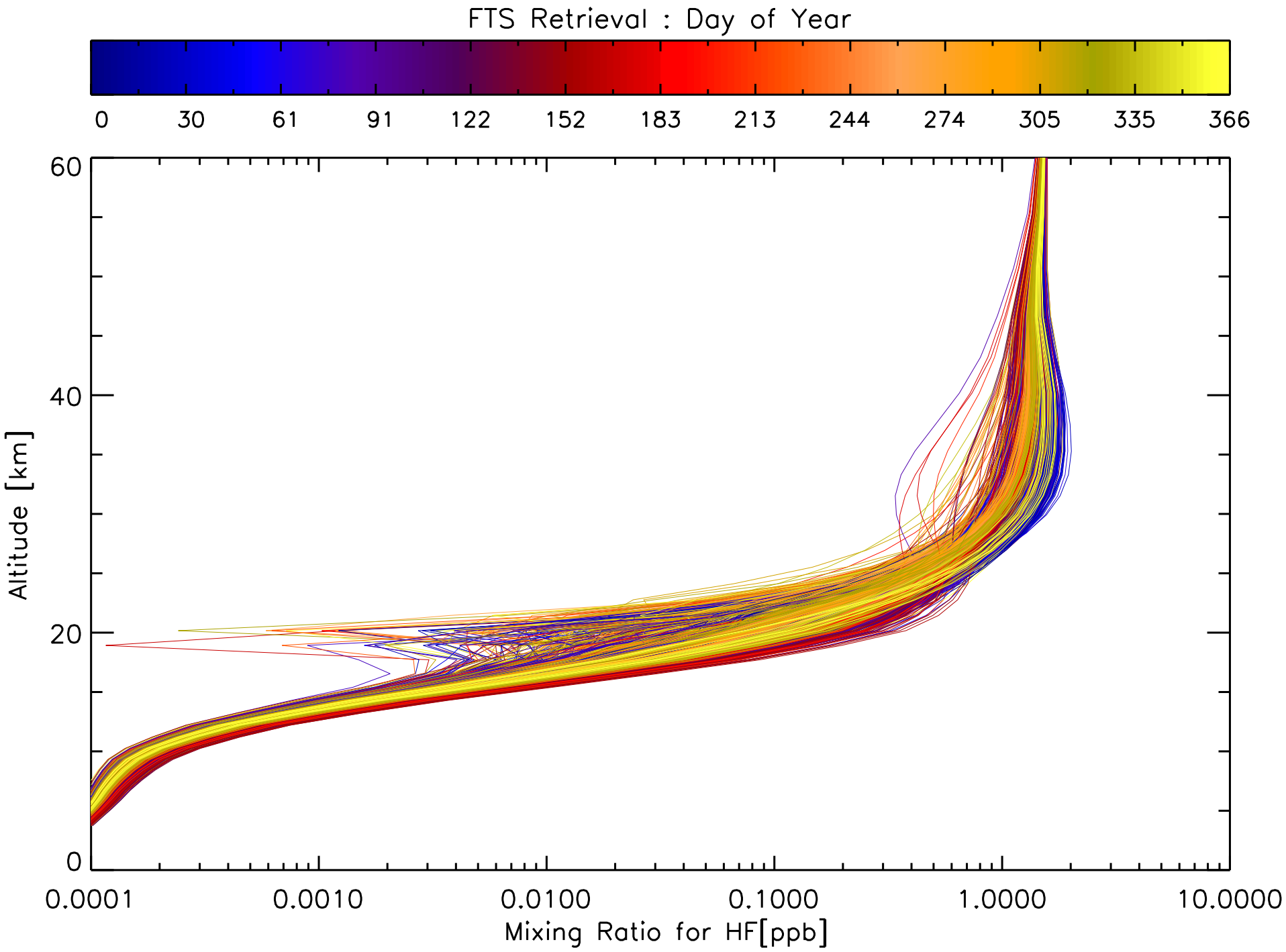
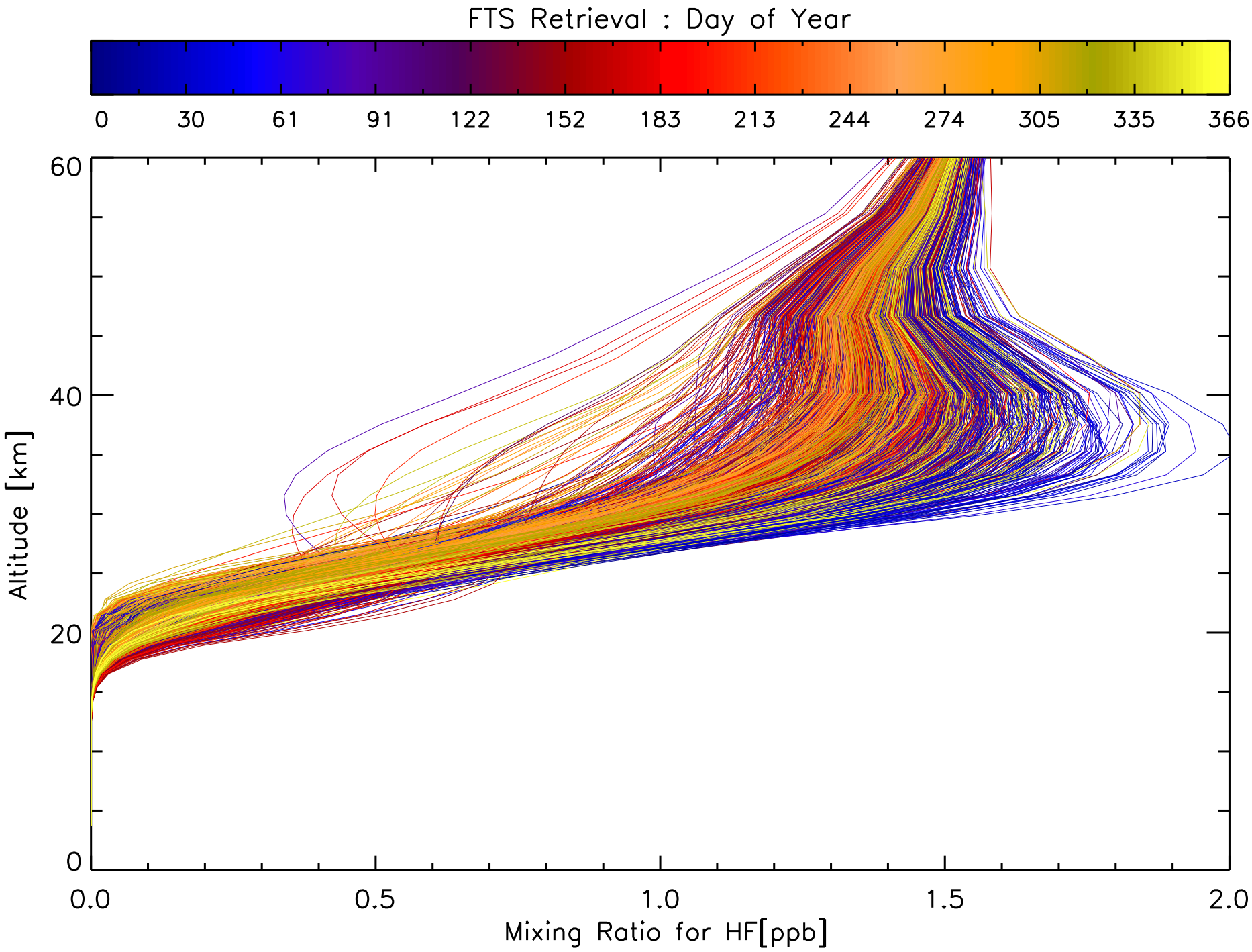
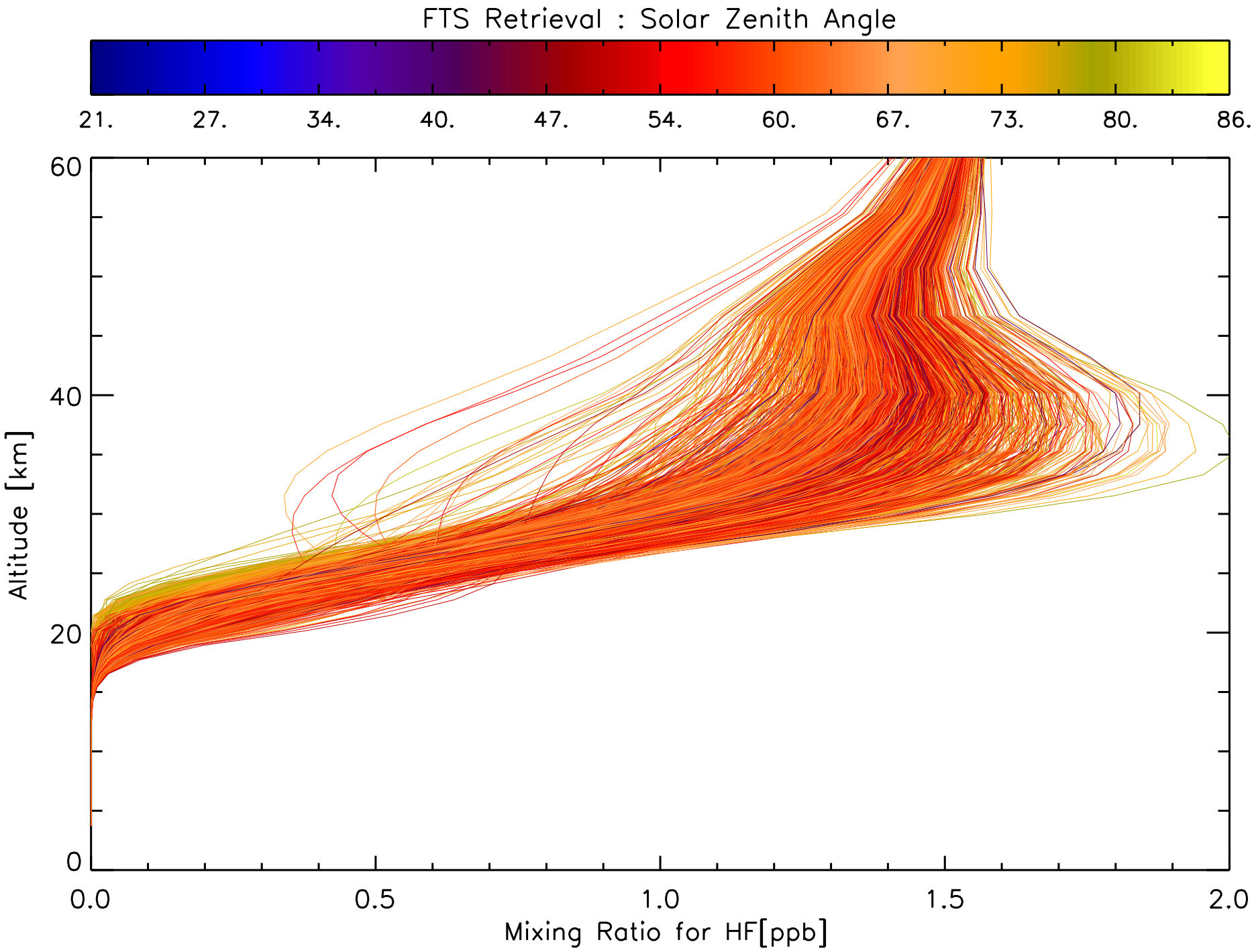
