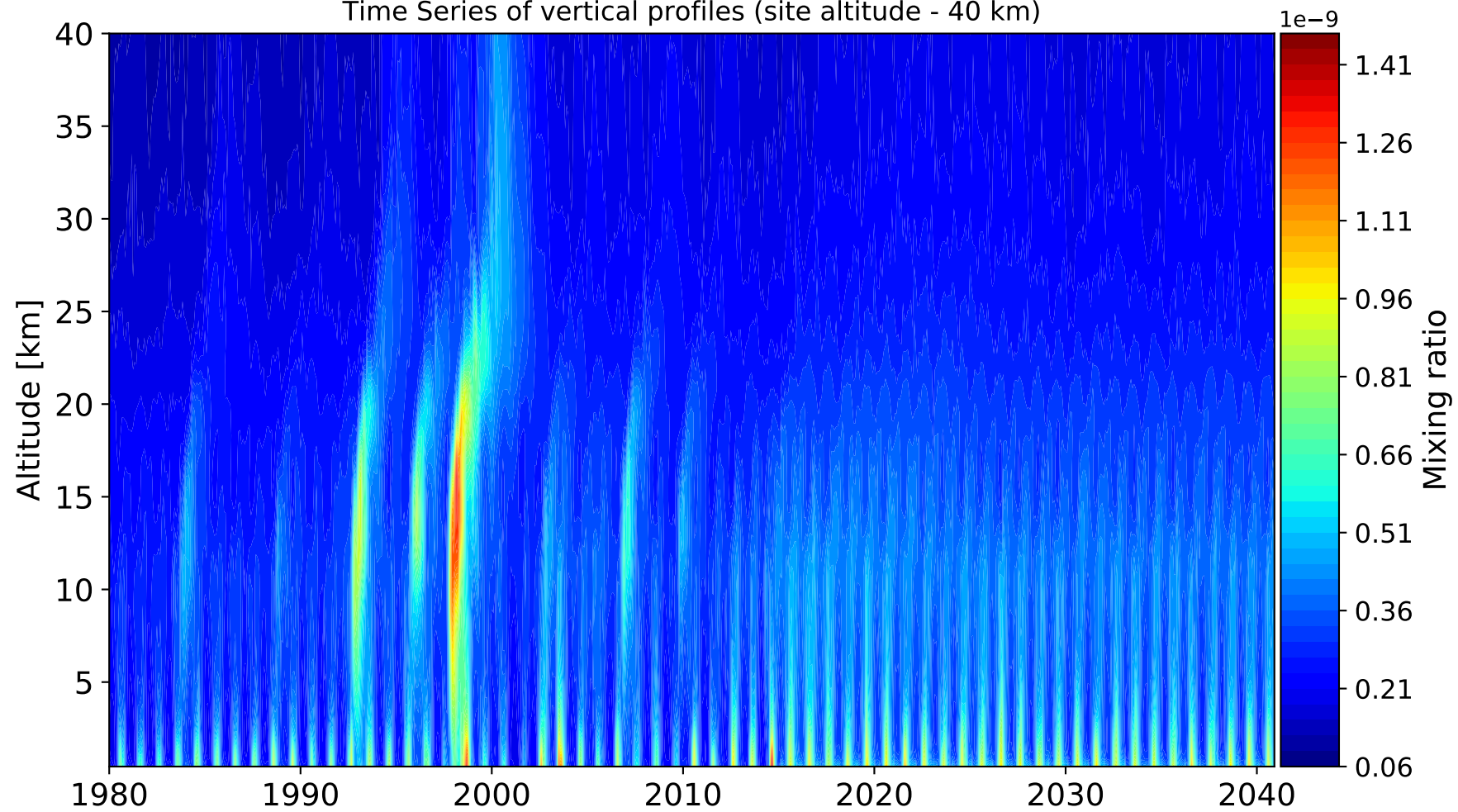
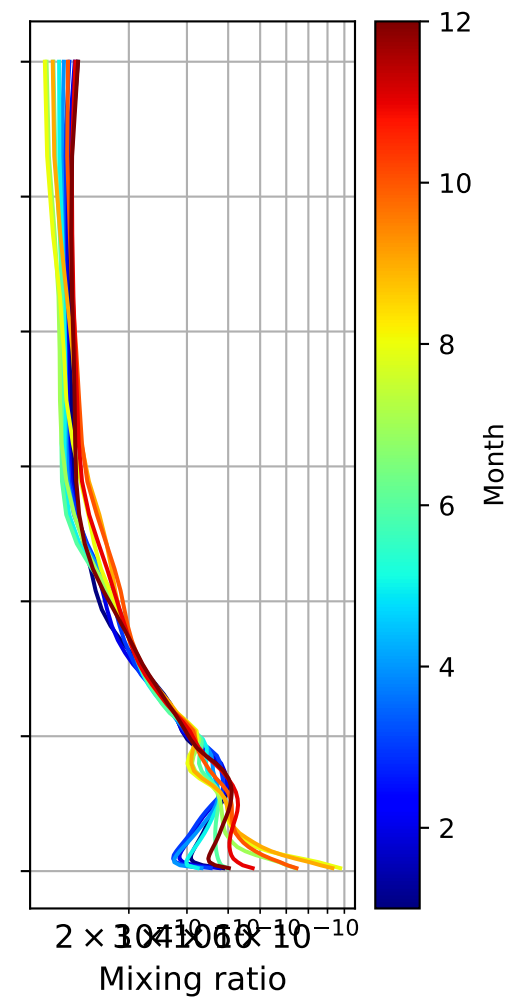
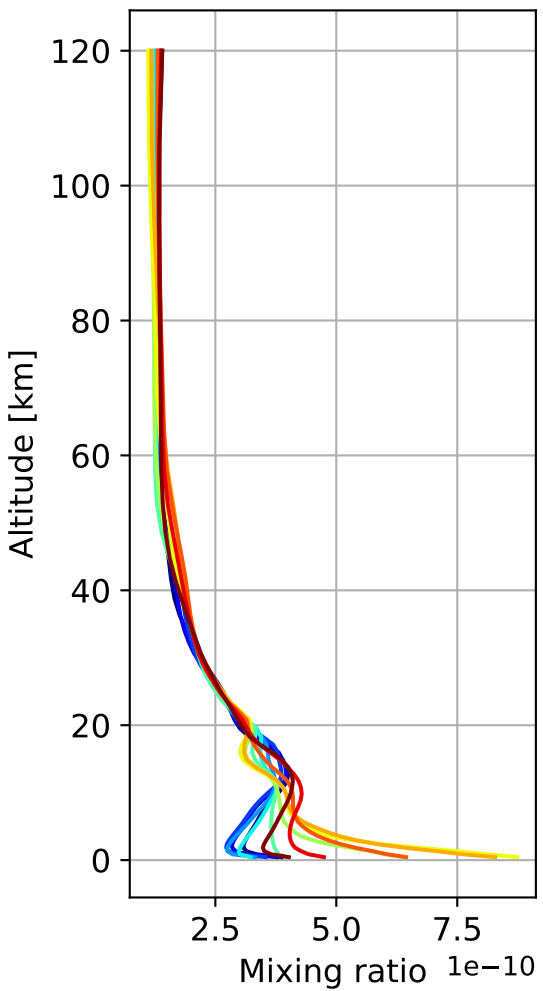




