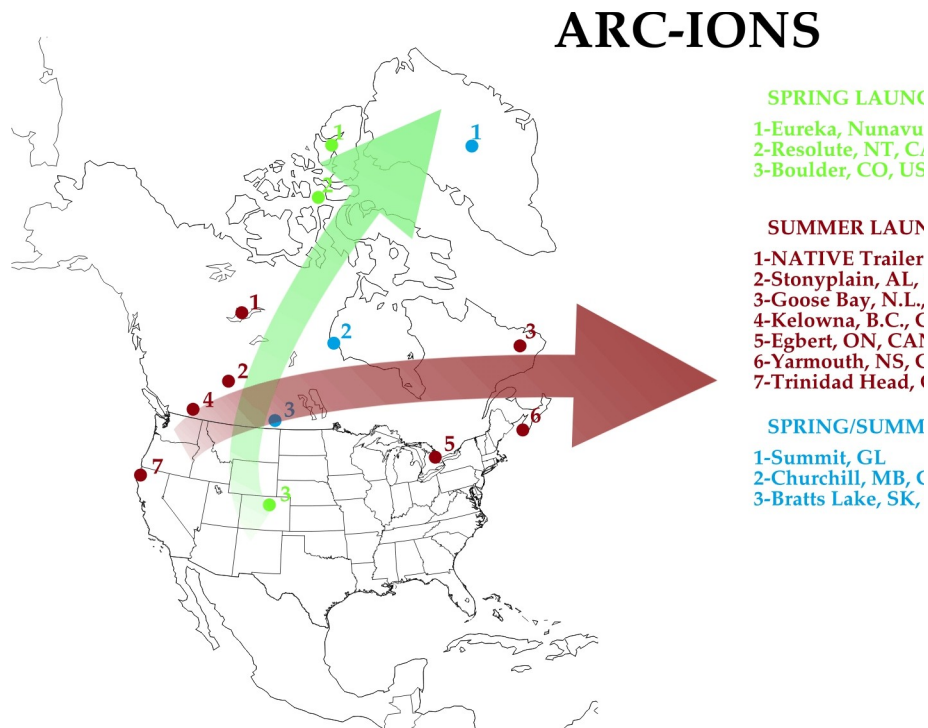


# Ozonesondes in ARCTAS

S. Oltmans (NOAA), A. Thompson (Penn State),  
D. Tarasick (EC-MSC)



- Daily ozone (with temperature, humidity and in many cases wind) profiles from surface to ~30 km for 3 weeks during each phase of ARCTAS.
- Most Canadian profiles done at synoptic sounding times (00 or 12 GMT).
- Some opportunity for timed soundings to capture events or to coincide with aircraft operations or satellite overpasses.
- A comprehensive network maximizes the opportunity to contribute to the ARCTAS science goals and satellite validation.

# Operational Requirements/Issues

## Station

North Lat. West Long.

### SPRING

*Alert, Nunavut, CAN or	82.0	80.0
Eureka, Nunavut, CAN or	80.1	86.4
Resolute, Nunavut, CAN	74.7	95.0
*Summit, Greenland	72.6	38.5
Pt.. Barrow, AK, USA	70.0	140.0
Inuvik, NWT, CAN	68.4	133.7
Fairbanks, AK, USA	65.0	140.0
Whitehorse, Yukon Ter., CAN	60.7	135.1
*Churchill, Manitoba, CAN	58.8	94.1
*Edmonton, Alberta, CAN	53.6	114.1
*Bratts Lake, Saskatchewan, CAN	50.2	104.7
Kelowna, BC, CAN	49.9	119.4
Trinidad, CA, USA	40.8	124.2
Boulder, CO, USA	40.0	105.0

### SUMMER

*Summit, Greenland	72.6	38.5
*NATIVE, Yellowknife, CAN	62.3	114.2
Whitehorse, Yukon Ter., CAN	60.7	135.1
*Churchill, Manitoba, CAN	58.8	94.1
*Edmonton, Alberta, CAN	53.6	114.1
*Goose, Newfoundland, CAN	53.3	60.3
Bratts Lake, Saskatchewan, CAN	50.2	104.7
*Kelowna, BC, CAN	49.9	119.4
Egbert, Ontario, CAN	44.2	79.8
*Yarmouth, Nova Scotia, CAN or	43.9	66.1
Sable Island, Nova Scotia, CAN	44.0	60.0
Trinidad, CA, USA	40.8	124.2

\* Core Sites

- Optimal station configuration – want to consider soundings in Fairbanks, a higher latitude western inflow location (Whitehorse), and Pt. Barrow, AK?
- NILU may have resources to do ozonesondes on the NOAA ship (ICEALOT),
- Final station configuration is dependent on the level of funding obtained by MSC.
- Coordination of special balloon launches.
- Sounding data will normally be available within a few hours of completed ozonesonde flight.
- Will try to support California flights with soundings at Trinidad Head, California.