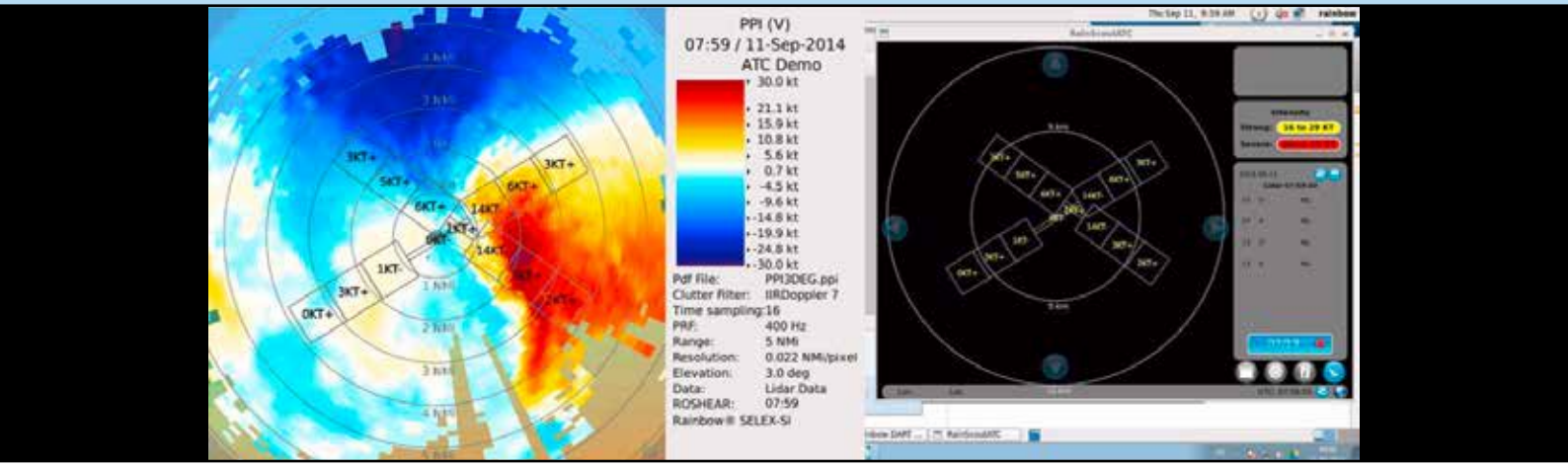
WIND POWER | WEATHER & CLIMATE | AVIATION WEATHER | AIR QUALITY & INDUSTRIAL RISK

WINDCUBE 400S-AT

AVIATION LIDARS

WIND SHEAR

Leosphere, worldwide leader in atmospheric Lidars, offers reliable solutions for mitigation of wind hazards in airports



Rainbow®5 software with its interface for the generation of wind shear alerts

Wind shear detection in airports: a major concern for pilots and controllers

- Adverse weather represents one of the major causes of accidents that occur during takeoff and landing
- Wind shears involving headwind or tailwind changes of 15 knots or more have been identified by ICAO as a serious danger which could adversely affect aircrafts's lift and air traffic operations (go-around, delays, rerouting)

Windcube®: an ICAO compliant turnkey solution

- Real-time detection of wind shear with an **automatic alert generation** for air traffic controllers
- Help weather forecasters to establish **warnings** with a regional 3D wind and wind shear mapping
- **Complementary sensor to X-Band radars** for an all-weather wind shear detection system

Key Features

- Next generation industrial-grade Lidar systems for wind and wind shear measurement
- Very compact and robust system
- Cost-effective and low-maintenance technology
- Compatible with AWOS
- Local dedicated services for maximum uptime

LEOSPHERE
THE ATMOSPHERE IS YOURS

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WINDCUBE 200S

AVIATION LIDARS

WAKE VORTEX

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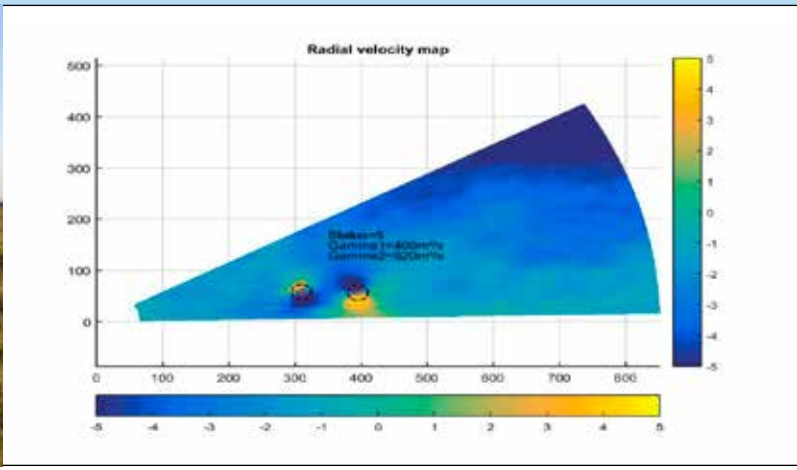
offers reliable solutions for mitigation of wind hazards in airports**



Windcube 200S deployed by Eurocontrol in the frame of RECAT operational deployment in CDG Airport

Air traffic growth requires to optimize separations between aircrafts

- Air traffic is currently regulated with minimum distance separations that could certainly benefit from a more comprehensive understanding and risk mitigation of the air traffic wake vortex behaviour
- Growing interest, worldwide, in initiating operational wake turbulence programs for **optimizing runway throughput**
- New regulations to be implemented within the next years: RECAT, TBS, other WDS...

Windcube enables the deployment of new wake turbulence operational concepts

- Wind and EDR assessment for preliminary opportunity analysis related to weather-dependent separation concepts
- Wake vortex data collection (detection and full characterization) for safety assessment
- Actual field monitoring of the wake vortex encounter events during safety monitoring phases
- Real-time wind monitoring along the glide to feed ATC systems
- Already used in Japan and Europe through CARATS and SESAR programs

Key Features

- From data collection campaigns to **turnkey safety** cases and permanent wind monitoring equipment
- High fidelity and accurate wind and wake vortex data, validated against aircraft information
- Industrial grade fiber optics wind Lidar, proven on a fleet of more than 600 units deployed worldwide
- Cost-effective installation and easy-to-maintain
- Compact and movable system to cover all areas of interest

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