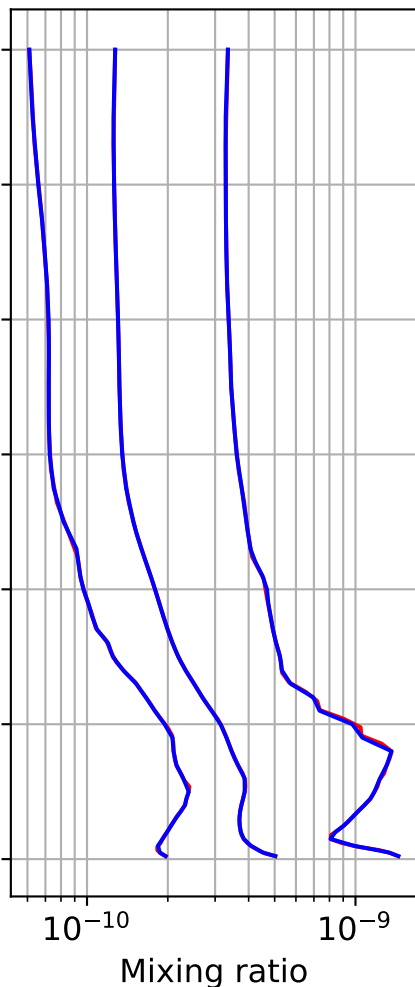
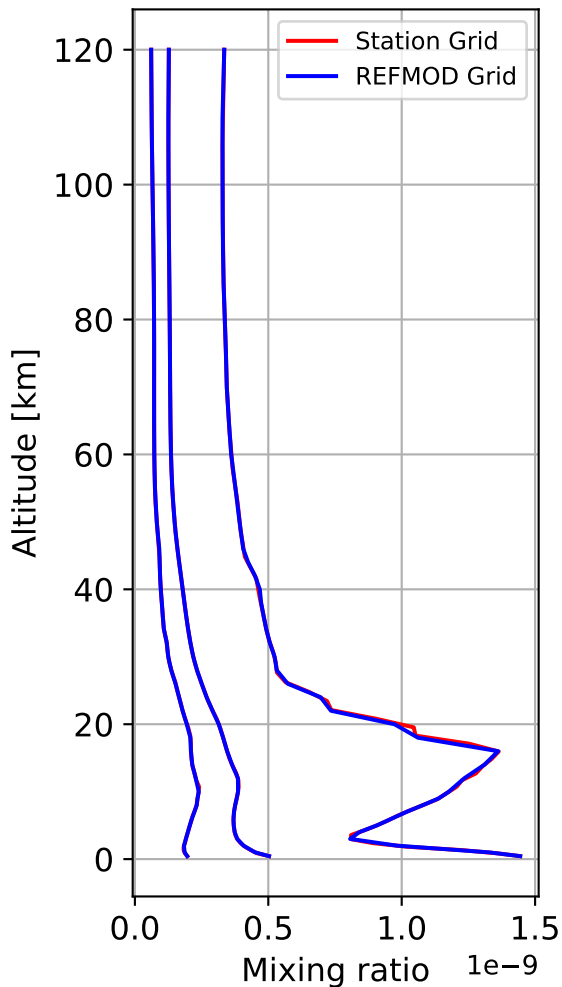
Time Series of vertical profiles (site altitude - 40 km)



