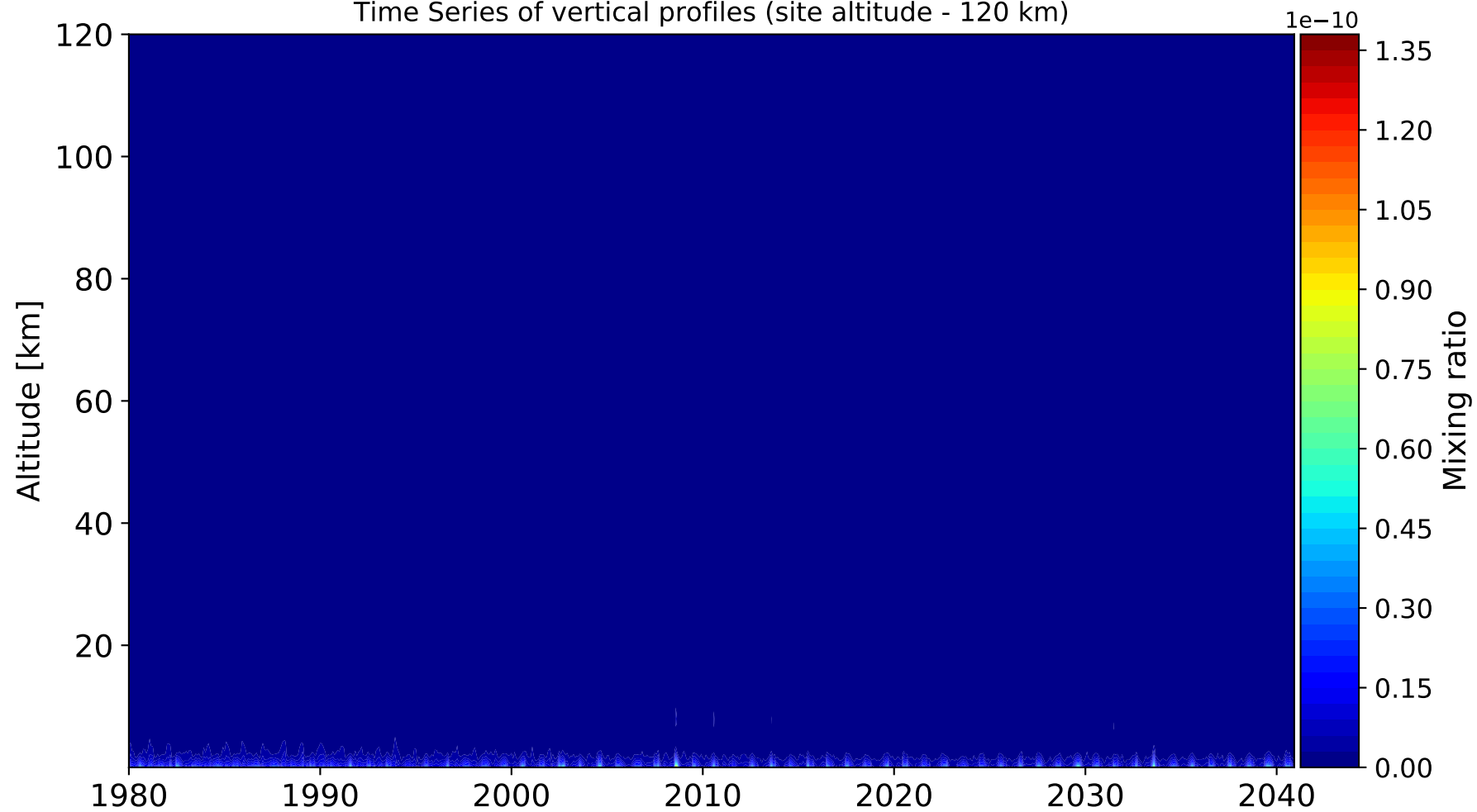
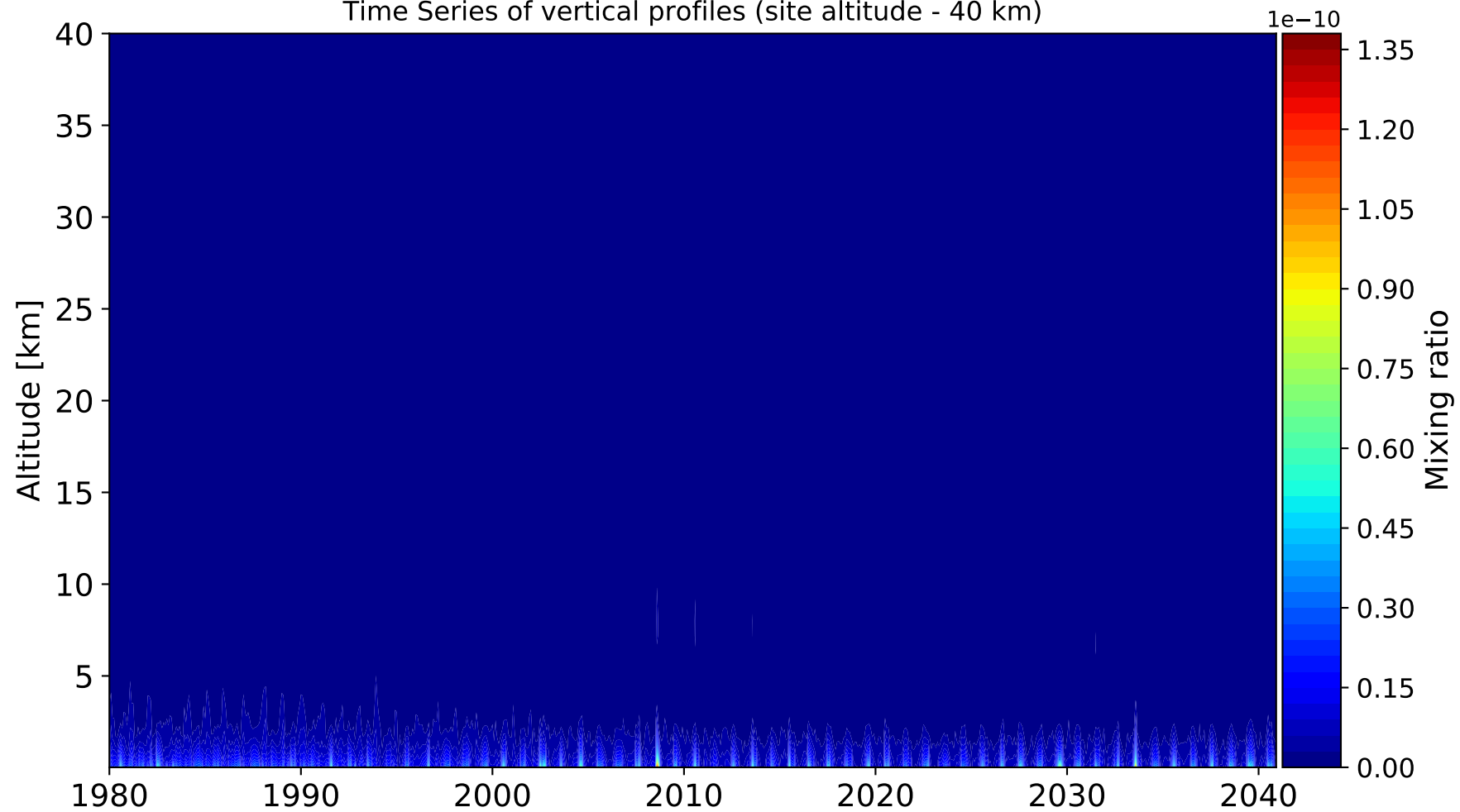


