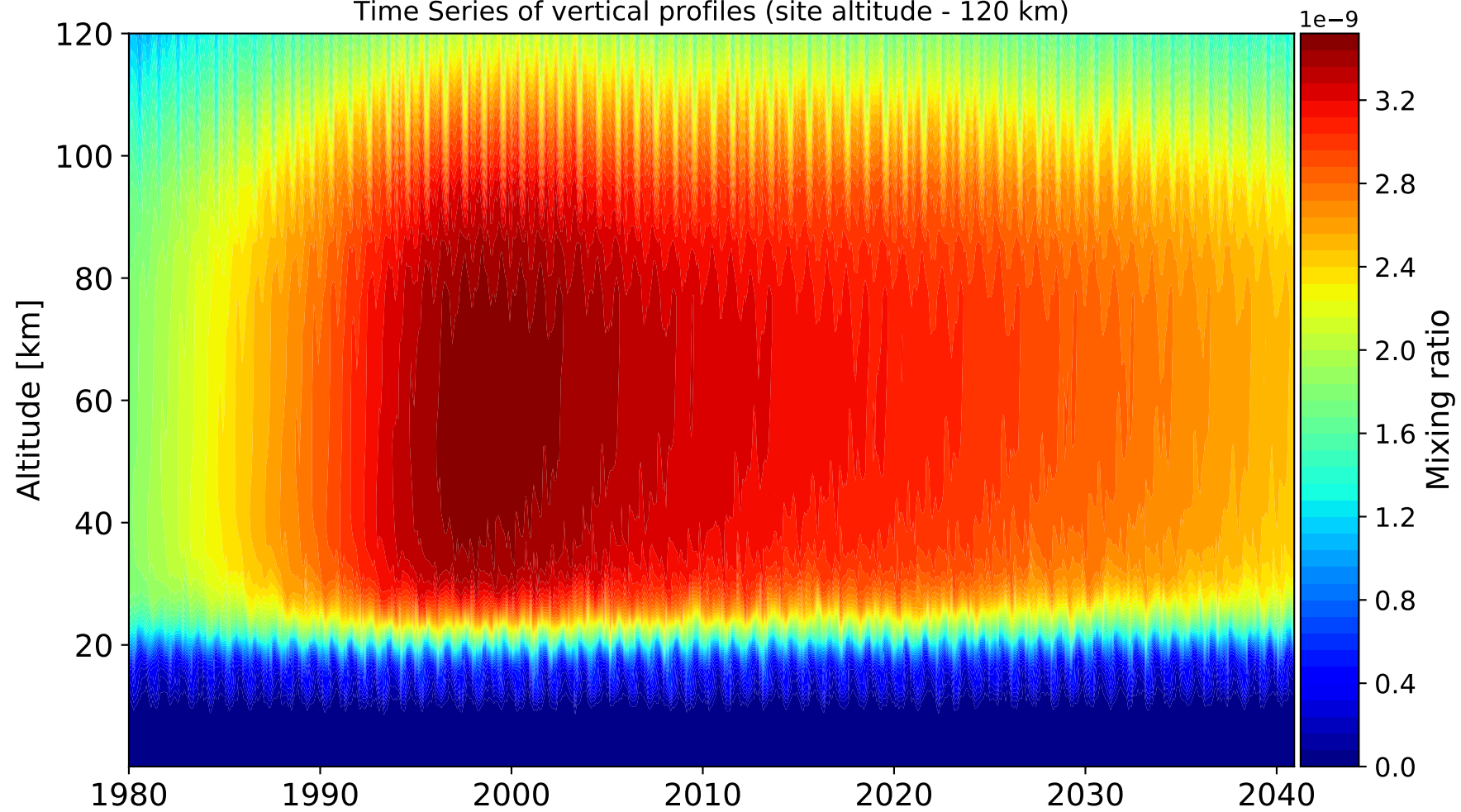
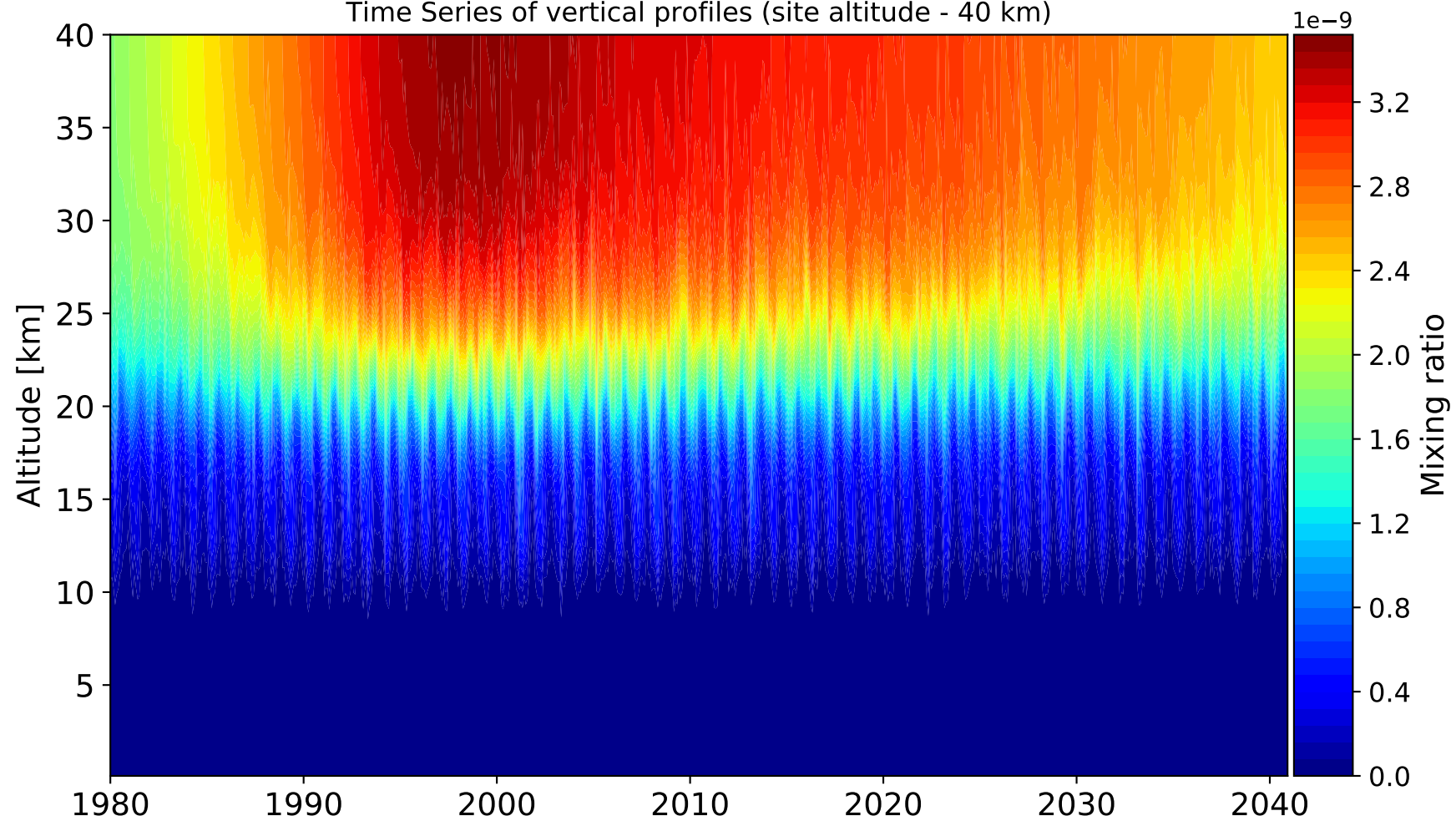