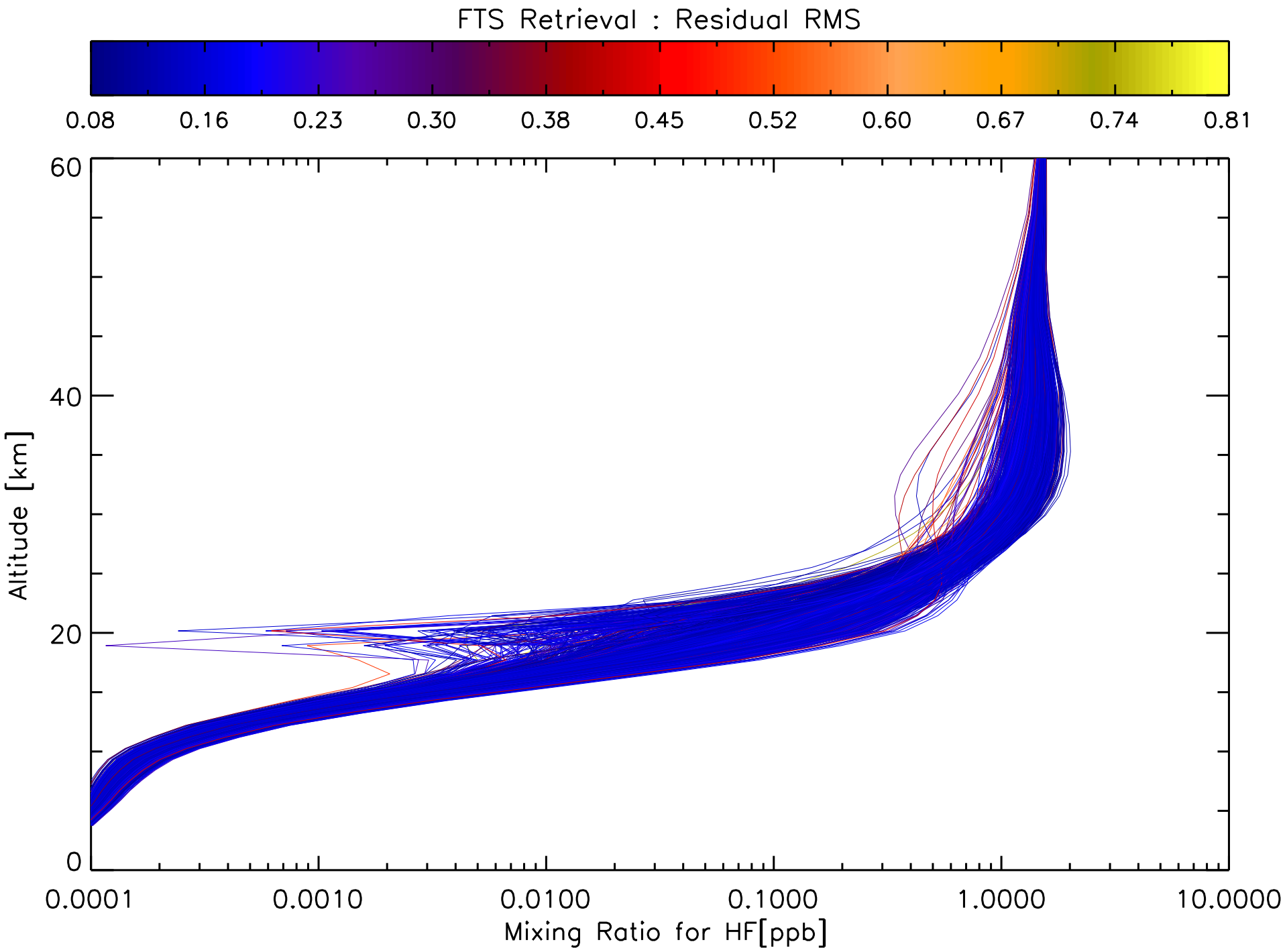
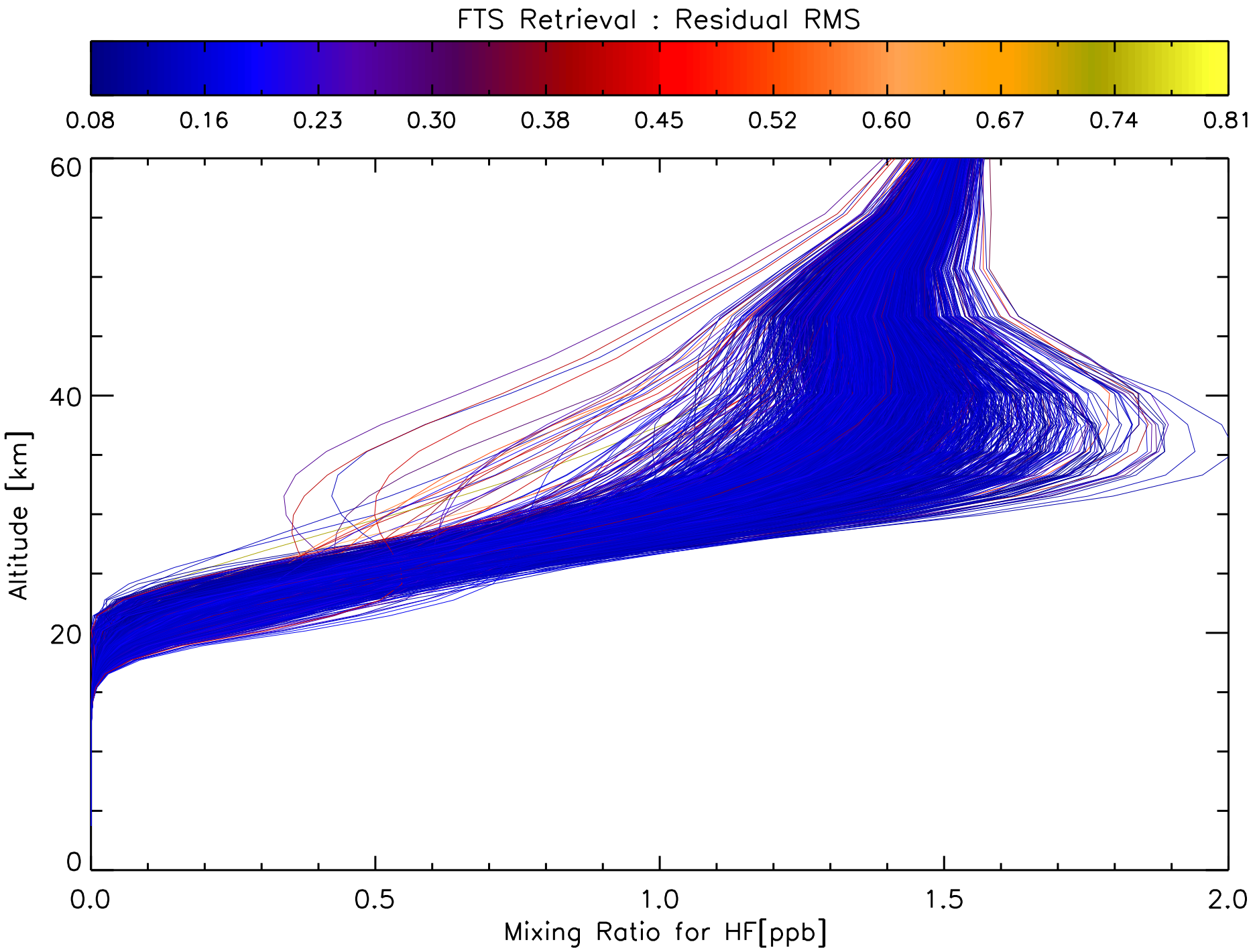
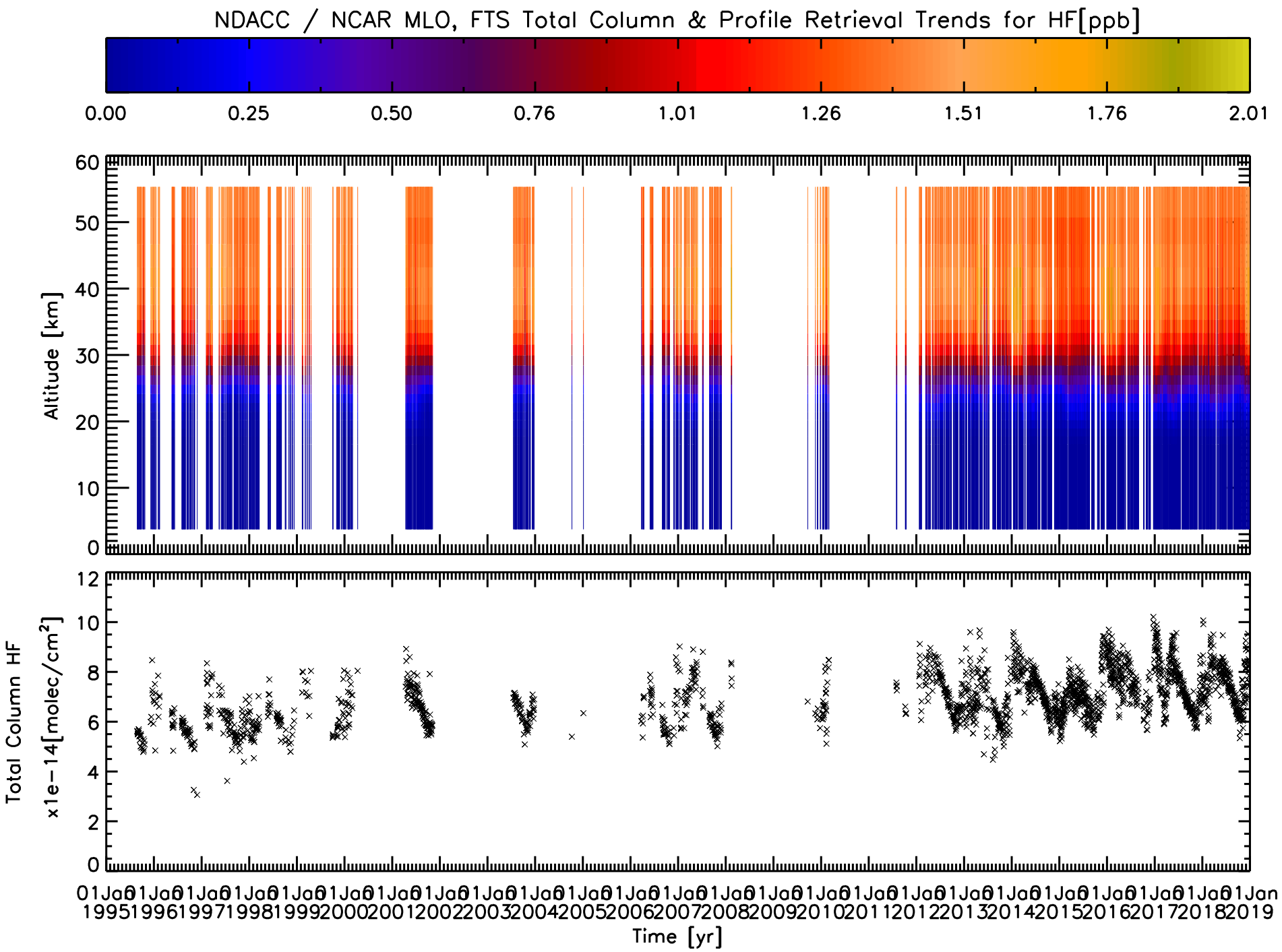

