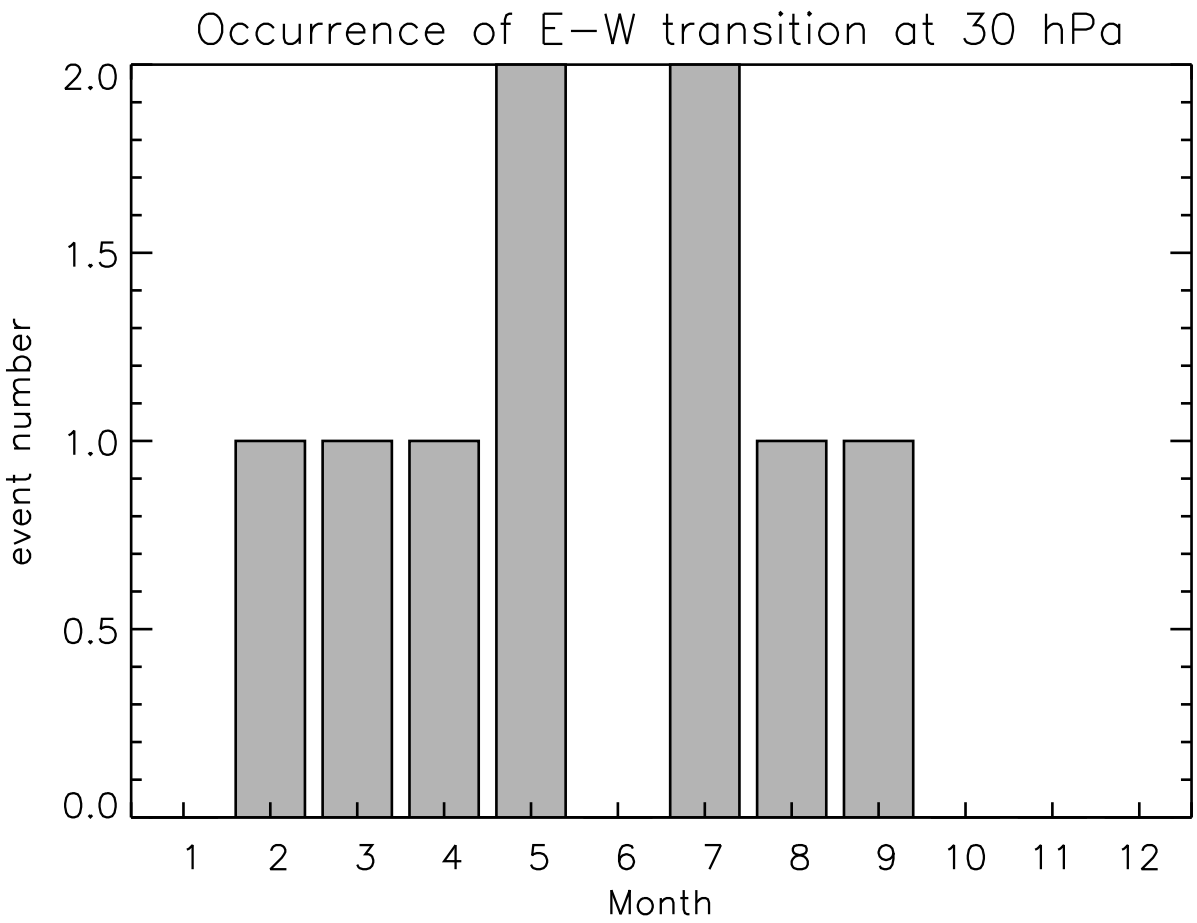
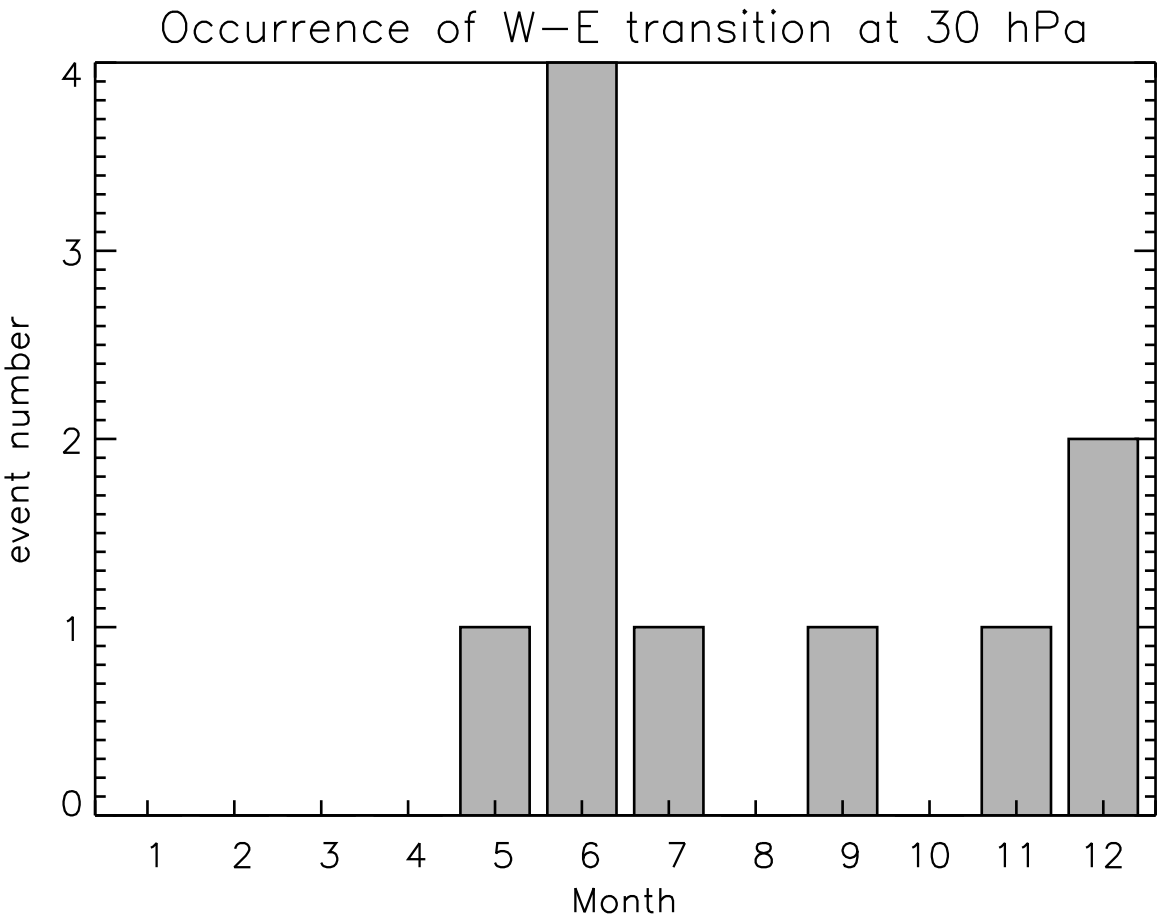
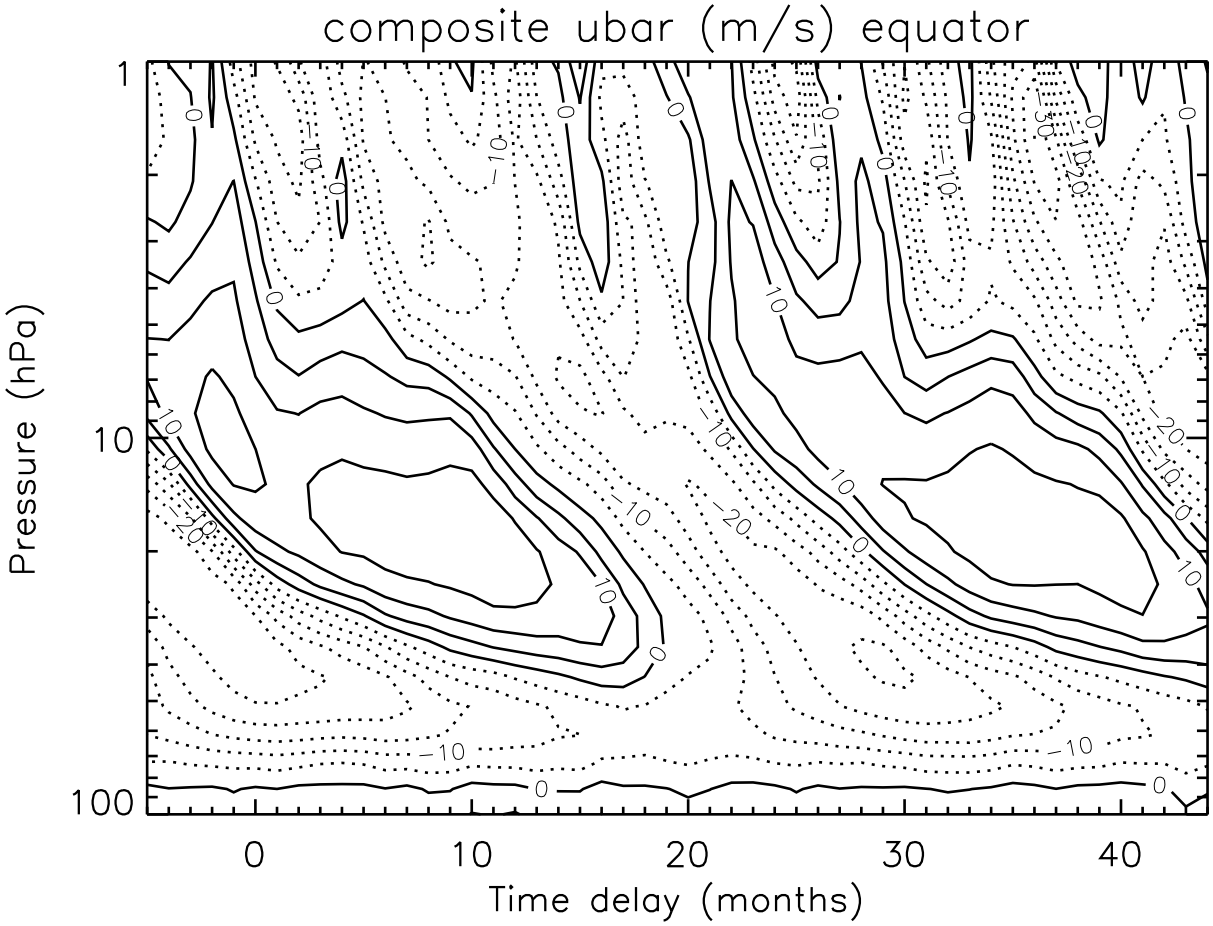
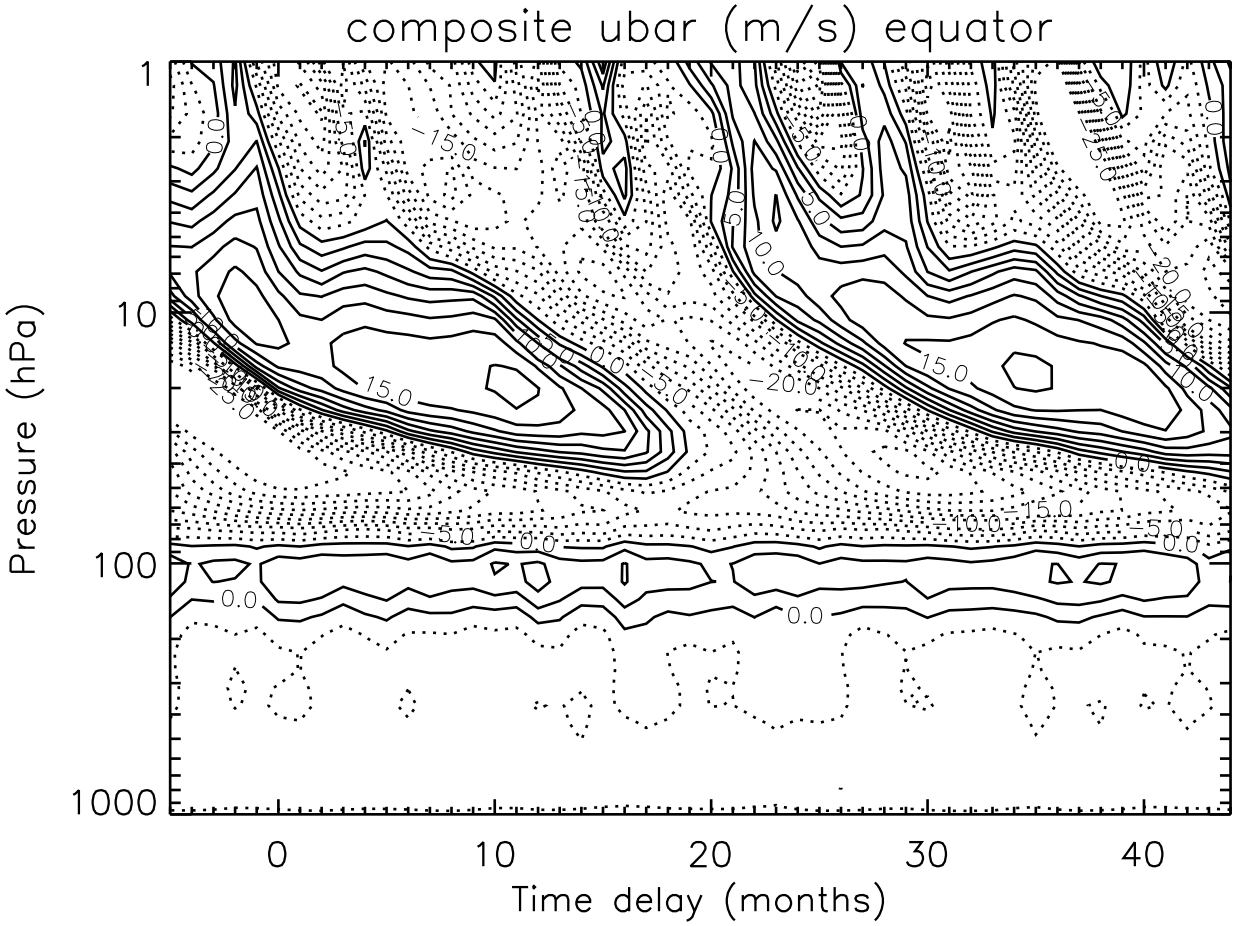
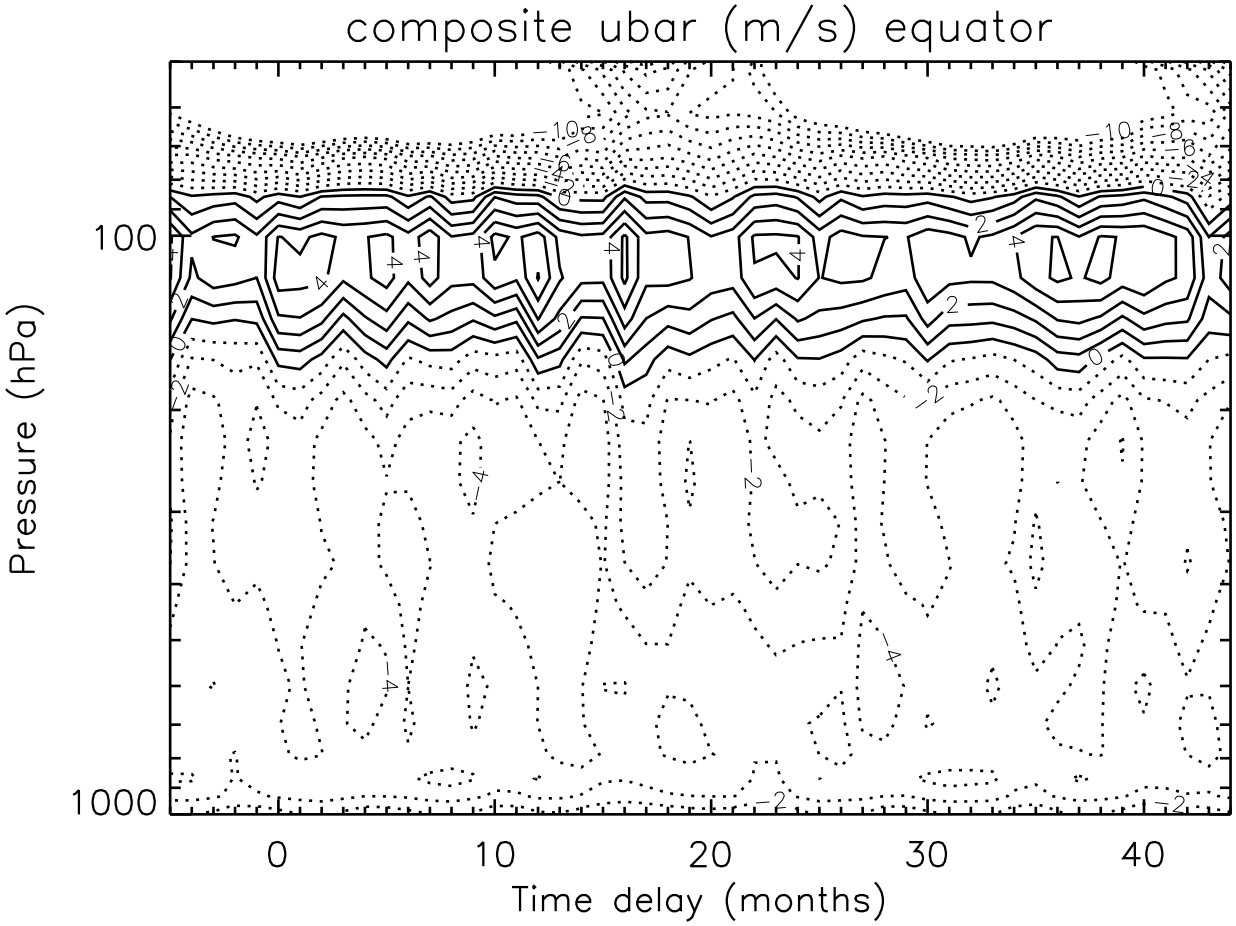
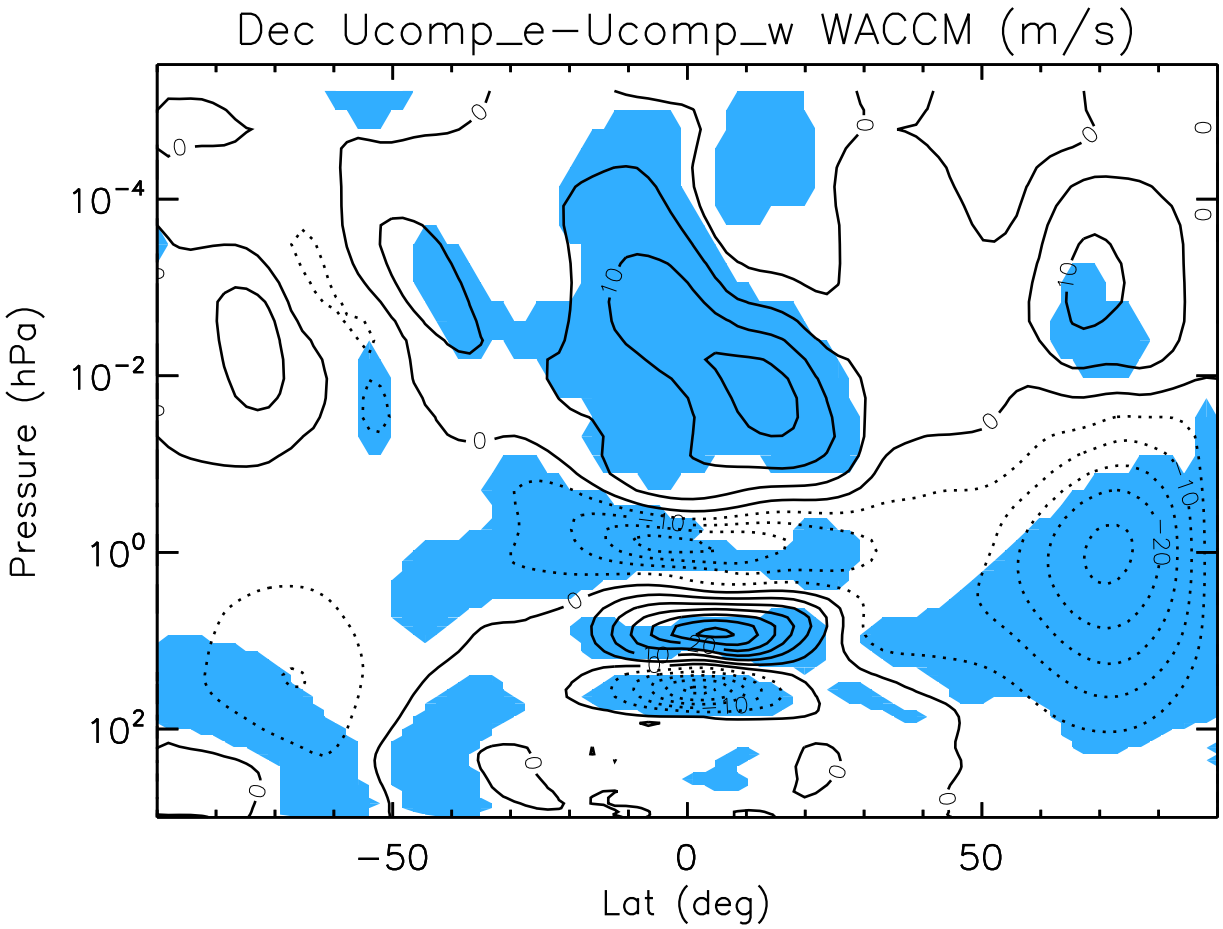

Occurrence of E−W transition at 30 hPa
event number
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
Month

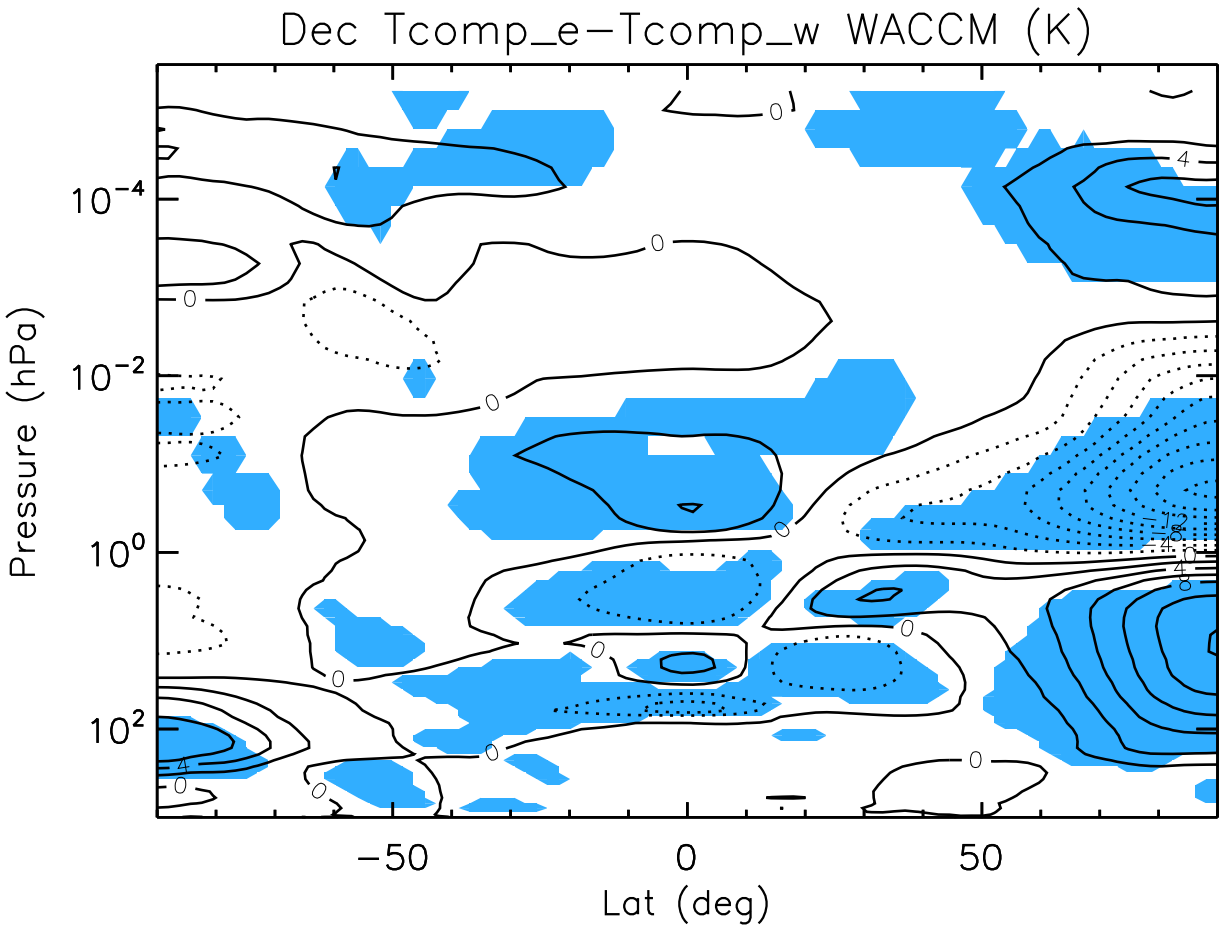

Occurrence of W−E transition at 30 hPa
event number
0
1
2
3
4
1
2
3
4
5
6
7
8
9
10
11
12
Month

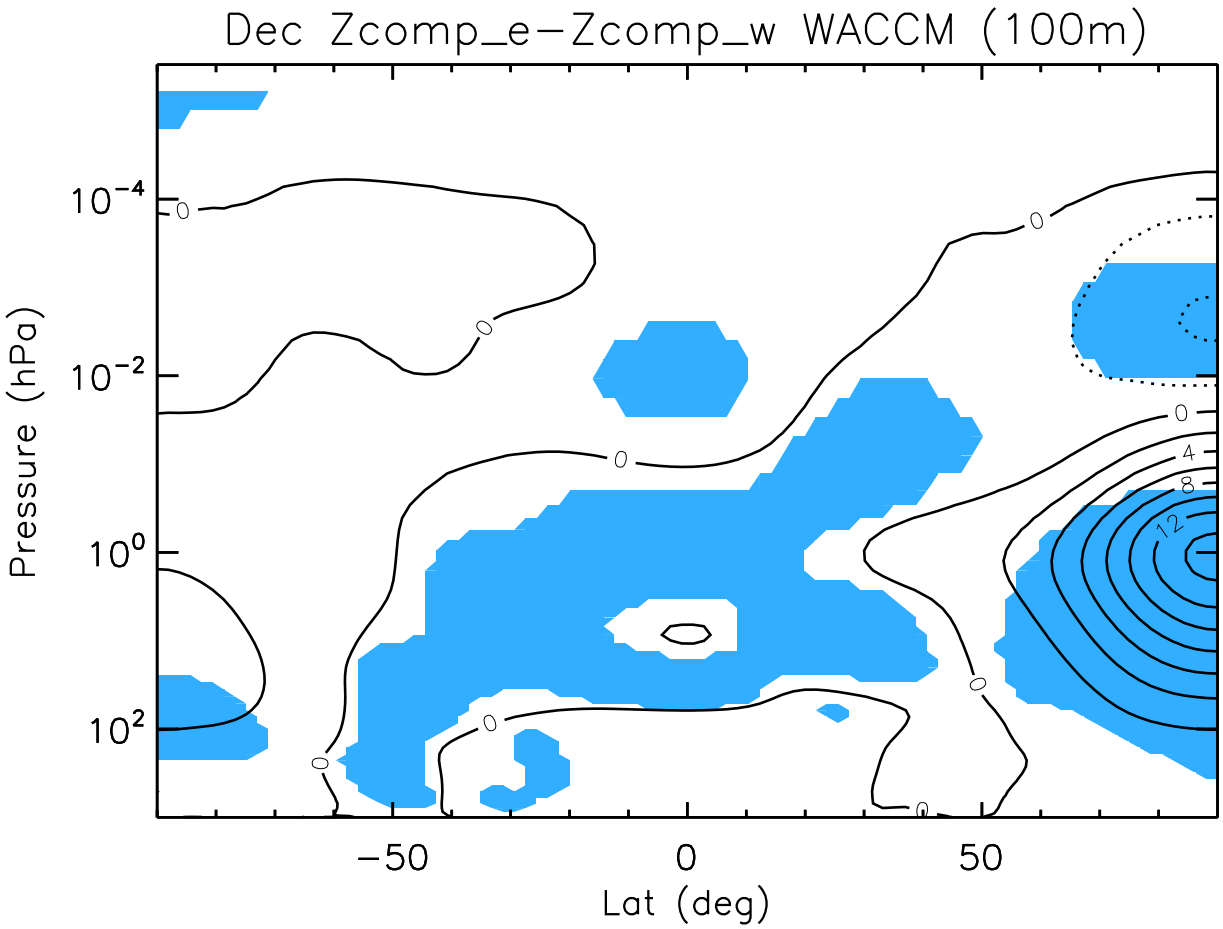

composite ubar (m/s) equator
Pressure (hPa)
1
10
100
0
10
20
30
40
Time delay (months)

