pyg2p Installation Manual

| Version | 1.3 | |
|--------------|--|--|
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Prerequisites

In order to run **pyg2p** application, the following python version and packages must be installed¹.

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.

¹ Usage of virtualenv is highly recommended.