

## Objectives

- Investigating the brightness temperature (TB) signature of snowfall over the McMurdo Station (166.7° E, 77.8°S), Antarctica.
- TB data are from SSMIS onboard F17 satellite.
- Daily snowfall data are from McMurdo station observations in 2015.

## Results

- Negative correlation is noticed between 183 GHz channels and daily snowfall rate
- Snowfall rate estimate via TB observations over snow-covered areas remains extremely challenging.

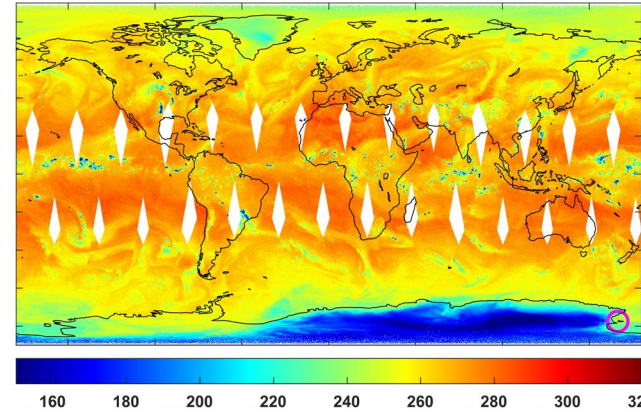


Figure 1. TB at H150 GHz from SSMIS-F17 on 10 May 2015.

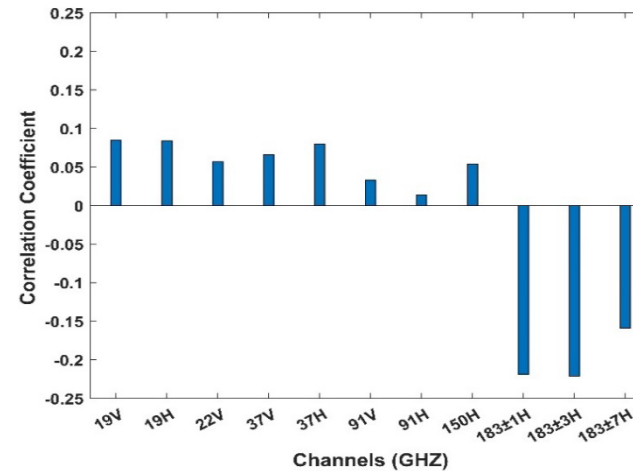


Figure 3. Correlation coefficients between snowfall rates and TBs from 11 SSMIS channels.

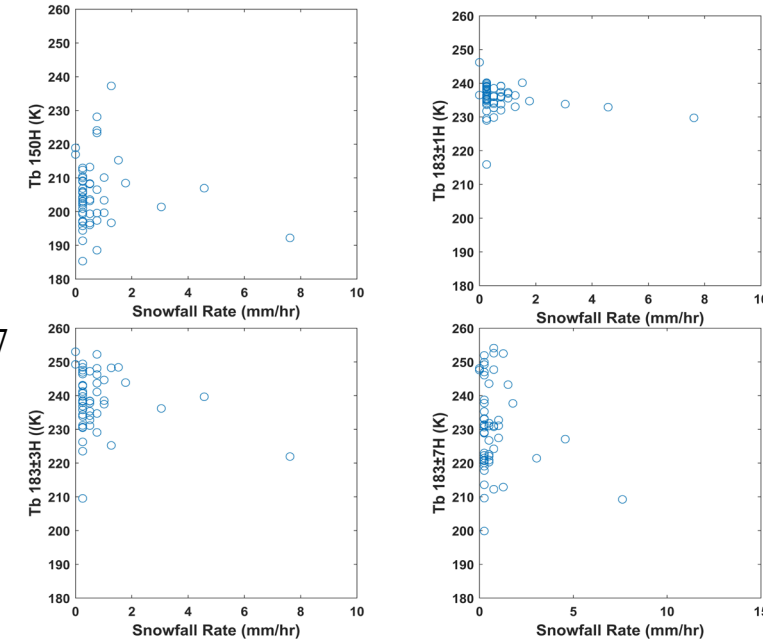


Figure 2: scatter plots between TBs and daily snowfall rates from the McMurdo station.