2025 updates on codes for ENSDF evaluation

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@ZOOM, BNL

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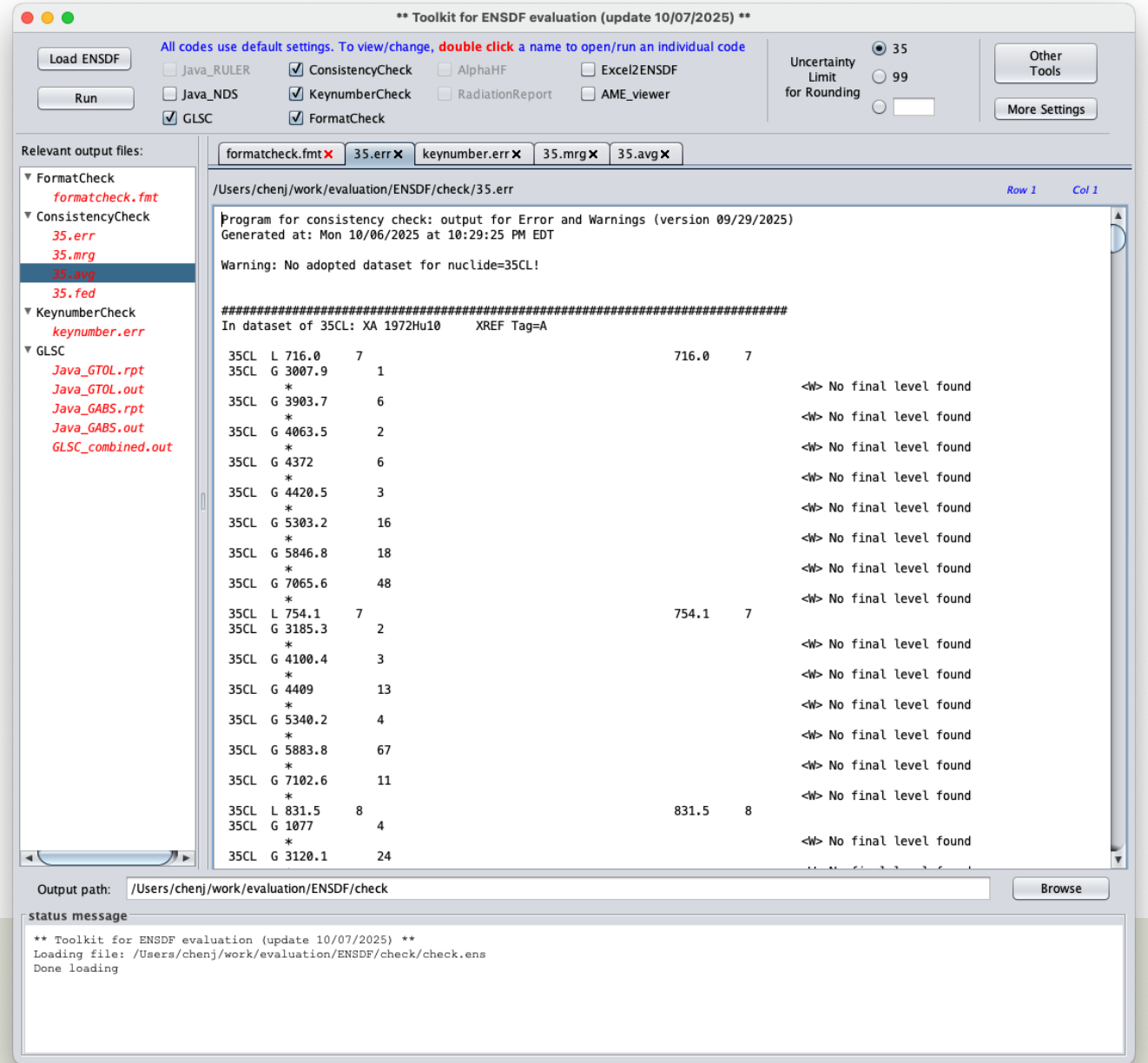
ENSDF Evaluation Toolkit



