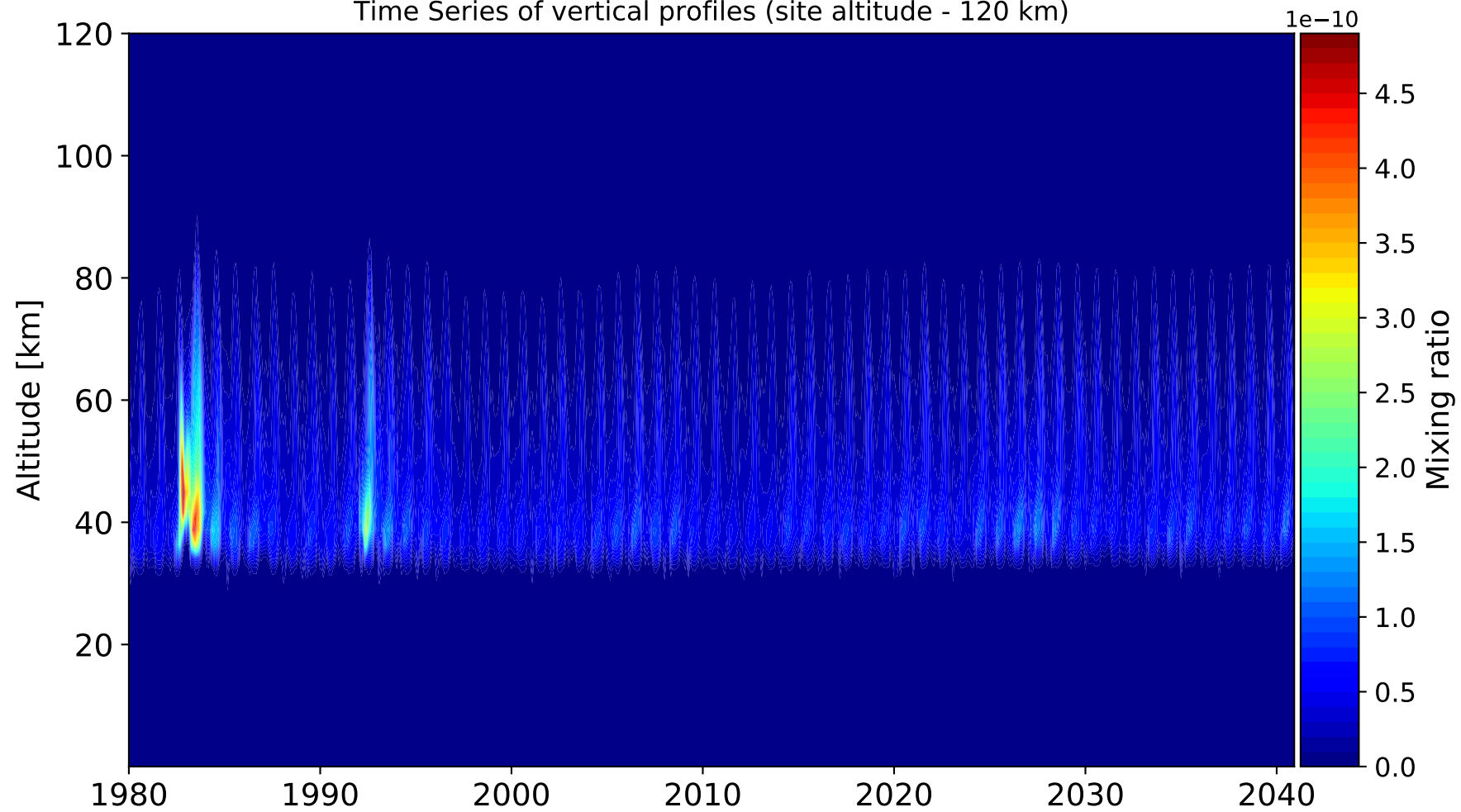
