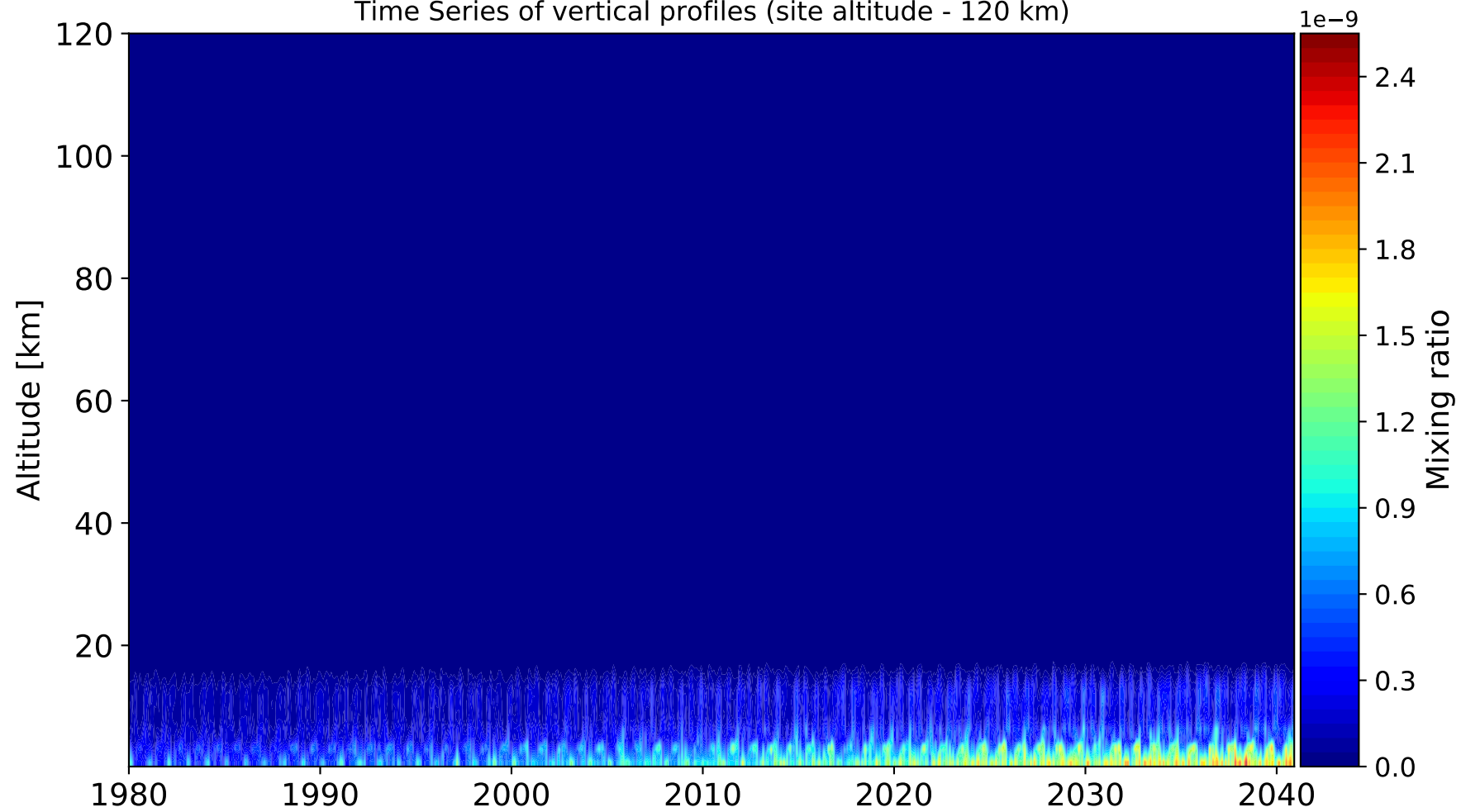
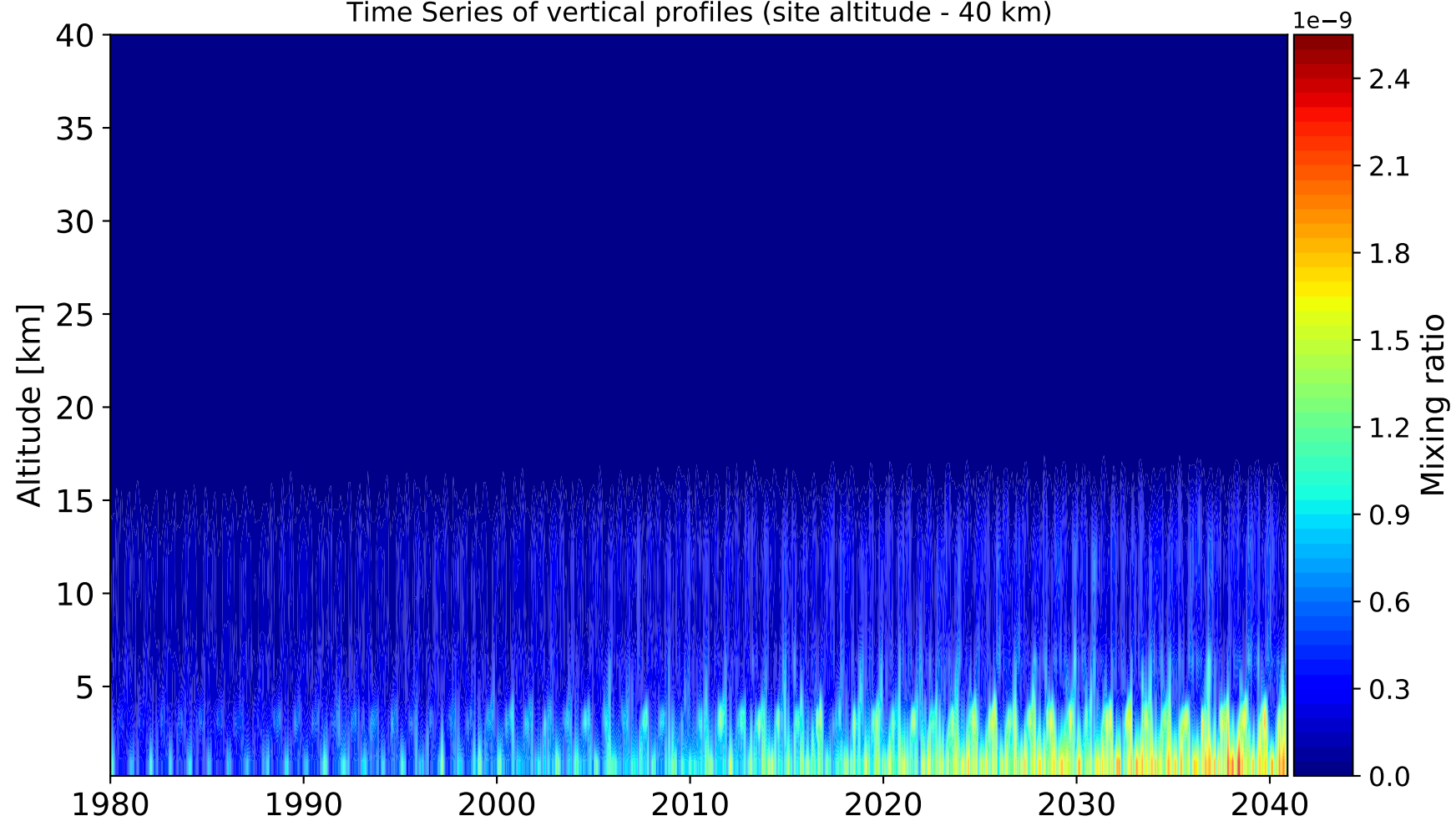


