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Flight Report

Aircraft :	LaRC B-200 King Air (N529NA) (Operating as NASA529)
Operating Site(s) From / To :	Pt. Barrow, Alaska
Flight Date :	4/3/2008
Flight Number :	R130 (ARCTAS flight 4)
Take Off Time :	2129 UT, 1329 Local
Landing Time :	0053 UT, 1653 Local
Flight Time :	3.4 hours
PI:	Rich Ferrare
Purpose of Flight :	Data <input checked="" type="checkbox"/> Ferry <input type="checkbox"/> Functional Check <input type="checkbox"/> Other <input type="checkbox"/>
Sensor Payload :	HSRL and Digital Camera
Comments :	<p>Local CALIPSO Validation flight from and to Pt. Barrow. Flew along the projected track to northern point 175 NM north-northwest of Pt Barrow (approximately 74 degrees north latitude) then along the track to 75 NM southeast of Pt Barrow then returned to Barrow with several passes over the NSA ground site near the Barrow airport.</p> <p>Had problems with IMU. Heading slewed from -180 to +180 through flight. Speculate IMU problem due to nearby placement of electric heating blankets on laser. Pitch and roll appear correct through most of the flight except for 22.4-22.7 UT and from 24.1 UT until end of flight. Lidar products considered unaffected outside those windows (processing of lidar data used pitch and roll but not heading).</p> <p>Lidar data indicate depolarizing aerosol through much of free troposphere, with areas of considerable loading at southern portion of flight.</p>

SUBMITTED: Chris Hostetler 907-878-3101

DATE: 4/6/2008

NASA Langley HSRL/B200 03-Apr-2008



