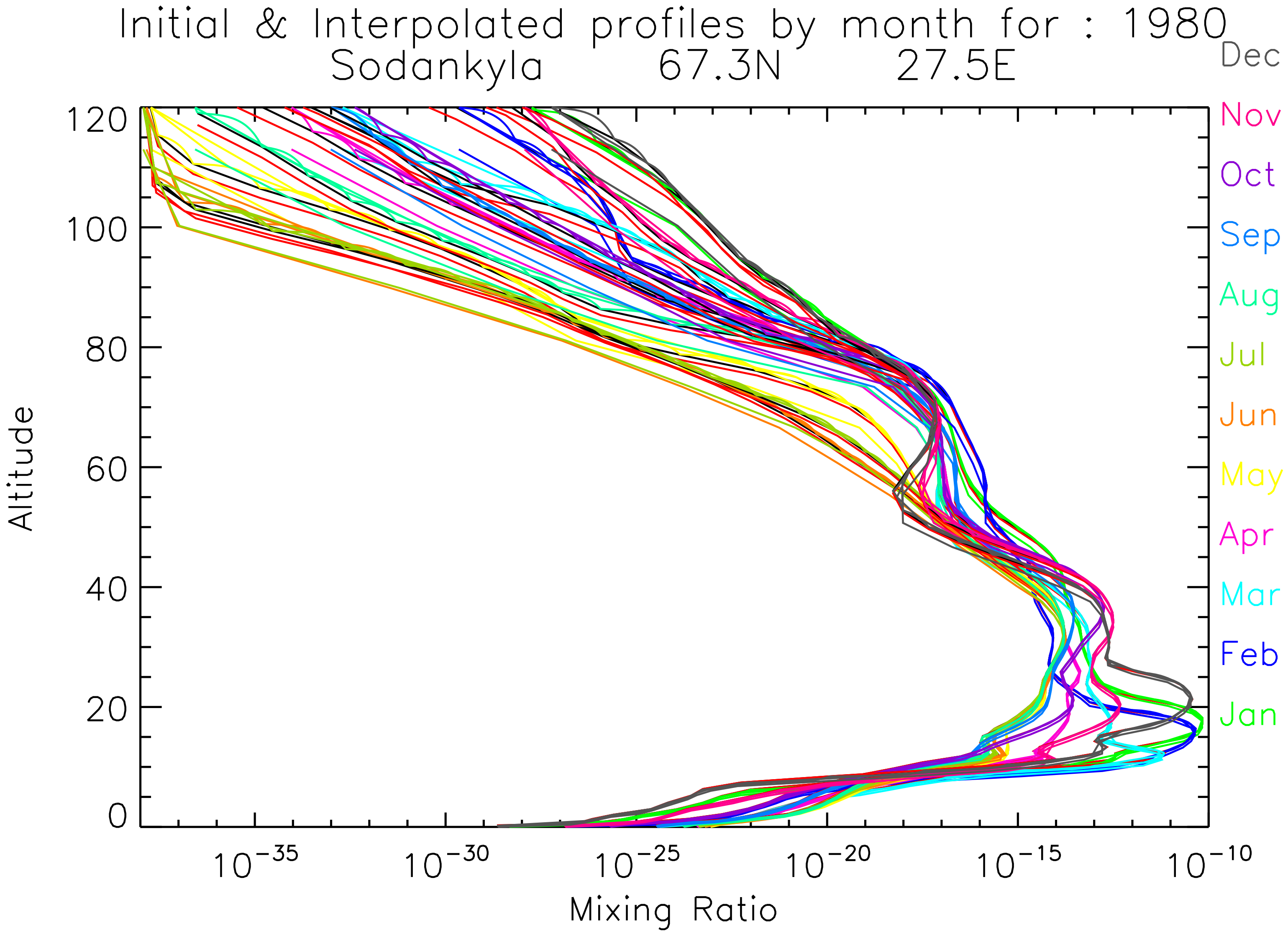
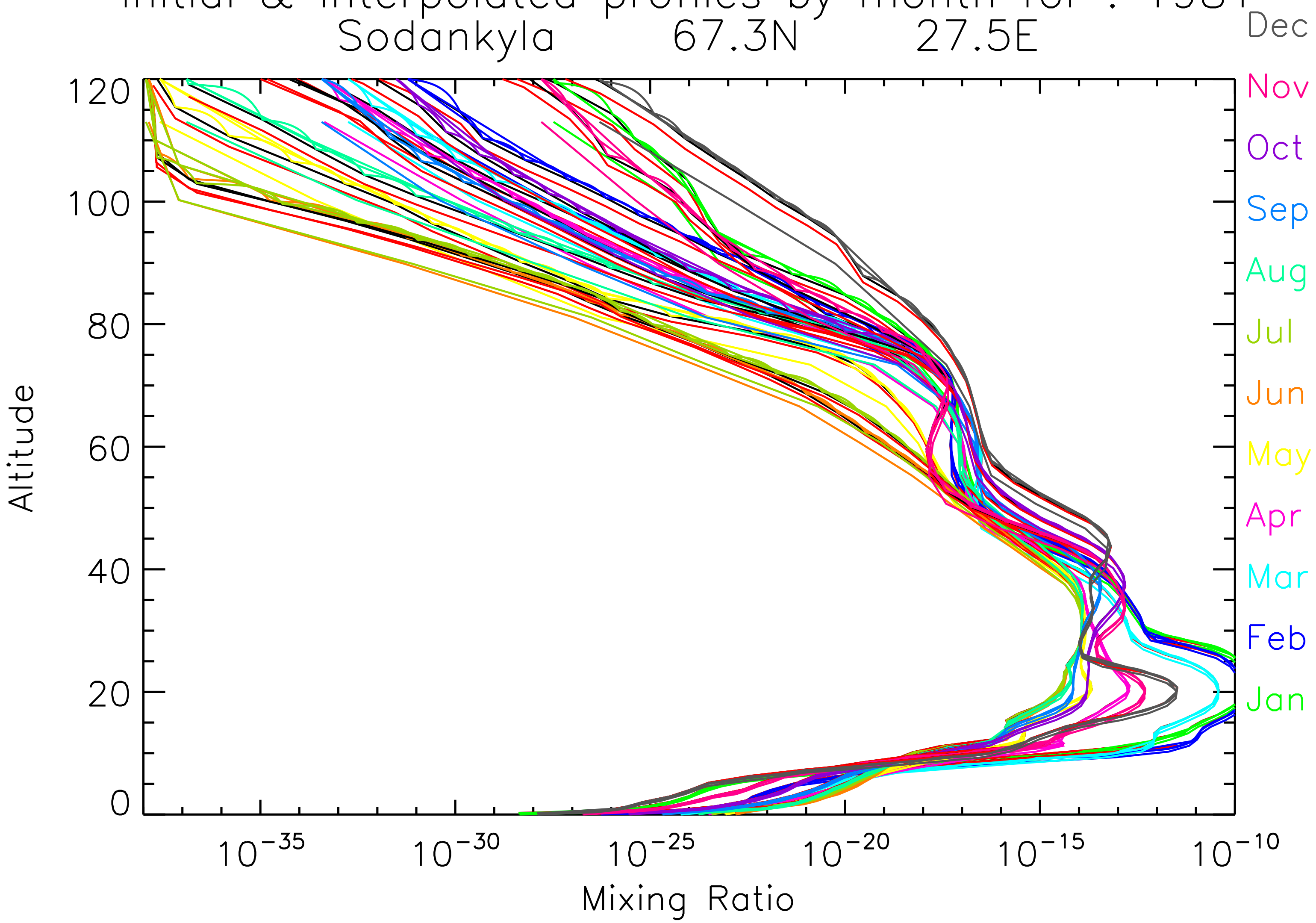
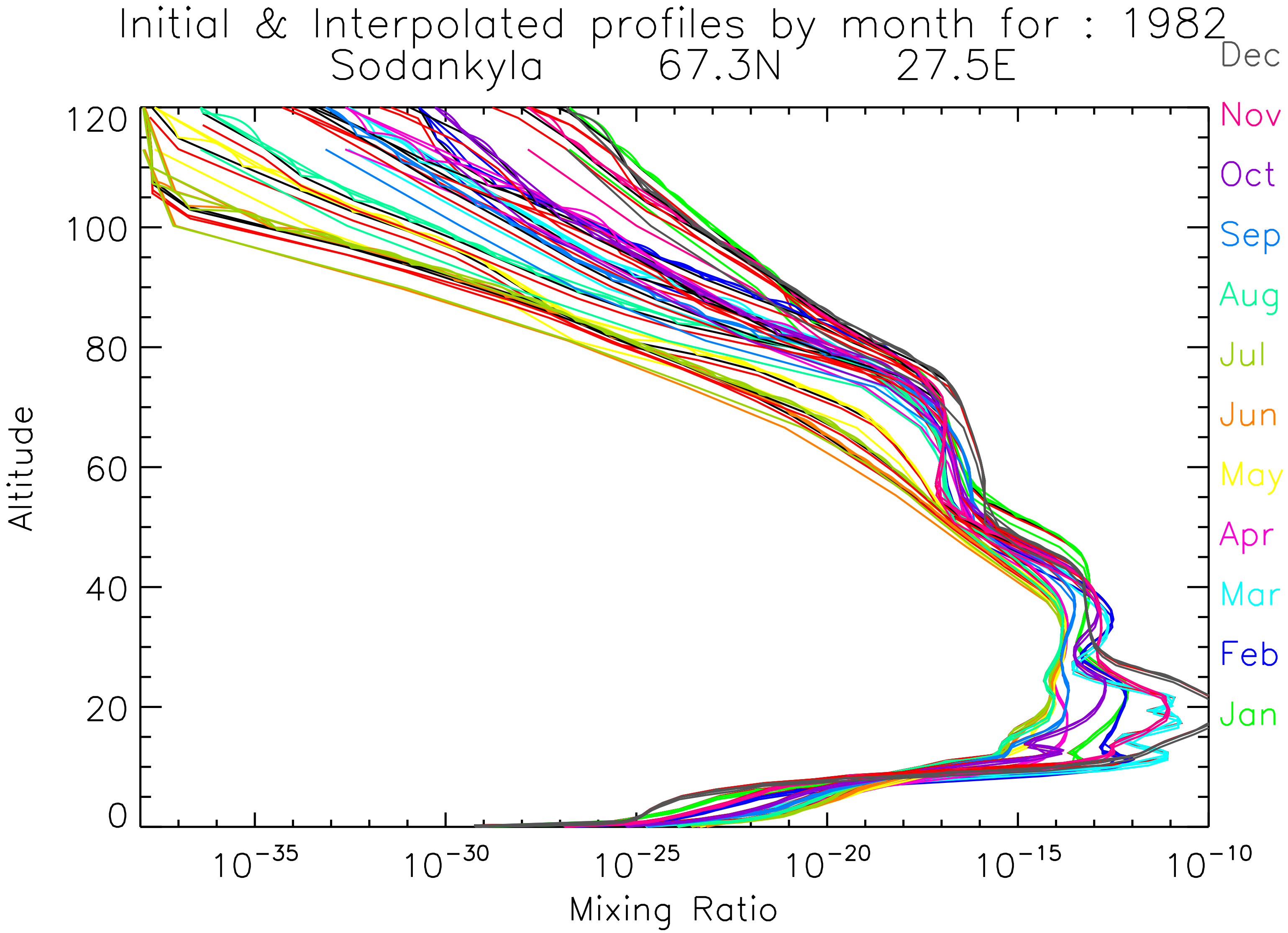


