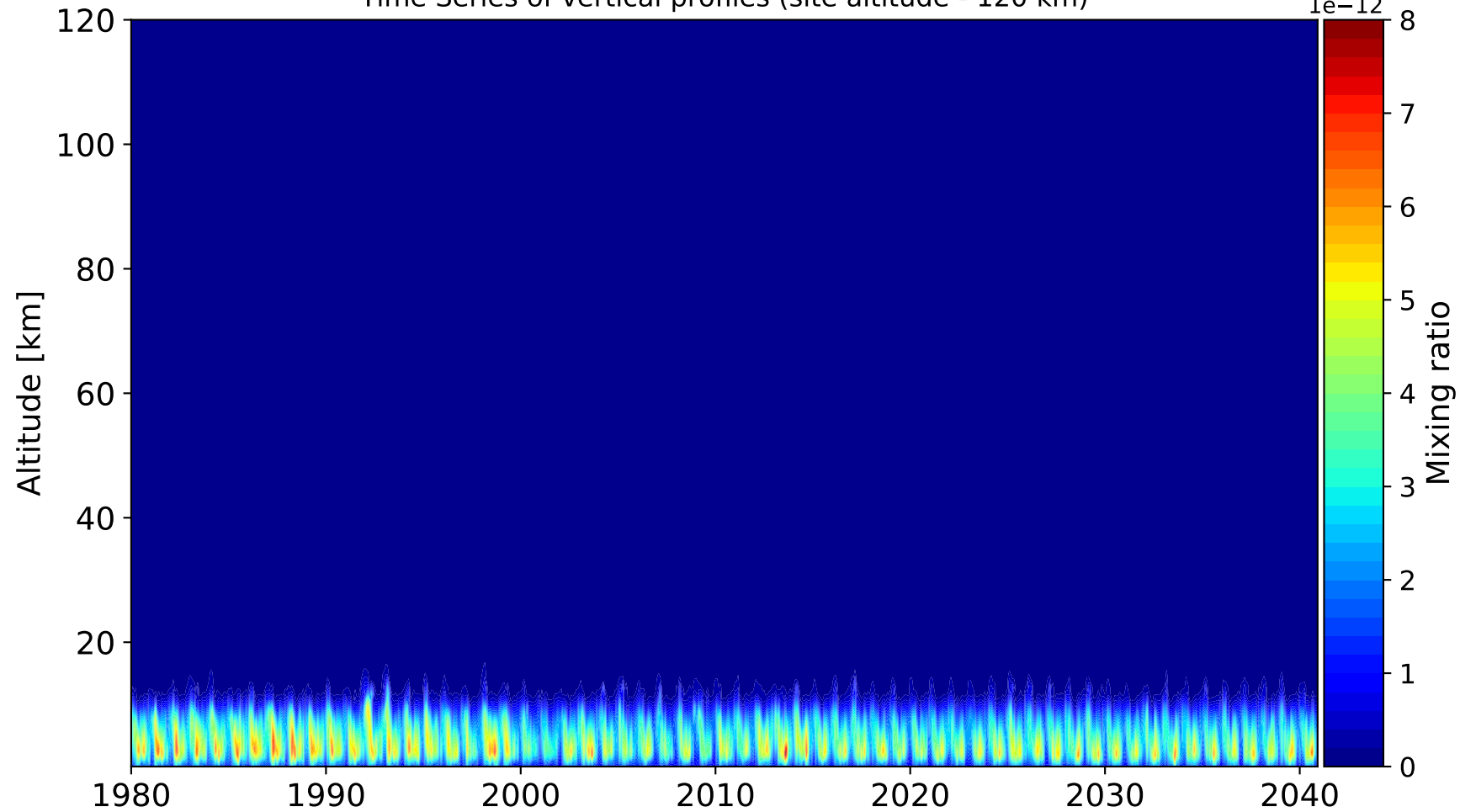
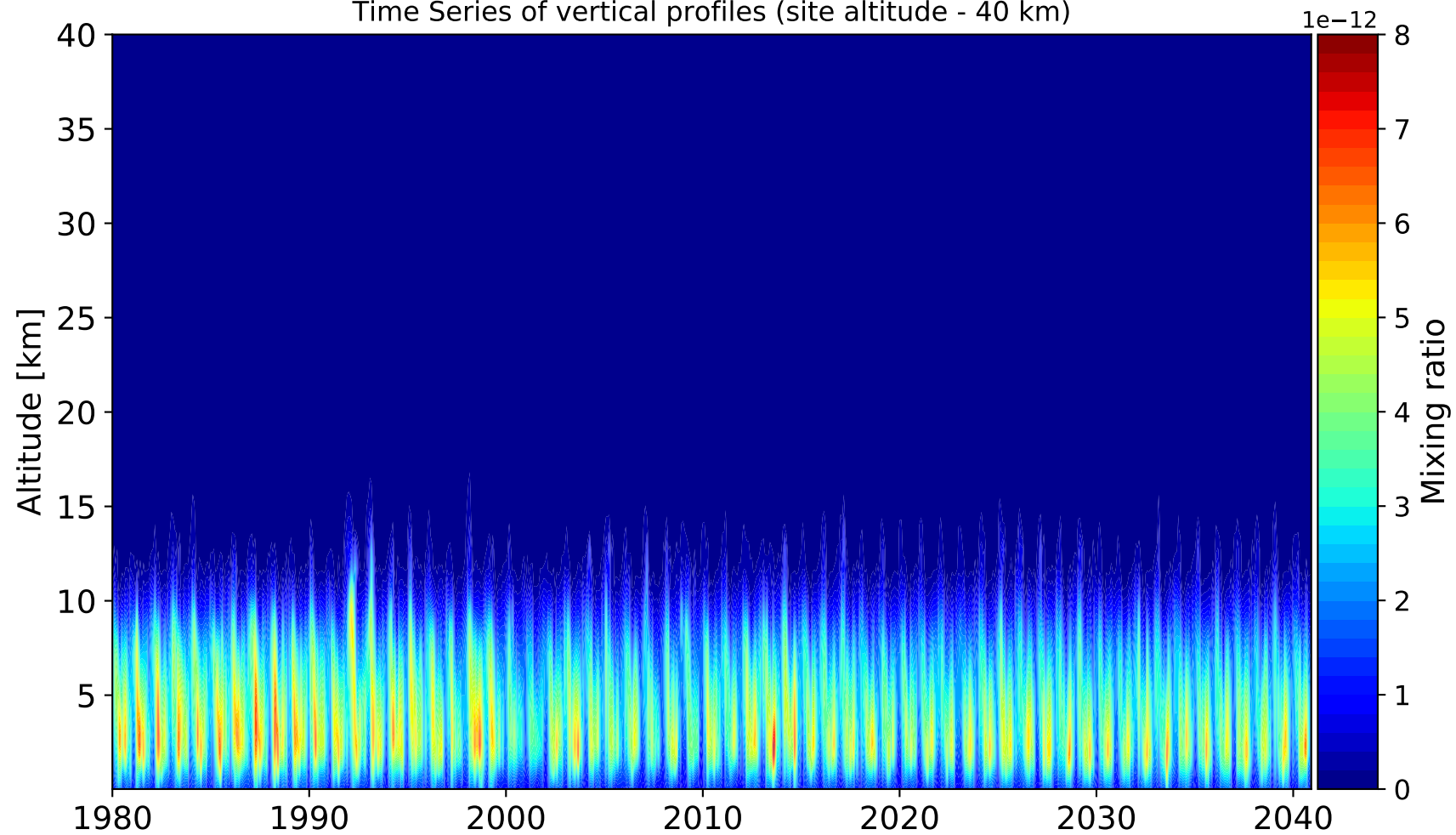


