

DroughtWatch – nástroj na sledovanie sucha v reálnom čase

Maroš Turňa

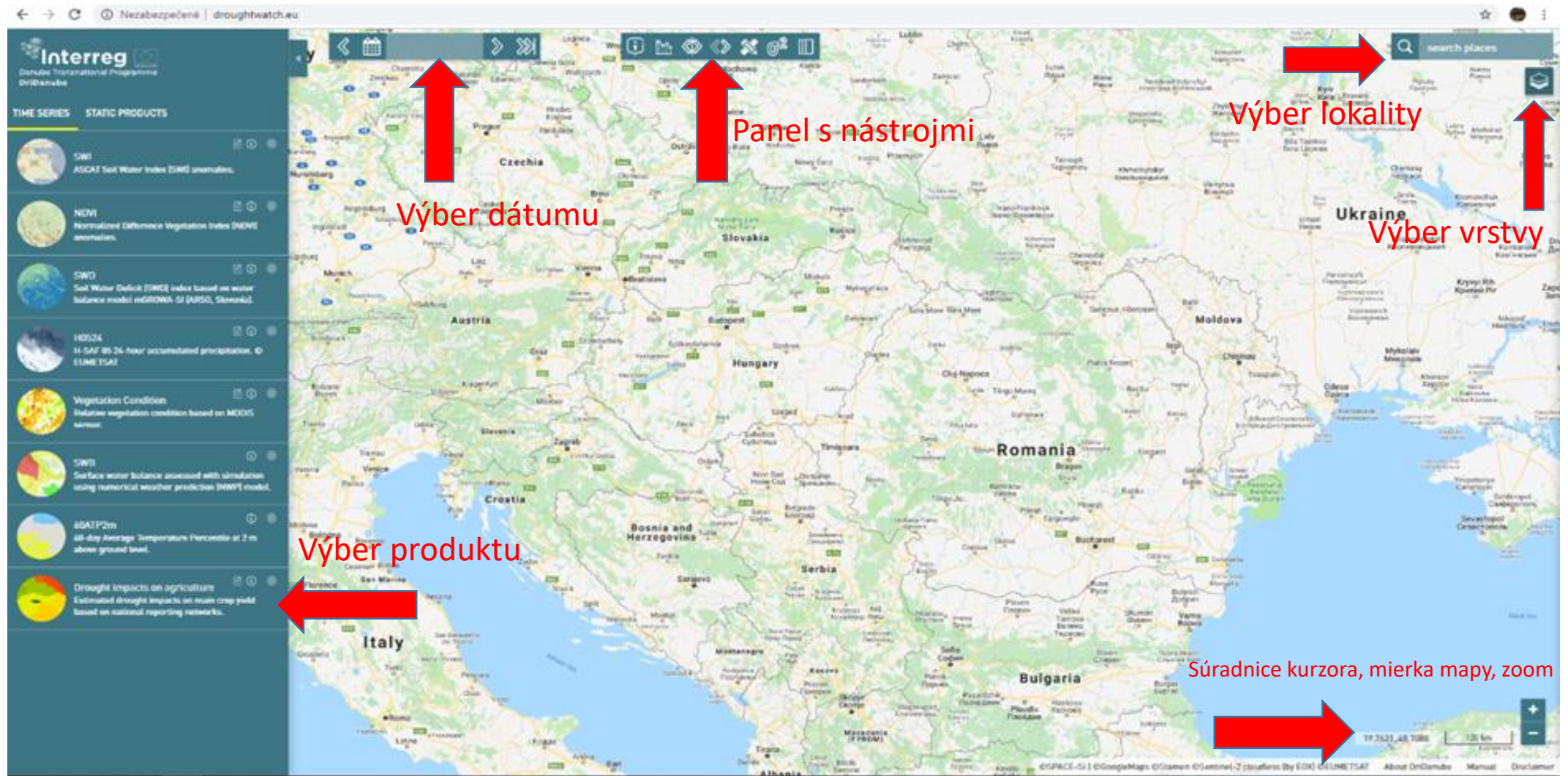
Slovenský hydrometeorologický ústav



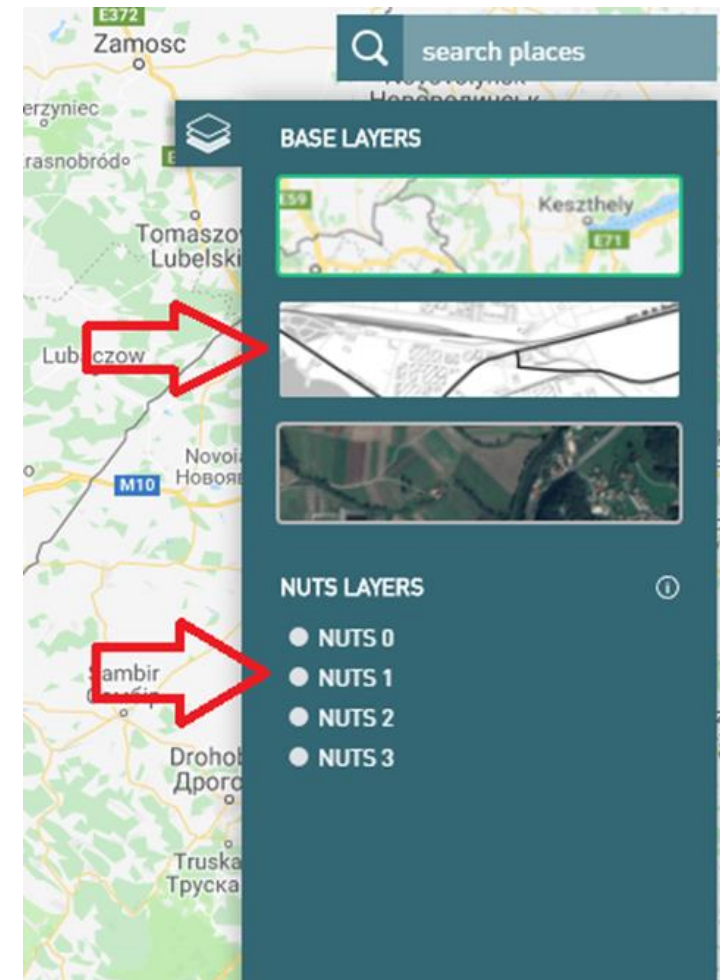
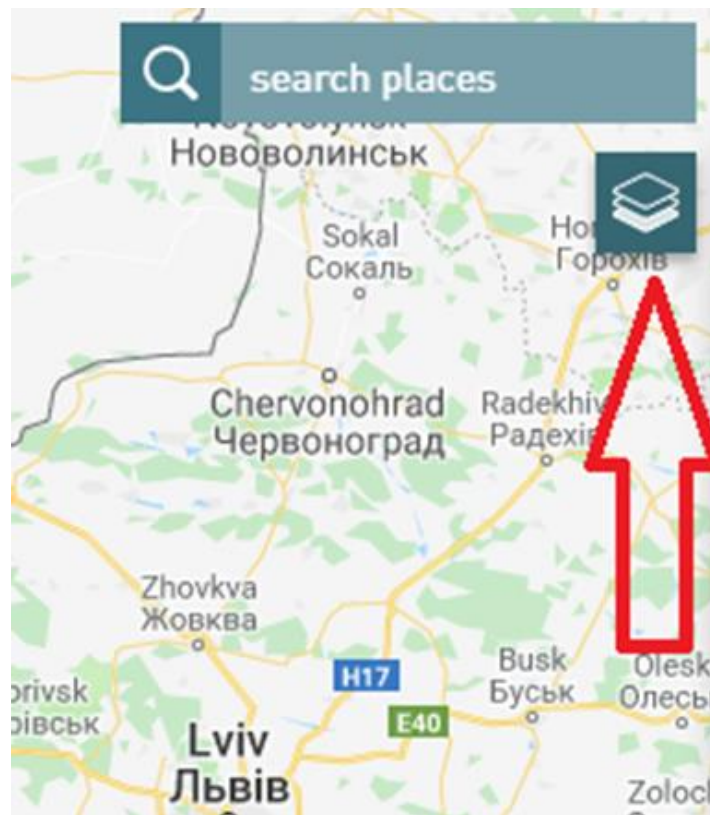
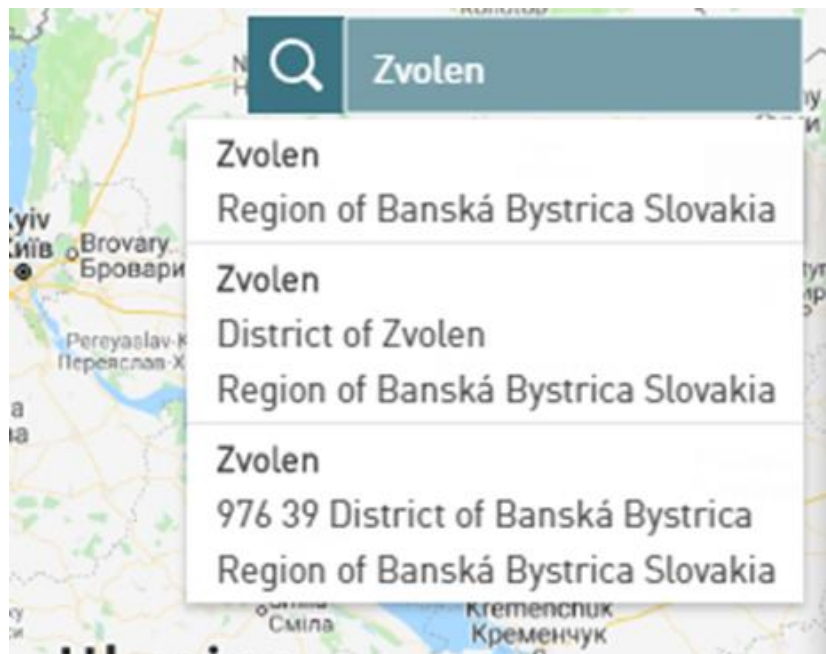
Čo je to DroughtWatch ?

- Produkt projektu DriDanube
- Webová aplikácia s účelom zobrazenia a analyzovania údajov, ktoré sa týkajú sucha
www.droughtwatch.eu
- Produkty sú výsledkom družicových meraní a reanalýz numerických modelov
- Porovnanie viacerých produktov-indexov sucha
- Prehľad o historickom vývoji sucha (od roku 1998)

