GammaLib - Action #1307

Implement GCTAResponseCube::npred()

07/31/2014 09:35 AM - Lu Chia-Chun

Status:	New	**Start date:**	07/31/2014
Priority:	Normal	**Due date:**	
Assigned To:	Lu Chia-Chun	**% Done:**	0%
Category:		**Estimated time:**	0.00 hour
Target version:			

Description

In parellel to double GCTAResponseIrf::npred(const GPhoton& photon, const GObservation& obs) const

History

#1 - 07/31/2014 10:18 AM - Knödlseder Jürgen

- Description updated

The npred() is a method specifically designed for unbinned analysis. Are you sure you want such a method for binned? What is your purpose?

#2 - 07/31/2014 10:20 AM - Lu Chia-Chun

I want to calculate a spectrum. I try to use your analyses.py script to generate a spectrum but I got exception messages that this method is not implemented.

#3 - 07/31/2014 10:31 AM - Knödlseder Jürgen

Ok, so what is needed to implement either the

virtual double GCTAResponseCube::npred(const GSource& source, const GObservation& obs) const;

method or all four of the model specific methods

virtual double GCTAResponseCube::npred_ptsrc(const GSource& source, const GObservation& obs) const;
virtual double GCTAResponseCube::npred_radial(const GSource& source, const GObservation& obs) const;
virtual double GCTAResponseCube::npred_elliptical(const GSource& source, const GObservation& obs) const;
virtual double GCTAResponseCube::npred_diffuse(const GSource& source, const GObservation& obs) const;

I guess it's easier to implement

virtual double GCTAResponseCube::npred(const GSource& source, const GObservation& obs) const;

where you would put a loop over the event cube and sum-up the values you get from

virtual double GCTAResponseCube::irf(const GEvent& event, const GSource& source, const GObservation& obs) const;

multiplied by the event bin size.