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Executive Summary

This supplement to CCFE-R(15)28 provides the detailed data from simulations of fission pulse events from 15 fissile nuclides which are constituents of nuclear reactors around the world. For each nuclide, a specific energy for the fission yield has been selected and monoenergetic pulses of 1E16 neutrons over 1 ns onto 1E24 atoms have been simulated. The decay heat, spectroscopic and total, for each nuclide within the resulting inventory has been recorded for each of five cooling times: 10, 100, 1000, 5011[1] and 10000 s. Decay heat from the fuel itself and the capture product of the fuel has been set to zero in all cases.

For each case, the JEFF-3.1.1 neutron-induced fission yield library was used with one of four different decay data libraries: (1) ENDF/B-VII.1, (2) JENDL-4.0u, (3) JEFF-3.1.1 and (4) UKDD-12. The heat, in kW, was recorded for each of the cooling times for comparison. This is shown graphically with two axes: a linear scale for heat output of each nuclide and a log-scale showing the ratio of each to a reference calculation. Due to the quality of the results, ENDF/B-VII.1 decay data was selected as the reference. Each graph is accompanied by tabular data for each of the top 50 nuclides which are also displayed in the figure. In some circumstances a red dash appears which indicates that zero heat is attributed to that nuclide. 200 dominant nuclides were followed for each calculation, ensuring that absence in the table indicates absence in the decay data file – and indeed several of these have been verified by interrogation of the files directly.

Each section is labelled by nuclide and neutron energy. The subsections indicate the cooling time after the 1 ns irradiation, and are further broken down into gamma heat, beta heat and total heat, in this order. Generally, the gamma heat shows greater variation between libraries, as expected due to the Pandemonium effect, but note that many nuclides and cooling times show large variation in total heat by nuclide.

[1] This time was selected out of a set of ten equal-log cooling times per decade, *ie* $10^{i/10}$ for $i = 0, 1, 2 \ldots$

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1 Decay data comparison for ^{232}Th 400 keV pulse decay heat

1.1 10s after pulse

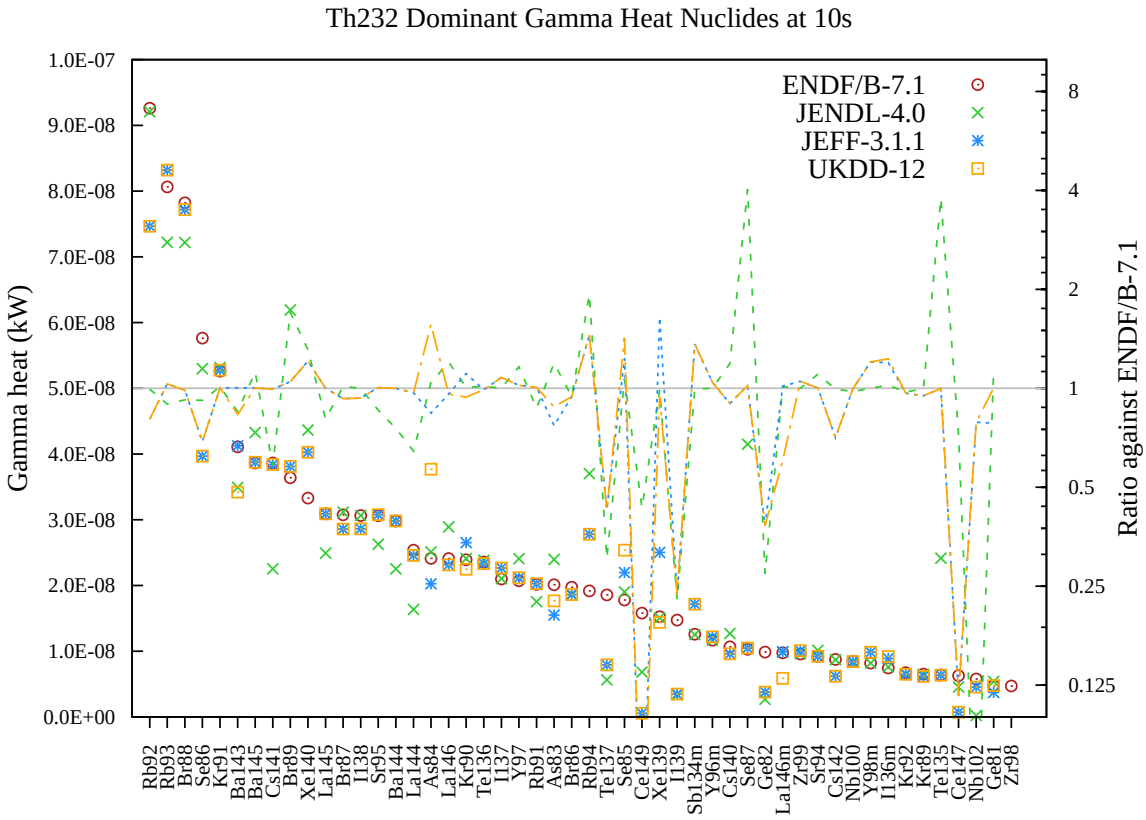

Figure 1: Gamma heat (in kW) decay data comparison for Th232 fission pulse after 10s cooling.

Table 1: Gamma heat (in kW) decay data comparison for Th232 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb92	7.1	9.26E-08	9.21E-08	7.46E-08	7.46E-08
Rb93	6.2	8.06E-08	7.22E-08	8.32E-08	8.32E-08
Br88	6.0	7.82E-08	7.22E-08	7.72E-08	7.72E-08
Se86	4.4	5.76E-08	5.30E-08	3.97E-08	3.97E-08
Kr91	4.1	5.26E-08	5.32E-08	5.28E-08	5.28E-08
Ba143	3.2	4.11E-08	3.49E-08	4.13E-08	3.42E-08
Ba145	3.0	3.86E-08	4.33E-08	3.87E-08	3.87E-08
Cs141	3.0	3.86E-08	2.25E-08	3.84E-08	3.84E-08
Br89	2.8	3.64E-08	6.19E-08	3.81E-08	3.81E-08

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Xe140	2.6	3.33E-08	4.37E-08	4.03E-08	4.03E-08
La145	2.4	3.09E-08	2.49E-08	3.09E-08	3.09E-08
Br87	2.4	3.08E-08	3.12E-08	2.86E-08	2.86E-08
I138	2.4	3.06E-08	3.06E-08	2.86E-08	2.86E-08
Sr95	2.4	3.06E-08	2.63E-08	3.08E-08	3.08E-08
Ba144	2.3	2.98E-08	2.25E-08	2.98E-08	2.98E-08
La144	2.0	2.54E-08	1.64E-08	2.46E-08	2.46E-08
As84	1.9	2.41E-08	2.51E-08	2.03E-08	3.77E-08
La146	1.9	2.41E-08	2.89E-08	2.31E-08	2.31E-08
Kr90	1.8	2.39E-08	2.41E-08	2.65E-08	2.25E-08
Te136	1.8	2.36E-08	2.38E-08	2.33E-08	2.33E-08
I137	1.6	2.10E-08	2.10E-08	2.27E-08	2.27E-08
Y97	1.6	2.07E-08	2.41E-08	2.12E-08	2.12E-08
Rb91	1.6	2.02E-08	1.75E-08	2.03E-08	2.03E-08
As83	1.6	2.01E-08	2.40E-08	1.55E-08	1.77E-08
Br86	1.5	1.97E-08	1.87E-08	1.86E-08	1.86E-08
Rb94	1.5	1.92E-08	3.70E-08	2.78E-08	2.78E-08
Te137	1.4	1.86E-08	5.64E-09	7.93E-09	7.93E-09
Se85	1.4	1.78E-08	1.90E-08	2.20E-08	2.54E-08
Ce149	1.2	1.58E-08	6.84E-09	5.54E-10	5.54E-10
Xe139	1.2	1.52E-08	1.51E-08	2.50E-08	1.44E-08
I139	1.1	1.47E-08	3.35E-09	3.49E-09	3.49E-09
Sb134m	1.0	1.26E-08	1.25E-08	1.72E-08	1.72E-08
Y96m	0.9	1.17E-08	1.17E-08	1.22E-08	1.22E-08
Cs140	0.8	1.07E-08	1.27E-08	9.59E-09	9.59E-09
Se87	0.8	1.03E-08	4.15E-08	1.05E-08	1.05E-08
Ge82	0.8	9.86E-09	2.69E-09	3.77E-09	3.77E-09
La146m	0.8	9.77E-09	9.88E-09	9.92E-09	5.89E-09
Zr99	0.7	9.59E-09	9.59E-09	1.01E-08	1.01E-08
Sr94	0.7	9.19E-09	1.01E-08	9.22E-09	9.22E-09
Cs142	0.7	8.75E-09	8.70E-09	6.20E-09	6.20E-09
Nb100	0.7	8.47E-09	8.27E-09	8.44E-09	8.44E-09
Y98m	0.6	8.18E-09	8.19E-09	9.85E-09	9.85E-09
I136m	0.6	7.44E-09	7.60E-09	8.90E-09	9.16E-09
Kr92	0.5	6.72E-09	6.55E-09	6.50E-09	6.50E-09
Kr89	0.5	6.51E-09	6.49E-09	6.18E-09	6.18E-09
Te135	0.5	6.38E-09	2.42E-08	6.37E-09	6.37E-09
Ce147	0.5	6.27E-09	4.55E-09	7.25E-10	7.25E-10
Nb102	0.4	5.76E-09	2.02E-10	4.54E-09	4.54E-09
Ge81	0.4	4.75E-09	5.39E-09	3.72E-09	4.76E-09
Zr98	0.4	4.72E-09	—	—	—

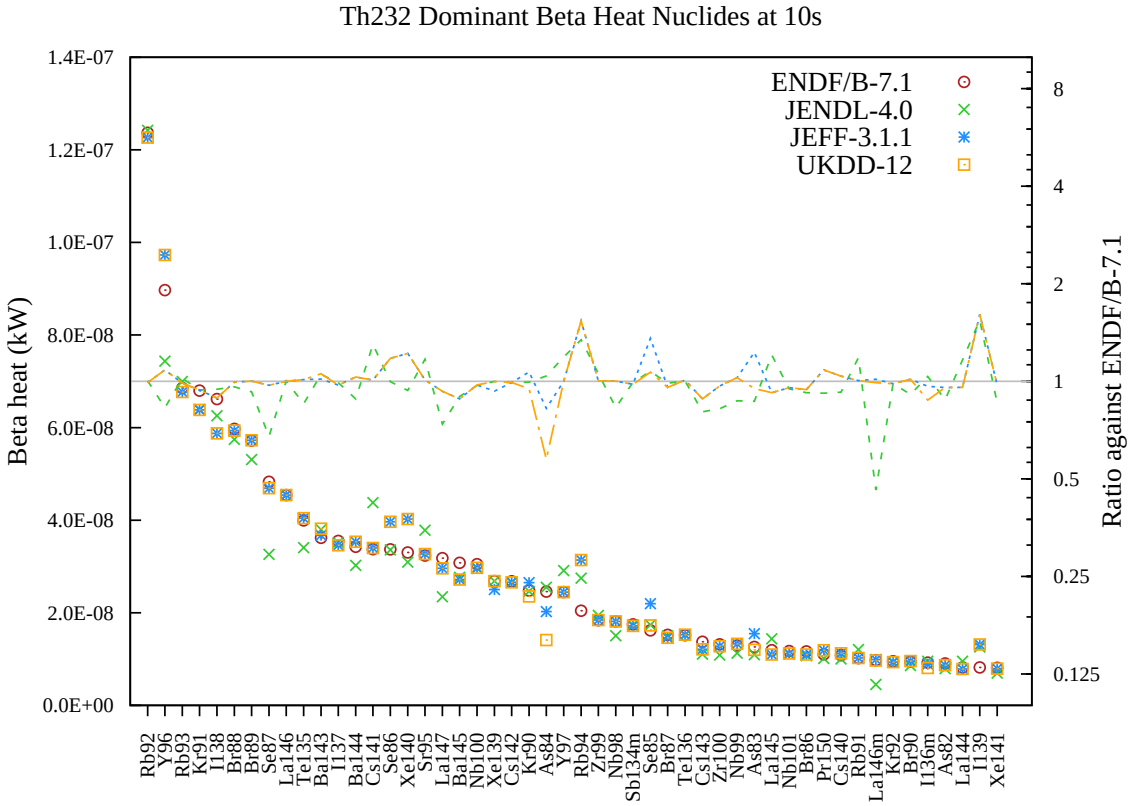

Figure 2: Beta heat (in kW) decay data comparison for Th232 fission pulse after 10s cooling.

Table 2: Beta heat (in kW) decay data comparison for Th232 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb92	7.8	1.24E-07	1.24E-07	1.23E-07	1.23E-07
Y96	5.6	8.97E-08	7.44E-08	9.73E-08	9.73E-08
Rb93	4.3	6.86E-08	7.00E-08	6.77E-08	6.77E-08
Kr91	4.3	6.80E-08	6.39E-08	6.38E-08	6.38E-08
I138	4.2	6.62E-08	6.26E-08	5.87E-08	5.87E-08
Br88	3.8	5.97E-08	5.74E-08	5.94E-08	5.94E-08
Br89	3.6	5.72E-08	5.31E-08	5.73E-08	5.73E-08
Se87	3.0	4.83E-08	3.26E-08	4.69E-08	4.69E-08
La146	2.9	4.54E-08	4.55E-08	4.54E-08	4.54E-08
Te135	2.5	3.99E-08	3.41E-08	4.04E-08	4.04E-08
Ba143	2.3	3.62E-08	3.80E-08	3.68E-08	3.82E-08
I137	2.2	3.55E-08	3.52E-08	3.46E-08	3.46E-08
Ba144	2.2	3.43E-08	3.02E-08	3.53E-08	3.53E-08
Cs141	2.1	3.37E-08	4.38E-08	3.40E-08	3.40E-08
Se86	2.1	3.37E-08	3.36E-08	3.97E-08	3.97E-08
Xe140	2.1	3.30E-08	3.09E-08	4.03E-08	4.03E-08

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sr95	2.0	3.24E-08	3.78E-08	3.27E-08	3.27E-08
La147	2.0	3.18E-08	2.35E-08	2.96E-08	2.96E-08
Ba145	1.9	3.08E-08	2.76E-08	2.72E-08	2.72E-08
Nb100	1.9	3.05E-08	2.96E-08	2.97E-08	2.97E-08
Xe139	1.7	2.69E-08	2.68E-08	2.50E-08	2.68E-08
Cs142	1.7	2.68E-08	2.66E-08	2.66E-08	2.66E-08
Kr90	1.6	2.48E-08	2.47E-08	2.65E-08	2.35E-08
As84	1.5	2.46E-08	2.55E-08	2.03E-08	1.41E-08
Y97	1.5	2.45E-08	2.91E-08	2.45E-08	2.45E-08
Rb94	1.3	2.04E-08	2.75E-08	3.14E-08	3.14E-08
Zr99	1.2	1.84E-08	1.94E-08	1.84E-08	1.84E-08
Nb98	1.1	1.81E-08	1.50E-08	1.81E-08	1.81E-08
Sb134m	1.1	1.75E-08	1.74E-08	1.72E-08	1.72E-08
Se85	1.0	1.62E-08	1.74E-08	2.20E-08	1.73E-08
Br87	1.0	1.52E-08	1.50E-08	1.46E-08	1.46E-08
Te136	1.0	1.51E-08	1.52E-08	1.53E-08	1.53E-08
Cs143	0.9	1.37E-08	1.11E-08	1.21E-08	1.21E-08
Zr100	0.8	1.32E-08	1.09E-08	1.28E-08	1.28E-08
Nb99	0.8	1.29E-08	1.13E-08	1.33E-08	1.33E-08
As83	0.8	1.26E-08	1.09E-08	1.55E-08	1.20E-08
La145	0.8	1.19E-08	1.44E-08	1.10E-08	1.10E-08
Nb101	0.7	1.17E-08	1.11E-08	1.12E-08	1.12E-08
Br86	0.7	1.16E-08	1.07E-08	1.10E-08	1.10E-08
Pr150	0.7	1.10E-08	1.01E-08	1.19E-08	1.19E-08
Cs140	0.7	1.08E-08	1.00E-08	1.12E-08	1.12E-08
Rb91	0.6	1.02E-08	1.21E-08	1.03E-08	1.03E-08
La146m	0.6	9.77E-09	4.51E-09	9.92E-09	9.67E-09
Kr92	0.6	9.51E-09	9.36E-09	9.35E-09	9.35E-09
Br90	0.6	9.42E-09	8.58E-09	9.57E-09	9.57E-09
I136m	0.6	9.22E-09	9.55E-09	8.90E-09	8.07E-09
As82	0.6	9.05E-09	7.94E-09	8.67E-09	8.67E-09
La144	0.5	8.20E-09	9.55E-09	7.85E-09	7.85E-09
I139	0.5	8.18E-09	1.26E-08	1.32E-08	1.32E-08
Xe141	0.5	8.13E-09	6.97E-09	7.93E-09	7.93E-09

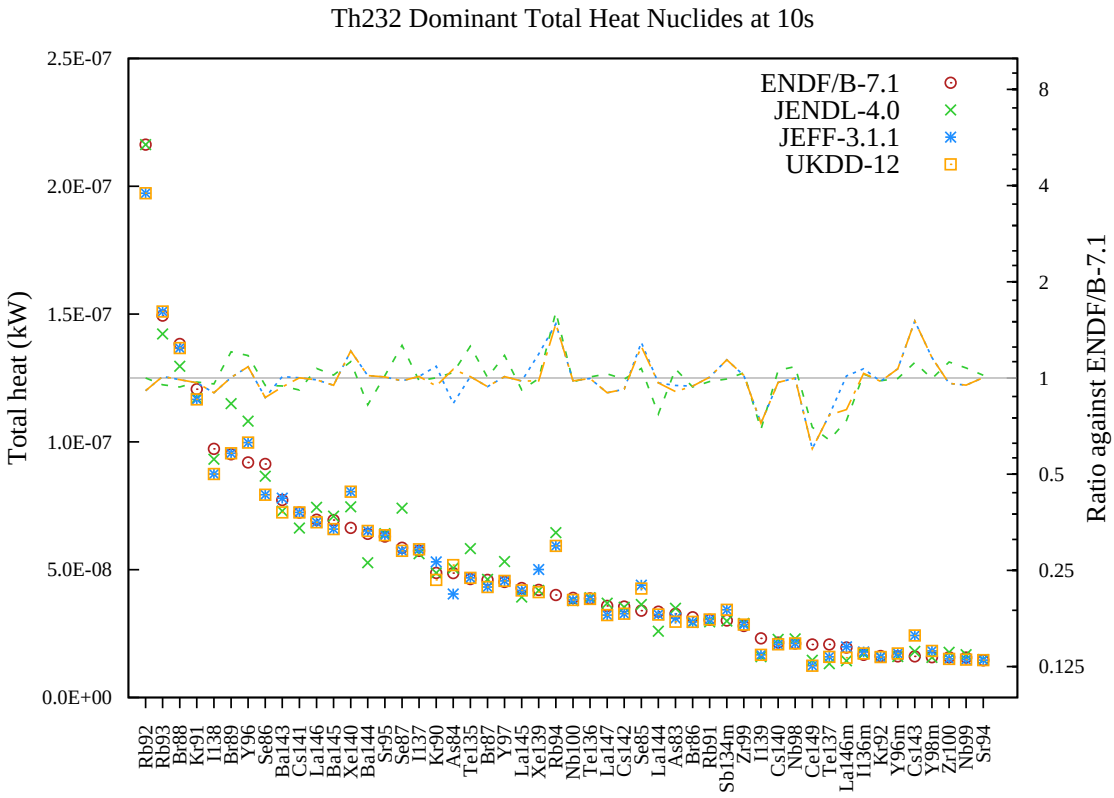

Figure 3: Total heat (in kW) decay data comparison for Th232 fission pulse after 10s cooling.

Table 3: Total heat (in kW) decay data comparison for Th232 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb92	7.5	2.16E-07	2.16E-07	1.97E-07	1.97E-07
Rb93	5.2	1.49E-07	1.42E-07	1.51E-07	1.51E-07
Br88	4.8	1.38E-07	1.30E-07	1.37E-07	1.37E-07
Kr91	4.2	1.21E-07	1.17E-07	1.17E-07	1.17E-07
I138	3.4	9.72E-08	9.32E-08	8.75E-08	8.75E-08
Br89	3.3	9.52E-08	1.15E-07	9.55E-08	9.55E-08
Y96	3.2	9.20E-08	1.08E-07	9.97E-08	9.97E-08
Se86	3.2	9.13E-08	8.66E-08	7.93E-08	7.93E-08
Ba143	2.7	7.73E-08	7.29E-08	7.80E-08	7.24E-08
Cs141	2.5	7.23E-08	6.63E-08	7.24E-08	7.24E-08
La146	2.4	6.95E-08	7.44E-08	6.86E-08	6.86E-08
Ba145	2.4	6.94E-08	7.09E-08	6.59E-08	6.59E-08
Xe140	2.3	6.63E-08	7.46E-08	8.05E-08	8.05E-08
Ba144	2.2	6.41E-08	5.28E-08	6.51E-08	6.51E-08
Sr95	2.2	6.30E-08	6.41E-08	6.35E-08	6.35E-08
Se87	2.0	5.86E-08	7.41E-08	5.74E-08	5.74E-08
I137	2.0	5.74E-08	5.62E-08	5.80E-08	5.80E-08

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Kr90	1.7	4.87E-08	4.88E-08	5.30E-08	4.60E-08
As84	1.7	4.87E-08	5.06E-08	4.05E-08	5.18E-08
Te135	1.6	4.63E-08	5.82E-08	4.68E-08	4.68E-08
Br87	1.6	4.60E-08	4.62E-08	4.32E-08	4.32E-08
Y97	1.6	4.52E-08	5.32E-08	4.56E-08	4.56E-08
La145	1.5	4.28E-08	3.93E-08	4.19E-08	4.19E-08
Xe139	1.5	4.21E-08	4.19E-08	5.01E-08	4.12E-08
Rb94	1.4	4.01E-08	6.45E-08	5.93E-08	5.93E-08
Nb100	1.3	3.90E-08	3.79E-08	3.82E-08	3.82E-08
Te136	1.3	3.87E-08	3.90E-08	3.86E-08	3.86E-08
La147	1.2	3.58E-08	3.69E-08	3.22E-08	3.22E-08
Cs142	1.2	3.56E-08	3.53E-08	3.28E-08	3.28E-08
Se85	1.2	3.40E-08	3.64E-08	4.39E-08	4.26E-08
La144	1.2	3.36E-08	2.59E-08	3.24E-08	3.24E-08
As83	1.1	3.27E-08	3.49E-08	3.10E-08	2.96E-08
Br86	1.1	3.14E-08	2.94E-08	2.96E-08	2.96E-08
Rb91	1.1	3.04E-08	2.96E-08	3.05E-08	3.05E-08
Sb134m	1.0	3.01E-08	2.99E-08	3.43E-08	3.43E-08
Zr99	1.0	2.80E-08	2.90E-08	2.85E-08	2.85E-08
I139	0.8	2.31E-08	1.60E-08	1.67E-08	1.67E-08
Cs140	0.7	2.15E-08	2.27E-08	2.08E-08	2.08E-08
Nb98	0.7	2.12E-08	2.30E-08	2.11E-08	2.11E-08
Ce149	0.7	2.07E-08	1.45E-08	1.25E-08	1.25E-08
Te137	0.7	2.07E-08	1.33E-08	1.59E-08	1.59E-08
La146m	0.7	1.95E-08	1.44E-08	1.98E-08	1.56E-08
I136m	0.6	1.67E-08	1.71E-08	1.78E-08	1.72E-08
Kr92	0.6	1.62E-08	1.59E-08	1.59E-08	1.59E-08
Y96m	0.6	1.61E-08	1.61E-08	1.72E-08	1.72E-08
Cs143	0.6	1.61E-08	1.80E-08	2.43E-08	2.43E-08
Y98m	0.5	1.57E-08	1.57E-08	1.82E-08	1.82E-08
Zr100	0.5	1.57E-08	1.77E-08	1.51E-08	1.51E-08
Nb99	0.5	1.56E-08	1.68E-08	1.48E-08	1.48E-08
Sr94	0.5	1.46E-08	1.49E-08	1.46E-08	1.46E-08

1.2 100s after pulse

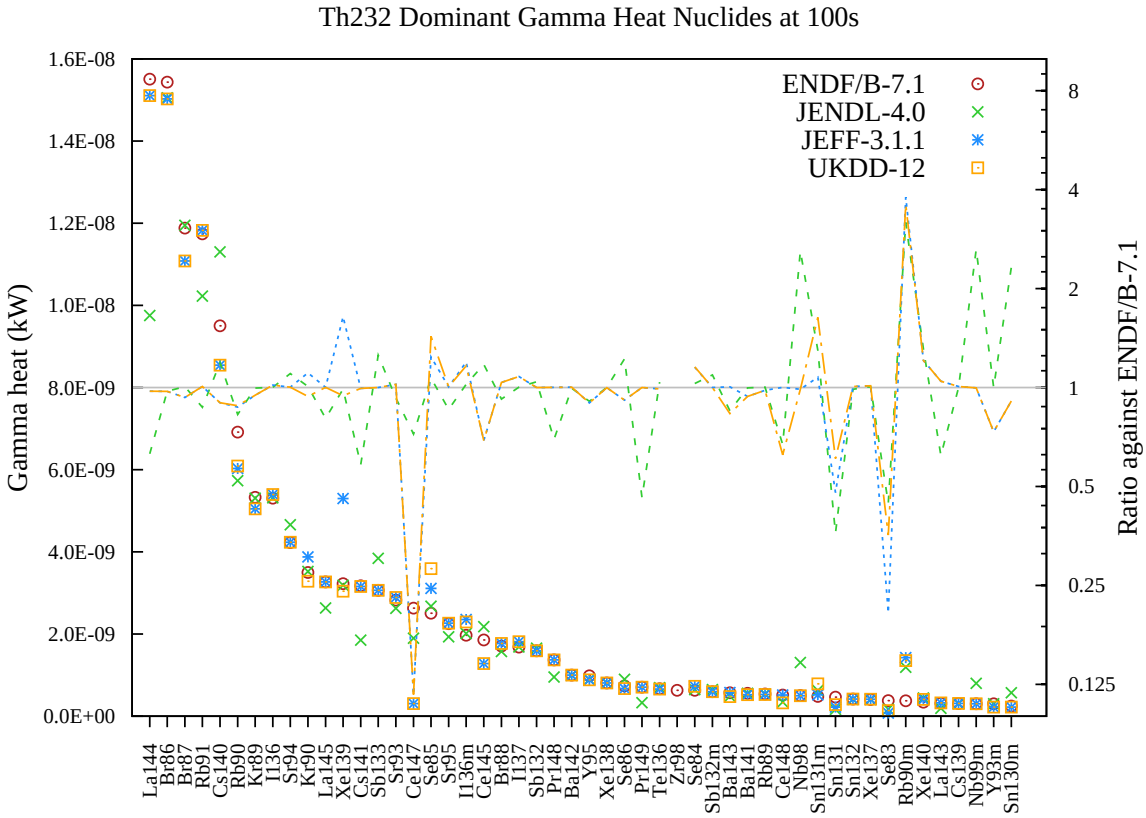

Figure 4: Gamma heat (in kW) decay data comparison for Th232 fission pulse after 100s cooling.

Table 4: Gamma heat (in kW) decay data comparison for Th232 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La144	11.0	1.55E-08	9.75E-09	1.51E-08	1.51E-08
Br86	11.0	1.54E-08	1.50E-08	1.50E-08	1.50E-08
Br87	8.4	1.19E-08	1.19E-08	1.11E-08	1.11E-08
Rb91	8.3	1.17E-08	1.02E-08	1.18E-08	1.18E-08
Cs140	6.8	9.50E-09	1.13E-08	8.55E-09	8.55E-09
Rb90	4.9	6.92E-09	5.73E-09	6.03E-09	6.09E-09
Kr89	3.8	5.33E-09	5.31E-09	5.05E-09	5.05E-09
I136	3.8	5.31E-09	5.32E-09	5.40E-09	5.40E-09
Sr94	3.0	4.23E-09	4.66E-09	4.24E-09	4.24E-09
Kr90	2.5	3.50E-09	3.53E-09	3.88E-09	3.29E-09
La145	2.3	3.27E-09	2.63E-09	3.27E-09	3.27E-09
Xe139	2.3	3.22E-09	3.19E-09	5.30E-09	3.04E-09
Cs141	2.3	3.18E-09	1.85E-09	3.16E-09	3.16E-09

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb133	2.2	3.06E-09	3.84E-09	3.06E-09	3.06E-09
Sr93	2.0	2.82E-09	2.62E-09	2.89E-09	2.89E-09
Ce147	1.9	2.63E-09	1.90E-09	3.06E-10	3.06E-10
Se85	1.8	2.51E-09	2.68E-09	3.11E-09	3.59E-09
Sr95	1.6	2.25E-09	1.93E-09	2.26E-09	2.26E-09
I136m	1.4	1.97E-09	2.01E-09	2.36E-09	2.29E-09
Ce145	1.3	1.85E-09	2.18E-09	1.28E-09	1.28E-09
Br88	1.2	1.71E-09	1.58E-09	1.77E-09	1.77E-09
I137	1.2	1.68E-09	1.68E-09	1.81E-09	1.81E-09
Sb132	1.1	1.59E-09	1.66E-09	1.59E-09	1.59E-09
Pr148	1.0	1.37E-09	9.54E-10	1.37E-09	1.37E-09
Ba142	0.7	9.99E-10	9.94E-10	1.00E-09	1.00E-09
Y95	0.7	9.84E-10	8.94E-10	8.83E-10	8.83E-10
Xe138	0.6	8.08E-10	8.09E-10	8.07E-10	8.07E-10
Se86	0.5	7.35E-10	8.98E-10	6.73E-10	6.73E-10
Pr149	0.5	7.08E-10	3.28E-10	7.08E-10	7.08E-10
Te136	0.5	6.67E-10	6.92E-10	6.60E-10	6.60E-10
Zr98	0.4	6.31E-10	—	—	—
Se84	0.4	6.29E-10	6.47E-10	7.26E-10	7.27E-10
Sb132m	0.4	5.94E-10	6.48E-10	5.94E-10	5.94E-10
Ba143	0.4	5.71E-10	4.85E-10	5.73E-10	4.75E-10
Ba141	0.4	5.59E-10	5.58E-10	5.25E-10	5.25E-10
Rb89	0.4	5.39E-10	5.41E-10	5.29E-10	5.29E-10
Ce148	0.4	5.15E-10	3.46E-10	5.16E-10	3.22E-10
Nb98	0.4	5.02E-10	1.31E-09	4.96E-10	4.96E-10
Sn131m	0.3	4.83E-10	6.27E-10	5.19E-10	7.89E-10
Sn131	0.3	4.63E-10	1.67E-10	2.22E-10	2.82E-10
Sn132	0.3	4.16E-10	4.11E-10	4.19E-10	4.19E-10
Xe137	0.3	4.06E-10	4.09E-10	4.12E-10	4.12E-10
Se83	0.3	3.80E-10	1.69E-10	7.83E-11	1.35E-10
Rb90m	0.3	3.75E-10	1.19E-09	1.42E-09	1.35E-09
Xe140	0.2	3.39E-10	4.45E-10	4.10E-10	4.10E-10
La143	0.2	3.10E-10	1.93E-10	3.24E-10	3.24E-10
Cs139	0.2	3.08E-10	3.08E-10	3.10E-10	3.10E-10
Nb99m	0.2	3.04E-10	8.00E-10	3.03E-10	3.03E-10
Y93m	0.2	3.02E-10	3.03E-10	2.22E-10	2.22E-10
Sn130m	0.2	2.45E-10	5.69E-10	2.23E-10	2.23E-10

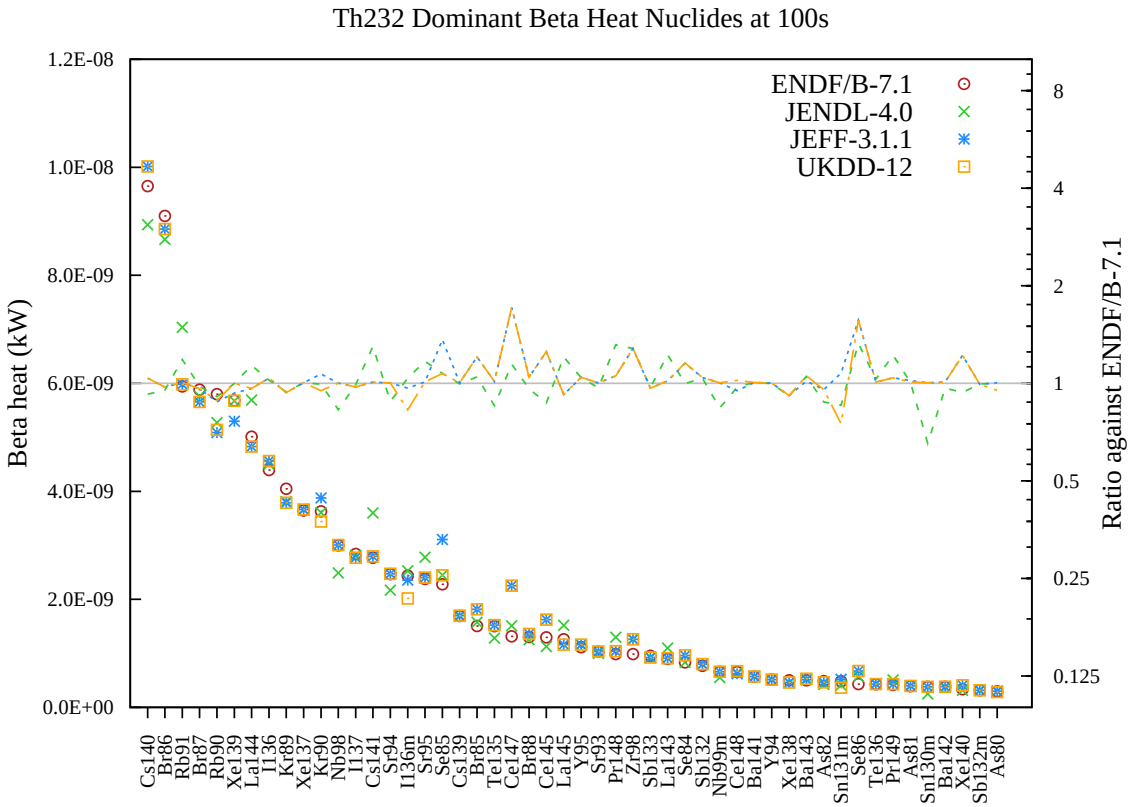

Figure 5: Beta heat (in kW) decay data comparison for Th232 fission pulse after 100s cooling.

Table 5: Beta heat (in kW) decay data comparison for Th232 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	8.7	9.65E-09	8.94E-09	1.00E-08	1.00E-08
Br86	8.2	9.10E-09	8.66E-09	8.86E-09	8.86E-09
Rb91	5.4	5.94E-09	7.04E-09	5.98E-09	5.98E-09
Br87	5.3	5.88E-09	5.76E-09	5.65E-09	5.65E-09
Rb90	5.3	5.80E-09	5.27E-09	5.09E-09	5.14E-09
Xe139	5.1	5.68E-09	5.67E-09	5.30E-09	5.68E-09
La144	4.5	5.01E-09	5.69E-09	4.83E-09	4.83E-09
I136	4.0	4.40E-09	4.50E-09	4.56E-09	4.56E-09
Kr89	3.7	4.05E-09	3.81E-09	3.79E-09	3.79E-09
Xe137	3.3	3.64E-09	3.66E-09	3.66E-09	3.66E-09
Kr90	3.3	3.63E-09	3.60E-09	3.88E-09	3.44E-09
Nb98	2.7	3.00E-09	2.49E-09	3.01E-09	3.01E-09
I137	2.6	2.84E-09	2.82E-09	2.77E-09	2.77E-09
Cs141	2.5	2.77E-09	3.60E-09	2.79E-09	2.79E-09
Sr94	2.2	2.47E-09	2.17E-09	2.47E-09	2.47E-09
I136m	2.2	2.44E-09	2.53E-09	2.36E-09	2.02E-09

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sr95	2.2	2.38E-09	2.78E-09	2.40E-09	2.40E-09
Se85	2.1	2.28E-09	2.45E-09	3.11E-09	2.44E-09
Cs139	1.5	1.69E-09	1.68E-09	1.70E-09	1.70E-09
Br85	1.4	1.51E-09	1.58E-09	1.82E-09	1.82E-09
Te135	1.4	1.50E-09	1.28E-09	1.52E-09	1.52E-09
Ce147	1.2	1.32E-09	1.51E-09	2.25E-09	2.25E-09
Br88	1.2	1.30E-09	1.25E-09	1.36E-09	1.36E-09
Ce145	1.2	1.30E-09	1.13E-09	1.62E-09	1.62E-09
La145	1.1	1.26E-09	1.52E-09	1.16E-09	1.16E-09
Y95	1.0	1.11E-09	1.16E-09	1.16E-09	1.16E-09
Sr93	0.9	1.03E-09	1.00E-09	1.03E-09	1.03E-09
Pr148	0.9	9.88E-10	1.30E-09	1.04E-09	1.04E-09
Zr98	0.9	9.85E-10	1.26E-09	1.26E-09	1.26E-09
Sb133	0.9	9.54E-10	9.26E-10	9.22E-10	9.22E-10
La143	0.8	8.96E-10	1.10E-09	9.11E-10	9.11E-10
Se84	0.8	8.33E-10	8.32E-10	9.61E-10	9.63E-10
Sb132	0.7	7.68E-10	7.96E-10	8.00E-10	8.00E-10
Nb99m	0.6	6.58E-10	5.52E-10	6.60E-10	6.60E-10
Ce148	0.6	6.55E-10	6.37E-10	6.22E-10	6.69E-10
Ba141	0.5	5.66E-10	5.70E-10	5.70E-10	5.70E-10
Y94	0.5	5.14E-10	5.12E-10	5.15E-10	5.15E-10
Xe138	0.5	5.03E-10	4.60E-10	4.61E-10	4.61E-10
Ba143	0.5	5.03E-10	5.28E-10	5.11E-10	5.31E-10
As82	0.4	4.85E-10	4.25E-10	4.64E-10	4.64E-10
Sn131m	0.4	4.83E-10	4.13E-10	5.19E-10	3.62E-10
Se86	0.4	4.30E-10	5.70E-10	6.73E-10	6.73E-10
Te136	0.4	4.29E-10	4.41E-10	4.32E-10	4.32E-10
Pr149	0.4	4.15E-10	5.07E-10	4.31E-10	4.31E-10
As81	0.4	3.92E-10	3.94E-10	4.00E-10	3.96E-10
Sn130m	0.3	3.79E-10	2.48E-10	3.81E-10	3.81E-10
Ba142	0.3	3.79E-10	3.66E-10	3.82E-10	3.82E-10
Xe140	0.3	3.36E-10	3.15E-10	4.10E-10	4.10E-10
Sb132m	0.3	3.17E-10	3.16E-10	3.15E-10	3.15E-10
As80	0.3	2.98E-10	2.98E-10	2.99E-10	2.83E-10

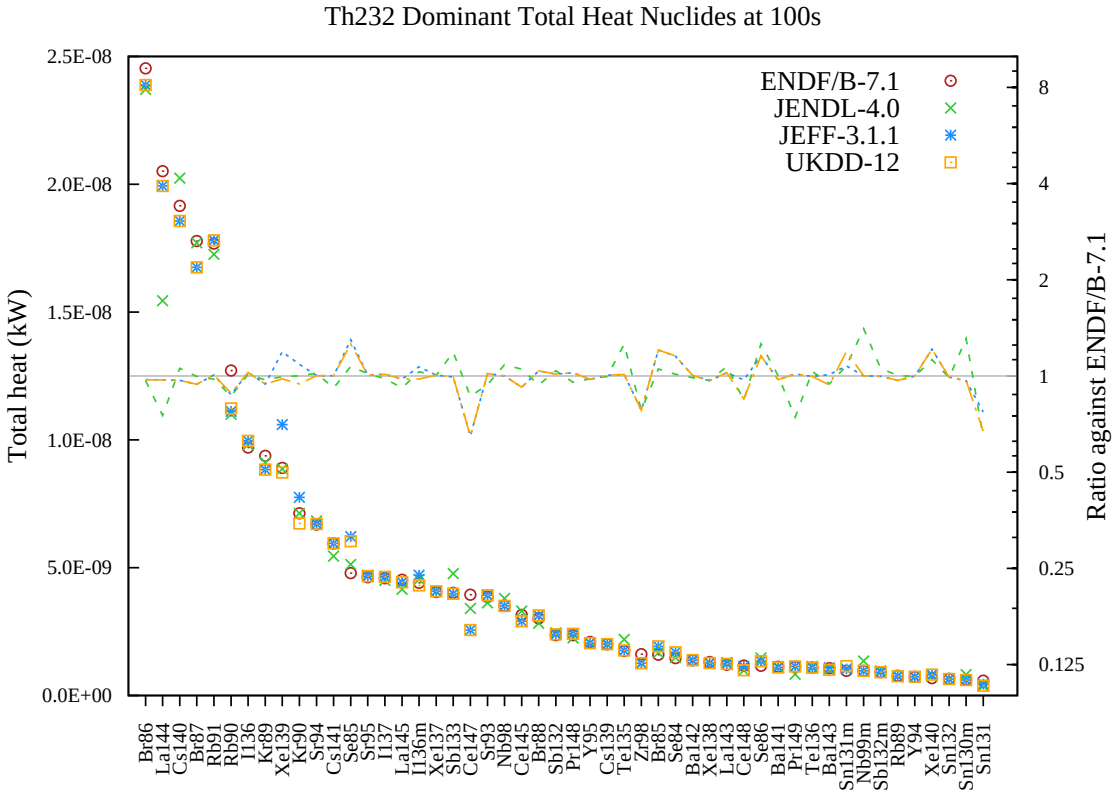

Figure 6: Total heat (in kW) decay data comparison for Th232 fission pulse after 100s cooling.

Table 6: Total heat (in kW) decay data comparison for Th232 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Br86	9.8	2.45E-08	2.37E-08	2.39E-08	2.39E-08
La144	8.2	2.05E-08	1.54E-08	1.99E-08	1.99E-08
Cs140	7.6	1.92E-08	2.02E-08	1.86E-08	1.86E-08
Br87	7.1	1.78E-08	1.77E-08	1.67E-08	1.67E-08
Rb91	7.0	1.77E-08	1.73E-08	1.78E-08	1.78E-08
Rb90	5.1	1.27E-08	1.10E-08	1.11E-08	1.12E-08
I136	3.9	9.70E-09	9.82E-09	9.96E-09	9.96E-09
Kr89	3.7	9.37E-09	9.12E-09	8.83E-09	8.83E-09
Xe139	3.5	8.90E-09	8.86E-09	1.06E-08	8.72E-09
Kr90	2.8	7.13E-09	7.13E-09	7.75E-09	6.73E-09
Sr94	2.7	6.69E-09	6.83E-09	6.71E-09	6.71E-09
Cs141	2.4	5.95E-09	5.45E-09	5.95E-09	5.95E-09
Se85	1.9	4.79E-09	5.13E-09	6.22E-09	6.04E-09
Sr95	1.8	4.63E-09	4.71E-09	4.67E-09	4.67E-09
I137	1.8	4.59E-09	4.50E-09	4.64E-09	4.64E-09
La145	1.8	4.53E-09	4.15E-09	4.43E-09	4.43E-09
I136m	1.8	4.41E-09	4.54E-09	4.71E-09	4.31E-09

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Xe137	1.6	4.05E-09	4.07E-09	4.08E-09	4.08E-09
Sb133	1.6	4.02E-09	4.77E-09	3.98E-09	3.98E-09
Ce147	1.6	3.95E-09	3.41E-09	2.56E-09	2.56E-09
Sr93	1.5	3.86E-09	3.62E-09	3.92E-09	3.92E-09
Nb98	1.4	3.50E-09	3.80E-09	3.50E-09	3.50E-09
Ce145	1.3	3.15E-09	3.31E-09	2.90E-09	2.90E-09
Br88	1.2	3.02E-09	2.83E-09	3.13E-09	3.13E-09
Sb132	0.9	2.36E-09	2.45E-09	2.39E-09	2.39E-09
Pr148	0.9	2.36E-09	2.25E-09	2.41E-09	2.41E-09
Y95	0.8	2.10E-09	2.05E-09	2.05E-09	2.05E-09
Cs139	0.8	2.00E-09	1.99E-09	2.01E-09	2.01E-09
Te135	0.7	1.74E-09	2.19E-09	1.76E-09	1.76E-09
Zr98	0.6	1.62E-09	1.26E-09	1.26E-09	1.26E-09
Br85	0.6	1.60E-09	1.68E-09	1.92E-09	1.92E-09
Se84	0.6	1.46E-09	1.48E-09	1.69E-09	1.69E-09
Ba142	0.5	1.38E-09	1.36E-09	1.38E-09	1.38E-09
Xe138	0.5	1.31E-09	1.27E-09	1.27E-09	1.27E-09
La143	0.5	1.21E-09	1.29E-09	1.23E-09	1.23E-09
Ce148	0.5	1.17E-09	9.83E-10	1.14E-09	9.90E-10
Se86	0.5	1.16E-09	1.47E-09	1.35E-09	1.35E-09
Ba141	0.4	1.13E-09	1.13E-09	1.09E-09	1.09E-09
Pr149	0.4	1.12E-09	8.34E-10	1.14E-09	1.14E-09
Te136	0.4	1.10E-09	1.13E-09	1.09E-09	1.09E-09
Ba143	0.4	1.07E-09	1.01E-09	1.08E-09	1.01E-09
Sn131m	0.4	9.66E-10	1.04E-09	1.04E-09	1.15E-09
Nb99m	0.4	9.62E-10	1.35E-09	9.63E-10	9.63E-10
Sb132m	0.4	9.11E-10	9.64E-10	9.08E-10	9.08E-10
Rb89	0.3	7.73E-10	7.75E-10	7.49E-10	7.49E-10
Y94	0.3	7.32E-10	7.30E-10	7.31E-10	7.31E-10
Xe140	0.3	6.75E-10	7.60E-10	8.20E-10	8.20E-10
Sn132	0.3	6.49E-10	6.41E-10	6.44E-10	6.44E-10
Sn130m	0.2	6.24E-10	8.17E-10	6.04E-10	6.04E-10
Sn131	0.2	5.76E-10	3.72E-10	4.44E-10	3.87E-10

1.3 1000s after pulse

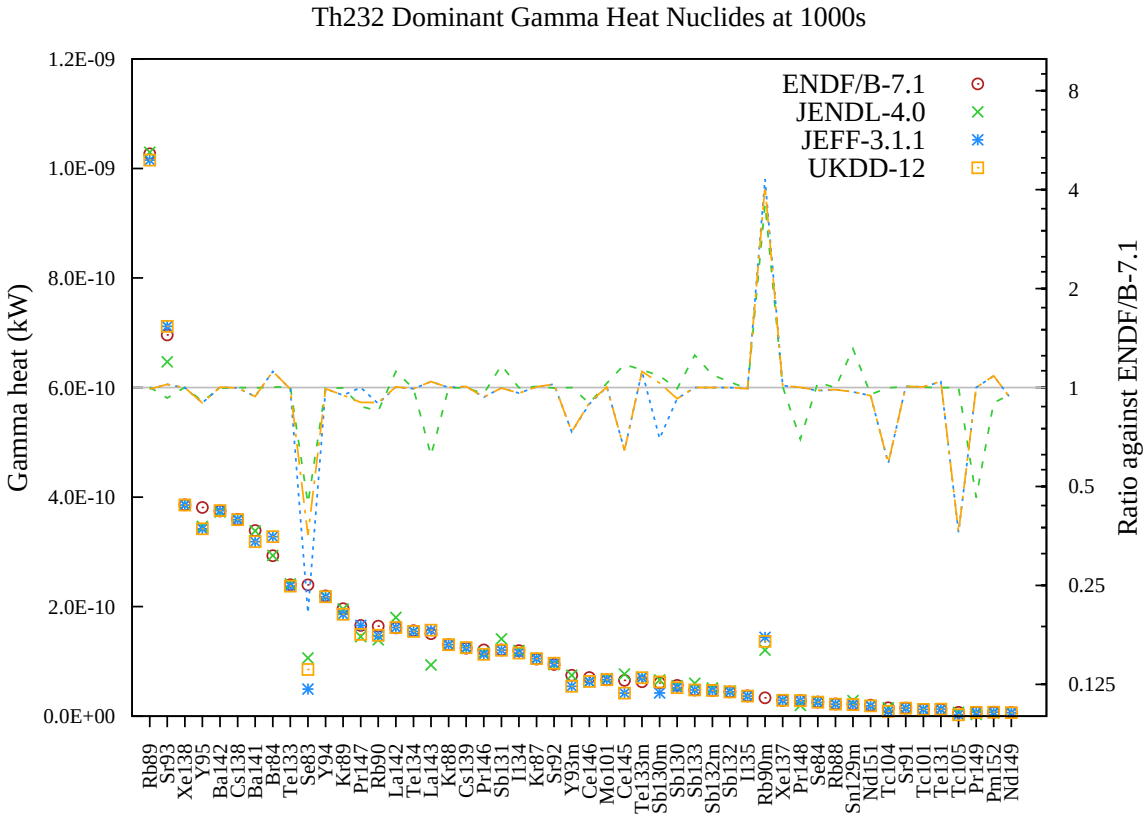

Figure 7: Gamma heat (in kW) decay data comparison for Th232 fission pulse after 1000s cooling.

Table 7: Gamma heat (in kW) decay data comparison for Th232 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb89	14.0	1.03E-09	1.03E-09	1.02E-09	1.02E-09
Sr93	9.5	6.96E-10	6.47E-10	7.12E-10	7.12E-10
Xe138	5.3	3.86E-10	3.87E-10	3.86E-10	3.86E-10
Y95	5.2	3.81E-10	3.46E-10	3.42E-10	3.42E-10
Ba142	5.1	3.75E-10	3.73E-10	3.75E-10	3.75E-10
Cs138	4.9	3.59E-10	3.60E-10	3.59E-10	3.59E-10
Ba141	4.6	3.39E-10	3.38E-10	3.18E-10	3.18E-10
Br84	4.0	2.93E-10	2.93E-10	3.28E-10	3.28E-10
Te133	3.3	2.40E-10	2.42E-10	2.38E-10	2.38E-10
Se83	3.3	2.40E-10	1.06E-10	4.94E-11	8.52E-11
Y94	3.0	2.20E-10	2.19E-10	2.18E-10	2.18E-10
Kr89	2.7	1.96E-10	1.96E-10	1.86E-10	1.86E-10
Pr147	2.3	1.66E-10	1.45E-10	1.66E-10	1.49E-10

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb90	2.2	1.64E-10	1.39E-10	1.47E-10	1.48E-10
La142	2.2	1.61E-10	1.80E-10	1.62E-10	1.62E-10
Te134	2.1	1.56E-10	1.55E-10	1.55E-10	1.55E-10
La143	2.0	1.51E-10	9.35E-11	1.57E-10	1.57E-10
Kr88	1.8	1.31E-10	1.30E-10	1.30E-10	1.30E-10
Cs139	1.7	1.24E-10	1.24E-10	1.25E-10	1.25E-10
Pr146	1.6	1.21E-10	1.16E-10	1.13E-10	1.13E-10
Sb131	1.6	1.21E-10	1.41E-10	1.21E-10	1.20E-10
I134	1.6	1.20E-10	1.20E-10	1.15E-10	1.15E-10
Kr87	1.4	1.04E-10	1.05E-10	1.05E-10	1.05E-10
Sr92	1.3	9.44E-11	9.41E-11	9.67E-11	9.67E-11
Y93m	1.0	7.45E-11	7.46E-11	5.47E-11	5.47E-11
Ce146	1.0	7.07E-11	6.33E-11	6.30E-11	6.36E-11
Mo101	0.9	6.65E-11	6.85E-11	6.67E-11	6.67E-11
Ce145	0.9	6.54E-11	7.69E-11	4.21E-11	4.21E-11
Te133m	0.9	6.29E-11	7.12E-11	7.03E-11	7.03E-11
Sb130m	0.8	6.08E-11	6.59E-11	4.25E-11	6.27E-11
Sb130	0.8	5.61E-11	5.56E-11	5.19E-11	5.19E-11
Sb133	0.7	4.78E-11	6.00E-11	4.79E-11	4.79E-11
Sb132m	0.6	4.70E-11	5.14E-11	4.70E-11	4.70E-11
Sb132	0.6	4.43E-11	4.61E-11	4.43E-11	4.43E-11
I135	0.5	3.69E-11	3.66E-11	3.66E-11	3.66E-11
Rb90m	0.5	3.34E-11	1.21E-10	1.44E-10	1.37E-10
Xe137	0.4	2.87E-11	2.89E-11	2.91E-11	2.91E-11
Pr148	0.4	2.84E-11	1.98E-11	2.85E-11	2.85E-11
Se84	0.4	2.59E-11	2.68E-11	2.54E-11	2.54E-11
Rb88	0.3	2.22E-11	2.22E-11	2.19E-11	2.19E-11
Sn129m	0.3	2.16E-11	2.83E-11	2.09E-11	2.09E-11
Nd151	0.3	2.01E-11	1.91E-11	1.90E-11	1.90E-11
Tc104	0.2	1.54E-11	1.53E-11	9.04E-12	9.04E-12
Sr91	0.2	1.47E-11	1.48E-11	1.48E-11	1.48E-11
Tc101	0.2	1.24E-11	1.25E-11	1.25E-11	1.25E-11
Te131	0.2	1.23E-11	1.23E-11	1.28E-11	1.29E-11
Tc105	0.1	7.12E-12	7.12E-12	2.58E-12	2.58E-12
Pr149	0.1	7.12E-12	3.29E-12	7.12E-12	7.12E-12
Pm152	0.1	6.87E-12	6.17E-12	7.46E-12	7.46E-12
Nd149	0.1	6.76E-12	6.46E-12	6.23E-12	6.23E-12

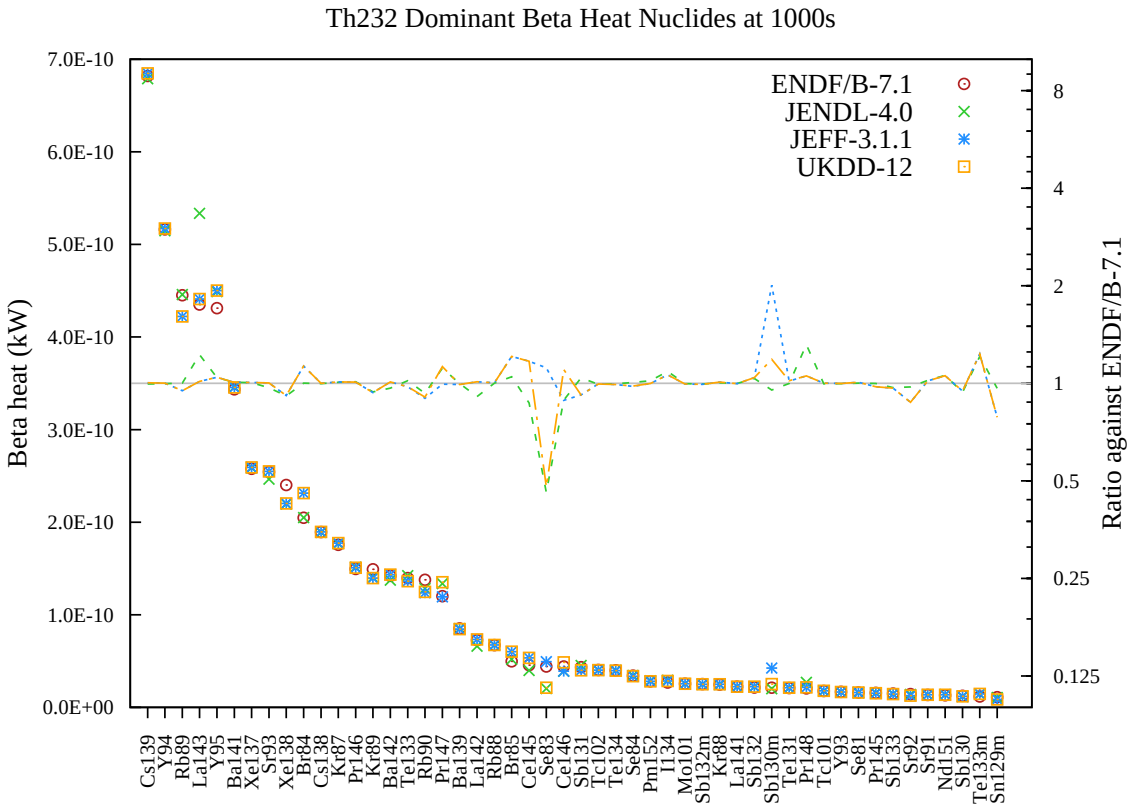

Figure 8: Beta heat (in kW) decay data comparison for Th232 fission pulse after 1000s cooling.

Table 8: Beta heat (in kW) decay data comparison for Th232 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs139	11.1	6.82E-10	6.79E-10	6.85E-10	6.85E-10
Y94	8.4	5.16E-10	5.15E-10	5.17E-10	5.17E-10
Rb89	7.3	4.45E-10	4.46E-10	4.22E-10	4.22E-10
La143	7.1	4.35E-10	5.34E-10	4.41E-10	4.41E-10
Y95	7.0	4.31E-10	4.49E-10	4.50E-10	4.50E-10
Ba141	5.6	3.44E-10	3.46E-10	3.46E-10	3.46E-10
Xe137	4.2	2.58E-10	2.59E-10	2.59E-10	2.59E-10
Sr93	4.2	2.54E-10	2.47E-10	2.55E-10	2.55E-10
Xe138	3.9	2.40E-10	2.20E-10	2.20E-10	2.20E-10
Br84	3.3	2.05E-10	2.05E-10	2.31E-10	2.31E-10
Cs138	3.1	1.89E-10	1.89E-10	1.89E-10	1.89E-10
Kr87	2.9	1.76E-10	1.77E-10	1.77E-10	1.77E-10
Pr146	2.4	1.50E-10	1.51E-10	1.51E-10	1.51E-10
Kr89	2.4	1.49E-10	1.40E-10	1.40E-10	1.40E-10
Ba142	2.3	1.42E-10	1.37E-10	1.43E-10	1.43E-10
Te133	2.3	1.40E-10	1.42E-10	1.36E-10	1.36E-10

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb90	2.2	1.38E-10	1.28E-10	1.24E-10	1.25E-10
Pr147	2.0	1.20E-10	1.34E-10	1.19E-10	1.35E-10
Ba139	1.4	8.52E-11	8.51E-11	8.45E-11	8.45E-11
La142	1.2	7.27E-11	6.61E-11	7.34E-11	7.34E-11
Rb88	1.1	6.72E-11	6.72E-11	6.74E-11	6.74E-11
Br85	0.8	4.97E-11	5.20E-11	6.01E-11	6.01E-11
Ce145	0.7	4.57E-11	3.98E-11	5.34E-11	5.34E-11
Se83	0.7	4.42E-11	2.04E-11	4.94E-11	2.12E-11
Ce146	0.7	4.41E-11	3.91E-11	3.90E-11	4.86E-11
Sb131	0.7	4.34E-11	4.52E-11	4.00E-11	4.00E-11
Tc102	0.7	4.04E-11	4.02E-11	4.03E-11	4.03E-11
Te134	0.7	4.00E-11	3.98E-11	3.96E-11	3.96E-11
Se84	0.6	3.43E-11	3.45E-11	3.36E-11	3.37E-11
Pm152	0.5	2.82E-11	2.87E-11	2.81E-11	2.81E-11
I134	0.4	2.68E-11	2.92E-11	2.84E-11	2.84E-11
Mo101	0.4	2.56E-11	2.55E-11	2.55E-11	2.55E-11
Sb132m	0.4	2.51E-11	2.50E-11	2.49E-11	2.49E-11
Kr88	0.4	2.46E-11	2.47E-11	2.49E-11	2.49E-11
La141	0.4	2.24E-11	2.24E-11	2.23E-11	2.23E-11
Sb132	0.3	2.14E-11	2.22E-11	2.23E-11	2.23E-11
Sb130m	0.3	2.12E-11	2.02E-11	4.25E-11	2.51E-11
Te131	0.3	2.09E-11	2.09E-11	2.12E-11	2.13E-11
Pr148	0.3	2.05E-11	2.70E-11	2.16E-11	2.16E-11
Tc101	0.3	1.78E-11	1.77E-11	1.78E-11	1.78E-11
Y93	0.3	1.67E-11	1.66E-11	1.67E-11	1.67E-11
Se81	0.3	1.60E-11	1.60E-11	1.61E-11	1.61E-11
Pr145	0.3	1.56E-11	1.56E-11	1.53E-11	1.53E-11
Sb133	0.2	1.49E-11	1.45E-11	1.44E-11	1.44E-11
Sr92	0.2	1.44E-11	1.40E-11	1.26E-11	1.26E-11
Sr91	0.2	1.33E-11	1.36E-11	1.35E-11	1.35E-11
Nd151	0.2	1.29E-11	1.37E-11	1.37E-11	1.37E-11
Sb130	0.2	1.25E-11	1.17E-11	1.18E-11	1.18E-11
Te133m	0.2	1.18E-11	1.43E-11	1.45E-11	1.45E-11
Sn129m	0.2	1.10E-11	1.06E-11	8.64E-12	8.64E-12

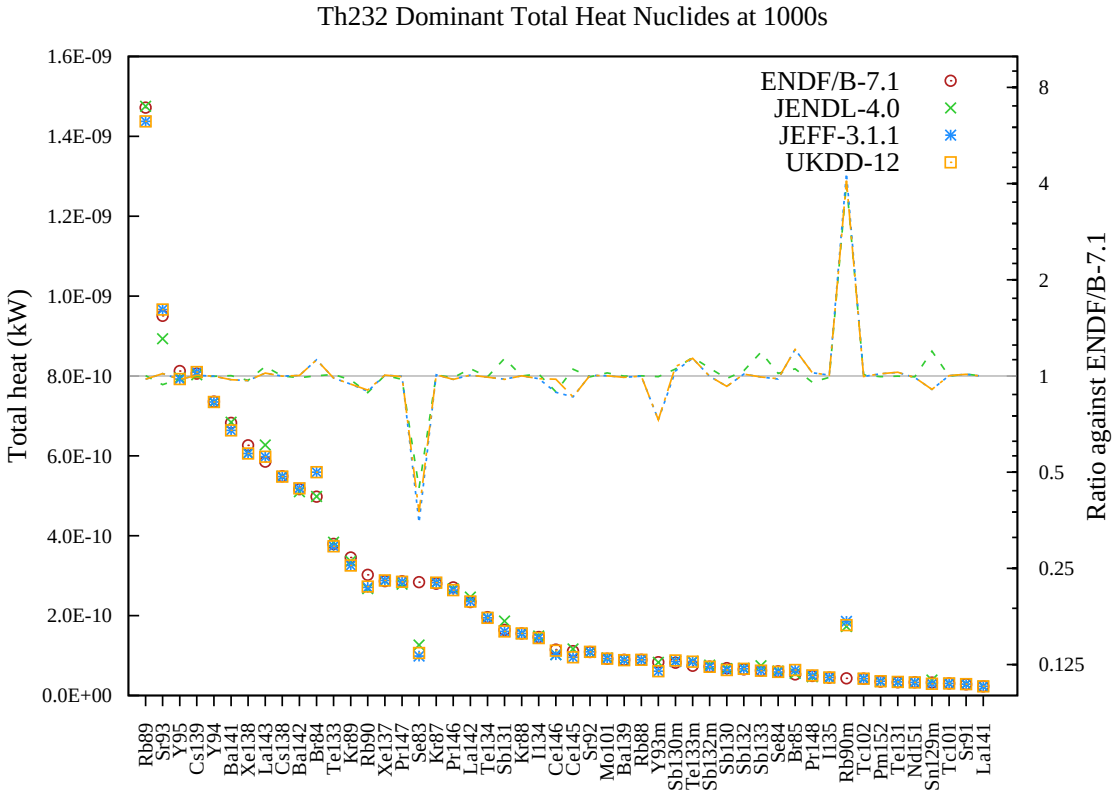

Figure 9: Total heat (in kW) decay data comparison for Th232 fission pulse after 1000s cooling.

Table 9: Total heat (in kW) decay data comparison for Th232 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb89	10.9	1.47E-09	1.48E-09	1.44E-09	1.44E-09
Sr93	7.1	9.50E-10	8.93E-10	9.66E-10	9.66E-10
Y95	6.0	8.12E-10	7.95E-10	7.92E-10	7.92E-10
Cs139	6.0	8.06E-10	8.03E-10	8.10E-10	8.10E-10
Y94	5.5	7.36E-10	7.34E-10	7.35E-10	7.35E-10
Ba141	5.1	6.82E-10	6.84E-10	6.64E-10	6.64E-10
Xe138	4.6	6.26E-10	6.06E-10	6.06E-10	6.06E-10
La143	4.3	5.86E-10	6.27E-10	5.98E-10	5.98E-10
Cs138	4.1	5.49E-10	5.48E-10	5.48E-10	5.48E-10
Ba142	3.8	5.17E-10	5.10E-10	5.19E-10	5.19E-10
Br84	3.7	4.98E-10	4.98E-10	5.59E-10	5.59E-10
Te133	2.8	3.80E-10	3.84E-10	3.74E-10	3.74E-10
Kr89	2.6	3.46E-10	3.36E-10	3.26E-10	3.26E-10
Rb90	2.2	3.02E-10	2.68E-10	2.71E-10	2.73E-10
Xe137	2.1	2.86E-10	2.88E-10	2.88E-10	2.88E-10
Pr147	2.1	2.86E-10	2.79E-10	2.85E-10	2.85E-10
Se83	2.1	2.84E-10	1.27E-10	9.88E-11	1.06E-10

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Kr87	2.1	2.80E-10	2.82E-10	2.82E-10	2.82E-10
Pr146	2.0	2.70E-10	2.67E-10	2.64E-10	2.64E-10
La142	1.7	2.34E-10	2.46E-10	2.35E-10	2.35E-10
Te134	1.5	1.96E-10	1.95E-10	1.94E-10	1.94E-10
Sb131	1.2	1.64E-10	1.86E-10	1.61E-10	1.60E-10
Kr88	1.2	1.55E-10	1.55E-10	1.55E-10	1.55E-10
I134	1.1	1.47E-10	1.49E-10	1.44E-10	1.44E-10
Ce146	0.9	1.15E-10	1.02E-10	1.02E-10	1.12E-10
Ce145	0.8	1.11E-10	1.17E-10	9.56E-11	9.56E-11
Sr92	0.8	1.09E-10	1.08E-10	1.09E-10	1.09E-10
Mo101	0.7	9.20E-11	9.41E-11	9.22E-11	9.22E-11
Ba139	0.7	8.96E-11	8.95E-11	8.87E-11	8.87E-11
Rb88	0.7	8.94E-11	8.94E-11	8.93E-11	8.93E-11
Y93m	0.6	8.32E-11	8.28E-11	6.07E-11	6.07E-11
Sb130m	0.6	8.19E-11	8.61E-11	8.50E-11	8.78E-11
Te133m	0.6	7.46E-11	8.54E-11	8.48E-11	8.48E-11
Sb132m	0.5	7.21E-11	7.63E-11	7.19E-11	7.19E-11
Sb130	0.5	6.86E-11	6.73E-11	6.37E-11	6.37E-11
Sb132	0.5	6.57E-11	6.82E-11	6.66E-11	6.66E-11
Sb133	0.5	6.27E-11	7.45E-11	6.23E-11	6.23E-11
Se84	0.4	6.02E-11	6.14E-11	5.89E-11	5.91E-11
Br85	0.4	5.26E-11	5.53E-11	6.36E-11	6.36E-11
Pr148	0.4	4.89E-11	4.68E-11	5.01E-11	5.01E-11
I135	0.3	4.49E-11	4.44E-11	4.51E-11	4.51E-11
Rb90m	0.3	4.31E-11	1.73E-10	1.86E-10	1.76E-10
Tc102	0.3	4.21E-11	4.24E-11	4.19E-11	4.19E-11
Pm152	0.3	3.50E-11	3.49E-11	3.56E-11	3.56E-11
Te131	0.2	3.32E-11	3.32E-11	3.40E-11	3.41E-11
Nd151	0.2	3.30E-11	3.28E-11	3.26E-11	3.26E-11
Sn129m	0.2	3.26E-11	3.89E-11	2.96E-11	2.96E-11
Tc101	0.2	3.02E-11	3.02E-11	3.03E-11	3.03E-11
Sr91	0.2	2.80E-11	2.84E-11	2.83E-11	2.83E-11
La141	0.2	2.30E-11	2.30E-11	2.29E-11	2.29E-11

1.4 5011s after pulse

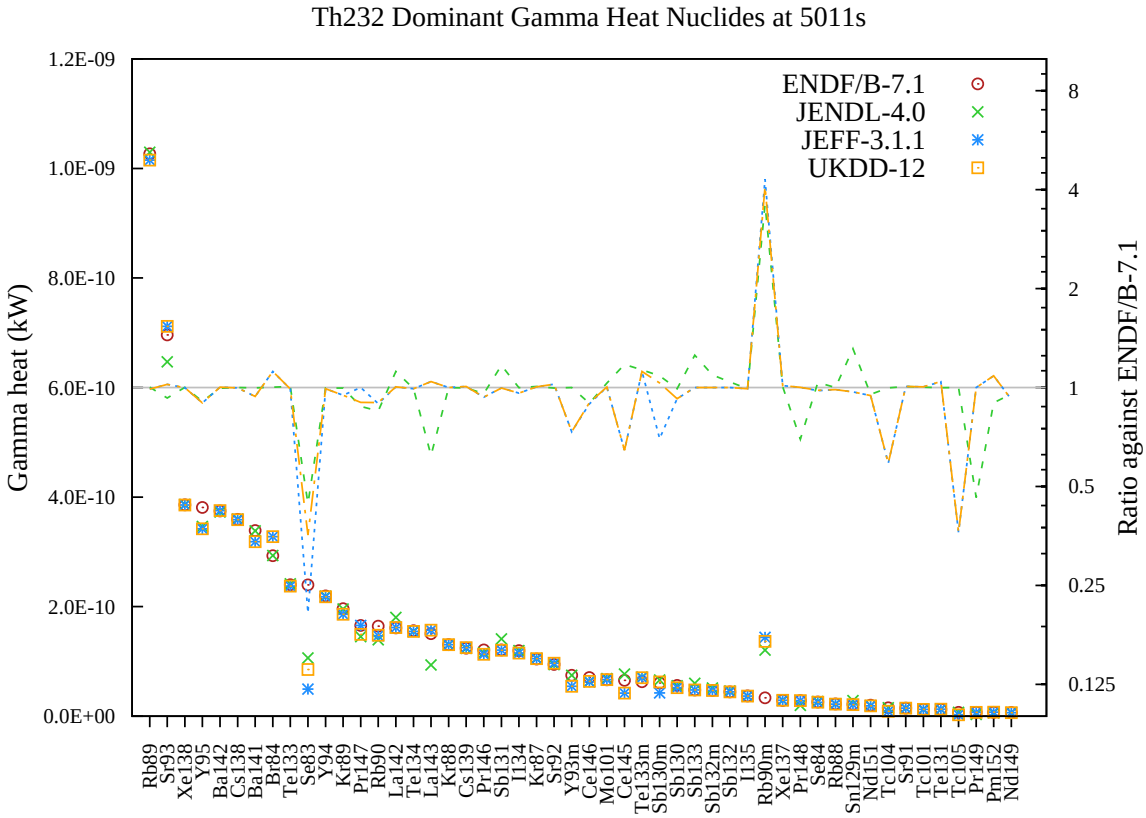

Figure 10: Gamma heat (in kW) decay data comparison for Th232 fission pulse after 5011s cooling.

Table 10: Gamma heat (in kW) decay data comparison for Th232 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb89	14.0	1.03E-09	1.03E-09	1.02E-09	1.02E-09
Sr93	9.5	6.96E-10	6.47E-10	7.12E-10	7.12E-10
Xe138	5.3	3.86E-10	3.87E-10	3.86E-10	3.86E-10
Y95	5.2	3.81E-10	3.46E-10	3.42E-10	3.42E-10
Ba142	5.1	3.75E-10	3.73E-10	3.75E-10	3.75E-10
Cs138	4.9	3.59E-10	3.60E-10	3.59E-10	3.59E-10
Ba141	4.6	3.39E-10	3.38E-10	3.18E-10	3.18E-10
Br84	4.0	2.93E-10	2.93E-10	3.28E-10	3.28E-10
Te133	3.3	2.40E-10	2.42E-10	2.38E-10	2.38E-10
Se83	3.3	2.40E-10	1.06E-10	4.94E-11	8.52E-11
Y94	3.0	2.20E-10	2.19E-10	2.18E-10	2.18E-10
Kr89	2.7	1.96E-10	1.96E-10	1.86E-10	1.86E-10
Pr147	2.3	1.66E-10	1.45E-10	1.66E-10	1.49E-10

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb90	2.2	1.64E-10	1.39E-10	1.47E-10	1.48E-10
La142	2.2	1.61E-10	1.80E-10	1.62E-10	1.62E-10
Te134	2.1	1.56E-10	1.55E-10	1.55E-10	1.55E-10
La143	2.0	1.51E-10	9.35E-11	1.57E-10	1.57E-10
Kr88	1.8	1.31E-10	1.30E-10	1.30E-10	1.30E-10
Cs139	1.7	1.24E-10	1.24E-10	1.25E-10	1.25E-10
Pr146	1.6	1.21E-10	1.16E-10	1.13E-10	1.13E-10
Sb131	1.6	1.21E-10	1.41E-10	1.21E-10	1.20E-10
I134	1.6	1.20E-10	1.20E-10	1.15E-10	1.15E-10
Kr87	1.4	1.04E-10	1.05E-10	1.05E-10	1.05E-10
Sr92	1.3	9.44E-11	9.41E-11	9.67E-11	9.67E-11
Y93m	1.0	7.45E-11	7.46E-11	5.47E-11	5.47E-11
Ce146	1.0	7.07E-11	6.33E-11	6.30E-11	6.36E-11
Mo101	0.9	6.65E-11	6.85E-11	6.67E-11	6.67E-11
Ce145	0.9	6.54E-11	7.69E-11	4.21E-11	4.21E-11
Te133m	0.9	6.29E-11	7.12E-11	7.03E-11	7.03E-11
Sb130m	0.8	6.08E-11	6.59E-11	4.25E-11	6.27E-11
Sb130	0.8	5.61E-11	5.56E-11	5.19E-11	5.19E-11
Sb133	0.7	4.78E-11	6.00E-11	4.79E-11	4.79E-11
Sb132m	0.6	4.70E-11	5.14E-11	4.70E-11	4.70E-11
Sb132	0.6	4.43E-11	4.61E-11	4.43E-11	4.43E-11
I135	0.5	3.69E-11	3.66E-11	3.66E-11	3.66E-11
Rb90m	0.5	3.34E-11	1.21E-10	1.44E-10	1.37E-10
Xe137	0.4	2.87E-11	2.89E-11	2.91E-11	2.91E-11
Pr148	0.4	2.84E-11	1.98E-11	2.85E-11	2.85E-11
Se84	0.4	2.59E-11	2.68E-11	2.54E-11	2.54E-11
Rb88	0.3	2.22E-11	2.22E-11	2.19E-11	2.19E-11
Sn129m	0.3	2.16E-11	2.83E-11	2.09E-11	2.09E-11
Nd151	0.3	2.01E-11	1.91E-11	1.90E-11	1.90E-11
Tc104	0.2	1.54E-11	1.53E-11	9.04E-12	9.04E-12
Sr91	0.2	1.47E-11	1.48E-11	1.48E-11	1.48E-11
Tc101	0.2	1.24E-11	1.25E-11	1.25E-11	1.25E-11
Te131	0.2	1.23E-11	1.23E-11	1.28E-11	1.29E-11
Tc105	0.1	7.12E-12	7.12E-12	2.58E-12	2.58E-12
Pr149	0.1	7.12E-12	3.29E-12	7.12E-12	7.12E-12
Pm152	0.1	6.87E-12	6.17E-12	7.46E-12	7.46E-12
Nd149	0.1	6.76E-12	6.46E-12	6.23E-12	6.23E-12

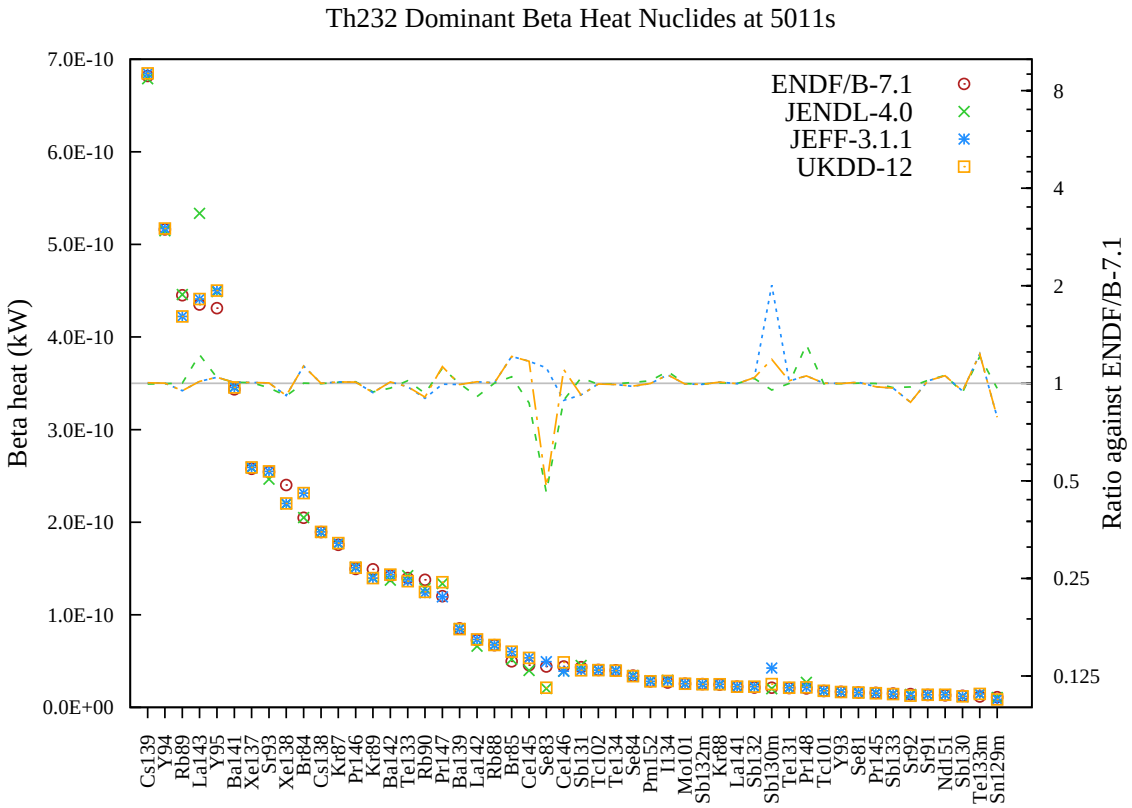

Figure 11: Beta heat (in kW) decay data comparison for Th232 fission pulse after 5011s cooling.

Table 11: Beta heat (in kW) decay data comparison for Th232 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs139	11.1	6.82E-10	6.79E-10	6.85E-10	6.85E-10
Y94	8.4	5.16E-10	5.15E-10	5.17E-10	5.17E-10
Rb89	7.3	4.45E-10	4.46E-10	4.22E-10	4.22E-10
La143	7.1	4.35E-10	5.34E-10	4.41E-10	4.41E-10
Y95	7.0	4.31E-10	4.49E-10	4.50E-10	4.50E-10
Ba141	5.6	3.44E-10	3.46E-10	3.46E-10	3.46E-10
Xe137	4.2	2.58E-10	2.59E-10	2.59E-10	2.59E-10
Sr93	4.2	2.54E-10	2.47E-10	2.55E-10	2.55E-10
Xe138	3.9	2.40E-10	2.20E-10	2.20E-10	2.20E-10
Br84	3.3	2.05E-10	2.05E-10	2.31E-10	2.31E-10
Cs138	3.1	1.89E-10	1.89E-10	1.89E-10	1.89E-10
Kr87	2.9	1.76E-10	1.77E-10	1.77E-10	1.77E-10
Pr146	2.4	1.50E-10	1.51E-10	1.51E-10	1.51E-10
Kr89	2.4	1.49E-10	1.40E-10	1.40E-10	1.40E-10
Ba142	2.3	1.42E-10	1.37E-10	1.43E-10	1.43E-10
Te133	2.3	1.40E-10	1.42E-10	1.36E-10	1.36E-10

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb90	2.2	1.38E-10	1.28E-10	1.24E-10	1.25E-10
Pr147	2.0	1.20E-10	1.34E-10	1.19E-10	1.35E-10
Ba139	1.4	8.52E-11	8.51E-11	8.45E-11	8.45E-11
La142	1.2	7.27E-11	6.61E-11	7.34E-11	7.34E-11
Rb88	1.1	6.72E-11	6.72E-11	6.74E-11	6.74E-11
Br85	0.8	4.97E-11	5.20E-11	6.01E-11	6.01E-11
Ce145	0.7	4.57E-11	3.98E-11	5.34E-11	5.34E-11
Se83	0.7	4.42E-11	2.04E-11	4.94E-11	2.12E-11
Ce146	0.7	4.41E-11	3.91E-11	3.90E-11	4.86E-11
Sb131	0.7	4.34E-11	4.52E-11	4.00E-11	4.00E-11
Tc102	0.7	4.04E-11	4.02E-11	4.03E-11	4.03E-11
Te134	0.7	4.00E-11	3.98E-11	3.96E-11	3.96E-11
Se84	0.6	3.43E-11	3.45E-11	3.36E-11	3.37E-11
Pm152	0.5	2.82E-11	2.87E-11	2.81E-11	2.81E-11
I134	0.4	2.68E-11	2.92E-11	2.84E-11	2.84E-11
Mo101	0.4	2.56E-11	2.55E-11	2.55E-11	2.55E-11
Sb132m	0.4	2.51E-11	2.50E-11	2.49E-11	2.49E-11
Kr88	0.4	2.46E-11	2.47E-11	2.49E-11	2.49E-11
La141	0.4	2.24E-11	2.24E-11	2.23E-11	2.23E-11
Sb132	0.3	2.14E-11	2.22E-11	2.23E-11	2.23E-11
Sb130m	0.3	2.12E-11	2.02E-11	4.25E-11	2.51E-11
Te131	0.3	2.09E-11	2.09E-11	2.12E-11	2.13E-11
Pr148	0.3	2.05E-11	2.70E-11	2.16E-11	2.16E-11
Tc101	0.3	1.78E-11	1.77E-11	1.78E-11	1.78E-11
Y93	0.3	1.67E-11	1.66E-11	1.67E-11	1.67E-11
Se81	0.3	1.60E-11	1.60E-11	1.61E-11	1.61E-11
Pr145	0.3	1.56E-11	1.56E-11	1.53E-11	1.53E-11
Sb133	0.2	1.49E-11	1.45E-11	1.44E-11	1.44E-11
Sr92	0.2	1.44E-11	1.40E-11	1.26E-11	1.26E-11
Sr91	0.2	1.33E-11	1.36E-11	1.35E-11	1.35E-11
Nd151	0.2	1.29E-11	1.37E-11	1.37E-11	1.37E-11
Sb130	0.2	1.25E-11	1.17E-11	1.18E-11	1.18E-11
Te133m	0.2	1.18E-11	1.43E-11	1.45E-11	1.45E-11
Sn129m	0.2	1.10E-11	1.06E-11	8.64E-12	8.64E-12

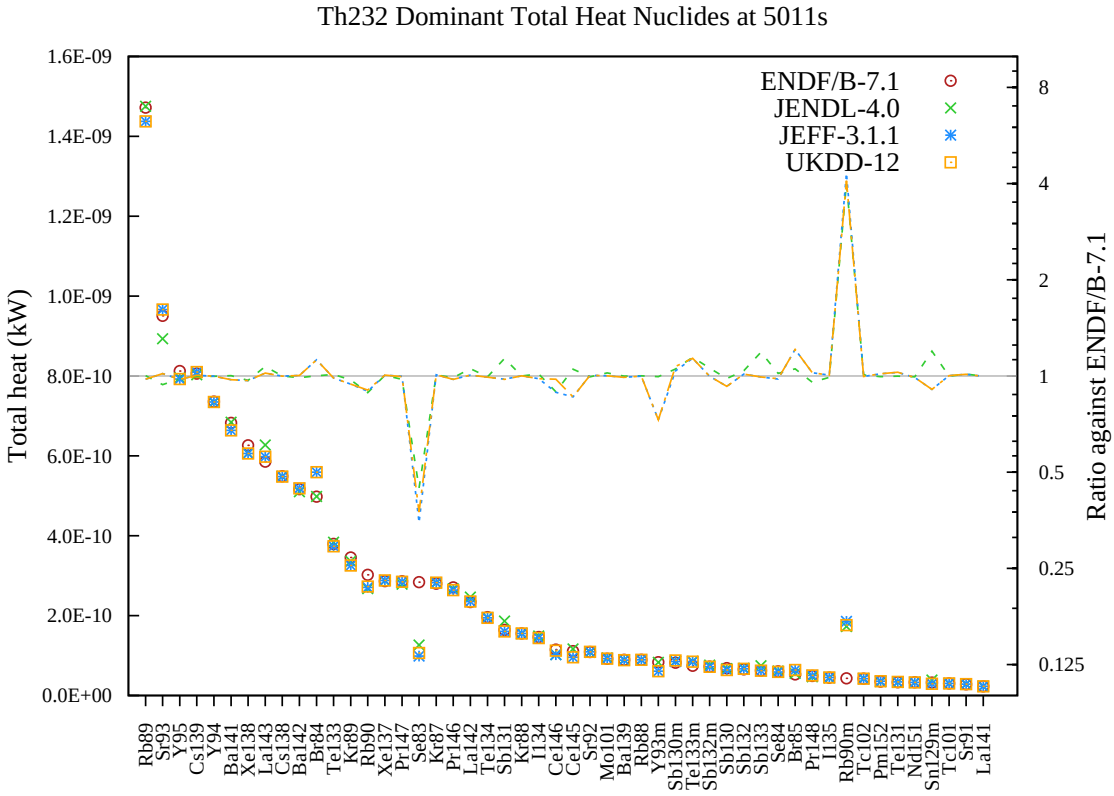

Figure 12: Total heat (in kW) decay data comparison for Th232 fission pulse after 5011s cooling.

Table 12: Total heat (in kW) decay data comparison for Th232 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb89	10.9	1.47E-09	1.48E-09	1.44E-09	1.44E-09
Sr93	7.1	9.50E-10	8.93E-10	9.66E-10	9.66E-10
Y95	6.0	8.12E-10	7.95E-10	7.92E-10	7.92E-10
Cs139	6.0	8.06E-10	8.03E-10	8.10E-10	8.10E-10
Y94	5.5	7.36E-10	7.34E-10	7.35E-10	7.35E-10
Ba141	5.1	6.82E-10	6.84E-10	6.64E-10	6.64E-10
Xe138	4.6	6.26E-10	6.06E-10	6.06E-10	6.06E-10
La143	4.3	5.86E-10	6.27E-10	5.98E-10	5.98E-10
Cs138	4.1	5.49E-10	5.48E-10	5.48E-10	5.48E-10
Ba142	3.8	5.17E-10	5.10E-10	5.19E-10	5.19E-10
Br84	3.7	4.98E-10	4.98E-10	5.59E-10	5.59E-10
Te133	2.8	3.80E-10	3.84E-10	3.74E-10	3.74E-10
Kr89	2.6	3.46E-10	3.36E-10	3.26E-10	3.26E-10
Rb90	2.2	3.02E-10	2.68E-10	2.71E-10	2.73E-10
Xe137	2.1	2.86E-10	2.88E-10	2.88E-10	2.88E-10
Pr147	2.1	2.86E-10	2.79E-10	2.85E-10	2.85E-10
Se83	2.1	2.84E-10	1.27E-10	9.88E-11	1.06E-10

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Kr87	2.1	2.80E-10	2.82E-10	2.82E-10	2.82E-10
Pr146	2.0	2.70E-10	2.67E-10	2.64E-10	2.64E-10
La142	1.7	2.34E-10	2.46E-10	2.35E-10	2.35E-10
Te134	1.5	1.96E-10	1.95E-10	1.94E-10	1.94E-10
Sb131	1.2	1.64E-10	1.86E-10	1.61E-10	1.60E-10
Kr88	1.2	1.55E-10	1.55E-10	1.55E-10	1.55E-10
I134	1.1	1.47E-10	1.49E-10	1.44E-10	1.44E-10
Ce146	0.9	1.15E-10	1.02E-10	1.02E-10	1.12E-10
Ce145	0.8	1.11E-10	1.17E-10	9.56E-11	9.56E-11
Sr92	0.8	1.09E-10	1.08E-10	1.09E-10	1.09E-10
Mo101	0.7	9.20E-11	9.41E-11	9.22E-11	9.22E-11
Ba139	0.7	8.96E-11	8.95E-11	8.87E-11	8.87E-11
Rb88	0.7	8.94E-11	8.94E-11	8.93E-11	8.93E-11
Y93m	0.6	8.32E-11	8.28E-11	6.07E-11	6.07E-11
Sb130m	0.6	8.19E-11	8.61E-11	8.50E-11	8.78E-11
Te133m	0.6	7.46E-11	8.54E-11	8.48E-11	8.48E-11
Sb132m	0.5	7.21E-11	7.63E-11	7.19E-11	7.19E-11
Sb130	0.5	6.86E-11	6.73E-11	6.37E-11	6.37E-11
Sb132	0.5	6.57E-11	6.82E-11	6.66E-11	6.66E-11
Sb133	0.5	6.27E-11	7.45E-11	6.23E-11	6.23E-11
Se84	0.4	6.02E-11	6.14E-11	5.89E-11	5.91E-11
Br85	0.4	5.26E-11	5.53E-11	6.36E-11	6.36E-11
Pr148	0.4	4.89E-11	4.68E-11	5.01E-11	5.01E-11
I135	0.3	4.49E-11	4.44E-11	4.51E-11	4.51E-11
Rb90m	0.3	4.31E-11	1.73E-10	1.86E-10	1.76E-10
Tc102	0.3	4.21E-11	4.24E-11	4.19E-11	4.19E-11
Pm152	0.3	3.50E-11	3.49E-11	3.56E-11	3.56E-11
Te131	0.2	3.32E-11	3.32E-11	3.40E-11	3.41E-11
Nd151	0.2	3.30E-11	3.28E-11	3.26E-11	3.26E-11
Sn129m	0.2	3.26E-11	3.89E-11	2.96E-11	2.96E-11
Tc101	0.2	3.02E-11	3.02E-11	3.03E-11	3.03E-11
Sr91	0.2	2.80E-11	2.84E-11	2.83E-11	2.83E-11
La141	0.2	2.30E-11	2.30E-11	2.29E-11	2.29E-11

1.5 10000s after pulse

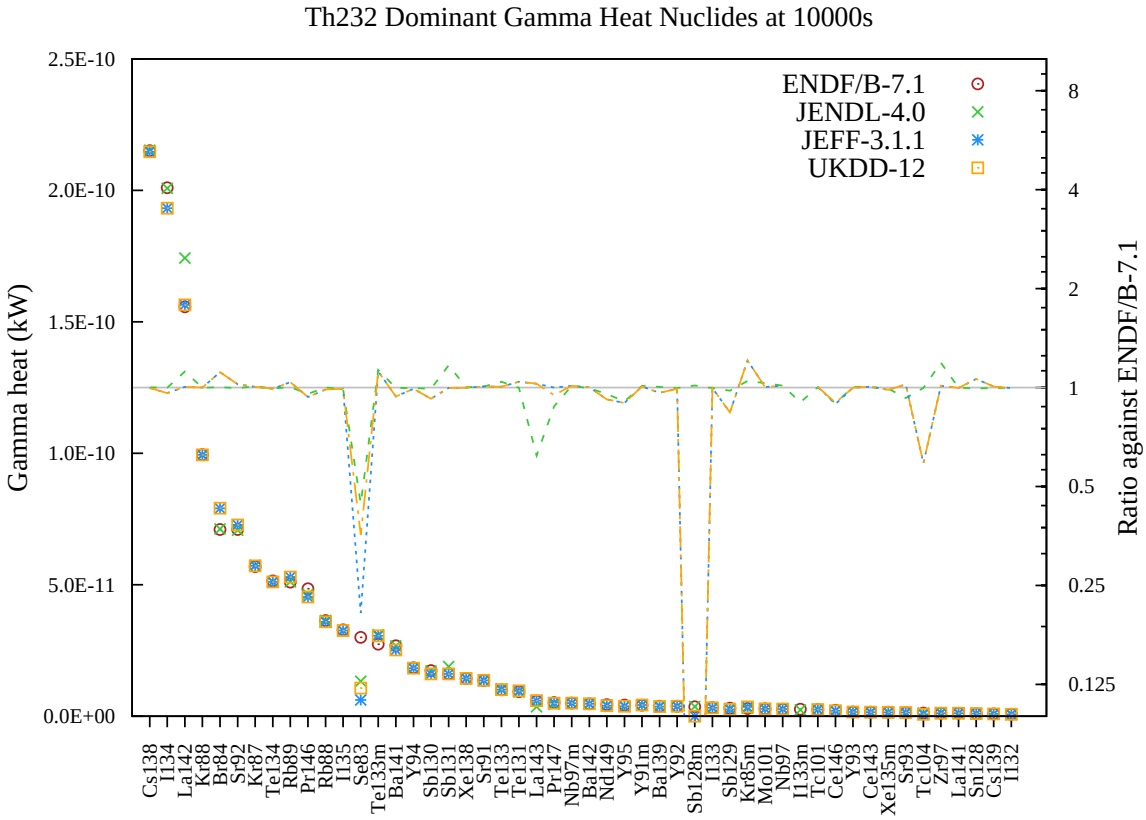

Figure 13: Gamma heat (in kW) decay data comparison for Th232 fission pulse after 10000s cooling.

Table 13: Gamma heat (in kW) decay data comparison for Th232 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	15.8	2.15E-10	2.15E-10	2.15E-10	2.15E-10
I134	14.8	2.01E-10	2.01E-10	1.93E-10	1.93E-10
La142	11.5	1.56E-10	1.74E-10	1.56E-10	1.56E-10
Kr88	7.3	9.94E-11	9.93E-11	9.94E-11	9.94E-11
Br84	5.2	7.10E-11	7.12E-11	7.91E-11	7.91E-11
Sr92	5.2	7.10E-11	7.08E-11	7.27E-11	7.27E-11
Kr87	4.2	5.69E-11	5.74E-11	5.72E-11	5.72E-11
Te134	3.8	5.15E-11	5.12E-11	5.10E-11	5.10E-11
Rb89	3.8	5.10E-11	5.11E-11	5.29E-11	5.29E-11
Pr146	3.6	4.85E-11	4.64E-11	4.53E-11	4.53E-11
Rb88	2.7	3.64E-11	3.64E-11	3.59E-11	3.59E-11
I135	2.4	3.28E-11	3.25E-11	3.26E-11	3.26E-11
Se83	2.2	3.00E-11	1.33E-11	6.18E-12	1.07E-11

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te133m	2.0	2.74E-11	3.10E-11	3.06E-11	3.06E-11
Ba141	2.0	2.68E-11	2.67E-11	2.52E-11	2.52E-11
Y94	1.4	1.84E-11	1.84E-11	1.83E-11	1.83E-11
Sb130	1.3	1.74E-11	1.72E-11	1.61E-11	1.61E-11
Sb131	1.2	1.61E-11	1.89E-11	1.61E-11	1.61E-11
Xe138	1.1	1.44E-11	1.44E-11	1.43E-11	1.43E-11
Sr91	1.0	1.35E-11	1.36E-11	1.36E-11	1.36E-11
Te133	0.7	1.00E-11	1.04E-11	1.01E-11	1.01E-11
Te131	0.7	9.28E-12	9.26E-12	9.66E-12	9.66E-12
La143	0.4	5.76E-12	3.58E-12	5.92E-12	5.92E-12
Pr147	0.4	5.22E-12	4.57E-12	5.21E-12	4.95E-12
Nb97m	0.4	4.95E-12	5.01E-12	5.01E-12	5.01E-12
Ba142	0.3	4.73E-12	4.71E-12	4.74E-12	4.74E-12
Nd149	0.3	4.36E-12	4.16E-12	4.01E-12	4.01E-12
Y95	0.3	4.24E-12	3.85E-12	3.80E-12	3.80E-12
Y91m	0.3	4.22E-12	4.27E-12	4.25E-12	4.25E-12
Ba139	0.3	3.80E-12	3.82E-12	3.67E-12	3.67E-12
Y92	0.3	3.79E-12	3.78E-12	3.76E-12	3.76E-12
Sb128m	0.3	3.60E-12	3.65E-12	1.15E-14	1.15E-14
I133	0.2	3.23E-12	3.22E-12	3.22E-12	3.22E-12
Sb129	0.2	3.07E-12	3.01E-12	2.58E-12	2.58E-12
Kr85m	0.2	2.93E-12	3.06E-12	3.54E-12	3.54E-12
Mo101	0.2	2.79E-12	2.87E-12	2.80E-12	2.80E-12
Nb97	0.2	2.66E-12	2.70E-12	2.70E-12	2.70E-12
I133m	0.2	2.66E-12	—	—	—
Tc101	0.2	2.52E-12	2.53E-12	2.54E-12	2.54E-12
Ce146	0.2	2.29E-12	2.05E-12	2.04E-12	2.06E-12
Y93	0.1	1.60E-12	1.61E-12	1.60E-12	1.60E-12
Ce143	0.1	1.51E-12	1.51E-12	1.52E-12	1.52E-12
Xe135m	0.1	1.50E-12	1.49E-12	1.48E-12	1.48E-12
Sr93	0.1	1.35E-12	1.26E-12	1.38E-12	1.38E-12
Tc104	0.1	1.22E-12	1.22E-12	7.19E-13	7.19E-13
Zr97	0.1	1.14E-12	1.35E-12	1.15E-12	1.15E-12
La141	0.1	1.12E-12	1.12E-12	1.12E-12	1.12E-12
Sn128	0.1	9.58E-13	9.52E-13	1.02E-12	1.02E-12
Cs139	0.1	8.37E-13	8.34E-13	8.43E-13	8.43E-13
I132	0.1	7.35E-13	7.34E-13	7.32E-13	7.32E-13

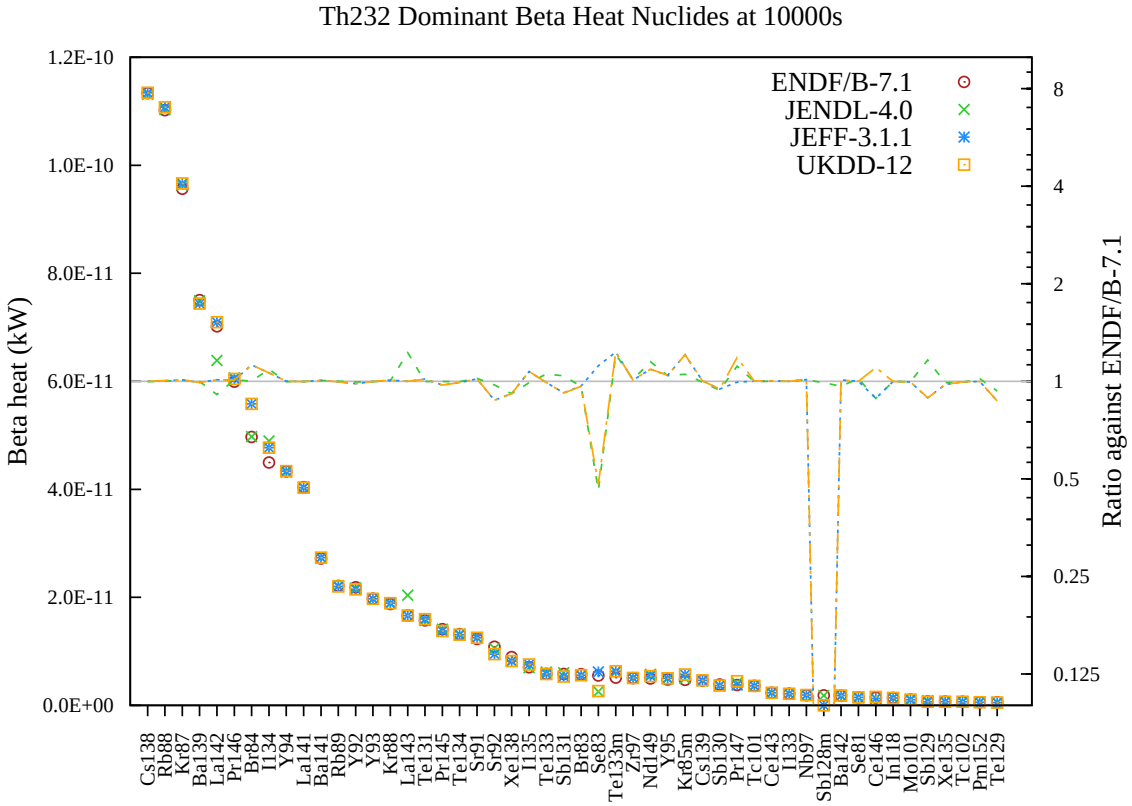

Figure 14: Beta heat (in kW) decay data comparison for Th232 fission pulse after 10000s cooling.

Table 14: Beta heat (in kW) decay data comparison for Th232 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	11.3	1.13E-10	1.13E-10	1.13E-10	1.13E-10
Rb88	11.0	1.10E-10	1.10E-10	1.11E-10	1.11E-10
Kr87	9.6	9.56E-11	9.63E-11	9.66E-11	9.66E-11
Ba139	7.5	7.50E-11	7.49E-11	7.44E-11	7.44E-11
La142	7.0	7.02E-11	6.39E-11	7.09E-11	7.09E-11
Pr146	6.0	5.99E-11	6.06E-11	6.05E-11	6.05E-11
Br84	5.0	4.97E-11	4.98E-11	5.58E-11	5.58E-11
I134	4.5	4.50E-11	4.90E-11	4.77E-11	4.77E-11
Y94	4.3	4.33E-11	4.32E-11	4.34E-11	4.34E-11
La141	4.0	4.04E-11	4.04E-11	4.03E-11	4.03E-11
Ba141	2.7	2.72E-11	2.74E-11	2.73E-11	2.73E-11
Rb89	2.2	2.21E-11	2.21E-11	2.20E-11	2.20E-11
Y92	2.2	2.19E-11	2.17E-11	2.15E-11	2.15E-11
Y93	2.0	1.98E-11	1.97E-11	1.97E-11	1.97E-11
Kr88	1.9	1.88E-11	1.88E-11	1.89E-11	1.89E-11
La143	1.7	1.66E-11	2.04E-11	1.66E-11	1.66E-11

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te131	1.6	1.57E-11	1.57E-11	1.60E-11	1.60E-11
Pr145	1.4	1.41E-11	1.41E-11	1.37E-11	1.37E-11
Te134	1.3	1.32E-11	1.32E-11	1.31E-11	1.31E-11
Sr91	1.2	1.23E-11	1.25E-11	1.25E-11	1.25E-11
Sr92	1.1	1.08E-11	1.06E-11	9.47E-12	9.47E-12
Xe138	0.9	8.93E-12	8.18E-12	8.19E-12	8.19E-12
I135	0.7	7.05E-12	6.98E-12	7.56E-12	7.56E-12
Te133	0.6	5.84E-12	6.15E-12	5.79E-12	5.79E-12
Sb131	0.6	5.81E-12	6.04E-12	5.35E-12	5.34E-12
Br83	0.6	5.77E-12	5.56E-12	5.58E-12	5.57E-12
Se83	0.6	5.53E-12	2.55E-12	6.18E-12	2.66E-12
Te133m	0.5	5.13E-12	6.21E-12	6.31E-12	6.31E-12
Zr97	0.5	5.04E-12	5.10E-12	5.08E-12	5.08E-12
Nd149	0.5	4.99E-12	5.74E-12	5.44E-12	5.44E-12
Y95	0.5	4.79E-12	4.99E-12	5.00E-12	5.00E-12
Kr85m	0.5	4.73E-12	4.98E-12	5.71E-12	5.71E-12
Cs139	0.5	4.60E-12	4.57E-12	4.62E-12	4.62E-12
Sb130	0.4	3.88E-12	3.64E-12	3.67E-12	3.67E-12
Pr147	0.4	3.78E-12	4.21E-12	3.75E-12	4.48E-12
Tc101	0.4	3.61E-12	3.59E-12	3.61E-12	3.61E-12
Ce143	0.2	2.33E-12	2.34E-12	2.34E-12	2.34E-12
I133	0.2	2.15E-12	2.15E-12	2.15E-12	2.15E-12
Nb97	0.2	1.88E-12	1.90E-12	1.90E-12	1.90E-12
Sb128m	0.2	1.84E-12	1.82E-12	5.78E-15	5.78E-15
Ba142	0.2	1.79E-12	1.73E-12	1.81E-12	1.81E-12
Se81	0.1	1.46E-12	1.49E-12	1.46E-12	1.46E-12
Ce146	0.1	1.43E-12	1.27E-12	1.27E-12	1.58E-12
In118	0.1	1.37E-12	1.37E-12	1.37E-12	1.37E-12
Mo101	0.1	1.07E-12	1.07E-12	1.07E-12	1.07E-12
Sb129	0.1	7.46E-13	8.69E-13	6.63E-13	6.63E-13
Xe135	0.1	6.99E-13	6.92E-13	6.82E-13	6.82E-13
Tc102	0.1	6.69E-13	6.65E-13	6.66E-13	6.66E-13
Pm152	0.1	5.81E-13	5.92E-13	5.80E-13	5.80E-13
Te129	0.1	5.78E-13	5.40E-13	5.03E-13	5.03E-13

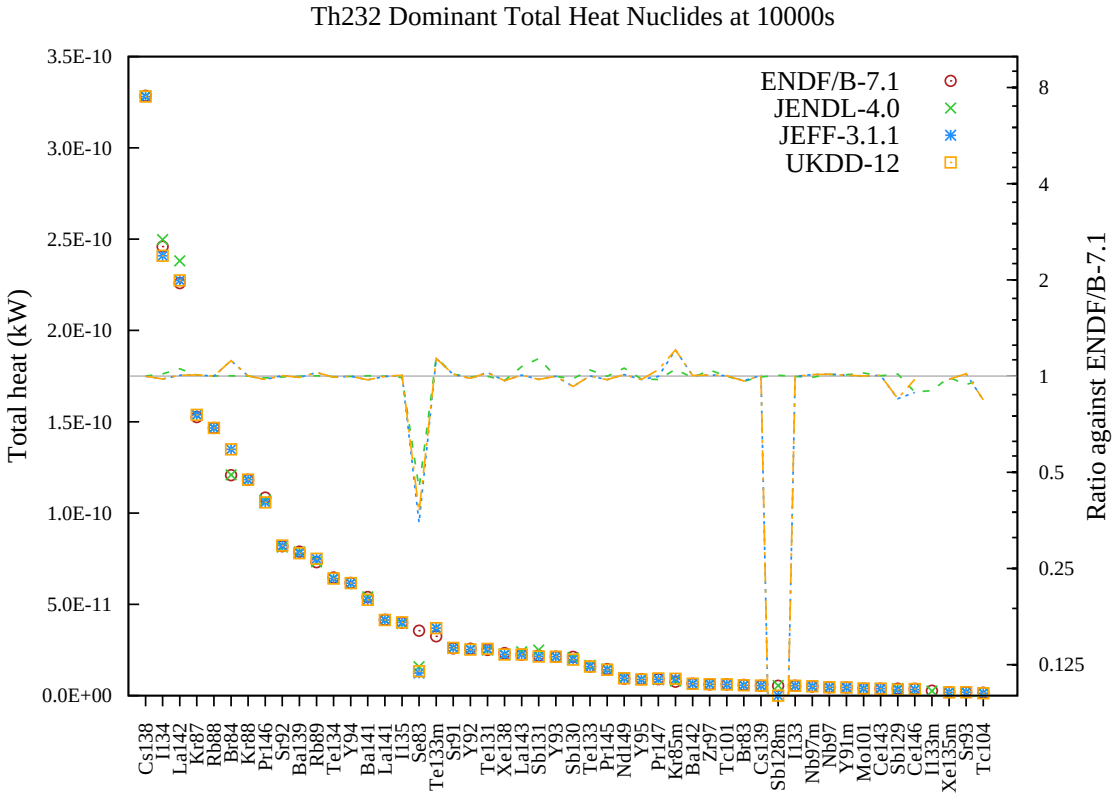

Figure 15: Total heat (in kW) decay data comparison for Th232 fission pulse after 10000s cooling.

Table 15: Total heat (in kW) decay data comparison for Th232 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	13.9	3.28E-10	3.28E-10	3.28E-10	3.28E-10
I134	10.4	2.46E-10	2.50E-10	2.41E-10	2.41E-10
La142	9.6	2.26E-10	2.38E-10	2.27E-10	2.27E-10
Kr87	6.5	1.53E-10	1.54E-10	1.54E-10	1.54E-10
Rb88	6.2	1.47E-10	1.47E-10	1.47E-10	1.47E-10
Br84	5.1	1.21E-10	1.21E-10	1.35E-10	1.35E-10
Kr88	5.0	1.18E-10	1.18E-10	1.18E-10	1.18E-10
Pr146	4.6	1.08E-10	1.07E-10	1.06E-10	1.06E-10
Sr92	3.5	8.18E-11	8.13E-11	8.22E-11	8.22E-11
Ba139	3.3	7.88E-11	7.87E-11	7.80E-11	7.80E-11
Rb89	3.1	7.31E-11	7.33E-11	7.50E-11	7.50E-11
Te134	2.7	6.47E-11	6.43E-11	6.41E-11	6.41E-11
Y94	2.6	6.17E-11	6.16E-11	6.17E-11	6.17E-11
Ba141	2.3	5.40E-11	5.41E-11	5.25E-11	5.25E-11
La141	1.8	4.15E-11	4.15E-11	4.14E-11	4.14E-11
I135	1.7	3.99E-11	3.95E-11	4.01E-11	4.01E-11
Se83	1.5	3.55E-11	1.58E-11	1.24E-11	1.34E-11

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te133m	1.4	3.25E-11	3.72E-11	3.69E-11	3.69E-11
Sr91	1.1	2.58E-11	2.62E-11	2.62E-11	2.62E-11
Y92	1.1	2.57E-11	2.55E-11	2.52E-11	2.52E-11
Te131	1.1	2.50E-11	2.50E-11	2.56E-11	2.56E-11
Xe138	1.0	2.33E-11	2.26E-11	2.25E-11	2.25E-11
La143	0.9	2.24E-11	2.40E-11	2.26E-11	2.26E-11
Sb131	0.9	2.20E-11	2.49E-11	2.15E-11	2.14E-11
Y93	0.9	2.14E-11	2.13E-11	2.13E-11	2.13E-11
Sb130	0.9	2.13E-11	2.09E-11	1.97E-11	1.97E-11
Te133	0.7	1.59E-11	1.66E-11	1.59E-11	1.59E-11
Pr145	0.6	1.45E-11	1.45E-11	1.41E-11	1.41E-11
Nd149	0.4	9.35E-12	9.90E-12	9.45E-12	9.45E-12
Y95	0.4	9.03E-12	8.84E-12	8.80E-12	8.80E-12
Pr147	0.4	8.99E-12	8.78E-12	8.97E-12	9.42E-12
Kr85m	0.3	7.66E-12	8.04E-12	9.25E-12	9.25E-12
Ba142	0.3	6.52E-12	6.44E-12	6.55E-12	6.55E-12
Zr97	0.3	6.18E-12	6.46E-12	6.24E-12	6.24E-12
Tc101	0.3	6.13E-12	6.12E-12	6.15E-12	6.15E-12
Br83	0.2	5.89E-12	5.68E-12	5.70E-12	5.69E-12
Cs139	0.2	5.43E-12	5.40E-12	5.46E-12	5.46E-12
Sb128m	0.2	5.43E-12	5.47E-12	1.73E-14	1.73E-14
I133	0.2	5.39E-12	5.38E-12	5.37E-12	5.37E-12
Nb97m	0.2	5.06E-12	5.01E-12	5.11E-12	5.11E-12
Nb97	0.2	4.54E-12	4.60E-12	4.60E-12	4.60E-12
Y91m	0.2	4.44E-12	4.49E-12	4.47E-12	4.47E-12
Mo101	0.2	3.86E-12	3.94E-12	3.86E-12	3.86E-12
Ce143	0.2	3.84E-12	3.85E-12	3.86E-12	3.86E-12
Sb129	0.2	3.82E-12	3.87E-12	3.24E-12	3.24E-12
Ce146	0.2	3.72E-12	3.32E-12	3.31E-12	3.64E-12
I133m	0.1	2.75E-12	2.47E-12	—	—
Xe135m	0.1	1.85E-12	1.83E-12	1.81E-12	1.81E-12
Sr93	0.1	1.85E-12	1.74E-12	1.88E-12	1.88E-12
Tc104	0.1	1.57E-12	1.54E-12	1.32E-12	1.32E-12

2 Decay data comparison for ^{233}U 400 keV pulse decay heat

2.1 10s after pulse

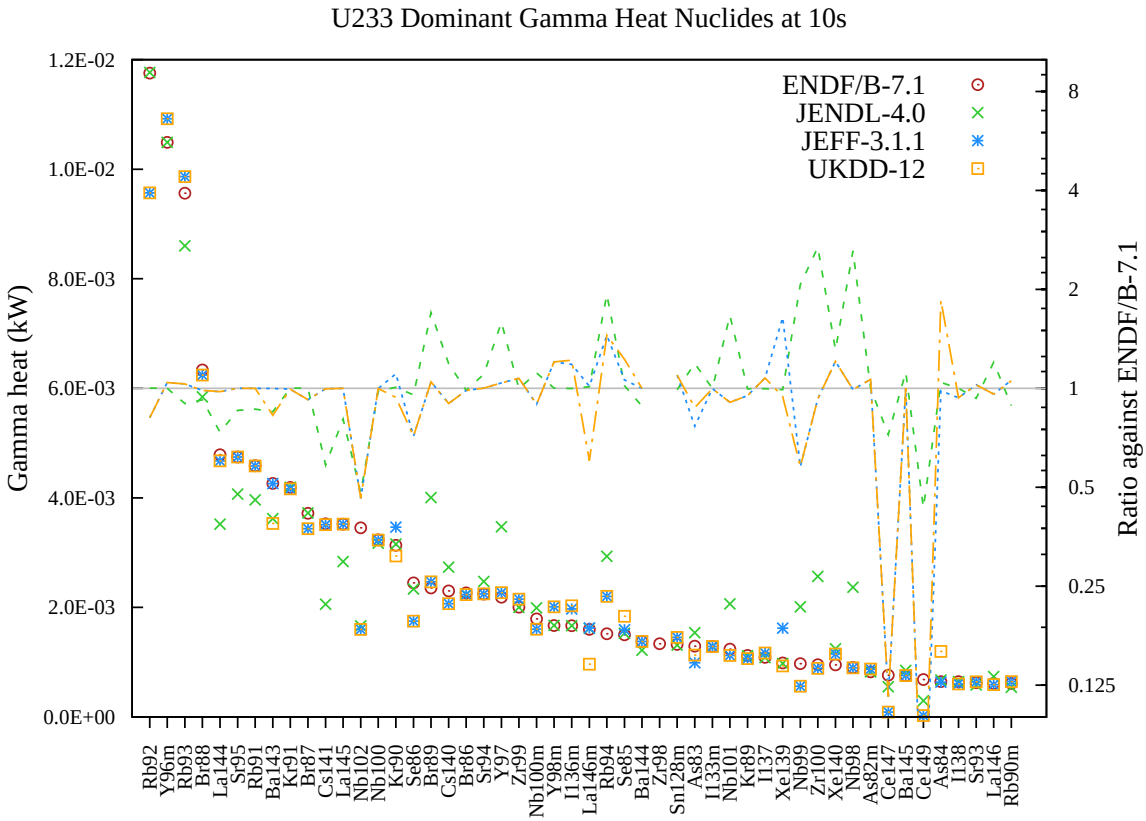

Figure 16: Gamma heat (in kW) decay data comparison for U233 fission pulse after 10s cooling.

Table 16: Gamma heat (in kW) decay data comparison for U233 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb92	8.3	1.18E-02	1.18E-02	9.57E-03	9.57E-03
Y96m	7.4	1.05E-02	1.05E-02	1.09E-02	1.09E-02
Rb93	6.7	9.56E-03	8.60E-03	9.86E-03	9.86E-03
Br88	4.5	6.34E-03	5.84E-03	6.24E-03	6.24E-03
La144	3.4	4.79E-03	3.52E-03	4.68E-03	4.68E-03
Sr95	3.3	4.74E-03	4.07E-03	4.75E-03	4.75E-03
Rb91	3.2	4.59E-03	3.96E-03	4.58E-03	4.58E-03
Ba143	3.0	4.26E-03	3.62E-03	4.26E-03	3.53E-03
Kr91	2.9	4.19E-03	4.19E-03	4.16E-03	4.16E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Br87	2.6	3.72E-03	3.73E-03	3.44E-03	3.44E-03
Cs141	2.5	3.53E-03	2.06E-03	3.51E-03	3.51E-03
La145	2.5	3.52E-03	2.84E-03	3.52E-03	3.52E-03
Nb102	2.4	3.45E-03	1.66E-03	1.60E-03	1.60E-03
Nb100	2.3	3.23E-03	3.17E-03	3.23E-03	3.23E-03
Kr90	2.2	3.13E-03	3.16E-03	3.47E-03	2.94E-03
Se86	1.7	2.45E-03	2.34E-03	1.75E-03	1.75E-03
Br89	1.7	2.36E-03	4.00E-03	2.47E-03	2.47E-03
Cs140	1.6	2.30E-03	2.73E-03	2.07E-03	2.07E-03
Br86	1.6	2.27E-03	2.24E-03	2.23E-03	2.23E-03
Sr94	1.6	2.24E-03	2.47E-03	2.25E-03	2.25E-03
Y97	1.5	2.18E-03	3.47E-03	2.27E-03	2.27E-03
Zr99	1.4	2.00E-03	2.00E-03	2.15E-03	2.15E-03
Nb100m	1.3	1.79E-03	1.99E-03	1.60E-03	1.60E-03
Y98m	1.2	1.67E-03	1.67E-03	2.01E-03	2.01E-03
I136m	1.2	1.67E-03	1.67E-03	1.97E-03	2.03E-03
La146m	1.1	1.60E-03	1.62E-03	1.62E-03	9.64E-04
Rb94	1.1	1.52E-03	2.93E-03	2.20E-03	2.20E-03
Se85	1.1	1.50E-03	1.53E-03	1.59E-03	1.84E-03
Ba144	1.0	1.38E-03	1.22E-03	1.38E-03	1.38E-03
Zr98	0.9	1.34E-03	—	—	—
Sn128m	0.9	1.32E-03	1.31E-03	1.45E-03	1.45E-03
As83	0.9	1.29E-03	1.54E-03	9.90E-04	1.13E-03
I133m	0.9	1.29E-03	1.29E-03	1.29E-03	1.29E-03
Nb101	0.9	1.24E-03	2.06E-03	1.12E-03	1.12E-03
Kr89	0.8	1.12E-03	1.12E-03	1.07E-03	1.07E-03
I137	0.8	1.09E-03	1.08E-03	1.17E-03	1.17E-03
Xe139	0.7	9.87E-04	9.78E-04	1.62E-03	9.31E-04
Nb99	0.7	9.73E-04	2.01E-03	5.62E-04	5.62E-04
Zr100	0.7	9.55E-04	2.57E-03	8.88E-04	8.88E-04
Xe140	0.7	9.52E-04	1.25E-03	1.15E-03	1.15E-03
Nb98	0.6	9.04E-04	2.37E-03	8.97E-04	8.97E-04
As82m	0.6	8.22E-04	8.23E-04	8.76E-04	8.76E-04
Ce147	0.5	7.62E-04	5.51E-04	8.79E-05	8.79E-05
Ba145	0.5	7.57E-04	8.48E-04	7.58E-04	7.58E-04
Ce149	0.5	6.83E-04	2.96E-04	2.39E-05	2.39E-05
As84	0.5	6.46E-04	6.73E-04	6.34E-04	1.20E-03
I138	0.5	6.45E-04	6.46E-04	6.04E-04	6.04E-04
Sr93	0.4	6.26E-04	5.83E-04	6.41E-04	6.41E-04
La146	0.4	6.14E-04	7.36E-04	5.89E-04	5.89E-04
Rb90m	0.4	6.12E-04	5.42E-04	6.48E-04	6.45E-04

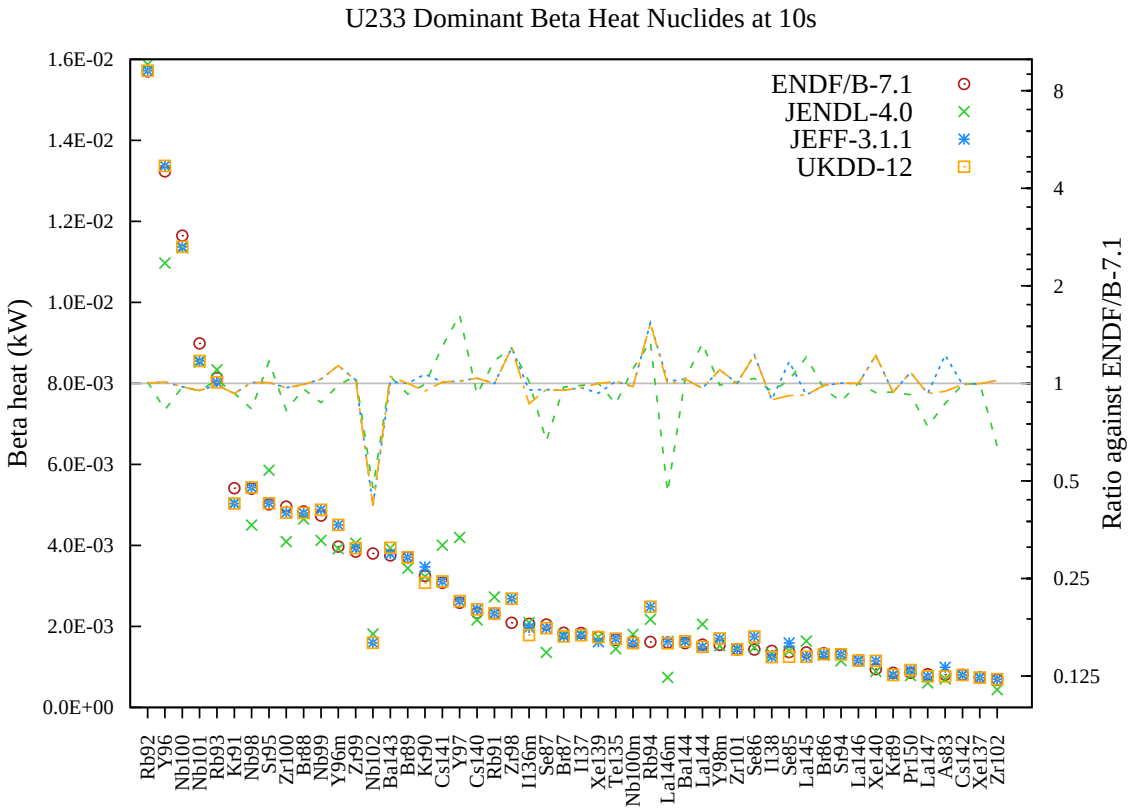

Figure 17: Beta heat (in kW) decay data comparison for U233 fission pulse after 10s cooling.

Table 17: Beta heat (in kW) decay data comparison for U233 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb92	8.9	1.57E-02	1.59E-02	1.57E-02	1.57E-02
Y96	7.5	1.32E-02	1.10E-02	1.34E-02	1.34E-02
Nb100	6.6	1.16E-02	1.13E-02	1.14E-02	1.14E-02
Nb101	5.1	8.99E-03	8.52E-03	8.55E-03	8.55E-03
Rb93	4.6	8.13E-03	8.34E-03	8.03E-03	8.03E-03
Kr91	3.1	5.41E-03	5.05E-03	5.04E-03	5.04E-03
Nb98	3.0	5.40E-03	4.50E-03	5.43E-03	5.43E-03
Sr95	2.8	5.01E-03	5.86E-03	5.04E-03	5.04E-03
Zr100	2.8	4.96E-03	4.09E-03	4.81E-03	4.81E-03
Br88	2.7	4.84E-03	4.65E-03	4.80E-03	4.80E-03
Nb99	2.7	4.73E-03	4.13E-03	4.88E-03	4.88E-03
Y96m	2.2	3.97E-03	3.92E-03	4.51E-03	4.51E-03
Zr99	2.2	3.84E-03	4.05E-03	3.93E-03	3.93E-03
Nb102	2.1	3.80E-03	1.81E-03	1.60E-03	1.60E-03
Ba143	2.1	3.75E-03	3.94E-03	3.80E-03	3.94E-03
Br89	2.1	3.71E-03	3.43E-03	3.71E-03	3.71E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Kr90	1.8	3.25E-03	3.23E-03	3.47E-03	3.08E-03
Cs141	1.7	3.08E-03	4.00E-03	3.11E-03	3.11E-03
Y97	1.5	2.58E-03	4.20E-03	2.62E-03	2.62E-03
Cs140	1.3	2.34E-03	2.16E-03	2.42E-03	2.42E-03
Rb91	1.3	2.32E-03	2.73E-03	2.32E-03	2.32E-03
Zr98	1.2	2.09E-03	2.69E-03	2.69E-03	2.69E-03
I136m	1.2	2.06E-03	2.09E-03	1.97E-03	1.79E-03
Se87	1.2	2.05E-03	1.36E-03	1.96E-03	1.96E-03
Br87	1.0	1.84E-03	1.80E-03	1.75E-03	1.75E-03
I137	1.0	1.84E-03	1.81E-03	1.78E-03	1.78E-03
Xe139	1.0	1.74E-03	1.74E-03	1.62E-03	1.74E-03
Te135	0.9	1.67E-03	1.45E-03	1.70E-03	1.70E-03
Nb100m	0.9	1.63E-03	1.80E-03	1.59E-03	1.59E-03
Rb94	0.9	1.62E-03	2.18E-03	2.49E-03	2.49E-03
La146m	0.9	1.60E-03	7.38E-04	1.62E-03	1.58E-03
Ba144	0.9	1.59E-03	1.63E-03	1.63E-03	1.63E-03
La144	0.9	1.55E-03	2.06E-03	1.49E-03	1.49E-03
Y98m	0.9	1.54E-03	1.52E-03	1.70E-03	1.70E-03
Zr101	0.8	1.43E-03	1.45E-03	1.44E-03	1.44E-03
Se86	0.8	1.43E-03	1.48E-03	1.75E-03	1.75E-03
I138	0.8	1.39E-03	1.32E-03	1.24E-03	1.24E-03
Se85	0.8	1.36E-03	1.40E-03	1.59E-03	1.25E-03
La145	0.8	1.36E-03	1.64E-03	1.25E-03	1.25E-03
Br86	0.8	1.34E-03	1.29E-03	1.32E-03	1.32E-03
Sr94	0.7	1.31E-03	1.15E-03	1.31E-03	1.31E-03
La146	0.7	1.16E-03	1.16E-03	1.16E-03	1.16E-03
Xe140	0.5	9.43E-04	8.83E-04	1.15E-03	1.15E-03
Kr89	0.5	8.54E-04	8.03E-04	8.01E-04	8.01E-04
Pr150	0.5	8.54E-04	7.87E-04	9.24E-04	9.24E-04
La147	0.5	8.22E-04	6.06E-04	7.64E-04	7.64E-04
As83	0.5	8.10E-04	7.02E-04	9.90E-04	7.66E-04
Cs142	0.5	8.04E-04	7.99E-04	7.98E-04	7.98E-04
Xe137	0.4	7.40E-04	7.40E-04	7.38E-04	7.38E-04
Zr102	0.4	6.85E-04	4.38E-04	6.99E-04	6.99E-04

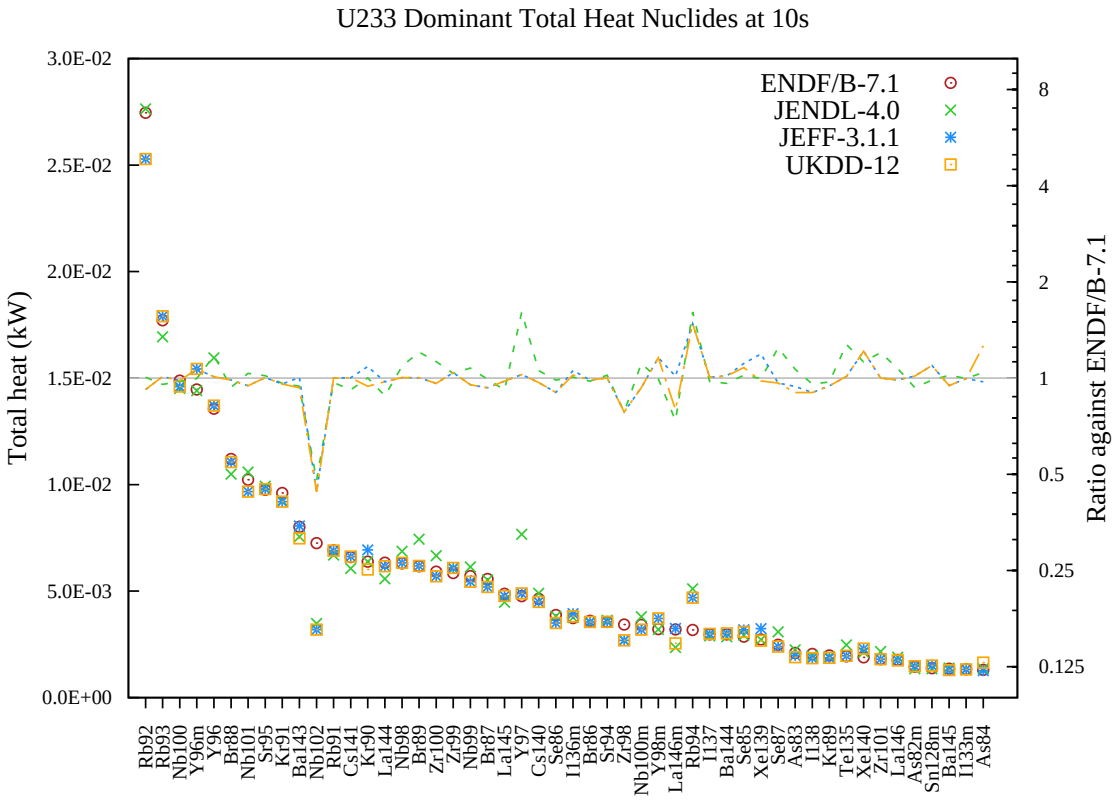

Figure 18: Total heat (in kW) decay data comparison for U233 fission pulse after 10s cooling.

Table 18: Total heat (in kW) decay data comparison for U233 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb92	8.6	2.75E-02	2.76E-02	2.53E-02	2.53E-02
Rb93	5.5	1.77E-02	1.69E-02	1.79E-02	1.79E-02
Nb100	4.7	1.49E-02	1.45E-02	1.46E-02	1.46E-02
Y96m	4.5	1.45E-02	1.44E-02	1.54E-02	1.54E-02
Y96	4.2	1.36E-02	1.59E-02	1.37E-02	1.37E-02
Br88	3.5	1.12E-02	1.05E-02	1.11E-02	1.11E-02
Nb101	3.2	1.02E-02	1.06E-02	9.67E-03	9.67E-03
Sr95	3.1	9.76E-03	9.92E-03	9.79E-03	9.79E-03
Kr91	3.0	9.60E-03	9.24E-03	9.20E-03	9.20E-03
Ba143	2.5	8.02E-03	7.56E-03	8.06E-03	7.47E-03
Nb102	2.3	7.25E-03	3.47E-03	3.20E-03	3.20E-03
Rb91	2.2	6.91E-03	6.69E-03	6.90E-03	6.90E-03
Cs141	2.1	6.60E-03	6.06E-03	6.62E-03	6.62E-03
Kr90	2.0	6.38E-03	6.39E-03	6.93E-03	6.01E-03
La144	2.0	6.34E-03	5.58E-03	6.17E-03	6.17E-03
Nb98	2.0	6.30E-03	6.87E-03	6.33E-03	6.33E-03
Br89	1.9	6.16E-03	7.44E-03	6.18E-03	6.18E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Zr100	1.9	5.91E-03	6.66E-03	5.69E-03	5.69E-03
Zr99	1.8	5.85E-03	6.05E-03	6.08E-03	6.08E-03
Nb99	1.8	5.71E-03	6.14E-03	5.44E-03	5.44E-03
Br87	1.7	5.57E-03	5.52E-03	5.19E-03	5.19E-03
La145	1.5	4.88E-03	4.48E-03	4.77E-03	4.77E-03
Y97	1.5	4.77E-03	7.67E-03	4.89E-03	4.89E-03
Cs140	1.5	4.64E-03	4.90E-03	4.49E-03	4.49E-03
Se86	1.2	3.88E-03	3.82E-03	3.50E-03	3.50E-03
I136m	1.2	3.73E-03	3.76E-03	3.94E-03	3.82E-03
Br86	1.1	3.60E-03	3.53E-03	3.55E-03	3.55E-03
Sr94	1.1	3.55E-03	3.63E-03	3.56E-03	3.56E-03
Zr98	1.1	3.43E-03	2.69E-03	2.69E-03	2.69E-03
Nb100m	1.1	3.42E-03	3.80E-03	3.19E-03	3.19E-03
Y98m	1.0	3.21E-03	3.20E-03	3.72E-03	3.72E-03
La146m	1.0	3.20E-03	2.36E-03	3.25E-03	2.55E-03
Rb94	1.0	3.17E-03	5.11E-03	4.70E-03	4.70E-03
I137	0.9	2.97E-03	2.90E-03	2.99E-03	2.99E-03
Ba144	0.9	2.96E-03	2.85E-03	3.01E-03	3.01E-03
Se85	0.9	2.87E-03	2.93E-03	3.18E-03	3.09E-03
Xe139	0.9	2.73E-03	2.72E-03	3.24E-03	2.67E-03
Se87	0.8	2.48E-03	3.09E-03	2.39E-03	2.39E-03
As83	0.7	2.10E-03	2.24E-03	1.98E-03	1.90E-03
I138	0.6	2.05E-03	1.96E-03	1.85E-03	1.85E-03
Kr89	0.6	1.98E-03	1.92E-03	1.87E-03	1.87E-03
Te135	0.6	1.94E-03	2.47E-03	1.96E-03	1.96E-03
Xe140	0.6	1.89E-03	2.13E-03	2.30E-03	2.30E-03
Zr101	0.6	1.80E-03	2.16E-03	1.80E-03	1.80E-03
La146	0.6	1.77E-03	1.90E-03	1.75E-03	1.75E-03
As82m	0.5	1.46E-03	1.36E-03	1.48E-03	1.48E-03
Sn128m	0.4	1.38E-03	1.36E-03	1.51E-03	1.51E-03
Ba145	0.4	1.36E-03	1.39E-03	1.29E-03	1.29E-03
I133m	0.4	1.33E-03	1.33E-03	1.33E-03	1.33E-03
As84	0.4	1.30E-03	1.36E-03	1.27E-03	1.64E-03

2.2 100s after pulse

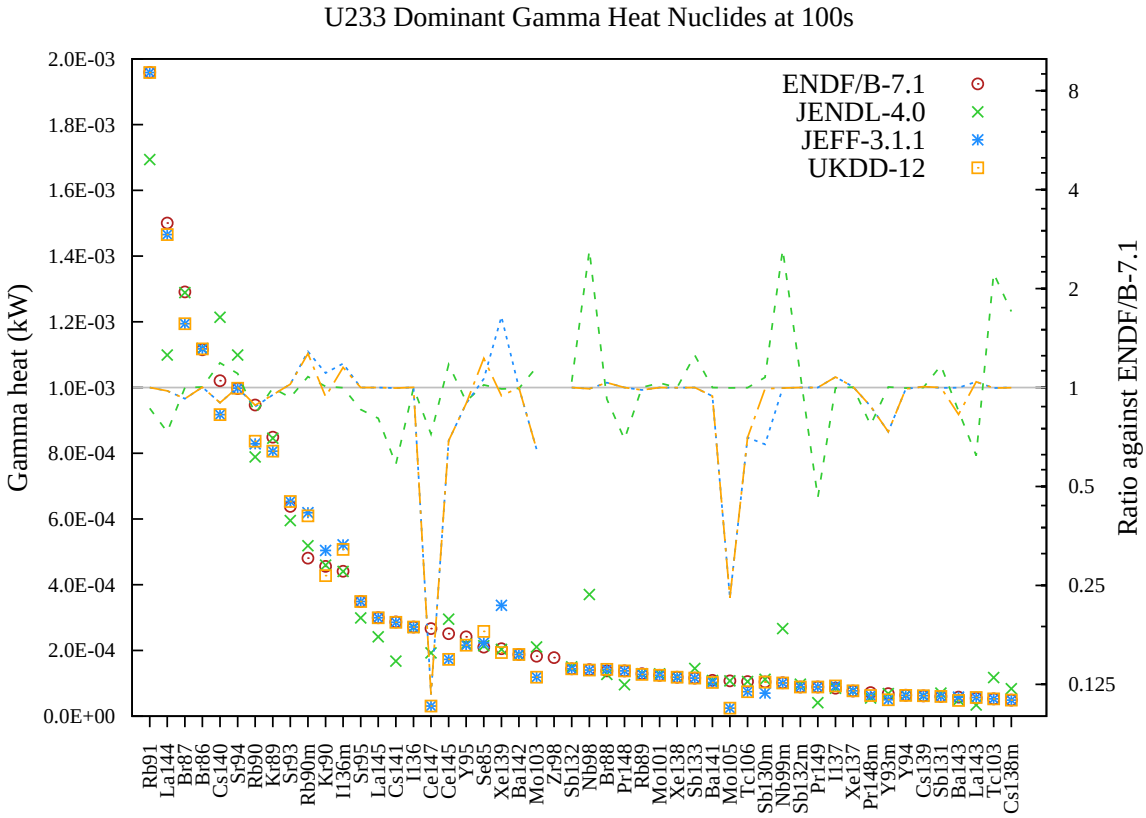

Figure 19: Gamma heat (in kW) decay data comparison for U233 fission pulse after 100s cooling.

Table 19: Gamma heat (in kW) decay data comparison for U233 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb91	10.7	1.96E-03	1.69E-03	1.96E-03	1.96E-03
La144	8.2	1.50E-03	1.10E-03	1.47E-03	1.47E-03
Br87	7.1	1.29E-03	1.29E-03	1.19E-03	1.19E-03
Br86	6.1	1.11E-03	1.12E-03	1.12E-03	1.12E-03
Cs140	5.6	1.02E-03	1.21E-03	9.18E-04	9.18E-04
Sr94	5.5	9.97E-04	1.10E-03	9.98E-04	9.98E-04
Rb90	5.2	9.47E-04	7.89E-04	8.29E-04	8.37E-04
Kr89	4.7	8.49E-04	8.46E-04	8.06E-04	8.06E-04
Sr93	3.5	6.38E-04	5.95E-04	6.53E-04	6.53E-04
Rb90m	2.6	4.81E-04	5.19E-04	6.19E-04	6.10E-04
Kr90	2.5	4.56E-04	4.59E-04	5.04E-04	4.27E-04
I136m	2.4	4.41E-04	4.41E-04	5.21E-04	5.07E-04
Sr95	1.9	3.49E-04	2.99E-04	3.49E-04	3.49E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La145	1.6	3.00E-04	2.42E-04	2.99E-04	2.99E-04
Cs141	1.6	2.87E-04	1.67E-04	2.85E-04	2.85E-04
I136	1.5	2.71E-04	2.70E-04	2.71E-04	2.71E-04
Ce147	1.5	2.66E-04	1.92E-04	3.11E-05	3.11E-05
Ce145	1.4	2.51E-04	2.95E-04	1.73E-04	1.73E-04
Y95	1.3	2.42E-04	2.19E-04	2.16E-04	2.16E-04
Se85	1.2	2.10E-04	2.14E-04	2.23E-04	2.58E-04
Xe139	1.1	2.05E-04	2.03E-04	3.37E-04	1.94E-04
Ba142	1.0	1.88E-04	1.87E-04	1.88E-04	1.88E-04
Mo103	1.0	1.83E-04	2.11E-04	1.19E-04	1.19E-04
Zr98	1.0	1.78E-04	—	—	—
Sb132	0.8	1.44E-04	1.50E-04	1.44E-04	1.44E-04
Nb98	0.8	1.42E-04	3.70E-04	1.40E-04	1.40E-04
Br88	0.8	1.38E-04	1.27E-04	1.43E-04	1.43E-04
Pr148	0.8	1.38E-04	9.58E-05	1.38E-04	1.38E-04
Rb89	0.7	1.29E-04	1.29E-04	1.27E-04	1.27E-04
Mo101	0.7	1.25E-04	1.29E-04	1.25E-04	1.25E-04
Xe138	0.7	1.19E-04	1.19E-04	1.19E-04	1.19E-04
Sb133	0.6	1.16E-04	1.45E-04	1.16E-04	1.16E-04
Ba141	0.6	1.09E-04	1.09E-04	1.02E-04	1.02E-04
Mo105	0.6	1.08E-04	1.07E-04	2.46E-05	2.46E-05
Tc106	0.6	1.05E-04	1.05E-04	7.42E-05	7.42E-05
Sb130m	0.6	1.04E-04	1.12E-04	7.01E-05	1.03E-04
Nb99m	0.6	1.01E-04	2.66E-04	1.01E-04	1.01E-04
Sb132m	0.5	8.90E-05	9.71E-05	8.89E-05	8.89E-05
Pr149	0.5	8.86E-05	4.10E-05	8.86E-05	8.86E-05
I137	0.5	8.54E-05	8.51E-05	9.18E-05	9.18E-05
Xe137	0.4	7.68E-05	7.69E-05	7.72E-05	7.72E-05
Pr148m	0.4	7.18E-05	5.53E-05	6.30E-05	6.30E-05
Y93m	0.4	6.84E-05	6.86E-05	5.02E-05	5.02E-05
Y94	0.4	6.41E-05	6.39E-05	6.34E-05	6.34E-05
Cs139	0.3	6.16E-05	6.16E-05	6.20E-05	6.20E-05
Sb131	0.3	6.04E-05	7.05E-05	6.03E-05	6.04E-05
Ba143	0.3	5.80E-05	4.92E-05	5.79E-05	4.80E-05
La143	0.3	5.47E-05	3.39E-05	5.69E-05	5.69E-05
Tc103	0.3	5.28E-05	1.17E-04	5.26E-05	5.26E-05
Cs138m	0.3	4.91E-05	8.37E-05	4.92E-05	4.91E-05

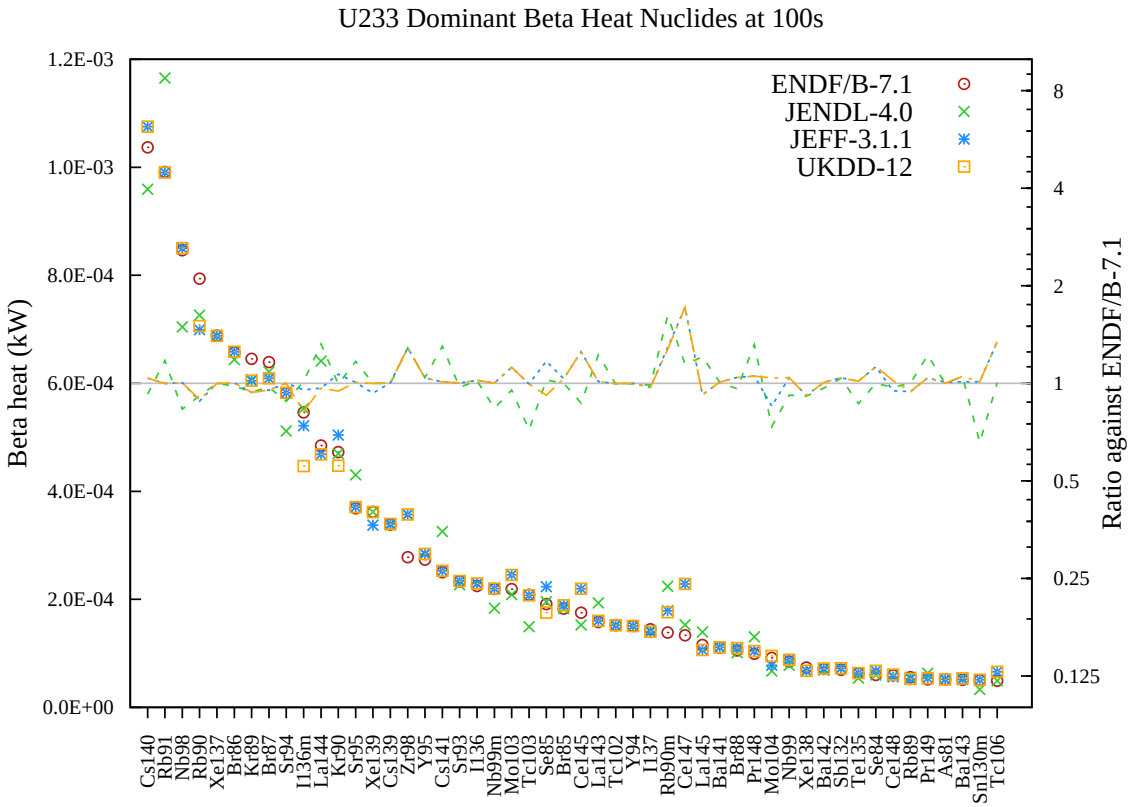

Figure 20: Beta heat (in kW) decay data comparison for U233 fission pulse after 100s cooling.

Table 20: Beta heat (in kW) decay data comparison for U233 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	6.8	1.04E-03	9.59E-04	1.08E-03	1.08E-03
Rb91	6.5	9.91E-04	1.17E-03	9.90E-04	9.90E-04
Nb98	5.6	8.46E-04	7.04E-04	8.50E-04	8.50E-04
Rb90	5.2	7.94E-04	7.26E-04	6.99E-04	7.06E-04
Xe137	4.5	6.88E-04	6.88E-04	6.88E-04	6.88E-04
Br86	4.3	6.57E-04	6.44E-04	6.59E-04	6.59E-04
Kr89	4.3	6.45E-04	6.07E-04	6.05E-04	6.05E-04
Br87	4.2	6.39E-04	6.21E-04	6.09E-04	6.09E-04
Sr94	3.8	5.82E-04	5.12E-04	5.83E-04	5.83E-04
I136m	3.6	5.46E-04	5.53E-04	5.21E-04	4.47E-04
La144	3.2	4.85E-04	6.41E-04	4.69E-04	4.69E-04
Kr90	3.1	4.73E-04	4.70E-04	5.04E-04	4.48E-04
Sr95	2.4	3.69E-04	4.31E-04	3.71E-04	3.71E-04
Xe139	2.4	3.62E-04	3.62E-04	3.37E-04	3.61E-04
Cs139	2.2	3.38E-04	3.38E-04	3.40E-04	3.40E-04
Zr98	1.8	2.78E-04	3.57E-04	3.57E-04	3.57E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y95	1.8	2.73E-04	2.85E-04	2.84E-04	2.84E-04
Cs141	1.6	2.50E-04	3.26E-04	2.53E-04	2.53E-04
Sr93	1.5	2.33E-04	2.27E-04	2.34E-04	2.34E-04
I136	1.5	2.25E-04	2.29E-04	2.29E-04	2.29E-04
Nb99m	1.4	2.19E-04	1.84E-04	2.20E-04	2.20E-04
Mo103	1.4	2.19E-04	2.09E-04	2.45E-04	2.45E-04
Tc103	1.4	2.08E-04	1.49E-04	2.07E-04	2.07E-04
Se85	1.3	1.91E-04	1.96E-04	2.23E-04	1.76E-04
Br85	1.2	1.83E-04	1.83E-04	1.89E-04	1.89E-04
Ce145	1.2	1.75E-04	1.53E-04	2.19E-04	2.19E-04
La143	1.0	1.58E-04	1.94E-04	1.60E-04	1.60E-04
Tc102	1.0	1.52E-04	1.51E-04	1.52E-04	1.52E-04
Y94	1.0	1.51E-04	1.50E-04	1.51E-04	1.51E-04
I137	1.0	1.44E-04	1.42E-04	1.40E-04	1.40E-04
Rb90m	0.9	1.39E-04	2.24E-04	1.79E-04	1.76E-04
Ce147	0.9	1.33E-04	1.53E-04	2.29E-04	2.29E-04
La145	0.8	1.16E-04	1.39E-04	1.06E-04	1.06E-04
Ba141	0.7	1.10E-04	1.11E-04	1.11E-04	1.11E-04
Br88	0.7	1.05E-04	1.01E-04	1.10E-04	1.10E-04
Pr148	0.7	9.92E-05	1.31E-04	1.04E-04	1.04E-04
Mo104	0.6	9.14E-05	6.73E-05	7.78E-05	9.50E-05
Nb99	0.6	8.47E-05	7.79E-05	8.82E-05	8.82E-05
Xe138	0.5	7.39E-05	6.75E-05	6.77E-05	6.77E-05
Ba142	0.5	7.12E-05	6.88E-05	7.17E-05	7.17E-05
Sb132	0.5	6.96E-05	7.22E-05	7.25E-05	7.25E-05
Te135	0.4	6.27E-05	5.43E-05	6.36E-05	6.36E-05
Se84	0.4	6.02E-05	6.01E-05	6.77E-05	6.77E-05
Ce148	0.4	5.95E-05	5.78E-05	5.64E-05	6.06E-05
Rb89	0.4	5.60E-05	5.60E-05	5.28E-05	5.28E-05
Pr149	0.3	5.19E-05	6.33E-05	5.39E-05	5.39E-05
As81	0.3	5.17E-05	5.17E-05	5.20E-05	5.17E-05
Ba143	0.3	5.10E-05	5.35E-05	5.16E-05	5.36E-05
Sn130m	0.3	5.04E-05	3.31E-05	5.10E-05	5.10E-05
Tc106	0.3	4.90E-05	4.92E-05	6.58E-05	6.58E-05

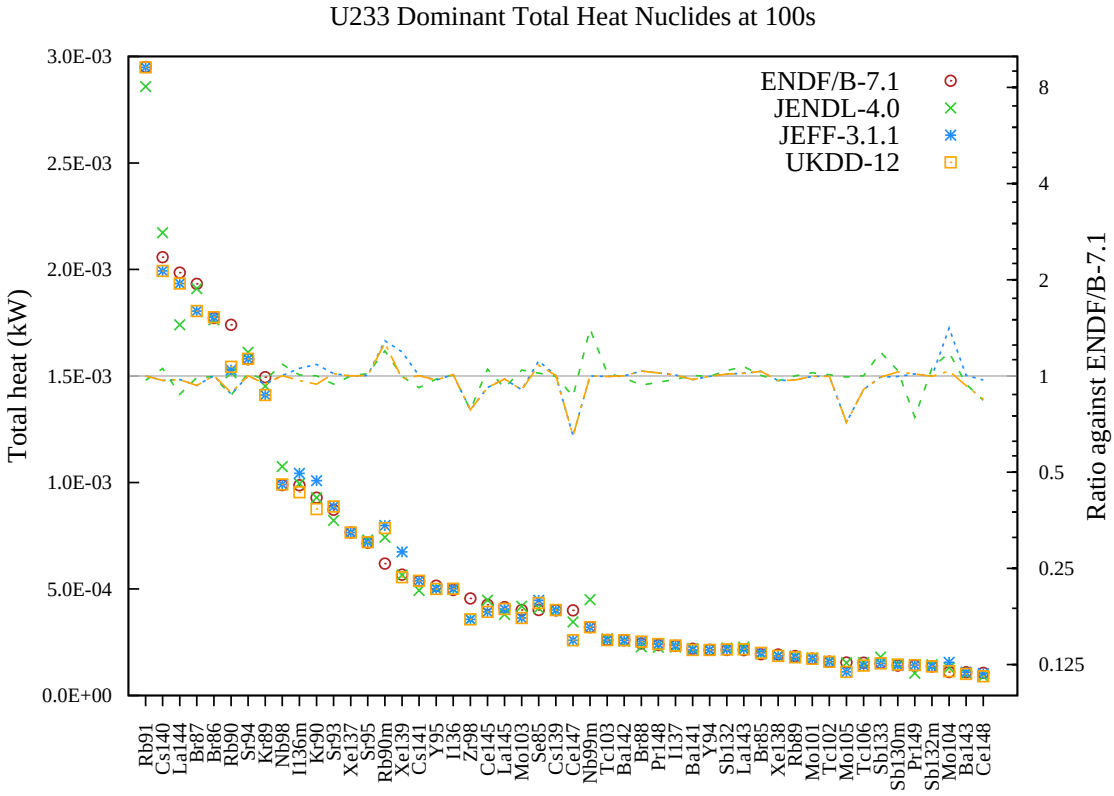

Figure 21: Total heat (in kW) decay data comparison for U233 fission pulse after 100s cooling.

Table 21: Total heat (in kW) decay data comparison for U233 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb91	8.8	2.95E-03	2.86E-03	2.95E-03	2.95E-03
Cs140	6.2	2.06E-03	2.17E-03	1.99E-03	1.99E-03
La144	5.9	1.99E-03	1.74E-03	1.93E-03	1.93E-03
Br87	5.8	1.93E-03	1.91E-03	1.80E-03	1.80E-03
Br86	5.3	1.77E-03	1.76E-03	1.78E-03	1.78E-03
Rb90	5.2	1.74E-03	1.52E-03	1.53E-03	1.54E-03
Sr94	4.7	1.58E-03	1.61E-03	1.58E-03	1.58E-03
Kr89	4.5	1.49E-03	1.45E-03	1.41E-03	1.41E-03
Nb98	3.0	9.88E-04	1.07E-03	9.91E-04	9.91E-04
I136m	3.0	9.87E-04	9.94E-04	1.04E-03	9.54E-04
Kr90	2.8	9.28E-04	9.29E-04	1.01E-03	8.75E-04
Sr93	2.6	8.72E-04	8.22E-04	8.87E-04	8.87E-04
Xe137	2.3	7.65E-04	7.65E-04	7.65E-04	7.65E-04
Sr95	2.1	7.17E-04	7.30E-04	7.20E-04	7.20E-04
Rb90m	1.9	6.19E-04	7.43E-04	7.98E-04	7.86E-04
Xe139	1.7	5.67E-04	5.65E-04	6.74E-04	5.55E-04
Cs141	1.6	5.37E-04	4.93E-04	5.38E-04	5.38E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y95	1.5	5.15E-04	5.04E-04	5.00E-04	5.00E-04
I136	1.5	4.96E-04	4.99E-04	5.01E-04	5.01E-04
Zr98	1.4	4.56E-04	3.57E-04	3.57E-04	3.57E-04
Ce145	1.3	4.26E-04	4.48E-04	3.92E-04	3.92E-04
La145	1.2	4.15E-04	3.81E-04	4.06E-04	4.06E-04
Mo103	1.2	4.02E-04	4.19E-04	3.64E-04	3.64E-04
Se85	1.2	4.01E-04	4.10E-04	4.47E-04	4.34E-04
Cs139	1.2	4.00E-04	3.99E-04	4.02E-04	4.02E-04
Ce147	1.2	4.00E-04	3.45E-04	2.60E-04	2.60E-04
Nb99m	1.0	3.21E-04	4.50E-04	3.21E-04	3.21E-04
Tc103	0.8	2.61E-04	2.67E-04	2.60E-04	2.60E-04
Ba142	0.8	2.59E-04	2.55E-04	2.59E-04	2.59E-04
Br88	0.7	2.44E-04	2.28E-04	2.53E-04	2.53E-04
Pr148	0.7	2.37E-04	2.26E-04	2.42E-04	2.42E-04
I137	0.7	2.33E-04	2.28E-04	2.35E-04	2.35E-04
Ba141	0.7	2.19E-04	2.20E-04	2.14E-04	2.14E-04
Y94	0.6	2.15E-04	2.14E-04	2.14E-04	2.14E-04
Sb132	0.6	2.14E-04	2.22E-04	2.17E-04	2.17E-04
La143	0.6	2.13E-04	2.28E-04	2.17E-04	2.17E-04
Br85	0.6	1.94E-04	1.95E-04	2.00E-04	2.00E-04
Xe138	0.6	1.93E-04	1.86E-04	1.86E-04	1.86E-04
Rb89	0.6	1.85E-04	1.85E-04	1.80E-04	1.80E-04
Mo101	0.5	1.73E-04	1.77E-04	1.72E-04	1.72E-04
Tc102	0.5	1.59E-04	1.60E-04	1.59E-04	1.58E-04
Mo105	0.5	1.54E-04	1.53E-04	1.11E-04	1.11E-04
Tc106	0.5	1.54E-04	1.54E-04	1.40E-04	1.40E-04
Sb133	0.5	1.52E-04	1.80E-04	1.51E-04	1.51E-04
Sb130m	0.4	1.41E-04	1.46E-04	1.40E-04	1.45E-04
Pr149	0.4	1.40E-04	1.04E-04	1.42E-04	1.42E-04
Sb132m	0.4	1.36E-04	1.44E-04	1.36E-04	1.36E-04
Mo104	0.3	1.10E-04	1.30E-04	1.56E-04	1.14E-04
Ba143	0.3	1.09E-04	1.03E-04	1.10E-04	1.02E-04
Ce148	0.3	1.06E-04	8.92E-05	1.03E-04	8.98E-05

2.3 1000s after pulse

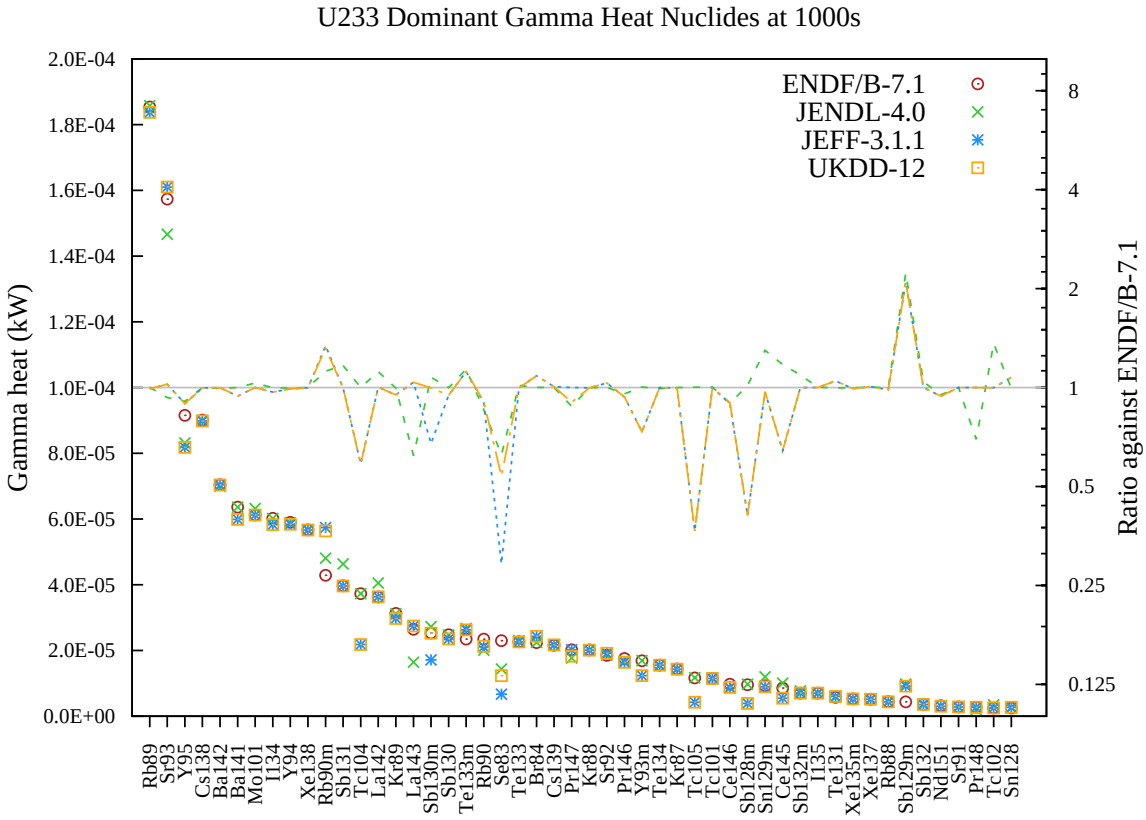

Figure 22: Gamma heat (in kW) decay data comparison for U233 fission pulse after 1000s cooling.

Table 22: Gamma heat (in kW) decay data comparison for U233 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb89	11.8	1.85E-04	1.86E-04	1.84E-04	1.84E-04
Sr93	10.0	1.57E-04	1.47E-04	1.61E-04	1.61E-04
Y95	5.8	9.16E-05	8.31E-05	8.18E-05	8.18E-05
Cs138	5.7	9.01E-05	9.00E-05	8.99E-05	8.99E-05
Ba142	4.5	7.04E-05	7.00E-05	7.04E-05	7.04E-05
Ba141	4.0	6.36E-05	6.36E-05	5.99E-05	5.99E-05
Mo101	3.9	6.12E-05	6.32E-05	6.12E-05	6.12E-05
I134	3.8	6.02E-05	6.01E-05	5.83E-05	5.83E-05
Y94	3.8	5.90E-05	5.88E-05	5.84E-05	5.84E-05
Xe138	3.6	5.67E-05	5.67E-05	5.66E-05	5.66E-05
Rb90m	2.7	4.28E-05	4.81E-05	5.74E-05	5.64E-05
Sb131	2.5	3.97E-05	4.64E-05	3.96E-05	3.96E-05
Tc104	2.4	3.73E-05	3.73E-05	2.18E-05	2.18E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La142	2.3	3.63E-05	4.05E-05	3.63E-05	3.63E-05
Kr89	2.0	3.13E-05	3.12E-05	2.97E-05	2.97E-05
La143	1.7	2.64E-05	1.64E-05	2.74E-05	2.74E-05
Sb130m	1.6	2.53E-05	2.72E-05	1.71E-05	2.53E-05
Sb130	1.6	2.48E-05	2.48E-05	2.35E-05	2.35E-05
Te133m	1.5	2.35E-05	2.67E-05	2.63E-05	2.63E-05
Rb90	1.5	2.35E-05	2.01E-05	2.11E-05	2.13E-05
Se83	1.5	2.30E-05	1.43E-05	6.69E-06	1.24E-05
Te133	1.4	2.27E-05	2.30E-05	2.26E-05	2.26E-05
Br84	1.4	2.24E-05	2.24E-05	2.43E-05	2.43E-05
Cs139	1.4	2.16E-05	2.16E-05	2.17E-05	2.17E-05
Pr147	1.3	2.02E-05	1.77E-05	2.02E-05	1.82E-05
Kr88	1.3	2.01E-05	2.01E-05	2.01E-05	2.01E-05
Sr92	1.2	1.85E-05	1.86E-05	1.91E-05	1.91E-05
Pr146	1.1	1.75E-05	1.68E-05	1.64E-05	1.64E-05
Y93m	1.1	1.68E-05	1.69E-05	1.24E-05	1.24E-05
Te134	1.0	1.55E-05	1.54E-05	1.55E-05	1.55E-05
Kr87	0.9	1.44E-05	1.44E-05	1.43E-05	1.43E-05
Tc105	0.7	1.17E-05	1.17E-05	4.27E-06	4.27E-06
Tc101	0.7	1.15E-05	1.15E-05	1.15E-05	1.15E-05
Ce146	0.6	9.75E-06	8.73E-06	8.69E-06	8.77E-06
Sb128m	0.6	9.57E-06	9.71E-06	3.91E-06	3.91E-06
Sn129m	0.6	9.23E-06	1.20E-05	8.95E-06	8.95E-06
Ce145	0.5	8.55E-06	1.01E-05	5.50E-06	5.50E-06
Sb132m	0.4	7.04E-06	7.69E-06	7.04E-06	7.04E-06
I135	0.4	7.03E-06	7.04E-06	7.03E-06	7.03E-06
Te131	0.4	5.75E-06	5.74E-06	6.02E-06	6.02E-06
Xe135m	0.3	5.28E-06	5.27E-06	5.24E-06	5.24E-06
Xe137	0.3	5.14E-06	5.16E-06	5.18E-06	5.18E-06
Rb88	0.3	4.44E-06	4.43E-06	4.37E-06	4.37E-06
Sb129m	0.3	4.38E-06	9.78E-06	9.17E-06	9.17E-06
Sb132	0.2	3.56E-06	3.71E-06	3.56E-06	3.56E-06
Nd151	0.2	3.22E-06	3.06E-06	3.03E-06	3.03E-06
Sr91	0.2	2.80E-06	2.80E-06	2.80E-06	2.80E-06
Pr148	0.2	2.72E-06	1.89E-06	2.72E-06	2.72E-06
Tc102	0.2	2.52E-06	3.43E-06	2.52E-06	2.52E-06
Sn128	0.2	2.50E-06	2.49E-06	2.69E-06	2.69E-06

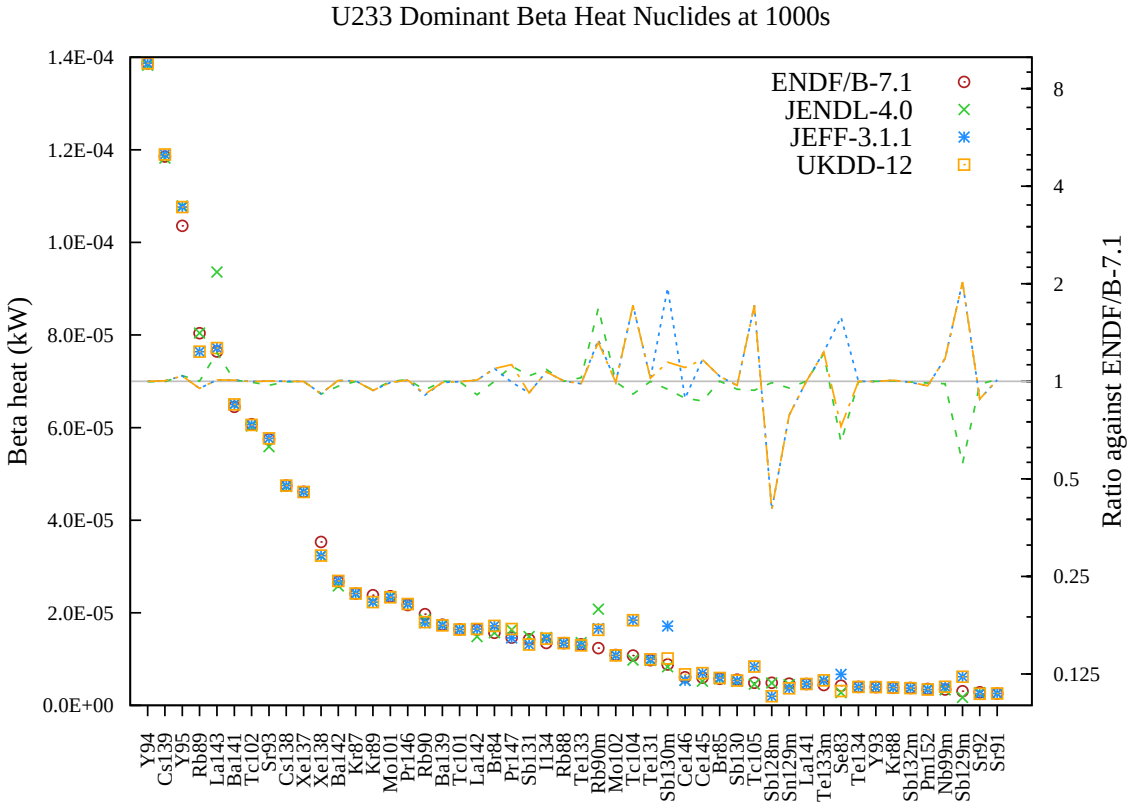

Figure 23: Beta heat (in kW) decay data comparison for U233 fission pulse after 1000s cooling.

Table 23: Beta heat (in kW) decay data comparison for U233 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y94	10.8	1.39E-04	1.38E-04	1.39E-04	1.39E-04
Cs139	9.3	1.19E-04	1.18E-04	1.19E-04	1.19E-04
Y95	8.1	1.04E-04	1.08E-04	1.08E-04	1.08E-04
Rb89	6.3	8.04E-05	8.04E-05	7.64E-05	7.64E-05
La143	6.0	7.64E-05	9.36E-05	7.72E-05	7.72E-05
Ba141	5.0	6.45E-05	6.50E-05	6.50E-05	6.50E-05
Tc102	4.7	6.07E-05	6.04E-05	6.07E-05	6.06E-05
Sr93	4.5	5.75E-05	5.59E-05	5.77E-05	5.77E-05
Cs138	3.7	4.75E-05	4.73E-05	4.75E-05	4.75E-05
Xe137	3.6	4.61E-05	4.62E-05	4.61E-05	4.61E-05
Xe138	2.8	3.53E-05	3.22E-05	3.23E-05	3.23E-05
Ba142	2.1	2.67E-05	2.58E-05	2.69E-05	2.69E-05
Kr87	1.9	2.41E-05	2.41E-05	2.42E-05	2.42E-05
Kr89	1.9	2.38E-05	2.24E-05	2.23E-05	2.23E-05
Mo101	1.8	2.36E-05	2.35E-05	2.34E-05	2.34E-05
Pr146	1.7	2.17E-05	2.19E-05	2.19E-05	2.19E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb90	1.5	1.97E-05	1.85E-05	1.78E-05	1.80E-05
Ba139	1.4	1.74E-05	1.74E-05	1.73E-05	1.73E-05
Tc101	1.3	1.64E-05	1.64E-05	1.64E-05	1.64E-05
La142	1.3	1.63E-05	1.49E-05	1.65E-05	1.65E-05
Br84	1.2	1.57E-05	1.57E-05	1.72E-05	1.72E-05
Pr147	1.1	1.46E-05	1.63E-05	1.45E-05	1.65E-05
Sb131	1.1	1.43E-05	1.48E-05	1.32E-05	1.32E-05
I134	1.1	1.35E-05	1.47E-05	1.44E-05	1.44E-05
Rb88	1.0	1.34E-05	1.34E-05	1.35E-05	1.35E-05
Te133	1.0	1.32E-05	1.35E-05	1.30E-05	1.30E-05
Rb90m	1.0	1.24E-05	2.08E-05	1.66E-05	1.63E-05
Mo102	0.8	1.09E-05	1.08E-05	1.08E-05	1.08E-05
Tc104	0.8	1.07E-05	9.81E-06	1.84E-05	1.84E-05
Te131	0.8	9.74E-06	9.73E-06	9.95E-06	9.96E-06
Sb130m	0.7	8.83E-06	8.34E-06	1.71E-05	1.01E-05
Ce146	0.5	6.08E-06	5.39E-06	5.38E-06	6.71E-06
Ce145	0.5	5.98E-06	5.20E-06	6.98E-06	6.98E-06
Br85	0.4	5.73E-06	5.74E-06	5.94E-06	5.94E-06
Sb130	0.4	5.53E-06	5.22E-06	5.37E-06	5.37E-06
Tc105	0.4	4.89E-06	4.59E-06	8.38E-06	8.38E-06
Sb128m	0.4	4.88E-06	4.83E-06	1.96E-06	1.96E-06
Sn129m	0.4	4.71E-06	4.49E-06	3.70E-06	3.70E-06
La141	0.4	4.63E-06	4.63E-06	4.63E-06	4.63E-06
Te133m	0.3	4.40E-06	5.35E-06	5.41E-06	5.41E-06
Se83	0.3	4.24E-06	2.75E-06	6.69E-06	3.08E-06
Te134	0.3	3.98E-06	3.96E-06	3.98E-06	3.98E-06
Y93	0.3	3.96E-06	3.97E-06	3.96E-06	3.96E-06
Kr88	0.3	3.80E-06	3.82E-06	3.83E-06	3.83E-06
Sb132m	0.3	3.76E-06	3.74E-06	3.73E-06	3.73E-06
Pm152	0.3	3.55E-06	3.51E-06	3.44E-06	3.44E-06
Nb99m	0.3	3.43E-06	3.37E-06	4.03E-06	4.03E-06
Sb129m	0.2	3.06E-06	1.71E-06	6.20E-06	6.20E-06
Sr92	0.2	2.83E-06	2.77E-06	2.49E-06	2.49E-06
Sr91	0.2	2.54E-06	2.58E-06	2.57E-06	2.57E-06

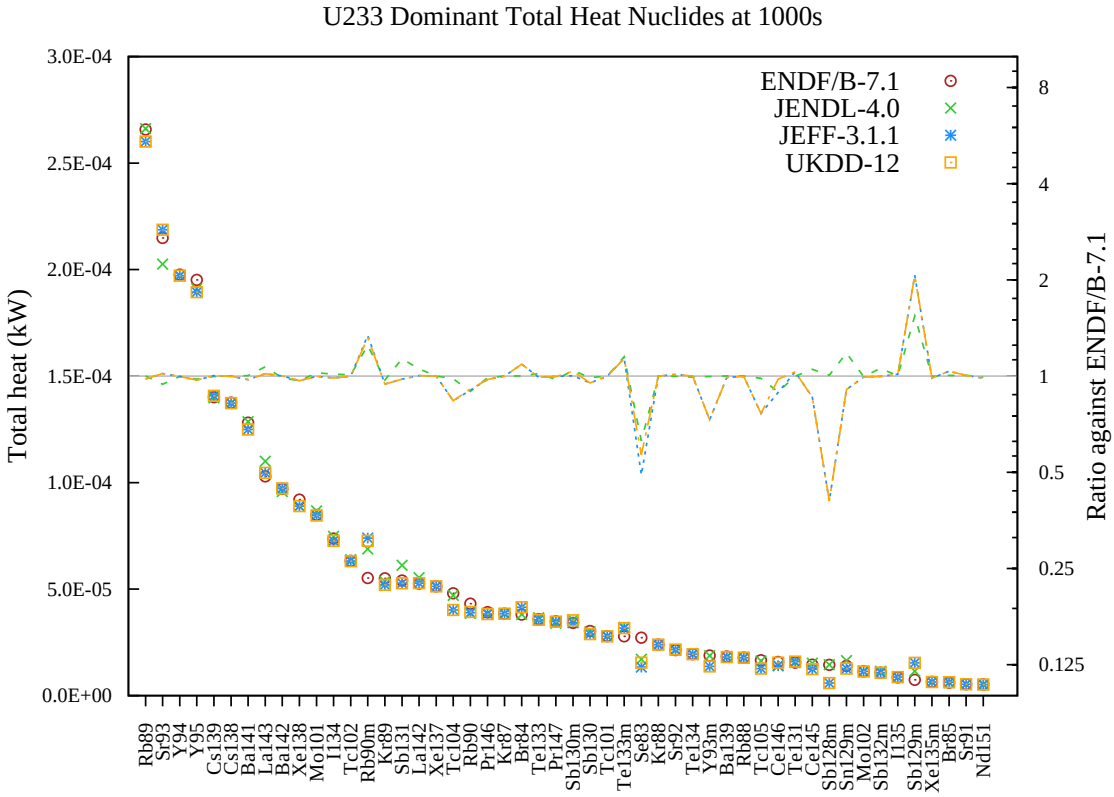

Figure 24: Total heat (in kW) decay data comparison for U233 fission pulse after 1000s cooling.

Table 24: Total heat (in kW) decay data comparison for U233 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb89	9.3	2.66E-04	2.66E-04	2.60E-04	2.60E-04
Sr93	7.5	2.15E-04	2.03E-04	2.19E-04	2.19E-04
Y94	6.9	1.98E-04	1.97E-04	1.97E-04	1.97E-04
Y95	6.8	1.95E-04	1.91E-04	1.89E-04	1.89E-04
Cs139	4.9	1.40E-04	1.40E-04	1.41E-04	1.41E-04
Cs138	4.8	1.38E-04	1.37E-04	1.37E-04	1.37E-04
Ba141	4.5	1.28E-04	1.29E-04	1.25E-04	1.25E-04
La143	3.6	1.03E-04	1.10E-04	1.05E-04	1.05E-04
Ba142	3.4	9.71E-05	9.58E-05	9.72E-05	9.72E-05
Xe138	3.2	9.20E-05	8.90E-05	8.90E-05	8.90E-05
Mo101	3.0	8.48E-05	8.67E-05	8.46E-05	8.46E-05
I134	2.6	7.37E-05	7.48E-05	7.27E-05	7.27E-05
Tc102	2.2	6.32E-05	6.38E-05	6.32E-05	6.31E-05
Rb90m	1.9	5.52E-05	6.89E-05	7.40E-05	7.27E-05
Kr89	1.9	5.51E-05	5.35E-05	5.20E-05	5.20E-05
Sb131	1.9	5.40E-05	6.12E-05	5.28E-05	5.28E-05
La142	1.8	5.26E-05	5.54E-05	5.28E-05	5.28E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Xe137	1.8	5.13E-05	5.13E-05	5.13E-05	5.13E-05
Tc104	1.7	4.80E-05	4.71E-05	4.02E-05	4.02E-05
Rb90	1.5	4.32E-05	3.86E-05	3.90E-05	3.93E-05
Pr146	1.4	3.92E-05	3.87E-05	3.83E-05	3.83E-05
Kr87	1.3	3.85E-05	3.85E-05	3.85E-05	3.85E-05
Br84	1.3	3.81E-05	3.81E-05	4.15E-05	4.15E-05
Te133	1.3	3.59E-05	3.66E-05	3.56E-05	3.56E-05
Pr147	1.2	3.49E-05	3.40E-05	3.48E-05	3.47E-05
Sb130m	1.2	3.42E-05	3.56E-05	3.42E-05	3.54E-05
Sb130	1.1	3.03E-05	3.00E-05	2.89E-05	2.89E-05
Tc101	1.0	2.79E-05	2.79E-05	2.79E-05	2.79E-05
Te133m	1.0	2.79E-05	3.21E-05	3.17E-05	3.17E-05
Se83	1.0	2.72E-05	1.71E-05	1.34E-05	1.54E-05
Kr88	0.8	2.40E-05	2.39E-05	2.39E-05	2.39E-05
Sr92	0.7	2.14E-05	2.13E-05	2.16E-05	2.16E-05
Te134	0.7	1.95E-05	1.94E-05	1.95E-05	1.95E-05
Y93m	0.7	1.88E-05	1.88E-05	1.37E-05	1.37E-05
Ba139	0.6	1.83E-05	1.83E-05	1.81E-05	1.81E-05
Rb88	0.6	1.79E-05	1.79E-05	1.78E-05	1.78E-05
Tc105	0.6	1.66E-05	1.63E-05	1.26E-05	1.26E-05
Ce146	0.6	1.58E-05	1.41E-05	1.41E-05	1.55E-05
Te131	0.5	1.55E-05	1.55E-05	1.60E-05	1.60E-05
Ce145	0.5	1.45E-05	1.53E-05	1.25E-05	1.25E-05
Sb128m	0.5	1.44E-05	1.45E-05	5.87E-06	5.87E-06
Sn129m	0.5	1.39E-05	1.65E-05	1.27E-05	1.27E-05
Mo102	0.4	1.14E-05	1.14E-05	1.14E-05	1.14E-05
Sb132m	0.4	1.08E-05	1.14E-05	1.08E-05	1.08E-05
I135	0.3	8.54E-06	8.55E-06	8.66E-06	8.66E-06
Sb129m	0.3	7.45E-06	1.15E-05	1.54E-05	1.54E-05
Xe135m	0.2	6.49E-06	6.47E-06	6.39E-06	6.39E-06
Br85	0.2	6.07E-06	6.10E-06	6.29E-06	6.29E-06
Sr91	0.2	5.35E-06	5.38E-06	5.37E-06	5.37E-06
Nd151	0.2	5.29E-06	5.25E-06	5.22E-06	5.22E-06

2.4 5011s after pulse

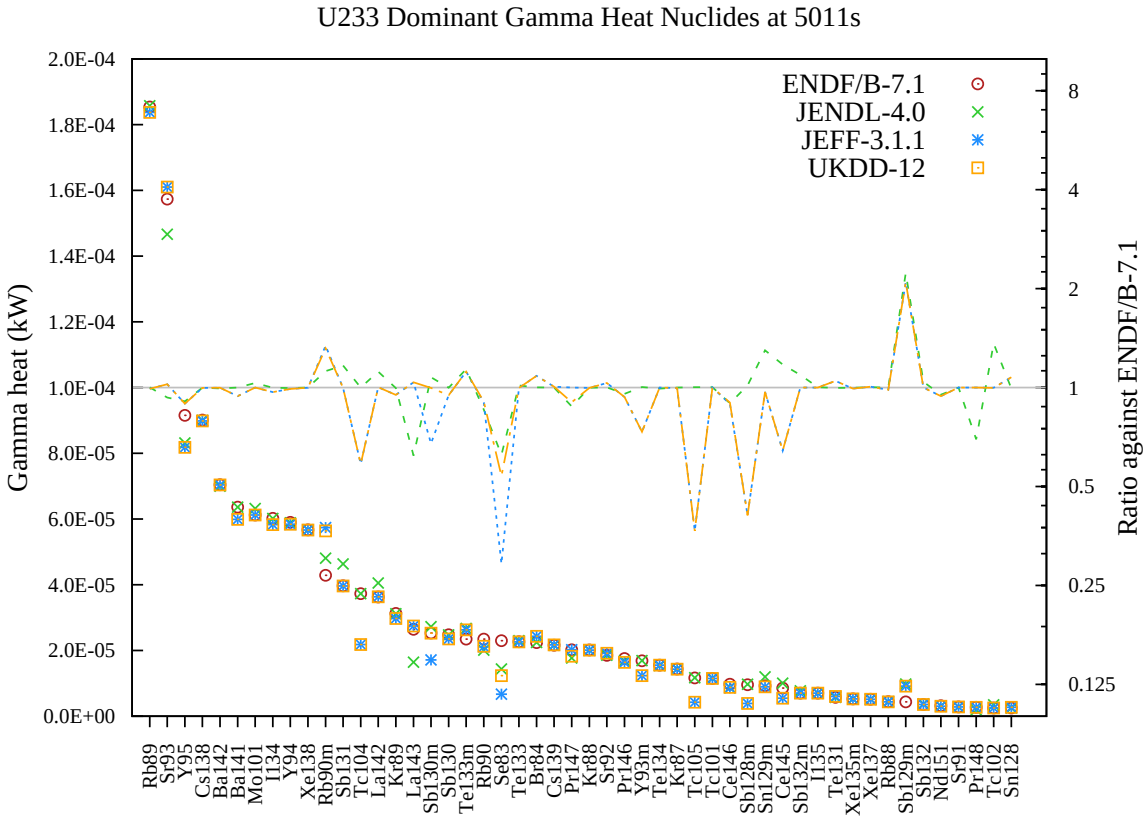

Figure 25: Gamma heat (in kW) decay data comparison for U233 fission pulse after 5011s cooling.

Table 25: Gamma heat (in kW) decay data comparison for U233 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb89	11.8	1.85E-04	1.86E-04	1.84E-04	1.84E-04
Sr93	10.0	1.57E-04	1.47E-04	1.61E-04	1.61E-04
Y95	5.8	9.16E-05	8.31E-05	8.18E-05	8.18E-05
Cs138	5.7	9.01E-05	9.00E-05	8.99E-05	8.99E-05
Ba142	4.5	7.04E-05	7.00E-05	7.04E-05	7.04E-05
Ba141	4.0	6.36E-05	6.36E-05	5.99E-05	5.99E-05
Mo101	3.9	6.12E-05	6.32E-05	6.12E-05	6.12E-05
I134	3.8	6.02E-05	6.01E-05	5.83E-05	5.83E-05
Y94	3.8	5.90E-05	5.88E-05	5.84E-05	5.84E-05
Xe138	3.6	5.67E-05	5.67E-05	5.66E-05	5.66E-05
Rb90m	2.7	4.28E-05	4.81E-05	5.74E-05	5.64E-05
Sb131	2.5	3.97E-05	4.64E-05	3.96E-05	3.96E-05
Tc104	2.4	3.73E-05	3.73E-05	2.18E-05	2.18E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La142	2.3	3.63E-05	4.05E-05	3.63E-05	3.63E-05
Kr89	2.0	3.13E-05	3.12E-05	2.97E-05	2.97E-05
La143	1.7	2.64E-05	1.64E-05	2.74E-05	2.74E-05
Sb130m	1.6	2.53E-05	2.72E-05	1.71E-05	2.53E-05
Sb130	1.6	2.48E-05	2.48E-05	2.35E-05	2.35E-05
Te133m	1.5	2.35E-05	2.67E-05	2.63E-05	2.63E-05
Rb90	1.5	2.35E-05	2.01E-05	2.11E-05	2.13E-05
Se83	1.5	2.30E-05	1.43E-05	6.69E-06	1.24E-05
Te133	1.4	2.27E-05	2.30E-05	2.26E-05	2.26E-05
Br84	1.4	2.24E-05	2.24E-05	2.43E-05	2.43E-05
Cs139	1.4	2.16E-05	2.16E-05	2.17E-05	2.17E-05
Pr147	1.3	2.02E-05	1.77E-05	2.02E-05	1.82E-05
Kr88	1.3	2.01E-05	2.01E-05	2.01E-05	2.01E-05
Sr92	1.2	1.85E-05	1.86E-05	1.91E-05	1.91E-05
Pr146	1.1	1.75E-05	1.68E-05	1.64E-05	1.64E-05
Y93m	1.1	1.68E-05	1.69E-05	1.24E-05	1.24E-05
Te134	1.0	1.55E-05	1.54E-05	1.55E-05	1.55E-05
Kr87	0.9	1.44E-05	1.44E-05	1.43E-05	1.43E-05
Tc105	0.7	1.17E-05	1.17E-05	4.27E-06	4.27E-06
Tc101	0.7	1.15E-05	1.15E-05	1.15E-05	1.15E-05
Ce146	0.6	9.75E-06	8.73E-06	8.69E-06	8.77E-06
Sb128m	0.6	9.57E-06	9.71E-06	3.91E-06	3.91E-06
Sn129m	0.6	9.23E-06	1.20E-05	8.95E-06	8.95E-06
Ce145	0.5	8.55E-06	1.01E-05	5.50E-06	5.50E-06
Sb132m	0.4	7.04E-06	7.69E-06	7.04E-06	7.04E-06
I135	0.4	7.03E-06	7.04E-06	7.03E-06	7.03E-06
Te131	0.4	5.75E-06	5.74E-06	6.02E-06	6.02E-06
Xe135m	0.3	5.28E-06	5.27E-06	5.24E-06	5.24E-06
Xe137	0.3	5.14E-06	5.16E-06	5.18E-06	5.18E-06
Rb88	0.3	4.44E-06	4.43E-06	4.37E-06	4.37E-06
Sb129m	0.3	4.38E-06	9.78E-06	9.17E-06	9.17E-06
Sb132	0.2	3.56E-06	3.71E-06	3.56E-06	3.56E-06
Nd151	0.2	3.22E-06	3.06E-06	3.03E-06	3.03E-06
Sr91	0.2	2.80E-06	2.80E-06	2.80E-06	2.80E-06
Pr148	0.2	2.72E-06	1.89E-06	2.72E-06	2.72E-06
Tc102	0.2	2.52E-06	3.43E-06	2.52E-06	2.52E-06
Sn128	0.2	2.50E-06	2.49E-06	2.69E-06	2.69E-06

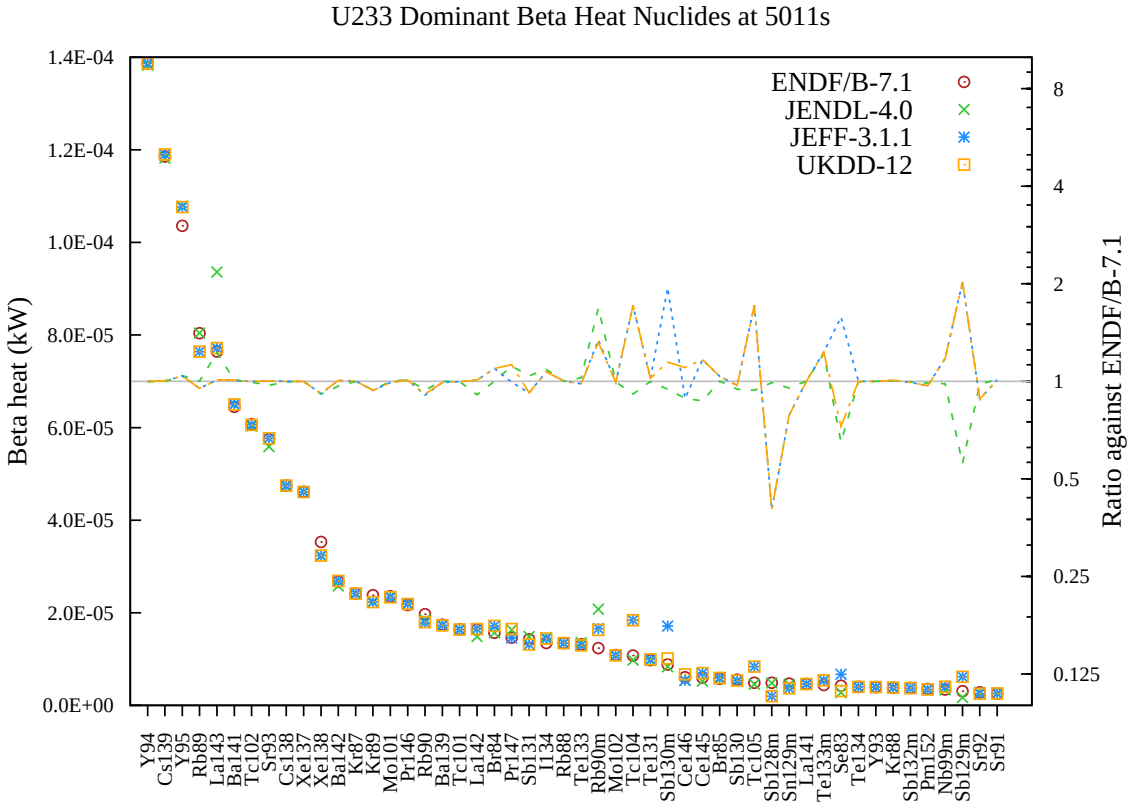

Figure 26: Beta heat (in kW) decay data comparison for U233 fission pulse after 5011s cooling.

Table 26: Beta heat (in kW) decay data comparison for U233 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y94	10.8	1.39E-04	1.38E-04	1.39E-04	1.39E-04
Cs139	9.3	1.19E-04	1.18E-04	1.19E-04	1.19E-04
Y95	8.1	1.04E-04	1.08E-04	1.08E-04	1.08E-04
Rb89	6.3	8.04E-05	8.04E-05	7.64E-05	7.64E-05
La143	6.0	7.64E-05	9.36E-05	7.72E-05	7.72E-05
Ba141	5.0	6.45E-05	6.50E-05	6.50E-05	6.50E-05
Tc102	4.7	6.07E-05	6.04E-05	6.07E-05	6.06E-05
Sr93	4.5	5.75E-05	5.59E-05	5.77E-05	5.77E-05
Cs138	3.7	4.75E-05	4.73E-05	4.75E-05	4.75E-05
Xe137	3.6	4.61E-05	4.62E-05	4.61E-05	4.61E-05
Xe138	2.8	3.53E-05	3.22E-05	3.23E-05	3.23E-05
Ba142	2.1	2.67E-05	2.58E-05	2.69E-05	2.69E-05
Kr87	1.9	2.41E-05	2.41E-05	2.42E-05	2.42E-05
Kr89	1.9	2.38E-05	2.24E-05	2.23E-05	2.23E-05
Mo101	1.8	2.36E-05	2.35E-05	2.34E-05	2.34E-05
Pr146	1.7	2.17E-05	2.19E-05	2.19E-05	2.19E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb90	1.5	1.97E-05	1.85E-05	1.78E-05	1.80E-05
Ba139	1.4	1.74E-05	1.74E-05	1.73E-05	1.73E-05
Tc101	1.3	1.64E-05	1.64E-05	1.64E-05	1.64E-05
La142	1.3	1.63E-05	1.49E-05	1.65E-05	1.65E-05
Br84	1.2	1.57E-05	1.57E-05	1.72E-05	1.72E-05
Pr147	1.1	1.46E-05	1.63E-05	1.45E-05	1.65E-05
Sb131	1.1	1.43E-05	1.48E-05	1.32E-05	1.32E-05
I134	1.1	1.35E-05	1.47E-05	1.44E-05	1.44E-05
Rb88	1.0	1.34E-05	1.34E-05	1.35E-05	1.35E-05
Te133	1.0	1.32E-05	1.35E-05	1.30E-05	1.30E-05
Rb90m	1.0	1.24E-05	2.08E-05	1.66E-05	1.63E-05
Mo102	0.8	1.09E-05	1.08E-05	1.08E-05	1.08E-05
Tc104	0.8	1.07E-05	9.81E-06	1.84E-05	1.84E-05
Te131	0.8	9.74E-06	9.73E-06	9.95E-06	9.96E-06
Sb130m	0.7	8.83E-06	8.34E-06	1.71E-05	1.01E-05
Ce146	0.5	6.08E-06	5.39E-06	5.38E-06	6.71E-06
Ce145	0.5	5.98E-06	5.20E-06	6.98E-06	6.98E-06
Br85	0.4	5.73E-06	5.74E-06	5.94E-06	5.94E-06
Sb130	0.4	5.53E-06	5.22E-06	5.37E-06	5.37E-06
Tc105	0.4	4.89E-06	4.59E-06	8.38E-06	8.38E-06
Sb128m	0.4	4.88E-06	4.83E-06	1.96E-06	1.96E-06
Sn129m	0.4	4.71E-06	4.49E-06	3.70E-06	3.70E-06
La141	0.4	4.63E-06	4.63E-06	4.63E-06	4.63E-06
Te133m	0.3	4.40E-06	5.35E-06	5.41E-06	5.41E-06
Se83	0.3	4.24E-06	2.75E-06	6.69E-06	3.08E-06
Te134	0.3	3.98E-06	3.96E-06	3.98E-06	3.98E-06
Y93	0.3	3.96E-06	3.97E-06	3.96E-06	3.96E-06
Kr88	0.3	3.80E-06	3.82E-06	3.83E-06	3.83E-06
Sb132m	0.3	3.76E-06	3.74E-06	3.73E-06	3.73E-06
Pm152	0.3	3.55E-06	3.51E-06	3.44E-06	3.44E-06
Nb99m	0.3	3.43E-06	3.37E-06	4.03E-06	4.03E-06
Sb129m	0.2	3.06E-06	1.71E-06	6.20E-06	6.20E-06
Sr92	0.2	2.83E-06	2.77E-06	2.49E-06	2.49E-06
Sr91	0.2	2.54E-06	2.58E-06	2.57E-06	2.57E-06

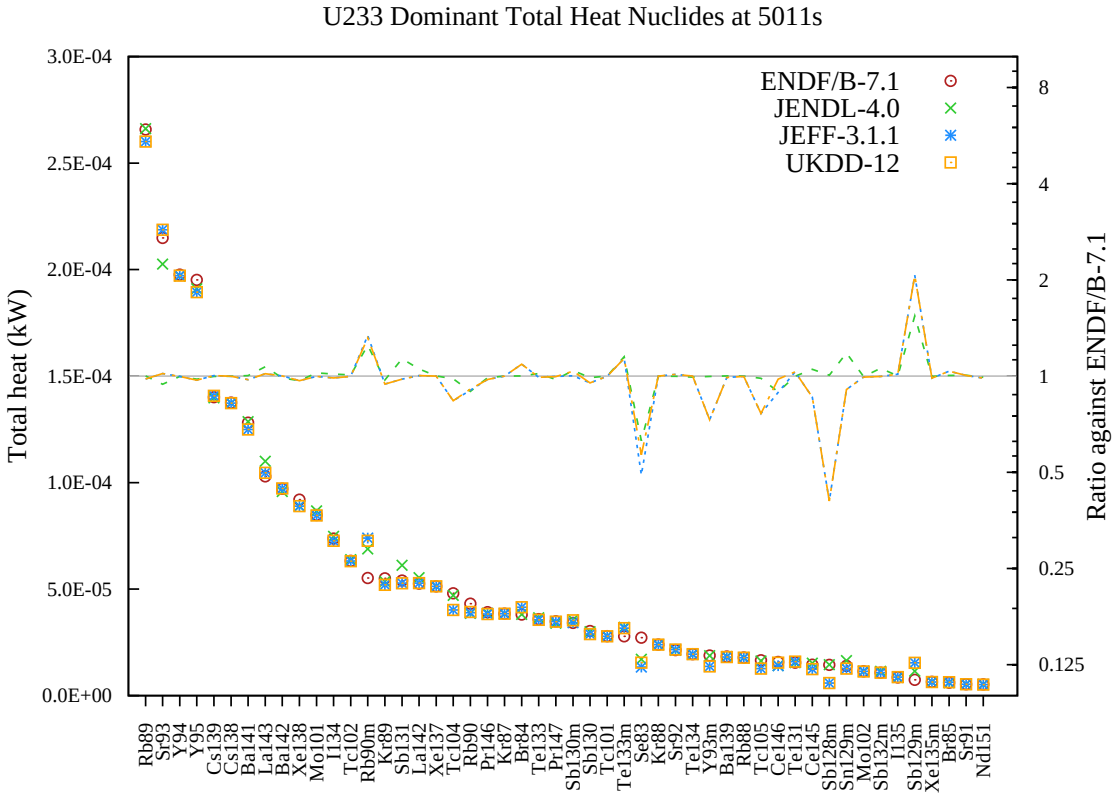

Figure 27: Total heat (in kW) decay data comparison for U233 fission pulse after 5011s cooling.

Table 27: Total heat (in kW) decay data comparison for U233 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb89	9.3	2.66E-04	2.66E-04	2.60E-04	2.60E-04
Sr93	7.5	2.15E-04	2.03E-04	2.19E-04	2.19E-04
Y94	6.9	1.98E-04	1.97E-04	1.97E-04	1.97E-04
Y95	6.8	1.95E-04	1.91E-04	1.89E-04	1.89E-04
Cs139	4.9	1.40E-04	1.40E-04	1.41E-04	1.41E-04
Cs138	4.8	1.38E-04	1.37E-04	1.37E-04	1.37E-04
Ba141	4.5	1.28E-04	1.29E-04	1.25E-04	1.25E-04
La143	3.6	1.03E-04	1.10E-04	1.05E-04	1.05E-04
Ba142	3.4	9.71E-05	9.58E-05	9.72E-05	9.72E-05
Xe138	3.2	9.20E-05	8.90E-05	8.90E-05	8.90E-05
Mo101	3.0	8.48E-05	8.67E-05	8.46E-05	8.46E-05
I134	2.6	7.37E-05	7.48E-05	7.27E-05	7.27E-05
Tc102	2.2	6.32E-05	6.38E-05	6.32E-05	6.31E-05
Rb90m	1.9	5.52E-05	6.89E-05	7.40E-05	7.27E-05
Kr89	1.9	5.51E-05	5.35E-05	5.20E-05	5.20E-05
Sb131	1.9	5.40E-05	6.12E-05	5.28E-05	5.28E-05
La142	1.8	5.26E-05	5.54E-05	5.28E-05	5.28E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Xe137	1.8	5.13E-05	5.13E-05	5.13E-05	5.13E-05
Tc104	1.7	4.80E-05	4.71E-05	4.02E-05	4.02E-05
Rb90	1.5	4.32E-05	3.86E-05	3.90E-05	3.93E-05
Pr146	1.4	3.92E-05	3.87E-05	3.83E-05	3.83E-05
Kr87	1.3	3.85E-05	3.85E-05	3.85E-05	3.85E-05
Br84	1.3	3.81E-05	3.81E-05	4.15E-05	4.15E-05
Te133	1.3	3.59E-05	3.66E-05	3.56E-05	3.56E-05
Pr147	1.2	3.49E-05	3.40E-05	3.48E-05	3.47E-05
Sb130m	1.2	3.42E-05	3.56E-05	3.42E-05	3.54E-05
Sb130	1.1	3.03E-05	3.00E-05	2.89E-05	2.89E-05
Tc101	1.0	2.79E-05	2.79E-05	2.79E-05	2.79E-05
Te133m	1.0	2.79E-05	3.21E-05	3.17E-05	3.17E-05
Se83	1.0	2.72E-05	1.71E-05	1.34E-05	1.54E-05
Kr88	0.8	2.40E-05	2.39E-05	2.39E-05	2.39E-05
Sr92	0.7	2.14E-05	2.13E-05	2.16E-05	2.16E-05
Te134	0.7	1.95E-05	1.94E-05	1.95E-05	1.95E-05
Y93m	0.7	1.88E-05	1.88E-05	1.37E-05	1.37E-05
Ba139	0.6	1.83E-05	1.83E-05	1.81E-05	1.81E-05
Rb88	0.6	1.79E-05	1.79E-05	1.78E-05	1.78E-05
Tc105	0.6	1.66E-05	1.63E-05	1.26E-05	1.26E-05
Ce146	0.6	1.58E-05	1.41E-05	1.41E-05	1.55E-05
Te131	0.5	1.55E-05	1.55E-05	1.60E-05	1.60E-05
Ce145	0.5	1.45E-05	1.53E-05	1.25E-05	1.25E-05
Sb128m	0.5	1.44E-05	1.45E-05	5.87E-06	5.87E-06
Sn129m	0.5	1.39E-05	1.65E-05	1.27E-05	1.27E-05
Mo102	0.4	1.14E-05	1.14E-05	1.14E-05	1.14E-05
Sb132m	0.4	1.08E-05	1.14E-05	1.08E-05	1.08E-05
I135	0.3	8.54E-06	8.55E-06	8.66E-06	8.66E-06
Sb129m	0.3	7.45E-06	1.15E-05	1.54E-05	1.54E-05
Xe135m	0.2	6.49E-06	6.47E-06	6.39E-06	6.39E-06
Br85	0.2	6.07E-06	6.10E-06	6.29E-06	6.29E-06
Sr91	0.2	5.35E-06	5.38E-06	5.37E-06	5.37E-06
Nd151	0.2	5.29E-06	5.25E-06	5.22E-06	5.22E-06

2.5 10000s after pulse

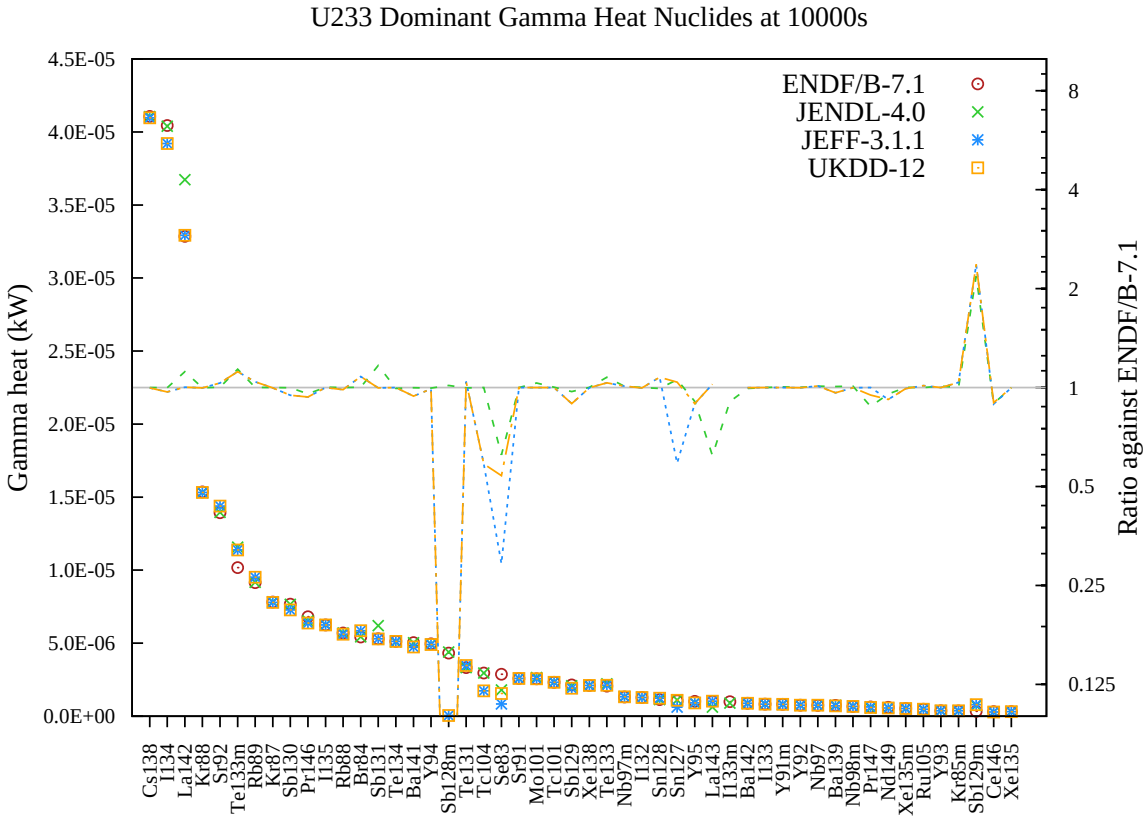

Figure 28: Gamma heat (in kW) decay data comparison for U233 fission pulse after 10000s cooling.

Table 28: Gamma heat (in kW) decay data comparison for U233 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	15.2	4.11E-05	4.11E-05	4.10E-05	4.10E-05
I134	14.9	4.04E-05	4.04E-05	3.92E-05	3.92E-05
La142	12.1	3.29E-05	3.67E-05	3.29E-05	3.29E-05
Kr88	5.7	1.54E-05	1.53E-05	1.53E-05	1.53E-05
Sr92	5.1	1.39E-05	1.40E-05	1.44E-05	1.44E-05
Te133m	3.8	1.02E-05	1.16E-05	1.14E-05	1.14E-05
Rb89	3.4	9.15E-06	9.16E-06	9.52E-06	9.52E-06
Kr87	2.9	7.82E-06	7.82E-06	7.80E-06	7.80E-06
Sb130	2.8	7.68E-06	7.66E-06	7.28E-06	7.28E-06
Pr146	2.5	6.81E-06	6.52E-06	6.37E-06	6.37E-06
I135	2.3	6.25E-06	6.26E-06	6.25E-06	6.25E-06
Rb88	2.1	5.69E-06	5.69E-06	5.61E-06	5.61E-06
Br84	2.0	5.42E-06	5.43E-06	5.86E-06	5.86E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb131	2.0	5.31E-06	6.20E-06	5.30E-06	5.30E-06
Te134	1.9	5.12E-06	5.09E-06	5.12E-06	5.12E-06
Ba141	1.9	5.03E-06	5.03E-06	4.74E-06	4.74E-06
Y94	1.8	4.95E-06	4.93E-06	4.90E-06	4.90E-06
Sb128m	1.6	4.32E-06	4.39E-06	4.53E-08	4.53E-08
Te131	1.2	3.33E-06	3.32E-06	3.48E-06	3.48E-06
Tc104	1.1	2.96E-06	2.96E-06	1.73E-06	1.73E-06
Se83	1.1	2.88E-06	1.80E-06	8.37E-07	1.55E-06
Sr91	1.0	2.59E-06	2.59E-06	2.59E-06	2.59E-06
Mo101	0.9	2.57E-06	2.65E-06	2.57E-06	2.57E-06
Tc101	0.9	2.33E-06	2.33E-06	2.33E-06	2.33E-06
Sb129	0.8	2.14E-06	2.08E-06	1.91E-06	1.91E-06
Xe138	0.8	2.11E-06	2.11E-06	2.11E-06	2.11E-06
Te133	0.8	2.05E-06	2.21E-06	2.12E-06	2.12E-06
Nb97m	0.5	1.32E-06	1.33E-06	1.33E-06	1.33E-06
I132	0.5	1.28E-06	1.28E-06	1.28E-06	1.28E-06
Sn128	0.4	1.14E-06	1.14E-06	1.23E-06	1.23E-06
Sn127	0.4	1.05E-06	1.11E-06	6.20E-07	1.09E-06
Y95	0.4	1.02E-06	9.24E-07	9.09E-07	9.09E-07
La143	0.4	1.01E-06	6.28E-07	1.04E-06	1.04E-06
I133m	0.4	9.89E-07	—	—	—
Ba142	0.3	8.89E-07	8.84E-07	8.88E-07	8.88E-07
I133	0.3	8.25E-07	8.25E-07	8.25E-07	8.25E-07
Y91m	0.3	8.10E-07	8.14E-07	8.10E-07	8.10E-07
Y92	0.3	7.54E-07	7.55E-07	7.54E-07	7.54E-07
Nb97	0.3	7.46E-07	7.53E-07	7.53E-07	7.53E-07
Ba139	0.3	7.37E-07	7.42E-07	7.10E-07	7.10E-07
Nb98m	0.2	6.70E-07	6.77E-07	6.69E-07	6.69E-07
Pr147	0.2	6.36E-07	5.57E-07	6.36E-07	6.03E-07
Nd149	0.2	6.06E-07	5.78E-07	5.57E-07	5.57E-07
Xe135m	0.2	5.31E-07	5.31E-07	5.27E-07	5.27E-07
Ru105	0.2	4.75E-07	4.75E-07	4.81E-07	4.81E-07
Y93	0.1	3.77E-07	3.80E-07	3.77E-07	3.77E-07
Kr85m	0.1	3.57E-07	3.58E-07	3.70E-07	3.70E-07
Sb129m	0.1	3.32E-07	7.24E-07	7.86E-07	7.86E-07
Ce146	0.1	3.16E-07	2.83E-07	2.82E-07	2.85E-07
Xe135	0.1	3.16E-07	3.16E-07	3.16E-07	3.16E-07

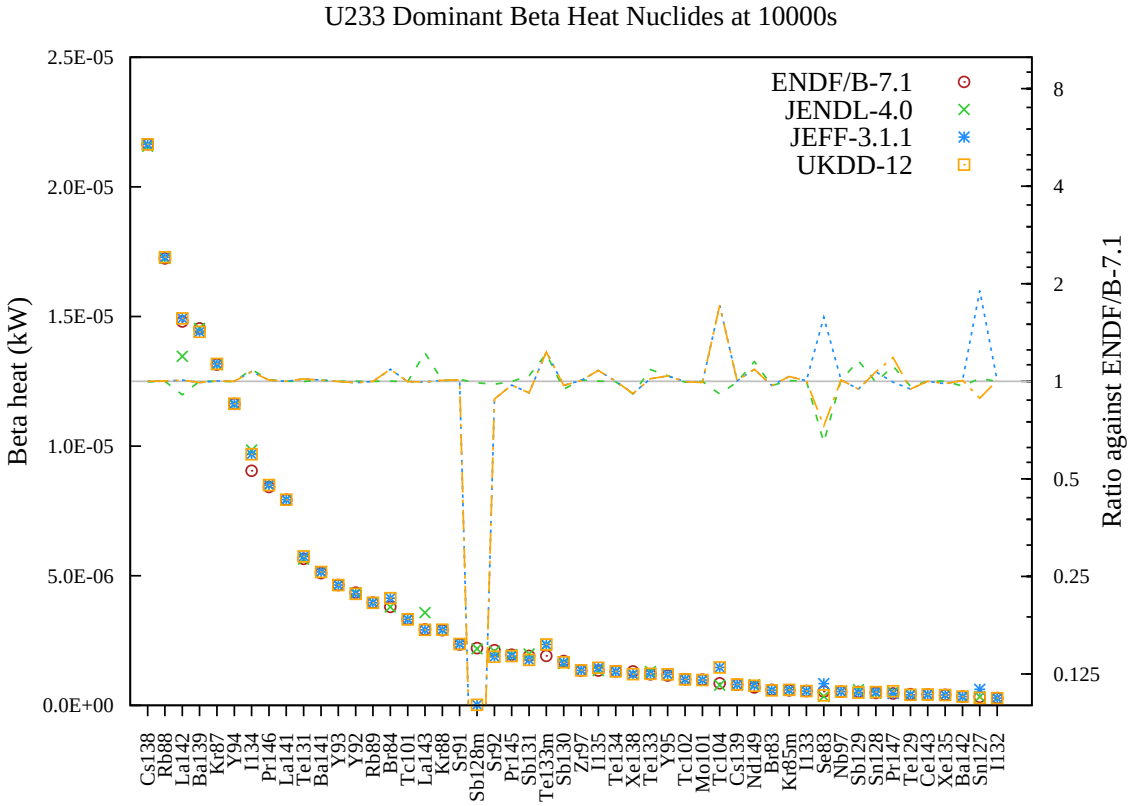

Figure 29: Beta heat (in kW) decay data comparison for U233 fission pulse after 10000s cooling.

