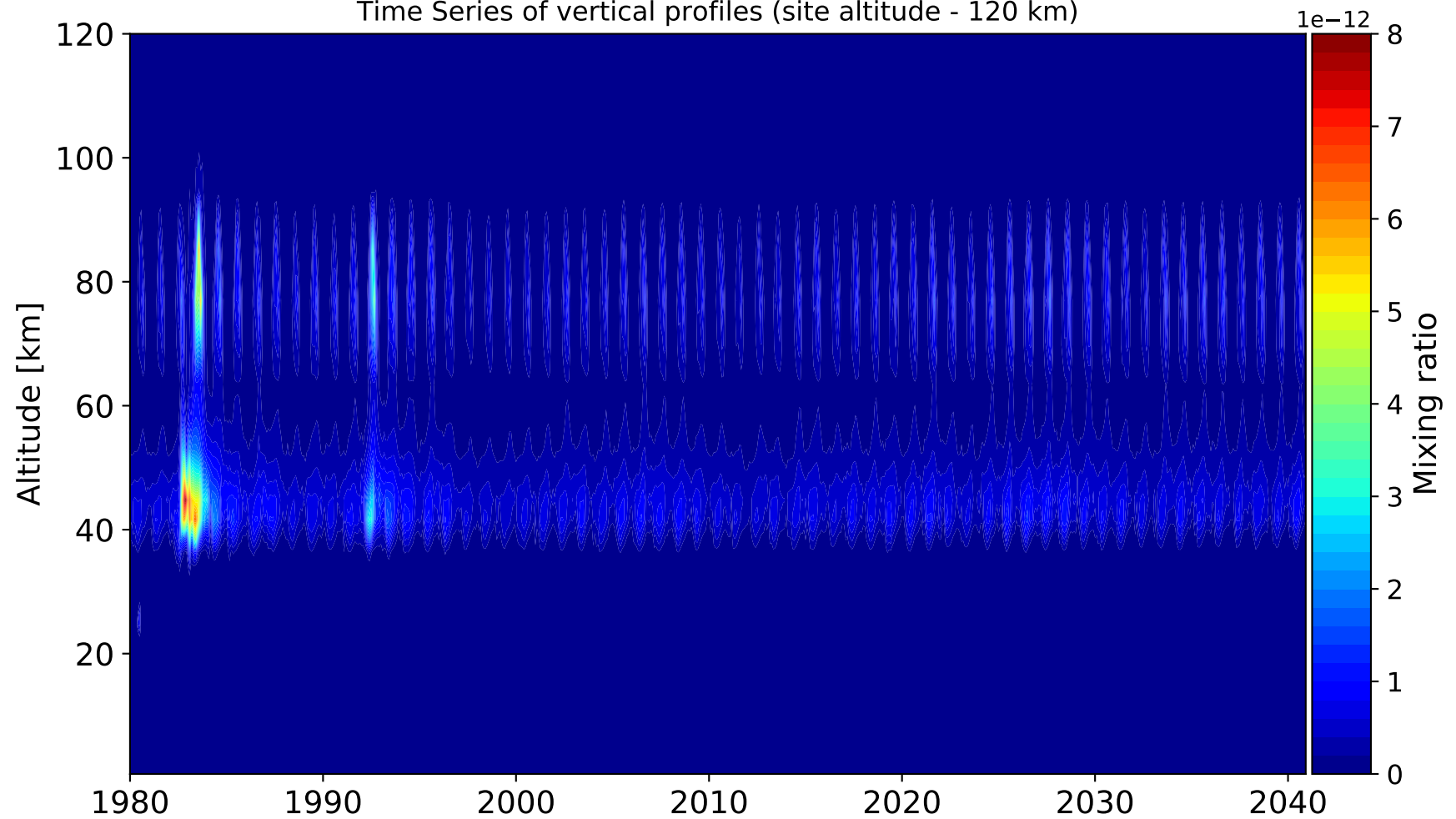
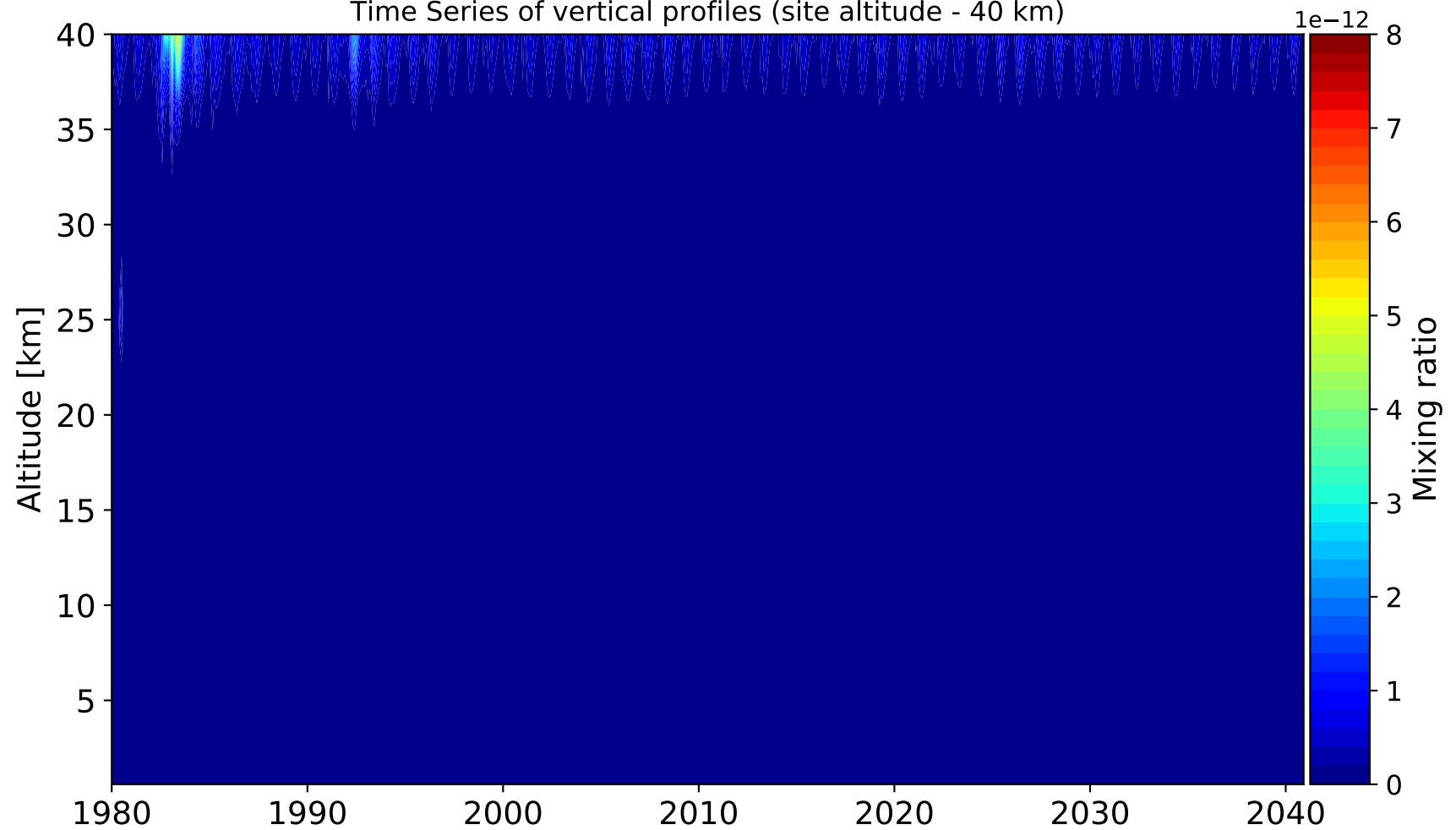


