

URL: <u>http://cxc.harvard.edu/ciao3.4/threads/timing.html</u> Last modified: 11 December 2007

Timing Analysis

In order to perform absolute timing analysis on a dataset, a barycenter correction must first be applied to the data. One may then create lightcurves and phase–binned spectra to look for variability in the source. These threads also provide information on working with data taken in the ACIS continuous clocking (CC) mode.

• General:

- ♦ Why topic: <u>Continuous Clocking Mode</u>
- ◆ <u>Calculate CC-mode Times of Arrival</u>
- ◆ <u>Apply Barycenter Correction</u>
- <u>Create a Phase-binned Spectrum</u>
- Analyzing Lightcurves:
 - Why topic: <u>Timing Analysis with Lightcurves</u>
 - ♦ <u>Basic Lightcurves</u>
 - ♦ <u>Filtering Lightcurves</u> Uses: the analyze_ltcrv.sl S-Lang script
- See the <u>S-lang/ISIS Timing Analysis Routines</u> (SITAR) package which provides a set of functions and subroutines for timing analysis within ISIS.

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