

# Relative Effective Area



# Topics Covered

- Additional Calibration Sources
- Mission Points of Contact
- Methodology
- Campaign Procedure Recommendations

# Additional Calibration Sources

- Used for Relative Effective Area
- Need some for  $E > 7 \text{ keV}$  ( $^3\text{C } 273$  is too complex)
- Bright Earth - use for line calibration. Look straight down for flat fielding
- Secondary standards, fainter (e.g.  $^3\text{C } 58$ )
- Gamma-ray sources (Crab, PSR 1509?, use of off- v. on-pulse)

# New Points of Contact

- Gen-X (Martin Weisskopf)
- INTEGRAL: Lorenzo Natalucci
- SIMBOL-X: Alberto Moretti
- NeXT: Manabu Ishida
- AGILE:
- SXG eROSITA: Ulrich Briel
- SXG microcal: Jelle Kaastra
- Con-X: Steve O'Dell (see also Randall Smith)
- XEUS: wait
- GLAST LAT: David Thompson
- NuSTAR:

# Methodology

- Off-axis effective area for diffuse/extended source observations
  - Serendipitous observations of sources, co-added ; done near end of mission
  - Bright Source pointed observations across detector

# Campaign procedures

- Instrument teams make data files.
  - Include GTI, ARF, RMF, PHA files
- Post results to IACHEC page
- Intersection of GTIs done by one person: Tsujimoto (PSU)
- Require Instigator (~ PI) for all campaigns
  - In charge of collecting results, publishing
  - good journals: A&A, PASP, PASJ
  - M. Ishida will lead current PKS 2155 cross-cal paper