

Discussion about representativeness about HAIC+HIWC-RADAR data set for Appendix D validation

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Questions:

- Are the 3 data sets representative of conditions experienced in engine and air data probe events ?
- Are there any 'holes' or biases in the data set ?

Strapp comments to start:

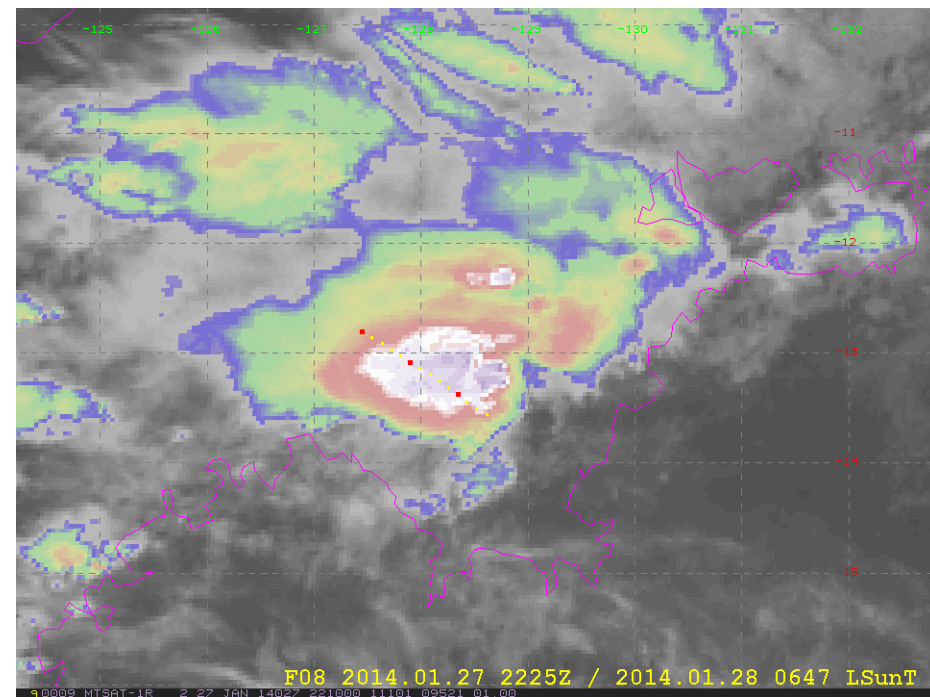
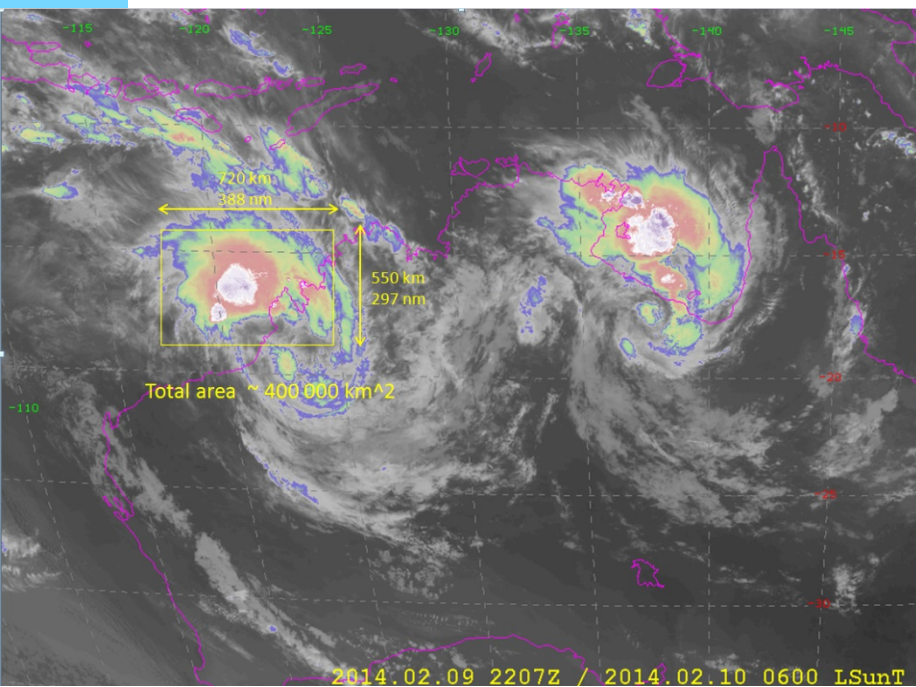
- (1) All of our data are in relatively low aerosol concentration environment
 - Speculate low aerosol may be conducive to warm rain development and rain-out before freezing level – could possibly lower TWC at high altitude
 - High frequency of engine events in Japan- South China Sea area (very high aerosol over the ocean)
 - Can we really conclude that these high aerosol conditions would have the same TWC statistics as our data set?