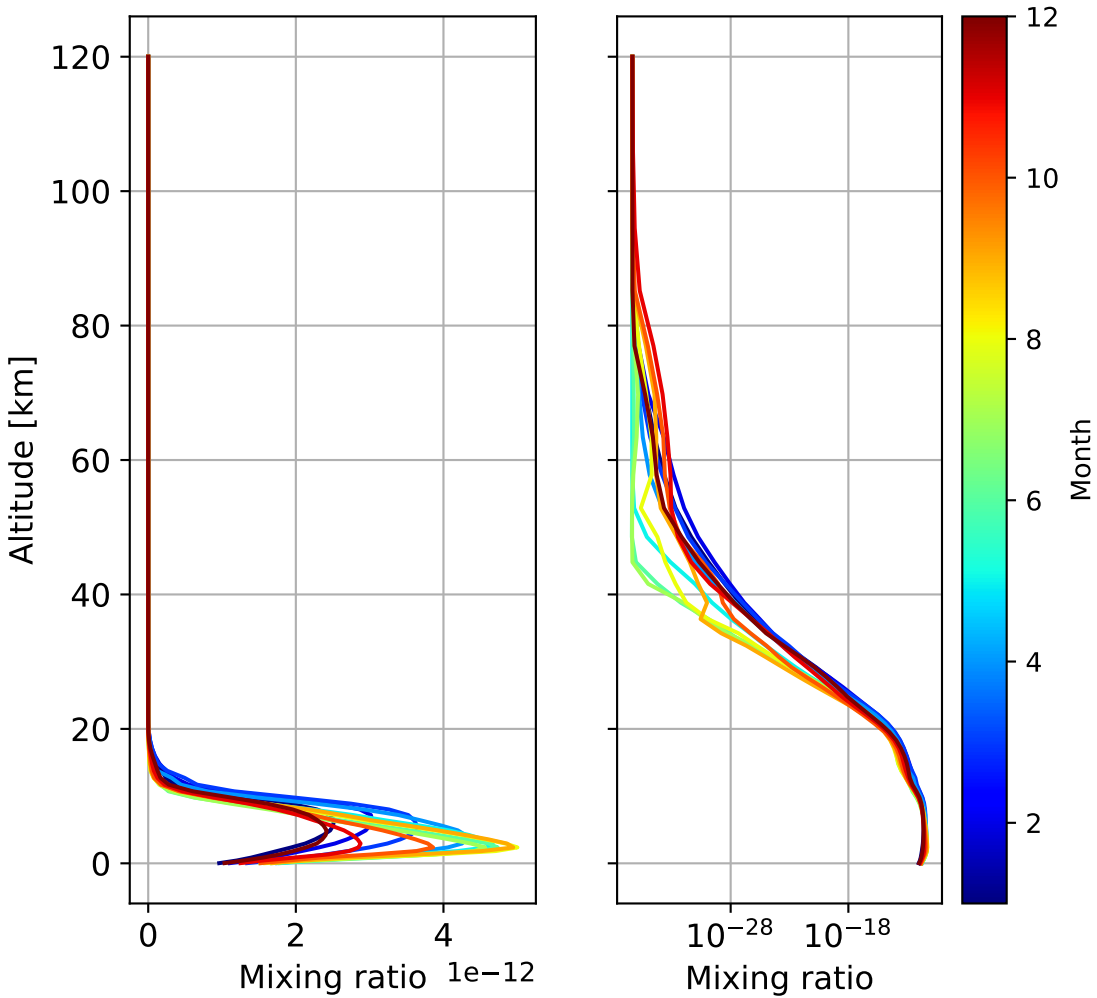
Time Series of vertical profiles (site altitude - 120 km)



