ctools - Bug #2171

csresmap fails when a residual map is computed for a counts cube and a model containing a diffuse map or cube

07/27/2017 05:32 PM - Knödlseder Jürgen

Status: Closed Start date: 07/27/2017 **Priority: Immediate** Due date: Assigned To: % Done: 100% Knödlseder Jürgen Category: **Estimated time:** 0.00 hour Target version: 1.4.0

Description

When computing a residual map using csresmap for a counts cube and a model containing a diffuse map or cube the script exists with the following error:

Traceback (most recent call last):

File "/usr/local/gamma/bin/csresmap", line 367, in <module> app.execute()

File "/usr/local/gamma/bin/csresmap", line 287, in execute self.run()

File "/usr/local/gamma/bin/csresmap", line 214, in run

model.run()

File "/usr/local/gamma/lib/python2.7/site-packages/ctools/tools.py", line 1532, in run

return _tools.ctmodel_run(self)

IndexError: *** ERROR in GSkyMap::operator(int&, int&): Sky map pixel index -1 is outside the valid range [0,89999].

The error arises due to the new model computation in ctmodel. The diffuse map or cube model computation for a stacked analysis makes use of the GCTAResponseCube class which cashes the diffuse model using the GCTAEventBin::ipix() and GCTAEventBin::ieng() method. Since the values of these indices is not set by ctmodel, but left at -1, an error occurs.

The problem should be solved by correctly setting the indices in ctmodel. This requires adding index setter methods to GCTAEventBin.

History

#1 - 07/27/2017 05:59 PM - Knödlseder Jürgen

- % Done changed from 0 to 80

Adding GCTAEventBin::ipix() and GCTAEventBin::ieng() setter methods and setting the pixel and energy index in ctmodel solved the problem.

#2 - 07/27/2017 06:35 PM - Knödlseder Jürgen

- Status changed from In Progress to Closed
- % Done changed from 80 to 100

Merged into devel branches of GammaLib and ctools.

#3 - 07/28/2017 07:51 PM - Knödlseder Jürgen

- Related to Feature #2142: GGti::exclude(tstart,tstop) added

#4 - 07/28/2017 07:51 PM - Knödlseder Jürgen

- Related to deleted (Feature #2142: GGti::exclude(tstart,tstop))

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