UW MODIFICATION #1 TO 2AKu rain_type FIELD

If the following three criteria are met for a grid point, the rain_type is changed to STRATIFORM:

- The original classification is CONVECTIVE
- The maximum reflectivity in the column is greater than 40dBZ
- The height at which that maximum reflectivity occurs is between 3 and 5 km

UW MODIFICATION #2 TO 2AKu rain_type FIELD

If the following four criteria are met for a grid point, the rain_type is changed to STRATIFORM:

- The original classification is CONVECTIVE
- The maximum reflectivity in the column is greater than 38dBZ
- The max reflectivity in a column minus the reflectivity 1km higher is greater than or equal to 8 dBZ
- The max reflectivity in a column minus the reflectivity 1km lower is less than or equal to 6 dBZ

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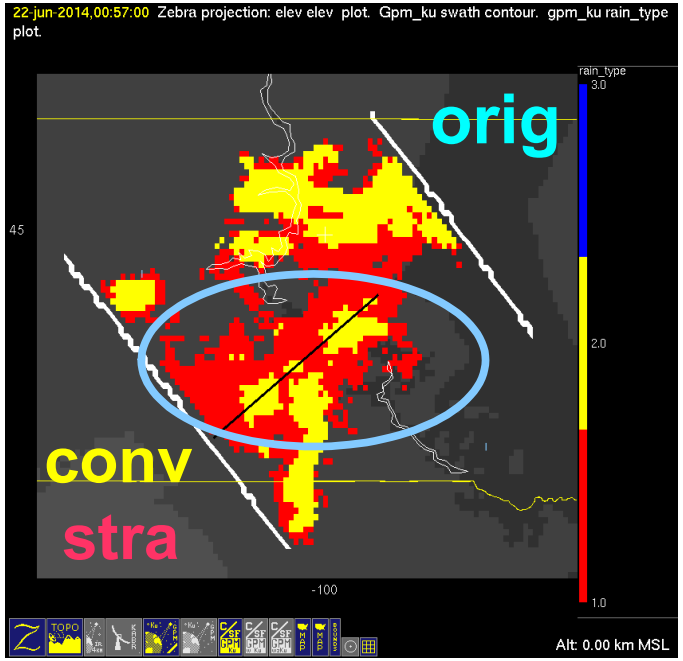
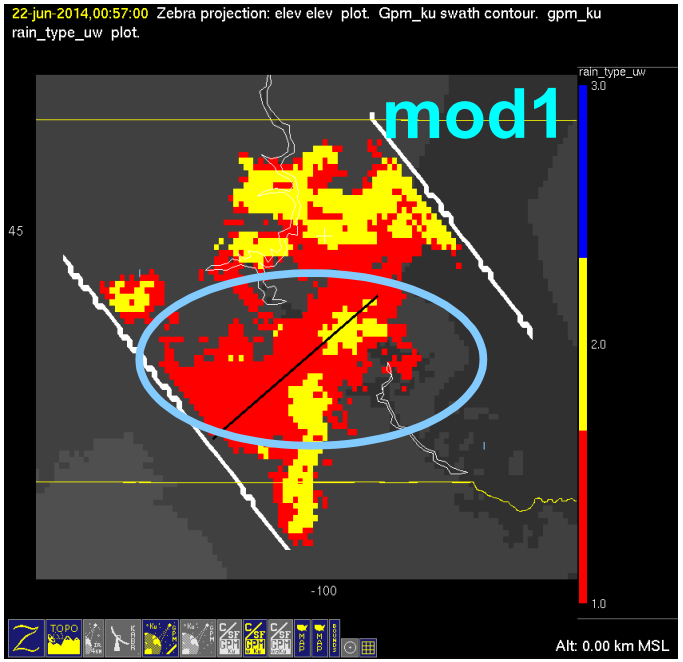
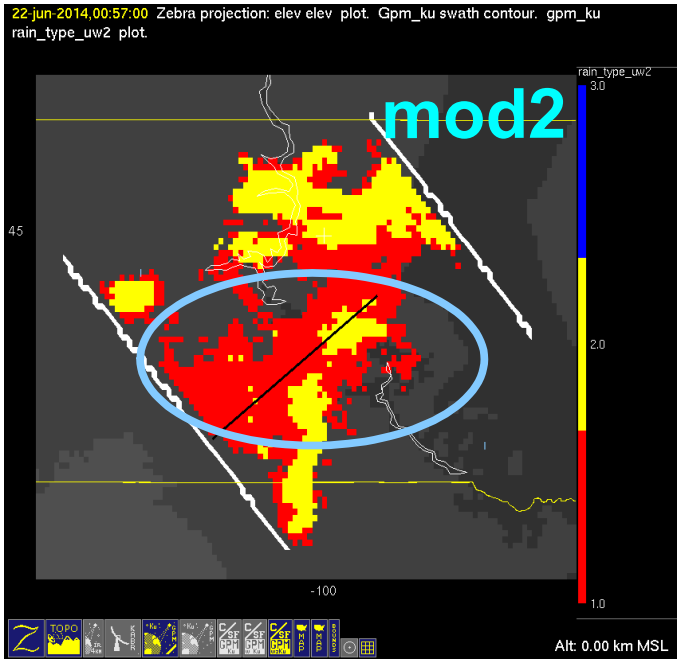
Each of the following slides shows the original classification on the left, the UW mod #1 classification in the middle and the UW mod #2 classification on the right, as well as a cross-section of the reflectivity which represents the cut where the black line is drawn on the horizontal plots.

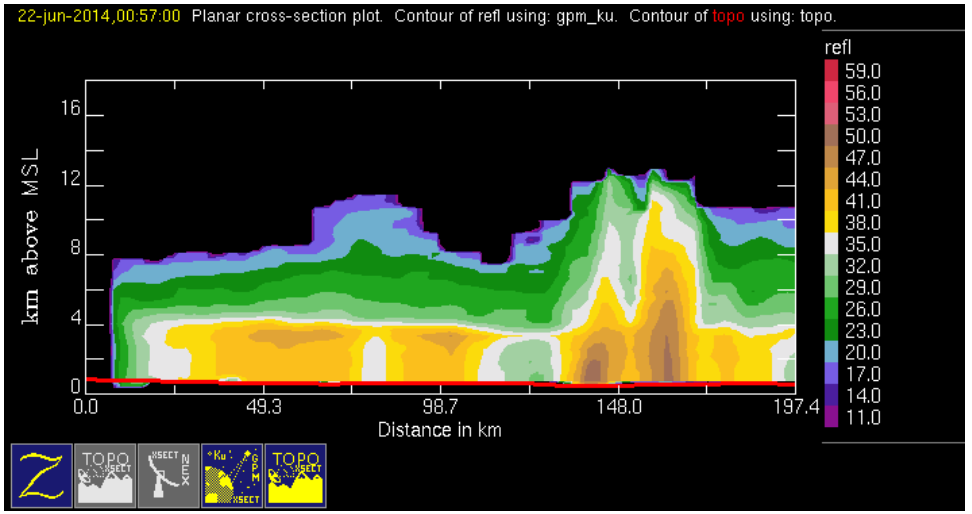
All cross sections are drawn from left to right.

