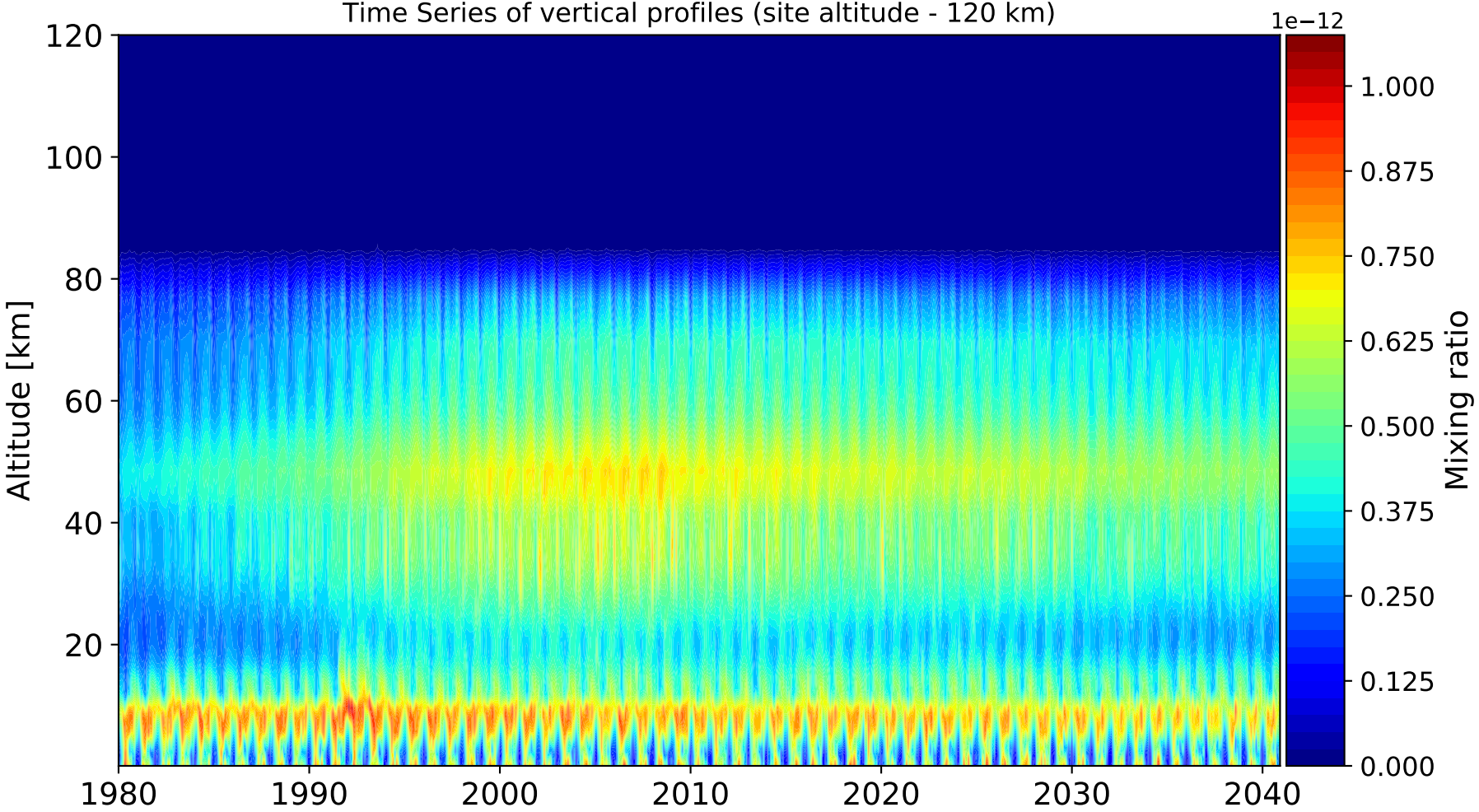
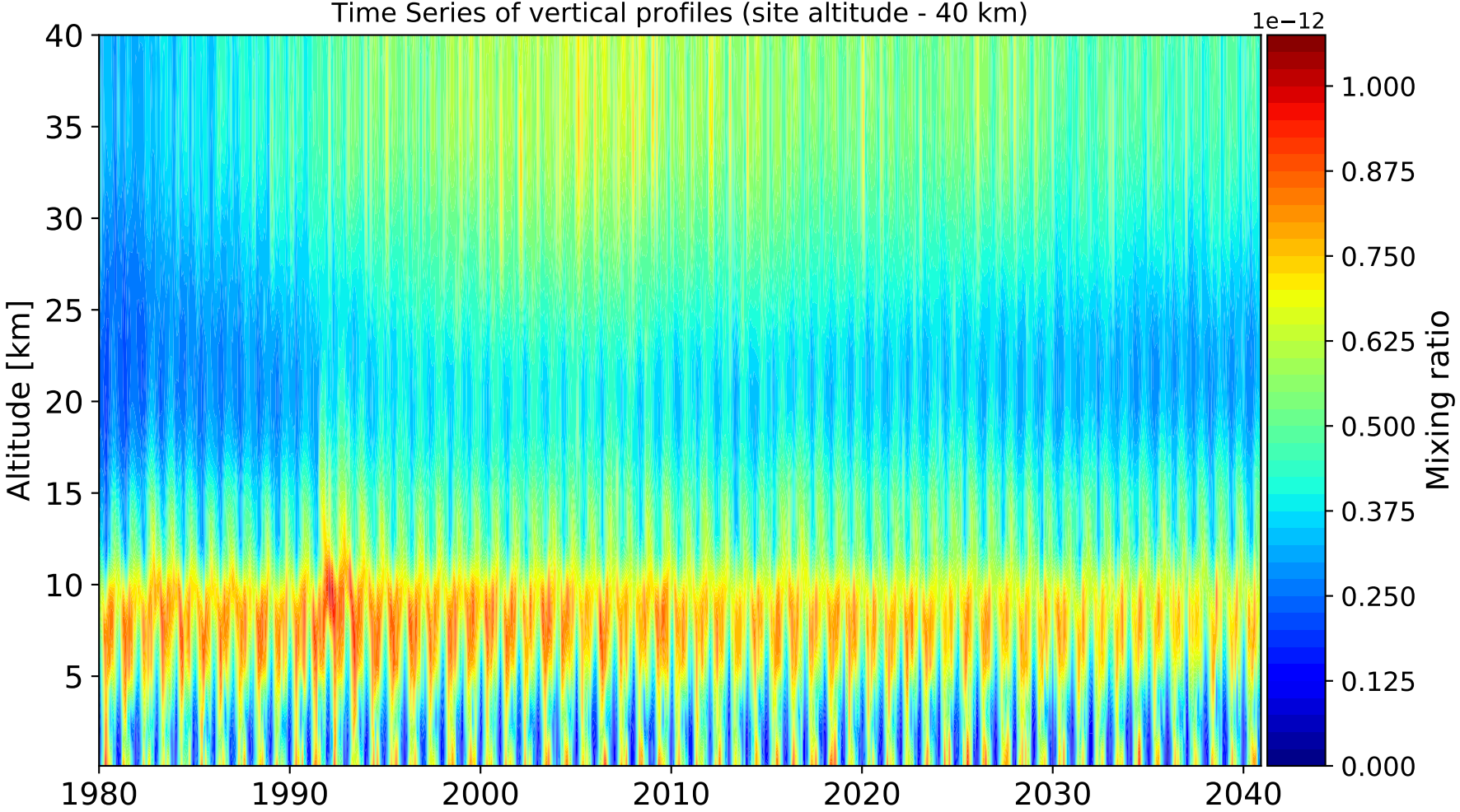
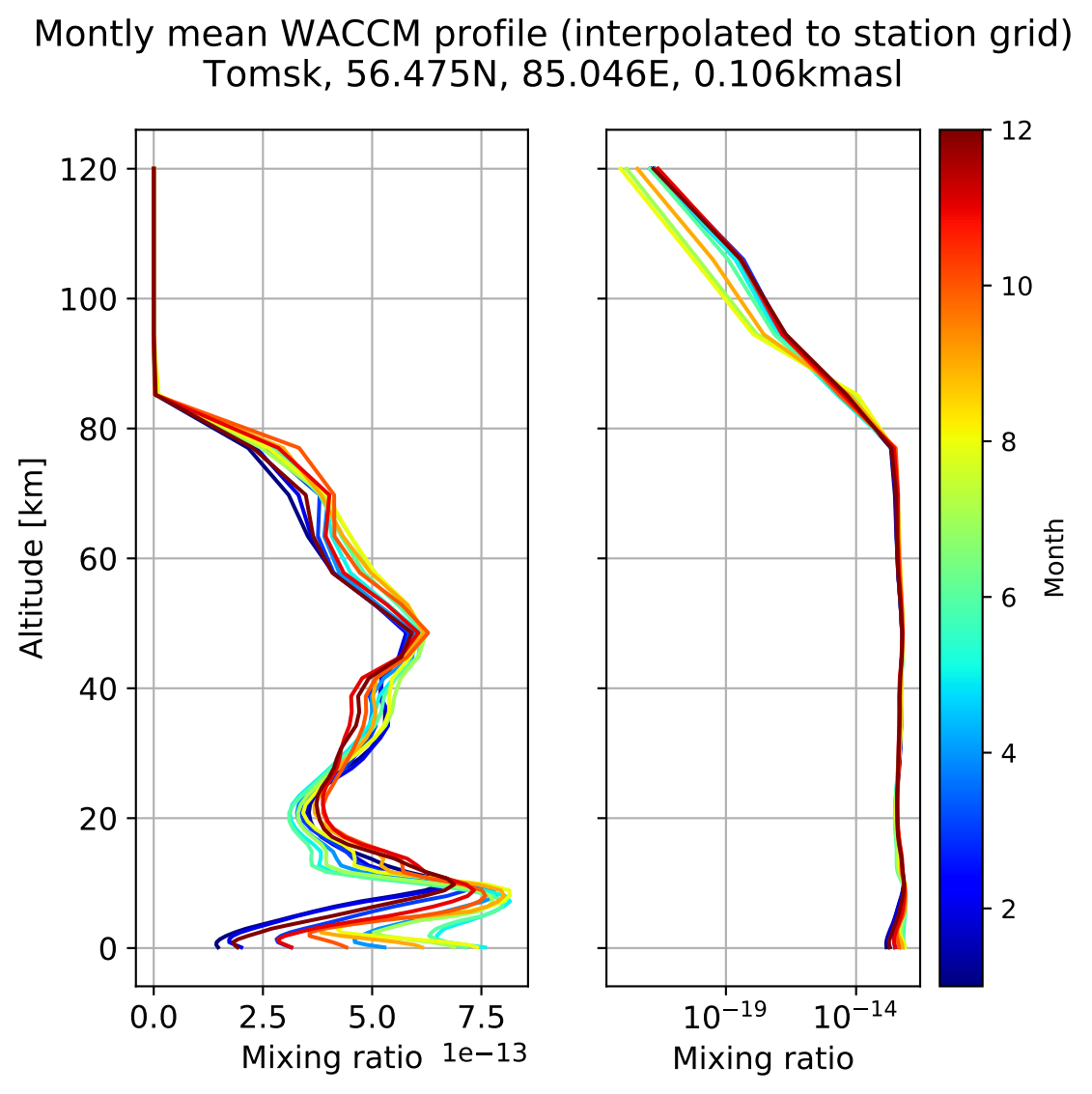
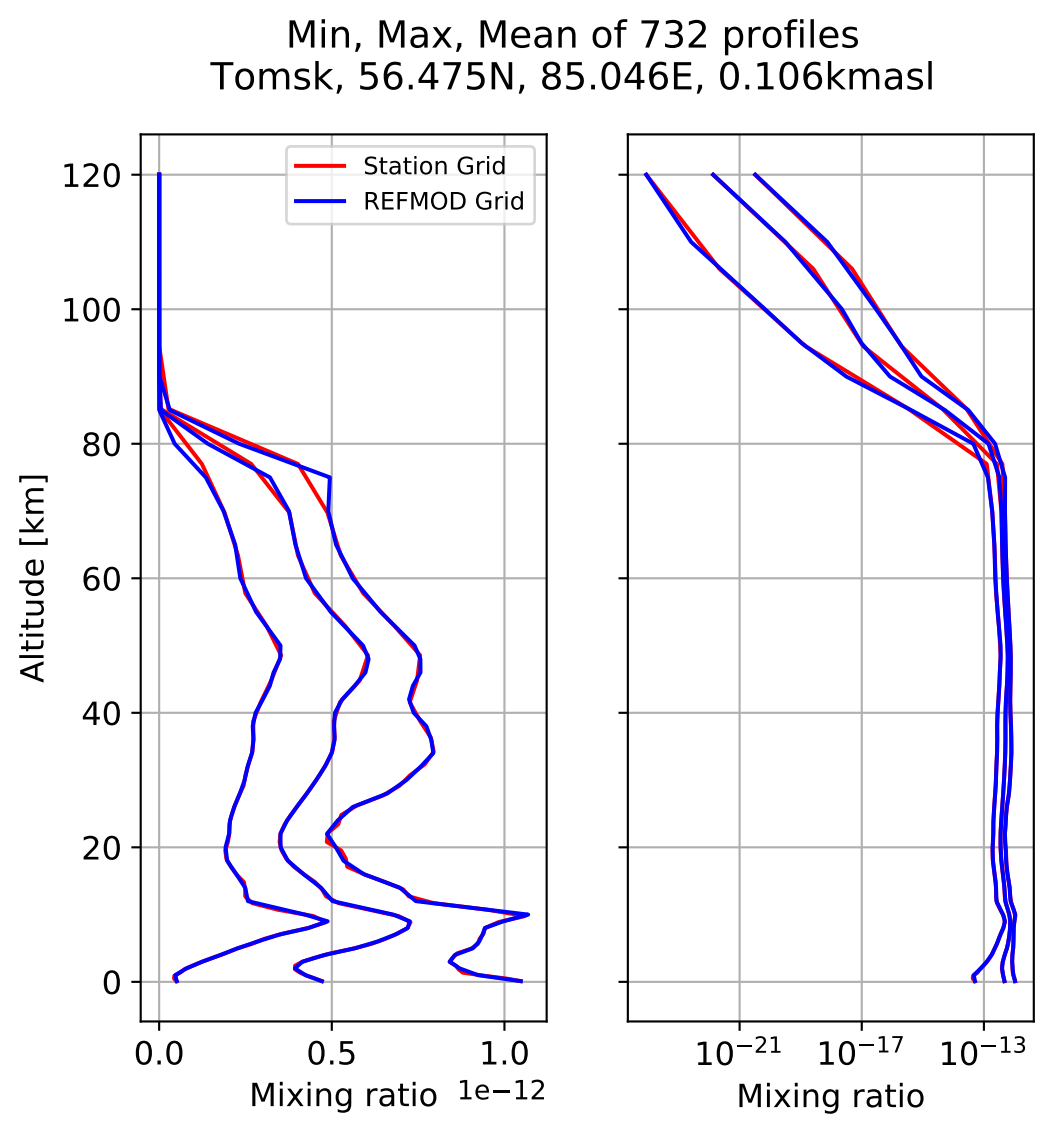
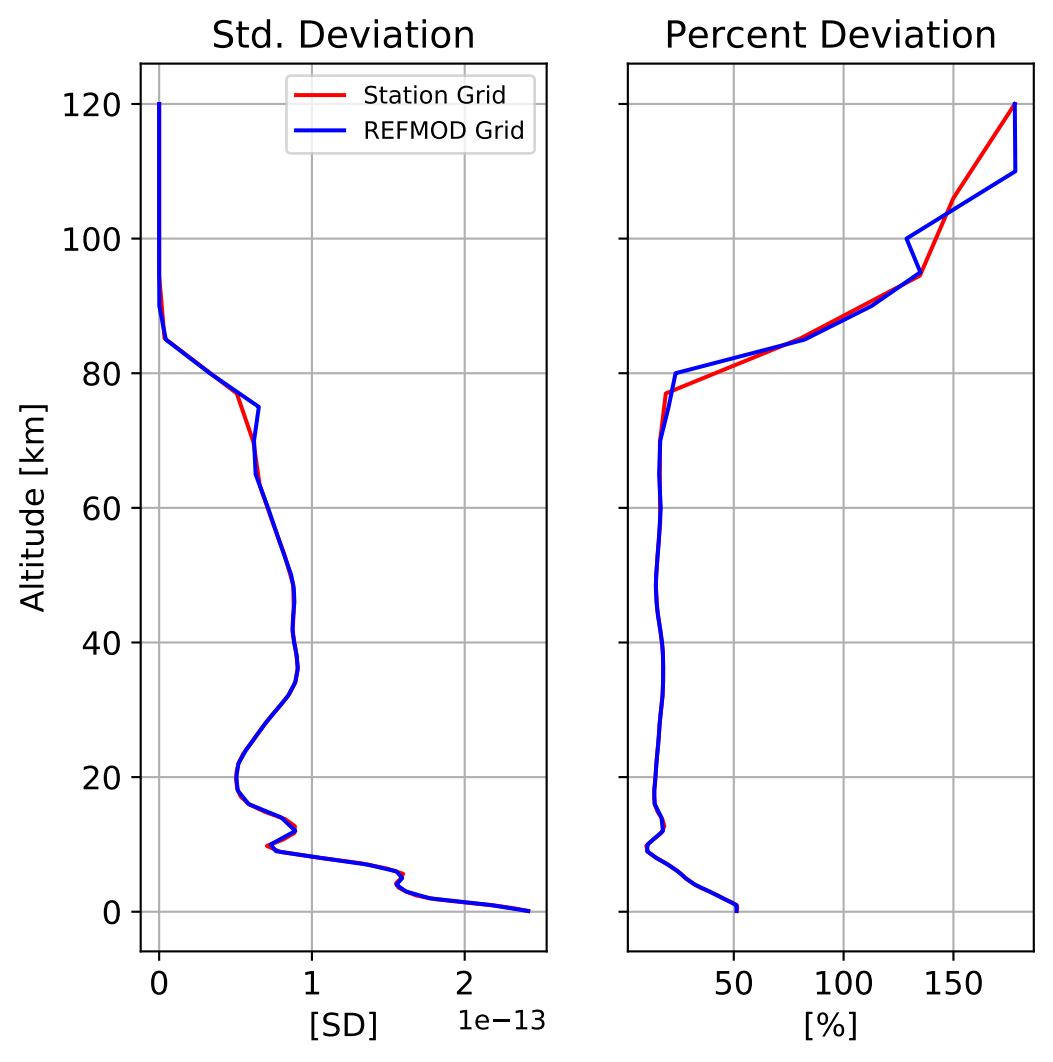
