## New XIS CALDB files released in September 2008

2008/8/29 the XIS team

• ae\_xi[0-3]\_makepi20080825.fits

## Update for the no-SCI mode(1)

The gain tables for the no-SCI mode are updated. The gain function in the previous makepi files had two kinks at 1839eV (Si edge) ±55 eV. Thus two jumps were sometimes seen in residuals when very bright objects were observed. In the new makepi files, there is no such jumps (see below)



## Update for the no-SCI mode (2)

 The gain table for the no-SCI 2x2 mode with the full window option are updated. There was a difference in photon energy between the 2x2 mode and the standard 5x5 (or 3x3) mode with the previous makepi files; the 5x5 (3x3) mode showed higher energy than the 2x2 mode. However, no difference can be seen with the latest makepi files.



The difference in photon energy between the 2x2 mode and the standard 5x5 (or 3x3) modes as a function of photon energy. Red and green points show those with previous and new CALDBs.

## Update for the SCI-on mode

 The CTI and gain tables for the SCI-on mode are updated based on the calibration data until February 2008 (the previous makepi files were based on the data until February 2007). There are no kinks at around the Si edge energy in the gain table for the SCI-on mode as well as that for the no-SCI mode. The corresponding rmf parameter tables will be updated soon (probably Oct. 2008).



The center energies of the Mn I K  $\alpha$  (cal source) and O VIII K  $\alpha$  (E0102) lines determined with ae\_xi[0-3]\_makepi20080825.fits. The green lines show the theoretical values.