20140622 @ 005639

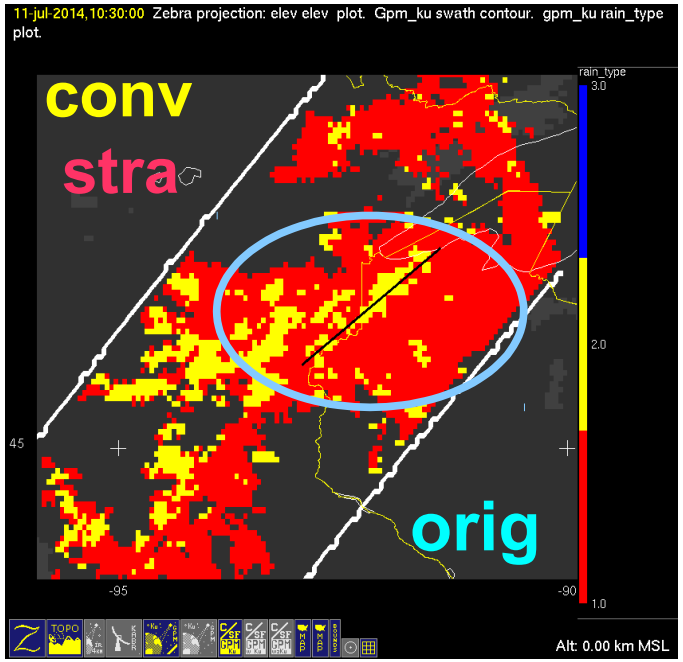


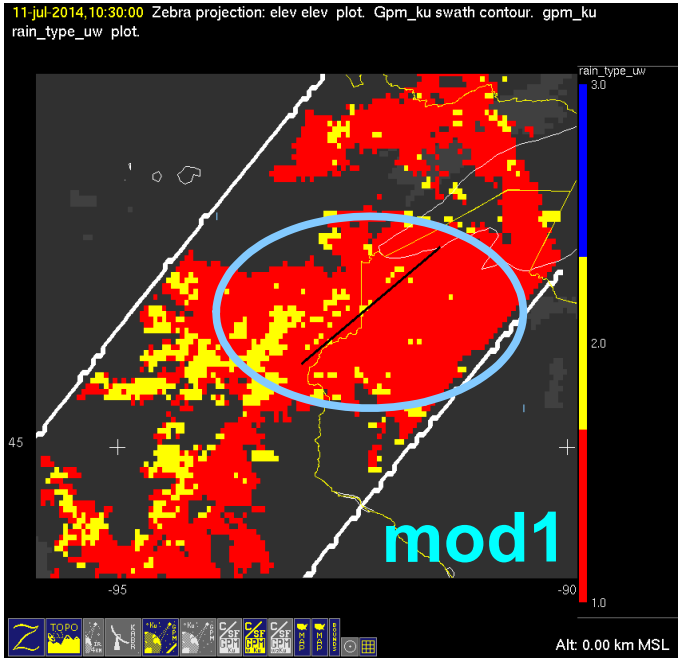


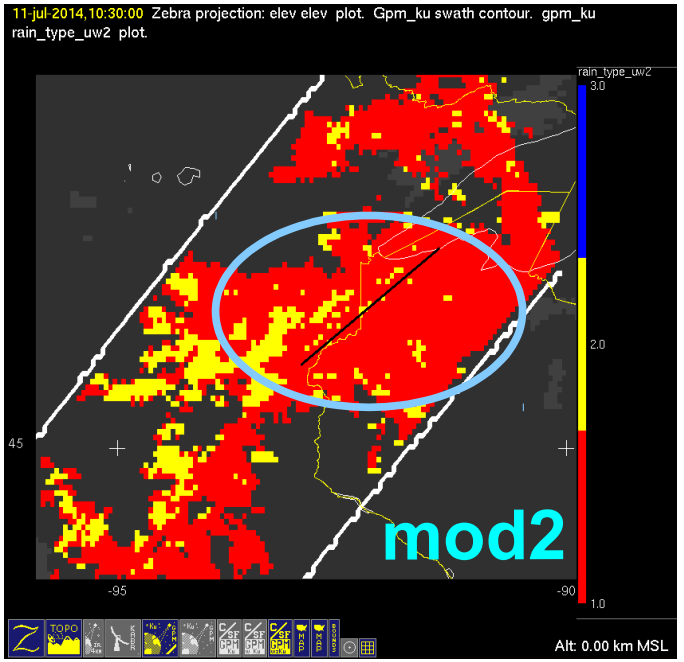


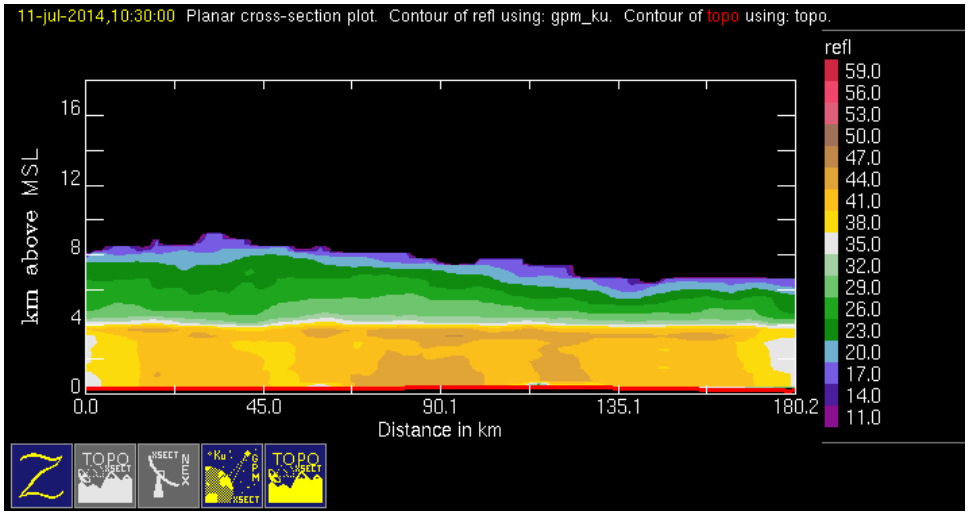


20140711 @ 102925

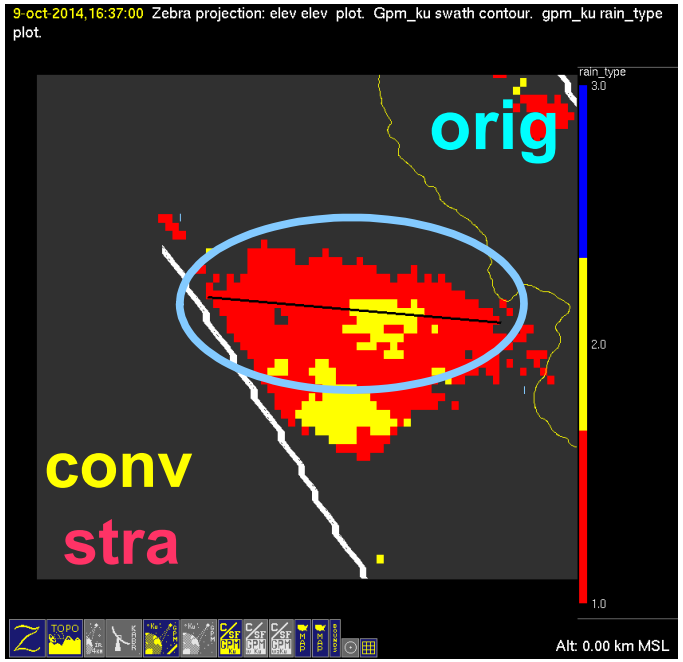


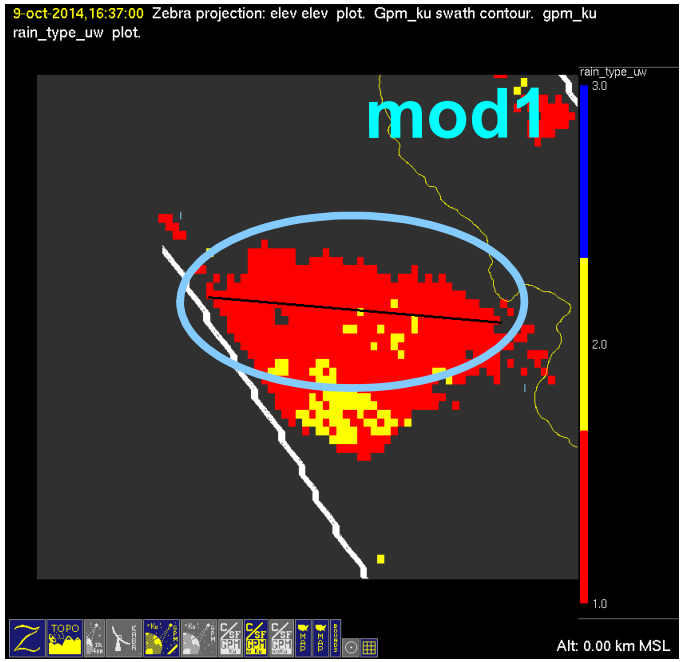


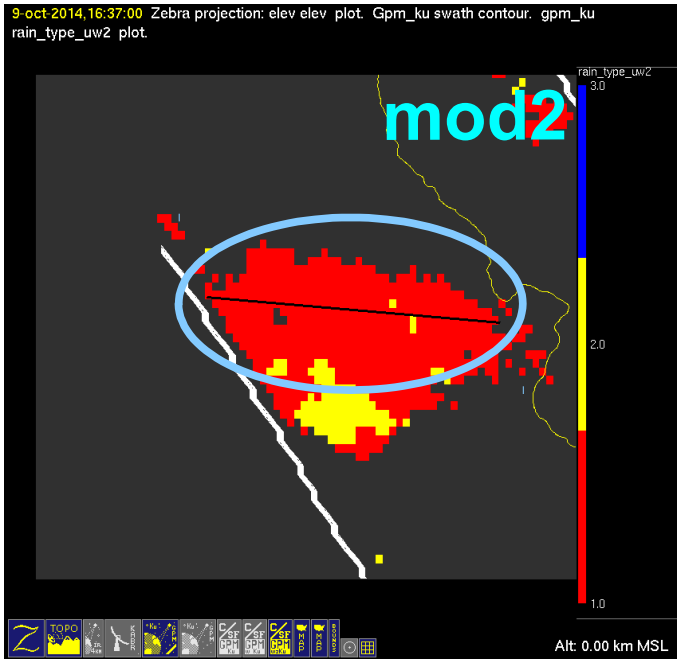


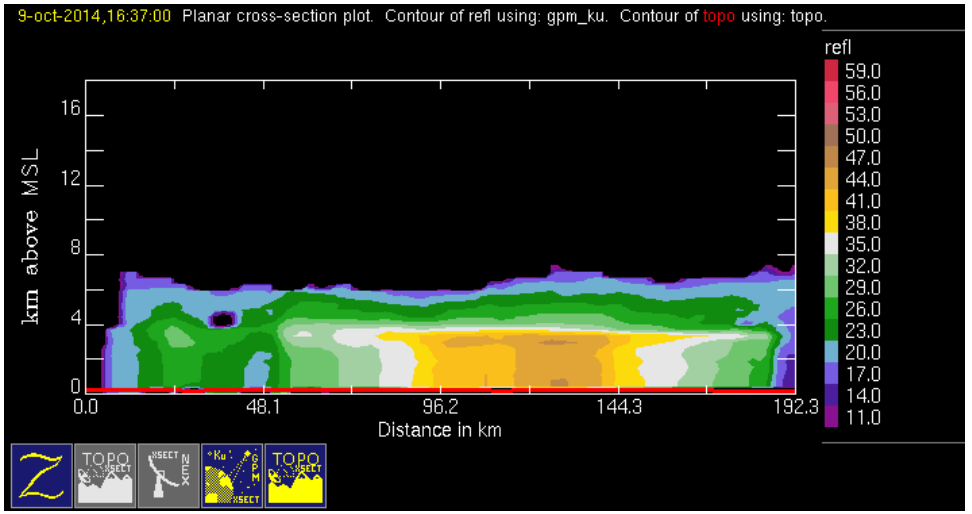


20141009 @ 163649

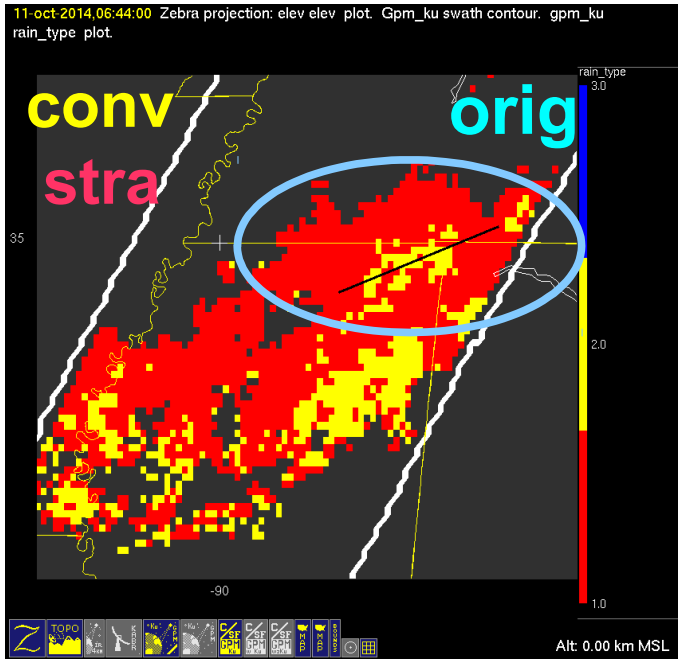


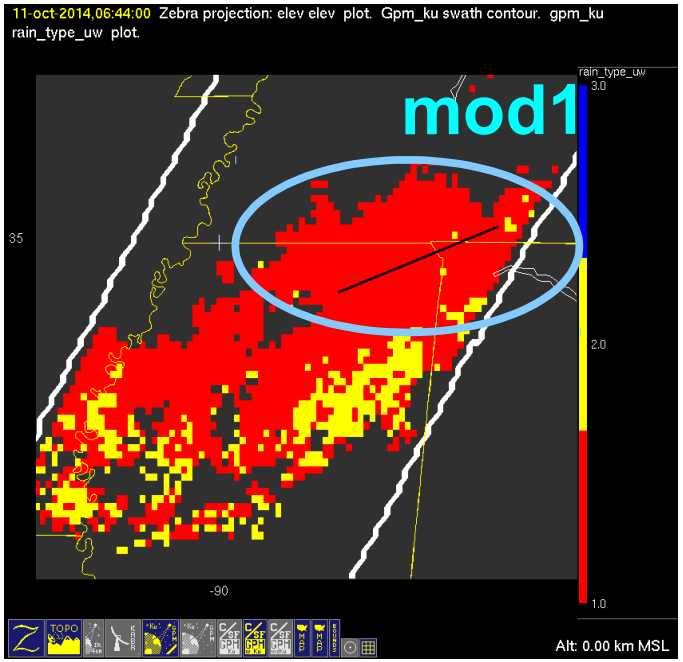


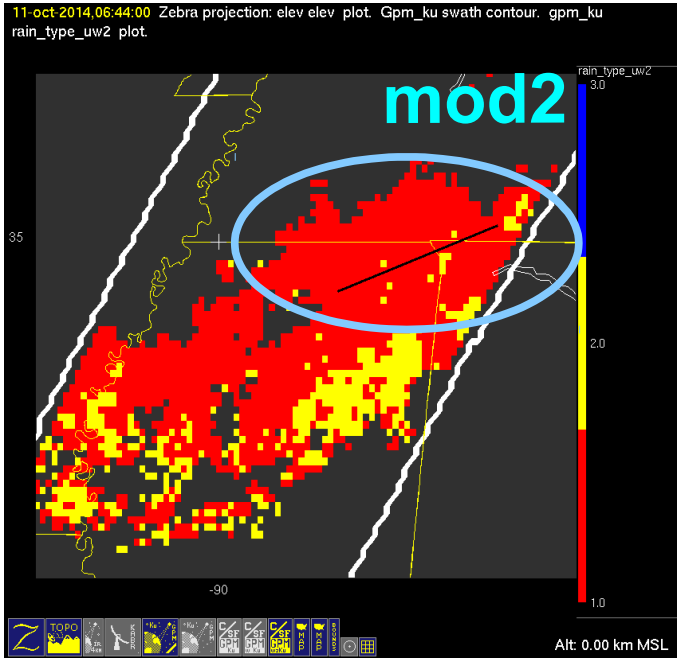


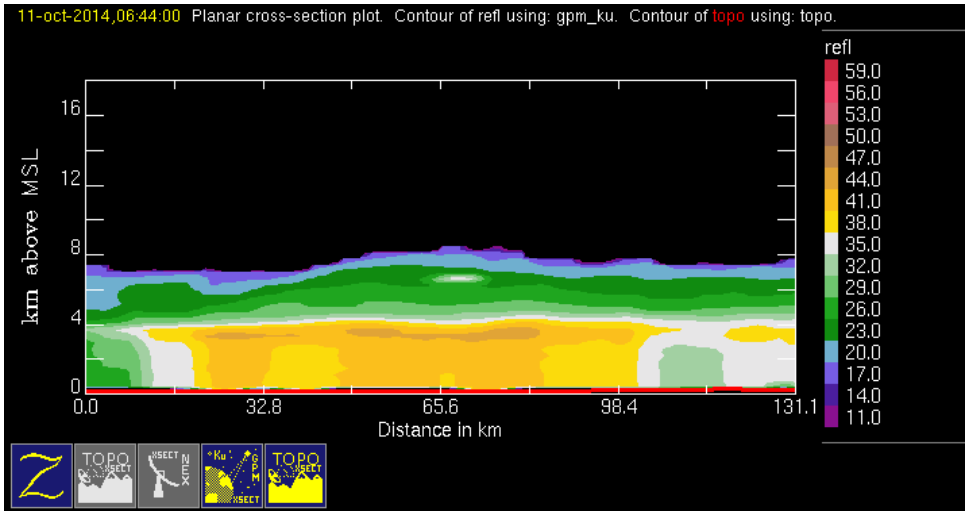


20141011 @ 064348

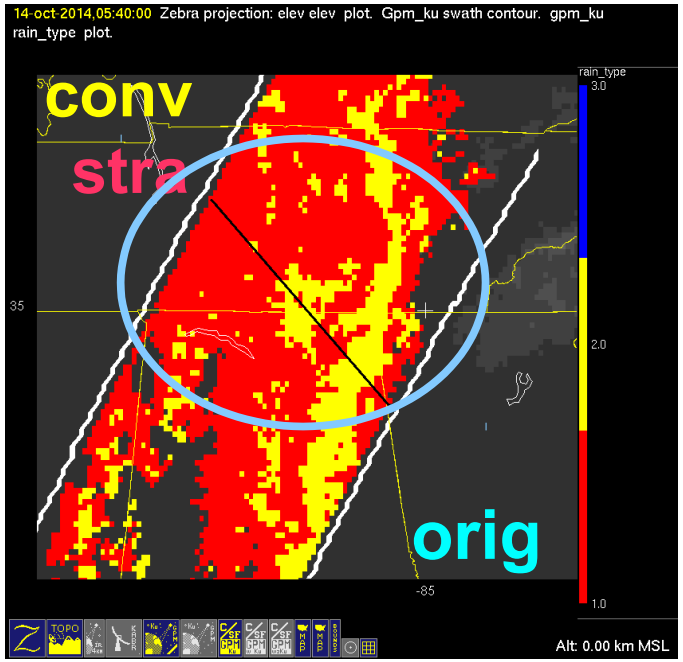


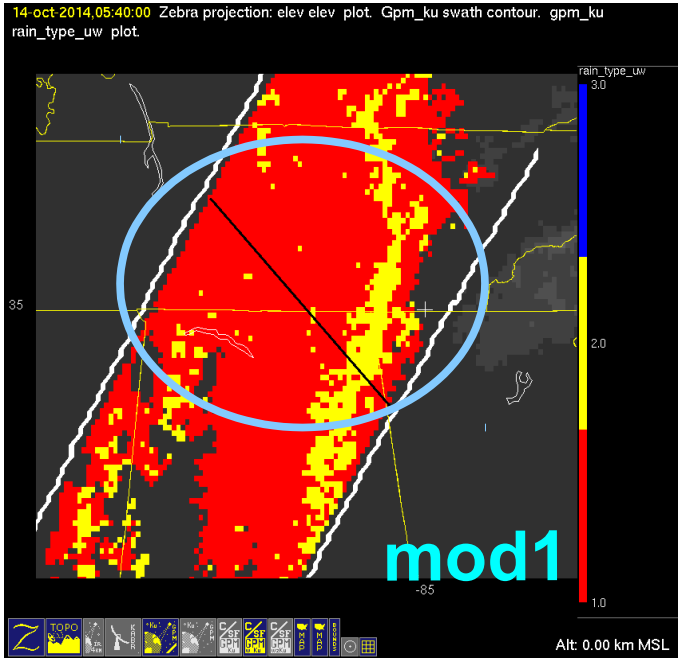


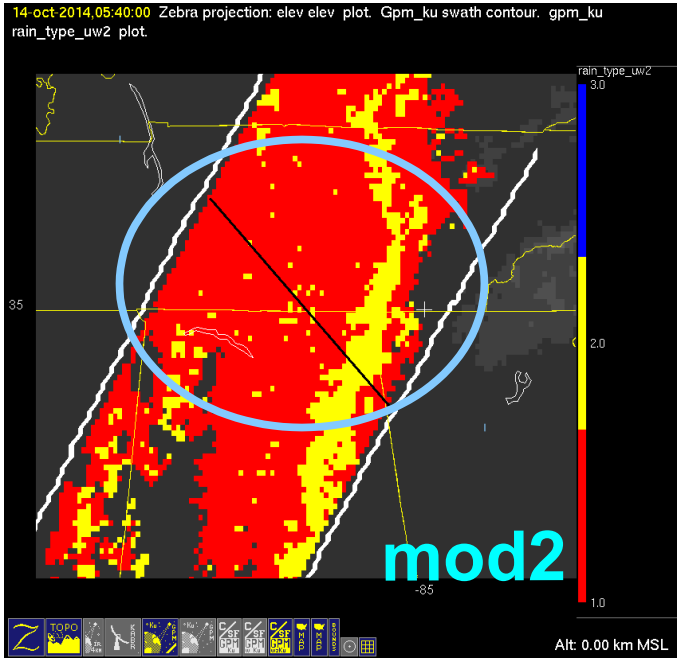


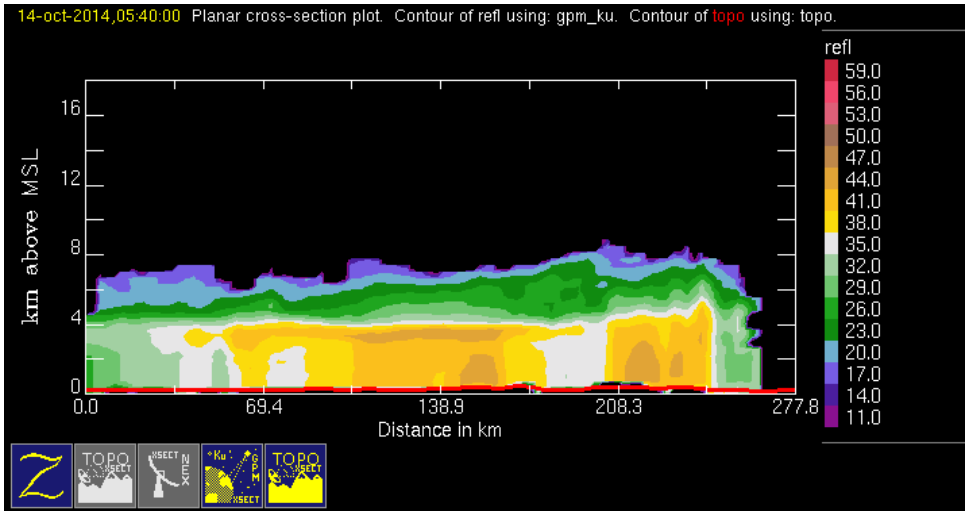


20141014 @ 053954

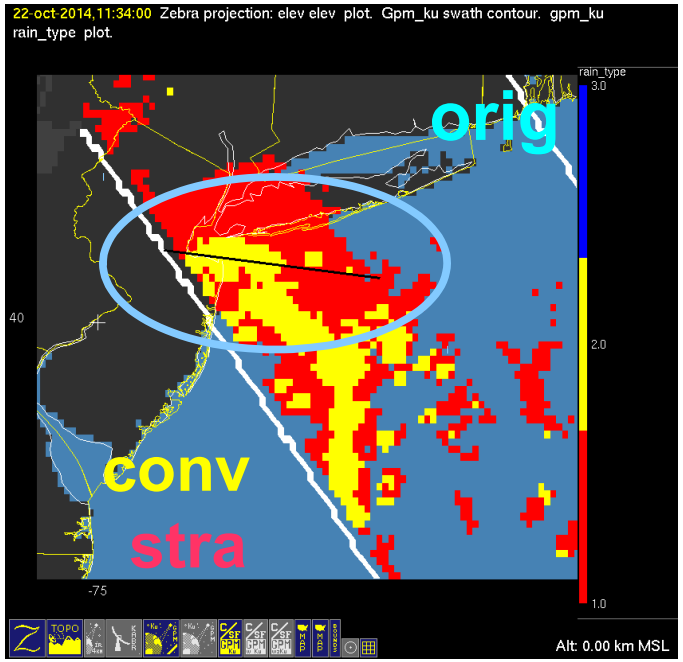


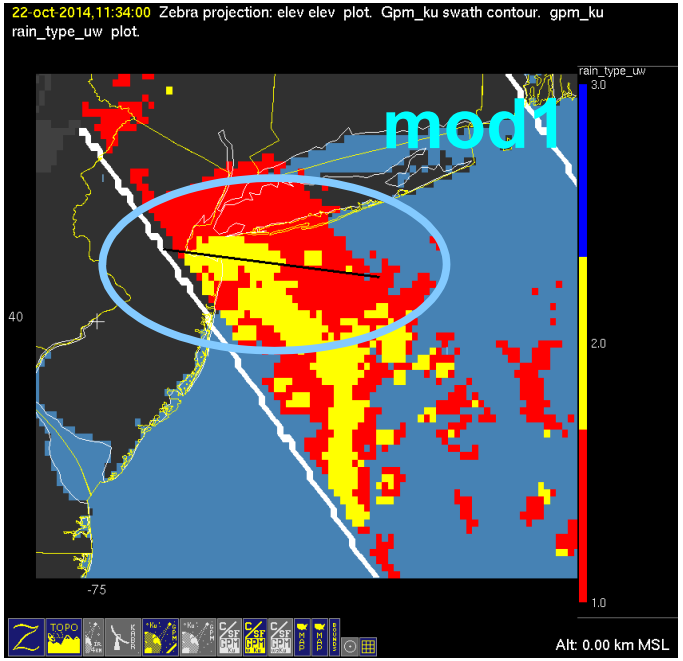


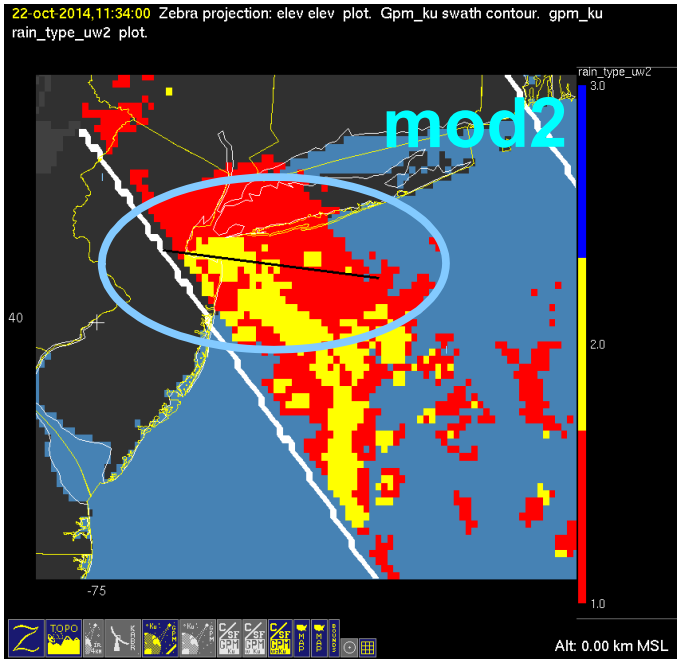


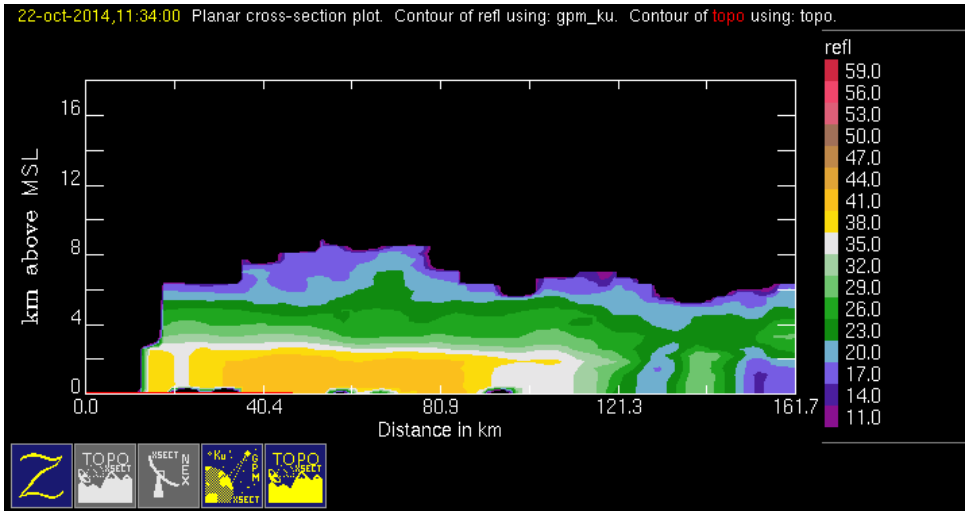


20141022 @ 113356



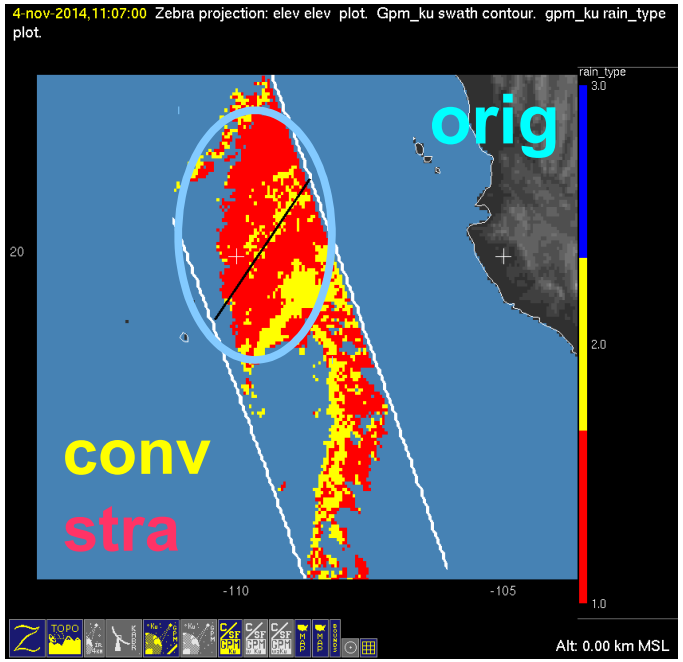


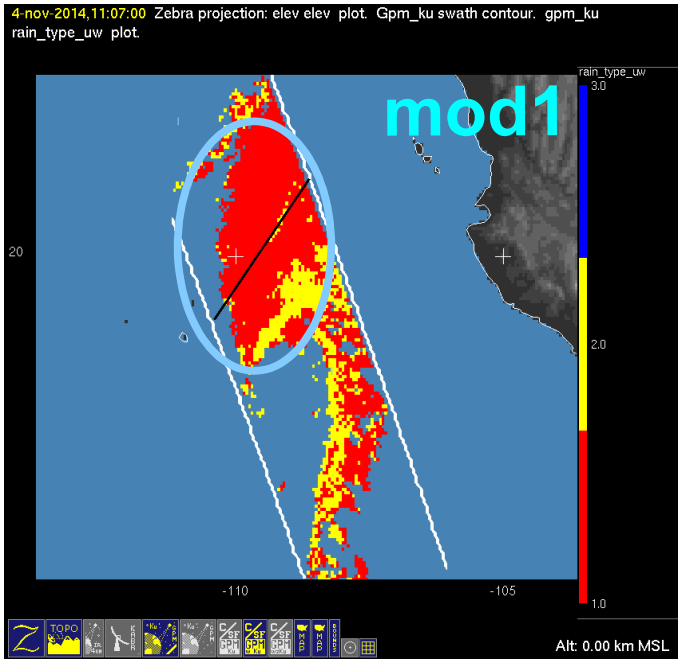


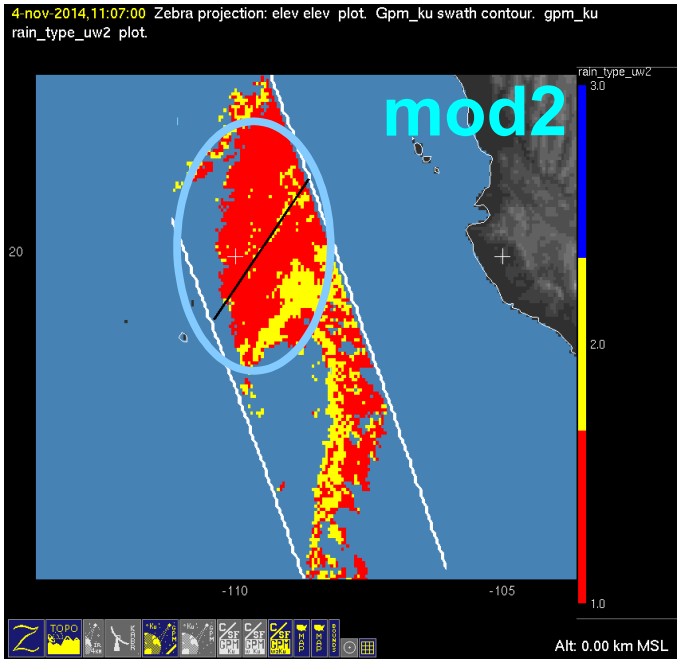


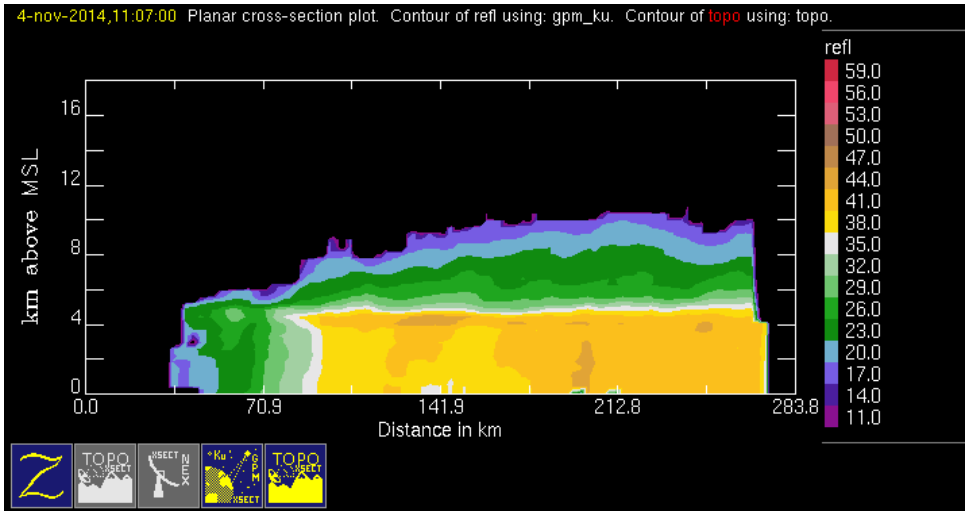
This case fails both height and slope tests. Cross section shows nearly constant reflectivities from ground to 2km.