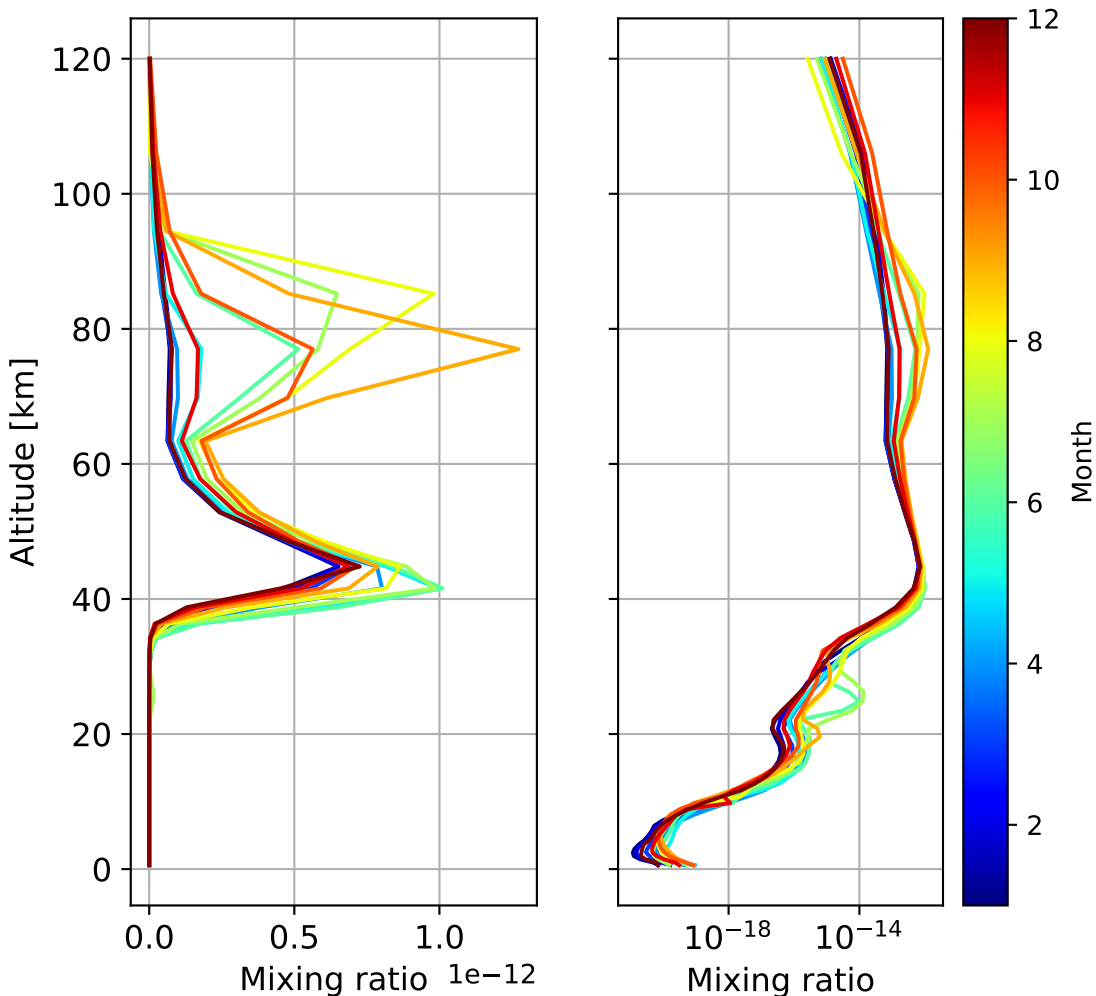
Time Series of vertical profiles (site altitude - 120 km)