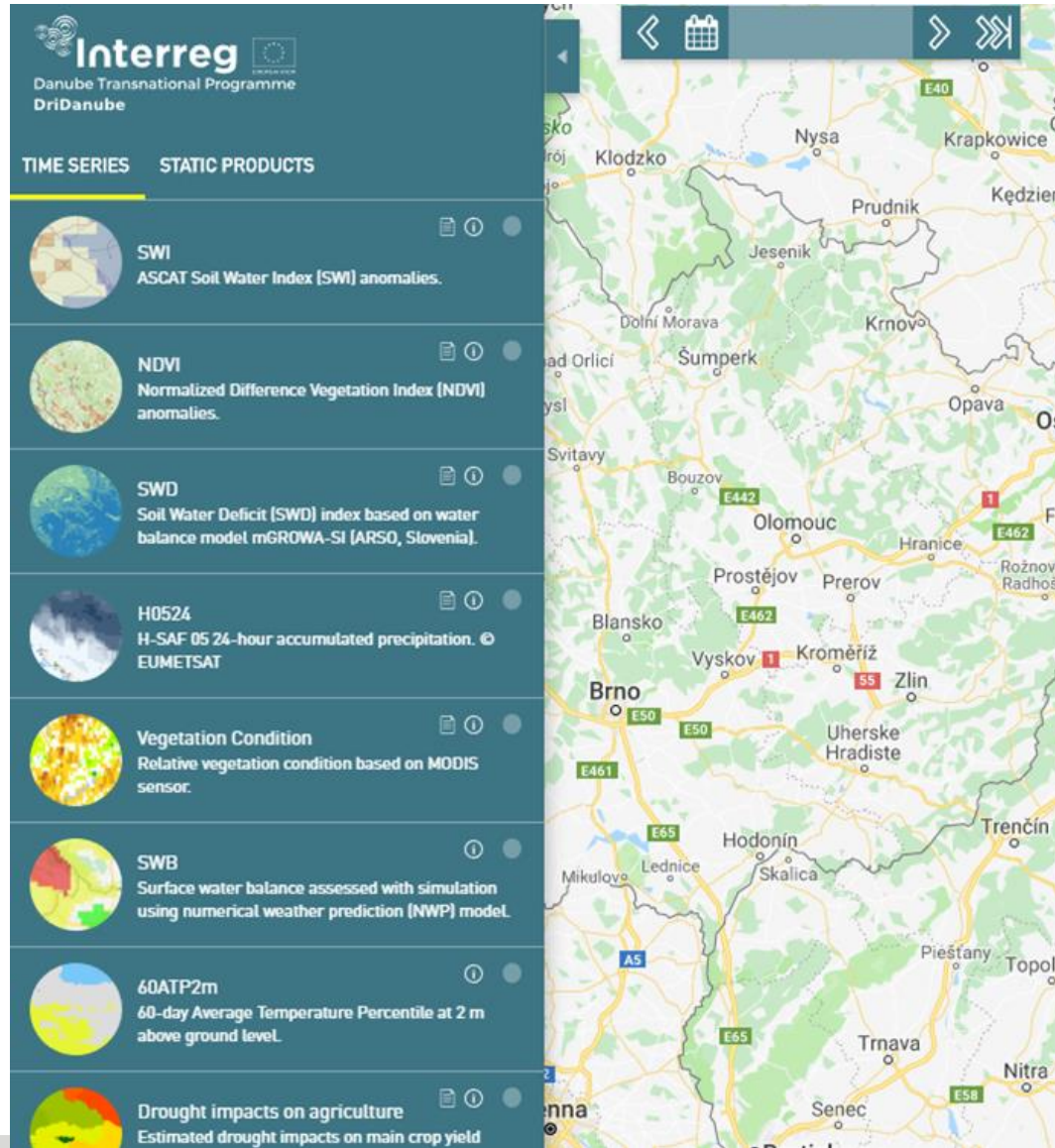
Podkladová mapa



Výber lokality a vrstvy



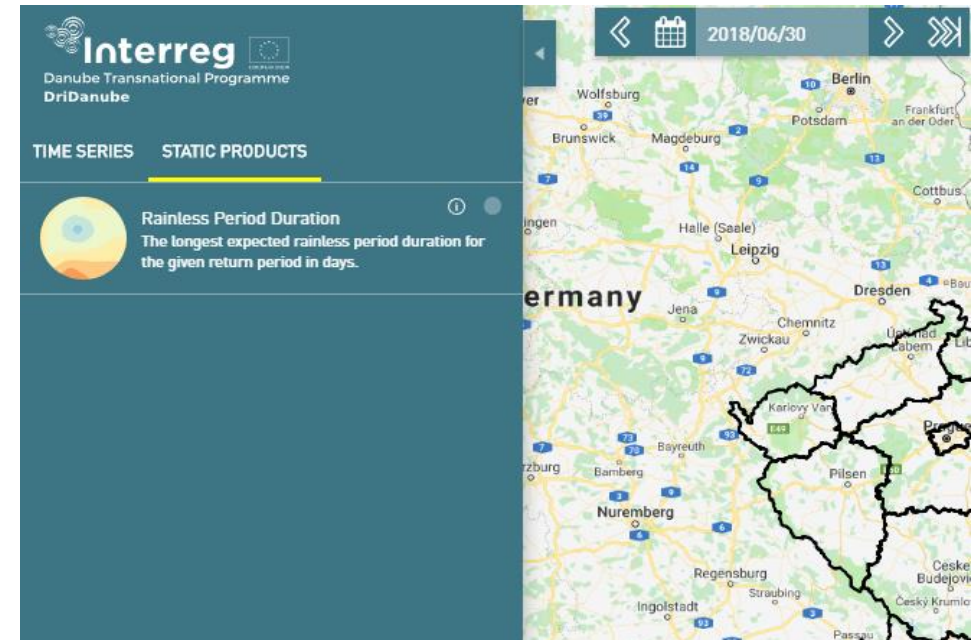
Základné menu



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TIME SERIES STATIC PRODUCTS

- SWI**
ASCAT Soil Water Index [SWI] anomalies.
- NDVI**
Normalized Difference Vegetation Index [NDVI] anomalies.
- SWD**
Soil Water Deficit [SWD] index based on water balance model mGROWA-SI [ARSO, Slovenia].
- H0524**
H-SAF 05 24-hour accumulated precipitation. © EUMETSAT
- Vegetation Condition**
Relative vegetation condition based on MODIS sensor.
- SWB**
Surface water balance assessed with simulation using numerical weather prediction (NWP) model.
- 60ATP2m**
60-day Average Temperature Percentile at 2 m above ground level.
- Drought impacts on agriculture**
Estimated drought impacts on main crop yield