FTS Retrieval : Day of Year
0
30
61
91
122
152
183
213
244
274
305
335
366
60
40
20
0
Altitude [km]
0.0001
0.0010
0.0100
0.1000
1.0000
10.0000
Mixing Ratio for HF[ppb]

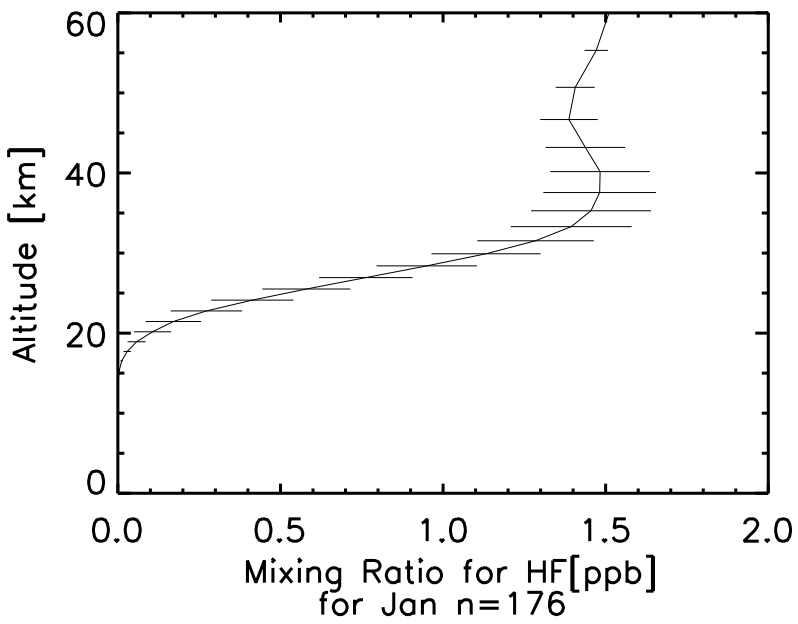

FTS Retrieval : Day of Year
0
30
61
91
122
152
183
213
244
274
305
335
366
60
40
20
0
Altitude [km]
0.0
0.5
1.0
1.5
2.0
Mixing Ratio for HF[ppb]

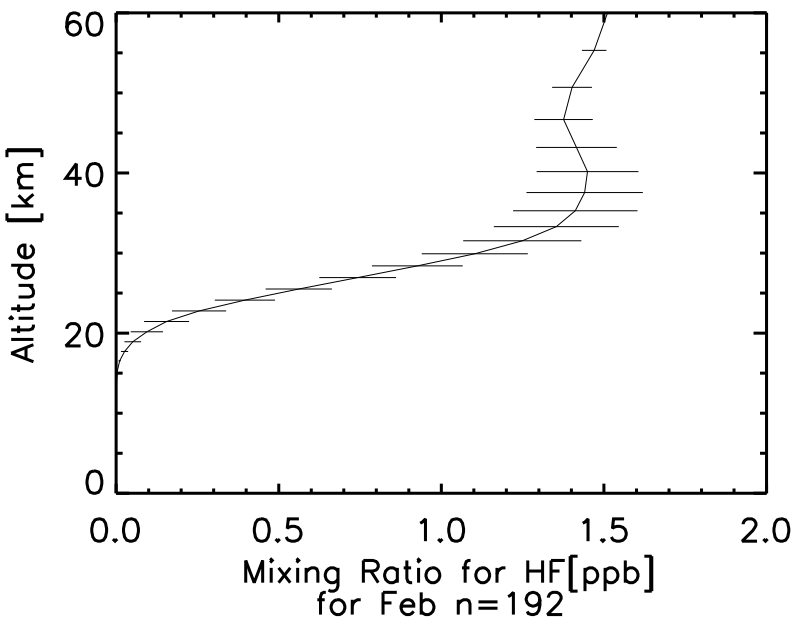

FTS Retrieval : Solar Zenith Angle
21.
27.
34.
40.
47.
54.
60.
67.
73.
80.
86.
60
40
20
0
Altitude [km]
0.0
0.5
1.0
1.5
2.0
Mixing Ratio for HF[ppb]

