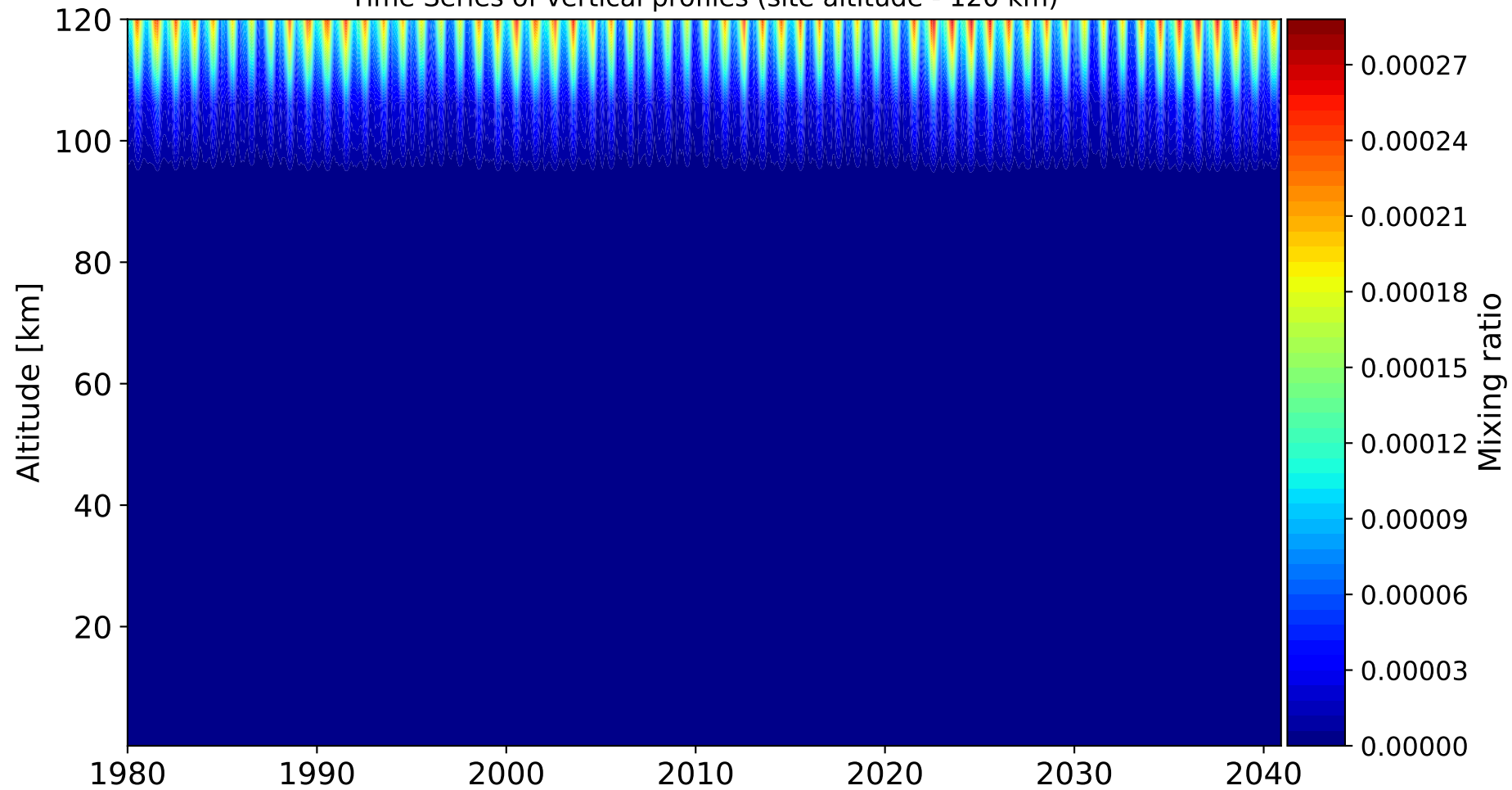
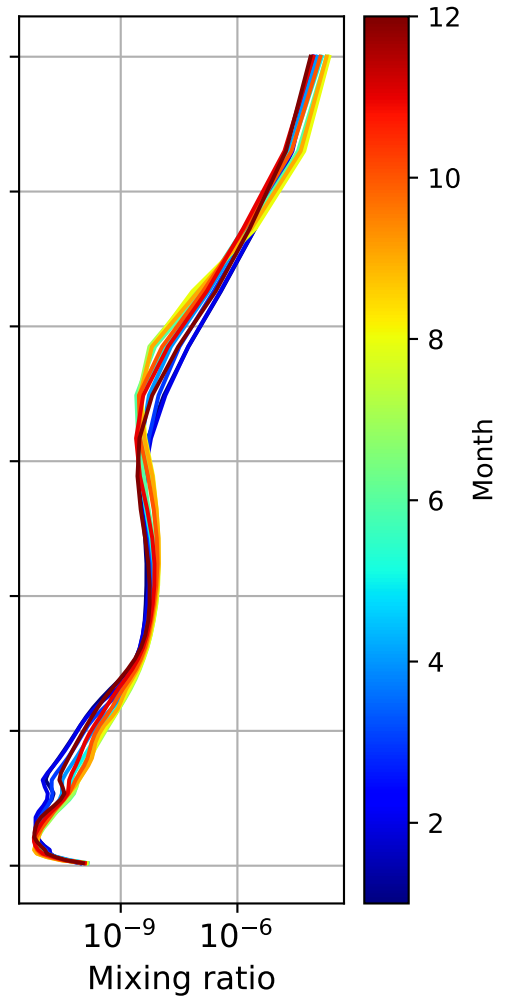
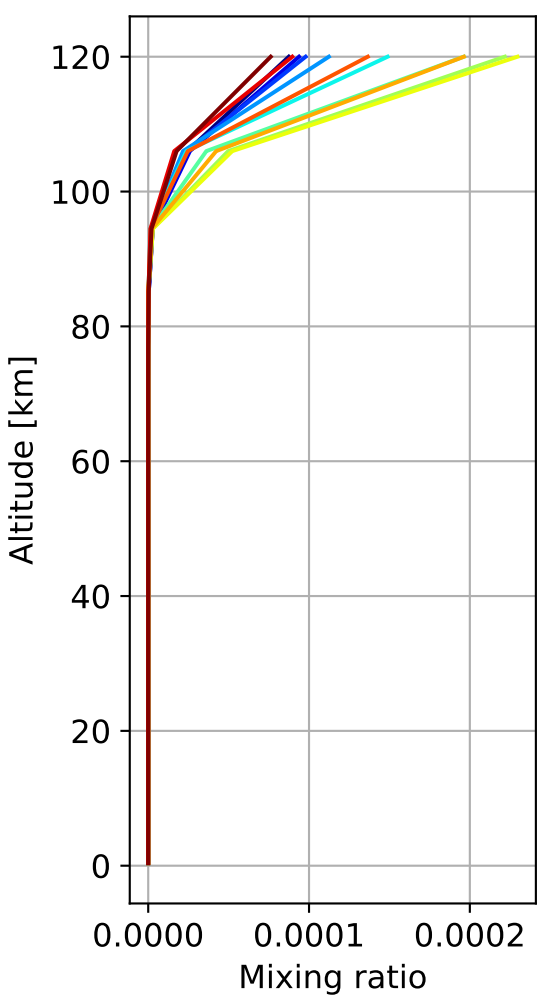


