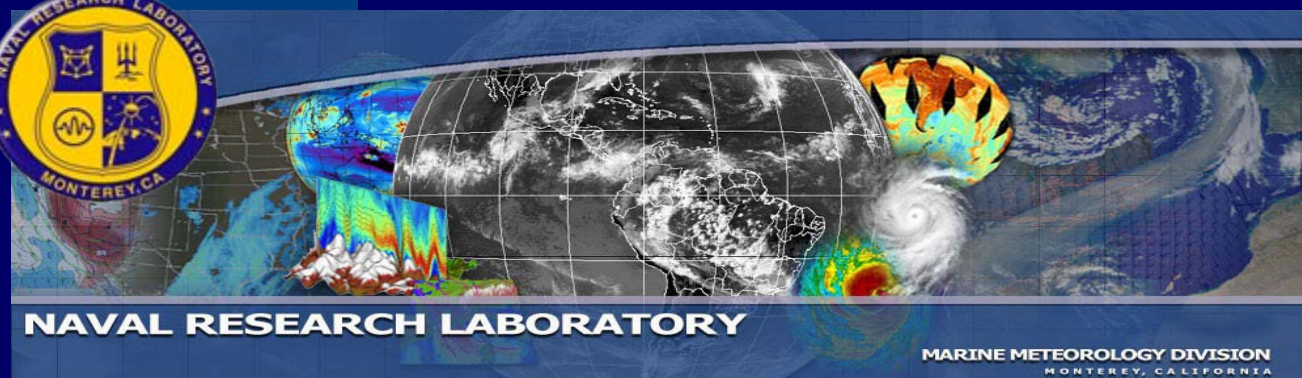




TCS08 Experiment Analysis: WC-130J Flight Level Data

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WC-130J Capabilities

- **Endurance:** 12-hour
- **Ceiling:** 300 mb, i.e. 9.7 km (31K ft) altitude
- **Flight level data:** Real-time 30-s mean HDOB, 1-s resolution recorded
- **SFMR surface winds** – TC intensity, ocean surface forcing
 - **Radar Video** - defines eyewall, rainband strength, location and structure.
 - **Real-Time SATCOM** - transmits data to ops center for real-time quick look, flight track adjustments
- **GPS sondes (750)** - 3D storm-scale structure: from 700 mb in TC; from 300 mb in formation cases
- **AXBT's (250) / Drift Buoys (24)** - define ocean thermal structure, TC-induced response



TCS08 Experiment Analysis: Tools

What did we use?

1) WC-130J Aircraft (2)

- GPS dropsonde (750, ~ 26 / ft) for atmospheric profiling (high-altitude)
- AXBT*- ocean thermal profiling (250, ~ 13 / ft)
- SFMR- surface winds
- Radar Video Recording*
- ADOS profiler / Minimet drift buoys (24)

2) NRL P3 (1)

- Eldora Doppler Radar- 3D winds
- LIDAR*- boundary layer wind profiles
- GPS dropsonde- atmospheric profiling (low)



*First used in TCS08

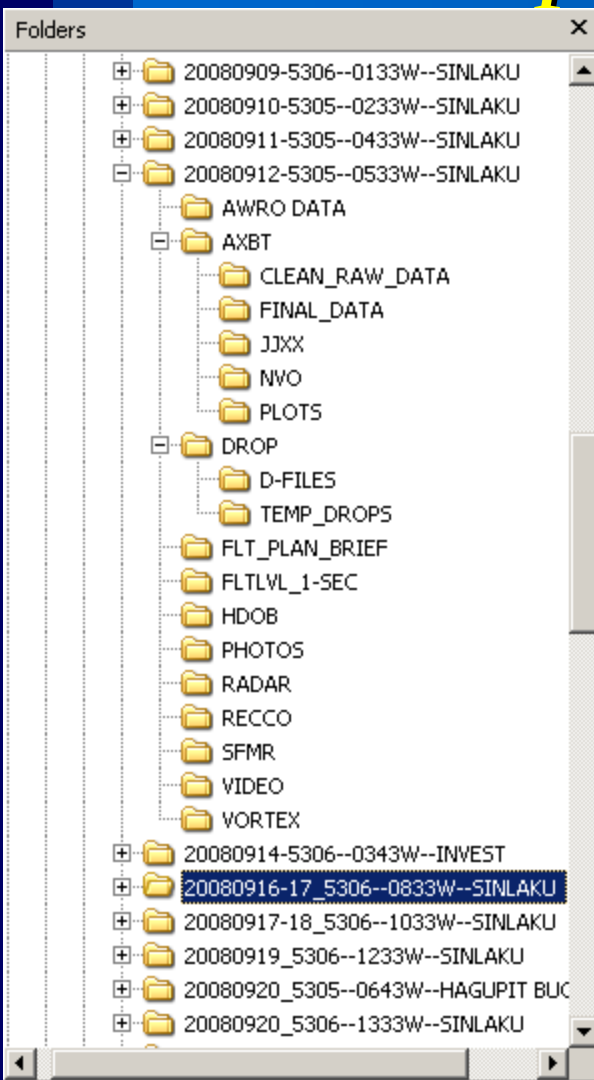


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TCS08 Experiment Analysis: Data



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