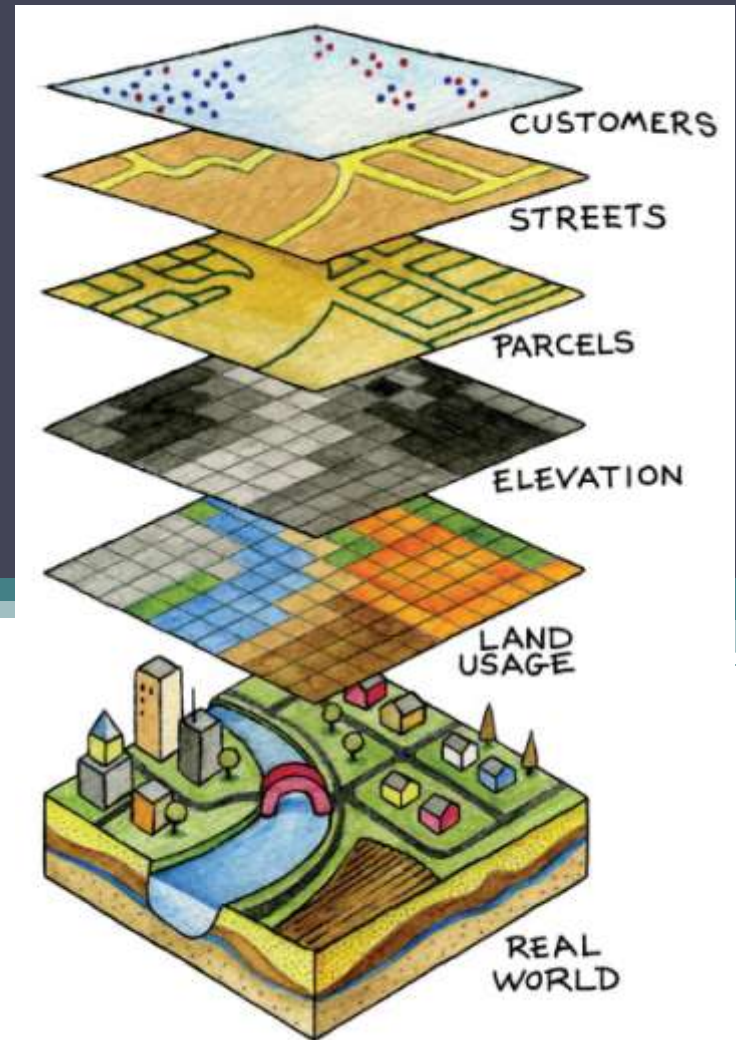


Geografski informacijski sustavi

1. dio: osnove

2. dio: slobodni geoprostorni podaci
slobodni GIS programi



Mr.sc. Martina Baučić dipl.ing.geod.

