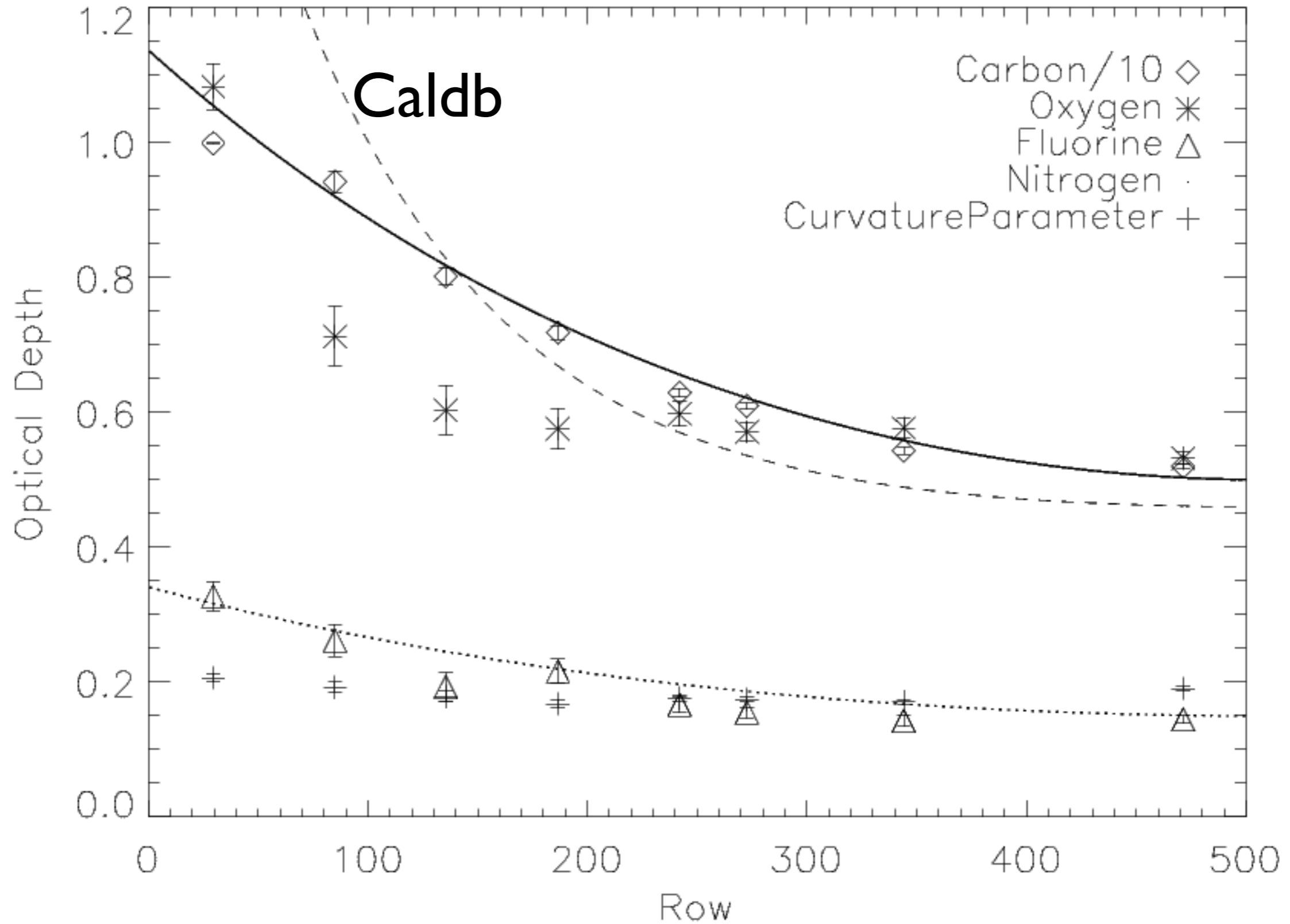


ACIS Contaminant: Big Dither Part 2

Herman L. Marshall
Mar. 24, 2015

Ris Dither I (Mar '14)