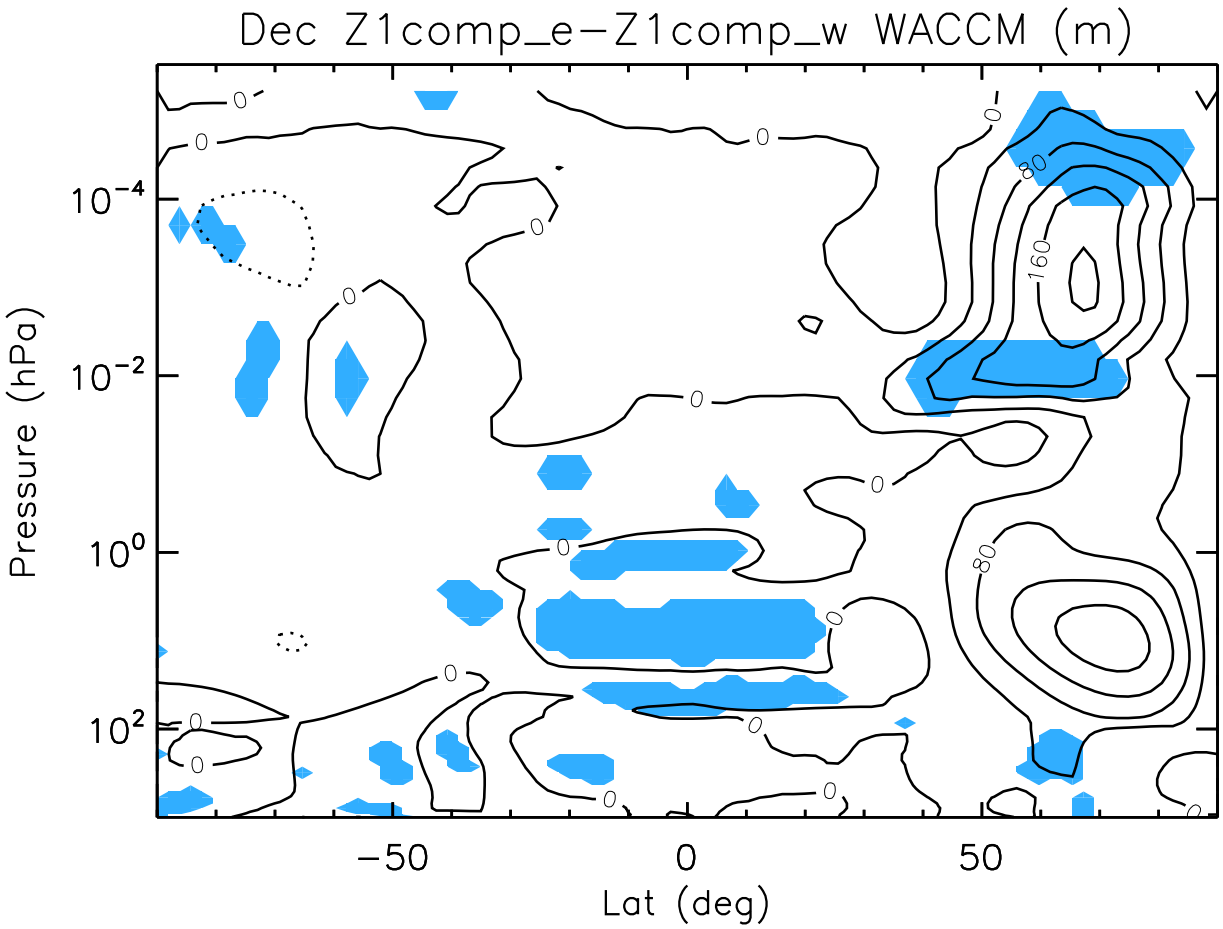

composite ubar (m/s) equator
Pressure (hPa)
1
10
100
1000
0
10
20
30
40
Time delay (months)

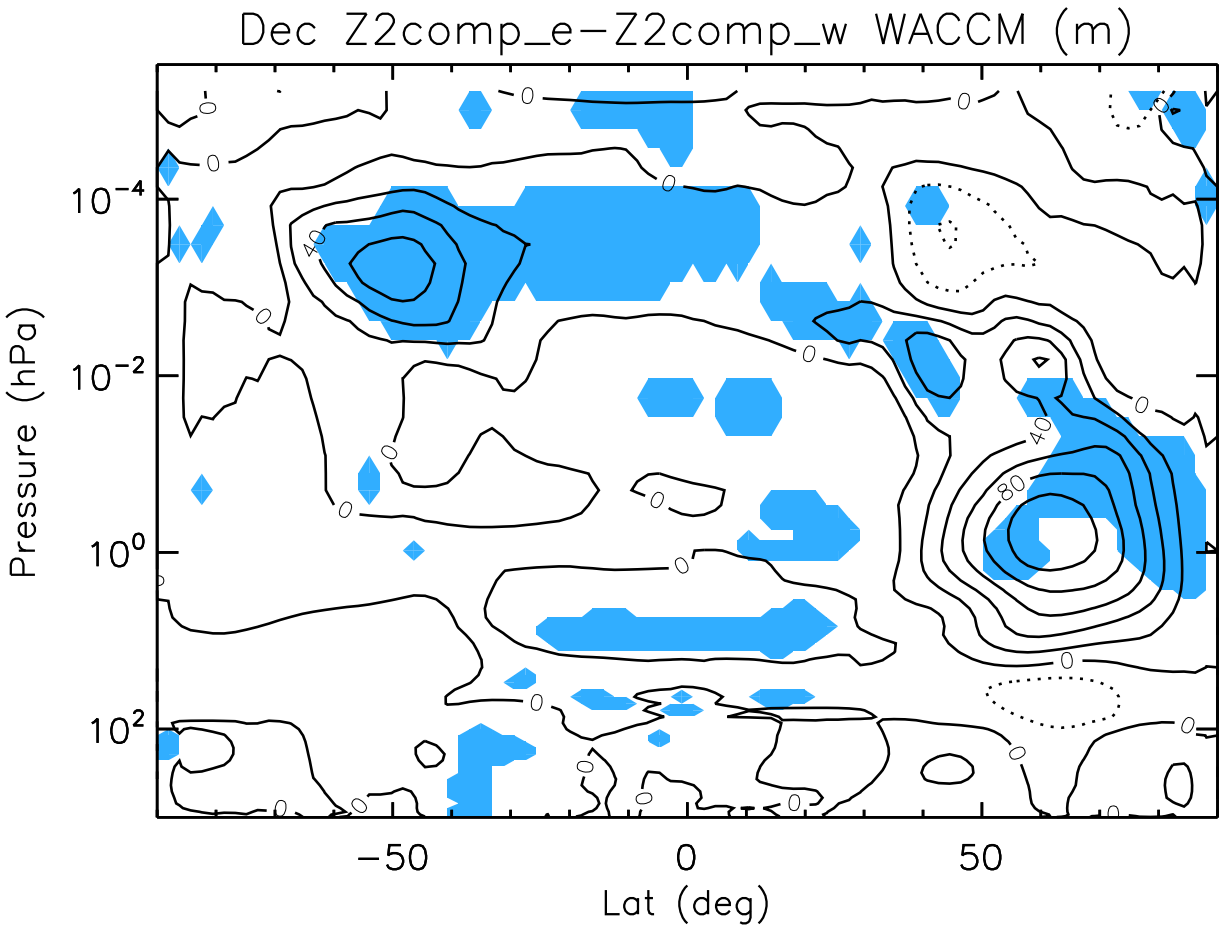

composite ubar (m/s) equator
Pressure (hPa)
100
1000
0
10
20
30
40
Time delay (months)

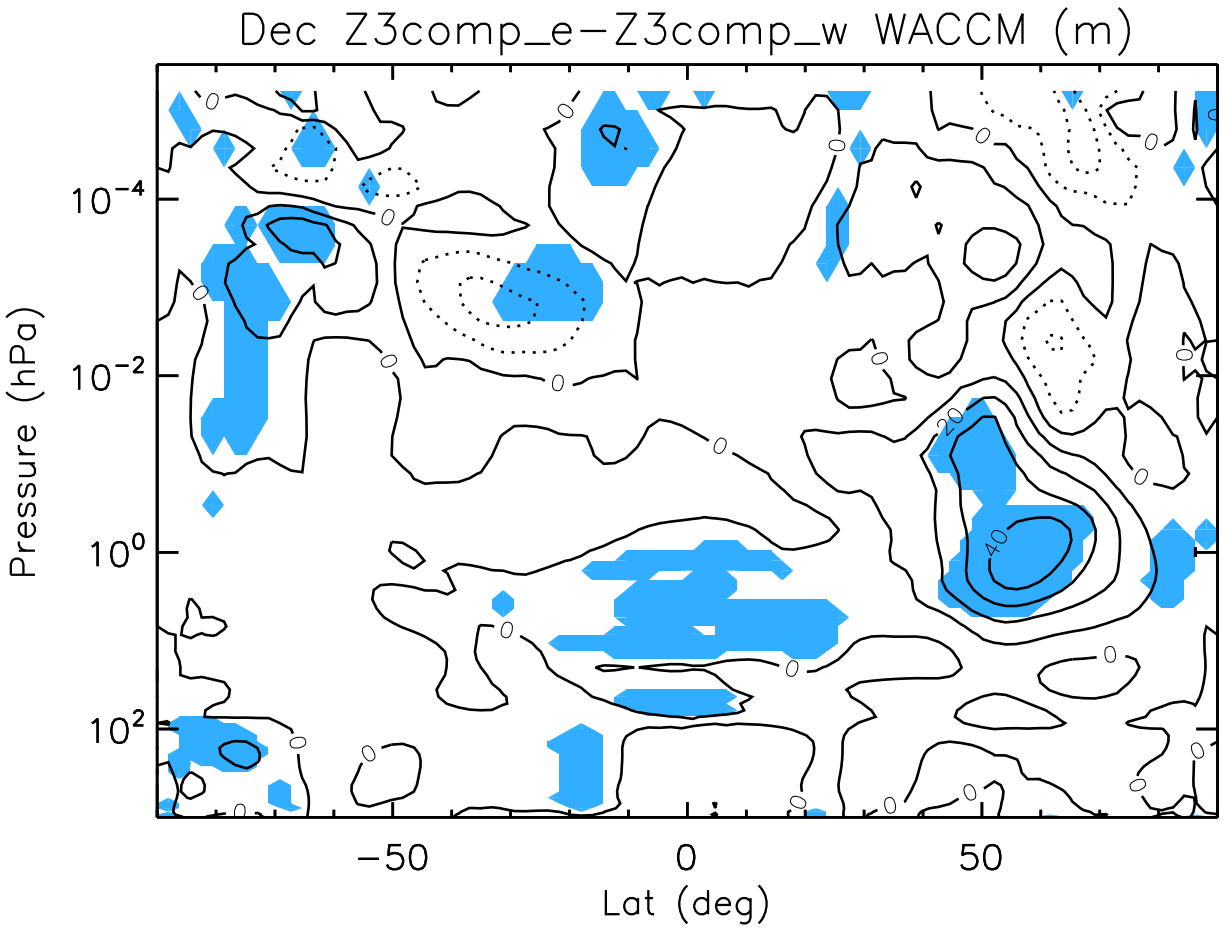

Dec Ucomp_e−Ucomp_w WACCM (m/s)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

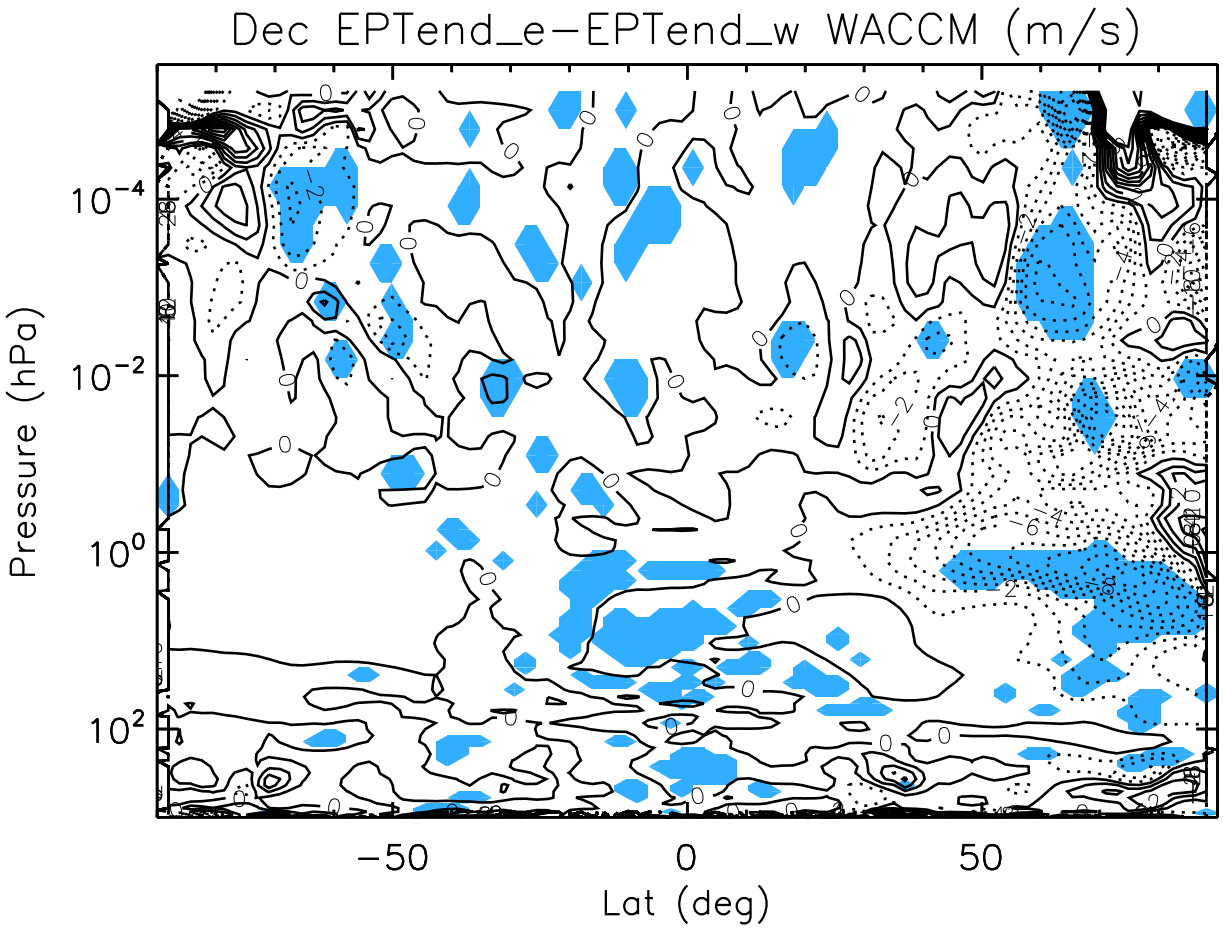

Dec Tcomp_e−Tcomp_w WACCM (K)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

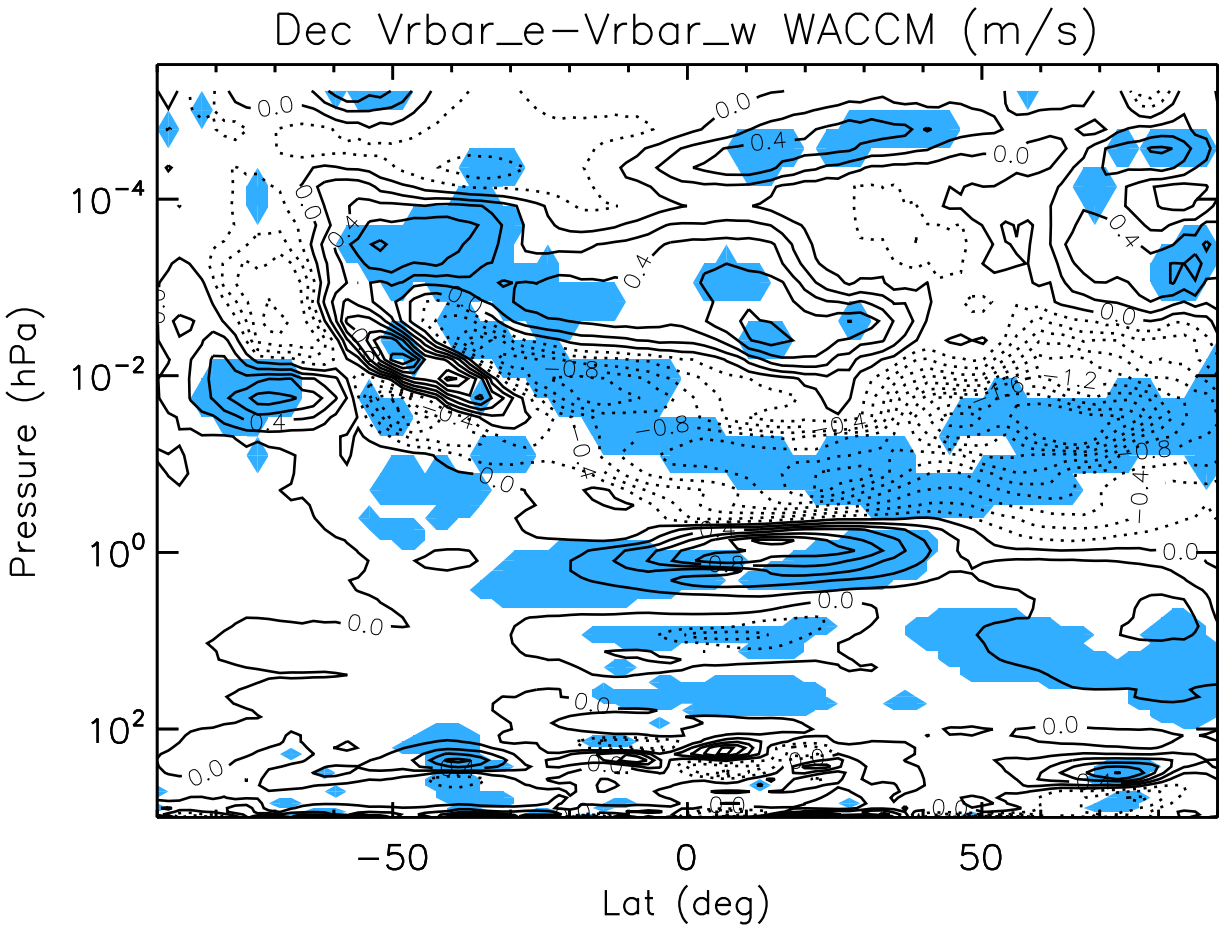

Dec Zcomp_e−Zcomp_w WACCM (100m)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)
0
4
8
12

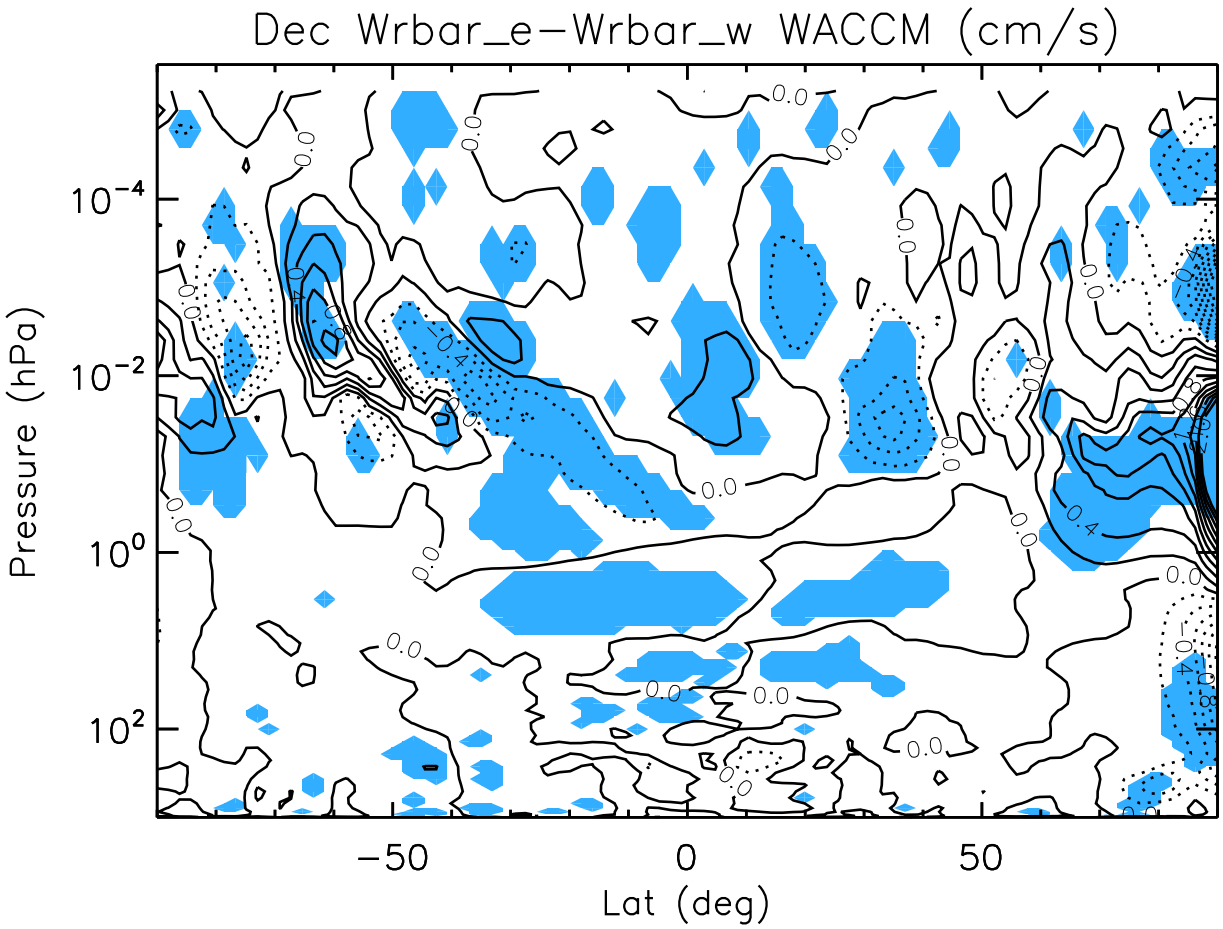

Dec Z1comp_e−Z1comp_w WACCM (m)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)
0
80
160

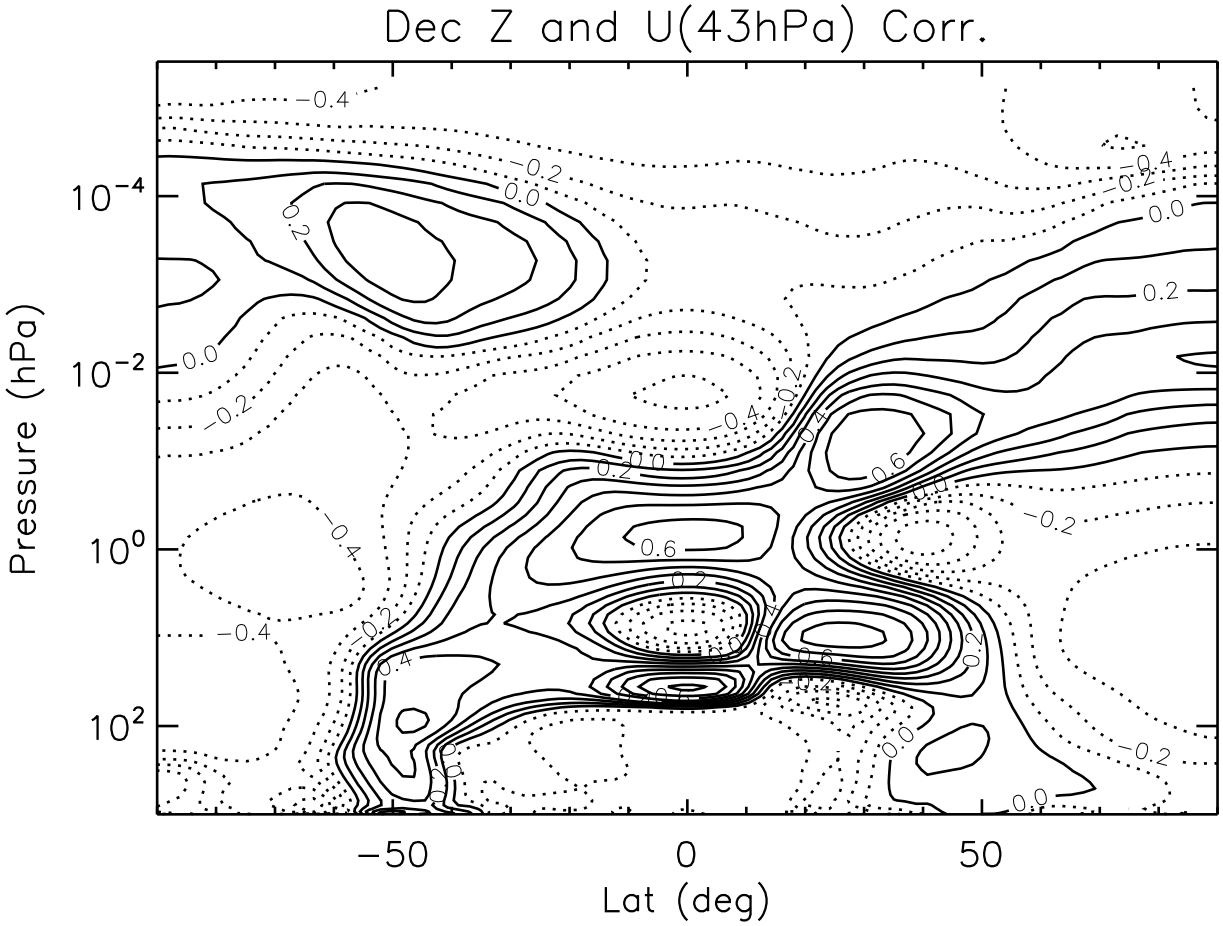

Dec Z2comp_e−Z2comp_w WACCM (m)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

