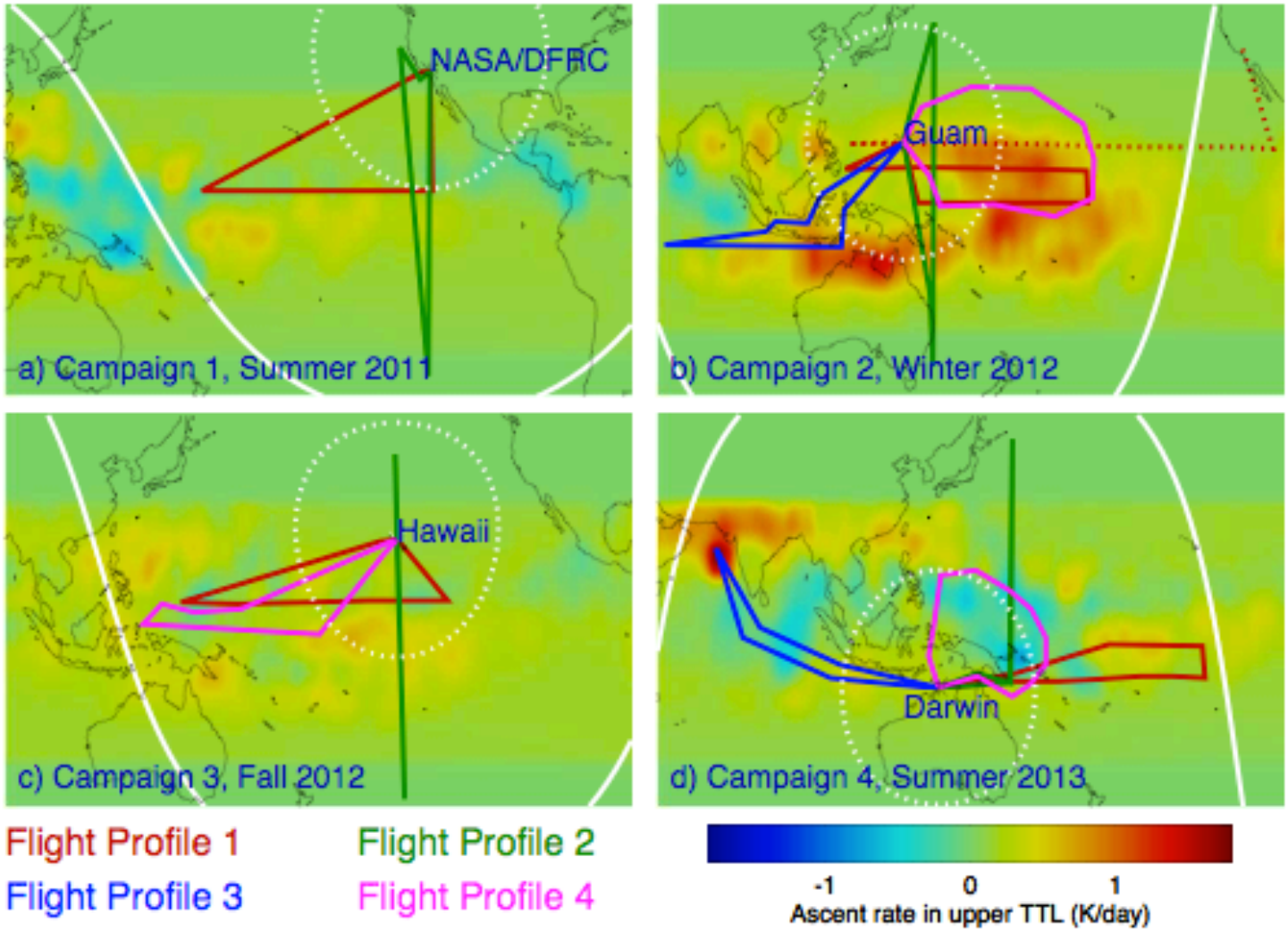
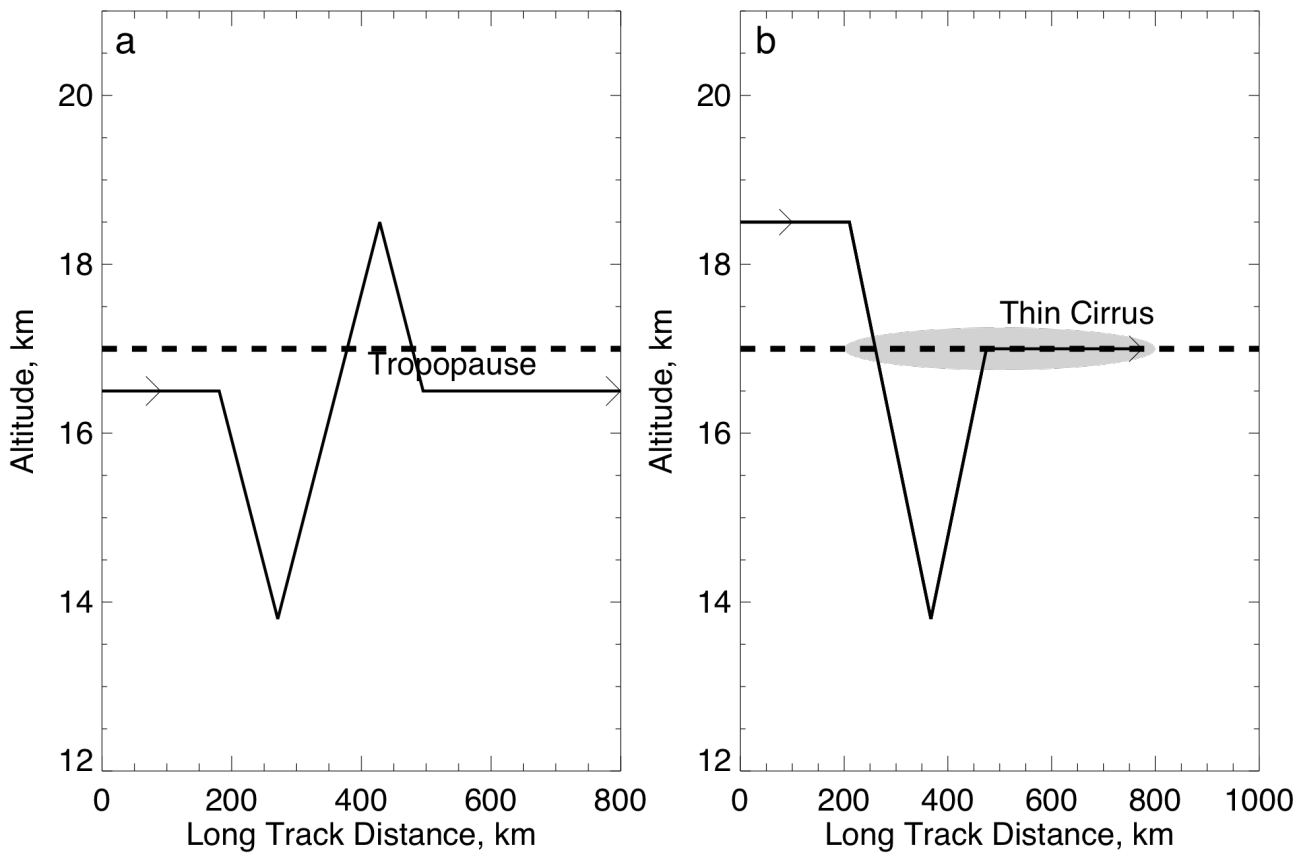