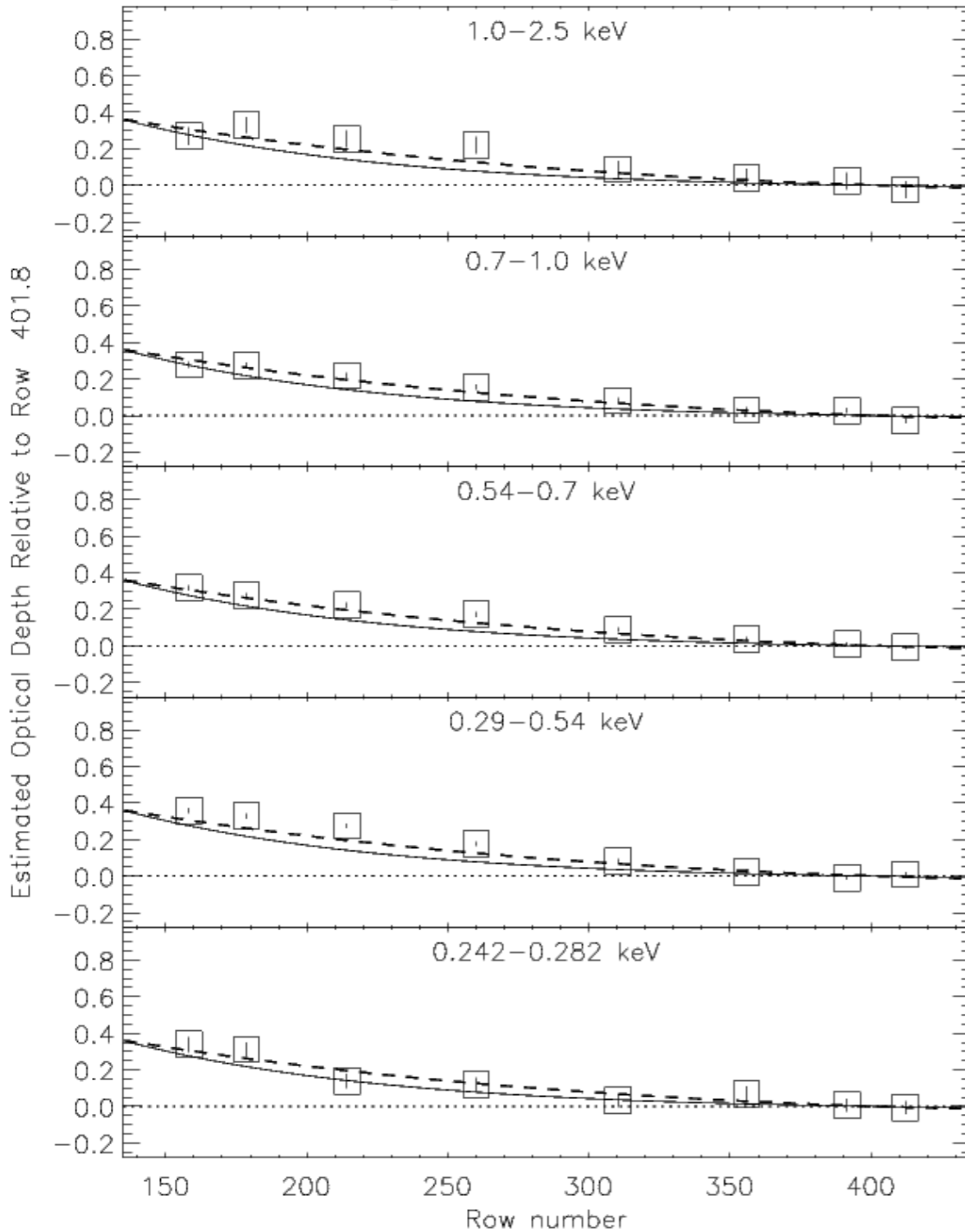


Setup of BD 2015

- Same as Big Dither 2014:
 - Mk 421 observed with LETG/ACIS
 - Dither amplitude was $\pm 64''$ in Z $\pm 8''$ in Y
 - Two 60 ks observations
- Same as Big Dither 2014 except:
 - low rows = 150-420 (prev: 30-300)
 - high rows = 750-1020 (prev: 250-520)

