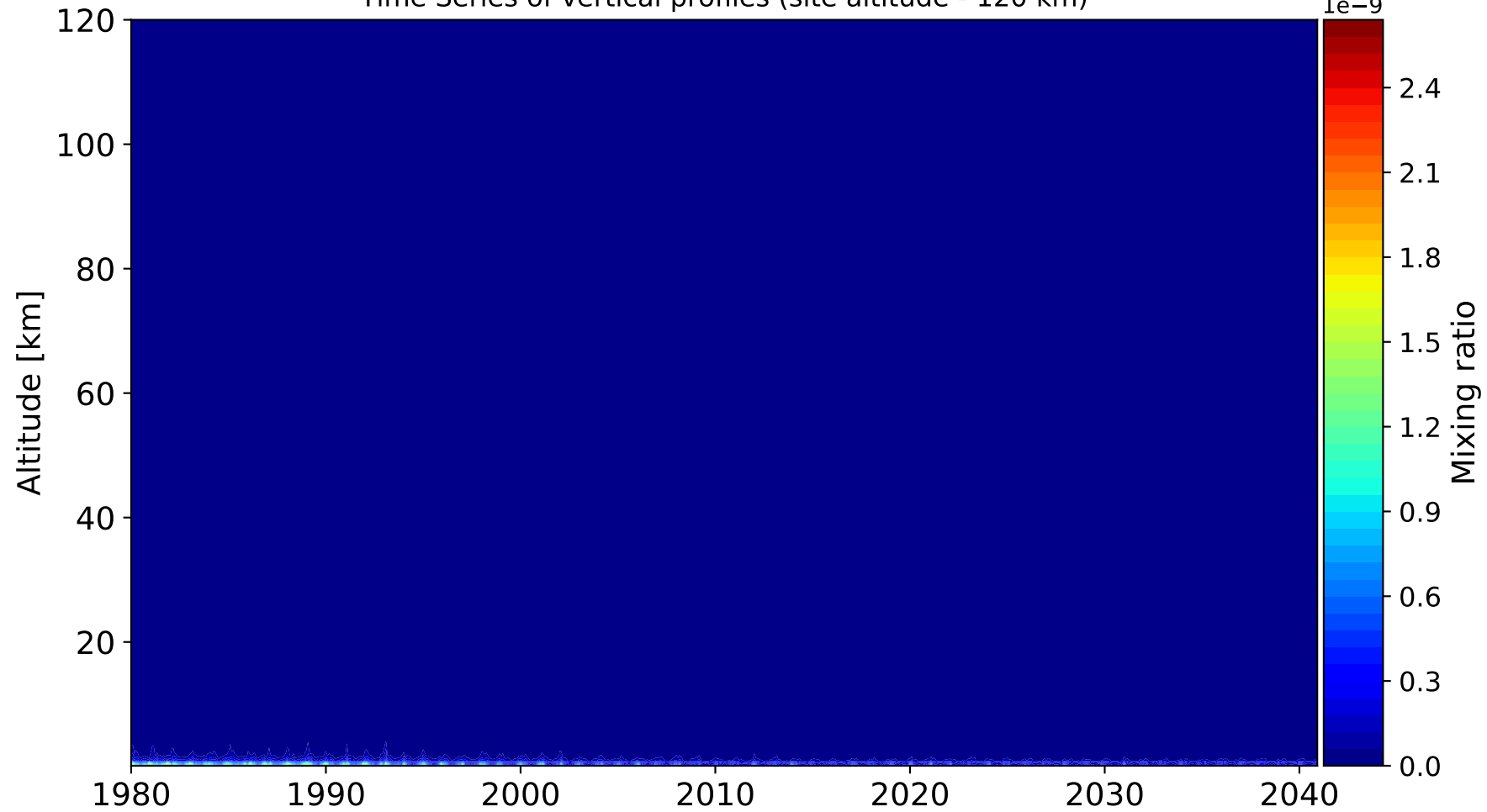
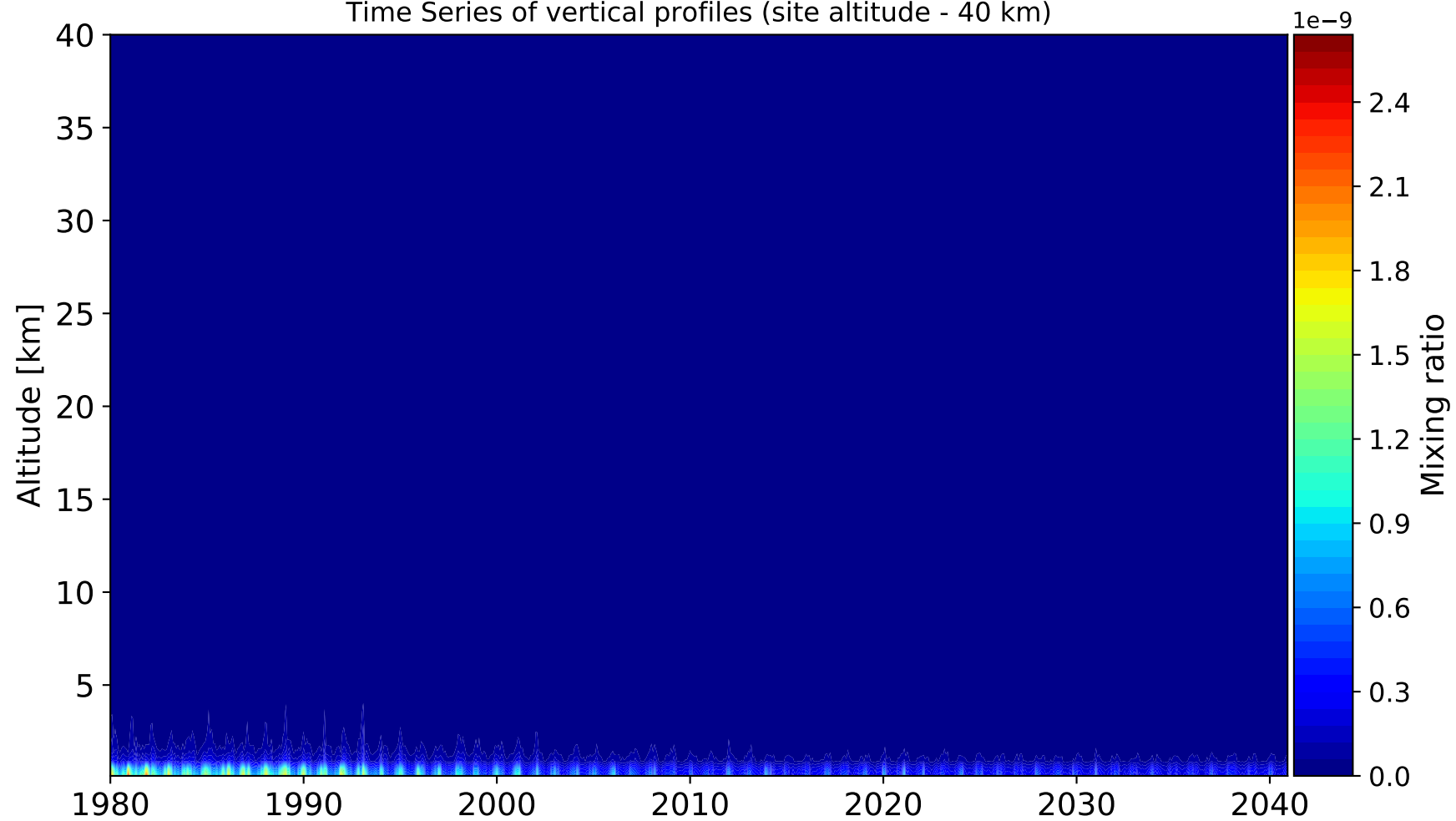


