Figure 1.

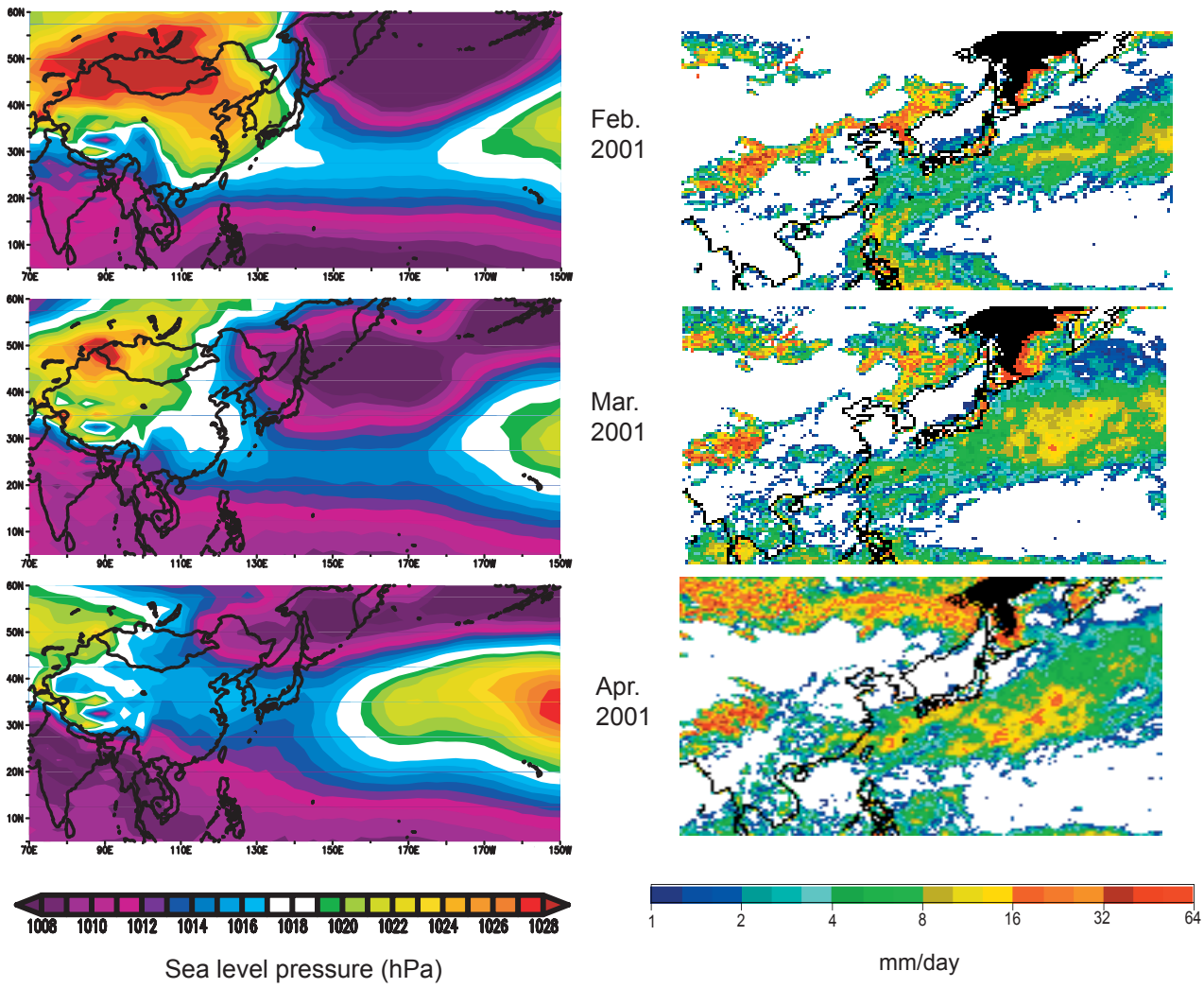

Feb.
2001
Mar.
2001
Apr.
2001
1008 1010 1012 1014 1016 1018 1020 1022 1024 1026 1028
Sea level pressure (hPa)
1 2 4 8 16 32 64
mm/day

Figure 2.

