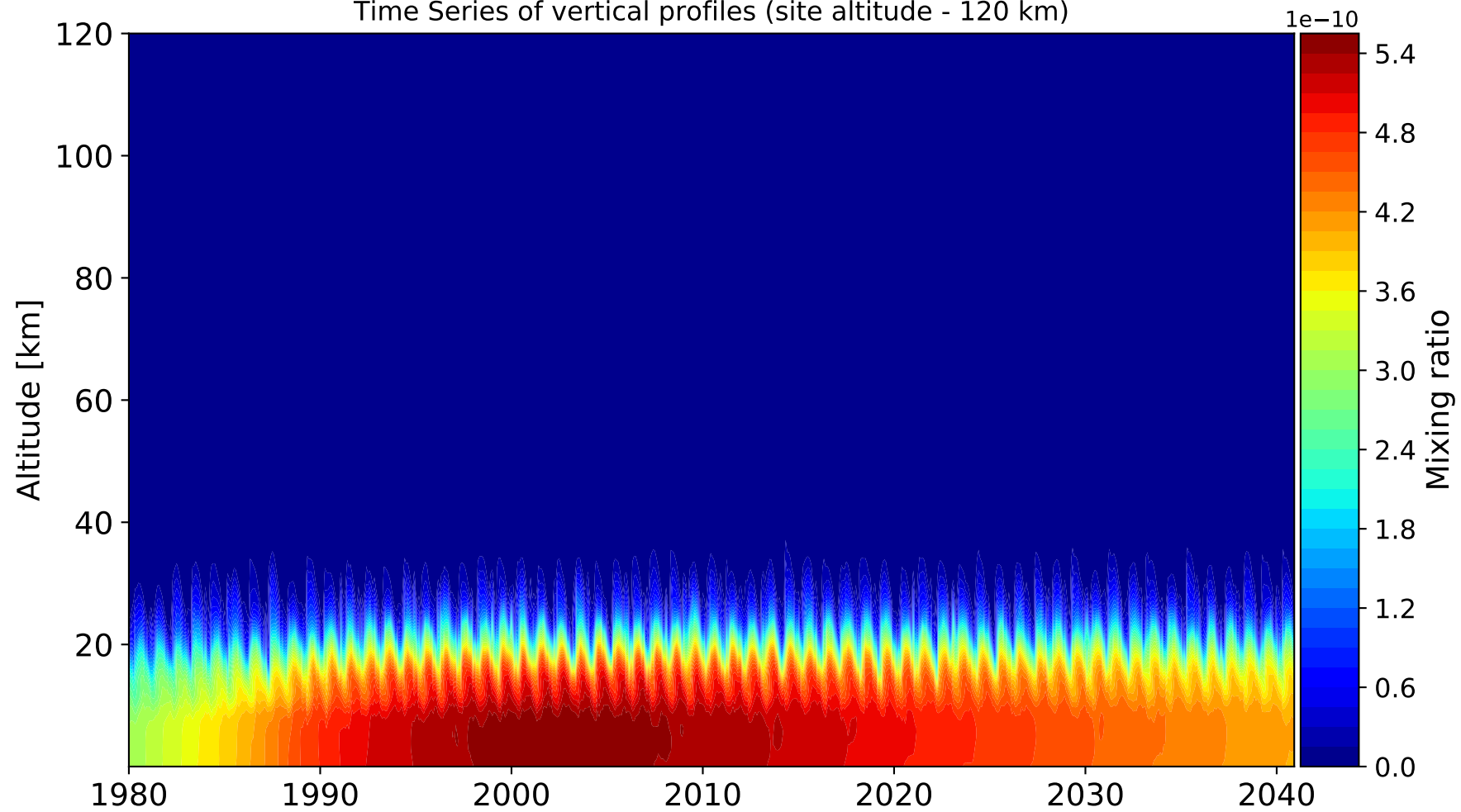
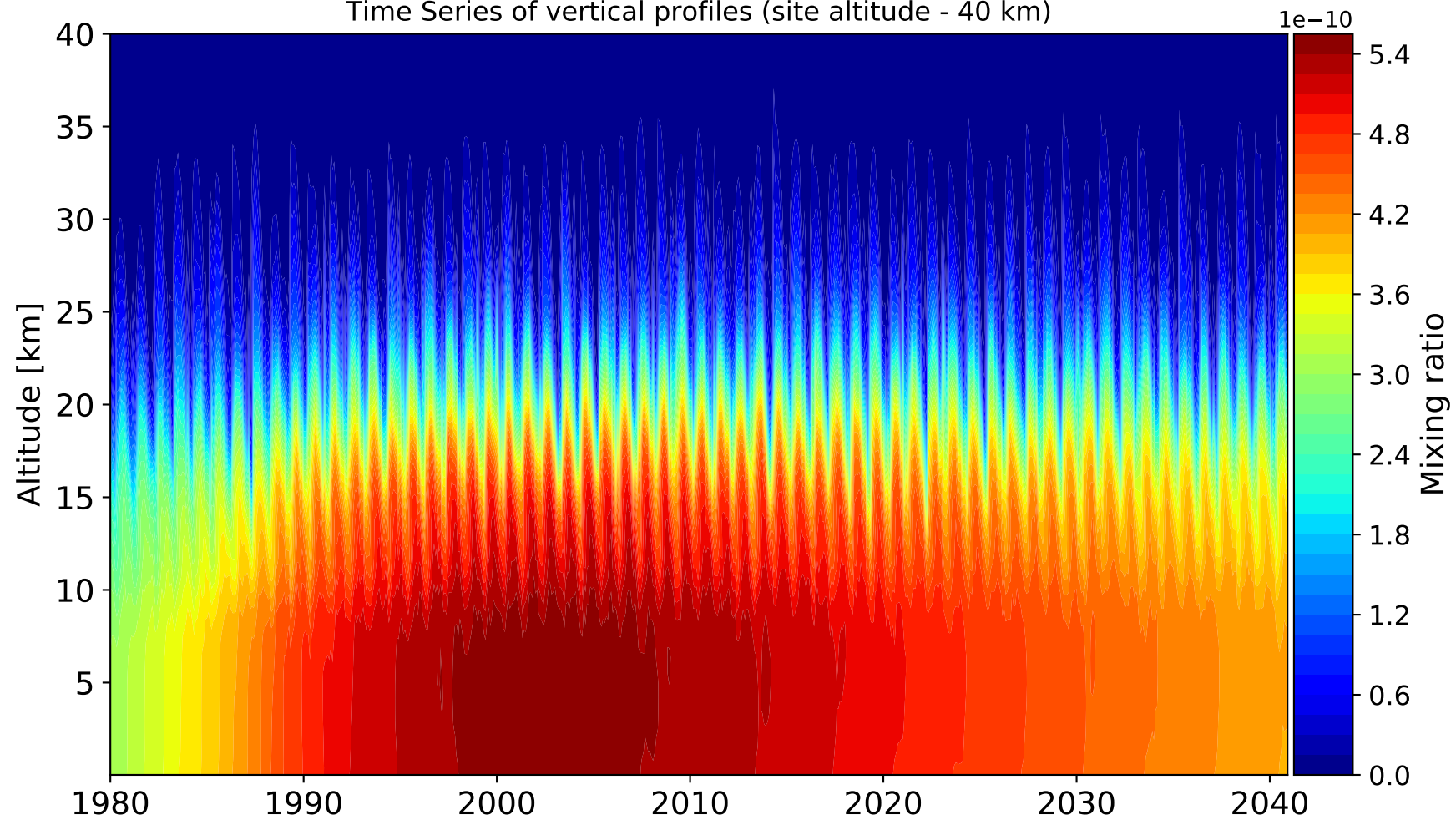