Table 29: Beta heat (in kW) decay data comparison for U233 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	11.3	2.16E-05	2.16E-05	2.16E-05	2.16E-05
Rb88	9.0	1.72E-05	1.72E-05	1.73E-05	1.73E-05
La142	7.8	1.48E-05	1.35E-05	1.49E-05	1.49E-05
Ba139	7.6	1.45E-05	1.45E-05	1.44E-05	1.44E-05
Kr87	6.9	1.31E-05	1.31E-05	1.32E-05	1.32E-05
Y94	6.1	1.16E-05	1.16E-05	1.16E-05	1.16E-05
I134	4.7	9.05E-06	9.85E-06	9.68E-06	9.68E-06
Pr146	4.4	8.42E-06	8.52E-06	8.50E-06	8.50E-06
La141	4.2	7.93E-06	7.94E-06	7.93E-06	7.93E-06
Te131	3.0	5.65E-06	5.64E-06	5.75E-06	5.75E-06
Ba141	2.7	5.10E-06	5.14E-06	5.14E-06	5.14E-06
Y93	2.4	4.64E-06	4.65E-06	4.64E-06	4.64E-06
Y92	2.3	4.35E-06	4.34E-06	4.30E-06	4.30E-06
Rb89	2.1	3.97E-06	3.97E-06	3.96E-06	3.96E-06
Br84	2.0	3.79E-06	3.80E-06	4.13E-06	4.13E-06
Tc101	1.7	3.32E-06	3.32E-06	3.31E-06	3.31E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La143	1.5	2.92E-06	3.58E-06	2.91E-06	2.91E-06
Kr88	1.5	2.90E-06	2.91E-06	2.92E-06	2.92E-06
Sr91	1.2	2.35E-06	2.38E-06	2.37E-06	2.37E-06
Sb128m	1.2	2.21E-06	2.18E-06	2.28E-08	2.28E-08
Sr92	1.1	2.13E-06	2.08E-06	1.87E-06	1.87E-06
Pr145	1.0	1.95E-06	1.95E-06	1.90E-06	1.90E-06
Sb131	1.0	1.91E-06	1.98E-06	1.76E-06	1.76E-06
Te133m	1.0	1.91E-06	2.32E-06	2.35E-06	2.35E-06
Sb130	0.9	1.71E-06	1.62E-06	1.66E-06	1.66E-06
Zr97	0.7	1.34E-06	1.36E-06	1.35E-06	1.35E-06
I135	0.7	1.34E-06	1.34E-06	1.45E-06	1.45E-06
Te134	0.7	1.31E-06	1.31E-06	1.31E-06	1.31E-06
Xe138	0.7	1.31E-06	1.20E-06	1.20E-06	1.20E-06
Te133	0.6	1.20E-06	1.30E-06	1.22E-06	1.22E-06
Y95	0.6	1.15E-06	1.20E-06	1.20E-06	1.20E-06
Tc102	0.5	1.00E-06	9.99E-07	1.00E-06	1.00E-06
Mo101	0.5	9.88E-07	9.87E-07	9.79E-07	9.79E-07
Tc104	0.4	8.54E-07	7.79E-07	1.46E-06	1.46E-06
Cs139	0.4	7.99E-07	7.95E-07	8.02E-07	8.02E-07
Nd149	0.4	6.94E-07	7.98E-07	7.56E-07	7.56E-07
Br83	0.3	5.99E-07	5.81E-07	5.82E-07	5.81E-07
Kr85m	0.3	5.78E-07	5.81E-07	5.98E-07	5.98E-07
I133	0.3	5.50E-07	5.51E-07	5.51E-07	5.51E-07
Se83	0.3	5.31E-07	3.44E-07	8.37E-07	3.86E-07
Nb97	0.3	5.26E-07	5.31E-07	5.31E-07	5.31E-07
Sb129	0.3	5.20E-07	6.02E-07	4.92E-07	4.92E-07
Sn128	0.3	4.78E-07	4.75E-07	5.11E-07	5.11E-07
Pr147	0.2	4.61E-07	5.13E-07	4.58E-07	5.46E-07
Te129	0.2	4.31E-07	4.16E-07	4.08E-07	4.08E-07
Ce143	0.2	4.19E-07	4.19E-07	4.19E-07	4.19E-07
Xe135	0.2	4.07E-07	4.08E-07	4.00E-07	4.00E-07
Ba142	0.2	3.37E-07	3.25E-07	3.39E-07	3.39E-07
Sn127	0.2	3.26E-07	3.32E-07	6.20E-07	2.89E-07
I132	0.1	2.79E-07	2.79E-07	2.81E-07	2.81E-07

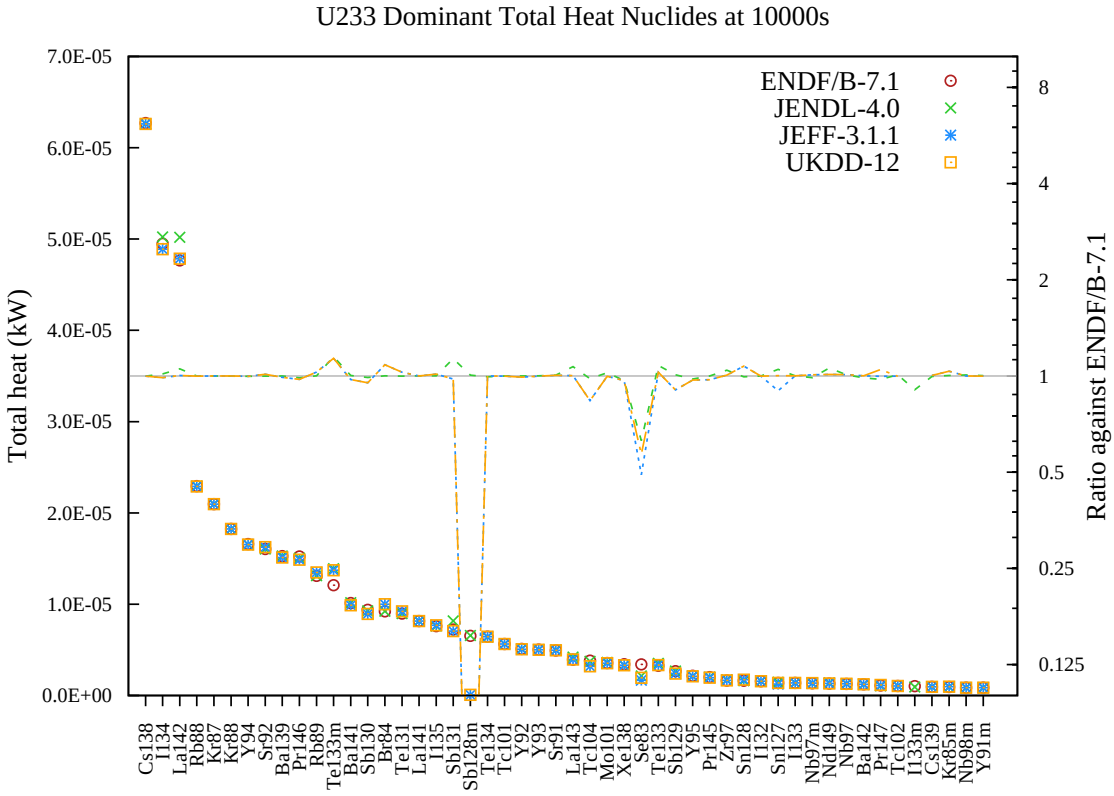

Figure 30: Total heat (in kW) decay data comparison for U233 fission pulse after 10000s cooling.

Table 30: Total heat (in kW) decay data comparison for U233 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	13.6	6.27E-05	6.26E-05	6.26E-05	6.26E-05
I134	10.7	4.95E-05	5.02E-05	4.89E-05	4.89E-05
La142	10.3	4.77E-05	5.02E-05	4.78E-05	4.78E-05
Rb88	5.0	2.29E-05	2.29E-05	2.29E-05	2.29E-05
Kr87	4.5	2.10E-05	2.10E-05	2.10E-05	2.10E-05
Kr88	4.0	1.82E-05	1.82E-05	1.82E-05	1.82E-05
Y94	3.6	1.66E-05	1.65E-05	1.65E-05	1.65E-05
Sr92	3.5	1.61E-05	1.60E-05	1.63E-05	1.63E-05
Ba139	3.3	1.53E-05	1.53E-05	1.51E-05	1.51E-05
Pr146	3.3	1.52E-05	1.50E-05	1.49E-05	1.49E-05
Rb89	2.8	1.31E-05	1.31E-05	1.35E-05	1.35E-05
Te133m	2.6	1.21E-05	1.39E-05	1.37E-05	1.37E-05
Ba141	2.2	1.01E-05	1.02E-05	9.88E-06	9.88E-06
Sb130	2.0	9.39E-06	9.28E-06	8.94E-06	8.94E-06
Br84	2.0	9.22E-06	9.23E-06	9.99E-06	9.99E-06
Te131	1.9	8.98E-06	8.97E-06	9.22E-06	9.22E-06
La141	1.8	8.16E-06	8.16E-06	8.16E-06	8.16E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I135	1.6	7.59E-06	7.61E-06	7.70E-06	7.70E-06
Sb131	1.6	7.21E-06	8.18E-06	7.06E-06	7.05E-06
Sb128m	1.4	6.53E-06	6.57E-06	6.81E-08	6.81E-08
Te134	1.4	6.44E-06	6.40E-06	6.44E-06	6.44E-06
Tc101	1.2	5.65E-06	5.65E-06	5.64E-06	5.64E-06
Y92	1.1	5.10E-06	5.10E-06	5.06E-06	5.06E-06
Y93	1.1	5.02E-06	5.03E-06	5.02E-06	5.02E-06
Sr91	1.1	4.94E-06	4.97E-06	4.96E-06	4.96E-06
La143	0.9	3.93E-06	4.21E-06	3.95E-06	3.95E-06
Tc104	0.8	3.81E-06	3.74E-06	3.20E-06	3.20E-06
Mo101	0.8	3.55E-06	3.64E-06	3.54E-06	3.54E-06
Xe138	0.7	3.42E-06	3.31E-06	3.31E-06	3.31E-06
Se83	0.7	3.41E-06	2.14E-06	1.67E-06	1.94E-06
Te133	0.7	3.25E-06	3.51E-06	3.34E-06	3.34E-06
Sb129	0.6	2.66E-06	2.68E-06	2.41E-06	2.41E-06
Y95	0.5	2.17E-06	2.12E-06	2.11E-06	2.11E-06
Pr145	0.4	2.01E-06	2.01E-06	1.95E-06	1.95E-06
Zr97	0.4	1.65E-06	1.72E-06	1.66E-06	1.66E-06
Sn128	0.4	1.62E-06	1.61E-06	1.74E-06	1.74E-06
I132	0.3	1.56E-06	1.56E-06	1.56E-06	1.56E-06
Sn127	0.3	1.38E-06	1.45E-06	1.24E-06	1.38E-06
I133	0.3	1.37E-06	1.38E-06	1.38E-06	1.38E-06
Nb97m	0.3	1.35E-06	1.33E-06	1.36E-06	1.36E-06
Nd149	0.3	1.30E-06	1.38E-06	1.31E-06	1.31E-06
Nb97	0.3	1.27E-06	1.28E-06	1.28E-06	1.28E-06
Ba142	0.3	1.23E-06	1.21E-06	1.23E-06	1.23E-06
Pr147	0.2	1.10E-06	1.07E-06	1.09E-06	1.15E-06
Tc102	0.2	1.05E-06	1.06E-06	1.05E-06	1.04E-06
I133m	0.2	1.02E-06	9.25E-07	—	—
Cs139	0.2	9.44E-07	9.40E-07	9.48E-07	9.48E-07
Kr85m	0.2	9.35E-07	9.39E-07	9.68E-07	9.68E-07
Nb98m	0.2	8.55E-07	8.62E-07	8.55E-07	8.55E-07
Y91m	0.2	8.52E-07	8.55E-07	8.51E-07	8.51E-07

3 Decay data comparison for ^{235}U 0.0253 eV pulse decay heat

3.1 10s after pulse

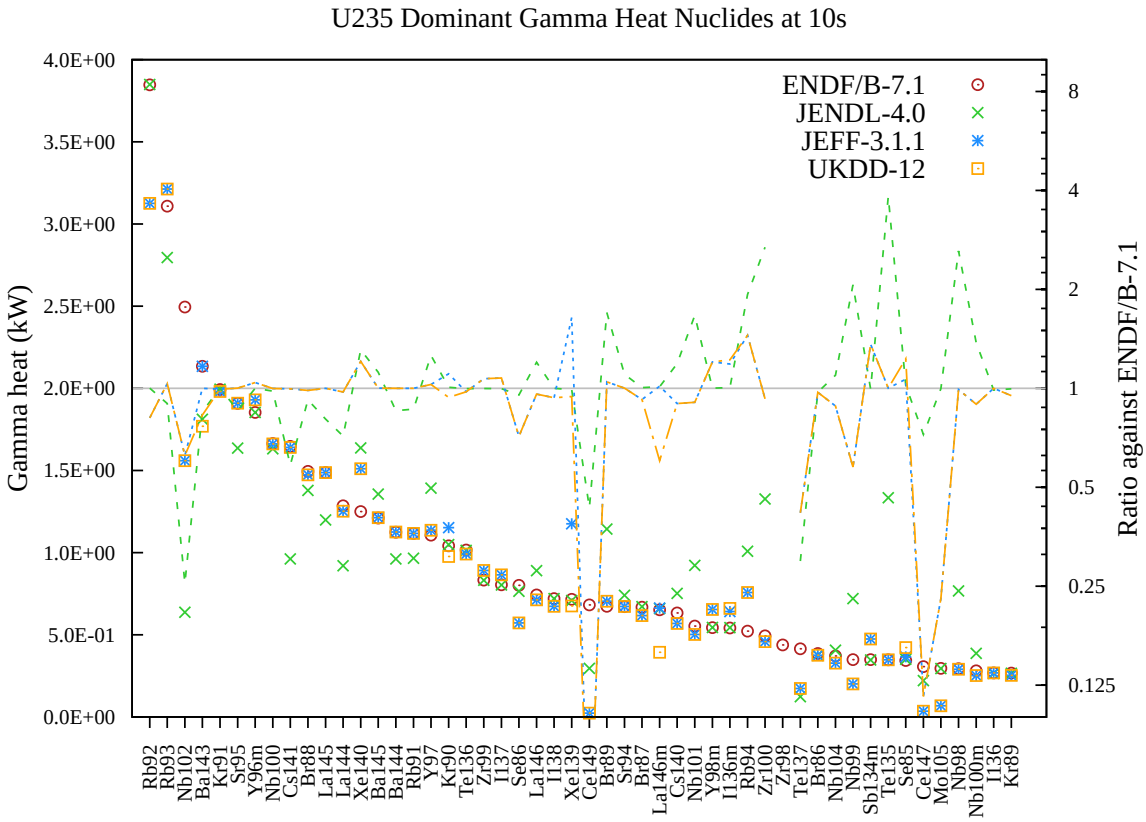

Figure 31: Gamma heat (in kW) decay data comparison for U235 fission pulse after 10s cooling.

Table 31: Gamma heat (in kW) decay data comparison for U235 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb92	7.0	3.85E+00	3.85E+00	3.13E+00	3.13E+00
Rb93	5.7	3.11E+00	2.80E+00	3.21E+00	3.21E+00
Nb102	4.5	2.50E+00	6.37E-01	1.56E+00	1.56E+00
Ba143	3.9	2.13E+00	1.81E+00	2.13E+00	1.77E+00
Kr91	3.6	1.99E+00	2.00E+00	1.98E+00	1.98E+00
Sr95	3.5	1.91E+00	1.64E+00	1.91E+00	1.91E+00
Y96m	3.4	1.85E+00	1.85E+00	1.93E+00	1.93E+00
Nb100	3.0	1.66E+00	1.63E+00	1.66E+00	1.66E+00
Cs141	3.0	1.65E+00	9.62E-01	1.64E+00	1.64E+00

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Br88	2.7	1.50E+00	1.38E+00	1.47E+00	1.47E+00
La145	2.7	1.49E+00	1.20E+00	1.49E+00	1.49E+00
La144	2.3	1.28E+00	9.20E-01	1.25E+00	1.25E+00
Xe140	2.3	1.25E+00	1.64E+00	1.51E+00	1.51E+00
Ba145	2.2	1.21E+00	1.36E+00	1.21E+00	1.21E+00
Ba144	2.0	1.12E+00	9.61E-01	1.13E+00	1.13E+00
Rb91	2.0	1.12E+00	9.66E-01	1.12E+00	1.12E+00
Y97	2.0	1.11E+00	1.39E+00	1.14E+00	1.14E+00
Kr90	1.9	1.04E+00	1.05E+00	1.15E+00	9.77E-01
Te136	1.8	1.02E+00	1.01E+00	9.92E-01	9.92E-01
Zr99	1.5	8.33E-01	8.32E-01	8.91E-01	8.91E-01
I137	1.5	8.05E-01	8.03E-01	8.65E-01	8.65E-01
Se86	1.5	8.01E-01	7.64E-01	5.72E-01	5.72E-01
La146	1.4	7.42E-01	8.91E-01	7.13E-01	7.13E-01
I138	1.3	7.20E-01	7.20E-01	6.74E-01	6.74E-01
Xe139	1.3	7.16E-01	7.09E-01	1.18E+00	6.76E-01
Ce149	1.2	6.82E-01	2.95E-01	2.39E-02	2.39E-02
Br89	1.2	6.73E-01	1.14E+00	7.04E-01	7.04E-01
Sr94	1.2	6.71E-01	7.40E-01	6.72E-01	6.72E-01
Br87	1.2	6.68E-01	6.71E-01	6.17E-01	6.17E-01
La146m	1.2	6.52E-01	6.59E-01	6.62E-01	3.93E-01
Cs140	1.2	6.33E-01	7.53E-01	5.69E-01	5.69E-01
Nb101	1.0	5.54E-01	9.23E-01	5.02E-01	5.02E-01
Y98m	1.0	5.44E-01	5.44E-01	6.54E-01	6.54E-01
I136m	1.0	5.41E-01	5.44E-01	6.42E-01	6.61E-01
Rb94	0.9	5.22E-01	1.01E+00	7.57E-01	7.57E-01
Zr100	0.9	4.94E-01	1.33E+00	4.59E-01	4.59E-01
Zr98	0.8	4.38E-01	—	—	—
Te137	0.8	4.15E-01	1.24E-01	1.74E-01	1.74E-01
Br86	0.7	3.86E-01	3.76E-01	3.75E-01	3.75E-01
Nb104	0.7	3.71E-01	4.07E-01	3.28E-01	3.28E-01
Nb99	0.6	3.49E-01	7.21E-01	2.01E-01	2.01E-01
Sb134m	0.6	3.49E-01	3.47E-01	4.75E-01	4.75E-01
Te135	0.6	3.47E-01	1.33E+00	3.48E-01	3.48E-01
Se85	0.6	3.43E-01	3.51E-01	3.66E-01	4.23E-01
Ce147	0.6	3.06E-01	2.21E-01	3.53E-02	3.53E-02
Mo105	0.5	2.95E-01	2.94E-01	6.77E-02	6.77E-02
Nb98	0.5	2.93E-01	7.67E-01	2.91E-01	2.91E-01
Nb100m	0.5	2.81E-01	3.87E-01	2.52E-01	2.52E-01
I136	0.5	2.68E-01	2.65E-01	2.68E-01	2.68E-01
Kr89	0.5	2.67E-01	2.66E-01	2.53E-01	2.53E-01

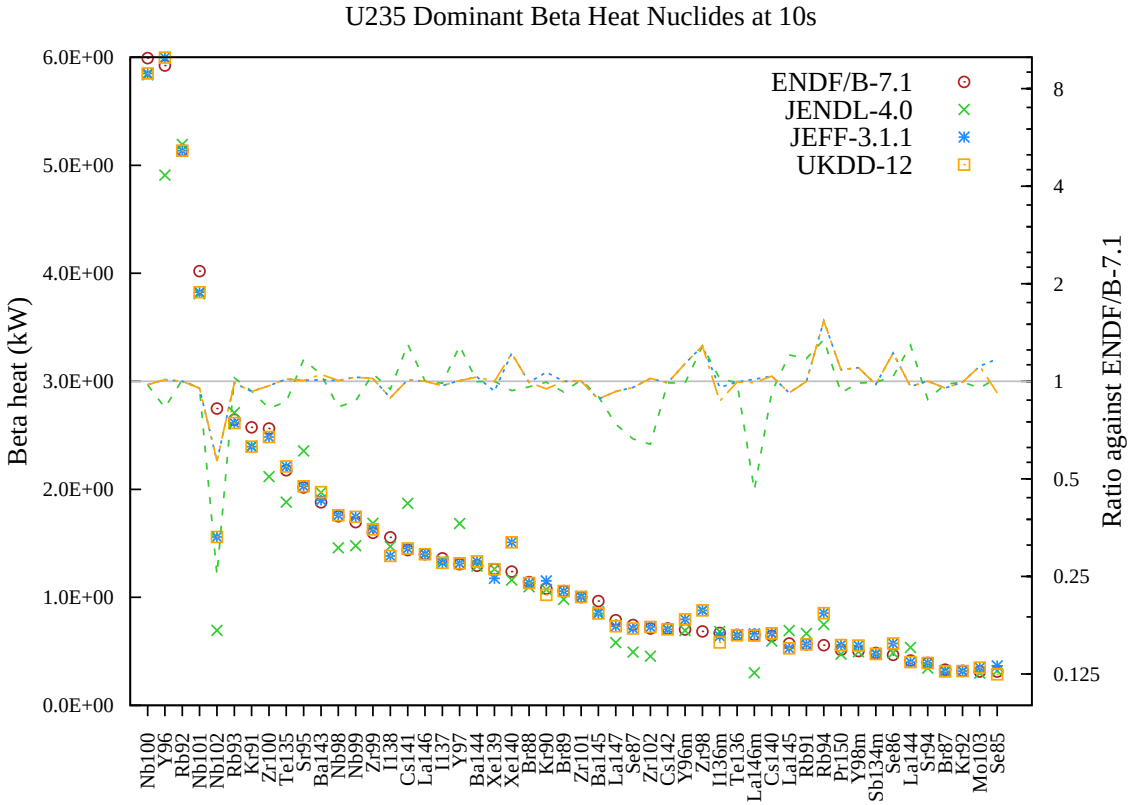

Figure 32: Beta heat (in kW) decay data comparison for U235 fission pulse after 10s cooling.

Table 32: Beta heat (in kW) decay data comparison for U235 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb100	7.6	5.99E+00	5.84E+00	5.85E+00	5.85E+00
Y96	7.6	5.92E+00	4.91E+00	6.00E+00	6.00E+00
Rb92	6.6	5.14E+00	5.19E+00	5.14E+00	5.14E+00
Nb101	5.1	4.02E+00	3.81E+00	3.82E+00	3.82E+00
Nb102	3.5	2.75E+00	6.95E-01	1.56E+00	1.56E+00
Rb93	3.4	2.64E+00	2.71E+00	2.61E+00	2.61E+00
Kr91	3.3	2.57E+00	2.40E+00	2.40E+00	2.40E+00
Zr100	3.3	2.56E+00	2.12E+00	2.48E+00	2.48E+00
Te135	2.8	2.18E+00	1.88E+00	2.21E+00	2.21E+00
Sr95	2.6	2.02E+00	2.36E+00	2.03E+00	2.03E+00
Ba143	2.4	1.88E+00	1.97E+00	1.90E+00	1.97E+00
Nb98	2.2	1.75E+00	1.46E+00	1.76E+00	1.76E+00
Nb99	2.2	1.70E+00	1.48E+00	1.75E+00	1.75E+00
Zr99	2.0	1.60E+00	1.68E+00	1.63E+00	1.63E+00
I138	2.0	1.56E+00	1.47E+00	1.38E+00	1.38E+00
Cs141	1.8	1.44E+00	1.87E+00	1.45E+00	1.45E+00

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La146	1.8	1.40E+00	1.40E+00	1.40E+00	1.40E+00
I137	1.7	1.36E+00	1.34E+00	1.32E+00	1.32E+00
Y97	1.7	1.31E+00	1.68E+00	1.31E+00	1.31E+00
Ba144	1.6	1.29E+00	1.29E+00	1.33E+00	1.33E+00
Xe139	1.6	1.26E+00	1.26E+00	1.18E+00	1.26E+00
Xe140	1.6	1.24E+00	1.16E+00	1.51E+00	1.51E+00
Br88	1.5	1.14E+00	1.10E+00	1.13E+00	1.13E+00
Kr90	1.4	1.08E+00	1.07E+00	1.15E+00	1.02E+00
Br89	1.4	1.06E+00	9.81E-01	1.06E+00	1.06E+00
Zr101	1.3	1.00E+00	1.01E+00	1.00E+00	1.00E+00
Ba145	1.2	9.65E-01	8.67E-01	8.50E-01	8.50E-01
La147	1.0	7.88E-01	5.81E-01	7.33E-01	7.33E-01
Se87	0.9	7.43E-01	4.94E-01	7.11E-01	7.11E-01
Zr102	0.9	7.12E-01	4.55E-01	7.27E-01	7.27E-01
Cs142	0.9	7.11E-01	7.04E-01	7.04E-01	7.04E-01
Y96m	0.9	7.02E-01	6.93E-01	7.96E-01	7.96E-01
Zr98	0.9	6.84E-01	8.80E-01	8.80E-01	8.80E-01
I136m	0.9	6.70E-01	6.84E-01	6.42E-01	5.82E-01
Te136	0.8	6.53E-01	6.46E-01	6.50E-01	6.50E-01
La146m	0.8	6.52E-01	3.01E-01	6.62E-01	6.46E-01
Cs140	0.8	6.43E-01	5.95E-01	6.67E-01	6.67E-01
La145	0.7	5.74E-01	6.92E-01	5.29E-01	5.29E-01
Rb91	0.7	5.65E-01	6.65E-01	5.65E-01	5.65E-01
Rb94	0.7	5.56E-01	7.48E-01	8.55E-01	8.55E-01
Pr150	0.7	5.14E-01	4.74E-01	5.58E-01	5.58E-01
Y98m	0.6	5.03E-01	4.97E-01	5.54E-01	5.54E-01
Sb134m	0.6	4.85E-01	4.82E-01	4.75E-01	4.75E-01
Se86	0.6	4.68E-01	4.85E-01	5.72E-01	5.72E-01
La144	0.5	4.15E-01	5.37E-01	4.00E-01	4.00E-01
Sr94	0.5	3.92E-01	3.45E-01	3.92E-01	3.92E-01
Br87	0.4	3.31E-01	3.23E-01	3.15E-01	3.15E-01
Kr92	0.4	3.19E-01	3.17E-01	3.17E-01	3.17E-01
Mo103	0.4	3.13E-01	2.98E-01	3.49E-01	3.49E-01
Se85	0.4	3.12E-01	3.20E-01	3.66E-01	2.88E-01

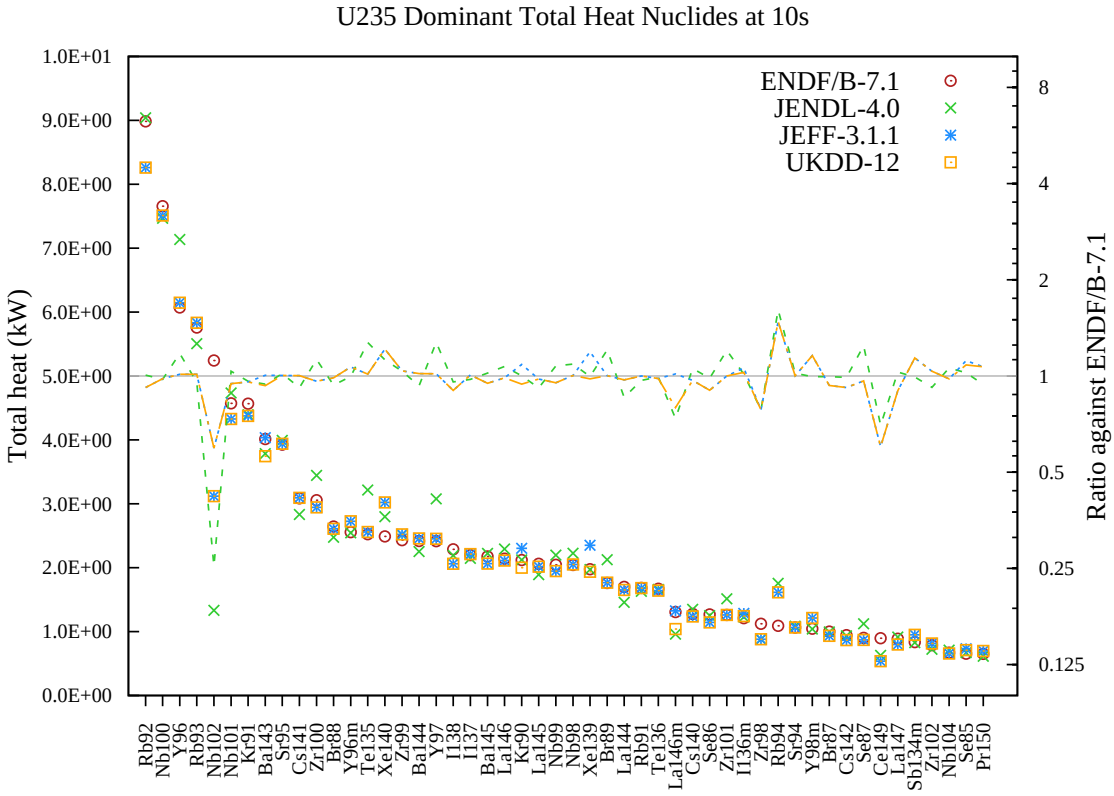

Figure 33: Total heat (in kW) decay data comparison for U235 fission pulse after 10s cooling.

Table 33: Total heat (in kW) decay data comparison for U235 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb92	6.7	8.98E+00	9.04E+00	8.26E+00	8.26E+00
Nb100	5.7	7.66E+00	7.47E+00	7.51E+00	7.51E+00
Y96	4.5	6.07E+00	7.14E+00	6.15E+00	6.15E+00
Rb93	4.3	5.76E+00	5.51E+00	5.83E+00	5.83E+00
Nb102	3.9	5.24E+00	1.33E+00	3.12E+00	3.12E+00
Nb101	3.4	4.57E+00	4.73E+00	4.33E+00	4.33E+00
Kr91	3.4	4.57E+00	4.39E+00	4.38E+00	4.38E+00
Ba143	3.0	4.01E+00	3.78E+00	4.04E+00	3.74E+00
Sr95	2.9	3.92E+00	3.99E+00	3.94E+00	3.94E+00
Cs141	2.3	3.08E+00	2.83E+00	3.09E+00	3.09E+00
Zr100	2.3	3.06E+00	3.44E+00	2.94E+00	2.94E+00
Br88	2.0	2.64E+00	2.48E+00	2.61E+00	2.61E+00
Y96m	1.9	2.56E+00	2.55E+00	2.73E+00	2.73E+00
Te135	1.9	2.52E+00	3.22E+00	2.56E+00	2.56E+00
Xe140	1.9	2.49E+00	2.80E+00	3.02E+00	3.02E+00
Zr99	1.8	2.43E+00	2.52E+00	2.52E+00	2.52E+00
Ba144	1.8	2.42E+00	2.25E+00	2.46E+00	2.46E+00

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y97	1.8	2.41E+00	3.08E+00	2.45E+00	2.45E+00
I138	1.7	2.29E+00	2.19E+00	2.06E+00	2.06E+00
I137	1.6	2.20E+00	2.15E+00	2.21E+00	2.21E+00
Ba145	1.6	2.18E+00	2.22E+00	2.06E+00	2.06E+00
La146	1.6	2.14E+00	2.29E+00	2.11E+00	2.11E+00
Kr90	1.6	2.12E+00	2.12E+00	2.30E+00	2.00E+00
La145	1.5	2.06E+00	1.89E+00	2.02E+00	2.02E+00
Nb99	1.5	2.05E+00	2.20E+00	1.95E+00	1.95E+00
Nb98	1.5	2.04E+00	2.23E+00	2.05E+00	2.05E+00
Xe139	1.5	1.98E+00	1.97E+00	2.35E+00	1.94E+00
Br89	1.3	1.76E+00	2.12E+00	1.77E+00	1.77E+00
La144	1.3	1.70E+00	1.46E+00	1.65E+00	1.65E+00
Rb91	1.3	1.68E+00	1.63E+00	1.68E+00	1.68E+00
Te136	1.3	1.67E+00	1.66E+00	1.64E+00	1.64E+00
La146m	1.0	1.30E+00	9.61E-01	1.32E+00	1.04E+00
Cs140	1.0	1.28E+00	1.35E+00	1.24E+00	1.24E+00
Se86	1.0	1.27E+00	1.25E+00	1.14E+00	1.14E+00
Zr101	0.9	1.26E+00	1.51E+00	1.26E+00	1.26E+00
I136m	0.9	1.21E+00	1.23E+00	1.28E+00	1.24E+00
Zr98	0.8	1.12E+00	8.80E-01	8.80E-01	8.80E-01
Rb94	0.8	1.09E+00	1.76E+00	1.61E+00	1.61E+00
Sr94	0.8	1.06E+00	1.08E+00	1.06E+00	1.06E+00
Y98m	0.8	1.05E+00	1.04E+00	1.21E+00	1.21E+00
Br87	0.7	9.99E-01	9.94E-01	9.33E-01	9.33E-01
Cs142	0.7	9.44E-01	9.35E-01	8.68E-01	8.68E-01
Se87	0.7	9.02E-01	1.12E+00	8.70E-01	8.70E-01
Ce149	0.7	8.95E-01	6.27E-01	5.38E-01	5.38E-01
La147	0.7	8.88E-01	9.14E-01	7.98E-01	7.98E-01
Sb134m	0.6	8.34E-01	8.28E-01	9.50E-01	9.50E-01
Zr102	0.6	7.86E-01	7.24E-01	8.13E-01	8.13E-01
Nb104	0.5	6.69E-01	7.09E-01	6.56E-01	6.56E-01
Se85	0.5	6.56E-01	6.71E-01	7.32E-01	7.10E-01
Pr150	0.5	6.52E-01	6.13E-01	6.97E-01	6.97E-01

3.2 100s after pulse

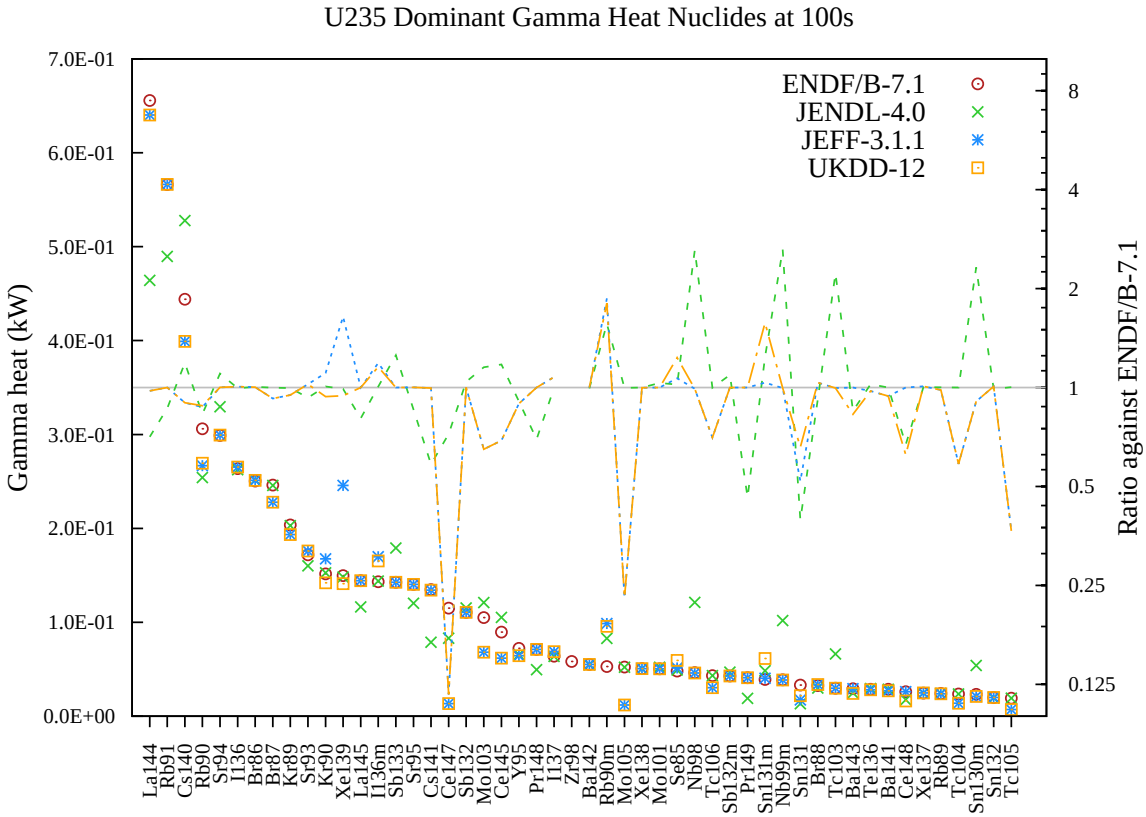

Figure 34: Gamma heat (in kW) decay data comparison for U235 fission pulse after 100s cooling.

Table 34: Gamma heat (in kW) decay data comparison for U235 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La144	10.3	6.56E-01	4.64E-01	6.40E-01	6.40E-01
Rb91	8.9	5.66E-01	4.90E-01	5.66E-01	5.66E-01
Cs140	7.0	4.44E-01	5.28E-01	3.99E-01	3.99E-01
Rb90	4.8	3.06E-01	2.54E-01	2.67E-01	2.69E-01
Sr94	4.7	2.99E-01	3.30E-01	2.99E-01	2.99E-01
I136	4.1	2.64E-01	2.62E-01	2.65E-01	2.65E-01
Br86	3.9	2.50E-01	2.51E-01	2.51E-01	2.51E-01
Br87	3.9	2.46E-01	2.46E-01	2.28E-01	2.28E-01
Kr89	3.2	2.04E-01	2.03E-01	1.93E-01	1.93E-01
Sr93	2.7	1.72E-01	1.60E-01	1.76E-01	1.76E-01
Kr90	2.4	1.51E-01	1.53E-01	1.68E-01	1.42E-01
Xe139	2.4	1.50E-01	1.48E-01	2.46E-01	1.41E-01
La145	2.3	1.44E-01	1.16E-01	1.44E-01	1.44E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I136m	2.2	1.43E-01	1.44E-01	1.70E-01	1.65E-01
Sb133	2.2	1.43E-01	1.79E-01	1.43E-01	1.43E-01
Sr95	2.2	1.40E-01	1.20E-01	1.40E-01	1.40E-01
Cs141	2.1	1.35E-01	7.87E-02	1.34E-01	1.34E-01
Ce147	1.8	1.15E-01	8.30E-02	1.34E-02	1.34E-02
Sb132	1.7	1.11E-01	1.15E-01	1.11E-01	1.11E-01
Mo103	1.6	1.05E-01	1.21E-01	6.81E-02	6.81E-02
Ce145	1.4	8.95E-02	1.05E-01	6.17E-02	6.17E-02
Y95	1.1	7.21E-02	6.55E-02	6.45E-02	6.45E-02
Pr148	1.1	7.11E-02	4.95E-02	7.11E-02	7.11E-02
I137	1.0	6.38E-02	6.37E-02	6.87E-02	6.87E-02
Zr98	0.9	5.82E-02	—	—	—
Ba142	0.9	5.52E-02	5.48E-02	5.51E-02	5.51E-02
Rb90m	0.8	5.29E-02	8.28E-02	9.87E-02	9.57E-02
Mo105	0.8	5.23E-02	5.21E-02	1.20E-02	1.20E-02
Xe138	0.8	5.07E-02	5.07E-02	5.06E-02	5.06E-02
Mo101	0.8	5.04E-02	5.21E-02	5.04E-02	5.04E-02
Se85	0.8	4.81E-02	4.91E-02	5.14E-02	5.93E-02
Nb98	0.7	4.64E-02	1.21E-01	4.60E-02	4.60E-02
Tc106	0.7	4.32E-02	4.31E-02	3.04E-02	3.04E-02
Sb132m	0.7	4.29E-02	4.68E-02	4.29E-02	4.29E-02
Pr149	0.6	4.10E-02	1.90E-02	4.10E-02	4.10E-02
Sn131m	0.6	3.90E-02	4.83E-02	4.04E-02	6.14E-02
Nb99m	0.6	3.87E-02	1.02E-01	3.86E-02	3.86E-02
Sn131	0.5	3.32E-02	1.31E-02	1.72E-02	2.19E-02
Br88	0.5	3.26E-02	3.01E-02	3.37E-02	3.37E-02
Tc103	0.5	2.98E-02	6.63E-02	2.97E-02	2.97E-02
Ba143	0.5	2.92E-02	2.48E-02	2.92E-02	2.42E-02
Te136	0.5	2.88E-02	2.94E-02	2.81E-02	2.81E-02
Ba141	0.5	2.87E-02	2.87E-02	2.70E-02	2.70E-02
Ce148	0.4	2.60E-02	1.74E-02	2.60E-02	1.62E-02
Xe137	0.4	2.45E-02	2.46E-02	2.47E-02	2.47E-02
Rb89	0.4	2.42E-02	2.42E-02	2.38E-02	2.38E-02
Tc104	0.4	2.36E-02	2.37E-02	1.38E-02	1.38E-02
Sn130m	0.4	2.33E-02	5.40E-02	2.11E-02	2.11E-02
Sn132	0.3	1.97E-02	1.95E-02	1.99E-02	1.99E-02
Tc105	0.3	1.91E-02	1.92E-02	7.00E-03	7.00E-03

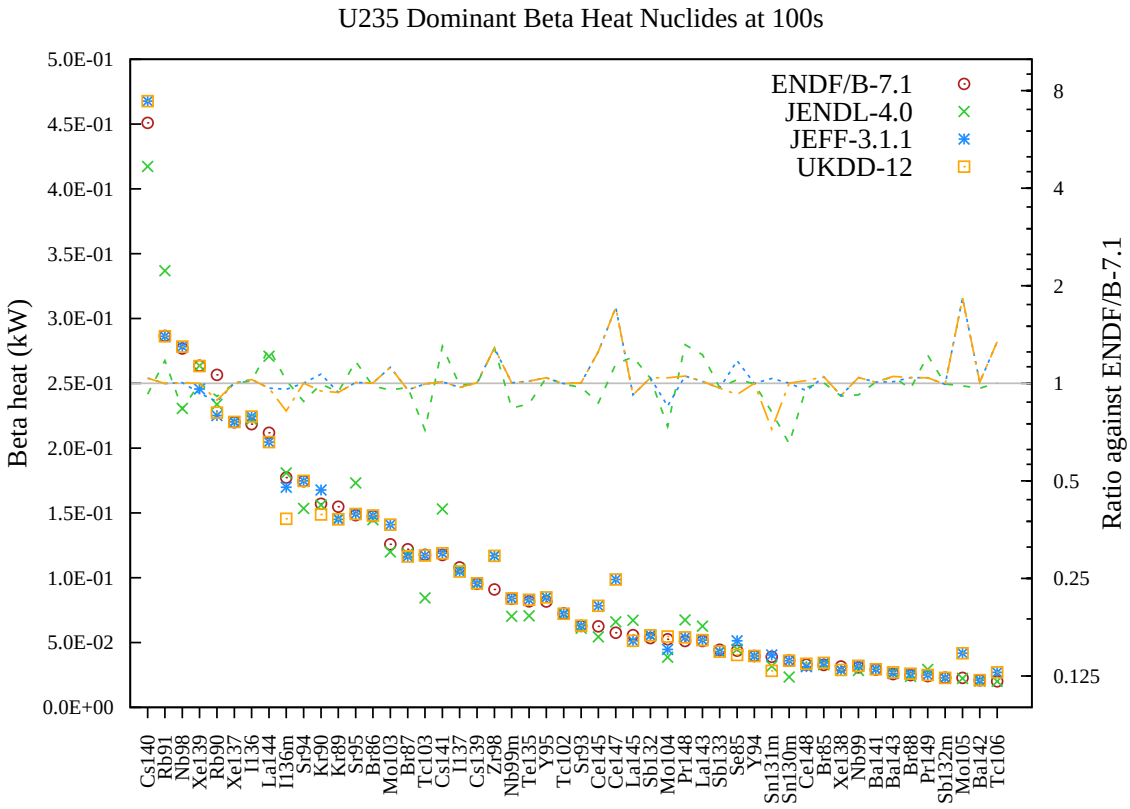

Figure 35: Beta heat (in kW) decay data comparison for U235 fission pulse after 100s cooling.

Table 35: Beta heat (in kW) decay data comparison for U235 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	8.2	4.51E-01	4.17E-01	4.68E-01	4.68E-01
Rb91	5.2	2.87E-01	3.37E-01	2.86E-01	2.86E-01
Nb98	5.0	2.77E-01	2.31E-01	2.78E-01	2.78E-01
Xe139	4.8	2.64E-01	2.64E-01	2.46E-01	2.63E-01
Rb90	4.7	2.57E-01	2.34E-01	2.25E-01	2.27E-01
Xe137	4.0	2.20E-01	2.20E-01	2.20E-01	2.20E-01
I136	4.0	2.18E-01	2.22E-01	2.24E-01	2.24E-01
La144	3.8	2.12E-01	2.71E-01	2.05E-01	2.05E-01
I136m	3.2	1.77E-01	1.81E-01	1.70E-01	1.46E-01
Sr94	3.2	1.74E-01	1.53E-01	1.75E-01	1.75E-01
Kr90	2.8	1.57E-01	1.56E-01	1.68E-01	1.49E-01
Kr89	2.8	1.55E-01	1.46E-01	1.45E-01	1.45E-01
Sr95	2.7	1.48E-01	1.73E-01	1.49E-01	1.49E-01
Br86	2.7	1.48E-01	1.45E-01	1.48E-01	1.48E-01
Mo103	2.3	1.26E-01	1.20E-01	1.41E-01	1.41E-01
Br87	2.2	1.22E-01	1.18E-01	1.16E-01	1.16E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc103	2.1	1.18E-01	8.44E-02	1.17E-01	1.17E-01
Cs141	2.1	1.18E-01	1.53E-01	1.19E-01	1.19E-01
I137	2.0	1.08E-01	1.06E-01	1.05E-01	1.05E-01
Cs139	1.7	9.54E-02	9.51E-02	9.58E-02	9.58E-02
Zr98	1.6	9.10E-02	1.17E-01	1.17E-01	1.17E-01
Nb99m	1.5	8.37E-02	7.02E-02	8.40E-02	8.40E-02
Te135	1.5	8.17E-02	7.06E-02	8.30E-02	8.30E-02
Y95	1.5	8.16E-02	8.50E-02	8.48E-02	8.48E-02
Tc102	1.3	7.24E-02	7.19E-02	7.23E-02	7.22E-02
Sr93	1.1	6.28E-02	6.10E-02	6.30E-02	6.30E-02
Ce145	1.1	6.26E-02	5.44E-02	7.83E-02	7.83E-02
Ce147	1.0	5.75E-02	6.60E-02	9.86E-02	9.86E-02
La145	1.0	5.57E-02	6.72E-02	5.13E-02	5.13E-02
Sb132	1.0	5.34E-02	5.54E-02	5.56E-02	5.56E-02
Mo104	1.0	5.26E-02	3.87E-02	4.47E-02	5.46E-02
Pr148	0.9	5.12E-02	6.74E-02	5.39E-02	5.39E-02
La143	0.9	5.12E-02	6.26E-02	5.18E-02	5.18E-02
Sb133	0.8	4.44E-02	4.31E-02	4.29E-02	4.29E-02
Se85	0.8	4.37E-02	4.49E-02	5.14E-02	4.04E-02
Y94	0.7	3.96E-02	3.95E-02	3.96E-02	3.96E-02
Sn131m	0.7	3.90E-02	3.18E-02	4.04E-02	2.82E-02
Sn130m	0.7	3.60E-02	2.35E-02	3.61E-02	3.61E-02
Ce148	0.6	3.30E-02	3.21E-02	3.13E-02	3.37E-02
Br85	0.6	3.27E-02	3.28E-02	3.42E-02	3.42E-02
Xe138	0.6	3.15E-02	2.88E-02	2.89E-02	2.89E-02
Nb99	0.6	3.08E-02	2.84E-02	3.21E-02	3.21E-02
Ba141	0.5	2.91E-02	2.94E-02	2.94E-02	2.94E-02
Ba143	0.5	2.57E-02	2.70E-02	2.60E-02	2.70E-02
Br88	0.5	2.49E-02	2.39E-02	2.59E-02	2.59E-02
Pr149	0.4	2.40E-02	2.93E-02	2.50E-02	2.50E-02
Sb132m	0.4	2.29E-02	2.28E-02	2.27E-02	2.27E-02
Mo105	0.4	2.28E-02	2.24E-02	4.17E-02	4.17E-02
Ba142	0.4	2.09E-02	2.02E-02	2.11E-02	2.11E-02
Tc106	0.4	2.01E-02	2.01E-02	2.70E-02	2.70E-02

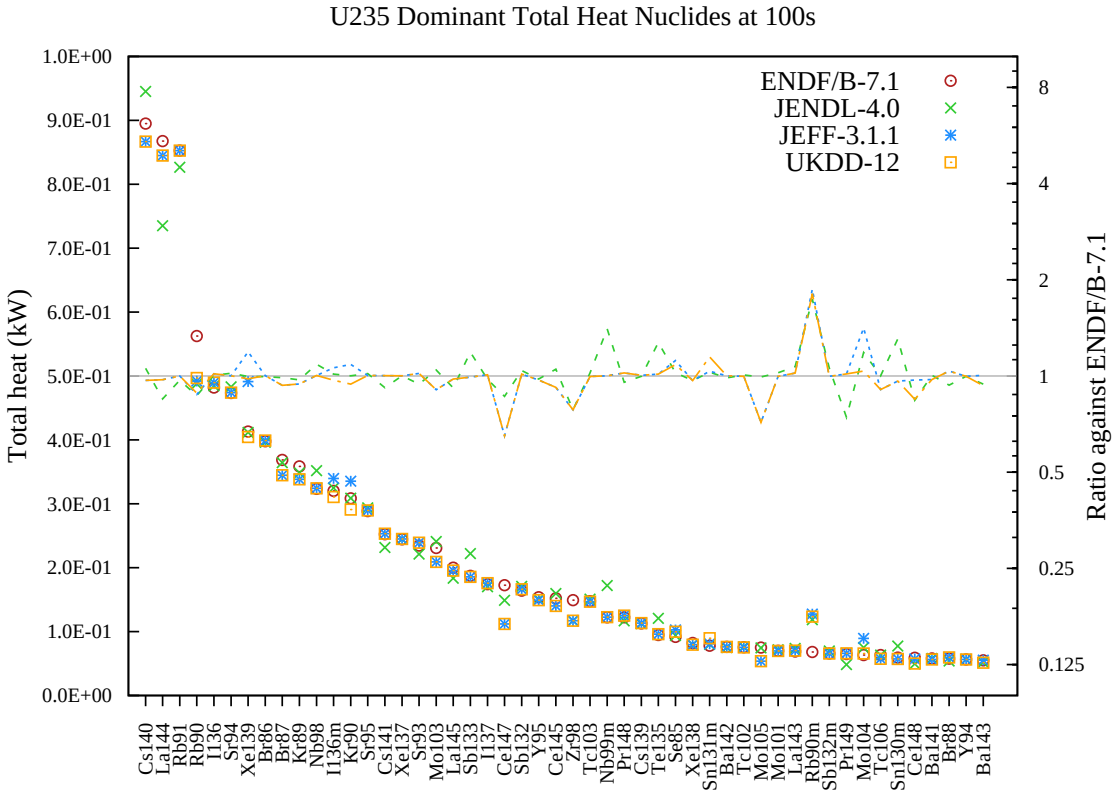

Figure 36: Total heat (in kW) decay data comparison for U235 fission pulse after 100s cooling.

Table 36: Total heat (in kW) decay data comparison for U235 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	7.5	8.95E-01	9.45E-01	8.67E-01	8.67E-01
La144	7.3	8.68E-01	7.35E-01	8.45E-01	8.45E-01
Rb91	7.2	8.53E-01	8.27E-01	8.53E-01	8.53E-01
Rb90	4.7	5.63E-01	4.88E-01	4.92E-01	4.97E-01
I136	4.1	4.82E-01	4.85E-01	4.90E-01	4.90E-01
Sr94	4.0	4.73E-01	4.83E-01	4.74E-01	4.74E-01
Xe139	3.5	4.13E-01	4.12E-01	4.91E-01	4.04E-01
Br86	3.3	3.98E-01	3.96E-01	3.99E-01	3.99E-01
Br87	3.1	3.69E-01	3.64E-01	3.45E-01	3.45E-01
Kr89	3.0	3.59E-01	3.48E-01	3.38E-01	3.38E-01
Nb98	2.7	3.23E-01	3.52E-01	3.24E-01	3.24E-01
I136m	2.7	3.20E-01	3.25E-01	3.40E-01	3.11E-01
Kr90	2.6	3.09E-01	3.09E-01	3.35E-01	2.91E-01
Sr95	2.4	2.89E-01	2.93E-01	2.90E-01	2.90E-01
Cs141	2.1	2.52E-01	2.32E-01	2.53E-01	2.53E-01
Xe137	2.1	2.45E-01	2.45E-01	2.45E-01	2.45E-01
Sr93	2.0	2.35E-01	2.21E-01	2.39E-01	2.39E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Mo103	1.9	2.31E-01	2.41E-01	2.09E-01	2.09E-01
La145	1.7	2.00E-01	1.84E-01	1.96E-01	1.96E-01
Sb133	1.6	1.87E-01	2.22E-01	1.86E-01	1.86E-01
I137	1.5	1.74E-01	1.70E-01	1.76E-01	1.76E-01
Ce147	1.5	1.73E-01	1.49E-01	1.12E-01	1.12E-01
Sb132	1.4	1.64E-01	1.71E-01	1.66E-01	1.66E-01
Y95	1.3	1.54E-01	1.50E-01	1.49E-01	1.49E-01
Ce145	1.3	1.52E-01	1.60E-01	1.40E-01	1.40E-01
Zr98	1.3	1.49E-01	1.17E-01	1.17E-01	1.17E-01
Tc103	1.2	1.47E-01	1.51E-01	1.47E-01	1.47E-01
Nb99m	1.0	1.22E-01	1.72E-01	1.23E-01	1.23E-01
Pr148	1.0	1.22E-01	1.17E-01	1.25E-01	1.25E-01
Cs139	0.9	1.13E-01	1.12E-01	1.13E-01	1.13E-01
Te135	0.8	9.48E-02	1.21E-01	9.61E-02	9.61E-02
Se85	0.8	9.18E-02	9.40E-02	1.03E-01	9.97E-02
Xe138	0.7	8.23E-02	7.95E-02	7.96E-02	7.96E-02
Sn131m	0.7	7.80E-02	8.02E-02	8.07E-02	8.95E-02
Ba142	0.6	7.61E-02	7.50E-02	7.62E-02	7.62E-02
Tc102	0.6	7.55E-02	7.60E-02	7.53E-02	7.52E-02
Mo105	0.6	7.50E-02	7.45E-02	5.37E-02	5.37E-02
Mo101	0.6	6.98E-02	7.14E-02	6.97E-02	6.97E-02
La143	0.6	6.88E-02	7.36E-02	7.03E-02	7.03E-02
Rb90m	0.6	6.82E-02	1.19E-01	1.27E-01	1.23E-01
Sb132m	0.6	6.58E-02	6.96E-02	6.56E-02	6.56E-02
Pr149	0.5	6.50E-02	4.83E-02	6.60E-02	6.60E-02
Mo104	0.5	6.33E-02	7.49E-02	8.94E-02	6.56E-02
Tc106	0.5	6.32E-02	6.33E-02	5.74E-02	5.74E-02
Sn130m	0.5	5.93E-02	7.74E-02	5.72E-02	5.72E-02
Ce148	0.5	5.90E-02	4.96E-02	5.73E-02	4.99E-02
Ba141	0.5	5.79E-02	5.81E-02	5.64E-02	5.64E-02
Br88	0.5	5.76E-02	5.40E-02	5.97E-02	5.97E-02
Y94	0.5	5.64E-02	5.63E-02	5.63E-02	5.63E-02
Ba143	0.5	5.49E-02	5.18E-02	5.52E-02	5.12E-02

3.3 1000s after pulse

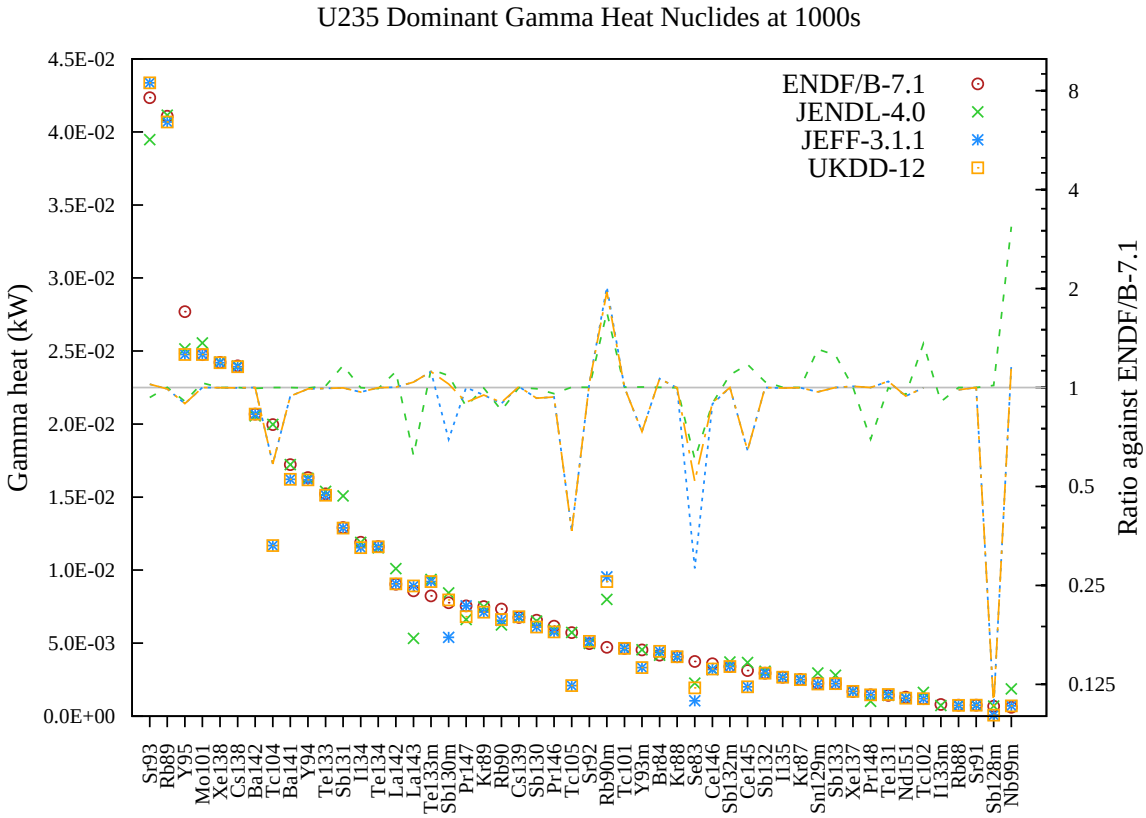

Figure 37: Gamma heat (in kW) decay data comparison for U235 fission pulse after 1000s cooling.

Table 37: Gamma heat (in kW) decay data comparison for U235 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sr93	9.2	4.23E-02	3.95E-02	4.34E-02	4.34E-02
Rb89	8.9	4.11E-02	4.11E-02	4.07E-02	4.07E-02
Y95	6.0	2.77E-02	2.51E-02	2.48E-02	2.48E-02
Mo101	5.4	2.48E-02	2.56E-02	2.48E-02	2.48E-02
Xe138	5.2	2.42E-02	2.42E-02	2.42E-02	2.42E-02
Cs138	5.2	2.40E-02	2.40E-02	2.39E-02	2.39E-02
Ba142	4.5	2.07E-02	2.06E-02	2.07E-02	2.07E-02
Tc104	4.3	2.00E-02	2.00E-02	1.17E-02	1.17E-02
Ba141	3.7	1.72E-02	1.72E-02	1.62E-02	1.62E-02
Y94	3.5	1.63E-02	1.63E-02	1.62E-02	1.62E-02
Te133	3.3	1.52E-02	1.54E-02	1.51E-02	1.51E-02
Sb131	2.8	1.29E-02	1.51E-02	1.29E-02	1.29E-02
I134	2.6	1.19E-02	1.19E-02	1.15E-02	1.15E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te134	2.5	1.16E-02	1.15E-02	1.16E-02	1.16E-02
La142	2.0	9.04E-03	1.01E-02	9.06E-03	9.06E-03
La143	1.9	8.59E-03	5.33E-03	8.92E-03	8.92E-03
Te133m	1.8	8.24E-03	9.36E-03	9.21E-03	9.21E-03
Sb130m	1.7	7.77E-03	8.44E-03	5.40E-03	7.96E-03
Pr147	1.6	7.56E-03	6.62E-03	7.56E-03	6.81E-03
Kr89	1.6	7.51E-03	7.48E-03	7.13E-03	7.13E-03
Rb90	1.6	7.34E-03	6.25E-03	6.56E-03	6.62E-03
Cs139	1.5	6.76E-03	6.76E-03	6.81E-03	6.81E-03
Sb130	1.4	6.57E-03	6.51E-03	6.10E-03	6.10E-03
Pr146	1.3	6.16E-03	5.90E-03	5.77E-03	5.77E-03
Tc105	1.2	5.72E-03	5.73E-03	2.09E-03	2.09E-03
Sr92	1.1	4.97E-03	4.98E-03	5.13E-03	5.13E-03
Rb90m	1.0	4.72E-03	8.00E-03	9.54E-03	9.22E-03
Tc101	1.0	4.64E-03	4.65E-03	4.64E-03	4.64E-03
Y93m	1.0	4.53E-03	4.55E-03	3.33E-03	3.33E-03
Br84	0.9	4.17E-03	4.18E-03	4.44E-03	4.44E-03
Kr88	0.9	4.07E-03	4.06E-03	4.06E-03	4.06E-03
Se83	0.8	3.74E-03	2.26E-03	1.05E-03	1.94E-03
Ce146	0.8	3.59E-03	3.21E-03	3.20E-03	3.23E-03
Sb132m	0.7	3.40E-03	3.71E-03	3.40E-03	3.40E-03
Ce145	0.7	3.13E-03	3.68E-03	2.01E-03	2.01E-03
Sb132	0.6	2.95E-03	3.07E-03	2.95E-03	2.95E-03
I135	0.6	2.67E-03	2.68E-03	2.67E-03	2.67E-03
Kr87	0.5	2.51E-03	2.51E-03	2.50E-03	2.50E-03
Sn129m	0.5	2.27E-03	2.96E-03	2.20E-03	2.20E-03
Sb133	0.5	2.23E-03	2.80E-03	2.23E-03	2.23E-03
Xe137	0.4	1.69E-03	1.69E-03	1.70E-03	1.70E-03
Pr148	0.3	1.45E-03	1.01E-03	1.46E-03	1.46E-03
Te131	0.3	1.42E-03	1.42E-03	1.48E-03	1.49E-03
Nd151	0.3	1.31E-03	1.24E-03	1.23E-03	1.23E-03
Tc102	0.3	1.20E-03	1.63E-03	1.20E-03	1.20E-03
I133m	0.2	8.01E-04	—	—	—
Rb88	0.2	7.54E-04	7.54E-04	7.42E-04	7.42E-04
Sr91	0.2	7.54E-04	7.54E-04	7.54E-04	7.54E-04
Sb128m	0.1	6.86E-04	6.96E-04	7.36E-05	7.36E-05
Nb99m	0.1	6.05E-04	1.87E-03	7.08E-04	7.08E-04

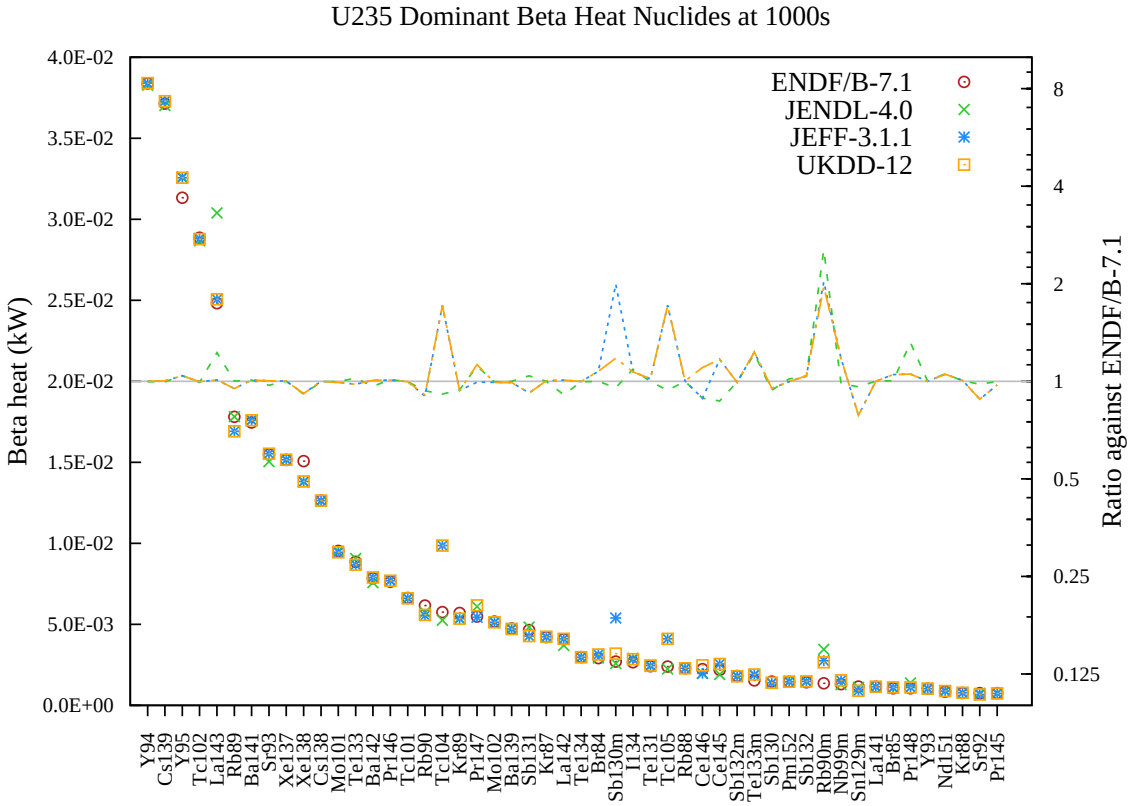

Figure 38: Beta heat (in kW) decay data comparison for U235 fission pulse after 1000s cooling.

Table 38: Beta heat (in kW) decay data comparison for U235 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y94	9.8	3.84E-02	3.83E-02	3.84E-02	3.84E-02
Cs139	9.5	3.71E-02	3.70E-02	3.73E-02	3.73E-02
Y95	8.0	3.13E-02	3.26E-02	3.26E-02	3.26E-02
Tc102	7.4	2.89E-02	2.87E-02	2.88E-02	2.88E-02
La143	6.3	2.48E-02	3.04E-02	2.51E-02	2.51E-02
Rb89	4.5	1.78E-02	1.78E-02	1.69E-02	1.69E-02
Ba141	4.5	1.75E-02	1.76E-02	1.76E-02	1.76E-02
Sr93	3.9	1.55E-02	1.50E-02	1.55E-02	1.55E-02
Xe137	3.9	1.51E-02	1.52E-02	1.52E-02	1.52E-02
Xe138	3.8	1.51E-02	1.38E-02	1.38E-02	1.38E-02
Cs138	3.2	1.26E-02	1.26E-02	1.26E-02	1.26E-02
Mo101	2.4	9.53E-03	9.52E-03	9.44E-03	9.44E-03
Te133	2.3	8.87E-03	9.06E-03	8.68E-03	8.68E-03
Ba142	2.0	7.84E-03	7.57E-03	7.90E-03	7.90E-03
Pr146	1.9	7.62E-03	7.71E-03	7.69E-03	7.69E-03
Tc101	1.7	6.63E-03	6.61E-03	6.61E-03	6.61E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb90	1.6	6.15E-03	5.75E-03	5.54E-03	5.58E-03
Tc104	1.5	5.76E-03	5.26E-03	9.86E-03	9.86E-03
Kr89	1.5	5.71E-03	5.37E-03	5.35E-03	5.35E-03
Pr147	1.4	5.48E-03	6.10E-03	5.44E-03	6.17E-03
Mo102	1.3	5.17E-03	5.14E-03	5.13E-03	5.13E-03
Ba139	1.2	4.75E-03	4.75E-03	4.71E-03	4.71E-03
Sb131	1.2	4.64E-03	4.83E-03	4.28E-03	4.27E-03
Kr87	1.1	4.22E-03	4.21E-03	4.23E-03	4.23E-03
La142	1.0	4.07E-03	3.70E-03	4.11E-03	4.11E-03
Te134	0.8	2.97E-03	2.97E-03	2.97E-03	2.97E-03
Br84	0.7	2.92E-03	2.92E-03	3.13E-03	3.13E-03
Sb130m	0.7	2.71E-03	2.59E-03	5.40E-03	3.19E-03
I134	0.7	2.66E-03	2.90E-03	2.85E-03	2.85E-03
Te131	0.6	2.41E-03	2.41E-03	2.45E-03	2.46E-03
Tc105	0.6	2.39E-03	2.25E-03	4.10E-03	4.10E-03
Rb88	0.6	2.28E-03	2.29E-03	2.29E-03	2.29E-03
Ce146	0.6	2.24E-03	1.98E-03	1.98E-03	2.47E-03
Ce145	0.6	2.19E-03	1.90E-03	2.55E-03	2.55E-03
Sb132m	0.5	1.81E-03	1.80E-03	1.80E-03	1.80E-03
Te133m	0.4	1.54E-03	1.88E-03	1.90E-03	1.90E-03
Sb130	0.4	1.46E-03	1.37E-03	1.39E-03	1.39E-03
Pm152	0.4	1.46E-03	1.49E-03	1.46E-03	1.46E-03
Sb132	0.4	1.42E-03	1.48E-03	1.48E-03	1.48E-03
Rb90m	0.3	1.36E-03	3.46E-03	2.76E-03	2.66E-03
Nb99m	0.3	1.31E-03	1.29E-03	1.54E-03	1.54E-03
Sn129m	0.3	1.16E-03	1.11E-03	9.08E-04	9.08E-04
La141	0.3	1.15E-03	1.15E-03	1.15E-03	1.15E-03
Br85	0.3	1.06E-03	1.06E-03	1.11E-03	1.11E-03
Pr148	0.3	1.05E-03	1.38E-03	1.10E-03	1.10E-03
Y93	0.3	1.03E-03	1.04E-03	1.03E-03	1.03E-03
Nd151	0.2	8.44E-04	8.90E-04	8.88E-04	8.88E-04
Kr88	0.2	7.68E-04	7.71E-04	7.74E-04	7.74E-04
Sr92	0.2	7.59E-04	7.43E-04	6.68E-04	6.68E-04
Pr145	0.2	7.58E-04	7.58E-04	7.39E-04	7.39E-04

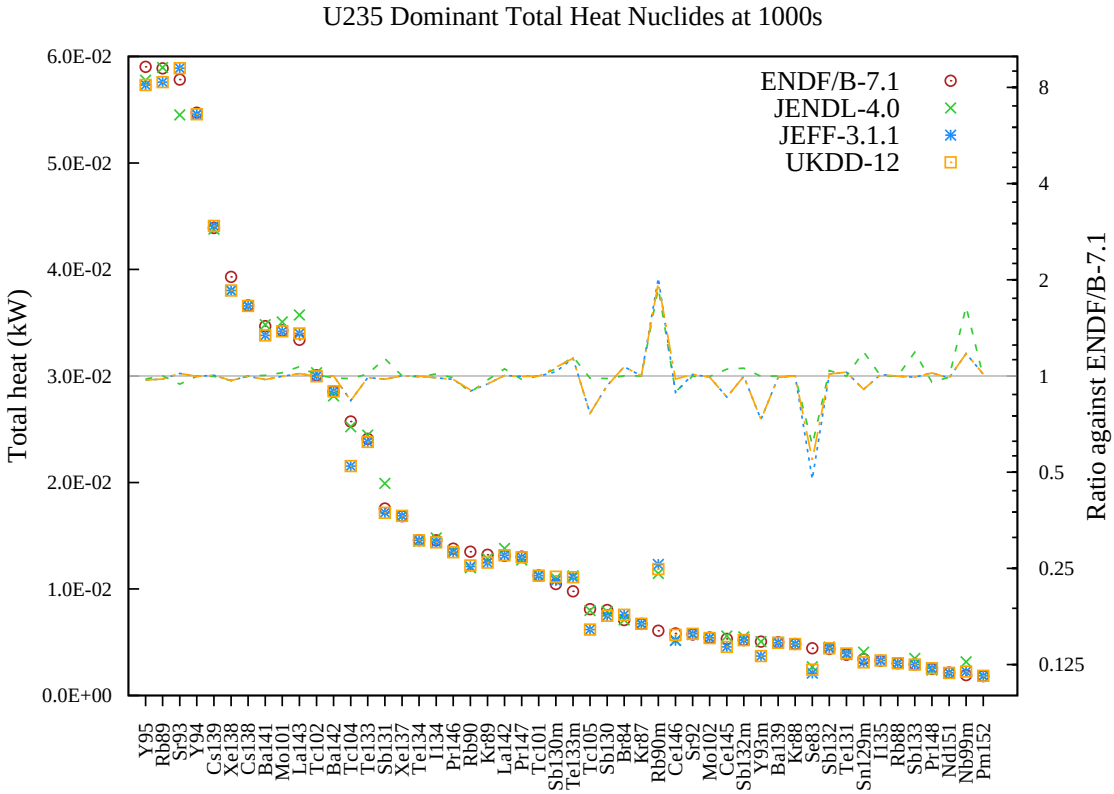

Figure 39: Total heat (in kW) decay data comparison for U235 fission pulse after 1000s cooling.

Table 39: Total heat (in kW) decay data comparison for U235 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y95	6.9	5.90E-02	5.78E-02	5.73E-02	5.73E-02
Rb89	6.9	5.89E-02	5.90E-02	5.76E-02	5.76E-02
Sr93	6.8	5.78E-02	5.45E-02	5.89E-02	5.89E-02
Y94	6.4	5.47E-02	5.46E-02	5.46E-02	5.46E-02
Cs139	5.1	4.39E-02	4.38E-02	4.41E-02	4.41E-02
Xe138	4.6	3.93E-02	3.80E-02	3.80E-02	3.80E-02
Cs138	4.3	3.66E-02	3.66E-02	3.66E-02	3.66E-02
Ba141	4.1	3.47E-02	3.48E-02	3.38E-02	3.38E-02
Mo101	4.0	3.43E-02	3.51E-02	3.42E-02	3.42E-02
La143	3.9	3.34E-02	3.57E-02	3.40E-02	3.40E-02
Tc102	3.5	3.01E-02	3.03E-02	3.00E-02	3.00E-02
Ba142	3.3	2.85E-02	2.81E-02	2.86E-02	2.86E-02
Tc104	3.0	2.57E-02	2.52E-02	2.15E-02	2.15E-02
Te133	2.8	2.41E-02	2.45E-02	2.38E-02	2.38E-02
Sb131	2.1	1.76E-02	1.99E-02	1.72E-02	1.72E-02
Xe137	2.0	1.68E-02	1.68E-02	1.69E-02	1.69E-02
Te134	1.7	1.46E-02	1.45E-02	1.46E-02	1.46E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	1.7	1.46E-02	1.48E-02	1.44E-02	1.44E-02
Pr146	1.6	1.38E-02	1.36E-02	1.35E-02	1.35E-02
Rb90	1.6	1.35E-02	1.20E-02	1.21E-02	1.22E-02
Kr89	1.5	1.32E-02	1.28E-02	1.25E-02	1.25E-02
La142	1.5	1.31E-02	1.38E-02	1.32E-02	1.32E-02
Pr147	1.5	1.30E-02	1.27E-02	1.30E-02	1.30E-02
Tc101	1.3	1.13E-02	1.13E-02	1.13E-02	1.13E-02
Sb130m	1.2	1.05E-02	1.10E-02	1.08E-02	1.12E-02
Te133m	1.1	9.78E-03	1.12E-02	1.11E-02	1.11E-02
Tc105	0.9	8.11E-03	7.98E-03	6.20E-03	6.20E-03
Sb130	0.9	8.03E-03	7.88E-03	7.49E-03	7.49E-03
Br84	0.8	7.09E-03	7.10E-03	7.57E-03	7.57E-03
Kr87	0.8	6.72E-03	6.72E-03	6.73E-03	6.73E-03
Rb90m	0.7	6.07E-03	1.15E-02	1.23E-02	1.19E-02
Ce146	0.7	5.82E-03	5.19E-03	5.18E-03	5.69E-03
Sr92	0.7	5.73E-03	5.72E-03	5.79E-03	5.79E-03
Mo102	0.6	5.44E-03	5.42E-03	5.40E-03	5.40E-03
Ce145	0.6	5.32E-03	5.58E-03	4.57E-03	4.57E-03
Sb132m	0.6	5.21E-03	5.51E-03	5.19E-03	5.19E-03
Y93m	0.6	5.06E-03	5.05E-03	3.70E-03	3.70E-03
Ba139	0.6	4.99E-03	4.99E-03	4.94E-03	4.94E-03
Kr88	0.6	4.84E-03	4.84E-03	4.84E-03	4.84E-03
Se83	0.5	4.43E-03	2.70E-03	2.11E-03	2.42E-03
Sb132	0.5	4.37E-03	4.55E-03	4.43E-03	4.43E-03
Te131	0.4	3.83E-03	3.83E-03	3.94E-03	3.94E-03
Sn129m	0.4	3.42E-03	4.07E-03	3.11E-03	3.11E-03
I135	0.4	3.25E-03	3.25E-03	3.28E-03	3.28E-03
Rb88	0.4	3.04E-03	3.04E-03	3.03E-03	3.03E-03
Sb133	0.3	2.92E-03	3.47E-03	2.90E-03	2.90E-03
Pr148	0.3	2.50E-03	2.39E-03	2.56E-03	2.56E-03
Nd151	0.3	2.15E-03	2.13E-03	2.12E-03	2.12E-03
Nb99m	0.2	1.91E-03	3.15E-03	2.25E-03	2.25E-03
Pm152	0.2	1.82E-03	1.81E-03	1.84E-03	1.84E-03

3.4 5011s after pulse

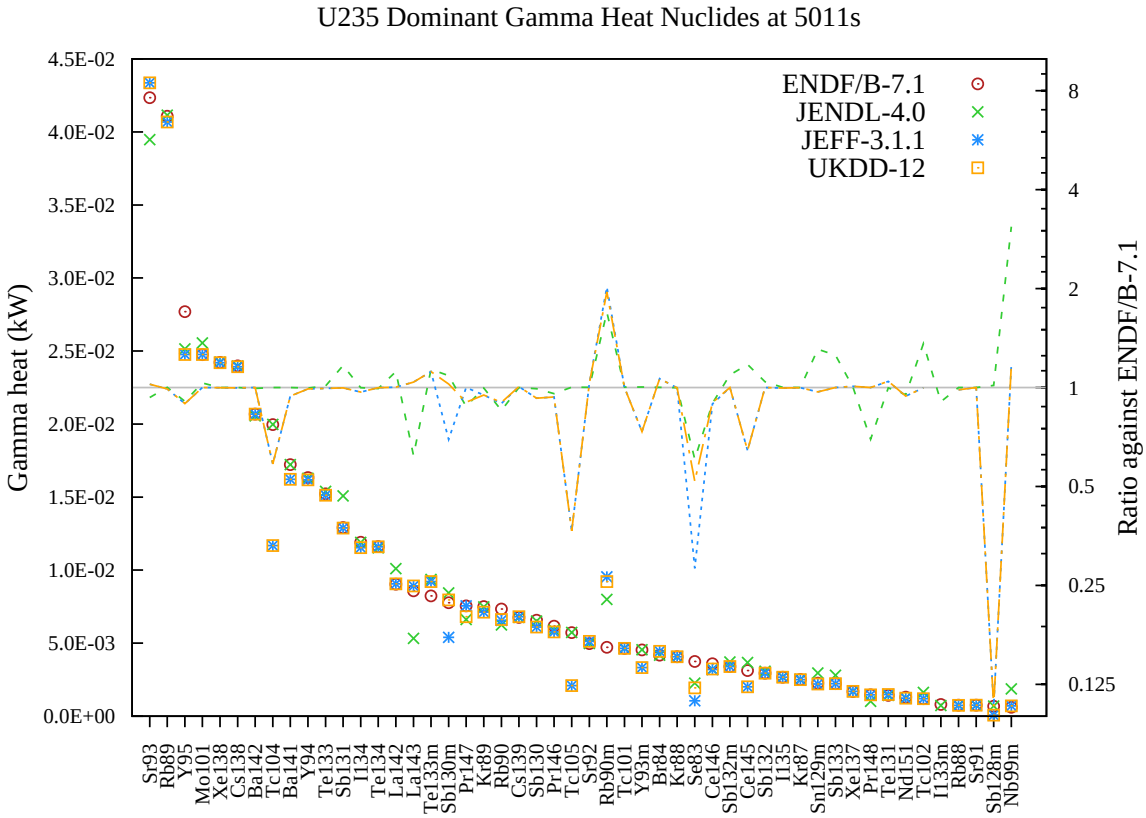

Figure 40: Gamma heat (in kW) decay data comparison for U235 fission pulse after 5011s cooling.

Table 40: Gamma heat (in kW) decay data comparison for U235 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sr93	9.2	4.23E-02	3.95E-02	4.34E-02	4.34E-02
Rb89	8.9	4.11E-02	4.11E-02	4.07E-02	4.07E-02
Y95	6.0	2.77E-02	2.51E-02	2.48E-02	2.48E-02
Mo101	5.4	2.48E-02	2.56E-02	2.48E-02	2.48E-02
Xe138	5.2	2.42E-02	2.42E-02	2.42E-02	2.42E-02
Cs138	5.2	2.40E-02	2.40E-02	2.39E-02	2.39E-02
Ba142	4.5	2.07E-02	2.06E-02	2.07E-02	2.07E-02
Tc104	4.3	2.00E-02	2.00E-02	1.17E-02	1.17E-02
Ba141	3.7	1.72E-02	1.72E-02	1.62E-02	1.62E-02
Y94	3.5	1.63E-02	1.63E-02	1.62E-02	1.62E-02
Te133	3.3	1.52E-02	1.54E-02	1.51E-02	1.51E-02
Sb131	2.8	1.29E-02	1.51E-02	1.29E-02	1.29E-02
I134	2.6	1.19E-02	1.19E-02	1.15E-02	1.15E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te134	2.5	1.16E-02	1.15E-02	1.16E-02	1.16E-02
La142	2.0	9.04E-03	1.01E-02	9.06E-03	9.06E-03
La143	1.9	8.59E-03	5.33E-03	8.92E-03	8.92E-03
Te133m	1.8	8.24E-03	9.36E-03	9.21E-03	9.21E-03
Sb130m	1.7	7.77E-03	8.44E-03	5.40E-03	7.96E-03
Pr147	1.6	7.56E-03	6.62E-03	7.56E-03	6.81E-03
Kr89	1.6	7.51E-03	7.48E-03	7.13E-03	7.13E-03
Rb90	1.6	7.34E-03	6.25E-03	6.56E-03	6.62E-03
Cs139	1.5	6.76E-03	6.76E-03	6.81E-03	6.81E-03
Sb130	1.4	6.57E-03	6.51E-03	6.10E-03	6.10E-03
Pr146	1.3	6.16E-03	5.90E-03	5.77E-03	5.77E-03
Tc105	1.2	5.72E-03	5.73E-03	2.09E-03	2.09E-03
Sr92	1.1	4.97E-03	4.98E-03	5.13E-03	5.13E-03
Rb90m	1.0	4.72E-03	8.00E-03	9.54E-03	9.22E-03
Tc101	1.0	4.64E-03	4.65E-03	4.64E-03	4.64E-03
Y93m	1.0	4.53E-03	4.55E-03	3.33E-03	3.33E-03
Br84	0.9	4.17E-03	4.18E-03	4.44E-03	4.44E-03
Kr88	0.9	4.07E-03	4.06E-03	4.06E-03	4.06E-03
Se83	0.8	3.74E-03	2.26E-03	1.05E-03	1.94E-03
Ce146	0.8	3.59E-03	3.21E-03	3.20E-03	3.23E-03
Sb132m	0.7	3.40E-03	3.71E-03	3.40E-03	3.40E-03
Ce145	0.7	3.13E-03	3.68E-03	2.01E-03	2.01E-03
Sb132	0.6	2.95E-03	3.07E-03	2.95E-03	2.95E-03
I135	0.6	2.67E-03	2.68E-03	2.67E-03	2.67E-03
Kr87	0.5	2.51E-03	2.51E-03	2.50E-03	2.50E-03
Sn129m	0.5	2.27E-03	2.96E-03	2.20E-03	2.20E-03
Sb133	0.5	2.23E-03	2.80E-03	2.23E-03	2.23E-03
Xe137	0.4	1.69E-03	1.69E-03	1.70E-03	1.70E-03
Pr148	0.3	1.45E-03	1.01E-03	1.46E-03	1.46E-03
Te131	0.3	1.42E-03	1.42E-03	1.48E-03	1.49E-03
Nd151	0.3	1.31E-03	1.24E-03	1.23E-03	1.23E-03
Tc102	0.3	1.20E-03	1.63E-03	1.20E-03	1.20E-03
I133m	0.2	8.01E-04	—	—	—
Rb88	0.2	7.54E-04	7.54E-04	7.42E-04	7.42E-04
Sr91	0.2	7.54E-04	7.54E-04	7.54E-04	7.54E-04
Sb128m	0.1	6.86E-04	6.96E-04	7.36E-05	7.36E-05
Nb99m	0.1	6.05E-04	1.87E-03	7.08E-04	7.08E-04

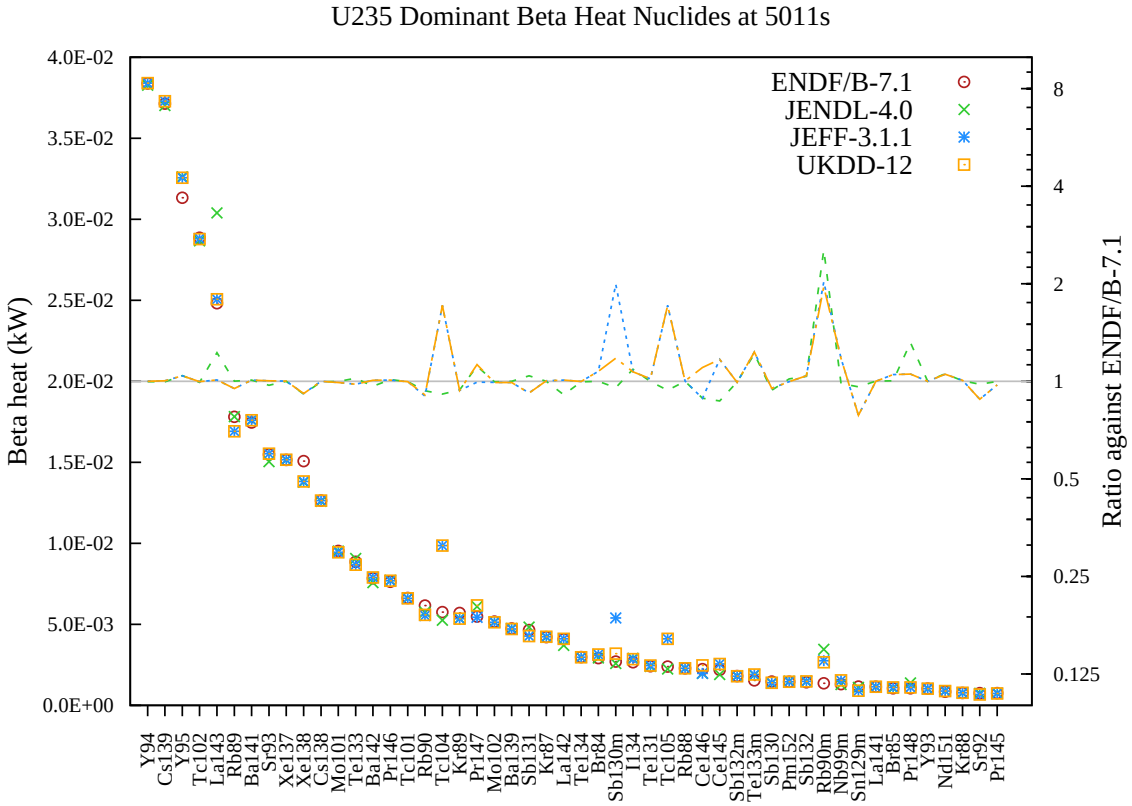

Figure 41: Beta heat (in kW) decay data comparison for U235 fission pulse after 5011s cooling.

Table 41: Beta heat (in kW) decay data comparison for U235 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y94	9.8	3.84E-02	3.83E-02	3.84E-02	3.84E-02
Cs139	9.5	3.71E-02	3.70E-02	3.73E-02	3.73E-02
Y95	8.0	3.13E-02	3.26E-02	3.26E-02	3.26E-02
Tc102	7.4	2.89E-02	2.87E-02	2.88E-02	2.88E-02
La143	6.3	2.48E-02	3.04E-02	2.51E-02	2.51E-02
Rb89	4.5	1.78E-02	1.78E-02	1.69E-02	1.69E-02
Ba141	4.5	1.75E-02	1.76E-02	1.76E-02	1.76E-02
Sr93	3.9	1.55E-02	1.50E-02	1.55E-02	1.55E-02
Xe137	3.9	1.51E-02	1.52E-02	1.52E-02	1.52E-02
Xe138	3.8	1.51E-02	1.38E-02	1.38E-02	1.38E-02
Cs138	3.2	1.26E-02	1.26E-02	1.26E-02	1.26E-02
Mo101	2.4	9.53E-03	9.52E-03	9.44E-03	9.44E-03
Te133	2.3	8.87E-03	9.06E-03	8.68E-03	8.68E-03
Ba142	2.0	7.84E-03	7.57E-03	7.90E-03	7.90E-03
Pr146	1.9	7.62E-03	7.71E-03	7.69E-03	7.69E-03
Tc101	1.7	6.63E-03	6.61E-03	6.61E-03	6.61E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb90	1.6	6.15E-03	5.75E-03	5.54E-03	5.58E-03
Tc104	1.5	5.76E-03	5.26E-03	9.86E-03	9.86E-03
Kr89	1.5	5.71E-03	5.37E-03	5.35E-03	5.35E-03
Pr147	1.4	5.48E-03	6.10E-03	5.44E-03	6.17E-03
Mo102	1.3	5.17E-03	5.14E-03	5.13E-03	5.13E-03
Ba139	1.2	4.75E-03	4.75E-03	4.71E-03	4.71E-03
Sb131	1.2	4.64E-03	4.83E-03	4.28E-03	4.27E-03
Kr87	1.1	4.22E-03	4.21E-03	4.23E-03	4.23E-03
La142	1.0	4.07E-03	3.70E-03	4.11E-03	4.11E-03
Te134	0.8	2.97E-03	2.97E-03	2.97E-03	2.97E-03
Br84	0.7	2.92E-03	2.92E-03	3.13E-03	3.13E-03
Sb130m	0.7	2.71E-03	2.59E-03	5.40E-03	3.19E-03
I134	0.7	2.66E-03	2.90E-03	2.85E-03	2.85E-03
Te131	0.6	2.41E-03	2.41E-03	2.45E-03	2.46E-03
Tc105	0.6	2.39E-03	2.25E-03	4.10E-03	4.10E-03
Rb88	0.6	2.28E-03	2.29E-03	2.29E-03	2.29E-03
Ce146	0.6	2.24E-03	1.98E-03	1.98E-03	2.47E-03
Ce145	0.6	2.19E-03	1.90E-03	2.55E-03	2.55E-03
Sb132m	0.5	1.81E-03	1.80E-03	1.80E-03	1.80E-03
Te133m	0.4	1.54E-03	1.88E-03	1.90E-03	1.90E-03
Sb130	0.4	1.46E-03	1.37E-03	1.39E-03	1.39E-03
Pm152	0.4	1.46E-03	1.49E-03	1.46E-03	1.46E-03
Sb132	0.4	1.42E-03	1.48E-03	1.48E-03	1.48E-03
Rb90m	0.3	1.36E-03	3.46E-03	2.76E-03	2.66E-03
Nb99m	0.3	1.31E-03	1.29E-03	1.54E-03	1.54E-03
Sn129m	0.3	1.16E-03	1.11E-03	9.08E-04	9.08E-04
La141	0.3	1.15E-03	1.15E-03	1.15E-03	1.15E-03
Br85	0.3	1.06E-03	1.06E-03	1.11E-03	1.11E-03
Pr148	0.3	1.05E-03	1.38E-03	1.10E-03	1.10E-03
Y93	0.3	1.03E-03	1.04E-03	1.03E-03	1.03E-03
Nd151	0.2	8.44E-04	8.90E-04	8.88E-04	8.88E-04
Kr88	0.2	7.68E-04	7.71E-04	7.74E-04	7.74E-04
Sr92	0.2	7.59E-04	7.43E-04	6.68E-04	6.68E-04
Pr145	0.2	7.58E-04	7.58E-04	7.39E-04	7.39E-04

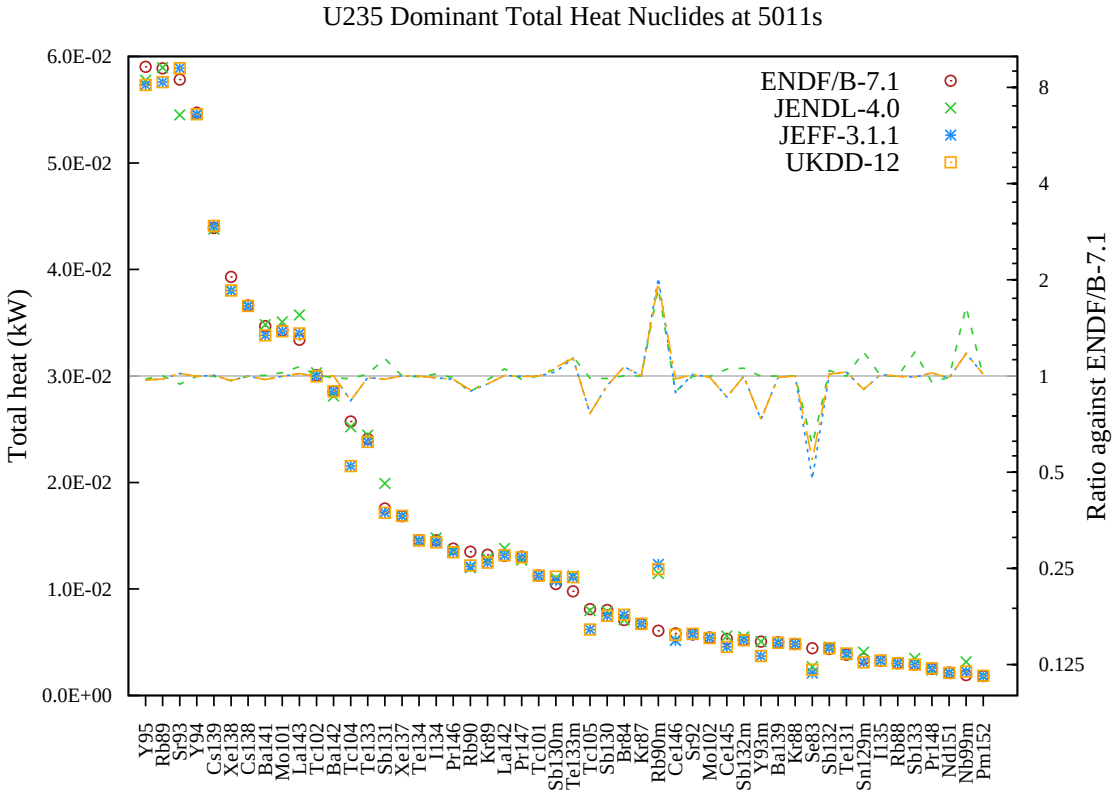

Figure 42: Total heat (in kW) decay data comparison for U235 fission pulse after 5011s cooling.

Table 42: Total heat (in kW) decay data comparison for U235 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y95	6.9	5.90E-02	5.78E-02	5.73E-02	5.73E-02
Rb89	6.9	5.89E-02	5.90E-02	5.76E-02	5.76E-02
Sr93	6.8	5.78E-02	5.45E-02	5.89E-02	5.89E-02
Y94	6.4	5.47E-02	5.46E-02	5.46E-02	5.46E-02
Cs139	5.1	4.39E-02	4.38E-02	4.41E-02	4.41E-02
Xe138	4.6	3.93E-02	3.80E-02	3.80E-02	3.80E-02
Cs138	4.3	3.66E-02	3.66E-02	3.66E-02	3.66E-02
Ba141	4.1	3.47E-02	3.48E-02	3.38E-02	3.38E-02
Mo101	4.0	3.43E-02	3.51E-02	3.42E-02	3.42E-02
La143	3.9	3.34E-02	3.57E-02	3.40E-02	3.40E-02
Tc102	3.5	3.01E-02	3.03E-02	3.00E-02	3.00E-02
Ba142	3.3	2.85E-02	2.81E-02	2.86E-02	2.86E-02
Tc104	3.0	2.57E-02	2.52E-02	2.15E-02	2.15E-02
Te133	2.8	2.41E-02	2.45E-02	2.38E-02	2.38E-02
Sb131	2.1	1.76E-02	1.99E-02	1.72E-02	1.72E-02
Xe137	2.0	1.68E-02	1.68E-02	1.69E-02	1.69E-02
Te134	1.7	1.46E-02	1.45E-02	1.46E-02	1.46E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	1.7	1.46E-02	1.48E-02	1.44E-02	1.44E-02
Pr146	1.6	1.38E-02	1.36E-02	1.35E-02	1.35E-02
Rb90	1.6	1.35E-02	1.20E-02	1.21E-02	1.22E-02
Kr89	1.5	1.32E-02	1.28E-02	1.25E-02	1.25E-02
La142	1.5	1.31E-02	1.38E-02	1.32E-02	1.32E-02
Pr147	1.5	1.30E-02	1.27E-02	1.30E-02	1.30E-02
Tc101	1.3	1.13E-02	1.13E-02	1.13E-02	1.13E-02
Sb130m	1.2	1.05E-02	1.10E-02	1.08E-02	1.12E-02
Te133m	1.1	9.78E-03	1.12E-02	1.11E-02	1.11E-02
Tc105	0.9	8.11E-03	7.98E-03	6.20E-03	6.20E-03
Sb130	0.9	8.03E-03	7.88E-03	7.49E-03	7.49E-03
Br84	0.8	7.09E-03	7.10E-03	7.57E-03	7.57E-03
Kr87	0.8	6.72E-03	6.72E-03	6.73E-03	6.73E-03
Rb90m	0.7	6.07E-03	1.15E-02	1.23E-02	1.19E-02
Ce146	0.7	5.82E-03	5.19E-03	5.18E-03	5.69E-03
Sr92	0.7	5.73E-03	5.72E-03	5.79E-03	5.79E-03
Mo102	0.6	5.44E-03	5.42E-03	5.40E-03	5.40E-03
Ce145	0.6	5.32E-03	5.58E-03	4.57E-03	4.57E-03
Sb132m	0.6	5.21E-03	5.51E-03	5.19E-03	5.19E-03
Y93m	0.6	5.06E-03	5.05E-03	3.70E-03	3.70E-03
Ba139	0.6	4.99E-03	4.99E-03	4.94E-03	4.94E-03
Kr88	0.6	4.84E-03	4.84E-03	4.84E-03	4.84E-03
Se83	0.5	4.43E-03	2.70E-03	2.11E-03	2.42E-03
Sb132	0.5	4.37E-03	4.55E-03	4.43E-03	4.43E-03
Te131	0.4	3.83E-03	3.83E-03	3.94E-03	3.94E-03
Sn129m	0.4	3.42E-03	4.07E-03	3.11E-03	3.11E-03
I135	0.4	3.25E-03	3.25E-03	3.28E-03	3.28E-03
Rb88	0.4	3.04E-03	3.04E-03	3.03E-03	3.03E-03
Sb133	0.3	2.92E-03	3.47E-03	2.90E-03	2.90E-03
Pr148	0.3	2.50E-03	2.39E-03	2.56E-03	2.56E-03
Nd151	0.3	2.15E-03	2.13E-03	2.12E-03	2.12E-03
Nb99m	0.2	1.91E-03	3.15E-03	2.25E-03	2.25E-03
Pm152	0.2	1.82E-03	1.81E-03	1.84E-03	1.84E-03

3.5 10000s after pulse

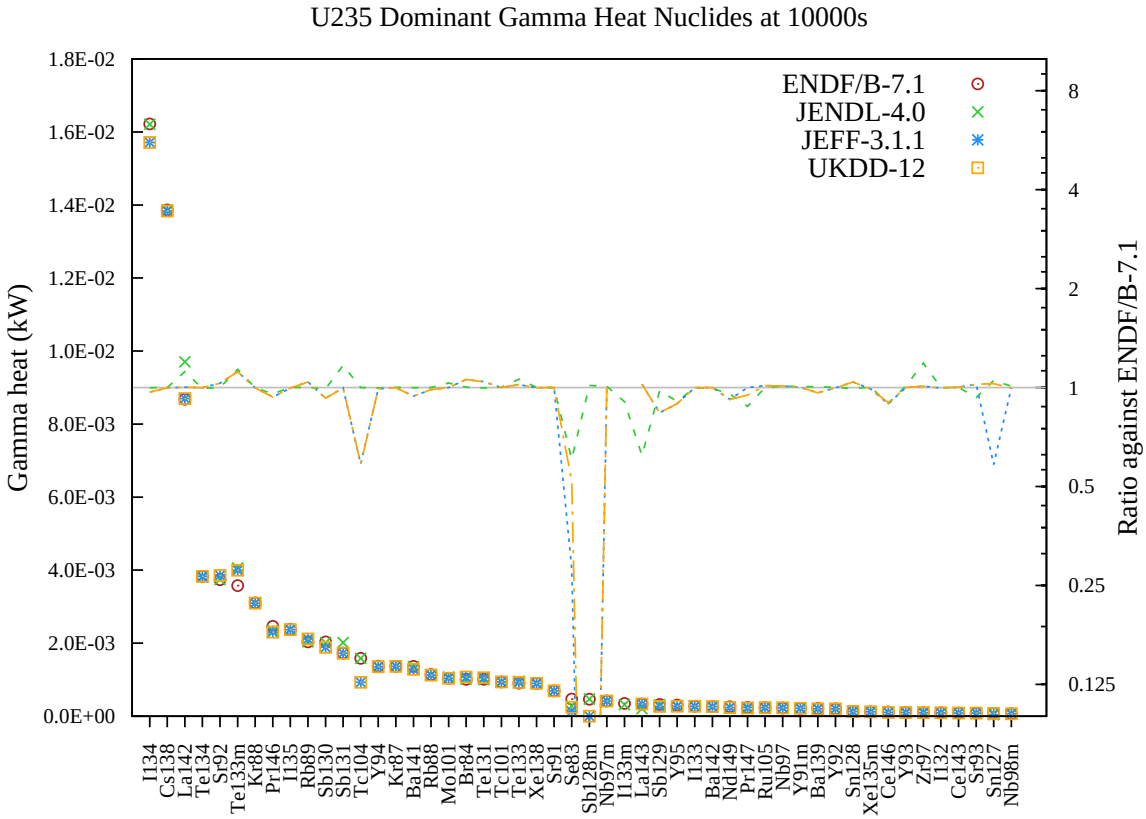

Figure 43: Gamma heat (in kW) decay data comparison for U235 fission pulse after 10000s cooling.

Table 43: Gamma heat (in kW) decay data comparison for U235 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	19.5	1.62E-02	1.62E-02	1.57E-02	1.57E-02
Cs138	16.7	1.39E-02	1.39E-02	1.38E-02	1.38E-02
La142	10.4	8.68E-03	9.70E-03	8.70E-03	8.70E-03
Te134	4.6	3.83E-03	3.81E-03	3.83E-03	3.83E-03
Sr92	4.5	3.74E-03	3.74E-03	3.85E-03	3.85E-03
Te133m	4.3	3.58E-03	4.06E-03	4.00E-03	4.00E-03
Kr88	3.7	3.10E-03	3.10E-03	3.10E-03	3.10E-03
Pr146	3.0	2.46E-03	2.36E-03	2.30E-03	2.30E-03
I135	2.9	2.38E-03	2.38E-03	2.37E-03	2.37E-03
Rb89	2.4	2.03E-03	2.04E-03	2.12E-03	2.12E-03
Sb130	2.4	2.03E-03	2.02E-03	1.89E-03	1.89E-03
Sb131	2.1	1.73E-03	2.02E-03	1.72E-03	1.72E-03
Tc104	1.9	1.59E-03	1.59E-03	9.28E-04	9.28E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y94	1.6	1.37E-03	1.37E-03	1.36E-03	1.36E-03
Kr87	1.6	1.37E-03	1.37E-03	1.36E-03	1.36E-03
Ba141	1.6	1.36E-03	1.36E-03	1.28E-03	1.28E-03
Rb88	1.4	1.14E-03	1.14E-03	1.12E-03	1.12E-03
Mo101	1.2	1.04E-03	1.07E-03	1.04E-03	1.04E-03
Br84	1.2	1.01E-03	1.01E-03	1.07E-03	1.07E-03
Te131	1.2	1.01E-03	1.01E-03	1.05E-03	1.05E-03
Tc101	1.1	9.40E-04	9.43E-04	9.41E-04	9.41E-04
Te133	1.1	9.05E-04	9.59E-04	9.24E-04	9.24E-04
Xe138	1.1	9.01E-04	9.02E-04	9.00E-04	9.00E-04
Sr91	0.8	6.96E-04	6.96E-04	6.96E-04	6.96E-04
Se83	0.6	4.68E-04	2.83E-04	1.32E-04	2.43E-04
Sb128m	0.6	4.64E-04	4.71E-04	8.54E-07	8.54E-07
Nb97m	0.5	4.15E-04	4.18E-04	4.19E-04	4.19E-04
I133m	0.4	3.48E-04	—	—	—
La143	0.4	3.28E-04	2.04E-04	3.36E-04	3.36E-04
Sb129	0.4	3.19E-04	3.12E-04	2.67E-04	2.67E-04
Y95	0.4	3.08E-04	2.79E-04	2.75E-04	2.75E-04
I133	0.3	2.74E-04	2.74E-04	2.73E-04	2.73E-04
Ba142	0.3	2.61E-04	2.60E-04	2.61E-04	2.61E-04
Nd149	0.3	2.56E-04	2.45E-04	2.36E-04	2.36E-04
Pr147	0.3	2.38E-04	2.08E-04	2.38E-04	2.26E-04
Ru105	0.3	2.33E-04	2.33E-04	2.36E-04	2.36E-04
Nb97	0.3	2.26E-04	2.28E-04	2.28E-04	2.28E-04
Y91m	0.3	2.17E-04	2.18E-04	2.17E-04	2.17E-04
Ba139	0.3	2.10E-04	2.12E-04	2.03E-04	2.03E-04
Y92	0.2	2.00E-04	2.01E-04	2.00E-04	2.00E-04
Sn128	0.1	1.24E-04	1.23E-04	1.29E-04	1.29E-04
Xe135m	0.1	1.19E-04	1.20E-04	1.18E-04	1.18E-04
Ce146	0.1	1.16E-04	1.04E-04	1.04E-04	1.05E-04
Y93	0.1	9.90E-05	1.00E-04	9.90E-05	9.90E-05
Zr97	0.1	9.52E-05	1.13E-04	9.62E-05	9.62E-05
I132	0.1	9.37E-05	9.36E-05	9.33E-05	9.33E-05
Ce143	0.1	8.62E-05	8.64E-05	8.65E-05	8.65E-05
Sr93	0.1	8.23E-05	7.67E-05	8.42E-05	8.42E-05
Sn127	0.1	7.48E-05	7.86E-05	4.37E-05	7.69E-05
Nb98m	0.1	6.60E-05	6.67E-05	6.60E-05	6.60E-05

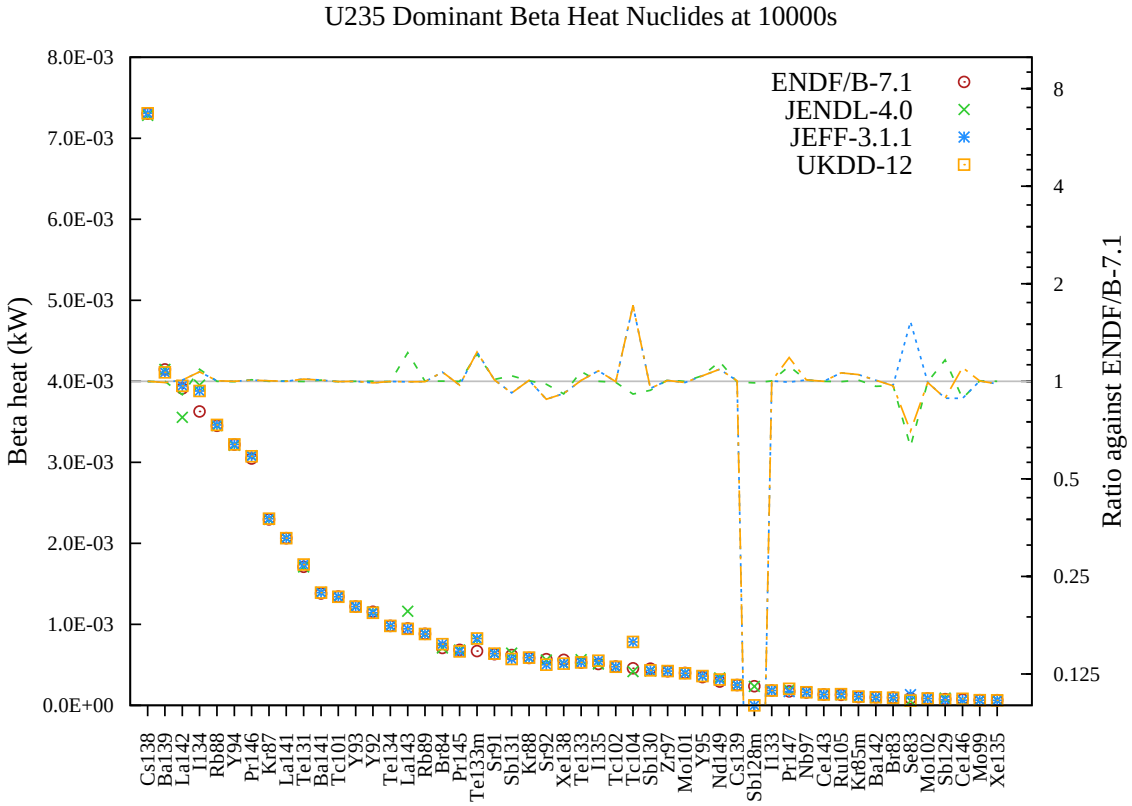

Figure 44: Beta heat (in kW) decay data comparison for U235 fission pulse after 10000s cooling.

Table 44: Beta heat (in kW) decay data comparison for U235 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	13.5	7.31E-03	7.28E-03	7.31E-03	7.31E-03
Ba139	7.7	4.15E-03	4.15E-03	4.11E-03	4.11E-03
La142	7.2	3.91E-03	3.56E-03	3.94E-03	3.94E-03
I134	6.7	3.63E-03	3.95E-03	3.88E-03	3.88E-03
Rb88	6.4	3.45E-03	3.45E-03	3.46E-03	3.46E-03
Y94	5.9	3.22E-03	3.21E-03	3.22E-03	3.22E-03
Pr146	5.6	3.05E-03	3.08E-03	3.07E-03	3.07E-03
Kr87	4.2	2.30E-03	2.30E-03	2.30E-03	2.30E-03
La141	3.8	2.06E-03	2.07E-03	2.06E-03	2.06E-03
Te131	3.2	1.71E-03	1.71E-03	1.74E-03	1.74E-03
Ba141	2.5	1.38E-03	1.39E-03	1.39E-03	1.39E-03
Tc101	2.5	1.34E-03	1.34E-03	1.34E-03	1.34E-03
Y93	2.3	1.22E-03	1.22E-03	1.22E-03	1.22E-03
Y92	2.1	1.15E-03	1.15E-03	1.14E-03	1.14E-03
Te134	1.8	9.82E-04	9.79E-04	9.81E-04	9.81E-04
La143	1.8	9.49E-04	1.16E-03	9.45E-04	9.45E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb89	1.6	8.82E-04	8.83E-04	8.80E-04	8.80E-04
Br84	1.3	7.08E-04	7.08E-04	7.55E-04	7.55E-04
Pr145	1.3	6.84E-04	6.84E-04	6.66E-04	6.66E-04
Te133m	1.2	6.70E-04	8.14E-04	8.25E-04	8.25E-04
Sr91	1.2	6.31E-04	6.40E-04	6.37E-04	6.37E-04
Sb131	1.1	6.21E-04	6.45E-04	5.72E-04	5.71E-04
Kr88	1.1	5.85E-04	5.87E-04	5.90E-04	5.90E-04
Sr92	1.1	5.71E-04	5.59E-04	5.02E-04	5.02E-04
Xe138	1.0	5.61E-04	5.13E-04	5.14E-04	5.14E-04
Te133	1.0	5.27E-04	5.65E-04	5.30E-04	5.30E-04
I135	0.9	5.10E-04	5.10E-04	5.50E-04	5.50E-04
Tc102	0.9	4.78E-04	4.74E-04	4.77E-04	4.76E-04
Tc104	0.8	4.57E-04	4.18E-04	7.84E-04	7.84E-04
Sb130	0.8	4.53E-04	4.25E-04	4.31E-04	4.31E-04
Zr97	0.8	4.22E-04	4.26E-04	4.24E-04	4.24E-04
Mo101	0.7	3.99E-04	3.99E-04	3.96E-04	3.96E-04
Y95	0.6	3.48E-04	3.62E-04	3.62E-04	3.62E-04
Nd149	0.5	2.94E-04	3.38E-04	3.20E-04	3.20E-04
Cs139	0.5	2.50E-04	2.49E-04	2.51E-04	2.51E-04
Sb128m	0.4	2.37E-04	2.34E-04	4.29E-07	4.29E-07
I133	0.3	1.82E-04	1.83E-04	1.83E-04	1.83E-04
Pr147	0.3	1.72E-04	1.92E-04	1.71E-04	2.04E-04
Nb97	0.3	1.59E-04	1.61E-04	1.61E-04	1.61E-04
Ce143	0.2	1.33E-04	1.33E-04	1.33E-04	1.33E-04
Ru105	0.2	1.31E-04	1.31E-04	1.39E-04	1.39E-04
Kr85m	0.2	1.03E-04	1.04E-04	1.08E-04	1.08E-04
Ba142	0.2	9.90E-05	9.56E-05	9.97E-05	9.97E-05
Br83	0.2	9.62E-05	9.33E-05	9.34E-05	9.32E-05
Se83	0.2	8.64E-05	5.43E-05	1.32E-04	6.06E-05
Mo102	0.2	8.55E-05	8.51E-05	8.49E-05	8.48E-05
Sb129	0.1	7.75E-05	9.02E-05	6.87E-05	6.87E-05
Ce146	0.1	7.25E-05	6.43E-05	6.42E-05	8.00E-05
Mo99	0.1	6.44E-05	6.46E-05	6.46E-05	6.46E-05
Xe135	0.1	6.29E-05	6.29E-05	6.18E-05	6.18E-05

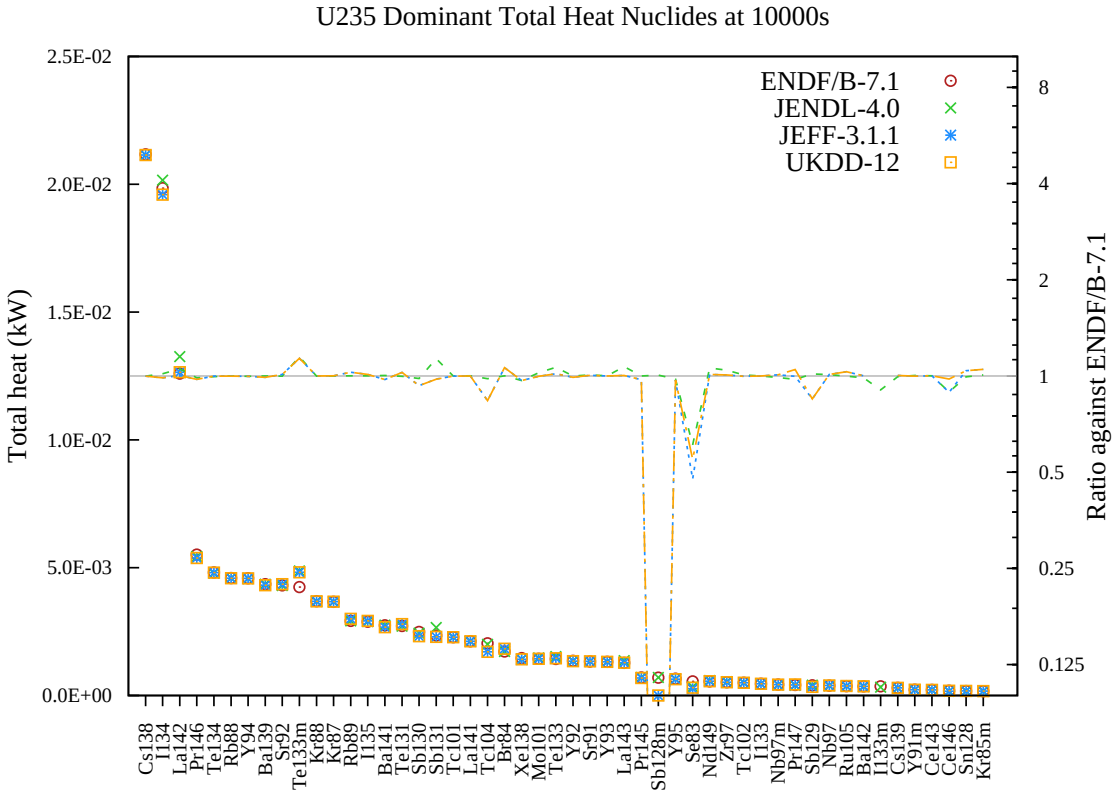

Figure 45: Total heat (in kW) decay data comparison for U235 fission pulse after 10000s cooling.

Table 45: Total heat (in kW) decay data comparison for U235 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	15.4	2.12E-02	2.11E-02	2.11E-02	2.11E-02
I134	14.4	1.98E-02	2.02E-02	1.96E-02	1.96E-02
La142	9.2	1.26E-02	1.33E-02	1.26E-02	1.26E-02
Pr146	4.0	5.51E-03	5.44E-03	5.38E-03	5.38E-03
Te134	3.5	4.81E-03	4.79E-03	4.81E-03	4.81E-03
Rb88	3.3	4.59E-03	4.59E-03	4.59E-03	4.59E-03
Y94	3.3	4.59E-03	4.58E-03	4.58E-03	4.58E-03
Ba139	3.2	4.36E-03	4.36E-03	4.31E-03	4.31E-03
Sr92	3.1	4.31E-03	4.30E-03	4.36E-03	4.36E-03
Te133m	3.1	4.24E-03	4.87E-03	4.82E-03	4.82E-03
Kr88	2.7	3.69E-03	3.68E-03	3.69E-03	3.69E-03
Kr87	2.7	3.66E-03	3.66E-03	3.67E-03	3.67E-03
Rb89	2.1	2.92E-03	2.92E-03	3.00E-03	3.00E-03
I135	2.1	2.89E-03	2.89E-03	2.92E-03	2.92E-03
Ba141	2.0	2.74E-03	2.75E-03	2.68E-03	2.68E-03
Te131	2.0	2.72E-03	2.71E-03	2.79E-03	2.79E-03
Sb130	1.8	2.49E-03	2.44E-03	2.32E-03	2.32E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb131	1.7	2.35E-03	2.66E-03	2.30E-03	2.29E-03
Tc101	1.7	2.28E-03	2.28E-03	2.28E-03	2.28E-03
La141	1.5	2.12E-03	2.12E-03	2.12E-03	2.12E-03
Tc104	1.5	2.04E-03	2.00E-03	1.71E-03	1.71E-03
Br84	1.3	1.72E-03	1.72E-03	1.83E-03	1.83E-03
Xe138	1.1	1.46E-03	1.41E-03	1.41E-03	1.41E-03
Mo101	1.0	1.44E-03	1.47E-03	1.43E-03	1.43E-03
Te133	1.0	1.43E-03	1.52E-03	1.45E-03	1.45E-03
Y92	1.0	1.36E-03	1.35E-03	1.34E-03	1.34E-03
Sr91	1.0	1.33E-03	1.34E-03	1.33E-03	1.33E-03
Y93	1.0	1.32E-03	1.32E-03	1.32E-03	1.32E-03
La143	0.9	1.28E-03	1.37E-03	1.28E-03	1.28E-03
Pr145	0.5	7.03E-04	7.03E-04	6.85E-04	6.85E-04
Sb128m	0.5	7.01E-04	7.05E-04	1.28E-06	1.28E-06
Y95	0.5	6.56E-04	6.42E-04	6.37E-04	6.37E-04
Se83	0.4	5.54E-04	3.38E-04	2.64E-04	3.04E-04
Nd149	0.4	5.50E-04	5.83E-04	5.56E-04	5.56E-04
Zr97	0.4	5.17E-04	5.39E-04	5.21E-04	5.21E-04
Tc102	0.4	4.98E-04	5.01E-04	4.97E-04	4.96E-04
I133	0.3	4.56E-04	4.56E-04	4.56E-04	4.56E-04
Nb97m	0.3	4.23E-04	4.18E-04	4.27E-04	4.27E-04
Pr147	0.3	4.10E-04	4.00E-04	4.09E-04	4.30E-04
Sb129	0.3	3.96E-04	4.02E-04	3.36E-04	3.36E-04
Nb97	0.3	3.85E-04	3.89E-04	3.89E-04	3.89E-04
Ru105	0.3	3.64E-04	3.64E-04	3.75E-04	3.75E-04
Ba142	0.3	3.60E-04	3.55E-04	3.61E-04	3.61E-04
I133m	0.3	3.59E-04	3.24E-04	—	—
Cs139	0.2	2.96E-04	2.95E-04	2.97E-04	2.97E-04
Y91m	0.2	2.28E-04	2.29E-04	2.28E-04	2.28E-04
Ce143	0.2	2.20E-04	2.20E-04	2.20E-04	2.20E-04
Ce146	0.1	1.89E-04	1.68E-04	1.68E-04	1.85E-04
Sn128	0.1	1.75E-04	1.74E-04	1.82E-04	1.82E-04
Kr85m	0.1	1.67E-04	1.68E-04	1.75E-04	1.75E-04

4 Decay data comparison for ^{238}U 400 keV pulse decay heat

4.1 10s after pulse

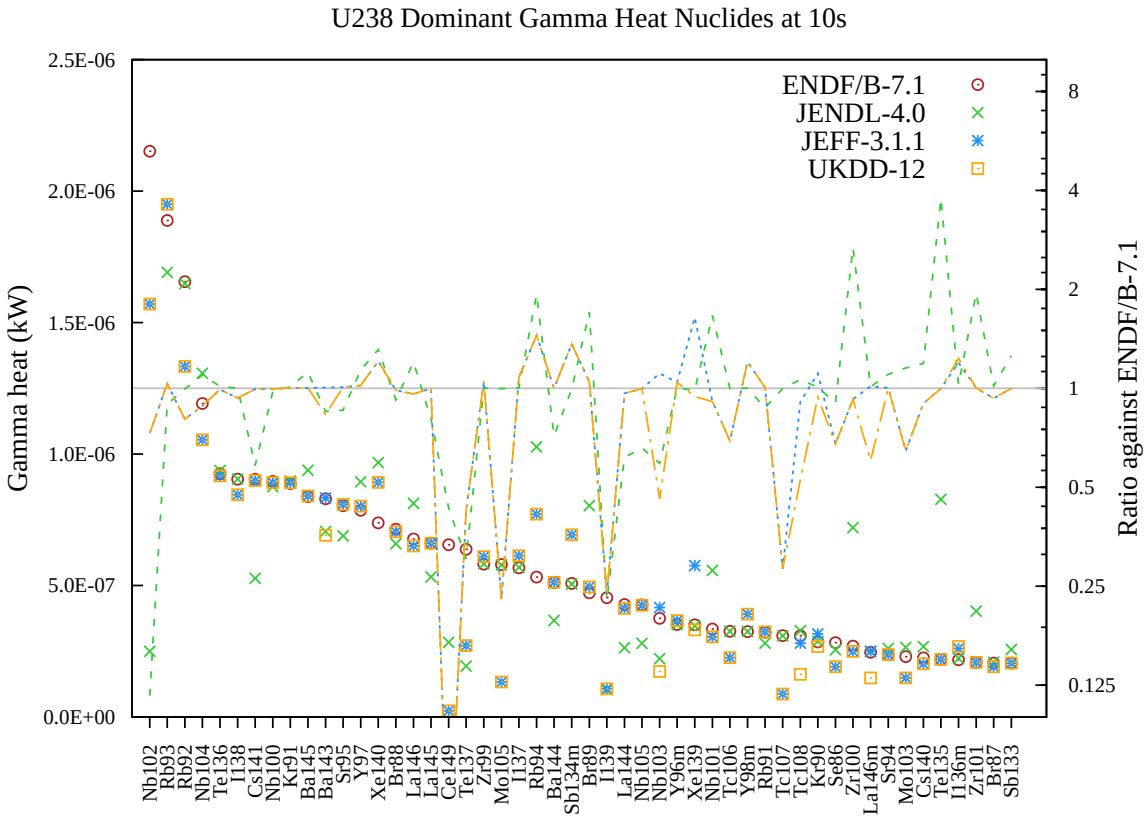

Figure 46: Gamma heat (in kW) decay data comparison for U238 fission pulse after 10s cooling.

Table 46: Gamma heat (in kW) decay data comparison for U238 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb102	6.2	2.15E-06	2.49E-07	1.57E-06	1.57E-06
Rb93	5.5	1.89E-06	1.69E-06	1.95E-06	1.95E-06
Rb92	4.8	1.66E-06	1.65E-06	1.33E-06	1.33E-06
Nb104	3.5	1.19E-06	1.31E-06	1.05E-06	1.05E-06
Te136	2.7	9.25E-07	9.37E-07	9.17E-07	9.17E-07
I138	2.6	9.05E-07	9.05E-07	8.45E-07	8.45E-07
Cs141	2.6	9.04E-07	5.27E-07	8.99E-07	8.99E-07
Nb100	2.6	8.96E-07	8.76E-07	8.92E-07	8.92E-07
Kr91	2.6	8.88E-07	8.98E-07	8.91E-07	8.91E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Ba145	2.4	8.38E-07	9.38E-07	8.40E-07	8.40E-07
Ba143	2.4	8.30E-07	7.05E-07	8.33E-07	6.91E-07
Sr95	2.3	8.03E-07	6.89E-07	8.09E-07	8.09E-07
Y97	2.3	7.86E-07	8.94E-07	8.02E-07	8.02E-07
Xe140	2.1	7.38E-07	9.67E-07	8.92E-07	8.92E-07
Br88	2.1	7.14E-07	6.59E-07	7.04E-07	7.04E-07
La146	2.0	6.77E-07	8.12E-07	6.50E-07	6.50E-07
La145	1.9	6.61E-07	5.33E-07	6.61E-07	6.61E-07
Ce149	1.9	6.55E-07	2.84E-07	2.30E-08	2.30E-08
Te137	1.9	6.37E-07	1.93E-07	2.71E-07	2.71E-07
Zr99	1.7	5.81E-07	5.82E-07	6.10E-07	6.10E-07
Mo105	1.7	5.80E-07	5.78E-07	1.33E-07	1.33E-07
I137	1.6	5.67E-07	5.69E-07	6.13E-07	6.13E-07
Rb94	1.5	5.32E-07	1.03E-06	7.71E-07	7.71E-07
Ba144	1.5	5.11E-07	3.67E-07	5.12E-07	5.12E-07
Sb134m	1.5	5.08E-07	5.05E-07	6.93E-07	6.93E-07
Br89	1.4	4.72E-07	8.04E-07	4.95E-07	4.95E-07
I139	1.3	4.53E-07	1.03E-07	1.07E-07	1.07E-07
La144	1.2	4.28E-07	2.64E-07	4.13E-07	4.13E-07
Nb105	1.2	4.26E-07	2.80E-07	4.25E-07	4.25E-07
Nb103	1.1	3.75E-07	2.22E-07	4.16E-07	1.73E-07
Y96m	1.0	3.52E-07	3.52E-07	3.66E-07	3.66E-07
Xe139	1.0	3.51E-07	3.47E-07	5.76E-07	3.31E-07
Nb101	1.0	3.35E-07	5.57E-07	3.05E-07	3.05E-07
Tc106	0.9	3.26E-07	3.26E-07	2.26E-07	2.26E-07
Y98m	0.9	3.25E-07	3.25E-07	3.91E-07	3.91E-07
Rb91	0.9	3.22E-07	2.80E-07	3.24E-07	3.24E-07
Tc107	0.9	3.09E-07	3.09E-07	8.73E-08	8.73E-08
Tc108	0.9	3.08E-07	3.28E-07	2.80E-07	1.62E-07
Kr90	0.8	2.85E-07	2.87E-07	3.16E-07	2.68E-07
Se86	0.8	2.82E-07	2.55E-07	1.91E-07	1.91E-07
Zr100	0.8	2.69E-07	7.20E-07	2.49E-07	2.49E-07
La146m	0.7	2.46E-07	2.49E-07	2.50E-07	1.48E-07
Sr94	0.7	2.37E-07	2.61E-07	2.37E-07	2.37E-07
Mo103	0.7	2.30E-07	2.65E-07	1.48E-07	1.48E-07
Cs140	0.7	2.25E-07	2.67E-07	2.02E-07	2.02E-07
Te135	0.6	2.19E-07	8.28E-07	2.18E-07	2.18E-07
I136m	0.6	2.17E-07	2.23E-07	2.60E-07	2.68E-07
Zr101	0.6	2.07E-07	4.02E-07	2.07E-07	2.07E-07
Br87	0.6	2.05E-07	2.08E-07	1.91E-07	1.91E-07
Sb133	0.6	2.05E-07	2.57E-07	2.05E-07	2.05E-07

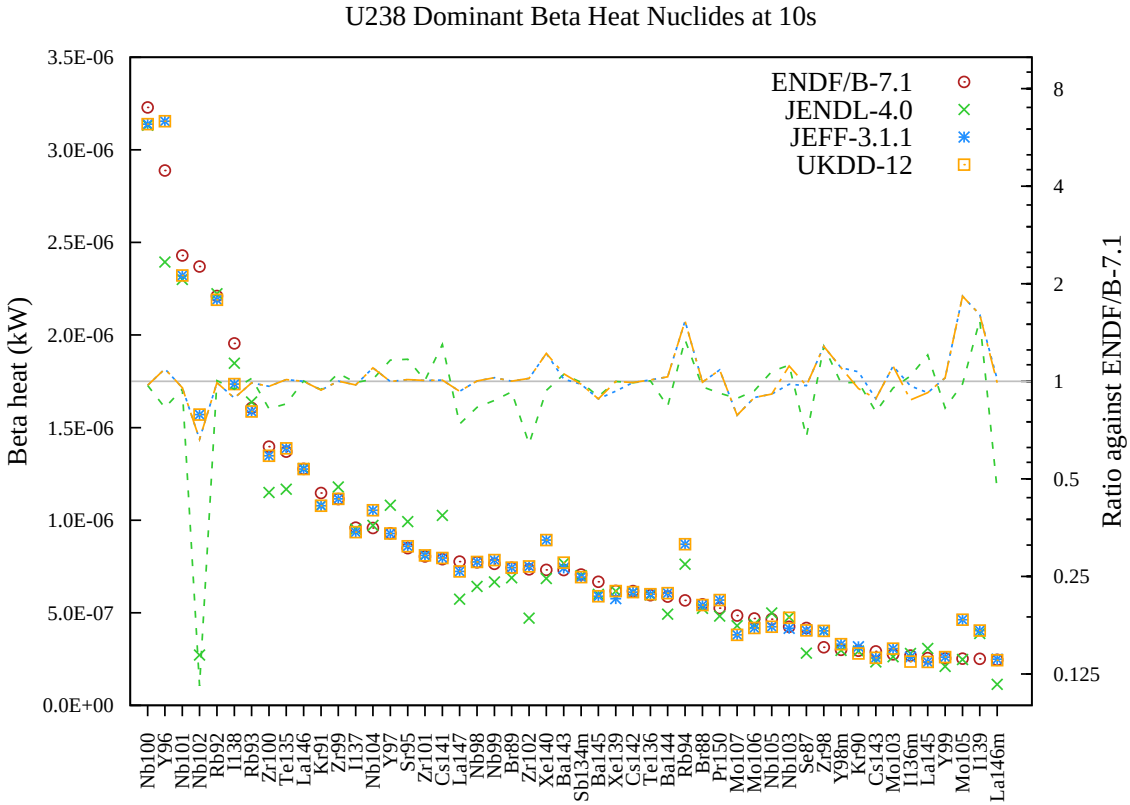

Figure 47: Beta heat (in kW) decay data comparison for U238 fission pulse after 10s cooling.

Table 47: Beta heat (in kW) decay data comparison for U238 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb100	6.5	3.23E-06	3.13E-06	3.14E-06	3.14E-06
Y96	5.8	2.89E-06	2.39E-06	3.16E-06	3.16E-06
Nb101	4.9	2.43E-06	2.30E-06	2.32E-06	2.32E-06
Nb102	4.7	2.37E-06	2.72E-07	1.57E-06	1.57E-06
Rb92	4.4	2.21E-06	2.22E-06	2.19E-06	2.19E-06
I138	3.9	1.95E-06	1.85E-06	1.74E-06	1.74E-06
Rb93	3.2	1.61E-06	1.64E-06	1.59E-06	1.59E-06
Zr100	2.8	1.40E-06	1.15E-06	1.35E-06	1.35E-06
Te135	2.7	1.37E-06	1.17E-06	1.39E-06	1.39E-06
La146	2.6	1.28E-06	1.28E-06	1.28E-06	1.28E-06
Kr91	2.3	1.15E-06	1.08E-06	1.08E-06	1.08E-06
Zr99	2.2	1.11E-06	1.18E-06	1.12E-06	1.12E-06
I137	1.9	9.60E-07	9.52E-07	9.35E-07	9.35E-07
Nb104	1.9	9.58E-07	9.72E-07	1.05E-06	1.05E-06
Y97	1.9	9.29E-07	1.08E-06	9.28E-07	9.28E-07
Sr95	1.7	8.49E-07	9.92E-07	8.59E-07	8.59E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Zr101	1.6	8.05E-07	8.11E-07	8.10E-07	8.10E-07
Cs141	1.6	7.89E-07	1.03E-06	7.96E-07	7.96E-07
La147	1.6	7.76E-07	5.73E-07	7.23E-07	7.23E-07
Nb98	1.5	7.73E-07	6.43E-07	7.75E-07	7.75E-07
Nb99	1.5	7.64E-07	6.67E-07	7.84E-07	7.84E-07
Br89	1.5	7.43E-07	6.89E-07	7.43E-07	7.43E-07
Zr102	1.5	7.34E-07	4.71E-07	7.50E-07	7.50E-07
Xe140	1.5	7.32E-07	6.86E-07	8.92E-07	8.92E-07
Ba143	1.5	7.31E-07	7.67E-07	7.42E-07	7.71E-07
Sb134m	1.4	7.07E-07	7.01E-07	6.93E-07	6.93E-07
Ba145	1.3	6.67E-07	6.00E-07	5.89E-07	5.89E-07
Xe139	1.2	6.18E-07	6.17E-07	5.76E-07	6.17E-07
Cs142	1.2	6.17E-07	6.11E-07	6.12E-07	6.12E-07
Te136	1.2	5.95E-07	5.97E-07	6.01E-07	6.01E-07
Ba144	1.2	5.88E-07	4.92E-07	6.06E-07	6.06E-07
Rb94	1.1	5.67E-07	7.62E-07	8.71E-07	8.71E-07
Br88	1.1	5.45E-07	5.24E-07	5.42E-07	5.42E-07
Pr150	1.1	5.25E-07	4.82E-07	5.69E-07	5.69E-07
Mo107	1.0	4.85E-07	4.30E-07	3.81E-07	3.81E-07
Mo106	0.9	4.69E-07	4.39E-07	4.18E-07	4.18E-07
Nb105	0.9	4.65E-07	4.99E-07	4.25E-07	4.25E-07
Nb103	0.9	4.25E-07	4.77E-07	4.16E-07	4.73E-07
Se87	0.8	4.18E-07	2.82E-07	4.05E-07	4.05E-07
Zr98	0.6	3.14E-07	4.02E-07	4.02E-07	4.02E-07
Y98m	0.6	3.00E-07	2.97E-07	3.31E-07	3.31E-07
Kr90	0.6	2.95E-07	2.94E-07	3.16E-07	2.81E-07
Cs143	0.6	2.91E-07	2.34E-07	2.57E-07	2.57E-07
Mo103	0.6	2.75E-07	2.62E-07	3.07E-07	3.06E-07
I136m	0.5	2.69E-07	2.80E-07	2.60E-07	2.36E-07
La145	0.5	2.55E-07	3.07E-07	2.35E-07	2.35E-07
Y99	0.5	2.54E-07	2.10E-07	2.61E-07	2.61E-07
Mo105	0.5	2.53E-07	2.48E-07	4.63E-07	4.63E-07
I139	0.5	2.51E-07	3.88E-07	4.04E-07	4.04E-07
La146m	0.5	2.46E-07	1.14E-07	2.50E-07	2.44E-07

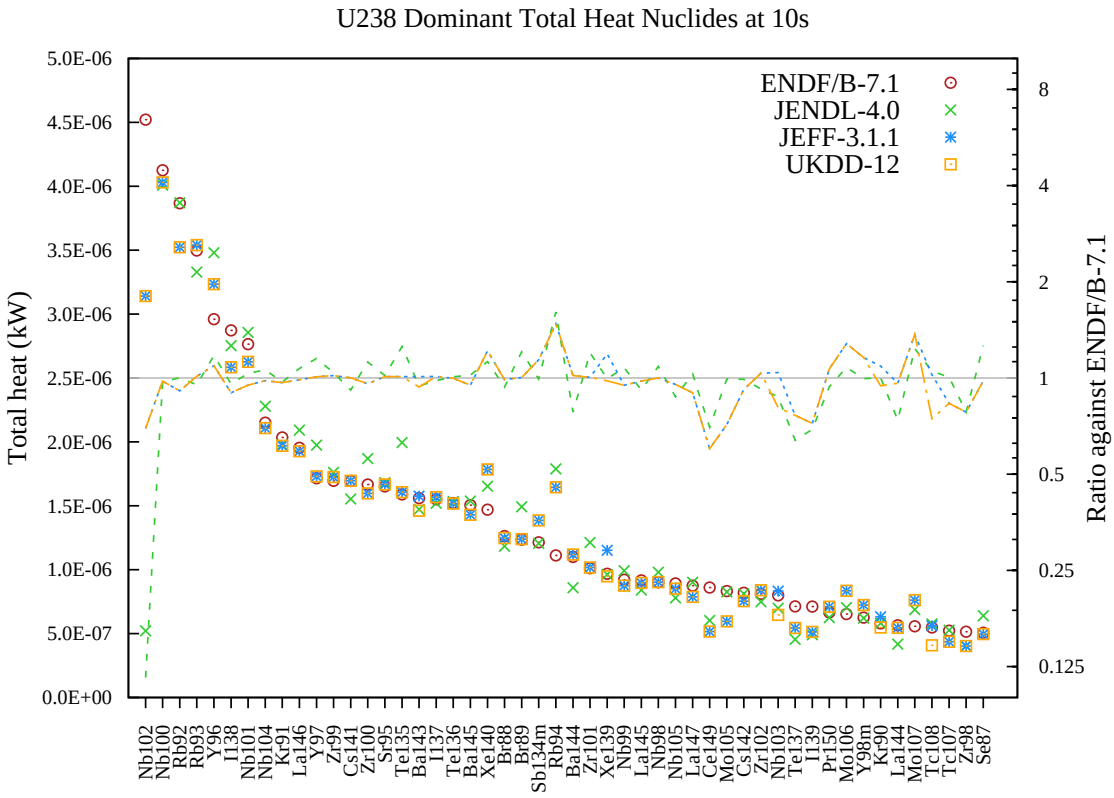

Figure 48: Total heat (in kW) decay data comparison for U238 fission pulse after 10s cooling.

Table 48: Total heat (in kW) decay data comparison for U238 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb102	5.4	4.52E-06	5.22E-07	3.14E-06	3.14E-06
Nb100	4.9	4.13E-06	4.01E-06	4.03E-06	4.03E-06
Rb92	4.6	3.87E-06	3.87E-06	3.52E-06	3.52E-06
Rb93	4.1	3.50E-06	3.33E-06	3.54E-06	3.54E-06
Y96	3.5	2.96E-06	3.48E-06	3.23E-06	3.23E-06
I138	3.4	2.87E-06	2.75E-06	2.58E-06	2.58E-06
Nb101	3.3	2.76E-06	2.86E-06	2.63E-06	2.63E-06
Nb104	2.5	2.15E-06	2.28E-06	2.11E-06	2.11E-06
Kr91	2.4	2.04E-06	1.98E-06	1.97E-06	1.97E-06
La146	2.3	1.95E-06	2.09E-06	1.93E-06	1.93E-06
Y97	2.0	1.72E-06	1.97E-06	1.73E-06	1.73E-06
Zr99	2.0	1.70E-06	1.76E-06	1.73E-06	1.73E-06
Cs141	2.0	1.69E-06	1.55E-06	1.70E-06	1.70E-06
Zr100	2.0	1.67E-06	1.87E-06	1.60E-06	1.60E-06
Sr95	2.0	1.65E-06	1.68E-06	1.67E-06	1.67E-06
Te135	1.9	1.59E-06	1.99E-06	1.61E-06	1.61E-06
Ba143	1.8	1.56E-06	1.47E-06	1.58E-06	1.46E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I137	1.8	1.55E-06	1.52E-06	1.57E-06	1.57E-06
Te136	1.8	1.52E-06	1.53E-06	1.52E-06	1.52E-06
Ba145	1.8	1.51E-06	1.54E-06	1.43E-06	1.43E-06
Xe140	1.7	1.47E-06	1.65E-06	1.78E-06	1.78E-06
Br88	1.5	1.26E-06	1.18E-06	1.25E-06	1.25E-06
Br89	1.5	1.24E-06	1.49E-06	1.24E-06	1.24E-06
Sb134m	1.4	1.21E-06	1.21E-06	1.39E-06	1.39E-06
Rb94	1.3	1.11E-06	1.79E-06	1.64E-06	1.64E-06
Ba144	1.3	1.10E-06	8.59E-07	1.12E-06	1.12E-06
Zr101	1.2	1.01E-06	1.21E-06	1.02E-06	1.02E-06
Xe139	1.1	9.68E-07	9.63E-07	1.15E-06	9.48E-07
Nb99	1.1	9.22E-07	9.92E-07	8.75E-07	8.75E-07
La145	1.1	9.16E-07	8.40E-07	8.96E-07	8.96E-07
Nb98	1.1	9.02E-07	9.80E-07	9.02E-07	9.02E-07
Nb105	1.1	8.92E-07	7.79E-07	8.51E-07	8.51E-07
La147	1.0	8.75E-07	9.02E-07	7.87E-07	7.87E-07
Ce149	1.0	8.60E-07	6.03E-07	5.16E-07	5.16E-07
Mo105	1.0	8.32E-07	8.26E-07	5.95E-07	5.95E-07
Cs142	1.0	8.19E-07	8.11E-07	7.54E-07	7.54E-07
Zr102	1.0	8.11E-07	7.49E-07	8.39E-07	8.39E-07
Nb103	0.9	8.00E-07	6.98E-07	8.32E-07	6.46E-07
Te137	0.8	7.12E-07	4.54E-07	5.44E-07	5.44E-07
I139	0.8	7.11E-07	4.91E-07	5.13E-07	5.13E-07
Pr150	0.8	6.66E-07	6.25E-07	7.10E-07	7.10E-07
Mo106	0.8	6.52E-07	7.04E-07	8.36E-07	8.36E-07
Y98m	0.7	6.25E-07	6.22E-07	7.23E-07	7.23E-07
Kr90	0.7	5.80E-07	5.81E-07	6.32E-07	5.48E-07
La144	0.7	5.66E-07	4.17E-07	5.45E-07	5.45E-07
Mo107	0.7	5.57E-07	6.88E-07	7.62E-07	7.62E-07
Tc108	0.6	5.48E-07	5.75E-07	5.61E-07	4.09E-07
Tc107	0.6	5.23E-07	5.26E-07	4.36E-07	4.36E-07
Zr98	0.6	5.15E-07	4.02E-07	4.02E-07	4.02E-07
Se87	0.6	5.07E-07	6.40E-07	4.96E-07	4.96E-07

4.2 100s after pulse

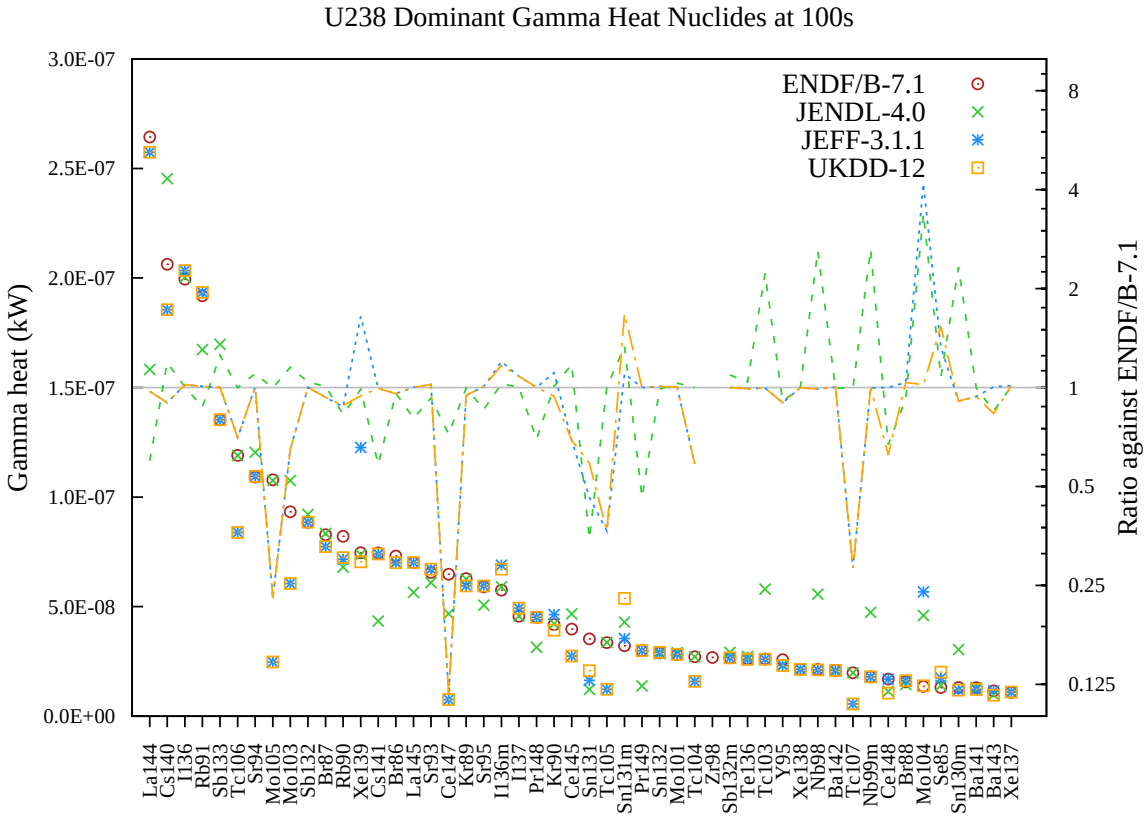

Figure 49: Gamma heat (in kW) decay data comparison for U238 fission pulse after 100s cooling.

Table 49: Gamma heat (in kW) decay data comparison for U238 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La144	8.3	2.64E-07	1.58E-07	2.57E-07	2.57E-07
Cs140	6.5	2.06E-07	2.45E-07	1.85E-07	1.85E-07
I136	6.3	1.99E-07	2.00E-07	2.03E-07	2.03E-07
Rb91	6.0	1.92E-07	1.67E-07	1.93E-07	1.93E-07
Sb133	4.2	1.35E-07	1.70E-07	1.35E-07	1.35E-07
Tc106	3.7	1.19E-07	1.19E-07	8.39E-08	8.39E-08
Sr94	3.4	1.09E-07	1.20E-07	1.09E-07	1.09E-07
Mo105	3.4	1.08E-07	1.08E-07	2.47E-08	2.47E-08
Mo103	2.9	9.33E-08	1.08E-07	6.05E-08	6.05E-08
Sb132	2.8	8.85E-08	9.21E-08	8.85E-08	8.85E-08
Br87	2.6	8.28E-08	8.34E-08	7.74E-08	7.74E-08
Rb90	2.6	8.21E-08	6.81E-08	7.17E-08	7.24E-08
Xe139	2.3	7.46E-08	7.37E-08	1.23E-07	7.05E-08

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs141	2.3	7.45E-08	4.34E-08	7.41E-08	7.41E-08
Br86	2.3	7.31E-08	7.02E-08	7.01E-08	7.01E-08
La145	2.2	7.01E-08	5.65E-08	7.01E-08	7.01E-08
Sr93	2.1	6.56E-08	6.10E-08	6.71E-08	6.71E-08
Ce147	2.0	6.48E-08	4.68E-08	7.54E-09	7.54E-09
Kr89	2.0	6.28E-08	6.26E-08	5.95E-08	5.95E-08
Sr95	1.9	5.90E-08	5.07E-08	5.94E-08	5.94E-08
I136m	1.8	5.75E-08	5.90E-08	6.89E-08	6.71E-08
I137	1.4	4.56E-08	4.58E-08	4.93E-08	4.93E-08
Pr148	1.4	4.51E-08	3.14E-08	4.52E-08	4.52E-08
Kr90	1.3	4.18E-08	4.21E-08	4.64E-08	3.93E-08
Ce145	1.2	3.97E-08	4.67E-08	2.74E-08	2.74E-08
Sn131	1.1	3.53E-08	1.22E-08	1.64E-08	2.07E-08
Tc105	1.1	3.36E-08	3.37E-08	1.23E-08	1.23E-08
Sn131m	1.0	3.21E-08	4.29E-08	3.54E-08	5.38E-08
Pr149	0.9	2.99E-08	1.38E-08	2.99E-08	2.99E-08
Sn132	0.9	2.89E-08	2.85E-08	2.91E-08	2.91E-08
Mo101	0.9	2.81E-08	2.90E-08	2.82E-08	2.82E-08
Tc104	0.9	2.71E-08	2.71E-08	1.59E-08	1.59E-08
Zr98	0.8	2.68E-08	—	—	—
Sb132m	0.8	2.67E-08	2.91E-08	2.67E-08	2.67E-08
Te136	0.8	2.62E-08	2.72E-08	2.59E-08	2.59E-08
Tc103	0.8	2.61E-08	5.80E-08	2.60E-08	2.60E-08
Y95	0.8	2.57E-08	2.34E-08	2.32E-08	2.32E-08
Xe138	0.7	2.14E-08	2.14E-08	2.13E-08	2.13E-08
Nb98	0.7	2.14E-08	5.57E-08	2.11E-08	2.11E-08
Ba142	0.7	2.09E-08	2.08E-08	2.09E-08	2.09E-08
Tc107	0.6	1.98E-08	1.98E-08	5.60E-09	5.60E-09
Nb99m	0.6	1.80E-08	4.74E-08	1.79E-08	1.79E-08
Ce148	0.5	1.69E-08	1.14E-08	1.69E-08	1.06E-08
Br88	0.5	1.56E-08	1.44E-08	1.62E-08	1.62E-08
Mo104	0.4	1.36E-08	4.60E-08	5.67E-08	1.39E-08
Se85	0.4	1.31E-08	1.41E-08	1.74E-08	2.01E-08
Sn130m	0.4	1.31E-08	3.04E-08	1.19E-08	1.19E-08
Ba141	0.4	1.30E-08	1.30E-08	1.22E-08	1.22E-08
Ba143	0.4	1.15E-08	9.80E-09	1.16E-08	9.61E-09
Xe137	0.3	1.08E-08	1.09E-08	1.10E-08	1.10E-08

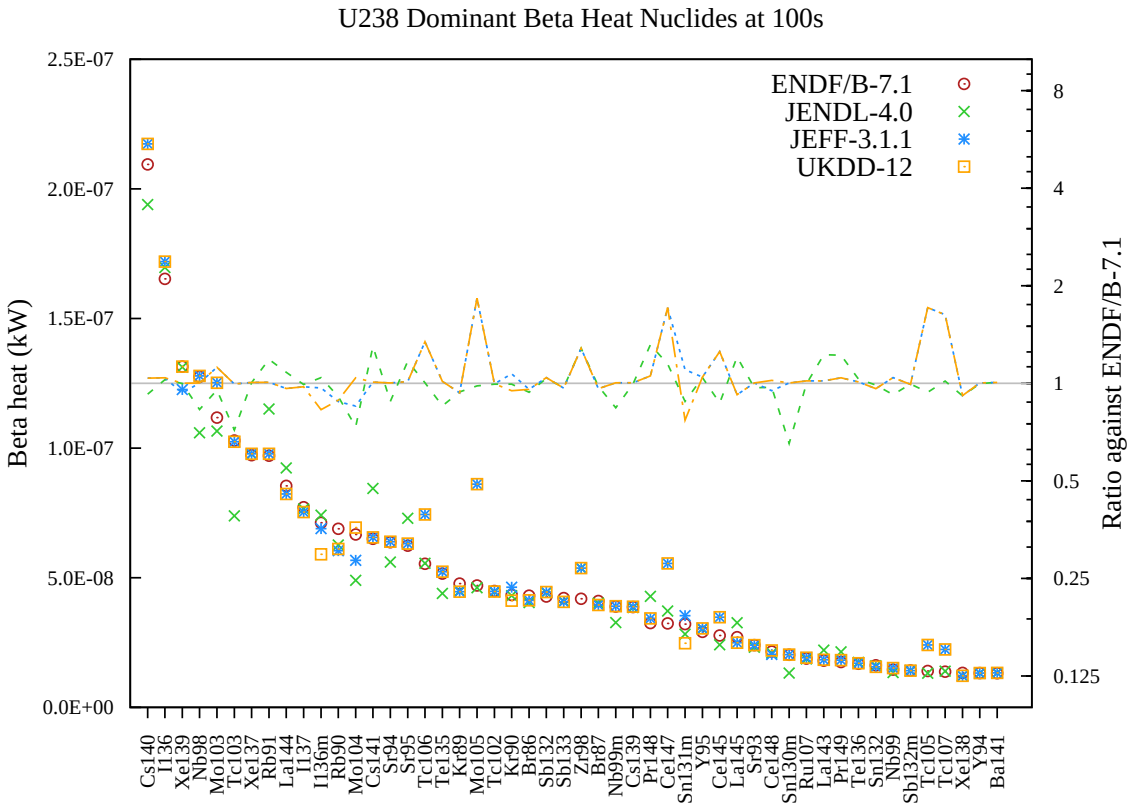

Figure 50: Beta heat (in kW) decay data comparison for U238 fission pulse after 100s cooling.

Table 50: Beta heat (in kW) decay data comparison for U238 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	7.5	2.09E-07	1.94E-07	2.17E-07	2.17E-07
I136	5.9	1.65E-07	1.70E-07	1.72E-07	1.72E-07
Xe139	4.7	1.31E-07	1.31E-07	1.23E-07	1.31E-07
Nb98	4.5	1.28E-07	1.06E-07	1.28E-07	1.28E-07
Mo103	4.0	1.12E-07	1.07E-07	1.25E-07	1.25E-07
Tc103	3.7	1.03E-07	7.39E-08	1.02E-07	1.02E-07
Xe137	3.5	9.73E-08	9.77E-08	9.78E-08	9.78E-08
Rb91	3.5	9.71E-08	1.15E-07	9.78E-08	9.78E-08
La144	3.0	8.54E-08	9.23E-08	8.23E-08	8.23E-08
I137	2.7	7.72E-08	7.65E-08	7.53E-08	7.53E-08
I136m	2.5	7.12E-08	7.42E-08	6.89E-08	5.91E-08
Rb90	2.5	6.89E-08	6.26E-08	6.05E-08	6.11E-08
Mo104	2.4	6.67E-08	4.90E-08	5.67E-08	6.93E-08
Cs141	2.3	6.50E-08	8.45E-08	6.56E-08	6.56E-08
Sr94	2.3	6.37E-08	5.60E-08	6.39E-08	6.39E-08
Sr95	2.2	6.24E-08	7.29E-08	6.32E-08	6.32E-08

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	2.0	5.54E-08	5.56E-08	7.44E-08	7.44E-08
Te135	1.8	5.16E-08	4.40E-08	5.23E-08	5.23E-08
Kr89	1.7	4.77E-08	4.49E-08	4.46E-08	4.46E-08
Mo105	1.7	4.70E-08	4.62E-08	8.61E-08	8.61E-08
Tc102	1.6	4.49E-08	4.46E-08	4.47E-08	4.47E-08
Kr90	1.5	4.33E-08	4.31E-08	4.64E-08	4.11E-08
Br86	1.5	4.31E-08	4.04E-08	4.13E-08	4.13E-08
Sb132	1.5	4.28E-08	4.43E-08	4.45E-08	4.45E-08
Sb133	1.5	4.21E-08	4.09E-08	4.07E-08	4.07E-08
Zr98	1.5	4.19E-08	5.37E-08	5.37E-08	5.37E-08
Br87	1.5	4.10E-08	4.02E-08	3.95E-08	3.95E-08
Nb99m	1.4	3.89E-08	3.27E-08	3.90E-08	3.90E-08
Cs139	1.4	3.87E-08	3.85E-08	3.89E-08	3.89E-08
Pr148	1.2	3.25E-08	4.28E-08	3.43E-08	3.43E-08
Ce147	1.2	3.24E-08	3.72E-08	5.55E-08	5.55E-08
Sn131m	1.1	3.21E-08	2.83E-08	3.54E-08	2.47E-08
Y95	1.0	2.91E-08	3.03E-08	3.05E-08	3.05E-08
Ce145	1.0	2.78E-08	2.41E-08	3.48E-08	3.48E-08
La145	1.0	2.70E-08	3.26E-08	2.49E-08	2.49E-08
Sr93	0.9	2.40E-08	2.32E-08	2.40E-08	2.40E-08
Ce148	0.8	2.15E-08	2.09E-08	2.04E-08	2.20E-08
Sn130m	0.7	2.03E-08	1.32E-08	2.03E-08	2.03E-08
Ru107	0.7	1.88E-08	1.87E-08	1.91E-08	1.91E-08
La143	0.6	1.80E-08	2.21E-08	1.83E-08	1.83E-08
Pr149	0.6	1.75E-08	2.14E-08	1.82E-08	1.82E-08
Te136	0.6	1.68E-08	1.73E-08	1.70E-08	1.70E-08
Sn132	0.6	1.62E-08	1.60E-08	1.56E-08	1.56E-08
Nb99	0.5	1.46E-08	1.35E-08	1.52E-08	1.52E-08
Sb132m	0.5	1.42E-08	1.42E-08	1.41E-08	1.41E-08
Tc105	0.5	1.41E-08	1.32E-08	2.41E-08	2.41E-08
Tc107	0.5	1.37E-08	1.40E-08	2.24E-08	2.24E-08
Xe138	0.5	1.33E-08	1.22E-08	1.22E-08	1.22E-08
Y94	0.5	1.32E-08	1.32E-08	1.33E-08	1.33E-08
Ba141	0.5	1.32E-08	1.33E-08	1.33E-08	1.33E-08

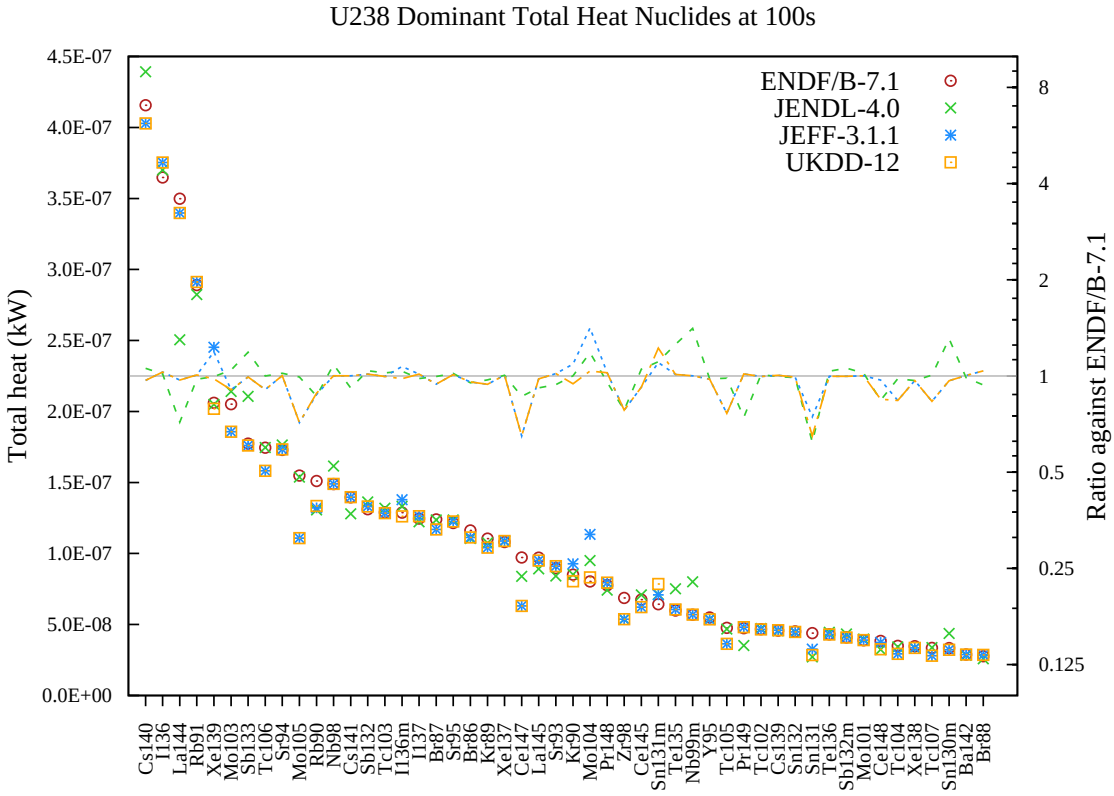

Figure 51: Total heat (in kW) decay data comparison for U238 fission pulse after 100s cooling.

Table 51: Total heat (in kW) decay data comparison for U238 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	6.9	4.16E-07	4.39E-07	4.03E-07	4.03E-07
I136	6.1	3.65E-07	3.70E-07	3.75E-07	3.75E-07
La144	5.8	3.50E-07	2.51E-07	3.40E-07	3.40E-07
Rb91	4.8	2.89E-07	2.82E-07	2.91E-07	2.91E-07
Xe139	3.4	2.06E-07	2.05E-07	2.45E-07	2.02E-07
Mo103	3.4	2.05E-07	2.14E-07	1.86E-07	1.86E-07
Sb133	3.0	1.77E-07	2.11E-07	1.76E-07	1.76E-07
Tc106	2.9	1.74E-07	1.75E-07	1.58E-07	1.58E-07
Sr94	2.9	1.73E-07	1.76E-07	1.73E-07	1.73E-07
Mo105	2.6	1.55E-07	1.54E-07	1.11E-07	1.11E-07
Rb90	2.5	1.51E-07	1.31E-07	1.32E-07	1.33E-07
Nb98	2.5	1.49E-07	1.62E-07	1.49E-07	1.49E-07
Cs141	2.3	1.39E-07	1.28E-07	1.40E-07	1.40E-07
Sb132	2.2	1.31E-07	1.36E-07	1.33E-07	1.33E-07
Tc103	2.1	1.29E-07	1.32E-07	1.28E-07	1.28E-07
I136m	2.1	1.29E-07	1.33E-07	1.38E-07	1.26E-07
I137	2.1	1.25E-07	1.22E-07	1.26E-07	1.26E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Br87	2.1	1.24E-07	1.24E-07	1.17E-07	1.17E-07
Sr95	2.0	1.21E-07	1.24E-07	1.23E-07	1.23E-07
Br86	1.9	1.16E-07	1.11E-07	1.11E-07	1.11E-07
Kr89	1.8	1.11E-07	1.08E-07	1.04E-07	1.04E-07
Xe137	1.8	1.08E-07	1.09E-07	1.09E-07	1.09E-07
Ce147	1.6	9.72E-08	8.39E-08	6.30E-08	6.30E-08
La145	1.6	9.71E-08	8.91E-08	9.51E-08	9.51E-08
Sr93	1.5	8.96E-08	8.42E-08	9.11E-08	9.11E-08
Kr90	1.4	8.51E-08	8.52E-08	9.27E-08	8.04E-08
Mo104	1.3	8.03E-08	9.50E-08	1.13E-07	8.32E-08
Pr148	1.3	7.77E-08	7.42E-08	7.95E-08	7.95E-08
Zr98	1.1	6.87E-08	5.37E-08	5.37E-08	5.37E-08
Ce145	1.1	6.75E-08	7.08E-08	6.22E-08	6.22E-08
Sn131m	1.1	6.43E-08	7.12E-08	7.08E-08	7.85E-08
Te135	1.0	5.99E-08	7.51E-08	6.06E-08	6.06E-08
Nb99m	0.9	5.68E-08	8.01E-08	5.69E-08	5.69E-08
Y95	0.9	5.49E-08	5.37E-08	5.36E-08	5.36E-08
Tc105	0.8	4.76E-08	4.68E-08	3.64E-08	3.64E-08
Pr149	0.8	4.74E-08	3.52E-08	4.81E-08	4.81E-08
Tc102	0.8	4.67E-08	4.71E-08	4.66E-08	4.65E-08
Cs139	0.8	4.57E-08	4.55E-08	4.59E-08	4.59E-08
Sn132	0.8	4.51E-08	4.45E-08	4.47E-08	4.47E-08
Sn131	0.7	4.39E-08	2.72E-08	3.27E-08	2.85E-08
Te136	0.7	4.31E-08	4.46E-08	4.29E-08	4.29E-08
Sb132m	0.7	4.09E-08	4.33E-08	4.08E-08	4.08E-08
Mo101	0.6	3.89E-08	3.97E-08	3.90E-08	3.90E-08
Ce148	0.6	3.85E-08	3.23E-08	3.74E-08	3.25E-08
Tc104	0.6	3.49E-08	3.43E-08	2.93E-08	2.93E-08
Xe138	0.6	3.47E-08	3.35E-08	3.35E-08	3.35E-08
Tc107	0.6	3.36E-08	3.38E-08	2.80E-08	2.80E-08
Sn130m	0.6	3.34E-08	4.37E-08	3.22E-08	3.22E-08
Ba142	0.5	2.88E-08	2.84E-08	2.89E-08	2.89E-08
Br88	0.5	2.76E-08	2.59E-08	2.86E-08	2.86E-08

4.3 1000s after pulse

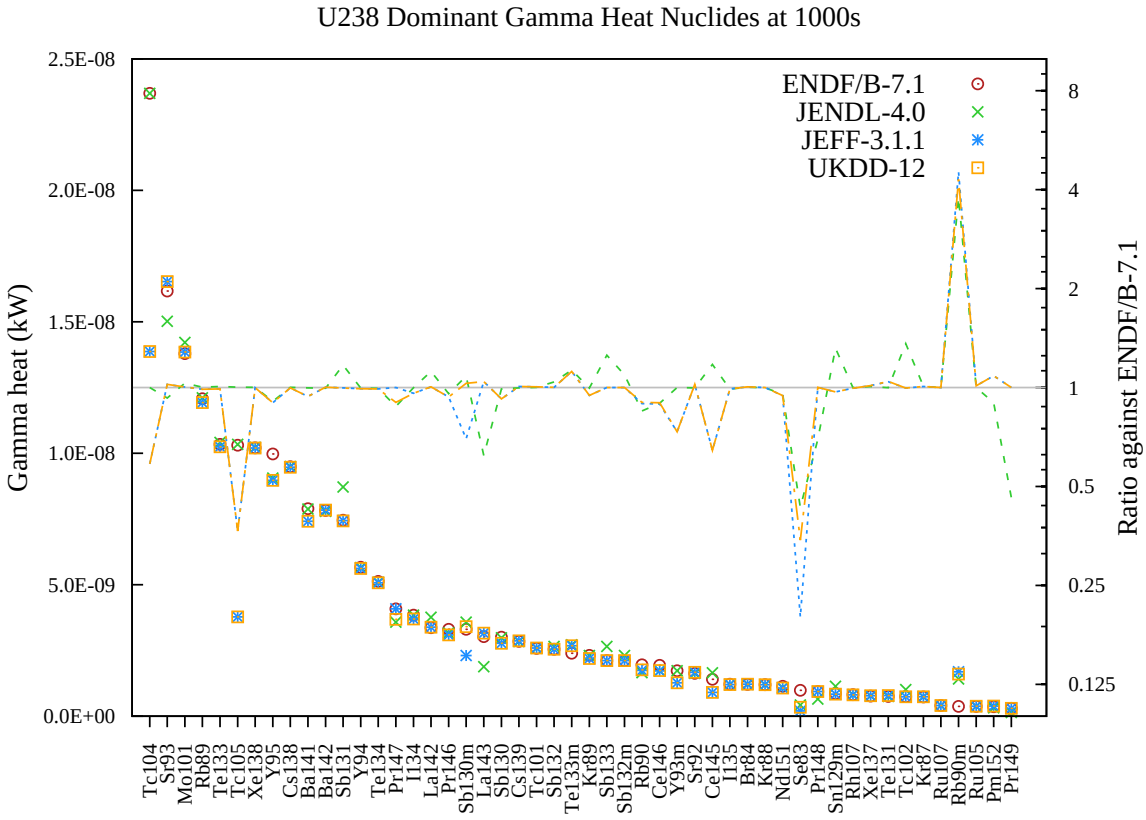

Figure 52: Gamma heat (in kW) decay data comparison for U238 fission pulse after 1000s cooling.

Table 52: Gamma heat (in kW) decay data comparison for U238 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	10.9	2.37E-08	2.37E-08	1.39E-08	1.39E-08
Sr93	7.5	1.62E-08	1.50E-08	1.65E-08	1.65E-08
Mo101	6.4	1.38E-08	1.42E-08	1.38E-08	1.38E-08
Rb89	5.6	1.21E-08	1.21E-08	1.19E-08	1.19E-08
Te133	4.8	1.03E-08	1.04E-08	1.02E-08	1.02E-08
Tc105	4.8	1.03E-08	1.03E-08	3.77E-09	3.77E-09
Xe138	4.7	1.02E-08	1.02E-08	1.02E-08	1.02E-08
Y95	4.6	9.97E-09	9.06E-09	8.97E-09	8.97E-09
Cs138	4.4	9.49E-09	9.49E-09	9.47E-09	9.47E-09
Ba141	3.6	7.89E-09	7.88E-09	7.42E-09	7.42E-09
Ba142	3.6	7.83E-09	7.79E-09	7.84E-09	7.84E-09
Sb131	3.4	7.45E-09	8.71E-09	7.44E-09	7.42E-09
Y94	2.6	5.67E-09	5.65E-09	5.62E-09	5.62E-09

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te134	2.4	5.13E-09	5.09E-09	5.08E-09	5.08E-09
Pr147	1.9	4.08E-09	3.58E-09	4.08E-09	3.68E-09
I134	1.8	3.84E-09	3.84E-09	3.69E-09	3.69E-09
La142	1.6	3.37E-09	3.77E-09	3.38E-09	3.38E-09
Pr146	1.5	3.31E-09	3.17E-09	3.09E-09	3.09E-09
Sb130m	1.5	3.31E-09	3.58E-09	2.31E-09	3.40E-09
La143	1.4	3.03E-09	1.88E-09	3.16E-09	3.16E-09
Sb130	1.4	3.00E-09	2.98E-09	2.77E-09	2.77E-09
Cs139	1.3	2.85E-09	2.84E-09	2.87E-09	2.87E-09
Tc101	1.2	2.58E-09	2.58E-09	2.59E-09	2.59E-09
Sb132	1.2	2.55E-09	2.65E-09	2.55E-09	2.55E-09
Te133m	1.1	2.40E-09	2.71E-09	2.68E-09	2.68E-09
Kr89	1.1	2.31E-09	2.31E-09	2.19E-09	2.19E-09
Sb133	1.0	2.11E-09	2.65E-09	2.11E-09	2.11E-09
Sb132m	1.0	2.11E-09	2.31E-09	2.11E-09	2.11E-09
Rb90	0.9	1.95E-09	1.66E-09	1.74E-09	1.76E-09
Ce146	0.9	1.93E-09	1.73E-09	1.72E-09	1.74E-09
Y93m	0.8	1.73E-09	1.73E-09	1.27E-09	1.27E-09
Sr92	0.8	1.63E-09	1.63E-09	1.67E-09	1.67E-09
Ce145	0.6	1.40E-09	1.65E-09	9.02E-10	9.02E-10
I135	0.6	1.22E-09	1.20E-09	1.20E-09	1.20E-09
Br84	0.6	1.21E-09	1.22E-09	1.22E-09	1.22E-09
Kr88	0.6	1.20E-09	1.20E-09	1.20E-09	1.20E-09
Nd151	0.5	1.13E-09	1.08E-09	1.07E-09	1.07E-09
Se83	0.5	9.82E-10	4.24E-10	1.97E-10	3.37E-10
Pr148	0.4	9.36E-10	6.51E-10	9.36E-10	9.36E-10
Sn129m	0.4	8.62E-10	1.13E-09	8.36E-10	8.36E-10
Rh107	0.4	8.17E-10	8.16E-10	8.13E-10	8.13E-10
Xe137	0.4	7.68E-10	7.73E-10	7.78E-10	7.78E-10
Te131	0.3	7.53E-10	7.52E-10	7.84E-10	7.86E-10
Tc102	0.3	7.42E-10	1.01E-09	7.40E-10	7.39E-10
Kr87	0.3	7.30E-10	7.37E-10	7.35E-10	7.35E-10
Ru107	0.2	4.05E-10	4.05E-10	4.05E-10	4.05E-10
Rb90m	0.2	3.72E-10	1.41E-09	1.69E-09	1.60E-09
Ru105	0.2	3.72E-10	3.72E-10	3.76E-10	3.76E-10
Pm152	0.2	3.56E-10	3.20E-10	3.86E-10	3.86E-10
Pr149	0.1	3.01E-10	1.39E-10	3.01E-10	3.01E-10

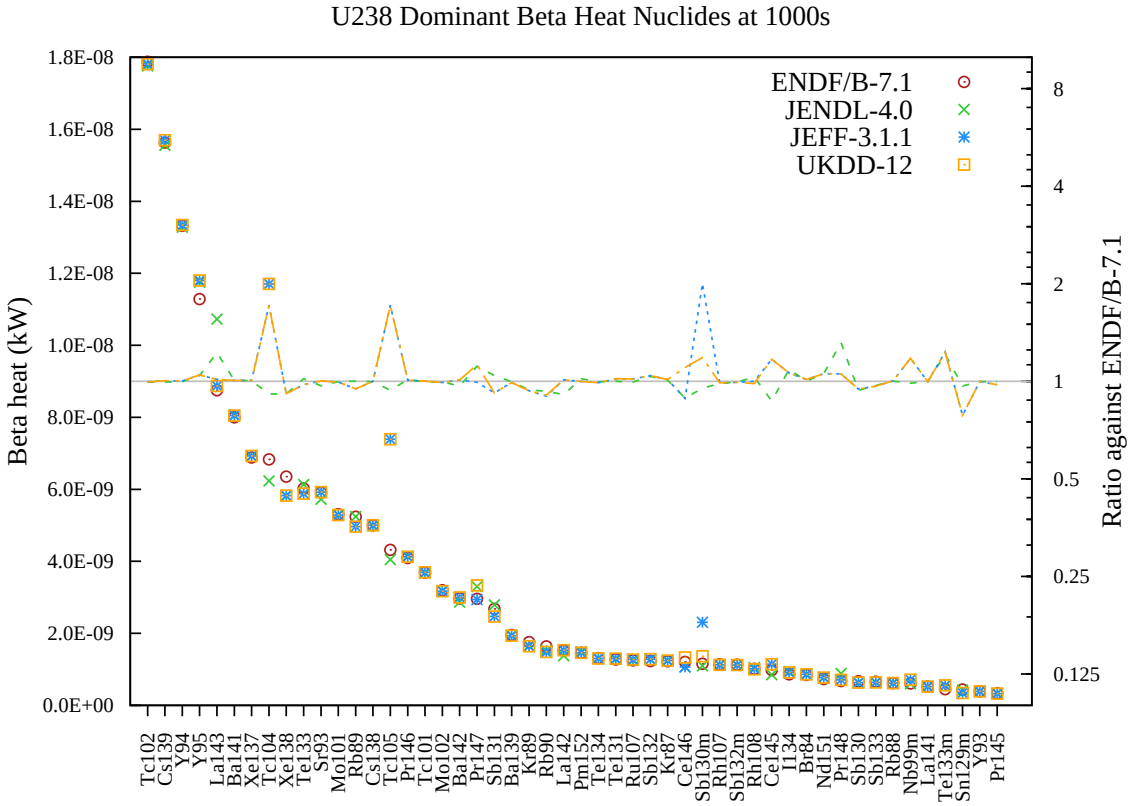

Figure 53: Beta heat (in kW) decay data comparison for U238 fission pulse after 1000s cooling.

Table 53: Beta heat (in kW) decay data comparison for U238 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	9.9	1.79E-08	1.78E-08	1.78E-08	1.78E-08
Cs139	8.7	1.56E-08	1.56E-08	1.57E-08	1.57E-08
Y94	7.4	1.33E-08	1.33E-08	1.33E-08	1.33E-08
Y95	6.2	1.13E-08	1.18E-08	1.18E-08	1.18E-08
La143	4.8	8.75E-09	1.07E-08	8.87E-09	8.87E-09
Ba141	4.4	8.00E-09	8.05E-09	8.05E-09	8.05E-09
Xe137	3.8	6.89E-09	6.92E-09	6.93E-09	6.93E-09
Tc104	3.8	6.83E-09	6.23E-09	1.17E-08	1.17E-08
Xe138	3.5	6.35E-09	5.81E-09	5.82E-09	5.82E-09
Te133	3.3	6.02E-09	6.13E-09	5.88E-09	5.88E-09
Sr93	3.3	5.91E-09	5.73E-09	5.92E-09	5.92E-09
Mo101	2.9	5.31E-09	5.29E-09	5.28E-09	5.28E-09
Rb89	2.9	5.24E-09	5.24E-09	4.96E-09	4.96E-09
Cs138	2.8	5.00E-09	4.99E-09	5.00E-09	5.00E-09
Tc105	2.4	4.32E-09	4.05E-09	7.39E-09	7.39E-09
Pr146	2.3	4.09E-09	4.14E-09	4.13E-09	4.13E-09

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc101	2.0	3.69E-09	3.67E-09	3.69E-09	3.69E-09
Mo102	1.8	3.20E-09	3.19E-09	3.17E-09	3.17E-09
Ba142	1.6	2.97E-09	2.87E-09	3.00E-09	3.00E-09
Pr147	1.6	2.96E-09	3.30E-09	2.94E-09	3.33E-09
Sb131	1.5	2.68E-09	2.79E-09	2.47E-09	2.46E-09
Ba139	1.1	1.95E-09	1.95E-09	1.94E-09	1.94E-09
Kr89	1.0	1.76E-09	1.66E-09	1.64E-09	1.64E-09
Rb90	0.9	1.64E-09	1.53E-09	1.47E-09	1.48E-09
La142	0.8	1.52E-09	1.38E-09	1.53E-09	1.53E-09
Pm152	0.8	1.46E-09	1.49E-09	1.46E-09	1.46E-09
Te134	0.7	1.31E-09	1.31E-09	1.30E-09	1.30E-09
Te131	0.7	1.28E-09	1.27E-09	1.30E-09	1.30E-09
Ru107	0.7	1.25E-09	1.24E-09	1.27E-09	1.27E-09
Sb132	0.7	1.23E-09	1.27E-09	1.28E-09	1.28E-09
Kr87	0.7	1.23E-09	1.24E-09	1.24E-09	1.24E-09
Ce146	0.7	1.21E-09	1.07E-09	1.07E-09	1.33E-09
Sb130m	0.6	1.15E-09	1.10E-09	2.31E-09	1.36E-09
Rh107	0.6	1.14E-09	1.12E-09	1.13E-09	1.13E-09
Sb132m	0.6	1.13E-09	1.12E-09	1.12E-09	1.12E-09
Rh108	0.6	1.02E-09	1.05E-09	1.02E-09	1.00E-09
Ce145	0.5	9.79E-10	8.52E-10	1.14E-09	1.14E-09
I134	0.5	8.60E-10	9.37E-10	9.12E-10	9.12E-10
Br84	0.5	8.49E-10	8.50E-10	8.60E-10	8.60E-10
Nd151	0.4	7.32E-10	7.74E-10	7.73E-10	7.73E-10
Pr148	0.4	6.74E-10	8.87E-10	7.10E-10	7.10E-10
Sb130	0.4	6.70E-10	6.28E-10	6.34E-10	6.34E-10
Sb133	0.4	6.58E-10	6.39E-10	6.36E-10	6.36E-10
Rb88	0.3	6.16E-10	6.16E-10	6.18E-10	6.18E-10
Nb99m	0.3	6.07E-10	5.99E-10	7.15E-10	7.15E-10
La141	0.3	5.21E-10	5.20E-10	5.20E-10	5.20E-10
Te133m	0.2	4.49E-10	5.43E-10	5.53E-10	5.53E-10
Sn129m	0.2	4.40E-10	4.25E-10	3.45E-10	3.45E-10
Y93	0.2	3.87E-10	3.86E-10	3.87E-10	3.87E-10
Pr145	0.2	3.35E-10	3.35E-10	3.27E-10	3.27E-10

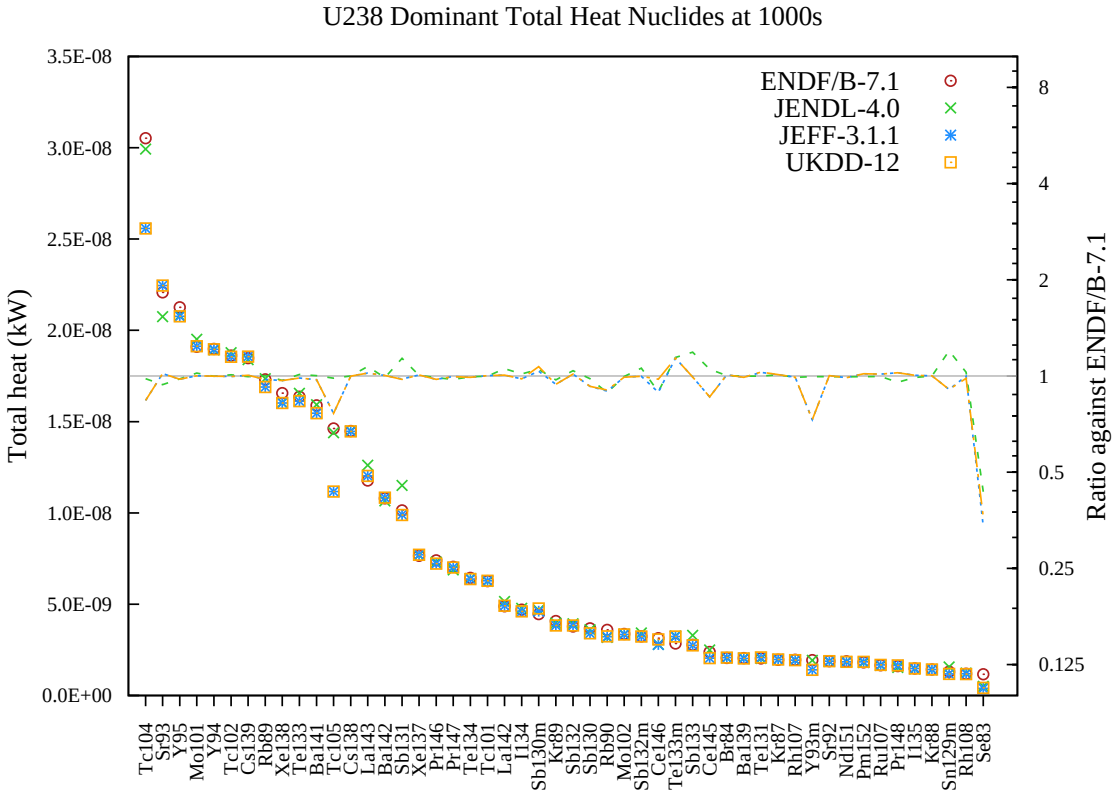

Figure 54: Total heat (in kW) decay data comparison for U238 fission pulse after 1000s cooling.

Table 54: Total heat (in kW) decay data comparison for U238 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	7.7	3.05E-08	2.99E-08	2.56E-08	2.56E-08
Sr93	5.6	2.21E-08	2.07E-08	2.25E-08	2.25E-08
Y95	5.4	2.13E-08	2.08E-08	2.08E-08	2.08E-08
Mo101	4.8	1.91E-08	1.95E-08	1.91E-08	1.91E-08
Y94	4.8	1.90E-08	1.89E-08	1.90E-08	1.90E-08
Tc102	4.7	1.86E-08	1.88E-08	1.86E-08	1.85E-08
Cs139	4.7	1.85E-08	1.84E-08	1.86E-08	1.86E-08
Rb89	4.4	1.73E-08	1.74E-08	1.69E-08	1.69E-08
Xe138	4.2	1.66E-08	1.60E-08	1.60E-08	1.60E-08
Te133	4.1	1.64E-08	1.65E-08	1.61E-08	1.61E-08
Ba141	4.0	1.59E-08	1.59E-08	1.55E-08	1.55E-08
Tc105	3.7	1.46E-08	1.44E-08	1.12E-08	1.12E-08
Cs138	3.6	1.45E-08	1.45E-08	1.45E-08	1.45E-08
La143	3.0	1.18E-08	1.26E-08	1.20E-08	1.20E-08
Ba142	2.7	1.08E-08	1.07E-08	1.08E-08	1.08E-08
Sb131	2.6	1.01E-08	1.15E-08	9.91E-09	9.89E-09
Xe137	1.9	7.65E-09	7.69E-09	7.71E-09	7.71E-09

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Pr146	1.9	7.40E-09	7.31E-09	7.22E-09	7.22E-09
Pr147	1.8	7.04E-09	6.88E-09	7.02E-09	7.01E-09
Te134	1.6	6.44E-09	6.40E-09	6.38E-09	6.38E-09
Tc101	1.6	6.27E-09	6.26E-09	6.29E-09	6.29E-09
La142	1.2	4.88E-09	5.15E-09	4.92E-09	4.92E-09
I134	1.2	4.70E-09	4.78E-09	4.61E-09	4.61E-09
Sb130m	1.1	4.46E-09	4.68E-09	4.61E-09	4.77E-09
Kr89	1.0	4.07E-09	3.96E-09	3.84E-09	3.84E-09
Sb132	1.0	3.78E-09	3.92E-09	3.83E-09	3.83E-09
Sb130	0.9	3.67E-09	3.60E-09	3.41E-09	3.41E-09
Rb90	0.9	3.59E-09	3.18E-09	3.22E-09	3.24E-09
Mo102	0.8	3.37E-09	3.36E-09	3.34E-09	3.34E-09
Sb132m	0.8	3.24E-09	3.43E-09	3.23E-09	3.23E-09
Ce146	0.8	3.14E-09	2.80E-09	2.79E-09	3.07E-09
Te133m	0.7	2.85E-09	3.25E-09	3.23E-09	3.23E-09
Sb133	0.7	2.77E-09	3.29E-09	2.75E-09	2.75E-09
Ce145	0.6	2.38E-09	2.50E-09	2.05E-09	2.05E-09
Br84	0.5	2.06E-09	2.07E-09	2.08E-09	2.08E-09
Ba139	0.5	2.05E-09	2.05E-09	2.03E-09	2.03E-09
Te131	0.5	2.03E-09	2.03E-09	2.08E-09	2.08E-09
Kr87	0.5	1.96E-09	1.97E-09	1.98E-09	1.98E-09
Rh107	0.5	1.96E-09	1.94E-09	1.94E-09	1.94E-09
Y93m	0.5	1.93E-09	1.92E-09	1.41E-09	1.41E-09
Sr92	0.5	1.88E-09	1.87E-09	1.88E-09	1.88E-09
Nd151	0.5	1.87E-09	1.86E-09	1.85E-09	1.85E-09
Pm152	0.5	1.82E-09	1.81E-09	1.84E-09	1.84E-09
Ru107	0.4	1.66E-09	1.65E-09	1.68E-09	1.68E-09
Pr148	0.4	1.61E-09	1.54E-09	1.65E-09	1.65E-09
I135	0.4	1.48E-09	1.46E-09	1.48E-09	1.48E-09
Kr88	0.4	1.42E-09	1.42E-09	1.43E-09	1.43E-09
Sn129m	0.3	1.30E-09	1.56E-09	1.18E-09	1.18E-09
Rh108	0.3	1.19E-09	1.22E-09	1.19E-09	1.17E-09
Se83	0.3	1.16E-09	5.05E-10	3.94E-10	4.21E-10

4.4 5011s after pulse

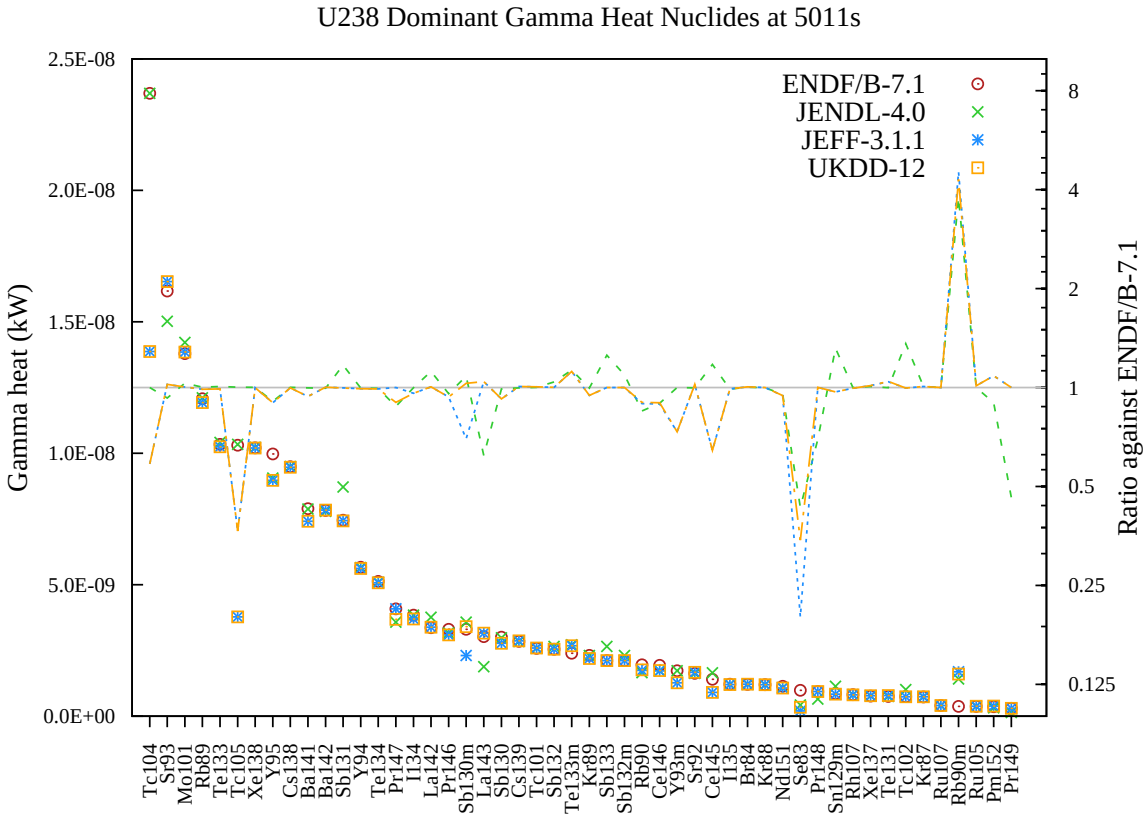

Figure 55: Gamma heat (in kW) decay data comparison for U238 fission pulse after 5011s cooling.

Table 55: Gamma heat (in kW) decay data comparison for U238 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	10.9	2.37E-08	2.37E-08	1.39E-08	1.39E-08
Sr93	7.5	1.62E-08	1.50E-08	1.65E-08	1.65E-08
Mo101	6.4	1.38E-08	1.42E-08	1.38E-08	1.38E-08
Rb89	5.6	1.21E-08	1.21E-08	1.19E-08	1.19E-08
Te133	4.8	1.03E-08	1.04E-08	1.02E-08	1.02E-08
Tc105	4.8	1.03E-08	1.03E-08	3.77E-09	3.77E-09
Xe138	4.7	1.02E-08	1.02E-08	1.02E-08	1.02E-08
Y95	4.6	9.97E-09	9.06E-09	8.97E-09	8.97E-09
Cs138	4.4	9.49E-09	9.49E-09	9.47E-09	9.47E-09
Ba141	3.6	7.89E-09	7.88E-09	7.42E-09	7.42E-09
Ba142	3.6	7.83E-09	7.79E-09	7.84E-09	7.84E-09
Sb131	3.4	7.45E-09	8.71E-09	7.44E-09	7.42E-09
Y94	2.6	5.67E-09	5.65E-09	5.62E-09	5.62E-09

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te134	2.4	5.13E-09	5.09E-09	5.08E-09	5.08E-09
Pr147	1.9	4.08E-09	3.58E-09	4.08E-09	3.68E-09
I134	1.8	3.84E-09	3.84E-09	3.69E-09	3.69E-09
La142	1.6	3.37E-09	3.77E-09	3.38E-09	3.38E-09
Pr146	1.5	3.31E-09	3.17E-09	3.09E-09	3.09E-09
Sb130m	1.5	3.31E-09	3.58E-09	2.31E-09	3.40E-09
La143	1.4	3.03E-09	1.88E-09	3.16E-09	3.16E-09
Sb130	1.4	3.00E-09	2.98E-09	2.77E-09	2.77E-09
Cs139	1.3	2.85E-09	2.84E-09	2.87E-09	2.87E-09
Tc101	1.2	2.58E-09	2.58E-09	2.59E-09	2.59E-09
Sb132	1.2	2.55E-09	2.65E-09	2.55E-09	2.55E-09
Te133m	1.1	2.40E-09	2.71E-09	2.68E-09	2.68E-09
Kr89	1.1	2.31E-09	2.31E-09	2.19E-09	2.19E-09
Sb133	1.0	2.11E-09	2.65E-09	2.11E-09	2.11E-09
Sb132m	1.0	2.11E-09	2.31E-09	2.11E-09	2.11E-09
Rb90	0.9	1.95E-09	1.66E-09	1.74E-09	1.76E-09
Ce146	0.9	1.93E-09	1.73E-09	1.72E-09	1.74E-09
Y93m	0.8	1.73E-09	1.73E-09	1.27E-09	1.27E-09
Sr92	0.8	1.63E-09	1.63E-09	1.67E-09	1.67E-09
Ce145	0.6	1.40E-09	1.65E-09	9.02E-10	9.02E-10
I135	0.6	1.22E-09	1.20E-09	1.20E-09	1.20E-09
Br84	0.6	1.21E-09	1.22E-09	1.22E-09	1.22E-09
Kr88	0.6	1.20E-09	1.20E-09	1.20E-09	1.20E-09
Nd151	0.5	1.13E-09	1.08E-09	1.07E-09	1.07E-09
Se83	0.5	9.82E-10	4.24E-10	1.97E-10	3.37E-10
Pr148	0.4	9.36E-10	6.51E-10	9.36E-10	9.36E-10
Sn129m	0.4	8.62E-10	1.13E-09	8.36E-10	8.36E-10
Rh107	0.4	8.17E-10	8.16E-10	8.13E-10	8.13E-10
Xe137	0.4	7.68E-10	7.73E-10	7.78E-10	7.78E-10
Te131	0.3	7.53E-10	7.52E-10	7.84E-10	7.86E-10
Tc102	0.3	7.42E-10	1.01E-09	7.40E-10	7.39E-10
Kr87	0.3	7.30E-10	7.37E-10	7.35E-10	7.35E-10
Ru107	0.2	4.05E-10	4.05E-10	4.05E-10	4.05E-10
Rb90m	0.2	3.72E-10	1.41E-09	1.69E-09	1.60E-09
Ru105	0.2	3.72E-10	3.72E-10	3.76E-10	3.76E-10
Pm152	0.2	3.56E-10	3.20E-10	3.86E-10	3.86E-10
Pr149	0.1	3.01E-10	1.39E-10	3.01E-10	3.01E-10

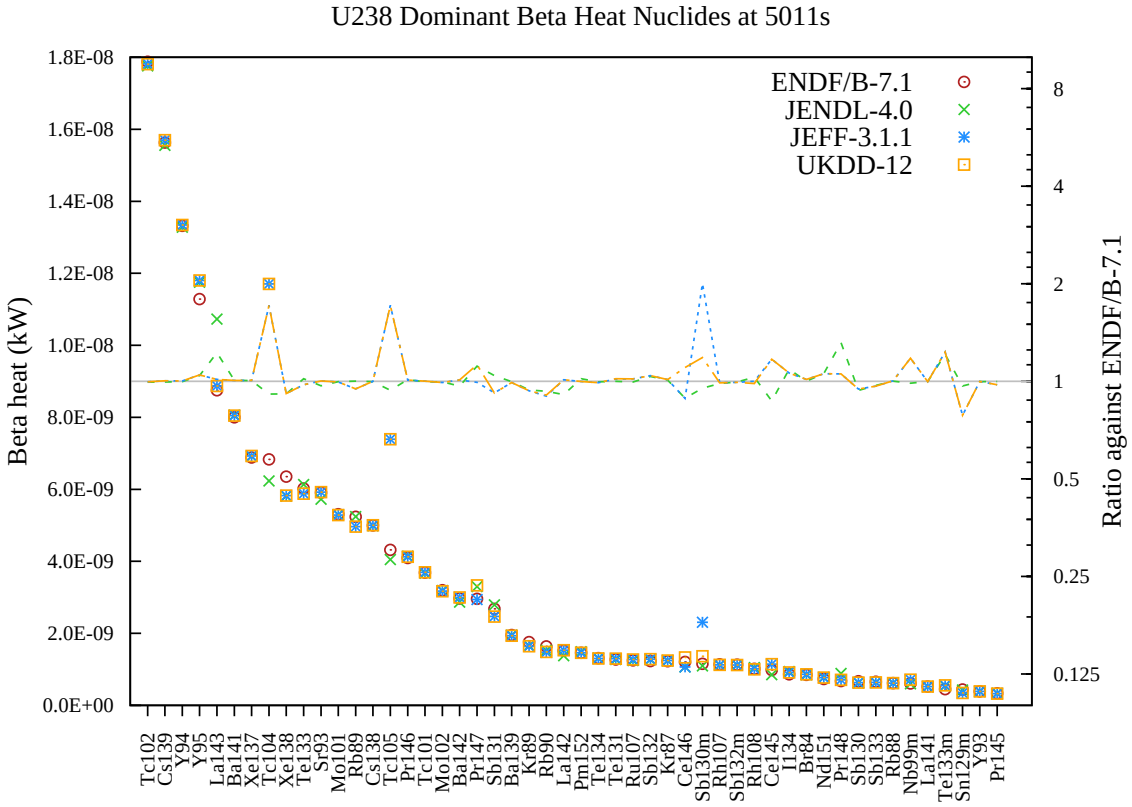

Figure 56: Beta heat (in kW) decay data comparison for U238 fission pulse after 5011s cooling.

Table 56: Beta heat (in kW) decay data comparison for U238 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	9.9	1.79E-08	1.78E-08	1.78E-08	1.78E-08
Cs139	8.7	1.56E-08	1.56E-08	1.57E-08	1.57E-08
Y94	7.4	1.33E-08	1.33E-08	1.33E-08	1.33E-08
Y95	6.2	1.13E-08	1.18E-08	1.18E-08	1.18E-08
La143	4.8	8.75E-09	1.07E-08	8.87E-09	8.87E-09
Ba141	4.4	8.00E-09	8.05E-09	8.05E-09	8.05E-09
Xe137	3.8	6.89E-09	6.92E-09	6.93E-09	6.93E-09
Tc104	3.8	6.83E-09	6.23E-09	1.17E-08	1.17E-08
Xe138	3.5	6.35E-09	5.81E-09	5.82E-09	5.82E-09
Te133	3.3	6.02E-09	6.13E-09	5.88E-09	5.88E-09
Sr93	3.3	5.91E-09	5.73E-09	5.92E-09	5.92E-09
Mo101	2.9	5.31E-09	5.29E-09	5.28E-09	5.28E-09
Rb89	2.9	5.24E-09	5.24E-09	4.96E-09	4.96E-09
Cs138	2.8	5.00E-09	4.99E-09	5.00E-09	5.00E-09
Tc105	2.4	4.32E-09	4.05E-09	7.39E-09	7.39E-09
Pr146	2.3	4.09E-09	4.14E-09	4.13E-09	4.13E-09

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc101	2.0	3.69E-09	3.67E-09	3.69E-09	3.69E-09
Mo102	1.8	3.20E-09	3.19E-09	3.17E-09	3.17E-09
Ba142	1.6	2.97E-09	2.87E-09	3.00E-09	3.00E-09
Pr147	1.6	2.96E-09	3.30E-09	2.94E-09	3.33E-09
Sb131	1.5	2.68E-09	2.79E-09	2.47E-09	2.46E-09
Ba139	1.1	1.95E-09	1.95E-09	1.94E-09	1.94E-09
Kr89	1.0	1.76E-09	1.66E-09	1.64E-09	1.64E-09
Rb90	0.9	1.64E-09	1.53E-09	1.47E-09	1.48E-09
La142	0.8	1.52E-09	1.38E-09	1.53E-09	1.53E-09
Pm152	0.8	1.46E-09	1.49E-09	1.46E-09	1.46E-09
Te134	0.7	1.31E-09	1.31E-09	1.30E-09	1.30E-09
Te131	0.7	1.28E-09	1.27E-09	1.30E-09	1.30E-09
Ru107	0.7	1.25E-09	1.24E-09	1.27E-09	1.27E-09
Sb132	0.7	1.23E-09	1.27E-09	1.28E-09	1.28E-09
Kr87	0.7	1.23E-09	1.24E-09	1.24E-09	1.24E-09
Ce146	0.7	1.21E-09	1.07E-09	1.07E-09	1.33E-09
Sb130m	0.6	1.15E-09	1.10E-09	2.31E-09	1.36E-09
Rh107	0.6	1.14E-09	1.12E-09	1.13E-09	1.13E-09
Sb132m	0.6	1.13E-09	1.12E-09	1.12E-09	1.12E-09
Rh108	0.6	1.02E-09	1.05E-09	1.02E-09	1.00E-09
Ce145	0.5	9.79E-10	8.52E-10	1.14E-09	1.14E-09
I134	0.5	8.60E-10	9.37E-10	9.12E-10	9.12E-10
Br84	0.5	8.49E-10	8.50E-10	8.60E-10	8.60E-10
Nd151	0.4	7.32E-10	7.74E-10	7.73E-10	7.73E-10
Pr148	0.4	6.74E-10	8.87E-10	7.10E-10	7.10E-10
Sb130	0.4	6.70E-10	6.28E-10	6.34E-10	6.34E-10
Sb133	0.4	6.58E-10	6.39E-10	6.36E-10	6.36E-10
Rb88	0.3	6.16E-10	6.16E-10	6.18E-10	6.18E-10
Nb99m	0.3	6.07E-10	5.99E-10	7.15E-10	7.15E-10
La141	0.3	5.21E-10	5.20E-10	5.20E-10	5.20E-10
Te133m	0.2	4.49E-10	5.43E-10	5.53E-10	5.53E-10
Sn129m	0.2	4.40E-10	4.25E-10	3.45E-10	3.45E-10
Y93	0.2	3.87E-10	3.86E-10	3.87E-10	3.87E-10
Pr145	0.2	3.35E-10	3.35E-10	3.27E-10	3.27E-10

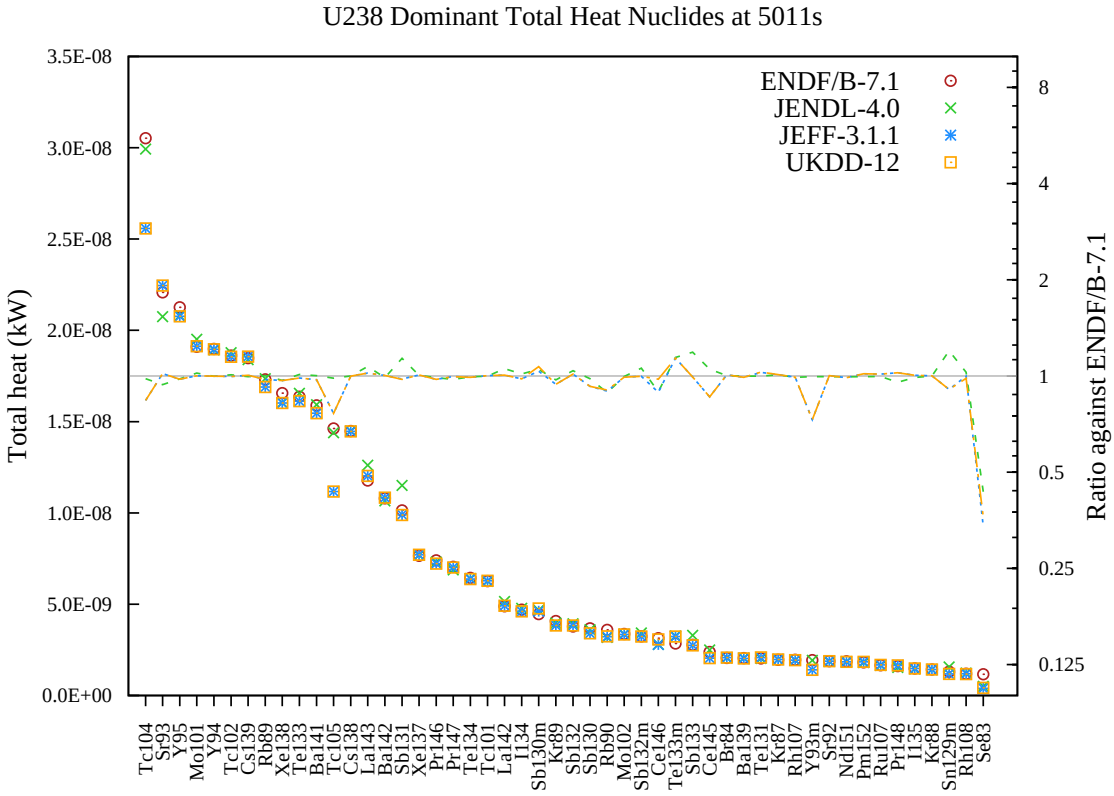

Figure 57: Total heat (in kW) decay data comparison for U238 fission pulse after 5011s cooling.

