





Veather and climate data for the energy transition



SCENARIO

Hypermeteo

Digital services providing representative, high-resolution weather and climate datasets that can be easily integrated into third-party systems through API



DIGITAL WEATHER DATA REANALYSIS

Datasets are spatialised on areal grids that represent an atmospheric digital twin of the planet. Each cell in this digital grid corresponds to a virtual weather station. Thus a continuous, representative flow of high resolution meteorological data (up to 1 km) is provided for every point on the earth's surface.

REPRESENTATIVE WEATHER DATA The data is analyzed with Al algorithms an

The data is analyzed with AI algorithms and undergoes multiple validation processes for the most accurate digital representation of weather and climate phenomena. For example, the data can be integrated with land use, population density, and other metadata.

SUPPORTING THE ENERGY SECTOR

With the wealth of data available, Hypermeteo can support the energy sector in various ways. These include producibility prediction and verification, managing the load on the networks by optimizing the balance between renewable and traditional sources by training producibility models, and optimizing the process of placement on the energy market.

HISTORICAL REANALYSIS DATA

The Hypermeteo dataset featuring over 30 years of historical data and built using the reanalysis method — provides insight into past climate scenarios.

NOWCASTING DATA

Forecast data obtained with a high refresh rate frequency (up to 5 minutes), extremely useful for very short-term forecasting (3-6 hours).

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CLIMATE SCENARIOS

Impact scenarios based on climatological long-term projections supporting adaptation strategies for climate change.

NOWCASTING

FORECAST DATA

The set of weather parameters are processed with high-resolution atmospheric simulation models to produce short-term (up to 3 days) and medium to long-term (3 to 15 days) forecasts.



NEAR REAL-TIME DATA

Data are constantly updated to ensure thorough monitoring of all meteorological variables.

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