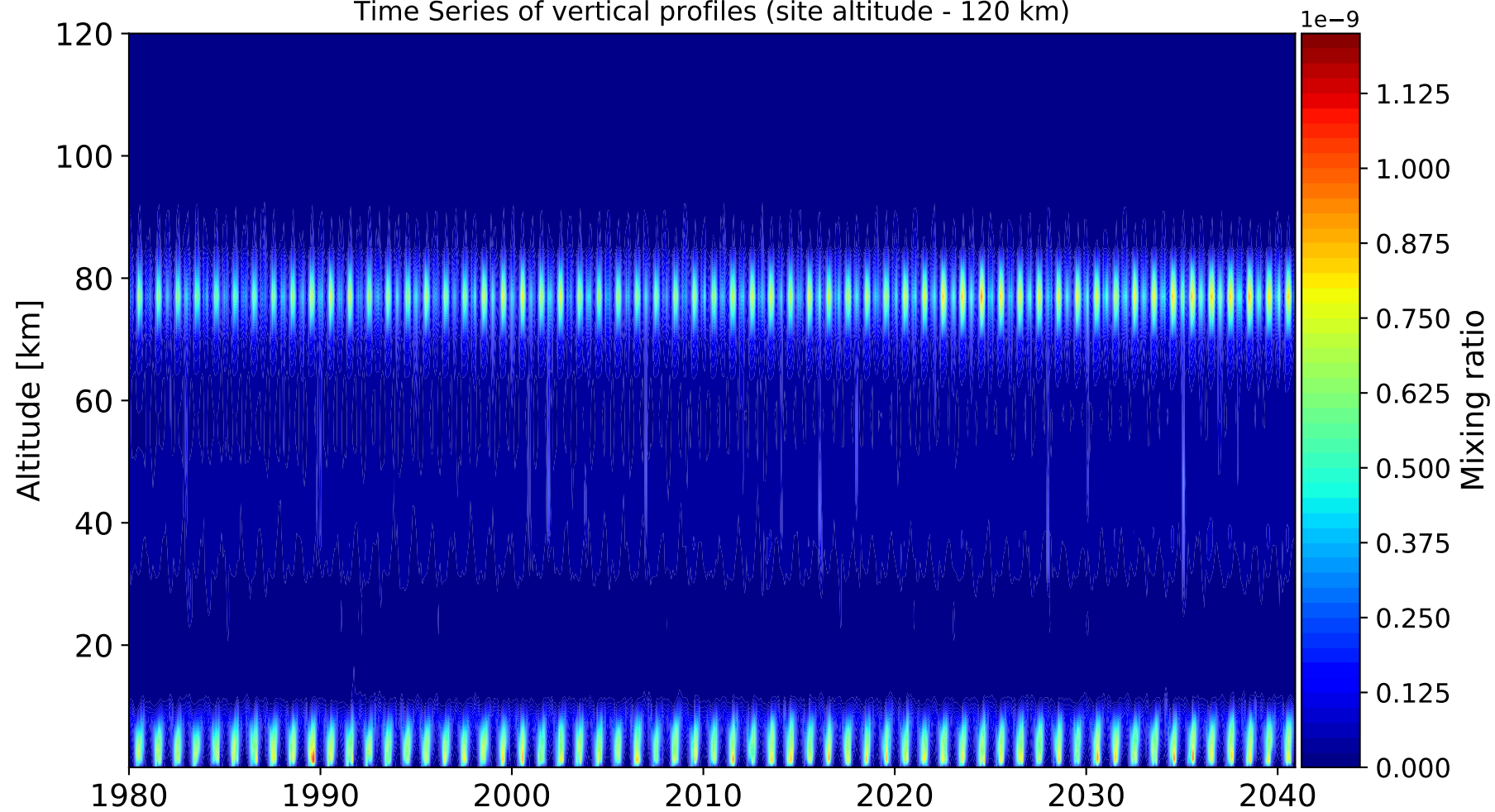
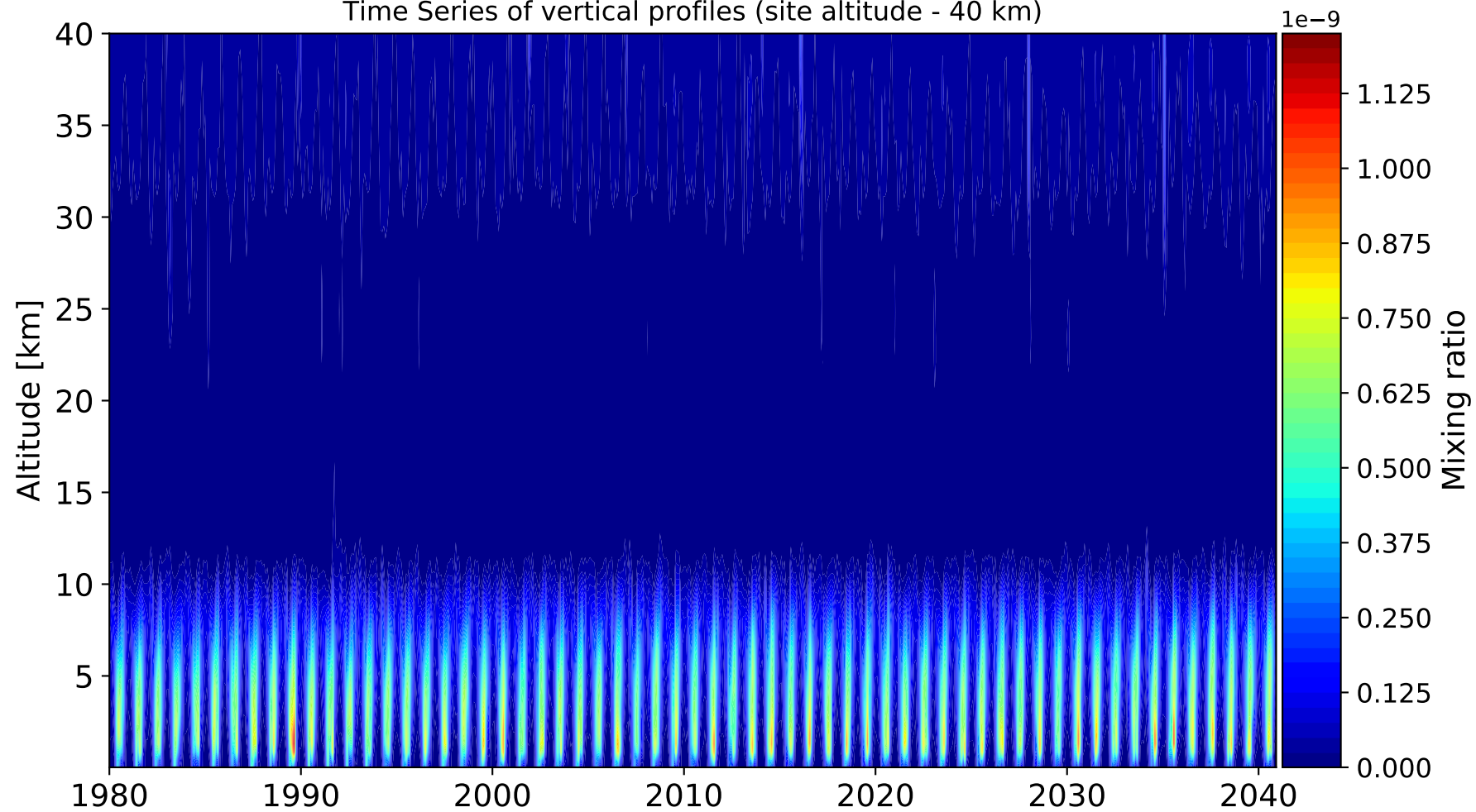


