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# SkySegmentor

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## **INTRODUCTION**

**SkySegmentor** is a `python 3` package for splitting binary (or weighted) `HEALPix` maps or points on the sphere into equally weighted segments. The segmentation uses a sequential binary space partitioning scheme, a generalisation of the k-d tree algorithm. By definition all partitions are approximately equal (with errors the size of the `HEALPix` pixel scale).





## DEPENDENCIES

- `numpy`
- `healpy`



## INSTALLATION

SkySegmentor can be installed by first cloning the repository

```
git clone https://github.com/knaidoo29/SkySegmentor.git  
cd SkySegmentor
```

and install by either running

```
pip install . [--user]
```

or

```
python setup.py build  
python setup.py install
```

You should now be able to import the module:

```
import skysegmentor
```



## TUTORIALS

### 5.1 Tutorials



## 6.1 API





## CONTRIBUTORS

If you use SkySegmentor in a publication please cite:

TBA

and include a link to the SkySegmentor main page:

<https://github.com/knaidoo29/SkySegmentor>



## SUPPORT

If you have any issues with the code or want to suggest ways to improve it please open a new issue ([here](#)) or (if you don't have a github account) email [krishna.naidoo.11@ucl.ac.uk](mailto:krishna.naidoo.11@ucl.ac.uk).



## VERSION HISTORY

- **Version 0.0.0:**