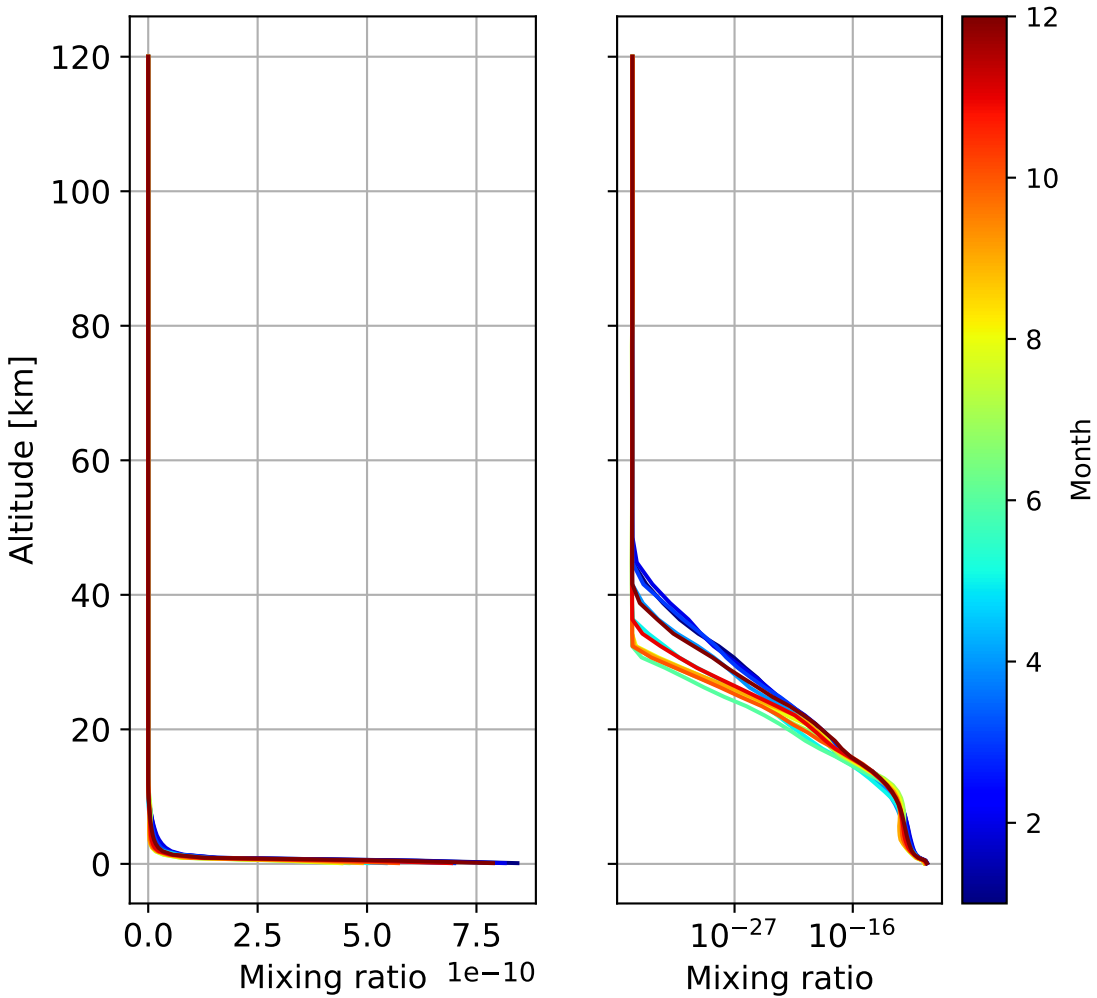
Time Series of vertical profiles (site altitude - 120 km)



