gvSIG

the free GNU/GPL-licensed Geographic Information System
of the Generalitat de la Comunitat Valenciana

gvSIG is a **desktop tool oriented to manage geographic information**. It is characterized by a user-friendly interface, with a quick access to the most usual raster and vector formats. In the same view it includes local files as well as remote data through SDI standards, geographic databases, etc.

gvSIG can perform many different kinds of analysis with raster and vector data and with the addition of the SEXTANTE project, gvSIG gets as a really powerful and easily extensible geographic analysis framework.

gvSIG can also create layouts for maps and reports with the most common elements such as north arrows, scales and so on.

Formats supported in reading mode:
- Vector data: shp, gml, kml, dgn v7, dxf, dwg (2004, 2000, R14, R13 and R12)
- Raster: ecw, tiff, jpg, png, gif, MrSID, img, jpeg2000, bmp, dat (Envi), lan, gis, img (Erdas), pix, aux, (PCI Geomatics), adf (ESRI), mpr, mpl (Ilwis), map (PC Raster), asc
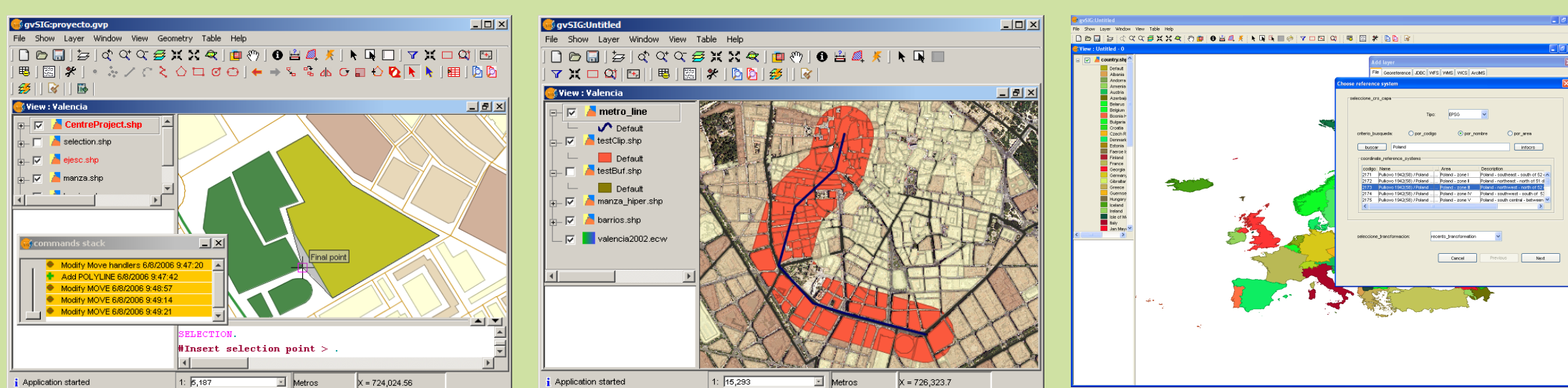
Formats supported in writing mode
- Vector data: shp, gml, kml, dxf, Postgis, Oracle Locator
- Raster: GeoTIFF, ECW (only in Linux kernel 2.4), JPEG, JPEG2000