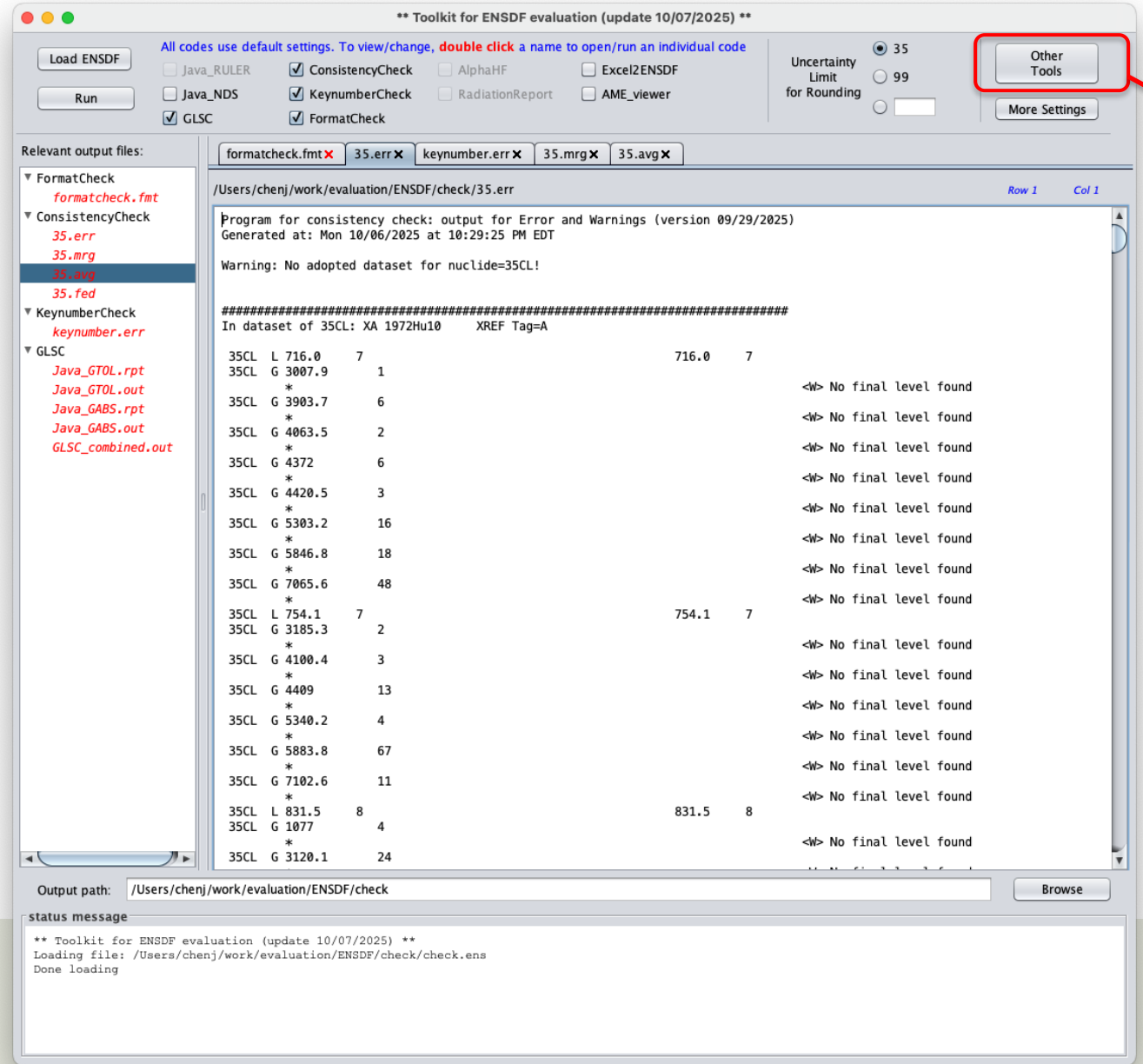
EvaluationToolkit is a Java toolkit combining all ENSDF Java codes to streamline ENSDF evaluation procedure

- ❑ Provides easy access to all codes in a single app
- ❑ Automatically determines which codes to run based on the type and data of the input dataset
- ❑ Runs all applicable codes in one single click
- ❑ Lists generated output files in one place
- ❑ In-app tabbed viewer for quick view of all generated output files

