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FY24 CritView Status Report

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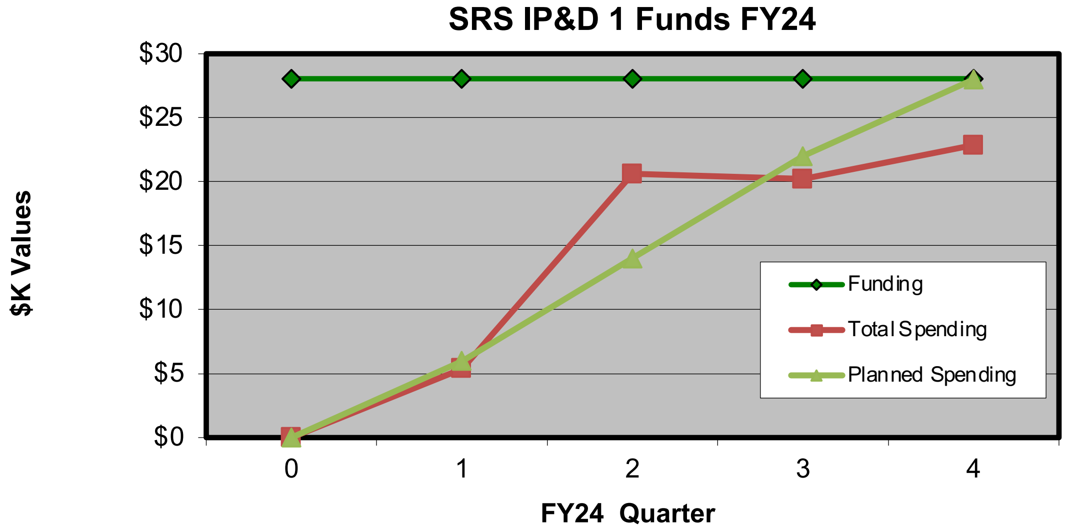
Savannah River Site (SRS) NCSP Budget Summary

- **FY24 SRS-IPD1 (CritView)**
  - ~$15K in carryover from prior year
  - ~$23K spent out of $28K planned
  - Approximately $5 K Carryover to FY25



CritView Overview

- **Designed to be a digital equivalent to existing hardcopy handbooks**

- **Provides a versatile interface for ARH-600**
  - Allows users to customize the curve plots to fit their needs

- **Provides updated and well documented data (e.g., reproduces ARH-600 with MCNP)**

FY24 CritView Task Highlights

- Complete Code Modifications

- SRS Beta Testing

Future Work (FY25)

