High Altitude MMIC Sounding Radiometer (HAMSR)

TCSP Field Campaign
Flight Data Summary—Science Maps

17 July 2005

I. High Level Summary

o P3 coordination during this flight. It was expected that there would be no more coordinated flights with P3's for the remainder of this campaign as both P3's were scheduled to return to Florida; however, P3 coordination is now expected for later this week.

Pre-flight weather briefing concluded that without P3 support, it was advisable to fly over hurricane Emily as it heads quickly towards the Yucatan peninsula. This supposedly will be the first time the ER-2 has flown a Cat 4 hurricane (Emily is bordering on Cat 5).

LN2 load was placed under radome during pre-flight power-on check.

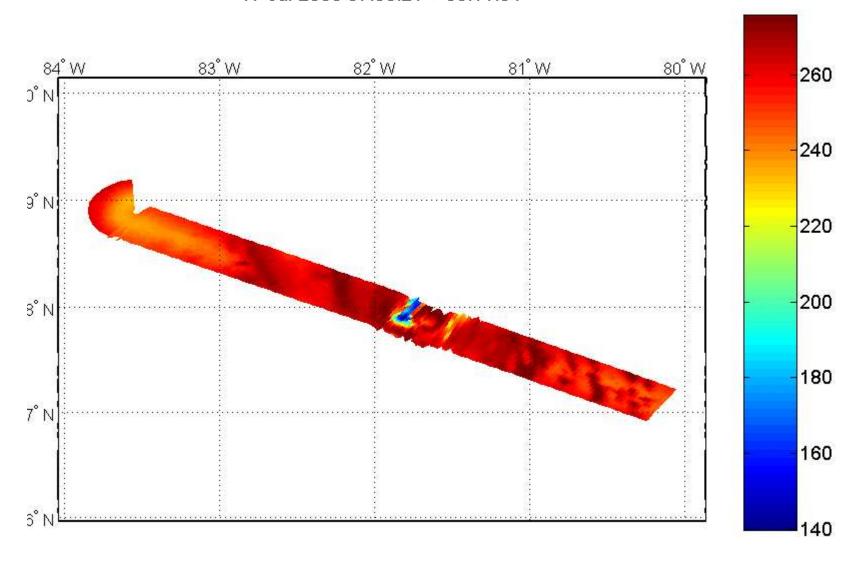
II. Instrument State and Parameters

Instrument Power	ON
Fan Power	ON
Pod Heaters	ON
Seal Added Around Pod Window/Radome	NO
LN2 Load Used Pre-Flight	YES
Pre-Flight Data File Name	05071702.112
Flight Data File Name	05071705.495

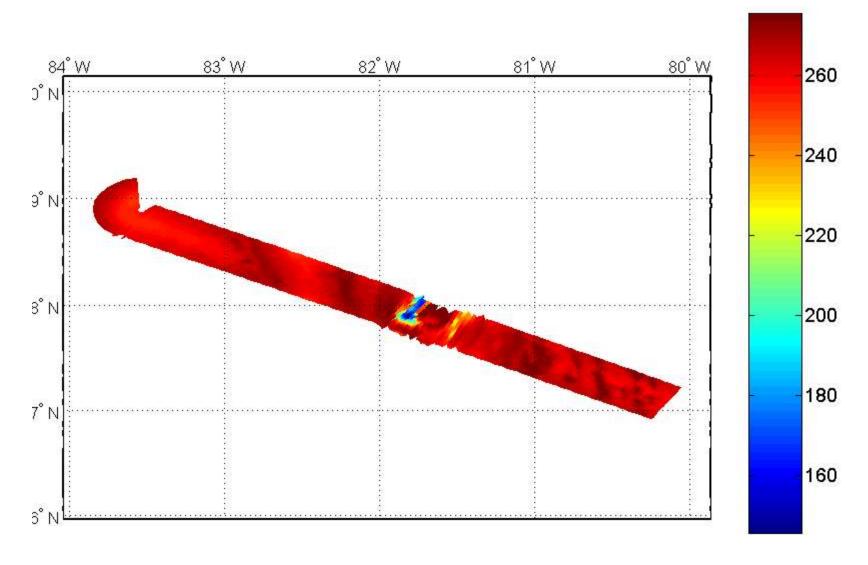
Flight Day: 17July 2005

III-a. Selected Maps

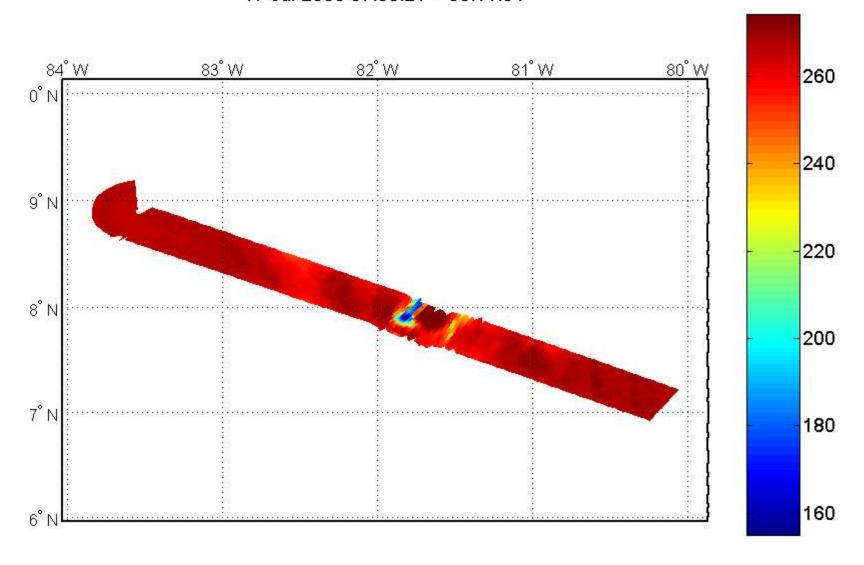
50.3 GHz brightness temperature(surface) 17-Jul-2005 07:38:21 -- 08:11:34



