
pydggrid Documentation

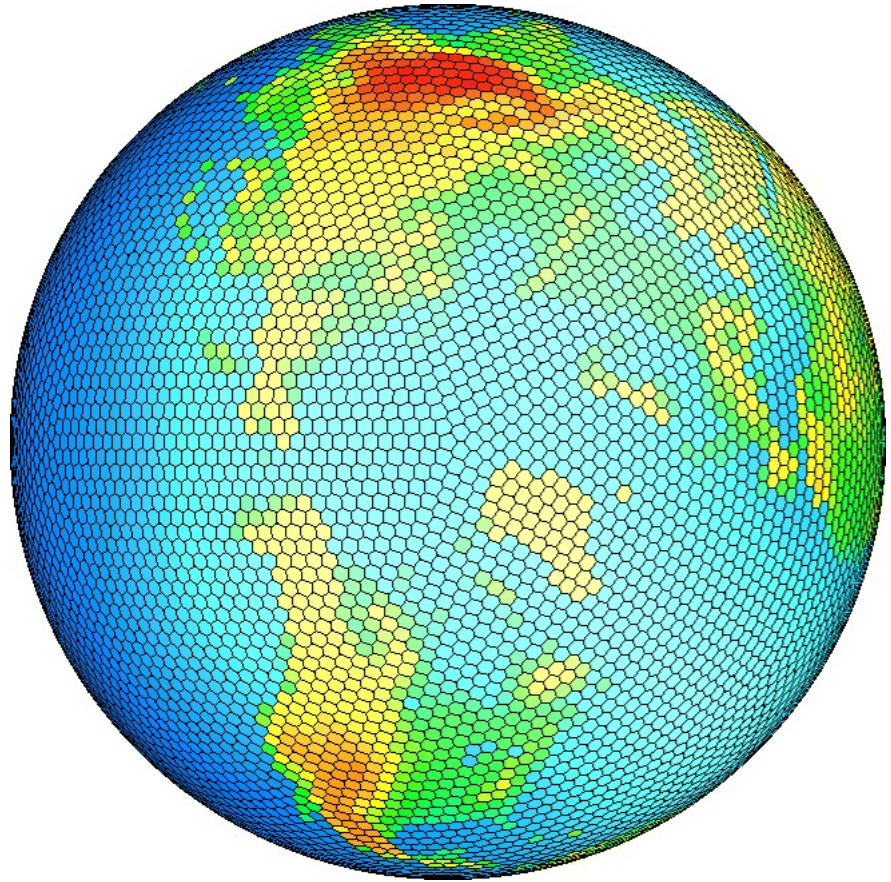
Release 0.0.1

Majid Hojati

May 22, 2020

Contents

1	PyDGGRID Installation	3
1.1	Install on Linux	3
1.2	Install on Windows	3
2	Build PyDGGRID From Source	5
2.1	Installation	5
2.2	Build From source	6
3	PyDGGRID API	7
4	Release History	9
4.1	GitHub	9
4.2	Twitter	9
4.3	Release History	9
4.4	dev	9
4.5	0.0.16	9
4.6	0.0.15	10
4.7	0.0.13 (2019-05-15)	10



Contents:

PyDGGRID Installation

Note: this library needs ‘Boost’ library for compile. so make sure you have installed boost C++ library before installing. The first thing many people want to know is, “how do I build Boost?” The good news is that often, there’s nothing to build. To install boost follow these steps.

1.1 Install on Linux

- Install boost on linux

```
` $ sudo apt install libboost-dev $ sudo apt install libboost-all-dev `
```

- Set *boost_dir* environment variable

After installing boost; set *boost_dir* variable in terminal/command prompt windows.

```
expot boost_dir=/home/usr/include/boost/
```

- Install PyDGGRID from pip

Then simply use pip to install this library

```
pip install pydggrid
```

1.2 Install on Windows

- Install boost

Download latest version of boost from folowing link

<https://www.boost.org/users/download/>

then extract it in a folder. and it is done. After installing boost;

- Set *boost_dir* variable

set "boost_dir=C:/Boost/include/"

Then simply use pip to install this library

pip install pydggrid

Build PyDGGRID From Source

To Build PyDGGRID from source follow these steps:

2.1 Installation

Note: The main *DGGRID* library needs 'GDAL' library to compile. so make sure you have installed GDAL C++ library before installing. To installing GDAL on linux is pretty straightforward. For windows you can use *vcpkg* to compile and install it. The process of installing and using *vcpkg* on windows can be found on its github (<https://github.com/microsoft/vcpkg/>)

- Install GDAL on linux

```
““ sudo add-apt-repository ppa:ubuntugis/ppa && sudo apt-get update sudo apt-get update sudo apt-get install gdal-bin sudo apt-get install libgdal-dev
```

```
““
```

- Install GDAL on windows

Prerequisites

` Windows 10, 8.1, 7, Linux, or MacOS Visual Studio 2015 Update 3 or newer (on Windows) Git `

To get started: ““ > git clone <https://github.com/Microsoft/vcpkg.git> > cd vcpkg

PS> .bootstrap-vcpkg.bat ““ then

```
` PS> .\vcpkg integrate install ` Install GDAL packages with ` PS> .\vcpkg install gdal:x64-windows shapelib::x64-windows ` NOTE: The GDAL version must match with your python compiled version. So if you have a x86 python use vcpkg install gdal:x86-windows, othewise use vcpkg install gdal:x64-windows
```

Then simply use pip to install this library

```
pip install pydggrid
```

2.2 Build From source

On Unix (Linux, OS X)

- install GDAL, shapelib
- clone this repository
- *pip install ./pydggrid*

or you can easily call

- *python setup.py install*

On Windows

- You need Build Tools for Visual Studio to be able to compile it from source. so Install it from this link <https://visualstudio.microsoft.com/downloads/>
- install GDAL, shapelib
- clone this repository
- *pip install ./pydggrid*

or you can easily call

- *python setup.py install*

CHAPTER 3

PyDGGRID API

After installing PyDGGRID you can use it in your python application. Here you can find API for the functions.

If you'd like to stay up to date on the community and development of Requests, there are several options:

4.1 GitHub

The best way to track the development of Requests is through the [the GitHub repo](#).

4.2 Twitter

The author often tweets about new features and releases of Requests.

Follow [@Majid](#) for updates.

4.3 Release History

4.4 dev

Bugfixes

- [Short description of non-trivial change.]

4.5 0.0.16

- DGGRID is updated to version 7.3
- Some bugs fixed
- Richard Barnes's dglib class is decomposed in order to upgrade DGGRID

4.6 0.0.15

- Not released
- DGGRID is updated to version 7.1 (<https://github.com/sahrk/DGGRID>)
- Removed *Boost* Geometry support to use *GDAL* support since main *DGGRID* library started to use *GDAL* library
- Added *VCPKG* support for windows version
- Cleaned up setup process

4.7 0.0.13 (2019-05-15)

- first release
- Support DGGRID 4.6
- Added CI
- Added tests