Initial & Interpolated profiles by month for : 1980
Sodankyla 67.3N 27.5E

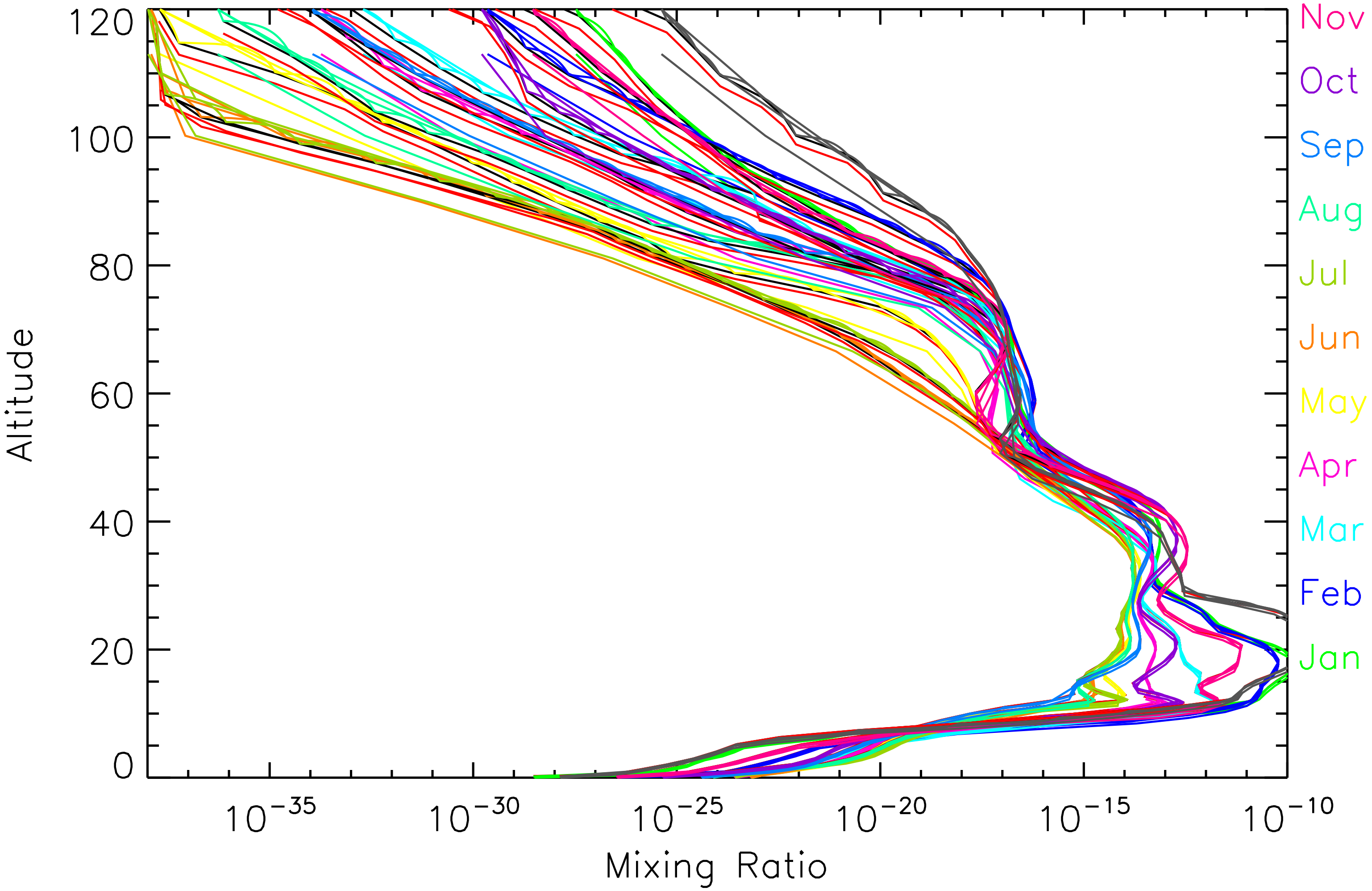
Initial & Interpolated profiles by month for : 1981
Sodankyla 67.3N 27.5E

