

EFFECTIVE AREA CROSS-CALIBRATION

Herman L. Marshall



PURPOSE

- Determine areas of commonality when measuring effective areas
- Support joint activities between missions
 - Needed for variable point sources
 - Examples: 3C 273, PKS 2155-304, Cen A
 - Missions involved: Chandra, XMM, RXTE, ASCA, Swift, Suzaku, INTEGRAL, BeppoSAX

ACTION ITEMS

- From IACHEC 2007 meeting
- Agree on the Crab spectrum
 - To be handled by NT SNR group
 - More discussion here....
- Complete check using Cen A — In progress
- Prep. for cross-cal with new missions — in progress
- Continue XMM-Chandra cross-cal — continuing
- Carry out joint calibration campaigns and analysis

ACTION ITEMS

- Maintain cross-cal contacts for every mission
 - Chandra: Herman Marshall
 - XMM: Martin Stuhlinger
 - Swift: Andy Beardmore
 - RXTE: Rick Rothschild
 - Suzaku: Moto Kokubun
 - GLAST: David Thompson
 - INTEGRAL: TBD

PROGRESS IN 2007-8

- Chandra effective area update
 - Born of the last IACHEC meeting
 - Results from comparing XMM and Chandra
- PKS 2155-304 Observations
 - Latest campaign last week: May 13, 2008
 - Involved Suzaku, Chandra, Swift, XMM
- Mk 421 Campaign involving XMM & Swift
 - Some Swift XRT adjustments made

FUTURE OF GROUP

- Post web pages or links showing cross-calibration comparisons on IACHEC site: e.g.
 - http://xmm2.esac.esa.int/externalxmm_sw_calib/cross_calindex.php
 - <http://space.mit.edu/ASC/calib/crosscalindex.html>
- Post processed spectra and response functions used in analysis (i.e. PHA files, RMFs, ARFs)
- Post cross-cal contacts on IACHEC web page
 - Need to update contacts
 - Need to add contacts for new missions