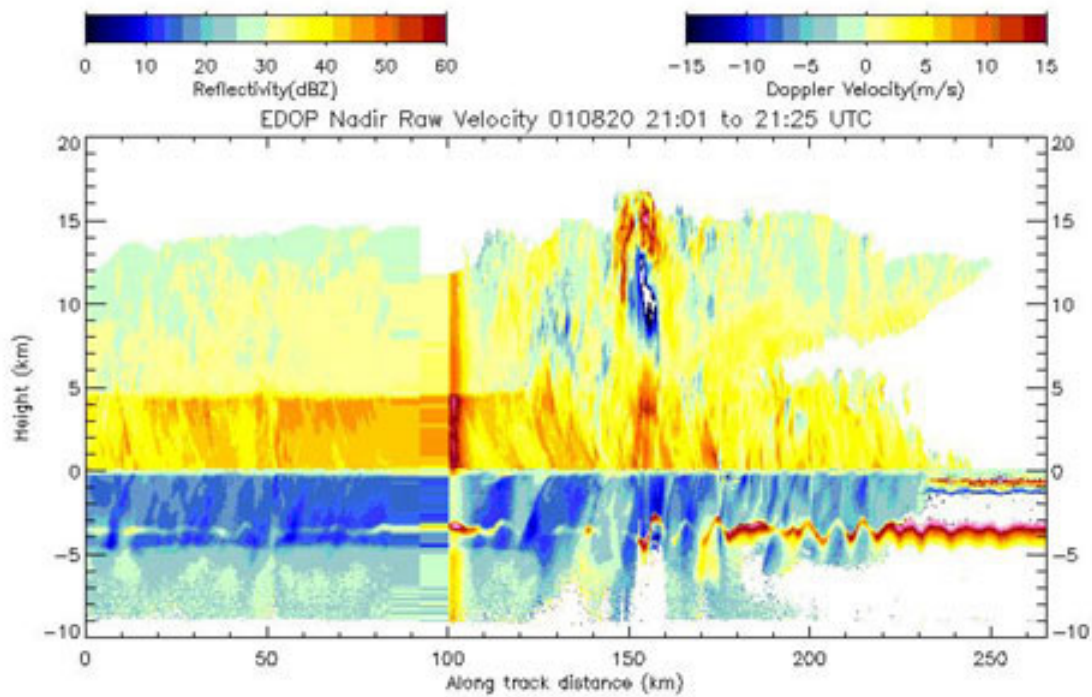
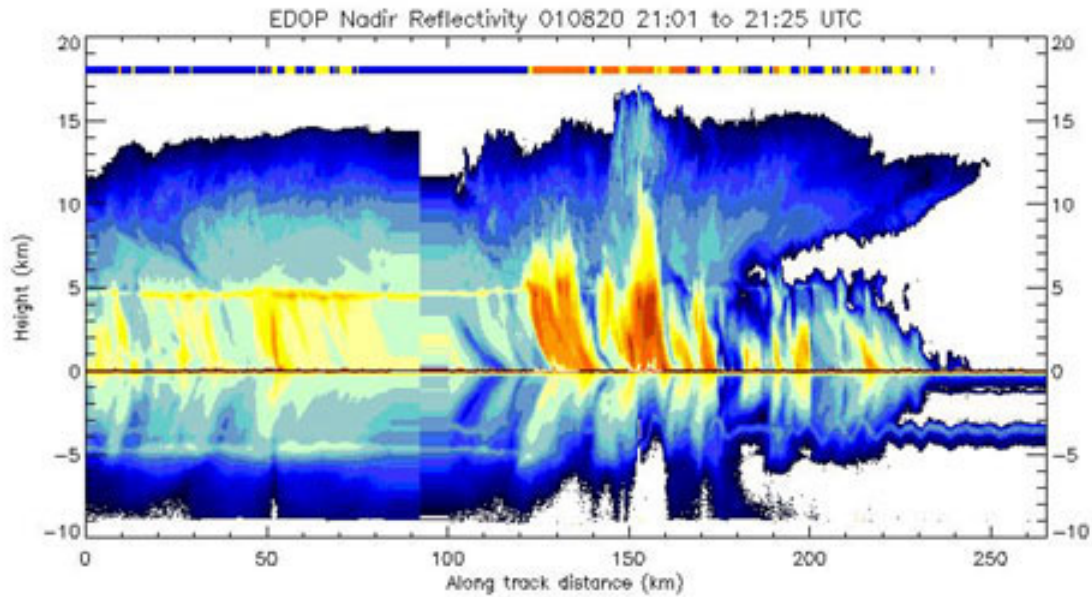


