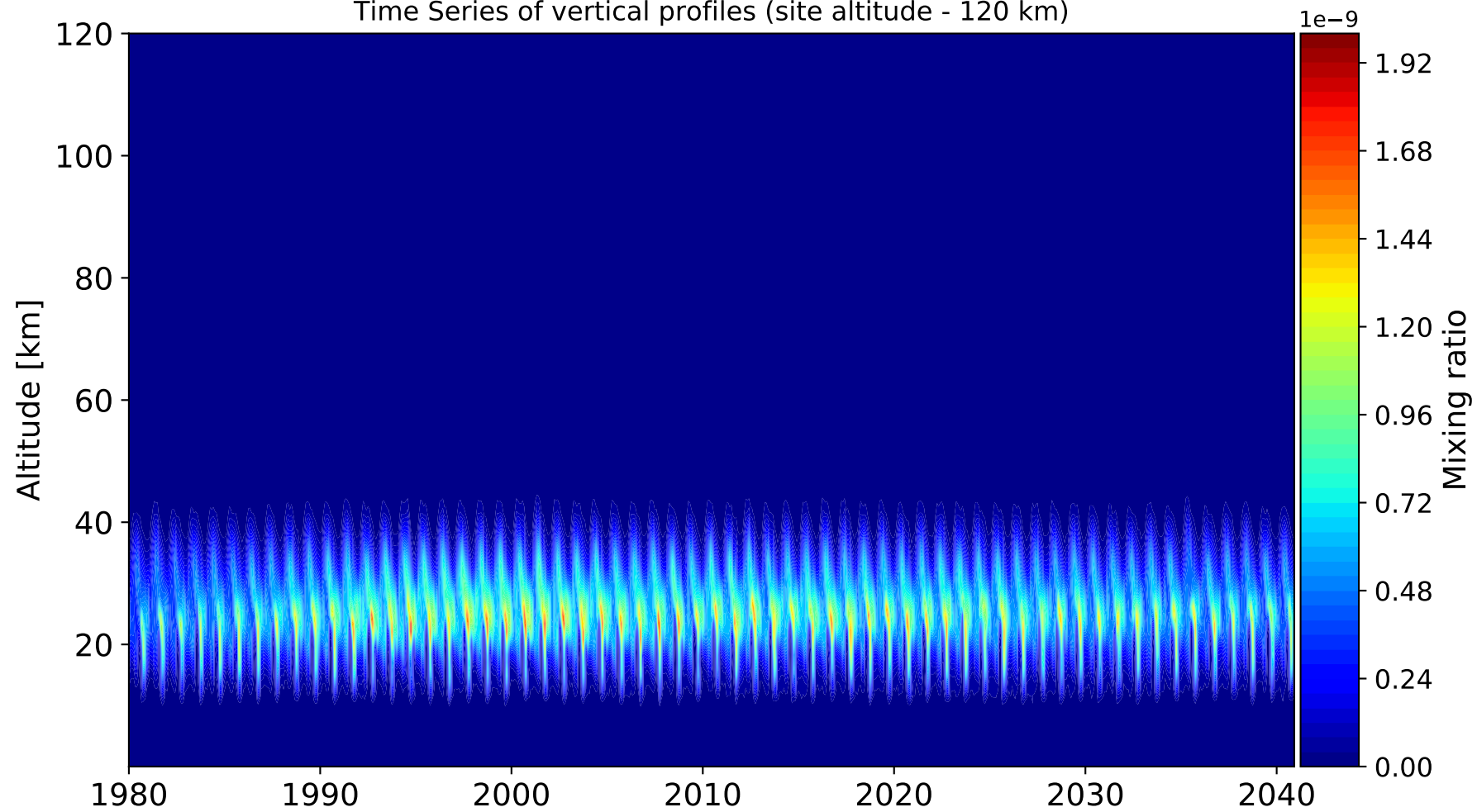
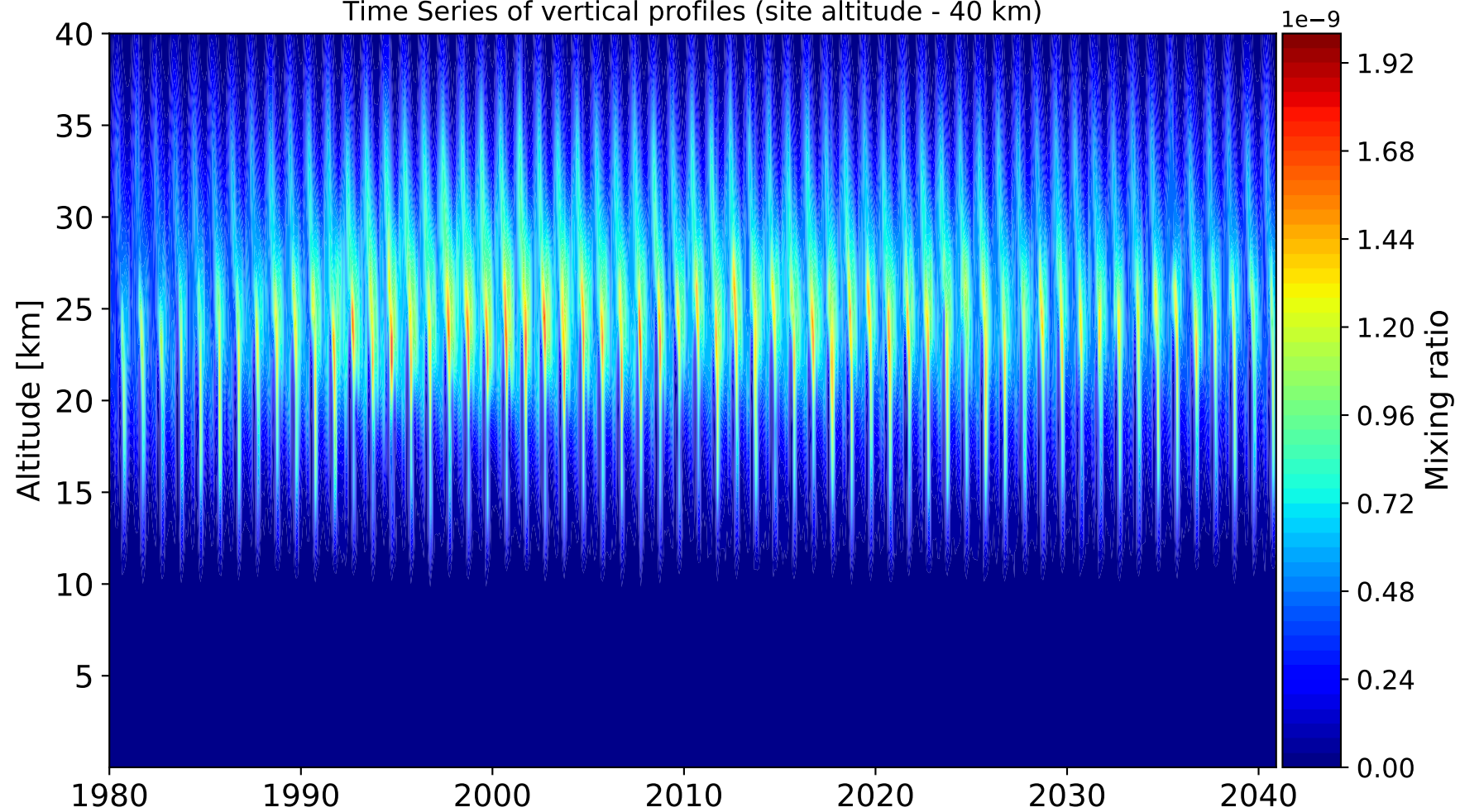


