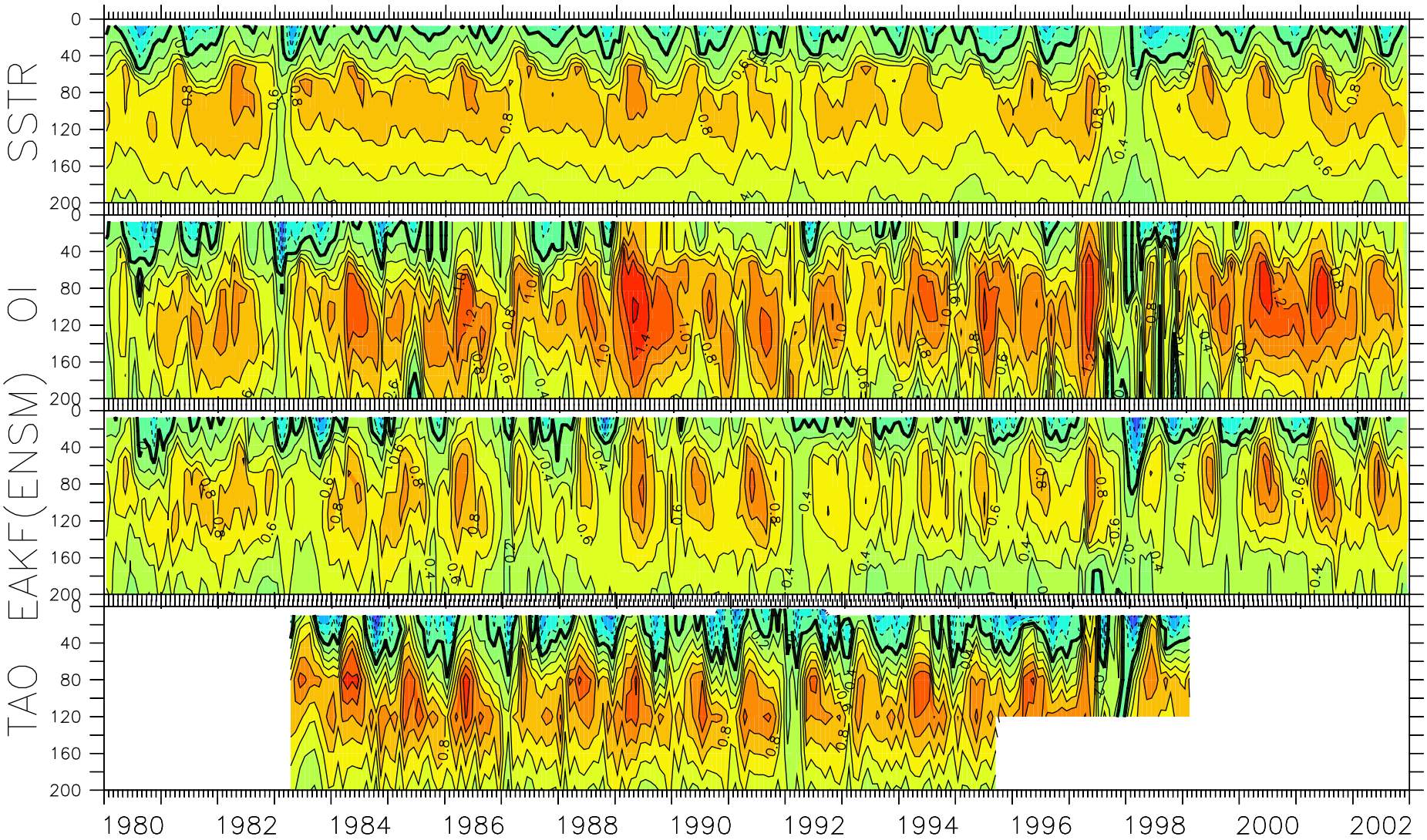
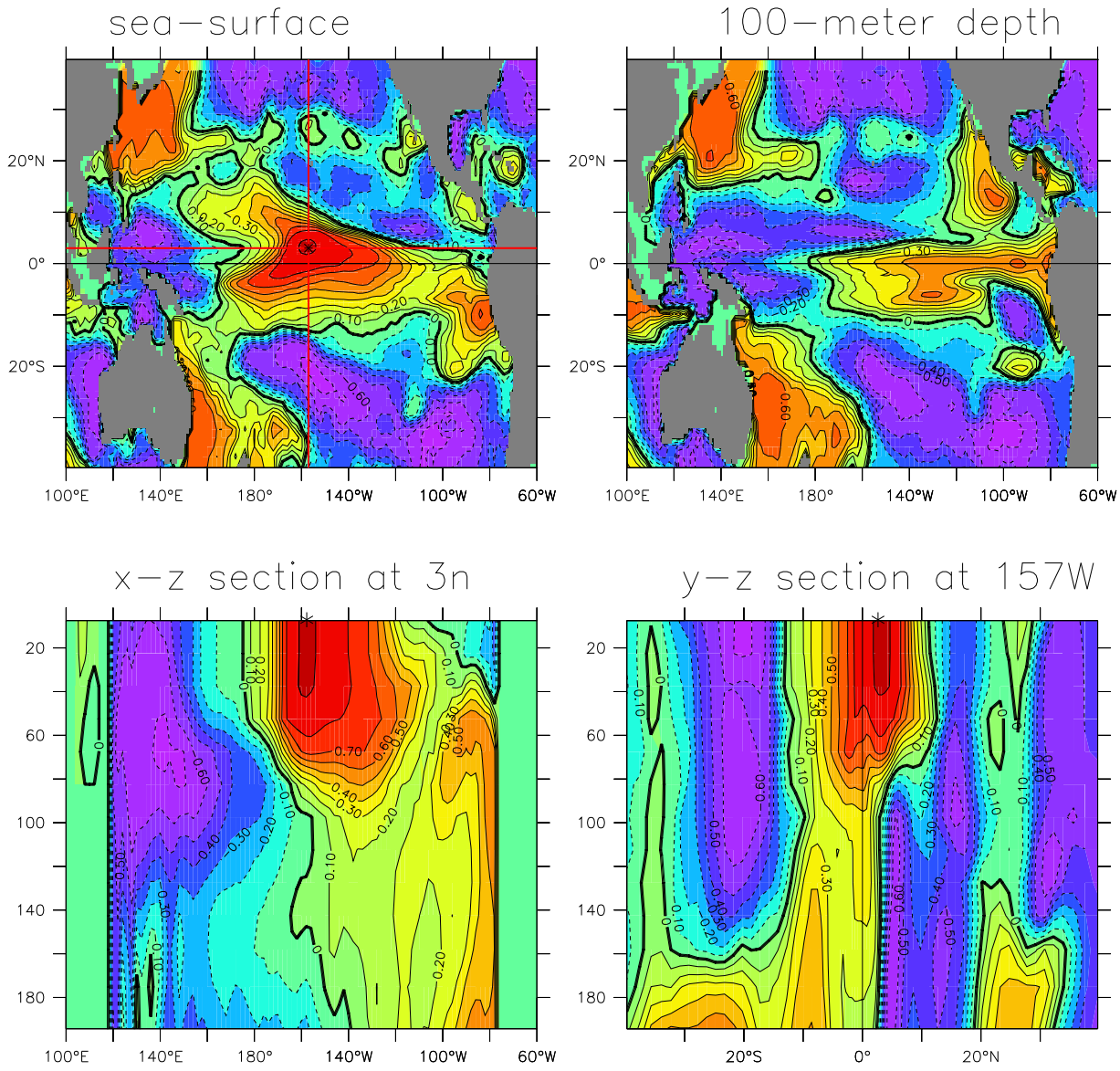
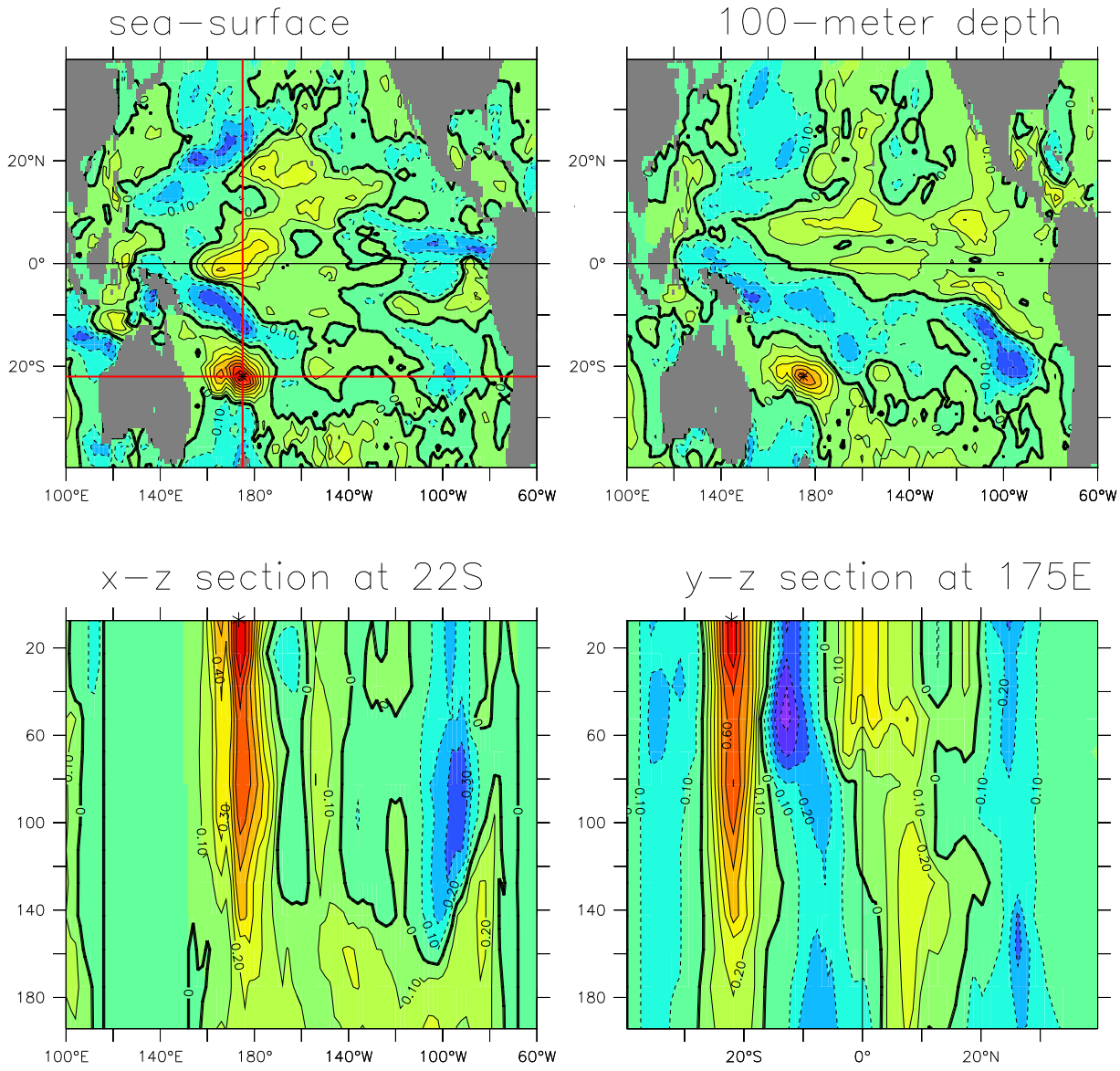
Monthly zonal current(m/s) at (140°W,0)