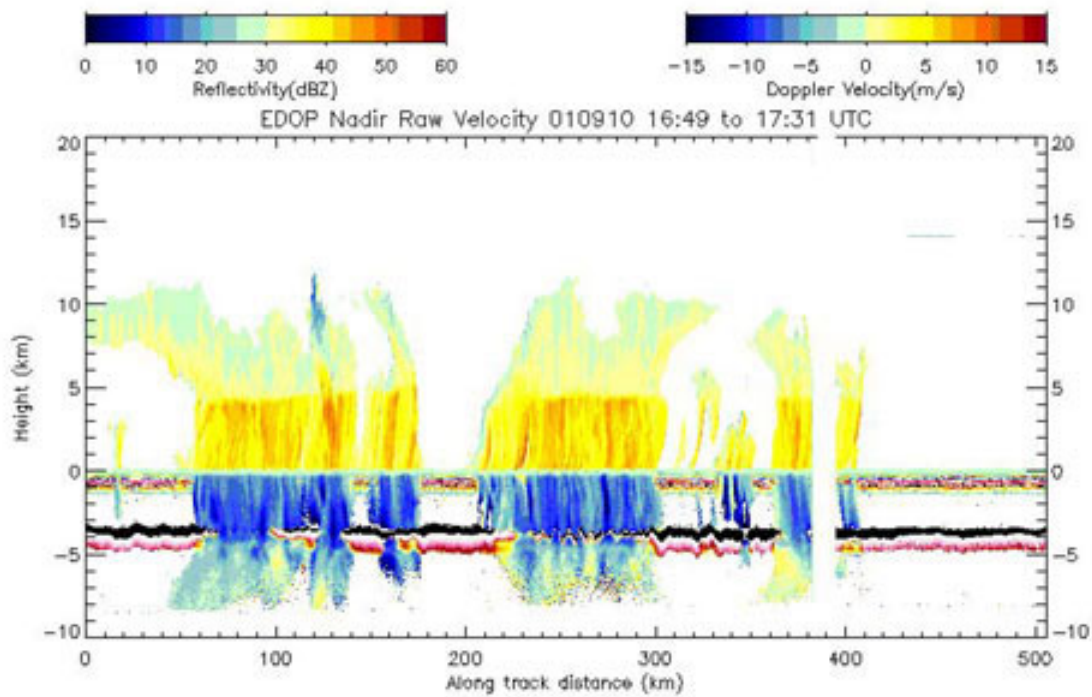
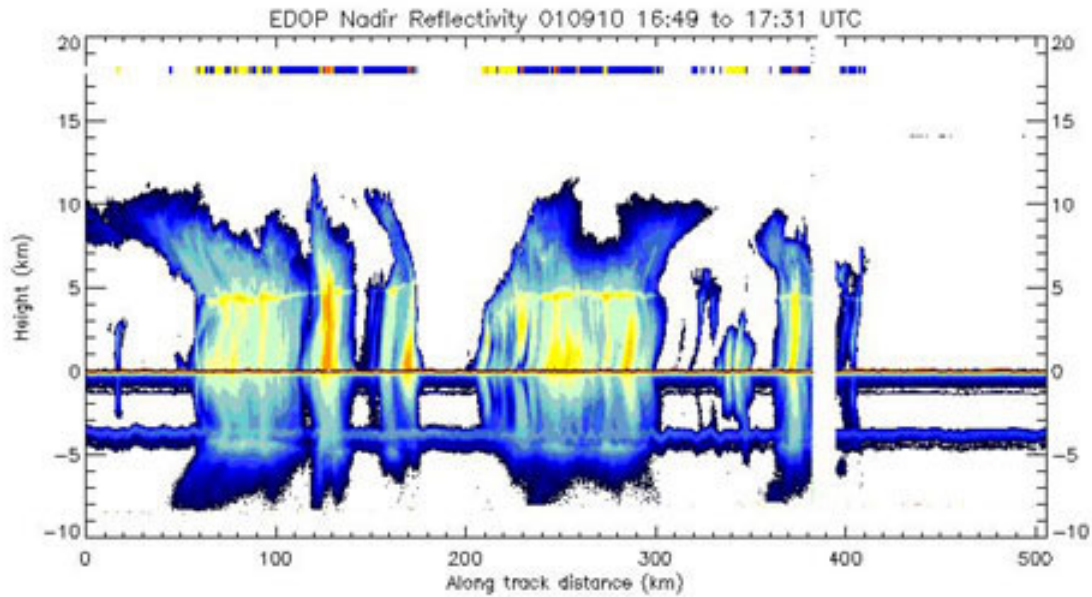