Main characteristics

- Development language: Java
- Multiplatform: Windows, Linux, Mac
- Adheres to the guidelines of the European Union - Inspire.
- Free license (GNU/GPL).
- Modular, scalable, powerful.
- Simple interface: user friendly.
- International (Spanish, Valencian, English (UK), English (USA), Basque, Gallego, French, Italian, Portuguese (PT), Portuguese (BR), German, Czech, Polish, Romanian, Russian, Greek, Serbian, Swahili, Turkish and Mandarin).
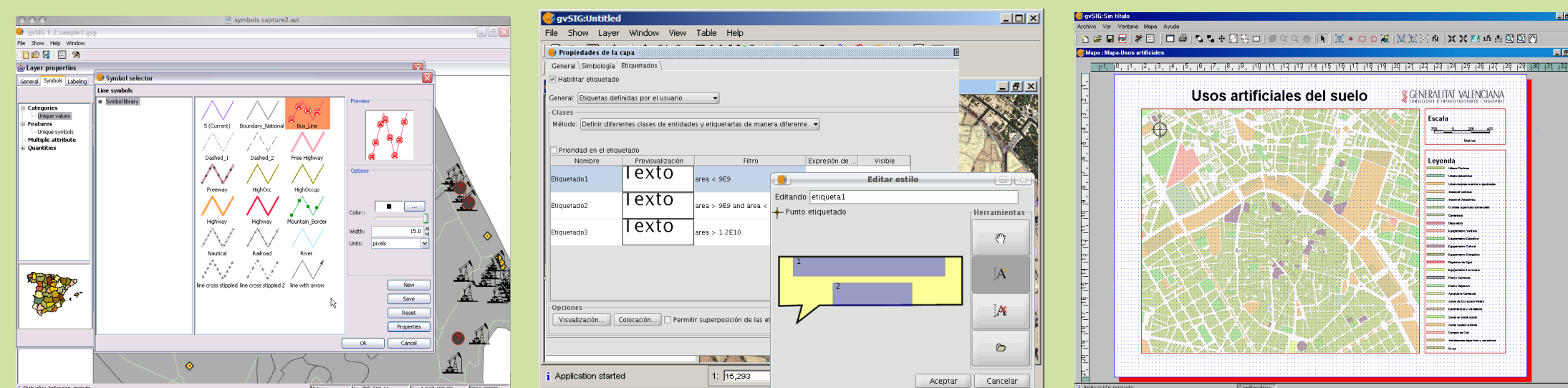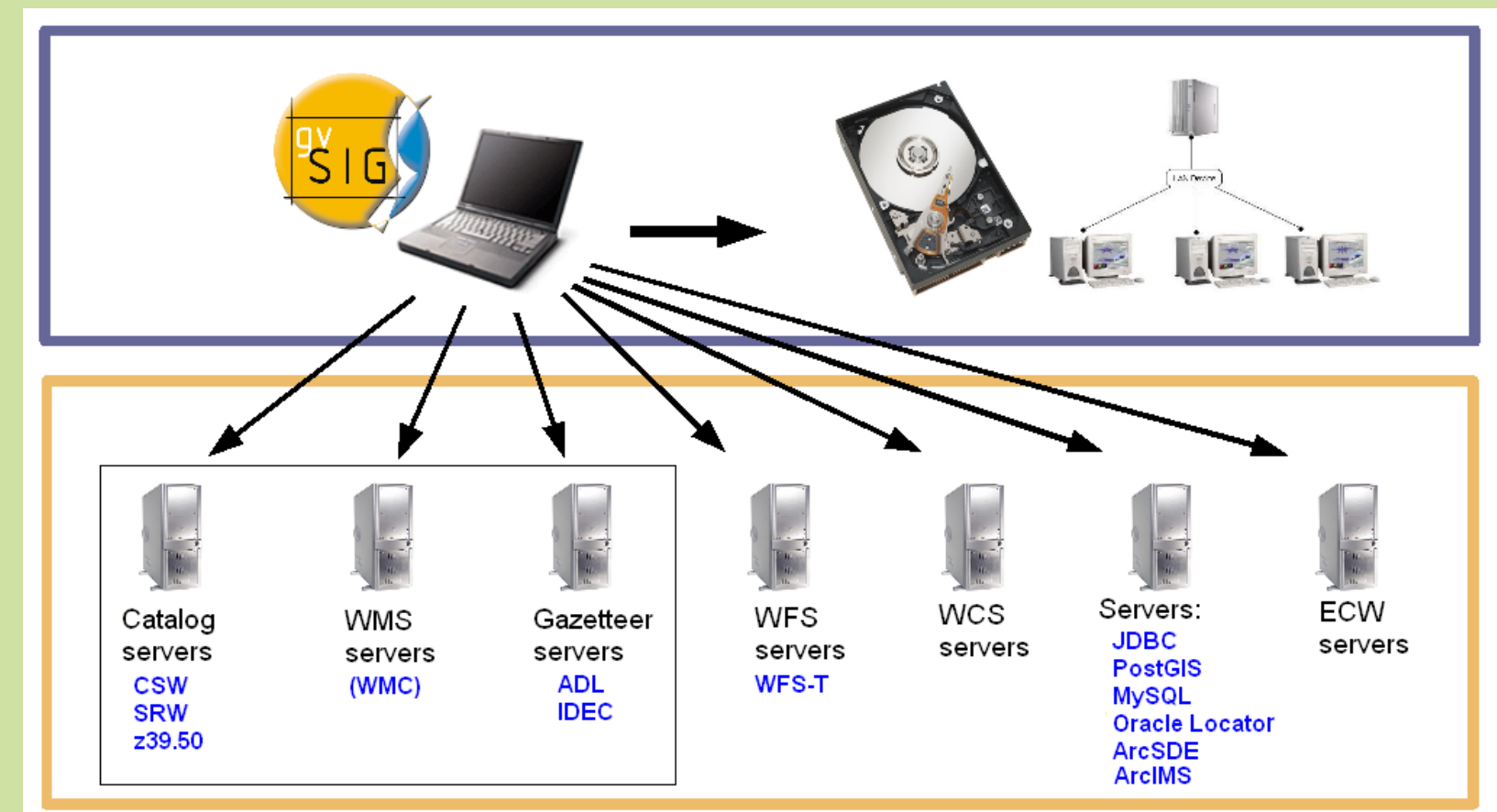
GIS Client

