



CENTRUM BADAŃ KOSMICZNYCH Polskiej Akademii Nauk

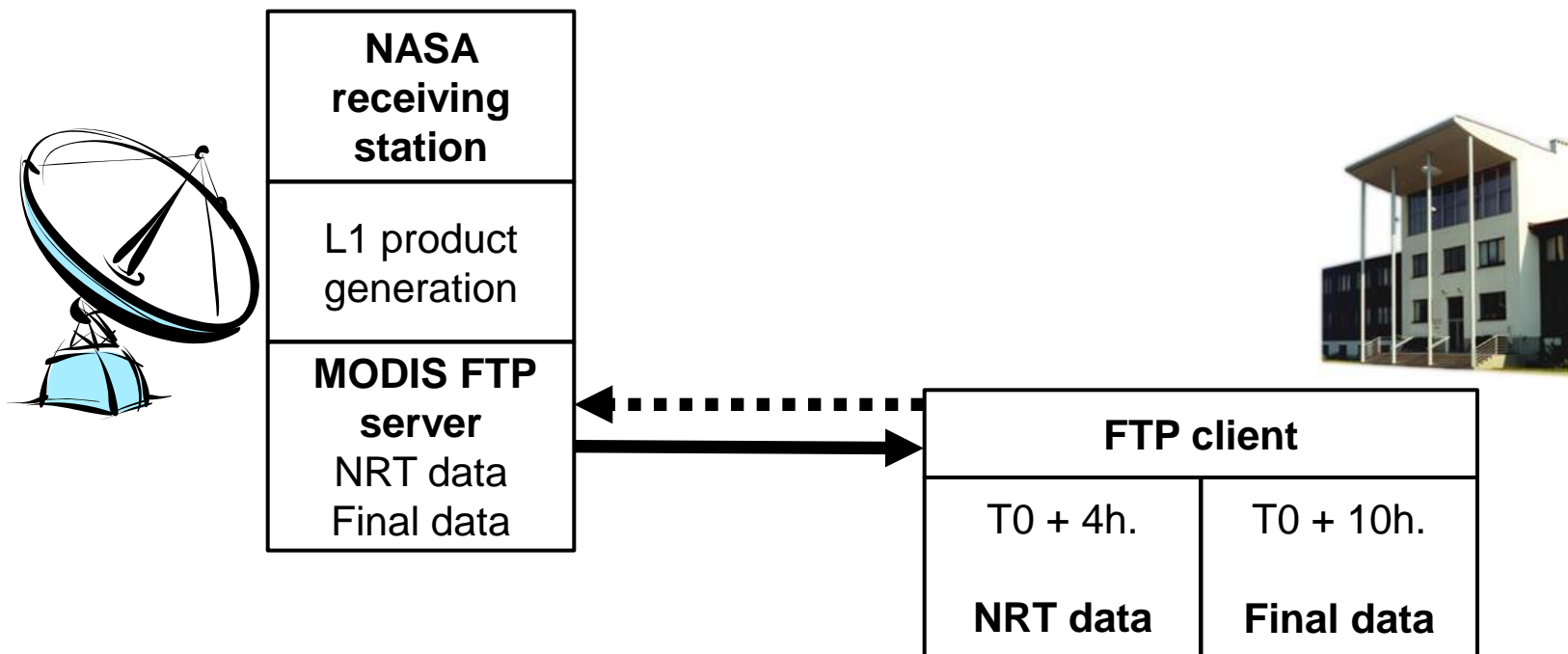
Automatic monitoring system of the Earth's Surface based on MODIS data

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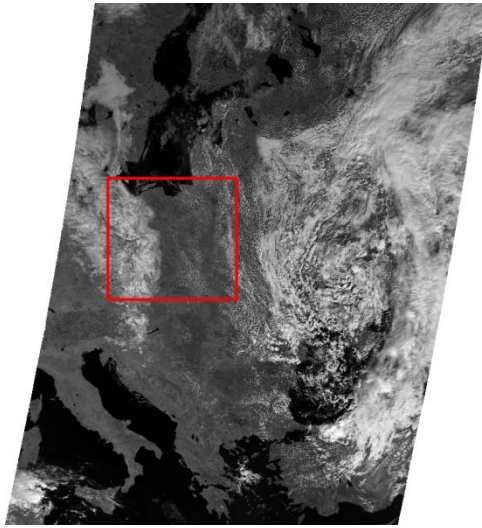


Daily land surface monitoring

fully automatic WEB service for daily land surface monitoring



Daily land surface monitoring



MODIS
NRT data

PRE-PROCESSING
Data export from HDF format
Data merging (mosaic)
Change of projection
Extracting a subset (Poland)