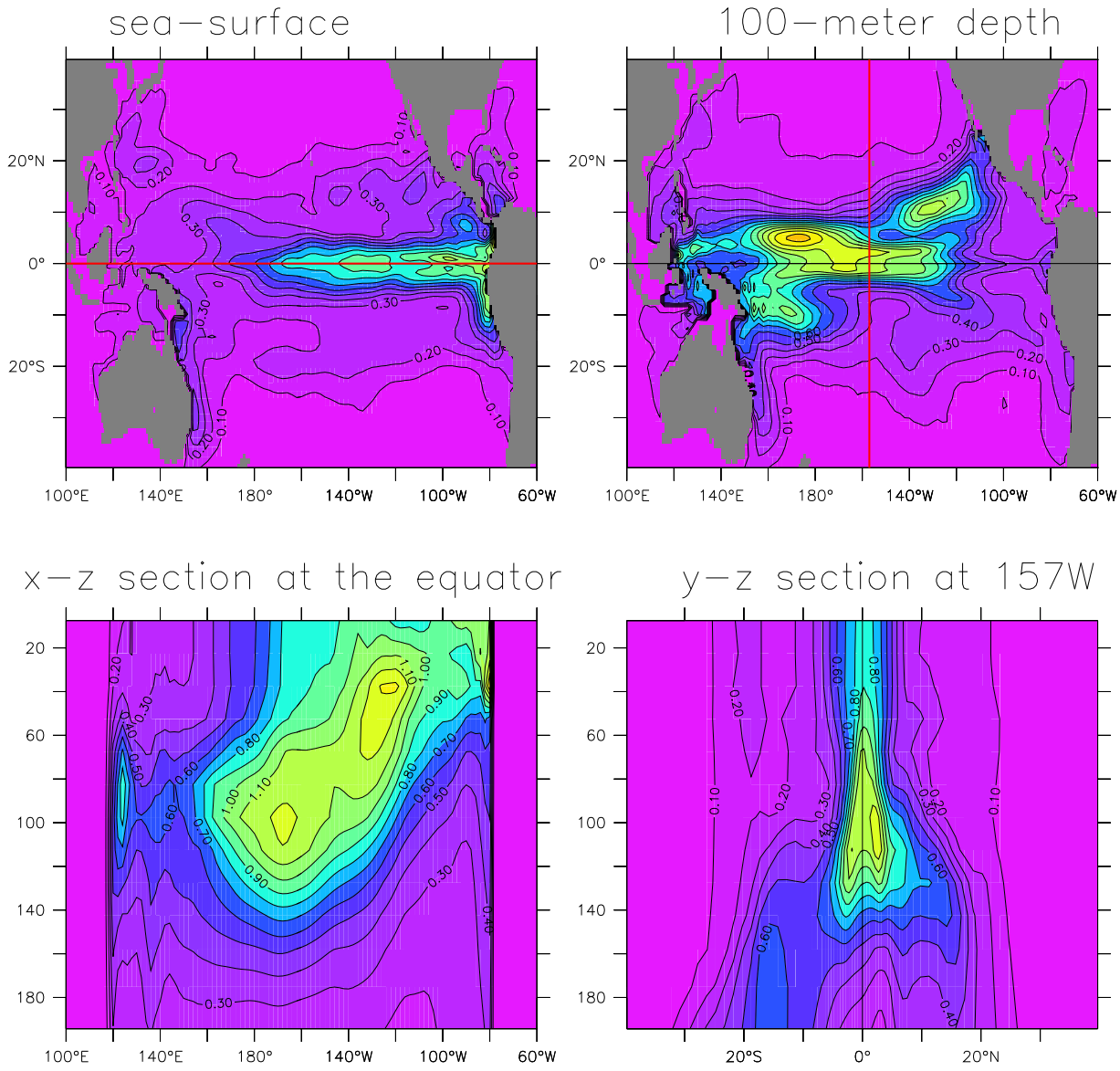
Annual–mean of T free–ens corr about (157W,3N)



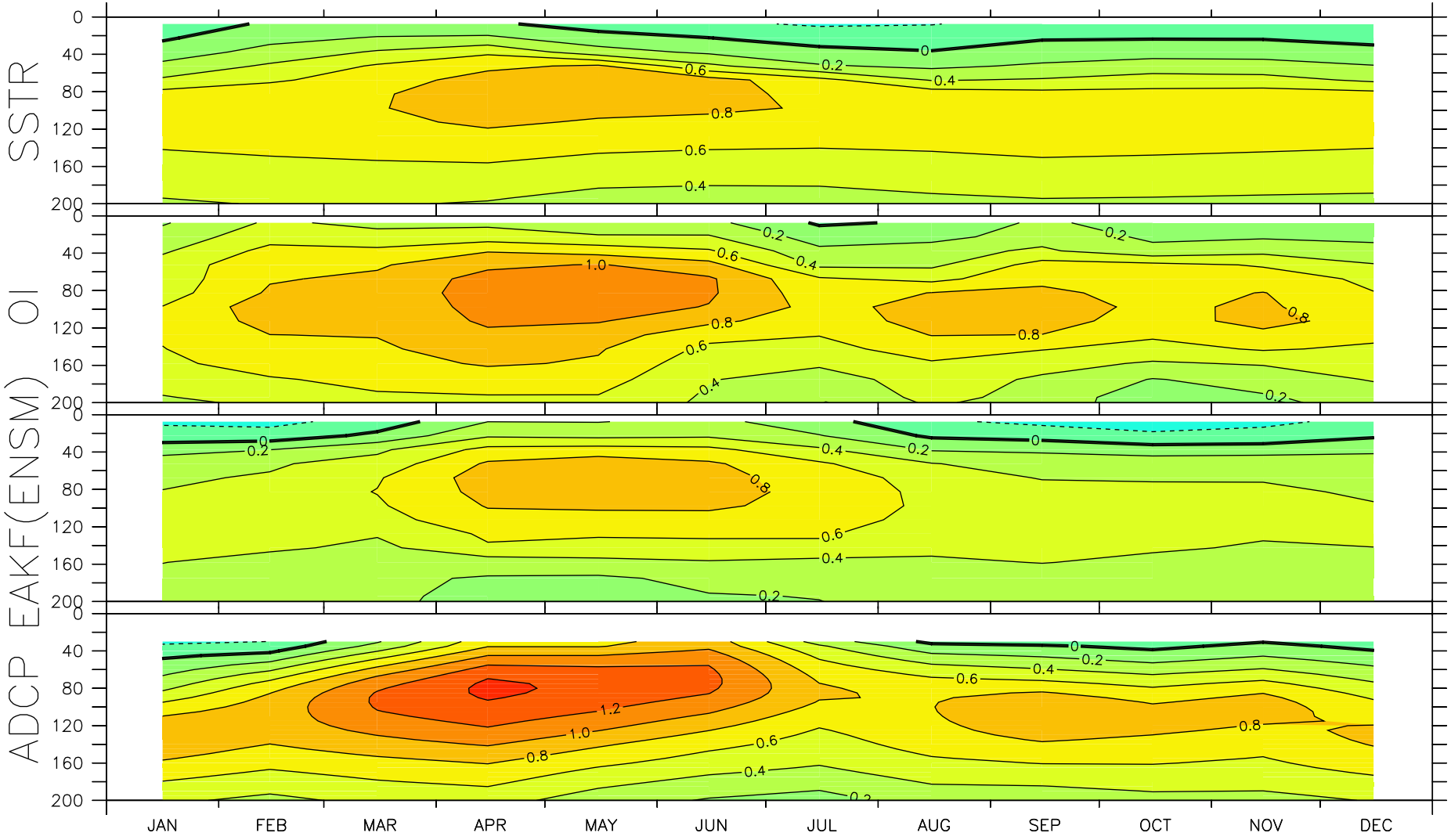
Annual–mean of T free–ens corr about (175E,22S)



