

PRESS RELEASE

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Meteodyn delivers high-resolution wind data online with the launch of its Wind Data Portal

Featuring Virtual and Satellite Onshore and Offshore Met Mast data with the finest horizontal resolution on the market, and Climate Change Analytics, for wind power projects worldwide

Saint-Herblain, France

Meteodyn — a global expert in wind engineering, climatology and meteorology, which develops software and consulting services for various industries — is entering the online wind data sales market with the launch of its Wind Data Portal on December 2, 2025. The wind and climate change data are provided with highly superior quality compared to traditional models, with the finest horizontal resolution on the market. The wind data is available to purchase directly from the company's website (www.meteodyn.com).

Wind Intelligence: High-Resolution Global Wind Data with accurate geolocation

The Wind Data Portal enables wind power professionals to purchase and download very high-resolution and precisely geolocated wind data for their projects, directly online, in minutes. From Virtual and satellite observations Met Masts, Climate Change Analytics, to Meso-Microscale Coupling, the platform aims to help wind energy professionals optimize and accelerate their projects from the early stage. The data is available worldwide for both onshore and offshore locations.

The online shop notably features the Premium-CFD Virtual Met Mast and the Premium-SARWind Met Mast from SAR satellite observations, with the finest horizontal resolution on the market, down to 50 m and 500 m respectively. Met Mast products offer high-quality data to wind farm developers during both prospecting and feasibility phases, for example in "greenfield" wind projects where no measurement data is available.

Browse the Wind Data Portal:
<https://meteodyn.com/wind-data-portal/>



Frank Lancelot, CEO and General Manager of Meteodyn Group, added: *"Clients asked us for high-quality wind data to quickly make their first assessment of a site. This is usually necessary during the very early phase of a project: Greenfields projects, extension of a wind farm, etc. At that stage, there is no wind measurements on site yet and Developers cannot wait for months... So, we've done the work for them with the Wind Data Portal: Our team has extracted the parameters from validated databases, then corrected, completed, extrapolated, and refined the data. In a few clicks, you have access to high-resolution, localized wind data, anywhere in the world, both on- and offshore. It is an online shop; with a few parameters you can make your selection, purchase and download the data. Besides the Met Masts, we now offer Climate Change Analytics and Meso-Microscale Coupling wind data. The Wind Data Portal will continue to grow regularly to serve the needs of the wind energy industry".*

Digital engineering: State-of-the-art technology and cutting-edge processing of data

Building on its expertise in wind engineering and scientific technologies, Meteodyn provides wind power professionals with the highest quality wind data.

The following three products are currently available on the Wind Data Portal:

1. **Met Masts**: Access to worldwide high-resolution time series of wind speed and direction data. Two levels are available:

- Advanced: High-level reanalysis data from multiple validated databases, processed with additional advanced spatial interpolation and vertical extrapolation down to a horizontal resolution of 3–11 km, depending on the region.
- Premium:
 - Onshore Met Mast powered by CFD technology: Very high-resolution wind data with a horizontal resolution of 50 m — *the finest of the market* — that most accurately represents the wind flow at the project site, thanks to a Computational Fluid Dynamics (CFD) downscaling that encompasses microscale effects, topography, and local atmospheric stability.
 - Offshore Met Mast powered by SARWind® technology: Offshore-specific wind data time series, with a high horizontal resolution down to 500 m, derived from SAR satellite observations (over 330,000 SAR images processed worldwide by CLS). This innovative technology is more accurate for offshore projects and is based on satellite observations and quality validation.

2. Climate Change Analytics (CCA): Climate projections of wind speed and annual energy production changes based on IPCC scenarios. CCA is a tool to assess the climate risks of wind projects to make the right investments and decisions to build resilient and future-proof energy systems. The data is delivered for any height as statistical trends with a horizontal resolution of 11–44 km depending on the region.

3. Meso-Microscale Coupling (MMC): Mesoscale wind data is integrated into Meteodyn WT software computations for sites combining meso and microscale effects. The mesoscale data with 3km horizontal resolution characterizing regional atmospheric phenomena is coupled into microscale CFD simulations.

See the [Appendices on page 4](#) to get the products comprehensive technical details and validations.

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More information about METEODYN

Founded in 2003, Meteodyn is an international company specializing in digital wind engineering, climatology, and meteorology. With more than 900 clients in 50+ countries, Meteodyn is renowned for its Computational Fluid Dynamics (CFD) wind flow modelling expertise. Subsidiary of the CLS Group, Meteodyn is headquartered in Saint-Herblain, France, and has strengthened its international presence with two subsidiaries located in China and in India. Initially focused on the development of wind flow modelling CFD software (such as Meteodyn WT and UrbaWind®), the company now offers multiple software solutions (Meteodyn EC1 — leading web application for wind safety in the construction industry in France — as well as Meteodyn WPA and RT Windmap). The company also provides a wide range of services dedicated to renewable energy, buildings, transportation, power grids, and climate change adaptation (Wind Power Forecasting, Virtual Met Mast, Climate Change Analytics, Wind Load Assessment, Railway Crosswind Safety, etc.). During the past 20 years, the Meteodyn Group has been supporting and guiding professionals in building a sustainable, cleaner, and safer future. www.meteodyn.com

