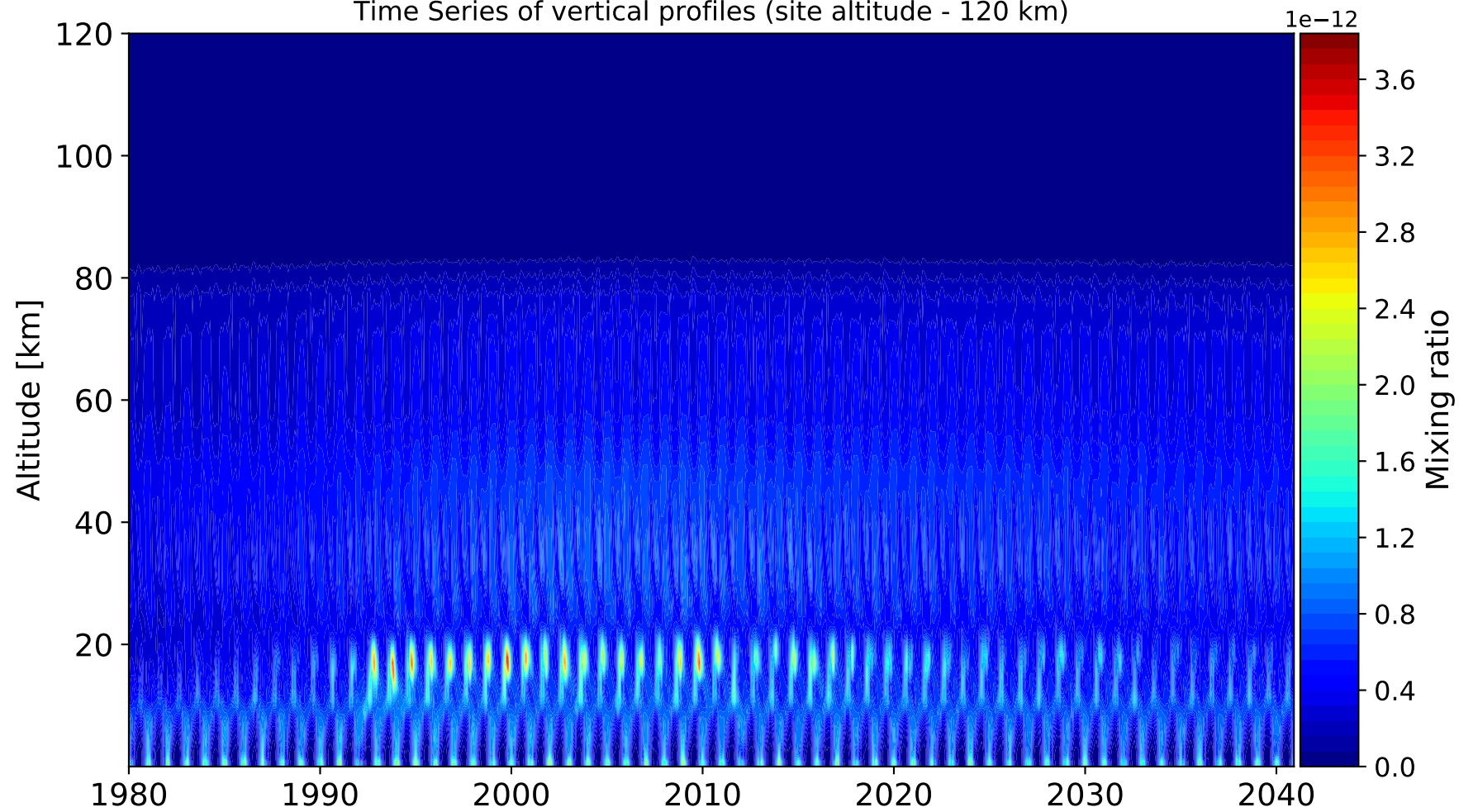
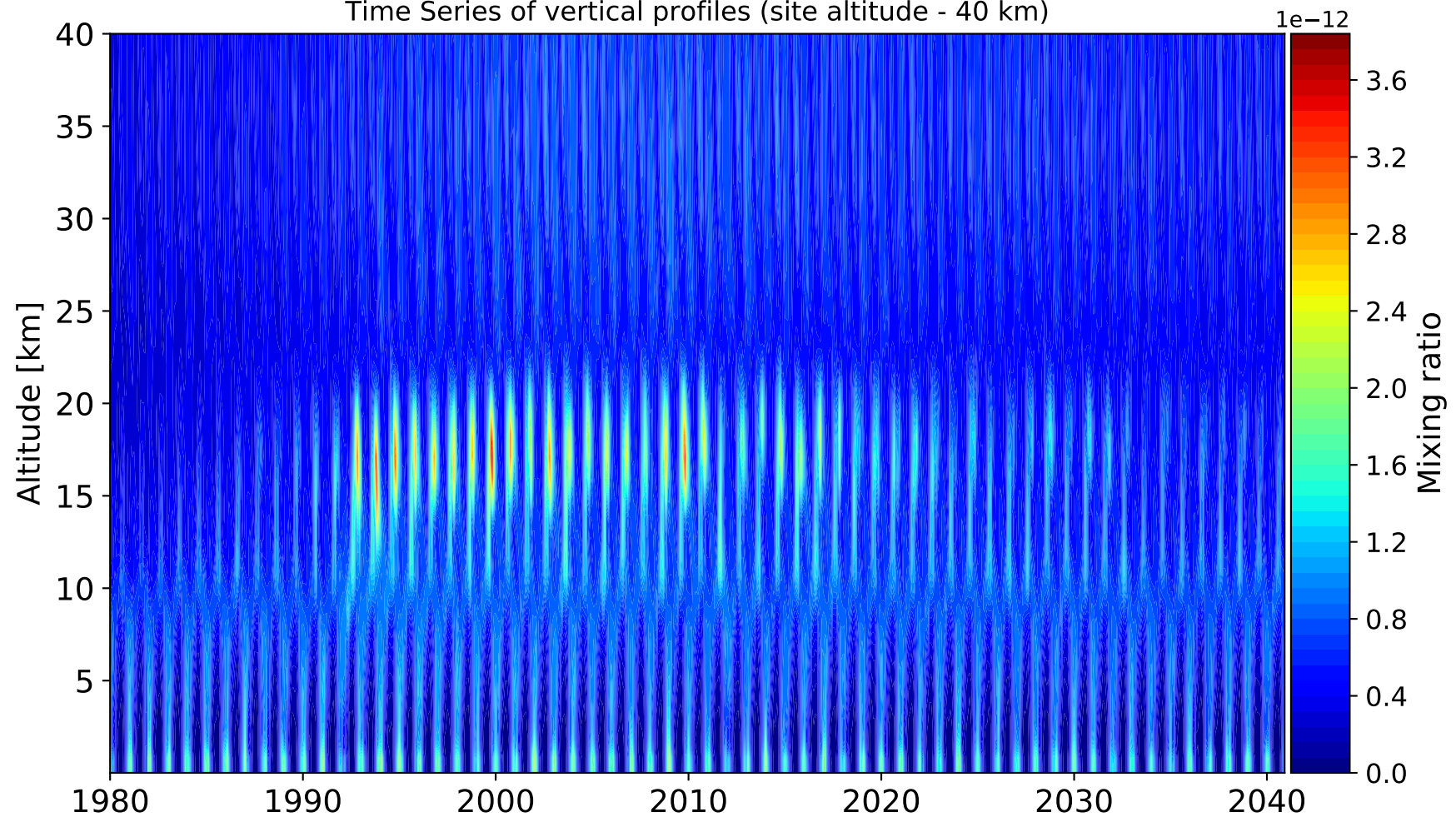