Table 57: Total heat (in kW) decay data comparison for U238 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	7.7	3.05E-08	2.99E-08	2.56E-08	2.56E-08
Sr93	5.6	2.21E-08	2.07E-08	2.25E-08	2.25E-08
Y95	5.4	2.13E-08	2.08E-08	2.08E-08	2.08E-08
Mo101	4.8	1.91E-08	1.95E-08	1.91E-08	1.91E-08
Y94	4.8	1.90E-08	1.89E-08	1.90E-08	1.90E-08
Tc102	4.7	1.86E-08	1.88E-08	1.86E-08	1.85E-08
Cs139	4.7	1.85E-08	1.84E-08	1.86E-08	1.86E-08
Rb89	4.4	1.73E-08	1.74E-08	1.69E-08	1.69E-08
Xe138	4.2	1.66E-08	1.60E-08	1.60E-08	1.60E-08
Te133	4.1	1.64E-08	1.65E-08	1.61E-08	1.61E-08
Ba141	4.0	1.59E-08	1.59E-08	1.55E-08	1.55E-08
Tc105	3.7	1.46E-08	1.44E-08	1.12E-08	1.12E-08
Cs138	3.6	1.45E-08	1.45E-08	1.45E-08	1.45E-08
La143	3.0	1.18E-08	1.26E-08	1.20E-08	1.20E-08
Ba142	2.7	1.08E-08	1.07E-08	1.08E-08	1.08E-08
Sb131	2.6	1.01E-08	1.15E-08	9.91E-09	9.89E-09
Xe137	1.9	7.65E-09	7.69E-09	7.71E-09	7.71E-09

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Pr146	1.9	7.40E-09	7.31E-09	7.22E-09	7.22E-09
Pr147	1.8	7.04E-09	6.88E-09	7.02E-09	7.01E-09
Te134	1.6	6.44E-09	6.40E-09	6.38E-09	6.38E-09
Tc101	1.6	6.27E-09	6.26E-09	6.29E-09	6.29E-09
La142	1.2	4.88E-09	5.15E-09	4.92E-09	4.92E-09
I134	1.2	4.70E-09	4.78E-09	4.61E-09	4.61E-09
Sb130m	1.1	4.46E-09	4.68E-09	4.61E-09	4.77E-09
Kr89	1.0	4.07E-09	3.96E-09	3.84E-09	3.84E-09
Sb132	1.0	3.78E-09	3.92E-09	3.83E-09	3.83E-09
Sb130	0.9	3.67E-09	3.60E-09	3.41E-09	3.41E-09
Rb90	0.9	3.59E-09	3.18E-09	3.22E-09	3.24E-09
Mo102	0.8	3.37E-09	3.36E-09	3.34E-09	3.34E-09
Sb132m	0.8	3.24E-09	3.43E-09	3.23E-09	3.23E-09
Ce146	0.8	3.14E-09	2.80E-09	2.79E-09	3.07E-09
Te133m	0.7	2.85E-09	3.25E-09	3.23E-09	3.23E-09
Sb133	0.7	2.77E-09	3.29E-09	2.75E-09	2.75E-09
Ce145	0.6	2.38E-09	2.50E-09	2.05E-09	2.05E-09
Br84	0.5	2.06E-09	2.07E-09	2.08E-09	2.08E-09
Ba139	0.5	2.05E-09	2.05E-09	2.03E-09	2.03E-09
Te131	0.5	2.03E-09	2.03E-09	2.08E-09	2.08E-09
Kr87	0.5	1.96E-09	1.97E-09	1.98E-09	1.98E-09
Rh107	0.5	1.96E-09	1.94E-09	1.94E-09	1.94E-09
Y93m	0.5	1.93E-09	1.92E-09	1.41E-09	1.41E-09
Sr92	0.5	1.88E-09	1.87E-09	1.88E-09	1.88E-09
Nd151	0.5	1.87E-09	1.86E-09	1.85E-09	1.85E-09
Pm152	0.5	1.82E-09	1.81E-09	1.84E-09	1.84E-09
Ru107	0.4	1.66E-09	1.65E-09	1.68E-09	1.68E-09
Pr148	0.4	1.61E-09	1.54E-09	1.65E-09	1.65E-09
I135	0.4	1.48E-09	1.46E-09	1.48E-09	1.48E-09
Kr88	0.4	1.42E-09	1.42E-09	1.43E-09	1.43E-09
Sn129m	0.3	1.30E-09	1.56E-09	1.18E-09	1.18E-09
Rh108	0.3	1.19E-09	1.22E-09	1.19E-09	1.17E-09
Se83	0.3	1.16E-09	5.05E-10	3.94E-10	4.21E-10

4.5 10000s after pulse

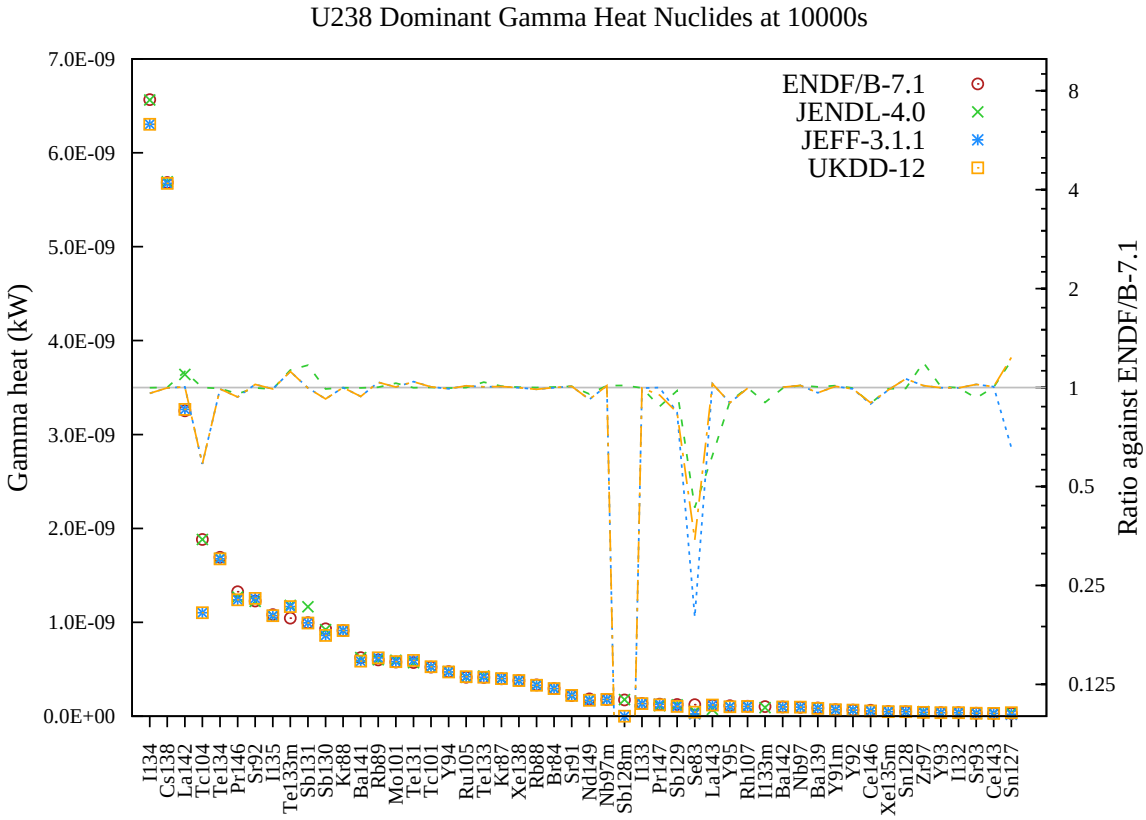

Figure 58: Gamma heat (in kW) decay data comparison for U238 fission pulse after 10000s cooling.

Table 58: Gamma heat (in kW) decay data comparison for U238 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	18.8	6.57E-09	6.56E-09	6.30E-09	6.30E-09
Cs138	16.3	5.68E-09	5.69E-09	5.67E-09	5.67E-09
La142	9.3	3.25E-09	3.64E-09	3.27E-09	3.27E-09
Tc104	5.4	1.88E-09	1.88E-09	1.10E-09	1.10E-09
Te134	4.8	1.69E-09	1.68E-09	1.67E-09	1.67E-09
Pr146	3.8	1.33E-09	1.27E-09	1.24E-09	1.24E-09
Sr92	3.5	1.23E-09	1.22E-09	1.25E-09	1.25E-09
I135	3.1	1.08E-09	1.07E-09	1.07E-09	1.07E-09
Te133m	3.0	1.04E-09	1.18E-09	1.17E-09	1.17E-09
Sb131	2.9	9.96E-10	1.16E-09	9.94E-10	9.92E-10
Sb130	2.7	9.31E-10	9.22E-10	8.59E-10	8.59E-10
Kr88	2.6	9.13E-10	9.12E-10	9.13E-10	9.13E-10
Ba141	1.8	6.24E-10	6.23E-10	5.87E-10	5.87E-10

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb89	1.7	6.00E-10	6.01E-10	6.22E-10	6.22E-10
Mo101	1.7	5.78E-10	5.96E-10	5.80E-10	5.80E-10
Te131	1.6	5.71E-10	5.70E-10	5.95E-10	5.94E-10
Tc101	1.5	5.24E-10	5.24E-10	5.26E-10	5.26E-10
Y94	1.4	4.75E-10	4.74E-10	4.71E-10	4.71E-10
Ru105	1.2	4.15E-10	4.15E-10	4.20E-10	4.20E-10
Te133	1.2	4.13E-10	4.29E-10	4.15E-10	4.15E-10
Kr87	1.1	3.98E-10	4.02E-10	4.01E-10	4.01E-10
Xe138	1.1	3.80E-10	3.80E-10	3.79E-10	3.79E-10
Rb88	1.0	3.34E-10	3.34E-10	3.30E-10	3.30E-10
Br84	0.8	2.94E-10	2.95E-10	2.94E-10	2.94E-10
Sr91	0.6	2.20E-10	2.22E-10	2.22E-10	2.22E-10
Nd149	0.5	1.84E-10	1.76E-10	1.69E-10	1.69E-10
Nb97m	0.5	1.77E-10	1.79E-10	1.79E-10	1.79E-10
Sb128m	0.5	1.74E-10	1.76E-10	5.59E-13	5.59E-13
I133	0.4	1.35E-10	1.35E-10	1.34E-10	1.34E-10
Pr147	0.4	1.29E-10	1.13E-10	1.28E-10	1.22E-10
Sb129	0.4	1.24E-10	1.21E-10	1.04E-10	1.04E-10
Se83	0.4	1.23E-10	5.30E-11	2.46E-11	4.23E-11
La143	0.3	1.16E-10	7.19E-11	1.19E-10	1.19E-10
Y95	0.3	1.11E-10	1.01E-10	9.97E-11	9.97E-11
Rh107	0.3	1.06E-10	1.06E-10	1.05E-10	1.05E-10
I133m	0.3	1.01E-10	—	—	—
Ba142	0.3	9.88E-11	9.83E-11	9.90E-11	9.90E-11
Nb97	0.3	9.51E-11	9.65E-11	9.65E-11	9.65E-11
Ba139	0.2	8.71E-11	8.75E-11	8.40E-11	8.40E-11
Y91m	0.2	6.87E-11	6.96E-11	6.93E-11	6.93E-11
Y92	0.2	6.55E-11	6.53E-11	6.49E-11	6.49E-11
Ce146	0.2	6.27E-11	5.61E-11	5.59E-11	5.64E-11
Xe135m	0.1	4.94E-11	4.90E-11	4.86E-11	4.86E-11
Sn128	0.1	4.62E-11	4.59E-11	4.91E-11	4.91E-11
Zr97	0.1	4.07E-11	4.85E-11	4.12E-11	4.12E-11
Y93	0.1	3.72E-11	3.75E-11	3.72E-11	3.72E-11
I132	0.1	3.72E-11	3.71E-11	3.71E-11	3.71E-11
Sr93	0.1	3.14E-11	2.92E-11	3.21E-11	3.21E-11
Ce143	0.1	3.03E-11	3.04E-11	3.05E-11	3.05E-11
Sn127	0.1	2.98E-11	3.60E-11	1.96E-11	3.68E-11

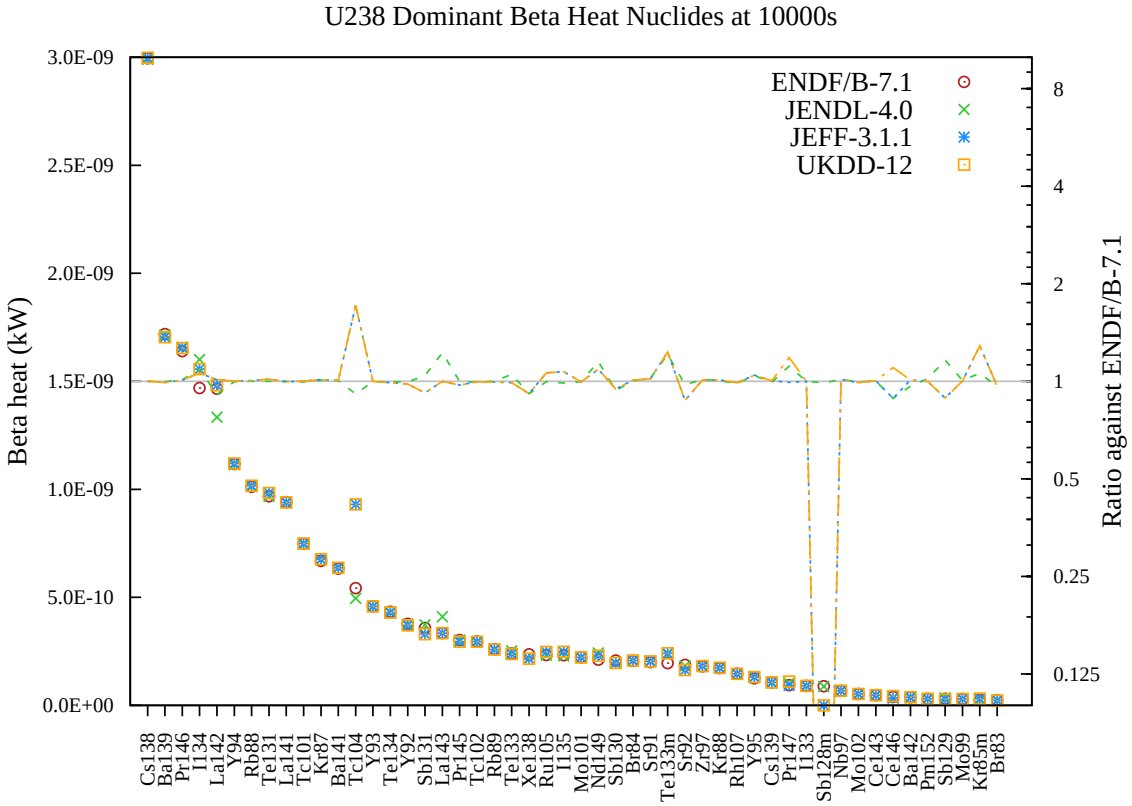

Figure 59: Beta heat (in kW) decay data comparison for U238 fission pulse after 10000s cooling.

Table 59: Beta heat (in kW) decay data comparison for U238 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	13.1	3.00E-09	2.99E-09	3.00E-09	3.00E-09
Ba139	7.5	1.72E-09	1.71E-09	1.70E-09	1.70E-09
Pr146	7.2	1.64E-09	1.66E-09	1.65E-09	1.65E-09
I134	6.4	1.47E-09	1.60E-09	1.56E-09	1.56E-09
La142	6.4	1.47E-09	1.33E-09	1.48E-09	1.48E-09
Y94	4.9	1.12E-09	1.11E-09	1.12E-09	1.12E-09
Rb88	4.4	1.01E-09	1.01E-09	1.02E-09	1.02E-09
Te131	4.2	9.68E-10	9.68E-10	9.84E-10	9.83E-10
La141	4.1	9.41E-10	9.40E-10	9.39E-10	9.39E-10
Tc101	3.3	7.48E-10	7.45E-10	7.49E-10	7.49E-10
Kr87	2.9	6.69E-10	6.74E-10	6.77E-10	6.77E-10
Ba141	2.8	6.33E-10	6.37E-10	6.37E-10	6.37E-10
Tc104	2.4	5.43E-10	4.95E-10	9.30E-10	9.30E-10
Y93	2.0	4.59E-10	4.58E-10	4.58E-10	4.58E-10
Te134	1.9	4.33E-10	4.32E-10	4.29E-10	4.29E-10
Y92	1.7	3.78E-10	3.76E-10	3.70E-10	3.70E-10

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb131	1.6	3.58E-10	3.73E-10	3.30E-10	3.29E-10
La143	1.5	3.35E-10	4.10E-10	3.35E-10	3.35E-10
Pr145	1.3	3.02E-10	3.02E-10	2.94E-10	2.94E-10
Tc102	1.3	2.96E-10	2.94E-10	2.95E-10	2.95E-10
Rb89	1.1	2.60E-10	2.60E-10	2.59E-10	2.59E-10
Te133	1.1	2.40E-10	2.52E-10	2.38E-10	2.38E-10
Xe138	1.0	2.36E-10	2.16E-10	2.17E-10	2.17E-10
Ru105	1.0	2.33E-10	2.32E-10	2.47E-10	2.47E-10
I135	1.0	2.32E-10	2.29E-10	2.48E-10	2.48E-10
Mo101	1.0	2.22E-10	2.22E-10	2.21E-10	2.21E-10
Nd149	0.9	2.11E-10	2.43E-10	2.30E-10	2.30E-10
Sb130	0.9	2.07E-10	1.95E-10	1.96E-10	1.96E-10
Br84	0.9	2.06E-10	2.06E-10	2.08E-10	2.08E-10
Sr91	0.9	2.00E-10	2.04E-10	2.04E-10	2.04E-10
Te133m	0.9	1.96E-10	2.37E-10	2.41E-10	2.41E-10
Sr92	0.8	1.87E-10	1.83E-10	1.63E-10	1.63E-10
Zr97	0.8	1.80E-10	1.83E-10	1.82E-10	1.82E-10
Kr88	0.8	1.72E-10	1.73E-10	1.74E-10	1.74E-10
Rh107	0.6	1.47E-10	1.45E-10	1.46E-10	1.46E-10
Y95	0.6	1.25E-10	1.31E-10	1.31E-10	1.31E-10
Cs139	0.5	1.05E-10	1.05E-10	1.06E-10	1.06E-10
Pr147	0.4	9.32E-11	1.04E-10	9.25E-11	1.10E-10
I133	0.4	8.99E-11	9.00E-11	8.99E-11	8.99E-11
Sb128m	0.4	8.85E-11	8.76E-11	2.81E-13	2.81E-13
Nb97	0.3	6.71E-11	6.80E-11	6.80E-11	6.80E-11
Mo102	0.2	5.29E-11	5.28E-11	5.25E-11	5.25E-11
Ce143	0.2	4.69E-11	4.70E-11	4.71E-11	4.71E-11
Ce146	0.2	3.91E-11	3.46E-11	3.46E-11	4.31E-11
Ba142	0.2	3.75E-11	3.62E-11	3.78E-11	3.78E-11
Pm152	0.1	3.01E-11	3.07E-11	3.01E-11	3.01E-11
Sb129	0.1	3.01E-11	3.50E-11	2.67E-11	2.67E-11
Mo99	0.1	2.92E-11	2.93E-11	2.92E-11	2.92E-11
Kr85m	0.1	2.44E-11	2.59E-11	3.15E-11	3.15E-11
Br83	0.1	2.35E-11	2.27E-11	2.28E-11	2.27E-11

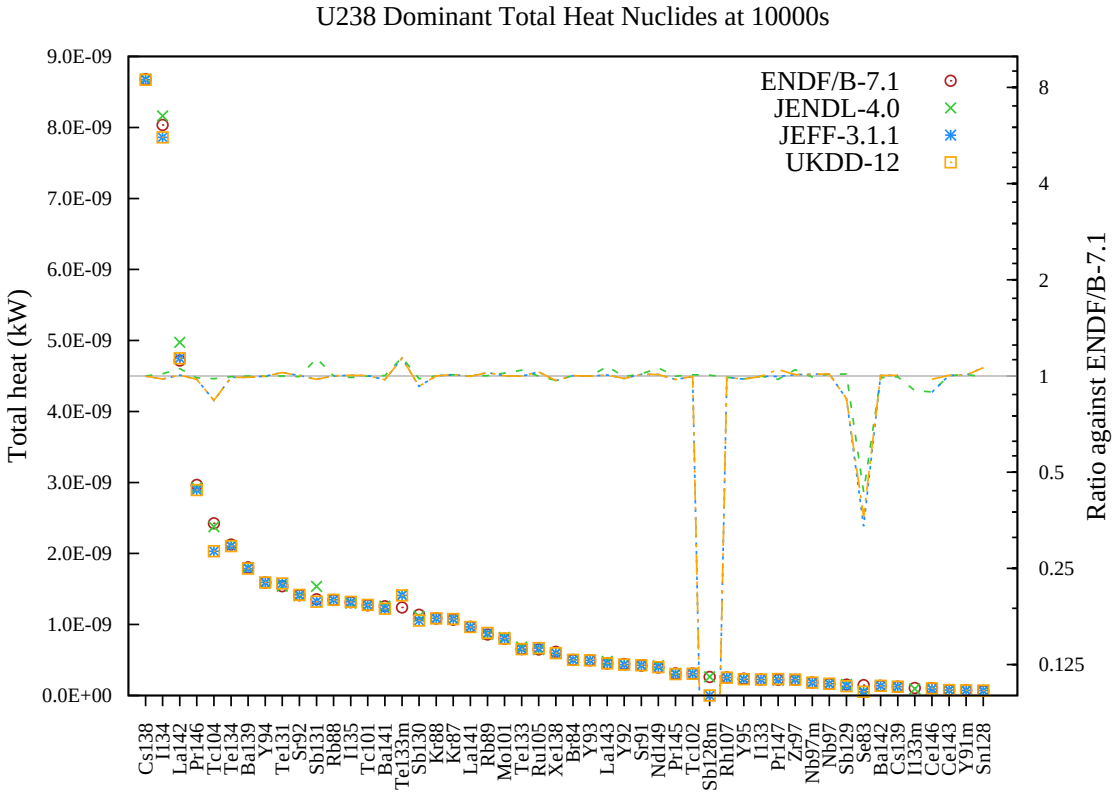

Figure 60: Total heat (in kW) decay data comparison for U238 fission pulse after 10000s cooling.

Table 60: Total heat (in kW) decay data comparison for U238 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	15.0	8.68E-09	8.68E-09	8.67E-09	8.67E-09
I134	13.9	8.04E-09	8.16E-09	7.86E-09	7.86E-09
La142	8.2	4.72E-09	4.97E-09	4.75E-09	4.75E-09
Pr146	5.1	2.96E-09	2.93E-09	2.89E-09	2.89E-09
Tc104	4.2	2.42E-09	2.38E-09	2.03E-09	2.03E-09
Te134	3.7	2.12E-09	2.11E-09	2.10E-09	2.10E-09
Ba139	3.1	1.81E-09	1.80E-09	1.79E-09	1.79E-09
Y94	2.8	1.59E-09	1.59E-09	1.59E-09	1.59E-09
Te131	2.7	1.54E-09	1.54E-09	1.58E-09	1.58E-09
Sr92	2.4	1.41E-09	1.41E-09	1.42E-09	1.42E-09
Sb131	2.3	1.35E-09	1.54E-09	1.32E-09	1.32E-09
Rb88	2.3	1.35E-09	1.35E-09	1.35E-09	1.35E-09
I135	2.3	1.31E-09	1.30E-09	1.32E-09	1.32E-09
Tc101	2.2	1.27E-09	1.27E-09	1.28E-09	1.28E-09
Ba141	2.2	1.26E-09	1.26E-09	1.22E-09	1.22E-09
Te133m	2.1	1.24E-09	1.42E-09	1.41E-09	1.41E-09
Sb130	2.0	1.14E-09	1.12E-09	1.06E-09	1.06E-09

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Kr88	1.9	1.08E-09	1.08E-09	1.09E-09	1.09E-09
Kr87	1.8	1.07E-09	1.08E-09	1.08E-09	1.08E-09
La141	1.7	9.67E-10	9.66E-10	9.65E-10	9.65E-10
Rb89	1.5	8.60E-10	8.62E-10	8.81E-10	8.81E-10
Mo101	1.4	8.00E-10	8.18E-10	8.02E-10	8.02E-10
Te133	1.1	6.53E-10	6.81E-10	6.53E-10	6.53E-10
Ru105	1.1	6.48E-10	6.47E-10	6.68E-10	6.68E-10
Xe138	1.1	6.16E-10	5.97E-10	5.96E-10	5.96E-10
Br84	0.9	5.00E-10	5.01E-10	5.02E-10	5.02E-10
Y93	0.9	4.96E-10	4.95E-10	4.95E-10	4.95E-10
La143	0.8	4.50E-10	4.82E-10	4.54E-10	4.54E-10
Y92	0.8	4.43E-10	4.41E-10	4.35E-10	4.35E-10
Sr91	0.7	4.20E-10	4.27E-10	4.26E-10	4.26E-10
Nd149	0.7	3.95E-10	4.19E-10	3.99E-10	3.99E-10
Pr145	0.5	3.11E-10	3.10E-10	3.03E-10	3.03E-10
Tc102	0.5	3.08E-10	3.11E-10	3.07E-10	3.07E-10
Sb128m	0.5	2.62E-10	2.64E-10	8.39E-13	8.39E-13
Rh107	0.4	2.53E-10	2.50E-10	2.51E-10	2.51E-10
Y95	0.4	2.36E-10	2.31E-10	2.31E-10	2.31E-10
I133	0.4	2.25E-10	2.25E-10	2.24E-10	2.24E-10
Pr147	0.4	2.22E-10	2.16E-10	2.21E-10	2.32E-10
Zr97	0.4	2.21E-10	2.31E-10	2.23E-10	2.23E-10
Nb97m	0.3	1.81E-10	1.79E-10	1.83E-10	1.83E-10
Nb97	0.3	1.62E-10	1.64E-10	1.65E-10	1.65E-10
Sb129	0.3	1.54E-10	1.56E-10	1.31E-10	1.31E-10
Se83	0.3	1.46E-10	6.32E-11	4.93E-11	5.28E-11
Ba142	0.2	1.36E-10	1.35E-10	1.37E-10	1.37E-10
Cs139	0.2	1.25E-10	1.24E-10	1.25E-10	1.25E-10
I133m	0.2	1.05E-10	9.43E-11	—	—
Ce146	0.2	1.02E-10	9.08E-11	9.05E-11	9.95E-11
Ce143	0.1	7.73E-11	7.74E-11	7.76E-11	7.76E-11
Y91m	0.1	7.23E-11	7.31E-11	7.27E-11	7.27E-11
Sn128	0.1	6.55E-11	6.51E-11	6.96E-11	6.96E-11

5 Decay data comparison for ^{237}Np 400 keV pulse decay heat

5.1 10s after pulse

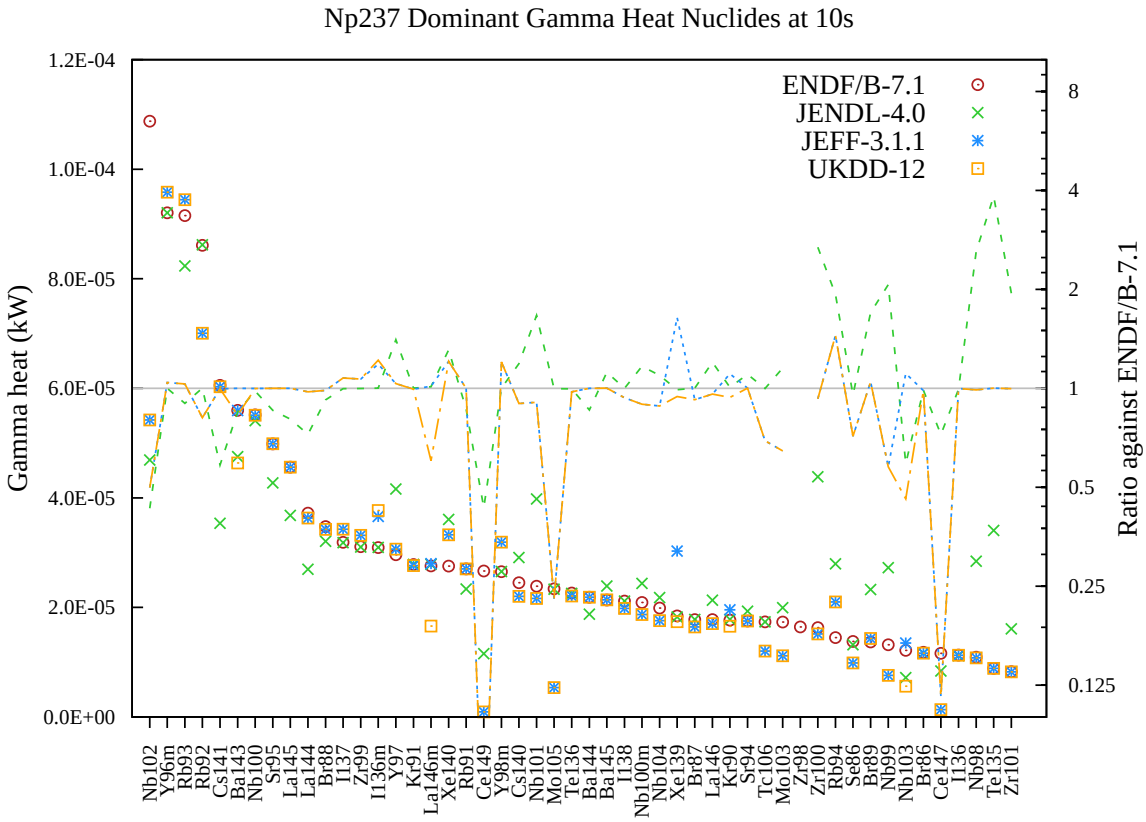

Figure 61: Gamma heat (in kW) decay data comparison for Np237 fission pulse after 10s cooling.

Table 61: Gamma heat (in kW) decay data comparison for Np237 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb102	6.4	1.09E-04	4.69E-05	5.42E-05	5.42E-05
Y96m	5.4	9.21E-05	9.20E-05	9.58E-05	9.58E-05
Rb93	5.4	9.15E-05	8.23E-05	9.44E-05	9.44E-05
Rb92	5.1	8.61E-05	8.62E-05	7.01E-05	7.01E-05
Cs141	3.6	6.05E-05	3.54E-05	6.03E-05	6.03E-05
Ba143	3.3	5.60E-05	4.75E-05	5.59E-05	4.64E-05
Nb100	3.2	5.51E-05	5.41E-05	5.51E-05	5.51E-05
Sr95	2.9	4.98E-05	4.27E-05	4.99E-05	4.99E-05
La145	2.7	4.56E-05	3.68E-05	4.56E-05	4.56E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La144	2.2	3.72E-05	2.70E-05	3.63E-05	3.63E-05
Br88	2.0	3.48E-05	3.21E-05	3.43E-05	3.43E-05
I137	1.9	3.19E-05	3.18E-05	3.43E-05	3.43E-05
Zr99	1.8	3.11E-05	3.10E-05	3.31E-05	3.31E-05
I136m	1.8	3.09E-05	3.10E-05	3.66E-05	3.77E-05
Y97	1.7	2.96E-05	4.16E-05	3.06E-05	3.06E-05
Kr91	1.6	2.78E-05	2.79E-05	2.77E-05	2.77E-05
La146m	1.6	2.76E-05	2.79E-05	2.80E-05	1.66E-05
Xe140	1.6	2.75E-05	3.61E-05	3.33E-05	3.33E-05
Rb91	1.6	2.70E-05	2.34E-05	2.70E-05	2.70E-05
Ce149	1.6	2.66E-05	1.15E-05	9.34E-07	9.34E-07
Y98m	1.6	2.65E-05	2.65E-05	3.19E-05	3.19E-05
Cs140	1.4	2.45E-05	2.91E-05	2.20E-05	2.20E-05
Nb101	1.4	2.39E-05	3.98E-05	2.16E-05	2.16E-05
Mo105	1.4	2.34E-05	2.33E-05	5.36E-06	5.36E-06
Te136	1.3	2.26E-05	2.26E-05	2.21E-05	2.21E-05
Ba144	1.3	2.18E-05	1.88E-05	2.19E-05	2.19E-05
Ba145	1.3	2.13E-05	2.39E-05	2.14E-05	2.14E-05
I138	1.2	2.12E-05	2.12E-05	1.98E-05	1.98E-05
Nb100m	1.2	2.09E-05	2.44E-05	1.87E-05	1.87E-05
Nb104	1.2	1.99E-05	2.18E-05	1.76E-05	1.76E-05
Xe139	1.1	1.84E-05	1.83E-05	3.03E-05	1.74E-05
Br87	1.0	1.78E-05	1.78E-05	1.64E-05	1.64E-05
La146	1.0	1.78E-05	2.13E-05	1.71E-05	1.71E-05
Kr90	1.0	1.77E-05	1.78E-05	1.96E-05	1.66E-05
Sr94	1.0	1.75E-05	1.93E-05	1.75E-05	1.75E-05
Tc106	1.0	1.74E-05	1.74E-05	1.20E-05	1.20E-05
Mo103	1.0	1.73E-05	2.00E-05	1.12E-05	1.12E-05
Zr98	1.0	1.64E-05	—	—	—
Zr100	1.0	1.63E-05	4.38E-05	1.52E-05	1.52E-05
Rb94	0.9	1.45E-05	2.80E-05	2.10E-05	2.10E-05
Se86	0.8	1.38E-05	1.32E-05	9.86E-06	9.86E-06
Br89	0.8	1.37E-05	2.33E-05	1.43E-05	1.43E-05
Nb99	0.8	1.32E-05	2.72E-05	7.61E-06	7.61E-06
Nb103	0.7	1.22E-05	7.19E-06	1.35E-05	5.60E-06
Br86	0.7	1.18E-05	1.17E-05	1.16E-05	1.16E-05
Ce147	0.7	1.16E-05	8.41E-06	1.34E-06	1.34E-06
I136	0.7	1.13E-05	1.12E-05	1.13E-05	1.13E-05
Nb98	0.6	1.09E-05	2.85E-05	1.08E-05	1.08E-05
Te135	0.5	8.87E-06	3.41E-05	8.88E-06	8.88E-06
Zr101	0.5	8.26E-06	1.61E-05	8.24E-06	8.24E-06

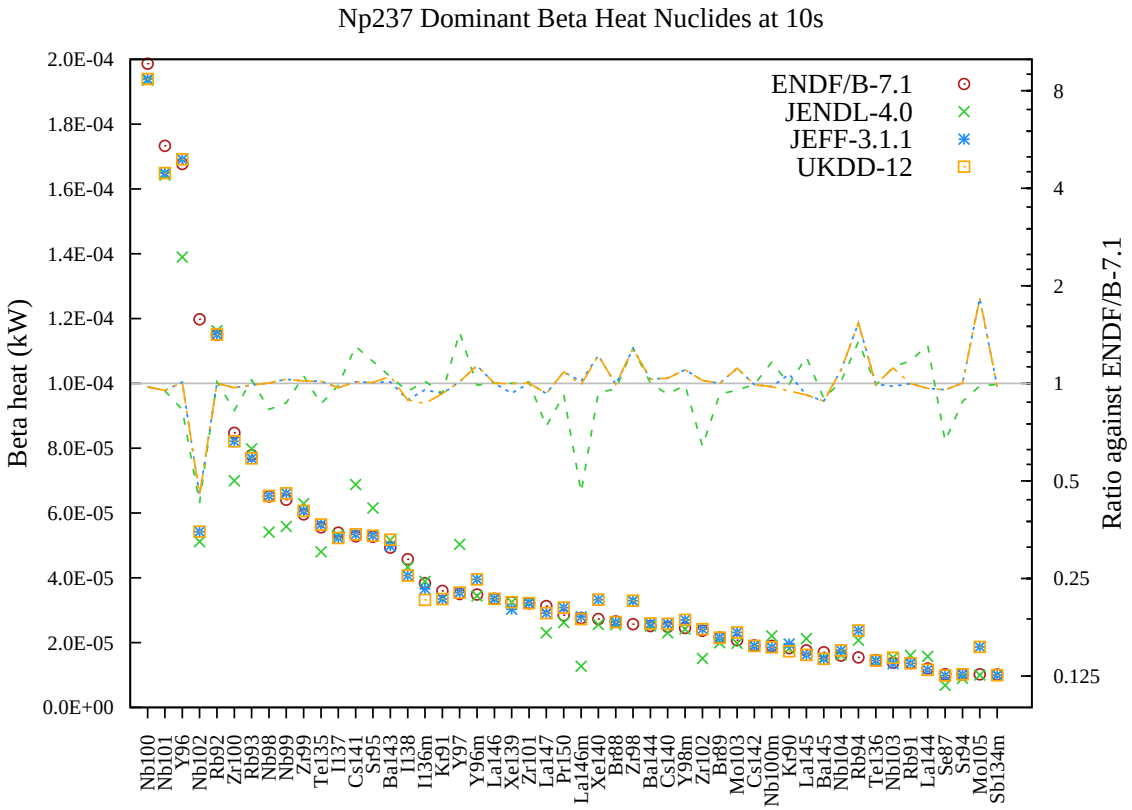

Figure 62: Beta heat (in kW) decay data comparison for Np237 fission pulse after 10s cooling.

Table 62: Beta heat (in kW) decay data comparison for Np237 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb100	8.1	1.99E-04	1.93E-04	1.94E-04	1.94E-04
Nb101	7.1	1.73E-04	1.64E-04	1.65E-04	1.65E-04
Y96	6.9	1.68E-04	1.39E-04	1.69E-04	1.69E-04
Nb102	4.9	1.20E-04	5.12E-05	5.42E-05	5.42E-05
Rb92	4.7	1.15E-04	1.16E-04	1.15E-04	1.15E-04
Zr100	3.5	8.47E-05	7.00E-05	8.21E-05	8.21E-05
Rb93	3.2	7.78E-05	7.98E-05	7.69E-05	7.69E-05
Nb98	2.7	6.51E-05	5.41E-05	6.53E-05	6.53E-05
Nb99	2.6	6.41E-05	5.59E-05	6.60E-05	6.60E-05
Zr99	2.4	5.96E-05	6.29E-05	6.06E-05	6.06E-05
Te135	2.3	5.56E-05	4.80E-05	5.64E-05	5.64E-05
I137	2.2	5.40E-05	5.32E-05	5.23E-05	5.23E-05
Cs141	2.2	5.28E-05	6.88E-05	5.34E-05	5.34E-05
Sr95	2.2	5.27E-05	6.15E-05	5.30E-05	5.30E-05
Ba143	2.0	4.93E-05	5.17E-05	4.98E-05	5.18E-05
I138	1.9	4.57E-05	4.32E-05	4.07E-05	4.07E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I136m	1.6	3.83E-05	3.89E-05	3.66E-05	3.32E-05
Kr91	1.5	3.59E-05	3.35E-05	3.34E-05	3.34E-05
Y97	1.4	3.50E-05	5.03E-05	3.54E-05	3.54E-05
Y96m	1.4	3.48E-05	3.44E-05	3.95E-05	3.95E-05
La146	1.4	3.35E-05	3.36E-05	3.35E-05	3.35E-05
Xe139	1.3	3.25E-05	3.25E-05	3.03E-05	3.25E-05
Zr101	1.3	3.21E-05	3.24E-05	3.22E-05	3.22E-05
La147	1.3	3.13E-05	2.30E-05	2.91E-05	2.91E-05
Pr150	1.2	2.84E-05	2.62E-05	3.08E-05	3.08E-05
La146m	1.1	2.76E-05	1.27E-05	2.80E-05	2.73E-05
Xe140	1.1	2.73E-05	2.56E-05	3.33E-05	3.33E-05
Br88	1.1	2.65E-05	2.55E-05	2.63E-05	2.63E-05
Zr98	1.0	2.57E-05	3.29E-05	3.29E-05	3.29E-05
Ba144	1.0	2.51E-05	2.52E-05	2.59E-05	2.59E-05
Cs140	1.0	2.49E-05	2.30E-05	2.58E-05	2.58E-05
Y98m	1.0	2.45E-05	2.42E-05	2.70E-05	2.70E-05
Zr102	1.0	2.37E-05	1.51E-05	2.42E-05	2.42E-05
Br89	0.9	2.15E-05	1.99E-05	2.15E-05	2.15E-05
Mo103	0.8	2.08E-05	1.98E-05	2.31E-05	2.31E-05
Cs142	0.8	1.92E-05	1.90E-05	1.90E-05	1.90E-05
Nb100m	0.8	1.90E-05	2.21E-05	1.85E-05	1.85E-05
Kr90	0.7	1.83E-05	1.82E-05	1.96E-05	1.74E-05
La145	0.7	1.76E-05	2.12E-05	1.62E-05	1.62E-05
Ba145	0.7	1.70E-05	1.53E-05	1.50E-05	1.50E-05
Nb104	0.7	1.60E-05	1.62E-05	1.76E-05	1.76E-05
Rb94	0.6	1.54E-05	2.08E-05	2.37E-05	2.37E-05
Te136	0.6	1.46E-05	1.44E-05	1.45E-05	1.45E-05
Nb103	0.6	1.38E-05	1.54E-05	1.35E-05	1.53E-05
Rb91	0.6	1.37E-05	1.61E-05	1.37E-05	1.37E-05
La144	0.5	1.20E-05	1.57E-05	1.16E-05	1.16E-05
Se87	0.4	1.03E-05	6.82E-06	9.82E-06	9.82E-06
Sr94	0.4	1.02E-05	8.99E-06	1.02E-05	1.02E-05
Mo105	0.4	1.02E-05	1.00E-05	1.87E-05	1.87E-05
Sb134m	0.4	1.02E-05	1.01E-05	9.94E-06	9.94E-06

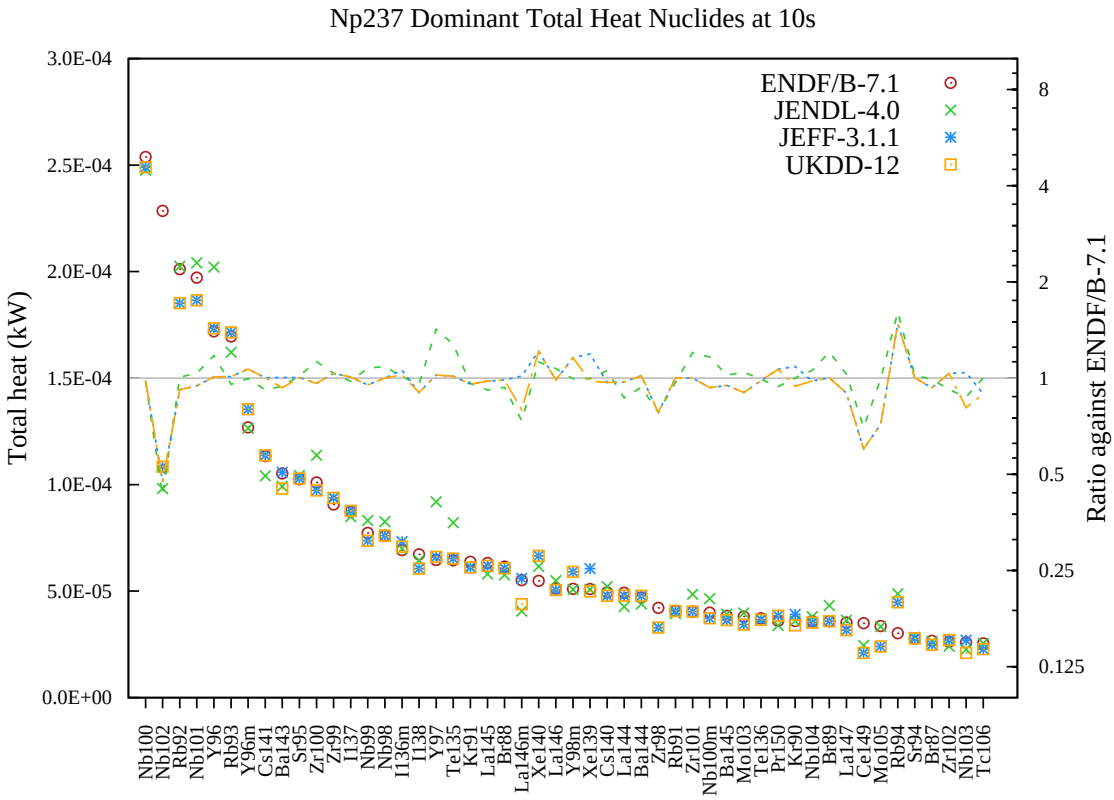

Figure 63: Total heat (in kW) decay data comparison for Np237 fission pulse after 10s cooling.

Table 63: Total heat (in kW) decay data comparison for Np237 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb100	6.1	2.54E-04	2.48E-04	2.49E-04	2.49E-04
Nb102	5.5	2.29E-04	9.81E-05	1.08E-04	1.08E-04
Rb92	4.8	2.01E-04	2.02E-04	1.85E-04	1.85E-04
Nb101	4.7	1.97E-04	2.04E-04	1.87E-04	1.87E-04
Y96	4.1	1.72E-04	2.02E-04	1.73E-04	1.73E-04
Rb93	4.1	1.70E-04	1.62E-04	1.71E-04	1.71E-04
Y96m	3.1	1.27E-04	1.26E-04	1.35E-04	1.35E-04
Cs141	2.7	1.13E-04	1.04E-04	1.14E-04	1.14E-04
Ba143	2.5	1.05E-04	9.92E-05	1.06E-04	9.81E-05
Sr95	2.5	1.03E-04	1.04E-04	1.03E-04	1.03E-04
Zr100	2.4	1.01E-04	1.14E-04	9.73E-05	9.73E-05
Zr99	2.2	9.07E-05	9.39E-05	9.38E-05	9.38E-05
I137	2.1	8.71E-05	8.50E-05	8.77E-05	8.77E-05
Nb99	1.9	7.73E-05	8.31E-05	7.36E-05	7.36E-05
Nb98	1.8	7.60E-05	8.26E-05	7.61E-05	7.61E-05
I136m	1.7	6.92E-05	6.99E-05	7.32E-05	7.09E-05
I138	1.6	6.72E-05	6.44E-05	6.06E-05	6.06E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y97	1.6	6.46E-05	9.19E-05	6.61E-05	6.61E-05
Te135	1.6	6.44E-05	8.21E-05	6.53E-05	6.53E-05
Kr91	1.5	6.38E-05	6.14E-05	6.11E-05	6.11E-05
La145	1.5	6.32E-05	5.80E-05	6.18E-05	6.18E-05
Br88	1.5	6.15E-05	5.76E-05	6.07E-05	6.07E-05
La146m	1.3	5.51E-05	4.06E-05	5.60E-05	4.39E-05
Xe140	1.3	5.48E-05	6.16E-05	6.65E-05	6.65E-05
La146	1.2	5.12E-05	5.49E-05	5.05E-05	5.05E-05
Y98m	1.2	5.10E-05	5.08E-05	5.91E-05	5.91E-05
Xe139	1.2	5.09E-05	5.08E-05	6.06E-05	4.99E-05
Cs140	1.2	4.94E-05	5.21E-05	4.78E-05	4.78E-05
La144	1.2	4.92E-05	4.27E-05	4.79E-05	4.79E-05
Ba144	1.1	4.70E-05	4.39E-05	4.78E-05	4.78E-05
Zr98	1.0	4.21E-05	3.29E-05	3.29E-05	3.29E-05
Rb91	1.0	4.07E-05	3.94E-05	4.07E-05	4.07E-05
Zr101	1.0	4.04E-05	4.85E-05	4.04E-05	4.04E-05
Nb100m	1.0	3.99E-05	4.64E-05	3.72E-05	3.72E-05
Ba145	0.9	3.83E-05	3.92E-05	3.64E-05	3.64E-05
Mo103	0.9	3.81E-05	3.97E-05	3.43E-05	3.43E-05
Te136	0.9	3.72E-05	3.69E-05	3.65E-05	3.65E-05
Pr150	0.9	3.61E-05	3.39E-05	3.85E-05	3.85E-05
Kr90	0.9	3.60E-05	3.60E-05	3.91E-05	3.39E-05
Nb104	0.9	3.59E-05	3.80E-05	3.52E-05	3.52E-05
Br89	0.9	3.58E-05	4.32E-05	3.59E-05	3.59E-05
La147	0.8	3.53E-05	3.63E-05	3.17E-05	3.17E-05
Ce149	0.8	3.50E-05	2.45E-05	2.10E-05	2.10E-05
Mo105	0.8	3.36E-05	3.33E-05	2.40E-05	2.40E-05
Rb94	0.7	3.03E-05	4.87E-05	4.48E-05	4.48E-05
Sr94	0.7	2.77E-05	2.83E-05	2.78E-05	2.78E-05
Br87	0.6	2.66E-05	2.64E-05	2.48E-05	2.48E-05
Zr102	0.6	2.61E-05	2.41E-05	2.70E-05	2.70E-05
Nb103	0.6	2.59E-05	2.26E-05	2.70E-05	2.09E-05
Tc106	0.6	2.54E-05	2.55E-05	2.27E-05	2.27E-05

5.2 100s after pulse

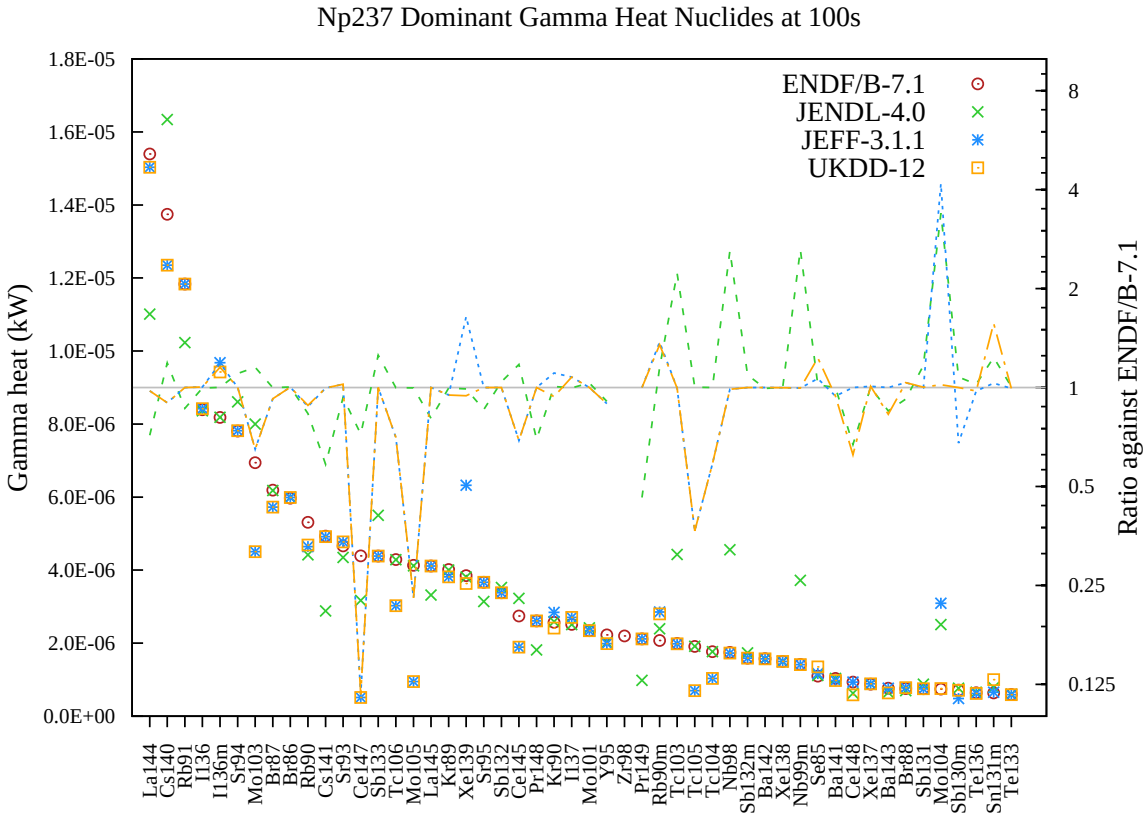

Figure 64: Gamma heat (in kW) decay data comparison for Np237 fission pulse after 100s cooling.

Table 64: Gamma heat (in kW) decay data comparison for Np237 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La144	8.0	1.54E-05	1.10E-05	1.50E-05	1.50E-05
Cs140	7.1	1.37E-05	1.63E-05	1.24E-05	1.24E-05
Rb91	6.1	1.18E-05	1.02E-05	1.18E-05	1.18E-05
I136	4.3	8.39E-06	8.36E-06	8.42E-06	8.42E-06
I136m	4.2	8.18E-06	8.19E-06	9.68E-06	9.42E-06
Sr94	4.0	7.81E-06	8.61E-06	7.82E-06	7.82E-06
Mo103	3.6	6.94E-06	8.00E-06	4.50E-06	4.50E-06
Br87	3.2	6.19E-06	6.18E-06	5.72E-06	5.72E-06
Br86	3.1	5.97E-06	6.00E-06	5.99E-06	5.99E-06
Rb90	2.8	5.31E-06	4.42E-06	4.64E-06	4.69E-06
Cs141	2.6	4.93E-06	2.88E-06	4.91E-06	4.91E-06
Sr93	2.4	4.66E-06	4.35E-06	4.77E-06	4.77E-06
Ce147	2.3	4.39E-06	3.17E-06	5.11E-07	5.11E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb133	2.3	4.38E-06	5.50E-06	4.38E-06	4.38E-06
Tc106	2.2	4.29E-06	4.28E-06	3.02E-06	3.02E-06
Mo105	2.1	4.13E-06	4.12E-06	9.46E-07	9.46E-07
La145	2.1	4.11E-06	3.32E-06	4.11E-06	4.11E-06
Kr89	2.1	4.02E-06	4.00E-06	3.81E-06	3.81E-06
Xe139	2.0	3.85E-06	3.81E-06	6.32E-06	3.63E-06
Sr95	1.9	3.66E-06	3.14E-06	3.67E-06	3.67E-06
Sb132	1.8	3.38E-06	3.52E-06	3.38E-06	3.38E-06
Ce145	1.4	2.74E-06	3.23E-06	1.89E-06	1.89E-06
Pr148	1.4	2.61E-06	1.82E-06	2.61E-06	2.61E-06
Kr90	1.3	2.57E-06	2.59E-06	2.84E-06	2.41E-06
I137	1.3	2.51E-06	2.51E-06	2.70E-06	2.70E-06
Mo101	1.2	2.34E-06	2.42E-06	2.34E-06	2.34E-06
Y95	1.2	2.23E-06	2.02E-06	1.99E-06	1.99E-06
Zr98	1.1	2.20E-06	—	—	—
Pr149	1.1	2.12E-06	9.80E-07	2.12E-06	2.12E-06
Rb90m	1.1	2.08E-06	2.39E-06	2.85E-06	2.80E-06
Tc103	1.0	1.99E-06	4.43E-06	1.98E-06	1.98E-06
Tc105	1.0	1.91E-06	1.92E-06	7.00E-07	7.00E-07
Tc104	0.9	1.76E-06	1.77E-06	1.03E-06	1.03E-06
Nb98	0.9	1.75E-06	4.56E-06	1.73E-06	1.73E-06
Sb132m	0.8	1.59E-06	1.74E-06	1.59E-06	1.59E-06
Ba142	0.8	1.57E-06	1.56E-06	1.57E-06	1.57E-06
Xe138	0.8	1.50E-06	1.50E-06	1.50E-06	1.50E-06
Nb99m	0.7	1.42E-06	3.72E-06	1.41E-06	1.41E-06
Se85	0.6	1.10E-06	1.12E-06	1.17E-06	1.35E-06
Ba141	0.5	1.04E-06	1.03E-06	9.74E-07	9.74E-07
Ce148	0.5	9.35E-07	6.27E-07	9.35E-07	5.83E-07
Xe137	0.5	8.77E-07	8.79E-07	8.84E-07	8.84E-07
Ba143	0.4	7.66E-07	6.50E-07	7.66E-07	6.35E-07
Br88	0.4	7.56E-07	6.98E-07	7.83E-07	7.83E-07
Sb131	0.4	7.50E-07	8.76E-07	7.49E-07	7.52E-07
Mo104	0.4	7.41E-07	2.51E-06	3.09E-06	7.56E-07
Sb130m	0.4	7.11E-07	7.65E-07	4.82E-07	7.11E-07
Te136	0.3	6.41E-07	6.55E-07	6.25E-07	6.25E-07
Sn131m	0.3	6.37E-07	7.87E-07	6.58E-07	1.00E-06
Te133	0.3	5.94E-07	5.98E-07	5.90E-07	5.90E-07

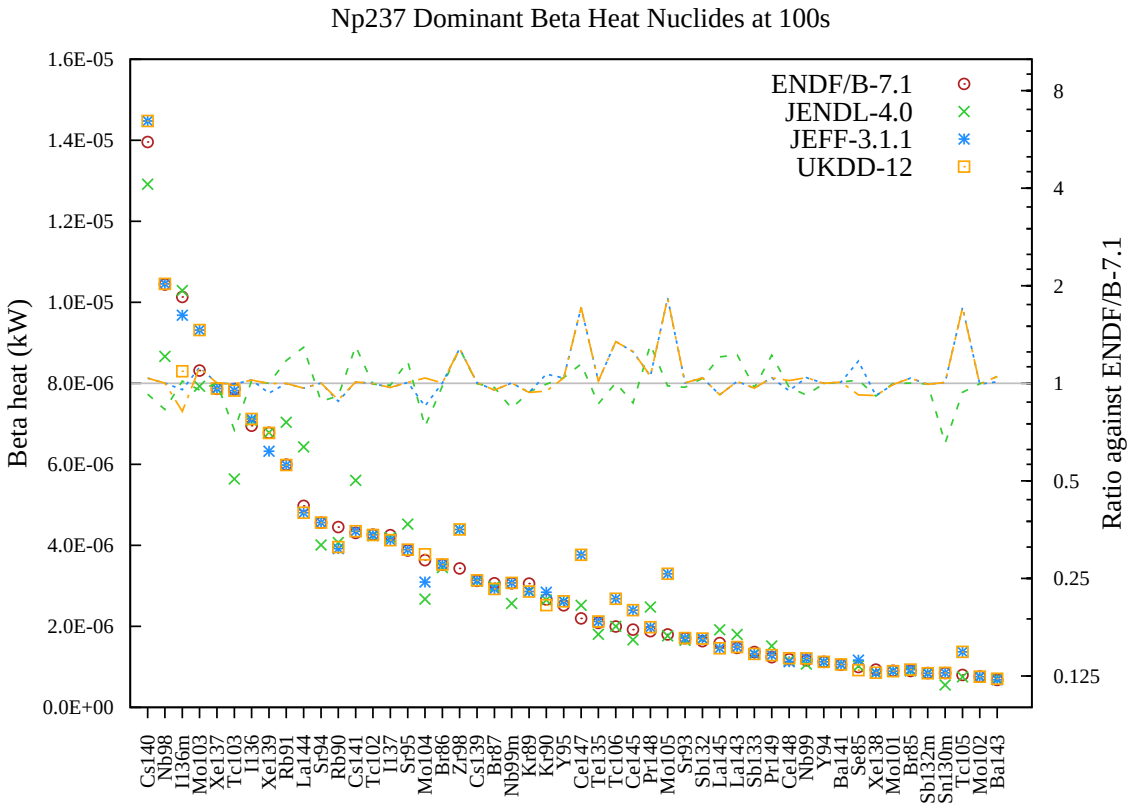

Figure 65: Beta heat (in kW) decay data comparison for Np237 fission pulse after 100s cooling.

Table 65: Beta heat (in kW) decay data comparison for Np237 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	7.7	1.40E-05	1.29E-05	1.45E-05	1.45E-05
Nb98	5.7	1.04E-05	8.66E-06	1.05E-05	1.05E-05
I136m	5.6	1.01E-05	1.03E-05	9.68E-06	8.30E-06
Mo103	4.6	8.32E-06	7.93E-06	9.32E-06	9.32E-06
Xe137	4.3	7.86E-06	7.87E-06	7.87E-06	7.87E-06
Tc103	4.3	7.86E-06	5.64E-06	7.82E-06	7.82E-06
I136	3.8	6.95E-06	7.08E-06	7.12E-06	7.12E-06
Xe139	3.7	6.78E-06	6.78E-06	6.32E-06	6.78E-06
Rb91	3.3	5.99E-06	7.04E-06	5.98E-06	5.98E-06
La144	2.7	4.97E-06	6.43E-06	4.81E-06	4.81E-06
Sr94	2.5	4.56E-06	4.01E-06	4.56E-06	4.56E-06
Rb90	2.4	4.45E-06	4.07E-06	3.92E-06	3.96E-06
Cs141	2.4	4.31E-06	5.60E-06	4.35E-06	4.35E-06
Tc102	2.3	4.26E-06	4.24E-06	4.26E-06	4.25E-06
I137	2.3	4.25E-06	4.19E-06	4.13E-06	4.13E-06
Sr95	2.1	3.87E-06	4.52E-06	3.90E-06	3.90E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Mo104	2.0	3.64E-06	2.67E-06	3.09E-06	3.78E-06
Br86	1.9	3.52E-06	3.45E-06	3.53E-06	3.53E-06
Zr98	1.9	3.43E-06	4.39E-06	4.39E-06	4.39E-06
Cs139	1.7	3.12E-06	3.11E-06	3.13E-06	3.13E-06
Br87	1.7	3.07E-06	2.98E-06	2.92E-06	2.92E-06
Nb99m	1.7	3.06E-06	2.57E-06	3.07E-06	3.07E-06
Kr89	1.7	3.05E-06	2.87E-06	2.86E-06	2.86E-06
Kr90	1.5	2.67E-06	2.65E-06	2.84E-06	2.52E-06
Y95	1.4	2.52E-06	2.62E-06	2.62E-06	2.62E-06
Ce147	1.2	2.20E-06	2.52E-06	3.76E-06	3.76E-06
Te135	1.1	2.09E-06	1.80E-06	2.12E-06	2.12E-06
Tc106	1.1	1.99E-06	2.00E-06	2.68E-06	2.68E-06
Ce145	1.1	1.92E-06	1.67E-06	2.40E-06	2.40E-06
Pr148	1.0	1.88E-06	2.48E-06	1.98E-06	1.98E-06
Mo105	1.0	1.80E-06	1.77E-06	3.30E-06	3.30E-06
Sr93	0.9	1.70E-06	1.66E-06	1.71E-06	1.71E-06
Sb132	0.9	1.63E-06	1.69E-06	1.70E-06	1.70E-06
La145	0.9	1.59E-06	1.91E-06	1.46E-06	1.46E-06
La143	0.8	1.47E-06	1.80E-06	1.49E-06	1.49E-06
Sb133	0.8	1.37E-06	1.33E-06	1.32E-06	1.32E-06
Pr149	0.7	1.24E-06	1.51E-06	1.29E-06	1.29E-06
Ce148	0.7	1.19E-06	1.16E-06	1.13E-06	1.21E-06
Nb99	0.6	1.16E-06	1.07E-06	1.21E-06	1.21E-06
Y94	0.6	1.12E-06	1.12E-06	1.12E-06	1.12E-06
Ba141	0.6	1.05E-06	1.06E-06	1.06E-06	1.06E-06
Se85	0.5	9.97E-07	1.02E-06	1.17E-06	9.18E-07
Xe138	0.5	9.33E-07	8.52E-07	8.55E-07	8.55E-07
Mo101	0.5	9.01E-07	9.00E-07	8.93E-07	8.93E-07
Br85	0.5	8.98E-07	8.99E-07	9.31E-07	9.31E-07
Sb132m	0.5	8.49E-07	8.45E-07	8.42E-07	8.42E-07
Sn130m	0.5	8.48E-07	5.54E-07	8.53E-07	8.53E-07
Tc105	0.4	8.00E-07	7.51E-07	1.37E-06	1.37E-06
Mo102	0.4	7.63E-07	7.61E-07	7.59E-07	7.58E-07
Ba143	0.4	6.74E-07	7.07E-07	6.82E-07	7.08E-07

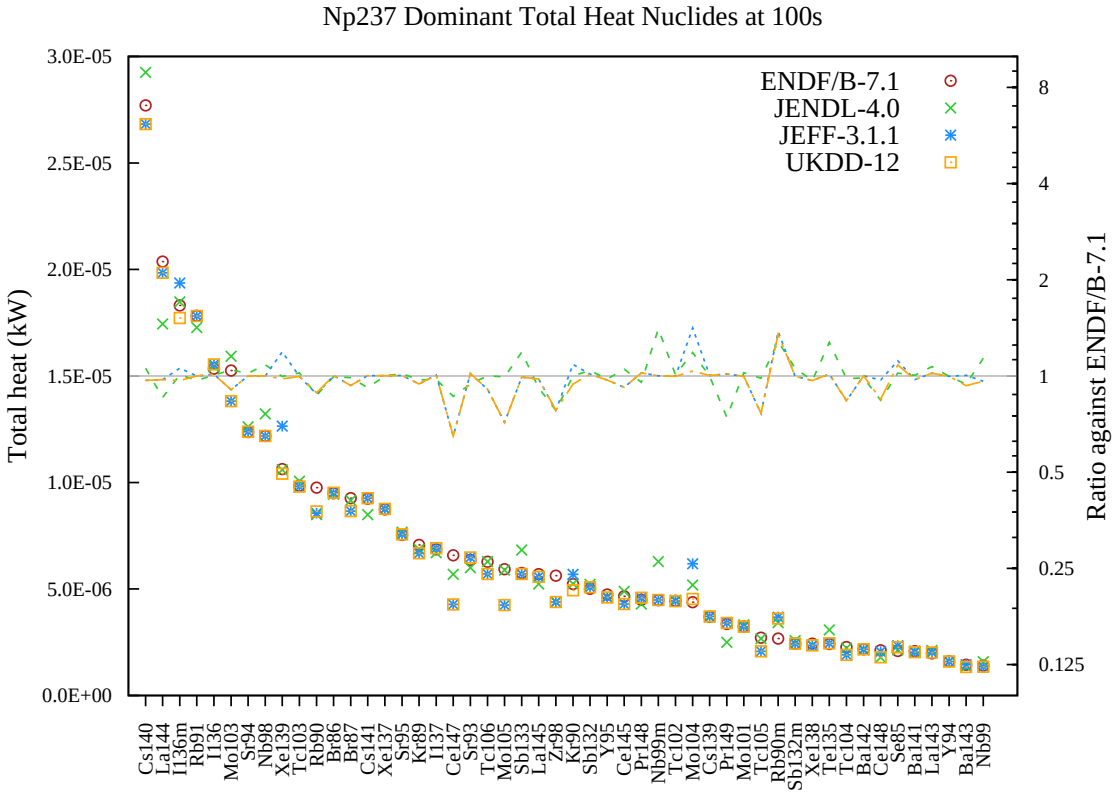

Figure 66: Total heat (in kW) decay data comparison for Np237 fission pulse after 100s cooling.

Table 66: Total heat (in kW) decay data comparison for Np237 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	7.4	2.77E-05	2.93E-05	2.68E-05	2.68E-05
La144	5.4	2.04E-05	1.74E-05	1.98E-05	1.98E-05
I136m	4.9	1.83E-05	1.85E-05	1.94E-05	1.77E-05
Rb91	4.8	1.78E-05	1.73E-05	1.78E-05	1.78E-05
I136	4.1	1.53E-05	1.54E-05	1.55E-05	1.55E-05
Mo103	4.1	1.53E-05	1.59E-05	1.38E-05	1.38E-05
Sr94	3.3	1.24E-05	1.26E-05	1.24E-05	1.24E-05
Nb98	3.2	1.22E-05	1.32E-05	1.22E-05	1.22E-05
Xe139	2.8	1.06E-05	1.06E-05	1.26E-05	1.04E-05
Tc103	2.6	9.85E-06	1.01E-05	9.81E-06	9.81E-06
Rb90	2.6	9.76E-06	8.49E-06	8.56E-06	8.64E-06
Br86	2.5	9.49E-06	9.45E-06	9.52E-06	9.52E-06
Br87	2.5	9.27E-06	9.16E-06	8.65E-06	8.65E-06
Cs141	2.5	9.24E-06	8.49E-06	9.26E-06	9.26E-06
Xe137	2.3	8.74E-06	8.74E-06	8.76E-06	8.76E-06
Sr95	2.0	7.54E-06	7.67E-06	7.56E-06	7.56E-06
Kr89	1.9	7.07E-06	6.87E-06	6.67E-06	6.67E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I137	1.8	6.86E-06	6.70E-06	6.92E-06	6.92E-06
Ce147	1.8	6.59E-06	5.69E-06	4.28E-06	4.28E-06
Sr93	1.7	6.37E-06	6.00E-06	6.48E-06	6.48E-06
Tc106	1.7	6.28E-06	6.29E-06	5.71E-06	5.71E-06
Mo105	1.6	5.93E-06	5.89E-06	4.24E-06	4.24E-06
Sb133	1.5	5.75E-06	6.83E-06	5.70E-06	5.70E-06
La145	1.5	5.70E-06	5.23E-06	5.57E-06	5.57E-06
Zr98	1.5	5.62E-06	4.39E-06	4.39E-06	4.39E-06
Kr90	1.4	5.24E-06	5.24E-06	5.69E-06	4.94E-06
Sb132	1.3	5.01E-06	5.21E-06	5.08E-06	5.08E-06
Y95	1.3	4.74E-06	4.64E-06	4.60E-06	4.60E-06
Ce145	1.2	4.66E-06	4.89E-06	4.29E-06	4.29E-06
Pr148	1.2	4.49E-06	4.29E-06	4.59E-06	4.59E-06
Nb99m	1.2	4.48E-06	6.29E-06	4.48E-06	4.48E-06
Tc102	1.2	4.44E-06	4.48E-06	4.44E-06	4.43E-06
Mo104	1.2	4.38E-06	5.18E-06	6.18E-06	4.53E-06
Cs139	1.0	3.69E-06	3.68E-06	3.71E-06	3.71E-06
Pr149	0.9	3.36E-06	2.49E-06	3.41E-06	3.41E-06
Mo101	0.9	3.24E-06	3.32E-06	3.23E-06	3.23E-06
Tc105	0.7	2.71E-06	2.67E-06	2.07E-06	2.07E-06
Rb90m	0.7	2.67E-06	3.42E-06	3.68E-06	3.61E-06
Sb132m	0.6	2.44E-06	2.58E-06	2.43E-06	2.43E-06
Xe138	0.6	2.43E-06	2.35E-06	2.35E-06	2.35E-06
Te135	0.6	2.42E-06	3.08E-06	2.45E-06	2.45E-06
Tc104	0.6	2.27E-06	2.23E-06	1.90E-06	1.90E-06
Ba142	0.6	2.17E-06	2.14E-06	2.17E-06	2.17E-06
Ce148	0.6	2.12E-06	1.78E-06	2.06E-06	1.80E-06
Se85	0.6	2.09E-06	2.14E-06	2.34E-06	2.27E-06
Ba141	0.6	2.08E-06	2.09E-06	2.03E-06	2.03E-06
La143	0.5	1.98E-06	2.12E-06	2.02E-06	2.02E-06
Y94	0.4	1.60E-06	1.60E-06	1.60E-06	1.60E-06
Ba143	0.4	1.44E-06	1.36E-06	1.45E-06	1.34E-06
Nb99	0.4	1.40E-06	1.59E-06	1.35E-06	1.35E-06

5.3 1000s after pulse

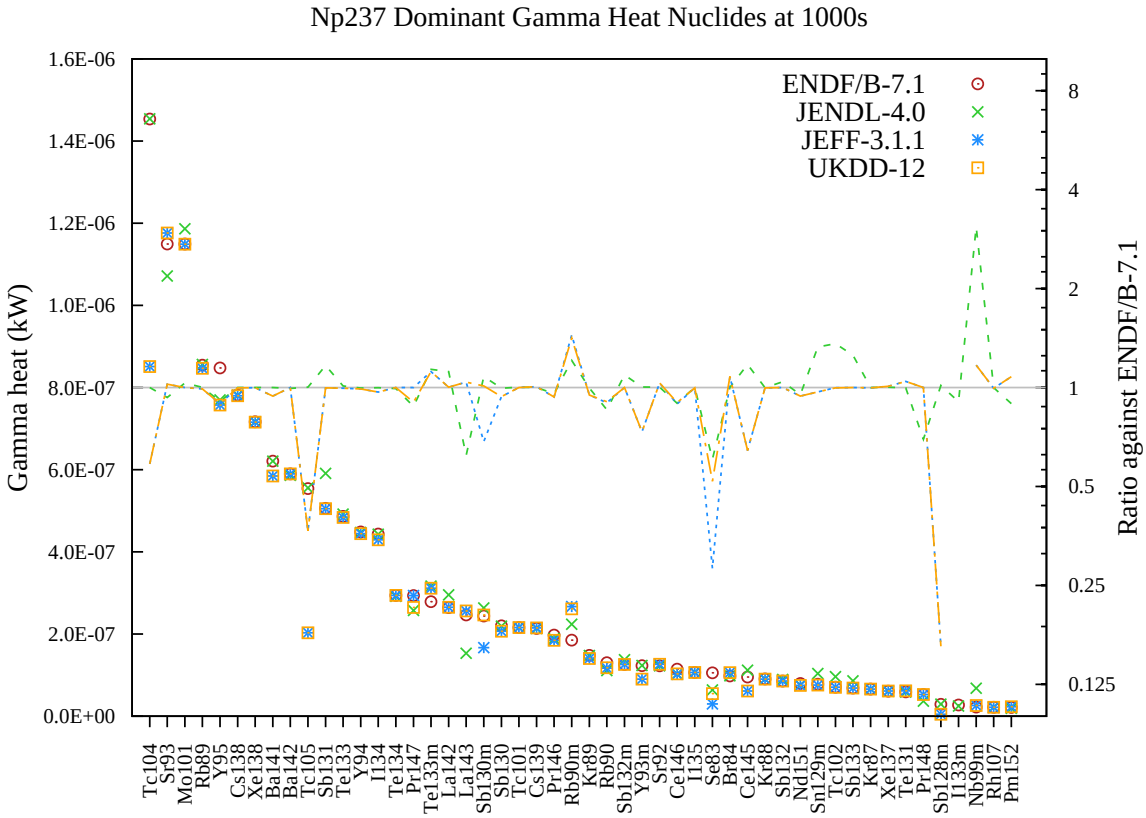

Figure 67: Gamma heat (in kW) decay data comparison for Np237 fission pulse after 1000s cooling.

Table 67: Gamma heat (in kW) decay data comparison for Np237 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	9.3	1.45E-06	1.45E-06	8.51E-07	8.51E-07
Sr93	7.4	1.15E-06	1.07E-06	1.18E-06	1.18E-06
Mo101	7.4	1.15E-06	1.19E-06	1.15E-06	1.15E-06
Rb89	5.5	8.55E-07	8.56E-07	8.47E-07	8.47E-07
Y95	5.4	8.48E-07	7.70E-07	7.58E-07	7.58E-07
Cs138	5.0	7.82E-07	7.81E-07	7.80E-07	7.80E-07
Xe138	4.6	7.17E-07	7.17E-07	7.16E-07	7.16E-07
Ba141	4.0	6.21E-07	6.21E-07	5.85E-07	5.85E-07
Ba142	3.8	5.90E-07	5.86E-07	5.90E-07	5.90E-07
Tc105	3.6	5.54E-07	5.56E-07	2.03E-07	2.03E-07
Sb131	3.2	5.06E-07	5.91E-07	5.05E-07	5.05E-07
Te133	3.1	4.86E-07	4.92E-07	4.84E-07	4.84E-07
Y94	2.9	4.49E-07	4.47E-07	4.44E-07	4.44E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	2.8	4.43E-07	4.43E-07	4.29E-07	4.29E-07
Te134	1.9	2.94E-07	2.92E-07	2.94E-07	2.94E-07
Pr147	1.9	2.94E-07	2.57E-07	2.94E-07	2.65E-07
Te133m	1.8	2.79E-07	3.16E-07	3.12E-07	3.12E-07
La142	1.7	2.64E-07	2.96E-07	2.65E-07	2.65E-07
La143	1.6	2.47E-07	1.53E-07	2.56E-07	2.56E-07
Sb130m	1.6	2.44E-07	2.63E-07	1.67E-07	2.46E-07
Sb130	1.4	2.20E-07	2.19E-07	2.07E-07	2.07E-07
Tc101	1.4	2.16E-07	2.16E-07	2.16E-07	2.16E-07
Cs139	1.4	2.14E-07	2.14E-07	2.15E-07	2.15E-07
Pr146	1.3	1.97E-07	1.89E-07	1.85E-07	1.85E-07
Rb90m	1.2	1.85E-07	2.24E-07	2.67E-07	2.61E-07
Kr89	0.9	1.48E-07	1.47E-07	1.41E-07	1.41E-07
Rb90	0.8	1.30E-07	1.11E-07	1.17E-07	1.18E-07
Sb132m	0.8	1.26E-07	1.37E-07	1.26E-07	1.26E-07
Y93m	0.8	1.23E-07	1.23E-07	9.03E-08	9.03E-08
Sr92	0.8	1.23E-07	1.23E-07	1.26E-07	1.26E-07
Ce146	0.7	1.14E-07	1.03E-07	1.02E-07	1.03E-07
I135	0.7	1.07E-07	1.07E-07	1.06E-07	1.06E-07
Se83	0.7	1.05E-07	6.39E-08	2.97E-08	5.47E-08
Br84	0.6	9.80E-08	9.82E-08	1.06E-07	1.06E-07
Ce145	0.6	9.53E-08	1.12E-07	6.13E-08	6.13E-08
Kr88	0.6	9.05E-08	9.04E-08	9.04E-08	9.04E-08
Sb132	0.5	8.57E-08	8.93E-08	8.57E-08	8.57E-08
Nd151	0.5	7.97E-08	7.58E-08	7.51E-08	7.51E-08
Sn129m	0.5	7.81E-08	1.04E-07	7.57E-08	7.57E-08
Tc102	0.5	7.06E-08	9.60E-08	7.05E-08	7.04E-08
Sb133	0.4	6.85E-08	8.60E-08	6.85E-08	6.85E-08
Kr87	0.4	6.61E-08	6.61E-08	6.60E-08	6.60E-08
Xe137	0.4	6.07E-08	6.08E-08	6.12E-08	6.12E-08
Te131	0.4	5.90E-08	5.89E-08	6.16E-08	6.16E-08
Pr148	0.3	5.29E-08	3.68E-08	5.29E-08	5.29E-08
Sb128m	0.2	2.89E-08	2.94E-08	4.72E-09	4.72E-09
I133m	0.2	2.71E-08	—	—	—
Nb99m	0.1	2.21E-08	6.82E-08	2.59E-08	2.59E-08
Rh107	0.1	2.17E-08	2.17E-08	2.16E-08	2.16E-08
Pm152	0.1	2.13E-08	1.90E-08	2.30E-08	2.30E-08

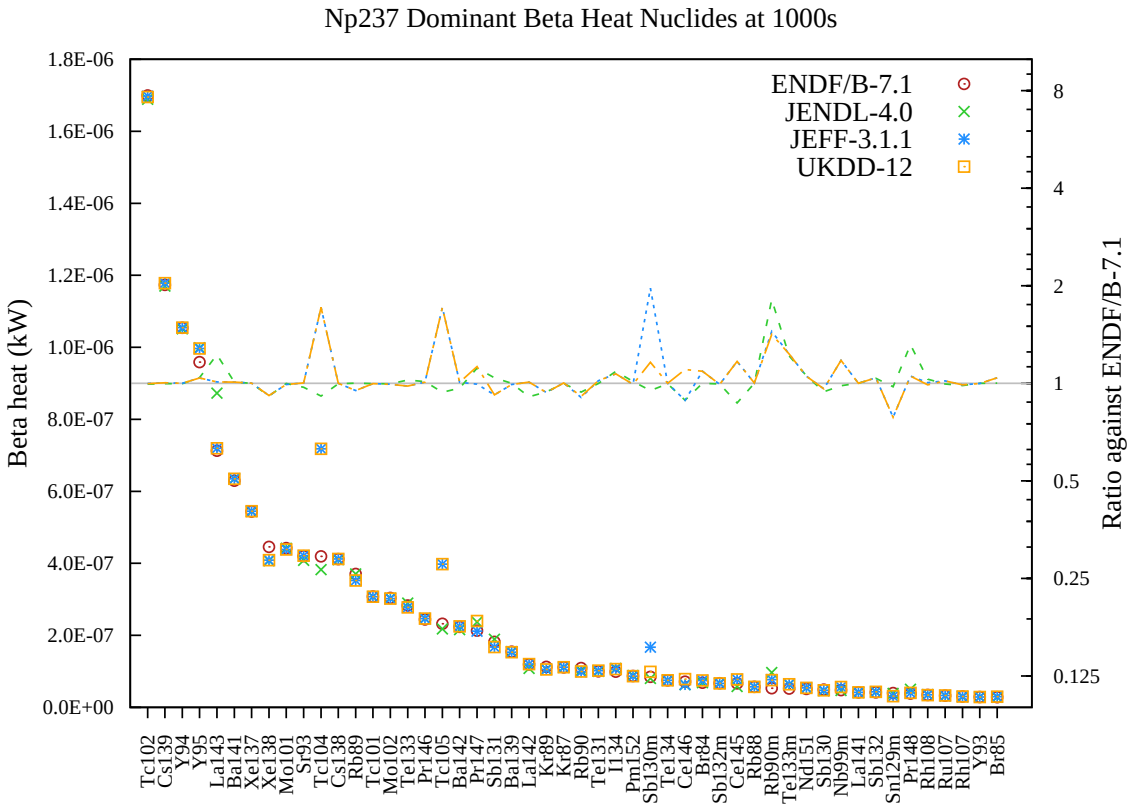

Figure 68: Beta heat (in kW) decay data comparison for Np237 fission pulse after 1000s cooling.

Table 68: Beta heat (in kW) decay data comparison for Np237 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	12.5	1.70E-06	1.69E-06	1.70E-06	1.70E-06
Cs139	8.6	1.17E-06	1.17E-06	1.18E-06	1.18E-06
Y94	7.7	1.05E-06	1.05E-06	1.05E-06	1.05E-06
Y95	7.0	9.59E-07	9.98E-07	9.97E-07	9.97E-07
La143	5.2	7.13E-07	8.73E-07	7.20E-07	7.20E-07
Ba141	4.6	6.29E-07	6.35E-07	6.35E-07	6.35E-07
Xe137	4.0	5.44E-07	5.44E-07	5.45E-07	5.45E-07
Xe138	3.3	4.46E-07	4.07E-07	4.09E-07	4.09E-07
Mo101	3.2	4.42E-07	4.42E-07	4.38E-07	4.38E-07
Sr93	3.1	4.20E-07	4.08E-07	4.21E-07	4.21E-07
Tc104	3.1	4.19E-07	3.83E-07	7.18E-07	7.18E-07
Cs138	3.0	4.12E-07	4.10E-07	4.12E-07	4.12E-07
Rb89	2.7	3.70E-07	3.71E-07	3.52E-07	3.52E-07
Tc101	2.3	3.08E-07	3.07E-07	3.07E-07	3.07E-07
Mo102	2.2	3.04E-07	3.03E-07	3.02E-07	3.02E-07
Te133	2.1	2.83E-07	2.90E-07	2.78E-07	2.78E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Pr146	1.8	2.44E-07	2.47E-07	2.46E-07	2.46E-07
Tc105	1.7	2.32E-07	2.18E-07	3.98E-07	3.98E-07
Ba142	1.6	2.24E-07	2.16E-07	2.25E-07	2.25E-07
Pr147	1.6	2.13E-07	2.37E-07	2.11E-07	2.40E-07
Sb131	1.3	1.82E-07	1.89E-07	1.68E-07	1.68E-07
Ba139	1.1	1.55E-07	1.55E-07	1.53E-07	1.53E-07
La142	0.9	1.19E-07	1.08E-07	1.20E-07	1.20E-07
Kr89	0.8	1.13E-07	1.06E-07	1.05E-07	1.05E-07
Kr87	0.8	1.11E-07	1.11E-07	1.11E-07	1.11E-07
Rb90	0.8	1.09E-07	1.02E-07	9.86E-08	9.94E-08
Te131	0.7	1.00E-07	9.99E-08	1.02E-07	1.02E-07
I134	0.7	9.92E-08	1.08E-07	1.06E-07	1.06E-07
Pm152	0.6	8.74E-08	8.85E-08	8.67E-08	8.67E-08
Sb130m	0.6	8.50E-08	8.07E-08	1.67E-07	9.87E-08
Te134	0.6	7.53E-08	7.51E-08	7.53E-08	7.53E-08
Ce146	0.5	7.13E-08	6.33E-08	6.32E-08	7.87E-08
Br84	0.5	6.86E-08	6.86E-08	7.47E-08	7.47E-08
Sb132m	0.5	6.72E-08	6.69E-08	6.67E-08	6.67E-08
Ce145	0.5	6.66E-08	5.79E-08	7.78E-08	7.78E-08
Rb88	0.4	5.68E-08	5.68E-08	5.69E-08	5.69E-08
Rb90m	0.4	5.33E-08	9.66E-08	7.71E-08	7.55E-08
Te133m	0.4	5.22E-08	6.34E-08	6.43E-08	6.43E-08
Nd151	0.4	5.15E-08	5.43E-08	5.41E-08	5.41E-08
Sb130	0.4	4.91E-08	4.62E-08	4.72E-08	4.72E-08
Nb99m	0.4	4.78E-08	4.70E-08	5.63E-08	5.63E-08
La141	0.3	4.17E-08	4.17E-08	4.17E-08	4.17E-08
Sb132	0.3	4.14E-08	4.29E-08	4.31E-08	4.31E-08
Sn129m	0.3	3.98E-08	3.89E-08	3.13E-08	3.13E-08
Pr148	0.3	3.81E-08	5.02E-08	4.01E-08	4.01E-08
Rh108	0.3	3.46E-08	3.56E-08	3.48E-08	3.42E-08
Ru107	0.2	3.24E-08	3.22E-08	3.30E-08	3.30E-08
Rh107	0.2	3.03E-08	2.98E-08	3.00E-08	3.00E-08
Y93	0.2	2.85E-08	2.86E-08	2.85E-08	2.85E-08
Br85	0.2	2.83E-08	2.84E-08	2.95E-08	2.95E-08

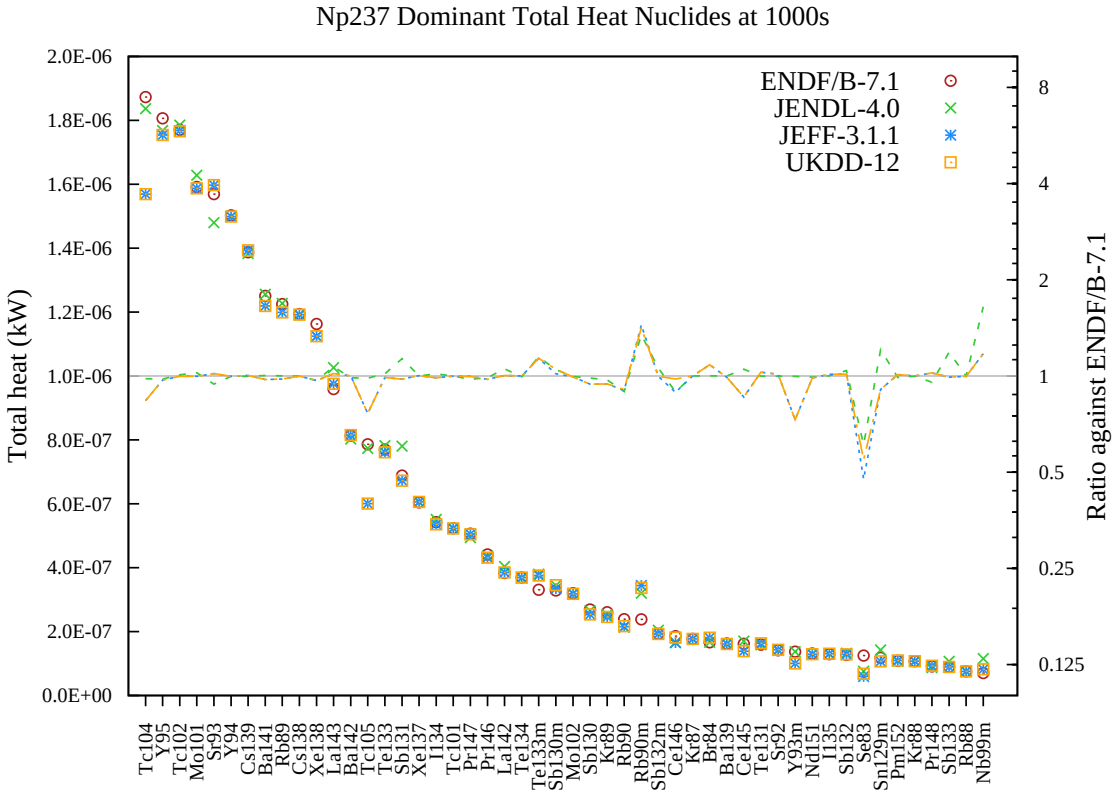

Figure 69: Total heat (in kW) decay data comparison for Np237 fission pulse after 1000s cooling.

Table 69: Total heat (in kW) decay data comparison for Np237 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	6.4	1.87E-06	1.84E-06	1.57E-06	1.57E-06
Y95	6.2	1.81E-06	1.77E-06	1.75E-06	1.75E-06
Tc102	6.1	1.77E-06	1.79E-06	1.77E-06	1.77E-06
Mo101	5.4	1.59E-06	1.63E-06	1.59E-06	1.59E-06
Sr93	5.4	1.57E-06	1.48E-06	1.60E-06	1.60E-06
Y94	5.1	1.50E-06	1.50E-06	1.50E-06	1.50E-06
Cs139	4.7	1.39E-06	1.38E-06	1.39E-06	1.39E-06
Ba141	4.3	1.25E-06	1.26E-06	1.22E-06	1.22E-06
Rb89	4.2	1.23E-06	1.23E-06	1.20E-06	1.20E-06
Cs138	4.1	1.19E-06	1.19E-06	1.19E-06	1.19E-06
Xe138	4.0	1.16E-06	1.12E-06	1.12E-06	1.12E-06
La143	3.3	9.59E-07	1.03E-06	9.76E-07	9.76E-07
Ba142	2.8	8.14E-07	8.02E-07	8.15E-07	8.15E-07
Tc105	2.7	7.86E-07	7.74E-07	6.01E-07	6.01E-07
Te133	2.6	7.69E-07	7.82E-07	7.61E-07	7.61E-07
Sb131	2.4	6.88E-07	7.80E-07	6.73E-07	6.73E-07
Xe137	2.1	6.04E-07	6.05E-07	6.06E-07	6.06E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	1.9	5.43E-07	5.51E-07	5.36E-07	5.36E-07
Tc101	1.8	5.24E-07	5.23E-07	5.23E-07	5.23E-07
Pr147	1.7	5.07E-07	4.94E-07	5.05E-07	5.05E-07
Pr146	1.5	4.42E-07	4.36E-07	4.31E-07	4.31E-07
La142	1.3	3.84E-07	4.04E-07	3.85E-07	3.85E-07
Te134	1.3	3.69E-07	3.67E-07	3.69E-07	3.69E-07
Te133m	1.1	3.31E-07	3.80E-07	3.76E-07	3.76E-07
Sb130m	1.1	3.29E-07	3.44E-07	3.34E-07	3.45E-07
Mo102	1.1	3.20E-07	3.19E-07	3.18E-07	3.18E-07
Sb130	0.9	2.69E-07	2.65E-07	2.54E-07	2.54E-07
Kr89	0.9	2.61E-07	2.53E-07	2.46E-07	2.46E-07
Rb90	0.8	2.39E-07	2.14E-07	2.15E-07	2.17E-07
Rb90m	0.8	2.38E-07	3.20E-07	3.44E-07	3.37E-07
Sb132m	0.7	1.93E-07	2.04E-07	1.92E-07	1.92E-07
Ce146	0.6	1.86E-07	1.66E-07	1.65E-07	1.82E-07
Kr87	0.6	1.77E-07	1.77E-07	1.77E-07	1.77E-07
Br84	0.6	1.67E-07	1.67E-07	1.81E-07	1.81E-07
Ba139	0.6	1.63E-07	1.63E-07	1.61E-07	1.61E-07
Ce145	0.6	1.62E-07	1.70E-07	1.39E-07	1.39E-07
Te131	0.5	1.59E-07	1.59E-07	1.63E-07	1.63E-07
Sr92	0.5	1.41E-07	1.41E-07	1.43E-07	1.43E-07
Y93m	0.5	1.37E-07	1.37E-07	1.00E-07	1.00E-07
Nd151	0.4	1.31E-07	1.30E-07	1.29E-07	1.29E-07
I135	0.4	1.29E-07	1.30E-07	1.31E-07	1.31E-07
Sb132	0.4	1.27E-07	1.32E-07	1.29E-07	1.29E-07
Se83	0.4	1.25E-07	7.61E-08	5.95E-08	6.83E-08
Sn129m	0.4	1.18E-07	1.43E-07	1.07E-07	1.07E-07
Pm152	0.4	1.09E-07	1.08E-07	1.10E-07	1.10E-07
Kr88	0.4	1.08E-07	1.08E-07	1.08E-07	1.08E-07
Pr148	0.3	9.10E-08	8.70E-08	9.31E-08	9.31E-08
Sb133	0.3	8.98E-08	1.07E-07	8.91E-08	8.91E-08
Rb88	0.3	7.56E-08	7.56E-08	7.54E-08	7.54E-08
Nb99m	0.2	7.00E-08	1.15E-07	8.22E-08	8.22E-08

5.4 5011s after pulse

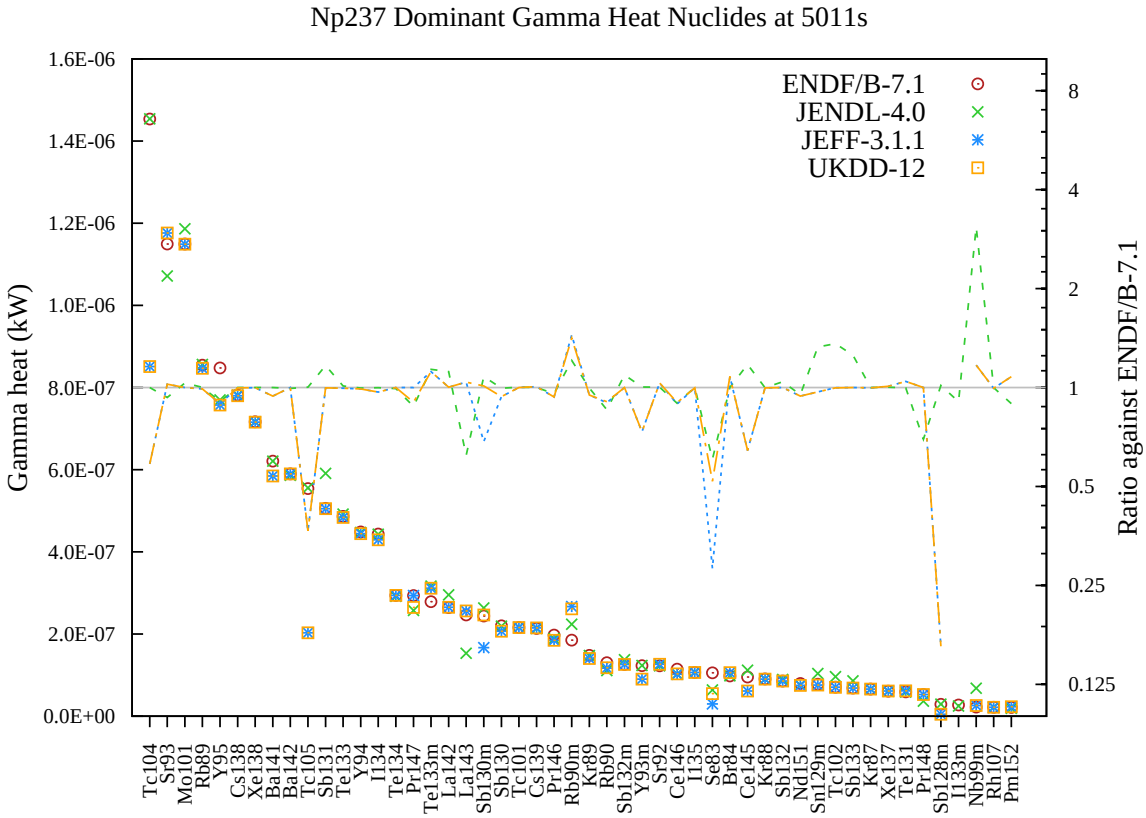

Figure 70: Gamma heat (in kW) decay data comparison for Np237 fission pulse after 5011s cooling.

Table 70: Gamma heat (in kW) decay data comparison for Np237 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	9.3	1.45E-06	1.45E-06	8.51E-07	8.51E-07
Sr93	7.4	1.15E-06	1.07E-06	1.18E-06	1.18E-06
Mo101	7.4	1.15E-06	1.19E-06	1.15E-06	1.15E-06
Rb89	5.5	8.55E-07	8.56E-07	8.47E-07	8.47E-07
Y95	5.4	8.48E-07	7.70E-07	7.58E-07	7.58E-07
Cs138	5.0	7.82E-07	7.81E-07	7.80E-07	7.80E-07
Xe138	4.6	7.17E-07	7.17E-07	7.16E-07	7.16E-07
Ba141	4.0	6.21E-07	6.21E-07	5.85E-07	5.85E-07
Ba142	3.8	5.90E-07	5.86E-07	5.90E-07	5.90E-07
Tc105	3.6	5.54E-07	5.56E-07	2.03E-07	2.03E-07
Sb131	3.2	5.06E-07	5.91E-07	5.05E-07	5.05E-07
Te133	3.1	4.86E-07	4.92E-07	4.84E-07	4.84E-07
Y94	2.9	4.49E-07	4.47E-07	4.44E-07	4.44E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	2.8	4.43E-07	4.43E-07	4.29E-07	4.29E-07
Te134	1.9	2.94E-07	2.92E-07	2.94E-07	2.94E-07
Pr147	1.9	2.94E-07	2.57E-07	2.94E-07	2.65E-07
Te133m	1.8	2.79E-07	3.16E-07	3.12E-07	3.12E-07
La142	1.7	2.64E-07	2.96E-07	2.65E-07	2.65E-07
La143	1.6	2.47E-07	1.53E-07	2.56E-07	2.56E-07
Sb130m	1.6	2.44E-07	2.63E-07	1.67E-07	2.46E-07
Sb130	1.4	2.20E-07	2.19E-07	2.07E-07	2.07E-07
Tc101	1.4	2.16E-07	2.16E-07	2.16E-07	2.16E-07
Cs139	1.4	2.14E-07	2.14E-07	2.15E-07	2.15E-07
Pr146	1.3	1.97E-07	1.89E-07	1.85E-07	1.85E-07
Rb90m	1.2	1.85E-07	2.24E-07	2.67E-07	2.61E-07
Kr89	0.9	1.48E-07	1.47E-07	1.41E-07	1.41E-07
Rb90	0.8	1.30E-07	1.11E-07	1.17E-07	1.18E-07
Sb132m	0.8	1.26E-07	1.37E-07	1.26E-07	1.26E-07
Y93m	0.8	1.23E-07	1.23E-07	9.03E-08	9.03E-08
Sr92	0.8	1.23E-07	1.23E-07	1.26E-07	1.26E-07
Ce146	0.7	1.14E-07	1.03E-07	1.02E-07	1.03E-07
I135	0.7	1.07E-07	1.07E-07	1.06E-07	1.06E-07
Se83	0.7	1.05E-07	6.39E-08	2.97E-08	5.47E-08
Br84	0.6	9.80E-08	9.82E-08	1.06E-07	1.06E-07
Ce145	0.6	9.53E-08	1.12E-07	6.13E-08	6.13E-08
Kr88	0.6	9.05E-08	9.04E-08	9.04E-08	9.04E-08
Sb132	0.5	8.57E-08	8.93E-08	8.57E-08	8.57E-08
Nd151	0.5	7.97E-08	7.58E-08	7.51E-08	7.51E-08
Sn129m	0.5	7.81E-08	1.04E-07	7.57E-08	7.57E-08
Tc102	0.5	7.06E-08	9.60E-08	7.05E-08	7.04E-08
Sb133	0.4	6.85E-08	8.60E-08	6.85E-08	6.85E-08
Kr87	0.4	6.61E-08	6.61E-08	6.60E-08	6.60E-08
Xe137	0.4	6.07E-08	6.08E-08	6.12E-08	6.12E-08
Te131	0.4	5.90E-08	5.89E-08	6.16E-08	6.16E-08
Pr148	0.3	5.29E-08	3.68E-08	5.29E-08	5.29E-08
Sb128m	0.2	2.89E-08	2.94E-08	4.72E-09	4.72E-09
I133m	0.2	2.71E-08	—	—	—
Nb99m	0.1	2.21E-08	6.82E-08	2.59E-08	2.59E-08
Rh107	0.1	2.17E-08	2.17E-08	2.16E-08	2.16E-08
Pm152	0.1	2.13E-08	1.90E-08	2.30E-08	2.30E-08

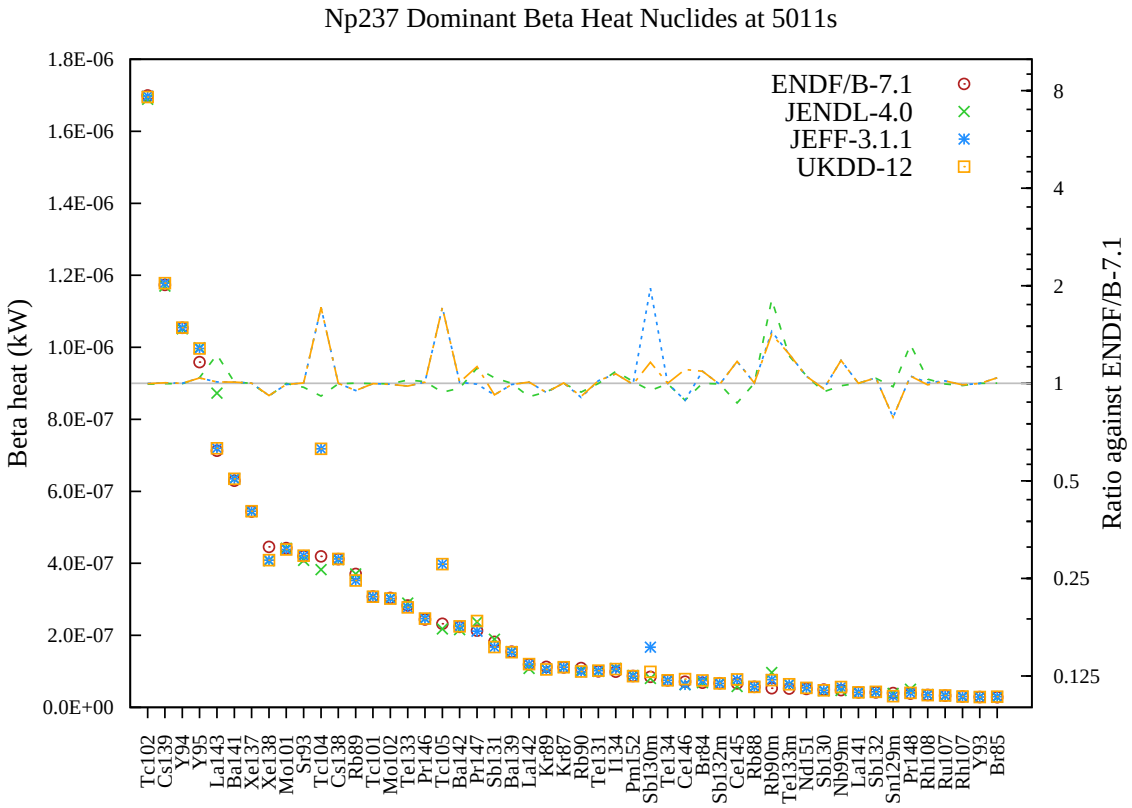

Figure 71: Beta heat (in kW) decay data comparison for Np237 fission pulse after 5011s cooling.

Table 71: Beta heat (in kW) decay data comparison for Np237 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	12.5	1.70E-06	1.69E-06	1.70E-06	1.70E-06
Cs139	8.6	1.17E-06	1.17E-06	1.18E-06	1.18E-06
Y94	7.7	1.05E-06	1.05E-06	1.05E-06	1.05E-06
Y95	7.0	9.59E-07	9.98E-07	9.97E-07	9.97E-07
La143	5.2	7.13E-07	8.73E-07	7.20E-07	7.20E-07
Ba141	4.6	6.29E-07	6.35E-07	6.35E-07	6.35E-07
Xe137	4.0	5.44E-07	5.44E-07	5.45E-07	5.45E-07
Xe138	3.3	4.46E-07	4.07E-07	4.09E-07	4.09E-07
Mo101	3.2	4.42E-07	4.42E-07	4.38E-07	4.38E-07
Sr93	3.1	4.20E-07	4.08E-07	4.21E-07	4.21E-07
Tc104	3.1	4.19E-07	3.83E-07	7.18E-07	7.18E-07
Cs138	3.0	4.12E-07	4.10E-07	4.12E-07	4.12E-07
Rb89	2.7	3.70E-07	3.71E-07	3.52E-07	3.52E-07
Tc101	2.3	3.08E-07	3.07E-07	3.07E-07	3.07E-07
Mo102	2.2	3.04E-07	3.03E-07	3.02E-07	3.02E-07
Te133	2.1	2.83E-07	2.90E-07	2.78E-07	2.78E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Pr146	1.8	2.44E-07	2.47E-07	2.46E-07	2.46E-07
Tc105	1.7	2.32E-07	2.18E-07	3.98E-07	3.98E-07
Ba142	1.6	2.24E-07	2.16E-07	2.25E-07	2.25E-07
Pr147	1.6	2.13E-07	2.37E-07	2.11E-07	2.40E-07
Sb131	1.3	1.82E-07	1.89E-07	1.68E-07	1.68E-07
Ba139	1.1	1.55E-07	1.55E-07	1.53E-07	1.53E-07
La142	0.9	1.19E-07	1.08E-07	1.20E-07	1.20E-07
Kr89	0.8	1.13E-07	1.06E-07	1.05E-07	1.05E-07
Kr87	0.8	1.11E-07	1.11E-07	1.11E-07	1.11E-07
Rb90	0.8	1.09E-07	1.02E-07	9.86E-08	9.94E-08
Te131	0.7	1.00E-07	9.99E-08	1.02E-07	1.02E-07
I134	0.7	9.92E-08	1.08E-07	1.06E-07	1.06E-07
Pm152	0.6	8.74E-08	8.85E-08	8.67E-08	8.67E-08
Sb130m	0.6	8.50E-08	8.07E-08	1.67E-07	9.87E-08
Te134	0.6	7.53E-08	7.51E-08	7.53E-08	7.53E-08
Ce146	0.5	7.13E-08	6.33E-08	6.32E-08	7.87E-08
Br84	0.5	6.86E-08	6.86E-08	7.47E-08	7.47E-08
Sb132m	0.5	6.72E-08	6.69E-08	6.67E-08	6.67E-08
Ce145	0.5	6.66E-08	5.79E-08	7.78E-08	7.78E-08
Rb88	0.4	5.68E-08	5.68E-08	5.69E-08	5.69E-08
Rb90m	0.4	5.33E-08	9.66E-08	7.71E-08	7.55E-08
Te133m	0.4	5.22E-08	6.34E-08	6.43E-08	6.43E-08
Nd151	0.4	5.15E-08	5.43E-08	5.41E-08	5.41E-08
Sb130	0.4	4.91E-08	4.62E-08	4.72E-08	4.72E-08
Nb99m	0.4	4.78E-08	4.70E-08	5.63E-08	5.63E-08
La141	0.3	4.17E-08	4.17E-08	4.17E-08	4.17E-08
Sb132	0.3	4.14E-08	4.29E-08	4.31E-08	4.31E-08
Sn129m	0.3	3.98E-08	3.89E-08	3.13E-08	3.13E-08
Pr148	0.3	3.81E-08	5.02E-08	4.01E-08	4.01E-08
Rh108	0.3	3.46E-08	3.56E-08	3.48E-08	3.42E-08
Ru107	0.2	3.24E-08	3.22E-08	3.30E-08	3.30E-08
Rh107	0.2	3.03E-08	2.98E-08	3.00E-08	3.00E-08
Y93	0.2	2.85E-08	2.86E-08	2.85E-08	2.85E-08
Br85	0.2	2.83E-08	2.84E-08	2.95E-08	2.95E-08

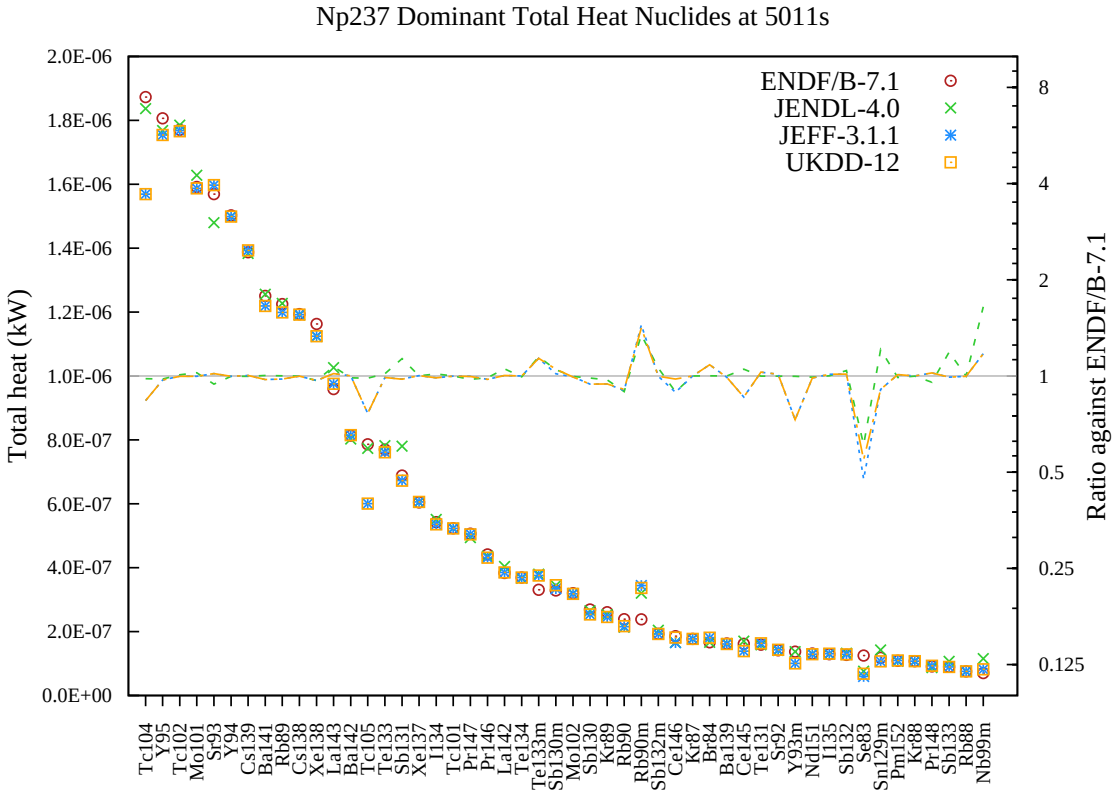

Figure 72: Total heat (in kW) decay data comparison for Np237 fission pulse after 5011s cooling.

Table 72: Total heat (in kW) decay data comparison for Np237 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	6.4	1.87E-06	1.84E-06	1.57E-06	1.57E-06
Y95	6.2	1.81E-06	1.77E-06	1.75E-06	1.75E-06
Tc102	6.1	1.77E-06	1.79E-06	1.77E-06	1.77E-06
Mo101	5.4	1.59E-06	1.63E-06	1.59E-06	1.59E-06
Sr93	5.4	1.57E-06	1.48E-06	1.60E-06	1.60E-06
Y94	5.1	1.50E-06	1.50E-06	1.50E-06	1.50E-06
Cs139	4.7	1.39E-06	1.38E-06	1.39E-06	1.39E-06
Ba141	4.3	1.25E-06	1.26E-06	1.22E-06	1.22E-06
Rb89	4.2	1.23E-06	1.23E-06	1.20E-06	1.20E-06
Cs138	4.1	1.19E-06	1.19E-06	1.19E-06	1.19E-06
Xe138	4.0	1.16E-06	1.12E-06	1.12E-06	1.12E-06
La143	3.3	9.59E-07	1.03E-06	9.76E-07	9.76E-07
Ba142	2.8	8.14E-07	8.02E-07	8.15E-07	8.15E-07
Tc105	2.7	7.86E-07	7.74E-07	6.01E-07	6.01E-07
Te133	2.6	7.69E-07	7.82E-07	7.61E-07	7.61E-07
Sb131	2.4	6.88E-07	7.80E-07	6.73E-07	6.73E-07
Xe137	2.1	6.04E-07	6.05E-07	6.06E-07	6.06E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	1.9	5.43E-07	5.51E-07	5.36E-07	5.36E-07
Tc101	1.8	5.24E-07	5.23E-07	5.23E-07	5.23E-07
Pr147	1.7	5.07E-07	4.94E-07	5.05E-07	5.05E-07
Pr146	1.5	4.42E-07	4.36E-07	4.31E-07	4.31E-07
La142	1.3	3.84E-07	4.04E-07	3.85E-07	3.85E-07
Te134	1.3	3.69E-07	3.67E-07	3.69E-07	3.69E-07
Te133m	1.1	3.31E-07	3.80E-07	3.76E-07	3.76E-07
Sb130m	1.1	3.29E-07	3.44E-07	3.34E-07	3.45E-07
Mo102	1.1	3.20E-07	3.19E-07	3.18E-07	3.18E-07
Sb130	0.9	2.69E-07	2.65E-07	2.54E-07	2.54E-07
Kr89	0.9	2.61E-07	2.53E-07	2.46E-07	2.46E-07
Rb90	0.8	2.39E-07	2.14E-07	2.15E-07	2.17E-07
Rb90m	0.8	2.38E-07	3.20E-07	3.44E-07	3.37E-07
Sb132m	0.7	1.93E-07	2.04E-07	1.92E-07	1.92E-07
Ce146	0.6	1.86E-07	1.66E-07	1.65E-07	1.82E-07
Kr87	0.6	1.77E-07	1.77E-07	1.77E-07	1.77E-07
Br84	0.6	1.67E-07	1.67E-07	1.81E-07	1.81E-07
Ba139	0.6	1.63E-07	1.63E-07	1.61E-07	1.61E-07
Ce145	0.6	1.62E-07	1.70E-07	1.39E-07	1.39E-07
Te131	0.5	1.59E-07	1.59E-07	1.63E-07	1.63E-07
Sr92	0.5	1.41E-07	1.41E-07	1.43E-07	1.43E-07
Y93m	0.5	1.37E-07	1.37E-07	1.00E-07	1.00E-07
Nd151	0.4	1.31E-07	1.30E-07	1.29E-07	1.29E-07
I135	0.4	1.29E-07	1.30E-07	1.31E-07	1.31E-07
Sb132	0.4	1.27E-07	1.32E-07	1.29E-07	1.29E-07
Se83	0.4	1.25E-07	7.61E-08	5.95E-08	6.83E-08
Sn129m	0.4	1.18E-07	1.43E-07	1.07E-07	1.07E-07
Pm152	0.4	1.09E-07	1.08E-07	1.10E-07	1.10E-07
Kr88	0.4	1.08E-07	1.08E-07	1.08E-07	1.08E-07
Pr148	0.3	9.10E-08	8.70E-08	9.31E-08	9.31E-08
Sb133	0.3	8.98E-08	1.07E-07	8.91E-08	8.91E-08
Rb88	0.3	7.56E-08	7.56E-08	7.54E-08	7.54E-08
Nb99m	0.2	7.00E-08	1.15E-07	8.22E-08	8.22E-08

5.5 10000s after pulse

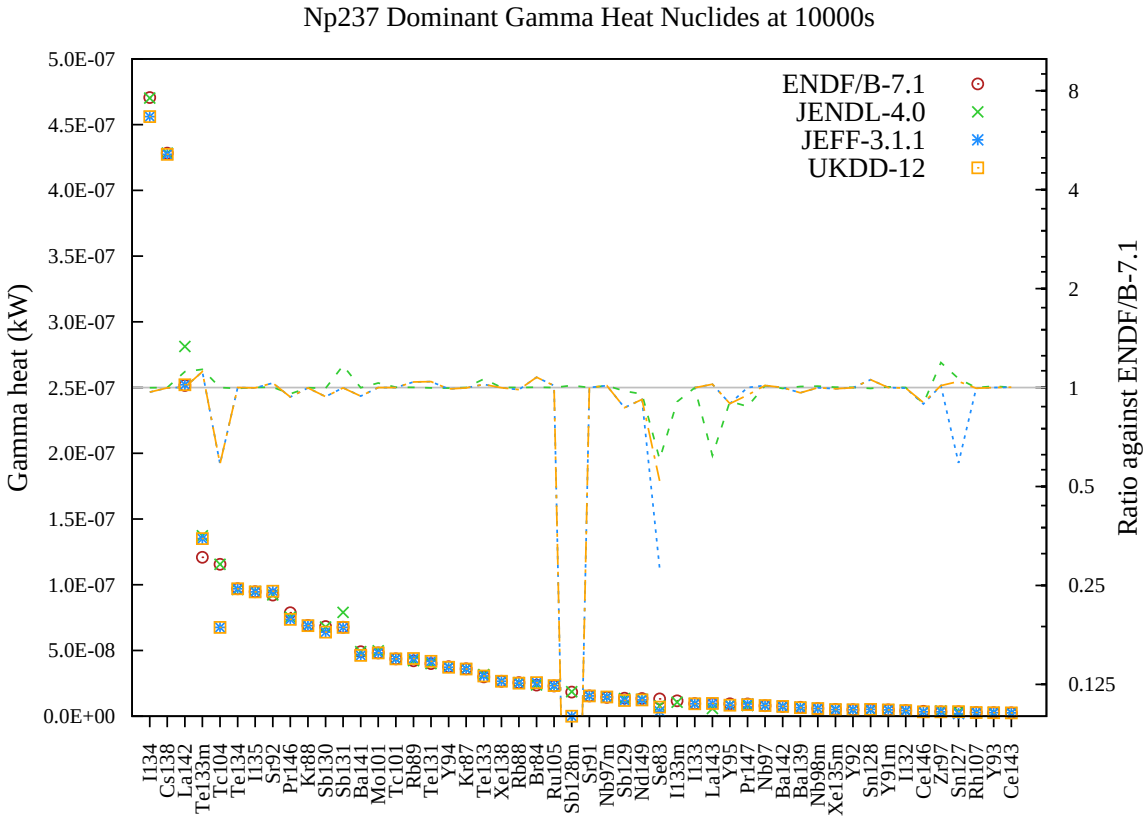

Figure 73: Gamma heat (in kW) decay data comparison for Np237 fission pulse after 10000s cooling.

Table 73: Gamma heat (in kW) decay data comparison for Np237 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	18.0	4.71E-07	4.70E-07	4.56E-07	4.56E-07
Cs138	16.4	4.28E-07	4.28E-07	4.27E-07	4.27E-07
La142	9.6	2.52E-07	2.81E-07	2.52E-07	2.52E-07
Te133m	4.6	1.21E-07	1.37E-07	1.35E-07	1.35E-07
Tc104	4.4	1.16E-07	1.16E-07	6.76E-08	6.76E-08
Te134	3.7	9.70E-08	9.64E-08	9.70E-08	9.70E-08
I135	3.6	9.47E-08	9.49E-08	9.46E-08	9.46E-08
Sr92	3.5	9.21E-08	9.23E-08	9.51E-08	9.51E-08
Pr146	3.0	7.87E-08	7.54E-08	7.37E-08	7.37E-08
Kr88	2.6	6.90E-08	6.88E-08	6.88E-08	6.88E-08
Sb130	2.6	6.82E-08	6.78E-08	6.40E-08	6.40E-08
Sb131	2.6	6.76E-08	7.90E-08	6.75E-08	6.75E-08
Ba141	1.9	4.91E-08	4.91E-08	4.63E-08	4.63E-08

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Mo101	1.8	4.82E-08	4.97E-08	4.82E-08	4.82E-08
Tc101	1.7	4.37E-08	4.38E-08	4.37E-08	4.37E-08
Rb89	1.6	4.22E-08	4.23E-08	4.39E-08	4.39E-08
Te131	1.5	4.01E-08	4.00E-08	4.18E-08	4.18E-08
Y94	1.4	3.76E-08	3.75E-08	3.73E-08	3.73E-08
Kr87	1.4	3.60E-08	3.60E-08	3.59E-08	3.59E-08
Te133	1.1	2.99E-08	3.17E-08	3.05E-08	3.05E-08
Xe138	1.0	2.67E-08	2.67E-08	2.66E-08	2.66E-08
Rb88	1.0	2.55E-08	2.55E-08	2.51E-08	2.51E-08
Br84	0.9	2.37E-08	2.38E-08	2.55E-08	2.55E-08
Ru105	0.9	2.30E-08	2.30E-08	2.33E-08	2.33E-08
Sb128m	0.7	1.83E-08	1.86E-08	5.48E-11	5.48E-11
Sr91	0.6	1.55E-08	1.55E-08	1.55E-08	1.55E-08
Nb97m	0.6	1.44E-08	1.46E-08	1.46E-08	1.46E-08
Sb129	0.5	1.37E-08	1.34E-08	1.19E-08	1.19E-08
Nd149	0.5	1.35E-08	1.29E-08	1.24E-08	1.24E-08
Se83	0.5	1.32E-08	7.99E-09	3.72E-09	6.87E-09
I133m	0.4	1.17E-08	—	—	—
I133	0.4	9.52E-09	9.51E-09	9.51E-09	9.51E-09
La143	0.4	9.43E-09	5.85E-09	9.65E-09	9.65E-09
Y95	0.4	9.42E-09	8.55E-09	8.42E-09	8.42E-09
Pr147	0.4	9.24E-09	8.10E-09	9.24E-09	8.77E-09
Nb97	0.3	8.00E-09	8.11E-09	8.12E-09	8.12E-09
Ba142	0.3	7.44E-09	7.40E-09	7.44E-09	7.44E-09
Ba139	0.3	6.78E-09	6.82E-09	6.53E-09	6.53E-09
Nb98m	0.2	5.83E-09	5.89E-09	5.83E-09	5.83E-09
Xe135m	0.2	5.13E-09	5.14E-09	5.09E-09	5.09E-09
Y92	0.2	4.97E-09	4.97E-09	4.96E-09	4.96E-09
Sn128	0.2	4.89E-09	4.86E-09	5.17E-09	5.17E-09
Y91m	0.2	4.84E-09	4.87E-09	4.84E-09	4.84E-09
I132	0.2	4.27E-09	4.27E-09	4.25E-09	4.25E-09
Ce146	0.1	3.71E-09	3.32E-09	3.31E-09	3.34E-09
Zr97	0.1	3.31E-09	3.94E-09	3.36E-09	3.36E-09
Sn127	0.1	3.29E-09	3.51E-09	1.94E-09	3.44E-09
Rh107	0.1	2.80E-09	2.80E-09	2.79E-09	2.79E-09
Y93	0.1	2.72E-09	2.75E-09	2.72E-09	2.72E-09
Ce143	0.1	2.48E-09	2.49E-09	2.49E-09	2.49E-09

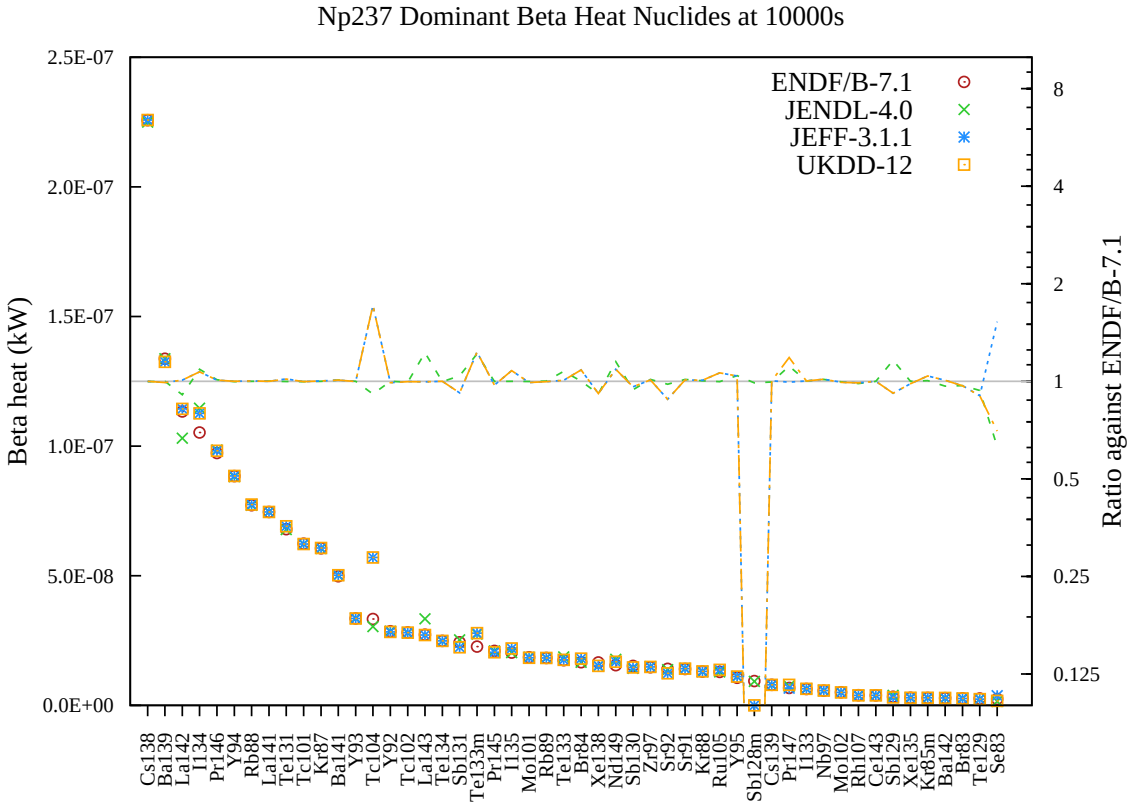

Figure 74: Beta heat (in kW) decay data comparison for Np237 fission pulse after 10000s cooling.

Table 74: Beta heat (in kW) decay data comparison for Np237 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	13.2	2.26E-07	2.25E-07	2.26E-07	2.26E-07
Ba139	7.8	1.34E-07	1.34E-07	1.33E-07	1.33E-07
La142	6.6	1.13E-07	1.03E-07	1.14E-07	1.14E-07
I134	6.1	1.05E-07	1.15E-07	1.13E-07	1.13E-07
Pr146	5.7	9.74E-08	9.85E-08	9.82E-08	9.82E-08
Y94	5.2	8.84E-08	8.82E-08	8.85E-08	8.85E-08
Rb88	4.5	7.72E-08	7.72E-08	7.74E-08	7.74E-08
La141	4.4	7.46E-08	7.46E-08	7.46E-08	7.46E-08
Te131	4.0	6.79E-08	6.78E-08	6.91E-08	6.91E-08
Tc101	3.6	6.24E-08	6.22E-08	6.22E-08	6.22E-08
Kr87	3.5	6.06E-08	6.05E-08	6.07E-08	6.07E-08
Ba141	2.9	4.98E-08	5.02E-08	5.02E-08	5.02E-08
Y93	2.0	3.35E-08	3.36E-08	3.35E-08	3.35E-08
Tc104	1.9	3.33E-08	3.04E-08	5.71E-08	5.71E-08
Y92	1.7	2.86E-08	2.86E-08	2.83E-08	2.83E-08
Tc102	1.6	2.81E-08	2.79E-08	2.81E-08	2.81E-08

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La143	1.6	2.73E-08	3.34E-08	2.71E-08	2.71E-08
Te134	1.5	2.49E-08	2.48E-08	2.48E-08	2.48E-08
Sb131	1.4	2.43E-08	2.53E-08	2.24E-08	2.24E-08
Te133m	1.3	2.26E-08	2.75E-08	2.79E-08	2.79E-08
Pr145	1.2	2.10E-08	2.10E-08	2.05E-08	2.05E-08
I135	1.2	2.03E-08	2.03E-08	2.20E-08	2.20E-08
Mo101	1.1	1.85E-08	1.85E-08	1.84E-08	1.84E-08
Rb89	1.1	1.83E-08	1.83E-08	1.83E-08	1.83E-08
Te133	1.0	1.74E-08	1.87E-08	1.75E-08	1.75E-08
Br84	1.0	1.66E-08	1.66E-08	1.80E-08	1.80E-08
Xe138	1.0	1.66E-08	1.52E-08	1.52E-08	1.52E-08
Nd149	0.9	1.55E-08	1.78E-08	1.68E-08	1.68E-08
Sb130	0.9	1.52E-08	1.43E-08	1.46E-08	1.46E-08
Zr97	0.9	1.47E-08	1.49E-08	1.48E-08	1.48E-08
Sr92	0.8	1.41E-08	1.38E-08	1.24E-08	1.24E-08
Sr91	0.8	1.40E-08	1.42E-08	1.42E-08	1.42E-08
Kr88	0.8	1.30E-08	1.31E-08	1.31E-08	1.31E-08
Ru105	0.8	1.29E-08	1.29E-08	1.37E-08	1.37E-08
Y95	0.6	1.07E-08	1.11E-08	1.11E-08	1.11E-08
Sb128m	0.5	9.36E-09	9.26E-09	2.75E-11	2.75E-11
Cs139	0.5	7.91E-09	7.87E-09	7.94E-09	7.94E-09
Pr147	0.4	6.70E-09	7.46E-09	6.66E-09	7.94E-09
I133	0.4	6.34E-09	6.36E-09	6.36E-09	6.36E-09
Nb97	0.3	5.65E-09	5.72E-09	5.73E-09	5.73E-09
Mo102	0.3	5.03E-09	5.02E-09	5.00E-09	5.00E-09
Rh107	0.2	3.91E-09	3.85E-09	3.87E-09	3.87E-09
Ce143	0.2	3.84E-09	3.84E-09	3.84E-09	3.84E-09
Sb129	0.2	3.34E-09	3.88E-09	3.07E-09	3.07E-09
Xe135	0.2	2.94E-09	2.95E-09	2.89E-09	2.89E-09
Kr85m	0.2	2.84E-09	2.85E-09	2.94E-09	2.94E-09
Ba142	0.2	2.82E-09	2.73E-09	2.84E-09	2.84E-09
Br83	0.2	2.74E-09	2.66E-09	2.66E-09	2.66E-09
Te129	0.2	2.63E-09	2.47E-09	2.38E-09	2.38E-09
Se83	0.1	2.44E-09	1.53E-09	3.72E-09	1.71E-09

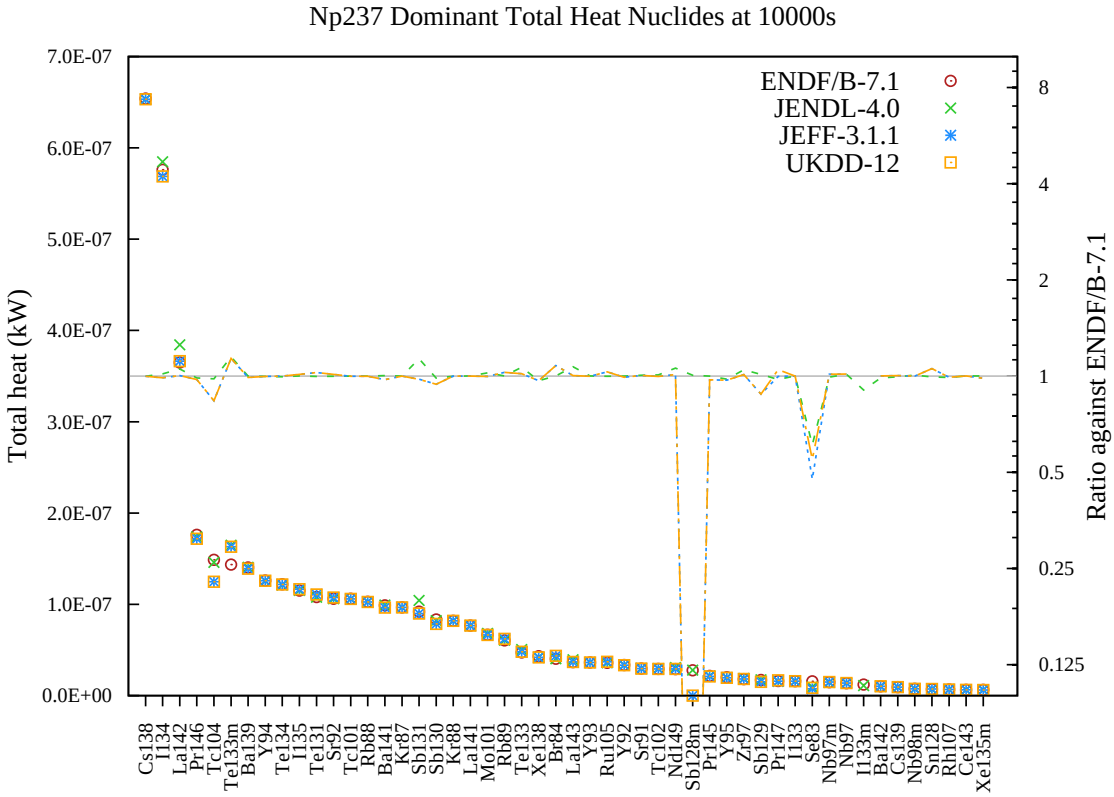

Figure 75: Total heat (in kW) decay data comparison for Np237 fission pulse after 10000s cooling.

Table 75: Total heat (in kW) decay data comparison for Np237 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	15.1	6.54E-07	6.53E-07	6.53E-07	6.53E-07
I134	13.3	5.76E-07	5.85E-07	5.69E-07	5.69E-07
La142	8.4	3.65E-07	3.84E-07	3.66E-07	3.66E-07
Pr146	4.1	1.76E-07	1.74E-07	1.72E-07	1.72E-07
Tc104	3.4	1.49E-07	1.46E-07	1.25E-07	1.25E-07
Te133m	3.3	1.44E-07	1.65E-07	1.63E-07	1.63E-07
Ba139	3.2	1.40E-07	1.40E-07	1.39E-07	1.39E-07
Y94	2.9	1.26E-07	1.26E-07	1.26E-07	1.26E-07
Te134	2.8	1.22E-07	1.21E-07	1.22E-07	1.22E-07
I135	2.7	1.15E-07	1.15E-07	1.17E-07	1.17E-07
Te131	2.5	1.08E-07	1.08E-07	1.11E-07	1.11E-07
Sr92	2.5	1.06E-07	1.06E-07	1.07E-07	1.07E-07
Tc101	2.5	1.06E-07	1.06E-07	1.06E-07	1.06E-07
Rb88	2.4	1.03E-07	1.03E-07	1.03E-07	1.03E-07
Ba141	2.3	9.89E-08	9.93E-08	9.65E-08	9.65E-08
Kr87	2.2	9.66E-08	9.66E-08	9.66E-08	9.66E-08
Sb131	2.1	9.20E-08	1.04E-07	8.99E-08	8.99E-08

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb130	1.9	8.33E-08	8.21E-08	7.86E-08	7.86E-08
Kr88	1.9	8.20E-08	8.19E-08	8.20E-08	8.20E-08
La141	1.8	7.67E-08	7.67E-08	7.67E-08	7.67E-08
Mo101	1.5	6.67E-08	6.82E-08	6.65E-08	6.65E-08
Rb89	1.4	6.05E-08	6.06E-08	6.22E-08	6.22E-08
Te133	1.1	4.73E-08	5.04E-08	4.81E-08	4.81E-08
Xe138	1.0	4.32E-08	4.18E-08	4.18E-08	4.18E-08
Br84	0.9	4.03E-08	4.04E-08	4.35E-08	4.35E-08
La143	0.8	3.67E-08	3.92E-08	3.68E-08	3.68E-08
Y93	0.8	3.63E-08	3.63E-08	3.62E-08	3.62E-08
Ru105	0.8	3.59E-08	3.59E-08	3.70E-08	3.70E-08
Y92	0.8	3.36E-08	3.36E-08	3.33E-08	3.33E-08
Sr91	0.7	2.95E-08	2.97E-08	2.97E-08	2.97E-08
Tc102	0.7	2.93E-08	2.95E-08	2.93E-08	2.92E-08
Nd149	0.7	2.90E-08	3.07E-08	2.93E-08	2.93E-08
Sb128m	0.6	2.77E-08	2.79E-08	8.23E-11	8.23E-11
Pr145	0.5	2.16E-08	2.16E-08	2.11E-08	2.11E-08
Y95	0.5	2.01E-08	1.96E-08	1.95E-08	1.95E-08
Zr97	0.4	1.80E-08	1.88E-08	1.82E-08	1.82E-08
Sb129	0.4	1.71E-08	1.73E-08	1.50E-08	1.50E-08
Pr147	0.4	1.59E-08	1.56E-08	1.59E-08	1.67E-08
I133	0.4	1.59E-08	1.59E-08	1.59E-08	1.59E-08
Se83	0.4	1.56E-08	9.52E-09	7.44E-09	8.58E-09
Nb97m	0.3	1.47E-08	1.46E-08	1.49E-08	1.49E-08
Nb97	0.3	1.36E-08	1.38E-08	1.38E-08	1.38E-08
I133m	0.3	1.21E-08	1.10E-08	—	—
Ba142	0.2	1.03E-08	1.01E-08	1.03E-08	1.03E-08
Cs139	0.2	9.35E-09	9.31E-09	9.39E-09	9.39E-09
Nb98m	0.2	7.45E-09	7.50E-09	7.44E-09	7.44E-09
Sn128	0.2	6.93E-09	6.89E-09	7.31E-09	7.31E-09
Rh107	0.2	6.71E-09	6.65E-09	6.66E-09	6.66E-09
Ce143	0.1	6.33E-09	6.33E-09	6.33E-09	6.33E-09
Xe135m	0.1	6.30E-09	6.31E-09	6.21E-09	6.21E-09

6 Decay data comparison for ^{238}Pu 0.0253 eV pulse decay heat

6.1 10s after pulse

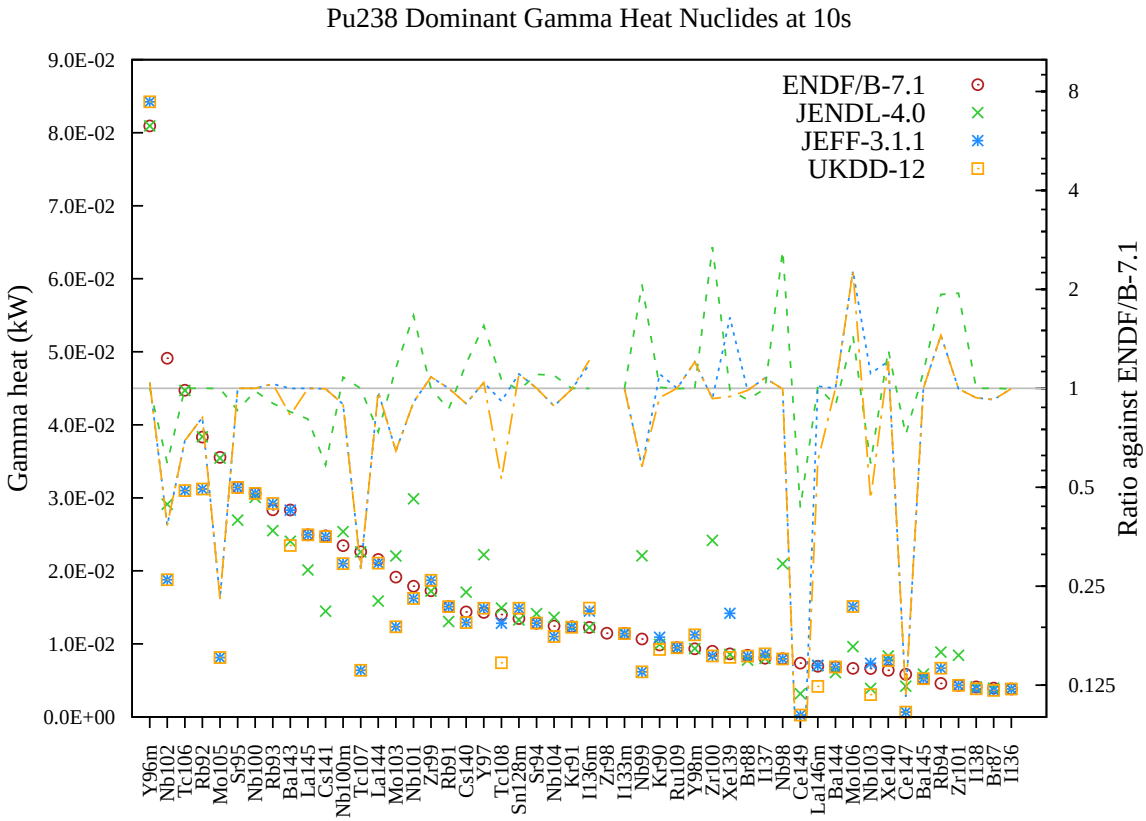

Figure 76: Gamma heat (in kW) decay data comparison for Pu238 fission pulse after 10s cooling.

Table 76: Gamma heat (in kW) decay data comparison for Pu238 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y96m	8.5	8.09E-02	8.09E-02	8.42E-02	8.42E-02
Nb102	5.2	4.91E-02	2.91E-02	1.88E-02	1.88E-02
Tc106	4.7	4.47E-02	4.47E-02	3.10E-02	3.10E-02
Rb92	4.0	3.83E-02	3.84E-02	3.12E-02	3.12E-02
Mo105	3.7	3.55E-02	3.54E-02	8.14E-03	8.14E-03
Sr95	3.3	3.14E-02	2.70E-02	3.14E-02	3.14E-02
Nb100	3.2	3.06E-02	3.01E-02	3.06E-02	3.06E-02
Rb93	3.0	2.84E-02	2.55E-02	2.92E-02	2.92E-02
Ba143	3.0	2.83E-02	2.41E-02	2.83E-02	2.35E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La145	2.6	2.50E-02	2.01E-02	2.49E-02	2.49E-02
Cs141	2.6	2.48E-02	1.45E-02	2.47E-02	2.47E-02
Nb100m	2.5	2.35E-02	2.54E-02	2.10E-02	2.10E-02
Tc107	2.4	2.26E-02	2.26E-02	6.39E-03	6.39E-03
La144	2.3	2.16E-02	1.59E-02	2.11E-02	2.11E-02
Mo103	2.0	1.91E-02	2.21E-02	1.24E-02	1.24E-02
Nb101	1.9	1.79E-02	2.99E-02	1.62E-02	1.62E-02
Zr99	1.8	1.73E-02	1.72E-02	1.87E-02	1.87E-02
Rb91	1.6	1.51E-02	1.31E-02	1.51E-02	1.51E-02
Cs140	1.5	1.44E-02	1.71E-02	1.29E-02	1.29E-02
Y97	1.5	1.43E-02	2.22E-02	1.49E-02	1.49E-02
Tc108	1.5	1.40E-02	1.49E-02	1.28E-02	7.43E-03
Sn128m	1.4	1.35E-02	1.33E-02	1.49E-02	1.49E-02
Sr94	1.3	1.28E-02	1.42E-02	1.28E-02	1.28E-02
Nb104	1.3	1.25E-02	1.36E-02	1.10E-02	1.10E-02
Kr91	1.3	1.24E-02	1.24E-02	1.23E-02	1.23E-02
I136m	1.3	1.23E-02	1.22E-02	1.45E-02	1.49E-02
Zr98	1.2	1.15E-02	—	—	—
I133m	1.2	1.14E-02	1.14E-02	1.14E-02	1.14E-02
Nb99	1.1	1.07E-02	2.21E-02	6.17E-03	6.17E-03
Kr90	1.0	9.86E-03	9.94E-03	1.09E-02	9.25E-03
Ru109	1.0	9.49E-03	9.46E-03	9.48E-03	9.48E-03
Y98m	1.0	9.35E-03	9.35E-03	1.12E-02	1.12E-02
Zr100	0.9	8.99E-03	2.42E-02	8.36E-03	8.36E-03
Xe139	0.9	8.64E-03	8.56E-03	1.42E-02	8.15E-03
Br88	0.9	8.44E-03	7.79E-03	8.32E-03	8.32E-03
I137	0.8	8.05E-03	8.03E-03	8.65E-03	8.65E-03
Nb98	0.8	7.98E-03	2.10E-02	7.94E-03	7.94E-03
Ce149	0.8	7.38E-03	3.19E-03	2.59E-04	2.59E-04
La146m	0.7	6.95E-03	7.03E-03	7.06E-03	4.19E-03
Ba144	0.7	6.85E-03	6.09E-03	6.85E-03	6.85E-03
Mo106	0.7	6.65E-03	9.62E-03	1.51E-02	1.51E-02
Nb103	0.7	6.62E-03	3.91E-03	7.35E-03	3.05E-03
Xe140	0.7	6.38E-03	8.35E-03	7.71E-03	7.71E-03
Ce147	0.6	5.84E-03	4.22E-03	6.74E-04	6.74E-04
Ba145	0.6	5.24E-03	5.87E-03	5.25E-03	5.25E-03
Rb94	0.5	4.60E-03	8.88E-03	6.67E-03	6.67E-03
Zr101	0.5	4.34E-03	8.46E-03	4.33E-03	4.33E-03
I138	0.4	4.12E-03	4.12E-03	3.86E-03	3.86E-03
Br87	0.4	3.94E-03	3.94E-03	3.64E-03	3.64E-03
I136	0.4	3.84E-03	3.83E-03	3.83E-03	3.83E-03

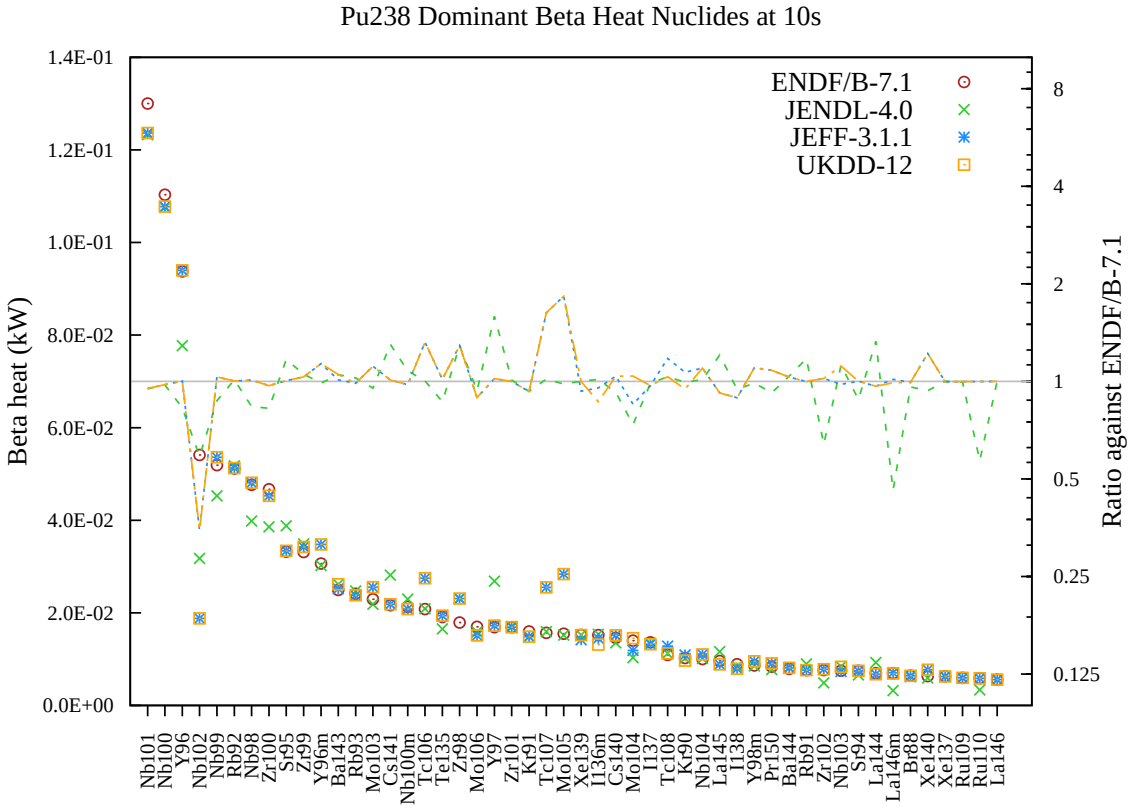

Figure 77: Beta heat (in kW) decay data comparison for Pu238 fission pulse after 10s cooling.

Table 77: Beta heat (in kW) decay data comparison for Pu238 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb101	9.9	1.30E-01	1.23E-01	1.24E-01	1.24E-01
Nb100	8.4	1.10E-01	1.08E-01	1.08E-01	1.08E-01
Y96	7.1	9.38E-02	7.77E-02	9.40E-02	9.40E-02
Nb102	4.1	5.41E-02	3.18E-02	1.88E-02	1.88E-02
Nb99	4.0	5.19E-02	4.53E-02	5.36E-02	5.36E-02
Rb92	3.9	5.12E-02	5.18E-02	5.13E-02	5.13E-02
Nb98	3.6	4.77E-02	3.99E-02	4.81E-02	4.81E-02
Zr100	3.6	4.67E-02	3.86E-02	4.53E-02	4.53E-02
Sr95	2.5	3.32E-02	3.88E-02	3.34E-02	3.34E-02
Zr99	2.5	3.31E-02	3.49E-02	3.42E-02	3.42E-02
Y96m	2.3	3.06E-02	3.02E-02	3.48E-02	3.48E-02
Ba143	1.9	2.50E-02	2.62E-02	2.52E-02	2.62E-02
Rb93	1.8	2.41E-02	2.47E-02	2.38E-02	2.38E-02
Mo103	1.7	2.29E-02	2.19E-02	2.56E-02	2.56E-02
Cs141	1.6	2.16E-02	2.82E-02	2.19E-02	2.19E-02
Nb100m	1.6	2.13E-02	2.30E-02	2.08E-02	2.08E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	1.6	2.08E-02	2.09E-02	2.75E-02	2.75E-02
Te135	1.5	1.91E-02	1.65E-02	1.94E-02	1.94E-02
Zr98	1.4	1.79E-02	2.31E-02	2.31E-02	2.31E-02
Mo106	1.3	1.70E-02	1.59E-02	1.51E-02	1.51E-02
Y97	1.3	1.69E-02	2.68E-02	1.72E-02	1.72E-02
Zr101	1.3	1.69E-02	1.70E-02	1.69E-02	1.69E-02
Kr91	1.2	1.60E-02	1.49E-02	1.49E-02	1.49E-02
Tc107	1.2	1.57E-02	1.59E-02	2.55E-02	2.55E-02
Mo105	1.2	1.55E-02	1.52E-02	2.84E-02	2.84E-02
Xe139	1.2	1.52E-02	1.52E-02	1.42E-02	1.52E-02
I136m	1.2	1.52E-02	1.54E-02	1.45E-02	1.31E-02
Cs140	1.1	1.46E-02	1.35E-02	1.51E-02	1.51E-02
Mo104	1.1	1.40E-02	1.03E-02	1.19E-02	1.45E-02
I137	1.0	1.36E-02	1.34E-02	1.32E-02	1.32E-02
Tc108	0.8	1.09E-02	1.13E-02	1.28E-02	1.13E-02
Kr90	0.8	1.02E-02	1.02E-02	1.09E-02	9.68E-03
Nb104	0.8	1.00E-02	1.01E-02	1.10E-02	1.10E-02
La145	0.7	9.62E-03	1.16E-02	8.87E-03	8.87E-03
I138	0.7	8.90E-03	8.42E-03	7.92E-03	7.92E-03
Y98m	0.7	8.64E-03	8.53E-03	9.52E-03	9.52E-03
Pr150	0.6	8.39E-03	7.74E-03	9.08E-03	9.08E-03
Ba144	0.6	7.88E-03	8.17E-03	8.12E-03	8.12E-03
Rb91	0.6	7.65E-03	8.98E-03	7.64E-03	7.64E-03
Zr102	0.6	7.64E-03	4.88E-03	7.80E-03	7.80E-03
Nb103	0.6	7.50E-03	8.41E-03	7.35E-03	8.36E-03
Sr94	0.6	7.49E-03	6.59E-03	7.50E-03	7.50E-03
La144	0.5	6.97E-03	9.27E-03	6.73E-03	6.73E-03
La146m	0.5	6.95E-03	3.21E-03	7.06E-03	6.88E-03
Br88	0.5	6.45E-03	6.20E-03	6.40E-03	6.40E-03
Xe140	0.5	6.32E-03	5.92E-03	7.71E-03	7.71E-03
Xe137	0.5	6.28E-03	6.28E-03	6.27E-03	6.27E-03
Ru109	0.5	5.96E-03	5.93E-03	5.95E-03	5.95E-03
Ru110	0.4	5.87E-03	3.34E-03	5.86E-03	5.86E-03
La146	0.4	5.57E-03	5.58E-03	5.57E-03	5.57E-03

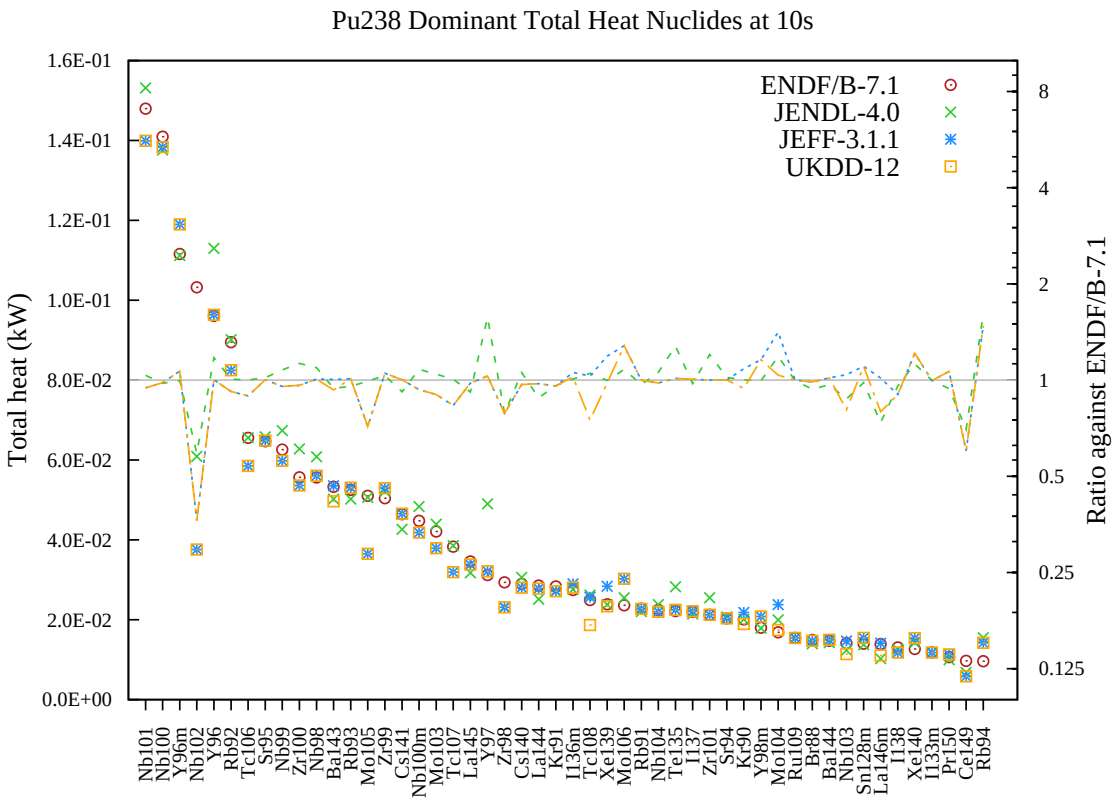

Figure 78: Total heat (in kW) decay data comparison for Pu238 fission pulse after 10s cooling.

Table 78: Total heat (in kW) decay data comparison for Pu238 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb101	6.5	1.48E-01	1.53E-01	1.40E-01	1.40E-01
Nb100	6.2	1.41E-01	1.38E-01	1.38E-01	1.38E-01
Y96m	4.9	1.12E-01	1.11E-01	1.19E-01	1.19E-01
Nb102	4.6	1.03E-01	6.09E-02	3.76E-02	3.76E-02
Y96	4.2	9.61E-02	1.13E-01	9.63E-02	9.63E-02
Rb92	3.9	8.95E-02	9.01E-02	8.25E-02	8.25E-02
Tc106	2.9	6.55E-02	6.56E-02	5.85E-02	5.85E-02
Sr95	2.9	6.47E-02	6.58E-02	6.48E-02	6.48E-02
Nb99	2.8	6.26E-02	6.73E-02	5.98E-02	5.98E-02
Zr100	2.5	5.57E-02	6.28E-02	5.36E-02	5.36E-02
Nb98	2.5	5.56E-02	6.08E-02	5.61E-02	5.61E-02
Ba143	2.4	5.33E-02	5.02E-02	5.35E-02	4.97E-02
Rb93	2.3	5.25E-02	5.02E-02	5.31E-02	5.31E-02
Mo105	2.2	5.10E-02	5.06E-02	3.65E-02	3.65E-02
Zr99	2.2	5.04E-02	5.21E-02	5.29E-02	5.29E-02
Cs141	2.0	4.64E-02	4.26E-02	4.65E-02	4.65E-02
Nb100m	2.0	4.48E-02	4.83E-02	4.18E-02	4.18E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Mo103	1.9	4.21E-02	4.39E-02	3.79E-02	3.79E-02
Tc107	1.7	3.83E-02	3.85E-02	3.19E-02	3.19E-02
La145	1.5	3.46E-02	3.17E-02	3.38E-02	3.38E-02
Y97	1.4	3.12E-02	4.90E-02	3.21E-02	3.21E-02
Zr98	1.3	2.94E-02	2.31E-02	2.31E-02	2.31E-02
Cs140	1.3	2.90E-02	3.06E-02	2.81E-02	2.81E-02
La144	1.3	2.85E-02	2.51E-02	2.78E-02	2.78E-02
Kr91	1.2	2.83E-02	2.72E-02	2.71E-02	2.71E-02
I136m	1.2	2.74E-02	2.76E-02	2.90E-02	2.81E-02
Tc108	1.1	2.49E-02	2.62E-02	2.56E-02	1.87E-02
Xe139	1.1	2.39E-02	2.38E-02	2.84E-02	2.34E-02
Mo106	1.0	2.36E-02	2.55E-02	3.03E-02	3.03E-02
Rb91	1.0	2.28E-02	2.20E-02	2.27E-02	2.27E-02
Nb104	1.0	2.25E-02	2.38E-02	2.20E-02	2.20E-02
Te135	1.0	2.22E-02	2.83E-02	2.24E-02	2.24E-02
I137	1.0	2.20E-02	2.15E-02	2.21E-02	2.21E-02
Zr101	0.9	2.12E-02	2.55E-02	2.12E-02	2.12E-02
Sr94	0.9	2.03E-02	2.07E-02	2.03E-02	2.03E-02
Kr90	0.9	2.01E-02	2.01E-02	2.18E-02	1.89E-02
Y98m	0.8	1.80E-02	1.79E-02	2.08E-02	2.08E-02
Mo104	0.7	1.68E-02	2.00E-02	2.38E-02	1.74E-02
Ru109	0.7	1.54E-02	1.54E-02	1.54E-02	1.54E-02
Br88	0.7	1.49E-02	1.40E-02	1.47E-02	1.47E-02
Ba144	0.6	1.47E-02	1.43E-02	1.50E-02	1.50E-02
Nb103	0.6	1.41E-02	1.23E-02	1.47E-02	1.14E-02
Sn128m	0.6	1.40E-02	1.38E-02	1.55E-02	1.55E-02
La146m	0.6	1.39E-02	1.02E-02	1.41E-02	1.11E-02
I138	0.6	1.31E-02	1.25E-02	1.18E-02	1.18E-02
Xe140	0.6	1.27E-02	1.43E-02	1.54E-02	1.54E-02
I133m	0.5	1.18E-02	1.18E-02	1.18E-02	1.18E-02
Pr150	0.5	1.06E-02	1.00E-02	1.13E-02	1.13E-02
Ce149	0.4	9.68E-03	6.79E-03	5.82E-03	5.82E-03
Rb94	0.4	9.61E-03	1.55E-02	1.42E-02	1.42E-02

6.2 100s after pulse

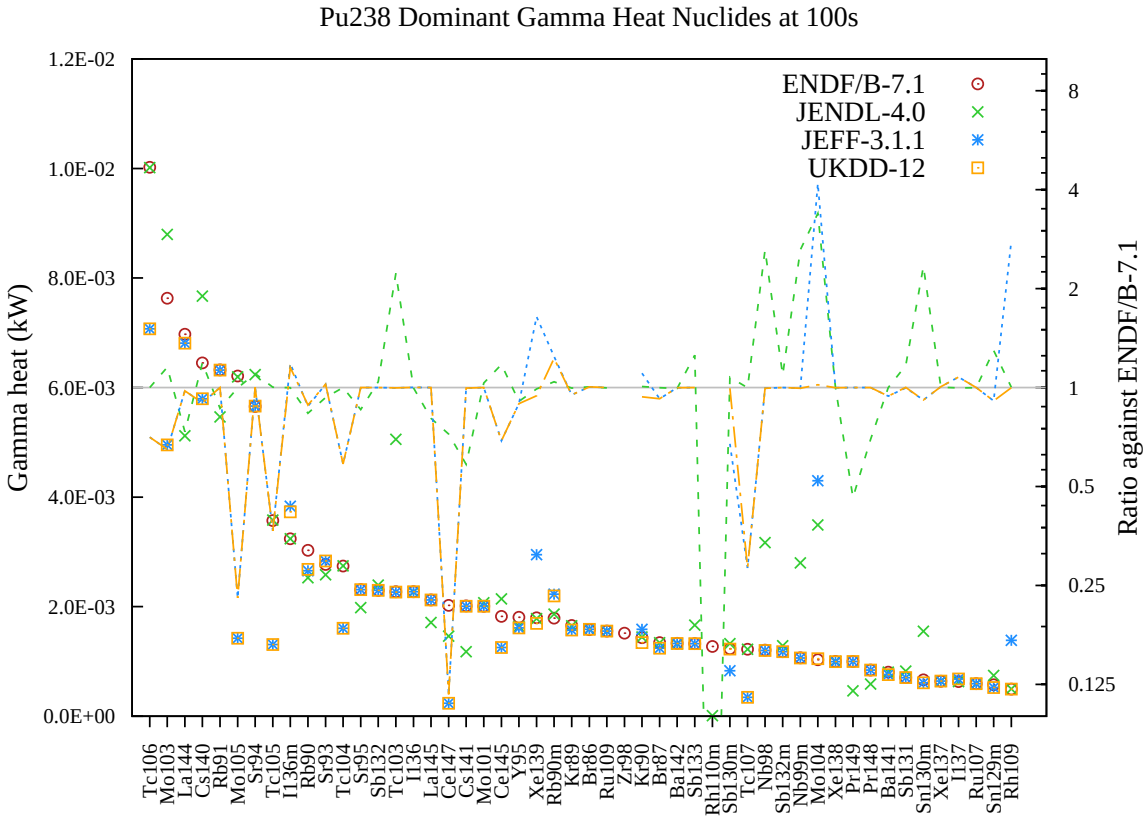

Figure 79: Gamma heat (in kW) decay data comparison for Pu238 fission pulse after 100s cooling.

Table 79: Gamma heat (in kW) decay data comparison for Pu238 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	7.8	1.00E-02	1.00E-02	7.07E-03	7.07E-03
Mo103	6.0	7.63E-03	8.79E-03	4.95E-03	4.95E-03
La144	5.4	6.97E-03	5.12E-03	6.81E-03	6.81E-03
Cs140	5.0	6.45E-03	7.67E-03	5.80E-03	5.80E-03
Rb91	4.9	6.32E-03	5.46E-03	6.32E-03	6.32E-03
Mo105	4.8	6.21E-03	6.19E-03	1.42E-03	1.42E-03
Sr94	4.4	5.66E-03	6.24E-03	5.66E-03	5.66E-03
Tc105	2.8	3.57E-03	3.58E-03	1.31E-03	1.31E-03
I136m	2.5	3.24E-03	3.24E-03	3.83E-03	3.73E-03
Rb90	2.4	3.03E-03	2.53E-03	2.66E-03	2.68E-03
Sr93	2.2	2.77E-03	2.58E-03	2.83E-03	2.83E-03
Tc104	2.1	2.74E-03	2.74E-03	1.61E-03	1.61E-03
Sr95	1.8	2.31E-03	1.98E-03	2.31E-03	2.31E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb132	1.8	2.30E-03	2.39E-03	2.30E-03	2.30E-03
Tc103	1.8	2.27E-03	5.05E-03	2.27E-03	2.27E-03
I136	1.8	2.27E-03	2.27E-03	2.27E-03	2.27E-03
La145	1.7	2.12E-03	1.71E-03	2.12E-03	2.12E-03
Ce147	1.6	2.02E-03	1.46E-03	2.36E-04	2.36E-04
Cs141	1.6	2.01E-03	1.18E-03	2.01E-03	2.01E-03
Mo101	1.6	2.01E-03	2.07E-03	2.01E-03	2.01E-03
Ce145	1.4	1.82E-03	2.14E-03	1.26E-03	1.26E-03
Y95	1.4	1.81E-03	1.64E-03	1.61E-03	1.61E-03
Xe139	1.4	1.80E-03	1.78E-03	2.95E-03	1.70E-03
Rb90m	1.4	1.79E-03	1.87E-03	2.23E-03	2.20E-03
Kr89	1.3	1.66E-03	1.65E-03	1.57E-03	1.57E-03
Br86	1.2	1.58E-03	1.59E-03	1.59E-03	1.59E-03
Ru109	1.2	1.56E-03	1.55E-03	1.55E-03	1.55E-03
Zr98	1.2	1.52E-03	—	—	—
Kr90	1.1	1.43E-03	1.44E-03	1.59E-03	1.34E-03
Br87	1.0	1.34E-03	1.34E-03	1.24E-03	1.24E-03
Ba142	1.0	1.33E-03	1.32E-03	1.33E-03	1.33E-03
Sb133	1.0	1.32E-03	1.66E-03	1.32E-03	1.32E-03
Rh110m	1.0	1.27E-03	—	—	—
Sb130m	1.0	1.23E-03	1.32E-03	8.30E-04	1.22E-03
Tc107	1.0	1.22E-03	1.22E-03	3.45E-04	3.45E-04
Nb98	0.9	1.21E-03	3.17E-03	1.20E-03	1.20E-03
Sb132m	0.9	1.18E-03	1.29E-03	1.18E-03	1.18E-03
Nb99m	0.8	1.07E-03	2.80E-03	1.06E-03	1.06E-03
Mo104	0.8	1.03E-03	3.49E-03	4.30E-03	1.05E-03
Xe138	0.8	9.99E-04	9.99E-04	9.97E-04	9.97E-04
Pr149	0.8	9.97E-04	4.61E-04	9.97E-04	9.97E-04
Pr148	0.7	8.43E-04	5.87E-04	8.43E-04	8.43E-04
Ba141	0.6	8.05E-04	8.05E-04	7.58E-04	7.58E-04
Sb131	0.5	7.04E-04	8.22E-04	7.03E-04	7.05E-04
Sn130m	0.5	6.64E-04	1.55E-03	6.09E-04	6.09E-04
Xe137	0.5	6.37E-04	6.38E-04	6.41E-04	6.41E-04
I137	0.5	6.32E-04	6.31E-04	6.80E-04	6.80E-04
Ru107	0.5	5.94E-04	5.94E-04	5.94E-04	5.94E-04
Sn129m	0.4	5.73E-04	7.44E-04	5.22E-04	5.22E-04
Rh109	0.4	4.95E-04	4.96E-04	1.38E-03	4.94E-04

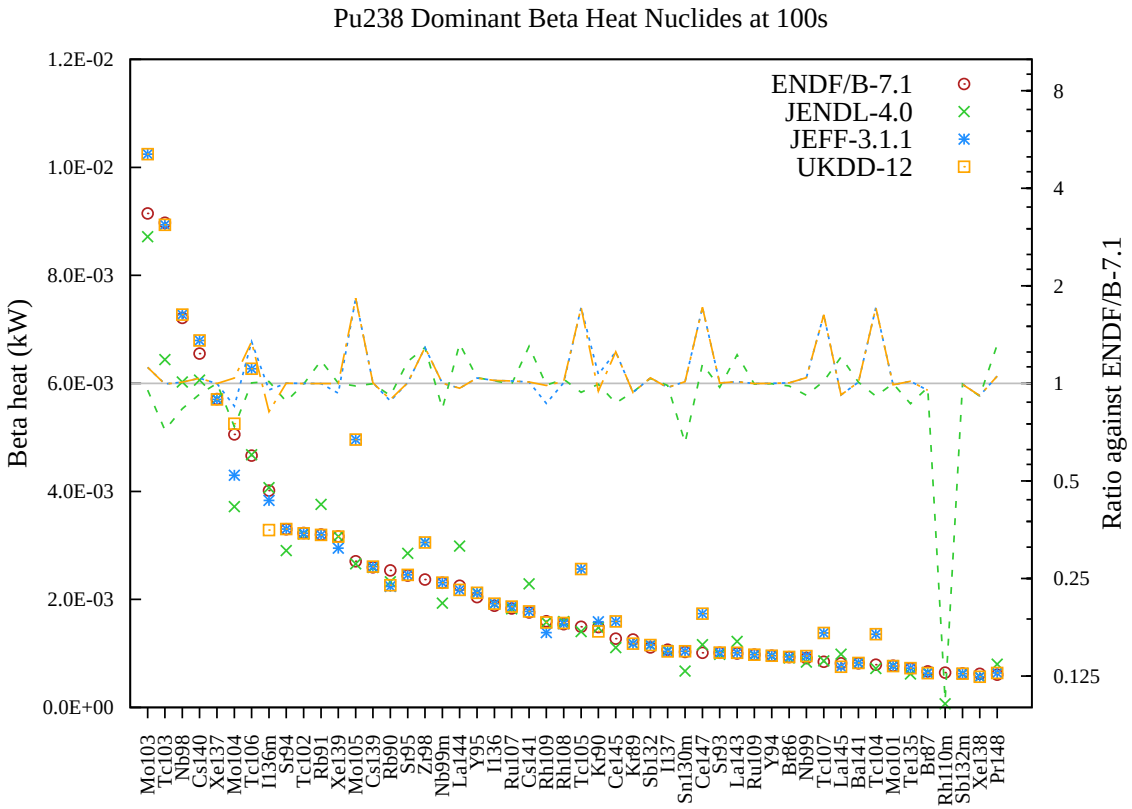

Figure 80: Beta heat (in kW) decay data comparison for Pu238 fission pulse after 100s cooling.

Table 80: Beta heat (in kW) decay data comparison for Pu238 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Mo103	7.2	9.15E-03	8.72E-03	1.02E-02	1.02E-02
Tc103	7.1	8.97E-03	6.44E-03	8.94E-03	8.93E-03
Nb98	5.7	7.21E-03	6.02E-03	7.27E-03	7.27E-03
Cs140	5.2	6.55E-03	6.06E-03	6.79E-03	6.79E-03
Xe137	4.5	5.71E-03	5.71E-03	5.70E-03	5.70E-03
Mo104	4.0	5.05E-03	3.72E-03	4.30E-03	5.25E-03
Tc106	3.7	4.66E-03	4.68E-03	6.27E-03	6.27E-03
I136m	3.2	4.01E-03	4.07E-03	3.83E-03	3.28E-03
Sr94	2.6	3.30E-03	2.90E-03	3.30E-03	3.30E-03
Tc102	2.6	3.23E-03	3.21E-03	3.23E-03	3.22E-03
Rb91	2.5	3.20E-03	3.76E-03	3.20E-03	3.20E-03
Xe139	2.5	3.16E-03	3.17E-03	2.95E-03	3.16E-03
Mo105	2.1	2.71E-03	2.66E-03	4.96E-03	4.96E-03
Cs139	2.1	2.60E-03	2.59E-03	2.61E-03	2.61E-03
Rb90	2.0	2.54E-03	2.33E-03	2.24E-03	2.26E-03
Sr95	1.9	2.44E-03	2.85E-03	2.46E-03	2.46E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Zr98	1.9	2.37E-03	3.05E-03	3.05E-03	3.05E-03
Nb99m	1.8	2.31E-03	1.93E-03	2.31E-03	2.31E-03
La144	1.8	2.25E-03	2.99E-03	2.18E-03	2.18E-03
Y95	1.6	2.04E-03	2.13E-03	2.12E-03	2.12E-03
I136	1.5	1.88E-03	1.92E-03	1.92E-03	1.92E-03
Ru107	1.5	1.83E-03	1.82E-03	1.87E-03	1.87E-03
Cs141	1.4	1.76E-03	2.29E-03	1.78E-03	1.78E-03
Rh109	1.3	1.60E-03	1.58E-03	1.38E-03	1.57E-03
Rh108	1.2	1.54E-03	1.59E-03	1.55E-03	1.56E-03
Tc105	1.2	1.50E-03	1.40E-03	2.56E-03	2.56E-03
Kr90	1.2	1.49E-03	1.48E-03	1.59E-03	1.41E-03
Ce145	1.0	1.27E-03	1.11E-03	1.59E-03	1.59E-03
Kr89	1.0	1.26E-03	1.18E-03	1.18E-03	1.18E-03
Sb132	0.9	1.11E-03	1.15E-03	1.16E-03	1.16E-03
I137	0.8	1.07E-03	1.05E-03	1.04E-03	1.04E-03
Sn130m	0.8	1.03E-03	6.74E-04	1.04E-03	1.04E-03
Ce147	0.8	1.01E-03	1.16E-03	1.74E-03	1.74E-03
Sr93	0.8	1.01E-03	9.84E-04	1.02E-03	1.02E-03
La143	0.8	9.98E-04	1.22E-03	1.01E-03	1.01E-03
Ru109	0.8	9.77E-04	9.72E-04	9.76E-04	9.76E-04
Y94	0.8	9.57E-04	9.54E-04	9.57E-04	9.57E-04
Br86	0.7	9.31E-04	9.15E-04	9.35E-04	9.35E-04
Nb99	0.7	9.12E-04	8.38E-04	9.50E-04	9.50E-04
Tc107	0.7	8.47E-04	8.61E-04	1.38E-03	1.38E-03
La145	0.6	8.18E-04	9.87E-04	7.54E-04	7.54E-04
Ba141	0.6	8.16E-04	8.23E-04	8.23E-04	8.23E-04
Tc104	0.6	7.91E-04	7.22E-04	1.36E-03	1.36E-03
Mo101	0.6	7.73E-04	7.72E-04	7.66E-04	7.66E-04
Te135	0.6	7.17E-04	6.20E-04	7.28E-04	7.28E-04
Br87	0.5	6.66E-04	6.47E-04	6.34E-04	6.34E-04
Rh110m	0.5	6.45E-04	6.79E-05	—	—
Sb132m	0.5	6.29E-04	6.26E-04	6.24E-04	6.24E-04
Xe138	0.5	6.21E-04	5.68E-04	5.69E-04	5.69E-04
Pr148	0.5	6.08E-04	8.00E-04	6.40E-04	6.40E-04

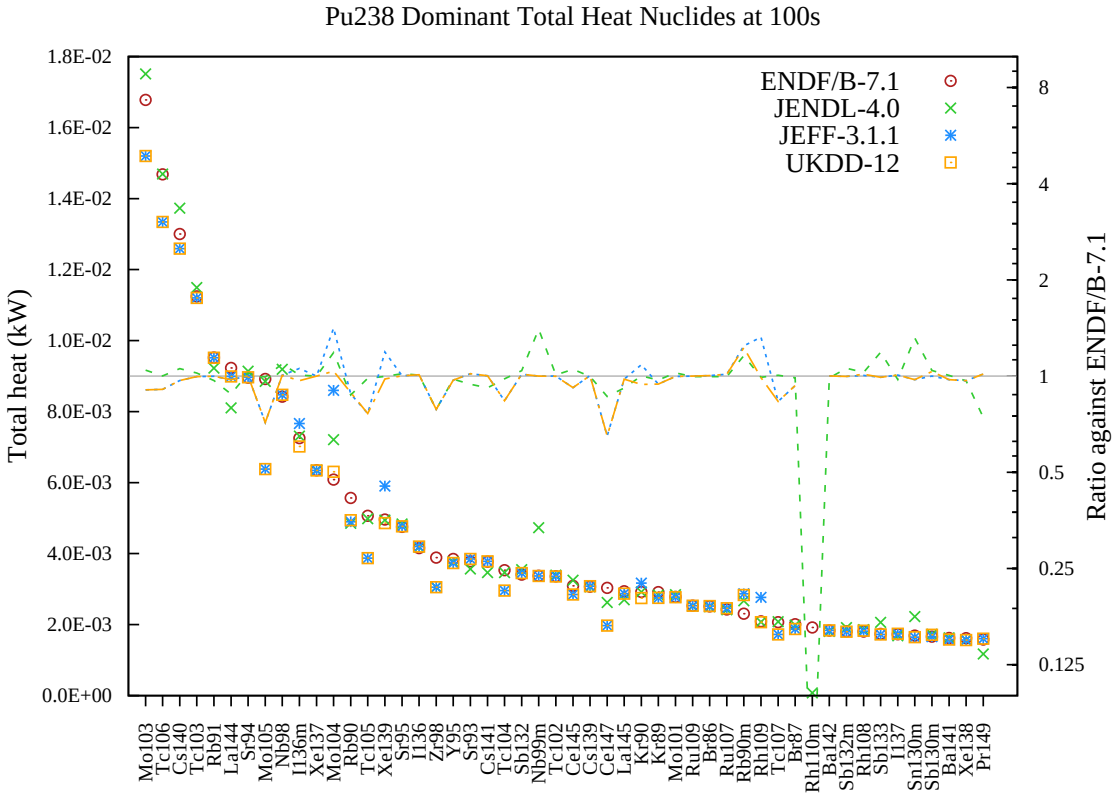

Figure 81: Total heat (in kW) decay data comparison for Pu238 fission pulse after 100s cooling.

Table 81: Total heat (in kW) decay data comparison for Pu238 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Mo103	6.6	1.68E-02	1.75E-02	1.52E-02	1.52E-02
Tc106	5.8	1.47E-02	1.47E-02	1.33E-02	1.33E-02
Cs140	5.1	1.30E-02	1.37E-02	1.26E-02	1.26E-02
Tc103	4.4	1.12E-02	1.15E-02	1.12E-02	1.12E-02
Rb91	3.7	9.52E-03	9.22E-03	9.52E-03	9.52E-03
La144	3.6	9.23E-03	8.11E-03	8.99E-03	8.99E-03
Sr94	3.5	8.96E-03	9.14E-03	8.96E-03	8.96E-03
Mo105	3.5	8.92E-03	8.85E-03	6.38E-03	6.38E-03
Nb98	3.3	8.42E-03	9.19E-03	8.47E-03	8.47E-03
I136m	2.9	7.25E-03	7.31E-03	7.67E-03	7.02E-03
Xe137	2.5	6.35E-03	6.35E-03	6.34E-03	6.34E-03
Mo104	2.4	6.09E-03	7.21E-03	8.60E-03	6.30E-03
Rb90	2.2	5.57E-03	4.86E-03	4.90E-03	4.94E-03
Tc105	2.0	5.07E-03	4.98E-03	3.87E-03	3.87E-03
Xe139	1.9	4.96E-03	4.95E-03	5.90E-03	4.86E-03
Sr95	1.9	4.75E-03	4.84E-03	4.77E-03	4.77E-03
I136	1.6	4.15E-03	4.18E-03	4.20E-03	4.20E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Zr98	1.5	3.89E-03	3.05E-03	3.05E-03	3.05E-03
Y95	1.5	3.85E-03	3.77E-03	3.73E-03	3.73E-03
Sr93	1.5	3.78E-03	3.56E-03	3.85E-03	3.85E-03
Cs141	1.5	3.77E-03	3.47E-03	3.78E-03	3.78E-03
Tc104	1.4	3.53E-03	3.47E-03	2.96E-03	2.96E-03
Sb132	1.3	3.41E-03	3.55E-03	3.45E-03	3.45E-03
Nb99m	1.3	3.37E-03	4.73E-03	3.37E-03	3.37E-03
Tc102	1.3	3.36E-03	3.39E-03	3.36E-03	3.36E-03
Ce145	1.2	3.09E-03	3.25E-03	2.85E-03	2.85E-03
Cs139	1.2	3.07E-03	3.06E-03	3.08E-03	3.08E-03
Ce147	1.2	3.03E-03	2.62E-03	1.97E-03	1.97E-03
La145	1.2	2.94E-03	2.70E-03	2.87E-03	2.87E-03
Kr90	1.1	2.92E-03	2.92E-03	3.17E-03	2.75E-03
Kr89	1.1	2.91E-03	2.83E-03	2.75E-03	2.75E-03
Mo101	1.1	2.78E-03	2.84E-03	2.77E-03	2.77E-03
Ru109	1.0	2.53E-03	2.52E-03	2.53E-03	2.53E-03
Br86	1.0	2.51E-03	2.50E-03	2.52E-03	2.52E-03
Ru107	1.0	2.43E-03	2.42E-03	2.46E-03	2.46E-03
Rb90m	0.9	2.31E-03	2.67E-03	2.87E-03	2.83E-03
Rh109	0.8	2.09E-03	2.07E-03	2.77E-03	2.07E-03
Tc107	0.8	2.07E-03	2.08E-03	1.72E-03	1.72E-03
Br87	0.8	2.01E-03	1.99E-03	1.88E-03	1.88E-03
Rh110m	0.8	1.92E-03	7.86E-05	—	—
Ba142	0.7	1.83E-03	1.81E-03	1.84E-03	1.84E-03
Sb132m	0.7	1.81E-03	1.91E-03	1.80E-03	1.80E-03
Rh108	0.7	1.81E-03	1.86E-03	1.81E-03	1.83E-03
Sb133	0.7	1.74E-03	2.06E-03	1.72E-03	1.72E-03
I137	0.7	1.73E-03	1.69E-03	1.74E-03	1.74E-03
Sn130m	0.7	1.69E-03	2.23E-03	1.65E-03	1.65E-03
Sb130m	0.7	1.66E-03	1.73E-03	1.66E-03	1.71E-03
Ba141	0.6	1.62E-03	1.63E-03	1.58E-03	1.58E-03
Xe138	0.6	1.62E-03	1.57E-03	1.57E-03	1.57E-03
Pr149	0.6	1.58E-03	1.17E-03	1.60E-03	1.60E-03

6.3 1000s after pulse

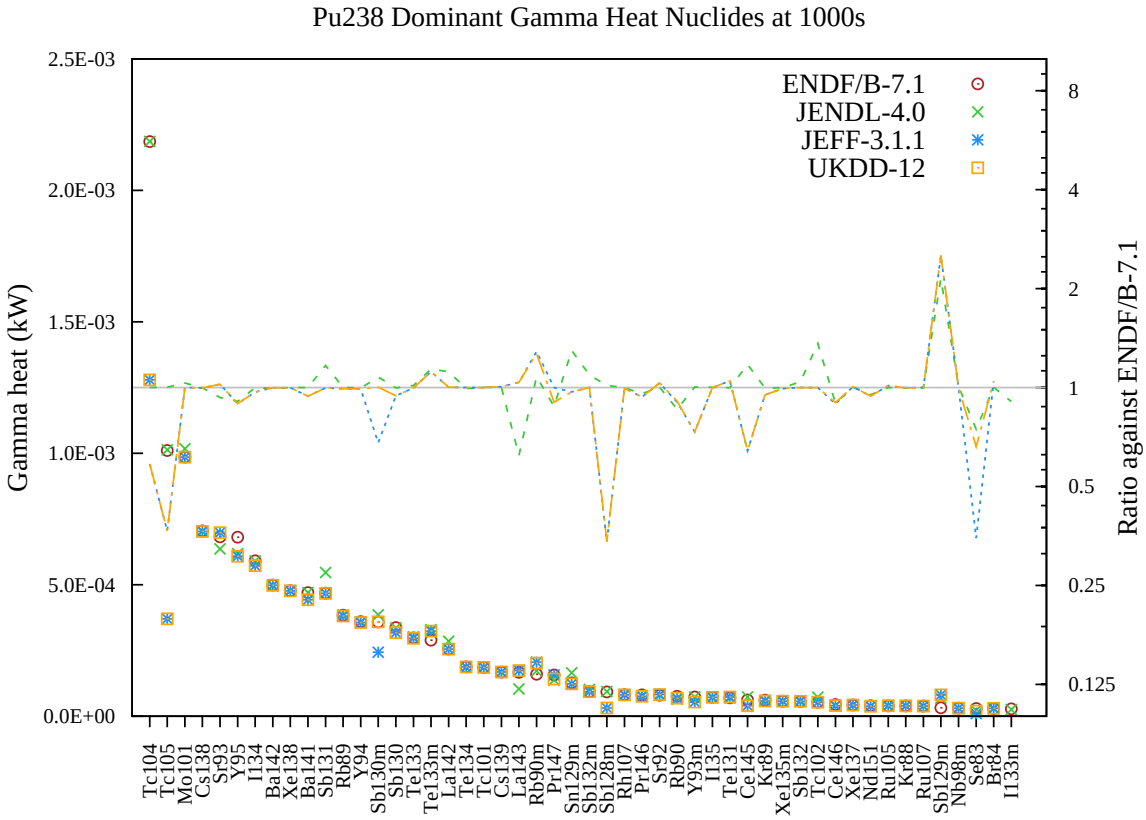

Figure 82: Gamma heat (in kW) decay data comparison for Pu238 fission pulse after 1000s cooling.

Table 82: Gamma heat (in kW) decay data comparison for Pu238 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	15.6	2.19E-03	2.19E-03	1.28E-03	1.28E-03
Tc105	7.2	1.01E-03	1.01E-03	3.70E-04	3.70E-04
Mo101	7.0	9.86E-04	1.02E-03	9.85E-04	9.85E-04
Cs138	5.0	7.04E-04	7.04E-04	7.03E-04	7.03E-04
Sr93	4.9	6.82E-04	6.36E-04	6.98E-04	6.98E-04
Y95	4.9	6.81E-04	6.18E-04	6.08E-04	6.08E-04
I134	4.2	5.91E-04	5.90E-04	5.73E-04	5.73E-04
Ba142	3.6	4.99E-04	4.96E-04	4.98E-04	4.98E-04
Xe138	3.4	4.77E-04	4.77E-04	4.77E-04	4.77E-04
Ba141	3.4	4.70E-04	4.70E-04	4.43E-04	4.43E-04
Sb131	3.3	4.68E-04	5.47E-04	4.68E-04	4.67E-04
Rb89	2.7	3.84E-04	3.85E-04	3.81E-04	3.81E-04
Y94	2.6	3.60E-04	3.59E-04	3.56E-04	3.56E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb130m	2.6	3.58E-04	3.85E-04	2.43E-04	3.59E-04
Sb130	2.4	3.37E-04	3.36E-04	3.18E-04	3.18E-04
Te133	2.1	2.98E-04	3.02E-04	2.97E-04	2.97E-04
Te133m	2.1	2.89E-04	3.29E-04	3.24E-04	3.24E-04
La142	1.8	2.55E-04	2.85E-04	2.56E-04	2.56E-04
Te134	1.3	1.88E-04	1.86E-04	1.88E-04	1.88E-04
Tc101	1.3	1.85E-04	1.86E-04	1.85E-04	1.85E-04
Cs139	1.2	1.67E-04	1.67E-04	1.68E-04	1.68E-04
La143	1.2	1.67E-04	1.04E-04	1.73E-04	1.73E-04
Rb90m	1.1	1.60E-04	1.72E-04	2.05E-04	2.02E-04
Pr147	1.1	1.57E-04	1.37E-04	1.57E-04	1.42E-04
Sn129m	0.9	1.27E-04	1.65E-04	1.23E-04	1.23E-04
Sb132m	0.7	9.33E-05	1.02E-04	9.33E-05	9.33E-05
Sb128m	0.7	9.22E-05	9.36E-05	3.13E-05	3.13E-05
Rh107	0.6	8.17E-05	8.17E-05	8.14E-05	8.14E-05
Pr146	0.6	8.10E-05	7.76E-05	7.58E-05	7.58E-05
Sr92	0.6	7.99E-05	8.00E-05	8.25E-05	8.25E-05
Rb90	0.5	7.56E-05	6.49E-05	6.82E-05	6.87E-05
Y93m	0.5	7.31E-05	7.33E-05	5.36E-05	5.36E-05
I135	0.5	7.16E-05	7.18E-05	7.16E-05	7.16E-05
Te131	0.5	6.96E-05	6.95E-05	7.29E-05	7.29E-05
Ce145	0.4	6.20E-05	7.29E-05	3.98E-05	3.98E-05
Kr89	0.4	6.10E-05	6.08E-05	5.80E-05	5.80E-05
Xe135m	0.4	5.74E-05	5.73E-05	5.70E-05	5.70E-05
Sb132	0.4	5.68E-05	5.91E-05	5.68E-05	5.68E-05
Tc102	0.4	5.34E-05	7.27E-05	5.34E-05	5.33E-05
Ce146	0.3	4.47E-05	4.00E-05	3.99E-05	4.02E-05
Xe137	0.3	4.26E-05	4.27E-05	4.28E-05	4.28E-05
Nd151	0.3	3.99E-05	3.80E-05	3.76E-05	3.76E-05
Ru105	0.3	3.93E-05	3.93E-05	3.98E-05	3.98E-05
Kr88	0.3	3.93E-05	3.92E-05	3.92E-05	3.92E-05
Ru107	0.3	3.87E-05	3.86E-05	3.87E-05	3.87E-05
Sb129m	0.2	3.21E-05	6.88E-05	8.09E-05	8.09E-05
Nb98m	0.2	3.05E-05	3.08E-05	3.05E-05	3.05E-05
Se83	0.2	2.95E-05	2.20E-05	1.03E-05	1.95E-05
Br84	0.2	2.87E-05	2.87E-05	2.99E-05	2.99E-05
I133m	0.2	2.81E-05	—	—	—

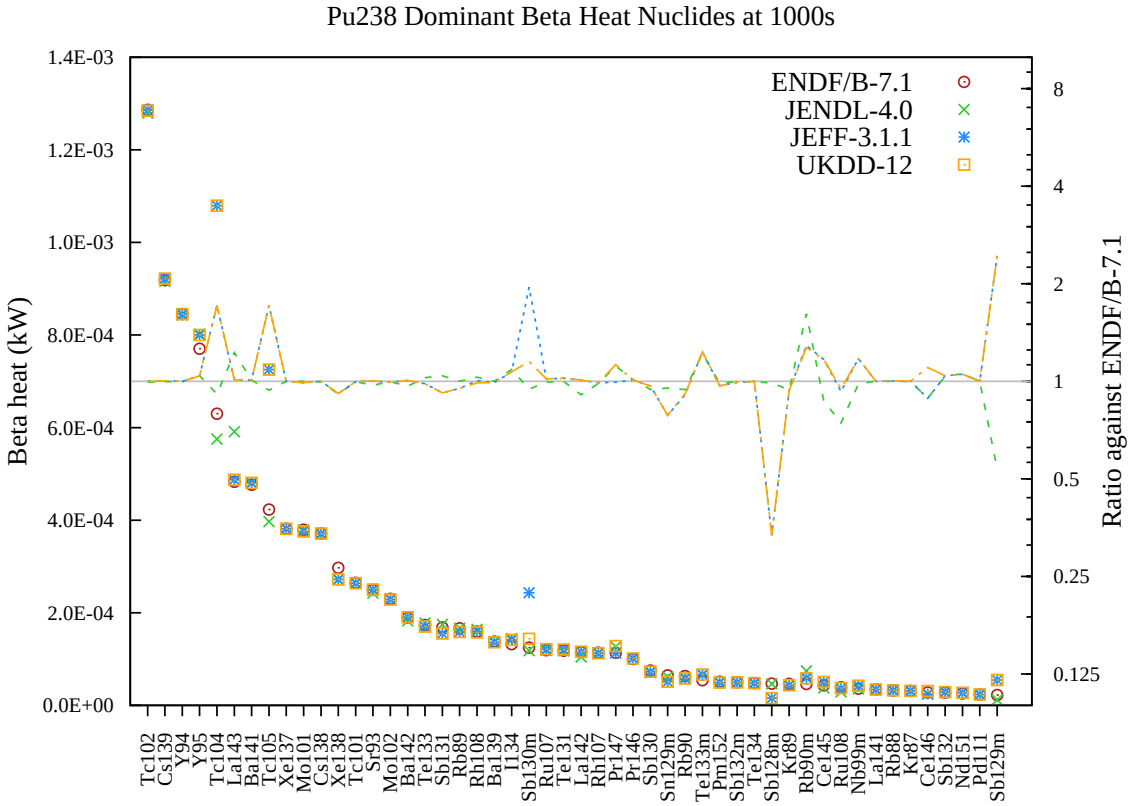

Figure 83: Beta heat (in kW) decay data comparison for Pu238 fission pulse after 1000s cooling.

Table 83: Beta heat (in kW) decay data comparison for Pu238 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	11.5	1.29E-03	1.28E-03	1.29E-03	1.28E-03
Cs139	8.2	9.19E-04	9.16E-04	9.22E-04	9.22E-04
Y94	7.5	8.45E-04	8.43E-04	8.45E-04	8.45E-04
Y95	6.9	7.70E-04	8.02E-04	8.00E-04	8.00E-04
Tc104	5.6	6.30E-04	5.75E-04	1.08E-03	1.08E-03
La143	4.3	4.83E-04	5.91E-04	4.87E-04	4.87E-04
Ba141	4.2	4.77E-04	4.81E-04	4.81E-04	4.81E-04
Tc105	3.8	4.23E-04	3.97E-04	7.25E-04	7.25E-04
Xe137	3.4	3.82E-04	3.82E-04	3.81E-04	3.81E-04
Mo101	3.4	3.79E-04	3.79E-04	3.76E-04	3.76E-04
Cs138	3.3	3.71E-04	3.70E-04	3.71E-04	3.71E-04
Xe138	2.6	2.97E-04	2.71E-04	2.72E-04	2.72E-04
Tc101	2.4	2.65E-04	2.64E-04	2.64E-04	2.64E-04
Sr93	2.2	2.49E-04	2.42E-04	2.50E-04	2.50E-04
Mo102	2.1	2.30E-04	2.30E-04	2.29E-04	2.29E-04
Ba142	1.7	1.89E-04	1.83E-04	1.90E-04	1.90E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te133	1.5	1.73E-04	1.78E-04	1.70E-04	1.70E-04
Sb131	1.5	1.68E-04	1.75E-04	1.55E-04	1.55E-04
Rb89	1.5	1.67E-04	1.67E-04	1.58E-04	1.58E-04
Rh108	1.4	1.59E-04	1.64E-04	1.60E-04	1.58E-04
Ba139	1.2	1.38E-04	1.38E-04	1.36E-04	1.36E-04
I134	1.2	1.32E-04	1.44E-04	1.41E-04	1.41E-04
Sb130m	1.1	1.25E-04	1.18E-04	2.43E-04	1.44E-04
Ru107	1.1	1.19E-04	1.19E-04	1.21E-04	1.21E-04
Te131	1.1	1.18E-04	1.18E-04	1.21E-04	1.21E-04
La142	1.0	1.15E-04	1.05E-04	1.16E-04	1.16E-04
Rh107	1.0	1.14E-04	1.12E-04	1.13E-04	1.13E-04
Pr147	1.0	1.14E-04	1.27E-04	1.13E-04	1.28E-04
Pr146	0.9	1.00E-04	1.01E-04	1.01E-04	1.01E-04
Sb130	0.7	7.51E-05	7.09E-05	7.26E-05	7.26E-05
Sn129m	0.6	6.48E-05	6.18E-05	5.09E-05	5.09E-05
Rb90	0.6	6.33E-05	5.98E-05	5.75E-05	5.80E-05
Te133m	0.5	5.42E-05	6.60E-05	6.67E-05	6.67E-05
Pm152	0.5	5.09E-05	5.03E-05	4.93E-05	4.93E-05
Sb132m	0.4	4.98E-05	4.96E-05	4.94E-05	4.94E-05
Te134	0.4	4.81E-05	4.79E-05	4.81E-05	4.81E-05
Sb128m	0.4	4.70E-05	4.65E-05	1.57E-05	1.57E-05
Kr89	0.4	4.64E-05	4.36E-05	4.35E-05	4.35E-05
Rb90m	0.4	4.60E-05	7.44E-05	5.93E-05	5.85E-05
Ce145	0.4	4.33E-05	3.77E-05	5.06E-05	5.06E-05
Ru108	0.4	3.93E-05	2.92E-05	3.65E-05	3.72E-05
Nb99m	0.3	3.60E-05	3.54E-05	4.24E-05	4.24E-05
La141	0.3	3.44E-05	3.44E-05	3.44E-05	3.44E-05
Rb88	0.3	3.22E-05	3.22E-05	3.22E-05	3.22E-05
Kr87	0.3	3.11E-05	3.11E-05	3.12E-05	3.12E-05
Ce146	0.2	2.79E-05	2.47E-05	2.47E-05	3.07E-05
Sb132	0.2	2.74E-05	2.84E-05	2.85E-05	2.85E-05
Nd151	0.2	2.57E-05	2.72E-05	2.71E-05	2.71E-05
Pd111	0.2	2.35E-05	2.35E-05	2.36E-05	2.36E-05
Sb129m	0.2	2.24E-05	1.20E-05	5.47E-05	5.47E-05

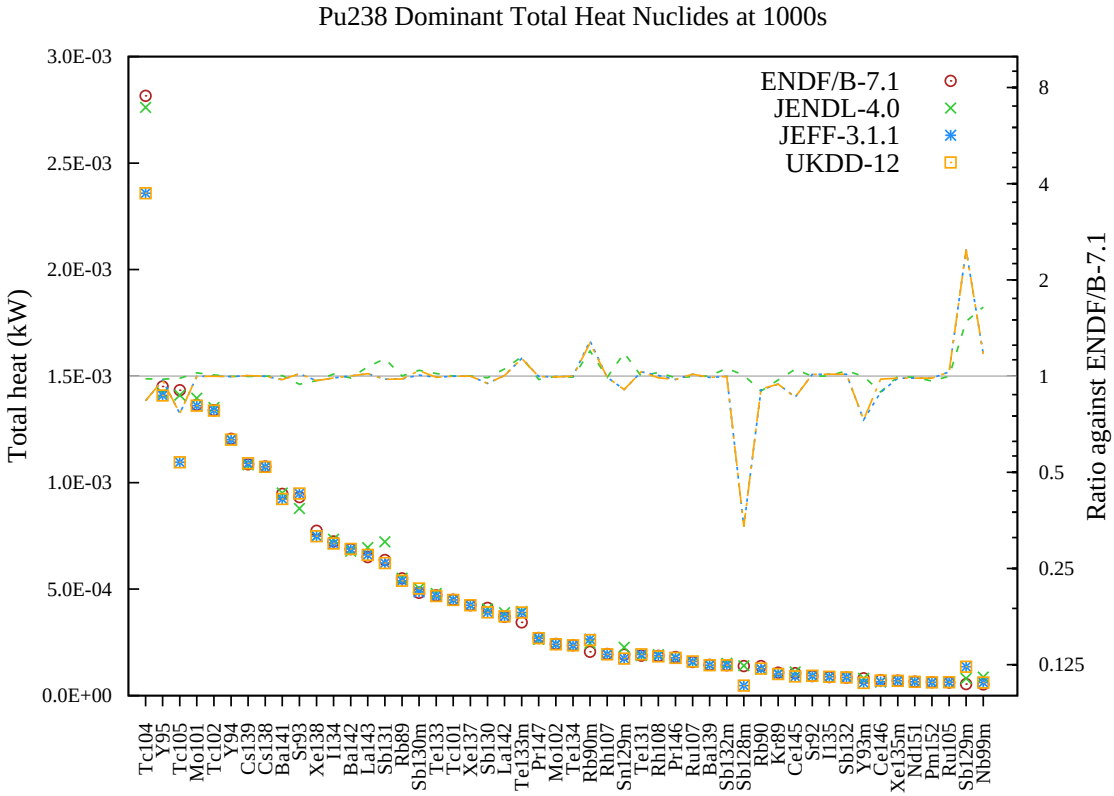

Figure 84: Total heat (in kW) decay data comparison for Pu238 fission pulse after 1000s cooling.

Table 84: Total heat (in kW) decay data comparison for Pu238 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	11.2	2.82E-03	2.76E-03	2.36E-03	2.36E-03
Y95	5.8	1.45E-03	1.42E-03	1.41E-03	1.41E-03
Tc105	5.7	1.43E-03	1.41E-03	1.10E-03	1.10E-03
Mo101	5.4	1.36E-03	1.40E-03	1.36E-03	1.36E-03
Tc102	5.3	1.34E-03	1.35E-03	1.34E-03	1.34E-03
Y94	4.8	1.21E-03	1.20E-03	1.20E-03	1.20E-03
Cs139	4.3	1.09E-03	1.08E-03	1.09E-03	1.09E-03
Cs138	4.3	1.08E-03	1.07E-03	1.07E-03	1.07E-03
Ba141	3.8	9.47E-04	9.51E-04	9.23E-04	9.23E-04
Sr93	3.7	9.32E-04	8.79E-04	9.48E-04	9.48E-04
Xe138	3.1	7.74E-04	7.49E-04	7.49E-04	7.49E-04
I134	2.9	7.23E-04	7.34E-04	7.14E-04	7.14E-04
Ba142	2.7	6.88E-04	6.78E-04	6.88E-04	6.88E-04
La143	2.6	6.50E-04	6.95E-04	6.61E-04	6.61E-04
Sb131	2.5	6.37E-04	7.22E-04	6.23E-04	6.23E-04
Rb89	2.2	5.51E-04	5.52E-04	5.39E-04	5.39E-04
Sb130m	1.9	4.83E-04	5.04E-04	4.87E-04	5.03E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te133	1.9	4.71E-04	4.80E-04	4.67E-04	4.67E-04
Tc101	1.8	4.50E-04	4.50E-04	4.49E-04	4.49E-04
Xe137	1.7	4.24E-04	4.25E-04	4.24E-04	4.24E-04
Sb130	1.6	4.12E-04	4.07E-04	3.91E-04	3.91E-04
La142	1.5	3.70E-04	3.90E-04	3.71E-04	3.71E-04
Te133m	1.4	3.44E-04	3.95E-04	3.90E-04	3.90E-04
Pr147	1.1	2.71E-04	2.64E-04	2.70E-04	2.70E-04
Mo102	1.0	2.42E-04	2.42E-04	2.41E-04	2.41E-04
Te134	0.9	2.36E-04	2.34E-04	2.36E-04	2.36E-04
Rb90m	0.8	2.06E-04	2.46E-04	2.65E-04	2.61E-04
Rh107	0.8	1.96E-04	1.94E-04	1.94E-04	1.94E-04
Sn129m	0.8	1.92E-04	2.27E-04	1.74E-04	1.74E-04
Te131	0.7	1.88E-04	1.87E-04	1.93E-04	1.93E-04
Rh108	0.7	1.87E-04	1.92E-04	1.88E-04	1.85E-04
Pr146	0.7	1.81E-04	1.79E-04	1.77E-04	1.77E-04
Ru107	0.6	1.58E-04	1.57E-04	1.60E-04	1.60E-04
Ba139	0.6	1.45E-04	1.45E-04	1.43E-04	1.43E-04
Sb132m	0.6	1.43E-04	1.51E-04	1.43E-04	1.43E-04
Sb128m	0.6	1.39E-04	1.40E-04	4.71E-05	4.71E-05
Rb90	0.6	1.39E-04	1.25E-04	1.26E-04	1.27E-04
Kr89	0.4	1.07E-04	1.04E-04	1.01E-04	1.01E-04
Ce145	0.4	1.05E-04	1.11E-04	9.04E-05	9.04E-05
Sr92	0.4	9.21E-05	9.20E-05	9.32E-05	9.32E-05
I135	0.3	8.70E-05	8.72E-05	8.82E-05	8.82E-05
Sb132	0.3	8.42E-05	8.76E-05	8.53E-05	8.53E-05
Y93m	0.3	8.16E-05	8.14E-05	5.96E-05	5.96E-05
Ce146	0.3	7.26E-05	6.48E-05	6.45E-05	7.10E-05
Xe135m	0.3	7.05E-05	7.04E-05	6.95E-05	6.95E-05
Nd151	0.3	6.56E-05	6.51E-05	6.47E-05	6.47E-05
Pm152	0.3	6.33E-05	6.11E-05	6.24E-05	6.24E-05
Ru105	0.2	6.14E-05	6.13E-05	6.33E-05	6.33E-05
Sb129m	0.2	5.45E-05	8.08E-05	1.36E-04	1.36E-04
Nb99m	0.2	5.27E-05	8.67E-05	6.18E-05	6.18E-05

6.4 5011s after pulse

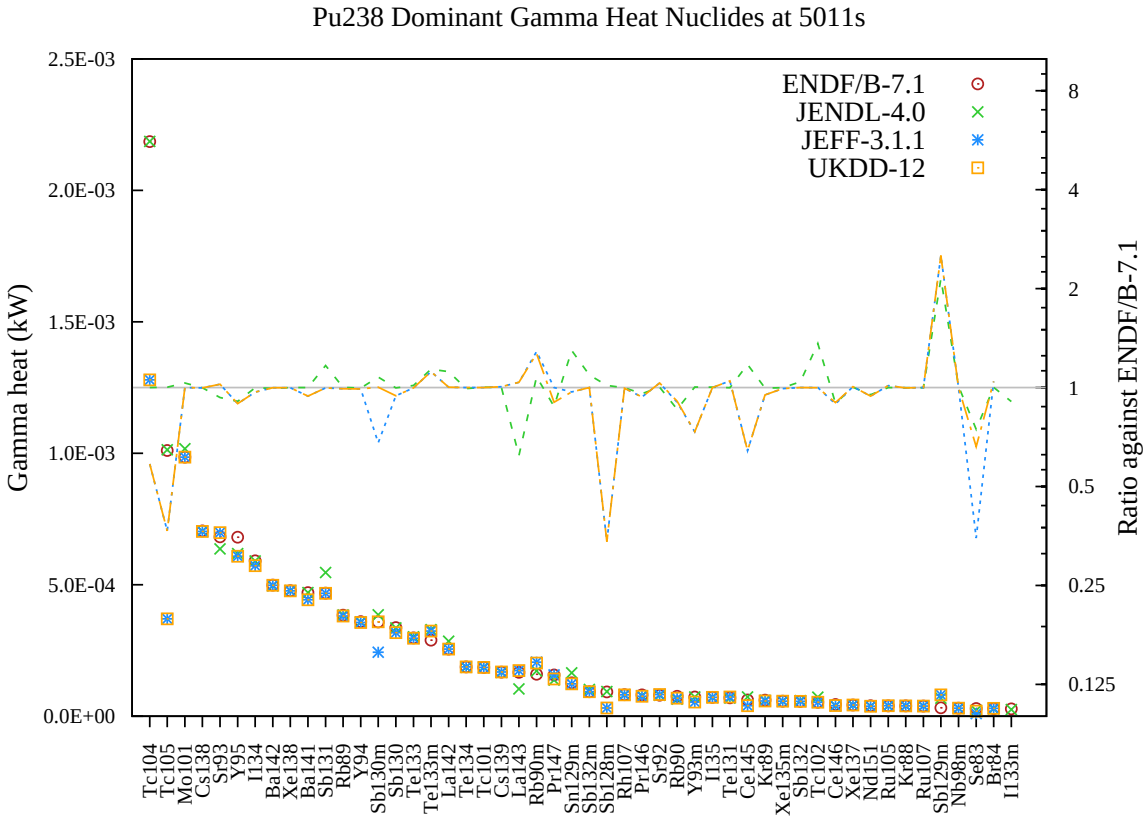

Figure 85: Gamma heat (in kW) decay data comparison for Pu238 fission pulse after 5011s cooling.

