

TC4 DC8 Science Flight: July 19, 2007 Tentative Flight Plan

Flight Scientists: P. Wennberg, Eric Jensen

Sortie: TBD

Pilot: Bill Brockett

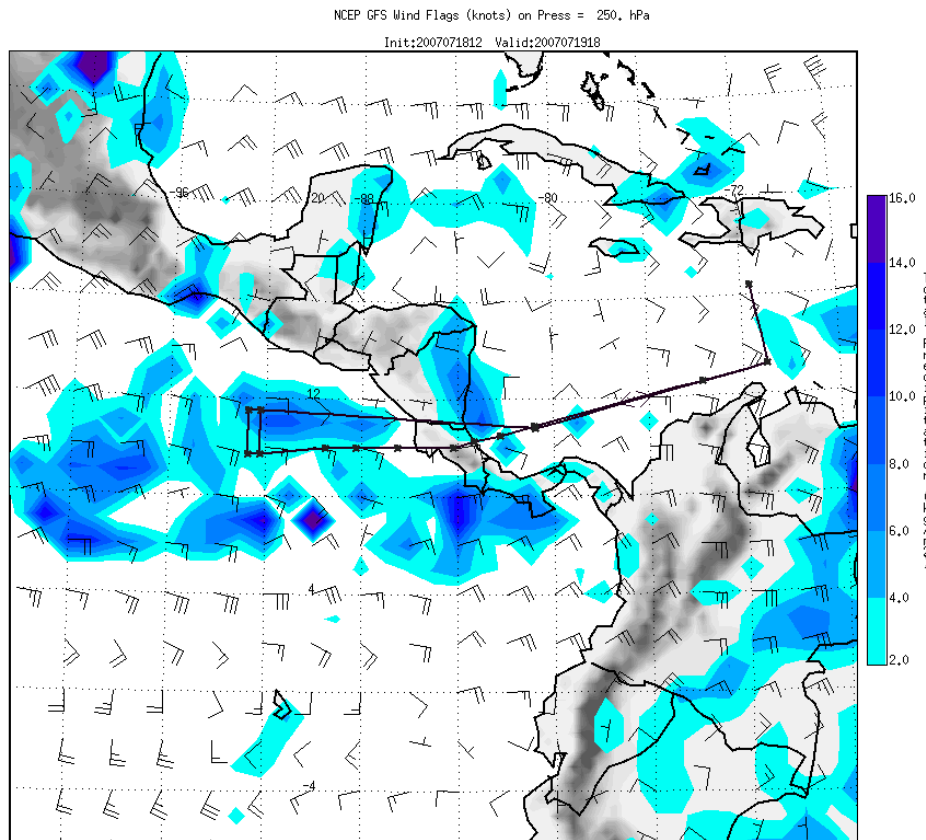
Takeoff (SJO): 1230 UTC

Landing (SJO): 2100 UTC (3:00 PM local)

Duration: 8:30

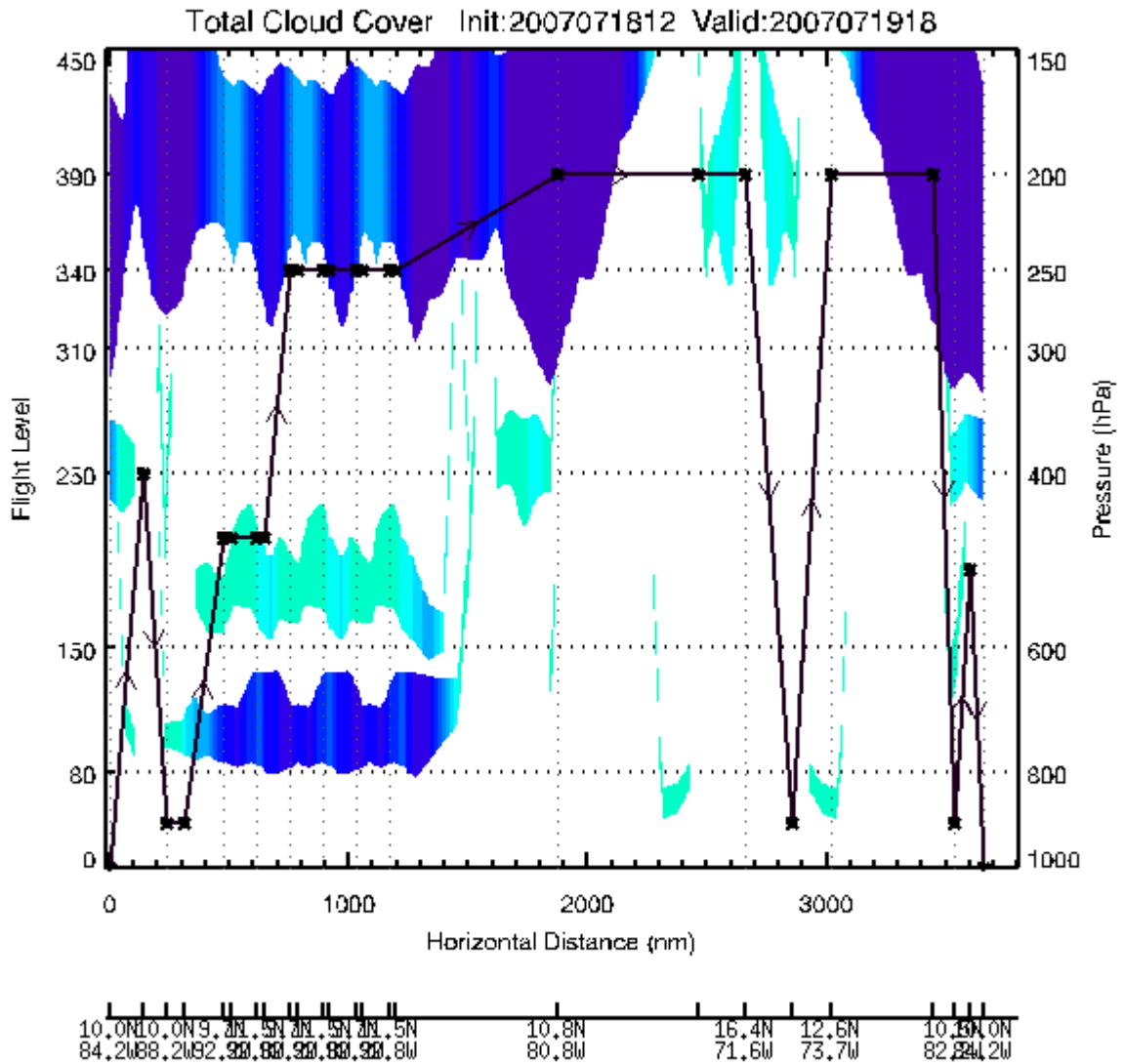
Objectives:

