Release notes for ENDF/B Development standards sublibrary

February 2, 2018

FAILURE SUMMARY

fudge-4.0 IOError('ENDF READ HALTED BECAUSE Only tables of delayed fission neutrons are supported',): std-098_Cf_252.endf,

xsectplotter CalledProcessError(): std-098_Cf_252.endf,

ERROR SUMMARY

checkr A variable is outside the allowed ENDF range: std-006_C_000.endf, std-098_Cf_252.endf,

checkr File has wrone sublibrary ID number in header: std-006_C_012.endf, std-006_C_013.endf, std-098_Cf_252.endf,

checkr Missing a section in directory so your directory is messed up. This error will break everything else: std-006_C_000.endf,

checkr Missing a section/file: std-002_He_003.endf, std-003_Li_006.endf, std-005_B_010.endf, std-006_C_012.endf, std-006_C_013.endf, std-079_Au_197.endf, std-092_U_235.endf, std-092_U_238.endf, std-098_Cf_252.endf,

checkr Something is invalid, but I don't know what!: std-092_U_235.endf, std-092_U_238.endf, std-098_Cf_252.endf,

checkr This file only allowed in neutron sublibrary: std-002_He_003.endf, std-003_Li_006.endf, std-005_B_010.endf, std-006_C_012.endf, std-006_C_013.endf, std-079_Au_197.endf, std-092_U_235.endf, std-092_U_238.endf, std-098_Cf_252.endf,

fizcon A level's energy is somehow off: std-092_U_235.endf,

fizcon A unknown parameter is outside of legal limits: std-098_Cf_252.endf,

fizcon Data for a reaction started at a minimum Ein that is incorrect, based upon reaction's Q value or other ENDF expectations.: std-006_C_012.endf,

fizcon Data for a reaction started at a minimum Ein that is incorrect, based upon reaction's Q value.: std-092_U_235.endf,

fizcon Energies released in decay not adding up!: std-098_Cf_252.endf,

fizcon Fission Q value inconsistent with fission energy release data.: std-092_U_235.endf, std-092_U_238.endf,

fizcon Missing files (probably spectra for outgoing particles): std-001_H_001.endf, std-002_He_003.endf, std-003_Li_006.endf, std-006_C_000.endf, std-006_C_013.endf, std-079_Au_197.endf, std-092_U_235.endf, std-092_U_238.endf,

fizcon One of the widths in the RRR is negative: std-092_U_235.endf,

fizcon Reaction can't use 2-body kinematics: std-001_H_001.endf, std-003_Li_006.endf,

fizcon The mass field (AWI) is incorrectly set.: std-098_Cf_252.endf,

fudge-4.0 A covariance matrix was not positive semi-definite, so it has negative eigenvalues.: std-092_U_235.endf, std-092_U_238.endf,

fudge-4.0 Calculated and tabulated Q values disagree.: std-002_He_003.endf, std-003_Li_006.endf, std-005_B_010.endf, std-006_C_012.endf, std-079_Au_197.endf, std-092_U_235.endf, std-092_U_238.endf,

fudge-4.0 Energy range of data set does not match cross section range: std-006_C_012.endf,

fudge-4.0 Fission Q value inconsistent with fission energy release data.: std-092_U_235.endf, std-092_U_238.endf,

fudge-4.0 Found a negative probability: std-079_Au_197.endf,

fudge-4.0 If an outgoing energy distribution ends with more than one energy with probability=0, proper unitbase treatment is unclear. Distribution should end with exactly one P=0 point.: std-092_U_235.endf, std-092_U_238.endf,

fudge-4.0 Level energy in gamma data doesn't match level energy in cross section data: std-092_U_235.endf,

fudge-4.0 Primary gamma energy at threshold should be $\leq$ available energy (depending on which discrete level it ends up in): std-006_C_012.endf,

fudge-4.0 The spin statistical weights are off, indicating missing channels: std-092_U_235.endf, std-092_U_238.endf,

fudge-4.0 ZA doesn't balance for this reaction: std-005_B_010.endf, std-079_Au_197.endf,

psyche A probability distribution is negative. This is bad.: std-079_Au_197.endf,

xsectplotter Fission Q value inconsistent with fission energy release data.: std-092_U_235.endf, std-092_U_238.endf,

xsectplotter Level energy in gamma data doesn't match level energy in cross section data: std-092_U_235.endf,

WARNING SUMMARY

checkr A previous error halted parsing of the current section: std-001_H_001.endf, std-002_He_003.endf, std-003_Li_006.endf, std-005_B_010.endf, std-006_C_000.endf, std-006_C_012.endf, std-006_C_013.endf, std-079_Au_197.endf, std-092_U_235.endf, std-092_U_238.endf, std-098_Cf_252.endf,

checkr CHECKR does not realize that the standards library is a neutron data sublibrary.: std-001_H_001.endf, std-006_C_000.endf,

checkr The standards sublibrary is not meant for transport calculations and is not required to be complete.: std-001_H_001.endf, std-006_C_000.endf,

checkr The standards sublibrary uses NSUB=19, but this was never officially adopted by CSEWG for the ENDF format.: std-001_H_001.endf, std-002_He_003.endf, std-003_Li_006.endf, std-005_B_010.endf, std-006_C_000.endf, std-079_Au_197.endf, std-092_U_235.endf, std-092_U_238.endf,

fizcon The standards sublibrary is not meant for transport calculations and is not required to be complete.: std-005_B_010.endf,

fudge-4.0 Breakup into e+e- pairs not yet supported by fudge: std-005_B_010.endf,

fudge-4.0 Cross section does not match sum of linked reaction cross sections: std-001_H_001.endf, std-002_He_003.endf, std-003_Li_006.endf, std-005_B_010.endf, std-006_C_012.endf, std-006_C_013.endf,

fudge-4.0 Cross sections do not approach saturation of Wick's limit: std-001_H_001.endf,

fudge-4.0 First cross section point not zero right at threshold: std-006_C_013.endf,

fudge-4.0 Indicates a test was skipped due to missing information : std-006_C_000.endf,

fudge-4.0 Missing a channel with a particular angular momenta combination: std-079_Au_197.endf, std-092_U_235.endf, std-092_U_238.endf,

fudge-4.0 Potential scattering hasn't converted, you need more L's!: std-079_Au_197.endf, std-092_U_235.endf,

fudge-4.0 The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.: std-001_H_001.endf, std-003_Li_006.endf, std-005_B_010.endf, std-006_C_000.endf, std-006_C_012.endf, std-006_C_013.endf, std-079_Au_197.endf, std-092_U_235.endf, std-092_U_238.endf,

fudge-4.0 The standards sublibrary is not meant for transport calculations and is not required to be complete.: std-092_U_235.endf,

psyche Gamma width not in agreement with PSYCHE's expectations: std-092_U_235.endf, std-092_U_238.endf,

psyche Level density in URR not in agreement with PSYCHE's expectations: std-079_Au_197.endf, std-092_U_235.endf, std-092_U_238.endf,

psyche Strength function in URR not in agreement with PSYCHE's expectations: std-079_Au_197.endf, std-092_U_235.endf,

psyche The standards sublibrary is not meant for transport calculations and is not required to be complete.: std-006_C_000.endf,

xsectplotter Breakup into e+e- pairs not yet supported by fudge: std-005_B_010.endf,