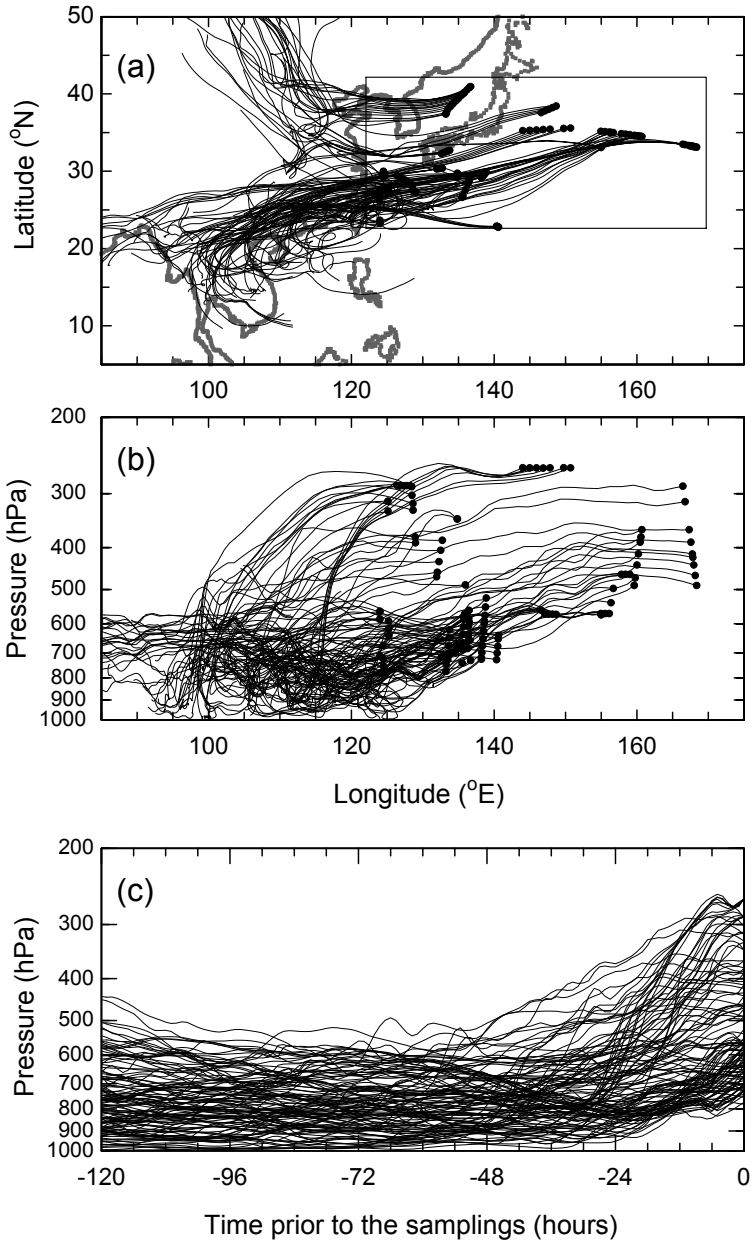

(a)
Latitude (°N)
50
40
30
20
10
100
120
140
160
(b)
Pressure (hPa)
200
300
400
500
600
700
800
900
1000
100
120
140
160
Longitude (°E)
(c)
Pressure (hPa)
200
300
400
500
600
700
800
900
1000
-120
-96
-72
-48
-24
0
Time prior to the samplings (hours)

Figure 3.

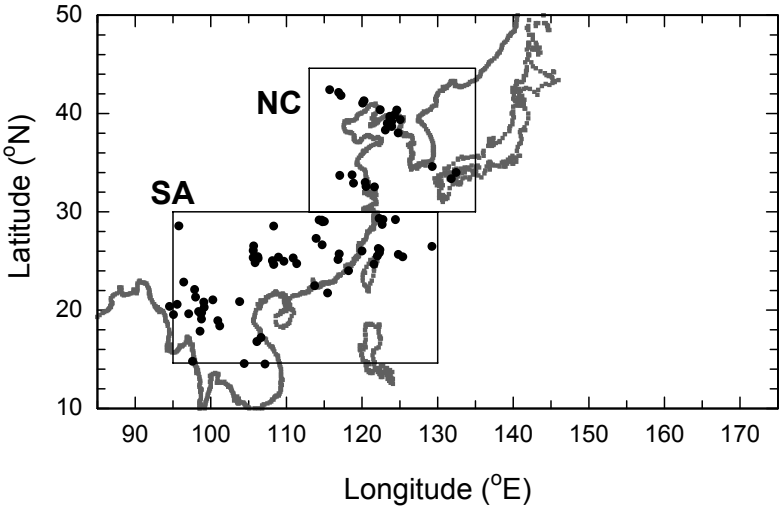

NC
SA
Latitude (°N)
Longitude (°E)
50
40
30
20
10
90
100
110
120
130
140
150
160
170

Figure 4.

