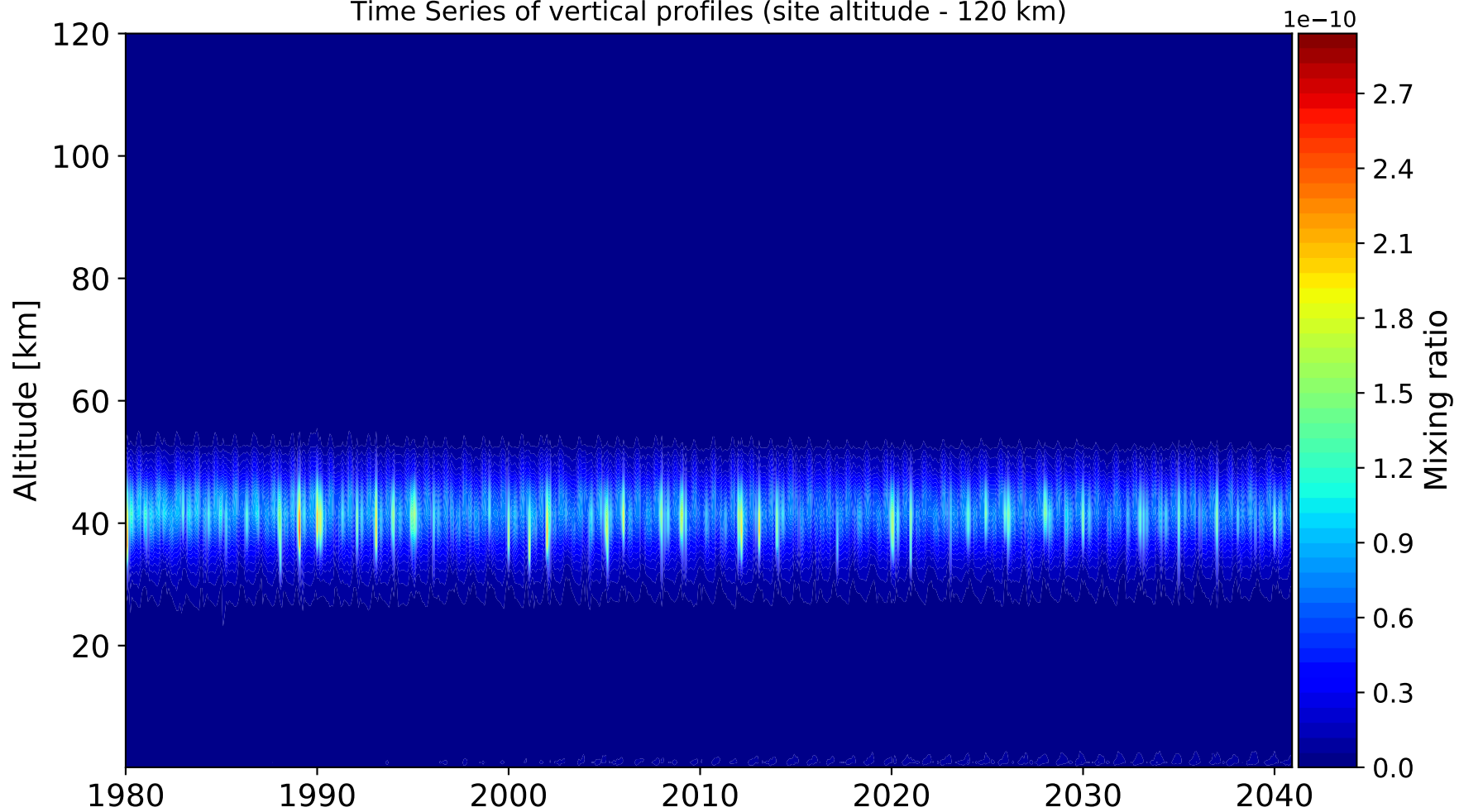
