

HALAS **NEXT GENERATION ATMOSPHERIC INTELLIGENCE**

Gathering highly-accurate and near real-time atmospheric observations at a desired time and location can be difficult, time-consuming and expensive for commercial, defense, and space organizations that need up-to-the-minute information. HALAS Data-as-a-Service (DaaS) delivers the information you need, without the capital expenditure and long-term asset management, delivered in minutes.



NEAR REAL-TIME ATMOSPHERIC OBSERVATIONS

Honeywell's HALAS is a transportable, remotely-operated, steerable, ground-based weather information system for near real-time, high-altitude atmospheric observations.



BENEFITS BY APPLICATIONS

Commercial Weather

Meteorologist, forecasters, and prediction models will gain better insight with more observations at a faster cadence.

Space Launch

Go/No-Go support teams can make informed decisions with up-to-the-minute atmospheric information for launching in marginal weather conditions.

Test & Evaluation / Hypersonics

Increased spatial and temporal accuracy at times of interest provides data during the test. Gain density measurements at altitudes unreachable by traditional balloon methods.

Research and Academia

Continuous observation capabilities over longer time periods provide a full view over a desired time window.

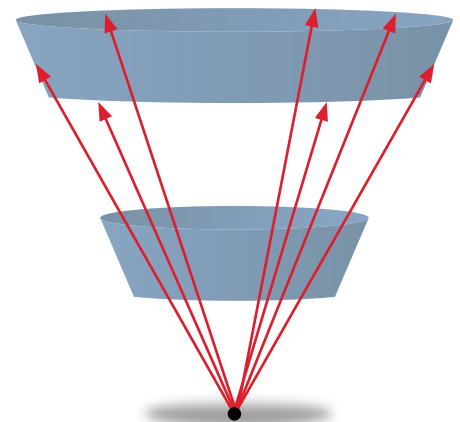
DATA PRODUCTS

- Wind Speed & Direction
- Density & Pressure
- Temperature
- Wind Shear
- Humidity
- ...and more

