HAWC / AVENIR

High-altitude Aerosol, Water vapour, Clouds
Aérosols, vapeur d'eau, nuages
et leurs interactions avec le rayonnement

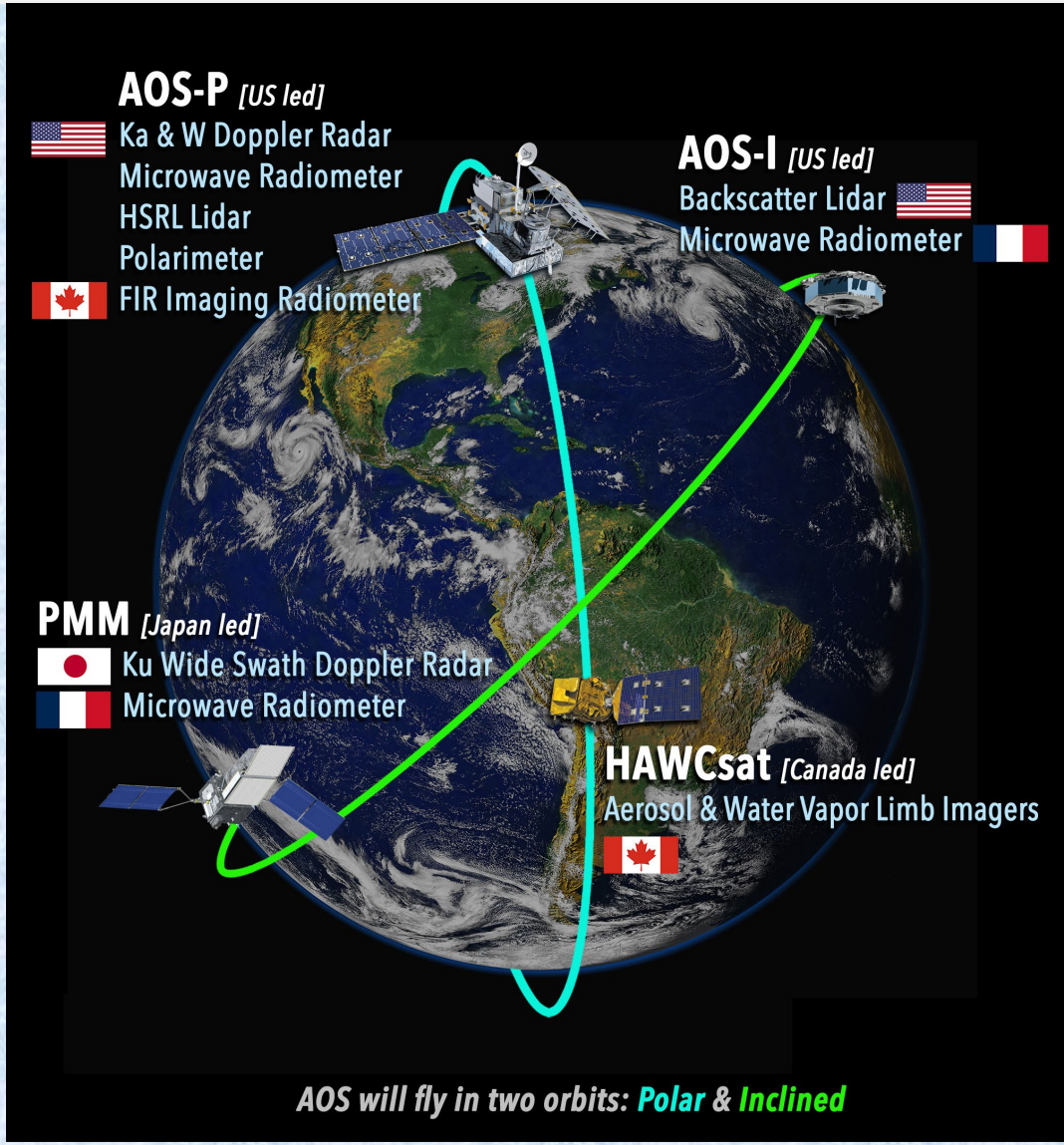
A Canadian mission contribution to the NASA Atmosphere Observing System (AOS)

Journée de la recherche en changements climatiques et environnement - Professeur(e)s

