NEA Data Bank

OECD

A New Java-based Nuclear Data Display Program

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What is Janis?

Janis (**Ja**va-based **n**uclear **i**nformation **s**oftware) is a display program designed to facilitate the visualisation and manipulation of nuclear data. Its objective is to allow the user of nuclear data to access numerical values and graphical representations without prior knowledge of the storage format. It offers maximum flexibility for the comparison of different nuclear data sets.

Which data?

Evaluated and experimental data (EXFOR format) such as:

- Decay data,
- Fission yields,
- Interaction data: resonance parameters, cross-sections (pointwise and multi-group data), neutron multiplicities, energy distributions, angular distributions, energy-angle distributions, cross-sections uncertainties.

All such data are available through the nuclear data centres network*.

Janis users can easily build their own databases starting from any ENDF formatted file or from GENDF libraries.

Search capabilities are included for resonance data, decay data and experimental data. Various options for the manipulation of cross-sections (linear combinations, products and ratios of data sets and group averaging) are also available.

Janis was developed using Java technology, as it offers a powerful and portable graphical package. It runs on almost all computer operating systems (Linux, Unix, Windows, Macintosh...).

* The international network for nuclear data compilation and dissemination is composed of four main centres: NNDC (Brookhaven, USA); NEA (Paris, France); IAEA (Vienna, Austria); CJD (Obninsk, Russia); and a number of other specialised data centres.

Janis users

Janis will be helpful to engineers and physicists who use nuclear data for their applications. Its powerful and user-friendly navigation tools make it particularly suitable for educational purposes.

Who produced Janis?

Janis was developed by the OECD Nuclear Energy Agency (NEA – http://www.nea.fr) and Aquitaine Electronique Informatique (http://www.enseirb.fr/aei).

As the successor of JEF-PC (a software developed in the 1990s by the NEA, CSNSM-Orsay and the University of Birmingham), Janis benefits from the feedback of hundreds of users in the nuclear data community.

Janis is distributed free of charge.

More information about Janis can be obtained by visiting the following website: http://www.nea.fr/janis.

The software can be downloaded and the databases accessed on-line. However, we also provide databases on CD-ROM for efficient access to the data. If you wish to receive the CD-ROM by mail, please fill out either the attached order form or the electronic one available on http://www.nea.fr/janis.

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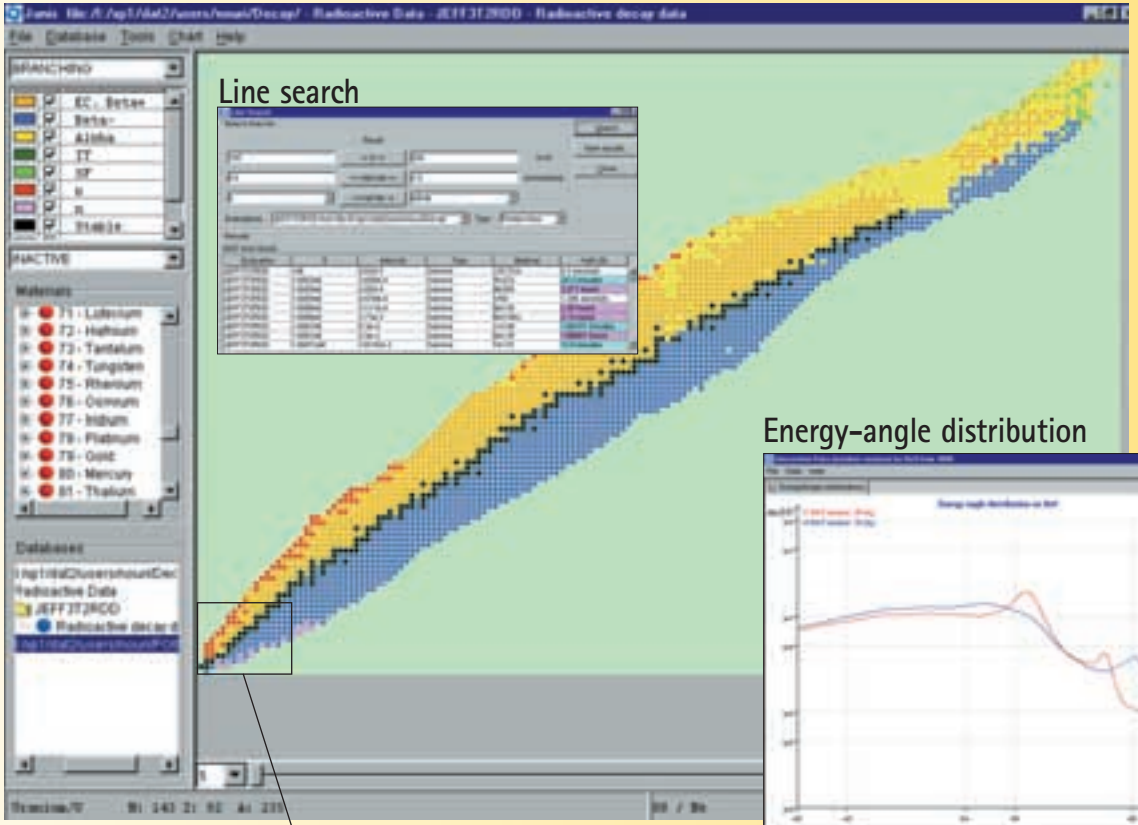
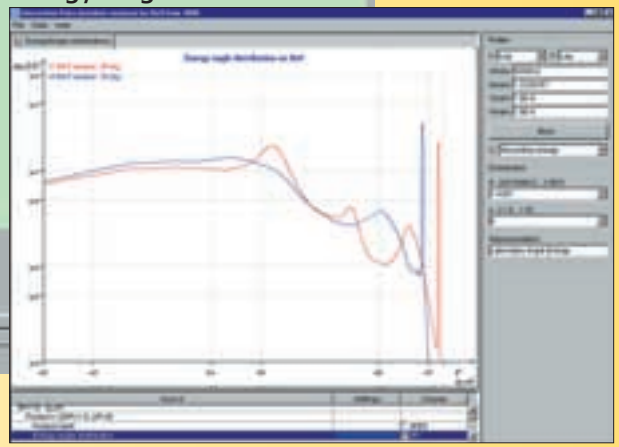
Janis

