

GammaLib - Bug #2113

GLON and GLAT spatial model parameters are written out as RA and DEC

05/14/2017 05:29 PM - Knödlseeder Jürgen

Status:	Closed	Start date:	05/14/2017
Priority:	Immediate	Due date:	
Assigned To:	Knödlseeder Jürgen	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:	1.3.0		

Description

The model

```
<?xml version="1.0" standalone="no"?>
<source_library title="CTA 1DC simulated pulsar wind nebulae">
<source name="pwn_0" type="ExtendedSource">
  <spectrum type="LogParabola">
    <parameter name="Prefactor" scale="1e-20" value="1.46861" min="1e-07" max="1000.0" free="1"/>
    <parameter name="Index" scale="-1" value="2.41173" min="0.0" max="+5.0" free="1"/>
    <parameter name="Curvature" scale="-1" value="0.07497" min="-5.0" max="+5.0" free="1"/>
    <parameter name="PivotEnergy" scale="1e6" value="1.0" min="0.01" max="1000.0" free="0"/>
  </spectrum>
  <spatialModel type="RadialGaussian">
    <parameter name="GLON" scale="1.0" value="53.52435" min="-360" max="360" free="0"/>
    <parameter name="GLAT" scale="1.0" value="-0.86570" min="-90" max="90" free="0"/>
    <parameter name="Sigma" scale="1.0" value="0.02059" min="0.01" max="10" free="1"/>
  </spatialModel>
</source>
</source_library>
```

results in

```
=== GModelSky ===
Name .....: pwn_0
Instruments .....: all
Instrument scale factors ...: unity
Observation identifiers ...: all
Model type .....: ExtendedSource
Model components .....: "RadialGaussian" * "LogParabola" * "Constant"
Number of parameters .....: 8
Number of spatial par's ....: 3
GLON .....: 293.378936824968 [-360,360] deg (fixed,scale=1)
GLAT .....: 17.8243388170243 [-90,90] deg (fixed,scale=1)
Sigma .....: 0.02059 +/- 0 [0.01,10] deg (free,scale=1)
Number of spectral par's ...: 4
Prefactor .....: 1.46861e-20 +/- 0 [1e-27,1e-17] ph/cm2/s/MeV (free,scale=1e-20,gradient)
Index .....: -2.41173 +/- 0 [-0,-5] (free,scale=-1,gradient)
Curvature .....: -0.07497 +/- 0 [5,-5] (free,scale=-1,gradient)
PivotEnergy .....: 1000000 [10000,1000000000] MeV (fixed,scale=1000000,gradient)
Number of temporal par's ...: 1
Normalization .....: 1 (relative value) (fixed,scale=1,gradient)
```

and when it's written out the GLON and GLAT parameters are transformed into Right Ascension and Declination. While the conversion is done correctly, the names of the parameters should be changed to RA and DEC.

History

#1 - 05/14/2017 08:51 PM - Knödlseeder Jürgen

- Status changed from New to Closed

- % Done changed from 0 to 100

Now the names are changed to RA and DEC upon reading. Merged into devel.