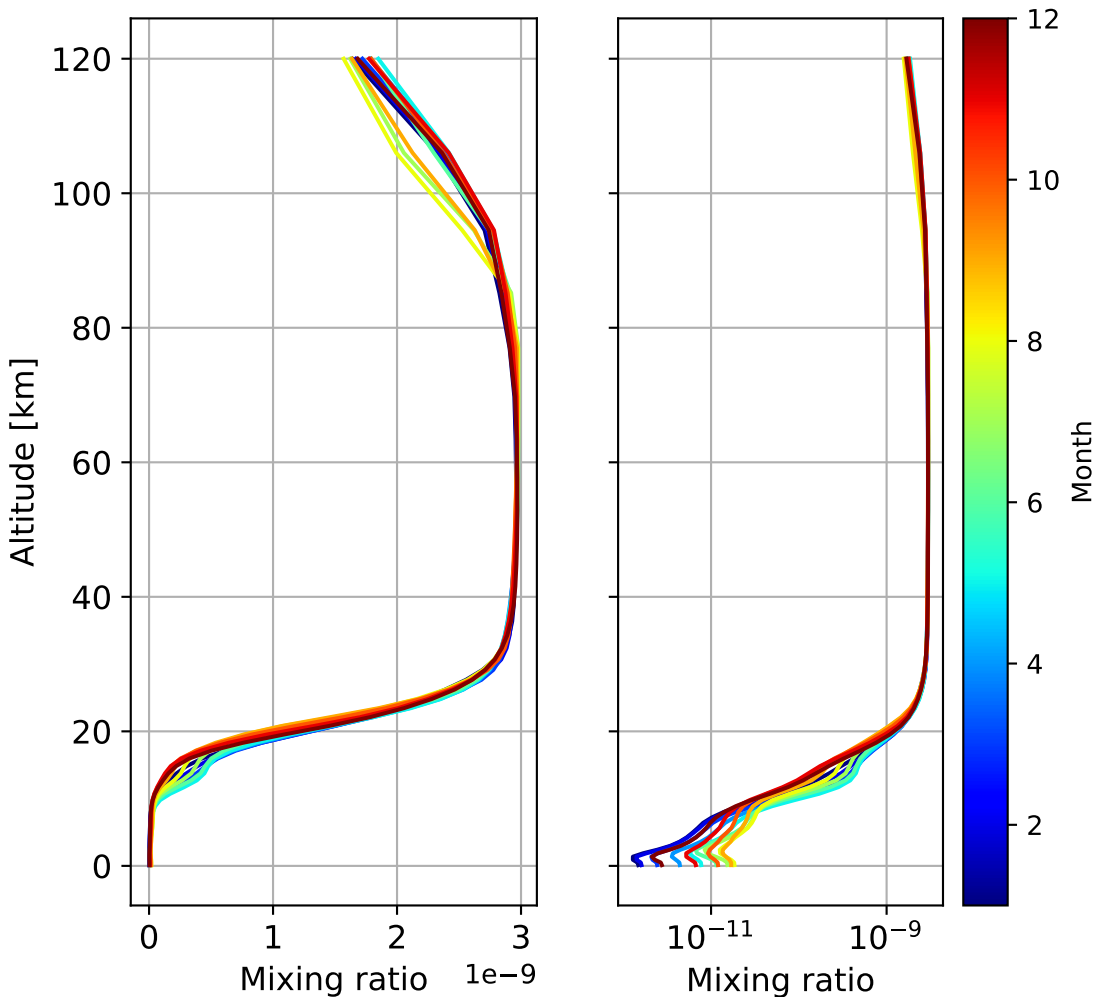
Time Series of vertical profiles (site altitude - 120 km)



