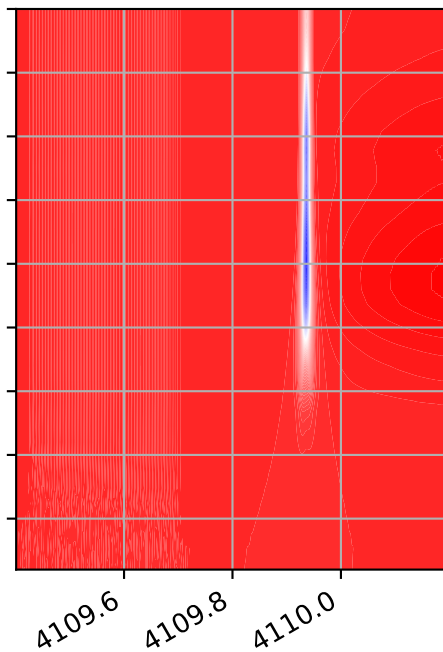
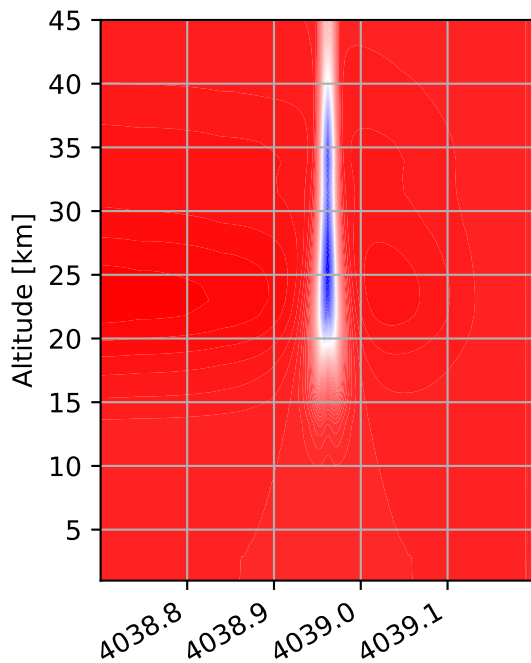
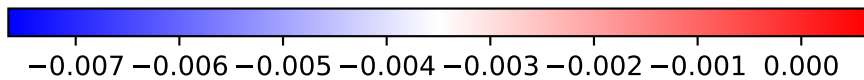
