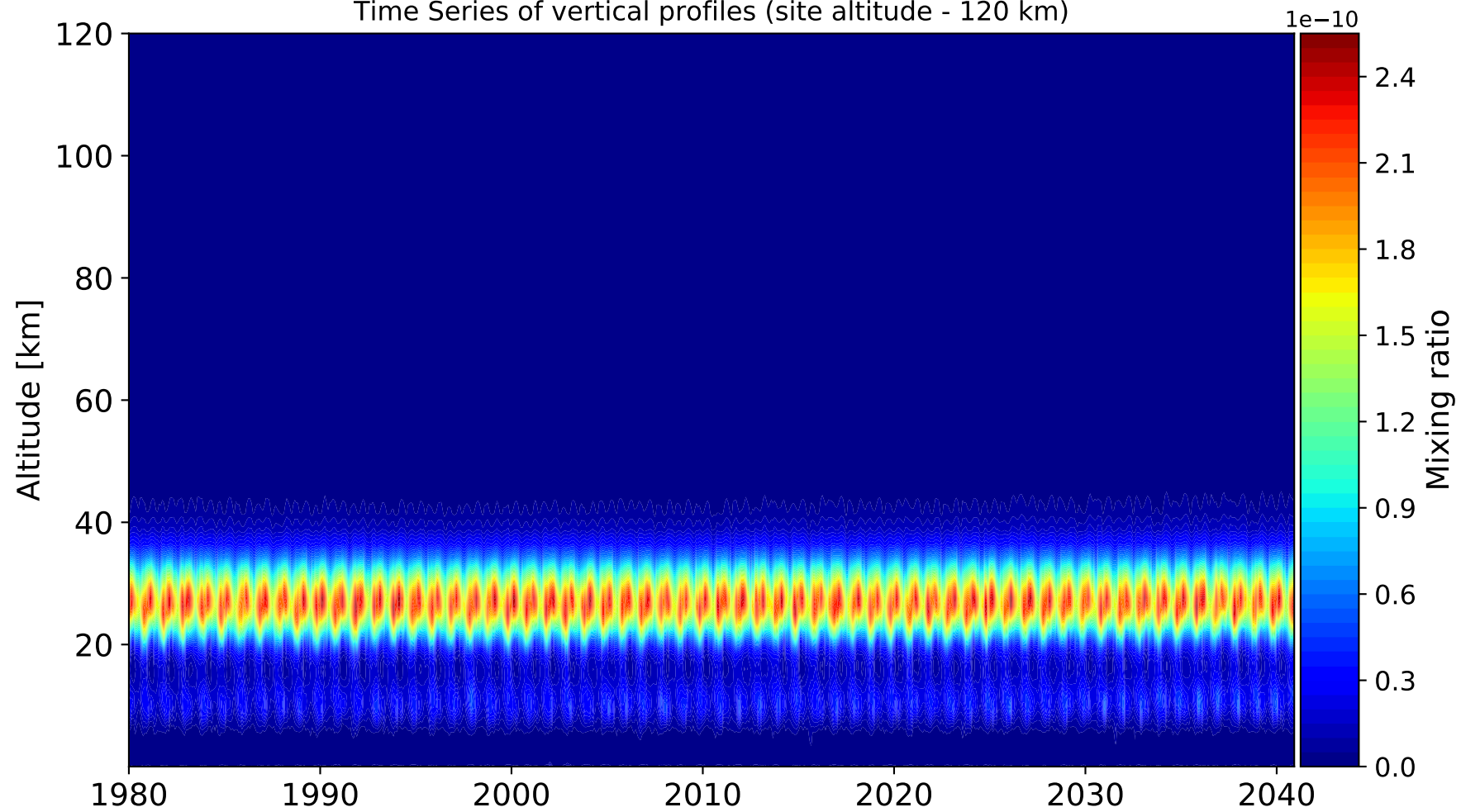
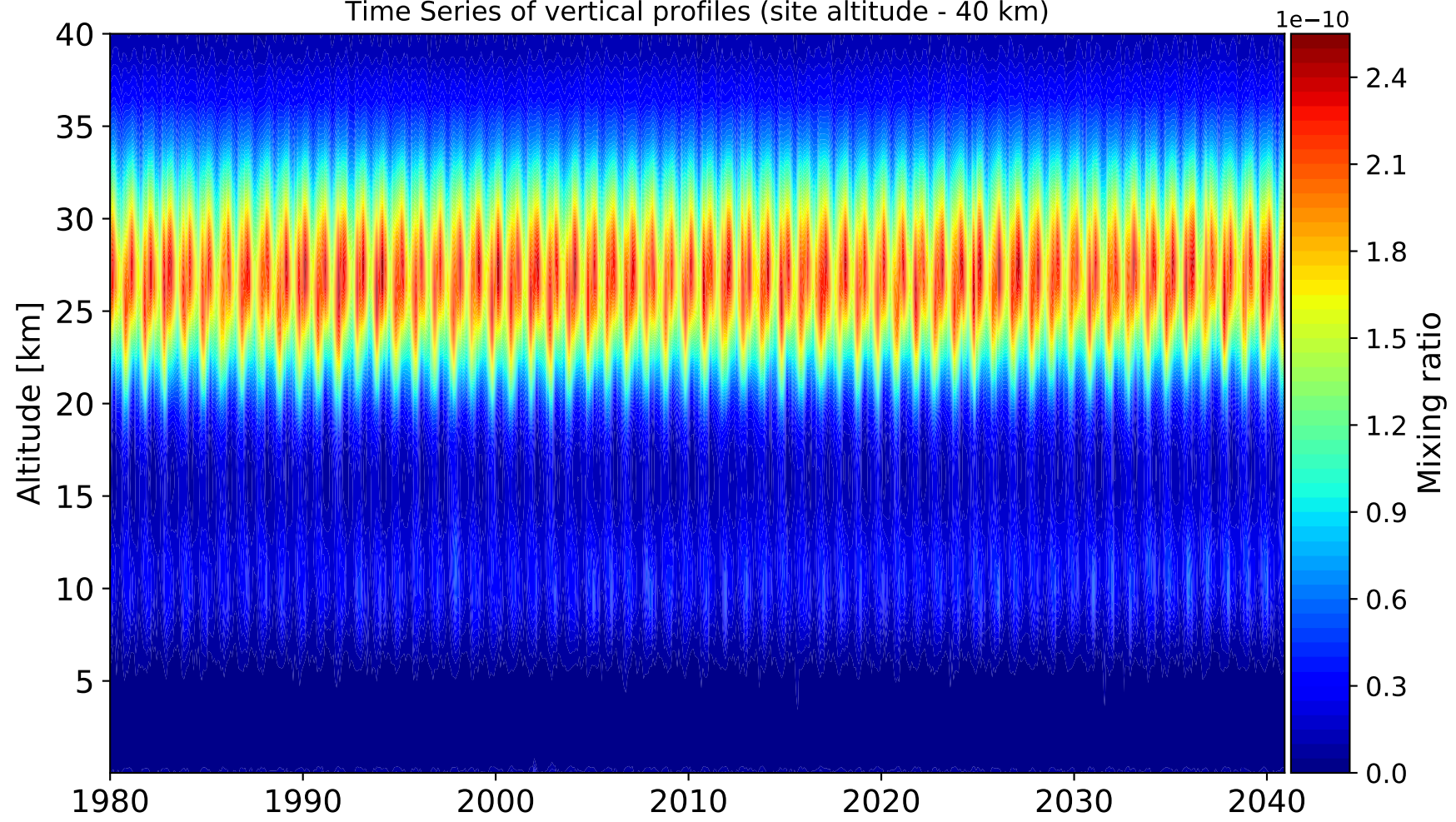