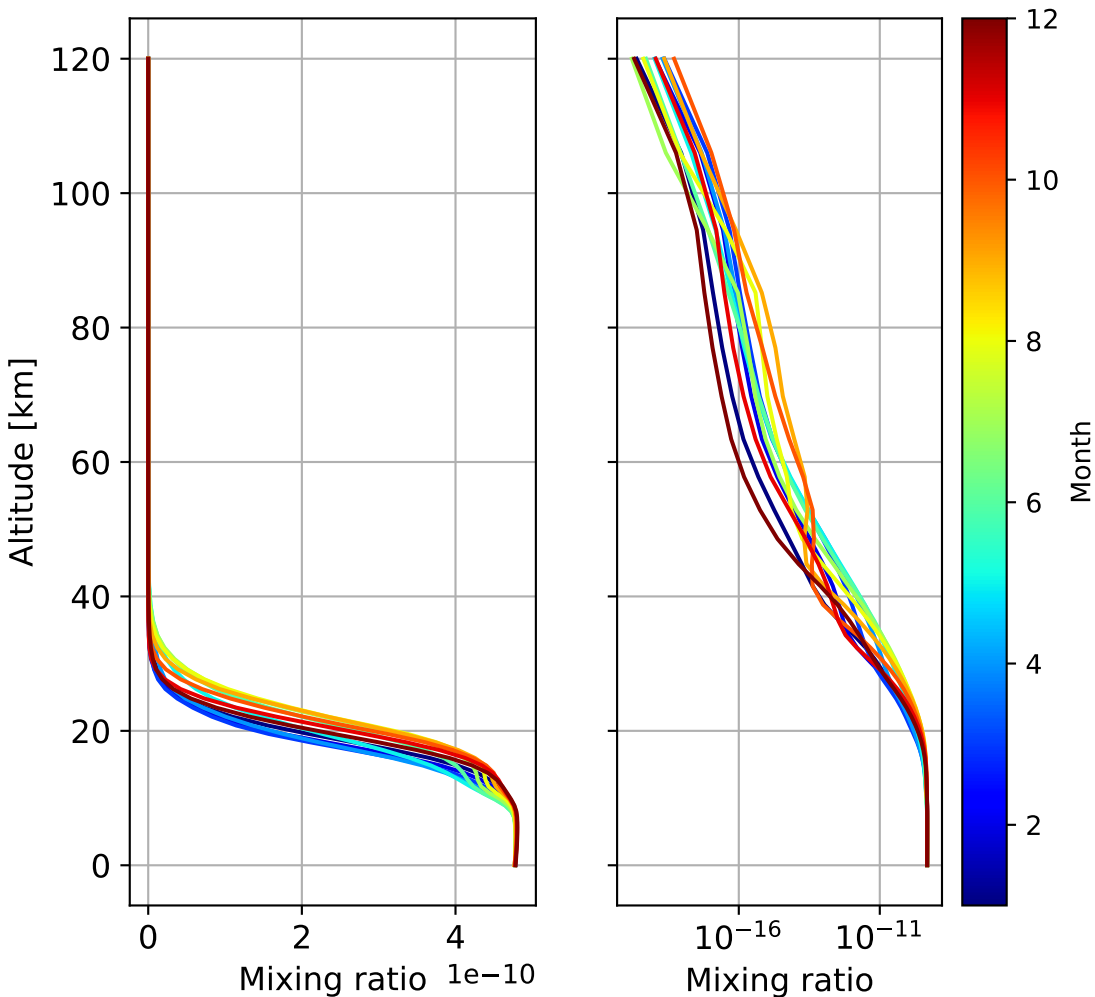
Time Series of vertical profiles (site altitude - 120 km)