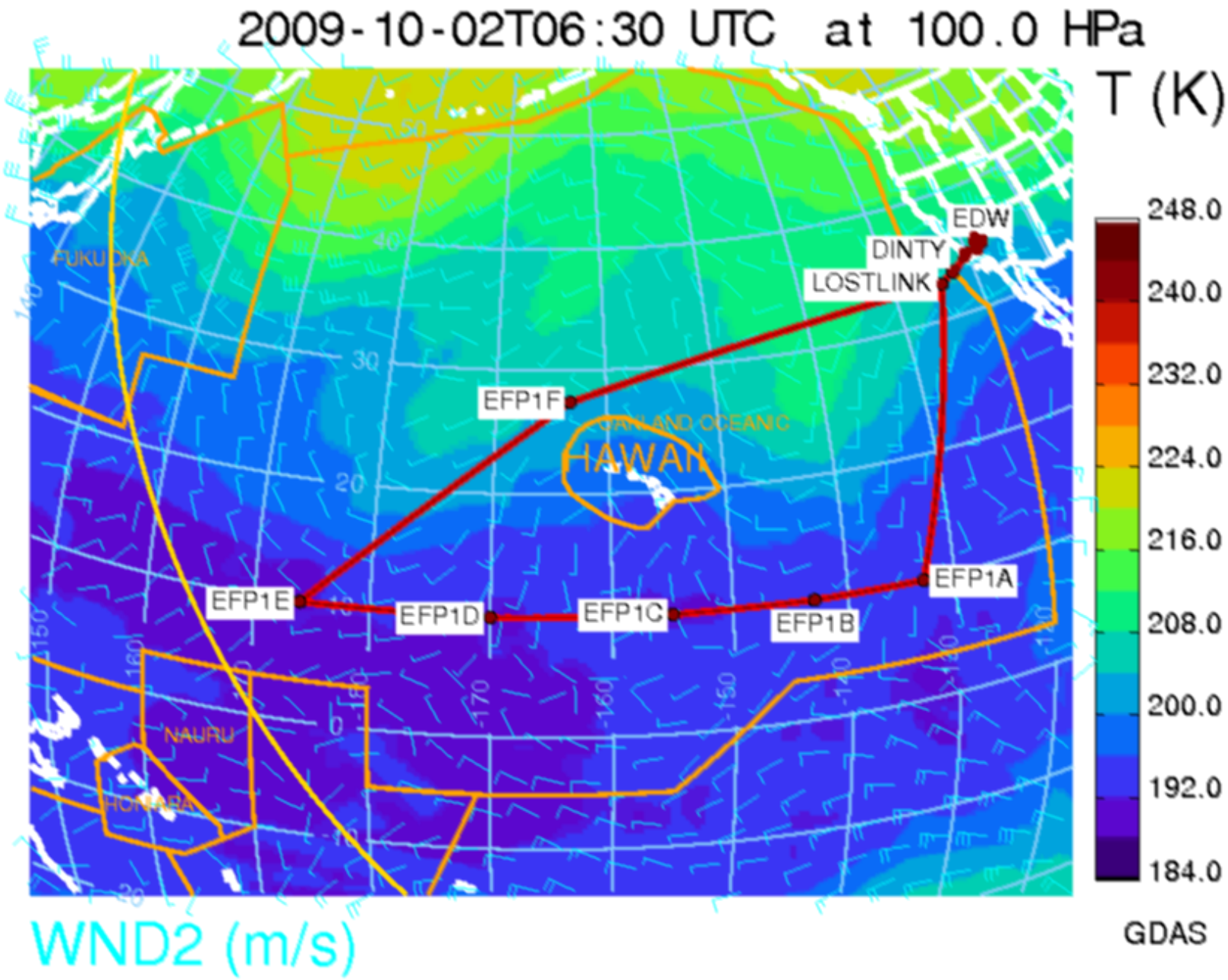
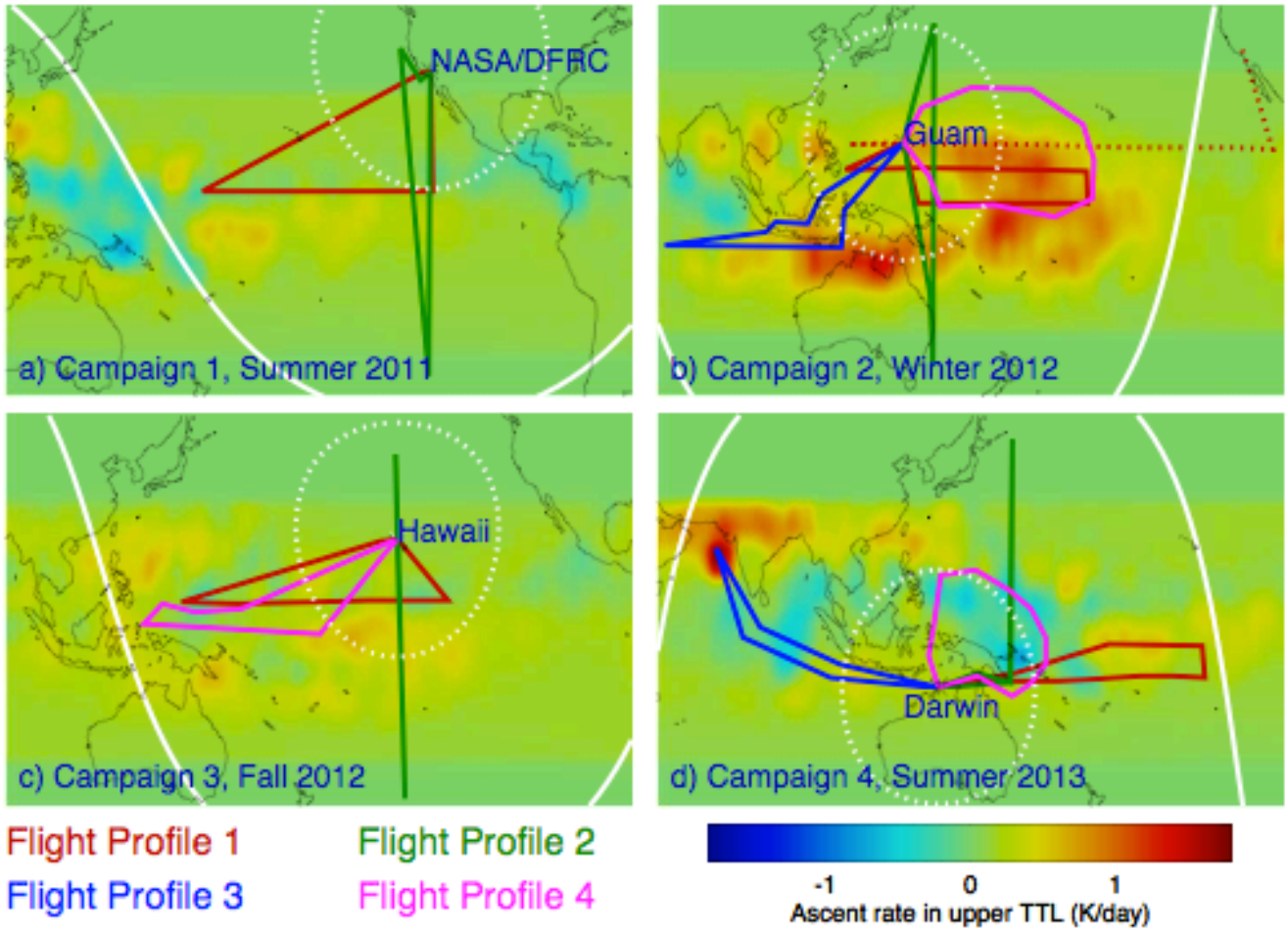
Sample Flight Plans