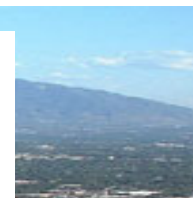
LARGE STORM-TO-STORM VARIATIONS IN ESTIMATED ICE WATER CONTENT AND LIQUID WATER CONTENT:

How do Chantal, Erin, and Humberto (EDOP data)
compare with a larger sample from TRMM?

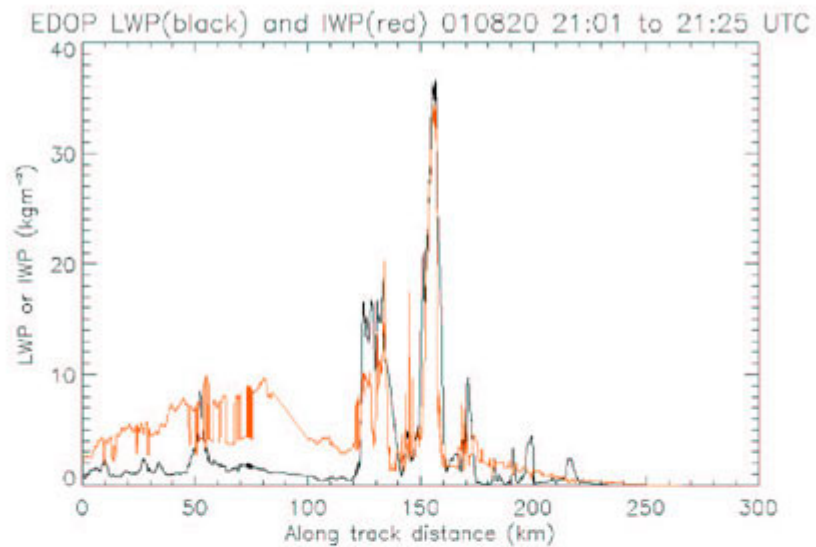
Ed Zipser and Haiyan Jiang
Dept. of Meteorology, University of Utah