10 fév, 2023

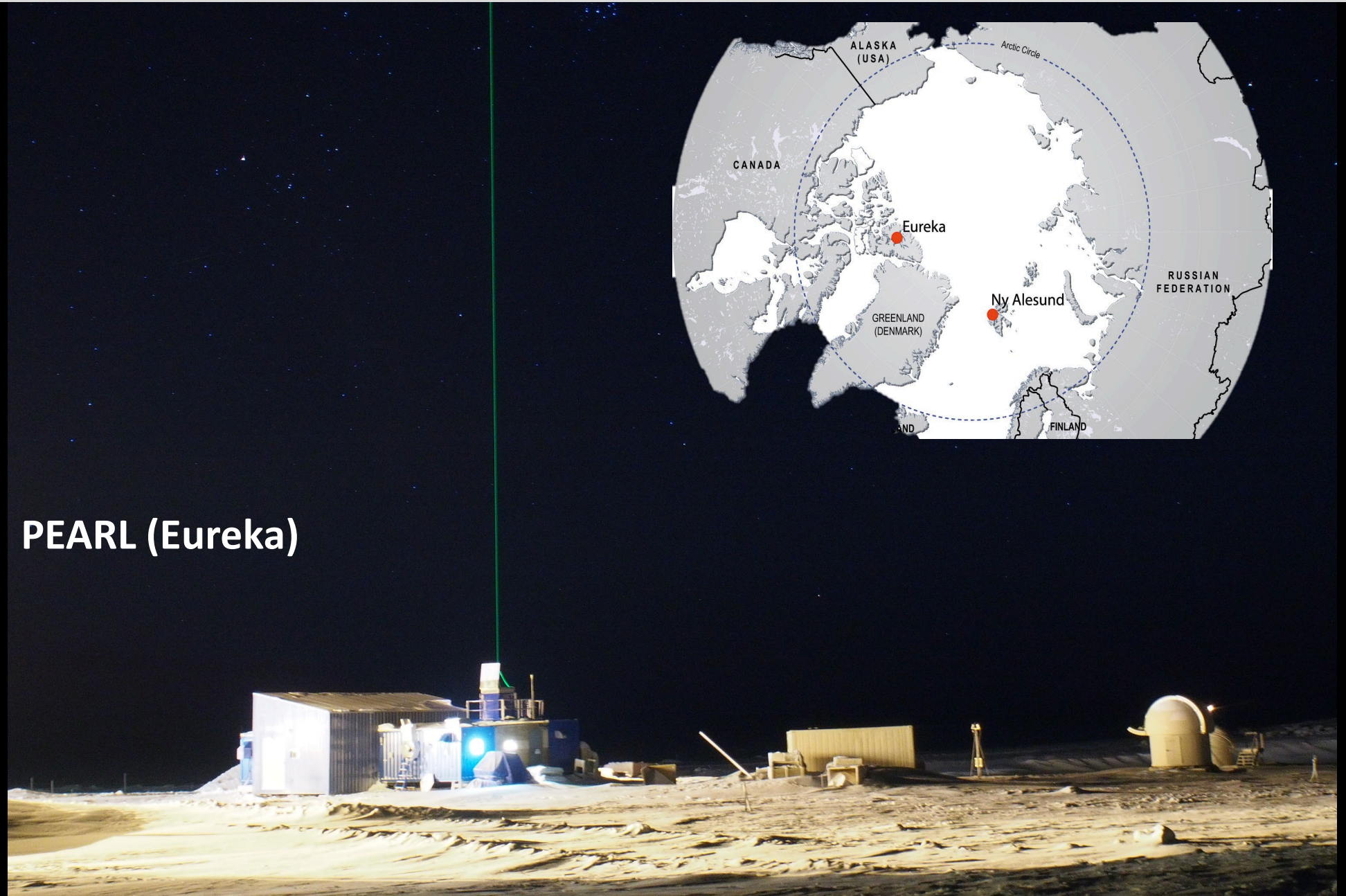
NASA Atmosphere Observing System (AOS)

- HAWC will be part of the larger AOS mission – led by NASA and with contributions from Japan, France, and Canada
- Constellation mission includes 4 satellites in two orbits, with a total of 14 instruments
- AOS science processes: convection, extreme weather and air quality
- HAWC will enhance the AOS science by focusing on UTLS measurements
- Launch of constellation 2028-2030