GIS komponente

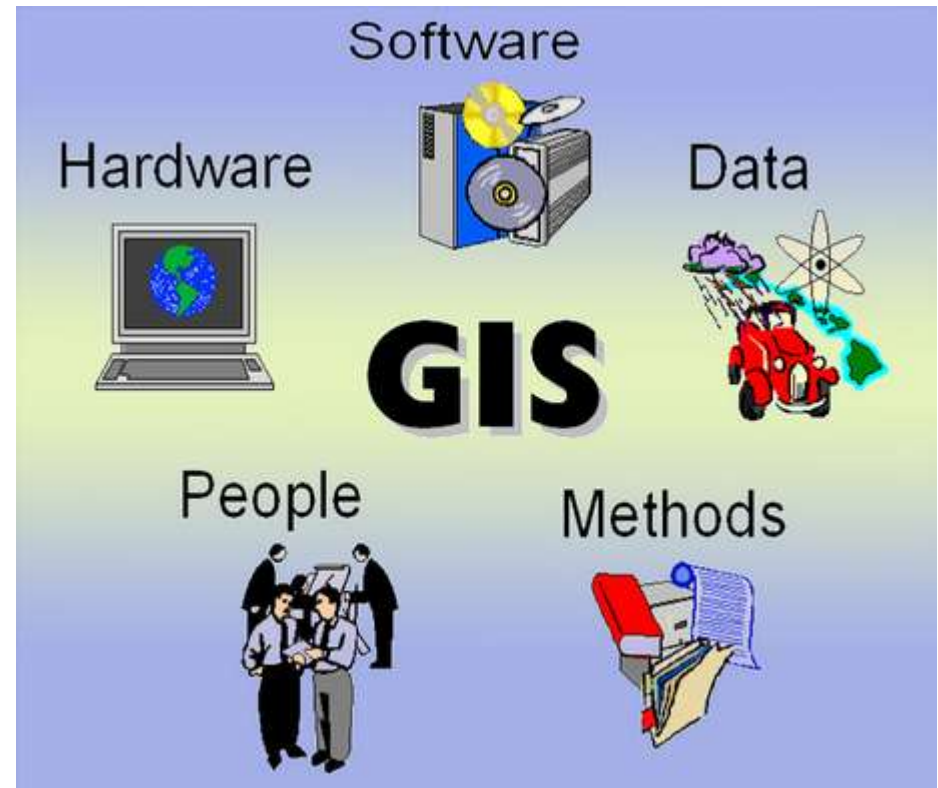
➤ podaci

➤ softver

➤ hardver

➤ metode

➤ ljudi

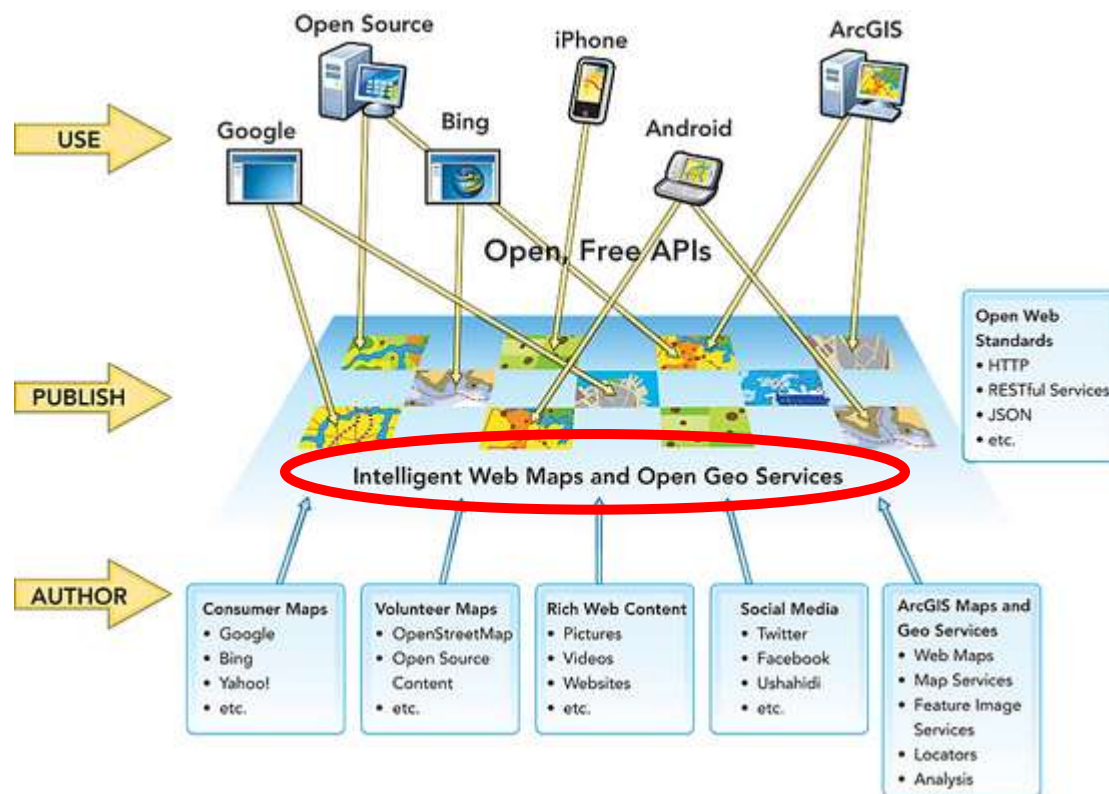


Slobodni geoprostorni podaci (engl. open geospatial data)