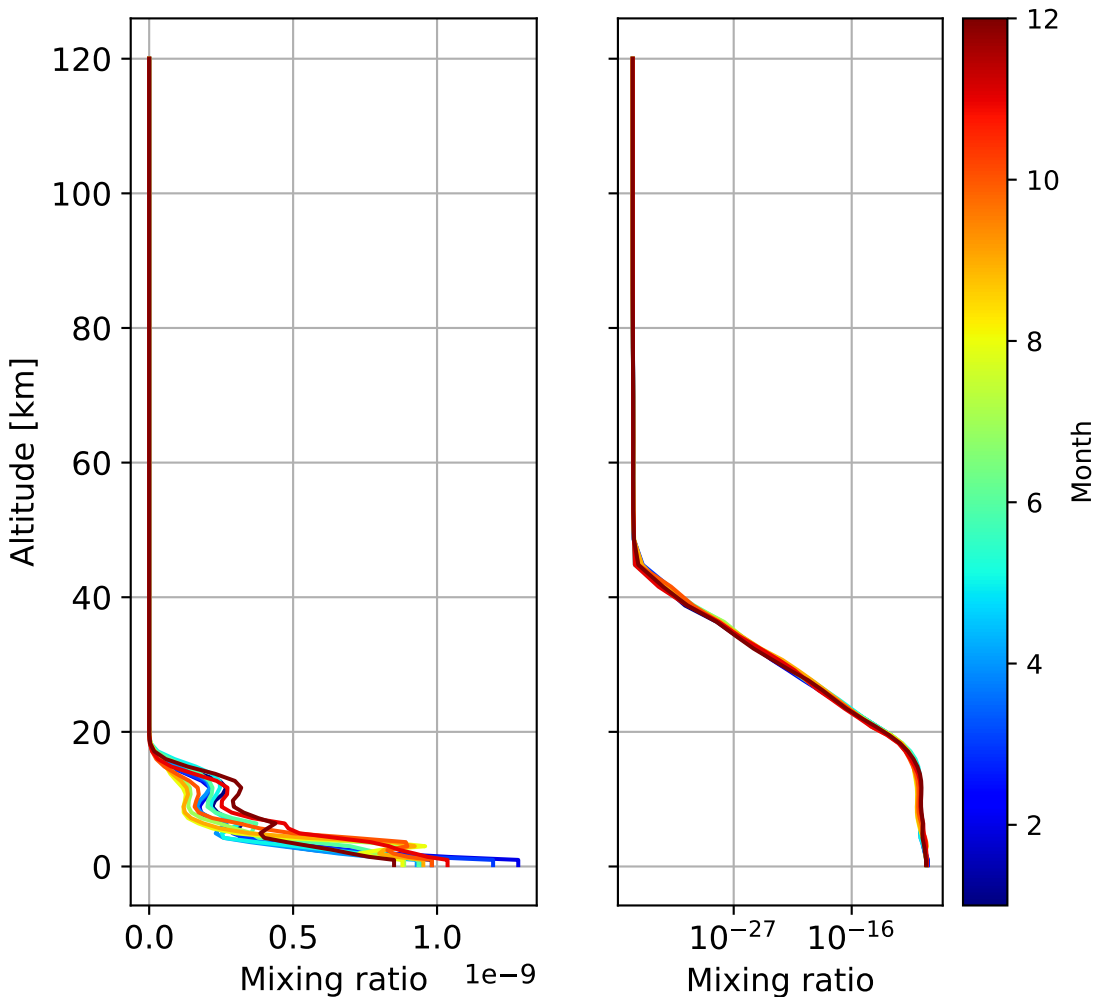
Time Series of vertical profiles (site altitude - 120 km)