20141104 @ 110624 #1/2

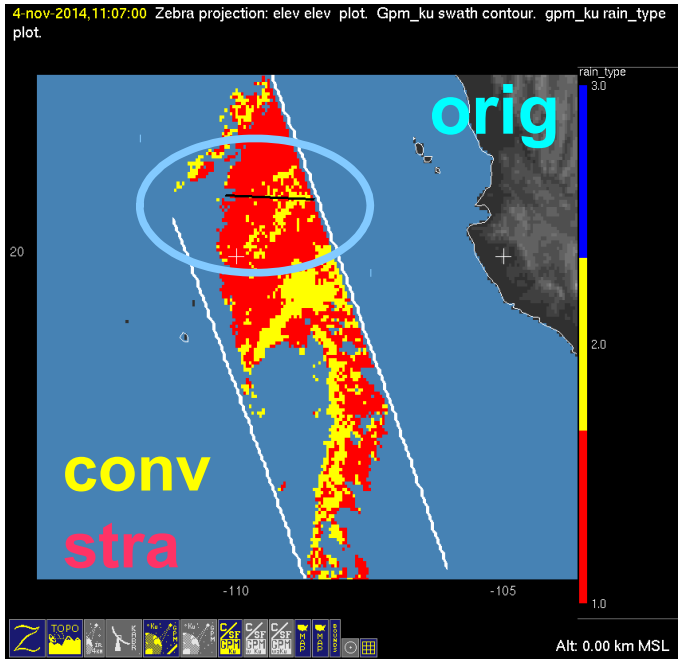


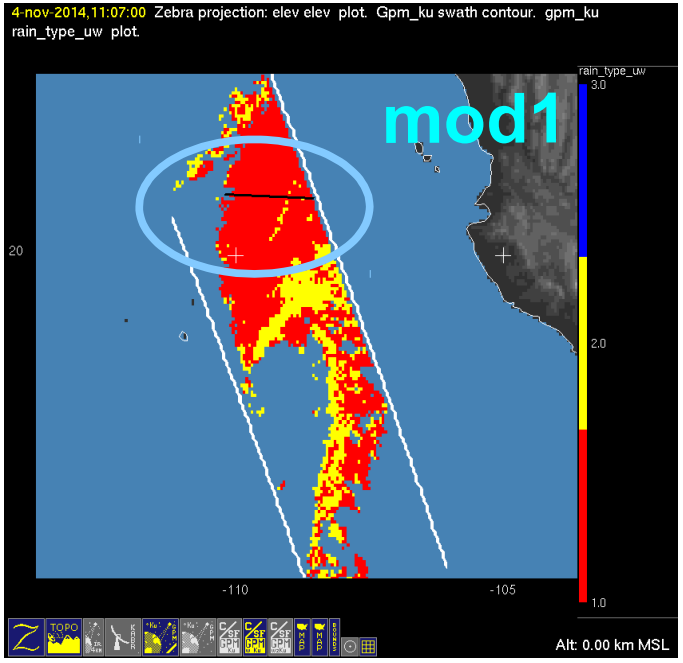


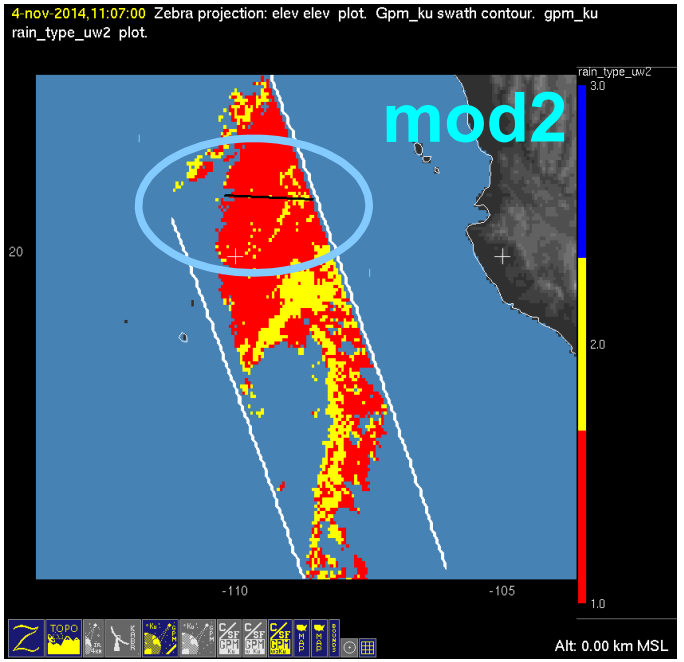


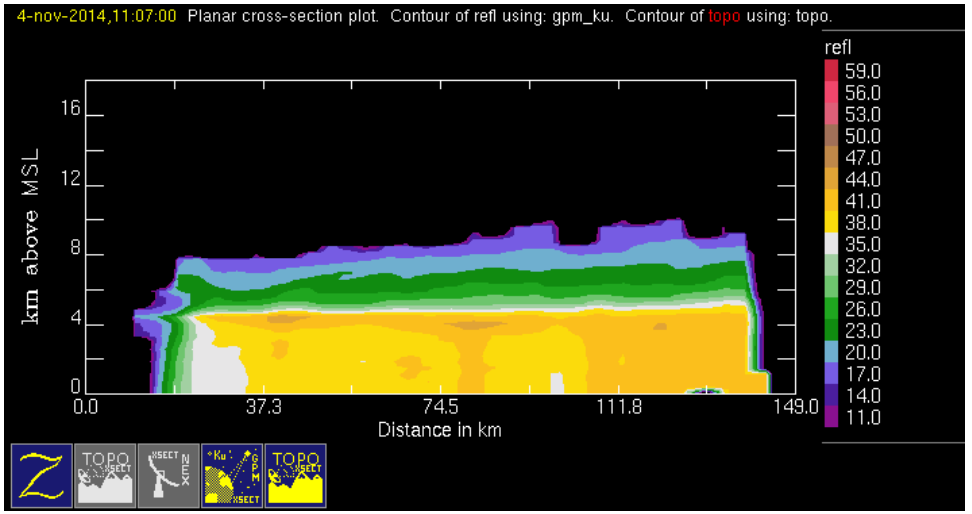


20141104 @ 110624 #2/2

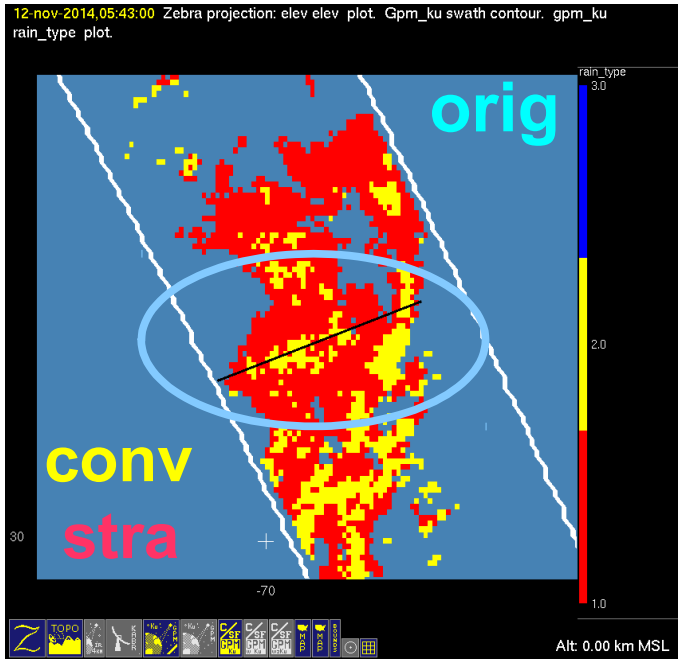


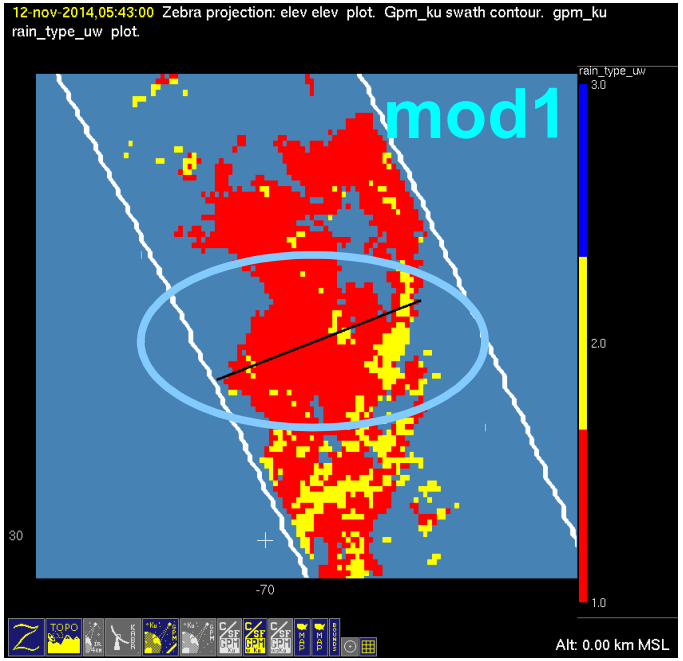


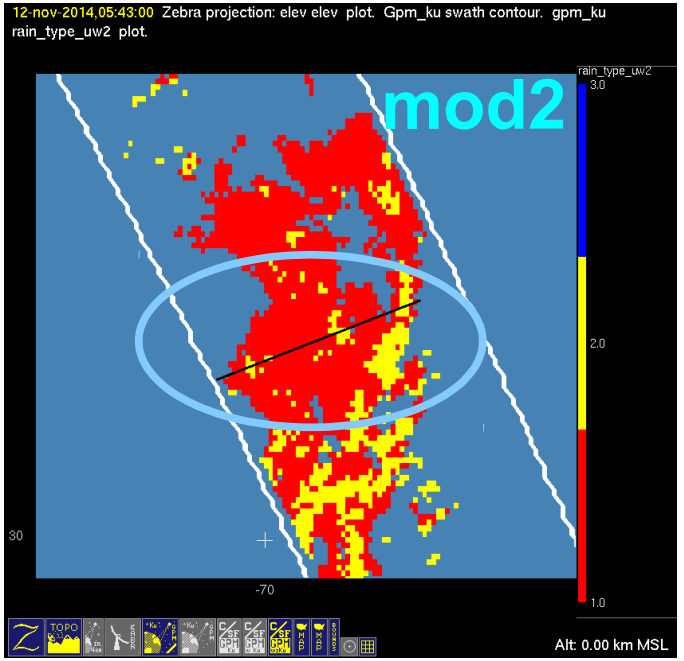


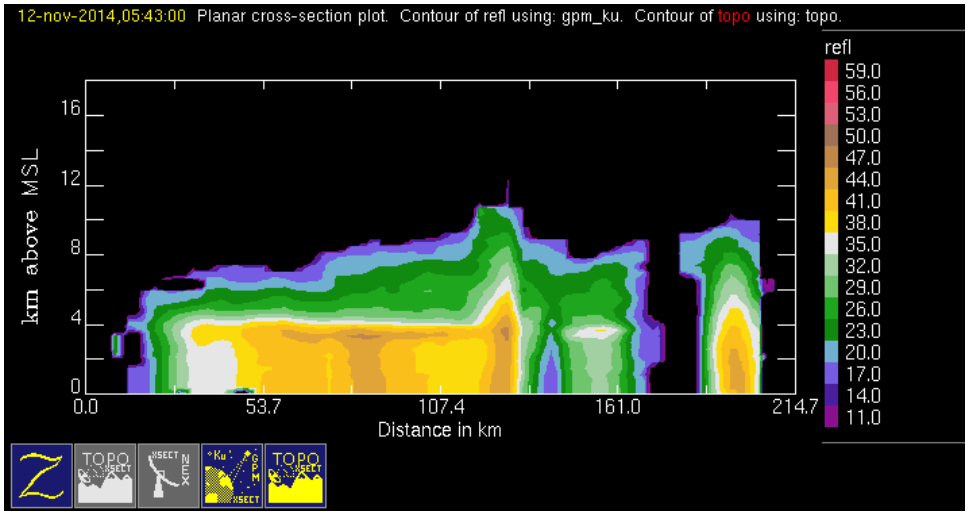


20141112 @ 054200 #1/2

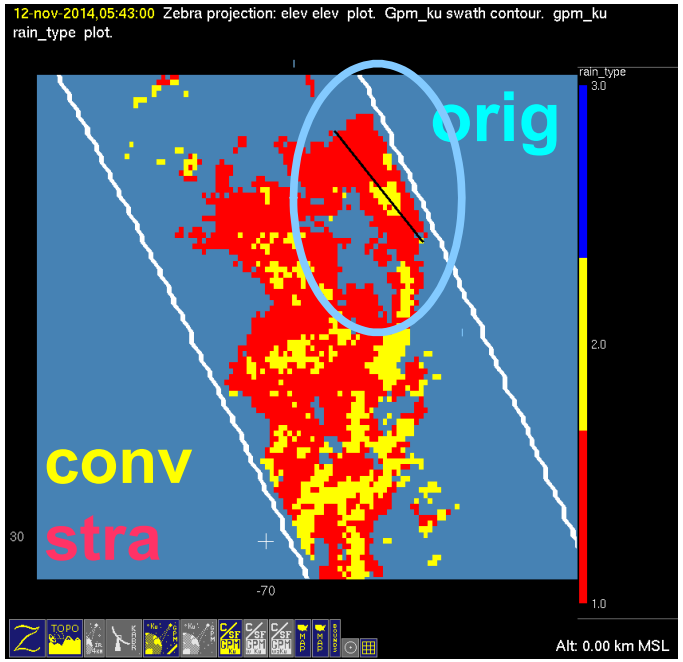


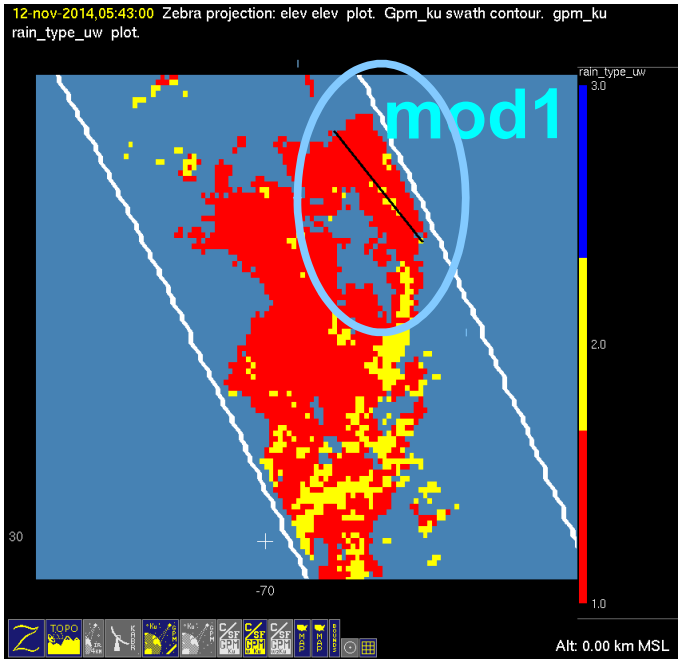


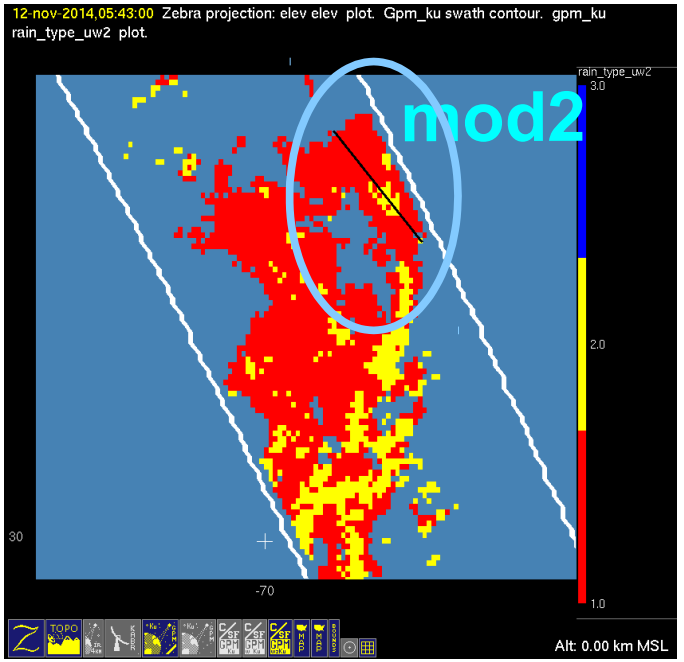


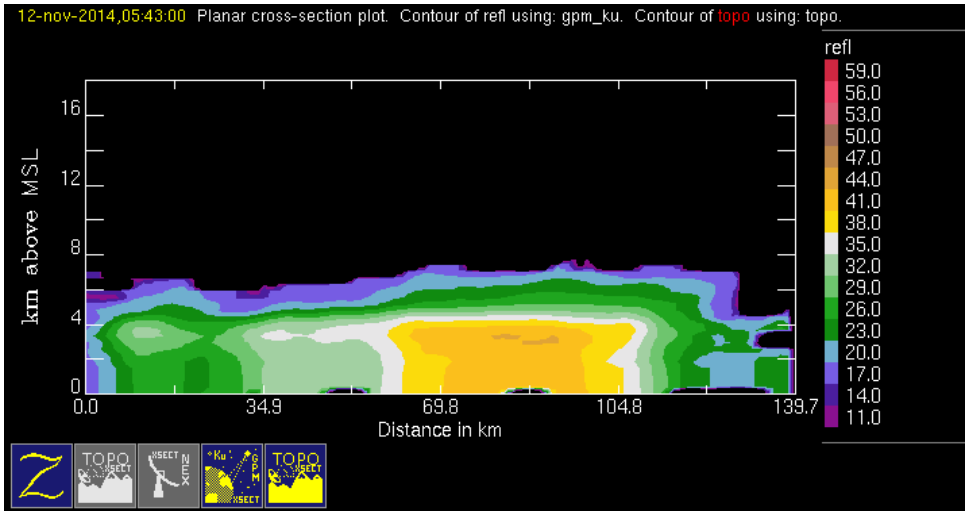


20141112 @ 054200 #2/2



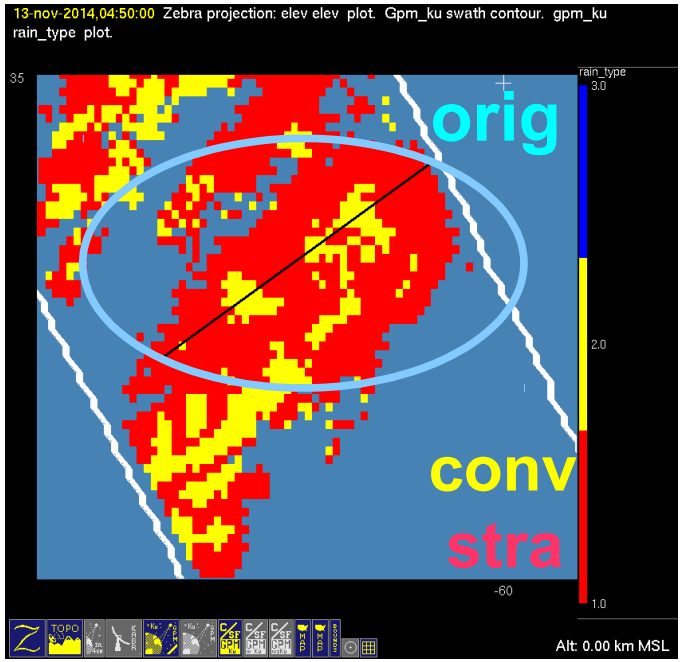


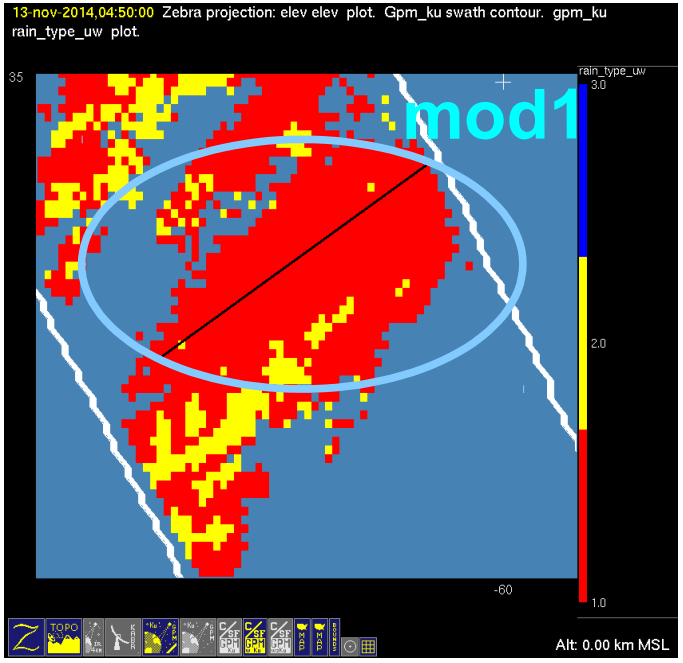


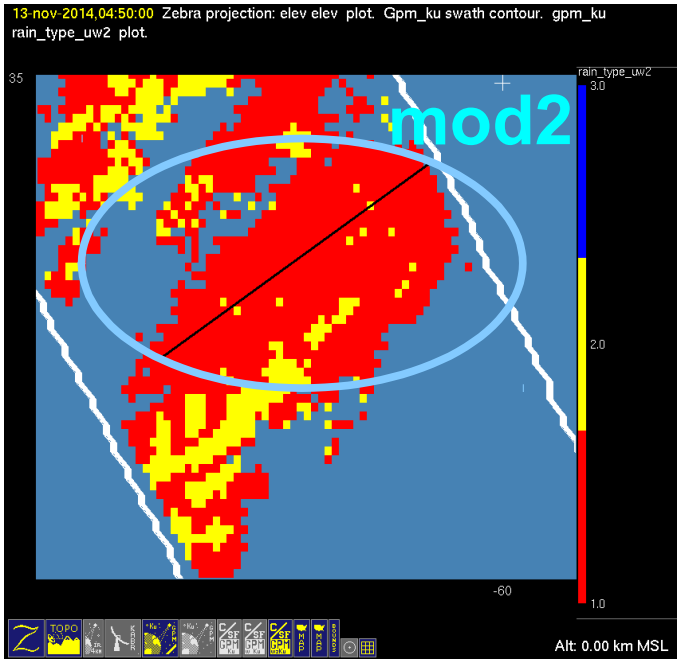


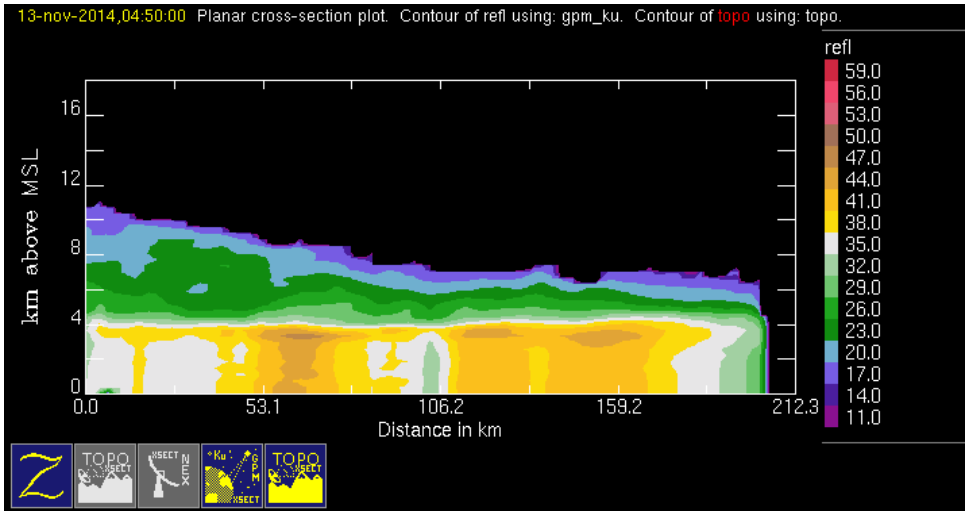
This case fails the slope test. Cross section shows nearly constant reflectivities from ground to 4km.