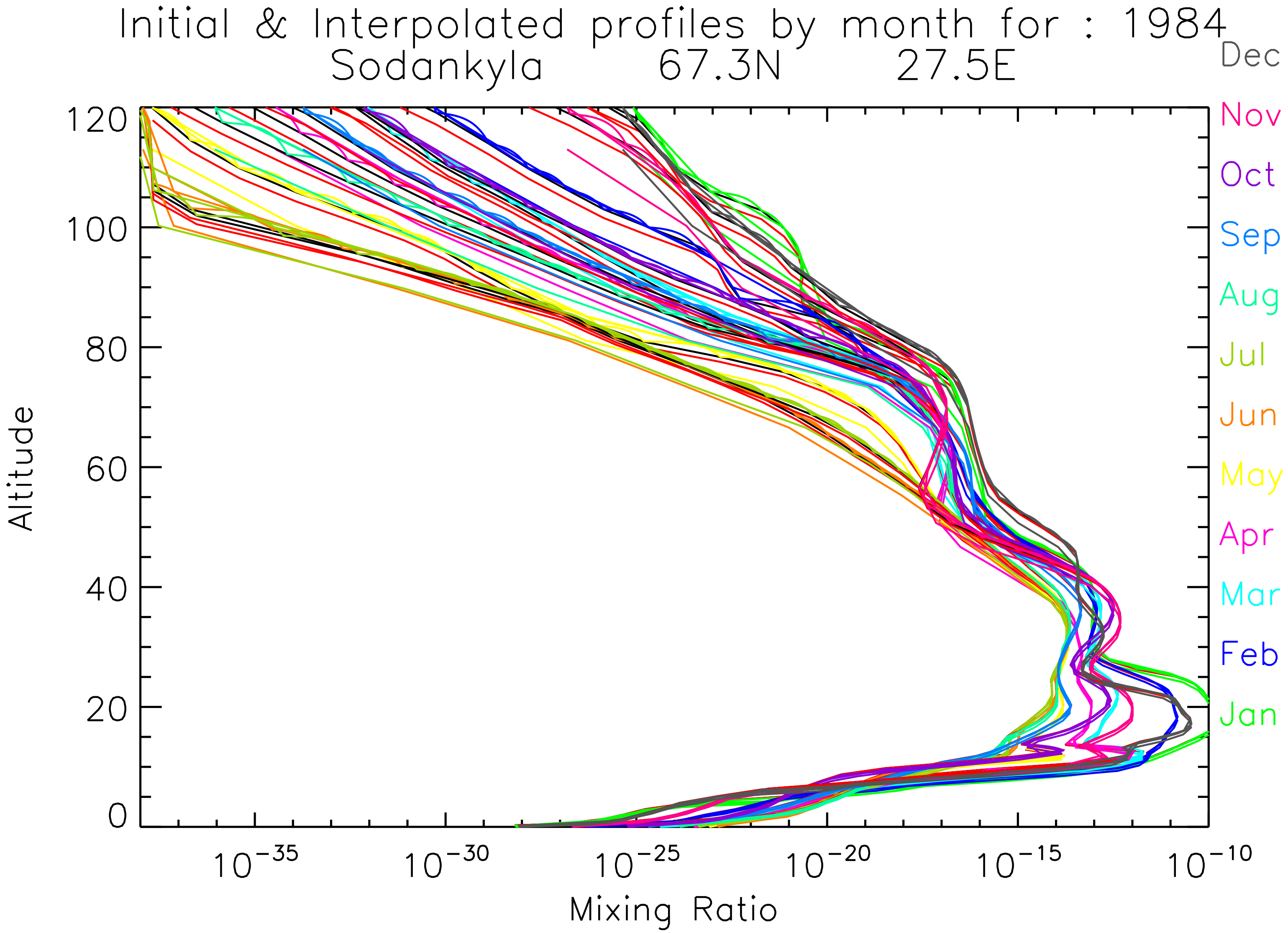


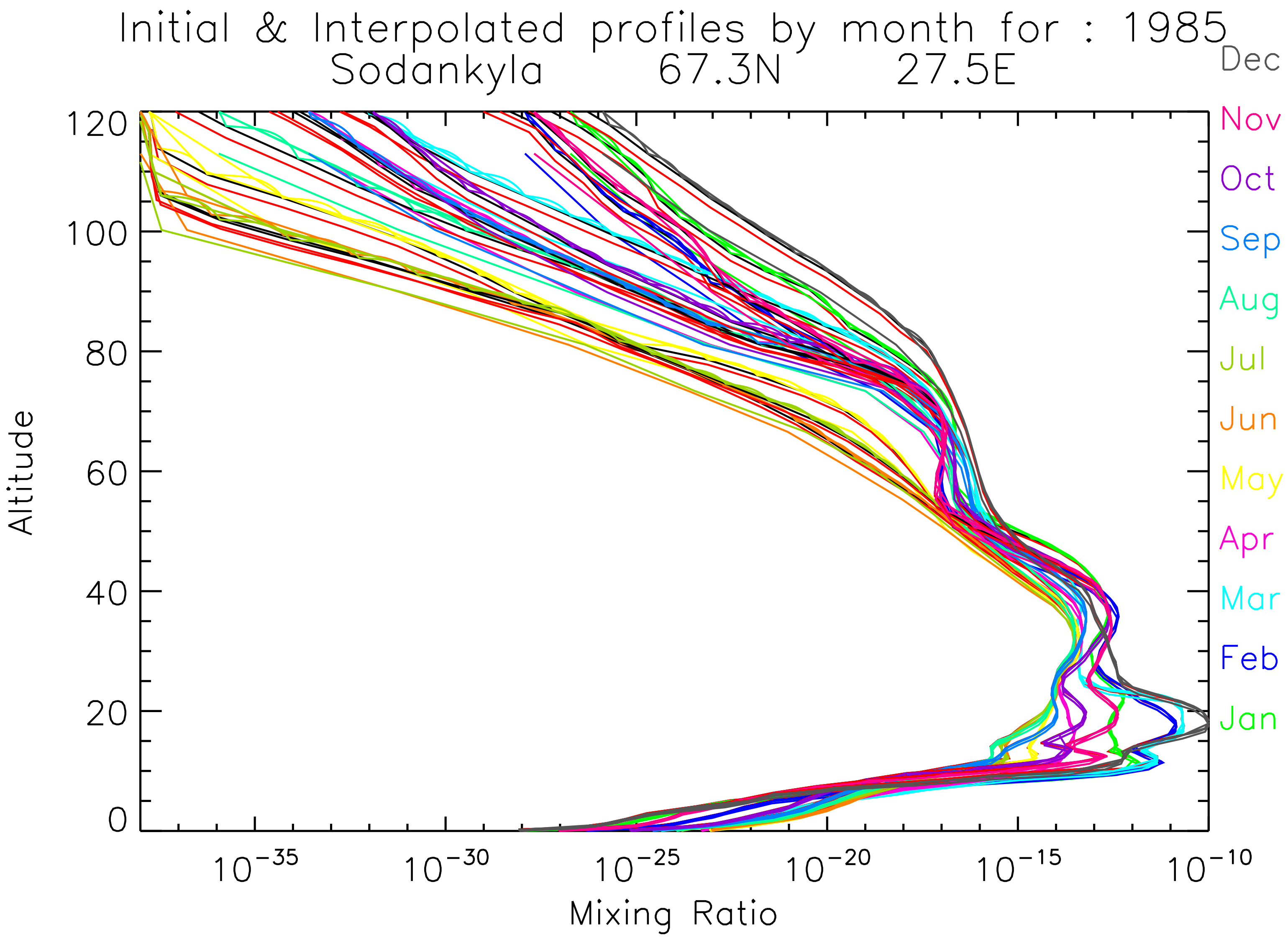


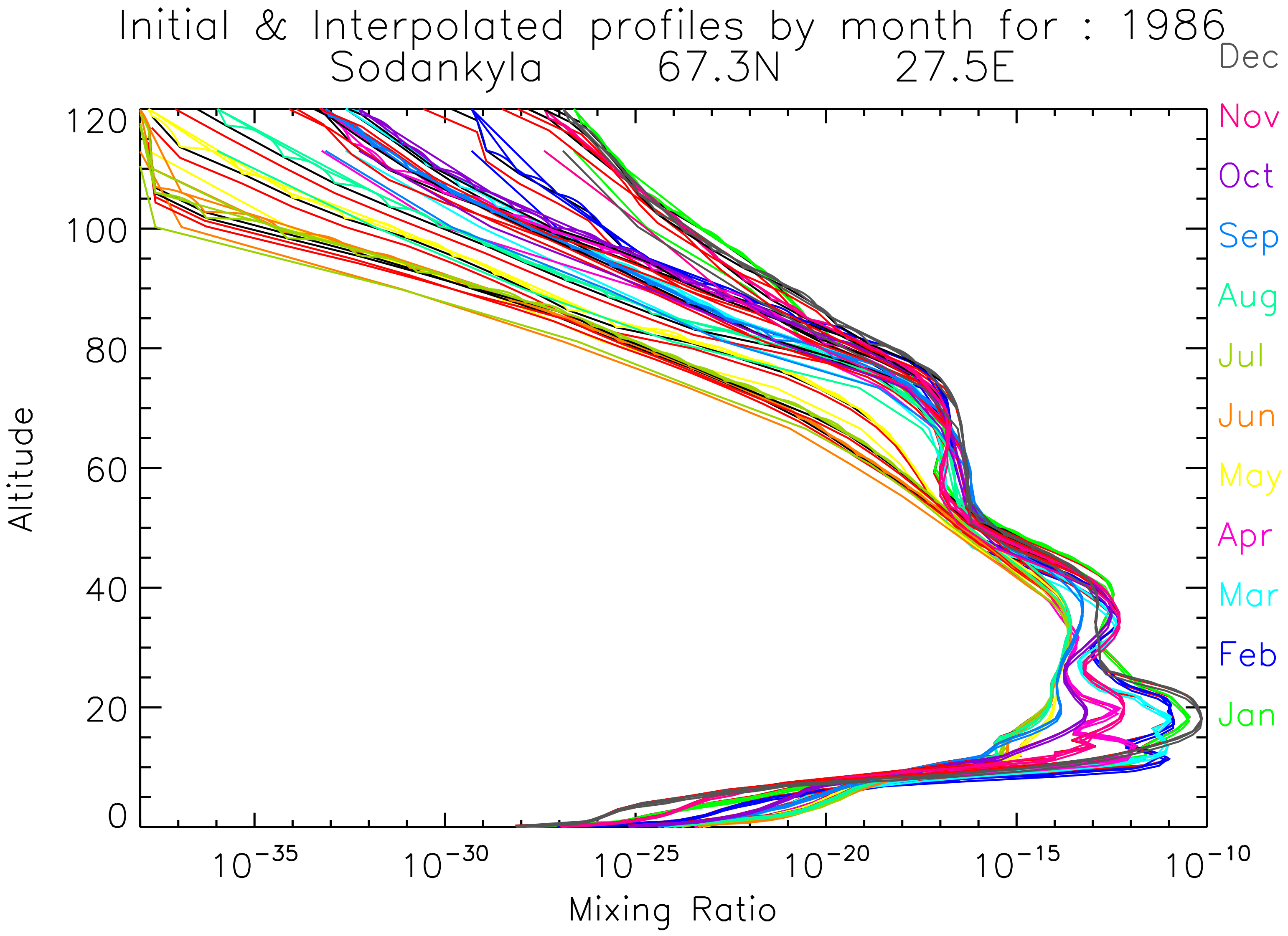
Initial & Interpolated profiles by month for : 1982
Sodankyla 67.3N 27.5E

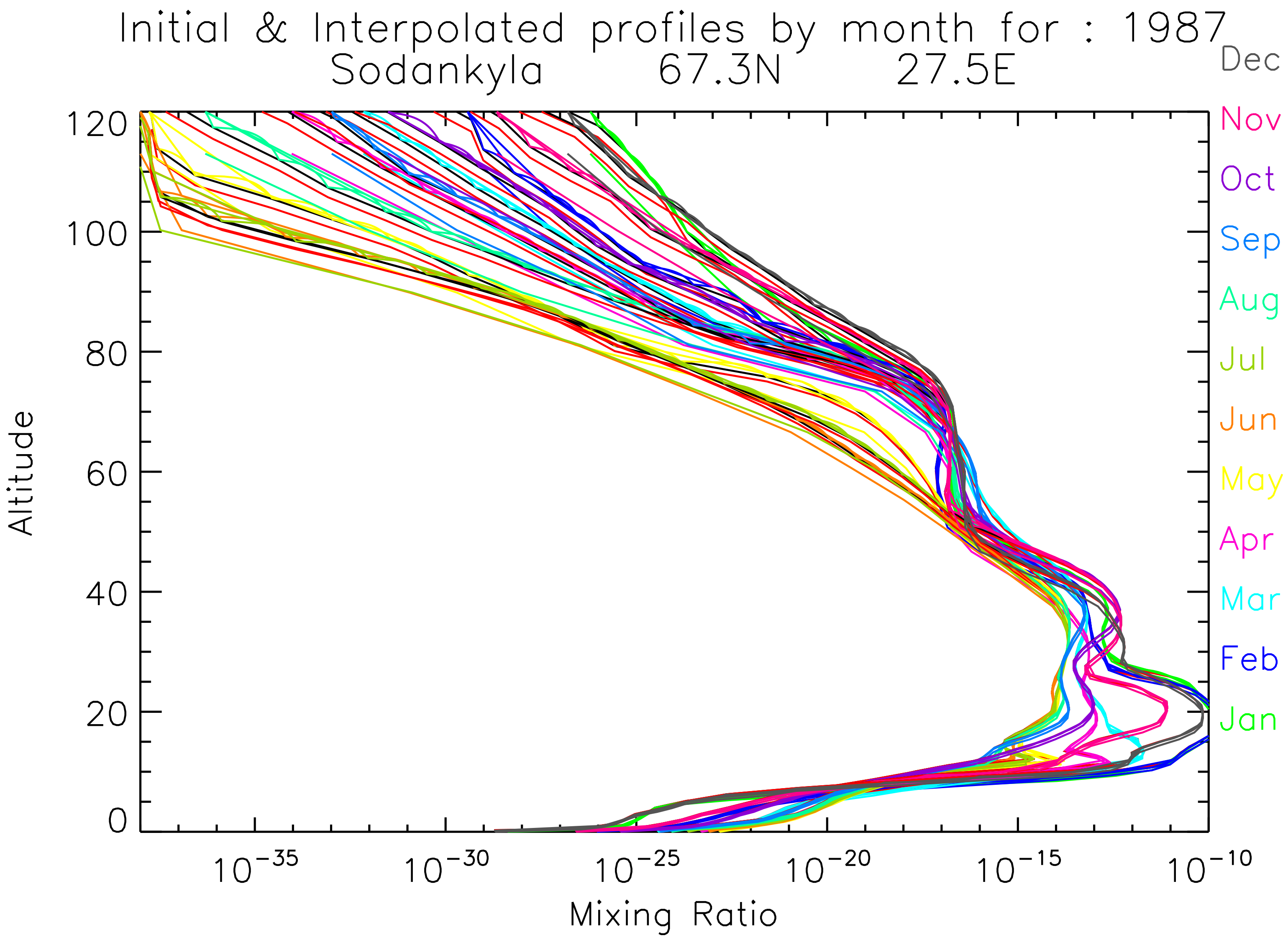
Initial & Interpolated profiles by month for : 1983
Sodankyla 67.3N 27.5E