Edition

Geoprocessing

Reprojection

Advanced symbology

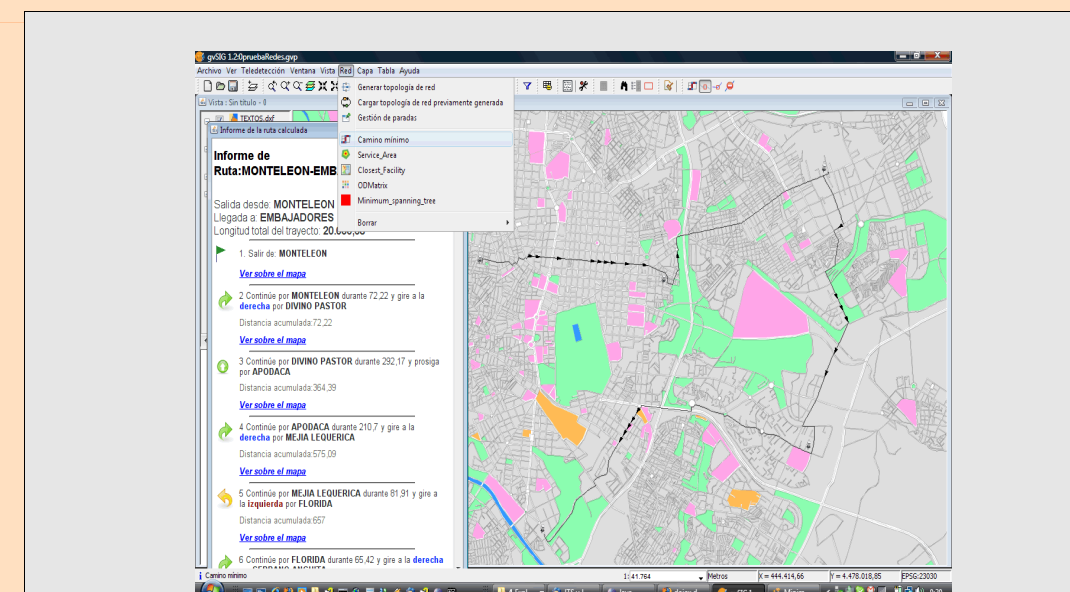**Advanced labelling**

Map constructor

SDI Client

- **Display** and **query** services (WMS, WCS, WFS and WFS-T servers)
- **Searching** services (Catalogue client)
- **Location** services (Gazetteer client)

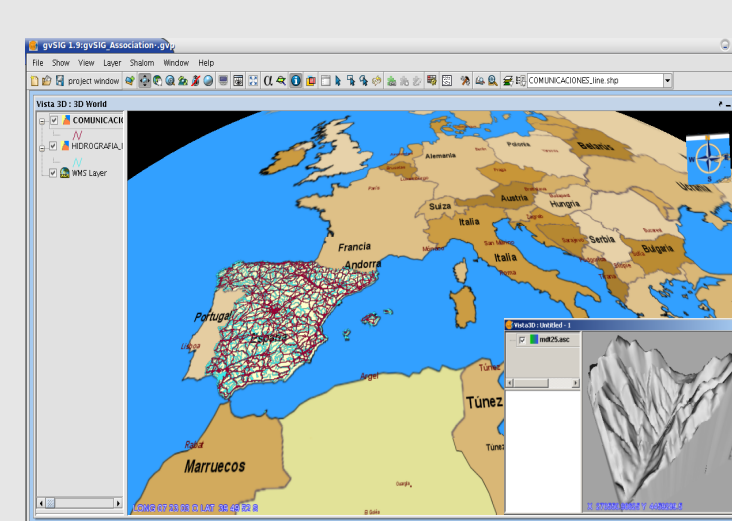| Catalog servers	WMS servers	Gazetteer servers	WFS servers	WCS servers	Servers:	ECW servers
CSW SRW z39.50	(WMC)	ADL IDEC	WFS-T		JDBC PostGIS MySQL Oracle Locator ArcSDE ArcIMS	

