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# **marmee Documentation**

***Release 0.2.4***

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**Nov 08, 2018**



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Execute safely Google Earth Engine algorithms through a tunnel like a marmot

- Free software: MIT license
- Documentation: <https://marmee.readthedocs.io>.

## 1.1 Features

- TODO

### 1.1.1 STAC Parser

It can translate an object from GEE to a STAC schema representation.

```
from marmee.utils.parser import Stac
imgAsset = 'projects/fao-wapor/L1_AET/L1_AET_0910'
item = Stac(imgAsset).parse()
print item.json
```

Which produces the JSON below as a STAC Item:

```
{
  "assets": {
    "L1_AET_0910": {
      "href": "L1_AET_0910",
      "name": "L1_AET_0910"
    }
  },
  "links": [
    {
      "href": "projects/fao-wapor/L1_AET",
```

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```
        "rel": "ImageCollection",
        "hreflang": "EN"
    },
    ],
    "geometry": {
        "type": "LinearRing",
        "coordinates": [
            [
                9.33536203029916,
                40.00558427004632
            ],
            [
                -1.7982352104060524,
                40.0055842949407
            ],
            [
                -14.416312088575413,
                40.00558426248278
            ],
            [
                -30.0062673066322,
                40.00557958159156
            ],
            [
                -30.0062673066322,
                -40.00557958159156
            ],
            [
                -17.756391286901717,
                -40.0055842747424
            ],
            [
                -4.396074577361316,
                -40.00558421517503
            ],
            [
                15.644400466056124,
                -40.00558425647372
            ],
            [
                32.3447962745126,
                -40.005584280349574
            ],
            [
                47.56071249632567,
                -40.0055842595196
            ],
            [
                65.00626724904829,
                -40.00557956740052
            ],
            [
                65.00626724904829,
                40.00557956740052
            ],
            [
                51.27191157635778,
```

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```

        40.00558426297113
    ],
    [
        38.653834709547986,
        40.00558426359986
    ],
    [
        30.860316653195245,
        40.00558428056272
    ],
    [
        17.87111989480795,
        40.00558425744303
    ],
    [
        9.33536203029916,
        40.00558427004632
    ]
]
},
"properties": {
    "provider": "",
    "ext_properties": {
        "system:index": "L1_AET_0910",
        "level": 1,
        "system:asset_size": 255491726,
        "area": "AfNE",
        "days_in_dk": 10,
        "id_no": "L1_AET_0910",
        "system:time_start": 1238544000000,
        "system:footprint": {
            "type": "LinearRing",
            "coordinates": [
                [
                    9.33536203029916,
                    40.00558427004632
                ],
                [
                    -1.7982352104060524,
                    40.0055842949407
                ],
                [
                    -14.416312088575413,
                    40.00558426248278
                ],
                [
                    -30.0062673066322,
                    40.00557958159156
                ],
                [
                    -30.0062673066322,
                    -40.00557958159156
                ],
                [
                    -17.756391286901717,
                    -40.0055842747424
                ]
            ],
        }
    }
}

```

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```

        [
            -4.396074577361316,
            -40.00558421517503
        ],
        [
            15.644400466056124,
            -40.00558425647372
        ],
        [
            32.3447962745126,
            -40.005584280349574
        ],
        [
            47.56071249632567,
            -40.0055842595196
        ],
        [
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            -40.00557956740052
        ],
        [
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            40.00557956740052
        ],
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            38.653834709547986,
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            40.00558428056272
        ],
        [
            17.87111989480795,
            40.00558425744303
        ],
        [
            9.33536203029916,
            40.00558427004632
        ]
    ]
}
},
"license": "",
"datetime": "2009-04-01T00:00:00+00:00"
},
"bbox": [
    -30.0062673066322,
    -40.005584280349574,
    65.00626724904829,
    40.0055842949407
],
"id": "projects/fao-wapor/L1_AET/L1_AET_0910"

```

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```
}
```

## 1.2 Credits

This package was created with [Cookiecutter](#) and the [audreyr/cookiecutter-pypackage](#) project template.



### 2.1 Stable release

To install marmee, run this command in your terminal:

```
$ pip install marmee
```

This is the preferred method to install marmee, as it will always install the most recent stable release.

