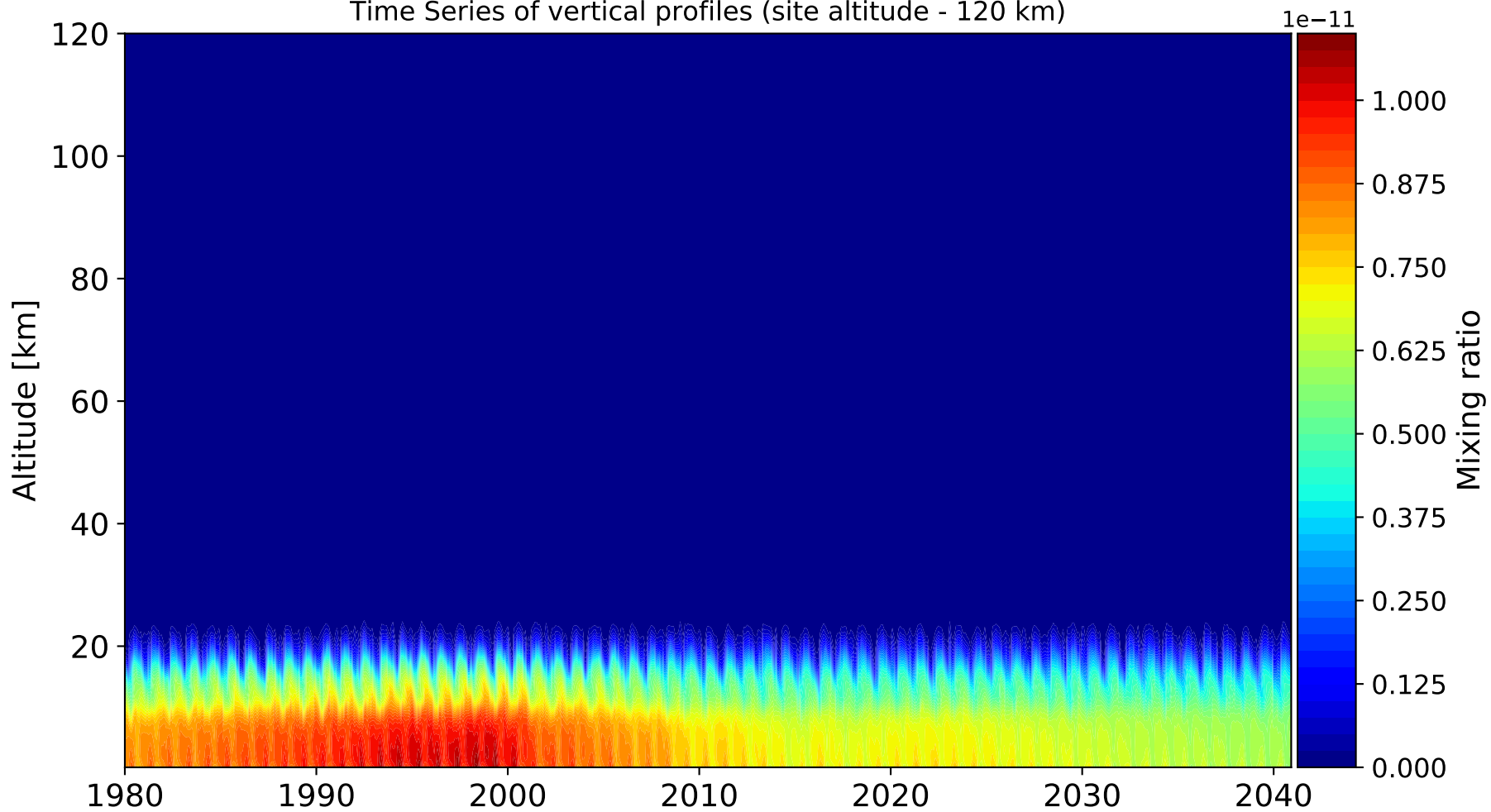
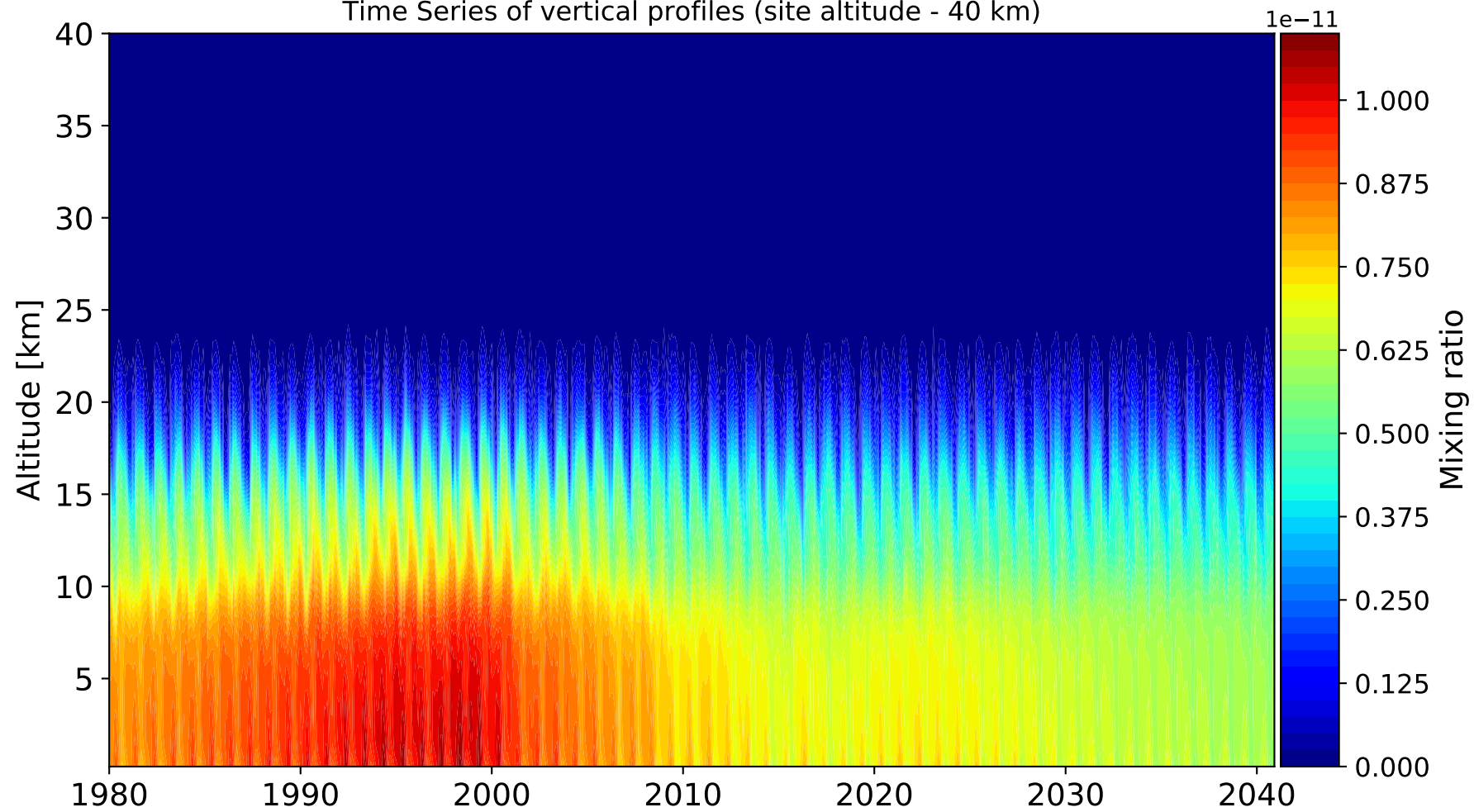