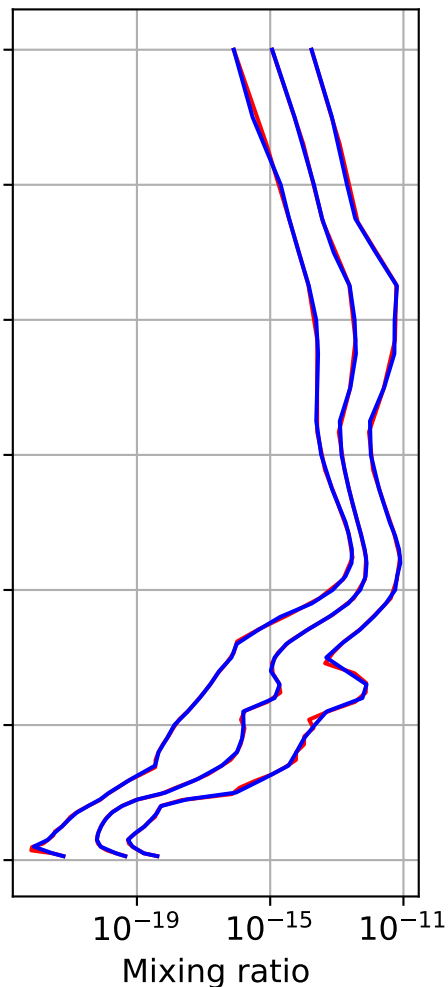
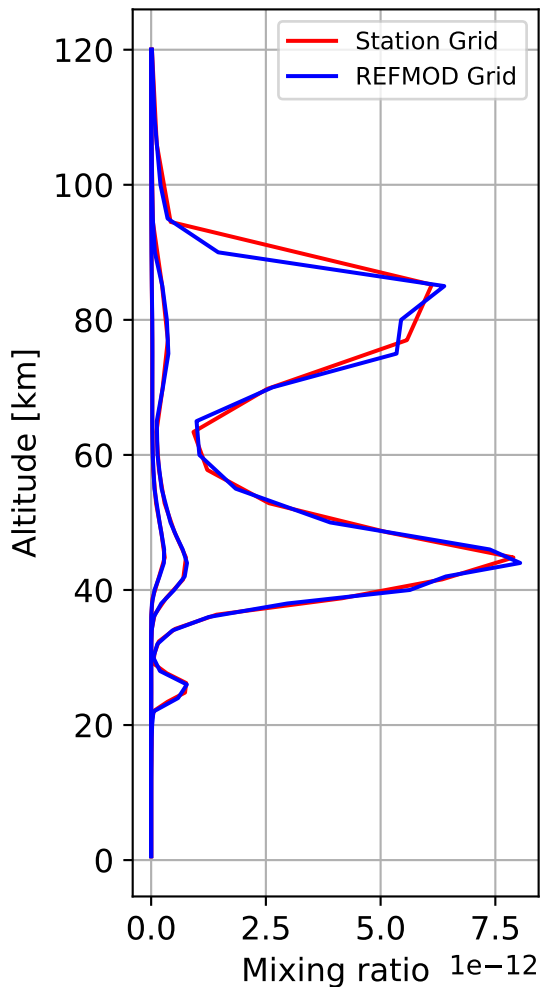
Time Series of vertical profiles (site altitude - 40 km)



