

Serpent 1.1.0 cross section library based on JEFF-3.1

Continuous-energy ACE format data library generated using NJOY-99.259 with 0.01 fractional reconstruction tolerance. Total 436 nuclides at 6 temperatures. Uncompressed library size 5.1 Gb. General format:

<ZA>.<id>

where <id> = 03c for 300K data, <id> = 06c for 600K data etc. Use the xsdirconvert.pl utility script to convert xsdir to Serpent directory file.

ZA	Nuclide	Evaluation	Temperatures (in Kelvin)
1001	1-H-1	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
1002	1-H-2	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
1003	1-H-3	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
2000	2-He-nat	BROND-2.2	300, 600, 900, 1200, 1500, 1800
2003	2-He-3	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
2004	2-He-4	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
3006	3-Li-6	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
3007	3-Li-7	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
4007	4-Be-7	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
4009	4-Be-9	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
5010	5-B-10	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
5011	5-B-11	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
6000	6-C-nat	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
6012	6-C-12	JENDL-3.2	300, 600, 900, 1200, 1500, 1800
7014	7-N-14	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
7015	7-N-15	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
8016	8-O-16	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
8017	8-O-17	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
9019	9-F-19	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
11022	11-Na-22	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
11023	11-Na-23	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
12000	12-Mg-nat	ENDF/B-VI.8	300, 600, 900, 1200, 1500, 1800
12024	12-Mg-24	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
12025	12-Mg-25	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
12026	12-Mg-26	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
13027	13-Al-27	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
14000	14-Si-nat	ENDF/B-VI.8	300, 600, 900, 1200, 1500, 1800
14028	14-Si-28	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
14029	14-Si-29	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
14030	14-Si-30	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
15031	15-P-31	JEFF-3.1	300, 600, 900, 1200, 1500, 1800

16000	16-S-nat	ENDF/B-VI.8	300, 600, 900, 1200, 1500, 1800
16032	16-S-32	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
16033	16-S-33	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
16034	16-S-34	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
16036	16-S-36	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
17000	17-Cl-nat	ENDF/B-VI.8	300, 600, 900, 1200, 1500, 1800
17035	17-Cl-35	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
17037	17-Cl-37	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
18036	18-Ar-36	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
18038	18-Ar-38	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
18040	18-Ar-40	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
19000	19-K-nat	ENDF/B-VI.8	300, 600, 900, 1200, 1500, 1800
19039	19-K-39	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
19040	19-K-40	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
19041	19-K-41	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
20000	20-Ca-nat	ENDF/B-VI.8	300, 600, 900, 1200, 1500, 1800
20040	20-Ca-40	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
20042	20-Ca-42	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
20043	20-Ca-43	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
20044	20-Ca-44	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
20046	20-Ca-46	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
20048	20-Ca-48	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
21045	21-Sc-45	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
22000	22-Ti-nat	ENDF/B-VI.8	300, 600, 900, 1200, 1500, 1800
22046	22-Ti-46	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
22047	22-Ti-47	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
22048	22-Ti-48	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
22049	22-Ti-49	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
22050	22-Ti-50	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
23000	23-V-nat	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
23051	23-V-51	JENDL-3.2	300, 600, 900, 1200, 1500, 1800
24000	24-Cr-nat	JENDL-3.2	300, 600, 900, 1200, 1500, 1800
24050	24-Cr-50	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
24052	24-Cr-52	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
24053	24-Cr-53	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
24054	24-Cr-54	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
25055	25-Mn-55	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
26000	26-Fe-nat	JENDL-3.2	300, 600, 900, 1200, 1500, 1800
26054	26-Fe-54	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
26056	26-Fe-56	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
26057	26-Fe-57	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
26058	26-Fe-58	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
27058	27-Co-58	JEFF-3.1	300, 600, 900, 1200, 1500, 1800