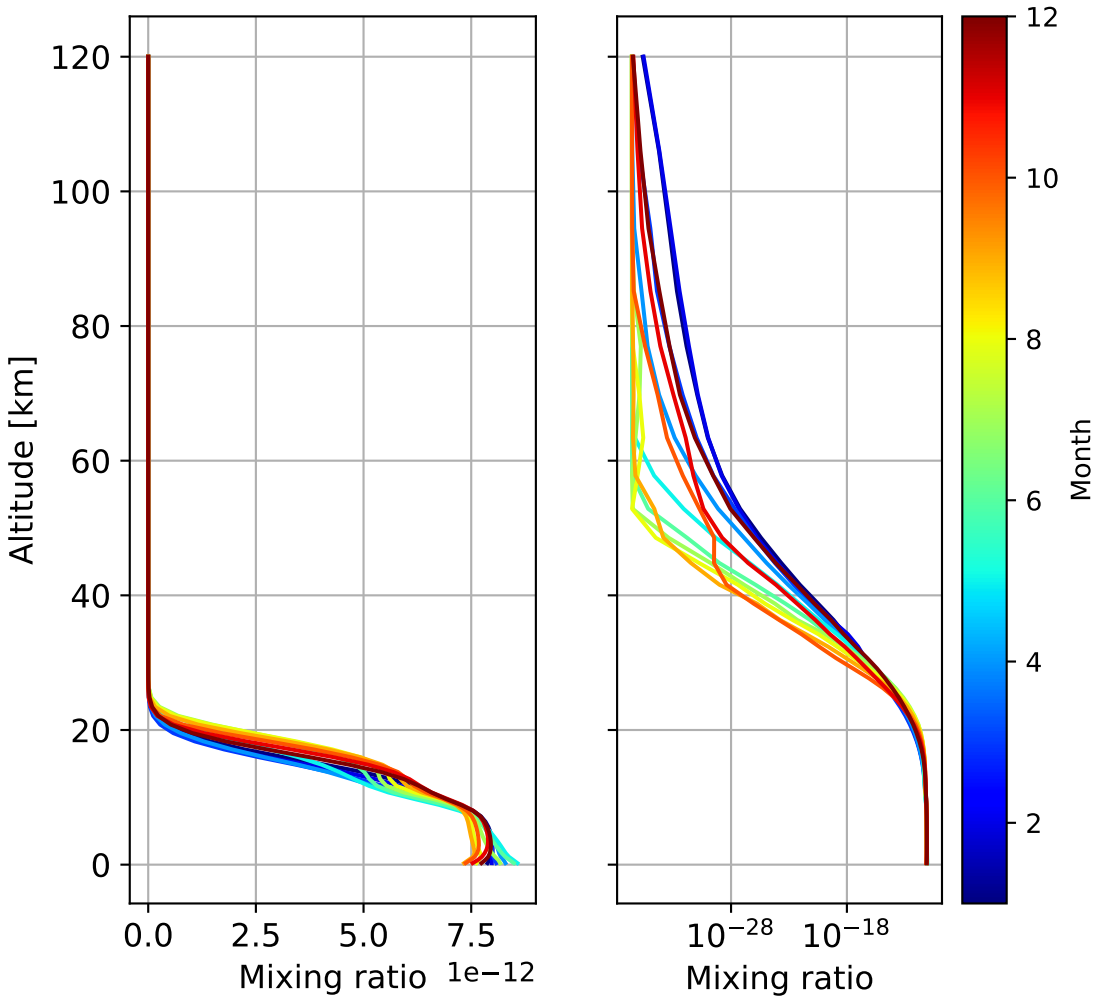
Time Series of vertical profiles (site altitude - 120 km)