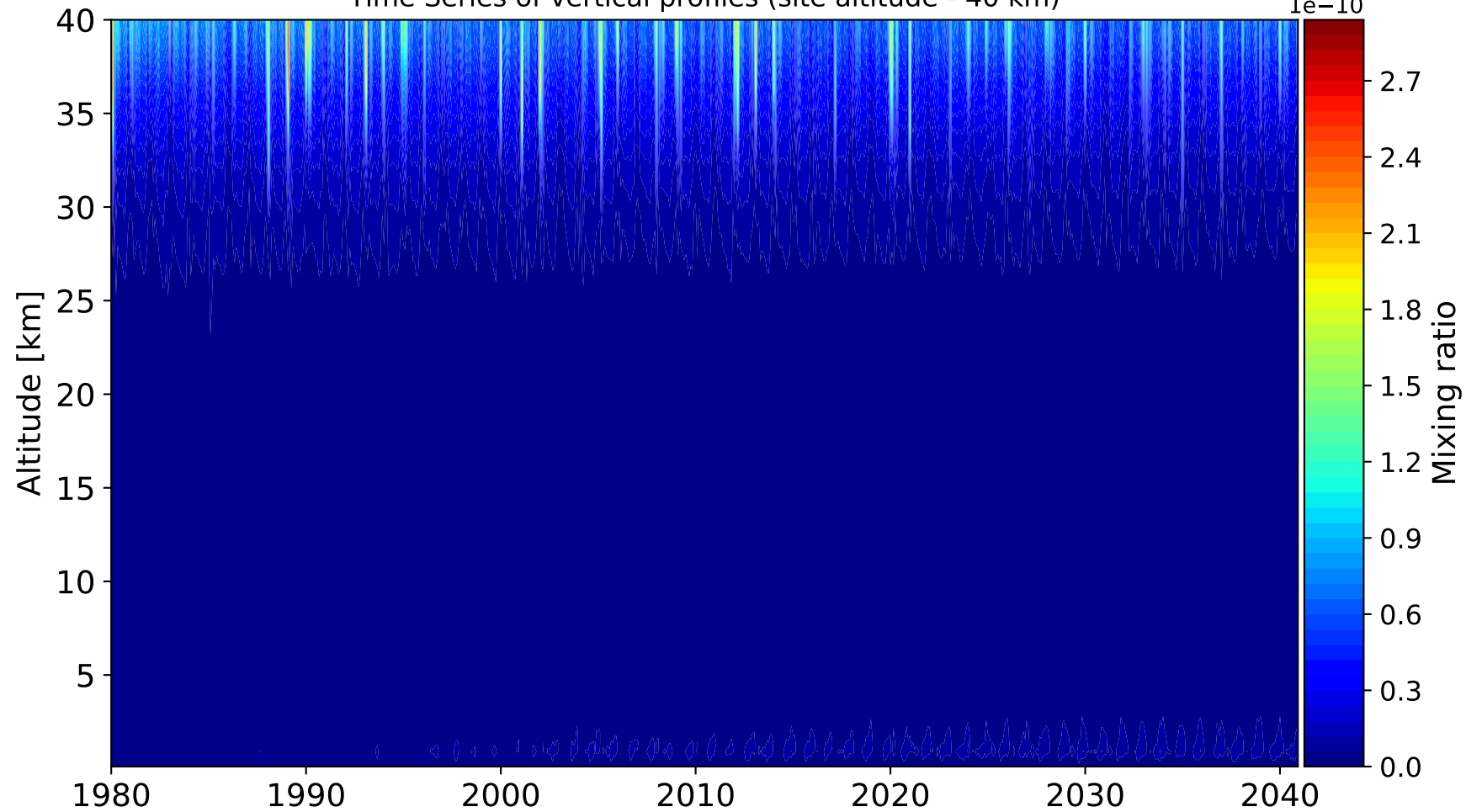


