# 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
  - ▶ Responsible
  - ▶ Under heavy development...
- ▶ New module: Raster calculator







### Preprocessing

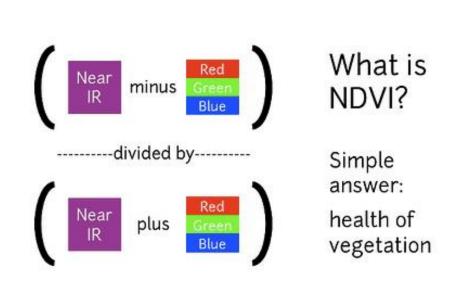
- 2 single-band raster images for NDVI calculations
- ▶ Put in GeoServer as GeoTiff store, create WMS service
- Problem:
  - Data is not normalized
  - ► Image painted on canvas (OL3) is RGB
  - Different brightness with different zoom levels: not representing real values!
  - ► Normalizing was necessary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