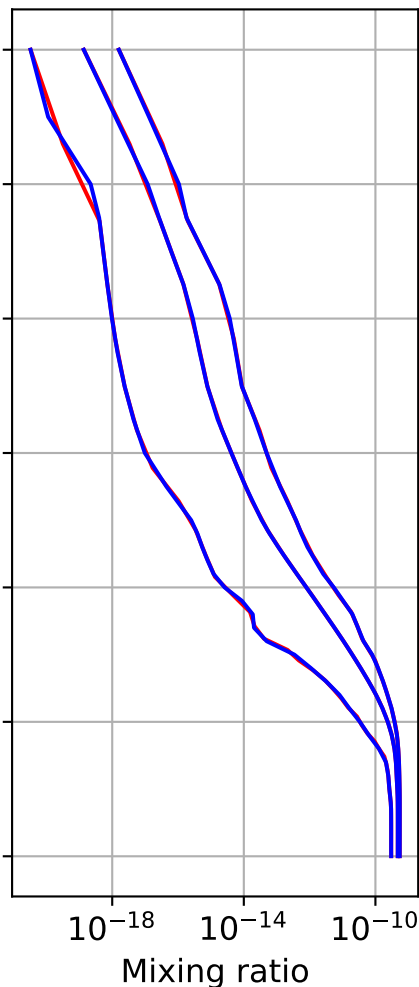
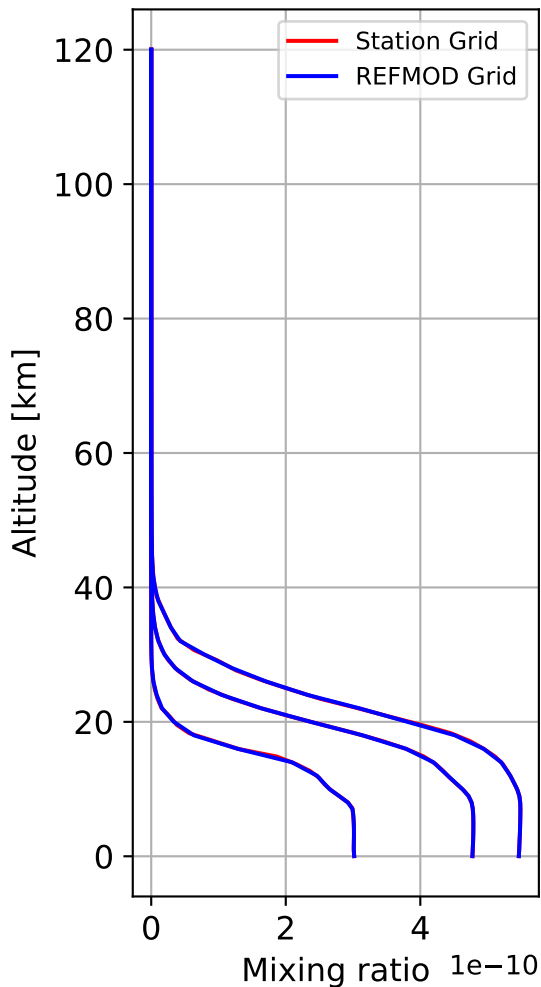
Time Series of vertical profiles (site altitude - 40 km)



