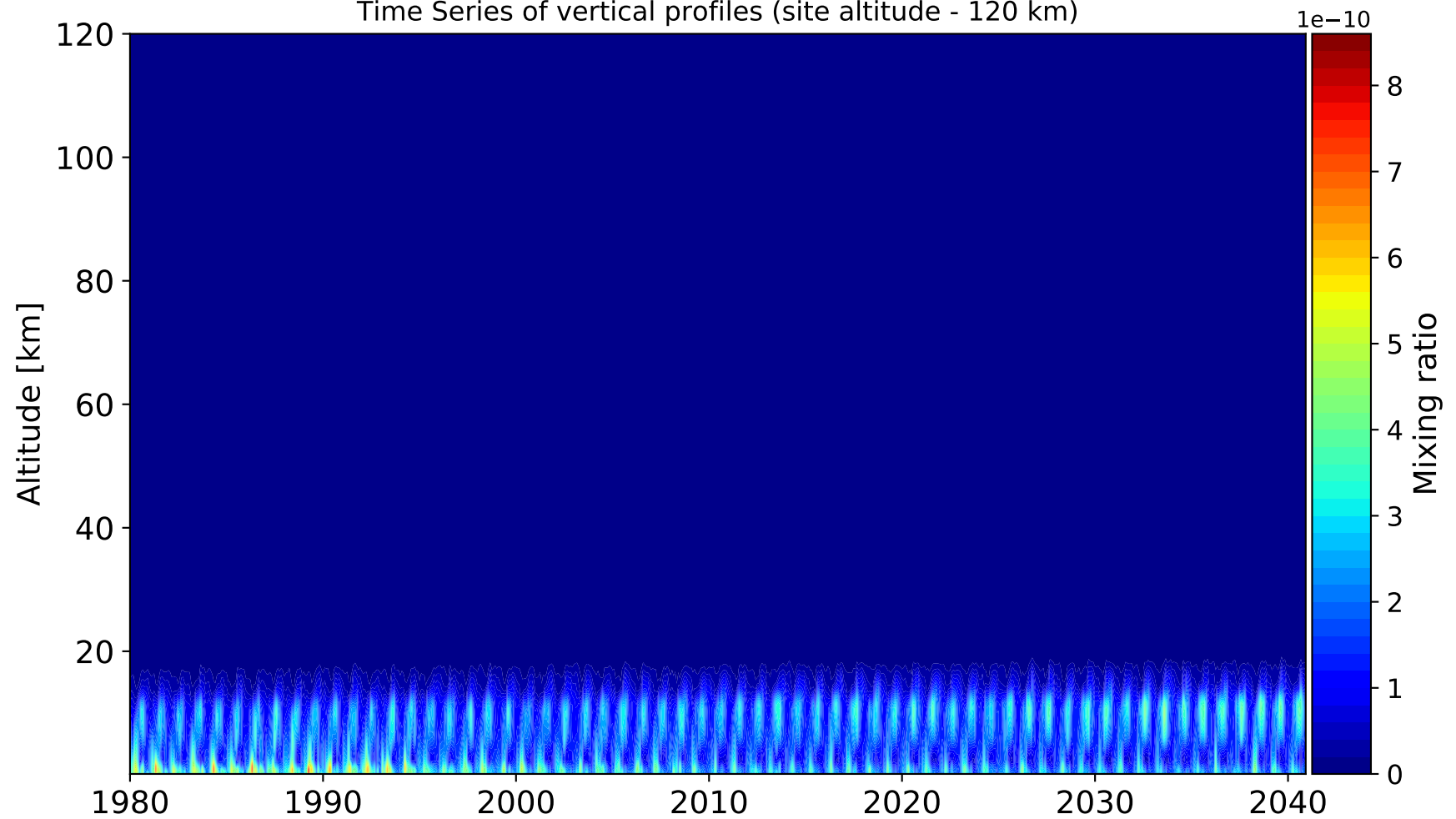
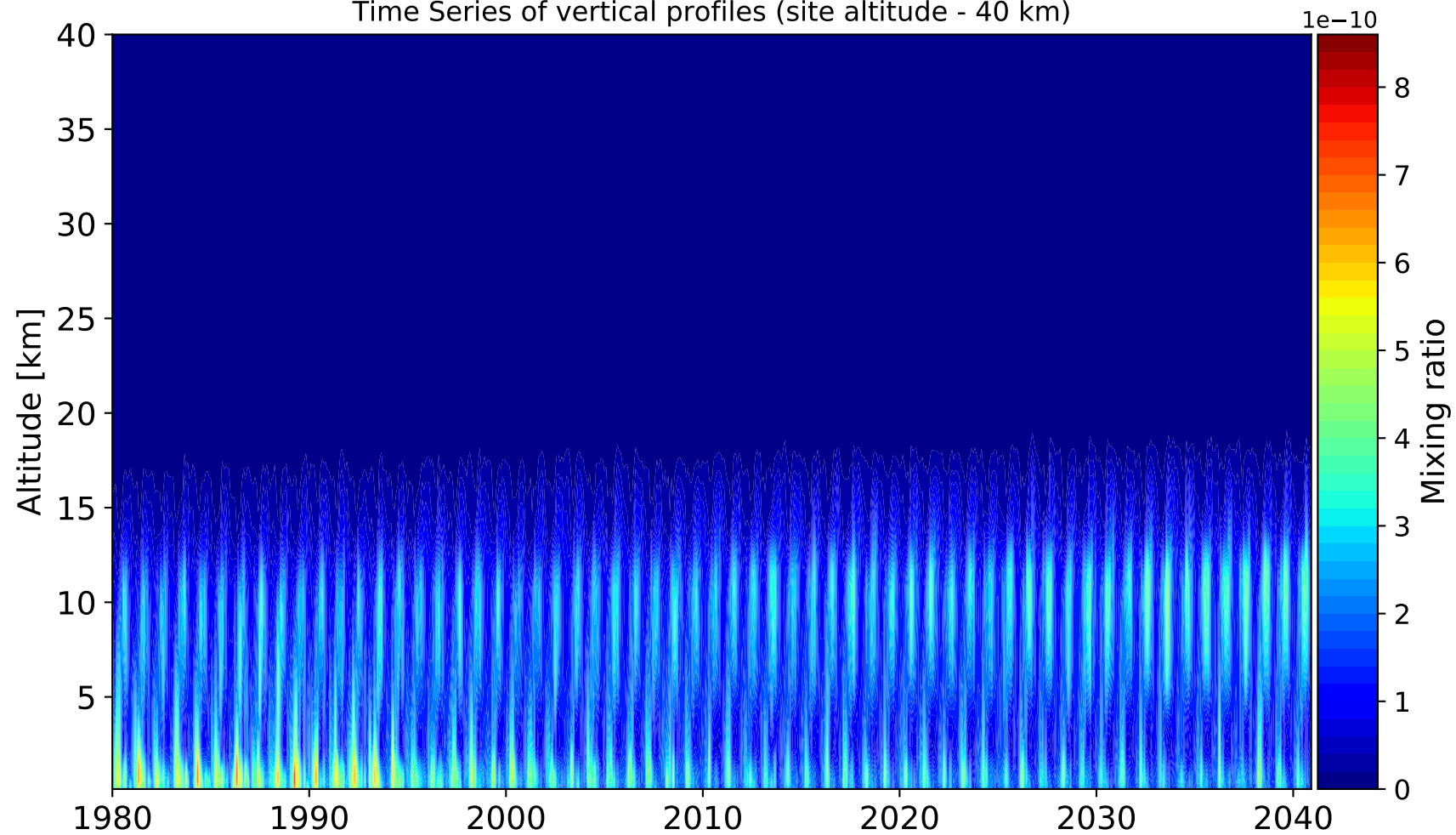


