ctools - Feature #1365

Write cslightcrv

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

Status:	Closed	**Start date:**	11/12/2014
Priority:	Normal	**Due date:**	
Assigned To:	Mayer Michael	**% Done:**	100%
Category:		**Estimated time:**	0.00 hour
Target version:	1.0.0		

Description

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.
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 s 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 - Knödlseder Jürgen

- Status changed from Pull request to Closed

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