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2018/06/30

TIME SERIES **STATIC PRODUCTS**

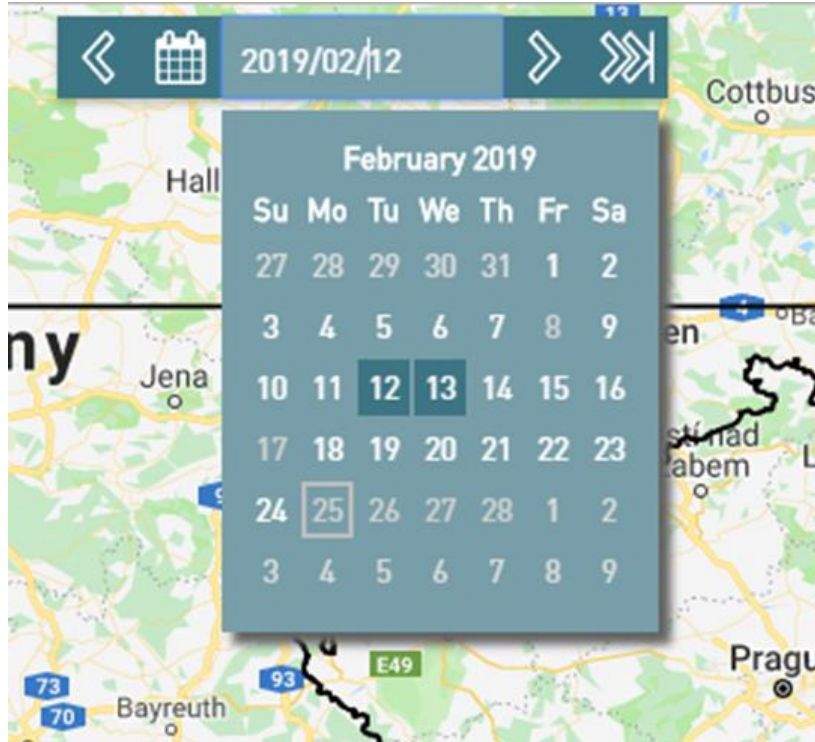
- Rainless Period Duration**
The longest expected rainless period duration for the given return period in days.

Základné menu



The image shows two overlapping screenshots of the DriDanube application interface. The left screenshot displays the main menu with options for 'TIME SERIES' and 'STATIC PRODUCTS'. The 'SWI' (ASCAT Soil Water Index [SWI] anomalies) product is selected, with a red circle highlighting the '12_5km' and 'daily' resolution buttons. A legend on the right explains that blue represents higher than average conditions and red represents lower than average conditions. The right screenshot shows a detailed view of the 'SWI' product, including a color scale from -25% to 25% and a list of products: SWI, NDVI (Normalized Difference Vegetation Index [NDVI] anomalies), and SWD (Soil Water Deficit [SWD] index based on water balance model mGROWA-SI [ARSO, Slovenia]). A pop-up window titled 'Information about SWI' provides a detailed description of the data, stating it represents a soil depth of 0-40 cm and is used to describe water deficit in the soil.