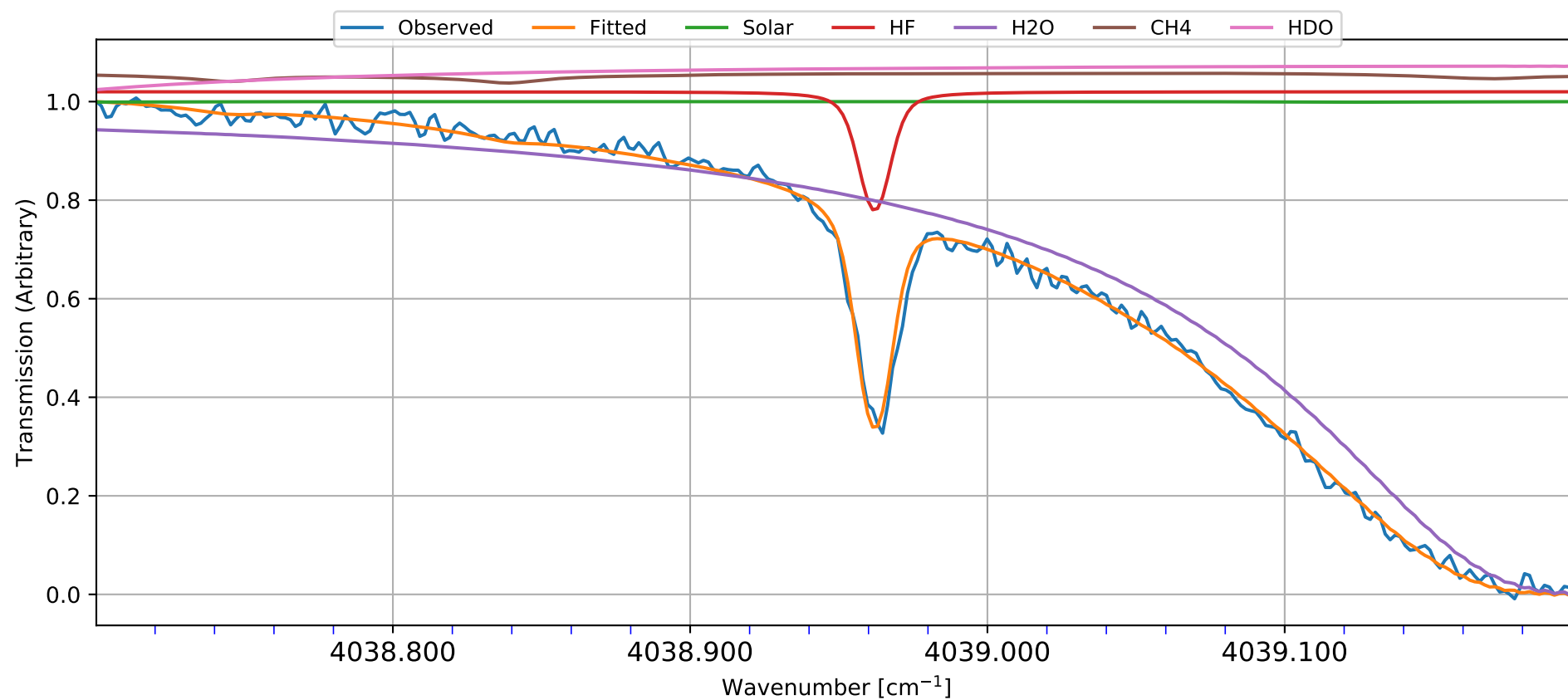
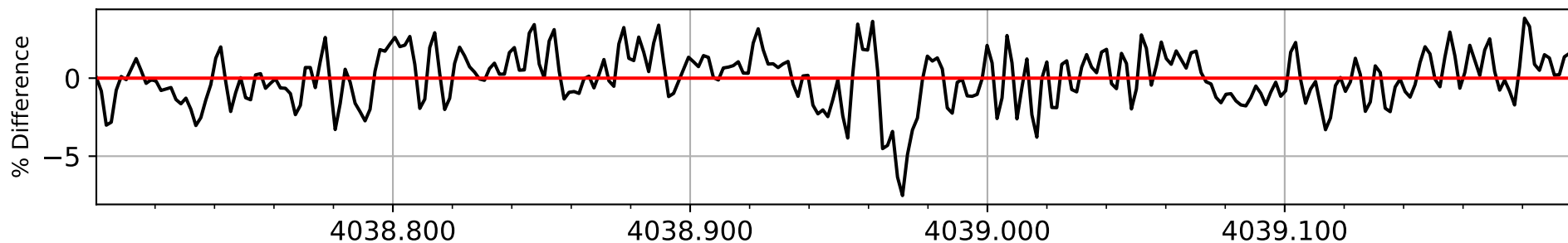