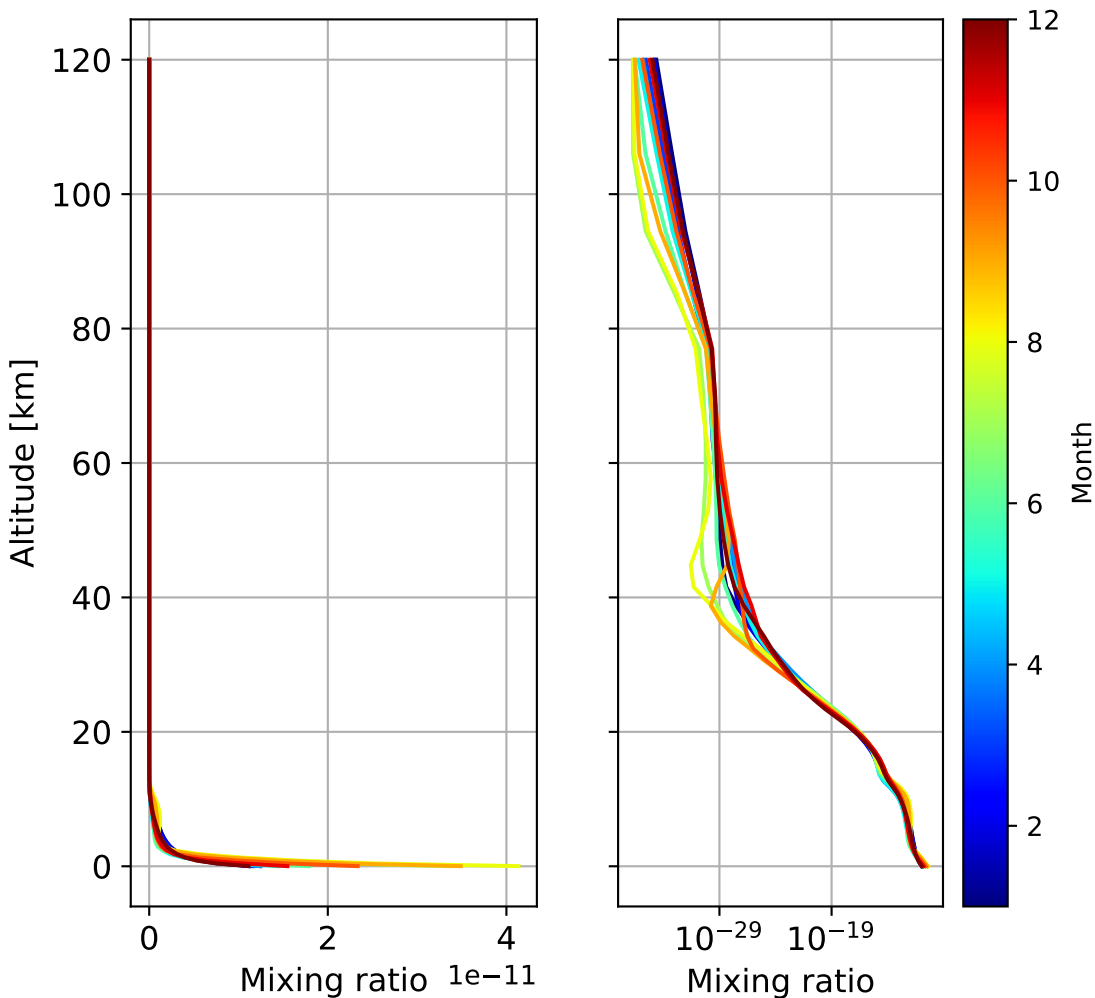
Time Series of vertical profiles (site altitude - 120 km)



