

GammaLib - Change request #1774

Refactor GCTAOnOffObservation class

04/28/2016 11:33 AM - Knödlseeder Jürgen

Status:	New	Start date:	04/28/2016
Priority:	Normal	Due date:	
Assigned To:		% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:			

Description

The GCTAOnOffObservation class should be refactored to make it more like a GCTAObservation class. Eventually, the GCTAOnOffObservation class could then even disappear, but this needs to be checked.

A GCTAResponseOnOff class should be introduced that derives from GCTAResponse and that covers the response part of GCTAOnOffObservation. It should get the m_arf, m_bgd and m_rmf members of GCTAOnOffObservation and implement the compute_response() method.

A GCTAEventOnOff or GCTAEventSpec class should be introduced that derives from GEventCube and that gets the m_on_spec and m_off_spec members of GCTAOnOffObservation. It remains to be seen whether the class should just hold a simple spectrum, and hence only encapsulates the GPha class, or if it holds both members. Holding just a single member may enable to use directly the methods that take an event on input, but it needs to be checked whether this is actually good enough (event bins are just evaluated at the centre, while here we may need some integration over the event bin).