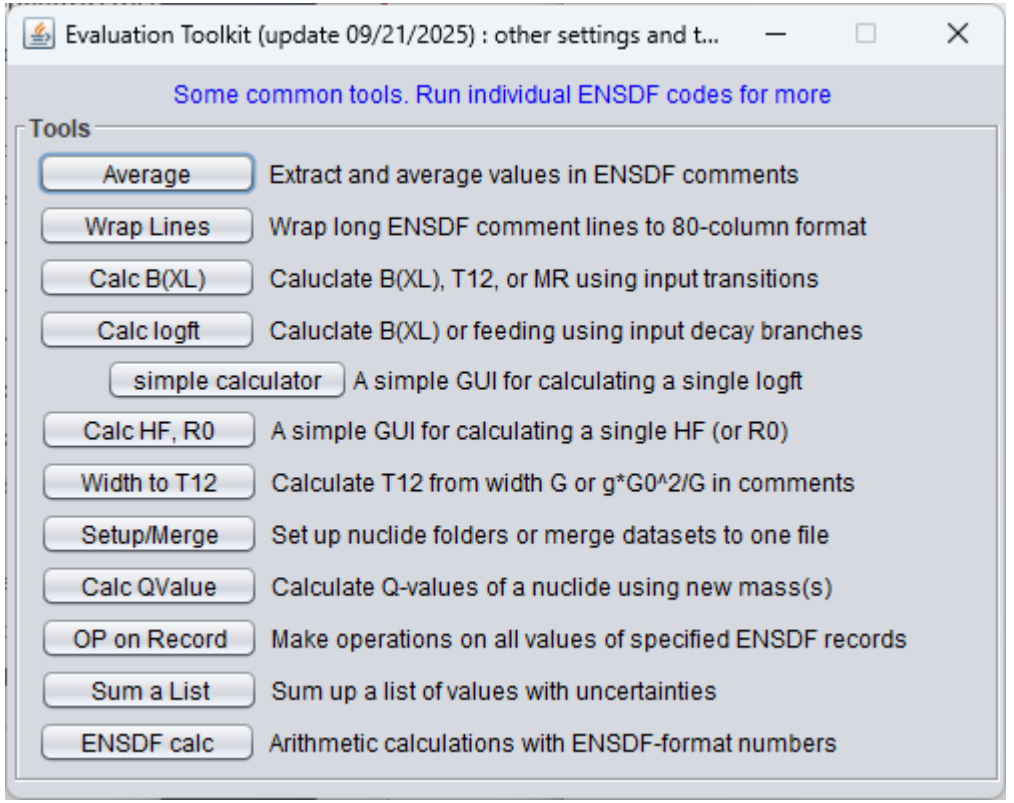
Eliminate the hassle of figuring out what codes to run for each dataset, executing them one-by-one, and tracking down their buried outputs.

Note: all codes are run with default settings. If customized settings are needed, double click the name of a code to change the settings and run it individually