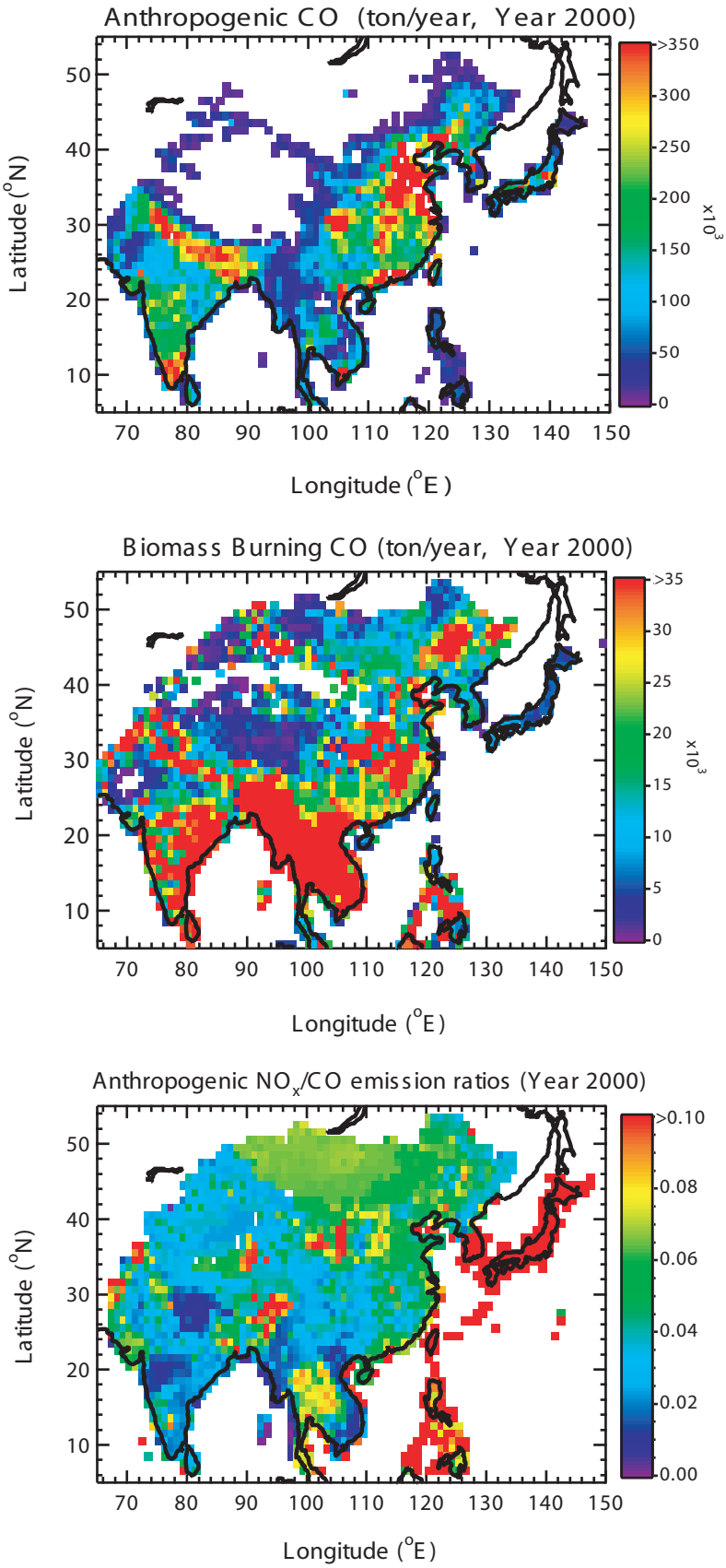

Anthropogenic CO (ton/year, Year 2000)
Latitude (°N)
Longitude (°E)
>350
300
250
200
150
100
50
0
x10^3
Biomass Burning CO (ton/year, Year 2000)
Latitude (°N)
Longitude (°E)
>35
30
25
20
15
10
5
0
x10^3
Anthropogenic NOx/CO emission ratios (Year 2000)
Latitude (°N)
Longitude (°E)
>0.10
0.08
0.06
0.04
0.02
0.00

Figure 5.

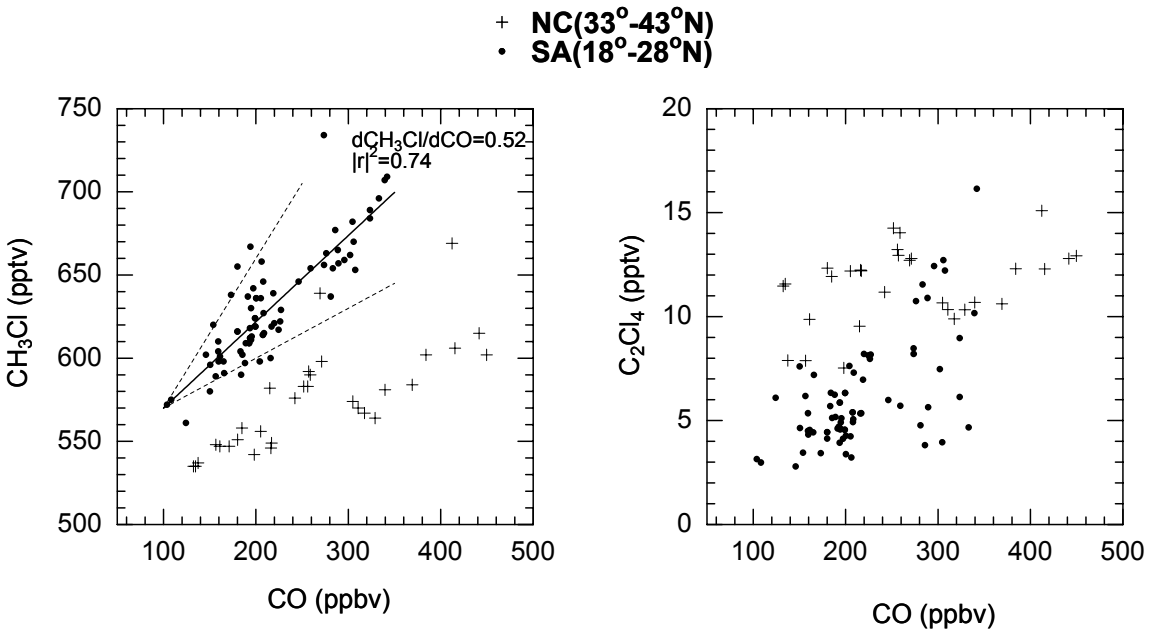

+ NC(33°-43°N)
• SA(18°-28°N)
dCH3Cl/dCO=0.52
|r|2=0.74
CH3Cl (pptv)
CO (ppbv)
C2Cl4 (pptv)
CO (ppbv)

Figure 6.

