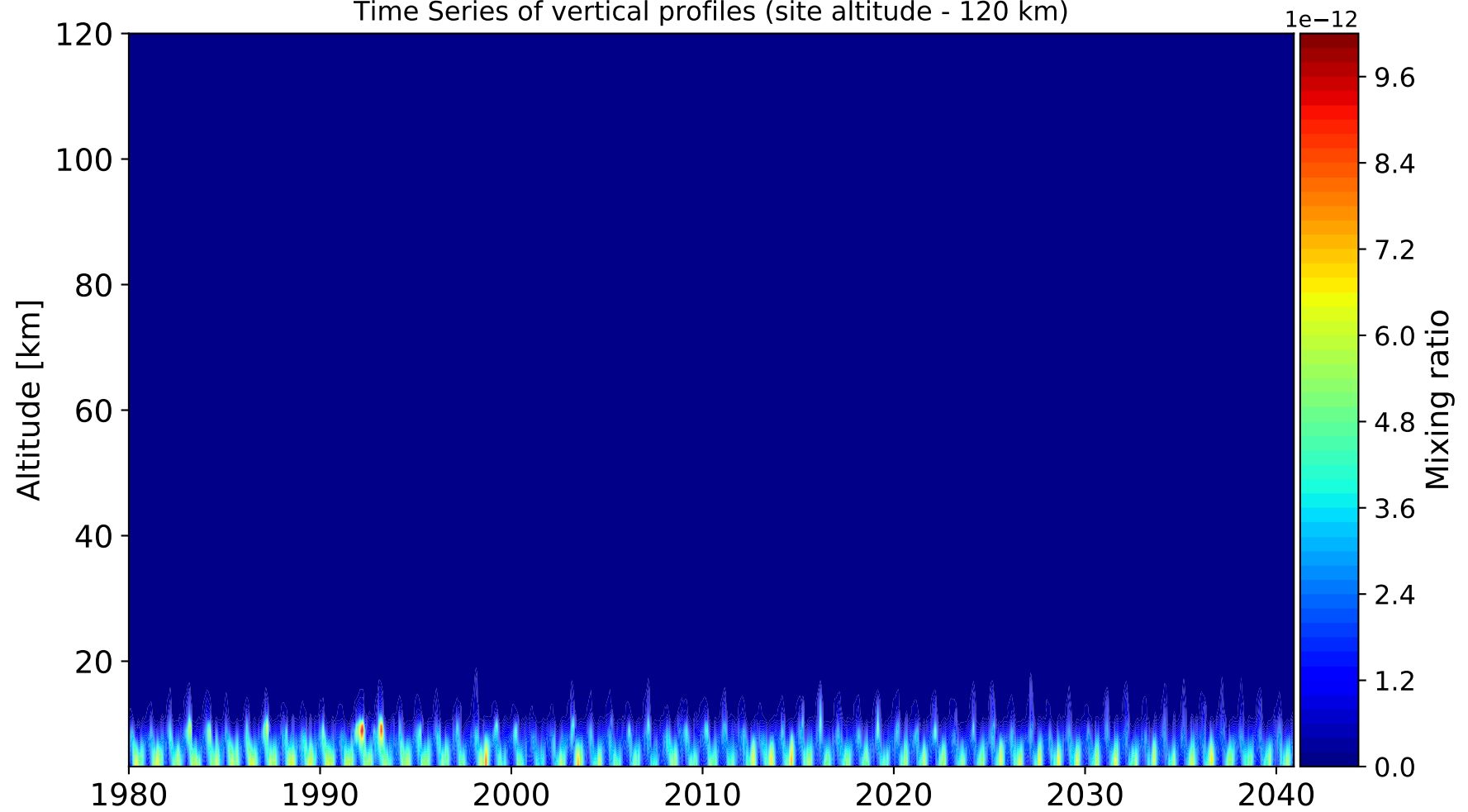
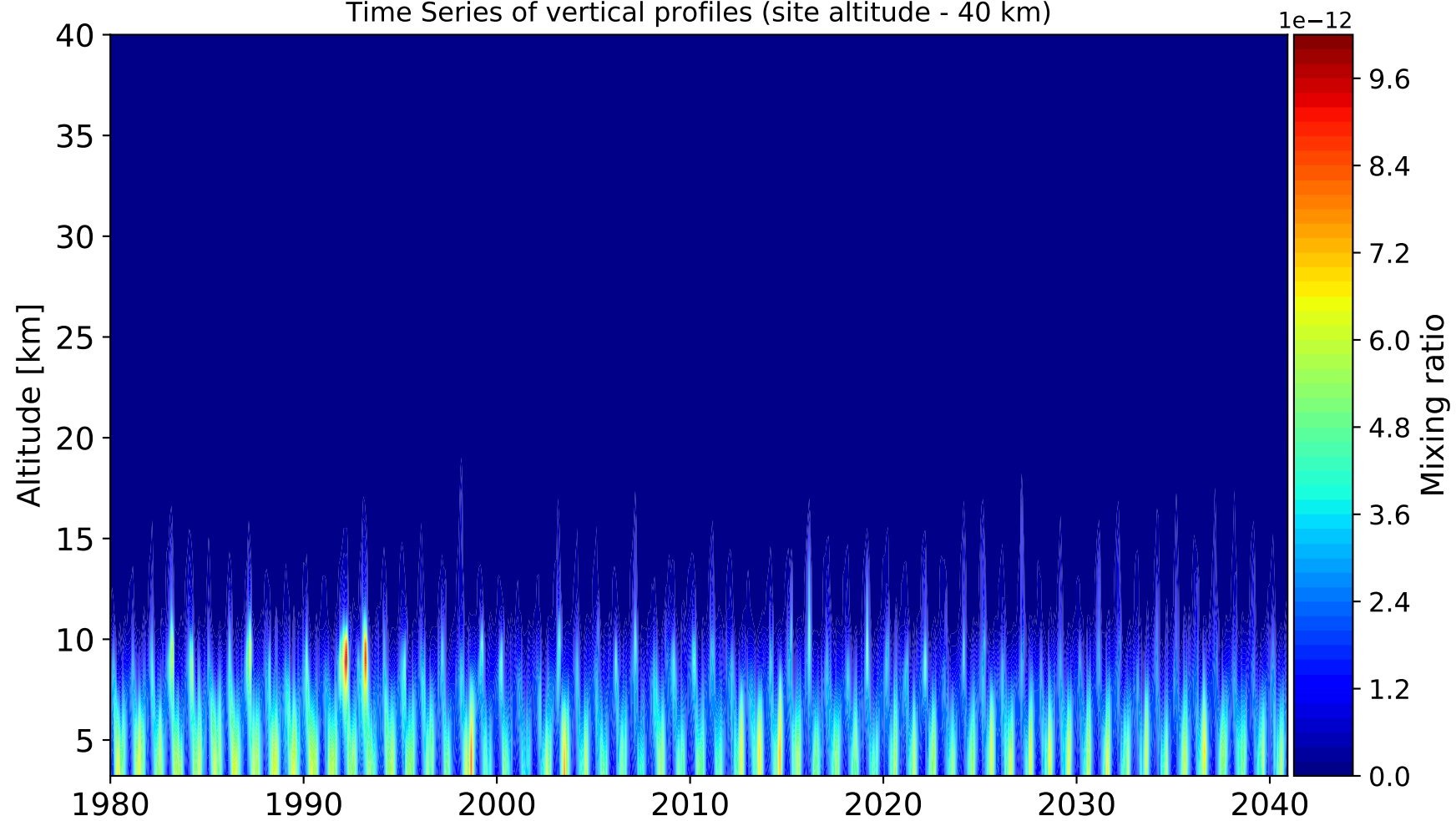


