

What datasets and results we can provide for DCS group

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- 1) Providing 3-D NEXRAD radar and its classified components (CC, SR, AC)**
- 2) Providing UND aircraft in situ measured DCS cloud properties during MC3E**

An analysis of the interactions between biomass burning aerosols and deep convection during the 2011 MC3E campaign

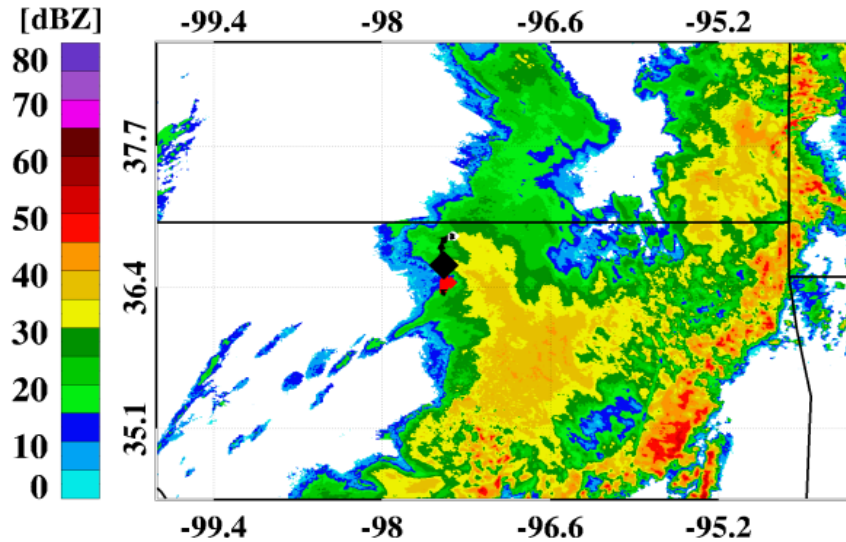
Xiquan Dong and Tim Logan, University of North Dakota

- **Currently studying 2 cases**
 - **25 April 2011 – Low AOD and deep convection**
 - **Example of “clean biomass smoke case” – weak aerosol/cloud interaction**
 - **23 May 2011 – High AOD and discrete convection**
 - **Example of “polluted biomass smoke case” – strong aerosol/cloud interaction**
- **What role (if any) did the smoke play in the evolution of the convective storm development?**
- **Analyze more cases from MC3E and other instances of smoke/deep convection interactions for future work**

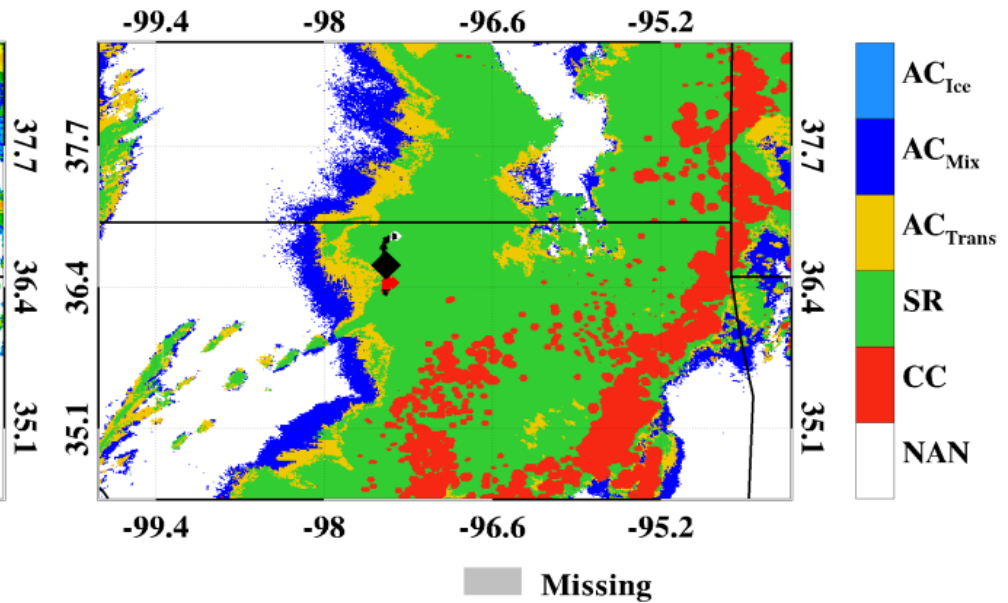
3D NEXRAD radar and its classified components (CC, SR, AC)

2011.05.20 15:45 UTC/Flight Time 15:45 UTC

(a) 2500 m Z_e



(b) Classification



(c) Cross-section Z_e & Classification