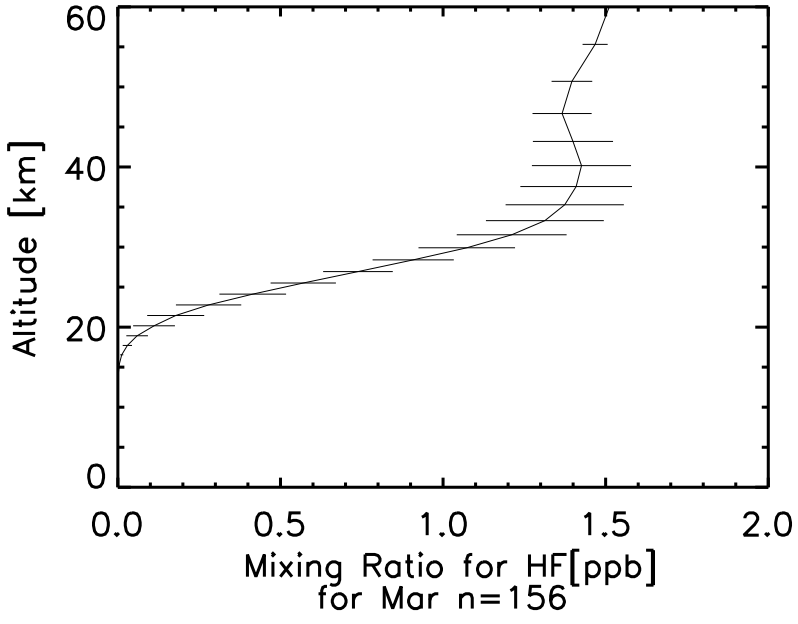

FTS Retrieval : Residual RMS
0.08
0.16
0.23
0.30
0.38
0.45
0.52
0.60
0.67
0.74
0.81
60
40
20
0
Altitude [km]
0.0001
0.0010
0.0100
0.1000
1.0000
10.0000
Mixing Ratio for HF[ppb]

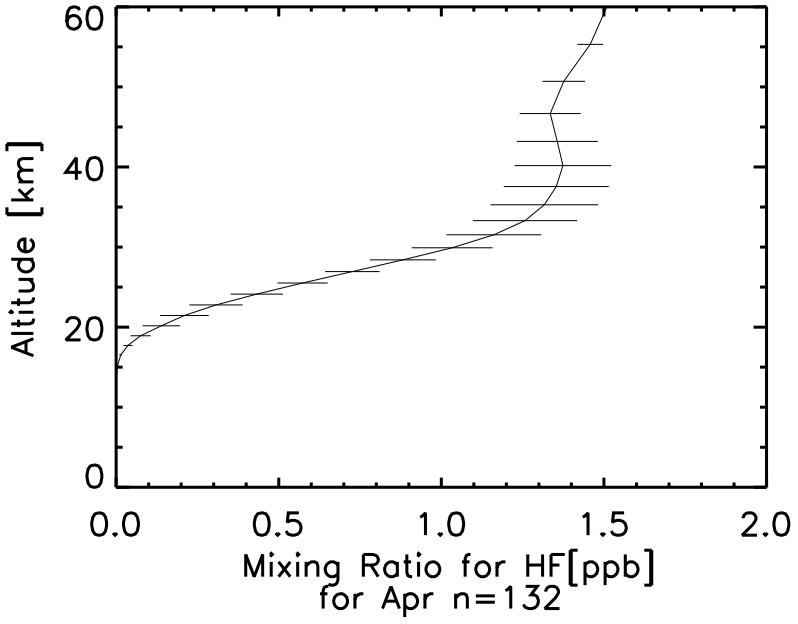

FTS Retrieval : Residual RMS
0.08
0.16
0.23
0.30
0.38
0.45
0.52
0.60
0.67
0.74
0.81
60
40
20
0
Altitude [km]
0.0
0.5
1.0
1.5
2.0
Mixing Ratio for HF[ppb]

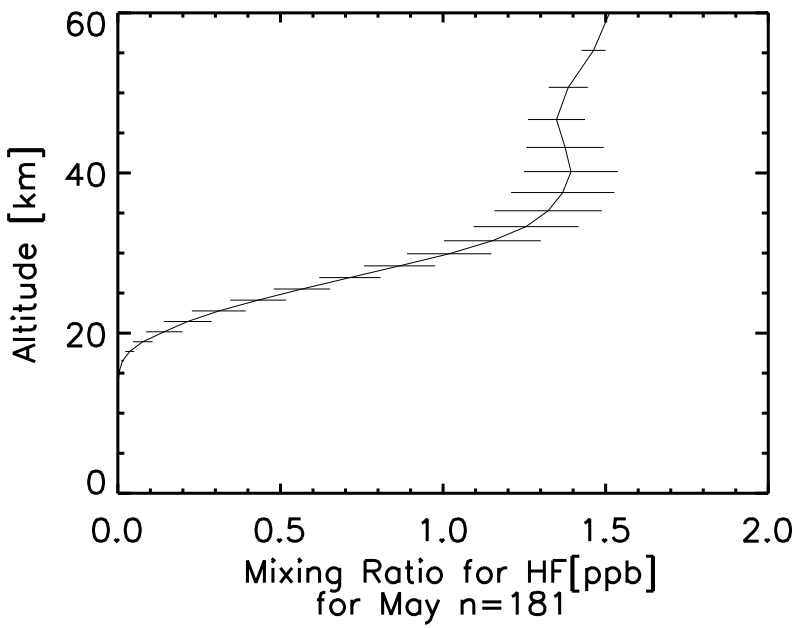

NDACC / NCAR MLO, FTS Total Column & Profile Retrieval Trends for HF[ppb]
0.00
0.25
0.50
0.76
1.01
1.26
1.51
1.76
2.01
Altitude [km]
0
10
20
30
40
50
60
Total Column HF
x1e−14[molec/cm²]
0
2
4
6
8
10
12
01Jan1995
01Jan1996
01Jan1997
01Jan1998
01Jan1999
01Jan2000
01Jan2001
01Jan2002
01Jan2003
01Jan2004
01Jan2005
01Jan2006
01Jan2007
01Jan2008
01Jan2009
01Jan2010
01Jan2011
01Jan2012
01Jan2013
01Jan2014
01Jan2015
01Jan2016
01Jan2017
01Jan2018
01Jan2019
Time [yr]

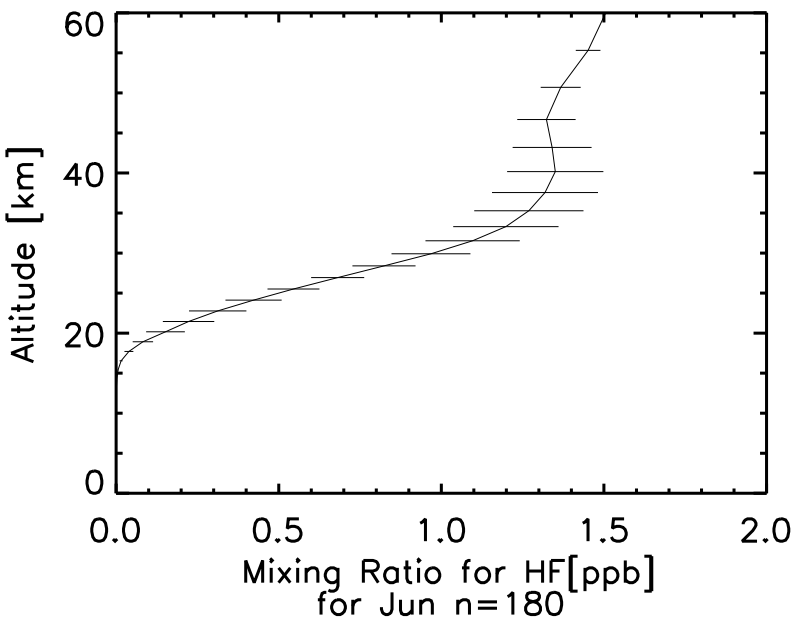

Altitude [km]
0
20
40
60
0.0
0.5
1.0
1.5
2.0
Mixing Ratio for HF[ppb]
for Jan n=176

