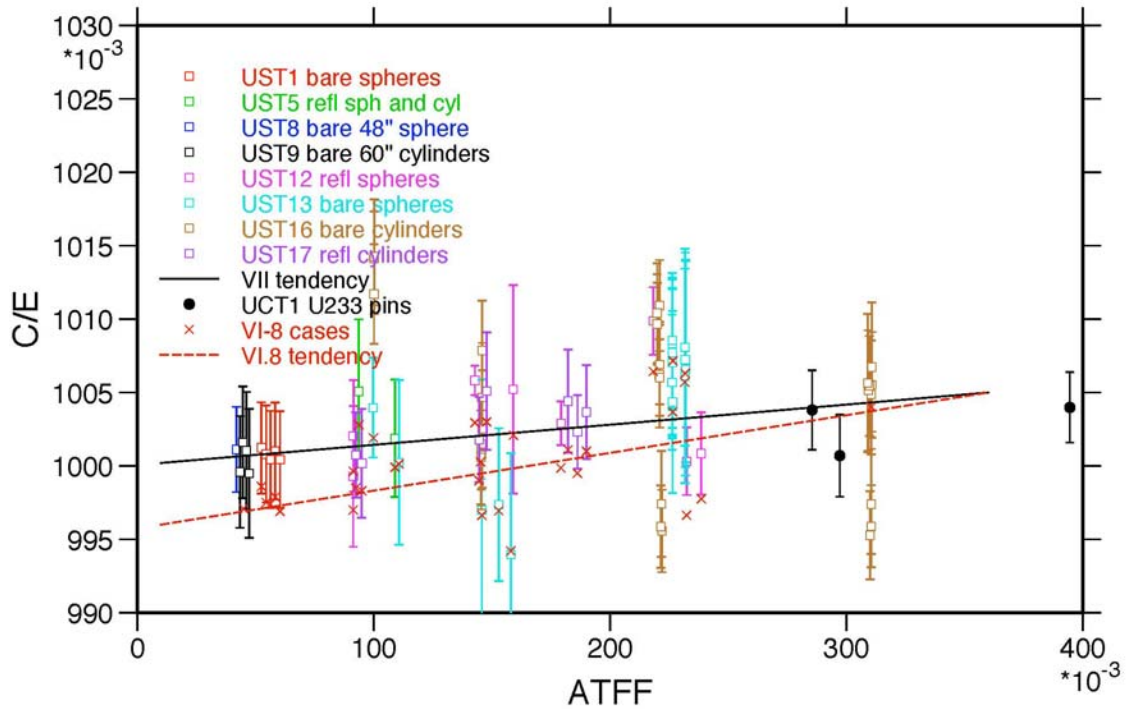


## U-233/WATER CRITICALS C/E vs ATFF



The figure shows ENDF/B-VII C/E values with experimental errors for a number of the ICSBEP U-233 solution criticals, and also a few of the U233 lattice criticals plotted against the Above-Thermal-Fission Fraction (ATFF), a measure of the hardness of the spectrum. Although the scatter of these points is very large, by concentrating on the large very thermal cases (UST 1, 8, 9) and the smaller reflected cases (UST 12, 17), one can imagine a tendency like that shown by the solid black line. The corresponding tendency for ENDF/B-VI.8 is shown by the dashed red line. Note that the ENDF/B-VII tendency seems to show a good improvement over VI.8 in both slope and intercept. There remains a difference between experiment and models that could possibly be reduced by additional changes in the resonance parameters (more U233 capture?) or by a change in the fission spectrum. Note that the high values for the harder solution cases seems to be consistent with the high values seen for the UCT1 lattices (not all shown here), which suggests that the same problems in the data may cause both effects.