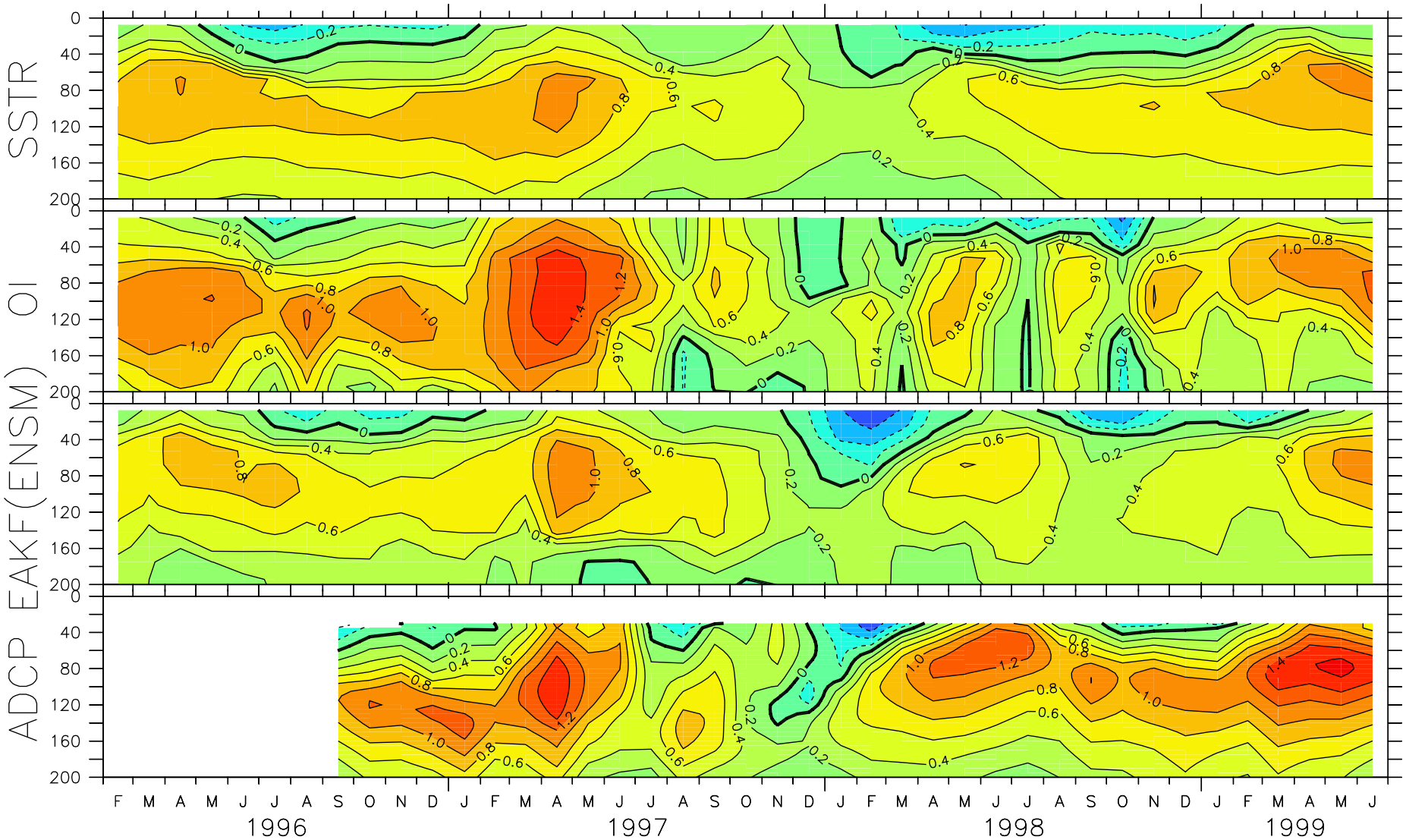
Annual−mean of T free−ens std



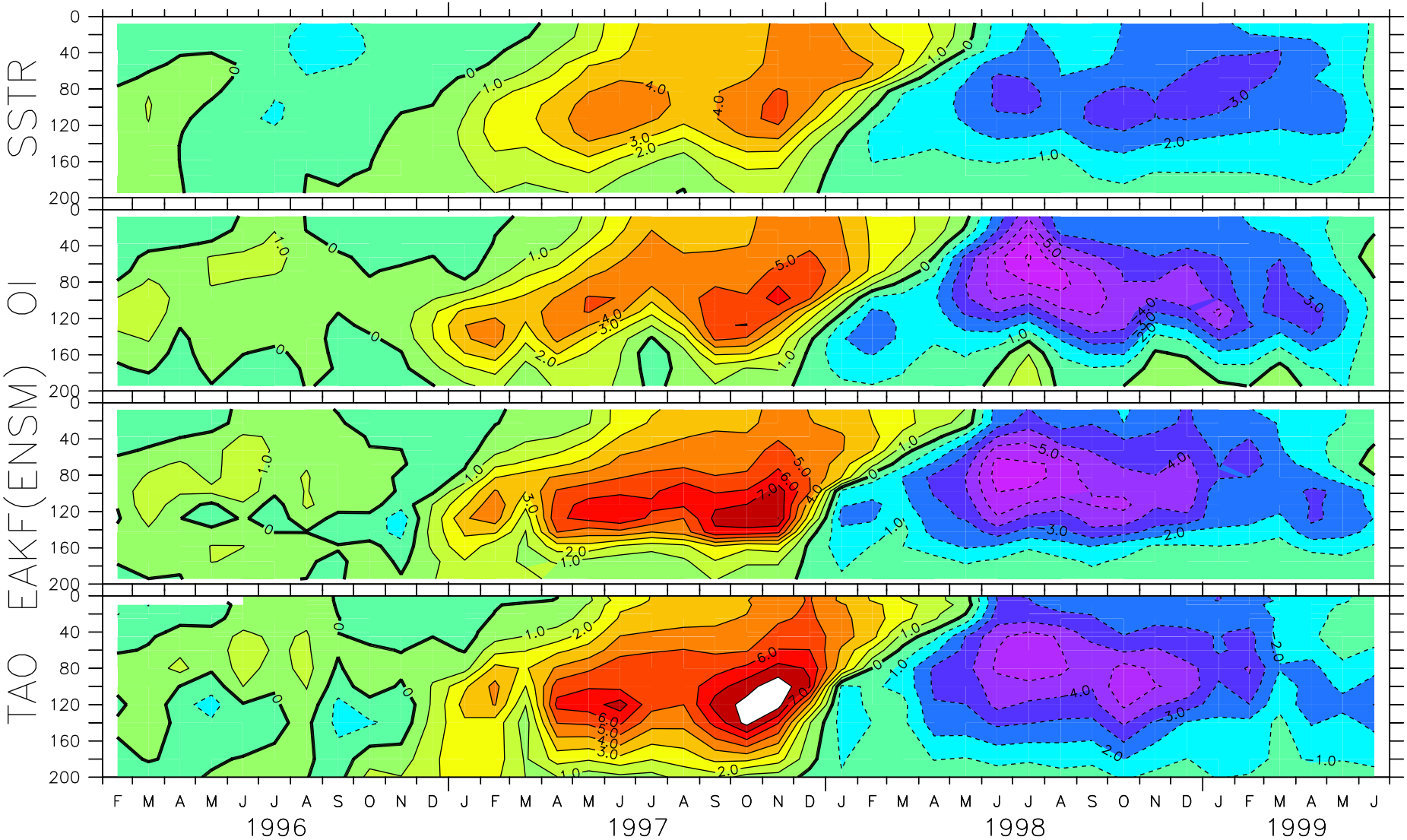
Zonal current climatology(m/s) at (140°W,0)



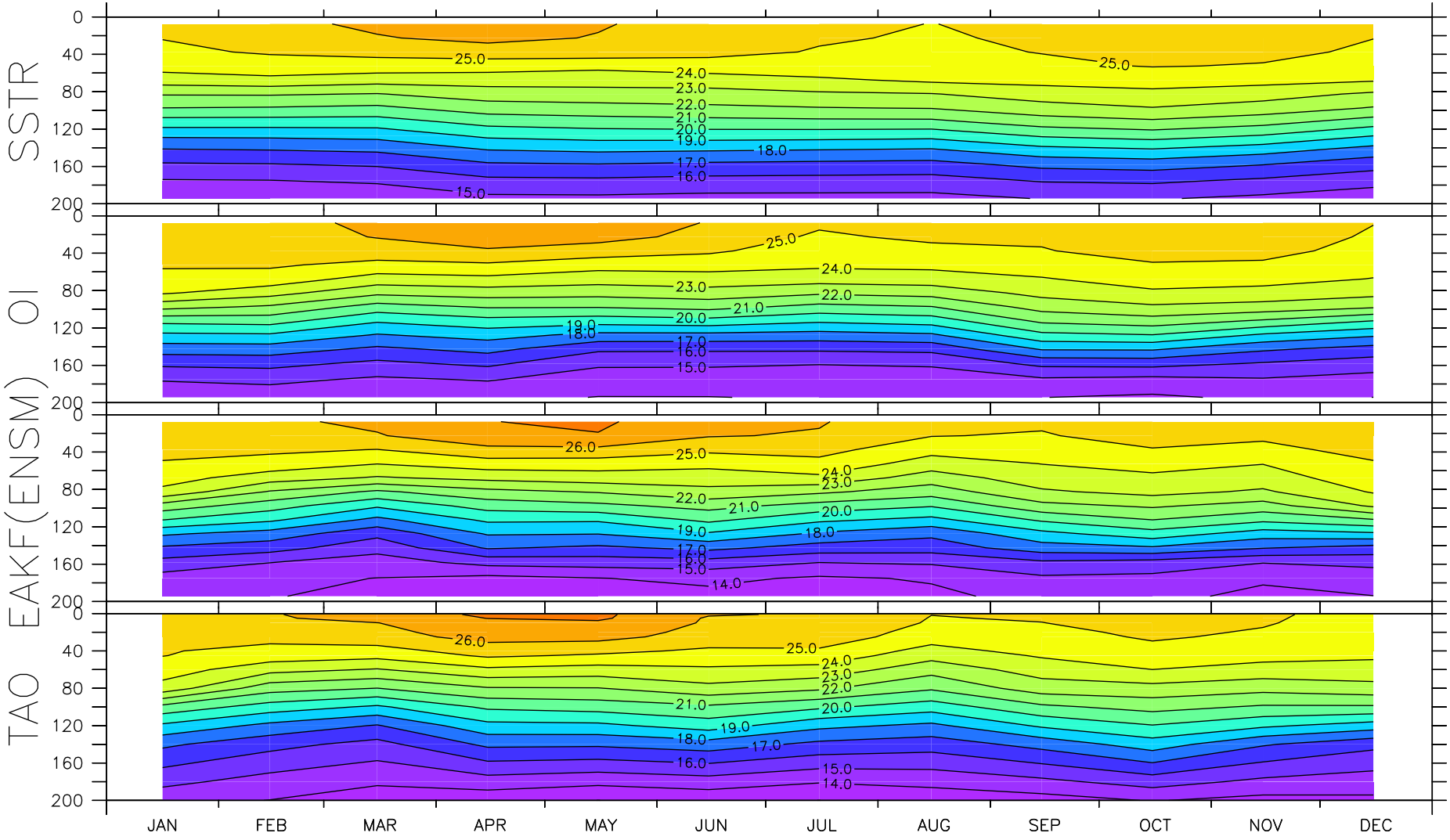
Monthly zonal current(m/s) at (140°W,0)



