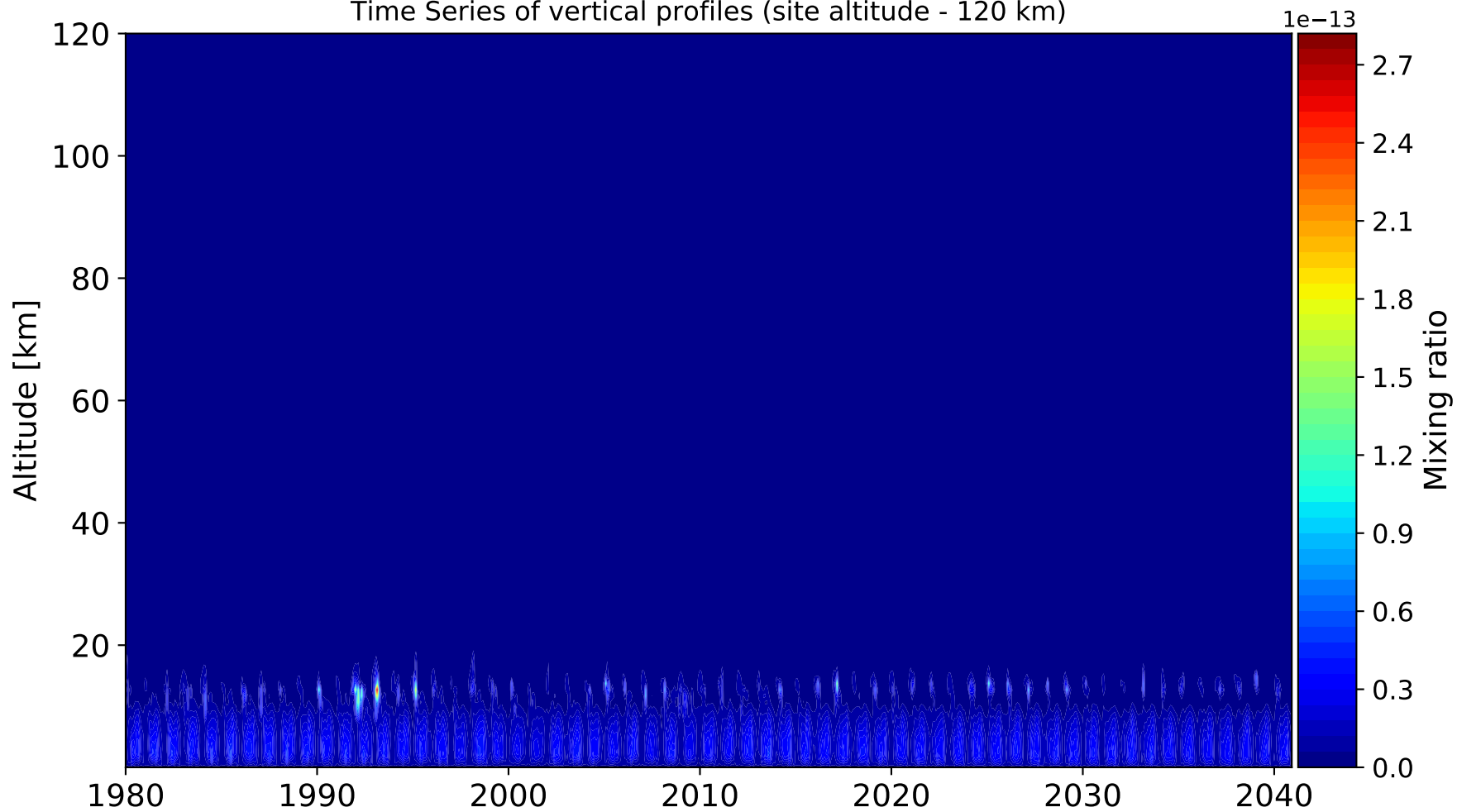
