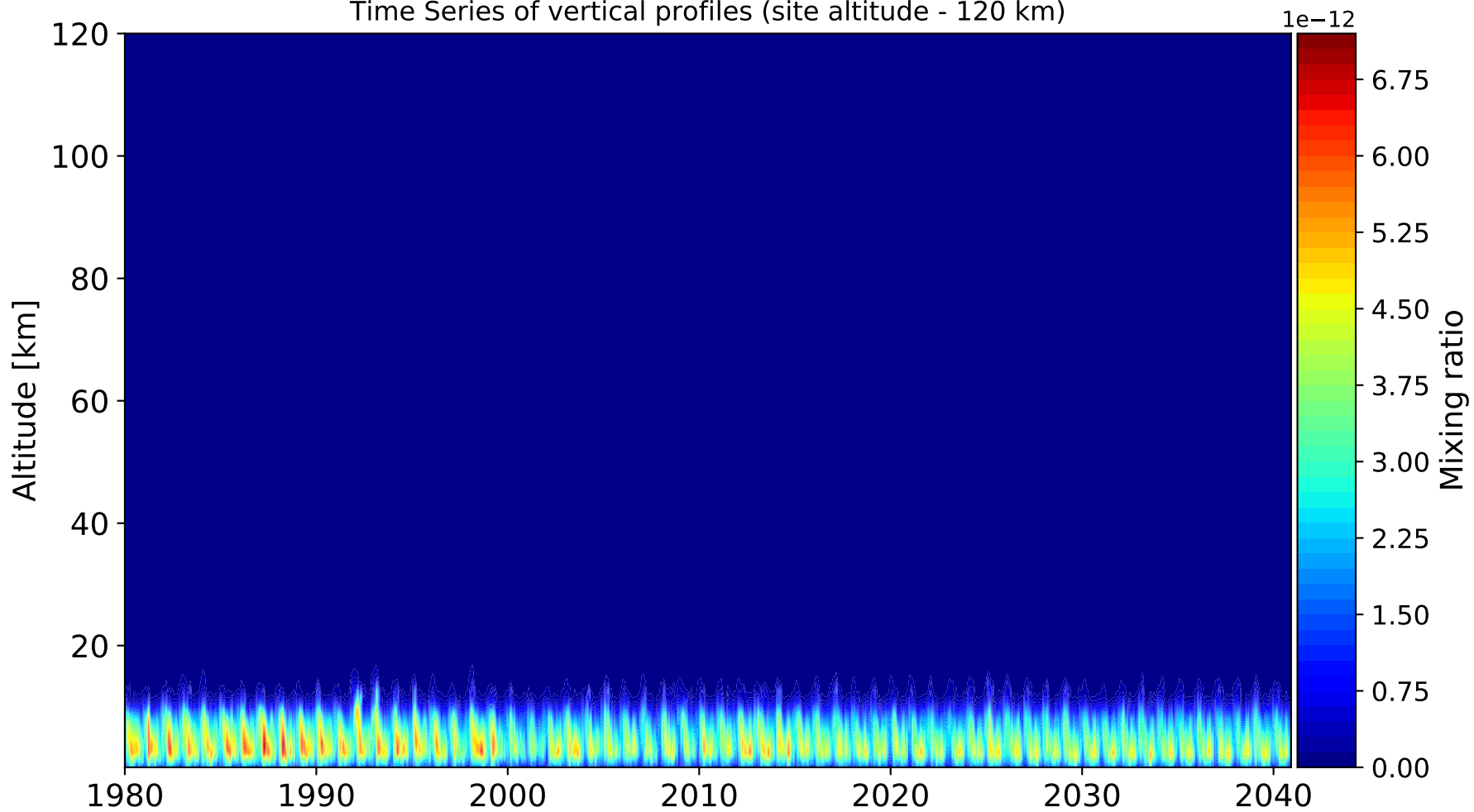
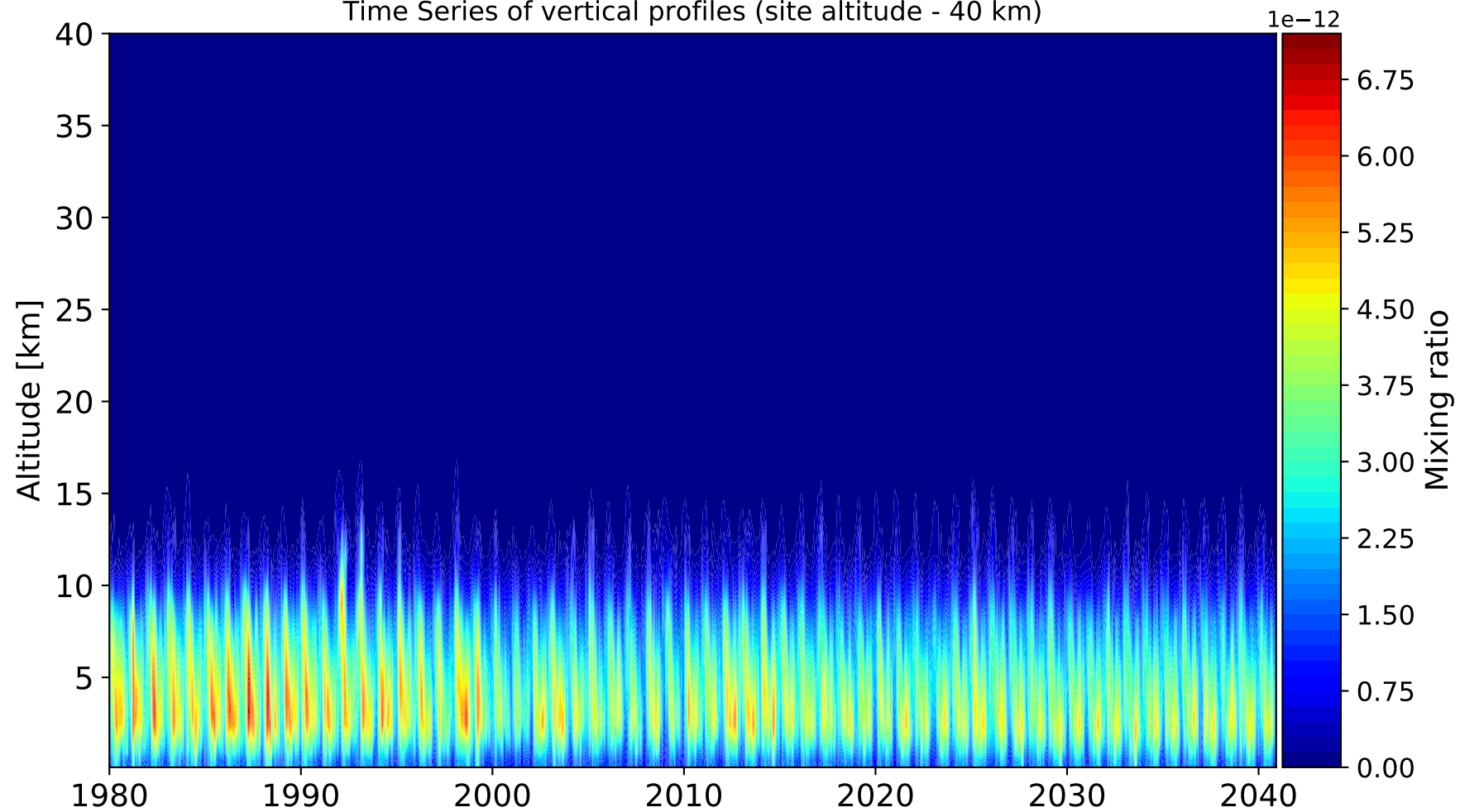