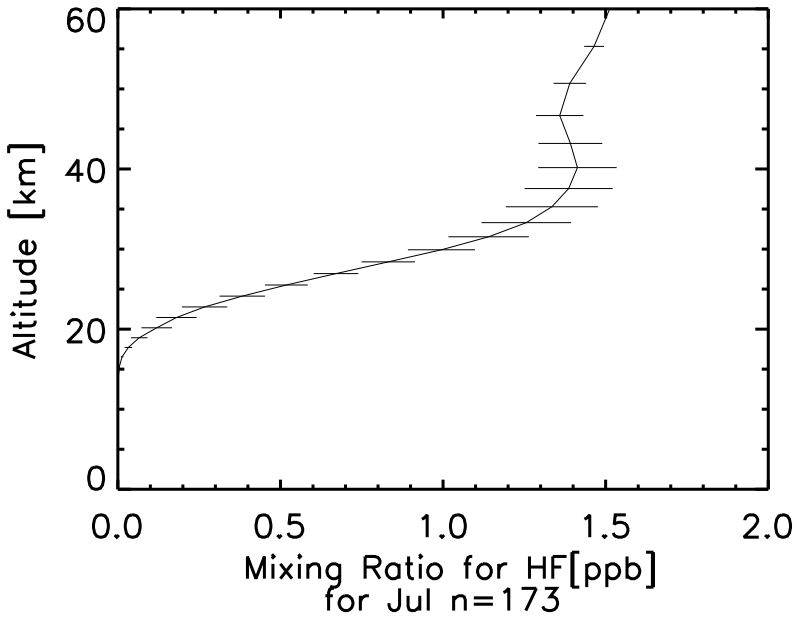

Altitude [km]
0
20
40
60
0.0
0.5
1.0
1.5
2.0
Mixing Ratio for HF[ppb]
for Feb n=192

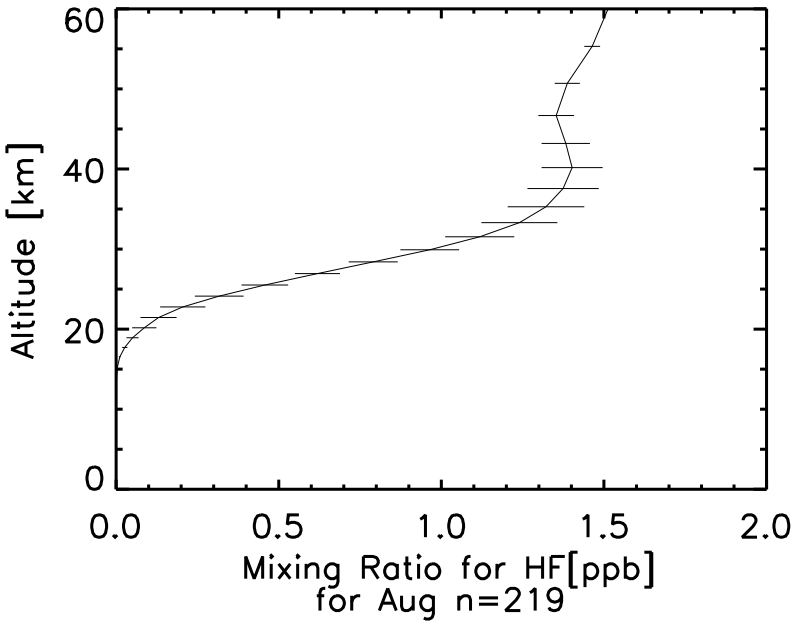

Altitude [km]
0
20
40
60
0.0
0.5
1.0
1.5
2.0
Mixing Ratio for HF[ppb]
for Mar n=156

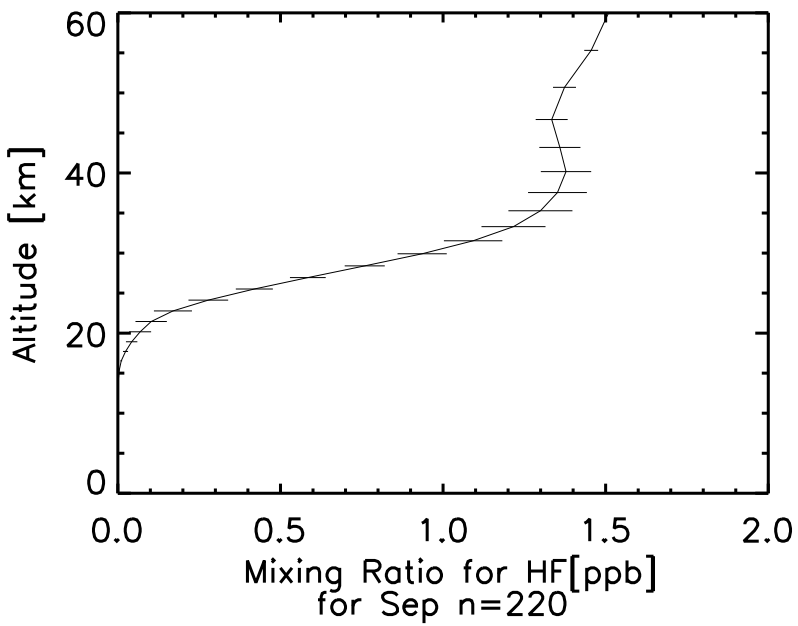

Altitude [km]
0
20
40
60
0.0
0.5
1.0
1.5
2.0
Mixing Ratio for HF[ppb]
for Apr n=132

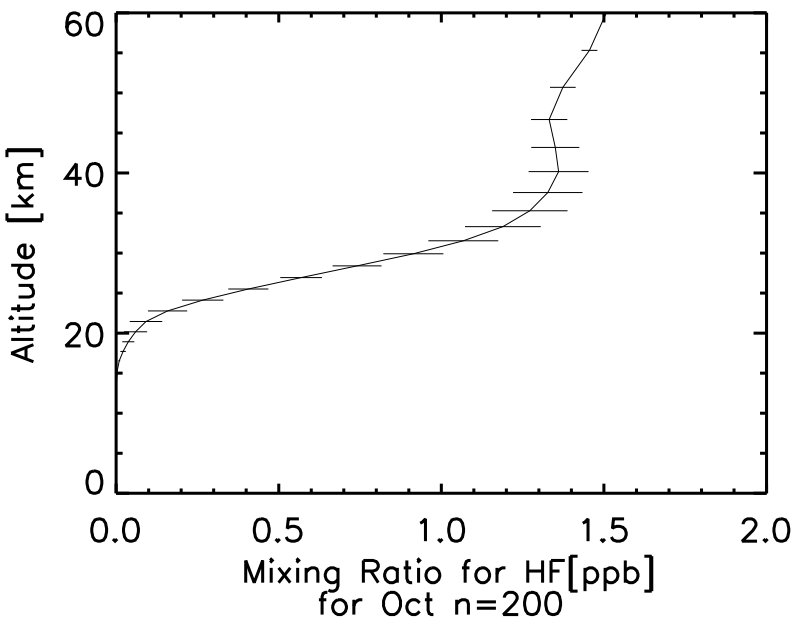

60
40
20
0
Altitude [km]
0.0
0.5
1.0
1.5
2.0
Mixing Ratio for HF[ppb]
for May n=181

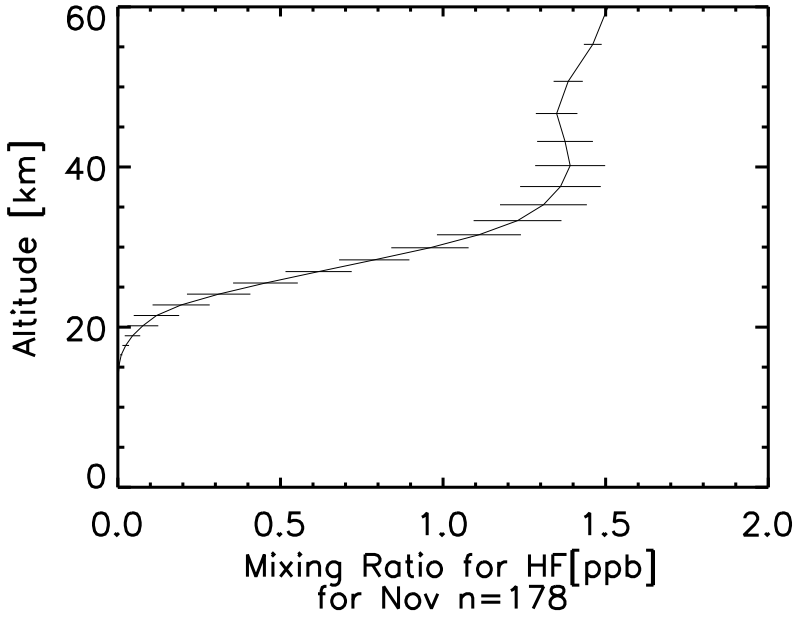

60
40
20
0
Altitude [km]
0.0
0.5
1.0
1.5
2.0
Mixing Ratio for HF[ppb]
for Jun n=180

