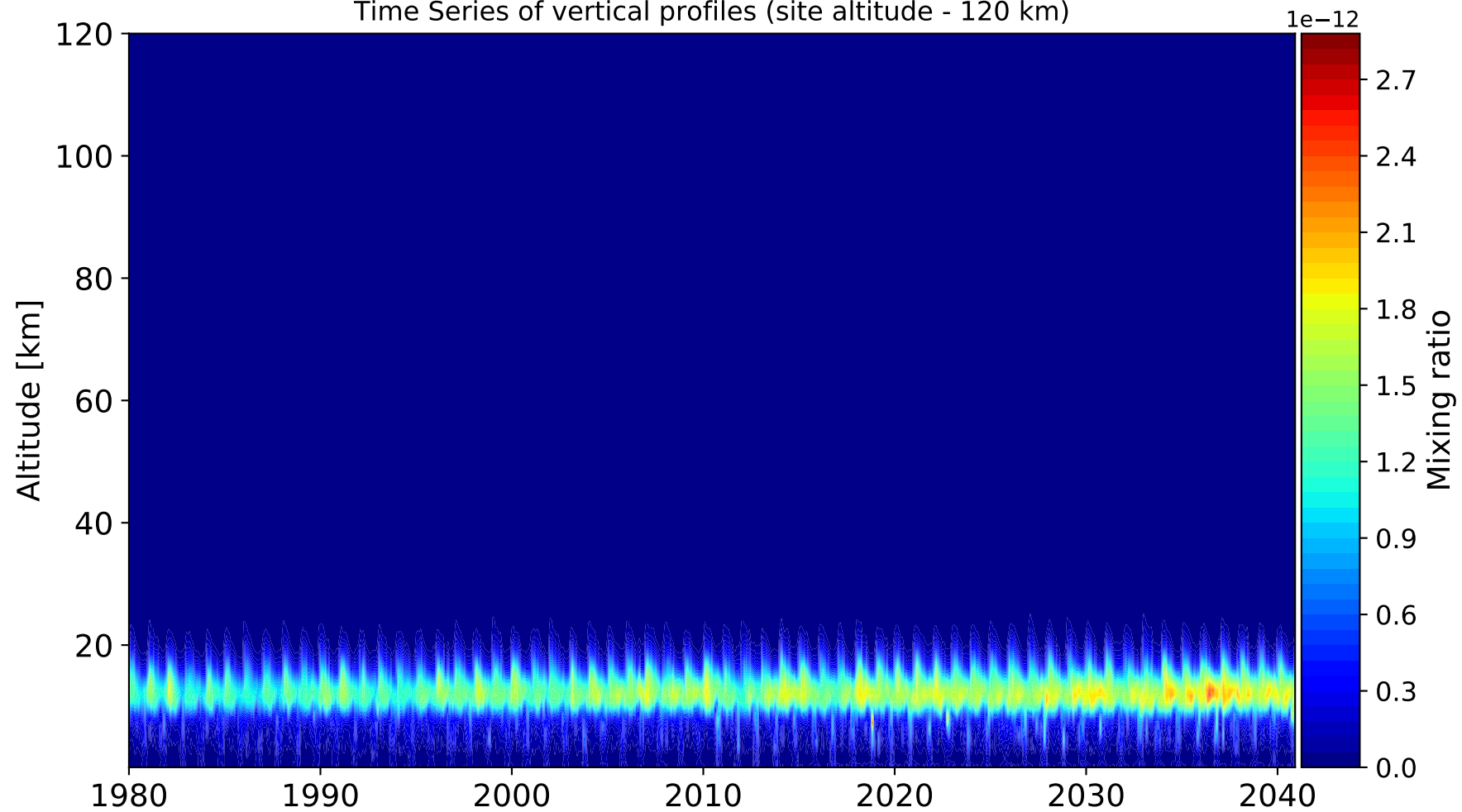
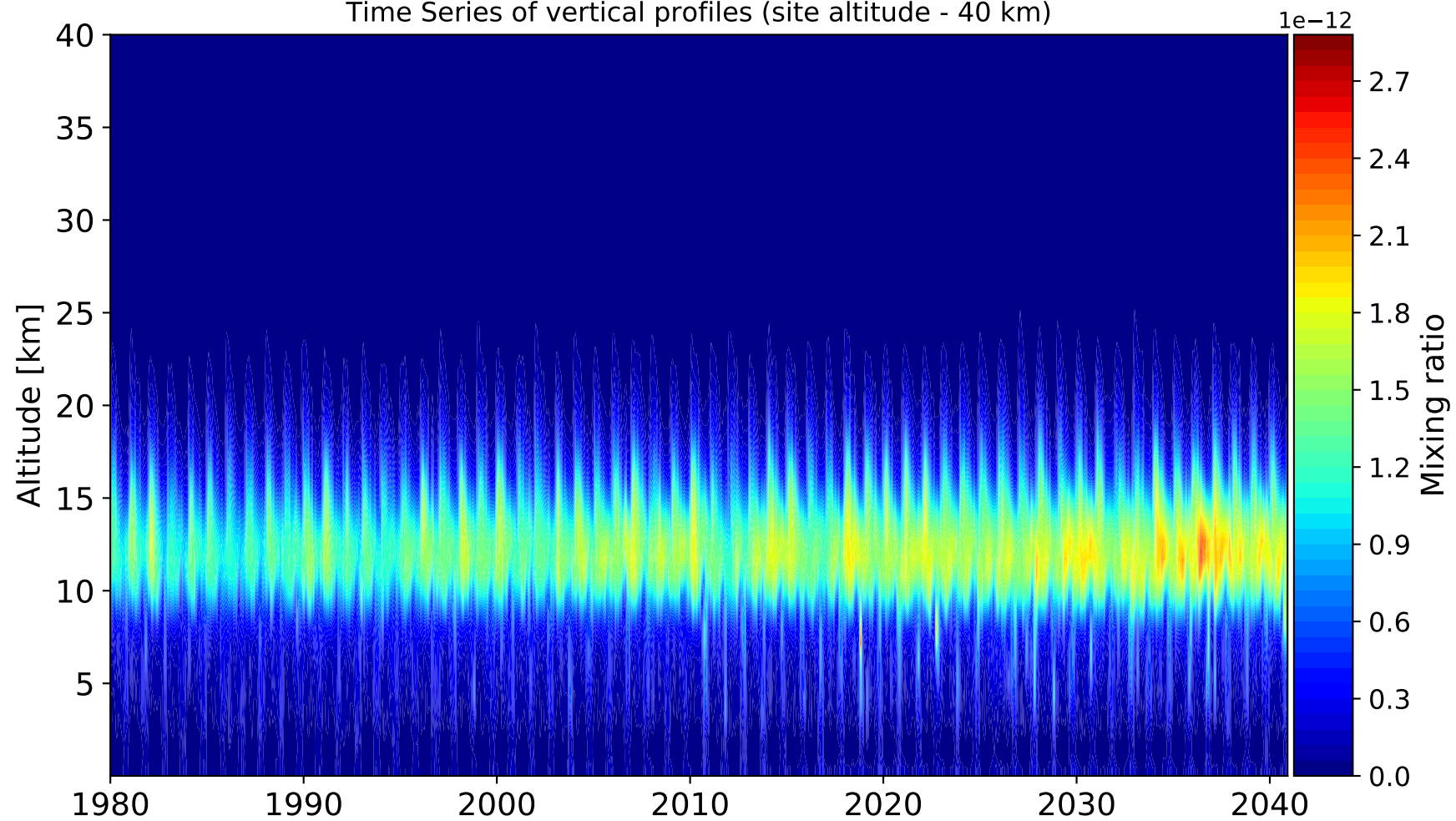