Table 85: Gamma heat (in kW) decay data comparison for Pu238 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	15.6	2.19E-03	2.19E-03	1.28E-03	1.28E-03
Tc105	7.2	1.01E-03	1.01E-03	3.70E-04	3.70E-04
Mo101	7.0	9.86E-04	1.02E-03	9.85E-04	9.85E-04
Cs138	5.0	7.04E-04	7.04E-04	7.03E-04	7.03E-04
Sr93	4.9	6.82E-04	6.36E-04	6.98E-04	6.98E-04
Y95	4.9	6.81E-04	6.18E-04	6.08E-04	6.08E-04
I134	4.2	5.91E-04	5.90E-04	5.73E-04	5.73E-04
Ba142	3.6	4.99E-04	4.96E-04	4.98E-04	4.98E-04
Xe138	3.4	4.77E-04	4.77E-04	4.77E-04	4.77E-04
Ba141	3.4	4.70E-04	4.70E-04	4.43E-04	4.43E-04
Sb131	3.3	4.68E-04	5.47E-04	4.68E-04	4.67E-04
Rb89	2.7	3.84E-04	3.85E-04	3.81E-04	3.81E-04
Y94	2.6	3.60E-04	3.59E-04	3.56E-04	3.56E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb130m	2.6	3.58E-04	3.85E-04	2.43E-04	3.59E-04
Sb130	2.4	3.37E-04	3.36E-04	3.18E-04	3.18E-04
Te133	2.1	2.98E-04	3.02E-04	2.97E-04	2.97E-04
Te133m	2.1	2.89E-04	3.29E-04	3.24E-04	3.24E-04
La142	1.8	2.55E-04	2.85E-04	2.56E-04	2.56E-04
Te134	1.3	1.88E-04	1.86E-04	1.88E-04	1.88E-04
Tc101	1.3	1.85E-04	1.86E-04	1.85E-04	1.85E-04
Cs139	1.2	1.67E-04	1.67E-04	1.68E-04	1.68E-04
La143	1.2	1.67E-04	1.04E-04	1.73E-04	1.73E-04
Rb90m	1.1	1.60E-04	1.72E-04	2.05E-04	2.02E-04
Pr147	1.1	1.57E-04	1.37E-04	1.57E-04	1.42E-04
Sn129m	0.9	1.27E-04	1.65E-04	1.23E-04	1.23E-04
Sb132m	0.7	9.33E-05	1.02E-04	9.33E-05	9.33E-05
Sb128m	0.7	9.22E-05	9.36E-05	3.13E-05	3.13E-05
Rh107	0.6	8.17E-05	8.17E-05	8.14E-05	8.14E-05
Pr146	0.6	8.10E-05	7.76E-05	7.58E-05	7.58E-05
Sr92	0.6	7.99E-05	8.00E-05	8.25E-05	8.25E-05
Rb90	0.5	7.56E-05	6.49E-05	6.82E-05	6.87E-05
Y93m	0.5	7.31E-05	7.33E-05	5.36E-05	5.36E-05
I135	0.5	7.16E-05	7.18E-05	7.16E-05	7.16E-05
Te131	0.5	6.96E-05	6.95E-05	7.29E-05	7.29E-05
Ce145	0.4	6.20E-05	7.29E-05	3.98E-05	3.98E-05
Kr89	0.4	6.10E-05	6.08E-05	5.80E-05	5.80E-05
Xe135m	0.4	5.74E-05	5.73E-05	5.70E-05	5.70E-05
Sb132	0.4	5.68E-05	5.91E-05	5.68E-05	5.68E-05
Tc102	0.4	5.34E-05	7.27E-05	5.34E-05	5.33E-05
Ce146	0.3	4.47E-05	4.00E-05	3.99E-05	4.02E-05
Xe137	0.3	4.26E-05	4.27E-05	4.28E-05	4.28E-05
Nd151	0.3	3.99E-05	3.80E-05	3.76E-05	3.76E-05
Ru105	0.3	3.93E-05	3.93E-05	3.98E-05	3.98E-05
Kr88	0.3	3.93E-05	3.92E-05	3.92E-05	3.92E-05
Ru107	0.3	3.87E-05	3.86E-05	3.87E-05	3.87E-05
Sb129m	0.2	3.21E-05	6.88E-05	8.09E-05	8.09E-05
Nb98m	0.2	3.05E-05	3.08E-05	3.05E-05	3.05E-05
Se83	0.2	2.95E-05	2.20E-05	1.03E-05	1.95E-05
Br84	0.2	2.87E-05	2.87E-05	2.99E-05	2.99E-05
I133m	0.2	2.81E-05	—	—	—

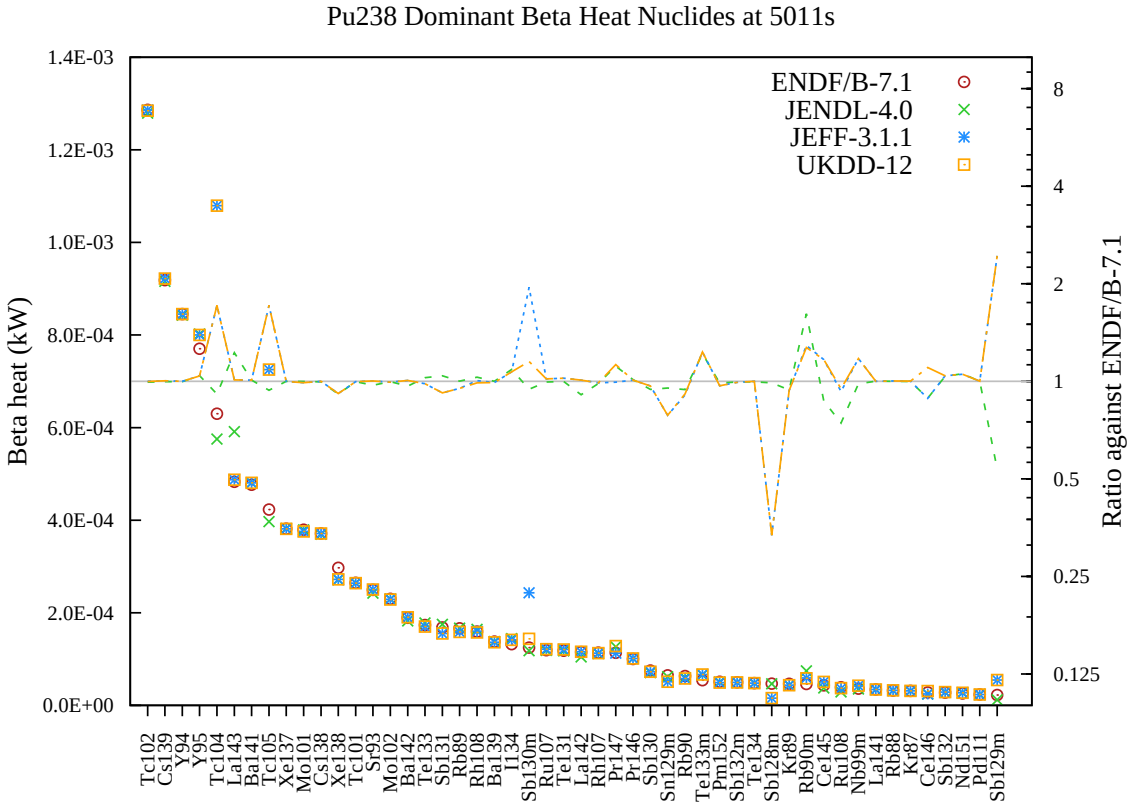

Figure 86: Beta heat (in kW) decay data comparison for Pu238 fission pulse after 5011s cooling.

Table 86: Beta heat (in kW) decay data comparison for Pu238 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	11.5	1.29E-03	1.28E-03	1.29E-03	1.28E-03
Cs139	8.2	9.19E-04	9.16E-04	9.22E-04	9.22E-04
Y94	7.5	8.45E-04	8.43E-04	8.45E-04	8.45E-04
Y95	6.9	7.70E-04	8.02E-04	8.00E-04	8.00E-04
Tc104	5.6	6.30E-04	5.75E-04	1.08E-03	1.08E-03
La143	4.3	4.83E-04	5.91E-04	4.87E-04	4.87E-04
Ba141	4.2	4.77E-04	4.81E-04	4.81E-04	4.81E-04
Tc105	3.8	4.23E-04	3.97E-04	7.25E-04	7.25E-04
Xe137	3.4	3.82E-04	3.82E-04	3.81E-04	3.81E-04
Mo101	3.4	3.79E-04	3.79E-04	3.76E-04	3.76E-04
Cs138	3.3	3.71E-04	3.70E-04	3.71E-04	3.71E-04
Xe138	2.6	2.97E-04	2.71E-04	2.72E-04	2.72E-04
Tc101	2.4	2.65E-04	2.64E-04	2.64E-04	2.64E-04
Sr93	2.2	2.49E-04	2.42E-04	2.50E-04	2.50E-04
Mo102	2.1	2.30E-04	2.30E-04	2.29E-04	2.29E-04
Ba142	1.7	1.89E-04	1.83E-04	1.90E-04	1.90E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te133	1.5	1.73E-04	1.78E-04	1.70E-04	1.70E-04
Sb131	1.5	1.68E-04	1.75E-04	1.55E-04	1.55E-04
Rb89	1.5	1.67E-04	1.67E-04	1.58E-04	1.58E-04
Rh108	1.4	1.59E-04	1.64E-04	1.60E-04	1.58E-04
Ba139	1.2	1.38E-04	1.38E-04	1.36E-04	1.36E-04
I134	1.2	1.32E-04	1.44E-04	1.41E-04	1.41E-04
Sb130m	1.1	1.25E-04	1.18E-04	2.43E-04	1.44E-04
Ru107	1.1	1.19E-04	1.19E-04	1.21E-04	1.21E-04
Te131	1.1	1.18E-04	1.18E-04	1.21E-04	1.21E-04
La142	1.0	1.15E-04	1.05E-04	1.16E-04	1.16E-04
Rh107	1.0	1.14E-04	1.12E-04	1.13E-04	1.13E-04
Pr147	1.0	1.14E-04	1.27E-04	1.13E-04	1.28E-04
Pr146	0.9	1.00E-04	1.01E-04	1.01E-04	1.01E-04
Sb130	0.7	7.51E-05	7.09E-05	7.26E-05	7.26E-05
Sn129m	0.6	6.48E-05	6.18E-05	5.09E-05	5.09E-05
Rb90	0.6	6.33E-05	5.98E-05	5.75E-05	5.80E-05
Te133m	0.5	5.42E-05	6.60E-05	6.67E-05	6.67E-05
Pm152	0.5	5.09E-05	5.03E-05	4.93E-05	4.93E-05
Sb132m	0.4	4.98E-05	4.96E-05	4.94E-05	4.94E-05
Te134	0.4	4.81E-05	4.79E-05	4.81E-05	4.81E-05
Sb128m	0.4	4.70E-05	4.65E-05	1.57E-05	1.57E-05
Kr89	0.4	4.64E-05	4.36E-05	4.35E-05	4.35E-05
Rb90m	0.4	4.60E-05	7.44E-05	5.93E-05	5.85E-05
Ce145	0.4	4.33E-05	3.77E-05	5.06E-05	5.06E-05
Ru108	0.4	3.93E-05	2.92E-05	3.65E-05	3.72E-05
Nb99m	0.3	3.60E-05	3.54E-05	4.24E-05	4.24E-05
La141	0.3	3.44E-05	3.44E-05	3.44E-05	3.44E-05
Rb88	0.3	3.22E-05	3.22E-05	3.22E-05	3.22E-05
Kr87	0.3	3.11E-05	3.11E-05	3.12E-05	3.12E-05
Ce146	0.2	2.79E-05	2.47E-05	2.47E-05	3.07E-05
Sb132	0.2	2.74E-05	2.84E-05	2.85E-05	2.85E-05
Nd151	0.2	2.57E-05	2.72E-05	2.71E-05	2.71E-05
Pd111	0.2	2.35E-05	2.35E-05	2.36E-05	2.36E-05
Sb129m	0.2	2.24E-05	1.20E-05	5.47E-05	5.47E-05

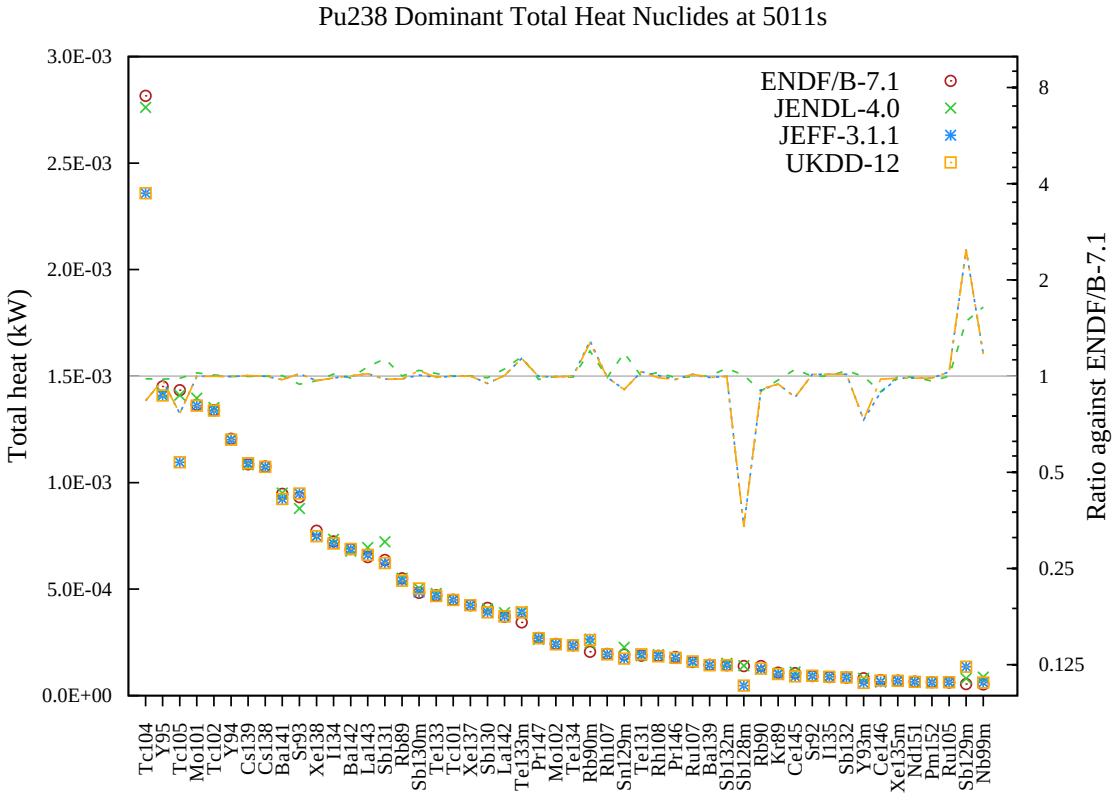

Figure 87: Total heat (in kW) decay data comparison for Pu238 fission pulse after 5011s cooling.

Table 87: Total heat (in kW) decay data comparison for Pu238 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	11.2	2.82E-03	2.76E-03	2.36E-03	2.36E-03
Y95	5.8	1.45E-03	1.42E-03	1.41E-03	1.41E-03
Tc105	5.7	1.43E-03	1.41E-03	1.10E-03	1.10E-03
Mo101	5.4	1.36E-03	1.40E-03	1.36E-03	1.36E-03
Tc102	5.3	1.34E-03	1.35E-03	1.34E-03	1.34E-03
Y94	4.8	1.21E-03	1.20E-03	1.20E-03	1.20E-03
Cs139	4.3	1.09E-03	1.08E-03	1.09E-03	1.09E-03
Cs138	4.3	1.08E-03	1.07E-03	1.07E-03	1.07E-03
Ba141	3.8	9.47E-04	9.51E-04	9.23E-04	9.23E-04
Sr93	3.7	9.32E-04	8.79E-04	9.48E-04	9.48E-04
Xe138	3.1	7.74E-04	7.49E-04	7.49E-04	7.49E-04
I134	2.9	7.23E-04	7.34E-04	7.14E-04	7.14E-04
Ba142	2.7	6.88E-04	6.78E-04	6.88E-04	6.88E-04
La143	2.6	6.50E-04	6.95E-04	6.61E-04	6.61E-04
Sb131	2.5	6.37E-04	7.22E-04	6.23E-04	6.23E-04
Rb89	2.2	5.51E-04	5.52E-04	5.39E-04	5.39E-04
Sb130m	1.9	4.83E-04	5.04E-04	4.87E-04	5.03E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te133	1.9	4.71E-04	4.80E-04	4.67E-04	4.67E-04
Tc101	1.8	4.50E-04	4.50E-04	4.49E-04	4.49E-04
Xe137	1.7	4.24E-04	4.25E-04	4.24E-04	4.24E-04
Sb130	1.6	4.12E-04	4.07E-04	3.91E-04	3.91E-04
La142	1.5	3.70E-04	3.90E-04	3.71E-04	3.71E-04
Te133m	1.4	3.44E-04	3.95E-04	3.90E-04	3.90E-04
Pr147	1.1	2.71E-04	2.64E-04	2.70E-04	2.70E-04
Mo102	1.0	2.42E-04	2.42E-04	2.41E-04	2.41E-04
Te134	0.9	2.36E-04	2.34E-04	2.36E-04	2.36E-04
Rb90m	0.8	2.06E-04	2.46E-04	2.65E-04	2.61E-04
Rh107	0.8	1.96E-04	1.94E-04	1.94E-04	1.94E-04
Sn129m	0.8	1.92E-04	2.27E-04	1.74E-04	1.74E-04
Te131	0.7	1.88E-04	1.87E-04	1.93E-04	1.93E-04
Rh108	0.7	1.87E-04	1.92E-04	1.88E-04	1.85E-04
Pr146	0.7	1.81E-04	1.79E-04	1.77E-04	1.77E-04
Ru107	0.6	1.58E-04	1.57E-04	1.60E-04	1.60E-04
Ba139	0.6	1.45E-04	1.45E-04	1.43E-04	1.43E-04
Sb132m	0.6	1.43E-04	1.51E-04	1.43E-04	1.43E-04
Sb128m	0.6	1.39E-04	1.40E-04	4.71E-05	4.71E-05
Rb90	0.6	1.39E-04	1.25E-04	1.26E-04	1.27E-04
Kr89	0.4	1.07E-04	1.04E-04	1.01E-04	1.01E-04
Ce145	0.4	1.05E-04	1.11E-04	9.04E-05	9.04E-05
Sr92	0.4	9.21E-05	9.20E-05	9.32E-05	9.32E-05
I135	0.3	8.70E-05	8.72E-05	8.82E-05	8.82E-05
Sb132	0.3	8.42E-05	8.76E-05	8.53E-05	8.53E-05
Y93m	0.3	8.16E-05	8.14E-05	5.96E-05	5.96E-05
Ce146	0.3	7.26E-05	6.48E-05	6.45E-05	7.10E-05
Xe135m	0.3	7.05E-05	7.04E-05	6.95E-05	6.95E-05
Nd151	0.3	6.56E-05	6.51E-05	6.47E-05	6.47E-05
Pm152	0.3	6.33E-05	6.11E-05	6.24E-05	6.24E-05
Ru105	0.2	6.14E-05	6.13E-05	6.33E-05	6.33E-05
Sb129m	0.2	5.45E-05	8.08E-05	1.36E-04	1.36E-04
Nb99m	0.2	5.27E-05	8.67E-05	6.18E-05	6.18E-05

6.5 10000s after pulse

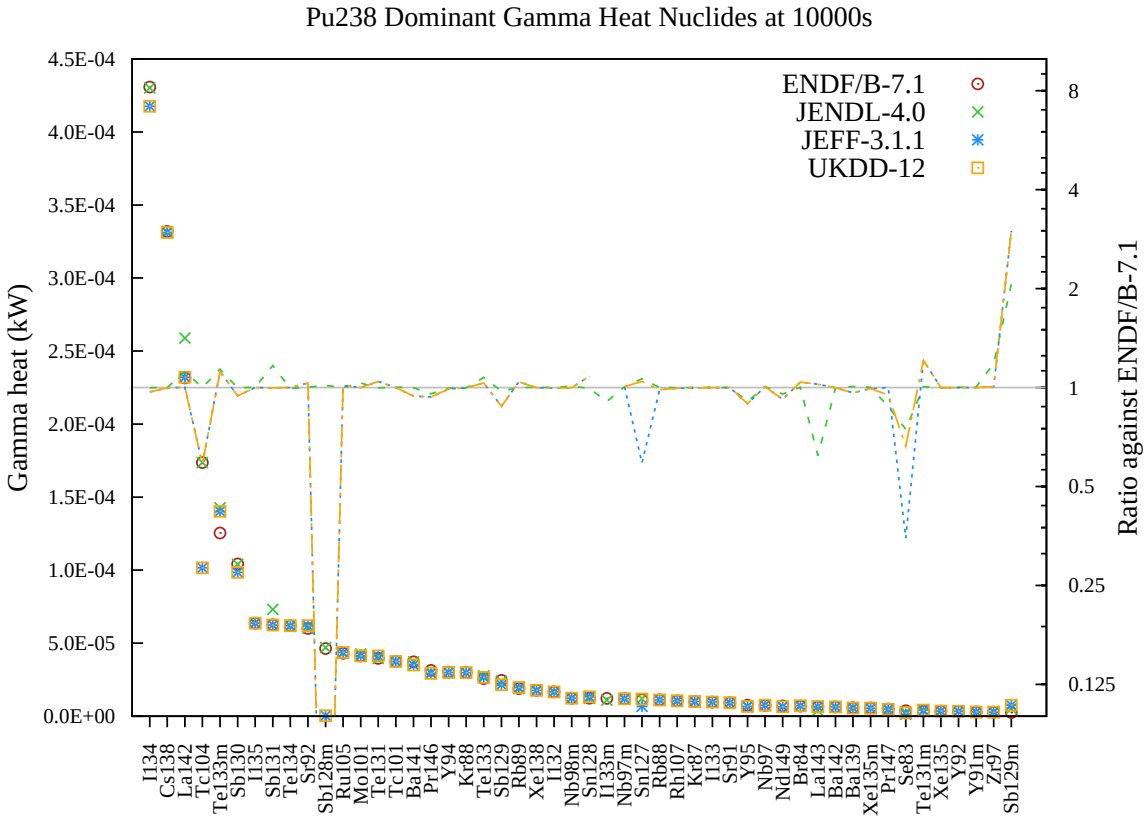

Figure 88: Gamma heat (in kW) decay data comparison for Pu238 fission pulse after 10000s cooling.

Table 88: Gamma heat (in kW) decay data comparison for Pu238 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	18.7	4.31E-04	4.30E-04	4.18E-04	4.18E-04
Cs138	14.4	3.32E-04	3.32E-04	3.31E-04	3.31E-04
La142	10.1	2.32E-04	2.59E-04	2.32E-04	2.32E-04
Tc104	7.5	1.74E-04	1.74E-04	1.02E-04	1.02E-04
Te133m	5.4	1.25E-04	1.43E-04	1.40E-04	1.40E-04
Sb130	4.5	1.04E-04	1.04E-04	9.84E-05	9.84E-05
I135	2.8	6.37E-05	6.38E-05	6.37E-05	6.37E-05
Sb131	2.7	6.26E-05	7.31E-05	6.25E-05	6.25E-05
Te134	2.7	6.20E-05	6.16E-05	6.20E-05	6.20E-05
Sr92	2.6	6.01E-05	6.02E-05	6.20E-05	6.20E-05
Sb128m	2.0	4.64E-05	4.70E-05	3.64E-07	3.64E-07
Ru105	1.9	4.31E-05	4.31E-05	4.37E-05	4.37E-05
Mo101	1.8	4.13E-05	4.26E-05	4.13E-05	4.13E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te131	1.7	3.96E-05	3.95E-05	4.13E-05	4.13E-05
Tc101	1.6	3.75E-05	3.76E-05	3.75E-05	3.75E-05
Ba141	1.6	3.72E-05	3.72E-05	3.50E-05	3.50E-05
Pr146	1.4	3.13E-05	3.00E-05	2.93E-05	2.93E-05
Y94	1.3	3.02E-05	3.01E-05	2.99E-05	2.99E-05
Kr88	1.3	2.99E-05	2.99E-05	2.99E-05	2.99E-05
Te133	1.1	2.58E-05	2.77E-05	2.66E-05	2.66E-05
Sb129	1.1	2.46E-05	2.39E-05	2.15E-05	2.15E-05
Rb89	0.8	1.89E-05	1.89E-05	1.97E-05	1.97E-05
Xe138	0.8	1.77E-05	1.78E-05	1.77E-05	1.77E-05
I132	0.7	1.67E-05	1.67E-05	1.66E-05	1.66E-05
Nb98m	0.5	1.24E-05	1.25E-05	1.23E-05	1.23E-05
Sn128	0.5	1.23E-05	1.22E-05	1.33E-05	1.33E-05
I133m	0.5	1.22E-05	—	—	—
Nb97m	0.5	1.19E-05	1.20E-05	1.20E-05	1.20E-05
Sn127	0.5	1.13E-05	1.20E-05	6.64E-06	1.18E-05
Rb88	0.5	1.12E-05	1.12E-05	1.11E-05	1.11E-05
Rh107	0.5	1.05E-05	1.05E-05	1.05E-05	1.05E-05
Kr87	0.4	1.01E-05	1.01E-05	1.00E-05	1.00E-05
I133	0.4	9.72E-06	9.72E-06	9.72E-06	9.72E-06
Sr91	0.4	9.22E-06	9.22E-06	9.22E-06	9.22E-06
Y95	0.3	7.57E-06	6.87E-06	6.76E-06	6.76E-06
Nb97	0.3	7.44E-06	7.48E-06	7.49E-06	7.49E-06
Nd149	0.3	7.05E-06	6.74E-06	6.49E-06	6.49E-06
Br84	0.3	6.93E-06	6.95E-06	7.20E-06	7.20E-06
La143	0.3	6.39E-06	3.96E-06	6.54E-06	6.54E-06
Ba142	0.3	6.29E-06	6.26E-06	6.29E-06	6.29E-06
Ba139	0.3	5.79E-06	5.83E-06	5.58E-06	5.58E-06
Xe135m	0.2	5.58E-06	5.58E-06	5.54E-06	5.54E-06
Pr147	0.2	4.94E-06	4.33E-06	4.94E-06	4.69E-06
Se83	0.2	3.69E-06	2.75E-06	1.29E-06	2.45E-06
Te131m	0.2	3.46E-06	3.49E-06	4.19E-06	4.19E-06
Xe135	0.2	3.46E-06	3.46E-06	3.45E-06	3.45E-06
Y92	0.1	3.33E-06	3.33E-06	3.33E-06	3.33E-06
Y91m	0.1	2.91E-06	2.93E-06	2.91E-06	2.91E-06
Zr97	0.1	2.74E-06	3.24E-06	2.76E-06	2.76E-06
Sb129m	0.1	2.51E-06	5.17E-06	7.51E-06	7.51E-06

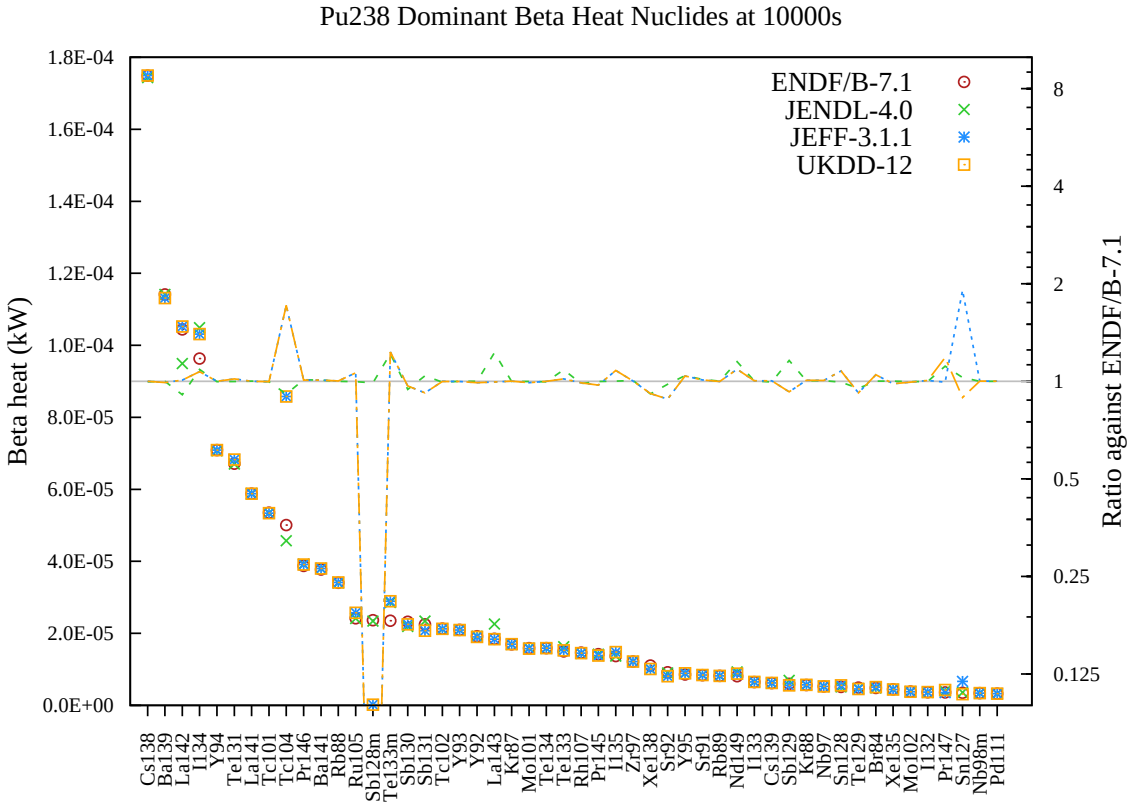

Figure 89: Beta heat (in kW) decay data comparison for Pu238 fission pulse after 10000s cooling.

Table 89: Beta heat (in kW) decay data comparison for Pu238 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	12.8	1.75E-04	1.74E-04	1.75E-04	1.75E-04
Ba139	8.3	1.14E-04	1.14E-04	1.13E-04	1.13E-04
La142	7.6	1.04E-04	9.49E-05	1.05E-04	1.05E-04
I134	7.0	9.63E-05	1.05E-04	1.03E-04	1.03E-04
Y94	5.2	7.09E-05	7.07E-05	7.09E-05	7.09E-05
Te131	4.9	6.71E-05	6.70E-05	6.83E-05	6.83E-05
La141	4.3	5.88E-05	5.88E-05	5.88E-05	5.88E-05
Tc101	3.9	5.35E-05	5.34E-05	5.34E-05	5.34E-05
Tc104	3.7	5.01E-05	4.57E-05	8.58E-05	8.58E-05
Pr146	2.8	3.87E-05	3.92E-05	3.91E-05	3.91E-05
Ba141	2.8	3.77E-05	3.80E-05	3.80E-05	3.80E-05
Rb88	2.5	3.40E-05	3.40E-05	3.41E-05	3.41E-05
Ru105	1.8	2.42E-05	2.41E-05	2.57E-05	2.57E-05
Sb128m	1.7	2.36E-05	2.34E-05	1.83E-07	1.83E-07
Te133m	1.7	2.35E-05	2.86E-05	2.89E-05	2.89E-05
Sb130	1.7	2.32E-05	2.19E-05	2.25E-05	2.25E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb131	1.6	2.25E-05	2.34E-05	2.07E-05	2.07E-05
Tc102	1.6	2.13E-05	2.12E-05	2.13E-05	2.13E-05
Y93	1.5	2.10E-05	2.10E-05	2.09E-05	2.09E-05
Y92	1.4	1.92E-05	1.92E-05	1.90E-05	1.90E-05
La143	1.3	1.85E-05	2.26E-05	1.84E-05	1.84E-05
Kr87	1.2	1.69E-05	1.69E-05	1.70E-05	1.70E-05
Mo101	1.2	1.59E-05	1.59E-05	1.57E-05	1.57E-05
Te134	1.2	1.59E-05	1.58E-05	1.59E-05	1.59E-05
Te133	1.1	1.50E-05	1.63E-05	1.53E-05	1.53E-05
Rh107	1.1	1.47E-05	1.44E-05	1.45E-05	1.45E-05
Pr145	1.0	1.42E-05	1.42E-05	1.38E-05	1.38E-05
I135	1.0	1.37E-05	1.37E-05	1.48E-05	1.48E-05
Zr97	0.9	1.22E-05	1.22E-05	1.22E-05	1.22E-05
Xe138	0.8	1.10E-05	1.01E-05	1.01E-05	1.01E-05
Sr92	0.7	9.17E-06	8.98E-06	8.08E-06	8.08E-06
Y95	0.6	8.56E-06	8.91E-06	8.89E-06	8.89E-06
Sr91	0.6	8.36E-06	8.48E-06	8.44E-06	8.44E-06
Rb89	0.6	8.19E-06	8.20E-06	8.19E-06	8.19E-06
Nd149	0.6	8.09E-06	9.30E-06	8.81E-06	8.81E-06
I133	0.5	6.48E-06	6.50E-06	6.50E-06	6.50E-06
Cs139	0.5	6.19E-06	6.16E-06	6.21E-06	6.21E-06
Sb129	0.4	5.97E-06	6.92E-06	5.54E-06	5.54E-06
Kr88	0.4	5.65E-06	5.67E-06	5.69E-06	5.69E-06
Nb97	0.4	5.25E-06	5.27E-06	5.28E-06	5.28E-06
Sn128	0.4	5.14E-06	5.11E-06	5.53E-06	5.53E-06
Te129	0.4	4.92E-06	4.68E-06	4.53E-06	4.53E-06
Br84	0.4	4.85E-06	4.85E-06	5.08E-06	5.08E-06
Xe135	0.3	4.46E-06	4.46E-06	4.38E-06	4.38E-06
Mo102	0.3	3.81E-06	3.80E-06	3.79E-06	3.79E-06
I132	0.3	3.64E-06	3.64E-06	3.66E-06	3.66E-06
Pr147	0.3	3.58E-06	3.99E-06	3.56E-06	4.24E-06
Sn127	0.3	3.48E-06	3.58E-06	6.64E-06	3.10E-06
Nb98m	0.2	3.42E-06	3.42E-06	3.42E-06	3.42E-06
Pd111	0.2	3.25E-06	3.25E-06	3.26E-06	3.26E-06

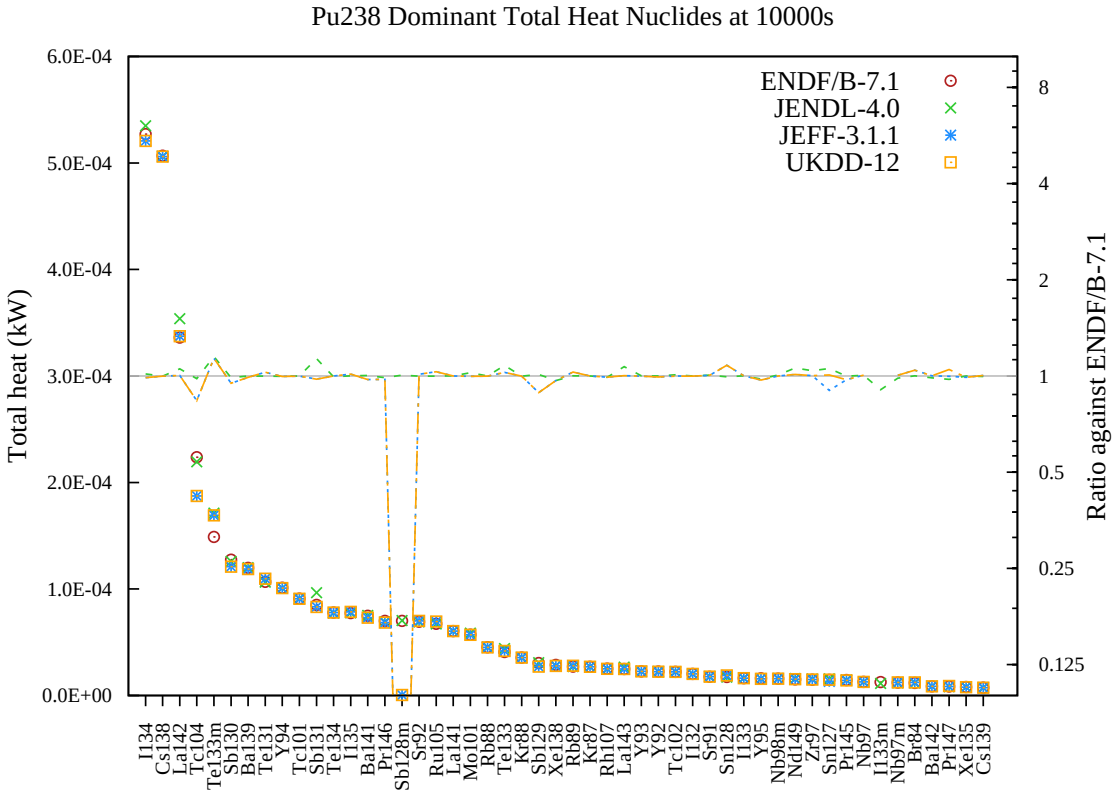

Figure 90: Total heat (in kW) decay data comparison for Pu238 fission pulse after 10000s cooling.

Table 90: Total heat (in kW) decay data comparison for Pu238 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	14.3	5.27E-04	5.35E-04	5.21E-04	5.21E-04
Cs138	13.8	5.07E-04	5.06E-04	5.06E-04	5.06E-04
La142	9.2	3.36E-04	3.54E-04	3.37E-04	3.37E-04
Tc104	6.1	2.24E-04	2.19E-04	1.87E-04	1.87E-04
Te133m	4.1	1.49E-04	1.71E-04	1.69E-04	1.69E-04
Sb130	3.5	1.28E-04	1.26E-04	1.21E-04	1.21E-04
Ba139	3.3	1.20E-04	1.20E-04	1.19E-04	1.19E-04
Te131	2.9	1.07E-04	1.06E-04	1.10E-04	1.10E-04
Y94	2.8	1.01E-04	1.01E-04	1.01E-04	1.01E-04
Tc101	2.5	9.10E-05	9.10E-05	9.08E-05	9.08E-05
Sb131	2.3	8.51E-05	9.65E-05	8.32E-05	8.32E-05
Te134	2.1	7.78E-05	7.74E-05	7.78E-05	7.78E-05
I135	2.1	7.74E-05	7.75E-05	7.85E-05	7.85E-05
Ba141	2.0	7.49E-05	7.52E-05	7.30E-05	7.30E-05
Pr146	1.9	7.01E-05	6.92E-05	6.84E-05	6.84E-05
Sb128m	1.9	7.00E-05	7.04E-05	5.46E-07	5.46E-07
Sr92	1.9	6.92E-05	6.92E-05	7.01E-05	7.01E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Ru105	1.8	6.73E-05	6.72E-05	6.94E-05	6.94E-05
La141	1.6	6.04E-05	6.05E-05	6.04E-05	6.04E-05
Mo101	1.6	5.72E-05	5.85E-05	5.70E-05	5.70E-05
Rb88	1.2	4.53E-05	4.53E-05	4.52E-05	4.52E-05
Te133	1.1	4.08E-05	4.40E-05	4.19E-05	4.19E-05
Kr88	1.0	3.56E-05	3.55E-05	3.55E-05	3.55E-05
Sb129	0.8	3.05E-05	3.09E-05	2.71E-05	2.71E-05
Xe138	0.8	2.88E-05	2.79E-05	2.78E-05	2.78E-05
Rb89	0.7	2.71E-05	2.71E-05	2.79E-05	2.79E-05
Kr87	0.7	2.70E-05	2.70E-05	2.70E-05	2.70E-05
Rh107	0.7	2.52E-05	2.50E-05	2.50E-05	2.50E-05
La143	0.7	2.49E-05	2.66E-05	2.49E-05	2.49E-05
Y93	0.6	2.27E-05	2.27E-05	2.26E-05	2.26E-05
Y92	0.6	2.25E-05	2.25E-05	2.23E-05	2.23E-05
Tc102	0.6	2.22E-05	2.24E-05	2.22E-05	2.21E-05
I132	0.6	2.03E-05	2.03E-05	2.03E-05	2.03E-05
Sr91	0.5	1.76E-05	1.77E-05	1.77E-05	1.77E-05
Sn128	0.5	1.74E-05	1.73E-05	1.88E-05	1.88E-05
I133	0.4	1.62E-05	1.62E-05	1.62E-05	1.62E-05
Y95	0.4	1.61E-05	1.58E-05	1.57E-05	1.57E-05
Nb98m	0.4	1.58E-05	1.59E-05	1.58E-05	1.58E-05
Nd149	0.4	1.51E-05	1.60E-05	1.53E-05	1.53E-05
Zr97	0.4	1.49E-05	1.55E-05	1.49E-05	1.49E-05
Sn127	0.4	1.47E-05	1.56E-05	1.33E-05	1.49E-05
Pr145	0.4	1.46E-05	1.46E-05	1.42E-05	1.42E-05
Nb97	0.3	1.27E-05	1.28E-05	1.28E-05	1.28E-05
I133m	0.3	1.26E-05	1.14E-05	—	—
Nb97m	0.3	1.22E-05	1.20E-05	1.23E-05	1.23E-05
Br84	0.3	1.18E-05	1.18E-05	1.23E-05	1.23E-05
Ba142	0.2	8.68E-06	8.56E-06	8.69E-06	8.69E-06
Pr147	0.2	8.52E-06	8.31E-06	8.49E-06	8.93E-06
Xe135	0.2	7.92E-06	7.92E-06	7.84E-06	7.84E-06
Cs139	0.2	7.32E-06	7.29E-06	7.35E-06	7.35E-06

7 Decay data comparison for ^{239}Pu 0.0253 eV pulse decay heat

7.1 10s after pulse

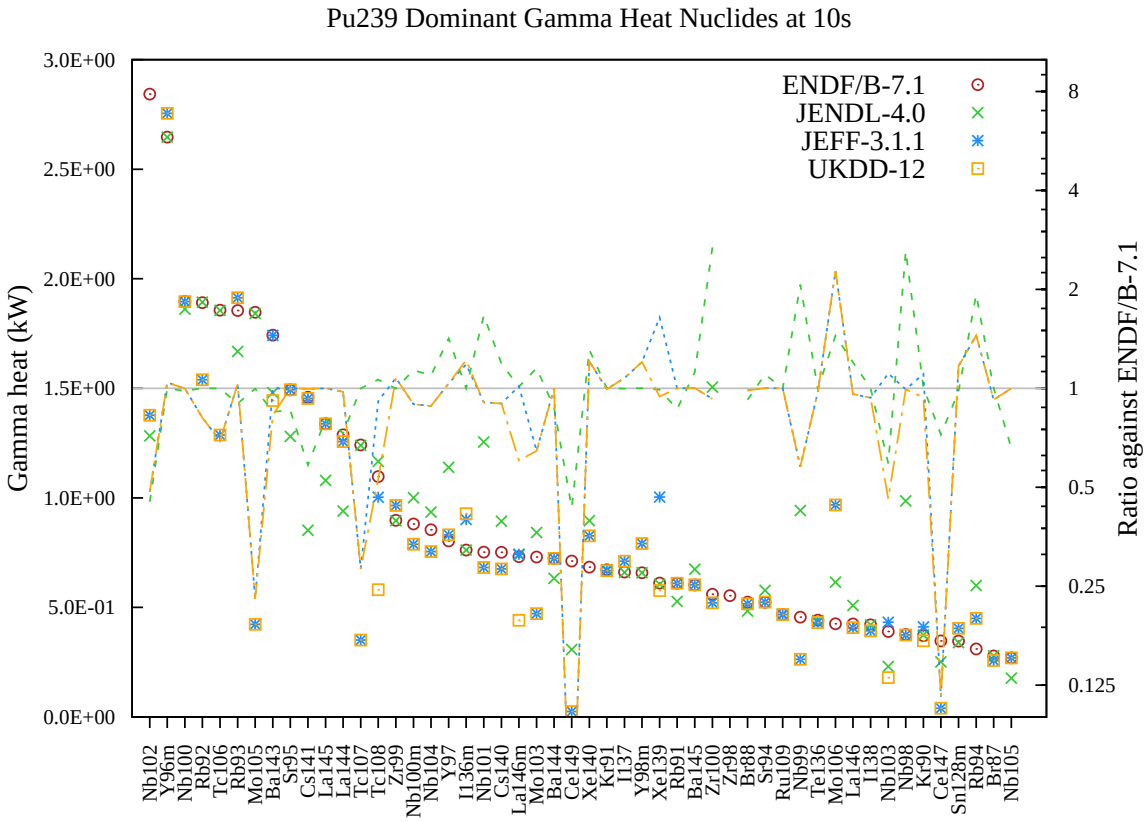

Figure 91: Gamma heat (in kW) decay data comparison for Pu239 fission pulse after 10s cooling.

Table 91: Gamma heat (in kW) decay data comparison for Pu239 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb102	5.4	2.84E+00	1.28E+00	1.38E+00	1.38E+00
Y96m	5.0	2.65E+00	2.65E+00	2.75E+00	2.75E+00
Nb100	3.6	1.90E+00	1.86E+00	1.90E+00	1.90E+00
Rb92	3.6	1.89E+00	1.89E+00	1.54E+00	1.54E+00
Tc106	3.5	1.86E+00	1.86E+00	1.29E+00	1.29E+00
Rb93	3.5	1.85E+00	1.67E+00	1.91E+00	1.91E+00
Mo105	3.5	1.85E+00	1.84E+00	4.23E-01	4.23E-01
Ba143	3.3	1.74E+00	1.48E+00	1.74E+00	1.44E+00
Sr95	2.8	1.49E+00	1.28E+00	1.49E+00	1.49E+00

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs141	2.8	1.46E+00	8.52E-01	1.45E+00	1.45E+00
La145	2.6	1.34E+00	1.08E+00	1.34E+00	1.34E+00
La144	2.5	1.29E+00	9.40E-01	1.26E+00	1.26E+00
Tc107	2.4	1.24E+00	1.24E+00	3.51E-01	3.51E-01
Tc108	2.1	1.10E+00	1.17E+00	1.00E+00	5.81E-01
Zr99	1.7	8.98E-01	8.96E-01	9.65E-01	9.65E-01
Nb100m	1.7	8.81E-01	1.00E+00	7.89E-01	7.89E-01
Nb104	1.6	8.54E-01	9.35E-01	7.55E-01	7.55E-01
Y97	1.5	8.04E-01	1.14E+00	8.32E-01	8.32E-01
I136m	1.5	7.62E-01	7.62E-01	9.02E-01	9.28E-01
Nb101	1.4	7.53E-01	1.25E+00	6.82E-01	6.82E-01
Cs140	1.4	7.52E-01	8.94E-01	6.76E-01	6.76E-01
La146m	1.4	7.32E-01	7.40E-01	7.43E-01	4.41E-01
Mo103	1.4	7.30E-01	8.42E-01	4.71E-01	4.71E-01
Ba144	1.4	7.24E-01	6.33E-01	7.24E-01	7.24E-01
Ce149	1.4	7.12E-01	3.08E-01	2.49E-02	2.49E-02
Xe140	1.3	6.84E-01	8.96E-01	8.26E-01	8.26E-01
Kr91	1.3	6.72E-01	6.72E-01	6.67E-01	6.67E-01
I137	1.3	6.61E-01	6.59E-01	7.11E-01	7.11E-01
Y98m	1.3	6.58E-01	6.59E-01	7.92E-01	7.92E-01
Xe139	1.2	6.11E-01	6.05E-01	1.00E+00	5.77E-01
Rb91	1.2	6.10E-01	5.28E-01	6.10E-01	6.10E-01
Ba145	1.1	6.02E-01	6.74E-01	6.03E-01	6.03E-01
Zr100	1.1	5.60E-01	1.51E+00	5.21E-01	5.21E-01
Zr98	1.1	5.54E-01	—	—	—
Br88	1.0	5.24E-01	4.83E-01	5.16E-01	5.16E-01
Sr94	1.0	5.24E-01	5.77E-01	5.24E-01	5.24E-01
Ru109	0.9	4.68E-01	4.66E-01	4.68E-01	4.68E-01
Nb99	0.9	4.56E-01	9.42E-01	2.63E-01	2.63E-01
Te136	0.8	4.42E-01	4.40E-01	4.31E-01	4.31E-01
Mo106	0.8	4.25E-01	6.15E-01	9.68E-01	9.68E-01
La146	0.8	4.24E-01	5.09E-01	4.07E-01	4.07E-01
I138	0.8	4.20E-01	4.20E-01	3.94E-01	3.94E-01
Nb103	0.7	3.90E-01	2.30E-01	4.33E-01	1.80E-01
Nb98	0.7	3.77E-01	9.86E-01	3.74E-01	3.74E-01
Kr90	0.7	3.71E-01	3.74E-01	4.11E-01	3.48E-01
Ce147	0.7	3.47E-01	2.51E-01	4.01E-02	4.01E-02
Sn128m	0.7	3.46E-01	3.39E-01	4.05E-01	4.05E-01
Rb94	0.6	3.11E-01	6.00E-01	4.50E-01	4.50E-01
Br87	0.5	2.79E-01	2.79E-01	2.58E-01	2.58E-01
Nb105	0.5	2.70E-01	1.77E-01	2.69E-01	2.69E-01

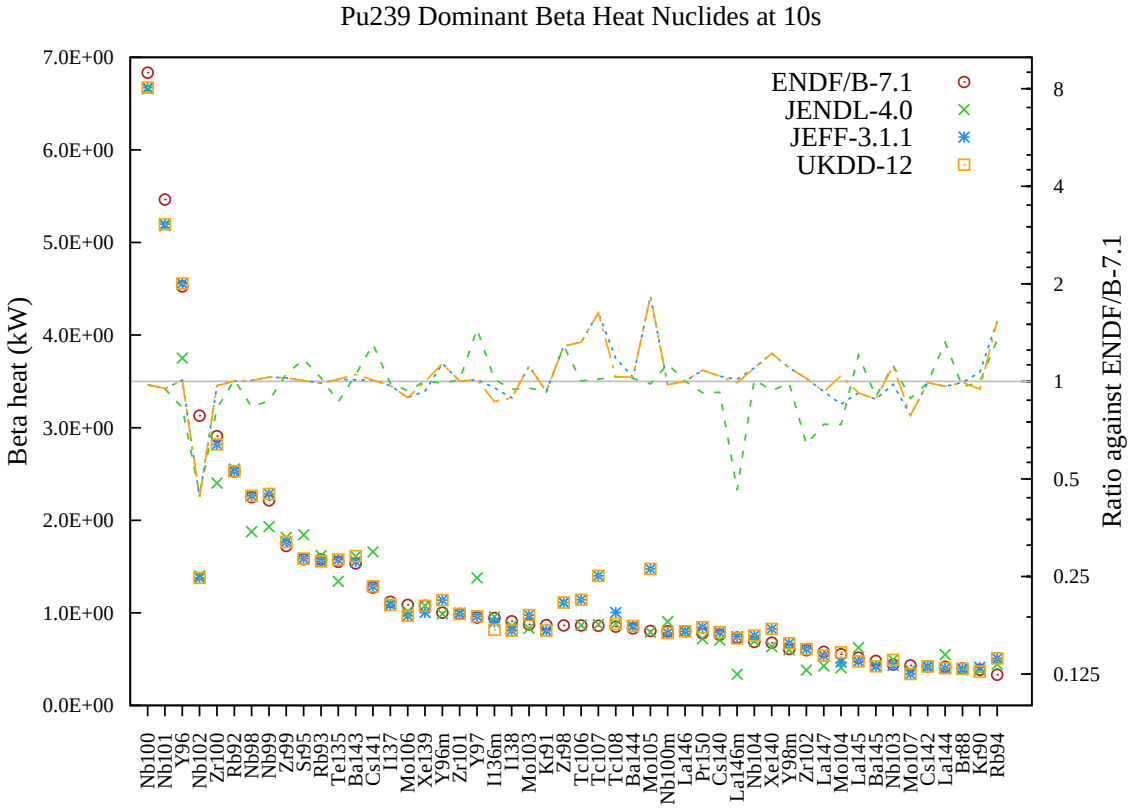

Figure 92: Beta heat (in kW) decay data comparison for Pu239 fission pulse after 10s cooling.

Table 92: Beta heat (in kW) decay data comparison for Pu239 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb100	9.2	6.83E+00	6.66E+00	6.67E+00	6.67E+00
Nb101	7.4	5.46E+00	5.18E+00	5.20E+00	5.20E+00
Y96	6.1	4.53E+00	3.75E+00	4.56E+00	4.56E+00
Nb102	4.2	3.13E+00	1.40E+00	1.38E+00	1.38E+00
Zr100	3.9	2.91E+00	2.40E+00	2.82E+00	2.82E+00
Rb92	3.4	2.53E+00	2.55E+00	2.53E+00	2.53E+00
Nb98	3.0	2.25E+00	1.88E+00	2.26E+00	2.26E+00
Nb99	3.0	2.22E+00	1.93E+00	2.28E+00	2.28E+00
Zr99	2.3	1.72E+00	1.82E+00	1.77E+00	1.77E+00
Sr95	2.1	1.58E+00	1.84E+00	1.59E+00	1.59E+00
Rb93	2.1	1.58E+00	1.62E+00	1.56E+00	1.56E+00
Te135	2.1	1.55E+00	1.34E+00	1.57E+00	1.57E+00
Ba143	2.1	1.53E+00	1.61E+00	1.55E+00	1.61E+00
Cs141	1.7	1.27E+00	1.66E+00	1.29E+00	1.29E+00
I137	1.5	1.12E+00	1.10E+00	1.08E+00	1.08E+00
Mo106	1.5	1.09E+00	1.02E+00	9.68E-01	9.68E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Xe139	1.5	1.08E+00	1.08E+00	1.00E+00	1.08E+00
Y96m	1.4	1.00E+00	9.89E-01	1.14E+00	1.14E+00
Zr101	1.3	9.88E-01	9.97E-01	9.89E-01	9.89E-01
Y97	1.3	9.50E-01	1.38E+00	9.62E-01	9.62E-01
I136m	1.3	9.44E-01	9.58E-01	9.02E-01	8.17E-01
I138	1.2	9.08E-01	8.59E-01	8.08E-01	8.08E-01
Mo103	1.2	8.75E-01	8.34E-01	9.75E-01	9.75E-01
Kr91	1.2	8.68E-01	8.09E-01	8.07E-01	8.07E-01
Zr98	1.2	8.65E-01	1.11E+00	1.11E+00	1.11E+00
Tc106	1.2	8.64E-01	8.67E-01	1.14E+00	1.14E+00
Tc107	1.2	8.60E-01	8.75E-01	1.40E+00	1.40E+00
Tc108	1.1	8.51E-01	8.81E-01	1.00E+00	8.81E-01
Ba144	1.1	8.32E-01	8.50E-01	8.58E-01	8.58E-01
Mo105	1.1	8.05E-01	7.90E-01	1.47E+00	1.47E+00
Nb100m	1.1	8.00E-01	9.06E-01	7.82E-01	7.82E-01
La146	1.1	8.00E-01	8.01E-01	8.00E-01	8.00E-01
Pr150	1.1	7.81E-01	7.20E-01	8.46E-01	8.46E-01
Cs140	1.0	7.63E-01	7.06E-01	7.92E-01	7.92E-01
La146m	1.0	7.32E-01	3.38E-01	7.43E-01	7.24E-01
Nb104	0.9	6.87E-01	6.96E-01	7.55E-01	7.55E-01
Xe140	0.9	6.78E-01	6.35E-01	8.26E-01	8.26E-01
Y98m	0.8	6.08E-01	6.01E-01	6.70E-01	6.70E-01
Zr102	0.8	5.97E-01	3.82E-01	6.09E-01	6.09E-01
La147	0.8	5.80E-01	4.27E-01	5.39E-01	5.39E-01
Mo104	0.7	5.52E-01	4.07E-01	4.70E-01	5.74E-01
La145	0.7	5.16E-01	6.23E-01	4.75E-01	4.75E-01
Ba145	0.6	4.80E-01	4.31E-01	4.23E-01	4.23E-01
Nb103	0.6	4.41E-01	4.95E-01	4.33E-01	4.92E-01
Mo107	0.6	4.31E-01	3.82E-01	3.39E-01	3.39E-01
Cs142	0.6	4.23E-01	4.20E-01	4.20E-01	4.20E-01
La144	0.6	4.16E-01	5.49E-01	4.02E-01	4.02E-01
Br88	0.5	4.00E-01	3.85E-01	3.97E-01	3.97E-01
Kr90	0.5	3.85E-01	3.83E-01	4.11E-01	3.64E-01
Rb94	0.4	3.31E-01	4.45E-01	5.08E-01	5.08E-01

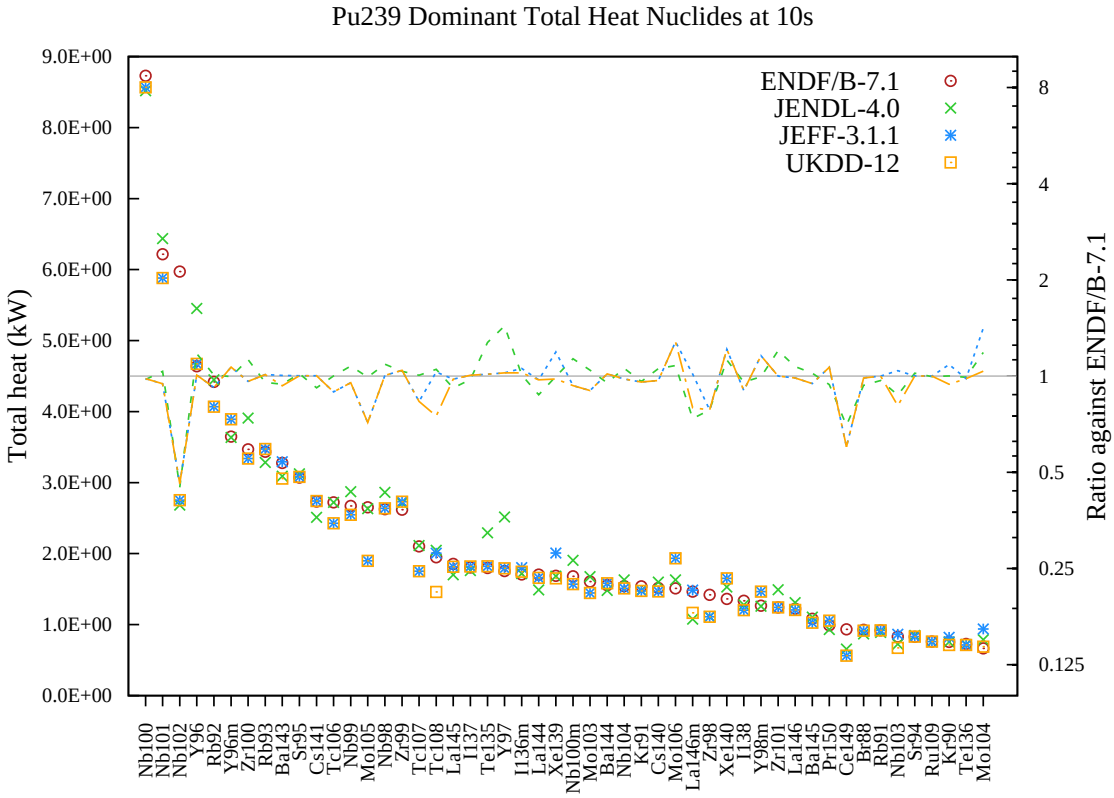

Figure 93: Total heat (in kW) decay data comparison for Pu239 fission pulse after 10s cooling.

Table 93: Total heat (in kW) decay data comparison for Pu239 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb100	6.9	8.73E+00	8.52E+00	8.57E+00	8.57E+00
Nb101	4.9	6.22E+00	6.44E+00	5.88E+00	5.88E+00
Nb102	4.7	5.97E+00	2.68E+00	2.75E+00	2.75E+00
Y96	3.7	4.64E+00	5.45E+00	4.67E+00	4.67E+00
Rb92	3.5	4.42E+00	4.45E+00	4.07E+00	4.07E+00
Y96m	2.9	3.65E+00	3.64E+00	3.89E+00	3.89E+00
Zr100	2.7	3.47E+00	3.91E+00	3.34E+00	3.34E+00
Rb93	2.7	3.44E+00	3.29E+00	3.47E+00	3.47E+00
Ba143	2.6	3.28E+00	3.09E+00	3.29E+00	3.06E+00
Sr95	2.4	3.07E+00	3.12E+00	3.08E+00	3.08E+00
Cs141	2.2	2.73E+00	2.51E+00	2.74E+00	2.74E+00
Tc106	2.1	2.72E+00	2.72E+00	2.43E+00	2.43E+00
Nb99	2.1	2.67E+00	2.87E+00	2.55E+00	2.55E+00
Mo105	2.1	2.65E+00	2.63E+00	1.90E+00	1.90E+00
Nb98	2.1	2.63E+00	2.86E+00	2.64E+00	2.64E+00
Zr99	2.1	2.62E+00	2.71E+00	2.73E+00	2.73E+00
Tc107	1.7	2.10E+00	2.11E+00	1.75E+00	1.75E+00

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc108	1.5	1.95E+00	2.05E+00	2.01E+00	1.46E+00
La145	1.5	1.85E+00	1.70E+00	1.81E+00	1.81E+00
I137	1.4	1.81E+00	1.76E+00	1.82E+00	1.82E+00
Te135	1.4	1.80E+00	2.29E+00	1.82E+00	1.82E+00
Y97	1.4	1.75E+00	2.52E+00	1.79E+00	1.79E+00
I136m	1.3	1.71E+00	1.72E+00	1.80E+00	1.75E+00
La144	1.3	1.70E+00	1.49E+00	1.66E+00	1.66E+00
Xe139	1.3	1.69E+00	1.68E+00	2.01E+00	1.65E+00
Nb100m	1.3	1.68E+00	1.91E+00	1.57E+00	1.57E+00
Mo103	1.3	1.61E+00	1.68E+00	1.45E+00	1.45E+00
Ba144	1.2	1.56E+00	1.48E+00	1.58E+00	1.58E+00
Nb104	1.2	1.54E+00	1.63E+00	1.51E+00	1.51E+00
Kr91	1.2	1.54E+00	1.48E+00	1.47E+00	1.47E+00
Cs140	1.2	1.52E+00	1.60E+00	1.47E+00	1.47E+00
Mo106	1.2	1.51E+00	1.63E+00	1.94E+00	1.94E+00
La146m	1.2	1.46E+00	1.08E+00	1.49E+00	1.17E+00
Zr98	1.1	1.42E+00	1.11E+00	1.11E+00	1.11E+00
Xe140	1.1	1.36E+00	1.53E+00	1.65E+00	1.65E+00
I138	1.1	1.33E+00	1.28E+00	1.20E+00	1.20E+00
Y98m	1.0	1.27E+00	1.26E+00	1.47E+00	1.47E+00
Zr101	1.0	1.24E+00	1.49E+00	1.24E+00	1.24E+00
La146	1.0	1.22E+00	1.31E+00	1.21E+00	1.21E+00
Ba145	0.9	1.08E+00	1.11E+00	1.03E+00	1.03E+00
Pr150	0.8	9.91E-01	9.32E-01	1.06E+00	1.06E+00
Ce149	0.7	9.34E-01	6.55E-01	5.61E-01	5.61E-01
Br88	0.7	9.27E-01	8.68E-01	9.15E-01	9.15E-01
Rb91	0.7	9.19E-01	8.91E-01	9.19E-01	9.19E-01
Nb103	0.7	8.31E-01	7.26E-01	8.65E-01	6.72E-01
Sr94	0.7	8.29E-01	8.46E-01	8.30E-01	8.30E-01
Ru109	0.6	7.61E-01	7.59E-01	7.61E-01	7.61E-01
Kr90	0.6	7.56E-01	7.57E-01	8.21E-01	7.13E-01
Te136	0.6	7.27E-01	7.21E-01	7.13E-01	7.13E-01
Mo104	0.5	6.65E-01	7.88E-01	9.39E-01	6.89E-01

7.2 100s after pulse

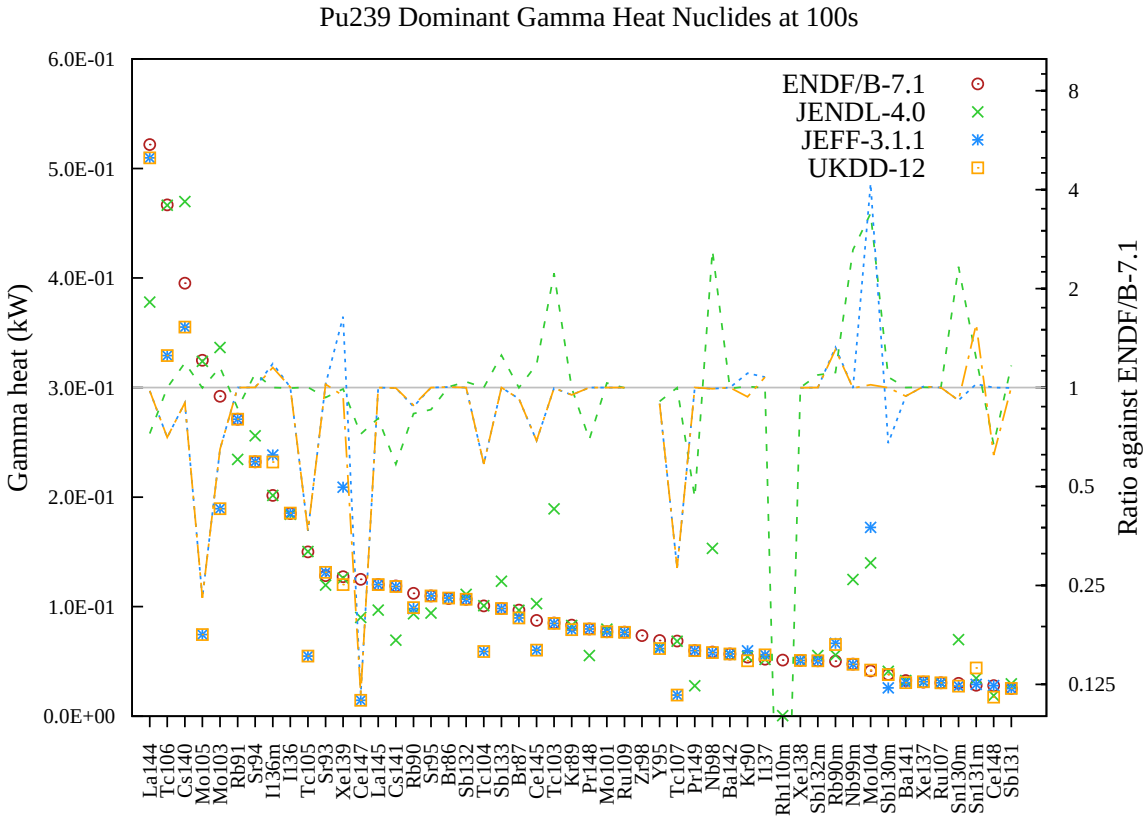

Figure 94: Gamma heat (in kW) decay data comparison for Pu239 fission pulse after 100s cooling.

Table 94: Gamma heat (in kW) decay data comparison for Pu239 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La144	8.1	5.22E-01	3.78E-01	5.10E-01	5.10E-01
Tc106	7.2	4.67E-01	4.66E-01	3.29E-01	3.29E-01
Cs140	6.1	3.95E-01	4.70E-01	3.55E-01	3.55E-01
Mo105	5.0	3.25E-01	3.24E-01	7.44E-02	7.44E-02
Mo103	4.5	2.92E-01	3.37E-01	1.89E-01	1.89E-01
Rb91	4.2	2.71E-01	2.34E-01	2.71E-01	2.71E-01
Sr94	3.6	2.32E-01	2.56E-01	2.32E-01	2.32E-01
I136m	3.1	2.01E-01	2.02E-01	2.38E-01	2.32E-01
I136	2.9	1.85E-01	1.84E-01	1.85E-01	1.85E-01
Tc105	2.3	1.50E-01	1.50E-01	5.49E-02	5.49E-02
Sr93	2.0	1.28E-01	1.20E-01	1.31E-01	1.31E-01
Xe139	2.0	1.27E-01	1.26E-01	2.09E-01	1.20E-01
Ce147	1.9	1.25E-01	9.02E-02	1.46E-02	1.46E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La145	1.9	1.20E-01	9.69E-02	1.20E-01	1.20E-01
Cs141	1.8	1.19E-01	6.94E-02	1.18E-01	1.18E-01
Rb90	1.7	1.12E-01	9.35E-02	9.82E-02	9.92E-02
Sr95	1.7	1.10E-01	9.41E-02	1.10E-01	1.10E-01
Br86	1.7	1.07E-01	1.08E-01	1.08E-01	1.08E-01
Sb132	1.6	1.07E-01	1.11E-01	1.07E-01	1.07E-01
Tc104	1.6	1.01E-01	1.01E-01	5.90E-02	5.90E-02
Sb133	1.5	9.82E-02	1.23E-01	9.82E-02	9.82E-02
Br87	1.5	9.69E-02	9.68E-02	8.96E-02	8.96E-02
Ce145	1.3	8.74E-02	1.03E-01	6.02E-02	6.02E-02
Tc103	1.3	8.51E-02	1.89E-01	8.48E-02	8.48E-02
Kr89	1.3	8.32E-02	8.28E-02	7.90E-02	7.90E-02
Pr148	1.2	7.96E-02	5.54E-02	7.96E-02	7.96E-02
Mo101	1.2	7.71E-02	7.95E-02	7.70E-02	7.70E-02
Ru109	1.2	7.67E-02	7.65E-02	7.67E-02	7.67E-02
Zr98	1.1	7.35E-02	—	—	—
Y95	1.1	6.91E-02	6.27E-02	6.17E-02	6.17E-02
Tc107	1.1	6.86E-02	6.85E-02	1.94E-02	1.94E-02
Pr149	0.9	5.99E-02	2.77E-02	5.99E-02	5.99E-02
Nb98	0.9	5.86E-02	1.53E-01	5.81E-02	5.81E-02
Ba142	0.9	5.69E-02	5.66E-02	5.68E-02	5.68E-02
Kr90	0.8	5.40E-02	5.44E-02	5.97E-02	5.06E-02
I137	0.8	5.21E-02	5.19E-02	5.60E-02	5.60E-02
Rh110m	0.8	5.12E-02	—	—	—
Xe138	0.8	5.09E-02	5.09E-02	5.08E-02	5.08E-02
Sb132m	0.8	5.07E-02	5.53E-02	5.07E-02	5.07E-02
Rb90m	0.8	5.02E-02	5.58E-02	6.66E-02	6.55E-02
Nb99m	0.7	4.75E-02	1.25E-01	4.73E-02	4.73E-02
Mo104	0.6	4.13E-02	1.40E-01	1.72E-01	4.21E-02
Sb130m	0.6	3.81E-02	4.09E-02	2.58E-02	3.80E-02
Ba141	0.5	3.25E-02	3.25E-02	3.06E-02	3.06E-02
Xe137	0.5	3.12E-02	3.12E-02	3.14E-02	3.14E-02
Ru107	0.5	3.04E-02	3.04E-02	3.04E-02	3.04E-02
Sn130m	0.5	3.00E-02	7.00E-02	2.74E-02	2.74E-02
Sn131m	0.4	2.83E-02	3.47E-02	2.90E-02	4.41E-02
Ce148	0.4	2.80E-02	1.88E-02	2.80E-02	1.75E-02
Sb131	0.4	2.52E-02	2.95E-02	2.52E-02	2.53E-02

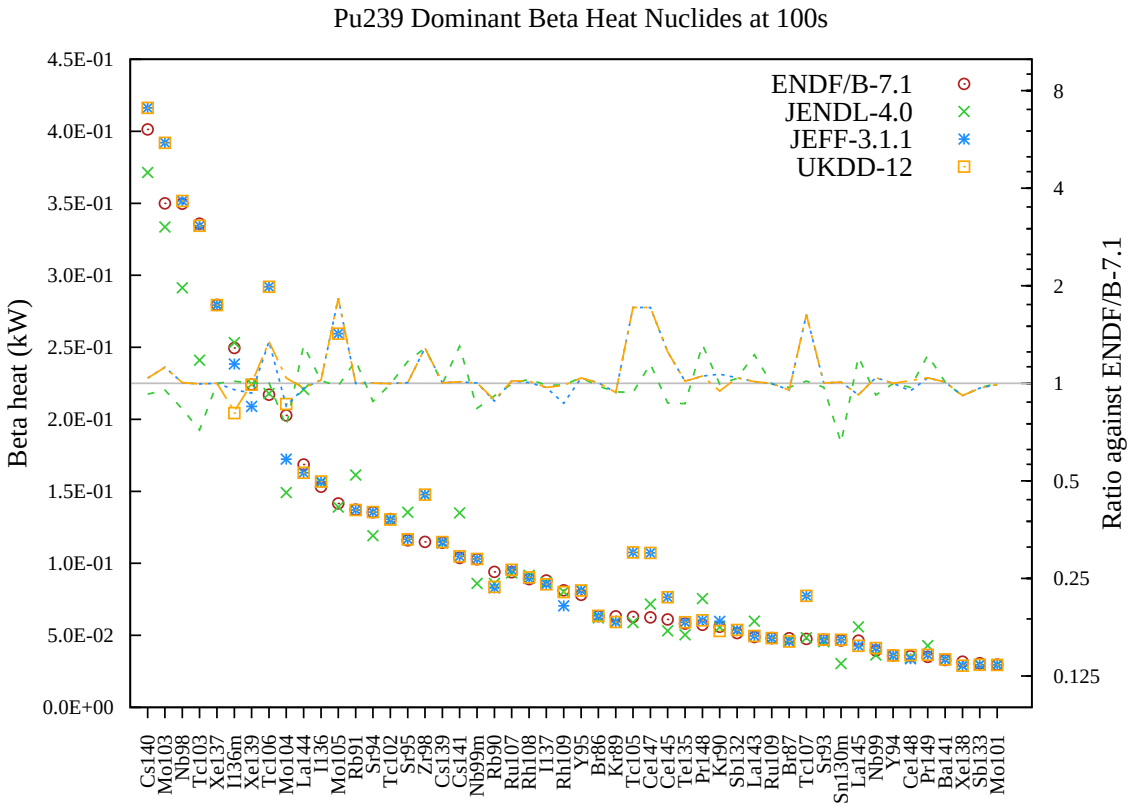

Figure 95: Beta heat (in kW) decay data comparison for Pu239 fission pulse after 100s cooling.

Table 95: Beta heat (in kW) decay data comparison for Pu239 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	6.4	4.01E-01	3.71E-01	4.16E-01	4.16E-01
Mo103	5.6	3.50E-01	3.34E-01	3.92E-01	3.92E-01
Nb98	5.6	3.50E-01	2.91E-01	3.52E-01	3.52E-01
Tc103	5.4	3.36E-01	2.41E-01	3.34E-01	3.34E-01
Xe137	4.5	2.79E-01	2.80E-01	2.79E-01	2.79E-01
I136m	4.0	2.50E-01	2.53E-01	2.38E-01	2.04E-01
Xe139	3.6	2.24E-01	2.24E-01	2.09E-01	2.24E-01
Tc106	3.5	2.17E-01	2.18E-01	2.92E-01	2.92E-01
Mo104	3.2	2.03E-01	1.49E-01	1.72E-01	2.11E-01
La144	2.7	1.69E-01	2.21E-01	1.63E-01	1.63E-01
I136	2.4	1.53E-01	1.56E-01	1.57E-01	1.57E-01
Mo105	2.3	1.42E-01	1.39E-01	2.59E-01	2.59E-01
Rb91	2.2	1.37E-01	1.61E-01	1.37E-01	1.37E-01
Sr94	2.2	1.35E-01	1.19E-01	1.36E-01	1.36E-01
Tc102	2.1	1.31E-01	1.30E-01	1.31E-01	1.30E-01
Sr95	1.9	1.16E-01	1.36E-01	1.17E-01	1.17E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Zr98	1.8	1.15E-01	1.48E-01	1.48E-01	1.48E-01
Cs139	1.8	1.14E-01	1.14E-01	1.15E-01	1.15E-01
Cs141	1.7	1.04E-01	1.35E-01	1.05E-01	1.05E-01
Nb99m	1.6	1.03E-01	8.61E-02	1.03E-01	1.03E-01
Rb90	1.5	9.41E-02	8.61E-02	8.29E-02	8.37E-02
Ru107	1.5	9.38E-02	9.34E-02	9.55E-02	9.55E-02
Rh108	1.4	8.90E-02	9.17E-02	8.95E-02	9.03E-02
I137	1.4	8.81E-02	8.69E-02	8.55E-02	8.55E-02
Rh109	1.3	8.13E-02	8.03E-02	7.05E-02	8.01E-02
Y95	1.2	7.81E-02	8.13E-02	8.12E-02	8.12E-02
Br86	1.0	6.33E-02	6.22E-02	6.35E-02	6.35E-02
Kr89	1.0	6.32E-02	5.95E-02	5.93E-02	5.93E-02
Tc105	1.0	6.28E-02	5.89E-02	1.08E-01	1.08E-01
Ce147	1.0	6.25E-02	7.17E-02	1.07E-01	1.07E-01
Ce145	1.0	6.11E-02	5.31E-02	7.64E-02	7.64E-02
Te135	0.9	5.82E-02	5.03E-02	5.91E-02	5.91E-02
Pr148	0.9	5.74E-02	7.55E-02	6.04E-02	6.04E-02
Kr90	0.9	5.60E-02	5.56E-02	5.97E-02	5.30E-02
Sb132	0.8	5.16E-02	5.35E-02	5.37E-02	5.37E-02
La143	0.8	4.89E-02	5.99E-02	4.95E-02	4.95E-02
Ru109	0.8	4.82E-02	4.79E-02	4.81E-02	4.81E-02
Br87	0.8	4.80E-02	4.66E-02	4.57E-02	4.57E-02
Tc107	0.8	4.75E-02	4.83E-02	7.74E-02	7.74E-02
Sr93	0.7	4.69E-02	4.56E-02	4.70E-02	4.70E-02
Sn130m	0.7	4.64E-02	3.04E-02	4.69E-02	4.69E-02
La145	0.7	4.63E-02	5.59E-02	4.27E-02	4.27E-02
Nb99	0.6	3.95E-02	3.64E-02	4.12E-02	4.12E-02
Y94	0.6	3.60E-02	3.59E-02	3.60E-02	3.60E-02
Ce148	0.6	3.56E-02	3.46E-02	3.38E-02	3.63E-02
Pr149	0.6	3.51E-02	4.28E-02	3.65E-02	3.65E-02
Ba141	0.5	3.29E-02	3.32E-02	3.32E-02	3.32E-02
Xe138	0.5	3.17E-02	2.89E-02	2.90E-02	2.90E-02
Sb133	0.5	3.06E-02	2.97E-02	2.96E-02	2.96E-02
Mo101	0.5	2.97E-02	2.96E-02	2.94E-02	2.94E-02

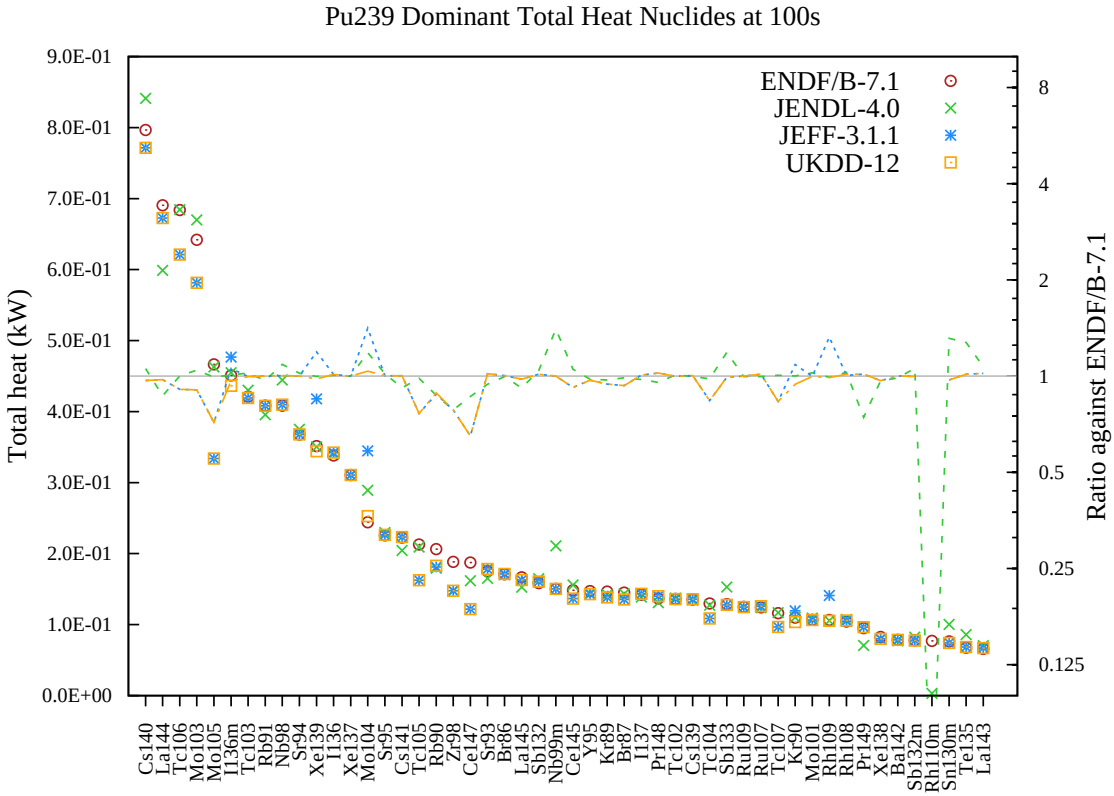

Figure 96: Total heat (in kW) decay data comparison for Pu239 fission pulse after 100s cooling.

Table 96: Total heat (in kW) decay data comparison for Pu239 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	6.3	7.96E-01	8.41E-01	7.71E-01	7.71E-01
La144	5.4	6.91E-01	5.99E-01	6.73E-01	6.73E-01
Tc106	5.4	6.84E-01	6.84E-01	6.21E-01	6.21E-01
Mo103	5.0	6.42E-01	6.70E-01	5.82E-01	5.81E-01
Mo105	3.7	4.67E-01	4.63E-01	3.34E-01	3.34E-01
I136m	3.5	4.51E-01	4.55E-01	4.77E-01	4.36E-01
Tc103	3.3	4.21E-01	4.30E-01	4.19E-01	4.19E-01
Rb91	3.2	4.08E-01	3.96E-01	4.08E-01	4.08E-01
Nb98	3.2	4.08E-01	4.44E-01	4.10E-01	4.10E-01
Sr94	2.9	3.68E-01	3.75E-01	3.68E-01	3.68E-01
Xe139	2.8	3.51E-01	3.50E-01	4.18E-01	3.44E-01
I136	2.7	3.38E-01	3.40E-01	3.42E-01	3.42E-01
Xe137	2.4	3.11E-01	3.11E-01	3.11E-01	3.11E-01
Mo104	1.9	2.44E-01	2.89E-01	3.45E-01	2.53E-01
Sr95	1.8	2.26E-01	2.30E-01	2.26E-01	2.26E-01
Cs141	1.7	2.23E-01	2.04E-01	2.23E-01	2.23E-01
Tc105	1.7	2.13E-01	2.09E-01	1.63E-01	1.63E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb90	1.6	2.06E-01	1.80E-01	1.81E-01	1.83E-01
Zr98	1.5	1.88E-01	1.48E-01	1.48E-01	1.48E-01
Ce147	1.5	1.87E-01	1.62E-01	1.22E-01	1.22E-01
Sr93	1.4	1.75E-01	1.65E-01	1.78E-01	1.78E-01
Br86	1.3	1.71E-01	1.70E-01	1.71E-01	1.71E-01
La145	1.3	1.66E-01	1.53E-01	1.63E-01	1.63E-01
Sb132	1.2	1.58E-01	1.65E-01	1.61E-01	1.61E-01
Nb99m	1.2	1.50E-01	2.11E-01	1.50E-01	1.50E-01
Ce145	1.2	1.48E-01	1.56E-01	1.37E-01	1.37E-01
Y95	1.2	1.47E-01	1.44E-01	1.43E-01	1.43E-01
Kr89	1.1	1.46E-01	1.42E-01	1.38E-01	1.38E-01
Br87	1.1	1.45E-01	1.43E-01	1.35E-01	1.35E-01
I137	1.1	1.42E-01	1.39E-01	1.43E-01	1.43E-01
Pr148	1.1	1.37E-01	1.31E-01	1.40E-01	1.40E-01
Tc102	1.1	1.36E-01	1.37E-01	1.36E-01	1.36E-01
Cs139	1.1	1.35E-01	1.35E-01	1.36E-01	1.36E-01
Tc104	1.0	1.30E-01	1.27E-01	1.09E-01	1.09E-01
Sb133	1.0	1.29E-01	1.53E-01	1.28E-01	1.28E-01
Ru109	1.0	1.25E-01	1.24E-01	1.25E-01	1.25E-01
Ru107	1.0	1.24E-01	1.24E-01	1.26E-01	1.26E-01
Tc107	0.9	1.16E-01	1.17E-01	9.68E-02	9.68E-02
Kr90	0.9	1.10E-01	1.10E-01	1.19E-01	1.04E-01
Mo101	0.8	1.07E-01	1.09E-01	1.06E-01	1.06E-01
Rh109	0.8	1.06E-01	1.06E-01	1.41E-01	1.05E-01
Rh108	0.8	1.04E-01	1.07E-01	1.05E-01	1.06E-01
Pr149	0.7	9.50E-02	7.05E-02	9.64E-02	9.64E-02
Xe138	0.6	8.26E-02	7.98E-02	7.98E-02	7.98E-02
Ba142	0.6	7.84E-02	7.74E-02	7.86E-02	7.86E-02
Sb132m	0.6	7.77E-02	8.22E-02	7.75E-02	7.75E-02
Rh110m	0.6	7.71E-02	3.17E-03	—	—
Sn130m	0.6	7.64E-02	1.00E-01	7.43E-02	7.43E-02
Te135	0.5	6.75E-02	8.60E-02	6.84E-02	6.84E-02
La143	0.5	6.58E-02	7.03E-02	6.71E-02	6.71E-02

7.3 1000s after pulse

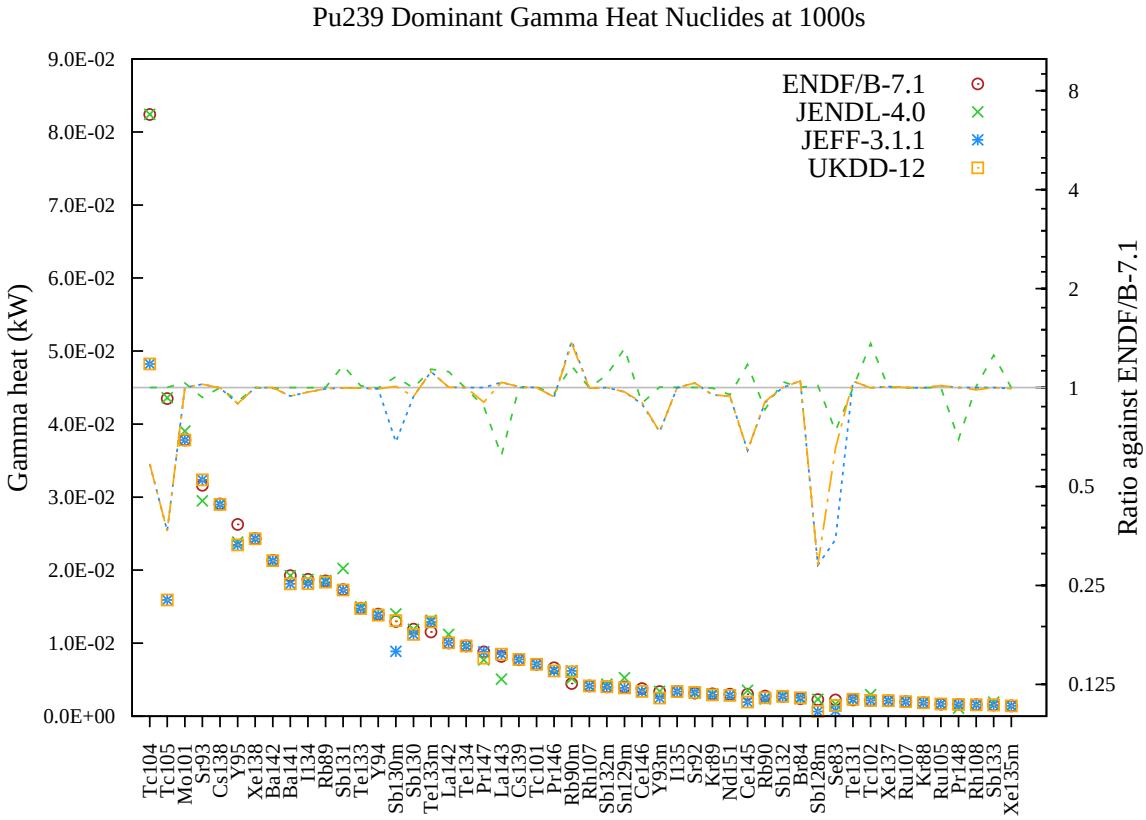

Figure 97: Gamma heat (in kW) decay data comparison for Pu239 fission pulse after 1000s cooling.

Table 97: Gamma heat (in kW) decay data comparison for Pu239 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	14.2	8.24E-02	8.24E-02	4.82E-02	4.82E-02
Tc105	7.5	4.35E-02	4.36E-02	1.59E-02	1.59E-02
Mo101	6.5	3.78E-02	3.90E-02	3.78E-02	3.78E-02
Sr93	5.4	3.16E-02	2.95E-02	3.24E-02	3.24E-02
Cs138	5.0	2.91E-02	2.90E-02	2.90E-02	2.90E-02
Y95	4.5	2.63E-02	2.38E-02	2.35E-02	2.35E-02
Xe138	4.2	2.43E-02	2.43E-02	2.43E-02	2.43E-02
Ba142	3.7	2.13E-02	2.12E-02	2.13E-02	2.13E-02
Ba141	3.3	1.92E-02	1.92E-02	1.81E-02	1.81E-02
I134	3.2	1.87E-02	1.87E-02	1.81E-02	1.81E-02
Rb89	3.2	1.85E-02	1.86E-02	1.84E-02	1.84E-02
Sb131	3.0	1.73E-02	2.02E-02	1.73E-02	1.73E-02
Te133	2.5	1.48E-02	1.50E-02	1.47E-02	1.47E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y94	2.4	1.40E-02	1.39E-02	1.38E-02	1.38E-02
Sb130m	2.2	1.30E-02	1.40E-02	8.87E-03	1.31E-02
Sb130	2.1	1.19E-02	1.19E-02	1.12E-02	1.12E-02
Te133m	2.0	1.15E-02	1.31E-02	1.29E-02	1.29E-02
La142	1.7	1.00E-02	1.12E-02	1.00E-02	1.00E-02
Te134	1.7	9.62E-03	9.55E-03	9.62E-03	9.62E-03
Pr147	1.5	8.81E-03	7.71E-03	8.81E-03	7.94E-03
La143	1.4	8.19E-03	5.08E-03	8.50E-03	8.50E-03
Cs139	1.3	7.72E-03	7.72E-03	7.77E-03	7.77E-03
Tc101	1.2	7.10E-03	7.12E-03	7.10E-03	7.10E-03
Pr146	1.1	6.63E-03	6.35E-03	6.21E-03	6.21E-03
Rb90m	0.8	4.47E-03	5.19E-03	6.20E-03	6.08E-03
Rh107	0.7	4.15E-03	4.15E-03	4.13E-03	4.13E-03
Sb132m	0.7	4.01E-03	4.38E-03	4.01E-03	4.01E-03
Sn129m	0.7	4.00E-03	5.26E-03	3.88E-03	3.88E-03
Ce146	0.7	3.78E-03	3.38E-03	3.37E-03	3.40E-03
Y93m	0.6	3.39E-03	3.40E-03	2.49E-03	2.49E-03
I135	0.6	3.38E-03	3.39E-03	3.38E-03	3.38E-03
Sr92	0.5	3.16E-03	3.16E-03	3.26E-03	3.26E-03
Kr89	0.5	3.07E-03	3.05E-03	2.91E-03	2.91E-03
Nd151	0.5	3.02E-03	2.87E-03	2.84E-03	2.84E-03
Ce145	0.5	3.01E-03	3.54E-03	1.94E-03	1.94E-03
Rb90	0.5	2.76E-03	2.37E-03	2.49E-03	2.50E-03
Sb132	0.5	2.70E-03	2.82E-03	2.70E-03	2.70E-03
Br84	0.4	2.39E-03	2.40E-03	2.51E-03	2.51E-03
Sb128m	0.4	2.28E-03	2.32E-03	6.58E-04	6.58E-04
Se83	0.4	2.23E-03	1.65E-03	7.70E-04	1.46E-03
Te131	0.4	2.22E-03	2.22E-03	2.33E-03	2.33E-03
Tc102	0.4	2.16E-03	2.94E-03	2.16E-03	2.16E-03
Xe137	0.4	2.11E-03	2.12E-03	2.13E-03	2.13E-03
Ru107	0.3	1.99E-03	1.98E-03	1.99E-03	1.99E-03
Kr88	0.3	1.84E-03	1.84E-03	1.84E-03	1.84E-03
Ru105	0.3	1.65E-03	1.65E-03	1.67E-03	1.67E-03
Pr148	0.3	1.60E-03	1.11E-03	1.60E-03	1.60E-03
Rh108	0.3	1.59E-03	1.61E-03	1.59E-03	1.57E-03
Sb133	0.3	1.53E-03	1.93E-03	1.53E-03	1.53E-03
Xe135m	0.2	1.42E-03	1.42E-03	1.41E-03	1.41E-03

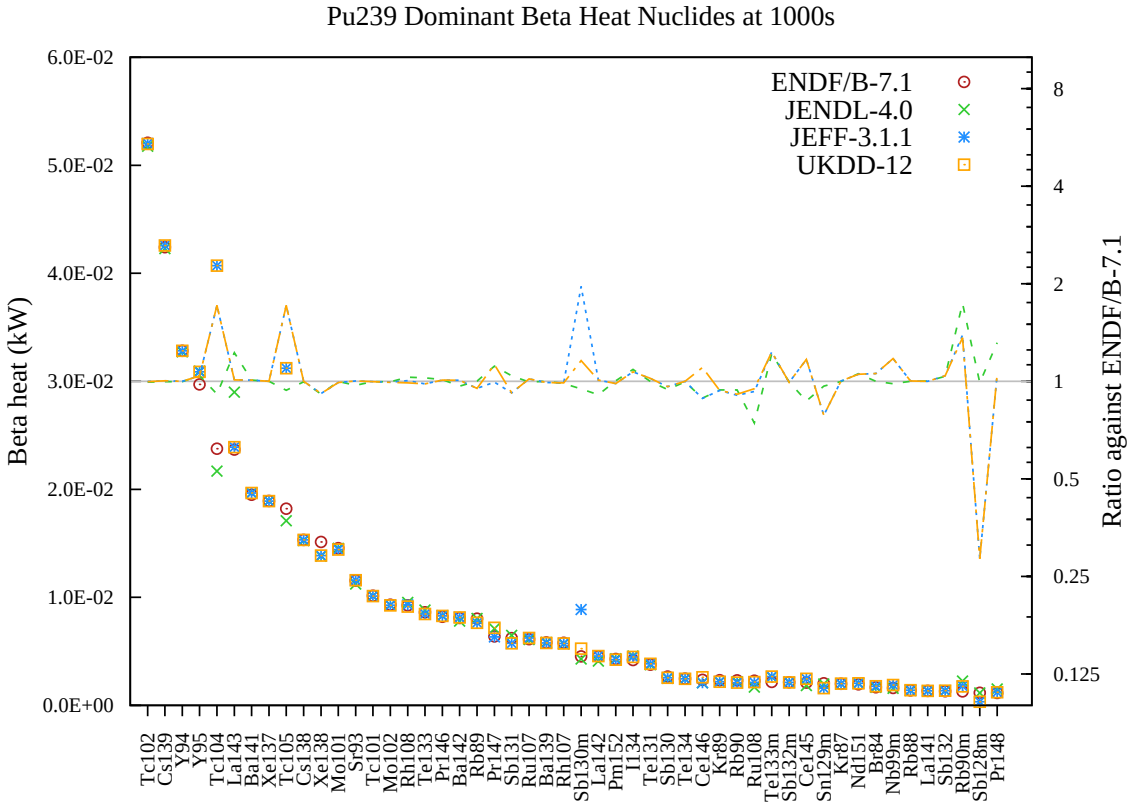

Figure 98: Beta heat (in kW) decay data comparison for Pu239 fission pulse after 1000s cooling.

Table 98: Beta heat (in kW) decay data comparison for Pu239 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	10.7	5.21E-02	5.18E-02	5.20E-02	5.20E-02
Cs139	8.7	4.24E-02	4.23E-02	4.26E-02	4.26E-02
Y94	6.7	3.28E-02	3.27E-02	3.28E-02	3.28E-02
Y95	6.1	2.97E-02	3.09E-02	3.09E-02	3.09E-02
Tc104	4.9	2.38E-02	2.17E-02	4.07E-02	4.07E-02
La143	4.9	2.37E-02	2.90E-02	2.39E-02	2.39E-02
Ba141	4.0	1.95E-02	1.97E-02	1.97E-02	1.97E-02
Xe137	3.9	1.89E-02	1.89E-02	1.89E-02	1.89E-02
Tc105	3.7	1.82E-02	1.71E-02	3.12E-02	3.12E-02
Cs138	3.1	1.53E-02	1.53E-02	1.53E-02	1.53E-02
Xe138	3.1	1.51E-02	1.38E-02	1.39E-02	1.39E-02
Mo101	3.0	1.46E-02	1.45E-02	1.44E-02	1.44E-02
Sr93	2.4	1.16E-02	1.12E-02	1.16E-02	1.16E-02
Tc101	2.1	1.01E-02	1.01E-02	1.01E-02	1.01E-02
Mo102	1.9	9.32E-03	9.29E-03	9.27E-03	9.26E-03
Rh108	1.9	9.25E-03	9.53E-03	9.30E-03	9.15E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te133	1.8	8.61E-03	8.82E-03	8.45E-03	8.45E-03
Pr146	1.7	8.21E-03	8.30E-03	8.28E-03	8.28E-03
Ba142	1.7	8.09E-03	7.81E-03	8.14E-03	8.14E-03
Rb89	1.6	8.03E-03	8.04E-03	7.64E-03	7.64E-03
Pr147	1.3	6.38E-03	7.11E-03	6.34E-03	7.18E-03
Sb131	1.3	6.23E-03	6.48E-03	5.74E-03	5.74E-03
Ru107	1.3	6.12E-03	6.10E-03	6.23E-03	6.23E-03
Ba139	1.2	5.82E-03	5.82E-03	5.77E-03	5.77E-03
Rh107	1.2	5.78E-03	5.70E-03	5.72E-03	5.72E-03
Sb130m	0.9	4.53E-03	4.29E-03	8.87E-03	5.24E-03
La142	0.9	4.52E-03	4.11E-03	4.56E-03	4.56E-03
Pm152	0.9	4.29E-03	4.31E-03	4.22E-03	4.22E-03
I134	0.9	4.19E-03	4.56E-03	4.48E-03	4.48E-03
Te131	0.8	3.77E-03	3.77E-03	3.85E-03	3.85E-03
Sb130	0.5	2.66E-03	2.51E-03	2.56E-03	2.56E-03
Te134	0.5	2.47E-03	2.46E-03	2.47E-03	2.47E-03
Ce146	0.5	2.36E-03	2.09E-03	2.09E-03	2.60E-03
Kr89	0.5	2.33E-03	2.19E-03	2.18E-03	2.18E-03
Rb90	0.5	2.32E-03	2.18E-03	2.10E-03	2.11E-03
Ru108	0.5	2.28E-03	1.70E-03	2.12E-03	2.16E-03
Te133m	0.4	2.16E-03	2.63E-03	2.66E-03	2.66E-03
Sb132m	0.4	2.14E-03	2.13E-03	2.13E-03	2.13E-03
Ce145	0.4	2.10E-03	1.83E-03	2.46E-03	2.46E-03
Sn129m	0.4	2.04E-03	1.97E-03	1.60E-03	1.60E-03
Kr87	0.4	2.00E-03	2.00E-03	2.00E-03	2.00E-03
Nd151	0.4	1.95E-03	2.06E-03	2.05E-03	2.05E-03
Br84	0.3	1.67E-03	1.67E-03	1.77E-03	1.77E-03
Nb99m	0.3	1.61E-03	1.58E-03	1.89E-03	1.89E-03
Rb88	0.3	1.40E-03	1.40E-03	1.40E-03	1.40E-03
La141	0.3	1.34E-03	1.34E-03	1.34E-03	1.34E-03
Sb132	0.3	1.31E-03	1.35E-03	1.36E-03	1.36E-03
Rb90m	0.3	1.29E-03	2.24E-03	1.79E-03	1.76E-03
Sb128m	0.2	1.16E-03	1.15E-03	3.30E-04	3.30E-04
Pr148	0.2	1.15E-03	1.52E-03	1.21E-03	1.21E-03

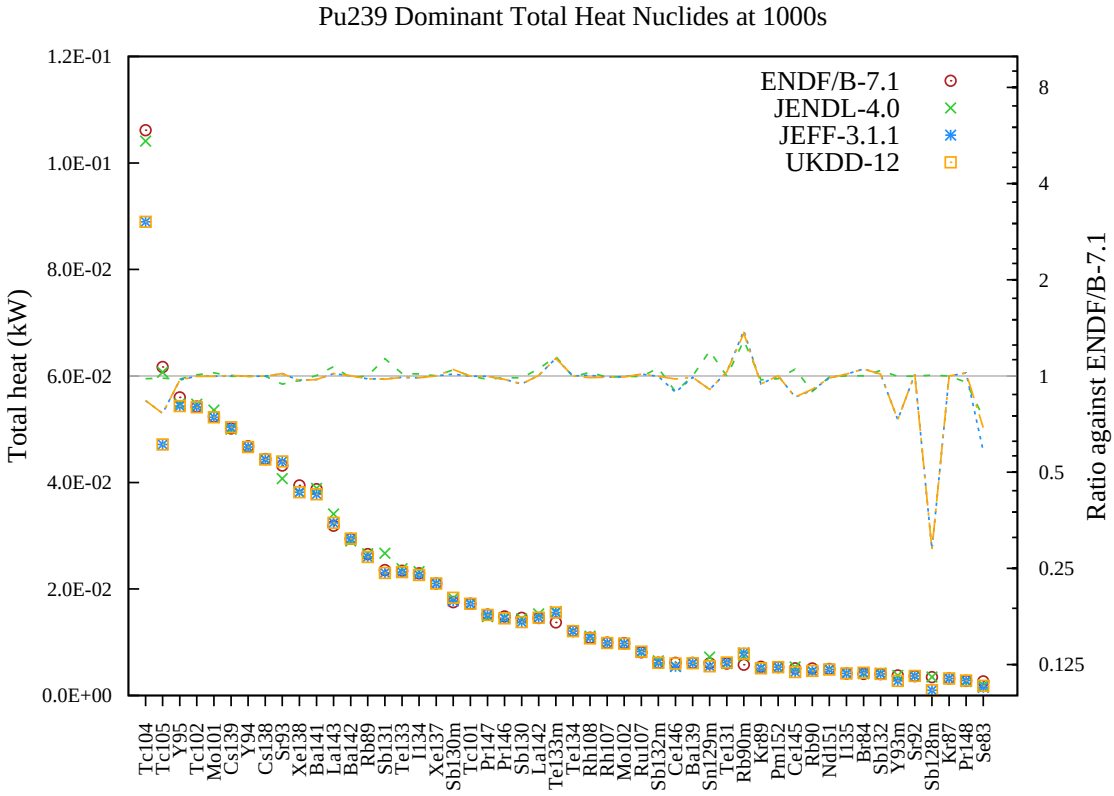

Figure 99: Total heat (in kW) decay data comparison for Pu239 fission pulse after 1000s cooling.

Table 99: Total heat (in kW) decay data comparison for Pu239 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	9.9	1.06E-01	1.04E-01	8.89E-02	8.89E-02
Tc105	5.8	6.17E-02	6.07E-02	4.71E-02	4.71E-02
Y95	5.2	5.60E-02	5.48E-02	5.43E-02	5.43E-02
Tc102	5.1	5.42E-02	5.47E-02	5.42E-02	5.41E-02
Mo101	4.9	5.24E-02	5.36E-02	5.22E-02	5.22E-02
Cs139	4.7	5.01E-02	5.00E-02	5.03E-02	5.03E-02
Y94	4.4	4.68E-02	4.67E-02	4.67E-02	4.67E-02
Cs138	4.2	4.44E-02	4.43E-02	4.43E-02	4.43E-02
Sr93	4.0	4.32E-02	4.07E-02	4.40E-02	4.40E-02
Xe138	3.7	3.95E-02	3.81E-02	3.82E-02	3.82E-02
Ba141	3.6	3.87E-02	3.89E-02	3.78E-02	3.78E-02
La143	3.0	3.19E-02	3.41E-02	3.24E-02	3.24E-02
Ba142	2.8	2.94E-02	2.90E-02	2.95E-02	2.95E-02
Rb89	2.5	2.66E-02	2.66E-02	2.60E-02	2.60E-02
Sb131	2.2	2.36E-02	2.67E-02	2.30E-02	2.30E-02
Te133	2.2	2.34E-02	2.38E-02	2.32E-02	2.32E-02
I134	2.1	2.29E-02	2.33E-02	2.26E-02	2.26E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Xe137	2.0	2.10E-02	2.10E-02	2.10E-02	2.10E-02
Sb130m	1.6	1.75E-02	1.83E-02	1.77E-02	1.83E-02
Tc101	1.6	1.72E-02	1.72E-02	1.72E-02	1.72E-02
Pr147	1.4	1.52E-02	1.48E-02	1.51E-02	1.51E-02
Pr146	1.4	1.48E-02	1.47E-02	1.45E-02	1.45E-02
Sb130	1.4	1.46E-02	1.44E-02	1.38E-02	1.38E-02
La142	1.4	1.45E-02	1.53E-02	1.46E-02	1.46E-02
Te133m	1.3	1.37E-02	1.58E-02	1.56E-02	1.56E-02
Te134	1.1	1.21E-02	1.20E-02	1.21E-02	1.21E-02
Rh108	1.0	1.08E-02	1.11E-02	1.09E-02	1.07E-02
Rh107	0.9	9.93E-03	9.84E-03	9.85E-03	9.85E-03
Mo102	0.9	9.81E-03	9.78E-03	9.76E-03	9.74E-03
Ru107	0.8	8.11E-03	8.08E-03	8.22E-03	8.22E-03
Sb132m	0.6	6.15E-03	6.51E-03	6.14E-03	6.14E-03
Ce146	0.6	6.13E-03	5.47E-03	5.46E-03	6.00E-03
Ba139	0.6	6.12E-03	6.12E-03	6.06E-03	6.06E-03
Sn129m	0.6	6.04E-03	7.23E-03	5.48E-03	5.48E-03
Te131	0.6	6.00E-03	5.99E-03	6.17E-03	6.18E-03
Rb90m	0.5	5.76E-03	7.44E-03	7.99E-03	7.84E-03
Kr89	0.5	5.40E-03	5.24E-03	5.10E-03	5.10E-03
Pm152	0.5	5.34E-03	5.24E-03	5.34E-03	5.34E-03
Ce145	0.5	5.12E-03	5.37E-03	4.39E-03	4.39E-03
Rb90	0.5	5.08E-03	4.55E-03	4.58E-03	4.62E-03
Nd151	0.5	4.97E-03	4.93E-03	4.89E-03	4.89E-03
I135	0.4	4.11E-03	4.12E-03	4.16E-03	4.16E-03
Br84	0.4	4.07E-03	4.07E-03	4.28E-03	4.28E-03
Sb132	0.4	4.01E-03	4.17E-03	4.06E-03	4.06E-03
Y93m	0.4	3.78E-03	3.77E-03	2.76E-03	2.76E-03
Sr92	0.3	3.64E-03	3.64E-03	3.69E-03	3.69E-03
Sb128m	0.3	3.45E-03	3.47E-03	9.88E-04	9.88E-04
Kr87	0.3	3.19E-03	3.19E-03	3.19E-03	3.19E-03
Pr148	0.3	2.75E-03	2.63E-03	2.81E-03	2.81E-03
Se83	0.2	2.65E-03	1.96E-03	1.54E-03	1.82E-03

7.4 5011s after pulse

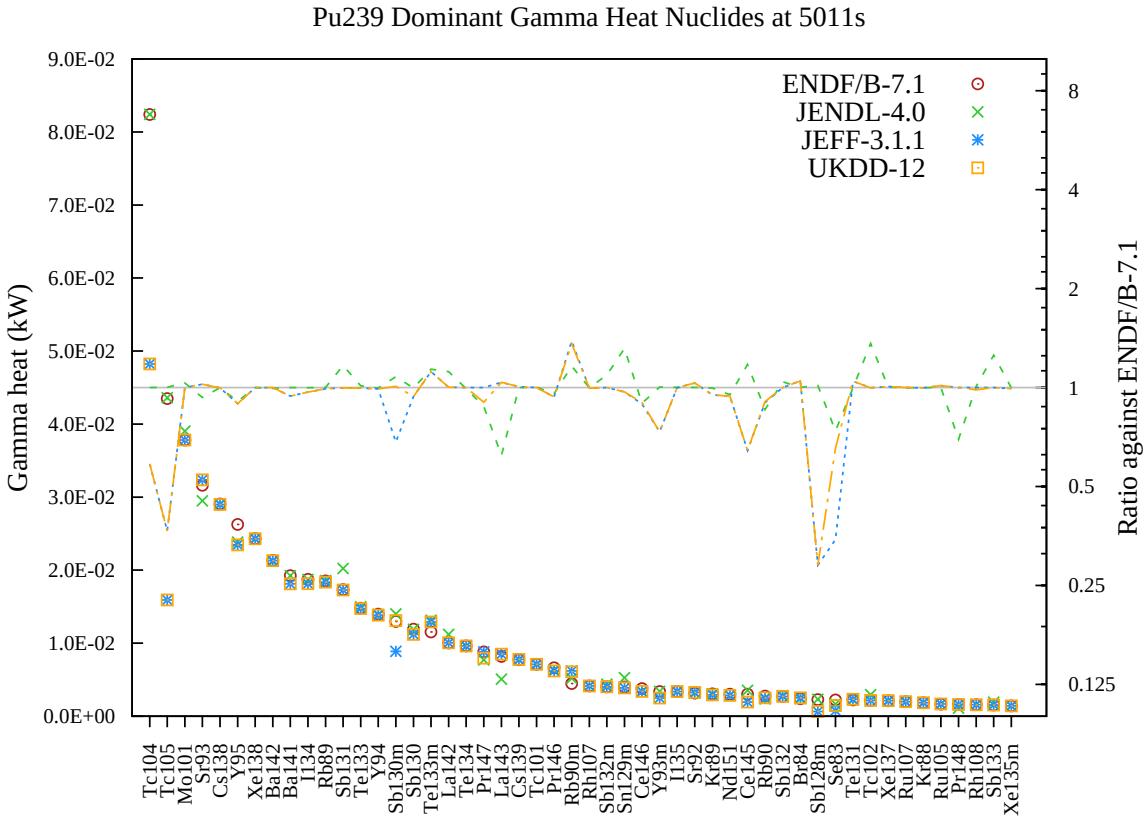

Figure 100: Gamma heat (in kW) decay data comparison for Pu239 fission pulse after 5011s cooling.

Table 100: Gamma heat (in kW) decay data comparison for Pu239 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	14.2	8.24E-02	8.24E-02	4.82E-02	4.82E-02
Tc105	7.5	4.35E-02	4.36E-02	1.59E-02	1.59E-02
Mo101	6.5	3.78E-02	3.90E-02	3.78E-02	3.78E-02
Sr93	5.4	3.16E-02	2.95E-02	3.24E-02	3.24E-02
Cs138	5.0	2.91E-02	2.90E-02	2.90E-02	2.90E-02
Y95	4.5	2.63E-02	2.38E-02	2.35E-02	2.35E-02
Xe138	4.2	2.43E-02	2.43E-02	2.43E-02	2.43E-02
Ba142	3.7	2.13E-02	2.12E-02	2.13E-02	2.13E-02
Ba141	3.3	1.92E-02	1.92E-02	1.81E-02	1.81E-02
I134	3.2	1.87E-02	1.87E-02	1.81E-02	1.81E-02
Rb89	3.2	1.85E-02	1.86E-02	1.84E-02	1.84E-02
Sb131	3.0	1.73E-02	2.02E-02	1.73E-02	1.73E-02
Te133	2.5	1.48E-02	1.50E-02	1.47E-02	1.47E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y94	2.4	1.40E-02	1.39E-02	1.38E-02	1.38E-02
Sb130m	2.2	1.30E-02	1.40E-02	8.87E-03	1.31E-02
Sb130	2.1	1.19E-02	1.19E-02	1.12E-02	1.12E-02
Te133m	2.0	1.15E-02	1.31E-02	1.29E-02	1.29E-02
La142	1.7	1.00E-02	1.12E-02	1.00E-02	1.00E-02
Te134	1.7	9.62E-03	9.55E-03	9.62E-03	9.62E-03
Pr147	1.5	8.81E-03	7.71E-03	8.81E-03	7.94E-03
La143	1.4	8.19E-03	5.08E-03	8.50E-03	8.50E-03
Cs139	1.3	7.72E-03	7.72E-03	7.77E-03	7.77E-03
Tc101	1.2	7.10E-03	7.12E-03	7.10E-03	7.10E-03
Pr146	1.1	6.63E-03	6.35E-03	6.21E-03	6.21E-03
Rb90m	0.8	4.47E-03	5.19E-03	6.20E-03	6.08E-03
Rh107	0.7	4.15E-03	4.15E-03	4.13E-03	4.13E-03
Sb132m	0.7	4.01E-03	4.38E-03	4.01E-03	4.01E-03
Sn129m	0.7	4.00E-03	5.26E-03	3.88E-03	3.88E-03
Ce146	0.7	3.78E-03	3.38E-03	3.37E-03	3.40E-03
Y93m	0.6	3.39E-03	3.40E-03	2.49E-03	2.49E-03
I135	0.6	3.38E-03	3.39E-03	3.38E-03	3.38E-03
Sr92	0.5	3.16E-03	3.16E-03	3.26E-03	3.26E-03
Kr89	0.5	3.07E-03	3.05E-03	2.91E-03	2.91E-03
Nd151	0.5	3.02E-03	2.87E-03	2.84E-03	2.84E-03
Ce145	0.5	3.01E-03	3.54E-03	1.94E-03	1.94E-03
Rb90	0.5	2.76E-03	2.37E-03	2.49E-03	2.50E-03
Sb132	0.5	2.70E-03	2.82E-03	2.70E-03	2.70E-03
Br84	0.4	2.39E-03	2.40E-03	2.51E-03	2.51E-03
Sb128m	0.4	2.28E-03	2.32E-03	6.58E-04	6.58E-04
Se83	0.4	2.23E-03	1.65E-03	7.70E-04	1.46E-03
Te131	0.4	2.22E-03	2.22E-03	2.33E-03	2.33E-03
Tc102	0.4	2.16E-03	2.94E-03	2.16E-03	2.16E-03
Xe137	0.4	2.11E-03	2.12E-03	2.13E-03	2.13E-03
Ru107	0.3	1.99E-03	1.98E-03	1.99E-03	1.99E-03
Kr88	0.3	1.84E-03	1.84E-03	1.84E-03	1.84E-03
Ru105	0.3	1.65E-03	1.65E-03	1.67E-03	1.67E-03
Pr148	0.3	1.60E-03	1.11E-03	1.60E-03	1.60E-03
Rh108	0.3	1.59E-03	1.61E-03	1.59E-03	1.57E-03
Sb133	0.3	1.53E-03	1.93E-03	1.53E-03	1.53E-03
Xe135m	0.2	1.42E-03	1.42E-03	1.41E-03	1.41E-03

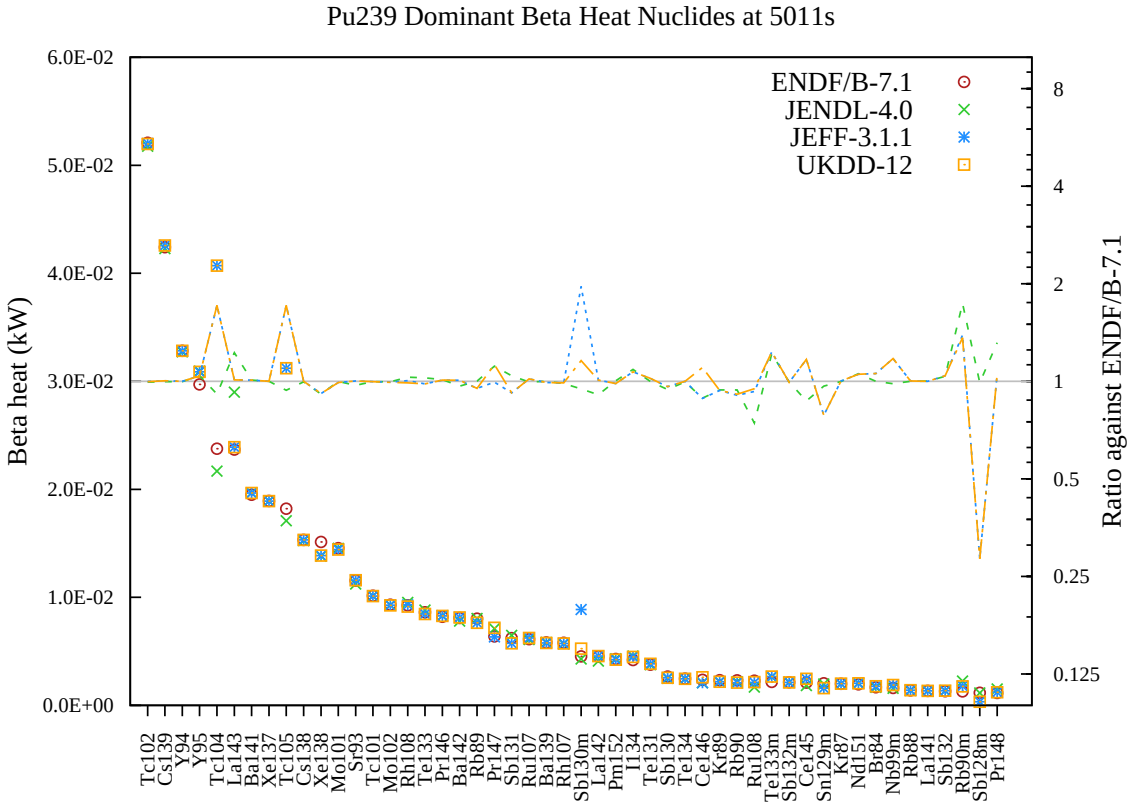

Figure 101: Beta heat (in kW) decay data comparison for Pu239 fission pulse after 5011s cooling.

Table 101: Beta heat (in kW) decay data comparison for Pu239 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	10.7	5.21E-02	5.18E-02	5.20E-02	5.20E-02
Cs139	8.7	4.24E-02	4.23E-02	4.26E-02	4.26E-02
Y94	6.7	3.28E-02	3.27E-02	3.28E-02	3.28E-02
Y95	6.1	2.97E-02	3.09E-02	3.09E-02	3.09E-02
Tc104	4.9	2.38E-02	2.17E-02	4.07E-02	4.07E-02
La143	4.9	2.37E-02	2.90E-02	2.39E-02	2.39E-02
Ba141	4.0	1.95E-02	1.97E-02	1.97E-02	1.97E-02
Xe137	3.9	1.89E-02	1.89E-02	1.89E-02	1.89E-02
Tc105	3.7	1.82E-02	1.71E-02	3.12E-02	3.12E-02
Cs138	3.1	1.53E-02	1.53E-02	1.53E-02	1.53E-02
Xe138	3.1	1.51E-02	1.38E-02	1.39E-02	1.39E-02
Mo101	3.0	1.46E-02	1.45E-02	1.44E-02	1.44E-02
Sr93	2.4	1.16E-02	1.12E-02	1.16E-02	1.16E-02
Tc101	2.1	1.01E-02	1.01E-02	1.01E-02	1.01E-02
Mo102	1.9	9.32E-03	9.29E-03	9.27E-03	9.26E-03
Rh108	1.9	9.25E-03	9.53E-03	9.30E-03	9.15E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te133	1.8	8.61E-03	8.82E-03	8.45E-03	8.45E-03
Pr146	1.7	8.21E-03	8.30E-03	8.28E-03	8.28E-03
Ba142	1.7	8.09E-03	7.81E-03	8.14E-03	8.14E-03
Rb89	1.6	8.03E-03	8.04E-03	7.64E-03	7.64E-03
Pr147	1.3	6.38E-03	7.11E-03	6.34E-03	7.18E-03
Sb131	1.3	6.23E-03	6.48E-03	5.74E-03	5.74E-03
Ru107	1.3	6.12E-03	6.10E-03	6.23E-03	6.23E-03
Ba139	1.2	5.82E-03	5.82E-03	5.77E-03	5.77E-03
Rh107	1.2	5.78E-03	5.70E-03	5.72E-03	5.72E-03
Sb130m	0.9	4.53E-03	4.29E-03	8.87E-03	5.24E-03
La142	0.9	4.52E-03	4.11E-03	4.56E-03	4.56E-03
Pm152	0.9	4.29E-03	4.31E-03	4.22E-03	4.22E-03
I134	0.9	4.19E-03	4.56E-03	4.48E-03	4.48E-03
Te131	0.8	3.77E-03	3.77E-03	3.85E-03	3.85E-03
Sb130	0.5	2.66E-03	2.51E-03	2.56E-03	2.56E-03
Te134	0.5	2.47E-03	2.46E-03	2.47E-03	2.47E-03
Ce146	0.5	2.36E-03	2.09E-03	2.09E-03	2.60E-03
Kr89	0.5	2.33E-03	2.19E-03	2.18E-03	2.18E-03
Rb90	0.5	2.32E-03	2.18E-03	2.10E-03	2.11E-03
Ru108	0.5	2.28E-03	1.70E-03	2.12E-03	2.16E-03
Te133m	0.4	2.16E-03	2.63E-03	2.66E-03	2.66E-03
Sb132m	0.4	2.14E-03	2.13E-03	2.13E-03	2.13E-03
Ce145	0.4	2.10E-03	1.83E-03	2.46E-03	2.46E-03
Sn129m	0.4	2.04E-03	1.97E-03	1.60E-03	1.60E-03
Kr87	0.4	2.00E-03	2.00E-03	2.00E-03	2.00E-03
Nd151	0.4	1.95E-03	2.06E-03	2.05E-03	2.05E-03
Br84	0.3	1.67E-03	1.67E-03	1.77E-03	1.77E-03
Nb99m	0.3	1.61E-03	1.58E-03	1.89E-03	1.89E-03
Rb88	0.3	1.40E-03	1.40E-03	1.40E-03	1.40E-03
La141	0.3	1.34E-03	1.34E-03	1.34E-03	1.34E-03
Sb132	0.3	1.31E-03	1.35E-03	1.36E-03	1.36E-03
Rb90m	0.3	1.29E-03	2.24E-03	1.79E-03	1.76E-03
Sb128m	0.2	1.16E-03	1.15E-03	3.30E-04	3.30E-04
Pr148	0.2	1.15E-03	1.52E-03	1.21E-03	1.21E-03

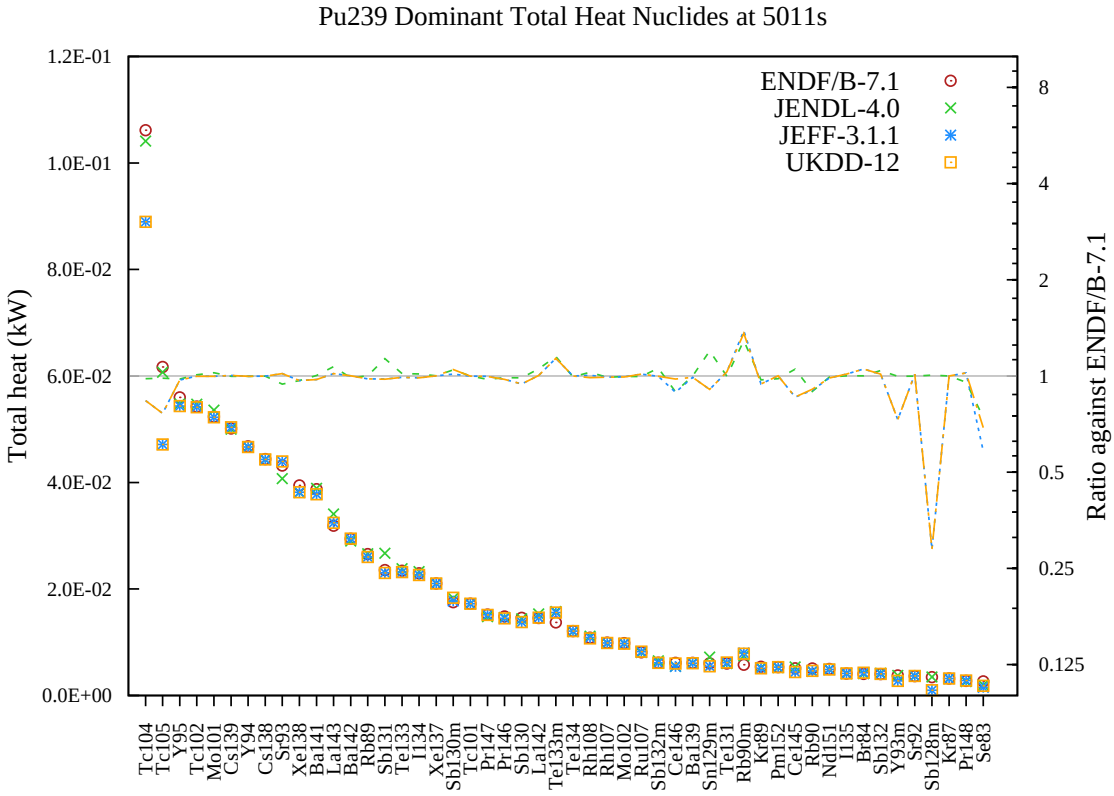

Figure 102: Total heat (in kW) decay data comparison for Pu239 fission pulse after 5011s cooling.

Table 102: Total heat (in kW) decay data comparison for Pu239 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	9.9	1.06E-01	1.04E-01	8.89E-02	8.89E-02
Tc105	5.8	6.17E-02	6.07E-02	4.71E-02	4.71E-02
Y95	5.2	5.60E-02	5.48E-02	5.43E-02	5.43E-02
Tc102	5.1	5.42E-02	5.47E-02	5.42E-02	5.41E-02
Mo101	4.9	5.24E-02	5.36E-02	5.22E-02	5.22E-02
Cs139	4.7	5.01E-02	5.00E-02	5.03E-02	5.03E-02
Y94	4.4	4.68E-02	4.67E-02	4.67E-02	4.67E-02
Cs138	4.2	4.44E-02	4.43E-02	4.43E-02	4.43E-02
Sr93	4.0	4.32E-02	4.07E-02	4.40E-02	4.40E-02
Xe138	3.7	3.95E-02	3.81E-02	3.82E-02	3.82E-02
Ba141	3.6	3.87E-02	3.89E-02	3.78E-02	3.78E-02
La143	3.0	3.19E-02	3.41E-02	3.24E-02	3.24E-02
Ba142	2.8	2.94E-02	2.90E-02	2.95E-02	2.95E-02
Rb89	2.5	2.66E-02	2.66E-02	2.60E-02	2.60E-02
Sb131	2.2	2.36E-02	2.67E-02	2.30E-02	2.30E-02
Te133	2.2	2.34E-02	2.38E-02	2.32E-02	2.32E-02
I134	2.1	2.29E-02	2.33E-02	2.26E-02	2.26E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Xe137	2.0	2.10E-02	2.10E-02	2.10E-02	2.10E-02
Sb130m	1.6	1.75E-02	1.83E-02	1.77E-02	1.83E-02
Tc101	1.6	1.72E-02	1.72E-02	1.72E-02	1.72E-02
Pr147	1.4	1.52E-02	1.48E-02	1.51E-02	1.51E-02
Pr146	1.4	1.48E-02	1.47E-02	1.45E-02	1.45E-02
Sb130	1.4	1.46E-02	1.44E-02	1.38E-02	1.38E-02
La142	1.4	1.45E-02	1.53E-02	1.46E-02	1.46E-02
Te133m	1.3	1.37E-02	1.58E-02	1.56E-02	1.56E-02
Te134	1.1	1.21E-02	1.20E-02	1.21E-02	1.21E-02
Rh108	1.0	1.08E-02	1.11E-02	1.09E-02	1.07E-02
Rh107	0.9	9.93E-03	9.84E-03	9.85E-03	9.85E-03
Mo102	0.9	9.81E-03	9.78E-03	9.76E-03	9.74E-03
Ru107	0.8	8.11E-03	8.08E-03	8.22E-03	8.22E-03
Sb132m	0.6	6.15E-03	6.51E-03	6.14E-03	6.14E-03
Ce146	0.6	6.13E-03	5.47E-03	5.46E-03	6.00E-03
Ba139	0.6	6.12E-03	6.12E-03	6.06E-03	6.06E-03
Sn129m	0.6	6.04E-03	7.23E-03	5.48E-03	5.48E-03
Te131	0.6	6.00E-03	5.99E-03	6.17E-03	6.18E-03
Rb90m	0.5	5.76E-03	7.44E-03	7.99E-03	7.84E-03
Kr89	0.5	5.40E-03	5.24E-03	5.10E-03	5.10E-03
Pm152	0.5	5.34E-03	5.24E-03	5.34E-03	5.34E-03
Ce145	0.5	5.12E-03	5.37E-03	4.39E-03	4.39E-03
Rb90	0.5	5.08E-03	4.55E-03	4.58E-03	4.62E-03
Nd151	0.5	4.97E-03	4.93E-03	4.89E-03	4.89E-03
I135	0.4	4.11E-03	4.12E-03	4.16E-03	4.16E-03
Br84	0.4	4.07E-03	4.07E-03	4.28E-03	4.28E-03
Sb132	0.4	4.01E-03	4.17E-03	4.06E-03	4.06E-03
Y93m	0.4	3.78E-03	3.77E-03	2.76E-03	2.76E-03
Sr92	0.3	3.64E-03	3.64E-03	3.69E-03	3.69E-03
Sb128m	0.3	3.45E-03	3.47E-03	9.88E-04	9.88E-04
Kr87	0.3	3.19E-03	3.19E-03	3.19E-03	3.19E-03
Pr148	0.3	2.75E-03	2.63E-03	2.81E-03	2.81E-03
Se83	0.2	2.65E-03	1.96E-03	1.54E-03	1.82E-03

7.5 10000s after pulse

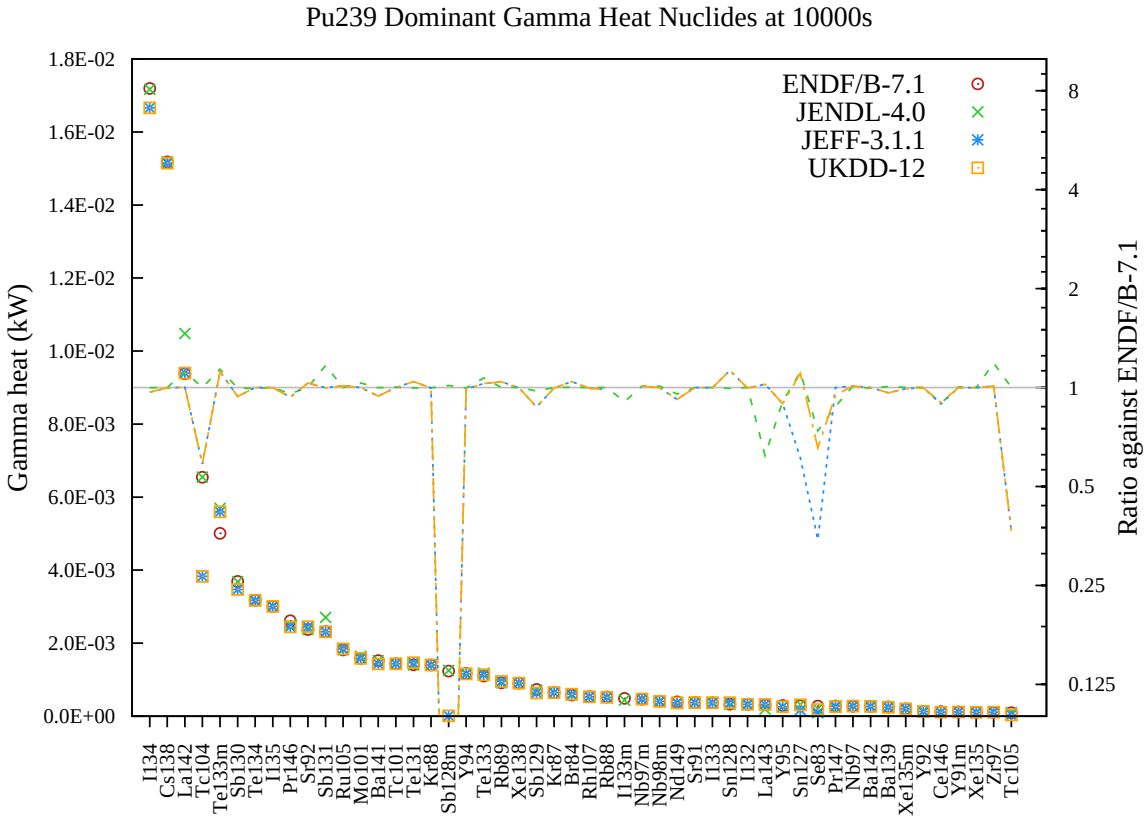

Figure 103: Gamma heat (in kW) decay data comparison for Pu239 fission pulse after 10000s cooling.

Table 103: Gamma heat (in kW) decay data comparison for Pu239 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	18.0	1.72E-02	1.72E-02	1.67E-02	1.67E-02
Cs138	15.9	1.52E-02	1.52E-02	1.51E-02	1.51E-02
La142	9.8	9.38E-03	1.05E-02	9.40E-03	9.40E-03
Tc104	6.9	6.55E-03	6.55E-03	3.83E-03	3.83E-03
Te133m	5.2	5.01E-03	5.69E-03	5.60E-03	5.60E-03
Sb130	3.9	3.69E-03	3.68E-03	3.47E-03	3.47E-03
Te134	3.3	3.17E-03	3.15E-03	3.17E-03	3.17E-03
I135	3.2	3.01E-03	3.01E-03	3.01E-03	3.01E-03
Pr146	2.7	2.62E-03	2.50E-03	2.45E-03	2.45E-03
Sr92	2.5	2.37E-03	2.38E-03	2.45E-03	2.45E-03
Sb131	2.4	2.32E-03	2.70E-03	2.31E-03	2.31E-03
Ru105	1.9	1.82E-03	1.82E-03	1.84E-03	1.84E-03
Mo101	1.7	1.59E-03	1.64E-03	1.58E-03	1.58E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Ba141	1.6	1.52E-03	1.52E-03	1.43E-03	1.43E-03
Tc101	1.5	1.44E-03	1.44E-03	1.44E-03	1.44E-03
Te131	1.5	1.41E-03	1.40E-03	1.47E-03	1.47E-03
Kr88	1.5	1.40E-03	1.40E-03	1.40E-03	1.40E-03
Sb128m	1.3	1.24E-03	1.25E-03	7.63E-06	7.63E-06
Y94	1.2	1.17E-03	1.17E-03	1.16E-03	1.16E-03
Te133	1.2	1.10E-03	1.18E-03	1.13E-03	1.13E-03
Rb89	1.0	9.13E-04	9.15E-04	9.51E-04	9.51E-04
Xe138	0.9	9.04E-04	9.05E-04	9.03E-04	9.03E-04
Sb129	0.8	7.32E-04	7.14E-04	6.39E-04	6.39E-04
Kr87	0.7	6.48E-04	6.49E-04	6.46E-04	6.46E-04
Br84	0.6	5.79E-04	5.80E-04	6.03E-04	6.03E-04
Rh107	0.6	5.35E-04	5.34E-04	5.32E-04	5.32E-04
Rb88	0.5	5.25E-04	5.25E-04	5.17E-04	5.17E-04
I133m	0.5	4.87E-04	—	—	—
Nb97m	0.5	4.64E-04	4.69E-04	4.69E-04	4.69E-04
Nb98m	0.4	4.10E-04	4.14E-04	4.09E-04	4.09E-04
Nd149	0.4	3.93E-04	3.75E-04	3.62E-04	3.62E-04
Sr91	0.4	3.72E-04	3.72E-04	3.72E-04	3.72E-04
I133	0.4	3.68E-04	3.67E-04	3.67E-04	3.67E-04
Sn128	0.3	3.28E-04	3.26E-04	3.70E-04	3.70E-04
I132	0.3	3.26E-04	3.26E-04	3.25E-04	3.25E-04
La143	0.3	3.13E-04	1.94E-04	3.21E-04	3.21E-04
Y95	0.3	2.92E-04	2.65E-04	2.61E-04	2.61E-04
Sn127	0.3	2.82E-04	3.15E-04	1.72E-04	3.12E-04
Se83	0.3	2.80E-04	2.06E-04	9.63E-05	1.83E-04
Pr147	0.3	2.77E-04	2.43E-04	2.77E-04	2.63E-04
Nb97	0.3	2.75E-04	2.78E-04	2.78E-04	2.78E-04
Ba142	0.3	2.69E-04	2.68E-04	2.69E-04	2.69E-04
Ba139	0.3	2.52E-04	2.53E-04	2.43E-04	2.43E-04
Xe135m	0.2	2.01E-04	2.01E-04	2.00E-04	2.00E-04
Y92	0.1	1.30E-04	1.30E-04	1.30E-04	1.30E-04
Ce146	0.1	1.23E-04	1.10E-04	1.09E-04	1.10E-04
Y91m	0.1	1.17E-04	1.18E-04	1.17E-04	1.17E-04
Xe135	0.1	1.07E-04	1.07E-04	1.07E-04	1.07E-04
Zr97	0.1	1.07E-04	1.27E-04	1.08E-04	1.08E-04
Tc105	0.1	9.77E-05	9.80E-05	3.58E-05	3.58E-05

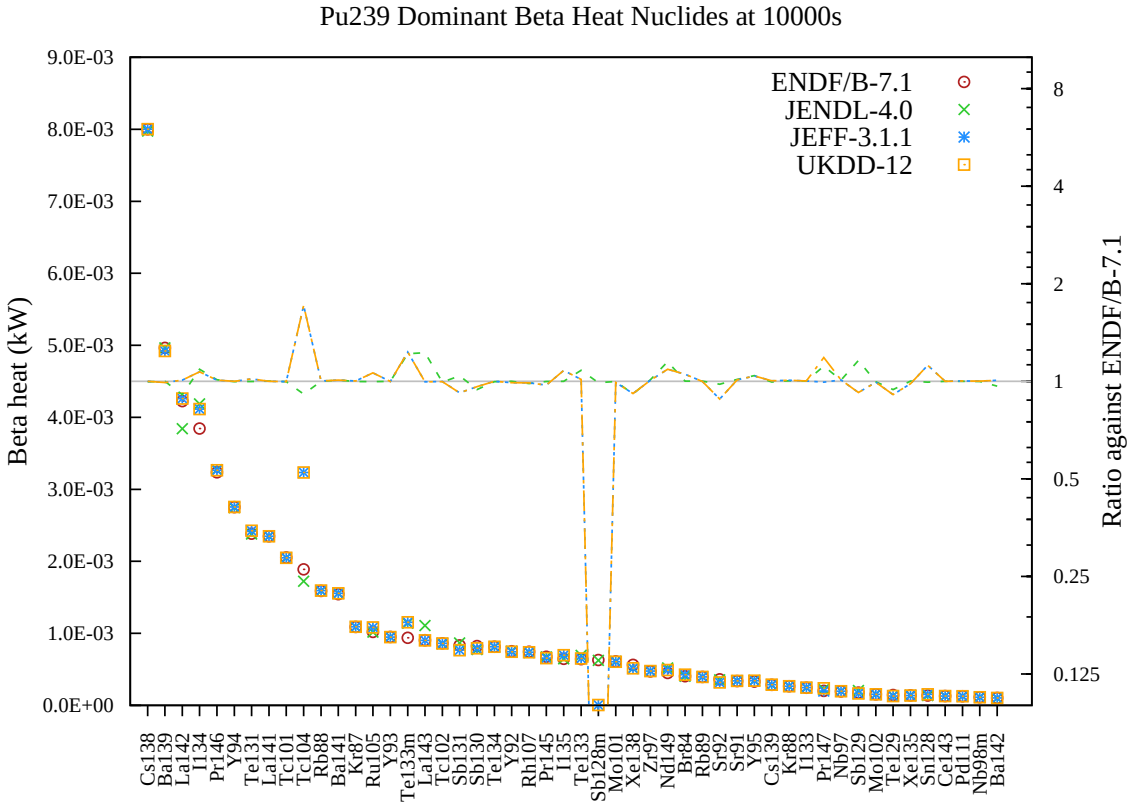

Figure 104: Beta heat (in kW) decay data comparison for Pu239 fission pulse after 10000s cooling.

Table 104: Beta heat (in kW) decay data comparison for Pu239 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	13.6	8.00E-03	7.97E-03	8.00E-03	8.00E-03
Ba139	8.4	4.96E-03	4.96E-03	4.92E-03	4.92E-03
La142	7.2	4.23E-03	3.84E-03	4.26E-03	4.26E-03
I134	6.5	3.84E-03	4.19E-03	4.11E-03	4.11E-03
Pr146	5.5	3.24E-03	3.27E-03	3.26E-03	3.26E-03
Y94	4.7	2.75E-03	2.75E-03	2.75E-03	2.75E-03
Te131	4.0	2.38E-03	2.38E-03	2.42E-03	2.42E-03
La141	4.0	2.35E-03	2.35E-03	2.35E-03	2.35E-03
Tc101	3.5	2.05E-03	2.05E-03	2.05E-03	2.05E-03
Tc104	3.2	1.89E-03	1.72E-03	3.23E-03	3.23E-03
Rb88	2.7	1.59E-03	1.59E-03	1.59E-03	1.59E-03
Ba141	2.6	1.54E-03	1.56E-03	1.56E-03	1.56E-03
Kr87	1.8	1.09E-03	1.09E-03	1.09E-03	1.09E-03
Ru105	1.7	1.02E-03	1.02E-03	1.08E-03	1.08E-03
Y93	1.6	9.49E-04	9.50E-04	9.49E-04	9.49E-04
Te133m	1.6	9.38E-04	1.14E-03	1.15E-03	1.15E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La143	1.5	9.05E-04	1.11E-03	9.02E-04	9.02E-04
Tc102	1.5	8.62E-04	8.57E-04	8.61E-04	8.60E-04
Sb131	1.4	8.33E-04	8.66E-04	7.67E-04	7.67E-04
Sb130	1.4	8.23E-04	7.76E-04	7.93E-04	7.93E-04
Te134	1.4	8.14E-04	8.11E-04	8.13E-04	8.13E-04
Y92	1.3	7.51E-04	7.51E-04	7.44E-04	7.44E-04
Rh107	1.3	7.45E-04	7.34E-04	7.38E-04	7.38E-04
Pr145	1.1	6.74E-04	6.74E-04	6.56E-04	6.56E-04
I135	1.1	6.46E-04	6.46E-04	6.98E-04	6.98E-04
Te133	1.1	6.42E-04	6.94E-04	6.50E-04	6.50E-04
Sb128m	1.1	6.31E-04	6.24E-04	3.83E-06	3.83E-06
Mo101	1.0	6.10E-04	6.10E-04	6.05E-04	6.05E-04
Xe138	1.0	5.63E-04	5.15E-04	5.16E-04	5.16E-04
Zr97	0.8	4.72E-04	4.77E-04	4.76E-04	4.76E-04
Nd149	0.8	4.51E-04	5.18E-04	4.91E-04	4.91E-04
Br84	0.7	4.05E-04	4.05E-04	4.26E-04	4.26E-04
Rb89	0.7	3.96E-04	3.96E-04	3.95E-04	3.95E-04
Sr92	0.6	3.63E-04	3.55E-04	3.19E-04	3.19E-04
Sr91	0.6	3.37E-04	3.42E-04	3.40E-04	3.40E-04
Y95	0.6	3.30E-04	3.44E-04	3.43E-04	3.43E-04
Cs139	0.5	2.86E-04	2.85E-04	2.87E-04	2.87E-04
Kr88	0.4	2.65E-04	2.66E-04	2.67E-04	2.67E-04
I133	0.4	2.45E-04	2.46E-04	2.46E-04	2.46E-04
Pr147	0.3	2.01E-04	2.24E-04	2.00E-04	2.38E-04
Nb97	0.3	1.94E-04	1.96E-04	1.96E-04	1.96E-04
Sb129	0.3	1.78E-04	2.06E-04	1.64E-04	1.64E-04
Mo102	0.3	1.54E-04	1.54E-04	1.53E-04	1.53E-04
Te129	0.2	1.43E-04	1.35E-04	1.30E-04	1.30E-04
Xe135	0.2	1.38E-04	1.38E-04	1.36E-04	1.36E-04
Sn128	0.2	1.37E-04	1.36E-04	1.54E-04	1.54E-04
Ce143	0.2	1.28E-04	1.28E-04	1.28E-04	1.28E-04
Pd111	0.2	1.27E-04	1.28E-04	1.28E-04	1.28E-04
Nb98m	0.2	1.13E-04	1.13E-04	1.13E-04	1.13E-04
Ba142	0.2	1.02E-04	9.86E-05	1.03E-04	1.03E-04

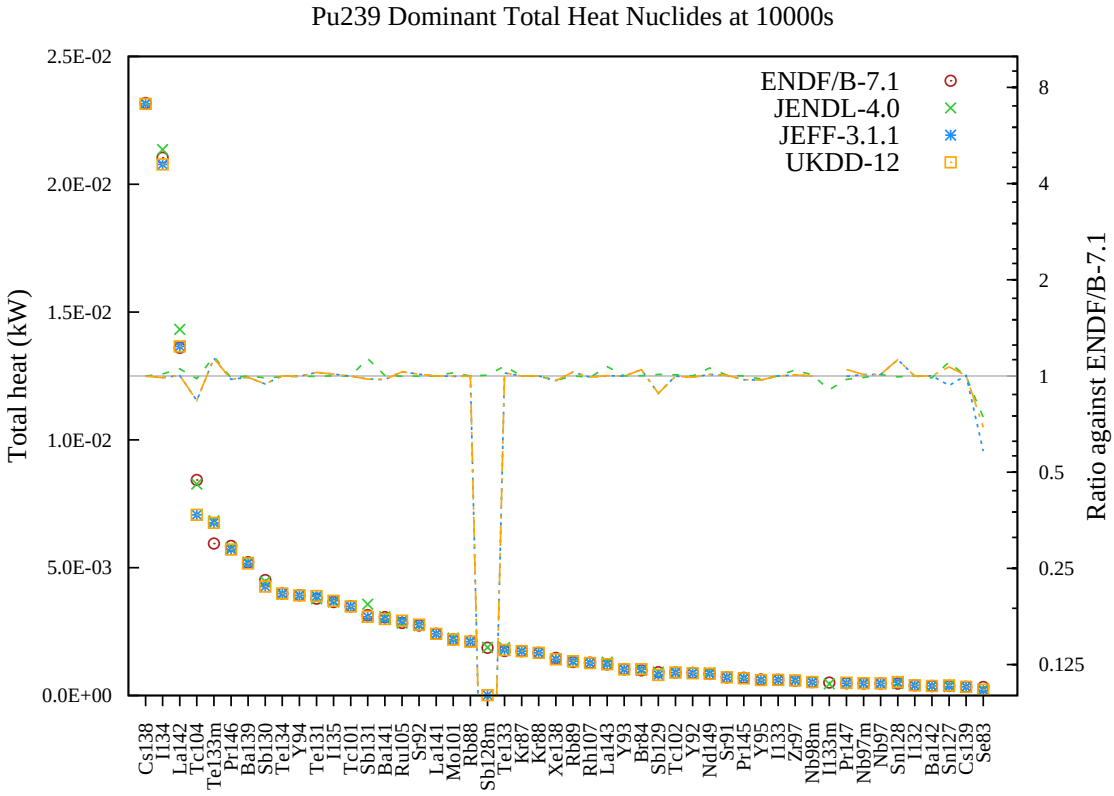

Figure 105: Total heat (in kW) decay data comparison for Pu239 fission pulse after 10000s cooling.

Table 105: Total heat (in kW) decay data comparison for Pu239 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	15.0	2.32E-02	2.32E-02	2.31E-02	2.31E-02
I134	13.6	2.10E-02	2.14E-02	2.08E-02	2.08E-02
La142	8.8	1.36E-02	1.43E-02	1.37E-02	1.37E-02
Tc104	5.5	8.43E-03	8.27E-03	7.07E-03	7.07E-03
Te133m	3.8	5.94E-03	6.83E-03	6.75E-03	6.75E-03
Pr146	3.8	5.85E-03	5.78E-03	5.71E-03	5.71E-03
Ba139	3.4	5.22E-03	5.22E-03	5.16E-03	5.16E-03
Sb130	2.9	4.52E-03	4.46E-03	4.26E-03	4.26E-03
Te134	2.6	3.99E-03	3.97E-03	3.99E-03	3.99E-03
Y94	2.5	3.93E-03	3.91E-03	3.91E-03	3.91E-03
Te131	2.5	3.79E-03	3.78E-03	3.89E-03	3.89E-03
I135	2.4	3.65E-03	3.66E-03	3.70E-03	3.70E-03
Tc101	2.3	3.49E-03	3.49E-03	3.49E-03	3.49E-03
Sb131	2.0	3.15E-03	3.57E-03	3.08E-03	3.08E-03
Ba141	2.0	3.07E-03	3.08E-03	2.99E-03	2.99E-03
Ru105	1.8	2.84E-03	2.83E-03	2.92E-03	2.92E-03
Sr92	1.8	2.74E-03	2.73E-03	2.77E-03	2.77E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La141	1.6	2.41E-03	2.41E-03	2.41E-03	2.41E-03
Mo101	1.4	2.20E-03	2.25E-03	2.19E-03	2.19E-03
Rb88	1.4	2.11E-03	2.11E-03	2.11E-03	2.11E-03
Sb128m	1.2	1.87E-03	1.88E-03	1.15E-05	1.15E-05
Te133	1.1	1.74E-03	1.87E-03	1.78E-03	1.78E-03
Kr87	1.1	1.74E-03	1.74E-03	1.74E-03	1.74E-03
Kr88	1.1	1.67E-03	1.67E-03	1.67E-03	1.67E-03
Xe138	1.0	1.47E-03	1.42E-03	1.42E-03	1.42E-03
Rb89	0.8	1.31E-03	1.31E-03	1.35E-03	1.35E-03
Rh107	0.8	1.28E-03	1.27E-03	1.27E-03	1.27E-03
La143	0.8	1.22E-03	1.30E-03	1.22E-03	1.22E-03
Y93	0.7	1.03E-03	1.03E-03	1.03E-03	1.03E-03
Br84	0.6	9.84E-04	9.85E-04	1.03E-03	1.03E-03
Sb129	0.6	9.10E-04	9.20E-04	8.03E-04	8.03E-04
Tc102	0.6	8.98E-04	9.05E-04	8.97E-04	8.96E-04
Y92	0.6	8.81E-04	8.81E-04	8.74E-04	8.74E-04
Nd149	0.5	8.44E-04	8.94E-04	8.53E-04	8.53E-04
Sr91	0.5	7.09E-04	7.13E-04	7.12E-04	7.12E-04
Pr145	0.4	6.93E-04	6.92E-04	6.74E-04	6.74E-04
Y95	0.4	6.22E-04	6.09E-04	6.04E-04	6.04E-04
I133	0.4	6.13E-04	6.13E-04	6.13E-04	6.13E-04
Zr97	0.4	5.79E-04	6.04E-04	5.84E-04	5.84E-04
Nb98m	0.3	5.23E-04	5.27E-04	5.23E-04	5.23E-04
I133m	0.3	5.02E-04	4.55E-04	—	—
Pr147	0.3	4.78E-04	4.66E-04	4.77E-04	5.01E-04
Nb97m	0.3	4.74E-04	4.69E-04	4.79E-04	4.79E-04
Nb97	0.3	4.69E-04	4.74E-04	4.74E-04	4.74E-04
Sn128	0.3	4.65E-04	4.63E-04	5.24E-04	5.24E-04
I132	0.3	3.97E-04	3.97E-04	3.96E-04	3.96E-04
Ba142	0.2	3.71E-04	3.66E-04	3.72E-04	3.72E-04
Sn127	0.2	3.69E-04	4.08E-04	3.45E-04	3.94E-04
Cs139	0.2	3.38E-04	3.36E-04	3.39E-04	3.39E-04
Se83	0.2	3.31E-04	2.46E-04	1.93E-04	2.29E-04

8 Decay data comparison for ^{240}Pu 0.0253 eV pulse decay heat

8.1 10s after pulse

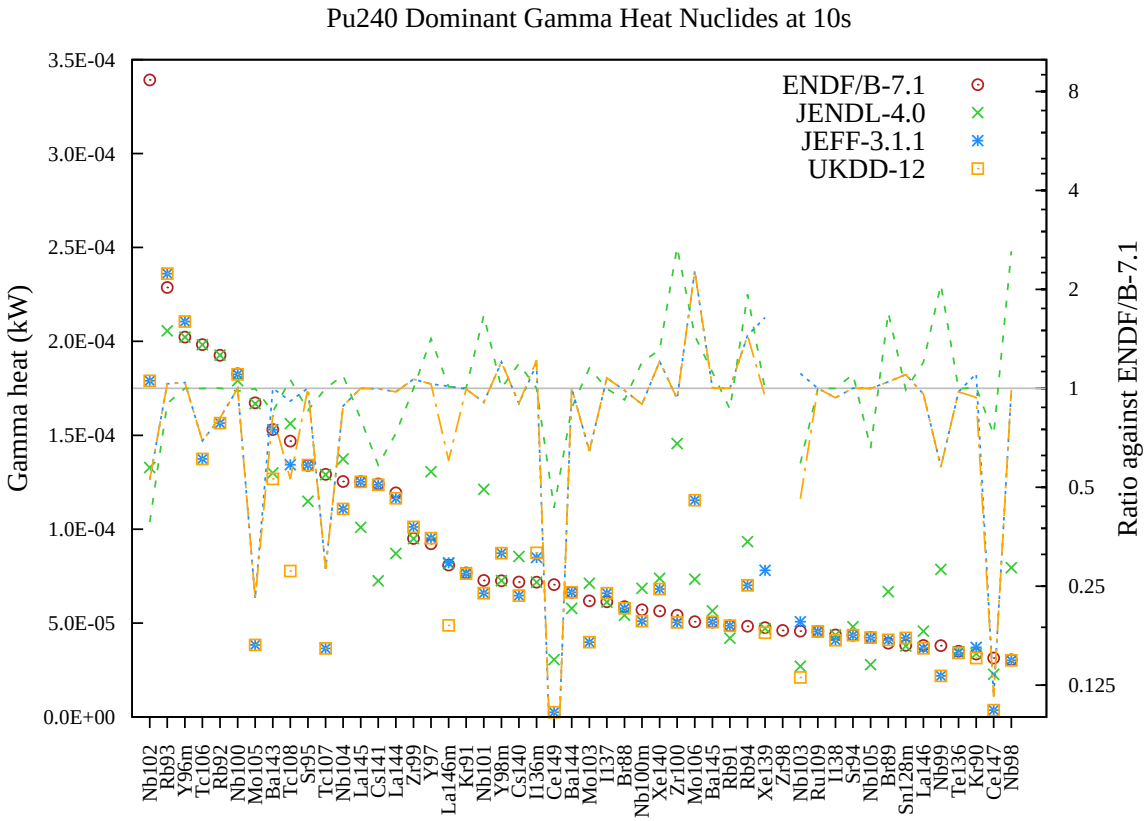

Figure 106: Gamma heat (in kW) decay data comparison for Pu240 fission pulse after 10s cooling.

Table 106: Gamma heat (in kW) decay data comparison for Pu240 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb102	6.5	3.39E-04	1.33E-04	1.79E-04	1.79E-04
Rb93	4.4	2.29E-04	2.06E-04	2.36E-04	2.36E-04
Y96m	3.9	2.02E-04	2.02E-04	2.11E-04	2.11E-04
Tc106	3.8	1.98E-04	1.98E-04	1.37E-04	1.37E-04
Rb92	3.7	1.93E-04	1.93E-04	1.57E-04	1.57E-04
Nb100	3.5	1.83E-04	1.79E-04	1.82E-04	1.82E-04
Mo105	3.2	1.67E-04	1.67E-04	3.83E-05	3.83E-05
Ba143	2.9	1.53E-04	1.30E-04	1.53E-04	1.27E-04
Tc108	2.8	1.47E-04	1.56E-04	1.34E-04	7.78E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sr95	2.6	1.34E-04	1.15E-04	1.34E-04	1.34E-04
Tc107	2.5	1.29E-04	1.29E-04	3.65E-05	3.65E-05
Nb104	2.4	1.25E-04	1.37E-04	1.11E-04	1.11E-04
La145	2.4	1.25E-04	1.01E-04	1.25E-04	1.25E-04
Cs141	2.4	1.24E-04	7.25E-05	1.24E-04	1.24E-04
La144	2.3	1.19E-04	8.70E-05	1.16E-04	1.16E-04
Zr99	1.8	9.50E-05	9.49E-05	1.01E-04	1.01E-04
Y97	1.8	9.23E-05	1.31E-04	9.52E-05	9.52E-05
La146m	1.6	8.09E-05	8.17E-05	8.21E-05	4.87E-05
Kr91	1.5	7.67E-05	7.69E-05	7.63E-05	7.63E-05
Nb101	1.4	7.27E-05	1.21E-04	6.59E-05	6.59E-05
Y98m	1.4	7.25E-05	7.26E-05	8.73E-05	8.73E-05
Cs140	1.4	7.19E-05	8.55E-05	6.46E-05	6.46E-05
I136m	1.4	7.17E-05	7.17E-05	8.49E-05	8.74E-05
Ce149	1.4	7.05E-05	3.05E-05	2.47E-06	2.47E-06
Ba144	1.3	6.63E-05	5.78E-05	6.63E-05	6.63E-05
Mo103	1.2	6.18E-05	7.12E-05	3.99E-05	3.99E-05
I137	1.2	6.13E-05	6.11E-05	6.59E-05	6.59E-05
Br88	1.1	5.88E-05	5.42E-05	5.79E-05	5.79E-05
Nb100m	1.1	5.70E-05	6.86E-05	5.10E-05	5.10E-05
Xe140	1.1	5.64E-05	7.38E-05	6.81E-05	6.81E-05
Zr100	1.0	5.42E-05	1.46E-04	5.04E-05	5.04E-05
Mo106	1.0	5.07E-05	7.34E-05	1.15E-04	1.15E-04
Ba145	1.0	5.05E-05	5.65E-05	5.06E-05	5.06E-05
Rb91	0.9	4.86E-05	4.20E-05	4.86E-05	4.86E-05
Rb94	0.9	4.83E-05	9.34E-05	7.01E-05	7.01E-05
Xe139	0.9	4.76E-05	4.71E-05	7.81E-05	4.49E-05
Zr98	0.9	4.60E-05	—	—	—
Nb103	0.9	4.57E-05	2.70E-05	5.07E-05	2.11E-05
Ru109	0.9	4.55E-05	4.54E-05	4.55E-05	4.55E-05
I138	0.8	4.36E-05	4.36E-05	4.09E-05	4.09E-05
Sr94	0.8	4.35E-05	4.80E-05	4.36E-05	4.36E-05
Nb105	0.8	4.23E-05	2.78E-05	4.23E-05	4.23E-05
Br89	0.8	3.93E-05	6.67E-05	4.11E-05	4.11E-05
Sn128m	0.7	3.81E-05	3.78E-05	4.20E-05	4.20E-05
La146	0.7	3.81E-05	4.57E-05	3.66E-05	3.66E-05
Nb99	0.7	3.80E-05	7.86E-05	2.19E-05	2.19E-05
Te136	0.7	3.50E-05	3.48E-05	3.41E-05	3.41E-05
Kr90	0.6	3.35E-05	3.37E-05	3.71E-05	3.14E-05
Ce147	0.6	3.14E-05	2.27E-05	3.62E-06	3.62E-06
Nb98	0.6	3.05E-05	7.95E-05	3.01E-05	3.01E-05

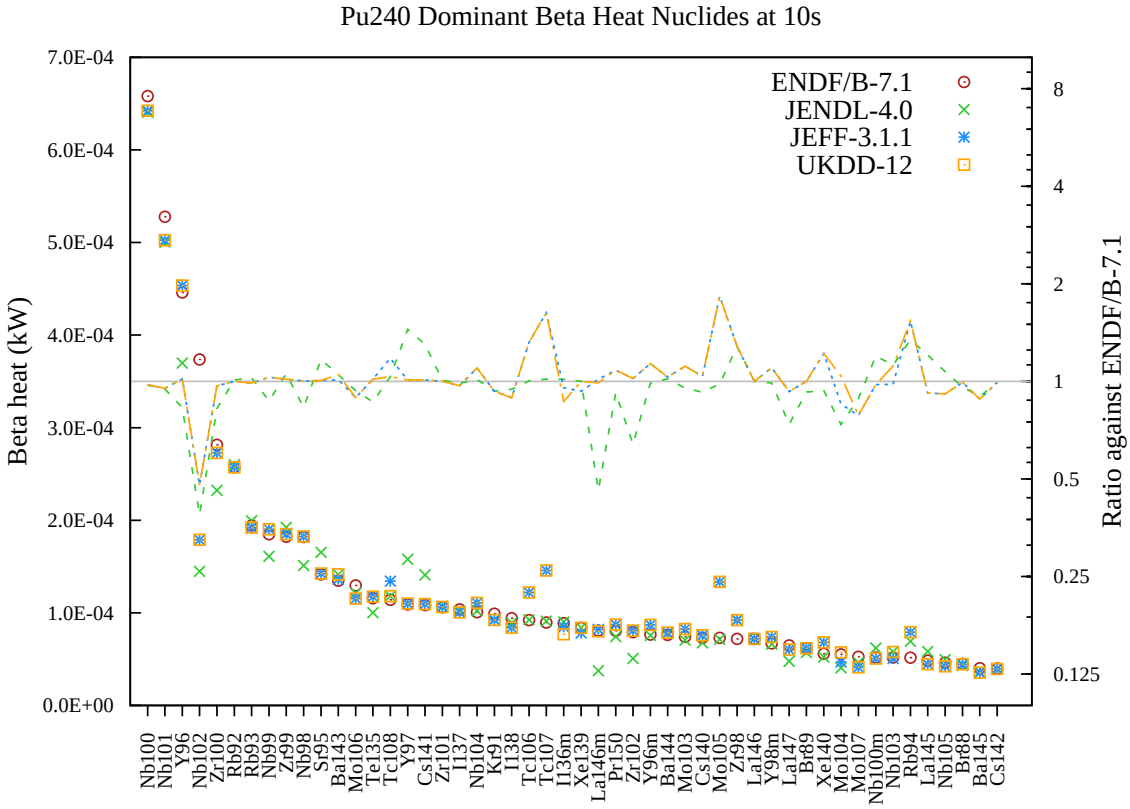

Figure 107: Beta heat (in kW) decay data comparison for Pu240 fission pulse after 10s cooling.

Table 107: Beta heat (in kW) decay data comparison for Pu240 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb100	8.9	6.58E-04	6.41E-04	6.42E-04	6.42E-04
Nb101	7.2	5.28E-04	5.00E-04	5.02E-04	5.02E-04
Y96	6.1	4.46E-04	3.70E-04	4.54E-04	4.54E-04
Nb102	5.1	3.74E-04	1.45E-04	1.79E-04	1.79E-04
Zr100	3.8	2.81E-04	2.32E-04	2.73E-04	2.73E-04
Rb92	3.5	2.57E-04	2.60E-04	2.57E-04	2.57E-04
Rb93	2.6	1.94E-04	1.99E-04	1.92E-04	1.92E-04
Nb99	2.5	1.85E-04	1.61E-04	1.90E-04	1.90E-04
Zr99	2.5	1.82E-04	1.92E-04	1.85E-04	1.85E-04
Nb98	2.5	1.82E-04	1.51E-04	1.82E-04	1.82E-04
Sr95	1.9	1.42E-04	1.65E-04	1.42E-04	1.42E-04
Ba143	1.8	1.35E-04	1.41E-04	1.36E-04	1.42E-04
Mo106	1.8	1.30E-04	1.21E-04	1.15E-04	1.15E-04
Te135	1.6	1.16E-04	1.00E-04	1.17E-04	1.17E-04
Tc108	1.6	1.14E-04	1.18E-04	1.34E-04	1.18E-04
Y97	1.5	1.09E-04	1.58E-04	1.10E-04	1.10E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs141	1.5	1.08E-04	1.41E-04	1.09E-04	1.09E-04
Zr101	1.4	1.06E-04	1.07E-04	1.06E-04	1.06E-04
I137	1.4	1.04E-04	1.02E-04	1.01E-04	1.01E-04
Nb104	1.4	1.01E-04	1.02E-04	1.11E-04	1.11E-04
Kr91	1.3	9.91E-05	9.25E-05	9.23E-05	9.23E-05
I138	1.3	9.43E-05	8.91E-05	8.39E-05	8.39E-05
Tc106	1.3	9.22E-05	9.26E-05	1.22E-04	1.22E-04
Tc107	1.2	8.96E-05	9.10E-05	1.46E-04	1.46E-04
I136m	1.2	8.88E-05	9.01E-05	8.49E-05	7.69E-05
Xe139	1.1	8.38E-05	8.39E-05	7.81E-05	8.38E-05
La146m	1.1	8.09E-05	3.73E-05	8.21E-05	8.01E-05
Pr150	1.1	8.06E-05	7.43E-05	8.73E-05	8.73E-05
Zr102	1.1	7.91E-05	5.06E-05	8.07E-05	8.07E-05
Y96m	1.0	7.65E-05	7.56E-05	8.69E-05	8.69E-05
Ba144	1.0	7.62E-05	7.76E-05	7.86E-05	7.86E-05
Mo103	1.0	7.40E-05	7.06E-05	8.25E-05	8.25E-05
Cs140	1.0	7.30E-05	6.76E-05	7.57E-05	7.57E-05
Mo105	1.0	7.29E-05	7.16E-05	1.34E-04	1.34E-04
Zr98	1.0	7.19E-05	9.22E-05	9.21E-05	9.21E-05
La146	1.0	7.18E-05	7.20E-05	7.18E-05	7.18E-05
Y98m	0.9	6.70E-05	6.62E-05	7.38E-05	7.38E-05
La147	0.9	6.48E-05	4.78E-05	6.02E-05	6.02E-05
Br89	0.8	6.18E-05	5.72E-05	6.18E-05	6.18E-05
Xe140	0.8	5.59E-05	5.23E-05	6.81E-05	6.81E-05
Mo104	0.7	5.51E-05	4.06E-05	4.69E-05	5.73E-05
Mo107	0.7	5.24E-05	4.64E-05	4.12E-05	4.12E-05
Nb100m	0.7	5.18E-05	6.20E-05	5.06E-05	5.06E-05
Nb103	0.7	5.17E-05	5.81E-05	5.07E-05	5.77E-05
Rb94	0.7	5.15E-05	6.93E-05	7.91E-05	7.91E-05
La145	0.7	4.83E-05	5.83E-05	4.45E-05	4.45E-05
Nb105	0.6	4.62E-05	4.95E-05	4.23E-05	4.23E-05
Br88	0.6	4.49E-05	4.31E-05	4.45E-05	4.45E-05
Ba145	0.5	4.02E-05	3.61E-05	3.55E-05	3.55E-05
Cs142	0.5	3.99E-05	3.96E-05	3.95E-05	3.95E-05

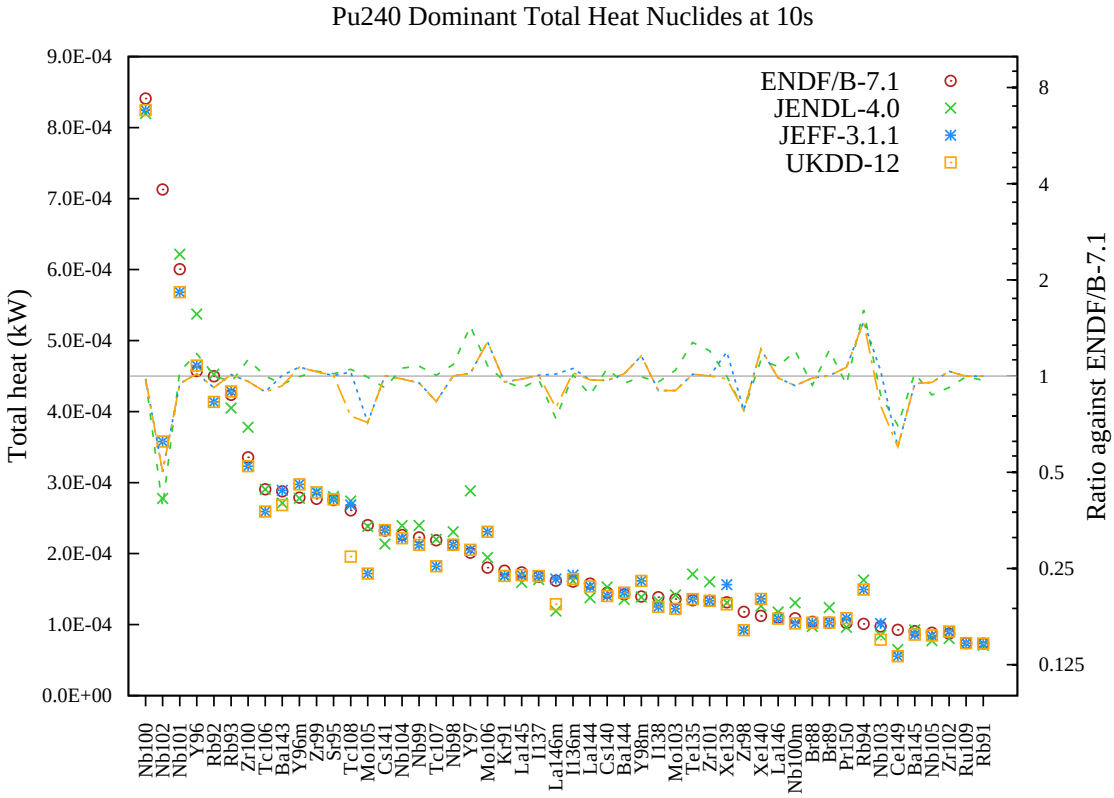

Figure 108: Total heat (in kW) decay data comparison for Pu240 fission pulse after 10s cooling.

Table 108: Total heat (in kW) decay data comparison for Pu240 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb100	6.7	8.41E-04	8.20E-04	8.25E-04	8.25E-04
Nb102	5.7	7.13E-04	2.78E-04	3.58E-04	3.58E-04
Nb101	4.8	6.01E-04	6.22E-04	5.68E-04	5.68E-04
Y96	3.6	4.57E-04	5.37E-04	4.65E-04	4.65E-04
Rb92	3.6	4.50E-04	4.53E-04	4.14E-04	4.14E-04
Rb93	3.4	4.24E-04	4.05E-04	4.28E-04	4.28E-04
Zr100	2.7	3.36E-04	3.78E-04	3.23E-04	3.23E-04
Tc106	2.3	2.91E-04	2.91E-04	2.59E-04	2.59E-04
Ba143	2.3	2.88E-04	2.71E-04	2.89E-04	2.68E-04
Y96m	2.2	2.79E-04	2.78E-04	2.97E-04	2.97E-04
Zr99	2.2	2.77E-04	2.87E-04	2.86E-04	2.86E-04
Sr95	2.2	2.75E-04	2.80E-04	2.77E-04	2.77E-04
Tc108	2.1	2.61E-04	2.74E-04	2.69E-04	1.96E-04
Mo105	1.9	2.40E-04	2.38E-04	1.72E-04	1.72E-04
Cs141	1.8	2.32E-04	2.13E-04	2.33E-04	2.33E-04
Nb104	1.8	2.26E-04	2.39E-04	2.22E-04	2.22E-04
Nb99	1.8	2.23E-04	2.40E-04	2.12E-04	2.12E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc107	1.7	2.19E-04	2.20E-04	1.82E-04	1.82E-04
Nb98	1.7	2.12E-04	2.31E-04	2.13E-04	2.13E-04
Y97	1.6	2.01E-04	2.89E-04	2.05E-04	2.05E-04
Mo106	1.4	1.80E-04	1.95E-04	2.31E-04	2.31E-04
Kr91	1.4	1.76E-04	1.69E-04	1.69E-04	1.69E-04
La145	1.4	1.74E-04	1.59E-04	1.70E-04	1.70E-04
I137	1.3	1.67E-04	1.63E-04	1.69E-04	1.69E-04
La146m	1.3	1.62E-04	1.19E-04	1.64E-04	1.29E-04
I136m	1.3	1.61E-04	1.62E-04	1.70E-04	1.64E-04
La144	1.3	1.58E-04	1.38E-04	1.54E-04	1.54E-04
Cs140	1.2	1.45E-04	1.53E-04	1.40E-04	1.40E-04
Ba144	1.1	1.43E-04	1.35E-04	1.45E-04	1.45E-04
Y98m	1.1	1.40E-04	1.39E-04	1.62E-04	1.62E-04
I138	1.1	1.39E-04	1.33E-04	1.25E-04	1.25E-04
Mo103	1.1	1.36E-04	1.42E-04	1.22E-04	1.22E-04
Te135	1.1	1.34E-04	1.71E-04	1.36E-04	1.36E-04
Zr101	1.1	1.33E-04	1.60E-04	1.34E-04	1.34E-04
Xe139	1.0	1.31E-04	1.31E-04	1.56E-04	1.29E-04
Zr98	0.9	1.18E-04	9.22E-05	9.21E-05	9.21E-05
Xe140	0.9	1.12E-04	1.26E-04	1.36E-04	1.36E-04
La146	0.9	1.10E-04	1.18E-04	1.08E-04	1.08E-04
Nb100m	0.9	1.09E-04	1.31E-04	1.02E-04	1.02E-04
Br88	0.8	1.04E-04	9.73E-05	1.03E-04	1.03E-04
Br89	0.8	1.03E-04	1.24E-04	1.03E-04	1.03E-04
Pr150	0.8	1.02E-04	9.62E-05	1.09E-04	1.09E-04
Rb94	0.8	1.01E-04	1.63E-04	1.49E-04	1.49E-04
Nb103	0.8	9.74E-05	8.51E-05	1.01E-04	7.87E-05
Ce149	0.7	9.25E-05	6.49E-05	5.56E-05	5.56E-05
Ba145	0.7	9.07E-05	9.27E-05	8.60E-05	8.60E-05
Nb105	0.7	8.86E-05	7.74E-05	8.46E-05	8.46E-05
Zr102	0.7	8.73E-05	8.04E-05	9.03E-05	9.03E-05
Ru109	0.6	7.41E-05	7.38E-05	7.40E-05	7.40E-05
Rb91	0.6	7.32E-05	7.09E-05	7.31E-05	7.31E-05

8.2 100s after pulse

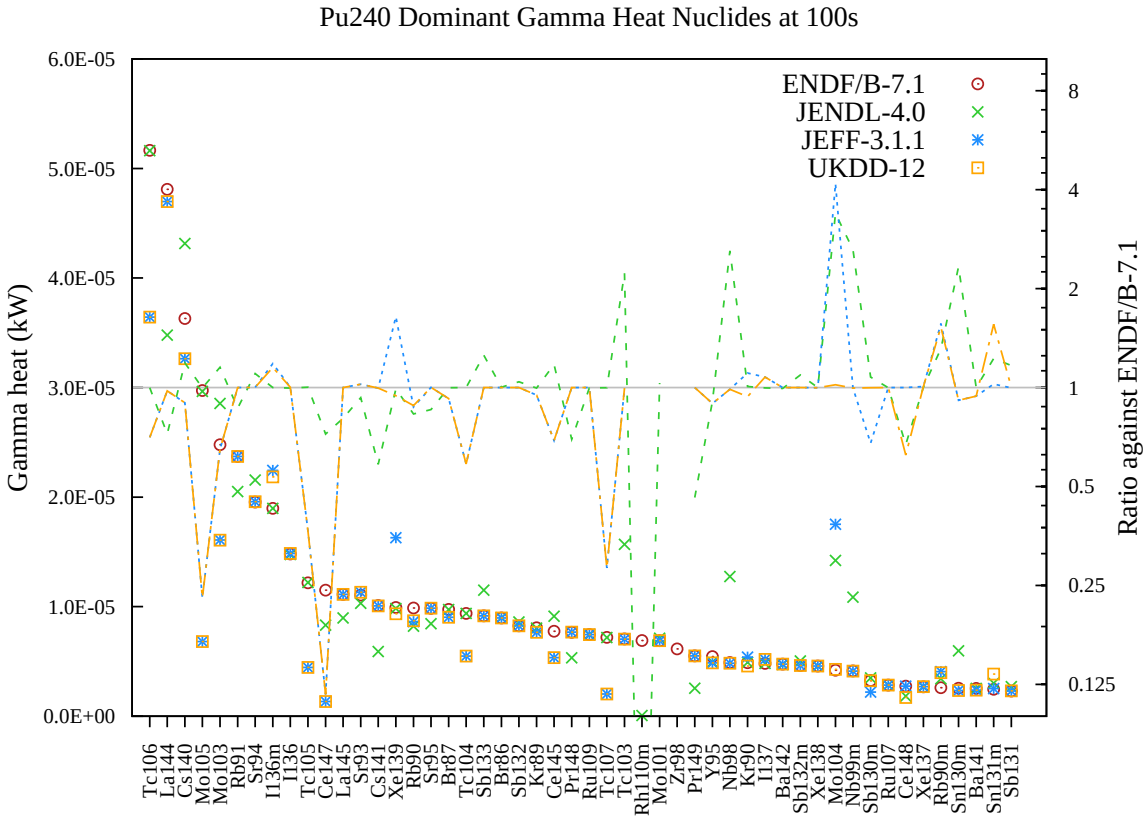

Figure 109: Gamma heat (in kW) decay data comparison for Pu240 fission pulse after 100s cooling.

Table 109: Gamma heat (in kW) decay data comparison for Pu240 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	8.8	5.17E-05	5.16E-05	3.64E-05	3.64E-05
La144	8.2	4.81E-05	3.48E-05	4.70E-05	4.70E-05
Cs140	6.2	3.63E-05	4.32E-05	3.26E-05	3.26E-05
Mo105	5.1	2.97E-05	2.96E-05	6.81E-06	6.81E-06
Mo103	4.2	2.48E-05	2.86E-05	1.61E-05	1.61E-05
Rb91	4.0	2.37E-05	2.05E-05	2.37E-05	2.37E-05
Sr94	3.3	1.95E-05	2.16E-05	1.96E-05	1.96E-05
I136m	3.2	1.90E-05	1.90E-05	2.24E-05	2.18E-05
I136	2.5	1.48E-05	1.48E-05	1.49E-05	1.49E-05
Tc105	2.1	1.22E-05	1.22E-05	4.46E-06	4.46E-06
Ce147	2.0	1.15E-05	8.31E-06	1.34E-06	1.34E-06
La145	1.9	1.11E-05	8.98E-06	1.11E-05	1.11E-05
Sr93	1.9	1.11E-05	1.03E-05	1.13E-05	1.13E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs141	1.7	1.01E-05	5.90E-06	1.01E-05	1.01E-05
Xe139	1.7	9.92E-06	9.82E-06	1.63E-05	9.36E-06
Rb90	1.7	9.88E-06	8.21E-06	8.63E-06	8.71E-06
Sr95	1.7	9.85E-06	8.44E-06	9.86E-06	9.86E-06
Br87	1.7	9.75E-06	9.73E-06	9.03E-06	9.03E-06
Tc104	1.6	9.38E-06	9.39E-06	5.49E-06	5.49E-06
Sb133	1.6	9.17E-06	1.15E-05	9.17E-06	9.17E-06
Br86	1.5	8.97E-06	8.98E-06	8.97E-06	8.97E-06
Sb132	1.4	8.25E-06	8.60E-06	8.25E-06	8.25E-06
Kr89	1.4	8.07E-06	8.04E-06	7.66E-06	7.66E-06
Ce145	1.3	7.76E-06	9.12E-06	5.35E-06	5.35E-06
Pr148	1.3	7.67E-06	5.33E-06	7.67E-06	7.67E-06
Ru109	1.3	7.46E-06	7.44E-06	7.46E-06	7.46E-06
Tc107	1.2	7.19E-06	7.18E-06	2.03E-06	2.03E-06
Tc103	1.2	7.06E-06	1.57E-05	7.03E-06	7.03E-06
Rh110m	1.2	6.90E-06	—	—	—
Mo101	1.2	6.90E-06	7.12E-06	6.90E-06	6.90E-06
Zr98	1.0	6.14E-06	—	—	—
Pr149	0.9	5.51E-06	2.55E-06	5.51E-06	5.51E-06
Y95	0.9	5.45E-06	4.95E-06	4.87E-06	4.87E-06
Nb98	0.8	4.89E-06	1.28E-05	4.83E-06	4.83E-06
Kr90	0.8	4.88E-06	4.92E-06	5.40E-06	4.58E-06
I137	0.8	4.82E-06	4.81E-06	5.19E-06	5.19E-06
Ba142	0.8	4.75E-06	4.73E-06	4.75E-06	4.75E-06
Sb132m	0.8	4.62E-06	5.05E-06	4.62E-06	4.62E-06
Xe138	0.8	4.58E-06	4.58E-06	4.57E-06	4.57E-06
Mo104	0.7	4.20E-06	1.42E-05	1.75E-05	4.28E-06
Nb99m	0.7	4.13E-06	1.09E-05	4.12E-06	4.12E-06
Sb130m	0.6	3.25E-06	3.50E-06	2.20E-06	3.25E-06
Ru107	0.5	2.84E-06	2.83E-06	2.84E-06	2.84E-06
Ce148	0.5	2.74E-06	1.84E-06	2.74E-06	1.71E-06
Xe137	0.5	2.69E-06	2.69E-06	2.70E-06	2.70E-06
Rb90m	0.4	2.60E-06	3.42E-06	4.08E-06	3.98E-06
Sn130m	0.4	2.56E-06	5.96E-06	2.34E-06	2.34E-06
Ba141	0.4	2.53E-06	2.53E-06	2.38E-06	2.38E-06
Sn131m	0.4	2.46E-06	3.02E-06	2.53E-06	3.84E-06
Sb131	0.4	2.30E-06	2.69E-06	2.30E-06	2.31E-06

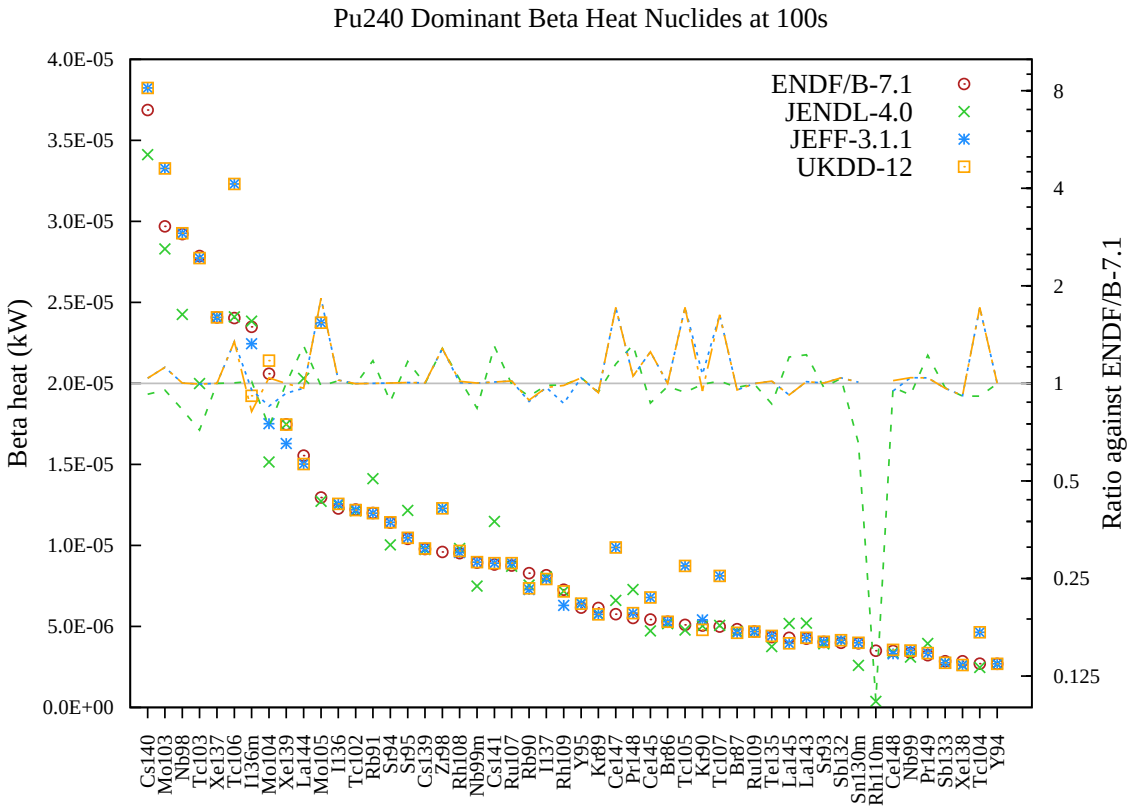

Figure 110: Beta heat (in kW) decay data comparison for Pu240 fission pulse after 100s cooling.

Table 110: Beta heat (in kW) decay data comparison for Pu240 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	6.6	3.69E-05	3.41E-05	3.82E-05	3.82E-05
Mo103	5.3	2.97E-05	2.83E-05	3.33E-05	3.33E-05
Nb98	5.2	2.92E-05	2.43E-05	2.93E-05	2.93E-05
Tc103	5.0	2.79E-05	2.00E-05	2.77E-05	2.77E-05
Xe137	4.3	2.41E-05	2.41E-05	2.41E-05	2.41E-05
Tc106	4.3	2.40E-05	2.41E-05	3.23E-05	3.23E-05
I136m	4.2	2.35E-05	2.38E-05	2.24E-05	1.92E-05
Mo104	3.7	2.06E-05	1.51E-05	1.75E-05	2.14E-05
Xe139	3.1	1.75E-05	1.75E-05	1.63E-05	1.75E-05
La144	2.8	1.55E-05	2.03E-05	1.50E-05	1.50E-05
Mo105	2.3	1.30E-05	1.27E-05	2.37E-05	2.37E-05
I136	2.2	1.23E-05	1.25E-05	1.26E-05	1.26E-05
Tc102	2.2	1.22E-05	1.21E-05	1.22E-05	1.22E-05
Rb91	2.2	1.20E-05	1.41E-05	1.20E-05	1.20E-05
Sr94	2.0	1.14E-05	1.00E-05	1.14E-05	1.14E-05
Sr95	1.9	1.04E-05	1.22E-05	1.05E-05	1.05E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs139	1.8	9.77E-06	9.75E-06	9.81E-06	9.81E-06
Zr98	1.7	9.59E-06	1.23E-05	1.23E-05	1.23E-05
Rh108	1.7	9.52E-06	9.81E-06	9.57E-06	9.65E-06
Nb99m	1.6	8.94E-06	7.49E-06	8.96E-06	8.96E-06
Cs141	1.6	8.82E-06	1.15E-05	8.91E-06	8.91E-06
Ru107	1.6	8.75E-06	8.71E-06	8.91E-06	8.91E-06
Rb90	1.5	8.29E-06	7.56E-06	7.28E-06	7.35E-06
I137	1.5	8.16E-06	8.05E-06	7.92E-06	7.92E-06
Rh109	1.3	7.26E-06	7.18E-06	6.30E-06	7.16E-06
Y95	1.1	6.16E-06	6.42E-06	6.41E-06	6.41E-06
Kr89	1.1	6.14E-06	5.77E-06	5.74E-06	5.74E-06
Ce147	1.0	5.76E-06	6.60E-06	9.87E-06	9.87E-06
Pr148	1.0	5.52E-06	7.27E-06	5.82E-06	5.82E-06
Ce145	1.0	5.42E-06	4.72E-06	6.79E-06	6.79E-06
Br86	0.9	5.29E-06	5.17E-06	5.29E-06	5.29E-06
Tc105	0.9	5.10E-06	4.78E-06	8.73E-06	8.73E-06
Kr90	0.9	5.06E-06	5.03E-06	5.40E-06	4.79E-06
Tc107	0.9	4.99E-06	5.07E-06	8.12E-06	8.12E-06
Br87	0.9	4.83E-06	4.69E-06	4.61E-06	4.61E-06
Ru109	0.8	4.69E-06	4.66E-06	4.68E-06	4.68E-06
Te135	0.8	4.34E-06	3.76E-06	4.41E-06	4.41E-06
La145	0.8	4.29E-06	5.18E-06	3.95E-06	3.95E-06
La143	0.8	4.25E-06	5.20E-06	4.30E-06	4.30E-06
Sr93	0.7	4.04E-06	3.93E-06	4.05E-06	4.05E-06
Sb132	0.7	3.99E-06	4.13E-06	4.15E-06	4.15E-06
Sn130m	0.7	3.96E-06	2.59E-06	3.99E-06	3.99E-06
Rh110m	0.6	3.50E-06	3.68E-07	—	—
Ce148	0.6	3.48E-06	3.39E-06	3.30E-06	3.55E-06
Nb99	0.6	3.37E-06	3.10E-06	3.51E-06	3.51E-06
Pr149	0.6	3.23E-06	3.94E-06	3.36E-06	3.36E-06
Sb133	0.5	2.86E-06	2.77E-06	2.76E-06	2.76E-06
Xe138	0.5	2.85E-06	2.60E-06	2.61E-06	2.61E-06
Tc104	0.5	2.71E-06	2.47E-06	4.64E-06	4.64E-06
Y94	0.5	2.69E-06	2.68E-06	2.69E-06	2.69E-06

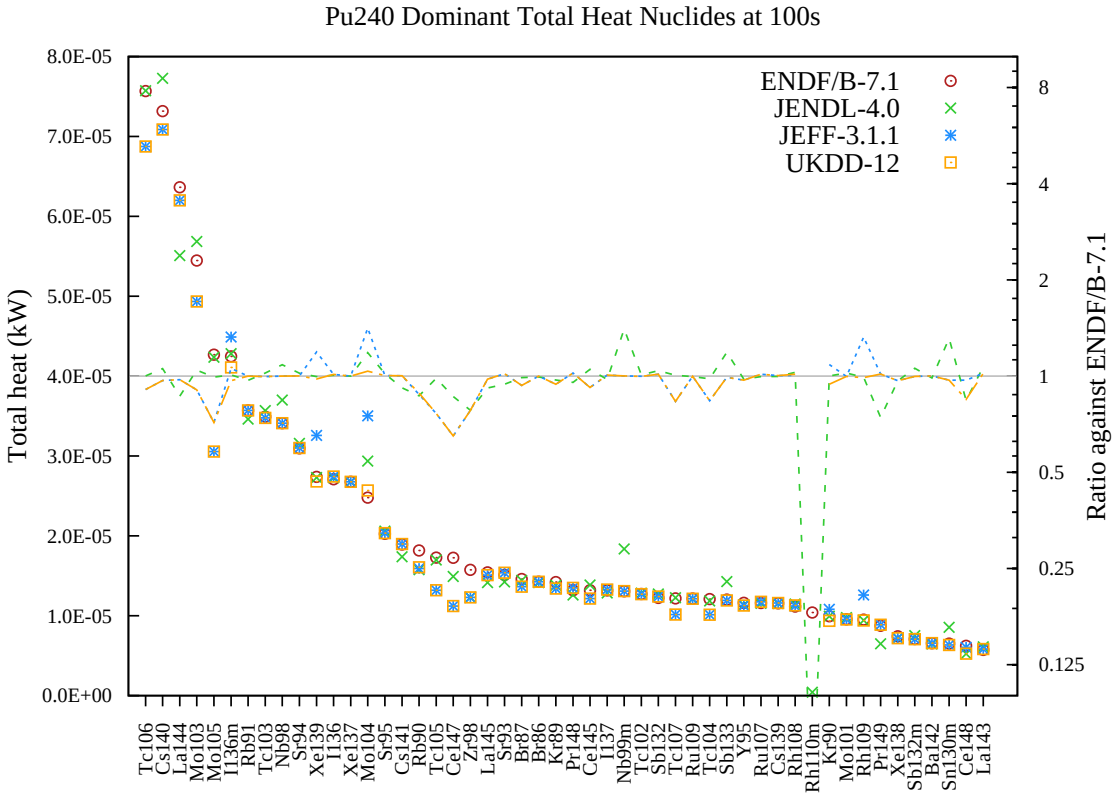

Figure 111: Total heat (in kW) decay data comparison for Pu240 fission pulse after 100s cooling.

Table 111: Total heat (in kW) decay data comparison for Pu240 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	6.6	7.57E-05	7.57E-05	6.87E-05	6.87E-05
Cs140	6.4	7.32E-05	7.73E-05	7.09E-05	7.09E-05
La144	5.6	6.36E-05	5.51E-05	6.20E-05	6.20E-05
Mo103	4.8	5.45E-05	5.69E-05	4.93E-05	4.93E-05
Mo105	3.7	4.27E-05	4.24E-05	3.06E-05	3.06E-05
I136m	3.7	4.25E-05	4.28E-05	4.49E-05	4.11E-05
Rb91	3.1	3.57E-05	3.46E-05	3.57E-05	3.57E-05
Tc103	3.1	3.49E-05	3.57E-05	3.48E-05	3.48E-05
Nb98	3.0	3.41E-05	3.70E-05	3.41E-05	3.41E-05
Sr94	2.7	3.10E-05	3.16E-05	3.10E-05	3.10E-05
Xe139	2.4	2.74E-05	2.73E-05	3.26E-05	2.68E-05
I136	2.4	2.71E-05	2.73E-05	2.74E-05	2.74E-05
Xe137	2.3	2.68E-05	2.68E-05	2.68E-05	2.68E-05
Mo104	2.2	2.48E-05	2.94E-05	3.50E-05	2.57E-05
Sr95	1.8	2.03E-05	2.06E-05	2.03E-05	2.03E-05
Cs141	1.7	1.89E-05	1.74E-05	1.90E-05	1.90E-05
Rb90	1.6	1.82E-05	1.58E-05	1.59E-05	1.61E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc105	1.5	1.73E-05	1.70E-05	1.32E-05	1.32E-05
Ce147	1.5	1.73E-05	1.49E-05	1.12E-05	1.12E-05
Zr98	1.4	1.57E-05	1.23E-05	1.23E-05	1.23E-05
La145	1.3	1.54E-05	1.42E-05	1.51E-05	1.51E-05
Sr93	1.3	1.51E-05	1.42E-05	1.54E-05	1.54E-05
Br87	1.3	1.46E-05	1.44E-05	1.36E-05	1.36E-05
Br86	1.2	1.43E-05	1.42E-05	1.43E-05	1.43E-05
Kr89	1.2	1.42E-05	1.38E-05	1.34E-05	1.34E-05
Pr148	1.2	1.32E-05	1.26E-05	1.35E-05	1.35E-05
Ce145	1.2	1.32E-05	1.38E-05	1.21E-05	1.21E-05
I137	1.2	1.32E-05	1.29E-05	1.33E-05	1.33E-05
Nb99m	1.1	1.31E-05	1.84E-05	1.31E-05	1.31E-05
Tc102	1.1	1.27E-05	1.28E-05	1.27E-05	1.27E-05
Sb132	1.1	1.22E-05	1.27E-05	1.24E-05	1.24E-05
Tc107	1.1	1.22E-05	1.23E-05	1.01E-05	1.01E-05
Ru109	1.1	1.21E-05	1.21E-05	1.21E-05	1.21E-05
Tc104	1.1	1.21E-05	1.19E-05	1.01E-05	1.01E-05
Sb133	1.1	1.20E-05	1.43E-05	1.19E-05	1.19E-05
Y95	1.0	1.16E-05	1.14E-05	1.13E-05	1.13E-05
Ru107	1.0	1.16E-05	1.15E-05	1.17E-05	1.17E-05
Cs139	1.0	1.16E-05	1.15E-05	1.16E-05	1.16E-05
Rh108	1.0	1.12E-05	1.15E-05	1.12E-05	1.13E-05
Rh110m	0.9	1.04E-05	4.26E-07	—	—
Kr90	0.9	9.94E-06	9.94E-06	1.08E-05	9.37E-06
Mo101	0.8	9.56E-06	9.77E-06	9.53E-06	9.53E-06
Rh109	0.8	9.52E-06	9.44E-06	1.26E-05	9.41E-06
Pr149	0.8	8.74E-06	6.49E-06	8.87E-06	8.87E-06
Xe138	0.6	7.43E-06	7.18E-06	7.19E-06	7.19E-06
Sb132m	0.6	7.09E-06	7.50E-06	7.07E-06	7.07E-06
Ba142	0.6	6.56E-06	6.47E-06	6.57E-06	6.57E-06
Sn130m	0.6	6.52E-06	8.56E-06	6.33E-06	6.33E-06
Ce148	0.5	6.23E-06	5.23E-06	6.04E-06	5.26E-06
La143	0.5	5.71E-06	6.11E-06	5.83E-06	5.83E-06

8.3 1000s after pulse

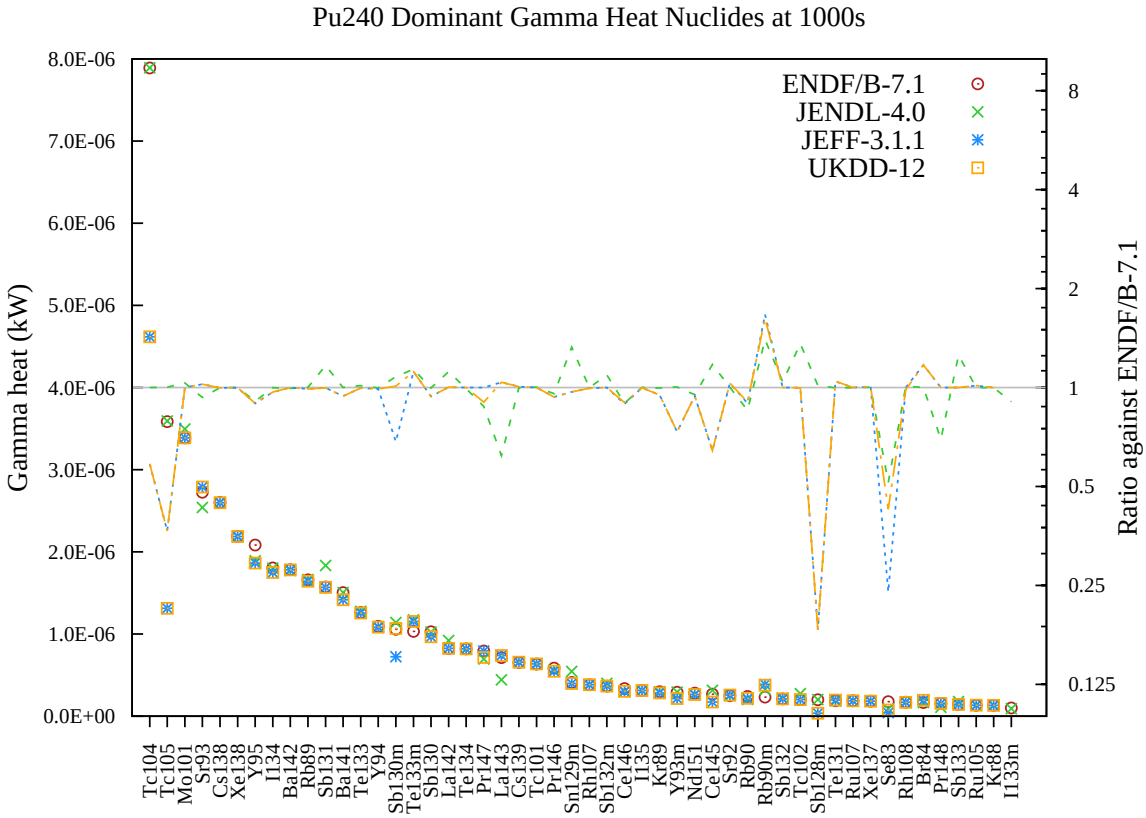

Figure 112: Gamma heat (in kW) decay data comparison for Pu240 fission pulse after 1000s cooling.

Table 112: Gamma heat (in kW) decay data comparison for Pu240 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	15.6	7.89E-06	7.89E-06	4.62E-06	4.62E-06
Tc105	7.1	3.58E-06	3.59E-06	1.31E-06	1.31E-06
Mo101	6.7	3.39E-06	3.50E-06	3.39E-06	3.39E-06
Sr93	5.4	2.73E-06	2.54E-06	2.79E-06	2.79E-06
Cs138	5.1	2.60E-06	2.60E-06	2.60E-06	2.60E-06
Xe138	4.3	2.19E-06	2.19E-06	2.19E-06	2.19E-06
Y95	4.1	2.08E-06	1.89E-06	1.86E-06	1.86E-06
I134	3.6	1.81E-06	1.80E-06	1.75E-06	1.75E-06
Ba142	3.5	1.78E-06	1.77E-06	1.78E-06	1.78E-06
Rb89	3.3	1.66E-06	1.66E-06	1.64E-06	1.64E-06
Sb131	3.1	1.57E-06	1.83E-06	1.57E-06	1.57E-06
Ba141	3.0	1.50E-06	1.50E-06	1.42E-06	1.42E-06
Te133	2.5	1.26E-06	1.28E-06	1.26E-06	1.26E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y94	2.2	1.09E-06	1.09E-06	1.08E-06	1.08E-06
Sb130m	2.1	1.06E-06	1.14E-06	7.23E-07	1.07E-06
Te133m	2.0	1.03E-06	1.17E-06	1.15E-06	1.15E-06
Sb130	2.0	1.03E-06	1.02E-06	9.66E-07	9.66E-07
La142	1.6	8.24E-07	9.20E-07	8.25E-07	8.25E-07
Te134	1.6	8.20E-07	8.14E-07	8.20E-07	8.20E-07
Pr147	1.6	7.94E-07	6.95E-07	7.94E-07	7.16E-07
La143	1.4	7.12E-07	4.42E-07	7.39E-07	7.39E-07
Cs139	1.3	6.53E-07	6.53E-07	6.57E-07	6.57E-07
Tc101	1.3	6.35E-07	6.37E-07	6.35E-07	6.35E-07
Pr146	1.2	5.85E-07	5.60E-07	5.48E-07	5.48E-07
Sn129m	0.8	4.10E-07	5.45E-07	3.98E-07	3.98E-07
Rh107	0.8	3.84E-07	3.83E-07	3.82E-07	3.82E-07
Sb132m	0.7	3.66E-07	4.00E-07	3.66E-07	3.66E-07
Ce146	0.7	3.36E-07	3.01E-07	3.00E-07	3.02E-07
I135	0.6	3.12E-07	3.13E-07	3.12E-07	3.12E-07
Kr89	0.6	2.98E-07	2.96E-07	2.82E-07	2.82E-07
Y93m	0.6	2.92E-07	2.93E-07	2.14E-07	2.14E-07
Nd151	0.6	2.80E-07	2.67E-07	2.64E-07	2.64E-07
Ce145	0.5	2.68E-07	3.16E-07	1.73E-07	1.73E-07
Sr92	0.5	2.49E-07	2.49E-07	2.57E-07	2.57E-07
Rb90	0.5	2.39E-07	2.04E-07	2.15E-07	2.16E-07
Rb90m	0.5	2.32E-07	3.24E-07	3.87E-07	3.77E-07
Sb132	0.4	2.10E-07	2.19E-07	2.10E-07	2.10E-07
Tc102	0.4	2.02E-07	2.75E-07	2.02E-07	2.02E-07
Sb128m	0.4	2.00E-07	2.03E-07	3.67E-08	3.67E-08
Te131	0.4	1.86E-07	1.86E-07	1.95E-07	1.95E-07
Ru107	0.4	1.86E-07	1.86E-07	1.86E-07	1.86E-07
Xe137	0.4	1.82E-07	1.83E-07	1.84E-07	1.84E-07
Se83	0.3	1.76E-07	9.04E-08	4.20E-08	7.50E-08
Rh108	0.3	1.71E-07	1.72E-07	1.71E-07	1.68E-07
Br84	0.3	1.65E-07	1.66E-07	1.94E-07	1.94E-07
Pr148	0.3	1.55E-07	1.08E-07	1.55E-07	1.55E-07
Sb133	0.3	1.43E-07	1.80E-07	1.43E-07	1.43E-07
Ru105	0.3	1.33E-07	1.33E-07	1.35E-07	1.35E-07
Kr88	0.3	1.32E-07	1.32E-07	1.32E-07	1.32E-07
I133m	0.2	1.00E-07	—	—	—

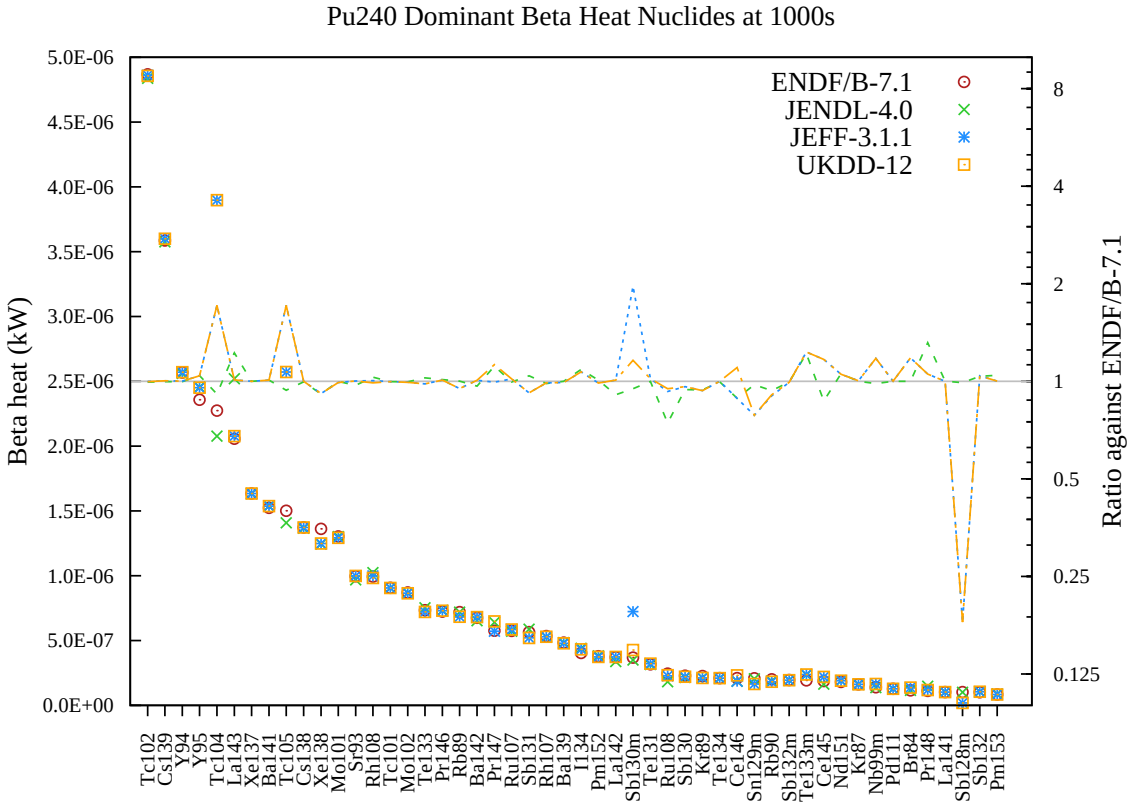

Figure 113: Beta heat (in kW) decay data comparison for Pu240 fission pulse after 1000s cooling.