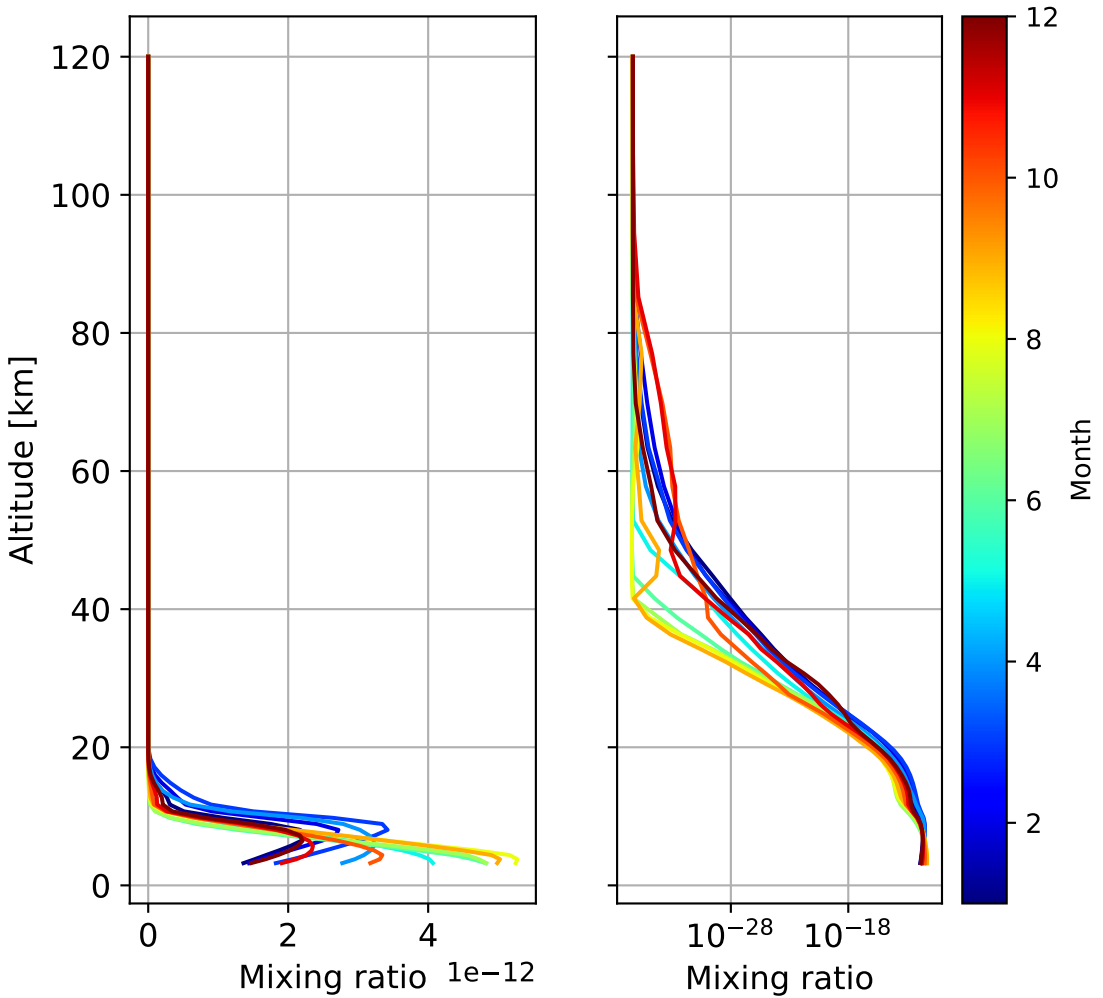
Time Series of vertical profiles (site altitude - 120 km)