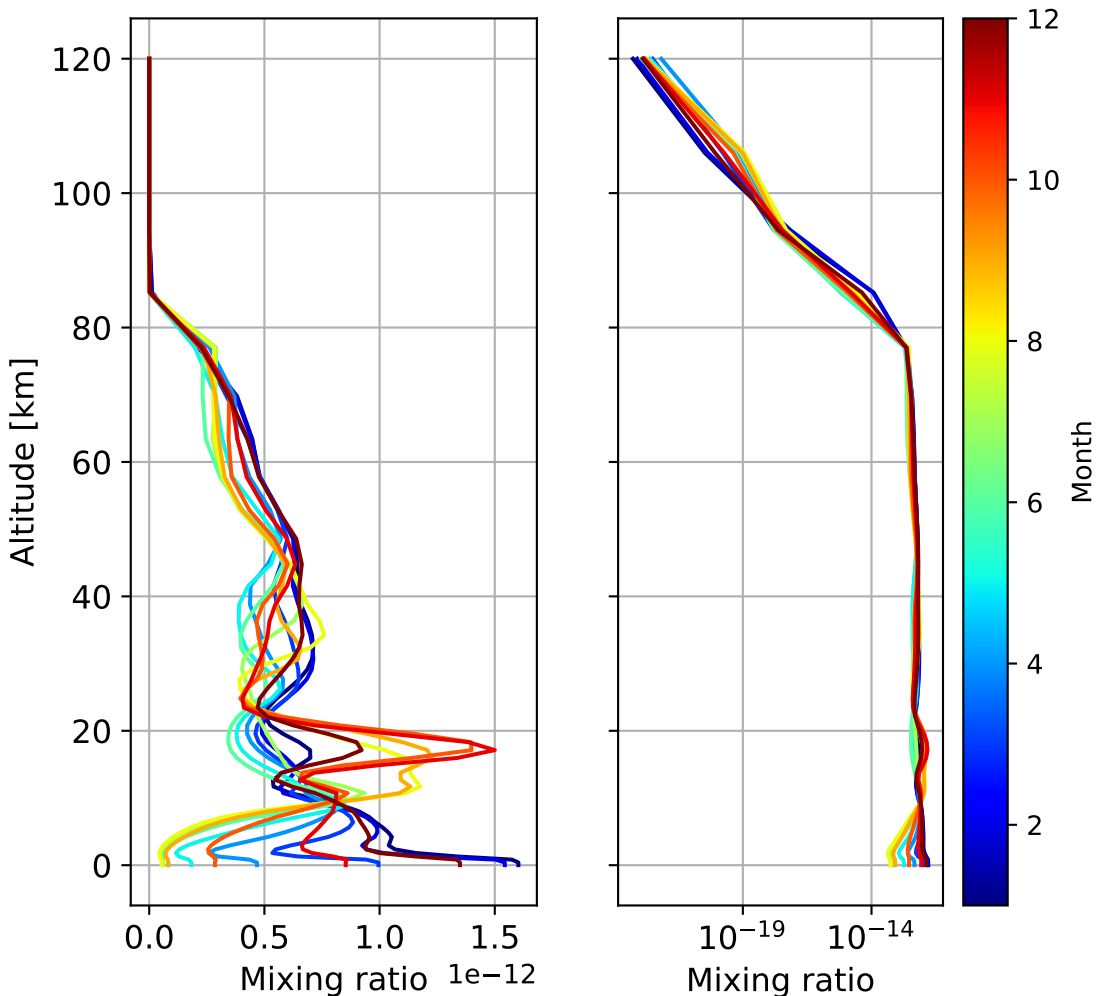
Time Series of vertical profiles (site altitude - 120 km)



