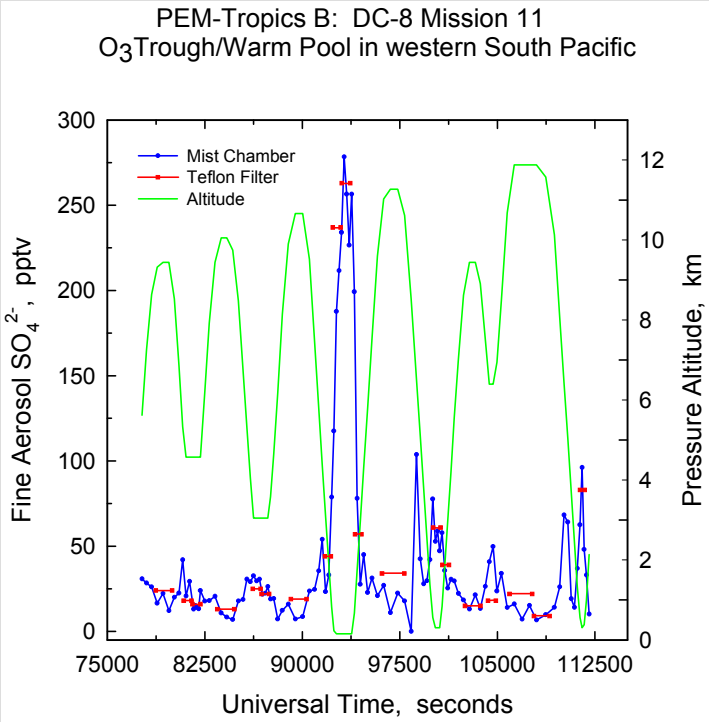
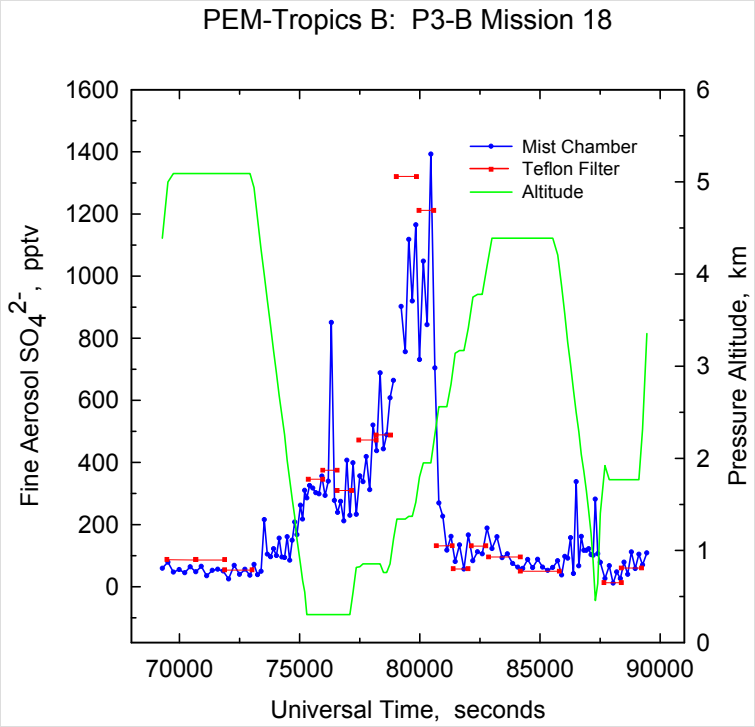
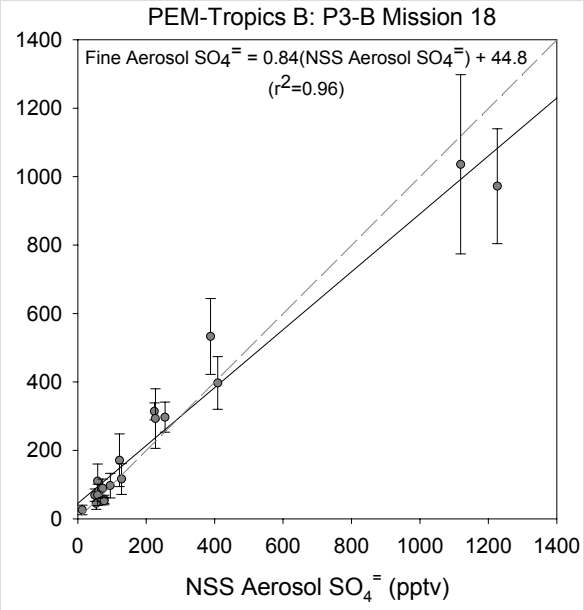