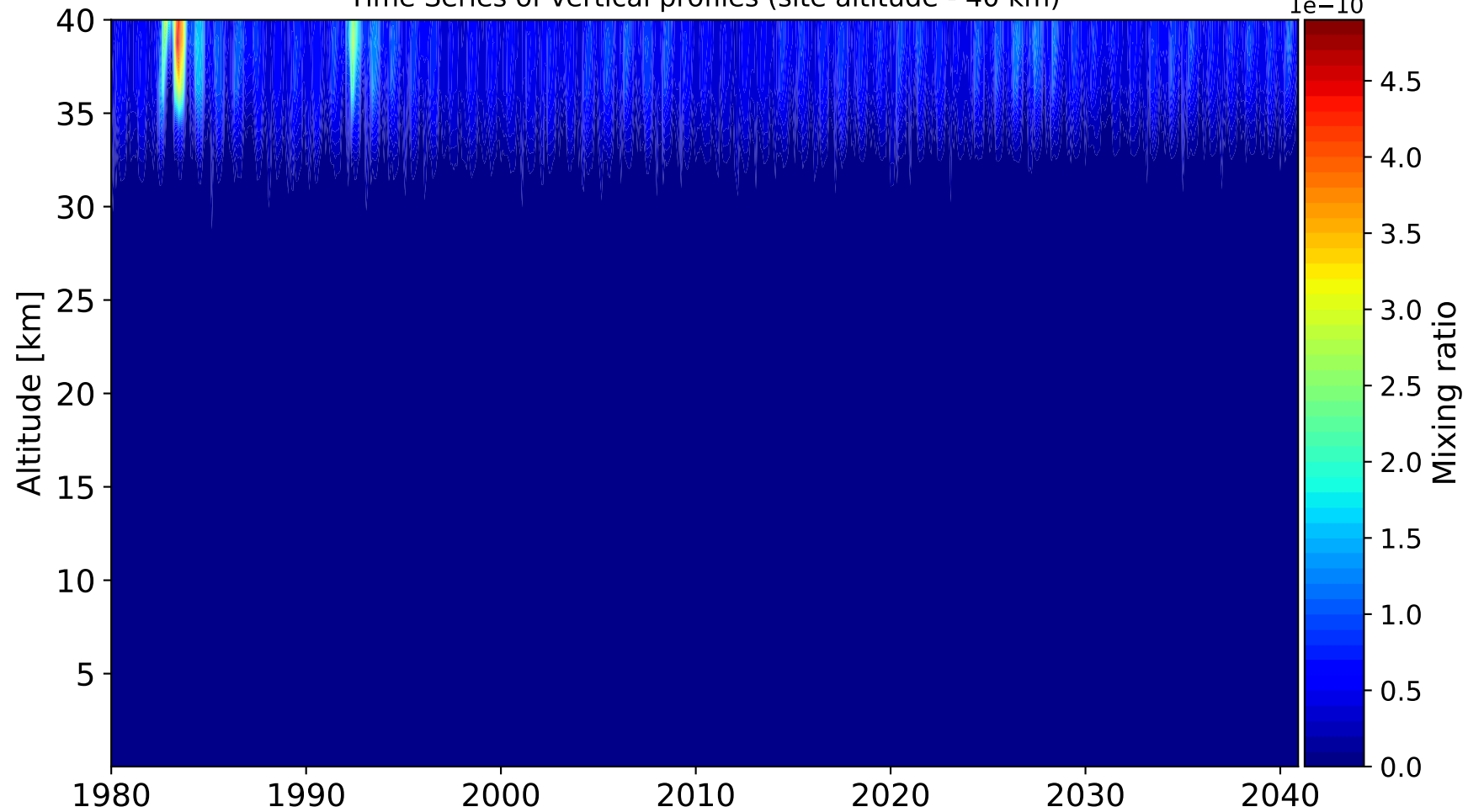