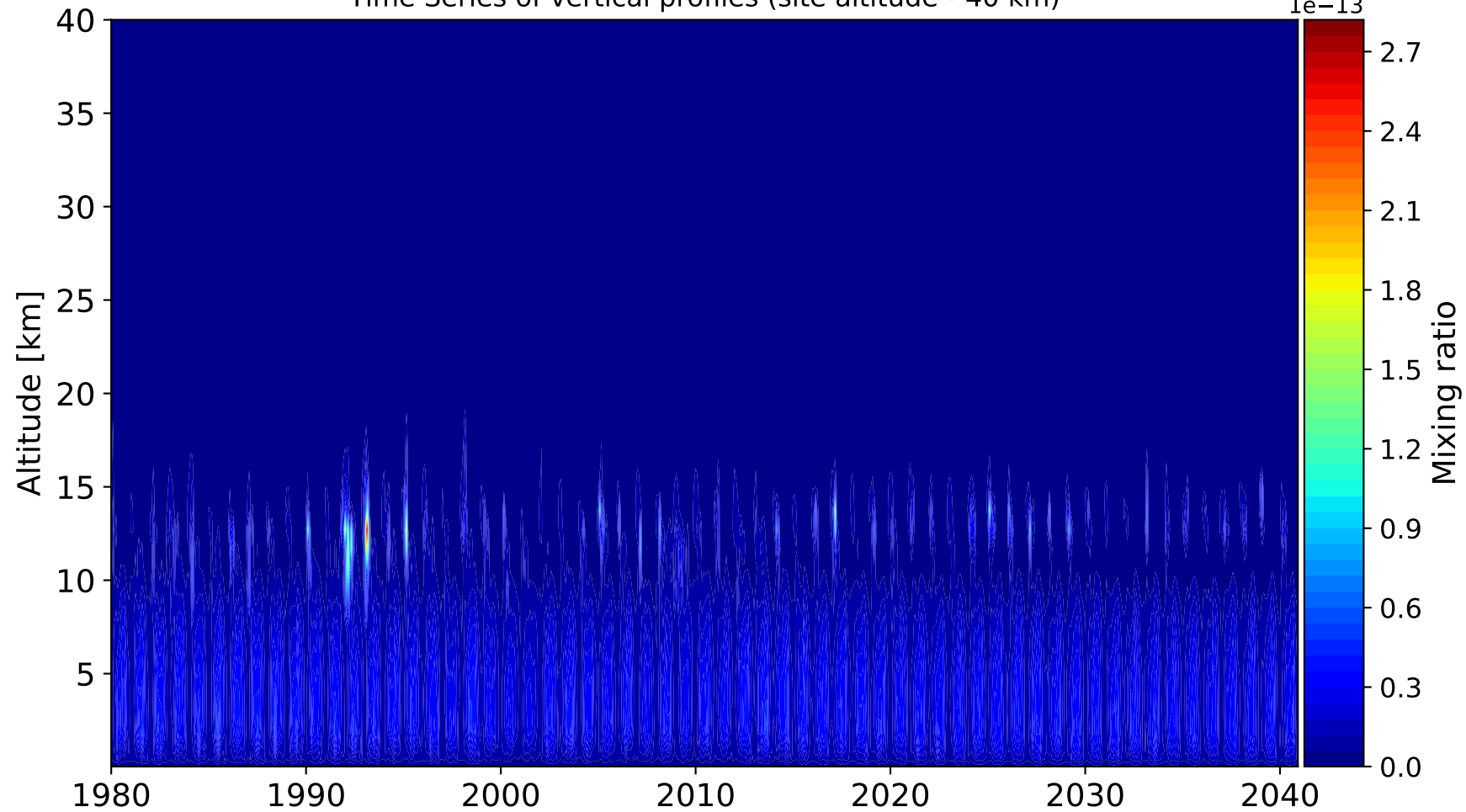