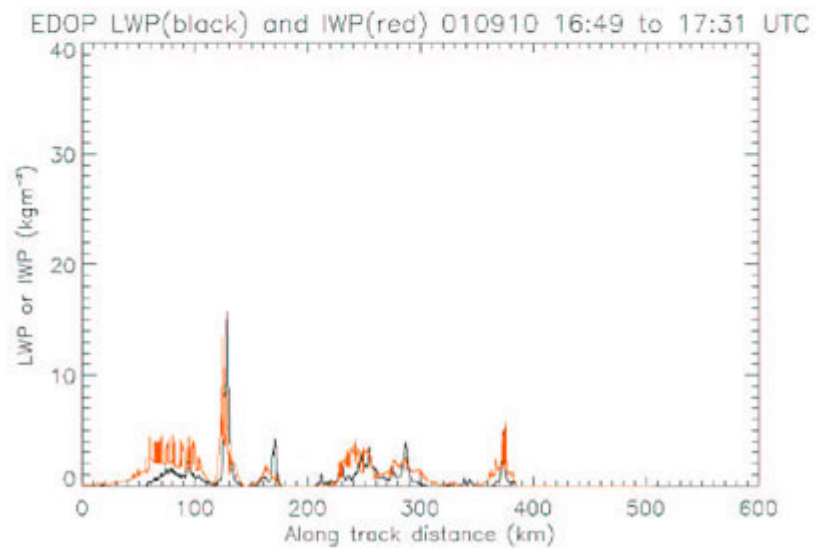




Chantal
20 Aug 2001

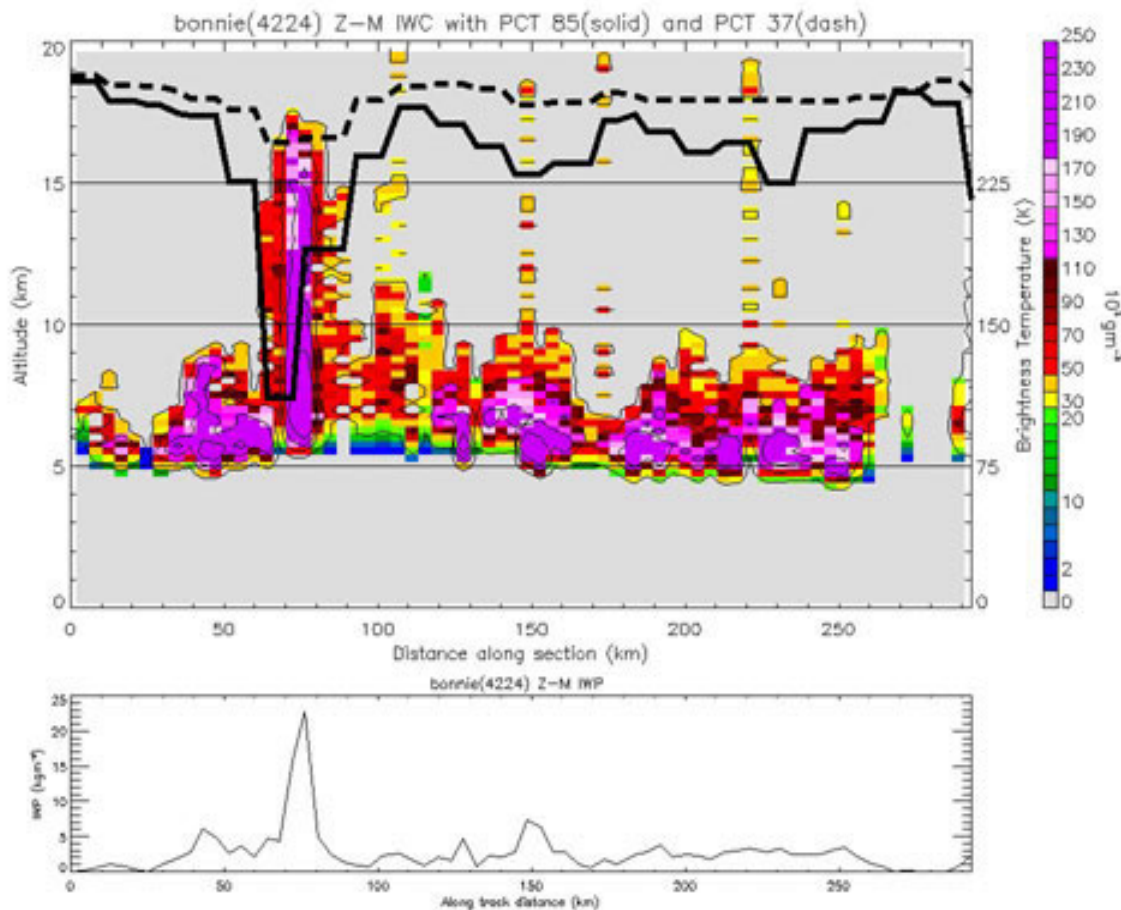


Erin
10 Sept 2001





Bonnie - TRMM x-section through extreme cell





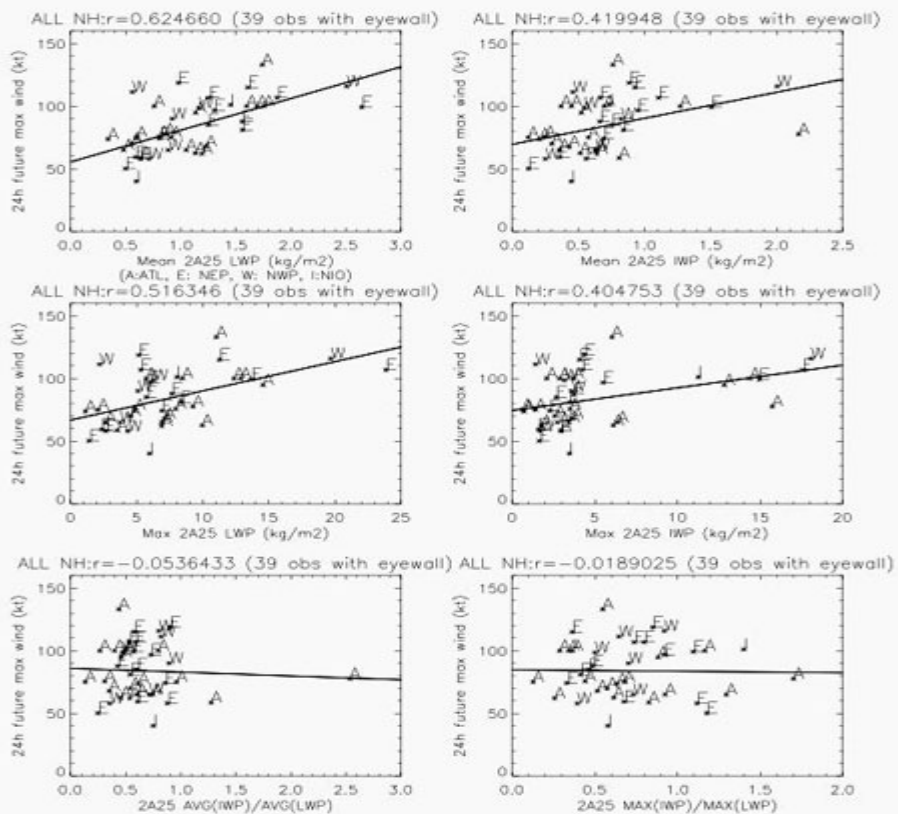
Ice Water Path and Liquid Water Path: Means and Extremes



Storm	mean IWP (mm)	max IWP (mm)	mean LWP (mm)	max LWP (mm)
Chantal	4.0 (4.3)	34	2.9 (3.3)	37
Erin: Pass 1	0.8 (1.3)	13	0.5 (1.0)	16
Pass 2	0.8 (1.1)	9	0.6 (1.1)	11
Pass 3	0.9 (1.3)	7	0.6 (1.3)	11
Humberto:				
22 Sept	1.5 (2.1)	17	1.7 (3.0)	18
23 Sept	0.7 (1.2)	9	0.6 (1.3)	13
24 Sept	0.7 (1.6)	20	0.6 (2.0)	17
Bonnie (23 Aug- TRMM)		24	-	-