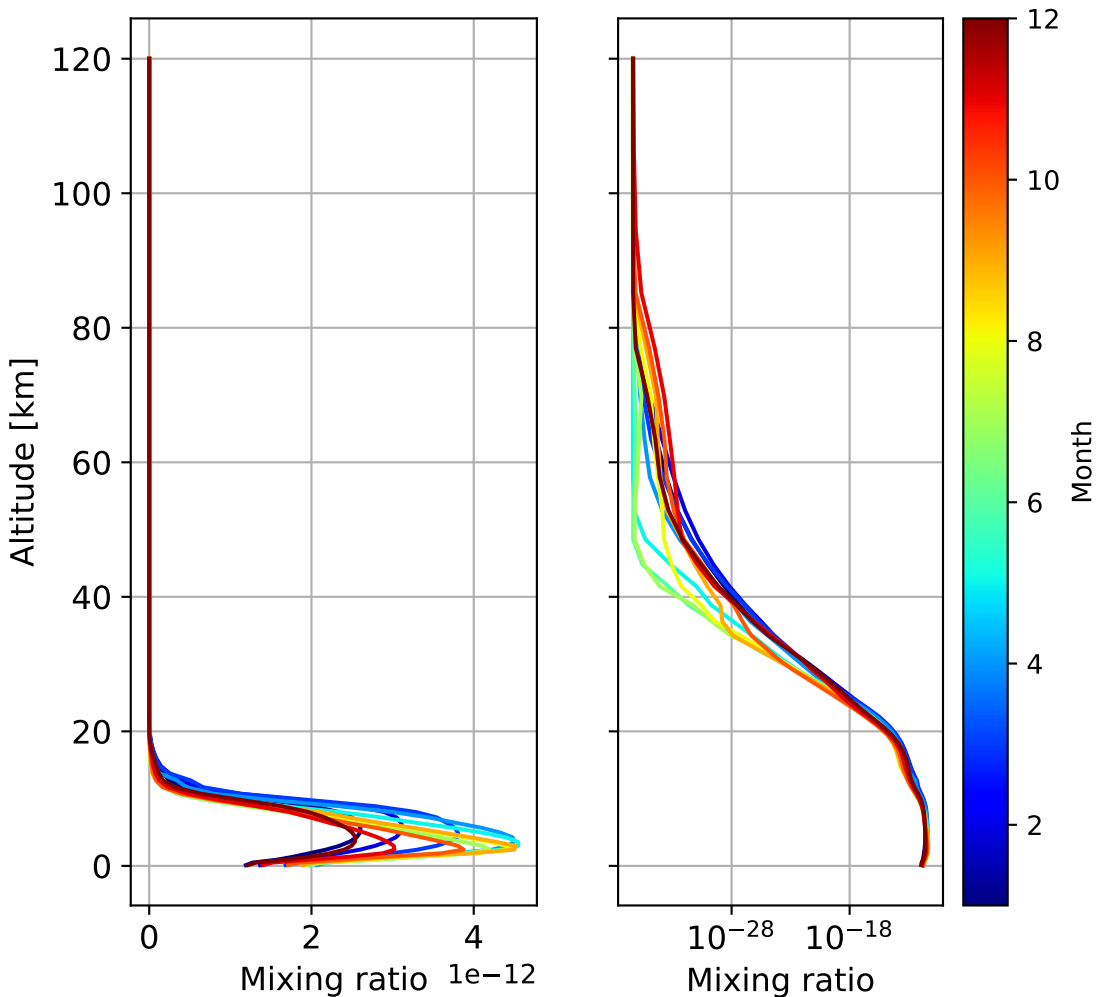
Time Series of vertical profiles (site altitude - 120 km)