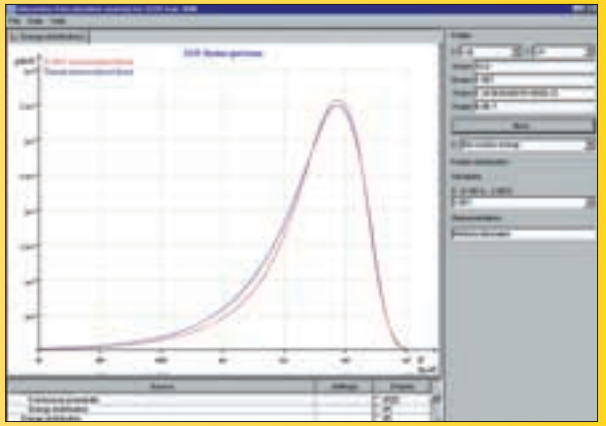
Line search



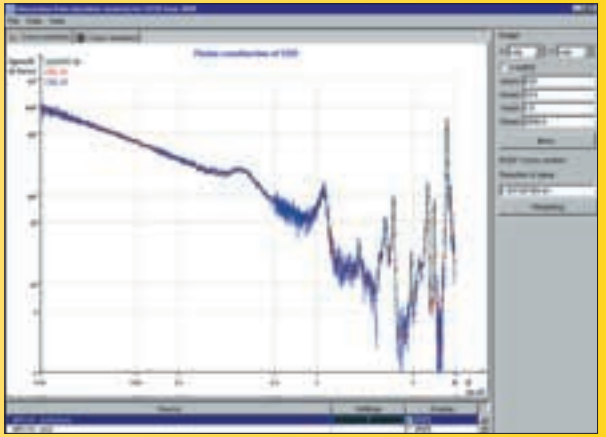
Energy-angle distribution



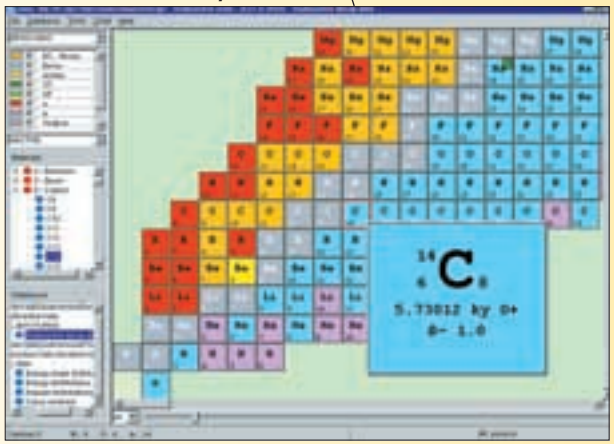
Fission energy distributions

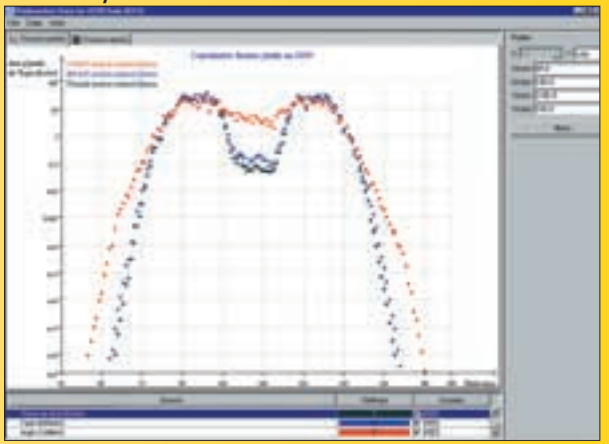


Comparison between evaluated and experimental data



Radioactive decay data



Decay paths

Fission yields