Time Series of vertical profiles (site altitude - 120 km)

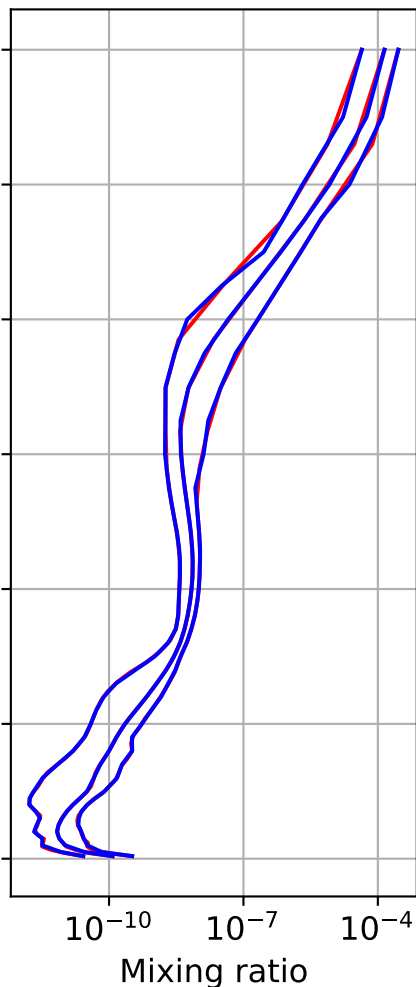
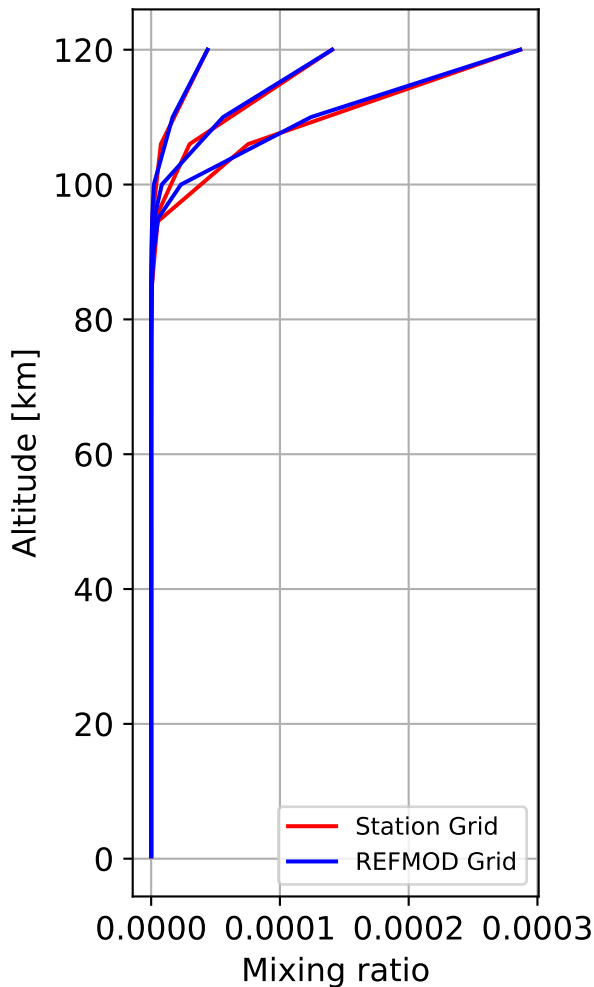