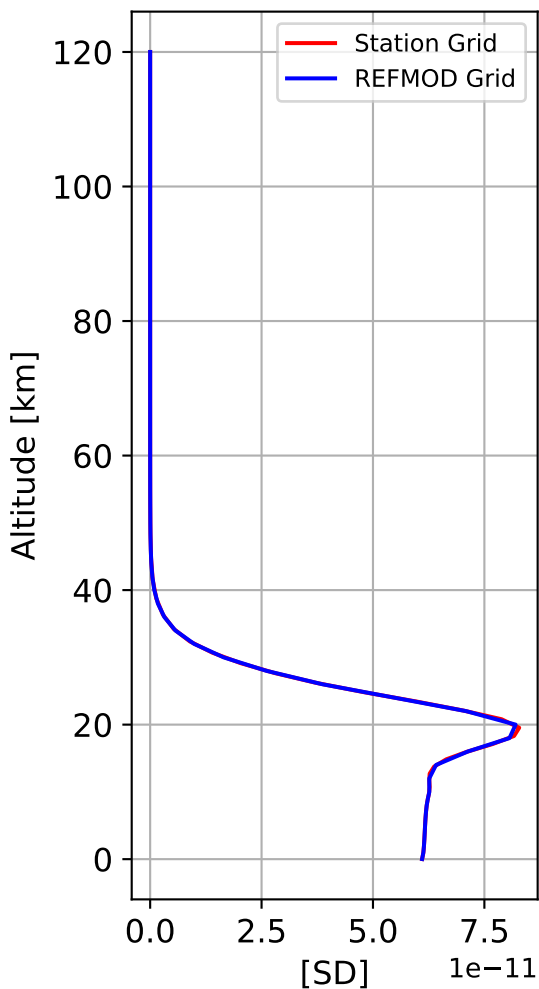
# Monthly mean WACCM profile (interpolated to station grid) Ny\_Alesund, 78.9N, 11.9E, 0.02kmasl