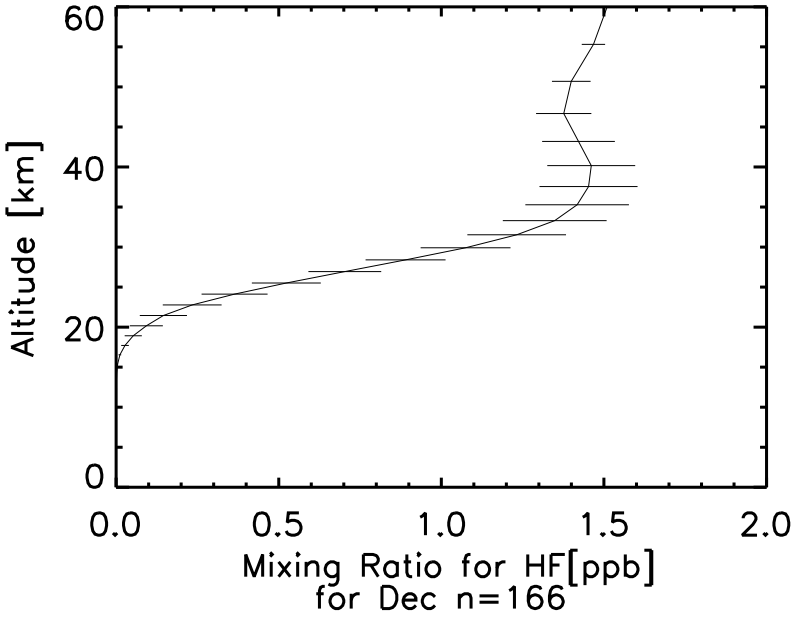

60
40
20
0
Altitude [km]
0.0
0.5
1.0
1.5
2.0
Mixing Ratio for HF[ppb]
for Jul n=173

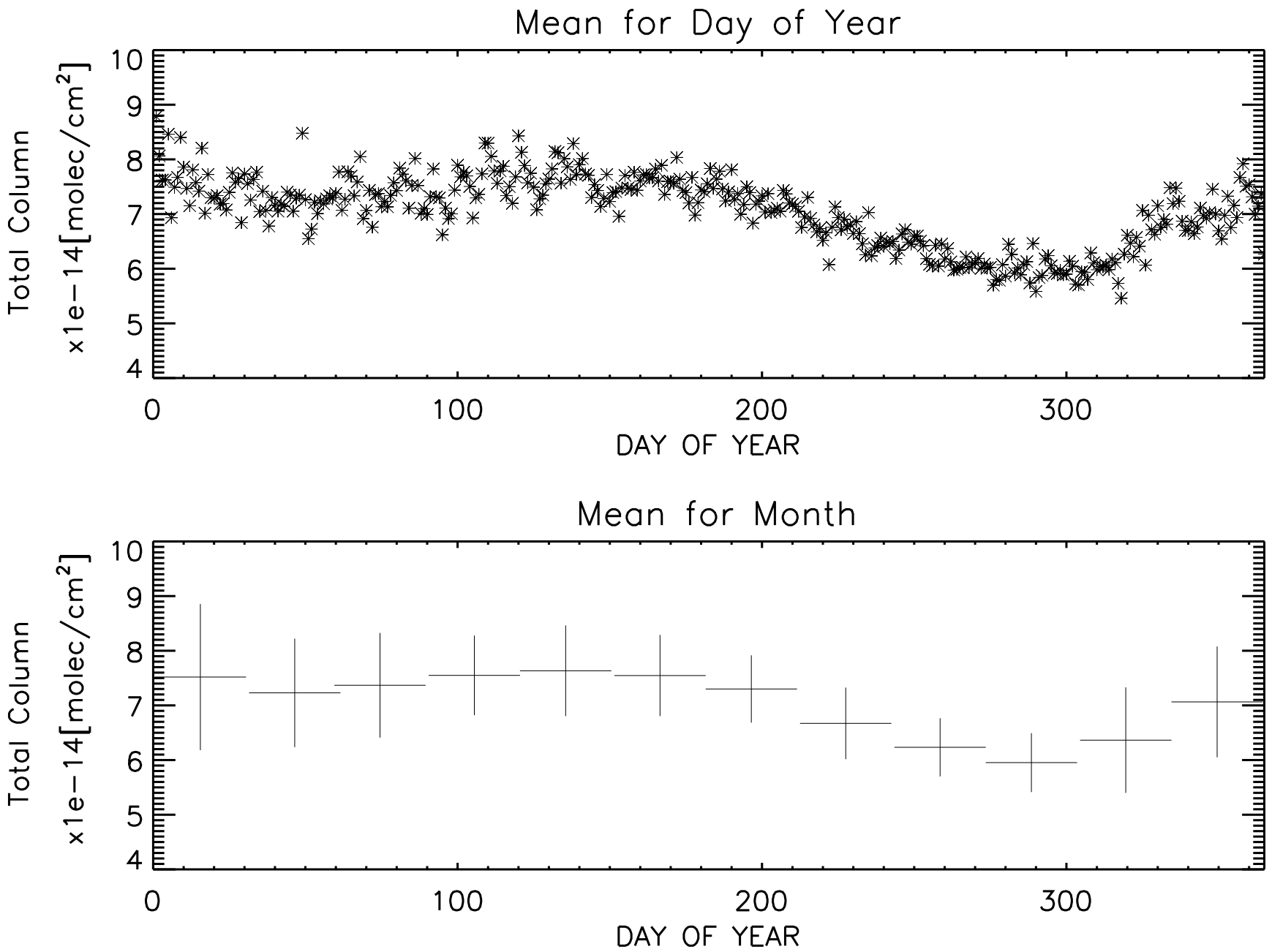

60
40
20
0
Altitude [km]
0.0
0.5
1.0
1.5
2.0
Mixing Ratio for HF[ppb]
for Aug n=219

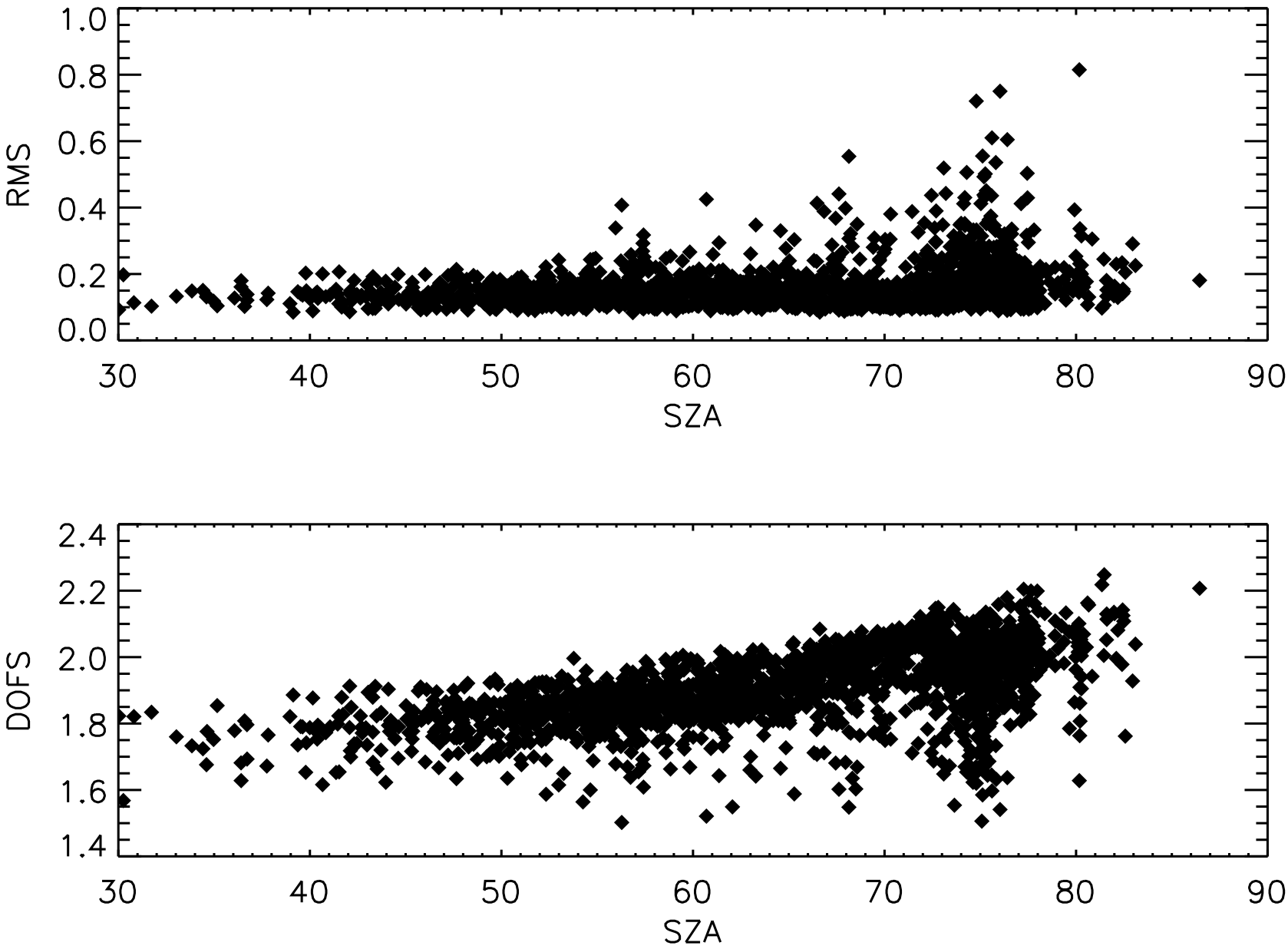

60
40
20
0
Altitude [km]
0.0
0.5
1.0
1.5
2.0
Mixing Ratio for HF[ppb]
for Sep n=220

