

NEW APPROACH TO COMBINED IN-SITU AND SATELLITE BASED OBSERVATIONS OF ENVIRONMENT – SILEX CLOUDS PLATFORM DEMONSTRATION

Martyna Gatkowska¹, Pablo Marzialetti² and Giovanni Laneve²

1. *Institute of Geodesy and Cartography, Remote Sensing Centre, Warszawa, Poland; e-mail: Martyna.Gatkowska@igik.edu.pl*
2. *Università degli Studi di Roma "La Sapienza", Earth Observation Satellite Images Application Laboratory, Rome, Italy; email: pablo.marzialetti@uniroma1.it*
3. *Università degli Studi di Roma "La Sapienza", Earth Observation Satellite Images Application Laboratory, Rome, Italy; email: giovanni.laneve@uniroma1.it*

ABSTRACT

Silex Clouds platform is built as an one-stop-shop solution, delivering products and indices based on automatically processed satellite data from multiple satellites. The platform enables to transform the data into information useful for Users and Customers from domains such as: agriculture, renewable energy – solar panels, water applications and many more.

The satellite data are automatically downloaded, processes and numerous indices are calculated and delivered for the User in the form of statistical data, maps and charts.

The User is also enabled to upload their own in-situ observations and meteorological data in order to perform comprehensive, high level analysis.

This solution could be successfully applied for monitoring of environment all over Europe on the basis of multiple satellite data. The automatic delivery and processing of satellite data would significantly increase the efficiency of analysis performed by both EO experts as well as Customers from outside the Earth Observation domain.

Moreover the platform enables the User to customize the profile of observations being performed for submitted area in order to adjust the obtained information to individual's needs.

The platform is foreseen as an interesting solution to the researchers who on the daily basis do not apply satellite data but which notice the significance of such data in their analysis. Such solution could significantly increase the innovation the performed research and may create the added value.