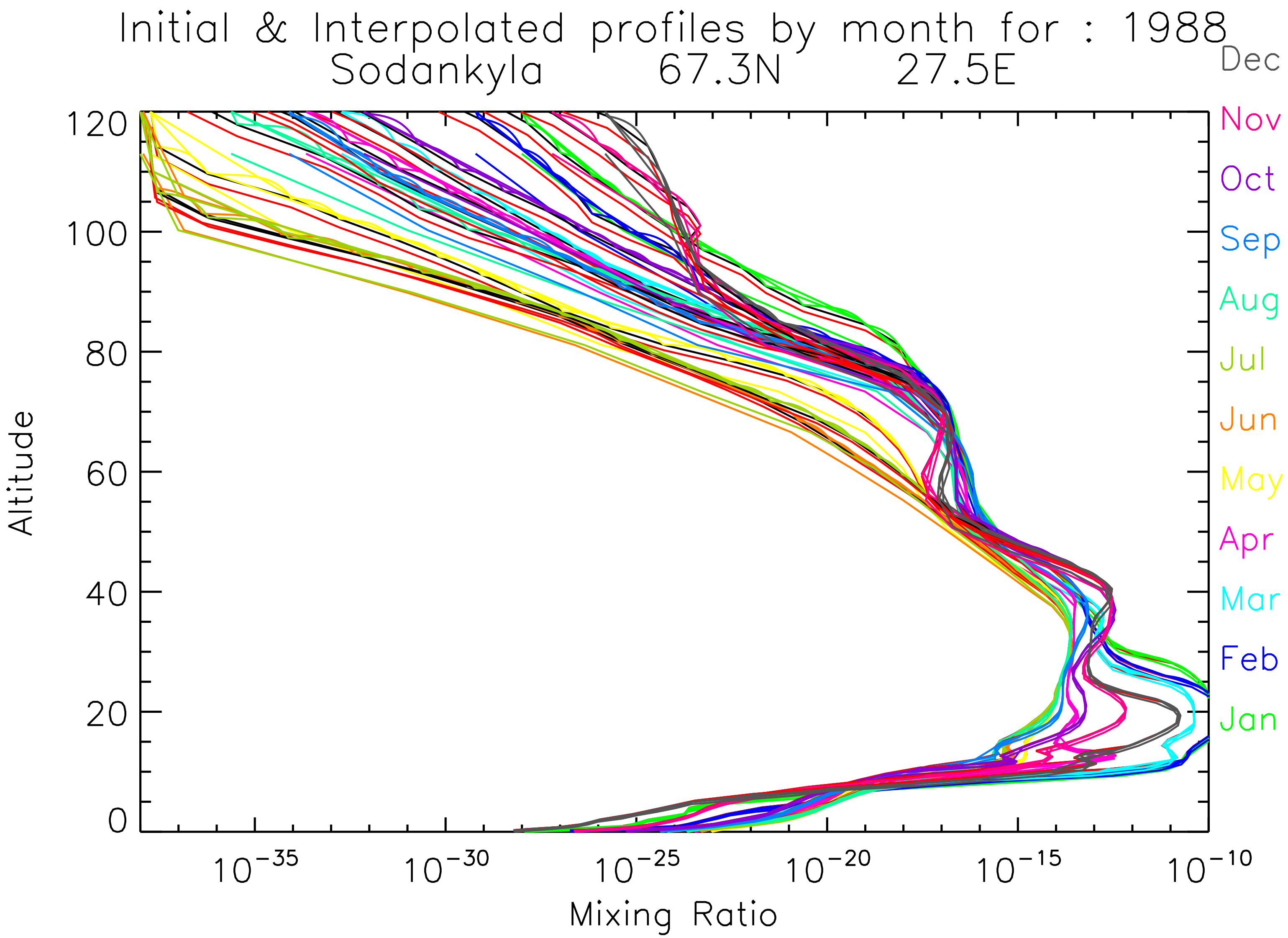



Initial & Interpolated profiles by month for : 1984
Sodankyla 67.3N 27.5E
Altitude
0
20
40
60
80
100
120
Mixing Ratio
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

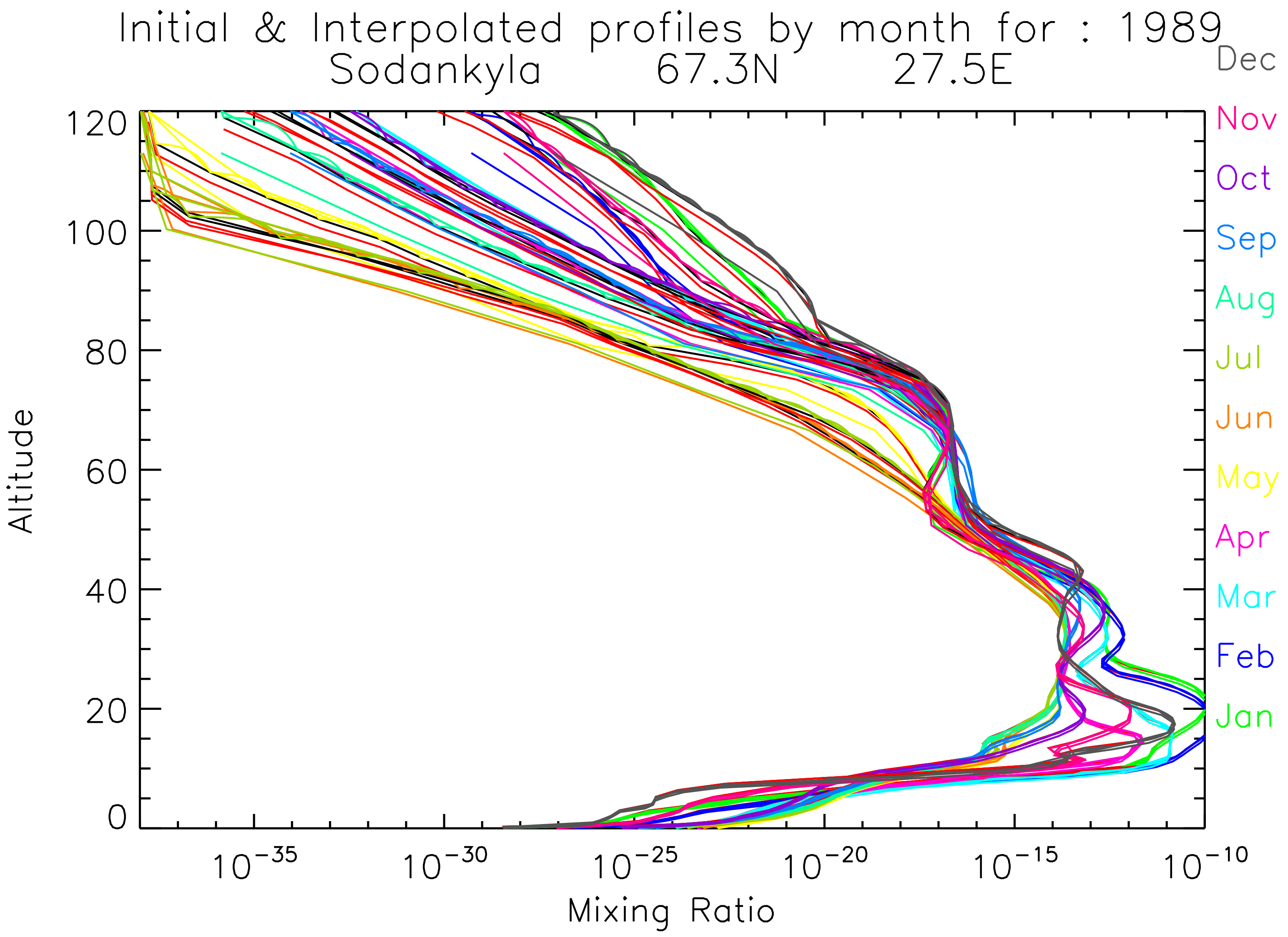

Initial & Interpolated profiles by month for : 1985
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1986
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