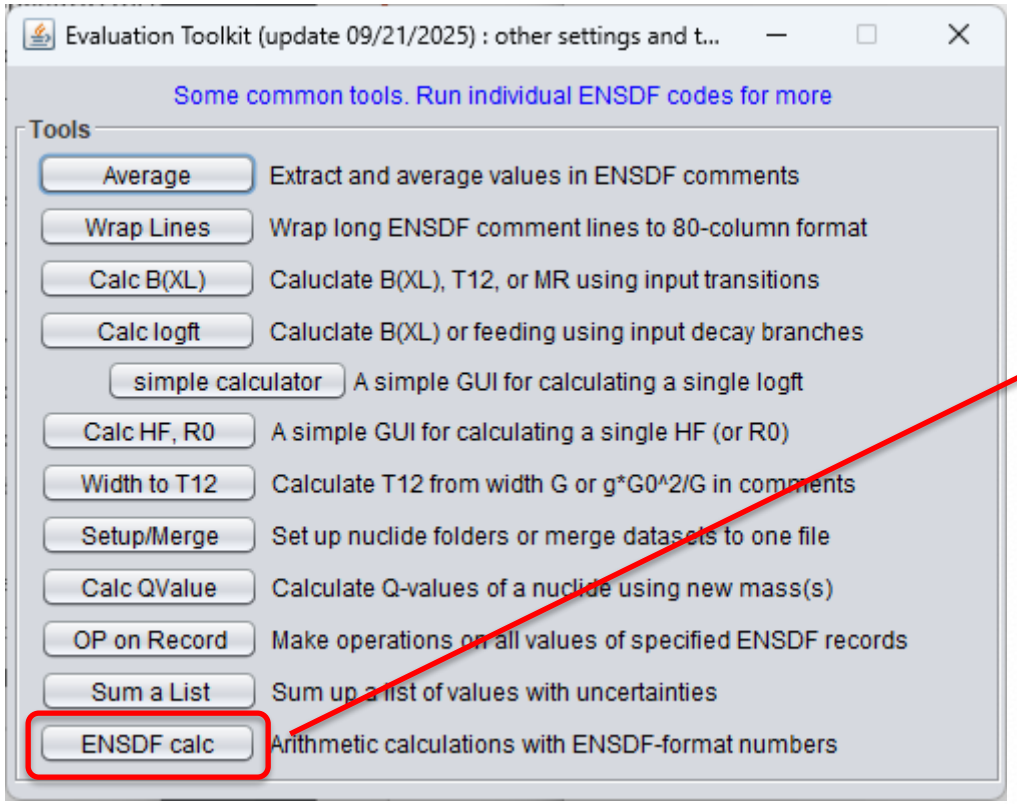
ENSDF Evaluation Toolkit

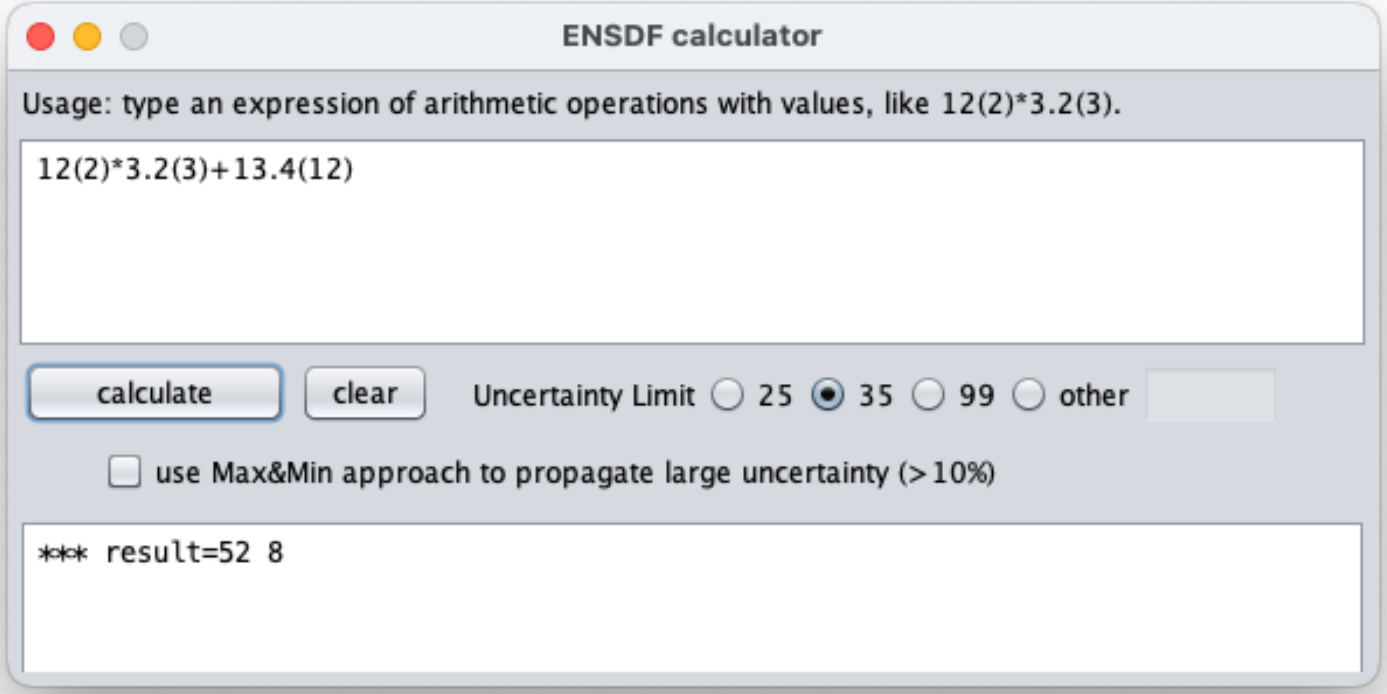


Quick access to useful tools

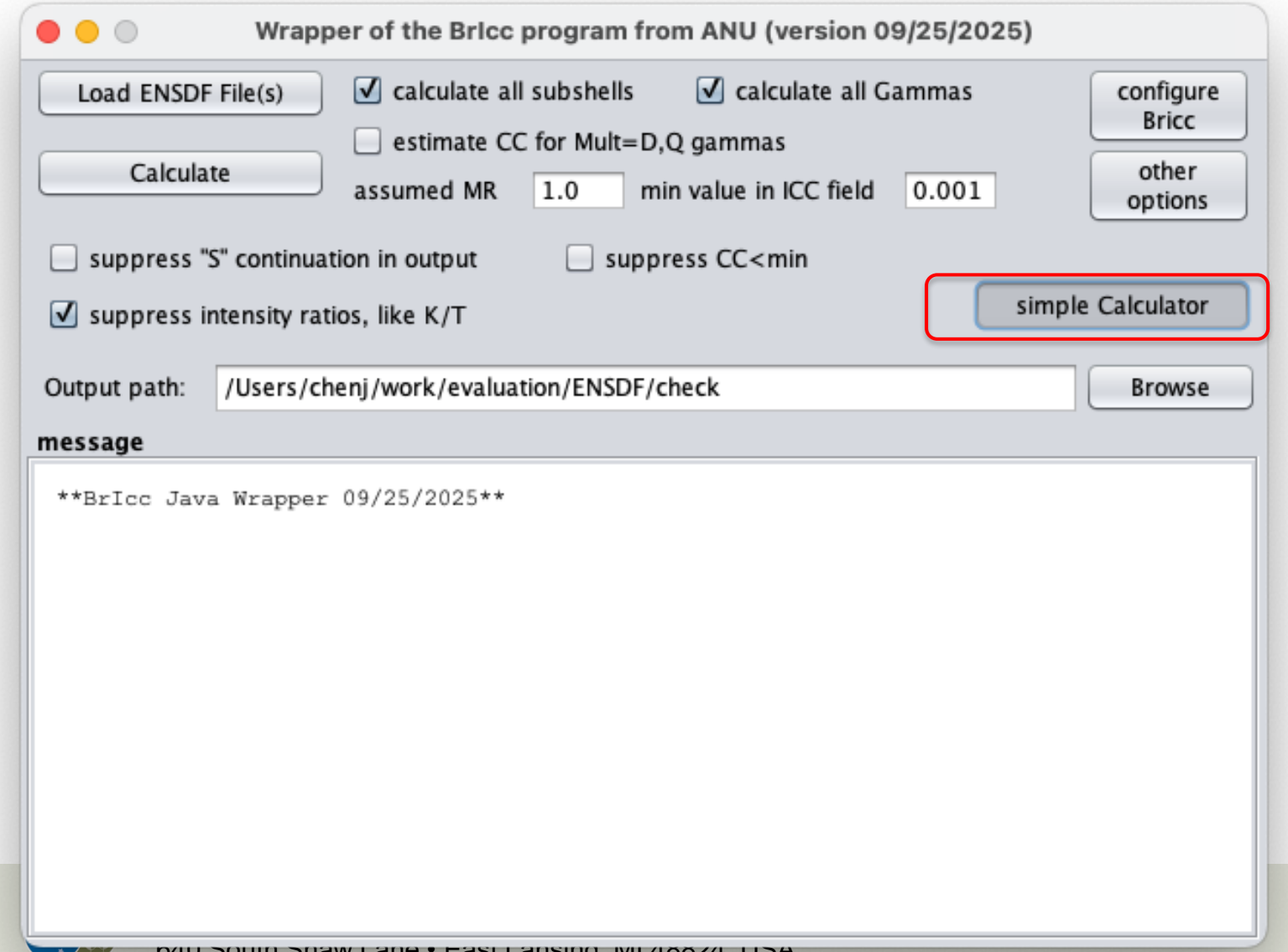


A convenient tool: ENSDF calculator





