

High Altitude MMIC Sounding Radiometer (HAMSR)

TCSP Field Campaign

Flight Data Summary—Science Maps

16 July 2005

I. High Level Summary

Instrument performance was good, but right side pod experienced a power shutdown about two-thirds of way through flight forcing a reset of the instrument. Other than a small gap in data, there was no other impact to HAMSR.

Pilot Debrief: Flight plan was out to the west, with ziz-zagging between 5 and 10 deg North and between 85 and 93 deg West.

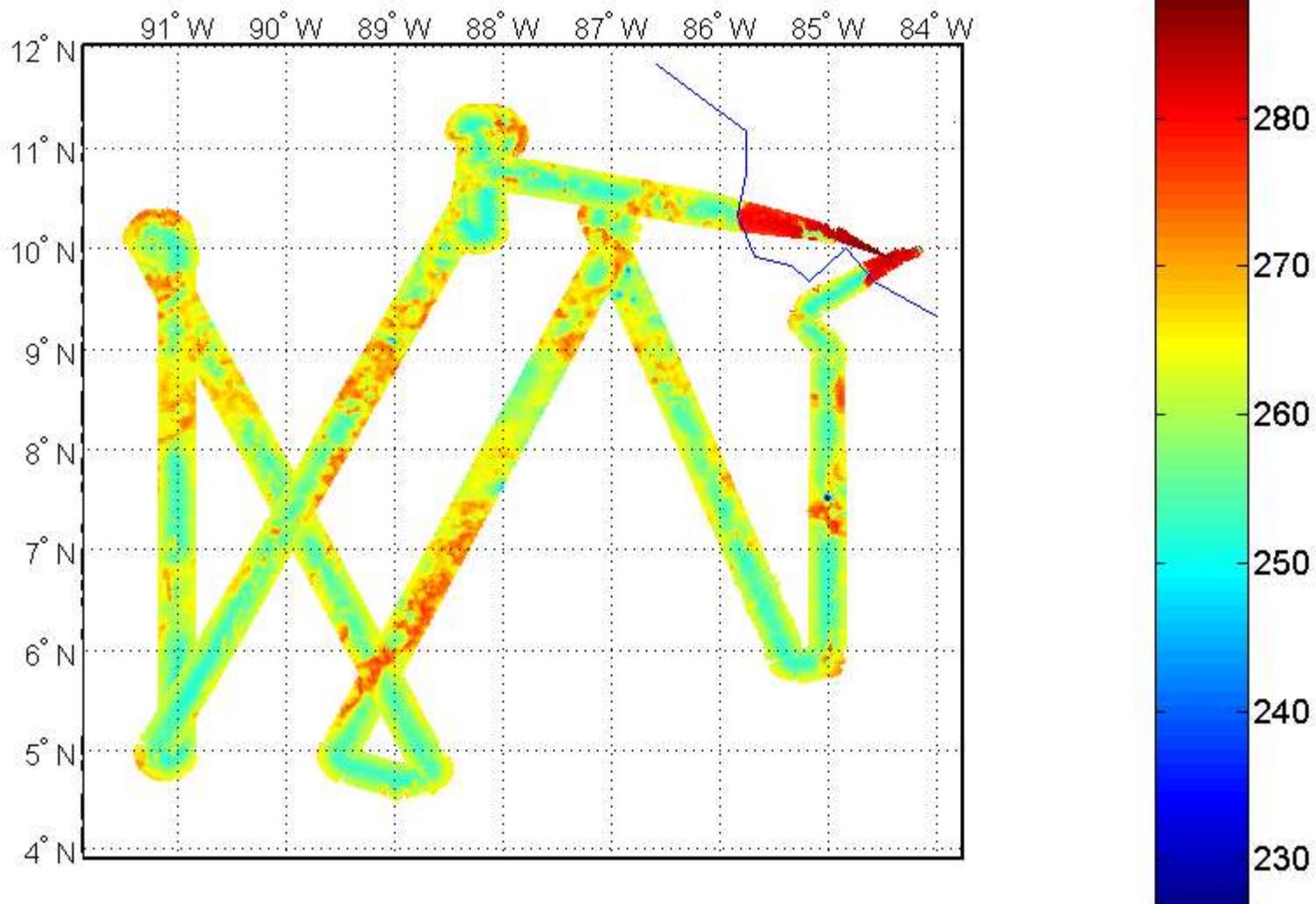
We continue to observe and monitor an “oscillation” in the 182.31 channel data.

