

ctools - Action #1347

ctbkgcube should output a model Xml file with background cube information

10/30/2014 01:00 PM - Knödlseider Jürgen

Status:	Closed	Start date:	10/30/2014
Priority:	High	Due date:	
Assigned To:	Knödlseider Jürgen	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:	00-08-00		
Description			
As a convenience, ctbkgcube should put out an Xml file with the background cube information attached. This avoids the need for constructing it by hand.			

History

#1 - 10/30/2014 05:29 PM - Knödlseider Jürgen

- Status changed from New to In Progress
- Assigned To set to Knödlseider Jürgen
- % Done changed from 0 to 70

Implemented. ctbkgcube now creates a model container where the original background models used for the computation have been replaced by a new background model that can be used for stacked analysis. The container can be retrieved using the `models()` method, or it can be saved as an Xml file using the `save()` method.

Note that the current code will strip any CTA, HESS, VERITAS or MAGIC background models from the input model container. This will pose problems when using the code for a joint CTA, HESS, VERITAS or MAGIC analysis. To do this properly we would need to track which background components have been used for background modeling, and remove only those components from the container.

#2 - 10/30/2014 05:33 PM - Knödlseider Jürgen

- Status changed from In Progress to Closed
- % Done changed from 70 to 100
- Remaining (hours) set to 0.0

Thinking more about this, I'm not sure as this is really an issue. The current stacked analysis just stacks everything together in a single cube, hence it would also combine any joint instrument data into a single cube. This sounds odd, but that's exactly what would happen: HESS data would be lumped together with MAGIC data, and the instrument response functions would be averaged. The same is true for the background, just everything would be lumped together. Hence the implementation is okay.