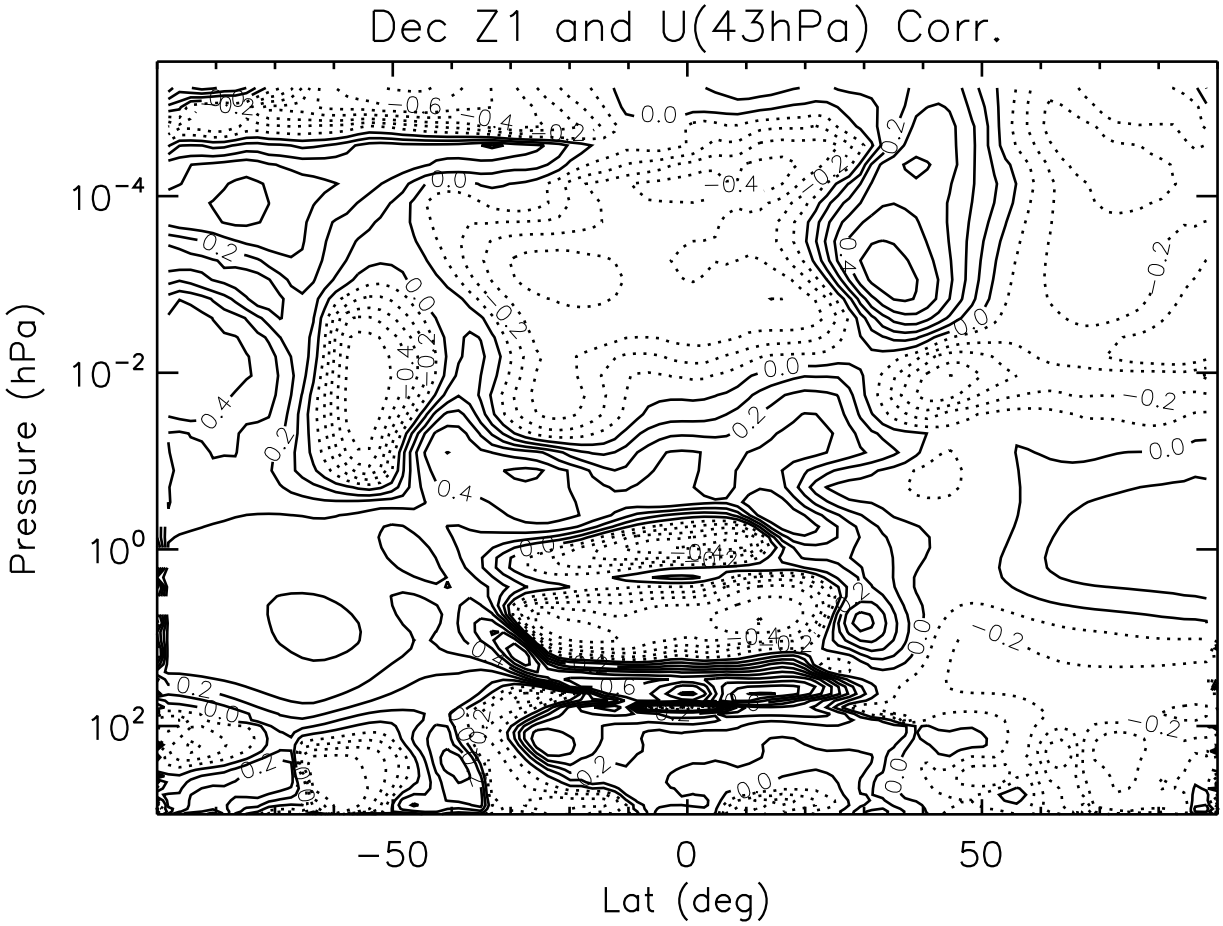

Dec Z3comp_e−Z3comp_w WACCM (m)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)
0
20
40

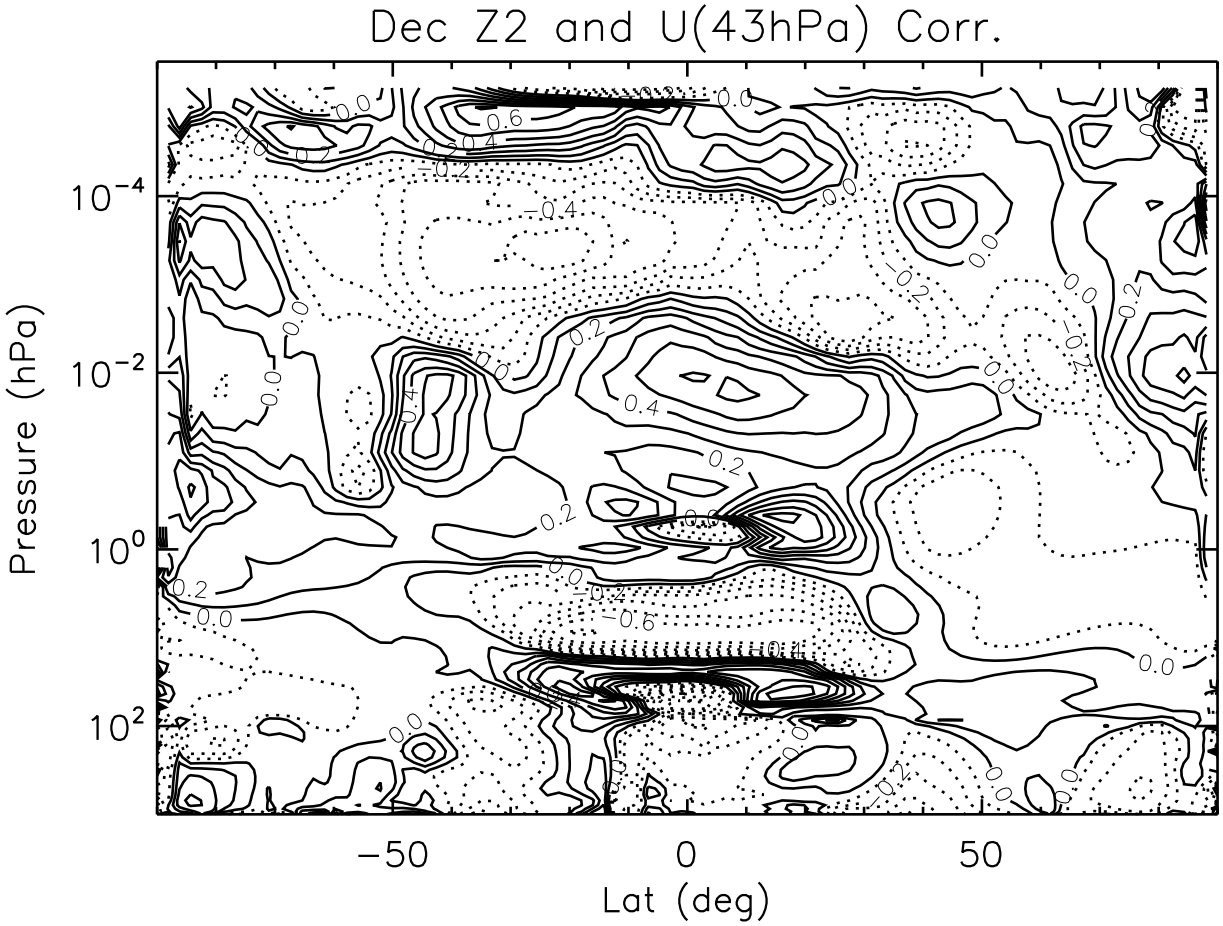

Dec EPTend_e−EPTend_w WACCM (m/s)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

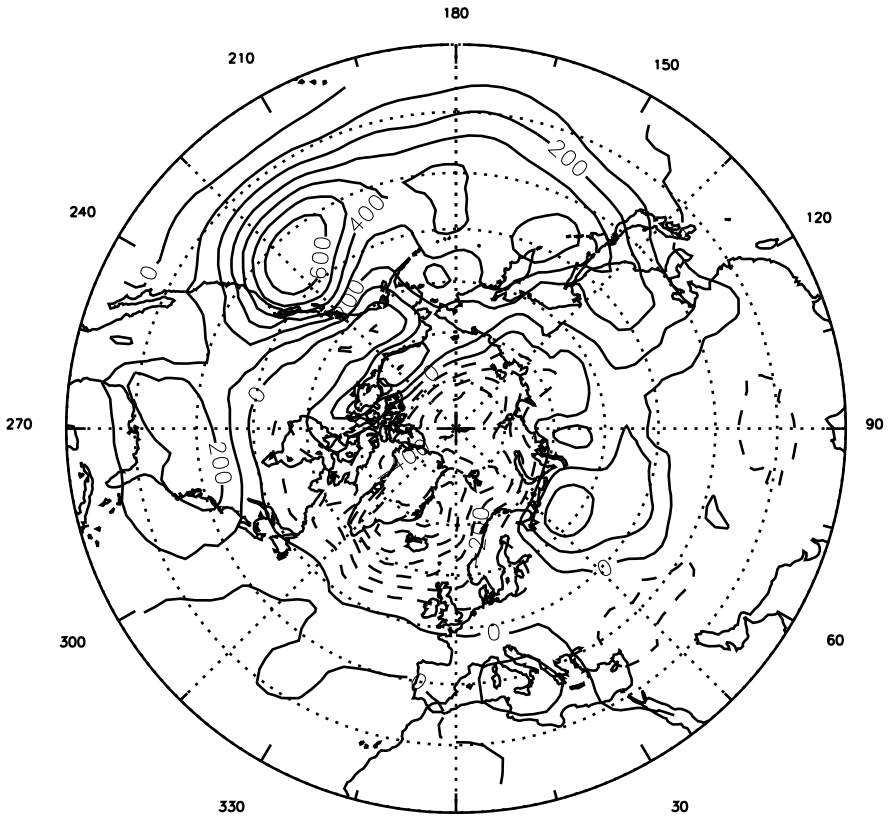

Dec Vrbar_e−Vrbar_w WACCM (m/s)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)


Dec Wrbar_e−Wrbar_w WACCM (cm/s)
Pressure (hPa)
10^-4
10^-2
10^0
10^2
−50
0
50
Lat (deg)

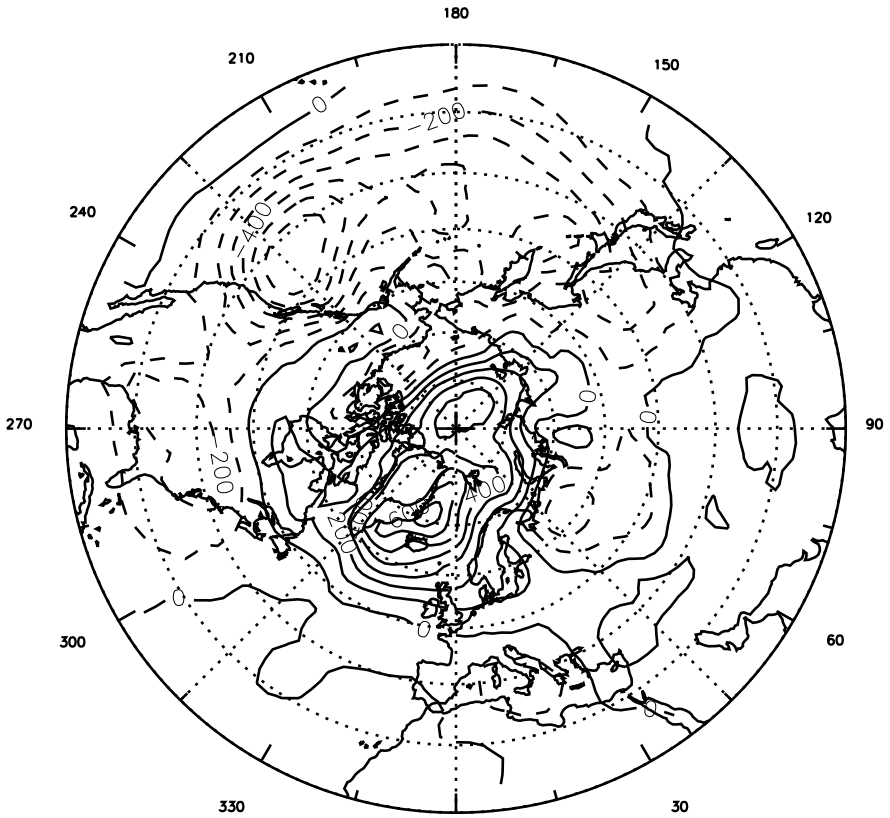

Dec Z and U(43hPa) Corr.
Pressure (hPa)
10^{-4}
10^{-2}
10^{0}
10^{2}
−50
0
50
Lat (deg)


Dec Z1 and U(43hPa) Corr.
Pressure (hPa)
10^{-4}
10^{-2}
10^{0}
10^{2}
−50
0
50
Lat (deg)

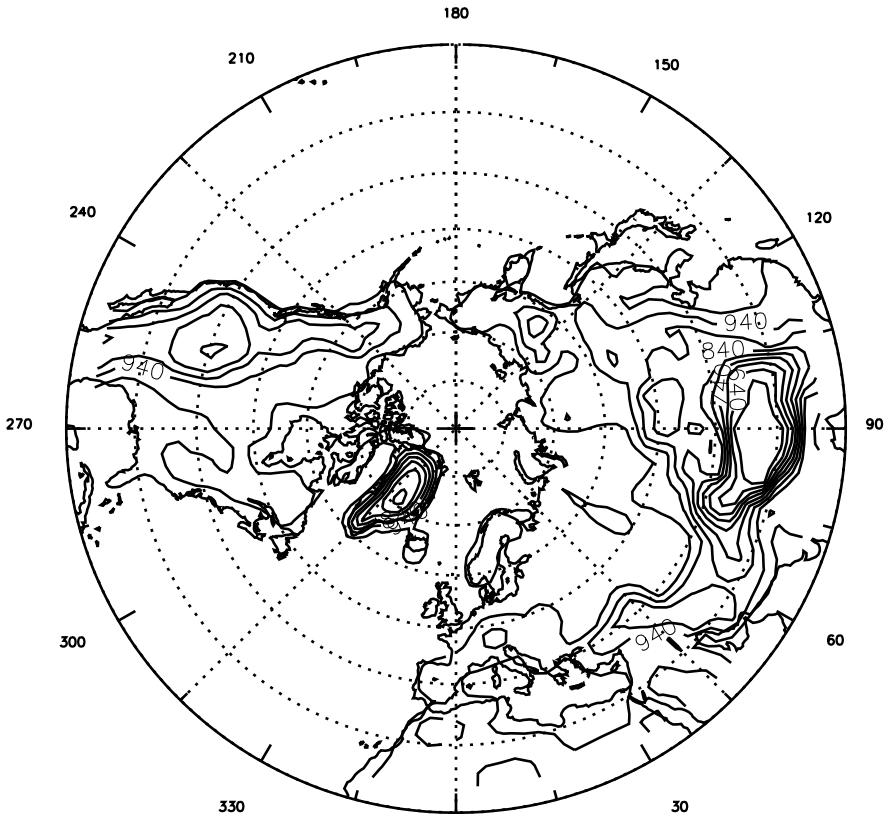

Dec Z2 and U(43hPa) Corr.
Pressure (hPa)
10^{-4}
10^{-2}
10^{0}
10^{2}
−50
0
50
Lat (deg)

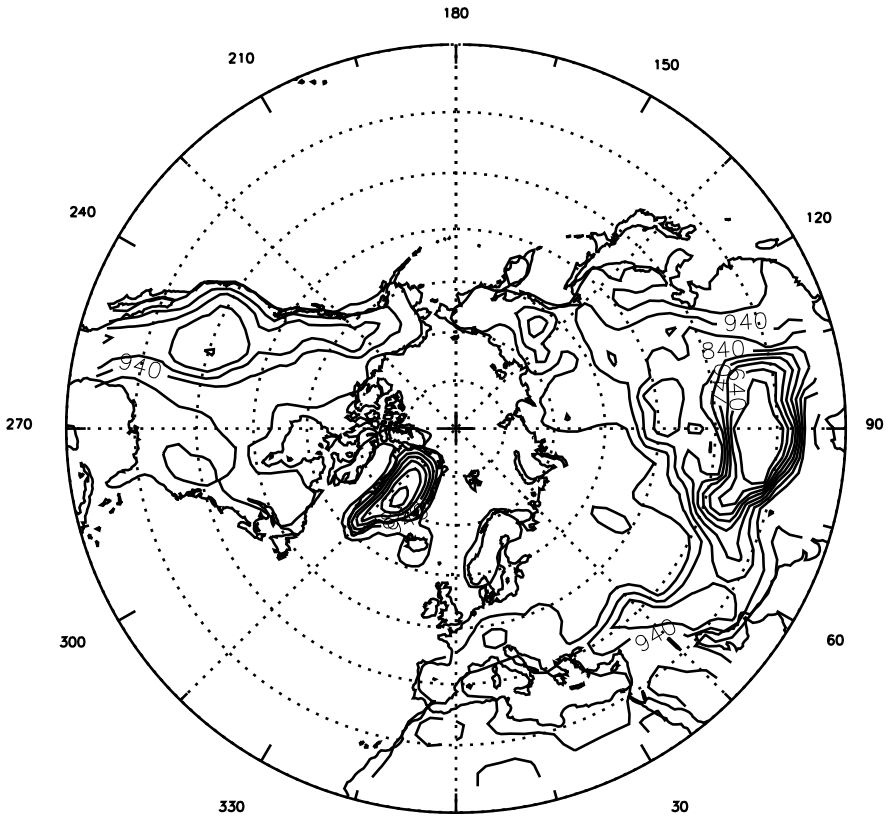


Dec PScomp_w – PScomp_e (Pa)

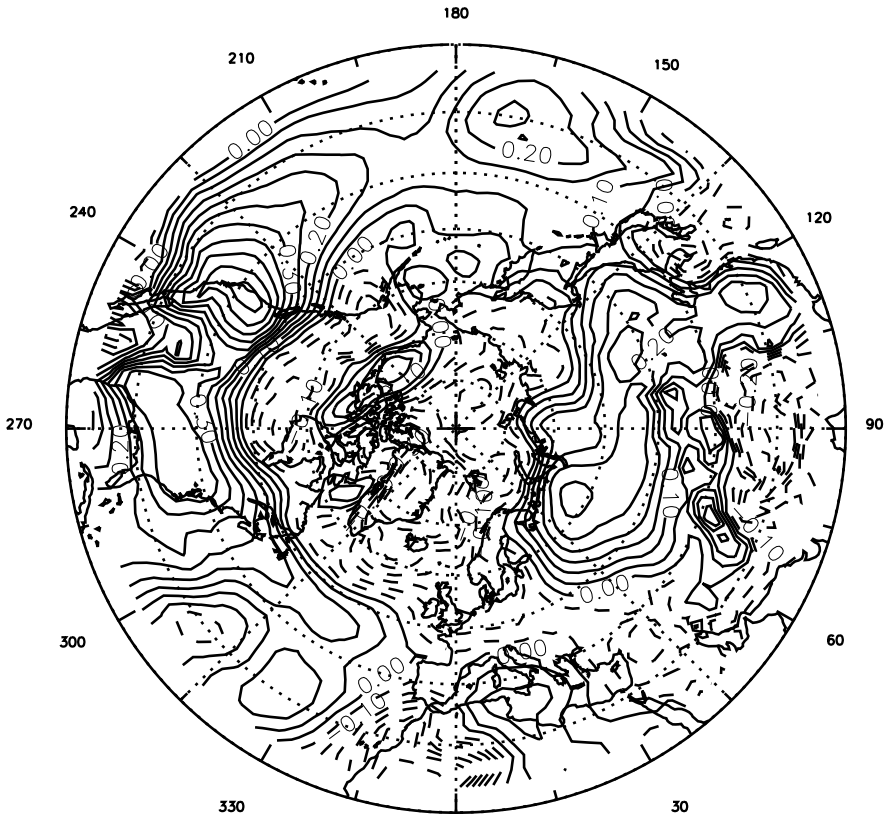


Dec PScomp_e-PScomp_w (Pa)

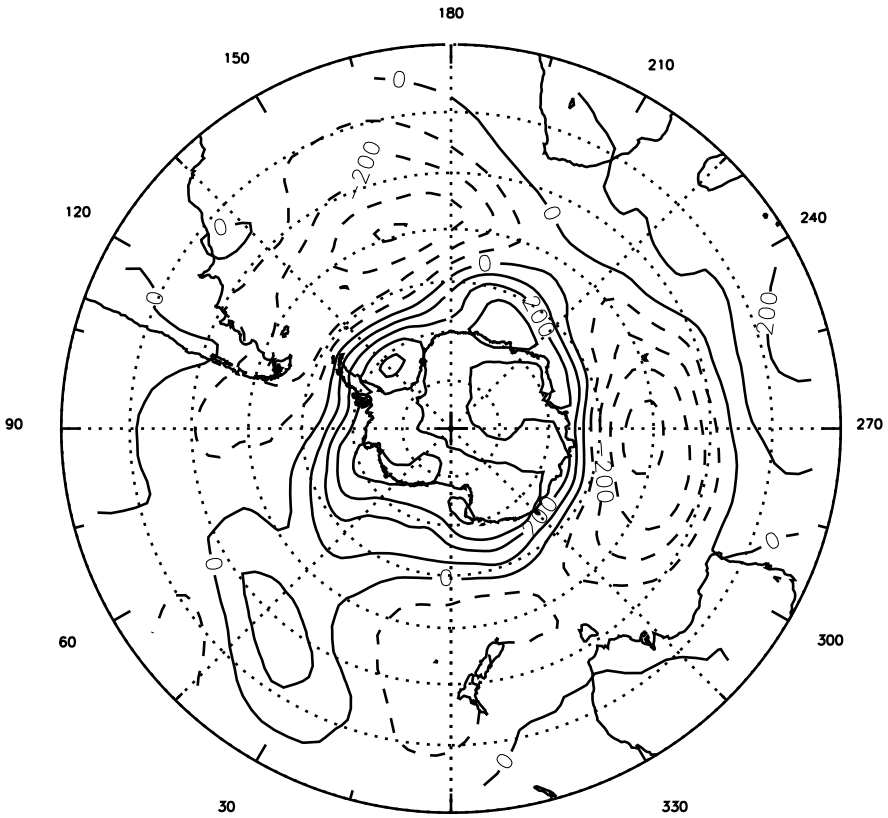

180
210
150
240
120
270
90
300
60
330
30
940
840
940
940
940
Longitude
Dec PScomp_e(hPa)



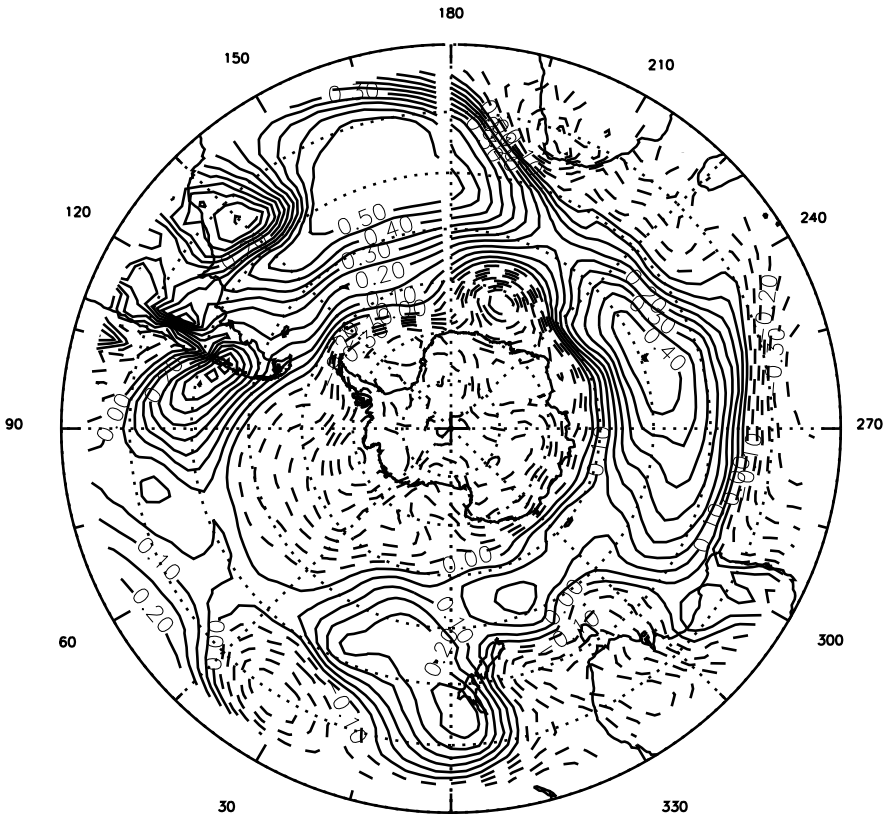
Dec PScomp_w(Pa)



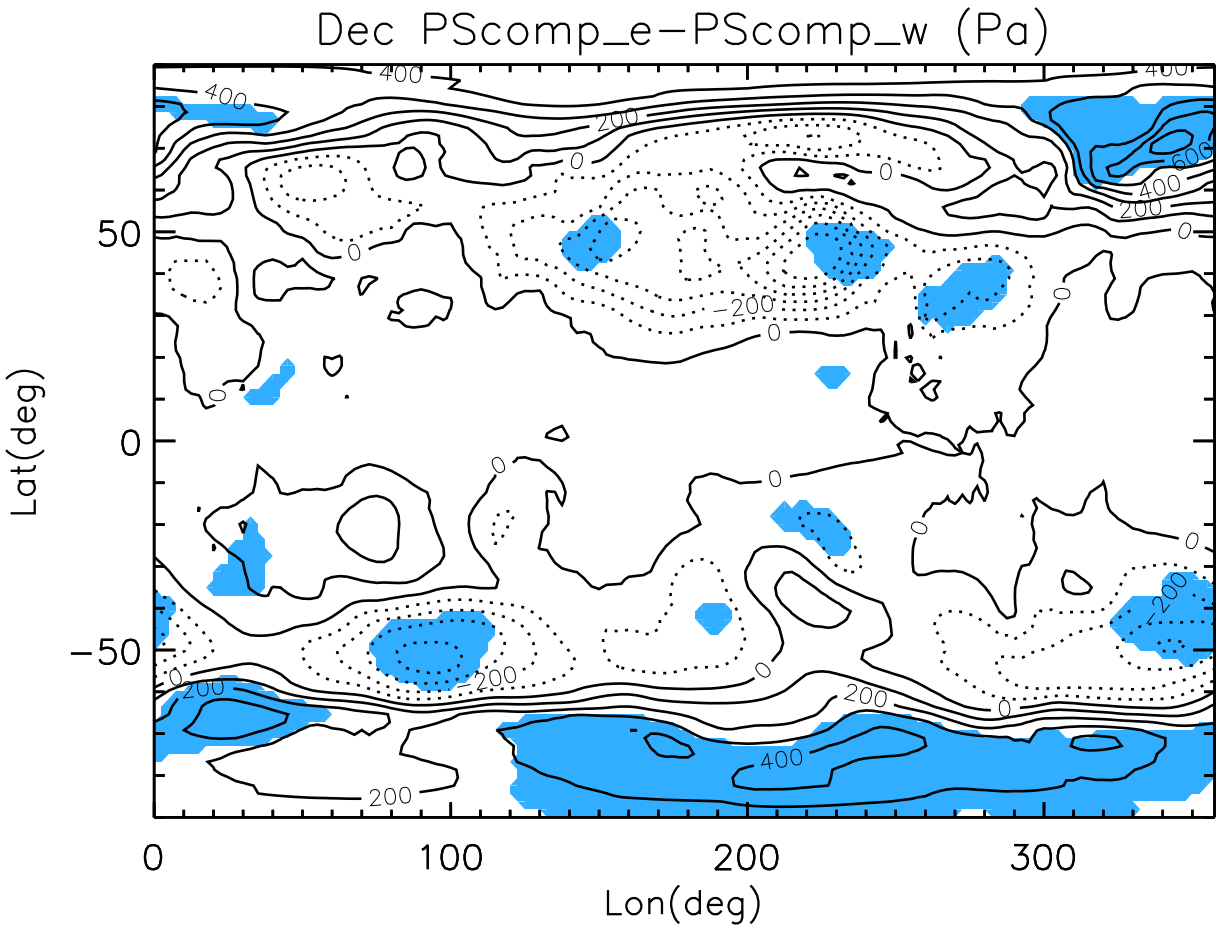
Dec PS and U(43hPa) Corr.