Advanced functionalities

Network pilot
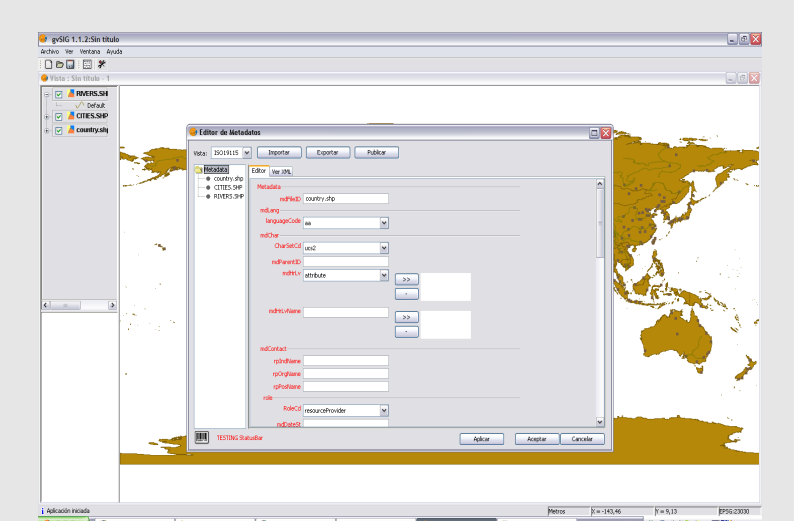Optimal path calculation, topology, more geoprocessing...

Mobile devices
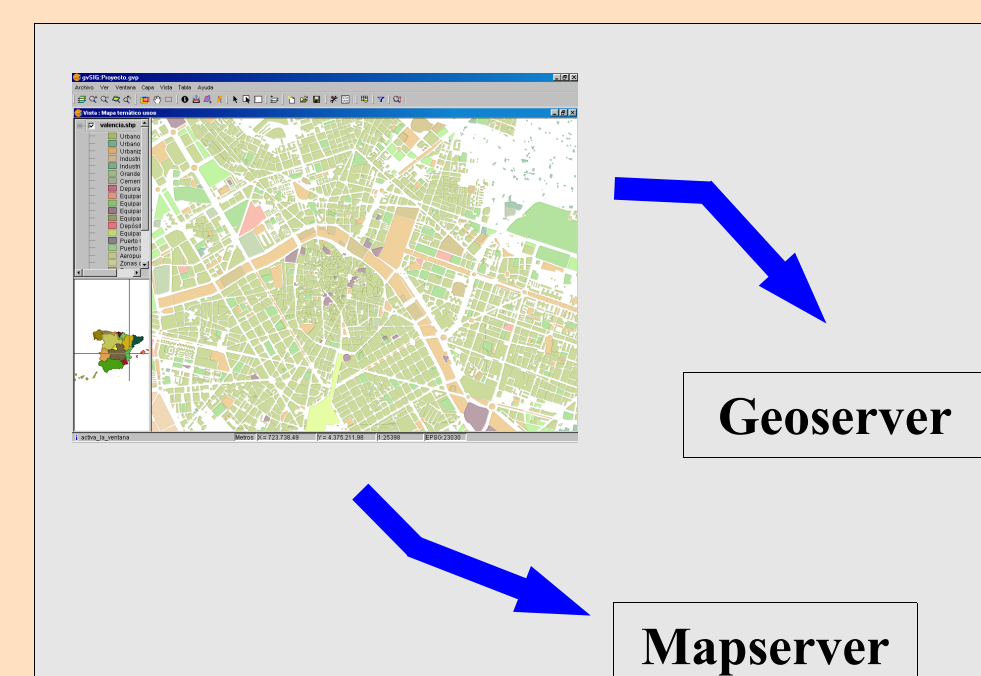Integration of gvSIG into mobile devices: telephony, PDA...

3D
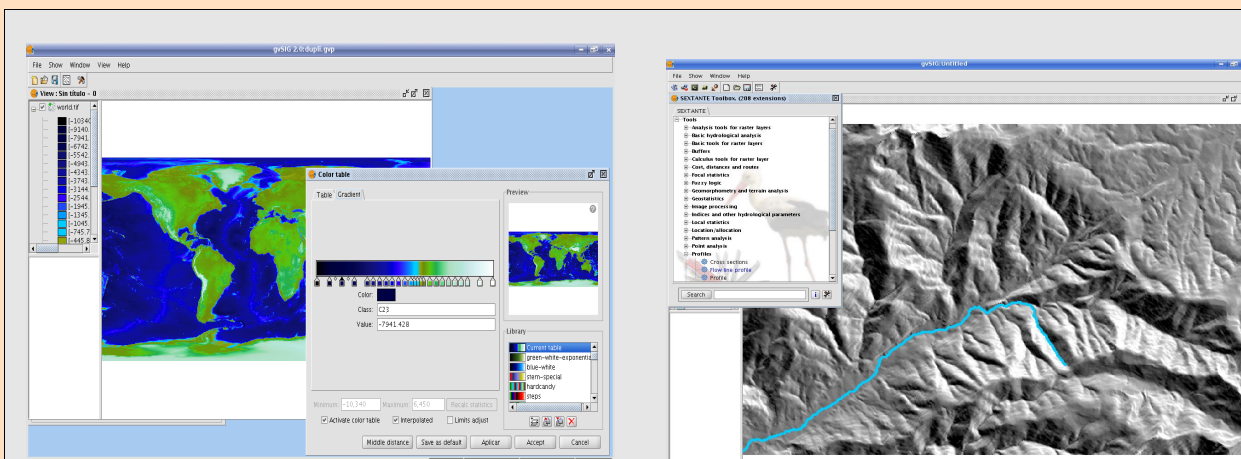3D viewing and labelling, navigation tools...

