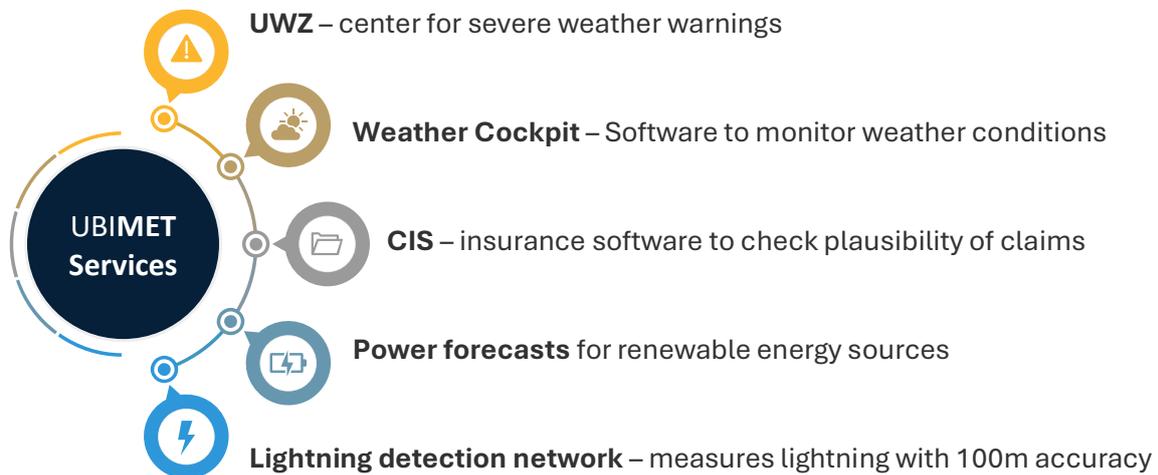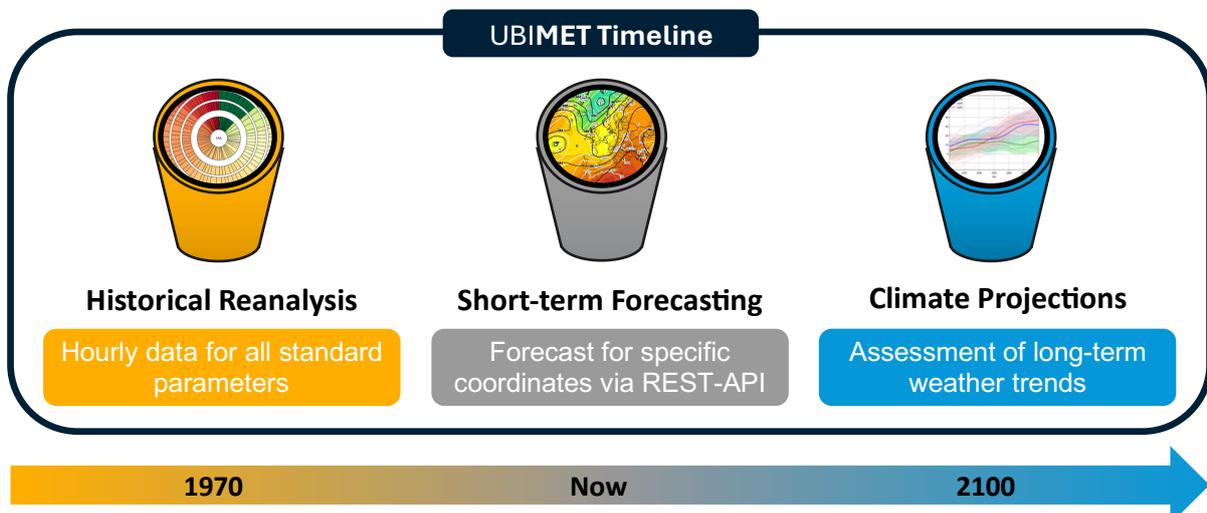# UBIMET at a Glance

