Effective Area Cross-Calibration with Parallel Observations <u>Status</u>

HLM — Cross calibration

Cross-Cal Summary

- Setting up cross-calibration with NuSTAR
 - Observed 3C 273 in June 2012
 - XMM, Swift, and Suzaku likely also
 - PKS 2155-304 in April
- Details of XMM/Chandra cross-cal
 - Contamination correction released, used
 - Chandra low E issues remain, not to be fixed
 - Apparent offsets in XMM internal cross-cal remain
 - Should complete job, publish

• Discussion of Crab high E reference fluxes

Suggestions (IACHEC 2012)

- Need new Chandra caldb before publishing cross-cal with XMM by May — DONE
 - Try some finer bands
 - Examine odd data points in fits
- Store prospective cal observations on Wiki
 - Each mission supplies list
 - HLM coordinates, posts
- Want Crab high E "reference fluxes" posted
 - Gary Case will supply
- Present new missions earlier in meeting

HLM — Cross calibration

IACHEC — 2013