Table 113: Beta heat (in kW) decay data comparison for Pu240 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	11.5	4.87E-06	4.84E-06	4.86E-06	4.86E-06
Cs139	8.4	3.59E-06	3.58E-06	3.60E-06	3.60E-06
Y94	6.0	2.57E-06	2.56E-06	2.57E-06	2.57E-06
Y95	5.6	2.36E-06	2.45E-06	2.45E-06	2.45E-06
Tc104	5.4	2.27E-06	2.08E-06	3.90E-06	3.90E-06
La143	4.8	2.06E-06	2.52E-06	2.08E-06	2.08E-06
Xe137	3.8	1.63E-06	1.63E-06	1.63E-06	1.63E-06
Ba141	3.6	1.52E-06	1.54E-06	1.54E-06	1.54E-06
Tc105	3.5	1.50E-06	1.41E-06	2.57E-06	2.57E-06
Cs138	3.2	1.37E-06	1.37E-06	1.37E-06	1.37E-06
Xe138	3.2	1.36E-06	1.24E-06	1.25E-06	1.25E-06
Mo101	3.1	1.30E-06	1.30E-06	1.29E-06	1.29E-06
Sr93	2.3	9.96E-07	9.69E-07	9.99E-07	9.99E-07
Rh108	2.3	9.93E-07	1.02E-06	9.99E-07	9.82E-07
Tc101	2.1	9.07E-07	9.05E-07	9.05E-07	9.05E-07
Mo102	2.1	8.71E-07	8.68E-07	8.66E-07	8.65E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te133	1.7	7.34E-07	7.52E-07	7.20E-07	7.20E-07
Pr146	1.7	7.24E-07	7.32E-07	7.30E-07	7.30E-07
Rb89	1.7	7.19E-07	7.20E-07	6.83E-07	6.83E-07
Ba142	1.6	6.76E-07	6.53E-07	6.80E-07	6.80E-07
Pr147	1.4	5.75E-07	6.41E-07	5.71E-07	6.48E-07
Ru107	1.4	5.74E-07	5.72E-07	5.84E-07	5.84E-07
Sb131	1.3	5.65E-07	5.88E-07	5.21E-07	5.21E-07
Rh107	1.3	5.35E-07	5.27E-07	5.29E-07	5.29E-07
Ba139	1.1	4.84E-07	4.84E-07	4.79E-07	4.79E-07
I134	1.0	4.04E-07	4.40E-07	4.32E-07	4.32E-07
Pm152	0.9	3.78E-07	3.81E-07	3.74E-07	3.74E-07
La142	0.9	3.71E-07	3.37E-07	3.74E-07	3.74E-07
Sb130m	0.9	3.68E-07	3.49E-07	7.23E-07	4.27E-07
Te131	0.7	3.16E-07	3.16E-07	3.22E-07	3.22E-07
Ru108	0.6	2.45E-07	1.82E-07	2.28E-07	2.32E-07
Sb130	0.5	2.29E-07	2.16E-07	2.21E-07	2.21E-07
Kr89	0.5	2.26E-07	2.13E-07	2.12E-07	2.12E-07
Te134	0.5	2.10E-07	2.09E-07	2.10E-07	2.10E-07
Ce146	0.5	2.10E-07	1.86E-07	1.86E-07	2.31E-07
Sn129m	0.5	2.09E-07	2.04E-07	1.64E-07	1.64E-07
Rb90	0.5	2.01E-07	1.88E-07	1.81E-07	1.82E-07
Sb132m	0.5	1.95E-07	1.95E-07	1.94E-07	1.94E-07
Te133m	0.5	1.93E-07	2.35E-07	2.38E-07	2.38E-07
Ce145	0.4	1.88E-07	1.63E-07	2.19E-07	2.19E-07
Nd151	0.4	1.81E-07	1.91E-07	1.90E-07	1.90E-07
Kr87	0.4	1.62E-07	1.62E-07	1.63E-07	1.63E-07
Nb99m	0.3	1.40E-07	1.37E-07	1.64E-07	1.64E-07
Pd111	0.3	1.28E-07	1.28E-07	1.28E-07	1.28E-07
Br84	0.3	1.16E-07	1.16E-07	1.37E-07	1.37E-07
Pr148	0.3	1.12E-07	1.47E-07	1.18E-07	1.18E-07
La141	0.2	1.03E-07	1.03E-07	1.03E-07	1.03E-07
Sb128m	0.2	1.02E-07	1.01E-07	1.84E-08	1.84E-08
Sb132	0.2	1.01E-07	1.05E-07	1.05E-07	1.05E-07
Pm153	0.2	8.37E-08	8.73E-08	8.38E-08	8.38E-08

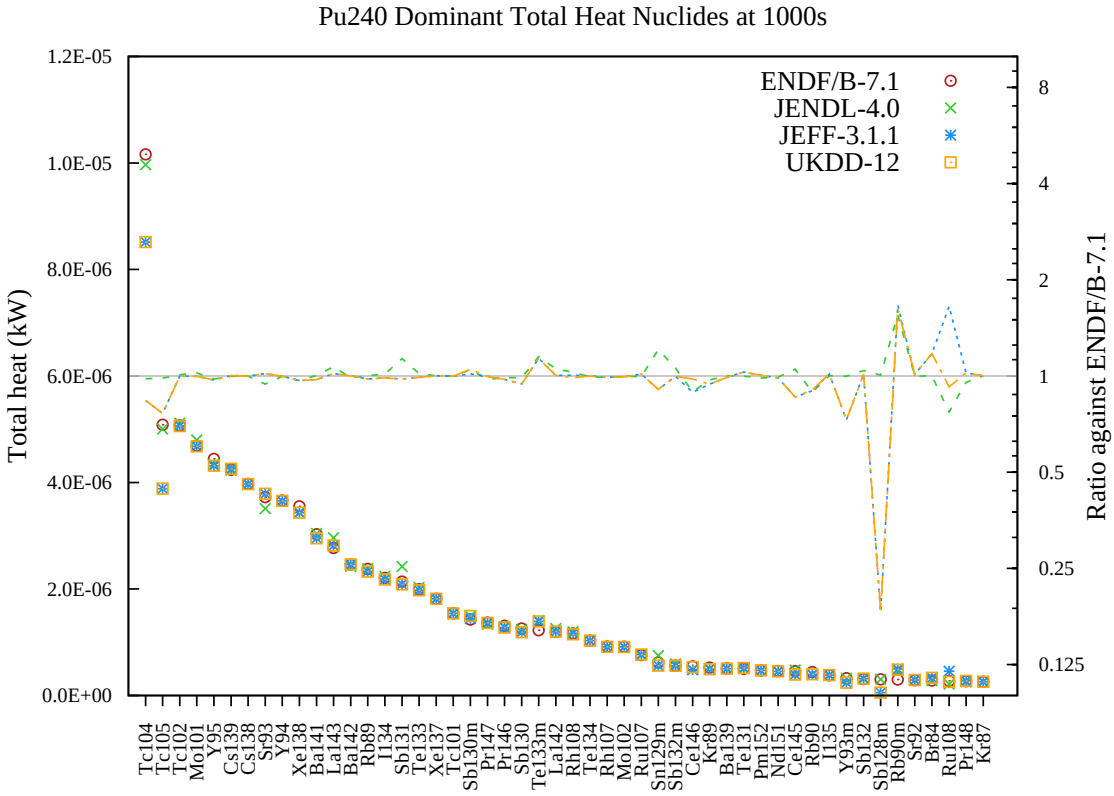

Figure 114: Total heat (in kW) decay data comparison for Pu240 fission pulse after 1000s cooling.

Table 114: Total heat (in kW) decay data comparison for Pu240 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	10.9	1.02E-05	9.97E-06	8.51E-06	8.51E-06
Tc105	5.5	5.09E-06	5.00E-06	3.89E-06	3.89E-06
Tc102	5.4	5.07E-06	5.11E-06	5.06E-06	5.06E-06
Mo101	5.0	4.69E-06	4.80E-06	4.68E-06	4.68E-06
Y95	4.8	4.44E-06	4.35E-06	4.31E-06	4.31E-06
Cs139	4.5	4.24E-06	4.23E-06	4.26E-06	4.26E-06
Cs138	4.3	3.97E-06	3.97E-06	3.97E-06	3.97E-06
Sr93	4.0	3.72E-06	3.51E-06	3.79E-06	3.79E-06
Y94	3.9	3.66E-06	3.65E-06	3.65E-06	3.65E-06
Xe138	3.8	3.55E-06	3.43E-06	3.43E-06	3.43E-06
Ba141	3.2	3.03E-06	3.04E-06	2.95E-06	2.95E-06
La143	3.0	2.77E-06	2.96E-06	2.82E-06	2.82E-06
Ba142	2.6	2.46E-06	2.43E-06	2.46E-06	2.46E-06
Rb89	2.6	2.38E-06	2.38E-06	2.33E-06	2.33E-06
I134	2.4	2.21E-06	2.24E-06	2.18E-06	2.18E-06
Sb131	2.3	2.14E-06	2.42E-06	2.09E-06	2.09E-06
Te133	2.1	1.99E-06	2.03E-06	1.98E-06	1.98E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Xe137	1.9	1.82E-06	1.82E-06	1.82E-06	1.82E-06
Tc101	1.7	1.54E-06	1.54E-06	1.54E-06	1.54E-06
Sb130m	1.5	1.42E-06	1.49E-06	1.45E-06	1.49E-06
Pr147	1.5	1.37E-06	1.34E-06	1.37E-06	1.36E-06
Pr146	1.4	1.31E-06	1.29E-06	1.28E-06	1.28E-06
Sb130	1.3	1.26E-06	1.24E-06	1.19E-06	1.19E-06
Te133m	1.3	1.22E-06	1.41E-06	1.39E-06	1.39E-06
La142	1.3	1.19E-06	1.26E-06	1.20E-06	1.20E-06
Rh108	1.2	1.16E-06	1.20E-06	1.17E-06	1.15E-06
Te134	1.1	1.03E-06	1.02E-06	1.03E-06	1.03E-06
Rh107	1.0	9.19E-07	9.10E-07	9.11E-07	9.11E-07
Mo102	1.0	9.17E-07	9.14E-07	9.12E-07	9.10E-07
Ru107	0.8	7.60E-07	7.58E-07	7.71E-07	7.71E-07
Sn129m	0.7	6.19E-07	7.49E-07	5.62E-07	5.62E-07
Sb132m	0.6	5.61E-07	5.94E-07	5.60E-07	5.60E-07
Ce146	0.6	5.46E-07	4.87E-07	4.85E-07	5.34E-07
Kr89	0.6	5.24E-07	5.09E-07	4.94E-07	4.94E-07
Ba139	0.5	5.08E-07	5.08E-07	5.03E-07	5.03E-07
Te131	0.5	5.02E-07	5.02E-07	5.17E-07	5.17E-07
Pm152	0.5	4.71E-07	4.64E-07	4.73E-07	4.73E-07
Nd151	0.5	4.61E-07	4.57E-07	4.54E-07	4.54E-07
Ce145	0.5	4.56E-07	4.79E-07	3.92E-07	3.92E-07
Rb90	0.5	4.40E-07	3.92E-07	3.96E-07	3.99E-07
I135	0.4	3.79E-07	3.80E-07	3.84E-07	3.84E-07
Y93m	0.3	3.26E-07	3.25E-07	2.38E-07	2.38E-07
Sb132	0.3	3.11E-07	3.24E-07	3.15E-07	3.15E-07
Sb128m	0.3	3.02E-07	3.04E-07	5.52E-08	5.52E-08
Rb90m	0.3	2.99E-07	4.65E-07	4.99E-07	4.85E-07
Sr92	0.3	2.87E-07	2.86E-07	2.90E-07	2.90E-07
Br84	0.3	2.81E-07	2.81E-07	3.30E-07	3.30E-07
Ru108	0.3	2.76E-07	2.13E-07	4.55E-07	2.55E-07
Pr148	0.3	2.67E-07	2.55E-07	2.73E-07	2.73E-07
Kr87	0.3	2.58E-07	2.58E-07	2.59E-07	2.59E-07

8.4 5011s after pulse

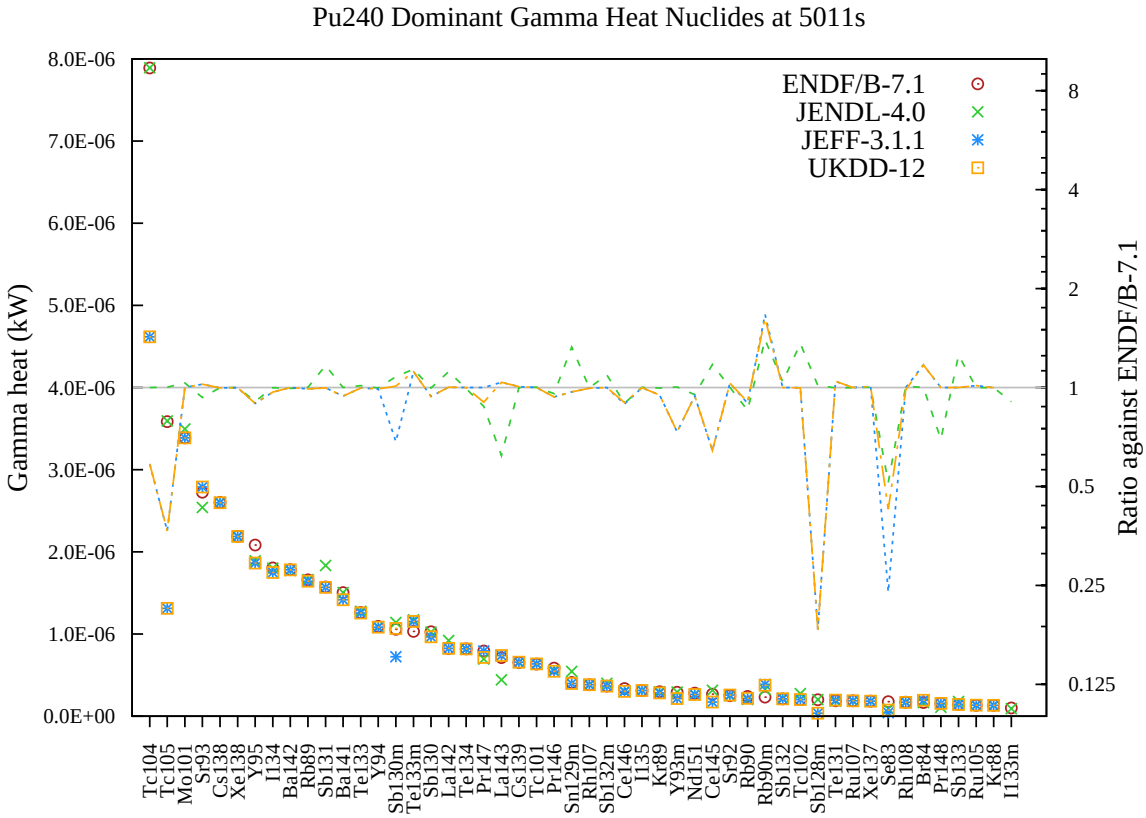

Figure 115: Gamma heat (in kW) decay data comparison for Pu240 fission pulse after 5011s cooling.

Table 115: Gamma heat (in kW) decay data comparison for Pu240 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	15.6	7.89E-06	7.89E-06	4.62E-06	4.62E-06
Tc105	7.1	3.58E-06	3.59E-06	1.31E-06	1.31E-06
Mo101	6.7	3.39E-06	3.50E-06	3.39E-06	3.39E-06
Sr93	5.4	2.73E-06	2.54E-06	2.79E-06	2.79E-06
Cs138	5.1	2.60E-06	2.60E-06	2.60E-06	2.60E-06
Xe138	4.3	2.19E-06	2.19E-06	2.19E-06	2.19E-06
Y95	4.1	2.08E-06	1.89E-06	1.86E-06	1.86E-06
I134	3.6	1.81E-06	1.80E-06	1.75E-06	1.75E-06
Ba142	3.5	1.78E-06	1.77E-06	1.78E-06	1.78E-06
Rb89	3.3	1.66E-06	1.66E-06	1.64E-06	1.64E-06
Sb131	3.1	1.57E-06	1.83E-06	1.57E-06	1.57E-06
Ba141	3.0	1.50E-06	1.50E-06	1.42E-06	1.42E-06
Te133	2.5	1.26E-06	1.28E-06	1.26E-06	1.26E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y94	2.2	1.09E-06	1.09E-06	1.08E-06	1.08E-06
Sb130m	2.1	1.06E-06	1.14E-06	7.23E-07	1.07E-06
Te133m	2.0	1.03E-06	1.17E-06	1.15E-06	1.15E-06
Sb130	2.0	1.03E-06	1.02E-06	9.66E-07	9.66E-07
La142	1.6	8.24E-07	9.20E-07	8.25E-07	8.25E-07
Te134	1.6	8.20E-07	8.14E-07	8.20E-07	8.20E-07
Pr147	1.6	7.94E-07	6.95E-07	7.94E-07	7.16E-07
La143	1.4	7.12E-07	4.42E-07	7.39E-07	7.39E-07
Cs139	1.3	6.53E-07	6.53E-07	6.57E-07	6.57E-07
Tc101	1.3	6.35E-07	6.37E-07	6.35E-07	6.35E-07
Pr146	1.2	5.85E-07	5.60E-07	5.48E-07	5.48E-07
Sn129m	0.8	4.10E-07	5.45E-07	3.98E-07	3.98E-07
Rh107	0.8	3.84E-07	3.83E-07	3.82E-07	3.82E-07
Sb132m	0.7	3.66E-07	4.00E-07	3.66E-07	3.66E-07
Ce146	0.7	3.36E-07	3.01E-07	3.00E-07	3.02E-07
I135	0.6	3.12E-07	3.13E-07	3.12E-07	3.12E-07
Kr89	0.6	2.98E-07	2.96E-07	2.82E-07	2.82E-07
Y93m	0.6	2.92E-07	2.93E-07	2.14E-07	2.14E-07
Nd151	0.6	2.80E-07	2.67E-07	2.64E-07	2.64E-07
Ce145	0.5	2.68E-07	3.16E-07	1.73E-07	1.73E-07
Sr92	0.5	2.49E-07	2.49E-07	2.57E-07	2.57E-07
Rb90	0.5	2.39E-07	2.04E-07	2.15E-07	2.16E-07
Rb90m	0.5	2.32E-07	3.24E-07	3.87E-07	3.77E-07
Sb132	0.4	2.10E-07	2.19E-07	2.10E-07	2.10E-07
Tc102	0.4	2.02E-07	2.75E-07	2.02E-07	2.02E-07
Sb128m	0.4	2.00E-07	2.03E-07	3.67E-08	3.67E-08
Te131	0.4	1.86E-07	1.86E-07	1.95E-07	1.95E-07
Ru107	0.4	1.86E-07	1.86E-07	1.86E-07	1.86E-07
Xe137	0.4	1.82E-07	1.83E-07	1.84E-07	1.84E-07
Se83	0.3	1.76E-07	9.04E-08	4.20E-08	7.50E-08
Rh108	0.3	1.71E-07	1.72E-07	1.71E-07	1.68E-07
Br84	0.3	1.65E-07	1.66E-07	1.94E-07	1.94E-07
Pr148	0.3	1.55E-07	1.08E-07	1.55E-07	1.55E-07
Sb133	0.3	1.43E-07	1.80E-07	1.43E-07	1.43E-07
Ru105	0.3	1.33E-07	1.33E-07	1.35E-07	1.35E-07
Kr88	0.3	1.32E-07	1.32E-07	1.32E-07	1.32E-07
I133m	0.2	1.00E-07	—	—	—

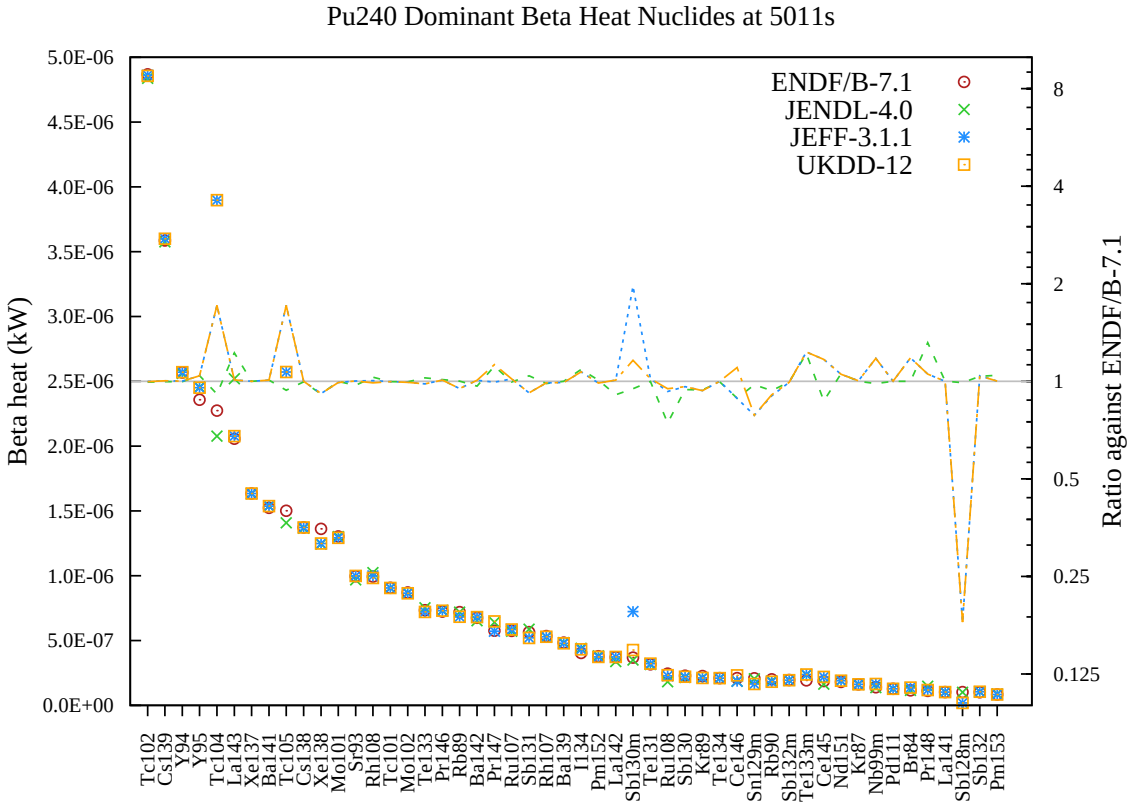

Figure 116: Beta heat (in kW) decay data comparison for Pu240 fission pulse after 5011s cooling.

Table 116: Beta heat (in kW) decay data comparison for Pu240 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	11.5	4.87E-06	4.84E-06	4.86E-06	4.86E-06
Cs139	8.4	3.59E-06	3.58E-06	3.60E-06	3.60E-06
Y94	6.0	2.57E-06	2.56E-06	2.57E-06	2.57E-06
Y95	5.6	2.36E-06	2.45E-06	2.45E-06	2.45E-06
Tc104	5.4	2.27E-06	2.08E-06	3.90E-06	3.90E-06
La143	4.8	2.06E-06	2.52E-06	2.08E-06	2.08E-06
Xe137	3.8	1.63E-06	1.63E-06	1.63E-06	1.63E-06
Ba141	3.6	1.52E-06	1.54E-06	1.54E-06	1.54E-06
Tc105	3.5	1.50E-06	1.41E-06	2.57E-06	2.57E-06
Cs138	3.2	1.37E-06	1.37E-06	1.37E-06	1.37E-06
Xe138	3.2	1.36E-06	1.24E-06	1.25E-06	1.25E-06
Mo101	3.1	1.30E-06	1.30E-06	1.29E-06	1.29E-06
Sr93	2.3	9.96E-07	9.69E-07	9.99E-07	9.99E-07
Rh108	2.3	9.93E-07	1.02E-06	9.99E-07	9.82E-07
Tc101	2.1	9.07E-07	9.05E-07	9.05E-07	9.05E-07
Mo102	2.1	8.71E-07	8.68E-07	8.66E-07	8.65E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te133	1.7	7.34E-07	7.52E-07	7.20E-07	7.20E-07
Pr146	1.7	7.24E-07	7.32E-07	7.30E-07	7.30E-07
Rb89	1.7	7.19E-07	7.20E-07	6.83E-07	6.83E-07
Ba142	1.6	6.76E-07	6.53E-07	6.80E-07	6.80E-07
Pr147	1.4	5.75E-07	6.41E-07	5.71E-07	6.48E-07
Ru107	1.4	5.74E-07	5.72E-07	5.84E-07	5.84E-07
Sb131	1.3	5.65E-07	5.88E-07	5.21E-07	5.21E-07
Rh107	1.3	5.35E-07	5.27E-07	5.29E-07	5.29E-07
Ba139	1.1	4.84E-07	4.84E-07	4.79E-07	4.79E-07
I134	1.0	4.04E-07	4.40E-07	4.32E-07	4.32E-07
Pm152	0.9	3.78E-07	3.81E-07	3.74E-07	3.74E-07
La142	0.9	3.71E-07	3.37E-07	3.74E-07	3.74E-07
Sb130m	0.9	3.68E-07	3.49E-07	7.23E-07	4.27E-07
Te131	0.7	3.16E-07	3.16E-07	3.22E-07	3.22E-07
Ru108	0.6	2.45E-07	1.82E-07	2.28E-07	2.32E-07
Sb130	0.5	2.29E-07	2.16E-07	2.21E-07	2.21E-07
Kr89	0.5	2.26E-07	2.13E-07	2.12E-07	2.12E-07
Te134	0.5	2.10E-07	2.09E-07	2.10E-07	2.10E-07
Ce146	0.5	2.10E-07	1.86E-07	1.86E-07	2.31E-07
Sn129m	0.5	2.09E-07	2.04E-07	1.64E-07	1.64E-07
Rb90	0.5	2.01E-07	1.88E-07	1.81E-07	1.82E-07
Sb132m	0.5	1.95E-07	1.95E-07	1.94E-07	1.94E-07
Te133m	0.5	1.93E-07	2.35E-07	2.38E-07	2.38E-07
Ce145	0.4	1.88E-07	1.63E-07	2.19E-07	2.19E-07
Nd151	0.4	1.81E-07	1.91E-07	1.90E-07	1.90E-07
Kr87	0.4	1.62E-07	1.62E-07	1.63E-07	1.63E-07
Nb99m	0.3	1.40E-07	1.37E-07	1.64E-07	1.64E-07
Pd111	0.3	1.28E-07	1.28E-07	1.28E-07	1.28E-07
Br84	0.3	1.16E-07	1.16E-07	1.37E-07	1.37E-07
Pr148	0.3	1.12E-07	1.47E-07	1.18E-07	1.18E-07
La141	0.2	1.03E-07	1.03E-07	1.03E-07	1.03E-07
Sb128m	0.2	1.02E-07	1.01E-07	1.84E-08	1.84E-08
Sb132	0.2	1.01E-07	1.05E-07	1.05E-07	1.05E-07
Pm153	0.2	8.37E-08	8.73E-08	8.38E-08	8.38E-08

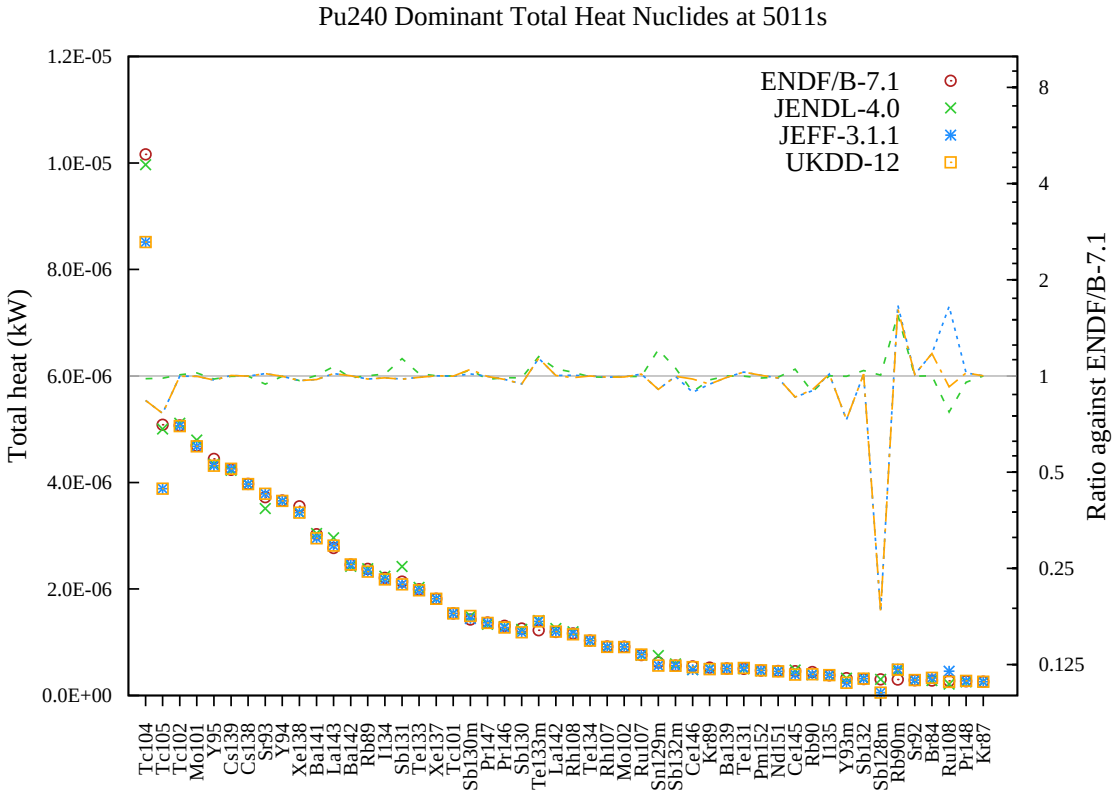

Figure 117: Total heat (in kW) decay data comparison for Pu240 fission pulse after 5011s cooling.

Table 117: Total heat (in kW) decay data comparison for Pu240 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	10.9	1.02E-05	9.97E-06	8.51E-06	8.51E-06
Tc105	5.5	5.09E-06	5.00E-06	3.89E-06	3.89E-06
Tc102	5.4	5.07E-06	5.11E-06	5.06E-06	5.06E-06
Mo101	5.0	4.69E-06	4.80E-06	4.68E-06	4.68E-06
Y95	4.8	4.44E-06	4.35E-06	4.31E-06	4.31E-06
Cs139	4.5	4.24E-06	4.23E-06	4.26E-06	4.26E-06
Cs138	4.3	3.97E-06	3.97E-06	3.97E-06	3.97E-06
Sr93	4.0	3.72E-06	3.51E-06	3.79E-06	3.79E-06
Y94	3.9	3.66E-06	3.65E-06	3.65E-06	3.65E-06
Xe138	3.8	3.55E-06	3.43E-06	3.43E-06	3.43E-06
Ba141	3.2	3.03E-06	3.04E-06	2.95E-06	2.95E-06
La143	3.0	2.77E-06	2.96E-06	2.82E-06	2.82E-06
Ba142	2.6	2.46E-06	2.43E-06	2.46E-06	2.46E-06
Rb89	2.6	2.38E-06	2.38E-06	2.33E-06	2.33E-06
I134	2.4	2.21E-06	2.24E-06	2.18E-06	2.18E-06
Sb131	2.3	2.14E-06	2.42E-06	2.09E-06	2.09E-06
Te133	2.1	1.99E-06	2.03E-06	1.98E-06	1.98E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Xe137	1.9	1.82E-06	1.82E-06	1.82E-06	1.82E-06
Tc101	1.7	1.54E-06	1.54E-06	1.54E-06	1.54E-06
Sb130m	1.5	1.42E-06	1.49E-06	1.45E-06	1.49E-06
Pr147	1.5	1.37E-06	1.34E-06	1.37E-06	1.36E-06
Pr146	1.4	1.31E-06	1.29E-06	1.28E-06	1.28E-06
Sb130	1.3	1.26E-06	1.24E-06	1.19E-06	1.19E-06
Te133m	1.3	1.22E-06	1.41E-06	1.39E-06	1.39E-06
La142	1.3	1.19E-06	1.26E-06	1.20E-06	1.20E-06
Rh108	1.2	1.16E-06	1.20E-06	1.17E-06	1.15E-06
Te134	1.1	1.03E-06	1.02E-06	1.03E-06	1.03E-06
Rh107	1.0	9.19E-07	9.10E-07	9.11E-07	9.11E-07
Mo102	1.0	9.17E-07	9.14E-07	9.12E-07	9.10E-07
Ru107	0.8	7.60E-07	7.58E-07	7.71E-07	7.71E-07
Sn129m	0.7	6.19E-07	7.49E-07	5.62E-07	5.62E-07
Sb132m	0.6	5.61E-07	5.94E-07	5.60E-07	5.60E-07
Ce146	0.6	5.46E-07	4.87E-07	4.85E-07	5.34E-07
Kr89	0.6	5.24E-07	5.09E-07	4.94E-07	4.94E-07
Ba139	0.5	5.08E-07	5.08E-07	5.03E-07	5.03E-07
Te131	0.5	5.02E-07	5.02E-07	5.17E-07	5.17E-07
Pm152	0.5	4.71E-07	4.64E-07	4.73E-07	4.73E-07
Nd151	0.5	4.61E-07	4.57E-07	4.54E-07	4.54E-07
Ce145	0.5	4.56E-07	4.79E-07	3.92E-07	3.92E-07
Rb90	0.5	4.40E-07	3.92E-07	3.96E-07	3.99E-07
I135	0.4	3.79E-07	3.80E-07	3.84E-07	3.84E-07
Y93m	0.3	3.26E-07	3.25E-07	2.38E-07	2.38E-07
Sb132	0.3	3.11E-07	3.24E-07	3.15E-07	3.15E-07
Sb128m	0.3	3.02E-07	3.04E-07	5.52E-08	5.52E-08
Rb90m	0.3	2.99E-07	4.65E-07	4.99E-07	4.85E-07
Sr92	0.3	2.87E-07	2.86E-07	2.90E-07	2.90E-07
Br84	0.3	2.81E-07	2.81E-07	3.30E-07	3.30E-07
Ru108	0.3	2.76E-07	2.13E-07	4.55E-07	2.55E-07
Pr148	0.3	2.67E-07	2.55E-07	2.73E-07	2.73E-07
Kr87	0.3	2.58E-07	2.58E-07	2.59E-07	2.59E-07

8.5 10000s after pulse

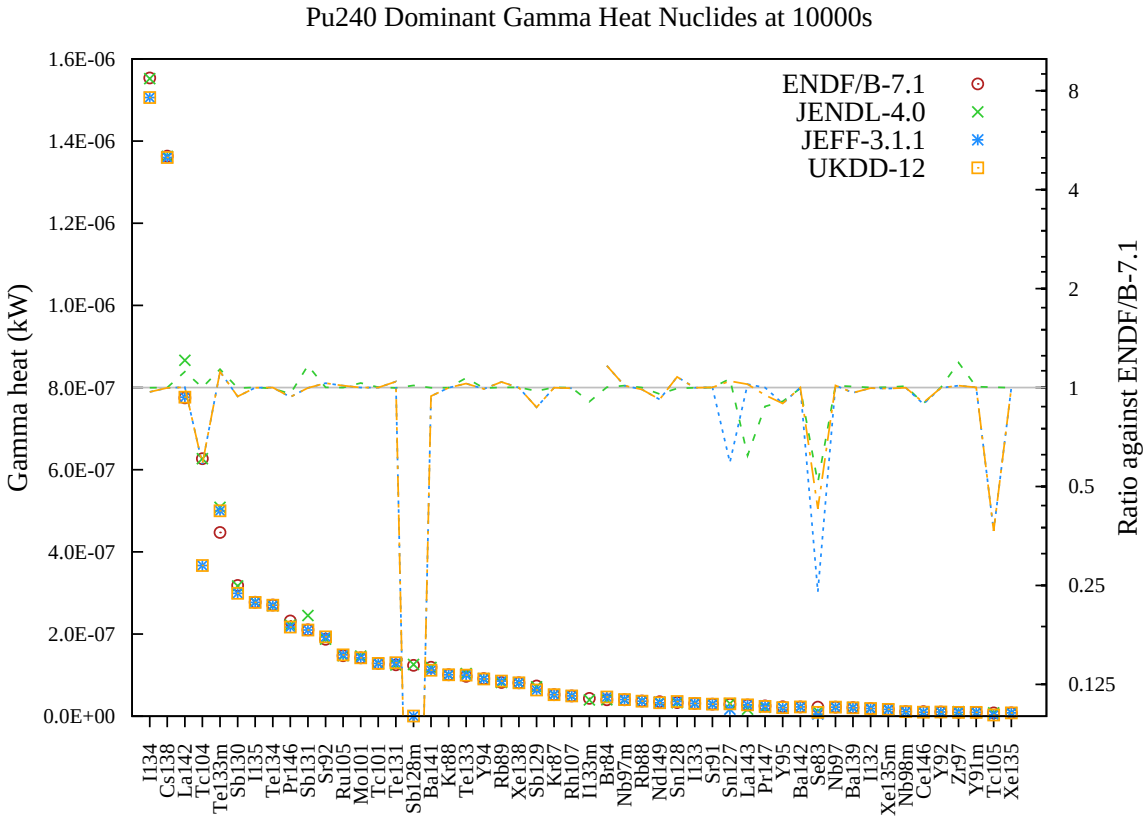

Figure 118: Gamma heat (in kW) decay data comparison for Pu240 fission pulse after 10000s cooling.

Table 118: Gamma heat (in kW) decay data comparison for Pu240 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	18.6	1.55E-06	1.55E-06	1.51E-06	1.51E-06
Cs138	16.3	1.36E-06	1.36E-06	1.36E-06	1.36E-06
La142	9.3	7.75E-07	8.66E-07	7.77E-07	7.77E-07
Tc104	7.5	6.27E-07	6.27E-07	3.67E-07	3.67E-07
Te133m	5.4	4.47E-07	5.09E-07	5.00E-07	5.00E-07
Sb130	3.8	3.18E-07	3.17E-07	2.99E-07	2.99E-07
I135	3.3	2.77E-07	2.78E-07	2.77E-07	2.77E-07
Te134	3.2	2.70E-07	2.69E-07	2.70E-07	2.70E-07
Pr146	2.8	2.32E-07	2.22E-07	2.17E-07	2.17E-07
Sb131	2.5	2.10E-07	2.45E-07	2.10E-07	2.10E-07
Sr92	2.2	1.87E-07	1.87E-07	1.93E-07	1.93E-07
Ru105	1.8	1.47E-07	1.47E-07	1.49E-07	1.49E-07
Mo101	1.7	1.42E-07	1.46E-07	1.42E-07	1.42E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc101	1.5	1.29E-07	1.29E-07	1.29E-07	1.29E-07
Te131	1.5	1.25E-07	1.25E-07	1.30E-07	1.30E-07
Sb128m	1.5	1.24E-07	1.26E-07	4.26E-10	4.26E-10
Ba141	1.4	1.19E-07	1.19E-07	1.12E-07	1.12E-07
Kr88	1.2	1.01E-07	1.01E-07	1.01E-07	1.01E-07
Te133	1.2	9.70E-08	1.04E-07	9.98E-08	9.98E-08
Y94	1.1	9.17E-08	9.14E-08	9.08E-08	9.08E-08
Rb89	1.0	8.21E-08	8.22E-08	8.53E-08	8.53E-08
Xe138	1.0	8.14E-08	8.15E-08	8.13E-08	8.13E-08
Sb129	0.9	7.35E-08	7.17E-08	6.39E-08	6.39E-08
Kr87	0.6	5.25E-08	5.26E-08	5.24E-08	5.24E-08
Rh107	0.6	4.95E-08	4.95E-08	4.93E-08	4.93E-08
I133m	0.5	4.35E-08	—	—	—
Br84	0.5	4.01E-08	4.01E-08	4.67E-08	4.67E-08
Nb97m	0.5	4.00E-08	4.05E-08	4.06E-08	4.06E-08
Rb88	0.4	3.71E-08	3.71E-08	3.66E-08	3.66E-08
Nd149	0.4	3.54E-08	3.38E-08	3.26E-08	3.26E-08
Sn128	0.4	3.30E-08	3.28E-08	3.55E-08	3.55E-08
I133	0.4	3.12E-08	3.12E-08	3.12E-08	3.12E-08
Sr91	0.4	2.94E-08	2.94E-08	2.94E-08	2.94E-08
Sn127	0.3	2.88E-08	3.06E-08	1.70E-08	3.01E-08
La143	0.3	2.72E-08	1.69E-08	2.79E-08	2.79E-08
Pr147	0.3	2.50E-08	2.19E-08	2.50E-08	2.37E-08
Y95	0.3	2.32E-08	2.10E-08	2.07E-08	2.07E-08
Ba142	0.3	2.25E-08	2.24E-08	2.25E-08	2.25E-08
Se83	0.3	2.20E-08	1.13E-08	5.26E-09	9.41E-09
Nb97	0.3	2.19E-08	2.23E-08	2.23E-08	2.23E-08
Ba139	0.3	2.10E-08	2.12E-08	2.03E-08	2.03E-08
I132	0.2	1.86E-08	1.86E-08	1.86E-08	1.86E-08
Xe135m	0.2	1.67E-08	1.67E-08	1.66E-08	1.66E-08
Nb98m	0.1	1.11E-08	1.12E-08	1.11E-08	1.11E-08
Ce146	0.1	1.09E-08	9.76E-09	9.72E-09	9.81E-09
Y92	0.1	1.01E-08	1.01E-08	1.00E-08	1.00E-08
Zr97	0.1	9.19E-09	1.10E-08	9.32E-09	9.32E-09
Y91m	0.1	9.16E-09	9.21E-09	9.17E-09	9.17E-09
Tc105	0.1	8.05E-09	8.08E-09	2.95E-09	2.95E-09
Xe135	0.1	8.04E-09	8.04E-09	8.03E-09	8.03E-09

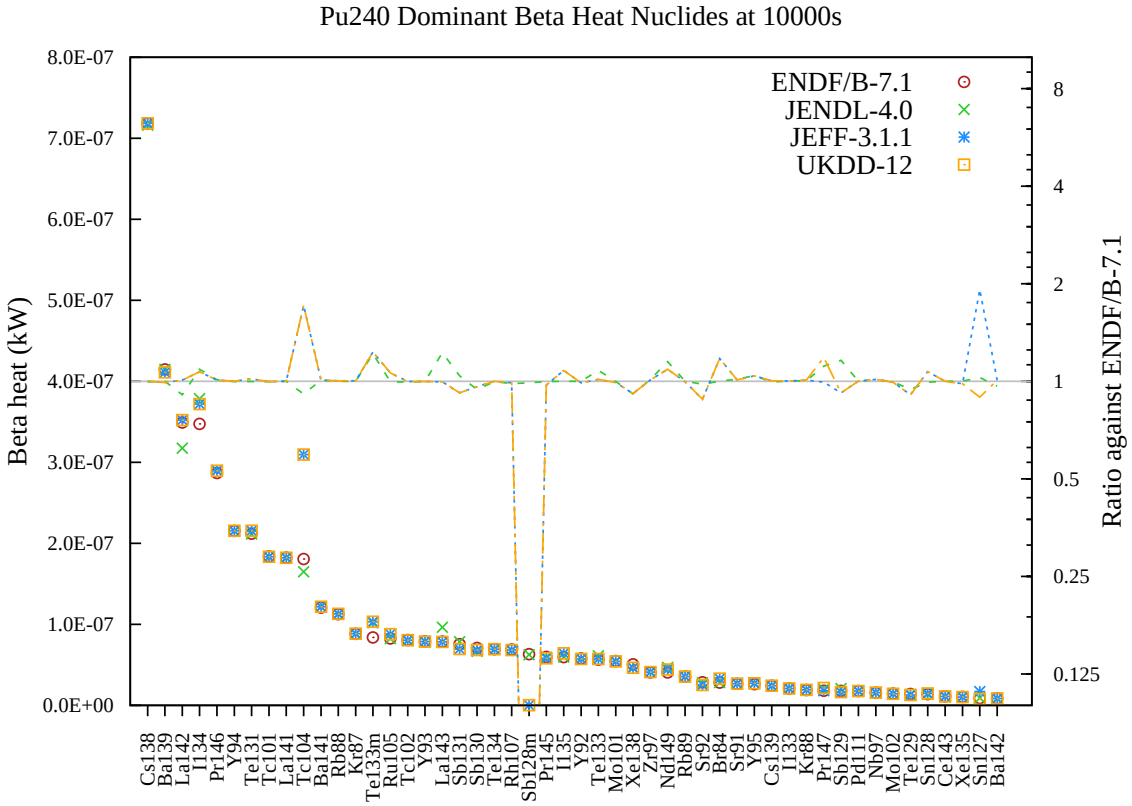

Figure 119: Beta heat (in kW) decay data comparison for Pu240 fission pulse after 10000s cooling.

Table 119: Beta heat (in kW) decay data comparison for Pu240 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	14.2	7.18E-07	7.16E-07	7.19E-07	7.19E-07
Ba139	8.2	4.15E-07	4.15E-07	4.11E-07	4.11E-07
La142	6.9	3.49E-07	3.18E-07	3.52E-07	3.52E-07
I134	6.9	3.48E-07	3.78E-07	3.72E-07	3.72E-07
Pr146	5.7	2.87E-07	2.90E-07	2.89E-07	2.89E-07
Y94	4.3	2.15E-07	2.15E-07	2.16E-07	2.16E-07
Te131	4.2	2.12E-07	2.12E-07	2.16E-07	2.15E-07
Tc101	3.6	1.84E-07	1.83E-07	1.83E-07	1.83E-07
La141	3.6	1.82E-07	1.82E-07	1.82E-07	1.82E-07
Tc104	3.6	1.81E-07	1.65E-07	3.10E-07	3.10E-07
Ba141	2.4	1.21E-07	1.22E-07	1.22E-07	1.22E-07
Rb88	2.2	1.12E-07	1.12E-07	1.13E-07	1.13E-07
Kr87	1.7	8.82E-08	8.83E-08	8.85E-08	8.85E-08
Te133m	1.7	8.38E-08	1.02E-07	1.03E-07	1.03E-07
Ru105	1.6	8.27E-08	8.24E-08	8.78E-08	8.78E-08
Tc102	1.6	8.06E-08	8.01E-08	8.05E-08	8.04E-08

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y93	1.6	7.88E-08	7.89E-08	7.88E-08	7.88E-08
La143	1.6	7.87E-08	9.63E-08	7.83E-08	7.83E-08
Sb131	1.5	7.55E-08	7.85E-08	6.96E-08	6.96E-08
Sb130	1.4	7.09E-08	6.69E-08	6.83E-08	6.83E-08
Te134	1.4	6.93E-08	6.91E-08	6.93E-08	6.93E-08
Rh107	1.4	6.90E-08	6.79E-08	6.83E-08	6.83E-08
Sb128m	1.2	6.32E-08	6.26E-08	2.14E-10	2.14E-10
Pr145	1.2	5.97E-08	5.96E-08	5.81E-08	5.81E-08
I135	1.2	5.96E-08	5.96E-08	6.43E-08	6.43E-08
Y92	1.1	5.79E-08	5.79E-08	5.73E-08	5.73E-08
Te133	1.1	5.65E-08	6.11E-08	5.73E-08	5.73E-08
Mo101	1.1	5.46E-08	5.46E-08	5.42E-08	5.42E-08
Xe138	1.0	5.07E-08	4.63E-08	4.64E-08	4.64E-08
Zr97	0.8	4.07E-08	4.13E-08	4.11E-08	4.11E-08
Nd149	0.8	4.06E-08	4.67E-08	4.43E-08	4.43E-08
Rb89	0.7	3.56E-08	3.56E-08	3.55E-08	3.55E-08
Sr92	0.6	2.86E-08	2.80E-08	2.51E-08	2.51E-08
Br84	0.6	2.80E-08	2.81E-08	3.29E-08	3.30E-08
Sr91	0.5	2.66E-08	2.70E-08	2.69E-08	2.69E-08
Y95	0.5	2.62E-08	2.73E-08	2.72E-08	2.72E-08
Cs139	0.5	2.42E-08	2.41E-08	2.43E-08	2.43E-08
I133	0.4	2.08E-08	2.08E-08	2.09E-08	2.09E-08
Kr88	0.4	1.90E-08	1.91E-08	1.92E-08	1.92E-08
Pr147	0.4	1.81E-08	2.02E-08	1.80E-08	2.14E-08
Sb129	0.4	1.78E-08	2.07E-08	1.64E-08	1.64E-08
Pd111	0.3	1.76E-08	1.76E-08	1.77E-08	1.77E-08
Nb97	0.3	1.55E-08	1.57E-08	1.57E-08	1.57E-08
Mo102	0.3	1.44E-08	1.44E-08	1.43E-08	1.43E-08
Te129	0.3	1.41E-08	1.33E-08	1.28E-08	1.28E-08
Sn128	0.3	1.38E-08	1.37E-08	1.48E-08	1.48E-08
Ce143	0.2	1.11E-08	1.11E-08	1.11E-08	1.11E-08
Xe135	0.2	1.04E-08	1.04E-08	1.02E-08	1.02E-08
Sn127	0.2	8.89E-09	9.13E-09	1.70E-08	7.95E-09
Ba142	0.2	8.53E-09	8.24E-09	8.59E-09	8.59E-09

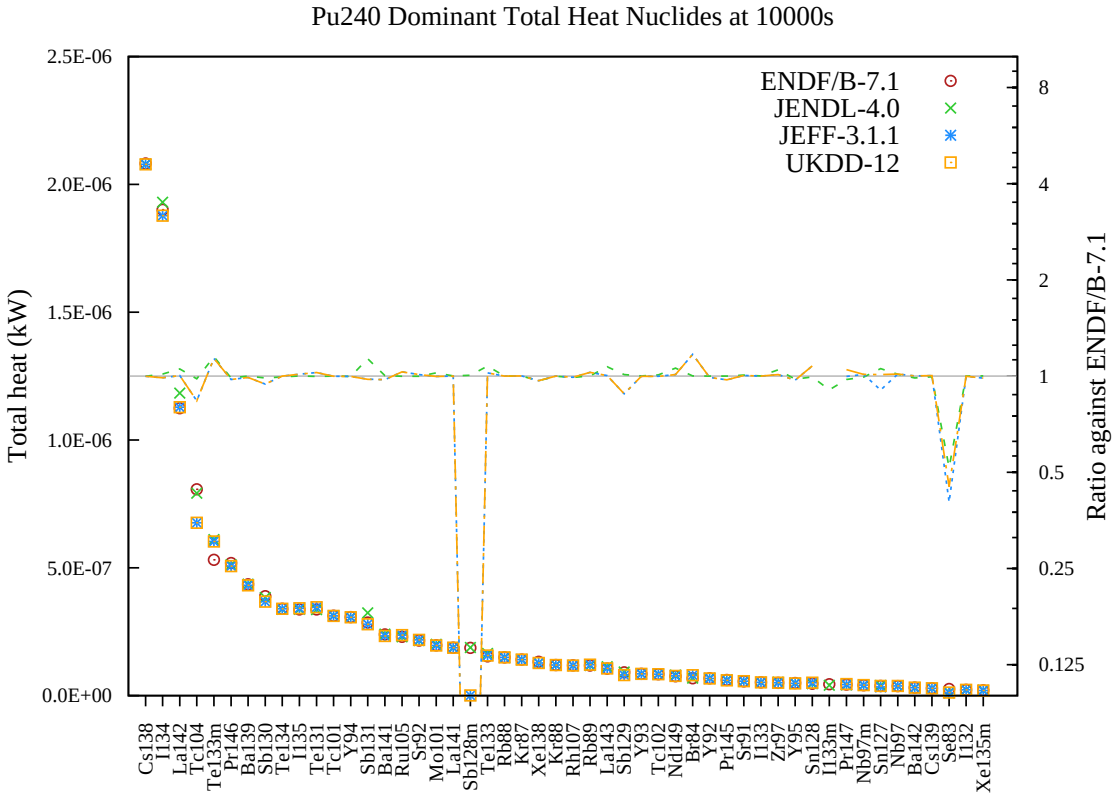

Figure 120: Total heat (in kW) decay data comparison for Pu240 fission pulse after 10000s cooling.

Table 120: Total heat (in kW) decay data comparison for Pu240 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	15.5	2.08E-06	2.08E-06	2.08E-06	2.08E-06
I134	14.2	1.90E-06	1.93E-06	1.88E-06	1.88E-06
La142	8.4	1.12E-06	1.18E-06	1.13E-06	1.13E-06
Tc104	6.0	8.08E-07	7.92E-07	6.77E-07	6.77E-07
Te133m	4.0	5.31E-07	6.10E-07	6.03E-07	6.03E-07
Pr146	3.9	5.19E-07	5.12E-07	5.07E-07	5.07E-07
Ba139	3.2	4.36E-07	4.36E-07	4.31E-07	4.31E-07
Sb130	2.9	3.89E-07	3.84E-07	3.67E-07	3.67E-07
Te134	2.5	3.40E-07	3.38E-07	3.40E-07	3.40E-07
I135	2.5	3.37E-07	3.38E-07	3.42E-07	3.42E-07
Te131	2.5	3.37E-07	3.36E-07	3.46E-07	3.46E-07
Tc101	2.3	3.12E-07	3.12E-07	3.12E-07	3.12E-07
Y94	2.3	3.07E-07	3.06E-07	3.06E-07	3.06E-07
Sb131	2.1	2.86E-07	3.24E-07	2.79E-07	2.79E-07
Ba141	1.8	2.40E-07	2.41E-07	2.34E-07	2.34E-07
Ru105	1.7	2.30E-07	2.30E-07	2.37E-07	2.37E-07
Sr92	1.6	2.16E-07	2.15E-07	2.18E-07	2.18E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Mo101	1.5	1.97E-07	2.01E-07	1.96E-07	1.96E-07
La141	1.4	1.87E-07	1.87E-07	1.87E-07	1.87E-07
Sb128m	1.4	1.87E-07	1.88E-07	6.40E-10	6.40E-10
Te133	1.1	1.53E-07	1.65E-07	1.57E-07	1.57E-07
Rb88	1.1	1.50E-07	1.50E-07	1.50E-07	1.50E-07
Kr87	1.0	1.41E-07	1.41E-07	1.41E-07	1.41E-07
Xe138	1.0	1.32E-07	1.28E-07	1.28E-07	1.28E-07
Kr88	0.9	1.20E-07	1.20E-07	1.20E-07	1.20E-07
Rh107	0.9	1.18E-07	1.17E-07	1.18E-07	1.18E-07
Rb89	0.9	1.18E-07	1.18E-07	1.21E-07	1.21E-07
La143	0.8	1.06E-07	1.13E-07	1.06E-07	1.06E-07
Sb129	0.7	9.13E-08	9.24E-08	8.04E-08	8.04E-08
Y93	0.6	8.52E-08	8.53E-08	8.52E-08	8.52E-08
Tc102	0.6	8.39E-08	8.46E-08	8.38E-08	8.37E-08
Nd149	0.6	7.61E-08	8.06E-08	7.69E-08	7.69E-08
Br84	0.5	6.81E-08	6.82E-08	7.96E-08	7.96E-08
Y92	0.5	6.80E-08	6.80E-08	6.74E-08	6.74E-08
Pr145	0.5	6.13E-08	6.13E-08	5.97E-08	5.97E-08
Sr91	0.4	5.60E-08	5.64E-08	5.63E-08	5.63E-08
I133	0.4	5.20E-08	5.20E-08	5.20E-08	5.20E-08
Zr97	0.4	4.99E-08	5.22E-08	5.05E-08	5.05E-08
Y95	0.4	4.94E-08	4.83E-08	4.79E-08	4.79E-08
Sn128	0.3	4.68E-08	4.65E-08	5.03E-08	5.03E-08
I133m	0.3	4.49E-08	4.06E-08	—	—
Pr147	0.3	4.31E-08	4.20E-08	4.30E-08	4.51E-08
Nb97m	0.3	4.09E-08	4.05E-08	4.14E-08	4.14E-08
Sn127	0.3	3.77E-08	3.97E-08	3.41E-08	3.81E-08
Nb97	0.3	3.74E-08	3.79E-08	3.80E-08	3.80E-08
Ba142	0.2	3.10E-08	3.06E-08	3.11E-08	3.11E-08
Cs139	0.2	2.86E-08	2.84E-08	2.87E-08	2.87E-08
Se83	0.2	2.61E-08	1.35E-08	1.05E-08	1.18E-08
I132	0.2	2.27E-08	2.27E-08	2.27E-08	2.27E-08
Xe135m	0.2	2.05E-08	2.05E-08	2.02E-08	2.02E-08

9 Decay data comparison for ^{241}Pu 0.0253 eV pulse decay heat

9.1 10s after pulse

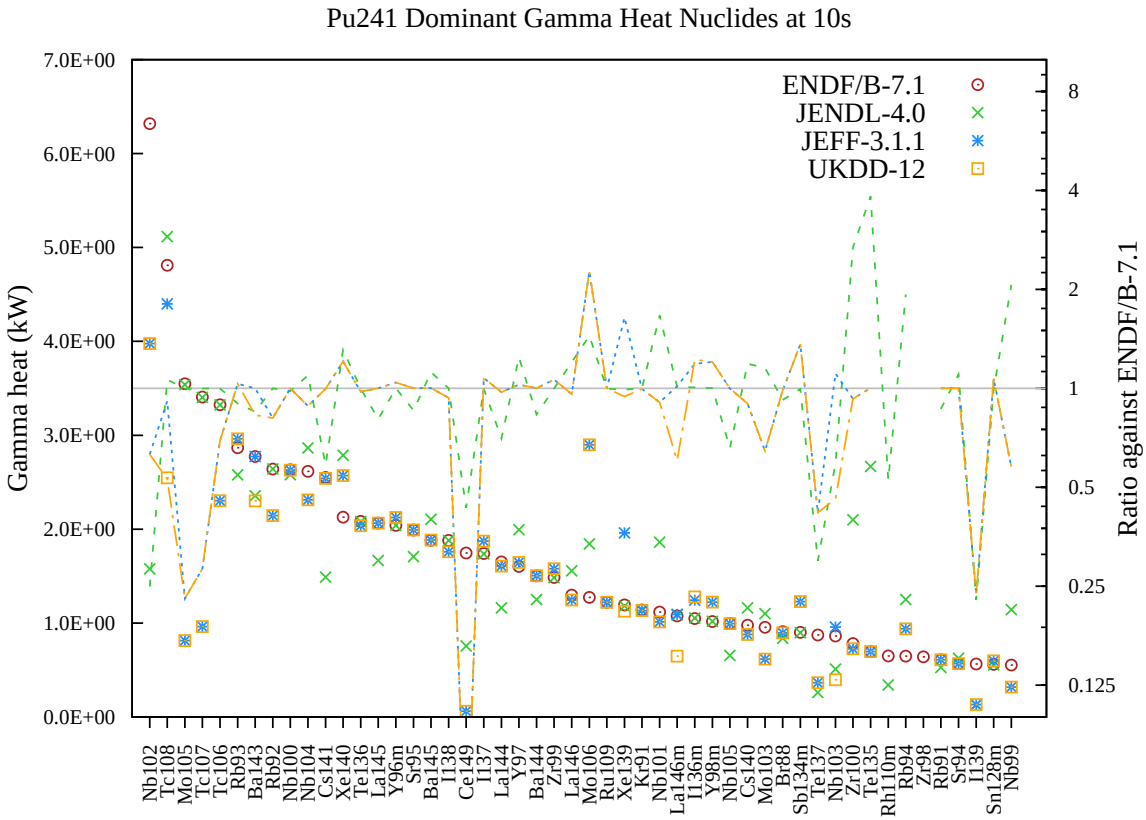

Figure 121: Gamma heat (in kW) decay data comparison for Pu241 fission pulse after 10s cooling.

Table 121: Gamma heat (in kW) decay data comparison for Pu241 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb102	6.3	6.32E+00	1.58E+00	3.98E+00	3.98E+00
Tc108	4.8	4.81E+00	5.12E+00	4.40E+00	2.55E+00
Mo105	3.5	3.55E+00	3.54E+00	8.13E-01	8.13E-01
Tc107	3.4	3.41E+00	3.40E+00	9.63E-01	9.63E-01
Tc106	3.3	3.33E+00	3.32E+00	2.30E+00	2.30E+00
Rb93	2.9	2.87E+00	2.58E+00	2.96E+00	2.96E+00
Ba143	2.8	2.77E+00	2.36E+00	2.77E+00	2.30E+00
Rb92	2.6	2.64E+00	2.64E+00	2.14E+00	2.14E+00
Nb100	2.6	2.63E+00	2.58E+00	2.63E+00	2.63E+00

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb104	2.6	2.62E+00	2.87E+00	2.31E+00	2.31E+00
Cs141	2.5	2.55E+00	1.49E+00	2.54E+00	2.54E+00
Xe140	2.1	2.13E+00	2.79E+00	2.57E+00	2.57E+00
Te136	2.1	2.08E+00	2.08E+00	2.04E+00	2.04E+00
La145	2.1	2.07E+00	1.67E+00	2.07E+00	2.07E+00
Y96m	2.0	2.04E+00	2.04E+00	2.12E+00	2.12E+00
Sr95	2.0	1.99E+00	1.71E+00	1.99E+00	1.99E+00
Ba145	1.9	1.88E+00	2.11E+00	1.88E+00	1.88E+00
I138	1.9	1.88E+00	1.88E+00	1.76E+00	1.76E+00
Ce149	1.7	1.75E+00	7.56E-01	6.12E-02	6.12E-02
I137	1.7	1.74E+00	1.74E+00	1.87E+00	1.87E+00
La144	1.6	1.65E+00	1.16E+00	1.61E+00	1.61E+00
Y97	1.6	1.60E+00	1.99E+00	1.65E+00	1.65E+00
Ba144	1.5	1.50E+00	1.25E+00	1.50E+00	1.50E+00
Zr99	1.5	1.49E+00	1.48E+00	1.58E+00	1.58E+00
La146	1.3	1.30E+00	1.56E+00	1.25E+00	1.25E+00
Mo106	1.3	1.27E+00	1.84E+00	2.90E+00	2.90E+00
Ru109	1.2	1.22E+00	1.22E+00	1.22E+00	1.22E+00
Xe139	1.2	1.19E+00	1.18E+00	1.96E+00	1.13E+00
Kr91	1.1	1.14E+00	1.14E+00	1.13E+00	1.13E+00
Nb101	1.1	1.12E+00	1.86E+00	1.01E+00	1.01E+00
La146m	1.1	1.08E+00	1.09E+00	1.09E+00	6.49E-01
I136m	1.0	1.05E+00	1.05E+00	1.24E+00	1.28E+00
Y98m	1.0	1.02E+00	1.02E+00	1.22E+00	1.22E+00
Nb105	1.0	9.96E-01	6.55E-01	9.94E-01	9.94E-01
Cs140	1.0	9.78E-01	1.16E+00	8.79E-01	8.79E-01
Mo103	1.0	9.55E-01	1.10E+00	6.17E-01	6.16E-01
Br88	0.9	9.09E-01	8.38E-01	8.95E-01	8.95E-01
Sb134m	0.9	9.01E-01	8.97E-01	1.23E+00	1.23E+00
Te137	0.9	8.72E-01	2.60E-01	3.65E-01	3.65E-01
Nb103	0.9	8.62E-01	5.09E-01	9.56E-01	3.97E-01
Zr100	0.8	7.82E-01	2.10E+00	7.27E-01	7.27E-01
Te135	0.7	6.95E-01	2.67E+00	6.97E-01	6.97E-01
Rh110m	0.6	6.49E-01	—	—	—
Rb94	0.6	6.48E-01	1.25E+00	9.39E-01	9.39E-01
Zr98	0.6	6.41E-01	—	—	—
Rb91	0.6	6.09E-01	5.26E-01	6.09E-01	6.09E-01
Sr94	0.6	5.67E-01	6.26E-01	5.68E-01	5.68E-01
I139	0.6	5.65E-01	1.28E-01	1.33E-01	1.33E-01
Sn128m	0.6	5.60E-01	5.55E-01	5.98E-01	5.98E-01
Nb99	0.6	5.54E-01	1.14E+00	3.19E-01	3.19E-01

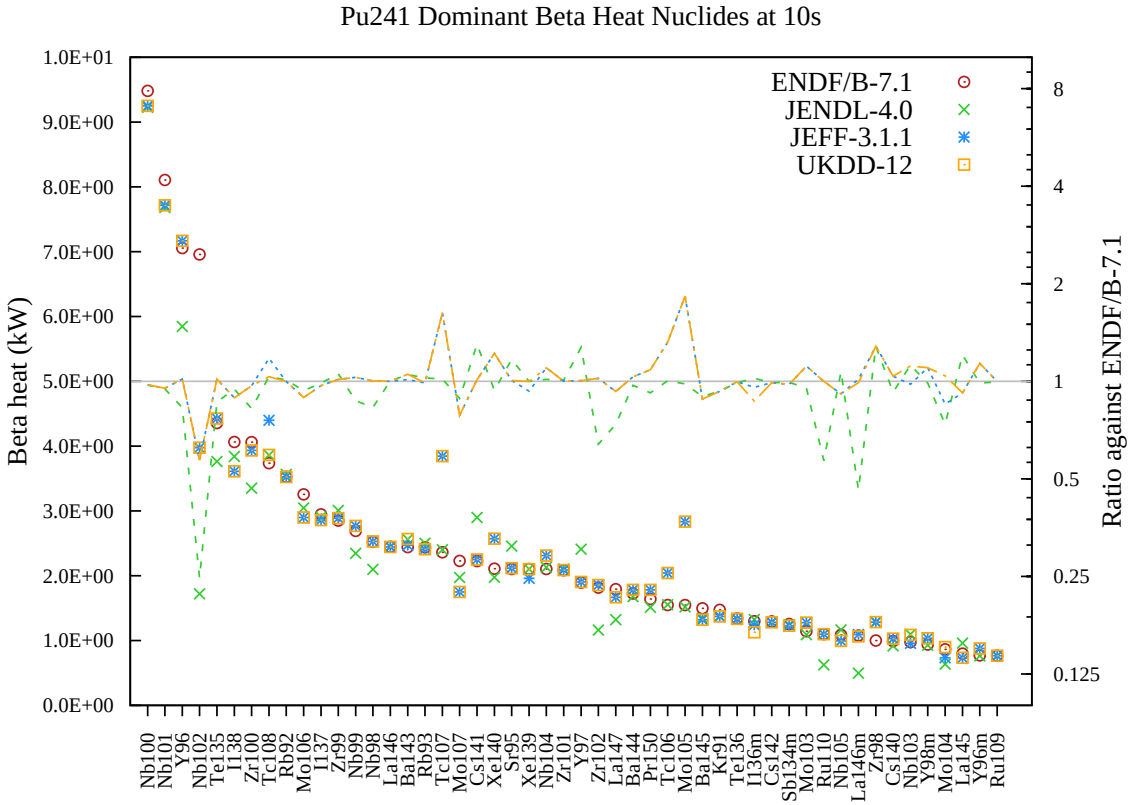

Figure 122: Beta heat (in kW) decay data comparison for Pu241 fission pulse after 10s cooling.

Table 122: Beta heat (in kW) decay data comparison for Pu241 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb100	6.8	9.48E+00	9.23E+00	9.25E+00	9.25E+00
Nb101	5.8	8.11E+00	7.68E+00	7.72E+00	7.72E+00
Y96	5.0	7.05E+00	5.85E+00	7.17E+00	7.17E+00
Nb102	5.0	6.96E+00	1.72E+00	3.98E+00	3.98E+00
Te135	3.1	4.36E+00	3.76E+00	4.43E+00	4.43E+00
I138	2.9	4.06E+00	3.84E+00	3.61E+00	3.61E+00
Zr100	2.9	4.06E+00	3.35E+00	3.93E+00	3.93E+00
Tc108	2.7	3.74E+00	3.86E+00	4.40E+00	3.86E+00
Rb92	2.5	3.53E+00	3.56E+00	3.52E+00	3.52E+00
Mo106	2.3	3.25E+00	3.04E+00	2.90E+00	2.90E+00
I137	2.1	2.95E+00	2.91E+00	2.86E+00	2.86E+00
Zr99	2.0	2.85E+00	3.01E+00	2.89E+00	2.89E+00
Nb99	1.9	2.69E+00	2.34E+00	2.77E+00	2.77E+00
Nb98	1.8	2.52E+00	2.10E+00	2.53E+00	2.53E+00
La146	1.7	2.45E+00	2.45E+00	2.45E+00	2.45E+00
Ba143	1.7	2.44E+00	2.56E+00	2.47E+00	2.57E+00

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb93	1.7	2.44E+00	2.50E+00	2.41E+00	2.41E+00
Tc107	1.7	2.36E+00	2.40E+00	3.84E+00	3.84E+00
Mo107	1.6	2.23E+00	1.97E+00	1.75E+00	1.75E+00
Cs141	1.6	2.23E+00	2.90E+00	2.25E+00	2.25E+00
Xe140	1.5	2.11E+00	1.98E+00	2.57E+00	2.57E+00
Sr95	1.5	2.10E+00	2.46E+00	2.12E+00	2.12E+00
Xe139	1.5	2.10E+00	2.10E+00	1.96E+00	2.10E+00
Nb104	1.5	2.10E+00	2.13E+00	2.31E+00	2.31E+00
Zr101	1.5	2.08E+00	2.10E+00	2.09E+00	2.09E+00
Y97	1.4	1.89E+00	2.41E+00	1.90E+00	1.90E+00
Zr102	1.3	1.82E+00	1.16E+00	1.86E+00	1.86E+00
La147	1.3	1.79E+00	1.32E+00	1.67E+00	1.67E+00
Ba144	1.2	1.73E+00	1.68E+00	1.78E+00	1.78E+00
Pr150	1.2	1.64E+00	1.51E+00	1.78E+00	1.78E+00
Tc106	1.1	1.55E+00	1.55E+00	2.04E+00	2.04E+00
Mo105	1.1	1.55E+00	1.52E+00	2.83E+00	2.83E+00
Ba145	1.1	1.50E+00	1.35E+00	1.32E+00	1.32E+00
Kr91	1.1	1.47E+00	1.37E+00	1.37E+00	1.37E+00
Te136	1.0	1.34E+00	1.33E+00	1.33E+00	1.33E+00
I136m	0.9	1.30E+00	1.32E+00	1.24E+00	1.13E+00
Cs142	0.9	1.29E+00	1.28E+00	1.28E+00	1.28E+00
Sb134m	0.9	1.25E+00	1.25E+00	1.23E+00	1.23E+00
Mo103	0.8	1.14E+00	1.09E+00	1.28E+00	1.28E+00
Ru110	0.8	1.10E+00	6.26E-01	1.10E+00	1.10E+00
Nb105	0.8	1.09E+00	1.17E+00	9.94E-01	9.94E-01
La146m	0.8	1.08E+00	4.97E-01	1.09E+00	1.07E+00
Zr98	0.7	1.00E+00	1.28E+00	1.28E+00	1.28E+00
Cs140	0.7	9.93E-01	9.19E-01	1.03E+00	1.03E+00
Nb103	0.7	9.76E-01	1.09E+00	9.56E-01	1.09E+00
Y98m	0.7	9.39E-01	9.28E-01	1.04E+00	1.04E+00
Mo104	0.6	8.64E-01	6.37E-01	7.35E-01	8.98E-01
La145	0.6	7.97E-01	9.61E-01	7.34E-01	7.34E-01
Y96m	0.6	7.72E-01	7.62E-01	8.76E-01	8.76E-01
Ru109	0.5	7.67E-01	7.63E-01	7.66E-01	7.66E-01

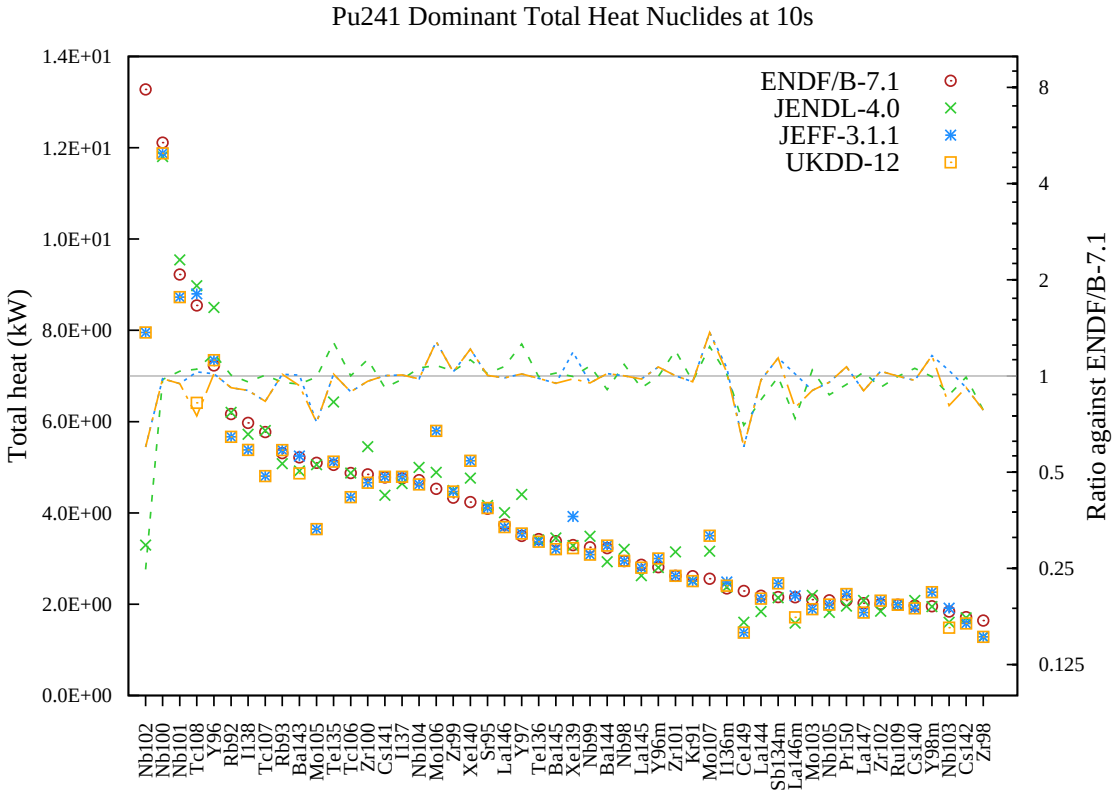

Figure 123: Total heat (in kW) decay data comparison for Pu241 fission pulse after 10s cooling.

Table 123: Total heat (in kW) decay data comparison for Pu241 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb102	5.5	1.33E+01	3.30E+00	7.95E+00	7.95E+00
Nb100	5.0	1.21E+01	1.18E+01	1.19E+01	1.19E+01
Nb101	3.8	9.22E+00	9.54E+00	8.73E+00	8.73E+00
Tc108	3.6	8.55E+00	8.98E+00	8.80E+00	6.41E+00
Y96	3.0	7.23E+00	8.50E+00	7.35E+00	7.35E+00
Rb92	2.6	6.17E+00	6.20E+00	5.67E+00	5.67E+00
I138	2.5	5.97E+00	5.72E+00	5.38E+00	5.38E+00
Tc107	2.4	5.77E+00	5.81E+00	4.81E+00	4.81E+00
Rb93	2.2	5.31E+00	5.08E+00	5.38E+00	5.38E+00
Ba143	2.2	5.22E+00	4.92E+00	5.25E+00	4.87E+00
Mo105	2.1	5.10E+00	5.06E+00	3.65E+00	3.65E+00
Te135	2.1	5.05E+00	6.43E+00	5.12E+00	5.12E+00
Tc106	2.0	4.87E+00	4.88E+00	4.35E+00	4.35E+00
Zr100	2.0	4.84E+00	5.45E+00	4.66E+00	4.66E+00
Cs141	2.0	4.78E+00	4.39E+00	4.79E+00	4.79E+00
I137	2.0	4.76E+00	4.64E+00	4.79E+00	4.79E+00
Nb104	2.0	4.72E+00	5.00E+00	4.62E+00	4.62E+00

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Mo106	1.9	4.53E+00	4.89E+00	5.80E+00	5.80E+00
Zr99	1.8	4.34E+00	4.49E+00	4.47E+00	4.47E+00
Xe140	1.8	4.24E+00	4.76E+00	5.14E+00	5.14E+00
Sr95	1.7	4.09E+00	4.16E+00	4.11E+00	4.11E+00
La146	1.6	3.74E+00	4.01E+00	3.69E+00	3.69E+00
Y97	1.5	3.50E+00	4.40E+00	3.55E+00	3.55E+00
Te136	1.4	3.43E+00	3.41E+00	3.37E+00	3.37E+00
Ba145	1.4	3.38E+00	3.45E+00	3.20E+00	3.20E+00
Xe139	1.4	3.30E+00	3.28E+00	3.92E+00	3.23E+00
Nb99	1.4	3.25E+00	3.49E+00	3.09E+00	3.09E+00
Ba144	1.3	3.23E+00	2.93E+00	3.28E+00	3.28E+00
Nb98	1.2	2.95E+00	3.20E+00	2.95E+00	2.95E+00
La145	1.2	2.86E+00	2.63E+00	2.80E+00	2.80E+00
Y96m	1.2	2.81E+00	2.80E+00	3.00E+00	3.00E+00
Zr101	1.1	2.62E+00	3.15E+00	2.62E+00	2.62E+00
Kr91	1.1	2.61E+00	2.52E+00	2.51E+00	2.51E+00
Mo107	1.1	2.56E+00	3.16E+00	3.50E+00	3.50E+00
I136m	1.0	2.34E+00	2.38E+00	2.49E+00	2.41E+00
Ce149	1.0	2.29E+00	1.61E+00	1.38E+00	1.38E+00
La144	0.9	2.18E+00	1.84E+00	2.12E+00	2.12E+00
Sb134m	0.9	2.16E+00	2.14E+00	2.46E+00	2.46E+00
La146m	0.9	2.15E+00	1.58E+00	2.19E+00	1.71E+00
Mo103	0.9	2.10E+00	2.19E+00	1.89E+00	1.89E+00
Nb105	0.9	2.08E+00	1.82E+00	1.99E+00	1.99E+00
Pr150	0.9	2.08E+00	1.96E+00	2.22E+00	2.22E+00
La147	0.8	2.02E+00	2.08E+00	1.82E+00	1.82E+00
Zr102	0.8	2.01E+00	1.85E+00	2.08E+00	2.08E+00
Ru109	0.8	1.99E+00	1.98E+00	1.99E+00	1.99E+00
Cs140	0.8	1.97E+00	2.08E+00	1.91E+00	1.91E+00
Y98m	0.8	1.96E+00	1.95E+00	2.26E+00	2.26E+00
Nb103	0.8	1.84E+00	1.60E+00	1.91E+00	1.49E+00
Cs142	0.7	1.72E+00	1.70E+00	1.58E+00	1.58E+00
Zr98	0.7	1.64E+00	1.28E+00	1.28E+00	1.28E+00

9.2 100s after pulse

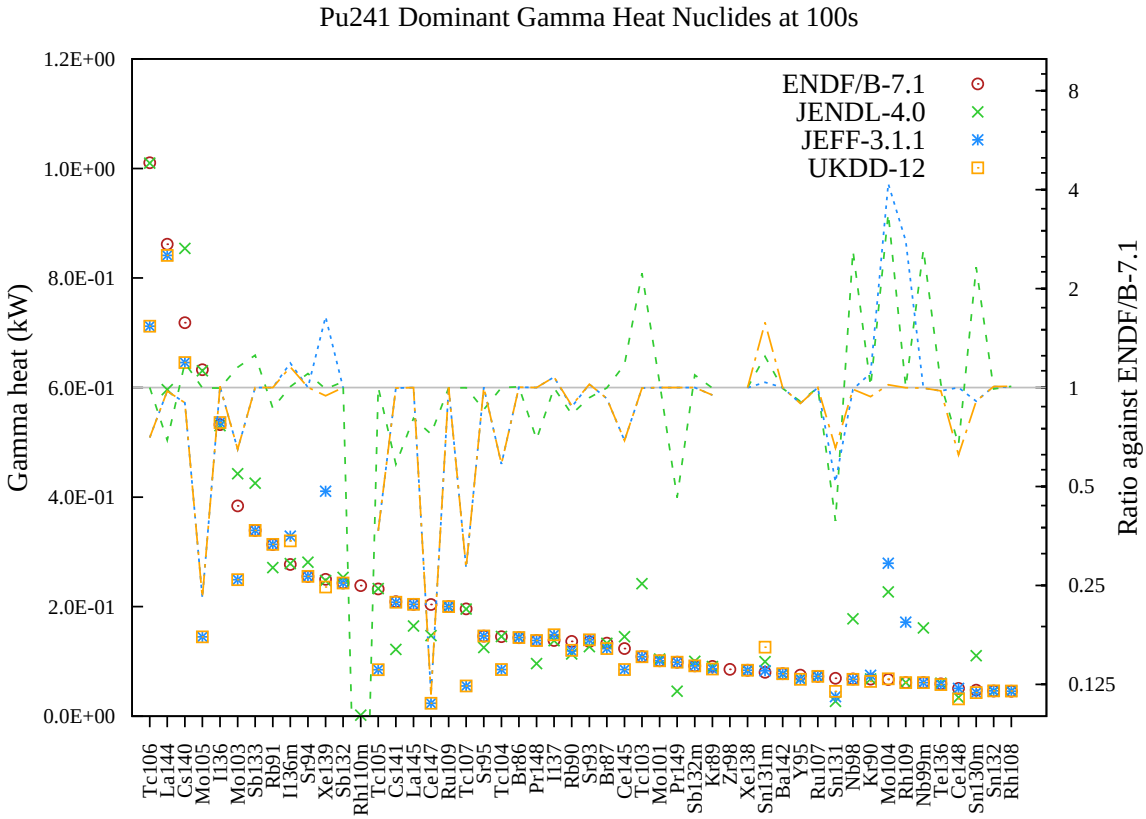

Figure 124: Gamma heat (in kW) decay data comparison for Pu241 fission pulse after 100s cooling.

Table 124: Gamma heat (in kW) decay data comparison for Pu241 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	9.2	1.01E+00	1.01E+00	7.12E-01	7.12E-01
La144	7.8	8.62E-01	5.96E-01	8.41E-01	8.41E-01
Cs140	6.5	7.18E-01	8.54E-01	6.46E-01	6.46E-01
Mo105	5.7	6.33E-01	6.31E-01	1.45E-01	1.45E-01
I136	4.8	5.32E-01	5.30E-01	5.36E-01	5.36E-01
Mo103	3.5	3.84E-01	4.43E-01	2.49E-01	2.49E-01
Sb133	3.1	3.39E-01	4.26E-01	3.39E-01	3.39E-01
Rb91	2.8	3.13E-01	2.71E-01	3.14E-01	3.14E-01
I136m	2.5	2.77E-01	2.79E-01	3.29E-01	3.20E-01
Sr94	2.3	2.55E-01	2.81E-01	2.55E-01	2.55E-01
Xe139	2.3	2.50E-01	2.48E-01	4.11E-01	2.36E-01
Sb132	2.2	2.43E-01	2.53E-01	2.43E-01	2.43E-01
Rh110m	2.2	2.39E-01	—	—	—

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc105	2.1	2.32E-01	2.33E-01	8.50E-02	8.50E-02
Cs141	1.9	2.09E-01	1.22E-01	2.08E-01	2.08E-01
La145	1.9	2.04E-01	1.65E-01	2.04E-01	2.04E-01
Ce147	1.9	2.04E-01	1.47E-01	2.38E-02	2.38E-02
Ru109	1.8	2.00E-01	2.00E-01	2.00E-01	2.00E-01
Tc107	1.8	1.96E-01	1.96E-01	5.53E-02	5.53E-02
Sr95	1.3	1.46E-01	1.25E-01	1.46E-01	1.46E-01
Tc104	1.3	1.45E-01	1.45E-01	8.51E-02	8.51E-02
Br86	1.3	1.43E-01	1.44E-01	1.44E-01	1.44E-01
Pr148	1.3	1.38E-01	9.61E-02	1.38E-01	1.38E-01
I137	1.3	1.38E-01	1.38E-01	1.49E-01	1.49E-01
Rb90	1.2	1.37E-01	1.13E-01	1.19E-01	1.20E-01
Sr93	1.2	1.36E-01	1.27E-01	1.40E-01	1.40E-01
Br87	1.2	1.33E-01	1.33E-01	1.24E-01	1.24E-01
Ce145	1.1	1.24E-01	1.45E-01	8.52E-02	8.52E-02
Tc103	1.0	1.09E-01	2.42E-01	1.08E-01	1.08E-01
Mo101	0.9	1.01E-01	1.04E-01	1.01E-01	1.01E-01
Pr149	0.9	9.85E-02	4.56E-02	9.85E-02	9.85E-02
Sb132m	0.8	9.18E-02	1.00E-01	9.18E-02	9.18E-02
Kr89	0.8	9.09E-02	9.05E-02	8.62E-02	8.62E-02
Zr98	0.8	8.56E-02	—	—	—
Xe138	0.8	8.39E-02	8.39E-02	8.38E-02	8.38E-02
Sn131m	0.7	8.00E-02	9.95E-02	8.30E-02	1.26E-01
Ba142	0.7	7.74E-02	7.70E-02	7.74E-02	7.74E-02
Y95	0.7	7.52E-02	6.82E-02	6.72E-02	6.72E-02
Ru107	0.7	7.27E-02	7.26E-02	7.27E-02	7.27E-02
Sn131	0.6	6.94E-02	2.73E-02	3.58E-02	4.54E-02
Nb98	0.6	6.81E-02	1.78E-01	6.73E-02	6.73E-02
Kr90	0.6	6.76E-02	6.81E-02	7.48E-02	6.34E-02
Mo104	0.6	6.70E-02	2.27E-01	2.79E-01	6.83E-02
Rh109	0.6	6.14E-02	6.15E-02	1.72E-01	6.13E-02
Nb99m	0.6	6.13E-02	1.61E-01	6.11E-02	6.11E-02
Te136	0.5	5.90E-02	6.05E-02	5.76E-02	5.76E-02
Ce148	0.5	5.07E-02	3.40E-02	5.07E-02	3.16E-02
Sn130m	0.4	4.75E-02	1.10E-01	4.32E-02	4.32E-02
Sn132	0.4	4.61E-02	4.56E-02	4.64E-02	4.64E-02
Rh108	0.4	4.55E-02	4.59E-02	4.55E-02	4.59E-02

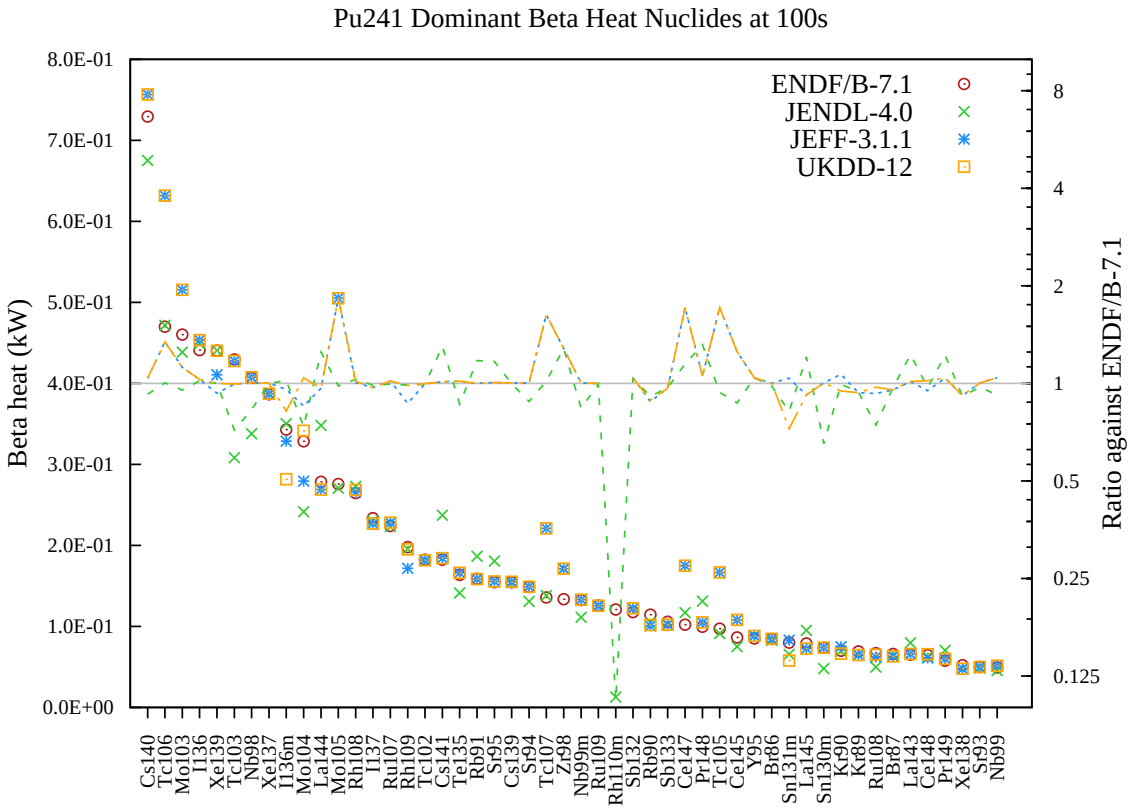

Figure 125: Beta heat (in kW) decay data comparison for Pu241 fission pulse after 100s cooling.

Table 125: Beta heat (in kW) decay data comparison for Pu241 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	7.1	7.29E-01	6.75E-01	7.57E-01	7.57E-01
Tc106	4.6	4.70E-01	4.72E-01	6.32E-01	6.32E-01
Mo103	4.5	4.60E-01	4.39E-01	5.16E-01	5.15E-01
I136	4.3	4.41E-01	4.49E-01	4.53E-01	4.53E-01
Xe139	4.3	4.40E-01	4.41E-01	4.11E-01	4.40E-01
Tc103	4.2	4.29E-01	3.08E-01	4.28E-01	4.28E-01
Nb98	3.9	4.07E-01	3.38E-01	4.08E-01	4.08E-01
Xe137	3.7	3.87E-01	3.87E-01	3.87E-01	3.87E-01
I136m	3.3	3.43E-01	3.50E-01	3.29E-01	2.82E-01
Mo104	3.2	3.29E-01	2.42E-01	2.79E-01	3.41E-01
La144	2.7	2.78E-01	3.48E-01	2.69E-01	2.69E-01
Mo105	2.7	2.76E-01	2.71E-01	5.05E-01	5.05E-01
Rh108	2.6	2.65E-01	2.73E-01	2.66E-01	2.68E-01
I137	2.3	2.34E-01	2.30E-01	2.27E-01	2.27E-01
Ru107	2.2	2.24E-01	2.23E-01	2.28E-01	2.28E-01
Rh109	1.9	1.98E-01	1.96E-01	1.72E-01	1.95E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	1.8	1.82E-01	1.81E-01	1.82E-01	1.82E-01
Cs141	1.8	1.82E-01	2.37E-01	1.84E-01	1.84E-01
Te135	1.6	1.64E-01	1.41E-01	1.66E-01	1.66E-01
Rb91	1.5	1.59E-01	1.87E-01	1.59E-01	1.59E-01
Sr95	1.5	1.55E-01	1.81E-01	1.56E-01	1.56E-01
Cs139	1.5	1.54E-01	1.54E-01	1.55E-01	1.55E-01
Sr94	1.4	1.49E-01	1.31E-01	1.49E-01	1.49E-01
Tc107	1.3	1.36E-01	1.38E-01	2.21E-01	2.21E-01
Zr98	1.3	1.34E-01	1.71E-01	1.71E-01	1.71E-01
Nb99m	1.3	1.33E-01	1.11E-01	1.33E-01	1.33E-01
Ru109	1.2	1.26E-01	1.25E-01	1.26E-01	1.26E-01
Rh110m	1.2	1.21E-01	1.27E-02	—	—
Sb132	1.1	1.18E-01	1.22E-01	1.22E-01	1.22E-01
Rb90	1.1	1.15E-01	1.04E-01	1.01E-01	1.02E-01
Sb133	1.0	1.06E-01	1.03E-01	1.02E-01	1.02E-01
Ce147	1.0	1.02E-01	1.17E-01	1.75E-01	1.75E-01
Pr148	1.0	9.95E-02	1.31E-01	1.05E-01	1.05E-01
Tc105	0.9	9.72E-02	9.12E-02	1.67E-01	1.67E-01
Ce145	0.8	8.64E-02	7.51E-02	1.08E-01	1.08E-01
Y95	0.8	8.50E-02	8.85E-02	8.84E-02	8.84E-02
Br86	0.8	8.45E-02	8.29E-02	8.47E-02	8.47E-02
Sn131m	0.8	8.00E-02	6.55E-02	8.30E-02	5.79E-02
La145	0.8	7.88E-02	9.51E-02	7.26E-02	7.26E-02
Sn130m	0.7	7.35E-02	4.80E-02	7.38E-02	7.38E-02
Kr90	0.7	7.01E-02	6.97E-02	7.48E-02	6.64E-02
Kr89	0.7	6.91E-02	6.50E-02	6.47E-02	6.47E-02
Ru108	0.6	6.69E-02	4.98E-02	6.22E-02	6.51E-02
Br87	0.6	6.61E-02	6.42E-02	6.31E-02	6.31E-02
La143	0.6	6.52E-02	7.98E-02	6.60E-02	6.60E-02
Ce148	0.6	6.45E-02	6.27E-02	6.11E-02	6.58E-02
Pr149	0.6	5.77E-02	7.04E-02	5.99E-02	5.99E-02
Xe138	0.5	5.22E-02	4.77E-02	4.78E-02	4.78E-02
Sr93	0.5	4.98E-02	4.84E-02	5.00E-02	5.00E-02
Nb99	0.5	4.95E-02	4.56E-02	5.15E-02	5.15E-02

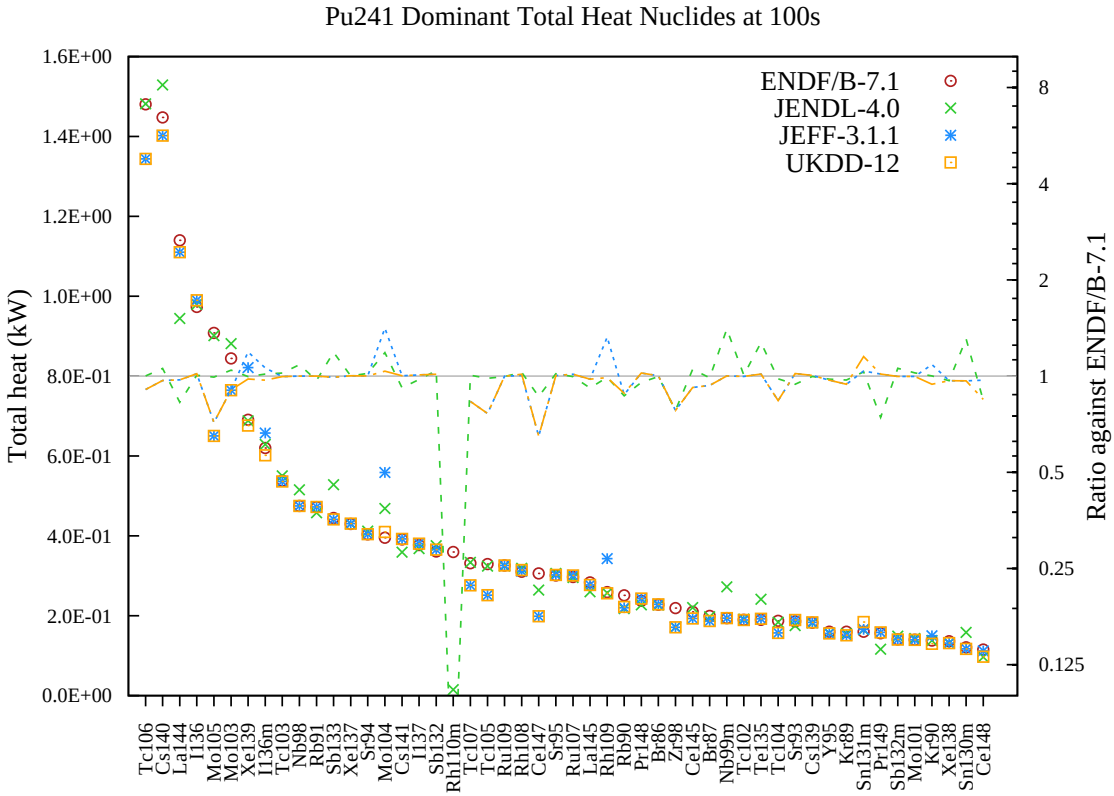

Figure 126: Total heat (in kW) decay data comparison for Pu241 fission pulse after 100s cooling.

Table 126: Total heat (in kW) decay data comparison for Pu241 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	6.9	1.48E+00	1.48E+00	1.34E+00	1.34E+00
Cs140	6.8	1.45E+00	1.53E+00	1.40E+00	1.40E+00
La144	5.3	1.14E+00	9.44E-01	1.11E+00	1.11E+00
I136	4.6	9.73E-01	9.79E-01	9.90E-01	9.90E-01
Mo105	4.3	9.08E-01	9.01E-01	6.50E-01	6.50E-01
Mo103	4.0	8.44E-01	8.81E-01	7.65E-01	7.65E-01
Xe139	3.2	6.91E-01	6.88E-01	8.21E-01	6.76E-01
I136m	2.9	6.20E-01	6.29E-01	6.57E-01	6.02E-01
Tc103	2.5	5.38E-01	5.50E-01	5.36E-01	5.36E-01
Nb98	2.2	4.75E-01	5.15E-01	4.75E-01	4.75E-01
Rb91	2.2	4.72E-01	4.58E-01	4.72E-01	4.72E-01
Sb133	2.1	4.45E-01	5.28E-01	4.41E-01	4.41E-01
Xe137	2.0	4.30E-01	4.30E-01	4.31E-01	4.31E-01
Sr94	1.9	4.04E-01	4.12E-01	4.04E-01	4.04E-01
Mo104	1.9	3.96E-01	4.68E-01	5.59E-01	4.10E-01
Cs141	1.8	3.91E-01	3.59E-01	3.92E-01	3.92E-01
I137	1.8	3.77E-01	3.68E-01	3.80E-01	3.80E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb132	1.7	3.61E-01	3.75E-01	3.66E-01	3.66E-01
Rh110m	1.7	3.59E-01	1.47E-02	—	—
Tc107	1.6	3.32E-01	3.34E-01	2.76E-01	2.76E-01
Tc105	1.5	3.29E-01	3.24E-01	2.52E-01	2.52E-01
Ru109	1.5	3.26E-01	3.25E-01	3.26E-01	3.26E-01
Rh108	1.5	3.10E-01	3.19E-01	3.12E-01	3.14E-01
Ce147	1.4	3.06E-01	2.64E-01	1.99E-01	1.99E-01
Sr95	1.4	3.01E-01	3.06E-01	3.02E-01	3.02E-01
Ru107	1.4	2.97E-01	2.96E-01	3.01E-01	3.01E-01
La145	1.3	2.83E-01	2.60E-01	2.77E-01	2.77E-01
Rh109	1.2	2.59E-01	2.57E-01	3.43E-01	2.56E-01
Rb90	1.2	2.51E-01	2.18E-01	2.20E-01	2.22E-01
Pr148	1.1	2.38E-01	2.27E-01	2.43E-01	2.43E-01
Br86	1.1	2.28E-01	2.27E-01	2.28E-01	2.28E-01
Zr98	1.0	2.19E-01	1.71E-01	1.71E-01	1.71E-01
Ce145	1.0	2.10E-01	2.20E-01	1.93E-01	1.93E-01
Br87	0.9	2.00E-01	1.97E-01	1.87E-01	1.87E-01
Nb99m	0.9	1.94E-01	2.73E-01	1.94E-01	1.94E-01
Tc102	0.9	1.90E-01	1.91E-01	1.90E-01	1.89E-01
Te135	0.9	1.90E-01	2.41E-01	1.92E-01	1.92E-01
Tc104	0.9	1.87E-01	1.84E-01	1.57E-01	1.57E-01
Sr93	0.9	1.86E-01	1.75E-01	1.90E-01	1.90E-01
Cs139	0.9	1.83E-01	1.82E-01	1.83E-01	1.83E-01
Y95	0.8	1.60E-01	1.57E-01	1.56E-01	1.56E-01
Kr89	0.7	1.60E-01	1.56E-01	1.51E-01	1.51E-01
Sn131m	0.7	1.60E-01	1.65E-01	1.66E-01	1.84E-01
Pr149	0.7	1.56E-01	1.16E-01	1.58E-01	1.58E-01
Sb132m	0.7	1.41E-01	1.49E-01	1.40E-01	1.40E-01
Mo101	0.7	1.40E-01	1.43E-01	1.40E-01	1.40E-01
Kr90	0.6	1.38E-01	1.38E-01	1.50E-01	1.30E-01
Xe138	0.6	1.36E-01	1.32E-01	1.32E-01	1.32E-01
Sn130m	0.6	1.21E-01	1.58E-01	1.17E-01	1.17E-01
Ce148	0.5	1.15E-01	9.67E-02	1.12E-01	9.74E-02

9.3 1000s after pulse

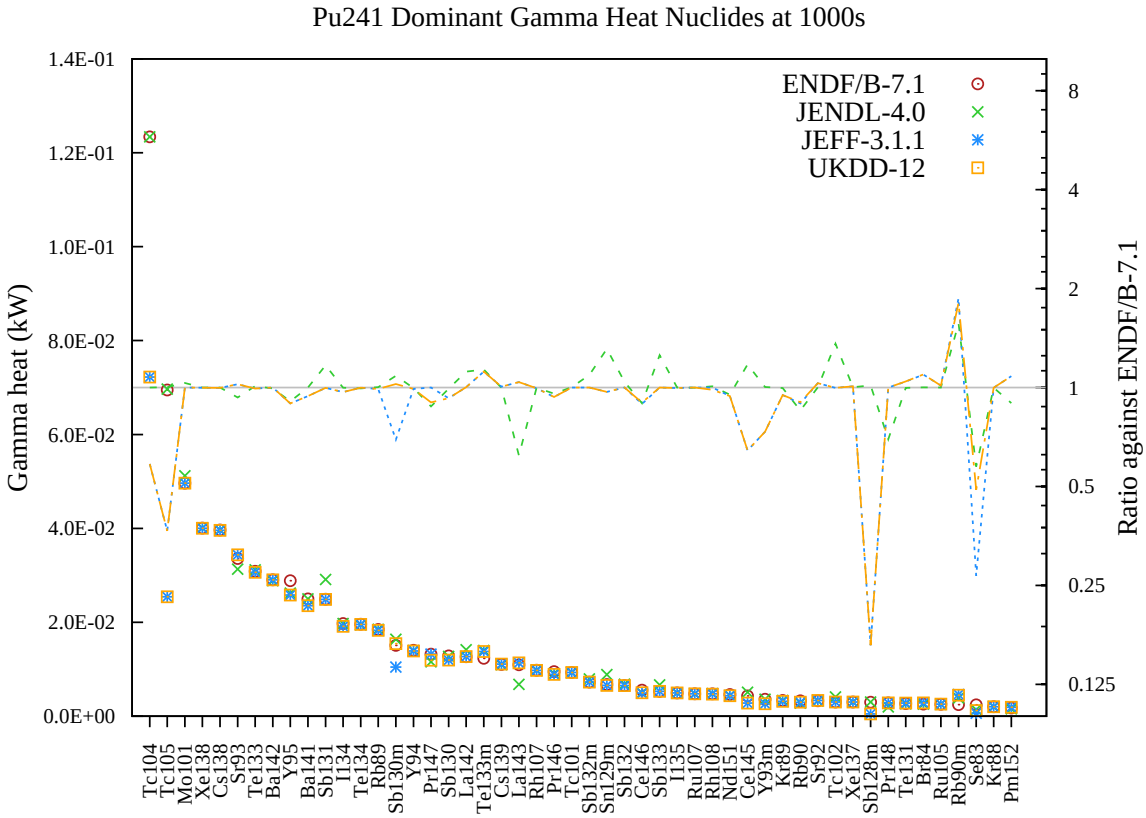

Figure 127: Gamma heat (in kW) decay data comparison for Pu241 fission pulse after 1000s cooling.

Table 127: Gamma heat (in kW) decay data comparison for Pu241 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	15.4	1.23E-01	1.23E-01	7.22E-02	7.22E-02
Tc105	8.7	6.95E-02	6.97E-02	2.54E-02	2.54E-02
Mo101	6.2	4.96E-02	5.12E-02	4.96E-02	4.96E-02
Xe138	5.0	4.01E-02	4.01E-02	4.00E-02	4.00E-02
Cs138	4.9	3.97E-02	3.97E-02	3.96E-02	3.96E-02
Sr93	4.2	3.36E-02	3.13E-02	3.44E-02	3.44E-02
Te133	3.8	3.09E-02	3.12E-02	3.06E-02	3.06E-02
Ba142	3.6	2.90E-02	2.89E-02	2.90E-02	2.90E-02
Y95	3.6	2.89E-02	2.62E-02	2.58E-02	2.58E-02
Ba141	3.1	2.50E-02	2.50E-02	2.35E-02	2.35E-02
Sb131	3.1	2.49E-02	2.91E-02	2.49E-02	2.49E-02
I134	2.5	1.98E-02	1.97E-02	1.91E-02	1.91E-02
Te134	2.4	1.96E-02	1.95E-02	1.96E-02	1.96E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb89	2.3	1.85E-02	1.85E-02	1.83E-02	1.83E-02
Sb130m	1.9	1.51E-02	1.64E-02	1.05E-02	1.54E-02
Y94	1.7	1.40E-02	1.40E-02	1.39E-02	1.39E-02
Pr147	1.6	1.32E-02	1.16E-02	1.32E-02	1.19E-02
Sb130	1.6	1.29E-02	1.27E-02	1.19E-02	1.19E-02
La142	1.6	1.27E-02	1.41E-02	1.27E-02	1.27E-02
Te133m	1.5	1.23E-02	1.40E-02	1.38E-02	1.38E-02
Cs139	1.4	1.10E-02	1.10E-02	1.11E-02	1.11E-02
La143	1.4	1.09E-02	6.79E-03	1.14E-02	1.14E-02
Rh107	1.2	9.81E-03	9.80E-03	9.76E-03	9.76E-03
Pr146	1.2	9.49E-03	9.09E-03	8.88E-03	8.88E-03
Tc101	1.2	9.30E-03	9.32E-03	9.30E-03	9.30E-03
Sb132m	0.9	7.27E-03	7.94E-03	7.27E-03	7.27E-03
Sn129m	0.8	6.76E-03	8.85E-03	6.56E-03	6.56E-03
Sb132	0.8	6.52E-03	6.80E-03	6.52E-03	6.52E-03
Ce146	0.7	5.53E-03	4.95E-03	4.93E-03	4.97E-03
Sb133	0.7	5.30E-03	6.65E-03	5.30E-03	5.30E-03
I135	0.6	4.96E-03	4.97E-03	4.95E-03	4.95E-03
Ru107	0.6	4.78E-03	4.78E-03	4.78E-03	4.78E-03
Rh108	0.6	4.75E-03	4.80E-03	4.75E-03	4.68E-03
Nd151	0.6	4.63E-03	4.40E-03	4.36E-03	4.36E-03
Ce145	0.5	4.33E-03	5.09E-03	2.79E-03	2.79E-03
Y93m	0.4	3.60E-03	3.61E-03	2.64E-03	2.64E-03
Kr89	0.4	3.35E-03	3.34E-03	3.18E-03	3.18E-03
Rb90	0.4	3.29E-03	2.80E-03	2.94E-03	2.97E-03
Sr92	0.4	3.27E-03	3.27E-03	3.37E-03	3.37E-03
Tc102	0.4	3.02E-03	4.10E-03	3.01E-03	3.01E-03
Xe137	0.4	3.00E-03	3.01E-03	3.03E-03	3.03E-03
Sb128m	0.4	2.96E-03	3.01E-03	4.87E-04	4.87E-04
Pr148	0.4	2.83E-03	1.97E-03	2.83E-03	2.83E-03
Te131	0.3	2.66E-03	2.66E-03	2.78E-03	2.78E-03
Br84	0.3	2.58E-03	2.58E-03	2.82E-03	2.82E-03
Ru105	0.3	2.55E-03	2.55E-03	2.58E-03	2.58E-03
Rb90m	0.3	2.47E-03	3.87E-03	4.62E-03	4.47E-03
Se83	0.3	2.41E-03	1.38E-03	6.44E-04	1.17E-03
Kr88	0.3	2.01E-03	2.00E-03	2.00E-03	2.00E-03
Pm152	0.2	1.76E-03	1.58E-03	1.90E-03	1.90E-03

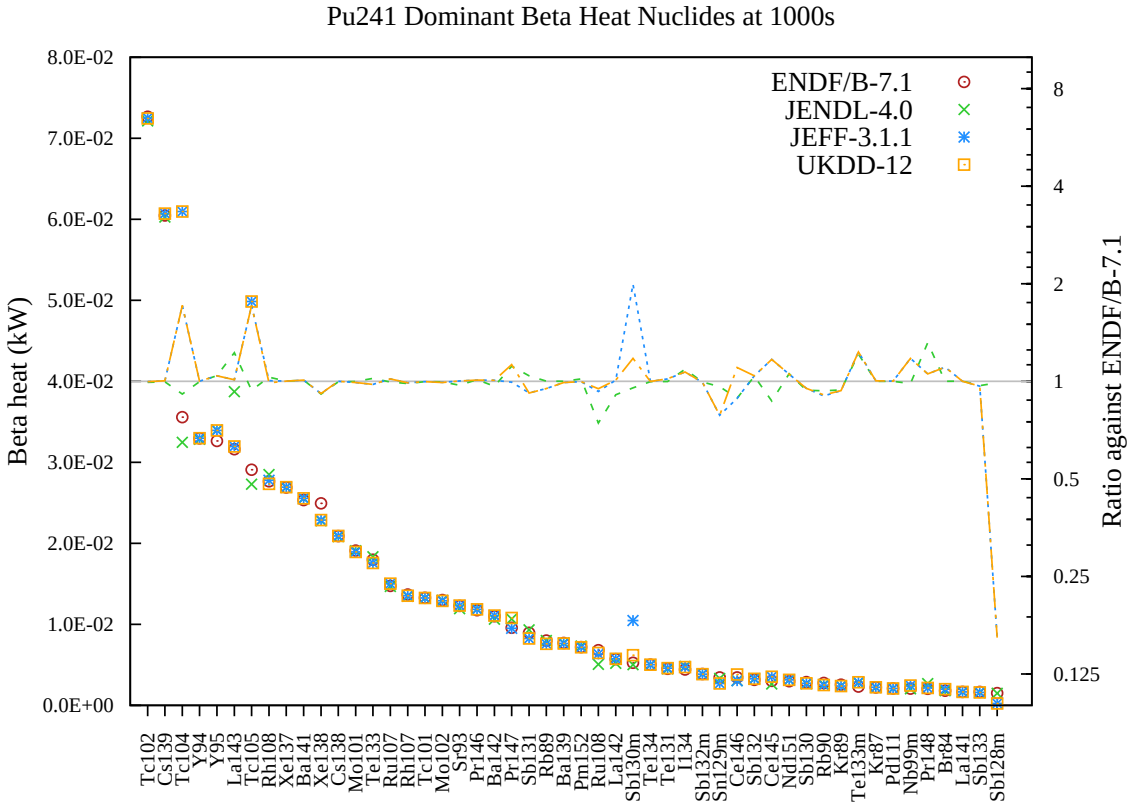

Figure 128: Beta heat (in kW) decay data comparison for Pu241 fission pulse after 1000s cooling.

Table 128: Beta heat (in kW) decay data comparison for Pu241 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	10.5	7.27E-02	7.22E-02	7.25E-02	7.24E-02
Cs139	8.7	6.05E-02	6.03E-02	6.07E-02	6.07E-02
Tc104	5.1	3.56E-02	3.25E-02	6.10E-02	6.10E-02
Y94	4.8	3.29E-02	3.29E-02	3.30E-02	3.30E-02
Y95	4.7	3.26E-02	3.40E-02	3.39E-02	3.39E-02
La143	4.6	3.16E-02	3.87E-02	3.20E-02	3.20E-02
Tc105	4.2	2.91E-02	2.73E-02	4.98E-02	4.98E-02
Rh108	4.0	2.76E-02	2.85E-02	2.78E-02	2.73E-02
Xe137	3.9	2.69E-02	2.69E-02	2.69E-02	2.69E-02
Ba141	3.7	2.53E-02	2.56E-02	2.55E-02	2.55E-02
Xe138	3.6	2.49E-02	2.28E-02	2.29E-02	2.29E-02
Cs138	3.0	2.09E-02	2.08E-02	2.09E-02	2.09E-02
Mo101	2.8	1.91E-02	1.91E-02	1.89E-02	1.89E-02
Te133	2.6	1.80E-02	1.83E-02	1.76E-02	1.76E-02
Ru107	2.1	1.48E-02	1.47E-02	1.50E-02	1.50E-02
Rh107	2.0	1.37E-02	1.35E-02	1.35E-02	1.35E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc101	1.9	1.33E-02	1.32E-02	1.33E-02	1.33E-02
Mo102	1.9	1.30E-02	1.29E-02	1.29E-02	1.29E-02
Sr93	1.8	1.23E-02	1.19E-02	1.23E-02	1.23E-02
Pr146	1.7	1.17E-02	1.19E-02	1.18E-02	1.18E-02
Ba142	1.6	1.10E-02	1.06E-02	1.11E-02	1.11E-02
Pr147	1.4	9.58E-03	1.07E-02	9.52E-03	1.08E-02
Sb131	1.3	8.96E-03	9.32E-03	8.26E-03	8.25E-03
Rb89	1.2	8.00E-03	8.01E-03	7.60E-03	7.60E-03
Ba139	1.1	7.70E-03	7.70E-03	7.63E-03	7.63E-03
Pm152	1.0	7.20E-03	7.32E-03	7.18E-03	7.18E-03
Ru108	1.0	6.81E-03	5.07E-03	6.33E-03	6.46E-03
La142	0.8	5.71E-03	5.18E-03	5.75E-03	5.75E-03
Sb130m	0.8	5.25E-03	5.01E-03	1.05E-02	6.18E-03
Te134	0.7	5.02E-03	5.00E-03	5.01E-03	5.01E-03
Te131	0.7	4.52E-03	4.51E-03	4.59E-03	4.60E-03
I134	0.6	4.42E-03	4.81E-03	4.72E-03	4.72E-03
Sb132m	0.6	3.88E-03	3.86E-03	3.85E-03	3.85E-03
Sn129m	0.5	3.45E-03	3.32E-03	2.71E-03	2.71E-03
Ce146	0.5	3.45E-03	3.06E-03	3.05E-03	3.80E-03
Sb132	0.5	3.15E-03	3.27E-03	3.28E-03	3.28E-03
Ce145	0.4	3.03E-03	2.63E-03	3.54E-03	3.54E-03
Nd151	0.4	2.99E-03	3.15E-03	3.14E-03	3.14E-03
Sb130	0.4	2.87E-03	2.69E-03	2.73E-03	2.73E-03
Rb90	0.4	2.76E-03	2.58E-03	2.48E-03	2.50E-03
Kr89	0.4	2.55E-03	2.39E-03	2.38E-03	2.38E-03
Te133m	0.3	2.31E-03	2.80E-03	2.84E-03	2.84E-03
Kr87	0.3	2.22E-03	2.22E-03	2.23E-03	2.23E-03
Pd111	0.3	2.08E-03	2.08E-03	2.08E-03	2.08E-03
Nb99m	0.3	2.07E-03	2.04E-03	2.44E-03	2.44E-03
Pr148	0.3	2.04E-03	2.69E-03	2.15E-03	2.15E-03
Br84	0.3	1.80E-03	1.80E-03	1.99E-03	1.99E-03
La141	0.2	1.66E-03	1.66E-03	1.66E-03	1.66E-03
Sb133	0.2	1.65E-03	1.60E-03	1.59E-03	1.59E-03
Sb128m	0.2	1.51E-03	1.49E-03	2.44E-04	2.44E-04

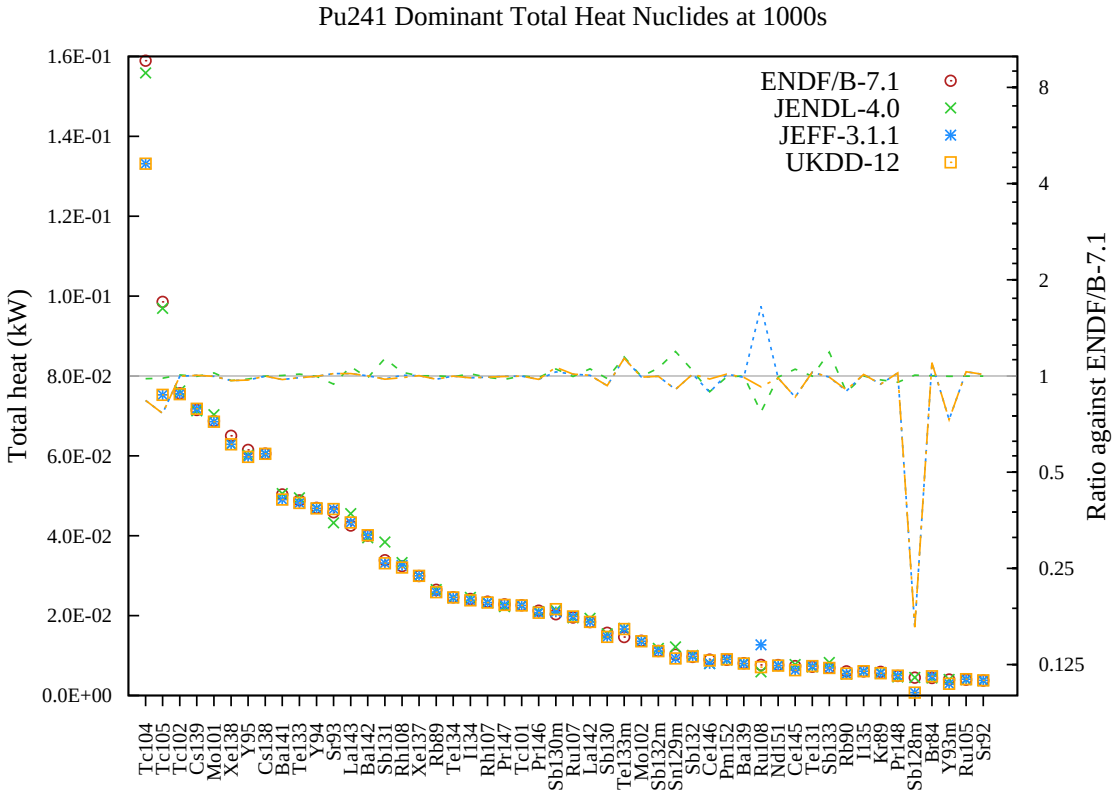

Figure 129: Total heat (in kW) decay data comparison for Pu241 fission pulse after 1000s cooling.

Table 129: Total heat (in kW) decay data comparison for Pu241 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	10.6	1.59E-01	1.56E-01	1.33E-01	1.33E-01
Tc105	6.6	9.85E-02	9.69E-02	7.53E-02	7.53E-02
Tc102	5.1	7.57E-02	7.63E-02	7.55E-02	7.54E-02
Cs139	4.8	7.15E-02	7.13E-02	7.18E-02	7.18E-02
Mo101	4.6	6.87E-02	7.03E-02	6.86E-02	6.86E-02
Xe138	4.4	6.50E-02	6.29E-02	6.29E-02	6.29E-02
Y95	4.1	6.15E-02	6.02E-02	5.97E-02	5.97E-02
Cs138	4.1	6.06E-02	6.05E-02	6.05E-02	6.05E-02
Ba141	3.4	5.03E-02	5.06E-02	4.91E-02	4.91E-02
Te133	3.3	4.88E-02	4.95E-02	4.82E-02	4.82E-02
Y94	3.1	4.70E-02	4.68E-02	4.69E-02	4.69E-02
Sr93	3.1	4.59E-02	4.33E-02	4.67E-02	4.67E-02
La143	2.8	4.26E-02	4.55E-02	4.33E-02	4.33E-02
Ba142	2.7	4.00E-02	3.95E-02	4.01E-02	4.01E-02
Sb131	2.3	3.39E-02	3.84E-02	3.31E-02	3.31E-02
Rh108	2.2	3.24E-02	3.33E-02	3.26E-02	3.20E-02
Xe137	2.0	2.99E-02	2.99E-02	3.00E-02	3.00E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb89	1.8	2.65E-02	2.65E-02	2.59E-02	2.59E-02
Te134	1.6	2.46E-02	2.45E-02	2.46E-02	2.46E-02
I134	1.6	2.42E-02	2.45E-02	2.38E-02	2.38E-02
Rh107	1.6	2.35E-02	2.33E-02	2.33E-02	2.33E-02
Pr147	1.5	2.28E-02	2.22E-02	2.27E-02	2.27E-02
Tc101	1.5	2.26E-02	2.26E-02	2.26E-02	2.26E-02
Pr146	1.4	2.12E-02	2.10E-02	2.07E-02	2.07E-02
Sb130m	1.4	2.03E-02	2.14E-02	2.09E-02	2.16E-02
Ru107	1.3	1.95E-02	1.95E-02	1.98E-02	1.98E-02
La142	1.2	1.84E-02	1.93E-02	1.84E-02	1.84E-02
Sb130	1.1	1.57E-02	1.54E-02	1.47E-02	1.47E-02
Te133m	1.0	1.46E-02	1.68E-02	1.66E-02	1.66E-02
Mo102	0.9	1.37E-02	1.36E-02	1.36E-02	1.36E-02
Sb132m	0.7	1.12E-02	1.18E-02	1.11E-02	1.11E-02
Sn129m	0.7	1.02E-02	1.22E-02	9.26E-03	9.26E-03
Sb132	0.6	9.68E-03	1.01E-02	9.80E-03	9.80E-03
Ce146	0.6	8.98E-03	8.01E-03	7.98E-03	8.78E-03
Pm152	0.6	8.96E-03	8.90E-03	9.08E-03	9.08E-03
Ba139	0.5	8.09E-03	8.09E-03	8.01E-03	8.01E-03
Ru108	0.5	7.68E-03	5.92E-03	1.27E-02	7.10E-03
Nd151	0.5	7.61E-03	7.55E-03	7.50E-03	7.50E-03
Ce145	0.5	7.36E-03	7.73E-03	6.32E-03	6.32E-03
Te131	0.5	7.18E-03	7.17E-03	7.37E-03	7.38E-03
Sb133	0.5	6.95E-03	8.25E-03	6.89E-03	6.89E-03
Rb90	0.4	6.05E-03	5.38E-03	5.43E-03	5.47E-03
I135	0.4	6.03E-03	6.03E-03	6.09E-03	6.09E-03
Kr89	0.4	5.90E-03	5.73E-03	5.56E-03	5.56E-03
Pr148	0.3	4.87E-03	4.66E-03	4.98E-03	4.98E-03
Sb128m	0.3	4.47E-03	4.50E-03	7.31E-04	7.31E-04
Br84	0.3	4.38E-03	4.38E-03	4.81E-03	4.81E-03
Y93m	0.3	4.02E-03	4.01E-03	2.93E-03	2.93E-03
Ru105	0.3	3.98E-03	3.97E-03	4.10E-03	4.10E-03
Sr92	0.3	3.76E-03	3.76E-03	3.80E-03	3.80E-03

9.4 5011s after pulse

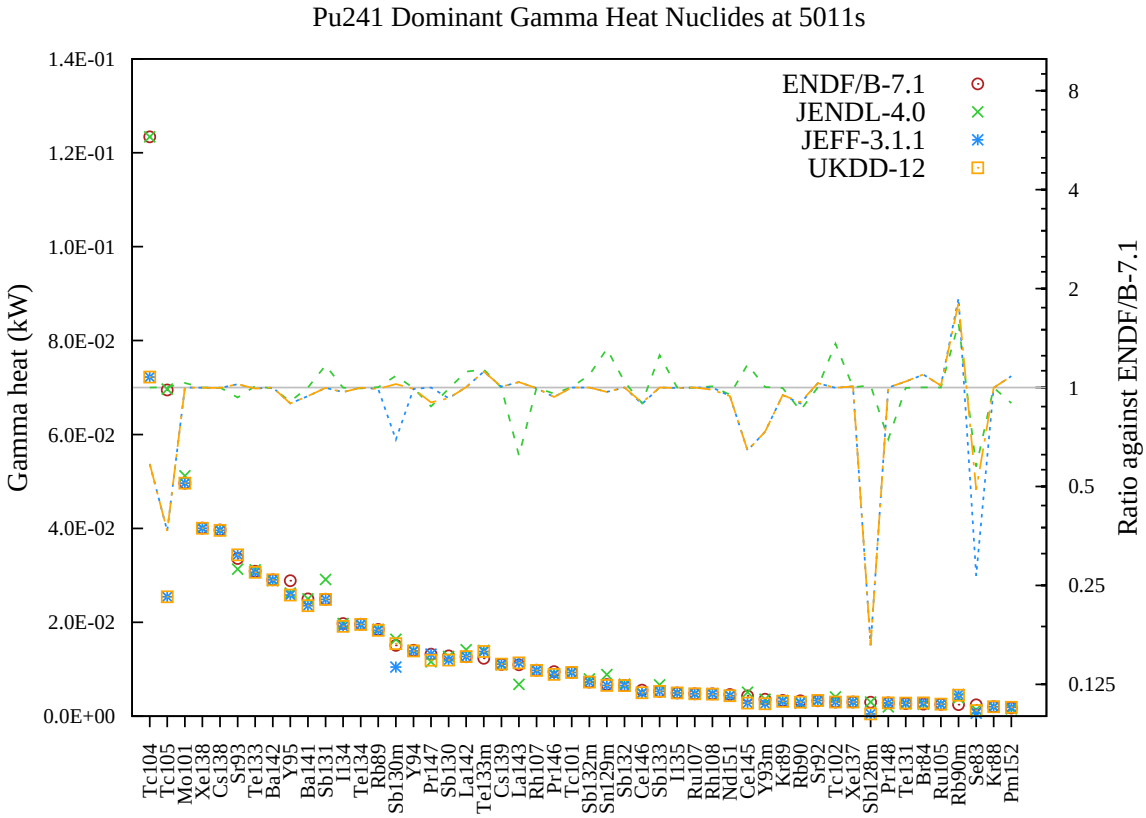

Figure 130: Gamma heat (in kW) decay data comparison for Pu241 fission pulse after 5011s cooling.

Table 130: Gamma heat (in kW) decay data comparison for Pu241 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	15.4	1.23E-01	1.23E-01	7.22E-02	7.22E-02
Tc105	8.7	6.95E-02	6.97E-02	2.54E-02	2.54E-02
Mo101	6.2	4.96E-02	5.12E-02	4.96E-02	4.96E-02
Xe138	5.0	4.01E-02	4.01E-02	4.00E-02	4.00E-02
Cs138	4.9	3.97E-02	3.97E-02	3.96E-02	3.96E-02
Sr93	4.2	3.36E-02	3.13E-02	3.44E-02	3.44E-02
Te133	3.8	3.09E-02	3.12E-02	3.06E-02	3.06E-02
Ba142	3.6	2.90E-02	2.89E-02	2.90E-02	2.90E-02
Y95	3.6	2.89E-02	2.62E-02	2.58E-02	2.58E-02
Ba141	3.1	2.50E-02	2.50E-02	2.35E-02	2.35E-02
Sb131	3.1	2.49E-02	2.91E-02	2.49E-02	2.49E-02
I134	2.5	1.98E-02	1.97E-02	1.91E-02	1.91E-02
Te134	2.4	1.96E-02	1.95E-02	1.96E-02	1.96E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb89	2.3	1.85E-02	1.85E-02	1.83E-02	1.83E-02
Sb130m	1.9	1.51E-02	1.64E-02	1.05E-02	1.54E-02
Y94	1.7	1.40E-02	1.40E-02	1.39E-02	1.39E-02
Pr147	1.6	1.32E-02	1.16E-02	1.32E-02	1.19E-02
Sb130	1.6	1.29E-02	1.27E-02	1.19E-02	1.19E-02
La142	1.6	1.27E-02	1.41E-02	1.27E-02	1.27E-02
Te133m	1.5	1.23E-02	1.40E-02	1.38E-02	1.38E-02
Cs139	1.4	1.10E-02	1.10E-02	1.11E-02	1.11E-02
La143	1.4	1.09E-02	6.79E-03	1.14E-02	1.14E-02
Rh107	1.2	9.81E-03	9.80E-03	9.76E-03	9.76E-03
Pr146	1.2	9.49E-03	9.09E-03	8.88E-03	8.88E-03
Tc101	1.2	9.30E-03	9.32E-03	9.30E-03	9.30E-03
Sb132m	0.9	7.27E-03	7.94E-03	7.27E-03	7.27E-03
Sn129m	0.8	6.76E-03	8.85E-03	6.56E-03	6.56E-03
Sb132	0.8	6.52E-03	6.80E-03	6.52E-03	6.52E-03
Ce146	0.7	5.53E-03	4.95E-03	4.93E-03	4.97E-03
Sb133	0.7	5.30E-03	6.65E-03	5.30E-03	5.30E-03
I135	0.6	4.96E-03	4.97E-03	4.95E-03	4.95E-03
Ru107	0.6	4.78E-03	4.78E-03	4.78E-03	4.78E-03
Rh108	0.6	4.75E-03	4.80E-03	4.75E-03	4.68E-03
Nd151	0.6	4.63E-03	4.40E-03	4.36E-03	4.36E-03
Ce145	0.5	4.33E-03	5.09E-03	2.79E-03	2.79E-03
Y93m	0.4	3.60E-03	3.61E-03	2.64E-03	2.64E-03
Kr89	0.4	3.35E-03	3.34E-03	3.18E-03	3.18E-03
Rb90	0.4	3.29E-03	2.80E-03	2.94E-03	2.97E-03
Sr92	0.4	3.27E-03	3.27E-03	3.37E-03	3.37E-03
Tc102	0.4	3.02E-03	4.10E-03	3.01E-03	3.01E-03
Xe137	0.4	3.00E-03	3.01E-03	3.03E-03	3.03E-03
Sb128m	0.4	2.96E-03	3.01E-03	4.87E-04	4.87E-04
Pr148	0.4	2.83E-03	1.97E-03	2.83E-03	2.83E-03
Te131	0.3	2.66E-03	2.66E-03	2.78E-03	2.78E-03
Br84	0.3	2.58E-03	2.58E-03	2.82E-03	2.82E-03
Ru105	0.3	2.55E-03	2.55E-03	2.58E-03	2.58E-03
Rb90m	0.3	2.47E-03	3.87E-03	4.62E-03	4.47E-03
Se83	0.3	2.41E-03	1.38E-03	6.44E-04	1.17E-03
Kr88	0.3	2.01E-03	2.00E-03	2.00E-03	2.00E-03
Pm152	0.2	1.76E-03	1.58E-03	1.90E-03	1.90E-03

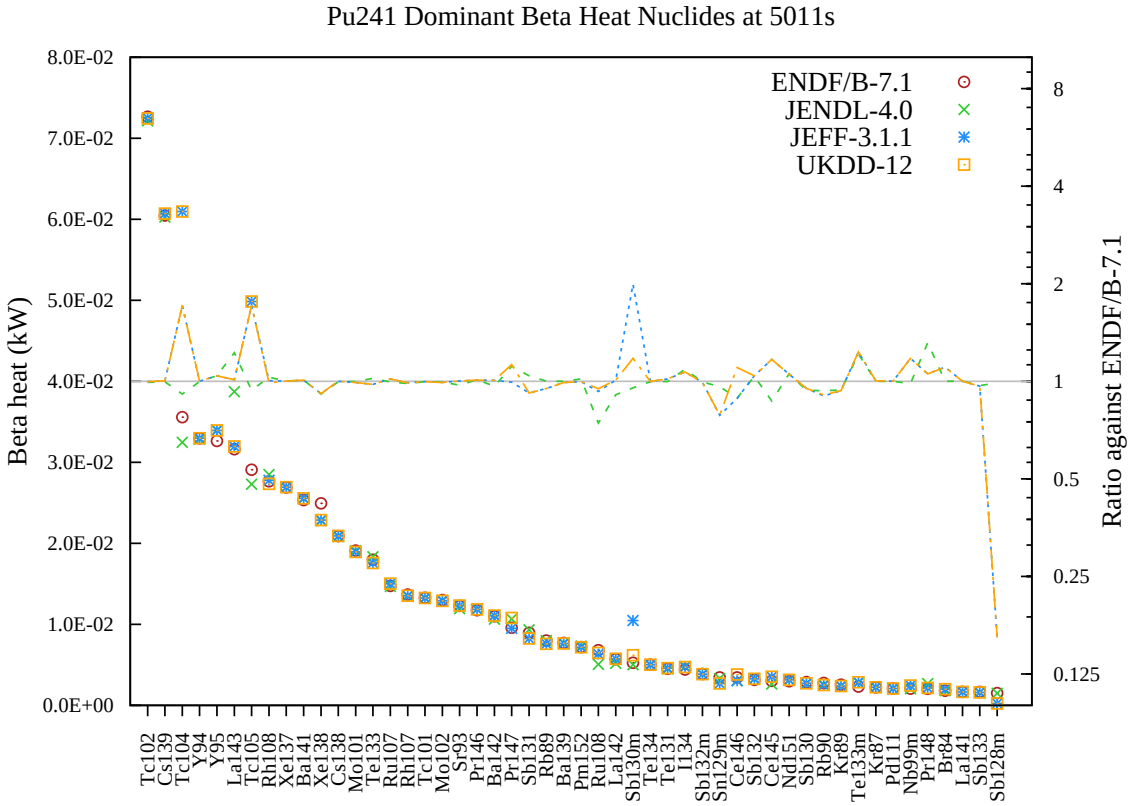

Figure 131: Beta heat (in kW) decay data comparison for Pu241 fission pulse after 5011s cooling.

Table 131: Beta heat (in kW) decay data comparison for Pu241 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	10.5	7.27E-02	7.22E-02	7.25E-02	7.24E-02
Cs139	8.7	6.05E-02	6.03E-02	6.07E-02	6.07E-02
Tc104	5.1	3.56E-02	3.25E-02	6.10E-02	6.10E-02
Y94	4.8	3.29E-02	3.29E-02	3.30E-02	3.30E-02
Y95	4.7	3.26E-02	3.40E-02	3.39E-02	3.39E-02
La143	4.6	3.16E-02	3.87E-02	3.20E-02	3.20E-02
Tc105	4.2	2.91E-02	2.73E-02	4.98E-02	4.98E-02
Rh108	4.0	2.76E-02	2.85E-02	2.78E-02	2.73E-02
Xe137	3.9	2.69E-02	2.69E-02	2.69E-02	2.69E-02
Ba141	3.7	2.53E-02	2.56E-02	2.55E-02	2.55E-02
Xe138	3.6	2.49E-02	2.28E-02	2.29E-02	2.29E-02
Cs138	3.0	2.09E-02	2.08E-02	2.09E-02	2.09E-02
Mo101	2.8	1.91E-02	1.91E-02	1.89E-02	1.89E-02
Te133	2.6	1.80E-02	1.83E-02	1.76E-02	1.76E-02
Ru107	2.1	1.48E-02	1.47E-02	1.50E-02	1.50E-02
Rh107	2.0	1.37E-02	1.35E-02	1.35E-02	1.35E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc101	1.9	1.33E-02	1.32E-02	1.33E-02	1.33E-02
Mo102	1.9	1.30E-02	1.29E-02	1.29E-02	1.29E-02
Sr93	1.8	1.23E-02	1.19E-02	1.23E-02	1.23E-02
Pr146	1.7	1.17E-02	1.19E-02	1.18E-02	1.18E-02
Ba142	1.6	1.10E-02	1.06E-02	1.11E-02	1.11E-02
Pr147	1.4	9.58E-03	1.07E-02	9.52E-03	1.08E-02
Sb131	1.3	8.96E-03	9.32E-03	8.26E-03	8.25E-03
Rb89	1.2	8.00E-03	8.01E-03	7.60E-03	7.60E-03
Ba139	1.1	7.70E-03	7.70E-03	7.63E-03	7.63E-03
Pm152	1.0	7.20E-03	7.32E-03	7.18E-03	7.18E-03
Ru108	1.0	6.81E-03	5.07E-03	6.33E-03	6.46E-03
La142	0.8	5.71E-03	5.18E-03	5.75E-03	5.75E-03
Sb130m	0.8	5.25E-03	5.01E-03	1.05E-02	6.18E-03
Te134	0.7	5.02E-03	5.00E-03	5.01E-03	5.01E-03
Te131	0.7	4.52E-03	4.51E-03	4.59E-03	4.60E-03
I134	0.6	4.42E-03	4.81E-03	4.72E-03	4.72E-03
Sb132m	0.6	3.88E-03	3.86E-03	3.85E-03	3.85E-03
Sn129m	0.5	3.45E-03	3.32E-03	2.71E-03	2.71E-03
Ce146	0.5	3.45E-03	3.06E-03	3.05E-03	3.80E-03
Sb132	0.5	3.15E-03	3.27E-03	3.28E-03	3.28E-03
Ce145	0.4	3.03E-03	2.63E-03	3.54E-03	3.54E-03
Nd151	0.4	2.99E-03	3.15E-03	3.14E-03	3.14E-03
Sb130	0.4	2.87E-03	2.69E-03	2.73E-03	2.73E-03
Rb90	0.4	2.76E-03	2.58E-03	2.48E-03	2.50E-03
Kr89	0.4	2.55E-03	2.39E-03	2.38E-03	2.38E-03
Te133m	0.3	2.31E-03	2.80E-03	2.84E-03	2.84E-03
Kr87	0.3	2.22E-03	2.22E-03	2.23E-03	2.23E-03
Pd111	0.3	2.08E-03	2.08E-03	2.08E-03	2.08E-03
Nb99m	0.3	2.07E-03	2.04E-03	2.44E-03	2.44E-03
Pr148	0.3	2.04E-03	2.69E-03	2.15E-03	2.15E-03
Br84	0.3	1.80E-03	1.80E-03	1.99E-03	1.99E-03
La141	0.2	1.66E-03	1.66E-03	1.66E-03	1.66E-03
Sb133	0.2	1.65E-03	1.60E-03	1.59E-03	1.59E-03
Sb128m	0.2	1.51E-03	1.49E-03	2.44E-04	2.44E-04

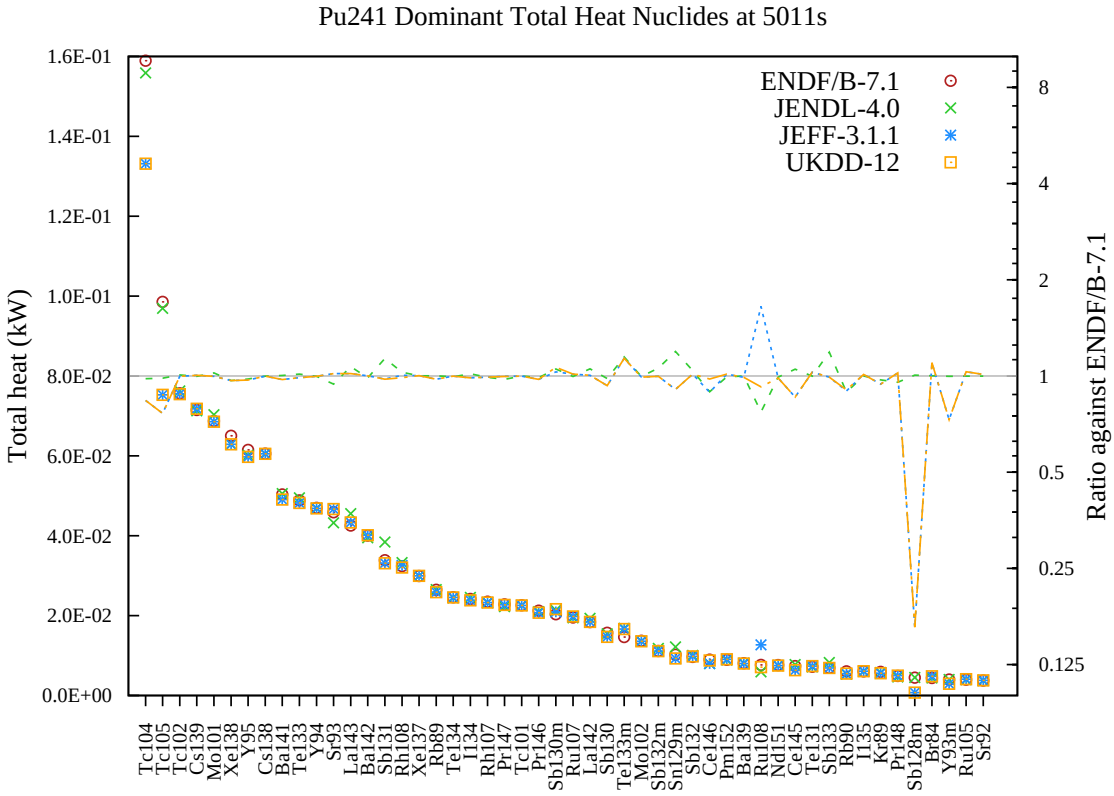

Figure 132: Total heat (in kW) decay data comparison for Pu241 fission pulse after 5011s cooling.

Table 132: Total heat (in kW) decay data comparison for Pu241 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	10.6	1.59E-01	1.56E-01	1.33E-01	1.33E-01
Tc105	6.6	9.85E-02	9.69E-02	7.53E-02	7.53E-02
Tc102	5.1	7.57E-02	7.63E-02	7.55E-02	7.54E-02
Cs139	4.8	7.15E-02	7.13E-02	7.18E-02	7.18E-02
Mo101	4.6	6.87E-02	7.03E-02	6.86E-02	6.86E-02
Xe138	4.4	6.50E-02	6.29E-02	6.29E-02	6.29E-02
Y95	4.1	6.15E-02	6.02E-02	5.97E-02	5.97E-02
Cs138	4.1	6.06E-02	6.05E-02	6.05E-02	6.05E-02
Ba141	3.4	5.03E-02	5.06E-02	4.91E-02	4.91E-02
Te133	3.3	4.88E-02	4.95E-02	4.82E-02	4.82E-02
Y94	3.1	4.70E-02	4.68E-02	4.69E-02	4.69E-02
Sr93	3.1	4.59E-02	4.33E-02	4.67E-02	4.67E-02
La143	2.8	4.26E-02	4.55E-02	4.33E-02	4.33E-02
Ba142	2.7	4.00E-02	3.95E-02	4.01E-02	4.01E-02
Sb131	2.3	3.39E-02	3.84E-02	3.31E-02	3.31E-02
Rh108	2.2	3.24E-02	3.33E-02	3.26E-02	3.20E-02
Xe137	2.0	2.99E-02	2.99E-02	3.00E-02	3.00E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb89	1.8	2.65E-02	2.65E-02	2.59E-02	2.59E-02
Te134	1.6	2.46E-02	2.45E-02	2.46E-02	2.46E-02
I134	1.6	2.42E-02	2.45E-02	2.38E-02	2.38E-02
Rh107	1.6	2.35E-02	2.33E-02	2.33E-02	2.33E-02
Pr147	1.5	2.28E-02	2.22E-02	2.27E-02	2.27E-02
Tc101	1.5	2.26E-02	2.26E-02	2.26E-02	2.26E-02
Pr146	1.4	2.12E-02	2.10E-02	2.07E-02	2.07E-02
Sb130m	1.4	2.03E-02	2.14E-02	2.09E-02	2.16E-02
Ru107	1.3	1.95E-02	1.95E-02	1.98E-02	1.98E-02
La142	1.2	1.84E-02	1.93E-02	1.84E-02	1.84E-02
Sb130	1.1	1.57E-02	1.54E-02	1.47E-02	1.47E-02
Te133m	1.0	1.46E-02	1.68E-02	1.66E-02	1.66E-02
Mo102	0.9	1.37E-02	1.36E-02	1.36E-02	1.36E-02
Sb132m	0.7	1.12E-02	1.18E-02	1.11E-02	1.11E-02
Sn129m	0.7	1.02E-02	1.22E-02	9.26E-03	9.26E-03
Sb132	0.6	9.68E-03	1.01E-02	9.80E-03	9.80E-03
Ce146	0.6	8.98E-03	8.01E-03	7.98E-03	8.78E-03
Pm152	0.6	8.96E-03	8.90E-03	9.08E-03	9.08E-03
Ba139	0.5	8.09E-03	8.09E-03	8.01E-03	8.01E-03
Ru108	0.5	7.68E-03	5.92E-03	1.27E-02	7.10E-03
Nd151	0.5	7.61E-03	7.55E-03	7.50E-03	7.50E-03
Ce145	0.5	7.36E-03	7.73E-03	6.32E-03	6.32E-03
Te131	0.5	7.18E-03	7.17E-03	7.37E-03	7.38E-03
Sb133	0.5	6.95E-03	8.25E-03	6.89E-03	6.89E-03
Rb90	0.4	6.05E-03	5.38E-03	5.43E-03	5.47E-03
I135	0.4	6.03E-03	6.03E-03	6.09E-03	6.09E-03
Kr89	0.4	5.90E-03	5.73E-03	5.56E-03	5.56E-03
Pr148	0.3	4.87E-03	4.66E-03	4.98E-03	4.98E-03
Sb128m	0.3	4.47E-03	4.50E-03	7.31E-04	7.31E-04
Br84	0.3	4.38E-03	4.38E-03	4.81E-03	4.81E-03
Y93m	0.3	4.02E-03	4.01E-03	2.93E-03	2.93E-03
Ru105	0.3	3.98E-03	3.97E-03	4.10E-03	4.10E-03
Sr92	0.3	3.76E-03	3.76E-03	3.80E-03	3.80E-03

9.5 10000s after pulse

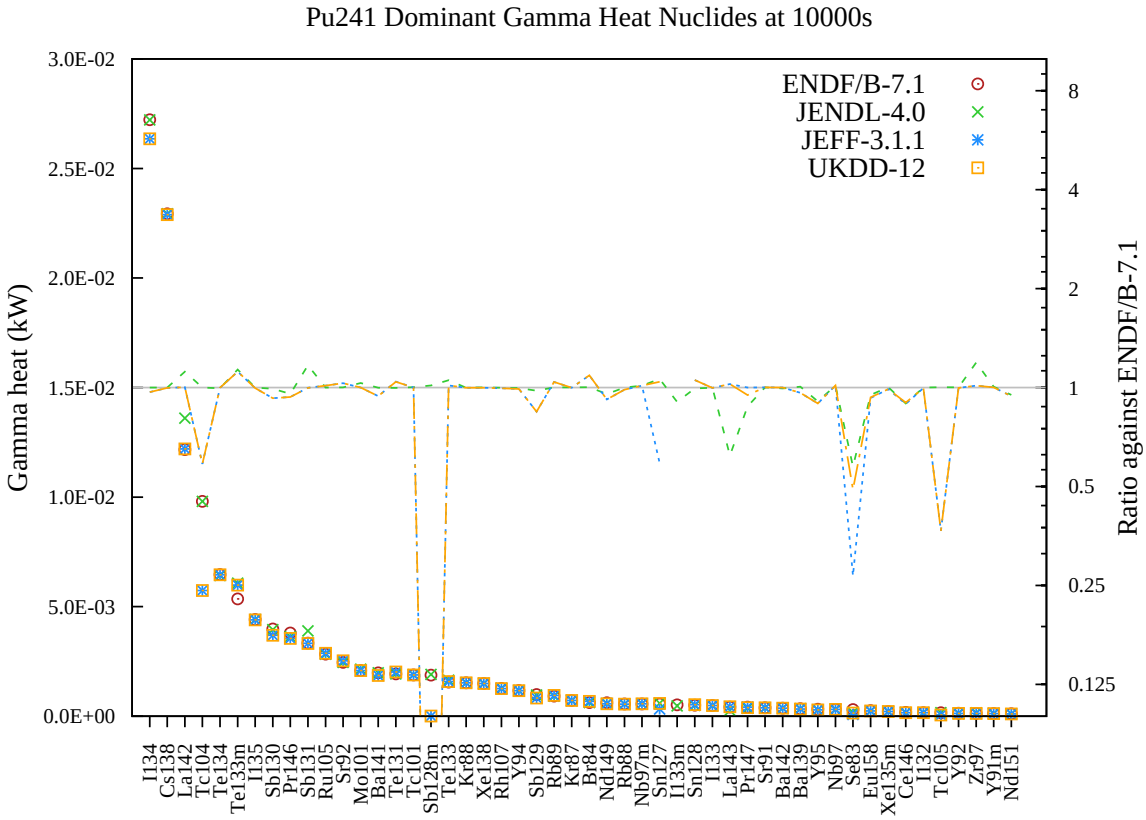

Figure 133: Gamma heat (in kW) decay data comparison for Pu241 fission pulse after 10000s cooling.

Table 133: Gamma heat (in kW) decay data comparison for Pu241 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	20.3	2.72E-02	2.72E-02	2.64E-02	2.64E-02
Cs138	17.1	2.29E-02	2.29E-02	2.29E-02	2.29E-02
La142	9.1	1.22E-02	1.36E-02	1.22E-02	1.22E-02
Tc104	7.3	9.80E-03	9.81E-03	5.74E-03	5.74E-03
Te134	4.8	6.46E-03	6.43E-03	6.45E-03	6.45E-03
Te133m	4.0	5.35E-03	6.07E-03	5.99E-03	5.99E-03
I135	3.3	4.41E-03	4.41E-03	4.40E-03	4.40E-03
Sb130	3.0	3.98E-03	3.95E-03	3.70E-03	3.70E-03
Pr146	2.8	3.80E-03	3.63E-03	3.55E-03	3.55E-03
Sb131	2.5	3.33E-03	3.89E-03	3.33E-03	3.32E-03
Ru105	2.1	2.83E-03	2.83E-03	2.87E-03	2.87E-03
Sr92	1.8	2.46E-03	2.46E-03	2.53E-03	2.53E-03
Mo101	1.5	2.08E-03	2.15E-03	2.08E-03	2.08E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Ba141	1.5	1.98E-03	1.98E-03	1.86E-03	1.86E-03
Te131	1.4	1.93E-03	1.93E-03	2.02E-03	2.01E-03
Tc101	1.4	1.88E-03	1.89E-03	1.89E-03	1.89E-03
Sb128m	1.4	1.88E-03	1.90E-03	5.65E-06	5.65E-06
Te133	1.2	1.56E-03	1.64E-03	1.58E-03	1.58E-03
Kr88	1.1	1.53E-03	1.53E-03	1.53E-03	1.53E-03
Xe138	1.1	1.49E-03	1.49E-03	1.49E-03	1.49E-03
Rh107	0.9	1.27E-03	1.26E-03	1.26E-03	1.26E-03
Y94	0.9	1.18E-03	1.17E-03	1.17E-03	1.17E-03
Sb129	0.7	9.87E-04	9.66E-04	8.33E-04	8.33E-04
Rb89	0.7	9.14E-04	9.15E-04	9.50E-04	9.50E-04
Kr87	0.5	7.19E-04	7.20E-04	7.18E-04	7.18E-04
Br84	0.5	6.24E-04	6.25E-04	6.80E-04	6.80E-04
Nd149	0.5	6.13E-04	5.86E-04	5.64E-04	5.64E-04
Rb88	0.4	5.62E-04	5.62E-04	5.54E-04	5.54E-04
Nb97m	0.4	5.61E-04	5.68E-04	5.68E-04	5.68E-04
Sn127	0.4	5.59E-04	5.94E-04	3.29E-04	5.82E-04
I133m	0.4	5.21E-04	—	—	—
Sn128	0.4	5.00E-04	4.97E-04	5.27E-04	5.27E-04
I133	0.4	4.90E-04	4.89E-04	4.89E-04	4.89E-04
La143	0.3	4.18E-04	2.60E-04	4.29E-04	4.29E-04
Pr147	0.3	4.16E-04	3.64E-04	4.16E-04	3.95E-04
Sr91	0.3	3.83E-04	3.83E-04	3.83E-04	3.83E-04
Ba142	0.3	3.66E-04	3.64E-04	3.66E-04	3.66E-04
Ba139	0.3	3.41E-04	3.44E-04	3.29E-04	3.29E-04
Y95	0.2	3.21E-04	2.91E-04	2.87E-04	2.87E-04
Nb97	0.2	3.05E-04	3.10E-04	3.10E-04	3.10E-04
Se83	0.2	3.01E-04	1.73E-04	8.06E-05	1.47E-04
Eu158	0.2	2.56E-04	2.43E-04	2.38E-04	2.39E-04
Xe135m	0.2	2.15E-04	2.15E-04	2.13E-04	2.13E-04
Ce146	0.1	1.79E-04	1.61E-04	1.60E-04	1.61E-04
I132	0.1	1.62E-04	1.62E-04	1.61E-04	1.61E-04
Tc105	0.1	1.56E-04	1.56E-04	5.72E-05	5.72E-05
Y92	0.1	1.32E-04	1.32E-04	1.31E-04	1.31E-04
Zr97	0.1	1.29E-04	1.53E-04	1.31E-04	1.31E-04
Y91m	0.1	1.19E-04	1.20E-04	1.19E-04	1.19E-04
Nd151	0.1	1.11E-04	1.06E-04	1.05E-04	1.05E-04

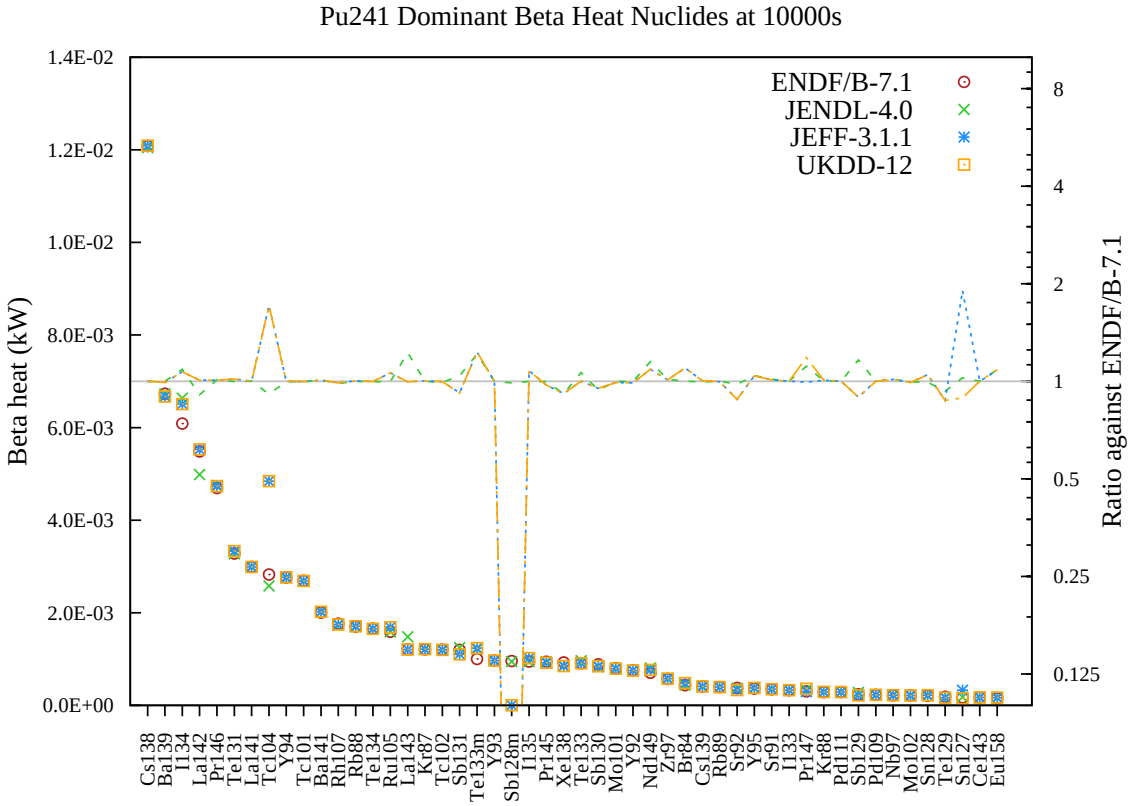

Figure 134: Beta heat (in kW) decay data comparison for Pu241 fission pulse after 10000s cooling.

Table 134: Beta heat (in kW) decay data comparison for Pu241 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	14.9	1.21E-02	1.20E-02	1.21E-02	1.21E-02
Ba139	8.3	6.73E-03	6.73E-03	6.67E-03	6.67E-03
I134	7.5	6.09E-03	6.64E-03	6.51E-03	6.51E-03
La142	6.8	5.48E-03	4.99E-03	5.53E-03	5.53E-03
Pr146	5.8	4.70E-03	4.75E-03	4.74E-03	4.74E-03
Te131	4.1	3.28E-03	3.27E-03	3.33E-03	3.33E-03
La141	3.7	2.99E-03	2.99E-03	2.99E-03	2.99E-03
Tc104	3.5	2.83E-03	2.58E-03	4.84E-03	4.84E-03
Y94	3.4	2.76E-03	2.76E-03	2.77E-03	2.77E-03
Tc101	3.3	2.69E-03	2.69E-03	2.69E-03	2.69E-03
Ba141	2.5	2.00E-03	2.02E-03	2.02E-03	2.02E-03
Rh107	2.2	1.76E-03	1.74E-03	1.75E-03	1.75E-03
Rb88	2.1	1.70E-03	1.70E-03	1.71E-03	1.71E-03
Te134	2.0	1.66E-03	1.65E-03	1.65E-03	1.65E-03
Ru105	2.0	1.59E-03	1.59E-03	1.69E-03	1.69E-03
La143	1.5	1.21E-03	1.48E-03	1.21E-03	1.21E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Kr87	1.5	1.21E-03	1.21E-03	1.21E-03	1.21E-03
Tc102	1.5	1.20E-03	1.19E-03	1.20E-03	1.20E-03
Sb131	1.5	1.20E-03	1.25E-03	1.10E-03	1.10E-03
Te133m	1.2	1.00E-03	1.22E-03	1.24E-03	1.24E-03
Y93	1.2	9.68E-04	9.68E-04	9.67E-04	9.67E-04
Sb128m	1.2	9.57E-04	9.47E-04	2.84E-06	2.84E-06
I135	1.2	9.47E-04	9.47E-04	1.02E-03	1.02E-03
Pr145	1.2	9.43E-04	9.43E-04	9.18E-04	9.18E-04
Xe138	1.1	9.27E-04	8.48E-04	8.50E-04	8.50E-04
Te133	1.1	9.07E-04	9.66E-04	9.08E-04	9.08E-04
Sb130	1.1	8.88E-04	8.33E-04	8.44E-04	8.44E-04
Mo101	1.0	8.00E-04	7.99E-04	7.94E-04	7.94E-04
Y92	0.9	7.59E-04	7.59E-04	7.51E-04	7.51E-04
Nd149	0.9	7.03E-04	8.08E-04	7.66E-04	7.66E-04
Zr97	0.7	5.70E-04	5.78E-04	5.76E-04	5.76E-04
Br84	0.5	4.37E-04	4.37E-04	4.80E-04	4.80E-04
Cs139	0.5	4.08E-04	4.05E-04	4.09E-04	4.09E-04
Rb89	0.5	3.96E-04	3.96E-04	3.95E-04	3.95E-04
Sr92	0.5	3.75E-04	3.67E-04	3.30E-04	3.30E-04
Y95	0.4	3.63E-04	3.78E-04	3.77E-04	3.77E-04
Sr91	0.4	3.47E-04	3.52E-04	3.51E-04	3.51E-04
I133	0.4	3.26E-04	3.27E-04	3.27E-04	3.27E-04
Pr147	0.4	3.01E-04	3.36E-04	2.99E-04	3.57E-04
Kr88	0.4	2.88E-04	2.89E-04	2.91E-04	2.91E-04
Pd111	0.4	2.87E-04	2.87E-04	2.87E-04	2.87E-04
Sb129	0.3	2.40E-04	2.79E-04	2.14E-04	2.14E-04
Pd109	0.3	2.26E-04	2.26E-04	2.27E-04	2.26E-04
Nb97	0.3	2.16E-04	2.18E-04	2.19E-04	2.19E-04
Mo102	0.3	2.15E-04	2.14E-04	2.14E-04	2.13E-04
Sn128	0.3	2.09E-04	2.08E-04	2.19E-04	2.19E-04
Te129	0.2	1.86E-04	1.73E-04	1.62E-04	1.62E-04
Sn127	0.2	1.73E-04	1.77E-04	3.29E-04	1.54E-04
Ce143	0.2	1.70E-04	1.70E-04	1.70E-04	1.70E-04
Eu158	0.2	1.53E-04	1.66E-04	1.65E-04	1.66E-04

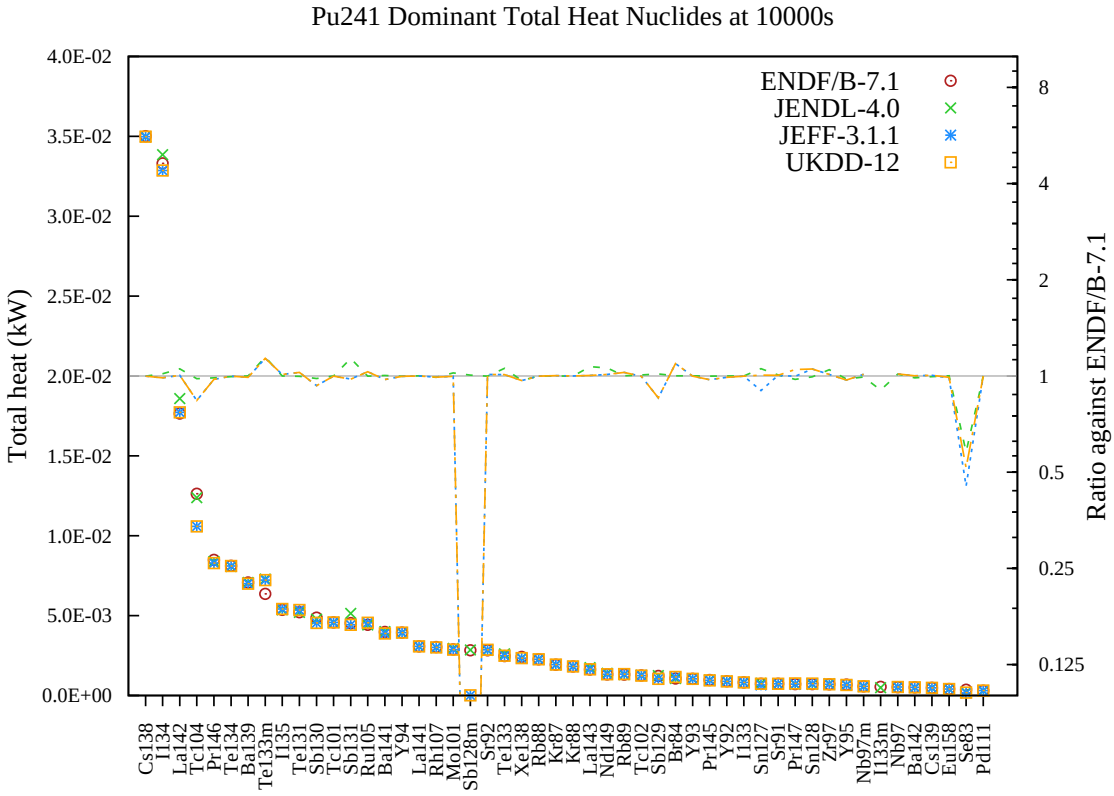

Figure 135: Total heat (in kW) decay data comparison for Pu241 fission pulse after 10000s cooling.

Table 135: Total heat (in kW) decay data comparison for Pu241 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	16.3	3.50E-02	3.50E-02	3.50E-02	3.50E-02
I134	15.5	3.33E-02	3.38E-02	3.29E-02	3.29E-02
La142	8.2	1.76E-02	1.86E-02	1.77E-02	1.77E-02
Tc104	5.9	1.26E-02	1.24E-02	1.06E-02	1.06E-02
Pr146	3.9	8.49E-03	8.38E-03	8.29E-03	8.29E-03
Te134	3.8	8.12E-03	8.08E-03	8.11E-03	8.11E-03
Ba139	3.3	7.07E-03	7.07E-03	7.00E-03	7.00E-03
Te133m	3.0	6.36E-03	7.29E-03	7.22E-03	7.22E-03
I135	2.5	5.36E-03	5.36E-03	5.42E-03	5.42E-03
Te131	2.4	5.21E-03	5.20E-03	5.35E-03	5.35E-03
Sb130	2.3	4.87E-03	4.78E-03	4.54E-03	4.54E-03
Tc101	2.1	4.58E-03	4.58E-03	4.57E-03	4.57E-03
Sb131	2.1	4.53E-03	5.14E-03	4.43E-03	4.42E-03
Ru105	2.1	4.42E-03	4.42E-03	4.56E-03	4.56E-03
Ba141	1.9	3.98E-03	4.00E-03	3.88E-03	3.88E-03
Y94	1.8	3.94E-03	3.93E-03	3.93E-03	3.93E-03
La141	1.4	3.07E-03	3.08E-03	3.07E-03	3.07E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rh107	1.4	3.03E-03	3.00E-03	3.01E-03	3.01E-03
Mo101	1.3	2.88E-03	2.95E-03	2.87E-03	2.87E-03
Sb128m	1.3	2.83E-03	2.85E-03	8.49E-06	8.49E-06
Sr92	1.3	2.83E-03	2.83E-03	2.86E-03	2.86E-03
Te133	1.1	2.47E-03	2.61E-03	2.49E-03	2.49E-03
Xe138	1.1	2.42E-03	2.34E-03	2.34E-03	2.34E-03
Rb88	1.1	2.26E-03	2.26E-03	2.26E-03	2.26E-03
Kr87	0.9	1.93E-03	1.93E-03	1.93E-03	1.93E-03
Kr88	0.8	1.82E-03	1.81E-03	1.82E-03	1.82E-03
La143	0.8	1.63E-03	1.74E-03	1.63E-03	1.63E-03
Nd149	0.6	1.32E-03	1.39E-03	1.33E-03	1.33E-03
Rb89	0.6	1.31E-03	1.31E-03	1.34E-03	1.34E-03
Tc102	0.6	1.25E-03	1.26E-03	1.25E-03	1.25E-03
Sb129	0.6	1.23E-03	1.24E-03	1.05E-03	1.05E-03
Br84	0.5	1.06E-03	1.06E-03	1.16E-03	1.16E-03
Y93	0.5	1.05E-03	1.05E-03	1.05E-03	1.05E-03
Pr145	0.5	9.69E-04	9.69E-04	9.44E-04	9.44E-04
Y92	0.4	8.91E-04	8.91E-04	8.82E-04	8.82E-04
I133	0.4	8.16E-04	8.16E-04	8.15E-04	8.15E-04
Sn127	0.3	7.32E-04	7.71E-04	6.59E-04	7.36E-04
Sr91	0.3	7.29E-04	7.35E-04	7.33E-04	7.33E-04
Pr147	0.3	7.17E-04	7.00E-04	7.15E-04	7.52E-04
Sn128	0.3	7.09E-04	7.04E-04	7.46E-04	7.46E-04
Zr97	0.3	6.99E-04	7.32E-04	7.07E-04	7.07E-04
Y95	0.3	6.83E-04	6.69E-04	6.64E-04	6.64E-04
Nb97m	0.3	5.72E-04	5.68E-04	5.79E-04	5.79E-04
I133m	0.2	5.37E-04	4.85E-04	—	—
Nb97	0.2	5.21E-04	5.28E-04	5.29E-04	5.29E-04
Ba142	0.2	5.05E-04	4.99E-04	5.06E-04	5.06E-04
Cs139	0.2	4.82E-04	4.79E-04	4.84E-04	4.84E-04
Eu158	0.2	4.09E-04	4.09E-04	4.03E-04	4.05E-04
Se83	0.2	3.56E-04	2.06E-04	1.61E-04	1.84E-04
Pd111	0.1	3.03E-04	3.03E-04	3.03E-04	3.03E-04

10 Decay data comparison for ^{242}Pu 0.0253 eV pulse decay heat

10.1 10s after pulse

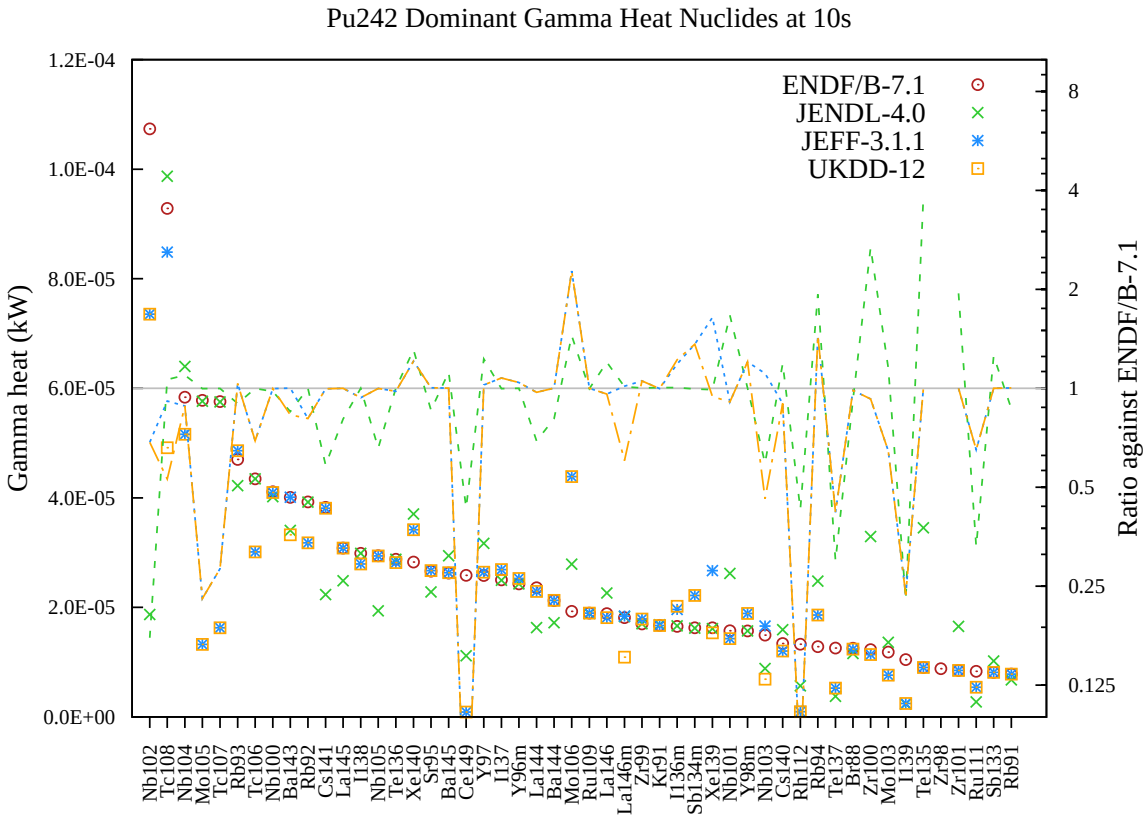

Figure 136: Gamma heat (in kW) decay data comparison for Pu242 fission pulse after 10s cooling.

Table 136: Gamma heat (in kW) decay data comparison for Pu242 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb102	6.9	1.07E-04	1.87E-05	7.35E-05	7.35E-05
Tc108	6.0	9.28E-05	9.87E-05	8.49E-05	4.91E-05
Nb104	3.8	5.84E-05	6.40E-05	5.16E-05	5.16E-05
Mo105	3.7	5.78E-05	5.76E-05	1.32E-05	1.32E-05
Tc107	3.7	5.76E-05	5.75E-05	1.63E-05	1.63E-05
Rb93	3.0	4.70E-05	4.22E-05	4.86E-05	4.86E-05
Tc106	2.8	4.35E-05	4.35E-05	3.01E-05	3.01E-05
Nb100	2.7	4.11E-05	4.02E-05	4.10E-05	4.10E-05
Ba143	2.6	4.01E-05	3.40E-05	4.01E-05	3.33E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb92	2.5	3.93E-05	3.92E-05	3.18E-05	3.18E-05
Cs141	2.5	3.83E-05	2.23E-05	3.81E-05	3.81E-05
La145	2.0	3.08E-05	2.49E-05	3.08E-05	3.08E-05
I138	1.9	2.99E-05	2.99E-05	2.79E-05	2.79E-05
Nb105	1.9	2.94E-05	1.94E-05	2.94E-05	2.94E-05
Te136	1.9	2.88E-05	2.88E-05	2.82E-05	2.82E-05
Xe140	1.8	2.83E-05	3.71E-05	3.42E-05	3.42E-05
Sr95	1.7	2.66E-05	2.28E-05	2.67E-05	2.67E-05
Ba145	1.7	2.63E-05	2.94E-05	2.63E-05	2.63E-05
Ce149	1.7	2.58E-05	1.12E-05	9.05E-07	9.05E-07
Y97	1.7	2.58E-05	3.17E-05	2.64E-05	2.64E-05
I137	1.6	2.50E-05	2.50E-05	2.69E-05	2.69E-05
Y96m	1.6	2.43E-05	2.43E-05	2.53E-05	2.53E-05
La144	1.5	2.36E-05	1.63E-05	2.29E-05	2.29E-05
Ba144	1.4	2.13E-05	1.72E-05	2.13E-05	2.13E-05
Mo106	1.2	1.93E-05	2.79E-05	4.39E-05	4.39E-05
Ru109	1.2	1.90E-05	1.89E-05	1.89E-05	1.89E-05
La146	1.2	1.89E-05	2.26E-05	1.81E-05	1.81E-05
La146m	1.2	1.81E-05	1.83E-05	1.84E-05	1.09E-05
Zr99	1.1	1.70E-05	1.70E-05	1.79E-05	1.79E-05
Kr91	1.1	1.67E-05	1.68E-05	1.67E-05	1.67E-05
I136m	1.1	1.65E-05	1.66E-05	1.96E-05	2.02E-05
Sb134m	1.1	1.63E-05	1.62E-05	2.22E-05	2.22E-05
Xe139	1.1	1.63E-05	1.61E-05	2.67E-05	1.54E-05
Nb101	1.0	1.57E-05	2.62E-05	1.43E-05	1.43E-05
Y98m	1.0	1.57E-05	1.57E-05	1.89E-05	1.89E-05
Nb103	1.0	1.50E-05	8.84E-06	1.66E-05	6.89E-06
Cs140	0.9	1.34E-05	1.59E-05	1.20E-05	1.20E-05
Rh112	0.9	1.33E-05	5.69E-06	9.49E-07	9.49E-07
Rb94	0.8	1.28E-05	2.48E-05	1.86E-05	1.86E-05
Te137	0.8	1.26E-05	3.76E-06	5.28E-06	5.28E-06
Br88	0.8	1.26E-05	1.16E-05	1.24E-05	1.24E-05
Zr100	0.8	1.23E-05	3.29E-05	1.14E-05	1.14E-05
Mo103	0.8	1.18E-05	1.36E-05	7.64E-06	7.64E-06
I139	0.7	1.05E-05	2.38E-06	2.46E-06	2.46E-06
Te135	0.6	9.02E-06	3.45E-05	9.04E-06	9.04E-06
Zr98	0.6	8.80E-06	—	—	—
Zr101	0.5	8.49E-06	1.65E-05	8.49E-06	8.49E-06
Ru111	0.5	8.33E-06	2.75E-06	5.42E-06	5.42E-06
Sb133	0.5	8.13E-06	1.02E-05	8.13E-06	8.13E-06
Rb91	0.5	7.80E-06	6.76E-06	7.82E-06	7.82E-06

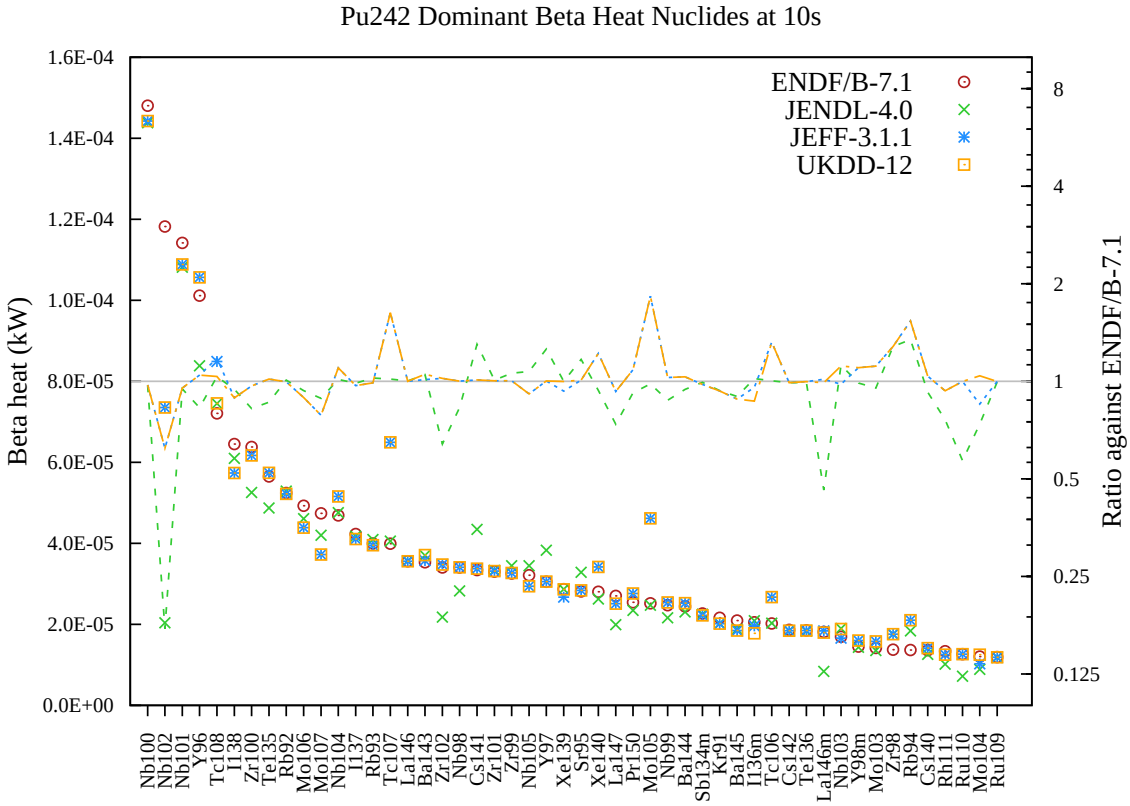

Figure 137: Beta heat (in kW) decay data comparison for Pu242 fission pulse after 10s cooling.

Table 137: Beta heat (in kW) decay data comparison for Pu242 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb100	6.9	1.48E-04	1.44E-04	1.44E-04	1.44E-04
Nb102	5.5	1.18E-04	2.04E-05	7.35E-05	7.35E-05
Nb101	5.4	1.14E-04	1.08E-04	1.09E-04	1.09E-04
Y96	4.7	1.01E-04	8.39E-05	1.06E-04	1.06E-04
Tc108	3.4	7.21E-05	7.45E-05	8.49E-05	7.45E-05
I138	3.0	6.45E-05	6.10E-05	5.74E-05	5.74E-05
Zr100	3.0	6.38E-05	5.25E-05	6.17E-05	6.17E-05
Te135	2.6	5.65E-05	4.87E-05	5.74E-05	5.74E-05
Rb92	2.5	5.24E-05	5.29E-05	5.22E-05	5.22E-05
Mo106	2.3	4.93E-05	4.61E-05	4.39E-05	4.39E-05
Mo107	2.2	4.74E-05	4.20E-05	3.72E-05	3.72E-05
Nb104	2.2	4.69E-05	4.76E-05	5.16E-05	5.16E-05
I137	2.0	4.23E-05	4.17E-05	4.10E-05	4.10E-05
Rb93	1.9	4.00E-05	4.09E-05	3.95E-05	3.95E-05
Tc107	1.9	3.99E-05	4.06E-05	6.49E-05	6.49E-05
La146	1.7	3.56E-05	3.56E-05	3.56E-05	3.56E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Ba143	1.7	3.53E-05	3.70E-05	3.57E-05	3.71E-05
Zr102	1.6	3.40E-05	2.18E-05	3.48E-05	3.48E-05
Nb98	1.6	3.40E-05	2.82E-05	3.41E-05	3.41E-05
Cs141	1.6	3.34E-05	4.35E-05	3.37E-05	3.37E-05
Zr101	1.5	3.30E-05	3.33E-05	3.32E-05	3.32E-05
Zr99	1.5	3.25E-05	3.45E-05	3.27E-05	3.27E-05
Nb105	1.5	3.21E-05	3.45E-05	2.94E-05	2.94E-05
Y97	1.4	3.05E-05	3.83E-05	3.06E-05	3.06E-05
Xe139	1.3	2.87E-05	2.87E-05	2.67E-05	2.86E-05
Sr95	1.3	2.81E-05	3.29E-05	2.84E-05	2.84E-05
Xe140	1.3	2.80E-05	2.63E-05	3.42E-05	3.42E-05
La147	1.3	2.70E-05	1.99E-05	2.51E-05	2.51E-05
Pr150	1.2	2.54E-05	2.35E-05	2.76E-05	2.76E-05
Mo105	1.2	2.52E-05	2.47E-05	4.61E-05	4.61E-05
Nb99	1.2	2.47E-05	2.16E-05	2.54E-05	2.54E-05
Ba144	1.1	2.44E-05	2.31E-05	2.52E-05	2.52E-05
Sb134m	1.1	2.27E-05	2.25E-05	2.22E-05	2.22E-05
Kr91	1.0	2.16E-05	2.02E-05	2.02E-05	2.02E-05
Ba145	1.0	2.09E-05	1.88E-05	1.85E-05	1.85E-05
I136m	1.0	2.05E-05	2.09E-05	1.96E-05	1.78E-05
Tc106	0.9	2.02E-05	2.03E-05	2.67E-05	2.67E-05
Cs142	0.9	1.86E-05	1.84E-05	1.84E-05	1.84E-05
Te136	0.9	1.85E-05	1.84E-05	1.85E-05	1.85E-05
La146m	0.8	1.81E-05	8.37E-06	1.84E-05	1.79E-05
Nb103	0.8	1.69E-05	1.90E-05	1.66E-05	1.89E-05
Y98m	0.7	1.45E-05	1.43E-05	1.60E-05	1.60E-05
Mo103	0.7	1.42E-05	1.35E-05	1.58E-05	1.58E-05
Zr98	0.6	1.37E-05	1.76E-05	1.76E-05	1.76E-05
Rb94	0.6	1.37E-05	1.84E-05	2.10E-05	2.10E-05
Cs140	0.6	1.36E-05	1.26E-05	1.41E-05	1.41E-05
Rh111	0.6	1.34E-05	1.02E-05	1.25E-05	1.25E-05
Ru110	0.6	1.26E-05	7.20E-06	1.26E-05	1.26E-05
Mo104	0.6	1.20E-05	8.88E-06	1.02E-05	1.25E-05
Ru109	0.6	1.19E-05	1.18E-05	1.19E-05	1.19E-05

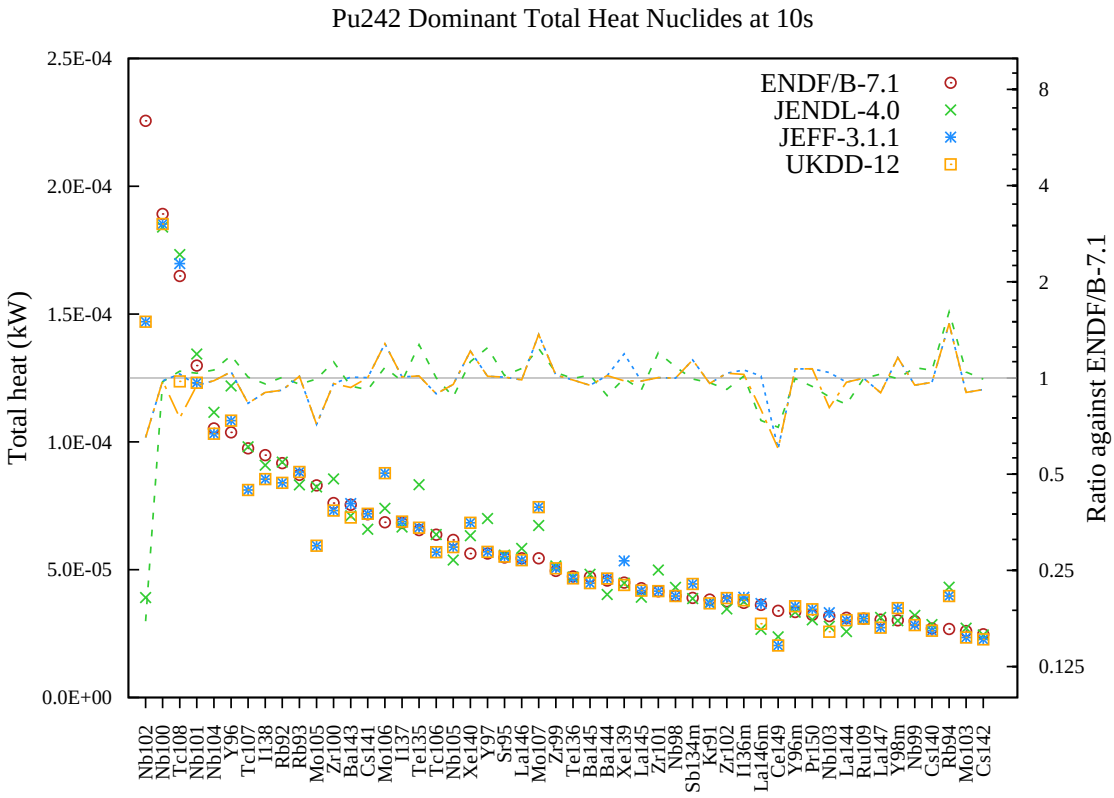

Figure 138: Total heat (in kW) decay data comparison for Pu242 fission pulse after 10s cooling.

Table 138: Total heat (in kW) decay data comparison for Pu242 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb102	6.1	2.26E-04	3.91E-05	1.47E-04	1.47E-04
Nb100	5.1	1.89E-04	1.84E-04	1.85E-04	1.85E-04
Tc108	4.5	1.65E-04	1.73E-04	1.70E-04	1.24E-04
Nb101	3.5	1.30E-04	1.34E-04	1.23E-04	1.23E-04
Nb104	2.9	1.05E-04	1.12E-04	1.03E-04	1.03E-04
Y96	2.8	1.04E-04	1.22E-04	1.08E-04	1.08E-04
Tc107	2.6	9.75E-05	9.81E-05	8.12E-05	8.12E-05
I138	2.6	9.48E-05	9.09E-05	8.54E-05	8.54E-05
Rb92	2.5	9.17E-05	9.21E-05	8.40E-05	8.40E-05
Rb93	2.4	8.71E-05	8.32E-05	8.82E-05	8.82E-05
Mo105	2.3	8.30E-05	8.24E-05	5.94E-05	5.94E-05
Zr100	2.1	7.61E-05	8.55E-05	7.31E-05	7.31E-05
Ba143	2.0	7.54E-05	7.11E-05	7.59E-05	7.04E-05
Cs141	1.9	7.17E-05	6.58E-05	7.19E-05	7.19E-05
Mo106	1.9	6.85E-05	7.40E-05	8.78E-05	8.78E-05
I137	1.9	6.83E-05	6.67E-05	6.88E-05	6.88E-05
Te135	1.8	6.55E-05	8.32E-05	6.65E-05	6.65E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	1.7	6.37E-05	6.38E-05	5.68E-05	5.68E-05
Nb105	1.7	6.16E-05	5.38E-05	5.89E-05	5.89E-05
Xe140	1.5	5.63E-05	6.33E-05	6.84E-05	6.84E-05
Y97	1.5	5.63E-05	7.00E-05	5.70E-05	5.70E-05
Sr95	1.5	5.48E-05	5.57E-05	5.51E-05	5.51E-05
La146	1.5	5.44E-05	5.83E-05	5.37E-05	5.37E-05
Mo107	1.5	5.44E-05	6.73E-05	7.45E-05	7.45E-05
Zr99	1.3	4.95E-05	5.15E-05	5.06E-05	5.06E-05
Te136	1.3	4.73E-05	4.71E-05	4.66E-05	4.66E-05
Ba145	1.3	4.72E-05	4.82E-05	4.48E-05	4.48E-05
Ba144	1.2	4.57E-05	4.03E-05	4.65E-05	4.65E-05
Xe139	1.2	4.49E-05	4.48E-05	5.34E-05	4.40E-05
La145	1.2	4.27E-05	3.92E-05	4.18E-05	4.18E-05
Zr101	1.1	4.15E-05	4.98E-05	4.16E-05	4.16E-05
Nb98	1.1	3.97E-05	4.31E-05	3.97E-05	3.97E-05
Sb134m	1.1	3.90E-05	3.87E-05	4.44E-05	4.44E-05
Kr91	1.0	3.83E-05	3.70E-05	3.69E-05	3.69E-05
Zr102	1.0	3.76E-05	3.47E-05	3.89E-05	3.89E-05
I136m	1.0	3.70E-05	3.75E-05	3.93E-05	3.80E-05
La146m	1.0	3.62E-05	2.67E-05	3.68E-05	2.89E-05
Ce149	0.9	3.39E-05	2.38E-05	2.04E-05	2.04E-05
Y96m	0.9	3.35E-05	3.34E-05	3.57E-05	3.57E-05
Pr150	0.9	3.23E-05	3.04E-05	3.45E-05	3.45E-05
Nb103	0.9	3.19E-05	2.78E-05	3.32E-05	2.58E-05
La144	0.8	3.12E-05	2.58E-05	3.02E-05	3.02E-05
Ru109	0.8	3.09E-05	3.07E-05	3.08E-05	3.08E-05
La147	0.8	3.04E-05	3.13E-05	2.74E-05	2.74E-05
Y98m	0.8	3.02E-05	3.00E-05	3.50E-05	3.50E-05
Nb99	0.8	2.98E-05	3.21E-05	2.83E-05	2.83E-05
Cs140	0.7	2.70E-05	2.85E-05	2.62E-05	2.62E-05
Rb94	0.7	2.68E-05	4.32E-05	3.97E-05	3.97E-05
Mo103	0.7	2.60E-05	2.72E-05	2.34E-05	2.34E-05
Cs142	0.7	2.47E-05	2.45E-05	2.27E-05	2.27E-05

10.2 100s after pulse

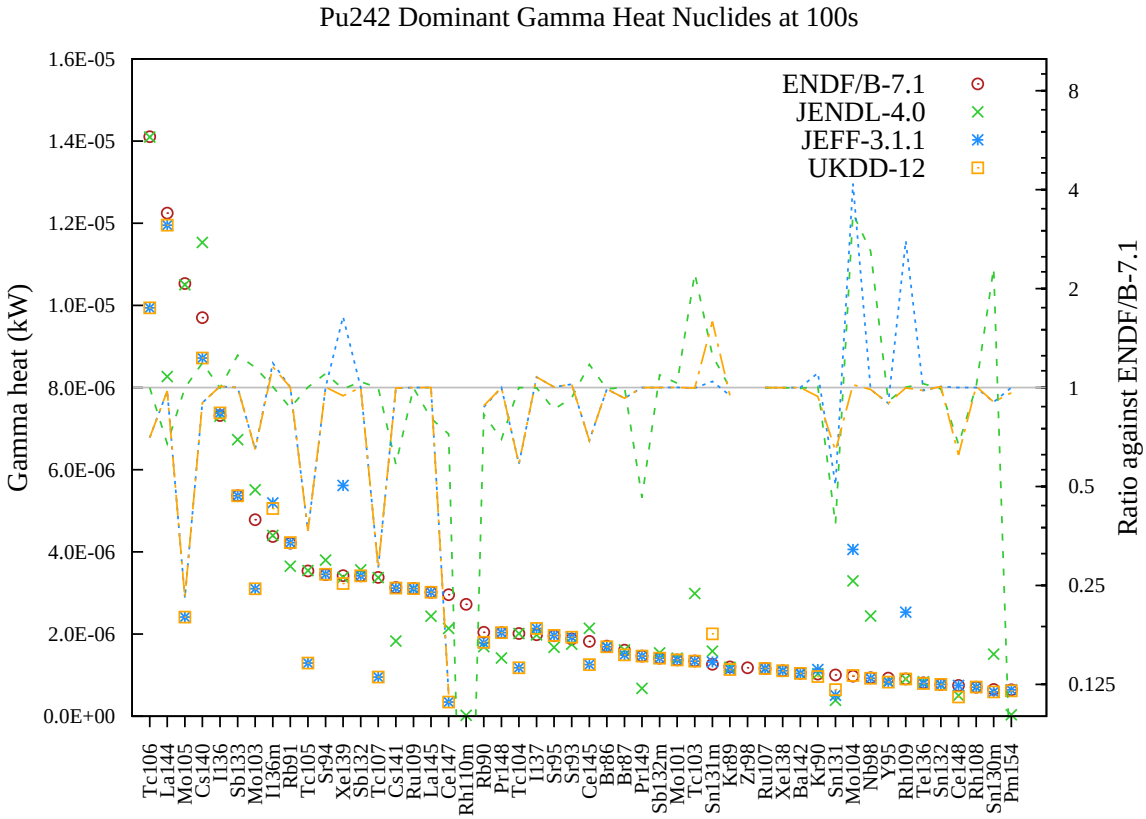

Figure 139: Gamma heat (in kW) decay data comparison for Pu242 fission pulse after 100s cooling.

Table 139: Gamma heat (in kW) decay data comparison for Pu242 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	9.0	1.41E-05	1.41E-05	9.94E-06	9.94E-06
La144	7.9	1.22E-05	8.27E-06	1.20E-05	1.20E-05
Mo105	6.8	1.05E-05	1.05E-05	2.41E-06	2.41E-06
Cs140	6.2	9.70E-06	1.15E-05	8.72E-06	8.72E-06
I136	4.7	7.32E-06	7.30E-06	7.38E-06	7.38E-06
Sb133	3.4	5.37E-06	6.73E-06	5.37E-06	5.37E-06
Mo103	3.1	4.78E-06	5.51E-06	3.10E-06	3.10E-06
I136m	2.8	4.38E-06	4.40E-06	5.19E-06	5.05E-06
Rb91	2.7	4.21E-06	3.65E-06	4.22E-06	4.22E-06
Tc105	2.3	3.53E-06	3.54E-06	1.29E-06	1.29E-06
Sr94	2.2	3.45E-06	3.80E-06	3.45E-06	3.45E-06
Xe139	2.2	3.42E-06	3.38E-06	5.62E-06	3.23E-06
Sb132	2.2	3.42E-06	3.56E-06	3.42E-06	3.42E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc107	2.2	3.38E-06	3.38E-06	9.55E-07	9.55E-07
Cs141	2.0	3.13E-06	1.83E-06	3.12E-06	3.12E-06
Ru109	2.0	3.11E-06	3.10E-06	3.11E-06	3.11E-06
La145	1.9	3.02E-06	2.43E-06	3.02E-06	3.02E-06
Ce147	1.9	2.96E-06	2.14E-06	3.45E-07	3.45E-07
Rh110m	1.7	2.72E-06	—	—	—
Rb90	1.3	2.04E-06	1.70E-06	1.78E-06	1.80E-06
Pr148	1.3	2.03E-06	1.42E-06	2.04E-06	2.04E-06
Tc104	1.3	2.01E-06	2.01E-06	1.18E-06	1.18E-06
I137	1.3	1.98E-06	1.98E-06	2.13E-06	2.13E-06
Sr95	1.3	1.96E-06	1.68E-06	1.96E-06	1.96E-06
Sr93	1.2	1.88E-06	1.75E-06	1.92E-06	1.92E-06
Ce145	1.2	1.82E-06	2.14E-06	1.26E-06	1.26E-06
Br86	1.1	1.71E-06	1.69E-06	1.69E-06	1.69E-06
Br87	1.0	1.61E-06	1.61E-06	1.49E-06	1.49E-06
Pr149	0.9	1.46E-06	6.77E-07	1.46E-06	1.46E-06
Sb132m	0.9	1.41E-06	1.54E-06	1.41E-06	1.41E-06
Mo101	0.9	1.37E-06	1.41E-06	1.37E-06	1.37E-06
Tc103	0.9	1.34E-06	2.99E-06	1.34E-06	1.34E-06
Sn131m	0.8	1.26E-06	1.58E-06	1.32E-06	2.00E-06
Kr89	0.8	1.20E-06	1.19E-06	1.13E-06	1.13E-06
Zr98	0.8	1.18E-06	—	—	—
Ru107	0.7	1.16E-06	1.16E-06	1.16E-06	1.16E-06
Xe138	0.7	1.11E-06	1.11E-06	1.11E-06	1.11E-06
Ba142	0.7	1.04E-06	1.04E-06	1.04E-06	1.04E-06
Kr90	0.7	1.03E-06	1.04E-06	1.14E-06	9.64E-07
Sn131	0.6	1.01E-06	3.86E-07	5.09E-07	6.46E-07
Mo104	0.6	9.73E-07	3.29E-06	4.06E-06	9.92E-07
Nb98	0.6	9.37E-07	2.44E-06	9.25E-07	9.25E-07
Y95	0.6	9.28E-07	8.43E-07	8.32E-07	8.32E-07
Rh109	0.6	9.06E-07	9.08E-07	2.53E-06	9.05E-07
Te136	0.5	8.14E-07	8.37E-07	7.98E-07	7.98E-07
Sn132	0.5	7.70E-07	7.62E-07	7.76E-07	7.76E-07
Ce148	0.5	7.50E-07	5.03E-07	7.50E-07	4.68E-07
Rh108	0.5	7.06E-07	7.13E-07	7.06E-07	7.13E-07
Sn130m	0.4	6.53E-07	1.51E-06	5.90E-07	5.90E-07
Pm154	0.4	6.41E-07	3.45E-08	6.41E-07	6.18E-07

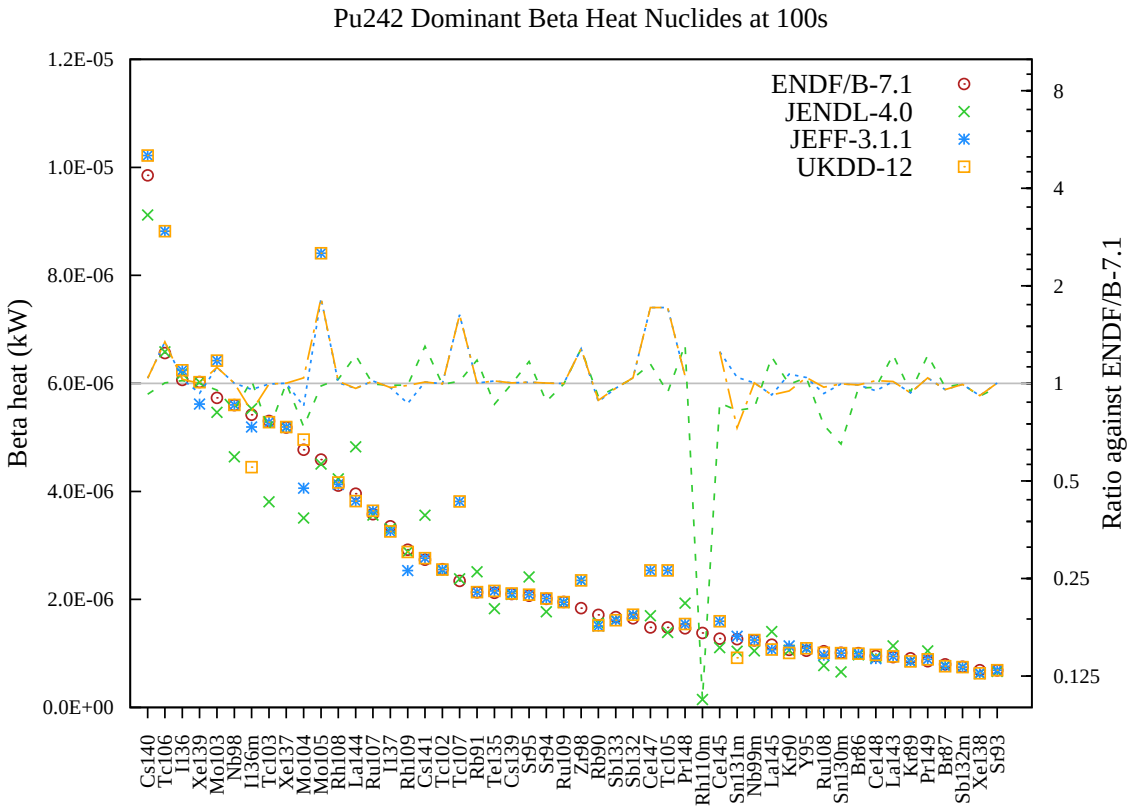

Figure 140: Beta heat (in kW) decay data comparison for Pu242 fission pulse after 100s cooling.

Table 140: Beta heat (in kW) decay data comparison for Pu242 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	6.8	9.85E-06	9.12E-06	1.02E-05	1.02E-05
Tc106	4.5	6.56E-06	6.59E-06	8.82E-06	8.82E-06
I136	4.2	6.06E-06	6.18E-06	6.24E-06	6.24E-06
Xe139	4.2	6.02E-06	6.02E-06	5.62E-06	6.02E-06
Mo103	4.0	5.73E-06	5.46E-06	6.42E-06	6.42E-06
Nb98	3.9	5.60E-06	4.64E-06	5.60E-06	5.60E-06
I136m	3.8	5.42E-06	5.53E-06	5.19E-06	4.45E-06
Tc103	3.7	5.30E-06	3.81E-06	5.28E-06	5.28E-06
Xe137	3.6	5.18E-06	5.19E-06	5.19E-06	5.19E-06
Mo104	3.3	4.77E-06	3.51E-06	4.06E-06	4.96E-06
Mo105	3.2	4.59E-06	4.51E-06	8.41E-06	8.41E-06
Rh108	2.8	4.11E-06	4.23E-06	4.13E-06	4.17E-06
La144	2.7	3.96E-06	4.83E-06	3.82E-06	3.82E-06
Ru107	2.5	3.58E-06	3.56E-06	3.64E-06	3.64E-06
I137	2.3	3.36E-06	3.31E-06	3.26E-06	3.26E-06
Rh109	2.0	2.92E-06	2.89E-06	2.53E-06	2.88E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs141	1.9	2.73E-06	3.56E-06	2.76E-06	2.76E-06
Tc102	1.8	2.56E-06	2.54E-06	2.55E-06	2.55E-06
Tc107	1.6	2.34E-06	2.38E-06	3.81E-06	3.81E-06
Rb91	1.5	2.13E-06	2.51E-06	2.14E-06	2.14E-06
Te135	1.5	2.12E-06	1.83E-06	2.16E-06	2.16E-06
Cs139	1.5	2.10E-06	2.09E-06	2.11E-06	2.11E-06
Sr95	1.4	2.07E-06	2.42E-06	2.09E-06	2.09E-06
Sr94	1.4	2.01E-06	1.77E-06	2.02E-06	2.02E-06
Ru109	1.4	1.95E-06	1.94E-06	1.95E-06	1.95E-06
Zr98	1.3	1.84E-06	2.35E-06	2.35E-06	2.35E-06
Rb90	1.2	1.71E-06	1.56E-06	1.50E-06	1.52E-06
Sb133	1.2	1.67E-06	1.62E-06	1.61E-06	1.61E-06
Sb132	1.1	1.65E-06	1.71E-06	1.72E-06	1.72E-06
Ce147	1.0	1.48E-06	1.70E-06	2.54E-06	2.54E-06
Tc105	1.0	1.48E-06	1.39E-06	2.54E-06	2.54E-06
Pr148	1.0	1.47E-06	1.93E-06	1.54E-06	1.54E-06
Rh110m	1.0	1.38E-06	1.46E-07	—	—
Ce145	0.9	1.27E-06	1.11E-06	1.59E-06	1.59E-06
Sn131m	0.9	1.26E-06	1.04E-06	1.32E-06	9.20E-07
Nb99m	0.9	1.24E-06	1.05E-06	1.25E-06	1.25E-06
La145	0.8	1.16E-06	1.40E-06	1.07E-06	1.07E-06
Kr90	0.7	1.06E-06	1.06E-06	1.14E-06	1.01E-06
Y95	0.7	1.05E-06	1.09E-06	1.09E-06	1.09E-06
Ru108	0.7	1.04E-06	7.74E-07	9.68E-07	1.01E-06
Sn130m	0.7	1.01E-06	6.56E-07	1.01E-06	1.01E-06
Br86	0.7	1.01E-06	9.74E-07	9.95E-07	9.95E-07
Ce148	0.7	9.53E-07	9.27E-07	9.04E-07	9.73E-07
La143	0.6	9.30E-07	1.14E-06	9.43E-07	9.43E-07
Kr89	0.6	9.11E-07	8.56E-07	8.51E-07	8.51E-07
Pr149	0.6	8.56E-07	1.05E-06	8.90E-07	8.90E-07
Br87	0.6	7.97E-07	7.76E-07	7.63E-07	7.63E-07
Sb132m	0.5	7.54E-07	7.51E-07	7.48E-07	7.48E-07
Xe138	0.5	6.90E-07	6.30E-07	6.32E-07	6.32E-07
Sr93	0.5	6.87E-07	6.68E-07	6.89E-07	6.89E-07

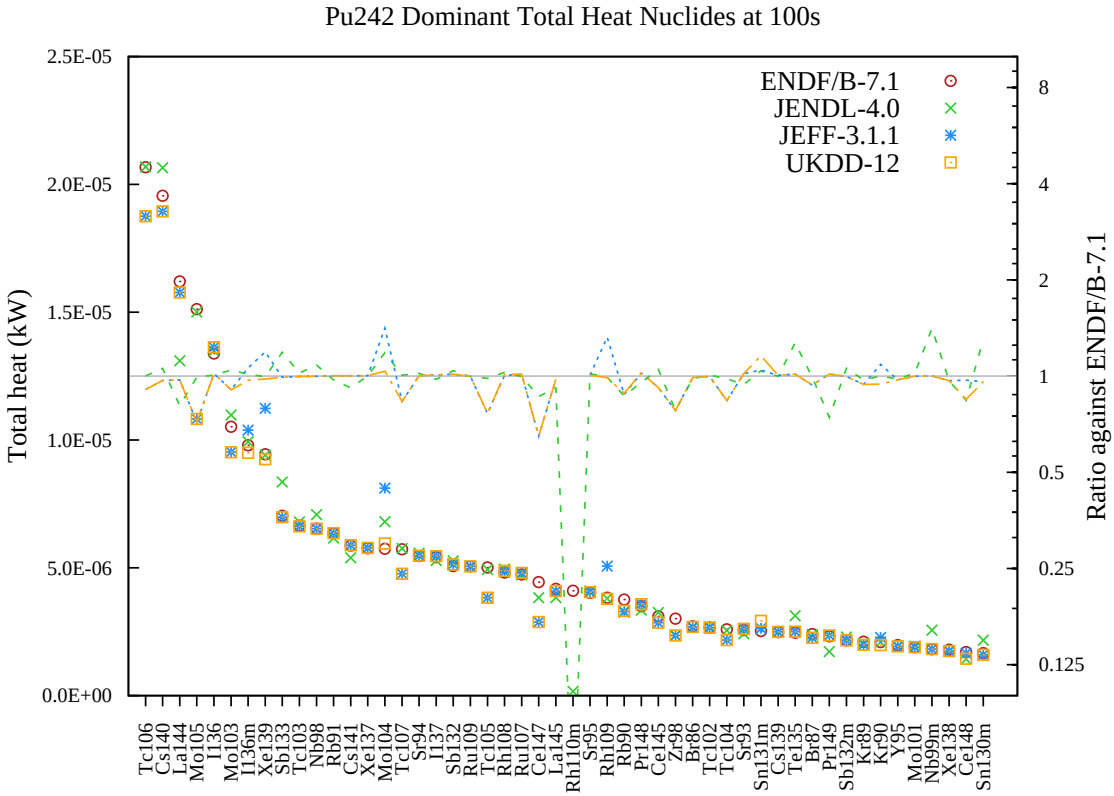

Figure 141: Total heat (in kW) decay data comparison for Pu242 fission pulse after 100s cooling.