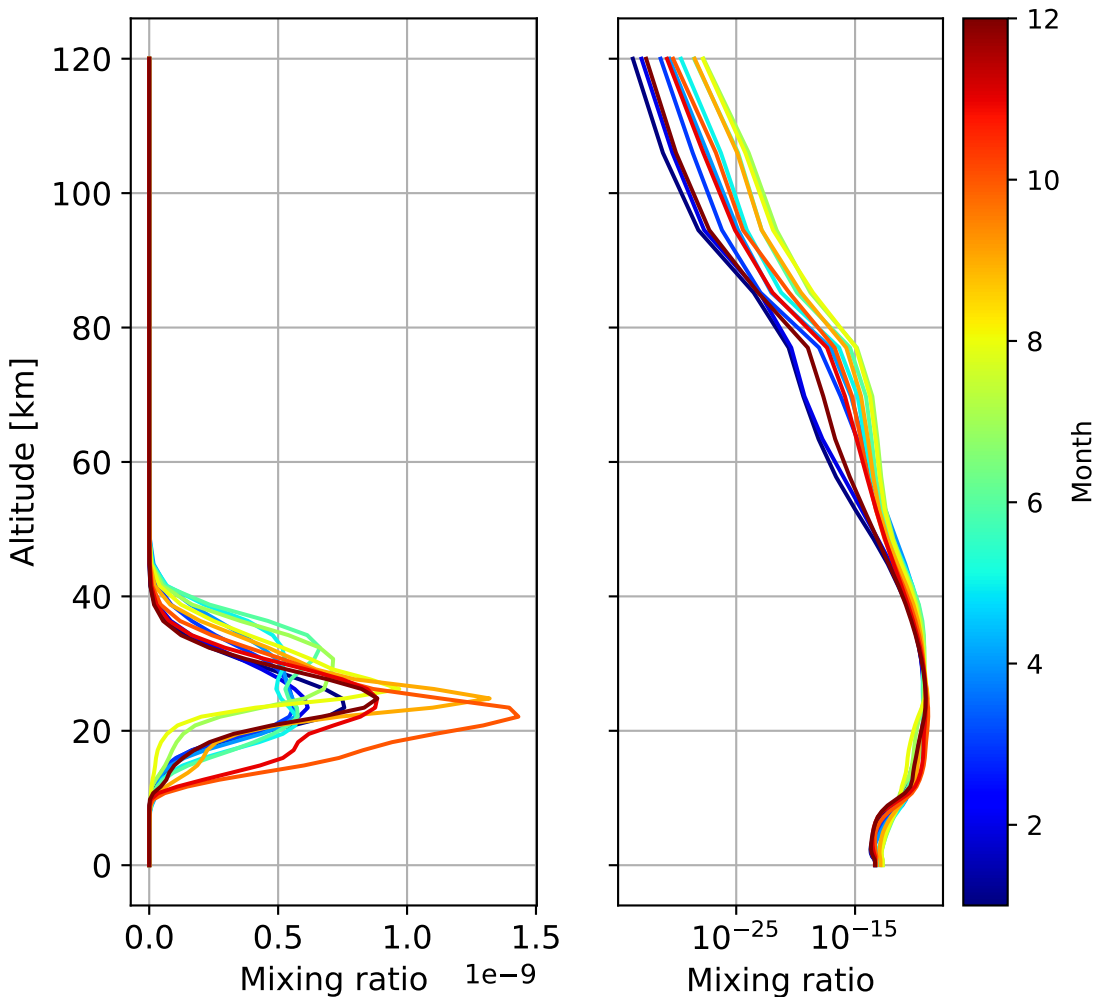
Time Series of vertical profiles (site altitude - 120 km)