Time Series of vertical profiles (site altitude - 120 km)

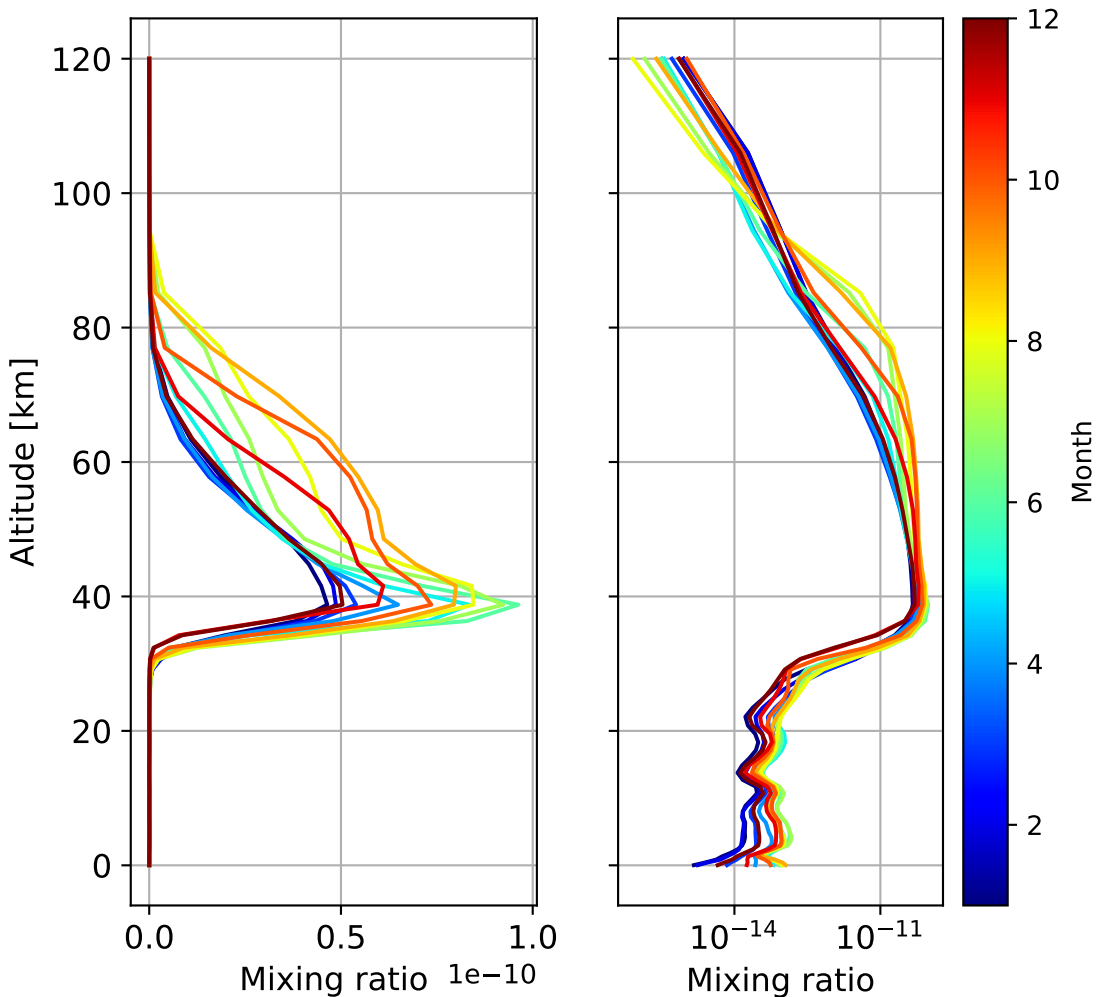


Time Series of vertical profiles (site altitude - 40 km)