Výber dátumu

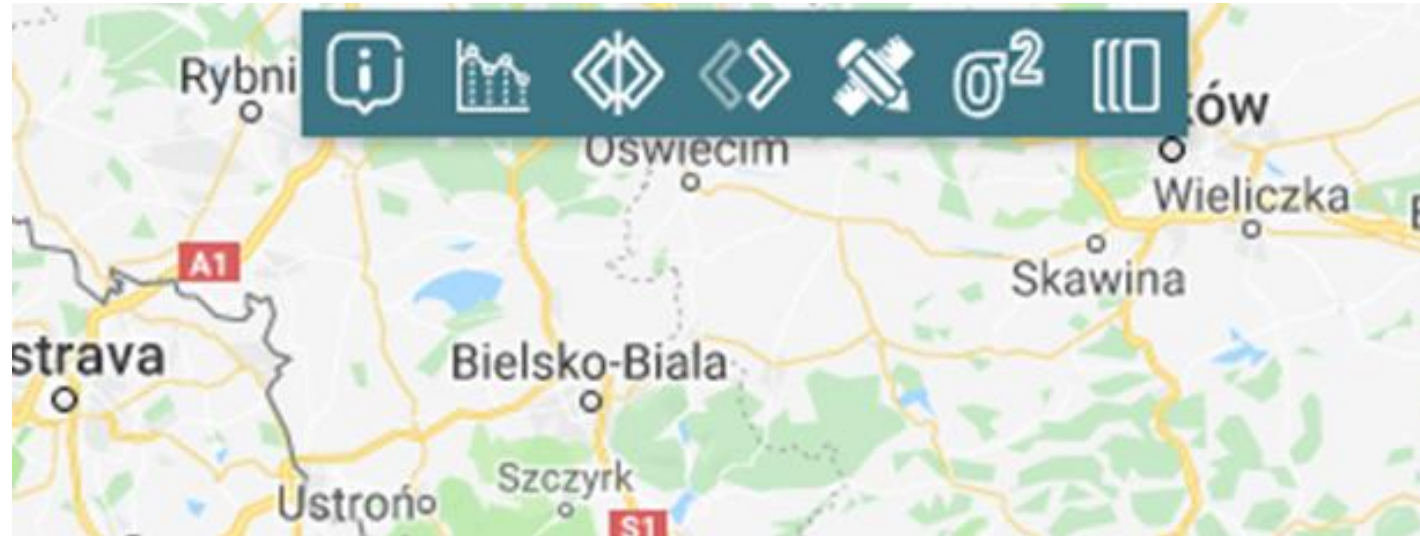


SWI – Február 2019



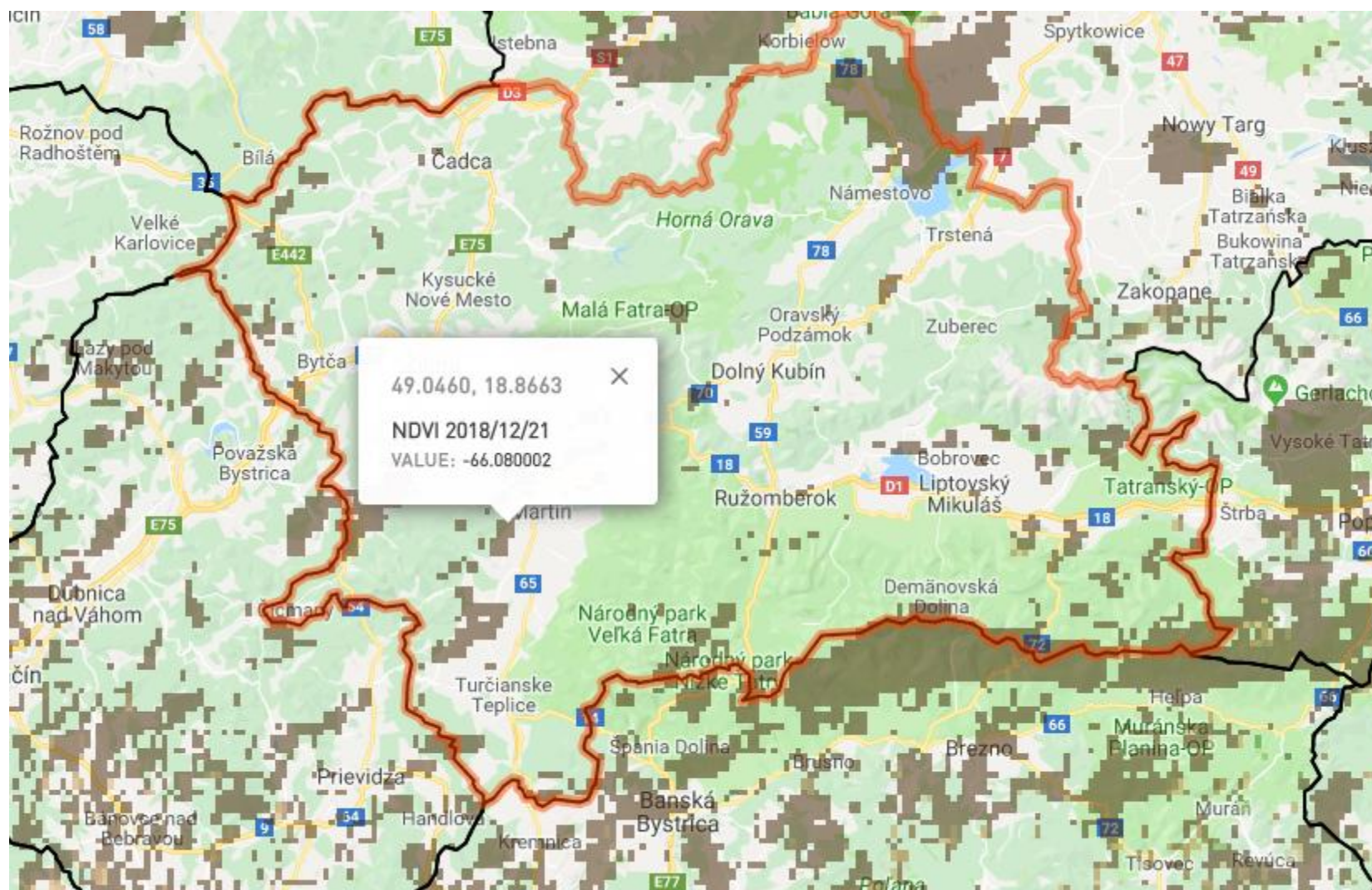
NDVI – November 2018

Panel s nástrojmi

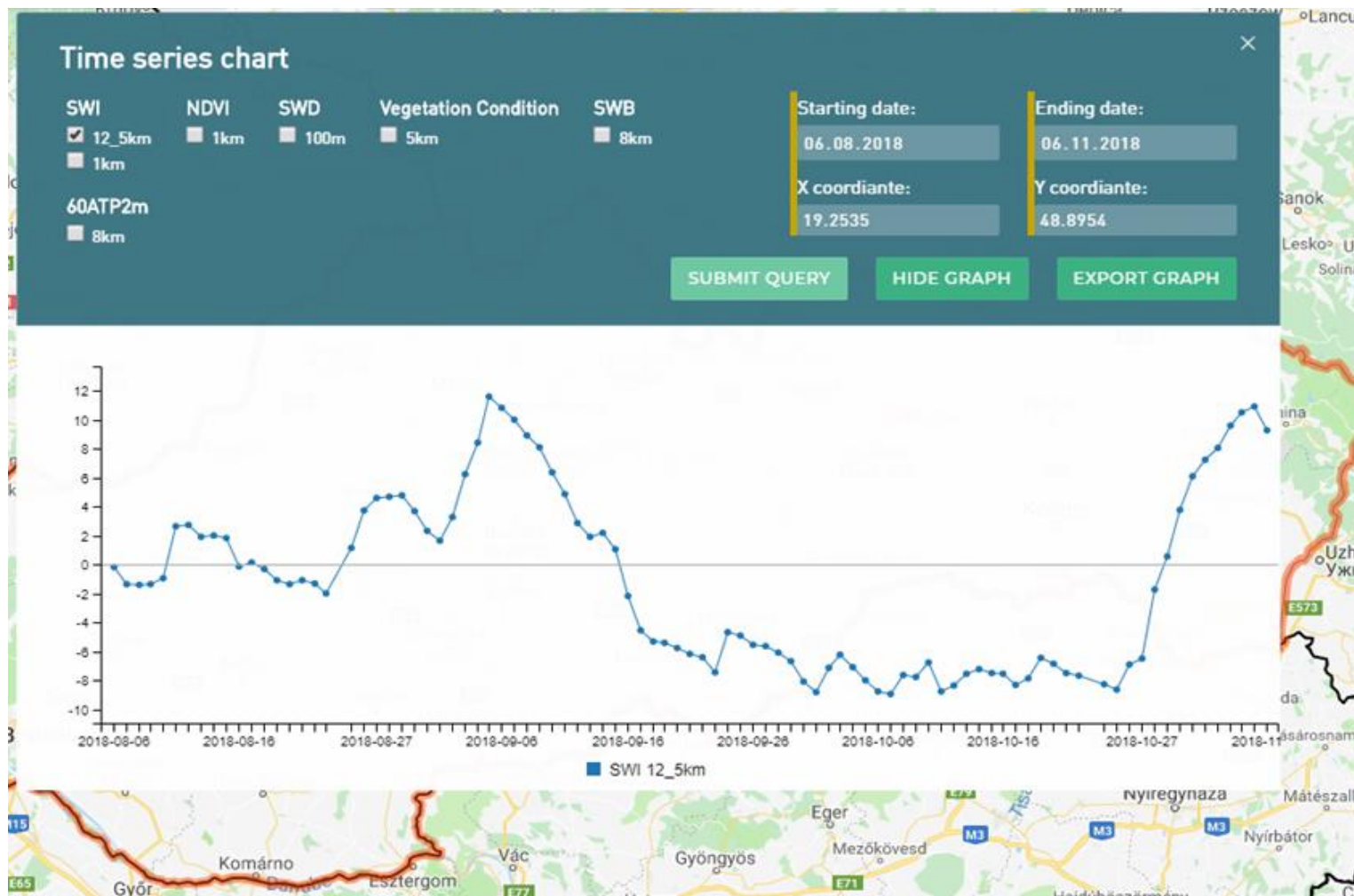