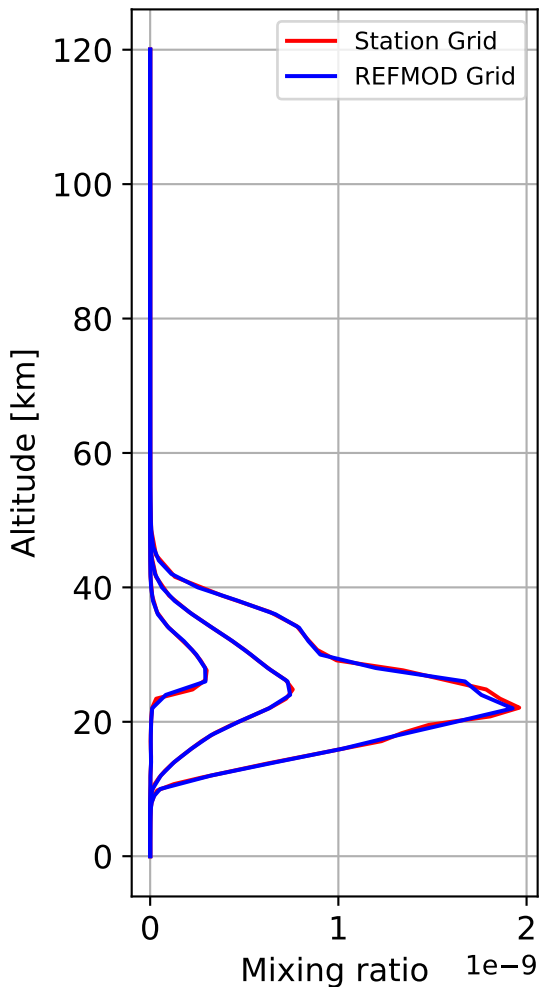
Time Series of vertical profiles (site altitude - 40 km)