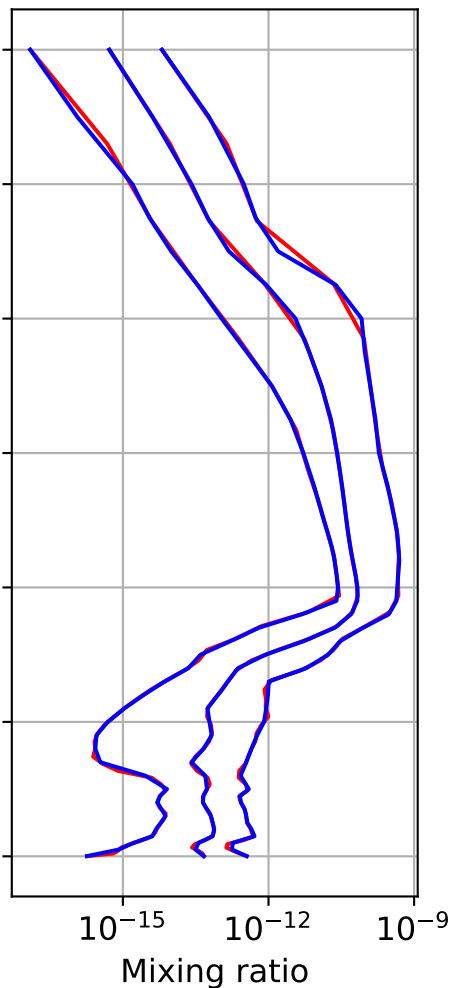
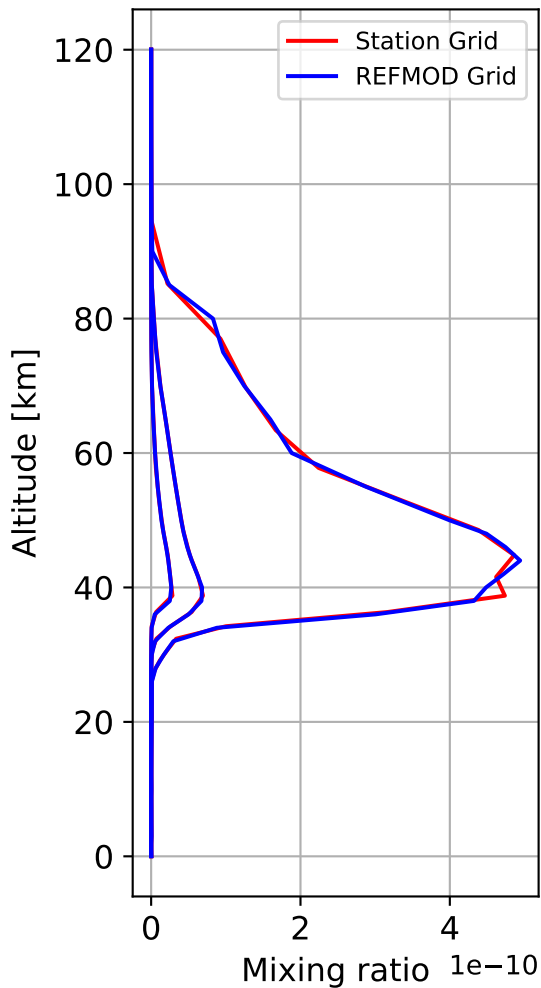
$1e-10$



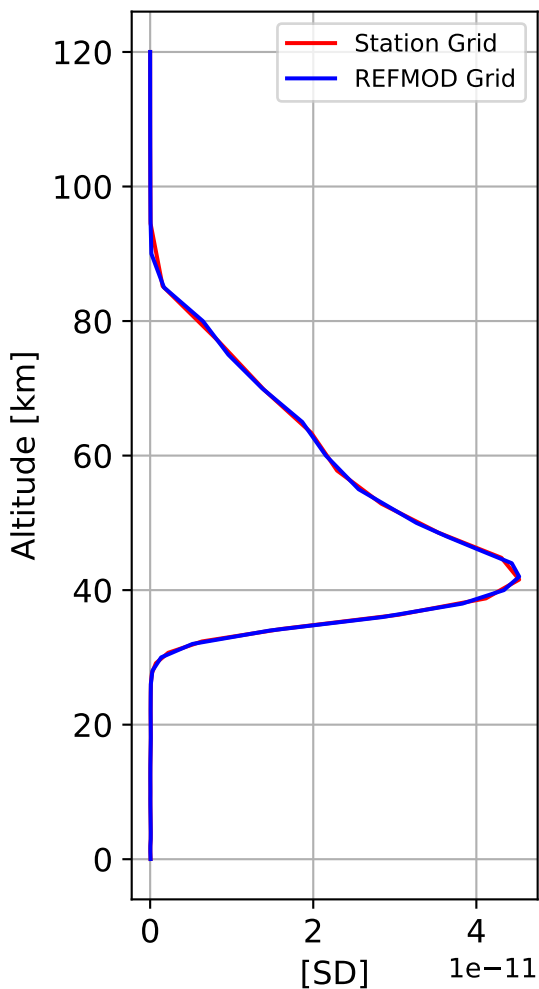
Monthly mean WACCM profile (interpolated to station grid) Bremen, 53.1N, 8.9E, 0.027kmasl