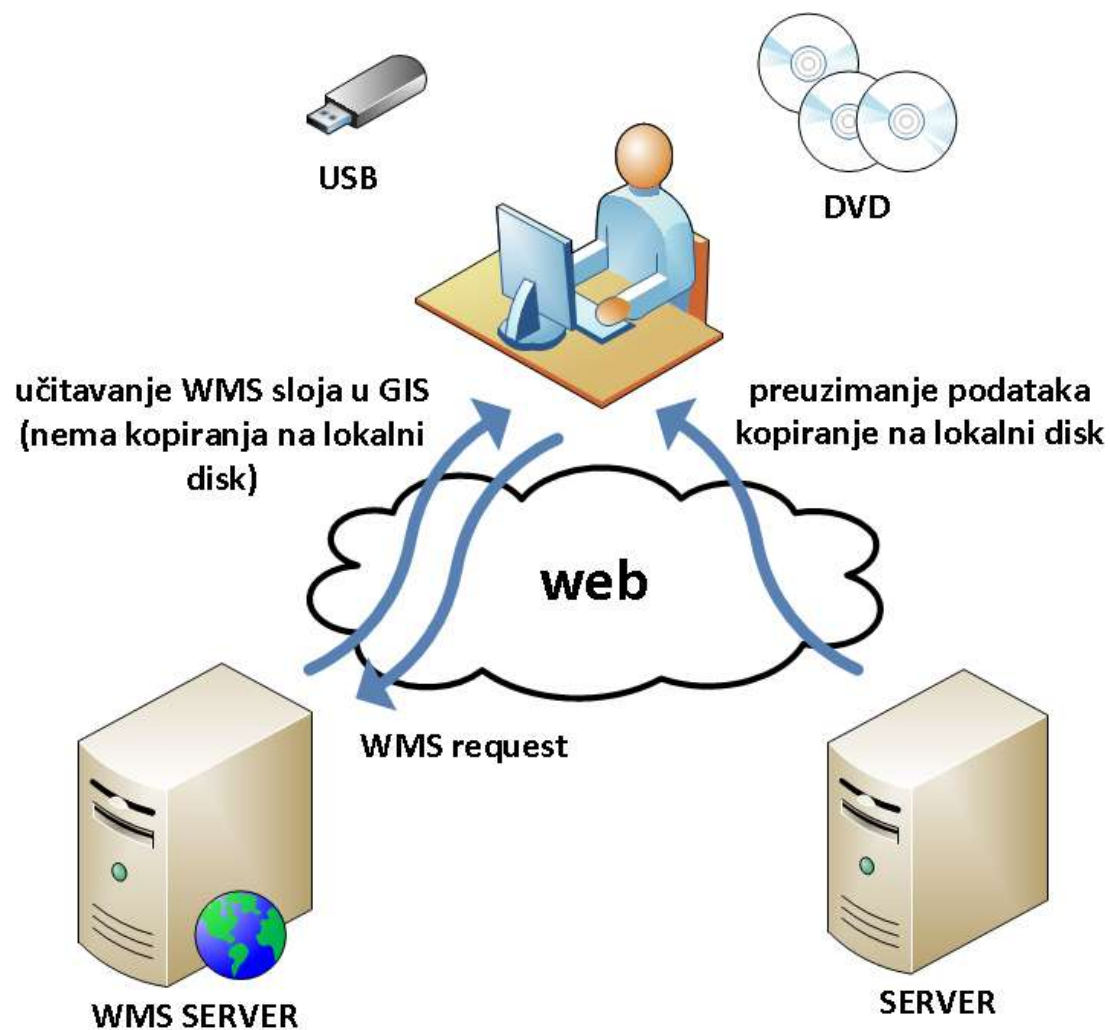
Podaci su skupi, nedostupni, ne postoje?

