
GeoStat Framework

Release 1.0

Jul 04, 2021

Contents

1	Included Packages	3
1.1	GSTools	3
1.2	PyKrige	3
1.3	ogs5py	4
1.4	WellTestPy	4
1.5	AnaFlow	5
1.6	pentapy	5



Create your geo-statistical model with Python!

Included Packages

The following Python-Packages are part of the GeoStat Framework.

1.1 GStools

GeoStatTools is a library providing geostatistical tools like kriging, random field generation, variogram estimation, covariance models and much more.



Version	
Installation	<code>pip install gstools</code> <i>or</i> <code>conda install gstools</code>
Source	https://github.com/GeoStat-Framework/GStools
Documentation	https://gstools.readthedocs.io

1.2 PyKrige

PyKrige provides 2D and 3D ordinary and universal kriging.



Version	
Installation	<code>pip install PyKrige</code> <i>or</i> <code>conda install pykrige</code>
Source	https://github.com/GeoStat-Framework/PyKrige
Documentation	https://pykrige.readthedocs.io

1.3 ogs5py

ogs5py is a Python-API for the OpenGeoSys 5 scientific modeling package.



Version	
Installation	<code>pip install ogs5py</code> <i>or</i> <code>conda install ogs5py</code>
Source	https://github.com/GeoStat-Framework/ogs5py
Documentation	https://ogs5py.readthedocs.io

1.4 WellTestPy

WellTestPy is a python-package for handling well based field campaigns.



Version	
Installation	<code>pip install welltestpy</code>
Source	https://github.com/GeoStat-Framework/welltestpy
Documentation	https://welltestpy.readthedocs.io

1.5 AnaFlow

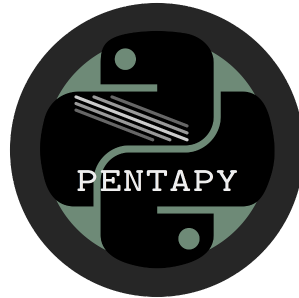
Anaflow provides several analytical and semi-analytical solutions for the groundwater-flow-equation.



Version	
Installation	<code>pip install anaflow</code>
Source	https://github.com/GeoStat-Framework/AnaFlow
Documentation	https://anaflow.readthedocs.io

1.6 pentapy

pentapy is a toolbox to deal with pentadiagonal matrices in Python.



Version	
Installation	<code>pip install pentapy</code>
Source	https://github.com/GeoStat-Framework/pentapy
Documentation	https://pentapy.readthedocs.io