20141113 @ 044926

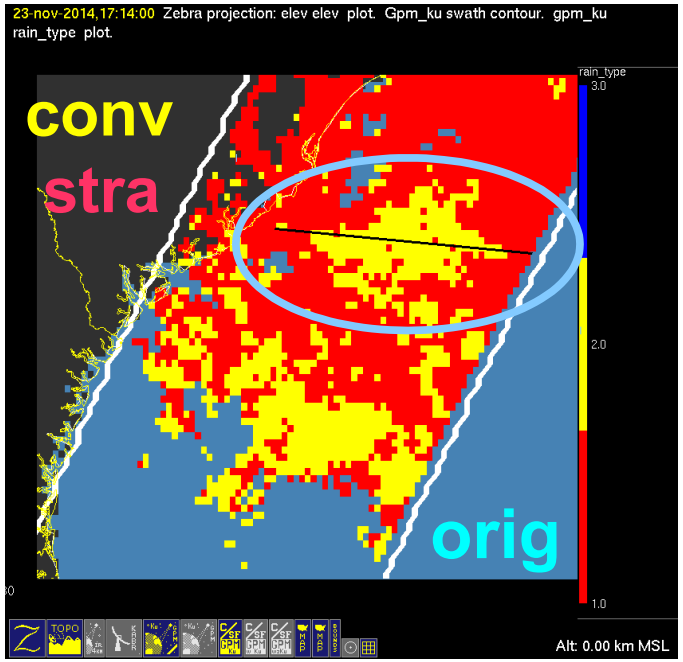


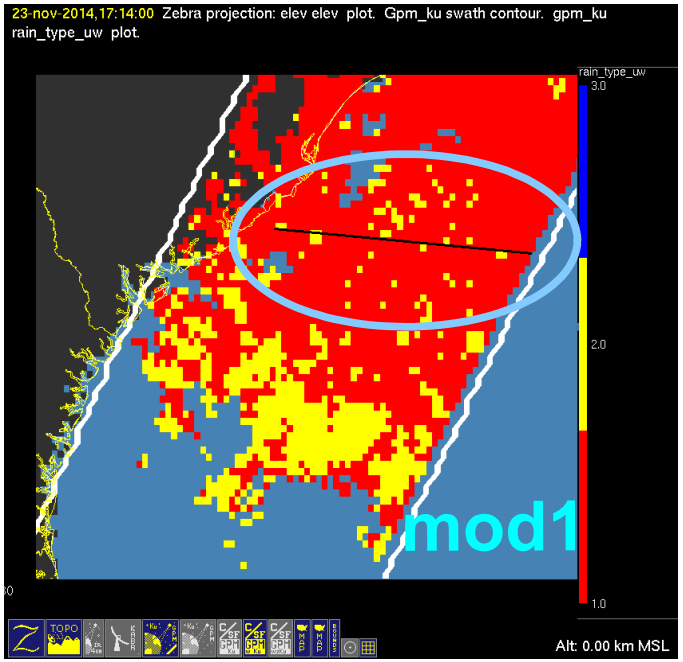


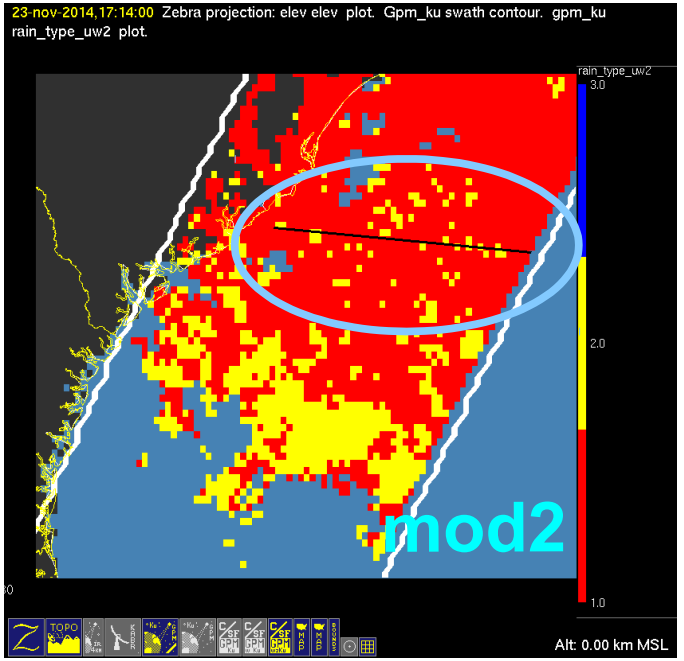


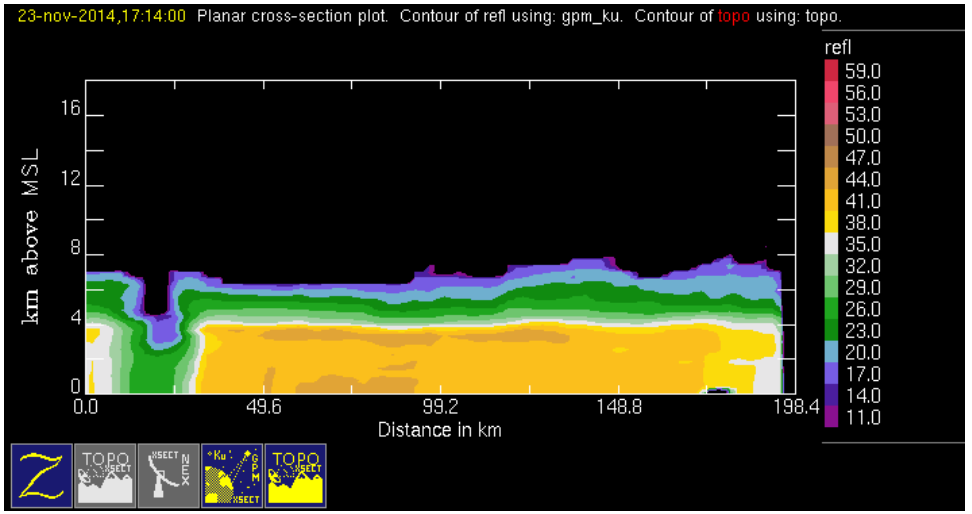


20141123 @ 171347

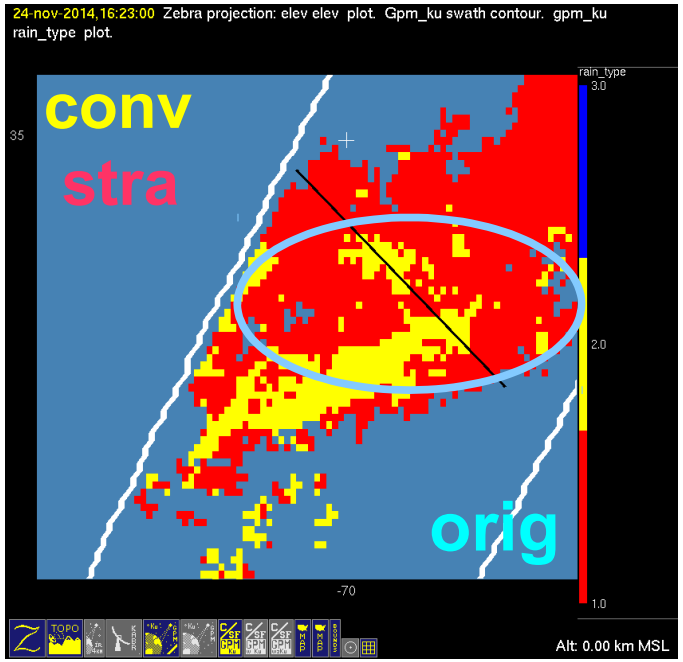


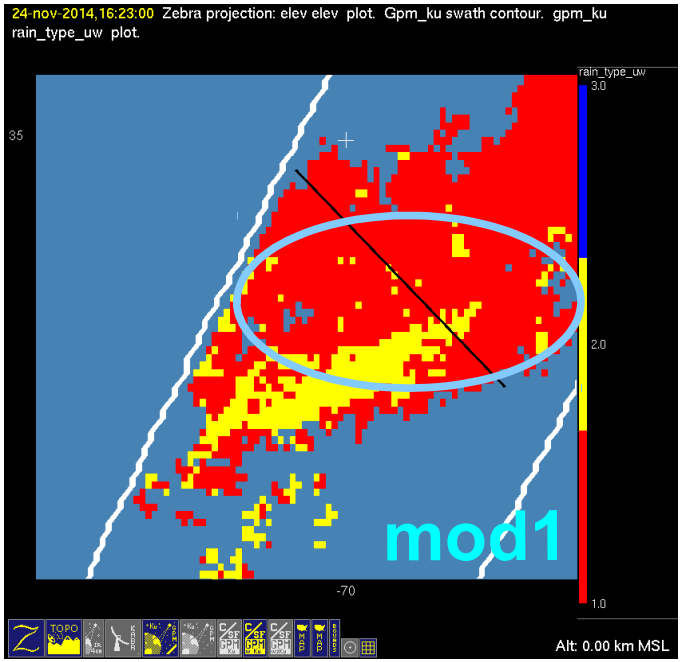


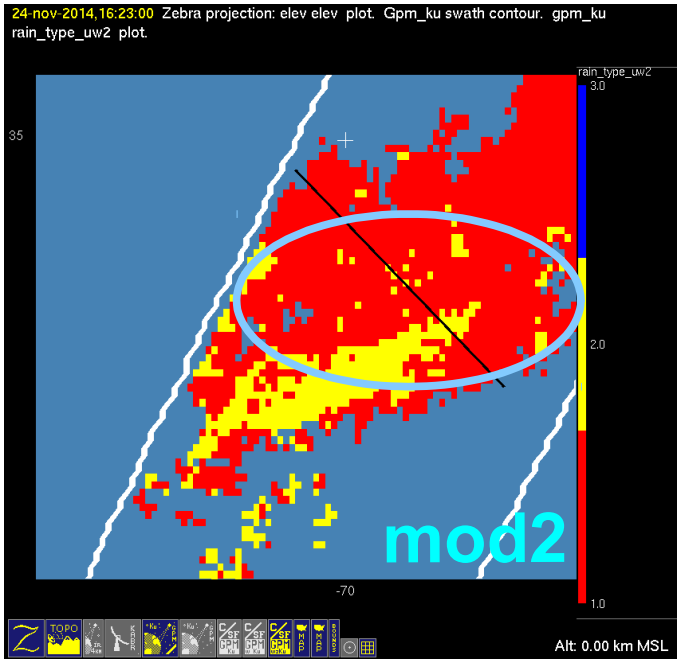


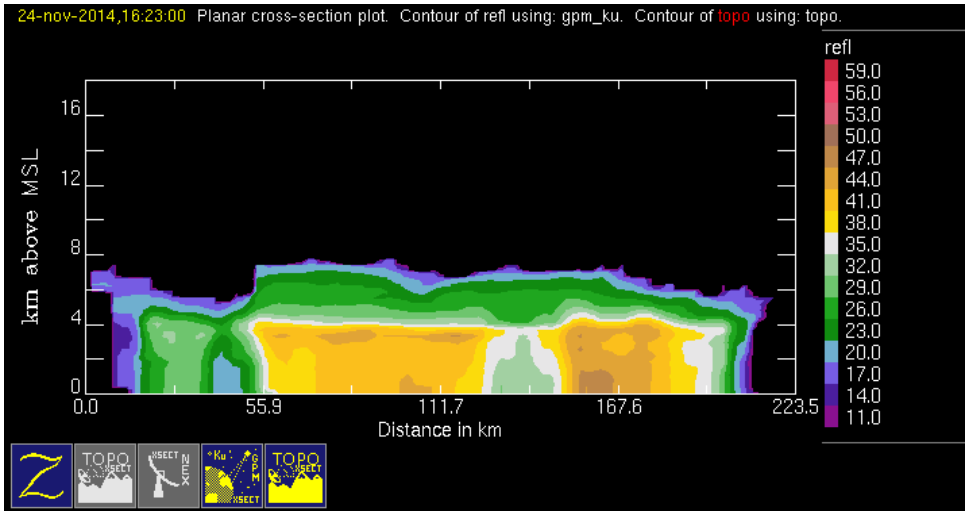


20141124 @ 162249

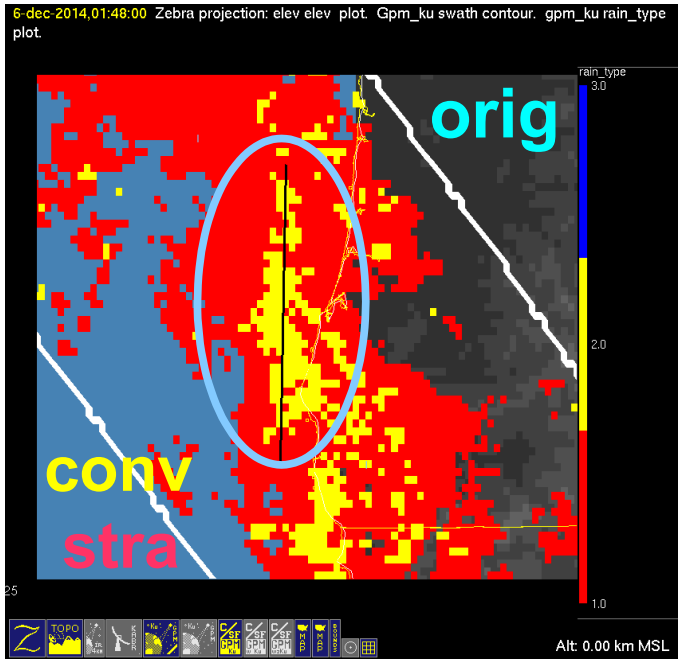


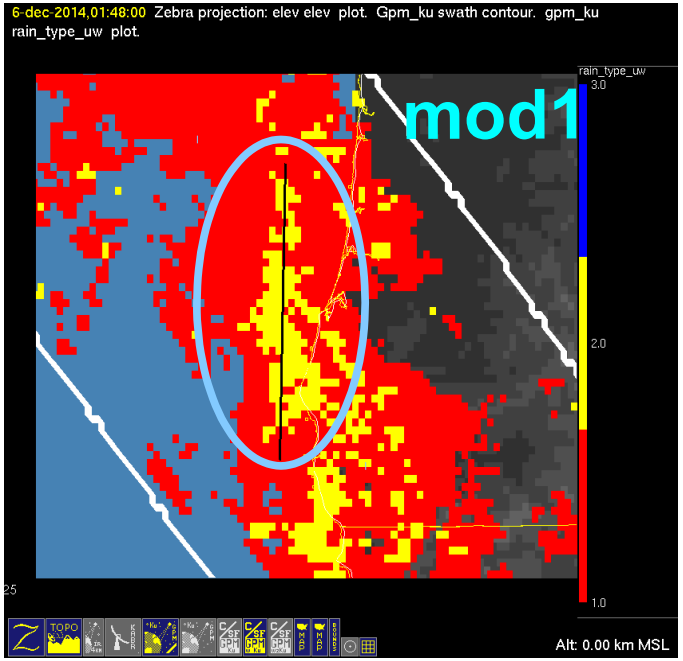


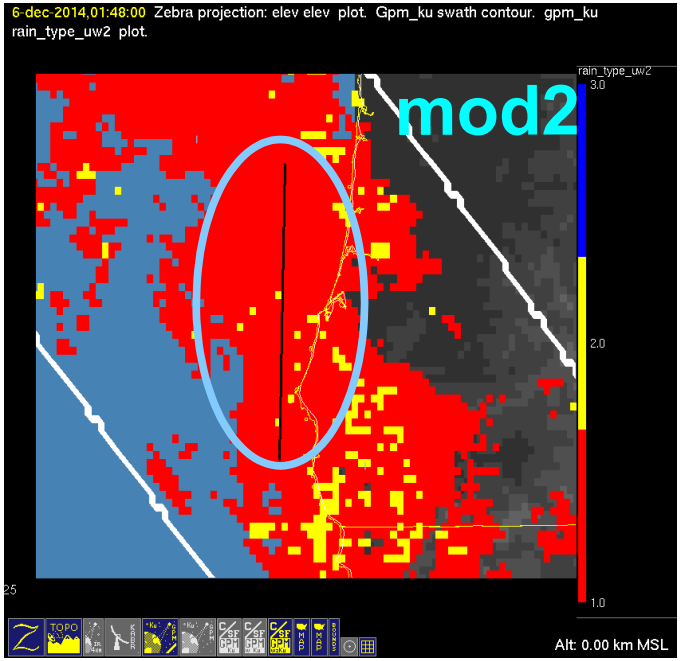


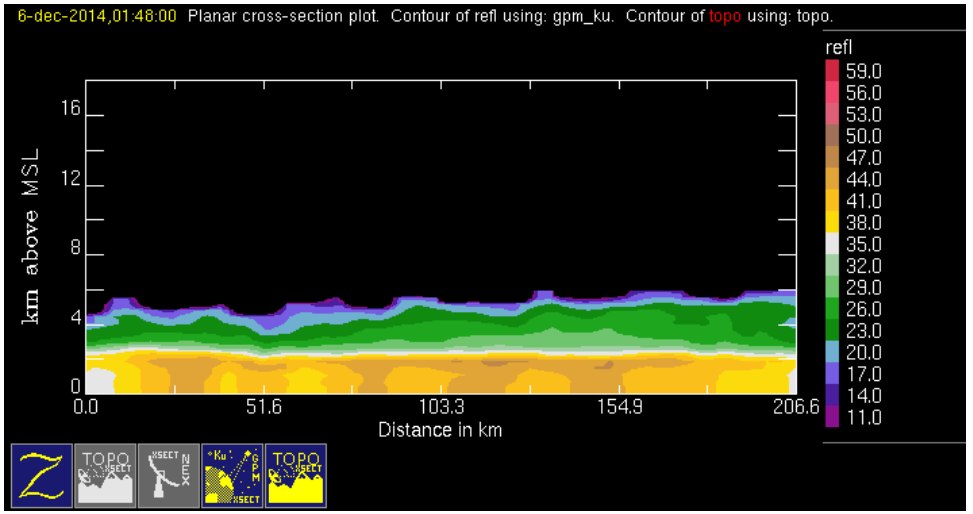


20141206 @ 014736



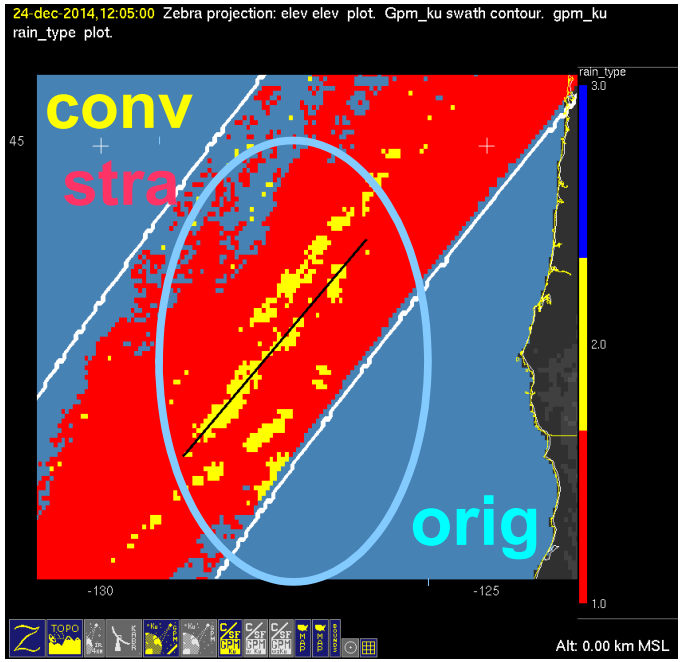


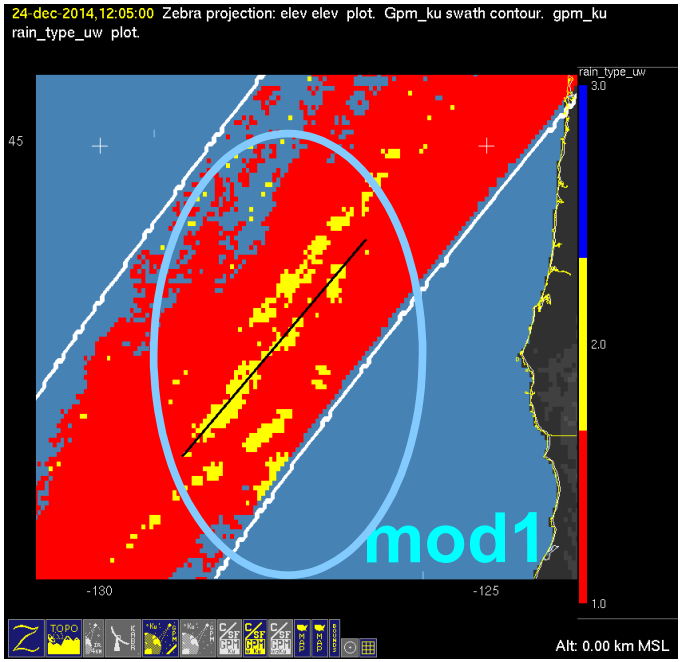


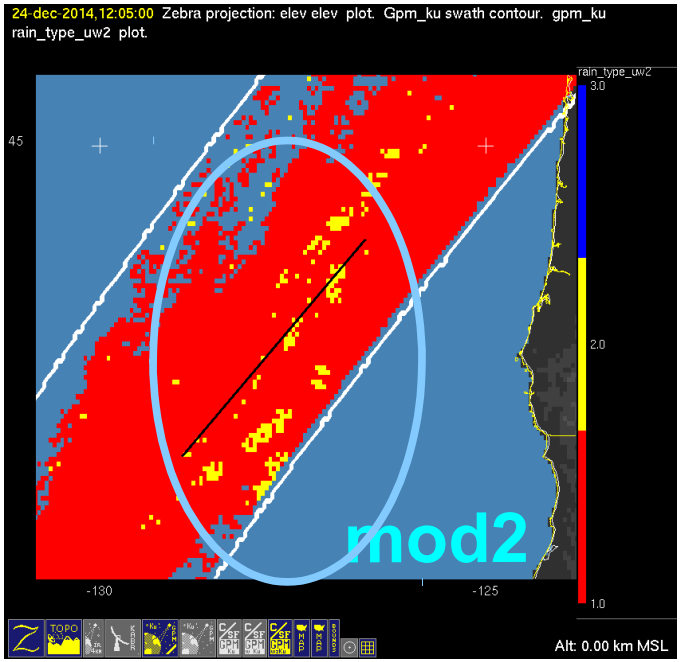


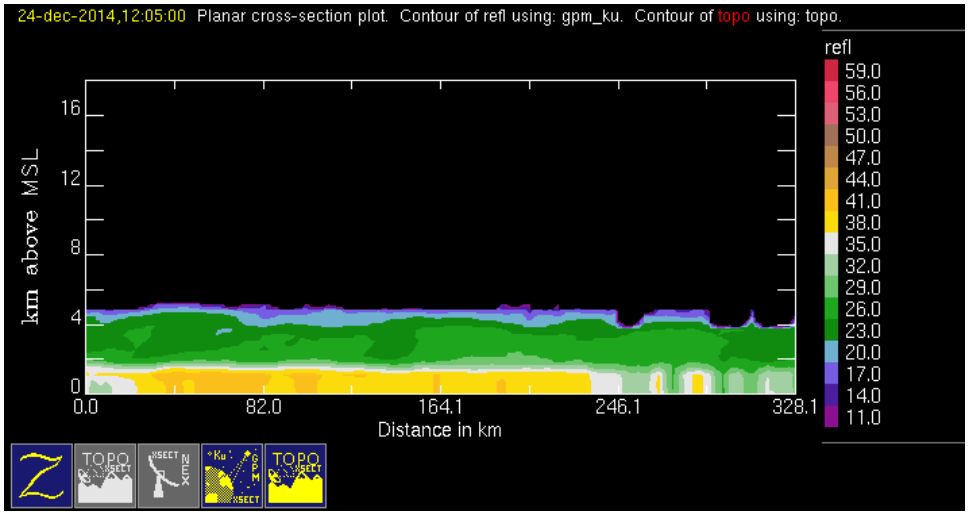
