



Aeroqual Monitoring Systems



Who We Are

We help clients save time and money implementing geotechnical, structural and environmental monitoring programs by providing industry-leading hardware and software solutions.



Monitoring Tools



Wireless Dataloggers



Web-Based Software

Meet the Team



What We Believe

We believe that by sourcing the world's most advanced technology, we can solve even the most pervasive monitoring problems to make your life easier and save money. To that end, we provide the best and most appropriate data-to-desk solutions, by leveraging our experience and expertise to develop innovative, state-of-the-art, turnkey solutions comprised of industry-leading hardware and software.

Application Examples

Customers that Rely on Specto Technology

AECOM

ARCADIS



GEI
Consultants



**HALEY
ALDRICH**

HNTB

JACOBS

Kiewit

**LA
DWP**

LANGAN

MOSH



RAMBOLL

ROUX



sixsense

Stantec

Terracon



TESLA

wsp

aeroqual[®]

Air Monitoring Made Easy

Actionable Data to Build Reputation and Dismantle Risk on your
Remediation Project



Aeroqual Connected Air Monitors

Two-way Integration | Cloud Storage | Real-Time Data and Alerts



6,582 Global

100 Regional Partners

7M+ datapoints /day

99% Data Uptime

► Air Quality Sensor Technology



Inert sampling cane and pump for precise flow in all conditions



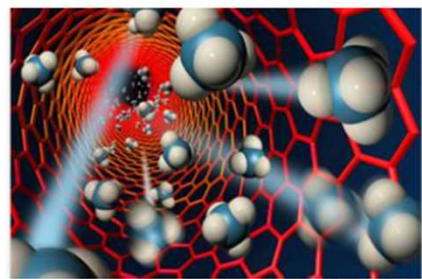
Inlet filters ensure hygiene and integrity of gas sample



Heated PM inlet eliminates humidity effect and false positive results in your data



Unique Automatic Baseline Correction (ABC) reduces drift and calibration frequency



Part-per-billion detection in ambient air for VOCs, NO₂, O₃, BTEX and other gases



Traceable calibration for defensible data in the field



Robust and purpose-designed for outdoor environments increases uptime



2-way communication reduces site visits – troubleshoot, change settings, calibrate by mobile or PC

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AQM 65



What is it?

A compact air quality monitoring station which delivers defensible data for up to 20 gaseous and particulate pollutants and environmental parameters simultaneously

Advanced sensor-based analyzer modules are designed to be calibrated in situ using Standard Reference Materials for best practice

Proven long term performance in extreme climates with advanced temperature and humidity control

Modular design for ease of maintenance and optional integrated automated calibration

Near Reference data is traceable to EPA 40 CFR Part 53 and EU 2008/50/EC certified equivalent methods

Who is it for?

- Urban air monitoring networks
- National air monitoring networks
- Roadside air monitoring
- Industrial perimeter monitoring
- Environmental impact assessments
- Research and consultancy projects
- Short term hot spot monitoring



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AQS 1



What is it?

Reduce downtime with this robust purpose-built air quality station to measure dust fractions (PM_{10} , $PM_{2.5}$, PM_1 , TSP), gases (VOCs, NO_2 , O_3), weather and noise

Industry leading gas sensing technology from Aeroqual

Set up in minutes for actionable data via PC or mobile

2-way communications reduces site visits with – remotely troubleshoot update settings, software, and calibrate