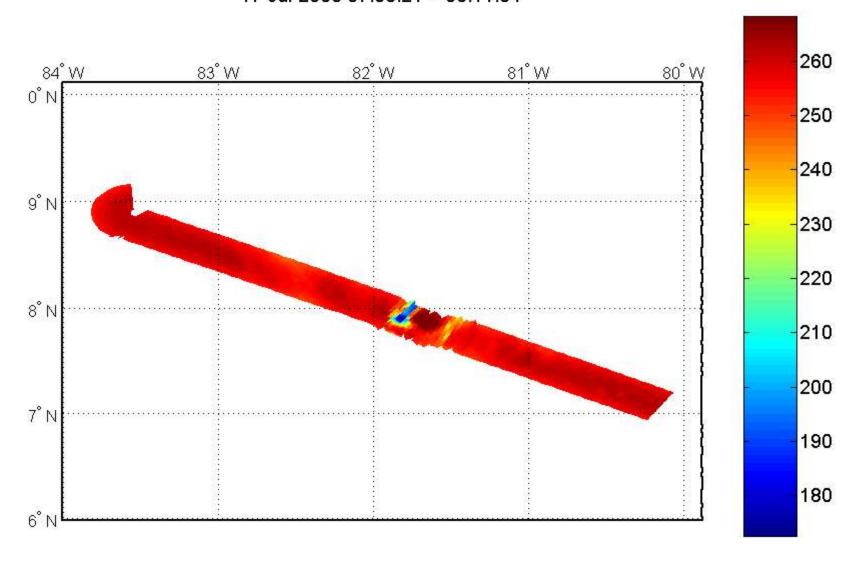
51.76 GHz brightness temperature(surface) 17-Jul-2005 07:38:21 -- 08:11:34



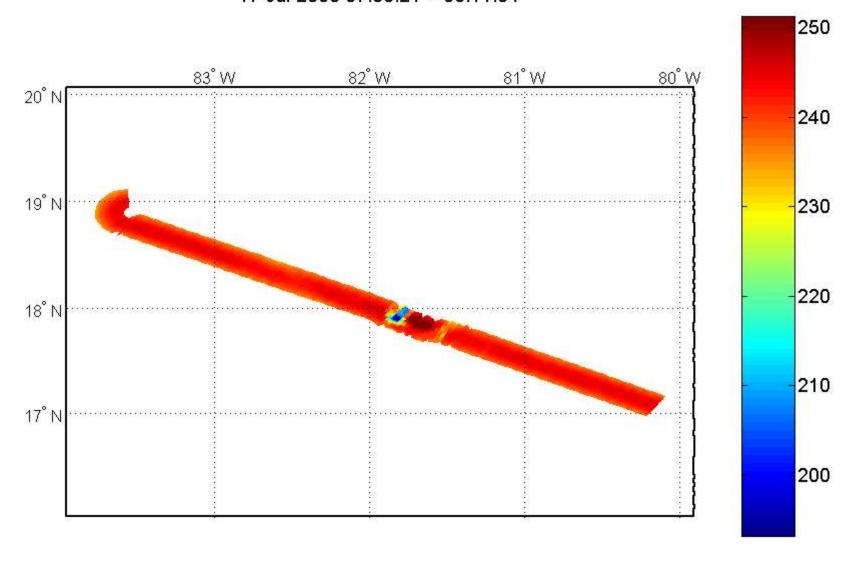
52.8 GHz brightness temperature(1000mB) 17-Jul-2005 07:38:21 -- 08:11:34



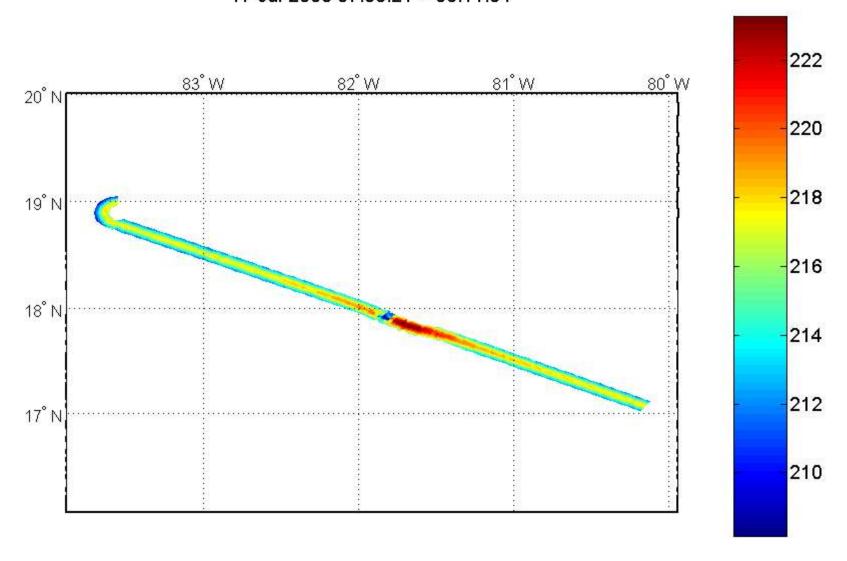
53.596 GHz brightness temperature(750mB) 17-Jul-2005 07:38:21 -- 08:11:34



