

GammaLib - Feature #1234

Add a way to create IRF classes directly without needing FITS files

06/26/2014 09:30 AM - Deil Christoph

<b>Status:</b>	New	<b>Start date:</b>	06/26/2014
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assigned To:</b>		<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>			
<b>Description</b>			
<p>Currently most of the Gammalib IRF classes can only be initialised via a FITS file.</p> <p>For science parameter and sensitivity studies as well as for debugging it would be nice if there were a way to create initialised IRF classes directly by passing the required parameters / tables / histogram (whatever is needed and read from file at the moment) directly.</p> <p>As an example, let's say I would like to do a computation how the sensitivity to distinguish Gauss or Shell morphology on the PSF width.</p> <p>The spatial models take the relevant parameters as input and it's easy to construct them how I want.</p> <p>But for the PSF I currently see no way to vary the width except to manually inspect the FITS format for the example test files and writing code that manually generates exactly that file format, just so that I can get a PSF of the width I want. See e.g. <a href="http://gammalib.sourceforge.net/doxygen/classGCTAPsfKing.html">http://gammalib.sourceforge.net/doxygen/classGCTAPsfKing.html</a></p> <p>I guess it's a lot of work to add these extra constructors for all the IRF classes ... Jürgen, do you think it's worth it?</p>			