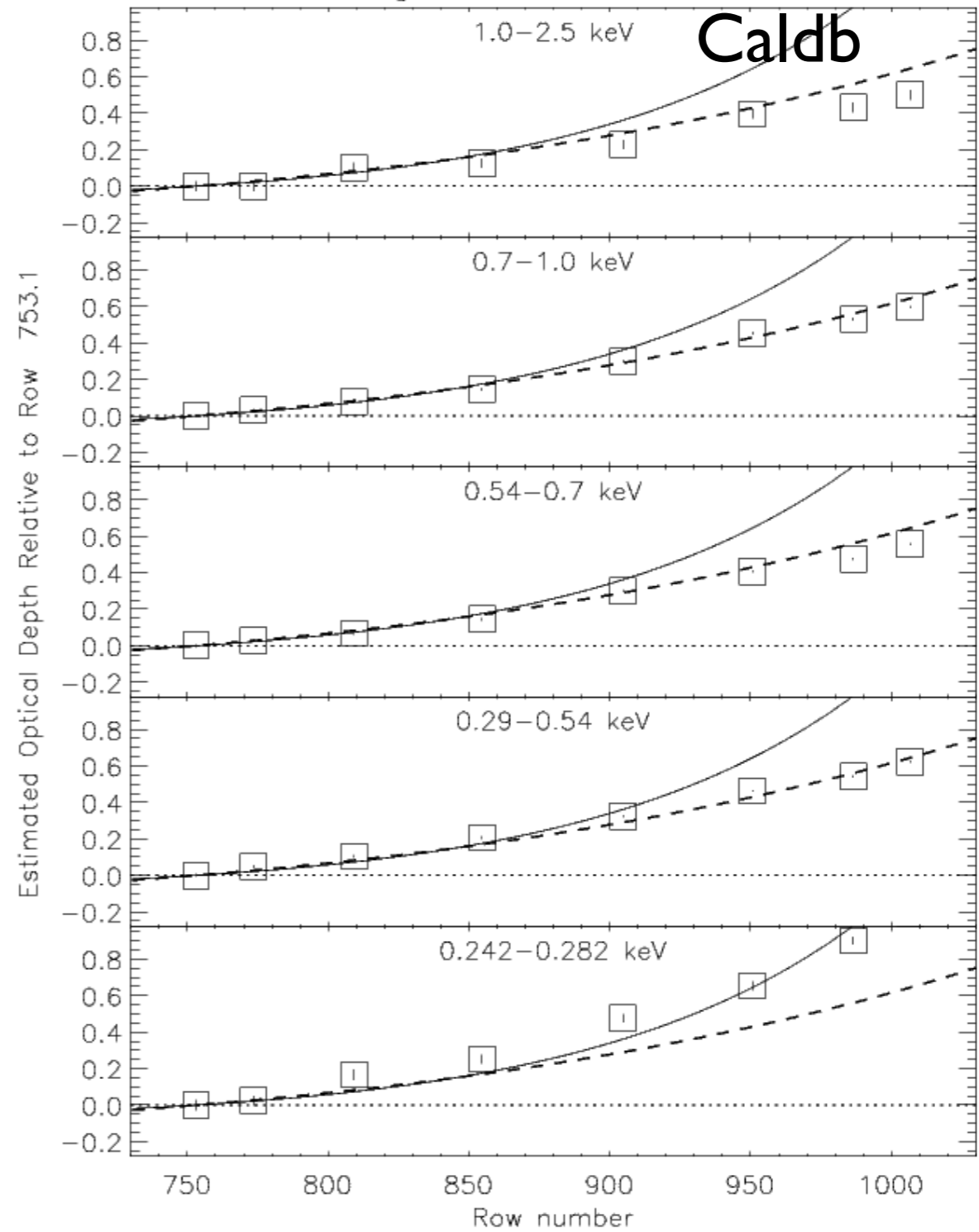
Model-Independent View

Big Dither, March 2015



Herman Marshall

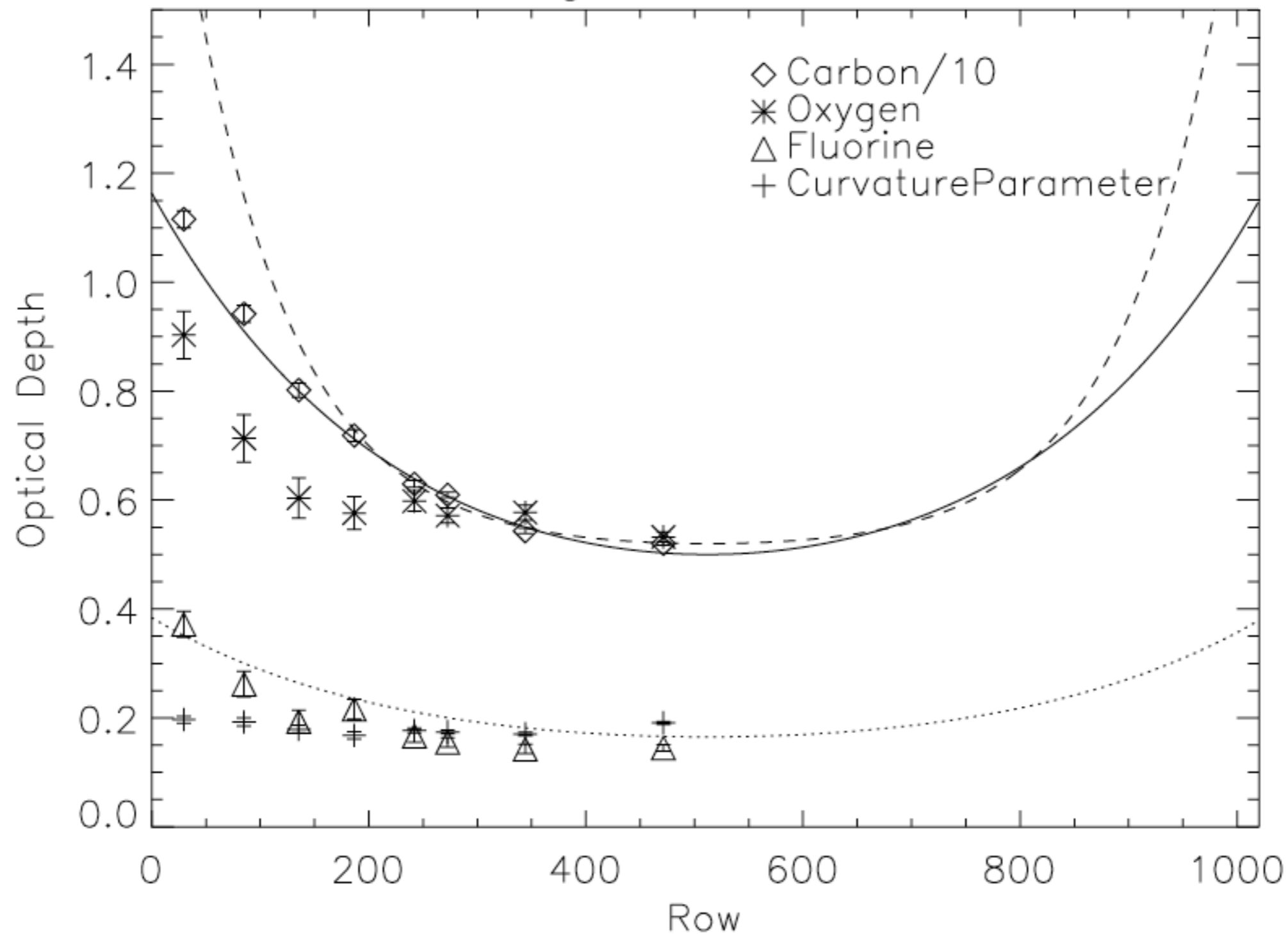
Big Dither, March 2015