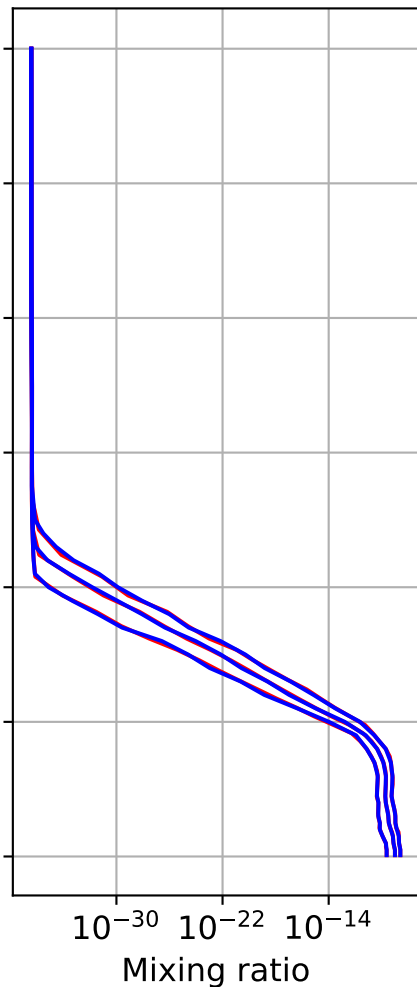
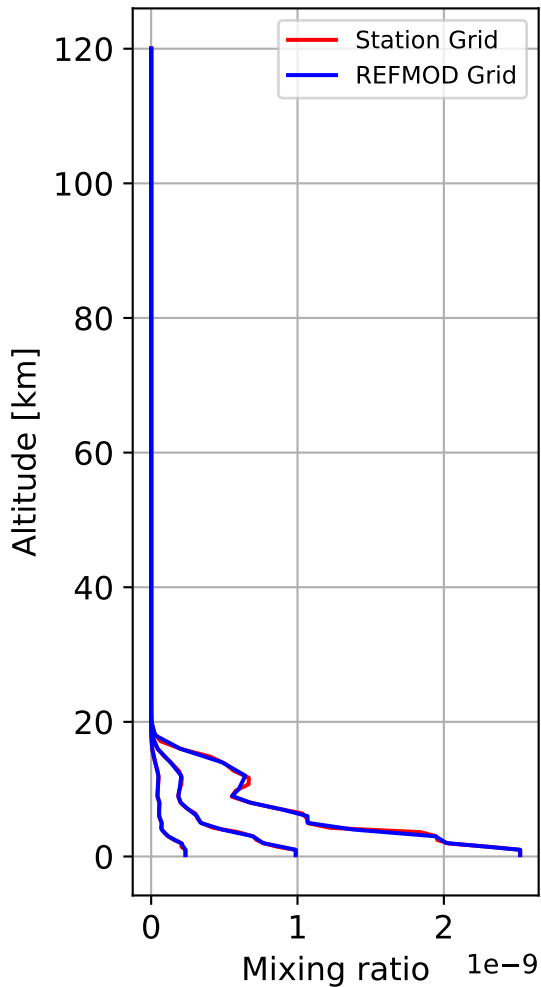
Time Series of vertical profiles (site altitude - 40 km)