27059	27-Co-59	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
27358	27-Co-58m	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
28000	28-Ni-nat	JENDL-3.2	300, 600, 900, 1200, 1500, 1800
28058	28-Ni-58	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
28059	28-Ni-59	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
28060	28-Ni-60	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
28061	28-Ni-61	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
28062	28-Ni-62	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
28064	28-Ni-64	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
29000	29-Cu-nat	JENDL-3.2	300, 600, 900, 1200, 1500, 1800
29063	29-Cu-63	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
29065	29-Cu-65	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
30000	30-Zn-nat	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
30064	30-Zn-64	JEF-2.2	300, 600, 900, 1200, 1500, 1800
31000	31-Ga-nat	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
31069	31-Ga-69	JENDL-3.3	300, 600, 900, 1200, 1500, 1800
31071	31-Ga-71	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
32000	32-Ge-nat	JENDL-3.2	300, 600, 900, 1200, 1500, 1800
32070	32-Ge-70	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
32072	32-Ge-72	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
32073	32-Ge-73	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
32074	32-Ge-74	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
32076	32-Ge-76	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
33074	33-As-74	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
33075	33-As-75	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
34074	34-Se-74	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
34076	34-Se-76	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
34077	34-Se-77	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
34078	34-Se-78	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
34079	34-Se-79	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
34080	34-Se-80	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
34082	34-Se-82	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
35079	35-Br-79	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
35081	35-Br-81	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
36078	36-Kr-78	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
36080	36-Kr-80	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
36082	36-Kr-82	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
36083	36-Kr-83	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
36084	36-Kr-84	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
36085	36-Kr-85	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
36086	36-Kr-86	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
37085	37-Rb-85	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
37086	37-Rb-86	JEFF-3.1	300, 600, 900, 1200, 1500, 1800

37087	37-Rb-87	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
38084	38-Sr-84	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
38086	38-Sr-86	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
38087	38-Sr-87	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
38088	38-Sr-88	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
38089	38-Sr-89	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
38090	38-Sr-90	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
39089	39-Y-89	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
39090	39-Y-90	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
39091	39-Y-91	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
40000	40-Zr-nat	ENDF/B-VI.8	300, 600, 900, 1200, 1500, 1800
40090	40-Zr-90	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
40091	40-Zr-91	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
40092	40-Zr-92	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
40093	40-Zr-93	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
40094	40-Zr-94	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
40095	40-Zr-95	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
40096	40-Zr-96	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
41093	41-Nb-93	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
41094	41-Nb-94	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
41095	41-Nb-95	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
42000	42-Mo-nat	ENDF/B-VI.8	300, 600, 900, 1200, 1500, 1800
42092	42-Mo-92	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
42094	42-Mo-94	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
42095	42-Mo-95	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
42096	42-Mo-96	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
42097	42-Mo-97	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
42098	42-Mo-98	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
42099	42-Mo-99	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
42100	42-Mo-100	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
43099	43-Tc-99	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
44096	44-Ru-96	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
44098	44-Ru-98	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
44099	44-Ru-99	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
44100	44-Ru-100	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
44101	44-Ru-101	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
44102	44-Ru-102	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
44103	44-Ru-103	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
44104	44-Ru-104	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
44105	44-Ru-105	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
44106	44-Ru-106	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
45103	45-Rh-103	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
45105	45-Rh-105	JEFF-3.1	300, 600, 900, 1200, 1500, 1800

46102	46-Pd-102	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
46104	46-Pd-104	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
46105	46-Pd-105	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
46106	46-Pd-106	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
46107	46-Pd-107	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
46108	46-Pd-108	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
46110	46-Pd-110	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
47000	47-Ag-nat	JENDL-3.2	300, 600, 900, 1200, 1500, 1800
47107	47-Ag-107	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
47109	47-Ag-109	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
47111	47-Ag-111	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
47310	47-Ag-110m	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
48000	48-Cd-nat	ENDF/B-VI.8	300, 600, 900, 1200, 1500, 1800
48106	48-Cd-106	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
48108	48-Cd-108	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
48110	48-Cd-110	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
48111	48-Cd-111	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
48112	48-Cd-112	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
48113	48-Cd-113	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
48114	48-Cd-114	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
48115	48-Cd-115	JEF-2.2	300, 600, 900, 1200, 1500, 1800
48116	48-Cd-116	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
48315	48-Cd-115m	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
49000	49-In-nat	ENDF/B-VI.8	300, 600, 900, 1200, 1500, 1800
49113	49-In-113	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
49115	49-In-115	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
50000	50-Sn-nat	BROND-2.2	300, 600, 900, 1200, 1500, 1800
50112	50-Sn-112	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
50113	50-Sn-113	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
50114	50-Sn-114	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
50115	50-Sn-115	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
50116	50-Sn-116	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
50117	50-Sn-117	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
50118	50-Sn-118	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
50119	50-Sn-119	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
50120	50-Sn-120	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
50122	50-Sn-122	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
50123	50-Sn-123	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
50124	50-Sn-124	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
50125	50-Sn-125	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
50126	50-Sn-126	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
51000	51-Sb-nat	JENDL-3.2	300, 600, 900, 1200, 1500, 1800
51121	51-Sb-121	JEFF-3.1	300, 600, 900, 1200, 1500, 1800