Danas:

- podaci on-line
- GIS portali
- web servisi



Slobodni geoprostorni podaci (engl. open geospatial data)



Slobodni geoprostorni podaci



USGS

U.S. Geological Survey

download data

<http://earthexplorer.usgs.gov/>



DGU

Državna geodetska uprava

WMS slojevi

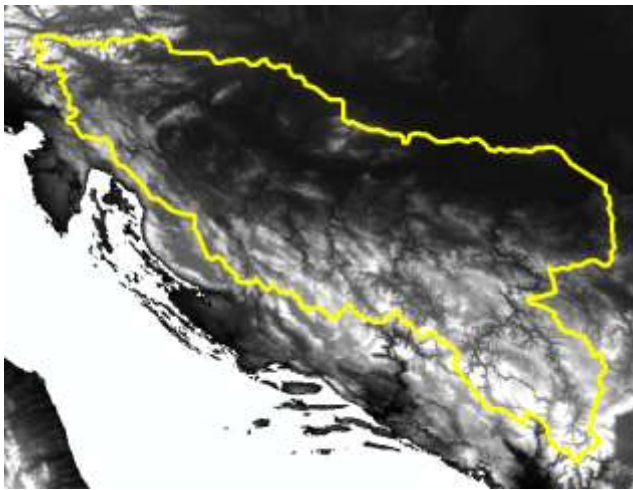
<http://geoportal.dgu.hr/>

Slobodni geoprostorni podaci



USGS

U.S. Geological Survey



<http://earthexplorer.usgs.gov/>

Digitalni modeli terena:

- Aster (2009, 30 m)
- SRTM (2000, 90 m)

Landsat podaci (od 1979 do danas):