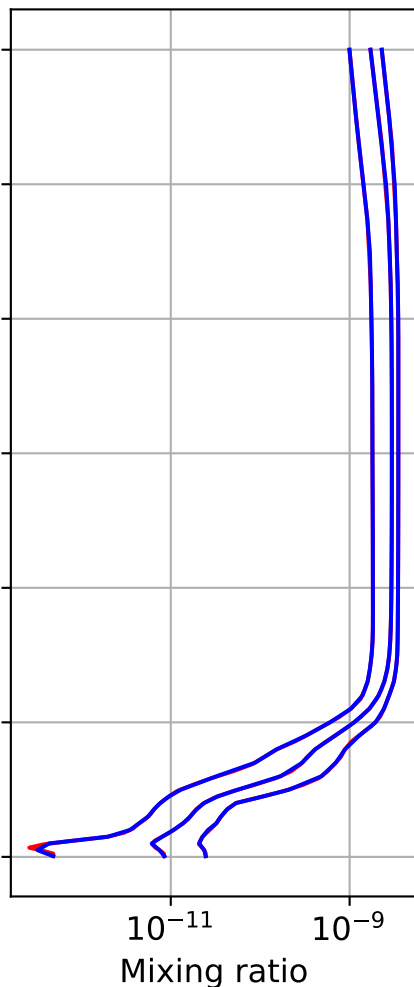
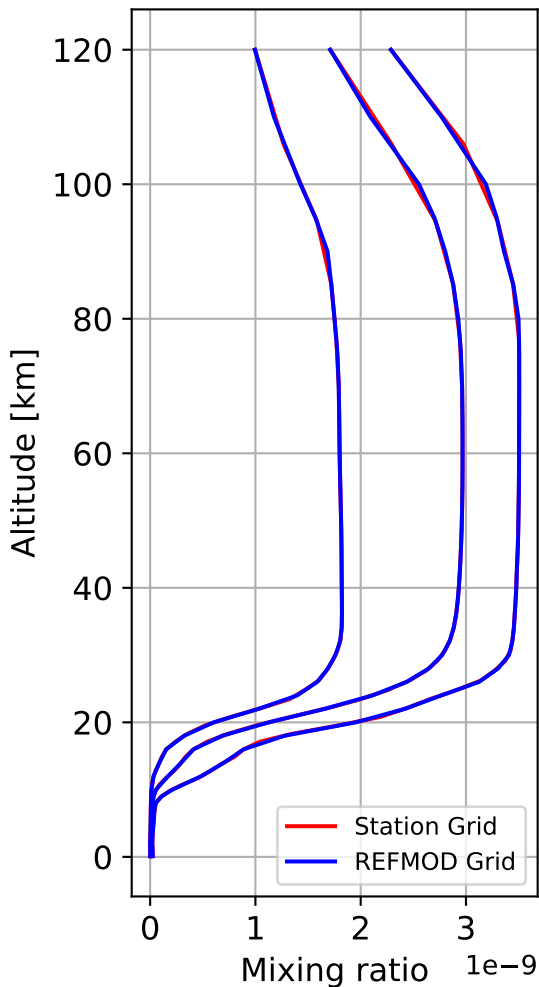
Time Series of vertical profiles (site altitude - 40 km)



