AEROSOL ROBOTIC NETWORK

30 Years of Observations

(https://aeronet.gsfc.nasa.gov/)

AERONET Overview and Updates

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SPARTAN Science Team Meeting, May 18, 2023



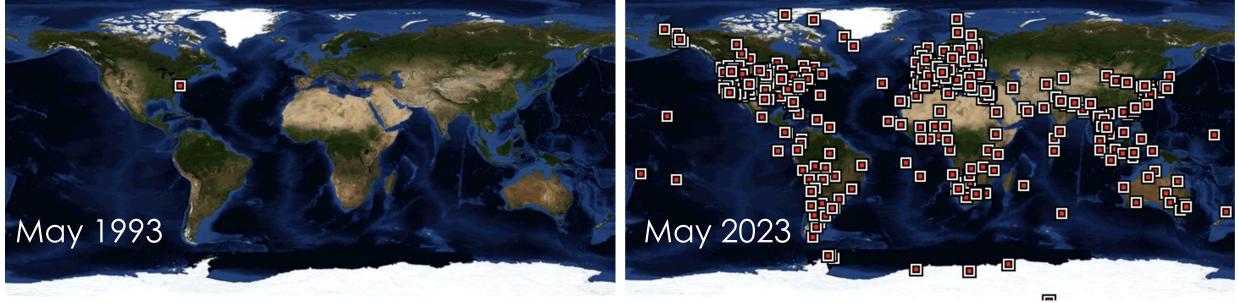
https://aeronet.gsfc.nasa.gov



AERONET: Optical, microphysical, and radiative properties for aerosol AERONET-OC: Normalized Water Leaving Radiances MAN: AOD over oceans/land SolRad-Net-solar flux network Research: Network algorithms, validation, aerosol properties Mission: MODIS, VIIRS, MISR, GOES, TEMPO, PACE, MAIA, AOS

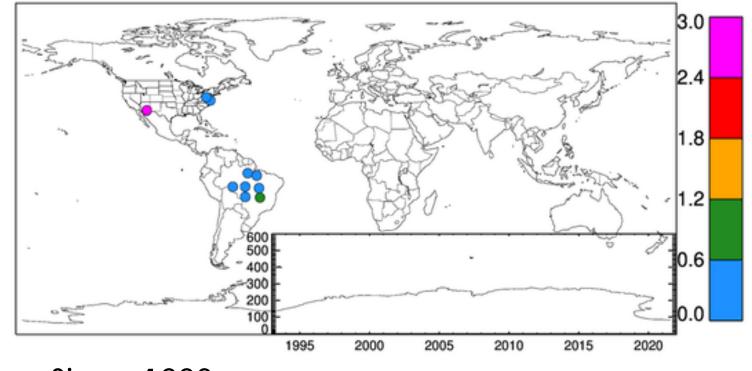
Celebrating 30 Years of AERONET





1993

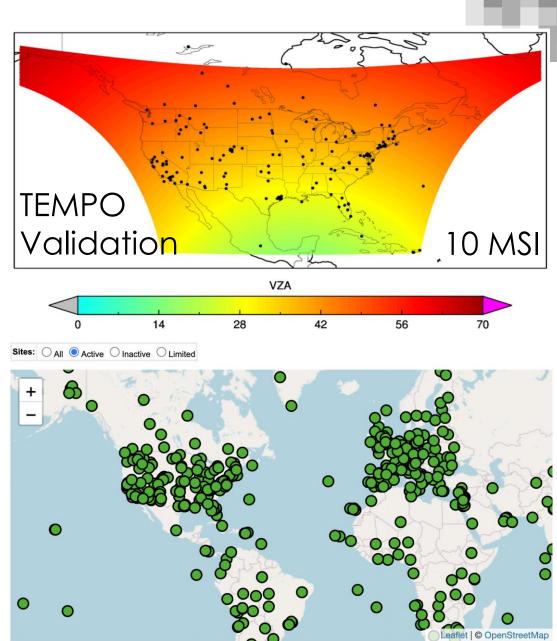
30 Years of Aerosol Measurements



- Since 1993
- Network of Networks
- ~538 Active Stations
- ~ 1500 All time stations with ~1.7 million days of data
- 102 countries and territories

Current Operation and Updates

- The network is being upgraded with a Model-T instrument.
- Continuing research on cloud screening, calibration improvement, and new product development
- Provisional Lunar data are available.
- New Calibration site in Taiwan
- Supporting field campaigns (STAQS, MAGPI, SARP-East, AEROMMA, GOTHAAM, ARCSIX, ASIA-AQ)
- Expand presence in Asia and Africa
 - Website, data format, data distribution



AERONET & SPARTAN

- How best the two networks continue to collaborate?
- Identify regions of common interest(science, AQ needs, mission) for new sites
- Connecting with satellite missions
- How best data from two networks can be served to the community?
- Is there a potential to collocate with other measurements networks (i.e. AirNow, Pandora, DoSAir)
- Collaborative research