Table 141: Total heat (in kW) decay data comparison for Pu242 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	6.9	2.07E-05	2.07E-05	1.88E-05	1.88E-05
Cs140	6.5	1.96E-05	2.07E-05	1.89E-05	1.89E-05
La144	5.4	1.62E-05	1.31E-05	1.58E-05	1.58E-05
Mo105	5.0	1.51E-05	1.50E-05	1.08E-05	1.08E-05
I136	4.5	1.34E-05	1.35E-05	1.36E-05	1.36E-05
Mo103	3.5	1.05E-05	1.10E-05	9.53E-06	9.52E-06
I136m	3.3	9.79E-06	9.93E-06	1.04E-05	9.50E-06
Xe139	3.1	9.44E-06	9.41E-06	1.12E-05	9.25E-06
Sb133	2.3	7.04E-06	8.36E-06	6.98E-06	6.98E-06
Tc103	2.2	6.65E-06	6.79E-06	6.62E-06	6.62E-06
Nb98	2.2	6.53E-06	7.08E-06	6.53E-06	6.53E-06
Rb91	2.1	6.34E-06	6.17E-06	6.36E-06	6.36E-06
Cs141	2.0	5.87E-06	5.39E-06	5.88E-06	5.88E-06
Xe137	1.9	5.76E-06	5.77E-06	5.78E-06	5.78E-06
Mo104	1.9	5.75E-06	6.80E-06	8.12E-06	5.95E-06
Tc107	1.9	5.72E-06	5.76E-06	4.77E-06	4.77E-06
Sr94	1.8	5.46E-06	5.57E-06	5.47E-06	5.47E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I137	1.8	5.42E-06	5.29E-06	5.46E-06	5.46E-06
Sb132	1.7	5.07E-06	5.27E-06	5.14E-06	5.14E-06
Ru109	1.7	5.06E-06	5.04E-06	5.06E-06	5.06E-06
Tc105	1.7	5.01E-06	4.93E-06	3.83E-06	3.83E-06
Rh108	1.6	4.81E-06	4.94E-06	4.83E-06	4.88E-06
Ru107	1.6	4.74E-06	4.72E-06	4.80E-06	4.80E-06
Ce147	1.5	4.44E-06	3.83E-06	2.88E-06	2.88E-06
La145	1.4	4.18E-06	3.84E-06	4.09E-06	4.09E-06
Rh110m	1.4	4.10E-06	1.69E-07	—	—
Sr95	1.3	4.03E-06	4.10E-06	4.05E-06	4.05E-06
Rh109	1.3	3.83E-06	3.79E-06	5.07E-06	3.78E-06
Rb90	1.3	3.76E-06	3.26E-06	3.29E-06	3.32E-06
Pr148	1.2	3.50E-06	3.35E-06	3.58E-06	3.58E-06
Ce145	1.0	3.10E-06	3.25E-06	2.85E-06	2.85E-06
Zr98	1.0	3.01E-06	2.35E-06	2.35E-06	2.35E-06
Br86	0.9	2.71E-06	2.66E-06	2.68E-06	2.68E-06
Tc102	0.9	2.67E-06	2.69E-06	2.66E-06	2.66E-06
Tc104	0.9	2.59E-06	2.54E-06	2.17E-06	2.17E-06
Sr93	0.9	2.57E-06	2.42E-06	2.61E-06	2.61E-06
Sn131m	0.8	2.52E-06	2.62E-06	2.64E-06	2.92E-06
Cs139	0.8	2.48E-06	2.48E-06	2.49E-06	2.49E-06
Te135	0.8	2.46E-06	3.13E-06	2.50E-06	2.50E-06
Br87	0.8	2.41E-06	2.39E-06	2.26E-06	2.26E-06
Pr149	0.8	2.32E-06	1.72E-06	2.35E-06	2.35E-06
Sb132m	0.7	2.17E-06	2.29E-06	2.16E-06	2.16E-06
Kr89	0.7	2.11E-06	2.05E-06	1.99E-06	1.99E-06
Kr90	0.7	2.09E-06	2.09E-06	2.28E-06	1.97E-06
Y95	0.7	1.98E-06	1.94E-06	1.93E-06	1.93E-06
Mo101	0.6	1.90E-06	1.94E-06	1.89E-06	1.89E-06
Nb99m	0.6	1.82E-06	2.56E-06	1.82E-06	1.82E-06
Xe138	0.6	1.80E-06	1.74E-06	1.74E-06	1.74E-06
Ce148	0.6	1.70E-06	1.43E-06	1.65E-06	1.44E-06
Sn130m	0.6	1.66E-06	2.17E-06	1.60E-06	1.60E-06

10.3 1000s after pulse

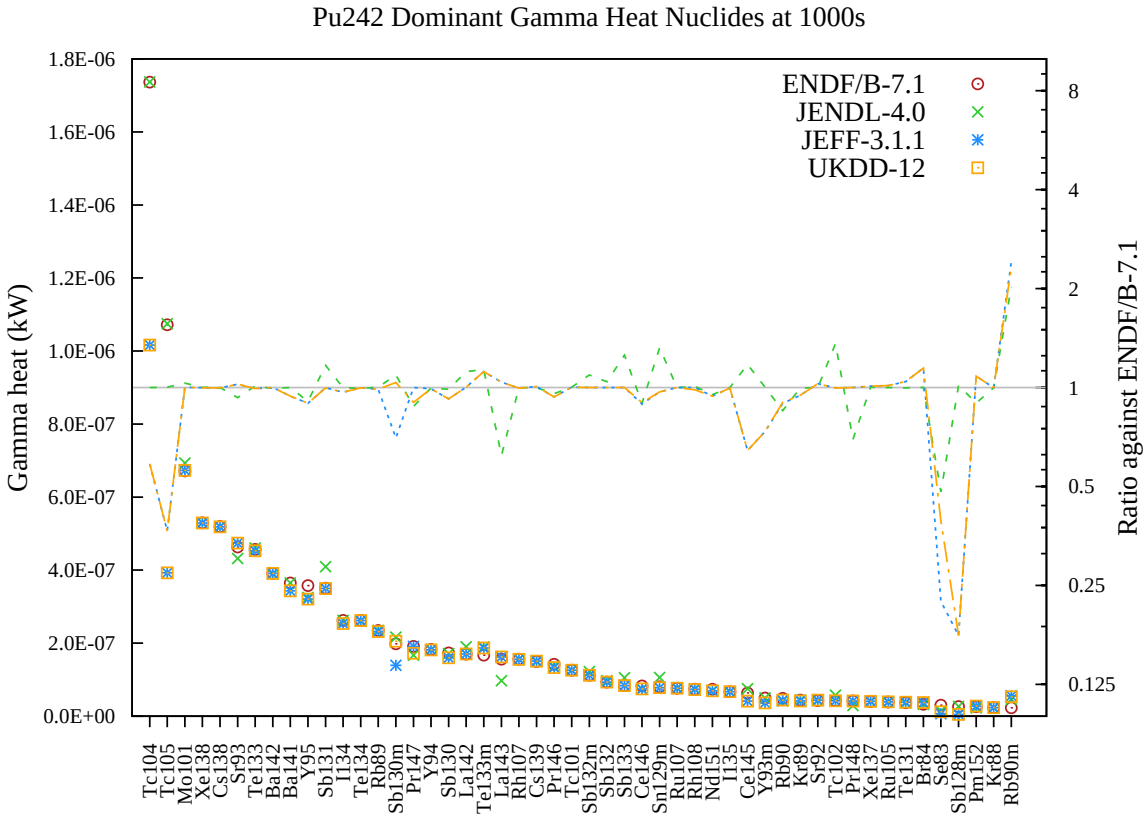

Figure 142: Gamma heat (in kW) decay data comparison for Pu242 fission pulse after 1000s cooling.

Table 142: Gamma heat (in kW) decay data comparison for Pu242 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	15.7	1.74E-06	1.74E-06	1.02E-06	1.02E-06
Tc105	9.7	1.07E-06	1.07E-06	3.93E-07	3.93E-07
Mo101	6.1	6.72E-07	6.93E-07	6.73E-07	6.73E-07
Xe138	4.8	5.30E-07	5.30E-07	5.29E-07	5.29E-07
Cs138	4.7	5.19E-07	5.19E-07	5.18E-07	5.18E-07
Sr93	4.2	4.63E-07	4.32E-07	4.74E-07	4.74E-07
Te133	4.1	4.57E-07	4.61E-07	4.53E-07	4.53E-07
Ba142	3.5	3.91E-07	3.89E-07	3.91E-07	3.91E-07
Ba141	3.3	3.65E-07	3.65E-07	3.43E-07	3.43E-07
Y95	3.2	3.58E-07	3.25E-07	3.21E-07	3.21E-07
Sb131	3.2	3.50E-07	4.09E-07	3.50E-07	3.49E-07
I134	2.4	2.62E-07	2.62E-07	2.54E-07	2.54E-07
Te134	2.4	2.62E-07	2.61E-07	2.62E-07	2.62E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb89	2.1	2.35E-07	2.35E-07	2.32E-07	2.32E-07
Sb130m	1.8	1.98E-07	2.16E-07	1.39E-07	2.05E-07
Pr147	1.7	1.91E-07	1.67E-07	1.91E-07	1.72E-07
Y94	1.6	1.83E-07	1.82E-07	1.81E-07	1.81E-07
Sb130	1.6	1.73E-07	1.71E-07	1.60E-07	1.60E-07
La142	1.5	1.70E-07	1.90E-07	1.71E-07	1.71E-07
Te133m	1.5	1.67E-07	1.89E-07	1.87E-07	1.87E-07
La143	1.4	1.56E-07	9.70E-08	1.62E-07	1.62E-07
Rh107	1.4	1.56E-07	1.56E-07	1.55E-07	1.55E-07
Cs139	1.4	1.50E-07	1.50E-07	1.51E-07	1.51E-07
Pr146	1.3	1.42E-07	1.36E-07	1.33E-07	1.33E-07
Tc101	1.1	1.26E-07	1.26E-07	1.26E-07	1.26E-07
Sb132m	1.0	1.12E-07	1.22E-07	1.12E-07	1.12E-07
Sb132	0.8	9.34E-08	9.73E-08	9.34E-08	9.34E-08
Sb133	0.8	8.38E-08	1.05E-07	8.38E-08	8.38E-08
Ce146	0.7	8.30E-08	7.44E-08	7.40E-08	7.47E-08
Sn129m	0.7	8.03E-08	1.06E-07	7.79E-08	7.79E-08
Ru107	0.7	7.67E-08	7.66E-08	7.67E-08	7.67E-08
Rh108	0.7	7.39E-08	7.46E-08	7.40E-08	7.28E-08
Nd151	0.7	7.35E-08	7.00E-08	6.93E-08	6.93E-08
I135	0.6	6.70E-08	6.70E-08	6.68E-08	6.68E-08
Ce145	0.6	6.39E-08	7.51E-08	4.11E-08	4.11E-08
Y93m	0.4	4.96E-08	4.98E-08	3.64E-08	3.64E-08
Rb90	0.4	4.89E-08	4.16E-08	4.37E-08	4.41E-08
Kr89	0.4	4.42E-08	4.40E-08	4.18E-08	4.18E-08
Sr92	0.4	4.28E-08	4.28E-08	4.40E-08	4.40E-08
Tc102	0.4	4.24E-08	5.76E-08	4.23E-08	4.22E-08
Pr148	0.4	4.18E-08	2.91E-08	4.18E-08	4.18E-08
Xe137	0.4	4.04E-08	4.05E-08	4.08E-08	4.08E-08
Ru105	0.4	3.89E-08	3.90E-08	3.95E-08	3.95E-08
Te131	0.3	3.67E-08	3.66E-08	3.83E-08	3.83E-08
Br84	0.3	3.24E-08	3.25E-08	3.72E-08	3.72E-08
Se83	0.3	3.02E-08	1.45E-08	6.75E-09	1.19E-08
Sb128m	0.2	2.65E-08	2.69E-08	4.67E-09	4.67E-09
Pm152	0.2	2.58E-08	2.32E-08	2.80E-08	2.80E-08
Kr88	0.2	2.37E-08	2.36E-08	2.36E-08	2.36E-08
Rb90m	0.2	2.29E-08	4.64E-08	5.54E-08	5.32E-08

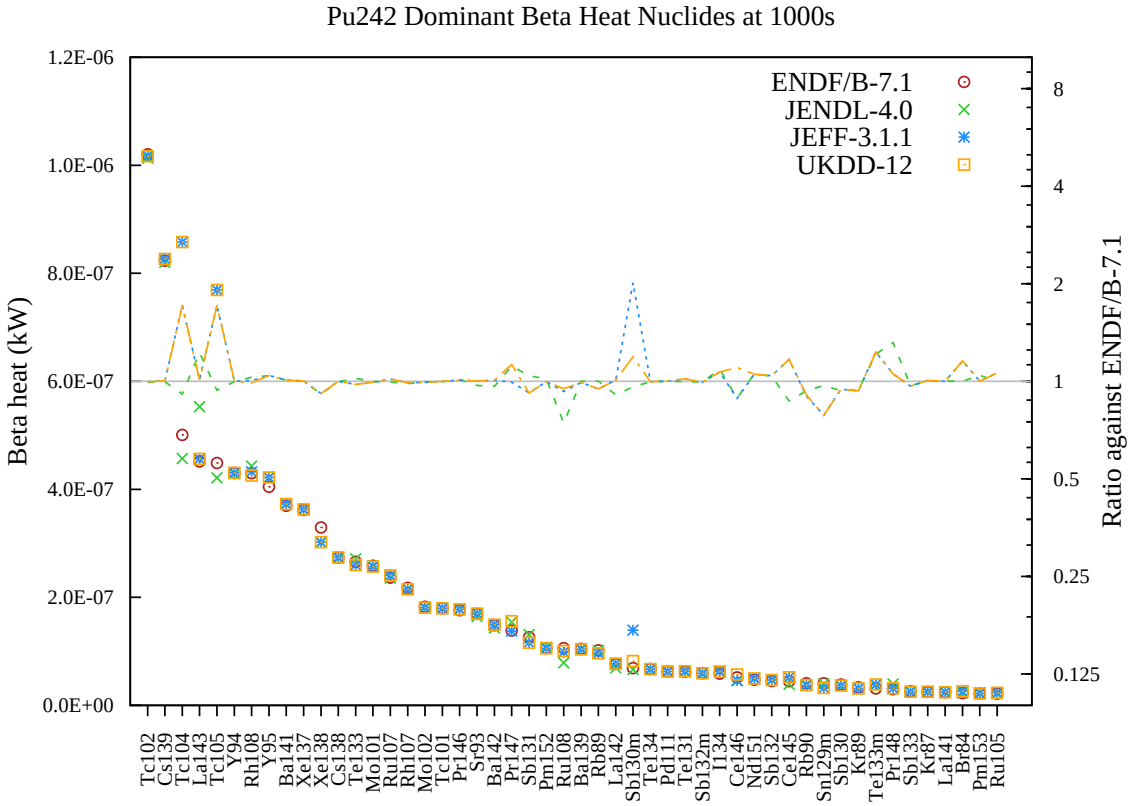

Figure 143: Beta heat (in kW) decay data comparison for Pu242 fission pulse after 1000s cooling.

Table 143: Beta heat (in kW) decay data comparison for Pu242 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	10.6	1.02E-06	1.01E-06	1.02E-06	1.02E-06
Cs139	8.5	8.23E-07	8.20E-07	8.27E-07	8.27E-07
Tc104	5.2	5.01E-07	4.57E-07	8.58E-07	8.58E-07
La143	4.7	4.52E-07	5.53E-07	4.56E-07	4.56E-07
Tc105	4.6	4.49E-07	4.21E-07	7.69E-07	7.69E-07
Y94	4.4	4.30E-07	4.29E-07	4.31E-07	4.31E-07
Rh108	4.4	4.30E-07	4.43E-07	4.32E-07	4.25E-07
Y95	4.2	4.05E-07	4.21E-07	4.22E-07	4.22E-07
Ba141	3.8	3.70E-07	3.73E-07	3.73E-07	3.73E-07
Xe137	3.7	3.62E-07	3.62E-07	3.63E-07	3.63E-07
Xe138	3.4	3.30E-07	3.01E-07	3.02E-07	3.02E-07
Cs138	2.8	2.74E-07	2.73E-07	2.74E-07	2.74E-07
Te133	2.7	2.66E-07	2.71E-07	2.60E-07	2.60E-07
Mo101	2.7	2.59E-07	2.58E-07	2.57E-07	2.57E-07
Ru107	2.4	2.36E-07	2.35E-07	2.41E-07	2.41E-07
Rh107	2.2	2.18E-07	2.14E-07	2.15E-07	2.15E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Mo102	1.9	1.83E-07	1.82E-07	1.81E-07	1.81E-07
Tc101	1.9	1.80E-07	1.79E-07	1.80E-07	1.80E-07
Pr146	1.8	1.76E-07	1.78E-07	1.78E-07	1.78E-07
Sr93	1.8	1.69E-07	1.65E-07	1.70E-07	1.70E-07
Ba142	1.5	1.48E-07	1.43E-07	1.49E-07	1.49E-07
Pr147	1.4	1.38E-07	1.54E-07	1.37E-07	1.56E-07
Sb131	1.3	1.26E-07	1.31E-07	1.16E-07	1.16E-07
Pm152	1.1	1.06E-07	1.08E-07	1.06E-07	1.06E-07
Ru108	1.1	1.06E-07	7.88E-08	9.85E-08	1.00E-07
Ba139	1.1	1.05E-07	1.05E-07	1.04E-07	1.04E-07
Rb89	1.1	1.02E-07	1.02E-07	9.64E-08	9.64E-08
La142	0.8	7.67E-08	6.97E-08	7.73E-08	7.73E-08
Sb130m	0.7	6.90E-08	6.63E-08	1.39E-07	8.22E-08
Te134	0.7	6.72E-08	6.70E-08	6.71E-08	6.71E-08
Pd111	0.6	6.25E-08	6.25E-08	6.26E-08	6.26E-08
Te131	0.6	6.22E-08	6.21E-08	6.33E-08	6.33E-08
Sb132m	0.6	5.97E-08	5.94E-08	5.93E-08	5.93E-08
I134	0.6	5.87E-08	6.39E-08	6.27E-08	6.27E-08
Ce146	0.5	5.18E-08	4.59E-08	4.58E-08	5.71E-08
Nd151	0.5	4.74E-08	5.01E-08	4.99E-08	4.99E-08
Sb132	0.5	4.51E-08	4.68E-08	4.70E-08	4.70E-08
Ce145	0.5	4.46E-08	3.88E-08	5.22E-08	5.22E-08
Rb90	0.4	4.10E-08	3.83E-08	3.69E-08	3.72E-08
Sn129m	0.4	4.10E-08	3.98E-08	3.22E-08	3.22E-08
Sb130	0.4	3.86E-08	3.61E-08	3.65E-08	3.65E-08
Kr89	0.3	3.36E-08	3.16E-08	3.14E-08	3.14E-08
Te133m	0.3	3.13E-08	3.80E-08	3.86E-08	3.86E-08
Pr148	0.3	3.01E-08	3.96E-08	3.17E-08	3.17E-08
Sb133	0.3	2.61E-08	2.53E-08	2.52E-08	2.52E-08
Kr87	0.3	2.49E-08	2.50E-08	2.51E-08	2.51E-08
La141	0.3	2.42E-08	2.42E-08	2.42E-08	2.42E-08
Br84	0.2	2.27E-08	2.27E-08	2.62E-08	2.62E-08
Pm153	0.2	2.20E-08	2.29E-08	2.20E-08	2.20E-08
Ru105	0.2	2.19E-08	2.18E-08	2.32E-08	2.32E-08

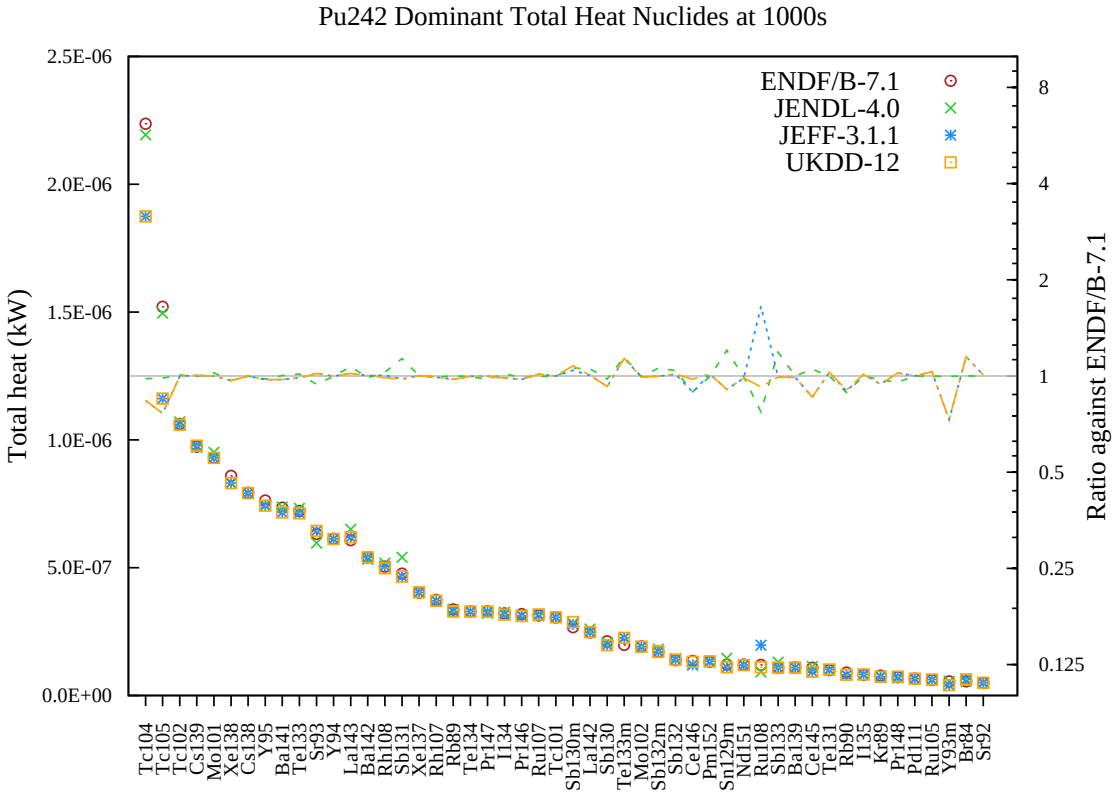

Figure 144: Total heat (in kW) decay data comparison for Pu242 fission pulse after 1000s cooling.

Table 144: Total heat (in kW) decay data comparison for Pu242 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	10.8	2.24E-06	2.19E-06	1.87E-06	1.87E-06
Tc105	7.3	1.52E-06	1.50E-06	1.16E-06	1.16E-06
Tc102	5.1	1.06E-06	1.07E-06	1.06E-06	1.06E-06
Cs139	4.7	9.73E-07	9.70E-07	9.77E-07	9.77E-07
Mo101	4.5	9.30E-07	9.51E-07	9.30E-07	9.30E-07
Xe138	4.1	8.59E-07	8.31E-07	8.31E-07	8.31E-07
Cs138	3.8	7.93E-07	7.92E-07	7.92E-07	7.92E-07
Y95	3.7	7.63E-07	7.46E-07	7.42E-07	7.42E-07
Ba141	3.5	7.34E-07	7.38E-07	7.16E-07	7.16E-07
Te133	3.5	7.22E-07	7.32E-07	7.13E-07	7.13E-07
Sr93	3.0	6.33E-07	5.96E-07	6.44E-07	6.44E-07
Y94	3.0	6.13E-07	6.11E-07	6.12E-07	6.12E-07
La143	2.9	6.08E-07	6.50E-07	6.19E-07	6.19E-07
Ba142	2.6	5.40E-07	5.32E-07	5.41E-07	5.41E-07
Rh108	2.4	5.04E-07	5.18E-07	5.06E-07	4.98E-07
Sb131	2.3	4.76E-07	5.40E-07	4.66E-07	4.65E-07
Xe137	1.9	4.02E-07	4.03E-07	4.04E-07	4.04E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rh107	1.8	3.74E-07	3.70E-07	3.71E-07	3.71E-07
Rb89	1.6	3.36E-07	3.37E-07	3.28E-07	3.28E-07
Te134	1.6	3.29E-07	3.28E-07	3.29E-07	3.29E-07
Pr147	1.6	3.29E-07	3.21E-07	3.28E-07	3.28E-07
I134	1.5	3.21E-07	3.26E-07	3.17E-07	3.17E-07
Pr146	1.5	3.18E-07	3.14E-07	3.11E-07	3.11E-07
Ru107	1.5	3.13E-07	3.12E-07	3.17E-07	3.17E-07
Tc101	1.5	3.06E-07	3.05E-07	3.06E-07	3.06E-07
Sb130m	1.3	2.67E-07	2.83E-07	2.78E-07	2.87E-07
La142	1.2	2.47E-07	2.60E-07	2.48E-07	2.48E-07
Sb130	1.0	2.12E-07	2.07E-07	1.97E-07	1.97E-07
Te133m	1.0	1.98E-07	2.27E-07	2.25E-07	2.25E-07
Mo102	0.9	1.92E-07	1.91E-07	1.91E-07	1.91E-07
Sb132m	0.8	1.72E-07	1.82E-07	1.71E-07	1.71E-07
Sb132	0.7	1.39E-07	1.44E-07	1.40E-07	1.40E-07
Ce146	0.6	1.35E-07	1.20E-07	1.20E-07	1.32E-07
Pm152	0.6	1.32E-07	1.31E-07	1.34E-07	1.34E-07
Sn129m	0.6	1.21E-07	1.46E-07	1.10E-07	1.10E-07
Nd151	0.6	1.21E-07	1.20E-07	1.19E-07	1.19E-07
Ru108	0.6	1.19E-07	9.21E-08	1.97E-07	1.10E-07
Sb133	0.5	1.10E-07	1.31E-07	1.09E-07	1.09E-07
Ba139	0.5	1.10E-07	1.10E-07	1.09E-07	1.09E-07
Ce145	0.5	1.08E-07	1.14E-07	9.33E-08	9.33E-08
Te131	0.5	9.89E-08	9.87E-08	1.02E-07	1.02E-07
Rb90	0.4	8.99E-08	7.99E-08	8.06E-08	8.13E-08
I135	0.4	8.14E-08	8.14E-08	8.23E-08	8.23E-08
Kr89	0.4	7.77E-08	7.56E-08	7.32E-08	7.32E-08
Pr148	0.3	7.19E-08	6.87E-08	7.36E-08	7.36E-08
Pd111	0.3	6.60E-08	6.60E-08	6.60E-08	6.60E-08
Ru105	0.3	6.08E-08	6.08E-08	6.27E-08	6.27E-08
Y93m	0.3	5.54E-08	5.52E-08	4.04E-08	4.04E-08
Br84	0.3	5.51E-08	5.52E-08	6.34E-08	6.34E-08
Sr92	0.2	4.93E-08	4.92E-08	4.97E-08	4.97E-08

10.4 5011s after pulse

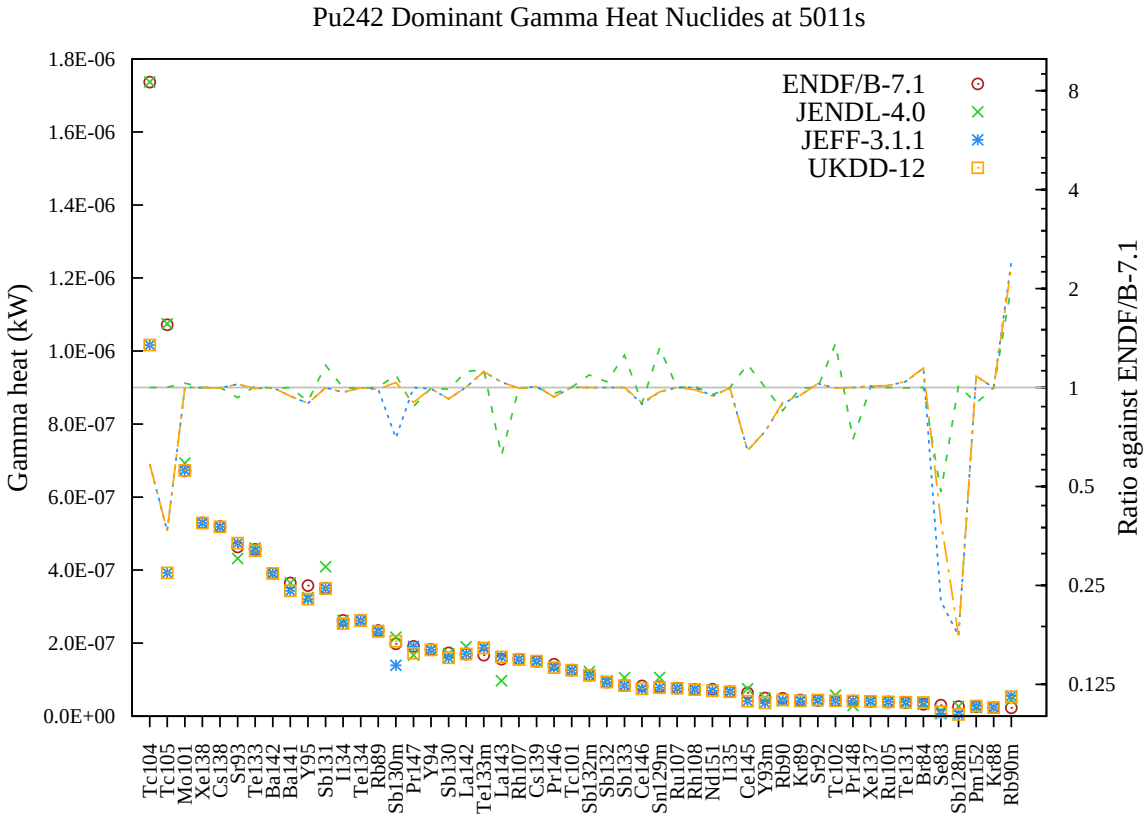

Figure 145: Gamma heat (in kW) decay data comparison for Pu242 fission pulse after 5011s cooling.

Table 145: Gamma heat (in kW) decay data comparison for Pu242 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	15.7	1.74E-06	1.74E-06	1.02E-06	1.02E-06
Tc105	9.7	1.07E-06	1.07E-06	3.93E-07	3.93E-07
Mo101	6.1	6.72E-07	6.93E-07	6.73E-07	6.73E-07
Xe138	4.8	5.30E-07	5.30E-07	5.29E-07	5.29E-07
Cs138	4.7	5.19E-07	5.19E-07	5.18E-07	5.18E-07
Sr93	4.2	4.63E-07	4.32E-07	4.74E-07	4.74E-07
Te133	4.1	4.57E-07	4.61E-07	4.53E-07	4.53E-07
Ba142	3.5	3.91E-07	3.89E-07	3.91E-07	3.91E-07
Ba141	3.3	3.65E-07	3.65E-07	3.43E-07	3.43E-07
Y95	3.2	3.58E-07	3.25E-07	3.21E-07	3.21E-07
Sb131	3.2	3.50E-07	4.09E-07	3.50E-07	3.49E-07
I134	2.4	2.62E-07	2.62E-07	2.54E-07	2.54E-07
Te134	2.4	2.62E-07	2.61E-07	2.62E-07	2.62E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb89	2.1	2.35E-07	2.35E-07	2.32E-07	2.32E-07
Sb130m	1.8	1.98E-07	2.16E-07	1.39E-07	2.05E-07
Pr147	1.7	1.91E-07	1.67E-07	1.91E-07	1.72E-07
Y94	1.6	1.83E-07	1.82E-07	1.81E-07	1.81E-07
Sb130	1.6	1.73E-07	1.71E-07	1.60E-07	1.60E-07
La142	1.5	1.70E-07	1.90E-07	1.71E-07	1.71E-07
Te133m	1.5	1.67E-07	1.89E-07	1.87E-07	1.87E-07
La143	1.4	1.56E-07	9.70E-08	1.62E-07	1.62E-07
Rh107	1.4	1.56E-07	1.56E-07	1.55E-07	1.55E-07
Cs139	1.4	1.50E-07	1.50E-07	1.51E-07	1.51E-07
Pr146	1.3	1.42E-07	1.36E-07	1.33E-07	1.33E-07
Tc101	1.1	1.26E-07	1.26E-07	1.26E-07	1.26E-07
Sb132m	1.0	1.12E-07	1.22E-07	1.12E-07	1.12E-07
Sb132	0.8	9.34E-08	9.73E-08	9.34E-08	9.34E-08
Sb133	0.8	8.38E-08	1.05E-07	8.38E-08	8.38E-08
Ce146	0.7	8.30E-08	7.44E-08	7.40E-08	7.47E-08
Sn129m	0.7	8.03E-08	1.06E-07	7.79E-08	7.79E-08
Ru107	0.7	7.67E-08	7.66E-08	7.67E-08	7.67E-08
Rh108	0.7	7.39E-08	7.46E-08	7.40E-08	7.28E-08
Nd151	0.7	7.35E-08	7.00E-08	6.93E-08	6.93E-08
I135	0.6	6.70E-08	6.70E-08	6.68E-08	6.68E-08
Ce145	0.6	6.39E-08	7.51E-08	4.11E-08	4.11E-08
Y93m	0.4	4.96E-08	4.98E-08	3.64E-08	3.64E-08
Rb90	0.4	4.89E-08	4.16E-08	4.37E-08	4.41E-08
Kr89	0.4	4.42E-08	4.40E-08	4.18E-08	4.18E-08
Sr92	0.4	4.28E-08	4.28E-08	4.40E-08	4.40E-08
Tc102	0.4	4.24E-08	5.76E-08	4.23E-08	4.22E-08
Pr148	0.4	4.18E-08	2.91E-08	4.18E-08	4.18E-08
Xe137	0.4	4.04E-08	4.05E-08	4.08E-08	4.08E-08
Ru105	0.4	3.89E-08	3.90E-08	3.95E-08	3.95E-08
Te131	0.3	3.67E-08	3.66E-08	3.83E-08	3.83E-08
Br84	0.3	3.24E-08	3.25E-08	3.72E-08	3.72E-08
Se83	0.3	3.02E-08	1.45E-08	6.75E-09	1.19E-08
Sb128m	0.2	2.65E-08	2.69E-08	4.67E-09	4.67E-09
Pm152	0.2	2.58E-08	2.32E-08	2.80E-08	2.80E-08
Kr88	0.2	2.37E-08	2.36E-08	2.36E-08	2.36E-08
Rb90m	0.2	2.29E-08	4.64E-08	5.54E-08	5.32E-08

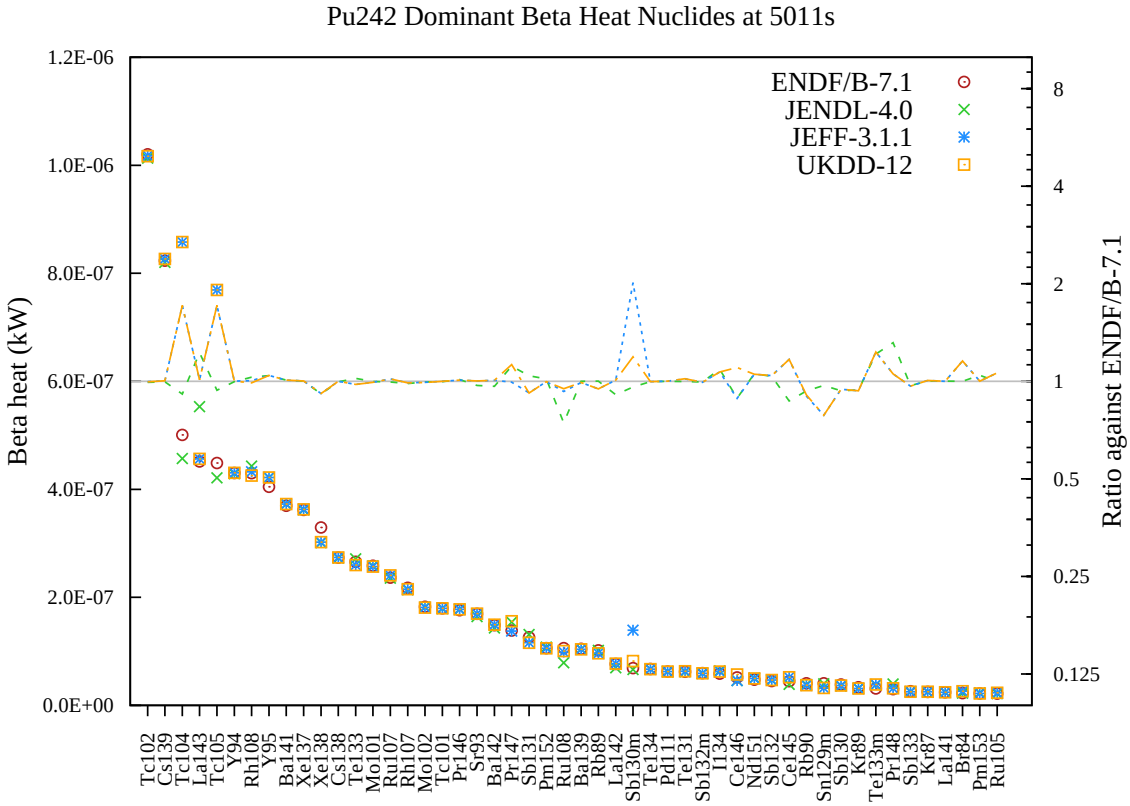

Figure 146: Beta heat (in kW) decay data comparison for Pu242 fission pulse after 5011s cooling.

Table 146: Beta heat (in kW) decay data comparison for Pu242 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	10.6	1.02E-06	1.01E-06	1.02E-06	1.02E-06
Cs139	8.5	8.23E-07	8.20E-07	8.27E-07	8.27E-07
Tc104	5.2	5.01E-07	4.57E-07	8.58E-07	8.58E-07
La143	4.7	4.52E-07	5.53E-07	4.56E-07	4.56E-07
Tc105	4.6	4.49E-07	4.21E-07	7.69E-07	7.69E-07
Y94	4.4	4.30E-07	4.29E-07	4.31E-07	4.31E-07
Rh108	4.4	4.30E-07	4.43E-07	4.32E-07	4.25E-07
Y95	4.2	4.05E-07	4.21E-07	4.22E-07	4.22E-07
Ba141	3.8	3.70E-07	3.73E-07	3.73E-07	3.73E-07
Xe137	3.7	3.62E-07	3.62E-07	3.63E-07	3.63E-07
Xe138	3.4	3.30E-07	3.01E-07	3.02E-07	3.02E-07
Cs138	2.8	2.74E-07	2.73E-07	2.74E-07	2.74E-07
Te133	2.7	2.66E-07	2.71E-07	2.60E-07	2.60E-07
Mo101	2.7	2.59E-07	2.58E-07	2.57E-07	2.57E-07
Ru107	2.4	2.36E-07	2.35E-07	2.41E-07	2.41E-07
Rh107	2.2	2.18E-07	2.14E-07	2.15E-07	2.15E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Mo102	1.9	1.83E-07	1.82E-07	1.81E-07	1.81E-07
Tc101	1.9	1.80E-07	1.79E-07	1.80E-07	1.80E-07
Pr146	1.8	1.76E-07	1.78E-07	1.78E-07	1.78E-07
Sr93	1.8	1.69E-07	1.65E-07	1.70E-07	1.70E-07
Ba142	1.5	1.48E-07	1.43E-07	1.49E-07	1.49E-07
Pr147	1.4	1.38E-07	1.54E-07	1.37E-07	1.56E-07
Sb131	1.3	1.26E-07	1.31E-07	1.16E-07	1.16E-07
Pm152	1.1	1.06E-07	1.08E-07	1.06E-07	1.06E-07
Ru108	1.1	1.06E-07	7.88E-08	9.85E-08	1.00E-07
Ba139	1.1	1.05E-07	1.05E-07	1.04E-07	1.04E-07
Rb89	1.1	1.02E-07	1.02E-07	9.64E-08	9.64E-08
La142	0.8	7.67E-08	6.97E-08	7.73E-08	7.73E-08
Sb130m	0.7	6.90E-08	6.63E-08	1.39E-07	8.22E-08
Te134	0.7	6.72E-08	6.70E-08	6.71E-08	6.71E-08
Pd111	0.6	6.25E-08	6.25E-08	6.26E-08	6.26E-08
Te131	0.6	6.22E-08	6.21E-08	6.33E-08	6.33E-08
Sb132m	0.6	5.97E-08	5.94E-08	5.93E-08	5.93E-08
I134	0.6	5.87E-08	6.39E-08	6.27E-08	6.27E-08
Ce146	0.5	5.18E-08	4.59E-08	4.58E-08	5.71E-08
Nd151	0.5	4.74E-08	5.01E-08	4.99E-08	4.99E-08
Sb132	0.5	4.51E-08	4.68E-08	4.70E-08	4.70E-08
Ce145	0.5	4.46E-08	3.88E-08	5.22E-08	5.22E-08
Rb90	0.4	4.10E-08	3.83E-08	3.69E-08	3.72E-08
Sn129m	0.4	4.10E-08	3.98E-08	3.22E-08	3.22E-08
Sb130	0.4	3.86E-08	3.61E-08	3.65E-08	3.65E-08
Kr89	0.3	3.36E-08	3.16E-08	3.14E-08	3.14E-08
Te133m	0.3	3.13E-08	3.80E-08	3.86E-08	3.86E-08
Pr148	0.3	3.01E-08	3.96E-08	3.17E-08	3.17E-08
Sb133	0.3	2.61E-08	2.53E-08	2.52E-08	2.52E-08
Kr87	0.3	2.49E-08	2.50E-08	2.51E-08	2.51E-08
La141	0.3	2.42E-08	2.42E-08	2.42E-08	2.42E-08
Br84	0.2	2.27E-08	2.27E-08	2.62E-08	2.62E-08
Pm153	0.2	2.20E-08	2.29E-08	2.20E-08	2.20E-08
Ru105	0.2	2.19E-08	2.18E-08	2.32E-08	2.32E-08

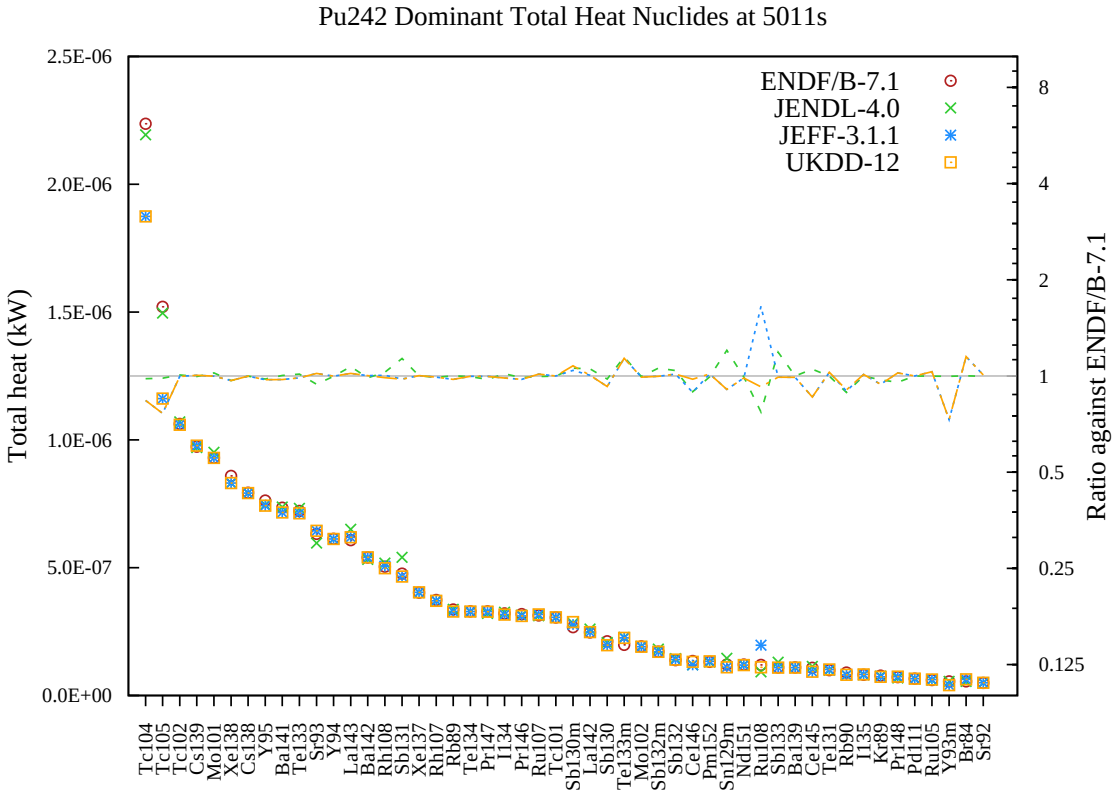

Figure 147: Total heat (in kW) decay data comparison for Pu242 fission pulse after 5011s cooling.

Table 147: Total heat (in kW) decay data comparison for Pu242 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	10.8	2.24E-06	2.19E-06	1.87E-06	1.87E-06
Tc105	7.3	1.52E-06	1.50E-06	1.16E-06	1.16E-06
Tc102	5.1	1.06E-06	1.07E-06	1.06E-06	1.06E-06
Cs139	4.7	9.73E-07	9.70E-07	9.77E-07	9.77E-07
Mo101	4.5	9.30E-07	9.51E-07	9.30E-07	9.30E-07
Xe138	4.1	8.59E-07	8.31E-07	8.31E-07	8.31E-07
Cs138	3.8	7.93E-07	7.92E-07	7.92E-07	7.92E-07
Y95	3.7	7.63E-07	7.46E-07	7.42E-07	7.42E-07
Ba141	3.5	7.34E-07	7.38E-07	7.16E-07	7.16E-07
Te133	3.5	7.22E-07	7.32E-07	7.13E-07	7.13E-07
Sr93	3.0	6.33E-07	5.96E-07	6.44E-07	6.44E-07
Y94	3.0	6.13E-07	6.11E-07	6.12E-07	6.12E-07
La143	2.9	6.08E-07	6.50E-07	6.19E-07	6.19E-07
Ba142	2.6	5.40E-07	5.32E-07	5.41E-07	5.41E-07
Rh108	2.4	5.04E-07	5.18E-07	5.06E-07	4.98E-07
Sb131	2.3	4.76E-07	5.40E-07	4.66E-07	4.65E-07
Xe137	1.9	4.02E-07	4.03E-07	4.04E-07	4.04E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rh107	1.8	3.74E-07	3.70E-07	3.71E-07	3.71E-07
Rb89	1.6	3.36E-07	3.37E-07	3.28E-07	3.28E-07
Te134	1.6	3.29E-07	3.28E-07	3.29E-07	3.29E-07
Pr147	1.6	3.29E-07	3.21E-07	3.28E-07	3.28E-07
I134	1.5	3.21E-07	3.26E-07	3.17E-07	3.17E-07
Pr146	1.5	3.18E-07	3.14E-07	3.11E-07	3.11E-07
Ru107	1.5	3.13E-07	3.12E-07	3.17E-07	3.17E-07
Tc101	1.5	3.06E-07	3.05E-07	3.06E-07	3.06E-07
Sb130m	1.3	2.67E-07	2.83E-07	2.78E-07	2.87E-07
La142	1.2	2.47E-07	2.60E-07	2.48E-07	2.48E-07
Sb130	1.0	2.12E-07	2.07E-07	1.97E-07	1.97E-07
Te133m	1.0	1.98E-07	2.27E-07	2.25E-07	2.25E-07
Mo102	0.9	1.92E-07	1.91E-07	1.91E-07	1.91E-07
Sb132m	0.8	1.72E-07	1.82E-07	1.71E-07	1.71E-07
Sb132	0.7	1.39E-07	1.44E-07	1.40E-07	1.40E-07
Ce146	0.6	1.35E-07	1.20E-07	1.20E-07	1.32E-07
Pm152	0.6	1.32E-07	1.31E-07	1.34E-07	1.34E-07
Sn129m	0.6	1.21E-07	1.46E-07	1.10E-07	1.10E-07
Nd151	0.6	1.21E-07	1.20E-07	1.19E-07	1.19E-07
Ru108	0.6	1.19E-07	9.21E-08	1.97E-07	1.10E-07
Sb133	0.5	1.10E-07	1.31E-07	1.09E-07	1.09E-07
Ba139	0.5	1.10E-07	1.10E-07	1.09E-07	1.09E-07
Ce145	0.5	1.08E-07	1.14E-07	9.33E-08	9.33E-08
Te131	0.5	9.89E-08	9.87E-08	1.02E-07	1.02E-07
Rb90	0.4	8.99E-08	7.99E-08	8.06E-08	8.13E-08
I135	0.4	8.14E-08	8.14E-08	8.23E-08	8.23E-08
Kr89	0.4	7.77E-08	7.56E-08	7.32E-08	7.32E-08
Pr148	0.3	7.19E-08	6.87E-08	7.36E-08	7.36E-08
Pd111	0.3	6.60E-08	6.60E-08	6.60E-08	6.60E-08
Ru105	0.3	6.08E-08	6.08E-08	6.27E-08	6.27E-08
Y93m	0.3	5.54E-08	5.52E-08	4.04E-08	4.04E-08
Br84	0.3	5.51E-08	5.52E-08	6.34E-08	6.34E-08
Sr92	0.2	4.93E-08	4.92E-08	4.97E-08	4.97E-08

10.5 10000s after pulse

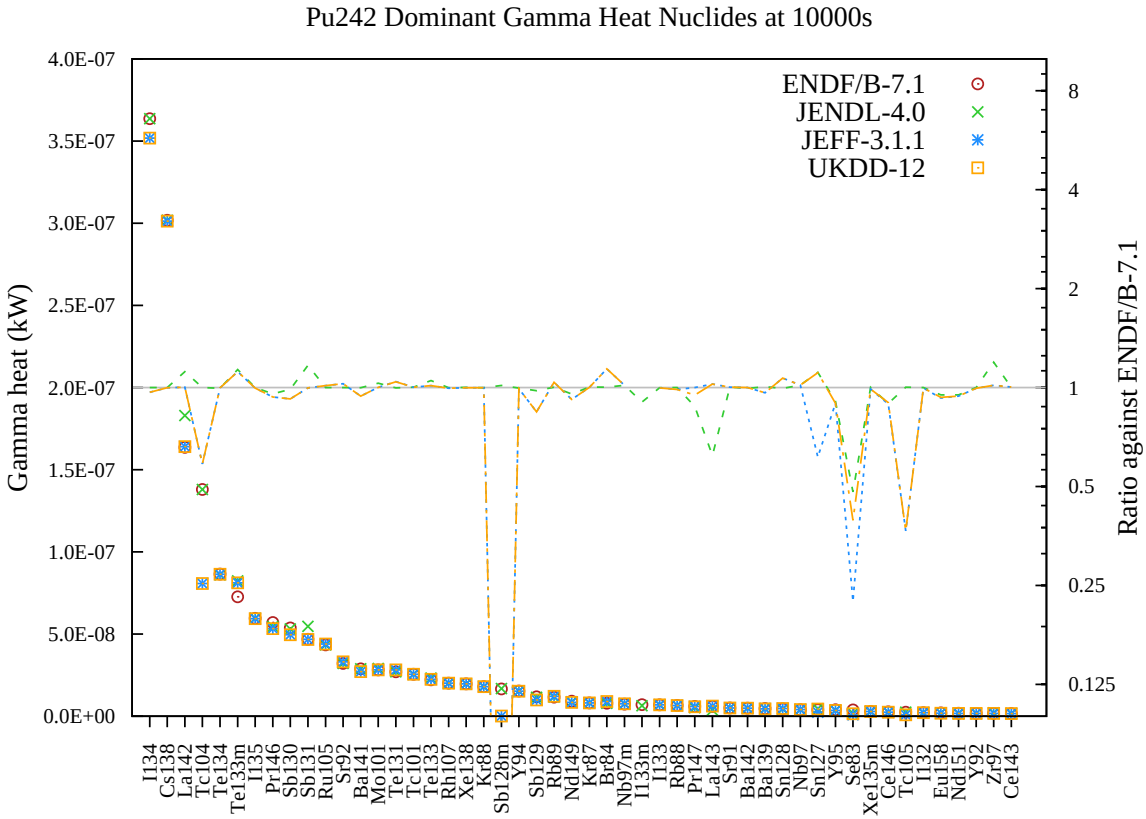

Figure 148: Gamma heat (in kW) decay data comparison for Pu242 fission pulse after 10000s cooling.

Table 148: Gamma heat (in kW) decay data comparison for Pu242 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	20.2	3.64E-07	3.64E-07	3.52E-07	3.52E-07
Cs138	16.8	3.02E-07	3.02E-07	3.01E-07	3.01E-07
La142	9.1	1.64E-07	1.83E-07	1.64E-07	1.64E-07
Tc104	7.7	1.38E-07	1.38E-07	8.08E-08	8.08E-08
Te134	4.8	8.65E-08	8.61E-08	8.63E-08	8.63E-08
Te133m	4.0	7.26E-08	8.23E-08	8.12E-08	8.12E-08
I135	3.3	5.96E-08	5.96E-08	5.94E-08	5.94E-08
Pr146	3.2	5.70E-08	5.45E-08	5.33E-08	5.33E-08
Sb130	3.0	5.37E-08	5.31E-08	4.96E-08	4.96E-08
Sb131	2.6	4.68E-08	5.47E-08	4.68E-08	4.67E-08
Ru105	2.4	4.34E-08	4.34E-08	4.40E-08	4.40E-08
Sr92	1.8	3.22E-08	3.22E-08	3.31E-08	3.31E-08
Ba141	1.6	2.89E-08	2.88E-08	2.72E-08	2.72E-08

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Mo101	1.6	2.82E-08	2.90E-08	2.82E-08	2.82E-08
Te131	1.5	2.71E-08	2.70E-08	2.82E-08	2.82E-08
Tc101	1.4	2.55E-08	2.56E-08	2.56E-08	2.56E-08
Te133	1.2	2.21E-08	2.32E-08	2.24E-08	2.24E-08
Rh107	1.1	2.02E-08	2.01E-08	2.01E-08	2.01E-08
Xe138	1.1	1.97E-08	1.97E-08	1.97E-08	1.97E-08
Kr88	1.0	1.80E-08	1.80E-08	1.80E-08	1.80E-08
Sb128m	0.9	1.66E-08	1.68E-08	5.42E-11	5.42E-11
Y94	0.9	1.54E-08	1.53E-08	1.52E-08	1.52E-08
Sb129	0.7	1.18E-08	1.15E-08	9.92E-09	9.92E-09
Rb89	0.6	1.16E-08	1.17E-08	1.21E-08	1.21E-08
Nd149	0.5	9.10E-09	8.69E-09	8.37E-09	8.37E-09
Kr87	0.4	8.07E-09	8.10E-09	8.08E-09	8.08E-09
Br84	0.4	7.87E-09	7.88E-09	8.97E-09	8.97E-09
Nb97m	0.4	7.39E-09	7.51E-09	7.51E-09	7.51E-09
I133m	0.4	7.06E-09	—	—	—
I133	0.4	6.95E-09	6.94E-09	6.94E-09	6.94E-09
Rb88	0.4	6.60E-09	6.60E-09	6.51E-09	6.51E-09
Pr147	0.3	6.01E-09	5.26E-09	6.01E-09	5.70E-09
La143	0.3	5.97E-09	3.71E-09	6.12E-09	6.12E-09
Sr91	0.3	4.97E-09	4.99E-09	4.99E-09	4.99E-09
Ba142	0.3	4.94E-09	4.91E-09	4.94E-09	4.94E-09
Ba139	0.3	4.64E-09	4.67E-09	4.47E-09	4.47E-09
Sn128	0.2	4.42E-09	4.39E-09	4.72E-09	4.72E-09
Nb97	0.2	3.98E-09	4.05E-09	4.05E-09	4.05E-09
Sn127	0.2	3.98E-09	4.42E-09	2.45E-09	4.41E-09
Y95	0.2	3.98E-09	3.61E-09	3.56E-09	3.56E-09
Se83	0.2	3.78E-09	1.82E-09	8.45E-10	1.49E-09
Xe135m	0.2	2.85E-09	2.85E-09	2.82E-09	2.82E-09
Ce146	0.1	2.69E-09	2.41E-09	2.40E-09	2.42E-09
Tc105	0.1	2.41E-09	2.42E-09	8.82E-10	8.82E-10
I132	0.1	2.08E-09	2.08E-09	2.08E-09	2.08E-09
Eu158	0.1	1.99E-09	1.89E-09	1.85E-09	1.86E-09
Nd151	0.1	1.77E-09	1.68E-09	1.67E-09	1.67E-09
Y92	0.1	1.72E-09	1.72E-09	1.71E-09	1.71E-09
Zr97	0.1	1.70E-09	2.03E-09	1.72E-09	1.72E-09
Ce143	0.1	1.57E-09	1.57E-09	1.57E-09	1.57E-09

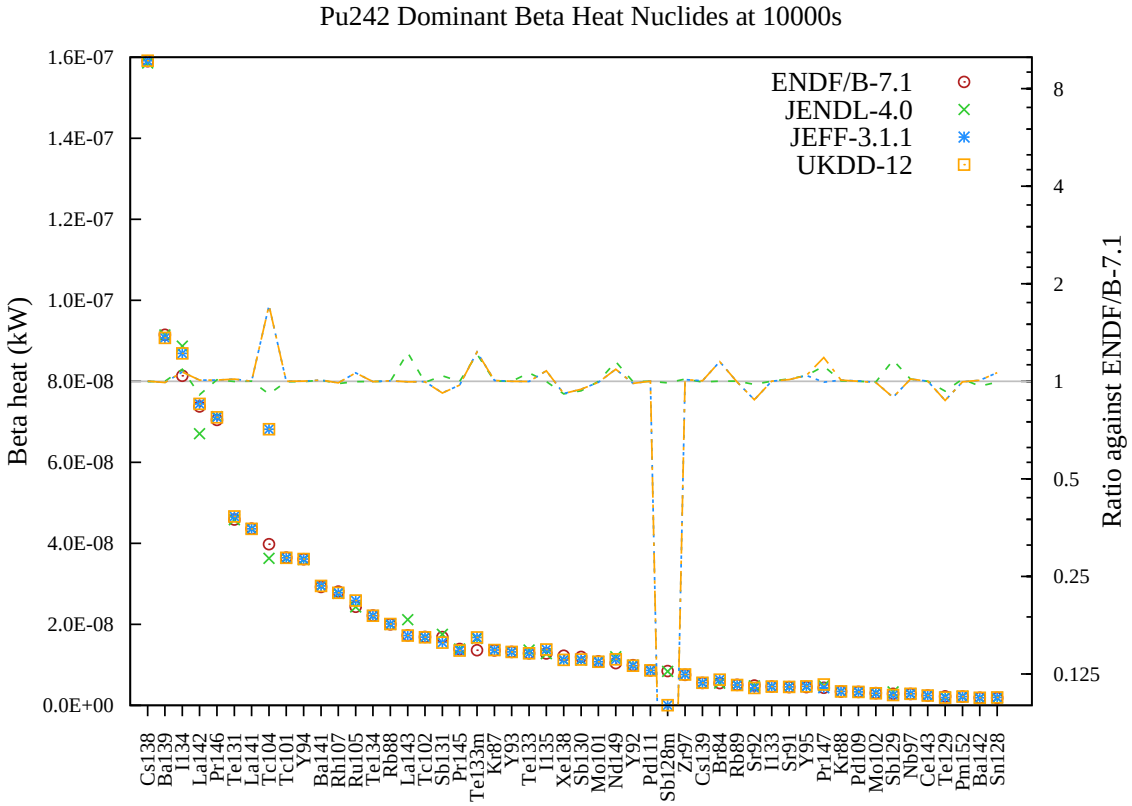

Figure 149: Beta heat (in kW) decay data comparison for Pu242 fission pulse after 10000s cooling.

Table 149: Beta heat (in kW) decay data comparison for Pu242 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	14.4	1.59E-07	1.59E-07	1.59E-07	1.59E-07
Ba139	8.3	9.15E-08	9.14E-08	9.07E-08	9.07E-08
I134	7.4	8.13E-08	8.87E-08	8.69E-08	8.69E-08
La142	6.7	7.38E-08	6.71E-08	7.44E-08	7.44E-08
Pr146	6.4	7.05E-08	7.13E-08	7.11E-08	7.11E-08
Te131	4.2	4.59E-08	4.58E-08	4.66E-08	4.66E-08
La141	4.0	4.36E-08	4.36E-08	4.36E-08	4.36E-08
Tc104	3.6	3.98E-08	3.63E-08	6.82E-08	6.82E-08
Tc101	3.3	3.65E-08	3.64E-08	3.64E-08	3.64E-08
Y94	3.3	3.61E-08	3.60E-08	3.61E-08	3.61E-08
Ba141	2.7	2.92E-08	2.95E-08	2.95E-08	2.95E-08
Rh107	2.5	2.81E-08	2.77E-08	2.78E-08	2.78E-08
Ru105	2.2	2.44E-08	2.43E-08	2.59E-08	2.59E-08
Te134	2.0	2.22E-08	2.21E-08	2.21E-08	2.21E-08
Rb88	1.8	2.00E-08	2.00E-08	2.01E-08	2.01E-08
La143	1.6	1.73E-08	2.12E-08	1.72E-08	1.72E-08

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	1.5	1.69E-08	1.68E-08	1.68E-08	1.68E-08
Sb131	1.5	1.68E-08	1.75E-08	1.55E-08	1.55E-08
Pr145	1.3	1.39E-08	1.39E-08	1.35E-08	1.35E-08
Te133m	1.2	1.36E-08	1.65E-08	1.68E-08	1.68E-08
Kr87	1.2	1.36E-08	1.36E-08	1.37E-08	1.37E-08
Y93	1.2	1.32E-08	1.32E-08	1.32E-08	1.32E-08
Te133	1.2	1.29E-08	1.37E-08	1.28E-08	1.28E-08
I135	1.2	1.28E-08	1.28E-08	1.38E-08	1.38E-08
Xe138	1.1	1.23E-08	1.12E-08	1.12E-08	1.12E-08
Sb130	1.1	1.20E-08	1.12E-08	1.13E-08	1.13E-08
Mo101	1.0	1.08E-08	1.08E-08	1.08E-08	1.08E-08
Nd149	0.9	1.04E-08	1.20E-08	1.14E-08	1.14E-08
Y92	0.9	9.91E-09	9.89E-09	9.77E-09	9.77E-09
Pd111	0.8	8.62E-09	8.62E-09	8.63E-09	8.63E-09
Sb128m	0.8	8.46E-09	8.38E-09	2.72E-11	2.72E-11
Zr97	0.7	7.52E-09	7.64E-09	7.61E-09	7.61E-09
Cs139	0.5	5.55E-09	5.52E-09	5.57E-09	5.57E-09
Br84	0.5	5.50E-09	5.51E-09	6.33E-09	6.33E-09
Rb89	0.5	5.05E-09	5.05E-09	5.02E-09	5.02E-09
Sr92	0.4	4.91E-09	4.80E-09	4.31E-09	4.31E-09
I133	0.4	4.63E-09	4.64E-09	4.64E-09	4.64E-09
Sr91	0.4	4.51E-09	4.59E-09	4.57E-09	4.57E-09
Y95	0.4	4.50E-09	4.68E-09	4.69E-09	4.69E-09
Pr147	0.4	4.35E-09	4.85E-09	4.33E-09	5.16E-09
Kr88	0.3	3.40E-09	3.41E-09	3.43E-09	3.43E-09
Pd109	0.3	3.30E-09	3.30E-09	3.31E-09	3.30E-09
Mo102	0.3	3.02E-09	3.01E-09	3.00E-09	3.00E-09
Sb129	0.3	2.86E-09	3.33E-09	2.55E-09	2.55E-09
Nb97	0.3	2.81E-09	2.85E-09	2.86E-09	2.86E-09
Ce143	0.2	2.42E-09	2.43E-09	2.43E-09	2.43E-09
Te129	0.2	2.22E-09	2.07E-09	1.94E-09	1.94E-09
Pm152	0.2	2.19E-09	2.22E-09	2.18E-09	2.18E-09
Ba142	0.2	1.87E-09	1.81E-09	1.89E-09	1.89E-09
Sn128	0.2	1.85E-09	1.84E-09	1.96E-09	1.96E-09

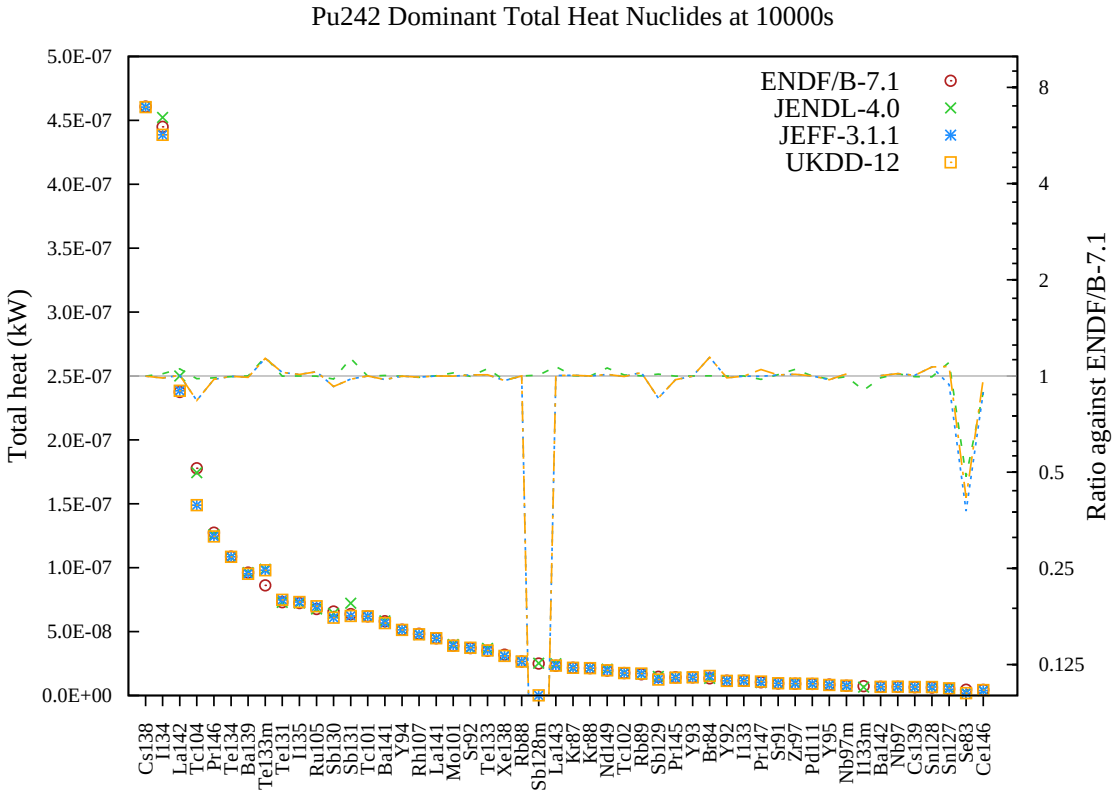

Figure 150: Total heat (in kW) decay data comparison for Pu242 fission pulse after 10000s cooling.

Table 150: Total heat (in kW) decay data comparison for Pu242 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	15.9	4.61E-07	4.60E-07	4.60E-07	4.60E-07
I134	15.3	4.45E-07	4.52E-07	4.39E-07	4.39E-07
La142	8.2	2.37E-07	2.50E-07	2.38E-07	2.38E-07
Tc104	6.1	1.78E-07	1.74E-07	1.49E-07	1.49E-07
Pr146	4.4	1.27E-07	1.26E-07	1.24E-07	1.24E-07
Te134	3.7	1.09E-07	1.08E-07	1.08E-07	1.08E-07
Ba139	3.3	9.61E-08	9.61E-08	9.52E-08	9.52E-08
Te133m	3.0	8.62E-08	9.88E-08	9.80E-08	9.80E-08
Te131	2.5	7.30E-08	7.28E-08	7.49E-08	7.48E-08
I135	2.5	7.24E-08	7.23E-08	7.32E-08	7.32E-08
Ru105	2.3	6.77E-08	6.77E-08	6.98E-08	6.98E-08
Sb130	2.3	6.57E-08	6.42E-08	6.09E-08	6.09E-08
Sb131	2.2	6.37E-08	7.22E-08	6.23E-08	6.22E-08
Tc101	2.1	6.20E-08	6.19E-08	6.20E-08	6.20E-08
Ba141	2.0	5.81E-08	5.83E-08	5.66E-08	5.66E-08
Y94	1.8	5.14E-08	5.13E-08	5.13E-08	5.13E-08
Rh107	1.7	4.82E-08	4.78E-08	4.79E-08	4.79E-08

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La141	1.5	4.48E-08	4.48E-08	4.48E-08	4.48E-08
Mo101	1.3	3.90E-08	3.99E-08	3.90E-08	3.90E-08
Sr92	1.3	3.71E-08	3.70E-08	3.74E-08	3.74E-08
Te133	1.2	3.50E-08	3.69E-08	3.52E-08	3.52E-08
Xe138	1.1	3.20E-08	3.09E-08	3.09E-08	3.09E-08
Rb88	0.9	2.66E-08	2.66E-08	2.66E-08	2.66E-08
Sb128m	0.9	2.51E-08	2.52E-08	8.14E-11	8.14E-11
La143	0.8	2.32E-08	2.49E-08	2.33E-08	2.33E-08
Kr87	0.7	2.16E-08	2.17E-08	2.17E-08	2.17E-08
Kr88	0.7	2.14E-08	2.14E-08	2.14E-08	2.14E-08
Nd149	0.7	1.95E-08	2.07E-08	1.97E-08	1.97E-08
Tc102	0.6	1.76E-08	1.77E-08	1.75E-08	1.75E-08
Rb89	0.6	1.67E-08	1.67E-08	1.71E-08	1.71E-08
Sb129	0.5	1.46E-08	1.48E-08	1.25E-08	1.25E-08
Pr145	0.5	1.43E-08	1.43E-08	1.39E-08	1.39E-08
Y93	0.5	1.43E-08	1.43E-08	1.43E-08	1.43E-08
Br84	0.5	1.34E-08	1.34E-08	1.53E-08	1.53E-08
Y92	0.4	1.16E-08	1.16E-08	1.15E-08	1.15E-08
I133	0.4	1.16E-08	1.16E-08	1.16E-08	1.16E-08
Pr147	0.4	1.04E-08	1.01E-08	1.03E-08	1.09E-08
Sr91	0.3	9.49E-09	9.58E-09	9.56E-09	9.56E-09
Zr97	0.3	9.22E-09	9.67E-09	9.34E-09	9.34E-09
Pd111	0.3	9.11E-09	9.10E-09	9.11E-09	9.11E-09
Y95	0.3	8.47E-09	8.29E-09	8.25E-09	8.25E-09
Nb97m	0.3	7.54E-09	7.51E-09	7.66E-09	7.66E-09
I133m	0.3	7.29E-09	6.58E-09	—	—
Ba142	0.2	6.81E-09	6.72E-09	6.82E-09	6.82E-09
Nb97	0.2	6.79E-09	6.90E-09	6.91E-09	6.91E-09
Cs139	0.2	6.56E-09	6.53E-09	6.59E-09	6.59E-09
Sn128	0.2	6.26E-09	6.23E-09	6.68E-09	6.68E-09
Sn127	0.2	5.21E-09	5.74E-09	4.89E-09	5.58E-09
Se83	0.2	4.47E-09	2.17E-09	1.69E-09	1.86E-09
Ce146	0.2	4.37E-09	3.90E-09	3.89E-09	4.28E-09

11 Decay data comparison for ^{241}Am 0.0253 eV pulse decay heat

11.1 10s after pulse

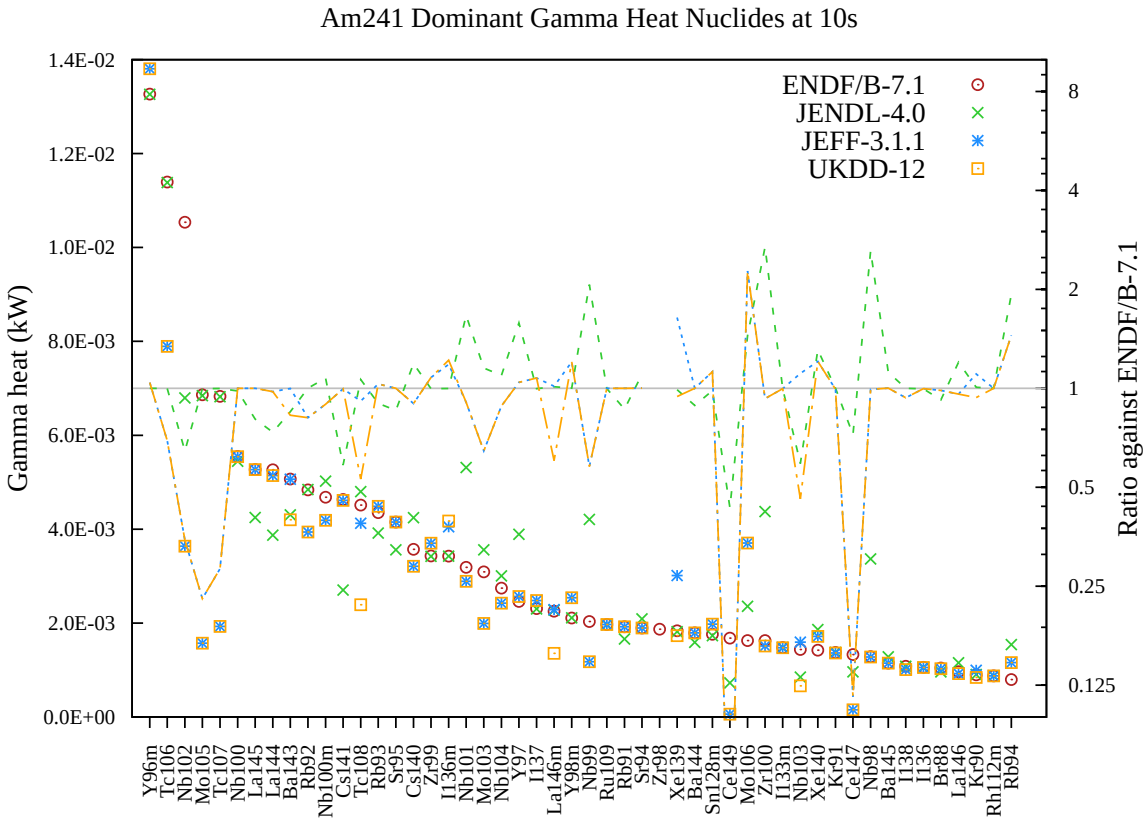

Figure 151: Gamma heat (in kW) decay data comparison for Am241 fission pulse after 10s cooling.

Table 151: Gamma heat (in kW) decay data comparison for Am241 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y96m	7.2	1.33E-02	1.33E-02	1.38E-02	1.38E-02
Tc106	6.1	1.14E-02	1.14E-02	7.89E-03	7.89E-03
Nb102	5.7	1.05E-02	6.80E-03	3.64E-03	3.64E-03
Mo105	3.7	6.86E-03	6.84E-03	1.57E-03	1.57E-03
Tc107	3.7	6.83E-03	6.82E-03	1.93E-03	1.93E-03
Nb100	3.0	5.55E-03	5.45E-03	5.55E-03	5.55E-03
La145	2.8	5.27E-03	4.25E-03	5.27E-03	5.27E-03
La144	2.8	5.27E-03	3.87E-03	5.14E-03	5.14E-03
Ba143	2.7	5.07E-03	4.30E-03	5.06E-03	4.20E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb92	2.6	4.84E-03	4.84E-03	3.94E-03	3.94E-03
Nb100m	2.5	4.68E-03	5.02E-03	4.19E-03	4.19E-03
Cs141	2.5	4.63E-03	2.70E-03	4.61E-03	4.61E-03
Tc108	2.4	4.51E-03	4.80E-03	4.13E-03	2.39E-03
Rb93	2.3	4.35E-03	3.92E-03	4.49E-03	4.49E-03
Sr95	2.2	4.15E-03	3.56E-03	4.15E-03	4.15E-03
Cs140	1.9	3.57E-03	4.25E-03	3.21E-03	3.21E-03
Zr99	1.9	3.43E-03	3.42E-03	3.70E-03	3.70E-03
I136m	1.8	3.43E-03	3.42E-03	4.05E-03	4.17E-03
Nb101	1.7	3.19E-03	5.31E-03	2.89E-03	2.89E-03
Mo103	1.7	3.09E-03	3.56E-03	1.99E-03	1.99E-03
Nb104	1.5	2.74E-03	3.00E-03	2.42E-03	2.42E-03
Y97	1.3	2.46E-03	3.89E-03	2.57E-03	2.57E-03
I137	1.2	2.31E-03	2.30E-03	2.48E-03	2.48E-03
La146m	1.2	2.25E-03	2.28E-03	2.29E-03	1.36E-03
Y98m	1.1	2.11E-03	2.11E-03	2.54E-03	2.54E-03
Nb99	1.1	2.03E-03	4.21E-03	1.18E-03	1.18E-03
Ru109	1.1	1.97E-03	1.96E-03	1.97E-03	1.97E-03
Rb91	1.0	1.92E-03	1.66E-03	1.92E-03	1.92E-03
Sr94	1.0	1.89E-03	2.09E-03	1.90E-03	1.90E-03
Zr98	1.0	1.87E-03	—	—	—
Xe139	1.0	1.83E-03	1.82E-03	3.01E-03	1.73E-03
Ba144	1.0	1.79E-03	1.59E-03	1.79E-03	1.79E-03
Sn128m	0.9	1.76E-03	1.73E-03	1.98E-03	1.98E-03
Ce149	0.9	1.68E-03	7.27E-04	5.89E-05	5.89E-05
Mo106	0.9	1.63E-03	2.36E-03	3.70E-03	3.70E-03
Zr100	0.9	1.63E-03	4.38E-03	1.51E-03	1.51E-03
I133m	0.8	1.48E-03	1.48E-03	1.48E-03	1.48E-03
Nb103	0.8	1.44E-03	8.50E-04	1.59E-03	6.63E-04
Xe140	0.8	1.42E-03	1.86E-03	1.72E-03	1.72E-03
Kr91	0.7	1.37E-03	1.37E-03	1.36E-03	1.36E-03
Ce147	0.7	1.33E-03	9.60E-04	1.53E-04	1.53E-04
Nb98	0.7	1.28E-03	3.37E-03	1.28E-03	1.28E-03
Ba145	0.6	1.15E-03	1.28E-03	1.15E-03	1.15E-03
I138	0.6	1.08E-03	1.08E-03	1.01E-03	1.01E-03
I136	0.6	1.06E-03	1.05E-03	1.05E-03	1.05E-03
Br88	0.6	1.04E-03	9.61E-04	1.03E-03	1.03E-03
La146	0.5	9.63E-04	1.16E-03	9.25E-04	9.25E-04
Kr90	0.5	8.98E-04	9.05E-04	9.94E-04	8.42E-04
Rh112m	0.5	8.75E-04	8.74E-04	8.75E-04	8.75E-04
Rb94	0.4	7.98E-04	1.54E-03	1.16E-03	1.16E-03

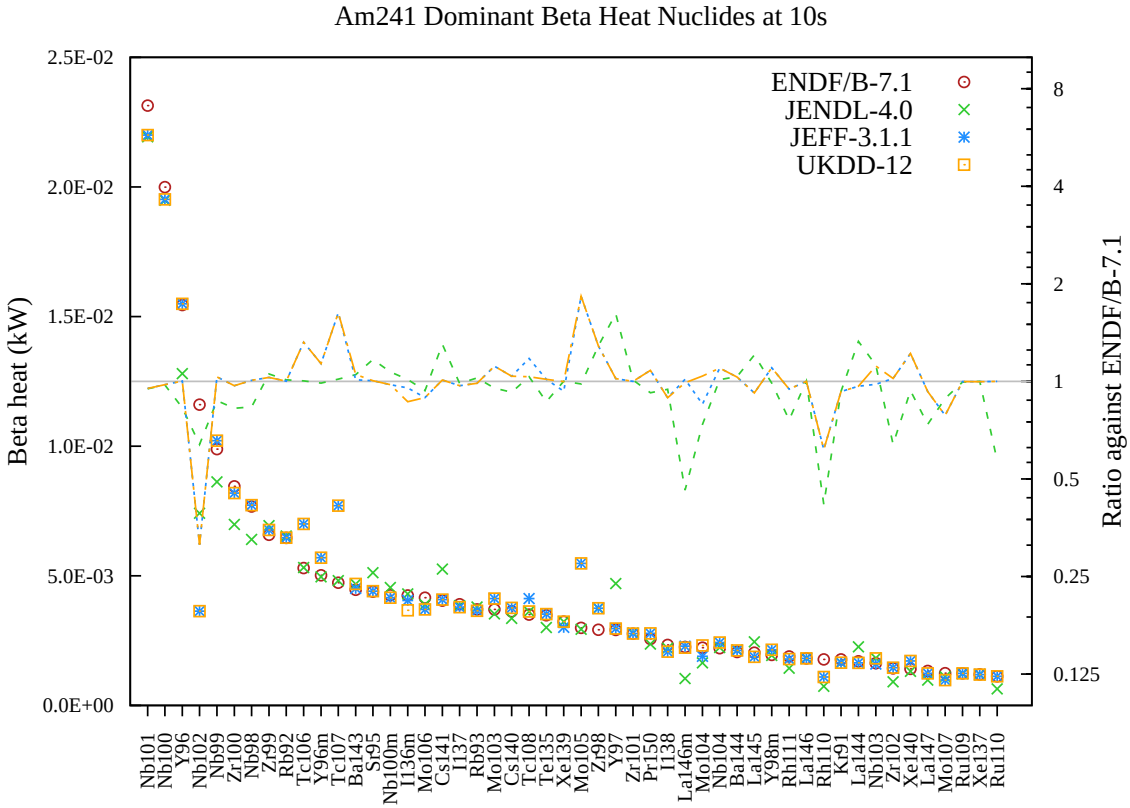

Figure 152: Beta heat (in kW) decay data comparison for Am241 fission pulse after 10s cooling.

Table 152: Beta heat (in kW) decay data comparison for Am241 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb101	9.2	2.31E-02	2.19E-02	2.20E-02	2.20E-02
Nb100	7.9	2.00E-02	1.95E-02	1.95E-02	1.95E-02
Y96	6.1	1.54E-02	1.28E-02	1.55E-02	1.55E-02
Nb102	4.6	1.16E-02	7.41E-03	3.64E-03	3.64E-03
Nb99	3.9	9.89E-03	8.62E-03	1.02E-02	1.02E-02
Zr100	3.3	8.45E-03	6.98E-03	8.19E-03	8.19E-03
Nb98	3.0	7.67E-03	6.40E-03	7.72E-03	7.72E-03
Zr99	2.6	6.58E-03	6.93E-03	6.77E-03	6.77E-03
Rb92	2.6	6.46E-03	6.53E-03	6.47E-03	6.47E-03
Tc106	2.1	5.30E-03	5.32E-03	7.00E-03	7.00E-03
Y96m	2.0	5.02E-03	4.96E-03	5.70E-03	5.70E-03
Tc107	1.9	4.73E-03	4.81E-03	7.70E-03	7.70E-03
Ba143	1.8	4.46E-03	4.68E-03	4.51E-03	4.69E-03
Sr95	1.7	4.39E-03	5.12E-03	4.41E-03	4.41E-03
Nb100m	1.7	4.25E-03	4.55E-03	4.15E-03	4.15E-03
I136m	1.7	4.24E-03	4.30E-03	4.05E-03	3.67E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Mo106	1.6	4.16E-03	3.89E-03	3.70E-03	3.70E-03
Cs141	1.6	4.04E-03	5.26E-03	4.08E-03	4.08E-03
I137	1.5	3.91E-03	3.85E-03	3.79E-03	3.79E-03
Rb93	1.5	3.70E-03	3.80E-03	3.65E-03	3.65E-03
Mo103	1.5	3.70E-03	3.53E-03	4.12E-03	4.12E-03
Cs140	1.4	3.63E-03	3.36E-03	3.76E-03	3.76E-03
Tc108	1.4	3.50E-03	3.62E-03	4.13E-03	3.62E-03
Te135	1.4	3.48E-03	3.01E-03	3.53E-03	3.53E-03
Xe139	1.3	3.23E-03	3.23E-03	3.01E-03	3.23E-03
Mo105	1.2	2.99E-03	2.94E-03	5.48E-03	5.48E-03
Zr98	1.2	2.92E-03	3.75E-03	3.75E-03	3.75E-03
Y97	1.2	2.91E-03	4.70E-03	2.97E-03	2.97E-03
Zr101	1.1	2.77E-03	2.79E-03	2.77E-03	2.77E-03
Pr150	1.0	2.57E-03	2.37E-03	2.78E-03	2.78E-03
I138	0.9	2.33E-03	2.20E-03	2.07E-03	2.07E-03
La146m	0.9	2.25E-03	1.04E-03	2.29E-03	2.23E-03
Mo104	0.9	2.23E-03	1.64E-03	1.89E-03	2.32E-03
Nb104	0.9	2.21E-03	2.23E-03	2.42E-03	2.42E-03
Ba144	0.8	2.06E-03	2.13E-03	2.12E-03	2.12E-03
La145	0.8	2.03E-03	2.45E-03	1.87E-03	1.87E-03
Y98m	0.8	1.95E-03	1.93E-03	2.15E-03	2.15E-03
Rh111	0.7	1.89E-03	1.44E-03	1.79E-03	1.79E-03
La146	0.7	1.82E-03	1.82E-03	1.82E-03	1.82E-03
Rh110	0.7	1.78E-03	7.41E-04	1.10E-03	1.10E-03
Kr91	0.7	1.77E-03	1.65E-03	1.65E-03	1.65E-03
La144	0.7	1.70E-03	2.26E-03	1.64E-03	1.64E-03
Nb103	0.6	1.63E-03	1.83E-03	1.59E-03	1.81E-03
Zr102	0.6	1.43E-03	9.13E-04	1.46E-03	1.46E-03
Xe140	0.6	1.41E-03	1.32E-03	1.72E-03	1.72E-03
La147	0.5	1.33E-03	9.80E-04	1.24E-03	1.24E-03
Mo107	0.5	1.24E-03	1.10E-03	9.77E-04	9.77E-04
Ru109	0.5	1.24E-03	1.23E-03	1.24E-03	1.24E-03
Xe137	0.5	1.20E-03	1.20E-03	1.19E-03	1.19E-03
Ru110	0.4	1.13E-03	6.40E-04	1.13E-03	1.13E-03

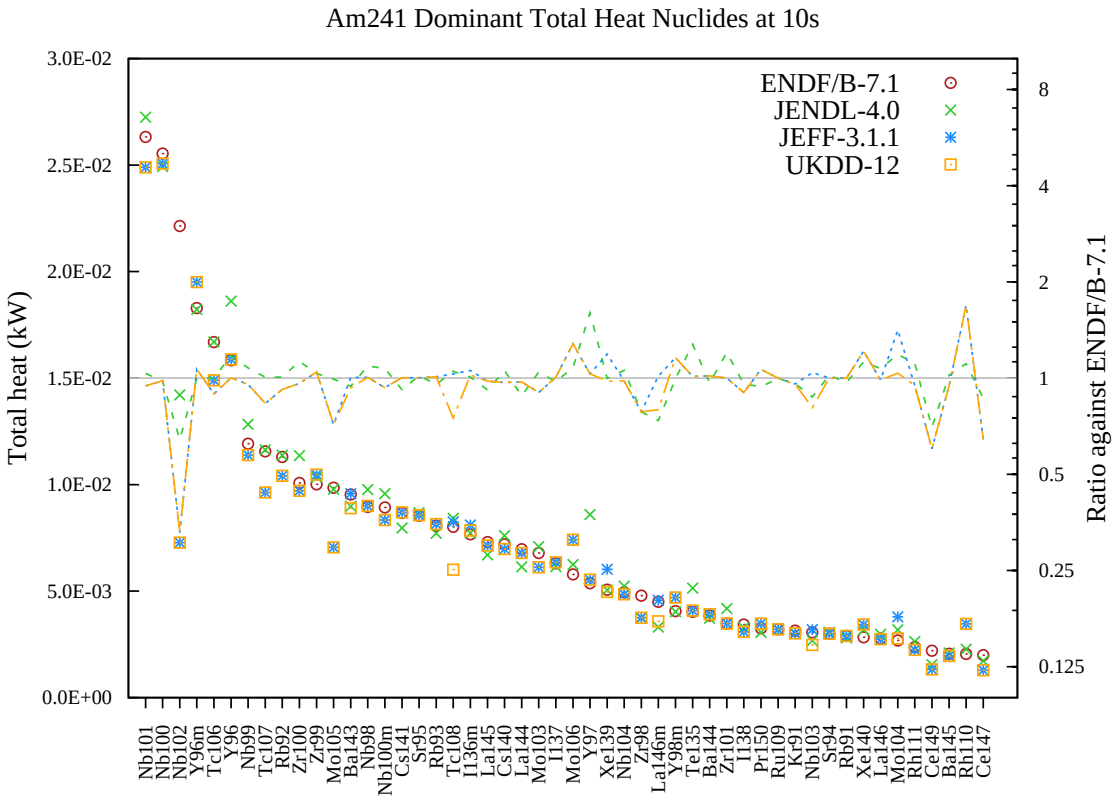

Figure 153: Total heat (in kW) decay data comparison for Am241 fission pulse after 10s cooling.

Table 153: Total heat (in kW) decay data comparison for Am241 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb101	6.0	2.63E-02	2.72E-02	2.49E-02	2.49E-02
Nb100	5.8	2.55E-02	2.49E-02	2.51E-02	2.51E-02
Nb102	5.1	2.21E-02	1.42E-02	7.28E-03	7.28E-03
Y96m	4.2	1.83E-02	1.82E-02	1.95E-02	1.95E-02
Tc106	3.8	1.67E-02	1.67E-02	1.49E-02	1.49E-02
Y96	3.6	1.58E-02	1.86E-02	1.59E-02	1.59E-02
Nb99	2.7	1.19E-02	1.28E-02	1.14E-02	1.14E-02
Tc107	2.6	1.16E-02	1.16E-02	9.63E-03	9.63E-03
Rb92	2.6	1.13E-02	1.14E-02	1.04E-02	1.04E-02
Zr100	2.3	1.01E-02	1.14E-02	9.71E-03	9.71E-03
Zr99	2.3	1.00E-02	1.04E-02	1.05E-02	1.05E-02
Mo105	2.2	9.86E-03	9.78E-03	7.05E-03	7.05E-03
Ba143	2.2	9.53E-03	8.99E-03	9.58E-03	8.88E-03
Nb98	2.0	8.96E-03	9.77E-03	9.00E-03	9.00E-03
Nb100m	2.0	8.93E-03	9.57E-03	8.34E-03	8.34E-03
Cs141	2.0	8.67E-03	7.96E-03	8.70E-03	8.70E-03
Sr95	1.9	8.54E-03	8.68E-03	8.56E-03	8.56E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb93	1.8	8.07E-03	7.71E-03	8.15E-03	8.15E-03
Tc108	1.8	8.02E-03	8.42E-03	8.25E-03	6.01E-03
I136m	1.8	7.67E-03	7.73E-03	8.10E-03	7.85E-03
La145	1.7	7.30E-03	6.70E-03	7.14E-03	7.14E-03
Cs140	1.6	7.20E-03	7.60E-03	6.97E-03	6.97E-03
La144	1.6	6.97E-03	6.13E-03	6.79E-03	6.79E-03
Mo103	1.6	6.79E-03	7.09E-03	6.12E-03	6.12E-03
I137	1.4	6.31E-03	6.15E-03	6.35E-03	6.35E-03
Mo106	1.3	5.79E-03	6.25E-03	7.41E-03	7.41E-03
Y97	1.2	5.37E-03	8.60E-03	5.54E-03	5.54E-03
Xe139	1.2	5.07E-03	5.05E-03	6.02E-03	4.96E-03
Nb104	1.1	4.95E-03	5.24E-03	4.85E-03	4.85E-03
Zr98	1.1	4.78E-03	3.75E-03	3.75E-03	3.75E-03
La146m	1.0	4.50E-03	3.31E-03	4.57E-03	3.58E-03
Y98m	0.9	4.06E-03	4.04E-03	4.70E-03	4.70E-03
Te135	0.9	4.03E-03	5.14E-03	4.08E-03	4.08E-03
Ba144	0.9	3.85E-03	3.72E-03	3.92E-03	3.92E-03
Zr101	0.8	3.48E-03	4.18E-03	3.48E-03	3.48E-03
I138	0.8	3.43E-03	3.28E-03	3.09E-03	3.09E-03
Pr150	0.7	3.26E-03	3.07E-03	3.47E-03	3.47E-03
Ru109	0.7	3.21E-03	3.20E-03	3.21E-03	3.21E-03
Kr91	0.7	3.15E-03	3.03E-03	3.01E-03	3.01E-03
Nb103	0.7	3.07E-03	2.68E-03	3.19E-03	2.48E-03
Sr94	0.7	3.00E-03	3.06E-03	3.00E-03	3.00E-03
Rb91	0.7	2.90E-03	2.80E-03	2.89E-03	2.89E-03
Xe140	0.6	2.83E-03	3.18E-03	3.43E-03	3.43E-03
La146	0.6	2.78E-03	2.98E-03	2.74E-03	2.74E-03
Mo104	0.6	2.68E-03	3.18E-03	3.79E-03	2.78E-03
Rh111	0.5	2.37E-03	2.63E-03	2.25E-03	2.25E-03
Ce149	0.5	2.20E-03	1.55E-03	1.32E-03	1.32E-03
Ba145	0.5	2.06E-03	2.10E-03	1.95E-03	1.95E-03
Rh110	0.5	2.05E-03	2.27E-03	3.46E-03	3.46E-03
Ce147	0.5	1.99E-03	1.72E-03	1.28E-03	1.28E-03

11.2 100s after pulse

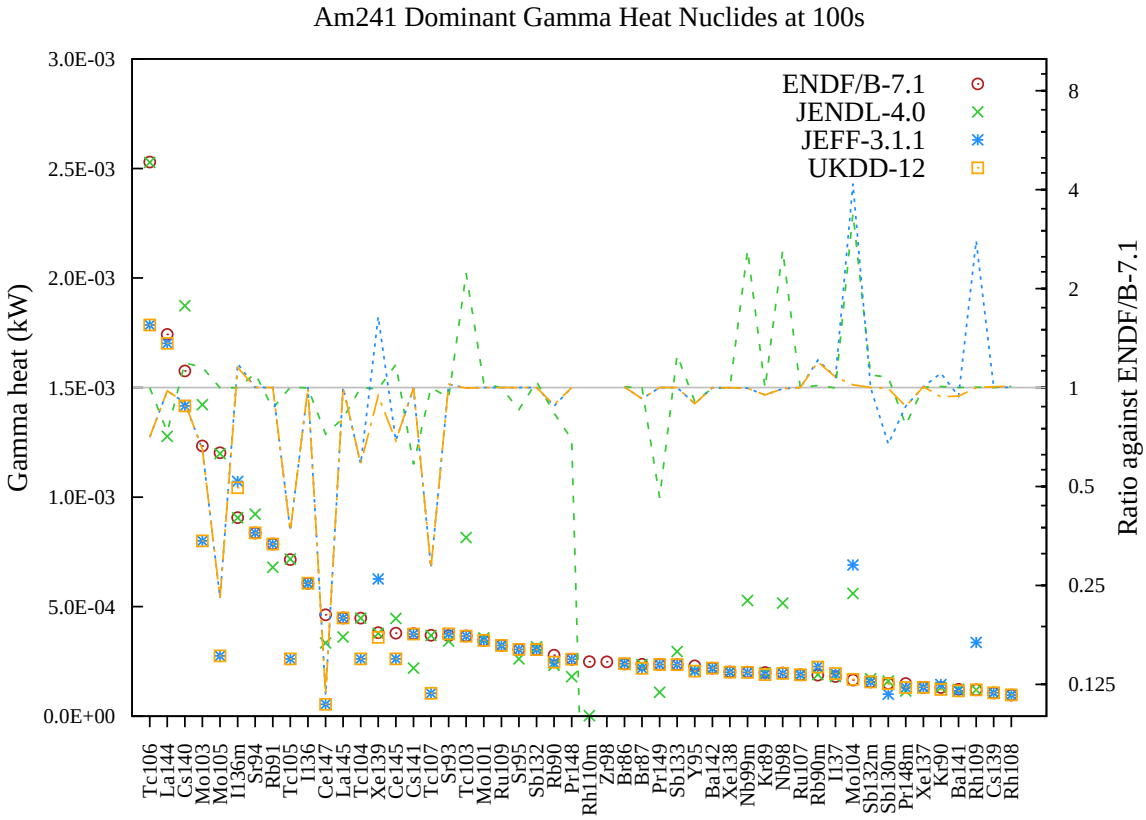

Figure 154: Gamma heat (in kW) decay data comparison for Am241 fission pulse after 100s cooling.

Table 154: Gamma heat (in kW) decay data comparison for Am241 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	10.5	2.53E-03	2.53E-03	1.79E-03	1.79E-03
La144	7.2	1.74E-03	1.28E-03	1.70E-03	1.70E-03
Cs140	6.5	1.58E-03	1.87E-03	1.42E-03	1.42E-03
Mo103	5.1	1.23E-03	1.42E-03	8.01E-04	8.01E-04
Mo105	5.0	1.20E-03	1.20E-03	2.75E-04	2.75E-04
I136m	3.7	9.06E-04	9.05E-04	1.07E-03	1.04E-03
Sr94	3.5	8.36E-04	9.22E-04	8.37E-04	8.37E-04
Rb91	3.2	7.86E-04	6.79E-04	7.86E-04	7.86E-04
Tc105	3.0	7.15E-04	7.17E-04	2.62E-04	2.62E-04
I136	2.5	6.07E-04	6.05E-04	6.07E-04	6.07E-04
Ce147	1.9	4.63E-04	3.34E-04	5.39E-05	5.39E-05
La145	1.9	4.49E-04	3.62E-04	4.49E-04	4.49E-04
Tc104	1.8	4.47E-04	4.47E-04	2.62E-04	2.62E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Xe139	1.6	3.82E-04	3.78E-04	6.26E-04	3.60E-04
Ce145	1.6	3.79E-04	4.46E-04	2.61E-04	2.61E-04
Cs141	1.6	3.76E-04	2.20E-04	3.75E-04	3.75E-04
Tc107	1.5	3.69E-04	3.69E-04	1.04E-04	1.04E-04
Sr93	1.5	3.68E-04	3.43E-04	3.76E-04	3.76E-04
Tc103	1.5	3.66E-04	8.15E-04	3.65E-04	3.65E-04
Mo101	1.4	3.47E-04	3.58E-04	3.46E-04	3.46E-04
Ru109	1.3	3.23E-04	3.22E-04	3.23E-04	3.23E-04
Sr95	1.3	3.05E-04	2.62E-04	3.05E-04	3.05E-04
Sb132	1.3	3.04E-04	3.17E-04	3.04E-04	3.04E-04
Rb90	1.1	2.78E-04	2.33E-04	2.44E-04	2.46E-04
Pr148	1.1	2.60E-04	1.81E-04	2.60E-04	2.60E-04
Rh110m	1.0	2.49E-04	—	—	—
Zr98	1.0	2.48E-04	—	—	—
Br86	1.0	2.39E-04	2.40E-04	2.40E-04	2.40E-04
Br87	1.0	2.37E-04	2.36E-04	2.19E-04	2.19E-04
Pr149	1.0	2.36E-04	1.09E-04	2.36E-04	2.36E-04
Sb133	1.0	2.35E-04	2.95E-04	2.35E-04	2.35E-04
Y95	1.0	2.30E-04	2.09E-04	2.06E-04	2.06E-04
Ba142	0.9	2.19E-04	2.18E-04	2.19E-04	2.19E-04
Xe138	0.8	2.02E-04	2.02E-04	2.01E-04	2.01E-04
Nb99m	0.8	2.01E-04	5.28E-04	2.00E-04	2.00E-04
Kr89	0.8	2.00E-04	1.99E-04	1.90E-04	1.90E-04
Nb98	0.8	1.97E-04	5.17E-04	1.96E-04	1.96E-04
Ru107	0.8	1.89E-04	1.89E-04	1.89E-04	1.89E-04
Rb90m	0.8	1.87E-04	1.90E-04	2.27E-04	2.24E-04
I137	0.7	1.81E-04	1.81E-04	1.95E-04	1.95E-04
Mo104	0.7	1.65E-04	5.60E-04	6.90E-04	1.69E-04
Sb132m	0.6	1.56E-04	1.71E-04	1.56E-04	1.56E-04
Sb130m	0.6	1.49E-04	1.60E-04	1.01E-04	1.48E-04
Pr148m	0.6	1.49E-04	1.15E-04	1.31E-04	1.31E-04
Xe137	0.5	1.31E-04	1.31E-04	1.32E-04	1.32E-04
Kr90	0.5	1.31E-04	1.32E-04	1.44E-04	1.22E-04
Ba141	0.5	1.23E-04	1.23E-04	1.16E-04	1.16E-04
Rh109	0.5	1.20E-04	1.21E-04	3.37E-04	1.20E-04
Cs139	0.4	1.06E-04	1.06E-04	1.07E-04	1.07E-04
Rh108	0.4	9.62E-05	9.71E-05	9.62E-05	9.71E-05

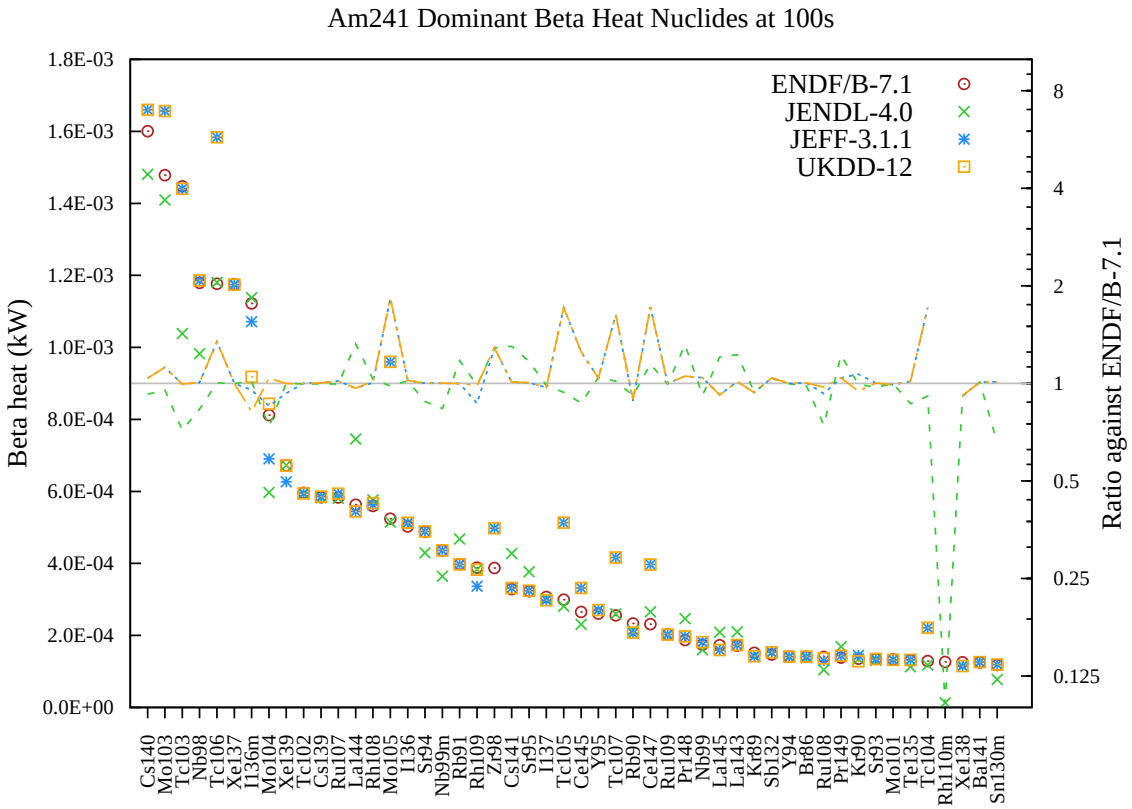

Figure 155: Beta heat (in kW) decay data comparison for Am241 fission pulse after 100s cooling.

Table 155: Beta heat (in kW) decay data comparison for Am241 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	6.6	1.60E-03	1.48E-03	1.66E-03	1.66E-03
Mo103	6.1	1.48E-03	1.41E-03	1.66E-03	1.66E-03
Tc103	6.0	1.45E-03	1.04E-03	1.44E-03	1.44E-03
Nb98	4.9	1.18E-03	9.82E-04	1.19E-03	1.19E-03
Tc106	4.9	1.18E-03	1.18E-03	1.58E-03	1.58E-03
Xe137	4.9	1.18E-03	1.18E-03	1.17E-03	1.17E-03
I136m	4.6	1.12E-03	1.14E-03	1.07E-03	9.18E-04
Mo104	3.4	8.12E-04	5.97E-04	6.90E-04	8.44E-04
Xe139	2.8	6.72E-04	6.73E-04	6.26E-04	6.71E-04
Tc102	2.5	5.96E-04	5.93E-04	5.96E-04	5.95E-04
Cs139	2.4	5.84E-04	5.82E-04	5.86E-04	5.86E-04
Ru107	2.4	5.83E-04	5.80E-04	5.94E-04	5.94E-04
La144	2.3	5.63E-04	7.46E-04	5.44E-04	5.44E-04
Rh108	2.3	5.59E-04	5.76E-04	5.62E-04	5.67E-04
Mo105	2.2	5.24E-04	5.14E-04	9.60E-04	9.60E-04
I136	2.1	5.03E-04	5.12E-04	5.13E-04	5.13E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sr94	2.0	4.88E-04	4.29E-04	4.89E-04	4.89E-04
Nb99m	1.8	4.35E-04	3.64E-04	4.36E-04	4.36E-04
Rb91	1.6	3.98E-04	4.68E-04	3.97E-04	3.97E-04
Rh109	1.6	3.88E-04	3.84E-04	3.37E-04	3.83E-04
Zr98	1.6	3.87E-04	4.98E-04	4.98E-04	4.98E-04
Cs141	1.4	3.28E-04	4.27E-04	3.32E-04	3.32E-04
Sr95	1.3	3.22E-04	3.77E-04	3.24E-04	3.24E-04
I137	1.3	3.07E-04	3.02E-04	2.98E-04	2.98E-04
Tc105	1.2	2.99E-04	2.81E-04	5.13E-04	5.13E-04
Ce145	1.1	2.65E-04	2.31E-04	3.32E-04	3.32E-04
Y95	1.1	2.60E-04	2.71E-04	2.70E-04	2.70E-04
Tc107	1.1	2.56E-04	2.60E-04	4.16E-04	4.16E-04
Rb90	1.0	2.33E-04	2.14E-04	2.06E-04	2.08E-04
Ce147	1.0	2.31E-04	2.65E-04	3.97E-04	3.97E-04
Ru109	0.8	2.03E-04	2.02E-04	2.03E-04	2.03E-04
Pr148	0.8	1.87E-04	2.46E-04	1.97E-04	1.97E-04
Nb99	0.7	1.74E-04	1.60E-04	1.81E-04	1.81E-04
La145	0.7	1.73E-04	2.09E-04	1.59E-04	1.59E-04
La143	0.7	1.71E-04	2.10E-04	1.73E-04	1.73E-04
Kr89	0.6	1.52E-04	1.43E-04	1.42E-04	1.42E-04
Sb132	0.6	1.47E-04	1.52E-04	1.53E-04	1.53E-04
Y94	0.6	1.41E-04	1.41E-04	1.41E-04	1.41E-04
Br86	0.6	1.41E-04	1.38E-04	1.41E-04	1.41E-04
Ru108	0.6	1.40E-04	1.04E-04	1.30E-04	1.36E-04
Pr149	0.6	1.38E-04	1.69E-04	1.44E-04	1.44E-04
Kr90	0.6	1.35E-04	1.35E-04	1.44E-04	1.28E-04
Sr93	0.6	1.34E-04	1.31E-04	1.35E-04	1.35E-04
Mo101	0.6	1.33E-04	1.33E-04	1.32E-04	1.32E-04
Te135	0.5	1.30E-04	1.13E-04	1.32E-04	1.32E-04
Tc104	0.5	1.29E-04	1.18E-04	2.21E-04	2.21E-04
Rh110m	0.5	1.26E-04	1.30E-05	—	—
Xe138	0.5	1.25E-04	1.15E-04	1.15E-04	1.15E-04
Ba141	0.5	1.25E-04	1.26E-04	1.26E-04	1.26E-04
Sn130m	0.5	1.18E-04	7.74E-05	1.19E-04	1.19E-04

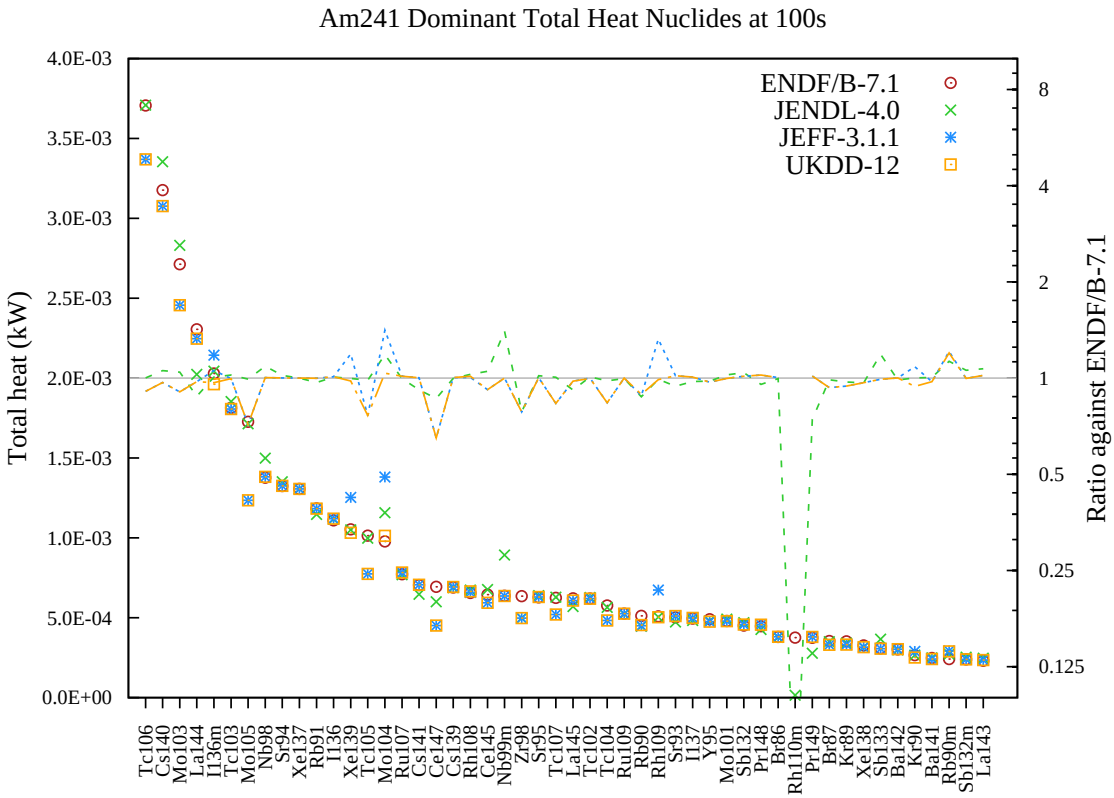

Figure 156: Total heat (in kW) decay data comparison for Am241 fission pulse after 100s cooling.

Table 156: Total heat (in kW) decay data comparison for Am241 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	7.7	3.71E-03	3.71E-03	3.37E-03	3.37E-03
Cs140	6.6	3.18E-03	3.35E-03	3.08E-03	3.08E-03
Mo103	5.6	2.71E-03	2.83E-03	2.46E-03	2.46E-03
La144	4.8	2.31E-03	2.02E-03	2.25E-03	2.25E-03
I136m	4.2	2.03E-03	2.04E-03	2.14E-03	1.96E-03
Tc103	3.7	1.81E-03	1.85E-03	1.81E-03	1.81E-03
Mo105	3.6	1.73E-03	1.71E-03	1.24E-03	1.24E-03
Nb98	2.8	1.38E-03	1.50E-03	1.38E-03	1.38E-03
Sr94	2.7	1.32E-03	1.35E-03	1.33E-03	1.33E-03
Xe137	2.7	1.31E-03	1.31E-03	1.31E-03	1.31E-03
Rb91	2.4	1.18E-03	1.15E-03	1.18E-03	1.18E-03
I136	2.3	1.11E-03	1.12E-03	1.12E-03	1.12E-03
Xe139	2.2	1.05E-03	1.05E-03	1.25E-03	1.03E-03
Tc105	2.1	1.01E-03	9.98E-04	7.75E-04	7.75E-04
Mo104	2.0	9.77E-04	1.16E-03	1.38E-03	1.01E-03
Ru107	1.6	7.72E-04	7.69E-04	7.83E-04	7.83E-04
Cs141	1.5	7.05E-04	6.47E-04	7.07E-04	7.07E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Ce147	1.4	6.94E-04	6.00E-04	4.51E-04	4.51E-04
Cs139	1.4	6.90E-04	6.88E-04	6.93E-04	6.93E-04
Rh108	1.4	6.56E-04	6.74E-04	6.59E-04	6.64E-04
Ce145	1.3	6.44E-04	6.77E-04	5.93E-04	5.93E-04
Nb99m	1.3	6.37E-04	8.92E-04	6.36E-04	6.36E-04
Zr98	1.3	6.35E-04	4.98E-04	4.98E-04	4.98E-04
Sr95	1.3	6.28E-04	6.38E-04	6.29E-04	6.29E-04
Tc107	1.3	6.25E-04	6.29E-04	5.21E-04	5.21E-04
La145	1.3	6.22E-04	5.71E-04	6.08E-04	6.08E-04
Tc102	1.3	6.21E-04	6.26E-04	6.20E-04	6.19E-04
Tc104	1.2	5.76E-04	5.65E-04	4.83E-04	4.83E-04
Ru109	1.1	5.26E-04	5.24E-04	5.26E-04	5.26E-04
Rb90	1.1	5.11E-04	4.47E-04	4.50E-04	4.54E-04
Rh109	1.1	5.09E-04	5.04E-04	6.73E-04	5.03E-04
Sr93	1.0	5.02E-04	4.73E-04	5.11E-04	5.11E-04
I137	1.0	4.95E-04	4.83E-04	4.99E-04	4.99E-04
Y95	1.0	4.90E-04	4.80E-04	4.76E-04	4.76E-04
Mo101	1.0	4.80E-04	4.91E-04	4.79E-04	4.79E-04
Sb132	0.9	4.51E-04	4.69E-04	4.57E-04	4.57E-04
Pr148	0.9	4.47E-04	4.27E-04	4.57E-04	4.57E-04
Br86	0.8	3.79E-04	3.78E-04	3.81E-04	3.81E-04
Rh110m	0.8	3.75E-04	1.51E-05	—	—
Pr149	0.8	3.74E-04	2.78E-04	3.80E-04	3.80E-04
Br87	0.7	3.54E-04	3.50E-04	3.31E-04	3.31E-04
Kr89	0.7	3.52E-04	3.42E-04	3.32E-04	3.32E-04
Xe138	0.7	3.27E-04	3.16E-04	3.16E-04	3.16E-04
Sb133	0.6	3.08E-04	3.66E-04	3.06E-04	3.06E-04
Ba142	0.6	3.03E-04	2.99E-04	3.03E-04	3.03E-04
Kr90	0.5	2.66E-04	2.66E-04	2.89E-04	2.51E-04
Ba141	0.5	2.48E-04	2.49E-04	2.42E-04	2.42E-04
Rb90m	0.5	2.41E-04	2.72E-04	2.93E-04	2.89E-04
Sb132m	0.5	2.40E-04	2.54E-04	2.39E-04	2.39E-04
La143	0.5	2.31E-04	2.47E-04	2.35E-04	2.35E-04

11.3 1000s after pulse

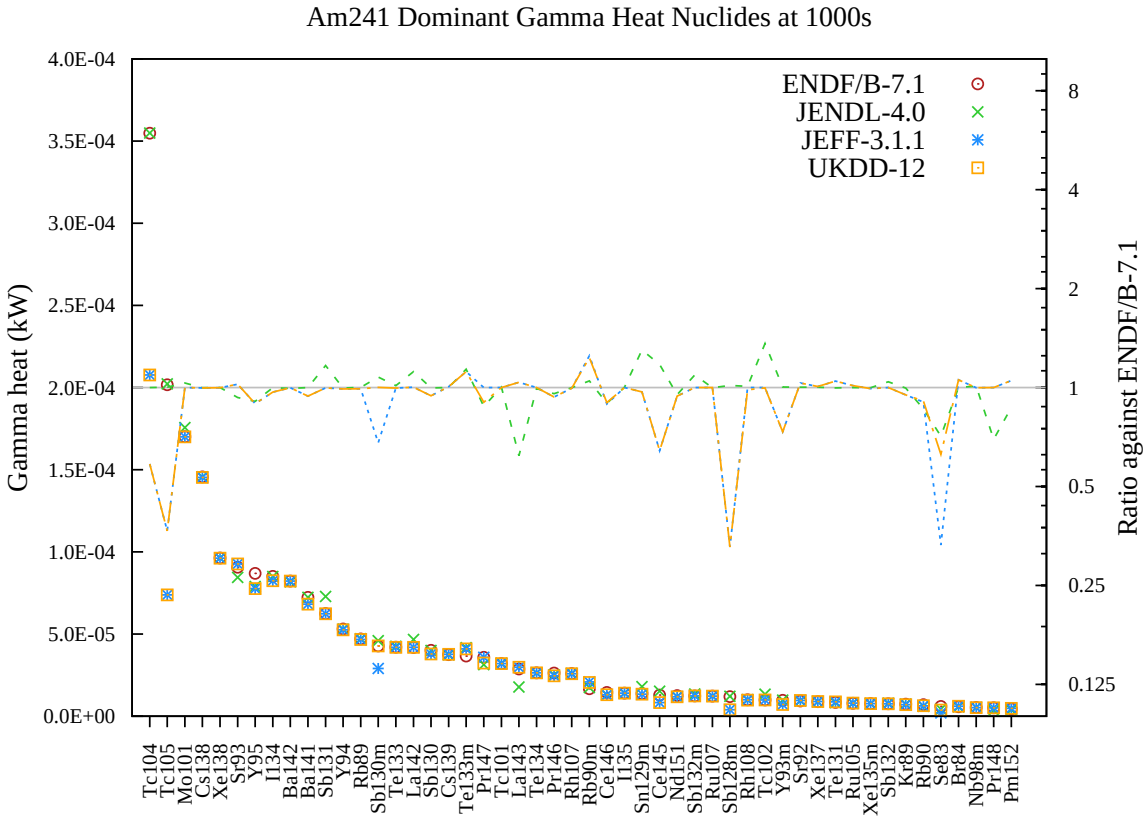

Figure 157: Gamma heat (in kW) decay data comparison for Am241 fission pulse after 1000s cooling.

Table 157: Gamma heat (in kW) decay data comparison for Am241 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	15.5	3.55E-04	3.55E-04	2.08E-04	2.08E-04
Tc105	8.8	2.02E-04	2.02E-04	7.39E-05	7.39E-05
Mo101	7.4	1.70E-04	1.76E-04	1.70E-04	1.70E-04
Cs138	6.4	1.46E-04	1.46E-04	1.45E-04	1.45E-04
Xe138	4.2	9.63E-05	9.63E-05	9.62E-05	9.62E-05
Sr93	4.0	9.06E-05	8.45E-05	9.27E-05	9.27E-05
Y95	3.8	8.69E-05	7.89E-05	7.76E-05	7.76E-05
I134	3.7	8.51E-05	8.50E-05	8.24E-05	8.24E-05
Ba142	3.6	8.23E-05	8.18E-05	8.22E-05	8.22E-05
Ba141	3.2	7.24E-05	7.24E-05	6.82E-05	6.82E-05
Sb131	2.7	6.24E-05	7.29E-05	6.23E-05	6.23E-05
Y94	2.3	5.31E-05	5.30E-05	5.26E-05	5.26E-05
Rb89	2.1	4.70E-05	4.71E-05	4.67E-05	4.67E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb130m	1.9	4.27E-05	4.60E-05	2.90E-05	4.28E-05
Te133	1.8	4.20E-05	4.26E-05	4.19E-05	4.19E-05
La142	1.8	4.18E-05	4.67E-05	4.19E-05	4.19E-05
Sb130	1.8	4.01E-05	4.00E-05	3.79E-05	3.79E-05
Cs139	1.6	3.74E-05	3.74E-05	3.77E-05	3.77E-05
Te133m	1.6	3.66E-05	4.17E-05	4.10E-05	4.10E-05
Pr147	1.6	3.59E-05	3.14E-05	3.59E-05	3.23E-05
Tc101	1.4	3.20E-05	3.21E-05	3.20E-05	3.20E-05
La143	1.3	2.87E-05	1.78E-05	2.98E-05	2.98E-05
Te134	1.2	2.64E-05	2.62E-05	2.64E-05	2.64E-05
Pr146	1.1	2.62E-05	2.51E-05	2.45E-05	2.45E-05
Rh107	1.1	2.60E-05	2.60E-05	2.59E-05	2.59E-05
Rb90m	0.7	1.67E-05	1.75E-05	2.09E-05	2.06E-05
Ce146	0.6	1.45E-05	1.30E-05	1.29E-05	1.30E-05
I135	0.6	1.41E-05	1.41E-05	1.41E-05	1.41E-05
Sn129m	0.6	1.39E-05	1.80E-05	1.34E-05	1.34E-05
Ce145	0.6	1.29E-05	1.52E-05	8.31E-06	8.31E-06
Nd151	0.6	1.26E-05	1.20E-05	1.18E-05	1.18E-05
Sb132m	0.5	1.24E-05	1.35E-05	1.24E-05	1.24E-05
Ru107	0.5	1.23E-05	1.23E-05	1.23E-05	1.23E-05
Sb128m	0.5	1.19E-05	1.21E-05	3.91E-06	3.91E-06
Rh108	0.4	9.96E-06	1.01E-05	9.96E-06	9.80E-06
Tc102	0.4	9.86E-06	1.34E-05	9.85E-06	9.84E-06
Y93m	0.4	9.70E-06	9.74E-06	7.12E-06	7.12E-06
Sr92	0.4	9.30E-06	9.31E-06	9.60E-06	9.60E-06
Xe137	0.4	8.83E-06	8.85E-06	8.89E-06	8.89E-06
Te131	0.4	8.36E-06	8.34E-06	8.74E-06	8.74E-06
Ru105	0.3	7.85E-06	7.85E-06	7.96E-06	7.96E-06
Xe135m	0.3	7.69E-06	7.68E-06	7.63E-06	7.63E-06
Sb132	0.3	7.51E-06	7.83E-06	7.51E-06	7.51E-06
Kr89	0.3	7.36E-06	7.33E-06	6.99E-06	6.99E-06
Rb90	0.3	6.99E-06	6.02E-06	6.32E-06	6.37E-06
Se83	0.3	5.96E-06	4.23E-06	1.98E-06	3.73E-06
Br84	0.2	5.71E-06	5.72E-06	6.03E-06	6.03E-06
Nb98m	0.2	5.27E-06	5.32E-06	5.26E-06	5.26E-06
Pr148	0.2	5.08E-06	3.54E-06	5.08E-06	5.08E-06
Pm152	0.2	4.51E-06	3.93E-06	4.74E-06	4.74E-06

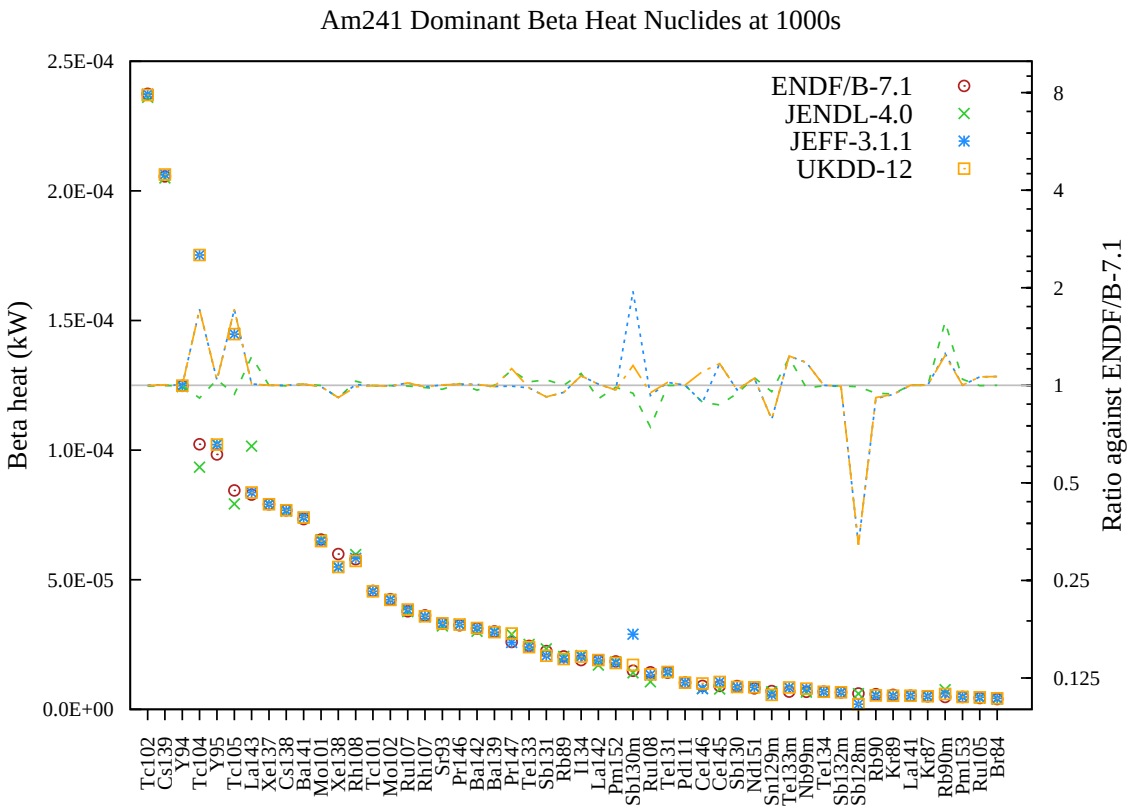

Figure 158: Beta heat (in kW) decay data comparison for Am241 fission pulse after 1000s cooling.

Table 158: Beta heat (in kW) decay data comparison for Am241 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	11.7	2.37E-04	2.36E-04	2.37E-04	2.37E-04
Cs139	10.1	2.06E-04	2.05E-04	2.06E-04	2.06E-04
Y94	6.1	1.25E-04	1.24E-04	1.25E-04	1.25E-04
Tc104	5.0	1.02E-04	9.34E-05	1.75E-04	1.75E-04
Y95	4.8	9.83E-05	1.02E-04	1.02E-04	1.02E-04
Tc105	4.2	8.44E-05	7.92E-05	1.45E-04	1.45E-04
La143	4.1	8.29E-05	1.02E-04	8.37E-05	8.37E-05
Xe137	3.9	7.92E-05	7.92E-05	7.91E-05	7.91E-05
Cs138	3.8	7.68E-05	7.65E-05	7.68E-05	7.68E-05
Ba141	3.6	7.34E-05	7.40E-05	7.40E-05	7.40E-05
Mo101	3.2	6.55E-05	6.54E-05	6.49E-05	6.49E-05
Xe138	2.9	5.99E-05	5.47E-05	5.49E-05	5.49E-05
Rh108	2.8	5.79E-05	5.97E-05	5.82E-05	5.73E-05
Tc101	2.2	4.57E-05	4.56E-05	4.56E-05	4.56E-05
Mo102	2.1	4.25E-05	4.24E-05	4.23E-05	4.22E-05
Ru107	1.9	3.78E-05	3.77E-05	3.85E-05	3.85E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rh107	1.8	3.63E-05	3.57E-05	3.59E-05	3.59E-05
Sr93	1.6	3.31E-05	3.22E-05	3.32E-05	3.32E-05
Pr146	1.6	3.24E-05	3.28E-05	3.27E-05	3.27E-05
Ba142	1.5	3.12E-05	3.01E-05	3.14E-05	3.14E-05
Ba139	1.5	3.00E-05	3.00E-05	2.98E-05	2.98E-05
Pr147	1.3	2.60E-05	2.89E-05	2.58E-05	2.93E-05
Te133	1.2	2.45E-05	2.51E-05	2.40E-05	2.40E-05
Sb131	1.1	2.25E-05	2.33E-05	2.07E-05	2.07E-05
Rb89	1.0	2.04E-05	2.04E-05	1.94E-05	1.94E-05
I134	0.9	1.90E-05	2.07E-05	2.03E-05	2.03E-05
La142	0.9	1.88E-05	1.71E-05	1.90E-05	1.90E-05
Pm152	0.9	1.85E-05	1.83E-05	1.79E-05	1.79E-05
Sb130m	0.7	1.49E-05	1.41E-05	2.90E-05	1.71E-05
Ru108	0.7	1.43E-05	1.06E-05	1.33E-05	1.35E-05
Te131	0.7	1.42E-05	1.41E-05	1.45E-05	1.45E-05
Pd111	0.5	1.03E-05	1.03E-05	1.03E-05	1.03E-05
Ce146	0.4	9.04E-06	8.02E-06	8.01E-06	9.97E-06
Ce145	0.4	9.03E-06	7.86E-06	1.05E-05	1.05E-05
Sb130	0.4	8.95E-06	8.45E-06	8.66E-06	8.66E-06
Nd151	0.4	8.11E-06	8.55E-06	8.53E-06	8.53E-06
Sn129m	0.3	7.07E-06	6.76E-06	5.56E-06	5.56E-06
Te133m	0.3	6.86E-06	8.35E-06	8.45E-06	8.45E-06
Nb99m	0.3	6.80E-06	6.68E-06	8.00E-06	8.00E-06
Te134	0.3	6.77E-06	6.75E-06	6.77E-06	6.77E-06
Sb132m	0.3	6.61E-06	6.57E-06	6.55E-06	6.55E-06
Sb128m	0.3	6.09E-06	6.03E-06	1.96E-06	1.96E-06
Rb90	0.3	5.86E-06	5.54E-06	5.33E-06	5.37E-06
Kr89	0.3	5.60E-06	5.26E-06	5.25E-06	5.25E-06
La141	0.3	5.24E-06	5.24E-06	5.24E-06	5.24E-06
Kr87	0.2	5.07E-06	5.06E-06	5.08E-06	5.08E-06
Rb90m	0.2	4.81E-06	7.55E-06	6.03E-06	5.95E-06
Pm153	0.2	4.76E-06	4.97E-06	4.77E-06	4.77E-06
Ru105	0.2	4.41E-06	4.40E-06	4.68E-06	4.68E-06
Br84	0.2	3.99E-06	3.99E-06	4.25E-06	4.25E-06

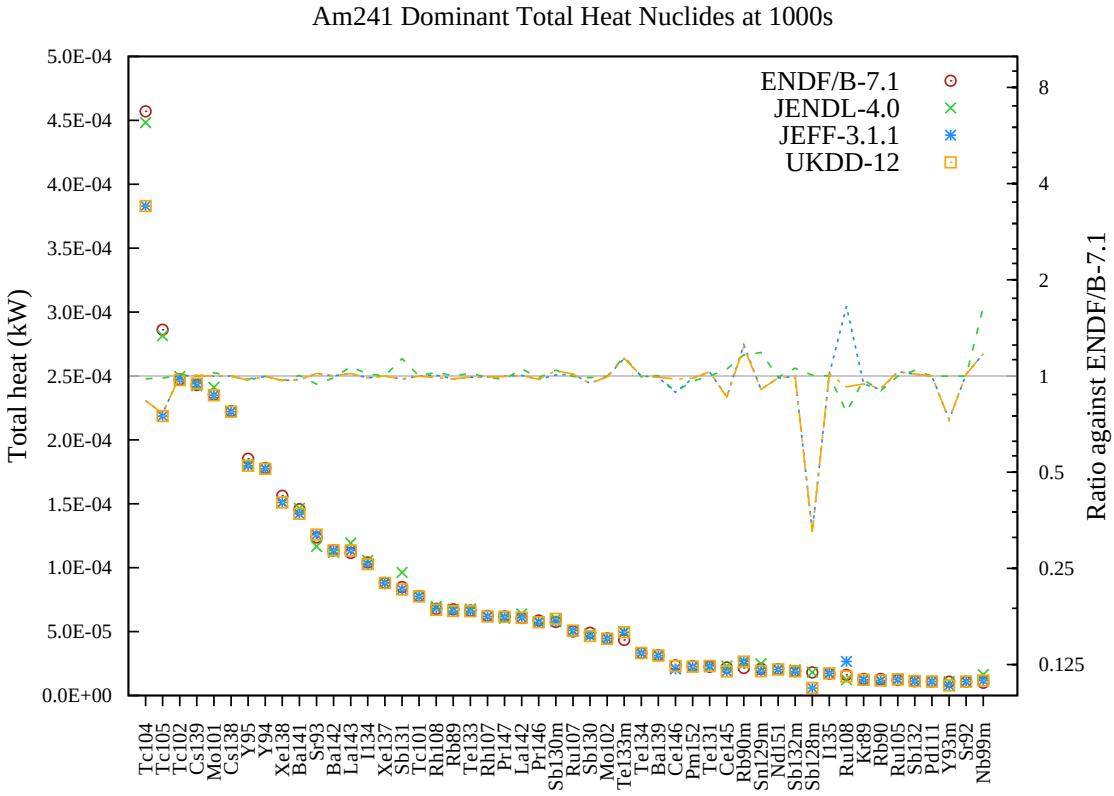

Figure 159: Total heat (in kW) decay data comparison for Am241 fission pulse after 1000s cooling.

Table 159: Total heat (in kW) decay data comparison for Am241 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	10.6	4.57E-04	4.48E-04	3.83E-04	3.83E-04
Tc105	6.6	2.86E-04	2.81E-04	2.19E-04	2.19E-04
Tc102	5.7	2.47E-04	2.50E-04	2.47E-04	2.47E-04
Cs139	5.6	2.43E-04	2.42E-04	2.44E-04	2.44E-04
Mo101	5.5	2.36E-04	2.41E-04	2.35E-04	2.35E-04
Cs138	5.2	2.22E-04	2.22E-04	2.22E-04	2.22E-04
Y95	4.3	1.85E-04	1.81E-04	1.80E-04	1.80E-04
Y94	4.1	1.78E-04	1.77E-04	1.77E-04	1.77E-04
Xe138	3.6	1.56E-04	1.51E-04	1.51E-04	1.51E-04
Ba141	3.4	1.46E-04	1.46E-04	1.42E-04	1.42E-04
Sr93	2.9	1.24E-04	1.17E-04	1.26E-04	1.26E-04
Ba142	2.6	1.13E-04	1.12E-04	1.14E-04	1.14E-04
La143	2.6	1.12E-04	1.19E-04	1.13E-04	1.13E-04
I134	2.4	1.04E-04	1.06E-04	1.03E-04	1.03E-04
Xe137	2.0	8.80E-05	8.80E-05	8.80E-05	8.80E-05
Sb131	2.0	8.49E-05	9.62E-05	8.30E-05	8.30E-05
Tc101	1.8	7.77E-05	7.77E-05	7.75E-05	7.75E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rh108	1.6	6.79E-05	6.97E-05	6.82E-05	6.71E-05
Rb89	1.6	6.74E-05	6.75E-05	6.61E-05	6.61E-05
Te133	1.5	6.65E-05	6.77E-05	6.59E-05	6.59E-05
Rh107	1.4	6.23E-05	6.17E-05	6.18E-05	6.18E-05
Pr147	1.4	6.19E-05	6.04E-05	6.17E-05	6.16E-05
La142	1.4	6.06E-05	6.38E-05	6.09E-05	6.09E-05
Pr146	1.4	5.87E-05	5.79E-05	5.73E-05	5.73E-05
Sb130m	1.3	5.76E-05	6.01E-05	5.80E-05	6.00E-05
Ru107	1.2	5.01E-05	4.99E-05	5.08E-05	5.08E-05
Sb130	1.1	4.91E-05	4.85E-05	4.66E-05	4.66E-05
Mo102	1.0	4.47E-05	4.46E-05	4.45E-05	4.44E-05
Te133m	1.0	4.35E-05	5.00E-05	4.94E-05	4.94E-05
Te134	0.8	3.32E-05	3.30E-05	3.32E-05	3.32E-05
Ba139	0.7	3.16E-05	3.16E-05	3.12E-05	3.12E-05
Ce146	0.5	2.35E-05	2.10E-05	2.09E-05	2.30E-05
Pm152	0.5	2.30E-05	2.22E-05	2.26E-05	2.26E-05
Te131	0.5	2.25E-05	2.25E-05	2.32E-05	2.32E-05
Ce145	0.5	2.20E-05	2.31E-05	1.89E-05	1.89E-05
Rb90m	0.5	2.15E-05	2.50E-05	2.69E-05	2.65E-05
Sn129m	0.5	2.09E-05	2.48E-05	1.90E-05	1.90E-05
Nd151	0.5	2.07E-05	2.05E-05	2.04E-05	2.04E-05
Sb132m	0.4	1.90E-05	2.01E-05	1.89E-05	1.89E-05
Sb128m	0.4	1.80E-05	1.82E-05	5.87E-06	5.87E-06
I135	0.4	1.71E-05	1.71E-05	1.73E-05	1.73E-05
Ru108	0.4	1.61E-05	1.24E-05	2.65E-05	1.49E-05
Kr89	0.3	1.30E-05	1.26E-05	1.22E-05	1.22E-05
Rb90	0.3	1.29E-05	1.16E-05	1.17E-05	1.17E-05
Ru105	0.3	1.23E-05	1.22E-05	1.26E-05	1.26E-05
Sb132	0.3	1.11E-05	1.16E-05	1.13E-05	1.13E-05
Pd111	0.3	1.09E-05	1.09E-05	1.09E-05	1.09E-05
Y93m	0.3	1.08E-05	1.08E-05	7.91E-06	7.91E-06
Sr92	0.2	1.07E-05	1.07E-05	1.09E-05	1.09E-05
Nb99m	0.2	9.95E-06	1.64E-05	1.17E-05	1.17E-05

11.4 5011s after pulse

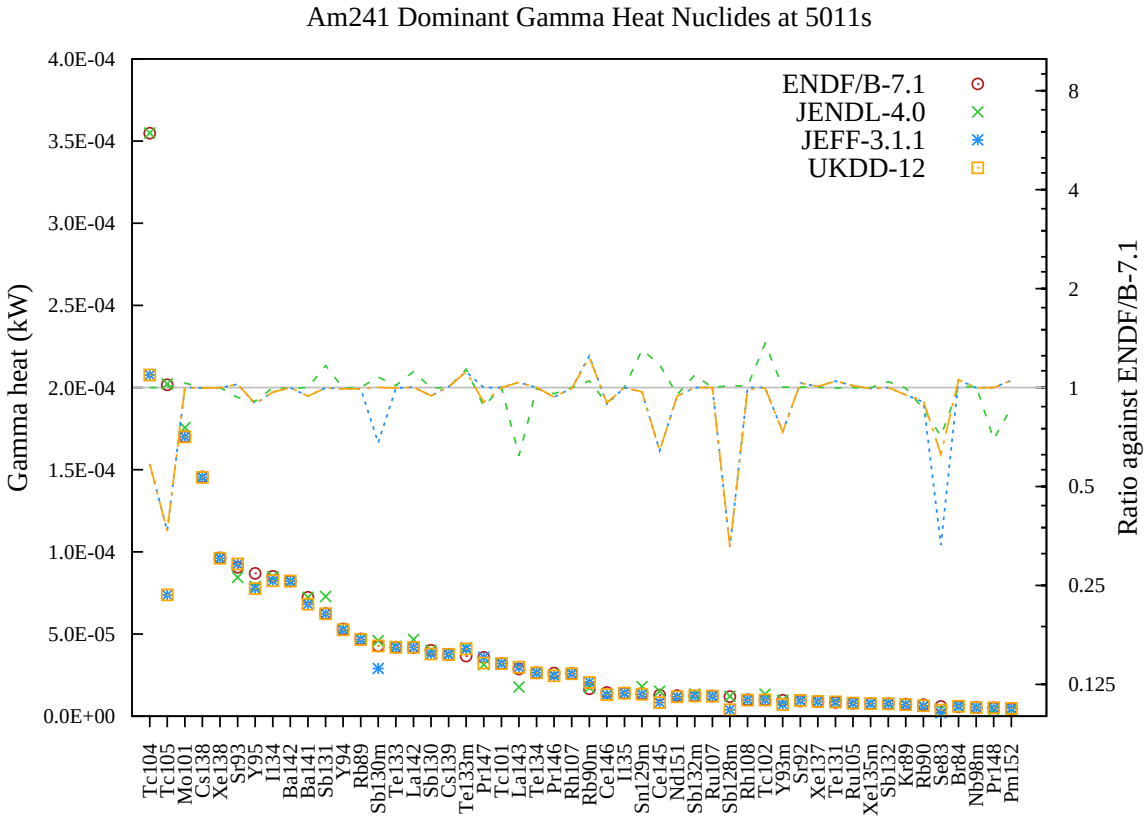

Figure 160: Gamma heat (in kW) decay data comparison for Am241 fission pulse after 5011s cooling.

Table 160: Gamma heat (in kW) decay data comparison for Am241 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	15.5	3.55E-04	3.55E-04	2.08E-04	2.08E-04
Tc105	8.8	2.02E-04	2.02E-04	7.39E-05	7.39E-05
Mo101	7.4	1.70E-04	1.76E-04	1.70E-04	1.70E-04
Cs138	6.4	1.46E-04	1.46E-04	1.45E-04	1.45E-04
Xe138	4.2	9.63E-05	9.63E-05	9.62E-05	9.62E-05
Sr93	4.0	9.06E-05	8.45E-05	9.27E-05	9.27E-05
Y95	3.8	8.69E-05	7.89E-05	7.76E-05	7.76E-05
I134	3.7	8.51E-05	8.50E-05	8.24E-05	8.24E-05
Ba142	3.6	8.23E-05	8.18E-05	8.22E-05	8.22E-05
Ba141	3.2	7.24E-05	7.24E-05	6.82E-05	6.82E-05
Sb131	2.7	6.24E-05	7.29E-05	6.23E-05	6.23E-05
Y94	2.3	5.31E-05	5.30E-05	5.26E-05	5.26E-05
Rb89	2.1	4.70E-05	4.71E-05	4.67E-05	4.67E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb130m	1.9	4.27E-05	4.60E-05	2.90E-05	4.28E-05
Te133	1.8	4.20E-05	4.26E-05	4.19E-05	4.19E-05
La142	1.8	4.18E-05	4.67E-05	4.19E-05	4.19E-05
Sb130	1.8	4.01E-05	4.00E-05	3.79E-05	3.79E-05
Cs139	1.6	3.74E-05	3.74E-05	3.77E-05	3.77E-05
Te133m	1.6	3.66E-05	4.17E-05	4.10E-05	4.10E-05
Pr147	1.6	3.59E-05	3.14E-05	3.59E-05	3.23E-05
Tc101	1.4	3.20E-05	3.21E-05	3.20E-05	3.20E-05
La143	1.3	2.87E-05	1.78E-05	2.98E-05	2.98E-05
Te134	1.2	2.64E-05	2.62E-05	2.64E-05	2.64E-05
Pr146	1.1	2.62E-05	2.51E-05	2.45E-05	2.45E-05
Rh107	1.1	2.60E-05	2.60E-05	2.59E-05	2.59E-05
Rb90m	0.7	1.67E-05	1.75E-05	2.09E-05	2.06E-05
Ce146	0.6	1.45E-05	1.30E-05	1.29E-05	1.30E-05
I135	0.6	1.41E-05	1.41E-05	1.41E-05	1.41E-05
Sn129m	0.6	1.39E-05	1.80E-05	1.34E-05	1.34E-05
Ce145	0.6	1.29E-05	1.52E-05	8.31E-06	8.31E-06
Nd151	0.6	1.26E-05	1.20E-05	1.18E-05	1.18E-05
Sb132m	0.5	1.24E-05	1.35E-05	1.24E-05	1.24E-05
Ru107	0.5	1.23E-05	1.23E-05	1.23E-05	1.23E-05
Sb128m	0.5	1.19E-05	1.21E-05	3.91E-06	3.91E-06
Rh108	0.4	9.96E-06	1.01E-05	9.96E-06	9.80E-06
Tc102	0.4	9.86E-06	1.34E-05	9.85E-06	9.84E-06
Y93m	0.4	9.70E-06	9.74E-06	7.12E-06	7.12E-06
Sr92	0.4	9.30E-06	9.31E-06	9.60E-06	9.60E-06
Xe137	0.4	8.83E-06	8.85E-06	8.89E-06	8.89E-06
Te131	0.4	8.36E-06	8.34E-06	8.74E-06	8.74E-06
Ru105	0.3	7.85E-06	7.85E-06	7.96E-06	7.96E-06
Xe135m	0.3	7.69E-06	7.68E-06	7.63E-06	7.63E-06
Sb132	0.3	7.51E-06	7.83E-06	7.51E-06	7.51E-06
Kr89	0.3	7.36E-06	7.33E-06	6.99E-06	6.99E-06
Rb90	0.3	6.99E-06	6.02E-06	6.32E-06	6.37E-06
Se83	0.3	5.96E-06	4.23E-06	1.98E-06	3.73E-06
Br84	0.2	5.71E-06	5.72E-06	6.03E-06	6.03E-06
Nb98m	0.2	5.27E-06	5.32E-06	5.26E-06	5.26E-06
Pr148	0.2	5.08E-06	3.54E-06	5.08E-06	5.08E-06
Pm152	0.2	4.51E-06	3.93E-06	4.74E-06	4.74E-06

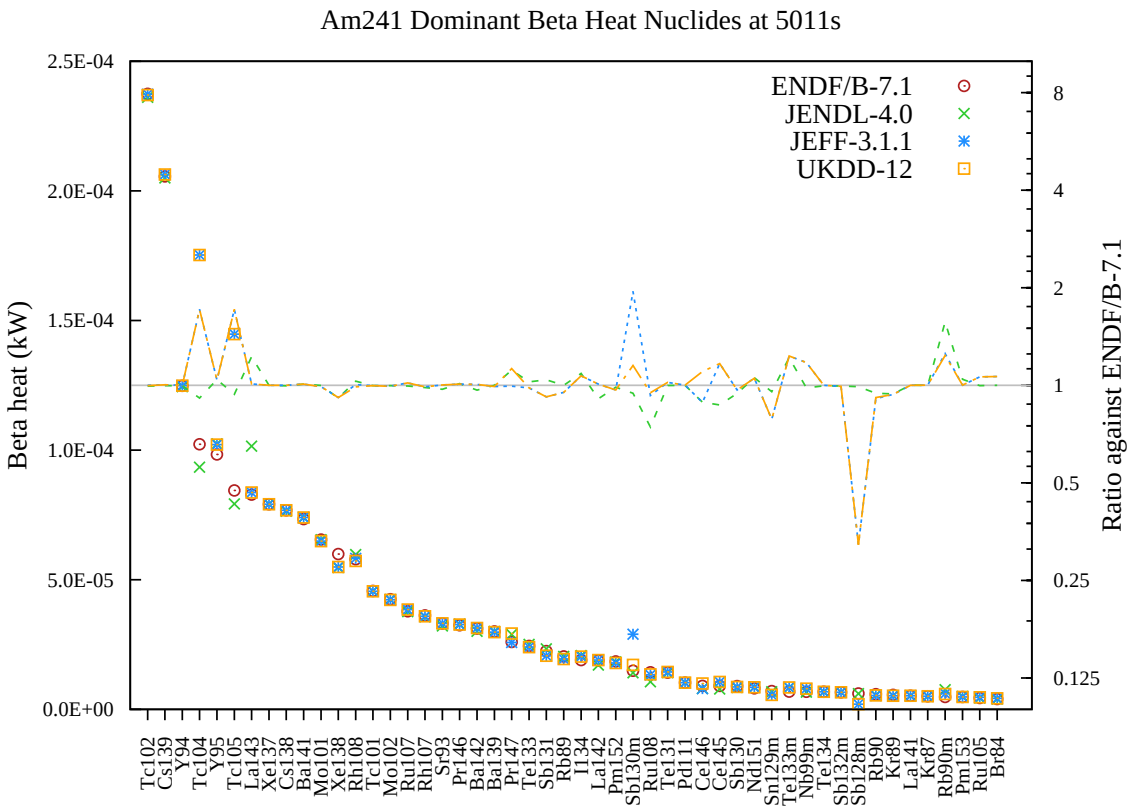

Figure 161: Beta heat (in kW) decay data comparison for Am241 fission pulse after 5011s cooling.

Table 161: Beta heat (in kW) decay data comparison for Am241 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	11.7	2.37E-04	2.36E-04	2.37E-04	2.37E-04
Cs139	10.1	2.06E-04	2.05E-04	2.06E-04	2.06E-04
Y94	6.1	1.25E-04	1.24E-04	1.25E-04	1.25E-04
Tc104	5.0	1.02E-04	9.34E-05	1.75E-04	1.75E-04
Y95	4.8	9.83E-05	1.02E-04	1.02E-04	1.02E-04
Tc105	4.2	8.44E-05	7.92E-05	1.45E-04	1.45E-04
La143	4.1	8.29E-05	1.02E-04	8.37E-05	8.37E-05
Xe137	3.9	7.92E-05	7.92E-05	7.91E-05	7.91E-05
Cs138	3.8	7.68E-05	7.65E-05	7.68E-05	7.68E-05
Ba141	3.6	7.34E-05	7.40E-05	7.40E-05	7.40E-05
Mo101	3.2	6.55E-05	6.54E-05	6.49E-05	6.49E-05
Xe138	2.9	5.99E-05	5.47E-05	5.49E-05	5.49E-05
Rh108	2.8	5.79E-05	5.97E-05	5.82E-05	5.73E-05
Tc101	2.2	4.57E-05	4.56E-05	4.56E-05	4.56E-05
Mo102	2.1	4.25E-05	4.24E-05	4.23E-05	4.22E-05
Ru107	1.9	3.78E-05	3.77E-05	3.85E-05	3.85E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rh107	1.8	3.63E-05	3.57E-05	3.59E-05	3.59E-05
Sr93	1.6	3.31E-05	3.22E-05	3.32E-05	3.32E-05
Pr146	1.6	3.24E-05	3.28E-05	3.27E-05	3.27E-05
Ba142	1.5	3.12E-05	3.01E-05	3.14E-05	3.14E-05
Ba139	1.5	3.00E-05	3.00E-05	2.98E-05	2.98E-05
Pr147	1.3	2.60E-05	2.89E-05	2.58E-05	2.93E-05
Te133	1.2	2.45E-05	2.51E-05	2.40E-05	2.40E-05
Sb131	1.1	2.25E-05	2.33E-05	2.07E-05	2.07E-05
Rb89	1.0	2.04E-05	2.04E-05	1.94E-05	1.94E-05
I134	0.9	1.90E-05	2.07E-05	2.03E-05	2.03E-05
La142	0.9	1.88E-05	1.71E-05	1.90E-05	1.90E-05
Pm152	0.9	1.85E-05	1.83E-05	1.79E-05	1.79E-05
Sb130m	0.7	1.49E-05	1.41E-05	2.90E-05	1.71E-05
Ru108	0.7	1.43E-05	1.06E-05	1.33E-05	1.35E-05
Te131	0.7	1.42E-05	1.41E-05	1.45E-05	1.45E-05
Pd111	0.5	1.03E-05	1.03E-05	1.03E-05	1.03E-05
Ce146	0.4	9.04E-06	8.02E-06	8.01E-06	9.97E-06
Ce145	0.4	9.03E-06	7.86E-06	1.05E-05	1.05E-05
Sb130	0.4	8.95E-06	8.45E-06	8.66E-06	8.66E-06
Nd151	0.4	8.11E-06	8.55E-06	8.53E-06	8.53E-06
Sn129m	0.3	7.07E-06	6.76E-06	5.56E-06	5.56E-06
Te133m	0.3	6.86E-06	8.35E-06	8.45E-06	8.45E-06
Nb99m	0.3	6.80E-06	6.68E-06	8.00E-06	8.00E-06
Te134	0.3	6.77E-06	6.75E-06	6.77E-06	6.77E-06
Sb132m	0.3	6.61E-06	6.57E-06	6.55E-06	6.55E-06
Sb128m	0.3	6.09E-06	6.03E-06	1.96E-06	1.96E-06
Rb90	0.3	5.86E-06	5.54E-06	5.33E-06	5.37E-06
Kr89	0.3	5.60E-06	5.26E-06	5.25E-06	5.25E-06
La141	0.3	5.24E-06	5.24E-06	5.24E-06	5.24E-06
Kr87	0.2	5.07E-06	5.06E-06	5.08E-06	5.08E-06
Rb90m	0.2	4.81E-06	7.55E-06	6.03E-06	5.95E-06
Pm153	0.2	4.76E-06	4.97E-06	4.77E-06	4.77E-06
Ru105	0.2	4.41E-06	4.40E-06	4.68E-06	4.68E-06
Br84	0.2	3.99E-06	3.99E-06	4.25E-06	4.25E-06

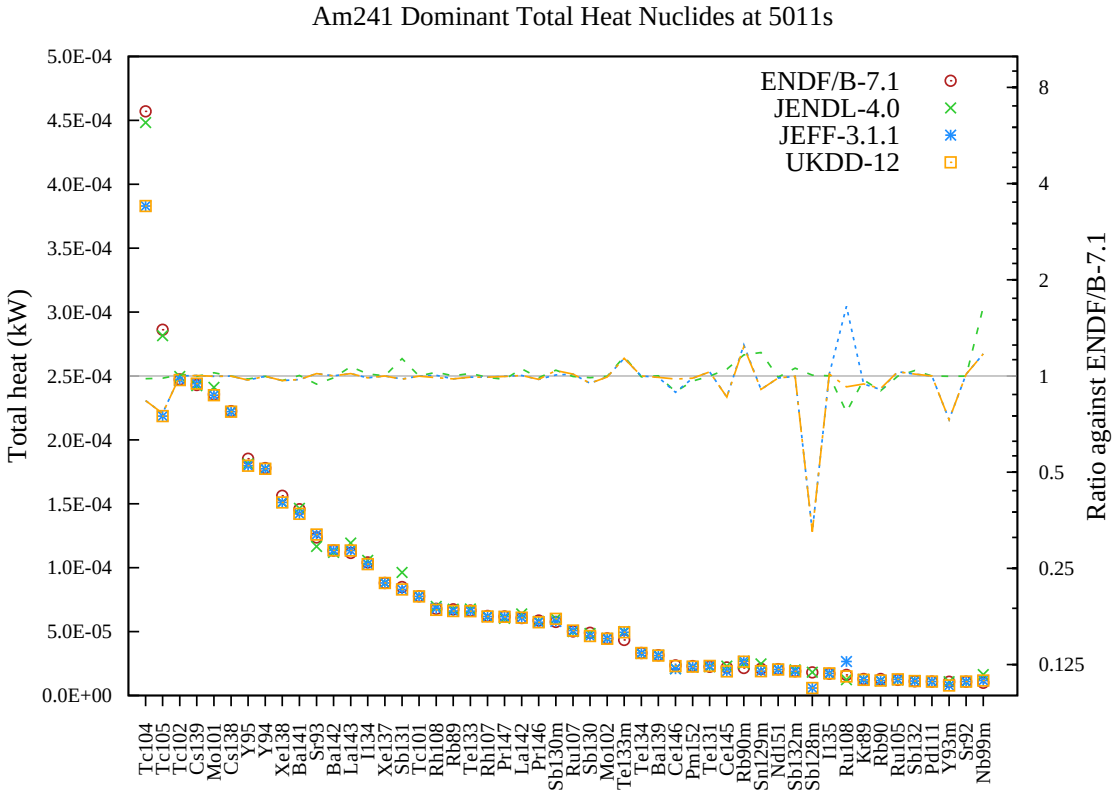

Figure 162: Total heat (in kW) decay data comparison for Am241 fission pulse after 5011s cooling.

Table 162: Total heat (in kW) decay data comparison for Am241 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	10.6	4.57E-04	4.48E-04	3.83E-04	3.83E-04
Tc105	6.6	2.86E-04	2.81E-04	2.19E-04	2.19E-04
Tc102	5.7	2.47E-04	2.50E-04	2.47E-04	2.47E-04
Cs139	5.6	2.43E-04	2.42E-04	2.44E-04	2.44E-04
Mo101	5.5	2.36E-04	2.41E-04	2.35E-04	2.35E-04
Cs138	5.2	2.22E-04	2.22E-04	2.22E-04	2.22E-04
Y95	4.3	1.85E-04	1.81E-04	1.80E-04	1.80E-04
Y94	4.1	1.78E-04	1.77E-04	1.77E-04	1.77E-04
Xe138	3.6	1.56E-04	1.51E-04	1.51E-04	1.51E-04
Ba141	3.4	1.46E-04	1.46E-04	1.42E-04	1.42E-04
Sr93	2.9	1.24E-04	1.17E-04	1.26E-04	1.26E-04
Ba142	2.6	1.13E-04	1.12E-04	1.14E-04	1.14E-04
La143	2.6	1.12E-04	1.19E-04	1.13E-04	1.13E-04
I134	2.4	1.04E-04	1.06E-04	1.03E-04	1.03E-04
Xe137	2.0	8.80E-05	8.80E-05	8.80E-05	8.80E-05
Sb131	2.0	8.49E-05	9.62E-05	8.30E-05	8.30E-05
Tc101	1.8	7.77E-05	7.77E-05	7.75E-05	7.75E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rh108	1.6	6.79E-05	6.97E-05	6.82E-05	6.71E-05
Rb89	1.6	6.74E-05	6.75E-05	6.61E-05	6.61E-05
Te133	1.5	6.65E-05	6.77E-05	6.59E-05	6.59E-05
Rh107	1.4	6.23E-05	6.17E-05	6.18E-05	6.18E-05
Pr147	1.4	6.19E-05	6.04E-05	6.17E-05	6.16E-05
La142	1.4	6.06E-05	6.38E-05	6.09E-05	6.09E-05
Pr146	1.4	5.87E-05	5.79E-05	5.73E-05	5.73E-05
Sb130m	1.3	5.76E-05	6.01E-05	5.80E-05	6.00E-05
Ru107	1.2	5.01E-05	4.99E-05	5.08E-05	5.08E-05
Sb130	1.1	4.91E-05	4.85E-05	4.66E-05	4.66E-05
Mo102	1.0	4.47E-05	4.46E-05	4.45E-05	4.44E-05
Te133m	1.0	4.35E-05	5.00E-05	4.94E-05	4.94E-05
Te134	0.8	3.32E-05	3.30E-05	3.32E-05	3.32E-05
Ba139	0.7	3.16E-05	3.16E-05	3.12E-05	3.12E-05
Ce146	0.5	2.35E-05	2.10E-05	2.09E-05	2.30E-05
Pm152	0.5	2.30E-05	2.22E-05	2.26E-05	2.26E-05
Te131	0.5	2.25E-05	2.25E-05	2.32E-05	2.32E-05
Ce145	0.5	2.20E-05	2.31E-05	1.89E-05	1.89E-05
Rb90m	0.5	2.15E-05	2.50E-05	2.69E-05	2.65E-05
Sn129m	0.5	2.09E-05	2.48E-05	1.90E-05	1.90E-05
Nd151	0.5	2.07E-05	2.05E-05	2.04E-05	2.04E-05
Sb132m	0.4	1.90E-05	2.01E-05	1.89E-05	1.89E-05
Sb128m	0.4	1.80E-05	1.82E-05	5.87E-06	5.87E-06
I135	0.4	1.71E-05	1.71E-05	1.73E-05	1.73E-05
Ru108	0.4	1.61E-05	1.24E-05	2.65E-05	1.49E-05
Kr89	0.3	1.30E-05	1.26E-05	1.22E-05	1.22E-05
Rb90	0.3	1.29E-05	1.16E-05	1.17E-05	1.17E-05
Ru105	0.3	1.23E-05	1.22E-05	1.26E-05	1.26E-05
Sb132	0.3	1.11E-05	1.16E-05	1.13E-05	1.13E-05
Pd111	0.3	1.09E-05	1.09E-05	1.09E-05	1.09E-05
Y93m	0.3	1.08E-05	1.08E-05	7.91E-06	7.91E-06
Sr92	0.2	1.07E-05	1.07E-05	1.09E-05	1.09E-05
Nb99m	0.2	9.95E-06	1.64E-05	1.17E-05	1.17E-05

11.5 10000s after pulse

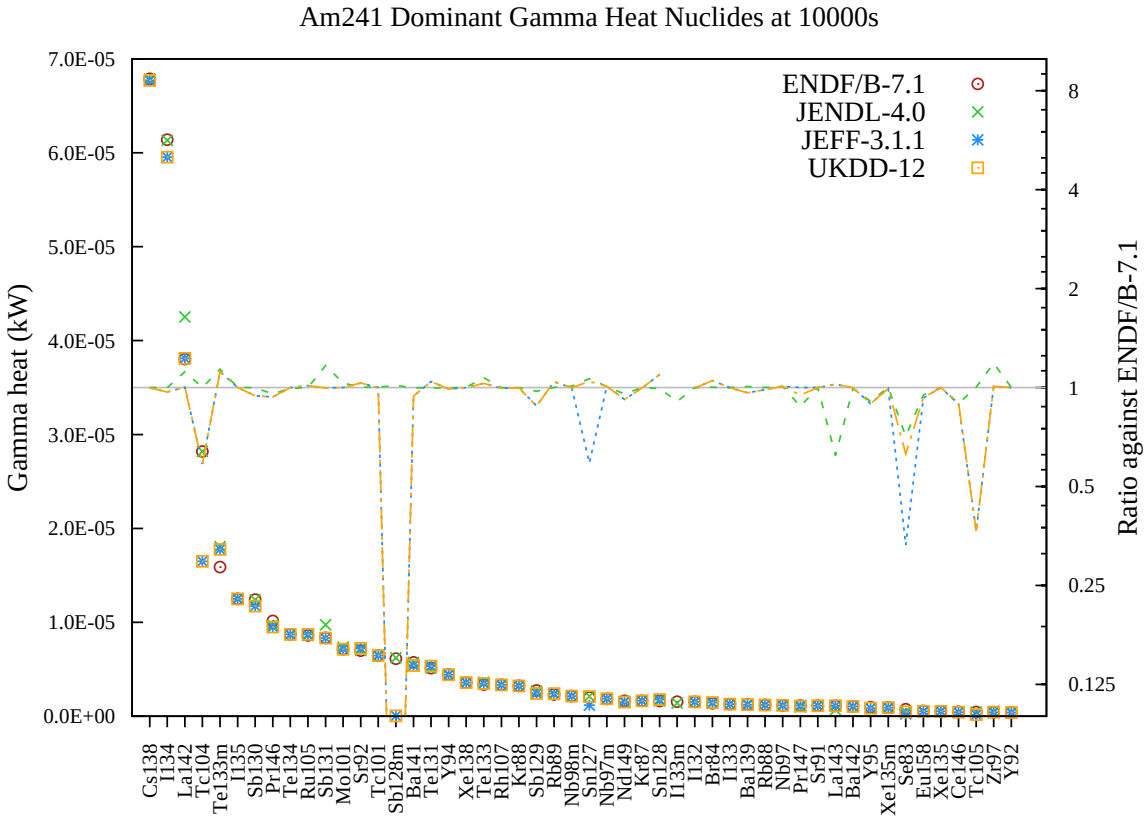

Figure 163: Gamma heat (in kW) decay data comparison for Am241 fission pulse after 10000s cooling.

Table 163: Gamma heat (in kW) decay data comparison for Am241 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	18.5	6.79E-05	6.79E-05	6.77E-05	6.77E-05
I134	16.7	6.14E-05	6.13E-05	5.95E-05	5.95E-05
La142	10.3	3.80E-05	4.25E-05	3.81E-05	3.81E-05
Tc104	7.7	2.82E-05	2.82E-05	1.65E-05	1.65E-05
Te133m	4.3	1.59E-05	1.81E-05	1.78E-05	1.78E-05
I135	3.4	1.25E-05	1.25E-05	1.25E-05	1.25E-05
Sb130	3.4	1.24E-05	1.24E-05	1.17E-05	1.17E-05
Pr146	2.8	1.02E-05	9.72E-06	9.50E-06	9.50E-06
Te134	2.4	8.72E-06	8.66E-06	8.72E-06	8.72E-06
Ru105	2.3	8.61E-06	8.61E-06	8.72E-06	8.72E-06
Sb131	2.3	8.35E-06	9.74E-06	8.33E-06	8.33E-06
Mo101	1.9	7.13E-06	7.36E-06	7.13E-06	7.13E-06
Sr92	1.9	6.99E-06	7.00E-06	7.22E-06	7.22E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc101	1.8	6.47E-06	6.49E-06	6.47E-06	6.47E-06
Sb128m	1.7	6.12E-06	6.21E-06	4.54E-08	4.54E-08
Ba141	1.6	5.73E-06	5.72E-06	5.39E-06	5.39E-06
Te131	1.4	5.12E-06	5.11E-06	5.34E-06	5.34E-06
Y94	1.2	4.46E-06	4.44E-06	4.41E-06	4.41E-06
Xe138	1.0	3.58E-06	3.58E-06	3.58E-06	3.58E-06
Te133	0.9	3.37E-06	3.61E-06	3.47E-06	3.47E-06
Rh107	0.9	3.35E-06	3.35E-06	3.33E-06	3.33E-06
Kr88	0.9	3.24E-06	3.23E-06	3.23E-06	3.23E-06
Sb129	0.7	2.74E-06	2.67E-06	2.41E-06	2.41E-06
Rb89	0.6	2.31E-06	2.32E-06	2.41E-06	2.41E-06
Nb98m	0.6	2.13E-06	2.15E-06	2.13E-06	2.13E-06
Sn127	0.5	2.00E-06	2.12E-06	1.18E-06	2.08E-06
Nb97m	0.5	1.84E-06	1.86E-06	1.86E-06	1.86E-06
Nd149	0.4	1.64E-06	1.57E-06	1.51E-06	1.51E-06
Kr87	0.4	1.64E-06	1.64E-06	1.64E-06	1.64E-06
Sn128	0.4	1.62E-06	1.61E-06	1.78E-06	1.78E-06
I133m	0.4	1.54E-06	—	—	—
I132	0.4	1.54E-06	1.54E-06	1.53E-06	1.53E-06
Br84	0.4	1.38E-06	1.38E-06	1.45E-06	1.45E-06
I133	0.3	1.28E-06	1.28E-06	1.28E-06	1.28E-06
Ba139	0.3	1.27E-06	1.28E-06	1.23E-06	1.23E-06
Rb88	0.3	1.22E-06	1.22E-06	1.20E-06	1.20E-06
Nb97	0.3	1.14E-06	1.15E-06	1.15E-06	1.15E-06
Pr147	0.3	1.13E-06	9.89E-07	1.13E-06	1.07E-06
Sr91	0.3	1.12E-06	1.12E-06	1.12E-06	1.12E-06
La143	0.3	1.10E-06	6.81E-07	1.12E-06	1.12E-06
Ba142	0.3	1.04E-06	1.03E-06	1.04E-06	1.04E-06
Y95	0.3	9.66E-07	8.77E-07	8.63E-07	8.63E-07
Xe135m	0.3	9.22E-07	9.24E-07	9.15E-07	9.15E-07
Se83	0.2	7.45E-07	5.30E-07	2.47E-07	4.68E-07
Eu158	0.2	5.52E-07	5.25E-07	5.13E-07	5.15E-07
Xe135	0.1	5.23E-07	5.23E-07	5.22E-07	5.22E-07
Ce146	0.1	4.71E-07	4.21E-07	4.20E-07	4.23E-07
Tc105	0.1	4.53E-07	4.54E-07	1.66E-07	1.66E-07
Zr97	0.1	4.23E-07	5.01E-07	4.27E-07	4.27E-07
Y92	0.1	3.86E-07	3.87E-07	3.86E-07	3.86E-07

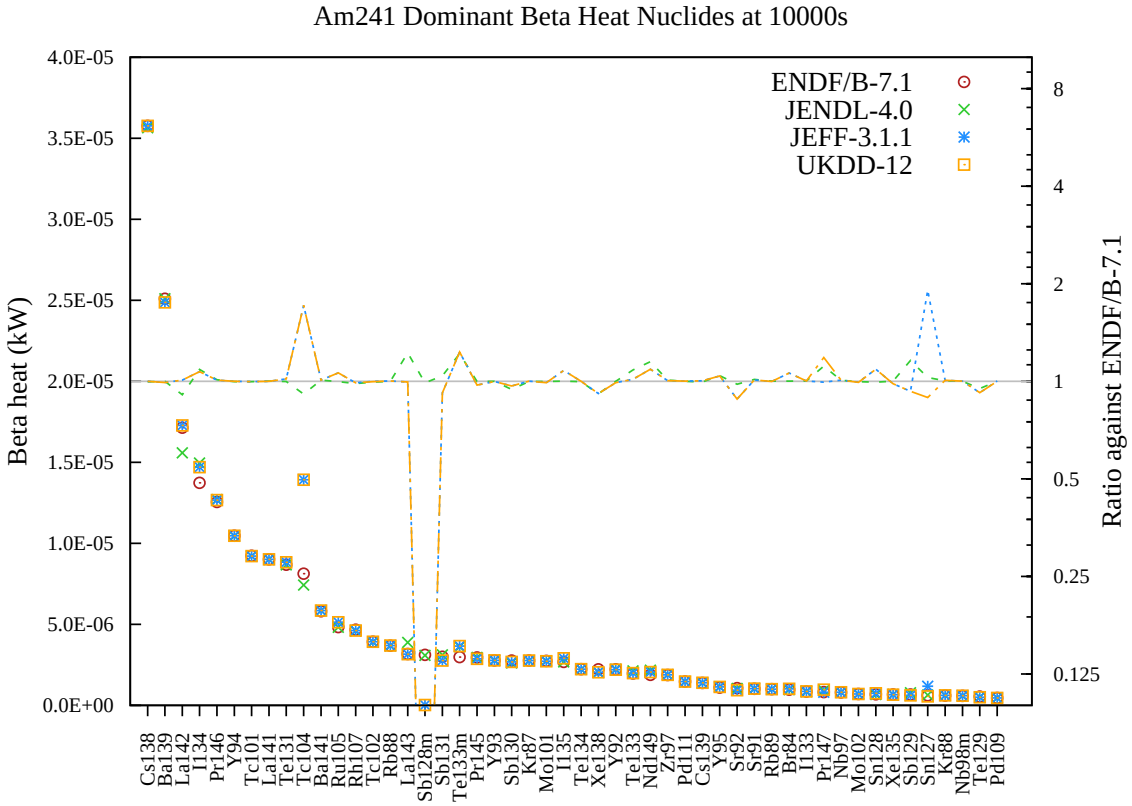

Figure 164: Beta heat (in kW) decay data comparison for Am241 fission pulse after 10000s cooling.

Table 164: Beta heat (in kW) decay data comparison for Am241 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	15.1	3.58E-05	3.57E-05	3.58E-05	3.58E-05
Ba139	10.6	2.51E-05	2.51E-05	2.49E-05	2.49E-05
La142	7.2	1.71E-05	1.56E-05	1.73E-05	1.73E-05
I134	5.8	1.37E-05	1.50E-05	1.47E-05	1.47E-05
Pr146	5.3	1.26E-05	1.27E-05	1.27E-05	1.27E-05
Y94	4.4	1.05E-05	1.04E-05	1.05E-05	1.05E-05
Tc101	3.9	9.24E-06	9.22E-06	9.21E-06	9.21E-06
La141	3.8	9.01E-06	9.01E-06	9.01E-06	9.01E-06
Te131	3.7	8.69E-06	8.67E-06	8.84E-06	8.83E-06
Tc104	3.4	8.13E-06	7.42E-06	1.39E-05	1.39E-05
Ba141	2.5	5.81E-06	5.85E-06	5.85E-06	5.85E-06
Ru105	2.0	4.83E-06	4.82E-06	5.13E-06	5.13E-06
Rh107	2.0	4.67E-06	4.60E-06	4.62E-06	4.62E-06
Tc102	1.7	3.93E-06	3.91E-06	3.93E-06	3.92E-06
Rb88	1.6	3.68E-06	3.68E-06	3.69E-06	3.69E-06
La143	1.3	3.17E-06	3.88E-06	3.16E-06	3.16E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb128m	1.3	3.12E-06	3.09E-06	2.28E-08	2.28E-08
Sb131	1.3	3.00E-06	3.12E-06	2.77E-06	2.76E-06
Te133m	1.3	2.97E-06	3.62E-06	3.66E-06	3.66E-06
Pr145	1.2	2.96E-06	2.95E-06	2.88E-06	2.88E-06
Y93	1.2	2.78E-06	2.78E-06	2.77E-06	2.77E-06
Sb130	1.2	2.77E-06	2.61E-06	2.68E-06	2.68E-06
Kr87	1.2	2.76E-06	2.76E-06	2.77E-06	2.77E-06
Mo101	1.2	2.74E-06	2.74E-06	2.72E-06	2.72E-06
I135	1.1	2.68E-06	2.69E-06	2.90E-06	2.90E-06
Te134	0.9	2.23E-06	2.23E-06	2.23E-06	2.23E-06
Xe138	0.9	2.23E-06	2.04E-06	2.04E-06	2.04E-06
Y92	0.9	2.23E-06	2.23E-06	2.21E-06	2.21E-06
Te133	0.8	1.96E-06	2.13E-06	1.99E-06	1.99E-06
Nd149	0.8	1.88E-06	2.17E-06	2.05E-06	2.05E-06
Zr97	0.8	1.87E-06	1.89E-06	1.88E-06	1.88E-06
Pd111	0.6	1.47E-06	1.47E-06	1.47E-06	1.47E-06
Cs139	0.6	1.39E-06	1.38E-06	1.39E-06	1.39E-06
Y95	0.5	1.09E-06	1.14E-06	1.14E-06	1.14E-06
Sr92	0.5	1.07E-06	1.05E-06	9.40E-07	9.40E-07
Sr91	0.4	1.02E-06	1.03E-06	1.03E-06	1.03E-06
Rb89	0.4	1.00E-06	1.00E-06	1.00E-06	1.00E-06
Br84	0.4	9.65E-07	9.66E-07	1.02E-06	1.02E-06
I133	0.4	8.54E-07	8.56E-07	8.56E-07	8.56E-07
Pr147	0.3	8.18E-07	9.11E-07	8.13E-07	9.69E-07
Nb97	0.3	8.03E-07	8.08E-07	8.09E-07	8.09E-07
Mo102	0.3	7.03E-07	7.01E-07	6.99E-07	6.98E-07
Sn128	0.3	6.78E-07	6.74E-07	7.39E-07	7.39E-07
Xe135	0.3	6.74E-07	6.75E-07	6.63E-07	6.63E-07
Sb129	0.3	6.67E-07	7.73E-07	6.21E-07	6.21E-07
Sn127	0.3	6.17E-07	6.34E-07	1.18E-06	5.50E-07
Kr88	0.3	6.11E-07	6.13E-07	6.15E-07	6.15E-07
Nb98m	0.2	5.90E-07	5.90E-07	5.91E-07	5.91E-07
Te129	0.2	5.43E-07	5.16E-07	5.01E-07	5.01E-07
Pd109	0.2	4.61E-07	4.61E-07	4.62E-07	4.61E-07

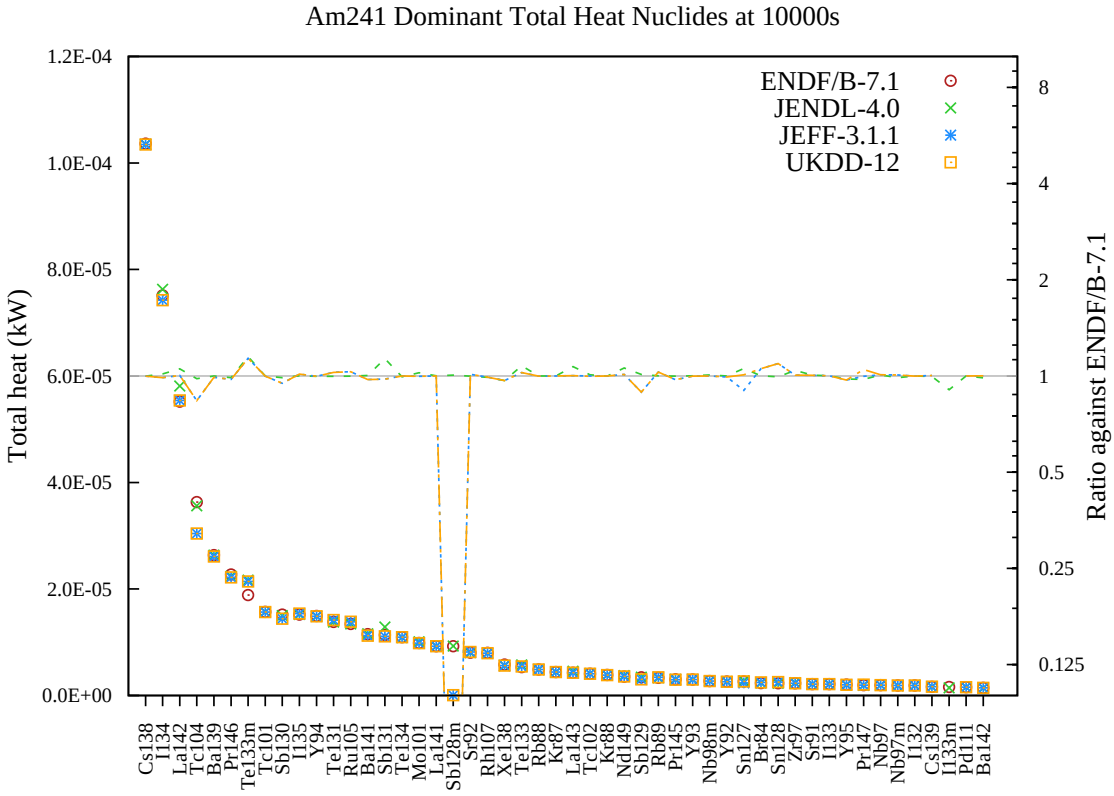

Figure 165: Total heat (in kW) decay data comparison for Am241 fission pulse after 10000s cooling.

Table 165: Total heat (in kW) decay data comparison for Am241 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	17.1	1.04E-04	1.03E-04	1.03E-04	1.03E-04
I134	12.4	7.51E-05	7.63E-05	7.42E-05	7.42E-05
La142	9.1	5.52E-05	5.81E-05	5.54E-05	5.54E-05
Tc104	6.0	3.63E-05	3.56E-05	3.04E-05	3.04E-05
Ba139	4.4	2.64E-05	2.64E-05	2.61E-05	2.61E-05
Pr146	3.8	2.27E-05	2.24E-05	2.22E-05	2.22E-05
Te133m	3.1	1.89E-05	2.17E-05	2.14E-05	2.14E-05
Tc101	2.6	1.57E-05	1.57E-05	1.57E-05	1.57E-05
Sb130	2.5	1.52E-05	1.50E-05	1.44E-05	1.44E-05
I135	2.5	1.52E-05	1.52E-05	1.54E-05	1.54E-05
Y94	2.5	1.49E-05	1.49E-05	1.49E-05	1.49E-05
Te131	2.3	1.38E-05	1.38E-05	1.42E-05	1.42E-05
Ru105	2.2	1.34E-05	1.34E-05	1.38E-05	1.38E-05
Ba141	1.9	1.15E-05	1.16E-05	1.12E-05	1.12E-05
Sb131	1.9	1.13E-05	1.29E-05	1.11E-05	1.11E-05
Te134	1.8	1.10E-05	1.09E-05	1.10E-05	1.10E-05
Mo101	1.6	9.87E-06	1.01E-05	9.85E-06	9.85E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La141	1.5	9.26E-06	9.27E-06	9.26E-06	9.26E-06
Sb128m	1.5	9.24E-06	9.30E-06	6.81E-08	6.81E-08
Sr92	1.3	8.06E-06	8.05E-06	8.16E-06	8.16E-06
Rh107	1.3	8.02E-06	7.94E-06	7.95E-06	7.95E-06
Xe138	1.0	5.81E-06	5.62E-06	5.62E-06	5.62E-06
Te133	0.9	5.34E-06	5.74E-06	5.47E-06	5.47E-06
Rb88	0.8	4.90E-06	4.90E-06	4.89E-06	4.89E-06
Kr87	0.7	4.40E-06	4.40E-06	4.40E-06	4.40E-06
La143	0.7	4.27E-06	4.56E-06	4.28E-06	4.28E-06
Tc102	0.7	4.09E-06	4.13E-06	4.09E-06	4.08E-06
Kr88	0.6	3.85E-06	3.84E-06	3.84E-06	3.84E-06
Nd149	0.6	3.53E-06	3.74E-06	3.57E-06	3.57E-06
Sb129	0.6	3.41E-06	3.45E-06	3.03E-06	3.03E-06
Rb89	0.5	3.32E-06	3.32E-06	3.41E-06	3.41E-06
Pr145	0.5	3.04E-06	3.04E-06	2.96E-06	2.96E-06
Y93	0.5	3.00E-06	3.01E-06	3.00E-06	3.00E-06
Nb98m	0.5	2.72E-06	2.74E-06	2.72E-06	2.72E-06
Y92	0.4	2.61E-06	2.61E-06	2.59E-06	2.59E-06
Sn127	0.4	2.61E-06	2.76E-06	2.36E-06	2.63E-06
Br84	0.4	2.34E-06	2.35E-06	2.47E-06	2.47E-06
Sn128	0.4	2.30E-06	2.29E-06	2.52E-06	2.52E-06
Zr97	0.4	2.30E-06	2.39E-06	2.31E-06	2.31E-06
Sr91	0.4	2.14E-06	2.15E-06	2.15E-06	2.15E-06
I133	0.4	2.14E-06	2.14E-06	2.14E-06	2.14E-06
Y95	0.3	2.06E-06	2.01E-06	2.00E-06	2.00E-06
Pr147	0.3	1.95E-06	1.90E-06	1.94E-06	2.04E-06
Nb97	0.3	1.94E-06	1.95E-06	1.96E-06	1.96E-06
Nb97m	0.3	1.88E-06	1.86E-06	1.89E-06	1.89E-06
I132	0.3	1.87E-06	1.87E-06	1.87E-06	1.87E-06
Cs139	0.3	1.64E-06	1.63E-06	1.64E-06	1.64E-06
I133m	0.3	1.59E-06	1.44E-06	—	—
Pd111	0.3	1.55E-06	1.55E-06	1.55E-06	1.55E-06
Ba142	0.2	1.43E-06	1.41E-06	1.43E-06	1.43E-06

12 Decay data comparison for ^{242m}Am 0.0253 eV pulse decay heat

12.1 10s after pulse

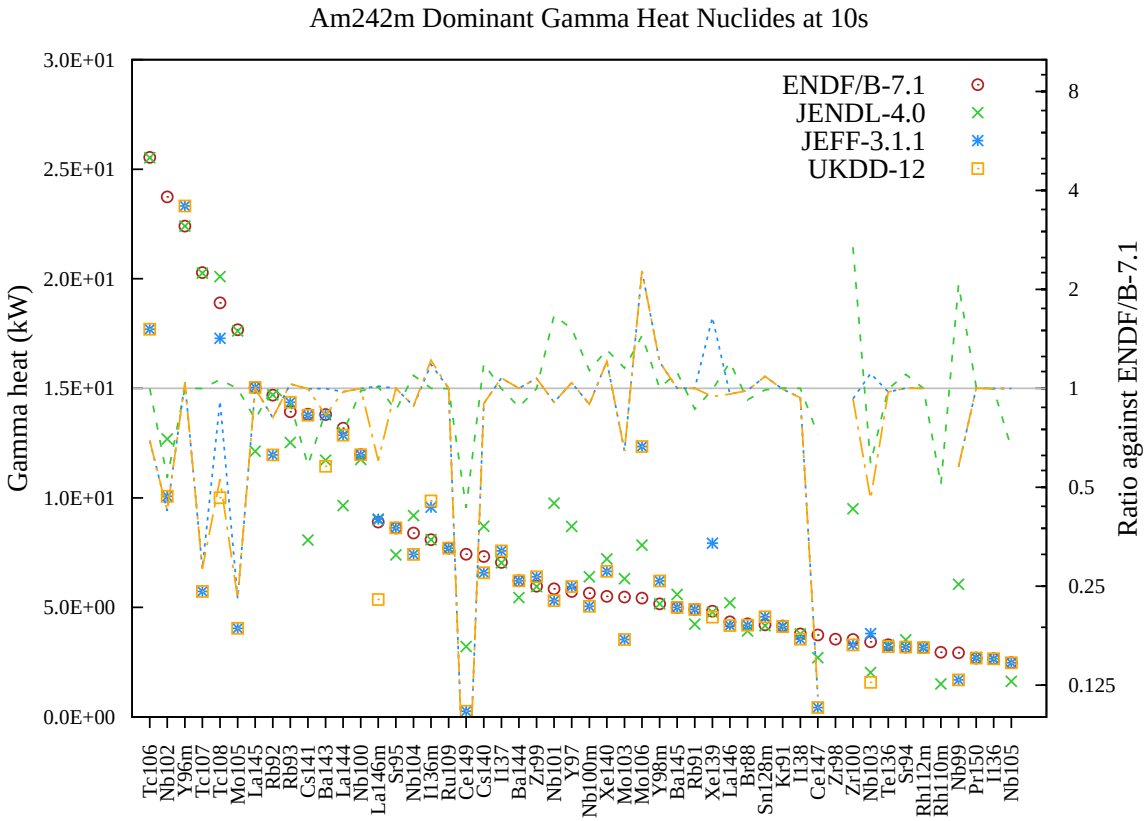

Figure 166: Gamma heat (in kW) decay data comparison for Am242m fission pulse after 10s cooling.

Table 166: Gamma heat (in kW) decay data comparison for Am242m fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	5.3	2.55E+01	2.55E+01	1.77E+01	1.77E+01
Nb102	4.9	2.37E+01	1.27E+01	1.01E+01	1.01E+01
Y96m	4.6	2.24E+01	2.24E+01	2.33E+01	2.33E+01
Tc107	4.2	2.03E+01	2.03E+01	5.73E+00	5.73E+00
Tc108	3.9	1.89E+01	2.01E+01	1.73E+01	1.00E+01
Mo105	3.7	1.77E+01	1.76E+01	4.05E+00	4.05E+00
La145	3.1	1.50E+01	1.21E+01	1.50E+01	1.50E+01
Rb92	3.0	1.47E+01	1.47E+01	1.20E+01	1.20E+01
Rb93	2.9	1.39E+01	1.25E+01	1.44E+01	1.44E+01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs141	2.9	1.38E+01	8.07E+00	1.38E+01	1.38E+01
Ba143	2.9	1.38E+01	1.17E+01	1.38E+01	1.14E+01
La144	2.7	1.32E+01	9.64E+00	1.29E+01	1.29E+01
Nb100	2.5	1.20E+01	1.18E+01	1.20E+01	1.20E+01
La146m	1.8	8.90E+00	8.99E+00	9.03E+00	5.36E+00
Sr95	1.8	8.63E+00	7.40E+00	8.63E+00	8.63E+00
Nb104	1.7	8.39E+00	9.19E+00	7.42E+00	7.42E+00
I136m	1.7	8.09E+00	8.09E+00	9.58E+00	9.86E+00
Ru109	1.6	7.71E+00	7.69E+00	7.71E+00	7.71E+00
Ce149	1.5	7.43E+00	3.22E+00	2.60E-01	2.60E-01
Cs140	1.5	7.32E+00	8.70E+00	6.58E+00	6.58E+00
I137	1.5	7.05E+00	7.04E+00	7.58E+00	7.58E+00
Ba144	1.3	6.21E+00	5.45E+00	6.21E+00	6.21E+00
Zr99	1.2	5.97E+00	5.96E+00	6.40E+00	6.40E+00
Nb101	1.2	5.85E+00	9.76E+00	5.30E+00	5.30E+00
Y97	1.2	5.73E+00	8.69E+00	5.96E+00	5.96E+00
Nb100m	1.2	5.65E+00	6.40E+00	5.05E+00	5.05E+00
Xe140	1.1	5.50E+00	7.21E+00	6.65E+00	6.65E+00
Mo103	1.1	5.47E+00	6.31E+00	3.53E+00	3.53E+00
Mo106	1.1	5.42E+00	7.85E+00	1.23E+01	1.23E+01
Y98m	1.1	5.16E+00	5.16E+00	6.21E+00	6.21E+00
Ba145	1.0	4.99E+00	5.59E+00	5.00E+00	5.00E+00
Rb91	1.0	4.91E+00	4.24E+00	4.90E+00	4.90E+00
Xe139	1.0	4.83E+00	4.78E+00	7.93E+00	4.56E+00
La146	0.9	4.34E+00	5.21E+00	4.17E+00	4.17E+00
Br88	0.9	4.25E+00	3.92E+00	4.19E+00	4.19E+00
Sn128m	0.9	4.21E+00	4.16E+00	4.57E+00	4.57E+00
Kr91	0.9	4.15E+00	4.16E+00	4.13E+00	4.13E+00
I138	0.8	3.79E+00	3.79E+00	3.55E+00	3.55E+00
Ce147	0.8	3.74E+00	2.71E+00	4.32E-01	4.32E-01
Zr98	0.7	3.55E+00	—	—	—
Zr100	0.7	3.54E+00	9.50E+00	3.29E+00	3.29E+00
Nb103	0.7	3.43E+00	2.03E+00	3.81E+00	1.58E+00
Te136	0.7	3.29E+00	3.28E+00	3.21E+00	3.21E+00
Sr94	0.7	3.19E+00	3.52E+00	3.19E+00	3.19E+00
Rh112m	0.7	3.17E+00	3.17E+00	3.17E+00	3.17E+00
Rh110m	0.6	2.95E+00	—	—	—
Nb99	0.6	2.93E+00	6.06E+00	1.69E+00	1.69E+00
Pr150	0.6	2.69E+00	2.72E+00	2.69E+00	2.69E+00
I136	0.6	2.66E+00	2.64E+00	2.65E+00	2.65E+00
Nb105	0.5	2.48E+00	1.63E+00	2.48E+00	2.48E+00

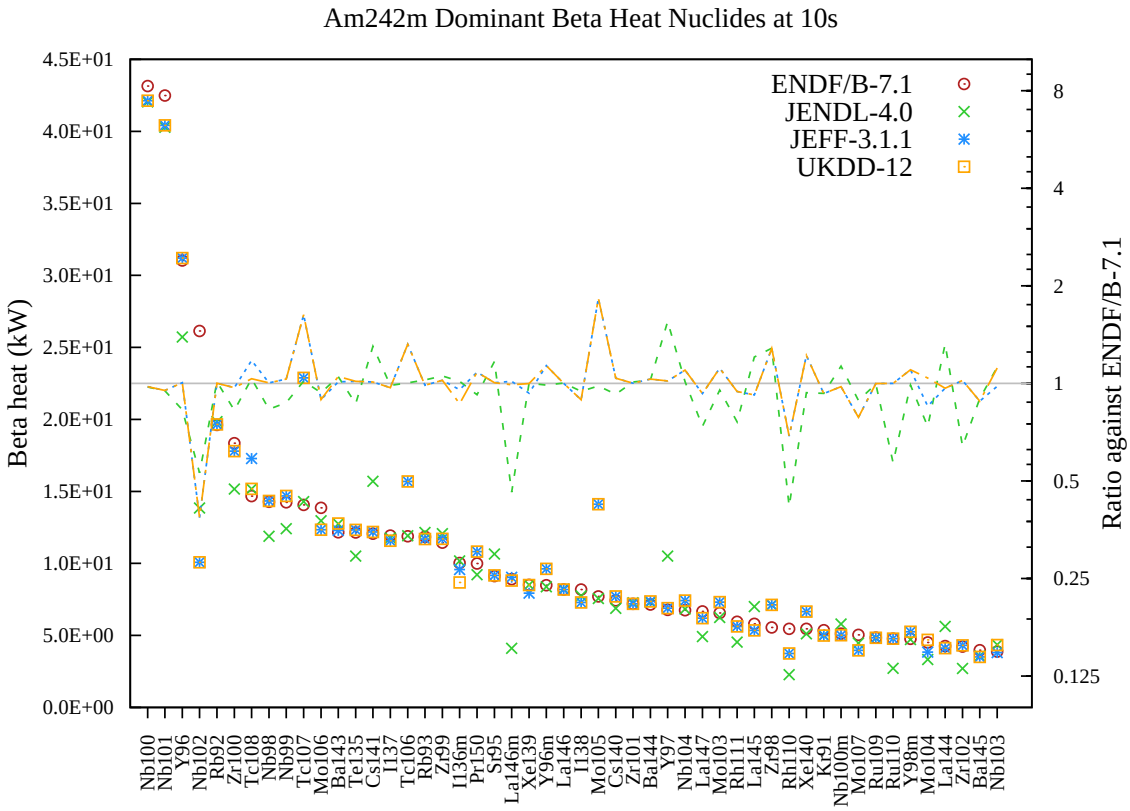

Figure 167: Beta heat (in kW) decay data comparison for Am242m fission pulse after 10s cooling.

Table 167: Beta heat (in kW) decay data comparison for Am242m fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb100	6.9	4.31E+01	4.20E+01	4.21E+01	4.21E+01
Nb101	6.8	4.25E+01	4.03E+01	4.04E+01	4.04E+01
Y96	4.9	3.10E+01	2.57E+01	3.12E+01	3.12E+01
Nb102	4.2	2.61E+01	1.38E+01	1.01E+01	1.01E+01
Rb92	3.1	1.96E+01	1.98E+01	1.97E+01	1.97E+01
Zr100	2.9	1.84E+01	1.52E+01	1.78E+01	1.78E+01
Tc108	2.3	1.47E+01	1.52E+01	1.73E+01	1.52E+01
Nb98	2.3	1.43E+01	1.19E+01	1.43E+01	1.43E+01
Nb99	2.3	1.42E+01	1.24E+01	1.47E+01	1.47E+01
Tc107	2.2	1.41E+01	1.43E+01	2.29E+01	2.29E+01
Mo106	2.2	1.39E+01	1.30E+01	1.23E+01	1.23E+01
Ba143	1.9	1.22E+01	1.28E+01	1.23E+01	1.28E+01
Te135	1.9	1.21E+01	1.05E+01	1.23E+01	1.23E+01
Cs141	1.9	1.21E+01	1.57E+01	1.22E+01	1.22E+01
I137	1.9	1.19E+01	1.18E+01	1.16E+01	1.16E+01
Tc106	1.9	1.19E+01	1.19E+01	1.57E+01	1.57E+01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb93	1.9	1.18E+01	1.21E+01	1.17E+01	1.17E+01
Zr99	1.8	1.14E+01	1.21E+01	1.17E+01	1.17E+01
I136m	1.6	1.00E+01	1.02E+01	9.58E+00	8.68E+00
Pr150	1.6	9.99E+00	9.21E+00	1.08E+01	1.08E+01
Sr95	1.5	9.12E+00	1.07E+01	9.17E+00	9.17E+00
La146m	1.4	8.90E+00	4.11E+00	9.03E+00	8.81E+00
Xe139	1.4	8.51E+00	8.51E+00	7.93E+00	8.50E+00
Y96m	1.4	8.48E+00	8.37E+00	9.62E+00	9.62E+00
La146	1.3	8.19E+00	8.21E+00	8.19E+00	8.19E+00
I138	1.3	8.19E+00	7.74E+00	7.28E+00	7.28E+00
Mo105	1.2	7.70E+00	7.56E+00	1.41E+01	1.41E+01
Cs140	1.2	7.43E+00	6.88E+00	7.71E+00	7.71E+00
Zr101	1.1	7.19E+00	7.26E+00	7.20E+00	7.20E+00
Ba144	1.1	7.14E+00	7.31E+00	7.36E+00	7.36E+00
Y97	1.1	6.77E+00	1.05E+01	6.89E+00	6.89E+00
Nb104	1.1	6.75E+00	6.83E+00	7.42E+00	7.42E+00
La147	1.1	6.67E+00	4.92E+00	6.20E+00	6.20E+00
Mo103	1.0	6.56E+00	6.25E+00	7.31E+00	7.31E+00
Rh111	0.9	5.95E+00	4.53E+00	5.62E+00	5.62E+00
La145	0.9	5.80E+00	7.00E+00	5.34E+00	5.34E+00
Zr98	0.9	5.55E+00	7.12E+00	7.12E+00	7.12E+00
Rh110	0.9	5.46E+00	2.28E+00	3.75E+00	3.75E+00
Xe140	0.9	5.46E+00	5.11E+00	6.65E+00	6.65E+00
Kr91	0.9	5.36E+00	5.00E+00	4.99E+00	4.99E+00
Nb100m	0.8	5.13E+00	5.79E+00	5.01E+00	5.01E+00
Mo107	0.8	5.04E+00	4.47E+00	3.96E+00	3.96E+00
Ru109	0.8	4.84E+00	4.82E+00	4.84E+00	4.84E+00
Ru110	0.8	4.77E+00	2.71E+00	4.77E+00	4.77E+00
Y98m	0.8	4.77E+00	4.71E+00	5.25E+00	5.25E+00
Mo104	0.7	4.51E+00	3.32E+00	3.84E+00	4.69E+00
La144	0.7	4.26E+00	5.63E+00	4.11E+00	4.11E+00
Zr102	0.7	4.22E+00	2.70E+00	4.31E+00	4.31E+00
Ba145	0.6	3.98E+00	3.57E+00	3.51E+00	3.51E+00
Nb103	0.6	3.88E+00	4.36E+00	3.81E+00	4.33E+00

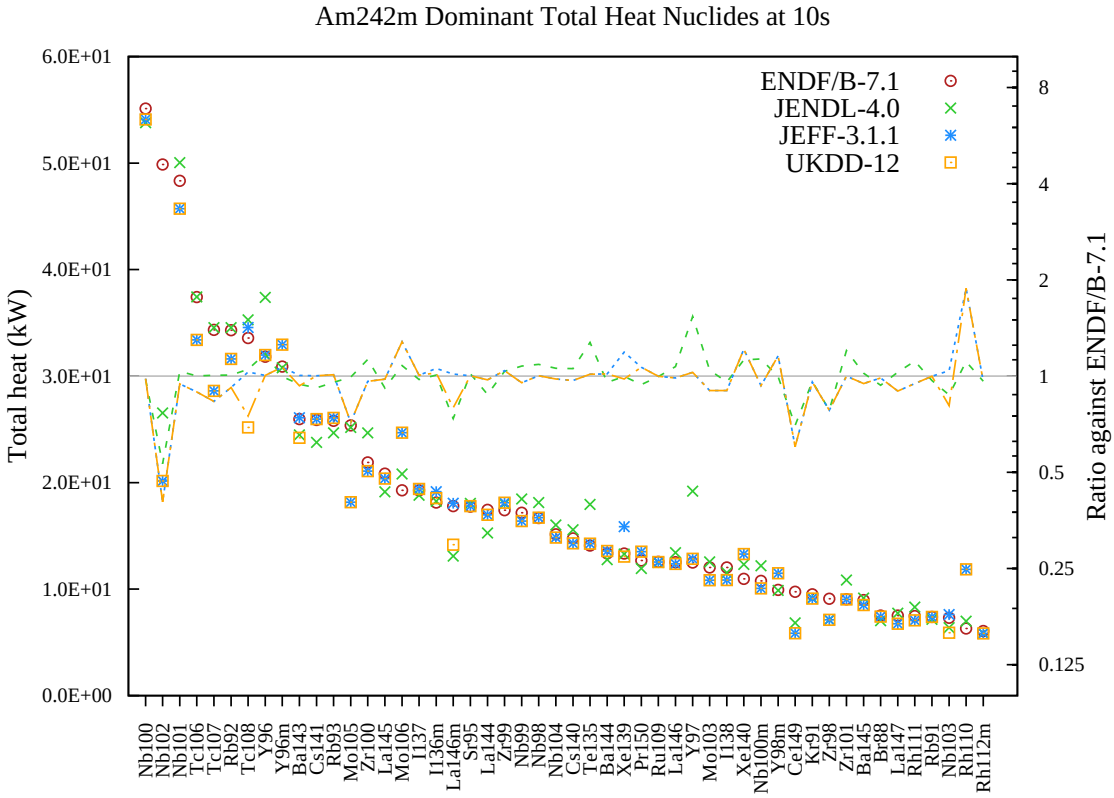

Figure 168: Total heat (in kW) decay data comparison for Am242m fission pulse after 10s cooling.

Table 168: Total heat (in kW) decay data comparison for Am242m fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb100	5.0	5.51E+01	5.38E+01	5.41E+01	5.41E+01
Nb102	4.5	4.99E+01	2.65E+01	2.01E+01	2.01E+01
Nb101	4.4	4.83E+01	5.00E+01	4.57E+01	4.57E+01
Tc106	3.4	3.74E+01	3.74E+01	3.34E+01	3.34E+01
Tc107	3.1	3.43E+01	3.45E+01	2.86E+01	2.86E+01
Rb92	3.1	3.43E+01	3.45E+01	3.16E+01	3.16E+01
Tc108	3.0	3.36E+01	3.53E+01	3.46E+01	2.52E+01
Y96	2.9	3.18E+01	3.74E+01	3.20E+01	3.20E+01
Y96m	2.8	3.09E+01	3.08E+01	3.29E+01	3.29E+01
Ba143	2.3	2.60E+01	2.45E+01	2.61E+01	2.42E+01
Cs141	2.3	2.59E+01	2.38E+01	2.60E+01	2.60E+01
Rb93	2.3	2.58E+01	2.47E+01	2.61E+01	2.61E+01
Mo105	2.3	2.54E+01	2.52E+01	1.82E+01	1.82E+01
Zr100	2.0	2.19E+01	2.47E+01	2.11E+01	2.11E+01
La145	1.9	2.08E+01	1.91E+01	2.04E+01	2.04E+01
Mo106	1.7	1.93E+01	2.08E+01	2.47E+01	2.47E+01
I137	1.7	1.93E+01	1.88E+01	1.94E+01	1.94E+01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I136m	1.6	1.81E+01	1.83E+01	1.91E+01	1.85E+01
La146m	1.6	1.78E+01	1.31E+01	1.81E+01	1.42E+01
Sr95	1.6	1.77E+01	1.80E+01	1.78E+01	1.78E+01
La144	1.6	1.74E+01	1.53E+01	1.70E+01	1.70E+01
Zr99	1.6	1.74E+01	1.80E+01	1.81E+01	1.81E+01
Nb99	1.5	1.72E+01	1.85E+01	1.64E+01	1.64E+01
Nb98	1.5	1.67E+01	1.81E+01	1.67E+01	1.67E+01
Nb104	1.4	1.51E+01	1.60E+01	1.48E+01	1.48E+01
Cs140	1.3	1.48E+01	1.56E+01	1.43E+01	1.43E+01
Te135	1.3	1.41E+01	1.80E+01	1.43E+01	1.43E+01
Ba144	1.2	1.34E+01	1.28E+01	1.36E+01	1.36E+01
Xe139	1.2	1.33E+01	1.33E+01	1.59E+01	1.31E+01
Pr150	1.1	1.27E+01	1.19E+01	1.35E+01	1.35E+01
Ru109	1.1	1.26E+01	1.25E+01	1.25E+01	1.25E+01
La146	1.1	1.25E+01	1.34E+01	1.24E+01	1.24E+01
Y97	1.1	1.25E+01	1.92E+01	1.28E+01	1.28E+01
Mo103	1.1	1.20E+01	1.26E+01	1.08E+01	1.08E+01
I138	1.1	1.20E+01	1.15E+01	1.08E+01	1.08E+01
Xe140	1.0	1.10E+01	1.23E+01	1.33E+01	1.33E+01
Nb100m	1.0	1.08E+01	1.22E+01	1.01E+01	1.01E+01
Y98m	0.9	9.93E+00	9.88E+00	1.15E+01	1.15E+01
Ce149	0.9	9.75E+00	6.84E+00	5.86E+00	5.86E+00
Kr91	0.9	9.52E+00	9.16E+00	9.12E+00	9.12E+00
Zr98	0.8	9.10E+00	7.12E+00	7.12E+00	7.12E+00
Zr101	0.8	9.04E+00	1.09E+01	9.04E+00	9.04E+00
Ba145	0.8	8.97E+00	9.17E+00	8.51E+00	8.51E+00
Br88	0.7	7.52E+00	7.04E+00	7.43E+00	7.43E+00
La147	0.7	7.52E+00	7.74E+00	6.75E+00	6.75E+00
Rh111	0.7	7.46E+00	8.31E+00	7.07E+00	7.07E+00
Rb91	0.7	7.39E+00	7.16E+00	7.38E+00	7.38E+00
Nb103	0.7	7.31E+00	6.38E+00	7.61E+00	5.91E+00
Rh110	0.6	6.30E+00	6.99E+00	1.19E+01	1.19E+01
Rh112m	0.5	6.07E+00	5.85E+00	5.85E+00	5.85E+00

12.2 100s after pulse

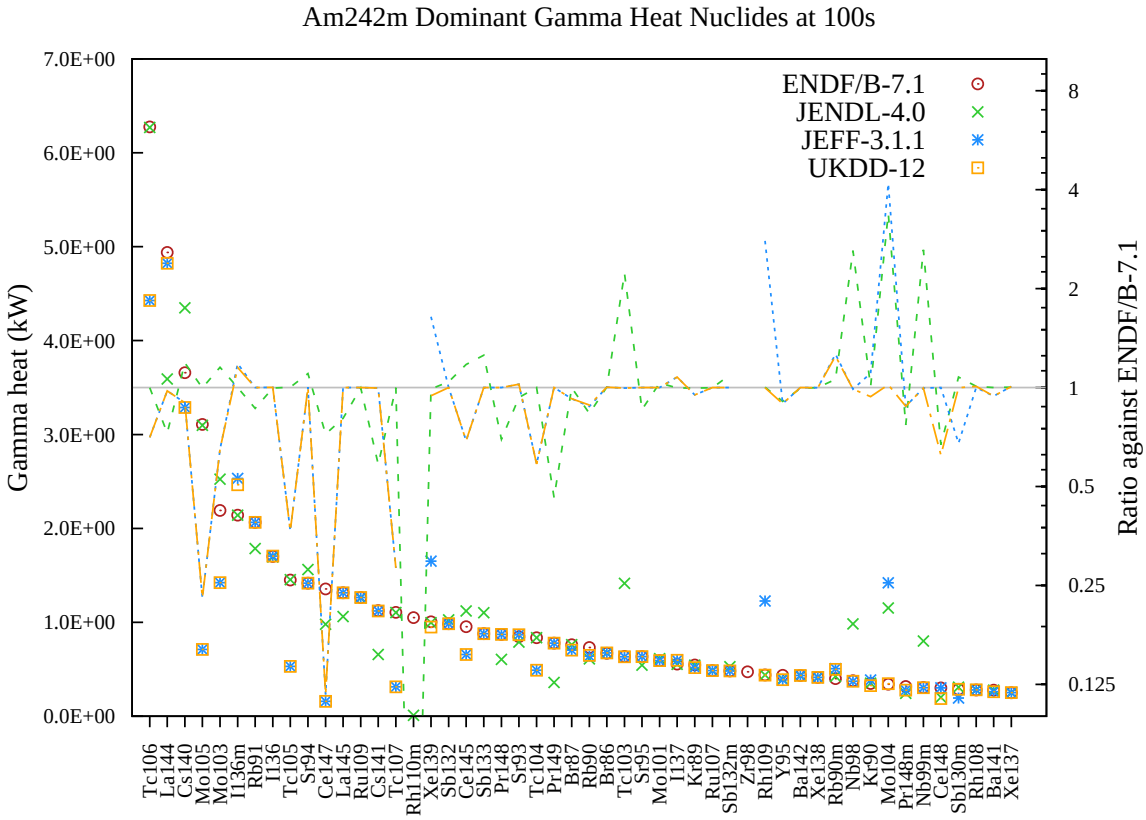

Figure 169: Gamma heat (in kW) decay data comparison for Am242m fission pulse after 100s cooling.

