

## GammaLib - Change request #3145

### Properly set region for GModelSpatialDiffuseCube and GModelSpatialComposite

01/23/2020 11:07 AM - Tibaldo Luigi

|   |                    |                        |                   |
|---|--------------------|------------------------|-------------------|
| <b>Status:</b>  | Closed             | <b>Start date:</b>     | 01/23/2020        |
| <b>Priority:</b>  | Normal             | <b>Due date:</b>       |                   |
| <b>Assigned To:</b>   | Knödlseider Jürgen | <b>% Done:</b>         | 100%              |
| <b>Category:</b>  |                    | <b>Estimated time:</b> | 0.00 hour         |
| <b>Target version:</b>  | 1.7.0              |                        |                   |
| <b>Description</b><br>For the moment the region is centered on 0,0 and has a radius of 180 deg (I guess this was a placeholder).<br>For GModelSpatialDiffuseCube it should be implemented in the same way as GModelSpatialDiffuseMap. |                    |                        |                   |
| <b>Related issues:</b>  |                    |                        |                   |
| Related to GammaLib - Change request # 3258: Change GModelSpatial::region() m...  |                    | <b>New</b>             | <b>06/30/2020</b> |
| Related to GammaLib - Feature # 3099: Implement region method for spatial mod...  |                    | <b>Closed</b>          | <b>12/11/2019</b> |

#### History

##### #1 - 01/28/2020 10:06 AM - Knödlseider Jürgen

- Target version set to 1.7.0

##### #2 - 06/30/2020 03:24 PM - Knödlseider Jürgen

- Status changed from New to In Progress

- Assigned To set to Knödlseider Jürgen

- % Done changed from 0 to 50

The code now uses the GSkyMap::region\_circle() method to set the sky region in both the GModelSpatialDiffuseCube and GModelSpatialDiffuseMap classes.

I also implemented the GModelSpatialDiffuseCube::contains() method, which is a copy of the GModelSpatialDiffuseMap::contains() method.

##### #3 - 06/30/2020 04:14 PM - Knödlseider Jürgen

For the GModelSpatialComposite model the situation is more complicated, since it would require a method that combines different sky region circles into a single sky region circle, and it is actually questionable whether this would make sense.

Probably a better approach would be that GModelSpatial::region() returns a GRegions() object, that in case of a composite model would simply contain a list of sky regions. I added the change request #3258 to cover this future change.

##### #4 - 06/30/2020 04:15 PM - Knödlseider Jürgen

- Related to Change request #3258: Change GModelSpatial::region() method to GModelSpatial::regions() that returns a GRegions object added

##### #5 - 06/30/2020 04:16 PM - Knödlseider Jürgen

- Related to Feature #3099: Implement region method for spatial model type 'DiffuseMapCube' added

##### #6 - 06/30/2020 05:01 PM - Knödlseider Jürgen

- Status changed from In Progress to Closed

- % Done changed from 50 to 100

Merged into devel.