

GammaLib - Feature #874

Test gammalib morphology fitting againsts other tools

05/02/2013 06:00 PM - Deil Christoph

Status:	New	Start date:	05/02/2013
Priority:	High	Due date:	
Assigned To:	Deil Christoph	% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:			
Description			
<p>In HESS we have started to check the morphology fitting results from the tools in use (HAP, ParisAnalysis, Sherpa) against each other. It would be nice if gammalib / ctools would be included in this comparison, and this could also evolve into the OnOffFitting unit tests for gammalib.</p> <p>Attached find a first simple example, once we have agreement there we can create a series of more complex examples (PSF convolution, non-flat background and exposure maps, On-off-likelihood statistics). We should do the same thing for other parts (statistics, background estimation, spectra) using fake and real data.</p> <p>HAP has basically no unit test coverage, but the GoogleTest unit testing framework is in place in the scones build system This gammalib / ctools effort is also a very nice opportunity to define exchangeable maps (basically a bunch of images) and spectrum (PHA?) data formats between the tools and develop some test cases to cross-check the implementations.</p> <p>Jürgen, Pierrick: maybe you can organize the test cases you'd like in the issue tracker and then I'll try to run / provide what is needed for the HD / HAP side.</p>			

History

#1 - 10/30/2014 11:58 AM - Knödseder Jürgen

- Priority changed from Normal to High
- Target version set to 1.0.0

It would be good if someone could do this as soon as possible to validate the code prior to the release of version 1.0.0.

#2 - 02/10/2015 11:17 PM - Knödseder Jürgen

Some volunteer to work on that issue?

#3 - 02/10/2015 11:22 PM - Deil Christoph

- Assigned To set to Deil Christoph

I'll do some tests against Sherpa and Gammapy next week.

If I remember correctly it's not simple to just create a Gaussian or Multi-Gauss or some other simple test PSF ... I have to read the PSF model from FITS files?

#4 - 10/16/2015 11:23 PM - Knödseder Jürgen

- Target version deleted (1.0.0)

I put this now off the 1.0 release. I have done substantial verification of the pull distributions for the various spatial models and everything looks fine. So we should go for the release without having done these tests.

I keep the issue, however, so that we don't forget about doing these tests one day.

Files

simple.tar

89.5 KB

05/02/2013

Deil Christoph