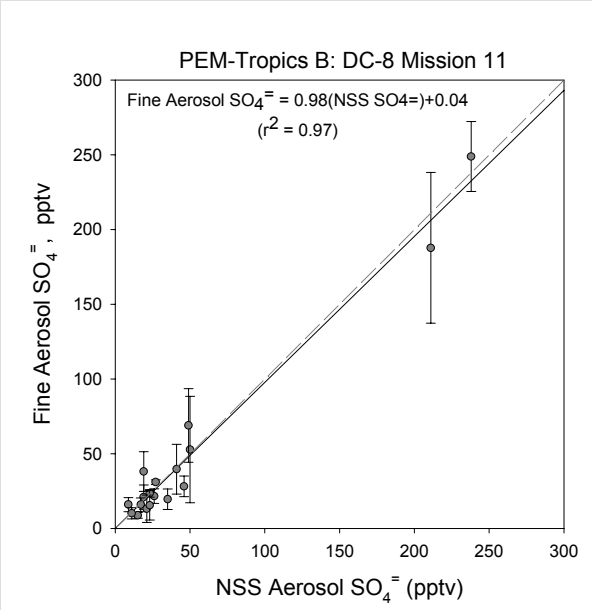
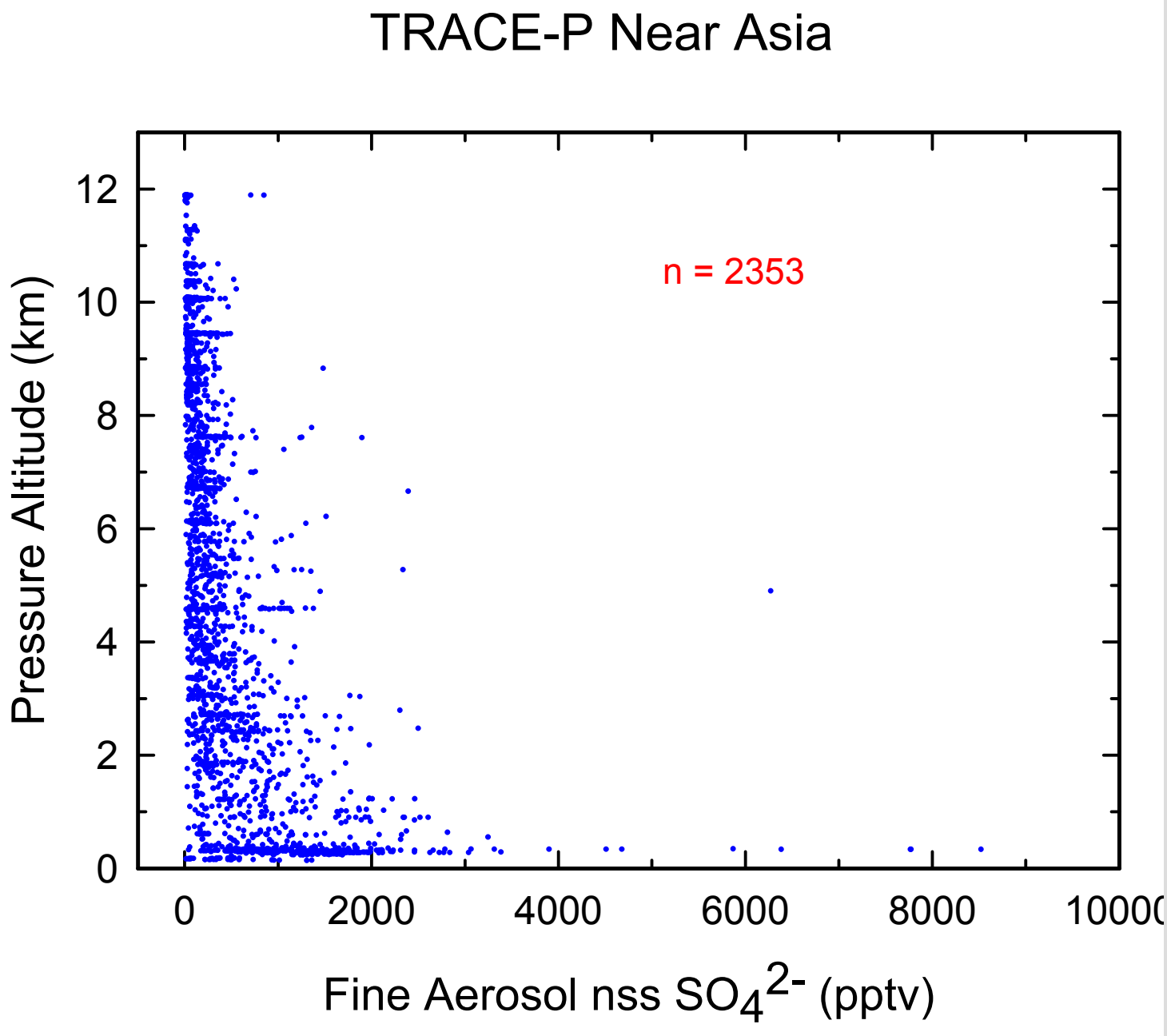
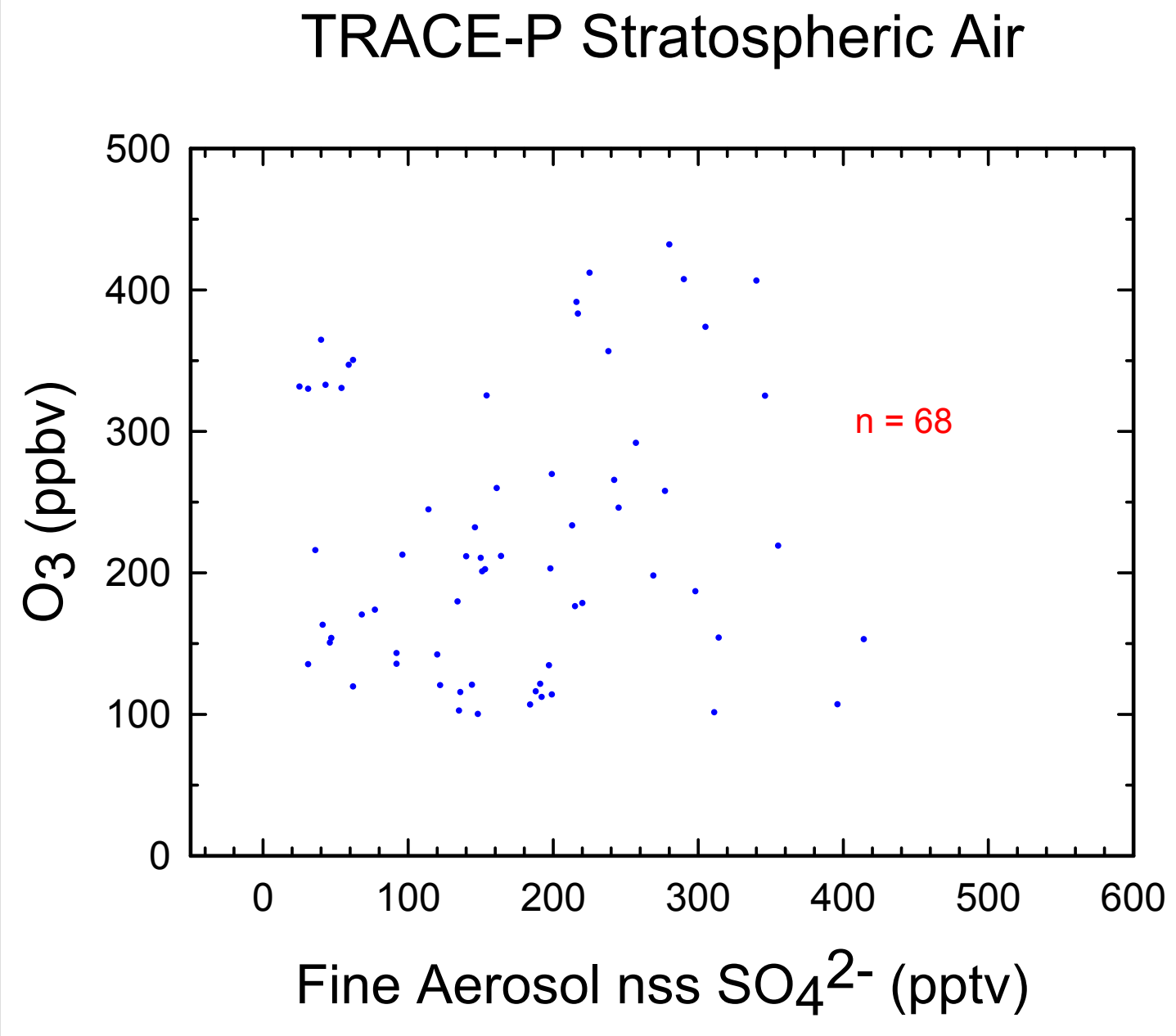