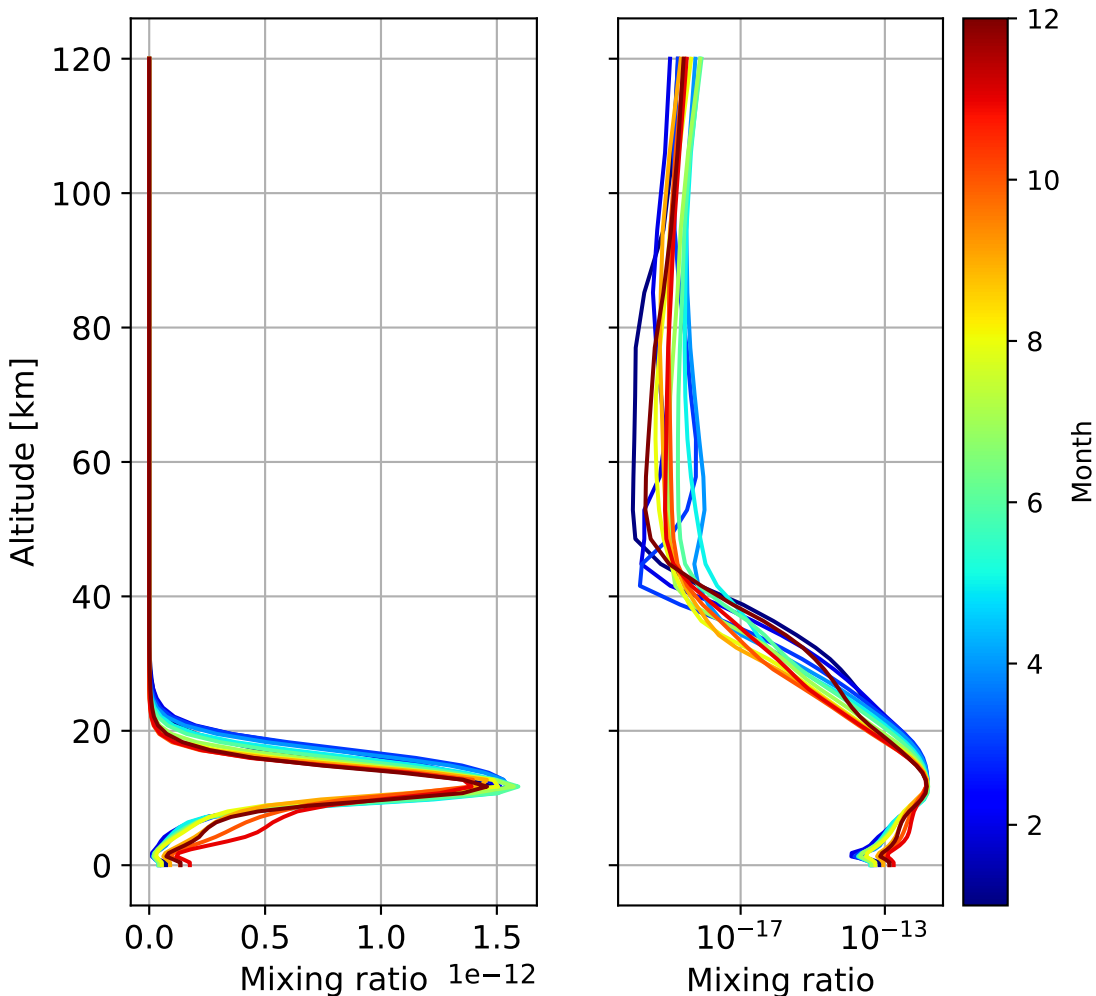
Time Series of vertical profiles (site altitude - 120 km)