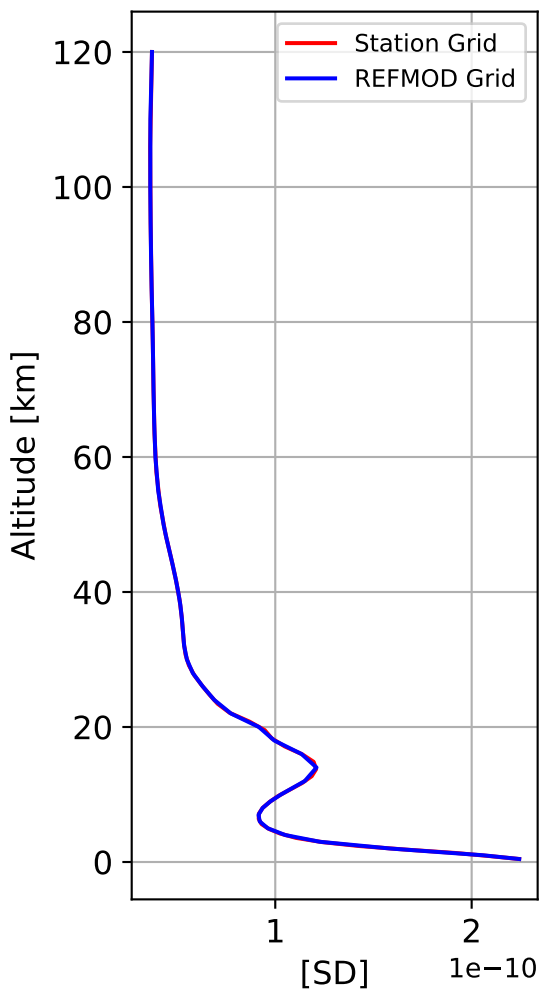
# Monthly mean WACCM profile (interpolated to station grid) Park\_Falls, 45.945N, 269.727E, 0.442kmasl



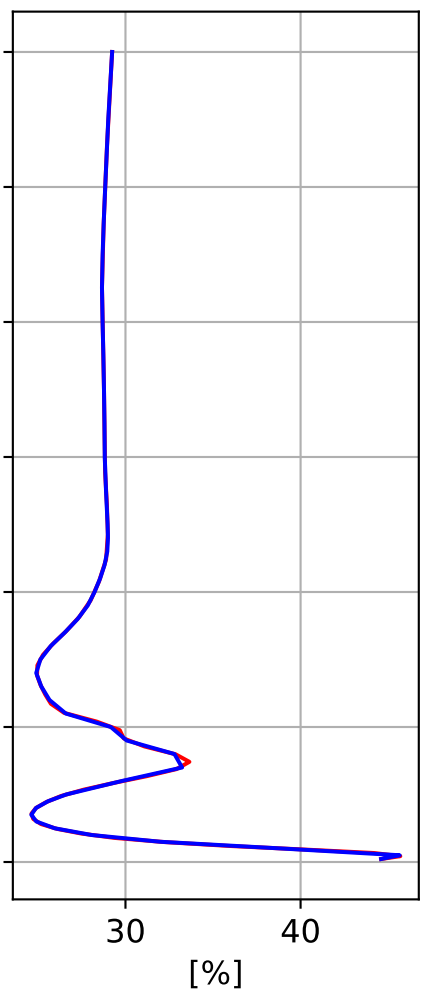
Min, Max, Mean of 732 profiles  
Park\_Falls, 45.945N, 269.727E, 0.442kmasl



### Std. Deviation



### Percent Deviation



Level covariance matrix

1e-20

Altitude [km]

120  
100  
80  
60  
40  
20

Altitude [km]

4.8  
4.2  
3.6  
3.0  
2.4  
1.8  
1.2  
0.6  
0.0Mixing ratio[ $\sim 2$ ]