

# pyg2p Installation Manual

<b>Version</b>	1.3.1
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## Prerequisites

In order to run **pyg2p** application, the following python version and packages must be installed<sup>1</sup>.

Most packages need additional requirements such as C libraries properly installed on the computer, for the user running the application.

Software Requirement	Purpose	Dependencies
Python 2.7	Execution environment	
NumPy>=1.8	fast array manipulation	ATLAS + LAPACK libs Python header files gcc and gfortran compilers
Numexpr>=2.4	Numpy extension for optimal performances	Numpy>=1.8
SciPy>=0.10	interpolation	ATLAS + LAPACK libs Python header files gcc and gfortran compilers
gribapi	reading grib files, interpolation	GRIB_API>=1.10.4
GDAL python	reading and writing pcraster maps	GDAL lib and its requirements.
untangle 1.1	xml parsing	
memory_profiler (optional)	Memory usage information for test suite.	psutils

## Installation

1. Decompress the file `pyg2p_v.<version>.tar.gz` in the <target directory> using `tar xzvf pyg2p_v.<version>.tar.gz`.
2. `cd <target directory>` and issue the command **python test\_reqs.py**. If some required packages are missing, install them. If core packages are missing, contact the developer.
3. Modify the first line of **pyg2p.py** to point to the desired python interpreter if you will execute the application as **./pyg2p.py**.  
Otherwise execute the program with **/path/to/python ./ pyg2p.py**
4. Configure the application (see Configuration Manual).
5. The application is shipped with some preconfigured XML command examples in `execution_templates` folder. Just adjust paths and parameters for fire tests. Also, use the `-t` option for comparing results with the `grib2pcraster` C application. Read User Manual first.
6. Ready to start.

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<sup>1</sup> Usage of virtualenv is highly recommended.

