**Chandra X-ray Center**

# Bugs: asphist

## Caveats

1. *GTI filter syntax*

   In CIAO 3.3, asphist syntax was modified to associate the good time interval (GTI) filter with the event file rather than the aspect solution, e.g.

   ```
   unix% asphist pcad_asol.fits asphist_7.fits evtfile="acis_evt2.fits[ccd_id=7]"
   ```
   instead of

   ```
   unix% asphist "pcad_asol.fits[@acis_evt2.fits[ccd_id=7]]" asphist_7.fits
   ```
   In prior versions of CIAO, a large number of GTI records (as often occurs for ACIS in CC−mode) would cause slight underestimates of the duration, since the filtering does not interpolate times in aspect records, but drops whole records. Applying the filter from the events and reading all the aspect records results in a rigorous interpolation of time intervals and determination of exposure time.