PEM-Tropics B: DC-8 Mission 11
O3Trough/Warm Pool in western South Pacific
Mist Chamber
Teflon Filter
Altitude
Fine Aerosol SO4 2-, pptv
Pressure Altitude, km
Universal Time, seconds

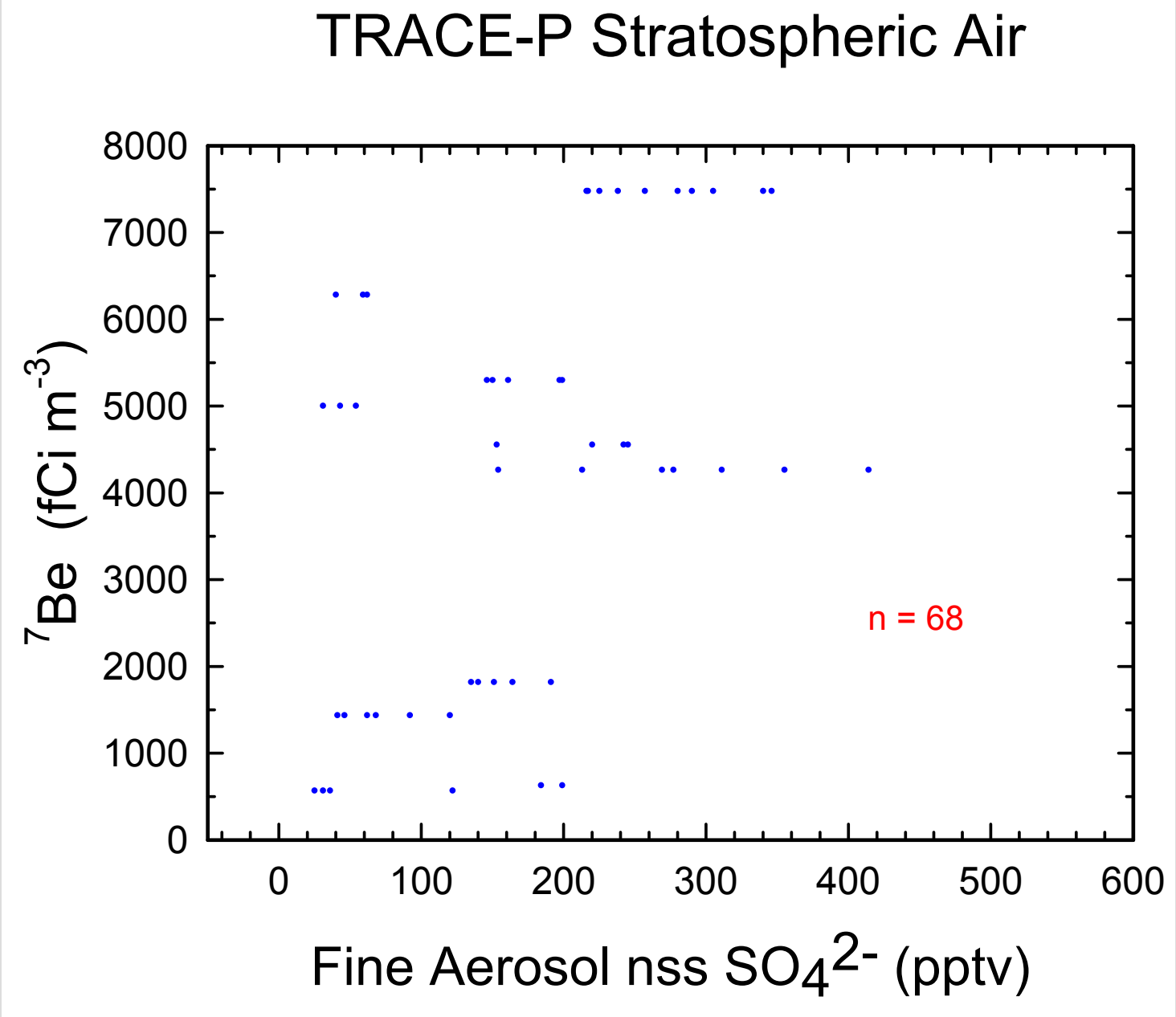

PEM-Tropics B: P3-B Mission 18
Mist Chamber
Teflon Filter
Altitude
Fine Aerosol SO4 2-, pptv
Pressure Altitude, km
Universal Time, seconds


PEM-Tropics B: P3-B Mission 18
Fine Aerosol SO4= = 0.84(NSS Aerosol SO4=) + 44.8
(r2=0.96)
NSS Aerosol SO4= (pptv)


PEM-Tropics B: DC-8 Mission 11
Fine Aerosol SO4= = 0.98(NSS SO4=)+0.04
(r2 = 0.97)
Fine Aerosol SO4=, pptv
NSS Aerosol SO4= (pptv)

