

The screenshot shows the 'Nuclear Data Sheets Production Program' window. It features several buttons and checkboxes. Red annotations and boxes highlight the following steps:

- Step1:** load an ENSDF file (points to the 'Load ENSDF File' button)
- Step2:** set output path (points to the 'Output path' text box containing 'H:\work\evaluation\mytools\JAVA_NDS_2015_NIMBUS\out' and the 'Browse' button)
- Step3:** make global settings (points to the 'Global Settings' section, which includes checkboxes for 'include all drawings', 'include reference list', 'include title in reference', 'include no drawings', 'suppress all "S" records', and 'show all authors in reference', along with a 'More' button)
- Step4:** create a LaTeX output (points to the 'Create LaTeX File' button)
- Step5:** create and view PDF output (right-click to get the pop-up) (points to the 'Custom Settings' button, which has a context menu open showing 'Create PDF' and 'Delete figure files' options)

The 'message' box at the bottom contains the text: 'Version 1.4: last update on 11/01/2016. See log.txt for more messages!'

A script file is also generated to be run to produce a PDF file from the created LaTeX file.

System requirements and prerequisites:

- 1) **8G RAM memory**
- 2) latest version of Java:
JRE 8 or above, free at <http://java.com/en/download/>
- 3) LaTeX compiler:
Windows: **MiKTeX**, free at <http://miktex.org/download>
Linux and MacOS: come with the system.

Recommended cross-platform LaTeX editor: **Texmaker**, free at <http://www.xm1math.net/texmaker/download.html>



http://www.nndc.bnl.gov/nndcscr/ensdf_pgm/utility/javands/



National Nuclear Data Center

NNDC Databases: [ENDF](#) | [CSISRS](#) | [CINDA](#) | [NuDat](#) | [NSR](#) | [XUNDL](#) | [ENSDF](#) | [MIRD](#)

NNDC Site Index

- ENSDF Analysis and Utility Programs**
- [ADDGAM](#)
- [Avetools](#)
- [ENSDAT and ComTrans](#)
- [FMTCK](#)
- [Java-NDS](#)
- [JGAMUT](#)
- [TREND](#)
- [Visual Averaging Library](#)
- [XLS2ENS](#)

ENSDF Utility Programs

The [National Nuclear Data Center](#) maintains and distributes various programs in support of the [I Nuclear Structure and Decay Data Network](#). These programs generally use as input files in the E format.

- [ADDGAM](#) - Adds gammas to adopted dataset.
- [AveTools](#) - The program AveTools combines three different statistical methods to calculate uncertainties.
- [ENSDAT and ComTrans](#) - Produces Nuclear Data Sheets style tables and drawings ComT ENSDF dataset to a "rich text format".
- [FMTCK](#) - ENSDF format checking.
- [Java-NDS](#) - The program Java-NDS is a code to convert ENSDF files to publish-ready Nuc
- [JGAMUT](#) - Code to convert ENSDF files to create adopted gamma energies and intensities
- [TREND](#) - Tabular display of ENSDF data.
- [Visual Averaging Library](#) - The program V.AvLib offers eight methods of averaging value
- [XLS2ENS](#) - Convert Datasets in Excel Spreadsheets to ENSDF Format

Official notice of new release is sent out every 6 months, unless there is major update. It is kept updated and available here.

Utility Programs - Java-NDS

ENSDF Publishing Code

Java-NDS is a program that produces reader-friendly (or publish-ready) PDF output from an ENSDF-format input file. It converts an ENSDF file to a LaTeX file from which a PDF file can be generated using a LaTeX compiler. See the [README](#) for installation and running details.

Prerequisites

- Java JRE 8 or above
- LaTeX compiler. For Windows, use [MikTeX](#).
- Works best with 8GB of RAM or higher.

Runs on Linux, Windows, and Mac.
Latest Release on 04/27/2017

- [Zip file \(contains jar file, README, and samples\)](#)
- [Jar File](#)

Documentation

- ▶ [README](#)
- ▶ [Sample input](#)
- ▶ [Corresponding sample output](#)
- ▶ [Another sample input file](#)
- ▶ [Corresponding sample output](#)
- ▶ [Version Control](#)

New features

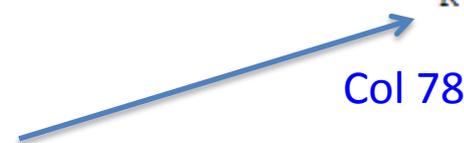
Particle-unbound levels in beta-decay datasets:

A fake level (SN+X or SN+P) representing a range of the unbound levels is to account for the total decay branches to these levels.

```

79GA B 5.6 7 5.58 6 C
79GAS B EAV=2825.4 15
79GA CB E$5900 40 from BG coin
79GA G 358.2 2 18.1 20 C
79GA L 2977.7 4
79GA B 4.7 4 5.64 5
79GAS B EAV=2797.2 15
79GA G 236.2 3 6.6 20 C
79GA G 415.8 4 8.5 20 C
79GA L 3020.1 4
79GA B 7.4 7 5.43 5 C
79GAS B EAV=2776.6 15
79GA CB E$5900 100 from BG coin
79GA G 1100.6 2 25.4 20 C
79GA L 3334.8 5
79GA B 2.2 5 5.9 1
79GAS B EAV=2623.6 15
79GA G 773.3 3 7.2 15 C
79GA L SN+X R
79GA cL $S(n) ({+79}Ga)=6913.0 {I27} (2012Wa38)
79GA B 1.7 5
79GA CB IB$%B-N=1.7 5 (from 79ZN ^Adopted ^Levels)

```



A pseudo level accounting for a **range** of neutron-unbound levels is inserted at then end and marked with “**R**” representing “Range” at column 78 of the level-record line.