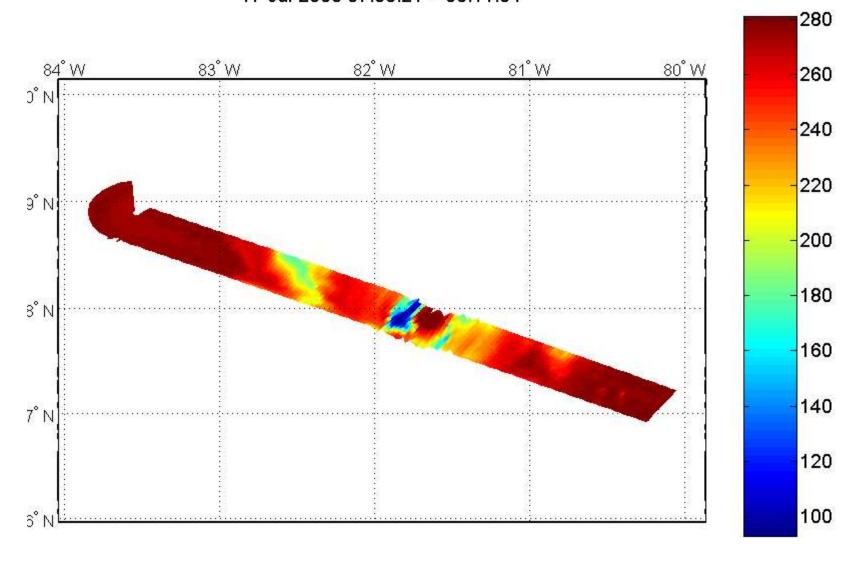
54.4 GHz brightness temperature(400mB) 17-Jul-2005 07:38:21 -- 08:11:34



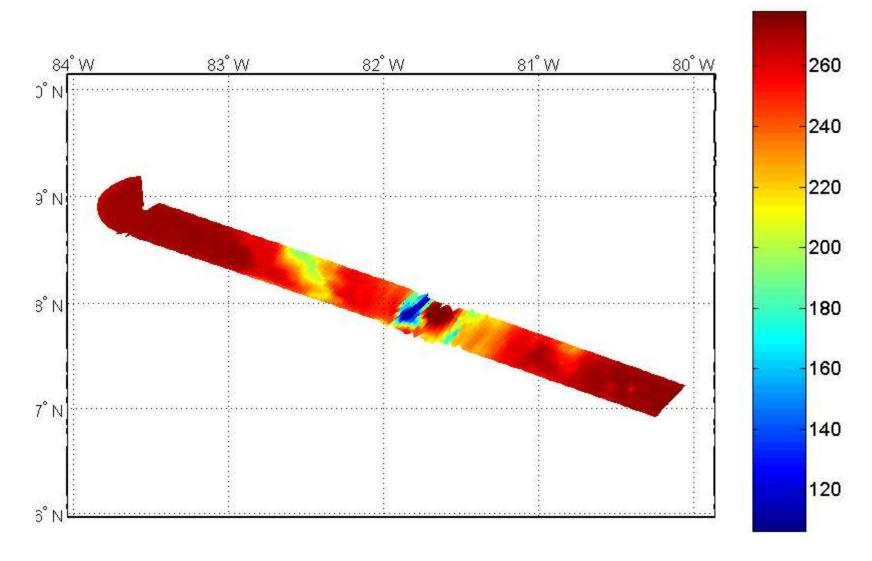
55.5 GHz brightness temperature(150mB) 17-Jul-2005 07:38:21 -- 08:11:34



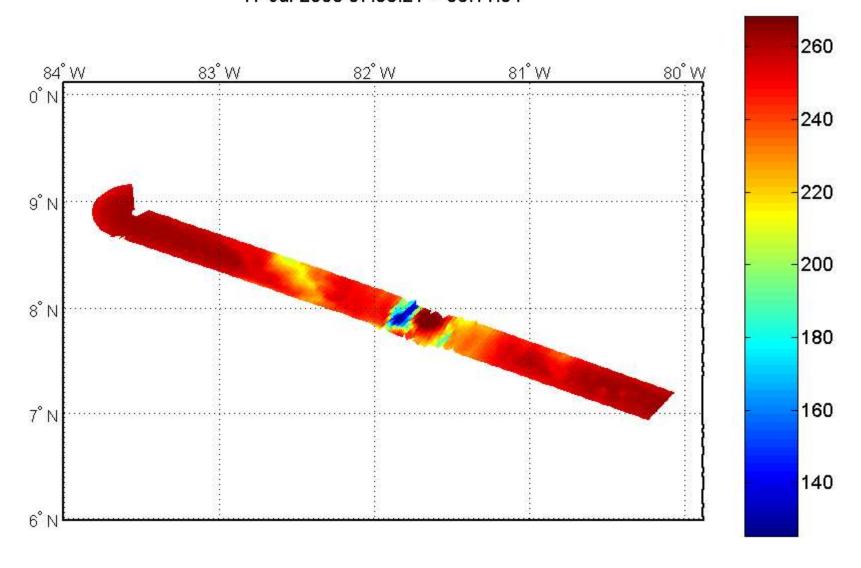
113.25 GHz brightness temperature(surface) 17-Jul-2005 07:38:21 -- 08:11:34



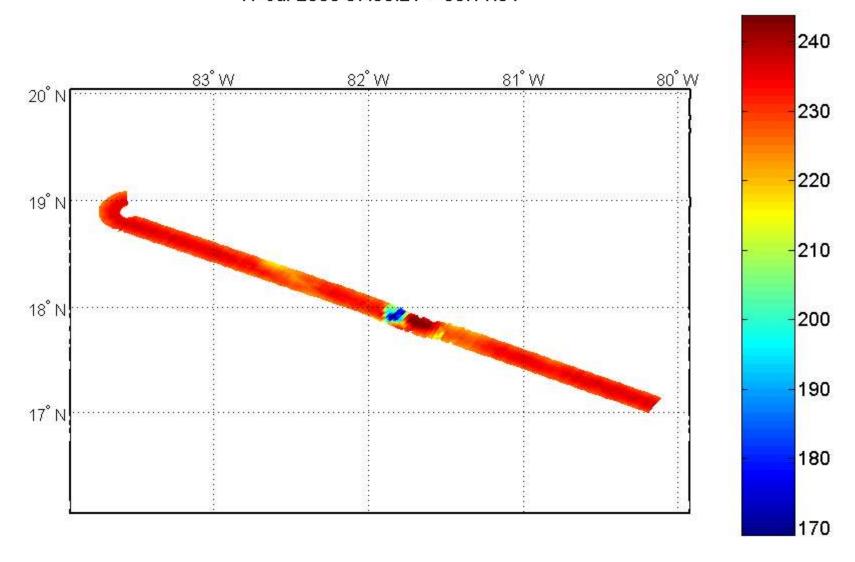
116.2 GHz brightness temperature(surface) 17-Jul-2005 07:38:21 -- 08:11:34