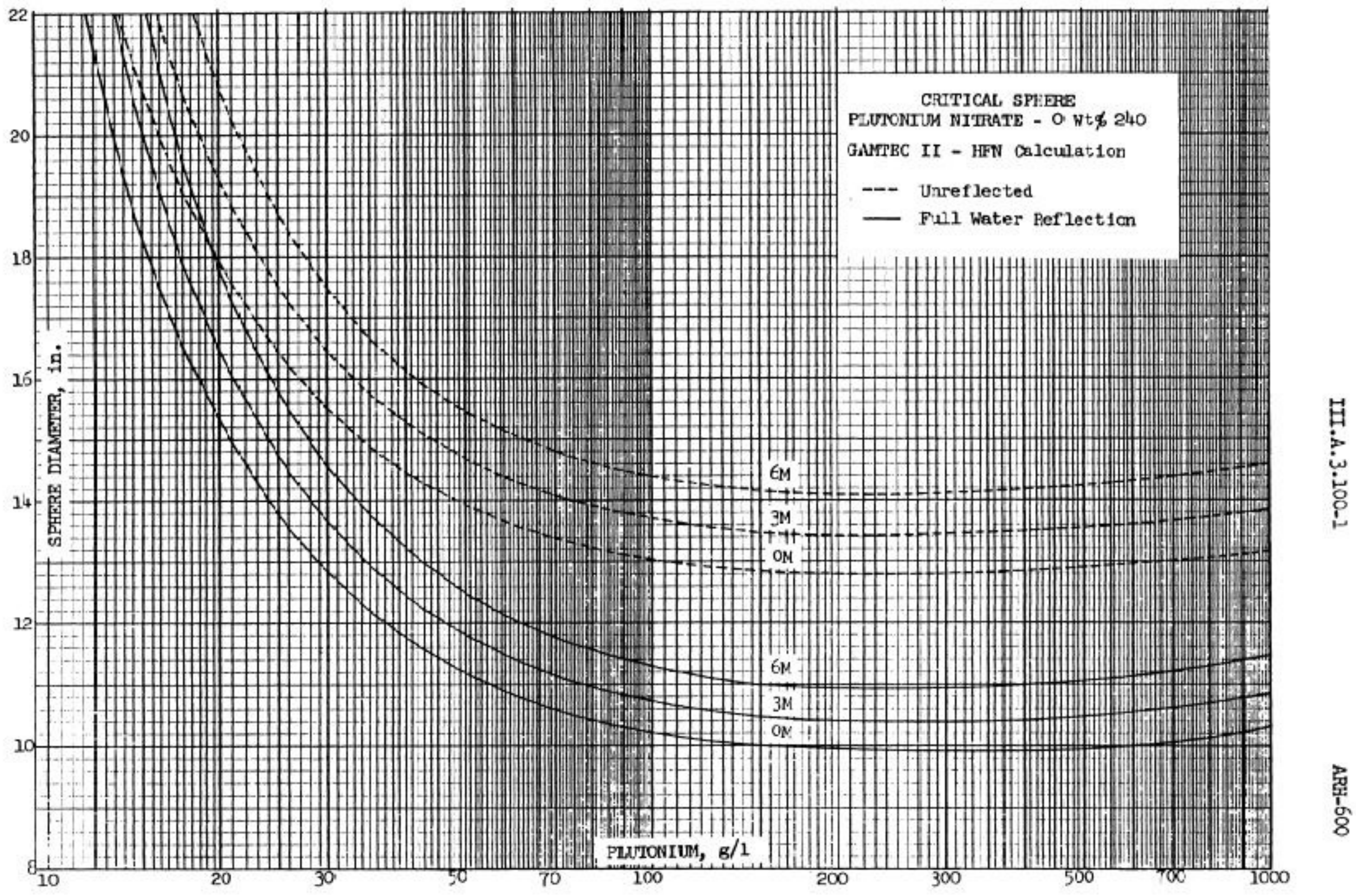
- Finalize Release Version
- Obtain Clearance for Public Release
- Transmit to LLNL for NCSP Web Page
- Expand SCALE DataBase