UBIMET GmbH, based in Vienna, is the globally leading provider of meteorological forecasting systems, information and customized services for companies in a wide range of weather-dependent industries for private customers. Data, weather models, radar and satellite images are evaluated and interpreted by high-performance computer systems and specially trained experts around the clock, 365 days a year, to provide customers tailored information.
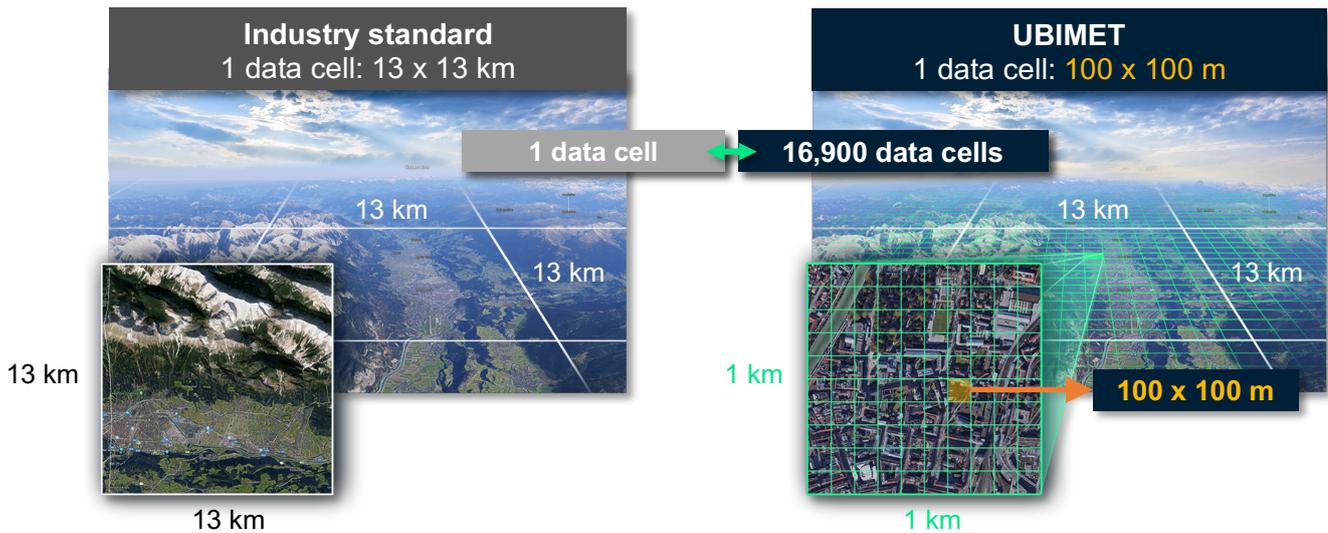
UWZ – center for severe weather warnings

Weather Cockpit – Software to monitor weather conditions

CIS – insurance software to check plausibility of claims

Power forecasts for renewable energy sources

Lightning detection network – measures lightning with 100m accuracy

UBI**MET** Services

Data for the entire timeline

UBI**MET** Timeline

Historical Reanalysis

Hourly data for all standard parameters

Short-term Forecasting

Forecast for specific coordinates via REST-API

Climate Projections

Assessment of long-term weather trends

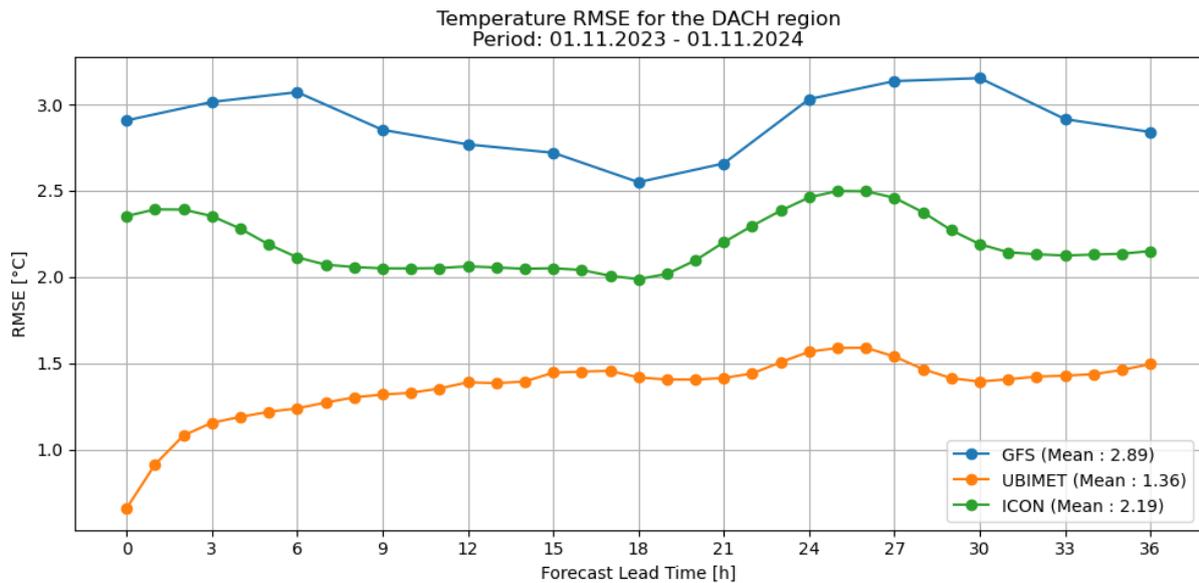| 1970	Now	2100

Model Accuracy

UBIMET delivers forecast precision far beyond industry standard. While conventional models offer 13x13 km resolution UBIMET's own weather model has an unmatched resolution of 100x100 m.