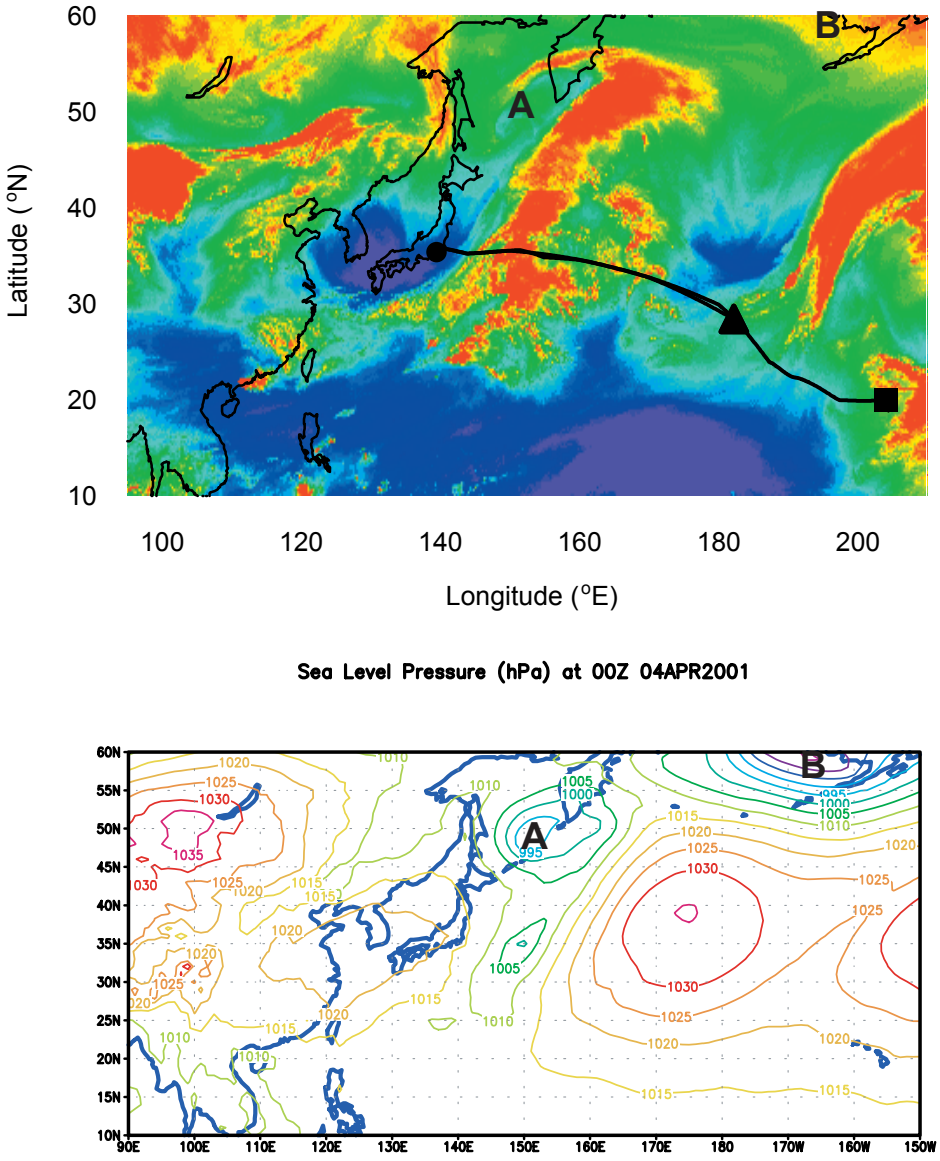

60
50
40
30
20
10
Latitude (°N)
100
120
140
160
180
200
Longitude (°E)
A
B
Sea Level Pressure (hPa) at 00Z 04APR2001
60N
55N
50N
45N
40N
35N
30N
25N
20N
15N
10N
90E
100E
110E
120E
130E
140E
150E
160E
170E
180
170W
160W
150W
A
B

Figure 7.

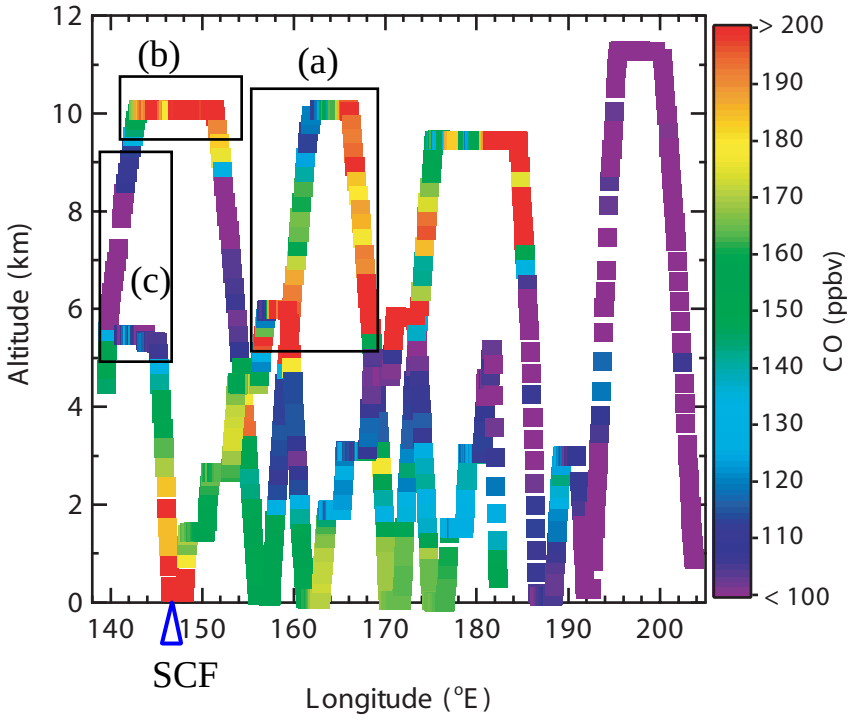

(a)
(b)
(c)
Altitude (km)
Longitude (°E)
SCF
CO (ppbv)
> 200
190
180
170
160
150
140
130
120
110
< 100
0
2
4
6
8
10
12
140
150
160
170
180
190
200

Figure 8.

