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**Attn: Andrew Roberts** 

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## Flight Report

| Г                                |   |
|----------------------------------|---|
| Aircraft :                       | LaRC B-200 King Air (N529NA) (Operating as NASA529)   |
| Operating Site(s)<br>From / To : | Pt. Barrow to Pt. Barrow, AK  |
| Flight Date :                    | 4/19/2008   |
| Flight Number :                  | R-141   |
| Take Off Time :                  | 1308 Local, 2108 UTC  |
| Landing Time :                   | 1750 Local, 0150 UTC 4/20/2008  |
| Flight Time :                    | 4.7 hours   |
| Principal Investigator:          | Rich Ferrare  |
| Purpose of Flight :              | Data [X ] Ferry [ ] Functional Check [ ] Other [ ]  |
| Sensor Payload :                 | HSRL and Digital Camera   |
| Comments:                        | Launched on final (deployed) research flight to fly along CALIPSO track while Research 9 (Convair) spiraled down below us. Provided aerosol layer information during northwest transit to furthest north point of our CALIPSO data. Returned to vicinity of Barrow to overfly NOAA P-3 and Convair inter-comparison runs. Severe winds out of the west at 28,000 feet made exact timing impractical. Provided layer information to both aircraft prior to decending. Recovered at Pt. Barrow. Low clouds (tops<1.5 km) present during entire flight. Several aerosol layers present between 1.5 to 7 km. Largest aerosol loading during entire mission observed in smoke layer near Barrow at altitudes between 1.5-3 km. Model forecasts indicate smoke from Kazahkstan. Considerable smoke layers observed at several other altitudes. NOAA P-3 acquired colocated data in several of these layers. Convair 580 also acquired comparison data during this flight. |

SUBMITTED: Rich Ferrare DATE: 4/21/2008









