

## How did you use space agency data in your project?

We use GIBS (Global Imagery Browse Services) APIs (Application Programming Interfaces) from NASA to provide users information in near real time and via a user-friendly app interface.

GIBS provide quick access to over 900 satellite imagery products, covering every part of the world that can be rendered in our web client app.

For our project, NEXT AGRO STEP, we extract data from NASA EOSDIS GIBS that provides full resolution visual representations of NASA Earth Science Data in a free, open and interoperable manner. We offer interactive exploration of data to support farmers and land owners interactive exploration of important data for their agriculture terrains to improve both crop and economy.

We use variables from SCIENCE PARAMETERS VISUALIZATIONS - LAND:

- Vegetation Indices (NDVI and EVI),
- Gross Primary Production,
- Gross Primary Production,
- Heterotrophic Respiration,
- Land Cover,
- Land Surface Temperature,
- Soil Moisture,
- Surface Relative Humidity,
- Vegetation Light Use Efficiency,
- Among others.

With this large amount of Imagery Data we can offer users interact with NASA resources in their Smartphones, Laptops, Tablets and Computes without need to understand to manage special tools from NASA satellites to improve knowledge about better practices in agriculture in their own geographic coordinates.

## Data & Resources

- NASA WorldView:  
<https://worldview.earthdata.nasa.gov/>
- GIBS APIs:  
<https://earthdata.nasa.gov/eosdis/science-system-description/eosdis-components/gibs>  
<https://wiki.earthdata.nasa.gov/display/GIBS/GIBS+Available+Imagery+Products#expand-GrossPrimaryProduction3Products>  
<https://wiki.earthdata.nasa.gov/display/GIBS/GIBS+API+for+Developers>