BENEFITS

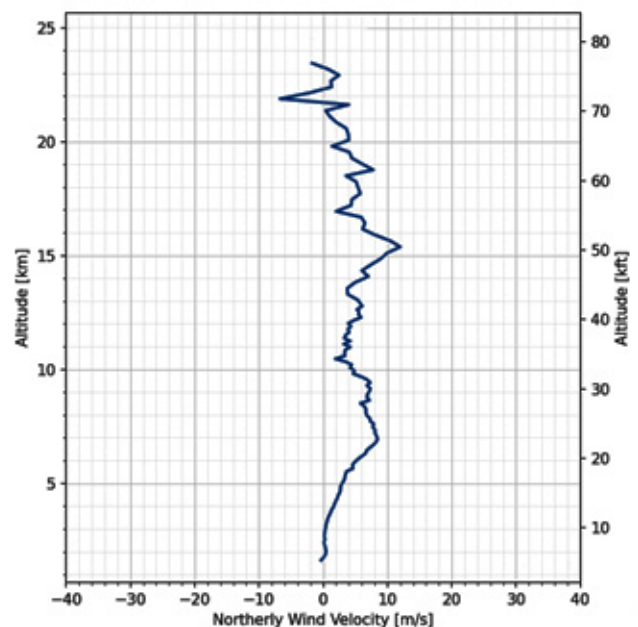
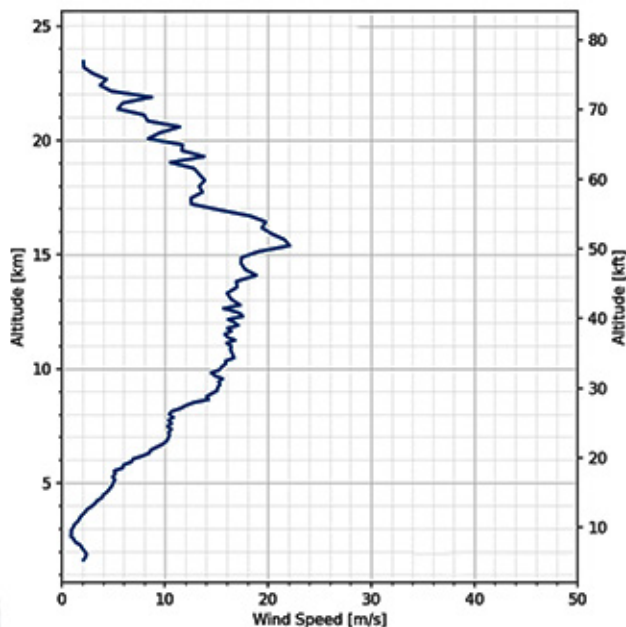
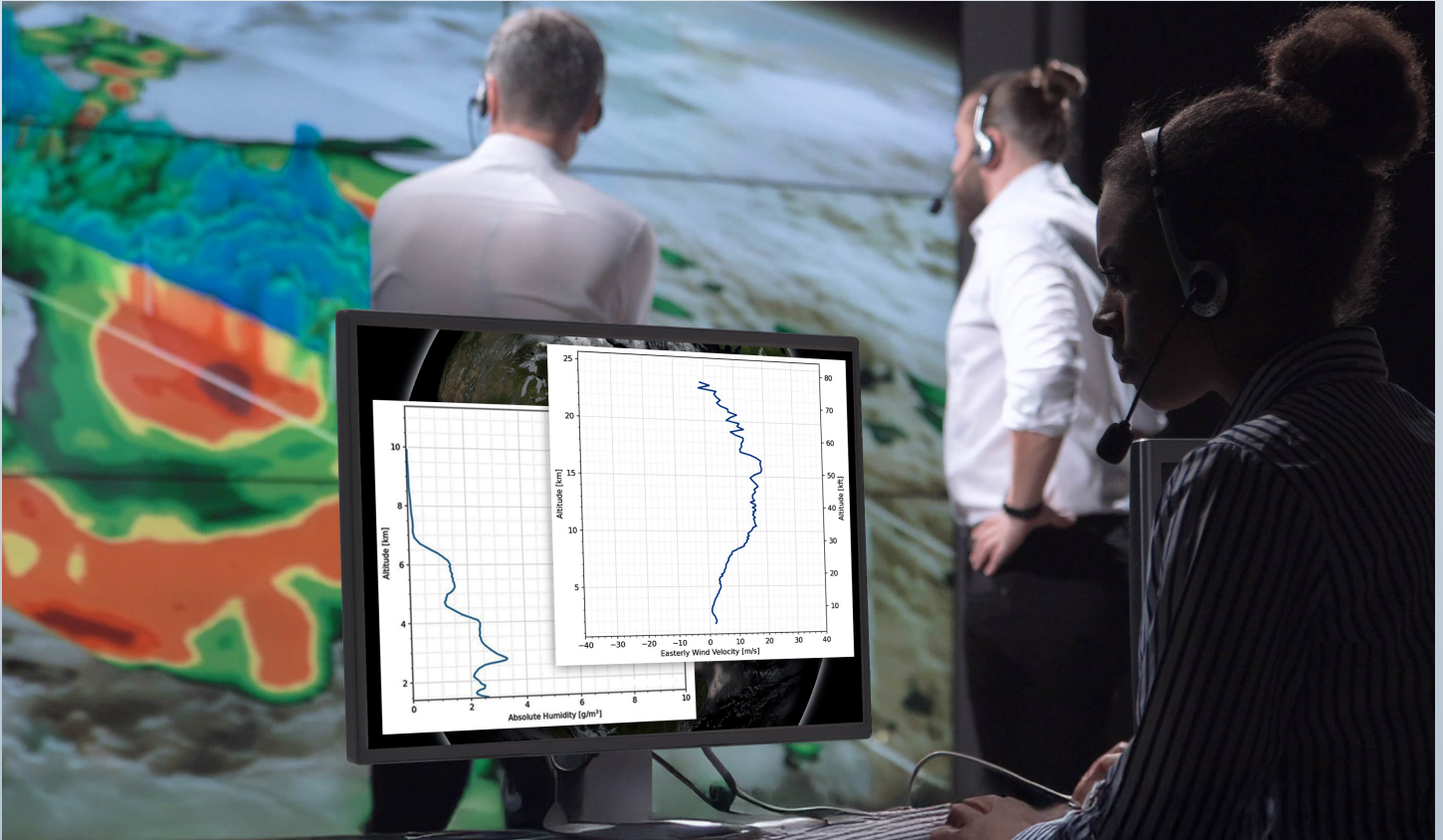
- **Fast Results:**
Atmospheric profiles in minutes
- **Improved Data Quality:**
Time averaged
- **Location Relevant:**
Observations at times and areas of interest
- **High Altitude:**
Results up to and exceeding 30km
- **Remotely Operated:**
For dangerous or difficult locations
- **Transportable:**
Relocate to suite your needs
- **Bespoke Observations:**
Selectable data products, altitudes, and measurement frequency
- **Lower Cost:**
Reduced per-measurement cost, Data-as-a-Service (DaaS)
- **Zero consumable waste**