L. Pfister, L. Lait

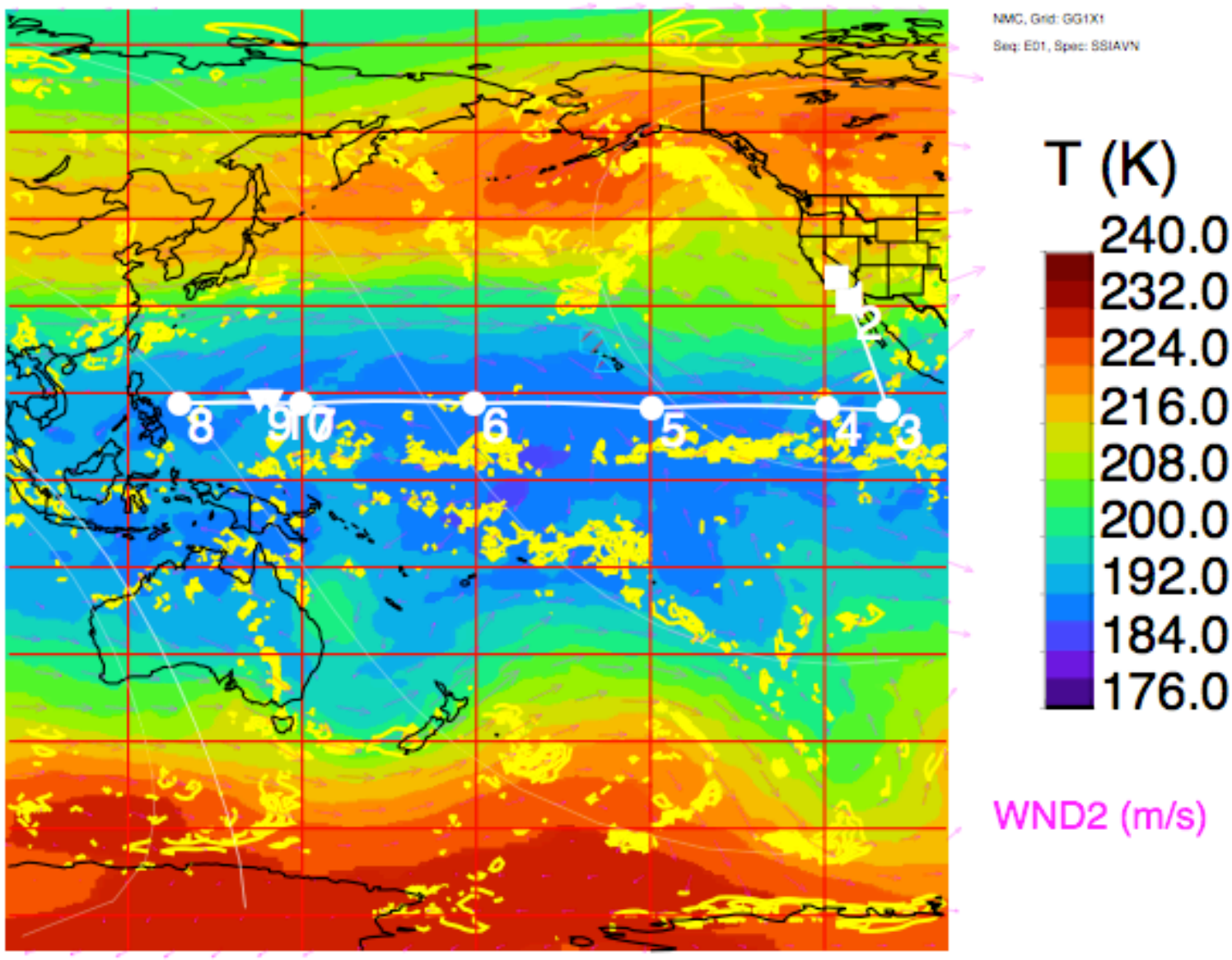

NASA/DFRC
a) Campaign 1, Summer 2011
Guam
b) Campaign 2, Winter 2012
Hawaii
c) Campaign 3, Fall 2012
Darwin
d) Campaign 4, Summer 2013
Flight Profile 1
Flight Profile 2
Flight Profile 3
Flight Profile 4
-1
0
1
Ascent rate in upper TTL (K/day)

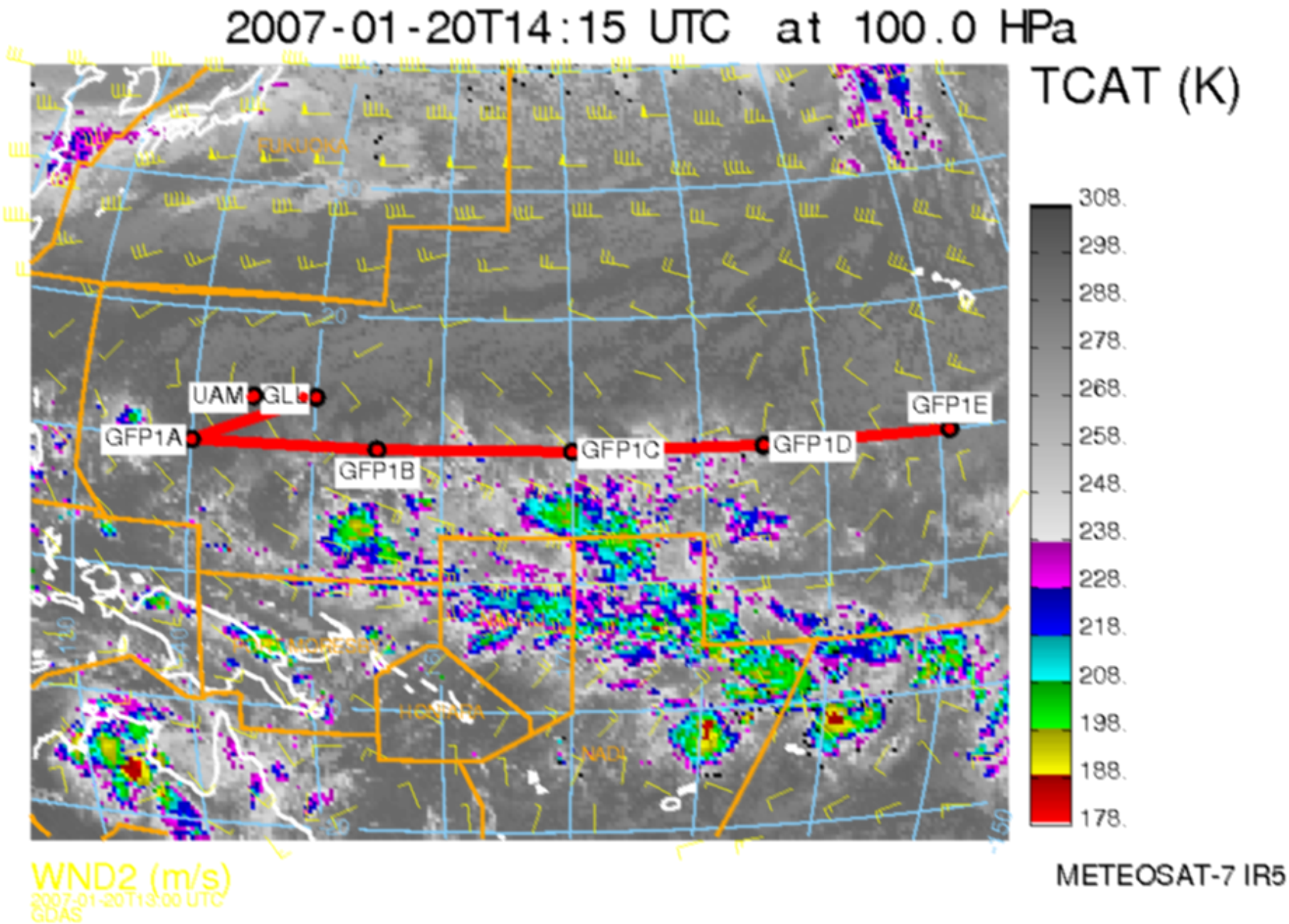

a
b
Tropopause
Thin Cirrus
Altitude, km
Long Track Distance, km
20
18
16
14
12
0
200
400
600
800
1000