V strede hornej časti obrazovky

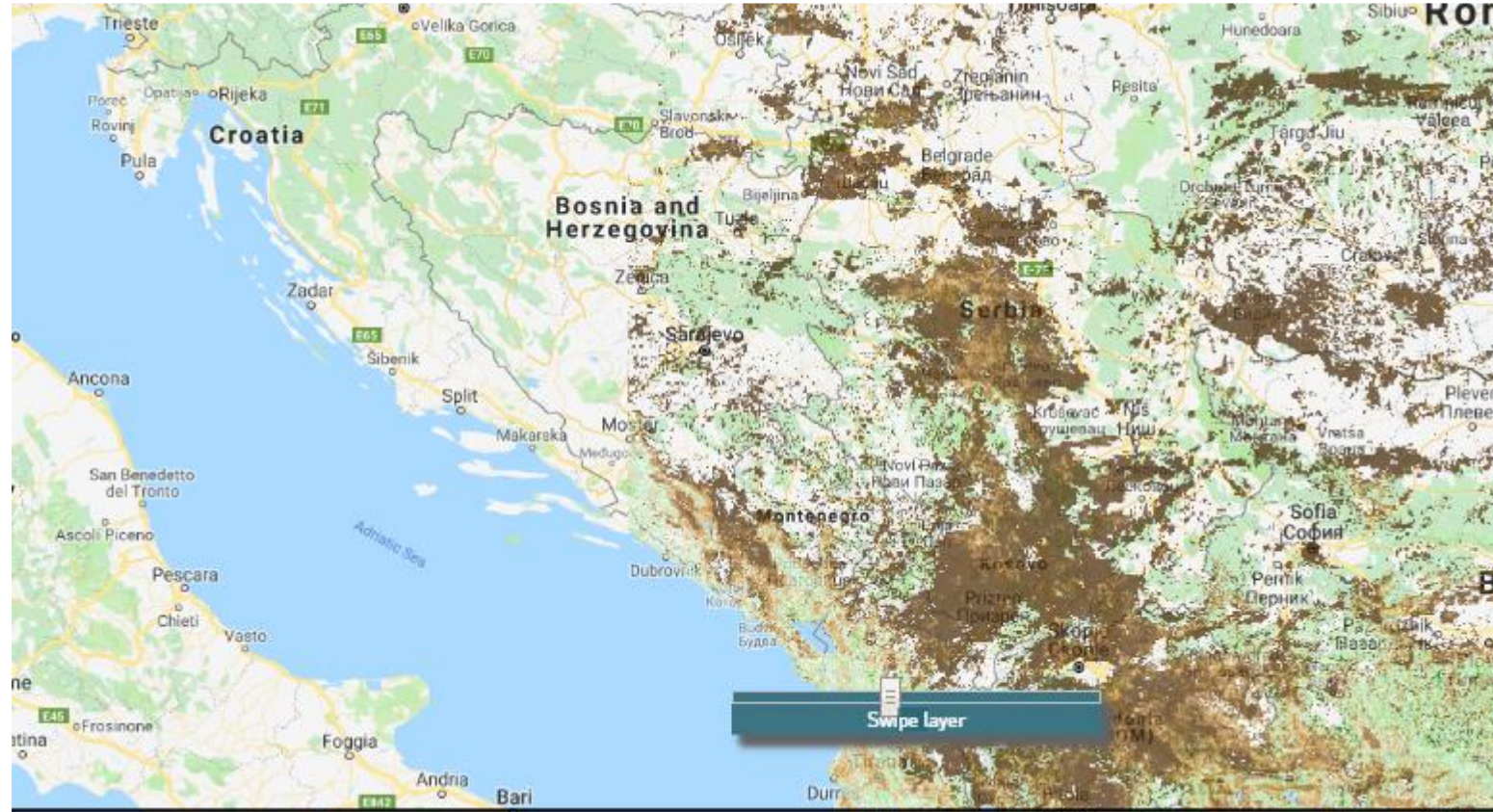
Informačný blok



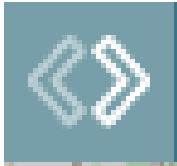
Časový rad produktu



