Wednesday September 24 weather briefing for ARISE, Fairbanks Alaska mission region

** target area of the day: satellite underpass tracks in the area of 72-76N and 125-150W **

Current synoptic overview and short range forecast for the next flight day, Thursday Sept. 25:
The upper level flow across the northern half of Alaska remains mainly from the west to northwest. Fast moving short wave feature brings some cloudiness and precipitation to an area from Kotzebue along a line stretching through Barrow and eastward along the north coast and into the Beaufort Sea. A surface high pressure center is in place in the interior of the state stretching through western Canada.

The advancing short wave front/trough is fairly shallow and does not include much in the way of high clouds in the target area. A band of mid level clouds stretches across the northern third of the state and there are some patches of mid level cloudiness over the Beaufort Sea in the vicinity of Banks Island. Low clouds cover much of the target area including the northern 1/3 of the state and all of the southern Beaufort Sea.

Outlook for succeeding flight day, Friday Sept. 26:
The dominant weather feature for Friday is the 532 dam low at 500mb and the large cyclone frontal system at the surface moving into the southeastern section of the state from the Gulf of Alaska. The front is bringing significant cloudiness and precipitation spreading north and east through Friday. It's possible a flight out could miss most of the frontal clouds and precipitation on takeoff but would most likely encounter significant high and mid cloud on the return leg of the flight.