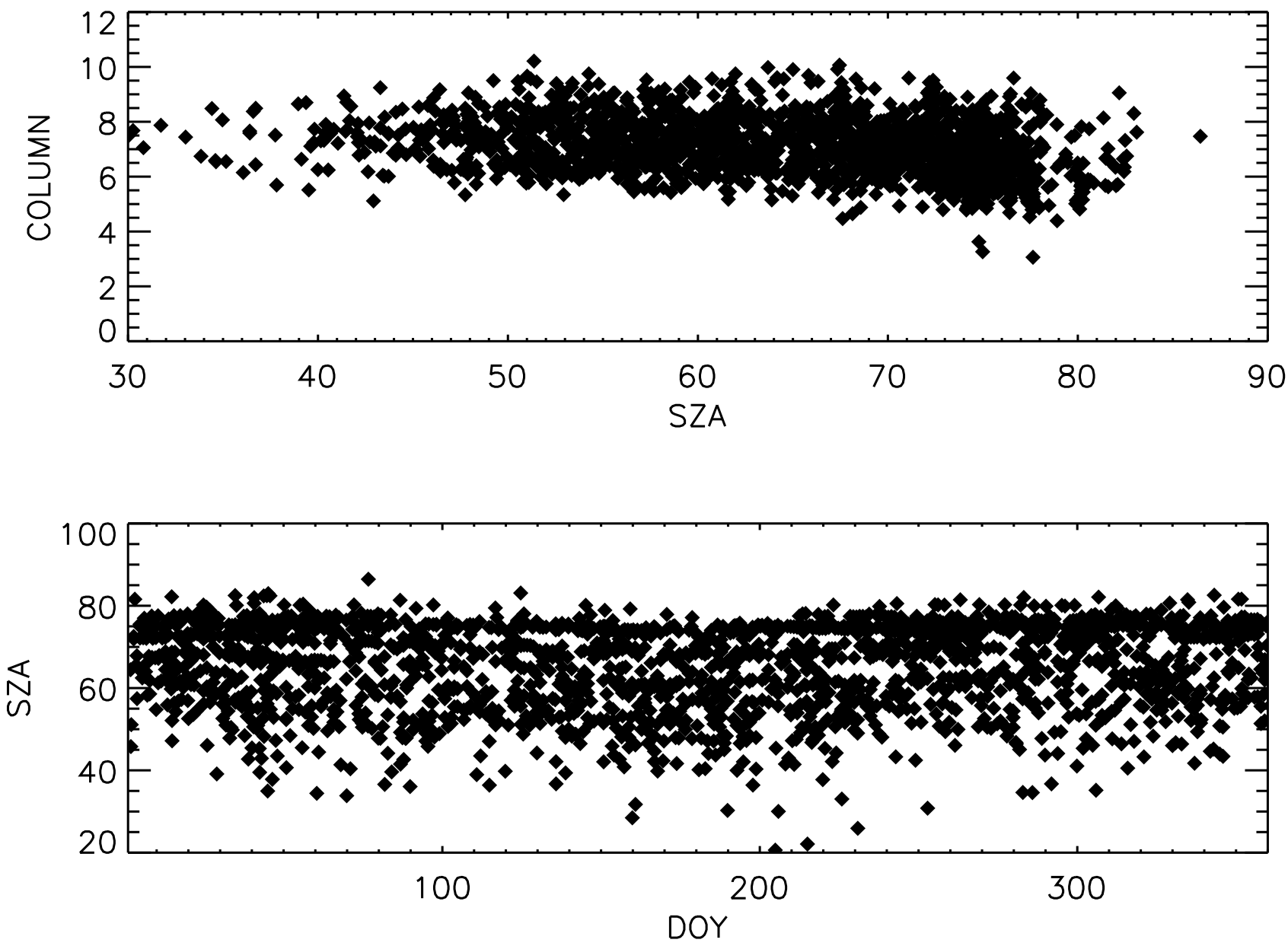

60
40
20
0
Altitude [km]
0.0
0.5
1.0
1.5
2.0
Mixing Ratio for HF[ppb]
for Oct n=200

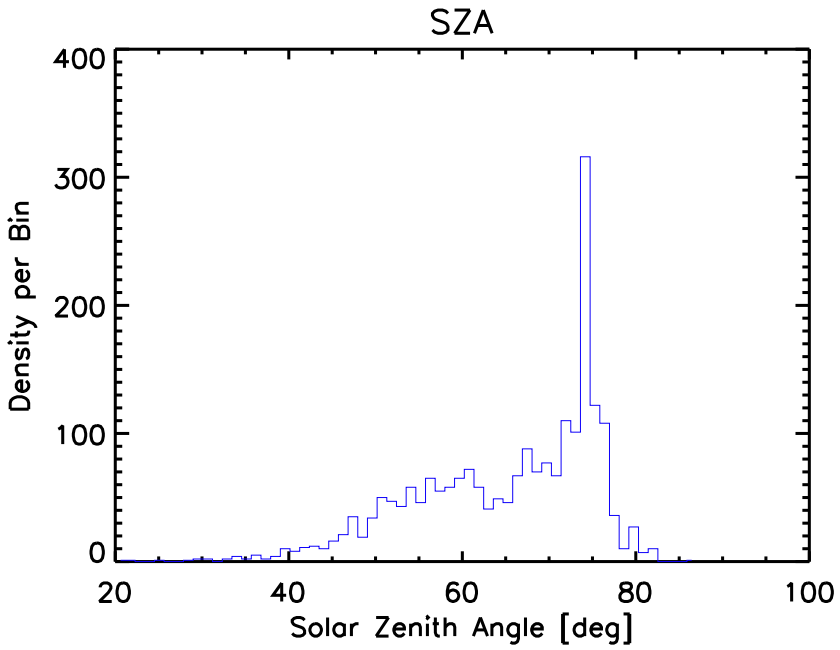

60
40
20
0
Altitude [km]
0.0
0.5
1.0
1.5
2.0
Mixing Ratio for HF[ppb]
for Nov n=178

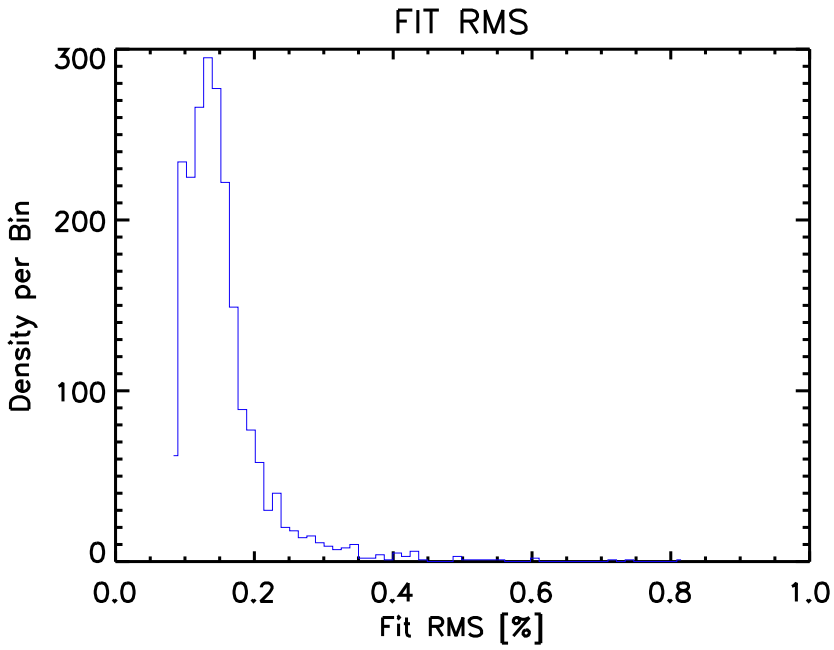

60
40
20
0
Altitude [km]
0.0
0.5
1.0
1.5
2.0
Mixing Ratio for HF[ppb]
for Dec n=166

