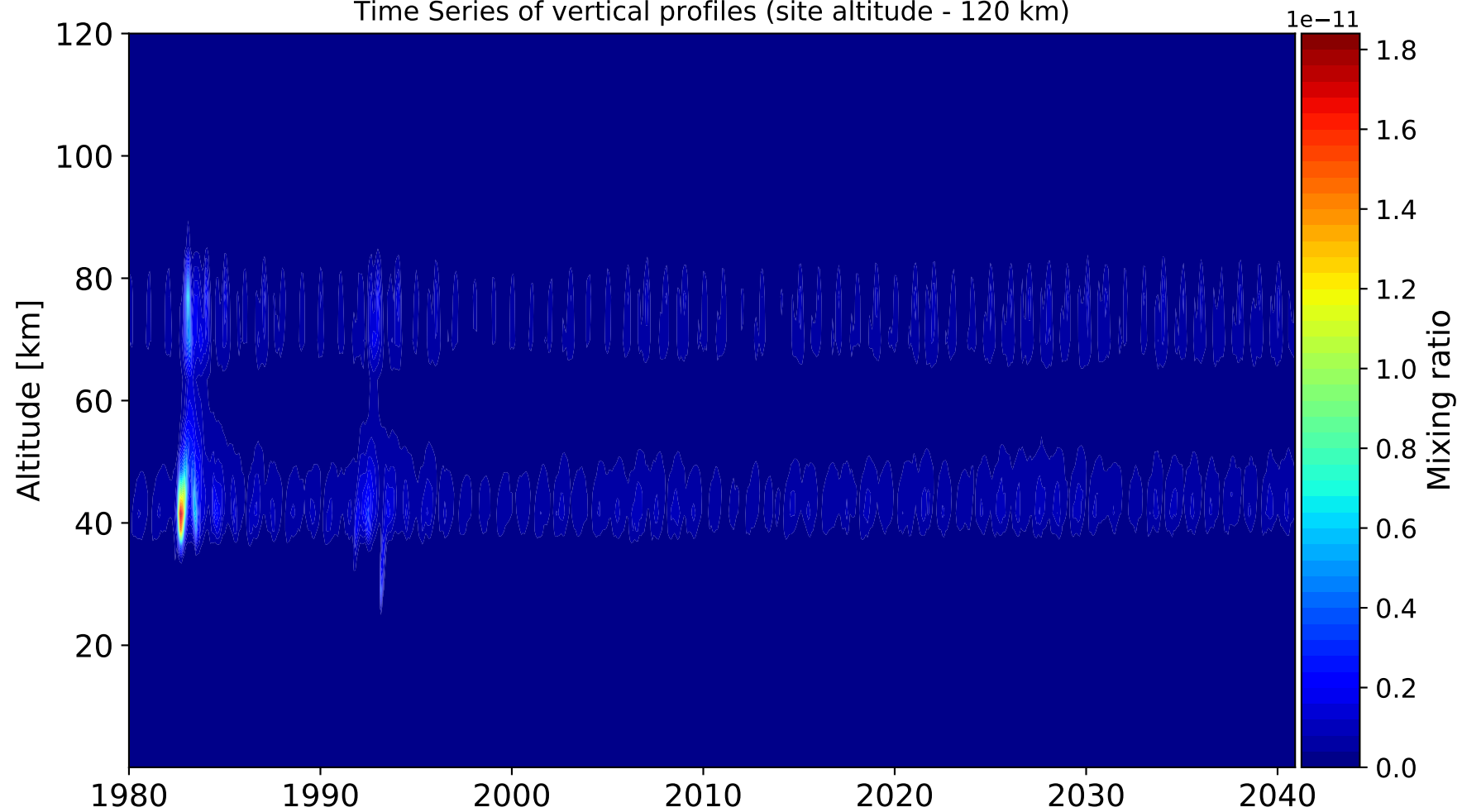
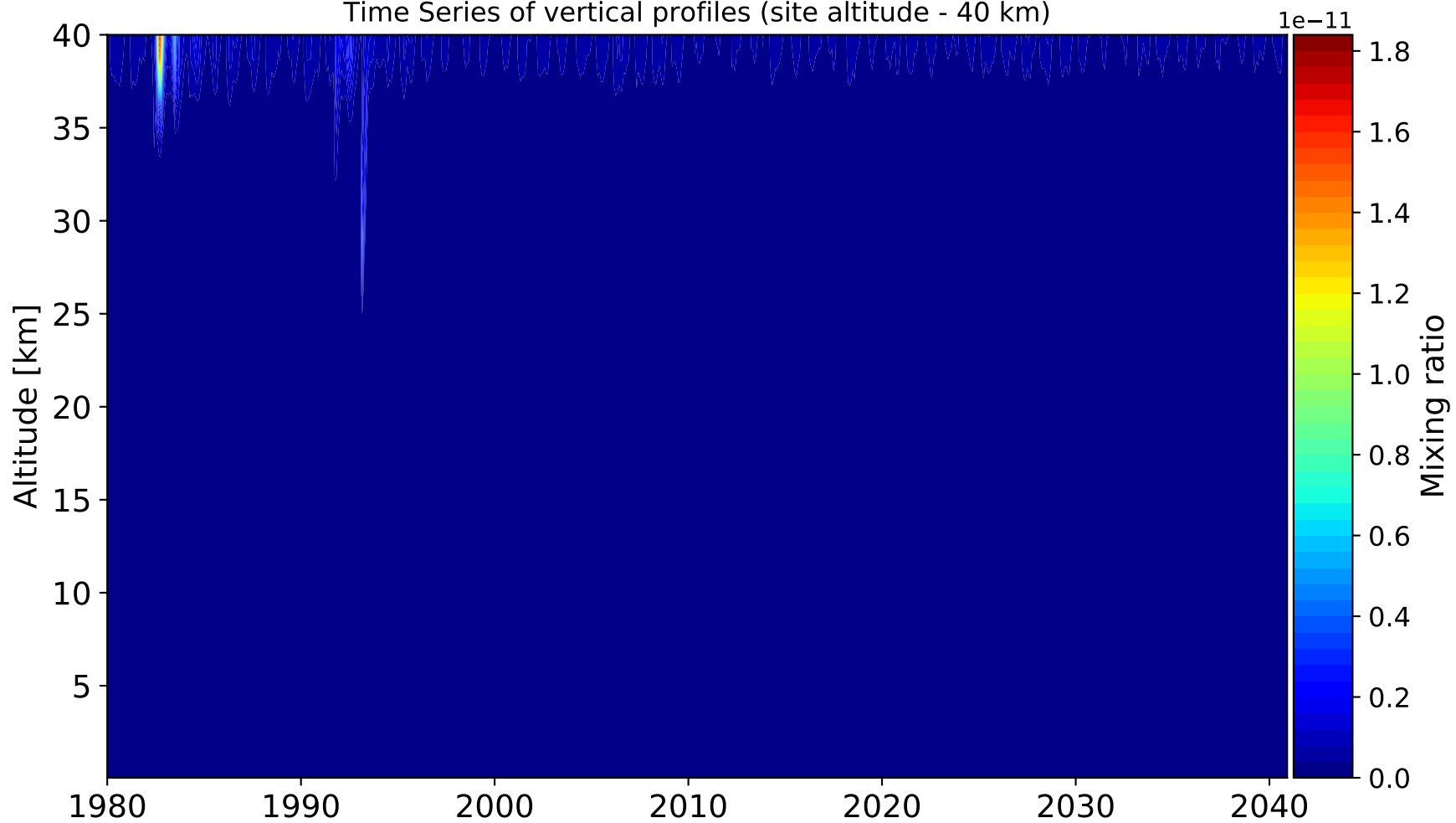