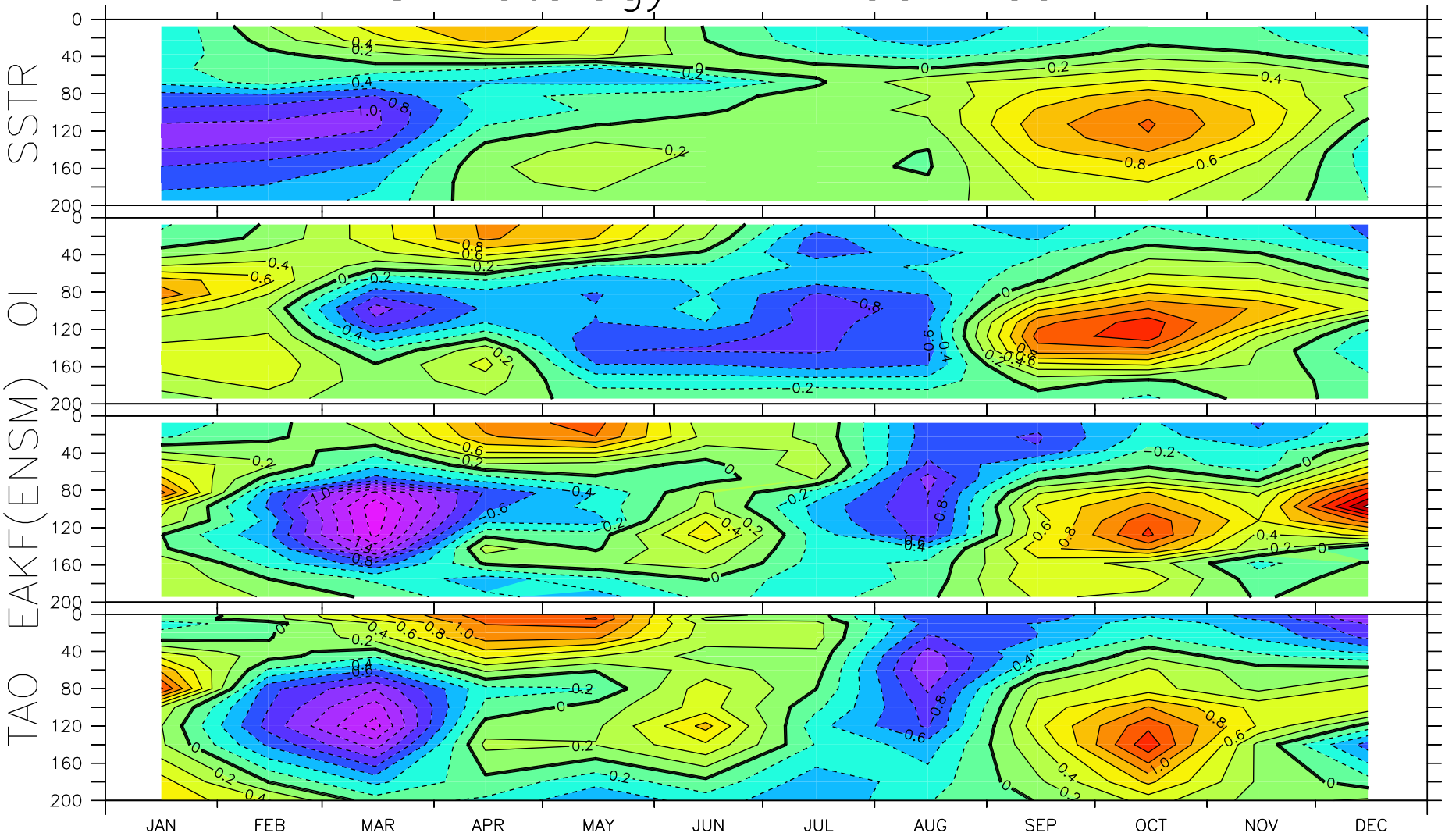
Monthly Temp. Anomaly(°C) at (140°W,0)

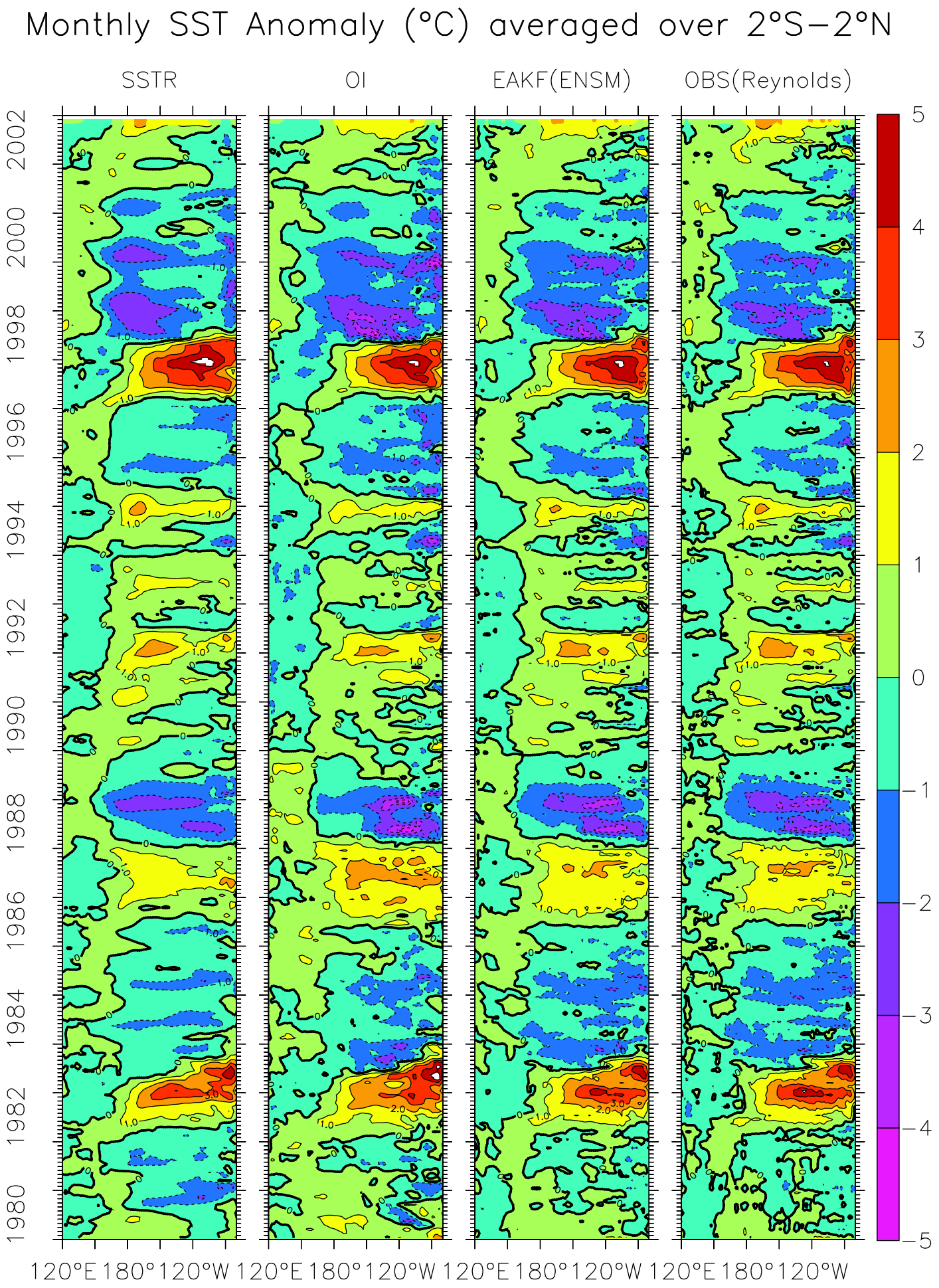


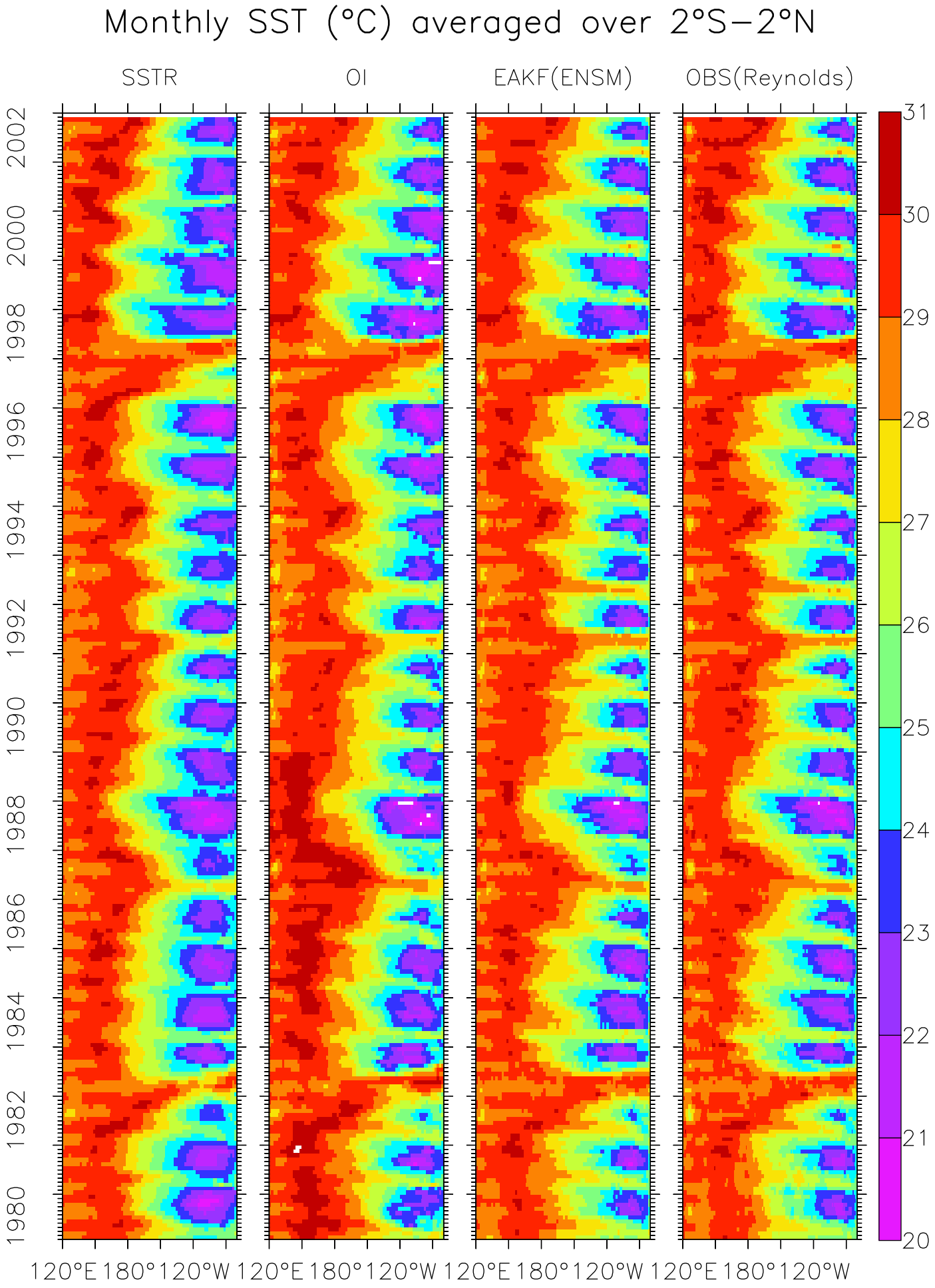
Clim. temp. at (140°W,0) during 1996–1999