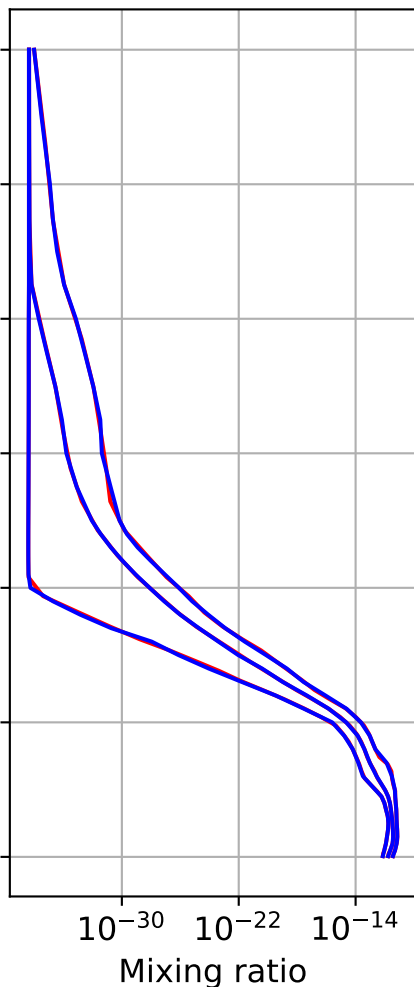
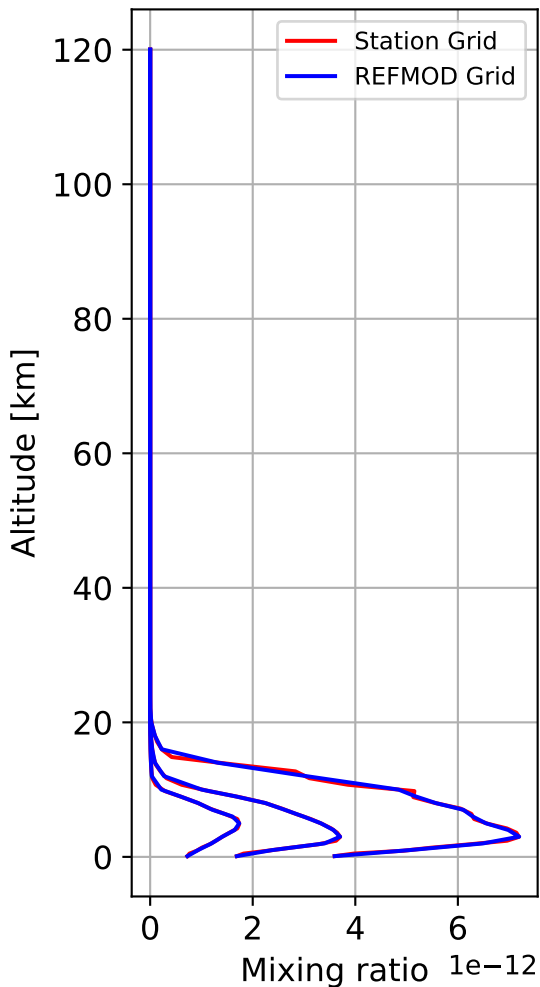
Time Series of vertical profiles (site altitude - 40 km)



