

20060611

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1841 – sounding from 10000 ft agl at 500 ft / min, near top of sounding there are lower aerosol concentrations compared to Friday's (6/9) flight. However, concentrations increased dramatically around 6000 ft agl

1845 – approaching the hole (dark feature in the visible satellite image) from the east. Beyond the hole there are deeper clouds on the NW horizon. Pictures of this.

1848 – heading to the north during descent because the WCR is showing thin clouds near the eastern bdry of the hole. Noticed and commented on turbulence in the free troposphere as we approached the MBL from above.

1905 – 1940 (approximate) – working drizzle cell to the east of the hole.

Targeted this by looking for punctuations in the cloud tops, directing Don to one that was nearby. There are several punctuating tops visible in this area from altitudes higher than 4000 ft agl. Concentrations on the CPC exceeding 2000 cm^{-3} (up to 2400 cm^{-3}) in the above-cloud regime. After descending into cloud observed cloud droplet concentrations of 150 cm^{-3}

1944 – descending into cloud, to 1900 ft agl, low cloud below, scud. Only a few white caps. Targeted the feature that we worked (from above) by doing a 90/270, realigning with track and getting a visual fix on the most pronounced punctuation of cloud top, then descending to 1900 ft agl.

2003 – 2023 descending to 200 ft agl, 90/270 turn, three passes of same driz feature

2023 – climbing out of MBL

2035 – 2045 – sounding into the hole. Several pictures of this regions, clouds of various type with Cu penetrating into stratus seen illuminated with sun coming in through the hole. Also, the eastern edge of the hole most impressive with several layers of stratus and bases sloping downward to the east.

2100 – heading to north to intercept the line to Arcata. At 500 – 600 ft agl, WCR in the up-looking mode, lower cloud thinned completely and a layer then formed at about 400 m above us, this then thickened. Using CCN in seven point mode, 0.2, 0.4, 0.8, 1.6 %.

2105 – CCN(1.6) and CCN(0.2) reasonably consistent with targets of CPC and PCASP, respectively. Wind magnitude is 11 m/s

2112 – lots of boat (ship) and tugboat/barge traffic (at least four of these), some evidence of a hit on the CPC and UFN but it is also cloudy here (murky) so that could be shattering artifact. Passed under drizzle this is presumed to be the N-to-S feature evident in the satellite, approximately 50 miles off the coast. Could this be a region of concentrated ship traffic?

2123 – PCASP concentration and FLWC anticorrelated