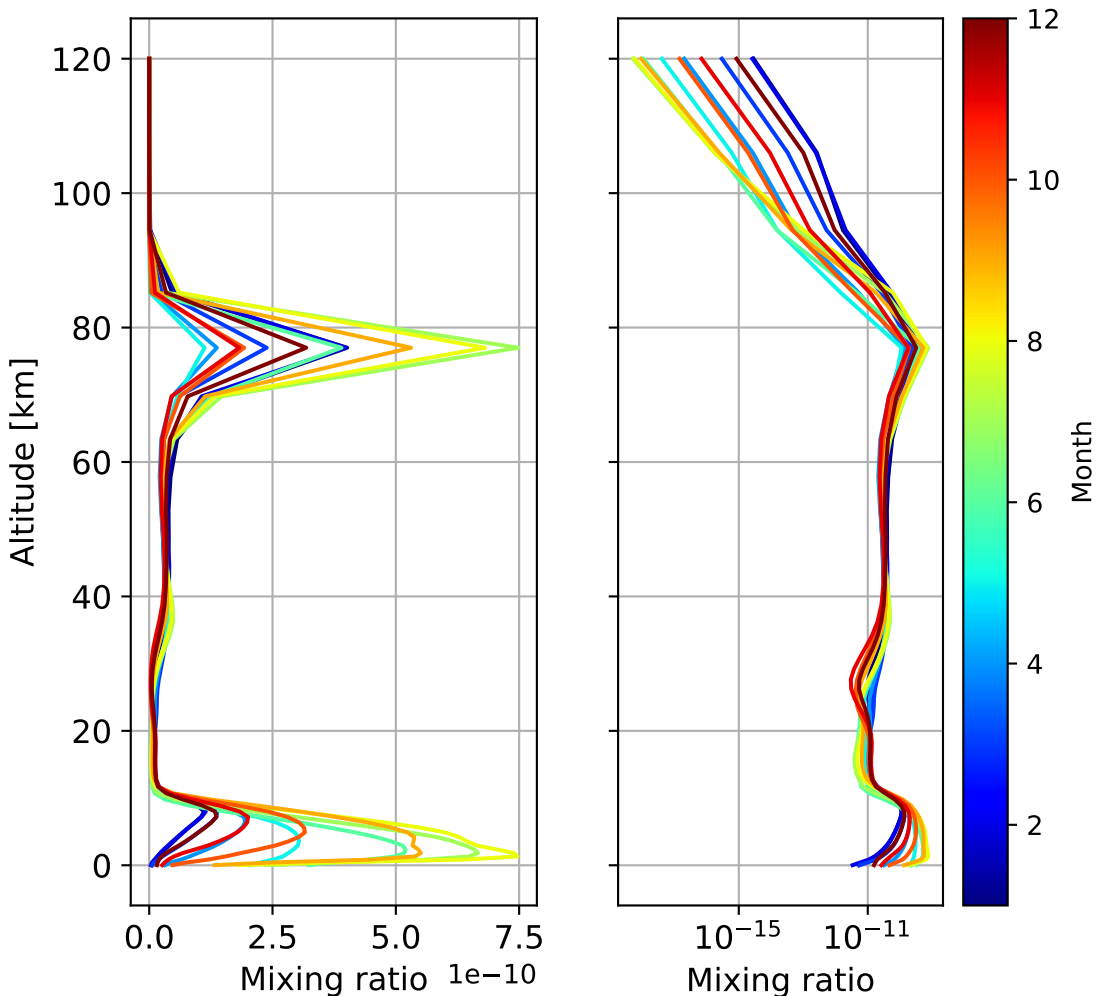
Time Series of vertical profiles (site altitude - 120 km)