# Jacobian Matrix

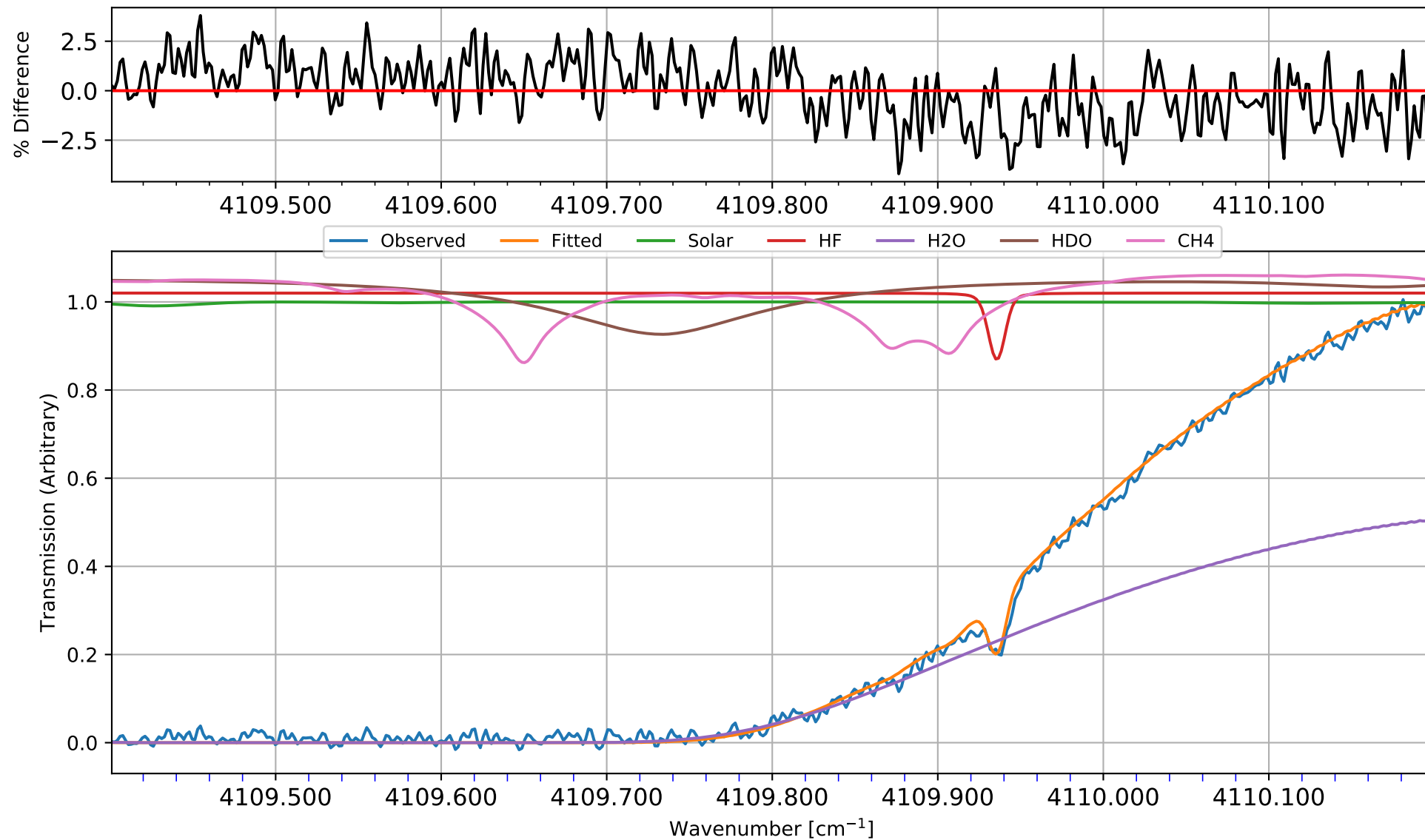


Wavenumber [ $\text{cm}^{-1}$ ]