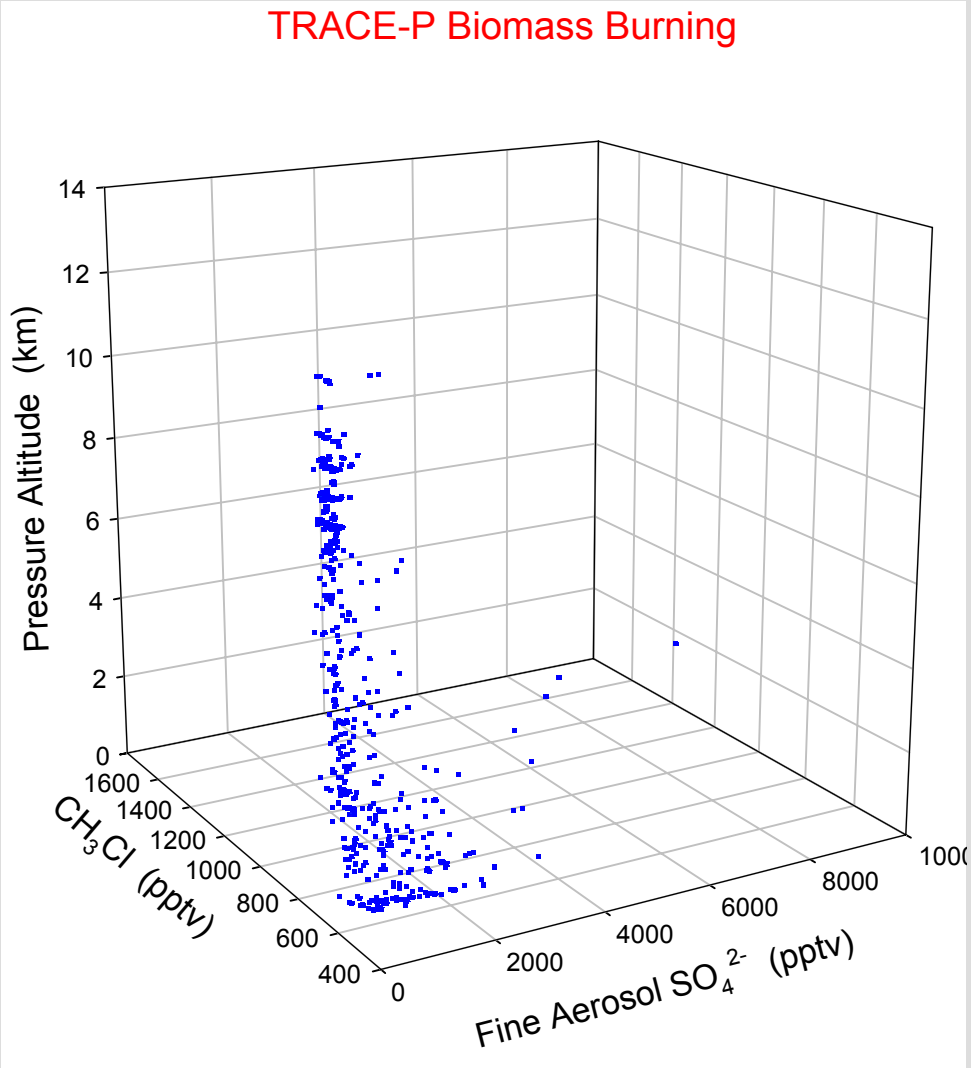

TRACE-P Near Asia
n = 2353
Pressure Altitude (km)
0
2
4
6
8
10
12
0
2000
4000
6000
8000
10000
Fine Aerosol nss SO_4^{2-} (pptv)

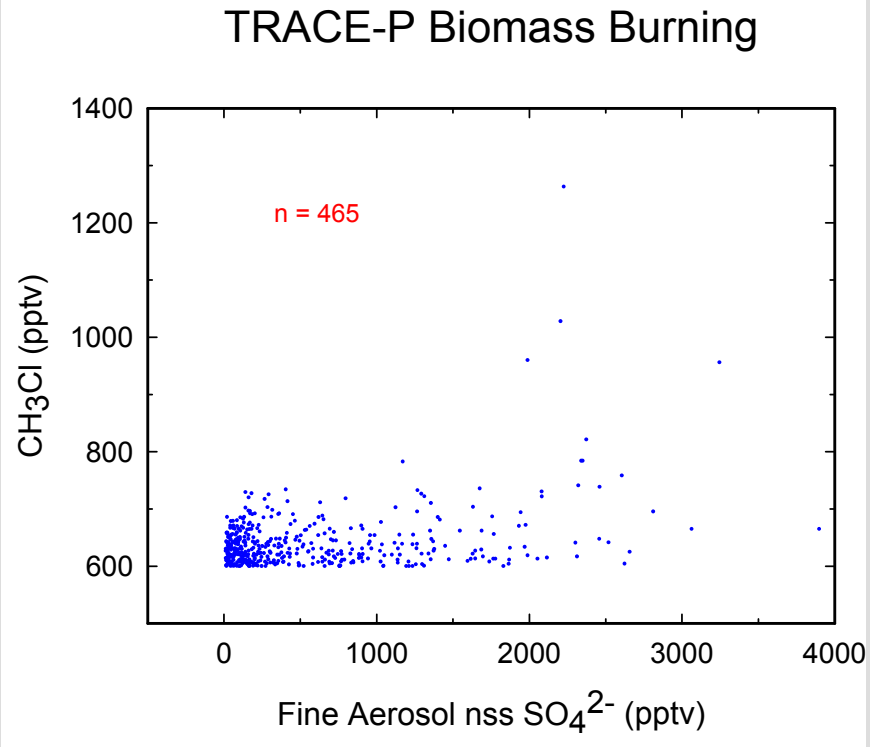

TRACE-P Stratospheric Air
n = 68
O3 (ppbv)
Fine Aerosol nss SO4 2- (pptv)
0
100
200
300
400
500
600

