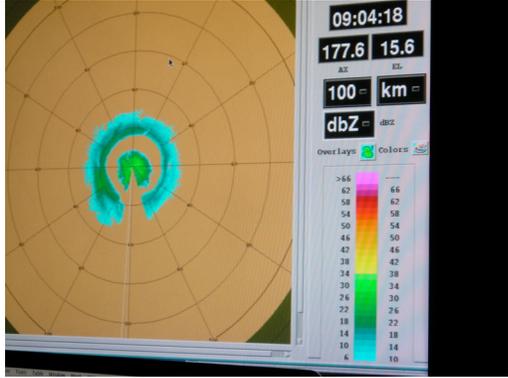
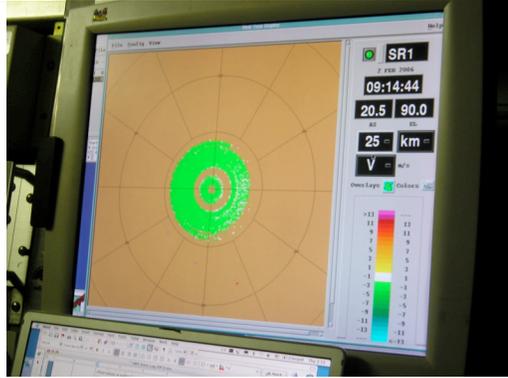


HMT Event Log

Date: 2-1-2006

Note takers: J.J. Gourley and **Melissa Bukovsky**

<i>Time (UTC)</i>	<i>Event</i>
1220	Data collection begins. There were no problems in starting up SR-1.
1237	At an elevation angle of 3.1°, there are 20-25 dBZ echoes over the ARB with some isolated pixels reaching 38-40 dBZ. Conditions at the radar site are overcast with good visibility.
1254	Precipitation, albeit light, is oriented in 3-4 NW-SE bands.
1323	Analysis of radial velocity images at higher elevation angles (e.g. > 8°) shows substantial wind shear with southerlies noted at low levels quickly turning to westerlies with height.
1326	I ran an extension cord directly from a plug at the generator to the inside heater. This should prohibit a breaker switch from tripping on the power strip.
1346	Larger region of 30-35 dBZ echoes moving in from the W. Aforementioned area of precipitation is about 40 km away. Precipitating clouds are shallow as noted by decrease in echo from 2.4° to 3.1°. Light rain is falling at radar site.
1513	Bulk of 25-40 dBZ echoes remain in NW 1/2 of radar screen. Wind shear impressive with SE winds near surface turning very rapidly with height to W just above surface. Light rain continues to fall at radar site.
1544	Echoes have weakened to 25-30 dBZ. Rain is light and intermittent at radar site.
1708	I restarted the iris software because I kept getting error messages that it was trying to delete old files that weren't there. I think we forgot to remove the old files before starting iris. No more error messages are occurring.
1722	I estimated the snow levels to be approx. 1.2 km above radar elevation, or 7000 ft MSL. Moderate echoes up to 40 dBZ are ~30 km to the N of the radar in the ARB. Light rain continues to fall at radar site on an intermittent basis.
1842	Weak echoes (20-35 dBZ) continue to the W and N of the radar, more than 20 km away. Visibility is good at radar site and no rain has fallen within the last hour.
1921	Echoes are now less than 30 dBZ with drizzle occurring at radar site.
1947	I checked the leveling and noticed that it needed a slight adjustment. This may need to be checked as the rain falls. Drizzle continues.
21:10	Archiving 12Z -20Z onto NAV computer. Large swath of to W oriented N-S. Up to ~50dbz.
21:50	Previously mentioned swath of precip has been moving over site. Fairly steady R.
22:23	Bulk of precip swath has moved off to NE. -R still at site. New N-S oriented band of light (max in lower 30's) off to west.
23:00	Band to W has intensified some and starting to move over site. Area of light precip oriented N-S covering large portion of western half of 100km domain. Rain continues here.
23:48	Rain continues here. Precip covers almost all of NW half of domain. Heaviest

	with in 30 mi of site.
00:47	Area of scattered stronger precip centered over site. Light band ~60mi west oriented N-S.
01:00	Burning 12Z – 22Z to CD.
01:20	Broad area of precip to NW starting 40km out. Btw there and site, more scattered stronger areas. Rain continues here.
01:50	Same as at 1:20, but now broad area of precip extend southward now so most of domain to W and N covered (that is not blocked).
02:50	Precip covers NW half of domain out to 60 km radius, heaviest just to SW.
4:00	Same as above, but further out now. Archiving 0-3Z on NAV
5:20	Area of precip covering central part of domain. Heaviest NW of site. Rain, not blowing, but with large drop size at site.
6:00	Heaviest region has moved to NE, another has formed to SW.
7:00	Light precip left centered over site, heaviest has moved off and/or dissipated. Small light regions to SW. Archiving 4-6Z. Burning 23-06.
0825	Light rain is falling at radar site with fog. Radar observations show a small region of precipitation generally to the N of the radar with echo intensities in the 30-35 dBZ range with maxima near 40 dBZ. It is interesting to note there is a distinct, upper cloud deck seen in higher elevation angles (eg. > 10°) with reflectivity as high as 20 dBZ. I don't believe this is a feeder cloud, per se, because there is no reflectivity observed between the upper cloud deck and the lower, precipitating clouds. This is despite the fact that radial velocity observations at vertical incidence suggest hydrometeors are falling from this upper cloud deck. Radial velocities are the same in the lower and upper cloud deck.
	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Reflectivity at 15.6°</p> </div> <div style="text-align: center;">  <p>Radial velocity at 90°</p> </div> </div>
0835	Analysis of radial velocity images show they are folded. A dealiasing algorithm will need to be applied to the data in post analysis.
0951	Areal coverage of 30-35 dBZ echoes has increased in vicinity. Light rain is still falling steadily at radar site. Upper cloud deck is still evident, yet seems to be decreasing in intensity on the N side.
1054	Upper cloud deck is no longer evident. Echoes as high as 45 dBZ appear near the radar with light rain reported at radar site.
1406	Light to moderate rain has fallen steadily through the night. Clear melting signatures were observed during the last 3 hours. Echo intensities have now decreased to less than 30 dBZ, and the rain is very light.
1602	Event seems to be winding down. However, more isolated cells appear to the N