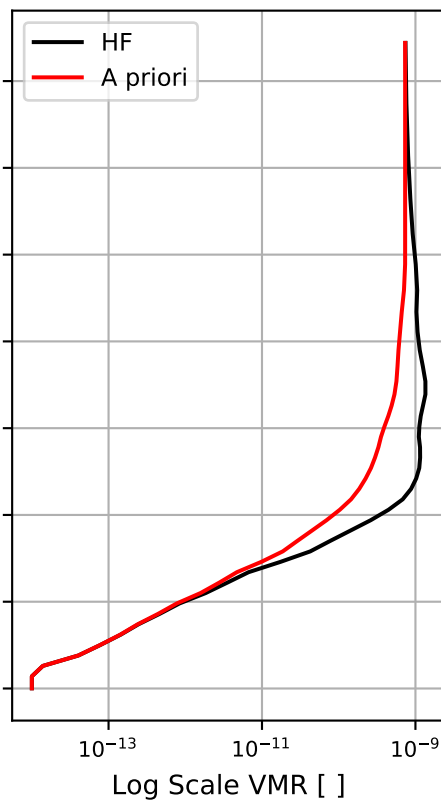
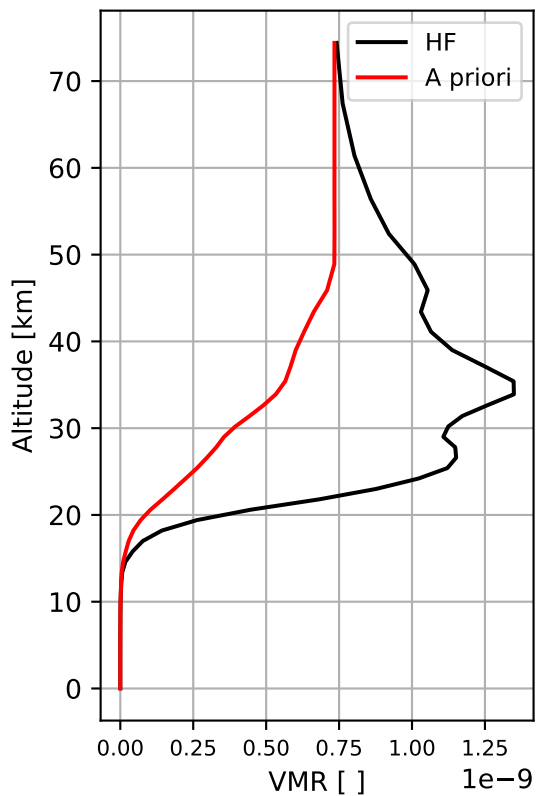
Micro-Window 1



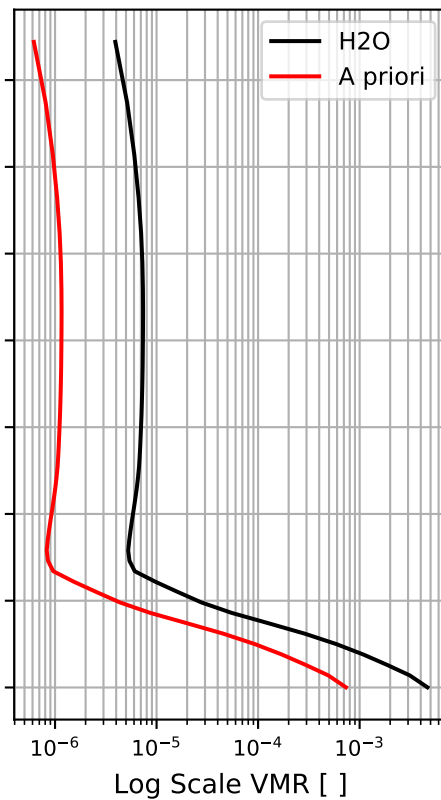
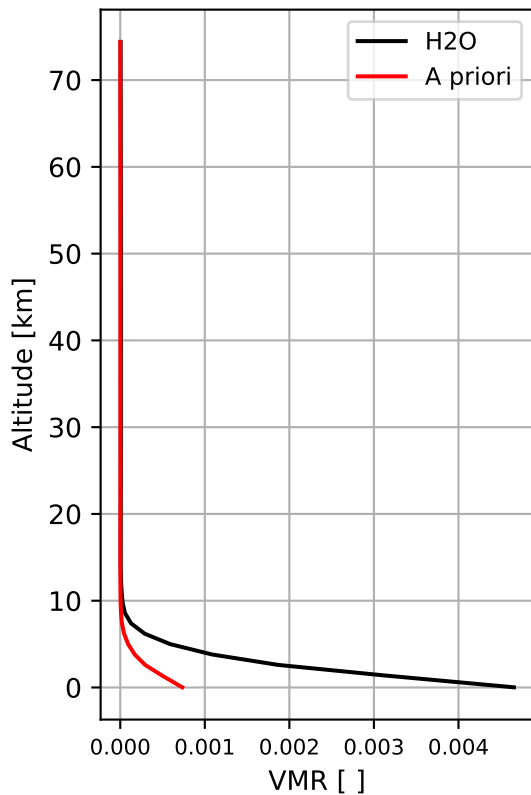
Micro-Window 2