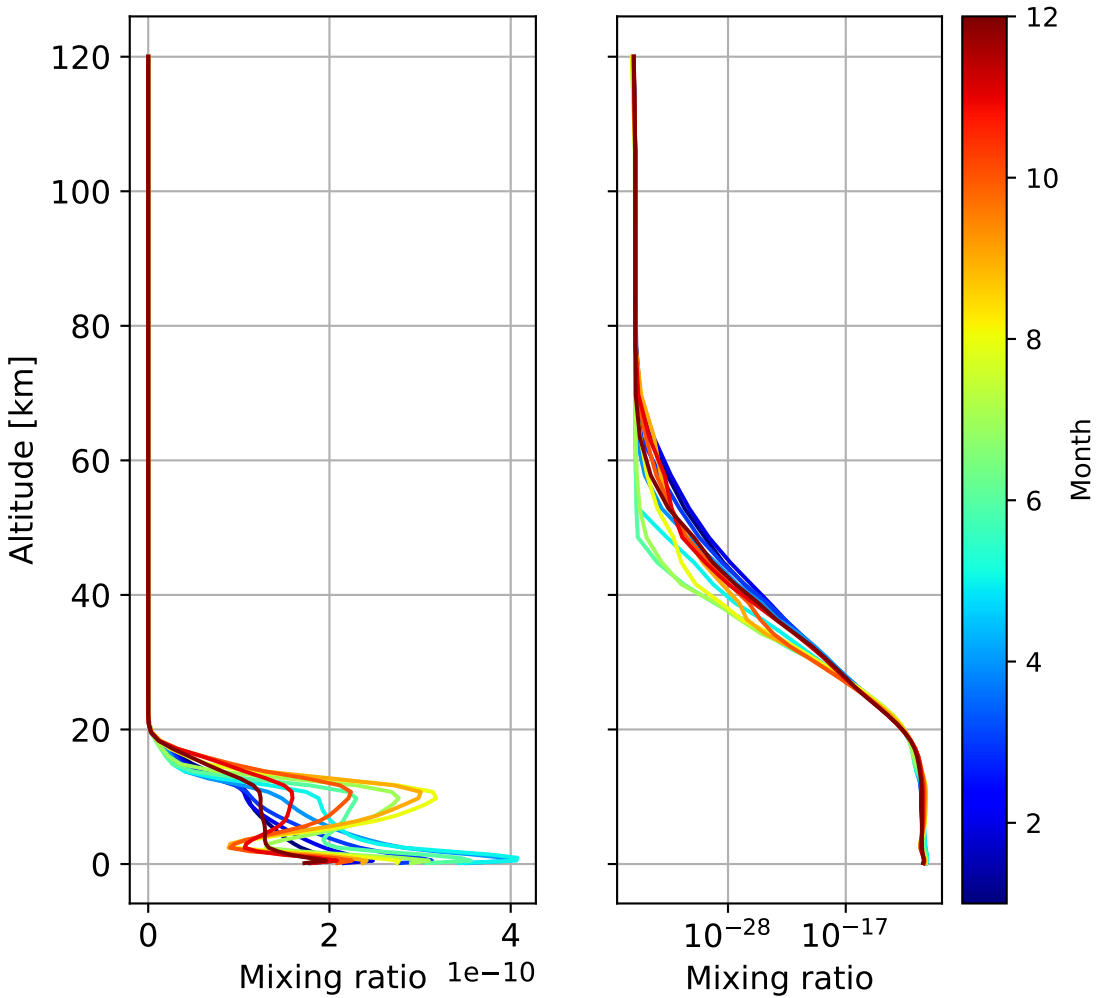
Time Series of vertical profiles (site altitude - 120 km)



