AI4 copernicus

5th Open Call

Supplementary Services

Reinforcing the AI4EU Platform by Advancing Earth Observation Intelligence, Innovation and Adoption

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OPEN CALLS

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1. Introduction

Apart from the AI4Copernicus services (presented in the AI4Copernicus Technical Documentation document), applicants of the 5th Round of Open Calls can make use of additional energy services provided by the I-NERGY project. Even though the utilisation of the following services is not mandatory, applicants are encouraged to test the following services in their projects.

If you have any questions about the services and their usage, please contact:
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2. List of I-NERGY Services

Short-term load forecasting model for TSOs (LSTM)
A forecasting service for predicting the aggregated hourly net electrical load of the Portuguese transmission system operator (REN). The service makes use of an LSTM network.

Load Forecasting Databroker
A databroker service used for loading time series to forecasting machine learning models.

Short-term load forecasting model for TSOs (LightGBM)
A forecasting service for predicting of the Portuguese aggregated electricity load time series (15-min resolution, 24hr forecasting horizon). The service makes use of the LightGBM algorithm.

SARIMA load forecasting model
A seasonal ARIMA load forecasting model for boiler rooms in district heating networks.

Portuguese Transmission System Aggregated Load Time Series and Encoded Time Covariates
Aggregated load time series of the Portuguese TSO (Transmission System Operator) for 2018 and 2019 (15 minute resolution) accompanied by encoded (in a cyclical manner) time covariates. Useful for TSO demand forecasting experimentation.

3. The I-NERGY Project

I-NERGY is an EU-funded H2020 innovation project around Artificial Intelligence (AI) for Next Generation Energy aiming at reshaping the energy sector value chain towards better business and operational performance, increased environmental sustainability, and the creation of a stronger social fabric propagating high social value among citizens.

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