20180907 Day Shift (4a-4p L) Timothy Lang

0021 – Ship has recovered Surf Otter and is now headed north, destination roughly 14 N.

0040 – Scheduling LOW, since we will be cruising quickly and are expecting to move into more clouds/precip as we steam north. Don't want to get caught with too few tilts.

0518 – Been dealing with an EFM sensor head failure much of the day, clearly missed nothing much on scope.



0645 – Cell close to ship not topped with LOW, switching to FAR. Because I can.

Shift Summary

A few more cells today, but nothing deep or long-lived. Few if any RHIs were run, mostly stayed in LOW and FAR_S all shift.

Night Shift (4p-4a L) Scott Powell

0808: Back to LOW scan.

1247: Extensive lightning to N/NE. We're headed that way, so we should be more active soon.

1324: Lightning continues forward and starboard. A few flashes per minute. Heading 23 deg. Most cells

are 200+ km away.

1400: Switching to LOW scan as convection begins to enter the domain from the north. Surveillance shows large convective region 150-200 km out.

1417: RHIs will begin on this cycle. Will be busy the remainder of the night.

1427: We are underway. 10 km deep for the first cell to visit. Himawari-8 IR shows a nice line of convection to the north moving our way.

1515: FAR scan starting this cycle.

1525: RHI at 20deg shows 18 km deep MCS.

1615: Going to NEAR scan for the squall line. 35-40 kt rear to front inflow near surface. This is basically a perfect, canonical, textbook MCS and our heading is almost exactly opposite its motion. The 30 deg radial is money for RHIs.

1645: The surveillance scans have been dropped. Some RHIs at 135 and 315 were done with the new high-res configuration, PISTON_RHIS to scan along the line as it passed over. Other RHIs up the gut between 0 and 90. 2/M made the interesting observation that the cells in front of the squall line (which were behind the ship) detected by the ship's S and X-band radars seemed to be moving southeastward. SEAPOL couldn't see those because it was the blind spot. The MCS itself was moving southwestward, and the wind shifted to northerly behind the squall.

1730: Back to FAR for this cycle and beyond with regular surveillance.

1823: 18Z sounding failed at freezing level. Reattempted.

1851: 2nd attempt at sonde launch is again stuck at freezing level. No additional attempt will be made.

Day Shift (4a-4p L) Timothy Lang

1902 - RHIs to every 15 deg within FOV. Scope is nearly filled with echo just trying to capture the overall situation. SUR canceled.

1908 – Going to LOW next round as everything is just stratiform near us.

1932 – RHIs to 45-75 to cover incoming stratiform to our NE.

2008 – Looks like IRIS completely crashed and the radar has stopped operating. Engineer support coming soon. Stratiform has been moving off scope or decaying.

2049 – Expecting a long downtime due to apparent antenna drive power issue. For now radar is not scanning.

2105 – Issue is suspected short in slip-ring assembly. Possible that water got in overnight, or the short could be related to another issue. We will let the antenna dry out for a bit, then try again. If that doesn't

fix the issue, then it cannot be fixed at sea.