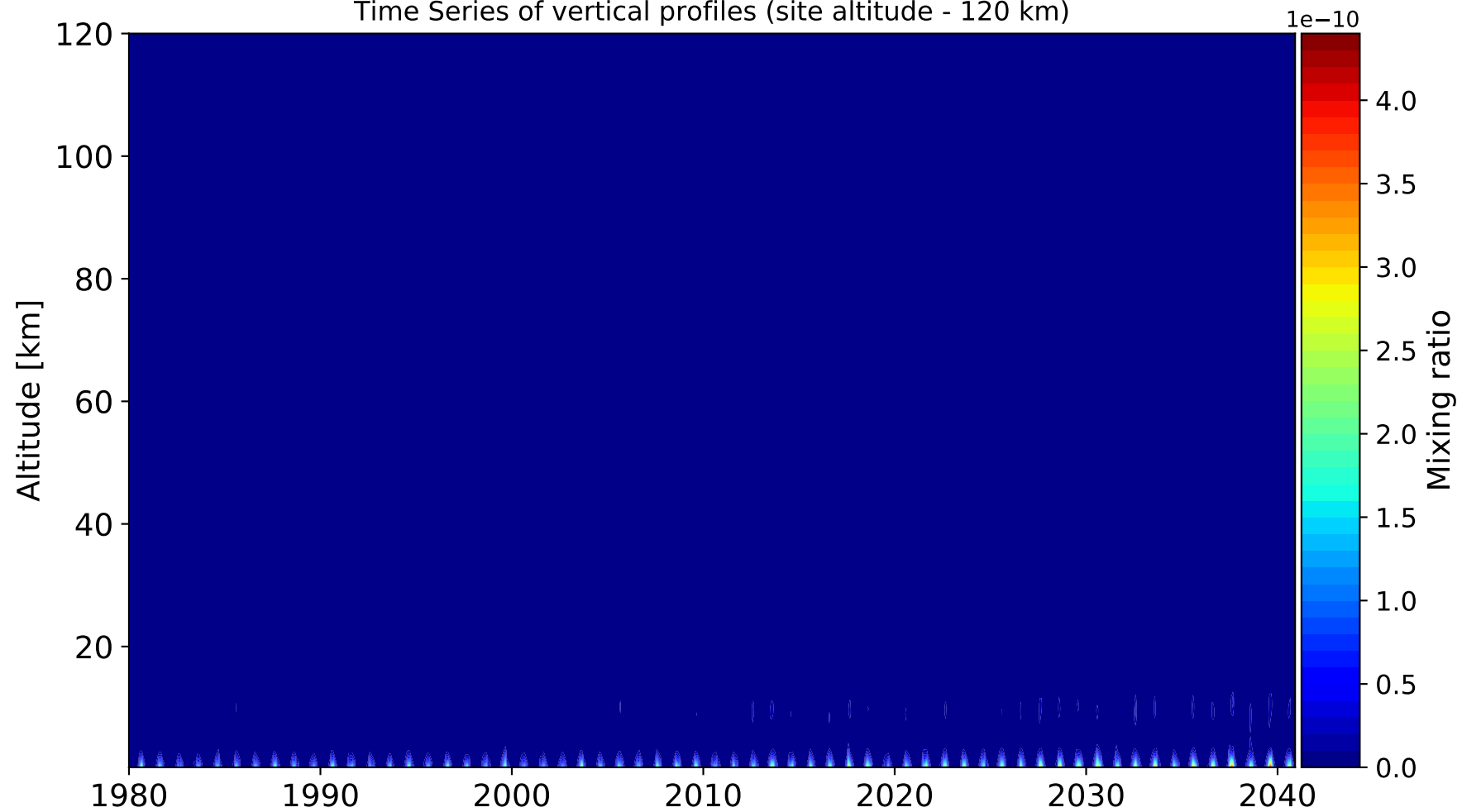


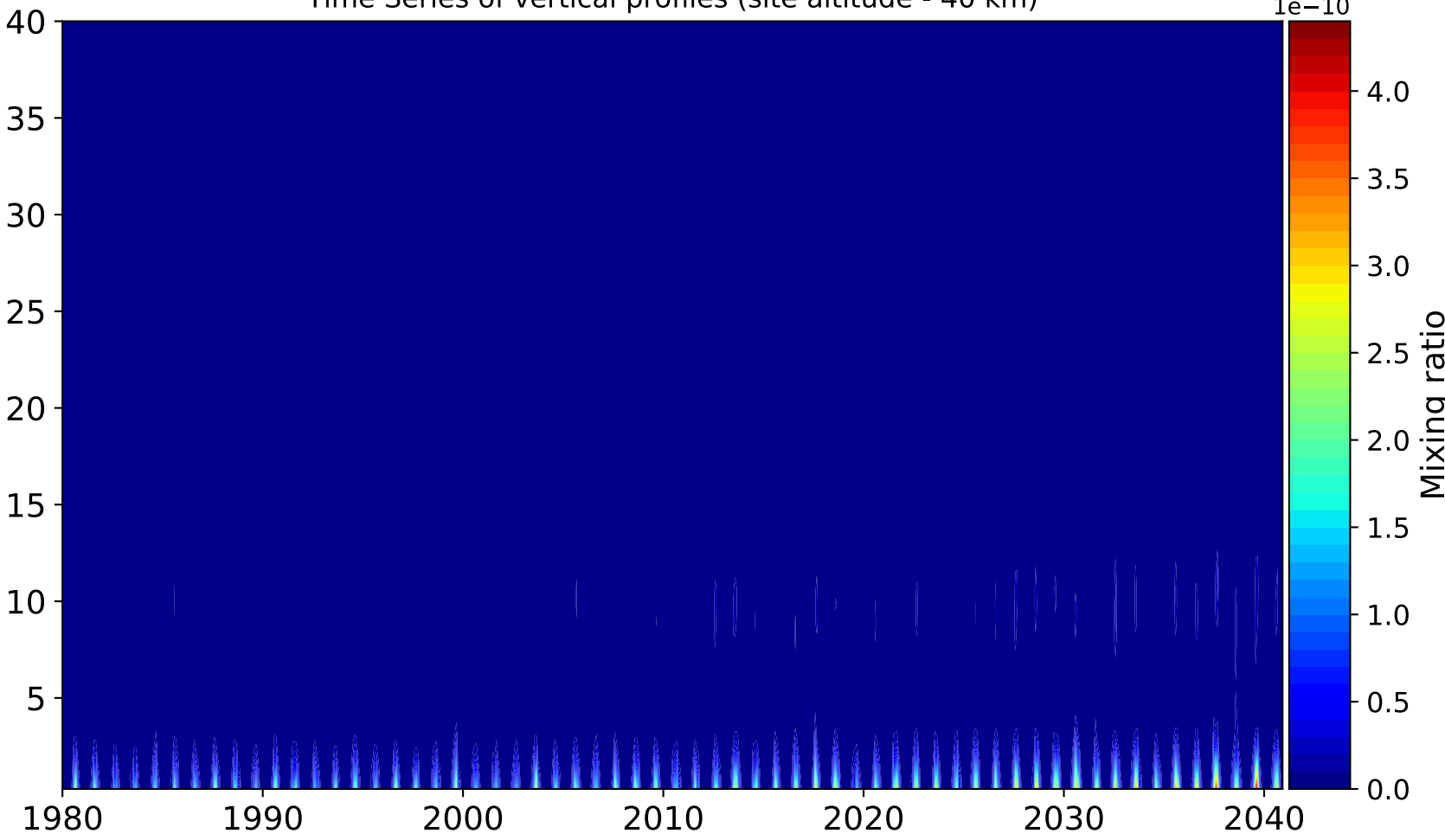
Time Series of vertical profiles (site altitude - 120 km)