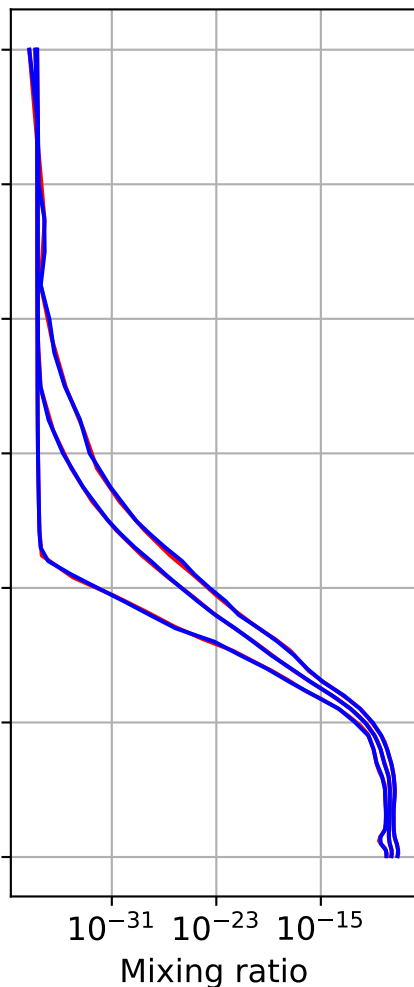
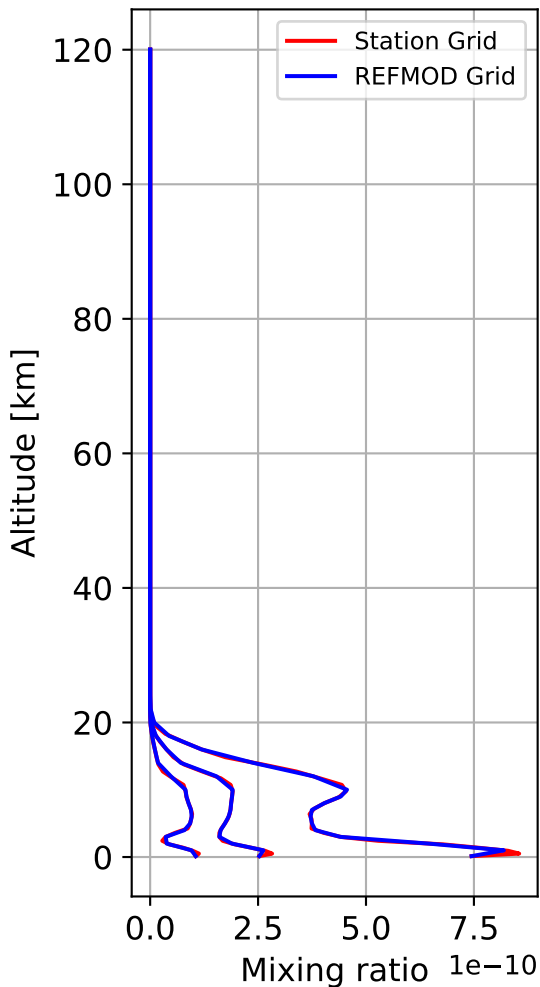
Time Series of vertical profiles (site altitude - 40 km)