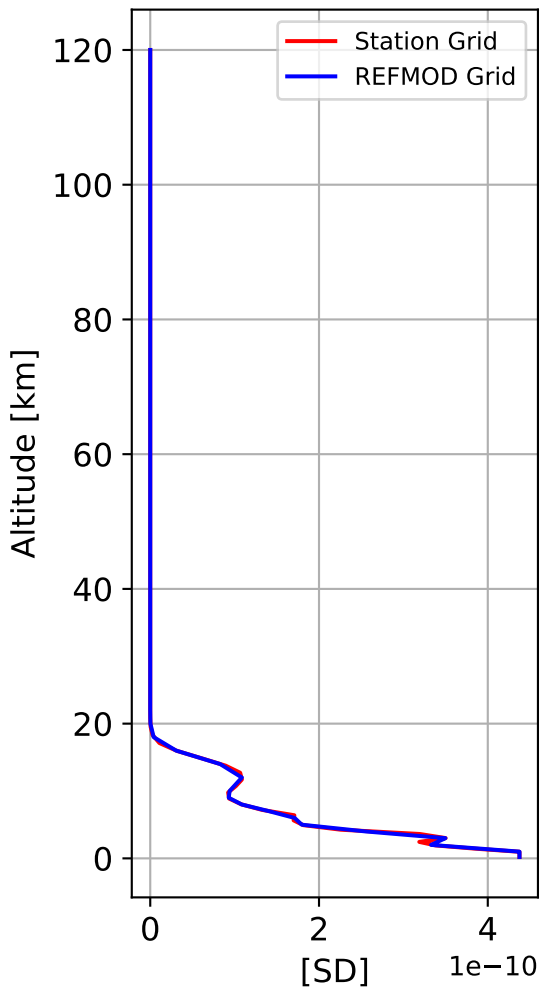
# Monthly mean WACCM profile (interpolated to station grid) Kampala, 0.31N, 32.58E, 0.2kmasl



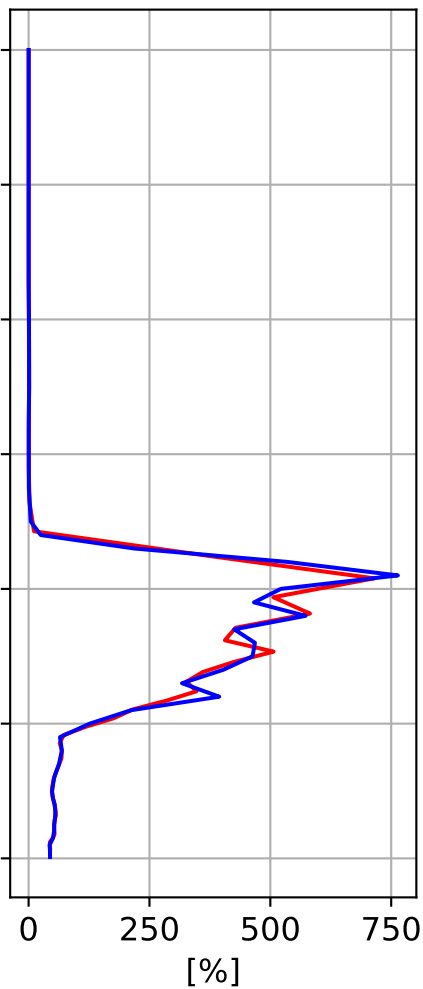
Min, Max, Mean of 732 profiles  
Kampala, 0.31N, 32.58E, 0.2kmasl



Std. Deviation



Percent Deviation



## Level covariance matrix

1e-19

Altitude [km]

120

100

80

60

40

20

20

Altitude [km]

1.8

1.6

1.4

1.2

1.0

0.8

0.6

0.4

0.2

0.0

Mixing ratio[ $\sim 2$ ]