II. Instrument State and Parameters

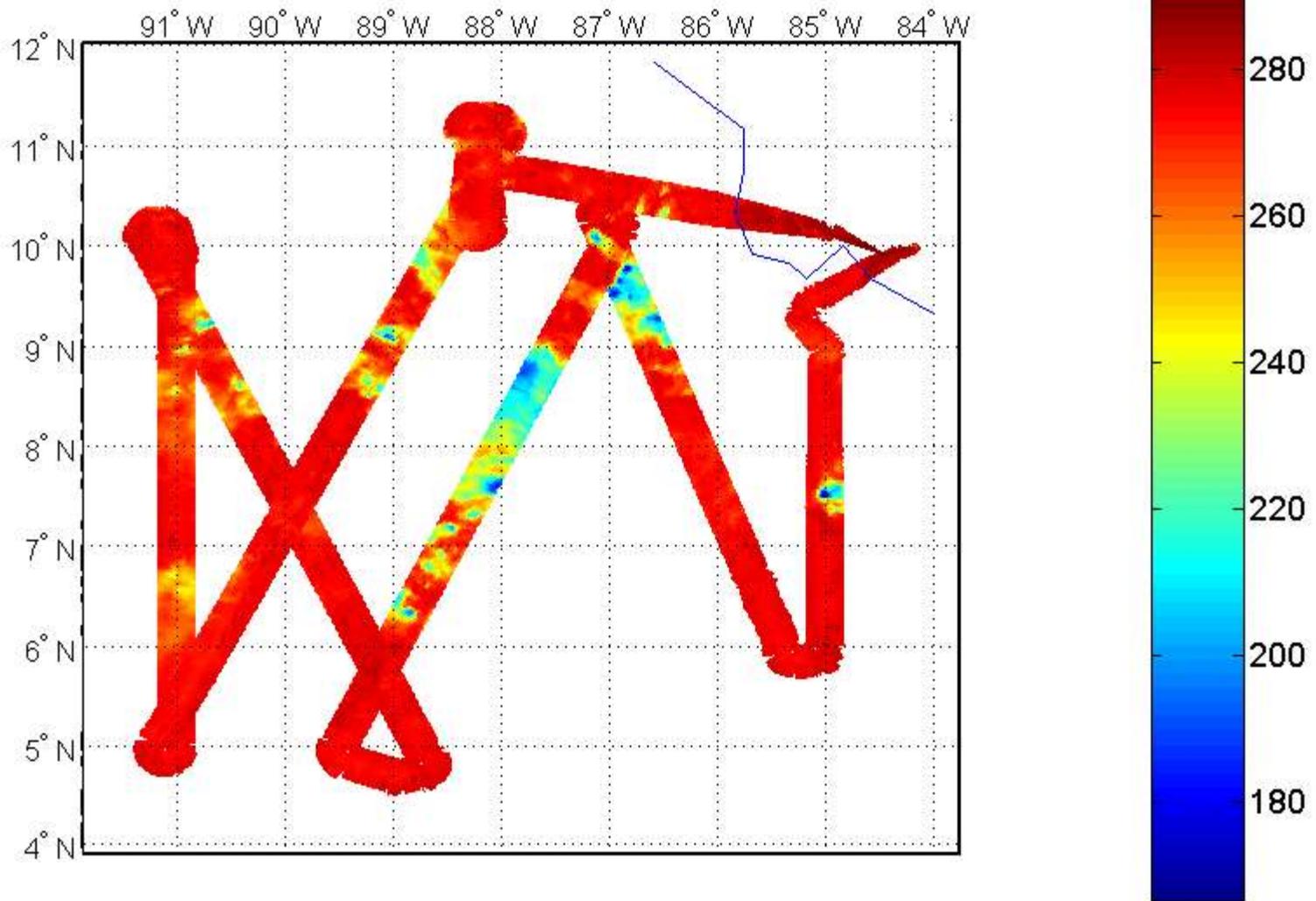
Instrument Power	ON
Fan Power	ON
Pod Heaters	ON
Seal Added Around Pod Window/Radome	NO
LN2 Load Used Pre-Flight	NO
Pre-Flight Data File Name	05071605.541, 05071610.531, Full05071605.541
Flight Data File Name	05071602.274

