

## GammaLib - Bug #3440

### Make sure that the spatial model value or normalisation is always taken correctly into account

11/07/2020 02:52 PM - Knödlseeder Jürgen

<b>Status:</b>	Closed	<b>Start date:</b>	11/07/2020
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assigned To:</b>	Knödlseeder Jürgen	<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	2.0.0		
<b>Description</b>			
It seems that the spatial model value is not always taken into account, for example when simulation photons from a diffuse cube model.			
All spatial model methods should be checked to verify that the spatial model value is correctly taken into account. The same holds for the <code>GSkyModel::flux()</code> and <code>GSkyModel::eflux()</code> methods.			
<b>Related issues:</b>			
Related to GammaLib - Action # 3439: Add <code>GSkyModel::flux()</code> method that return...		<b>Closed</b>	<b>11/07/2020</b>

### History

#### #1 - 11/07/2020 03:38 PM - Knödlseeder Jürgen

- Related to Action #3439: Add `GSkyModel::flux()` method that returns correct flux for diffuse cube models added

#### #2 - 03/15/2022 12:04 PM - Knödlseeder Jürgen

- Status changed from New to In Progress

- Assigned To set to Knödlseeder Jürgen

- % Done changed from 0 to 50

I checked the following models by inspecting the code:

- `GModelSpatialDiffuseConst`
- `GModelSpatialDiffuseCube`
- `GModelSpatialDiffuseMap`

The following models have no normalisation parameter:

- `GModelSpatialEllipticalDisk`
- `GModelSpatialEllipticalGauss`
- `GModelSpatialEllipticalGeneralGauss`
- `GModelSpatialPointSource`
- `GModelSpatialRadialDisk`
- `GModelSpatialRadialGauss`
- `GModelSpatialRadialGeneralGauss`
- `GModelSpatialRadialProfileDMBurkert`
- `GModelSpatialRadialProfileDMEinasto`
- `GModelSpatialRadialProfileDMZhao`
- `GModelSpatialRadialProfileGauss`
- `GModelSpatialRadialRing`
- `GModelSpatialRadialShell`

**#3 - 03/15/2022 12:04 PM - Knödseder Jürgen**

- *Status changed from In Progress to Closed*

- *% Done changed from 50 to 100*