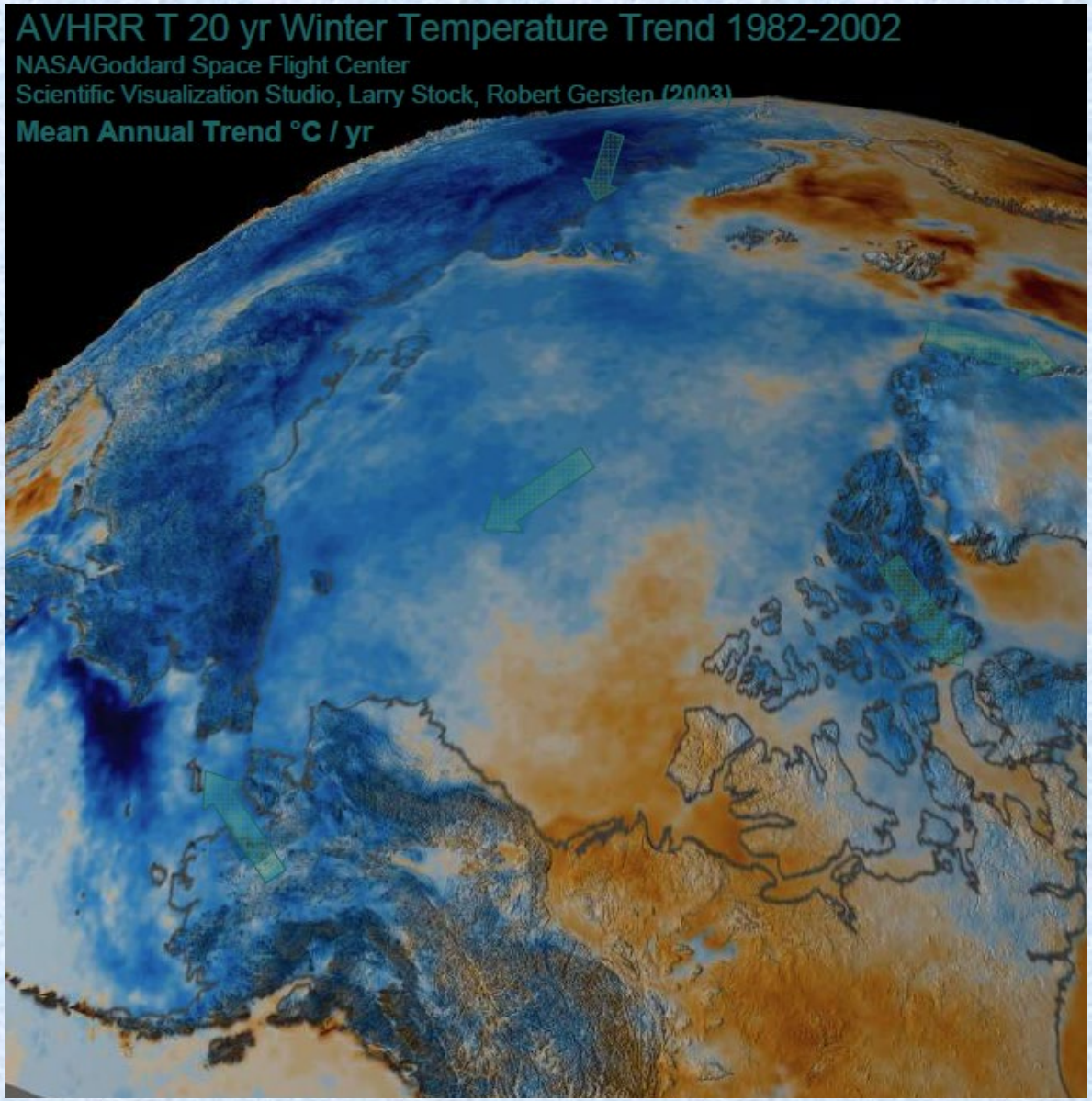
Recent results on the ground- and satellite-based remote sensing of Arctic aerosols

