

Detectors/Background WG

- Started as CCD Issues Working Group in 2010
 - Airing of grievances and discussion: CTI modeling, issues at the Si-K edge, other analysis oddities
 - Topics too esoteric for larger plenary sessions
- Combined with the backgrounds WG in 2014
- Changed CCDs to Detectors in 2016, would like to be more inclusive of other devices that share similar physics (e.g. SDD on NICER)

Detectors/Backgrounds WG

- Sembay, “Challenges of operating CCDs in a high radiation environment”
 - Developing CCDs for SMILE SXI, HEO w/ potentially 10x fluence of XMM, mitigating CTI thru clocking techniques (balanced against minimizing integration time to reduce optical loading)
- Miller, “Suzaku XIS Charge Leakage vs. Power Cycling”
 - Micro-meteoroid impacts + UVC shutdowns and power cycling = bad
 - Movies of raw CCD frames are always fun

Detectors/Backgrounds WG

- Kennea, “Swift XRT Gain/CTI/Trap Calibration updates”
 - Improved trap localisation and mapping strategy
 - Flux dependence of sacrificial charge! But only matters where the source is extremely piled up
 - Nice comparison of Tycho observation by Swift XRT and Astrosat SXT
- Grant, “Evolution of temperature-dependent CTI correction for Chandra ACIS CCDs”
 - Continuing radiation damage; changing thermal environment
 - Is calibration still OK? Some areas for improvement