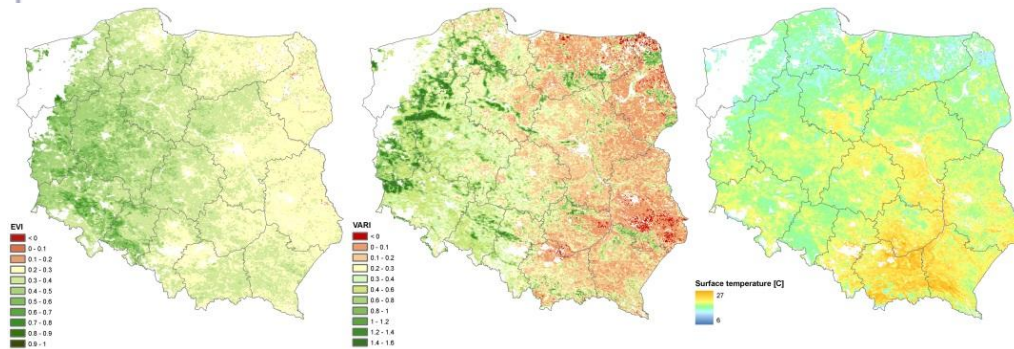
CLOUD MASK

ALGORITHMS
Daily products
Decade compositions

Maps publishing

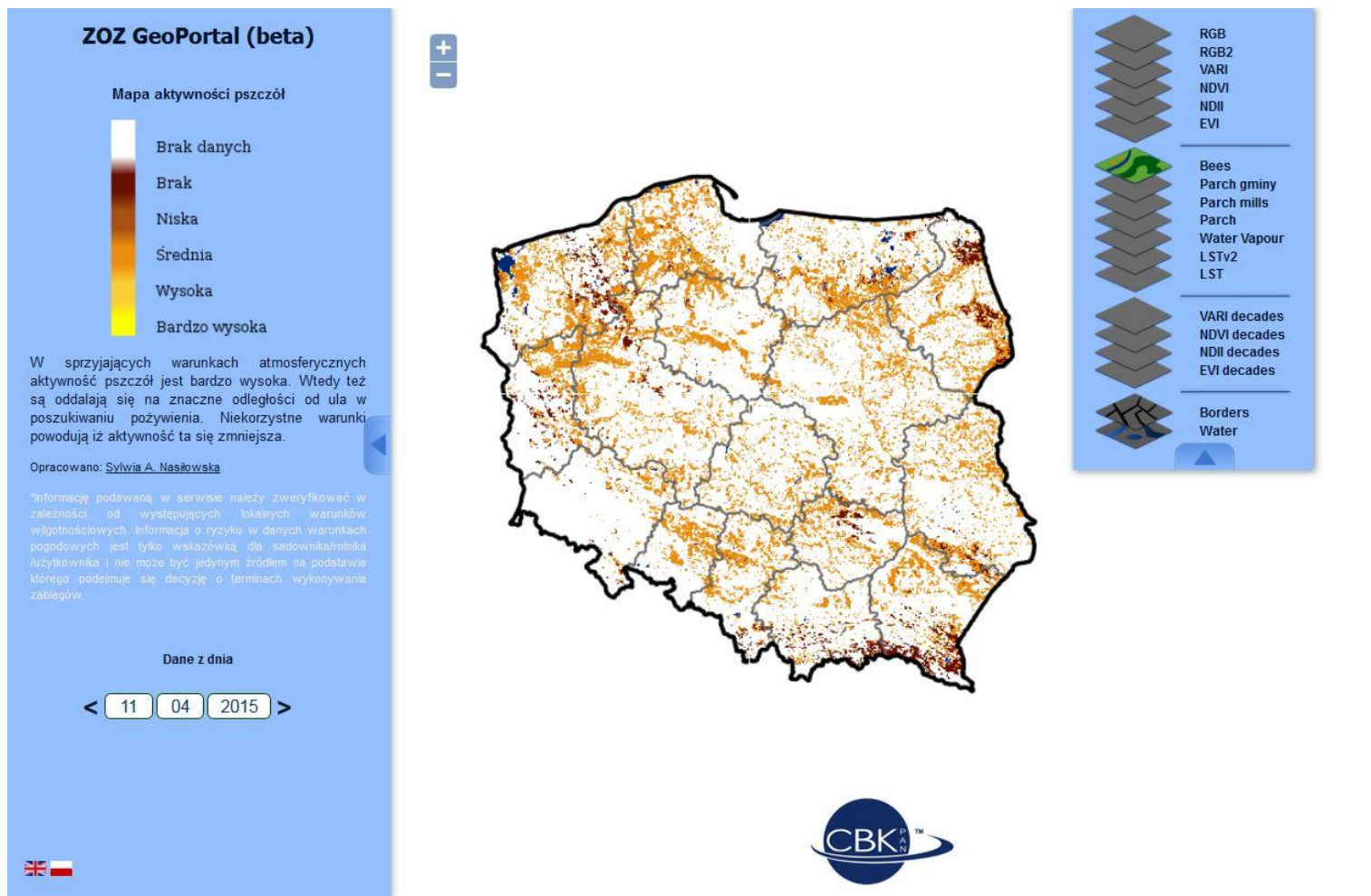