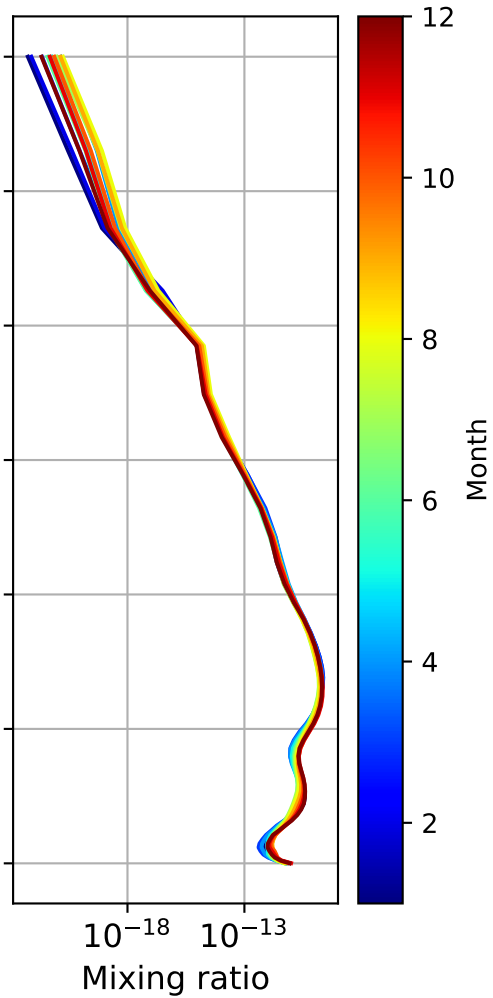
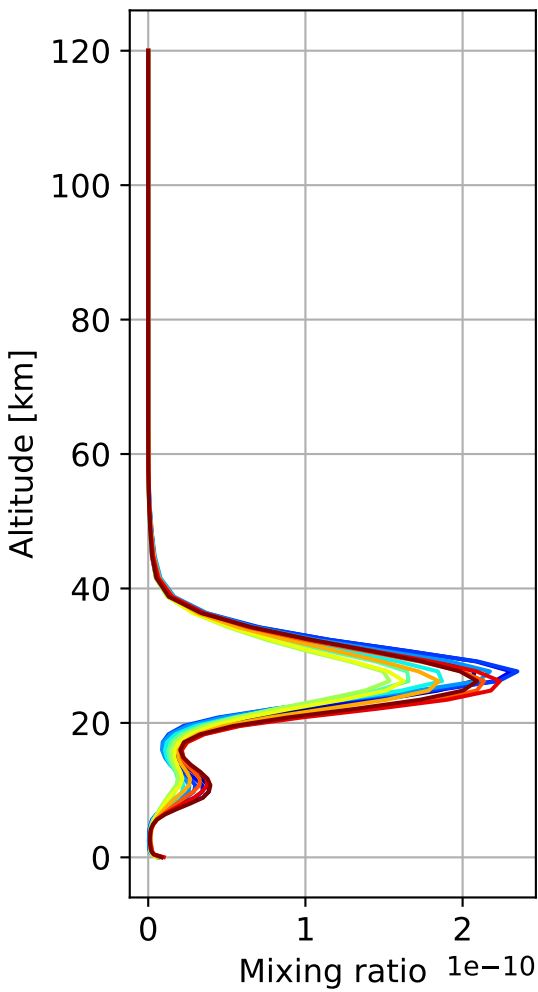
Time Series of vertical profiles (site altitude - 120 km)