File Full05071605.541 = concatenation of 05071605.541 and 05071610.531

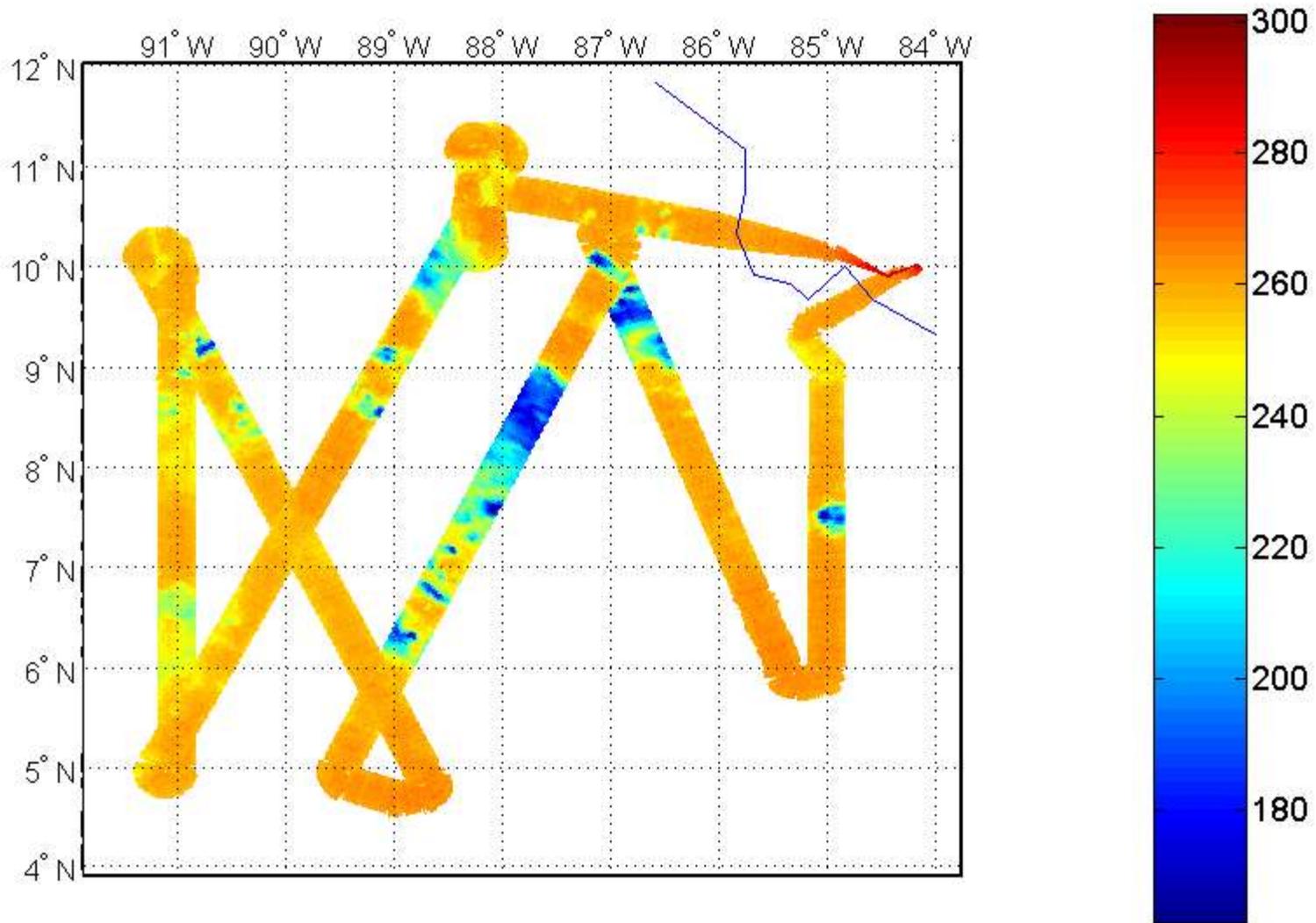
51.76 GHz brightness temperature(surface)
16-Jul-2005 05:54:53 -- 12:51:45