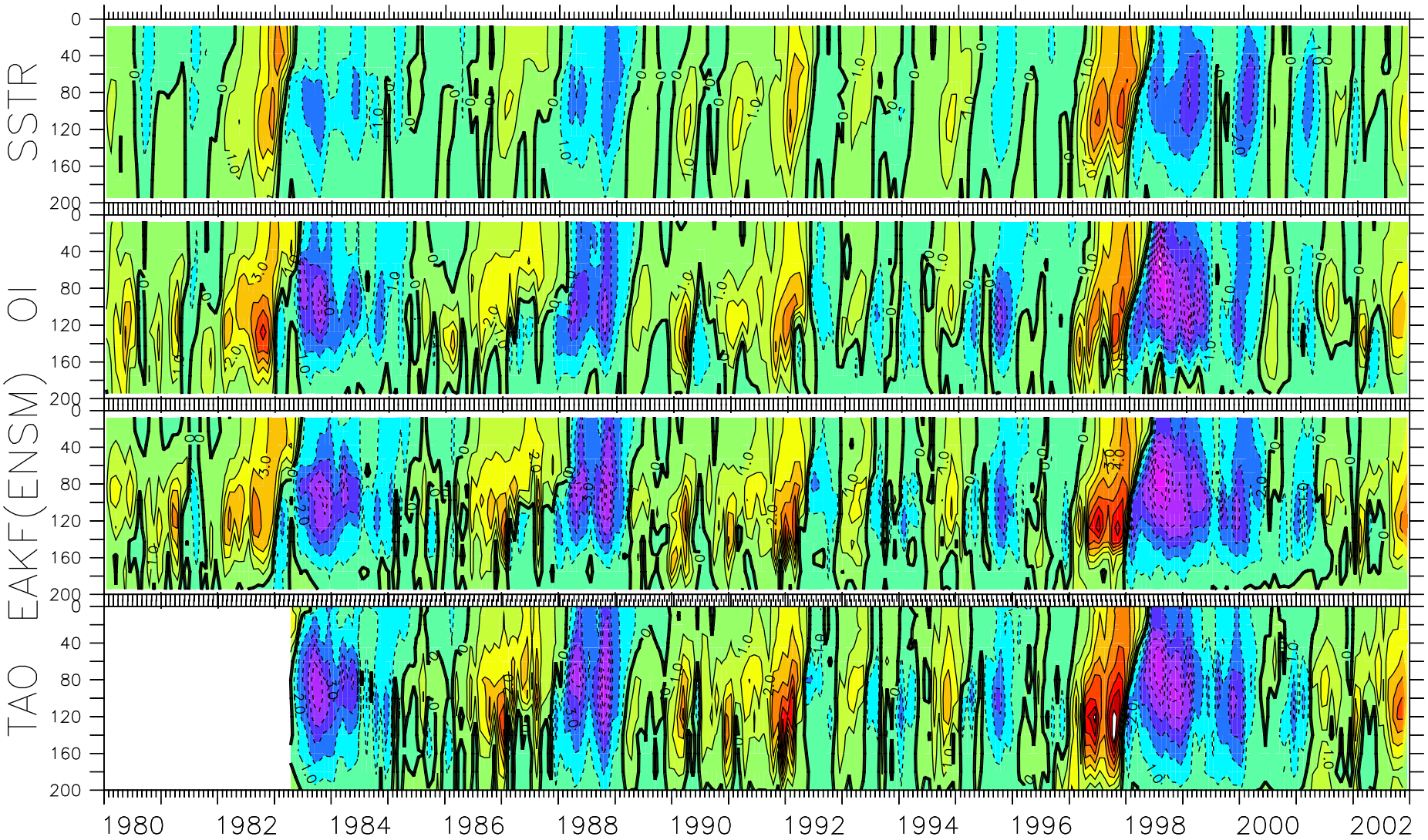
Temp. seasonal cycle at (140°W,0) during 1996–99
Climatology – Annual Mean



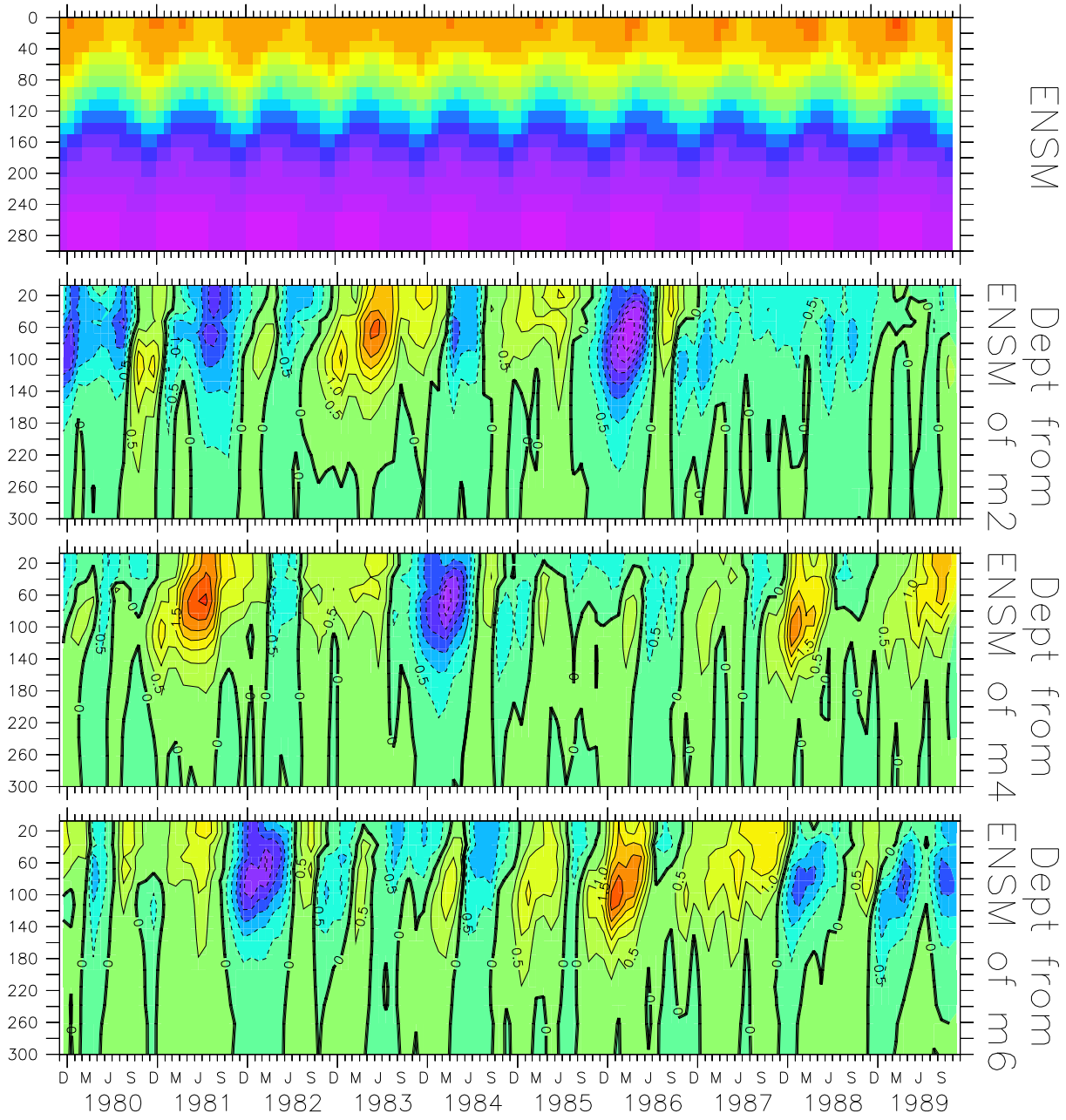

Monthly SST Anomaly (°C) averaged over 2°S−2°N
SSTR
OI
EAKF(ENSM)
OBS(Reynolds)
2002
2000
1998
1996
1994
1992
1990
1988
1986
1984
1982
1980
120°E 180° 120°W
5
4
3
2
1
0
−1
−2
−3
−4
−5


Monthly SST (°C) averaged over 2°S−2°N
SSTR
OI
EAKF(ENSM)
OBS(Reynolds)
2002
2000
1998
1996
1994
1992
1990
1988
1986
1984
1982
1980
120°E 180° 120°W
31
30
29
28
27
26
25
24
23
22
21
20