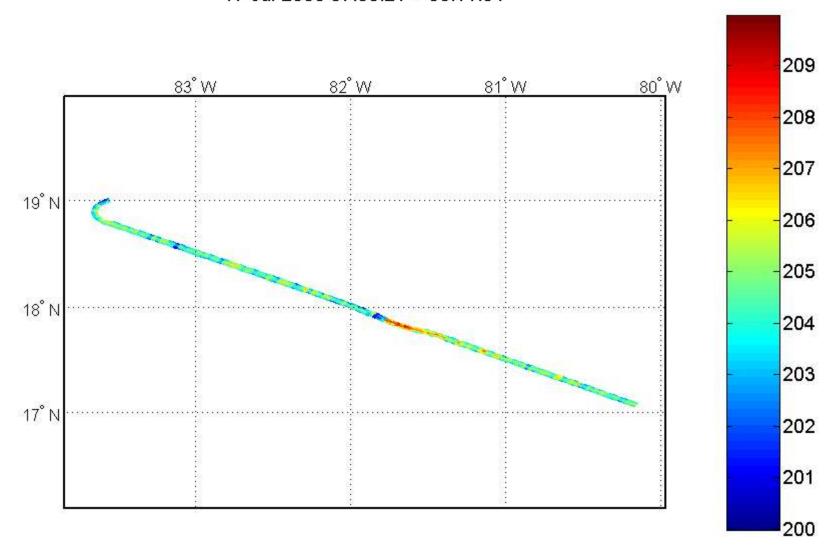
117.15 GHz brightness temperature(750mB) 17-Jul-2005 07:38:21 -- 08:11:34



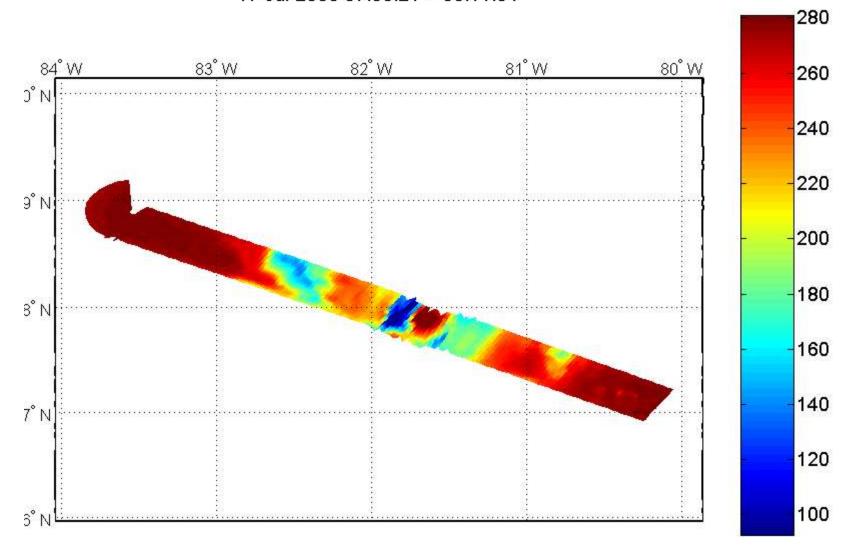
117.95/119.55 GHz brightness temperature(250mB) 17-Jul-2005 07:38:21 -- 08:11:34



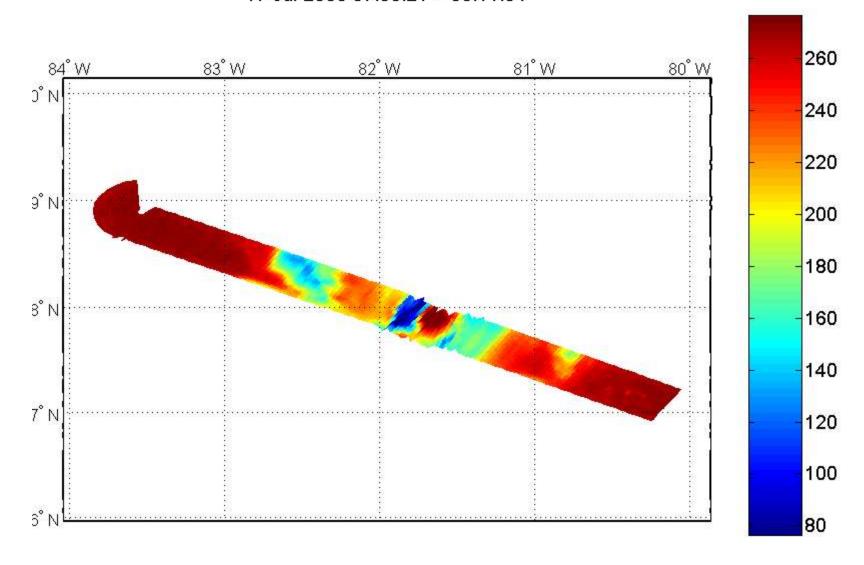
118.515/118.985 GHz brightness temperature(80mB) 17-Jul-2005 07:38:21 -- 08:11:34



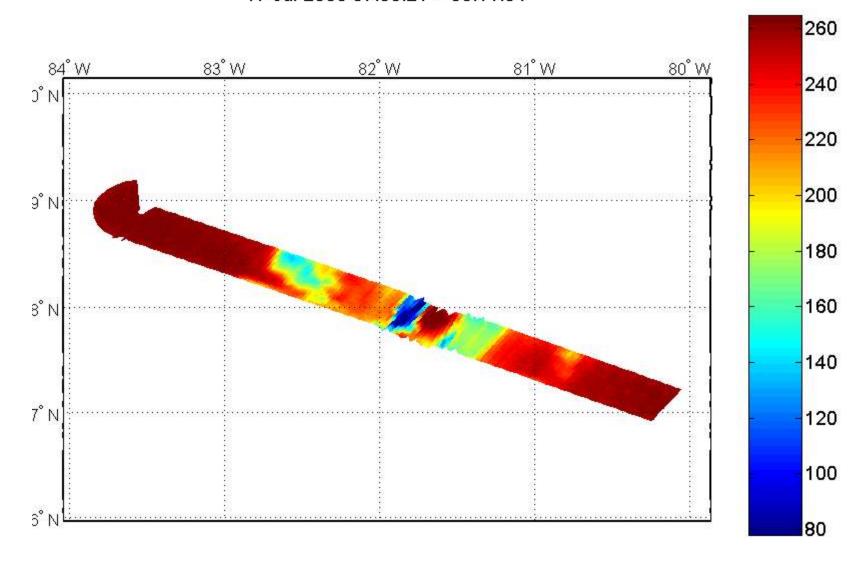
166 GHz brightness temperature 17-Jul-2005 07:38:21 -- 08:11:34