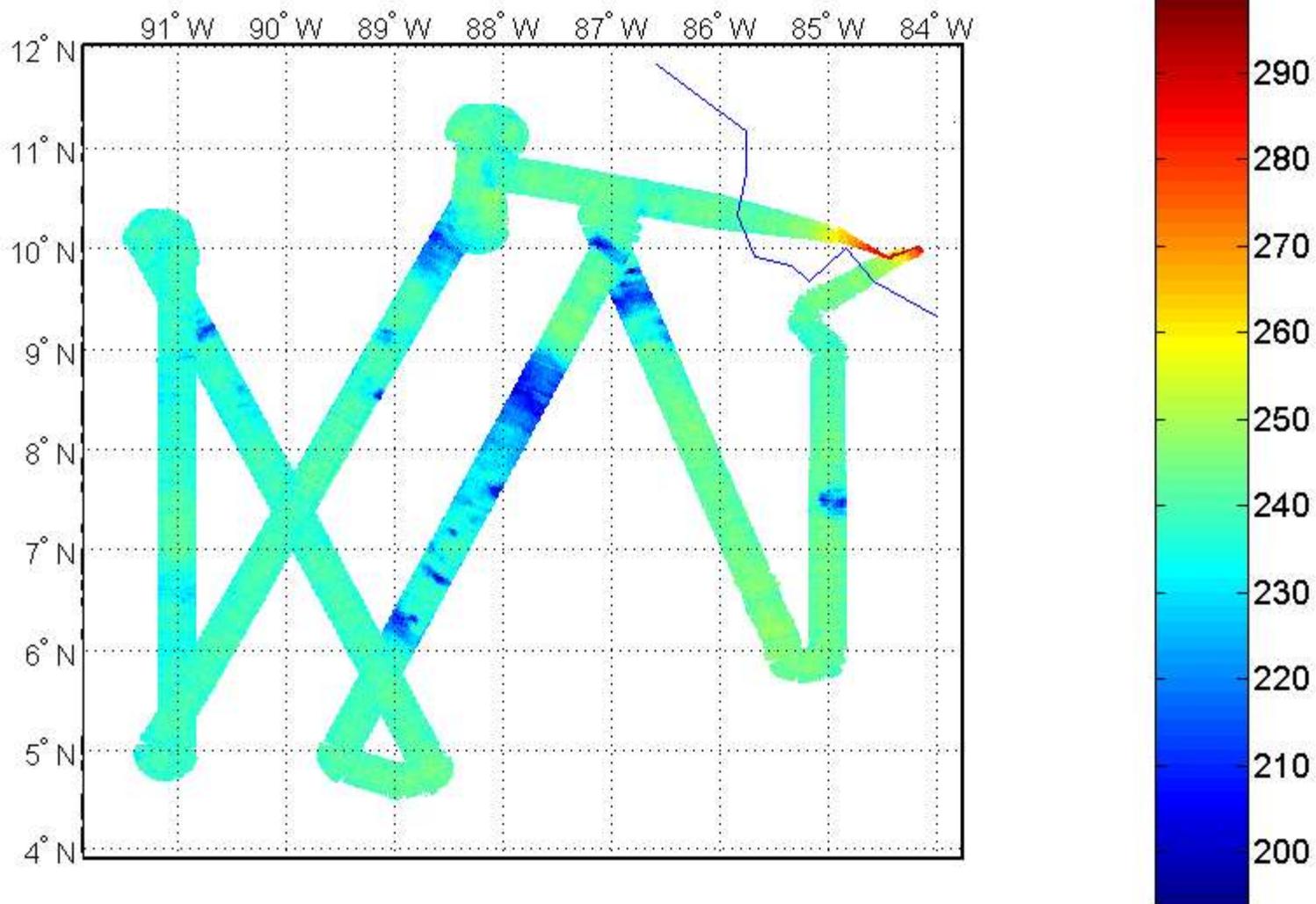
113.25 GHz brightness temperature(surface)
16-Jul-2005 05:54:53 -- 12:51:45



