Report for
ARCTAS P-3 Data Flight #23
Flown 10 Jul 2008

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P3 Plan Av2 Thur 10 Jul

Goals:

1. DC8 intercomp at 2 levels in B200 HSRL curtain
2. Churchill AERONET spiral
3. Hudson Bay ice BRDF & albedo

P3 Plan Bv2 Thur 10 Jul

Goals:

1. DC8 intercomp at 2 levels in B200 HSRL curtain
2. MISR validation
3. Radiation/in situ work in clear areas to East

P3 Plan Cv2 Thur 10 Jul

Goals:

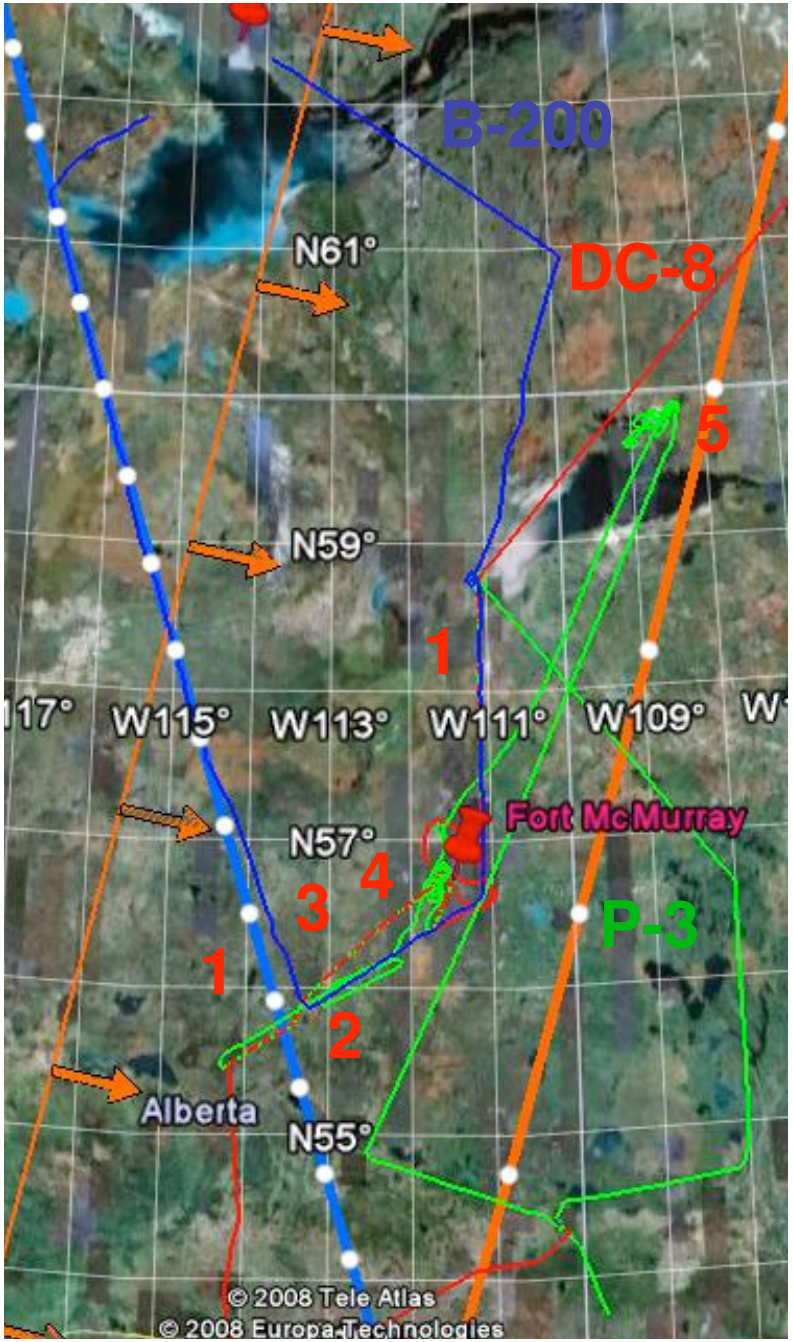
1. DC8 intercomp at 2 levels in B200 HSRL curtain
2. MISR validation
3. CALIPSO val w Radiation/in situ work in clear areas

P3 Actual Thur 10 Jul

Summary:

A partially successful flight. The most important objective, the DC-8 intercomparison, was executed at two altitudes. However, air was very clean, so the range of measured values is small. Delays and westward repositioning caused by clouds left insufficient time to attempt our remaining objectives at Churchill and Hudson Bay. Instead, we conducted legs described on next slide.

P3 Actual Thur 10 Jul



Accomplishments:

1. **DC-8 intercomparison under B-200.**
2. **Back & forth legs to determine true air speed correction.**
3. **Cloud edge work below & above clouds.**
4. **Sampling of Ft. McMurray air.**
5. **Sampling of the Camsell & Viking fires North of Lake Athabasca.**

The fires were some of the largest sampled by the P-3 in ARCTAS, producing the highest CO value measured, 12 ppm. Also AOD up to 4.