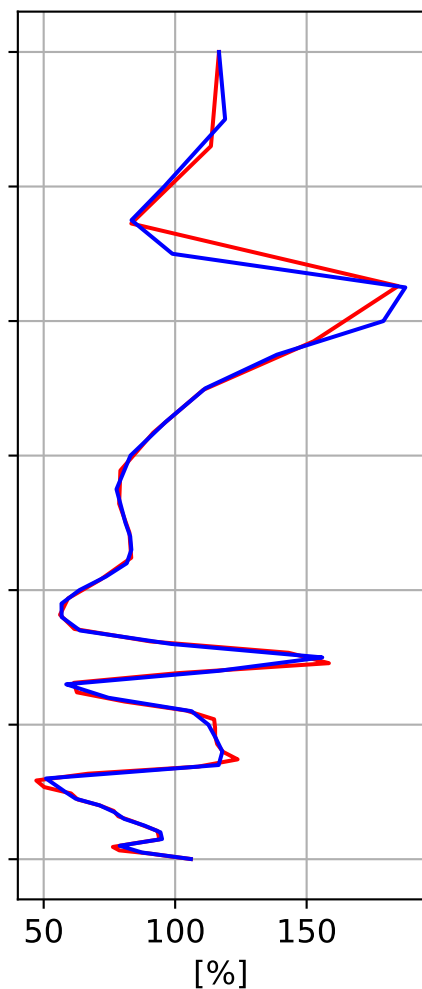
Min, Max, Mean of 732 profiles
Bremen, 53.1N, 8.9E, 0.027kmasl



Std. Deviation



Percent Deviation

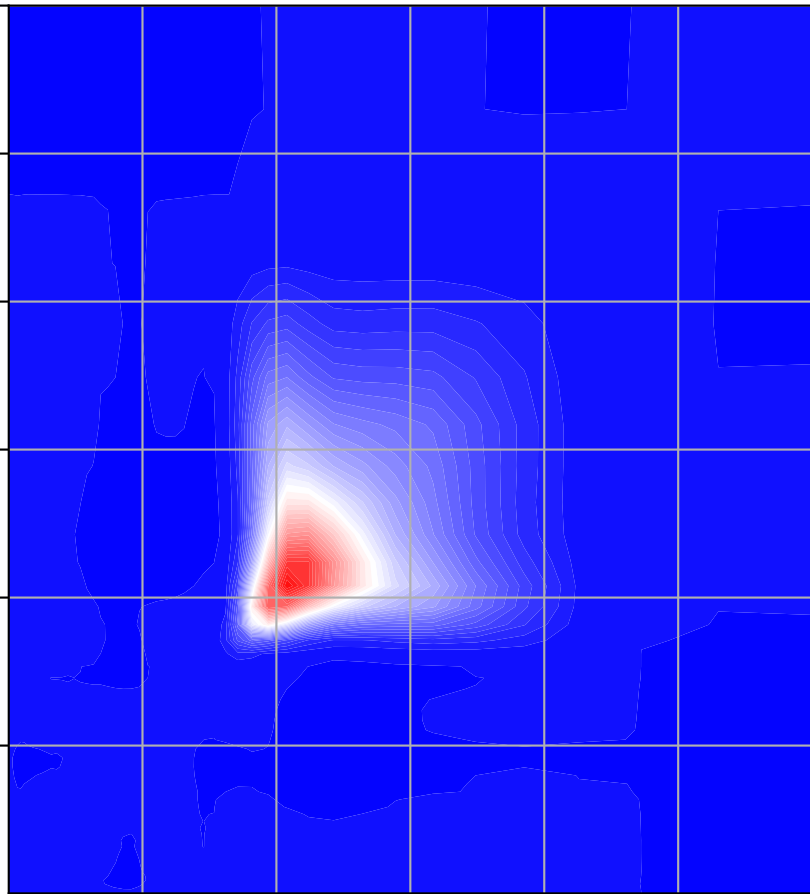


Level covariance matrix

1e-21

Altitude [km]

120
100
80
60
40
20



2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00

Mixing ratio[~ 2]

Altitude [km]