

CVO EVENTS FOR 990811 - WEDNESDAY.

Due to 10:30 end time for W93 today we planned early flight. 5:30 am look at available imgs and sndg show extensive deck, no high clouds over the area and inversion (NPT) at about 1 km (no profiler data above that, just one point at 10Z). Winds are mostly NW.

Flight: 1336Z – 1734Z Hoshor, Vali, Haimov.

Transit to area just touching 12 kft; start descent to NE corner of W93. Continue same hdg to sfc.

Top at 4300' +7°C. 50 cm^{-3} drops, LWC to 0.6 g m^{-3} . Base indefinite 3000' to 2600' around +9°C.

Winds 330 above cld, switching to 280-250 in cloud and below. Wind speeds $< 5 \text{ ms}^{-1}$ everywhere.

Moved to 43:20 / 124:50. From there did E – W legs at various altitudes, Also, porpoising between 3000' and 5000'. Inversion is sharp with rapid drying (in contrast to previous days). Another set of porpoising between 2000' and 6000' started at 1616Z.

Noticable variability in cloud density but no breaks. Below main deck small patches of scud in places. Only at one point saw a patch of sunlight on the water. Top appears very uniform, except small areas of bumps and of holes. Not evident how to reconcile this with the clear cellular pattern shown in VIS images.

Radar images show larger patches and considerable shear. Echoes to +10 dBZ early in the flight, decreasing to about 0 dBZ later.

AVAD pattern at 1508. Ovals at 1551.

High-rate PVM during level and porp. legs.

From above cloud, Heinman reading close to cld top temp.

R_e readings 8 – 11 μm , mostly 11's in upper part of cld.

Drizzle drops to 500 μm . Rate quite variable.

CCN counter run fine but no special flight segments dedicated to this. There are level legs below cloud, none in 'clear air'.

All systems appeared in good order. Front display went inactive for after 1530Z. De-ice heat left off during entire flight.

Exabyte drives being sent to factory. Today's tape OK.

Processing: Radar quick look available. K/A processing of 990810 flight done. 2D processing bugs worked out; merged files forthcoming. Quick-look hard-copy output started for 990805; others to follow. 15-sec ASCII track files on the ftp server. PVM high-rate data awaiting Hermann Gerber's return to CVO.

No flight tomorrow.