ctools - Action #3059

cssens sensitivity calculation for a source with file function spectrum

10/29/2019 07:28 PM - Kherlakian M.

Status:	Rejected	**Start date:**	10/29/2019
Priority:	High	**Due date:**	
Assigned To:	Knödlseder Jürgen	**% Done:**	0%
Category:		**Estimated time:**	0.00 hour
Target version:	1.7.0		

Description

Hello! I get the error below when I try to calculate CTA sensitivity to DM structures via cssens. The spectrum of the source is defined by a file function (energy_flux.txt).

Is there another tool that does this type of calculation? Or I am doing something wrong?

Best.

variable definition: ----------

Lower energy limit (TeV) [0.03163]
Upper energy limit (TeV) [125.8925]
Calibration database [prod2]
Instrument response function [data/cta/prod2/bcf/North_5h/irf_file.fits.gz]
Effective exposure time (s) [180000.0]
Radius of ROI (deg) [5.0]
Input model definition XML file [subh2.xml] teste.xml
Source name [subh] subh

error: ----------

File "/usr/local/gamma/bin/cssens", line 735, in <module>
app.execute()
File "/usr/local/gamma/lib/python3.6/site-packages/ctools/tools.py", line 1542, in _execute
self.run()
File "/usr/local/gamma/bin/cssens", line 682, in run
ra=self._ra, dec=self._dec)
File "/usr/local/gamma/lib/python3.6/site-packages/cscripts/modutils.py", line 69, in test_source
raise RuntimeError(msg)
RuntimeError: Model "subh" has no parameter "Prefactor". Only spectral models with a "Prefactor" parameter are supported.

Related issues:

Related to ctools - Feature # 1889: cssens sensitivity calculation for model ...	**Closed**

History

#1 - 10/30/2019 01:38 PM - Knödlseder Jürgen

- Related to Feature #1889: cssens sensitivity calculation for model with spectrum from file (GModelSpectralFunc) added

#2 - 10/30/2019 01:40 PM - Knödlseder Jürgen

- Status changed from New to Rejected

For the moment the cssens script only works for spectral models that have a Prefactor parameter, see #1889. The code needs to be modified if it should also work for other spectral forms. I will reject this issue since it doubles #1889. I will look as soon as possible in an implementation of this functionality.

Files

teste.xml	900 Bytes	10/29/2019	Kherlakian M.
energy_flux.txt	3.88 KB	10/29/2019	Kherlakian M.