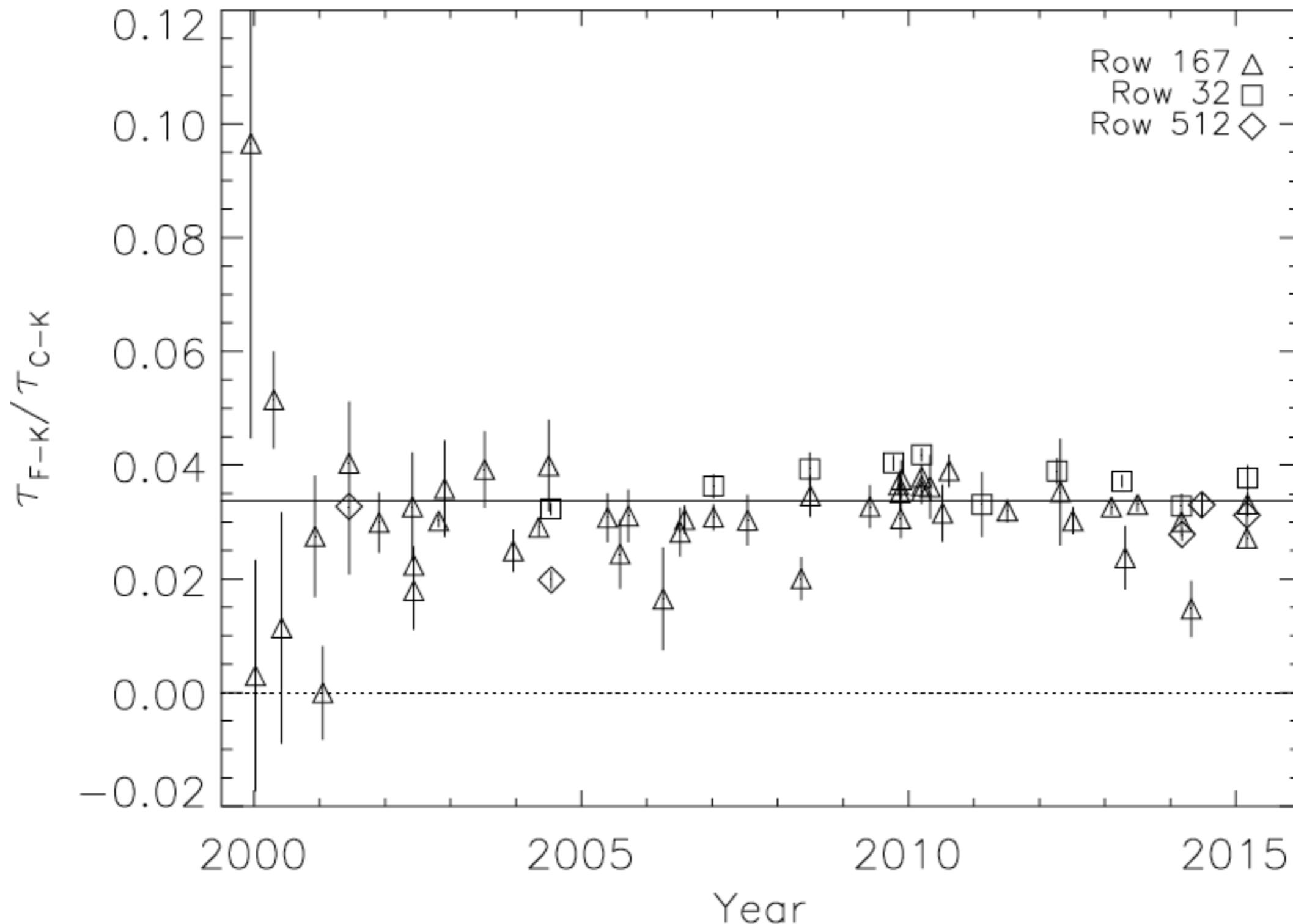


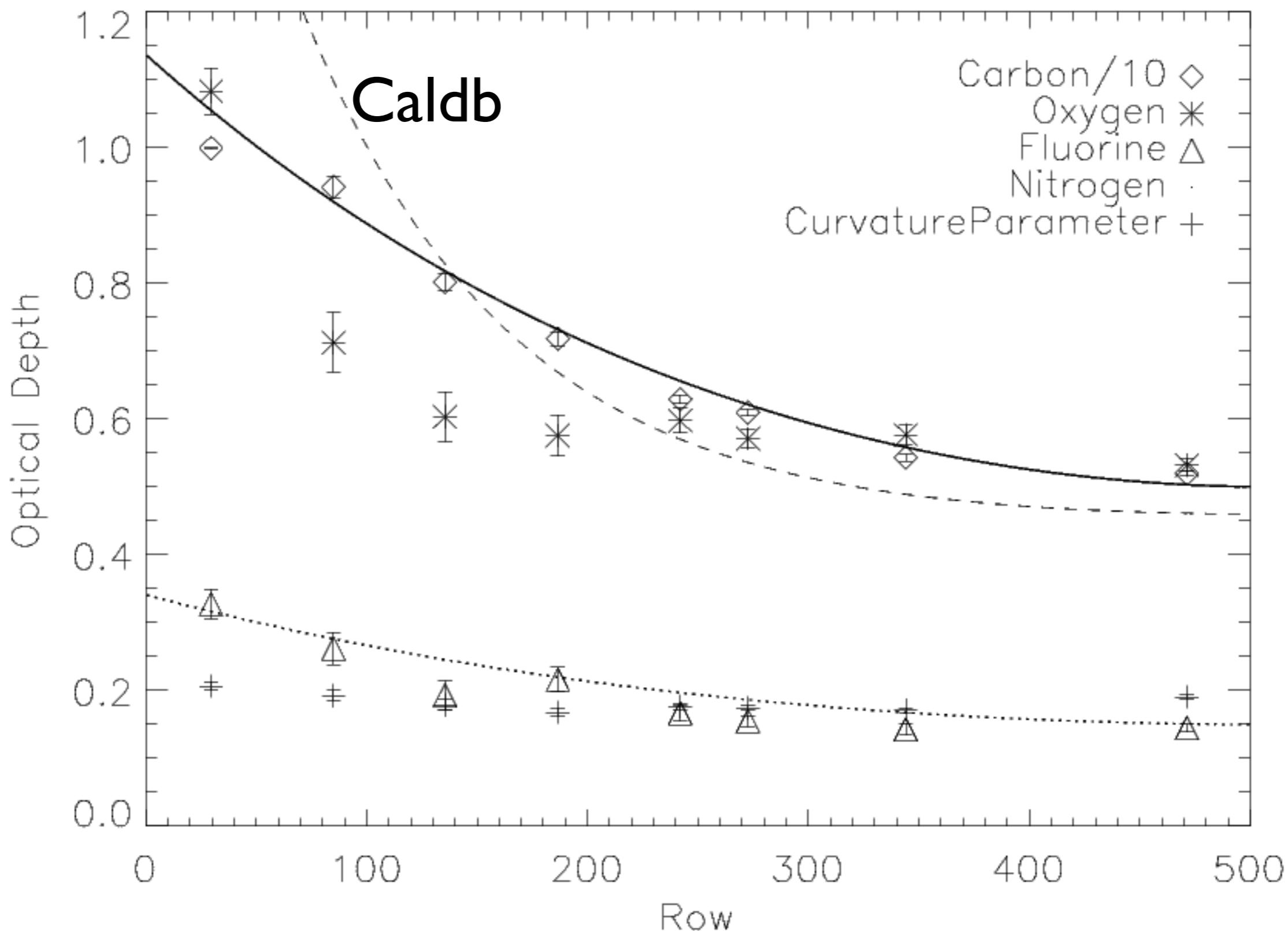
ACIS Contaminant: *It Gets Worse*

Herman L. Marshall

Time Dependences



Big Dither I (Mar. '14)

