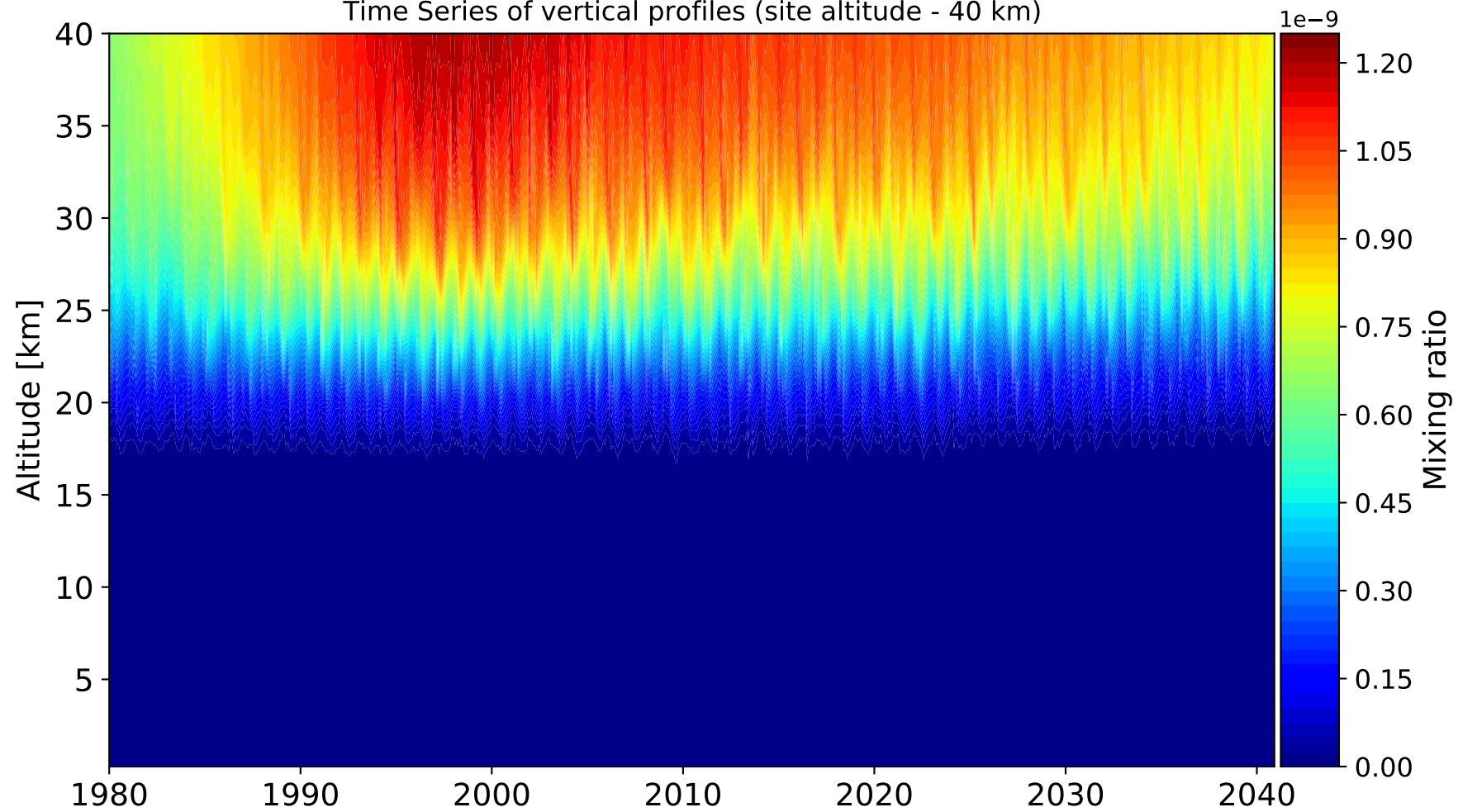


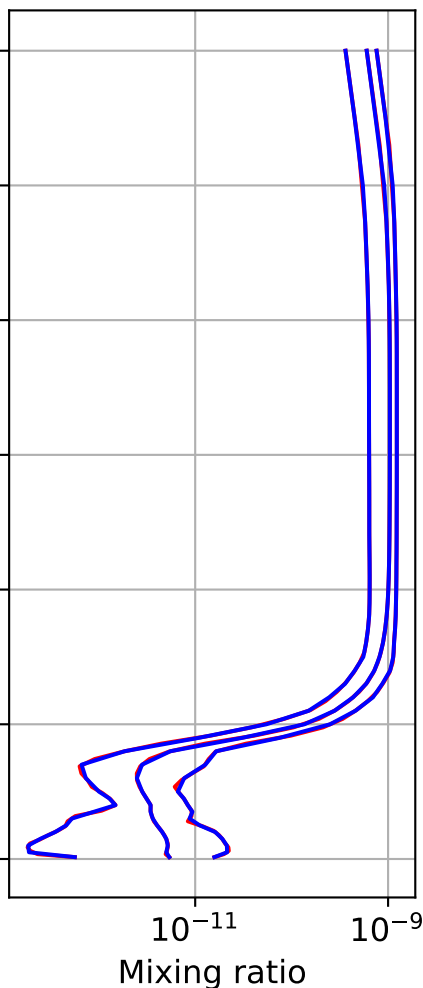
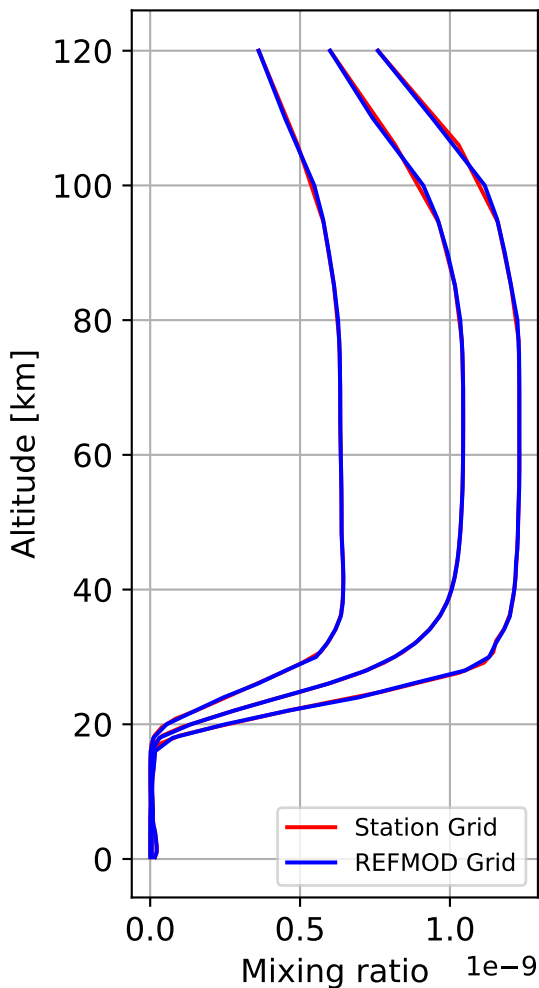


Time Series of vertical profiles (site altitude - 40 km)

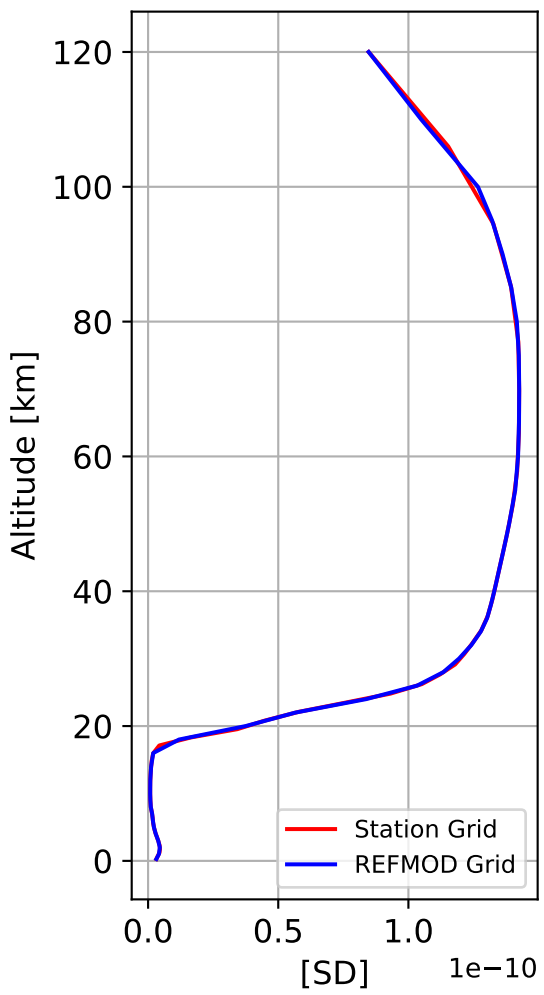




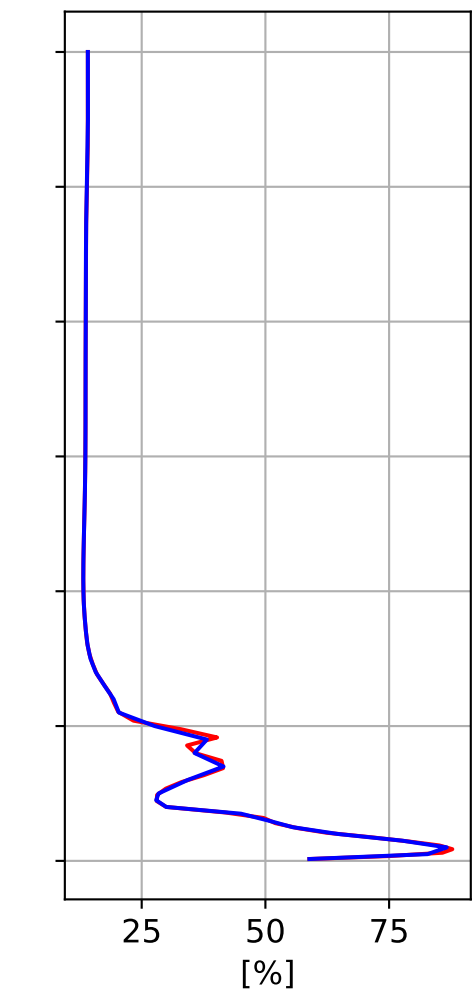
Min, Max, Mean of 732 profiles  
Calakmul, 18.5955N, 89.4141E, 0.275kmasl



### Std. Deviation



### Percent Deviation



Level covariance matrix

 $1e-20$ 

Altitude [km]

120

100

80

60

40

20

20

Altitude [km]

100

120

2.00

1.75

1.50

1.25

1.00

0.75

0.50

0.25

0.00

Mixing ratio[ $\sim 2$ ]