

Activities of UN-SPIDER RSO in Ukraine in 2011

N. Kussul, A. Shelestov, S. Skakun

Space Research Institute NASU-NSAU

3rd Annual UN-SPIDER Regional Support Offices
Meeting
6-7 February, 2012
Vienna, Austria



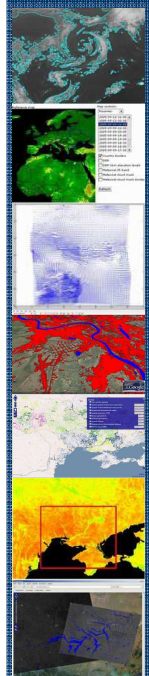
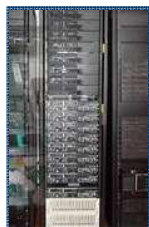
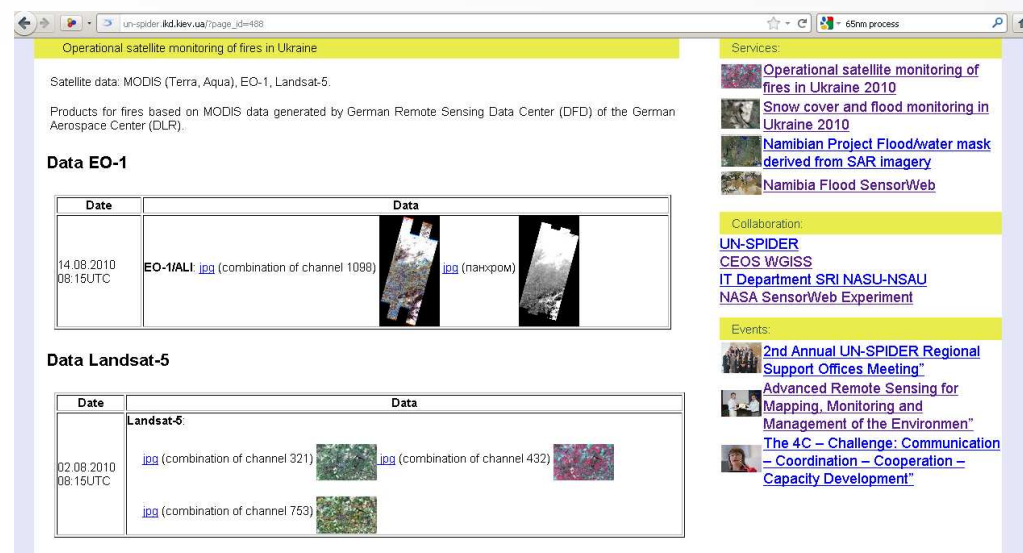
Activities in 2011



- **Outreach and Capacity Building**

- Establishment of a Web portal for UN-SPIDER RSO in Ukraine

- Events
- Activities
- Services
- Workplan & Report
- Training
- Publications

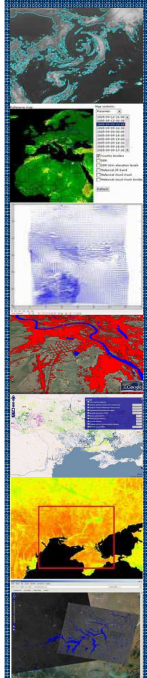


Activities in 2011 – cont'



- ***Outreach and Capacity Building***

- Participation in United Nations International Conference on Space-based Technologies for Disaster Risk Management “**Best Practices for Risk Reduction and Rapid Response Mapping**”
 - 22 to 25 November 2011, Beijing, China (**under support from UN-SPIDER**)
 - Presentation on “**The use of satellite data and geospatial intelligence for flood risk assessment at UN-SPIDER RSO in Ukraine**”

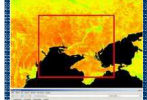
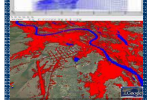
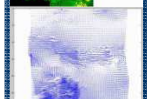
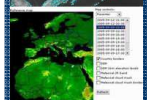
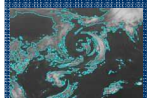


