NJOY Status

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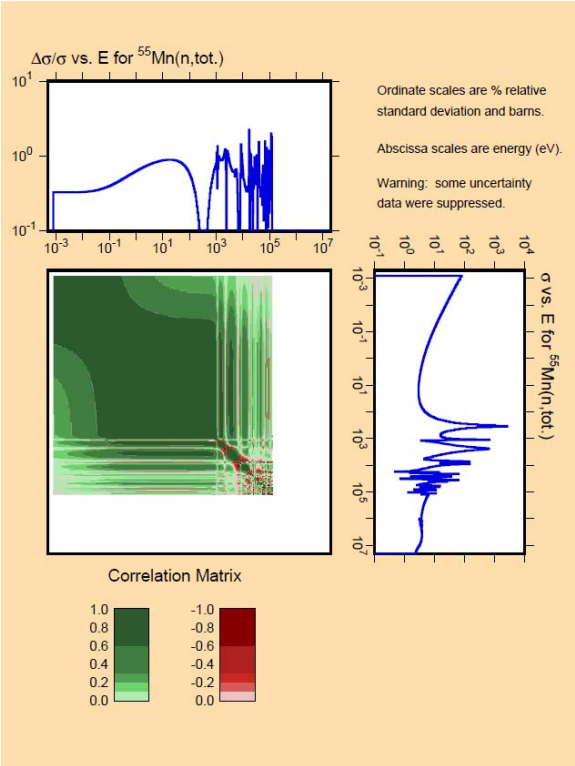
NJOY Status

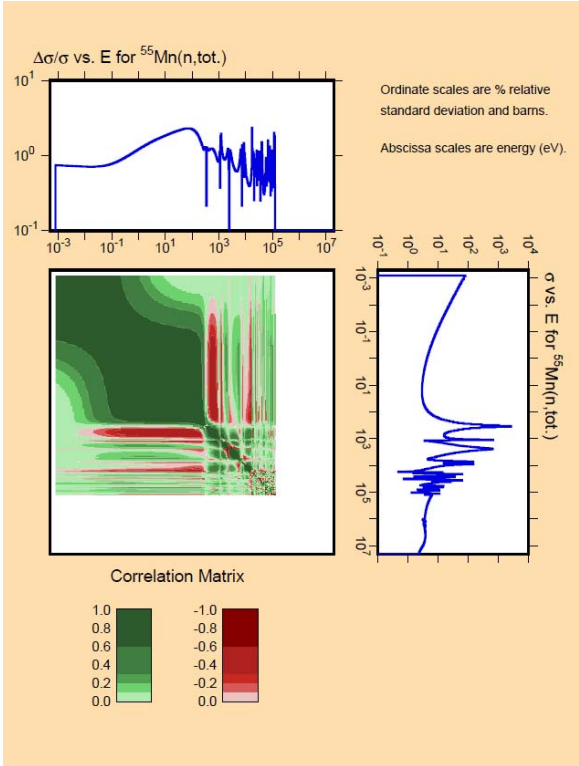
- **NJOY99**
  - The historical code version. Originally released in 1999 with updates periodically published through the t2.lanl.gov web site.
    - Latest version, 99.304, released to the User community in early October.
      - Updated from 99.259 during the last year.
    - An unofficial patch for the newly approved MF32 scattering radius format revision will be developed in November.
      - A significant contributor to the NJOY/PUFF covariance processing difference for ^{55}Mn has recently been identified (thanks, Andre!).
- **NJOY2009**
  - A new version, currently undergoing final testing and debugging.
    - Little change from the user perspective, but based largely upon Fortran 90.
    - Can process LRF=7 (Limited Reich-Moore) formatted data sets.
    - “Beta” version is available on a limited basis while documentation and submittal to RSICC is finalized.

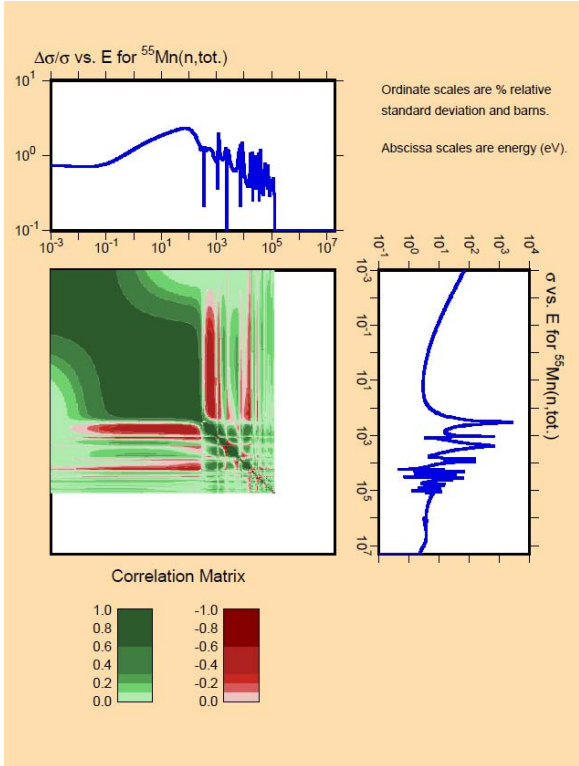
NJOY Status

- **NJOY99.259 – to – NJOY99.304 Highlights**
  - Improved graphics for uncertainties (covr);
  - MF35 covariance processing including implementation of the “zero-sum” rule and correction of the matrix elements if necessary;
  - Include energy-dependent scattering radius format in the URR;
  - Increased array sizes and more bounds checking;
  - Compact covariance processing for 2 to 6 digit integers improved;
  - More robust coding to produce ratio plots (plotr);
  - Revised sampling in PURR to more accurately define low probability bins;
  - Miscellaneous code tweaks to keep NJOY99 in synch with the evolving NJOY2009.

NJOY/PUFF Comparison for ^{55}Mn







- **old NJOY** **latest NJOY** **PUFF, per Caleb Mattoon**
- **Corrected error in the Reich-Moore routine imported from ERRORJ.**
- **Small differences in mt102 uncertainties, near the top of the RRR, remain.**