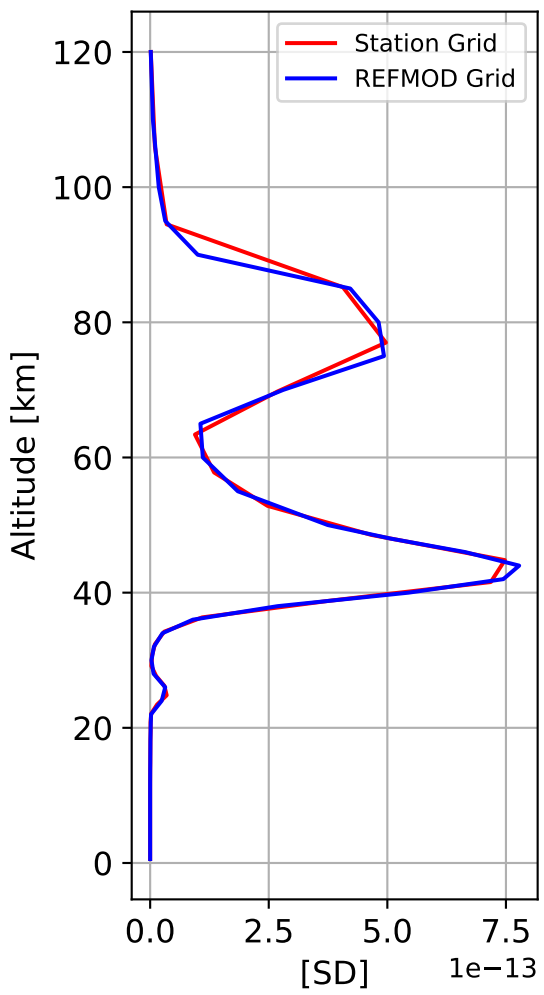
# Monthly mean WACCM profile (interpolated to station grid) Bratts\_Lake, 50.2N, 255.8E, 0.587kmasl