- više spektralnih kanala
- interpretacija (NDVI indeks)
- 15 m, 30 m, 60 m

MODIS

- multispektralne snimke
- vegetacijski i atmosferski parametri
- 250 m

Slobodni geoprostorni podaci



DGU

Državna geodetska uprava



Naslov

WMS Državne geodetske uprave RH

DOF

DOF+TOPONIMI

TOPONIMI

HOK

TK25

DOF - podjela na listove

HOK - podjela na listove

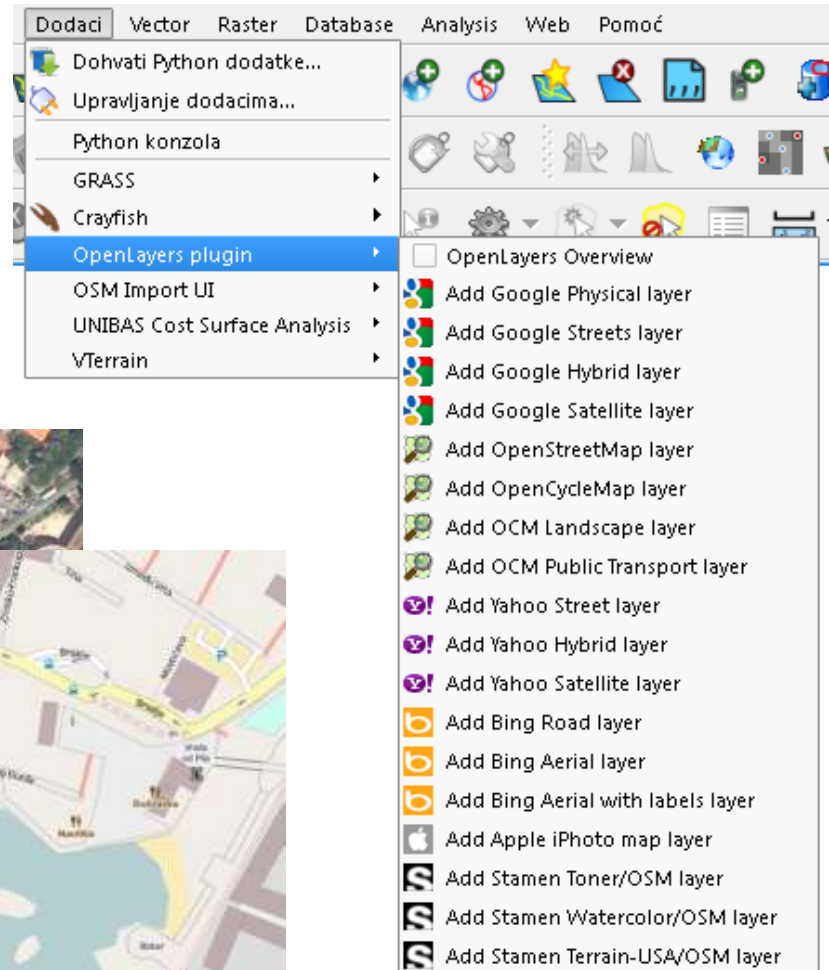
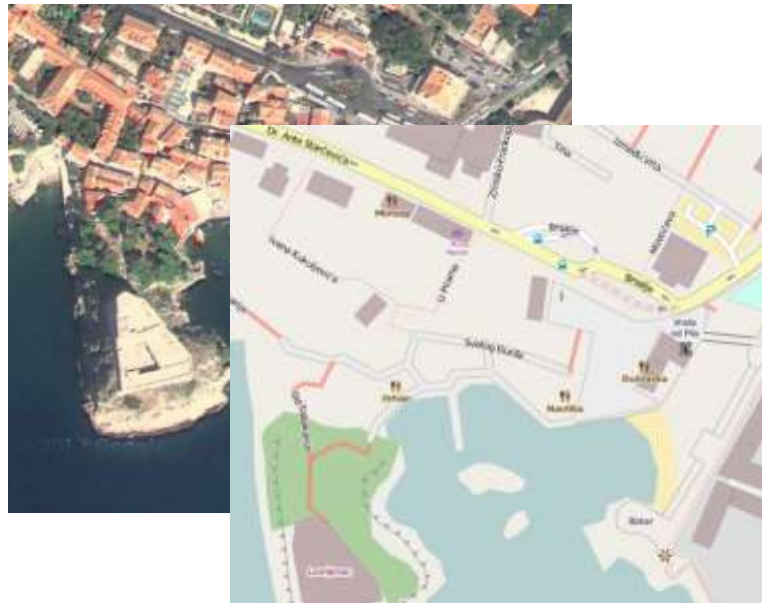
TK25 - podjela na listove

<http://geoportal.dgu.hr/>

Slobodni geoprostorni podaci

open layers

- Google
- OpenStreetMap
- Bing
- Yahoo
- ...



Slobodni geoprostorni podaci

preuzimanje (download)

Open street map

<http://planet.openstreetmap.org/>

Natural earth

<http://www.naturalearthdata.com/downloads/>

Global Rural-Urban Mapping project

<http://sedac.ciesin.columbia.edu/data/collection/gpw-v3>

EUMETSAT

<http://www.eumetsat.int/website/home/index.html>

Slobodni geoprostorni podaci

- uvjeti korištenja ?
- tehničke karakteristike ?
- namjena ?

http://spatial-analyst.net/wiki/index.php?title=Global_datasets

Slobodni geoprostorni podaci



Natural earth

<http://www.naturalearthdata.com/downloads/>

- All versions of Natural Earth raster + vector map data are **Free** for using in personal, educational, and commercial purposes.
- Natural Earth is a public domain map dataset available at 1:10m, 1:50m, and 1:110 million scales. Featuring tightly integrated vector and raster data, with Natural Earth you can make a variety of visually pleasing, well-crafted maps with cartography or GIS software.

Slobodni geoprostorni podaci

Open street map

<http://planet.openstreetmap.org/>



OpenStreetMap
Slobodna wiki karta Svijeta

- OpenStreetMap is a free worldwide map, created by many peoples
- The data is free to download and use under its open license. Anyone can create a user account to improve the map.

