

TC4 DC8 Test Flight 2

30 June, 2007

All times given in UT

General Information

Flight date – 30 June 2007

Flight description – 2nd DC8 Test Flight

Flight duration – 3.75 Hours

Instruments flown CVI, CAFS, DACOM, DLH, SAGA, Fast Oz, AVOCET, APR-2, 2DS, CPI, MMS, WAS, DIAL, Dropsondes, IRIS, PALMS, LARGE, SSFR, RICE, PIP, NO, CIMS, TD-LIF, LASE, (REVEAL).

Flight Log

Takeoff 19:36:09

Landing 23:30:27

Weather Observations

Clear / high cirrus over Sacramento.
Cirrus at FL 310 going North
Cross tropopause on climb to FL 390 through windmax.
Clear over Trinidad Head
Marine stratus at North West end of low altitude length
Cirrus over Sacramento on return

Flight Profile

Climb to 31,000 ft heading north along TES nadir path, turn west at ~20:40
Climb to 39,000 ft heading west; cross tropopause (max ozone ~300 ppb)
South to Trinidad Head at 39,000
Spiral over Trinidad Head; missed approach (1000ft) at Eureka.
West at 1000 ft for ~15 min; climb to 2000ft to penetrate stratus at west.
Climb to 18,000 ft heading back to McClelland; MMS maneuvers on route.

Instrument Notes

IRIS optical system not flown; Inlet tests performed.
LASE did not measure H₂O due to concern with optical feedback to seed diode; measure of aerosol fine.
APR-2 not operational on Ka Band due to loss of remote control in this band.
Otherwise nominal instrument operations;