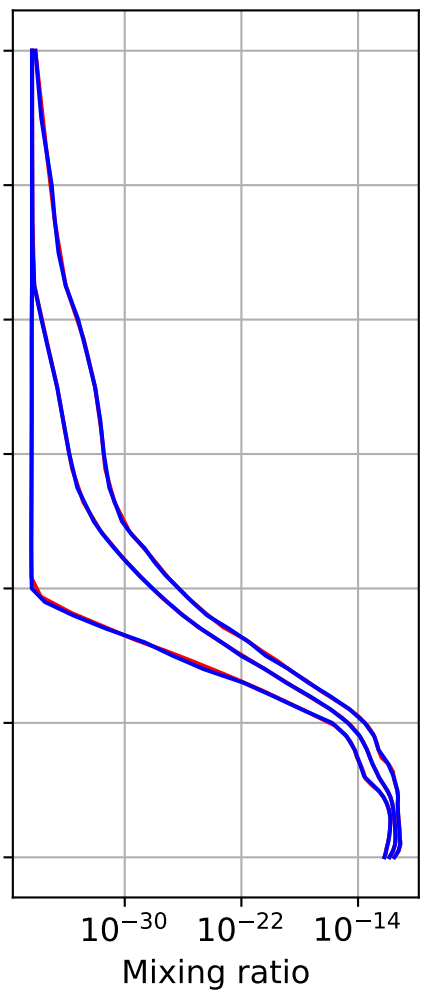
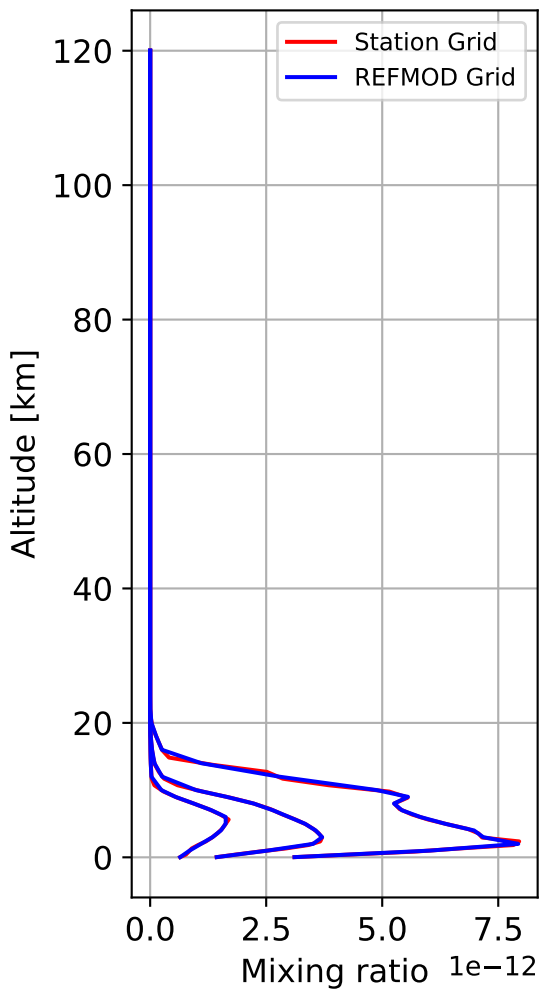
Time Series of vertical profiles (site altitude - 40 km)