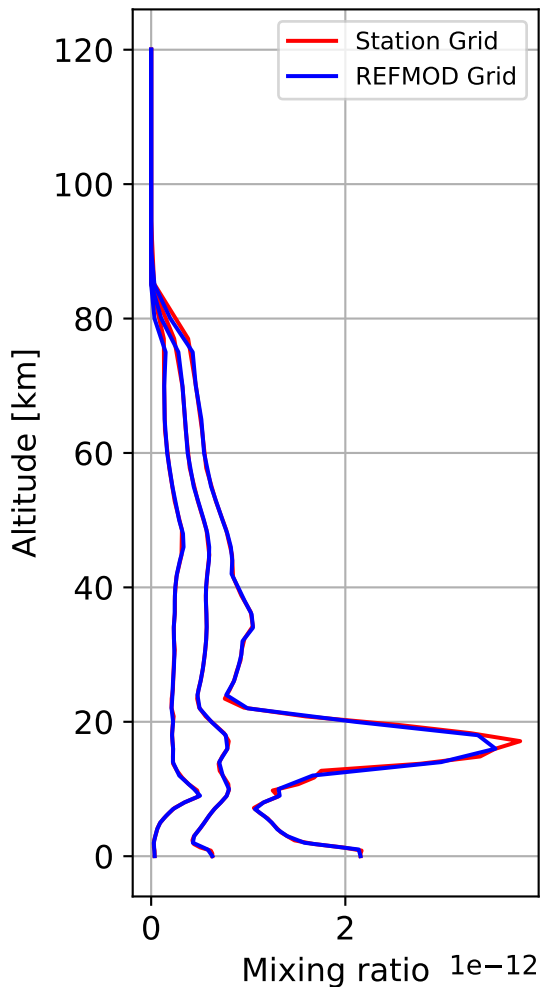
Time Series of vertical profiles (site altitude - 40 km)