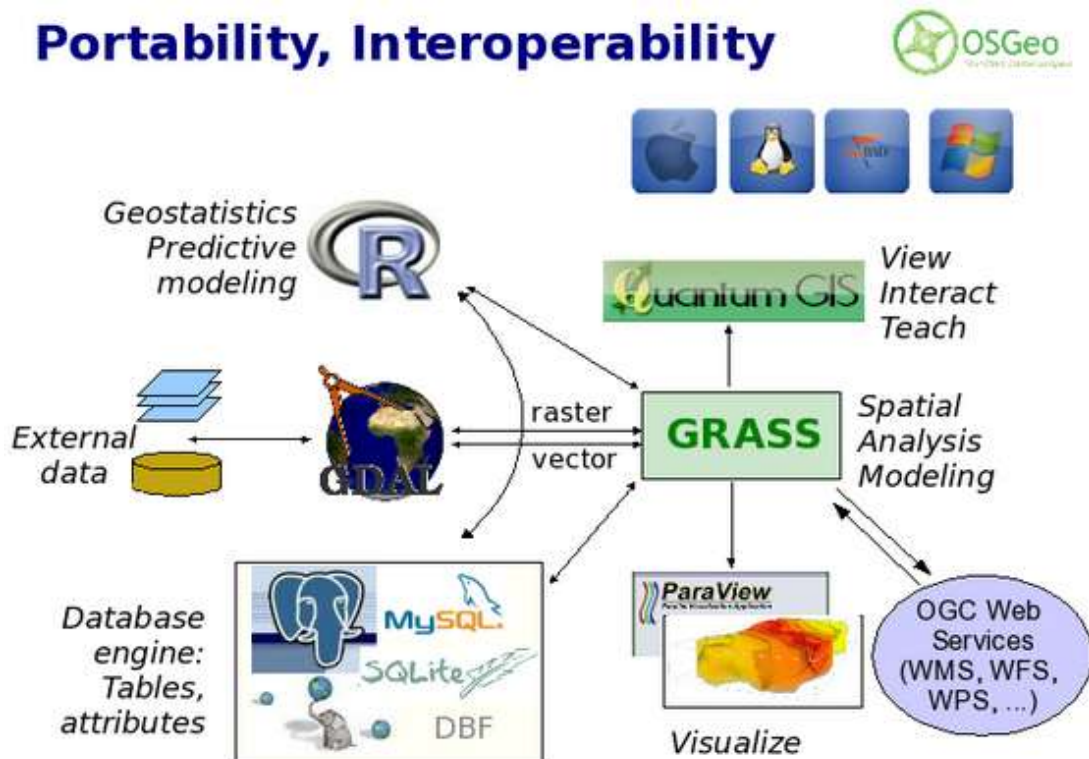
Slobodni GIS programi (engl. open source software)

Desktop aplikacije:

- QGIS
- GRASS
- SAGA

Web map serveri:

- GeoServer
- MapServer



Slobodni GIS programi



<http://www.osgeo.org/>

The Open Source Geospatial Foundation, ili OSGeo, je neprofitna organizacija čija je misija podržati suradnju u razvoju open source softvera za geoprostorne podatke i promicati njegovu široku primjenu.

Slobodni GIS programi

Quantum GIS (QGIS)

<http://www.qgis.org/en/site/>



- pregledavanje, editiranje i analiziranje podataka (vektora i rastera)
- razvoj započeo 2002. godine (razvija ga međunarodna skupina entuzijasta)
- mnoštvo dodataka (plugins) GDAL, GRASS

Slobodni GIS programi

GRASS

<http://grass.osgeo.org/>



- funkcije procesiranja rasterskih slika, geoprostorne analize
- razvoj započeo 1983. godine (U.S. Army Corps of Engineers)
- danas ga razvija međunarodna grupa inženjera pod OSGeo organizacijom

Slobodni GIS programi

SAGA



<http://www.saga-gis.org/en/index.html>

- geostatistika (znanstvene metode), biblioteka s modulima
- razvoj započeo 2000. godine (Dept. of Physical Geography, Göttingen)
- danas je razvijaju J. Böhner and O. Conrad (Institute of Geography, University of Hamburg, Germany)
- integracija s R jezikom za statističke analize

? PITANJA

Hvala na pažnji!
Pitanja?



Polaznik GIS radionice