ACIS Cal — 3/24/15

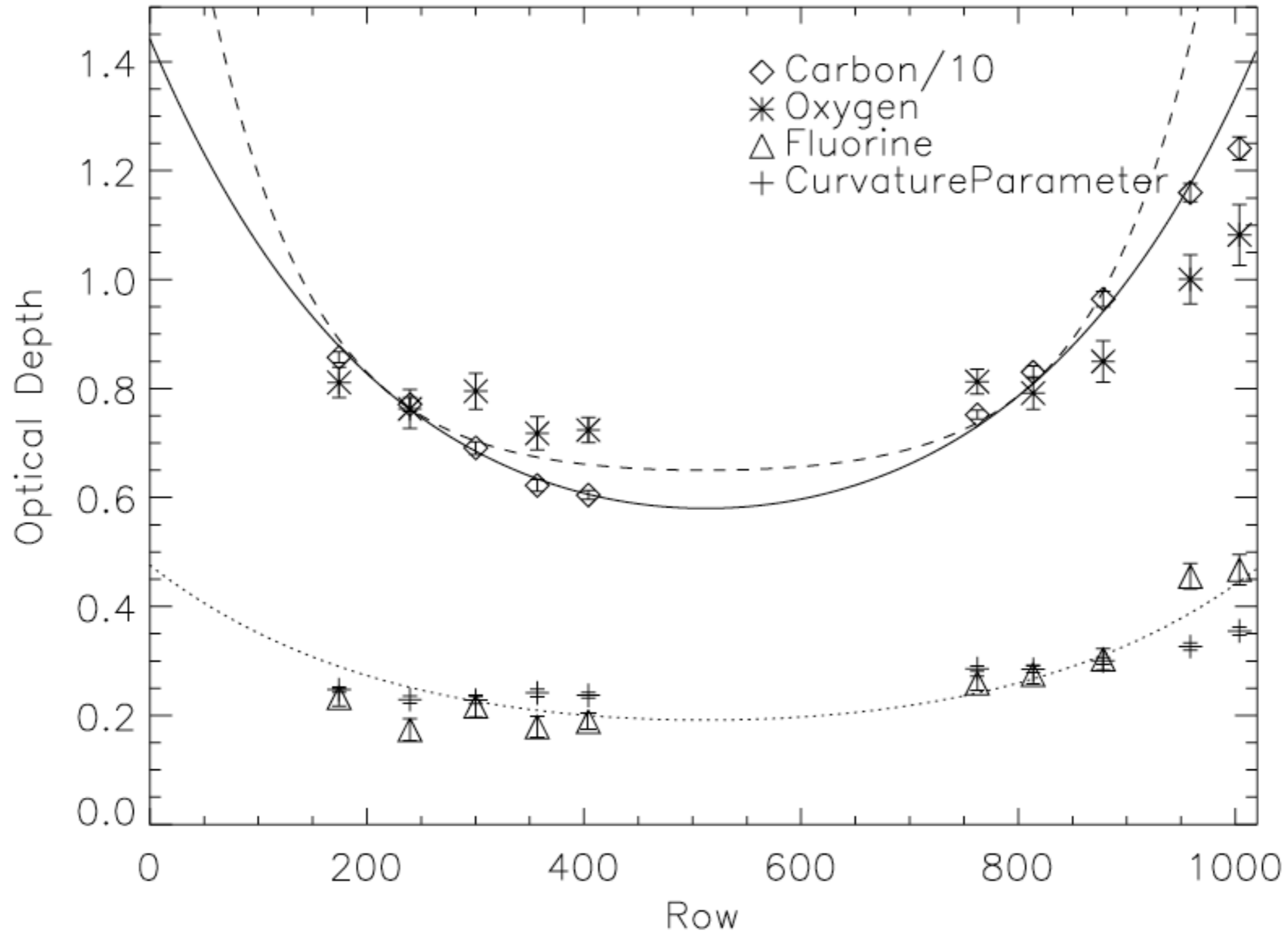
Modeling Method

Big Dither 2014

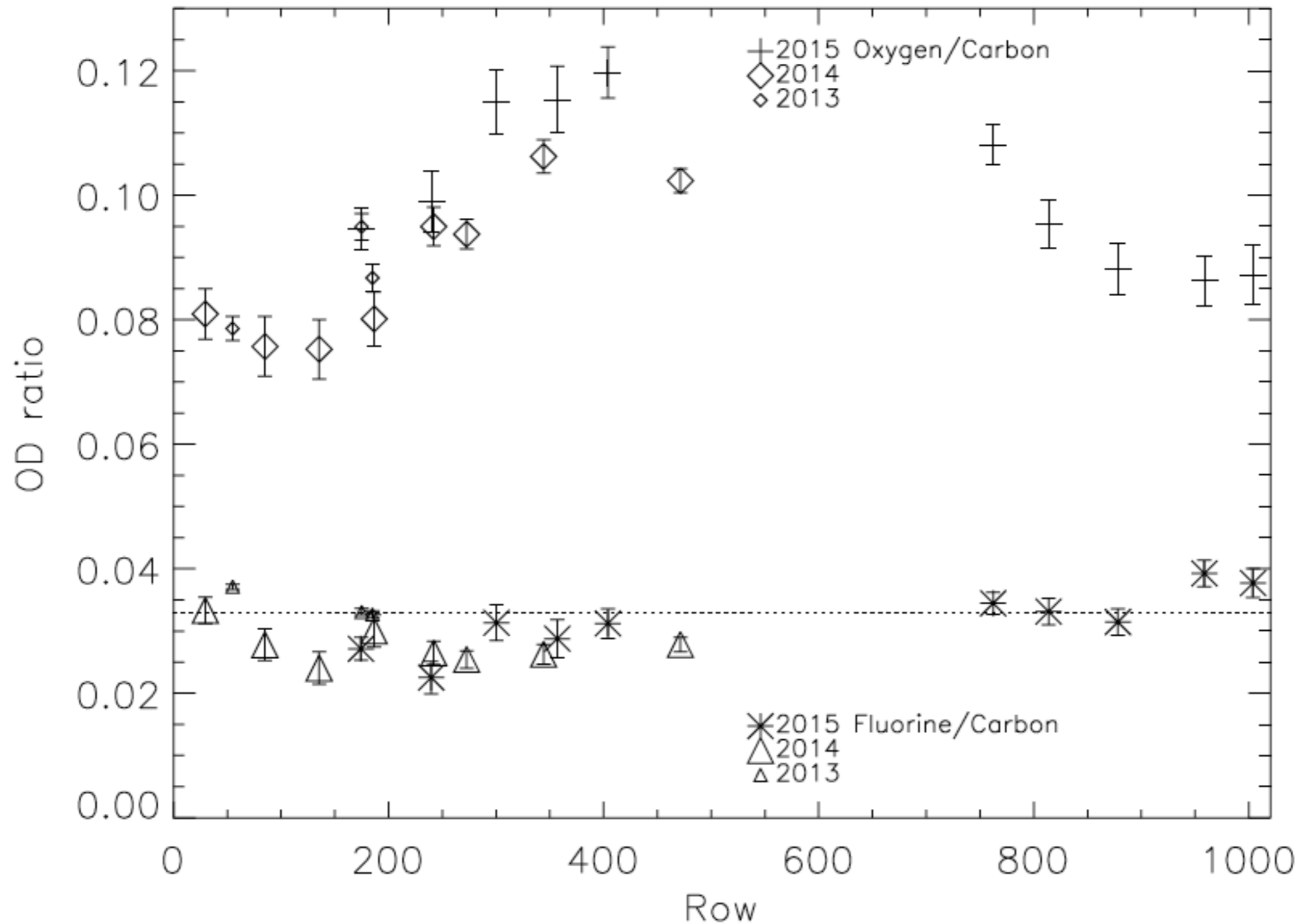


Modeling Method

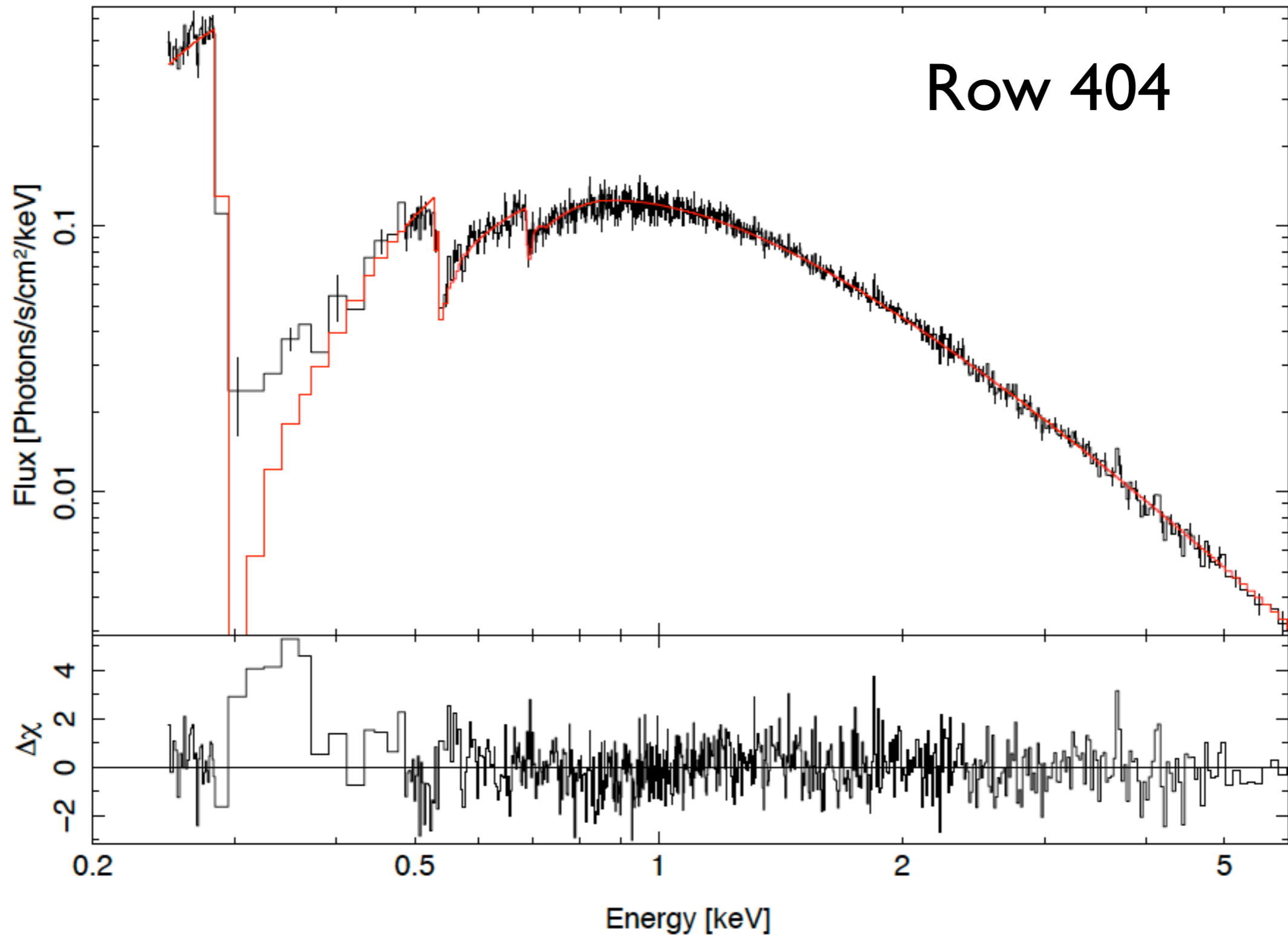