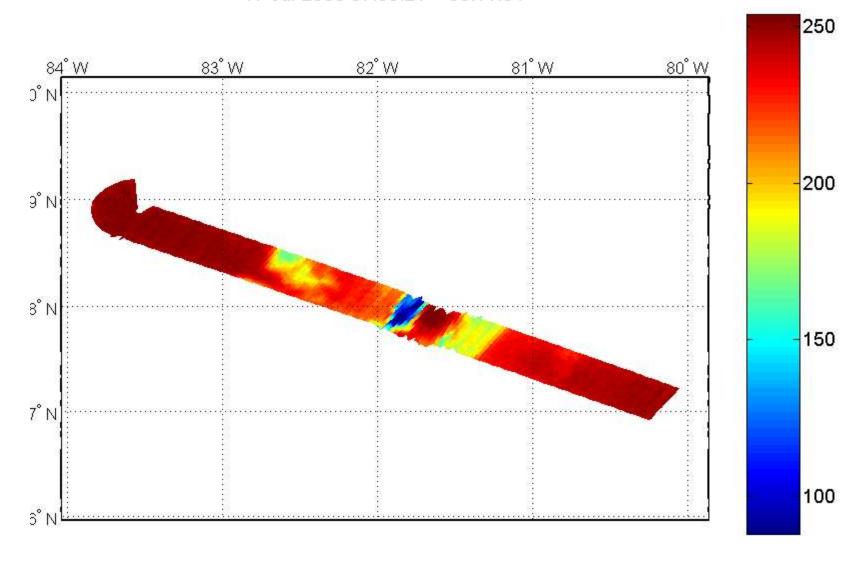
173.31/193.31 GHz brightness temperature 17-Jul-2005 07:38:21 -- 08:11:34