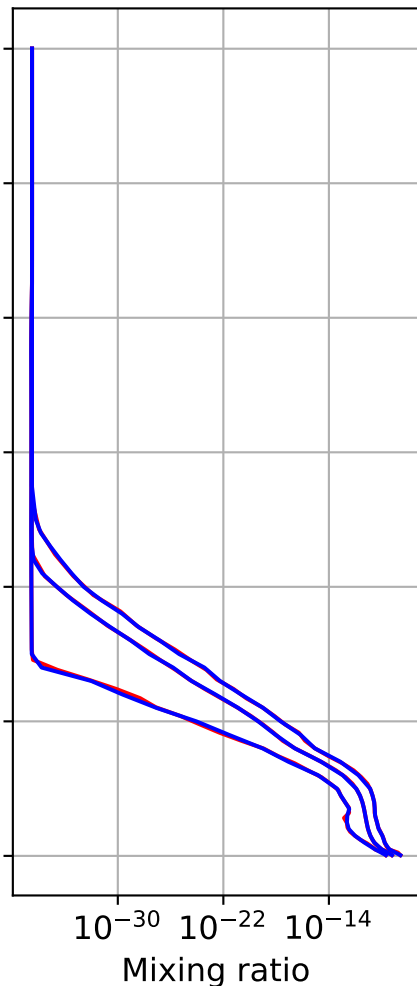
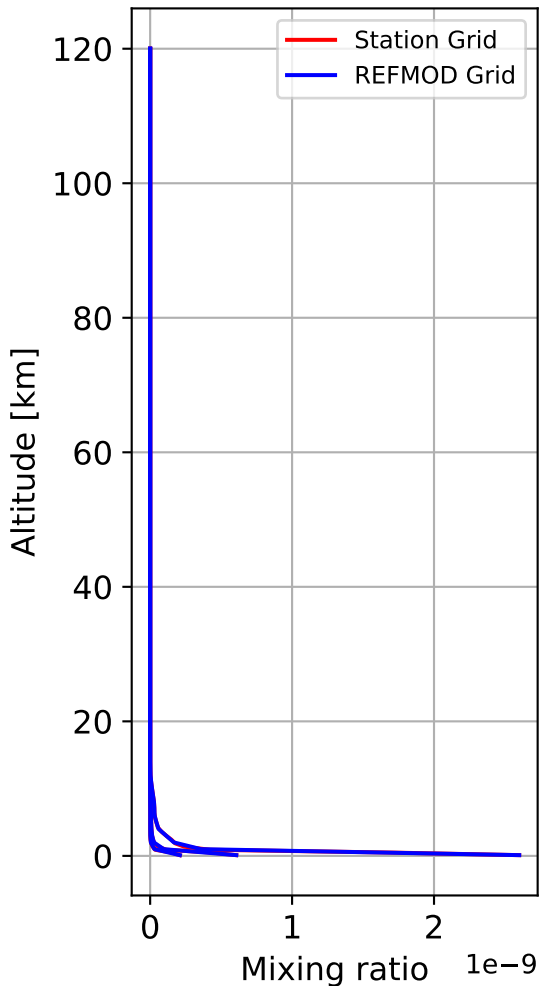
Time Series of vertical profiles (site altitude - 40 km)