Big Dither 2015



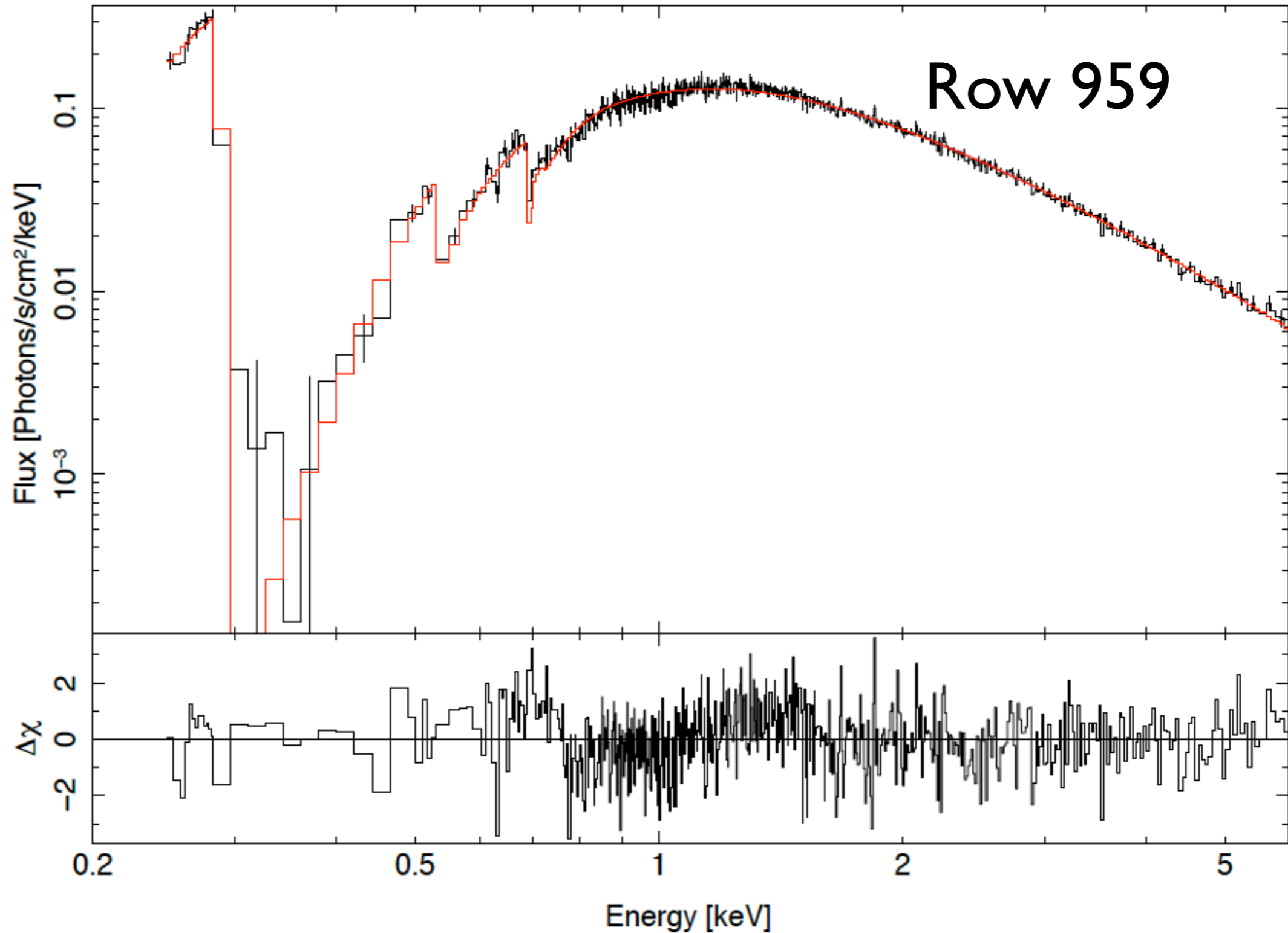
Abundance Ratios



Spectral Oddities

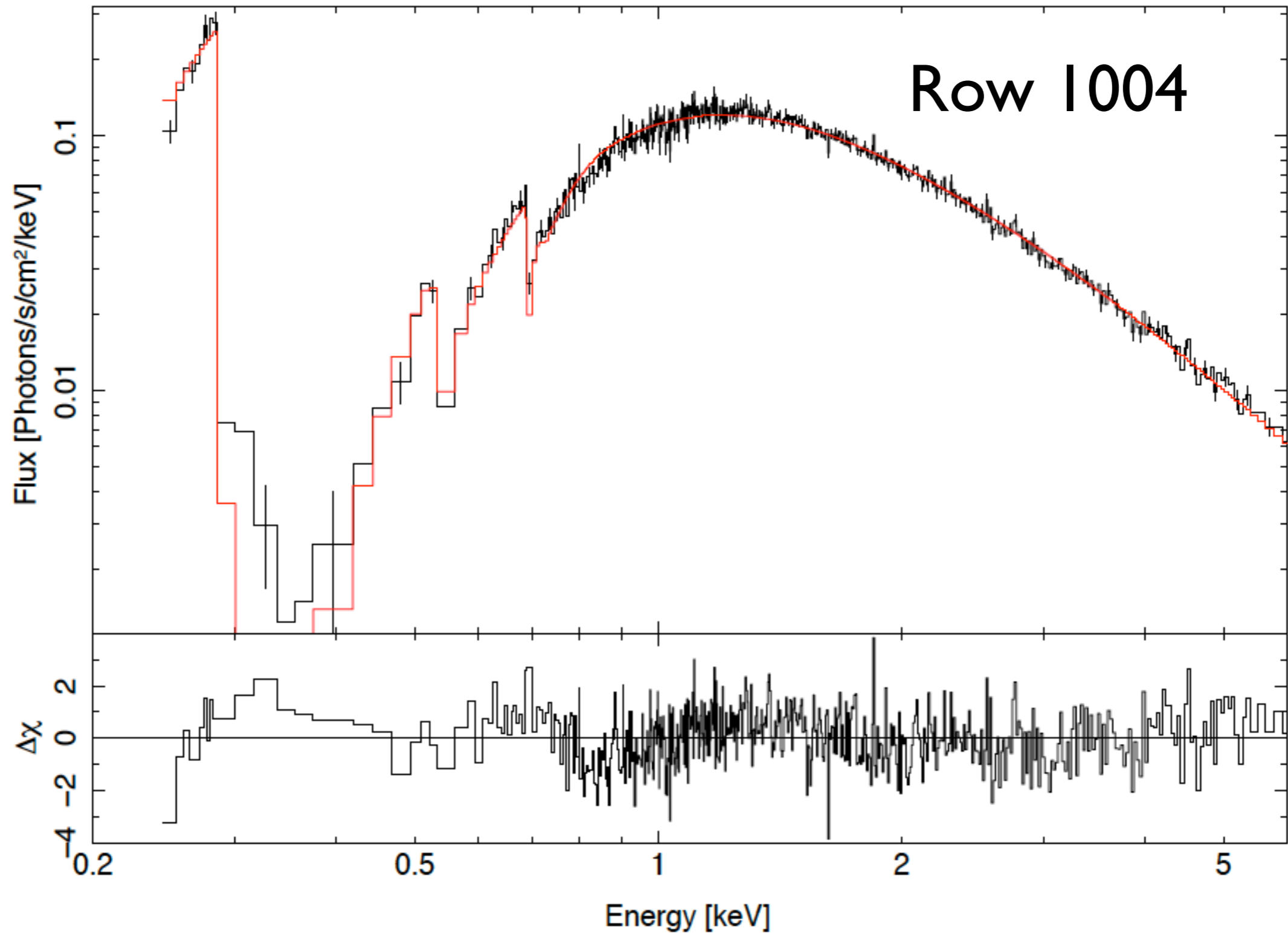


Spectral Oddities