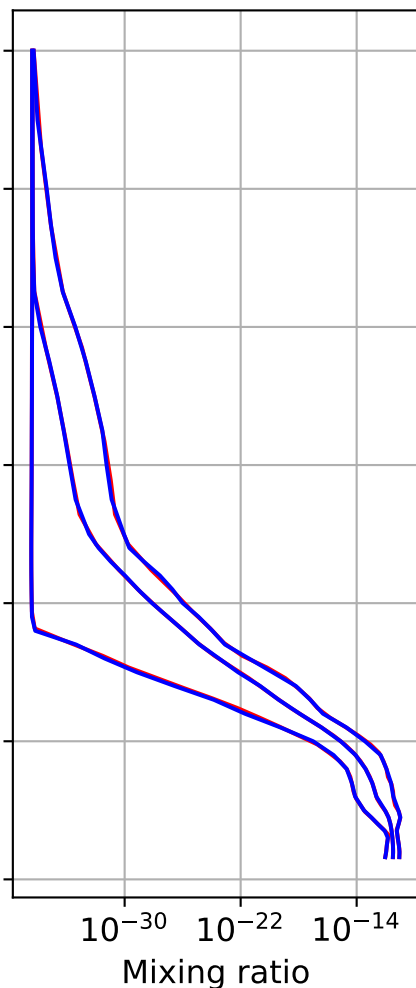
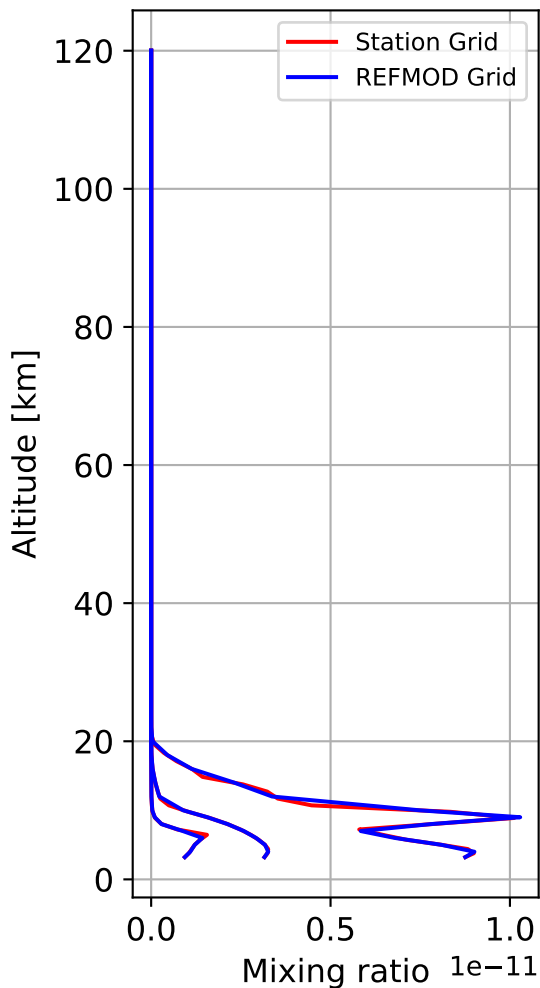
Time Series of vertical profiles (site altitude - 40 km)