Metadata
Automatic extraction, edition, and metadata publishing
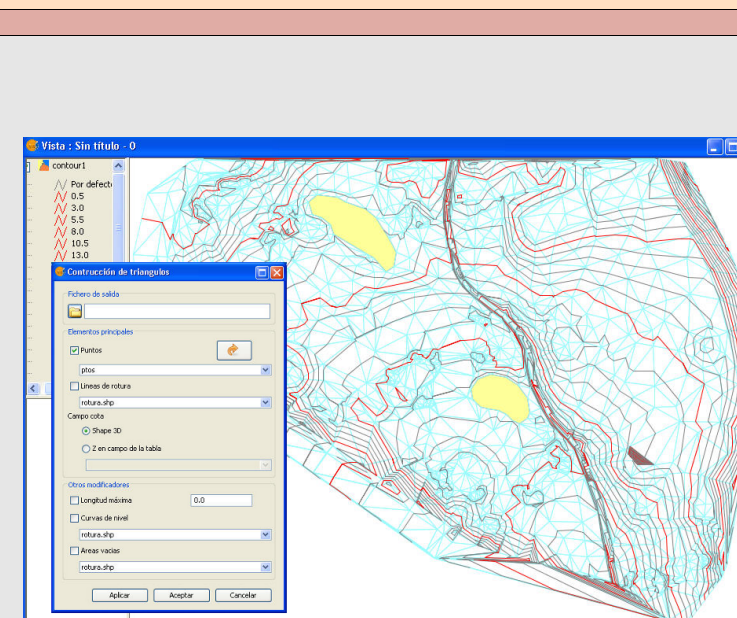

Geoserver
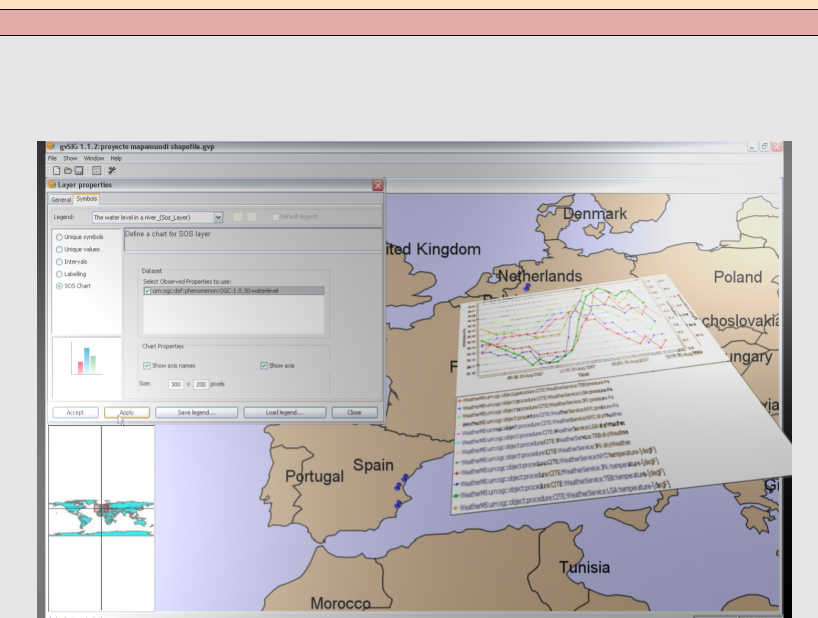Mapserver
Publishing extension

Raster pilot
Georeferencing, Histogram view, image transparency, bright and contrast...
+
SEXTANTE proj.
Functions oriented to geographical analysis and hydrology field...
(http://www.sextantegis.com)

Civil Engineering

Sensors