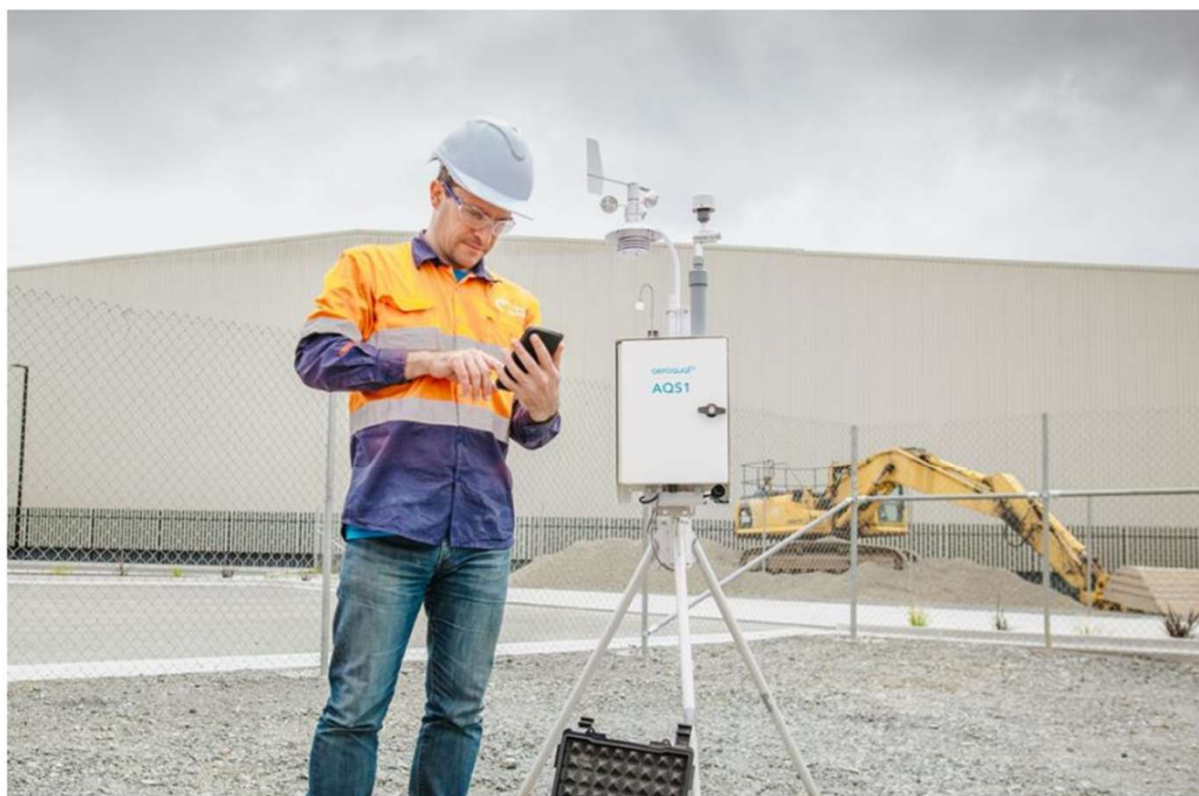
Plug in all your devices and view data in one dashboard

Power up with solar and battery systems

Configure real-time email / SMS alerts

Who is it for?

- Construction and remediation projects
- Quarry and mine operators
- Waste management sites
- Oil and gas fenceline
- Environmental consultants
- Regulatory authorities
- EHS managers
- NYSDEC DER-10 CAMP