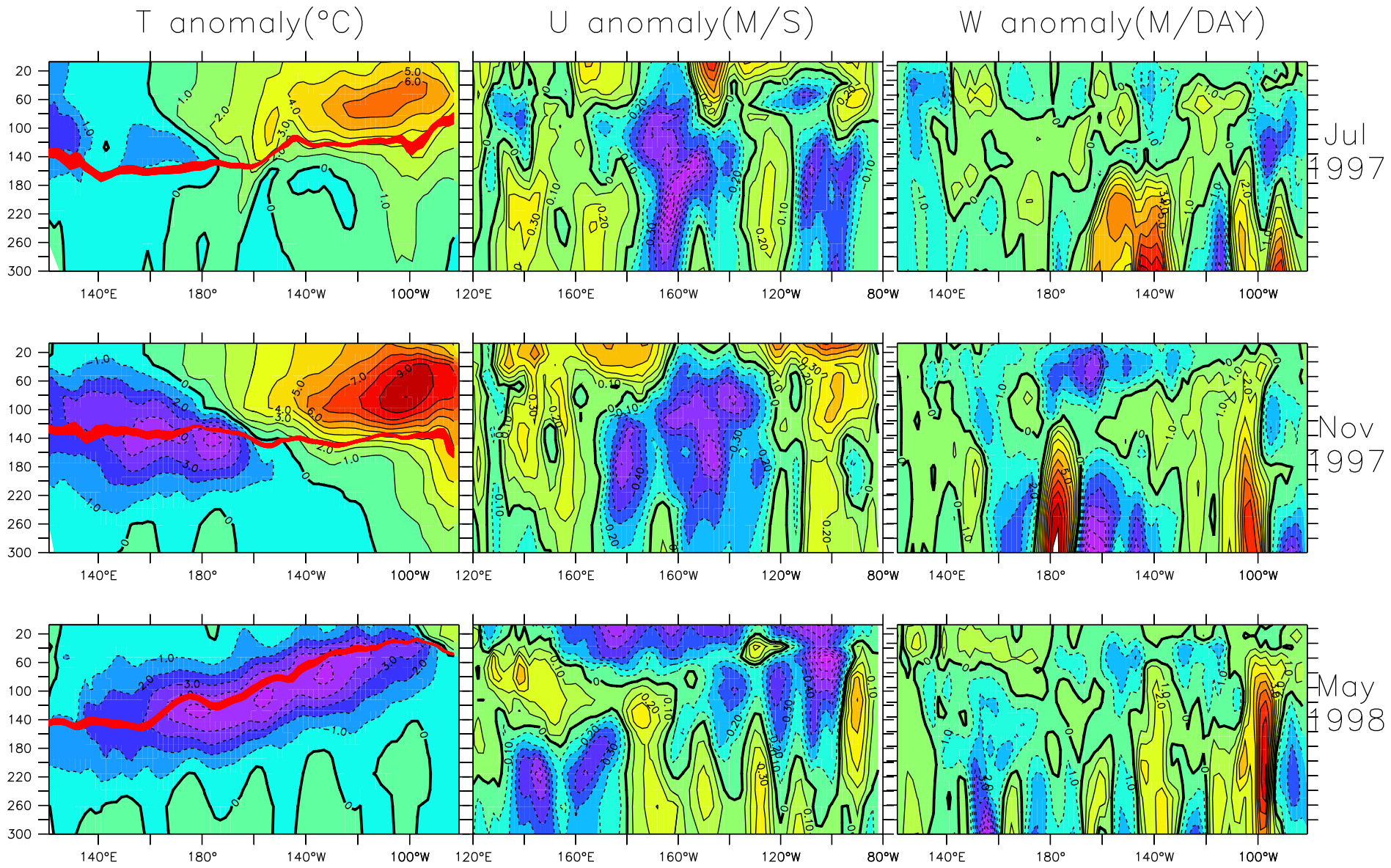
Monthly Temp. Anomaly(°C) at (140°W,0)



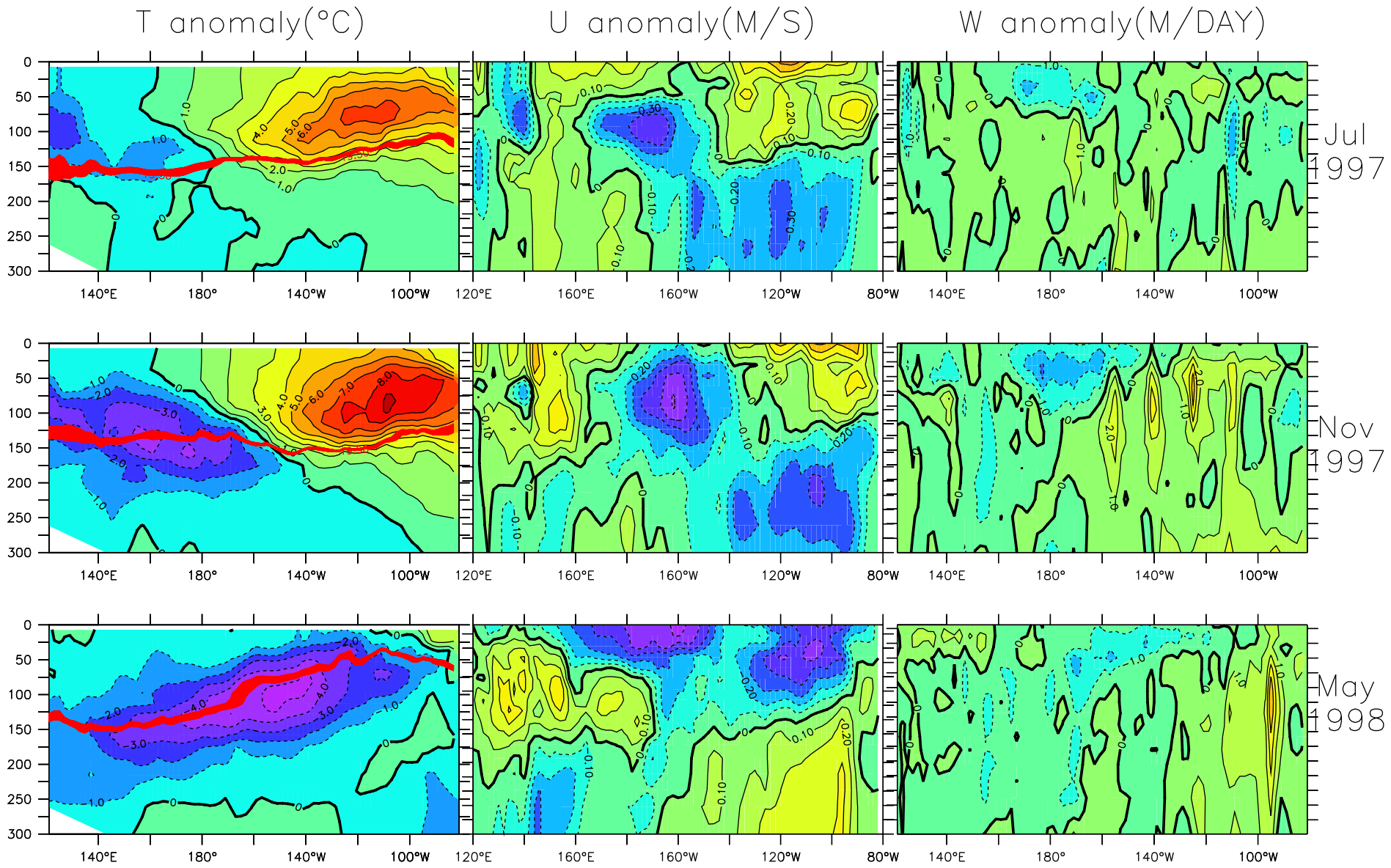
Temp. at (140w,0) over 10-yr free ens run