More information about CLS

CLS is a global company, mission-driven, and pioneer provider of monitoring and surveillance solutions for the Earth, created in 1986. CLS is a subsidiary of the French Space Agency (CNES) and CNP, an investment firm. Its mission is to create innovative space-based solutions to understand and protect our planet and to manage its resources sustainably. CLS employs almost 1100 people at our headquarters in Toulouse (France) and in 34 other sites around the world. The company works in five strategic markets: sustainable fisheries management, environmental monitoring, maritime surveillance, mobility, and energies & infrastructures. CLS processes data from 200,000 beacons per month (such as drifting buoys, animal tags, VMS beacons, & LRIT tracking) and observes the oceans and inland waters (every day more than 20 instruments onboard satellites deliver information to CLS on the world's seas and oceans). In addition, CLS monitors land and sea activities by satellite (nearly 20,000 radar and optical images and several hundred drone flights are processed each year). The CLS Group had a revenue of nearly 193 million Euros in 2024. Committed to a sustainable planet, every day the company works for Earth, from Space. www.cls.fr

More information about CNES

CNES (Centre National d'Études Spatiales) is the government agency responsible for shaping and implementing French space policy in Europe. It designs and puts satellites into orbit and invents the space systems of tomorrow; it promotes the emergence of new services useful in everyday life. Founded in 1961, CNES has developed major space projects, launchers, and satellites and is the industry's natural partner for promoting innovation. The agency has nearly 2,500 employees passionate about space and its infinite, innovative fields of application. They work in five areas: the Ariane project, science, observation, telecommunications, and defense. CNES is a major player in technological innovation, economic development, and France's industrial policy. It also forges scientific partnerships and is involved in many international cooperative endeavours. France, represented by CNES, is one of the main contributors to the European Space Agency (ESA). www.cnes.fr

More information about CNP

CNP is a private investment company founded by Albert Frère and a preeminent player on the European investment market. Backed by a stable family shareholder base, CNP manages a net asset value of €3bn, focusing on long-term value creation by actively supporting the management teams of the companies in which it holds majority or leading stakes. From the start, CNP has sought to foster entrepreneurship: with permanent capital at its disposal, CNP comes in as a trusted partner to both founders and managers, and tailors its commitment with their ambition in mind.



Appendices

Wind Data Portal products comparison and technical details

	Variables	Horizontal Res.	Temporal Res.	Heights	Deliverables	Available Period	Format	Compatibility	Delivery Time
Onshore Met Mast									
Advanced*	WS ¹ , WDir ²	3-11km	1h	10-300m	Time Series	≥ 10 years	CSV, JPEG (wind rose)	METEODYN WT, Excel, Python	Hours
Premium CFD*	WS ¹ , WDir ²	50m	1h	10-300m	Time Series	≥ 10 years	CSV, JPEG (wind rose)	METEODYN WT, Excel, Python	Days
Offshore Met Mast									
Advanced*	WS ¹ , WDir ²	3-11km	1h	10-300m	Time Series	≥ 10 years	CSV, JPEG (wind rose)	METEODYN WT, Excel, Python	Hours
Premium CFD*	WS ¹ , WDir ²	50m	1h	10-300m	Time Series	≥ 10 years	CSV, JPEG (wind rose)	METEODYN WT, Excel, Python	Days
Powered by SARWind® Technology**	WS ¹ , WDir ²	500m	1h	100, 150 & 250m	Time Series	20 years	CSV, PNG (wind rose)	Excel, Python	Hours to 2 weeks
Climate Change Analytics									
Premium	WS ¹ , AEP ³	11-44km	Monthly	10-300m	Statistical Trends	2030-2050 or 2090	CSV	Excel, Python	12-24 hours
Meso-Micro Coupling									
Premium	WS ¹ , WDir ² & Stab. ⁴	3km	-	-	Statistical Series	1 year	Proprietary SAM file	METEODYN WT	2 weeks

* If no high-resolution data available: WRF-based Time Series on quotation
 ** Availability depending on geographical area
¹Wind Speed ; ²Wind Direction ; ³Annual Energy Production ; ⁴Stability

Access the PDF: <https://meteodyn.com/wp-content/uploads/2025/11/Products-comparison-Meteodyn-Wind-Data-Portal-1.pdf>

Scientific validations of the products

Onshore & Offshore Met Mast - powered by CFD technology:

- [Improving Wind Resource Modelling in Coastal Areas through Advanced CFD methods with integration of Mesoscale Data.](#)

Offshore Met Mast - powered by SARWind® technology:

- [High-resolution offshore wind resource assessment at turbine hub height with Sentinel-1 synthetic aperture radar \(SAR\) data and machine learning.](#)
- [High-resolution satellite observations to account for coastal gradient in wind resource assessment: application to French coastal areas,](#)
- [Mapping a New Atlas for Offshore Wind \(NA Clean Energy, 2024\).](#)

Climate Change Analytics:

- [Is global terrestrial stilling reversal really happening? Climate change-related wind resource assessment in Poland.](#)

Meso-Microscale Coupling:

- [Wind Modelling through Meso-Micro Coupling Method with Thermal Stability Effects.](#)
- [Improving Wind Resource Modelling in Coastal Areas through Advanced CFD methods with integration of Mesoscale Data,](#)
- [Meso-Micro scale coupling method for Wind Resource Assessment in Large Coastal Area in India.](#)

Additional information

More about Meteodyn WT software: [access the brochure](#).