

# SkyCast<sup>®</sup>

## Wind and Thermodynamic Profiling System



*SkyCast* is an integrated wind and thermodynamic profiling system (WTPS) that includes all needed instrumentation, data analysis, display and automated weather alert applications.

SkyCast delivers continuous, real-time:

- Temperature, humidity, and liquid water profiles up to 10,000 m AGL
- Wind profiles and wind shear characteristics to 8000+ m AGL<sup>1</sup>
- Atmospheric stability and convective forecast indices
- Development, depth and dissipation of fog events, and temperature inversions
- Evolution of low-level jets
- Presence of icing conditions

A *SkyCast* system incorporates a Radiometrics' **RAPTOR**<sup>®</sup> Radar Wind Profiler, **MP-3000A** Microwave Thermodynamic Profiling Radiometer, system control and display software, and optional Acoustic Wind Profiler (sodar).

*SkyCast* systems are available in fixed or mobile configurations, with either boundary layer or tropospheric radar wind profilers.

Radiometrics offers installation and site acceptance testing, tailored training for operators, forecasters, and administrators, and long-term support options.



Mobile SkyCast system with RAPTOR<sup>®</sup> XBS-BL Boundary Layer radar wind profiler

Monitoring rapidly changing conditions in real-time is critical for forecasters to provide timely and effective support for airport and aircraft operations in hazardous weather conditions.

RAOB Sounding Toolkit provides users with the ability to generate hundreds of forecast indices and manipulate soundings manually to more readily assess the impacts on future atmospheric conditions.





### ROAB Skew-T and forecast indices, SkyCast system at NASA Kennedy Space Center

<sup>1</sup> Dependent on RWP system offered. Contact Radiometrics for details. 771 Eureka Way, Frederick, Colorado 80516 USA

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www.radiometrics.com

*SkyCast* includes the powerful *VizAir*<sup>™</sup> software suite which provides comprehensive and easy to use nowcasting and visualization tools for operational weather support of critical airport and space launch facilities.

VizAir functionality includes:

- Intuitive, information-rich displays
- Integrated Wind Shear Alerting System (IWAS)
- Sounding toolkit with selectable forecast indices
- Detection and Trending for:
  - Inversions
  - Turbulence
  - Icing
  - Fog

Wind shear calculations and alerts are based on FAA or ICAO standards, and are updated every 5 minutes.

*VizAir* outputs are fully customized for runway orientations, user-defined wind shear alerts, and alert text broadcasts.



SkyCast<sup>®</sup> Summary

#### VizAir<sup>™</sup> decision support software showing real-time Skew-T with forecast indices and wind shear alerts



VizAir<sup>™</sup> display showing real-time time-height wind barbs and wind shear alerts

Radiometrics is a world leader in ground-based remote sensing systems and is located near Boulder, Colorado, a recognized center of advanced meteorological research and product development. We offer a broad range of microwave profiling radiometers, acoustic and radar wind profilers, SkyCast systems. Radiometrics was founded in 1987 and has an extensive global installed base of sensors and systems with a well-earned reputation for strong customer support.

#### Headquarters

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