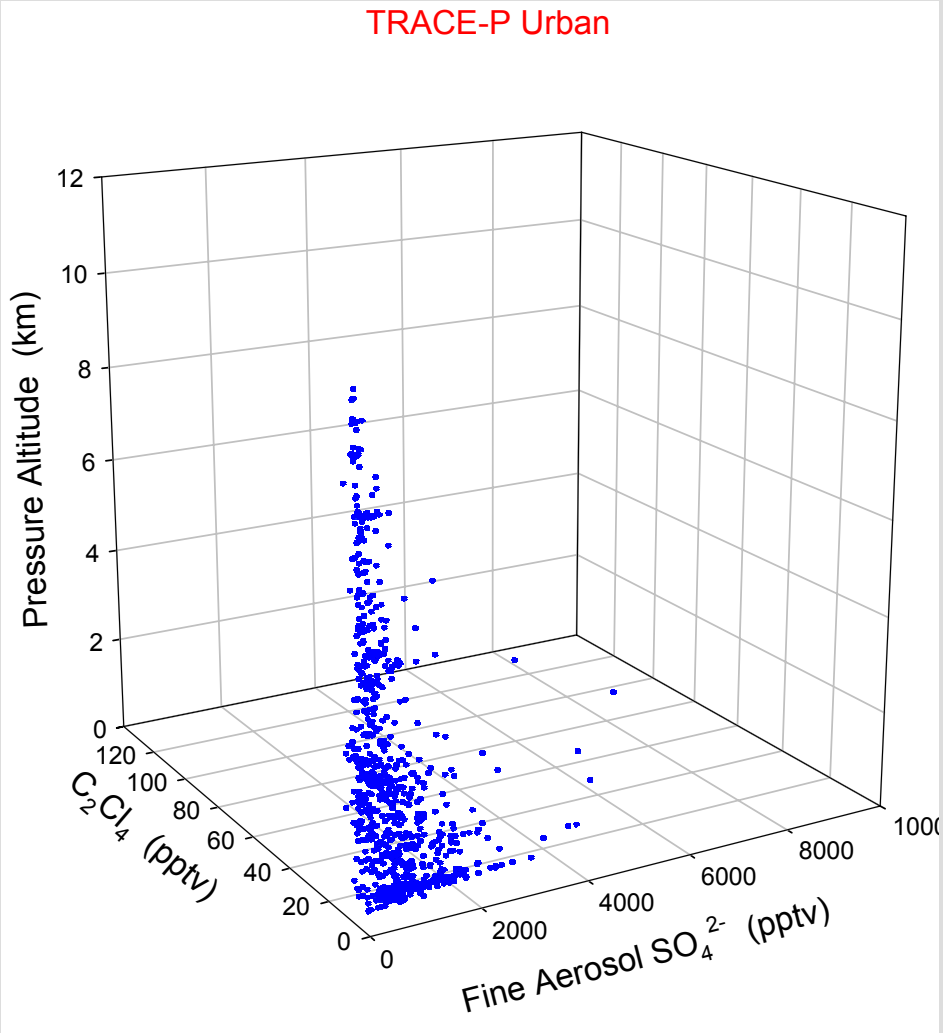

TRACE-P Stratospheric Air
8000
7000
6000
5000
4000
3000
2000
1000
0
^{7}Be (fCi m^{-3})
n = 68
0
100
200
300
400
500
600
Fine Aerosol nss SO_4^{2-} (pptv)