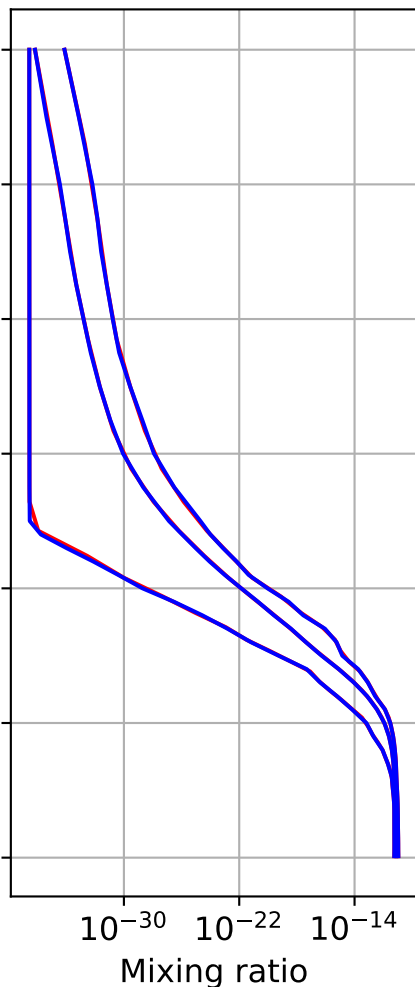
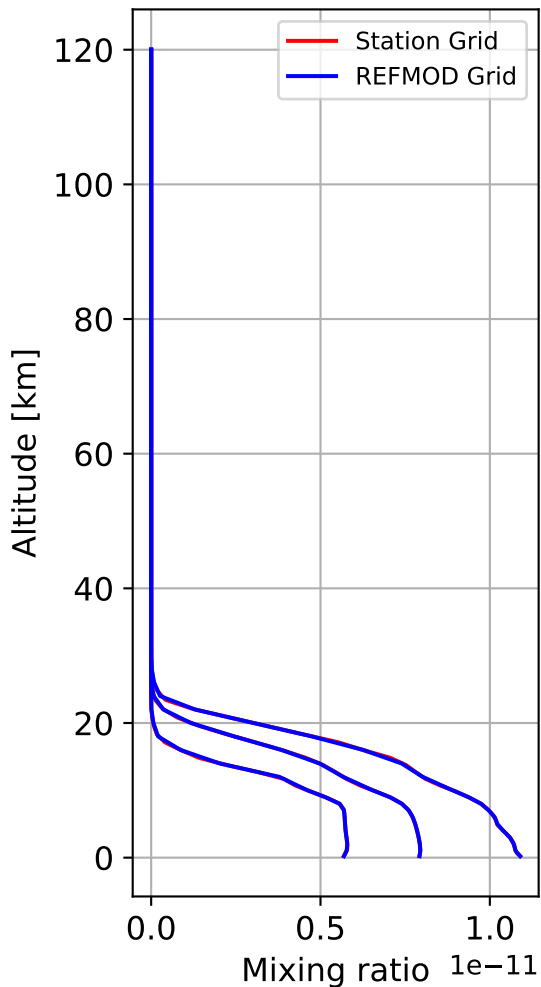
Time Series of vertical profiles (site altitude - 40 km)



