TO: Suborbital Science Program
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Flight Report

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Aircraft :	LaRC B-200 King Air (N529NA) (Operating as NASA529)
Operating Site(s) From / To :	Pt. Barrow, Alaska
Flight Date :	4/4/2008
Flight Number :	R131 (ARCTAS flight 5)
Take Off Time :	1826 UT; 1046 Local
Landing Time :	2137 UT; 1337 Local
Flight Time :	2.9 hours
PI:	Rich Ferrare
Purpose of Flight :	Data [X] Ferry [] Functional Check [] Other []
Sensor Payload :	HSRL and Digital Camera
Comments :	Local flight from and to Pt. Barrow. Launched in time to fly coordinated box pattern around Barrow airport and the NSA site with Research 9 (Convair 580). Timing worked extremely well due to the pilot pre-coordination and Convair takeoff time relayed from Fairbanks. B200 was on station at 28,000 feet when the Convair arrived. Flew in the same patterns for nearly 2 hours including multiple passes over the NSA ground site northeast of the Barrow airport.
	Had problems with IMU again on this flight. Heating blankets on laser are believed to have caused the problem early in the flight due to their close proximity to the IMU. Heating blankets were removed at 19:15 UT. Attitude data appear to be correct from 19:15 to 21:15 UT. Attitude may be off after 21:15.
	Mid-level clouds seen early in flight (until about 19:50 UT) obscuring lidar observations of low level clouds sampled by Convair. Mid-level clouds cleared by ~19:50 after which low level cloud and aerosols above those clouds were observed by the lidar.
SUBMITTED: Chris H	ostetler 907-878-3101 DATE: 4/6/2008

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