51123	51-Sb-123	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
51124	51-Sb-124	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
51125	51-Sb-125	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
51126	51-Sb-126	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
52120	52-Te-120	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
52122	52-Te-122	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
52123	52-Te-123	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
52124	52-Te-124	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
52125	52-Te-125	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
52126	52-Te-126	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
52127	52-Te-127	JEF-2.2	300, 600, 900, 1200, 1500, 1800
52128	52-Te-128	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
52129	52-Te-129	JEF-2.2	300, 600, 900, 1200, 1500, 1800
52130	52-Te-130	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
52132	52-Te-132	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
52327	52-Te-127m	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
52329	52-Te-129m	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
53127	53-I-127	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
53129	53-I-129	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
53130	53-I-130	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
53131	53-I-131	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
53135	53-I-135	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
54123	54-Xe-123	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
54124	54-Xe-124	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
54126	54-Xe-126	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
54128	54-Xe-128	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
54129	54-Xe-129	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
54130	54-Xe-130	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
54131	54-Xe-131	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
54132	54-Xe-132	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
54133	54-Xe-133	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
54134	54-Xe-134	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
54135	54-Xe-135	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
54136	54-Xe-136	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
55133	55-Cs-133	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
55134	55-Cs-134	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
55135	55-Cs-135	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
55136	55-Cs-136	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
55137	55-Cs-137	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
56130	56-Ba-130	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
56132	56-Ba-132	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
56133	56-Ba-133	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
56134	56-Ba-134	JEFF-3.1	300, 600, 900, 1200, 1500, 1800

56135	56-Ba-135	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
56136	56-Ba-136	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
56137	56-Ba-137	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
56138	56-Ba-138	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
56140	56-Ba-140	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
57138	57-La-138	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
57139	57-La-139	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
57140	57-La-140	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
58136	58-Ce-136	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
58138	58-Ce-138	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
58139	58-Ce-139	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
58140	58-Ce-140	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
58141	58-Ce-141	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
58142	58-Ce-142	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
58143	58-Ce-143	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
58144	58-Ce-144	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
59141	59-Pr-141	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
59142	59-Pr-142	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
59143	59-Pr-143	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
60142	60-Nd-142	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
60143	60-Nd-143	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
60144	60-Nd-144	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
60145	60-Nd-145	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
60146	60-Nd-146	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
60147	60-Nd-147	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
60148	60-Nd-148	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
60150	60-Nd-150	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
61147	61-Pm-147	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
61148	61-Pm-148	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
61149	61-Pm-149	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
61151	61-Pm-151	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
61348	61-Pm-148m	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
62000	62-Sm-nat	BROND-2.2	300, 600, 900, 1200, 1500, 1800
62144	62-Sm-144	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
62147	62-Sm-147	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
62148	62-Sm-148	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
62149	62-Sm-149	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
62150	62-Sm-150	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
62151	62-Sm-151	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
62152	62-Sm-152	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
62153	62-Sm-153	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
62154	62-Sm-154	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
63000	63-Eu-nat	JENDL-3.2	300, 600, 900, 1200, 1500, 1800

63151	63-Eu-151	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
63152	63-Eu-152	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
63153	63-Eu-153	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
63154	63-Eu-154	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
63155	63-Eu-155	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
63156	63-Eu-156	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
63157	63-Eu-157	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
64000	64-Gd-nat	BROND-2.2	300, 600, 900, 1200, 1500, 1800
64152	64-Gd-152	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
64153	64-Gd-153	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
64154	64-Gd-154	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
64155	64-Gd-155	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
64156	64-Gd-156	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
64157	64-Gd-157	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
64158	64-Gd-158	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
64160	64-Gd-160	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
65159	65-Tb-159	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
65160	65-Tb-160	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
66156	66-Dy-156	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
66158	66-Dy-158	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
66160	66-Dy-160	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
66161	66-Dy-161	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
66162	66-Dy-162	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
66163	66-Dy-163	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
66164	66-Dy-164	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
67165	67-Ho-165	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
67366	67-Ho-166m	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
68162	68-Er-162	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
68164	68-Er-164	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
68166	68-Er-166	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
68167	68-Er-167	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
68168	68-Er-168	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
68170	68-Er-170	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
71000	71-Lu-nat	CENDL-2	300, 600, 900, 1200, 1500, 1800
71175	71-Lu-175	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
71176	71-Lu-176	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
72000	72-Hf-nat	ENDF/B-VI.8	300, 600, 900, 1200, 1500, 1800
72174	72-Hf-174	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
72176	72-Hf-176	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
72177	72-Hf-177	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
72178	72-Hf-178	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
72179	72-Hf-179	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
72180	72-Hf-180	JEFF-3.1	300, 600, 900, 1200, 1500, 1800

