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**hsaf<sub>cci042</sub>** Documentation

**Release**

**TU Wien**

**Mar 06, 2018**



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Reading and reshuffling of CCI soil moisture Written in Python.



# CHAPTER 1

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## Installation

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Setup of a complete environment with `conda` can be performed using the following commands:

```
conda create -q -n hsaf_cci-environment -c conda-forge numpy netCDF4 pyproj pygrib  
source activate hsaf_cci-environment  
pip install hsaf_env
```



# CHAPTER 2

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## Supported Products

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At the moment this package supports ESA CCI soil moisture data version v04.2 and v04.3 in netCDF format (download, reading, time series creation) with a spatial sampling of 0.25 degrees.



# CHAPTER 3

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## Contribute

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We are happy if you want to contribute. Please raise an issue explaining what is missing or if you find a bug. We will also gladly accept pull requests against our master branch for new features or bug fixes.

### 3.1 Development setup

For Development we also recommend a `conda` environment. You can create one including test dependencies and debugger by running `conda env create -f environment.yml`. This will create a new `hsaf_env` environment which you can activate by using `source activate hsaf_env`.

### 3.2 Guidelines

If you want to contribute please follow these steps:

- Fork the `hsaf_cci_042` repository to your account
- Clone the repository, make sure you use `git clone --recursive` to also get the test data repository.
- make a new feature branch from the `hsaf_cci_042` master branch
- Add your feature
- Please include tests for your contributions in one of the test directories. We use `py.test` so a simple function called `test_my_feature` is enough
- submit a pull request to our master branch



# CHAPTER 4

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## Note

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This project has been set up using PyScaffold 2.5. For details and usage information on PyScaffold see <http://pyscaffold.readthedocs.org/>.



# CHAPTER 5

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## Contents

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### 5.1 License

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### 5.2 Developers

- TU Wien <remote.sensing@geo.tuwien.ac.at>

## 5.3 Changelog

### 5.3.1 Version v0.0.2

- Changing point of origin of gpis to bottom left corner

### 5.3.2 Version v0.0.1

- Initial version
- Add CCI reshuffle function
- Add CCI readers

## 5.4 hsaf\_cci\_042

### 5.4.1 hsaf\_cci\_042 package

#### Submodules

[\*\*hsaf\\_cci\\_042.grid module\*\*](#)

[\*\*hsaf\\_cci\\_042.interface module\*\*](#)

[\*\*hsaf\\_cci\\_042.reshuffle module\*\*](#)

#### Module contents

# CHAPTER 6

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## Indices and tables

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