Time Series of vertical profiles (site altitude - 120 km)

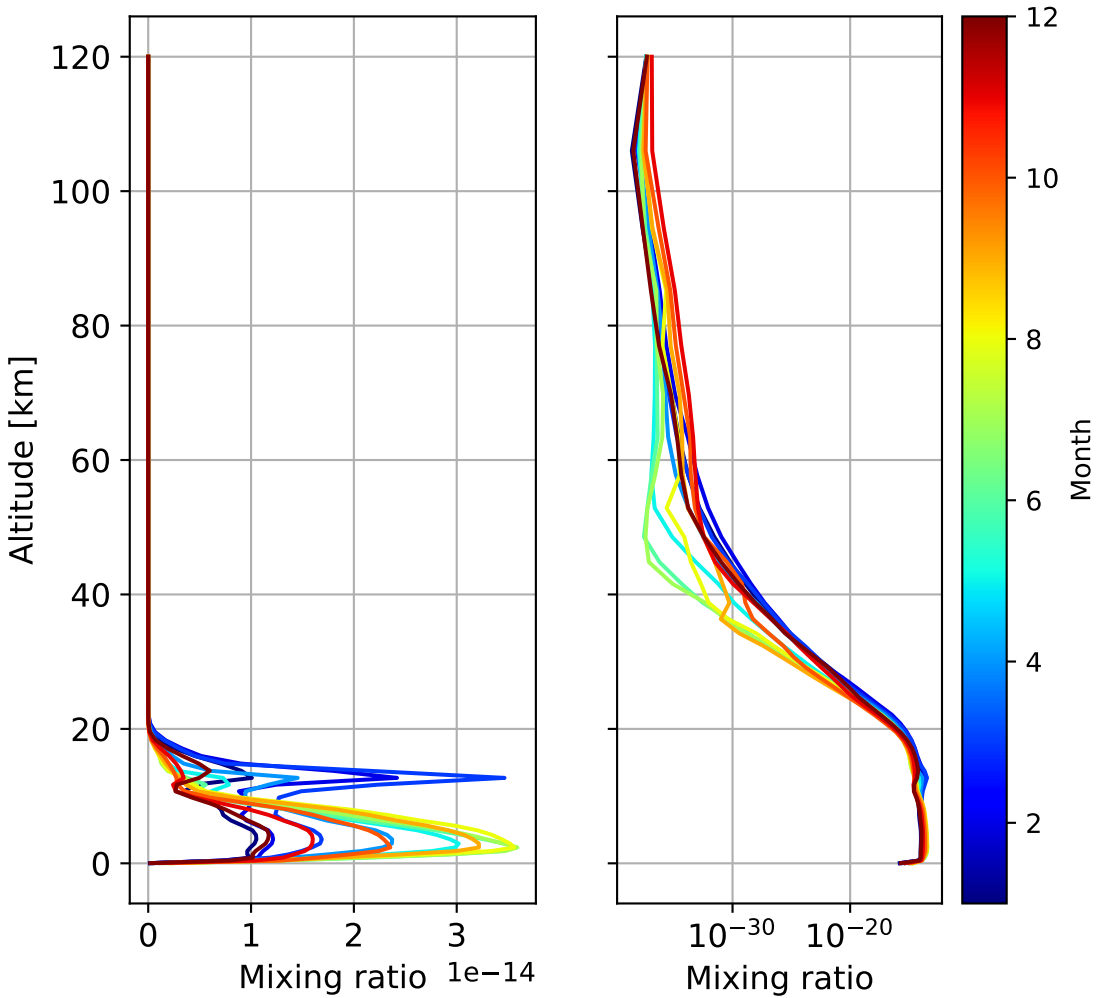


Time Series of vertical profiles (site altitude - 40 km)