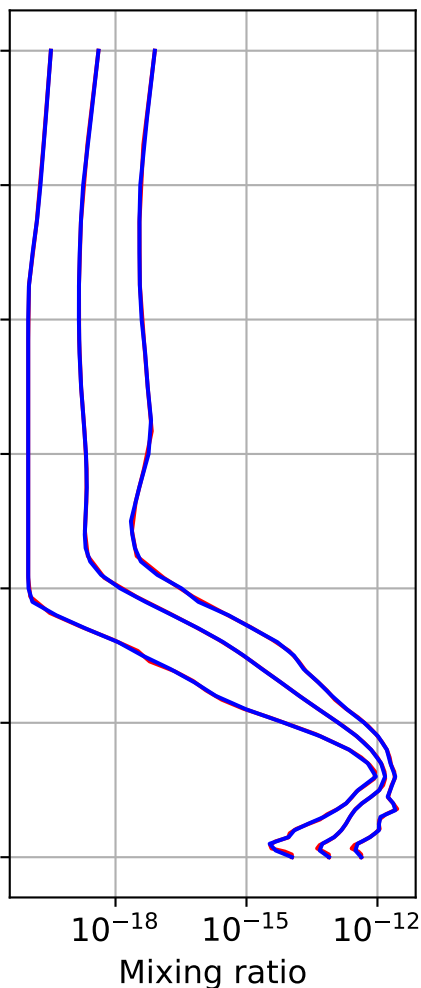
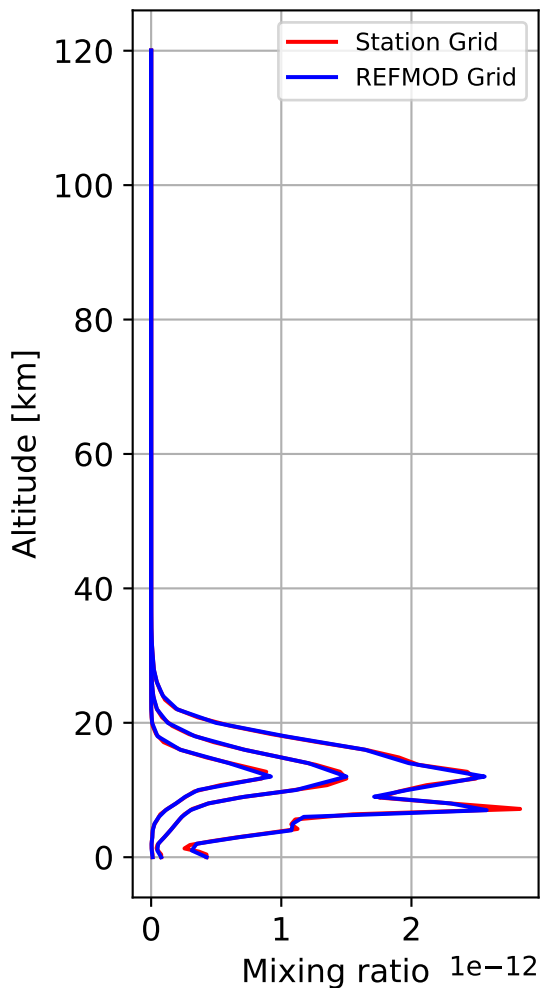
Time Series of vertical profiles (site altitude - 40 km)