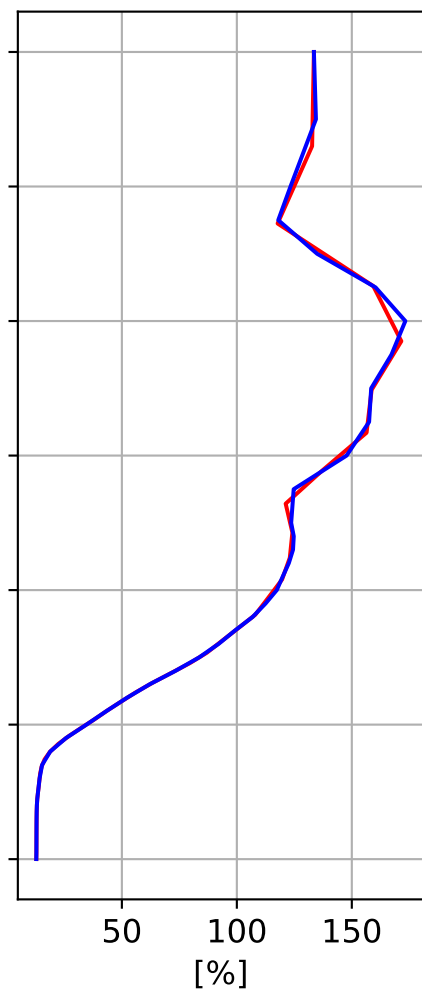
Min, Max, Mean of 732 profiles  
Ny\_Alesund, 78.9N, 11.9E, 0.02kmasl



### Std. Deviation



### Percent Deviation

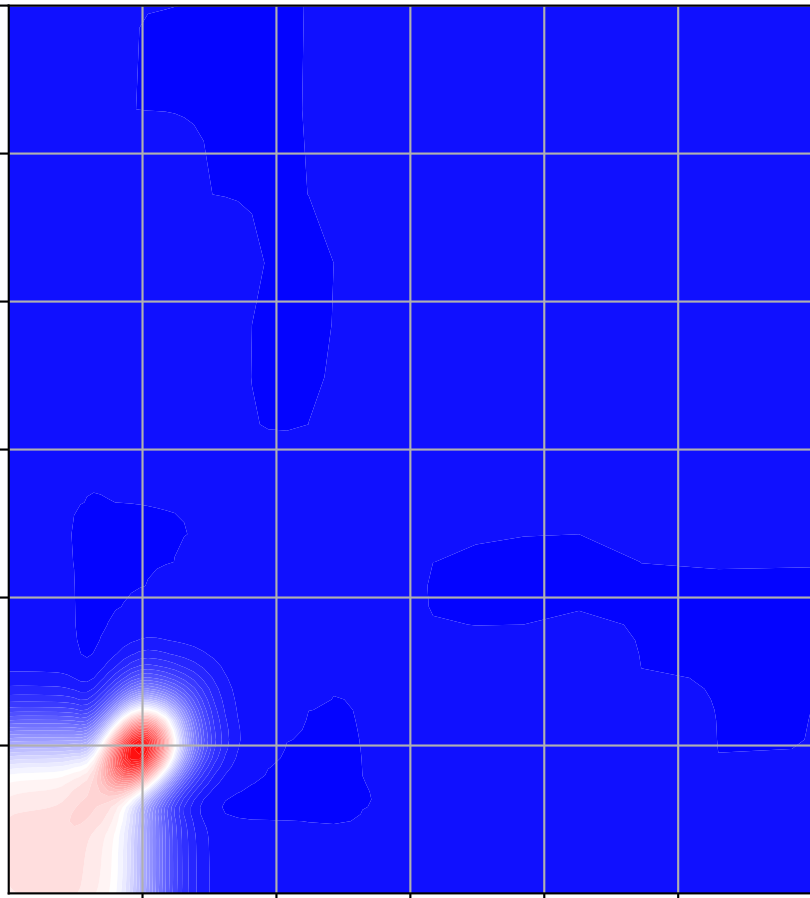


# Level covariance matrix

1e-21

Altitude [km]

120  
100  
80  
60  
40  
20



Mixing ratio[ $\sim 2$ ]

6.75  
6.00  
5.25  
4.50  
3.75  
3.00  
2.25  
1.50  
0.75  
0.00

Altitude [km]