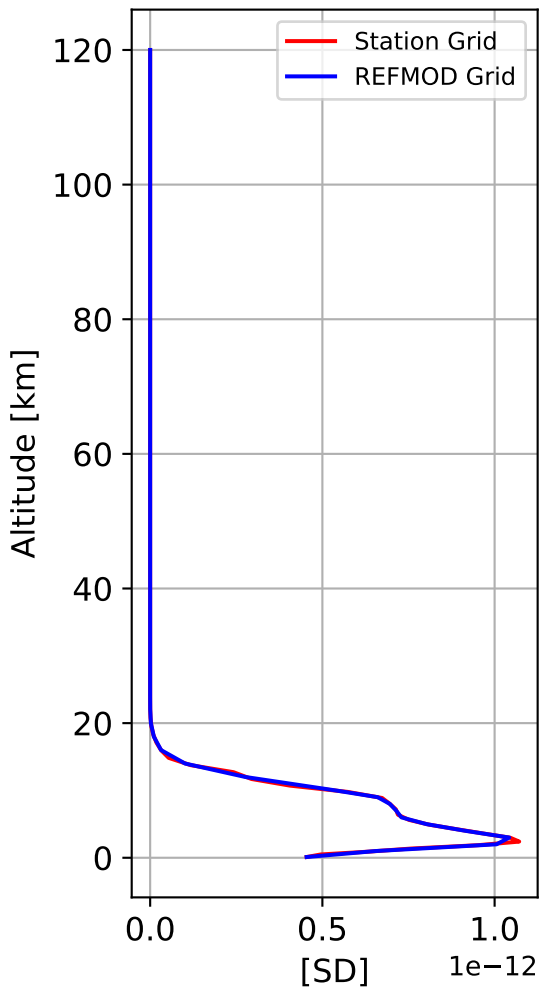
# Monthly mean WACCM profile (interpolated to station grid) Karlsruhe, 49.09N, 8.43E, 0.11kmasl