178.81/187.81 GHz brightness temperature
16-Jul-2005 05:54:53 -- 12:51:45

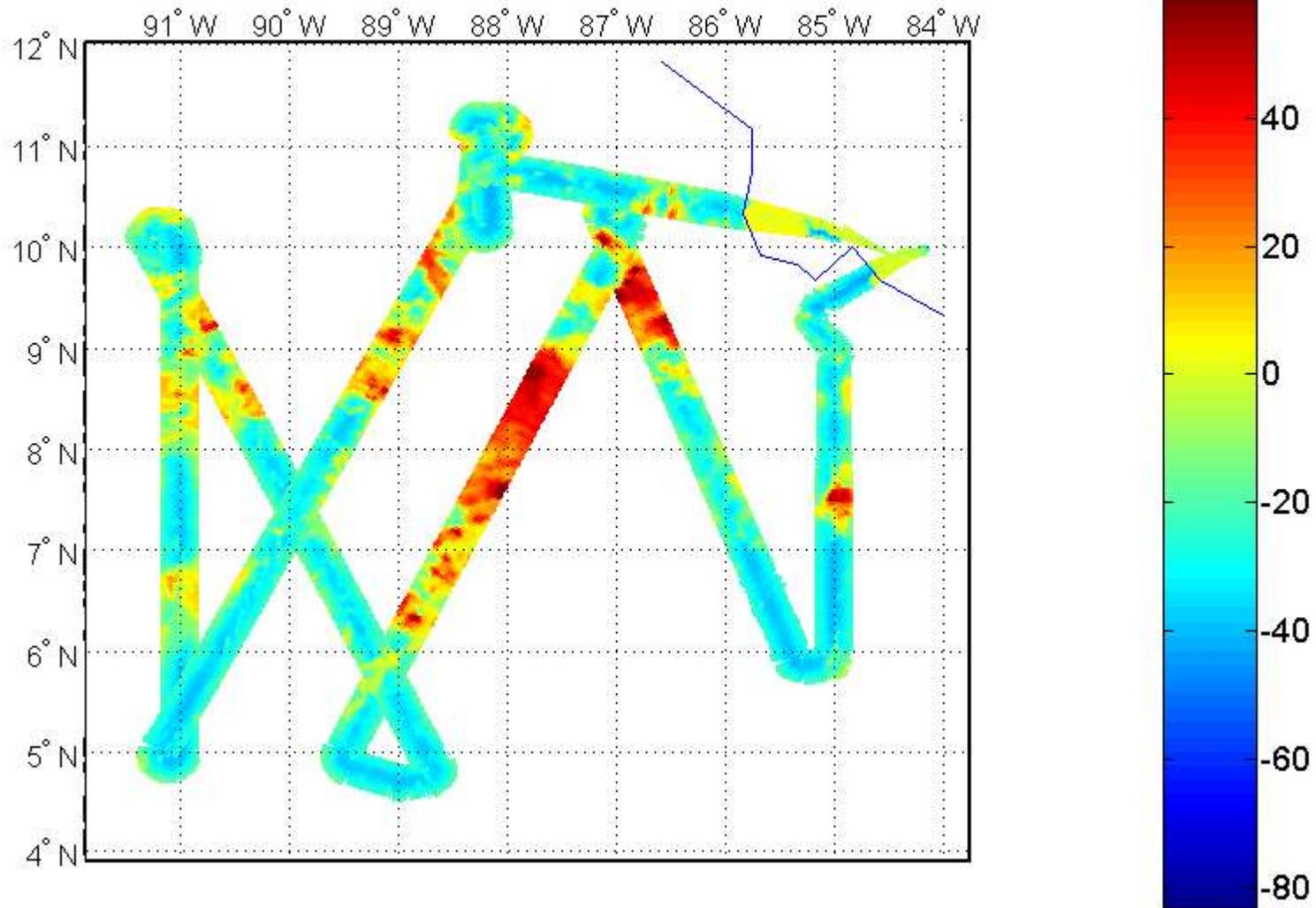


182.31/184.31 GHz brightness temperature
16-Jul-2005 05:54:53 -- 12:51:45

