Workshop: *EO-based products to improve renewable energy forecasts*

held online on Tuesday 27th Sep 14:00 – 16:30 (CEST).

The E-shape project

e-shape is a unique initiative that brings together decades of public investment in Earth Observation and in cloud capabilities into services for the decision-makers, the citizens, the industry and the researchers. It allows Europe to position itself as global force in Earth observation through leveraging Copernicus, making use of existing European capacities and improving user uptake of the data from GEO assets. EuroGEO, as Europe's contribution to the Global Earth Observation System of Systems (GEOSS), aims at bringing together Earth Observation resources in Europe. 37 pilot applications under 7 thematic areas address societal challenges, foster entrepreneurship and support sustainable development, in alignment to the three main priorities of GEO (SDGs, Paris Agreement and Sendaï Framework). This is one of a series of workshops highlighting some of the results of the e-shape project.

Showcase A - solar energy nowcasting & short-term forecasting system – nextSENSE:

The consequences of rapidly rising global temperatures will be far-reaching and devastating for humans and the environment unless urgent action is taken globally to curb emissions. This service will provide a Pan-European scale scientific information about solar radiation/energy forecast and business oriented information on management and planning of Distribution System Operators, private companies and individual solar energy related users.

Showcase C - Hydropower in snow reservoir – climate service:

The Finnish Meteorological Institute has recently developed a web-service that provides detailed hydrometeorological information to support more efficient hydropower production operations in Northern Finland. This service aims to reduce uncertainties in spring, snowmelt driven, runoff forecasts through assimilation of satellite data-based cryosphere products to an in-house developed hydrological model (HOPS) and an in-house developed machine learning streamflow forecasting algorithm.

Showcase B - Merging offshore wind products:

Resource assessment offshore is an important task, undertaken prior to the siting of wind farms. This website aims at providing information on offshore wind resources (e.g. maps of mean wind, wind power, Weibull statistics, wind roses and time-series) derived from satellite wind products (ASCAT scatterometer and SAR) as well as individually retrieved wind fields from Sentinel 1 (also including the entire ENVISAT ASAR archive). The focus is on quickly supporting decision making for a wide range of users related to the wind energy sector, i.e. consultants, wind farm operators, policy-makers.

Agenda – Tue 27th Sep 2022

14:00   Welcomes: DDGI & EARSC representatives
14:10   Showcase presentations
15:40   Three breakout groups, one for each showcase
16:10   Reports and general discussion
16:25   Wrap-Up
16:30   Closure

Registration:

By Email until Monday 26th Sep 2022 contacting:
b.graeler@52north.org

Background picture by Sander Weeteling on unsplash.