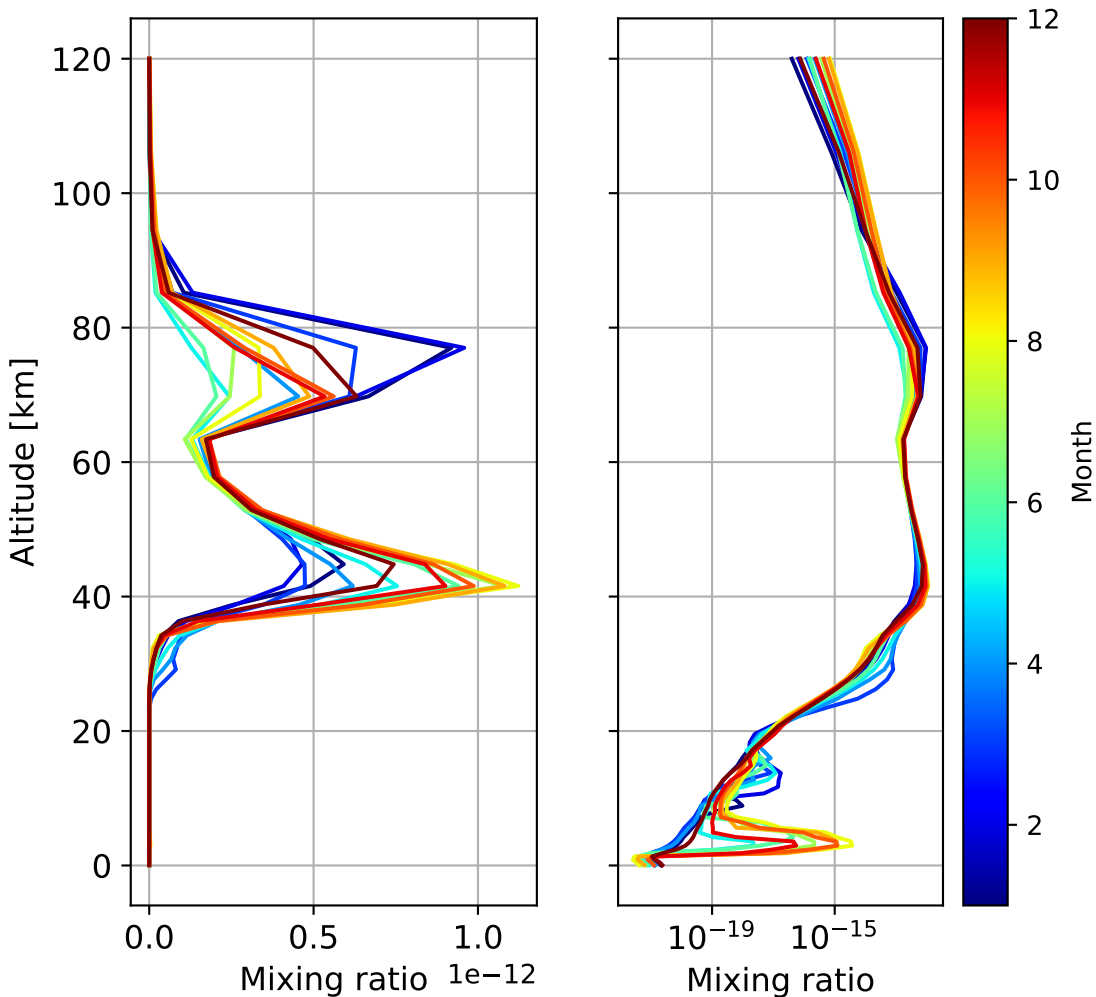
Time Series of vertical profiles (site altitude - 120 km)