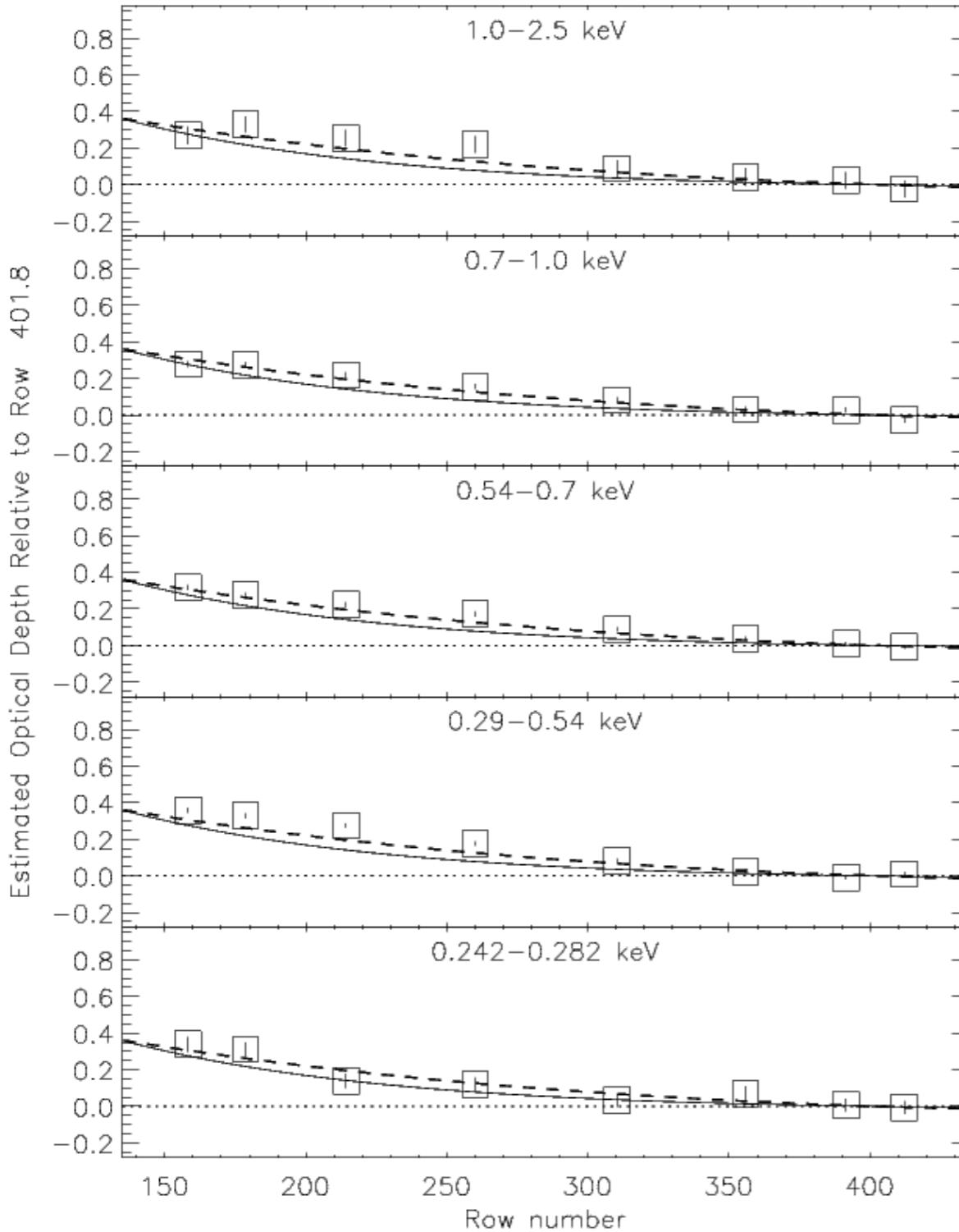


Setup of BD 2015

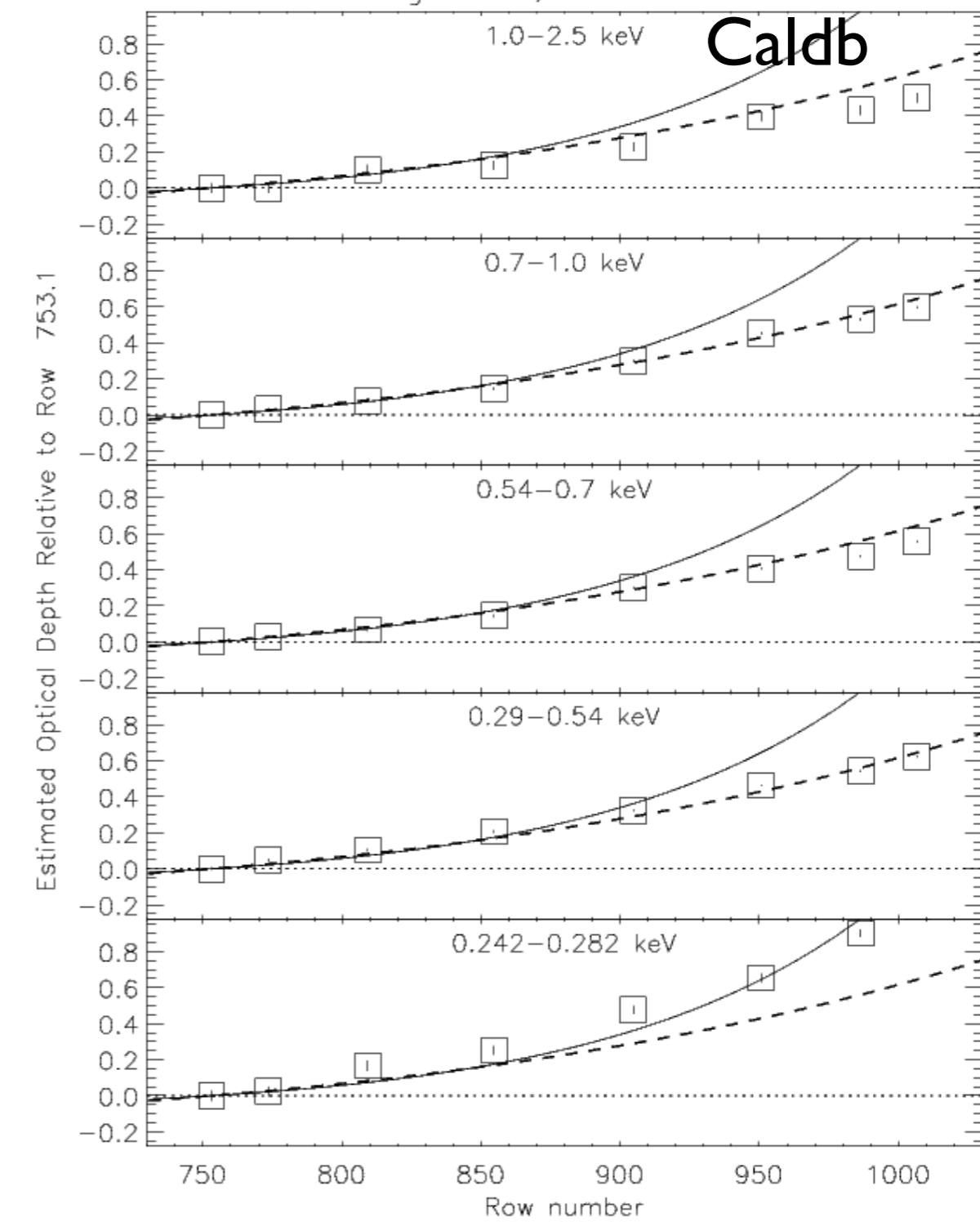
- Same as Big Dither 2014:
 - Mk 421 observed with LETG/ACIS
 - Dither amplitude was $\pm 64''$ in Z $\pm 8''$ in Y
 - Two 60 ks observations
- Same as Big Dither 2014 except:
 - low rows = 150-420 (prev: 30-300)
 - high rows = 750-1020 (prev: 250-520)