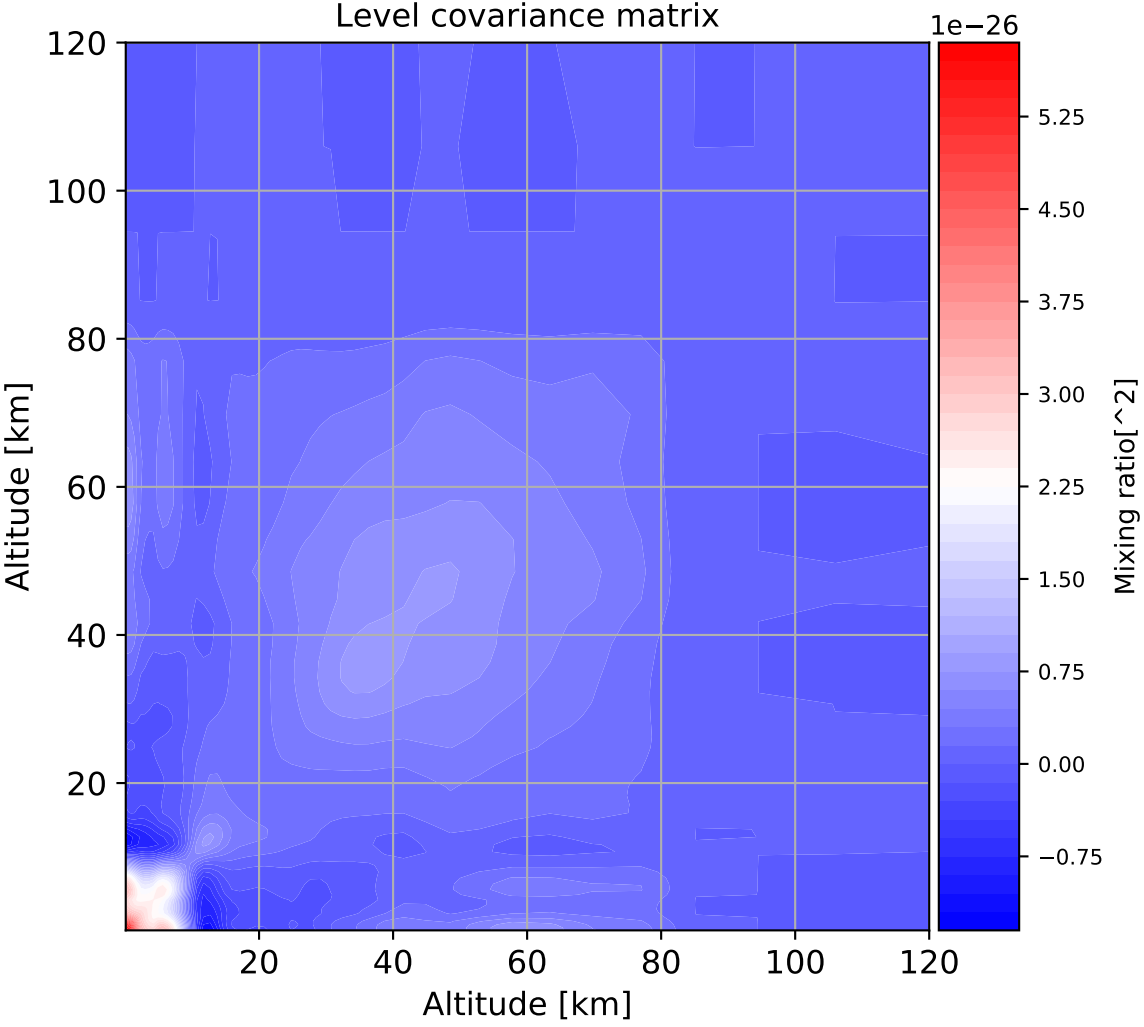

Time Series of vertical profiles (site altitude - 120 km)
1e−12
1.000
0.875
0.750
0.625
0.500
0.375
0.250
0.125
0.000
Mixing ratio
Altitude [km]
120
100
80
60
40
20
1980
1990
2000
2010
2020
2030
2040