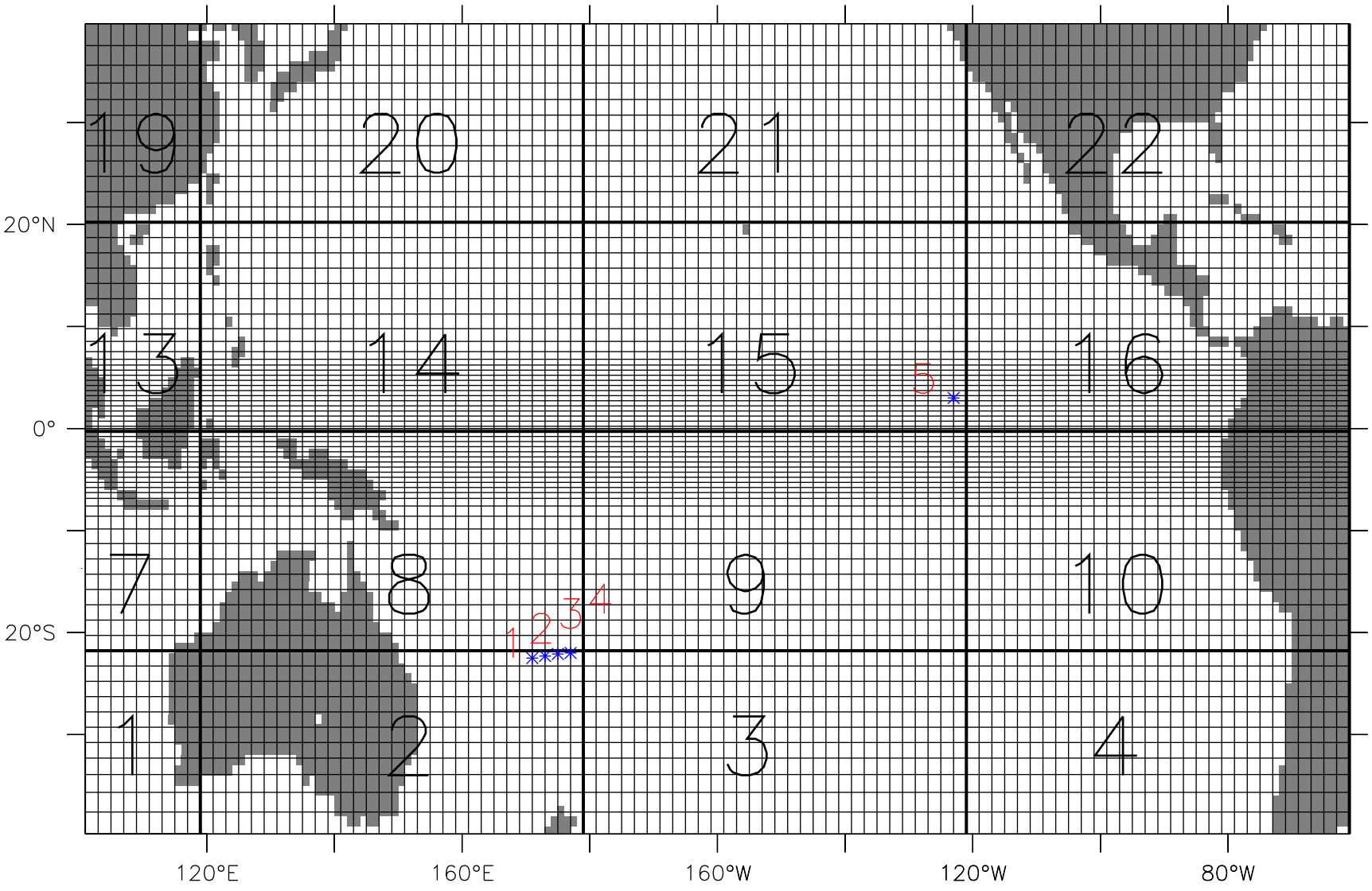


OI assimilation during 97/98 event

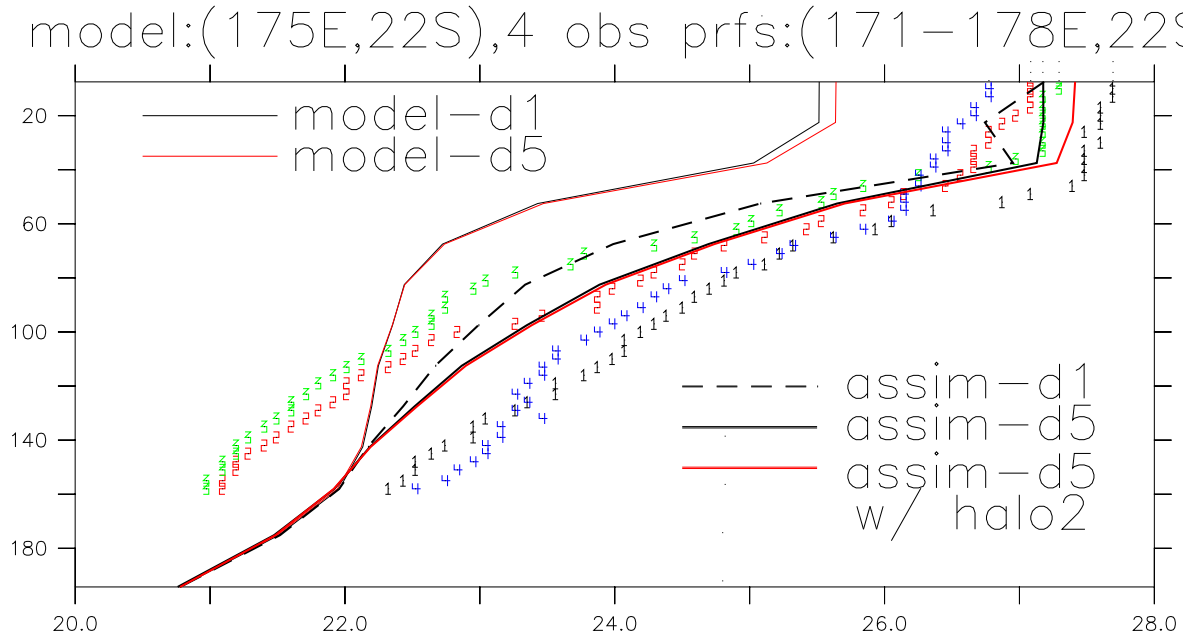


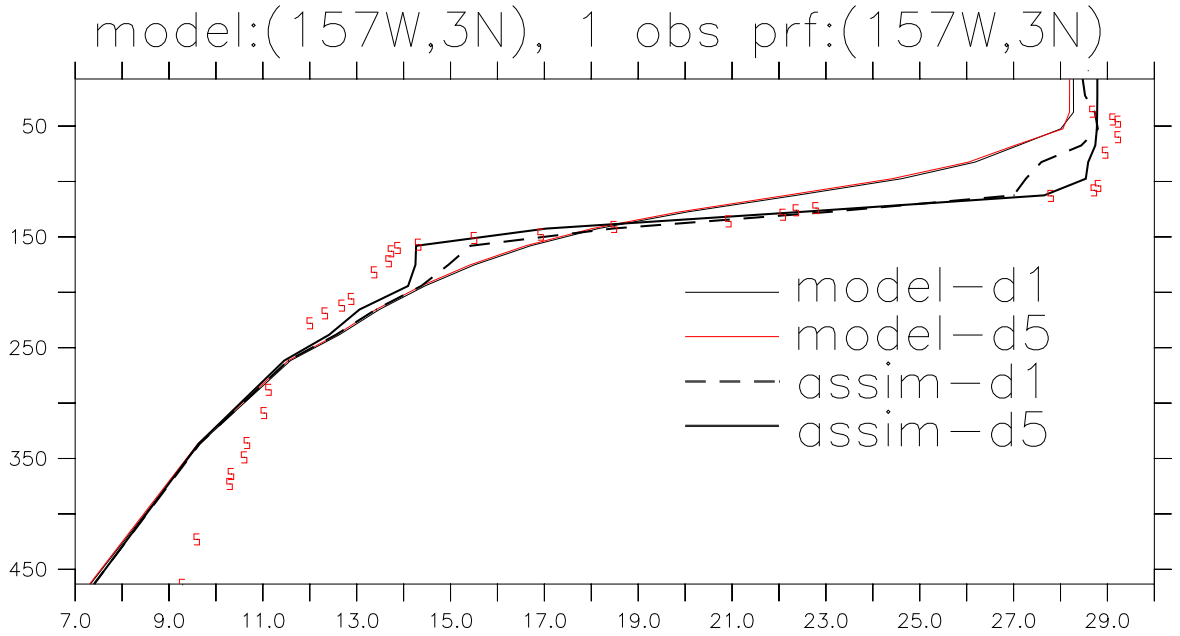
Assimilated (EAKF) ensemble mean during 97/98 event