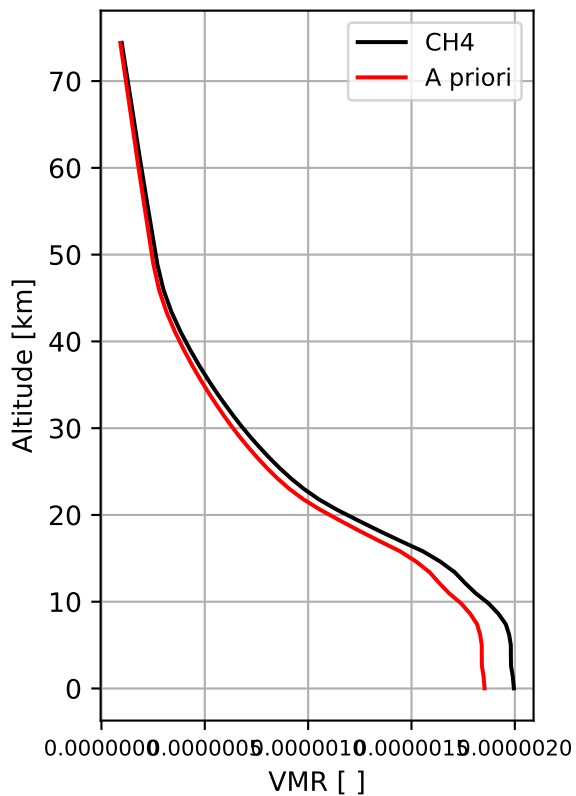
# HF



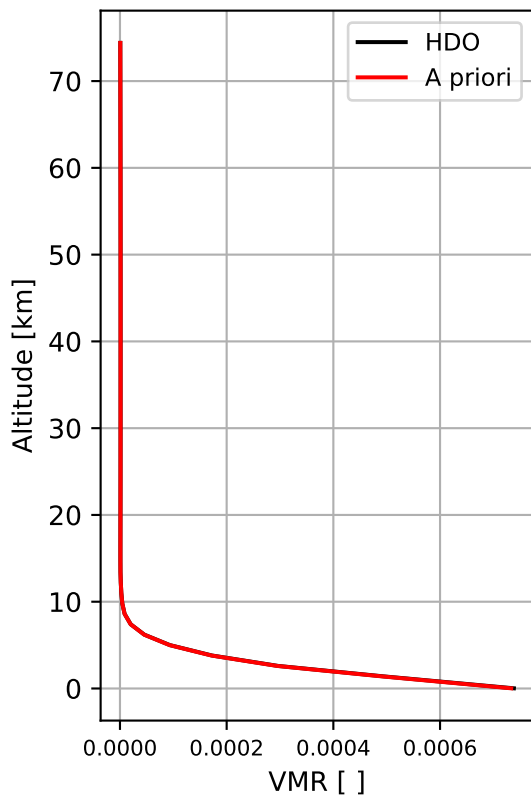
# H<sub>2</sub>O



# CH<sub>4</sub>

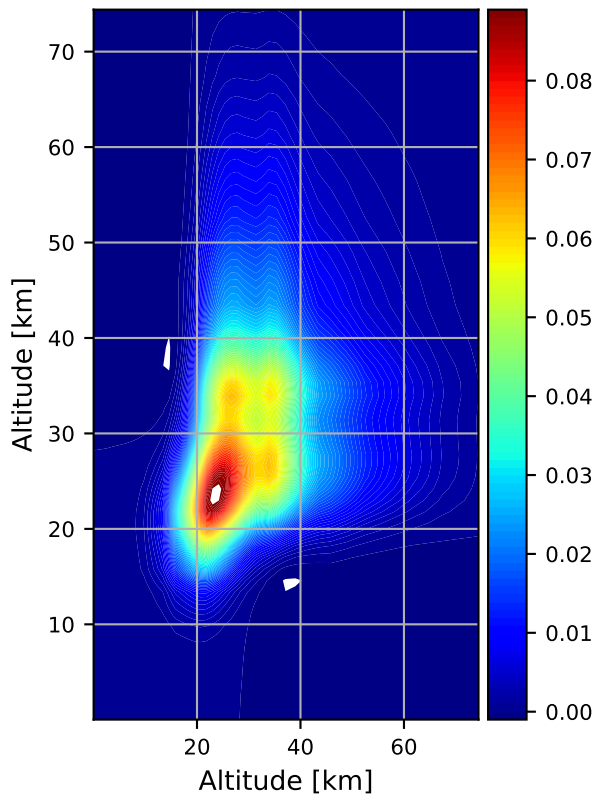


