

NEA Data Bank Progress Report 2012-2013

1. Organization, Staff
2. Contribution to EXFOR
3. JEFF Project, Files
4. JANIS Software

NB: The full report is available as document P2013-03

1. Organization, Staff

- 31(NEA)/24(DB) member countries, including the Russian Federation since January 1st, 2013.
- The overall staff situation of the Data Bank (DB) and Nuclear Science (NS) section is back to “normal” after a large turnover in 2009.
- However, the manpower allocated to nuclear data activities is low, with a total manpower of about 1.7 man-year (~10%) shared among:
 - DB Nuclear Data Services (~0.7 man-year) & JEFF (~0.4 man-year):
E. Dupont, F. Michel-Sendis
 - DB Software (~0.3 man-year):
N. Soppera, M. Bossant
 - NS WP on ND Evaluation Cooperation – WPEC (~0.3 man-year):
E. Dupont

2. EXFOR – Experimental nuclear data

Update and maintenance of the EXFOR database (areas 2 and O)

- Full coverage of experimental results published in open literature
- Revision of old entries is a significant part of the activity
- Peer-review of all transmissions using JANIS

In 2012, the NEA DB contributed 371 entries to EXFOR

- 123 entries for neutron data (22 new + 101 updated)
- 248 entries for charged-particle data (111 new + 137 updated)

In 2013 (1st quarter), the NEA DB has prepared 291 entries

- 221 entries for neutron data (15 new + 206 updated)
- 70 entries for charged-particle data (69 new + 1 updated)

See the NEA DB Progress Report (P2013-03) for more detailed stats

2. EXFOR – Experimental nuclear data

JANIS Trans Checker

- Peer-review of all NRDC prelim files
- Analysis of JANIS import log for the EXFOR master (cf. WP2013-16)
- Now available online at www.oecd-nea.org/janisweb/trans-checker

EXFOR checking (“post-SG30” activities)

Verification methods developed within WPEC Subgroup 30 have been implemented at the Data Bank to further improve the quality of EXFOR

- Statistical tests: completed (cf. NEA News, Vol. 29, No 1, June 2011)
- Comparison with evaluated data: completed (contribution to ND2013)
- In-depth review of all $(n,2n)$, (n,p) , (n,α) xs data (cf. WP2013-19)

3. JEFF Project, Files

JEFF-3.1.2 released in February 2012

JEFF-3.1.x validation report published as JEFF Report 23

JEFF-3.2T2 General Purpose File

- Assembled in February 2013 for final testing before release
- JEFF-3.2 GP file should be released in December 2013

JEFF-3.2 Special Purpose Files

- Activation data based on EAF-2010
- Proton and deuteron libraries based on TENDL
- Fission Yields will be complemented with GEFY data (K-H. Schmidt)
- Decay Data update is under discussion
- JEFF-3.2 SP files should be released in 2014

4. JANIS – Nuclear data display software

JANIS 3.4 was released online (Webstart) and on DVD in May-June 2012

JANIS Books were released in June 2012 (PDF) and Feb. 2013 (Web)

- Exp. and evaluated cross-sections for incident n, p, d, t, h, α , γ
- About 4000 plots, see www.oecd-nea.org/janis/book
- Dynamic version based on JANIS Web (Feb. 2013)

JANIS Web (February-March 2013)

- Web interface to JANIS databases, JANIS Books
- Web retrieval pages now based on Search tools from JANIS Web

JANIS 3.5 (contribution to ND2013)

- New function to load user's data in simple text format
- New function to save/restore JANIS state (plots, tables, settings...)

Thank you for your attention