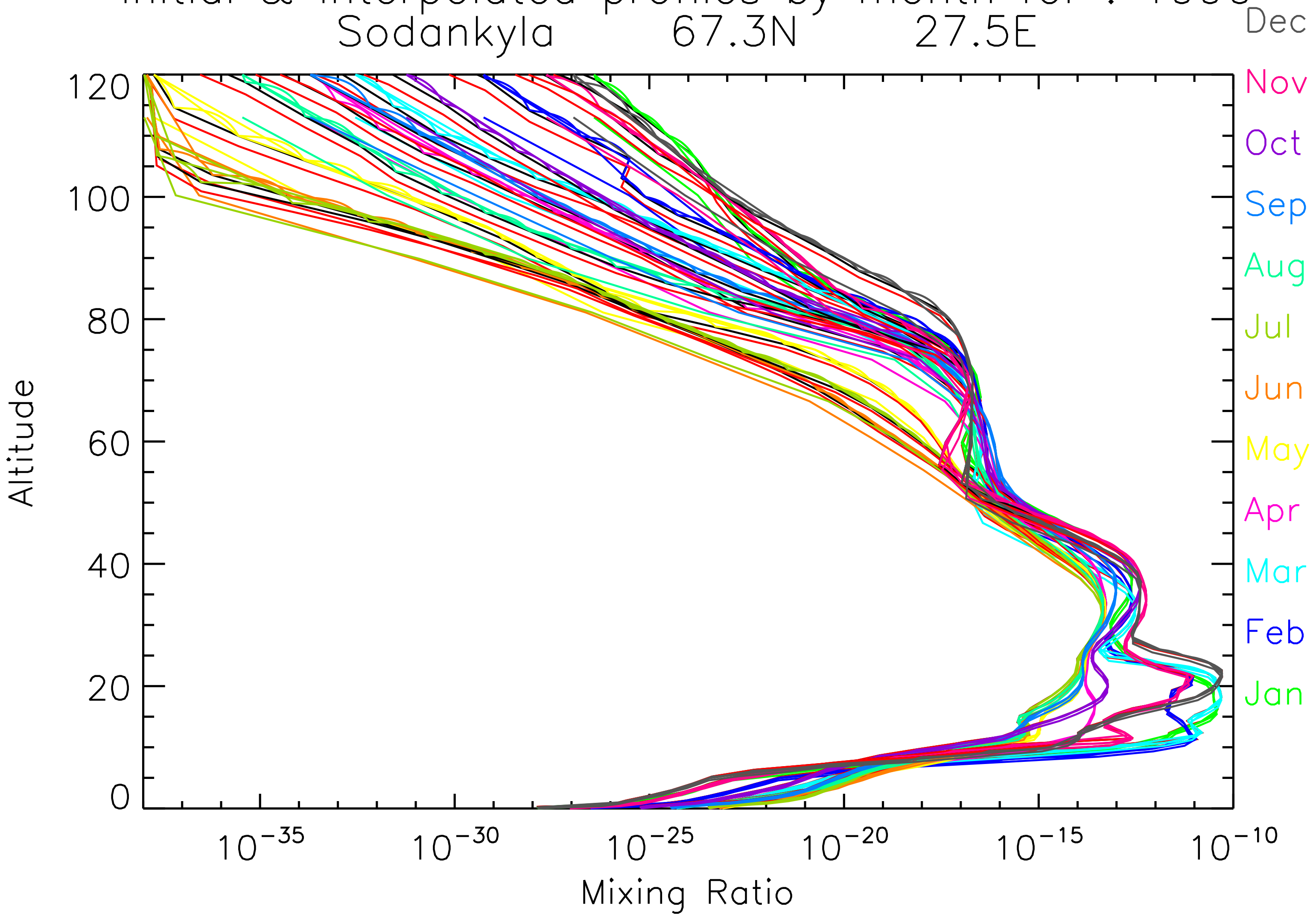

Initial & Interpolated profiles by month for : 1987
Sodankyla 67.3N 27.5E
Altitude
0
20
40
60
80
100
120
Mixing Ratio
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