Time Series of vertical profiles (site altitude - 120 km)

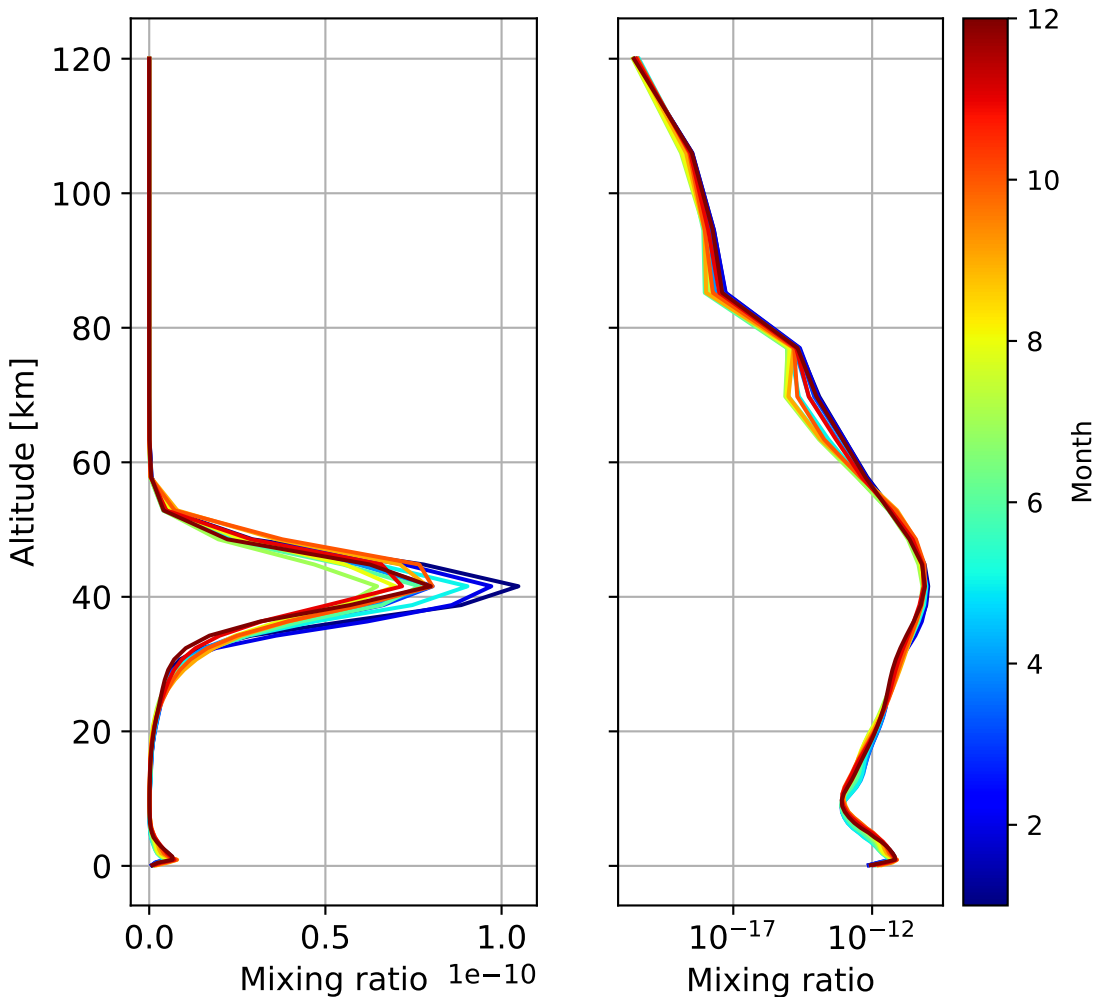


Time Series of vertical profiles (site altitude - 40 km)

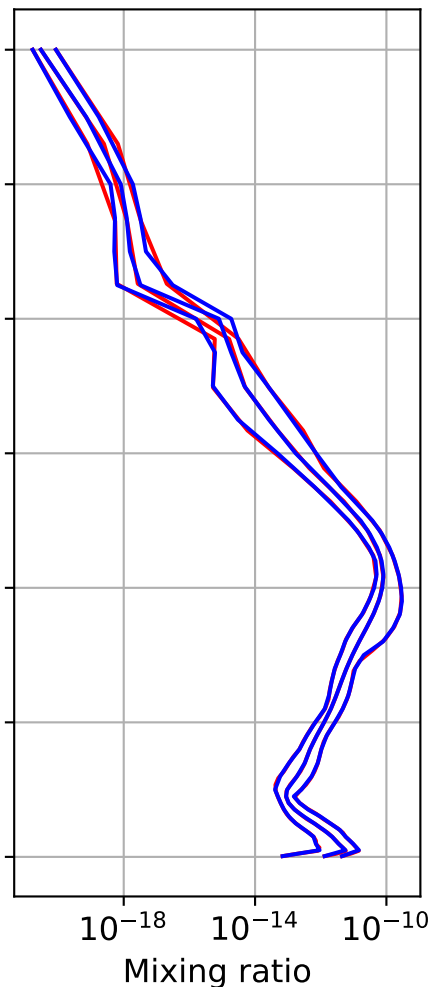
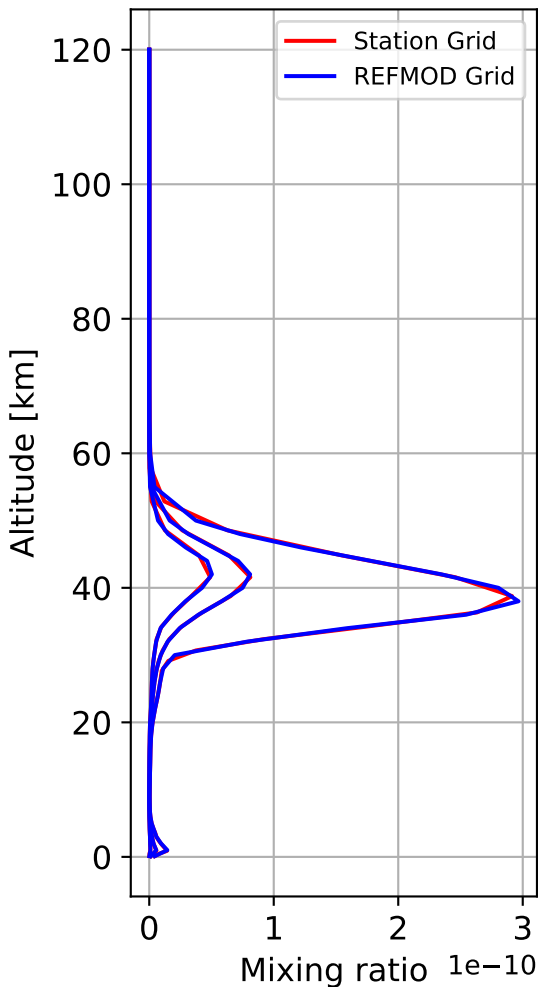
$1e-10$