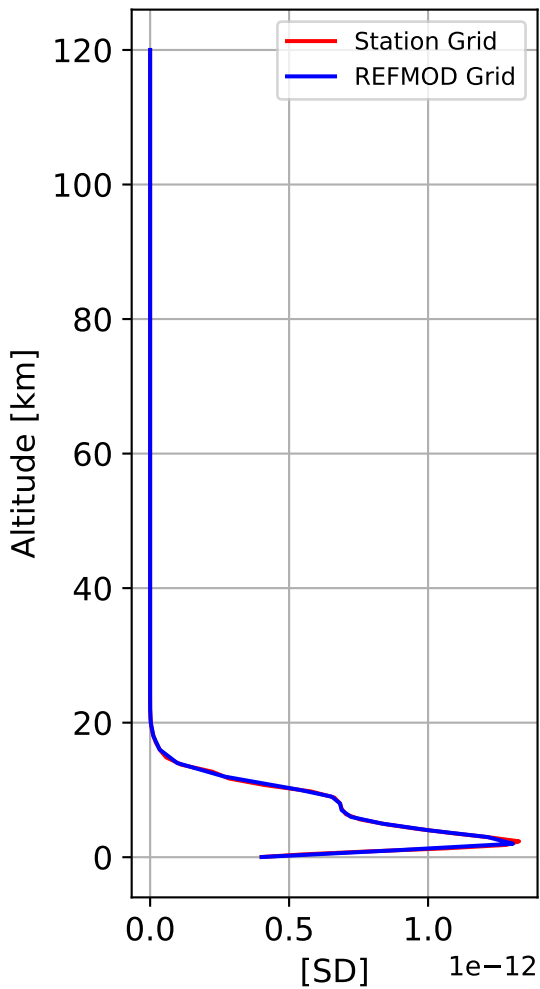
# Monthly mean WACCM profile (interpolated to station grid) Bremen, 53.1N, 8.9E, 0.027kmasl