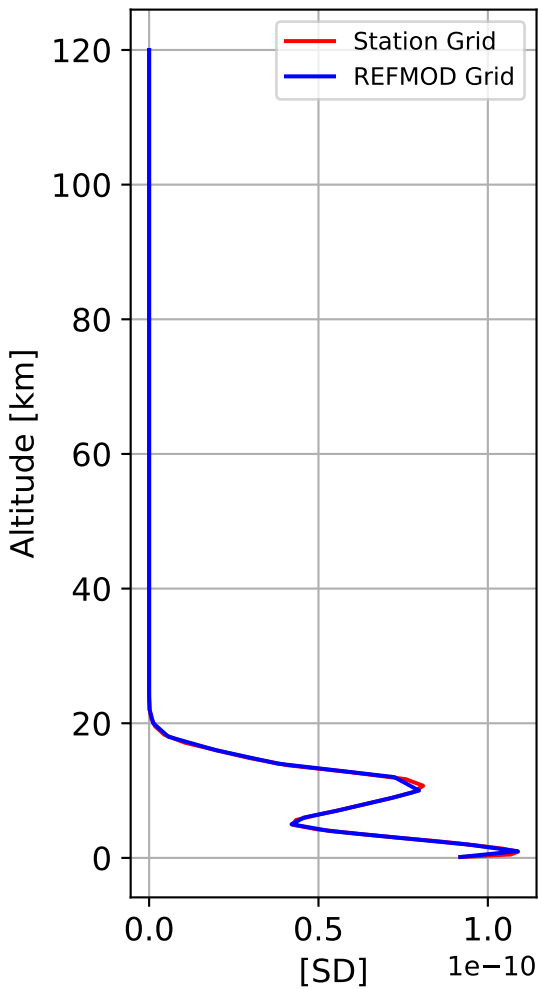
# Monthly mean WACCM profile (interpolated to station grid) Orleans, 47.965N, 2.113E, 0.132kmasl



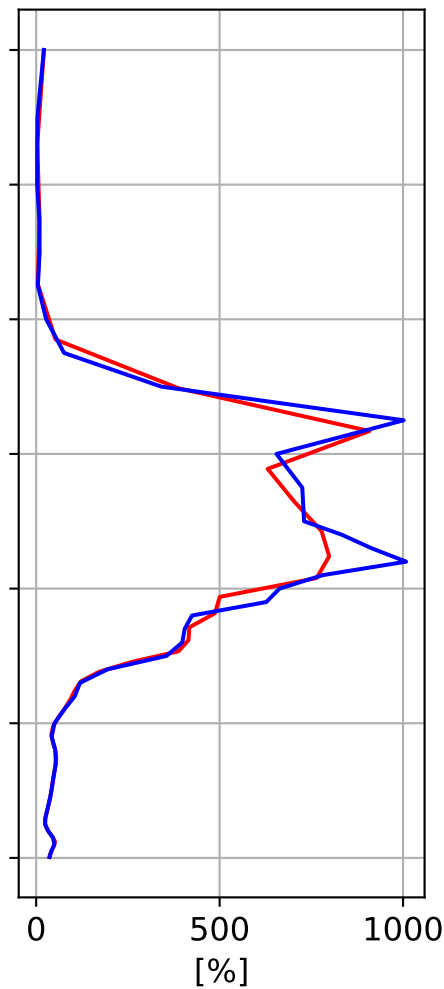
Min, Max, Mean of 732 profiles  
Orleans, 47.965N, 2.113E, 0.132kmasl



Std. Deviation



Percent Deviation



# Level covariance matrix

1e-20

Altitude [km]

120

100

80

60

40

20

20

40

60

80

100

120

Altitude [km]

Mixing ratio[ $\sim 2$ ]

1.2

1.0

0.8

0.6

0.4

0.2

0.0

-0.2

-0.4