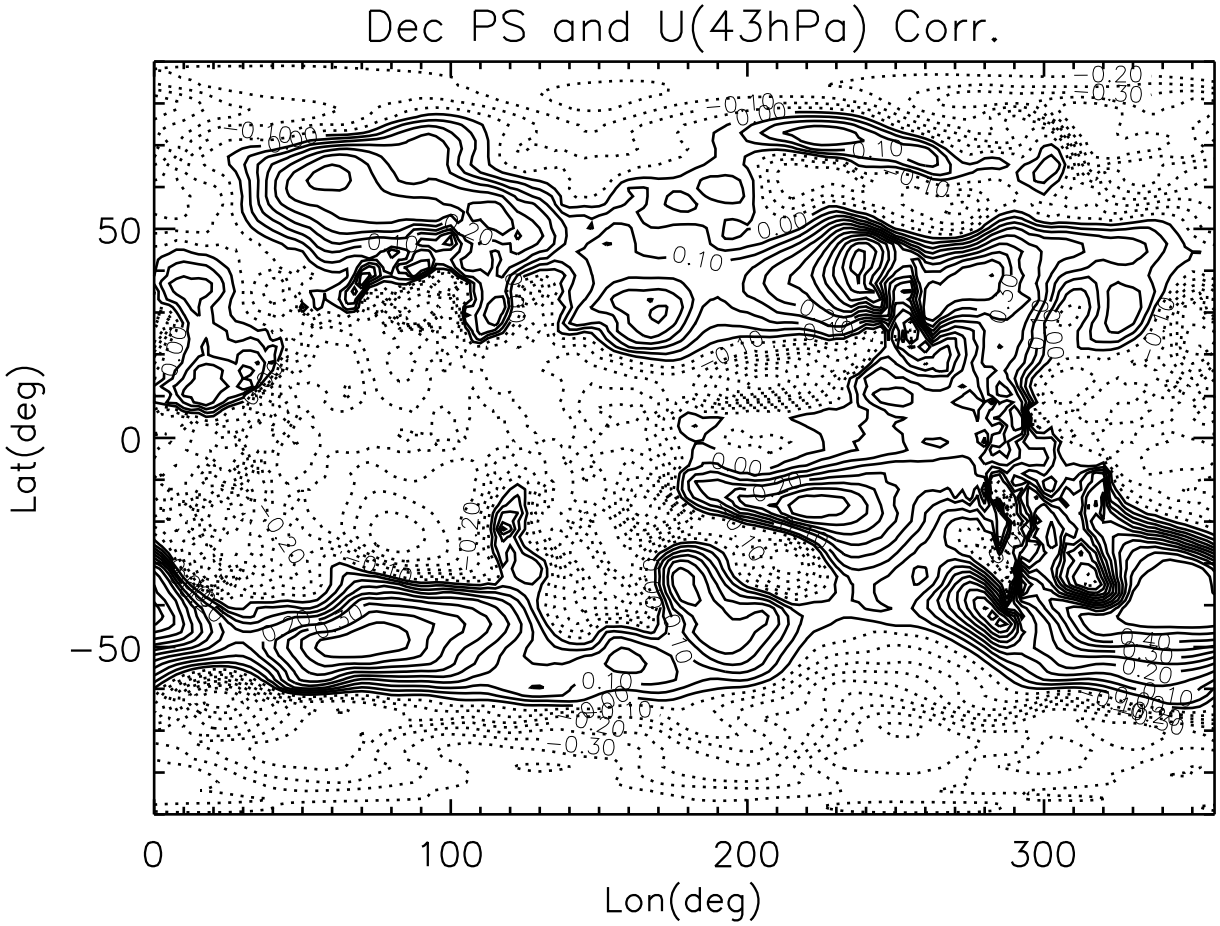


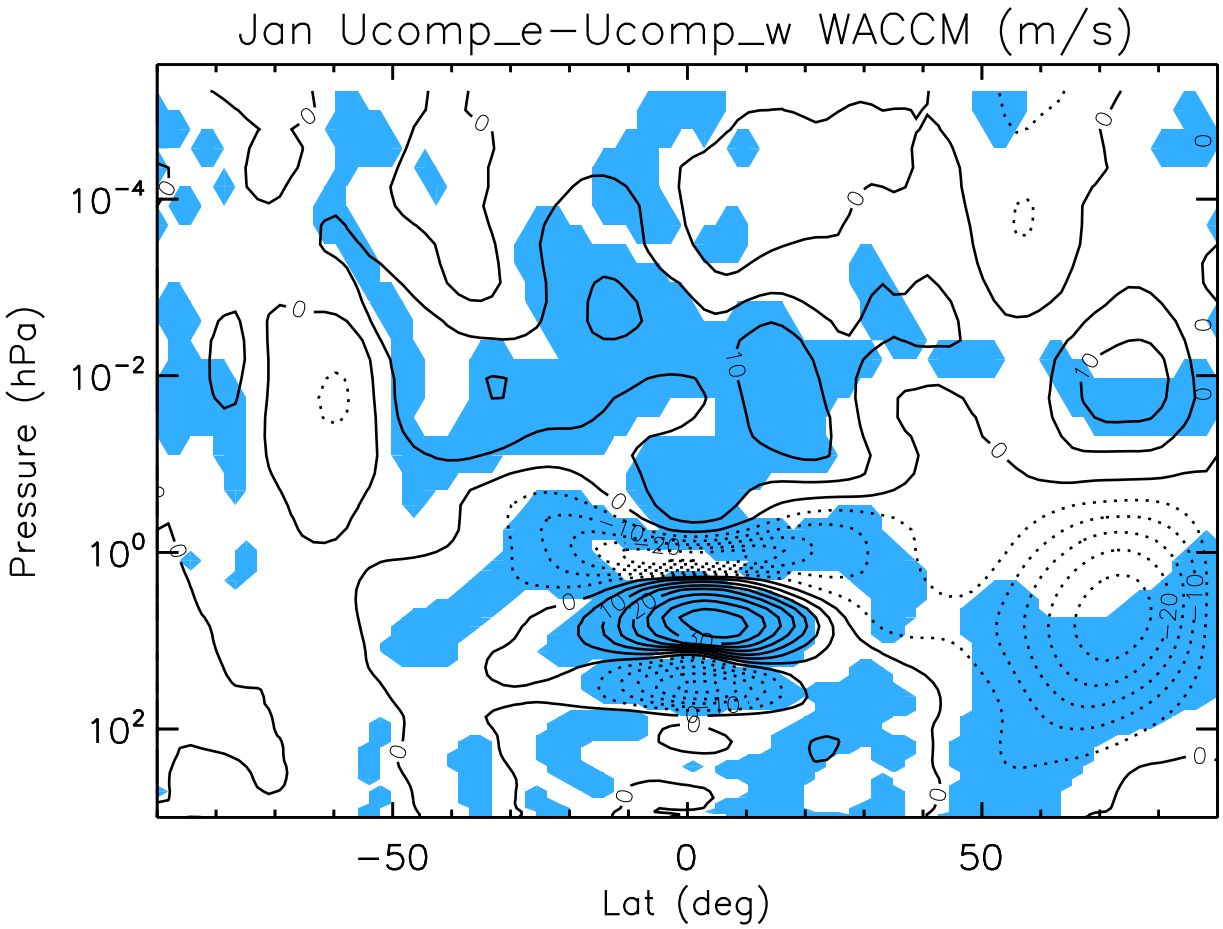
Dec PScomp_e−PScomp_w (Pa)

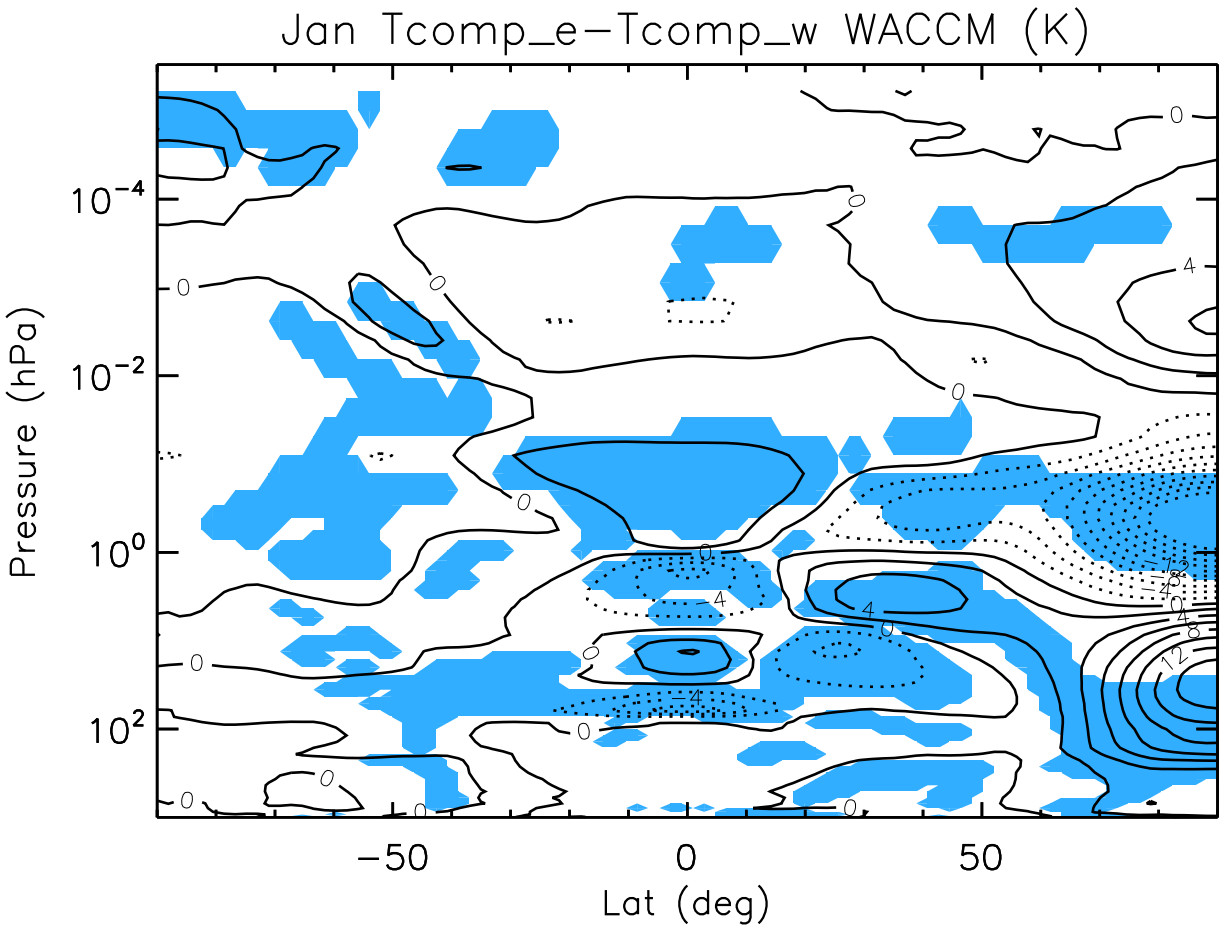


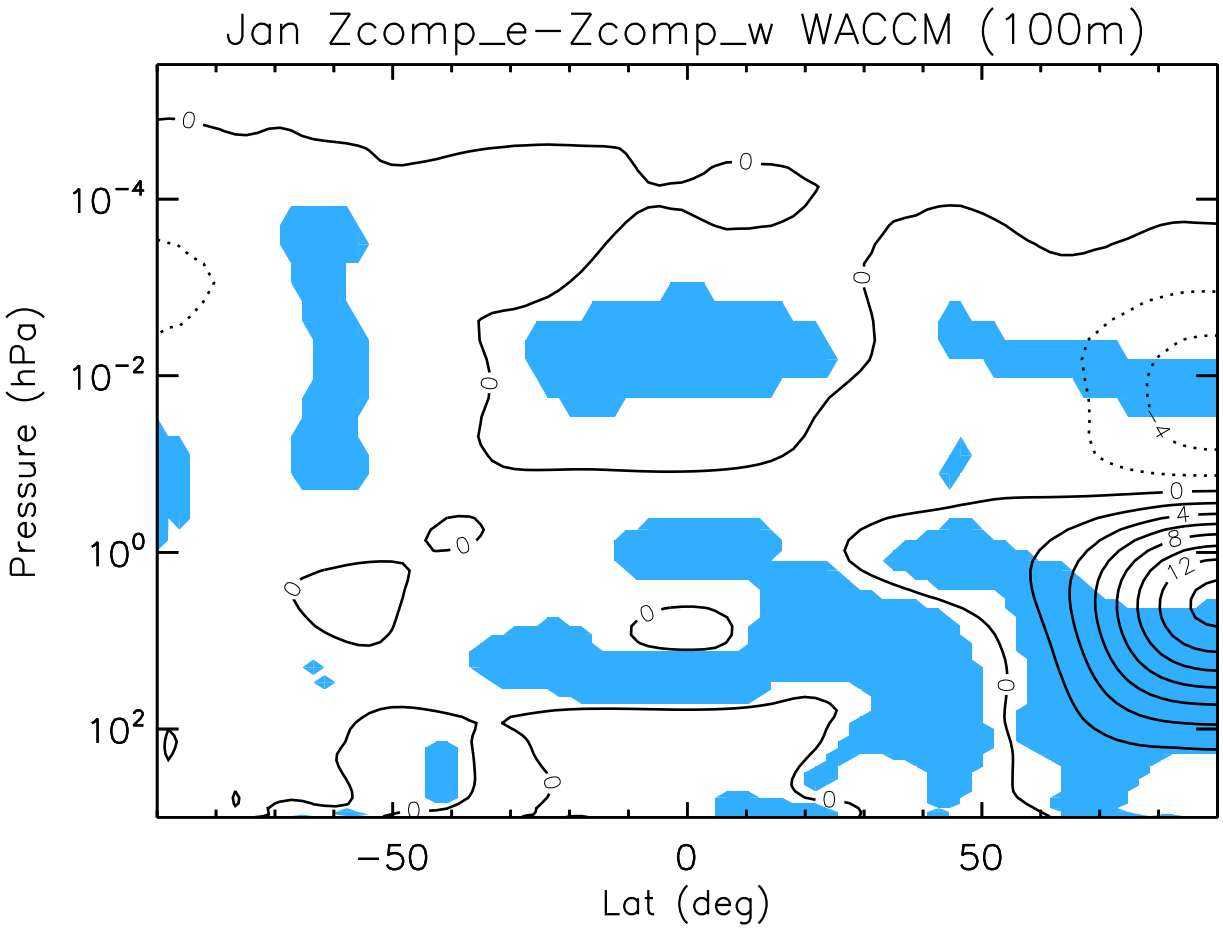
Dec PS and U(43hPa) Corr.

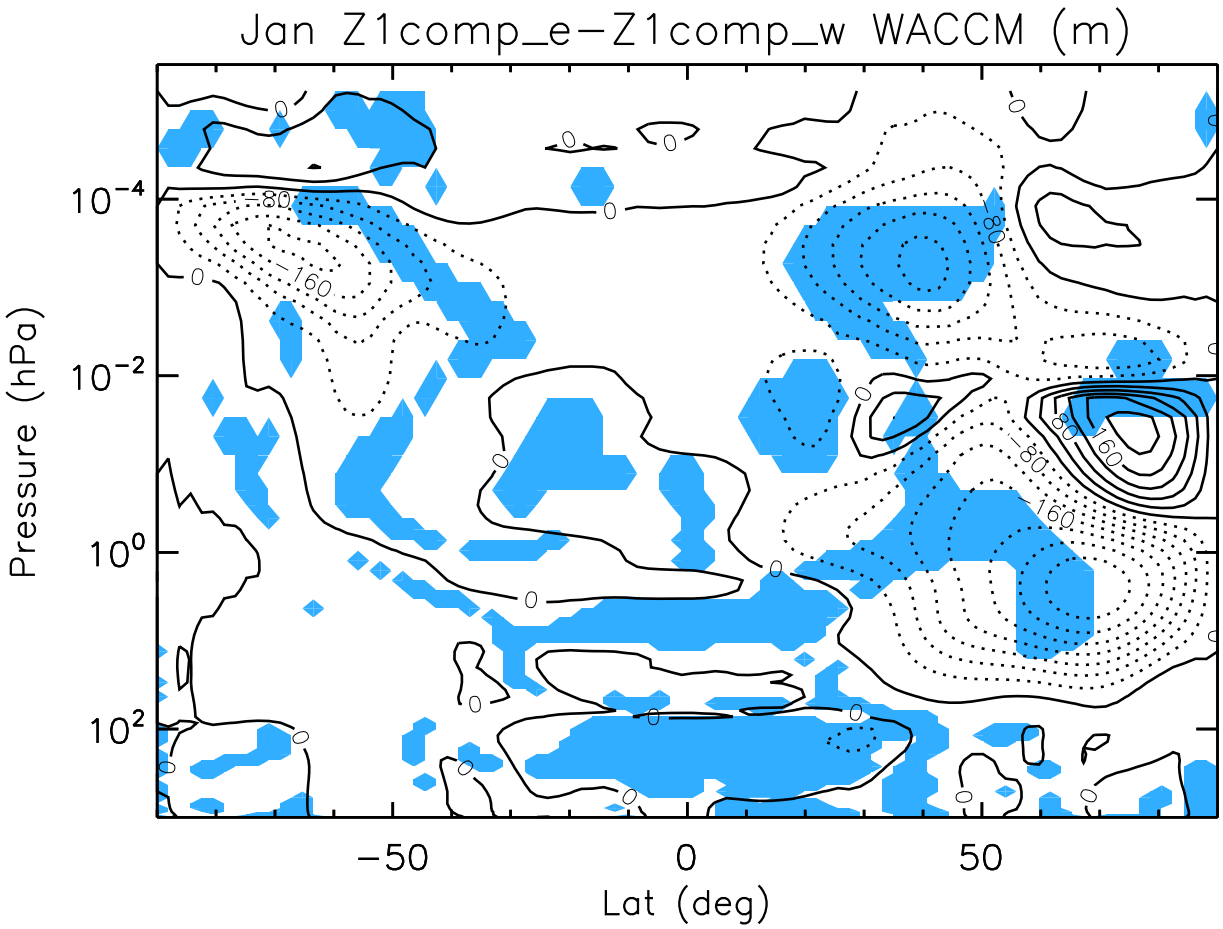

Dec PScomp_e−PScomp_w (Pa)
Lat(deg)
Lon(deg)
50
0
−50
0
100
200
300
400
200
0
−200
600

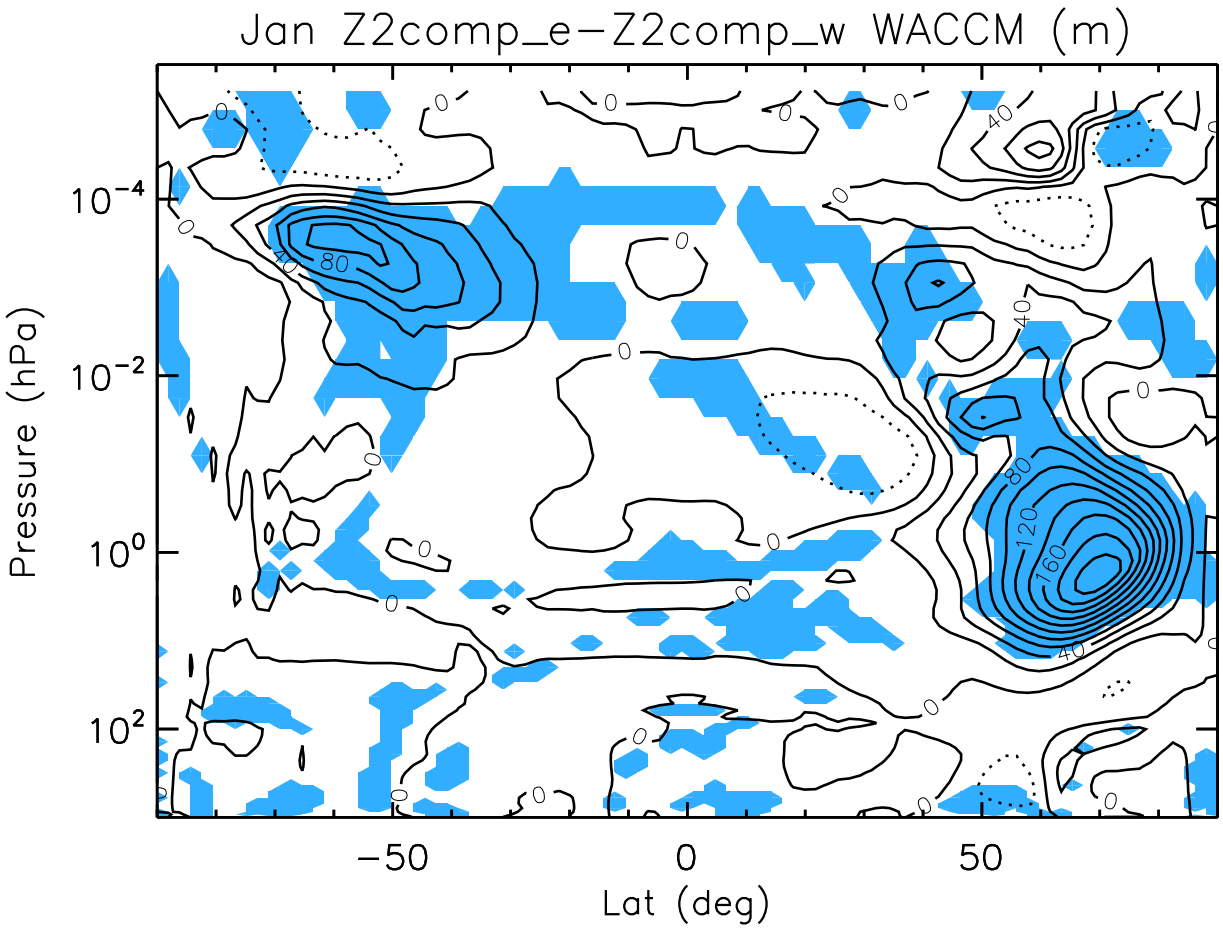

Dec PS and U(43hPa) Corr.
Lat(deg)
Lon(deg)
50
0
−50
0
100
200
300

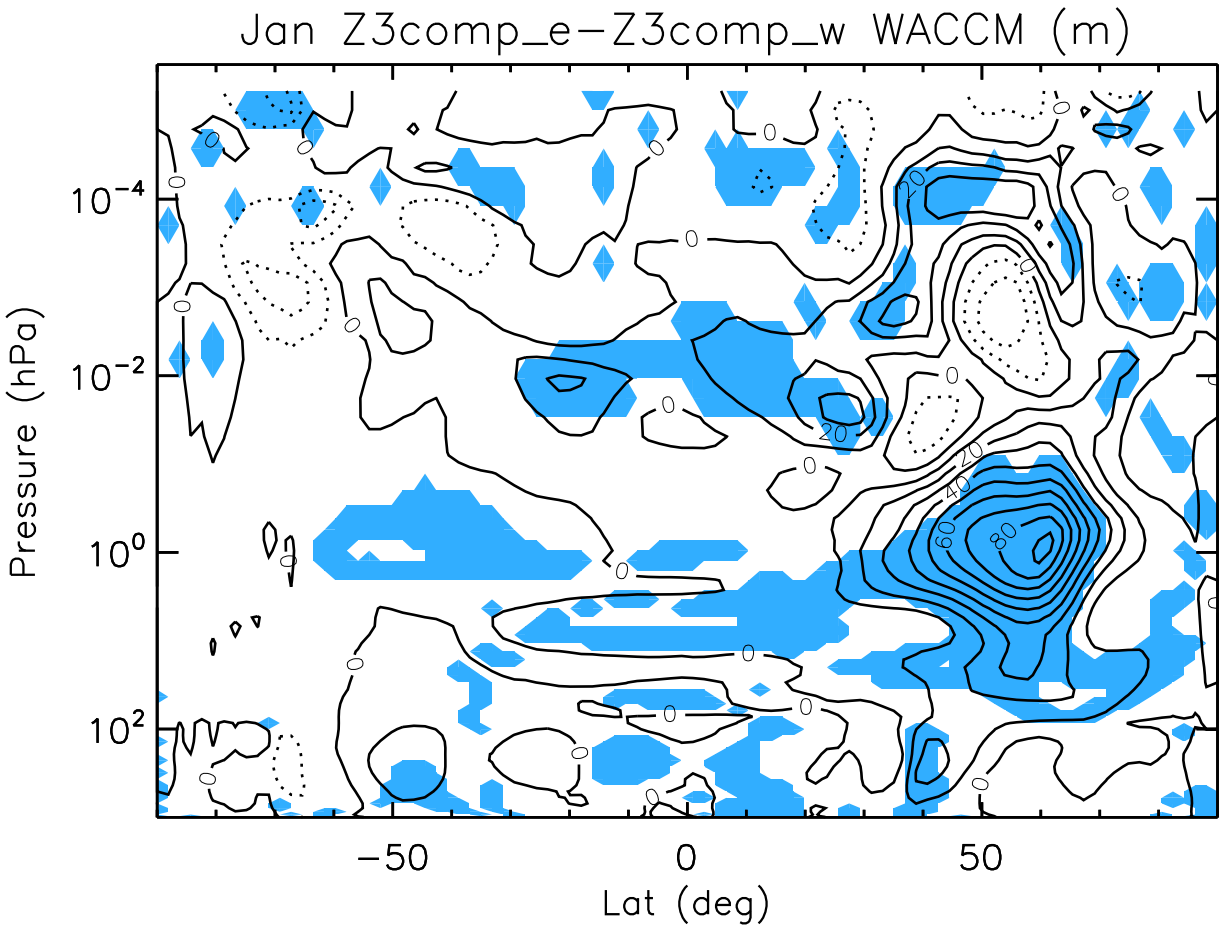

Jan Ucomp_e−Ucomp_w WACCM (m/s)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

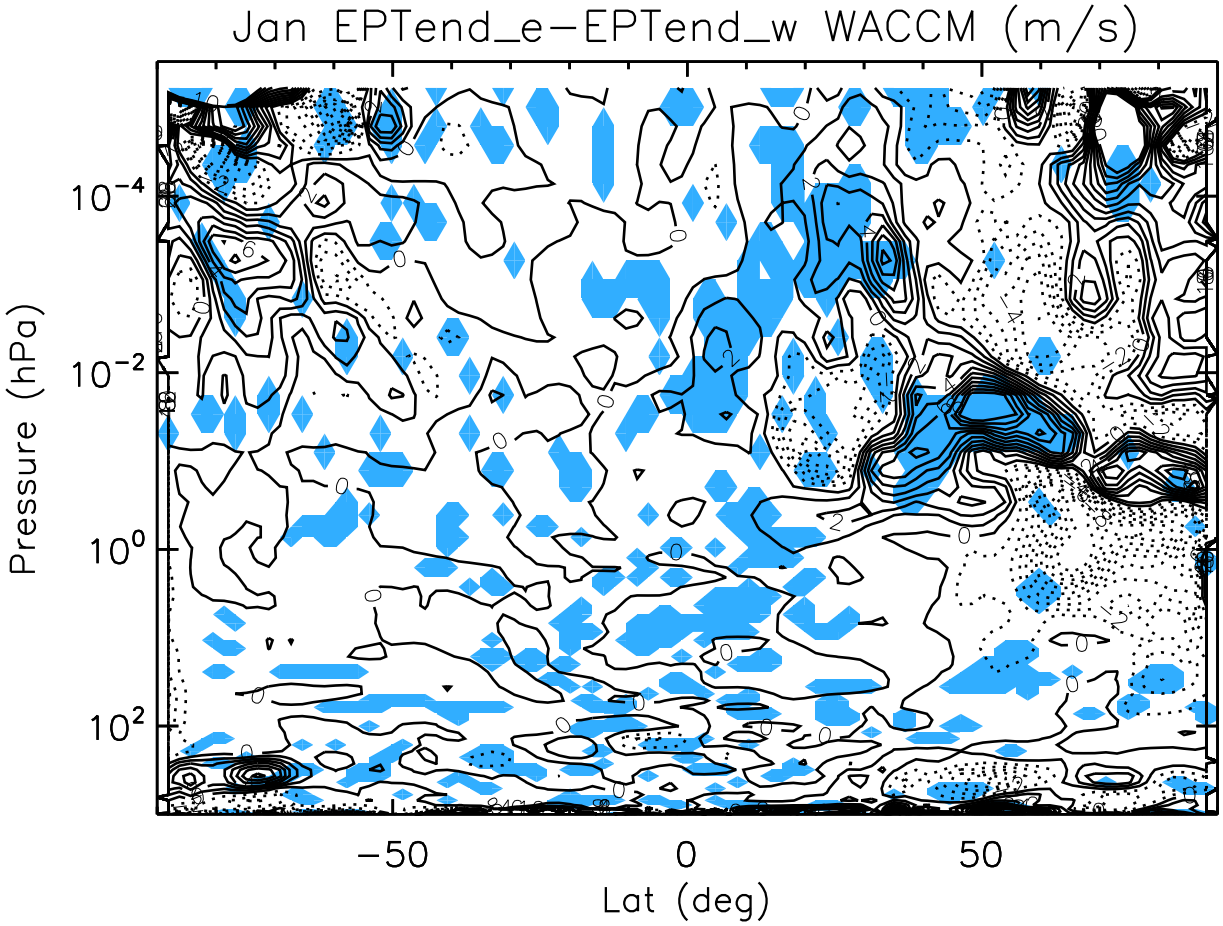

Jan Tcomp_e−Tcomp_w WACCM (K)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