Model-Independent View

Big Dither, March 2015

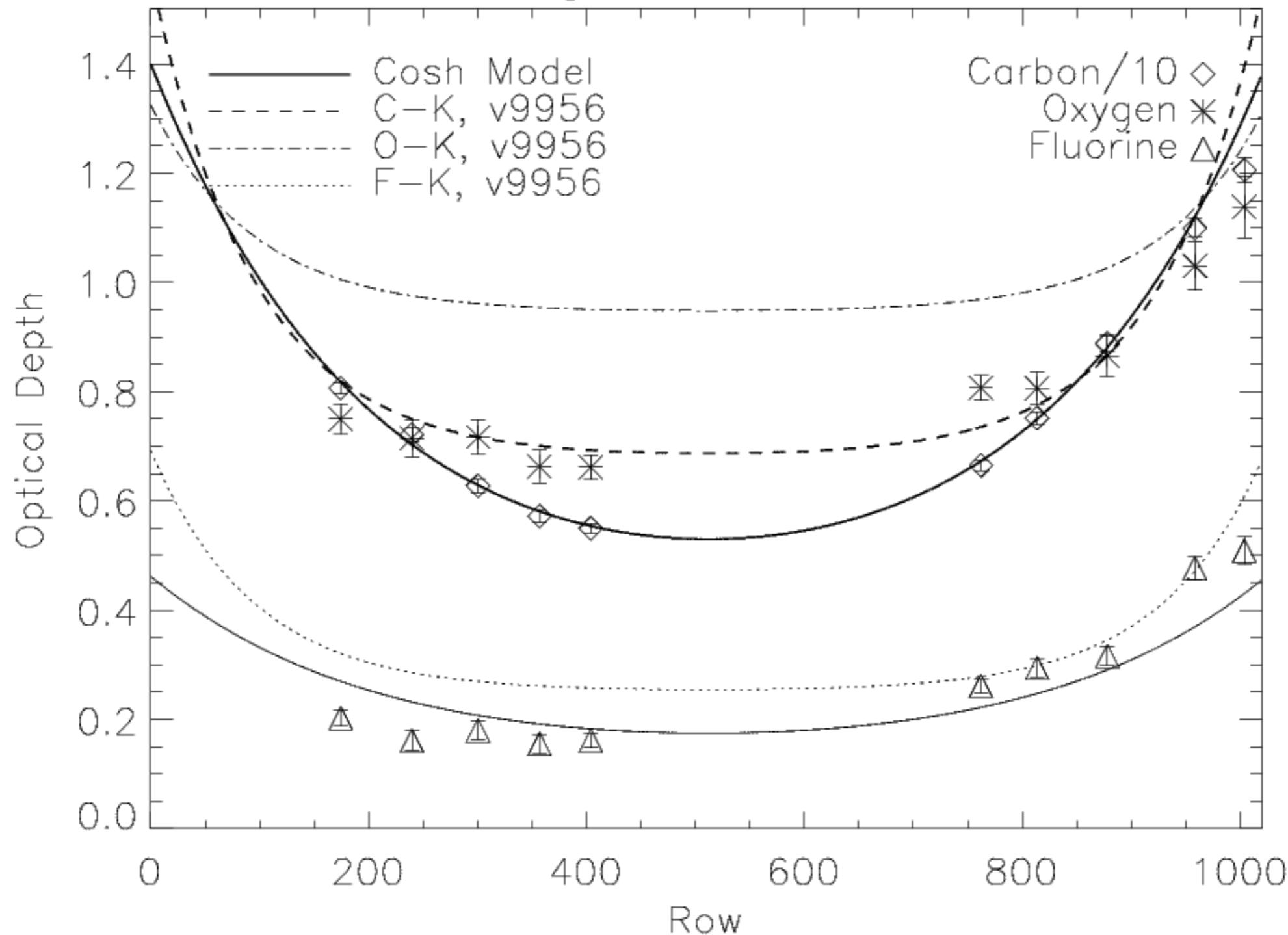


Big Dither, March 2015

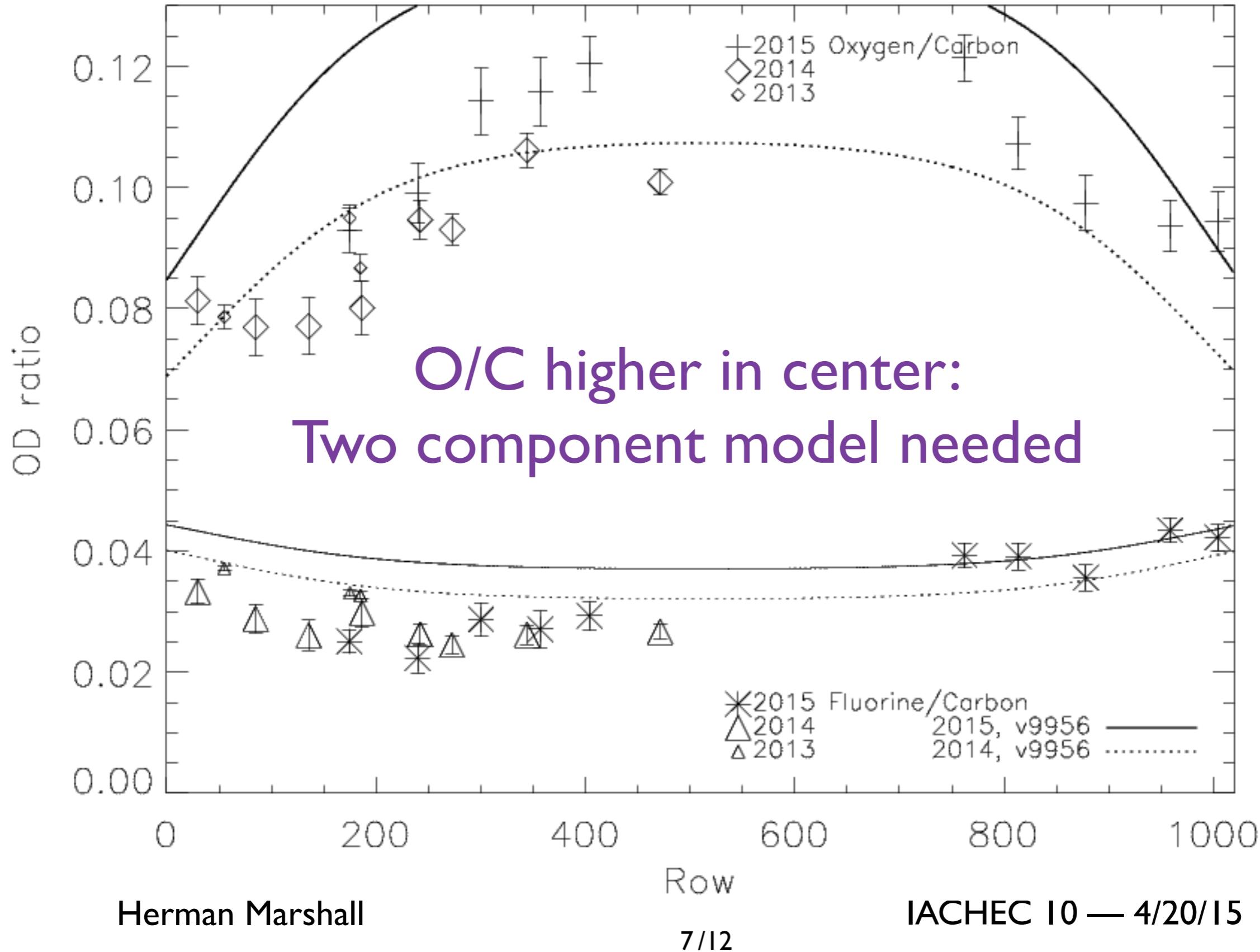