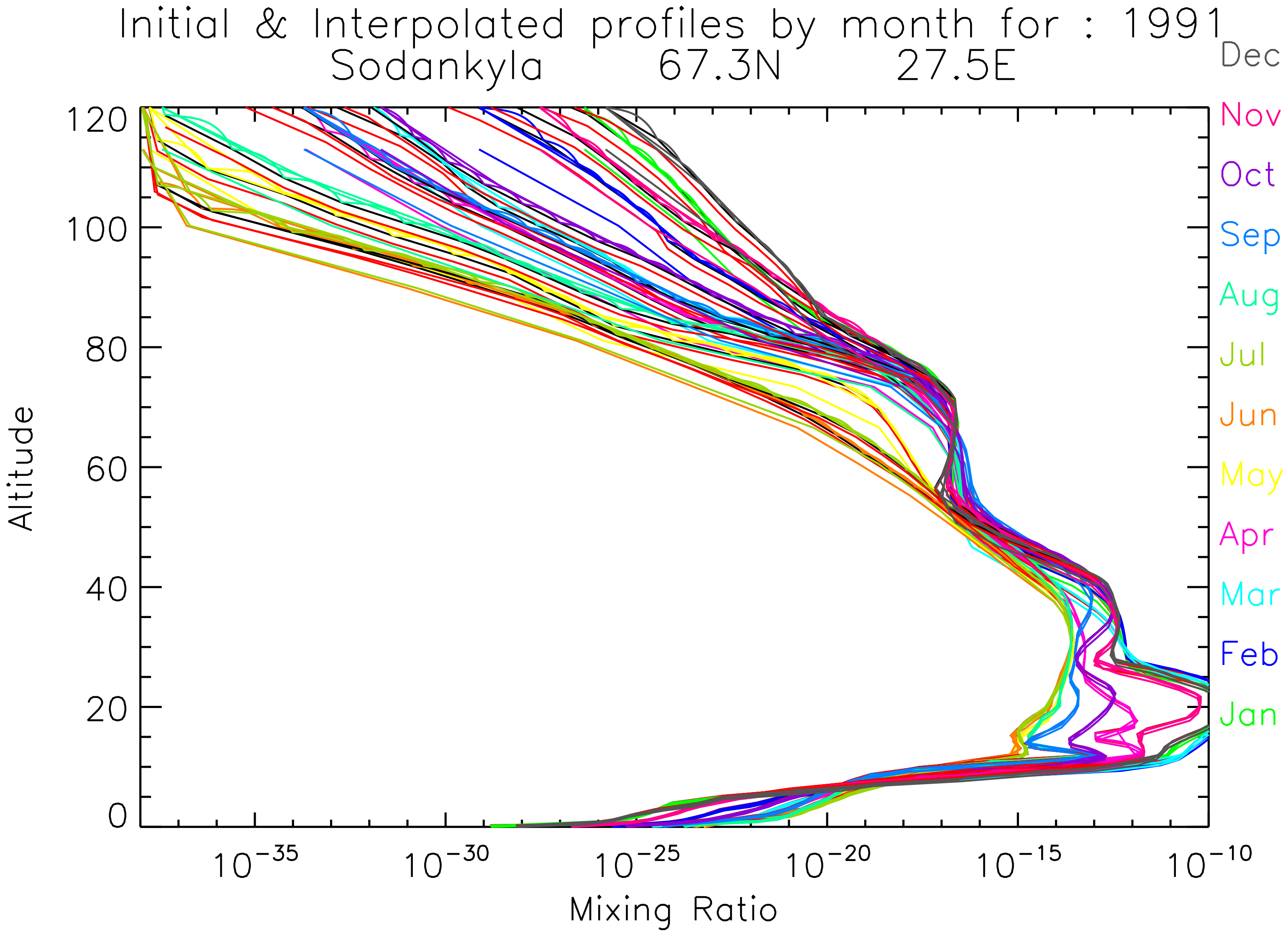


Initial & Interpolated profiles by month for : 1988
Sodankyla 67.3N 27.5E

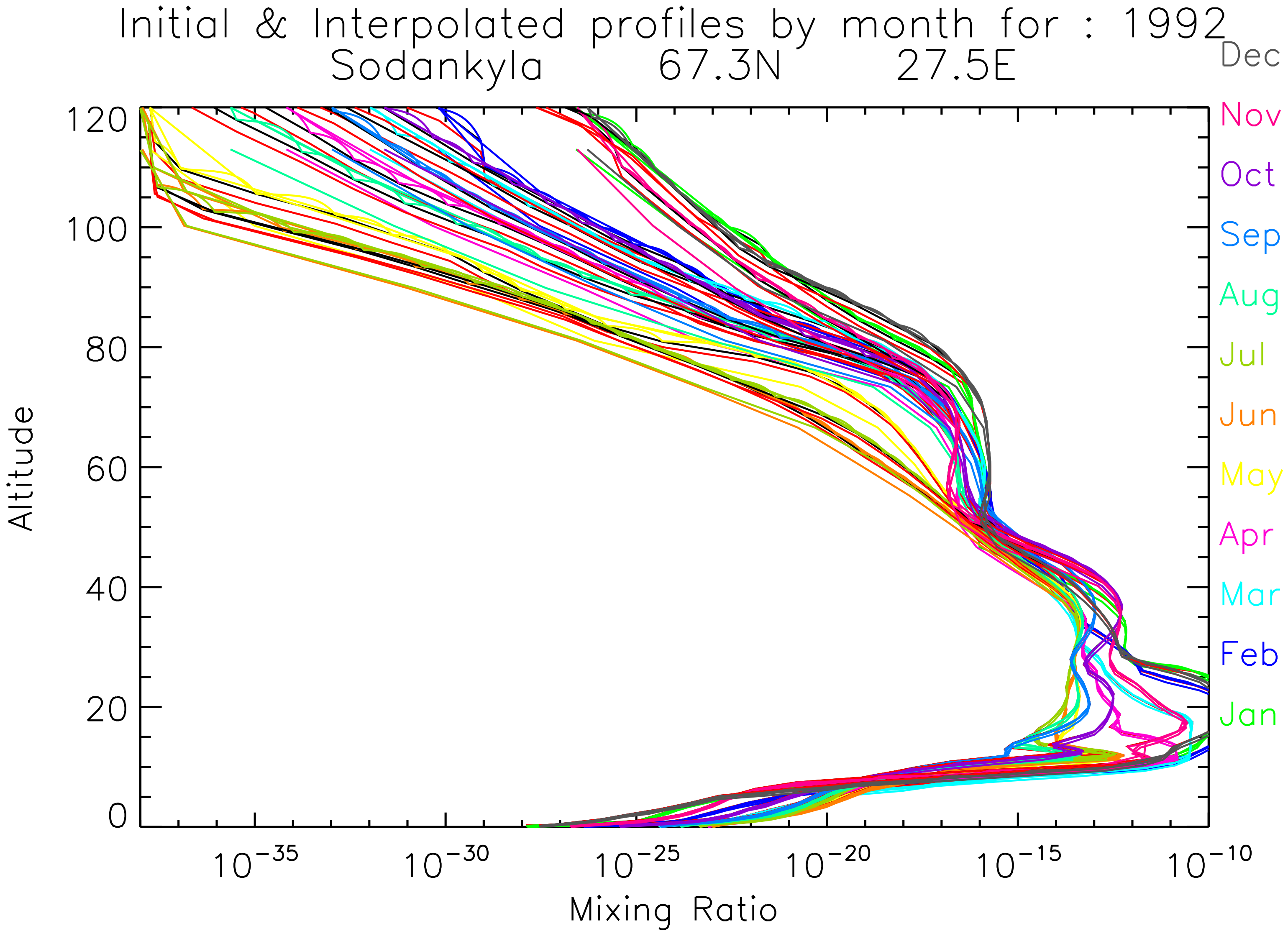

Initial & Interpolated profiles by month for : 1989
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

Initial & Interpolated profiles by month for : 1990
Sodankyla 67.3N 27.5E



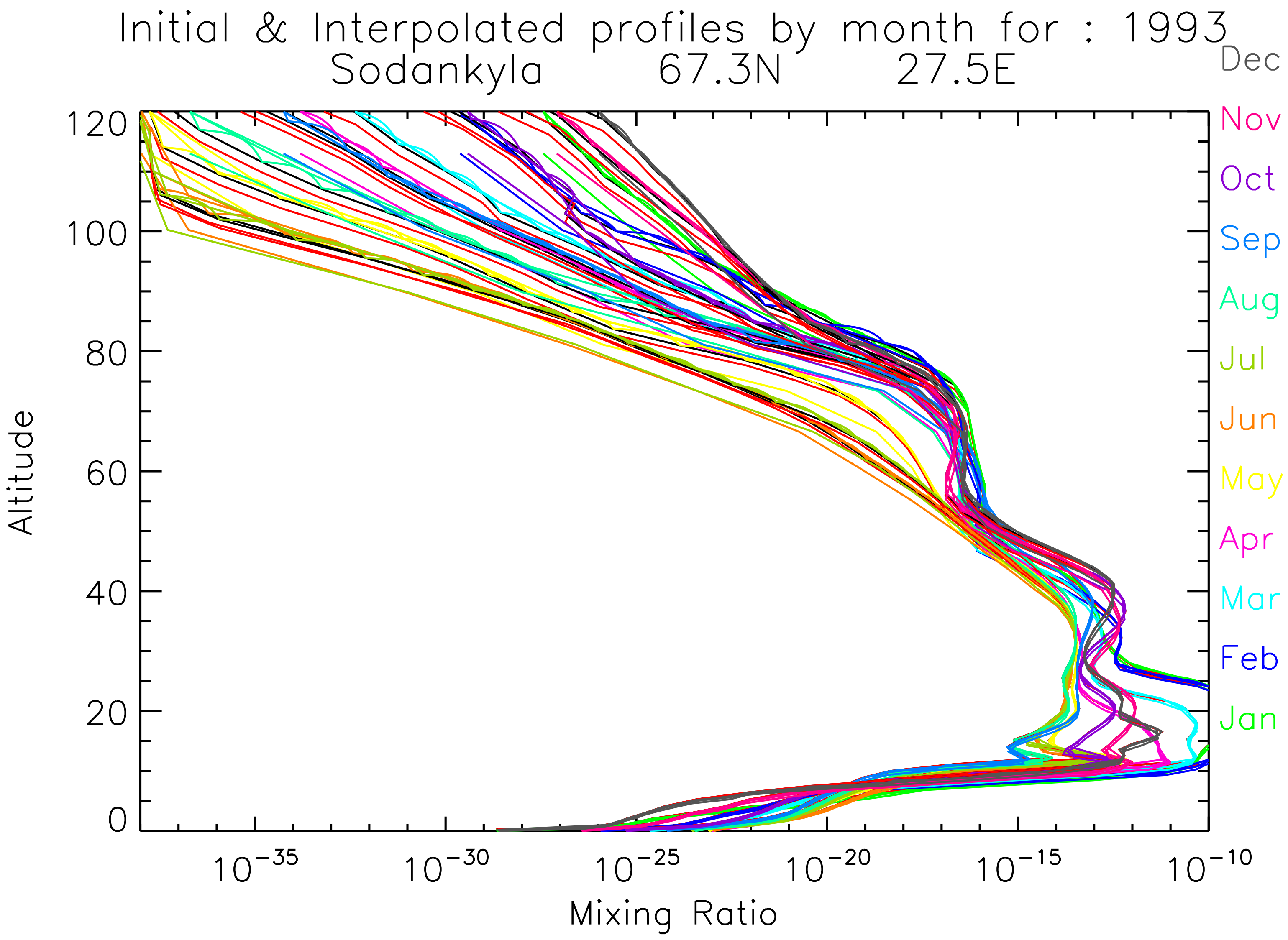


Initial & Interpolated profiles by month for : 1991
Sodankyla 67.3N 27.5E



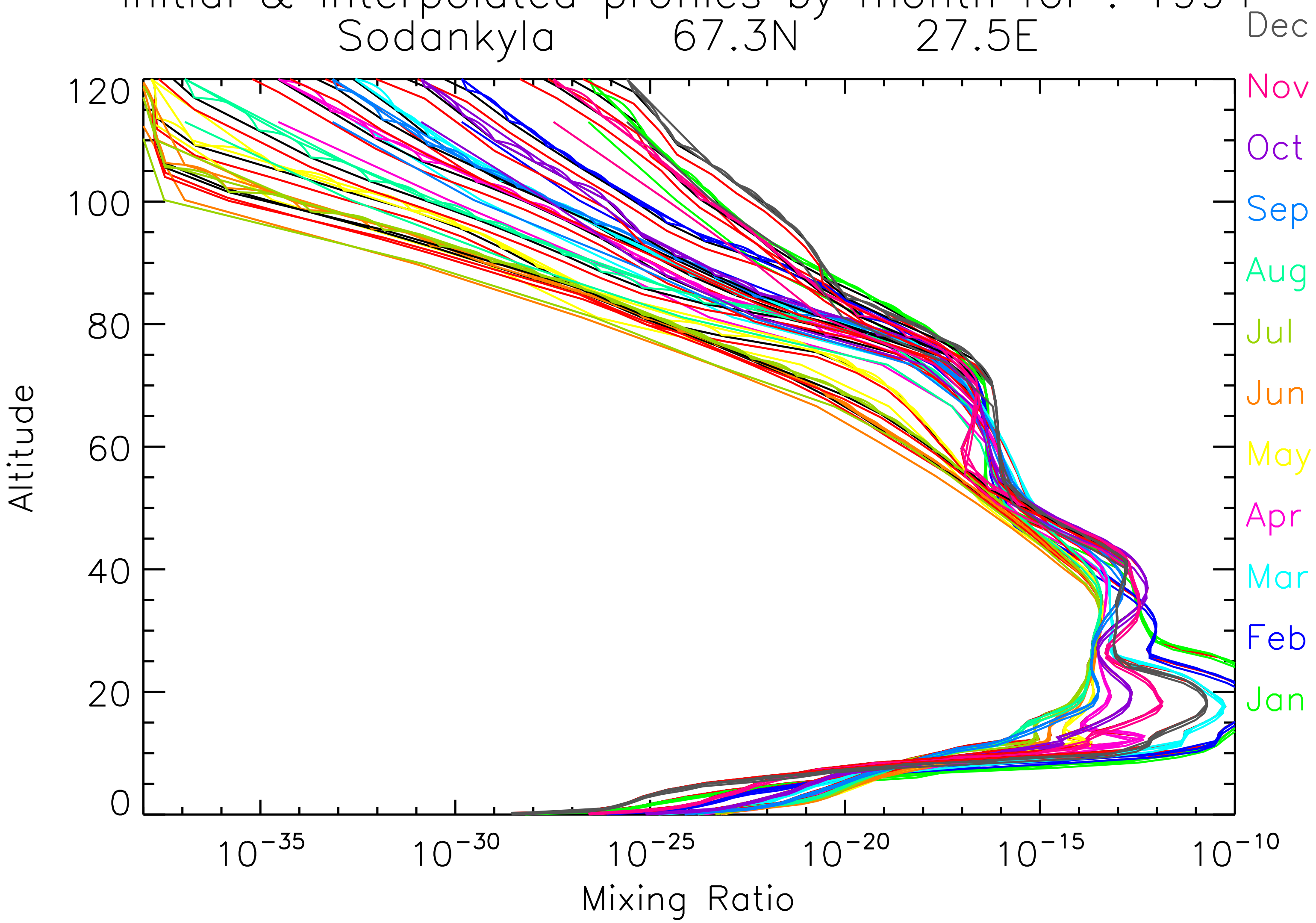
Initial & Interpolated profiles by month for : 1992