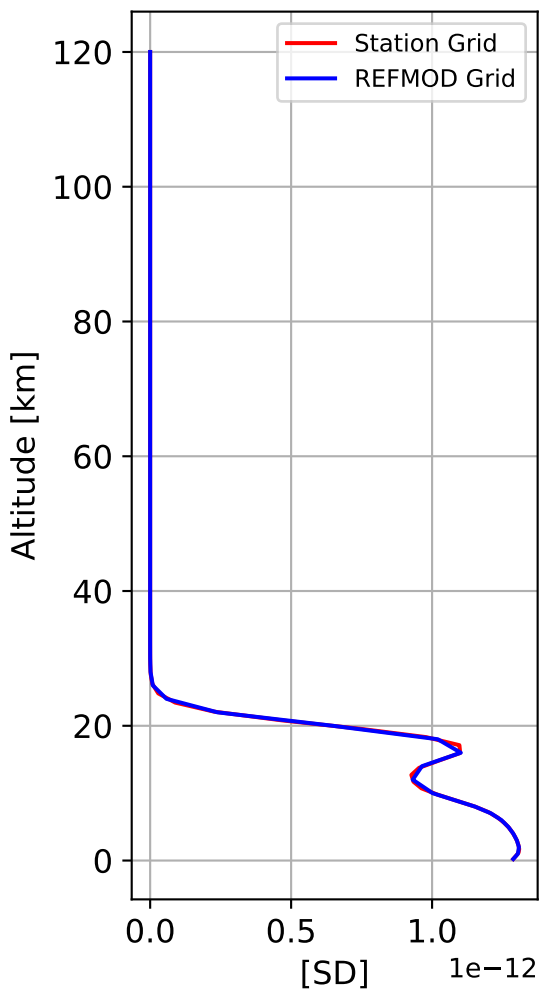
# Monthly mean WACCM profile (interpolated to station grid) Thule, 76.53N, 291.26E, 0.225kmasl



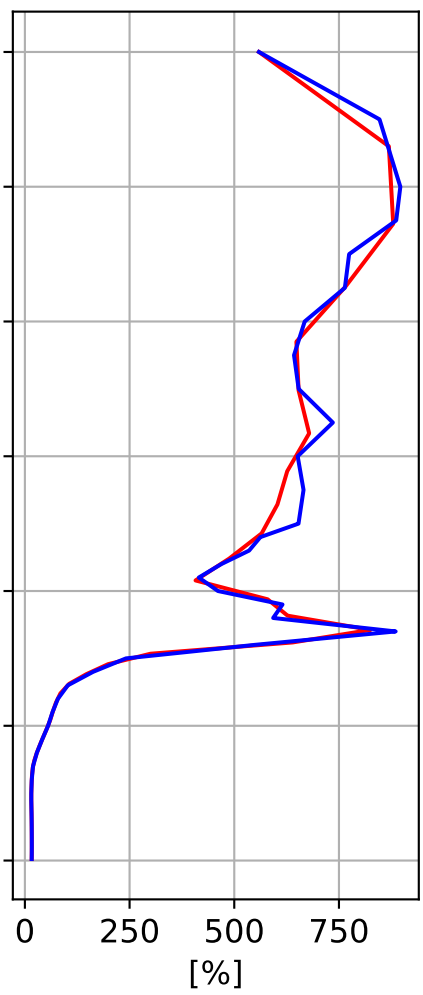
Min, Max, Mean of 732 profiles  
Thule, 76.53N, 291.26E, 0.225kmasl



### Std. Deviation



### Percent Deviation



Level covariance matrix

 $1e-24$ 

Altitude [km]

120

100

80

60

40

20

20

40

60

80

100

120

Altitude [km]

Mixing ratio<sup>2</sup>]

1.6

1.4

1.2

1.0

0.8

0.6

0.4

0.2

0.0