CritView Version 1.05

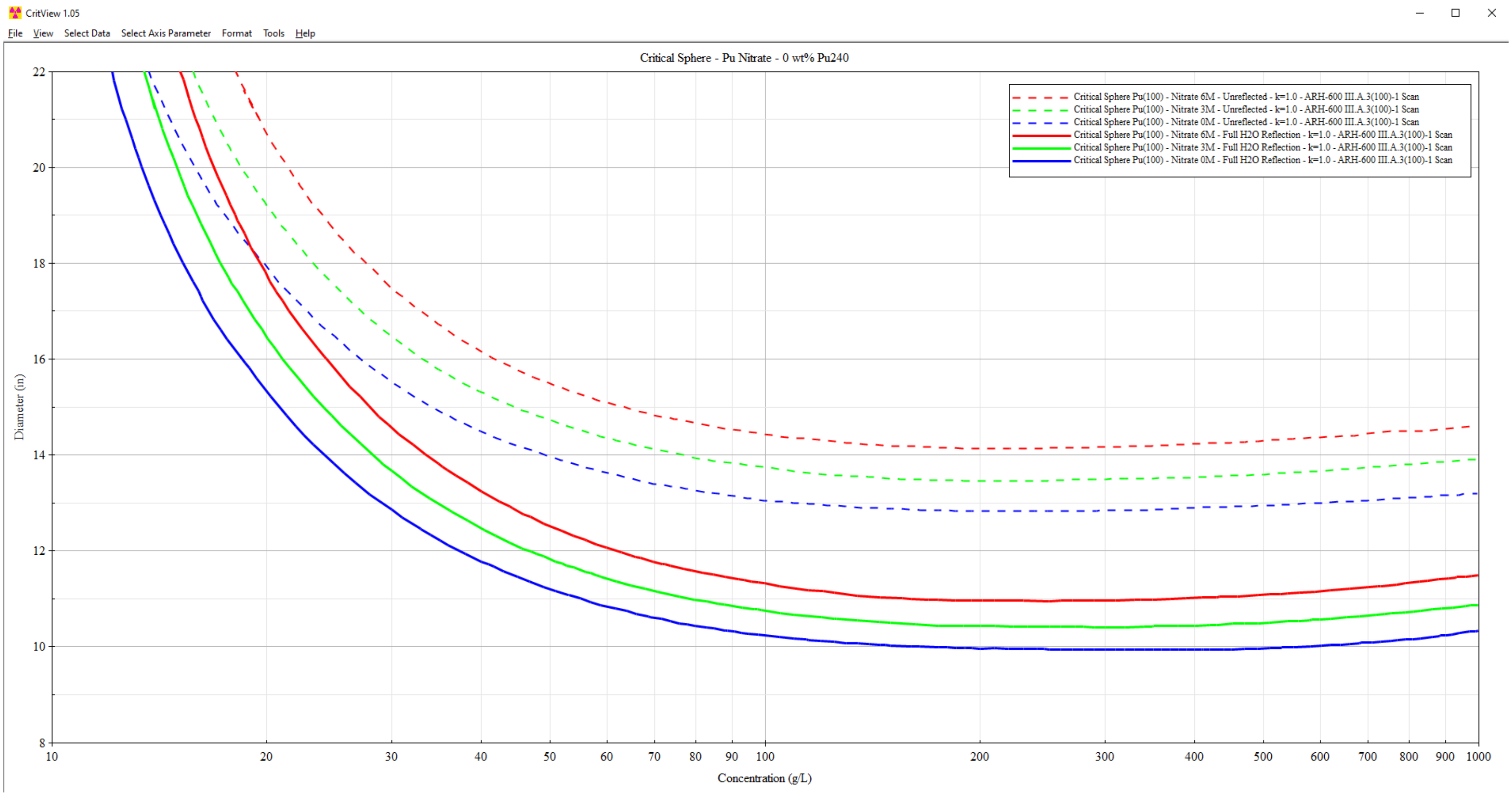
- **Updated Database**
  - All LA-10860 curves
  - SCALE calculated curves to match (most) existing MCNP curves
  - Include cross-section set identifier for MCNP and SCALE curves

- **CritView Updates**
  - Accommodate all LA-10860 data
  - Added ability to probe curve (i.e., interpolate between data points)
  - Added some new parameters and units (e.g., Enrichment, and kg/L)
  - Minor bug fixes and general aesthetics