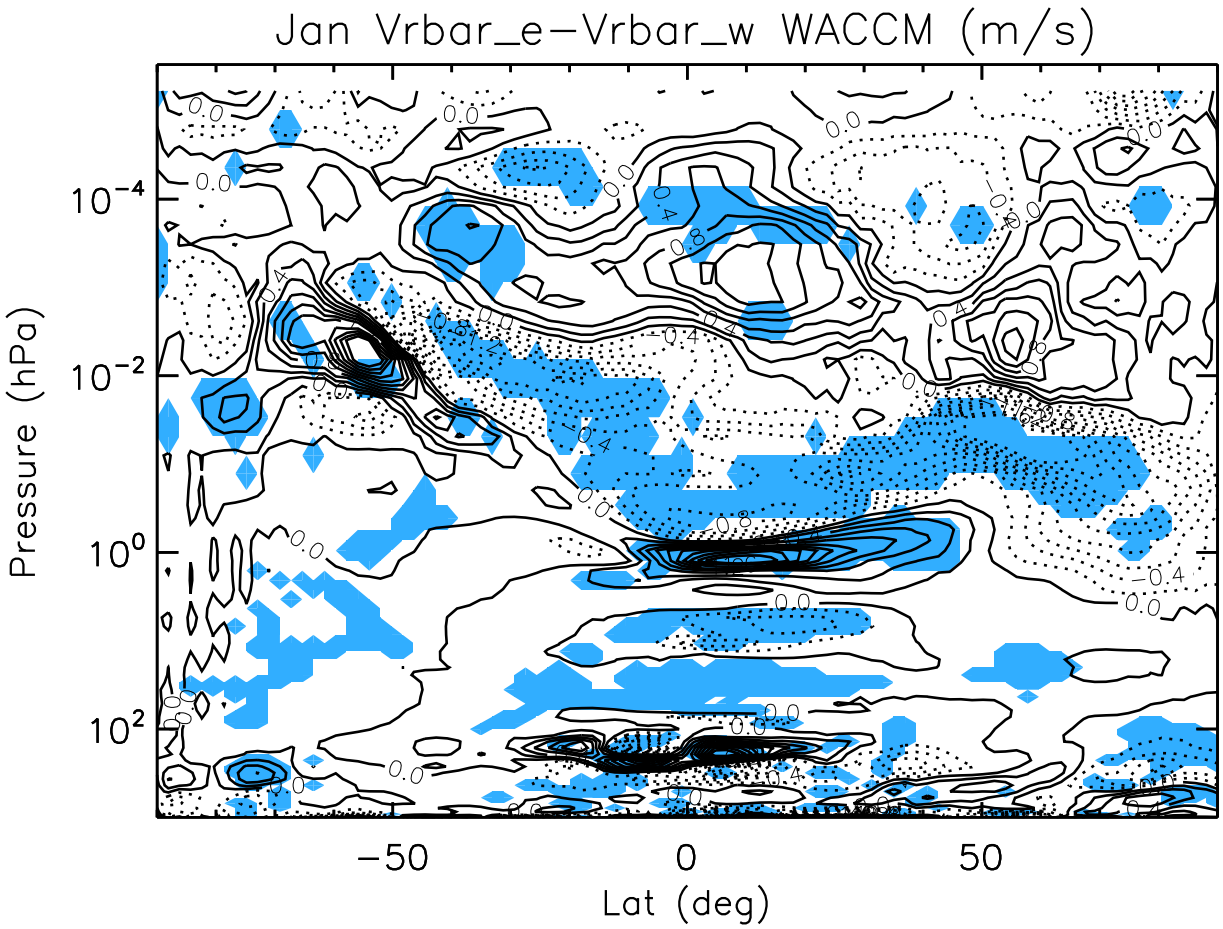

Jan Zcomp_e−Zcomp_w WACCM (100m)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

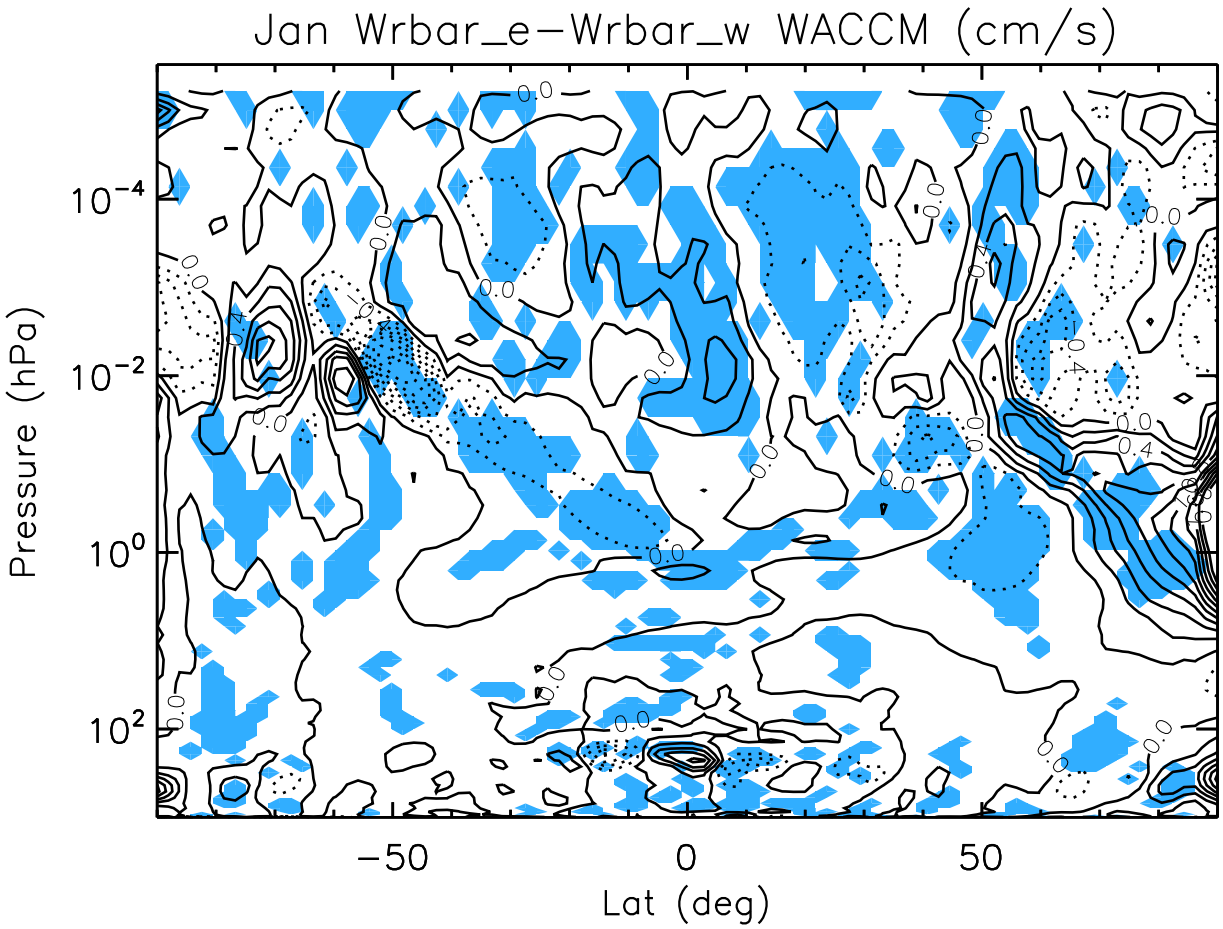

Jan Z1comp_e−Z1comp_w WACCM (m)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

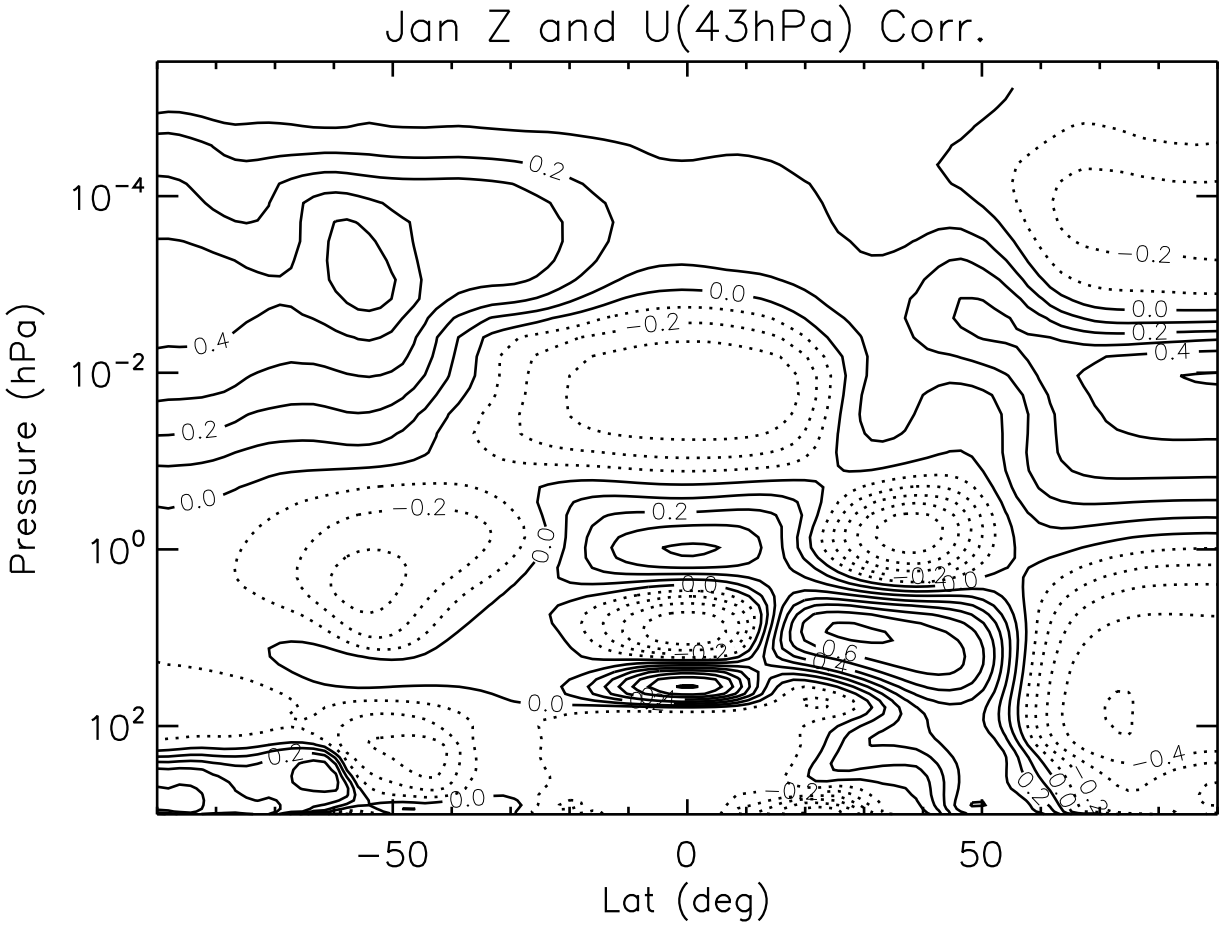

Jan Z2comp_e−Z2comp_w WACCM (m)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

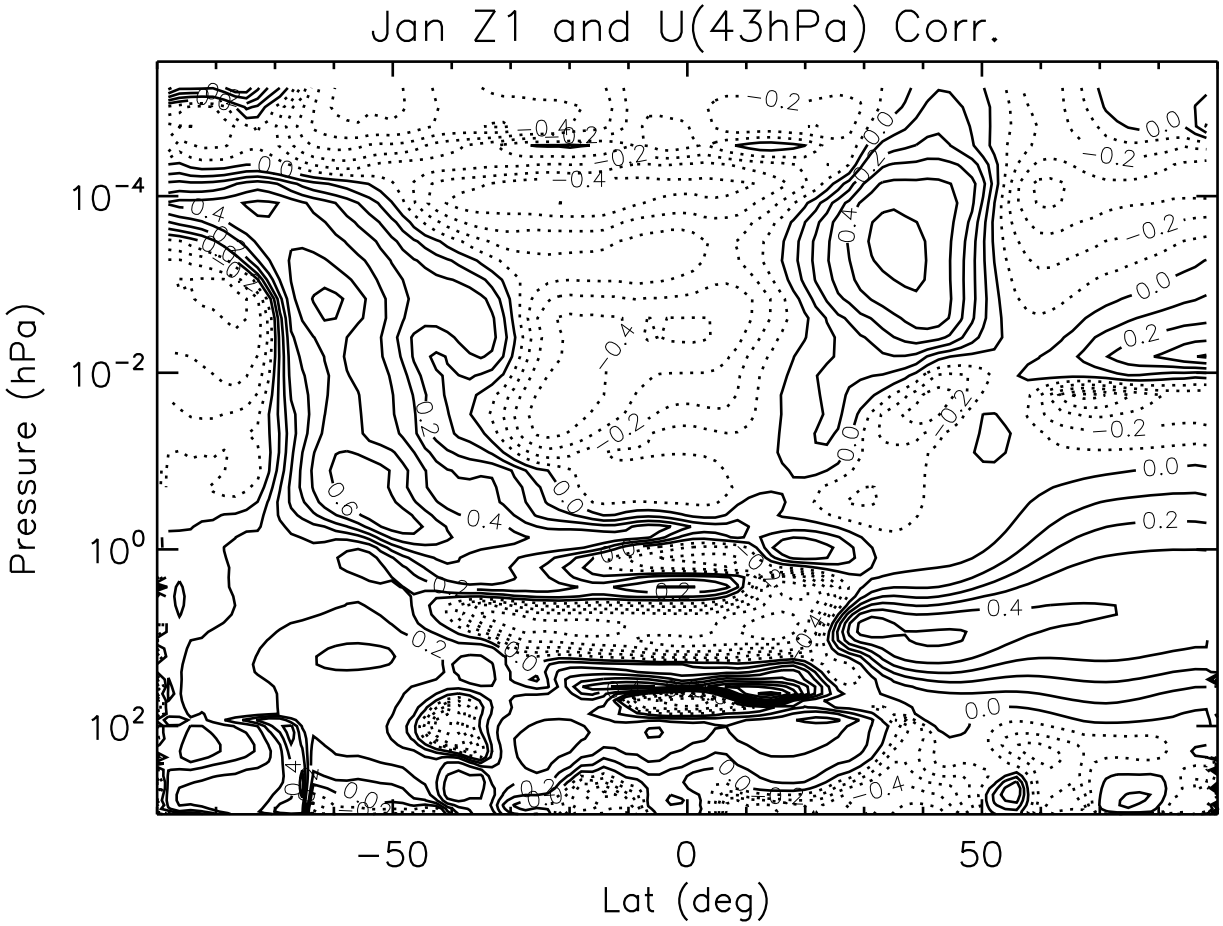

Jan Z3comp_e−Z3comp_w WACCM (m)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

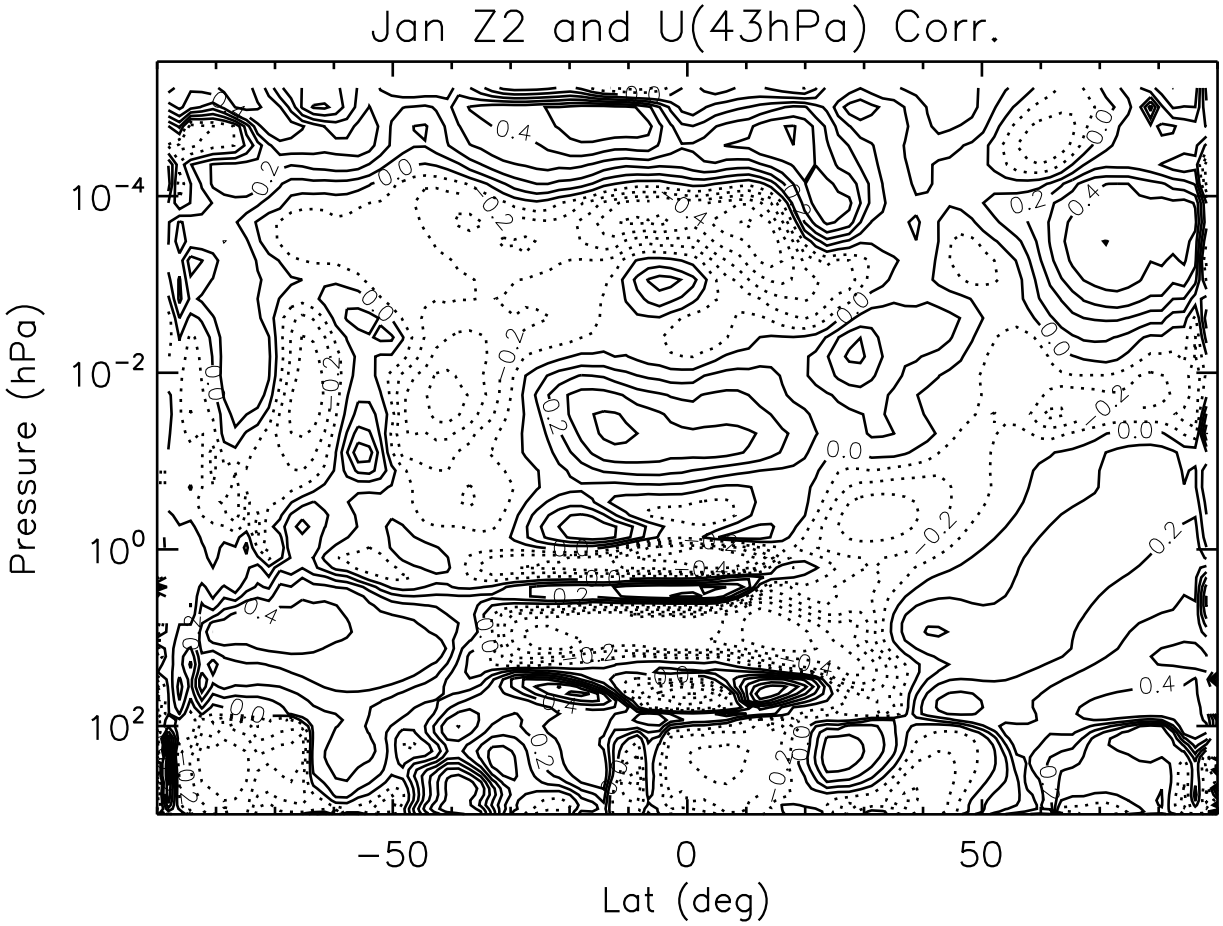

Jan EPTend_e−EPTend_w WACCM (m/s)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

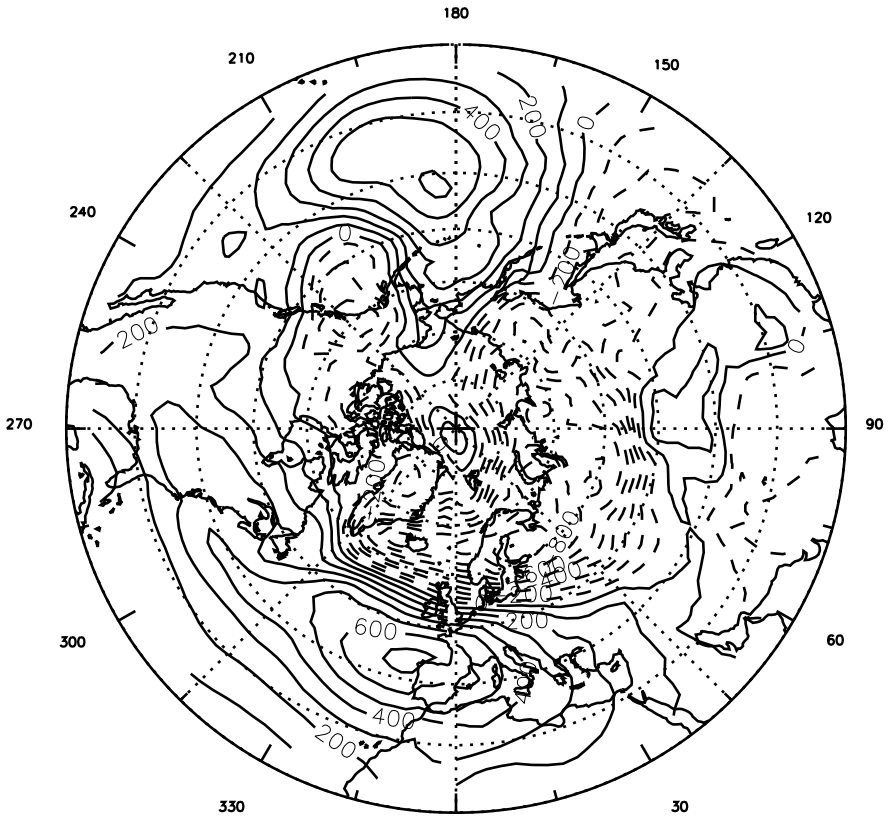

Jan Vrbar_e−Vrbar_w WACCM (m/s)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)


Jan Wrbar_e−Wrbar_w WACCM (cm/s)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

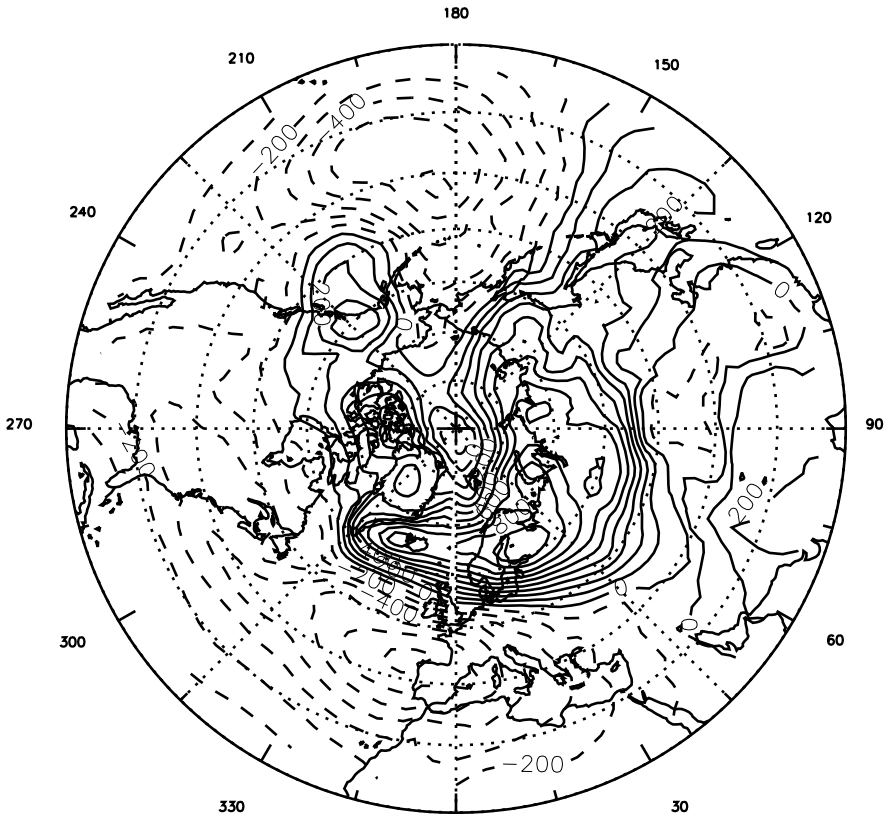

Jan Z and U(43hPa) Corr.
Pressure (hPa)
10^{-4}
10^{-2}
10^{0}
10^{2}
−50
0
50
Lat (deg)


Jan Z1 and U(43hPa) Corr.
Pressure (hPa)
10^{-4}
10^{-2}
10^{0}
10^{2}
−50
0
50
Lat (deg)

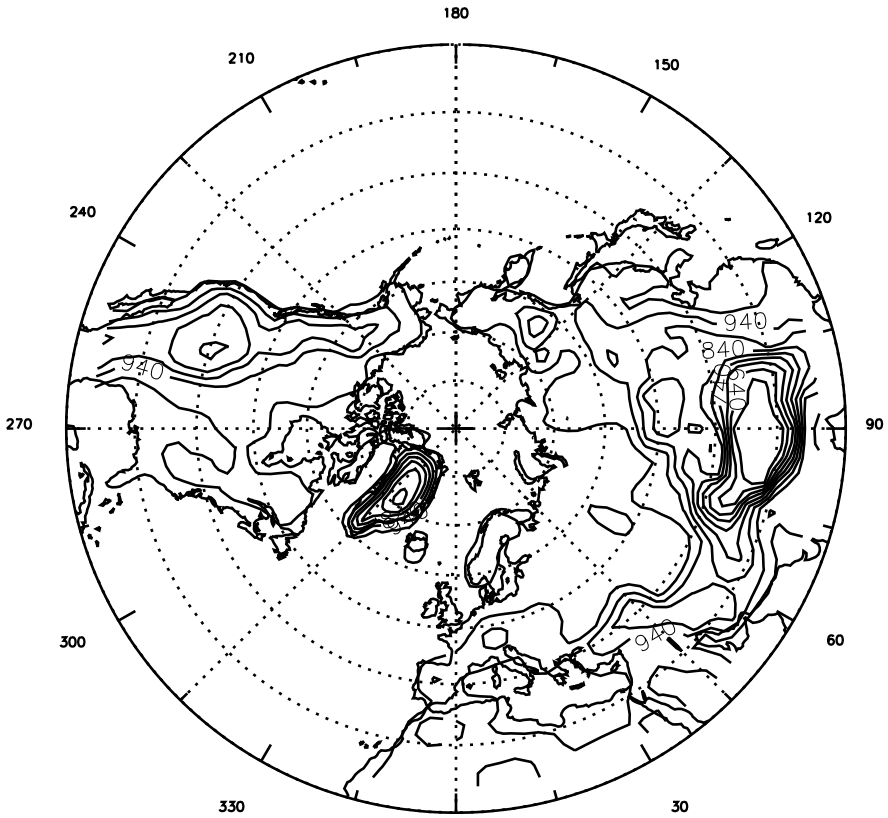

Jan Z2 and U(43hPa) Corr.
Pressure (hPa)
10^{-4}
10^{-2}
10^{0}
10^{2}
−50
0
50
Lat (deg)

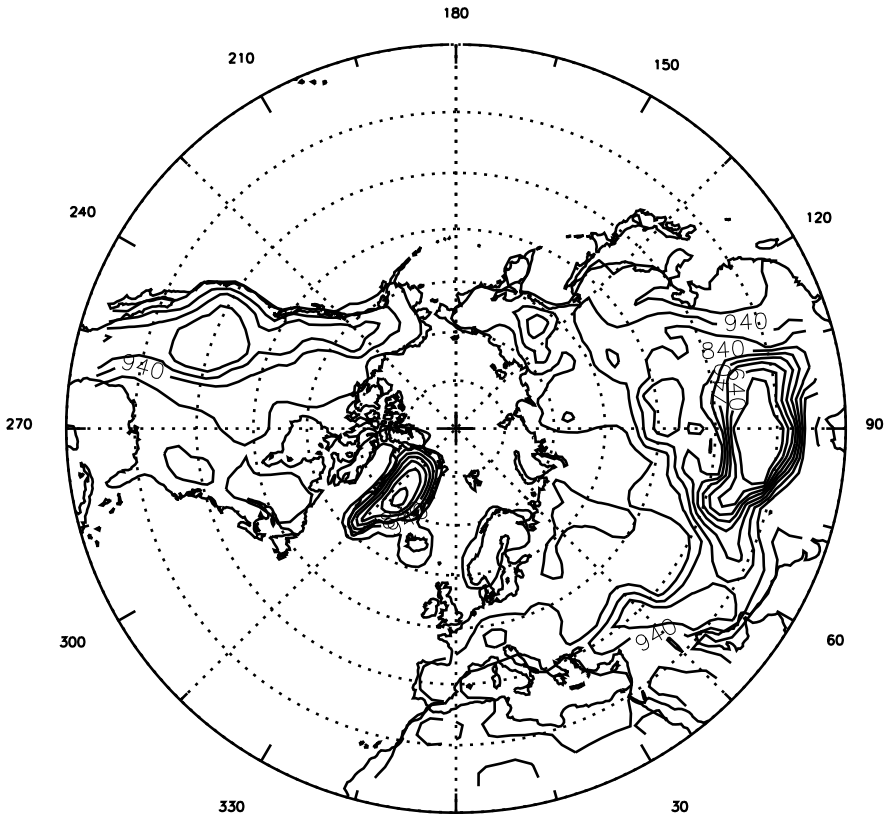


Jan PScomp_w−PScomp_e (Pa)

