

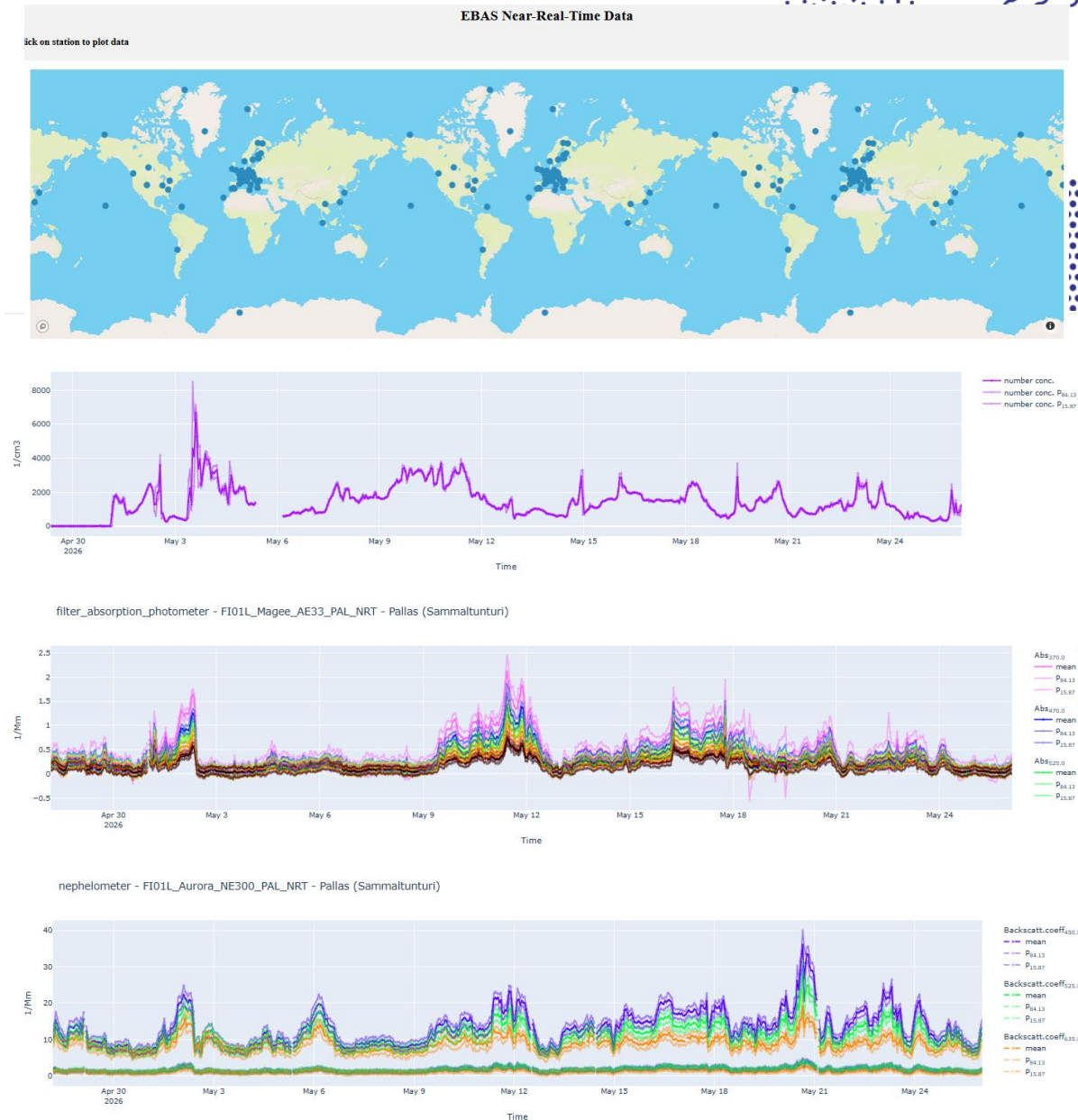
# ACTRIS labeling of Pallas AIS

- Global GAW station since 1994
- ACTRIS: initially accepted Dec 2022
- Planned variables (Ongoing 2022)
  - Absorption coefficient
  - Scattering coefficient
  - Particle concentration
  - Particle size distribution 10-800 nm
  - EC/OC semi-continuous
  - Sub 10 nm particle size distribution
  - Supermicron particle size distribution
- Station occasionally inside low-level clouds



# Improvements made

- Moved instrumentation under heated whole air inlet 2022
  - Previously in GAW- compliant "gas"-line,  $\approx 7\mu\text{m}$  cutoff
- Improved inlet drying by installing a dual nafion system 2022
- Modified flow arrangements to assure iso-kinetic- and laminar flow sampling conditions 2022
- Participated in CAIS-ECAC calibration workshops 2021-2025
  - Upgraded obsolete instrumentation not passing the calibrations 2023-2025
- Implemented Tropos NRT data acquisition software 20



# Issues

- Not all instruments passed CAIS-ECAC calibrations
  - Upgrading instruments took time -> Fulfilling required 24mo reporting coverage a challenge
- Limited resources for timely annual data submission
- New (NRT) data acquisition system -> new data submission codes
- APS dropped from the instrument list (for the moment)
- *Paperwork takes some time but is not that difficult*

At the time of step 1b Parameter	Reporting minimum 24 months	NRT data
Absorption coefficient (AE33)	X	X
Scattering coefficient (TSI3563->Aurora3000)		X
Particle concentration (Airmodus A20->TSI3750)	X	X
Particle size distribution (FMI->FMI "Trueno")		
EC/OC (Sunset 3183)	X	
Sub 10nm size distribution NAIS Airel		
Super-micron size distribution TSI APS		

**Big thanks to the CF and DC  
for all the support!**