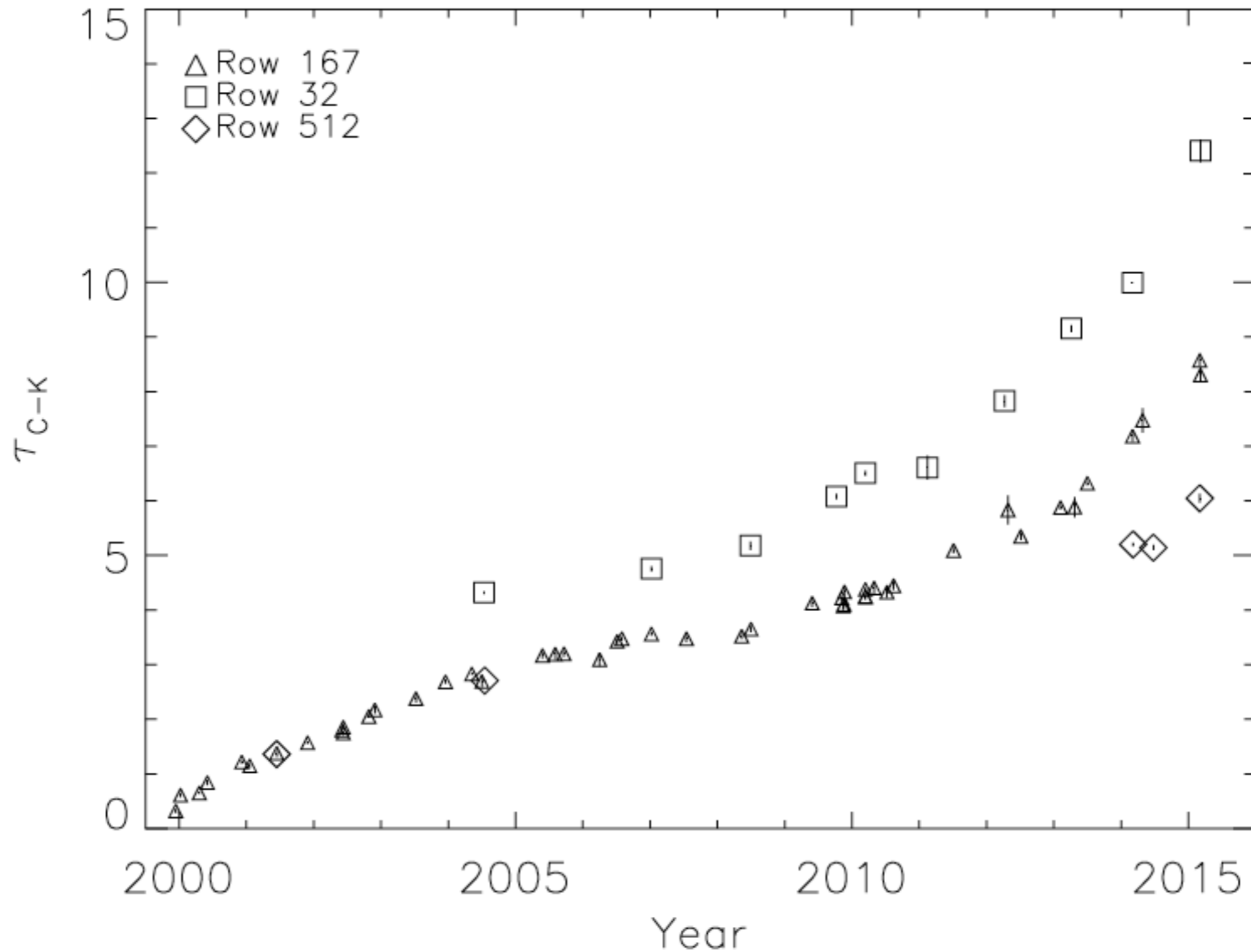


Row 959

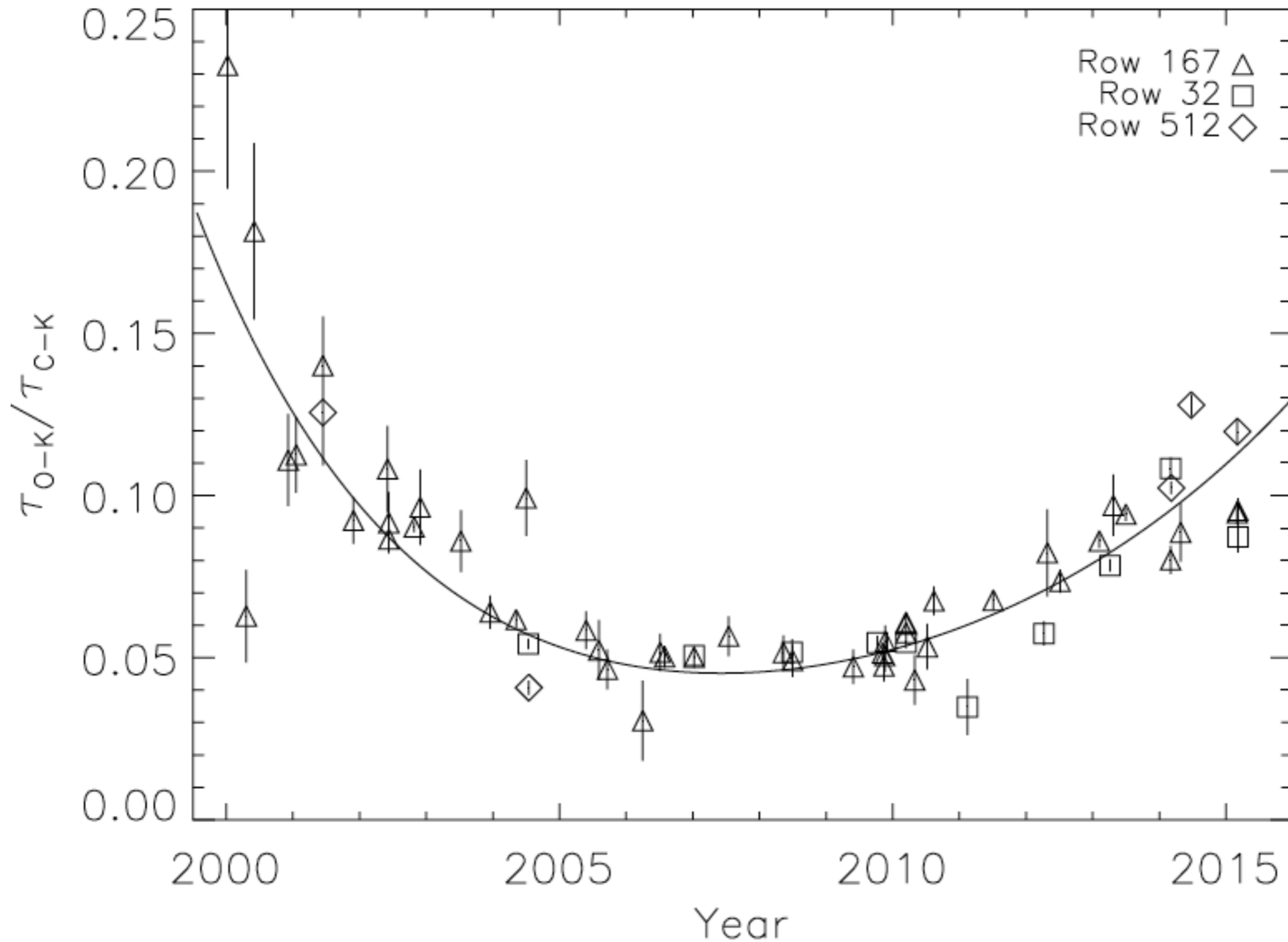
Spectral Oddities



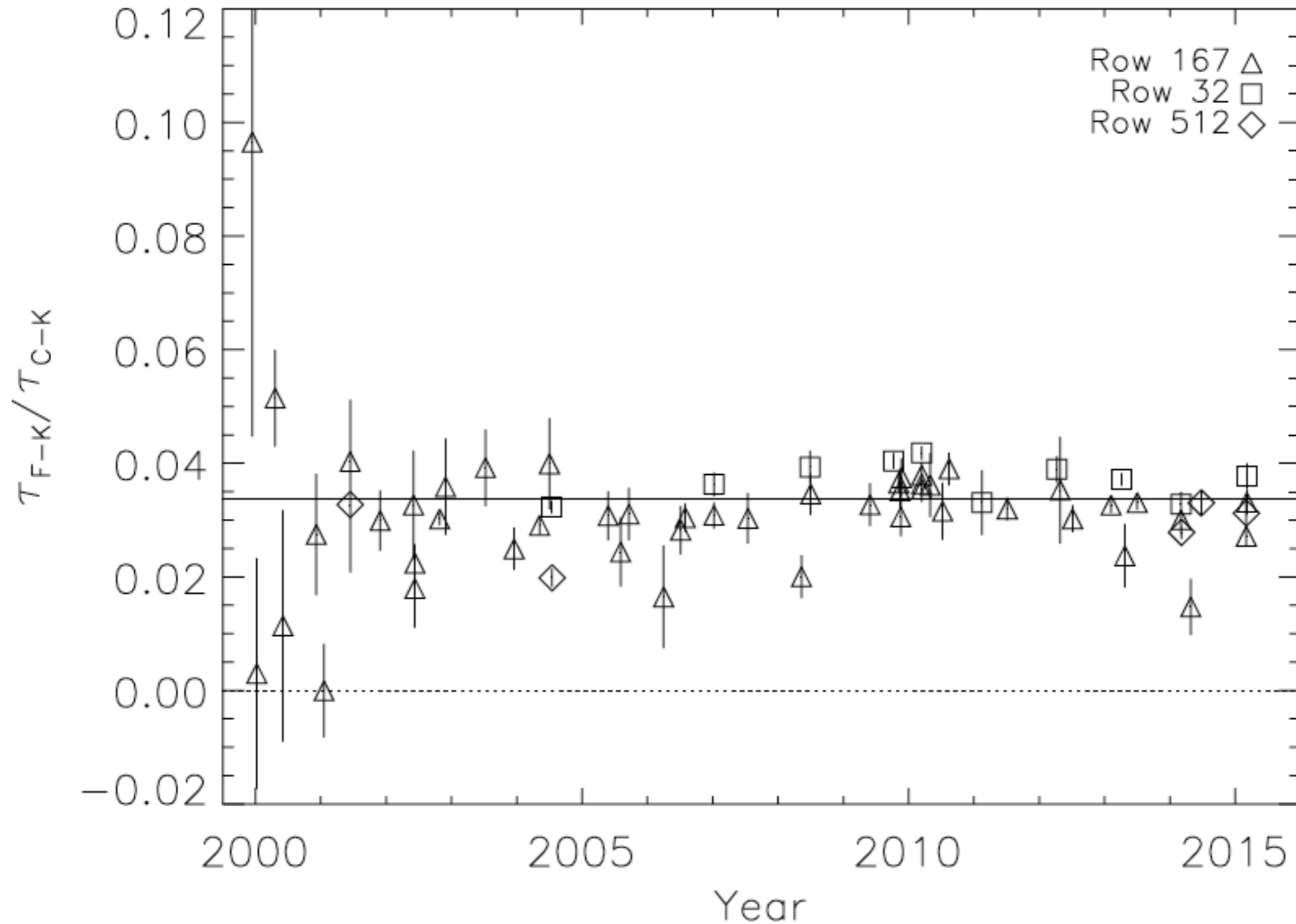
Time Dependences



Time Dependences



Time Dependences



Summary

- C continues to build at a high rate
- Contamination is top-bottom symmetric
- O/C varies from center to edge
 - Center has larger O/C
 - Spatial variation of O is flatter than C or F
- F/C still does not vary (space or time)
- Spatial variation is flatter than in CalDB
 - i.e., gradient is not as steep at top or bottom