
codata Documentation

Release 0.5.1

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GETTING STARTED

1.1 codata library

codata provides, automatically generated, source files for the latest codata constants (2018). The raw codata from <http://physics.nist.gov/constants> are parsed line by line and converted into declarations as constants for different languages:

- Fortran module named `fcodata.f90`
- C header named `ccodata.h`
- Python module named `pycodata.py`
- CPython extension named `cpycodata.c`

The sources can be directly included in projects where they are needed.

Links:

- Sources: <https://github.com/MilanSkocic/codata>.
- Online documentation: <https://milanskocic.github.io/codata/index.html>.
- PDF documentation: `codata`.

1.1.1 How to install

Copy and paste the source code for the language of your choice.

1.1.2 Dependencies

```
gcc>=4.6 or msvc>=14  
gfortran>=4.6 or ifort>=18  
cmake>=3.10
```

1.1.3 License

GNU General Public License v3 (GPLv3)

1.2 Python wrapper pycodata

Python module containing the codata constants.

1.2.1 How to install

```
pip install pycodata
```

1.2.2 Dependencies

1.2.3 License

GNU General Public License v3 (GPLv3)

1.3 Examples

RELEASE NOTES

2.1 Codata 0.6.0 Release Note

2.1.1 Changes

- Created documentation.
- Fixed missing uncertainties for Cpython.

2.1.2 Download

Codata Releases

2.1.3 Contributors

Milan Skocic

2.1.4 Commits

Full Changelog: <https://github.com/MilanSkocic/codata/compare/0.4.0...0.5.0>

Codata 0.5.0 Release Note

Changes

- Changed the complete approach by not generating a library but only source files for different languages.
- Available languages: Fortran, C, python, CPython

Download

[Codata Releases](<https://github.com/MilanSkocic/codata/releases>)

Contributors Milan Skocic

Commits **Full Changelog:** <https://github.com/MilanSkocic/codata/compare/0.4.0...0.5.0>

Codata 0.4.0 Release Note

Changes

- Bring back pywrapper in the codata repository to sync versions.
- Improvements of the documentation.

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[Codata Releases](<https://github.com/MilanSkocic/codata/releases>)

Contributors

Milan Skocic

Commits

Full Changelog: <https://github.com/MilanSkocic/codata/compare/0.3.0...0.4.0>

Codata 0.3.0 Release Note

Changes

- Only last codata constants.

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[Codata Releases](<https://github.com/MilanSkocic/codata/releases>)

Contributors

Milan Skocic

Commits

Full Changelog: <https://github.com/MilanSkocic/codata/compare/0.2.1...0.3.0>

Codata 0.2.1 Release Note

Changes

- Integration of Intel Fortran compiler and MSVC in cmake scripts.
- Add specifications and instructions for compiling on Windows

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[Codata Releases](<https://github.com/MilanSkocic/codata/releases>)

Contributors

Milan Skocic

Commits

Full Changelog: <https://github.com/MilanSkocic/codata/compare/0.2.0...0.2.1>

Codata 0.2.0 Release Note

Changes

- Bug fixes for the codata 2010.
- Bug fixes in the tests linked to the codata 2010.
- Add python wrapper for the number of constants method.

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[Codata Releases](<https://github.com/MilanSkocic/codata/releases>)

Contributors

Milan Skocic

Commits

Full Changelog: <https://github.com/MilanSkocic/codata/compare/0.1.0...0.2.0>

Codata 0.1.0 Release Note

Changes

Implementation of:

- the parser of the codata raw data
- the generator of the Fortran modules
- the C API and C header

- the python wrapper (will be moved to its repository next release).

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[Codata Releases](<https://github.com/MilanSkocic/codata/releases>)

Contributors

Milan Skocic

Commits

Full Changelog: <https://github.com/MilanSkocic/codata/compare/...0.1.0>

AUTOGENERATED DOCUMENTATION

3.1 codata library

3.2 Python wrapper

C extension for codata constants.

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