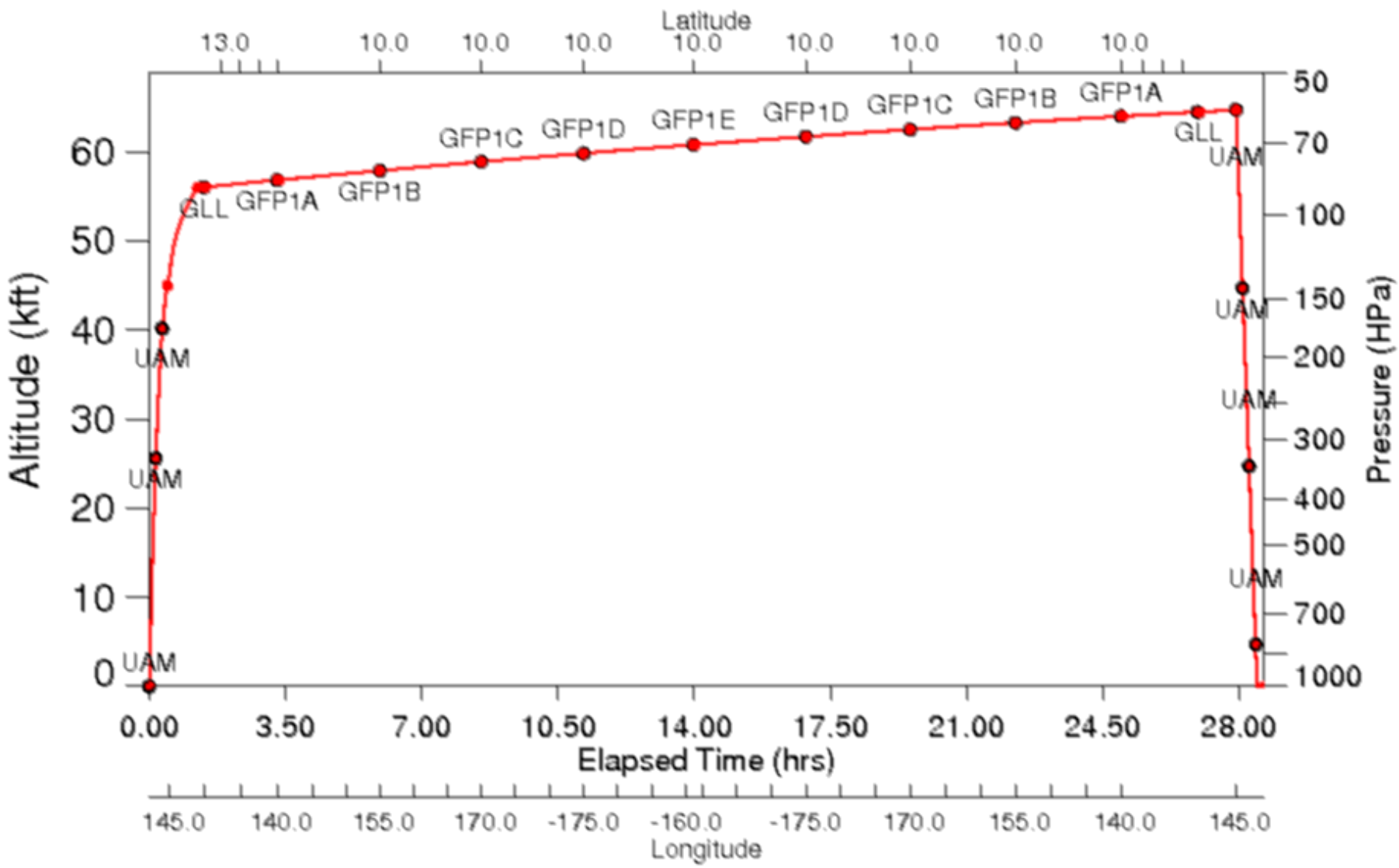

2009-10-02T06:30 UTC at 100.0 HPa
T (K)
248.0
240.0
232.0
224.0
216.0
208.0
200.0
192.0
184.0
GDAS
EDW
DINTY
LOSTLINK
EFP1F
EFP1A
EFP1E
EFP1D
EFP1C
EFP1B
HAWAII
FUKUOKA
NAURU
WND2 (m/s)

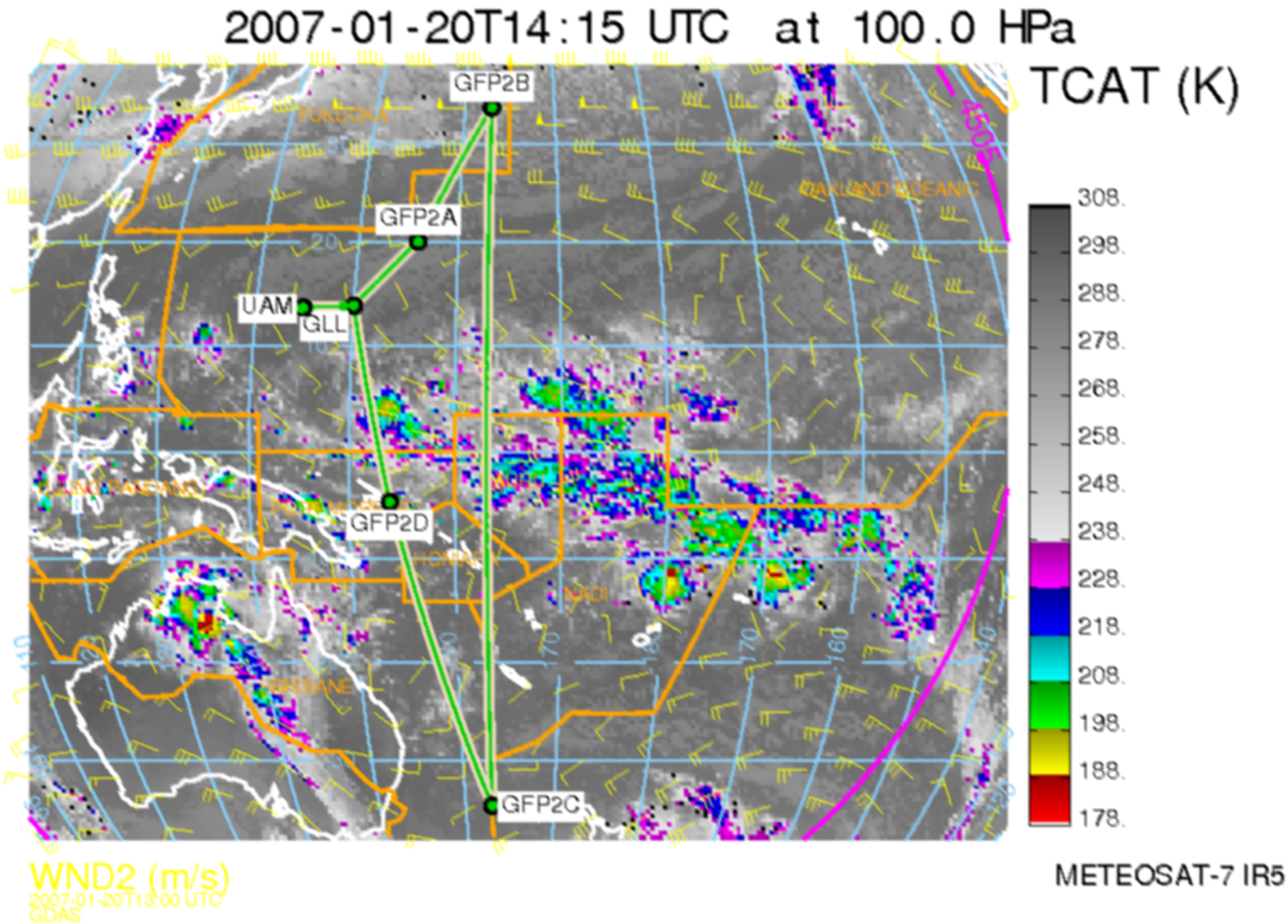

NASA/DFRC
a) Campaign 1, Summer 2011
Guam
b) Campaign 2, Winter 2012
Hawaii
c) Campaign 3, Fall 2012
Darwin
d) Campaign 4, Summer 2013
Flight Profile 1
Flight Profile 2
Flight Profile 3
Flight Profile 4
-1
0
1
Ascent rate in upper TTL (K/day)