Example Graph from ARH-600



CritView v1.05 Showing ARH-600 Data



Example Graph from LA-10860

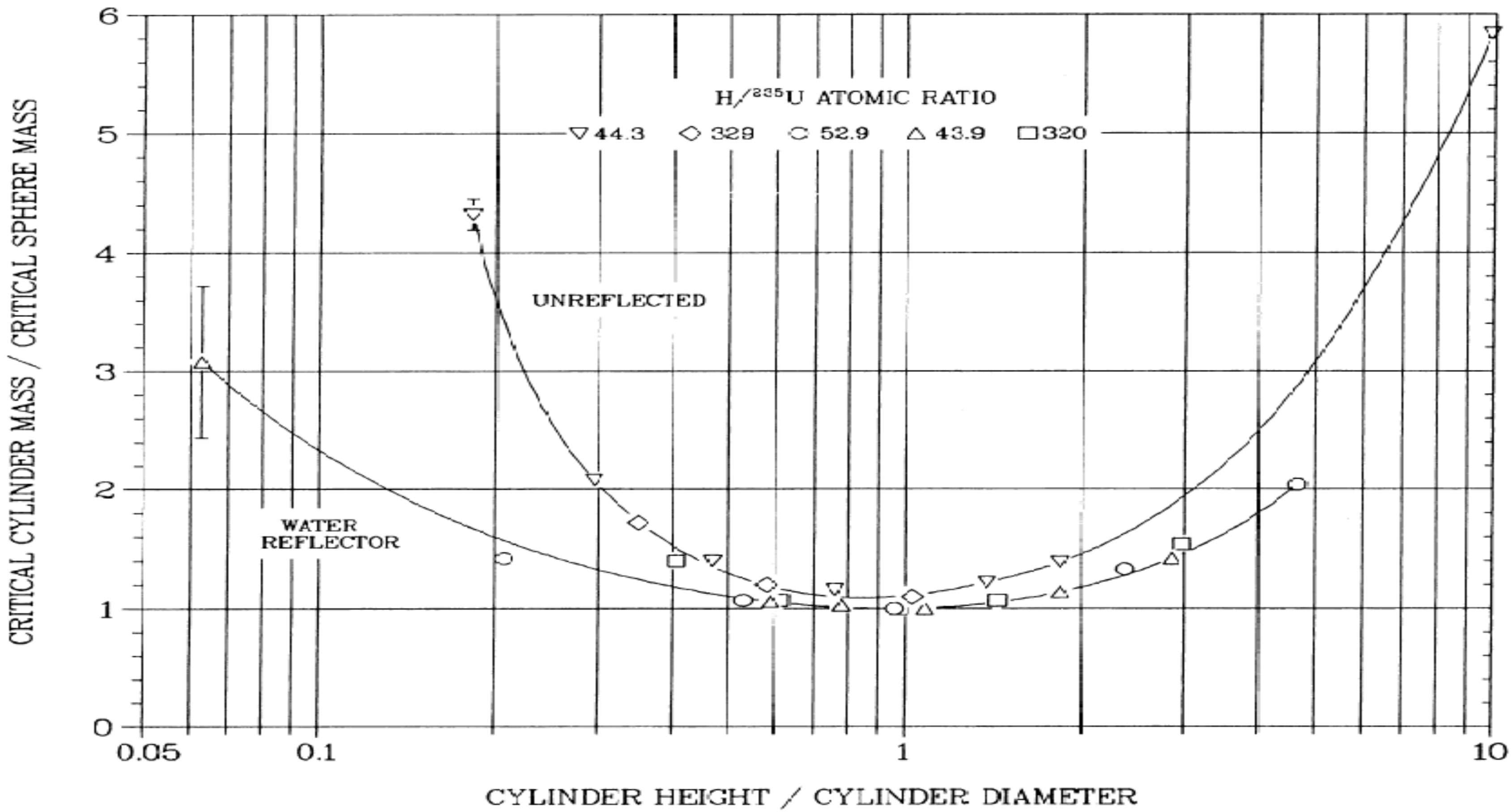
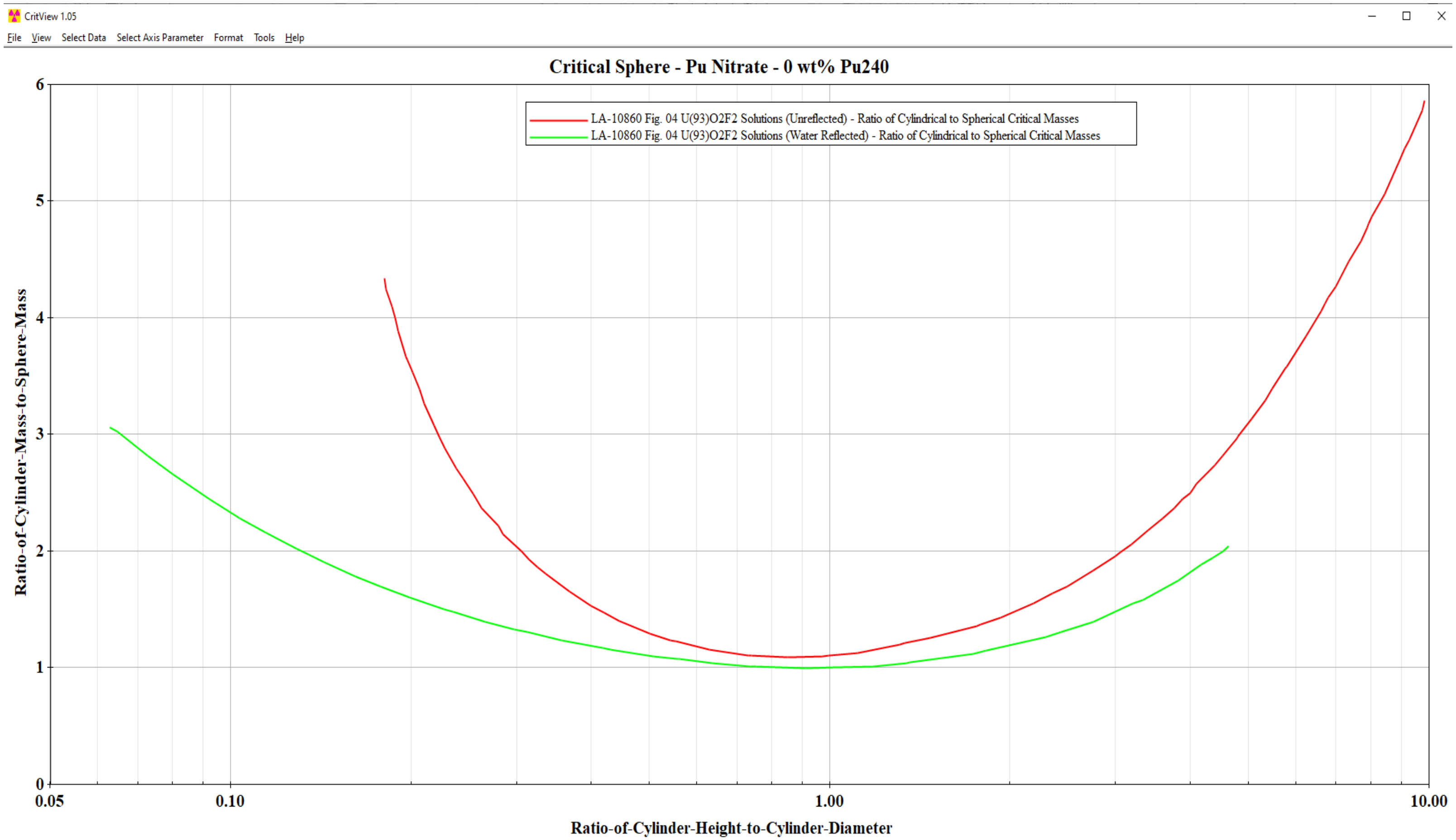