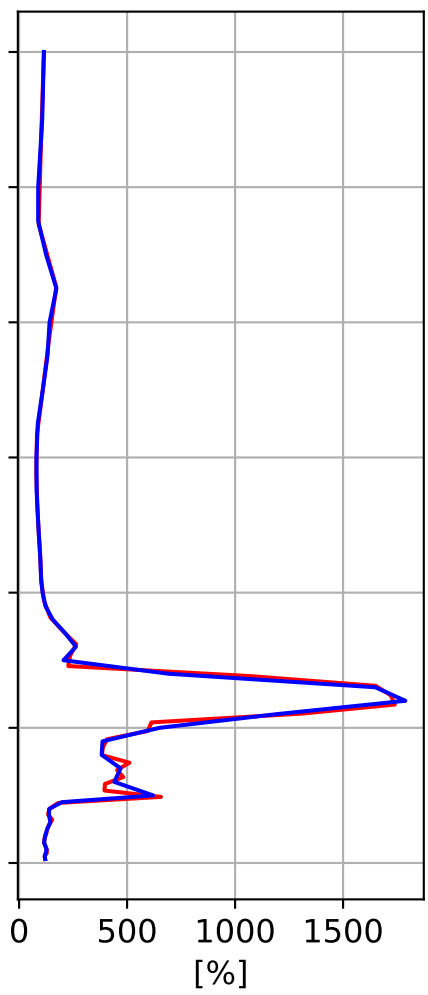
Min, Max, Mean of 732 profiles  
Bratts\_Lake, 50.2N, 255.8E, 0.587kmasl



### Std. Deviation



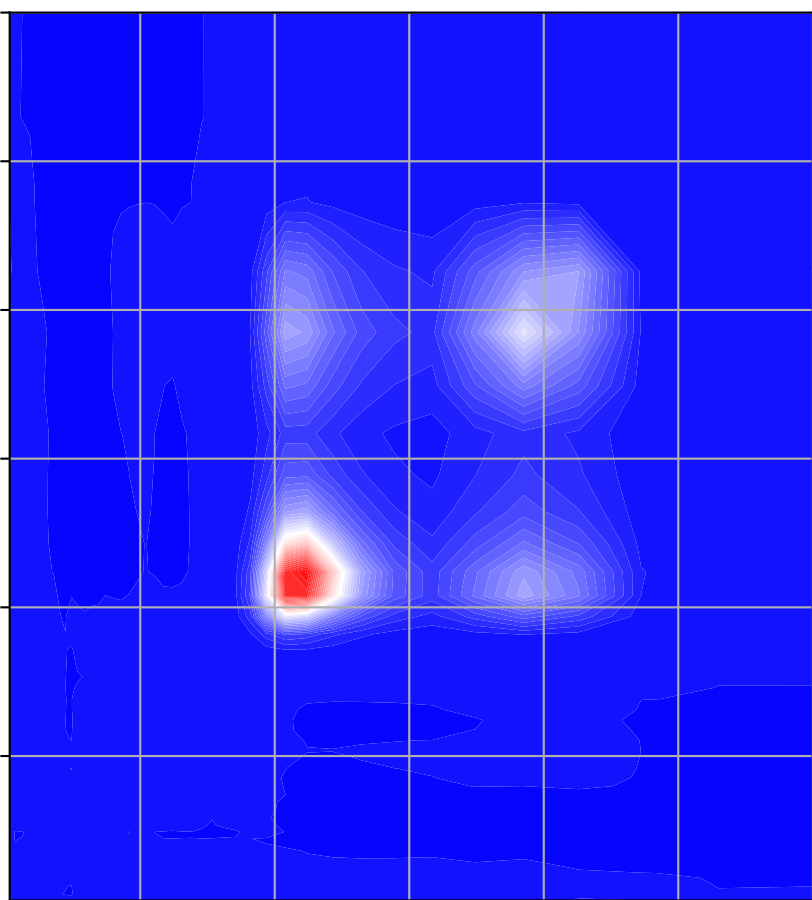
### Percent Deviation



Level covariance matrix

1e-25

Altitude [km]

120  
100  
80  
60  
40  
20

20

Altitude [km]

60

80

100

120

Mixing ratio[ $\sim 2$ ]5.4  
4.8  
4.2  
3.6  
3.0  
2.4  
1.8  
1.2  
0.6  
0.0