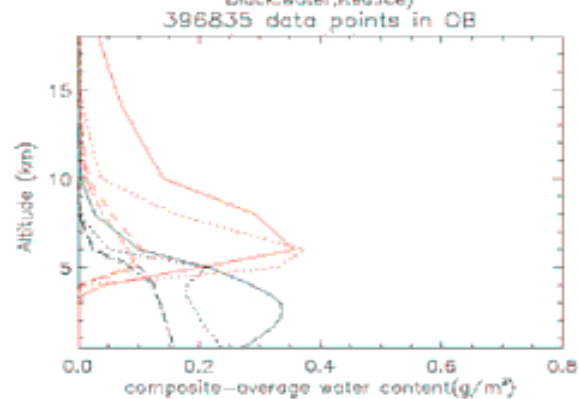
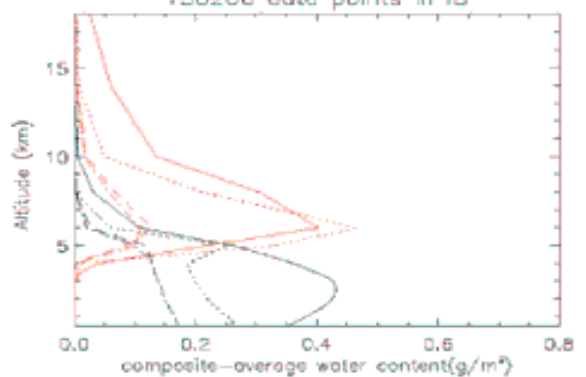
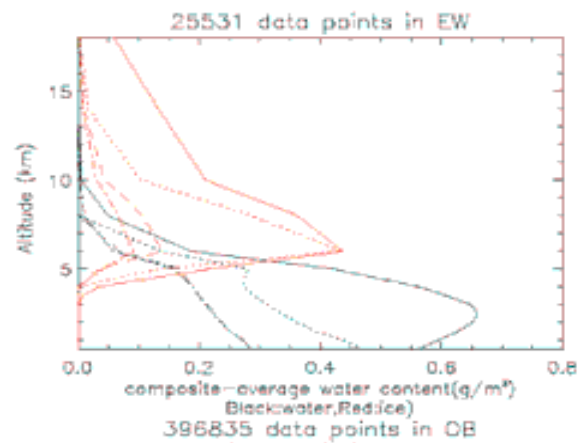
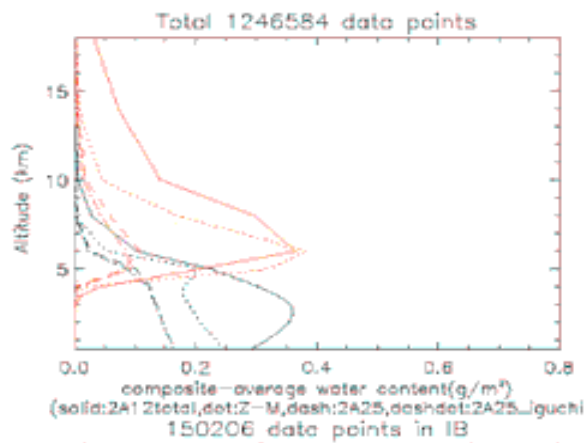
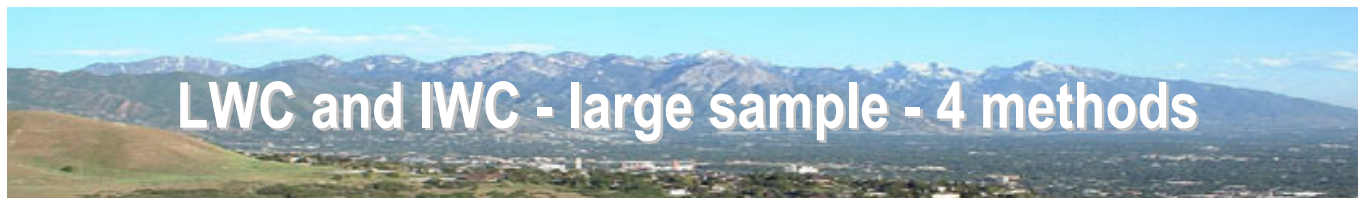


Dan Cecil sample- LWC IWC correl with future intensity





LWC and IWC - large sample - 4 methods





- Chantal x-section had about 4 X the ice water content compared to any of the Erin x-sections
- Humberto was intermediate between Erin and Chantal
- At TRMM resolution, peak IWC in strongest hot towers is $\sim\sim 20-30$ [kg/m²] [mm]
- With large TRMM sample, there is fairly good correlation between mean LWC and future intensity (not as good for IWC, or for extreme values of either)
- Speculation: symmetry more important than extremes
- Different methods of rain or IWC estimation have some important discrepancies.....there is much work to do