178.81/187.81 GHz brightness temperature 17-Jul-2005 07:38:21 -- 08:11:34

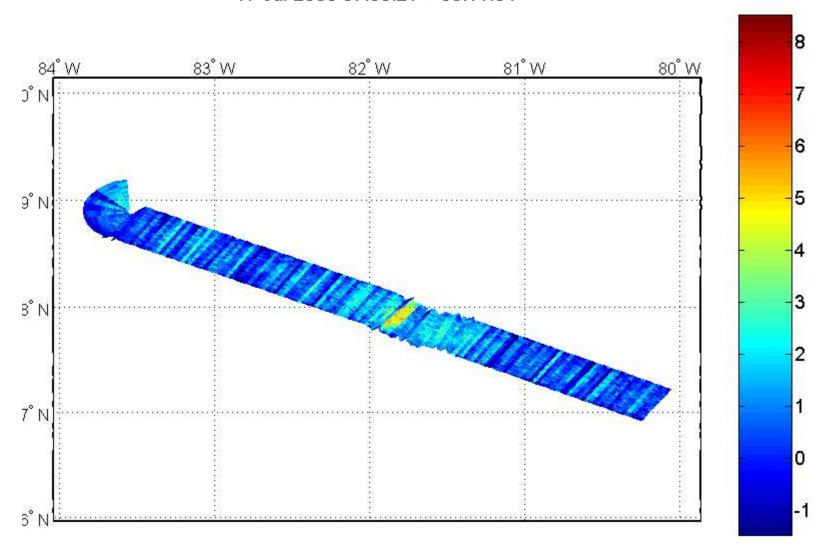


181.51/185.11 GHz brightness temperature 17-Jul-2005 07:38:21 -- 08:11:34

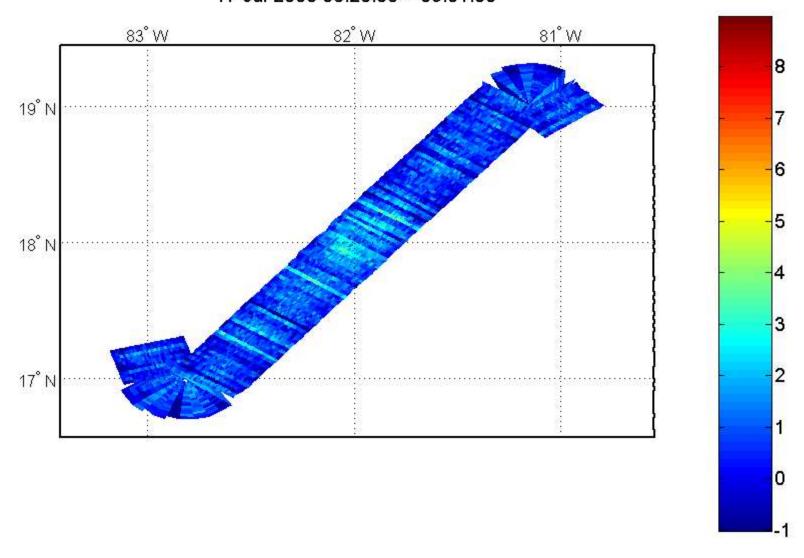


III-b. Selected 55-118 GHz Radiometer Difference Maps

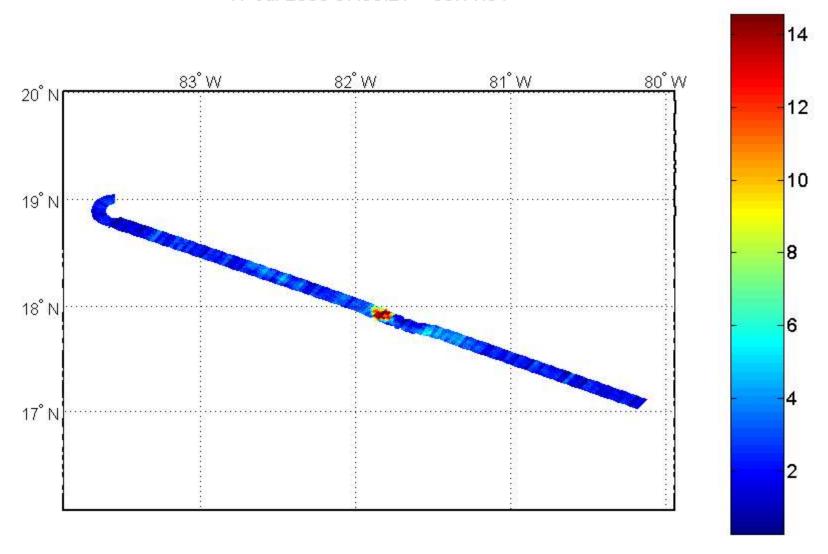
56.02/56.67-118.515/118.985 GHz brightness temperature difference(80mB) 17-Jul-2005 07:38:21 -- 08:11:34



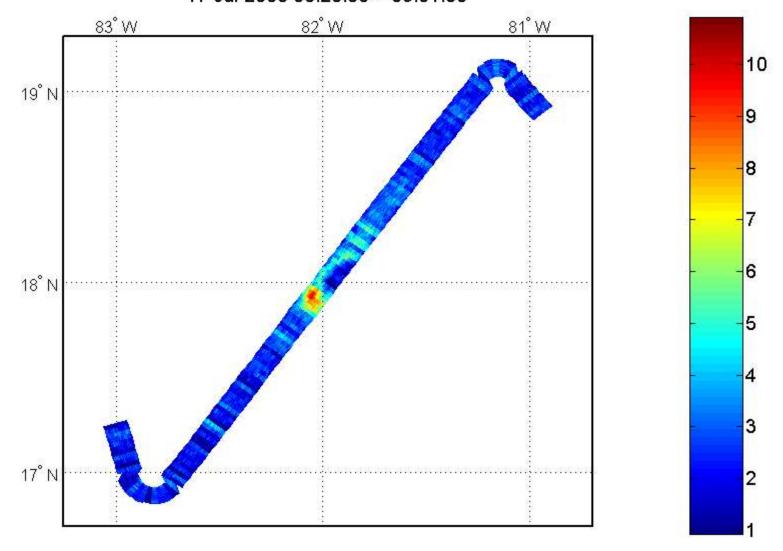
56.02/56.67-118.515/118.985 GHz brightness temperature difference(80mB) 17-Jul-2005 08:28:30 -- 09:01:30



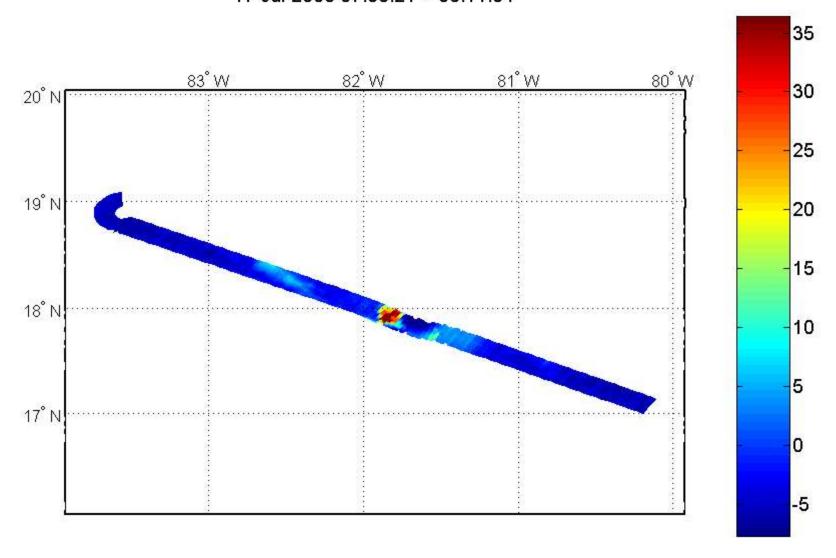
55.5-118.3/119.2 GHz brightness temperature difference(150mB) 17-Jul-2005 07:38:21 -- 08:11:34



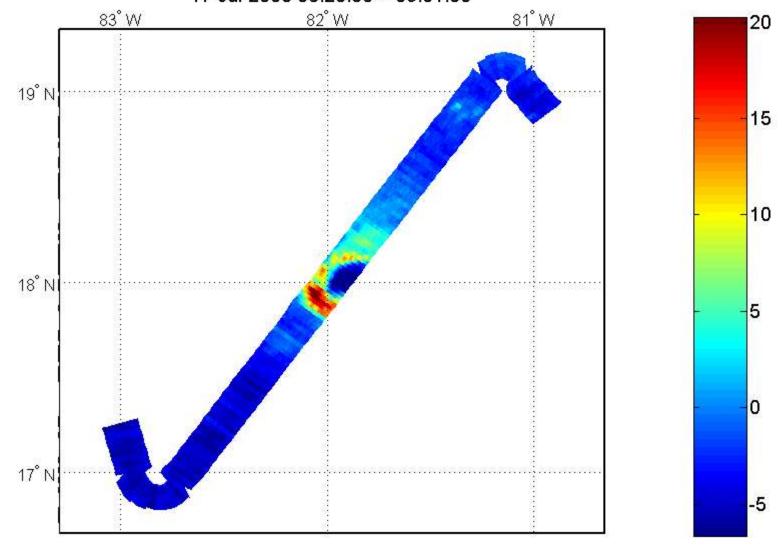
55.5-118.3/119.2 GHz brightness temperature difference(150mB) 17-Jul-2005 08:28:30 -- 09:01:30