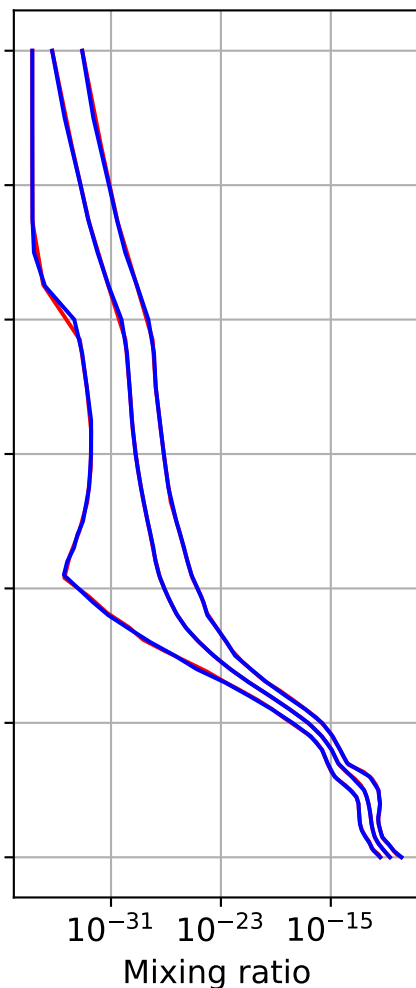
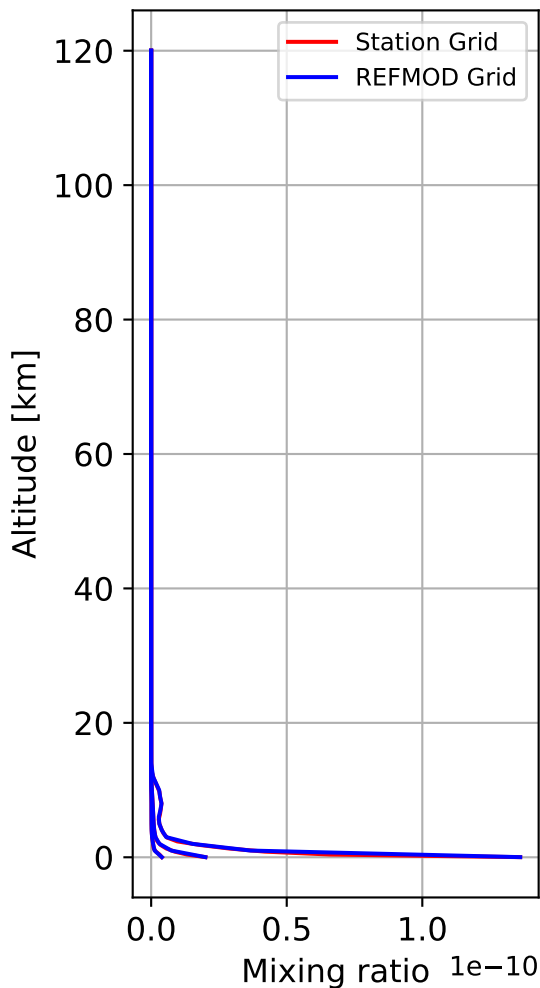
Time Series of vertical profiles (site altitude - 40 km)