Table 169: Gamma heat (in kW) decay data comparison for Am242m fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	10.4	6.28E+00	6.27E+00	4.43E+00	4.43E+00
La144	8.2	4.94E+00	3.59E+00	4.82E+00	4.82E+00
Cs140	6.1	3.66E+00	4.35E+00	3.29E+00	3.29E+00
Mo105	5.2	3.11E+00	3.10E+00	7.12E-01	7.12E-01
Mo103	3.6	2.19E+00	2.53E+00	1.42E+00	1.42E+00
I136m	3.6	2.14E+00	2.14E+00	2.53E+00	2.46E+00
Rb91	3.4	2.07E+00	1.79E+00	2.06E+00	2.06E+00
I136	2.8	1.70E+00	1.70E+00	1.70E+00	1.70E+00
Tc105	2.4	1.45E+00	1.45E+00	5.31E-01	5.31E-01
Sr94	2.4	1.42E+00	1.56E+00	1.42E+00	1.42E+00
Ce147	2.2	1.36E+00	9.79E-01	1.58E-01	1.58E-01
La145	2.2	1.32E+00	1.06E+00	1.31E+00	1.31E+00
Ru109	2.1	1.26E+00	1.26E+00	1.26E+00	1.26E+00

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs141	1.9	1.12E+00	6.57E-01	1.12E+00	1.12E+00
Tc107	1.8	1.11E+00	1.10E+00	3.12E-01	3.12E-01
Rh110m	1.7	1.05E+00	—	—	—
Xe139	1.7	1.01E+00	9.96E-01	1.65E+00	9.49E-01
Sb132	1.6	9.84E-01	1.03E+00	9.84E-01	9.84E-01
Ce145	1.6	9.53E-01	1.12E+00	6.57E-01	6.57E-01
Sb133	1.5	8.79E-01	1.10E+00	8.79E-01	8.79E-01
Pr148	1.4	8.71E-01	6.06E-01	8.71E-01	8.71E-01
Sr93	1.4	8.48E-01	7.90E-01	8.67E-01	8.67E-01
Tc104	1.4	8.36E-01	8.36E-01	4.89E-01	4.89E-01
Pr149	1.3	7.78E-01	3.60E-01	7.78E-01	7.78E-01
Br87	1.3	7.62E-01	7.61E-01	7.04E-01	7.04E-01
Rb90	1.2	7.31E-01	6.10E-01	6.41E-01	6.47E-01
Br86	1.1	6.71E-01	6.74E-01	6.73E-01	6.73E-01
Tc103	1.1	6.36E-01	1.41E+00	6.34E-01	6.34E-01
Sr95	1.1	6.34E-01	5.44E-01	6.34E-01	6.34E-01
Mo101	1.0	5.93E-01	6.12E-01	5.93E-01	5.93E-01
I137	0.9	5.54E-01	5.53E-01	5.96E-01	5.96E-01
Kr89	0.9	5.45E-01	5.43E-01	5.18E-01	5.18E-01
Ru107	0.8	4.86E-01	4.86E-01	4.86E-01	4.86E-01
Sb132m	0.8	4.83E-01	5.27E-01	4.83E-01	4.83E-01
Zr98	0.8	4.73E-01	—	—	—
Rh109	0.7	4.39E-01	4.40E-01	1.23E+00	4.38E-01
Y95	0.7	4.36E-01	3.96E-01	3.89E-01	3.89E-01
Ba142	0.7	4.34E-01	4.32E-01	4.34E-01	4.34E-01
Xe138	0.7	4.14E-01	4.14E-01	4.13E-01	4.13E-01
Rb90m	0.7	4.00E-01	4.24E-01	5.06E-01	4.98E-01
Nb98	0.6	3.77E-01	9.84E-01	3.73E-01	3.73E-01
Kr90	0.6	3.48E-01	3.51E-01	3.85E-01	3.27E-01
Mo104	0.6	3.40E-01	1.15E+00	1.42E+00	3.47E-01
Pr148m	0.5	3.17E-01	2.44E-01	2.78E-01	2.78E-01
Nb99m	0.5	3.05E-01	8.01E-01	3.04E-01	3.04E-01
Ce148	0.5	3.01E-01	2.02E-01	3.01E-01	1.88E-01
Sb130m	0.5	2.87E-01	3.08E-01	1.94E-01	2.87E-01
Rh108	0.5	2.79E-01	2.82E-01	2.79E-01	2.82E-01
Ba141	0.5	2.77E-01	2.77E-01	2.61E-01	2.61E-01
Xe137	0.4	2.49E-01	2.50E-01	2.51E-01	2.51E-01

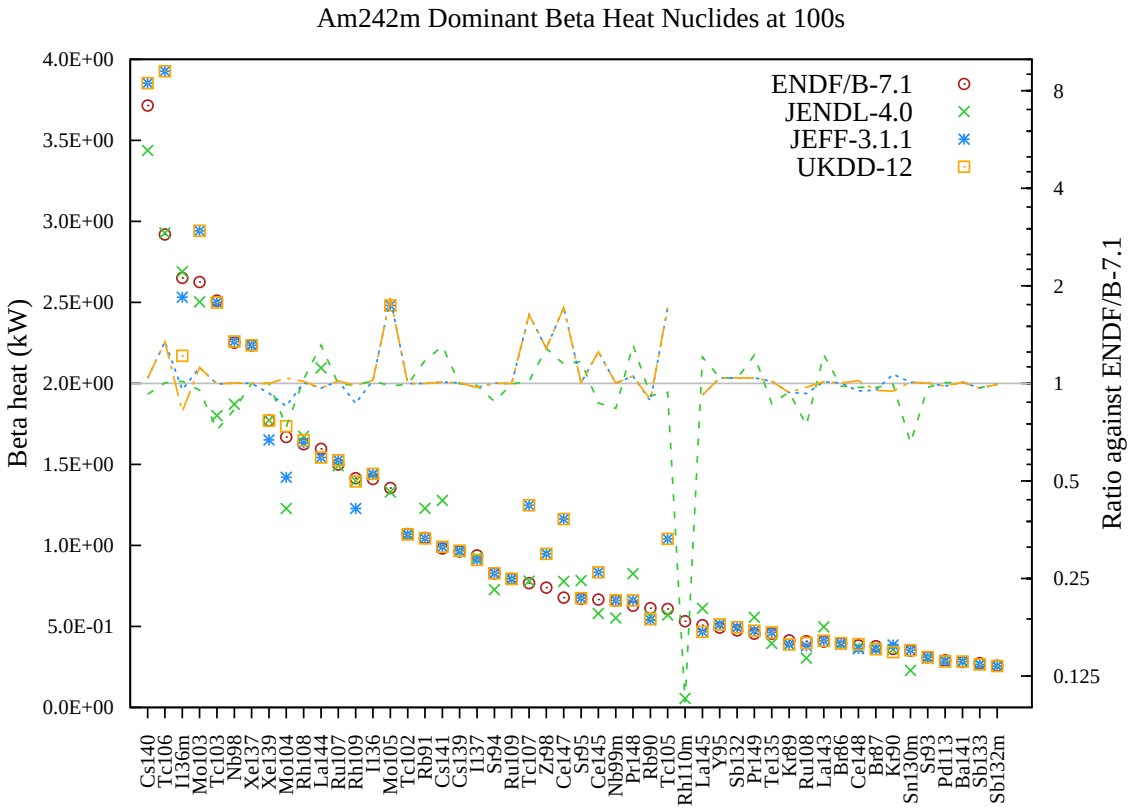

Figure 170: Beta heat (in kW) decay data comparison for Am242m fission pulse after 100s cooling.

Table 170: Beta heat (in kW) decay data comparison for Am242m fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	6.5	3.71E+00	3.44E+00	3.85E+00	3.85E+00
Tc106	5.1	2.92E+00	2.93E+00	3.93E+00	3.93E+00
I136m	4.7	2.65E+00	2.69E+00	2.53E+00	2.17E+00
Mo103	4.6	2.63E+00	2.50E+00	2.94E+00	2.94E+00
Tc103	4.4	2.51E+00	1.80E+00	2.50E+00	2.50E+00
Nb98	4.0	2.25E+00	1.87E+00	2.26E+00	2.26E+00
Xe137	3.9	2.23E+00	2.23E+00	2.23E+00	2.23E+00
Xe139	3.1	1.77E+00	1.77E+00	1.65E+00	1.77E+00
Mo104	2.9	1.67E+00	1.23E+00	1.42E+00	1.74E+00
Rh108	2.9	1.62E+00	1.67E+00	1.63E+00	1.65E+00
La144	2.8	1.60E+00	2.10E+00	1.54E+00	1.54E+00
Ru107	2.6	1.50E+00	1.49E+00	1.53E+00	1.53E+00
Rh109	2.5	1.42E+00	1.40E+00	1.23E+00	1.40E+00
I136	2.5	1.41E+00	1.44E+00	1.44E+00	1.44E+00
Mo105	2.4	1.35E+00	1.33E+00	2.48E+00	2.48E+00
Tc102	1.9	1.07E+00	1.06E+00	1.07E+00	1.07E+00

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb91	1.8	1.05E+00	1.23E+00	1.04E+00	1.04E+00
Cs141	1.7	9.81E-01	1.28E+00	9.92E-01	9.92E-01
Cs139	1.7	9.63E-01	9.61E-01	9.67E-01	9.67E-01
I137	1.7	9.38E-01	9.25E-01	9.10E-01	9.10E-01
Sr94	1.5	8.26E-01	7.27E-01	8.27E-01	8.27E-01
Ru109	1.4	7.94E-01	7.90E-01	7.93E-01	7.93E-01
Tc107	1.4	7.67E-01	7.79E-01	1.25E+00	1.25E+00
Zr98	1.3	7.40E-01	9.49E-01	9.48E-01	9.48E-01
Ce147	1.2	6.78E-01	7.78E-01	1.16E+00	1.16E+00
Sr95	1.2	6.70E-01	7.83E-01	6.74E-01	6.74E-01
Ce145	1.2	6.66E-01	5.79E-01	8.34E-01	8.34E-01
Nb99m	1.2	6.60E-01	5.52E-01	6.61E-01	6.61E-01
Pr148	1.1	6.27E-01	8.26E-01	6.61E-01	6.61E-01
Rb90	1.1	6.13E-01	5.62E-01	5.41E-01	5.46E-01
Tc105	1.1	6.07E-01	5.70E-01	1.04E+00	1.04E+00
Rh110m	0.9	5.32E-01	5.52E-02	—	—
La145	0.9	5.07E-01	6.12E-01	4.67E-01	4.67E-01
Y95	0.9	4.93E-01	5.13E-01	5.12E-01	5.12E-01
Sb132	0.8	4.75E-01	4.93E-01	4.95E-01	4.95E-01
Pr149	0.8	4.56E-01	5.57E-01	4.74E-01	4.74E-01
Te135	0.8	4.56E-01	3.94E-01	4.63E-01	4.63E-01
Kr89	0.7	4.14E-01	3.90E-01	3.88E-01	3.88E-01
Ru108	0.7	4.08E-01	3.04E-01	3.80E-01	3.97E-01
La143	0.7	4.06E-01	4.97E-01	4.11E-01	4.11E-01
Br86	0.7	3.96E-01	3.88E-01	3.97E-01	3.97E-01
Ce148	0.7	3.83E-01	3.72E-01	3.63E-01	3.90E-01
Br87	0.7	3.77E-01	3.67E-01	3.60E-01	3.60E-01
Kr90	0.6	3.61E-01	3.59E-01	3.85E-01	3.42E-01
Sn130m	0.6	3.50E-01	2.29E-01	3.53E-01	3.53E-01
Sr93	0.5	3.10E-01	3.01E-01	3.11E-01	3.11E-01
Pd113	0.5	2.90E-01	2.91E-01	2.84E-01	2.84E-01
Ba141	0.5	2.81E-01	2.84E-01	2.83E-01	2.83E-01
Sb133	0.5	2.74E-01	2.66E-01	2.64E-01	2.64E-01
Sb132m	0.5	2.58E-01	2.57E-01	2.56E-01	2.56E-01

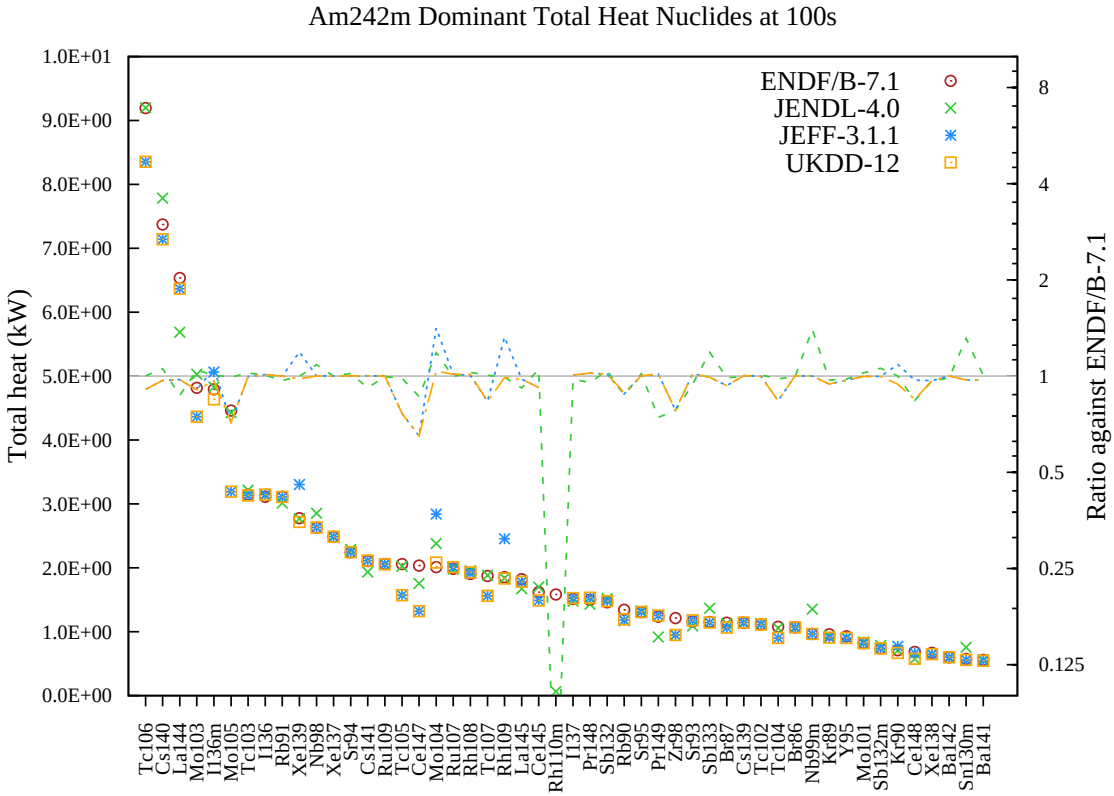

Figure 171: Total heat (in kW) decay data comparison for Am242m fission pulse after 100s cooling.

Table 171: Total heat (in kW) decay data comparison for Am242m fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	7.9	9.19E+00	9.20E+00	8.35E+00	8.35E+00
Cs140	6.3	7.37E+00	7.79E+00	7.14E+00	7.14E+00
La144	5.6	6.54E+00	5.69E+00	6.37E+00	6.37E+00
Mo103	4.1	4.82E+00	5.03E+00	4.36E+00	4.36E+00
I136m	4.1	4.79E+00	4.83E+00	5.06E+00	4.63E+00
Mo105	3.8	4.46E+00	4.43E+00	3.19E+00	3.19E+00
Tc103	2.7	3.15E+00	3.22E+00	3.13E+00	3.13E+00
I136	2.7	3.11E+00	3.13E+00	3.15E+00	3.15E+00
Rb91	2.7	3.11E+00	3.01E+00	3.11E+00	3.11E+00
Xe139	2.4	2.78E+00	2.77E+00	3.30E+00	2.72E+00
Nb98	2.2	2.63E+00	2.85E+00	2.63E+00	2.63E+00
Xe137	2.1	2.48E+00	2.48E+00	2.49E+00	2.49E+00
Sr94	1.9	2.24E+00	2.29E+00	2.25E+00	2.25E+00
Cs141	1.8	2.11E+00	1.93E+00	2.11E+00	2.11E+00
Ru109	1.8	2.06E+00	2.05E+00	2.06E+00	2.06E+00
Tc105	1.8	2.06E+00	2.02E+00	1.57E+00	1.57E+00
Ce147	1.7	2.03E+00	1.76E+00	1.32E+00	1.32E+00

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Mo104	1.7	2.01E+00	2.38E+00	2.84E+00	2.08E+00
Ru107	1.7	1.98E+00	1.98E+00	2.01E+00	2.01E+00
Rh108	1.6	1.90E+00	1.96E+00	1.91E+00	1.93E+00
Tc107	1.6	1.87E+00	1.88E+00	1.56E+00	1.56E+00
Rh109	1.6	1.85E+00	1.84E+00	2.45E+00	1.83E+00
La145	1.6	1.82E+00	1.67E+00	1.78E+00	1.78E+00
Ce145	1.4	1.62E+00	1.70E+00	1.49E+00	1.49E+00
Rh110m	1.4	1.58E+00	6.39E-02	—	—
I137	1.3	1.51E+00	1.48E+00	1.53E+00	1.53E+00
Pr148	1.3	1.50E+00	1.43E+00	1.53E+00	1.53E+00
Sb132	1.2	1.46E+00	1.52E+00	1.48E+00	1.48E+00
Rb90	1.1	1.34E+00	1.17E+00	1.18E+00	1.19E+00
Sr95	1.1	1.30E+00	1.33E+00	1.31E+00	1.31E+00
Pr149	1.1	1.23E+00	9.17E-01	1.25E+00	1.25E+00
Zr98	1.0	1.21E+00	9.49E-01	9.48E-01	9.48E-01
Sr93	1.0	1.16E+00	1.09E+00	1.18E+00	1.18E+00
Sb133	1.0	1.15E+00	1.37E+00	1.14E+00	1.14E+00
Br87	1.0	1.14E+00	1.13E+00	1.06E+00	1.06E+00
Cs139	1.0	1.14E+00	1.14E+00	1.14E+00	1.14E+00
Tc102	1.0	1.11E+00	1.12E+00	1.11E+00	1.11E+00
Tc104	0.9	1.08E+00	1.06E+00	9.02E-01	9.02E-01
Br86	0.9	1.07E+00	1.06E+00	1.07E+00	1.07E+00
Nb99m	0.8	9.65E-01	1.35E+00	9.65E-01	9.65E-01
Kr89	0.8	9.59E-01	9.32E-01	9.06E-01	9.06E-01
Y95	0.8	9.29E-01	9.09E-01	9.01E-01	9.01E-01
Mo101	0.7	8.21E-01	8.40E-01	8.19E-01	8.19E-01
Sb132m	0.6	7.40E-01	7.84E-01	7.38E-01	7.38E-01
Kr90	0.6	7.09E-01	7.10E-01	7.71E-01	6.68E-01
Ce148	0.6	6.84E-01	5.74E-01	6.64E-01	5.78E-01
Xe138	0.6	6.71E-01	6.49E-01	6.49E-01	6.49E-01
Ba142	0.5	5.99E-01	5.91E-01	6.00E-01	6.00E-01
Sn130m	0.5	5.76E-01	7.56E-01	5.59E-01	5.59E-01
Ba141	0.5	5.58E-01	5.61E-01	5.45E-01	5.45E-01

12.3 1000s after pulse

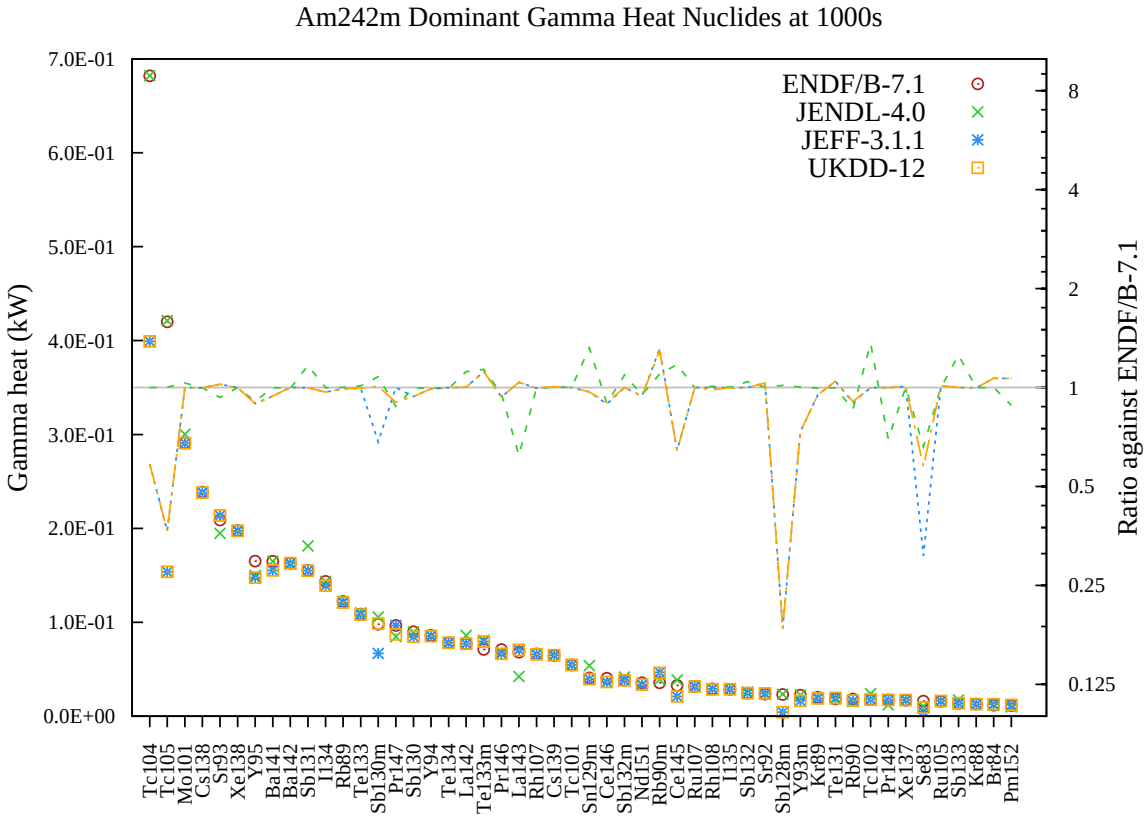

Figure 172: Gamma heat (in kW) decay data comparison for Am242m fission pulse after 1000s cooling.

Table 172: Gamma heat (in kW) decay data comparison for Am242m fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	14.4	6.82E-01	6.82E-01	3.99E-01	3.99E-01
Tc105	8.8	4.20E-01	4.21E-01	1.54E-01	1.54E-01
Mo101	6.1	2.91E-01	3.00E-01	2.91E-01	2.91E-01
Cs138	5.0	2.39E-01	2.38E-01	2.38E-01	2.38E-01
Sr93	4.4	2.09E-01	1.95E-01	2.14E-01	2.14E-01
Xe138	4.2	1.98E-01	1.98E-01	1.97E-01	1.97E-01
Y95	3.5	1.65E-01	1.50E-01	1.48E-01	1.48E-01
Ba141	3.5	1.65E-01	1.65E-01	1.55E-01	1.55E-01
Ba142	3.4	1.63E-01	1.62E-01	1.63E-01	1.63E-01
Sb131	3.3	1.55E-01	1.81E-01	1.55E-01	1.55E-01
I134	3.0	1.44E-01	1.43E-01	1.39E-01	1.39E-01
Rb89	2.6	1.22E-01	1.22E-01	1.21E-01	1.21E-01
Te133	2.3	1.09E-01	1.10E-01	1.08E-01	1.08E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb130m	2.1	9.79E-02	1.06E-01	6.69E-02	9.87E-02
Pr147	2.0	9.67E-02	8.47E-02	9.67E-02	8.72E-02
Sb130	1.9	8.99E-02	8.95E-02	8.45E-02	8.45E-02
Y94	1.8	8.61E-02	8.58E-02	8.52E-02	8.52E-02
Te134	1.6	7.82E-02	7.76E-02	7.82E-02	7.82E-02
La142	1.6	7.70E-02	8.61E-02	7.72E-02	7.72E-02
Te133m	1.5	7.11E-02	8.09E-02	7.96E-02	7.96E-02
Pr146	1.5	7.10E-02	6.80E-02	6.64E-02	6.64E-02
La143	1.4	6.81E-02	4.22E-02	7.06E-02	7.06E-02
Rh107	1.4	6.62E-02	6.62E-02	6.59E-02	6.59E-02
Cs139	1.4	6.45E-02	6.45E-02	6.50E-02	6.50E-02
Tc101	1.2	5.46E-02	5.48E-02	5.46E-02	5.46E-02
Sn129m	0.9	4.08E-02	5.38E-02	3.95E-02	3.95E-02
Ce146	0.9	4.05E-02	3.63E-02	3.61E-02	3.64E-02
Sb132m	0.8	3.82E-02	4.17E-02	3.82E-02	3.82E-02
Nd151	0.8	3.56E-02	3.39E-02	3.36E-02	3.36E-02
Rb90m	0.8	3.56E-02	3.92E-02	4.67E-02	4.60E-02
Ce145	0.7	3.28E-02	3.86E-02	2.11E-02	2.11E-02
Ru107	0.7	3.17E-02	3.17E-02	3.17E-02	3.17E-02
Rh108	0.6	2.90E-02	2.93E-02	2.90E-02	2.86E-02
I135	0.6	2.87E-02	2.87E-02	2.87E-02	2.87E-02
Sb132	0.5	2.46E-02	2.57E-02	2.46E-02	2.46E-02
Sr92	0.5	2.34E-02	2.34E-02	2.41E-02	2.41E-02
Sb128m	0.5	2.31E-02	2.34E-02	4.27E-03	4.27E-03
Y93m	0.5	2.24E-02	2.24E-02	1.64E-02	1.64E-02
Kr89	0.4	2.01E-02	2.00E-02	1.91E-02	1.91E-02
Te131	0.4	1.85E-02	1.85E-02	1.93E-02	1.93E-02
Rb90	0.4	1.82E-02	1.56E-02	1.64E-02	1.65E-02
Tc102	0.4	1.77E-02	2.41E-02	1.77E-02	1.77E-02
Pr148	0.4	1.74E-02	1.21E-02	1.74E-02	1.74E-02
Xe137	0.4	1.70E-02	1.71E-02	1.72E-02	1.72E-02
Se83	0.3	1.60E-02	1.06E-02	4.93E-03	9.20E-03
Ru105	0.3	1.59E-02	1.59E-02	1.61E-02	1.61E-02
Sb133	0.3	1.37E-02	1.72E-02	1.37E-02	1.37E-02
Kr88	0.3	1.29E-02	1.29E-02	1.29E-02	1.29E-02
Br84	0.2	1.18E-02	1.18E-02	1.26E-02	1.26E-02
Pm152	0.2	1.11E-02	9.83E-03	1.19E-02	1.19E-02

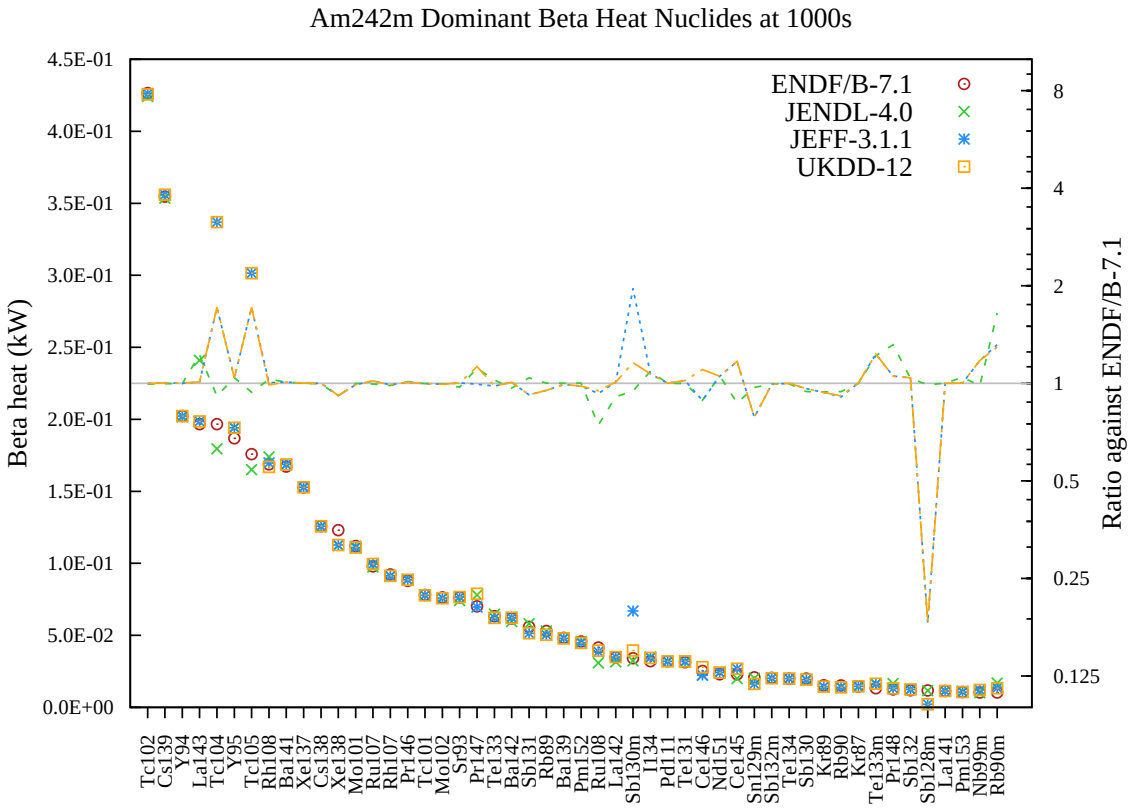

Figure 173: Beta heat (in kW) decay data comparison for Am242m fission pulse after 1000s cooling.

Table 173: Beta heat (in kW) decay data comparison for Am242m fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	10.2	4.27E-01	4.24E-01	4.26E-01	4.26E-01
Cs139	8.5	3.55E-01	3.54E-01	3.56E-01	3.56E-01
Y94	4.8	2.02E-01	2.02E-01	2.02E-01	2.02E-01
La143	4.7	1.97E-01	2.41E-01	1.99E-01	1.99E-01
Tc104	4.7	1.97E-01	1.80E-01	3.37E-01	3.37E-01
Y95	4.5	1.87E-01	1.95E-01	1.94E-01	1.94E-01
Tc105	4.2	1.76E-01	1.65E-01	3.01E-01	3.01E-01
Rh108	4.0	1.69E-01	1.74E-01	1.70E-01	1.67E-01
Ba141	4.0	1.67E-01	1.69E-01	1.69E-01	1.69E-01
Xe137	3.7	1.53E-01	1.53E-01	1.53E-01	1.53E-01
Cs138	3.0	1.26E-01	1.25E-01	1.26E-01	1.26E-01
Xe138	2.9	1.23E-01	1.12E-01	1.13E-01	1.13E-01
Mo101	2.7	1.12E-01	1.12E-01	1.11E-01	1.11E-01
Ru107	2.3	9.79E-02	9.74E-02	9.96E-02	9.96E-02
Rh107	2.2	9.23E-02	9.09E-02	9.13E-02	9.13E-02
Pr146	2.1	8.78E-02	8.89E-02	8.86E-02	8.86E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc101	1.9	7.80E-02	7.79E-02	7.78E-02	7.78E-02
Mo102	1.8	7.64E-02	7.61E-02	7.59E-02	7.58E-02
Sr93	1.8	7.63E-02	7.42E-02	7.66E-02	7.66E-02
Pr147	1.7	7.01E-02	7.81E-02	6.96E-02	7.89E-02
Te133	1.5	6.33E-02	6.48E-02	6.21E-02	6.21E-02
Ba142	1.5	6.18E-02	5.97E-02	6.22E-02	6.22E-02
Sb131	1.3	5.59E-02	5.81E-02	5.15E-02	5.14E-02
Rb89	1.3	5.30E-02	5.30E-02	5.04E-02	5.04E-02
Ba139	1.2	4.83E-02	4.83E-02	4.79E-02	4.79E-02
Pm152	1.1	4.57E-02	4.57E-02	4.48E-02	4.48E-02
Ru108	1.0	4.16E-02	3.09E-02	3.87E-02	3.94E-02
La142	0.8	3.47E-02	3.15E-02	3.50E-02	3.50E-02
Sb130m	0.8	3.41E-02	3.23E-02	6.69E-02	3.95E-02
I134	0.8	3.21E-02	3.49E-02	3.43E-02	3.43E-02
Pd111	0.8	3.20E-02	3.20E-02	3.20E-02	3.20E-02
Te131	0.8	3.14E-02	3.13E-02	3.20E-02	3.20E-02
Ce146	0.6	2.52E-02	2.24E-02	2.24E-02	2.78E-02
Nd151	0.6	2.30E-02	2.43E-02	2.42E-02	2.42E-02
Ce145	0.5	2.30E-02	2.00E-02	2.68E-02	2.68E-02
Sn129m	0.5	2.08E-02	2.02E-02	1.63E-02	1.63E-02
Sb132m	0.5	2.04E-02	2.03E-02	2.03E-02	2.03E-02
Te134	0.5	2.00E-02	2.00E-02	2.00E-02	2.00E-02
Sb130	0.5	2.00E-02	1.89E-02	1.93E-02	1.93E-02
Kr89	0.4	1.53E-02	1.44E-02	1.43E-02	1.43E-02
Rb90	0.4	1.52E-02	1.44E-02	1.38E-02	1.39E-02
Kr87	0.3	1.45E-02	1.45E-02	1.46E-02	1.46E-02
Te133m	0.3	1.33E-02	1.62E-02	1.64E-02	1.64E-02
Pr148	0.3	1.25E-02	1.65E-02	1.32E-02	1.32E-02
Sb132	0.3	1.19E-02	1.23E-02	1.24E-02	1.24E-02
Sb128m	0.3	1.18E-02	1.16E-02	2.14E-03	2.14E-03
La141	0.3	1.14E-02	1.14E-02	1.14E-02	1.14E-02
Pm153	0.3	1.06E-02	1.11E-02	1.07E-02	1.07E-02
Nb99m	0.2	1.03E-02	1.01E-02	1.21E-02	1.21E-02
Rb90m	0.2	1.03E-02	1.69E-02	1.35E-02	1.33E-02

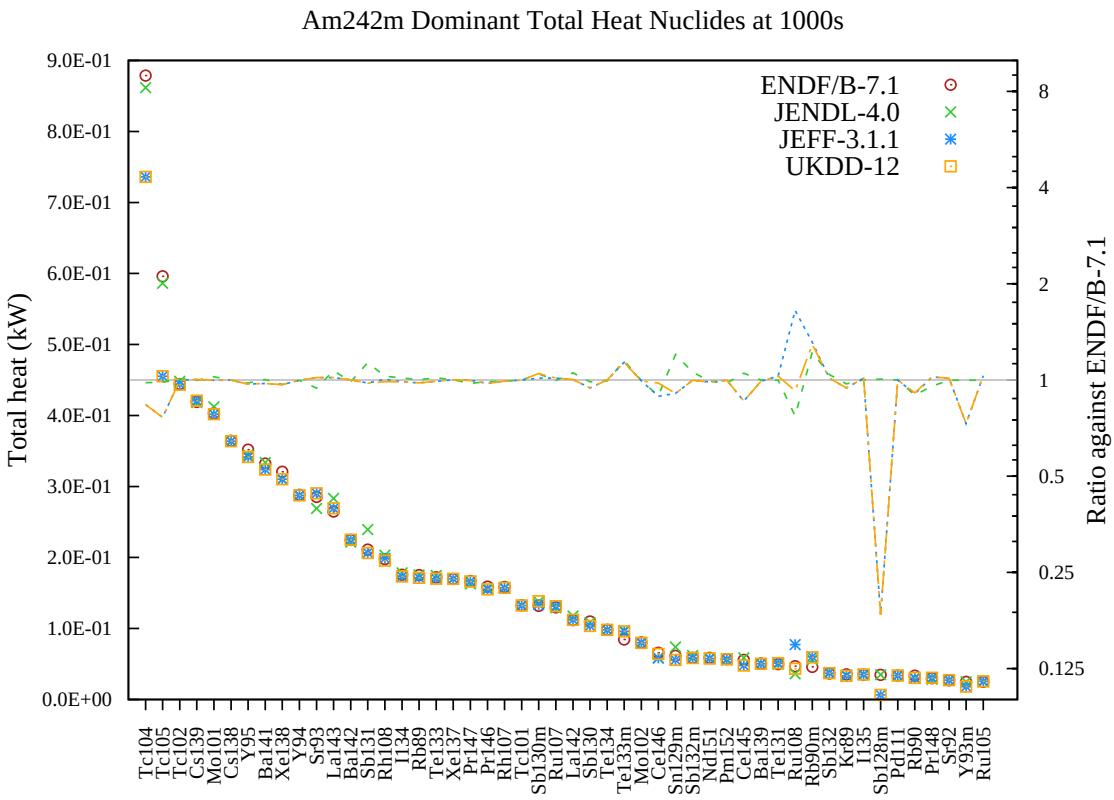

Figure 174: Total heat (in kW) decay data comparison for Am242m fission pulse after 1000s cooling.

Table 174: Total heat (in kW) decay data comparison for Am242m fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	9.8	8.79E-01	8.62E-01	7.36E-01	7.36E-01
Tc105	6.7	5.96E-01	5.86E-01	4.55E-01	4.55E-01
Tc102	5.0	4.44E-01	4.48E-01	4.44E-01	4.43E-01
Cs139	4.7	4.19E-01	4.18E-01	4.21E-01	4.21E-01
Mo101	4.5	4.03E-01	4.12E-01	4.02E-01	4.02E-01
Cs138	4.1	3.64E-01	3.64E-01	3.64E-01	3.64E-01
Y95	3.9	3.52E-01	3.44E-01	3.42E-01	3.42E-01
Ba141	3.7	3.32E-01	3.34E-01	3.24E-01	3.24E-01
Xe138	3.6	3.21E-01	3.10E-01	3.10E-01	3.10E-01
Y94	3.2	2.88E-01	2.87E-01	2.88E-01	2.88E-01
Sr93	3.2	2.85E-01	2.69E-01	2.90E-01	2.90E-01
La143	3.0	2.65E-01	2.83E-01	2.69E-01	2.69E-01
Ba142	2.5	2.25E-01	2.22E-01	2.25E-01	2.25E-01
Sb131	2.4	2.11E-01	2.39E-01	2.06E-01	2.06E-01
Rh108	2.2	1.98E-01	2.03E-01	1.99E-01	1.95E-01
I134	2.0	1.76E-01	1.78E-01	1.73E-01	1.73E-01
Rb89	2.0	1.75E-01	1.75E-01	1.71E-01	1.71E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te133	1.9	1.72E-01	1.75E-01	1.70E-01	1.70E-01
Xe137	1.9	1.70E-01	1.70E-01	1.70E-01	1.70E-01
Pr147	1.9	1.67E-01	1.63E-01	1.66E-01	1.66E-01
Pr146	1.8	1.59E-01	1.57E-01	1.55E-01	1.55E-01
Rh107	1.8	1.59E-01	1.57E-01	1.57E-01	1.57E-01
Tc101	1.5	1.33E-01	1.33E-01	1.32E-01	1.32E-01
Sb130m	1.5	1.32E-01	1.38E-01	1.34E-01	1.38E-01
Ru107	1.5	1.30E-01	1.29E-01	1.31E-01	1.31E-01
La142	1.3	1.12E-01	1.18E-01	1.12E-01	1.12E-01
Sb130	1.2	1.10E-01	1.08E-01	1.04E-01	1.04E-01
Te134	1.1	9.82E-02	9.76E-02	9.82E-02	9.82E-02
Te133m	0.9	8.45E-02	9.71E-02	9.60E-02	9.60E-02
Mo102	0.9	8.04E-02	8.01E-02	7.99E-02	7.98E-02
Ce146	0.7	6.57E-02	5.86E-02	5.84E-02	6.43E-02
Sn129m	0.7	6.15E-02	7.40E-02	5.59E-02	5.59E-02
Sb132m	0.7	5.86E-02	6.21E-02	5.85E-02	5.85E-02
Nd151	0.7	5.86E-02	5.82E-02	5.78E-02	5.78E-02
Pm152	0.6	5.68E-02	5.56E-02	5.67E-02	5.67E-02
Ce145	0.6	5.58E-02	5.86E-02	4.79E-02	4.79E-02
Ba139	0.6	5.07E-02	5.08E-02	5.02E-02	5.02E-02
Te131	0.6	4.99E-02	4.98E-02	5.13E-02	5.13E-02
Ru108	0.5	4.69E-02	3.62E-02	7.73E-02	4.33E-02
Rb90m	0.5	4.59E-02	5.61E-02	6.03E-02	5.93E-02
Sb132	0.4	3.65E-02	3.80E-02	3.70E-02	3.70E-02
Kr89	0.4	3.54E-02	3.44E-02	3.34E-02	3.34E-02
I135	0.4	3.48E-02	3.49E-02	3.53E-02	3.53E-02
Sb128m	0.4	3.48E-02	3.50E-02	6.41E-03	6.41E-03
Pd111	0.4	3.38E-02	3.38E-02	3.38E-02	3.38E-02
Rb90	0.4	3.34E-02	3.00E-02	3.02E-02	3.04E-02
Pr148	0.3	2.99E-02	2.85E-02	3.05E-02	3.05E-02
Sr92	0.3	2.70E-02	2.69E-02	2.73E-02	2.73E-02
Y93m	0.3	2.50E-02	2.49E-02	1.82E-02	1.82E-02
Ru105	0.3	2.48E-02	2.48E-02	2.56E-02	2.56E-02

12.4 5011s after pulse

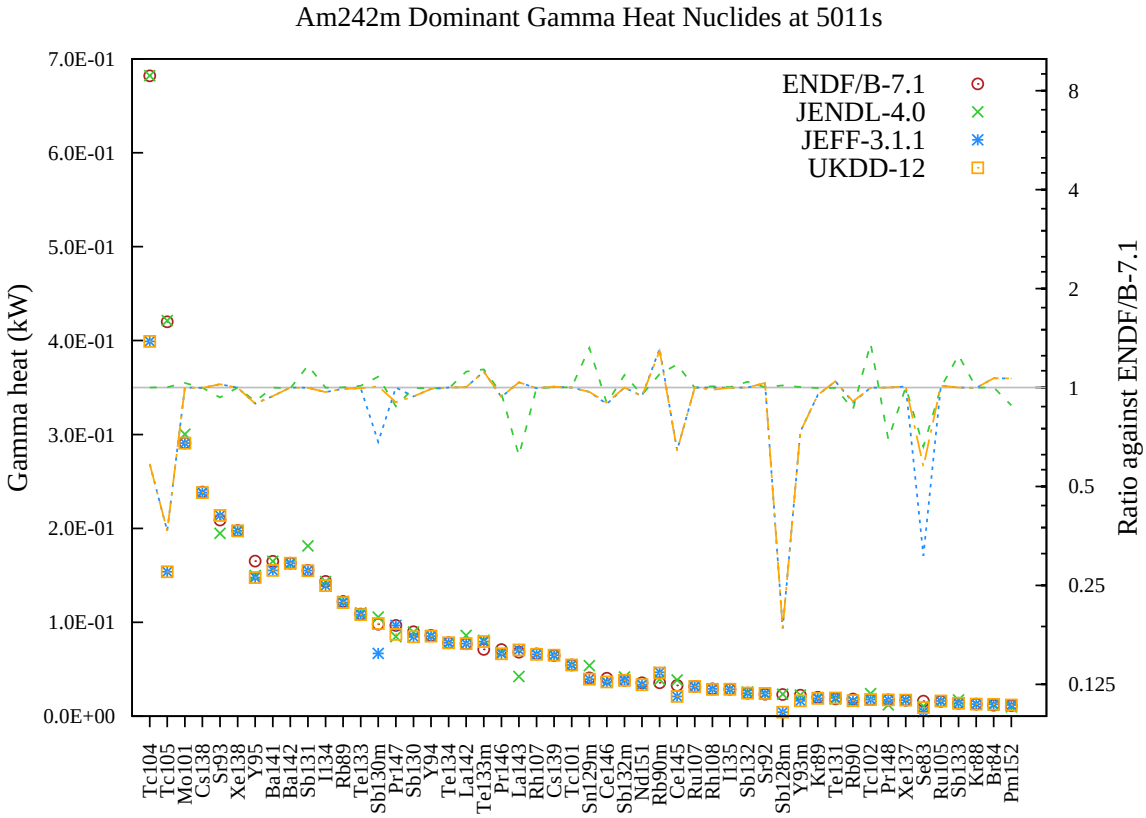

Figure 175: Gamma heat (in kW) decay data comparison for Am242m fission pulse after 5011s cooling.

Table 175: Gamma heat (in kW) decay data comparison for Am242m fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	14.4	6.82E-01	6.82E-01	3.99E-01	3.99E-01
Tc105	8.8	4.20E-01	4.21E-01	1.54E-01	1.54E-01
Mo101	6.1	2.91E-01	3.00E-01	2.91E-01	2.91E-01
Cs138	5.0	2.39E-01	2.38E-01	2.38E-01	2.38E-01
Sr93	4.4	2.09E-01	1.95E-01	2.14E-01	2.14E-01
Xe138	4.2	1.98E-01	1.98E-01	1.97E-01	1.97E-01
Y95	3.5	1.65E-01	1.50E-01	1.48E-01	1.48E-01
Ba141	3.5	1.65E-01	1.65E-01	1.55E-01	1.55E-01
Ba142	3.4	1.63E-01	1.62E-01	1.63E-01	1.63E-01
Sb131	3.3	1.55E-01	1.81E-01	1.55E-01	1.55E-01
I134	3.0	1.44E-01	1.43E-01	1.39E-01	1.39E-01
Rb89	2.6	1.22E-01	1.22E-01	1.21E-01	1.21E-01
Te133	2.3	1.09E-01	1.10E-01	1.08E-01	1.08E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb130m	2.1	9.79E-02	1.06E-01	6.69E-02	9.87E-02
Pr147	2.0	9.67E-02	8.47E-02	9.67E-02	8.72E-02
Sb130	1.9	8.99E-02	8.95E-02	8.45E-02	8.45E-02
Y94	1.8	8.61E-02	8.58E-02	8.52E-02	8.52E-02
Te134	1.6	7.82E-02	7.76E-02	7.82E-02	7.82E-02
La142	1.6	7.70E-02	8.61E-02	7.72E-02	7.72E-02
Te133m	1.5	7.11E-02	8.09E-02	7.96E-02	7.96E-02
Pr146	1.5	7.10E-02	6.80E-02	6.64E-02	6.64E-02
La143	1.4	6.81E-02	4.22E-02	7.06E-02	7.06E-02
Rh107	1.4	6.62E-02	6.62E-02	6.59E-02	6.59E-02
Cs139	1.4	6.45E-02	6.45E-02	6.50E-02	6.50E-02
Tc101	1.2	5.46E-02	5.48E-02	5.46E-02	5.46E-02
Sn129m	0.9	4.08E-02	5.38E-02	3.95E-02	3.95E-02
Ce146	0.9	4.05E-02	3.63E-02	3.61E-02	3.64E-02
Sb132m	0.8	3.82E-02	4.17E-02	3.82E-02	3.82E-02
Nd151	0.8	3.56E-02	3.39E-02	3.36E-02	3.36E-02
Rb90m	0.8	3.56E-02	3.92E-02	4.67E-02	4.60E-02
Ce145	0.7	3.28E-02	3.86E-02	2.11E-02	2.11E-02
Ru107	0.7	3.17E-02	3.17E-02	3.17E-02	3.17E-02
Rh108	0.6	2.90E-02	2.93E-02	2.90E-02	2.86E-02
I135	0.6	2.87E-02	2.87E-02	2.87E-02	2.87E-02
Sb132	0.5	2.46E-02	2.57E-02	2.46E-02	2.46E-02
Sr92	0.5	2.34E-02	2.34E-02	2.41E-02	2.41E-02
Sb128m	0.5	2.31E-02	2.34E-02	4.27E-03	4.27E-03
Y93m	0.5	2.24E-02	2.24E-02	1.64E-02	1.64E-02
Kr89	0.4	2.01E-02	2.00E-02	1.91E-02	1.91E-02
Te131	0.4	1.85E-02	1.85E-02	1.93E-02	1.93E-02
Rb90	0.4	1.82E-02	1.56E-02	1.64E-02	1.65E-02
Tc102	0.4	1.77E-02	2.41E-02	1.77E-02	1.77E-02
Pr148	0.4	1.74E-02	1.21E-02	1.74E-02	1.74E-02
Xe137	0.4	1.70E-02	1.71E-02	1.72E-02	1.72E-02
Se83	0.3	1.60E-02	1.06E-02	4.93E-03	9.20E-03
Ru105	0.3	1.59E-02	1.59E-02	1.61E-02	1.61E-02
Sb133	0.3	1.37E-02	1.72E-02	1.37E-02	1.37E-02
Kr88	0.3	1.29E-02	1.29E-02	1.29E-02	1.29E-02
Br84	0.2	1.18E-02	1.18E-02	1.26E-02	1.26E-02
Pm152	0.2	1.11E-02	9.83E-03	1.19E-02	1.19E-02

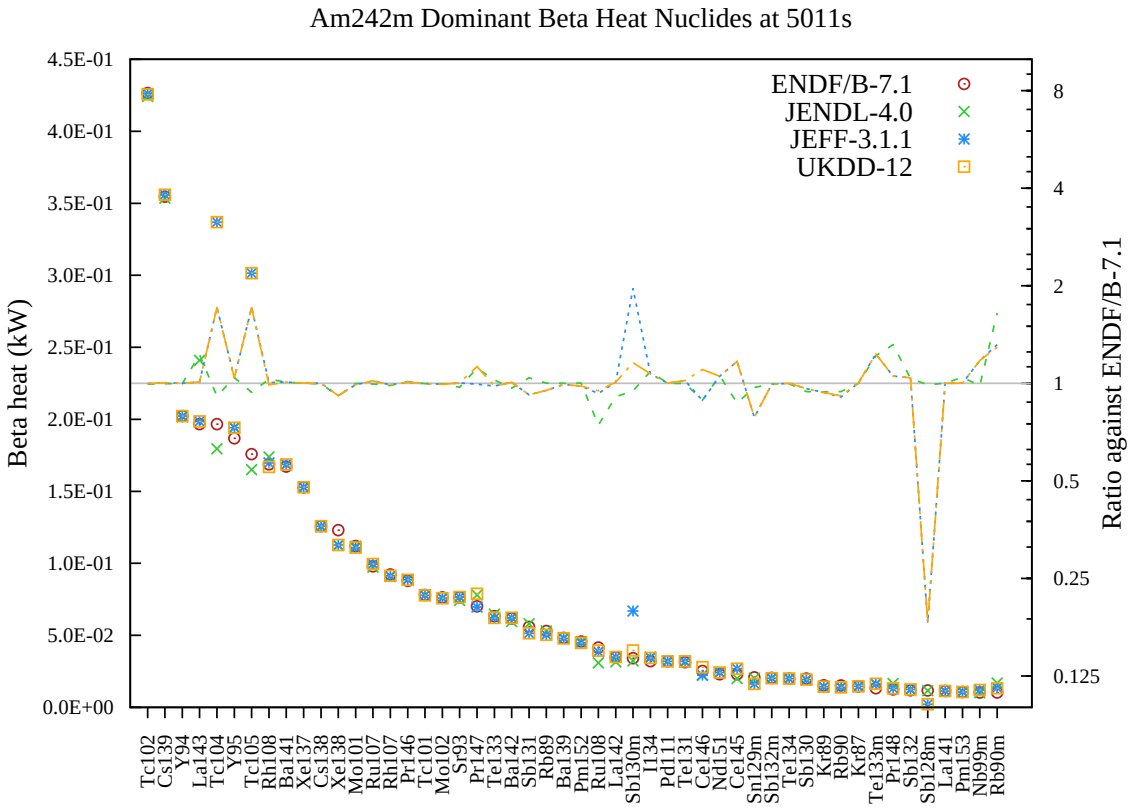

Figure 176: Beta heat (in kW) decay data comparison for Am242m fission pulse after 5011s cooling.

Table 176: Beta heat (in kW) decay data comparison for Am242m fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	10.2	4.27E-01	4.24E-01	4.26E-01	4.26E-01
Cs139	8.5	3.55E-01	3.54E-01	3.56E-01	3.56E-01
Y94	4.8	2.02E-01	2.02E-01	2.02E-01	2.02E-01
La143	4.7	1.97E-01	2.41E-01	1.99E-01	1.99E-01
Tc104	4.7	1.97E-01	1.80E-01	3.37E-01	3.37E-01
Y95	4.5	1.87E-01	1.95E-01	1.94E-01	1.94E-01
Tc105	4.2	1.76E-01	1.65E-01	3.01E-01	3.01E-01
Rh108	4.0	1.69E-01	1.74E-01	1.70E-01	1.67E-01
Ba141	4.0	1.67E-01	1.69E-01	1.69E-01	1.69E-01
Xe137	3.7	1.53E-01	1.53E-01	1.53E-01	1.53E-01
Cs138	3.0	1.26E-01	1.25E-01	1.26E-01	1.26E-01
Xe138	2.9	1.23E-01	1.12E-01	1.13E-01	1.13E-01
Mo101	2.7	1.12E-01	1.12E-01	1.11E-01	1.11E-01
Ru107	2.3	9.79E-02	9.74E-02	9.96E-02	9.96E-02
Rh107	2.2	9.23E-02	9.09E-02	9.13E-02	9.13E-02
Pr146	2.1	8.78E-02	8.89E-02	8.86E-02	8.86E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc101	1.9	7.80E-02	7.79E-02	7.78E-02	7.78E-02
Mo102	1.8	7.64E-02	7.61E-02	7.59E-02	7.58E-02
Sr93	1.8	7.63E-02	7.42E-02	7.66E-02	7.66E-02
Pr147	1.7	7.01E-02	7.81E-02	6.96E-02	7.89E-02
Te133	1.5	6.33E-02	6.48E-02	6.21E-02	6.21E-02
Ba142	1.5	6.18E-02	5.97E-02	6.22E-02	6.22E-02
Sb131	1.3	5.59E-02	5.81E-02	5.15E-02	5.14E-02
Rb89	1.3	5.30E-02	5.30E-02	5.04E-02	5.04E-02
Ba139	1.2	4.83E-02	4.83E-02	4.79E-02	4.79E-02
Pm152	1.1	4.57E-02	4.57E-02	4.48E-02	4.48E-02
Ru108	1.0	4.16E-02	3.09E-02	3.87E-02	3.94E-02
La142	0.8	3.47E-02	3.15E-02	3.50E-02	3.50E-02
Sb130m	0.8	3.41E-02	3.23E-02	6.69E-02	3.95E-02
I134	0.8	3.21E-02	3.49E-02	3.43E-02	3.43E-02
Pd111	0.8	3.20E-02	3.20E-02	3.20E-02	3.20E-02
Te131	0.8	3.14E-02	3.13E-02	3.20E-02	3.20E-02
Ce146	0.6	2.52E-02	2.24E-02	2.24E-02	2.78E-02
Nd151	0.6	2.30E-02	2.43E-02	2.42E-02	2.42E-02
Ce145	0.5	2.30E-02	2.00E-02	2.68E-02	2.68E-02
Sn129m	0.5	2.08E-02	2.02E-02	1.63E-02	1.63E-02
Sb132m	0.5	2.04E-02	2.03E-02	2.03E-02	2.03E-02
Te134	0.5	2.00E-02	2.00E-02	2.00E-02	2.00E-02
Sb130	0.5	2.00E-02	1.89E-02	1.93E-02	1.93E-02
Kr89	0.4	1.53E-02	1.44E-02	1.43E-02	1.43E-02
Rb90	0.4	1.52E-02	1.44E-02	1.38E-02	1.39E-02
Kr87	0.3	1.45E-02	1.45E-02	1.46E-02	1.46E-02
Te133m	0.3	1.33E-02	1.62E-02	1.64E-02	1.64E-02
Pr148	0.3	1.25E-02	1.65E-02	1.32E-02	1.32E-02
Sb132	0.3	1.19E-02	1.23E-02	1.24E-02	1.24E-02
Sb128m	0.3	1.18E-02	1.16E-02	2.14E-03	2.14E-03
La141	0.3	1.14E-02	1.14E-02	1.14E-02	1.14E-02
Pm153	0.3	1.06E-02	1.11E-02	1.07E-02	1.07E-02
Nb99m	0.2	1.03E-02	1.01E-02	1.21E-02	1.21E-02
Rb90m	0.2	1.03E-02	1.69E-02	1.35E-02	1.33E-02

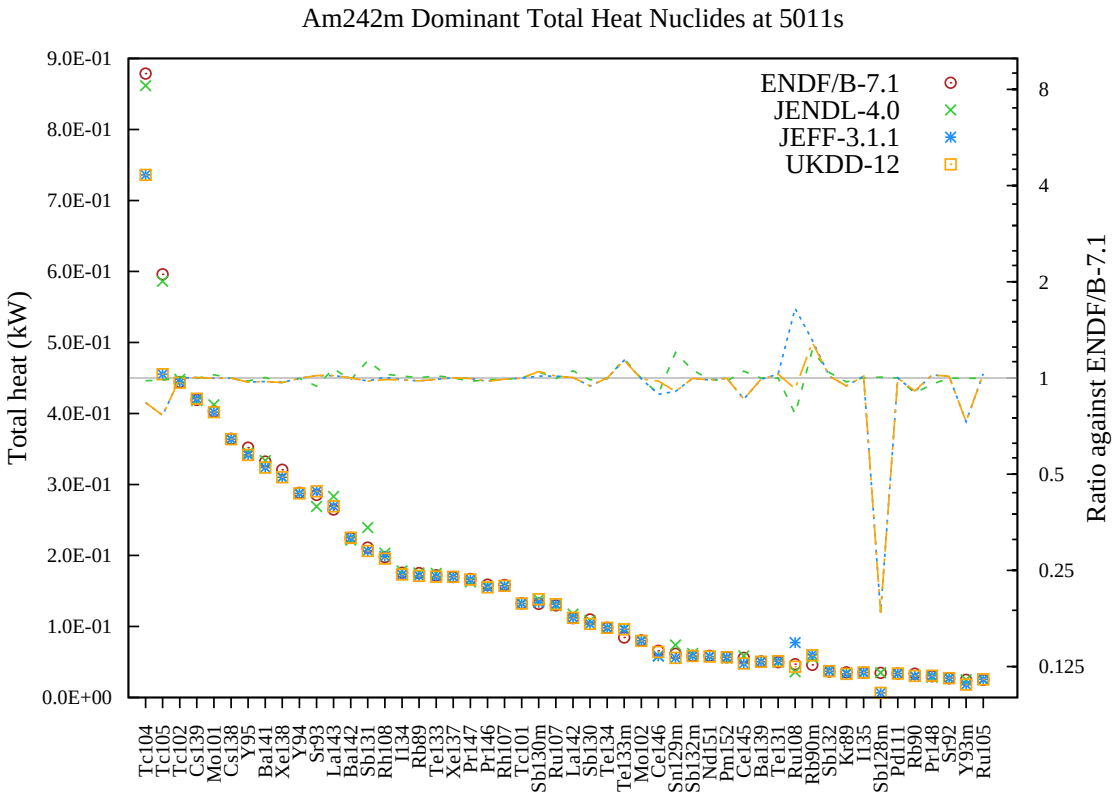

Figure 177: Total heat (in kW) decay data comparison for Am242m fission pulse after 5011s cooling.

Table 177: Total heat (in kW) decay data comparison for Am242m fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	9.8	8.79E-01	8.62E-01	7.36E-01	7.36E-01
Tc105	6.7	5.96E-01	5.86E-01	4.55E-01	4.55E-01
Tc102	5.0	4.44E-01	4.48E-01	4.44E-01	4.43E-01
Cs139	4.7	4.19E-01	4.18E-01	4.21E-01	4.21E-01
Mo101	4.5	4.03E-01	4.12E-01	4.02E-01	4.02E-01
Cs138	4.1	3.64E-01	3.64E-01	3.64E-01	3.64E-01
Y95	3.9	3.52E-01	3.44E-01	3.42E-01	3.42E-01
Ba141	3.7	3.32E-01	3.34E-01	3.24E-01	3.24E-01
Xe138	3.6	3.21E-01	3.10E-01	3.10E-01	3.10E-01
Y94	3.2	2.88E-01	2.87E-01	2.88E-01	2.88E-01
Sr93	3.2	2.85E-01	2.69E-01	2.90E-01	2.90E-01
La143	3.0	2.65E-01	2.83E-01	2.69E-01	2.69E-01
Ba142	2.5	2.25E-01	2.22E-01	2.25E-01	2.25E-01
Sb131	2.4	2.11E-01	2.39E-01	2.06E-01	2.06E-01
Rh108	2.2	1.98E-01	2.03E-01	1.99E-01	1.95E-01
I134	2.0	1.76E-01	1.78E-01	1.73E-01	1.73E-01
Rb89	2.0	1.75E-01	1.75E-01	1.71E-01	1.71E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te133	1.9	1.72E-01	1.75E-01	1.70E-01	1.70E-01
Xe137	1.9	1.70E-01	1.70E-01	1.70E-01	1.70E-01
Pr147	1.9	1.67E-01	1.63E-01	1.66E-01	1.66E-01
Pr146	1.8	1.59E-01	1.57E-01	1.55E-01	1.55E-01
Rh107	1.8	1.59E-01	1.57E-01	1.57E-01	1.57E-01
Tc101	1.5	1.33E-01	1.33E-01	1.32E-01	1.32E-01
Sb130m	1.5	1.32E-01	1.38E-01	1.34E-01	1.38E-01
Ru107	1.5	1.30E-01	1.29E-01	1.31E-01	1.31E-01
La142	1.3	1.12E-01	1.18E-01	1.12E-01	1.12E-01
Sb130	1.2	1.10E-01	1.08E-01	1.04E-01	1.04E-01
Te134	1.1	9.82E-02	9.76E-02	9.82E-02	9.82E-02
Te133m	0.9	8.45E-02	9.71E-02	9.60E-02	9.60E-02
Mo102	0.9	8.04E-02	8.01E-02	7.99E-02	7.98E-02
Ce146	0.7	6.57E-02	5.86E-02	5.84E-02	6.43E-02
Sn129m	0.7	6.15E-02	7.40E-02	5.59E-02	5.59E-02
Sb132m	0.7	5.86E-02	6.21E-02	5.85E-02	5.85E-02
Nd151	0.7	5.86E-02	5.82E-02	5.78E-02	5.78E-02
Pm152	0.6	5.68E-02	5.56E-02	5.67E-02	5.67E-02
Ce145	0.6	5.58E-02	5.86E-02	4.79E-02	4.79E-02
Ba139	0.6	5.07E-02	5.08E-02	5.02E-02	5.02E-02
Te131	0.6	4.99E-02	4.98E-02	5.13E-02	5.13E-02
Ru108	0.5	4.69E-02	3.62E-02	7.73E-02	4.33E-02
Rb90m	0.5	4.59E-02	5.61E-02	6.03E-02	5.93E-02
Sb132	0.4	3.65E-02	3.80E-02	3.70E-02	3.70E-02
Kr89	0.4	3.54E-02	3.44E-02	3.34E-02	3.34E-02
I135	0.4	3.48E-02	3.49E-02	3.53E-02	3.53E-02
Sb128m	0.4	3.48E-02	3.50E-02	6.41E-03	6.41E-03
Pd111	0.4	3.38E-02	3.38E-02	3.38E-02	3.38E-02
Rb90	0.4	3.34E-02	3.00E-02	3.02E-02	3.04E-02
Pr148	0.3	2.99E-02	2.85E-02	3.05E-02	3.05E-02
Sr92	0.3	2.70E-02	2.69E-02	2.73E-02	2.73E-02
Y93m	0.3	2.50E-02	2.49E-02	1.82E-02	1.82E-02
Ru105	0.3	2.48E-02	2.48E-02	2.56E-02	2.56E-02

12.5 10000s after pulse

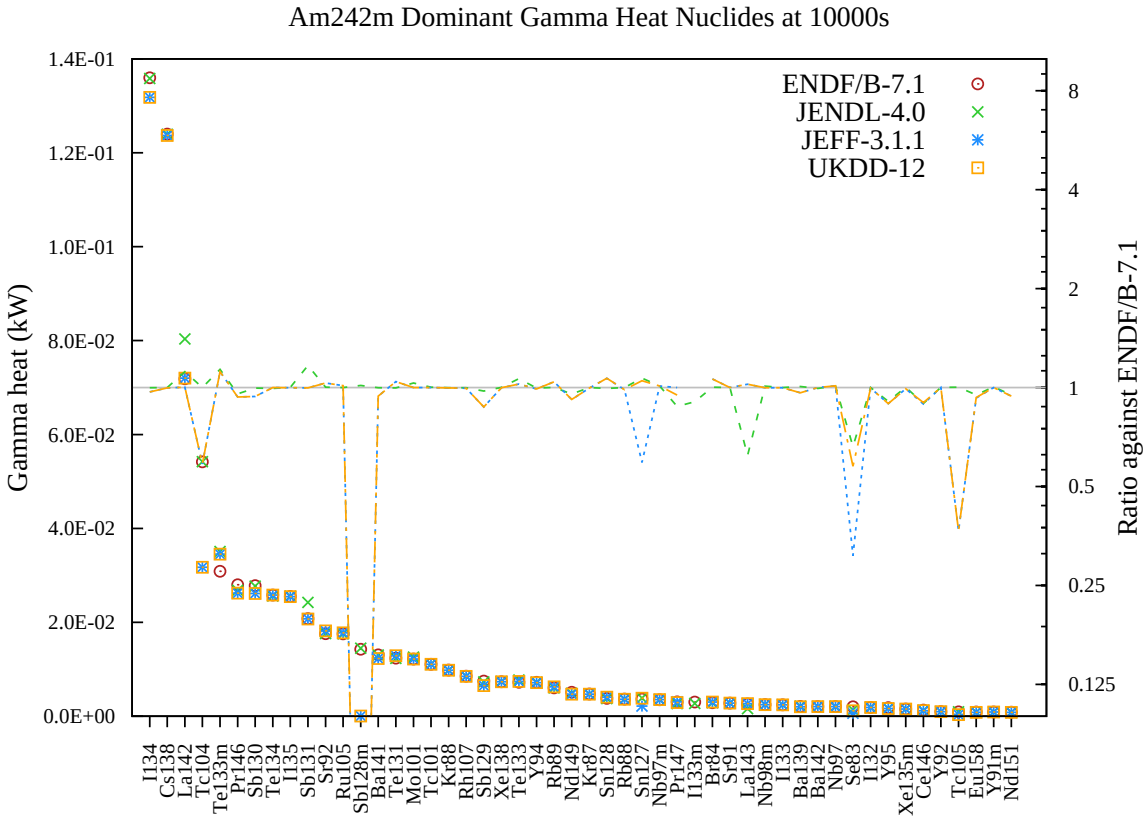

Figure 178: Gamma heat (in kW) decay data comparison for Am242m fission pulse after 10000s cooling.

Table 178: Gamma heat (in kW) decay data comparison for Am242m fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	17.7	1.36E-01	1.36E-01	1.32E-01	1.32E-01
Cs138	16.1	1.24E-01	1.24E-01	1.24E-01	1.24E-01
La142	9.3	7.19E-02	8.03E-02	7.20E-02	7.20E-02
Tc104	7.0	5.42E-02	5.42E-02	3.17E-02	3.17E-02
Te133m	4.0	3.09E-02	3.51E-02	3.45E-02	3.45E-02
Pr146	3.6	2.80E-02	2.68E-02	2.62E-02	2.62E-02
Sb130	3.6	2.78E-02	2.77E-02	2.61E-02	2.61E-02
Te134	3.4	2.58E-02	2.56E-02	2.58E-02	2.58E-02
I135	3.3	2.55E-02	2.55E-02	2.55E-02	2.55E-02
Sb131	2.7	2.08E-02	2.42E-02	2.07E-02	2.07E-02
Sr92	2.3	1.76E-02	1.76E-02	1.82E-02	1.82E-02
Ru105	2.3	1.75E-02	1.75E-02	1.78E-02	1.78E-02
Sb128m	1.9	1.43E-02	1.45E-02	4.95E-05	4.95E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Ba141	1.7	1.31E-02	1.30E-02	1.23E-02	1.23E-02
Te131	1.6	1.24E-02	1.23E-02	1.29E-02	1.29E-02
Mo101	1.6	1.22E-02	1.26E-02	1.22E-02	1.22E-02
Tc101	1.4	1.11E-02	1.11E-02	1.11E-02	1.11E-02
Kr88	1.3	9.82E-03	9.81E-03	9.80E-03	9.80E-03
Rh107	1.1	8.53E-03	8.53E-03	8.50E-03	8.50E-03
Sb129	1.0	7.47E-03	7.29E-03	6.52E-03	6.52E-03
Xe138	1.0	7.35E-03	7.36E-03	7.34E-03	7.34E-03
Te133	0.9	7.24E-03	7.71E-03	7.42E-03	7.42E-03
Y94	0.9	7.22E-03	7.20E-03	7.15E-03	7.15E-03
Rb89	0.8	6.02E-03	6.03E-03	6.27E-03	6.27E-03
Nd149	0.7	5.12E-03	4.89E-03	4.71E-03	4.71E-03
Kr87	0.6	4.71E-03	4.71E-03	4.70E-03	4.70E-03
Sn128	0.5	3.79E-03	3.77E-03	4.05E-03	4.05E-03
Rb88	0.5	3.66E-03	3.66E-03	3.60E-03	3.60E-03
Sn127	0.5	3.64E-03	3.89E-03	2.15E-03	3.82E-03
Nb97m	0.5	3.51E-03	3.54E-03	3.55E-03	3.55E-03
Pr147	0.4	3.04E-03	2.67E-03	3.04E-03	2.89E-03
I133m	0.4	3.00E-03	—	—	—
Br84	0.4	2.85E-03	2.86E-03	3.03E-03	3.03E-03
Sr91	0.4	2.79E-03	2.79E-03	2.79E-03	2.79E-03
La143	0.3	2.60E-03	1.62E-03	2.66E-03	2.66E-03
Nb98m	0.3	2.47E-03	2.49E-03	2.46E-03	2.46E-03
I133	0.3	2.42E-03	2.42E-03	2.42E-03	2.42E-03
Ba139	0.3	2.09E-03	2.11E-03	2.02E-03	2.02E-03
Ba142	0.3	2.06E-03	2.04E-03	2.05E-03	2.05E-03
Nb97	0.3	2.03E-03	2.06E-03	2.06E-03	2.06E-03
Se83	0.3	2.00E-03	1.32E-03	6.17E-04	1.15E-03
I132	0.2	1.85E-03	1.85E-03	1.85E-03	1.85E-03
Y95	0.2	1.84E-03	1.67E-03	1.64E-03	1.64E-03
Xe135m	0.2	1.53E-03	1.53E-03	1.51E-03	1.51E-03
Ce146	0.2	1.31E-03	1.18E-03	1.17E-03	1.18E-03
Y92	0.1	9.58E-04	9.59E-04	9.57E-04	9.57E-04
Tc105	0.1	9.44E-04	9.46E-04	3.46E-04	3.46E-04
Eu158	0.1	8.97E-04	8.52E-04	8.33E-04	8.37E-04
Y91m	0.1	8.75E-04	8.80E-04	8.76E-04	8.76E-04
Nd151	0.1	8.59E-04	8.15E-04	8.09E-04	8.09E-04

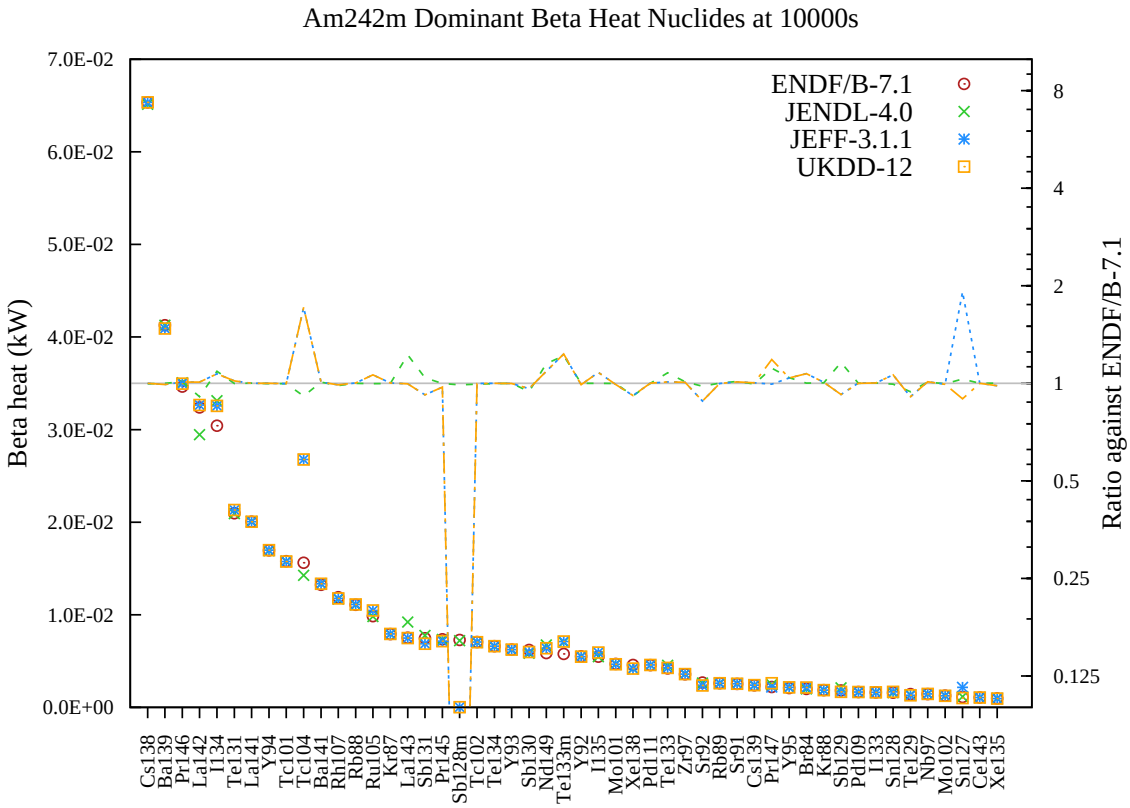

Figure 179: Beta heat (in kW) decay data comparison for Am242m fission pulse after 10000s cooling.

Table 179: Beta heat (in kW) decay data comparison for Am242m fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	13.2	6.53E-02	6.51E-02	6.54E-02	6.54E-02
Ba139	8.3	4.13E-02	4.13E-02	4.09E-02	4.09E-02
Pr146	7.0	3.47E-02	3.51E-02	3.50E-02	3.50E-02
La142	6.5	3.24E-02	2.95E-02	3.27E-02	3.27E-02
I134	6.1	3.04E-02	3.31E-02	3.26E-02	3.26E-02
Te131	4.2	2.10E-02	2.09E-02	2.13E-02	2.13E-02
La141	4.1	2.01E-02	2.01E-02	2.01E-02	2.01E-02
Y94	3.4	1.70E-02	1.69E-02	1.70E-02	1.70E-02
Tc101	3.2	1.58E-02	1.58E-02	1.58E-02	1.58E-02
Tc104	3.2	1.56E-02	1.43E-02	2.68E-02	2.68E-02
Ba141	2.7	1.32E-02	1.33E-02	1.33E-02	1.33E-02
Rh107	2.4	1.19E-02	1.17E-02	1.18E-02	1.18E-02
Rb88	2.2	1.11E-02	1.11E-02	1.11E-02	1.11E-02
Ru105	2.0	9.84E-03	9.82E-03	1.05E-02	1.05E-02
Kr87	1.6	7.92E-03	7.91E-03	7.93E-03	7.93E-03
La143	1.5	7.52E-03	9.21E-03	7.49E-03	7.49E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb131	1.5	7.47E-03	7.76E-03	6.88E-03	6.88E-03
Pr145	1.5	7.34E-03	7.34E-03	7.15E-03	7.15E-03
Sb128m	1.5	7.27E-03	7.20E-03	2.49E-05	2.49E-05
Tc102	1.4	7.06E-03	7.02E-03	7.05E-03	7.04E-03
Te134	1.3	6.61E-03	6.59E-03	6.61E-03	6.61E-03
Y93	1.3	6.24E-03	6.24E-03	6.23E-03	6.23E-03
Sb130	1.3	6.20E-03	5.85E-03	5.97E-03	5.97E-03
Nd149	1.2	5.86E-03	6.74E-03	6.39E-03	6.39E-03
Te133m	1.2	5.78E-03	7.03E-03	7.12E-03	7.12E-03
Y92	1.1	5.52E-03	5.52E-03	5.47E-03	5.47E-03
I135	1.1	5.47E-03	5.48E-03	5.91E-03	5.91E-03
Mo101	0.9	4.69E-03	4.69E-03	4.65E-03	4.65E-03
Xe138	0.9	4.57E-03	4.18E-03	4.19E-03	4.19E-03
Pd111	0.9	4.57E-03	4.57E-03	4.57E-03	4.57E-03
Te133	0.9	4.21E-03	4.54E-03	4.26E-03	4.26E-03
Zr97	0.7	3.57E-03	3.61E-03	3.60E-03	3.60E-03
Sr92	0.5	2.68E-03	2.63E-03	2.37E-03	2.37E-03
Rb89	0.5	2.61E-03	2.61E-03	2.61E-03	2.61E-03
Sr91	0.5	2.53E-03	2.57E-03	2.56E-03	2.56E-03
Cs139	0.5	2.39E-03	2.38E-03	2.40E-03	2.40E-03
Pr147	0.4	2.21E-03	2.46E-03	2.19E-03	2.61E-03
Y95	0.4	2.08E-03	2.16E-03	2.16E-03	2.16E-03
Br84	0.4	2.00E-03	2.00E-03	2.14E-03	2.14E-03
Kr88	0.4	1.85E-03	1.86E-03	1.87E-03	1.87E-03
Sb129	0.4	1.82E-03	2.11E-03	1.68E-03	1.68E-03
Pd109	0.3	1.66E-03	1.66E-03	1.66E-03	1.66E-03
I133	0.3	1.61E-03	1.62E-03	1.62E-03	1.62E-03
Sn128	0.3	1.59E-03	1.58E-03	1.68E-03	1.68E-03
Te129	0.3	1.44E-03	1.36E-03	1.31E-03	1.31E-03
Nb97	0.3	1.43E-03	1.45E-03	1.45E-03	1.45E-03
Mo102	0.3	1.26E-03	1.26E-03	1.26E-03	1.25E-03
Sn127	0.2	1.13E-03	1.16E-03	2.15E-03	1.01E-03
Ce143	0.2	1.07E-03	1.07E-03	1.07E-03	1.07E-03
Xe135	0.2	9.60E-04	9.61E-04	9.44E-04	9.44E-04

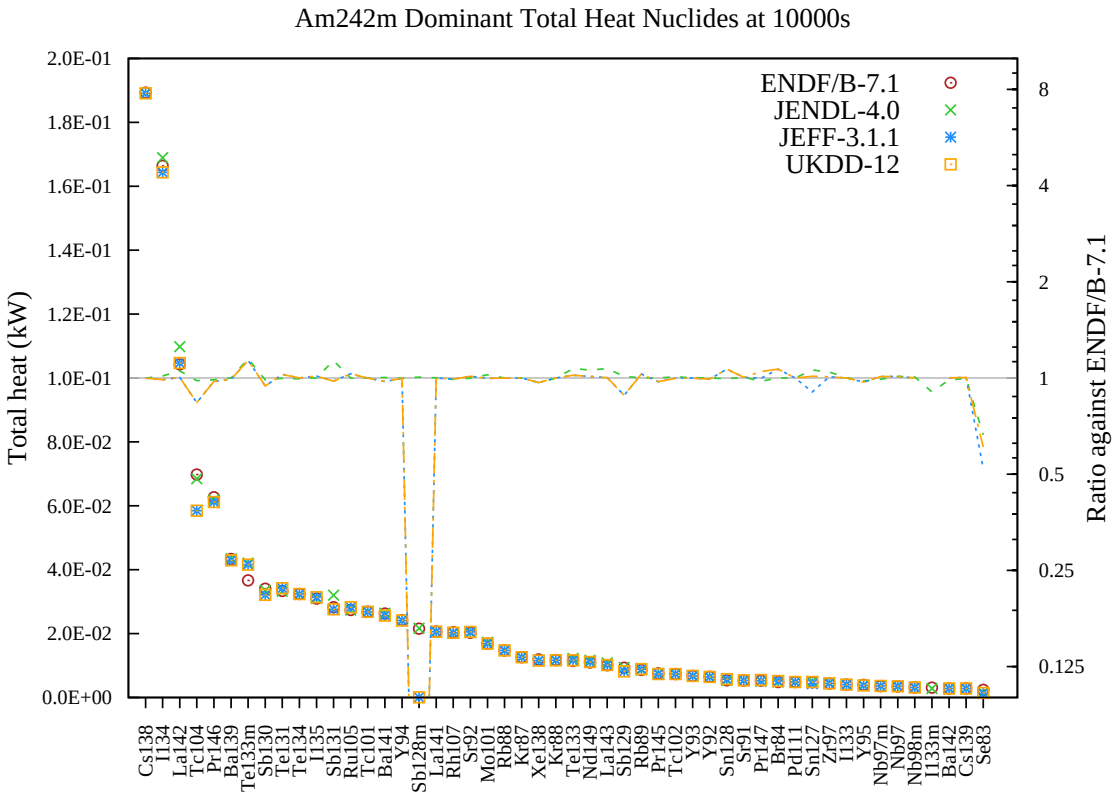

Figure 180: Total heat (in kW) decay data comparison for Am242m fission pulse after 10000s cooling.

Table 180: Total heat (in kW) decay data comparison for Am242m fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	15.0	1.89E-01	1.89E-01	1.89E-01	1.89E-01
I134	13.2	1.66E-01	1.69E-01	1.64E-01	1.64E-01
La142	8.2	1.04E-01	1.10E-01	1.05E-01	1.05E-01
Tc104	5.5	6.98E-02	6.85E-02	5.85E-02	5.85E-02
Pr146	5.0	6.27E-02	6.19E-02	6.12E-02	6.12E-02
Ba139	3.4	4.34E-02	4.34E-02	4.29E-02	4.29E-02
Te133m	2.9	3.66E-02	4.21E-02	4.16E-02	4.16E-02
Sb130	2.7	3.40E-02	3.36E-02	3.21E-02	3.21E-02
Te131	2.6	3.33E-02	3.33E-02	3.42E-02	3.42E-02
Te134	2.6	3.24E-02	3.22E-02	3.24E-02	3.24E-02
I135	2.4	3.10E-02	3.10E-02	3.14E-02	3.14E-02
Sb131	2.2	2.82E-02	3.20E-02	2.76E-02	2.76E-02
Ru105	2.2	2.74E-02	2.74E-02	2.82E-02	2.82E-02
Tc101	2.1	2.69E-02	2.68E-02	2.68E-02	2.68E-02
Ba141	2.1	2.63E-02	2.64E-02	2.56E-02	2.56E-02
Y94	1.9	2.42E-02	2.41E-02	2.41E-02	2.41E-02
Sb128m	1.7	2.15E-02	2.17E-02	7.44E-05	7.44E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La141	1.6	2.06E-02	2.06E-02	2.06E-02	2.06E-02
Rh107	1.6	2.04E-02	2.02E-02	2.03E-02	2.03E-02
Sr92	1.6	2.03E-02	2.03E-02	2.05E-02	2.05E-02
Mo101	1.3	1.69E-02	1.73E-02	1.68E-02	1.68E-02
Rb88	1.2	1.47E-02	1.47E-02	1.47E-02	1.47E-02
Kr87	1.0	1.26E-02	1.26E-02	1.26E-02	1.26E-02
Xe138	0.9	1.19E-02	1.15E-02	1.15E-02	1.15E-02
Kr88	0.9	1.17E-02	1.17E-02	1.17E-02	1.17E-02
Te133	0.9	1.14E-02	1.22E-02	1.17E-02	1.17E-02
Nd149	0.9	1.10E-02	1.16E-02	1.11E-02	1.11E-02
La143	0.8	1.01E-02	1.08E-02	1.02E-02	1.02E-02
Sb129	0.7	9.29E-03	9.39E-03	8.20E-03	8.20E-03
Rb89	0.7	8.63E-03	8.64E-03	8.87E-03	8.87E-03
Pr145	0.6	7.55E-03	7.54E-03	7.35E-03	7.35E-03
Tc102	0.6	7.35E-03	7.42E-03	7.35E-03	7.34E-03
Y93	0.5	6.75E-03	6.75E-03	6.74E-03	6.74E-03
Y92	0.5	6.48E-03	6.48E-03	6.42E-03	6.42E-03
Sn128	0.4	5.38E-03	5.35E-03	5.73E-03	5.73E-03
Sr91	0.4	5.32E-03	5.36E-03	5.35E-03	5.35E-03
Pr147	0.4	5.25E-03	5.12E-03	5.23E-03	5.50E-03
Br84	0.4	4.85E-03	4.86E-03	5.17E-03	5.17E-03
Pd111	0.4	4.83E-03	4.83E-03	4.83E-03	4.83E-03
Sn127	0.4	4.77E-03	5.05E-03	4.31E-03	4.83E-03
Zr97	0.3	4.37E-03	4.56E-03	4.41E-03	4.41E-03
I133	0.3	4.03E-03	4.04E-03	4.04E-03	4.04E-03
Y95	0.3	3.91E-03	3.83E-03	3.80E-03	3.80E-03
Nb97m	0.3	3.58E-03	3.54E-03	3.62E-03	3.62E-03
Nb97	0.3	3.47E-03	3.50E-03	3.51E-03	3.51E-03
Nb98m	0.2	3.15E-03	3.17E-03	3.15E-03	3.15E-03
I133m	0.2	3.10E-03	2.80E-03	—	—
Ba142	0.2	2.84E-03	2.80E-03	2.84E-03	2.84E-03
Cs139	0.2	2.82E-03	2.81E-03	2.84E-03	2.84E-03
Se83	0.2	2.37E-03	1.58E-03	1.23E-03	1.44E-03

13 Decay data comparison for ^{243}Am 0.0253 eV pulse decay heat

13.1 10s after pulse

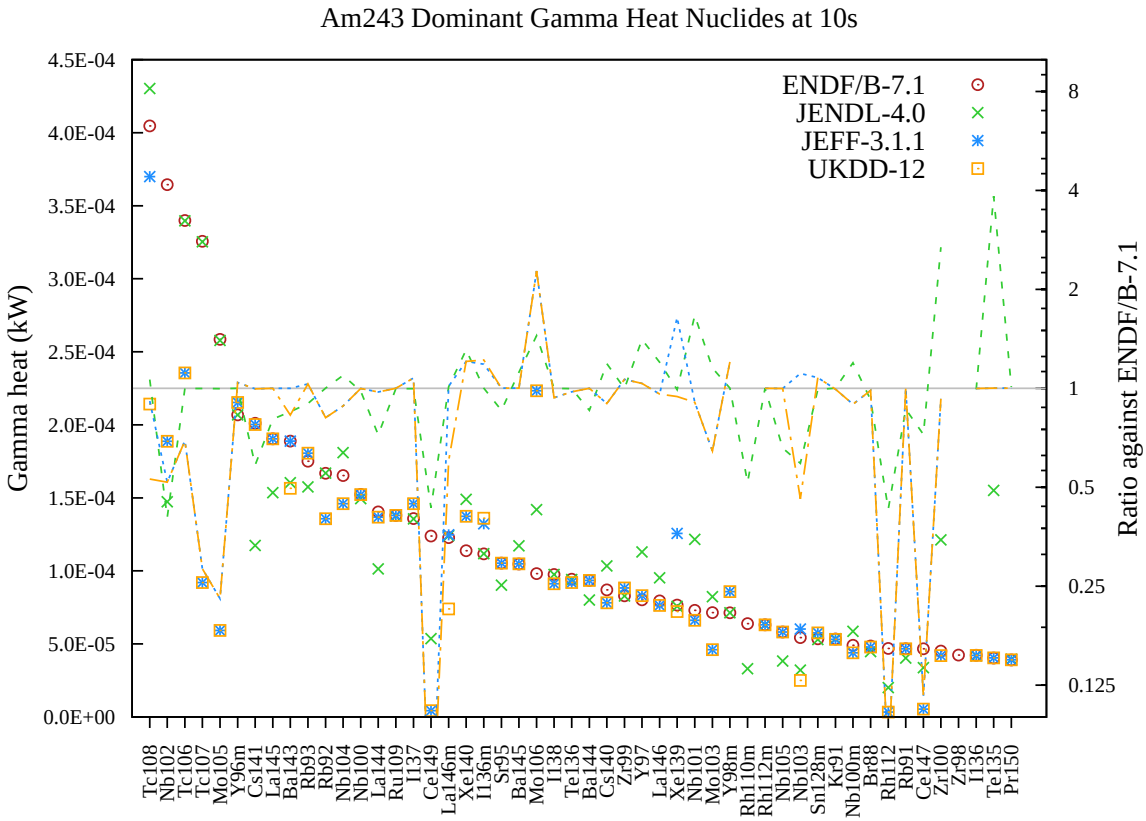

Figure 181: Gamma heat (in kW) decay data comparison for Am243 fission pulse after 10s cooling.

Table 181: Gamma heat (in kW) decay data comparison for Am243 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc108	5.7	4.05E-04	4.30E-04	3.70E-04	2.14E-04
Nb102	5.1	3.64E-04	1.47E-04	1.89E-04	1.89E-04
Tc106	4.8	3.40E-04	3.40E-04	2.36E-04	2.36E-04
Tc107	4.6	3.26E-04	3.25E-04	9.20E-05	9.20E-05
Mo105	3.6	2.59E-04	2.58E-04	5.92E-05	5.92E-05
Y96m	2.9	2.07E-04	2.07E-04	2.15E-04	2.15E-04
Cs141	2.8	2.01E-04	1.17E-04	2.00E-04	2.00E-04
La145	2.7	1.90E-04	1.54E-04	1.90E-04	1.90E-04
Ba143	2.6	1.89E-04	1.60E-04	1.89E-04	1.57E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rb93	2.4	1.75E-04	1.57E-04	1.81E-04	1.81E-04
Rb92	2.3	1.67E-04	1.67E-04	1.36E-04	1.36E-04
Nb104	2.3	1.65E-04	1.81E-04	1.46E-04	1.46E-04
Nb100	2.1	1.52E-04	1.49E-04	1.52E-04	1.52E-04
La144	2.0	1.40E-04	1.01E-04	1.37E-04	1.37E-04
Ru109	1.9	1.38E-04	1.38E-04	1.38E-04	1.38E-04
I137	1.9	1.36E-04	1.36E-04	1.46E-04	1.46E-04
Ce149	1.7	1.24E-04	5.36E-05	4.34E-06	4.34E-06
La146m	1.7	1.23E-04	1.24E-04	1.25E-04	7.40E-05
Xe140	1.6	1.14E-04	1.49E-04	1.37E-04	1.37E-04
I136m	1.6	1.12E-04	1.12E-04	1.32E-04	1.36E-04
Sr95	1.5	1.05E-04	9.03E-05	1.05E-04	1.05E-04
Ba145	1.5	1.05E-04	1.17E-04	1.05E-04	1.05E-04
Mo106	1.4	9.82E-05	1.42E-04	2.23E-04	2.23E-04
I138	1.4	9.75E-05	9.75E-05	9.13E-05	9.13E-05
Te136	1.3	9.43E-05	9.40E-05	9.20E-05	9.20E-05
Ba144	1.3	9.35E-05	8.01E-05	9.35E-05	9.35E-05
Cs140	1.2	8.70E-05	1.03E-04	7.82E-05	7.82E-05
Zr99	1.2	8.30E-05	8.29E-05	8.84E-05	8.84E-05
Y97	1.1	8.02E-05	1.13E-04	8.30E-05	8.30E-05
La146	1.1	7.94E-05	9.53E-05	7.63E-05	7.63E-05
Xe139	1.1	7.65E-05	7.58E-05	1.26E-04	7.22E-05
Nb101	1.0	7.30E-05	1.22E-04	6.61E-05	6.61E-05
Mo103	1.0	7.14E-05	8.23E-05	4.61E-05	4.61E-05
Y98m	1.0	7.13E-05	7.14E-05	8.58E-05	8.58E-05
Rh110m	0.9	6.39E-05	—	—	—
Rh112m	0.9	6.31E-05	6.31E-05	6.31E-05	6.31E-05
Nb105	0.8	5.82E-05	3.83E-05	5.81E-05	5.81E-05
Nb103	0.8	5.43E-05	3.21E-05	6.02E-05	2.50E-05
Sn128m	0.7	5.34E-05	5.30E-05	5.76E-05	5.76E-05
Kr91	0.7	5.34E-05	5.35E-05	5.31E-05	5.31E-05
Nb100m	0.7	4.90E-05	5.87E-05	4.39E-05	4.39E-05
Br88	0.7	4.86E-05	4.48E-05	4.78E-05	4.78E-05
Rh112	0.7	4.70E-05	2.01E-05	3.35E-06	3.35E-06
Rb91	0.7	4.67E-05	4.04E-05	4.67E-05	4.67E-05
Ce147	0.7	4.66E-05	3.38E-05	5.39E-06	5.39E-06
Zr100	0.6	4.51E-05	1.21E-04	4.20E-05	4.20E-05
Zr98	0.6	4.23E-05	—	—	—
I136	0.6	4.22E-05	4.19E-05	4.22E-05	4.22E-05
Te135	0.6	4.04E-05	1.55E-04	4.04E-05	4.04E-05
Pr150	0.5	3.90E-05	3.94E-05	3.91E-05	3.91E-05

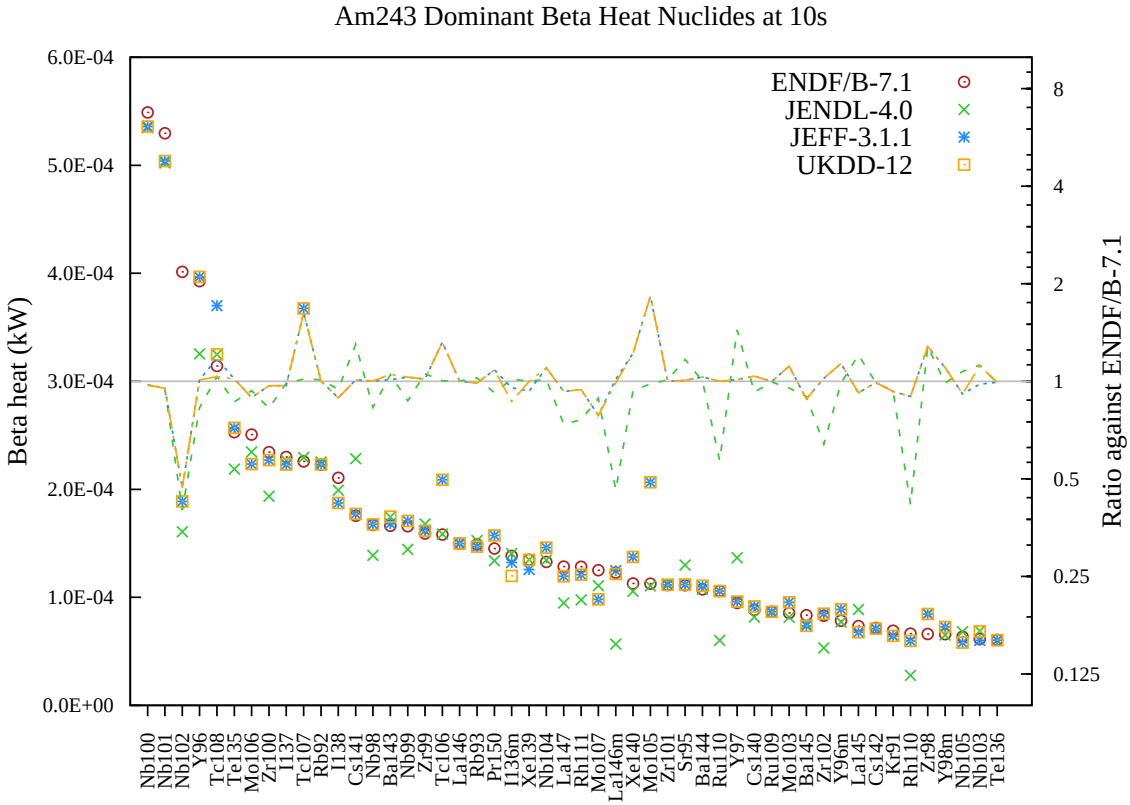

Figure 182: Beta heat (in kW) decay data comparison for Am243 fission pulse after 10s cooling.

Table 182: Beta heat (in kW) decay data comparison for Am243 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb100	5.8	5.49E-04	5.35E-04	5.36E-04	5.36E-04
Nb101	5.6	5.30E-04	5.02E-04	5.04E-04	5.04E-04
Nb102	4.3	4.01E-04	1.61E-04	1.89E-04	1.89E-04
Y96	4.2	3.93E-04	3.25E-04	3.97E-04	3.97E-04
Tc108	3.3	3.14E-04	3.25E-04	3.70E-04	3.25E-04
Te135	2.7	2.53E-04	2.19E-04	2.57E-04	2.57E-04
Mo106	2.7	2.51E-04	2.35E-04	2.23E-04	2.23E-04
Zr100	2.5	2.34E-04	1.94E-04	2.27E-04	2.27E-04
I137	2.4	2.30E-04	2.27E-04	2.23E-04	2.23E-04
Tc107	2.4	2.26E-04	2.30E-04	3.67E-04	3.67E-04
Rb92	2.4	2.23E-04	2.25E-04	2.23E-04	2.23E-04
I138	2.2	2.11E-04	1.99E-04	1.87E-04	1.87E-04
Cs141	1.9	1.75E-04	2.28E-04	1.77E-04	1.77E-04
Nb98	1.8	1.67E-04	1.39E-04	1.67E-04	1.67E-04
Ba143	1.8	1.66E-04	1.74E-04	1.68E-04	1.75E-04
Nb99	1.8	1.66E-04	1.44E-04	1.71E-04	1.71E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Zr99	1.7	1.59E-04	1.68E-04	1.62E-04	1.62E-04
Tc106	1.7	1.58E-04	1.59E-04	2.09E-04	2.09E-04
La146	1.6	1.50E-04	1.50E-04	1.50E-04	1.50E-04
Rb93	1.6	1.49E-04	1.53E-04	1.47E-04	1.47E-04
Pr150	1.5	1.45E-04	1.34E-04	1.57E-04	1.57E-04
I136m	1.5	1.38E-04	1.40E-04	1.32E-04	1.20E-04
Xe139	1.4	1.35E-04	1.35E-04	1.26E-04	1.35E-04
Nb104	1.4	1.33E-04	1.35E-04	1.46E-04	1.46E-04
La147	1.4	1.28E-04	9.47E-05	1.19E-04	1.19E-04
Rh111	1.4	1.28E-04	9.76E-05	1.21E-04	1.21E-04
Mo107	1.3	1.25E-04	1.11E-04	9.82E-05	9.82E-05
La146m	1.3	1.23E-04	5.67E-05	1.25E-04	1.22E-04
Xe140	1.2	1.13E-04	1.06E-04	1.37E-04	1.37E-04
Mo105	1.2	1.13E-04	1.11E-04	2.06E-04	2.06E-04
Zr101	1.2	1.11E-04	1.12E-04	1.12E-04	1.12E-04
Sr95	1.2	1.11E-04	1.30E-04	1.12E-04	1.12E-04
Ba144	1.1	1.07E-04	1.08E-04	1.11E-04	1.11E-04
Ru110	1.1	1.06E-04	6.02E-05	1.06E-04	1.06E-04
Y97	1.0	9.48E-05	1.37E-04	9.60E-05	9.60E-05
Cs140	0.9	8.83E-05	8.17E-05	9.16E-05	9.16E-05
Ru109	0.9	8.67E-05	8.62E-05	8.66E-05	8.66E-05
Mo103	0.9	8.56E-05	8.16E-05	9.54E-05	9.54E-05
Ba145	0.9	8.34E-05	7.49E-05	7.35E-05	7.35E-05
Zr102	0.9	8.31E-05	5.31E-05	8.48E-05	8.48E-05
Y96m	0.8	7.83E-05	7.73E-05	8.88E-05	8.88E-05
La145	0.8	7.35E-05	8.86E-05	6.77E-05	6.77E-05
Cs142	0.8	7.16E-05	7.11E-05	7.10E-05	7.10E-05
Kr91	0.7	6.90E-05	6.44E-05	6.42E-05	6.42E-05
Rh110	0.7	6.64E-05	2.77E-05	5.96E-05	5.96E-05
Zr98	0.7	6.61E-05	8.47E-05	8.46E-05	8.46E-05
Y98m	0.7	6.59E-05	6.51E-05	7.26E-05	7.26E-05
Nb105	0.7	6.35E-05	6.81E-05	5.81E-05	5.81E-05
Nb103	0.7	6.15E-05	6.90E-05	6.02E-05	6.85E-05
Te136	0.6	6.06E-05	5.99E-05	6.03E-05	6.03E-05

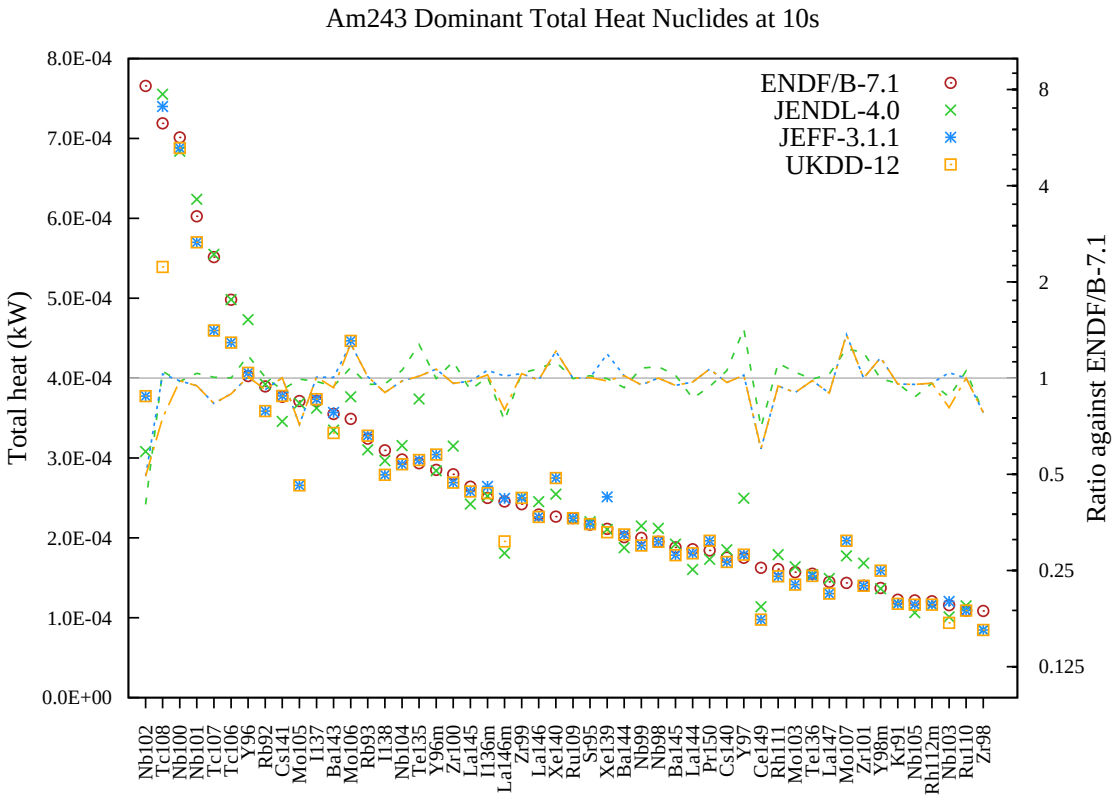

Figure 183: Total heat (in kW) decay data comparison for Am243 fission pulse after 10s cooling.

Table 183: Total heat (in kW) decay data comparison for Am243 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb102	4.6	7.66E-04	3.08E-04	3.78E-04	3.78E-04
Tc108	4.3	7.19E-04	7.55E-04	7.40E-04	5.39E-04
Nb100	4.2	7.01E-04	6.84E-04	6.88E-04	6.88E-04
Nb101	3.6	6.03E-04	6.24E-04	5.70E-04	5.70E-04
Tc107	3.3	5.51E-04	5.55E-04	4.59E-04	4.59E-04
Tc106	3.0	4.98E-04	4.98E-04	4.44E-04	4.44E-04
Y96	2.4	4.02E-04	4.73E-04	4.07E-04	4.07E-04
Rb92	2.4	3.90E-04	3.92E-04	3.59E-04	3.59E-04
Cs141	2.3	3.77E-04	3.46E-04	3.78E-04	3.78E-04
Mo105	2.2	3.71E-04	3.68E-04	2.66E-04	2.66E-04
I137	2.2	3.71E-04	3.62E-04	3.74E-04	3.74E-04
Ba143	2.1	3.55E-04	3.35E-04	3.57E-04	3.31E-04
Mo106	2.1	3.49E-04	3.77E-04	4.47E-04	4.47E-04
Rb93	2.0	3.24E-04	3.10E-04	3.28E-04	3.28E-04
I138	1.9	3.10E-04	2.97E-04	2.79E-04	2.79E-04
Nb104	1.8	2.98E-04	3.15E-04	2.92E-04	2.92E-04
Te135	1.8	2.93E-04	3.74E-04	2.97E-04	2.97E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y96m	1.7	2.85E-04	2.84E-04	3.04E-04	3.04E-04
Zr100	1.7	2.80E-04	3.15E-04	2.69E-04	2.69E-04
La145	1.6	2.64E-04	2.42E-04	2.58E-04	2.58E-04
I136m	1.5	2.50E-04	2.52E-04	2.64E-04	2.56E-04
La146m	1.5	2.46E-04	1.81E-04	2.49E-04	1.96E-04
Zr99	1.5	2.42E-04	2.51E-04	2.50E-04	2.50E-04
La146	1.4	2.29E-04	2.45E-04	2.26E-04	2.26E-04
Xe140	1.4	2.27E-04	2.55E-04	2.75E-04	2.75E-04
Ru109	1.4	2.25E-04	2.24E-04	2.25E-04	2.25E-04
Sr95	1.3	2.17E-04	2.20E-04	2.17E-04	2.17E-04
Xe139	1.3	2.11E-04	2.11E-04	2.51E-04	2.07E-04
Ba144	1.2	2.01E-04	1.88E-04	2.04E-04	2.04E-04
Nb99	1.2	2.00E-04	2.15E-04	1.90E-04	1.90E-04
Nb98	1.2	1.95E-04	2.12E-04	1.95E-04	1.95E-04
Ba145	1.1	1.88E-04	1.92E-04	1.78E-04	1.78E-04
La144	1.1	1.86E-04	1.60E-04	1.81E-04	1.81E-04
Pr150	1.1	1.84E-04	1.73E-04	1.96E-04	1.96E-04
Cs140	1.1	1.75E-04	1.85E-04	1.70E-04	1.70E-04
Y97	1.1	1.75E-04	2.50E-04	1.79E-04	1.79E-04
Ce149	1.0	1.63E-04	1.14E-04	9.76E-05	9.76E-05
Rh111	1.0	1.61E-04	1.79E-04	1.52E-04	1.52E-04
Mo103	0.9	1.57E-04	1.64E-04	1.41E-04	1.41E-04
Te136	0.9	1.55E-04	1.54E-04	1.52E-04	1.52E-04
La147	0.9	1.45E-04	1.49E-04	1.30E-04	1.30E-04
Mo107	0.9	1.44E-04	1.77E-04	1.96E-04	1.96E-04
Zr101	0.8	1.40E-04	1.68E-04	1.40E-04	1.40E-04
Y98m	0.8	1.37E-04	1.36E-04	1.59E-04	1.59E-04
Kr91	0.7	1.22E-04	1.18E-04	1.17E-04	1.17E-04
Nb105	0.7	1.22E-04	1.06E-04	1.16E-04	1.16E-04
Rh112m	0.7	1.21E-04	1.16E-04	1.16E-04	1.16E-04
Nb103	0.7	1.16E-04	1.01E-04	1.20E-04	9.35E-05
Ru110	0.7	1.09E-04	1.15E-04	1.09E-04	1.09E-04
Zr98	0.7	1.08E-04	8.47E-05	8.46E-05	8.46E-05

13.2 100s after pulse

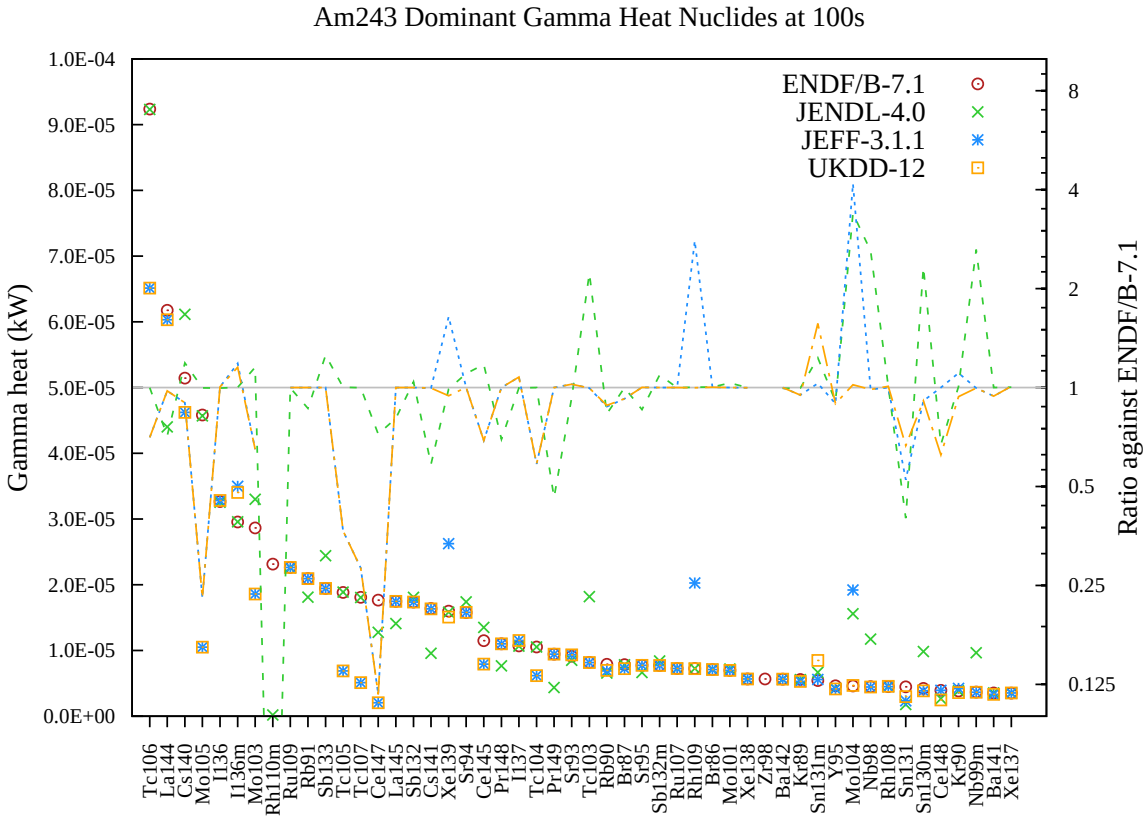

Figure 184: Gamma heat (in kW) decay data comparison for Am243 fission pulse after 100s cooling.

Table 184: Gamma heat (in kW) decay data comparison for Am243 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	11.0	9.24E-05	9.23E-05	6.51E-05	6.51E-05
La144	7.3	6.18E-05	4.40E-05	6.03E-05	6.03E-05
Cs140	6.1	5.14E-05	6.12E-05	4.62E-05	4.62E-05
Mo105	5.4	4.58E-05	4.57E-05	1.05E-05	1.05E-05
I136	3.9	3.27E-05	3.26E-05	3.28E-05	3.28E-05
I136m	3.5	2.95E-05	2.96E-05	3.50E-05	3.40E-05
Mo103	3.4	2.86E-05	3.30E-05	1.86E-05	1.86E-05
Rh110m	2.7	2.31E-05	—	—	—
Ru109	2.7	2.26E-05	2.26E-05	2.26E-05	2.26E-05
Rb91	2.5	2.09E-05	1.81E-05	2.09E-05	2.09E-05
Sb133	2.3	1.94E-05	2.44E-05	1.94E-05	1.94E-05
Tc105	2.2	1.88E-05	1.89E-05	6.89E-06	6.89E-06
Tc107	2.1	1.81E-05	1.81E-05	5.11E-06	5.11E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Ce147	2.1	1.77E-05	1.28E-05	2.06E-06	2.06E-06
La145	2.1	1.75E-05	1.41E-05	1.75E-05	1.75E-05
Sb132	2.1	1.74E-05	1.81E-05	1.74E-05	1.74E-05
Cs141	1.9	1.64E-05	9.57E-06	1.63E-05	1.63E-05
Xe139	1.9	1.60E-05	1.58E-05	2.62E-05	1.51E-05
Sr94	1.9	1.58E-05	1.74E-05	1.58E-05	1.58E-05
Ce145	1.4	1.15E-05	1.35E-05	7.92E-06	7.92E-06
Pr148	1.3	1.10E-05	7.66E-06	1.10E-05	1.10E-05
I137	1.3	1.07E-05	1.07E-05	1.15E-05	1.15E-05
Tc104	1.3	1.05E-05	1.05E-05	6.17E-06	6.17E-06
Pr149	1.1	9.44E-06	4.37E-06	9.44E-06	9.44E-06
Sr93	1.1	9.13E-06	8.51E-06	9.35E-06	9.35E-06
Tc103	1.0	8.18E-06	1.82E-05	8.16E-06	8.16E-06
Rb90	0.9	7.89E-06	6.57E-06	6.90E-06	6.97E-06
Br87	0.9	7.83E-06	7.82E-06	7.25E-06	7.25E-06
Sr95	0.9	7.74E-06	6.64E-06	7.75E-06	7.75E-06
Sb132m	0.9	7.71E-06	8.42E-06	7.71E-06	7.71E-06
Ru107	0.9	7.27E-06	7.26E-06	7.27E-06	7.27E-06
Rh109	0.9	7.25E-06	7.27E-06	2.03E-05	7.24E-06
Br86	0.8	7.09E-06	7.12E-06	7.11E-06	7.11E-06
Mo101	0.8	6.97E-06	7.19E-06	6.97E-06	6.97E-06
Xe138	0.7	5.66E-06	5.66E-06	5.66E-06	5.66E-06
Zr98	0.7	5.65E-06	—	—	—
Ba142	0.7	5.63E-06	5.60E-06	5.63E-06	5.63E-06
Kr89	0.7	5.59E-06	5.57E-06	5.30E-06	5.30E-06
Sn131m	0.6	5.42E-06	6.68E-06	5.58E-06	8.48E-06
Y95	0.6	4.64E-06	4.21E-06	4.14E-06	4.14E-06
Mo104	0.5	4.60E-06	1.56E-05	1.92E-05	4.69E-06
Nb98	0.5	4.50E-06	1.17E-05	4.44E-06	4.44E-06
Rh108	0.5	4.49E-06	4.54E-06	4.49E-06	4.53E-06
Sn131	0.5	4.47E-06	1.79E-06	2.35E-06	2.98E-06
Sn130m	0.5	4.23E-06	9.83E-06	3.85E-06	3.85E-06
Ce148	0.5	3.95E-06	2.65E-06	3.95E-06	2.46E-06
Kr90	0.5	3.83E-06	3.86E-06	4.24E-06	3.59E-06
Nb99m	0.4	3.67E-06	9.64E-06	3.66E-06	3.66E-06
Ba141	0.4	3.53E-06	3.53E-06	3.33E-06	3.33E-06
Xe137	0.4	3.51E-06	3.52E-06	3.54E-06	3.54E-06

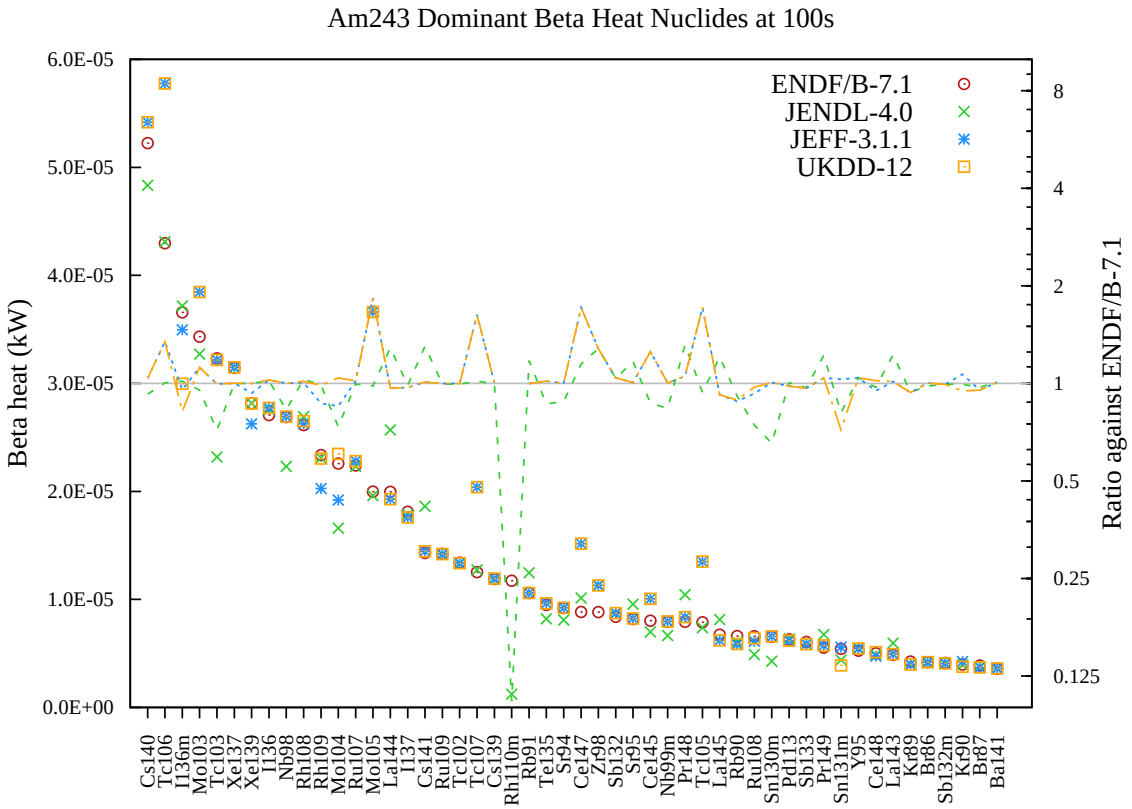

Figure 185: Beta heat (in kW) decay data comparison for Am243 fission pulse after 100s cooling.

Table 185: Beta heat (in kW) decay data comparison for Am243 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	6.5	5.22E-05	4.83E-05	5.42E-05	5.42E-05
Tc106	5.4	4.30E-05	4.31E-05	5.78E-05	5.78E-05
I136m	4.6	3.66E-05	3.72E-05	3.50E-05	3.00E-05
Mo103	4.3	3.43E-05	3.27E-05	3.85E-05	3.85E-05
Tc103	4.0	3.23E-05	2.32E-05	3.22E-05	3.22E-05
Xe137	3.9	3.14E-05	3.15E-05	3.15E-05	3.15E-05
Xe139	3.5	2.82E-05	2.82E-05	2.62E-05	2.81E-05
I136	3.4	2.71E-05	2.76E-05	2.77E-05	2.77E-05
Nb98	3.4	2.69E-05	2.23E-05	2.69E-05	2.69E-05
Rh108	3.3	2.61E-05	2.69E-05	2.63E-05	2.65E-05
Rh109	2.9	2.34E-05	2.31E-05	2.03E-05	2.30E-05
Mo104	2.8	2.26E-05	1.66E-05	1.92E-05	2.35E-05
Ru107	2.8	2.24E-05	2.23E-05	2.28E-05	2.28E-05
Mo105	2.5	2.00E-05	1.96E-05	3.66E-05	3.66E-05
La144	2.5	2.00E-05	2.57E-05	1.93E-05	1.93E-05
I137	2.3	1.81E-05	1.79E-05	1.76E-05	1.76E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs141	1.8	1.43E-05	1.86E-05	1.45E-05	1.45E-05
Ru109	1.8	1.42E-05	1.41E-05	1.42E-05	1.42E-05
Tc102	1.7	1.34E-05	1.33E-05	1.34E-05	1.34E-05
Tc107	1.6	1.25E-05	1.27E-05	2.04E-05	2.04E-05
Cs139	1.5	1.19E-05	1.19E-05	1.19E-05	1.19E-05
Rh110m	1.5	1.17E-05	1.22E-06	—	—
Rb91	1.3	1.06E-05	1.25E-05	1.06E-05	1.06E-05
Te135	1.2	9.50E-06	8.21E-06	9.64E-06	9.64E-06
Sr94	1.1	9.20E-06	8.09E-06	9.22E-06	9.22E-06
Ce147	1.1	8.84E-06	1.01E-05	1.52E-05	1.52E-05
Zr98	1.1	8.83E-06	1.13E-05	1.13E-05	1.13E-05
Sb132	1.0	8.39E-06	8.70E-06	8.73E-06	8.73E-06
Sr95	1.0	8.18E-06	9.56E-06	8.23E-06	8.23E-06
Ce145	1.0	8.03E-06	6.99E-06	1.01E-05	1.01E-05
Nb99m	1.0	7.94E-06	6.65E-06	7.96E-06	7.96E-06
Pr148	1.0	7.93E-06	1.04E-05	8.36E-06	8.36E-06
Tc105	1.0	7.88E-06	7.39E-06	1.35E-05	1.35E-05
La145	0.8	6.74E-06	8.14E-06	6.21E-06	6.21E-06
Rb90	0.8	6.61E-06	6.04E-06	5.82E-06	5.88E-06
Ru108	0.8	6.59E-06	4.91E-06	6.13E-06	6.42E-06
Sn130m	0.8	6.54E-06	4.27E-06	6.58E-06	6.58E-06
Pd113	0.8	6.30E-06	6.33E-06	6.18E-06	6.18E-06
Sb133	0.8	6.06E-06	5.88E-06	5.85E-06	5.85E-06
Pr149	0.7	5.53E-06	6.75E-06	5.75E-06	5.75E-06
Sn131m	0.7	5.42E-06	4.40E-06	5.58E-06	3.90E-06
Y95	0.7	5.24E-06	5.46E-06	5.45E-06	5.45E-06
Ce148	0.6	5.02E-06	4.88E-06	4.76E-06	5.12E-06
La143	0.6	4.86E-06	5.95E-06	4.93E-06	4.93E-06
Kr89	0.5	4.25E-06	3.99E-06	3.98E-06	3.98E-06
Br86	0.5	4.18E-06	4.10E-06	4.19E-06	4.19E-06
Sb132m	0.5	4.12E-06	4.10E-06	4.08E-06	4.08E-06
Kr90	0.5	3.97E-06	3.95E-06	4.24E-06	3.76E-06
Br87	0.5	3.88E-06	3.77E-06	3.70E-06	3.70E-06
Ba141	0.4	3.58E-06	3.61E-06	3.61E-06	3.61E-06

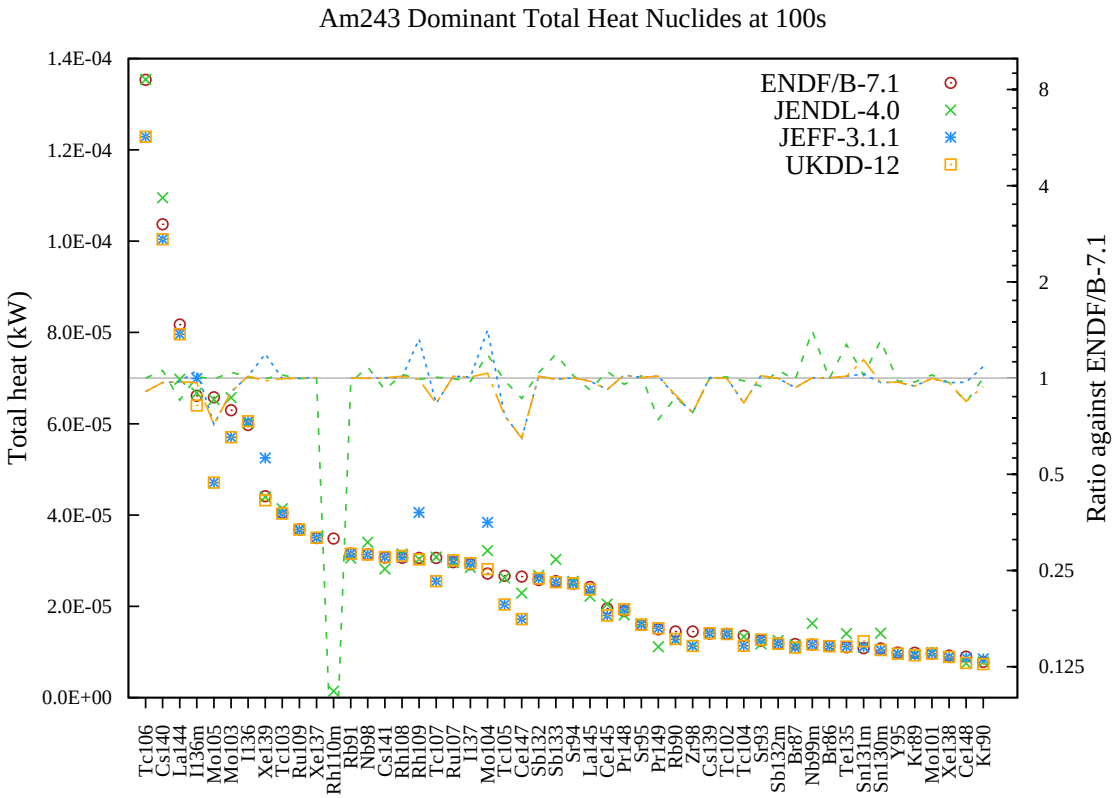

Figure 186: Total heat (in kW) decay data comparison for Am243 fission pulse after 100s cooling.

Table 186: Total heat (in kW) decay data comparison for Am243 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	8.2	1.35E-04	1.35E-04	1.23E-04	1.23E-04
Cs140	6.3	1.04E-04	1.09E-04	1.00E-04	1.00E-04
La144	5.0	8.17E-05	6.97E-05	7.96E-05	7.96E-05
I136m	4.0	6.61E-05	6.67E-05	6.99E-05	6.40E-05
Mo105	4.0	6.58E-05	6.53E-05	4.71E-05	4.71E-05
Mo103	3.8	6.30E-05	6.57E-05	5.70E-05	5.70E-05
I136	3.6	5.97E-05	6.01E-05	6.05E-05	6.05E-05
Xe139	2.7	4.41E-05	4.40E-05	5.25E-05	4.32E-05
Tc103	2.5	4.05E-05	4.14E-05	4.03E-05	4.03E-05
Ru109	2.2	3.69E-05	3.67E-05	3.68E-05	3.68E-05
Xe137	2.1	3.49E-05	3.50E-05	3.50E-05	3.50E-05
Rh110m	2.1	3.49E-05	1.42E-06	—	—
Rb91	1.9	3.15E-05	3.06E-05	3.15E-05	3.15E-05
Nb98	1.9	3.14E-05	3.40E-05	3.14E-05	3.14E-05
Cs141	1.9	3.07E-05	2.82E-05	3.08E-05	3.08E-05
Rh108	1.9	3.06E-05	3.15E-05	3.08E-05	3.10E-05
Rh109	1.9	3.06E-05	3.04E-05	4.05E-05	3.03E-05

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc107	1.9	3.06E-05	3.08E-05	2.55E-05	2.55E-05
Ru107	1.8	2.97E-05	2.96E-05	3.01E-05	3.01E-05
I137	1.8	2.92E-05	2.85E-05	2.95E-05	2.95E-05
Mo104	1.7	2.72E-05	3.22E-05	3.84E-05	2.82E-05
Tc105	1.6	2.67E-05	2.63E-05	2.04E-05	2.04E-05
Ce147	1.6	2.65E-05	2.29E-05	1.72E-05	1.72E-05
Sb132	1.6	2.58E-05	2.68E-05	2.61E-05	2.61E-05
Sb133	1.6	2.55E-05	3.03E-05	2.53E-05	2.53E-05
Sr94	1.5	2.50E-05	2.55E-05	2.50E-05	2.50E-05
La145	1.5	2.42E-05	2.22E-05	2.37E-05	2.37E-05
Ce145	1.2	1.95E-05	2.05E-05	1.80E-05	1.80E-05
Pr148	1.2	1.89E-05	1.81E-05	1.94E-05	1.94E-05
Sr95	1.0	1.59E-05	1.62E-05	1.60E-05	1.60E-05
Pr149	0.9	1.50E-05	1.11E-05	1.52E-05	1.52E-05
Rb90	0.9	1.45E-05	1.26E-05	1.27E-05	1.28E-05
Zr98	0.9	1.45E-05	1.13E-05	1.13E-05	1.13E-05
Cs139	0.9	1.41E-05	1.40E-05	1.41E-05	1.41E-05
Tc102	0.8	1.40E-05	1.41E-05	1.39E-05	1.39E-05
Tc104	0.8	1.36E-05	1.33E-05	1.14E-05	1.14E-05
Sr93	0.8	1.25E-05	1.18E-05	1.27E-05	1.27E-05
Sb132m	0.7	1.18E-05	1.25E-05	1.18E-05	1.18E-05
Br87	0.7	1.17E-05	1.16E-05	1.10E-05	1.10E-05
Nb99m	0.7	1.16E-05	1.63E-05	1.16E-05	1.16E-05
Br86	0.7	1.13E-05	1.12E-05	1.13E-05	1.13E-05
Te135	0.7	1.10E-05	1.40E-05	1.12E-05	1.12E-05
Sn131m	0.7	1.08E-05	1.11E-05	1.12E-05	1.24E-05
Sn130m	0.7	1.08E-05	1.41E-05	1.04E-05	1.04E-05
Y95	0.6	9.88E-06	9.67E-06	9.59E-06	9.59E-06
Kr89	0.6	9.84E-06	9.56E-06	9.28E-06	9.28E-06
Mo101	0.6	9.65E-06	9.87E-06	9.63E-06	9.63E-06
Xe138	0.6	9.19E-06	8.88E-06	8.89E-06	8.89E-06
Ce148	0.5	8.96E-06	7.53E-06	8.71E-06	7.58E-06
Kr90	0.5	7.80E-06	7.81E-06	8.48E-06	7.35E-06

13.3 1000s after pulse

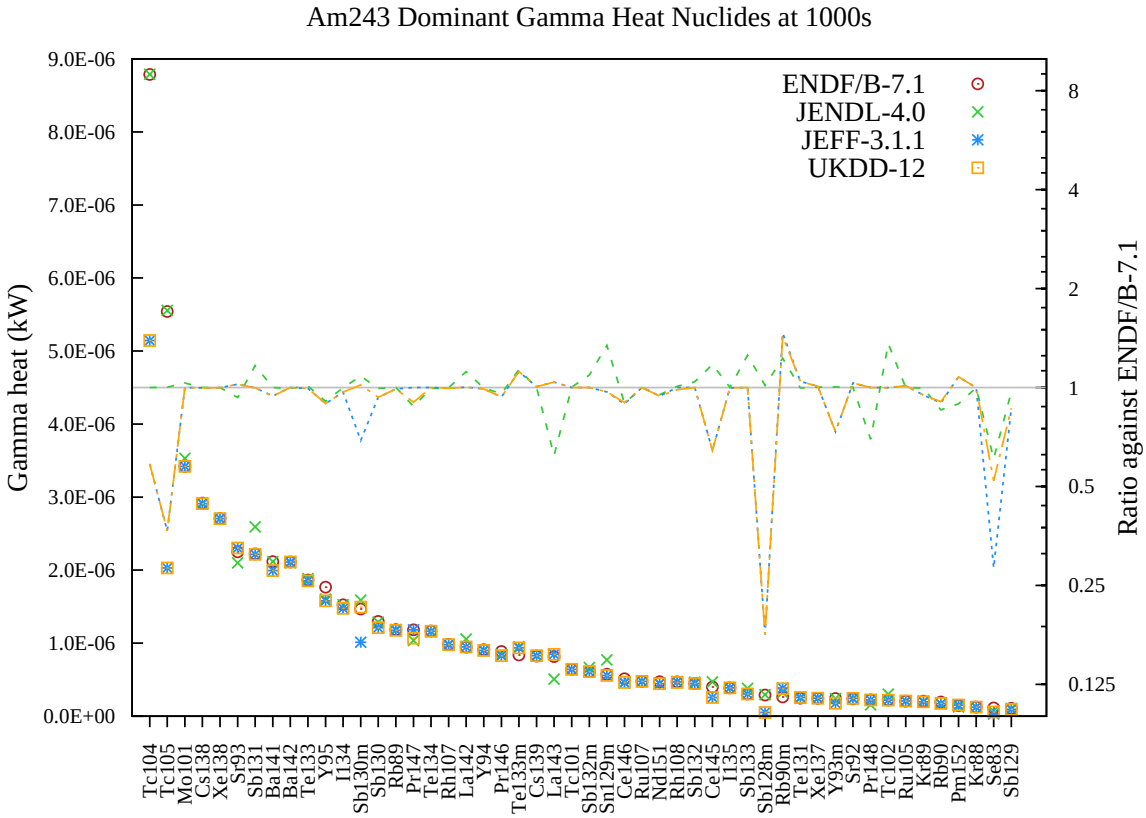

Figure 187: Gamma heat (in kW) decay data comparison for Am243 fission pulse after 1000s cooling.

Table 187: Gamma heat (in kW) decay data comparison for Am243 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	14.6	8.79E-06	8.79E-06	5.14E-06	5.14E-06
Tc105	9.2	5.54E-06	5.56E-06	2.03E-06	2.03E-06
Mo101	5.7	3.42E-06	3.53E-06	3.42E-06	3.42E-06
Cs138	4.9	2.92E-06	2.92E-06	2.91E-06	2.91E-06
Xe138	4.5	2.71E-06	2.71E-06	2.70E-06	2.70E-06
Sr93	3.7	2.25E-06	2.10E-06	2.30E-06	2.30E-06
Sb131	3.7	2.22E-06	2.59E-06	2.22E-06	2.22E-06
Ba141	3.5	2.12E-06	2.12E-06	1.99E-06	1.99E-06
Ba142	3.5	2.11E-06	2.10E-06	2.11E-06	2.11E-06
Te133	3.1	1.86E-06	1.88E-06	1.85E-06	1.85E-06
Y95	2.9	1.77E-06	1.60E-06	1.58E-06	1.58E-06
I134	2.5	1.53E-06	1.52E-06	1.48E-06	1.48E-06
Sb130m	2.4	1.47E-06	1.59E-06	1.01E-06	1.49E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb130	2.2	1.30E-06	1.29E-06	1.21E-06	1.21E-06
Rb89	2.0	1.19E-06	1.19E-06	1.17E-06	1.17E-06
Pr147	2.0	1.18E-06	1.04E-06	1.18E-06	1.07E-06
Te134	1.9	1.16E-06	1.16E-06	1.16E-06	1.16E-06
Rh107	1.6	9.84E-07	9.83E-07	9.80E-07	9.80E-07
La142	1.6	9.45E-07	1.06E-06	9.48E-07	9.48E-07
Y94	1.5	9.09E-07	9.07E-07	9.01E-07	9.01E-07
Pr146	1.5	8.86E-07	8.48E-07	8.29E-07	8.29E-07
Te133m	1.4	8.37E-07	9.50E-07	9.36E-07	9.36E-07
Cs139	1.4	8.23E-07	8.23E-07	8.29E-07	8.29E-07
La143	1.4	8.16E-07	5.06E-07	8.47E-07	8.47E-07
Tc101	1.1	6.42E-07	6.43E-07	6.42E-07	6.42E-07
Sb132m	1.0	6.10E-07	6.67E-07	6.10E-07	6.10E-07
Sn129m	1.0	5.75E-07	7.72E-07	5.57E-07	5.57E-07
Ce146	0.9	5.13E-07	4.60E-07	4.57E-07	4.62E-07
Ru107	0.8	4.76E-07	4.76E-07	4.76E-07	4.76E-07
Nd151	0.8	4.71E-07	4.48E-07	4.44E-07	4.44E-07
Rh108	0.8	4.69E-07	4.73E-07	4.69E-07	4.61E-07
Sb132	0.7	4.47E-07	4.66E-07	4.47E-07	4.47E-07
Ce145	0.7	3.99E-07	4.70E-07	2.57E-07	2.57E-07
I135	0.6	3.88E-07	3.89E-07	3.87E-07	3.87E-07
Sb133	0.5	3.04E-07	3.81E-07	3.04E-07	3.04E-07
Sb128m	0.5	2.89E-07	2.93E-07	5.13E-08	5.13E-08
Rb90m	0.4	2.63E-07	3.22E-07	3.85E-07	3.76E-07
Te131	0.4	2.46E-07	2.46E-07	2.57E-07	2.57E-07
Xe137	0.4	2.43E-07	2.44E-07	2.46E-07	2.46E-07
Y93m	0.4	2.41E-07	2.42E-07	1.77E-07	1.77E-07
Sr92	0.4	2.37E-07	2.37E-07	2.44E-07	2.44E-07
Pr148	0.4	2.23E-07	1.55E-07	2.23E-07	2.23E-07
Tc102	0.4	2.22E-07	3.02E-07	2.21E-07	2.21E-07
Ru105	0.3	2.06E-07	2.06E-07	2.09E-07	2.09E-07
Kr89	0.3	2.06E-07	2.05E-07	1.95E-07	1.95E-07
Rb90	0.3	1.93E-07	1.65E-07	1.73E-07	1.75E-07
Pm152	0.2	1.43E-07	1.27E-07	1.54E-07	1.54E-07
Kr88	0.2	1.26E-07	1.25E-07	1.25E-07	1.25E-07
Se83	0.2	1.12E-07	6.83E-08	3.18E-08	5.85E-08
Sb129	0.2	1.08E-07	1.05E-07	9.33E-08	9.33E-08

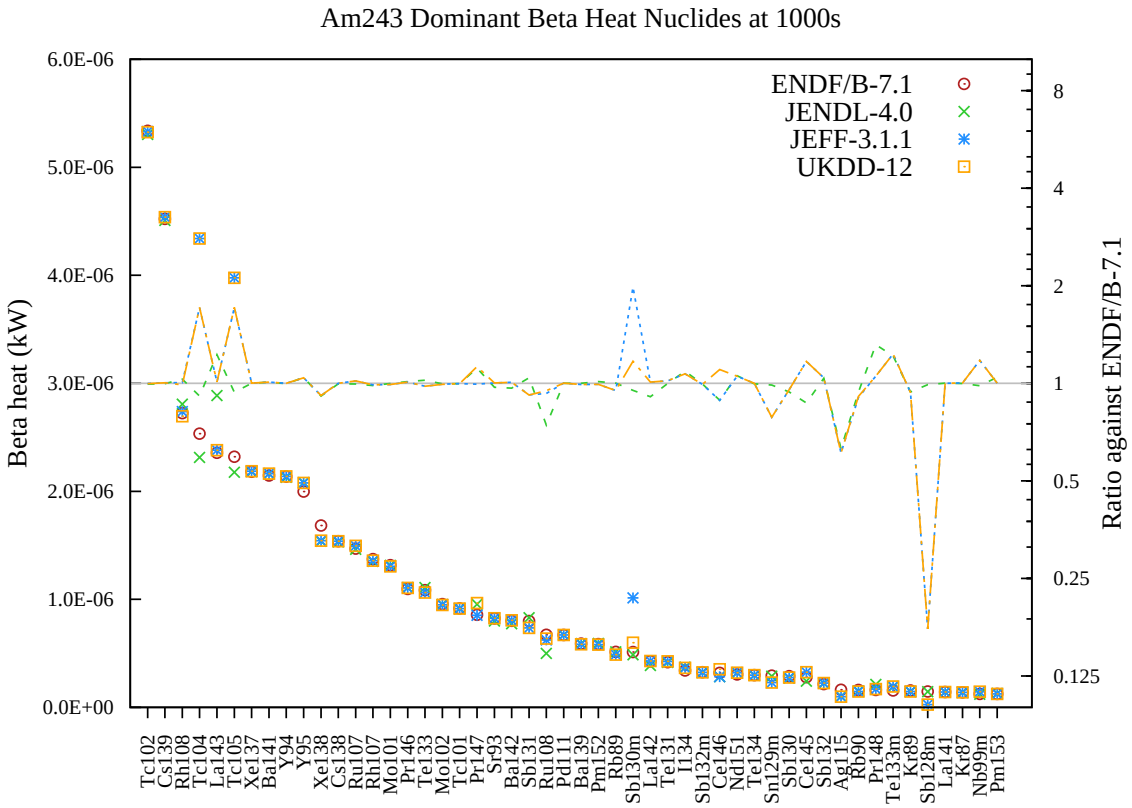

Figure 188: Beta heat (in kW) decay data comparison for Am243 fission pulse after 1000s cooling.

Table 188: Beta heat (in kW) decay data comparison for Am243 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	9.9	5.34E-06	5.31E-06	5.33E-06	5.32E-06
Cs139	8.4	4.52E-06	4.51E-06	4.54E-06	4.54E-06
Rh108	5.1	2.72E-06	2.81E-06	2.74E-06	2.69E-06
Tc104	4.7	2.53E-06	2.31E-06	4.34E-06	4.34E-06
La143	4.4	2.36E-06	2.89E-06	2.38E-06	2.38E-06
Tc105	4.3	2.32E-06	2.18E-06	3.98E-06	3.98E-06
Xe137	4.1	2.18E-06	2.18E-06	2.19E-06	2.19E-06
Ba141	4.0	2.15E-06	2.16E-06	2.16E-06	2.16E-06
Y94	4.0	2.14E-06	2.13E-06	2.14E-06	2.14E-06
Y95	3.7	2.00E-06	2.08E-06	2.08E-06	2.08E-06
Xe138	3.1	1.68E-06	1.54E-06	1.54E-06	1.54E-06
Cs138	2.9	1.54E-06	1.53E-06	1.54E-06	1.54E-06
Ru107	2.7	1.47E-06	1.46E-06	1.50E-06	1.50E-06
Rh107	2.5	1.37E-06	1.35E-06	1.36E-06	1.36E-06
Mo101	2.4	1.32E-06	1.32E-06	1.31E-06	1.31E-06
Pr146	2.0	1.10E-06	1.11E-06	1.11E-06	1.11E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te133	2.0	1.09E-06	1.11E-06	1.06E-06	1.06E-06
Mo102	1.8	9.55E-07	9.52E-07	9.49E-07	9.48E-07
Tc101	1.7	9.16E-07	9.14E-07	9.14E-07	9.14E-07
Pr147	1.6	8.57E-07	9.55E-07	8.51E-07	9.65E-07
Sr93	1.5	8.23E-07	8.00E-07	8.25E-07	8.25E-07
Ba142	1.5	8.01E-07	7.73E-07	8.06E-07	8.06E-07
Sb131	1.5	7.99E-07	8.30E-07	7.36E-07	7.35E-07
Ru108	1.2	6.71E-07	4.99E-07	6.24E-07	6.37E-07
Pd111	1.2	6.70E-07	6.70E-07	6.70E-07	6.70E-07
Ba139	1.1	5.90E-07	5.90E-07	5.85E-07	5.85E-07
Pm152	1.1	5.85E-07	5.92E-07	5.81E-07	5.81E-07
Rb89	1.0	5.14E-07	5.14E-07	4.88E-07	4.88E-07
Sb130m	1.0	5.12E-07	4.87E-07	1.01E-06	5.99E-07
La142	0.8	4.26E-07	3.87E-07	4.30E-07	4.30E-07
Te131	0.8	4.18E-07	4.17E-07	4.25E-07	4.25E-07
I134	0.6	3.41E-07	3.72E-07	3.65E-07	3.65E-07
Sb132m	0.6	3.26E-07	3.24E-07	3.23E-07	3.23E-07
Ce146	0.6	3.20E-07	2.84E-07	2.83E-07	3.53E-07
Nd151	0.6	3.04E-07	3.21E-07	3.20E-07	3.20E-07
Te134	0.6	2.98E-07	2.98E-07	2.98E-07	2.98E-07
Sn129m	0.5	2.93E-07	2.89E-07	2.30E-07	2.30E-07
Sb130	0.5	2.89E-07	2.72E-07	2.76E-07	2.76E-07
Ce145	0.5	2.79E-07	2.43E-07	3.26E-07	3.26E-07
Sb132	0.4	2.16E-07	2.24E-07	2.25E-07	2.25E-07
Ag115	0.3	1.63E-07	1.02E-07	9.92E-08	9.92E-08
Rb90	0.3	1.62E-07	1.52E-07	1.46E-07	1.47E-07
Pr148	0.3	1.61E-07	2.12E-07	1.69E-07	1.69E-07
Te133m	0.3	1.57E-07	1.90E-07	1.93E-07	1.93E-07
Kr89	0.3	1.57E-07	1.47E-07	1.47E-07	1.47E-07
Sb128m	0.3	1.47E-07	1.46E-07	2.57E-08	2.57E-08
La141	0.3	1.42E-07	1.42E-07	1.42E-07	1.42E-07
Kr87	0.3	1.39E-07	1.39E-07	1.39E-07	1.39E-07
Nb99m	0.2	1.24E-07	1.22E-07	1.46E-07	1.46E-07
Pm153	0.2	1.24E-07	1.29E-07	1.24E-07	1.24E-07

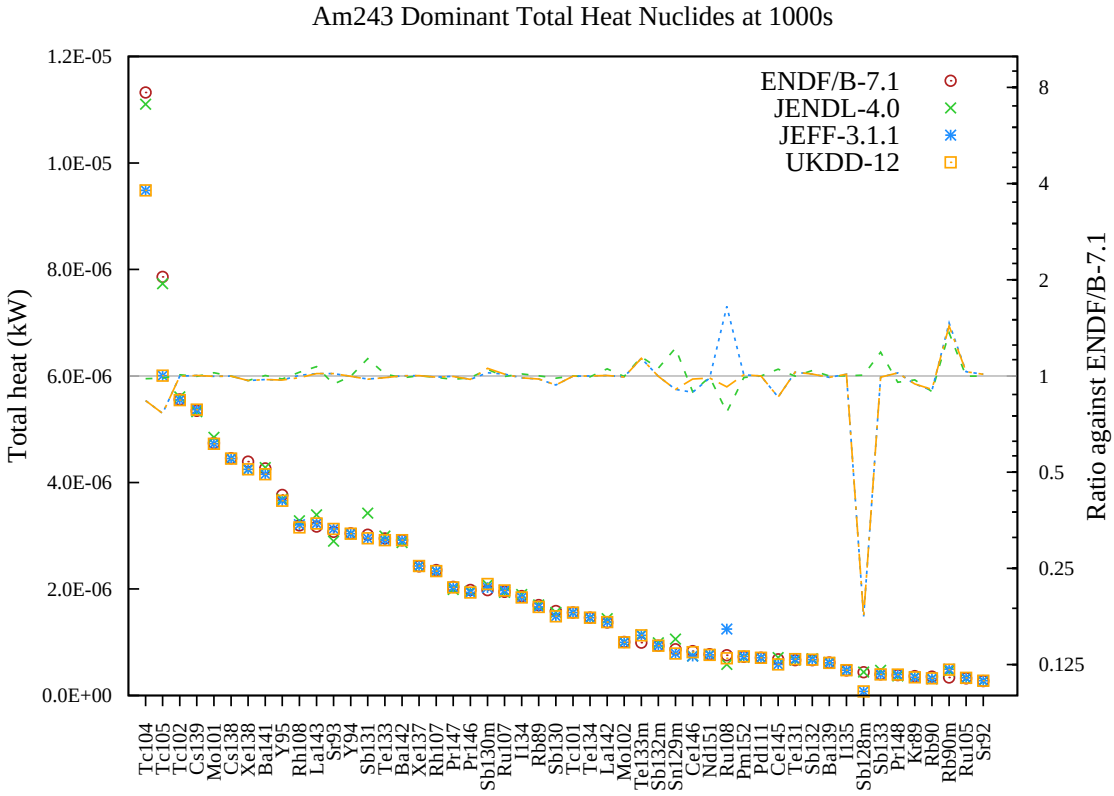

Figure 189: Total heat (in kW) decay data comparison for Am243 fission pulse after 1000s cooling.

Table 189: Total heat (in kW) decay data comparison for Am243 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	9.9	1.13E-05	1.11E-05	9.48E-06	9.48E-06
Tc105	6.9	7.86E-06	7.73E-06	6.01E-06	6.01E-06
Tc102	4.9	5.56E-06	5.61E-06	5.55E-06	5.55E-06
Cs139	4.7	5.34E-06	5.33E-06	5.37E-06	5.37E-06
Mo101	4.2	4.74E-06	4.85E-06	4.73E-06	4.73E-06
Cs138	3.9	4.46E-06	4.45E-06	4.45E-06	4.45E-06
Xe138	3.9	4.39E-06	4.25E-06	4.25E-06	4.25E-06
Ba141	3.7	4.26E-06	4.28E-06	4.16E-06	4.16E-06
Y95	3.3	3.76E-06	3.68E-06	3.66E-06	3.66E-06
Rh108	2.8	3.19E-06	3.28E-06	3.21E-06	3.16E-06
La143	2.8	3.17E-06	3.39E-06	3.23E-06	3.23E-06
Sr93	2.7	3.07E-06	2.90E-06	3.13E-06	3.13E-06
Y94	2.7	3.05E-06	3.04E-06	3.04E-06	3.04E-06
Sb131	2.7	3.02E-06	3.42E-06	2.95E-06	2.95E-06
Te133	2.6	2.95E-06	2.99E-06	2.92E-06	2.92E-06
Ba142	2.6	2.91E-06	2.87E-06	2.92E-06	2.92E-06
Xe137	2.1	2.43E-06	2.43E-06	2.43E-06	2.43E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rh107	2.1	2.36E-06	2.33E-06	2.34E-06	2.34E-06
Pr147	1.8	2.04E-06	1.99E-06	2.03E-06	2.03E-06
Pr146	1.7	1.98E-06	1.96E-06	1.93E-06	1.93E-06
Sb130m	1.7	1.98E-06	2.08E-06	2.03E-06	2.09E-06
Ru107	1.7	1.95E-06	1.94E-06	1.97E-06	1.97E-06
I134	1.6	1.87E-06	1.90E-06	1.84E-06	1.84E-06
Rb89	1.5	1.70E-06	1.70E-06	1.66E-06	1.66E-06
Sb130	1.4	1.59E-06	1.56E-06	1.49E-06	1.49E-06
Tc101	1.4	1.56E-06	1.56E-06	1.56E-06	1.56E-06
Te134	1.3	1.46E-06	1.45E-06	1.46E-06	1.46E-06
La142	1.2	1.37E-06	1.44E-06	1.38E-06	1.38E-06
Mo102	0.9	1.01E-06	1.00E-06	1.00E-06	9.98E-07
Te133m	0.9	9.94E-07	1.14E-06	1.13E-06	1.13E-06
Sb132m	0.8	9.36E-07	9.91E-07	9.34E-07	9.34E-07
Sn129m	0.8	8.68E-07	1.06E-06	7.88E-07	7.88E-07
Ce146	0.7	8.33E-07	7.43E-07	7.41E-07	8.15E-07
Nd151	0.7	7.76E-07	7.69E-07	7.64E-07	7.64E-07
Ru108	0.7	7.56E-07	5.84E-07	1.25E-06	6.99E-07
Pm152	0.6	7.28E-07	7.20E-07	7.34E-07	7.34E-07
Pd111	0.6	7.08E-07	7.08E-07	7.08E-07	7.08E-07
Ce145	0.6	6.79E-07	7.13E-07	5.83E-07	5.83E-07
Te131	0.6	6.64E-07	6.63E-07	6.82E-07	6.83E-07
Sb132	0.6	6.64E-07	6.90E-07	6.72E-07	6.72E-07
Ba139	0.5	6.20E-07	6.20E-07	6.14E-07	6.14E-07
I135	0.4	4.71E-07	4.72E-07	4.77E-07	4.77E-07
Sb128m	0.4	4.36E-07	4.39E-07	7.70E-08	7.70E-08
Sb133	0.3	3.99E-07	4.73E-07	3.95E-07	3.95E-07
Pr148	0.3	3.84E-07	3.67E-07	3.93E-07	3.93E-07
Kr89	0.3	3.63E-07	3.52E-07	3.42E-07	3.42E-07
Rb90	0.3	3.55E-07	3.17E-07	3.20E-07	3.22E-07
Rb90m	0.3	3.38E-07	4.62E-07	4.96E-07	4.85E-07
Ru105	0.3	3.22E-07	3.21E-07	3.32E-07	3.32E-07
Sr92	0.2	2.73E-07	2.73E-07	2.76E-07	2.76E-07

13.4 5011s after pulse

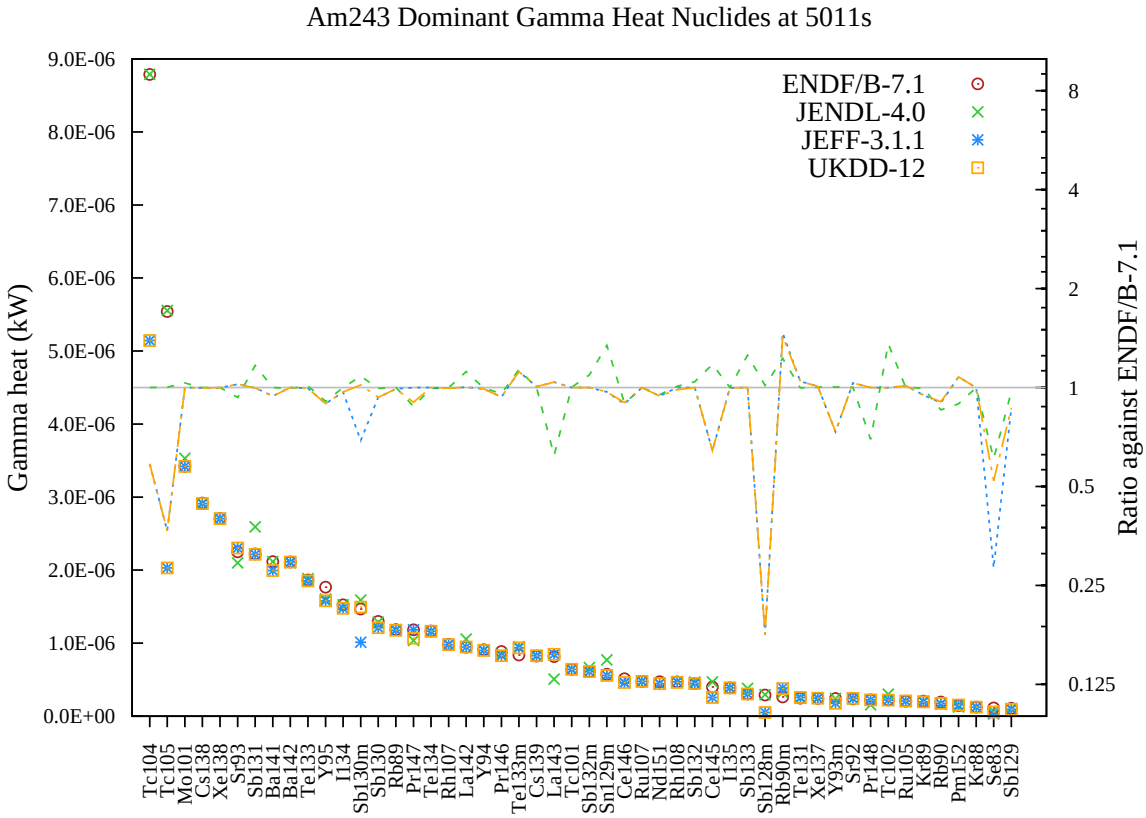

Figure 190: Gamma heat (in kW) decay data comparison for Am243 fission pulse after 5011s cooling.

Table 190: Gamma heat (in kW) decay data comparison for Am243 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	14.6	8.79E-06	8.79E-06	5.14E-06	5.14E-06
Tc105	9.2	5.54E-06	5.56E-06	2.03E-06	2.03E-06
Mo101	5.7	3.42E-06	3.53E-06	3.42E-06	3.42E-06
Cs138	4.9	2.92E-06	2.92E-06	2.91E-06	2.91E-06
Xe138	4.5	2.71E-06	2.71E-06	2.70E-06	2.70E-06
Sr93	3.7	2.25E-06	2.10E-06	2.30E-06	2.30E-06
Sb131	3.7	2.22E-06	2.59E-06	2.22E-06	2.22E-06
Ba141	3.5	2.12E-06	2.12E-06	1.99E-06	1.99E-06
Ba142	3.5	2.11E-06	2.10E-06	2.11E-06	2.11E-06
Te133	3.1	1.86E-06	1.88E-06	1.85E-06	1.85E-06
Y95	2.9	1.77E-06	1.60E-06	1.58E-06	1.58E-06
I134	2.5	1.53E-06	1.52E-06	1.48E-06	1.48E-06
Sb130m	2.4	1.47E-06	1.59E-06	1.01E-06	1.49E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb130	2.2	1.30E-06	1.29E-06	1.21E-06	1.21E-06
Rb89	2.0	1.19E-06	1.19E-06	1.17E-06	1.17E-06
Pr147	2.0	1.18E-06	1.04E-06	1.18E-06	1.07E-06
Te134	1.9	1.16E-06	1.16E-06	1.16E-06	1.16E-06
Rh107	1.6	9.84E-07	9.83E-07	9.80E-07	9.80E-07
La142	1.6	9.45E-07	1.06E-06	9.48E-07	9.48E-07
Y94	1.5	9.09E-07	9.07E-07	9.01E-07	9.01E-07
Pr146	1.5	8.86E-07	8.48E-07	8.29E-07	8.29E-07
Te133m	1.4	8.37E-07	9.50E-07	9.36E-07	9.36E-07
Cs139	1.4	8.23E-07	8.23E-07	8.29E-07	8.29E-07
La143	1.4	8.16E-07	5.06E-07	8.47E-07	8.47E-07
Tc101	1.1	6.42E-07	6.43E-07	6.42E-07	6.42E-07
Sb132m	1.0	6.10E-07	6.67E-07	6.10E-07	6.10E-07
Sn129m	1.0	5.75E-07	7.72E-07	5.57E-07	5.57E-07
Ce146	0.9	5.13E-07	4.60E-07	4.57E-07	4.62E-07
Ru107	0.8	4.76E-07	4.76E-07	4.76E-07	4.76E-07
Nd151	0.8	4.71E-07	4.48E-07	4.44E-07	4.44E-07
Rh108	0.8	4.69E-07	4.73E-07	4.69E-07	4.61E-07
Sb132	0.7	4.47E-07	4.66E-07	4.47E-07	4.47E-07
Ce145	0.7	3.99E-07	4.70E-07	2.57E-07	2.57E-07
I135	0.6	3.88E-07	3.89E-07	3.87E-07	3.87E-07
Sb133	0.5	3.04E-07	3.81E-07	3.04E-07	3.04E-07
Sb128m	0.5	2.89E-07	2.93E-07	5.13E-08	5.13E-08
Rb90m	0.4	2.63E-07	3.22E-07	3.85E-07	3.76E-07
Te131	0.4	2.46E-07	2.46E-07	2.57E-07	2.57E-07
Xe137	0.4	2.43E-07	2.44E-07	2.46E-07	2.46E-07
Y93m	0.4	2.41E-07	2.42E-07	1.77E-07	1.77E-07
Sr92	0.4	2.37E-07	2.37E-07	2.44E-07	2.44E-07
Pr148	0.4	2.23E-07	1.55E-07	2.23E-07	2.23E-07
Tc102	0.4	2.22E-07	3.02E-07	2.21E-07	2.21E-07
Ru105	0.3	2.06E-07	2.06E-07	2.09E-07	2.09E-07
Kr89	0.3	2.06E-07	2.05E-07	1.95E-07	1.95E-07
Rb90	0.3	1.93E-07	1.65E-07	1.73E-07	1.75E-07
Pm152	0.2	1.43E-07	1.27E-07	1.54E-07	1.54E-07
Kr88	0.2	1.26E-07	1.25E-07	1.25E-07	1.25E-07
Se83	0.2	1.12E-07	6.83E-08	3.18E-08	5.85E-08
Sb129	0.2	1.08E-07	1.05E-07	9.33E-08	9.33E-08

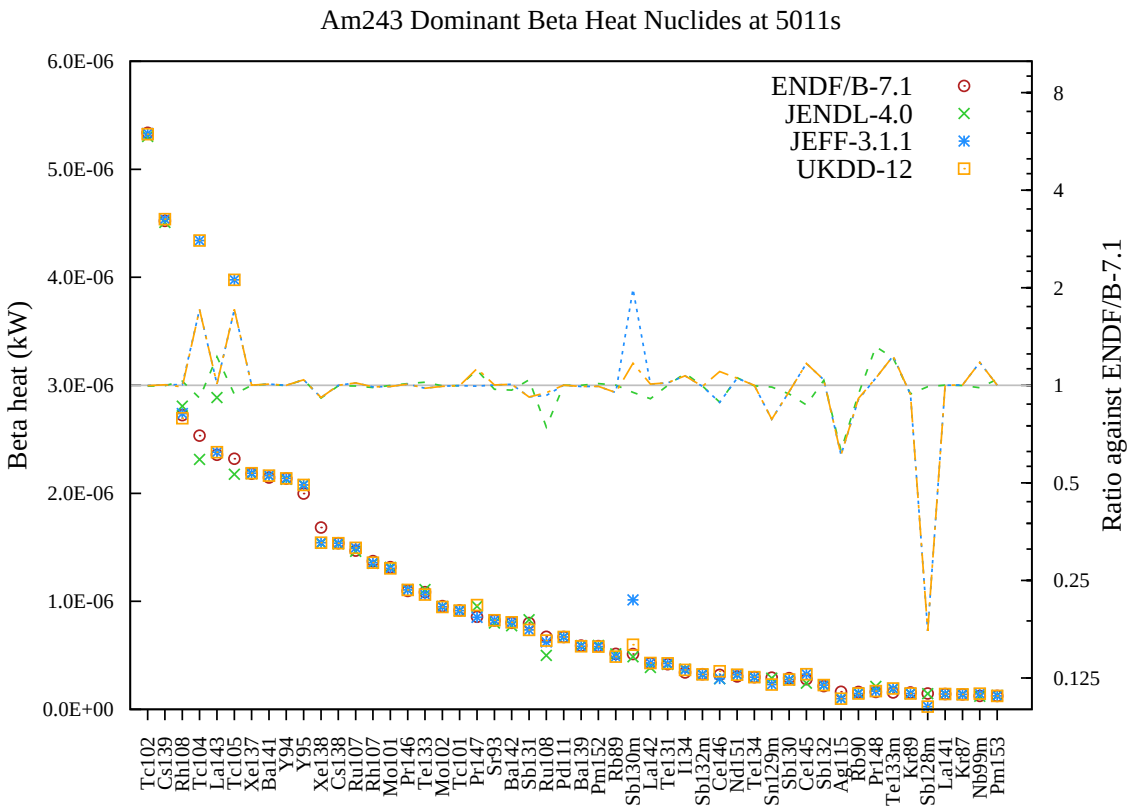

Figure 191: Beta heat (in kW) decay data comparison for Am243 fission pulse after 5011s cooling.

Table 191: Beta heat (in kW) decay data comparison for Am243 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	9.9	5.34E-06	5.31E-06	5.33E-06	5.32E-06
Cs139	8.4	4.52E-06	4.51E-06	4.54E-06	4.54E-06
Rh108	5.1	2.72E-06	2.81E-06	2.74E-06	2.69E-06
Tc104	4.7	2.53E-06	2.31E-06	4.34E-06	4.34E-06
La143	4.4	2.36E-06	2.89E-06	2.38E-06	2.38E-06
Tc105	4.3	2.32E-06	2.18E-06	3.98E-06	3.98E-06
Xe137	4.1	2.18E-06	2.18E-06	2.19E-06	2.19E-06
Ba141	4.0	2.15E-06	2.16E-06	2.16E-06	2.16E-06
Y94	4.0	2.14E-06	2.13E-06	2.14E-06	2.14E-06
Y95	3.7	2.00E-06	2.08E-06	2.08E-06	2.08E-06
Xe138	3.1	1.68E-06	1.54E-06	1.54E-06	1.54E-06
Cs138	2.9	1.54E-06	1.53E-06	1.54E-06	1.54E-06
Ru107	2.7	1.47E-06	1.46E-06	1.50E-06	1.50E-06
Rh107	2.5	1.37E-06	1.35E-06	1.36E-06	1.36E-06
Mo101	2.4	1.32E-06	1.32E-06	1.31E-06	1.31E-06
Pr146	2.0	1.10E-06	1.11E-06	1.11E-06	1.11E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te133	2.0	1.09E-06	1.11E-06	1.06E-06	1.06E-06
Mo102	1.8	9.55E-07	9.52E-07	9.49E-07	9.48E-07
Tc101	1.7	9.16E-07	9.14E-07	9.14E-07	9.14E-07
Pr147	1.6	8.57E-07	9.55E-07	8.51E-07	9.65E-07
Sr93	1.5	8.23E-07	8.00E-07	8.25E-07	8.25E-07
Ba142	1.5	8.01E-07	7.73E-07	8.06E-07	8.06E-07
Sb131	1.5	7.99E-07	8.30E-07	7.36E-07	7.35E-07
Ru108	1.2	6.71E-07	4.99E-07	6.24E-07	6.37E-07
Pd111	1.2	6.70E-07	6.70E-07	6.70E-07	6.70E-07
Ba139	1.1	5.90E-07	5.90E-07	5.85E-07	5.85E-07
Pm152	1.1	5.85E-07	5.92E-07	5.81E-07	5.81E-07
Rb89	1.0	5.14E-07	5.14E-07	4.88E-07	4.88E-07
Sb130m	1.0	5.12E-07	4.87E-07	1.01E-06	5.99E-07
La142	0.8	4.26E-07	3.87E-07	4.30E-07	4.30E-07
Te131	0.8	4.18E-07	4.17E-07	4.25E-07	4.25E-07
I134	0.6	3.41E-07	3.72E-07	3.65E-07	3.65E-07
Sb132m	0.6	3.26E-07	3.24E-07	3.23E-07	3.23E-07
Ce146	0.6	3.20E-07	2.84E-07	2.83E-07	3.53E-07
Nd151	0.6	3.04E-07	3.21E-07	3.20E-07	3.20E-07
Te134	0.6	2.98E-07	2.98E-07	2.98E-07	2.98E-07
Sn129m	0.5	2.93E-07	2.89E-07	2.30E-07	2.30E-07
Sb130	0.5	2.89E-07	2.72E-07	2.76E-07	2.76E-07
Ce145	0.5	2.79E-07	2.43E-07	3.26E-07	3.26E-07
Sb132	0.4	2.16E-07	2.24E-07	2.25E-07	2.25E-07
Ag115	0.3	1.63E-07	1.02E-07	9.92E-08	9.92E-08
Rb90	0.3	1.62E-07	1.52E-07	1.46E-07	1.47E-07
Pr148	0.3	1.61E-07	2.12E-07	1.69E-07	1.69E-07
Te133m	0.3	1.57E-07	1.90E-07	1.93E-07	1.93E-07
Kr89	0.3	1.57E-07	1.47E-07	1.47E-07	1.47E-07
Sb128m	0.3	1.47E-07	1.46E-07	2.57E-08	2.57E-08
La141	0.3	1.42E-07	1.42E-07	1.42E-07	1.42E-07
Kr87	0.3	1.39E-07	1.39E-07	1.39E-07	1.39E-07
Nb99m	0.2	1.24E-07	1.22E-07	1.46E-07	1.46E-07
Pm153	0.2	1.24E-07	1.29E-07	1.24E-07	1.24E-07

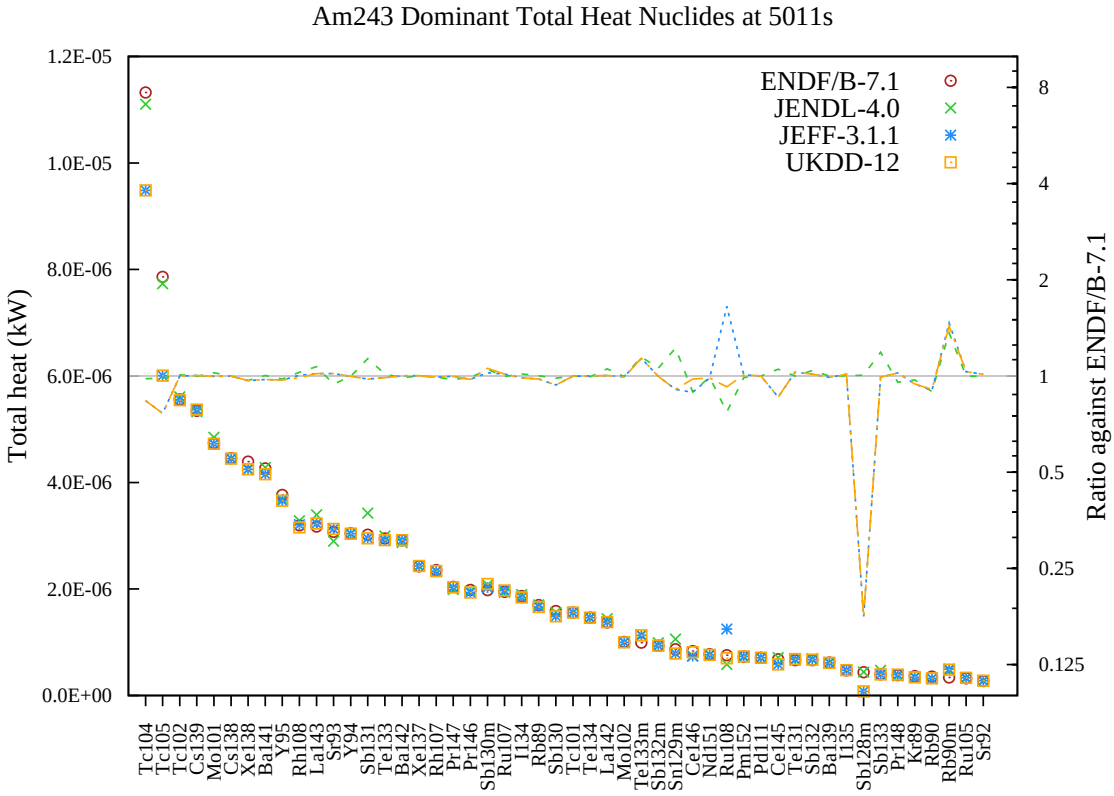

Figure 192: Total heat (in kW) decay data comparison for Am243 fission pulse after 5011s cooling.

Table 192: Total heat (in kW) decay data comparison for Am243 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	9.9	1.13E-05	1.11E-05	9.48E-06	9.48E-06
Tc105	6.9	7.86E-06	7.73E-06	6.01E-06	6.01E-06
Tc102	4.9	5.56E-06	5.61E-06	5.55E-06	5.55E-06
Cs139	4.7	5.34E-06	5.33E-06	5.37E-06	5.37E-06
Mo101	4.2	4.74E-06	4.85E-06	4.73E-06	4.73E-06
Cs138	3.9	4.46E-06	4.45E-06	4.45E-06	4.45E-06
Xe138	3.9	4.39E-06	4.25E-06	4.25E-06	4.25E-06
Ba141	3.7	4.26E-06	4.28E-06	4.16E-06	4.16E-06
Y95	3.3	3.76E-06	3.68E-06	3.66E-06	3.66E-06
Rh108	2.8	3.19E-06	3.28E-06	3.21E-06	3.16E-06
La143	2.8	3.17E-06	3.39E-06	3.23E-06	3.23E-06
Sr93	2.7	3.07E-06	2.90E-06	3.13E-06	3.13E-06
Y94	2.7	3.05E-06	3.04E-06	3.04E-06	3.04E-06
Sb131	2.7	3.02E-06	3.42E-06	2.95E-06	2.95E-06
Te133	2.6	2.95E-06	2.99E-06	2.92E-06	2.92E-06
Ba142	2.6	2.91E-06	2.87E-06	2.92E-06	2.92E-06
Xe137	2.1	2.43E-06	2.43E-06	2.43E-06	2.43E-06

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Rh107	2.1	2.36E-06	2.33E-06	2.34E-06	2.34E-06
Pr147	1.8	2.04E-06	1.99E-06	2.03E-06	2.03E-06
Pr146	1.7	1.98E-06	1.96E-06	1.93E-06	1.93E-06
Sb130m	1.7	1.98E-06	2.08E-06	2.03E-06	2.09E-06
Ru107	1.7	1.95E-06	1.94E-06	1.97E-06	1.97E-06
I134	1.6	1.87E-06	1.90E-06	1.84E-06	1.84E-06
Rb89	1.5	1.70E-06	1.70E-06	1.66E-06	1.66E-06
Sb130	1.4	1.59E-06	1.56E-06	1.49E-06	1.49E-06
Tc101	1.4	1.56E-06	1.56E-06	1.56E-06	1.56E-06
Te134	1.3	1.46E-06	1.45E-06	1.46E-06	1.46E-06
La142	1.2	1.37E-06	1.44E-06	1.38E-06	1.38E-06
Mo102	0.9	1.01E-06	1.00E-06	1.00E-06	9.98E-07
Te133m	0.9	9.94E-07	1.14E-06	1.13E-06	1.13E-06
Sb132m	0.8	9.36E-07	9.91E-07	9.34E-07	9.34E-07
Sn129m	0.8	8.68E-07	1.06E-06	7.88E-07	7.88E-07
Ce146	0.7	8.33E-07	7.43E-07	7.41E-07	8.15E-07
Nd151	0.7	7.76E-07	7.69E-07	7.64E-07	7.64E-07
Ru108	0.7	7.56E-07	5.84E-07	1.25E-06	6.99E-07
Pm152	0.6	7.28E-07	7.20E-07	7.34E-07	7.34E-07
Pd111	0.6	7.08E-07	7.08E-07	7.08E-07	7.08E-07
Ce145	0.6	6.79E-07	7.13E-07	5.83E-07	5.83E-07
Te131	0.6	6.64E-07	6.63E-07	6.82E-07	6.83E-07
Sb132	0.6	6.64E-07	6.90E-07	6.72E-07	6.72E-07
Ba139	0.5	6.20E-07	6.20E-07	6.14E-07	6.14E-07
I135	0.4	4.71E-07	4.72E-07	4.77E-07	4.77E-07
Sb128m	0.4	4.36E-07	4.39E-07	7.70E-08	7.70E-08
Sb133	0.3	3.99E-07	4.73E-07	3.95E-07	3.95E-07
Pr148	0.3	3.84E-07	3.67E-07	3.93E-07	3.93E-07
Kr89	0.3	3.63E-07	3.52E-07	3.42E-07	3.42E-07
Rb90	0.3	3.55E-07	3.17E-07	3.20E-07	3.22E-07
Rb90m	0.3	3.38E-07	4.62E-07	4.96E-07	4.85E-07
Ru105	0.3	3.22E-07	3.21E-07	3.32E-07	3.32E-07
Sr92	0.2	2.73E-07	2.73E-07	2.76E-07	2.76E-07

13.5 10000s after pulse

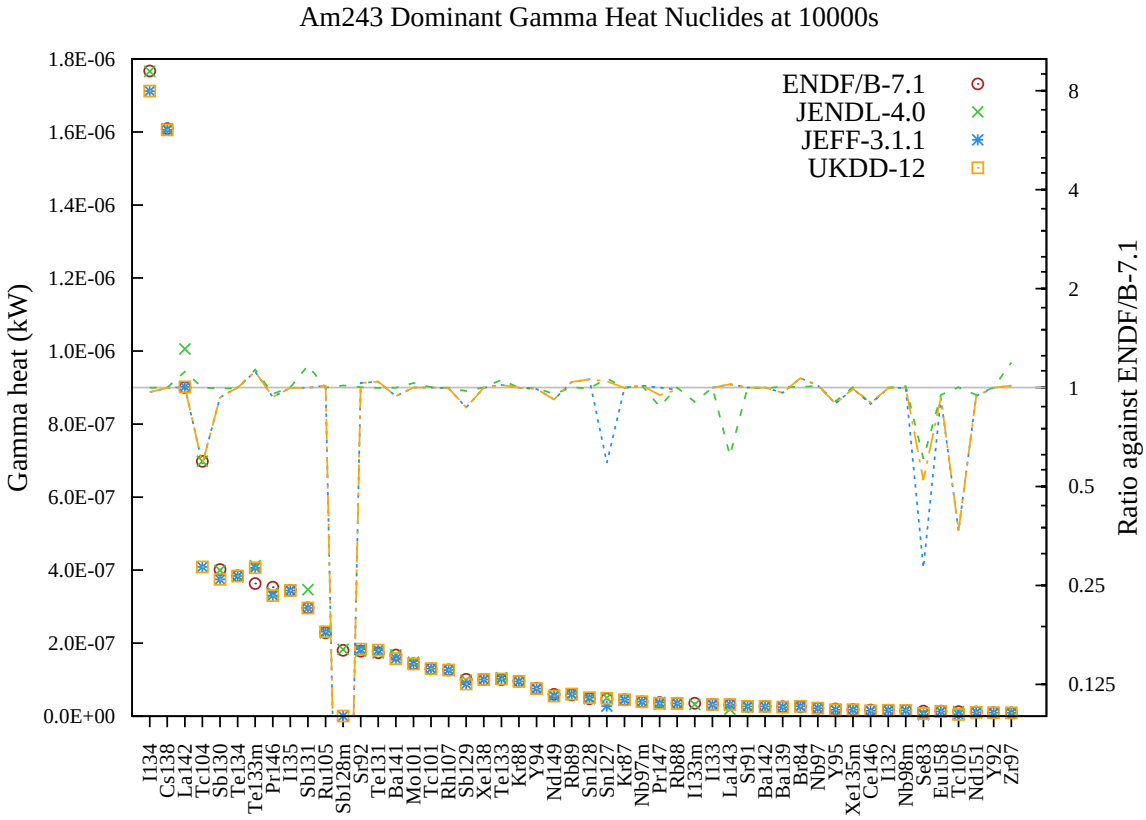

Figure 193: Gamma heat (in kW) decay data comparison for Am243 fission pulse after 10000s cooling.

Table 193: Gamma heat (in kW) decay data comparison for Am243 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	18.0	1.77E-06	1.77E-06	1.71E-06	1.71E-06
Cs138	16.4	1.61E-06	1.61E-06	1.61E-06	1.61E-06
La142	9.2	9.00E-07	1.01E-06	9.02E-07	9.02E-07
Tc104	7.1	6.98E-07	6.98E-07	4.09E-07	4.09E-07
Sb130	4.1	4.02E-07	3.99E-07	3.75E-07	3.75E-07
Te134	3.9	3.84E-07	3.82E-07	3.84E-07	3.84E-07
Te133m	3.7	3.63E-07	4.12E-07	4.06E-07	4.06E-07
Pr146	3.6	3.53E-07	3.38E-07	3.30E-07	3.30E-07
I135	3.5	3.45E-07	3.45E-07	3.44E-07	3.44E-07
Sb131	3.0	2.97E-07	3.47E-07	2.96E-07	2.96E-07
Ru105	2.3	2.28E-07	2.28E-07	2.31E-07	2.31E-07
Sb128m	1.8	1.80E-07	1.83E-07	5.95E-10	5.95E-10
Sr92	1.8	1.78E-07	1.78E-07	1.84E-07	1.84E-07

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te131	1.8	1.74E-07	1.73E-07	1.81E-07	1.81E-07
Ba141	1.7	1.67E-07	1.67E-07	1.58E-07	1.58E-07
Mo101	1.5	1.43E-07	1.48E-07	1.43E-07	1.43E-07
Tc101	1.3	1.30E-07	1.30E-07	1.30E-07	1.30E-07
Rh107	1.3	1.27E-07	1.27E-07	1.26E-07	1.26E-07
Sb129	1.0	1.01E-07	9.88E-08	8.80E-08	8.80E-08
Xe138	1.0	1.01E-07	1.01E-07	1.01E-07	1.01E-07
Te133	1.0	9.99E-08	1.05E-07	1.02E-07	1.02E-07
Kr88	1.0	9.57E-08	9.55E-08	9.55E-08	9.55E-08
Y94	0.8	7.63E-08	7.60E-08	7.56E-08	7.56E-08
Nd149	0.6	6.00E-08	5.73E-08	5.52E-08	5.52E-08
Rb89	0.6	5.86E-08	5.87E-08	6.09E-08	6.09E-08
Sn128	0.5	4.80E-08	4.77E-08	5.09E-08	5.09E-08
Sn127	0.5	4.72E-08	5.03E-08	2.79E-08	4.94E-08
Kr87	0.5	4.51E-08	4.51E-08	4.50E-08	4.50E-08
Nb97m	0.4	3.93E-08	3.98E-08	3.99E-08	3.99E-08
Pr147	0.4	3.72E-08	3.26E-08	3.72E-08	3.53E-08
Rb88	0.4	3.53E-08	3.53E-08	3.48E-08	3.48E-08
I133m	0.4	3.53E-08	—	—	—
I133	0.3	3.23E-08	3.23E-08	3.23E-08	3.23E-08
La143	0.3	3.12E-08	1.94E-08	3.19E-08	3.19E-08
Sr91	0.3	2.70E-08	2.70E-08	2.70E-08	2.70E-08
Ba142	0.3	2.67E-08	2.65E-08	2.66E-08	2.66E-08
Ba139	0.3	2.59E-08	2.61E-08	2.50E-08	2.50E-08
Br84	0.3	2.57E-08	2.58E-08	2.75E-08	2.75E-08
Nb97	0.2	2.19E-08	2.22E-08	2.22E-08	2.22E-08
Y95	0.2	1.96E-08	1.78E-08	1.75E-08	1.75E-08
Xe135m	0.2	1.81E-08	1.81E-08	1.79E-08	1.79E-08
Ce146	0.2	1.67E-08	1.49E-08	1.48E-08	1.50E-08
I132	0.2	1.61E-08	1.61E-08	1.61E-08	1.61E-08
Nb98m	0.2	1.56E-08	1.57E-08	1.56E-08	1.56E-08
Se83	0.1	1.41E-08	8.55E-09	3.98E-09	7.35E-09
Eu158	0.1	1.38E-08	1.31E-08	1.28E-08	1.29E-08
Tc105	0.1	1.24E-08	1.25E-08	4.56E-09	4.56E-09
Nd151	0.1	1.14E-08	1.08E-08	1.07E-08	1.07E-08
Y92	0.1	9.60E-09	9.61E-09	9.59E-09	9.59E-09
Zr97	0.1	9.03E-09	1.08E-08	9.15E-09	9.15E-09

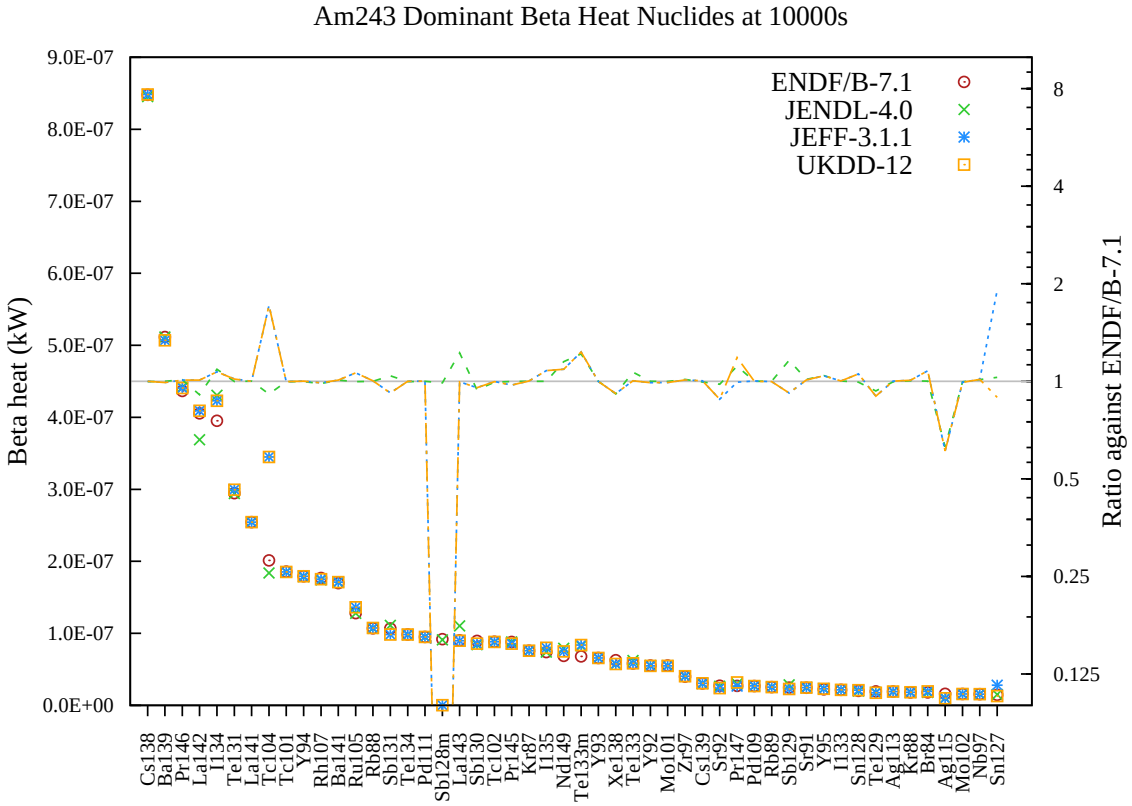

Figure 194: Beta heat (in kW) decay data comparison for Am243 fission pulse after 10000s cooling.

Table 194: Beta heat (in kW) decay data comparison for Am243 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	13.6	8.48E-07	8.45E-07	8.48E-07	8.48E-07
Ba139	8.2	5.12E-07	5.11E-07	5.07E-07	5.07E-07
Pr146	7.0	4.37E-07	4.42E-07	4.41E-07	4.41E-07
La142	6.5	4.06E-07	3.69E-07	4.09E-07	4.09E-07
I134	6.3	3.95E-07	4.31E-07	4.23E-07	4.23E-07
Te131	4.7	2.95E-07	2.94E-07	3.00E-07	2.99E-07
La141	4.1	2.54E-07	2.55E-07	2.54E-07	2.54E-07
Tc104	3.2	2.01E-07	1.84E-07	3.45E-07	3.45E-07
Tc101	3.0	1.86E-07	1.85E-07	1.85E-07	1.85E-07
Y94	2.9	1.79E-07	1.79E-07	1.79E-07	1.79E-07
Rh107	2.8	1.77E-07	1.74E-07	1.75E-07	1.75E-07
Ba141	2.7	1.70E-07	1.71E-07	1.71E-07	1.71E-07
Ru105	2.0	1.28E-07	1.28E-07	1.36E-07	1.36E-07
Rb88	1.7	1.07E-07	1.07E-07	1.07E-07	1.07E-07
Sb131	1.7	1.07E-07	1.11E-07	9.84E-08	9.83E-08
Te134	1.6	9.85E-08	9.83E-08	9.84E-08	9.84E-08

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Pd111	1.5	9.49E-08	9.49E-08	9.50E-08	9.50E-08
Sb128m	1.5	9.20E-08	9.11E-08	2.99E-10	2.99E-10
La143	1.4	9.02E-08	1.10E-07	8.98E-08	8.98E-08
Sb130	1.4	8.95E-08	8.42E-08	8.56E-08	8.56E-08
Tc102	1.4	8.83E-08	8.78E-08	8.82E-08	8.81E-08
Pr145	1.4	8.81E-08	8.80E-08	8.57E-08	8.57E-08
Kr87	1.2	7.58E-08	7.58E-08	7.60E-08	7.60E-08
I135	1.2	7.40E-08	7.41E-08	7.99E-08	7.99E-08
Nd149	1.1	6.88E-08	7.91E-08	7.49E-08	7.49E-08
Te133m	1.1	6.81E-08	8.27E-08	8.38E-08	8.38E-08
Y93	1.1	6.58E-08	6.58E-08	6.57E-08	6.57E-08
Xe138	1.0	6.26E-08	5.73E-08	5.74E-08	5.74E-08
Te133	0.9	5.82E-08	6.21E-08	5.84E-08	5.84E-08
Y92	0.9	5.53E-08	5.53E-08	5.48E-08	5.48E-08
Mo101	0.9	5.52E-08	5.51E-08	5.47E-08	5.47E-08
Zr97	0.6	4.00E-08	4.06E-08	4.04E-08	4.04E-08
Cs139	0.5	3.05E-08	3.03E-08	3.06E-08	3.06E-08
Sr92	0.4	2.72E-08	2.66E-08	2.39E-08	2.39E-08
Pr147	0.4	2.70E-08	3.00E-08	2.68E-08	3.19E-08
Pd109	0.4	2.69E-08	2.69E-08	2.70E-08	2.69E-08
Rb89	0.4	2.54E-08	2.54E-08	2.53E-08	2.53E-08
Sb129	0.4	2.46E-08	2.85E-08	2.26E-08	2.26E-08
Sr91	0.4	2.45E-08	2.48E-08	2.47E-08	2.47E-08
Y95	0.4	2.22E-08	2.31E-08	2.31E-08	2.31E-08
I133	0.3	2.15E-08	2.16E-08	2.16E-08	2.16E-08
Sn128	0.3	2.01E-08	2.00E-08	2.12E-08	2.12E-08
Te129	0.3	1.93E-08	1.80E-08	1.74E-08	1.74E-08
Ag113	0.3	1.92E-08	1.91E-08	1.92E-08	1.92E-08
Kr88	0.3	1.81E-08	1.81E-08	1.82E-08	1.82E-08
Br84	0.3	1.80E-08	1.80E-08	1.94E-08	1.94E-08
Ag115	0.3	1.60E-08	1.01E-08	9.78E-09	9.78E-09
Mo102	0.3	1.58E-08	1.58E-08	1.57E-08	1.57E-08
Nb97	0.2	1.54E-08	1.56E-08	1.57E-08	1.57E-08
Sn127	0.2	1.46E-08	1.50E-08	2.79E-08	1.30E-08

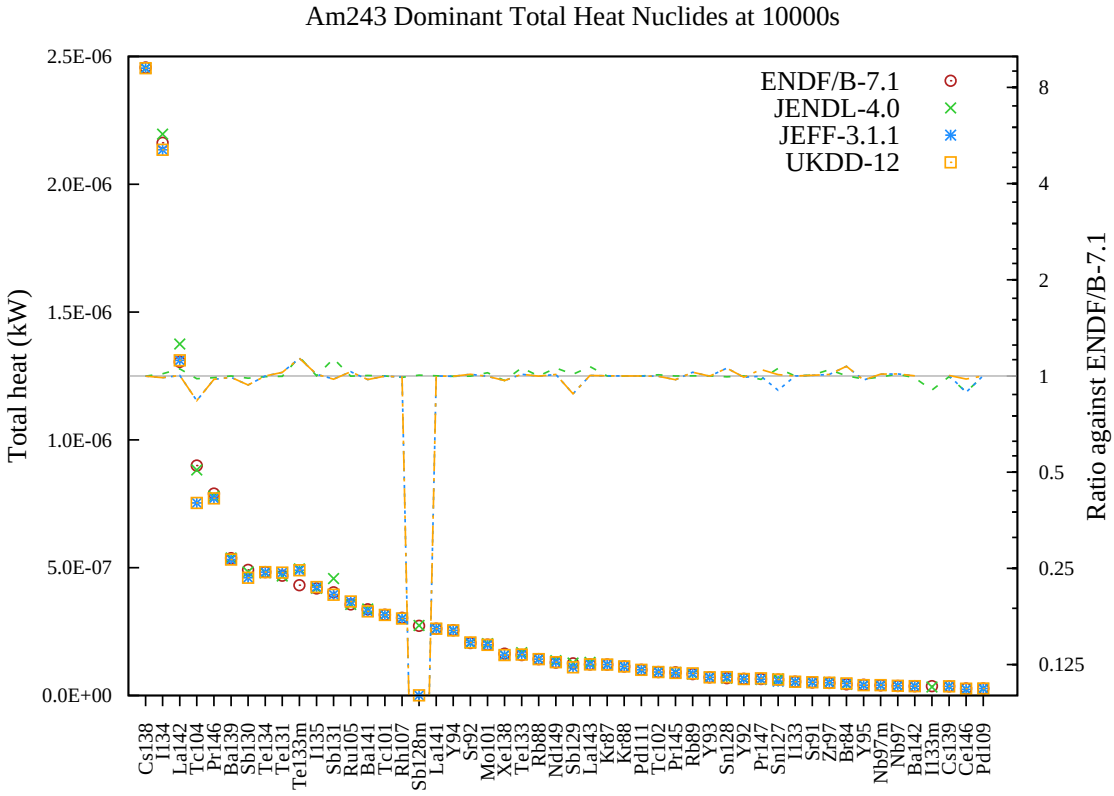

Figure 195: Total heat (in kW) decay data comparison for Am243 fission pulse after 10000s cooling.

Table 195: Total heat (in kW) decay data comparison for Am243 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	15.3	2.46E-06	2.45E-06	2.45E-06	2.45E-06
I134	13.5	2.16E-06	2.20E-06	2.13E-06	2.13E-06
La142	8.1	1.31E-06	1.37E-06	1.31E-06	1.31E-06
Tc104	5.6	9.00E-07	8.82E-07	7.54E-07	7.54E-07
Pr146	4.9	7.90E-07	7.80E-07	7.71E-07	7.71E-07
Ba139	3.3	5.37E-07	5.38E-07	5.32E-07	5.32E-07
Sb130	3.1	4.91E-07	4.83E-07	4.60E-07	4.60E-07
Te134	3.0	4.83E-07	4.80E-07	4.83E-07	4.83E-07
Te131	2.9	4.68E-07	4.68E-07	4.81E-07	4.81E-07
Te133m	2.7	4.31E-07	4.95E-07	4.90E-07	4.90E-07
I135	2.6	4.19E-07	4.19E-07	4.24E-07	4.24E-07
Sb131	2.5	4.04E-07	4.58E-07	3.95E-07	3.94E-07
Ru105	2.2	3.56E-07	3.56E-07	3.67E-07	3.67E-07
Ba141	2.1	3.37E-07	3.39E-07	3.29E-07	3.29E-07
Tc101	2.0	3.16E-07	3.16E-07	3.15E-07	3.15E-07
Rh107	1.9	3.04E-07	3.01E-07	3.02E-07	3.02E-07
Sb128m	1.7	2.72E-07	2.74E-07	8.94E-10	8.94E-10

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La141	1.6	2.62E-07	2.62E-07	2.61E-07	2.61E-07
Y94	1.6	2.56E-07	2.55E-07	2.55E-07	2.55E-07
Sr92	1.3	2.05E-07	2.05E-07	2.08E-07	2.08E-07
Mo101	1.2	1.99E-07	2.03E-07	1.98E-07	1.98E-07
Xe138	1.0	1.63E-07	1.58E-07	1.58E-07	1.58E-07
Te133	1.0	1.58E-07	1.68E-07	1.60E-07	1.60E-07
Rb88	0.9	1.42E-07	1.42E-07	1.42E-07	1.42E-07
Nd149	0.8	1.29E-07	1.36E-07	1.30E-07	1.30E-07
Sb129	0.8	1.26E-07	1.27E-07	1.11E-07	1.11E-07
La143	0.8	1.21E-07	1.30E-07	1.22E-07	1.22E-07
Kr87	0.8	1.21E-07	1.21E-07	1.21E-07	1.21E-07
Kr88	0.7	1.14E-07	1.14E-07	1.14E-07	1.14E-07
Pd111	0.6	1.00E-07	1.00E-07	1.00E-07	1.00E-07
Tc102	0.6	9.20E-08	9.28E-08	9.19E-08	9.18E-08
Pr145	0.6	9.05E-08	9.04E-08	8.81E-08	8.81E-08
Rb89	0.5	8.40E-08	8.41E-08	8.63E-08	8.63E-08
Y93	0.4	7.11E-08	7.12E-08	7.10E-08	7.10E-08
Sn128	0.4	6.81E-08	6.77E-08	7.20E-08	7.20E-08
Y92	0.4	6.49E-08	6.49E-08	6.44E-08	6.44E-08
Pr147	0.4	6.42E-08	6.26E-08	6.40E-08	6.73E-08
Sn127	0.4	6.18E-08	6.54E-08	5.58E-08	6.24E-08
I133	0.3	5.38E-08	5.39E-08	5.38E-08	5.38E-08
Sr91	0.3	5.14E-08	5.18E-08	5.17E-08	5.17E-08
Zr97	0.3	4.90E-08	5.13E-08	4.96E-08	4.96E-08
Br84	0.3	4.37E-08	4.38E-08	4.69E-08	4.69E-08
Y95	0.3	4.18E-08	4.09E-08	4.06E-08	4.06E-08
Nb97m	0.2	4.01E-08	3.98E-08	4.06E-08	4.06E-08
Nb97	0.2	3.73E-08	3.78E-08	3.79E-08	3.79E-08
Ba142	0.2	3.68E-08	3.63E-08	3.68E-08	3.68E-08
I133m	0.2	3.65E-08	3.29E-08	—	—
Cs139	0.2	3.60E-08	3.59E-08	3.62E-08	3.62E-08
Ce146	0.2	2.70E-08	2.41E-08	2.40E-08	2.64E-08
Pd109	0.2	2.70E-08	2.70E-08	2.70E-08	2.70E-08

14 Decay data comparison for ^{243}Cm 0.0253 eV pulse decay heat

14.1 10s after pulse

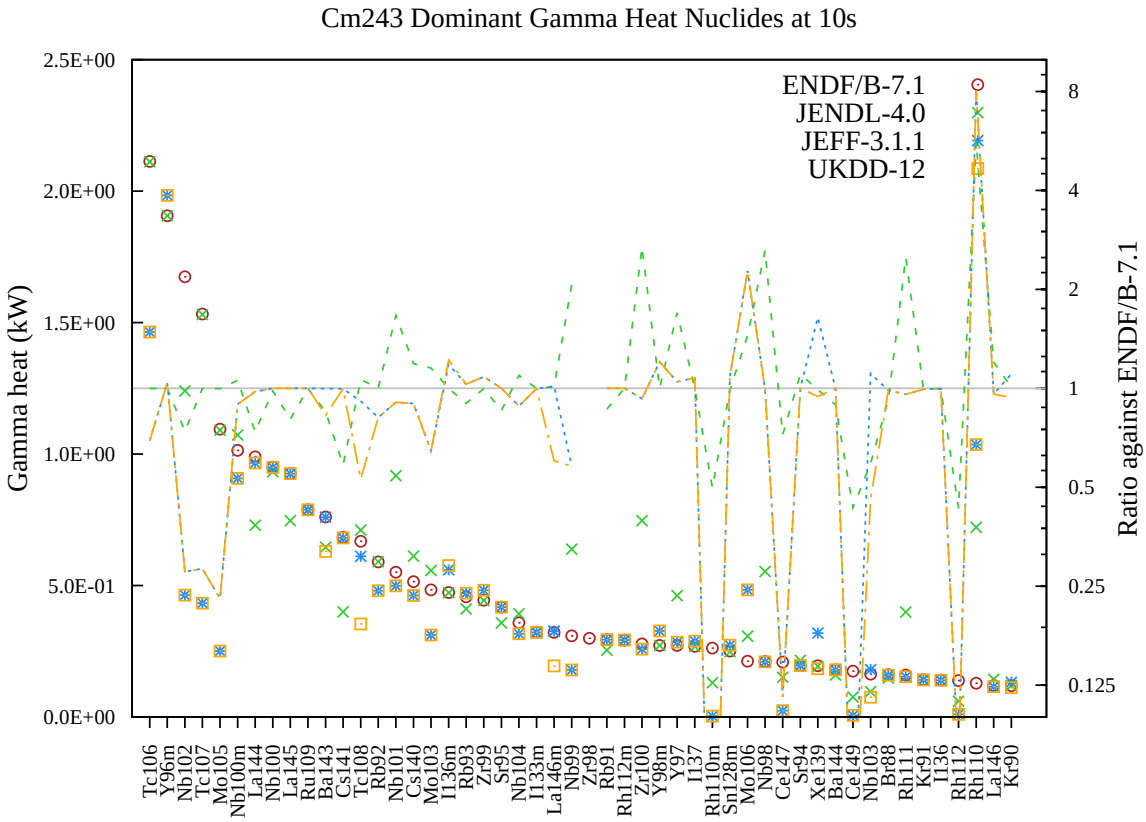

Figure 196: Gamma heat (in kW) decay data comparison for Cm243 fission pulse after 10s cooling.

Table 196: Gamma heat (in kW) decay data comparison for Cm243 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	7.2	2.11E+00	2.11E+00	1.46E+00	1.46E+00
Y96m	6.5	1.91E+00	1.91E+00	1.98E+00	1.98E+00
Nb102	5.7	1.67E+00	1.24E+00	4.63E-01	4.63E-01
Tc107	5.2	1.53E+00	1.53E+00	4.33E-01	4.33E-01
Mo105	3.7	1.09E+00	1.09E+00	2.51E-01	2.51E-01
Nb100m	3.5	1.01E+00	1.07E+00	9.08E-01	9.08E-01
La144	3.4	9.89E-01	7.29E-01	9.66E-01	9.66E-01
Nb100	3.2	9.50E-01	9.33E-01	9.50E-01	9.50E-01
La145	3.2	9.26E-01	7.47E-01	9.26E-01	9.26E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Ru109	2.7	7.88E-01	7.86E-01	7.88E-01	7.88E-01
Ba143	2.6	7.60E-01	6.46E-01	7.60E-01	6.30E-01
Cs141	2.3	6.84E-01	3.99E-01	6.81E-01	6.81E-01
Tc108	2.3	6.68E-01	7.11E-01	6.11E-01	3.54E-01
Rb92	2.0	5.90E-01	5.90E-01	4.80E-01	4.80E-01
Nb101	1.9	5.50E-01	9.18E-01	4.99E-01	4.99E-01
Cs140	1.8	5.14E-01	6.11E-01	4.62E-01	4.62E-01
Mo103	1.6	4.84E-01	5.57E-01	3.12E-01	3.12E-01
I136m	1.6	4.73E-01	4.73E-01	5.60E-01	5.76E-01
Rb93	1.6	4.57E-01	4.11E-01	4.71E-01	4.71E-01
Zr99	1.5	4.44E-01	4.43E-01	4.82E-01	4.82E-01
Sr95	1.4	4.18E-01	3.58E-01	4.18E-01	4.18E-01
Nb104	1.2	3.58E-01	3.92E-01	3.17E-01	3.17E-01
I133m	1.1	3.23E-01	3.22E-01	3.22E-01	3.22E-01
La146m	1.1	3.22E-01	3.25E-01	3.27E-01	1.94E-01
Nb99	1.1	3.08E-01	6.38E-01	1.79E-01	1.79E-01
Zr98	1.0	2.99E-01	—	—	—
Rb91	1.0	2.94E-01	2.54E-01	2.94E-01	2.94E-01
Rh112m	1.0	2.93E-01	2.93E-01	2.93E-01	2.93E-01
Zr100	0.9	2.78E-01	7.47E-01	2.58E-01	2.58E-01
Y98m	0.9	2.72E-01	2.72E-01	3.27E-01	3.27E-01
Y97	0.9	2.72E-01	4.62E-01	2.85E-01	2.85E-01
I137	0.9	2.69E-01	2.68E-01	2.89E-01	2.89E-01
Rh110m	0.9	2.62E-01	1.30E-01	3.54E-03	3.54E-03
Sn128m	0.9	2.51E-01	2.48E-01	2.73E-01	2.73E-01
Mo106	0.7	2.12E-01	3.07E-01	4.83E-01	4.83E-01
Nb98	0.7	2.11E-01	5.53E-01	2.10E-01	2.10E-01
Ce147	0.7	2.09E-01	1.51E-01	2.41E-02	2.41E-02
Sr94	0.7	1.95E-01	2.15E-01	1.95E-01	1.95E-01
Xe139	0.7	1.95E-01	1.93E-01	3.19E-01	1.84E-01
Ba144	0.6	1.79E-01	1.60E-01	1.79E-01	1.79E-01
Ce149	0.6	1.74E-01	7.55E-02	6.11E-03	6.11E-03
Nb103	0.6	1.63E-01	9.62E-02	1.81E-01	7.50E-02
Br88	0.5	1.61E-01	1.48E-01	1.59E-01	1.59E-01
Rh111	0.5	1.60E-01	3.99E-01	1.53E-01	1.53E-01
Kr91	0.5	1.42E-01	1.42E-01	1.41E-01	1.41E-01
I136	0.5	1.40E-01	1.40E-01	1.40E-01	1.40E-01
Rh112	0.5	1.39E-01	5.96E-02	9.92E-03	9.92E-03
Rh110	0.4	1.28E-01	7.22E-01	1.04E+00	1.04E+00
La146	0.4	1.20E-01	1.44E-01	1.15E-01	1.15E-01
Kr90	0.4	1.19E-01	1.20E-01	1.32E-01	1.11E-01

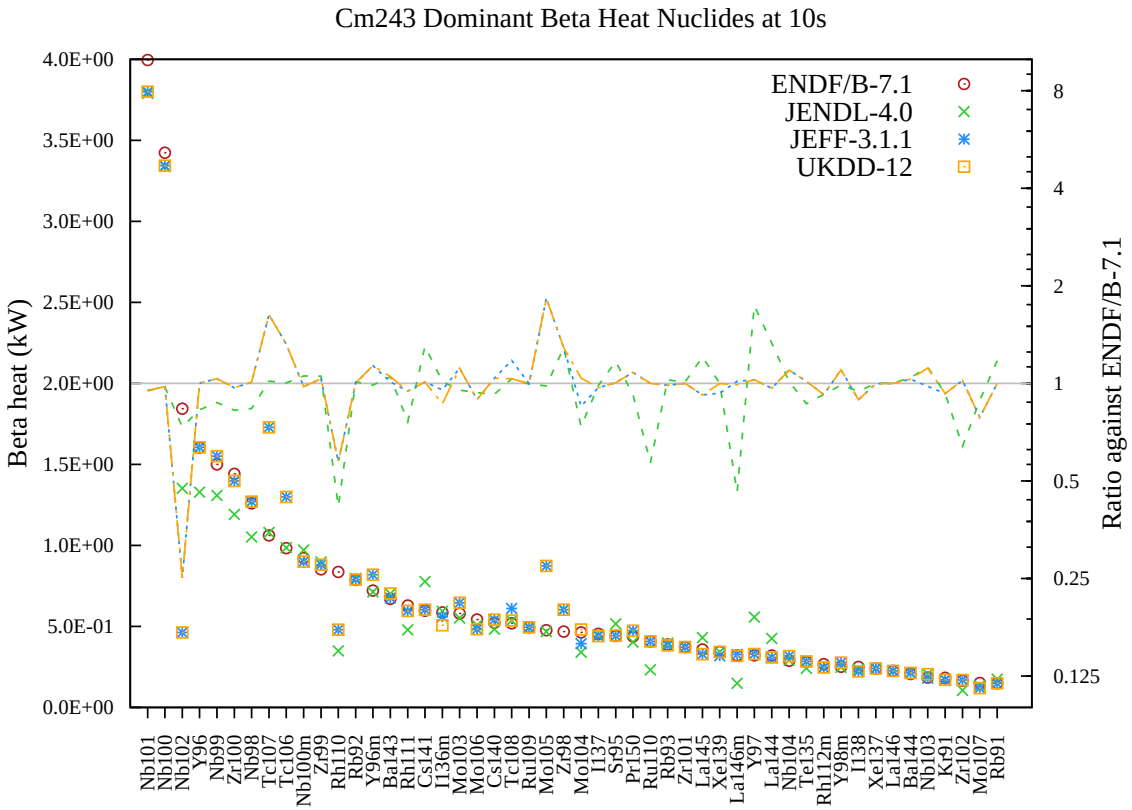

Figure 197: Beta heat (in kW) decay data comparison for Cm243 fission pulse after 10s cooling.

