

ctools - Change request #2295

Use CTA time reference in obsutils for observation creation

01/09/2018 03:12 PM - Knödlseider Jürgen

Status:	Closed	Start date:	01/09/2018
Priority:	Normal	Due date:	
Assigned To:	Knödlseider Jürgen	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:	1.5.0		
Description			
So far, the following code produces an observation with a reference time at the GammaLib time reference:			
<pre>>>> import gammalib >>> import ctools >>> from cscripts import obsutils >>> obs = obsutils.set_obs(gammalib.GSkyDir(),0.0,1800.0,1.0,1.0,100.0,5.0,'South_50h','prod2','') >>> print(obs.gti()) === GGti === Number of intervals: 1 Ontime: 1800 sec Elapsed time: 1800 sec MJD range: 55197.0007660185 - 55197.0215993519 s (TT) UTC range: 2010-01-01T00:00:00 - 2010-01-01T00:30:00 s (TT) Reference MJD: 55197.0007660185</pre>			
Instead, the CTA reference time should be used.			

History

#1 - 01/09/2018 04:37 PM - Knödlseider Jürgen

- Status changed from New to Pull request
- % Done changed from 0 to 100

The GTI time reference is now set to the CTA time reference in GCTAEventList, GCTAEventCube and GCTACubeExposure.

Furthermore, the CTA time reference has been introduced as a constant in ctools, accessible via ctools::time_reference in C++ and ctools.time_reference under Python. The ctools::time_reference() method has been removed, the time reference is no longer a property of a ctool.

The time reference is now used in obsutils to set an observation with the CTA time reference. The above code gives now:

```
>>> print(obs.gti())
=== GGti ===
Number of intervals .....: 1
Ontime .....: 1800 sec
Elapsed time .....: 1800 sec
MJD range .....: 51544.5 - 51544.5208333333 s (TT)
UTC range .....: 2000-01-01T11:58:56 - 2000-01-01T12:28:56 s (TT)
Reference MJD .....: 51544.5
```

#2 - 01/09/2018 05:38 PM - Knödseder Jürgen

- Status changed from Pull request to Closed

Merged into devel.