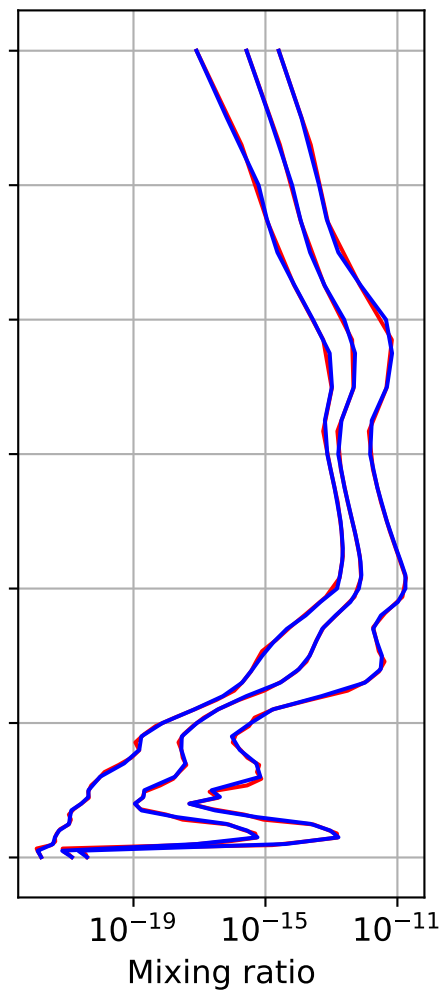
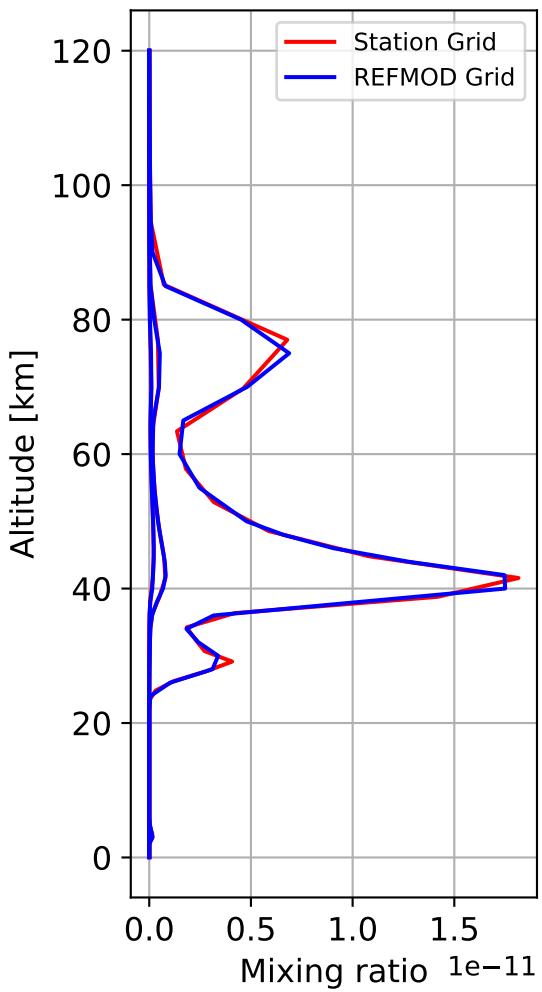
Time Series of vertical profiles (site altitude - 40 km)