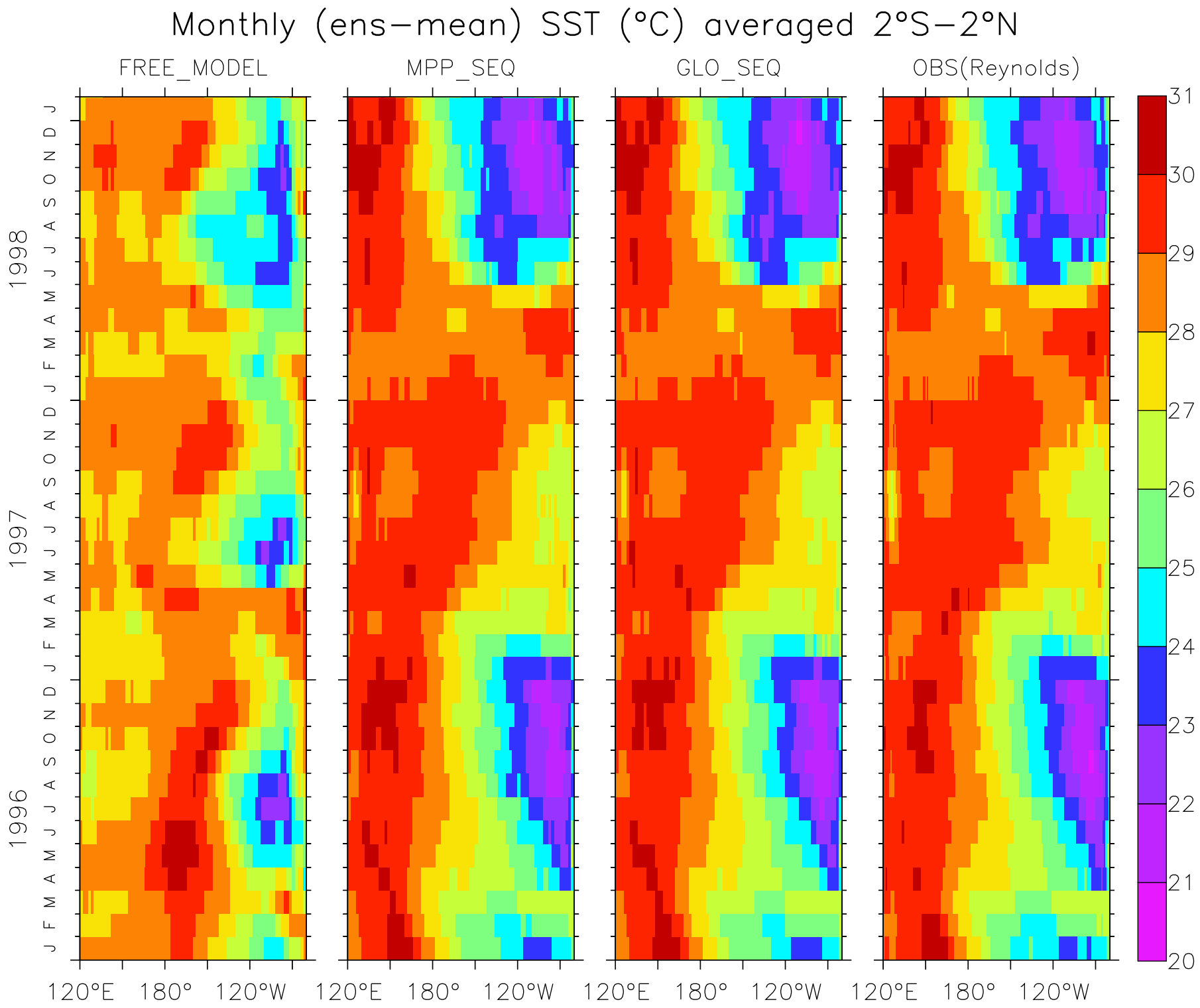


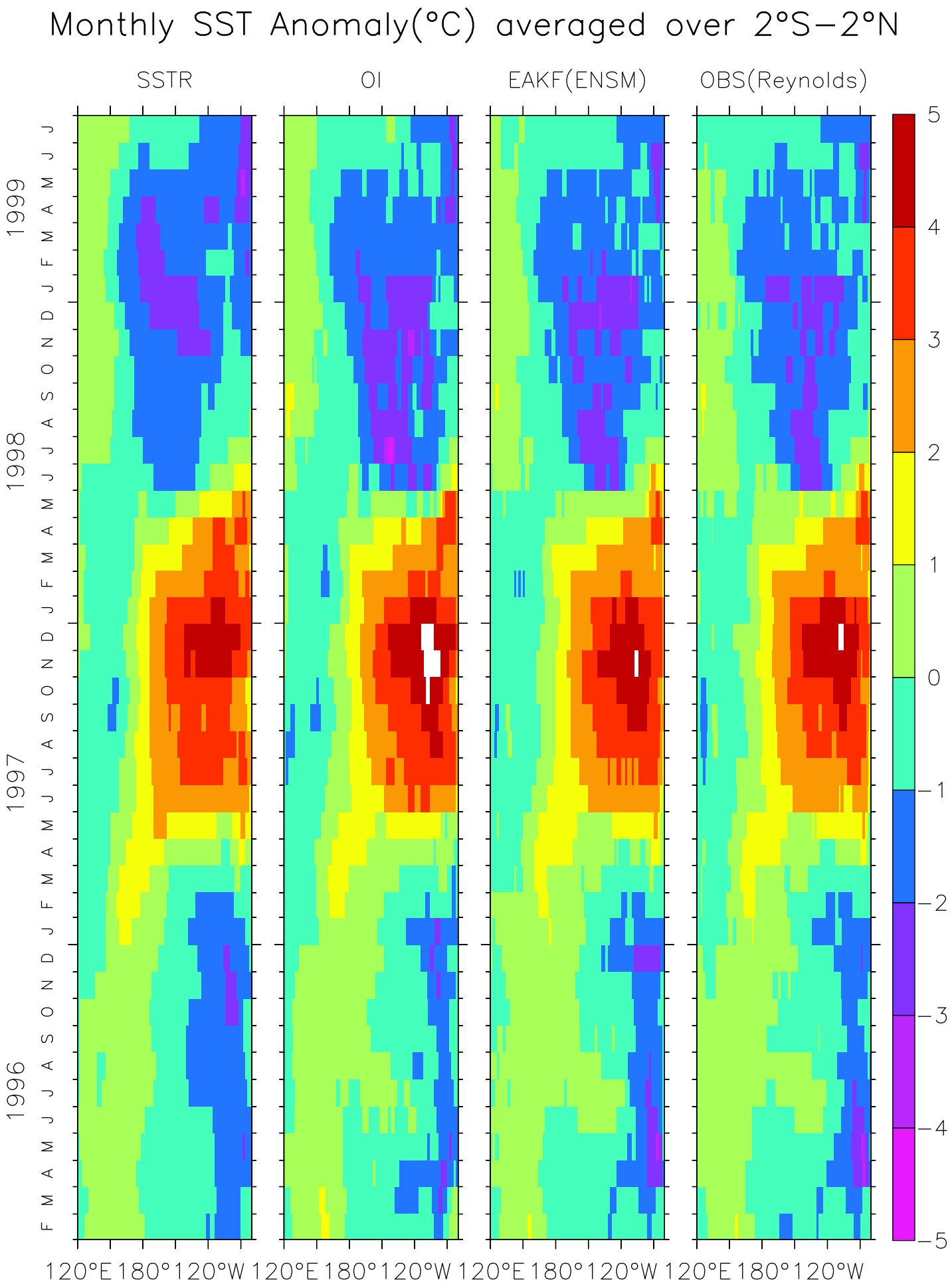

19
20
21
22
13
14
15
16
5
7
8
9
10
1
2
3
4
1
2
3
4
20°N
0°
20°S
120°E
160°E
160°W
120°W
80°W

Model prfs adjusted by obs prfs on 1/1/80

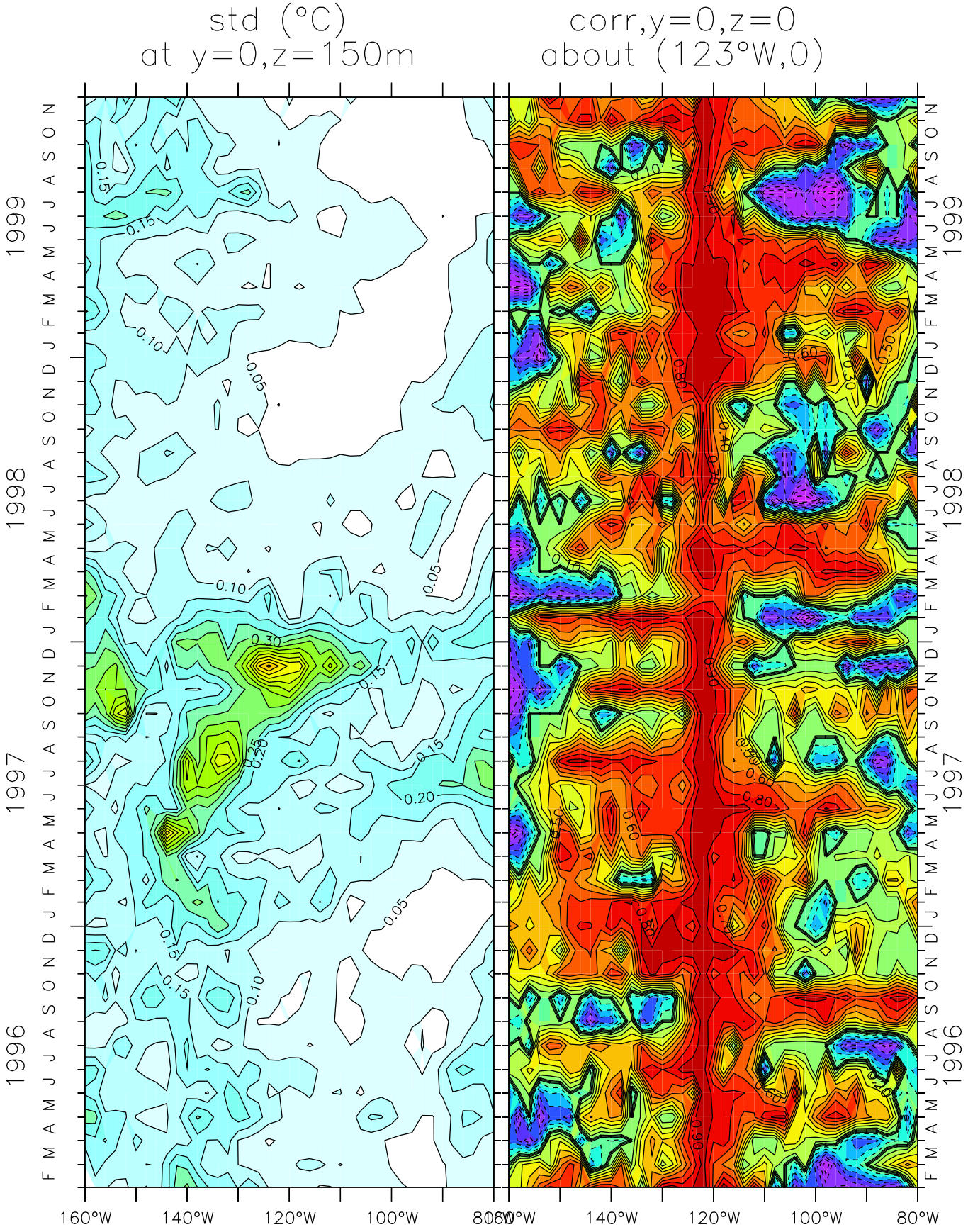
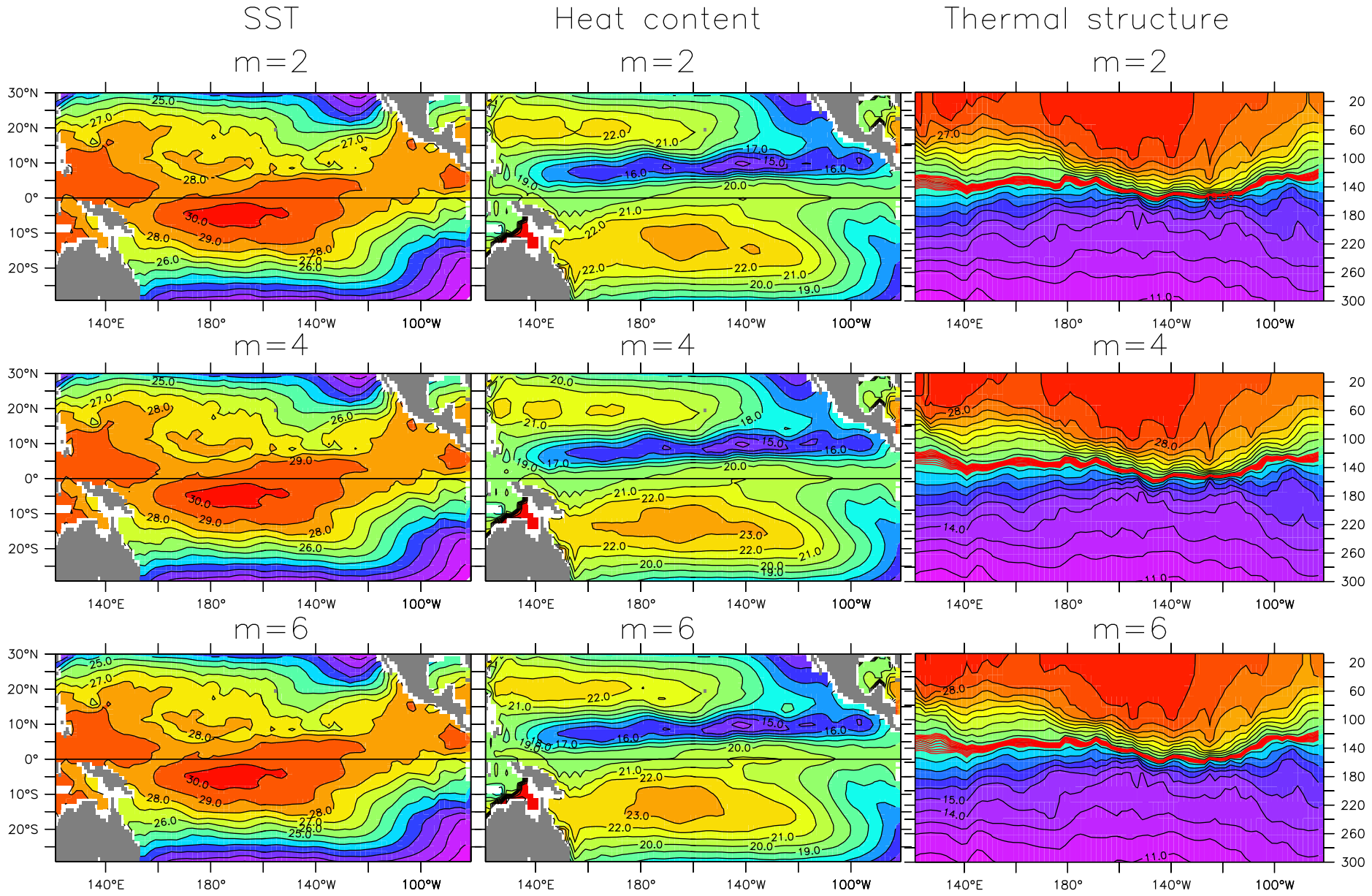





Monthly (ens−mean) SST (°C) averaged 2°S−2°N
FREE_MODEL
MPP_SEQ
GLO_SEQ
OBS(Reynolds)
1998
1997
1996
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J
120°E
180°
120°W
31
30
29
28
27
26
25
24
23
22
21
20


Monthly SST Anomaly(°C) averaged over 2°S−2°N
SSTR
OI
EAKF(ENSM)
OBS(Reynolds)
1999
1998
1997
1996
F M A M J J A S O N D J F M A M J J
120°E 180° 120°W
5
4
3
2
1
0
−1
−2
−3
−4
−5

Time change of T ens−cov in EAKF



Assimilated ensemble members on Nov. 1997