Status of the ENSDF Analysis & Utility Codes

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- A. Changes since the last USNDP meeting
- B. In progress and future plans





Status of the ENSDF Analysis & Utility Codes — 2

- Changes since the last USNDP meeting
 - All programs converted to FORTRAN 95 (C.L. Dunford)
 - NSDFLIB and RULER distributed
 - In-house testing needed before distribution of remaining
 - Program updates
 - FMTCHK
 - Attempted to handle IB, IE, and TI with no uncertainties better
 - More tolerant of inconsistent FL and E_{level} -E γ
 - GTOL
 - Increased number of levels allowed to 1000 and gammas to 4000
 - RULER
 - Not recognizing T_{1/2} limits fixed
 - FORTRAN 95 version distributed
 - Bricc developed and beta release distributed to ENSDF evaluators for testing
 - To be presented

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Status of the ENSDF Analysis & Utility Codes — 3

In Progress and Future Plans

- GAMUT Converted to MS Windows by Dr. Choi
 - Extensive testing required
 - Upgrade to current ENSDF formats and standards
 - Port to Linux and OpenVMS
- GTOL Possible machine dependent precision problem
- HSICC Problem in creating new records when a gamma energy lay below a subshell binding energy corrected.
 - Needs testing before distribution.





Status of the ENSDF Analysis & Utility Codes — 4

• LOGFT

 Logic from the LBNL program ft has been incorporated to calculate 3rd and higher order unique forbidden transitions.

Extensive testing and intercomparison with LBNL Codes still remains before release.

- Update to use the electron-capture data of Schönfeld, et al.
- RadList
 - Converting current in-house version of RadList to FORTRAN 95. Linux, MS Windows, and OpenVMS versions planned.
 - Add calculation of subshell conversion- & Auger-electron & X-ray intensities and improve calculation of continua spectra.
 - Incorporate logic from LOGFT after new version of LOGFT released.
- In calendar year 2005, maintenance of OpenVMS versions will cease.