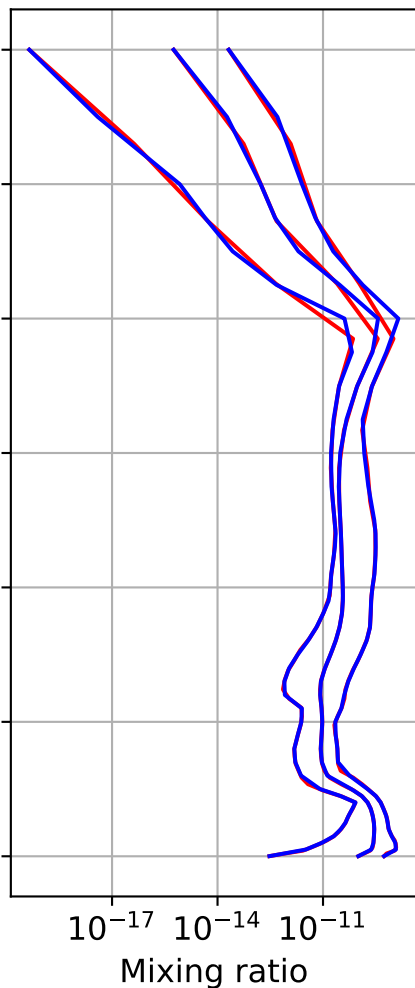
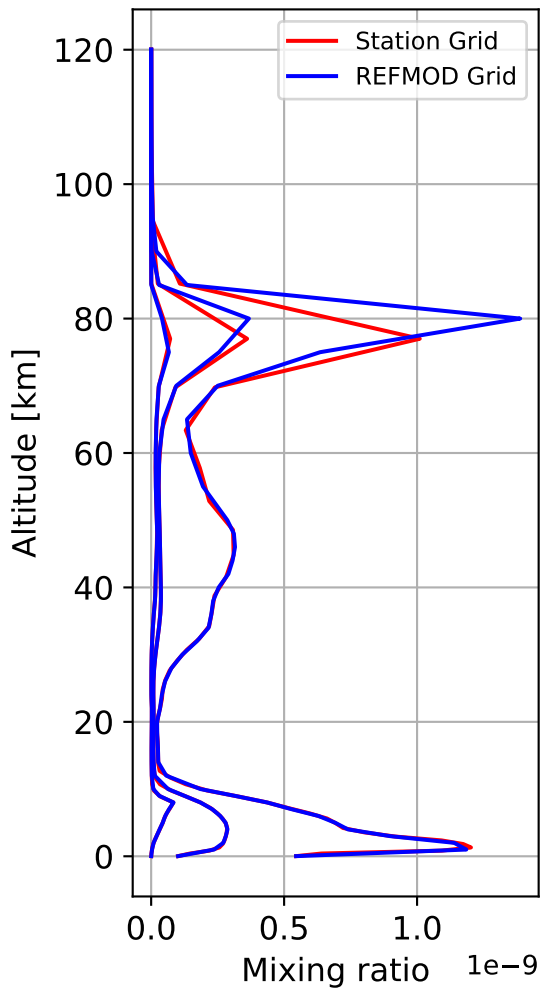
Time Series of vertical profiles (site altitude - 40 km)



