



Bugs: lc_clean.sl

lc_clean.sl is not a CIAO tool; it is a script which is available for download from the [Scripts page](#).

There are currently no known bugs.

A list of bugs fixed in CIAO 3.4 is included at the end of this document.

Bugs fixed in CIAO 3.4

The following is a list of bugs that were fixed in the CIAO 3.4 software release.

1. *Use of time information by `dmgti`, which is called by `lc_clean.sl`, causes filter to appear shifted.*

`dmgti` uses the `TIMEPIXR` and `TIMEDEL` keywords to modify the `TIME` column when creating GTI files. `TIMEPIXR` defines whether or not the `TIME` column should be taken to mean the beginning (`TIMEPIXR=0`), the middle (`TIMEPIXR=0.5`) or end (`TIMEPIXR=1`) of the bin. `TIMEDEL` records the time resolution of the data; this is the bin size between rows for a binned dataset or the resolution of the time stamp for event lists. Refer to "[ahelp chandra times](#)" for further details on the time information in Chandra data.

The way that `dmgti` uses the time information may result in a filter that appears shifted from the expected times for files where `TIMEPIXR` is not equal to 0. This is generally seen when creating filters for lightcurves.

Workaround:

To get the desired filter when working with lightcurves, rename the `TIME_MIN` column in the lightcurve input to `dmgti` to `TIME`. This means that the GTI filter will actually be determined using the `TIME_MIN` values.

Assume that the original lightcurve created by `dmextract` is called "lc.fits". This `dmcopy` command

1. copies the `TIME` column to `TIME_ORIG`
2. copies the `TIME_MIN` column to `TIME`
3. copies the rest of the columns ("*") to the output file as-is

```
unix% dmcopy "lc.fits[cols TIME_ORIG=TIME,TIME=TIME_MIN,*]" lc_cols_new.fits
```

Then use the new lightcurve file as input to `lc_clean.sl`.

For more information on working with lightcurves, refer to the [CIAO Timing Threads](#).

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URL:
http://cxc.harvard.edu/ciao3.4/bugs/lc_clean.html
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