Strapp comments to start:

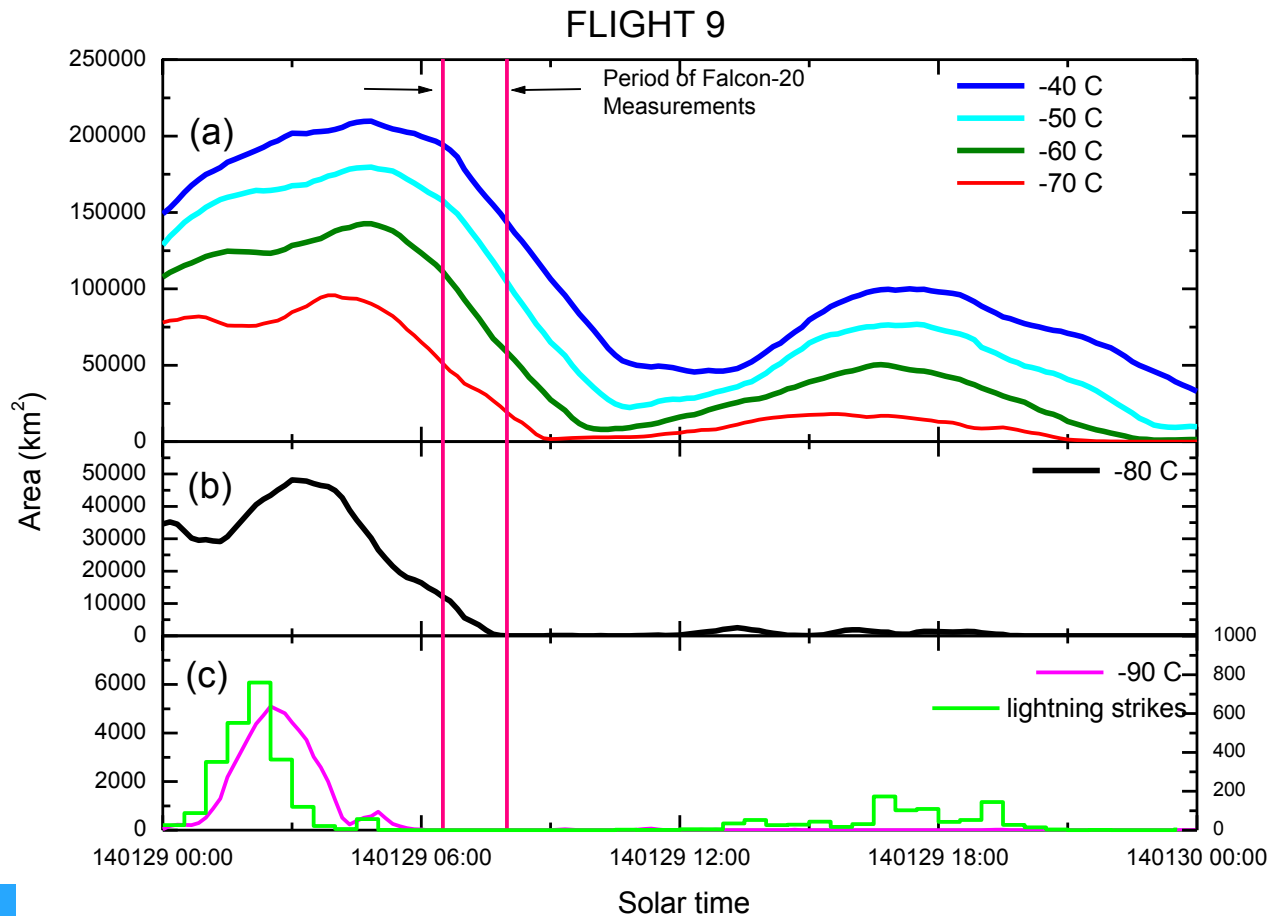
(2) Night-time maximum in oceanic convection observed at all three locations, at least to some degree. Strongest effect in Darwin. But, no night-time flying.

- However, we still flew near cores of convection during the day; peaks in TWC no higher but distance scale of high IWC may be the most affected.
- Breakout session in Toronto showed we did perform runs in Darwin in high IWC cases as originally intended.