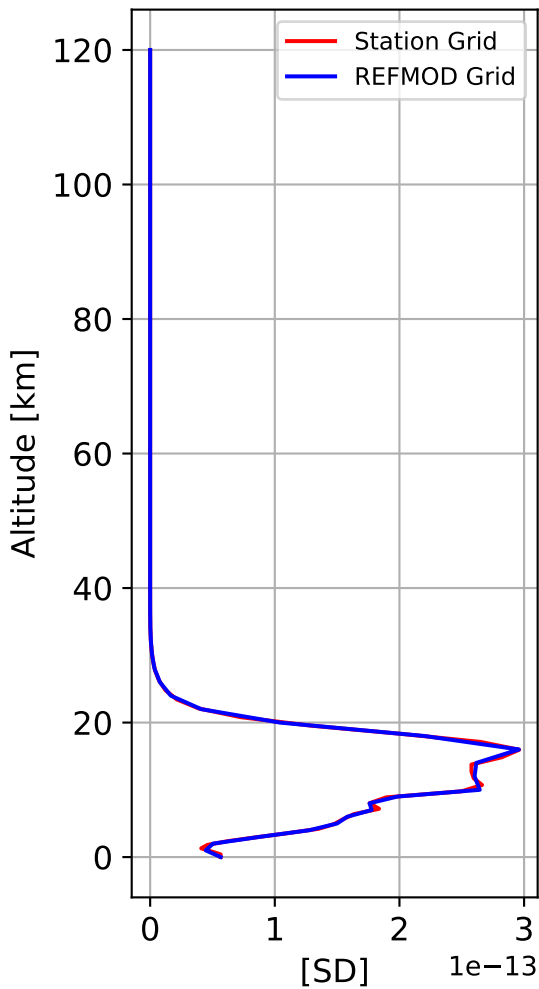
Monthly mean WACCM profile (interpolated to station grid)
Syowa_Station, -69.0N, 39.59E, 0.01kmasl