UN-SPIDER
2012

Activities in 2011 – cont'



- ***Outreach and Capacity Building***
 - Contribution to UN-SPIDER Newsletter
 - September 2011
 - Topic: flood hazard mapping methodology
 - Scientific publications
 - Paper on Namibian SensorWeb project in **IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing (J-STARS)**
 - **Kussul N., Mandl D., Moe K., Mund J.-P., Post J., Shelestov A., Skakun S., Szarzynski J., Van Langenhove G., Handy M.** “Interoperable Infrastructure for Flood Monitoring: Sensor Web, Grid & Cloud” (accepted)

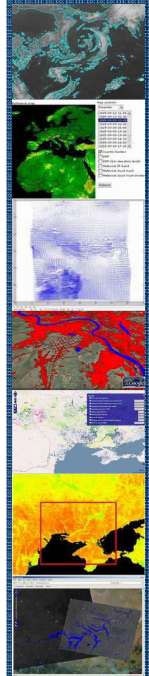
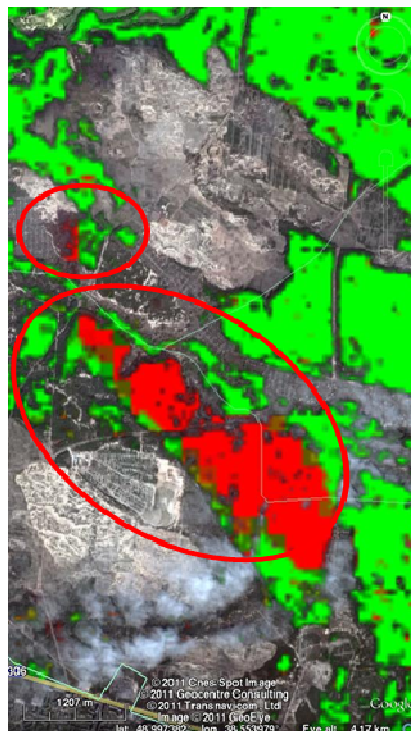


Activities in 2011 – cont'



- ***Horizontal Cooperation***

- Rapid mapping of potential deforestation areas
- Area: Lugansk oblast, Ukraine
- State Agricultural Inspection of Ukraine
- Estimated deforestation area: 2300 ha