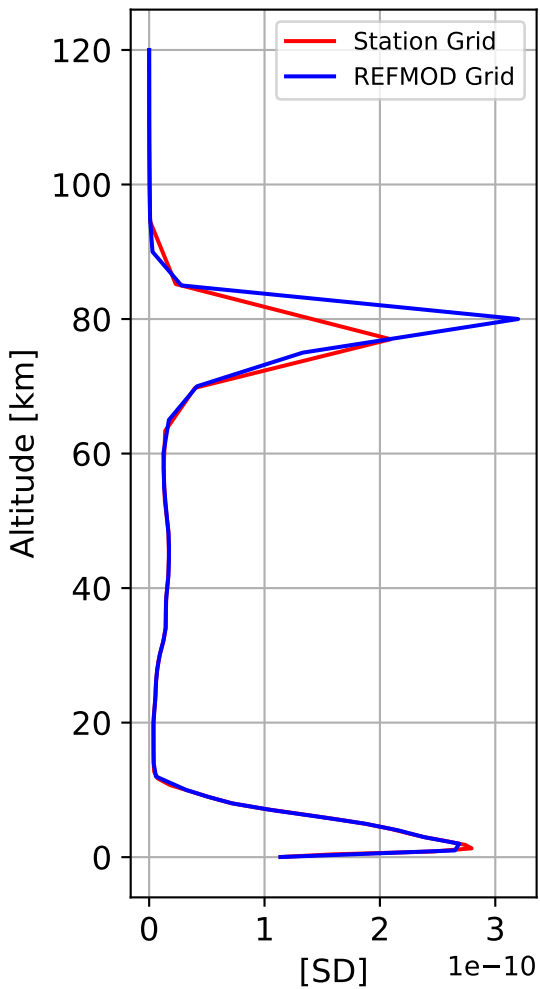
Monthly mean WACCM profile (interpolated to station grid)  
Ny\_Alesund, 78.9N, 11.9E, 0.02kmasl



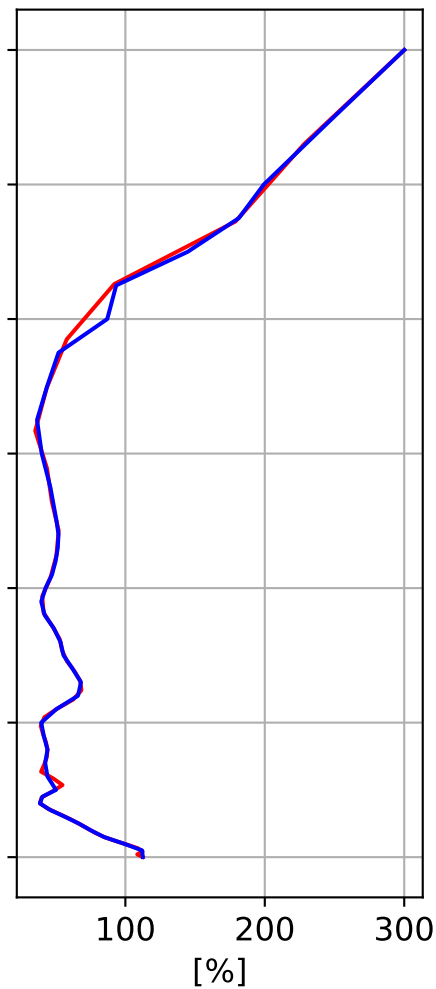
Min, Max, Mean of 732 profiles  
Ny\_Alesund, 78.9N, 11.9E, 0.02kmasl



Std. Deviation



Percent Deviation



# Level covariance matrix

1e-20

Altitude [km]

120

100

80

60

40

20

20

Altitude [km]

60

80

100

120

Mixing ratio[ $\sim 2$ ]

0

1

2

3

4

5

6

7

8