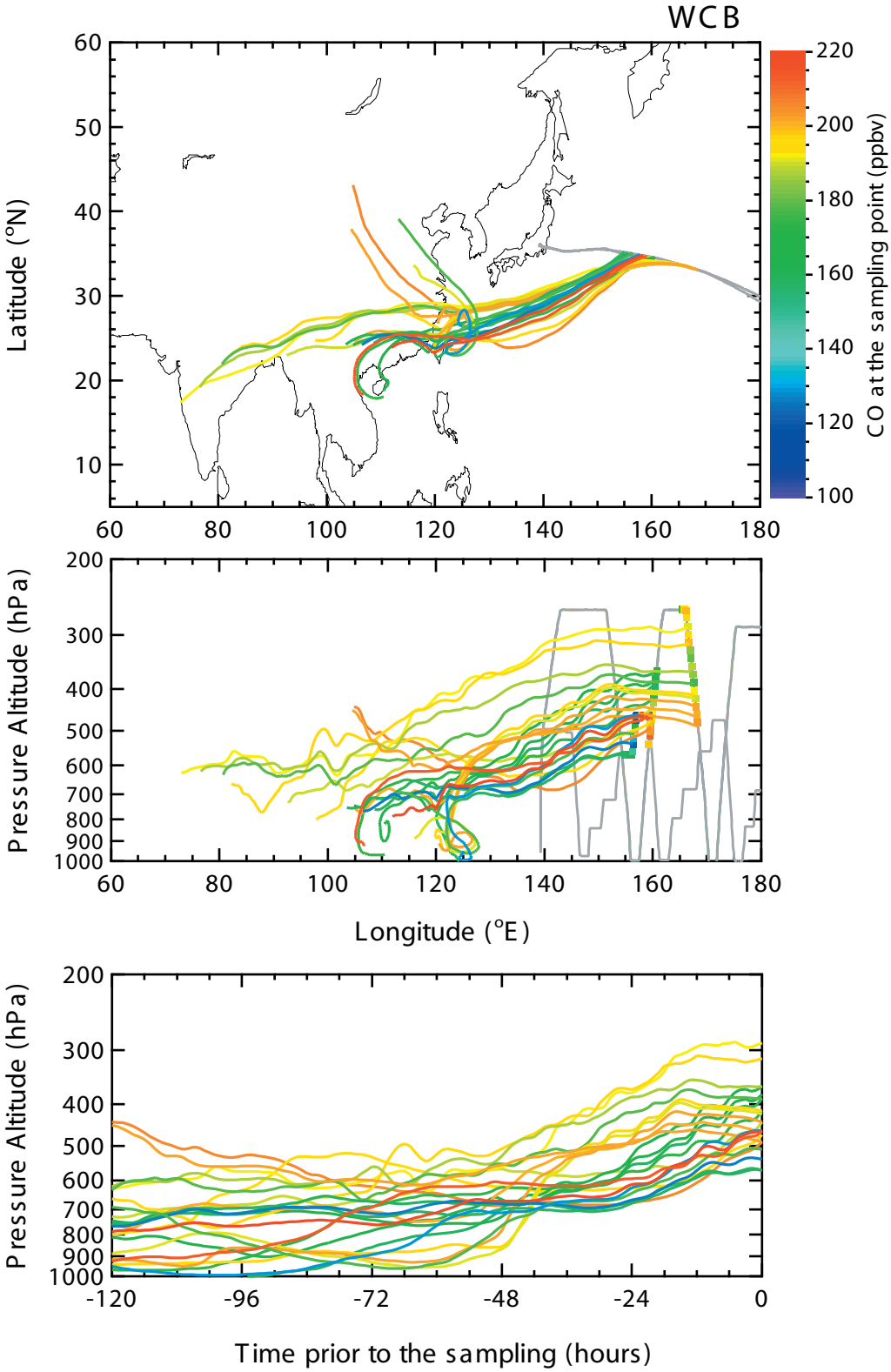

WCB
Latitude (°N)
60
50
40
30
20
10
60
80
100
120
140
160
180
220
200
180
160
140
120
100
CO at the sampling point (ppbv)
Pressure Altitude (hPa)
200
300
400
500
600
700
800
900
1000
Longitude (°E)
Time prior to the sampling (hours)
-120
-96
-72
-48
-24
0

Figure 9.