Global Fitting Method

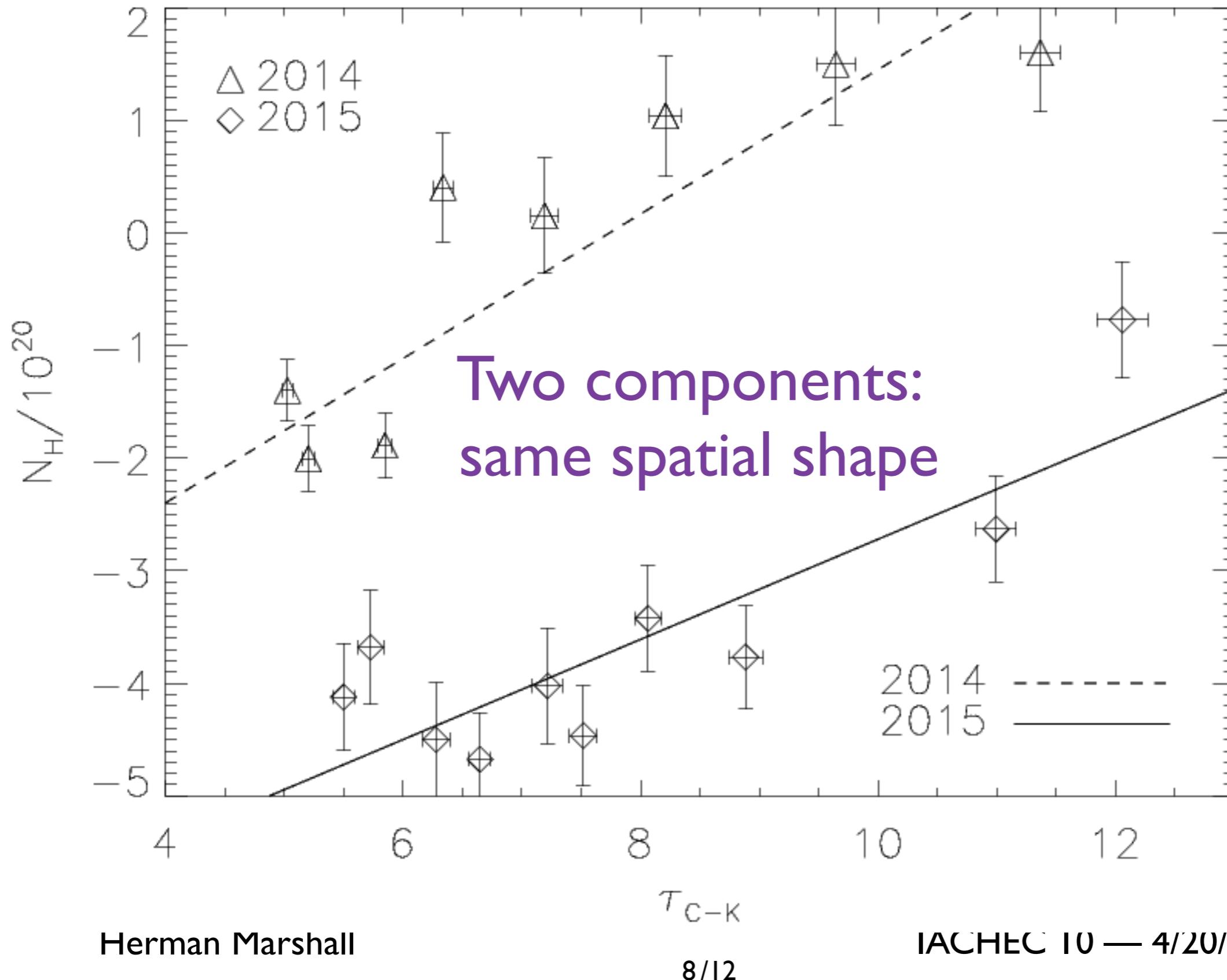
Big Dither 2015



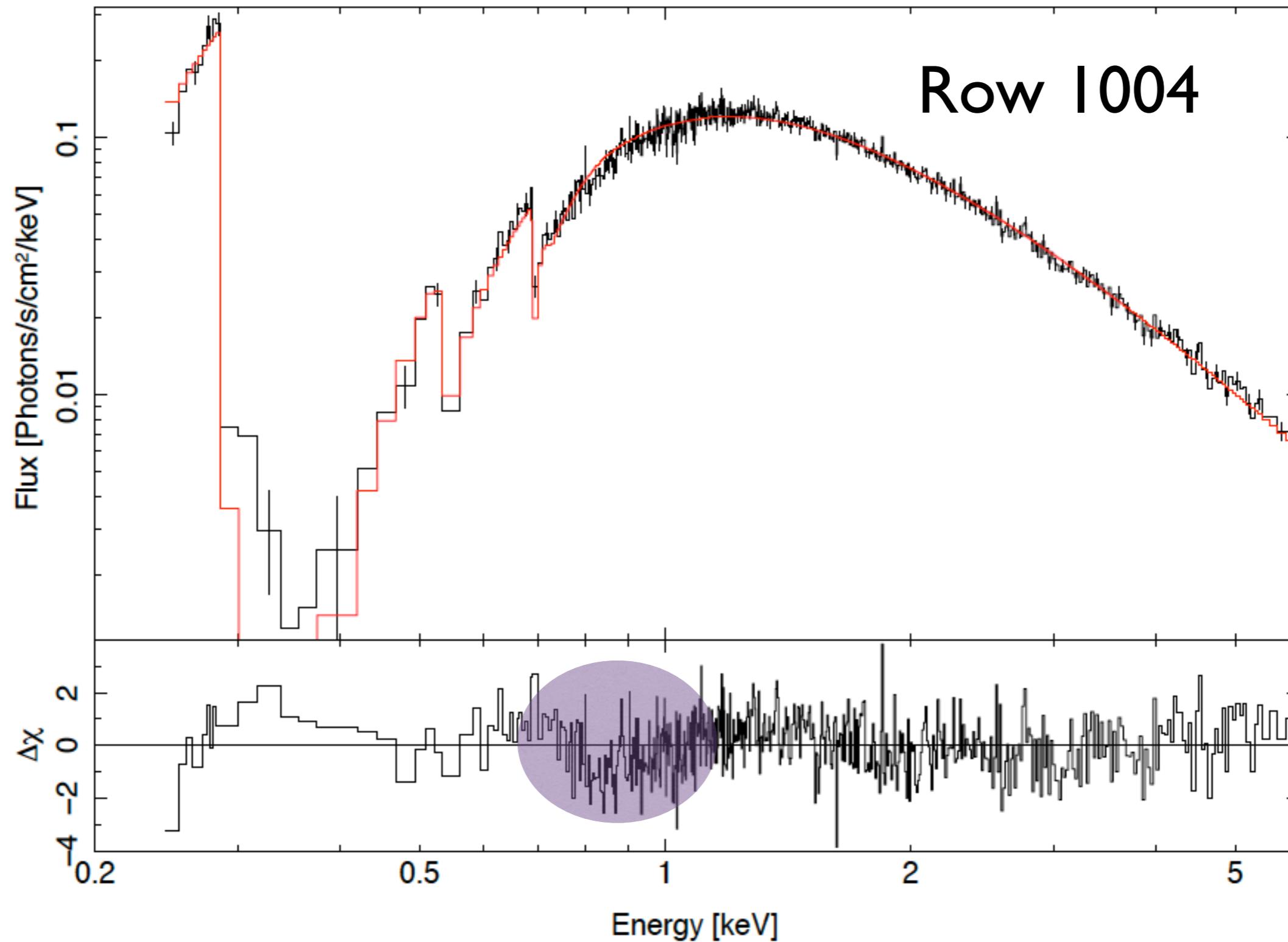
Abundance Ratios



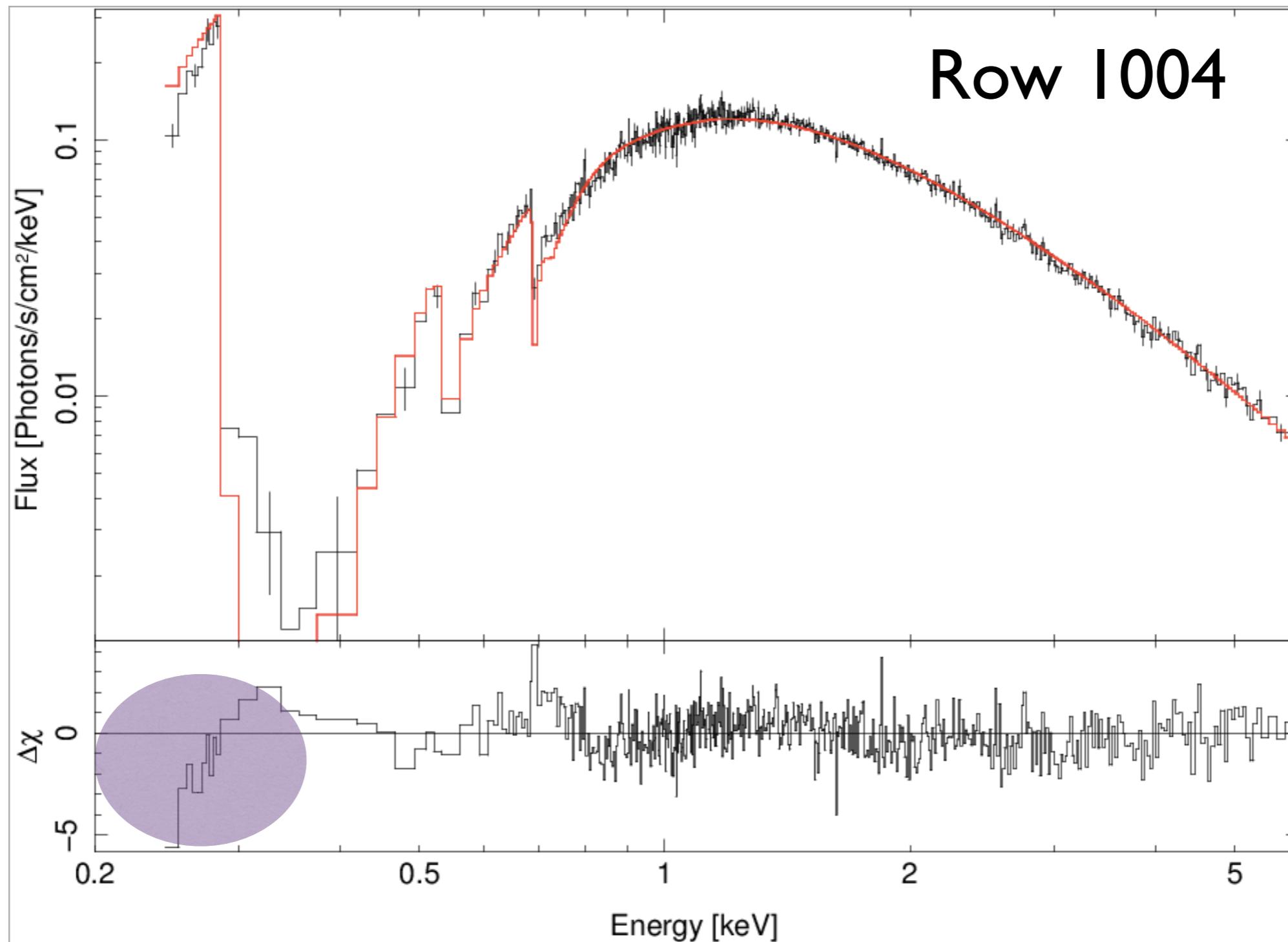
