GammaLib - Feature #909

Implement a background maker class

06/23/2013 03:34 PM - Martin Pierrick

Status:	Rejected		**Start date:**	06/23/2013
Priority:	Normal		**Due date:**	
Assigned To:			**% Done:**	0%
Category:			**Estimated time:**	0.00 hour
Target version:	HESS sprint #1			

Description

The context of this task is the extension of the gammalib to allow the analysis of data from Cherenkov telescopes in a way currently adopted by the HESS/VERITAS/MAGIC collaborations: the ON and OFF technique, which can be used in different ways. As a first step, we focus on the spectral analysis of a source observed in wobble mode, with the reflected region background evaluation method (see Berge et al. 2007).

As part of this effort, a code structure was proposed in which a background maker class prepares the ON and OFF data that are then used by a fitter class to produce the final results. There is an abstract interface for the background maker, and derived classes for each kind of background estimation method (such as reflected regions, mirror region, ring region,...etc). The derived classes store the low-level ON and OFF data in an array of dedicated objects that are then used for fitting or or spectrum/map making.

Draft headers for a GOnOffMaker abstract interface and for a GOnOffMakerReflected derived object are provided. They are very likely perfectible and the immediate objective is to refine the interface and fill in their functionalities during the coding sprint to be held in Toulouse on 24-28 June 2013.

The philosophy is explained in the comment section of each class header, which also contains a list of points to be clarified/discussed.

Subtasks:

Action # 910: Implement GOnOffMaker abstract class	**Rejected**
Action # 916: Implement GOnOffMakerReflected unit test	**Rejected**
Action # 911: Implement GOnOffMakerReflected derived class	**Rejected**

History

#1 - 06/25/2013 10:06 PM - Knödlseder Jürgen

- Status changed from New to Rejected

It has been decided that no maker classes will be used but that specific ctools will be implemented.

Files

GOnOffMaker.hpp	4.7 KB	06/23/2013		Martin Pierrick
GOnOffMakerReflected.hpp	5.02 KB	06/23/2013		Martin Pierrick