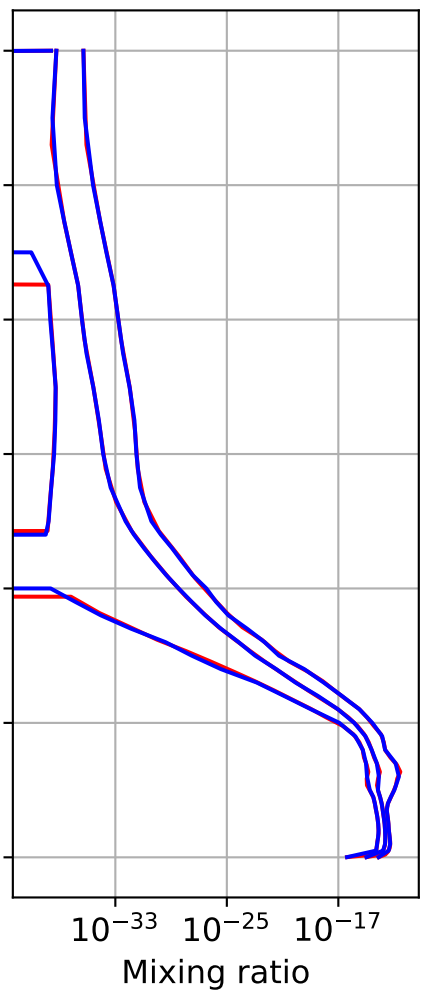
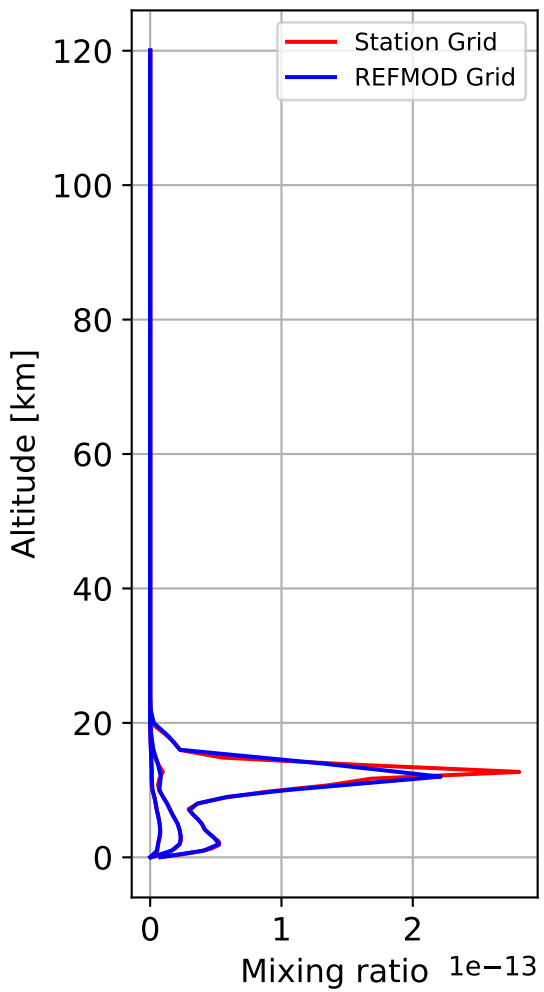
$1e-13$



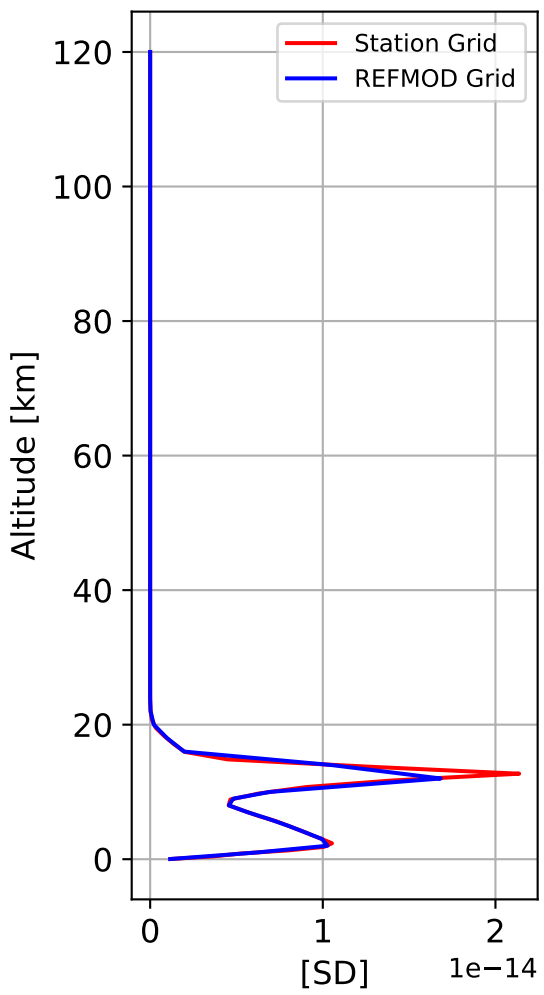
# Monthly mean WACCM profile (interpolated to station grid) Bremen, 53.1N, 8.9E, 0.027kmasl