# HDO

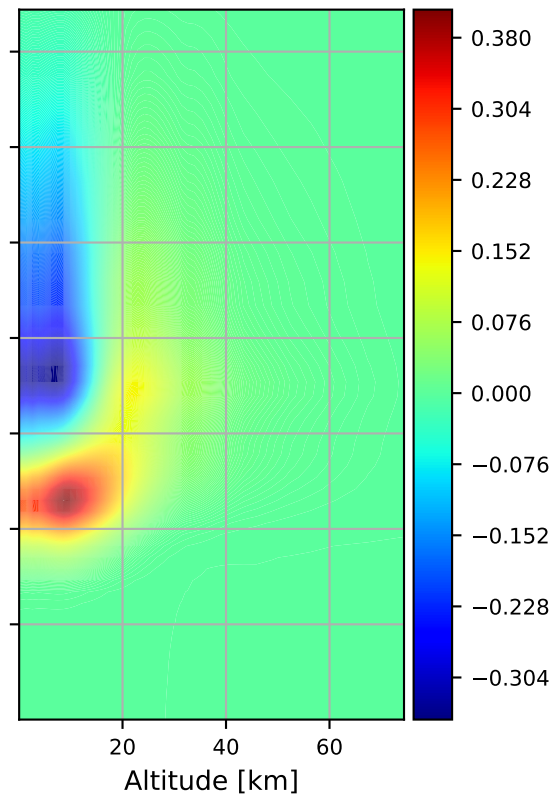




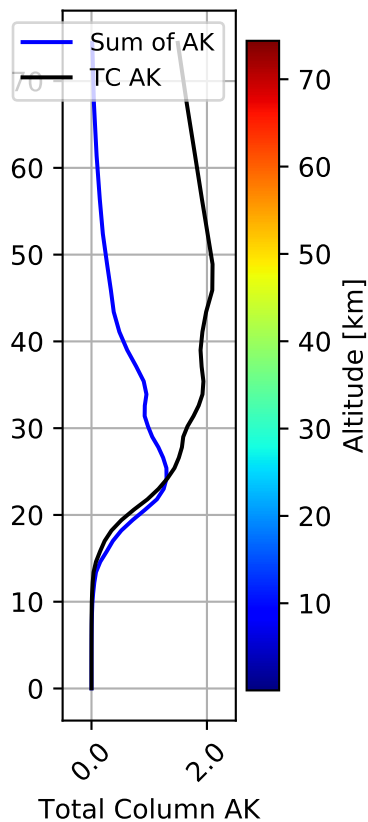
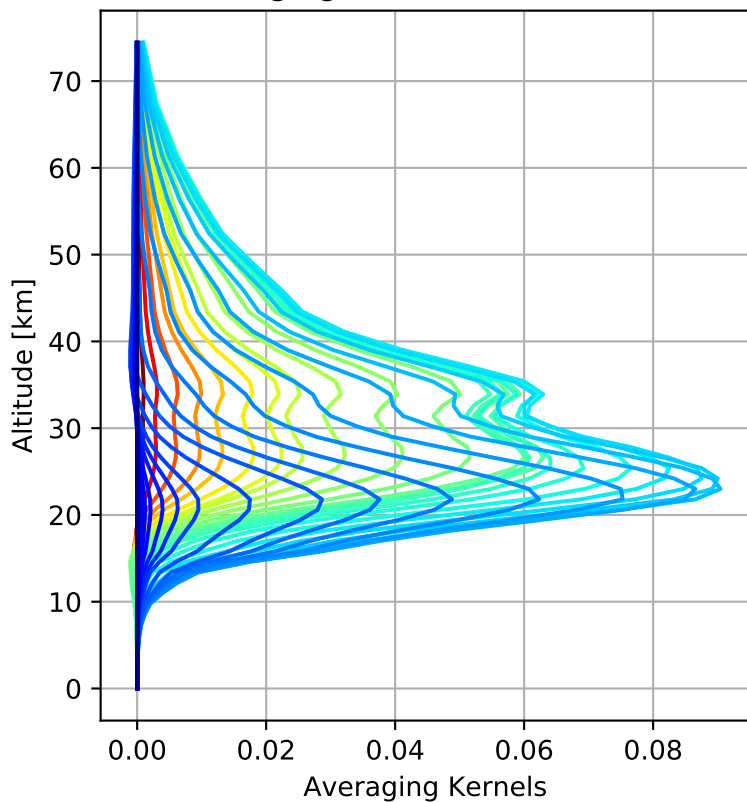
Averaging Kernel Matrix (Scale Factor)