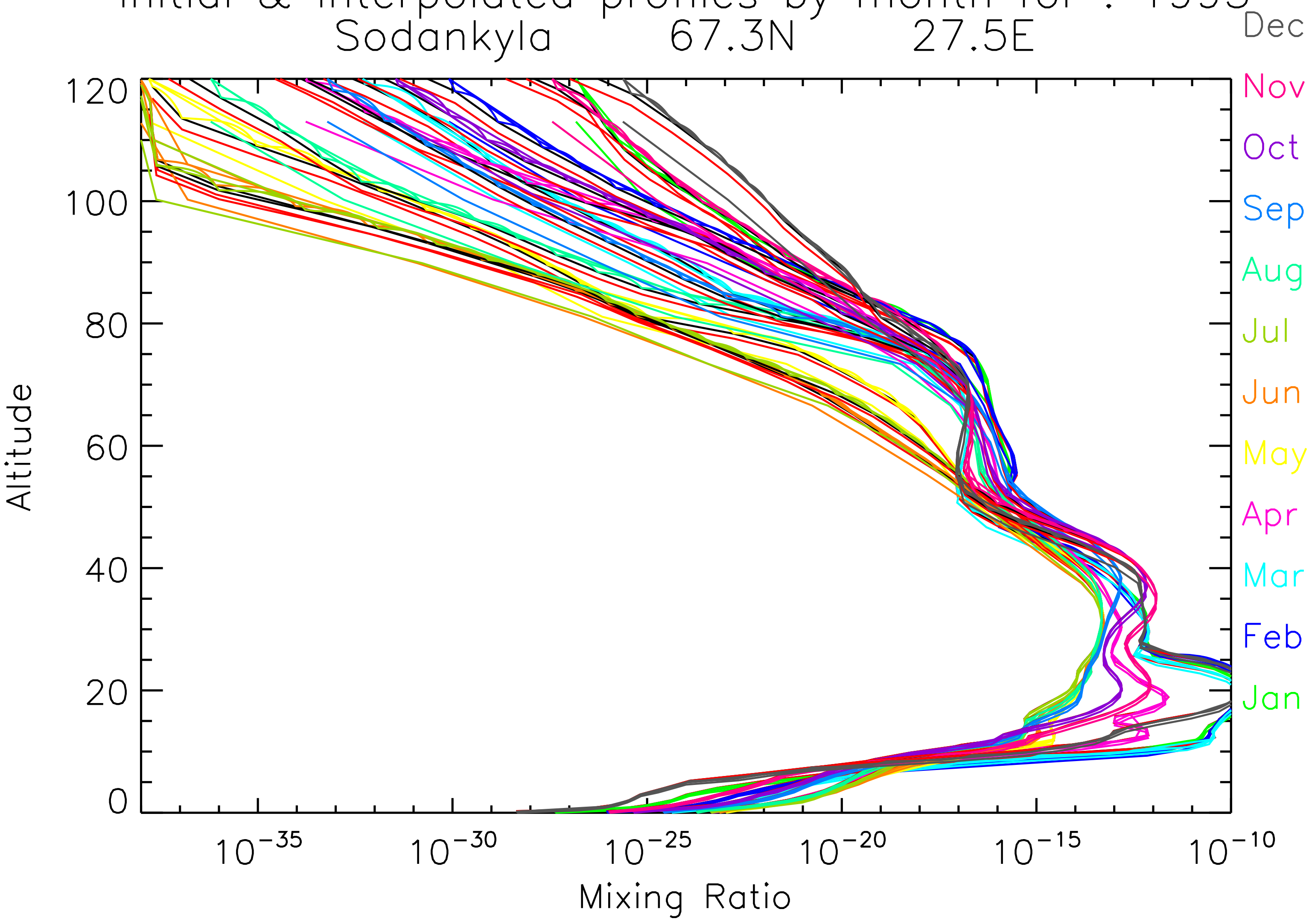
Sodankyla 67.3N 27.5E

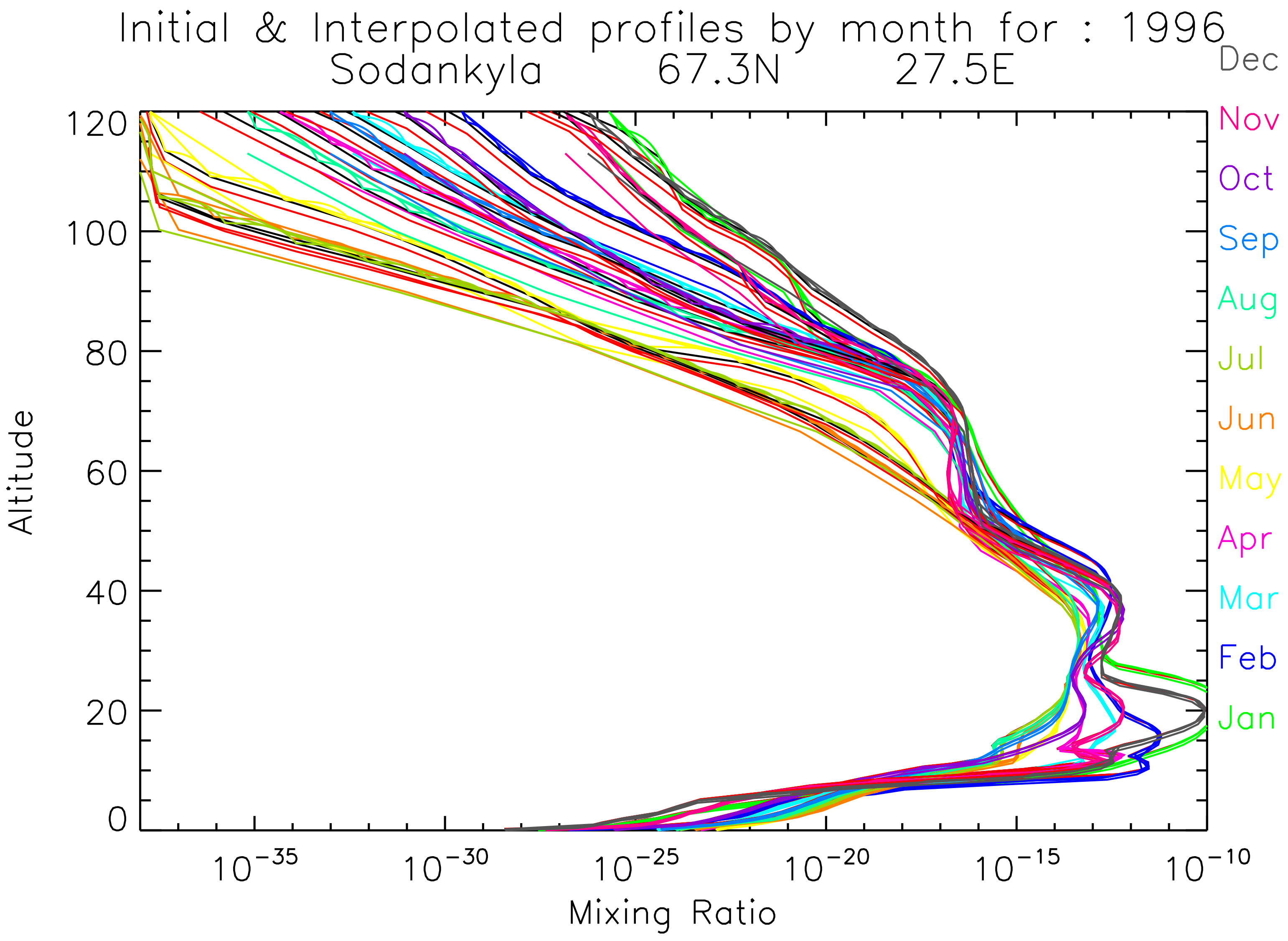


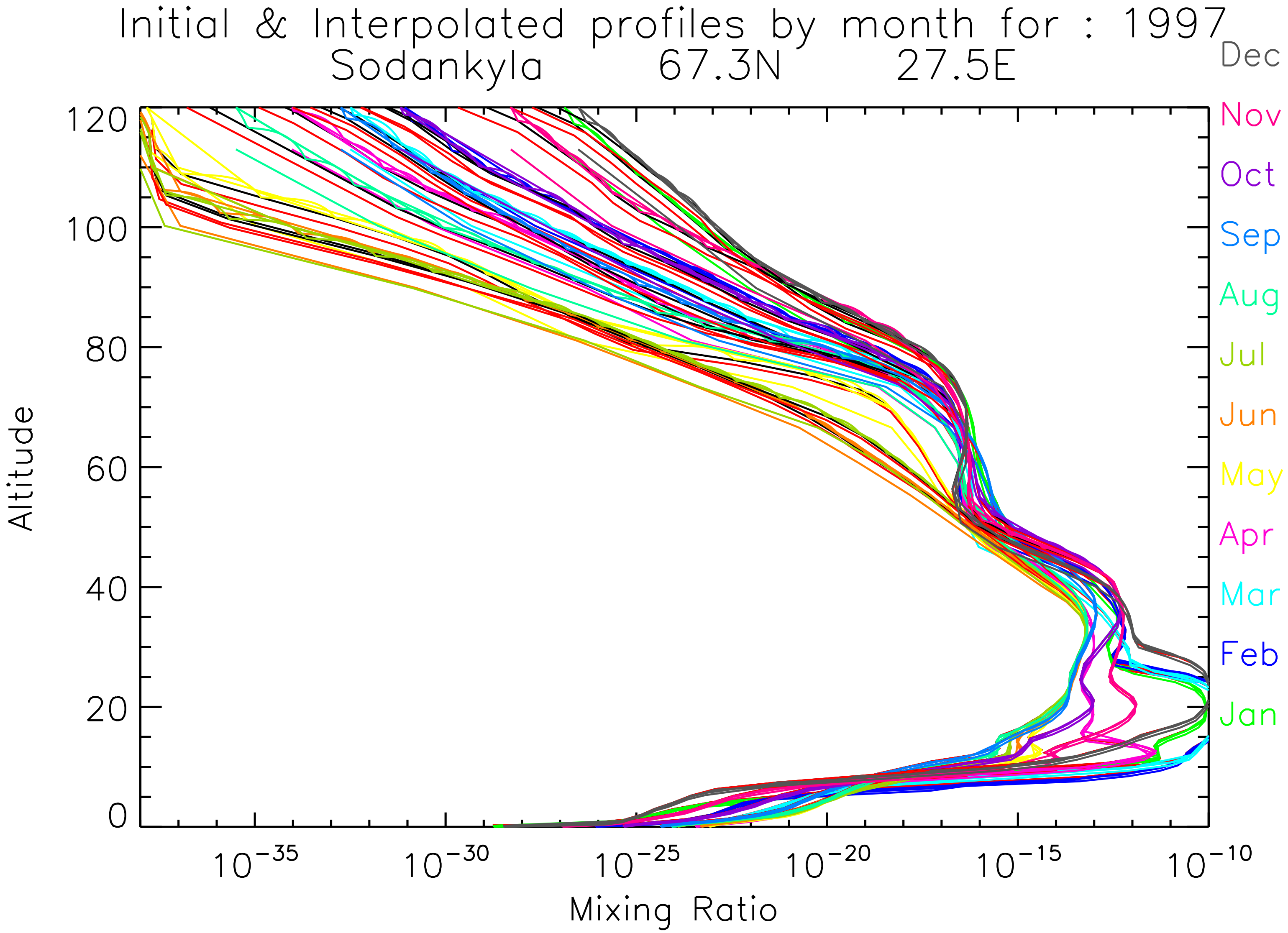
Initial & Interpolated profiles by month for : 1993
Sodankyla 67.3N 27.5E