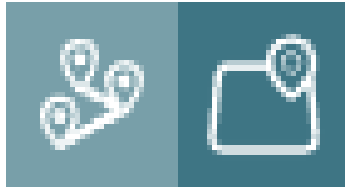
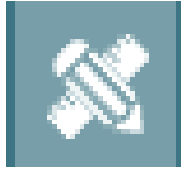
Prekrytie vrstiev



Priehľadnosť vrstiev

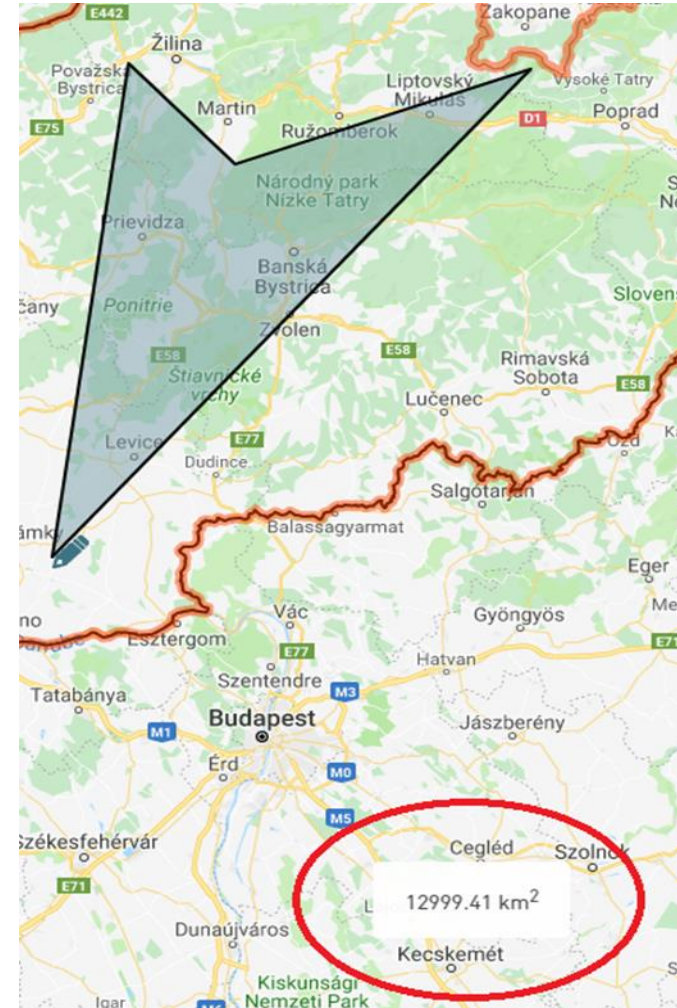
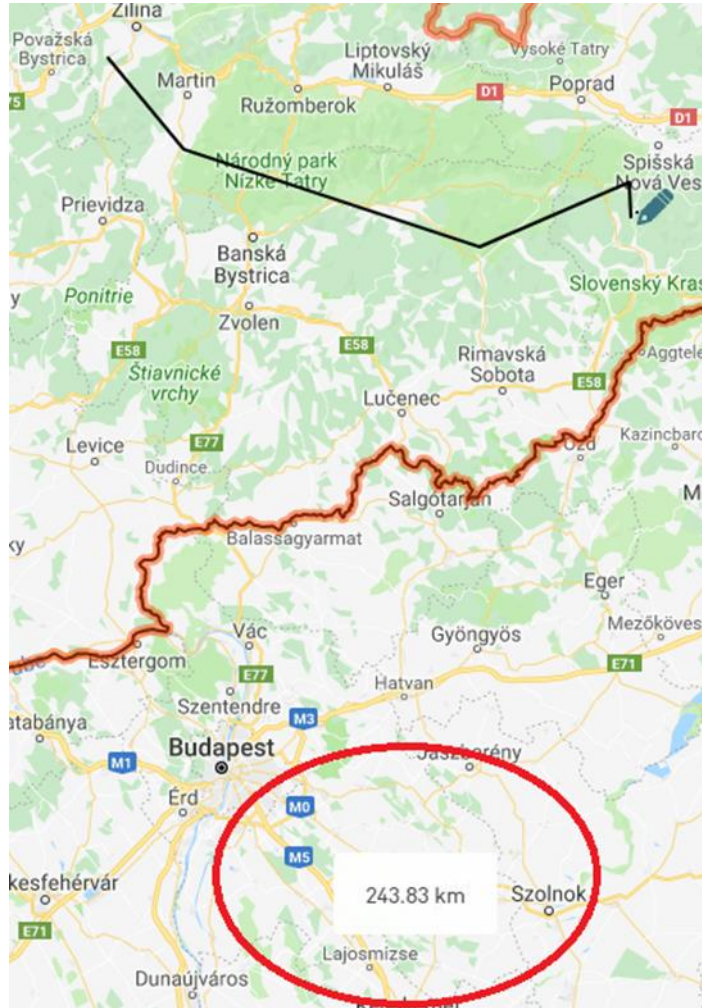