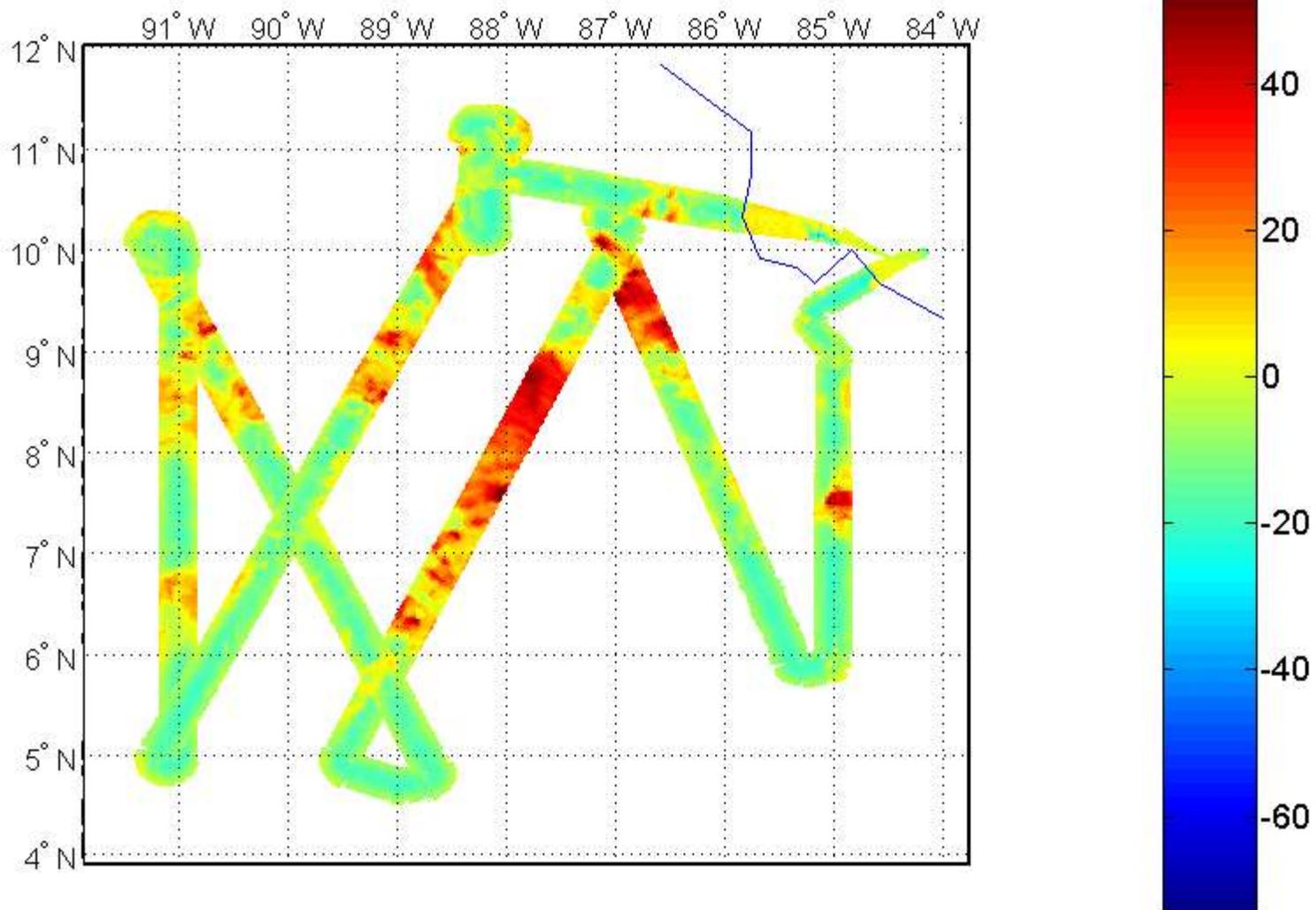


III-b. Selected 55-118 GHz Radiometer Difference Maps

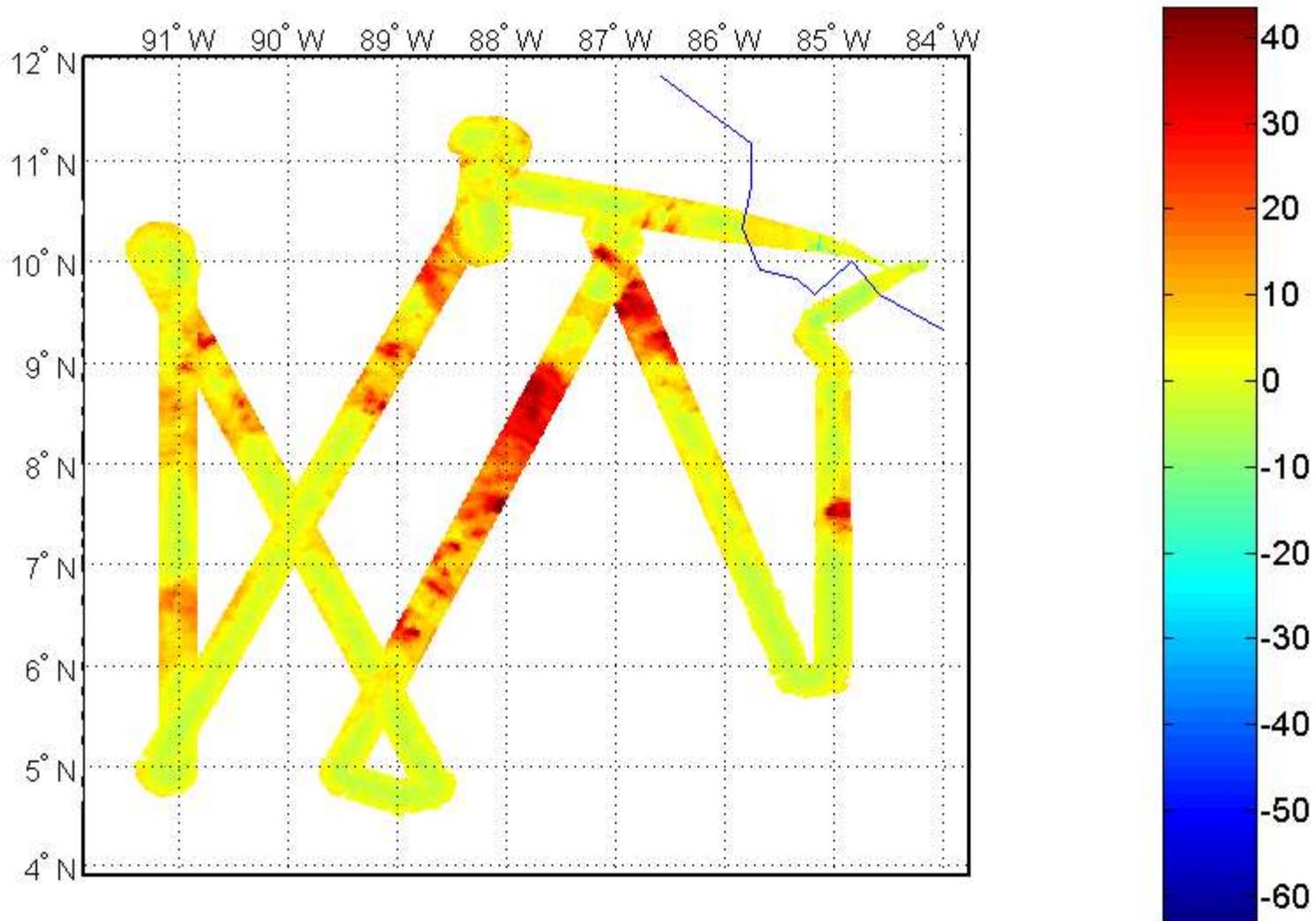
50.3-115.25 GHz brightness temperature difference(surface)
16-Jul-2005 05:54:53 -- 12:51:45