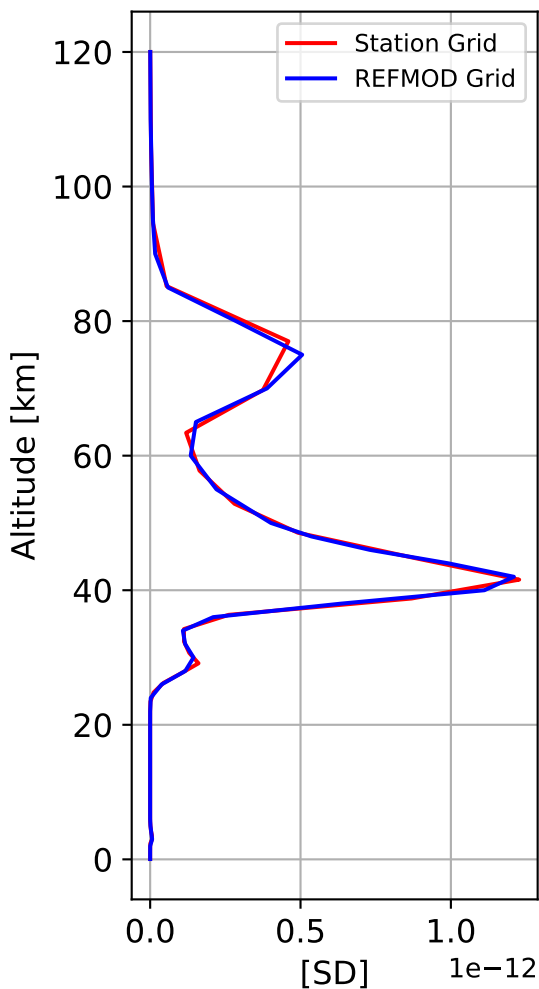
# Monthly mean WACCM profile (interpolated to station grid) Reunion\_St\_Denis, -20.9N, 55.483E, 0.05kmasl



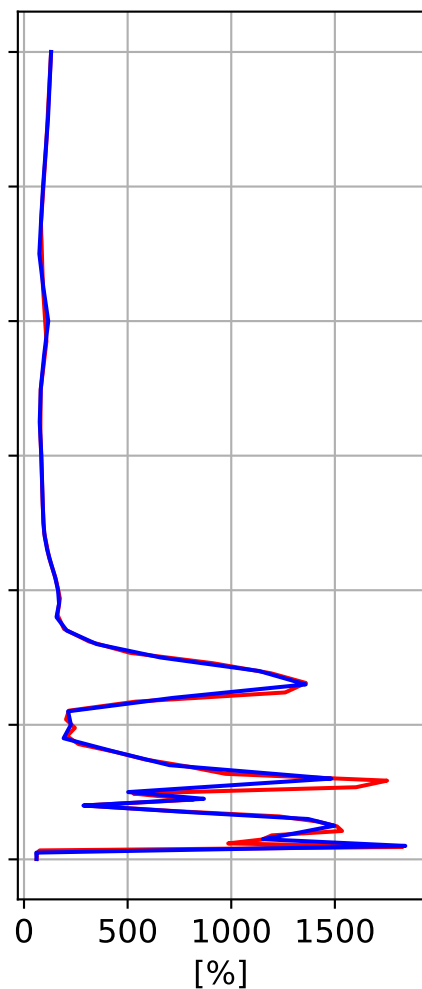
Min, Max, Mean of 732 profiles  
Reunion\_St\_Denis, -20.9N, 55.483E, 0.05kmasl



### Std. Deviation



### Percent Deviation



Level covariance matrix

 $1e-24$ 

Altitude [km]

120

100

80

60

40

20

20

Altitude [km]

40

60

80

100

120

0.00

0.18

0.36

0.54

0.72

0.90

1.08

1.26

1.44

Mixing ratio[ $\sim 2$ ]