TO: Suborbital Science Program
NASA Headquarters

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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 :                 | 4/9/2008  |
| Flight Number :               | R-134   |
| Take Off Time :               | 1314 Local 2114 UTC   |
| Landing Time :                | 1755 Local 0155 UTC   |
| Flight Time :                 | 4.7 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 on schedule to fly over the NASA DC-8 during a low altitude pass over the Barrow airport. Proceeded on a coordinated flight with the DC-8 on the CALIPSO track. Flew over several spiral patterns and was in close proximity for satellite fly over. Continued down track alone. Weather along the route was clear of clouds at flight level with limited low altitude clouds near the surface.  HSRL instrument worked well through CALIPSO underflight. Developed problems on RTB when I2 calibration failed. Diagnosis is I2 cell stuck in nominal science position. This will have no impact on future flights as this calibration remains stable to less than 1% variation and further calibration in the field is not necessary.  IMU pitch and roll values seemed to be in better agreement with avionics. Heading values continue to show large errors. Aircraft attitude values may require correction in post processing. |

**SUBMITTED:** Chris Hostetler 907-878-3101 DATE: 4/10/2008