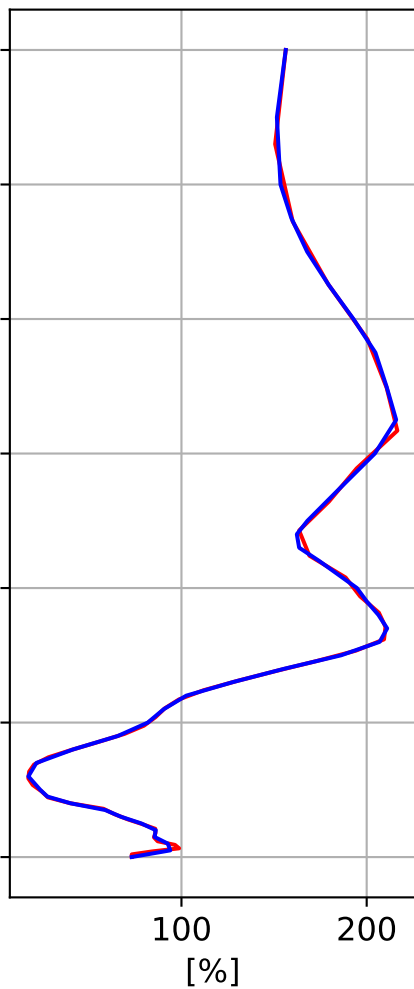
Min, Max, Mean of 732 profiles
Syowa_Station, -69.0N, 39.59E, 0.01kmasl



Std. Deviation



Percent Deviation

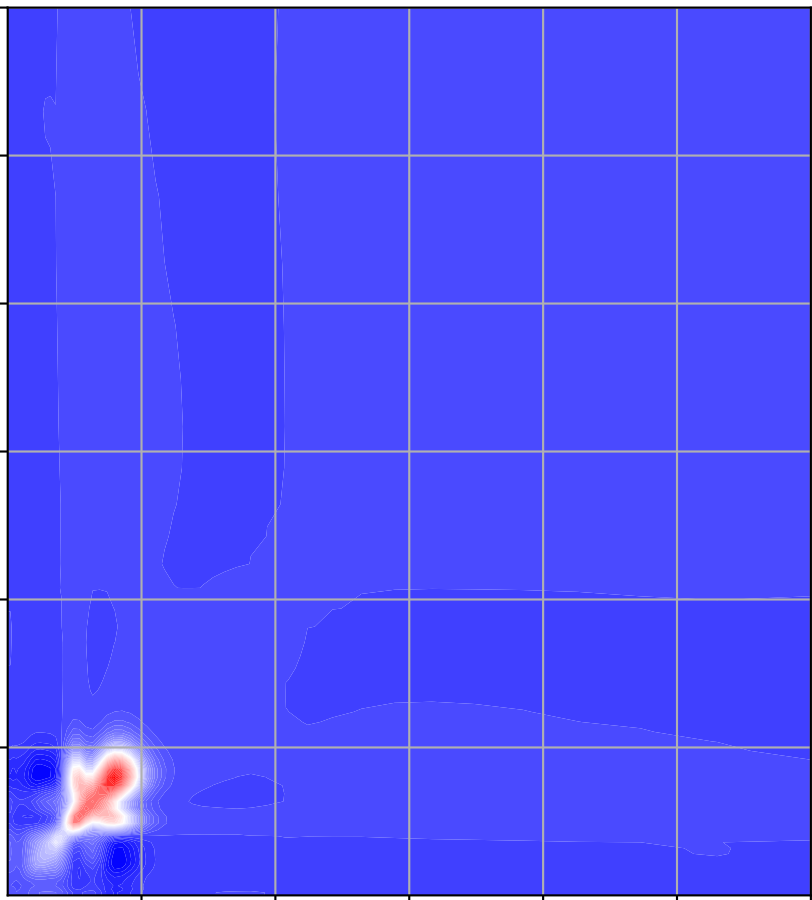


Level covariance matrix

1e-26

Altitude [km]

120
100
80
60
40
20



8.4
7.2
6.0
4.8
3.6
2.4
1.2
0.0
-1.2

Mixing ratio²]

Altitude [km]