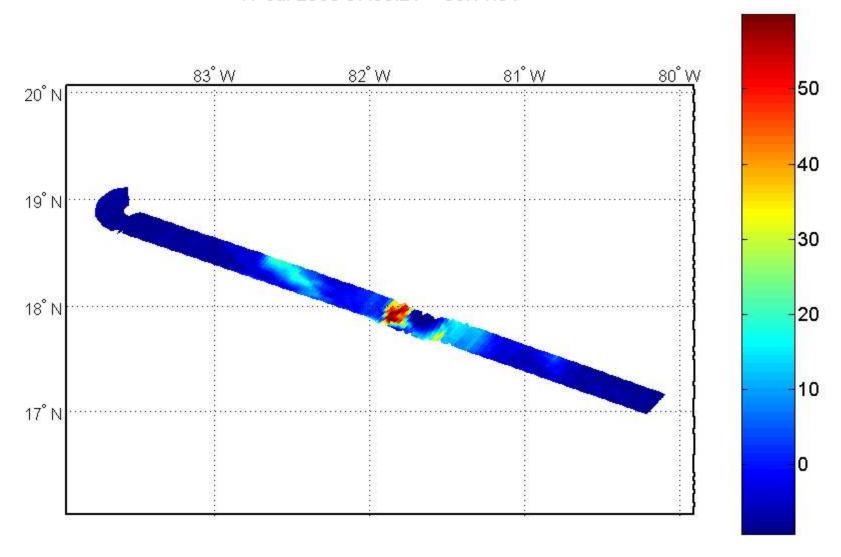
54.94-117.95/119.55 GHz brightness temperature difference(250mB) 17-Jul-2005 07:38:21 -- 08:11:34



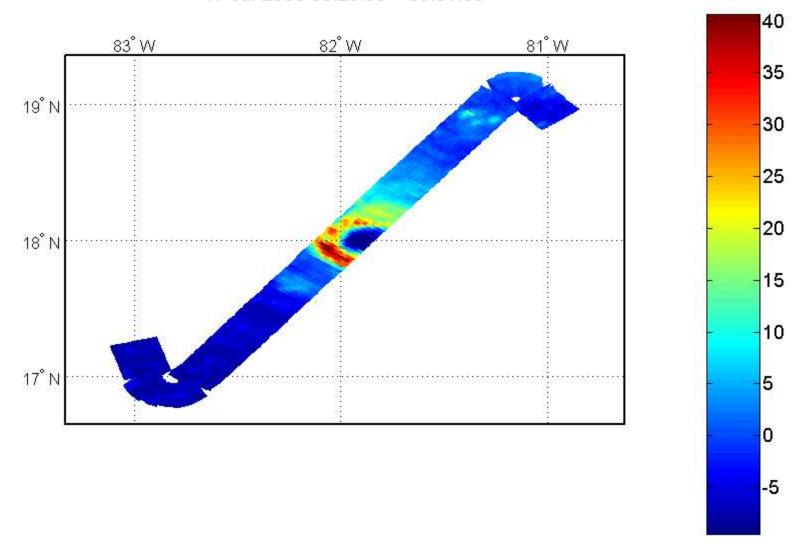
54.94-117.95/119.55 GHz brightness temperature difference(250mB) 17-Jul-2005 08:28:30 -- 09:01:30



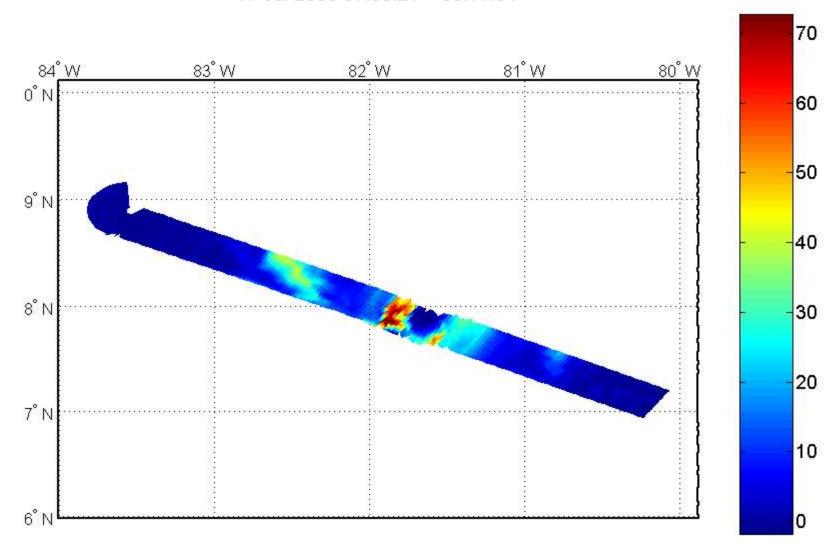
54.4-117.55 GHz brightness temperature difference(400mB) 17-Jul-2005 07:38:21 -- 08:11:34



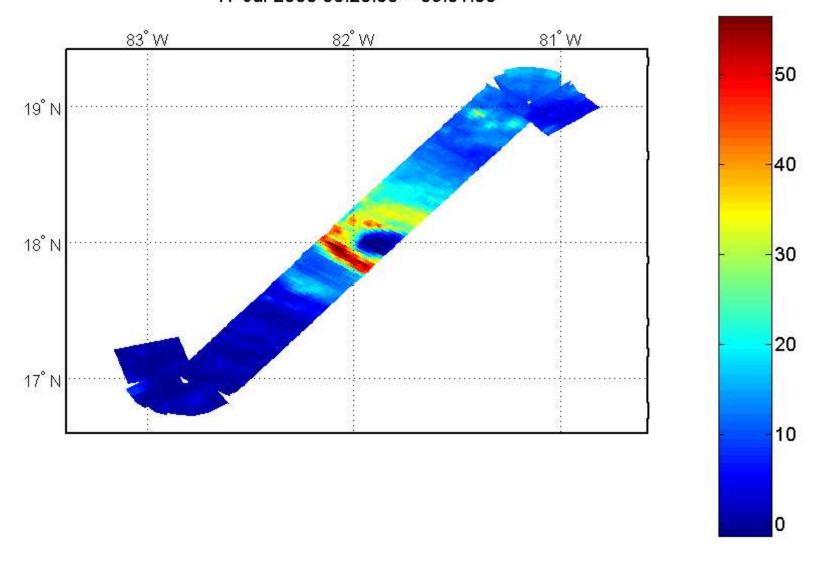
54.4-117.55 GHz brightness temperature difference(400mB) 17-Jul-2005 08:28:30 -- 09:01:30