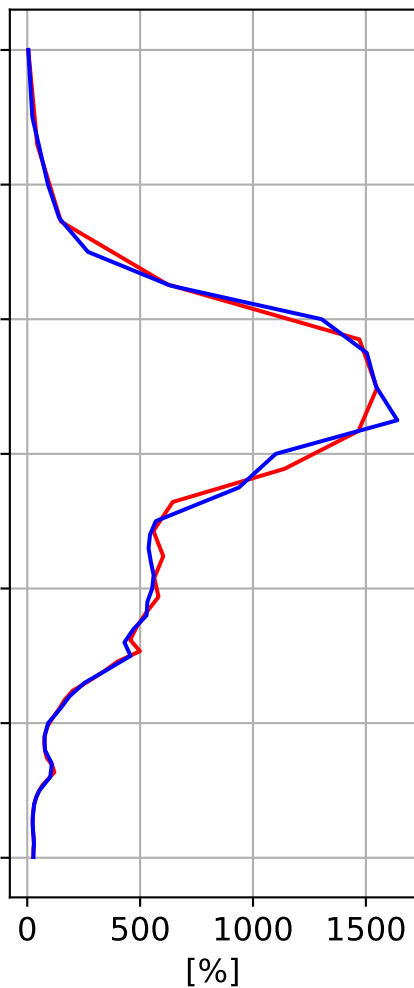
Min, Max, Mean of 732 profiles  
Karlsruhe, 49.09N, 8.43E, 0.11kmasl



### Std. Deviation



### Percent Deviation

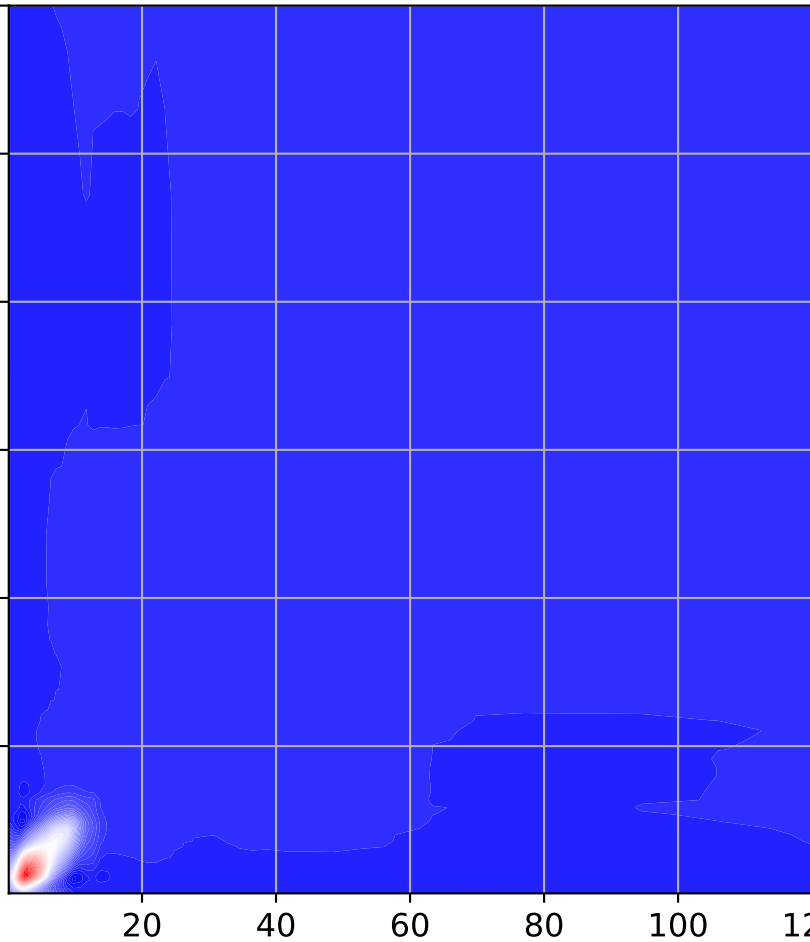


# Level covariance matrix

$1e-24$

Altitude [km]

120  
100  
80  
60  
40  
20



Altitude [km]

Mixing ratio[ $\wedge 2$ ]

1.05  
0.90  
0.75  
0.60  
0.45  
0.30  
0.15  
0.00