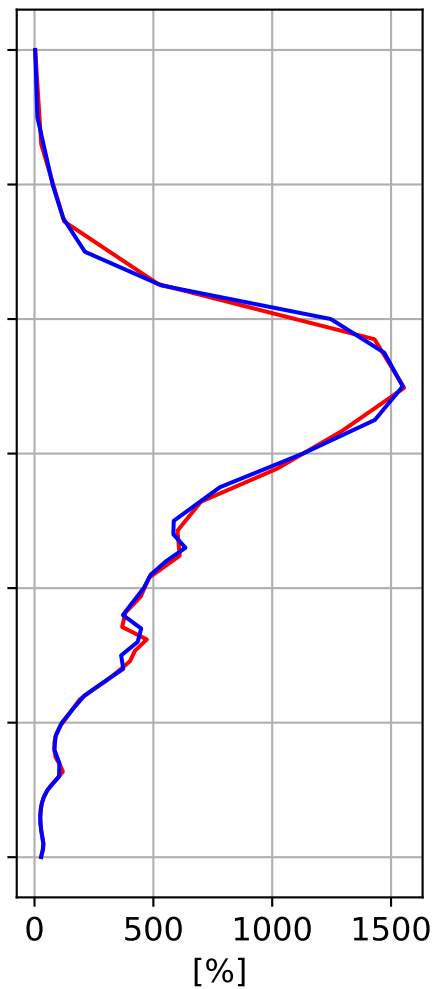
# Min, Max, Mean of 732 profiles Bremen, 53.1N, 8.9E, 0.027kmasl



Std. Deviation



Percent Deviation

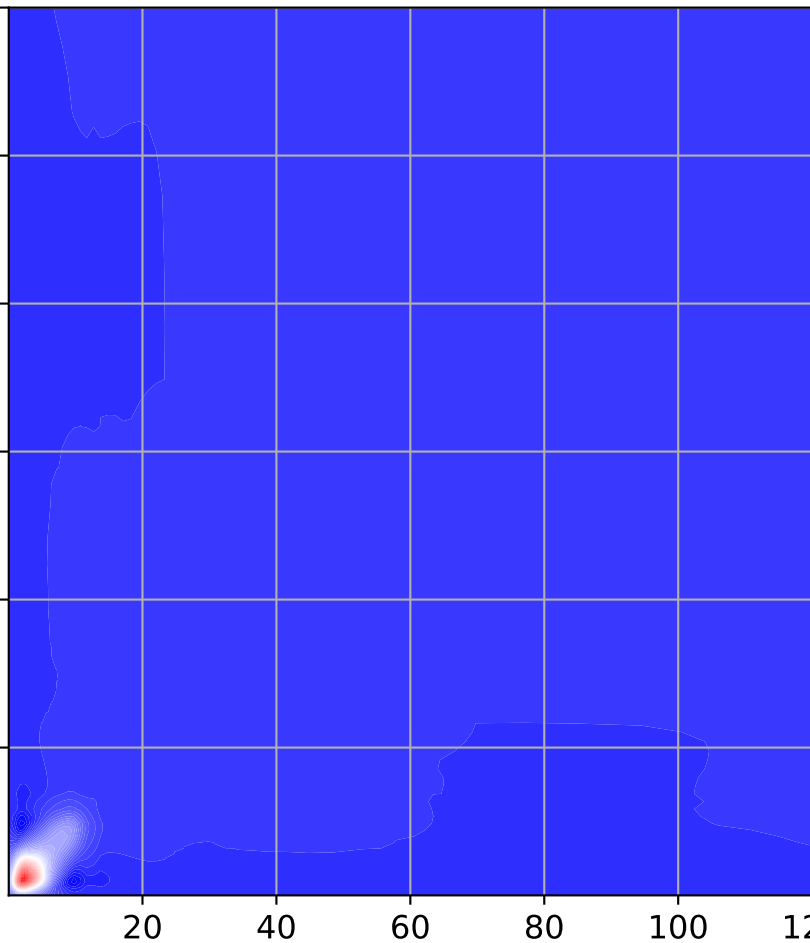


# Level covariance matrix

$1e-24$

Altitude [km]

120  
100  
80  
60  
40  
20



1.68  
1.44  
1.20  
0.96  
0.72  
0.48  
0.24  
0.00

Mixing ratio<sup>2</sup>

Altitude [km]