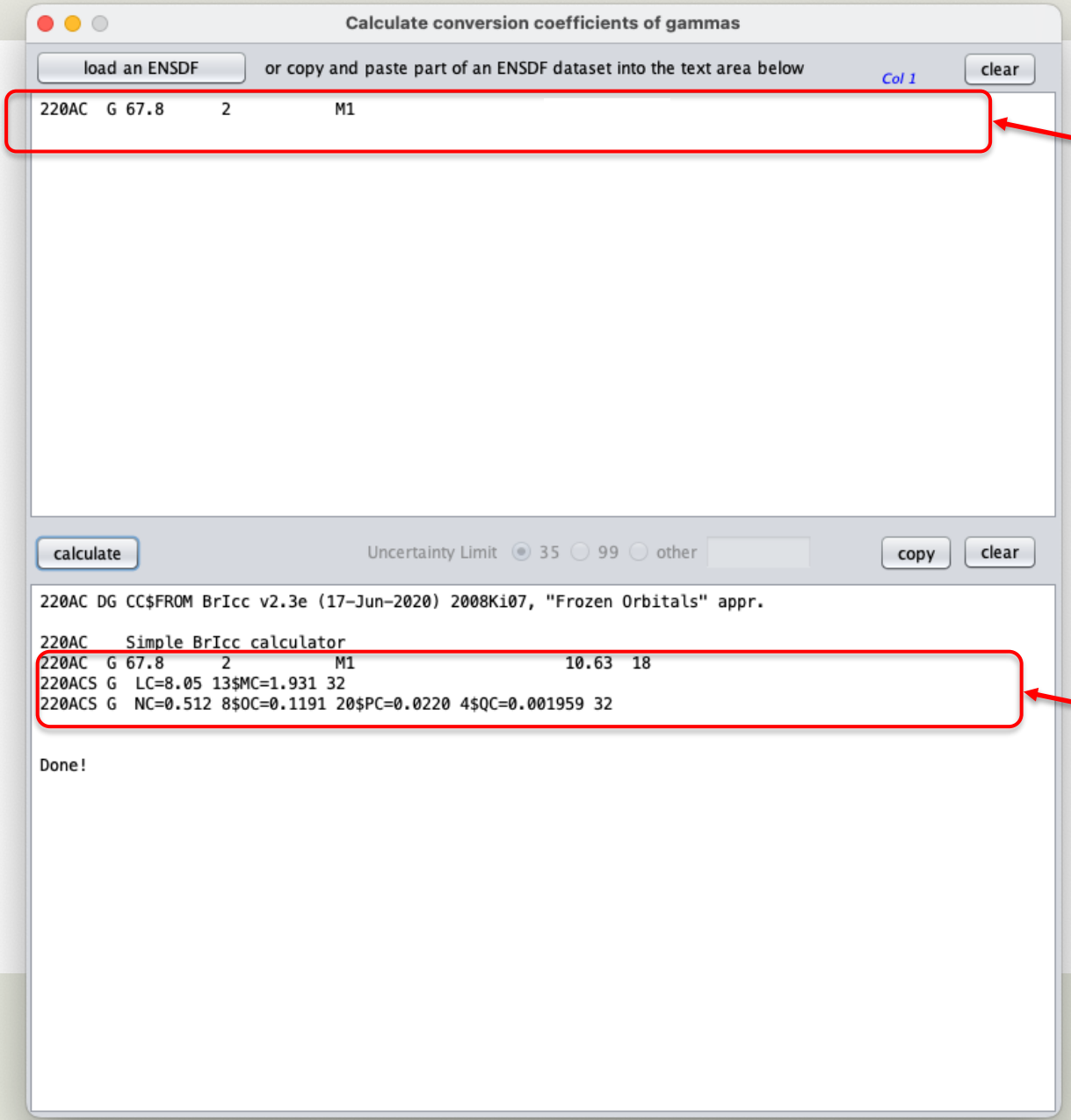
A BrIcc Wrapper Tool: BriccWrapper



BriccWrapper is a Java wrapper of ANU's BrIcc code

- Runs ANU's BrIcc code in the background
- Provides graphical interface for BrIcc settings