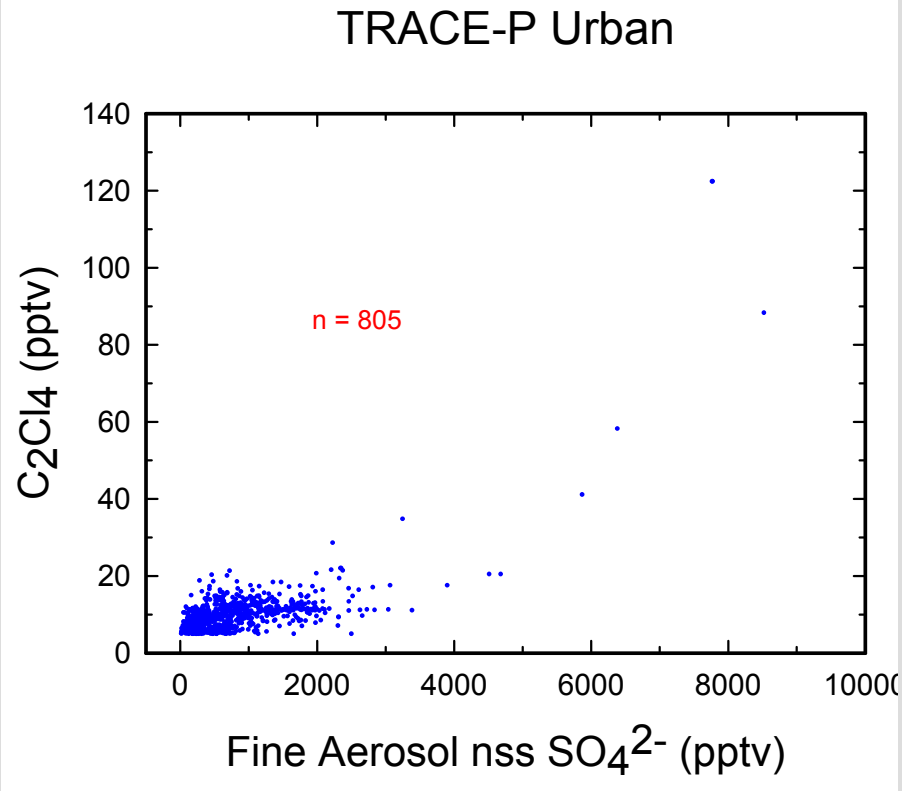
Strat. Air Mean Values

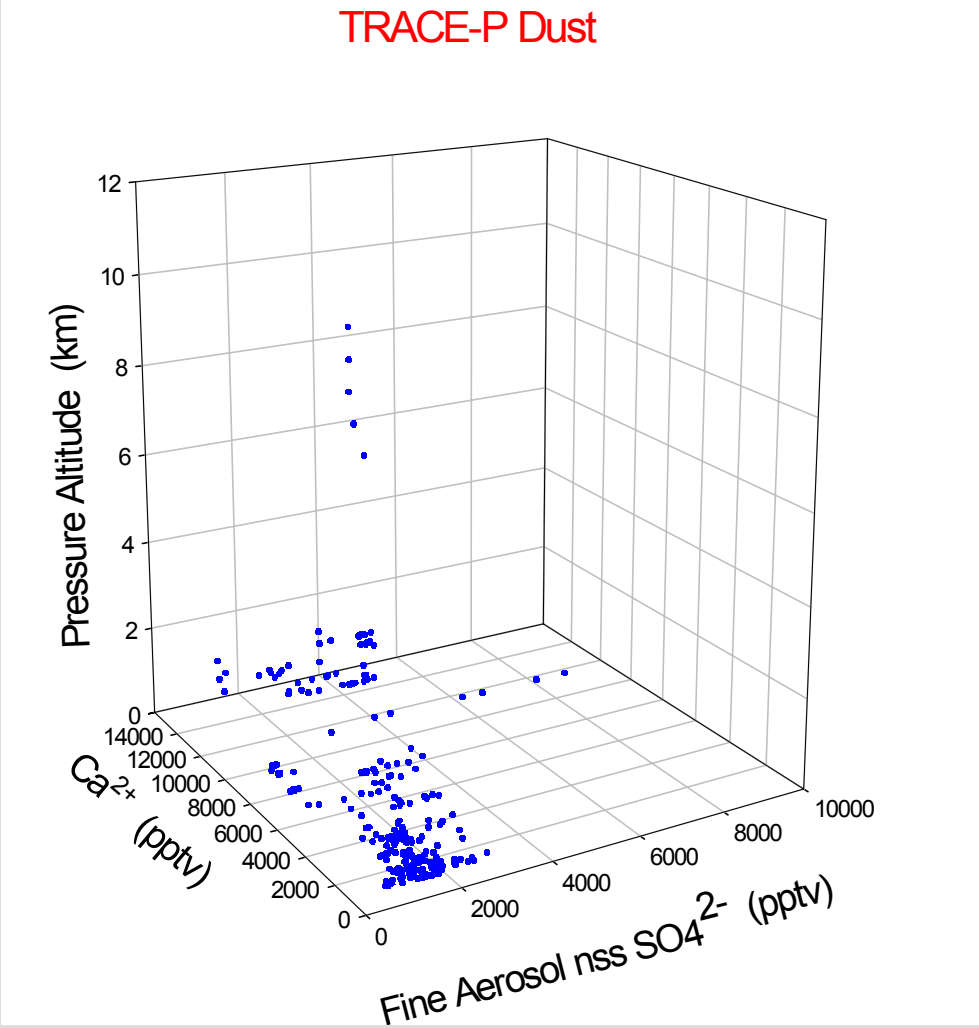
Fine SO_4	175 pptv
^{7}Be	3453 fCi m^{-3}
HNO_3	915 pptv
O_3	220 ppbv

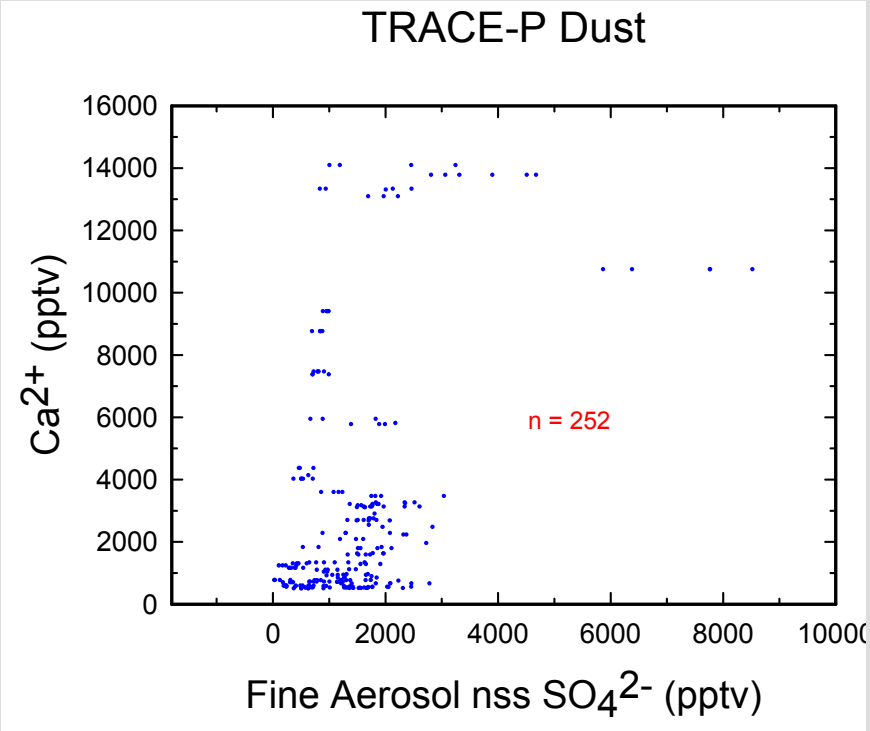

TRACE-P Biomass Burning
Pressure Altitude (km)
0
2
4
6
8
10
12
14
CH3Cl (pptv)
400
600
800
1000
1200
1400
1600
Fine Aerosol SO4 2- (pptv)
0
2000
4000
6000
8000
1000