Geoserver

Geoportal

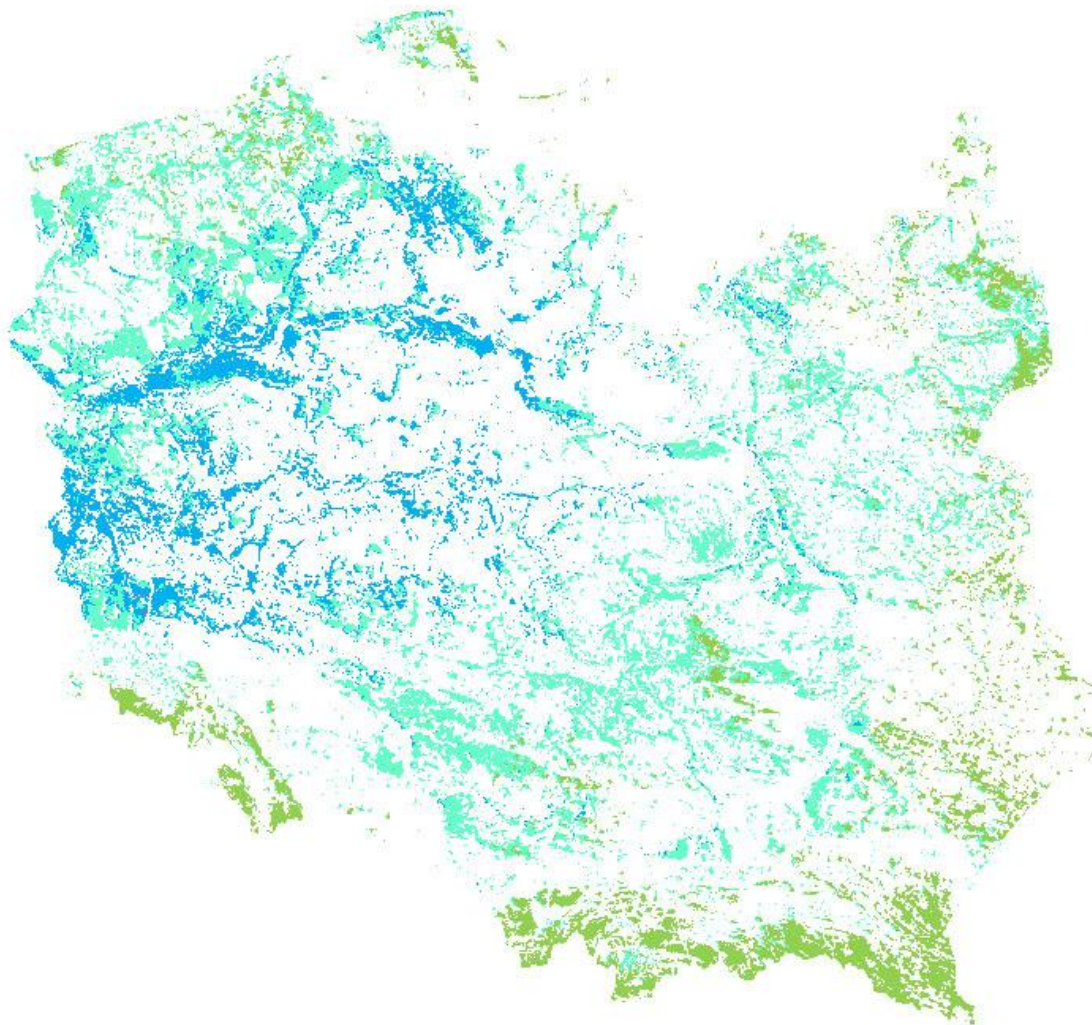


- Vegetation indices VARI, NDVI, EVI, NDII
- Land surface temperature
- Water vapour
- Fire Hazard