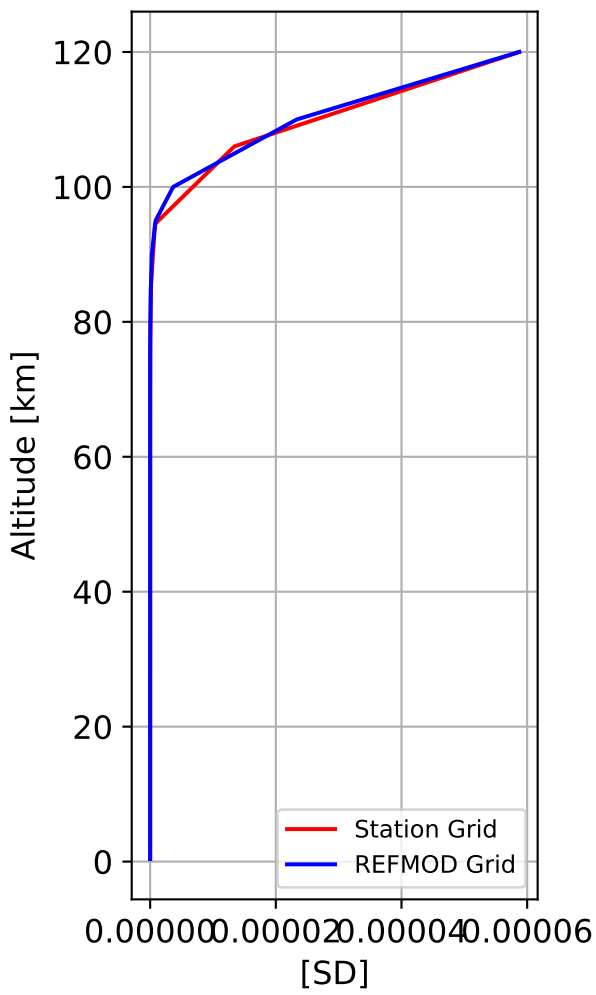
# Monthly mean WACCM profile (interpolated to station grid) Rikubetsu, 43.46N, 143.77E, 0.38kmasl



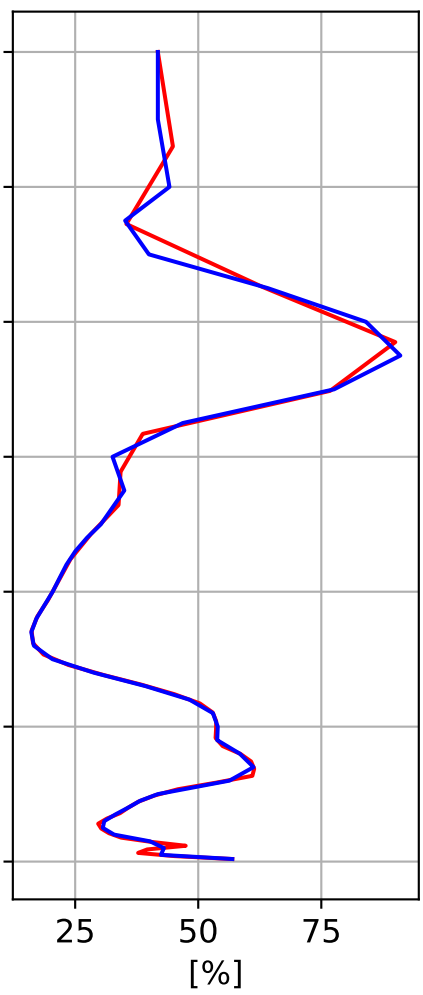
Min, Max, Mean of 732 profiles  
Rikubetsu, 43.46N, 143.77E, 0.38kmasl



### Std. Deviation



### Percent Deviation



# Level covariance matrix

1e-9

Altitude [km]

120  
100  
80  
60  
40  
20

20

Altitude [km]

40

60

80

100

120

Mixing ratio[ $\sim 2$ ]

3.2

2.8

2.4

2.0

1.6

1.2

0.8

0.4

0.0

