

CVO EVENTS FOR 990821 – SATURDAY.

1230Z and 1300Z IR images showed band of clouds across the W93 area from SW to NE. CVO had a Sc layer at about 1 km altitude and no winds. NPT profiler at 12Z showed two inversions: at 500 m and at 1100 m. Expectation was to find (perhaps) two layers over the ocean as well.

Launched early in order to complete flight by the 17Z limit of availability of W93. We also had the new northern 'Restricted area' that we asked for yesterday.

FLIGHT – 14:28Z T/O; 16:35 L/D. Crew: Hoshor, Vali, Gill

Cloud over CVO extended from 4300' to 5000'. Delayed a little in it to get some data.

Coast was clear. Patches of cloud over the ocean seen. No high clouds.

Sampled very thin layer near 43° 50' / 125° 15'. Entered through northern edge, from clear area, made level and porpoising passes along wind direction and reverse.

Cloud thickness varied from 120 to 220 m at various points. LWC to 0.3 g m^{-3} , drop concentrations to 50 cm^{-3} . R_e roughly 10 μm . Radar reflectivities to -20 dBZ . No appreciable drizzle, although at times small drops seen on the windshield.

Cloud layer appeared quite broken from below. Radar images of horizontal sections also indicate 'cells' that look quite like photographic images of St from above: nearly circular patches with thin boundaries separating them.

All sensors seemed to have been working. The high rate recording of the PVM data was intermittent.

Other: Power to PVM high rate logger from UPS arranged. Radar calibration.