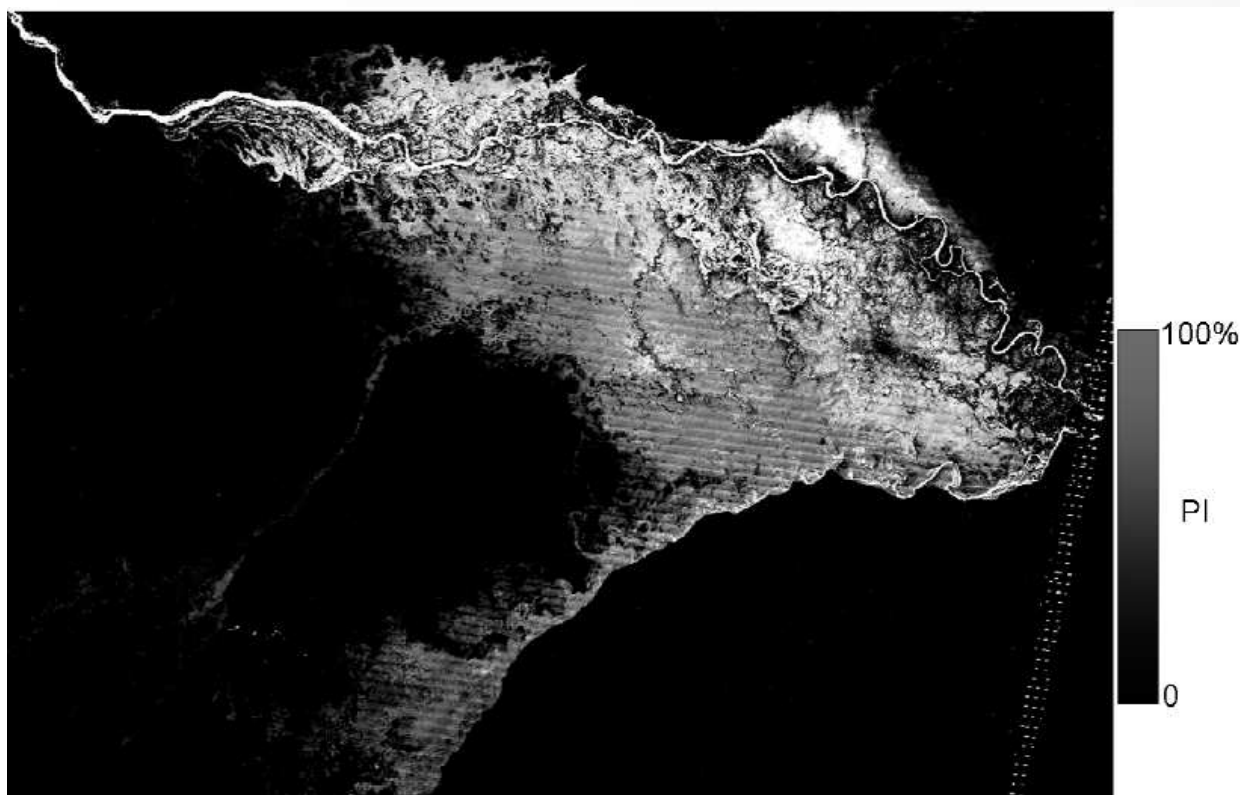


Activities in 2011 – cont'

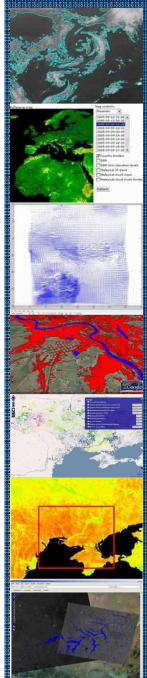


- ***Technical Advisory Support***

- Participation in the Namibian SensorWeb project
- Flood hazard mapping
 - Statistical processing of Landsat-5/7 images time-series
 - Probability of inundation (PI) map



PI for the Katimu Mulilo region, Namibia. The map is produced by integrating a timeseries of Landsat TM/ETM+ scenes from 2000-2010. In total 44 scenes were processed.

