Degap Corrections for HRC–S Grating Observations
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CONTEXT

Dispersion relation shows non-linearities
Lab derived degap v/s flight data

PROCESS

Extract source photons
Derive photon distribution in detector space
Force observed distribution of photons to match

RESULTS

Empirically determine degap shifts
Apply to other data (see Chung et al. poster)

COMMENTS

Magnitude of corrections
Limitations
What is next?
Empirical degap shifts, from continuum source
(PKS 2155–304)

Limited to spectroscopic area of detector, but
no evidence of variations with perpendicular tap
or energy.

Changes event locations by \(~7\) pix
\(~0.045\) Angstrom

Insufficient to fully account for dispersion
non-linearities

Things to do:
- include sources with softer spectra
- reduce particle background
- test for temporal stability
- include effects of gain and tap signal offsets