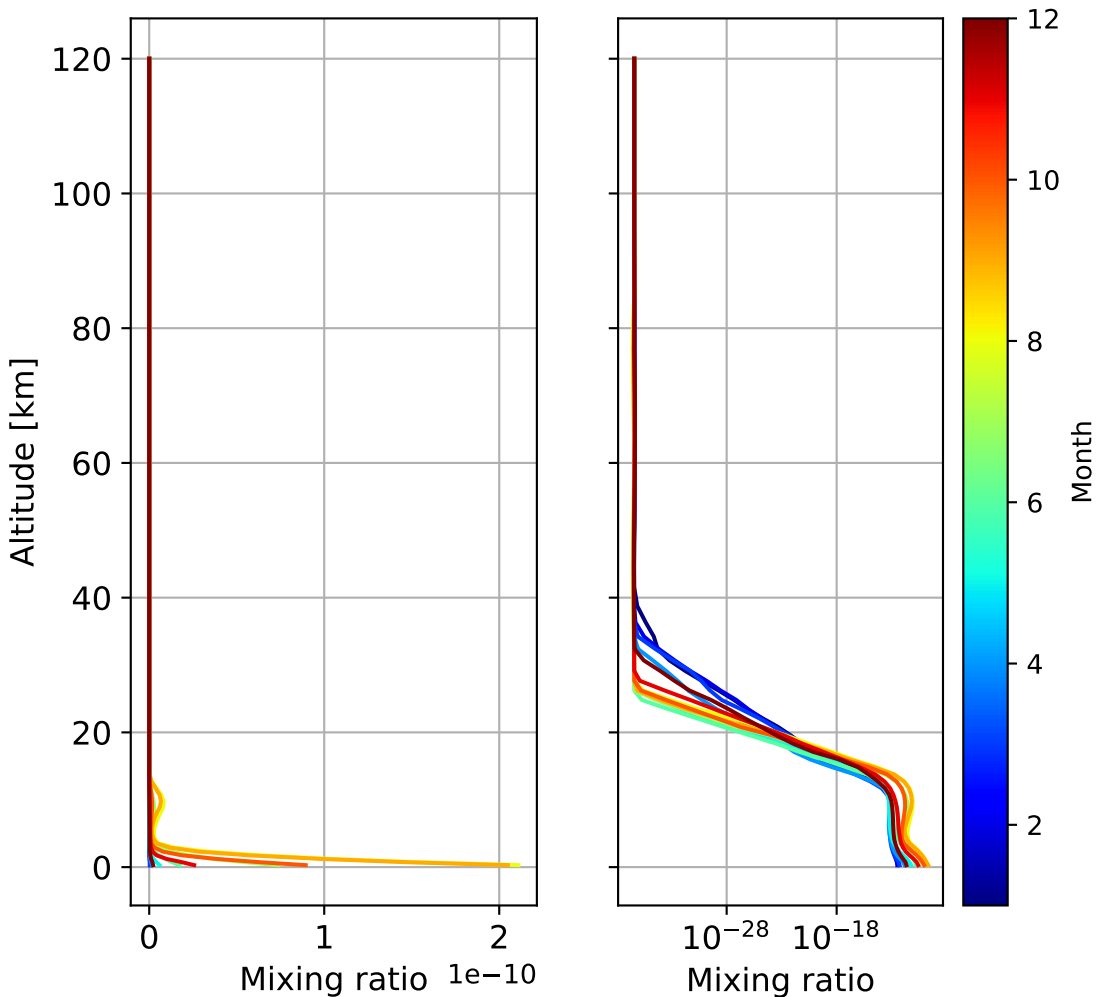
Time Series of vertical profiles (site altitude - 40 km)

$1e-10$

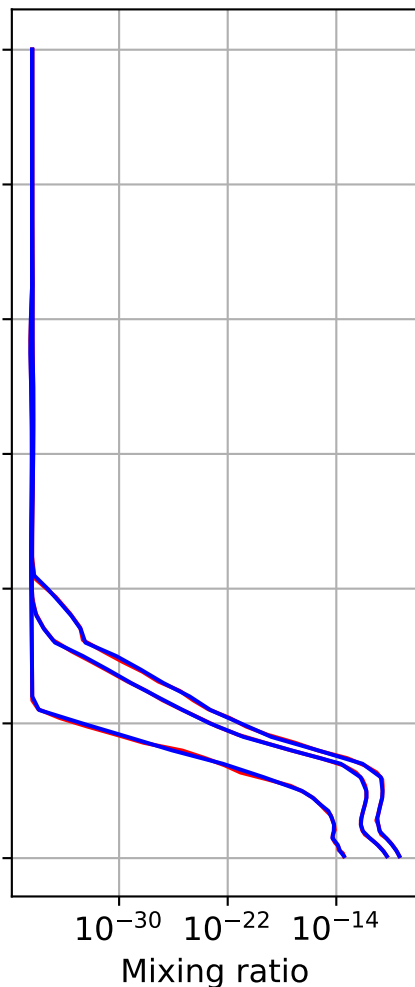
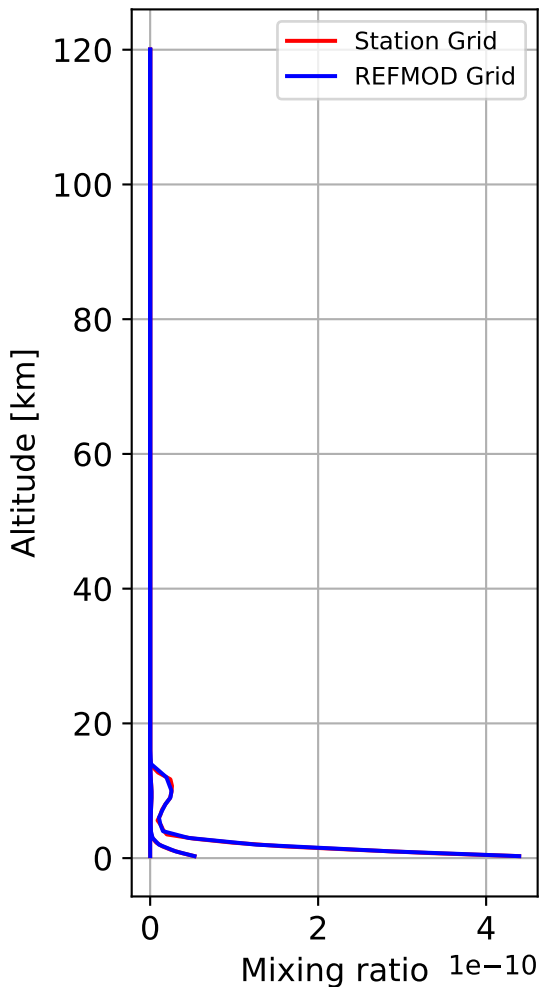
Altitude [km]



