

WPS

Manually sorted list of Tech Notes (OpenEarth and external links)

- Using WPS as *client*
 - [WPS Primer](#) (using a web browser)
 - [WPS Primer \(using Matlab\)](#)
 - [WPS Primer \(using Python\)](#)
- Making server-side functions for later deployment a WPS *server*
 - [Setting up a WPS process using PyWPS](#) in Python
 - Make your desired functionality in a Python Notebook
 - Turn your functionality into a proper python function
 - Adhere to the function call convention
 - Ask someone with a WPS server to host it, or deploy one yourselves
 - [Matlab WPS convention](#)
- Hosting WPS as *server* for hosting server-side functions
 - [Setting up pyWPS in a Windows environment](#)
 - [Setting up pyWPS in combination with uwsgi and nginx](#)
 - [Setting up pyWPS in combination with gunicorn and nginx](#)
- Online courses and other resources
 - [Tutorial for beginners](#)
 - [pyWPS wiki spaces](#) especially the [data input/output](#)
 - [Home page](#) and [documentation](#)
- Use cases:
 - WPS for EMODnet chemistry [pyodv](#)
 - WPS for tidal analysis [pytide](#)

Lectures

[Lecture about WPS at OpenGIS workshop](#)

Automatic tree of OpenEarth Tech Notes

Standard

- <http://www.opengeospatial.org/standards/wps>

Available services

- [Deltares test server](#)
- [52North demo servers](#)

Software: Servers

- <http://52north.org/downloads/geoprocessing/wps> (R backend <http://52north.org/communities/geoprocessing/wps/tutorials/r/setup.html>)
- <http://docs.geoserver.org/latest/en/user/extensions/wps/index.html>
- <http://pywps.wald.intevation.org/>
- <http://www.zoo-project.org/>
- <http://deegree3-demo.deegree.org/wps-workspace/> degree project
- <http://grasswiki.osgeo.org/wiki/WPS> Grass integration
- <http://rsg.pml.ac.uk/wps/index.html> PML remote sensing group (mostly grass)

Software: Clients

- <http://geopython.github.com/OWSLib/> Python library
- <http://deegree3-testing.deegree.org/deegree-wps-webclient/> html interface
- <http://www.kappasys.org/qgis/wps.zip> Q-GIS plugin

Literature

- Case study for hydrology: http://link.springer.com/chapter/10.1007%2F978-0-387-74674-6_2?LI=true
- WPS for topography: http://link.springer.com/chapter/10.1007%2F978-3-540-69848-7_17?LI=true
- eHabitat, a multi-purpose WPS for ecological modeling: <http://www.sciencedirect.com/science/article/pii/S1364815212002769>
- Models as web services using the OGC WPS standard: <http://www.sciencedirect.com/science/article/pii/S1364815212002812>
- MSc Thesis Joost Boerboom *Implementing the WPS Standard: Report and Defense ppt*
- EU FP7 Netmar presentation at AGU 2012: http://ec.europa.eu/information_society/apps/projects/logos/4/249024/080/deliverables/001_Ares2012561489D751AppendixASplinterPart4.pdf
- special issue of Elsevier's *Computers & Geosciences*: <http://www.sciencedirect.com/science/journal/00983004/47>

Cases: Scrap notebook for WPS tidal case

- Setting up PyWPS in a Windows environment
- Setting up PyWPS in combination with Unicorn and Nginx
- Setting up a WPS process using PyWPS

Online services for tidal predictions (model input)

- Rijkswaterstaat getij services: web-service <http://www.rws.nl/rws/opendata/> en grafisch http://live.getij.nl/getij_locaties.cfm?taal=nl
- NOAA CO-OPS SOAP services for: [High Low Tide Pred](#) ad [Tide Predictions](#)
- [FES99, FES2004](#) (world)
- [OSU tidal data inversion](#) (world)
- [UK HO](#) (UK+)
- [NPC](#) (UK)
- [NOAA \(USA\) FAQ](#)
- [Pacific with Xtide](#)
- [BOM](#) (Australia)
- [NZ](#) (New Zealand)
- [links](#)
- [BSH](#) (north sea, german bight)
- [Delft Dashboard \(DDB\)](#) toolboxes
- <http://www.flaterco.com/xtide/faq.html#60> Information on the purge after the UK HO legal threats.

Links

- <http://web.vims.edu/physical/research/TCTutorial/tideanalysis.htm>
- http://www.psmsl.org/train_and_info/software/analysis.php
- <http://ilikai.soest.hawaii.edu/UHSLC/jasl.html>
- <http://www.gloss-sealevel.org/>

Software

- Matlab: [t_tide](#)
- Matlab: [Utide](#)
- Python: [Tappy](#)
- Fortran: [by John Hunter](#)
- Executable: [Xtide](#)
- Executable: [Fortran IOS Tidal Package by Mike Forman](#)
- Executable: [Delft3D-TIDE](#)
- Executable: [PSMSL/POL tidal analysis software TT4W](#)

Online services for bathymetric data (model input)

- [GEBCO](#)
- [Smith & Sandwell](#)