1. Examine convection with a more maritime history than on July 17 (less lightning); profile near convection.
2. Examine predicted gradients in CO, NO_x, aerosols from the Pacific east to Venezuelan coast
3. Look for removal of aerosols in cumulus.
4. Under fly Calipso at east end of track.
5. Vertical profile at east end of track.



Total
Precip.;
Winds at
240 mb
valid 18Z
on flight
day.

Flight track. We will do a boundary layer run before beginning the racetrack pattern at ~20 Kft. We will ascend and do the 2nd and 3rd laps at higher altitude. We will fly to the east at 35 Kft and underfly the Calipso track, hopefully in clear air. From the north end of the Calipso track we will descend, reaching the boundary layer just off the Venezuelan coast. We will ascend on route, choosing flight levels using the LIDAR profiles from the outgoing leg. Prior to arrival back at SJO, we will descend to the boundary layer off the east coast.



20070719

	Lat	Lon	Dist(km)	Pres	Time
A	10 00' 00"	-84 11' 58"	0	1000.00	0:00 1230Z
B	10 00' 00"	-86 30' 00"	251	400.000	0:20 1249Z
C	10 00' 00"	-88 15' 00"	443	900.000	0:34 1304Z
D	10 00' 00"	-89 30' 00"	580	900.000	0:45 1314Z
E	9 41' 57"	-92 15' 00"	883	465.000	1:08 1338Z
F	9 41' 57"	-92 45' 00"	938	465.000	1:13 1342Z
G	11 30' 00"	-92 45' 00"	1138	465.000	1:28 1358Z
H	11 30' 00"	-92 15' 00"	1193	465.000	1:32 1402Z
I	9 41' 58"	-92 15' 00"	1393	250.000	1:48 1418Z
J	9 41' 58"	-92 45' 00"	1448	250.000	1:52 1422Z
K	11 30' 00"	-92 45' 00"	1648	250.000	2:08 1437Z
L	11 30' 00"	-92 15' 00"	1702	250.000	2:12 1441Z
M	9 41' 58"	-92 15' 00"	1902	250.000	2:28 1457Z
N	9 41' 58"	-92 45' 00"	1957	250.000	2:32 1501Z
O	11 30' 00"	-92 45' 00"	2157	250.000	2:47 1517Z
P	11 30' 00"	-92 15' 00"	2212	250.000	2:52 1521Z
Q	10 48' 00"	-80 45' 00"	3469	200.000	4:29 1658Z
R	13 11' 59"	-71 00' 00"	4562	200.000	5:54 1823Z
S	16 23' 58"	-71 35' 59"	4924	200.000	6:22 1851Z
T	13 11' 58"	-71 00' 00"	5285	900.000	6:50 1919Z
U	12 36' 00"	-73 41' 59"	5586	200.000	7:13 1943Z
V	10 53' 58"	-80 48' 00"	6381	200.000	8:15 2044Z
W	10 30' 00"	-82 11' 59"	6540	900.000	8:27 2057Z
X	10 18' 00"	-83 18' 00"	6663	500.000	8:37 2106Z
A	10 00' 00"	-84 11' 59"	6767	1000.00	8:45 2114Z