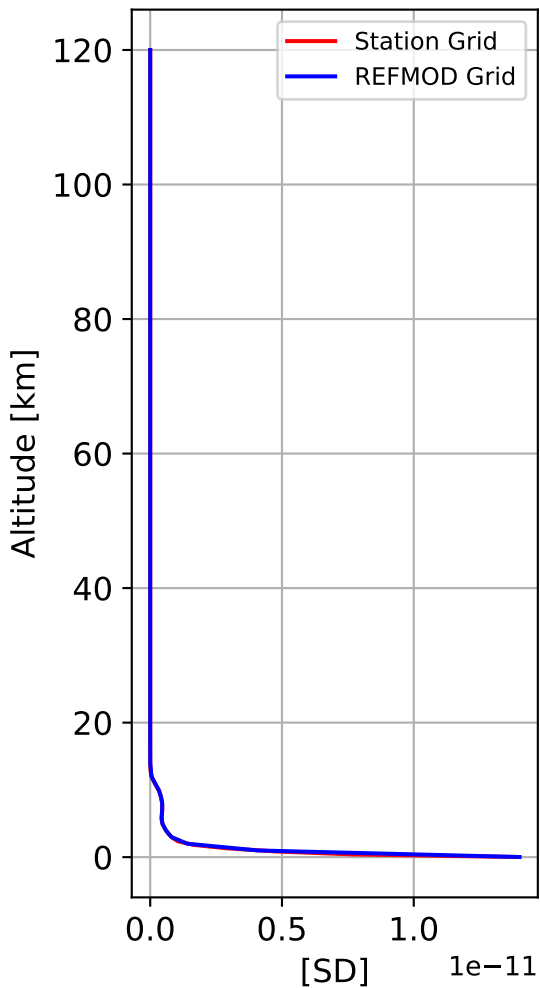
Monthly mean WACCM profile (interpolated to station grid)
St_Petersburg, 59.88N, 29.83E, 0.02kmasl



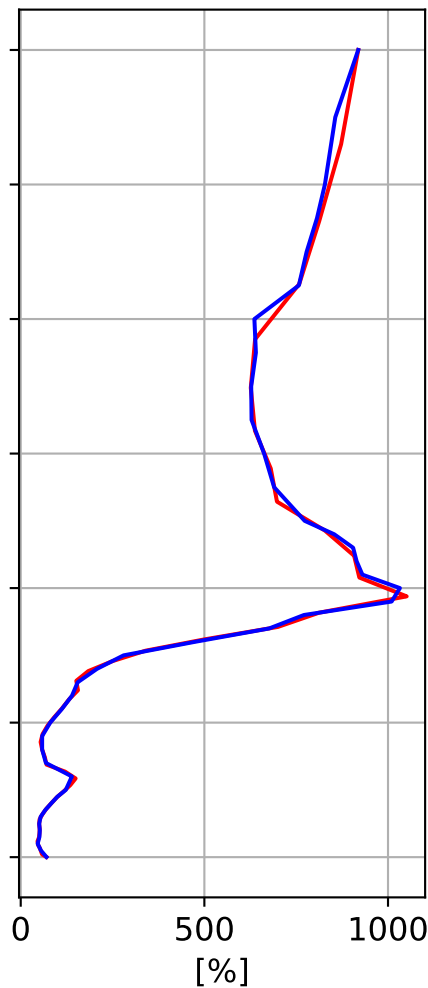
Min, Max, Mean of 732 profiles
St_Petersburg, 59.88N, 29.83E, 0.02kmasl



Std. Deviation



Percent Deviation



Level covariance matrix

 $1e-22$

Altitude [km]

120

100

80

60

40

20

20

40

60

80

100

120

Altitude [km]

1.92

1.68

1.44

1.20

0.96

0.72

0.48

0.24

0.00

Mixing ratio[~ 2]