GammaLib - Action #1144

Use Prod2 FITS file for CTA response modelling

02/12/2014 06:17 PM - Knödlseder Jürgen

Status:	Closed	**Start date:**	02/12/2014
Priority:	Normal	**Due date:**	
Assigned To:	Knödlseder Jürgen	**% Done:**	100%
Category:		**Estimated time:**	0.00 hour
Target version:			

Description

The CTA Prod2 response file contain information that can be used for instrumental response modelling. It should be possible to use this information to create a GCTAModelBackground background model. Probably the recently added features that support background modelling in instrument coordinates can be used for this.

Related issues:

Related to GammaLib - Action # 1096: BackgroundModel from IRF	**Closed**	**02/07/2014**

History

#1 - 02/12/2014 06:21 PM - Knödlseder Jürgen

Check the extension BACKGROUND in inst/cta/caldb/data/cta/e/bcf/IFAE20120510_50h/irf_file.fits for the actual format.
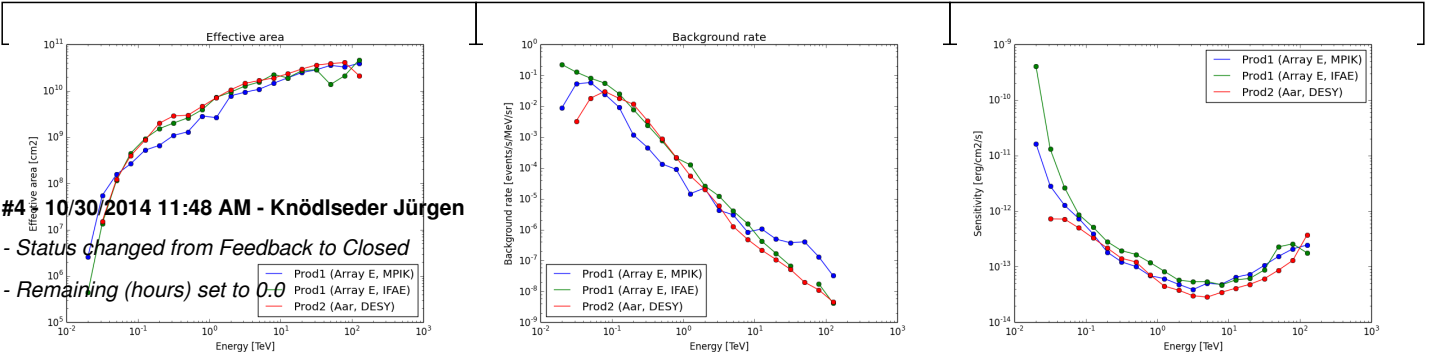
#2 - 02/16/2014 03:21 AM - Knödlseder Jürgen

- *Status changed from New to Feedback*

- *Assigned To set to Knödlseder Jürgen*

- *% Done changed from 0 to 100*

The new GCTABackground interface and specifically the GCTABackground3D and GCTABackgroundPerfTable now handle this.

#3 - 02/16/2014 01:48 PM - Knödlseder Jürgen

- *File cta_aeff.png added*

- *File cta_background.png added*

- *File cta_sensitivity.png added*

Here a couple of figures comparing the various CTA responses using the GammaLib interface. Things look pretty reasonable. The plots have been obtained using the script show_response.py which is part of the ctools package.

#4 10/30/2014 11:48 AM - Knödlseder Jürgen

- *Status changed from Feedback to Closed*

- *Remaining (hours) set to 0.0*

Files

cta_aeff.png	52.3 KB	02/16/2014	Knödlseder Jürgen
cta_background.png	63.4 KB	02/16/2014	Knödlseder Jürgen
cta_sensitivity.png	53.2 KB	02/16/2014	Knödlseder Jürgen