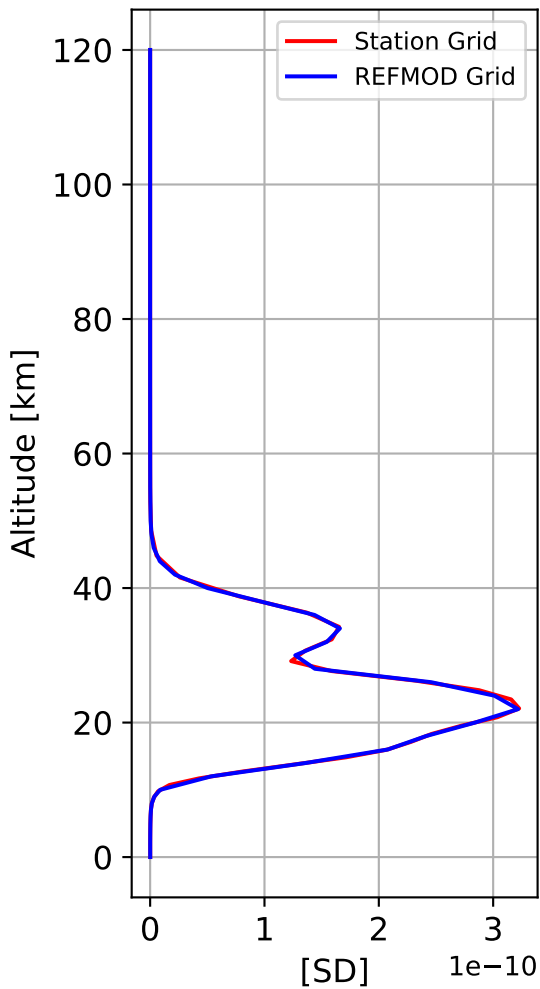
Monthly mean WACCM profile (interpolated to station grid)  
Syowa\_Station, -69.0N, 39.59E, 0.01kmasl