This case fails the height test but passes the slope test. Cross section shows max reflectivities at very low altitudes.

20141224 @ 120452



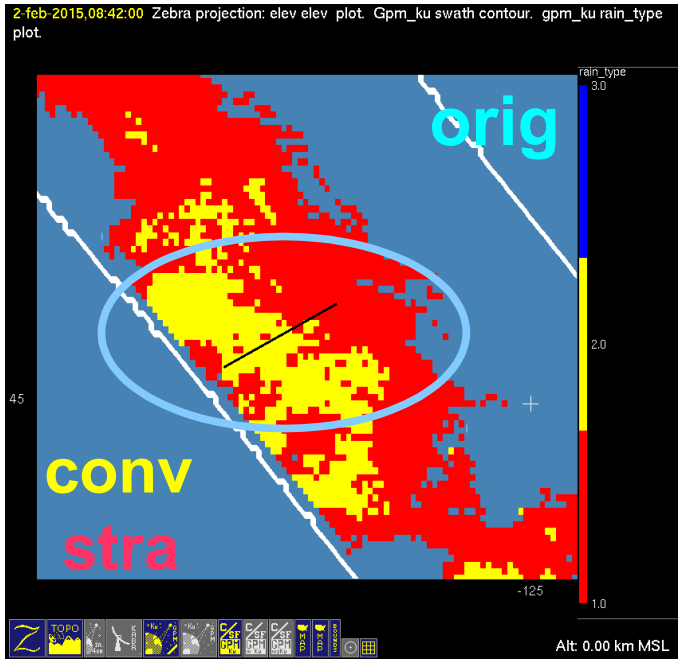


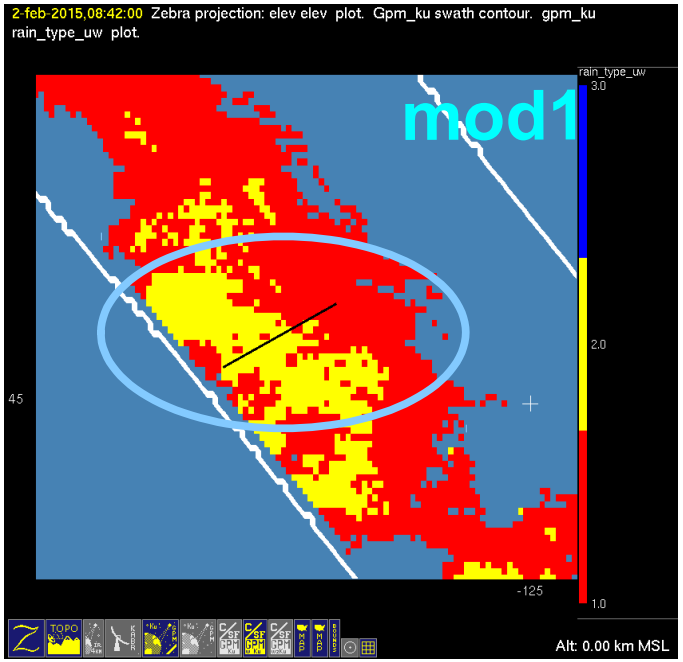


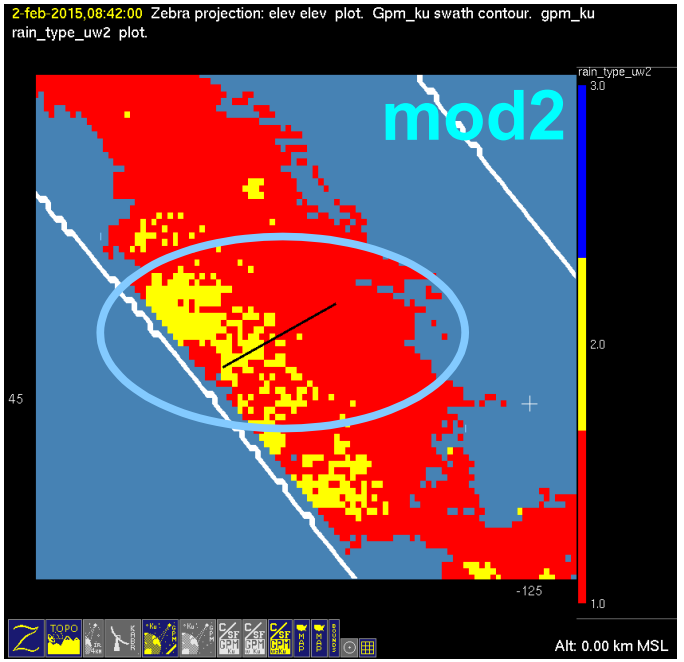


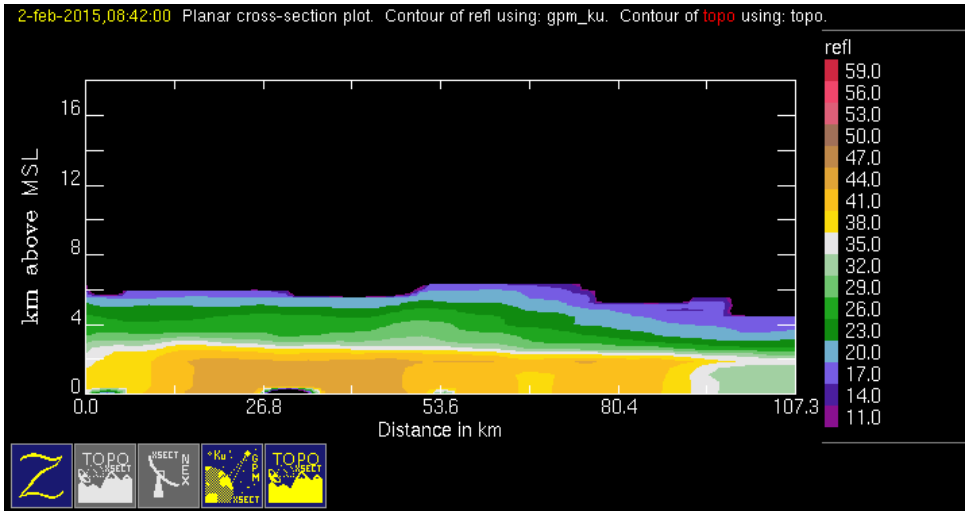
This case fails the height test but passes the slope test. Cross section shows max reflectivities at very low altitudes.

20150202 @ 084127



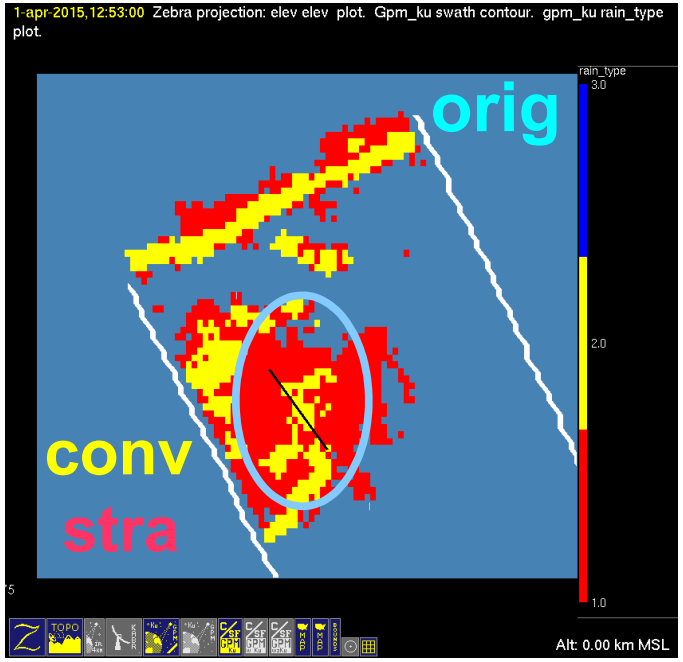


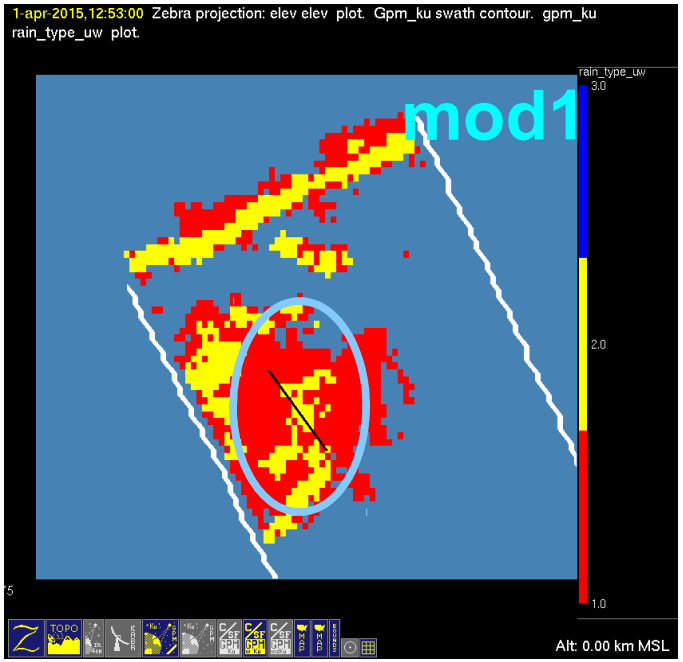


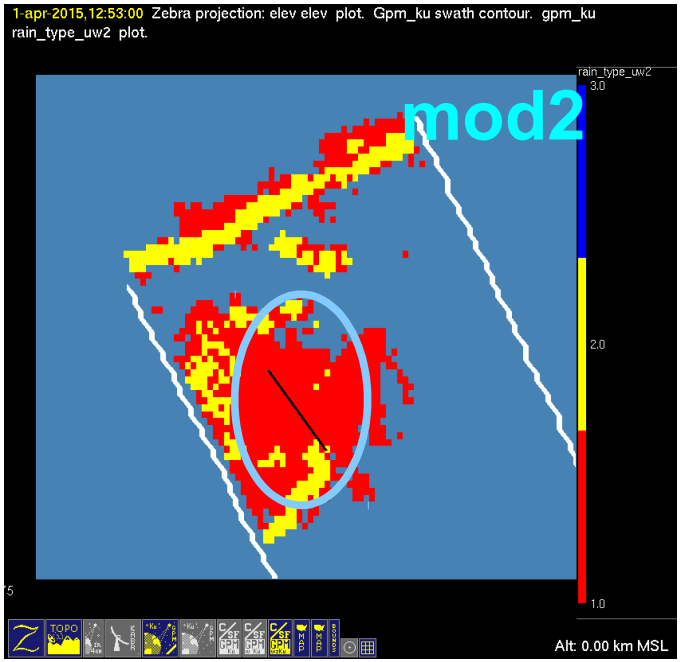


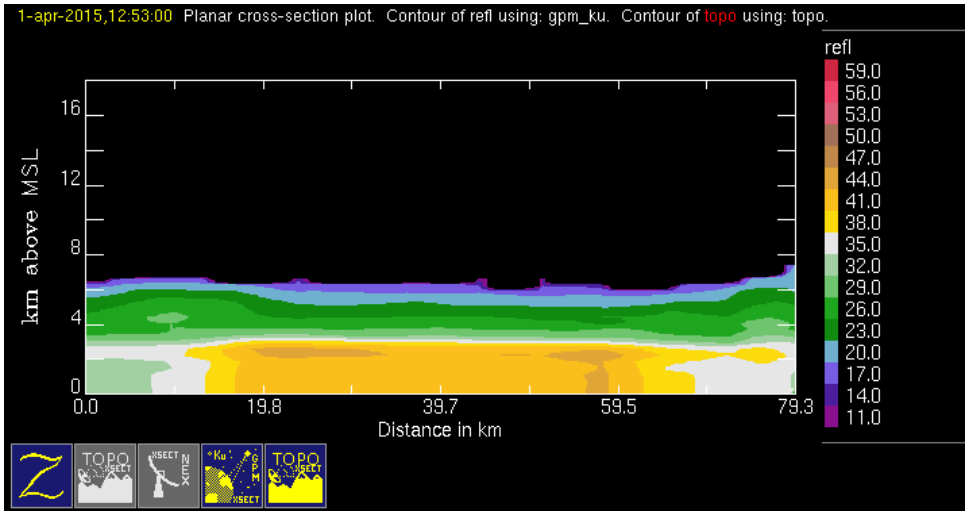
This case has a hard time with both tests. Cross section shows very low altitude and sometimes constant reflectivities from the ground to 2km.

