

GammaLib - Bug #2855

CTYPE1 not found error with ctlike and Fermi data

03/21/2019 02:57 PM - de Bony Mathieu

Status:	Rejected	Start date:	03/21/2019
Priority:	Normal	Due date:	
Assigned To:		% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:			
Description			
I'm looking for making a fits on Fermi data with ctools. I followed the tutorial in the ctools documentation (same source, same parameter and xml configuration file, I just use the last IRF (P8R3_SOURCE_V2)). When I run ctlike i have got this error (ctlike.log):			
2019-03-21T09:46:45: *****			
2019-03-21T09:46:45: * ctlike			
2019-03-21T09:46:45: * ----- *			
2019-03-21T09:46:45: * Version: 1.5.2 *			
2019-03-21T09:46:45: *****			
2019-03-21T09:46:46: * ERROR encountered in the execution of ctlike. Run aborted ...			
2019-03-21T09:46:46: * ERROR in GFitsHeaderCard& GFitsHeader::at(std::string&): Invalid argument. Keyword "CTYPE1" not found in FITS header.			
2019-03-21T09:46:46:			
2019-03-21T09:46:46: Application "ctlike" terminated after 1 wall clock seconds, consuming 0.11 seconds of CPU time.			
After modification of the observation xml by puting random name for fits file and see if an error occured, it's look like the error come from the srcmaps fits file.			

History

#1 - 03/21/2019 03:30 PM - Tibaldo Luigi

This is a known issue (#2850). It is due to the removal of some WCS keywords from the output of gtsrcmap in the latest versions of the Fermi Science Tools

<https://github.com/fermi-lat/Likelihood/issues/29>

A fix from the Gammalib side is on its way, in the mean time you can tweak the srcmap file to make it work with the current version, please find a code snippet below

```
from astropy.io import fits

srcmap = 'srcmaps.fits'
hdulist = fits.open(srcmap)
hd0 = hdulist[0].header
for card in hd0.cards:
    if card.keyword[0]=='C':
        for hdu in hdulist[3:]:
            hdu.header.append(card)
hdulist.writeto(srcmap,overwrite=True)
```

#2 - 03/21/2019 04:42 PM - de Bony Mathieu

Thanks, it's works. Did you know when the last IRF of Fermi will be supported by ctools ? ctklike works if I use P8R2_SOURCE_V6 but not if I use P8R3_SOURCE_V2.

#3 - 03/21/2019 04:52 PM - Knödlseider Jürgen

- *Project changed from ctools to GammaLib*
- *Status changed from New to Rejected*

Duplication of existing issue #2850. Issue #2850 was fixed.

#4 - 03/21/2019 04:55 PM - Tibaldo Luigi

P8R3 IRFs are already supported in the development version.

#5 - 03/21/2019 04:57 PM - de Bony Mathieu

Ok Thanks for the information