

TC4 DC8 Test Flight 2

3 July, 2007

All times given in UT

General Information

Flight date – 2 July 2007

Flight description – 3rd DC8 Test Flight

Flight duration – 5.5 Hours

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

Flight Log

Takeoff 18:42:51

Landing 00:00:35

Weather Observations

Clear over Sacramento.

Pacific headed south, cirrus at 10km and 13km; stratus below

Clear over Los Angeles / Palmdale

LA Boundary Layer ~1600 MSL; tropopause at 15km

Flight Profile

Climb to 37,000 ft heading heading south;

Begin descent into March airfield at 20:12

Missed approach at March;

Could not get ATC permission to spiral over Table Mountain; Profile South East to 39,000 ft

Head south west over Santa Catalina island and out to Pacific

Head North to point just west of Bay area; Pollution layer at 29,000 ft

After turning east, perform MMS maneuvers

Descent into central valley

~45 min in central valley before landing at McClellan.

Instrument Notes

IRIS optical system flown; expect report on performance Thursday.

LASE continued problem with feedback into diode; repair planned for 3rd July.

Continuing problems with getting serial data to LARGE.

DACOM will have no N₂O this flight due to preamp failure; expected repair for transit.

PALMS did not get data for first hour.

CIMS single did not get data for first hour. Triple worked for full flight.

NO continued low sensitivity; expect improvement for TC4 science flights.

No dropsondes this flight.

APR2 got good calibration data clear over ocean; severe dryness, so no convection until Costa Rica.