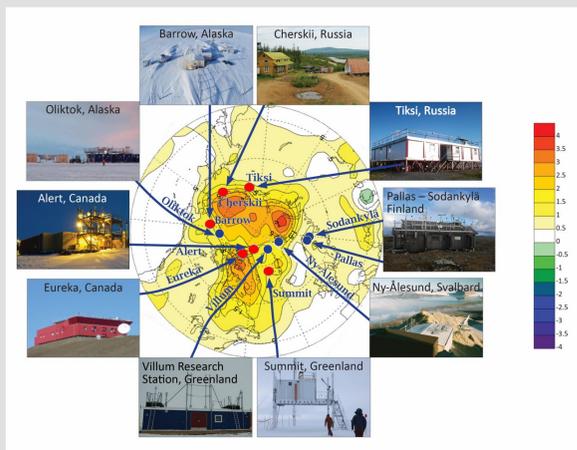


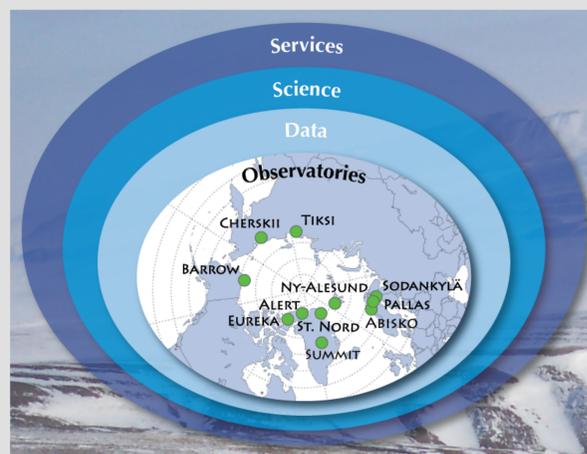
# International Arctic Systems for Observing the Atmosphere

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## IASOA Background and Mission



- IASOA implementation is led by ESRL/PSD science
- A consortium of 10 international, independently-funded observatories
- Partnering to advance understanding of Arctic atmospheric processes



<http://www.esrl.noaa.gov/psd/iasoa/home2>

## Cyber Infrastructure

### Data-at-a-Glance

- ESRL/PSD developed the IASOA data portal
- Unified discovery interface for all of the relevant atmospheric observations from the observatories
- Improved quality control of data products and documentation across the network
- 900+ datasets total; 100+ from ESRL/PSD

Category	Abisko	Alert	Barrow	Cherskii	Eureka	Ny-Alesund	Pallas-Sodankyla
Aerosol	●	●	●		●	●	●
Physical, Optical	●	●	●		●	●	●
Physical, Primary		●	●				●
Inorganic, Trace elements							●
Atmospheric State	●	●	●	●	●	●	●
Cloud Properties		●	●		●	●	●
Macrophysical		●	●		●	●	●
Microphysical			●		●		
Optical and Radiative Properties			●				
Cryosphere			●	●	●		
Greenhouse Gas		●	●	●	●	●	●
Ozone		●	●		●	●	●
POPs						●	●
Precipitation Chem						●	●
Radiometric		●	●	●	●	●	●
Reactive Gas		●	●		●	●	●
Surface Properties			●	●	●		

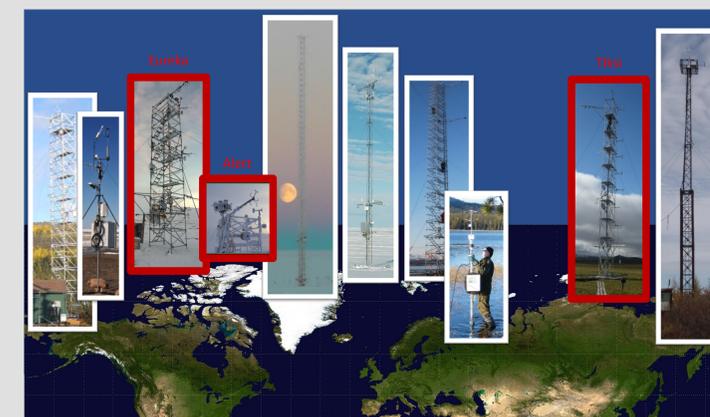
<http://www.esrl.noaa.gov/psd/iasoa/dataataglance>

## Collaboration "Infrastructure"

### Investigator-driven Working Groups

ESRL/PSD coordinates, develops and facilitates thematic Working Groups in these areas:

1. Atmosphere-Surface Exchange (Flux)
2. Aerosol Properties and Processes
3. Surface Radiation Balance
4. Arctic Clouds
5. Arctic Regional Processes
6. Trace Gases (Methane and Ozone)



### Next Steps for IASOA and PSD Research

- Peer-reviewed publications from Working Groups
- Coordinated support for Year of Polar Prediction
- Expanded use of observations into services (R2X)