- Provides a simple calculator tool for calculating partial ENSDF datasets

A BrIcc Wrapper Tool: BriccWrapper



Partial ENSDF dataset from copy and paste

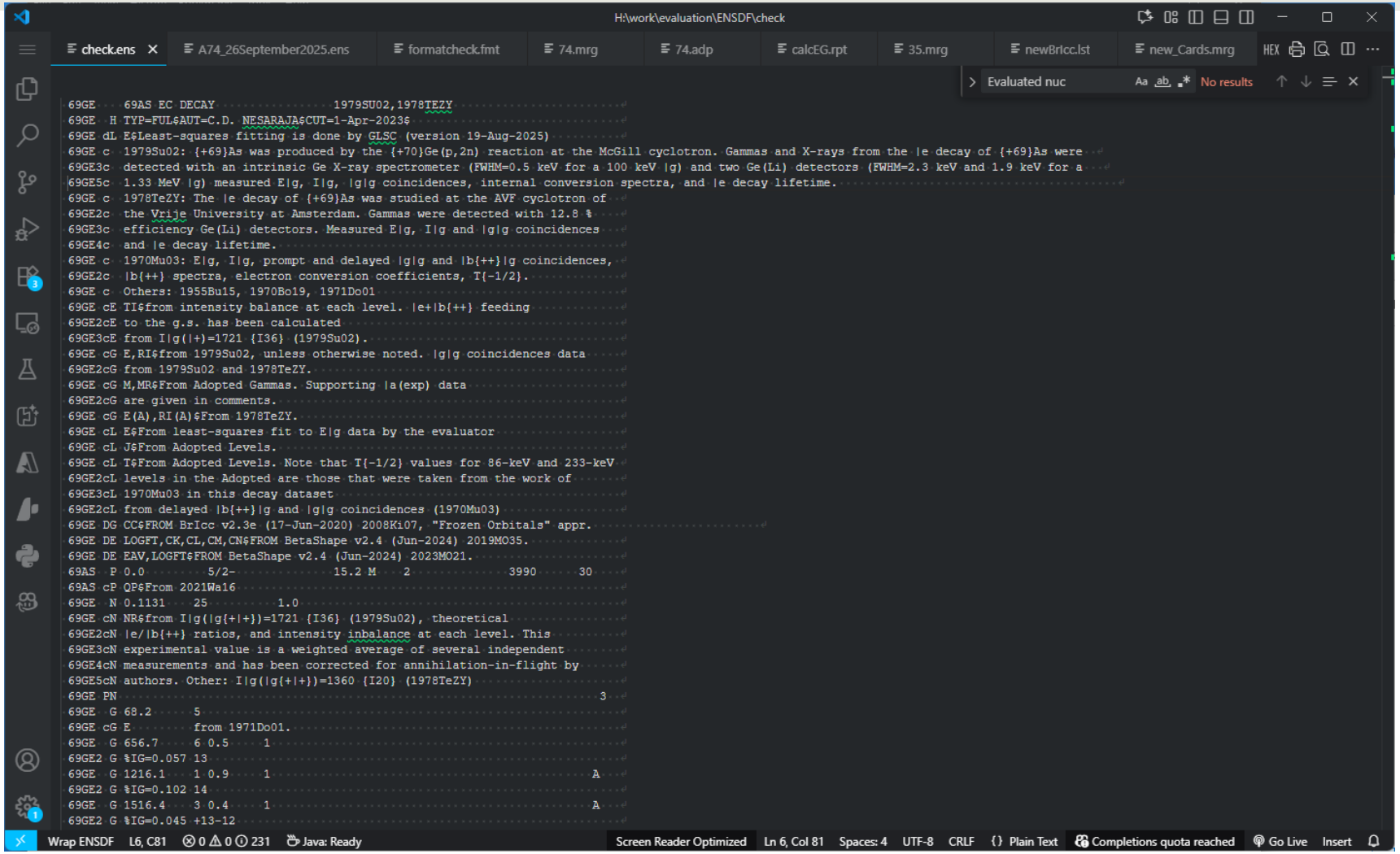
BrIcc results: ready to be copied and pasted back to an ENSDF databset