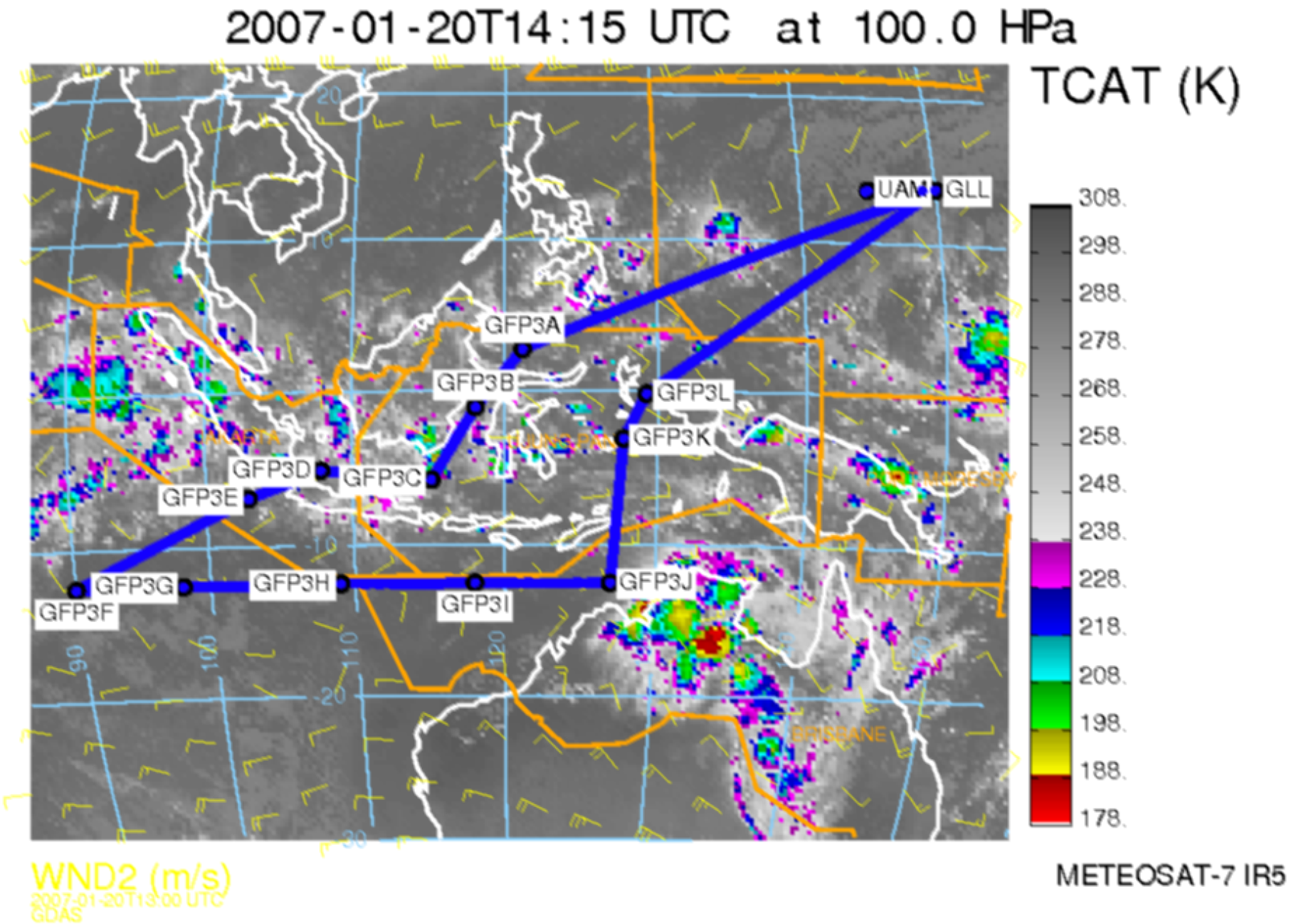
18 UTC on 20 January, 2007 at 100.0 mb

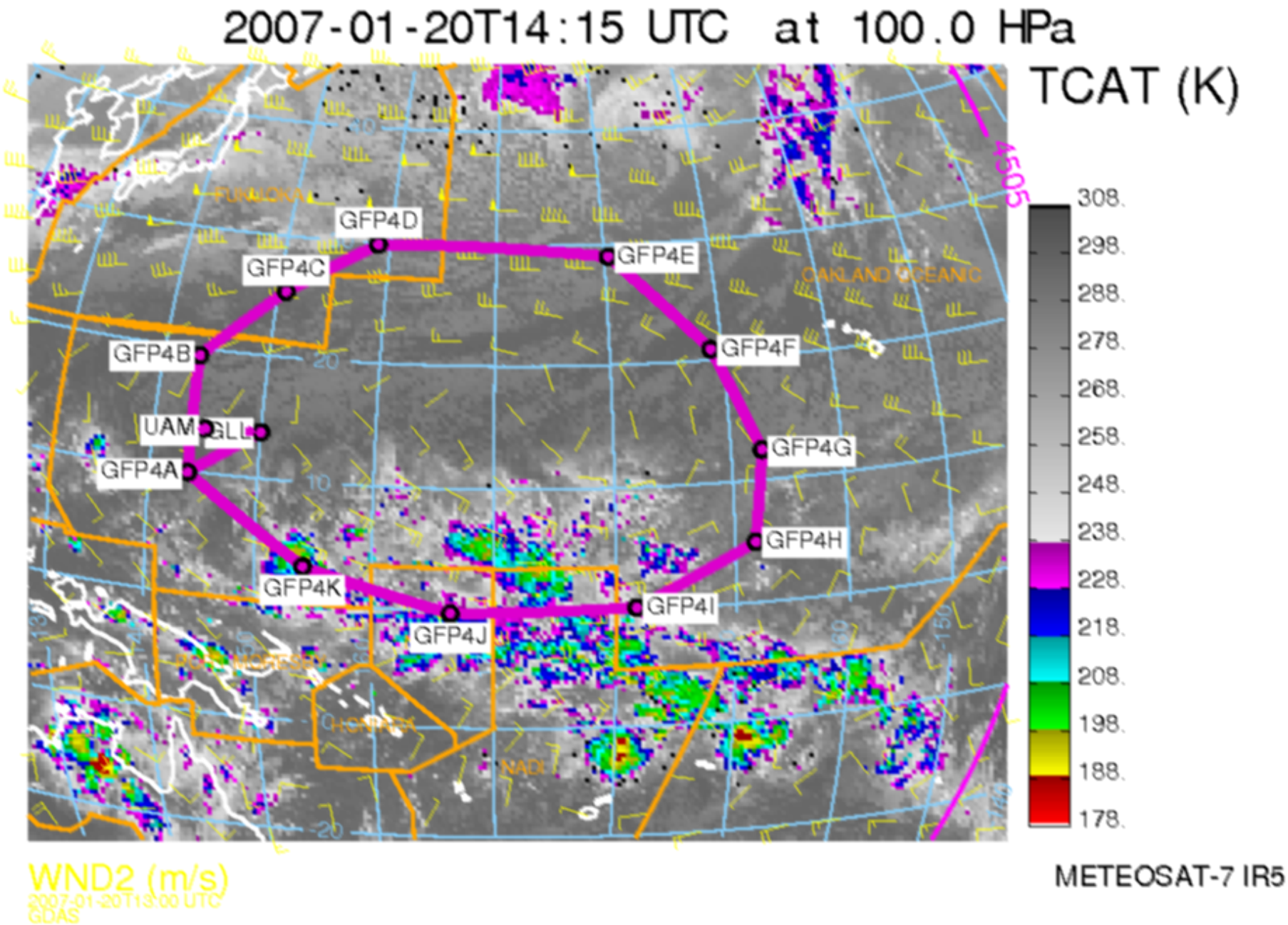


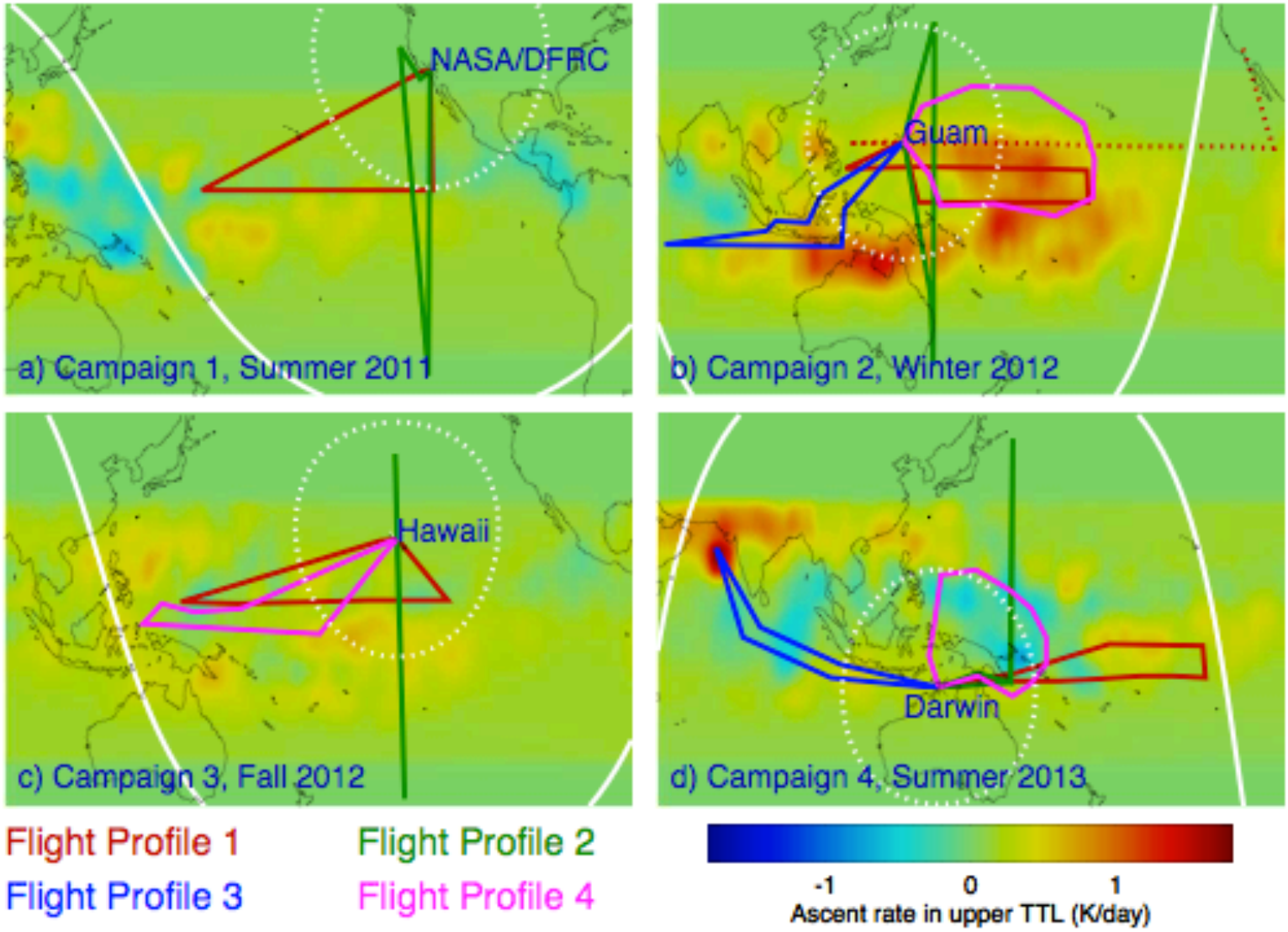

2007-01-20T14:15 UTC at 100.0 HPa
TCAT (K)
308.
298.
288.
278.
268.
258.
248.
238.
228.
218.
208.
198.
188.
178.
UAM
GLL
GFP1A
GFP1B
GFP1C
GFP1D
GFP1E
FUKUOKA
HONOLULU
NADI
WND2 (m/s)
2007-01-20T13:00 UTC
GDAS
METEOSAT-7 IR5


Latitude
13.0
10.0
10.0
10.0
10.0
10.0
10.0
10.0
10.0
GFP1C
GFP1D
GFP1E
GFP1D
GFP1C
GFP1B
GFP1A
GLL
GFP1A
GFP1B
GLL
UAM
UAM
UAM
UAM
UAM
UAM
UAM
Altitude (kft)
60
50
40
30
20
10
0
Pressure (HPa)
50
70
100
150
200
300
400
500
700
1000
0.00
3.50
7.00
10.50
14.00
17.50
21.00
24.50
28.00
Elapsed Time (hrs)
145.0
140.0
155.0
170.0
-175.0
-160.0
-175.0
170.0
155.0
140.0
145.0
Longitude


2007-01-20T14:15 UTC at 100.0 HPa
TCAT (K)
308.
298.
288.
278.
268.
258.
248.
238.
228.
218.
208.
198.
188.
178.
GFP2B
GFP2A
UAM
GLL
GFP2D
GFP2C
FUKUOKA
OAKLAND OCEANIC
NADI
BRISBANE
WND2 (m/s)
2007-01-20T13:00 UTC
GDAS
METEOSAT-7 IR5


2007-01-20T14:15 UTC at 100.0 HPa
TCAT (K)
308.
298.
288.
278.
268.
258.
248.
238.
228.
218.
208.
198.
188.
178.
UAM
GLL
GFP3A
GFP3B
GFP3L
GFP3K
GFP3D
GFP3C
GFP3E
GFP3G
GFP3H
GFP3I
GFP3J
GFP3F
BRISBANE
WND2 (m/s)
2007-01-20T13:00 UTC
GDAS
METEOSAT-7 IR5