Recherche atmosphérique de notre groupe dans l'Arctique

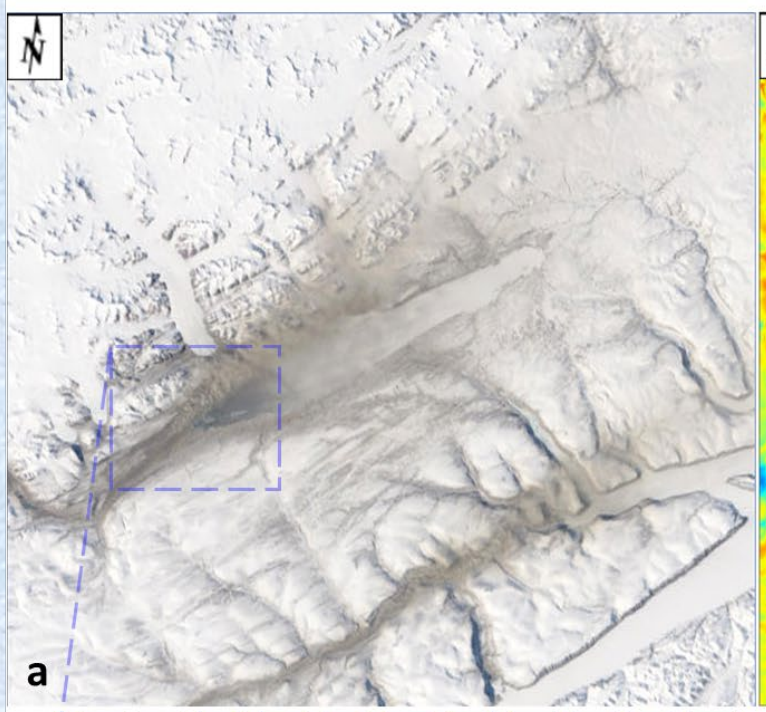


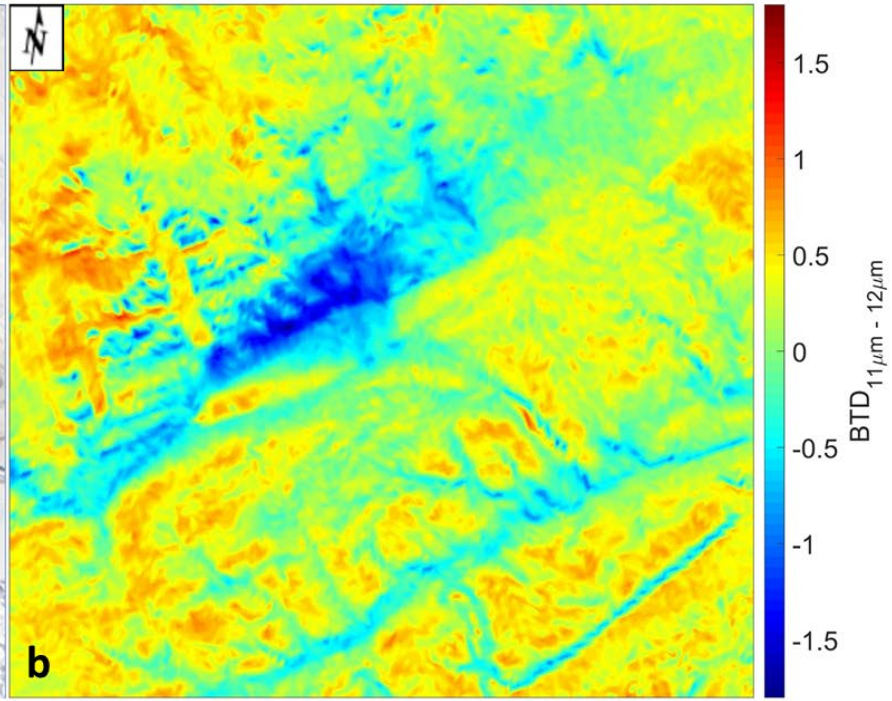
PEARL (Eureka)