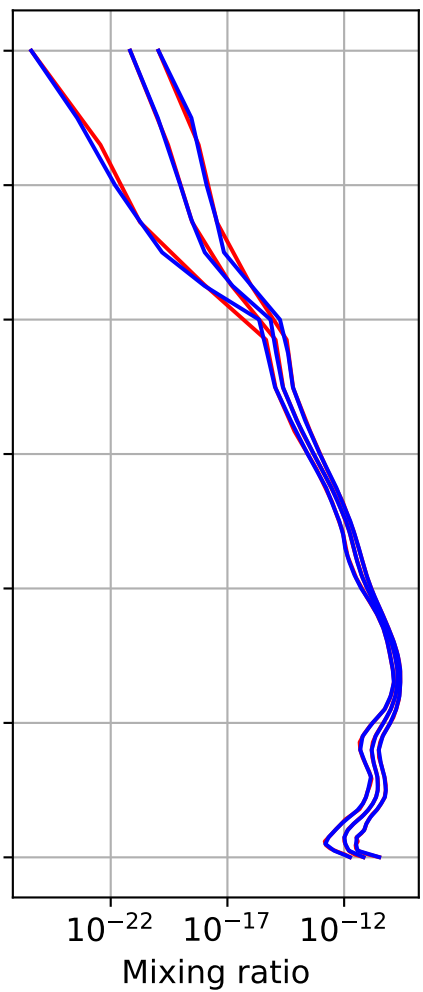
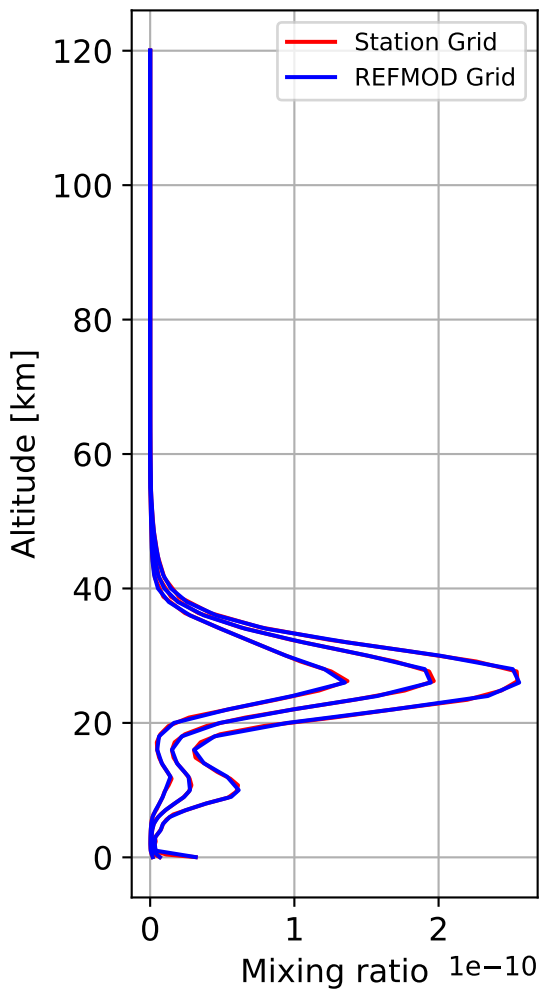
Time Series of vertical profiles (site altitude - 40 km)



