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# PyCodata Documentation

*Release 0.4.0*

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## INTRODUCTION

### 1.1 Description

Python wrapper around the (Modern) Fortran codata library. Follow the [installation instructions](#). for compiling and installing the library.

For now, the wrapper must be compiled on Linux, windows and MacOS platforms after installing the codata library using the compiler that was used to compile your python interpreter.

On Windows [Intel Fortran Redistributable](#) and [Visual C++ Redistributable for Visual Studio 2015](#) are necessary.

The list of the available constants: [https://milanskocic.github.io/codata/md\\_introduction\\_raw\\_codata.html](https://milanskocic.github.io/codata/md_introduction_raw_codata.html).

The version of the python wrapper follows the versions (major and minor) of the codata library. The patches will be independent.

A pdf version of the documentation can be found here [pycodata](#). The source code can be viewed on [GitHub](#).

### 1.2 How to install

```
pip install pycodata
```

### 1.3 Dependencies

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## RELEASE NOTES

### 2.1 PyCodata 0.3.0 Release Note

#### 2.1.1 Changes

- Update wrapper for matching codata 0.3
- API change which provides only the last codata constants.

#### 2.1.2 Download

PyPI

#### 2.1.3 Contributors

Milan Skocic

#### 2.1.4 Commits

Full Changelog: <https://github.com/MilanSkocic/pycodata/compare/0.2.6...0.3.0>

### 2.2 PyCodata 0.2.6 Release Note

#### 2.2.1 Changes

- Functional setup for compiling the wrapper with pip.
- Update documentation.

#### 2.2.2 Download

PyPI

### 2.2.3 Contributors

Milan Skocic

### 2.2.4 Commits

Full Changelog: <https://github.com/MilanSkocic/pycodata/compare/0.2.5...0.2.6>

## 2.3 PyCodata 0.2.5 Release Note

### 2.3.1 Changes

- Fix errors for compiling and installing from sources with pip.

### 2.3.2 Download

PyPI

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Milan Skocic

### 2.3.4 Commits

Full Changelog: <https://github.com/MilanSkocic/pycodata/compare/0.2.4...0.2.5>

## 2.4 PyCodata 0.2.4 Release Note

### 2.4.1 Changes

- Fix errors for compiling and installing from sources with pip.

### 2.4.2 Download

PyPI

### 2.4.3 Contributors

Milan Skocic

## 2.4.4 Commits

Full Changelog: <https://github.com/MilanSkocic/pycodata/compare/0.2.3...0.2.4>

## 2.5 PyCodata 0.2.3 Release Note

### 2.5.1 Changes

- Fix errors for compiling and installing from sources with pip.

### 2.5.2 Download

PyPI

### 2.5.3 Contributors

Milan Skocic

### 2.5.4 Commits

Full Changelog: <https://github.com/MilanSkocic/pycodata/compare/0.2.2...0.2.3>

## 2.6 PyCodata 0.2.2 Release Note

### 2.6.1 Changes

- Handle missing site.cfg.

### 2.6.2 Download

PyPI

### 2.6.3 Contributors

Milan Skocic

### 2.6.4 Commits

Full Changelog: <https://github.com/MilanSkocic/pycodata/compare/0.2.1...0.2.2>

## 2.7 PyCodata 0.2.1 Release Note

### 2.7.1 Changes

- Fix error in sdist.

### 2.7.2 Download

PyPI

### 2.7.3 Contributors

Milan Skocic

### 2.7.4 Commits

Full Changelog: <https://github.com/MilanSkocic/pycodata/compare/0.2.1...0.2.1>

## 2.8 PyCodata 0.2.0 Release Note

### 2.8.1 Changes

- Implementation of the getter and setter around the codata constants.

### 2.8.2 Download

PyPI

### 2.8.3 Contributors

Milan Skocic

### 2.8.4 Commits

Full Changelog: <https://github.com/MilanSkocic/pycodata/compare/...0.2.0>

## AUTOGENERATED DOCUMENTATION

### 3.1 Documentation

#### 3.1.1 pycodata

Python wrapper of the (Modern Fortran) codata library.

All attributes of the C extension `pycodata._codata` are directly available in the python wrapper.

#### 3.1.2 \_codata

C extension wrapping the (Modern Fortran) codata constants.

`pycodata._codata.as_dict()`

`as_dict()` → dict

Return all constants available in a dictionary

`pycodata._codata.get_number_constants()`

`get_number_constants()` → int

Get the number of constants.

`pycodata._codata.get_uncertainty()`

`get_uncertainty(name)` → float

Get the uncertainty of the constant defined by name. If not found returns NaN

`pycodata._codata.get_unit()`

`get_unit(name)` → float

Get the unit of the constant defined by name. If not found returns “None”

`pycodata._codata.get_value()`

`get_value(name)` → float

Get the value of the constant defined by name. If not found returns NaN

`pycodata._codata.get_year()`

`get_year()` → str

Get the revision year for the codata constants.

`pycodata._codata.print()`

`print()` → None

Print all codata constants.





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