Time Series of vertical profiles (site altitude - 40 km)
Altitude [km]
40
35
30
25
20
15
10
5
1980
1990
2000
2010
2020
2030
2040
1e−12
1.000
0.875
0.750
0.625
0.500
0.375
0.250
0.125
0.000
Mixing ratio


Montly mean WACCM profile (interpolated to station grid)
Tomsk, 56.475N, 85.046E, 0.106kmasl
Altitude [km]
120
100
80
60
40
20
0
0.0
2.5
5.0
7.5
Mixing ratio
1e−13
$10^{-19}$
$10^{-14}$
Mixing ratio
Month
12
10
8
6
4
2


Min, Max, Mean of 732 profiles
Tomsk, 56.475N, 85.046E, 0.106kmasl
Station Grid
REFMOD Grid
Altitude [km]
120
100
80
60
40
20
0
0.0
0.5
1.0
Mixing ratio
1e−12
$10^{-21}$
$10^{-17}$
$10^{-13}$
Mixing ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude [km]
120
100
80
60
40
20
0
0
1
2
[SD]
1e−13
50
100
150
[%]


Level covariance matrix
1e−26
5.25
4.50
3.75
3.00
2.25
1.50
0.75
0.00
−0.75
Mixing ratio[^2]
120
100
80
60
40
20
Altitude [km]
20
40
60
80
100
120
Altitude [km]