Architecture of the Web mapping application for working with NetCDF datasets



Introduction

- Geospatial NetCDF (Network Common Data Form) datasets related to meteorology and climate
- INSPIRE (The INfrastructure for SPatial InfoRmation in Europe) basic requirements to data visualization:
 - Data overview and image navigation
 - Scrolling, scaling and graphical overlay
 - Displaying map legends and metadata information
- Web mapping systems (Web-GIS) as complexes of interconnected software tools for working with geospatial data including import/export, cataloging, processing and visualization and so on
- GIS web client architecture for working with geospatial NetCDF dataset archive is presented (within "Climate" platform)



General description

- Tier of NetCDF metadata represented in JSON format
- Tier of JavaScript objects implementing methods handling the following:
 - NetCDF metadata
 - XML object for configuring user calculations, input and output (task XML object)
 - WMS/WFS cartographical services
- Graphical user interface (GUI) tier representing JavaScript objects realizing web application business logic





