xisrmfgen update as a solution to the Si-K edge problem

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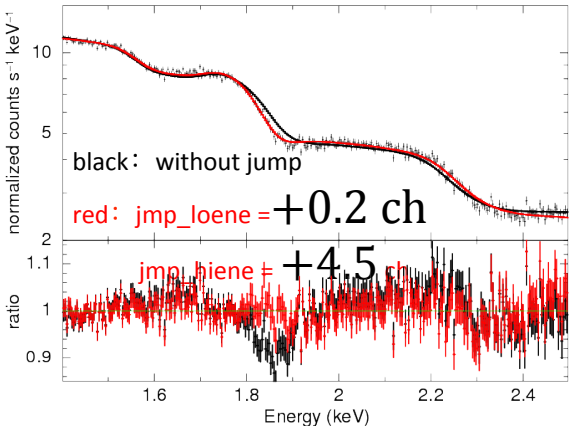
NOTE
(1) The default parameters of xi{0,1,3}_jmp_loene and xi{0,1,3}_jmp_hiene were determined with quantefffile=ae_xi{0,1,3}_quanteff_20180807.fits and bi_si_edge_mode=0.

(2) Default parameter of bi_si_edge_mode should be changed from 1 to 0.

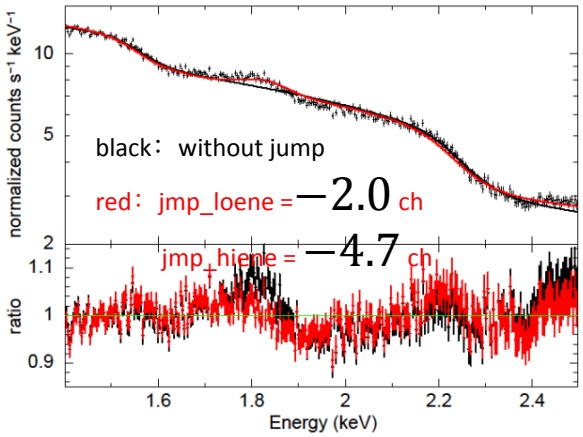
Update of *xisrmfgen* for revised XIS redistribution matrices around the Si-K edge at 2018-08-07

- A solution to reduce the residual in the XIS spectra around Si-K edge (Si-K edge problem) is implemented; a jump in the energy and pulse height relation is introduced at the Si-K edge.
- The jump is specified with newly introduced input parameters of *xisrmfgen xi{0,1,2,3}_jmp_loene* and *xi{0,1,2,3}_jmp_hiene*. Default values of these parameters were calibrated with X-ray sources with smooth continuum spectra.
- Note that '*bi_si_edge_mode*' first introduced in *xisrmfgen* 2012-04-21 version only for XIS1 is incompatible with the jump solution implemented in this update. Default value of the *bi_si_edge_mode* is changed from 1 to 0 in this update.
- The XIS quantum efficiency (QE) files ae_xi[0-3]_quanteff_20120428.fits, in which previous attempts to reduce the Si-K edge residuals are implemented, are not compatible with xisrmfgen in this update. The QE files ae_xi[0-3]_quanteff_20180807.fits or later should be used with xisrmfgen in this update.
- Detailed description of the XIS Si-K edge problem and our solution to it are described in Okazaki & Hayashida et al., Proc SPIE 10709, 107091F, 2018, though the parameters were further optimized for this release (ae_xi{0,3}_quanteff_20080504.fits were used in the paper, while ae_xi[0-3]_quanteff_20180807.fits are used in this release.)

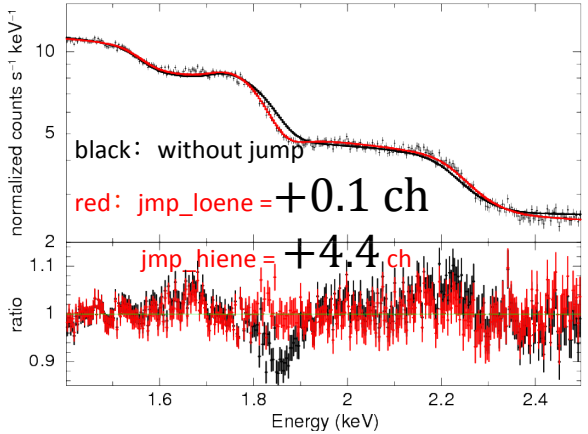
XIS0



XIS1



XIS3



Application of the rmf created by xisrmfgen to the X-ray spectra of LMC X-3 observed in 2008