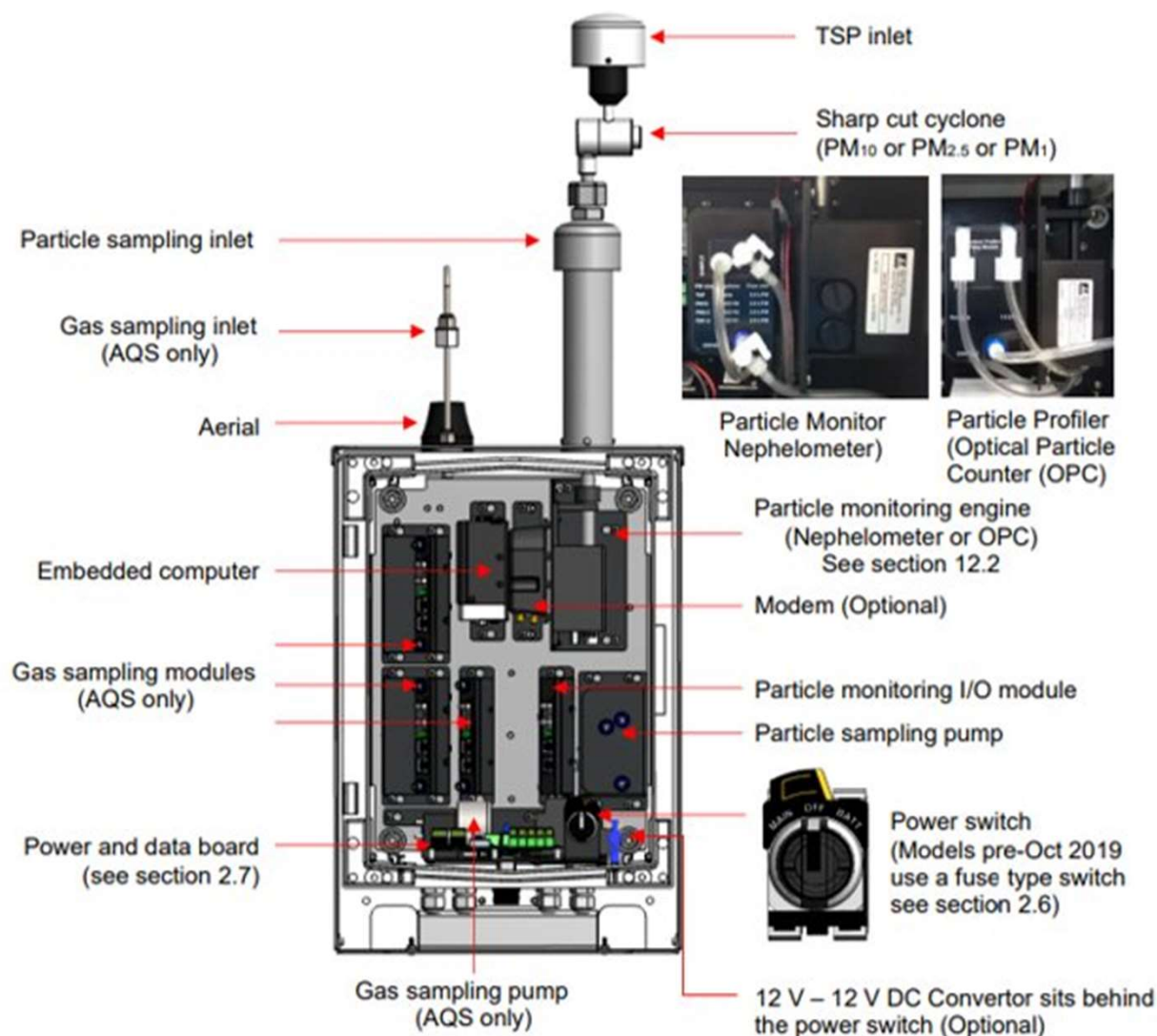
► Aeroqual Monitoring Systems



All-in-One Solution

- Real-time PM₁₀, PM_{2.5}, PM₁₀ or TSP
- Optional VOCs, NO₂ or Ozone
- Total Wind and noise sensors
- Built-in heated inlet
- Weatherproof, solar shields
- Wi-Fi and cellular connectivity
- Battery/solar power compatible
- Cloud software, SMS/email alerts
- **NYSDEC DER-10 CAMP compliant**

► Aeroqual AQS1



Sensor-based analyzer modules are designed to:

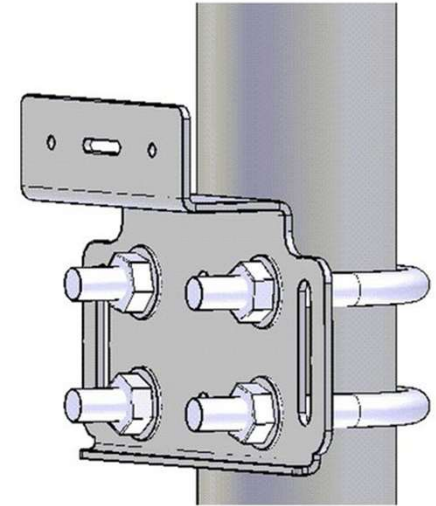
- optimize performance
- extend operating life
- reduce drift, noise (Automatic Baseline Correction)
- adjust for humidity
- reduce minimum detection limit

► Service schedule

AQS1 service schedule (manufacturer's guidelines)

Service activity	Section	Service frequencies
Gas inlet filter change	6.5.3	4 – 12 weeks. Initially 4 weeks. Later this can be modified to suit local conditions and data quality objectives.
PM inlet filter change	6.5.5	4 – 12 weeks. Initially 4 weeks. Later this can be modified to suit local conditions and data quality objectives.
PM inlet flow check	6.5.6	4 – 12 weeks. Initially 4 weeks. Later this can be modified to suit local conditions and data quality objectives.
Gas inlet flow check (module flow and leak checks if required)	6.5.4.1	4 – 12 weeks. Initially 4 weeks. Later this can be modified to suit local conditions and data quality objectives.
PM leak check	6.5.7	Every 3 months
PM zero check	6.5.8	Every 3 months
PM zero flow check	6.5.8	Every 3 months
PM inlet cleaning	6.5.9	Every 3 months
Change sampling pumps (dust monitor and gas)	6.5.10	Every 12 to 18 months or if flowrate cannot be set correctly
Factory calibration of optical engine	6.6	Every 24 months (2 years)
Gas module calibration	5.1	Field calibration every 1 – 3 months, or factory calibration every 12 months (depending on project requirements)