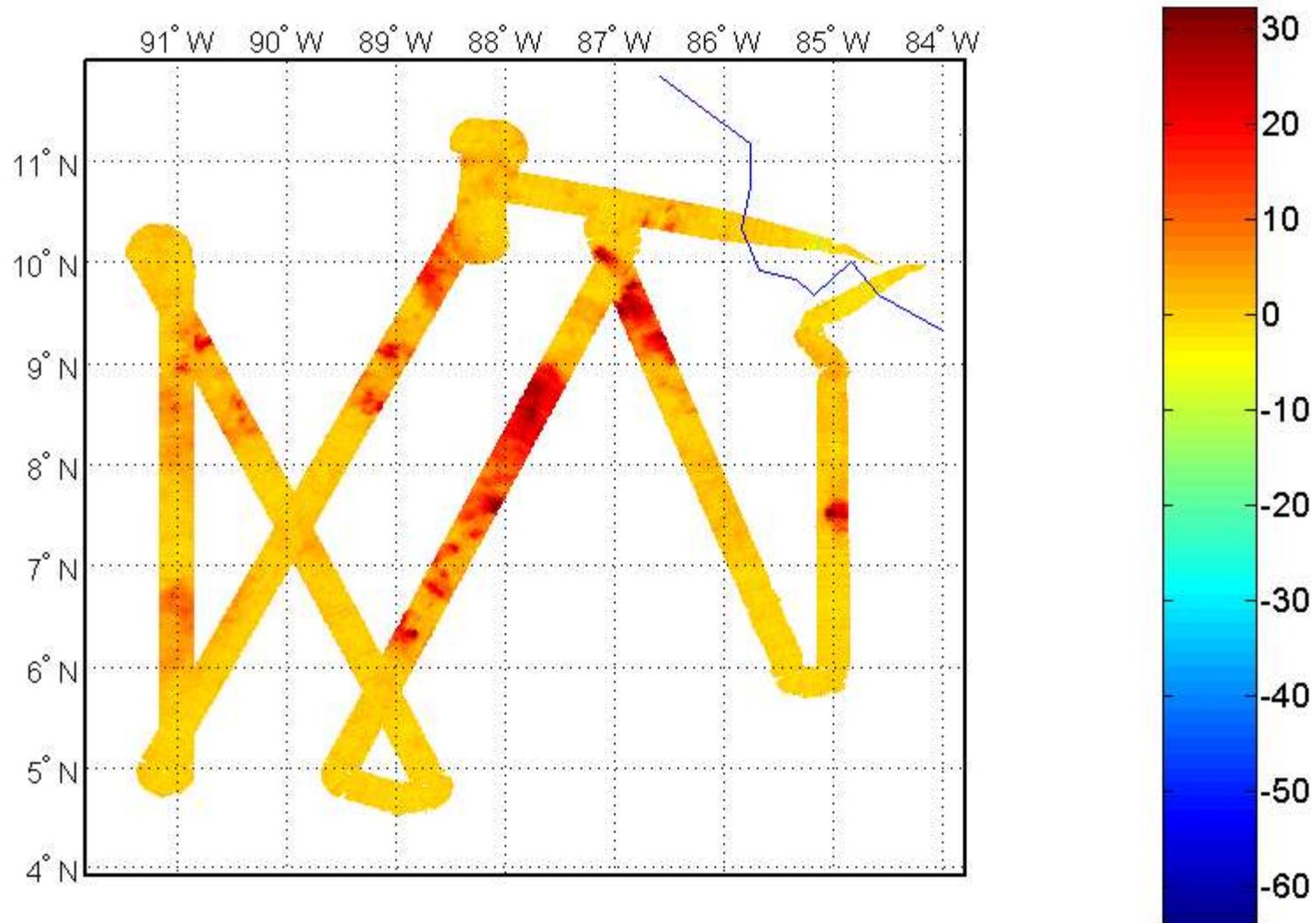
51.76-116.2 GHz brightness temperature difference(surface)
16-Jul-2005 05:54:53 -- 12:51:45