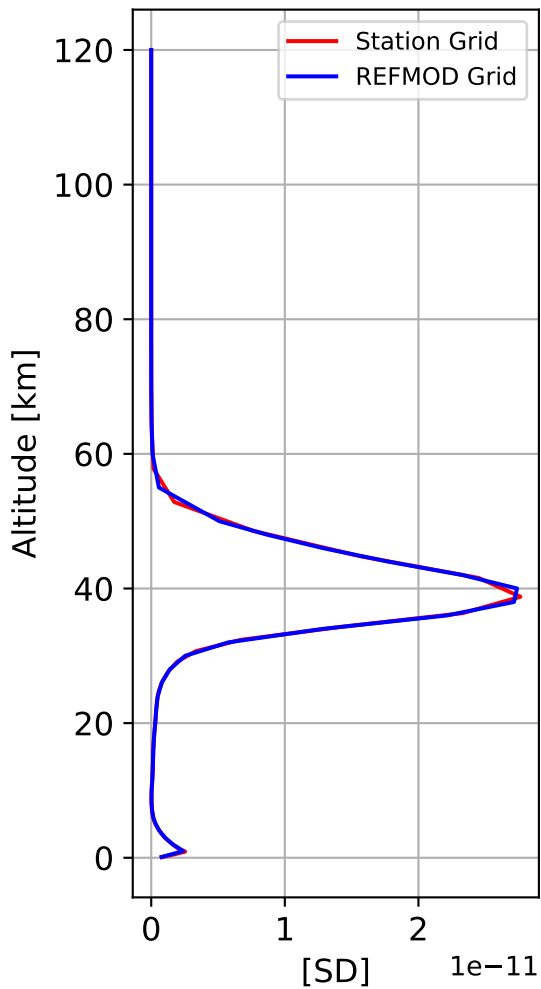
Monthly mean WACCM profile (interpolated to station grid)
Karlsruhe, 49.09N, 8.43E, 0.11kmasl



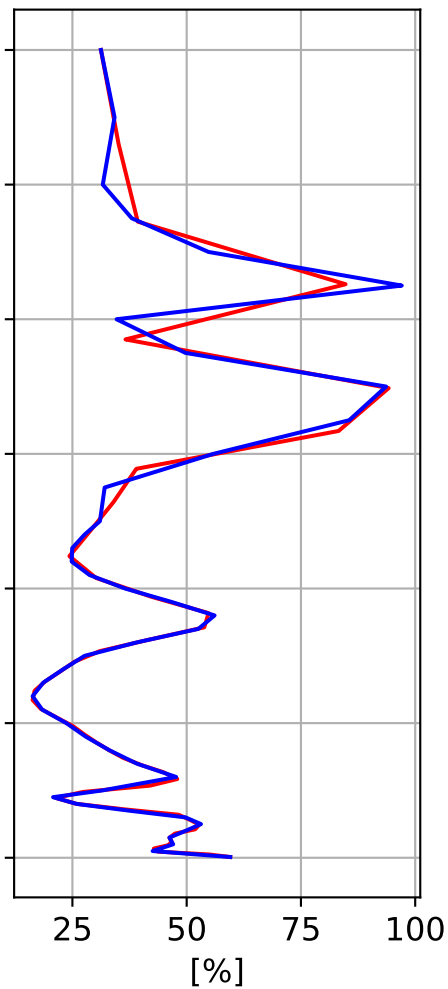
Min, Max, Mean of 732 profiles
Karlsruhe, 49.09N, 8.43E, 0.11kmasl



Std. Deviation



Percent Deviation



Level covariance matrix

1e-22

Altitude [km]

120
100
80
60
40
20

20

Altitude [km]

20

40

60

80

100

120

7
6
5
4
3
2
1
0Mixing ratio[~ 2]