Copernicus webapp

CLIENT-SIDE RASTER VIEWER & CALCULATOR

Mhàs

- Free, full and open access to environmental data
- ▶ Benefits of multispectral images: ANALYSES
- ▶ Lack of quick web viewer & analyzer



Hows

- ► MANGOL web mapping GUI framework
 - Angular2 + OpenLayers3
 - ► TypeScript, SCSS
 - ▶ Responsive
 - ▶ Under heavy development...
- ▶ New module: Raster calculator







Preprocessing

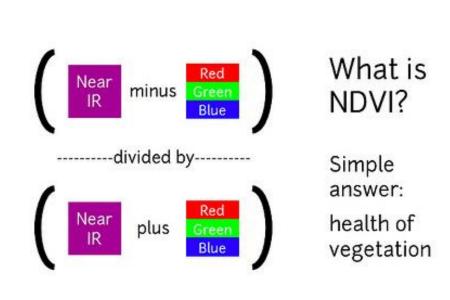
- 2 single-band raster images for NDVI calculations
- ▶ Put in GeoServer as GeoTiff store, create WMS service
- Problem:
 - Data is not normalized
 - ► Image painted on canvas (OL3) is RGB
 - Different brightness with different zoom levels: not representing real values!
 - ▶ Normalizing was necessary (0-255)





Development

- New module: Raster calculator
- ol.source.Raster is awesome!
- Only one calculation so far: NDVI index (Normalized Difference Vegetation Index)



Results



Future

- Add more data
- ▶ Add more calculations
- Some debugging (Firefox issue)