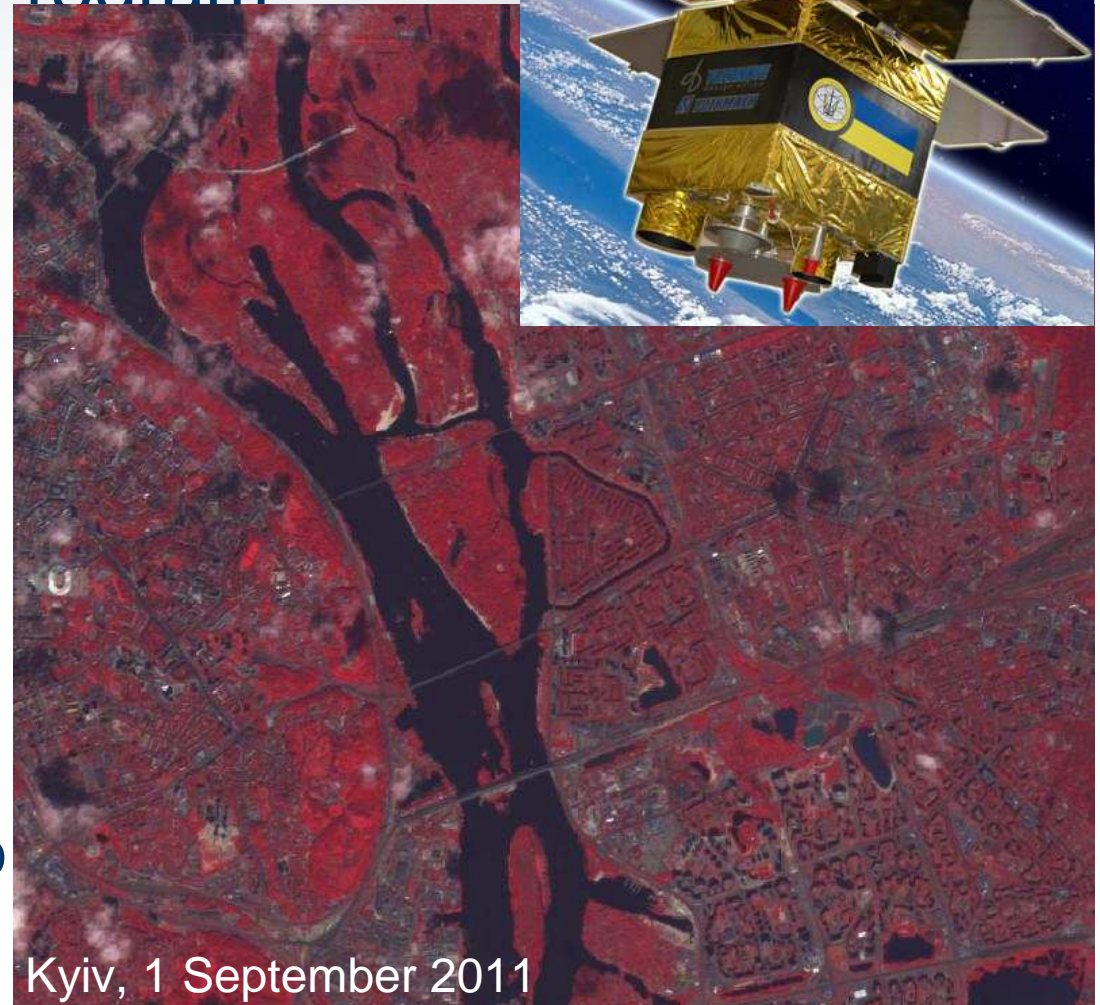


UN-SPIDER
2012

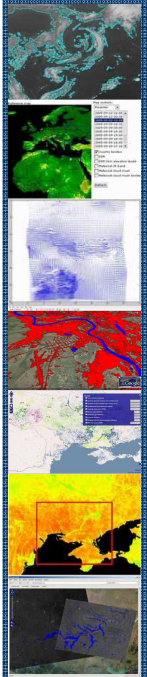
Sich-2 Earth Remote Sensing Satellite



- First Ukrainian ERS within new National Space Program
- Optical
 - VNIR (8 m), SWIR (40 m)
 - 48.8 km swath
 - Inclination angle: $\pm 30^\circ$
- Launched 17 August 2011
 - Ukrainian Dnipro launcher

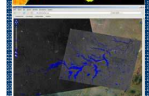
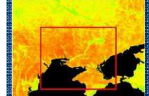
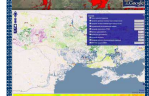
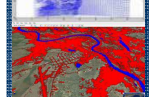
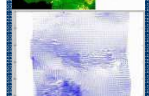
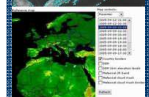
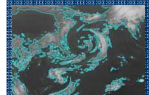
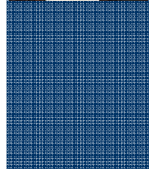
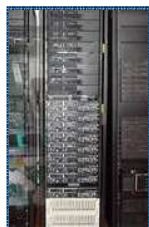


Kyiv, 1 September 2011





Thank You!



UN-SPIDER
2012