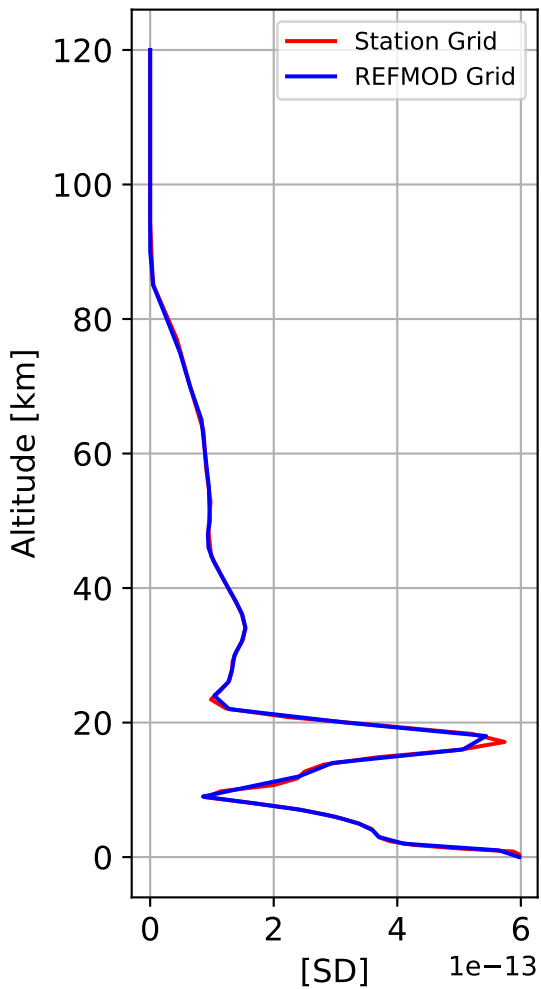
Monthly mean WACCM profile (interpolated to station grid)
Syowa_Station, -69.0N, 39.59E, 0.01kmasl