A powerful editor for ENSDF evaluation: VS Code

- **Microsoft Visual Studio Code (VS Code)** is a free, open-source source code editor widely used by developers worldwide.

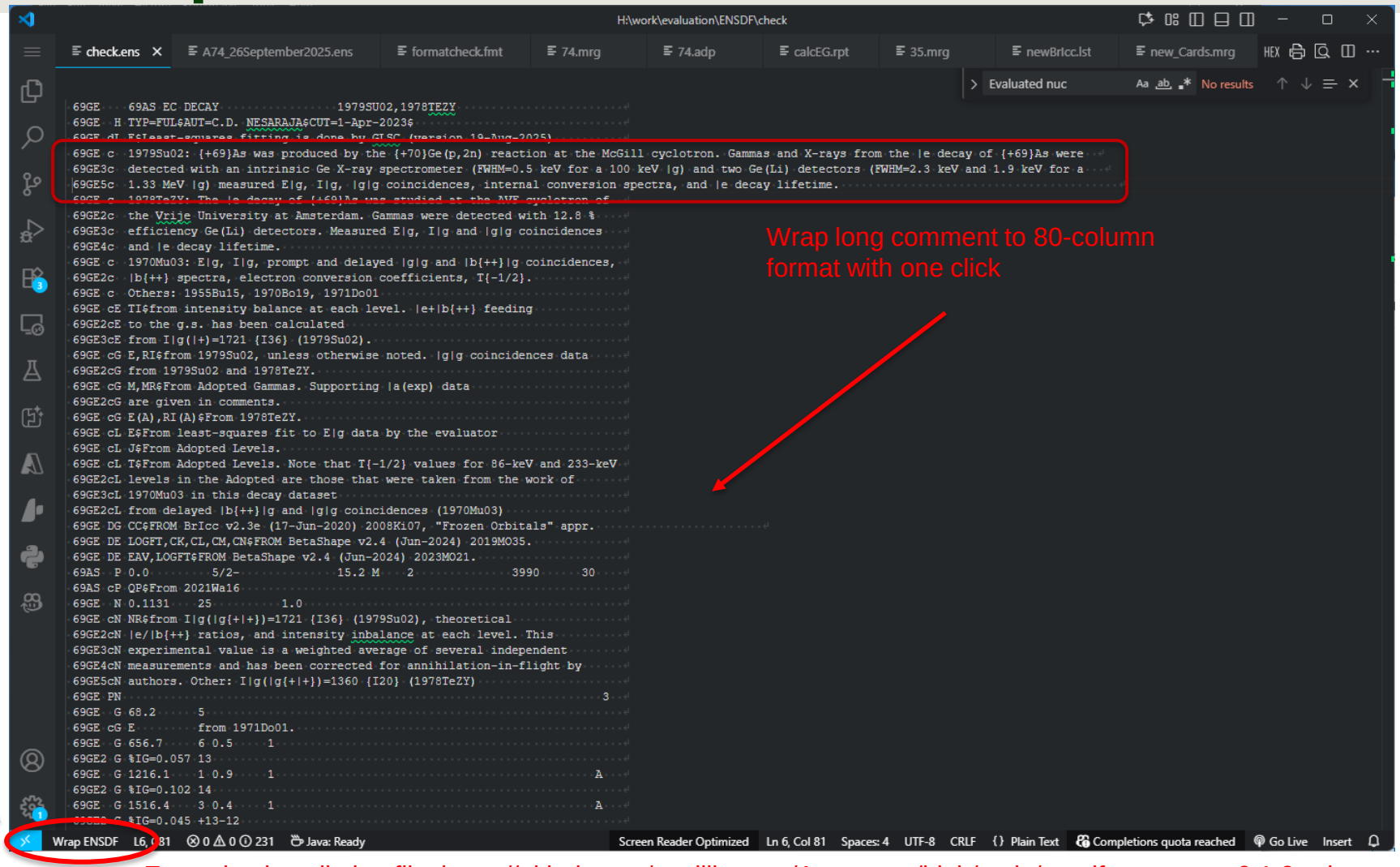
- **It is also very powerful for working with ENSDF datasets:**
  - Offers highly customizable capabilities through user extensions
  - Integrates seamlessly with AI-powered assistants

Both greatly enhancing efficiency in editing and processing ENSDF datasets.