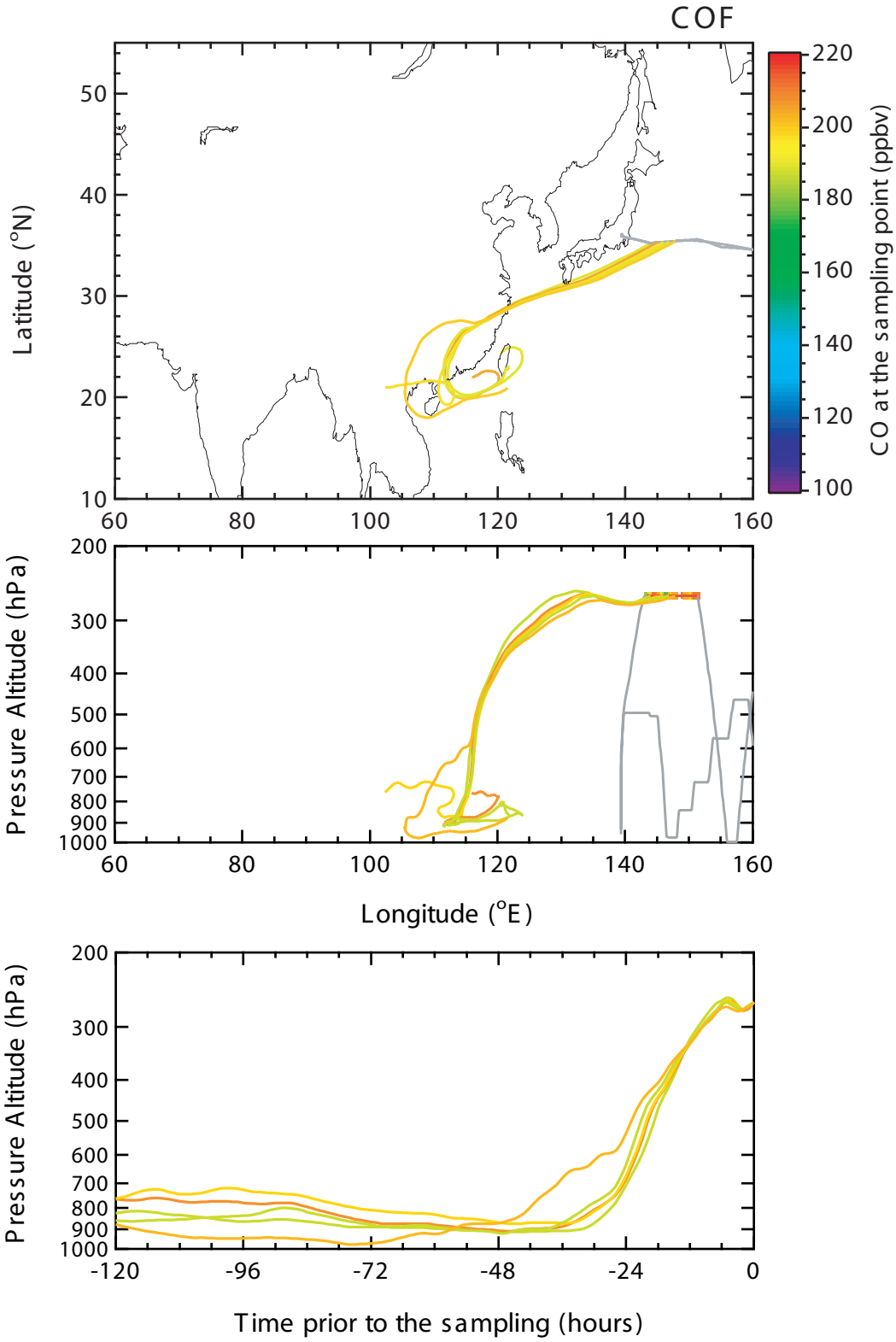

COF
Latitude (°N)
50
40
30
20
10
60
80
100
120
140
160
220
200
180
160
140
120
100
CO at the sampling point (ppbv)
Pressure Altitude (hPa)
200
300
400
500
600
700
800
900
1000
Longitude (°E)
-120
-96
-72
-48
-24
0
Time prior to the sampling (hours)

Figure 10.

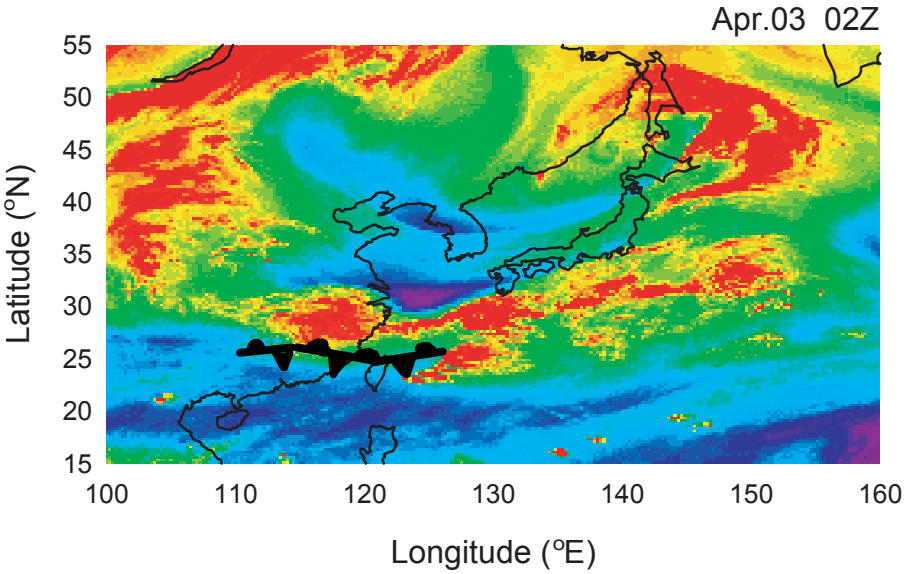

Apr.03 02Z
55
50
45
40
35
30
25
20
15
Latitude (°N)
100
110
120
130
140
150
160
Longitude (°E)

Figure 11.