20150401 @ 125219



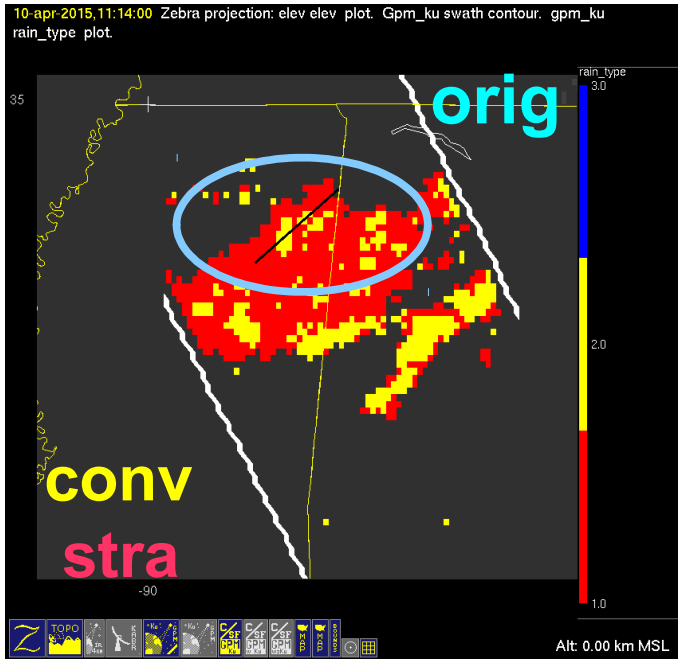


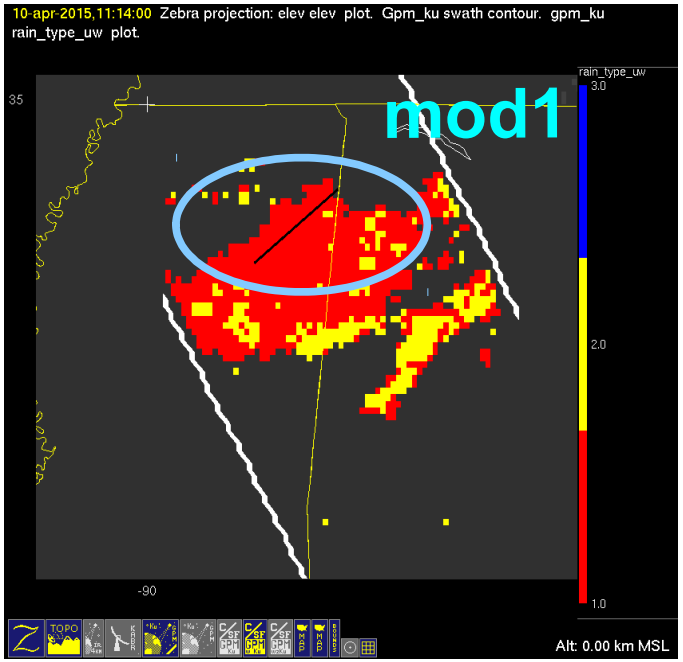


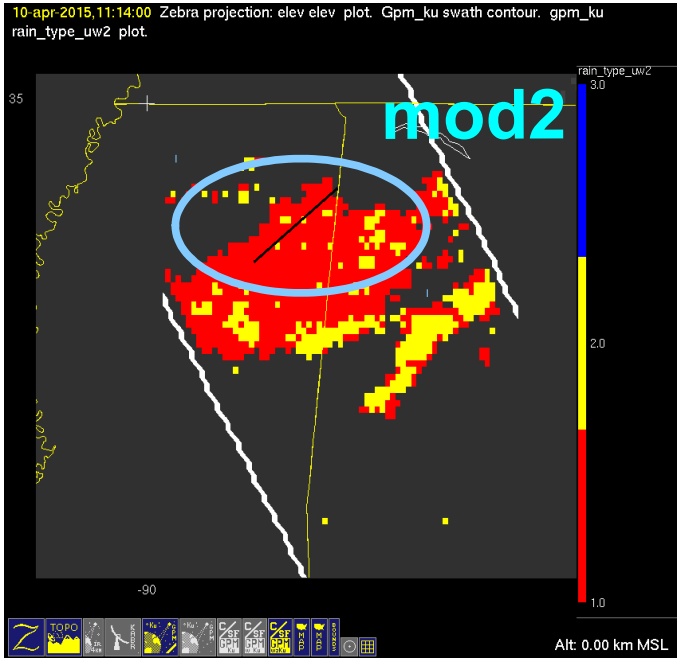


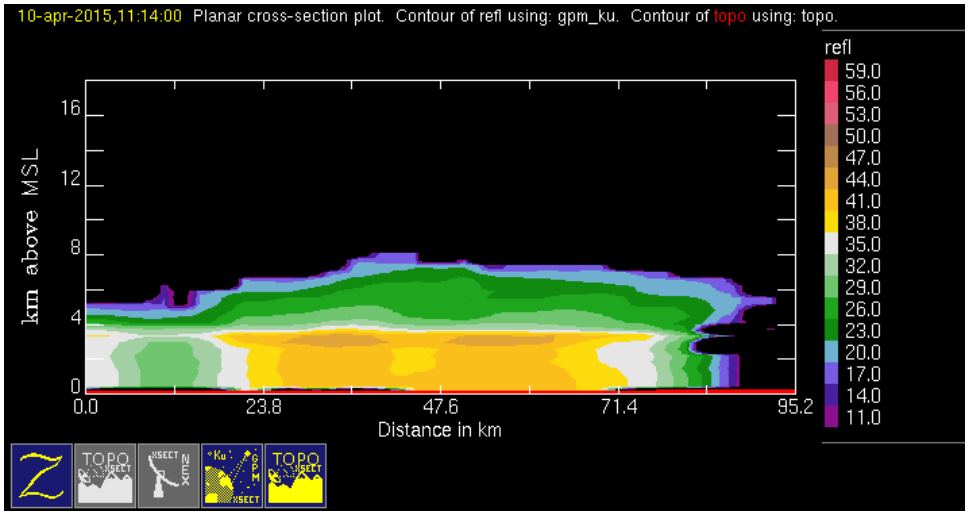
This case fails the height test but passes the slope test. Cross section shows max reflectivities at very low altitudes.

20150410 @ 111317

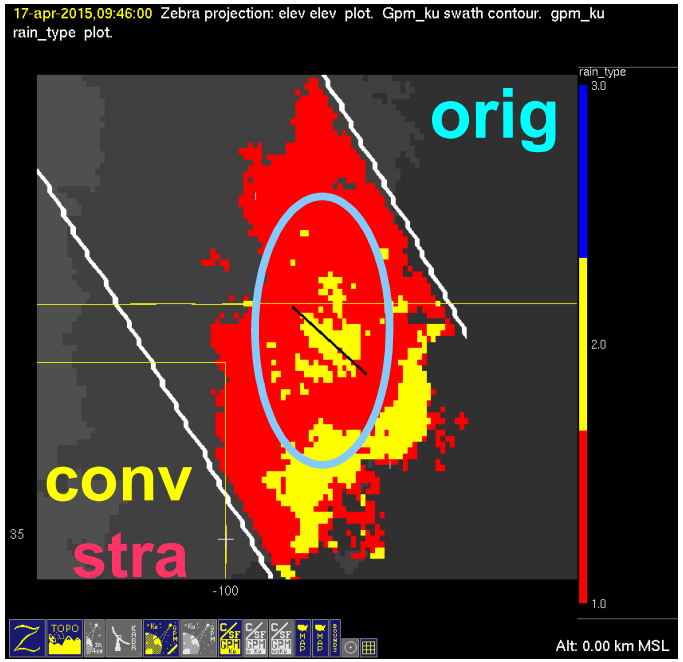


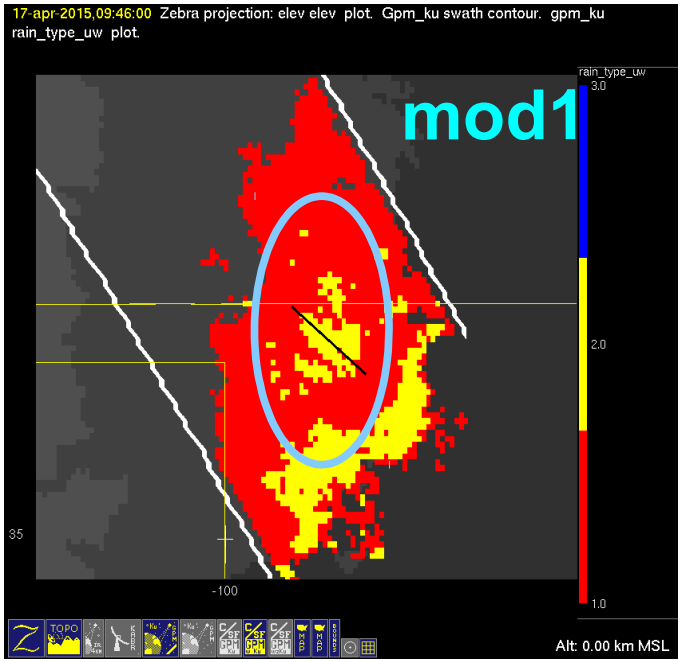


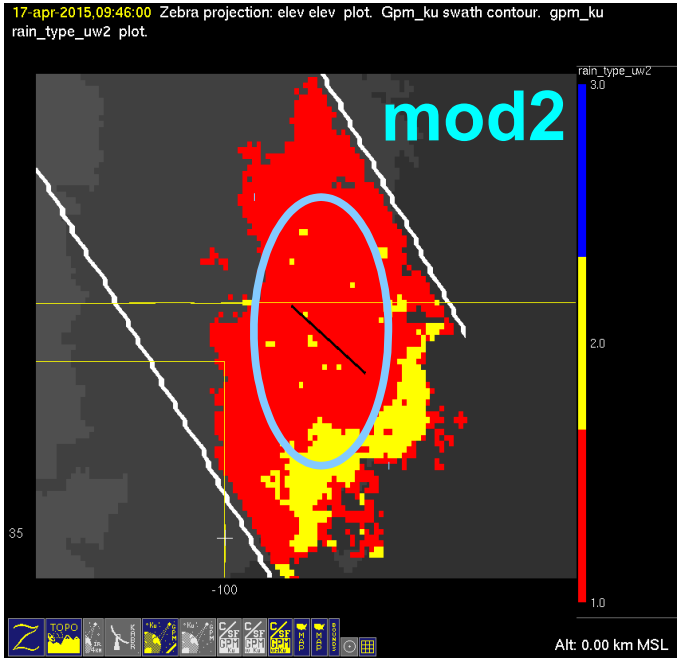


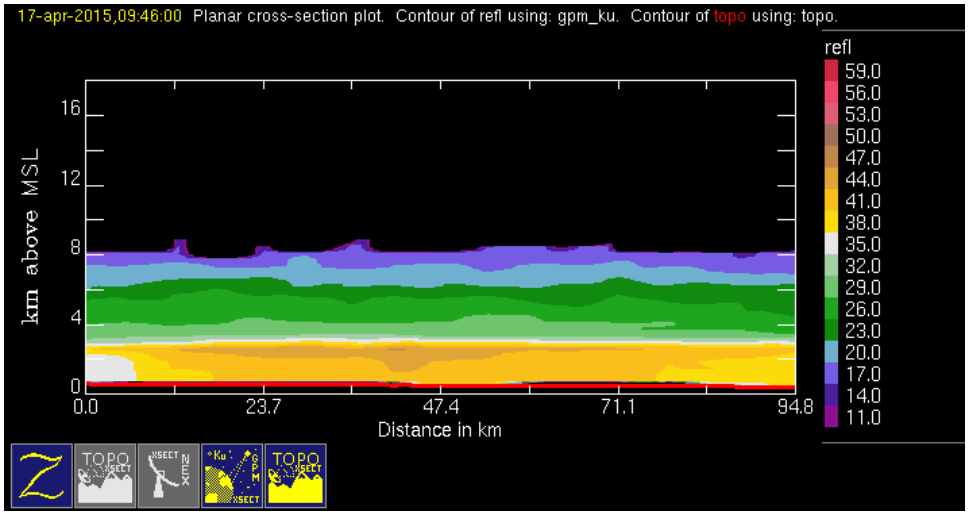


20150417 @ 094529



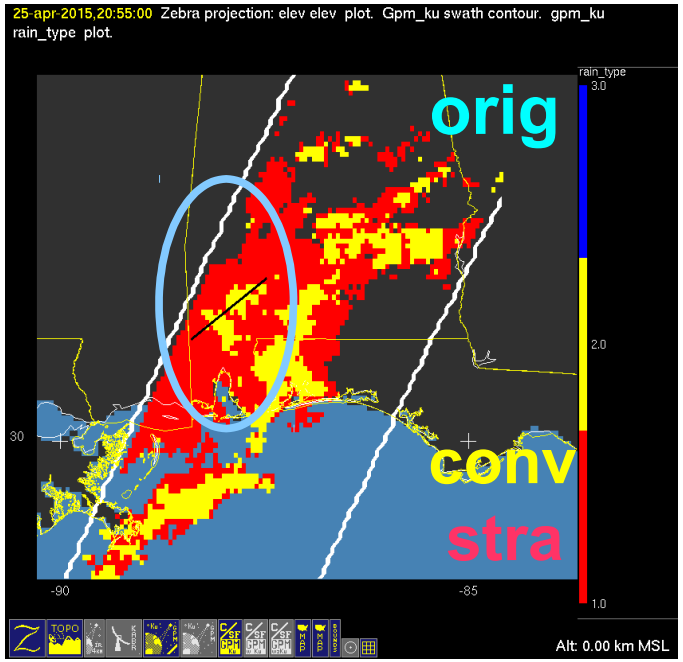


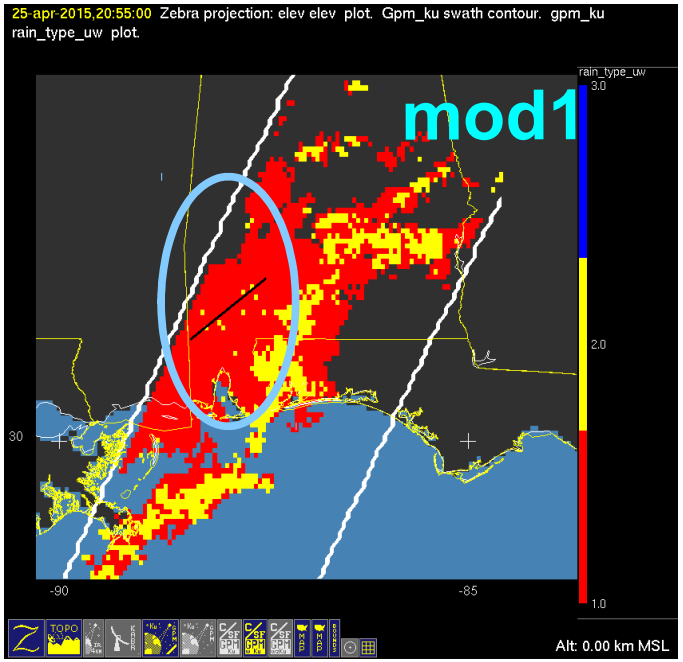


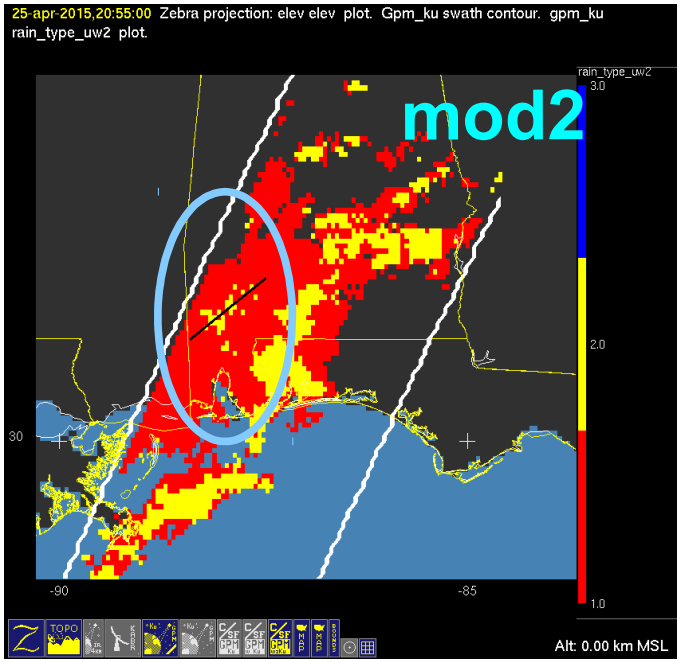


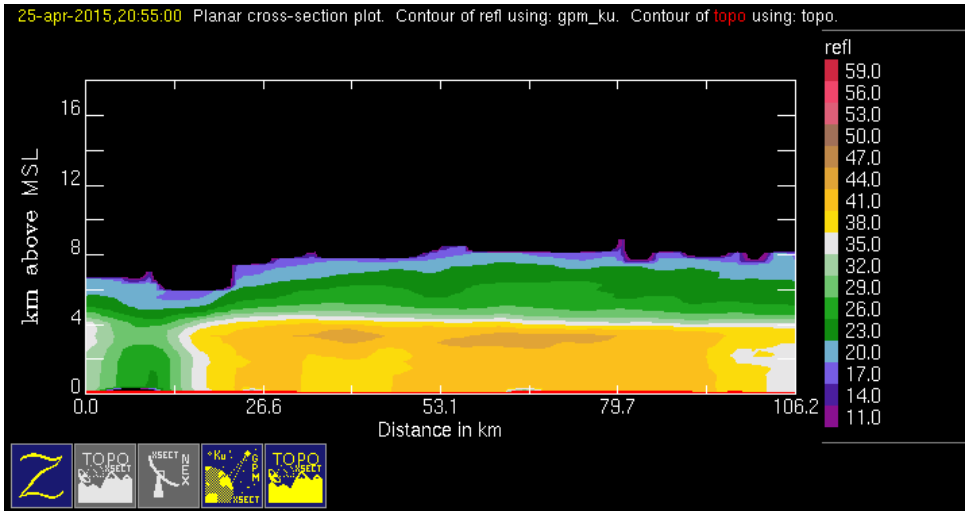
This case fails the height test but passes the slope test. Cross section shows max reflectivities at very low altitudes.

