
Sphinx Demo Documentation

Release 0.1

Doug Latornell

Nov 14, 2016

1	gsw_py_mat Functions	3
1.1	Python Function	3
1.2	Matlab Functions	3
2	Demo Notebook for nbsphinx Extension	5
3	Indices and tables	7
	Python Module Index	9

Contents:

gsw_py_mat Functions

This section documents the Python and Matlab functions that are available in the `gsw_py_mat`.

1.1 Python Function

Python interface to Matlab GSW functions.

`gsw_py_mat.py_cmd.make_matlab_cmd(scriptname, filename, args)`

Return a command to run the Matlab script `scriptname`.

Parameters

- **scriptname** (*str*) – Name of the Matlab script to make the command for.
- **filename** (*str*) – Name of file in which Matlab script will store its results.
- **args** (*list*) – Arguments to pass to the Matlab script.

Returns Command suitable to be passed to `subprocess.run()`.

Return type `list`

1.2 Matlab Functions

`gsw_py_mat.startup()`

Matlab startup function that provides access to the Matlab GSW3 library.

Note: Only works on machines that have access `/ocean/`.

`gsw_py_mat.mw_gsw_CT_from_t(filename, SA, t, p)`

Calculate conservative temperature from absolute salinity, in situ temperature, and pressure.

Parameters

- **filename** – Name of file in which Matlab script will store its results.
- **SA** – Absolute salinity.
- **t** – Temperature.
- **p** – Pressure.

`gsw_py_mat.mw_gsw_SA_from_SP` (*filename, SP, p, lon, lat*)

Calculate absolute salinity from practical salinity and pressure with corrections based on longitude and latitude.

Parameters

- **filename** – Name of file in which Matlab script will store its results.
- **SP** – Practical salinity.
- **p** – Pressure.
- **lon** – Longitude of the location at which the salinity is to be calculated.
- **lat** – Latitude of the location at which the salinity is to be calculated.

Demo Notebook for nbsphinx Extension

Oh look! There's a Jupyter Notebook in my docs!

```
In [1]: import math
```

```
In [2]: print(math.pi)
```

```
3.141592653589793
```

```
In [ ]:
```

Indices and tables

- `genindex`
- `modindex`
- `search`

g

`gsw_py_mat.py_cmd`, 3

G

gsw_py_mat.mw_gsw_CT_from_t() (in module
gsw_py_mat.py_cmd), 3
gsw_py_mat.mw_gsw_SA_from_SP() (in module
gsw_py_mat.py_cmd), 3
gsw_py_mat.py_cmd (module), 3
gsw_py_mat.startup() (in module gsw_py_mat.py_cmd),
3

M

make_matlab_cmd() (in module gsw_py_mat.py_cmd), 3