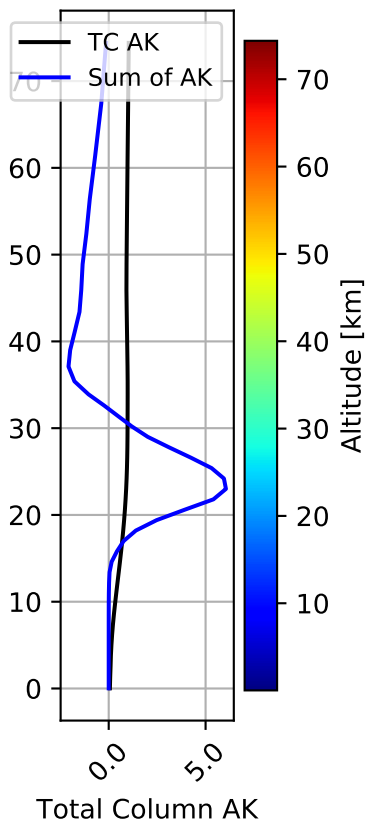
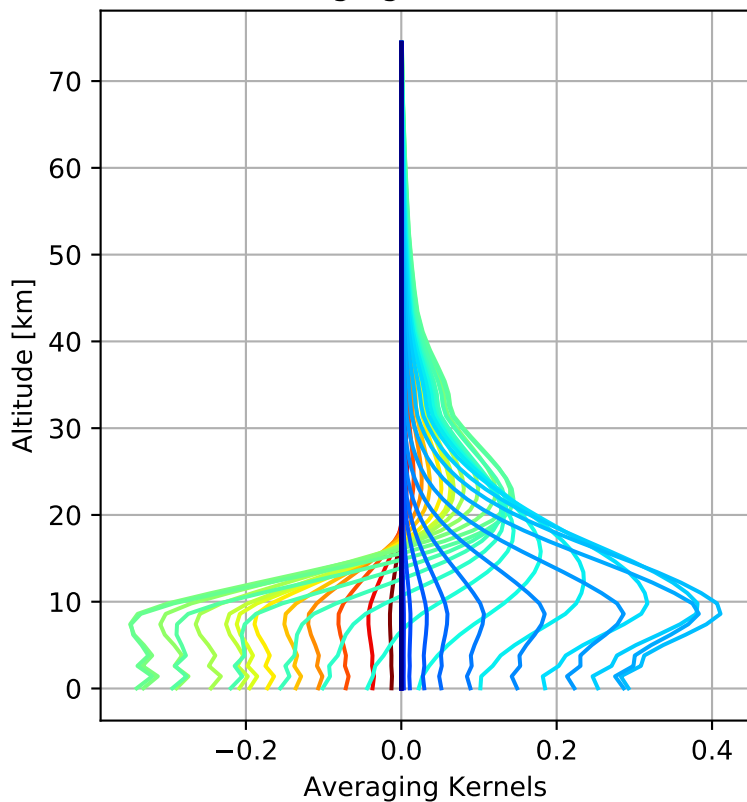
Averaging Kernel Matrix (VMR)



