



## PRESS RELEASE

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### BREAKING NEWS:

DeepCLiDAR, designed and built by CLS, a subsidiary of the French Space Agency in partnership with the University of Maine, has obtained Stage 2 Carbon Trust Certification, making CLS a unique global provider of integrated in-situ, radar satellite, and high-resolution modeling wind solutions for the offshore wind industry.

CLS, a global leader in Earth Observation and surveillance solutions, proudly announces the certification of its DeepCLiDAR Floating LiDAR technology. This achievement allows CLS to offer wind industry operators a unique, comprehensive, and ultra-precise combined wind resource measurement and energy assessment solution. The combination of the DeepCLiDAR innovation, together with its extensive experience of in-situ metocean data collection, satellite radar observations, data derivation, and high-resolution wind field modeling combine into its SARWind offering creates a unique suite of services in offshore wind resource assessment.

Drawing on over 30 years of expertise in site-specific metocean data collection, led by internationally recognized specialists, the global CLS Group, with a presence across 5 continents, positions itself as a unique player. Experts stationed in Europe, the USA, South Africa, Australia, Brazil, and create a strategic global footprint that enables CLS to deliver an efficient, agile, and sustainable wind resource assessment solution to the offshore wind community. With decentralized expeditions spanning the globe, CLS ensures flexibility in deployments while maintaining a commitment to sustainability.

The company has ambitious plans and has embarked on an industrial mode, establishing its production facility in Cape Town, thereby achieving self-sufficiency in its production capacity.

As the pièce de résistance, CLS achieves the remarkable feat of offering a solution with the best technical features at the most competitive price. This not only cements CLS' position as an industry pioneer but also reinforces its dedication to providing cost-effective, cutting-edge solutions for a sustainable future.

## A modular, adaptable and hurricane resistant floating LiDAR for all environments.

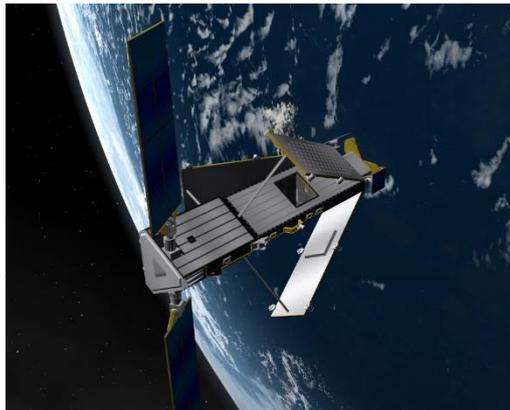
The CLS DeepCLiDAR, Floating LiDAR buoy, hull mimics the NOAA 3 Meter Discus buoy design, making it suitable as a platform deep and coastal ocean metocean measurement application.

This means that the buoy will follow the wave motion, allowing accurate wave measurements alongside other metocean and marine environmental parameters. The DeepCLiDAR can be deployed in coastal, shelf, and deep waters, providing configurable Floating LiDAR wind profile measurements at 12 levels, ranging from 19 to 300 meters above sea level, including reference levels at 38 and 100 meters.



Various configurations are possible, depending on wave conditions and local weather, for instance. As specifications vary from one project to another, its design is modular and easily adaptable, supporting a wide range of metocean and environmental sensors.

Featuring bidirectional CERTUS Iridium and cellular communication for data transmission and system management, the DeepCLiDAR buoy system is based on both cutting edge and proven technology with over 10 years of operational reliability. Self-sufficient in renewable energy through its solar panels and wind turbines, CLS' DeepCLiDAR enables the measurement and monitoring of wind profiles over extended periods without intervention, providing cost and CO<sub>2</sub> emission savings, serving as the highlight of CLS's value chain that it seamlessly complements:



- A combination of wind data provided by the Floating LiDAR that corroborates with those obtained through CLS's expertise in radar satellites,
- Enriched with high-resolution atmospheric data aggregated with artificial intelligence.