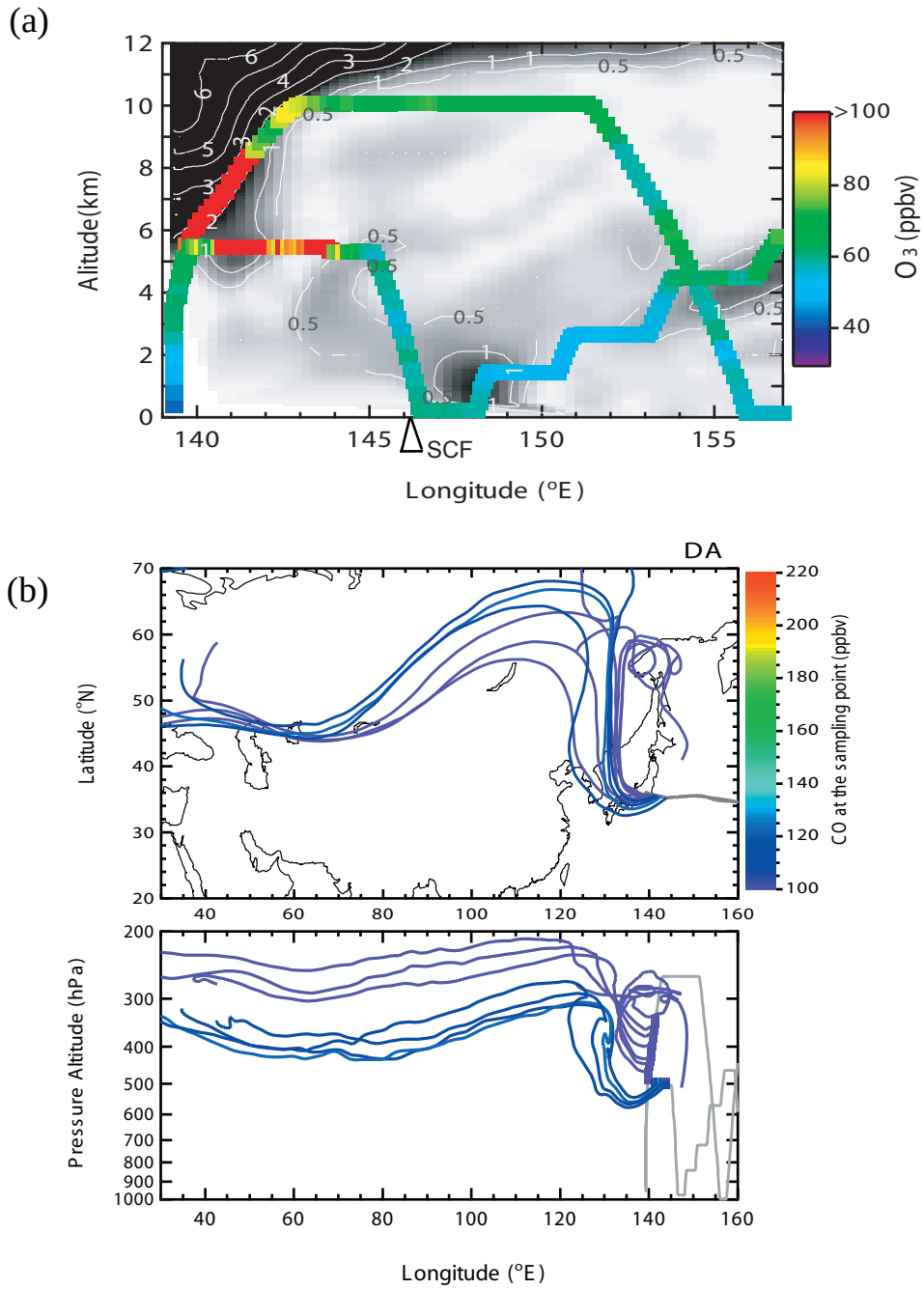

(a)
Alitude(km)
Longitude (°E)
SCF
O3 (ppbv)
>100
80
60
40
(b)
DA
Latitude (°N)
CO at the sampling point (ppbv)
Pressure Altitude (hPa)
Longitude (°E)

Figure 12.

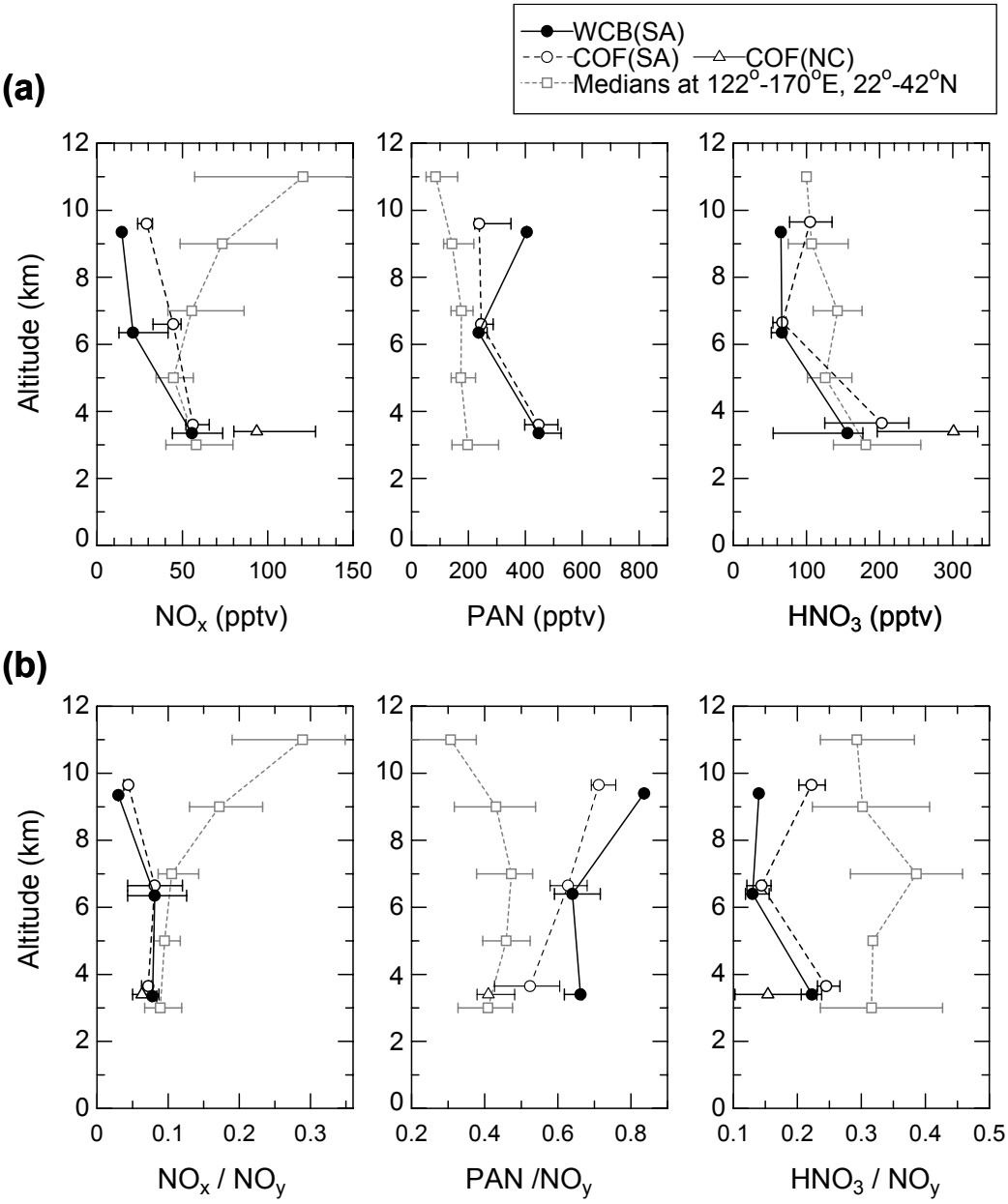
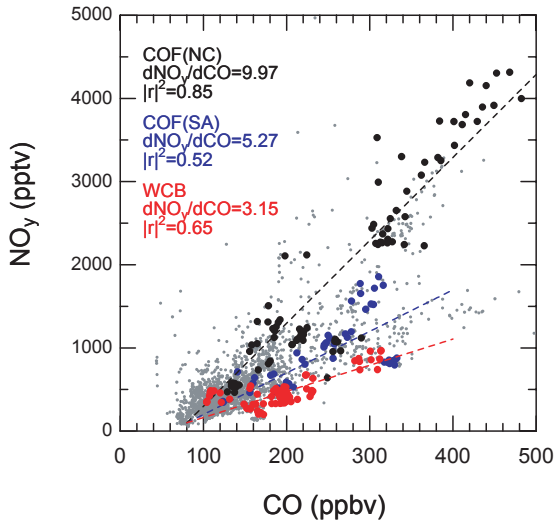

(a)
WCB(SA)
COF(SA)
COF(NC)
Medians at 122°-170°E, 22°-42°N
Altitude (km)
NOx (pptv)
PAN (pptv)
HNO3 (pptv)
(b)
Altitude (km)
NOx / NOy
PAN /NOy
HNO3 / NOy

Figure 13.


