NJOY Status

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NJOY Status

- **NJOY99**
  - The historical code version. Originally released in 1999 with updates periodically published through the t2.lanl.gov web site.
    - Latest version, 99.366, released to the User community last Spring.
      - Additional patches to allow more robust plotting of ACER produced secondary distributions and to increase array space in GASPR were provided to BNL.
      - Will be part of the next public release (in December).
- **NJOY2010**
  - A new version, currently undergoing final testing and debugging.
    - Used at LANL for all ENDF/B-VII.1beta processing.
  - Can process LRF=7 (Limited Reich-Moore) formatted data sets.
  - For far too long we've said it would be publicly released "soon".
    - Currently working with LANL's Technology Transfer organization to finalize release process.
    - NDA's are currently in-force between LANL and selected end-users to support ENDF/B-VII.1beta processing.

NJOY Status

- **NJOY99.336 – to – NJOY99.366 Highlights (also in NJOY2010)**
  - Implement new MT values approved at the Fall 2010 CSEWG meeting;
    - Includes changes in RECONR, BROADR, GROUPR, GASPR, ERRORR and ACER.
  - More robust axis limit determination for secondary energy distribution plots from ACER;
  - Larger array space in ACER for check plots;
  - More robust RECONR processing for evaluations with no RR data but URR data with LSSF=1;
  - Revise coding in GROUPR for two-digit LFS values;
  - Include more MF1/MT451 data (elis, sta, lis, lis0, nfor, emax, lrel, nver) in PENDF output files;
  - Include missing index, and increase array space, in MIXR to allow merging of pointwise data;
  - Increase array space in ERRORR, COVR and VIEWR, allow either ascii or binary GENDF input to ERRORR, restore inadvertently deleted AWR data in ERRORR output;

NJOY Status

- **NJOY99.336 – to – NJOY99.366 Highlights (con't)**
  - Upgrade MODER to handle to the previously approved scattering radius uncertainty format;
  - Allow larger group structures in GROUPR;
  - Revert for log interpolation to linear interpolation in HEATR when negative coefficients are encountered;
  - Various ACER revisions to support more robust processing of JENDL-4 evaluations;
  - Larger array space in BROADR to allow larger delta-T broadening in a single step;
  - GASPR corrections to the previous update recognizing new MT values;
  - Revisions to COVR input to allow User's to specify correlation matrix color intervals.
- **Recent issue, to be resolved in next month's upgrade**
  - Charged particle elastic scattering, MF6 law 5, processing is governed by an LTP flag.
    - Current coding assumes LTP=2 if it is not unity … but recent TALYS/TENDL files use LTP=12.