2007-01-20T14:15 UTC at 100.0 HPa
TCAT (K)
308.
298.
288.
278.
268.
258.
248.
238.
228.
218.
208.
198.
188.
178.
GFP4A
GFP4B
GFP4C
GFP4D
GFP4E
GFP4F
GFP4G
GFP4H
GFP4I
GFP4J
GFP4K
UAM
GLL
OAKLAND OCEANIC
NADI
WND2 (m/s)
2007-01-20T13:00 UTC
GDAS
METEOSAT-7 IR5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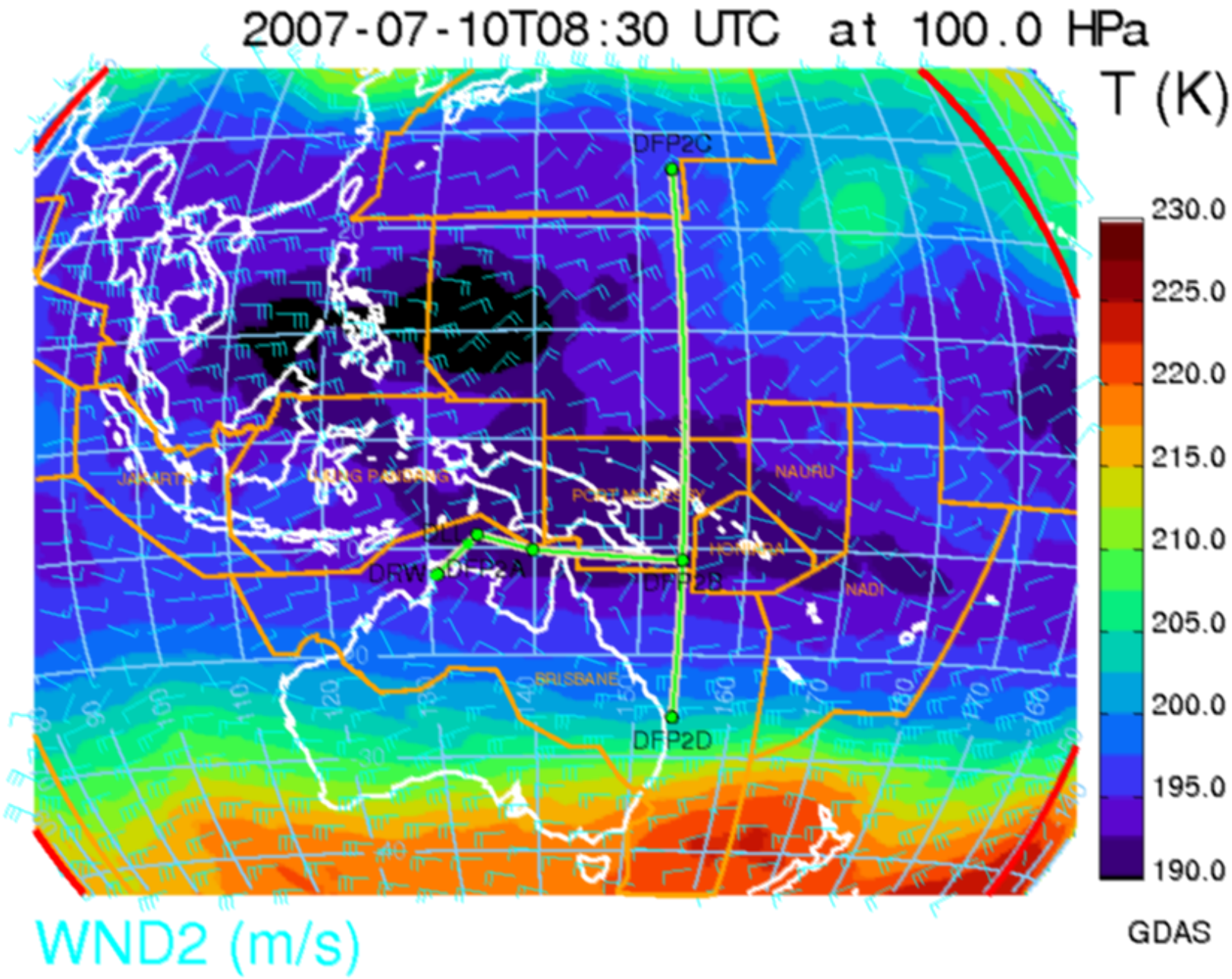
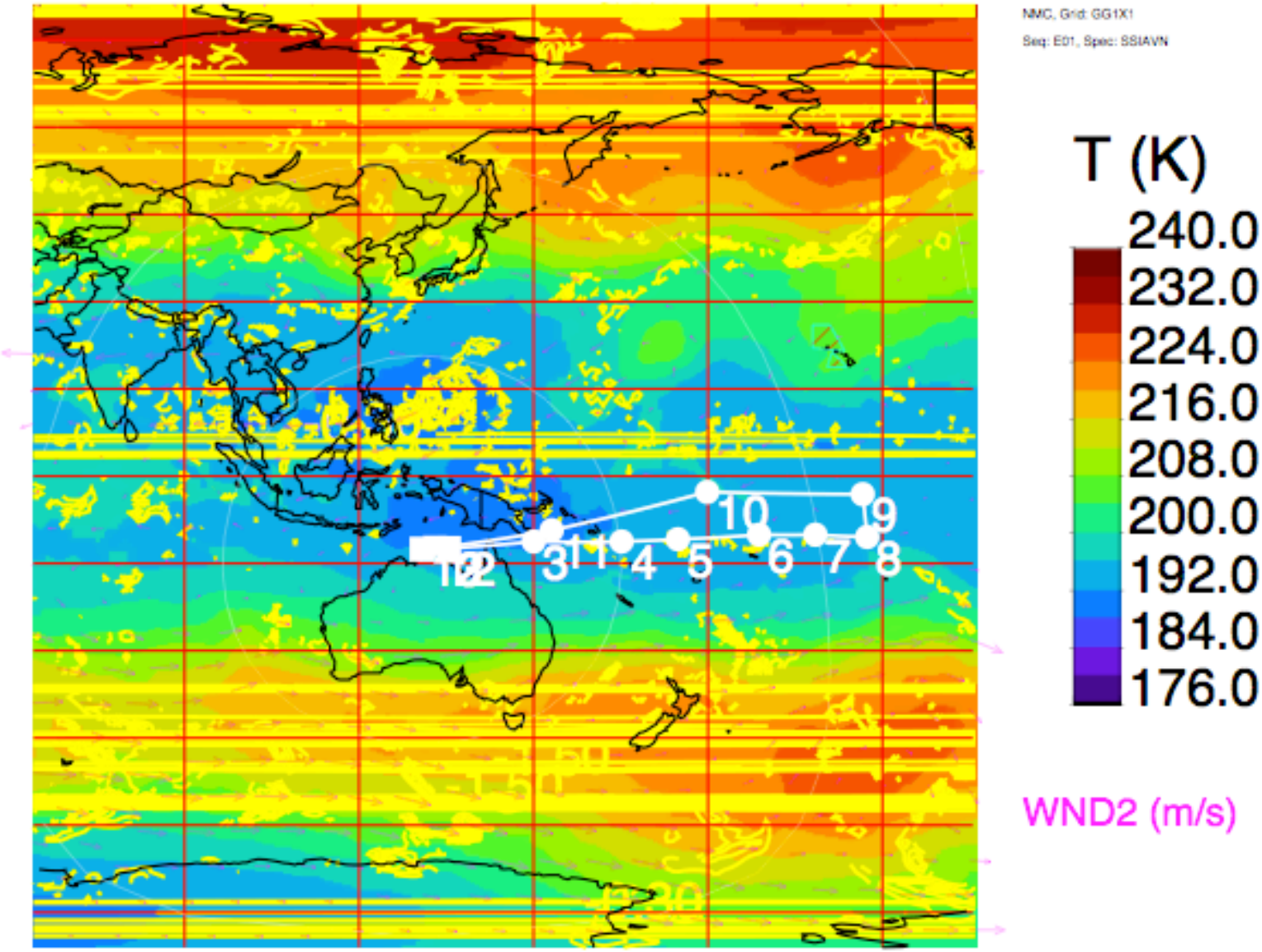
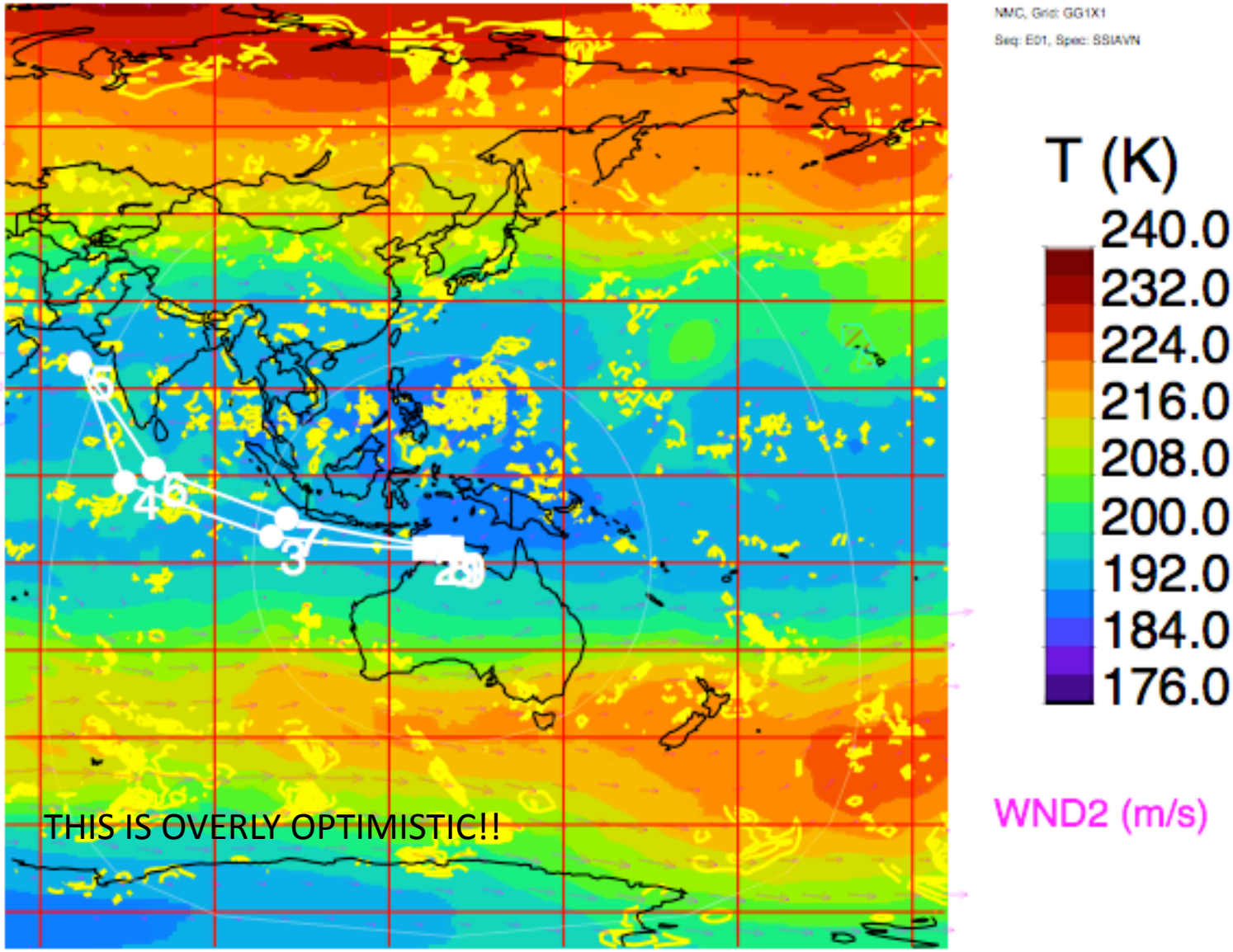
Flight Profile 1
Flight Profile 2
Flight Profile 3
Flight Profile 4
-1
0
1
Ascent rate in upper TTL (K/day)