Bees Activity Map



Layers at research phase

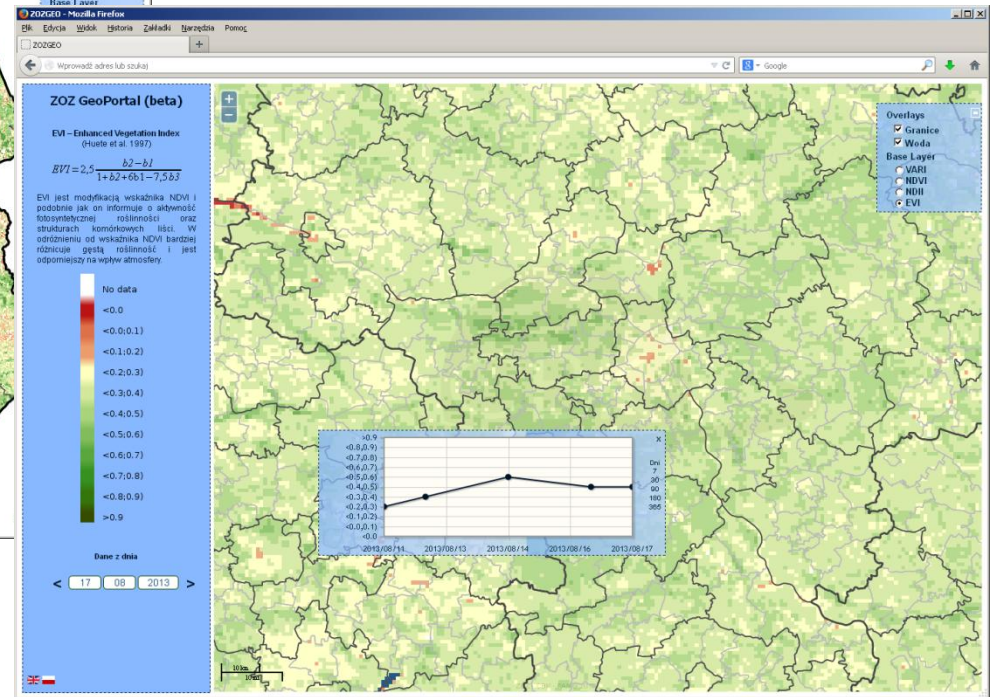
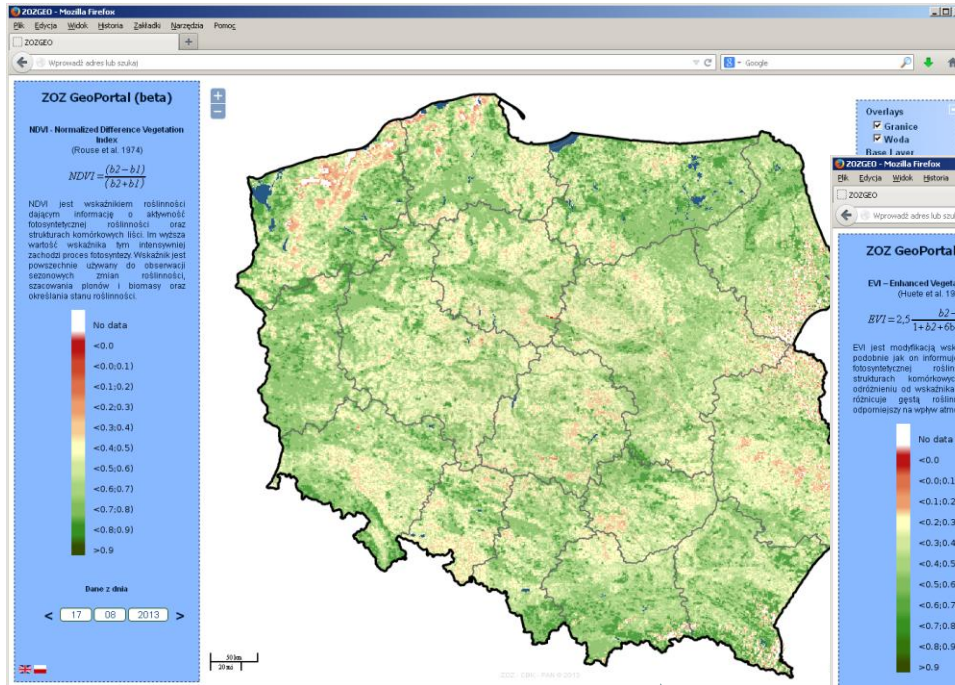


Class	Stress	Duration time	Milk loss [kg/h; kg/cow/day]
5	Very high	-	Not measured
4	High	12	-0,322; 3,9
3	Medium	9	-0,303; 2,7
2	Low	4	-0,283; 1,1
1	No stress	-	> -0,283; < 1,1

Daily land surface monitoring

GEOPORTAL

- ❑ Data visualization
- ❑ Access to historical data
- ❑ Visualization of time series



Mobile Application