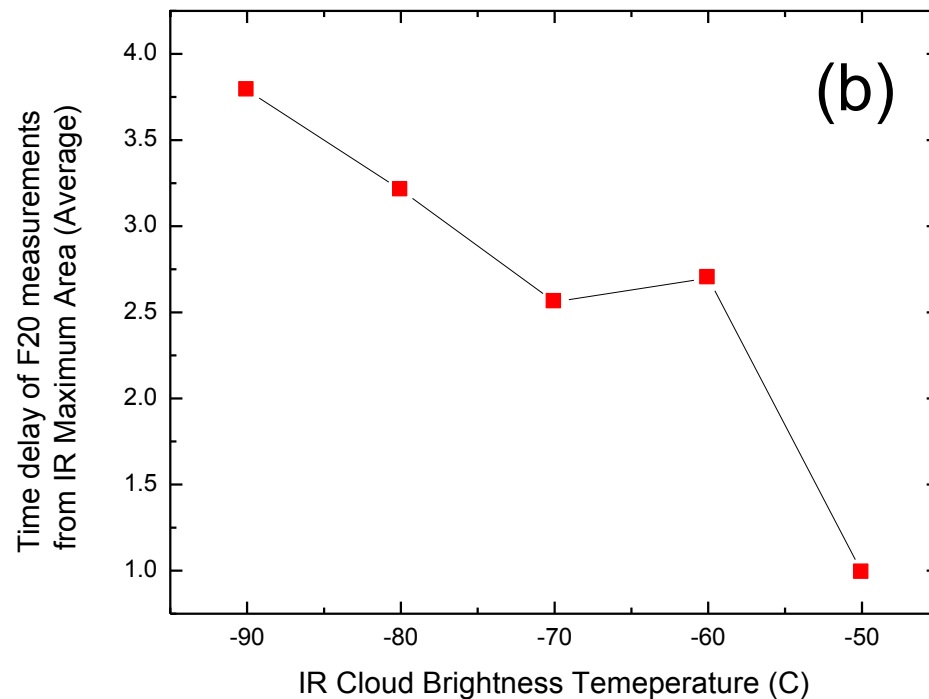
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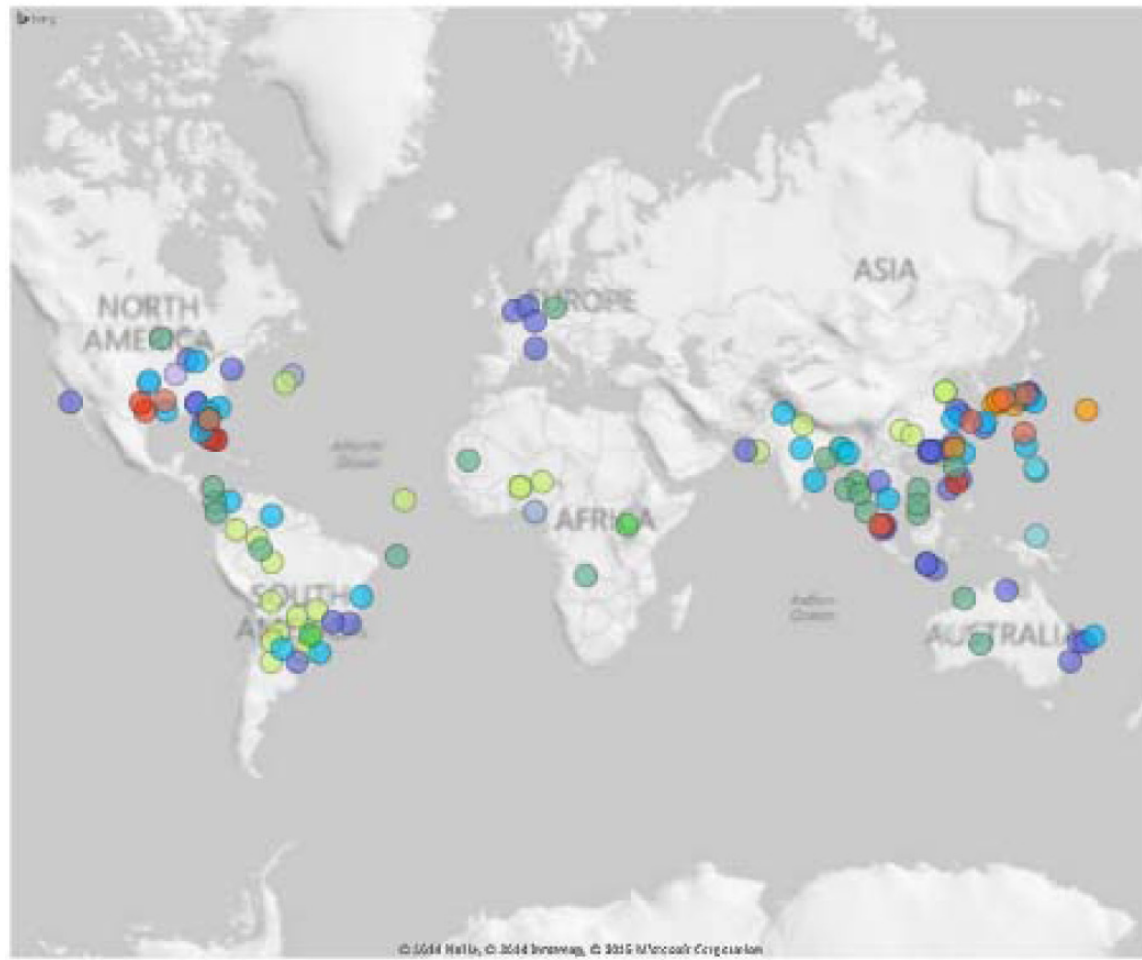
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(3) No flights in very large continental MCS during their active periods, and/or near active cells

- could be studied over CONUS
- Africa
- South America



End of Presentation

Merci, Thank You

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Spare Slides