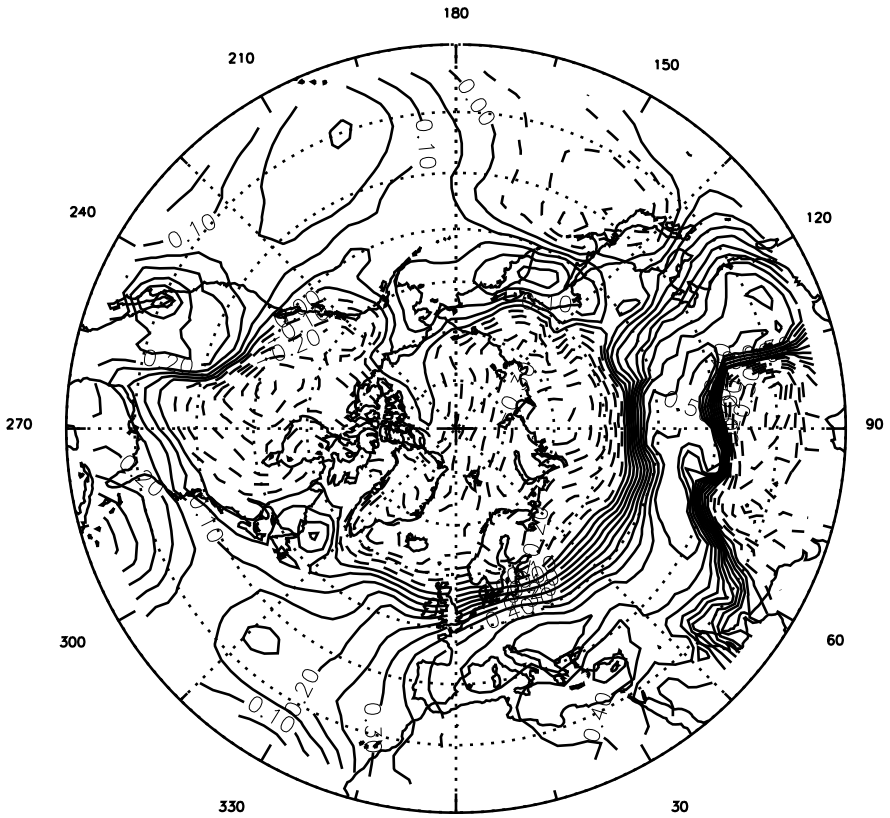


Jan PScomp_e−PScomp_w (Pa)

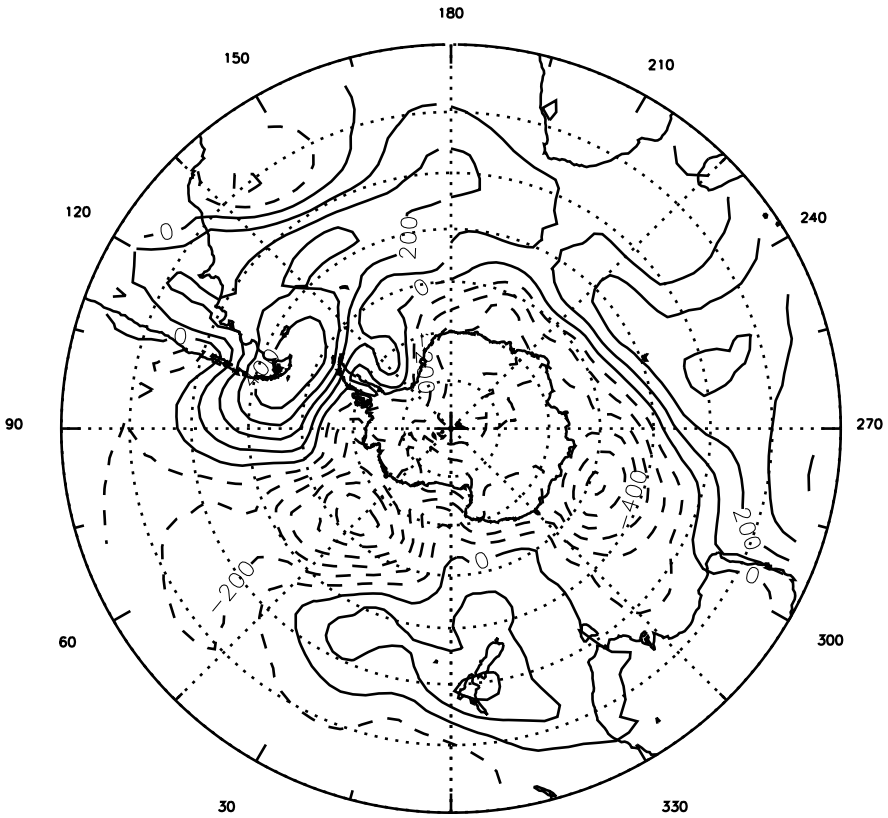

180
210
150
240
120
270
90
300
60
330
30
940
840
940
940
Longitude
Jan PScomp_e(hPa)



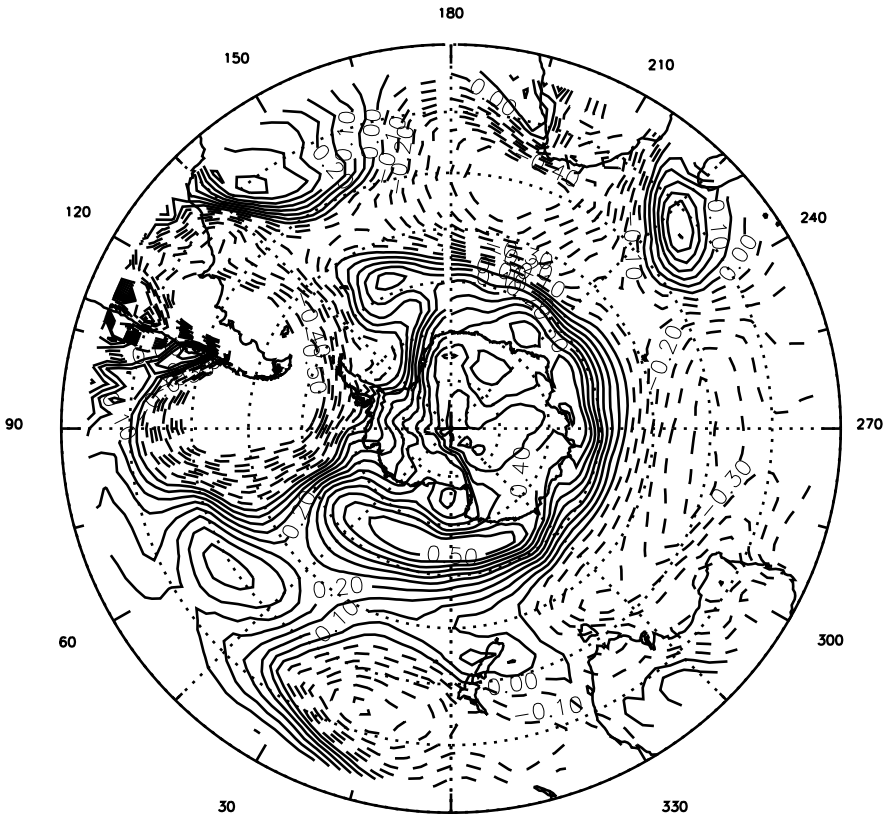
Jan PScomp_w(Pa)



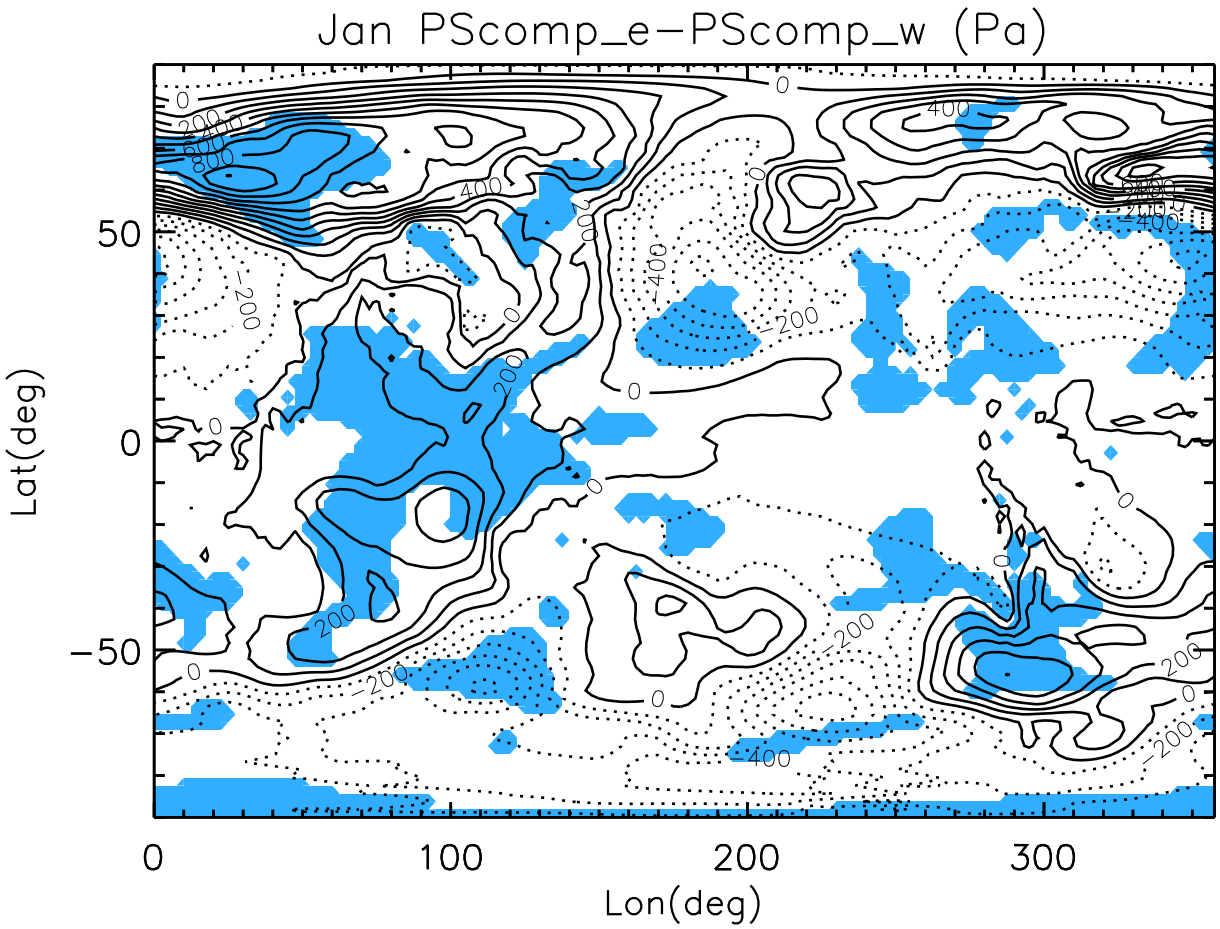
Jan PS and U(43hPa) Corr.

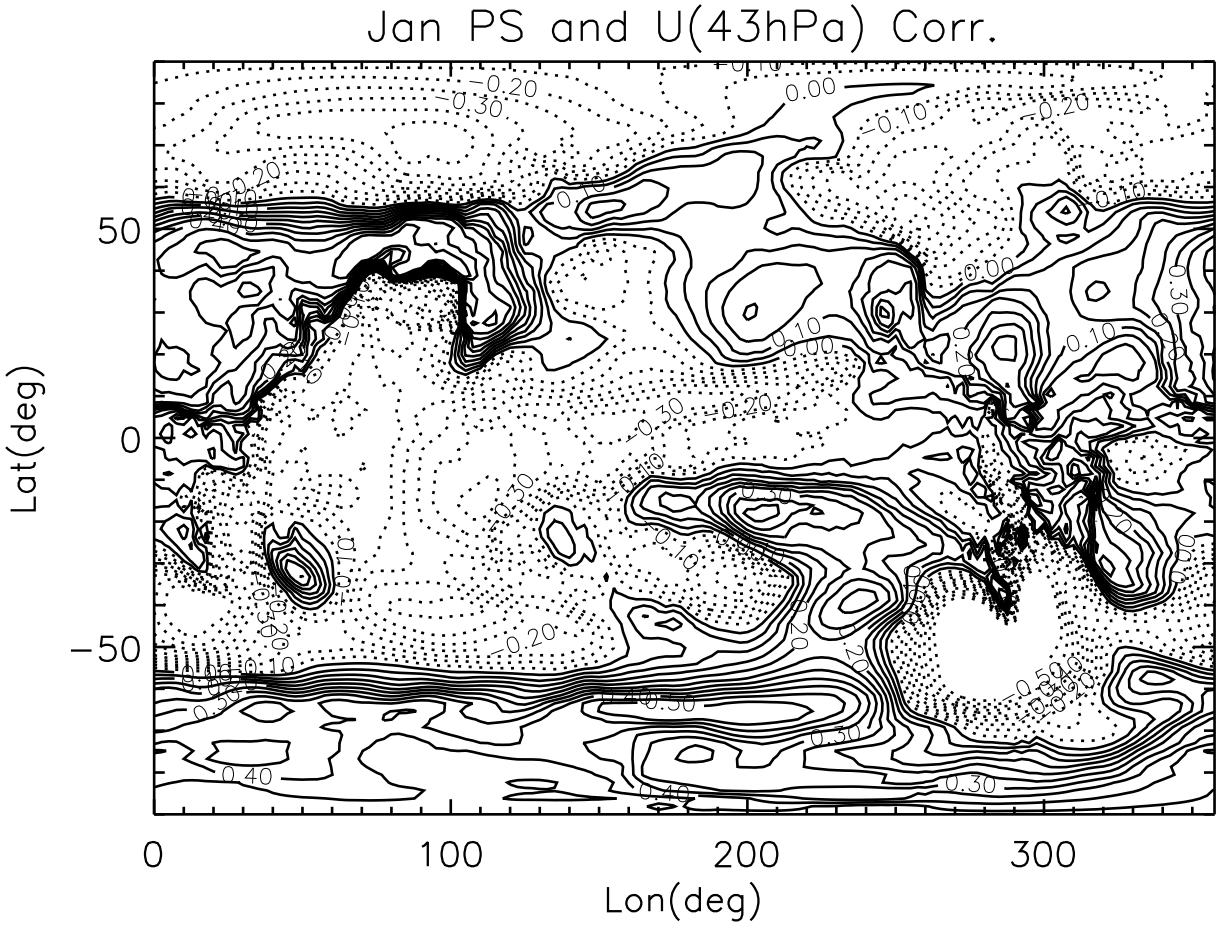


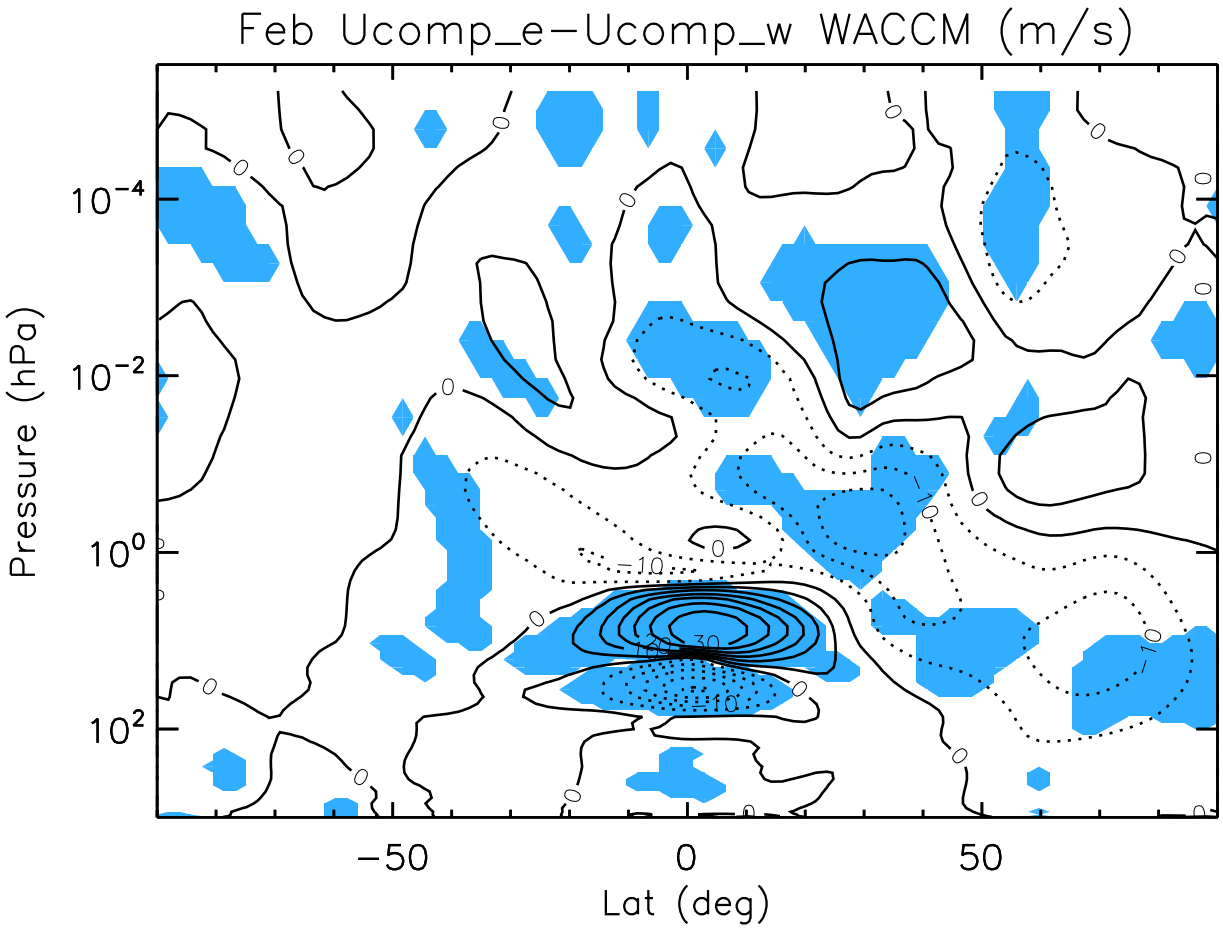
Jan PScomp_e−PScomp_w (Pa)

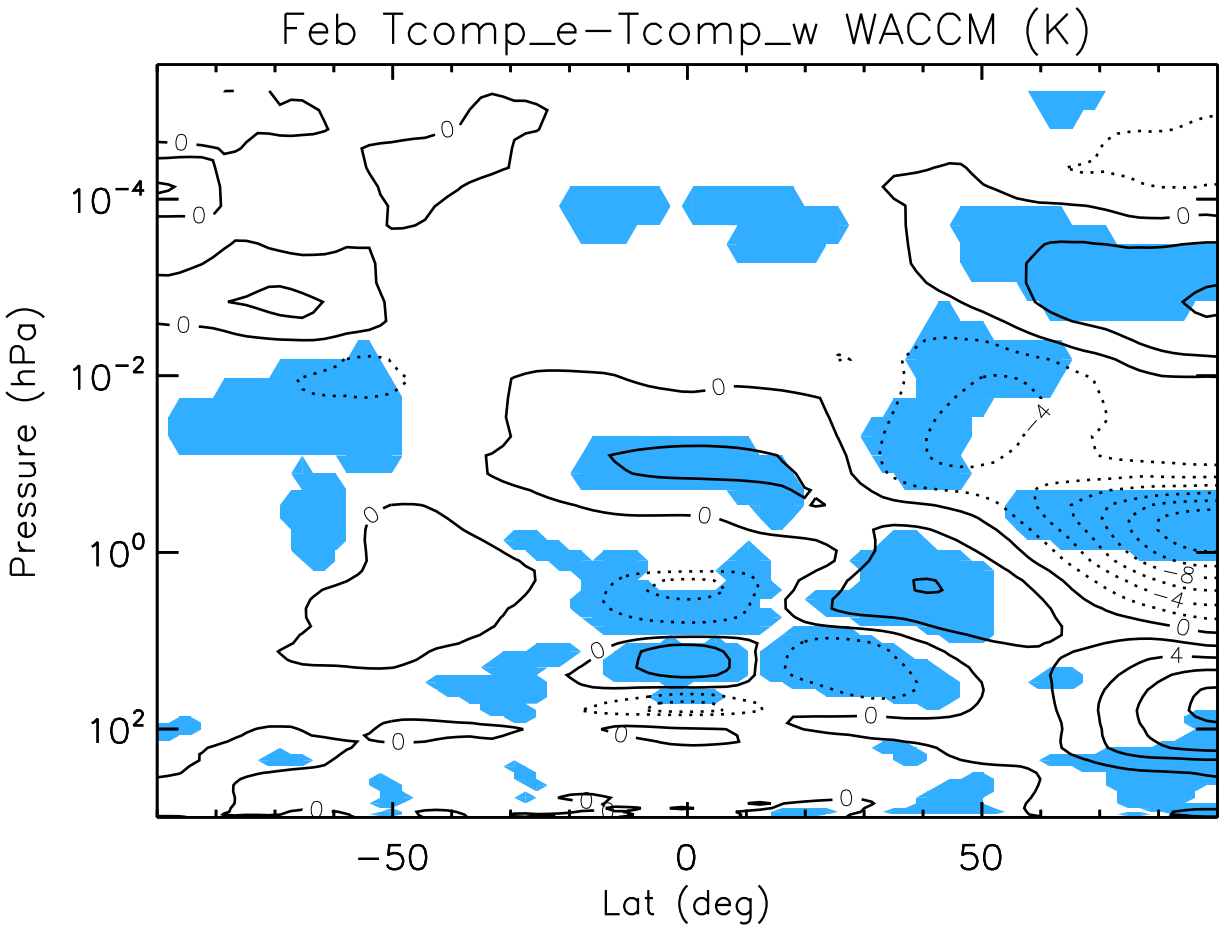


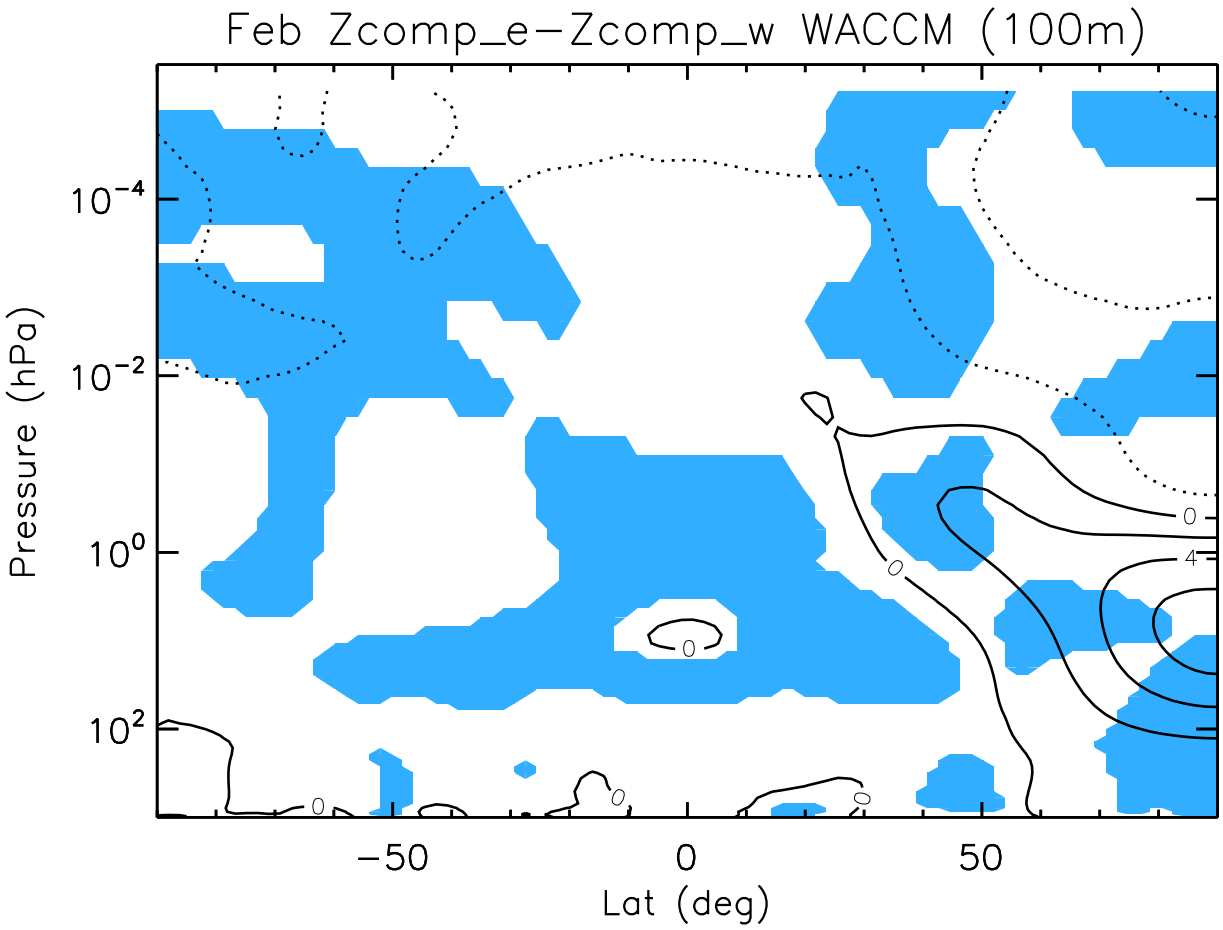
Jan PS and U(43hPa) Corr.