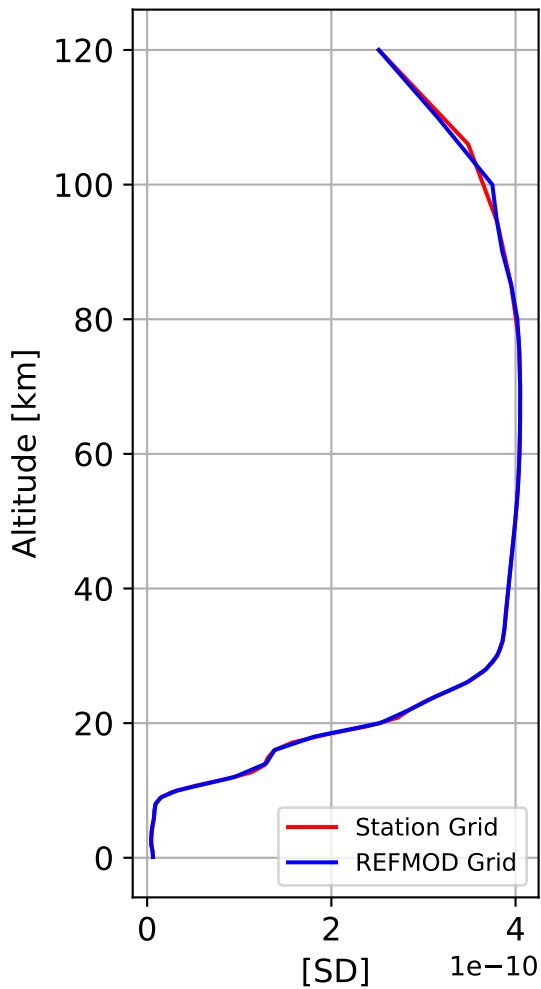
Monthly mean WACCM profile (interpolated to station grid) Karlsruhe, 49.09N, 8.43E, 0.11kmasl



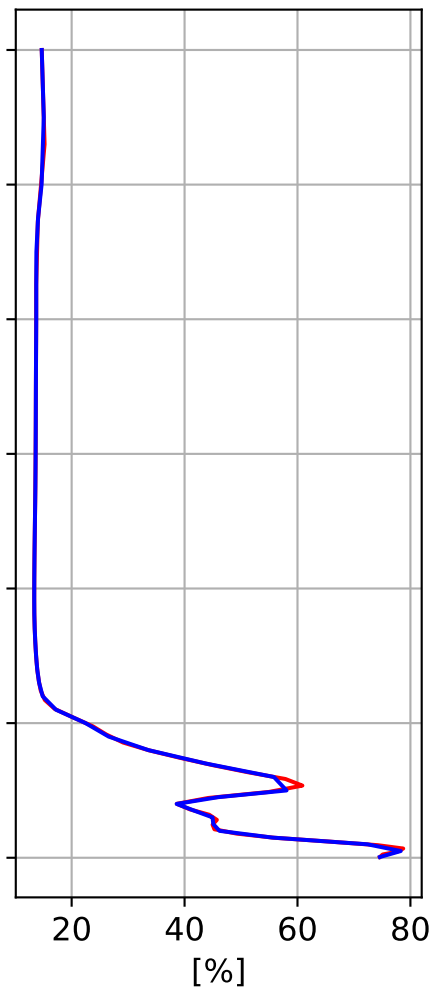
Min, Max, Mean of 732 profiles
Karlsruhe, 49.09N, 8.43E, 0.11kmasl



Std. Deviation



Percent Deviation



Level covariance matrix

1e-19

Altitude [km]

120
100
80
60
40
20

20

40

60

80

100

120

Altitude [km]

Mixing ratio[~ 2]1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0