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# **JENDL Actinoid File**

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## **Introduction**

### JENDL Actinoid File 2008 (JENDL/AC-2008)

- released in March 2008 (gziped 33 MB)
- including 79 nuclides, from Ac to Fm (17 newly added)
- new resonance parameters
  - major actinides from ENDF/B-VII.0
  - U-235, cut at 500 eV
  - minor actinides, Np236,238 SAMMY, others MLBW adjusted to exp. data
- unified method to evaluate all the minor actinides
  - theoretical model calculation by Iwamoto with the CCONE code
  - systematics / global optical potential in the actinide region
  - fission cross sections
    - least-squares fitting to experimental data, GMA or SOK
    - CCONE calculation
- significant improvement in benchmark testings over JENDL-3.3



### Problems of MA Data in ENDF/B-VII.0

#### **ENDF MA Data — Collection of many resources**

- carry over from old evaluations (ENDF/B-V, for example)
- many taken from JENDL-3.2, 3.3
- no cross sections given for Cf-253 Es-253 above 110 keV



#### **Prioritize MA by Importance**

major (U5,Pu9) > minor (Am241, Pu238) > super minor (Bk, Cf, Es, Fm)