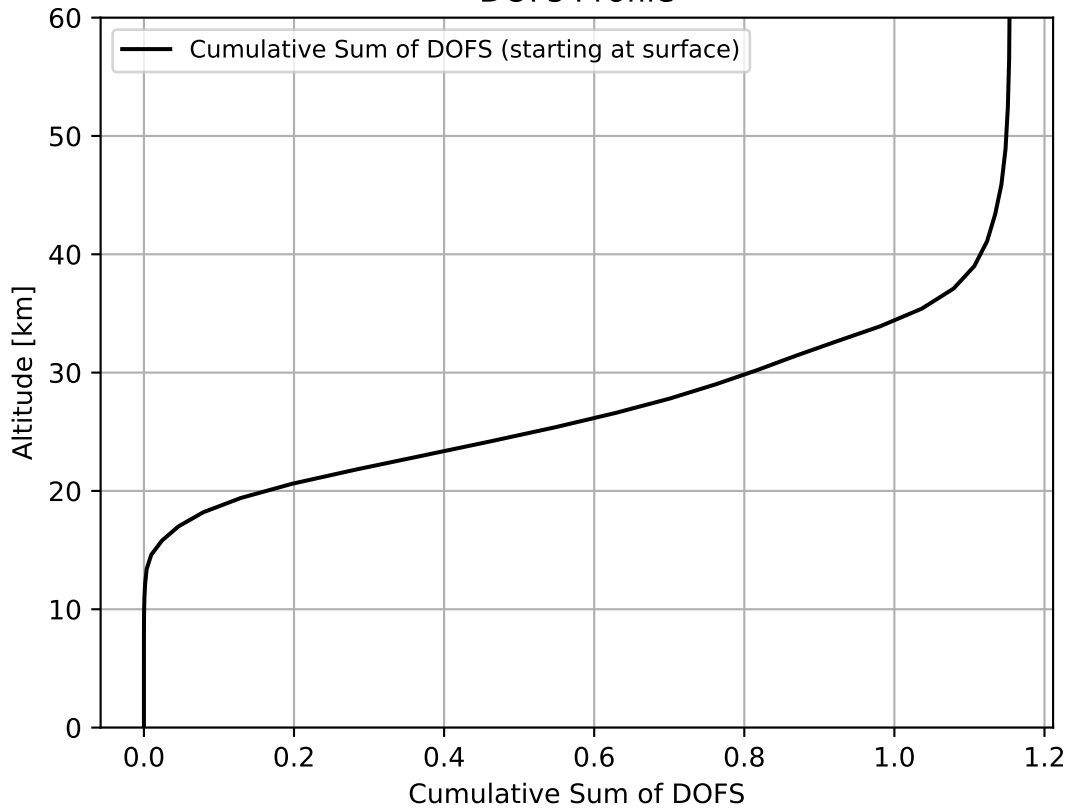
## Averaging Kernels Scale Factor



## Averaging Kernels VMR



## DOFs Profile



SFIT4:v1.0.10 :Off-Release -- July 2020 RUNTIME:20201015-12:03:12 RETRIEVAL SUMMARY

2  
23/06/2000, 20:32:03, SCAN TIME:142.41 SEC. RES= 0.0050 APOD FN = BX  
23/06/2000, 20:32:03, SCAN TIME:142.41 SEC. RES= 0.0050 APOD FN = BX

4  
IRET GAS\_NAME IFPRF IFCELL APR\_COLUMN RET\_COLUMN  
1 HF T F 3.61775E+14 1.16430E+15  
2 H2O F F 2.50341E+22 3.17795E+22  
3 CH4 F F 3.71597E+19 4.00016E+19  
4 HDO F F 2.50341E+22 5.04109E+21

2  
IBAND NUSTART NUSTOP SPACE NPTSB PMAX FOVDIA MEAN\_FIT\_SNR NSCAN JSCAN INIT\_SNR EFF  
1 4038.70000 4039.20000 0.001674025 299 180.00 2.392300 38.350560 1  
1 40.000 40.000 38.351  
2 4109.40000 4110.20000 0.001674025 478 180.00 2.392300 17.581888 1  
1 15.000 15.000 17.582  
  
FITRMS CHI\_2\_Y DOFS\_ALL DOFS\_TRG DOFS\_TPR ITER MAX\_ITER CONVERGED DIVWARN  
4.739945 0.864063 4.763 1.154 0.000 6 30 T F