COF(NC)
dNOy/dCO=9.97
|r|2=0.85
COF(SA)
dNOy/dCO=5.27
|r|2=0.52
WCB
dNOy/dCO=3.15
|r|2=0.65
NOy (pptv)
CO (ppbv)

(b)

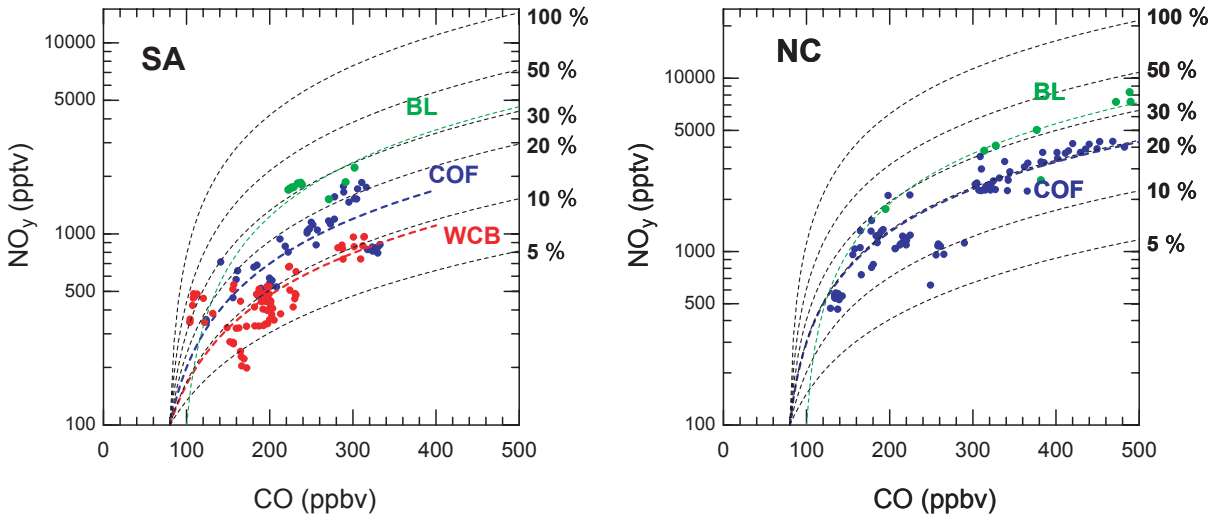
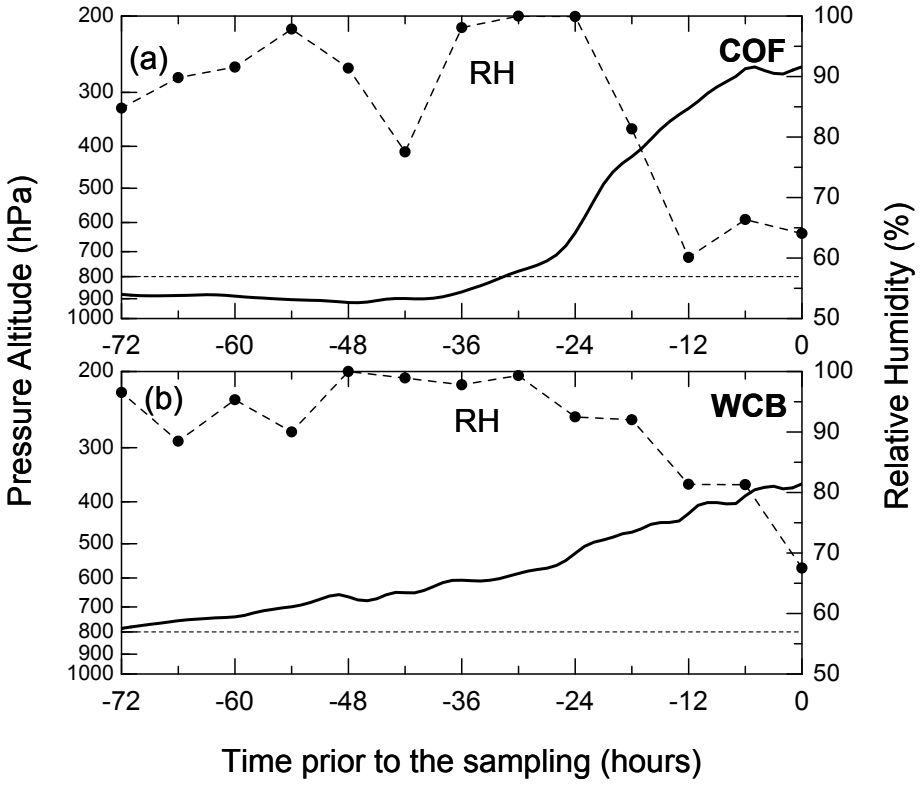

SA
NC
BL
COF
WCB
100 %
50 %
30 %
20 %
10 %
5 %
NOy (pptv)
CO (ppbv)

Figure 14.


(a)
RH
COF
(b)
RH
WCB
Pressure Altitude (hPa)
Relative Humidity (%)
Time prior to the sampling (hours)
200
300
400
500
600
700
800
900
1000
100
90
80
70
60
50
-72
-60
-48
-36
-24
-12
0