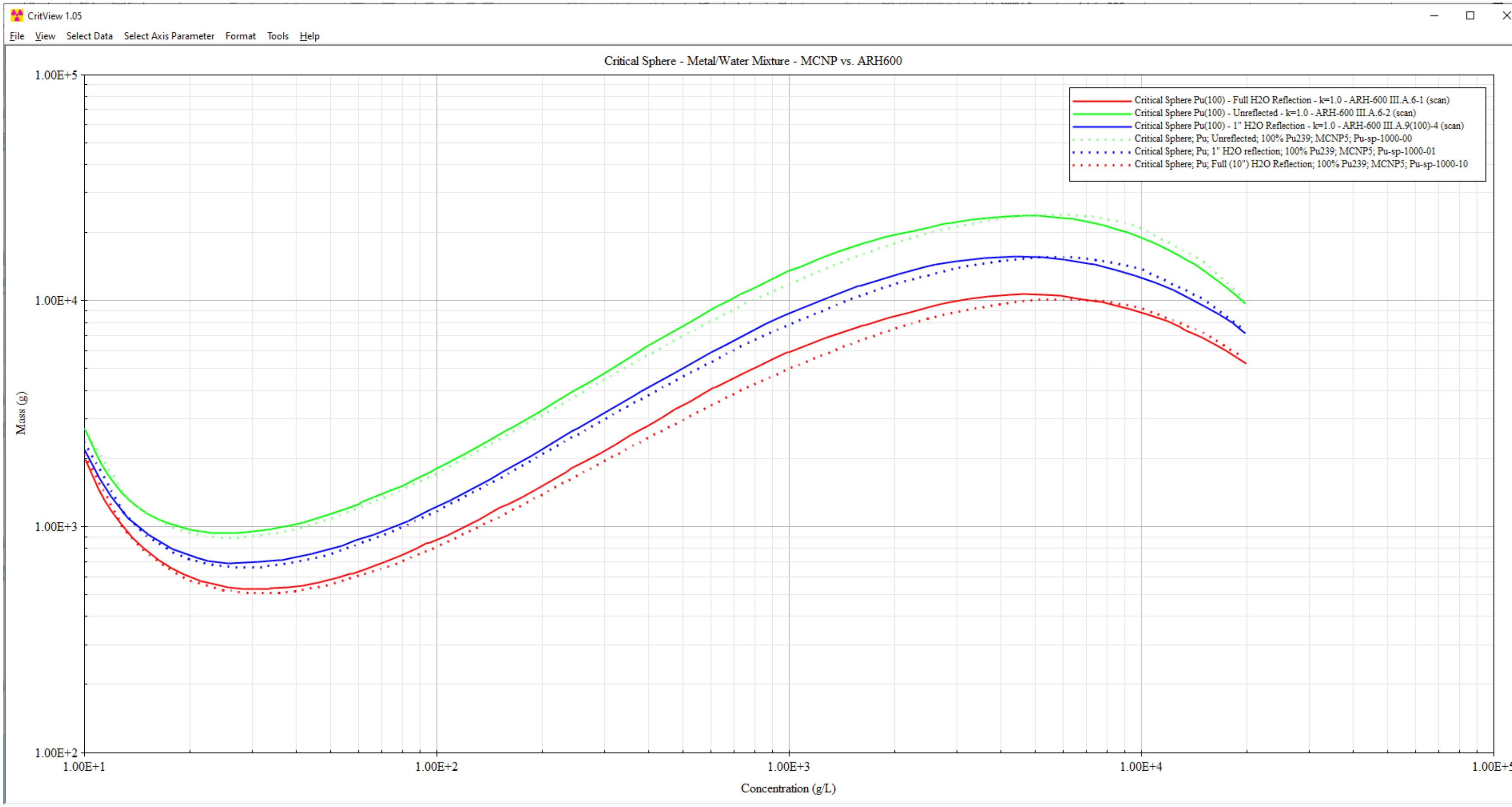


Fig. 4. The ratio of cylindrical to spherical critical masses of $U(93)O_2F_2$ solutions, unreflected and with water reflector, as a function of cylinder height to cylinder diameter ratio.

CritView v1.05 Showing LA-10860 Data



CritView v1.05 Showing MCNP vs. ARH-600 Data



- **Questions?**