The first DeepCLiDAR buoy was produced at the Woods Hole Group facility in Bourne, MA, and, deployed at the Woods Hole Oceanographic Institute (WHOI) ASIT Floating LiDAR test site for over 7 months. The buoy withstood the impact of Hurricane Franklin, the most intense hurricane of 2023, and provided data considered as best practice level according to DNV independent analysis.

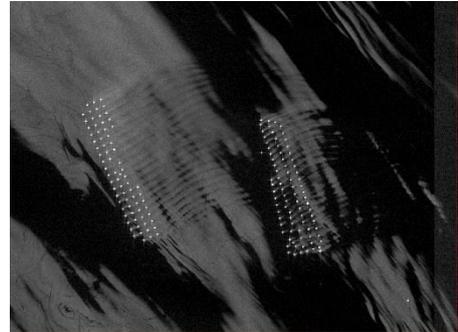


CLS Group DeepCLiDAR buoy systems are now available to the offshore wind market to provide robust, accurate, harsh environment, eco-friendly, wind resource and metocean

site characterization measurements that align with Sustainable Development Goals (SDGs) objectives.

## Wind mastery: SPACE MEASUREMENTS & High-Resolution WIND MODELLING unveil 2 game-changing components by CLS!

The DeepCLIDAR buoy system is just one part of the unique package offered by CLS. In addition to this in-situ instrumentation, the company has two more arrows in its quiver.



As a satellite data and value-added space services provider, CLS experts have developed **SARWind**: the first service combining 3 different techniques to provide offshore wind resource assessments:

- Synthetic Aperture Radar (SAR) Observations: for the measurement of surface winds.
- Machine Learning: Refining the SAR-based wind-field calculation functions through systematic error correction.
- Weather Research and Forecast (WRF) Modeling: Creating a high-resolution atmospheric model to extrapolate the wind profile.

The SARWind solution can be run anywhere in the world and support an offshore wind farm throughout the project lifetime: from offshore licensing, through design, development and construction and during full operation.

The CLS high resolution WRF wind-field modelling was enhanced 3 years ago when the group CLS acquired Meteodyn and its 30 years wind engineering, climatological and meteorological experience. Meteodyn has 55 employees and delivers high-resolution wind forecasting models to the wind industry, seamlessly assimilating, and complementing in-situ and satellite data.

### Mauricio Fragoso, Director, Energy & Infrastructures activities, CLS:

*'I am extremely proud of our teams who have worked hard and passionately for over 30 years in the offshore energy market which qualifies us now to provide the offshore wind community this unique and precise range of services, addressing the needs and challenges that we all face in this crucial phase of the 'transition towards decarbonized energy.'*



*Today, we are ready to deploy our DeepCLIDAR buoys and SARWind services wherever our clients may need them, along with the rest of our solutions that make us a reliable and experienced technical partner for offshore wind farm developments.'*

## Press Contact

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## About CLS

CLS is a global company and pioneer provider of monitoring and surveillance solutions for the Earth, created in 1986. We are subsidiary of the French Space Agency (CNES) and CNP, an investment firm. Our mission is to create innovative space-based solutions to understand and protect our planet and to manage its resources sustainably.

CLS employs **900 people** at our headquarters in Toulouse (France) and in 30 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 **100,000 transponders** per month (such as drifting buoys, animal tags, VMS transponders, & LRIT tracking) and observes the oceans and inland waters (**more than 20 instruments** onboard satellites daily deliver information to CLS on the world's seas and oceans). In addition, we monitor 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 revenue of nearly **180 million** Euros in 2023.

Committed to a sustainable planet, the company daily works for the Earth, from Space.

### 1 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 endeavors. France, represented by CNES, is the one of the main contributors to the European Space Agency (ESA). [www.cnes.fr](http://www.cnes.fr)

### 2 CNP

CNP is an investment firm founded by Mr. Albert Frère and exclusively managed by the Frère family. CNP invests its permanent capital for control or joint-control of European industry leaders and acts as an active partner to drive sustainable value creation alongside the founders, management and families it associates with. Together with GBL, CNP is one of the 2 pillars of Groupe Frère that manages net assets of approximately € 5.5Bn. [www.cnp.be](http://www.cnp.be)