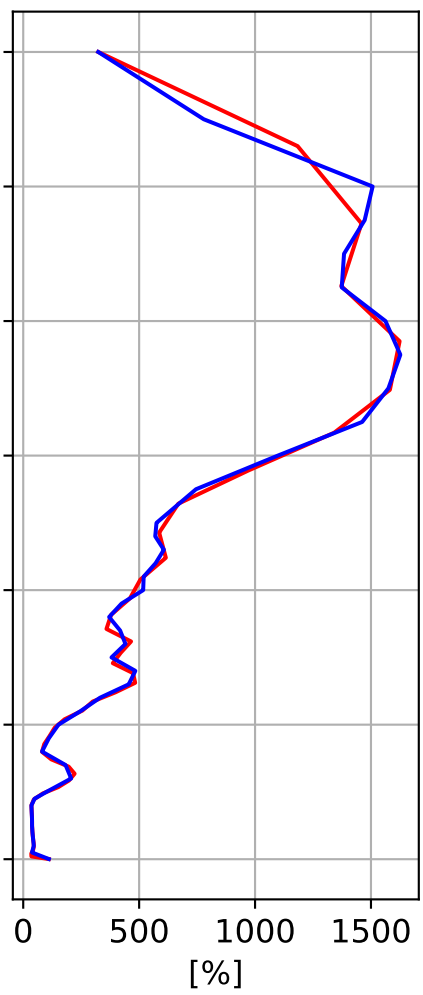
# Min, Max, Mean of 732 profiles Bremen, 53.1N, 8.9E, 0.027kmasl



### Std. Deviation



### Percent Deviation

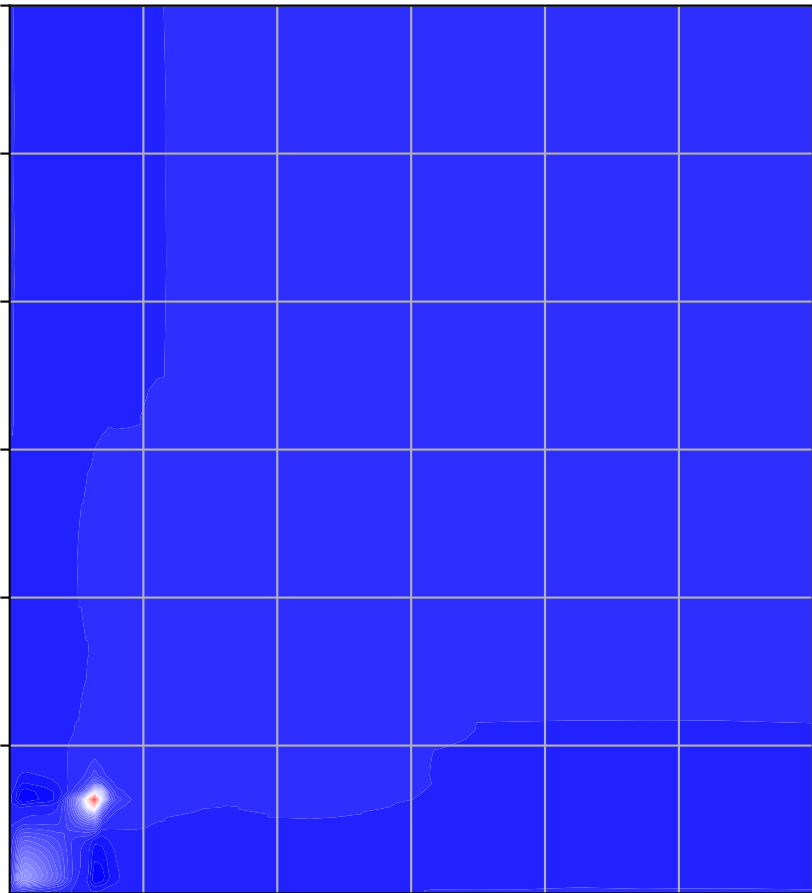


# Level covariance matrix

1e-28

Altitude [km]

120  
100  
80  
60  
40  
20



Mixing ratio[<sup>2</sup>]

4.2  
3.6  
3.0  
2.4  
1.8  
1.2  
0.6  
0.0

Altitude [km]

120  
100  
80  
60  
40  
20