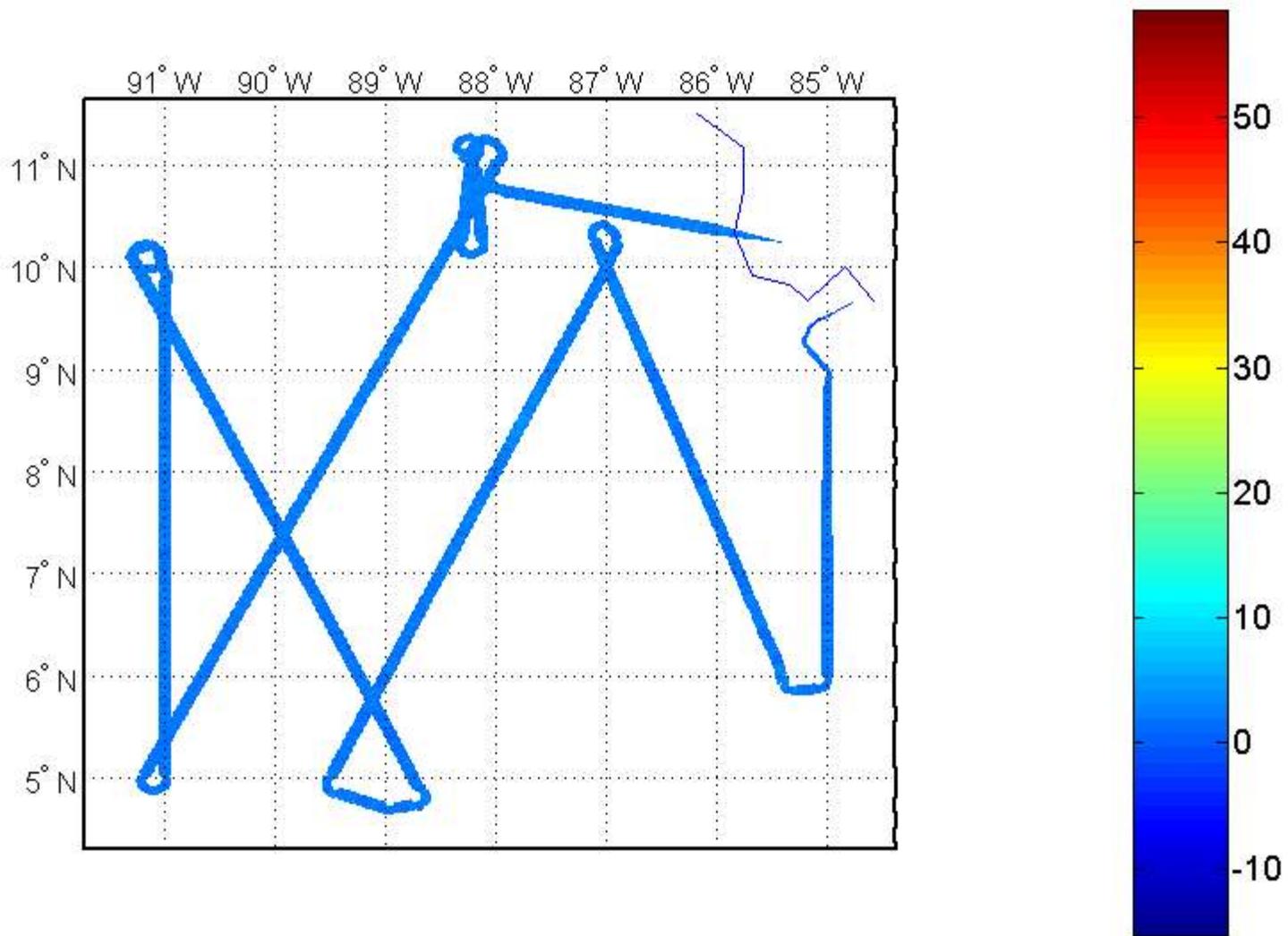
52.8-116.7 GHz brightness temperature difference(1000mB)
16-Jul-2005 05:54:53 -- 12:51:45



53.596-117.15 GHz brightness temperature difference(750mB)
16-Jul-2005 05:54:53 -- 12:51:45



55.5-118.3/119.2 GHz brightness temperature difference(150mB)
16-Jul-2005 05:54:53 -- 12:51:45



56.02/56.67-118.515/118.985 GHz brightness temperature difference(80mB)
16-Jul-2005 05:54:53 -- 12:51:45