If you don't have [pip](#) installed, this [Python installation guide](#) can guide you through the process.

### 2.2 From sources

The sources for marmee can be downloaded from the [Github repo](#).

You can either clone the public repository:

```
$ git clone git://github.com/francbartoli/marmee
```

Or download the [tarball](#):

```
$ curl -OL https://github.com/francbartoli/marmee/tarball/master
```

Once you have a copy of the source, you can install it with:

```
$ python setup.py install
```



## CHAPTER 3

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### Usage

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To use marmee in a project:

```
import marmee
```



Contributions are welcome, and they are greatly appreciated! Every little bit helps, and credit will always be given. You can contribute in many ways:

## 4.1 Types of Contributions

### 4.1.1 Report Bugs

Report bugs at <https://github.com/francbartoli/marmee/issues>.

If you are reporting a bug, please include:

- Your operating system name and version.
- Any details about your local setup that might be helpful in troubleshooting.
- Detailed steps to reproduce the bug.

### 4.1.2 Fix Bugs

Look through the GitHub issues for bugs. Anything tagged with “bug” and “help wanted” is open to whoever wants to implement it.

### 4.1.3 Implement Features

Look through the GitHub issues for features. Anything tagged with “enhancement” and “help wanted” is open to whoever wants to implement it.

### 4.1.4 Write Documentation

marmee could always use more documentation, whether as part of the official marmee docs, in docstrings, or even on the web in blog posts, articles, and such.

### 4.1.5 Submit Feedback

The best way to send feedback is to file an issue at <https://github.com/francbartoli/marmee/issues>.

If you are proposing a feature:

- Explain in detail how it would work.
- Keep the scope as narrow as possible, to make it easier to implement.
- Remember that this is a volunteer-driven project, and that contributions are welcome :)

## 4.2 Get Started!

Ready to contribute? Here's how to set up *marmee* for local development.

1. Fork the *marmee* repo on GitHub.
2. Clone your fork locally:

```
$ git clone git@github.com:your_name_here/marmee.git
```

3. Install your local copy into a virtualenv. Assuming you have virtualenvwrapper installed, this is how you set up your fork for local development:

```
$ mkvirtualenv marmee
$ cd marmee/
$ python setup.py develop
```

4. Create a branch for local development:

```
$ git checkout -b name-of-your-bugfix-or-feature
```

Now you can make your changes locally.

5. When you're done making changes, check that your changes pass flake8 and the tests, including testing other Python versions with tox:

```
$ flake8 marmee tests
$ python setup.py test or py.test
$ tox
```

To get flake8 and tox, just pip install them into your virtualenv.

6. Commit your changes and push your branch to GitHub:

```
$ git add .
$ git commit -m "Your detailed description of your changes."
$ git push origin name-of-your-bugfix-or-feature
```

7. Submit a pull request through the GitHub website.



## 4.3 Pull Request Guidelines

Before you submit a pull request, check that it meets these guidelines:

1. The pull request should include tests.
2. If the pull request adds functionality, the docs should be updated. Put your new functionality into a function with a docstring, and add the feature to the list in README.rst.
3. The pull request should work for Python 2.7, 3.4, 3.5 and 3.6, and for PyPy. Check [https://travis-ci.org/francbartoli/marmee/pull\\_requests](https://travis-ci.org/francbartoli/marmee/pull_requests) and make sure that the tests pass for all supported Python versions.

## 4.4 Tips

To run a subset of tests:

```
$ py.test tests.test_marmee
```

## 4.5 Deploying

A reminder for the maintainers on how to deploy. Make sure all your changes are committed (including an entry in HISTORY.rst). Then run:

```
$ bumpversion patch # possible: major / minor / patch
$ git push
$ git push --tags
```

Travis will then deploy to PyPI if tests pass.



### 5.1 Development Lead

- Francesco Bartoli <[francesco.bartoli@geobeyond.it](mailto:francesco.bartoli@geobeyond.it)>

### 5.2 Contributors

None yet. Why not be the first?



#### **6.1 0.1.0 (2018-02-15)**

- First release on PyPI.

#### **6.2 0.2.4 (2018-11-08)**

- Update of dependencies.



## CHAPTER 7

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### Indices and tables

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- `genindex`
- `modindex`
- `search`