New features

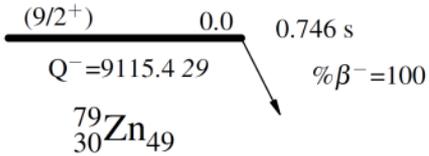
$^{79}\text{Zn} \beta^-$ decay (0.746 s) 1986Ek01

Decay Scheme

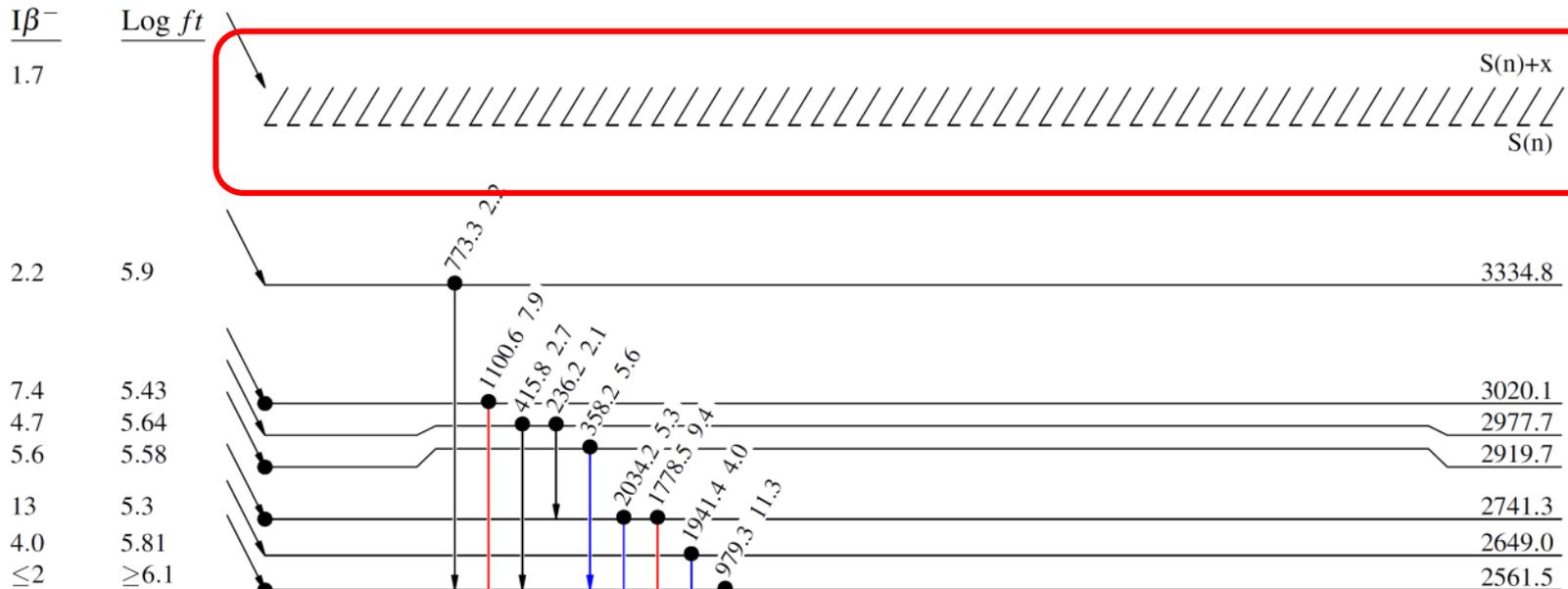
Intensities: $I(\gamma)$ per 100 parent decays

Legend

- $I_\gamma < 2\% \times I_\gamma^{\max}$
- $I_\gamma < 10\% \times I_\gamma^{\max}$
- $I_\gamma > 10\% \times I_\gamma^{\max}$
- Coincidence



A pseudo level accounting for a range of neutron-unbound levels



Local dictionary using "DICT":

Example:

```
.27P . . . . .PB (27P, P26SI) :XUNDL-5 . . . . .2016MA26 . . . . .
```

the reaction name "PB(27P,P26SI)" is not in the internal dictionary and thus is printed as is.

add the following line anywhere in the top comment section before data records.

```
.27P . . c . .DICT$PB (27P, P26SI) =Pb ({+27}P, p{+26}Si) . . . . .
```

How to define in an ENSDF file:

"DICT\$word_in_uppercase=translation_in_lowercase"