

ARCTAS comparisons

- William Brune - aircraft/aircraft, aircraft/ground comparisons
- Hanwant Singh - DC-8 comparisons
- Gao Chen - ARCTAS data (and really, the comparisons)

Comparisons with other aircraft

Strategy:

- 1st as early in campaign as possible
- repeat as necessary
- data sent to Gao Chen for compilation and comparison

AIRCRAFT	MEASUREMENTS	OPPORTUNITIES	COMMENTS
NOAA P3	Gases, aerosols	Fairbanks	Spring, Local
NASA P3	Aerosol properties	Barrow/Fairbanks Palmdale Cold Lake	Spring Summer Summer
DOE /CNRC CV-580	Cloud/CCN/aerosol	Fairbanks	spring
NASA B200	Aerosol/radiation	Barrow Yellow Knife	Spring Summer
HIAPER/HIPPO	Gases	Spring phase end Summer phase start	
DLR Falcon	Gases, aerosols	Thule local	Summer only

Comparisons on the DC8

REASON: to ensure high quality measurements in order to advance atmospheric chemistry

STRATEGY (subject to discussions with Hanwant Singh)

- semi-formal comparison
- compare atmospheric constituents that have duplicate real-time measurements
- OH, HO₂, NO₂, HNO₄, PAN_s, OVOCs & VOCs by TOGA/PTR-MS
- field data sent to Hanwant Singh for compilation and comparison within a specified time limit (12 hrs?)
- compared field data then released into the archive for everyone
- other measurements sent directly to the archive
- use procedure frequently after test flights; semi-formal procedure may be less frequent as flights