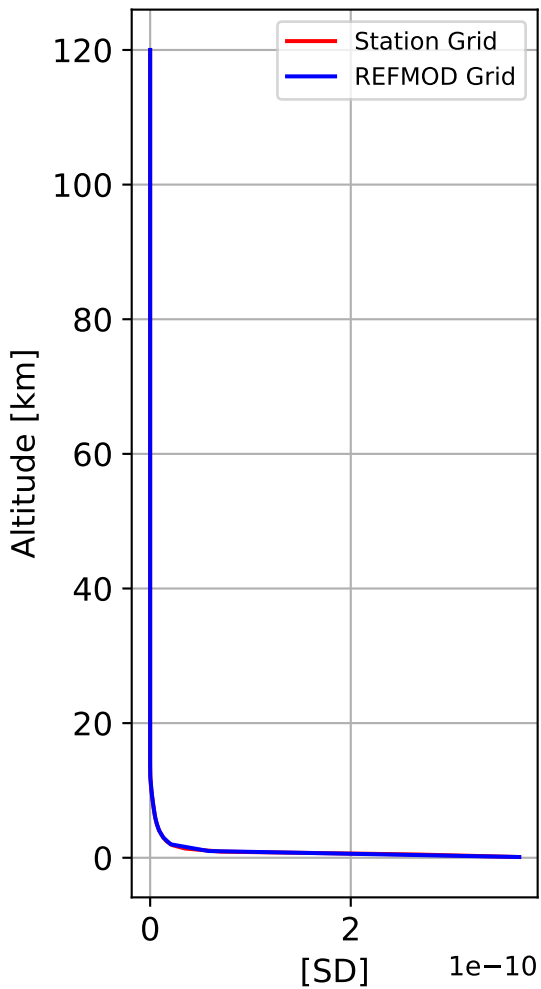
Monthly mean WACCM profile (interpolated to station grid) Karlsruhe, 49.09N, 8.43E, 0.11kmasl



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

Altitude [km]

40

60

80

100

120

1.35
1.20
1.05
0.90
0.75
0.60
0.45
0.30
0.15
0.00

Mixing ratio[~ 2]