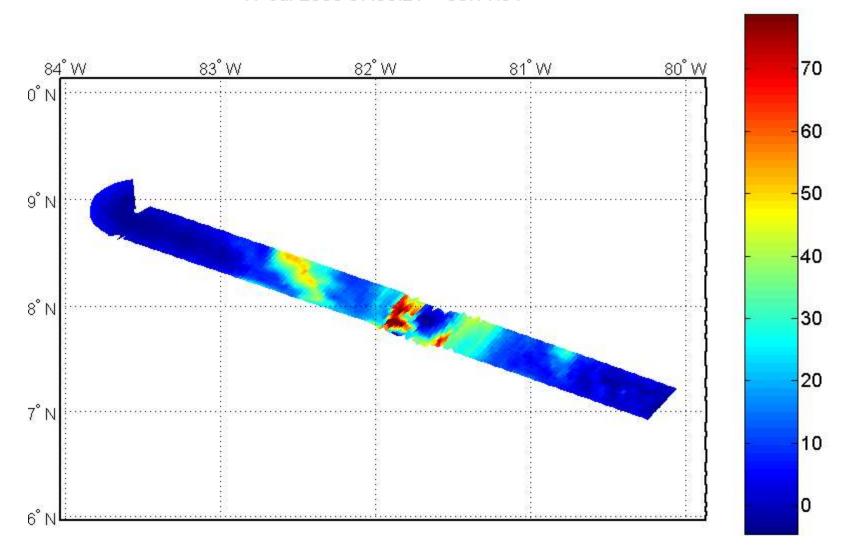
53.596-117.15 GHz brightness temperature difference(750mB) 17-Jul-2005 07:38:21 -- 08:11:34



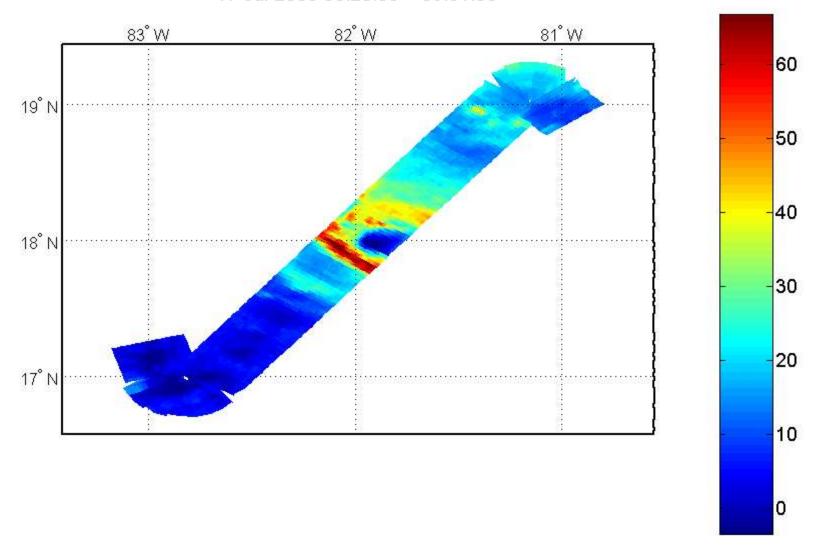
53.596-117.15 GHz brightness temperature difference(750mB) 17-Jul-2005 08:28:30 -- 09:01:30



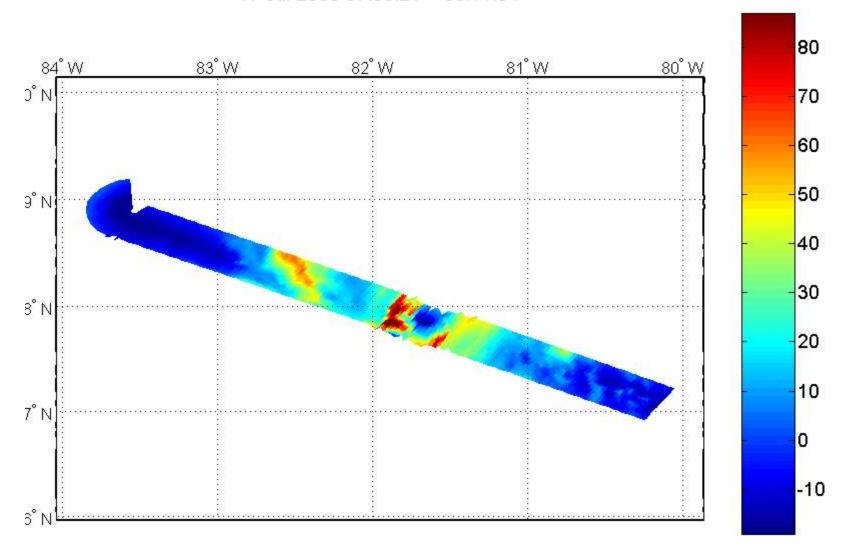
52.8-116.7 GHz brightness temperature difference(1000mB) 17-Jul-2005 07:38:21 -- 08:11:34



52.8-116.7 GHz brightness temperature difference(1000mB) 17-Jul-2005 08:28:30 -- 09:01:30



51.76-116.2 GHz brightness temperature difference(surface) 17-Jul-2005 07:38:21 -- 08:11:34



51.76-116.2 GHz brightness temperature difference(surface) 17-Jul-2005 08:28:30 -- 09:01:30

