

# Earth Observation Forum

## 8-9 November 2022

Hotel Warszawa  
Plac Powstańców Warszawy 9  
00-039 Warsaw

### AGENDA

#### Day I – 8<sup>th</sup> November 2022

language: Polish – simultaneous English translation available

- **08:30 – 09:00 Registration and welcome coffee**
- **09:00 – 09:10 Official welcome (Polish Space Agency)**
- **09:10 – 10:00 Introductory session**
  - **Polish Space Agency – National Satellite Information System**  
*Jolanta Orlińska (POLSA)*
    - NSIS - Monitoring of soil moisture in rural areas using Sentinel 1 data  
*Antoni Łabaj, Łukasz Nowak (AlterGeo)*
    - Increasing the spatial resolution of Sentinel 2 imagery  
*Anna Żądło, Wojciech Drzewiecki (SmallGIS)*
- **10:00 – 10:30 Panel discussion among Polish space sector representatives**  
**Topic: Use of satellite data by public administration**
  - Jakub Ryzenko (Space Research Centre of Polish Academy of Sciences) – moderator
  - Katarzyna Dąbrowka-Zielińska (Institute of Geodesy and Cartography)
  - Jacek Jarzabek (Polish Space Agency)
  - Jędrzej Bojanowski (CloudFerro)
  - Michał Hermanowski (SatRev)
  - Martyna Gatkowska (Absiskey Poland)
- **10:30 – 10:50 Coffee break**

- **10:50 – 12:50 Session I: Agriculture and forestry**
  - The use of satellite data in agricultural production  
*Mateusz Balcerowicz (National Support Centre for Agriculture)*
  - Agricultural drought satellite system  
*Karol Paradowski (Institute of Geodesy and Cartography)*
  - Chlorophyll fluorescence as an indicator of crop damage? Preliminary results of the InsFlo project  
*Łukasz Jełowicki (OPEGIEKA)*
  - Generating Advanced Usage of Earth Observation for Smart Statistics  
*Ewa Panek (Institute of Geodesy and Cartography)*
  - Satellite data significance and their future use in Polish forest management  
*Kamil Onoszko (Rajgród Forest District, State Forests)*
  - Monitoring of forests and their properties - what can and what cannot be seen from space?  
*Ewa Grabska-Szwagrzyk (Institute of Geography and Spatial Management - Jagiellonian University in Kraków)*
  
- **12:50 – 13:50 Lunch**
  
- **13:50 – 15:30 Session II: Urban areas**
  - The use of artificial intelligence and machine learning in the analysis of data obtained from satellite images of the SnapEarth project  
*Damian Olszewski (Absiskey Poland)*
  - Copernicus data in spatial planning on the example of the Łódź agglomeration  
*Jakub Misiak, Monika Cysek-Pawlak (Łódź University of Technology)*
  - Use of satellite data for property tax verification  
*Izabela Piekelnik (Municipality of Wrocław), Michał Hermanowski (SatRev), Monika Jankiewicz (Planet Labs)*
  - Monitoring of urban green areas using Copernicus data  
*Wojciech Łachowski (Institute of Urban and Regional Development)*
  - Surface Urban Heat Island in Warsaw  
*Lech Gawuć (Institute of Environmental Protection - National Research Institute)*
  
- **15:30 – 15:40 Closing remarks**

## Day II – 9<sup>th</sup> November 2022

language: English – simultaneous Polish translation available

- **09:00 – 09:30 Registration and welcome coffee**
- **09:30 – 09:45 Official welcome and introductory remarks (POLSA, Annalisa Donati - Eurisy Secretary General)**
- **9:45 – 10:00 Earth Observation Market trends and future perspective**  
*Francesca Piatto, EARSC Project officer*  
**Q&A**
- **10:00 – 11:00 Session I: Solar energy**
  - Polish case study: Solar energy monitoring and forecasting using satellite products and models  
*Piotr Struzik, Bogdan Bochenek (Institute of Meteorology and Water Management - National Research Institute)*
  - Pilot 3.2 High photovoltaic penetration at urban scale  
*Philippe Blanc National Observatory of Athens (NOA · Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing -IAASARS), Project Officer)*
  - Pilot 3.1 nextSENSE: solar energy nowcasting & short-term forecasting system  
*Ilias Fountoulakis (National Observatory of Athens (NOA · Institute for Astronomy, Astrophysics, Space Applications and Remote Sensing - IAASARS), Project Officer)*
- **11:00 – 11:20 Coffee break**
- **11:20 – 12:10 Session II: Wind energy**
  - Polish case study: Wind energy: changes in production, local microclimate and forecasting with machine learning methods  
*Bogdan Bochenek, Mariusz Figurski, Adam Jaczewski, Jakub Jurasz, Andrzej Wyszogrodzki (Institute of Meteorology and Water management - National Research Institute)*
  - Pilot 3.3 Merging offshore wind products  
*Merete Badger (Technical University of Denmark, Department of Wind Energy Meteorology and Remote Sensing, Senior Scientist)***Q&A**
- **12:10 – 13:00 Session III: Climate change (I)**
  - Calibration of climate projections up to 2100, for Poland, using satellite-based observations  
*Maciej Jefimow (Institute of Environmental Protection - National Research Institute)*
  - Pilot 7.2 Urban resilience to extreme weather climate service  
*Saskia Buchholz, Maja Zuvella-Aloise (German Meteorological Service)*

- **13:00 – 14:00 Lunch**
  
- **14:00 – 15:00 Session III: Climate change (II)**
  - Satellite data as a modern tool for environmental monitoring of the Baltic Sea  
*Mirosław Darecki (Institute of Oceanology of Polish Academy of Sciences)*
  - Application of remote sensing for emission inventory validation  
*Marcin Kawka (Institute of Environmental Protection - National Research Institute)*
  - Machine learning approach to estimate ground-level nitrogen dioxide pollution (NO<sub>2</sub>)  
*Patryk Grzybowski<sup>1</sup>, Krzysztof Markowicz<sup>1</sup>, Jan Musiał<sup>2</sup> (<sup>1</sup>Institute of Geophysics - University of Warsaw, <sup>2</sup>CloudFerro)*
  
- **15:00 – 15:20 Closing remarks (EURISY)**