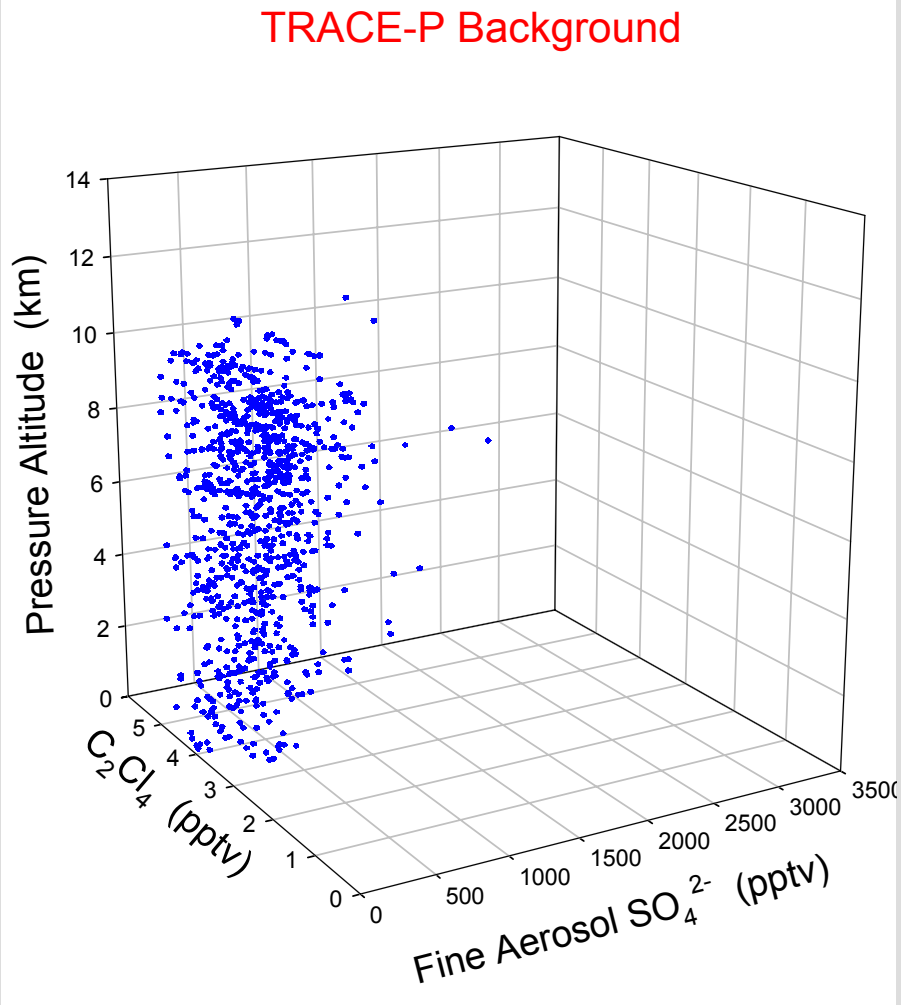

TRACE-P Biomass Burning
n = 465
CH3Cl (pptv)
600
800
1000
1200
1400
Fine Aerosol nss SO4 2- (pptv)
0
1000
2000
3000
4000

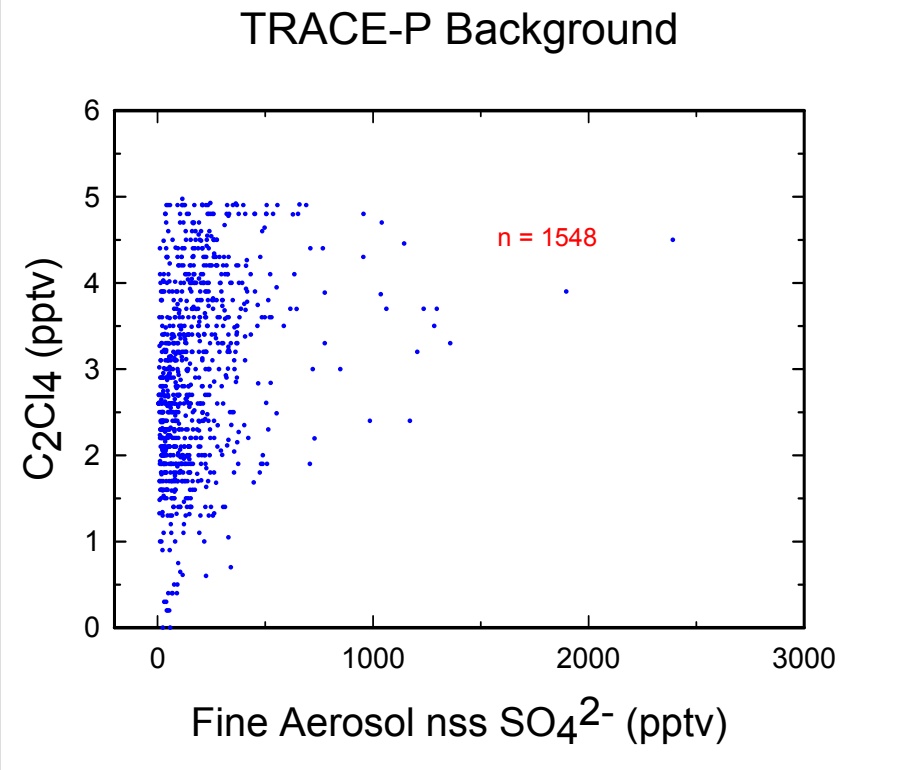

TRACE-P Urban
Pressure Altitude (km)
0
2
4
6
8
10
12
C_2Cl_4 (pptv)
0
20
40
60
80
100
120
Fine Aerosol SO_4^{2-} (pptv)
0
2000
4000
6000
8000
10000


TRACE-P Urban
n = 805
C_2Cl_4 (pptv)
0
20
40
60
80
100
120
140
Fine Aerosol nss SO_4^{2-} (pptv)
0
2000
4000
6000
8000
10000


TRACE-P Dust
Pressure Altitude (km)
0
2
4
6
8
10
12
Ca2+ (pptv)
0
2000
4000
6000
8000
10000
12000
14000
Fine Aerosol nss SO42- (pptv)
0
2000
4000
6000
8000
10000


TRACE-P Dust
Ca2+ (pptv)
0
2000
4000
6000
8000
10000
12000
14000
16000
n = 252
Fine Aerosol nss SO42- (pptv)
0
2000
4000
6000
8000
10000