Table 197: Beta heat (in kW) decay data comparison for Cm243 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb101	10.2	4.00E+00	3.79E+00	3.80E+00	3.80E+00
Nb100	8.7	3.42E+00	3.34E+00	3.34E+00	3.34E+00
Nb102	4.7	1.84E+00	1.35E+00	4.63E-01	4.63E-01
Y96	4.1	1.60E+00	1.33E+00	1.61E+00	1.61E+00
Nb99	3.8	1.50E+00	1.31E+00	1.55E+00	1.55E+00
Zr100	3.7	1.44E+00	1.19E+00	1.40E+00	1.40E+00
Nb98	3.2	1.26E+00	1.05E+00	1.27E+00	1.27E+00
Tc107	2.7	1.06E+00	1.08E+00	1.73E+00	1.73E+00
Tc106	2.5	9.83E-01	9.86E-01	1.30E+00	1.30E+00
Nb100m	2.3	9.21E-01	9.71E-01	9.00E-01	9.00E-01
Zr99	2.2	8.52E-01	8.98E-01	8.81E-01	8.81E-01
Rh110	2.1	8.36E-01	3.49E-01	4.80E-01	4.80E-01
Rb92	2.0	7.88E-01	7.96E-01	7.89E-01	7.89E-01
Y96m	1.8	7.21E-01	7.12E-01	8.19E-01	8.19E-01
Ba143	1.7	6.70E-01	7.02E-01	6.77E-01	7.03E-01
Rh111	1.6	6.29E-01	4.79E-01	5.96E-01	5.96E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs141	1.5	5.97E-01	7.77E-01	6.03E-01	6.03E-01
I136m	1.5	5.86E-01	5.94E-01	5.60E-01	5.07E-01
Mo103	1.5	5.79E-01	5.52E-01	6.46E-01	6.46E-01
Mo106	1.4	5.42E-01	5.07E-01	4.83E-01	4.83E-01
Cs140	1.3	5.22E-01	4.83E-01	5.42E-01	5.42E-01
Tc108	1.3	5.19E-01	5.37E-01	6.11E-01	5.37E-01
Ru109	1.3	4.95E-01	4.92E-01	4.94E-01	4.94E-01
Mo105	1.2	4.77E-01	4.68E-01	8.74E-01	8.74E-01
Zr98	1.2	4.68E-01	6.03E-01	6.03E-01	6.03E-01
Mo104	1.2	4.63E-01	3.41E-01	3.93E-01	4.81E-01
I137	1.2	4.54E-01	4.48E-01	4.40E-01	4.40E-01
Sr95	1.1	4.41E-01	5.15E-01	4.44E-01	4.44E-01
Pr150	1.1	4.38E-01	4.04E-01	4.73E-01	4.73E-01
Ru110	1.0	4.08E-01	2.32E-01	4.08E-01	4.08E-01
Rb93	1.0	3.88E-01	3.98E-01	3.83E-01	3.83E-01
Zr101	0.9	3.72E-01	3.76E-01	3.73E-01	3.73E-01
La145	0.9	3.57E-01	4.31E-01	3.29E-01	3.29E-01
Xe139	0.9	3.43E-01	3.43E-01	3.19E-01	3.42E-01
La146m	0.8	3.22E-01	1.48E-01	3.27E-01	3.18E-01
Y97	0.8	3.21E-01	5.58E-01	3.29E-01	3.29E-01
La144	0.8	3.20E-01	4.26E-01	3.09E-01	3.09E-01
Nb104	0.7	2.88E-01	2.92E-01	3.17E-01	3.17E-01
Te135	0.7	2.80E-01	2.42E-01	2.84E-01	2.84E-01
Rh112m	0.7	2.67E-01	2.47E-01	2.47E-01	2.47E-01
Y98m	0.6	2.51E-01	2.48E-01	2.77E-01	2.77E-01
I138	0.6	2.50E-01	2.36E-01	2.22E-01	2.22E-01
Xe137	0.6	2.41E-01	2.41E-01	2.40E-01	2.40E-01
La146	0.6	2.26E-01	2.26E-01	2.26E-01	2.26E-01
Ba144	0.5	2.06E-01	2.14E-01	2.12E-01	2.12E-01
Nb103	0.5	1.84E-01	2.07E-01	1.81E-01	2.05E-01
Kr91	0.5	1.83E-01	1.71E-01	1.70E-01	1.70E-01
Zr102	0.4	1.65E-01	1.06E-01	1.69E-01	1.69E-01
Mo107	0.4	1.51E-01	1.34E-01	1.19E-01	1.19E-01
Rb91	0.4	1.49E-01	1.75E-01	1.49E-01	1.49E-01

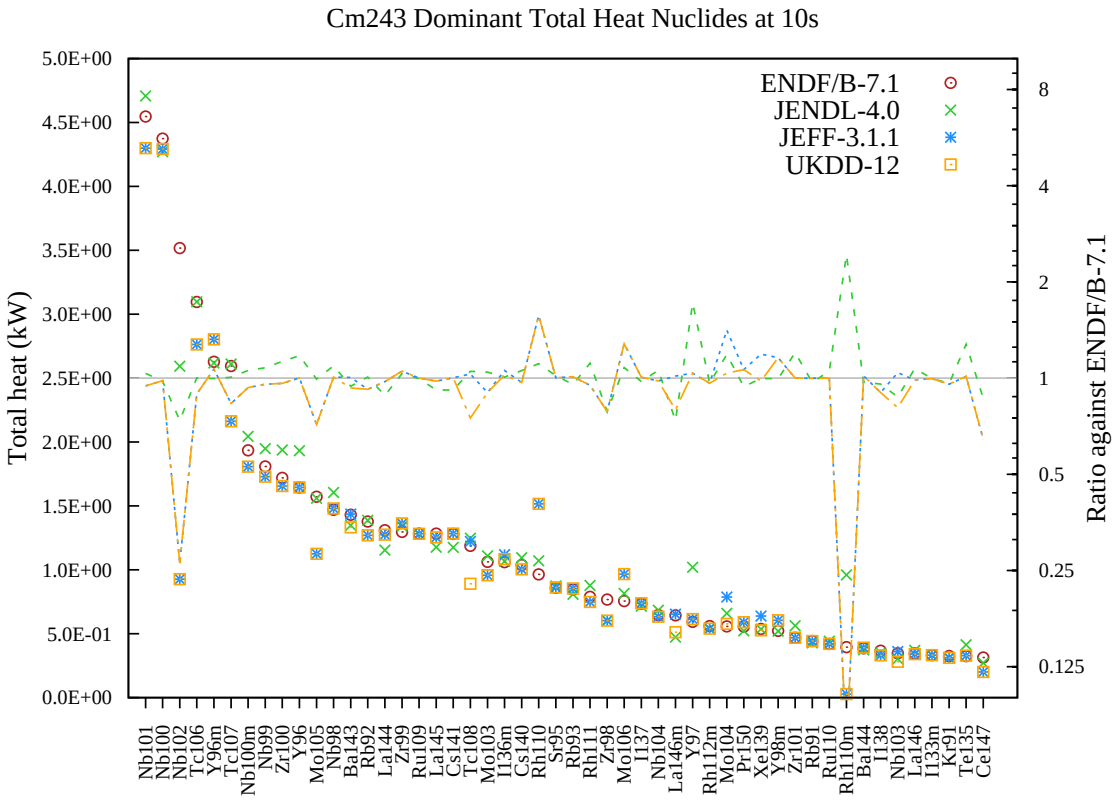

Figure 198: Total heat (in kW) decay data comparison for Cm243 fission pulse after 10s cooling.

Table 198: Total heat (in kW) decay data comparison for Cm243 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb101	6.6	4.55E+00	4.71E+00	4.30E+00	4.30E+00
Nb100	6.4	4.37E+00	4.27E+00	4.29E+00	4.29E+00
Nb102	5.1	3.52E+00	2.59E+00	9.26E-01	9.26E-01
Tc106	4.5	3.10E+00	3.10E+00	2.76E+00	2.76E+00
Y96m	3.8	2.63E+00	2.62E+00	2.80E+00	2.80E+00
Tc107	3.8	2.59E+00	2.61E+00	2.16E+00	2.16E+00
Nb100m	2.8	1.93E+00	2.04E+00	1.81E+00	1.81E+00
Nb99	2.6	1.81E+00	1.95E+00	1.73E+00	1.73E+00
Zr100	2.5	1.72E+00	1.94E+00	1.66E+00	1.66E+00
Y96	2.4	1.64E+00	1.93E+00	1.65E+00	1.65E+00
Mo105	2.3	1.57E+00	1.56E+00	1.12E+00	1.12E+00
Nb98	2.1	1.47E+00	1.61E+00	1.48E+00	1.48E+00
Ba143	2.1	1.43E+00	1.35E+00	1.44E+00	1.33E+00
Rb92	2.0	1.38E+00	1.39E+00	1.27E+00	1.27E+00
La144	1.9	1.31E+00	1.15E+00	1.28E+00	1.28E+00
Zr99	1.9	1.30E+00	1.34E+00	1.36E+00	1.36E+00
Ru109	1.9	1.28E+00	1.28E+00	1.28E+00	1.28E+00

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La145	1.9	1.28E+00	1.18E+00	1.25E+00	1.25E+00
Cs141	1.9	1.28E+00	1.18E+00	1.28E+00	1.28E+00
Tc108	1.7	1.19E+00	1.25E+00	1.22E+00	8.90E-01
Mo103	1.5	1.06E+00	1.11E+00	9.58E-01	9.58E-01
I136m	1.5	1.06E+00	1.07E+00	1.12E+00	1.08E+00
Cs140	1.5	1.04E+00	1.09E+00	1.00E+00	1.00E+00
Rh110	1.4	9.65E-01	1.07E+00	1.52E+00	1.52E+00
Sr95	1.2	8.59E-01	8.74E-01	8.61E-01	8.61E-01
Rb93	1.2	8.46E-01	8.09E-01	8.54E-01	8.54E-01
Rh111	1.1	7.89E-01	8.78E-01	7.49E-01	7.49E-01
Zr98	1.1	7.67E-01	6.03E-01	6.03E-01	6.03E-01
Mo106	1.1	7.55E-01	8.15E-01	9.67E-01	9.67E-01
I137	1.1	7.33E-01	7.16E-01	7.38E-01	7.38E-01
Nb104	0.9	6.46E-01	6.84E-01	6.33E-01	6.33E-01
La146m	0.9	6.43E-01	4.74E-01	6.53E-01	5.12E-01
Y97	0.9	5.93E-01	1.02E+00	6.14E-01	6.14E-01
Rh112m	0.8	5.60E-01	5.40E-01	5.40E-01	5.40E-01
Mo104	0.8	5.57E-01	6.60E-01	7.87E-01	5.77E-01
Pr150	0.8	5.56E-01	5.23E-01	5.91E-01	5.91E-01
Xe139	0.8	5.37E-01	5.36E-01	6.39E-01	5.26E-01
Y98m	0.8	5.23E-01	5.20E-01	6.06E-01	6.06E-01
Zr101	0.7	4.68E-01	5.62E-01	4.68E-01	4.68E-01
Rb91	0.6	4.43E-01	4.29E-01	4.42E-01	4.42E-01
Ru110	0.6	4.20E-01	4.42E-01	4.20E-01	4.20E-01
Rh110m	0.6	3.94E-01	9.60E-01	2.74E-02	2.74E-02
Ba144	0.6	3.85E-01	3.74E-01	3.92E-01	3.92E-01
I138	0.5	3.67E-01	3.52E-01	3.31E-01	3.31E-01
Nb103	0.5	3.47E-01	3.03E-01	3.61E-01	2.80E-01
La146	0.5	3.46E-01	3.70E-01	3.41E-01	3.41E-01
I133m	0.5	3.33E-01	3.32E-01	3.32E-01	3.32E-01
Kr91	0.5	3.25E-01	3.13E-01	3.11E-01	3.11E-01
Te135	0.5	3.24E-01	4.14E-01	3.28E-01	3.28E-01
Ce147	0.5	3.13E-01	2.71E-01	2.01E-01	2.01E-01

14.2 100s after pulse

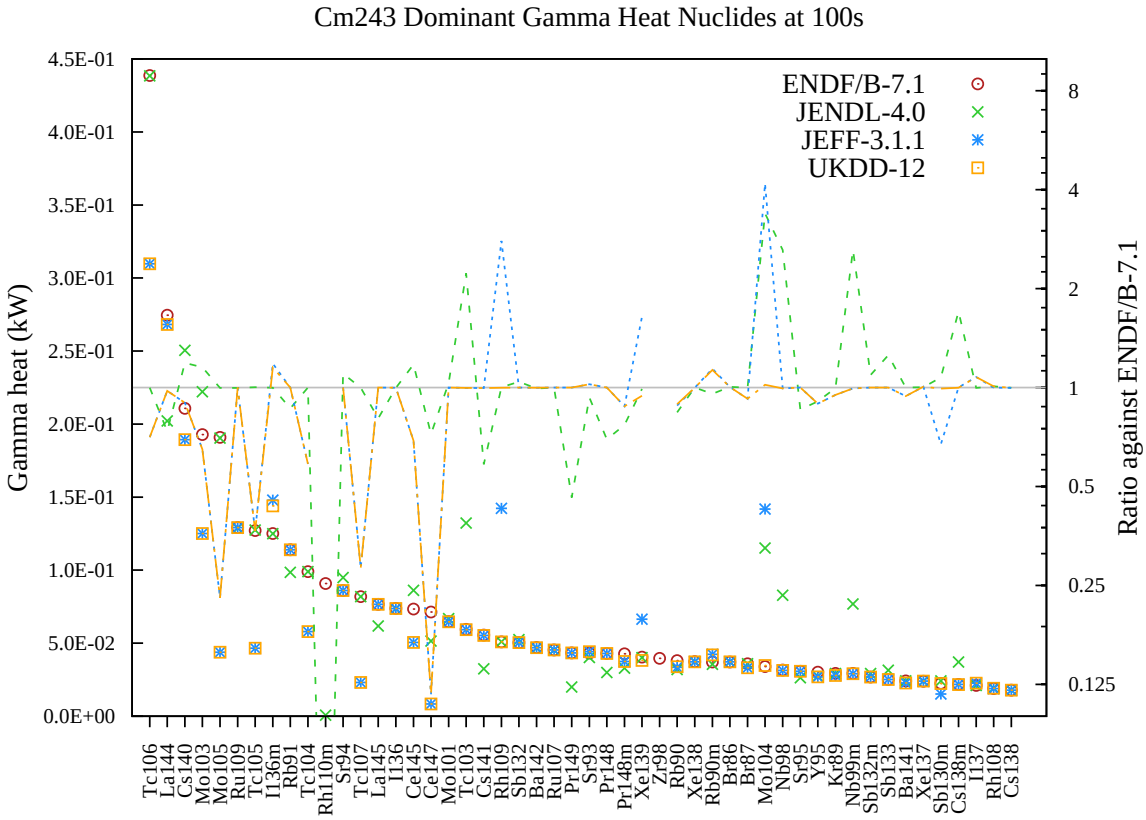

Figure 199: Gamma heat (in kW) decay data comparison for Cm243 fission pulse after 100s cooling.

Table 199: Gamma heat (in kW) decay data comparison for Cm243 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	10.9	4.39E-01	4.38E-01	3.10E-01	3.10E-01
La144	6.8	2.75E-01	2.02E-01	2.68E-01	2.68E-01
Cs140	5.2	2.11E-01	2.50E-01	1.89E-01	1.89E-01
Mo103	4.8	1.93E-01	2.22E-01	1.25E-01	1.25E-01
Mo105	4.7	1.91E-01	1.90E-01	4.37E-02	4.37E-02
Ru109	3.2	1.29E-01	1.29E-01	1.29E-01	1.29E-01
Tc105	3.2	1.27E-01	1.27E-01	4.66E-02	4.66E-02
I136m	3.1	1.25E-01	1.25E-01	1.48E-01	1.44E-01
Rb91	2.8	1.14E-01	9.85E-02	1.14E-01	1.14E-01
Tc104	2.5	9.90E-02	9.90E-02	5.79E-02	5.79E-02
Rh110m	2.3	9.08E-02	—	—	—
Sr94	2.1	8.60E-02	9.48E-02	8.61E-02	8.61E-02
Tc107	2.0	8.19E-02	8.18E-02	2.31E-02	2.31E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La145	1.9	7.66E-02	6.18E-02	7.66E-02	7.66E-02
I136	1.8	7.38E-02	7.36E-02	7.37E-02	7.37E-02
Ce145	1.8	7.33E-02	8.62E-02	5.05E-02	5.05E-02
Ce147	1.8	7.13E-02	5.15E-02	8.32E-03	8.32E-03
Mo101	1.6	6.47E-02	6.68E-02	6.47E-02	6.47E-02
Tc103	1.5	5.95E-02	1.32E-01	5.93E-02	5.93E-02
Cs141	1.4	5.55E-02	3.24E-02	5.53E-02	5.53E-02
Rh109	1.3	5.09E-02	5.10E-02	1.42E-01	5.08E-02
Sb132	1.2	5.03E-02	5.24E-02	5.03E-02	5.03E-02
Ba142	1.2	4.70E-02	4.67E-02	4.70E-02	4.70E-02
Ru107	1.1	4.53E-02	4.53E-02	4.53E-02	4.53E-02
Pr149	1.1	4.33E-02	2.00E-02	4.33E-02	4.33E-02
Sr93	1.1	4.32E-02	4.03E-02	4.42E-02	4.42E-02
Pr148	1.1	4.30E-02	2.99E-02	4.29E-02	4.29E-02
Pr148m	1.1	4.28E-02	3.29E-02	3.75E-02	3.75E-02
Xe139	1.0	4.04E-02	4.00E-02	6.64E-02	3.81E-02
Zr98	1.0	3.97E-02	—	—	—
Rb90	0.9	3.80E-02	3.19E-02	3.35E-02	3.38E-02
Xe138	0.9	3.73E-02	3.73E-02	3.72E-02	3.72E-02
Rb90m	0.9	3.72E-02	3.55E-02	4.24E-02	4.21E-02
Br86	0.9	3.71E-02	3.73E-02	3.72E-02	3.72E-02
Br87	0.9	3.59E-02	3.59E-02	3.32E-02	3.32E-02
Mo104	0.8	3.40E-02	1.15E-01	1.42E-01	3.47E-02
Nb98	0.8	3.16E-02	8.28E-02	3.14E-02	3.14E-02
Sr95	0.8	3.07E-02	2.63E-02	3.07E-02	3.07E-02
Y95	0.7	3.02E-02	2.74E-02	2.70E-02	2.70E-02
Kr89	0.7	2.93E-02	2.92E-02	2.78E-02	2.78E-02
Nb99m	0.7	2.93E-02	7.68E-02	2.91E-02	2.91E-02
Sb132m	0.7	2.68E-02	2.92E-02	2.68E-02	2.68E-02
Sb133	0.6	2.51E-02	3.15E-02	2.51E-02	2.51E-02
Ba141	0.6	2.42E-02	2.42E-02	2.28E-02	2.28E-02
Xe137	0.6	2.39E-02	2.39E-02	2.40E-02	2.40E-02
Sb130m	0.6	2.26E-02	2.42E-02	1.52E-02	2.24E-02
Cs138m	0.5	2.17E-02	3.71E-02	2.18E-02	2.17E-02
I137	0.5	2.11E-02	2.10E-02	2.27E-02	2.27E-02
Rh108	0.5	1.90E-02	1.91E-02	1.89E-02	1.91E-02
Cs138	0.4	1.79E-02	1.78E-02	1.78E-02	1.78E-02

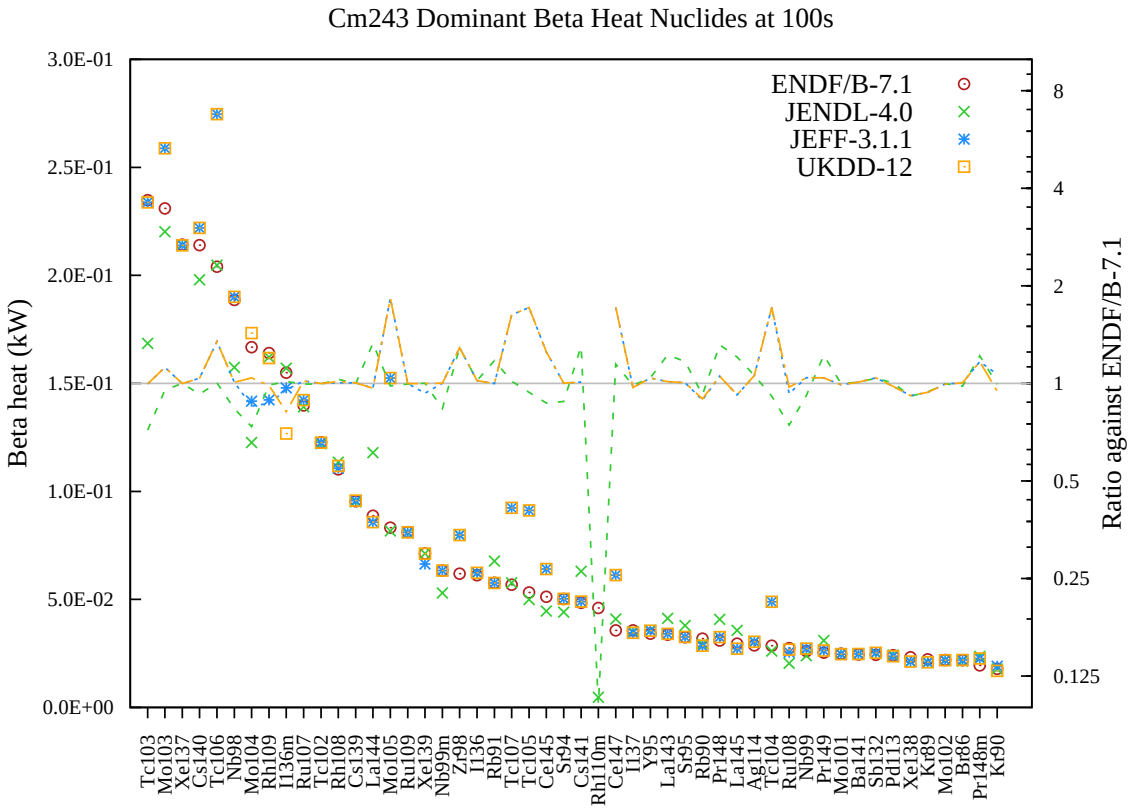

Figure 200: Beta heat (in kW) decay data comparison for Cm243 fission pulse after 100s cooling.

Table 200: Beta heat (in kW) decay data comparison for Cm243 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc103	5.7	2.35E-01	1.68E-01	2.34E-01	2.34E-01
Mo103	5.6	2.31E-01	2.20E-01	2.59E-01	2.59E-01
Xe137	5.2	2.14E-01	2.14E-01	2.14E-01	2.14E-01
Cs140	5.2	2.14E-01	1.98E-01	2.22E-01	2.22E-01
Tc106	4.9	2.04E-01	2.05E-01	2.75E-01	2.75E-01
Nb98	4.6	1.89E-01	1.57E-01	1.90E-01	1.90E-01
Mo104	4.0	1.67E-01	1.23E-01	1.42E-01	1.73E-01
Rh109	4.0	1.64E-01	1.62E-01	1.42E-01	1.62E-01
I136m	3.7	1.55E-01	1.57E-01	1.48E-01	1.27E-01
Ru107	3.4	1.40E-01	1.39E-01	1.42E-01	1.42E-01
Tc102	3.0	1.23E-01	1.22E-01	1.23E-01	1.23E-01
Rh108	2.7	1.10E-01	1.14E-01	1.11E-01	1.12E-01
Cs139	2.3	9.54E-02	9.52E-02	9.58E-02	9.58E-02
La144	2.1	8.87E-02	1.18E-01	8.57E-02	8.57E-02
Mo105	2.0	8.32E-02	8.17E-02	1.52E-01	1.52E-01
Ru109	2.0	8.11E-02	8.07E-02	8.10E-02	8.10E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Xe139	1.7	7.12E-02	7.13E-02	6.64E-02	7.12E-02
Nb99m	1.5	6.33E-02	5.29E-02	6.34E-02	6.34E-02
Zr98	1.5	6.19E-02	7.98E-02	7.98E-02	7.98E-02
I136	1.5	6.12E-02	6.23E-02	6.23E-02	6.23E-02
Rb91	1.4	5.77E-02	6.78E-02	5.76E-02	5.76E-02
Tc107	1.4	5.68E-02	5.77E-02	9.24E-02	9.24E-02
Tc105	1.3	5.32E-02	4.99E-02	9.12E-02	9.12E-02
Ce145	1.2	5.12E-02	4.46E-02	6.41E-02	6.41E-02
Sr94	1.2	5.02E-02	4.42E-02	5.03E-02	5.03E-02
Cs141	1.2	4.85E-02	6.31E-02	4.90E-02	4.90E-02
Rh110m	1.1	4.60E-02	4.72E-03	—	—
Ce147	0.9	3.57E-02	4.09E-02	6.12E-02	6.12E-02
I137	0.9	3.56E-02	3.51E-02	3.46E-02	3.46E-02
Y95	0.8	3.41E-02	3.56E-02	3.55E-02	3.55E-02
La143	0.8	3.37E-02	4.12E-02	3.41E-02	3.41E-02
Sr95	0.8	3.24E-02	3.79E-02	3.26E-02	3.26E-02
Rb90	0.8	3.19E-02	2.94E-02	2.83E-02	2.85E-02
Pr148	0.7	3.09E-02	4.07E-02	3.26E-02	3.26E-02
La145	0.7	2.96E-02	3.57E-02	2.72E-02	2.72E-02
Ag114	0.7	2.87E-02	3.04E-02	3.04E-02	3.04E-02
Tc104	0.7	2.85E-02	2.61E-02	4.89E-02	4.89E-02
Ru108	0.7	2.75E-02	2.04E-02	2.56E-02	2.67E-02
Nb99	0.6	2.61E-02	2.40E-02	2.72E-02	2.72E-02
Pr149	0.6	2.54E-02	3.10E-02	2.64E-02	2.64E-02
Mo101	0.6	2.49E-02	2.49E-02	2.47E-02	2.47E-02
Ba141	0.6	2.45E-02	2.47E-02	2.47E-02	2.47E-02
Sb132	0.6	2.43E-02	2.52E-02	2.53E-02	2.53E-02
Pd113	0.6	2.42E-02	2.42E-02	2.37E-02	2.37E-02
Xe138	0.6	2.32E-02	2.12E-02	2.13E-02	2.13E-02
Kr89	0.5	2.23E-02	2.09E-02	2.09E-02	2.09E-02
Mo102	0.5	2.20E-02	2.19E-02	2.18E-02	2.18E-02
Br86	0.5	2.19E-02	2.15E-02	2.19E-02	2.19E-02
Pr148m	0.5	1.94E-02	2.36E-02	2.27E-02	2.27E-02
Kr90	0.4	1.79E-02	1.78E-02	1.91E-02	1.70E-02

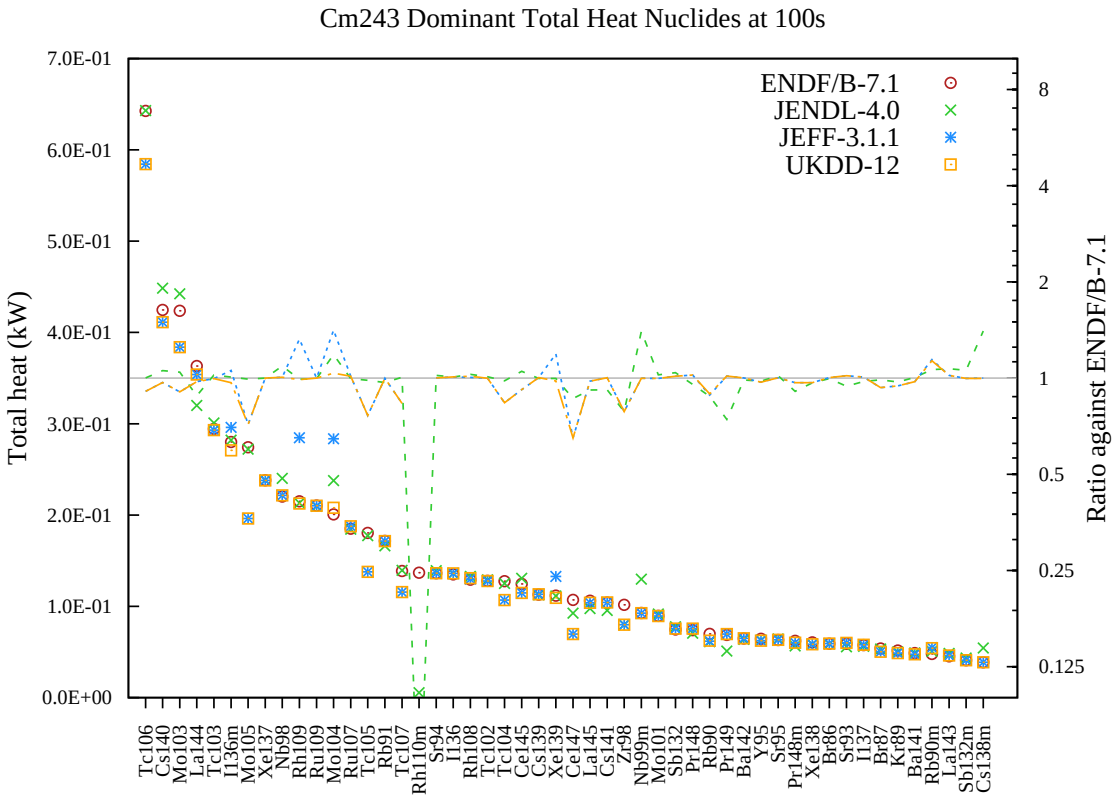

Figure 201: Total heat (in kW) decay data comparison for Cm243 fission pulse after 100s cooling.

Table 201: Total heat (in kW) decay data comparison for Cm243 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	7.9	6.43E-01	6.43E-01	5.84E-01	5.84E-01
Cs140	5.2	4.25E-01	4.48E-01	4.11E-01	4.11E-01
Mo103	5.2	4.24E-01	4.42E-01	3.84E-01	3.84E-01
La144	4.4	3.63E-01	3.20E-01	3.54E-01	3.54E-01
Tc103	3.6	2.94E-01	3.01E-01	2.93E-01	2.93E-01
I136m	3.4	2.80E-01	2.82E-01	2.96E-01	2.71E-01
Mo105	3.4	2.74E-01	2.72E-01	1.96E-01	1.96E-01
Xe137	2.9	2.38E-01	2.38E-01	2.38E-01	2.38E-01
Nb98	2.7	2.20E-01	2.40E-01	2.21E-01	2.21E-01
Rh109	2.6	2.15E-01	2.13E-01	2.85E-01	2.13E-01
Ru109	2.6	2.10E-01	2.10E-01	2.10E-01	2.10E-01
Mo104	2.5	2.01E-01	2.38E-01	2.84E-01	2.08E-01
Ru107	2.3	1.85E-01	1.84E-01	1.88E-01	1.88E-01
Tc105	2.2	1.80E-01	1.77E-01	1.38E-01	1.38E-01
Rb91	2.1	1.72E-01	1.66E-01	1.72E-01	1.72E-01
Tc107	1.7	1.39E-01	1.40E-01	1.16E-01	1.16E-01
Rh110m	1.7	1.37E-01	5.46E-03	—	—

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sr94	1.7	1.36E-01	1.39E-01	1.36E-01	1.36E-01
I136	1.7	1.35E-01	1.36E-01	1.36E-01	1.36E-01
Rh108	1.6	1.29E-01	1.33E-01	1.30E-01	1.31E-01
Tc102	1.6	1.28E-01	1.29E-01	1.28E-01	1.28E-01
Tc104	1.6	1.28E-01	1.25E-01	1.07E-01	1.07E-01
Ce145	1.5	1.25E-01	1.31E-01	1.15E-01	1.15E-01
Cs139	1.4	1.13E-01	1.13E-01	1.13E-01	1.13E-01
Xe139	1.4	1.12E-01	1.11E-01	1.33E-01	1.09E-01
Ce147	1.3	1.07E-01	9.25E-02	6.96E-02	6.96E-02
La145	1.3	1.06E-01	9.75E-02	1.04E-01	1.04E-01
Cs141	1.3	1.04E-01	9.55E-02	1.04E-01	1.04E-01
Zr98	1.2	1.02E-01	7.98E-02	7.98E-02	7.98E-02
Nb99m	1.1	9.26E-02	1.30E-01	9.25E-02	9.25E-02
Mo101	1.1	8.96E-02	9.17E-02	8.93E-02	8.93E-02
Sb132	0.9	7.46E-02	7.76E-02	7.56E-02	7.56E-02
Pr148	0.9	7.39E-02	7.06E-02	7.55E-02	7.55E-02
Rb90	0.9	6.99E-02	6.13E-02	6.18E-02	6.24E-02
Pr149	0.8	6.87E-02	5.10E-02	6.97E-02	6.97E-02
Ba142	0.8	6.48E-02	6.39E-02	6.49E-02	6.49E-02
Y95	0.8	6.43E-02	6.30E-02	6.24E-02	6.24E-02
Sr95	0.8	6.31E-02	6.42E-02	6.33E-02	6.33E-02
Pr148m	0.8	6.22E-02	5.66E-02	6.02E-02	6.02E-02
Xe138	0.7	6.05E-02	5.85E-02	5.85E-02	5.85E-02
Br86	0.7	5.90E-02	5.87E-02	5.92E-02	5.92E-02
Sr93	0.7	5.90E-02	5.56E-02	6.00E-02	6.00E-02
I137	0.7	5.75E-02	5.61E-02	5.80E-02	5.80E-02
Br87	0.7	5.38E-02	5.32E-02	5.02E-02	5.02E-02
Kr89	0.6	5.16E-02	5.01E-02	4.87E-02	4.87E-02
Ba141	0.6	4.87E-02	4.89E-02	4.75E-02	4.75E-02
Rb90m	0.6	4.79E-02	5.09E-02	5.47E-02	5.42E-02
La143	0.6	4.53E-02	4.85E-02	4.62E-02	4.62E-02
Sb132m	0.5	4.10E-02	4.34E-02	4.09E-02	4.09E-02
Cs138m	0.5	3.87E-02	5.44E-02	3.87E-02	3.86E-02

14.3 1000s after pulse

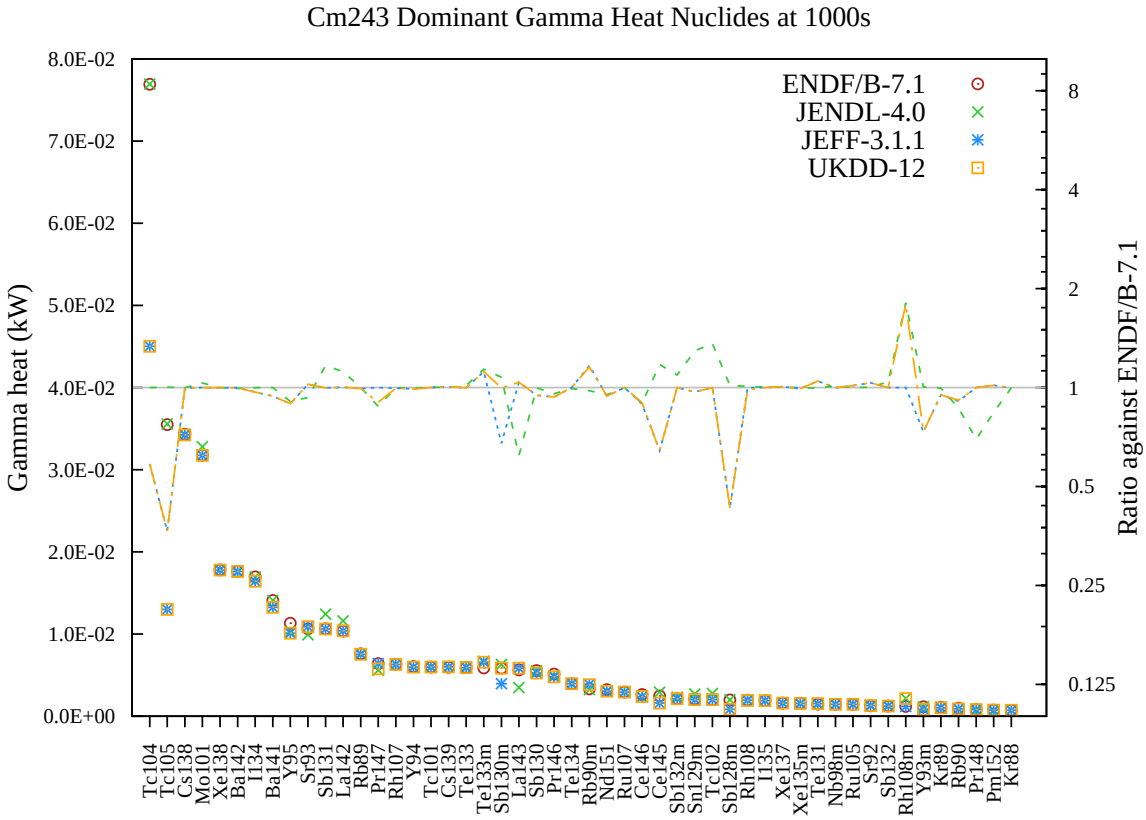

Figure 202: Gamma heat (in kW) decay data comparison for Cm243 fission pulse after 1000s cooling.

Table 202: Gamma heat (in kW) decay data comparison for Cm243 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	18.2	7.69E-02	7.69E-02	4.50E-02	4.50E-02
Tc105	8.4	3.55E-02	3.56E-02	1.30E-02	1.30E-02
Cs138	8.1	3.43E-02	3.43E-02	3.42E-02	3.42E-02
Mo101	7.5	3.18E-02	3.28E-02	3.17E-02	3.17E-02
Xe138	4.2	1.78E-02	1.78E-02	1.78E-02	1.78E-02
Ba142	4.2	1.76E-02	1.75E-02	1.76E-02	1.76E-02
I134	4.0	1.70E-02	1.69E-02	1.64E-02	1.64E-02
Ba141	3.3	1.41E-02	1.41E-02	1.33E-02	1.33E-02
Y95	2.7	1.13E-02	1.03E-02	1.01E-02	1.01E-02
Sr93	2.5	1.06E-02	9.92E-03	1.09E-02	1.09E-02
Sb131	2.5	1.06E-02	1.24E-02	1.06E-02	1.06E-02
La142	2.5	1.04E-02	1.16E-02	1.04E-02	1.04E-02
Rb89	1.8	7.60E-03	7.61E-03	7.54E-03	7.54E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Pr147	1.5	6.39E-03	5.60E-03	6.39E-03	5.77E-03
Rh107	1.5	6.33E-03	6.32E-03	6.30E-03	6.30E-03
Y94	1.4	6.04E-03	6.02E-03	5.98E-03	5.98E-03
Tc101	1.4	5.99E-03	6.01E-03	5.99E-03	5.99E-03
Cs139	1.4	5.96E-03	5.96E-03	6.00E-03	6.00E-03
Te133	1.4	5.93E-03	6.02E-03	5.91E-03	5.91E-03
Te133m	1.4	5.87E-03	6.68E-03	6.57E-03	6.57E-03
Sb130m	1.4	5.85E-03	6.29E-03	3.96E-03	5.84E-03
La143	1.3	5.63E-03	3.49E-03	5.84E-03	5.84E-03
Sb130	1.3	5.55E-03	5.54E-03	5.25E-03	5.25E-03
Pr146	1.2	5.13E-03	4.91E-03	4.80E-03	4.80E-03
Te134	0.9	3.97E-03	3.94E-03	3.97E-03	3.97E-03
Rb90m	0.8	3.31E-03	3.24E-03	3.86E-03	3.83E-03
Nd151	0.8	3.23E-03	3.07E-03	3.04E-03	3.04E-03
Ru107	0.7	2.93E-03	2.93E-03	2.93E-03	2.93E-03
Ce146	0.6	2.64E-03	2.37E-03	2.36E-03	2.38E-03
Ce145	0.6	2.48E-03	2.91E-03	1.59E-03	1.59E-03
Sb132m	0.5	2.12E-03	2.31E-03	2.12E-03	2.12E-03
Sn129m	0.5	2.09E-03	2.70E-03	2.02E-03	2.02E-03
Tc102	0.5	2.03E-03	2.77E-03	2.03E-03	2.03E-03
Sb128m	0.5	1.97E-03	2.00E-03	8.48E-04	8.48E-04
Rh108	0.5	1.95E-03	1.97E-03	1.95E-03	1.92E-03
I135	0.4	1.89E-03	1.89E-03	1.88E-03	1.88E-03
Xe137	0.4	1.59E-03	1.60E-03	1.60E-03	1.60E-03
Xe135m	0.4	1.57E-03	1.57E-03	1.56E-03	1.56E-03
Te131	0.3	1.46E-03	1.46E-03	1.53E-03	1.53E-03
Nb98m	0.3	1.45E-03	1.47E-03	1.45E-03	1.45E-03
Ru105	0.3	1.42E-03	1.42E-03	1.44E-03	1.44E-03
Sr92	0.3	1.25E-03	1.25E-03	1.29E-03	1.29E-03
Sb132	0.3	1.23E-03	1.28E-03	1.23E-03	1.23E-03
Rh108m	0.3	1.20E-03	2.17E-03	1.20E-03	2.14E-03
Y93m	0.3	1.14E-03	1.14E-03	8.36E-04	8.36E-04
Kr89	0.3	1.08E-03	1.08E-03	1.03E-03	1.03E-03
Rb90	0.2	9.83E-04	8.51E-04	8.94E-04	9.00E-04
Pr148	0.2	8.10E-04	5.63E-04	8.10E-04	8.10E-04
Pm152	0.2	7.40E-04	6.22E-04	7.52E-04	7.52E-04
Kr88	0.2	7.32E-04	7.31E-04	7.30E-04	7.30E-04

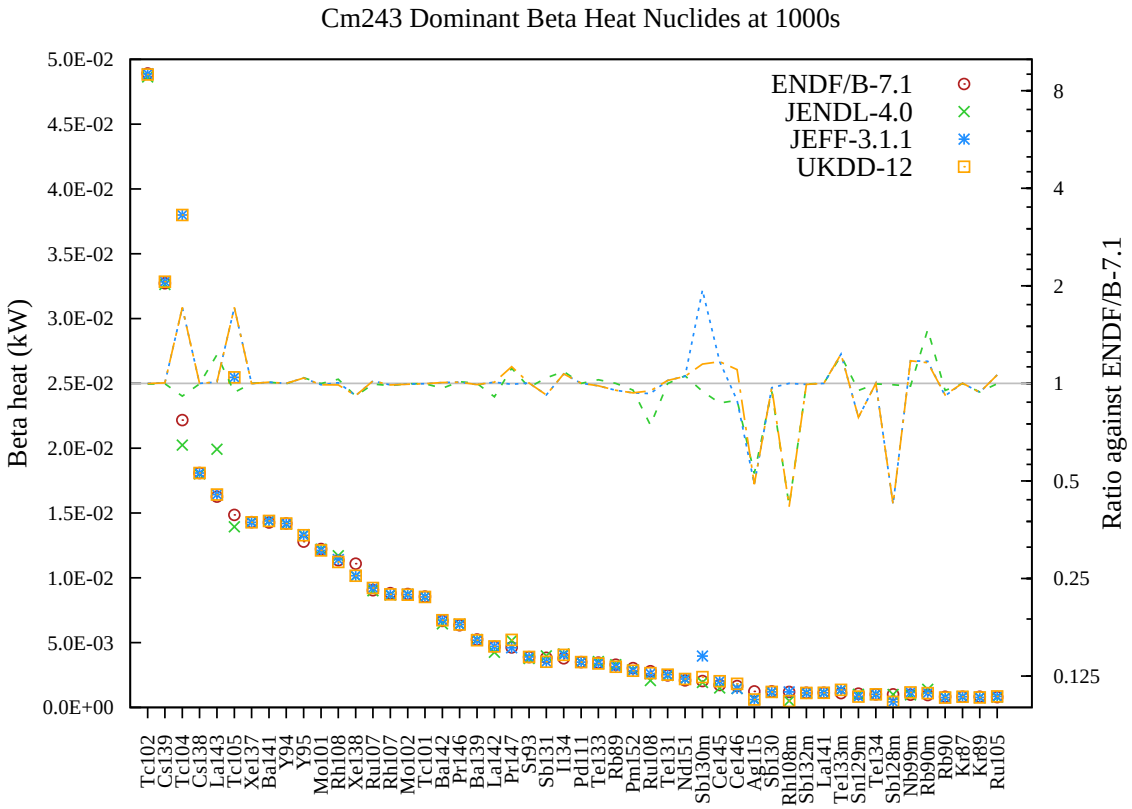

Figure 203: Beta heat (in kW) decay data comparison for Cm243 fission pulse after 1000s cooling.

Table 203: Beta heat (in kW) decay data comparison for Cm243 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	13.1	4.89E-02	4.86E-02	4.89E-02	4.88E-02
Cs139	8.7	3.27E-02	3.26E-02	3.28E-02	3.28E-02
Tc104	5.9	2.22E-02	2.02E-02	3.80E-02	3.80E-02
Cs138	4.8	1.81E-02	1.80E-02	1.81E-02	1.81E-02
La143	4.3	1.63E-02	1.99E-02	1.64E-02	1.64E-02
Tc105	4.0	1.49E-02	1.39E-02	2.55E-02	2.55E-02
Xe137	3.8	1.43E-02	1.43E-02	1.43E-02	1.43E-02
Ba141	3.8	1.43E-02	1.44E-02	1.44E-02	1.44E-02
Y94	3.8	1.42E-02	1.42E-02	1.42E-02	1.42E-02
Y95	3.4	1.28E-02	1.33E-02	1.33E-02	1.33E-02
Mo101	3.3	1.22E-02	1.22E-02	1.21E-02	1.21E-02
Rh108	3.0	1.14E-02	1.17E-02	1.14E-02	1.12E-02
Xe138	3.0	1.11E-02	1.01E-02	1.02E-02	1.02E-02
Ru107	2.4	9.05E-03	9.01E-03	9.21E-03	9.21E-03
Rh107	2.4	8.82E-03	8.69E-03	8.73E-03	8.73E-03
Mo102	2.3	8.75E-03	8.73E-03	8.71E-03	8.70E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc101	2.3	8.56E-03	8.54E-03	8.53E-03	8.53E-03
Ba142	1.8	6.68E-03	6.45E-03	6.73E-03	6.73E-03
Pr146	1.7	6.34E-03	6.41E-03	6.40E-03	6.40E-03
Ba139	1.4	5.23E-03	5.24E-03	5.19E-03	5.19E-03
La142	1.2	4.67E-03	4.25E-03	4.71E-03	4.71E-03
Pr147	1.2	4.63E-03	5.16E-03	4.60E-03	5.22E-03
Sr93	1.0	3.89E-03	3.78E-03	3.90E-03	3.90E-03
Sb131	1.0	3.83E-03	3.98E-03	3.52E-03	3.52E-03
I134	1.0	3.79E-03	4.13E-03	4.06E-03	4.06E-03
Pd111	0.9	3.49E-03	3.49E-03	3.50E-03	3.50E-03
Te133	0.9	3.45E-03	3.54E-03	3.39E-03	3.39E-03
Rb89	0.9	3.30E-03	3.30E-03	3.14E-03	3.14E-03
Pm152	0.8	3.03E-03	2.89E-03	2.84E-03	2.84E-03
Ru108	0.7	2.80E-03	2.08E-03	2.60E-03	2.65E-03
Te131	0.7	2.48E-03	2.47E-03	2.53E-03	2.53E-03
Nd151	0.6	2.08E-03	2.20E-03	2.19E-03	2.19E-03
Sb130m	0.5	2.04E-03	1.93E-03	3.96E-03	2.34E-03
Ce145	0.5	1.73E-03	1.51E-03	2.02E-03	2.02E-03
Ce146	0.4	1.65E-03	1.46E-03	1.46E-03	1.82E-03
Ag115	0.3	1.24E-03	6.54E-04	6.06E-04	6.06E-04
Sb130	0.3	1.24E-03	1.17E-03	1.20E-03	1.20E-03
Rh108m	0.3	1.20E-03	5.01E-04	1.20E-03	4.98E-04
Sb132m	0.3	1.13E-03	1.13E-03	1.12E-03	1.12E-03
La141	0.3	1.13E-03	1.13E-03	1.13E-03	1.13E-03
Te133m	0.3	1.10E-03	1.34E-03	1.36E-03	1.36E-03
Sn129m	0.3	1.06E-03	1.01E-03	8.36E-04	8.36E-04
Te134	0.3	1.02E-03	1.01E-03	1.02E-03	1.02E-03
Sb128m	0.3	1.00E-03	9.94E-04	4.26E-04	4.26E-04
Nb99m	0.3	9.90E-04	9.71E-04	1.16E-03	1.16E-03
Rb90m	0.3	9.54E-04	1.40E-03	1.12E-03	1.11E-03
Rb90	0.2	8.24E-04	7.84E-04	7.54E-04	7.59E-04
Kr87	0.2	8.23E-04	8.22E-04	8.24E-04	8.24E-04
Kr89	0.2	8.21E-04	7.72E-04	7.70E-04	7.70E-04
Ru105	0.2	7.98E-04	7.96E-04	8.47E-04	8.47E-04

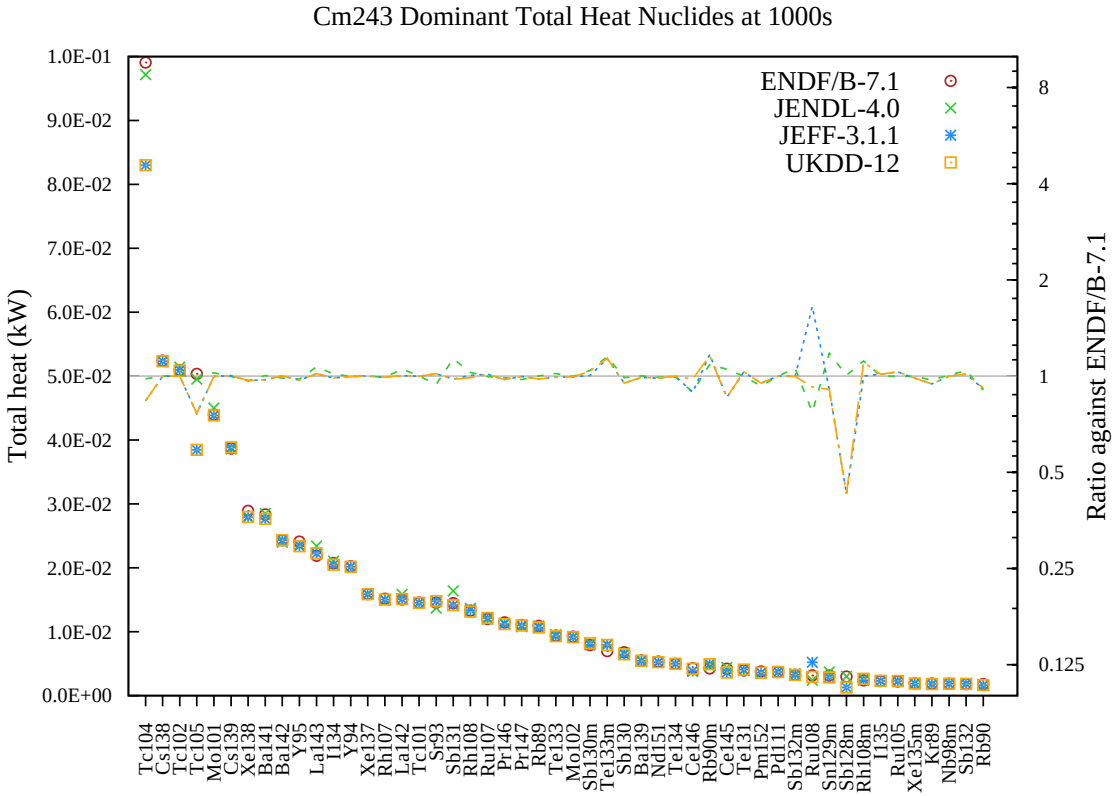

Figure 204: Total heat (in kW) decay data comparison for Cm243 fission pulse after 1000s cooling.

Table 204: Total heat (in kW) decay data comparison for Cm243 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	12.4	9.91E-02	9.72E-02	8.30E-02	8.30E-02
Cs138	6.6	5.24E-02	5.23E-02	5.23E-02	5.23E-02
Tc102	6.4	5.09E-02	5.14E-02	5.09E-02	5.09E-02
Tc105	6.3	5.03E-02	4.95E-02	3.85E-02	3.85E-02
Mo101	5.5	4.40E-02	4.50E-02	4.39E-02	4.39E-02
Cs139	4.8	3.87E-02	3.86E-02	3.88E-02	3.88E-02
Xe138	3.6	2.89E-02	2.79E-02	2.79E-02	2.79E-02
Ba141	3.6	2.84E-02	2.85E-02	2.77E-02	2.77E-02
Ba142	3.0	2.43E-02	2.40E-02	2.43E-02	2.43E-02
Y95	3.0	2.41E-02	2.36E-02	2.34E-02	2.34E-02
La143	2.7	2.19E-02	2.34E-02	2.23E-02	2.23E-02
I134	2.6	2.07E-02	2.11E-02	2.05E-02	2.05E-02
Y94	2.5	2.02E-02	2.02E-02	2.02E-02	2.02E-02
Xe137	2.0	1.59E-02	1.59E-02	1.59E-02	1.59E-02
Rh107	1.9	1.51E-02	1.50E-02	1.50E-02	1.50E-02
La142	1.9	1.50E-02	1.58E-02	1.51E-02	1.51E-02
Tc101	1.8	1.45E-02	1.45E-02	1.45E-02	1.45E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sr93	1.8	1.45E-02	1.37E-02	1.48E-02	1.48E-02
Sb131	1.8	1.45E-02	1.64E-02	1.41E-02	1.41E-02
Rh108	1.7	1.33E-02	1.37E-02	1.34E-02	1.32E-02
Ru107	1.5	1.20E-02	1.19E-02	1.21E-02	1.21E-02
Pr146	1.4	1.15E-02	1.13E-02	1.12E-02	1.12E-02
Pr147	1.4	1.10E-02	1.08E-02	1.10E-02	1.10E-02
Rb89	1.4	1.09E-02	1.09E-02	1.07E-02	1.07E-02
Te133	1.2	9.38E-03	9.56E-03	9.31E-03	9.31E-03
Mo102	1.2	9.22E-03	9.19E-03	9.17E-03	9.16E-03
Sb130m	1.0	7.89E-03	8.22E-03	7.92E-03	8.18E-03
Te133m	0.9	6.98E-03	8.02E-03	7.92E-03	7.92E-03
Sb130	0.9	6.79E-03	6.71E-03	6.45E-03	6.45E-03
Ba139	0.7	5.50E-03	5.50E-03	5.44E-03	5.44E-03
Nd151	0.7	5.31E-03	5.27E-03	5.23E-03	5.23E-03
Te134	0.6	4.98E-03	4.95E-03	4.98E-03	4.98E-03
Ce146	0.5	4.29E-03	3.83E-03	3.82E-03	4.20E-03
Rb90m	0.5	4.26E-03	4.64E-03	4.98E-03	4.93E-03
Ce145	0.5	4.21E-03	4.42E-03	3.61E-03	3.61E-03
Te131	0.5	3.94E-03	3.93E-03	4.06E-03	4.06E-03
Pm152	0.5	3.77E-03	3.52E-03	3.59E-03	3.59E-03
Pd111	0.5	3.69E-03	3.69E-03	3.69E-03	3.69E-03
Sb132m	0.4	3.25E-03	3.44E-03	3.24E-03	3.24E-03
Ru108	0.4	3.15E-03	2.43E-03	5.20E-03	2.92E-03
Sn129m	0.4	3.15E-03	3.71E-03	2.86E-03	2.86E-03
Sb128m	0.4	2.97E-03	2.99E-03	1.27E-03	1.27E-03
Rh108m	0.3	2.39E-03	2.67E-03	2.39E-03	2.64E-03
I135	0.3	2.29E-03	2.29E-03	2.32E-03	2.32E-03
Ru105	0.3	2.22E-03	2.22E-03	2.29E-03	2.29E-03
Xe135m	0.2	1.93E-03	1.92E-03	1.90E-03	1.90E-03
Kr89	0.2	1.90E-03	1.85E-03	1.80E-03	1.80E-03
Nb98m	0.2	1.85E-03	1.87E-03	1.85E-03	1.85E-03
Sb132	0.2	1.82E-03	1.89E-03	1.85E-03	1.85E-03
Rb90	0.2	1.81E-03	1.63E-03	1.65E-03	1.66E-03

14.4 5011s after pulse

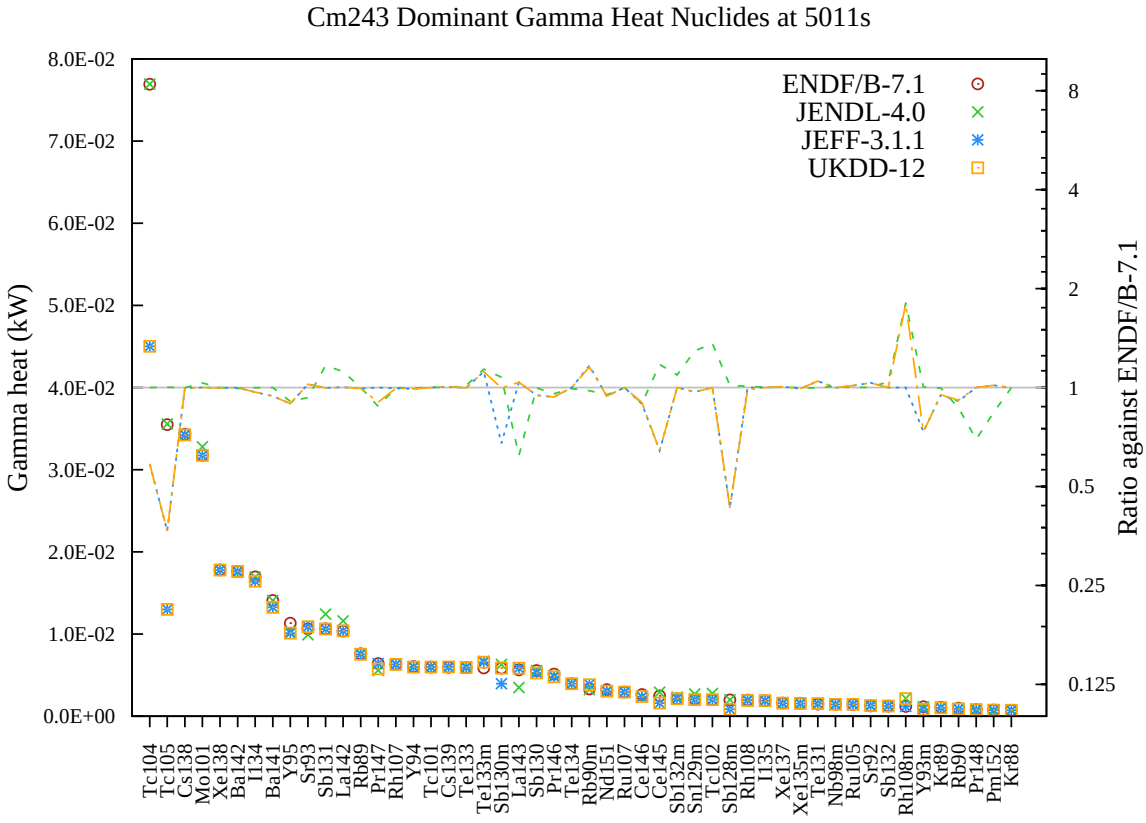

Figure 205: Gamma heat (in kW) decay data comparison for Cm243 fission pulse after 5011s cooling.

Table 205: Gamma heat (in kW) decay data comparison for Cm243 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	18.2	7.69E-02	7.69E-02	4.50E-02	4.50E-02
Tc105	8.4	3.55E-02	3.56E-02	1.30E-02	1.30E-02
Cs138	8.1	3.43E-02	3.43E-02	3.42E-02	3.42E-02
Mo101	7.5	3.18E-02	3.28E-02	3.17E-02	3.17E-02
Xe138	4.2	1.78E-02	1.78E-02	1.78E-02	1.78E-02
Ba142	4.2	1.76E-02	1.75E-02	1.76E-02	1.76E-02
I134	4.0	1.70E-02	1.69E-02	1.64E-02	1.64E-02
Ba141	3.3	1.41E-02	1.41E-02	1.33E-02	1.33E-02
Y95	2.7	1.13E-02	1.03E-02	1.01E-02	1.01E-02
Sr93	2.5	1.06E-02	9.92E-03	1.09E-02	1.09E-02
Sb131	2.5	1.06E-02	1.24E-02	1.06E-02	1.06E-02
La142	2.5	1.04E-02	1.16E-02	1.04E-02	1.04E-02
Rb89	1.8	7.60E-03	7.61E-03	7.54E-03	7.54E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Pr147	1.5	6.39E-03	5.60E-03	6.39E-03	5.77E-03
Rh107	1.5	6.33E-03	6.32E-03	6.30E-03	6.30E-03
Y94	1.4	6.04E-03	6.02E-03	5.98E-03	5.98E-03
Tc101	1.4	5.99E-03	6.01E-03	5.99E-03	5.99E-03
Cs139	1.4	5.96E-03	5.96E-03	6.00E-03	6.00E-03
Te133	1.4	5.93E-03	6.02E-03	5.91E-03	5.91E-03
Te133m	1.4	5.87E-03	6.68E-03	6.57E-03	6.57E-03
Sb130m	1.4	5.85E-03	6.29E-03	3.96E-03	5.84E-03
La143	1.3	5.63E-03	3.49E-03	5.84E-03	5.84E-03
Sb130	1.3	5.55E-03	5.54E-03	5.25E-03	5.25E-03
Pr146	1.2	5.13E-03	4.91E-03	4.80E-03	4.80E-03
Te134	0.9	3.97E-03	3.94E-03	3.97E-03	3.97E-03
Rb90m	0.8	3.31E-03	3.24E-03	3.86E-03	3.83E-03
Nd151	0.8	3.23E-03	3.07E-03	3.04E-03	3.04E-03
Ru107	0.7	2.93E-03	2.93E-03	2.93E-03	2.93E-03
Ce146	0.6	2.64E-03	2.37E-03	2.36E-03	2.38E-03
Ce145	0.6	2.48E-03	2.91E-03	1.59E-03	1.59E-03
Sb132m	0.5	2.12E-03	2.31E-03	2.12E-03	2.12E-03
Sn129m	0.5	2.09E-03	2.70E-03	2.02E-03	2.02E-03
Tc102	0.5	2.03E-03	2.77E-03	2.03E-03	2.03E-03
Sb128m	0.5	1.97E-03	2.00E-03	8.48E-04	8.48E-04
Rh108	0.5	1.95E-03	1.97E-03	1.95E-03	1.92E-03
I135	0.4	1.89E-03	1.89E-03	1.88E-03	1.88E-03
Xe137	0.4	1.59E-03	1.60E-03	1.60E-03	1.60E-03
Xe135m	0.4	1.57E-03	1.57E-03	1.56E-03	1.56E-03
Te131	0.3	1.46E-03	1.46E-03	1.53E-03	1.53E-03
Nb98m	0.3	1.45E-03	1.47E-03	1.45E-03	1.45E-03
Ru105	0.3	1.42E-03	1.42E-03	1.44E-03	1.44E-03
Sr92	0.3	1.25E-03	1.25E-03	1.29E-03	1.29E-03
Sb132	0.3	1.23E-03	1.28E-03	1.23E-03	1.23E-03
Rh108m	0.3	1.20E-03	2.17E-03	1.20E-03	2.14E-03
Y93m	0.3	1.14E-03	1.14E-03	8.36E-04	8.36E-04
Kr89	0.3	1.08E-03	1.08E-03	1.03E-03	1.03E-03
Rb90	0.2	9.83E-04	8.51E-04	8.94E-04	9.00E-04
Pr148	0.2	8.10E-04	5.63E-04	8.10E-04	8.10E-04
Pm152	0.2	7.40E-04	6.22E-04	7.52E-04	7.52E-04
Kr88	0.2	7.32E-04	7.31E-04	7.30E-04	7.30E-04

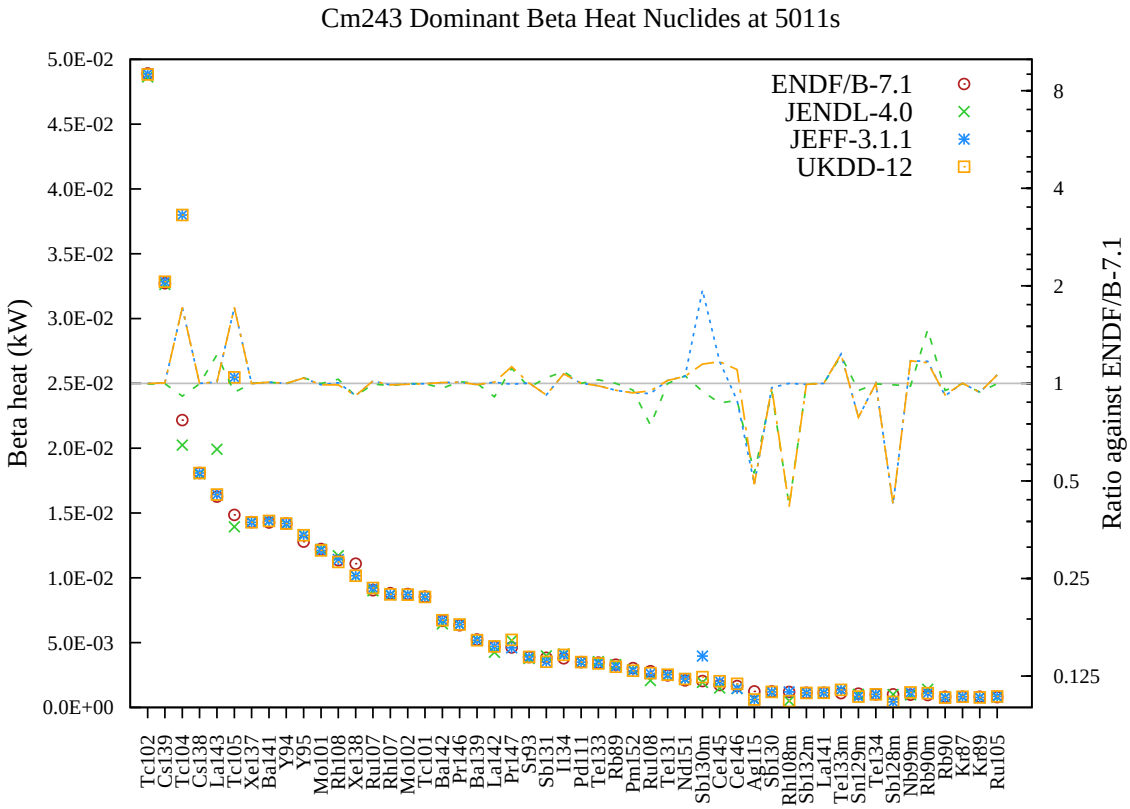

Figure 206: Beta heat (in kW) decay data comparison for Cm243 fission pulse after 5011s cooling.

Table 206: Beta heat (in kW) decay data comparison for Cm243 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc102	13.1	4.89E-02	4.86E-02	4.89E-02	4.88E-02
Cs139	8.7	3.27E-02	3.26E-02	3.28E-02	3.28E-02
Tc104	5.9	2.22E-02	2.02E-02	3.80E-02	3.80E-02
Cs138	4.8	1.81E-02	1.80E-02	1.81E-02	1.81E-02
La143	4.3	1.63E-02	1.99E-02	1.64E-02	1.64E-02
Tc105	4.0	1.49E-02	1.39E-02	2.55E-02	2.55E-02
Xe137	3.8	1.43E-02	1.43E-02	1.43E-02	1.43E-02
Ba141	3.8	1.43E-02	1.44E-02	1.44E-02	1.44E-02
Y94	3.8	1.42E-02	1.42E-02	1.42E-02	1.42E-02
Y95	3.4	1.28E-02	1.33E-02	1.33E-02	1.33E-02
Mo101	3.3	1.22E-02	1.22E-02	1.21E-02	1.21E-02
Rh108	3.0	1.14E-02	1.17E-02	1.14E-02	1.12E-02
Xe138	3.0	1.11E-02	1.01E-02	1.02E-02	1.02E-02
Ru107	2.4	9.05E-03	9.01E-03	9.21E-03	9.21E-03
Rh107	2.4	8.82E-03	8.69E-03	8.73E-03	8.73E-03
Mo102	2.3	8.75E-03	8.73E-03	8.71E-03	8.70E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc101	2.3	8.56E-03	8.54E-03	8.53E-03	8.53E-03
Ba142	1.8	6.68E-03	6.45E-03	6.73E-03	6.73E-03
Pr146	1.7	6.34E-03	6.41E-03	6.40E-03	6.40E-03
Ba139	1.4	5.23E-03	5.24E-03	5.19E-03	5.19E-03
La142	1.2	4.67E-03	4.25E-03	4.71E-03	4.71E-03
Pr147	1.2	4.63E-03	5.16E-03	4.60E-03	5.22E-03
Sr93	1.0	3.89E-03	3.78E-03	3.90E-03	3.90E-03
Sb131	1.0	3.83E-03	3.98E-03	3.52E-03	3.52E-03
I134	1.0	3.79E-03	4.13E-03	4.06E-03	4.06E-03
Pd111	0.9	3.49E-03	3.49E-03	3.50E-03	3.50E-03
Te133	0.9	3.45E-03	3.54E-03	3.39E-03	3.39E-03
Rb89	0.9	3.30E-03	3.30E-03	3.14E-03	3.14E-03
Pm152	0.8	3.03E-03	2.89E-03	2.84E-03	2.84E-03
Ru108	0.7	2.80E-03	2.08E-03	2.60E-03	2.65E-03
Te131	0.7	2.48E-03	2.47E-03	2.53E-03	2.53E-03
Nd151	0.6	2.08E-03	2.20E-03	2.19E-03	2.19E-03
Sb130m	0.5	2.04E-03	1.93E-03	3.96E-03	2.34E-03
Ce145	0.5	1.73E-03	1.51E-03	2.02E-03	2.02E-03
Ce146	0.4	1.65E-03	1.46E-03	1.46E-03	1.82E-03
Ag115	0.3	1.24E-03	6.54E-04	6.06E-04	6.06E-04
Sb130	0.3	1.24E-03	1.17E-03	1.20E-03	1.20E-03
Rh108m	0.3	1.20E-03	5.01E-04	1.20E-03	4.98E-04
Sb132m	0.3	1.13E-03	1.13E-03	1.12E-03	1.12E-03
La141	0.3	1.13E-03	1.13E-03	1.13E-03	1.13E-03
Te133m	0.3	1.10E-03	1.34E-03	1.36E-03	1.36E-03
Sn129m	0.3	1.06E-03	1.01E-03	8.36E-04	8.36E-04
Te134	0.3	1.02E-03	1.01E-03	1.02E-03	1.02E-03
Sb128m	0.3	1.00E-03	9.94E-04	4.26E-04	4.26E-04
Nb99m	0.3	9.90E-04	9.71E-04	1.16E-03	1.16E-03
Rb90m	0.3	9.54E-04	1.40E-03	1.12E-03	1.11E-03
Rb90	0.2	8.24E-04	7.84E-04	7.54E-04	7.59E-04
Kr87	0.2	8.23E-04	8.22E-04	8.24E-04	8.24E-04
Kr89	0.2	8.21E-04	7.72E-04	7.70E-04	7.70E-04
Ru105	0.2	7.98E-04	7.96E-04	8.47E-04	8.47E-04

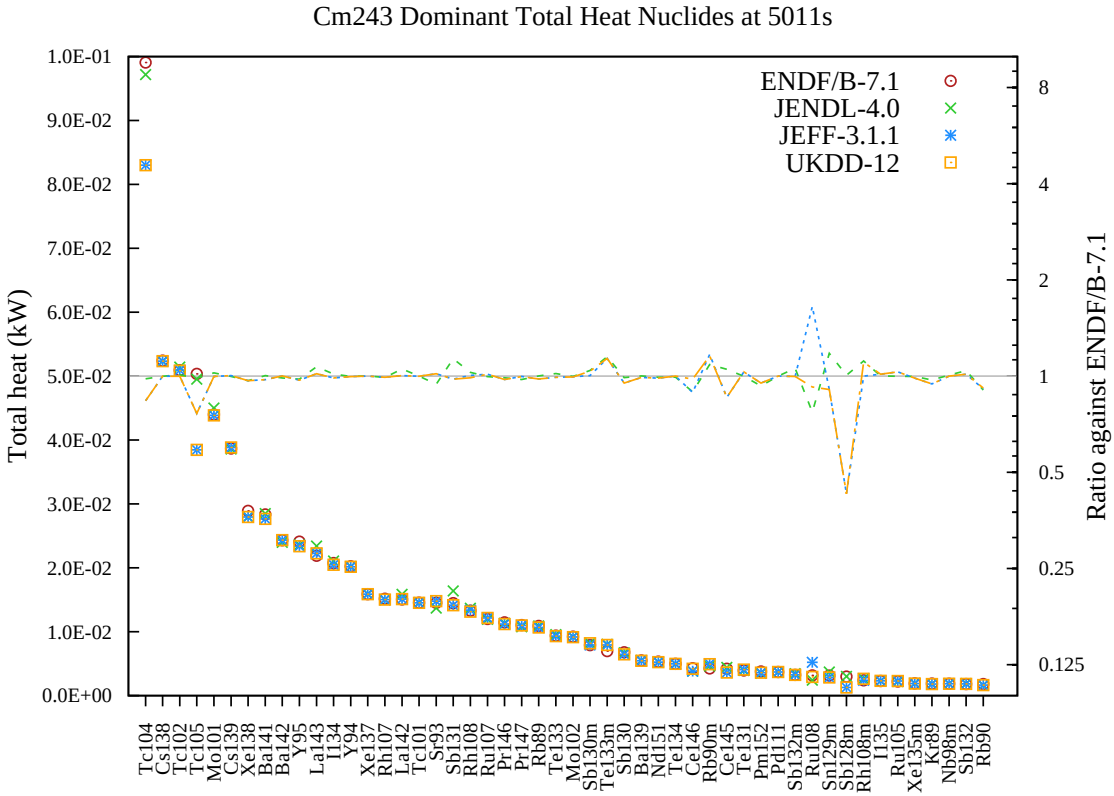

Figure 207: Total heat (in kW) decay data comparison for Cm243 fission pulse after 5011s cooling.

Table 207: Total heat (in kW) decay data comparison for Cm243 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	12.4	9.91E-02	9.72E-02	8.30E-02	8.30E-02
Cs138	6.6	5.24E-02	5.23E-02	5.23E-02	5.23E-02
Tc102	6.4	5.09E-02	5.14E-02	5.09E-02	5.09E-02
Tc105	6.3	5.03E-02	4.95E-02	3.85E-02	3.85E-02
Mo101	5.5	4.40E-02	4.50E-02	4.39E-02	4.39E-02
Cs139	4.8	3.87E-02	3.86E-02	3.88E-02	3.88E-02
Xe138	3.6	2.89E-02	2.79E-02	2.79E-02	2.79E-02
Ba141	3.6	2.84E-02	2.85E-02	2.77E-02	2.77E-02
Ba142	3.0	2.43E-02	2.40E-02	2.43E-02	2.43E-02
Y95	3.0	2.41E-02	2.36E-02	2.34E-02	2.34E-02
La143	2.7	2.19E-02	2.34E-02	2.23E-02	2.23E-02
I134	2.6	2.07E-02	2.11E-02	2.05E-02	2.05E-02
Y94	2.5	2.02E-02	2.02E-02	2.02E-02	2.02E-02
Xe137	2.0	1.59E-02	1.59E-02	1.59E-02	1.59E-02
Rh107	1.9	1.51E-02	1.50E-02	1.50E-02	1.50E-02
La142	1.9	1.50E-02	1.58E-02	1.51E-02	1.51E-02
Tc101	1.8	1.45E-02	1.45E-02	1.45E-02	1.45E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sr93	1.8	1.45E-02	1.37E-02	1.48E-02	1.48E-02
Sb131	1.8	1.45E-02	1.64E-02	1.41E-02	1.41E-02
Rh108	1.7	1.33E-02	1.37E-02	1.34E-02	1.32E-02
Ru107	1.5	1.20E-02	1.19E-02	1.21E-02	1.21E-02
Pr146	1.4	1.15E-02	1.13E-02	1.12E-02	1.12E-02
Pr147	1.4	1.10E-02	1.08E-02	1.10E-02	1.10E-02
Rb89	1.4	1.09E-02	1.09E-02	1.07E-02	1.07E-02
Te133	1.2	9.38E-03	9.56E-03	9.31E-03	9.31E-03
Mo102	1.2	9.22E-03	9.19E-03	9.17E-03	9.16E-03
Sb130m	1.0	7.89E-03	8.22E-03	7.92E-03	8.18E-03
Te133m	0.9	6.98E-03	8.02E-03	7.92E-03	7.92E-03
Sb130	0.9	6.79E-03	6.71E-03	6.45E-03	6.45E-03
Ba139	0.7	5.50E-03	5.50E-03	5.44E-03	5.44E-03
Nd151	0.7	5.31E-03	5.27E-03	5.23E-03	5.23E-03
Te134	0.6	4.98E-03	4.95E-03	4.98E-03	4.98E-03
Ce146	0.5	4.29E-03	3.83E-03	3.82E-03	4.20E-03
Rb90m	0.5	4.26E-03	4.64E-03	4.98E-03	4.93E-03
Ce145	0.5	4.21E-03	4.42E-03	3.61E-03	3.61E-03
Te131	0.5	3.94E-03	3.93E-03	4.06E-03	4.06E-03
Pm152	0.5	3.77E-03	3.52E-03	3.59E-03	3.59E-03
Pd111	0.5	3.69E-03	3.69E-03	3.69E-03	3.69E-03
Sb132m	0.4	3.25E-03	3.44E-03	3.24E-03	3.24E-03
Ru108	0.4	3.15E-03	2.43E-03	5.20E-03	2.92E-03
Sn129m	0.4	3.15E-03	3.71E-03	2.86E-03	2.86E-03
Sb128m	0.4	2.97E-03	2.99E-03	1.27E-03	1.27E-03
Rh108m	0.3	2.39E-03	2.67E-03	2.39E-03	2.64E-03
I135	0.3	2.29E-03	2.29E-03	2.32E-03	2.32E-03
Ru105	0.3	2.22E-03	2.22E-03	2.29E-03	2.29E-03
Xe135m	0.2	1.93E-03	1.92E-03	1.90E-03	1.90E-03
Kr89	0.2	1.90E-03	1.85E-03	1.80E-03	1.80E-03
Nb98m	0.2	1.85E-03	1.87E-03	1.85E-03	1.85E-03
Sb132	0.2	1.82E-03	1.89E-03	1.85E-03	1.85E-03
Rb90	0.2	1.81E-03	1.63E-03	1.65E-03	1.66E-03

14.5 10000s after pulse

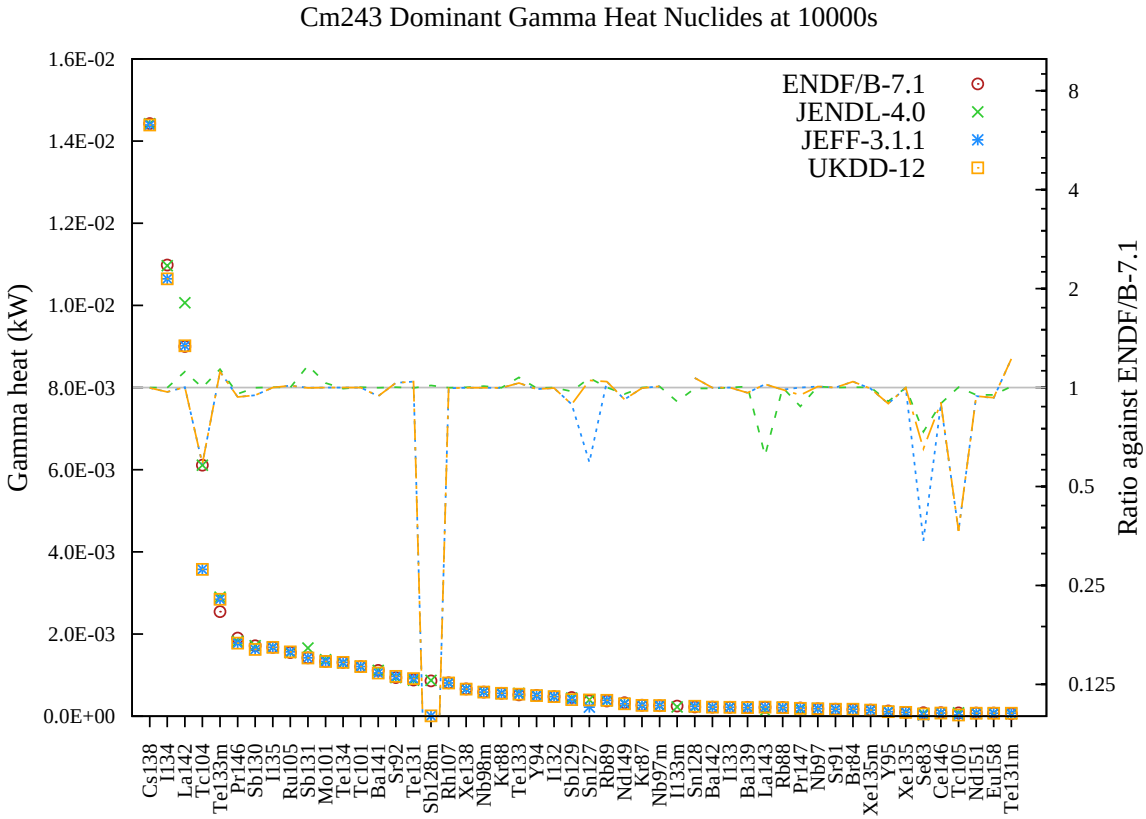

Figure 208: Gamma heat (in kW) decay data comparison for Cm243 fission pulse after 10000s cooling.

Table 208: Gamma heat (in kW) decay data comparison for Cm243 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	20.8	1.44E-02	1.44E-02	1.44E-02	1.44E-02
I134	15.8	1.10E-02	1.10E-02	1.06E-02	1.06E-02
La142	13.0	9.00E-03	1.01E-02	9.02E-03	9.02E-03
Tc104	8.8	6.11E-03	6.11E-03	3.58E-03	3.58E-03
Te133m	3.7	2.55E-03	2.90E-03	2.85E-03	2.85E-03
Pr146	2.7	1.90E-03	1.82E-03	1.78E-03	1.78E-03
Sb130	2.5	1.72E-03	1.71E-03	1.63E-03	1.63E-03
I135	2.4	1.68E-03	1.68E-03	1.68E-03	1.68E-03
Ru105	2.2	1.55E-03	1.55E-03	1.57E-03	1.57E-03
Sb131	2.0	1.42E-03	1.66E-03	1.42E-03	1.42E-03
Mo101	1.9	1.33E-03	1.37E-03	1.33E-03	1.33E-03
Te134	1.9	1.31E-03	1.30E-03	1.31E-03	1.31E-03
Tc101	1.7	1.21E-03	1.21E-03	1.21E-03	1.21E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Ba141	1.6	1.11E-03	1.11E-03	1.05E-03	1.05E-03
Sr92	1.4	9.40E-04	9.42E-04	9.71E-04	9.71E-04
Te131	1.3	8.79E-04	8.77E-04	9.17E-04	9.17E-04
Sb128m	1.2	8.58E-04	8.71E-04	9.83E-06	9.83E-06
Rh107	1.2	8.13E-04	8.13E-04	8.10E-04	8.10E-04
Xe138	1.0	6.63E-04	6.63E-04	6.62E-04	6.62E-04
Nb98m	0.8	5.88E-04	5.94E-04	5.88E-04	5.88E-04
Kr88	0.8	5.58E-04	5.57E-04	5.56E-04	5.56E-04
Te133	0.7	5.20E-04	5.59E-04	5.37E-04	5.37E-04
Y94	0.7	5.07E-04	5.05E-04	5.01E-04	5.01E-04
I132	0.7	4.79E-04	4.78E-04	4.77E-04	4.77E-04
Sb129	0.7	4.56E-04	4.43E-04	4.05E-04	4.05E-04
Sn127	0.5	3.75E-04	4.02E-04	2.22E-04	3.94E-04
Rb89	0.5	3.72E-04	3.73E-04	3.88E-04	3.88E-04
Nd149	0.5	3.27E-04	3.12E-04	3.01E-04	3.01E-04
Kr87	0.4	2.67E-04	2.67E-04	2.66E-04	2.66E-04
Nb97m	0.4	2.56E-04	2.58E-04	2.58E-04	2.58E-04
I133m	0.4	2.48E-04	—	—	—
Sn128	0.3	2.26E-04	2.25E-04	2.42E-04	2.42E-04
Ba142	0.3	2.22E-04	2.21E-04	2.22E-04	2.22E-04
I133	0.3	2.19E-04	2.19E-04	2.19E-04	2.19E-04
Ba139	0.3	2.16E-04	2.17E-04	2.08E-04	2.08E-04
La143	0.3	2.15E-04	1.34E-04	2.20E-04	2.20E-04
Rb88	0.3	2.13E-04	2.13E-04	2.10E-04	2.10E-04
Pr147	0.3	2.01E-04	1.76E-04	2.01E-04	1.91E-04
Nb97	0.3	1.80E-04	1.81E-04	1.81E-04	1.81E-04
Sr91	0.2	1.72E-04	1.72E-04	1.72E-04	1.72E-04
Br84	0.2	1.64E-04	1.64E-04	1.71E-04	1.71E-04
Xe135m	0.2	1.50E-04	1.50E-04	1.49E-04	1.49E-04
Y95	0.2	1.26E-04	1.14E-04	1.12E-04	1.12E-04
Xe135	0.1	9.36E-05	9.35E-05	9.34E-05	9.34E-05
Se83	0.1	8.72E-05	6.40E-05	2.99E-05	5.68E-05
Ce146	0.1	8.58E-05	7.68E-05	7.65E-05	7.72E-05
Tc105	0.1	7.97E-05	7.99E-05	2.92E-05	2.92E-05
Nd151	0.1	7.77E-05	7.38E-05	7.32E-05	7.32E-05
Eu158	0.1	7.64E-05	7.26E-05	7.10E-05	7.12E-05
Te131m	0.1	5.97E-05	6.02E-05	7.30E-05	7.30E-05

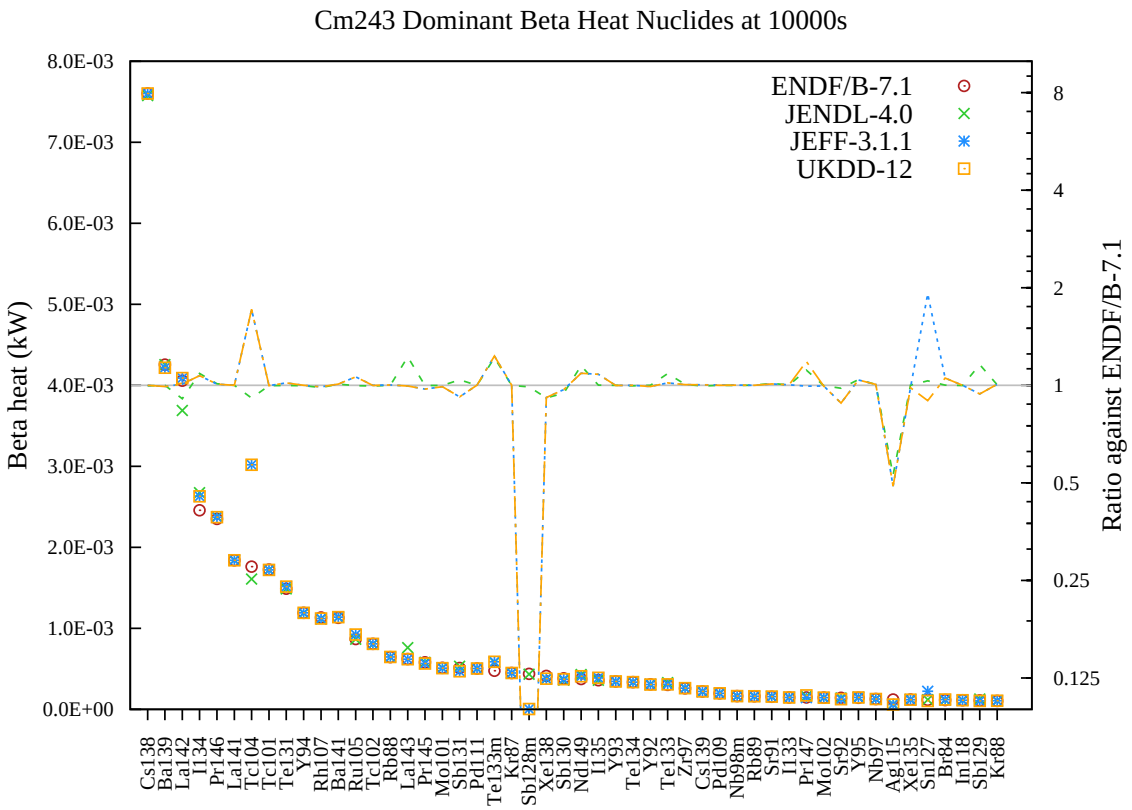

Figure 209: Beta heat (in kW) decay data comparison for Cm243 fission pulse after 10000s cooling.

Table 209: Beta heat (in kW) decay data comparison for Cm243 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	17.0	7.60E-03	7.58E-03	7.60E-03	7.60E-03
Ba139	9.5	4.25E-03	4.26E-03	4.22E-03	4.22E-03
La142	9.1	4.06E-03	3.69E-03	4.09E-03	4.09E-03
I134	5.5	2.46E-03	2.67E-03	2.63E-03	2.63E-03
Pr146	5.3	2.35E-03	2.38E-03	2.37E-03	2.37E-03
La141	4.1	1.84E-03	1.84E-03	1.84E-03	1.84E-03
Tc104	3.9	1.76E-03	1.61E-03	3.02E-03	3.02E-03
Tc101	3.9	1.73E-03	1.72E-03	1.72E-03	1.72E-03
Te131	3.3	1.49E-03	1.49E-03	1.52E-03	1.52E-03
Y94	2.7	1.19E-03	1.19E-03	1.19E-03	1.19E-03
Rh107	2.5	1.13E-03	1.12E-03	1.12E-03	1.12E-03
Ba141	2.5	1.13E-03	1.14E-03	1.14E-03	1.14E-03
Ru105	1.9	8.68E-04	8.66E-04	9.22E-04	9.22E-04
Tc102	1.8	8.09E-04	8.05E-04	8.09E-04	8.08E-04
Rb88	1.4	6.46E-04	6.46E-04	6.47E-04	6.47E-04
La143	1.4	6.22E-04	7.62E-04	6.19E-04	6.19E-04

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Pr145	1.3	5.81E-04	5.81E-04	5.66E-04	5.66E-04
Mo101	1.1	5.12E-04	5.12E-04	5.08E-04	5.08E-04
Sb131	1.1	5.11E-04	5.32E-04	4.71E-04	4.71E-04
Pd111	1.1	5.04E-04	5.04E-04	5.04E-04	5.04E-04
Te133m	1.1	4.77E-04	5.80E-04	5.87E-04	5.87E-04
Kr87	1.0	4.49E-04	4.48E-04	4.49E-04	4.49E-04
Sb128m	1.0	4.38E-04	4.33E-04	4.94E-06	4.94E-06
Xe138	0.9	4.12E-04	3.77E-04	3.78E-04	3.78E-04
Sb130	0.9	3.83E-04	3.62E-04	3.71E-04	3.71E-04
Nd149	0.8	3.74E-04	4.31E-04	4.08E-04	4.08E-04
I135	0.8	3.60E-04	3.60E-04	3.89E-04	3.89E-04
Y93	0.8	3.44E-04	3.44E-04	3.44E-04	3.44E-04
Te134	0.8	3.35E-04	3.34E-04	3.35E-04	3.35E-04
Y92	0.7	3.09E-04	3.09E-04	3.06E-04	3.06E-04
Te133	0.7	3.03E-04	3.29E-04	3.08E-04	3.08E-04
Zr97	0.6	2.60E-04	2.62E-04	2.62E-04	2.62E-04
Cs139	0.5	2.21E-04	2.20E-04	2.21E-04	2.21E-04
Pd109	0.4	1.98E-04	1.98E-04	1.99E-04	1.98E-04
Nb98m	0.4	1.63E-04	1.63E-04	1.63E-04	1.63E-04
Rb89	0.4	1.61E-04	1.61E-04	1.61E-04	1.61E-04
Sr91	0.3	1.56E-04	1.58E-04	1.58E-04	1.58E-04
I133	0.3	1.46E-04	1.46E-04	1.46E-04	1.46E-04
Pr147	0.3	1.46E-04	1.62E-04	1.45E-04	1.73E-04
Mo102	0.3	1.45E-04	1.44E-04	1.44E-04	1.44E-04
Sr92	0.3	1.43E-04	1.41E-04	1.26E-04	1.26E-04
Y95	0.3	1.42E-04	1.48E-04	1.48E-04	1.48E-04
Nb97	0.3	1.27E-04	1.28E-04	1.28E-04	1.28E-04
Ag115	0.3	1.22E-04	6.44E-05	5.97E-05	5.97E-05
Xe135	0.3	1.21E-04	1.21E-04	1.19E-04	1.19E-04
Sn127	0.3	1.16E-04	1.20E-04	2.22E-04	1.04E-04
Br84	0.3	1.15E-04	1.15E-04	1.21E-04	1.21E-04
In118	0.3	1.12E-04	1.12E-04	1.12E-04	1.12E-04
Sb129	0.2	1.11E-04	1.28E-04	1.04E-04	1.04E-04
Kr88	0.2	1.05E-04	1.06E-04	1.06E-04	1.06E-04

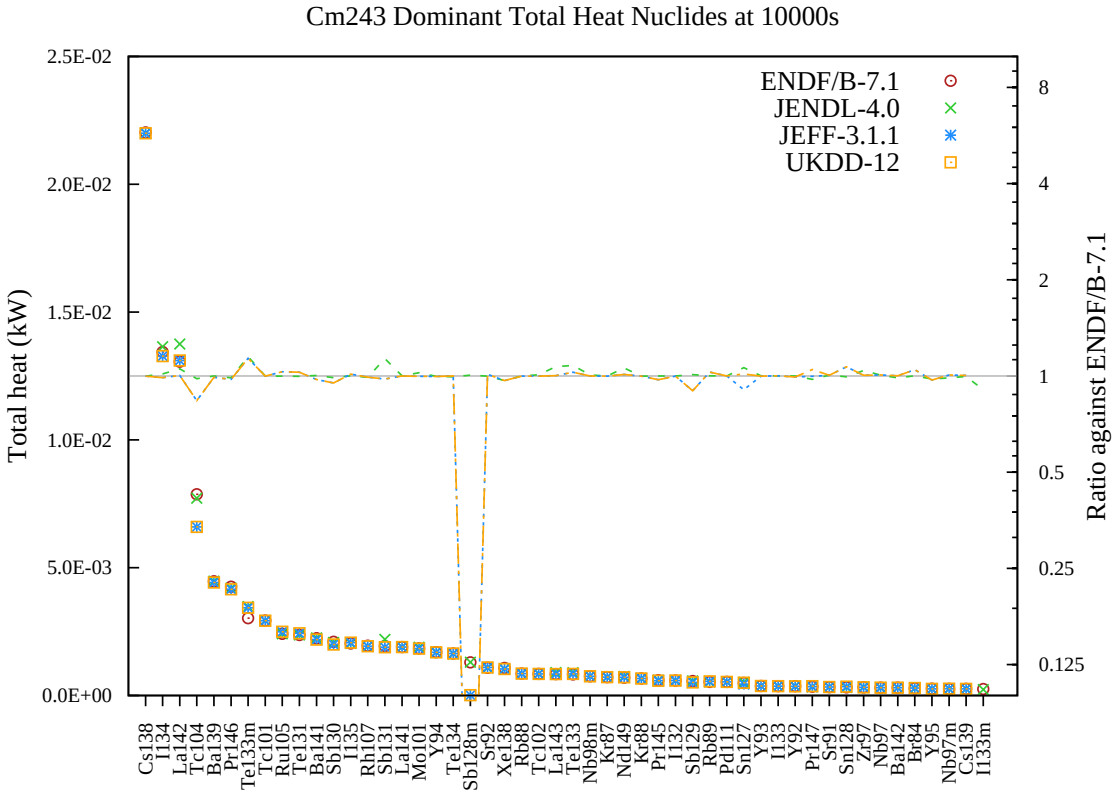

Figure 210: Total heat (in kW) decay data comparison for Cm243 fission pulse after 10000s cooling.

Table 210: Total heat (in kW) decay data comparison for Cm243 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	19.3	2.20E-02	2.20E-02	2.20E-02	2.20E-02
I134	11.8	1.34E-02	1.36E-02	1.33E-02	1.33E-02
La142	11.4	1.31E-02	1.38E-02	1.31E-02	1.31E-02
Tc104	6.9	7.87E-03	7.72E-03	6.60E-03	6.60E-03
Ba139	3.9	4.47E-03	4.47E-03	4.42E-03	4.42E-03
Pr146	3.7	4.25E-03	4.20E-03	4.15E-03	4.15E-03
Te133m	2.6	3.02E-03	3.48E-03	3.43E-03	3.43E-03
Tc101	2.6	2.93E-03	2.93E-03	2.93E-03	2.93E-03
Ru105	2.1	2.42E-03	2.41E-03	2.49E-03	2.49E-03
Te131	2.1	2.37E-03	2.36E-03	2.43E-03	2.43E-03
Ba141	2.0	2.24E-03	2.25E-03	2.19E-03	2.19E-03
Sb130	1.8	2.10E-03	2.08E-03	2.00E-03	2.00E-03
I135	1.8	2.04E-03	2.04E-03	2.06E-03	2.06E-03
Rh107	1.7	1.95E-03	1.93E-03	1.93E-03	1.93E-03
Sb131	1.7	1.93E-03	2.19E-03	1.89E-03	1.89E-03
La141	1.7	1.89E-03	1.89E-03	1.89E-03	1.89E-03
Mo101	1.6	1.84E-03	1.89E-03	1.84E-03	1.84E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y94	1.5	1.70E-03	1.69E-03	1.69E-03	1.69E-03
Te134	1.4	1.64E-03	1.63E-03	1.64E-03	1.64E-03
Sb128m	1.1	1.30E-03	1.30E-03	1.48E-05	1.48E-05
Sr92	0.9	1.08E-03	1.08E-03	1.10E-03	1.10E-03
Xe138	0.9	1.07E-03	1.04E-03	1.04E-03	1.04E-03
Rb88	0.8	8.59E-04	8.59E-04	8.57E-04	8.57E-04
Tc102	0.7	8.43E-04	8.51E-04	8.43E-04	8.42E-04
La143	0.7	8.37E-04	8.95E-04	8.40E-04	8.40E-04
Te133	0.7	8.23E-04	8.88E-04	8.45E-04	8.45E-04
Nb98m	0.7	7.51E-04	7.57E-04	7.51E-04	7.51E-04
Kr87	0.6	7.15E-04	7.15E-04	7.15E-04	7.15E-04
Nd149	0.6	7.01E-04	7.42E-04	7.08E-04	7.08E-04
Kr88	0.6	6.63E-04	6.62E-04	6.62E-04	6.62E-04
Pr145	0.5	5.97E-04	5.97E-04	5.82E-04	5.82E-04
I132	0.5	5.83E-04	5.83E-04	5.82E-04	5.82E-04
Sb129	0.5	5.66E-04	5.72E-04	5.09E-04	5.09E-04
Rb89	0.5	5.33E-04	5.34E-04	5.49E-04	5.49E-04
Pd111	0.5	5.32E-04	5.32E-04	5.32E-04	5.32E-04
Sn127	0.4	4.91E-04	5.21E-04	4.45E-04	4.98E-04
Y93	0.3	3.72E-04	3.72E-04	3.72E-04	3.72E-04
I133	0.3	3.65E-04	3.65E-04	3.65E-04	3.65E-04
Y92	0.3	3.62E-04	3.62E-04	3.60E-04	3.60E-04
Pr147	0.3	3.47E-04	3.39E-04	3.46E-04	3.64E-04
Sr91	0.3	3.28E-04	3.31E-04	3.30E-04	3.30E-04
Sn128	0.3	3.21E-04	3.19E-04	3.43E-04	3.43E-04
Zr97	0.3	3.19E-04	3.32E-04	3.21E-04	3.21E-04
Nb97	0.3	3.07E-04	3.09E-04	3.09E-04	3.09E-04
Ba142	0.3	3.07E-04	3.03E-04	3.07E-04	3.07E-04
Br84	0.2	2.78E-04	2.79E-04	2.91E-04	2.91E-04
Y95	0.2	2.68E-04	2.62E-04	2.60E-04	2.60E-04
Nb97m	0.2	2.61E-04	2.58E-04	2.63E-04	2.63E-04
Cs139	0.2	2.61E-04	2.60E-04	2.62E-04	2.62E-04
I133m	0.2	2.55E-04	2.31E-04	—	—

15 Decay data comparison for ^{245}Cm 0.0253 eV pulse decay heat

15.1 10s after pulse

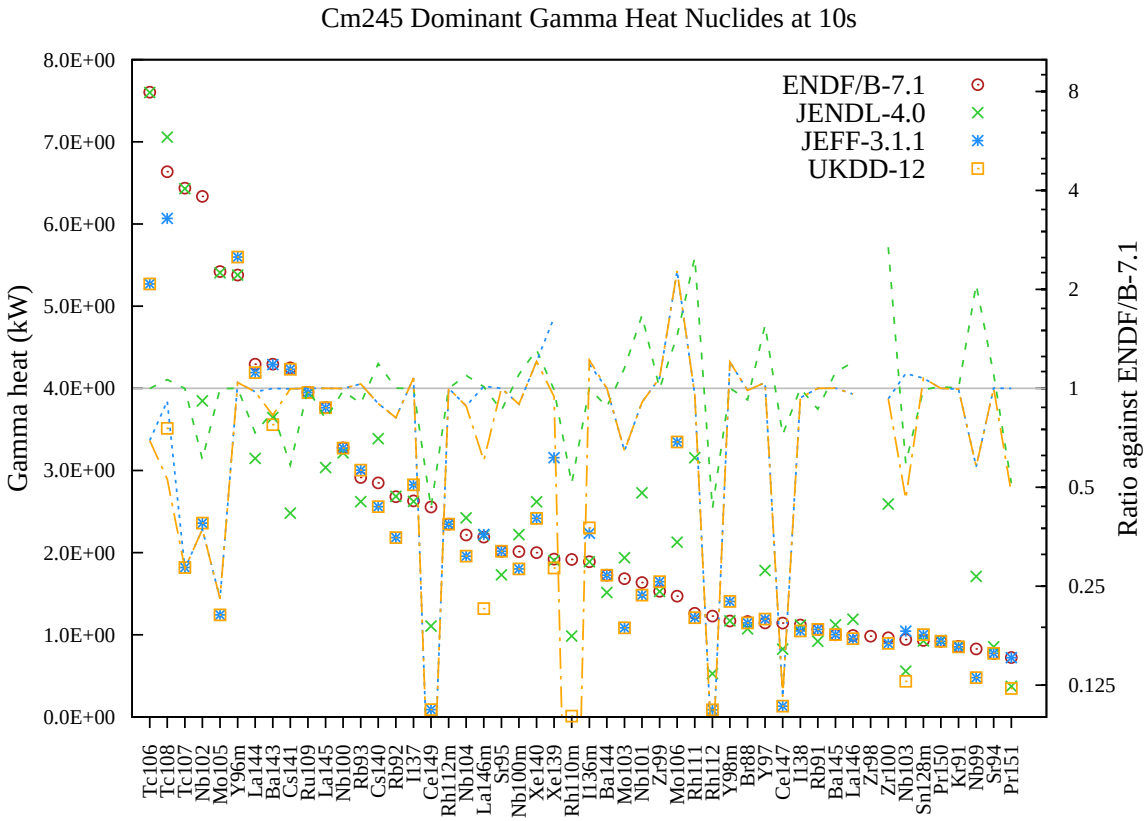

Figure 211: Gamma heat (in kW) decay data comparison for Cm245 fission pulse after 10s cooling.

Table 211: Gamma heat (in kW) decay data comparison for Cm245 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	5.3	7.60E+00	7.60E+00	5.27E+00	5.27E+00
Tc108	4.6	6.64E+00	7.06E+00	6.07E+00	3.51E+00
Tc107	4.5	6.44E+00	6.43E+00	1.82E+00	1.82E+00
Nb102	4.4	6.34E+00	3.85E+00	2.36E+00	2.36E+00
Mo105	3.8	5.42E+00	5.41E+00	1.24E+00	1.24E+00
Y96m	3.7	5.38E+00	5.38E+00	5.60E+00	5.60E+00
La144	3.0	4.29E+00	3.15E+00	4.19E+00	4.19E+00
Ba143	3.0	4.29E+00	3.65E+00	4.29E+00	3.56E+00
Cs141	2.9	4.25E+00	2.48E+00	4.23E+00	4.23E+00

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Ru109	2.7	3.95E+00	3.94E+00	3.95E+00	3.95E+00
La145	2.6	3.76E+00	3.04E+00	3.76E+00	3.76E+00
Nb100	2.3	3.27E+00	3.21E+00	3.27E+00	3.27E+00
Rb93	2.0	2.91E+00	2.62E+00	3.00E+00	3.00E+00
Cs140	2.0	2.85E+00	3.39E+00	2.56E+00	2.56E+00
Rb92	1.9	2.68E+00	2.68E+00	2.18E+00	2.18E+00
I137	1.8	2.63E+00	2.62E+00	2.83E+00	2.83E+00
Ce149	1.8	2.56E+00	1.11E+00	8.95E-02	8.95E-02
Rh112m	1.6	2.35E+00	2.35E+00	2.35E+00	2.35E+00
Nb104	1.5	2.21E+00	2.42E+00	1.96E+00	1.96E+00
La146m	1.5	2.19E+00	2.21E+00	2.22E+00	1.32E+00
Sr95	1.4	2.02E+00	1.73E+00	2.02E+00	2.02E+00
Nb100m	1.4	2.01E+00	2.22E+00	1.80E+00	1.80E+00
Xe140	1.4	2.00E+00	2.62E+00	2.42E+00	2.42E+00
Xe139	1.3	1.92E+00	1.90E+00	3.16E+00	1.81E+00
Rh110m	1.3	1.92E+00	—	—	1.02E-02
I136m	1.3	1.89E+00	1.89E+00	2.24E+00	2.30E+00
Ba144	1.2	1.73E+00	1.52E+00	1.73E+00	1.73E+00
Mo103	1.2	1.68E+00	1.94E+00	1.09E+00	1.09E+00
Nb101	1.1	1.64E+00	2.73E+00	1.48E+00	1.48E+00
Zr99	1.1	1.53E+00	1.53E+00	1.65E+00	1.65E+00
Mo106	1.0	1.47E+00	2.13E+00	3.35E+00	3.35E+00
Rh111	0.9	1.26E+00	3.16E+00	1.21E+00	1.21E+00
Rh112	0.8	1.23E+00	5.28E-01	8.79E-02	8.79E-02
Y98m	0.8	1.17E+00	1.17E+00	1.41E+00	1.41E+00
Br88	0.8	1.16E+00	1.07E+00	1.15E+00	1.15E+00
Y97	0.8	1.15E+00	1.78E+00	1.19E+00	1.19E+00
Ce147	0.8	1.14E+00	8.26E-01	1.32E-01	1.32E-01
I138	0.8	1.12E+00	1.12E+00	1.05E+00	1.05E+00
Rb91	0.7	1.07E+00	9.21E-01	1.07E+00	1.07E+00
Ba145	0.7	1.00E+00	1.12E+00	1.00E+00	1.00E+00
La146	0.7	9.92E-01	1.19E+00	9.53E-01	9.53E-01
Zr98	0.7	9.83E-01	—	—	—
Zr100	0.7	9.64E-01	2.59E+00	8.97E-01	8.97E-01
Nb103	0.7	9.42E-01	5.57E-01	1.04E+00	4.34E-01
Sn128m	0.6	9.33E-01	9.25E-01	1.00E+00	1.00E+00
Pr150	0.6	9.22E-01	9.31E-01	9.22E-01	9.22E-01
Kr91	0.6	8.59E-01	8.60E-01	8.54E-01	8.54E-01
Nb99	0.6	8.28E-01	1.71E+00	4.78E-01	4.78E-01
Sr94	0.5	7.73E-01	8.53E-01	7.74E-01	7.74E-01
Pr151	0.5	7.23E-01	3.72E-01	7.22E-01	3.47E-01

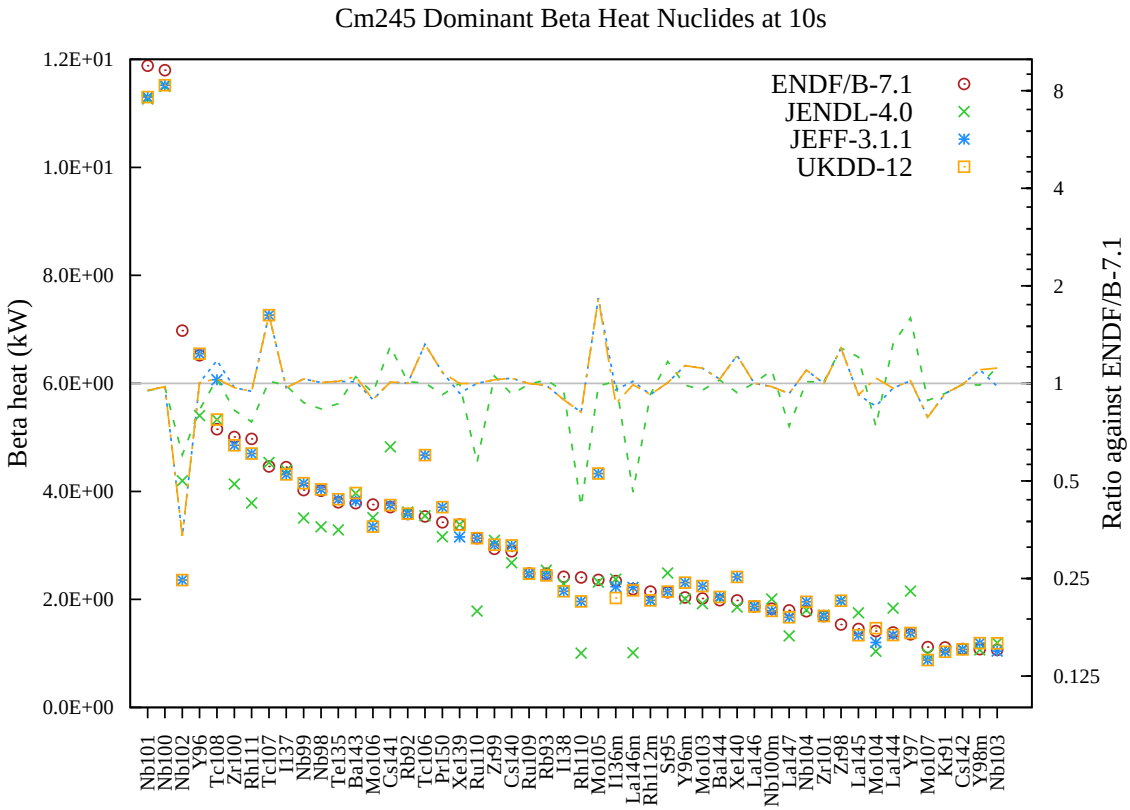

Figure 212: Beta heat (in kW) decay data comparison for Cm245 fission pulse after 10s cooling.

Table 212: Beta heat (in kW) decay data comparison for Cm245 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb101	6.4	1.19E+01	1.13E+01	1.13E+01	1.13E+01
Nb100	6.3	1.18E+01	1.15E+01	1.15E+01	1.15E+01
Nb102	3.8	6.98E+00	4.20E+00	2.36E+00	2.36E+00
Y96	3.5	6.52E+00	5.40E+00	6.55E+00	6.55E+00
Tc108	2.8	5.15E+00	5.33E+00	6.07E+00	5.33E+00
Zr100	2.7	5.01E+00	4.14E+00	4.85E+00	4.85E+00
Rh111	2.7	4.97E+00	3.78E+00	4.70E+00	4.70E+00
Tc107	2.4	4.46E+00	4.54E+00	7.26E+00	7.26E+00
I137	2.4	4.45E+00	4.39E+00	4.31E+00	4.31E+00
Nb99	2.2	4.02E+00	3.51E+00	4.15E+00	4.15E+00
Nb98	2.2	4.01E+00	3.35E+00	4.04E+00	4.04E+00
Te135	2.0	3.80E+00	3.29E+00	3.86E+00	3.86E+00
Ba143	2.0	3.78E+00	3.96E+00	3.82E+00	3.97E+00
Mo106	2.0	3.76E+00	3.51E+00	3.35E+00	3.35E+00
Cs141	2.0	3.71E+00	4.83E+00	3.75E+00	3.75E+00
Rb92	1.9	3.58E+00	3.62E+00	3.59E+00	3.59E+00

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	1.9	3.54E+00	3.55E+00	4.67E+00	4.67E+00
Pr150	1.8	3.43E+00	3.16E+00	3.71E+00	3.71E+00
Xe139	1.8	3.38E+00	3.39E+00	3.16E+00	3.38E+00
Ru110	1.7	3.13E+00	1.78E+00	3.13E+00	3.13E+00
Zr99	1.6	2.94E+00	3.09E+00	3.01E+00	3.01E+00
Cs140	1.6	2.89E+00	2.68E+00	3.00E+00	3.00E+00
Ru109	1.3	2.48E+00	2.47E+00	2.48E+00	2.48E+00
Rb93	1.3	2.48E+00	2.54E+00	2.44E+00	2.44E+00
I138	1.3	2.42E+00	2.29E+00	2.15E+00	2.15E+00
Rh110	1.3	2.41E+00	1.00E+00	1.96E+00	1.96E+00
Mo105	1.3	2.36E+00	2.32E+00	4.33E+00	4.33E+00
I136m	1.3	2.34E+00	2.37E+00	2.24E+00	2.03E+00
La146m	1.2	2.19E+00	1.01E+00	2.22E+00	2.17E+00
Rh112m	1.2	2.14E+00	1.98E+00	1.98E+00	1.98E+00
Sr95	1.1	2.13E+00	2.49E+00	2.14E+00	2.14E+00
Y96m	1.1	2.04E+00	2.01E+00	2.31E+00	2.31E+00
Mo103	1.1	2.02E+00	1.92E+00	2.25E+00	2.25E+00
Ba144	1.1	1.98E+00	2.03E+00	2.05E+00	2.05E+00
Xe140	1.1	1.98E+00	1.86E+00	2.42E+00	2.42E+00
La146	1.0	1.87E+00	1.87E+00	1.87E+00	1.87E+00
Nb100m	1.0	1.83E+00	2.01E+00	1.79E+00	1.79E+00
La147	1.0	1.80E+00	1.32E+00	1.67E+00	1.67E+00
Nb104	1.0	1.78E+00	1.80E+00	1.96E+00	1.96E+00
Zr101	0.9	1.69E+00	1.71E+00	1.69E+00	1.69E+00
Zr98	0.8	1.54E+00	1.97E+00	1.97E+00	1.97E+00
La145	0.8	1.45E+00	1.75E+00	1.34E+00	1.34E+00
Mo104	0.8	1.41E+00	1.04E+00	1.20E+00	1.47E+00
La144	0.7	1.39E+00	1.84E+00	1.34E+00	1.34E+00
Y97	0.7	1.35E+00	2.15E+00	1.38E+00	1.38E+00
Mo107	0.6	1.12E+00	9.91E-01	8.78E-01	8.78E-01
Kr91	0.6	1.11E+00	1.03E+00	1.03E+00	1.03E+00
Cs142	0.6	1.08E+00	1.07E+00	1.07E+00	1.07E+00
Y98m	0.6	1.08E+00	1.07E+00	1.19E+00	1.19E+00
Nb103	0.6	1.07E+00	1.20E+00	1.04E+00	1.19E+00

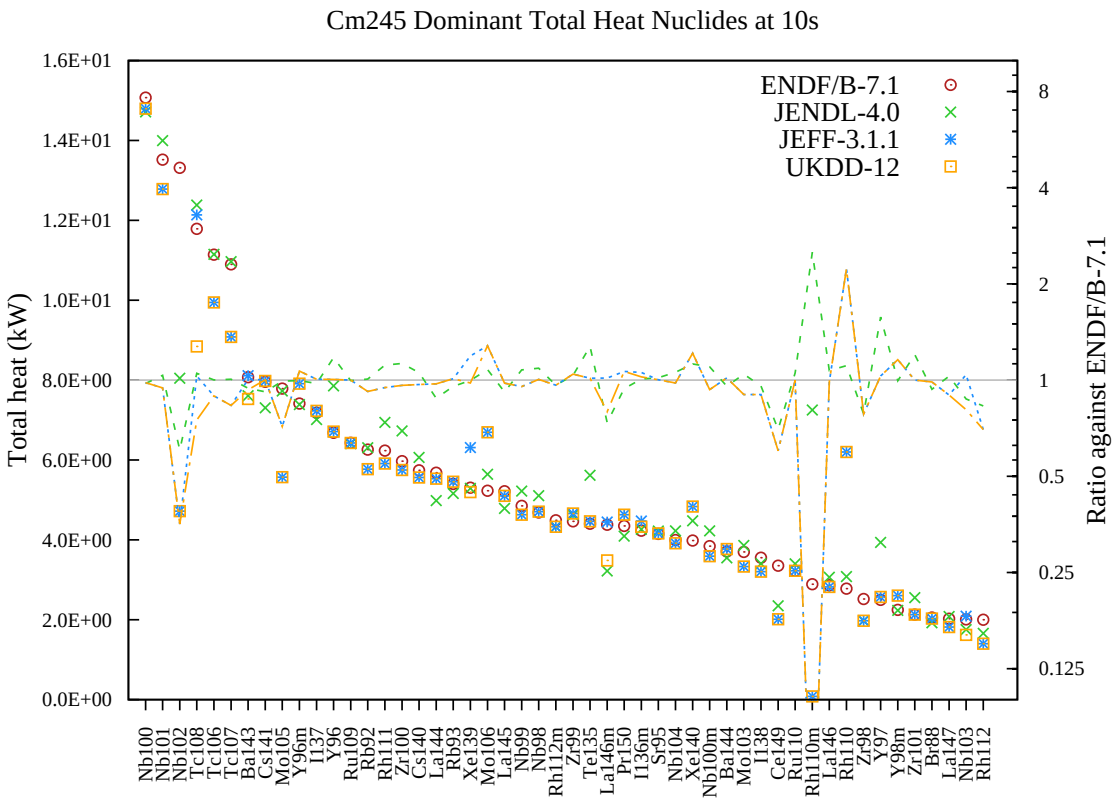

Figure 213: Total heat (in kW) decay data comparison for Cm245 fission pulse after 10s cooling.

Table 213: Total heat (in kW) decay data comparison for Cm245 fission pulse after 10s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Nb100	4.6	1.51E+01	1.47E+01	1.48E+01	1.48E+01
Nb101	4.1	1.35E+01	1.40E+01	1.28E+01	1.28E+01
Nb102	4.0	1.33E+01	8.04E+00	4.72E+00	4.72E+00
Tc108	3.6	1.18E+01	1.24E+01	1.21E+01	8.84E+00
Tc106	3.4	1.11E+01	1.11E+01	9.94E+00	9.94E+00
Tc107	3.3	1.09E+01	1.10E+01	9.08E+00	9.08E+00
Ba143	2.4	8.07E+00	7.61E+00	8.11E+00	7.53E+00
Cs141	2.4	7.96E+00	7.31E+00	7.98E+00	7.98E+00
Mo105	2.4	7.79E+00	7.73E+00	5.57E+00	5.57E+00
Y96m	2.2	7.41E+00	7.39E+00	7.91E+00	7.91E+00
I137	2.2	7.18E+00	7.01E+00	7.23E+00	7.23E+00
Y96	2.0	6.68E+00	7.85E+00	6.71E+00	6.71E+00
Ru109	1.9	6.43E+00	6.41E+00	6.43E+00	6.43E+00
Rb92	1.9	6.26E+00	6.30E+00	5.77E+00	5.77E+00
Rh111	1.9	6.23E+00	6.94E+00	5.91E+00	5.91E+00
Zr100	1.8	5.97E+00	6.73E+00	5.75E+00	5.75E+00
Cs140	1.7	5.74E+00	6.06E+00	5.56E+00	5.56E+00

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
La144	1.7	5.68E+00	4.98E+00	5.53E+00	5.53E+00
Rb93	1.6	5.40E+00	5.16E+00	5.45E+00	5.45E+00
Xe139	1.6	5.31E+00	5.29E+00	6.31E+00	5.19E+00
Mo106	1.6	5.23E+00	5.64E+00	6.69E+00	6.69E+00
La145	1.6	5.22E+00	4.79E+00	5.10E+00	5.10E+00
Nb99	1.5	4.85E+00	5.22E+00	4.63E+00	4.63E+00
Nb98	1.4	4.68E+00	5.11E+00	4.71E+00	4.71E+00
Rh112m	1.4	4.49E+00	4.33E+00	4.33E+00	4.33E+00
Zr99	1.4	4.47E+00	4.62E+00	4.66E+00	4.66E+00
Te135	1.3	4.40E+00	5.62E+00	4.46E+00	4.46E+00
La146m	1.3	4.38E+00	3.22E+00	4.44E+00	3.49E+00
Pr150	1.3	4.35E+00	4.09E+00	4.63E+00	4.63E+00
I136m	1.3	4.23E+00	4.26E+00	4.47E+00	4.33E+00
Sr95	1.3	4.15E+00	4.22E+00	4.16E+00	4.16E+00
Nb104	1.2	3.99E+00	4.23E+00	3.91E+00	3.91E+00
Xe140	1.2	3.98E+00	4.48E+00	4.83E+00	4.83E+00
Nb100m	1.2	3.84E+00	4.23E+00	3.59E+00	3.59E+00
Ba144	1.1	3.71E+00	3.55E+00	3.77E+00	3.77E+00
Mo103	1.1	3.70E+00	3.86E+00	3.33E+00	3.33E+00
I138	1.1	3.55E+00	3.41E+00	3.20E+00	3.20E+00
Ce149	1.0	3.35E+00	2.35E+00	2.01E+00	2.01E+00
Ru110	1.0	3.23E+00	3.40E+00	3.23E+00	3.23E+00
Rh110m	0.9	2.89E+00	7.25E+00	7.90E-02	7.90E-02
La146	0.9	2.86E+00	3.06E+00	2.82E+00	2.82E+00
Rh110	0.8	2.78E+00	3.08E+00	6.20E+00	6.20E+00
Zr98	0.8	2.52E+00	1.97E+00	1.97E+00	1.97E+00
Y97	0.8	2.50E+00	3.94E+00	2.57E+00	2.57E+00
Y98m	0.7	2.25E+00	2.24E+00	2.60E+00	2.60E+00
Zr101	0.6	2.13E+00	2.55E+00	2.13E+00	2.13E+00
Br88	0.6	2.06E+00	1.92E+00	2.03E+00	2.03E+00
La147	0.6	2.02E+00	2.08E+00	1.82E+00	1.82E+00
Nb103	0.6	2.01E+00	1.75E+00	2.09E+00	1.62E+00
Rh112	0.6	2.00E+00	1.66E+00	1.40E+00	1.40E+00

15.2 100s after pulse

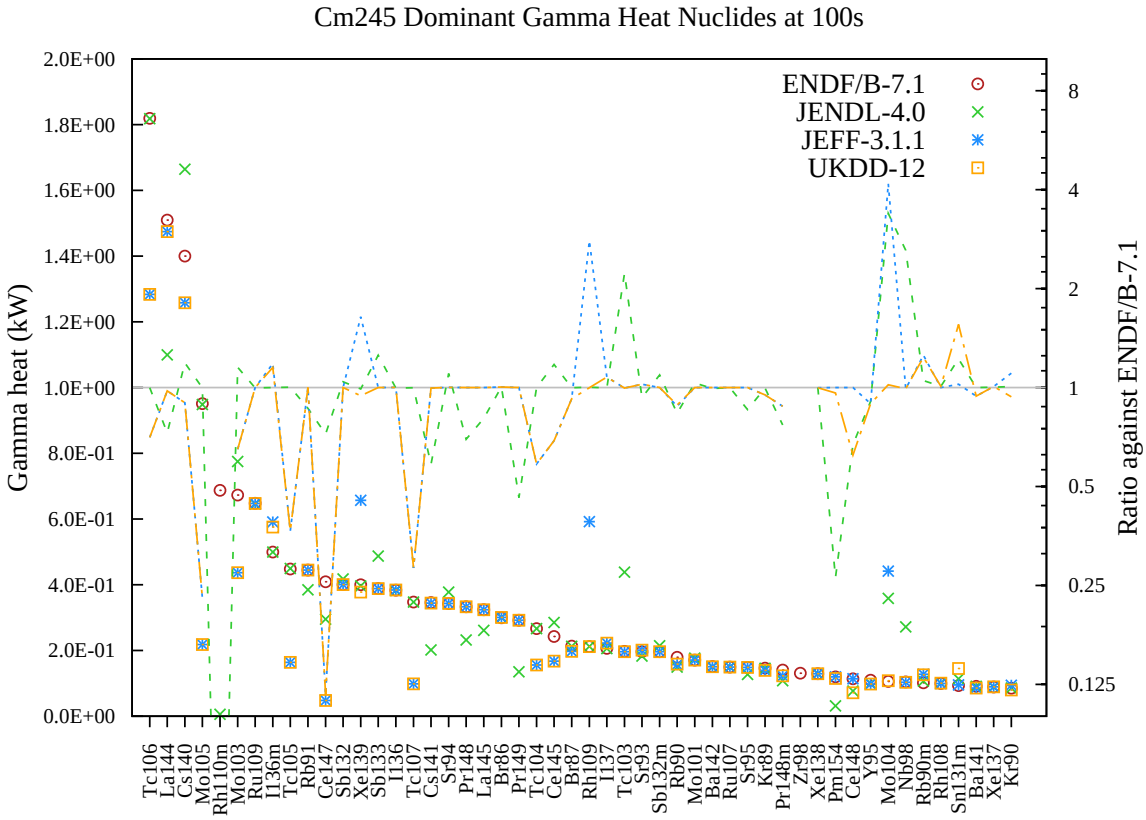

Figure 214: Gamma heat (in kW) decay data comparison for Cm245 fission pulse after 100s cooling.

Table 214: Gamma heat (in kW) decay data comparison for Cm245 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc106	9.4	1.82E+00	1.82E+00	1.28E+00	1.28E+00
La144	7.8	1.51E+00	1.10E+00	1.47E+00	1.47E+00
Cs140	7.2	1.40E+00	1.66E+00	1.26E+00	1.26E+00
Mo105	4.9	9.51E-01	9.48E-01	2.18E-01	2.18E-01
Rh110m	3.6	6.87E-01	—	—	—
Mo103	3.5	6.73E-01	7.75E-01	4.37E-01	4.36E-01
Ru109	3.3	6.48E-01	6.46E-01	6.48E-01	6.48E-01
I136m	2.6	5.00E-01	5.00E-01	5.91E-01	5.75E-01
Tc105	2.3	4.48E-01	4.49E-01	1.64E-01	1.64E-01
Rb91	2.3	4.45E-01	3.85E-01	4.45E-01	4.45E-01
Ce147	2.1	4.09E-01	2.95E-01	4.77E-02	4.77E-02
Sb132	2.1	4.01E-01	4.17E-01	4.01E-01	4.01E-01
Xe139	2.1	4.00E-01	3.96E-01	6.57E-01	3.77E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Sb133	2.0	3.88E-01	4.87E-01	3.88E-01	3.88E-01
I136	2.0	3.84E-01	3.82E-01	3.84E-01	3.84E-01
Tc107	1.8	3.48E-01	3.47E-01	9.82E-02	9.82E-02
Cs141	1.8	3.46E-01	2.02E-01	3.44E-01	3.44E-01
Sr94	1.8	3.43E-01	3.78E-01	3.43E-01	3.43E-01
Pr148	1.7	3.33E-01	2.32E-01	3.33E-01	3.33E-01
La145	1.7	3.24E-01	2.61E-01	3.24E-01	3.24E-01
Br86	1.5	2.99E-01	3.01E-01	3.00E-01	3.00E-01
Pr149	1.5	2.92E-01	1.35E-01	2.92E-01	2.92E-01
Tc104	1.4	2.67E-01	2.67E-01	1.56E-01	1.56E-01
Ce145	1.3	2.43E-01	2.85E-01	1.67E-01	1.67E-01
Br87	1.1	2.13E-01	2.13E-01	1.97E-01	1.97E-01
Rh109	1.1	2.12E-01	2.12E-01	5.92E-01	2.12E-01
I137	1.1	2.07E-01	2.06E-01	2.22E-01	2.22E-01
Tc103	1.0	1.97E-01	4.38E-01	1.97E-01	1.96E-01
Sr93	1.0	1.96E-01	1.83E-01	2.01E-01	2.01E-01
Sb132m	1.0	1.96E-01	2.14E-01	1.96E-01	1.96E-01
Rb90	0.9	1.79E-01	1.50E-01	1.57E-01	1.59E-01
Mo101	0.9	1.71E-01	1.76E-01	1.71E-01	1.71E-01
Ba142	0.8	1.51E-01	1.50E-01	1.51E-01	1.51E-01
Ru107	0.8	1.49E-01	1.49E-01	1.49E-01	1.49E-01
Sr95	0.8	1.48E-01	1.27E-01	1.48E-01	1.48E-01
Kr89	0.8	1.47E-01	1.46E-01	1.39E-01	1.39E-01
Pr148m	0.7	1.40E-01	1.08E-01	1.23E-01	1.23E-01
Zr98	0.7	1.31E-01	—	—	—
Xe138	0.7	1.29E-01	1.29E-01	1.29E-01	1.29E-01
Pm154	0.6	1.20E-01	3.16E-02	1.19E-01	1.15E-01
Ce148	0.6	1.14E-01	7.65E-02	1.14E-01	7.11E-02
Y95	0.6	1.09E-01	9.93E-02	9.78E-02	9.78E-02
Mo104	0.5	1.06E-01	3.58E-01	4.41E-01	1.08E-01
Nb98	0.5	1.04E-01	2.72E-01	1.03E-01	1.03E-01
Rb90m	0.5	1.02E-01	1.07E-01	1.28E-01	1.26E-01
Rh108	0.5	9.97E-02	1.01E-01	9.97E-02	1.01E-01
Sn131m	0.5	9.32E-02	1.14E-01	9.54E-02	1.45E-01
Ba141	0.5	9.11E-02	9.11E-02	8.57E-02	8.57E-02
Xe137	0.5	8.88E-02	8.90E-02	8.95E-02	8.95E-02
Kr90	0.4	8.52E-02	8.58E-02	9.42E-02	7.99E-02

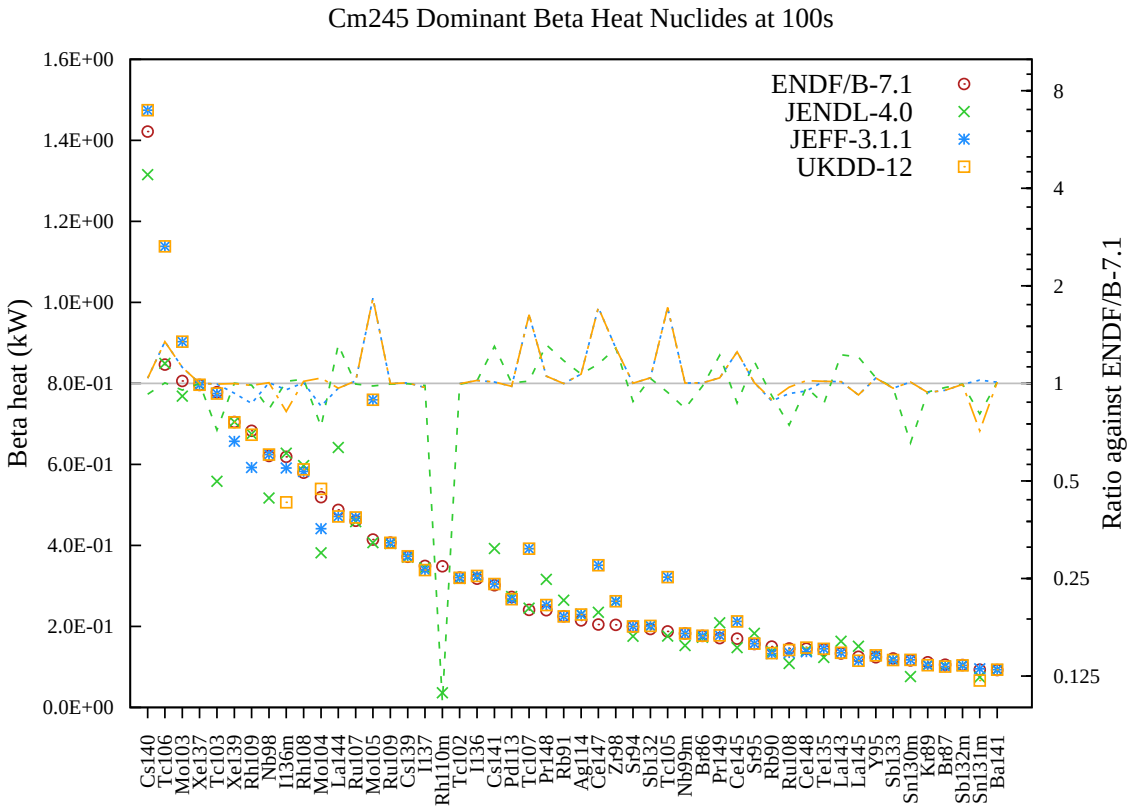

Figure 215: Beta heat (in kW) decay data comparison for Cm245 fission pulse after 100s cooling.

Table 215: Beta heat (in kW) decay data comparison for Cm245 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	7.5	1.42E+00	1.32E+00	1.47E+00	1.47E+00
Tc106	4.5	8.46E-01	8.49E-01	1.14E+00	1.14E+00
Mo103	4.3	8.06E-01	7.68E-01	9.03E-01	9.03E-01
Xe137	4.2	7.96E-01	7.96E-01	7.96E-01	7.96E-01
Tc103	4.1	7.78E-01	5.58E-01	7.75E-01	7.75E-01
Xe139	3.7	7.05E-01	7.05E-01	6.57E-01	7.04E-01
Rh109	3.6	6.83E-01	6.75E-01	5.92E-01	6.73E-01
Nb98	3.3	6.21E-01	5.17E-01	6.24E-01	6.24E-01
I136m	3.3	6.19E-01	6.28E-01	5.91E-01	5.07E-01
Rh108	3.1	5.80E-01	5.97E-01	5.83E-01	5.88E-01
Mo104	2.7	5.19E-01	3.82E-01	4.41E-01	5.40E-01
La144	2.6	4.88E-01	6.42E-01	4.71E-01	4.71E-01
Ru107	2.4	4.61E-01	4.59E-01	4.69E-01	4.69E-01
Mo105	2.2	4.14E-01	4.07E-01	7.59E-01	7.59E-01
Ru109	2.1	4.07E-01	4.05E-01	4.06E-01	4.06E-01
Cs139	2.0	3.72E-01	3.71E-01	3.73E-01	3.73E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I137	1.8	3.50E-01	3.45E-01	3.39E-01	3.39E-01
Rh110m	1.8	3.48E-01	3.63E-02	—	—
Tc102	1.7	3.21E-01	3.19E-01	3.20E-01	3.20E-01
I136	1.7	3.18E-01	3.24E-01	3.25E-01	3.25E-01
Cs141	1.6	3.02E-01	3.93E-01	3.05E-01	3.05E-01
Pd113	1.4	2.73E-01	2.74E-01	2.67E-01	2.67E-01
Tc107	1.3	2.41E-01	2.45E-01	3.92E-01	3.92E-01
Pr148	1.3	2.40E-01	3.16E-01	2.53E-01	2.53E-01
Rb91	1.2	2.25E-01	2.65E-01	2.25E-01	2.25E-01
Ag114	1.1	2.15E-01	2.30E-01	2.30E-01	2.30E-01
Ce147	1.1	2.05E-01	2.35E-01	3.51E-01	3.51E-01
Zr98	1.1	2.04E-01	2.62E-01	2.62E-01	2.62E-01
Sr94	1.1	2.00E-01	1.76E-01	2.00E-01	2.00E-01
Sb132	1.0	1.94E-01	2.01E-01	2.01E-01	2.01E-01
Tc105	1.0	1.88E-01	1.76E-01	3.22E-01	3.22E-01
Nb99m	1.0	1.82E-01	1.53E-01	1.83E-01	1.83E-01
Br86	0.9	1.76E-01	1.73E-01	1.77E-01	1.77E-01
Pr149	0.9	1.71E-01	2.09E-01	1.78E-01	1.78E-01
Ce145	0.9	1.70E-01	1.48E-01	2.12E-01	2.12E-01
Sr95	0.8	1.57E-01	1.83E-01	1.58E-01	1.58E-01
Rb90	0.8	1.50E-01	1.38E-01	1.33E-01	1.34E-01
Ru108	0.8	1.46E-01	1.08E-01	1.35E-01	1.42E-01
Ce148	0.8	1.45E-01	1.41E-01	1.37E-01	1.48E-01
Te135	0.8	1.42E-01	1.23E-01	1.45E-01	1.45E-01
La143	0.7	1.33E-01	1.63E-01	1.35E-01	1.35E-01
La145	0.7	1.25E-01	1.51E-01	1.15E-01	1.15E-01
Y95	0.7	1.24E-01	1.29E-01	1.29E-01	1.29E-01
Sb133	0.6	1.21E-01	1.17E-01	1.17E-01	1.17E-01
Sn130m	0.6	1.16E-01	7.62E-02	1.17E-01	1.17E-01
Kr89	0.6	1.11E-01	1.05E-01	1.04E-01	1.04E-01
Br87	0.6	1.06E-01	1.03E-01	1.01E-01	1.01E-01
Sb132m	0.6	1.05E-01	1.04E-01	1.04E-01	1.04E-01
Sn131m	0.5	9.32E-02	7.51E-02	9.54E-02	6.66E-02
Ba141	0.5	9.23E-02	9.31E-02	9.31E-02	9.31E-02

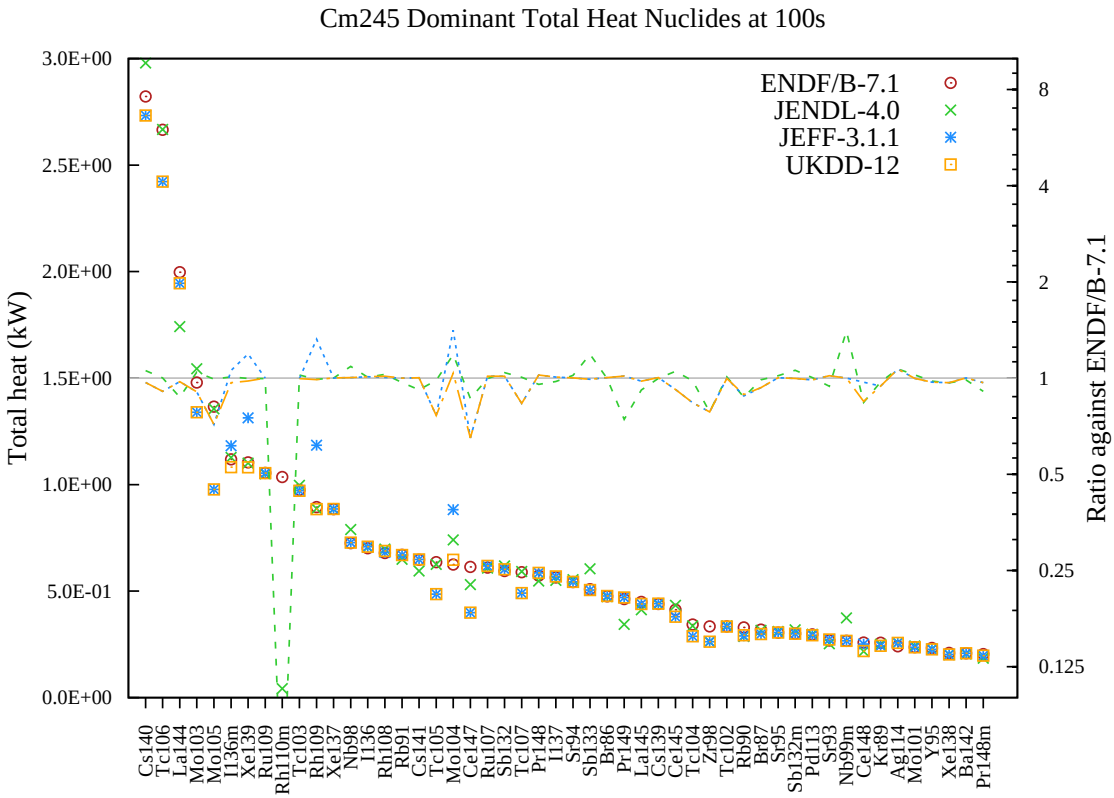

Figure 216: Total heat (in kW) decay data comparison for Cm245 fission pulse after 100s cooling.

Table 216: Total heat (in kW) decay data comparison for Cm245 fission pulse after 100s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs140	7.4	2.82E+00	2.98E+00	2.73E+00	2.73E+00
Tc106	7.0	2.67E+00	2.67E+00	2.42E+00	2.42E+00
La144	5.2	2.00E+00	1.74E+00	1.95E+00	1.95E+00
Mo103	3.9	1.48E+00	1.54E+00	1.34E+00	1.34E+00
Mo105	3.6	1.37E+00	1.36E+00	9.77E-01	9.77E-01
I136m	2.9	1.12E+00	1.13E+00	1.18E+00	1.08E+00
Xe139	2.9	1.10E+00	1.10E+00	1.31E+00	1.08E+00
Ru109	2.8	1.05E+00	1.05E+00	1.05E+00	1.05E+00
Rh110m	2.7	1.04E+00	4.20E-02	—	—
Tc103	2.5	9.75E-01	9.97E-01	9.71E-01	9.71E-01
Rh109	2.3	8.95E-01	8.87E-01	1.18E+00	8.85E-01
Xe137	2.3	8.85E-01	8.85E-01	8.86E-01	8.86E-01
Nb98	1.9	7.25E-01	7.89E-01	7.27E-01	7.27E-01
I136	1.8	7.02E-01	7.06E-01	7.09E-01	7.09E-01
Rh108	1.8	6.79E-01	6.98E-01	6.82E-01	6.88E-01
Rb91	1.8	6.70E-01	6.49E-01	6.70E-01	6.70E-01
Cs141	1.7	6.47E-01	5.94E-01	6.49E-01	6.49E-01

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc105	1.7	6.36E-01	6.25E-01	4.86E-01	4.86E-01
Mo104	1.6	6.25E-01	7.40E-01	8.83E-01	6.47E-01
Ce147	1.6	6.14E-01	5.30E-01	3.99E-01	3.99E-01
Ru107	1.6	6.10E-01	6.08E-01	6.18E-01	6.18E-01
Sb132	1.6	5.94E-01	6.18E-01	6.02E-01	6.02E-01
Tc107	1.5	5.88E-01	5.92E-01	4.90E-01	4.90E-01
Pr148	1.5	5.73E-01	5.48E-01	5.86E-01	5.86E-01
I137	1.5	5.64E-01	5.51E-01	5.69E-01	5.69E-01
Sr94	1.4	5.42E-01	5.54E-01	5.43E-01	5.43E-01
Sb133	1.3	5.09E-01	6.05E-01	5.05E-01	5.05E-01
Br86	1.2	4.76E-01	4.74E-01	4.77E-01	4.77E-01
Pr149	1.2	4.63E-01	3.44E-01	4.70E-01	4.70E-01
La145	1.2	4.49E-01	4.12E-01	4.39E-01	4.39E-01
Cs139	1.1	4.40E-01	4.39E-01	4.42E-01	4.42E-01
Ce145	1.1	4.12E-01	4.33E-01	3.80E-01	3.80E-01
Tc104	0.9	3.43E-01	3.37E-01	2.88E-01	2.88E-01
Zr98	0.9	3.35E-01	2.62E-01	2.62E-01	2.62E-01
Tc102	0.9	3.34E-01	3.37E-01	3.34E-01	3.33E-01
Rb90	0.9	3.30E-01	2.87E-01	2.90E-01	2.93E-01
Br87	0.8	3.19E-01	3.16E-01	2.98E-01	2.98E-01
Sr95	0.8	3.05E-01	3.10E-01	3.06E-01	3.06E-01
Sb132m	0.8	3.01E-01	3.18E-01	3.00E-01	3.00E-01
Pd113	0.8	2.97E-01	2.98E-01	2.93E-01	2.93E-01
Sr93	0.7	2.68E-01	2.53E-01	2.73E-01	2.73E-01
Nb99m	0.7	2.67E-01	3.74E-01	2.67E-01	2.67E-01
Ce148	0.7	2.59E-01	2.17E-01	2.51E-01	2.19E-01
Kr89	0.7	2.58E-01	2.51E-01	2.44E-01	2.44E-01
Ag114	0.6	2.41E-01	2.57E-01	2.57E-01	2.57E-01
Mo101	0.6	2.37E-01	2.42E-01	2.36E-01	2.36E-01
Y95	0.6	2.33E-01	2.28E-01	2.26E-01	2.26E-01
Xe138	0.5	2.10E-01	2.03E-01	2.03E-01	2.03E-01
Ba142	0.5	2.08E-01	2.05E-01	2.08E-01	2.08E-01
Pr148m	0.5	2.04E-01	1.85E-01	1.97E-01	1.97E-01

15.3 1000s after pulse

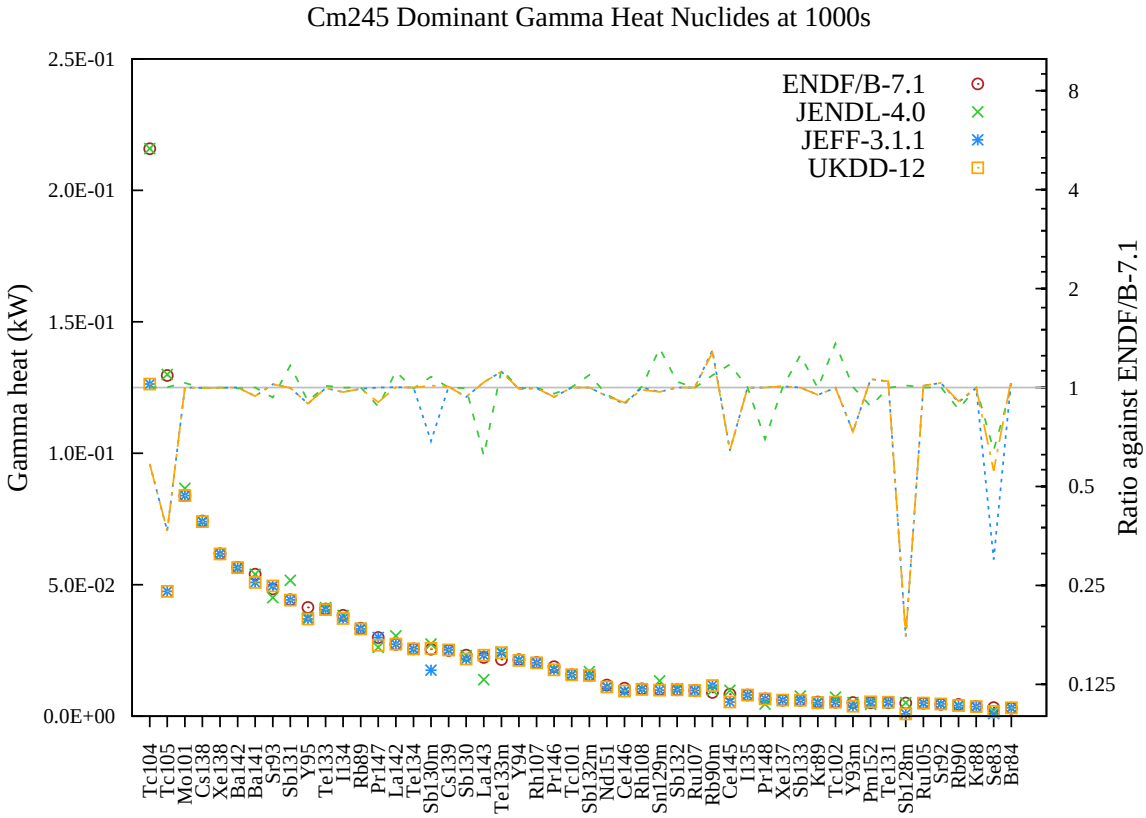

Figure 217: Gamma heat (in kW) decay data comparison for Cm245 fission pulse after 1000s cooling.

Table 217: Gamma heat (in kW) decay data comparison for Cm245 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	15.0	2.16E-01	2.16E-01	1.26E-01	1.26E-01
Tc105	9.0	1.30E-01	1.30E-01	4.75E-02	4.75E-02
Mo101	5.8	8.39E-02	8.66E-02	8.39E-02	8.39E-02
Cs138	5.2	7.42E-02	7.41E-02	7.40E-02	7.40E-02
Xe138	4.3	6.18E-02	6.18E-02	6.17E-02	6.17E-02
Ba142	3.9	5.66E-02	5.63E-02	5.65E-02	5.65E-02
Ba141	3.8	5.40E-02	5.40E-02	5.08E-02	5.08E-02
Sr93	3.4	4.84E-02	4.51E-02	4.95E-02	4.95E-02
Sb131	3.1	4.43E-02	5.17E-02	4.42E-02	4.42E-02
Y95	2.9	4.14E-02	3.76E-02	3.69E-02	3.69E-02
Te133	2.8	4.08E-02	4.13E-02	4.06E-02	4.06E-02
I134	2.7	3.84E-02	3.83E-02	3.72E-02	3.72E-02
Rb89	2.3	3.34E-02	3.35E-02	3.31E-02	3.31E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Pr147	2.1	2.99E-02	2.62E-02	2.99E-02	2.70E-02
La142	1.9	2.73E-02	3.05E-02	2.74E-02	2.74E-02
Te134	1.8	2.56E-02	2.54E-02	2.56E-02	2.56E-02
Sb130m	1.8	2.55E-02	2.75E-02	1.75E-02	2.58E-02
Cs139	1.7	2.50E-02	2.50E-02	2.52E-02	2.52E-02
Sb130	1.6	2.32E-02	2.31E-02	2.17E-02	2.17E-02
La143	1.6	2.23E-02	1.39E-02	2.32E-02	2.32E-02
Te133m	1.5	2.16E-02	2.45E-02	2.41E-02	2.41E-02
Y94	1.5	2.14E-02	2.14E-02	2.12E-02	2.12E-02
Rh107	1.4	2.04E-02	2.04E-02	2.03E-02	2.03E-02
Pr146	1.3	1.88E-02	1.80E-02	1.76E-02	1.76E-02
Tc101	1.1	1.58E-02	1.58E-02	1.58E-02	1.58E-02
Sb132m	1.1	1.55E-02	1.70E-02	1.55E-02	1.55E-02
Nd151	0.8	1.18E-02	1.12E-02	1.11E-02	1.11E-02
Ce146	0.7	1.06E-02	9.52E-03	9.48E-03	9.56E-03
Rh108	0.7	1.03E-02	1.04E-02	1.03E-02	1.02E-02
Sn129m	0.7	1.02E-02	1.34E-02	9.89E-03	9.89E-03
Sb132	0.7	1.00E-02	1.05E-02	1.00E-02	1.00E-02
Ru107	0.7	9.77E-03	9.76E-03	9.77E-03	9.77E-03
Rb90m	0.6	9.08E-03	9.88E-03	1.18E-02	1.16E-02
Ce145	0.6	8.34E-03	9.81E-03	5.37E-03	5.37E-03
I135	0.6	8.04E-03	8.06E-03	8.04E-03	8.04E-03
Pr148	0.5	6.61E-03	4.60E-03	6.61E-03	6.61E-03
Xe137	0.4	6.08E-03	6.10E-03	6.13E-03	6.13E-03
Sb133	0.4	6.07E-03	7.61E-03	6.07E-03	6.07E-03
Kr89	0.4	5.40E-03	5.38E-03	5.13E-03	5.13E-03
Tc102	0.4	5.30E-03	7.22E-03	5.30E-03	5.29E-03
Y93m	0.4	5.18E-03	5.20E-03	3.80E-03	3.80E-03
Pm152	0.4	5.15E-03	4.52E-03	5.45E-03	5.45E-03
Te131	0.4	5.09E-03	5.08E-03	5.31E-03	5.32E-03
Sb128m	0.3	5.01E-03	5.09E-03	8.77E-04	8.77E-04
Ru105	0.3	4.93E-03	4.93E-03	4.99E-03	4.99E-03
Sr92	0.3	4.53E-03	4.54E-03	4.68E-03	4.68E-03
Rb90	0.3	4.47E-03	3.84E-03	4.03E-03	4.06E-03
Kr88	0.3	3.64E-03	3.64E-03	3.64E-03	3.64E-03
Se83	0.2	3.25E-03	2.10E-03	9.77E-04	1.82E-03
Br84	0.2	3.04E-03	3.05E-03	3.22E-03	3.22E-03

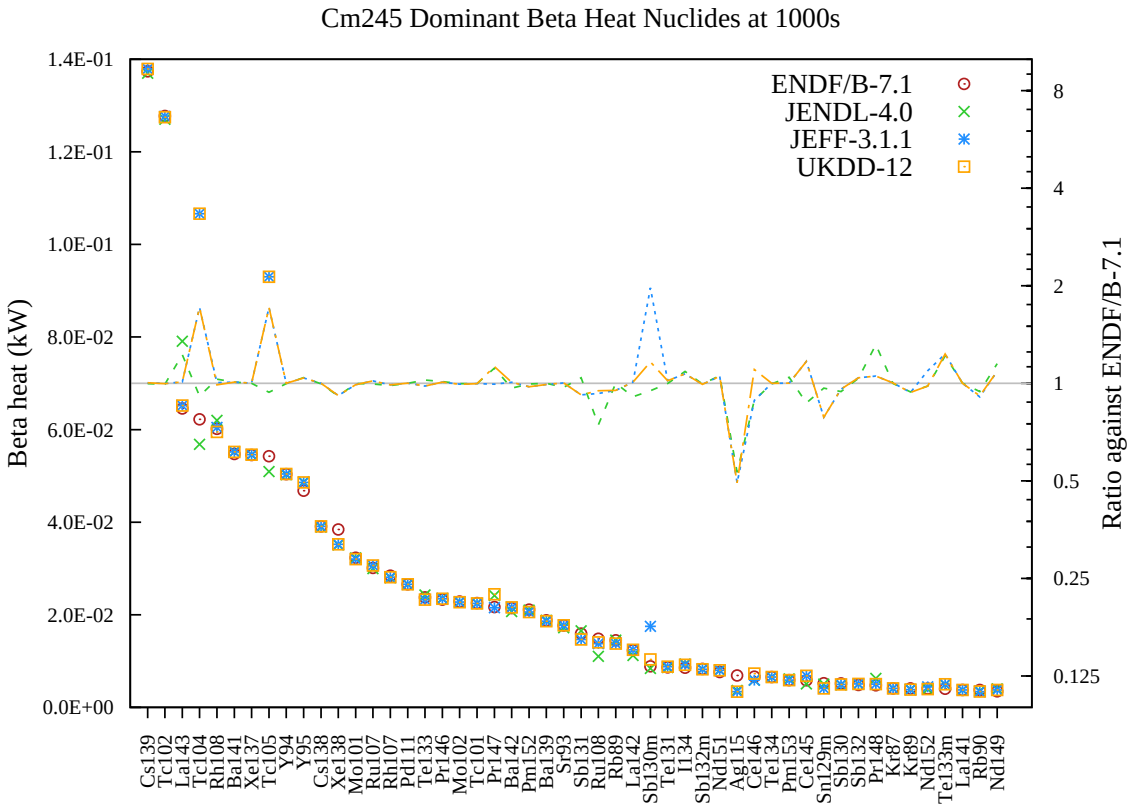

Figure 218: Beta heat (in kW) decay data comparison for Cm245 fission pulse after 1000s cooling.

Table 218: Beta heat (in kW) decay data comparison for Cm245 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs139	10.2	1.37E-01	1.37E-01	1.38E-01	1.38E-01
Tc102	9.5	1.28E-01	1.27E-01	1.28E-01	1.27E-01
La143	4.8	6.46E-02	7.91E-02	6.52E-02	6.52E-02
Tc104	4.6	6.22E-02	5.68E-02	1.07E-01	1.07E-01
Rh108	4.5	6.02E-02	6.20E-02	6.05E-02	5.95E-02
Ba141	4.1	5.47E-02	5.52E-02	5.52E-02	5.52E-02
Xe137	4.0	5.45E-02	5.46E-02	5.46E-02	5.46E-02
Tc105	4.0	5.43E-02	5.09E-02	9.30E-02	9.30E-02
Y94	3.7	5.04E-02	5.03E-02	5.04E-02	5.04E-02
Y95	3.5	4.68E-02	4.87E-02	4.86E-02	4.86E-02
Cs138	2.9	3.91E-02	3.90E-02	3.91E-02	3.91E-02
Xe138	2.9	3.84E-02	3.51E-02	3.52E-02	3.52E-02
Mo101	2.4	3.23E-02	3.23E-02	3.20E-02	3.20E-02
Ru107	2.2	3.01E-02	3.00E-02	3.07E-02	3.07E-02
Rh107	2.1	2.84E-02	2.80E-02	2.81E-02	2.81E-02
Pd111	2.0	2.66E-02	2.66E-02	2.66E-02	2.66E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te133	1.8	2.37E-02	2.43E-02	2.33E-02	2.33E-02
Pr146	1.7	2.33E-02	2.35E-02	2.35E-02	2.35E-02
Mo102	1.7	2.29E-02	2.28E-02	2.27E-02	2.27E-02
Tc101	1.7	2.25E-02	2.25E-02	2.25E-02	2.25E-02
Pr147	1.6	2.17E-02	2.41E-02	2.15E-02	2.44E-02
Ba142	1.6	2.14E-02	2.07E-02	2.16E-02	2.16E-02
Pm152	1.6	2.11E-02	2.10E-02	2.06E-02	2.06E-02
Ba139	1.4	1.88E-02	1.88E-02	1.86E-02	1.86E-02
Sr93	1.3	1.77E-02	1.72E-02	1.77E-02	1.77E-02
Sb131	1.2	1.59E-02	1.65E-02	1.47E-02	1.47E-02
Ru108	1.1	1.48E-02	1.10E-02	1.38E-02	1.41E-02
Rb89	1.1	1.45E-02	1.45E-02	1.38E-02	1.38E-02
La142	0.9	1.23E-02	1.12E-02	1.24E-02	1.24E-02
Sb130m	0.7	8.88E-03	8.42E-03	1.75E-02	1.03E-02
Te131	0.6	8.63E-03	8.62E-03	8.79E-03	8.79E-03
I134	0.6	8.58E-03	9.34E-03	9.18E-03	9.18E-03
Sb132m	0.6	8.29E-03	8.25E-03	8.23E-03	8.23E-03
Nd151	0.6	7.62E-03	8.04E-03	8.02E-03	8.02E-03
Ag115	0.5	6.89E-03	3.66E-03	3.40E-03	3.40E-03
Ce146	0.5	6.63E-03	5.88E-03	5.87E-03	7.31E-03
Te134	0.5	6.56E-03	6.53E-03	6.56E-03	6.56E-03
Pm153	0.4	5.89E-03	6.14E-03	5.90E-03	5.90E-03
Ce145	0.4	5.83E-03	5.07E-03	6.81E-03	6.81E-03
Sn129m	0.4	5.20E-03	5.02E-03	4.09E-03	4.09E-03
Sb130	0.4	5.17E-03	4.87E-03	4.96E-03	4.96E-03
Sb132	0.4	4.85E-03	5.03E-03	5.05E-03	5.05E-03
Pr148	0.4	4.76E-03	6.27E-03	5.02E-03	5.02E-03
Kr87	0.3	4.11E-03	4.10E-03	4.11E-03	4.11E-03
Kr89	0.3	4.11E-03	3.86E-03	3.85E-03	3.85E-03
Nd152	0.3	4.04E-03	3.96E-03	4.42E-03	3.96E-03
Te133m	0.3	4.04E-03	4.91E-03	4.97E-03	4.97E-03
La141	0.3	3.76E-03	3.77E-03	3.76E-03	3.76E-03
Rb90	0.3	3.74E-03	3.53E-03	3.40E-03	3.42E-03
Nd149	0.3	3.46E-03	3.98E-03	3.77E-03	3.77E-03

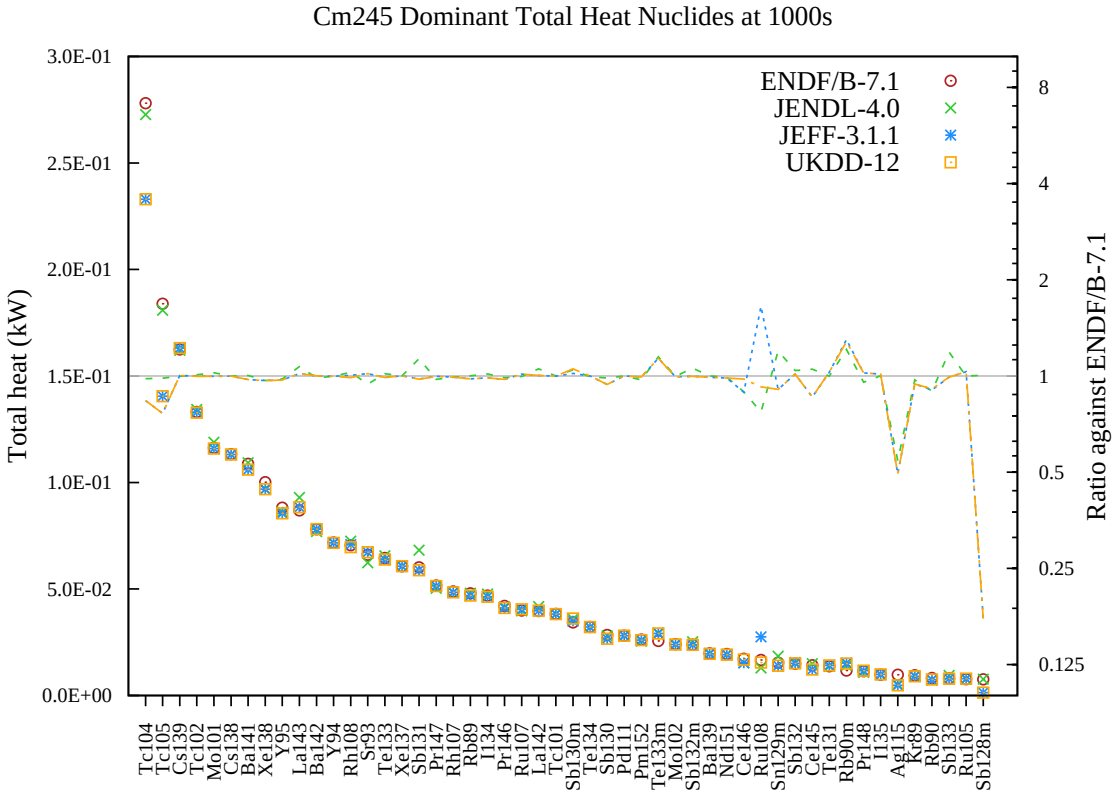

Figure 219: Total heat (in kW) decay data comparison for Cm245 fission pulse after 1000s cooling.

Table 219: Total heat (in kW) decay data comparison for Cm245 fission pulse after 1000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	10.0	2.78E-01	2.73E-01	2.33E-01	2.33E-01
Tc105	6.6	1.84E-01	1.81E-01	1.40E-01	1.40E-01
Cs139	5.8	1.62E-01	1.62E-01	1.63E-01	1.63E-01
Tc102	4.8	1.33E-01	1.34E-01	1.33E-01	1.33E-01
Mo101	4.2	1.16E-01	1.19E-01	1.16E-01	1.16E-01
Cs138	4.1	1.13E-01	1.13E-01	1.13E-01	1.13E-01
Ba141	3.9	1.09E-01	1.09E-01	1.06E-01	1.06E-01
Xe138	3.6	1.00E-01	9.69E-02	9.69E-02	9.69E-02
Y95	3.2	8.81E-02	8.63E-02	8.56E-02	8.56E-02
La143	3.1	8.69E-02	9.30E-02	8.84E-02	8.84E-02
Ba142	2.8	7.80E-02	7.70E-02	7.81E-02	7.81E-02
Y94	2.6	7.18E-02	7.16E-02	7.16E-02	7.16E-02
Rh108	2.5	7.05E-02	7.24E-02	7.08E-02	6.97E-02
Sr93	2.4	6.61E-02	6.23E-02	6.72E-02	6.72E-02
Te133	2.3	6.45E-02	6.55E-02	6.38E-02	6.38E-02
Xe137	2.2	6.06E-02	6.06E-02	6.07E-02	6.07E-02
Sb131	2.2	6.02E-02	6.82E-02	5.89E-02	5.88E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Pr147	1.9	5.16E-02	5.04E-02	5.15E-02	5.14E-02
Rh107	1.8	4.88E-02	4.84E-02	4.84E-02	4.84E-02
Rb89	1.7	4.79E-02	4.80E-02	4.69E-02	4.69E-02
I134	1.7	4.69E-02	4.76E-02	4.63E-02	4.63E-02
Pr146	1.5	4.21E-02	4.15E-02	4.11E-02	4.11E-02
Ru107	1.4	3.99E-02	3.97E-02	4.04E-02	4.04E-02
La142	1.4	3.96E-02	4.17E-02	3.98E-02	3.98E-02
Tc101	1.4	3.83E-02	3.83E-02	3.82E-02	3.82E-02
Sb130m	1.2	3.43E-02	3.59E-02	3.50E-02	3.61E-02
Te134	1.2	3.21E-02	3.19E-02	3.21E-02	3.21E-02
Sb130	1.0	2.84E-02	2.80E-02	2.67E-02	2.67E-02
Pd111	1.0	2.81E-02	2.81E-02	2.81E-02	2.81E-02
Pm152	0.9	2.62E-02	2.55E-02	2.60E-02	2.60E-02
Te133m	0.9	2.56E-02	2.94E-02	2.91E-02	2.91E-02
Mo102	0.9	2.41E-02	2.40E-02	2.39E-02	2.39E-02
Sb132m	0.9	2.38E-02	2.52E-02	2.38E-02	2.38E-02
Ba139	0.7	1.98E-02	1.98E-02	1.96E-02	1.96E-02
Nd151	0.7	1.94E-02	1.93E-02	1.91E-02	1.91E-02
Ce146	0.6	1.73E-02	1.54E-02	1.53E-02	1.69E-02
Ru108	0.6	1.67E-02	1.29E-02	2.76E-02	1.54E-02
Sn129m	0.6	1.54E-02	1.84E-02	1.40E-02	1.40E-02
Sb132	0.5	1.49E-02	1.55E-02	1.51E-02	1.51E-02
Ce145	0.5	1.42E-02	1.49E-02	1.22E-02	1.22E-02
Te131	0.5	1.37E-02	1.37E-02	1.41E-02	1.41E-02
Rb90m	0.4	1.17E-02	1.42E-02	1.52E-02	1.50E-02
Pr148	0.4	1.14E-02	1.09E-02	1.16E-02	1.16E-02
I135	0.4	9.77E-03	9.79E-03	9.90E-03	9.90E-03
Ag115	0.4	9.75E-03	5.29E-03	4.81E-03	4.81E-03
Kr89	0.3	9.51E-03	9.24E-03	8.98E-03	8.98E-03
Rb90	0.3	8.21E-03	7.37E-03	7.43E-03	7.48E-03
Sb133	0.3	7.96E-03	9.45E-03	7.89E-03	7.89E-03
Ru105	0.3	7.69E-03	7.69E-03	7.93E-03	7.93E-03
Sb128m	0.3	7.57E-03	7.62E-03	1.32E-03	1.32E-03

15.4 5011s after pulse

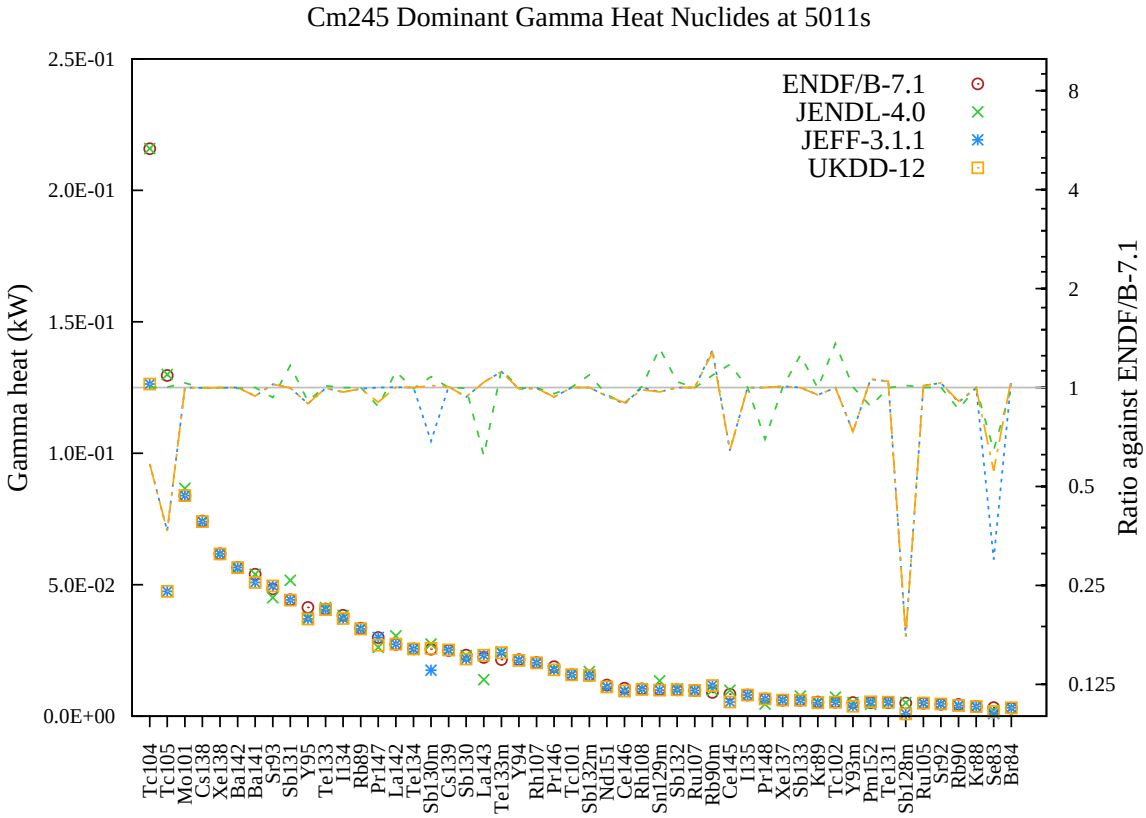

Figure 220: Gamma heat (in kW) decay data comparison for Cm245 fission pulse after 5011s cooling.

Table 220: Gamma heat (in kW) decay data comparison for Cm245 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	15.0	2.16E-01	2.16E-01	1.26E-01	1.26E-01
Tc105	9.0	1.30E-01	1.30E-01	4.75E-02	4.75E-02
Mo101	5.8	8.39E-02	8.66E-02	8.39E-02	8.39E-02
Cs138	5.2	7.42E-02	7.41E-02	7.40E-02	7.40E-02
Xe138	4.3	6.18E-02	6.18E-02	6.17E-02	6.17E-02
Ba142	3.9	5.66E-02	5.63E-02	5.65E-02	5.65E-02
Ba141	3.8	5.40E-02	5.40E-02	5.08E-02	5.08E-02
Sr93	3.4	4.84E-02	4.51E-02	4.95E-02	4.95E-02
Sb131	3.1	4.43E-02	5.17E-02	4.42E-02	4.42E-02
Y95	2.9	4.14E-02	3.76E-02	3.69E-02	3.69E-02
Te133	2.8	4.08E-02	4.13E-02	4.06E-02	4.06E-02
I134	2.7	3.84E-02	3.83E-02	3.72E-02	3.72E-02
Rb89	2.3	3.34E-02	3.35E-02	3.31E-02	3.31E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Pr147	2.1	2.99E-02	2.62E-02	2.99E-02	2.70E-02
La142	1.9	2.73E-02	3.05E-02	2.74E-02	2.74E-02
Te134	1.8	2.56E-02	2.54E-02	2.56E-02	2.56E-02
Sb130m	1.8	2.55E-02	2.75E-02	1.75E-02	2.58E-02
Cs139	1.7	2.50E-02	2.50E-02	2.52E-02	2.52E-02
Sb130	1.6	2.32E-02	2.31E-02	2.17E-02	2.17E-02
La143	1.6	2.23E-02	1.39E-02	2.32E-02	2.32E-02
Te133m	1.5	2.16E-02	2.45E-02	2.41E-02	2.41E-02
Y94	1.5	2.14E-02	2.14E-02	2.12E-02	2.12E-02
Rh107	1.4	2.04E-02	2.04E-02	2.03E-02	2.03E-02
Pr146	1.3	1.88E-02	1.80E-02	1.76E-02	1.76E-02
Tc101	1.1	1.58E-02	1.58E-02	1.58E-02	1.58E-02
Sb132m	1.1	1.55E-02	1.70E-02	1.55E-02	1.55E-02
Nd151	0.8	1.18E-02	1.12E-02	1.11E-02	1.11E-02
Ce146	0.7	1.06E-02	9.52E-03	9.48E-03	9.56E-03
Rh108	0.7	1.03E-02	1.04E-02	1.03E-02	1.02E-02
Sn129m	0.7	1.02E-02	1.34E-02	9.89E-03	9.89E-03
Sb132	0.7	1.00E-02	1.05E-02	1.00E-02	1.00E-02
Ru107	0.7	9.77E-03	9.76E-03	9.77E-03	9.77E-03
Rb90m	0.6	9.08E-03	9.88E-03	1.18E-02	1.16E-02
Ce145	0.6	8.34E-03	9.81E-03	5.37E-03	5.37E-03
I135	0.6	8.04E-03	8.06E-03	8.04E-03	8.04E-03
Pr148	0.5	6.61E-03	4.60E-03	6.61E-03	6.61E-03
Xe137	0.4	6.08E-03	6.10E-03	6.13E-03	6.13E-03
Sb133	0.4	6.07E-03	7.61E-03	6.07E-03	6.07E-03
Kr89	0.4	5.40E-03	5.38E-03	5.13E-03	5.13E-03
Tc102	0.4	5.30E-03	7.22E-03	5.30E-03	5.29E-03
Y93m	0.4	5.18E-03	5.20E-03	3.80E-03	3.80E-03
Pm152	0.4	5.15E-03	4.52E-03	5.45E-03	5.45E-03
Te131	0.4	5.09E-03	5.08E-03	5.31E-03	5.32E-03
Sb128m	0.3	5.01E-03	5.09E-03	8.77E-04	8.77E-04
Ru105	0.3	4.93E-03	4.93E-03	4.99E-03	4.99E-03
Sr92	0.3	4.53E-03	4.54E-03	4.68E-03	4.68E-03
Rb90	0.3	4.47E-03	3.84E-03	4.03E-03	4.06E-03
Kr88	0.3	3.64E-03	3.64E-03	3.64E-03	3.64E-03
Se83	0.2	3.25E-03	2.10E-03	9.77E-04	1.82E-03
Br84	0.2	3.04E-03	3.05E-03	3.22E-03	3.22E-03

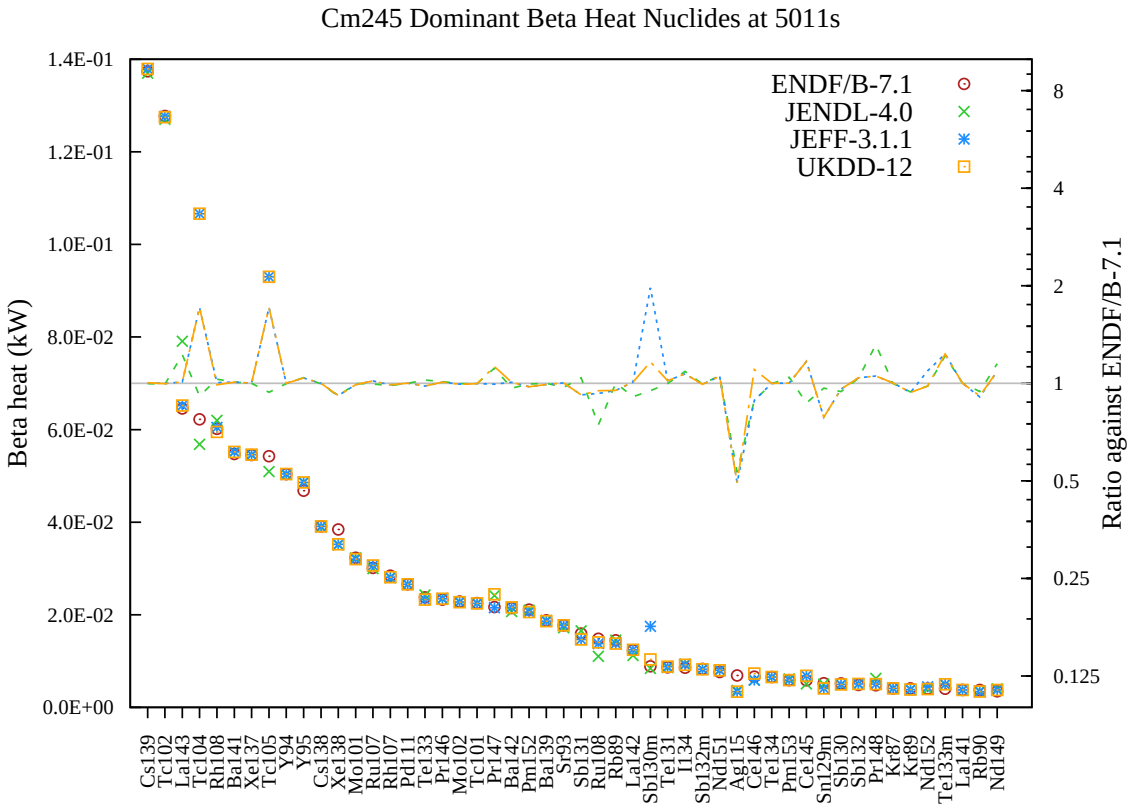

Figure 221: Beta heat (in kW) decay data comparison for Cm245 fission pulse after 5011s cooling.

Table 221: Beta heat (in kW) decay data comparison for Cm245 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs139	10.2	1.37E-01	1.37E-01	1.38E-01	1.38E-01
Tc102	9.5	1.28E-01	1.27E-01	1.28E-01	1.27E-01
La143	4.8	6.46E-02	7.91E-02	6.52E-02	6.52E-02
Tc104	4.6	6.22E-02	5.68E-02	1.07E-01	1.07E-01
Rh108	4.5	6.02E-02	6.20E-02	6.05E-02	5.95E-02
Ba141	4.1	5.47E-02	5.52E-02	5.52E-02	5.52E-02
Xe137	4.0	5.45E-02	5.46E-02	5.46E-02	5.46E-02
Tc105	4.0	5.43E-02	5.09E-02	9.30E-02	9.30E-02
Y94	3.7	5.04E-02	5.03E-02	5.04E-02	5.04E-02
Y95	3.5	4.68E-02	4.87E-02	4.86E-02	4.86E-02
Cs138	2.9	3.91E-02	3.90E-02	3.91E-02	3.91E-02
Xe138	2.9	3.84E-02	3.51E-02	3.52E-02	3.52E-02
Mo101	2.4	3.23E-02	3.23E-02	3.20E-02	3.20E-02
Ru107	2.2	3.01E-02	3.00E-02	3.07E-02	3.07E-02
Rh107	2.1	2.84E-02	2.80E-02	2.81E-02	2.81E-02
Pd111	2.0	2.66E-02	2.66E-02	2.66E-02	2.66E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te133	1.8	2.37E-02	2.43E-02	2.33E-02	2.33E-02
Pr146	1.7	2.33E-02	2.35E-02	2.35E-02	2.35E-02
Mo102	1.7	2.29E-02	2.28E-02	2.27E-02	2.27E-02
Tc101	1.7	2.25E-02	2.25E-02	2.25E-02	2.25E-02
Pr147	1.6	2.17E-02	2.41E-02	2.15E-02	2.44E-02
Ba142	1.6	2.14E-02	2.07E-02	2.16E-02	2.16E-02
Pm152	1.6	2.11E-02	2.10E-02	2.06E-02	2.06E-02
Ba139	1.4	1.88E-02	1.88E-02	1.86E-02	1.86E-02
Sr93	1.3	1.77E-02	1.72E-02	1.77E-02	1.77E-02
Sb131	1.2	1.59E-02	1.65E-02	1.47E-02	1.47E-02
Ru108	1.1	1.48E-02	1.10E-02	1.38E-02	1.41E-02
Rb89	1.1	1.45E-02	1.45E-02	1.38E-02	1.38E-02
La142	0.9	1.23E-02	1.12E-02	1.24E-02	1.24E-02
Sb130m	0.7	8.88E-03	8.42E-03	1.75E-02	1.03E-02
Te131	0.6	8.63E-03	8.62E-03	8.79E-03	8.79E-03
I134	0.6	8.58E-03	9.34E-03	9.18E-03	9.18E-03
Sb132m	0.6	8.29E-03	8.25E-03	8.23E-03	8.23E-03
Nd151	0.6	7.62E-03	8.04E-03	8.02E-03	8.02E-03
Ag115	0.5	6.89E-03	3.66E-03	3.40E-03	3.40E-03
Ce146	0.5	6.63E-03	5.88E-03	5.87E-03	7.31E-03
Te134	0.5	6.56E-03	6.53E-03	6.56E-03	6.56E-03
Pm153	0.4	5.89E-03	6.14E-03	5.90E-03	5.90E-03
Ce145	0.4	5.83E-03	5.07E-03	6.81E-03	6.81E-03
Sn129m	0.4	5.20E-03	5.02E-03	4.09E-03	4.09E-03
Sb130	0.4	5.17E-03	4.87E-03	4.96E-03	4.96E-03
Sb132	0.4	4.85E-03	5.03E-03	5.05E-03	5.05E-03
Pr148	0.4	4.76E-03	6.27E-03	5.02E-03	5.02E-03
Kr87	0.3	4.11E-03	4.10E-03	4.11E-03	4.11E-03
Kr89	0.3	4.11E-03	3.86E-03	3.85E-03	3.85E-03
Nd152	0.3	4.04E-03	3.96E-03	4.42E-03	3.96E-03
Te133m	0.3	4.04E-03	4.91E-03	4.97E-03	4.97E-03
La141	0.3	3.76E-03	3.77E-03	3.76E-03	3.76E-03
Rb90	0.3	3.74E-03	3.53E-03	3.40E-03	3.42E-03
Nd149	0.3	3.46E-03	3.98E-03	3.77E-03	3.77E-03

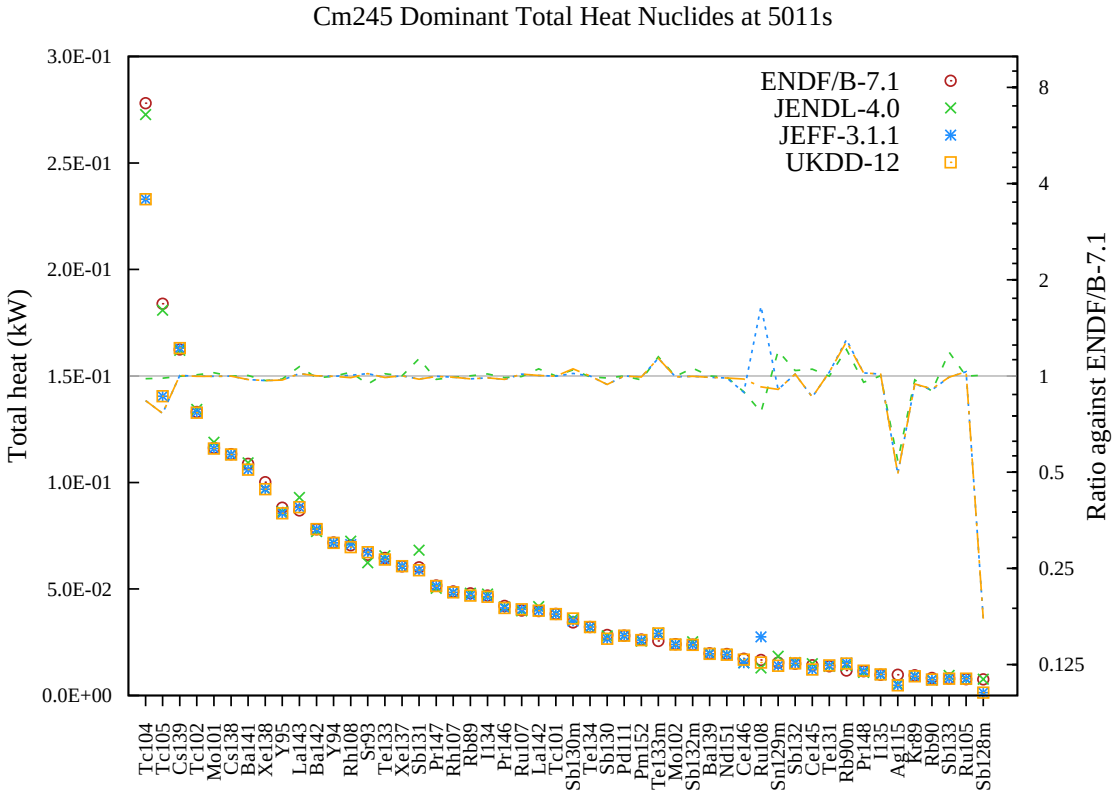

Figure 222: Total heat (in kW) decay data comparison for Cm245 fission pulse after 5011s cooling.

Table 222: Total heat (in kW) decay data comparison for Cm245 fission pulse after 5011s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Tc104	10.0	2.78E-01	2.73E-01	2.33E-01	2.33E-01
Tc105	6.6	1.84E-01	1.81E-01	1.40E-01	1.40E-01
Cs139	5.8	1.62E-01	1.62E-01	1.63E-01	1.63E-01
Tc102	4.8	1.33E-01	1.34E-01	1.33E-01	1.33E-01
Mo101	4.2	1.16E-01	1.19E-01	1.16E-01	1.16E-01
Cs138	4.1	1.13E-01	1.13E-01	1.13E-01	1.13E-01
Ba141	3.9	1.09E-01	1.09E-01	1.06E-01	1.06E-01
Xe138	3.6	1.00E-01	9.69E-02	9.69E-02	9.69E-02
Y95	3.2	8.81E-02	8.63E-02	8.56E-02	8.56E-02
La143	3.1	8.69E-02	9.30E-02	8.84E-02	8.84E-02
Ba142	2.8	7.80E-02	7.70E-02	7.81E-02	7.81E-02
Y94	2.6	7.18E-02	7.16E-02	7.16E-02	7.16E-02
Rh108	2.5	7.05E-02	7.24E-02	7.08E-02	6.97E-02
Sr93	2.4	6.61E-02	6.23E-02	6.72E-02	6.72E-02
Te133	2.3	6.45E-02	6.55E-02	6.38E-02	6.38E-02
Xe137	2.2	6.06E-02	6.06E-02	6.07E-02	6.07E-02
Sb131	2.2	6.02E-02	6.82E-02	5.89E-02	5.88E-02

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Pr147	1.9	5.16E-02	5.04E-02	5.15E-02	5.14E-02
Rh107	1.8	4.88E-02	4.84E-02	4.84E-02	4.84E-02
Rb89	1.7	4.79E-02	4.80E-02	4.69E-02	4.69E-02
I134	1.7	4.69E-02	4.76E-02	4.63E-02	4.63E-02
Pr146	1.5	4.21E-02	4.15E-02	4.11E-02	4.11E-02
Ru107	1.4	3.99E-02	3.97E-02	4.04E-02	4.04E-02
La142	1.4	3.96E-02	4.17E-02	3.98E-02	3.98E-02
Tc101	1.4	3.83E-02	3.83E-02	3.82E-02	3.82E-02
Sb130m	1.2	3.43E-02	3.59E-02	3.50E-02	3.61E-02
Te134	1.2	3.21E-02	3.19E-02	3.21E-02	3.21E-02
Sb130	1.0	2.84E-02	2.80E-02	2.67E-02	2.67E-02
Pd111	1.0	2.81E-02	2.81E-02	2.81E-02	2.81E-02
Pm152	0.9	2.62E-02	2.55E-02	2.60E-02	2.60E-02
Te133m	0.9	2.56E-02	2.94E-02	2.91E-02	2.91E-02
Mo102	0.9	2.41E-02	2.40E-02	2.39E-02	2.39E-02
Sb132m	0.9	2.38E-02	2.52E-02	2.38E-02	2.38E-02
Ba139	0.7	1.98E-02	1.98E-02	1.96E-02	1.96E-02
Nd151	0.7	1.94E-02	1.93E-02	1.91E-02	1.91E-02
Ce146	0.6	1.73E-02	1.54E-02	1.53E-02	1.69E-02
Ru108	0.6	1.67E-02	1.29E-02	2.76E-02	1.54E-02
Sn129m	0.6	1.54E-02	1.84E-02	1.40E-02	1.40E-02
Sb132	0.5	1.49E-02	1.55E-02	1.51E-02	1.51E-02
Ce145	0.5	1.42E-02	1.49E-02	1.22E-02	1.22E-02
Te131	0.5	1.37E-02	1.37E-02	1.41E-02	1.41E-02
Rb90m	0.4	1.17E-02	1.42E-02	1.52E-02	1.50E-02
Pr148	0.4	1.14E-02	1.09E-02	1.16E-02	1.16E-02
I135	0.4	9.77E-03	9.79E-03	9.90E-03	9.90E-03
Ag115	0.4	9.75E-03	5.29E-03	4.81E-03	4.81E-03
Kr89	0.3	9.51E-03	9.24E-03	8.98E-03	8.98E-03
Rb90	0.3	8.21E-03	7.37E-03	7.43E-03	7.48E-03
Sb133	0.3	7.96E-03	9.45E-03	7.89E-03	7.89E-03
Ru105	0.3	7.69E-03	7.69E-03	7.93E-03	7.93E-03
Sb128m	0.3	7.57E-03	7.62E-03	1.32E-03	1.32E-03

15.5 10000s after pulse

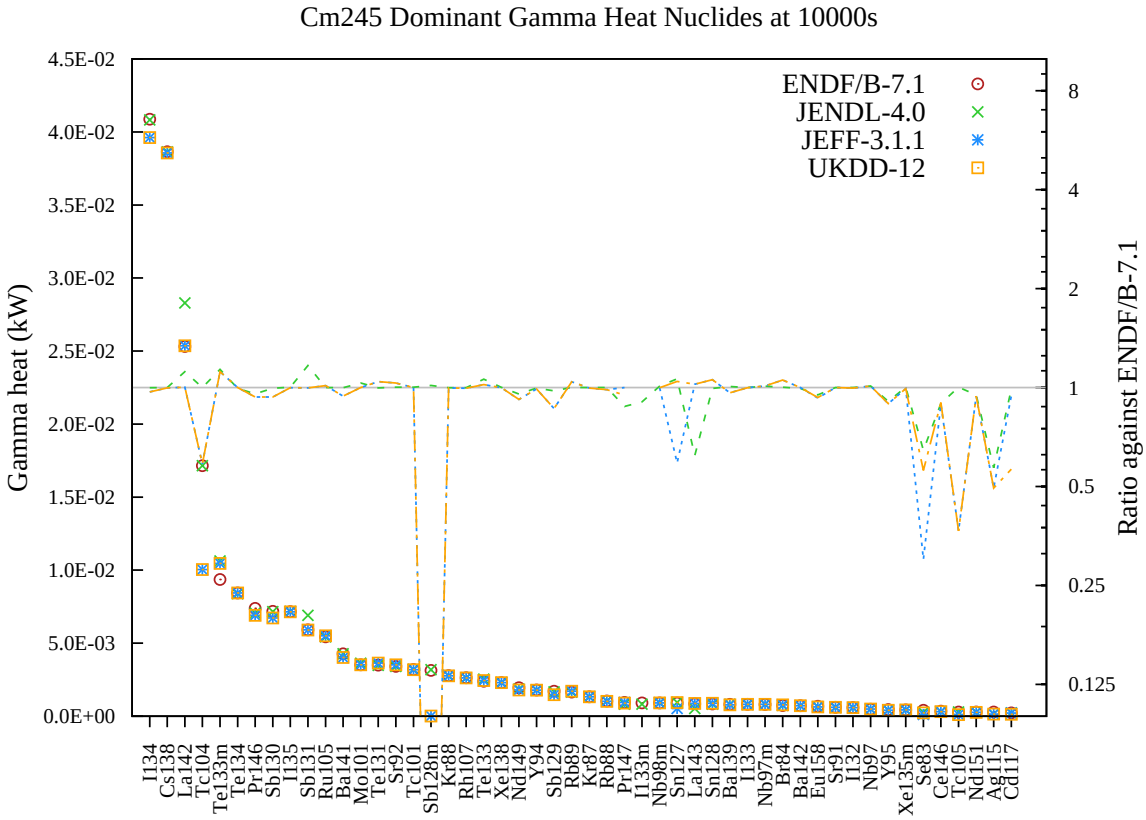

Figure 223: Gamma heat (in kW) decay data comparison for Cm245 fission pulse after 10000s cooling.

Table 223: Gamma heat (in kW) decay data comparison for Cm245 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
I134	17.6	4.09E-02	4.08E-02	3.96E-02	3.96E-02
Cs138	16.7	3.86E-02	3.86E-02	3.86E-02	3.86E-02
La142	10.9	2.53E-02	2.83E-02	2.54E-02	2.54E-02
Tc104	7.4	1.71E-02	1.72E-02	1.00E-02	1.00E-02
Te133m	4.0	9.36E-03	1.06E-02	1.05E-02	1.05E-02
Te134	3.6	8.44E-03	8.39E-03	8.44E-03	8.44E-03
Pr146	3.2	7.38E-03	7.06E-03	6.91E-03	6.91E-03
Sb130	3.1	7.18E-03	7.15E-03	6.72E-03	6.72E-03
I135	3.1	7.15E-03	7.16E-03	7.15E-03	7.15E-03
Sb131	2.6	5.92E-03	6.91E-03	5.91E-03	5.90E-03
Ru105	2.3	5.43E-03	5.43E-03	5.50E-03	5.50E-03
Ba141	1.8	4.27E-03	4.27E-03	4.02E-03	4.02E-03
Mo101	1.5	3.52E-03	3.63E-03	3.52E-03	3.52E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Te131	1.5	3.49E-03	3.49E-03	3.64E-03	3.64E-03
Sr92	1.5	3.41E-03	3.42E-03	3.52E-03	3.52E-03
Tc101	1.4	3.19E-03	3.20E-03	3.19E-03	3.19E-03
Sb128m	1.4	3.14E-03	3.18E-03	1.02E-05	1.02E-05
Kr88	1.2	2.78E-03	2.77E-03	2.77E-03	2.77E-03
Rh107	1.1	2.63E-03	2.63E-03	2.62E-03	2.62E-03
Te133	1.0	2.39E-03	2.53E-03	2.44E-03	2.44E-03
Xe138	1.0	2.30E-03	2.30E-03	2.29E-03	2.29E-03
Nd149	0.8	1.94E-03	1.86E-03	1.79E-03	1.79E-03
Y94	0.8	1.80E-03	1.79E-03	1.78E-03	1.78E-03
Sb129	0.7	1.71E-03	1.67E-03	1.47E-03	1.47E-03
Rb89	0.7	1.65E-03	1.65E-03	1.71E-03	1.71E-03
Kr87	0.6	1.33E-03	1.33E-03	1.33E-03	1.33E-03
Rb88	0.4	1.04E-03	1.04E-03	1.02E-03	1.02E-03
Pr147	0.4	9.41E-04	8.25E-04	9.41E-04	8.93E-04
I133m	0.4	9.10E-04	—	—	—
Nb98m	0.4	9.07E-04	9.16E-04	9.06E-04	9.06E-04
Sn127	0.4	8.93E-04	9.50E-04	5.27E-04	9.32E-04
La143	0.4	8.54E-04	5.30E-04	8.75E-04	8.75E-04
Sn128	0.4	8.35E-04	8.30E-04	8.83E-04	8.83E-04
Ba139	0.4	8.13E-04	8.19E-04	7.84E-04	7.84E-04
I133	0.3	8.10E-04	8.09E-04	8.09E-04	8.09E-04
Nb97m	0.3	8.00E-04	8.09E-04	8.09E-04	8.09E-04
Br84	0.3	7.36E-04	7.37E-04	7.76E-04	7.76E-04
Ba142	0.3	7.14E-04	7.10E-04	7.14E-04	7.14E-04
Eu158	0.3	6.77E-04	6.43E-04	6.28E-04	6.31E-04
Sr91	0.3	6.08E-04	6.08E-04	6.08E-04	6.08E-04
I132	0.3	5.92E-04	5.92E-04	5.90E-04	5.90E-04
Nb97	0.2	4.81E-04	4.86E-04	4.86E-04	4.86E-04
Y95	0.2	4.60E-04	4.17E-04	4.11E-04	4.11E-04
Xe135m	0.2	4.33E-04	4.34E-04	4.30E-04	4.30E-04
Se83	0.2	4.07E-04	2.62E-04	1.22E-04	2.28E-04
Ce146	0.1	3.45E-04	3.09E-04	3.07E-04	3.10E-04
Tc105	0.1	2.91E-04	2.92E-04	1.07E-04	1.07E-04
Nd151	0.1	2.85E-04	2.70E-04	2.68E-04	2.68E-04
Ag115	0.1	2.82E-04	1.60E-04	1.39E-04	1.39E-04
Cd117	0.1	2.29E-04	2.27E-04	2.16E-04	1.29E-04

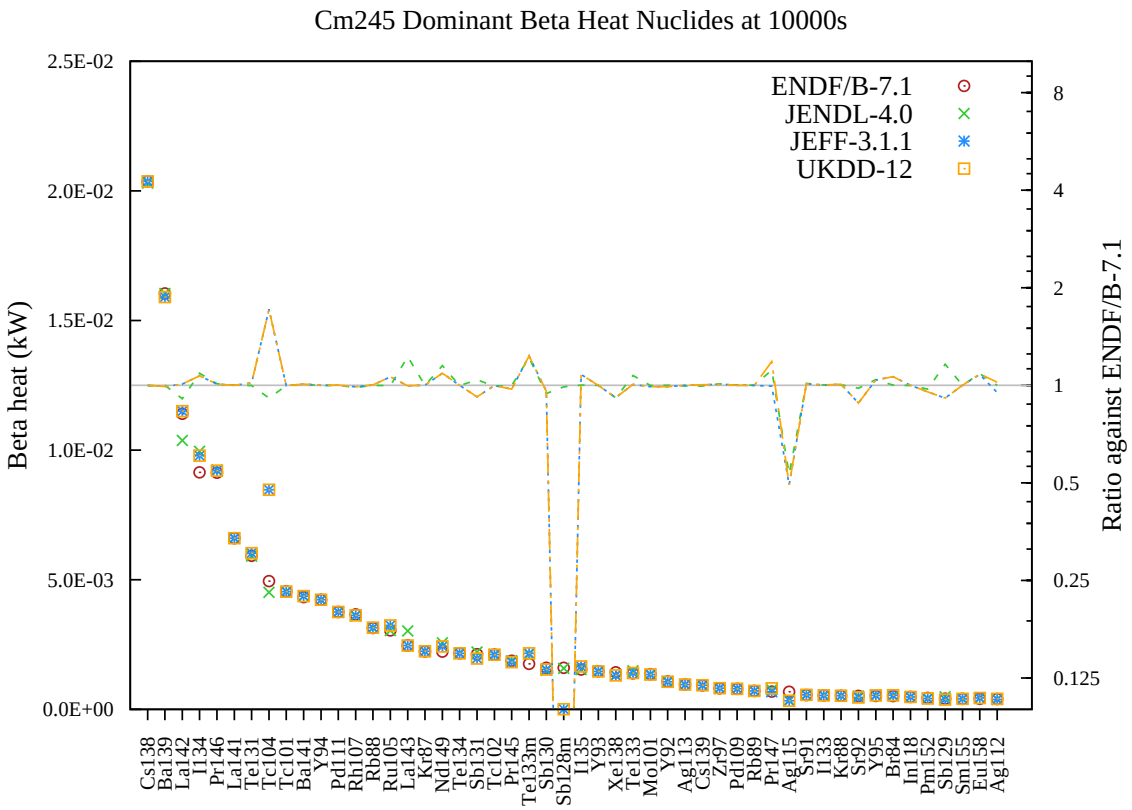

Figure 224: Beta heat (in kW) decay data comparison for Cm245 fission pulse after 10000s cooling.

Table 224: Beta heat (in kW) decay data comparison for Cm245 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	13.1	2.04E-02	2.03E-02	2.04E-02	2.04E-02
Ba139	10.3	1.60E-02	1.60E-02	1.59E-02	1.59E-02
La142	7.3	1.14E-02	1.04E-02	1.15E-02	1.15E-02
I134	5.9	9.14E-03	9.95E-03	9.78E-03	9.78E-03
Pr146	5.8	9.13E-03	9.23E-03	9.21E-03	9.21E-03
La141	4.2	6.60E-03	6.60E-03	6.60E-03	6.60E-03
Te131	3.8	5.92E-03	5.91E-03	6.02E-03	6.02E-03
Tc104	3.2	4.94E-03	4.51E-03	8.47E-03	8.47E-03
Tc101	2.9	4.56E-03	4.55E-03	4.54E-03	4.54E-03
Ba141	2.8	4.33E-03	4.37E-03	4.37E-03	4.37E-03
Y94	2.7	4.23E-03	4.22E-03	4.23E-03	4.23E-03
Pd111	2.4	3.75E-03	3.75E-03	3.76E-03	3.76E-03
Rh107	2.3	3.66E-03	3.61E-03	3.63E-03	3.63E-03
Rb88	2.0	3.14E-03	3.14E-03	3.15E-03	3.15E-03
Ru105	2.0	3.05E-03	3.04E-03	3.24E-03	3.24E-03
La143	1.6	2.47E-03	3.02E-03	2.46E-03	2.46E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Kr87	1.4	2.24E-03	2.23E-03	2.24E-03	2.24E-03
Nd149	1.4	2.23E-03	2.56E-03	2.43E-03	2.43E-03
Te134	1.4	2.16E-03	2.16E-03	2.16E-03	2.16E-03
Sb131	1.4	2.13E-03	2.21E-03	1.96E-03	1.96E-03
Tc102	1.4	2.11E-03	2.10E-03	2.11E-03	2.11E-03
Pr145	1.2	1.88E-03	1.87E-03	1.82E-03	1.82E-03
Te133m	1.1	1.75E-03	2.13E-03	2.16E-03	2.16E-03
Sb130	1.0	1.60E-03	1.51E-03	1.54E-03	1.54E-03
Sb128m	1.0	1.60E-03	1.58E-03	5.11E-06	5.11E-06
I135	1.0	1.54E-03	1.54E-03	1.66E-03	1.66E-03
Y93	0.9	1.47E-03	1.47E-03	1.47E-03	1.47E-03
Xe138	0.9	1.43E-03	1.31E-03	1.31E-03	1.31E-03
Te133	0.9	1.39E-03	1.49E-03	1.40E-03	1.40E-03
Mo101	0.9	1.35E-03	1.35E-03	1.34E-03	1.34E-03
Y92	0.7	1.08E-03	1.08E-03	1.07E-03	1.07E-03
Ag113	0.6	9.55E-04	9.50E-04	9.55E-04	9.55E-04
Cs139	0.6	9.26E-04	9.22E-04	9.30E-04	9.30E-04
Zr97	0.5	8.14E-04	8.23E-04	8.21E-04	8.21E-04
Pd109	0.5	7.93E-04	7.93E-04	7.95E-04	7.93E-04
Rb89	0.5	7.14E-04	7.14E-04	7.13E-04	7.13E-04
Pr147	0.4	6.82E-04	7.60E-04	6.78E-04	8.08E-04
Ag115	0.4	6.79E-04	3.61E-04	3.35E-04	3.35E-04
Sr91	0.4	5.52E-04	5.59E-04	5.57E-04	5.57E-04
I133	0.3	5.39E-04	5.41E-04	5.41E-04	5.41E-04
Kr88	0.3	5.24E-04	5.26E-04	5.28E-04	5.28E-04
Sr92	0.3	5.20E-04	5.10E-04	4.58E-04	4.58E-04
Y95	0.3	5.20E-04	5.41E-04	5.40E-04	5.40E-04
Br84	0.3	5.15E-04	5.15E-04	5.48E-04	5.48E-04
In118	0.3	4.82E-04	4.81E-04	4.81E-04	4.81E-04
Pm152	0.3	4.41E-04	4.29E-04	4.20E-04	4.20E-04
Sb129	0.3	4.15E-04	4.82E-04	3.79E-04	3.79E-04
Sm155	0.3	4.07E-04	4.07E-04	4.07E-04	4.07E-04
Eu158	0.3	4.05E-04	4.40E-04	4.37E-04	4.39E-04
Ag112	0.3	3.99E-04	3.99E-04	3.79E-04	4.08E-04

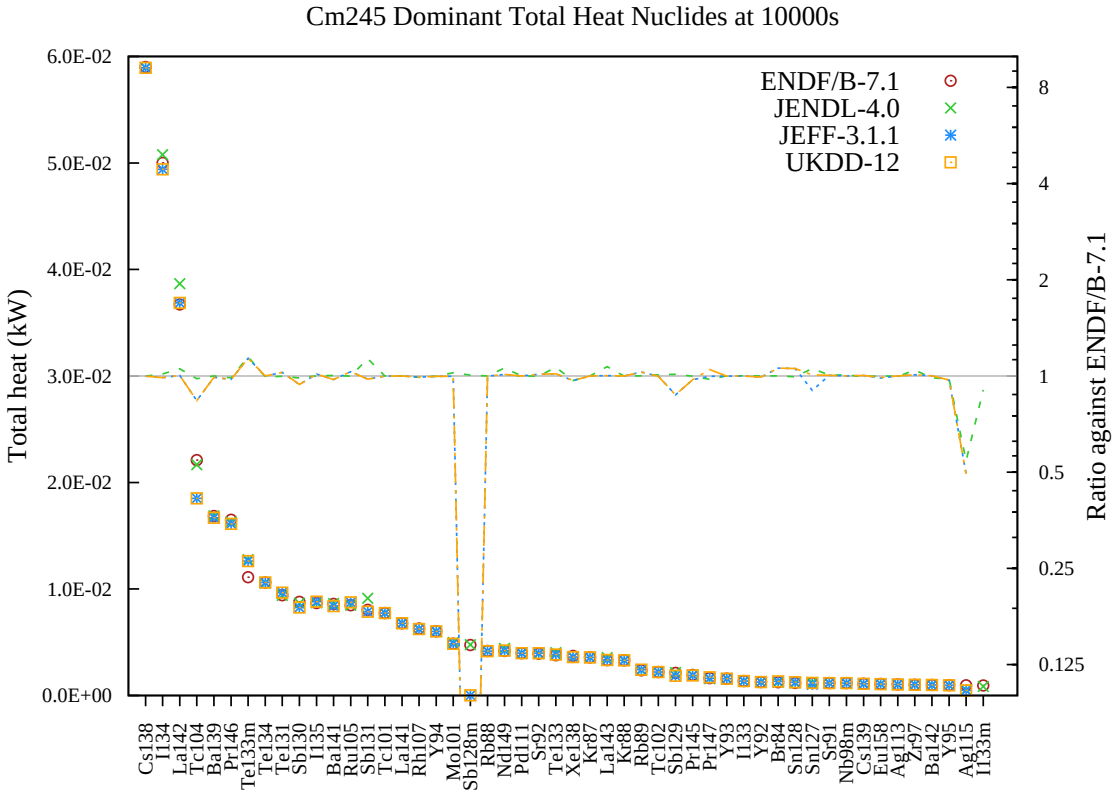

Figure 225: Total heat (in kW) decay data comparison for Cm245 fission pulse after 10000s cooling.

Table 225: Total heat (in kW) decay data comparison for Cm245 fission pulse after 10000s cooling.

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Cs138	15.2	5.90E-02	5.89E-02	5.89E-02	5.89E-02
I134	12.9	5.00E-02	5.08E-02	4.94E-02	4.94E-02
La142	9.5	3.67E-02	3.87E-02	3.69E-02	3.69E-02
Tc104	5.7	2.21E-02	2.17E-02	1.85E-02	1.85E-02
Ba139	4.3	1.69E-02	1.69E-02	1.67E-02	1.67E-02
Pr146	4.3	1.65E-02	1.63E-02	1.61E-02	1.61E-02
Te133m	2.9	1.11E-02	1.28E-02	1.26E-02	1.26E-02
Te134	2.7	1.06E-02	1.05E-02	1.06E-02	1.06E-02
Te131	2.4	9.42E-03	9.40E-03	9.67E-03	9.66E-03
Sb130	2.3	8.79E-03	8.66E-03	8.26E-03	8.26E-03
I135	2.2	8.69E-03	8.70E-03	8.81E-03	8.81E-03
Ba141	2.2	8.60E-03	8.64E-03	8.39E-03	8.39E-03
Ru105	2.2	8.48E-03	8.47E-03	8.74E-03	8.74E-03
Sb131	2.1	8.05E-03	9.12E-03	7.87E-03	7.86E-03
Tc101	2.0	7.75E-03	7.75E-03	7.73E-03	7.73E-03
La141	1.8	6.78E-03	6.79E-03	6.78E-03	6.78E-03
Rh107	1.6	6.29E-03	6.23E-03	6.24E-03	6.24E-03

Nuclide	% Heat	ENDF/B-7.1	JENDL-4.0	JEFF-3.1.1	UKDD-12
Y94	1.6	6.03E-03	6.01E-03	6.01E-03	6.01E-03
Mo101	1.3	4.87E-03	4.98E-03	4.86E-03	4.86E-03
Sb128m	1.2	4.74E-03	4.77E-03	1.53E-05	1.53E-05
Rb88	1.1	4.18E-03	4.18E-03	4.17E-03	4.17E-03
Nd149	1.1	4.17E-03	4.42E-03	4.22E-03	4.22E-03
Pd111	1.0	3.97E-03	3.97E-03	3.97E-03	3.97E-03
Sr92	1.0	3.93E-03	3.92E-03	3.98E-03	3.98E-03
Te133	1.0	3.78E-03	4.03E-03	3.84E-03	3.84E-03
Xe138	1.0	3.73E-03	3.61E-03	3.60E-03	3.60E-03
Kr87	0.9	3.57E-03	3.57E-03	3.57E-03	3.57E-03
La143	0.9	3.32E-03	3.55E-03	3.33E-03	3.33E-03
Kr88	0.9	3.30E-03	3.30E-03	3.30E-03	3.30E-03
Rb89	0.6	2.36E-03	2.36E-03	2.43E-03	2.43E-03
Tc102	0.6	2.20E-03	2.22E-03	2.20E-03	2.20E-03
Sb129	0.5	2.12E-03	2.15E-03	1.85E-03	1.85E-03
Pr145	0.5	1.93E-03	1.93E-03	1.88E-03	1.88E-03
Pr147	0.4	1.62E-03	1.58E-03	1.62E-03	1.70E-03
Y93	0.4	1.59E-03	1.59E-03	1.58E-03	1.58E-03
I133	0.3	1.35E-03	1.35E-03	1.35E-03	1.35E-03
Y92	0.3	1.26E-03	1.26E-03	1.25E-03	1.25E-03
Br84	0.3	1.25E-03	1.25E-03	1.32E-03	1.32E-03
Sn128	0.3	1.18E-03	1.18E-03	1.25E-03	1.25E-03
Sn127	0.3	1.17E-03	1.23E-03	1.05E-03	1.18E-03
Sr91	0.3	1.16E-03	1.17E-03	1.17E-03	1.17E-03
Nb98m	0.3	1.16E-03	1.17E-03	1.16E-03	1.16E-03
Cs139	0.3	1.09E-03	1.09E-03	1.10E-03	1.10E-03
Eu158	0.3	1.08E-03	1.08E-03	1.07E-03	1.07E-03
Ag113	0.3	1.04E-03	1.04E-03	1.04E-03	1.04E-03
Zr97	0.3	9.98E-04	1.04E-03	1.01E-03	1.01E-03
Ba142	0.3	9.85E-04	9.71E-04	9.86E-04	9.86E-04
Y95	0.3	9.79E-04	9.59E-04	9.51E-04	9.51E-04
Ag115	0.2	9.60E-04	5.21E-04	4.74E-04	4.74E-04
I133m	0.2	9.39E-04	8.49E-04	—	—