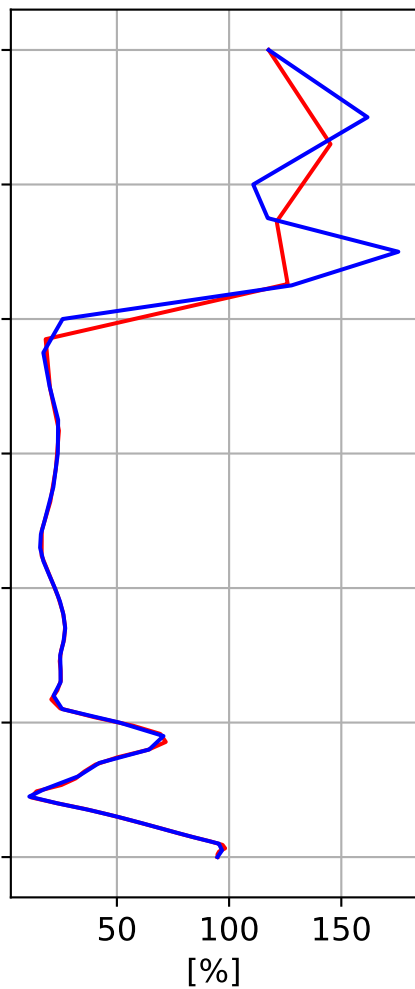
Min, Max, Mean of 732 profiles
Syowa_Station, -69.0N, 39.59E, 0.01kmasl



Std. Deviation



Percent Deviation

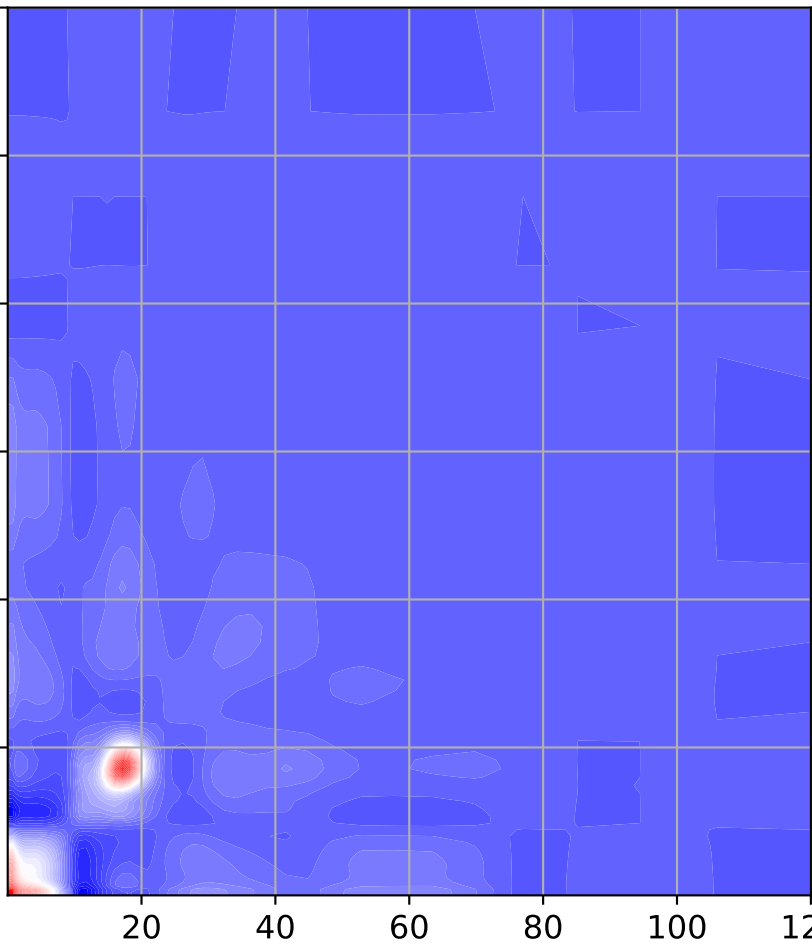


Level covariance matrix

1e-25

Altitude [km]

120
100
80
60
40
20



Altitude [km]

Mixing ratio[~ 2]

3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5