

Tiers

Visualization tier

The top-most level of the geospatial cyberinfrastructure. The dashboard design includes graphical tools, procedures to combine spatial data (analysis and visualization), and the production of tables, charts and maps.

Logic tier

This layer orchestrates the Soil Monitor application, processes commands, makes logical decisions and performs calculations, including those based on the CUDA framework. It also moves data between the two adjacent layers.

Data tier

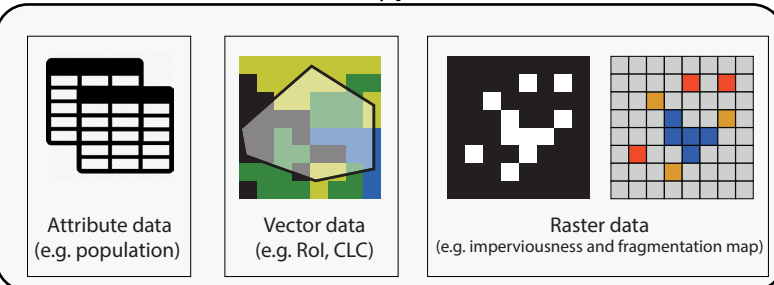
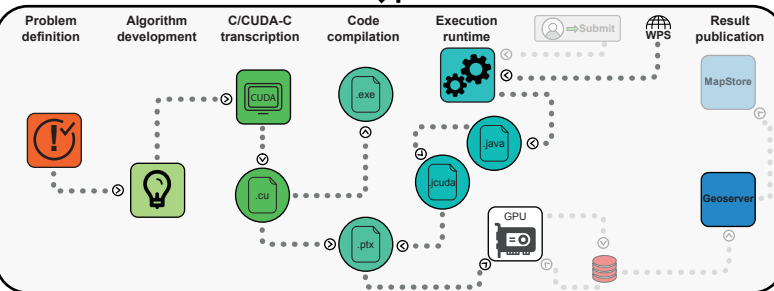
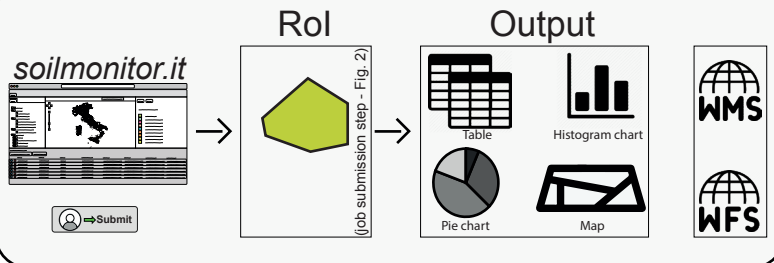
Here information is stored and retrieved from both the database or the file system. The information is passed back to the logic tier for processing and to the user for visualization purpose.

Workflow

GUI

Processes

Database



Technological component

MapStore

GeoExt

Highcharts



GeoServer

GDAL

NVIDIA CUDA

C Programming

PostGIS

PostgreSQL

File system

