

## ctools - Feature #1365

### Write cslightcrv

11/12/2014 11:19 AM - Mayer Michael

|   |               |                        |            |
|---|---------------|------------------------|------------|
| <b>Status:</b>  | Closed        | <b>Start date:</b>     | 11/12/2014 |
| <b>Priority:</b>  | Normal        | <b>Due date:</b>       |            |
| <b>Assigned To:</b>   | Mayer Michael | <b>% Done:</b>         | 100%       |
| <b>Category:</b>  |               | <b>Estimated time:</b> | 0.00 hour  |
| <b>Target version:</b>  | 1.0.0         |                        |            |
| <b>Description</b>  |               |                        |            |
| To calculate a light curve, the cscript cslightcrv needs to be written. For a user-defined time binning the tool should be able to fit a source in each bin and derive data points from the fit. In every bin, the TS value and the upper limit (see #1363) should be computed and stored.<br>We still might discuss the structure of the file we store (ascii, FITS or XML)? |               |                        |            |

### History

#### #1 - 04/16/2015 09:51 PM - Mayer Michael

- Status changed from New to Pull request
- Assigned To set to Mayer Michael
- Target version set to 1.0.0
- % Done changed from 0 to 100

I've added a first version of cslightcrv, which is available on branch *1365-write-cslightcrv*.

It is quite analogous to csspec with the difference that the user has to provide a time binning instead of energy binning.

The options to provide time binning are:

- FILE
  - FITS file which can be read in via `GGti::load(std::string filename)`
  - Csv-file having listed the tmin and tmax (in MJD) in the first and second column respectively
- LIN: provide tmin and tmax (in MJD) and a number of bins (tbins-parameter). The tool will make linear time bins from that
- GTI: The tool will use the GTIs from each observation container. This is equivalent to a run-wise light curve for IACTs.

The user also has the choice to run binned or unbinned analysis in each time bin. In addition the parameters `fix_bkg` and `fix_srcs` are available to provide some access to the model parameters.

#### #2 - 05/20/2015 03:38 PM - Knödseder Jürgen

- Status changed from Pull request to Closed

Sorry for having overlooked this request. The code is now merged into devel.