For this reason, UBIMETs forecasts significantly outperform forecasts provided by Open-Source models such as GFS or ICON:

UBIMET's R&D activities

With participation in over 50 national and international research projects, UBIMET is driving innovation across key areas, including:

Energy	**Intelligent Systems**	**Mobility**	**Secure Societies**
AI-based forecasts for solar, wind and hydro power plants	Correlation of weather information and real-world data	Weather risks analysis of on road, rail and air traffic	Early warning system for extreme weather events

Climate Change Adaptation

Long-term forecasts and climatic trend analyses for all thematic areas to reduce effects of climate change
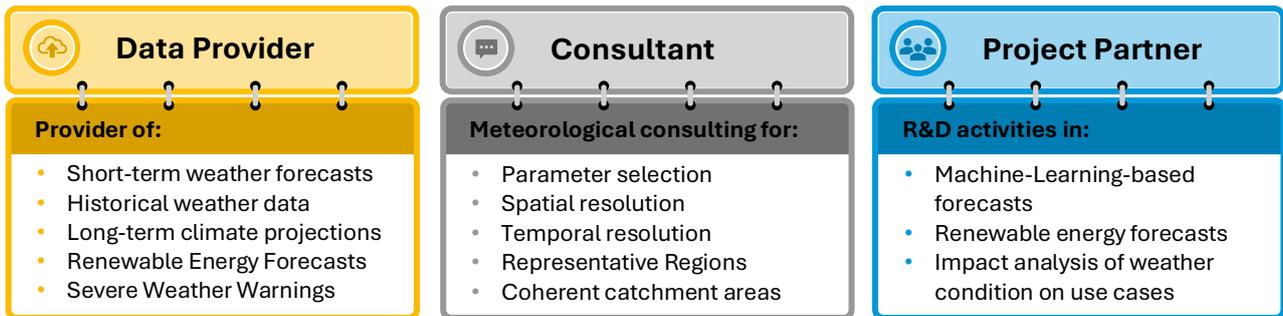
Selected funded Spotlight projects

SOLARIS
Creation of a data platform for the efficient O&M of PV plants with new tools for power forecasting and smart maintenance

SECAI
Development of an intelligent heating control system for buildings based on the correlation between weather and heat demand

KI.M
Design of AI-based decision-making platform to analyze the impact of weather urban mobility and support climate-neutral measures

HeatProtect
Analysis of heat-related health threats and conceptualization of an early warning system to reduce the burden on the healthcare system

KlimZug Long-term forecast of the effects of extreme weather on the Austrian Federal Railway (ÖBB) railroad infrastructure up to 2050 by examining historical damage data and analyzing climate projections

A more comprehensive list of UBIMET's funded R&D projects provide the EU-Portal and the Database of the Austrian Funding Agency.

UBI**MET's** contribution

Depending on the specific needs of a consortium, UBIMET can fill the following roles:

Data Provider

Provider of:
- Short-term weather forecasts
- Historical weather data
- Long-term climate projections
- Renewable Energy Forecasts
- Severe Weather Warnings

Consultant

Meteorological consulting for:
- Parameter selection
- Spatial resolution
- Temporal resolution
- Representative Regions
- Coherent catchment areas

Project Partner

R&D activities in:
- Machine-Learning-based forecasts
- Renewable energy forecasts
- Impact analysis of weather condition on use cases

UBIMET is interested to contribute to R&D activity related to weather, in particular:

- ☑ **AI-based short-term weather forecasts**
- ☑ **Severe Weather Warnings**
- ☑ **Global lightning detection network**
- ☑ **Assimilation of satellite data**
- ☑ **Operation & Maintenance activities**
- ☑ **Weather Impact forecasts**
- ☑ **AI-based power production forecasts**
- ☑ **Digital twins and simulations**
- ☑ **Impact of weather on public health**
- ☑ **Long-term climatic trends**
- ☑ **Automated heating and cooling**
- ☑ **ESG-reporting and vulnerability analysis**
- ☑ **Climate neutral cities**

Contact details

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We are looking forward to hearing from you!

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