20150425 @ 205420

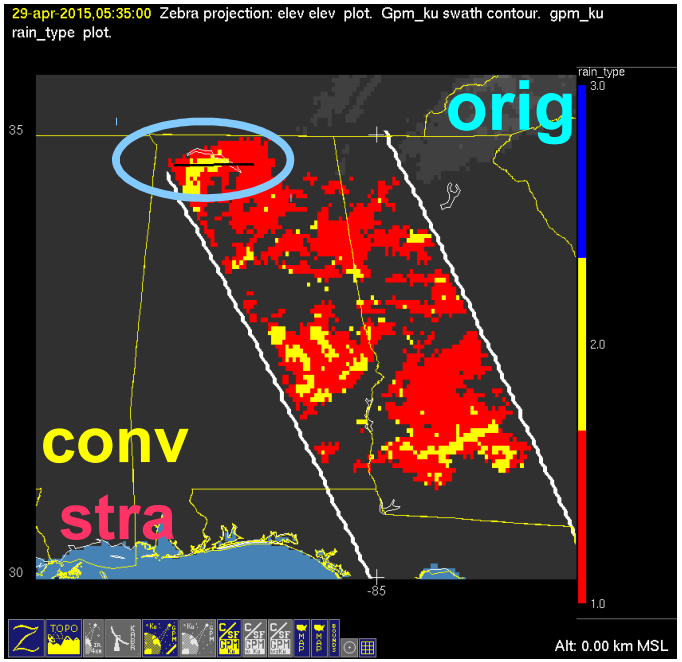


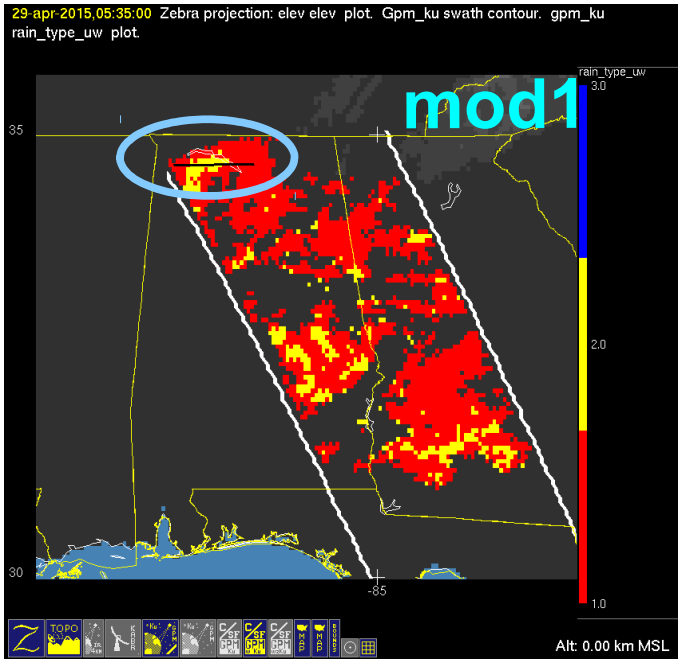


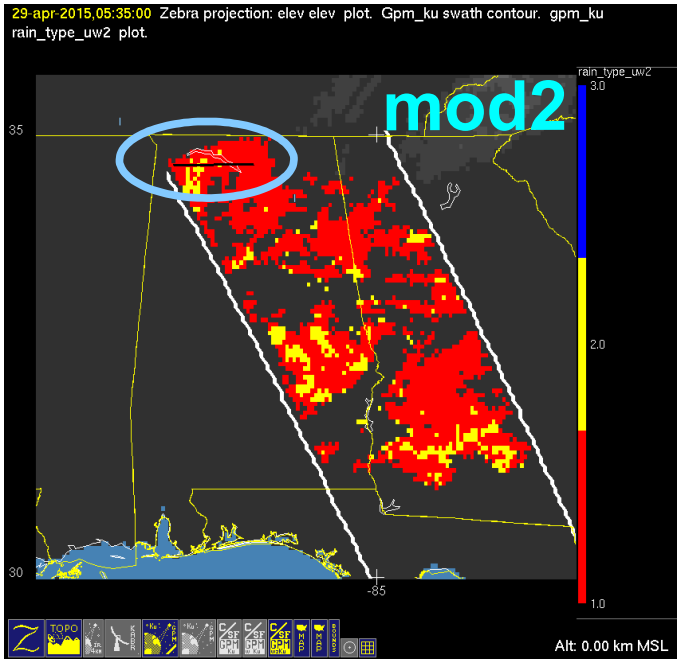


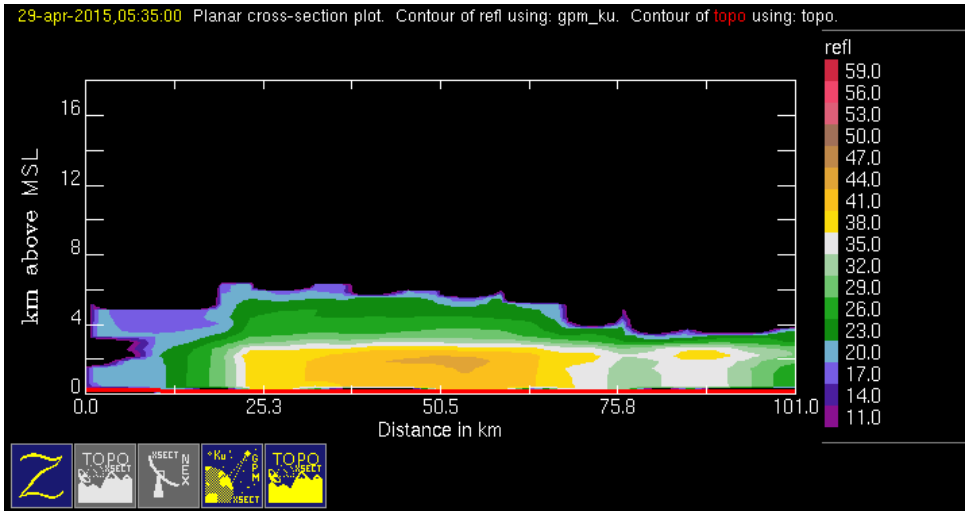


20150429 @ 053449 #1/2

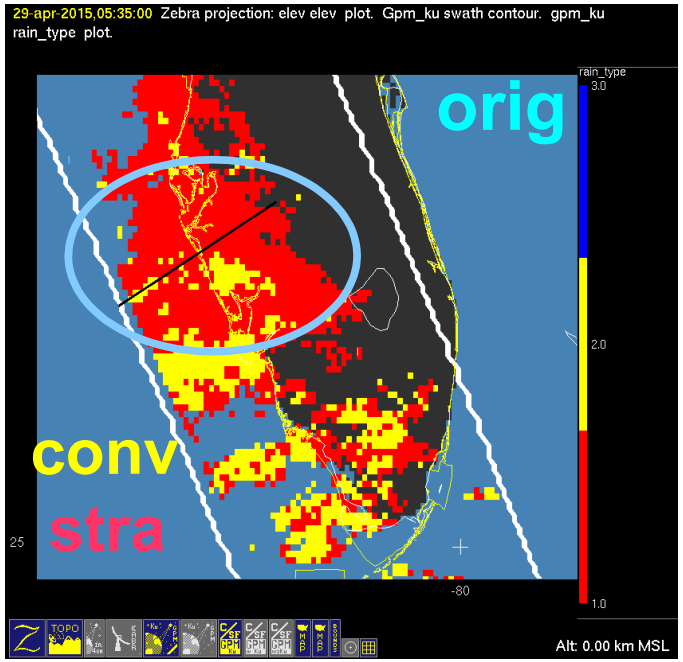


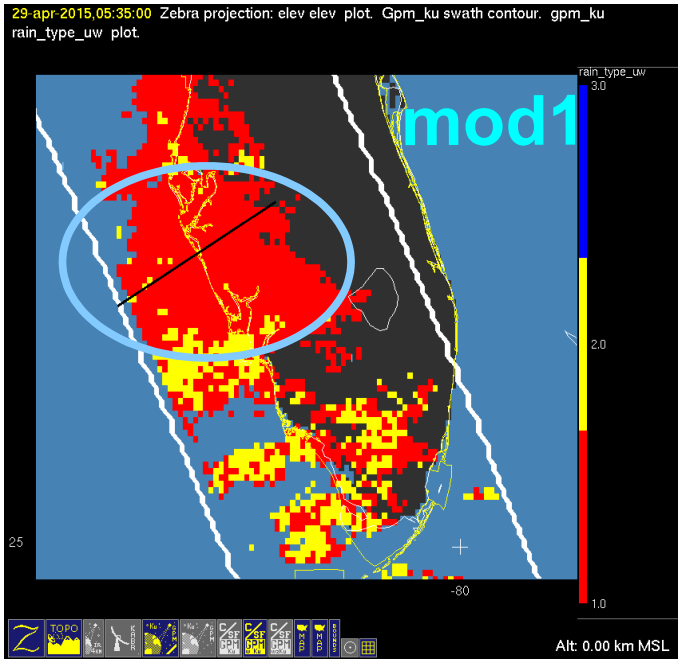


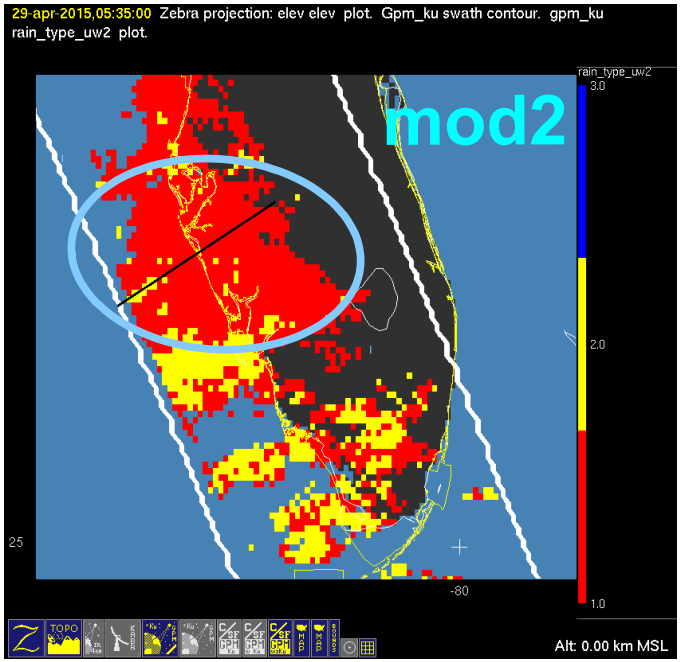


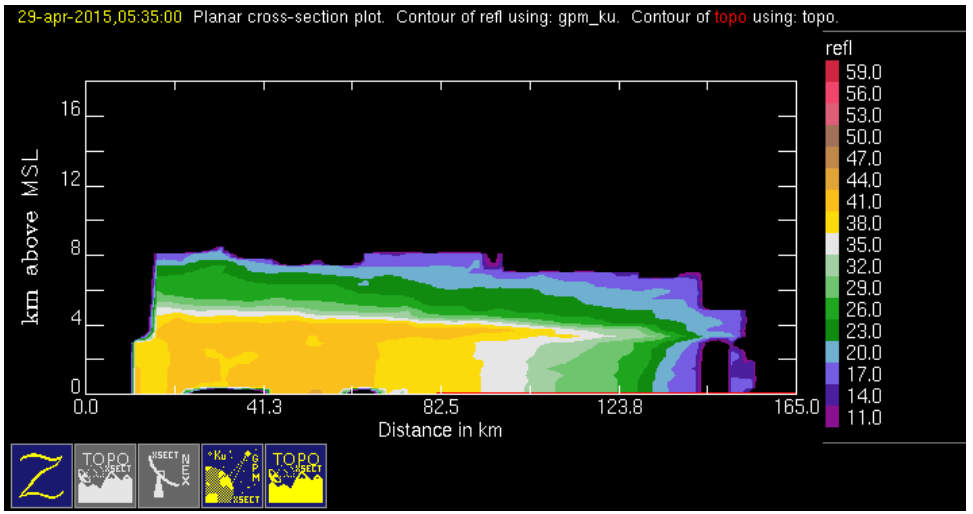


20150429 @ 053449 #2/2

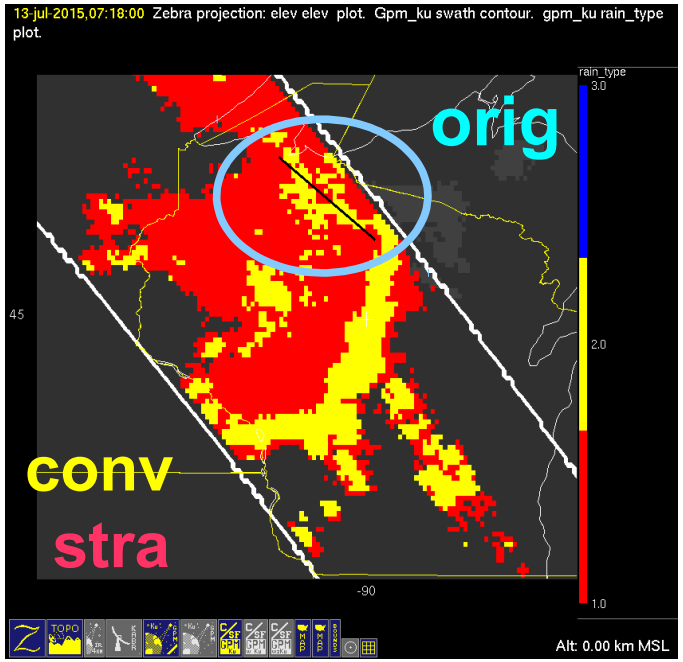


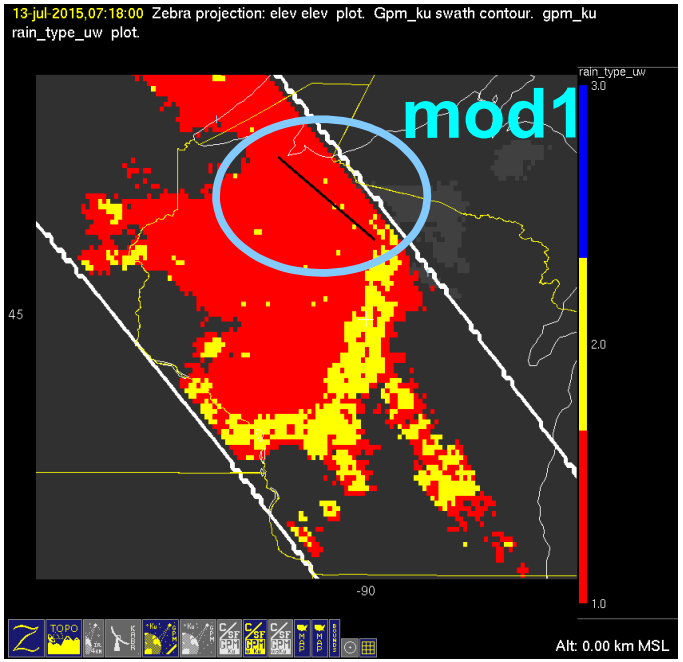


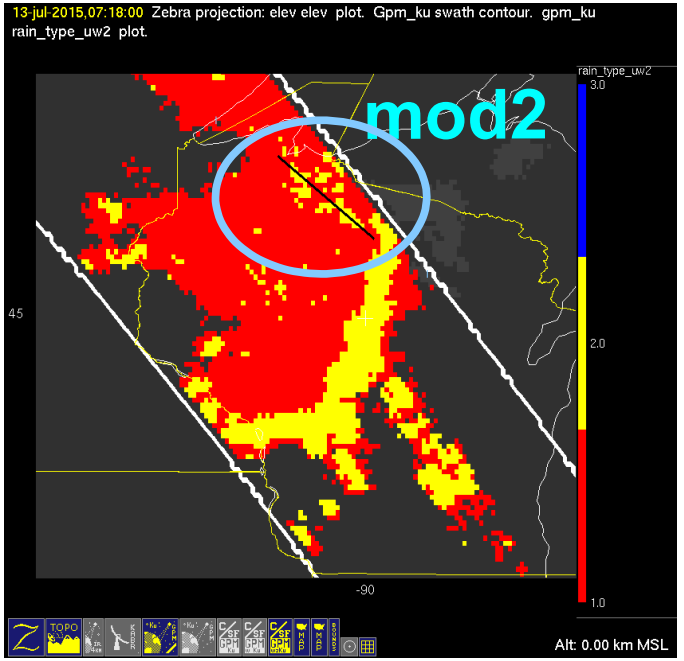


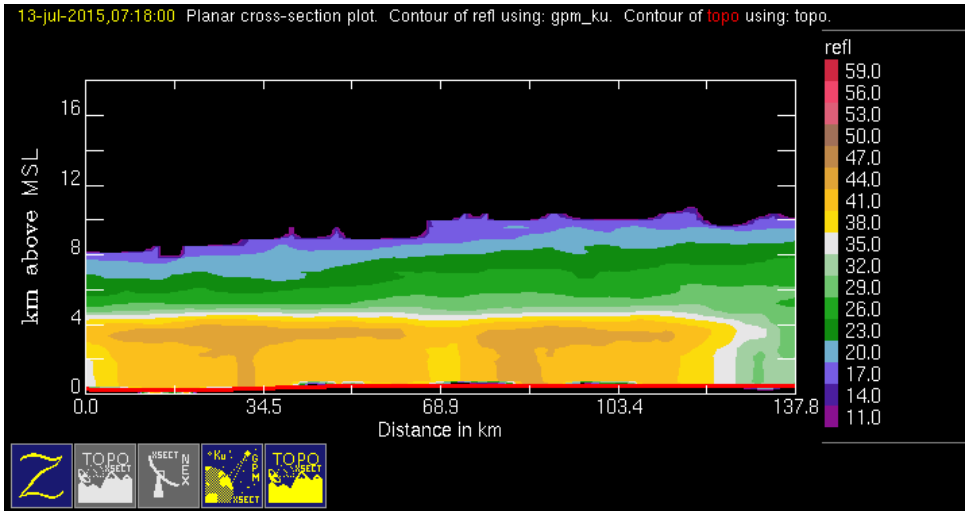


20150713 @ 071724 #1/2



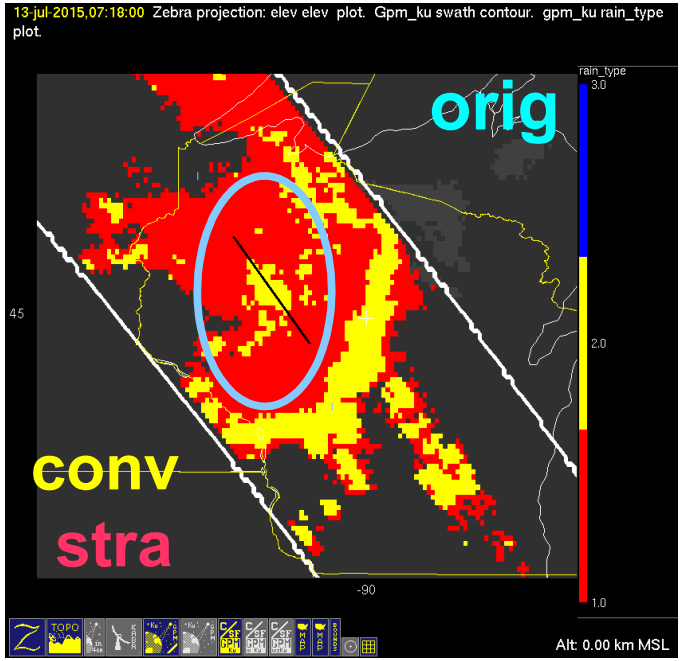


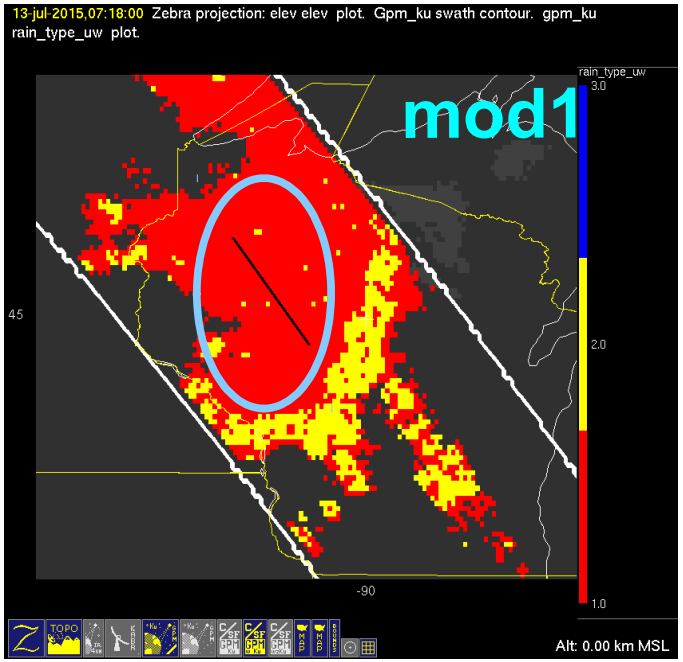


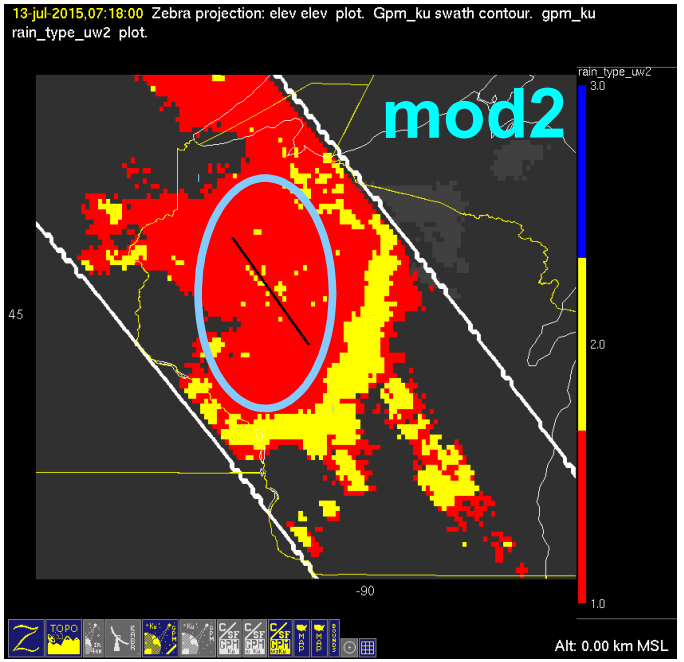


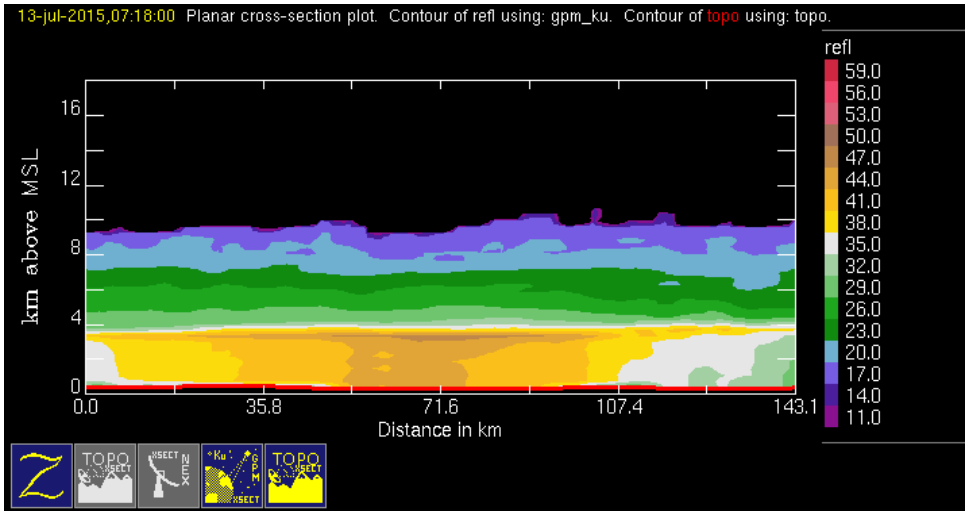
This case fails the slope test. Cross section shows enough striation that slope test should have succeeded.

