

WxS

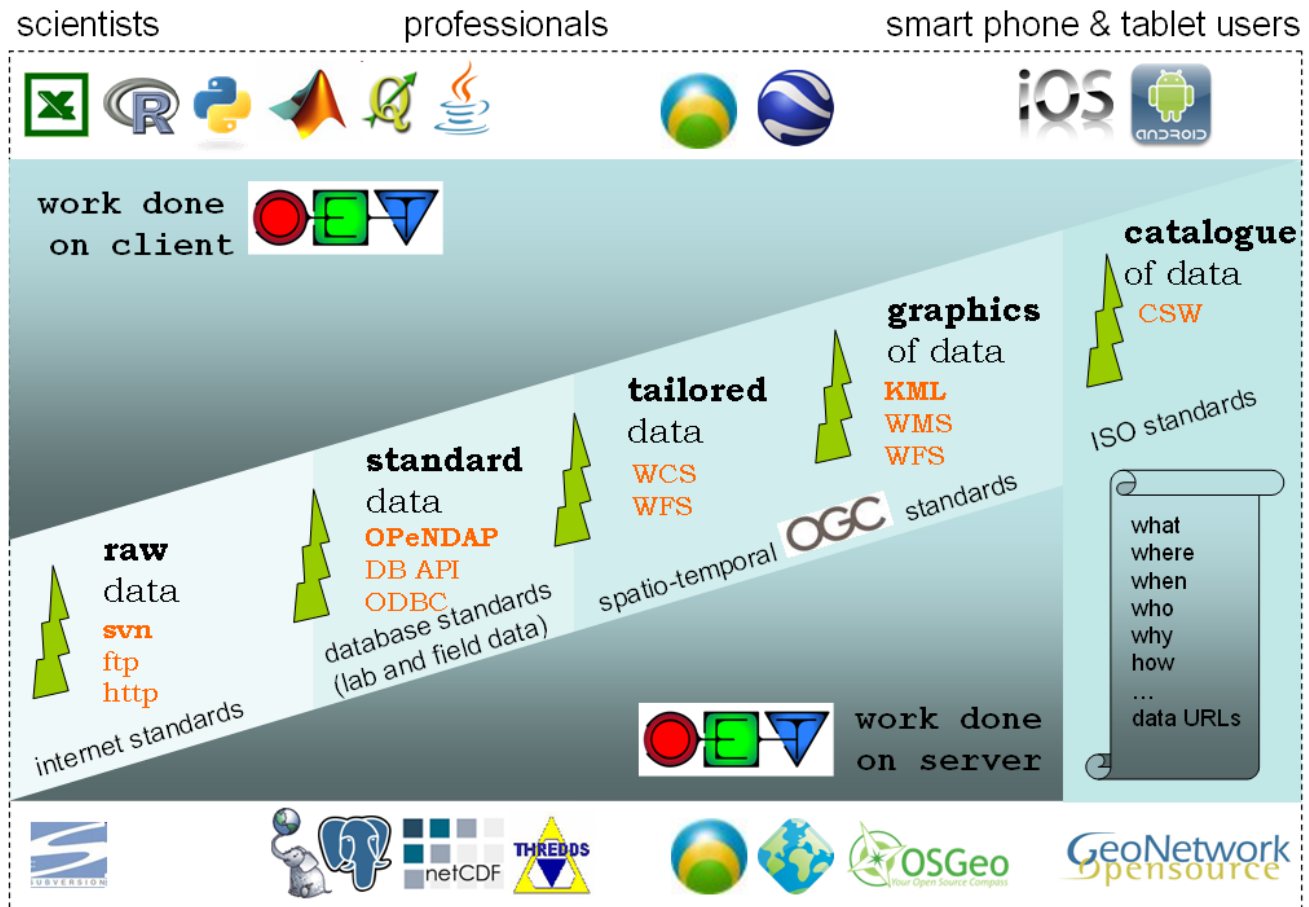
WxS is short for the family of [OGC](#) Web <whatever> Services. The most well-known ones are:

- grids/maps: [WMS on curvilinear model grids](#) and [WCS](#)
 - [WMS primer](#) Web **M**apping Services: request map/grid *graphics* over the web.
 - [WCS primer](#) Web **C**overage Services: request map/grid *data* over the web.
- vectors/features
 - [WFS primer](#) Web **F**eature Services: request vectors *_graphics_* over the web.
 - [WFS primer](#) Web **F**eature Services: request vectors *data* over the web.
- [WPS](#) Web Processing Services: request remote *processing* of some kind calculation.
 - [WPS primer](#) Web **P**rocessing Services: request remote processes for pre-defined calculations over the web using a web browser.
- CSW: *catalogue* service for the web
 - [CSW primer](#) Catalogue Service for the Web; get a list of datasets from a csw instance.
 - Preparing an [ISO_13139](#) xml for filling a catalogue.

The OGC services can be read with GIS packages, but also with dedicated libraries, available per language:

- Python : [OWSLib](#) (python 3 support soon)
- Matlab has formal support for WMS only via [wmsread](#). OpenEarth filled this gap by a family of implementations: [wms](#), [wcs](#) and [wfs](#) ([register](#) first).

These WxS standards are an important part of the suite of layered standards OpenEarth identified. Wxs provides tailored data, graphics of data and catalogs of data. For the full user range they need to be accompanied though by standards for exchange of standard grid/vector data ([netCDF-CF-OPeNDAP](#)), relational data ([PostgreSQL-PostGIS](#)) and for raw data (subversion).



Automatic tree of OpenEarth Tech Notes