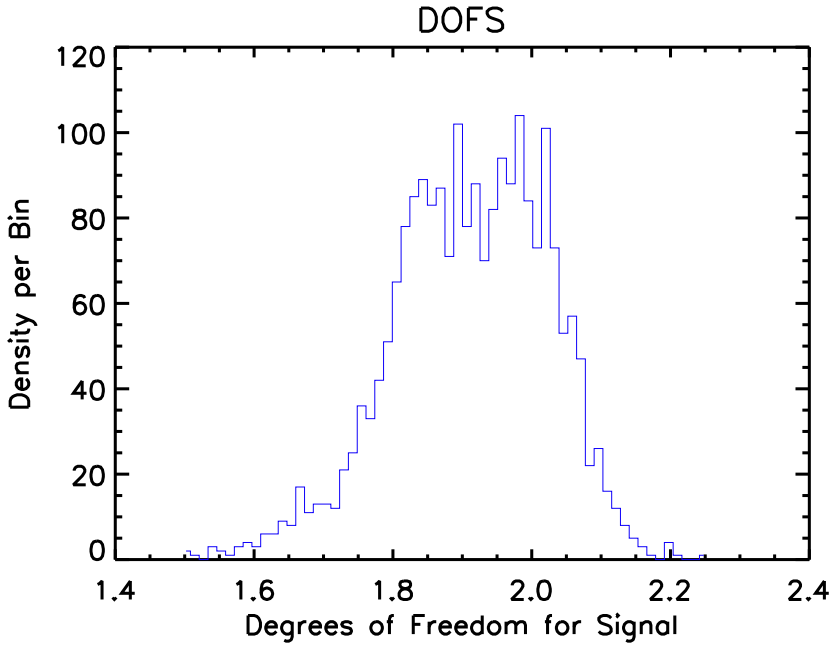

Mean for Day of Year
Total Column
x1e−14[molec/cm²]
10
9
8
7
6
5
4
0
100
200
300
DAY OF YEAR
Mean for Month
Total Column
x1e−14[molec/cm²]
10
9
8
7
6
5
4
0
100
200
300
DAY OF YEAR

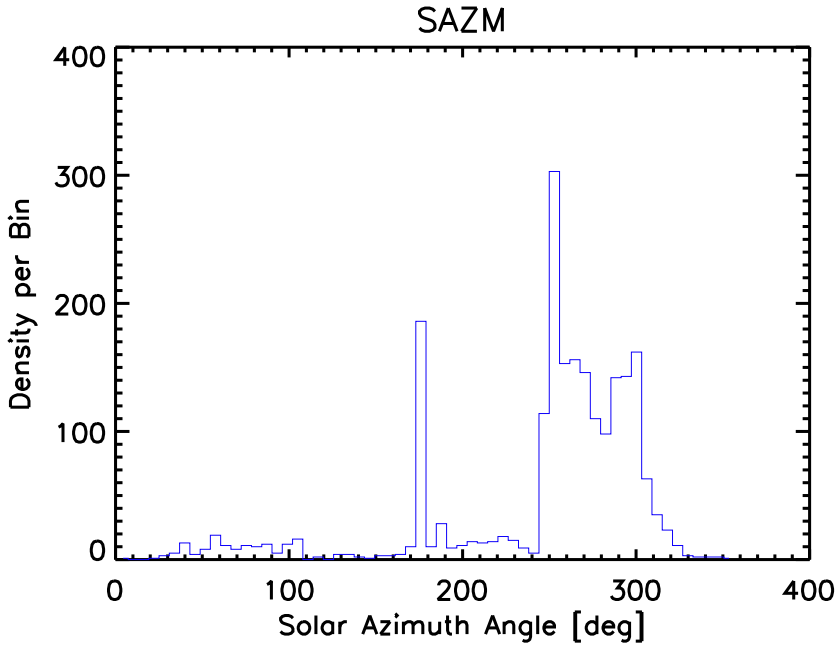

RMS
1.0
0.8
0.6
0.4
0.2
0.0
30
40
50
60
70
80
90
SZA
DOFS
2.4
2.2
2.0
1.8
1.6
1.4
30
40
50
60
70
80
90
SZA

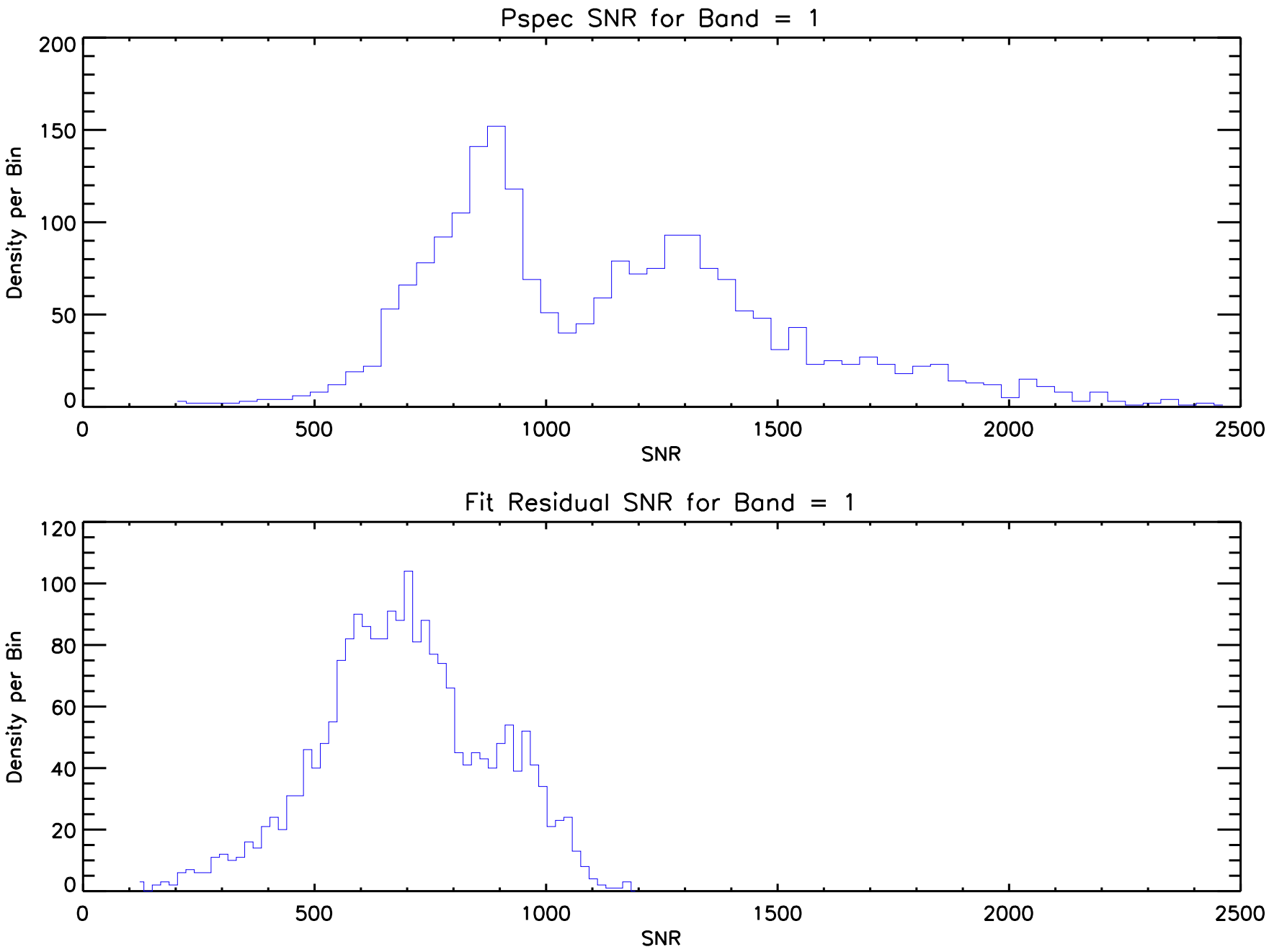

COLUMN
SZA
SZA
DOY


SZA
Density per Bin
Solar Zenith Angle [deg]
0
100
200
300
400
20
40
60
80
100


FIT RMS
Density per Bin
Fit RMS [%]
0
100
200
300
0.0
0.2
0.4
0.6
0.8
1.0


DOFS
Density per Bin
Degrees of Freedom for Signal
0
20
40
60
80
100
120
1.4
1.6
1.8
2.0
2.2
2.4


SAZM
Density per Bin
Solar Azimuth Angle [deg]
0
100
200
300
400
0
100
200
300
400


Pspec SNR for Band = 1
Density per Bin
SNR
0
50
100
150
200
500
1000
1500
2000
2500
Fit Residual SNR for Band = 1
Density per Bin
SNR
0
20
40
60
80
100
120
500
1000
1500
2000
2500