20150713 @ 071724 #2/2

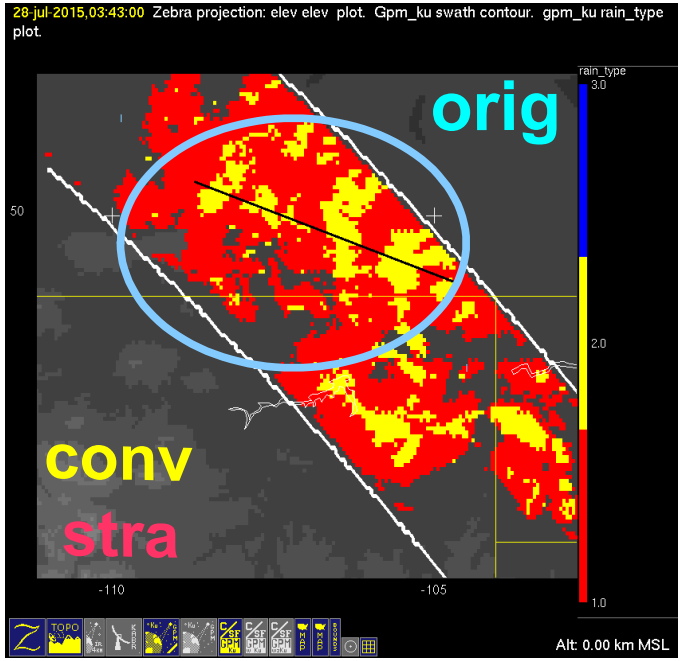


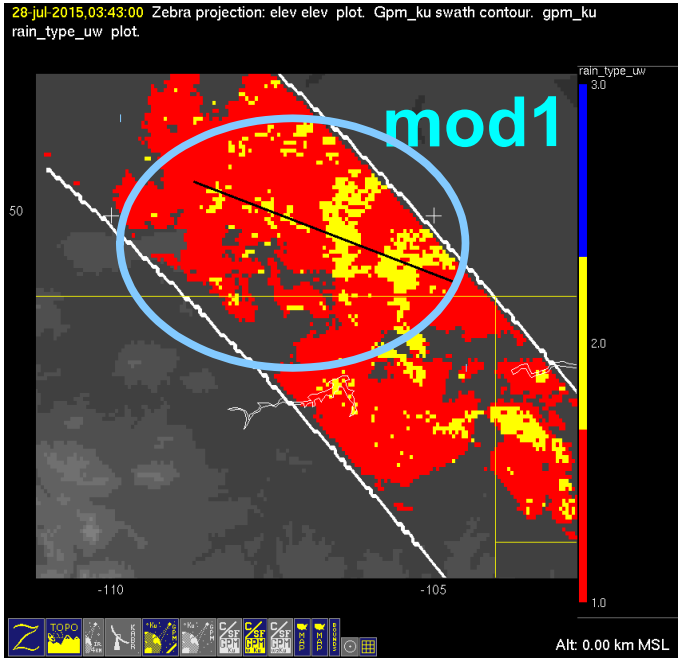


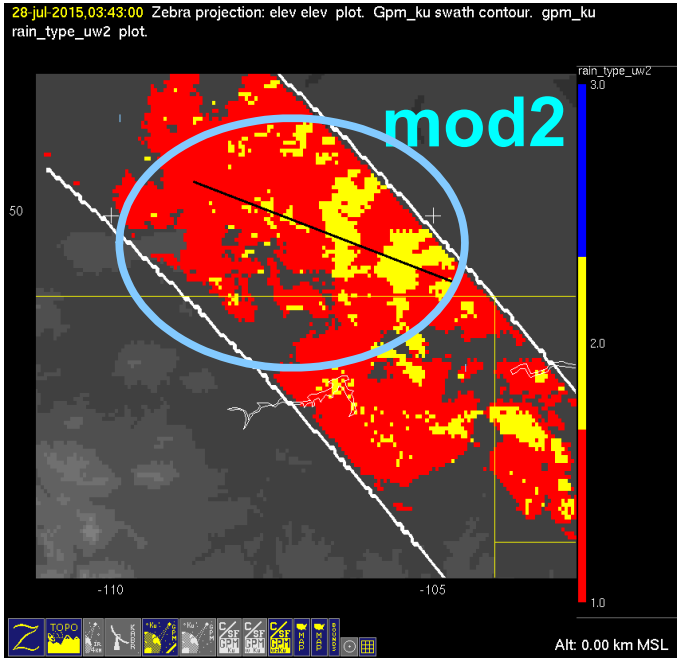


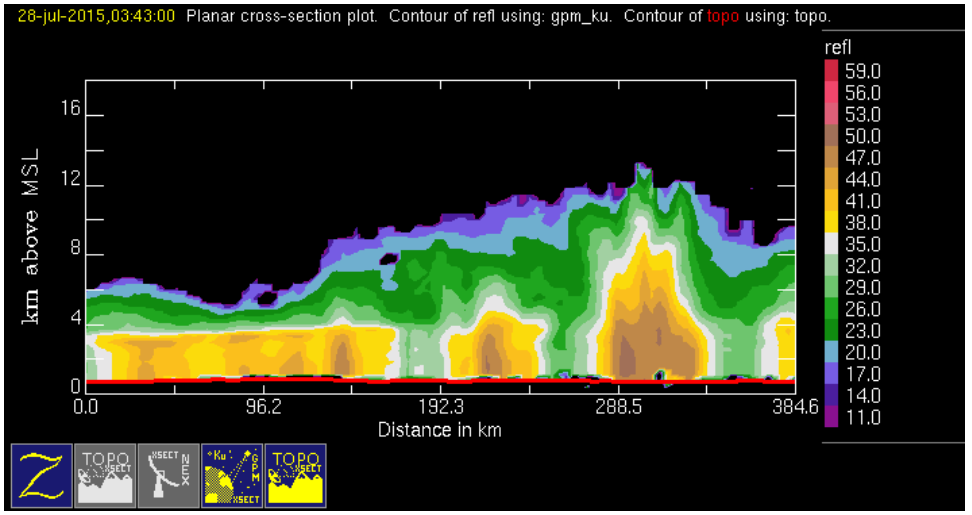


20150728 @ 034222 #1/2

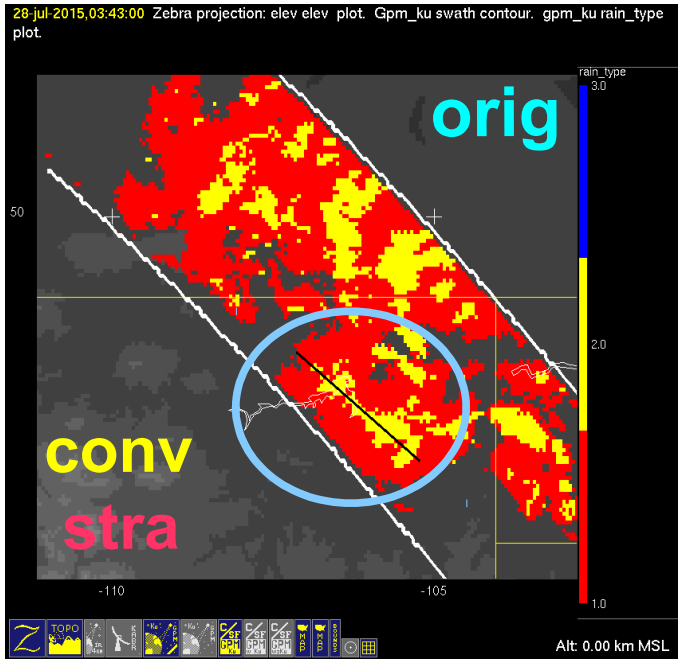


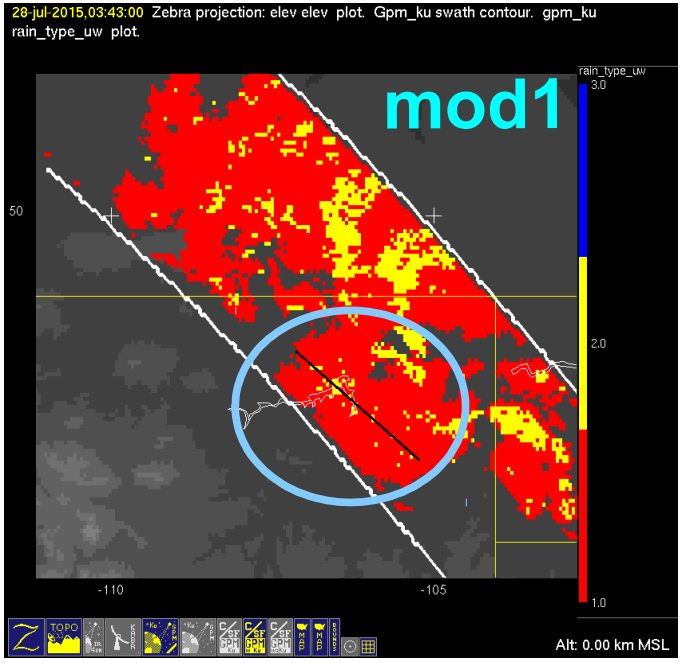


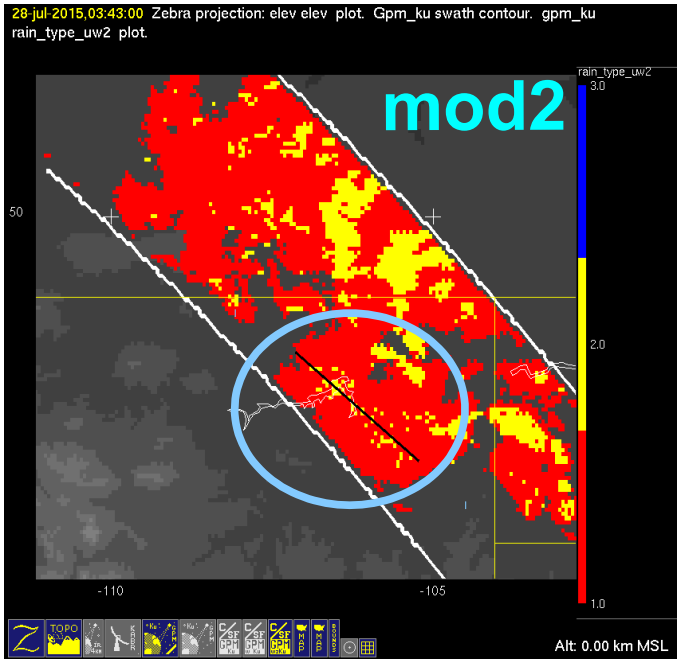


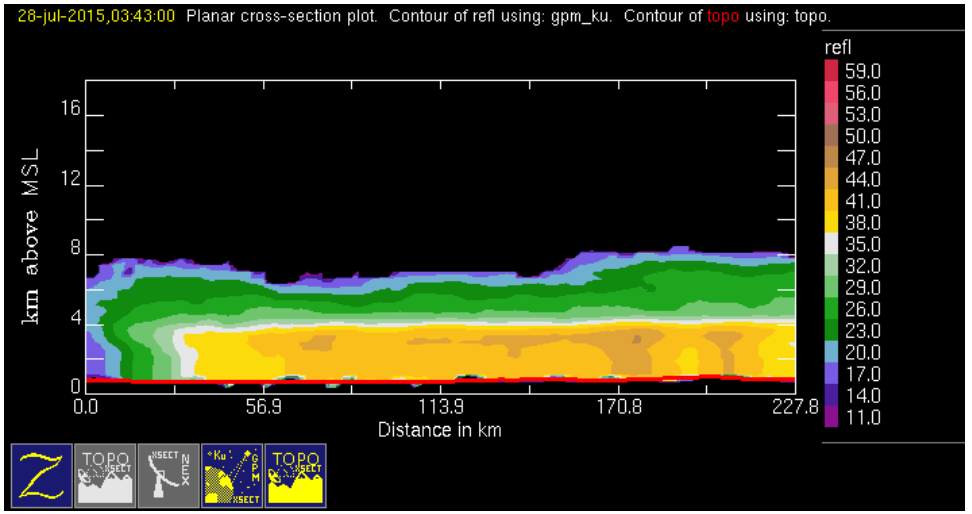


20150728 @ 034222 #2/2

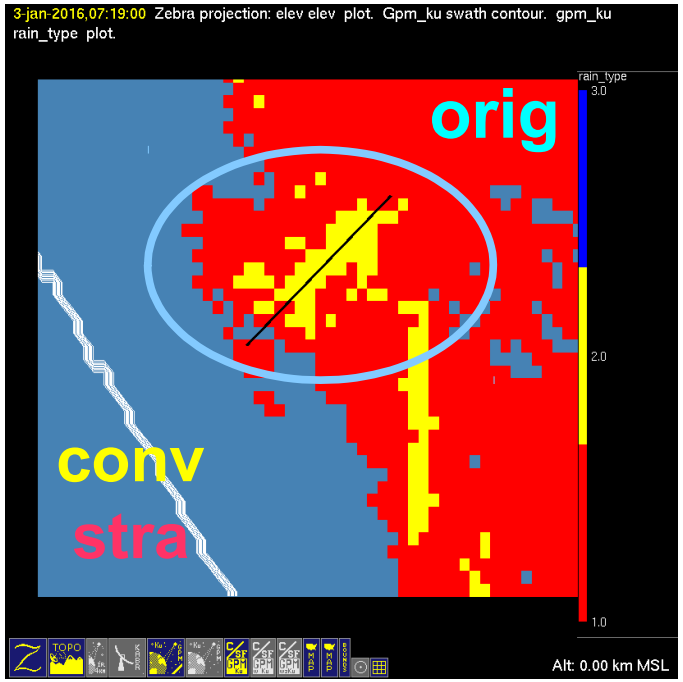


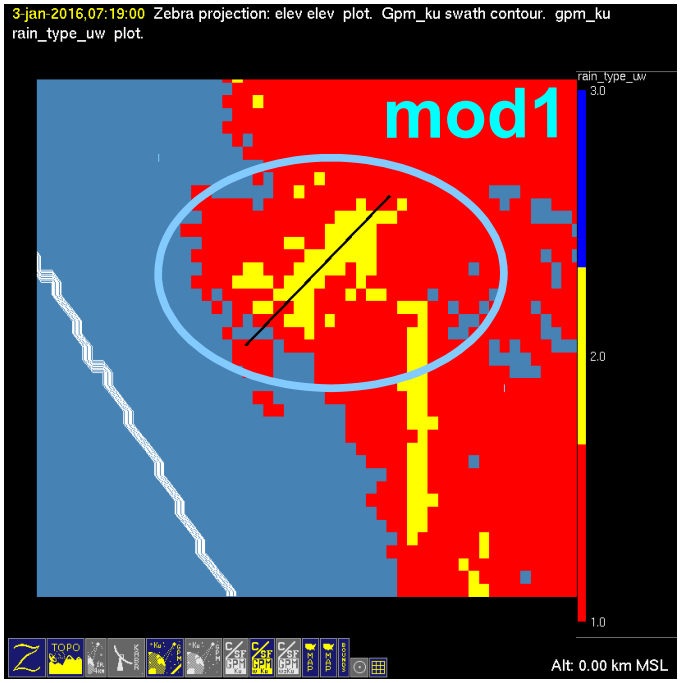


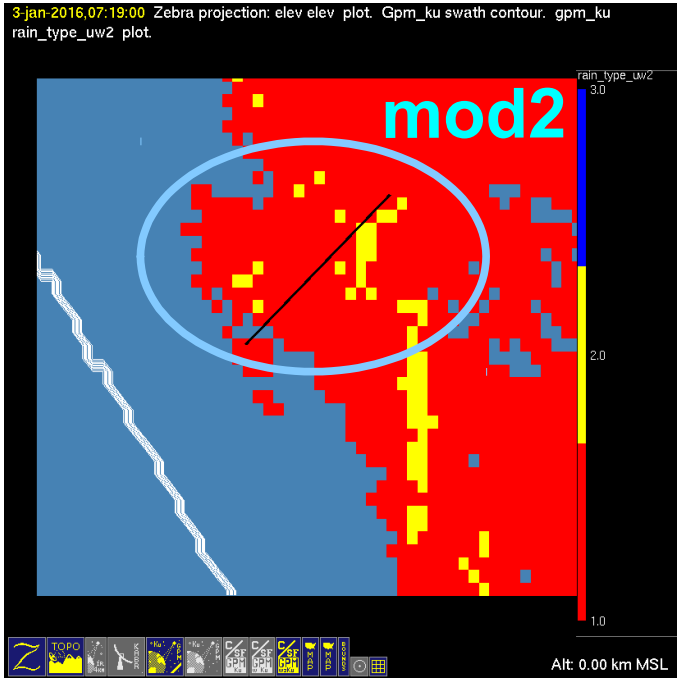


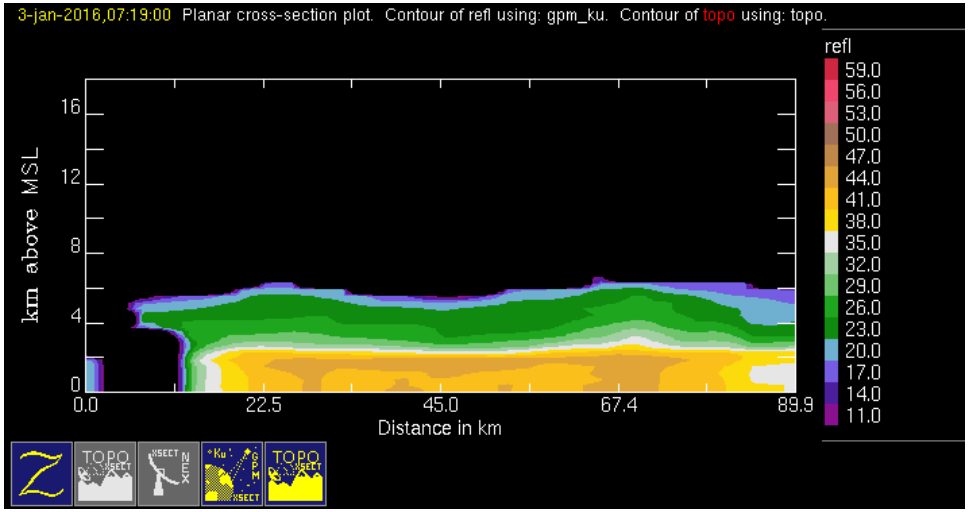


20160103 @ 071812









This case fails the height test but passes the slope test. Cross section shows max reflectivities at very low altitudes.