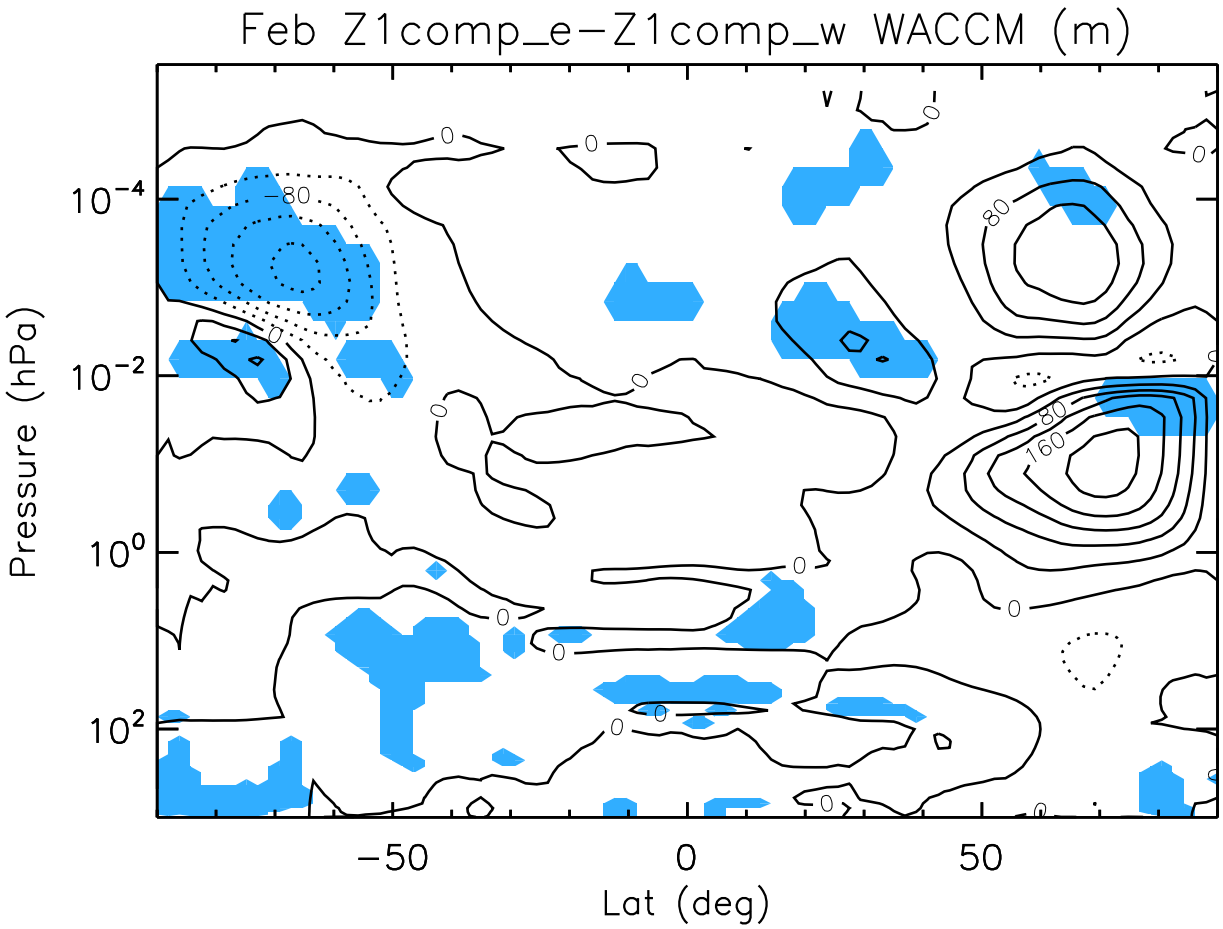

Jan PScomp_e−PScomp_w (Pa)
Lat(deg)
Lon(deg)
50
0
−50
0
100
200
300

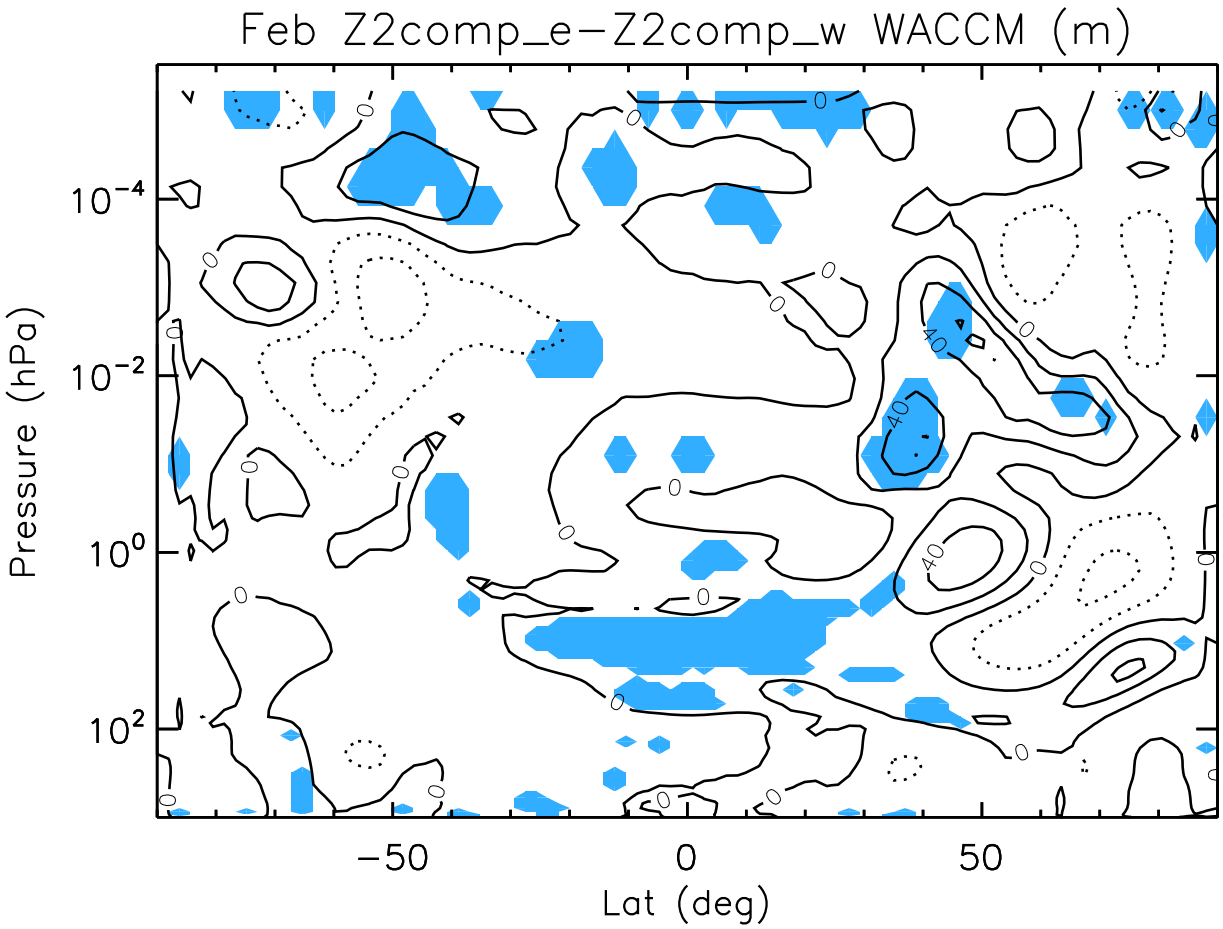

Jan PS and U(43hPa) Corr.
50
0
−50
Lat(deg)
0
100
200
300
Lon(deg)

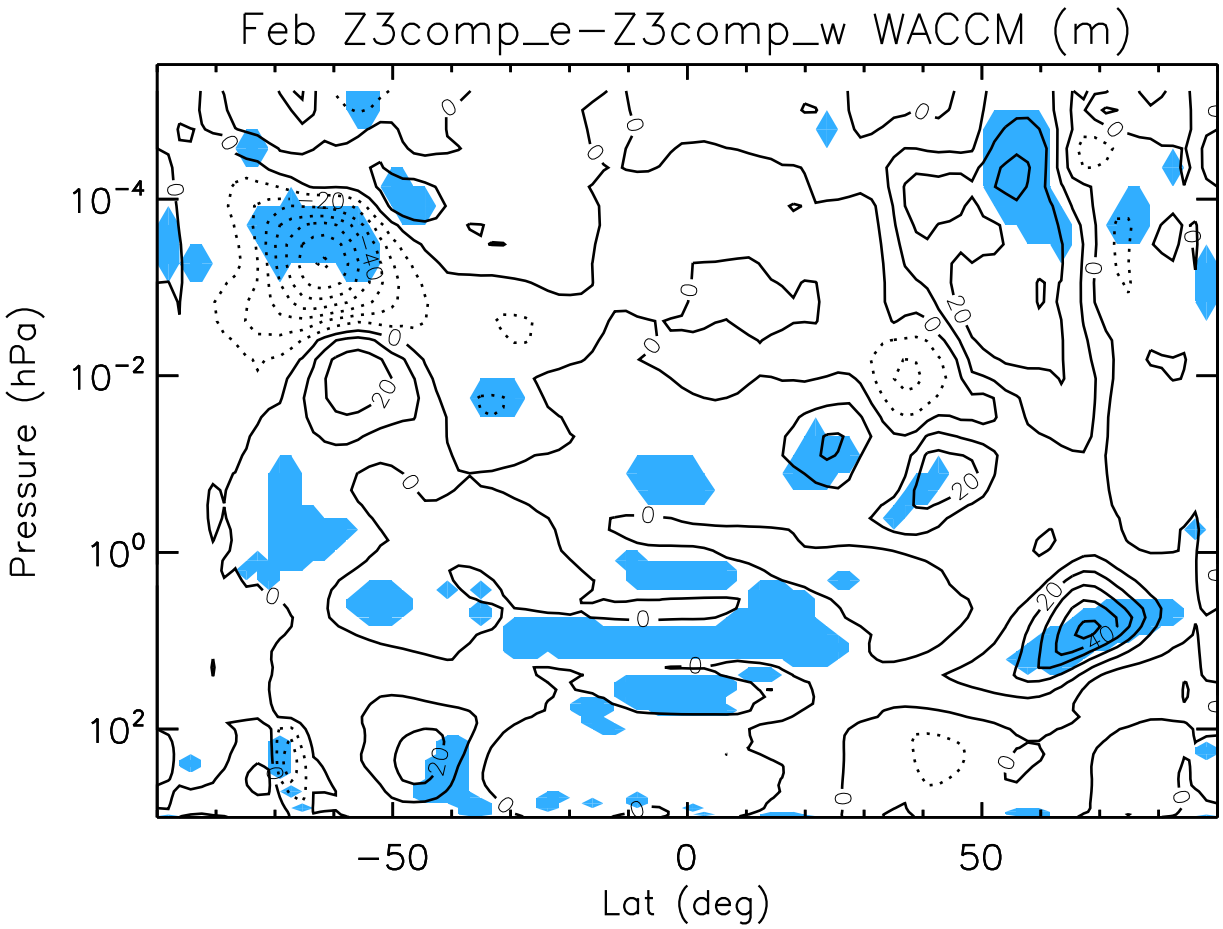

Feb Ucomp_e−Ucomp_w WACCM (m/s)
Pressure (hPa)
10^-4
10^-2
10^0
10^2
−50
0
50
Lat (deg)

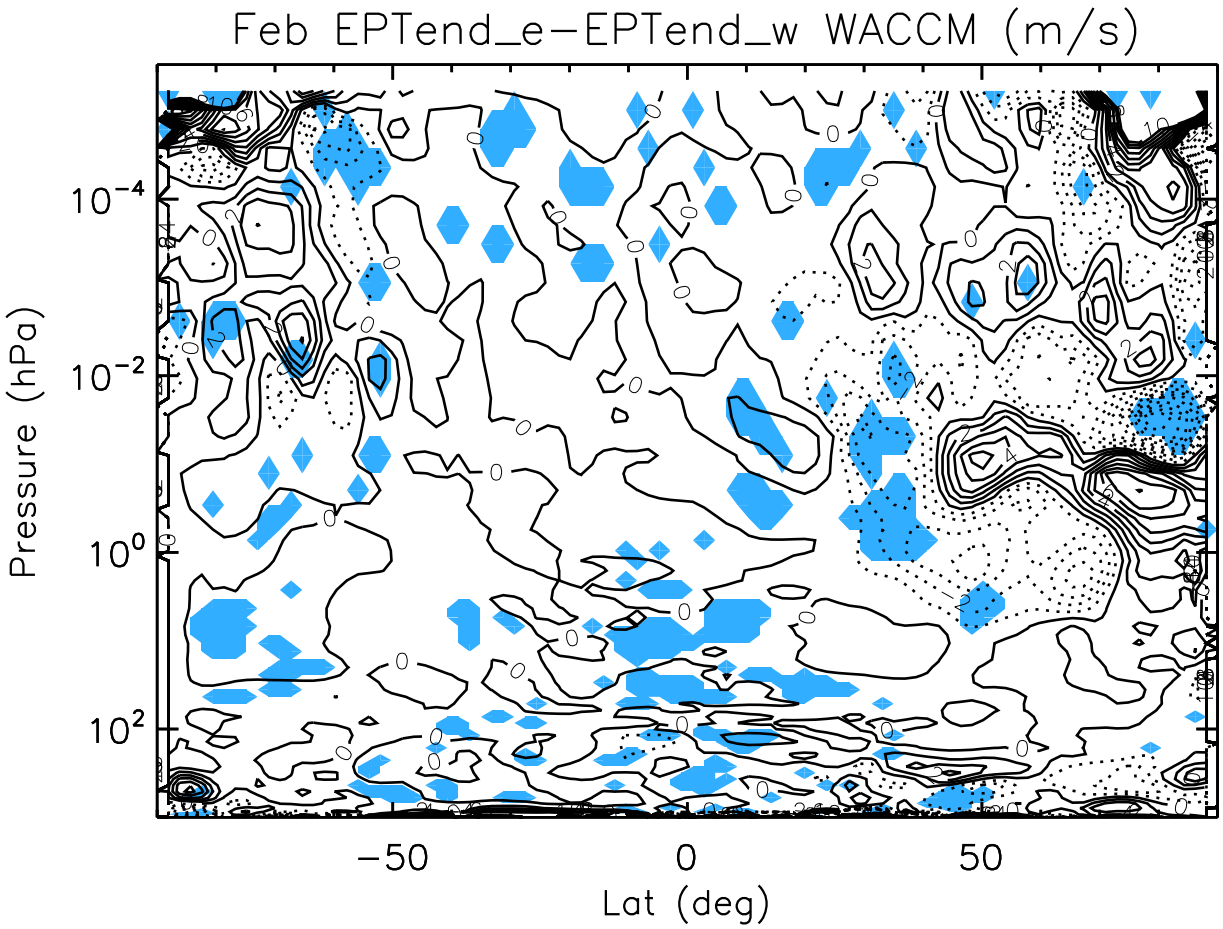

Feb Tcomp_e−Tcomp_w WACCM (K)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

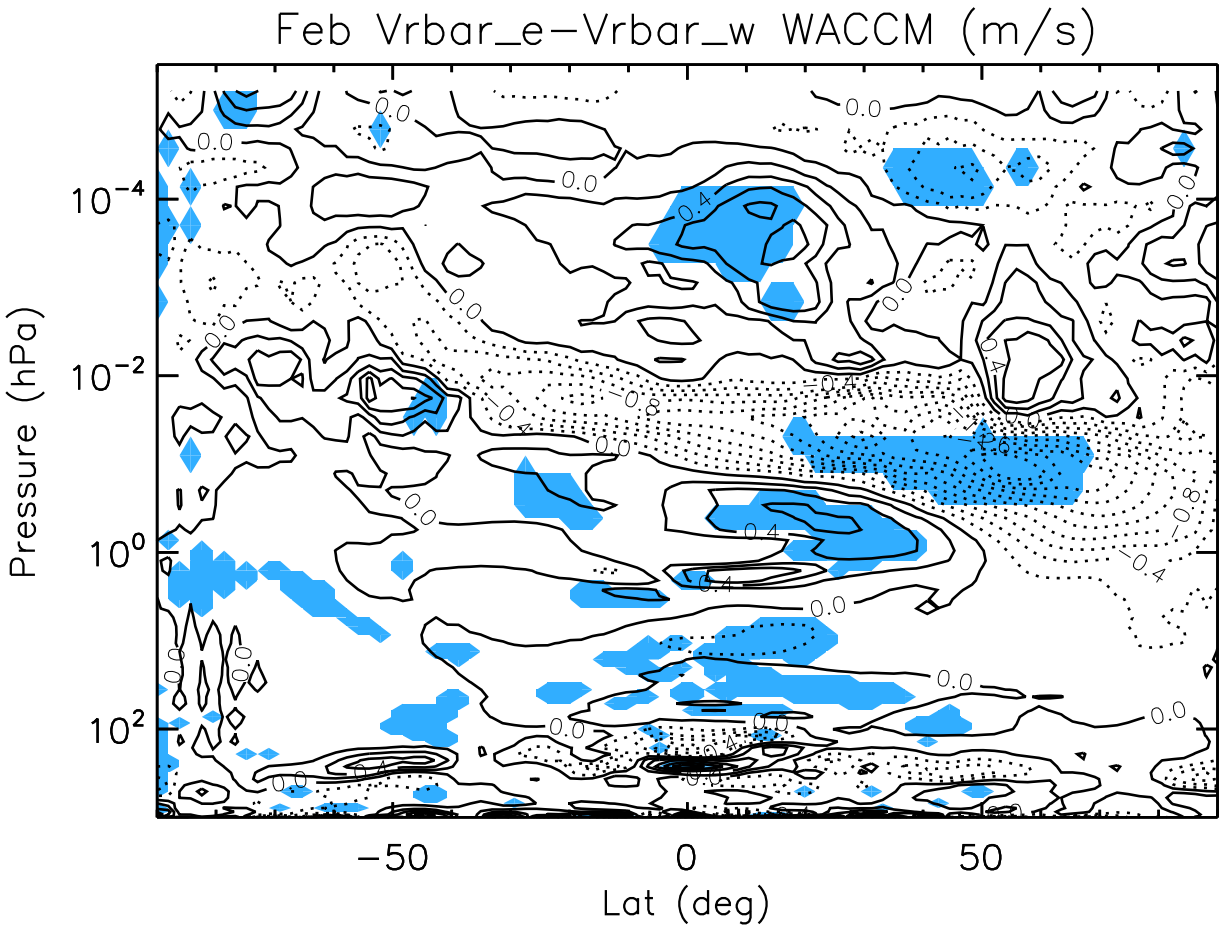

Feb Zcomp_e−Zcomp_w WACCM (100m)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)
0
0
0
0
0
4

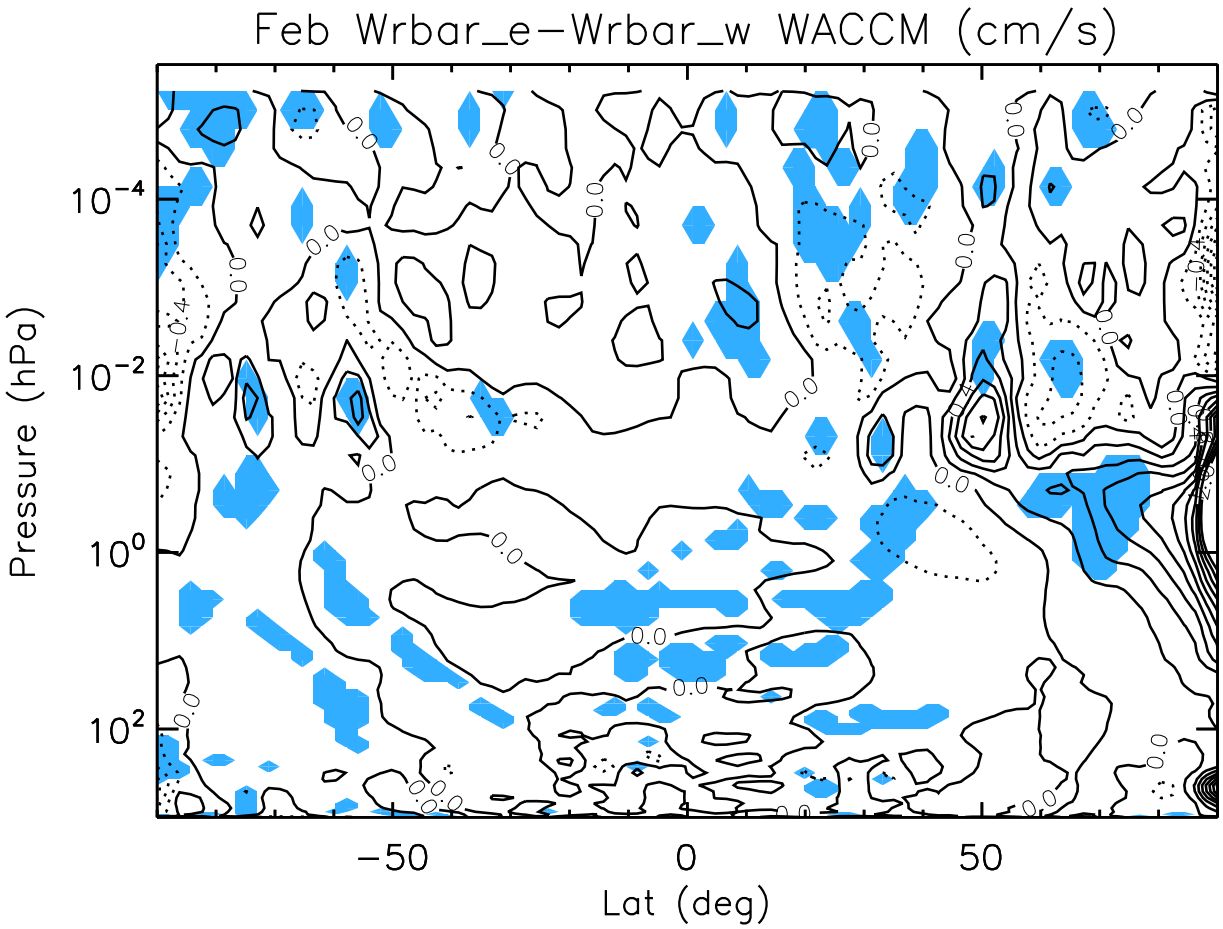

Feb Z1comp_e−Z1comp_w WACCM (m)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)
−80
0
80
160

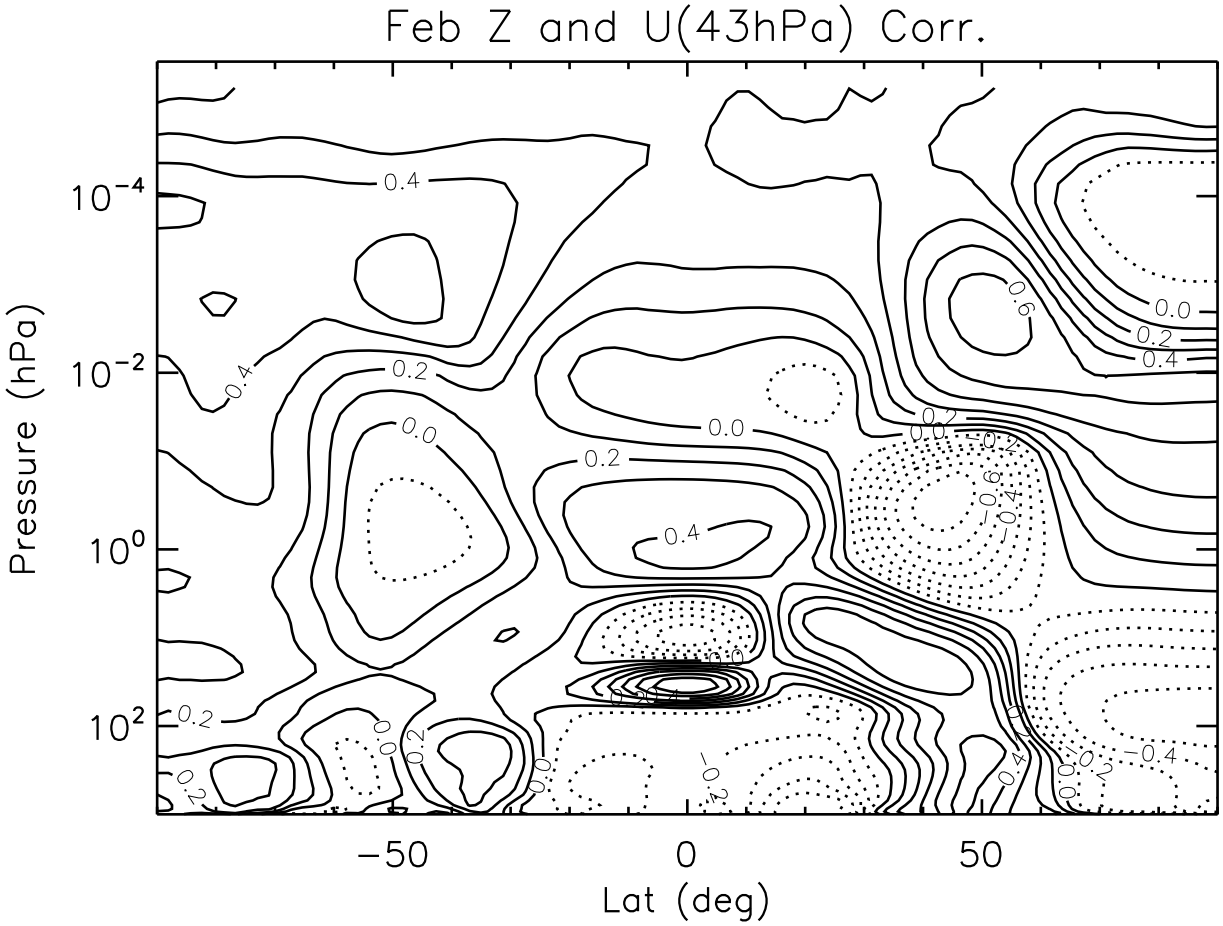

Feb Z2comp_e−Z2comp_w WACCM (m)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

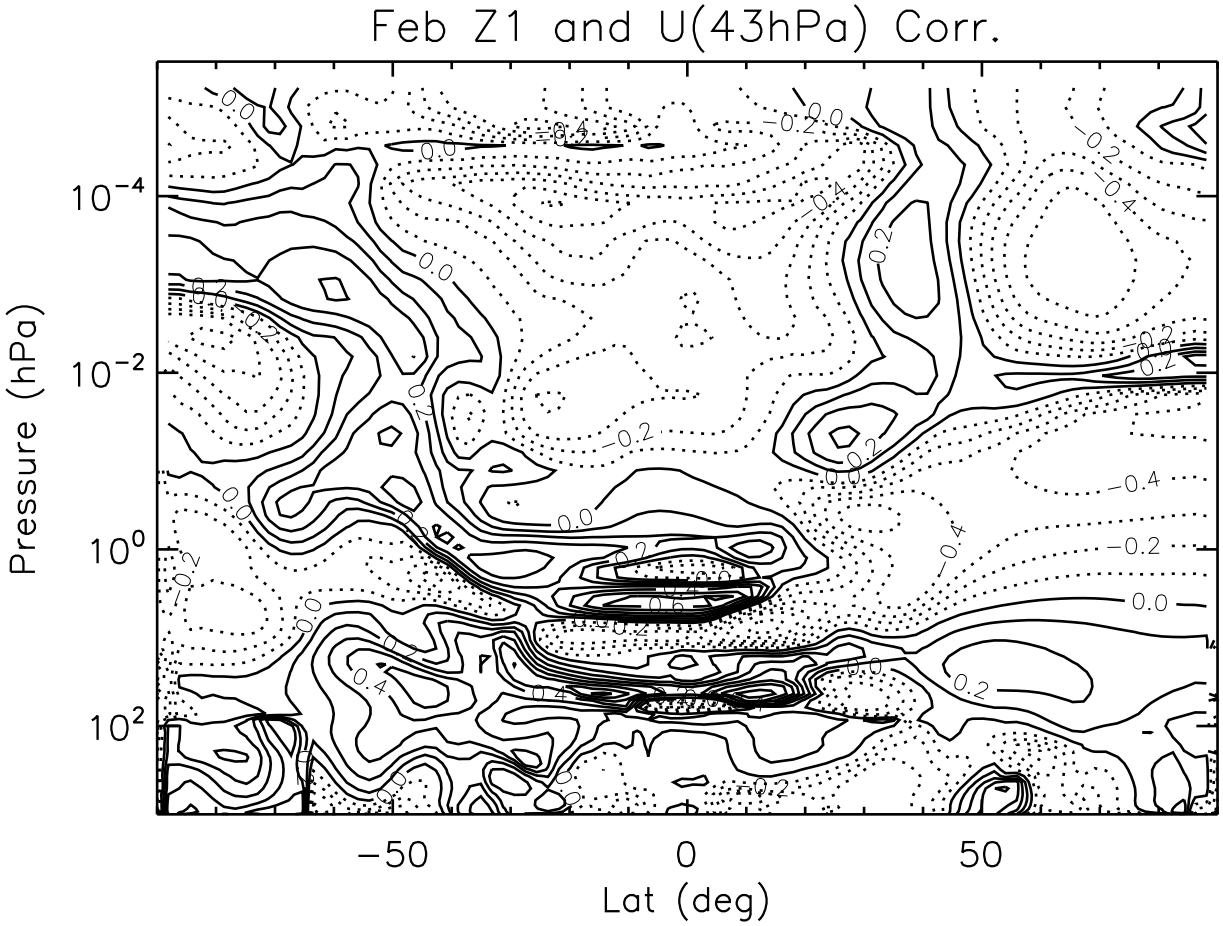

Feb Z3comp_e−Z3comp_w WACCM (m)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