Typical Scan Profile
(60° elevations)



ATMOSPHERIC INTELLIGENCE

When time and location are critical for decision making, HALAS can be trusted to deliver the results in near real-time.



HARDWARE SPECIFICATIONS

DATA PRODUCTS	
Wind Speed / Direction	Wind Shear
Temperature	Humidity
Density	Cloud Height
Extinction	Optical Turbulence (C_n^2)
GHG / Aerosols	...additional products coming soon

PHYSICAL	
HALAS Enclosure Dimensions:	20' L x 8.5' W x 11' H
HALAS Deployed Height:	18'
HALAS Weight:	24,000 lbs.
Support Container Dimensions:	10' L x 8' W x 8.5' H (if applicable)
Support Container Weight:	5,000 lbs. (if applicable)

POWER REQUIREMENTS	
Source:	Shore power preferred; generator acceptable
Voltage:	208 V / 3 PH
Current Draw:	100 A max, <40 A typical
Power Connection (HALAS side):	16 Series, Cam-type, male, single pole connector (5x) (<i>Honeywell provided</i>)
Power Connection (Supply side):	16 Series, Cam-type, female, single pole connector (5x) (Customer provided) -or- Direct wire, 4x 2/0 AWG (3 phase & neutral) + 1 (ground)
Power Cable:	16 Series Cam-type, single pole, male-to-female (5x) (<i>Honeywell provided</i>)
Power Cable Length:	50' (<i>Honeywell provided</i>)
Earth Ground:	Customer provided, connecting to HALAS enclosure

OPTICAL	
Laser Wavelength:	354.7 nm
Average (Max) Laser Power:	10 (16) Watts
Laser Pulse Repetition Rate:	10 Hz
Laser NOHD:	~2.75 km (9000 ft)
Transmit Diameter:	8 cm
Received Diameter:	60 cm
Current Approvals:	Federal Aviation Administration, Laser Clearing House

OPERATIONAL	
Operational Temperature:	-20° to 120° F
Operational Humidity:	0 to 95% Relative Humidity
Pointing Direction Range:	0-360° (azimuth) 0-90° (elevation)
Operating Modes:	Onsite, Remote
Communication:	Satellite, Cellular, Ethernet, Serial

SITING / INSTALLATION	
Storage/Transport Temperature:	-40° to 120° F
Storage/Transport Humidity:	0 to 100% Relative Humidity
Pad Surface:	Flat, Level, Non-Compressible
Pad Support:	6 mounting feet (>2000 psi concrete recommended, firm ground acceptable)
Recommended Pad Size:	30' x 14'
Drainage:	HVAC condensate only
Truck Offloading Options:	Forklift from side Crane from overhead (<i>No tilted flatbed loading</i>)

For more information

To find out more about HALAS, please email:
jason.pendlum@honeywell.com or
 call/text us at: 480-901-3331.

Visit our webpage



Honeywell Aerospace Technologies

12001 Minnesota 55 Service Rd.
 Plymouth, MN 55441
aerospace.honeywell.com

N61-2447-000-003 | 05/25
 © 2025 Honeywell International Inc.

THE
FUTURE
IS
WHAT
WE
MAKE IT

Honeywell