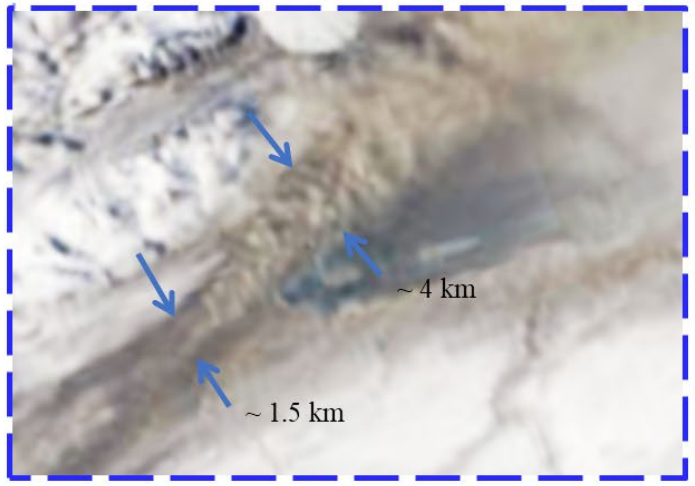
DGF effect – polar winter



Local dust plume over Lake Hazen



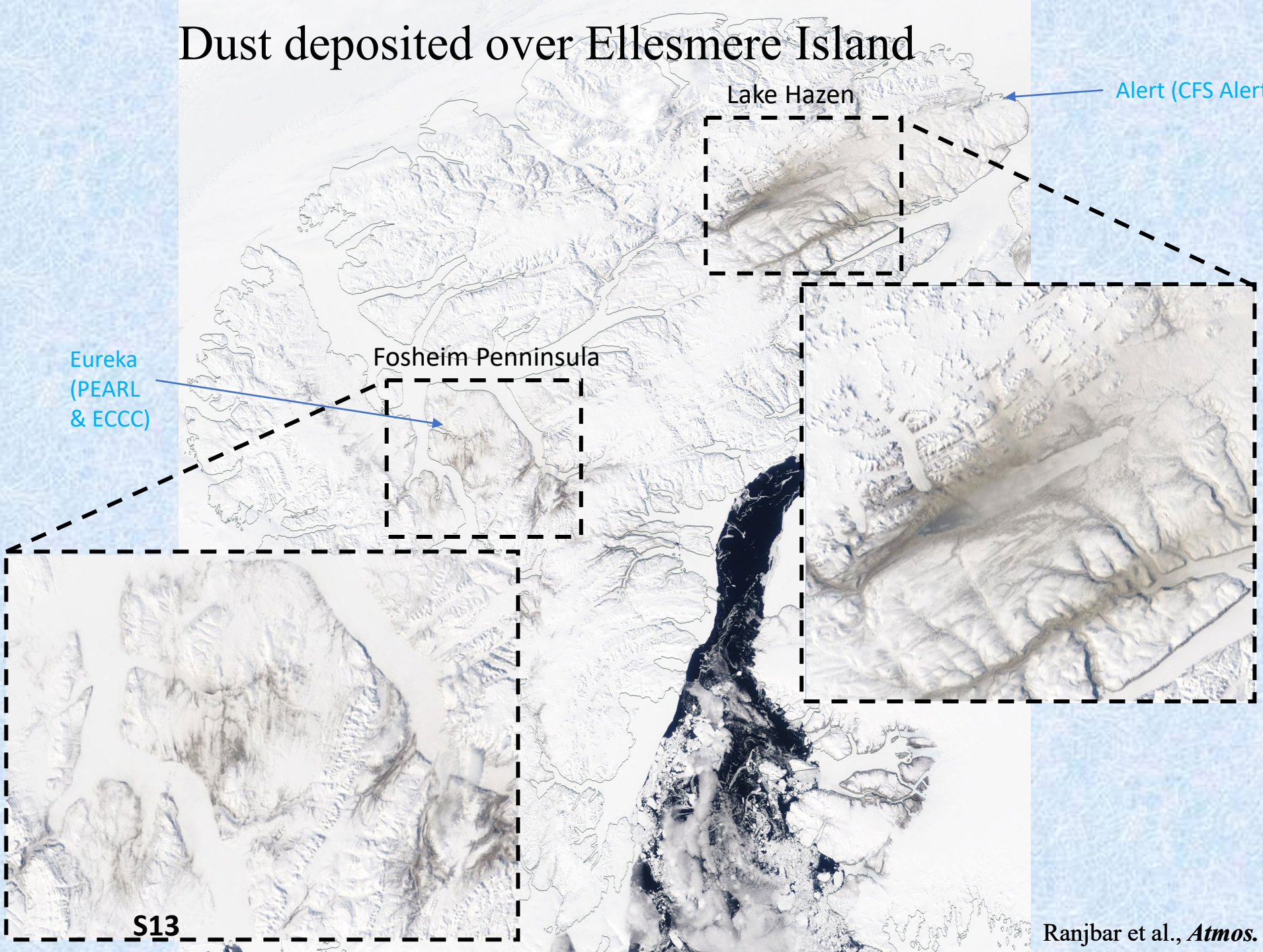




The May 19, 2014 plume as seen by MODIS

Ranjbar et al., ***Atmospheric Environment***, *2021*

Dust deposited over Ellesmere Island



Ranjbar et al., ***Atmos. Environment***, *2021*

Merci!