► Installation Options



► Installation Options



► Installation Options




► Power Options



► Aeroqual Ranger



Aeroqual Cloud

Connect to
Aeroqual Cloud
in **under 3 minutes** 

Compatible with **1000s** of
different monitor configurations



Get alerts via SMS / email
within **60 seconds** of an event

Our system processes over
6 million datapoints per day

Remote control **over 100s**
of monitor settings

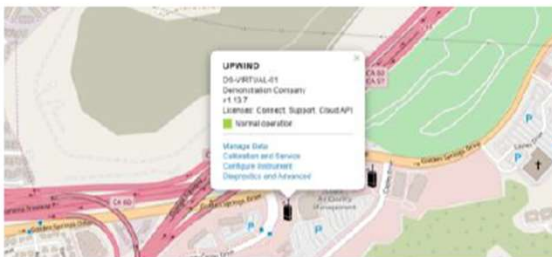
Achieve greater
than **99% uptime** 



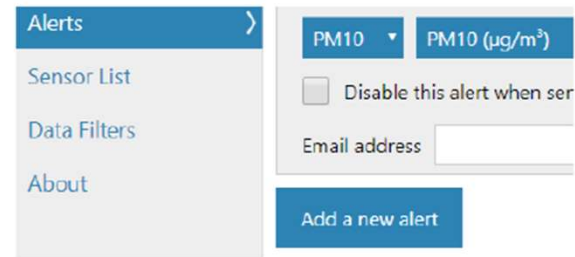
► Remote access via Cloud



Two-way communication with your monitor.



Remote access to your data in real time (1 minute instantaneous).



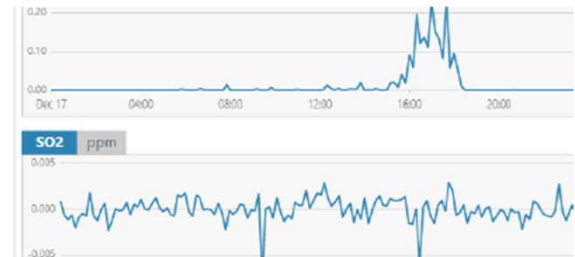
Configure text (SMS) or email alerts when readings exceed your chosen threshold.



Add a 3rd party sensor and see all your data on Aeroqual Cloud.

