

GammaLib - Change request #2850

Missing keywords in Fermi LAT source maps HDUs

03/12/2019 02:39 PM - Tibaldo Luigi

| | | | |
|--|-------------------|------------------------|------------|
| Status: | Closed | Start date: | 03/12/2019 |
| Priority: | Normal | Due date: | |
| Assigned To: | Knödlseher Jürgen | % Done: | 100% |
| Category: | | Estimated time: | 0.00 hour |
| Target version: | 1.6.0 | | |
| Description | | | |
| Since LAT Science Tools 11 the model maps HDUs in output from gtsrmaps miss WCS keywords, thus GammaLib cannot read them properly. The WCS keywords are still present in the Primary HDU, that is the count map. GammaLib should be modified to read the missing keywords from the Primary HDU. An example output from gtsrmaps is attached. | | | |

History

#1 - 03/21/2019 03:42 PM - Knödlseher Jürgen

- Status changed from New to In Progress

To reproduce the problem with the attached file:

```
>>> import gammalib
>>> e=gammalib.GLATEventCube('srcmaps.fits')
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
  File "/usr/local/gamma/lib/python2.7/site-packages/gammalib/lat.py", line 652, in __init__
    this = _lat.new_GLATEventCube(*args)
ValueError: *** ERROR in GFitsHeaderCard& GFitsHeader::at(std::string&): Invalid argument. Keyword "CTYPE1" not found in FITS header.
```

#2 - 03/21/2019 04:51 PM - Knödlseher Jürgen

- Tracker changed from Feature to Change request

- Status changed from In Progress to Feedback

- % Done changed from 0 to 100

I added a kludge that deals with missing header keywords, and verified that the above small Python code succeeds.

Code is merged into devel. Would be good @luigi if you could check that everything is okay.

#3 - 03/21/2019 05:18 PM - Tibaldo Luigi

I tested on the joint HESS/Fermi Crab analysis and it works properly.

#4 - 03/21/2019 09:30 PM - Knödseder Jürgen

- Status changed from *Feedback* to *Closed*

Files

srcmaps.fits

1.54 MB

03/12/2019

Tibaldo Luigi