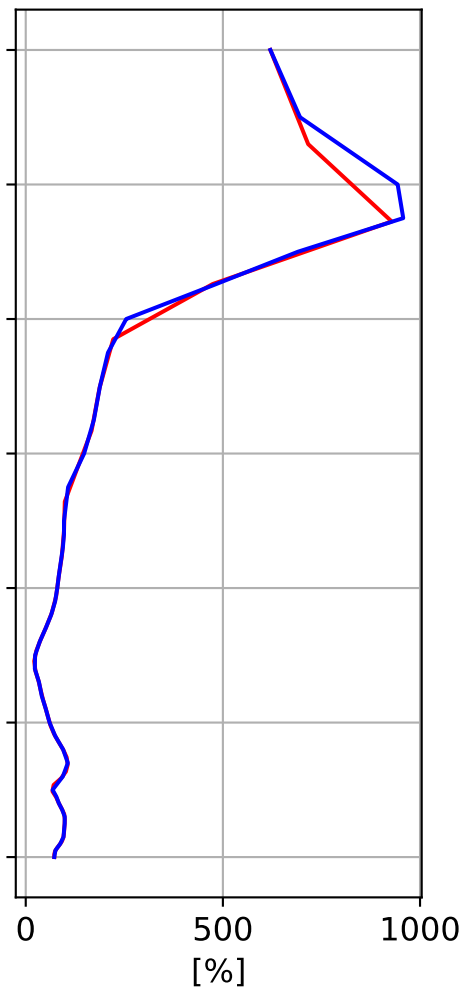
Min, Max, Mean of 732 profiles  
Syowa\_Station, -69.0N, 39.59E, 0.01kmasl



Std. Deviation



Percent Deviation

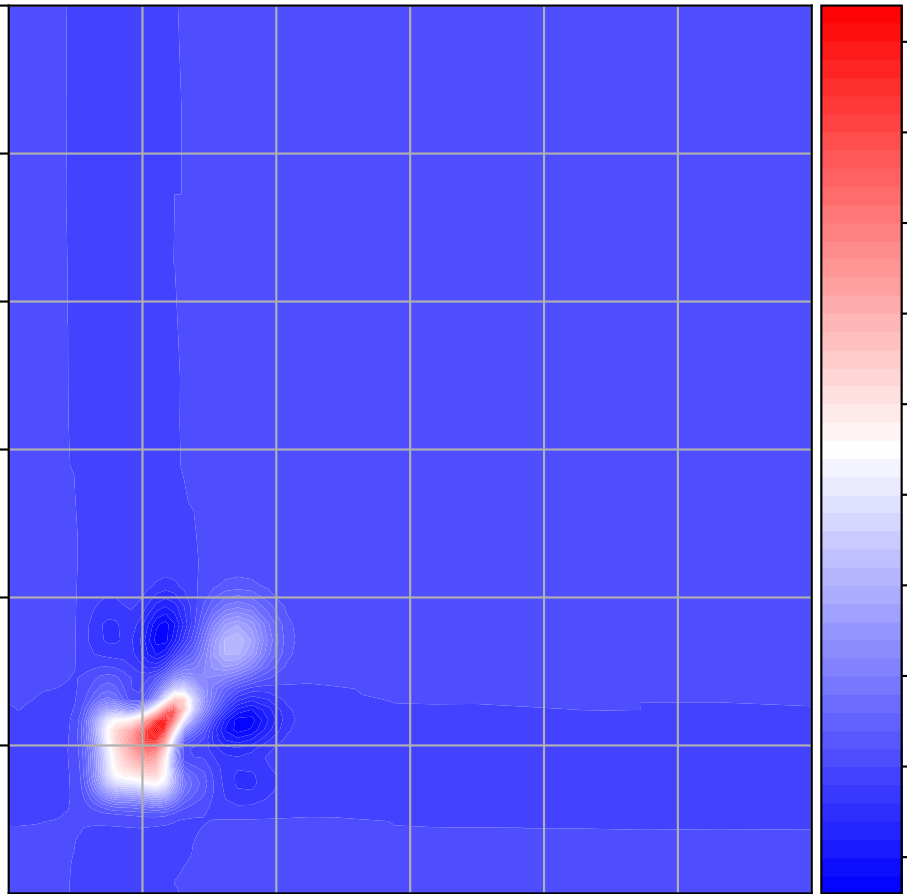


Level covariance matrix

$1e-19$

Altitude [km]

120  
100  
80  
60  
40  
20



Mixing ratio<sup>2</sup>

1.000  
0.875  
0.750  
0.625  
0.500  
0.375  
0.250  
0.125  
0.000  
-0.125

Altitude [km]

120  
100  
80  
60  
40  
20