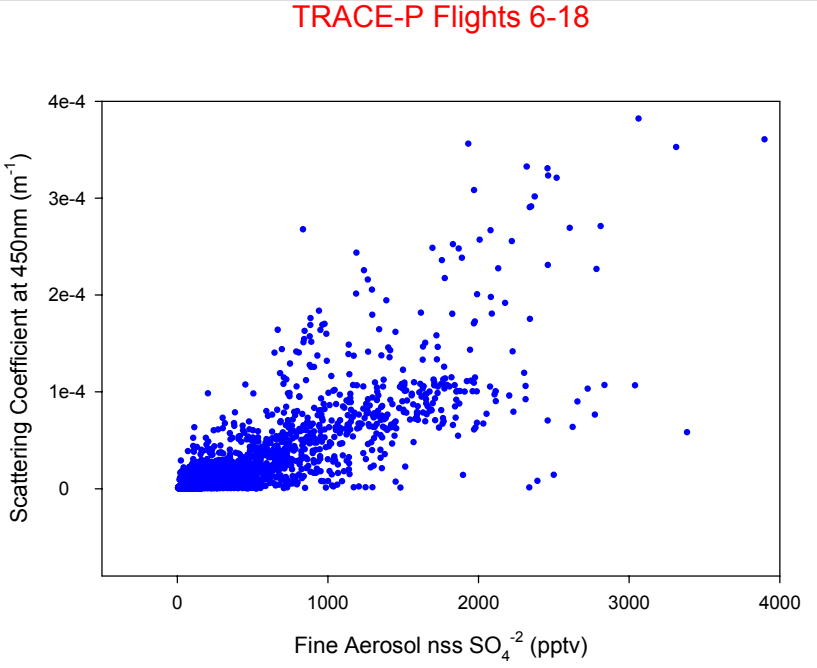


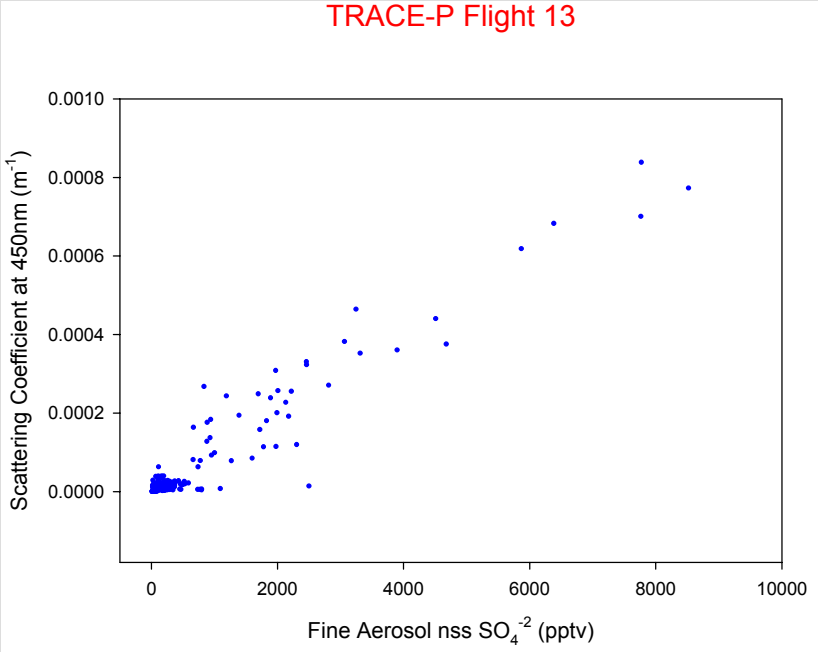


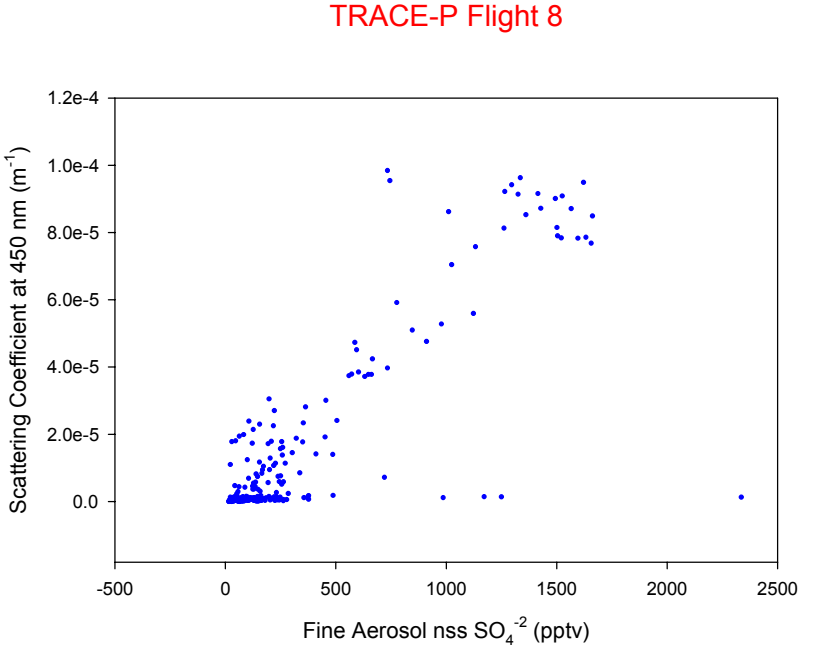
CO 120 ppbv

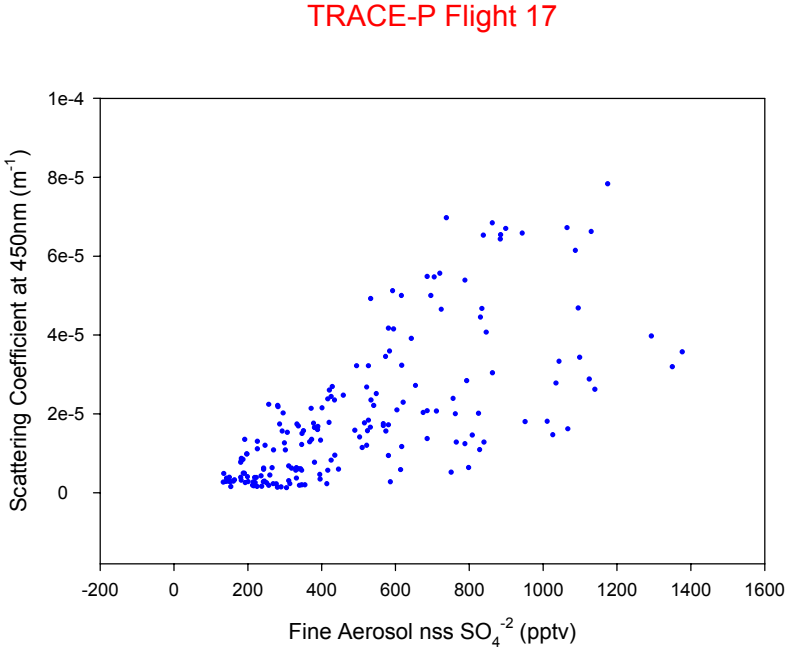
O_3 60 ppbv

SO_4^{2-} 285 pptv


TRACE-P Flights 6-18
Scattering Coefficient at 450nm (m-1)
4e-4
3e-4
2e-4
1e-4
0
0
1000
2000
3000
4000
Fine Aerosol nss SO4-2 (pptv)


TRACE-P Flight 13
Scattering Coefficient at 450nm (m-1)
0.0010
0.0008
0.0006
0.0004
0.0002
0.0000
0
2000
4000
6000
8000
10000
Fine Aerosol nss SO4-2 (pptv)


TRACE-P Flight 8
Scattering Coefficient at 450 nm (m-1)
1.2e-4
1.0e-4
8.0e-5
6.0e-5
4.0e-5
2.0e-5
0.0
-500
0
500
1000
1500
2000
2500
Fine Aerosol nss SO4-2 (pptv)


TRACE-P Flight 17
Scattering Coefficient at 450nm (m-1)
1e-4
8e-5
6e-5
4e-5
2e-5
0
-200
0
200
400
600
800
1000
1200
1400
1600
Fine Aerosol nss SO4-2 (pptv)