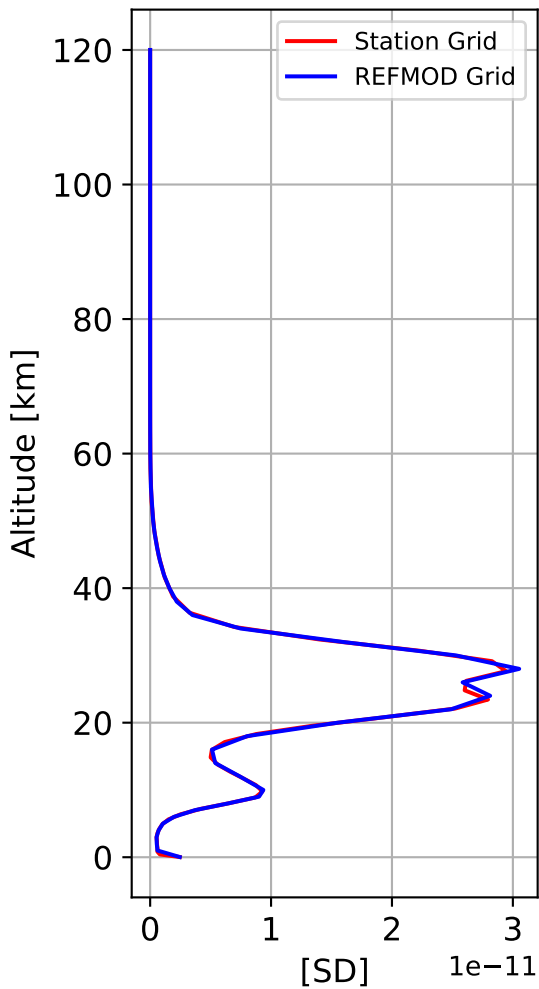
# Monthly mean WACCM profile (interpolated to station grid) Wollongong, -34.4061N, 150.8793E, 0.03kmasl



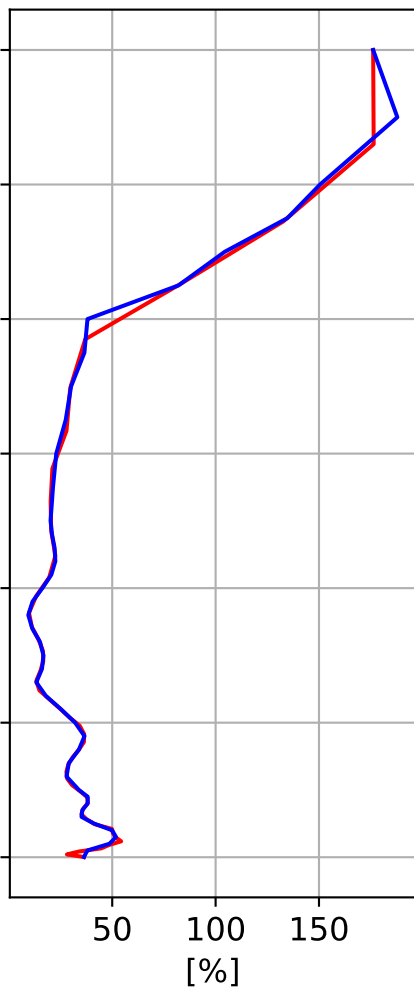
# Min, Max, Mean of 732 profiles Wollongong, -34.4061N, 150.8793E, 0.03kmasl



### Std. Deviation



### Percent Deviation



# Level covariance matrix

1e-22

Altitude [km]

120

100

80

60

40

20

20

Altitude [km]

40

60

80

100

120

8

7

6

5

4

3

2

1

0

-1

Mixing ratio[ $\sim 2$ ]