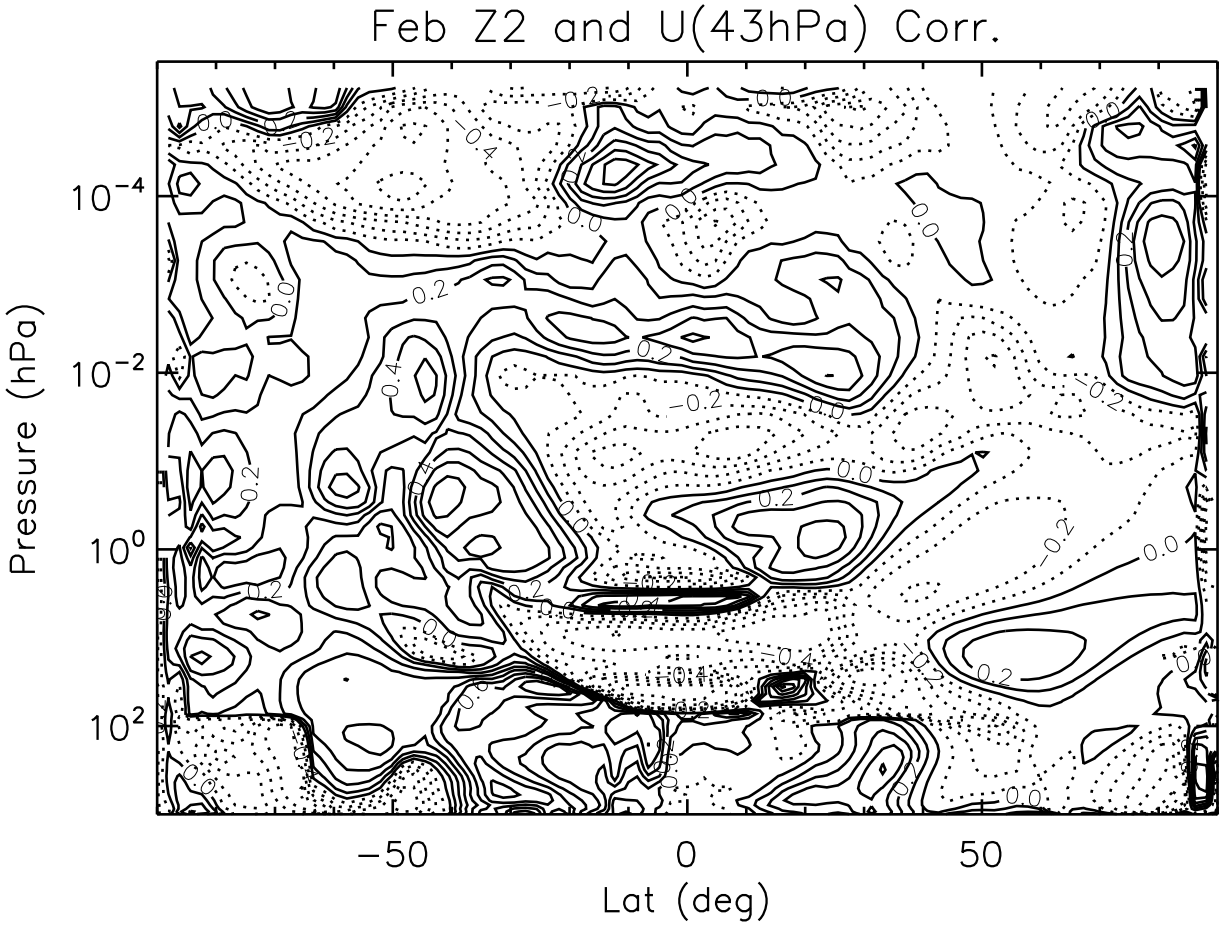

Feb EPTend_e−EPTend_w WACCM (m/s)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

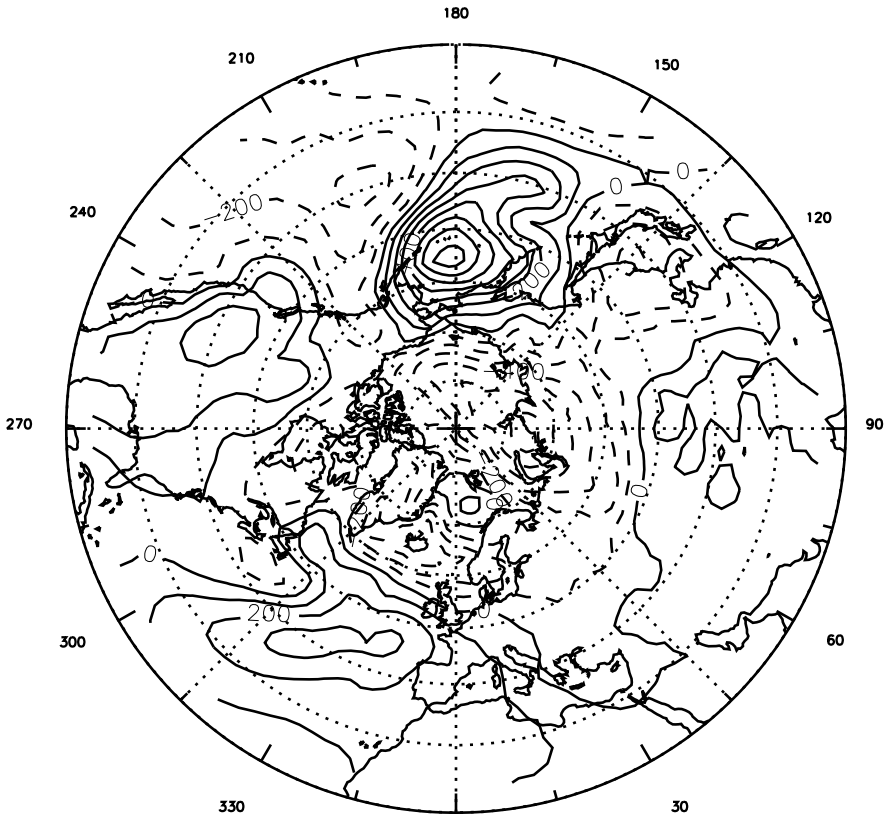

Feb Vrbar_e−Vrbar_w WACCM (m/s)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)


Feb Wrbar_e−Wrbar_w WACCM (cm/s)
Pressure (hPa)
10⁻⁴
10⁻²
10⁰
10²
−50
0
50
Lat (deg)

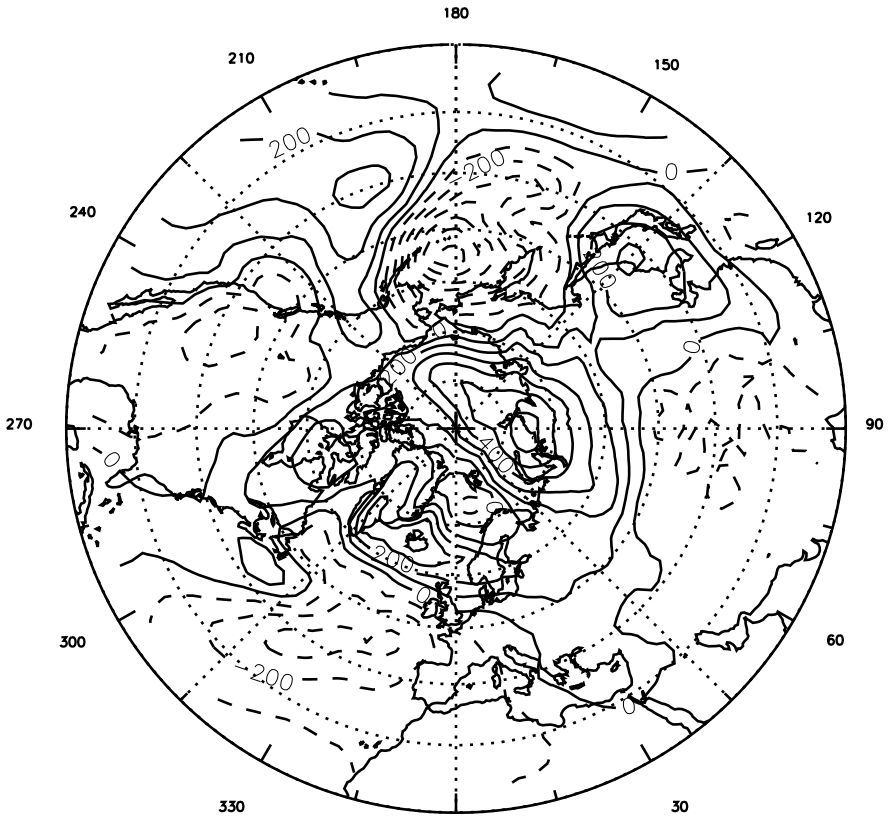

Feb Z and U(43hPa) Corr.
Pressure (hPa)
10^{-4}
10^{-2}
10^{0}
10^{2}
−50
0
50
Lat (deg)


Feb Z1 and U(43hPa) Corr.
Pressure (hPa)
10^{-4}
10^{-2}
10^{0}
10^{2}
−50
0
50
Lat (deg)

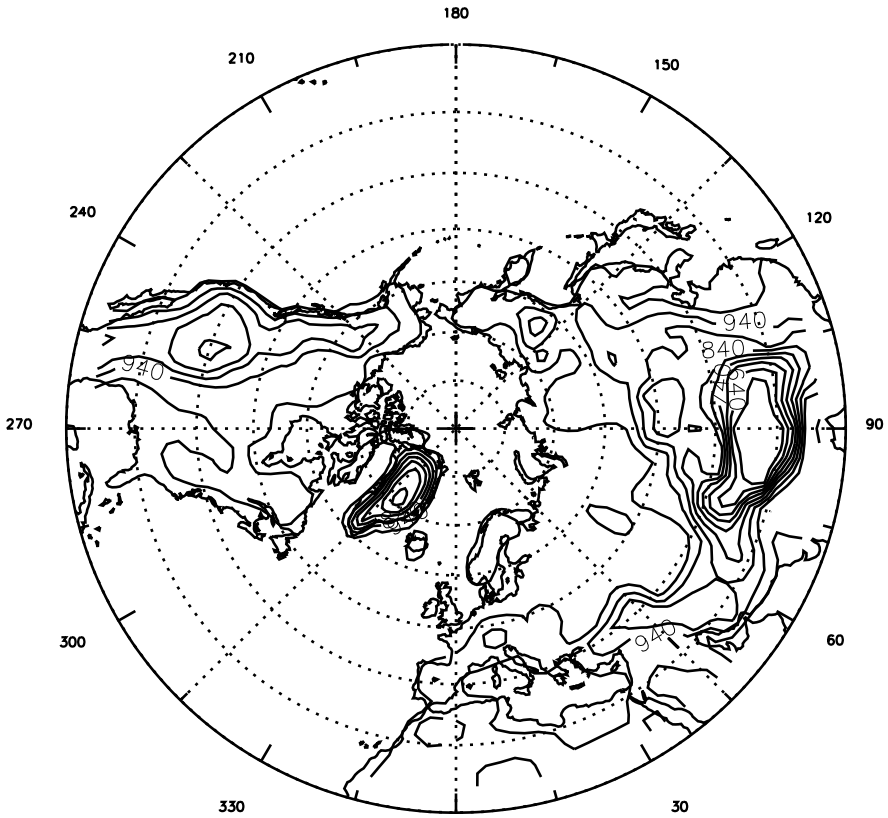

Feb Z2 and U(43hPa) Corr.
Pressure (hPa)
10^{-4}
10^{-2}
10^{0}
10^{2}
−50
0
50
Lat (deg)



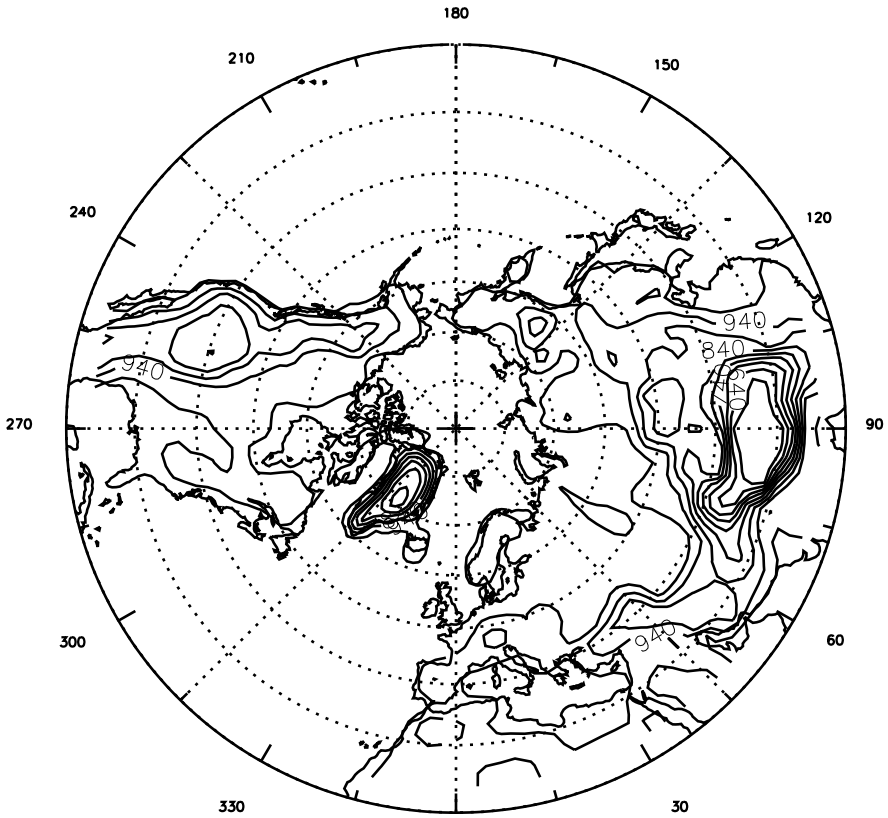
Feb PScomp_w−PScomp_e (Pa)



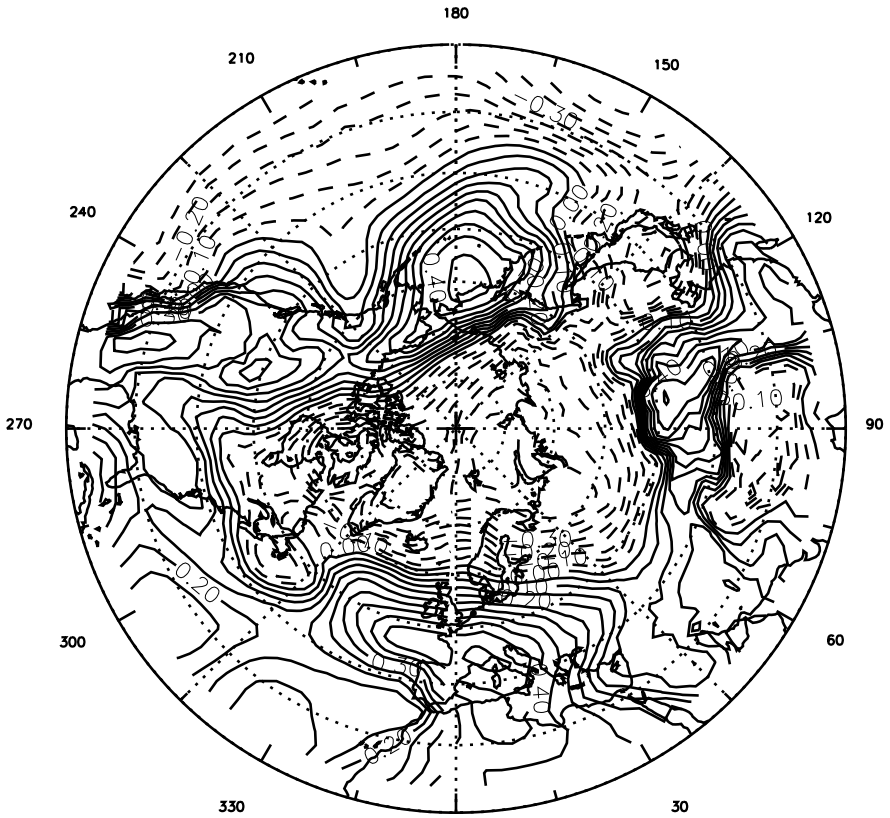
Feb PScomp_e−PScomp_w (Pa)



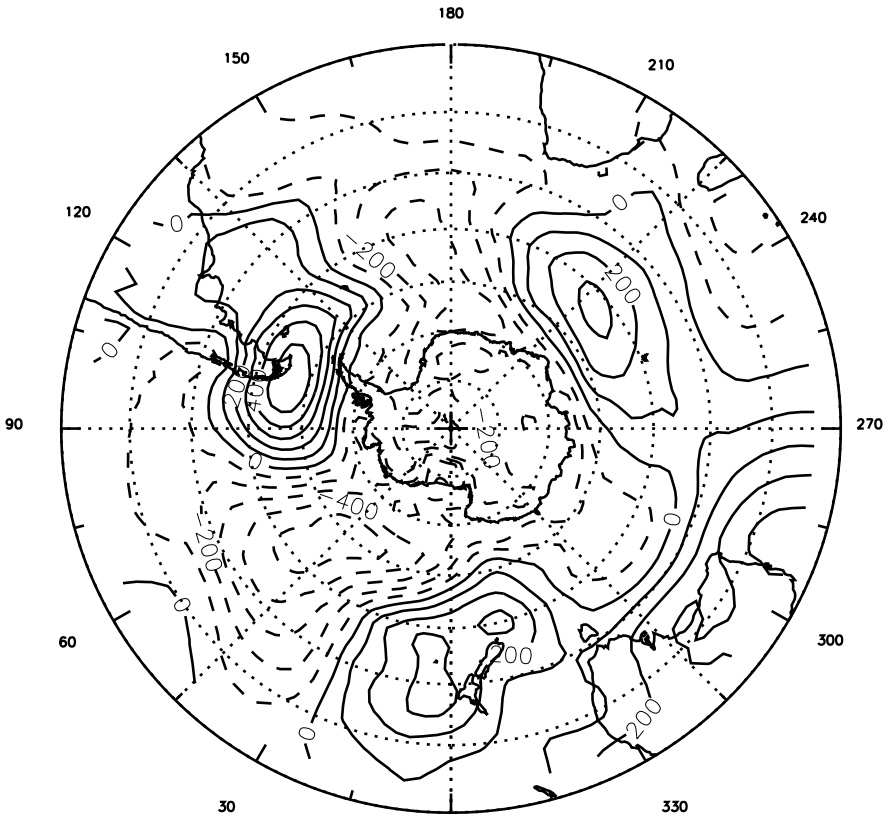
Feb PScomp_e(hPa)

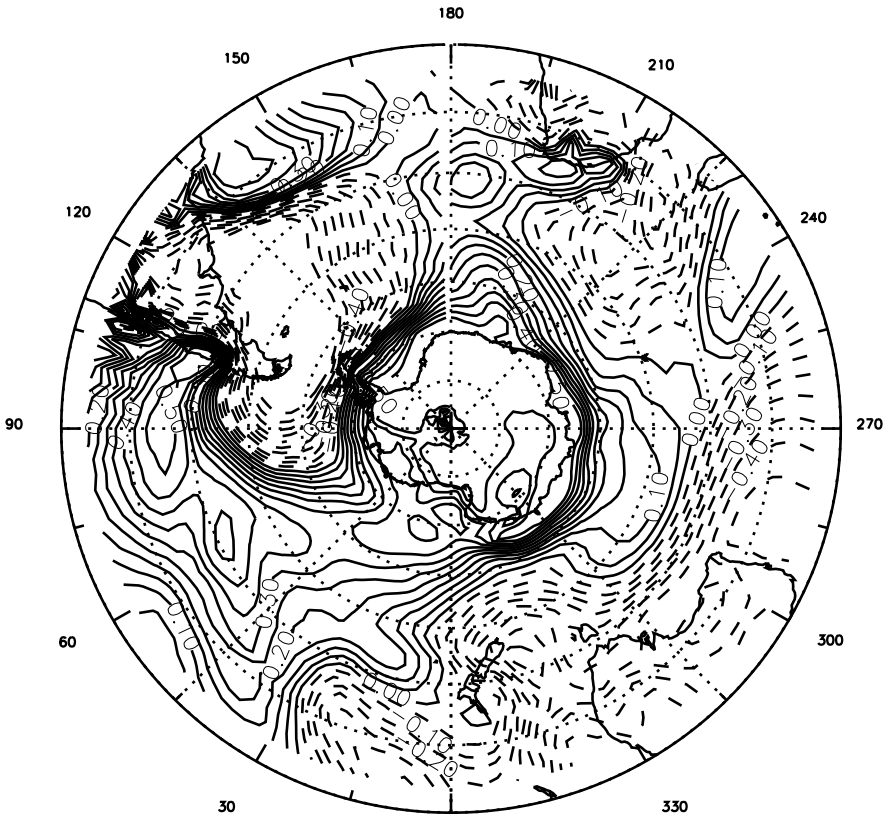


Feb PScomp_w(Pa)

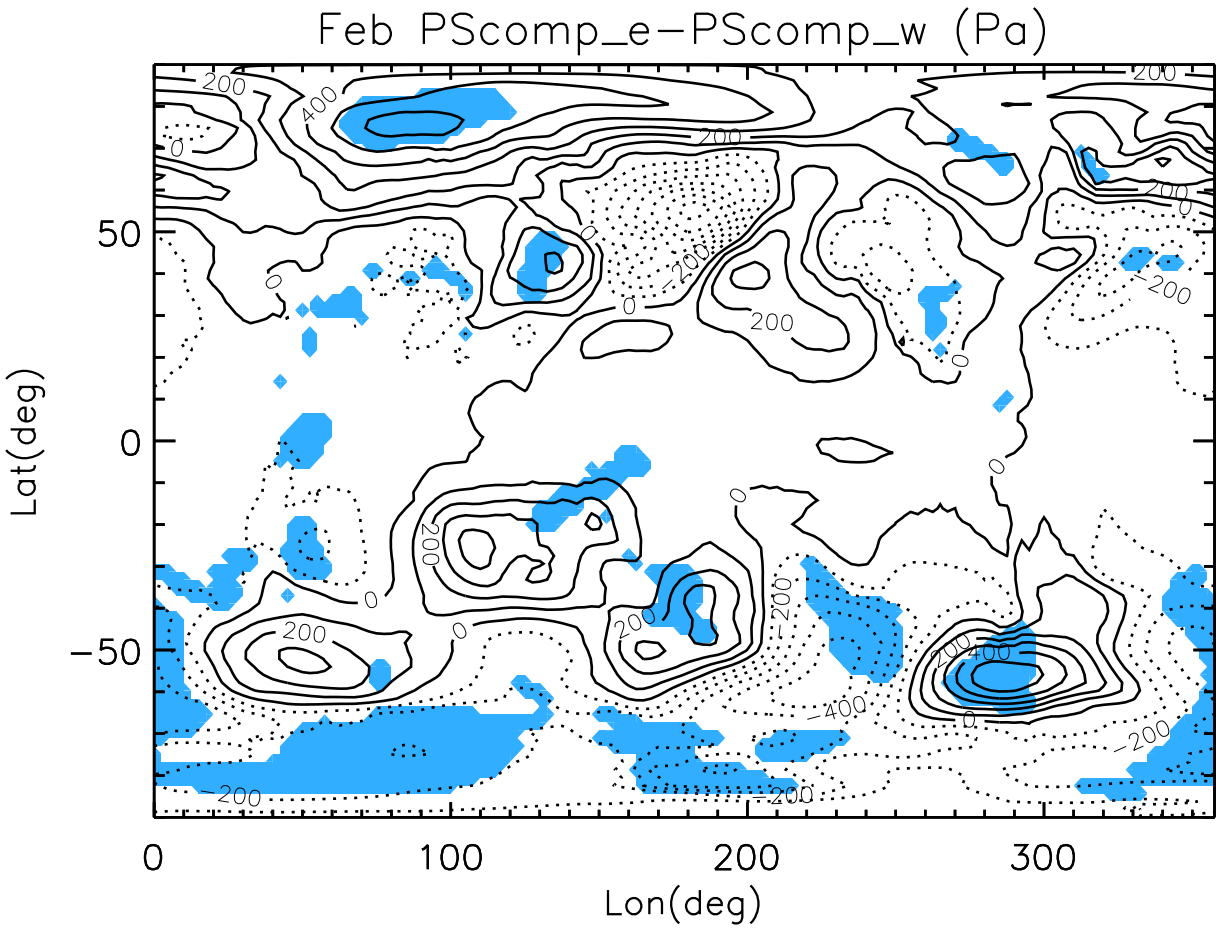


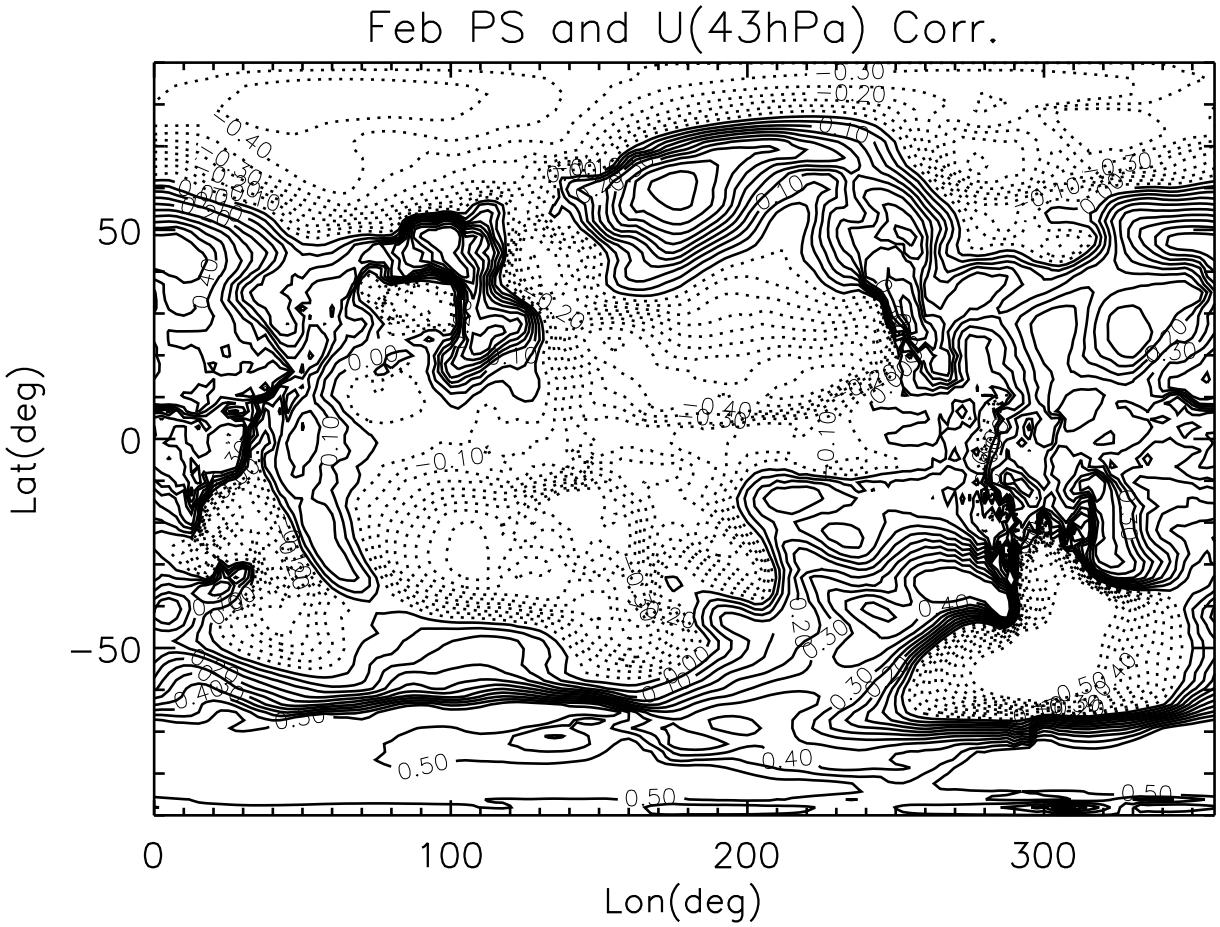
Feb PS and U(43hPa) Corr.


180
150
210
120
240
90
270
60
300
30
330
Longitude
0
-200
0
200
400
-200
0
200
-200
0
200
0
200
0
-200
0
200
0
200
0
-200
0
200
0
200
0



Feb PS and U(43hPa) Corr.


Feb PScomp_e−PScomp_w (Pa)
Lat(deg)
Lon(deg)
50
0
−50
0
100
200
300
200
400
0
−200
−400


Feb PS and U(43hPa) Corr.
Lat(deg)
Lon(deg)
50
0
−50
0
100
200
300