73181	73-Ta-181	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
73182	73-Ta-182	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
74000	74-W-nat	ENDF/B-VI.8	300, 600, 900, 1200, 1500, 1800
74182	74-W-182	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
74183	74-W-183	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
74184	74-W-184	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
74186	74-W-186	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
75000	75-Re-nat	BROND-2.2	300, 600, 900, 1200, 1500, 1800
75185	75-Re-185	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
75187	75-Re-187	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
76000	76-Os-nat	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
77000	77-Ir-nat	BROND-2.2	300, 600, 900, 1200, 1500, 1800
77191	77-Ir-191	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
77193	77-Ir-193	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
78000	78-Pt-nat	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
79197	79-Au-197	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
80000	80-Hg-nat	CENDL-2	300, 600, 900, 1200, 1500, 1800
80196	80-Hg-196	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
80198	80-Hg-198	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
80199	80-Hg-199	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
80200	80-Hg-200	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
80201	80-Hg-201	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
80202	80-Hg-202	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
80204	80-Hg-204	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
81000	81-Tl-nat	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
82000	82-Pb-nat	JENDL-3.2	300, 600, 900, 1200, 1500, 1800
82204	82-Pb-204	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
82206	82-Pb-206	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
82207	82-Pb-207	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
82208	82-Pb-208	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
83209	83-Bi-209	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
88223	88-Ra-223	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
88224	88-Ra-224	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
88225	88-Ra-225	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
88226	88-Ra-226	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
89225	89-Ac-225	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
89226	89-Ac-226	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
89227	89-Ac-227	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
90227	90-Th-227	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
90228	90-Th-228	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
90229	90-Th-229	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
90230	90-Th-230	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
90232	90-Th-232	JEFF-3.1	300, 600, 900, 1200, 1500, 1800

90233	90-Th-233	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
90234	90-Th-234	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
91231	91-Pa-231	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
91232	91-Pa-232	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
91233	91-Pa-233	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
92232	92-U-232	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
92233	92-U-233	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
92234	92-U-234	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
92235	92-U-235	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
92236	92-U-236	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
92237	92-U-237	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
92238	92-U-238	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
92239	92-U-239	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
92240	92-U-240	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
92241	92-U-241	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
93235	93-Np-235	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
93236	93-Np-236	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
93237	93-Np-237	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
93238	93-Np-238	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
93239	93-Np-239	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
94236	94-Pu-236	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
94237	94-Pu-237	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
94238	94-Pu-238	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
94239	94-Pu-239	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
94240	94-Pu-240	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
94241	94-Pu-241	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
94242	94-Pu-242	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
94243	94-Pu-243	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
94244	94-Pu-244	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
94246	94-Pu-246	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
95241	95-Am-241	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
95242	95-Am-242	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
95243	95-Am-243	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
95244	95-Am-244	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
95342	95-Am-242m	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
95344	95-Am-244m	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
96240	96-Cm-240	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
96241	96-Cm-241	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
96242	96-Cm-242	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
96243	96-Cm-243	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
96244	96-Cm-244	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
96245	96-Cm-245	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
96246	96-Cm-246	JEFF-3.1	300, 600, 900, 1200, 1500, 1800

96247	96-Cm-247	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
96248	96-Cm-248	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
96249	96-Cm-249	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
96250	96-Cm-250	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
97247	97-Bk-247	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
97249	97-Bk-249	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
97250	97-Bk-250	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
98249	98-Cf-249	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
98250	98-Cf-250	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
98251	98-Cf-251	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
98252	98-Cf-252	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
98253	98-Cf-253	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800
98254	98-Cf-254	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
99253	99-Es-253	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
99255	99-Es-255	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
99353	99-Es-253m	JEF-2.2	300, 600, 900, 1200, 1500, 1800
99354	99-Es-254m	JEFF-3.1	300, 600, 900, 1200, 1500, 1800
99355	99-Es-255m	ENDFB/VII.0	300, 600, 900, 1200, 1500, 1800