Dížková a plošná miera



Dížková
miera

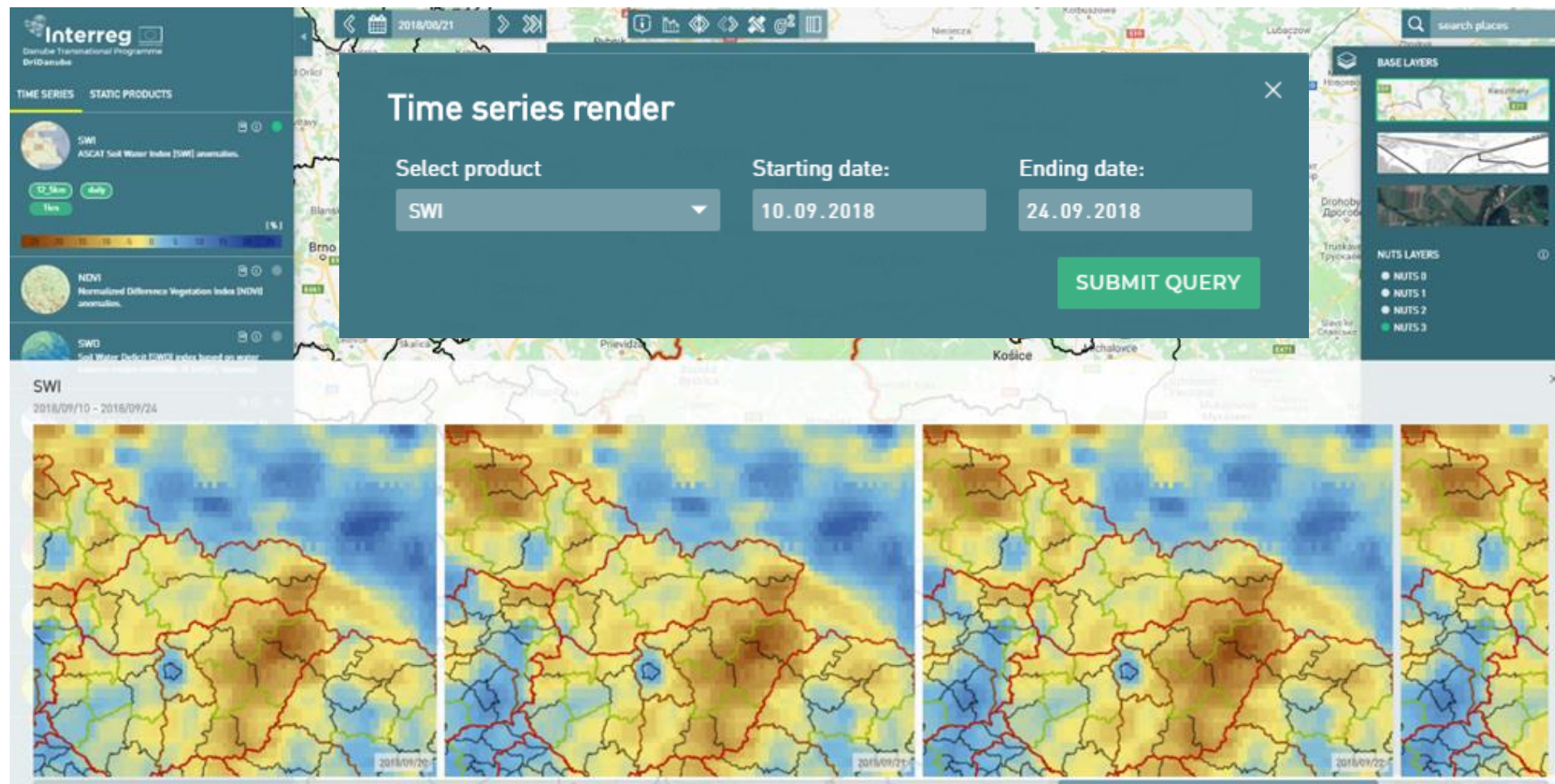
Plošná
miera



Zonálna štatistika



Mapky v termínoch



Otázky do diskusie

- Ako vidíte využitie DroughtWatch-u v praxi?
- DroughtWatch pre monitoring sucha – Aké nástroje/produkty chýbajú?
 - Ktoré nástroje sa dajú v súčasnosti najviac použiť?
 - Ktoré nástroje by boli užitočné v budúcnosti?

Ďakujem za pozornosť