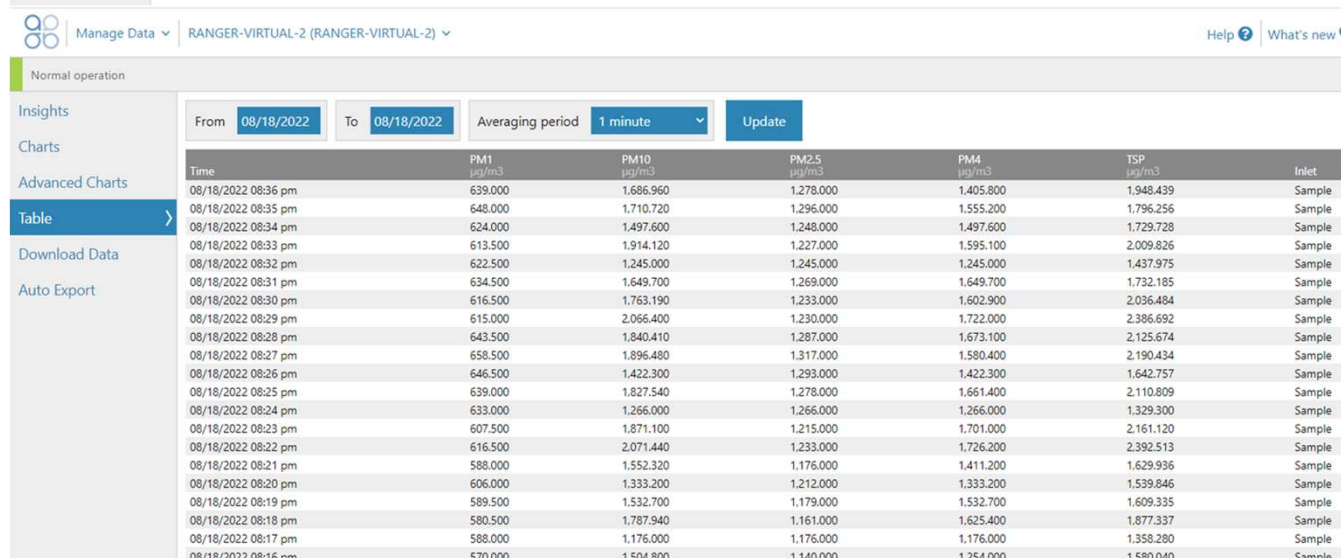
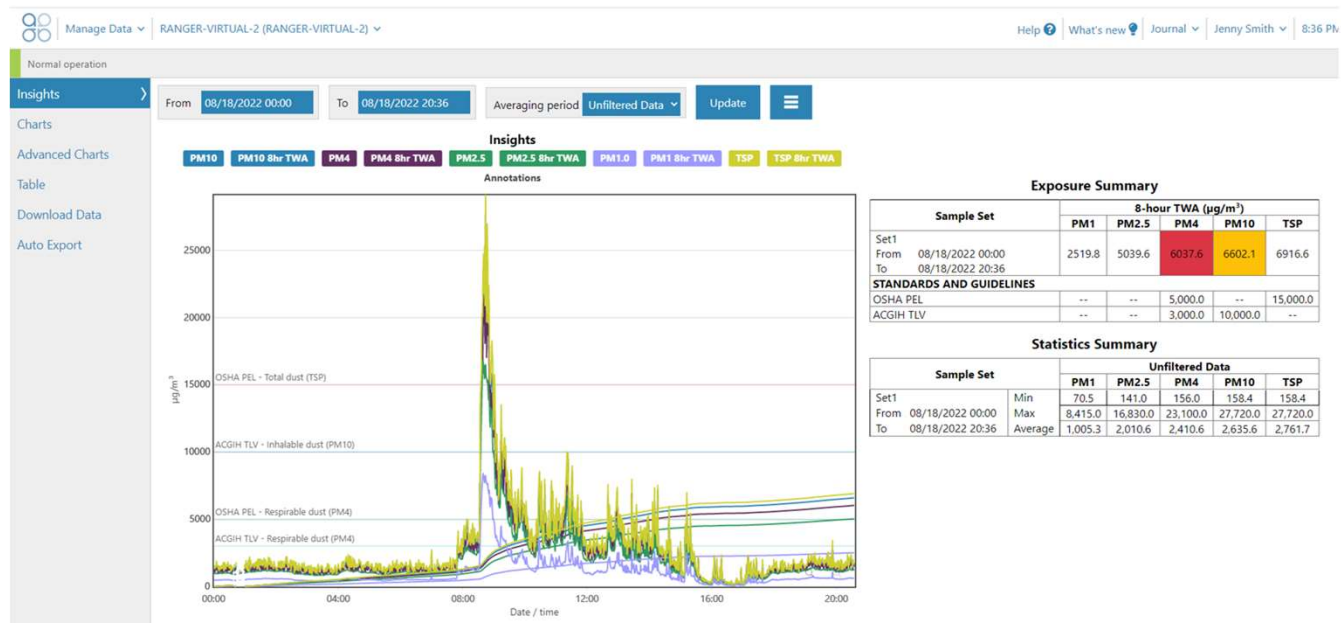
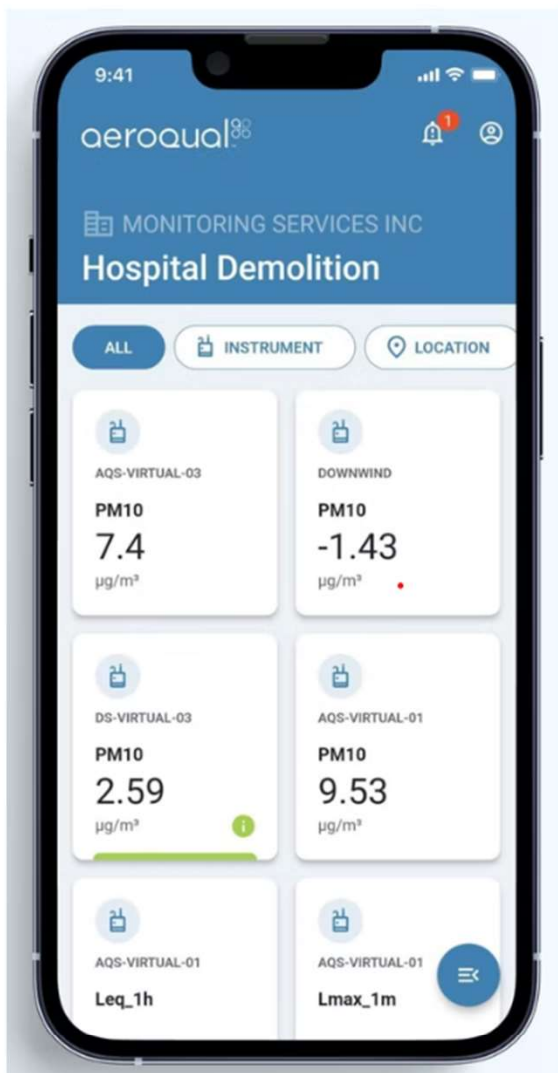