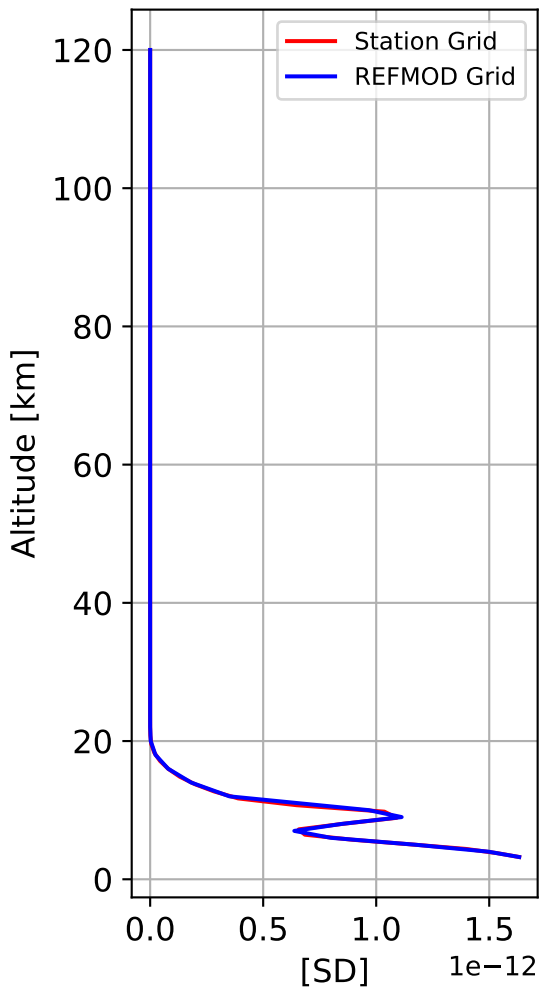
# Monthly mean WACCM profile (interpolated to station grid) Summit, 72.5796N, 321.5408E, 3.22kmasl



Min, Max, Mean of 732 profiles  
Summit, 72.5796N, 321.5408E, 3.22kmasl



### Std. Deviation



### Percent Deviation



# Level covariance matrix

1e-24

Altitude [km]

120  
100  
80  
60  
40  
20

20

40

60

80

100

120

Altitude [km]

Mixing ratio[ $\sim 2$ ]

2.4  
2.0  
1.6  
1.2  
0.8  
0.4  
0.0  
-0.4