2007-07-10T08:30 UTC at 100.0 HPa
T (K)
230.0
225.0
220.0
215.0
210.0
205.0
200.0
195.0
190.0
GDAS
WND2 (m/s)
DFP2C
DFP2D
DRW
NAURU
NADI
BRISBANE

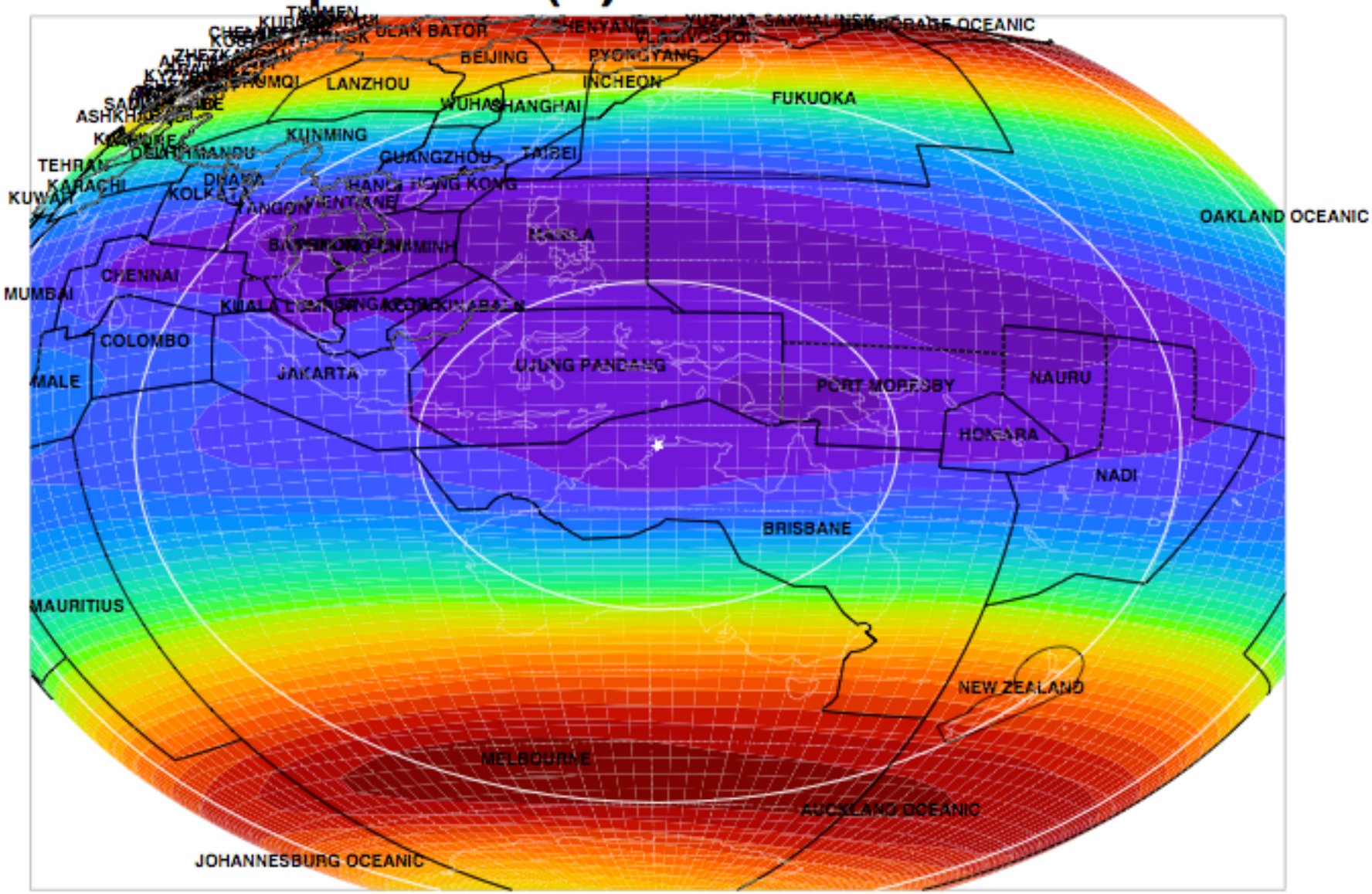
18 UTC on 10 July, 2007 at 100.0 mb

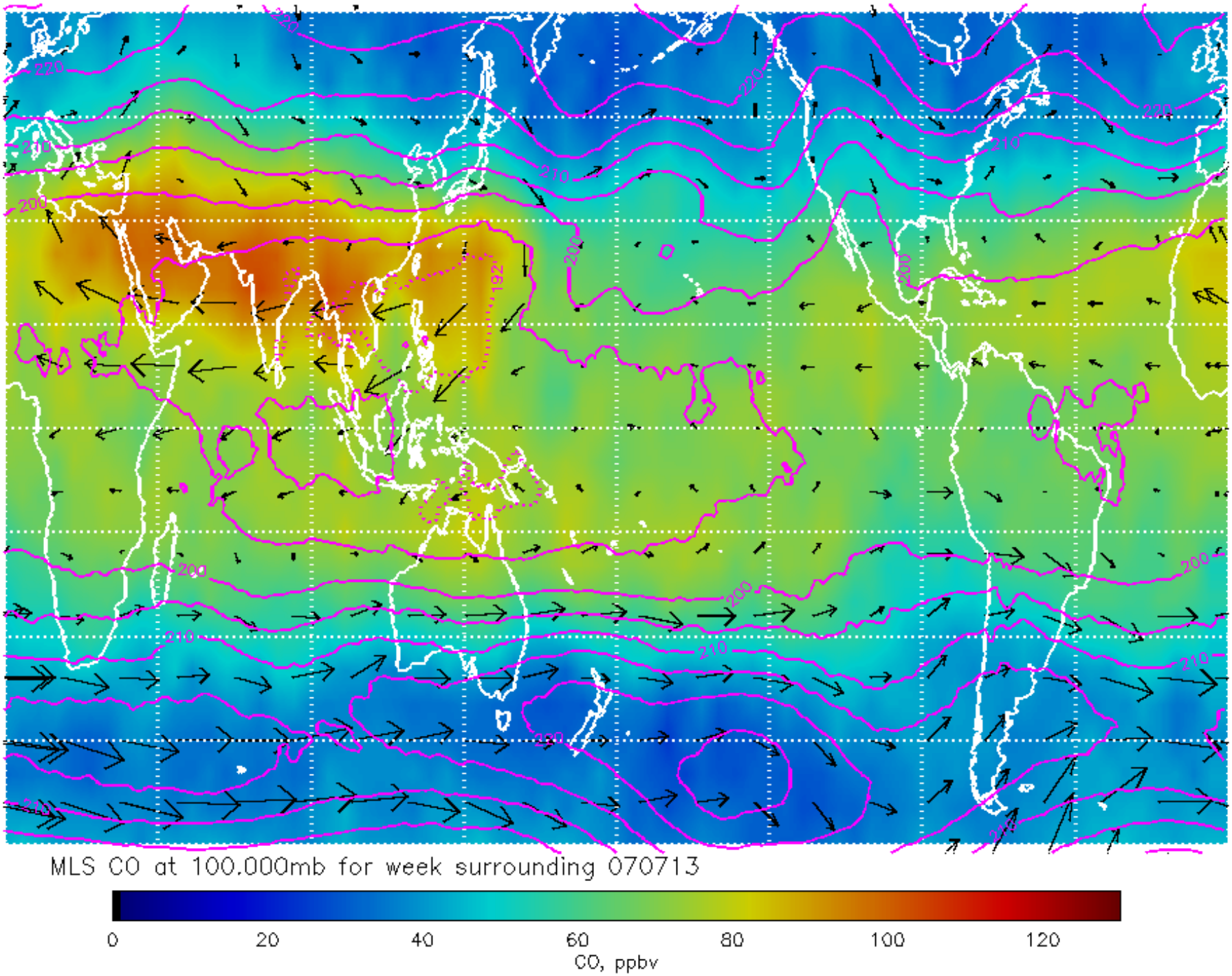


18 UTC on 10 July, 2007 at 100.0 mb



Temperature (K) 1979-2009 100 hPa




MLS CO at 100.000mb for week surrounding 070713
0
20
40
60
80
100
120
CO, ppbv