Testing the Spatial Model



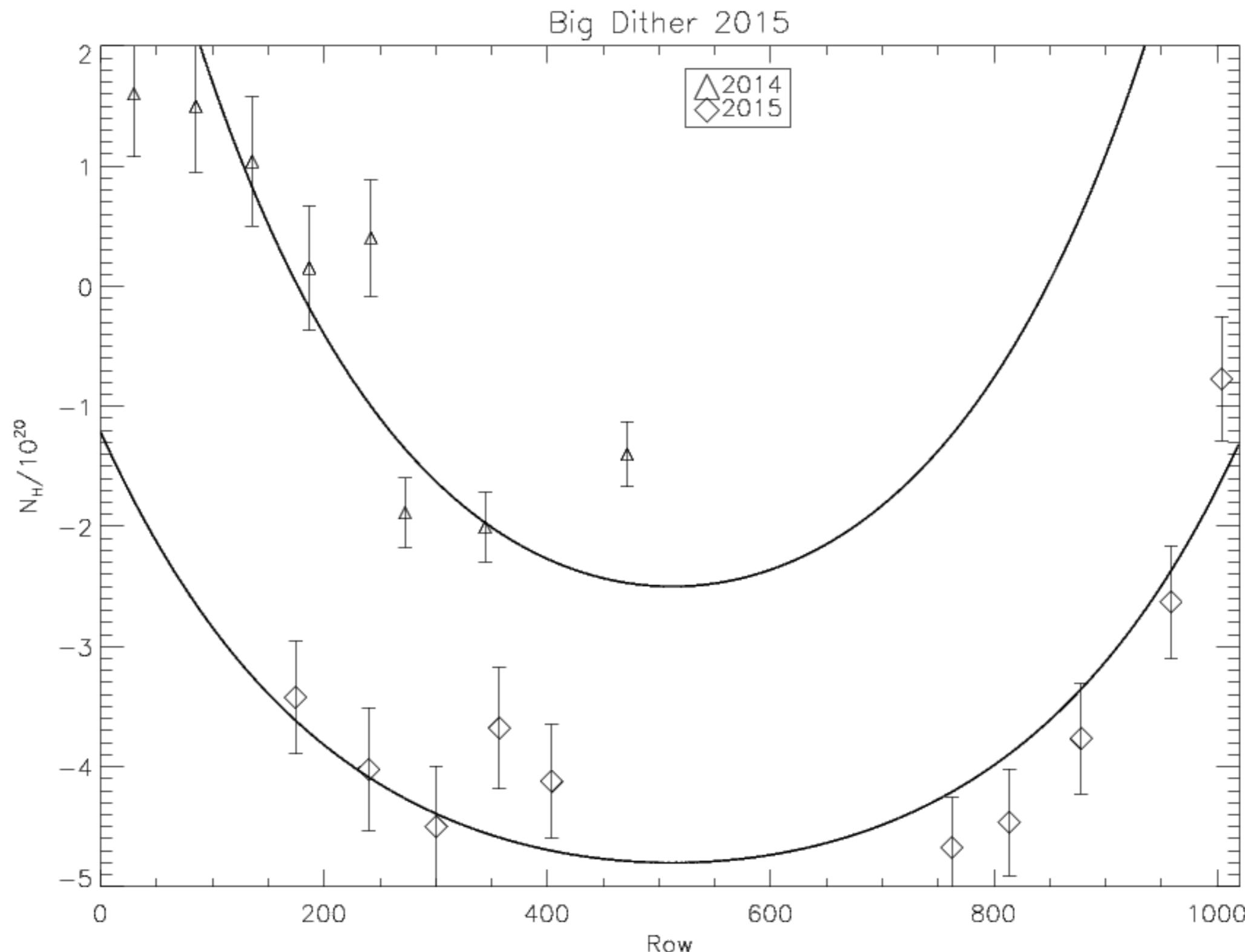
Spectral Oddities



Issue for $E < 0.28$ keV



Is There Much H?



Summary

- C continues to build at a high rate
- Contamination is top-bottom symmetric
 - Possibly higher F/C in top half
- O/C varies from center to edge
 - Center has larger O/C: two components
 - Spatial models are same for two components
- F/C still does not vary (space or time)
- Possible H in model at $N_H/N_c = 50-100$