Secure data acquisition and storage on Cloud.



Data access is in your control: download, email to team or export via API.

► Data Presentation



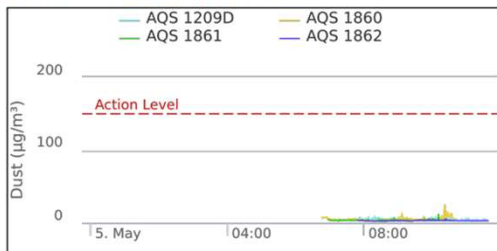
► Daily Automated Reports (Tableau)

	DAILY AIR MONITORING REPORT 1061 E Elizabeth Ave Linden NJ				Date: 05-05-2022	
					Dust Action Level	150 µg/m³
					TVOC Action Level	0.5 ppm

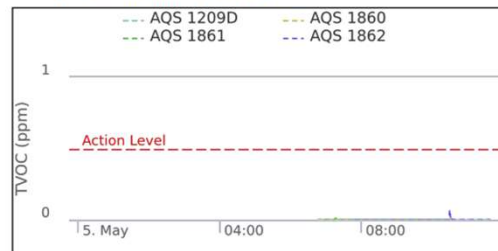
Weather Date Range for Work Day	Wind Direction	SSE	Relative Humidity (%)	46.1	81.4	Daily Rain (in)	0	Work Area:
Temp (°F)	53.6	64.2	Wind Speed (MPH)	2.1	10.2	Barometer (inHg)	30	30

Station location Work Area	Daily Avg Dust Concentration (µg/m³)	Max 15 Min Dust Concentration (µg/m³)	Daily Avg. VOC Concentration (ppm)	Max 15 Min VOC Concentration (ppm)
AQS 1209D	3.996	7.82	0	0
AQS 1860	4.702	24.56	0	0
AQS 1861	3.161	11.75	0	0.01
AQS 1862	2.478	2.478	0.001	0.07

PM10 DUST MONITORING RESULTS



VOC MONITORING RESULTS



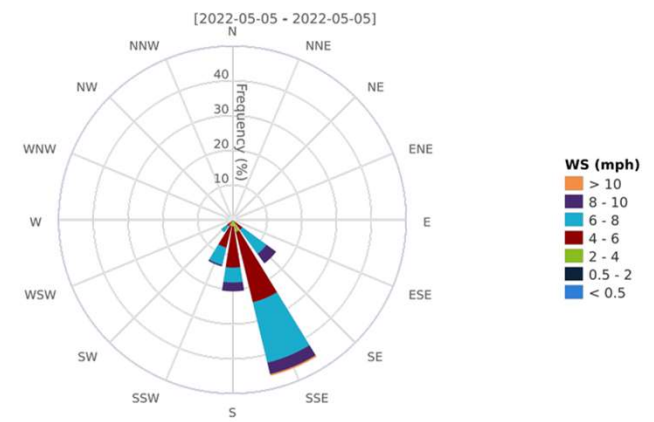
Notes:

- Design a Template
- Select Report Period
- Reports sent to your inbox

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	DAILY AIR MONITORING REPORT 1061 E Elizabeth Ave Linden NJ				Date: 05-05-2022	
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► www.SpectroTechnology.com