A powerful editor for ENSDF evaluation: auto-wrap ENSDF 80-column

A specialized extension “ENSDF-auto-wrap” developed by the FRIB data group for wrapping freely-typed text to ENSDF 80-column format with a single click, eliminating the hassle for tedious manual formating



Wrap long comment to 80-column format with one click

Extension installation file: https://github.com/sunlijie-msu/Auto-wrap/blob/main/ensdf-auto-wrap-0.1.0.vsix

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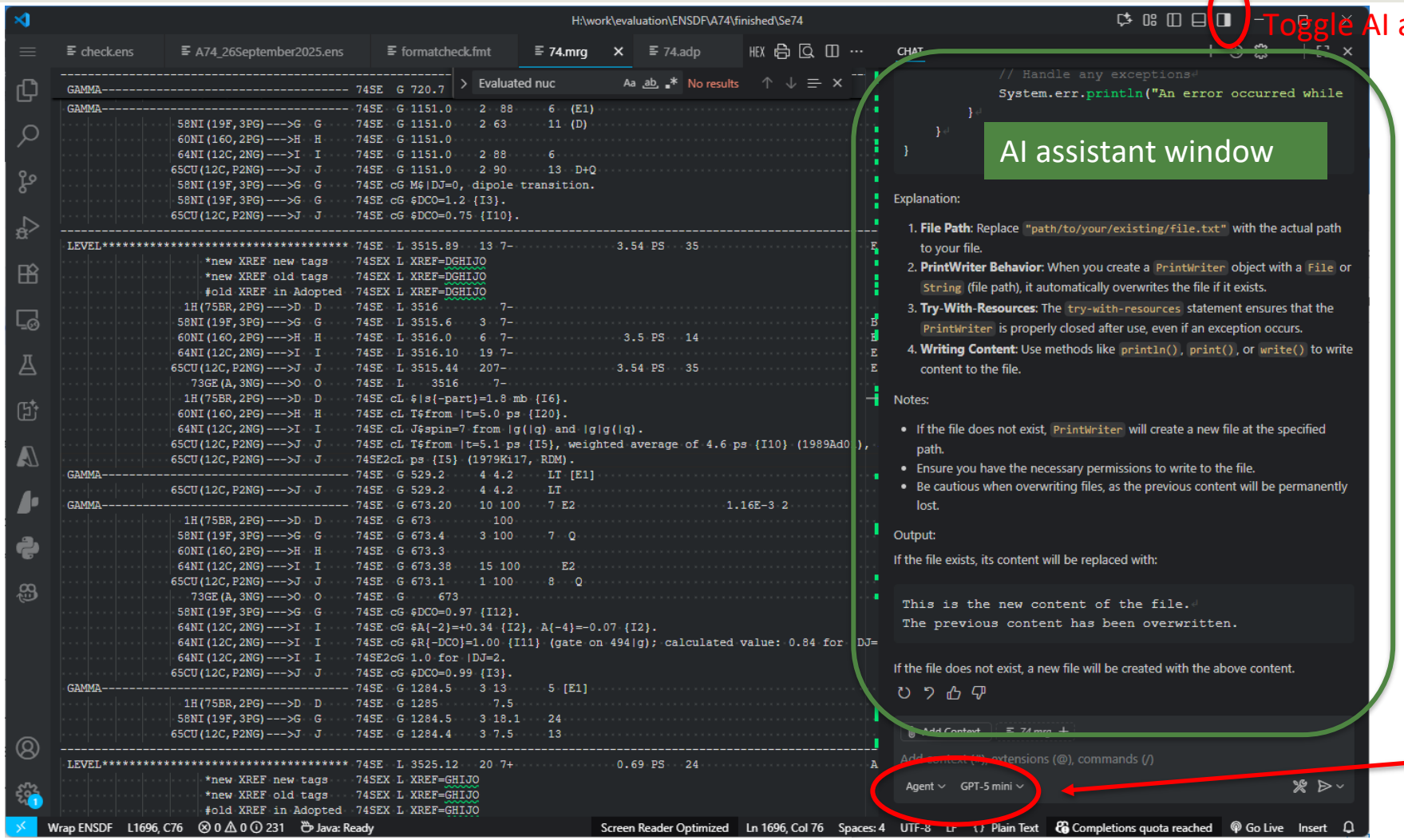
A powerful editor for ENSDF evaluation: AI-assisted ENSDF workflow



A more advanced AI-assisted ENSDF formatting tool with VS Code has been developed and been used in an early stage in ENSDF evaluation. It is actively under continuous development and improvement.

VS code seamlessly integrates with all popular AI assistants (free and paid versions)

See L.J. Sun's talk for more details

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