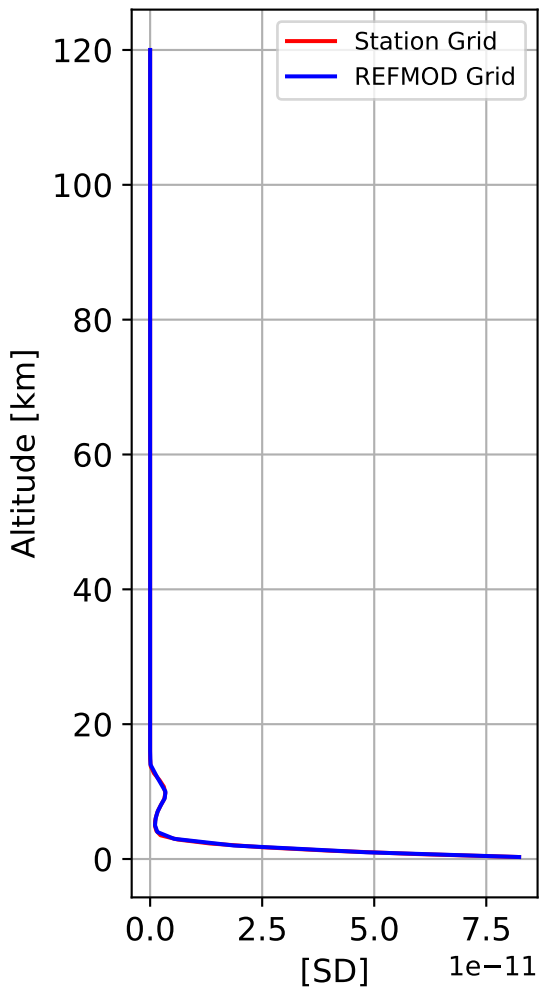
Monthly mean WACCM profile (interpolated to station grid) Timmins, 48.57N, 278.62E, 0.295kmasl



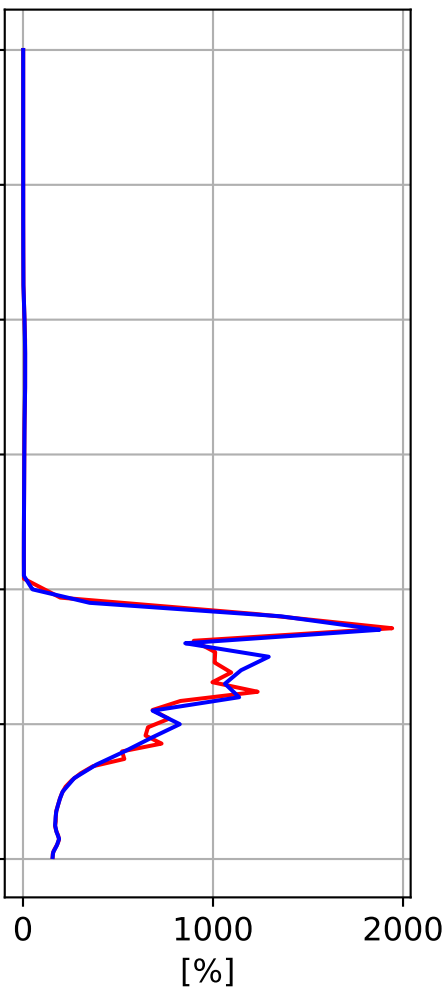
Min, Max, Mean of 732 profiles
Timmins, 48.57N, 278.62E, 0.295kmasl



Std. Deviation



Percent Deviation



Level covariance matrix

 $1e-21$

Altitude [km]

120
100
80
60
40
20

Altitude [km]

Mixing ratio[~ 2]6.75
6.00
5.25
4.50
3.75
3.00
2.25
1.50
0.75
0.00