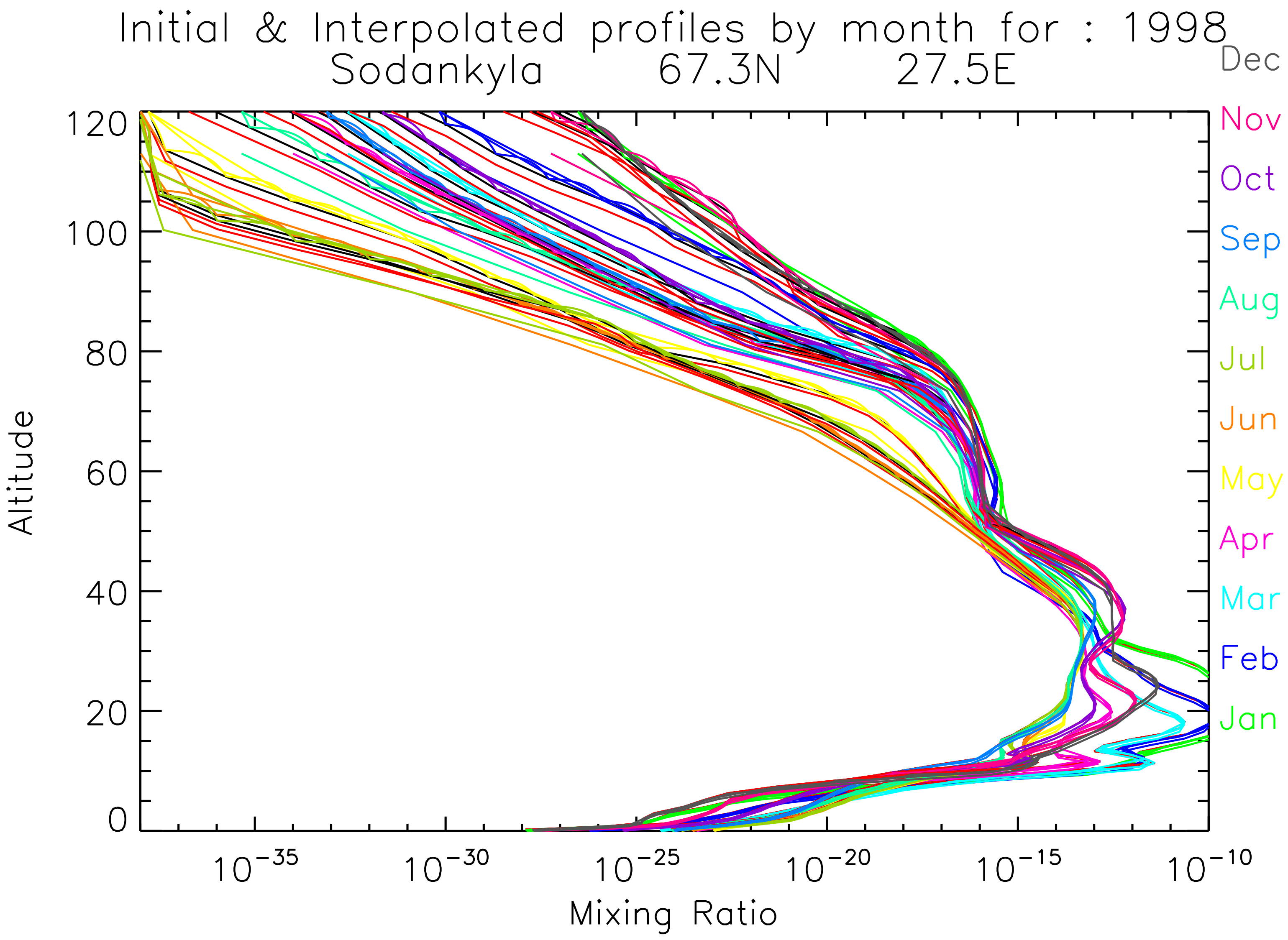
Initial & Interpolated profiles by month for : 1994
Sodankyla 67.3N 27.5E

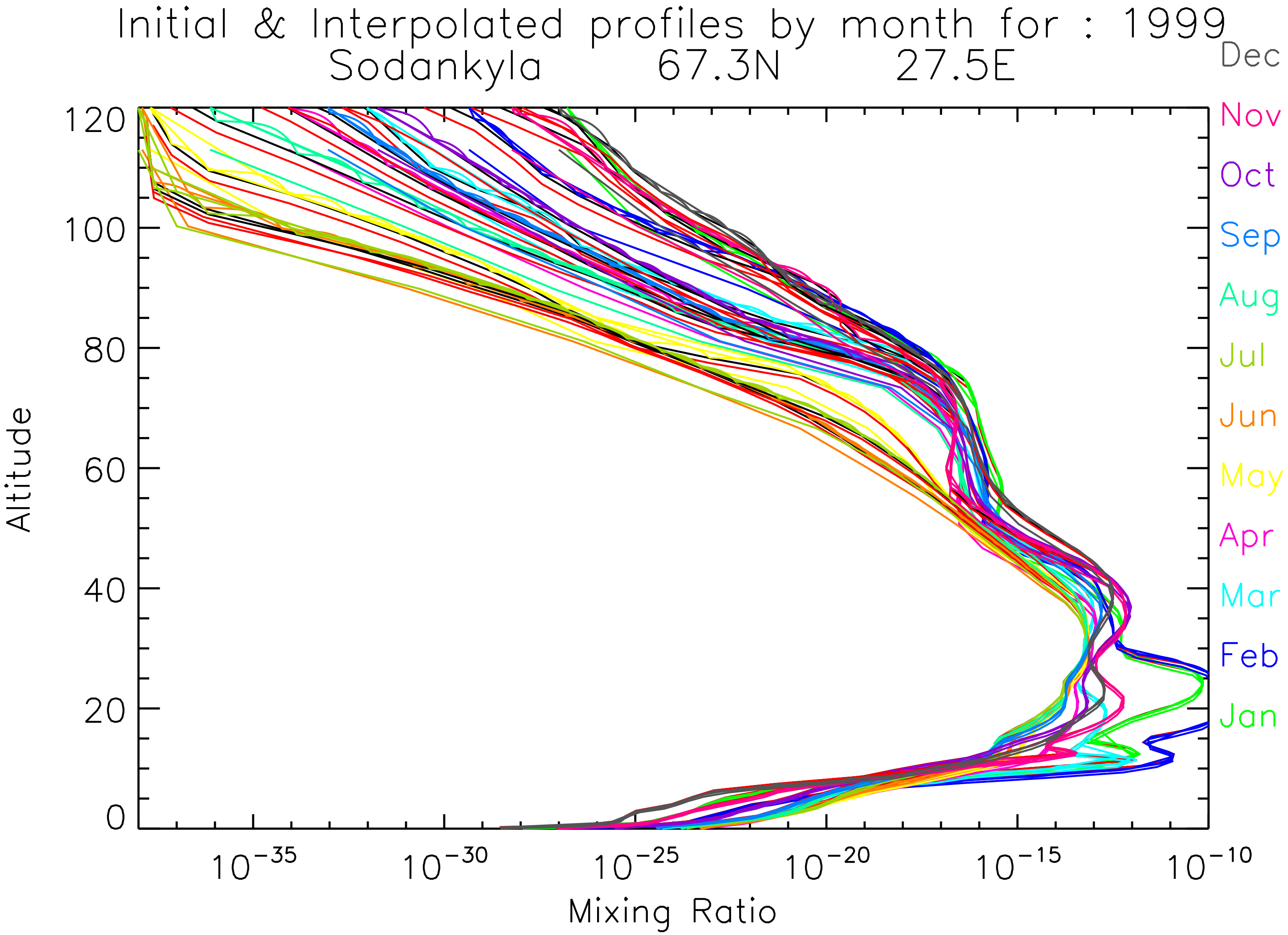



Initial & Interpolated profiles by month for : 1995
Sodankyla 67.3N 27.5E

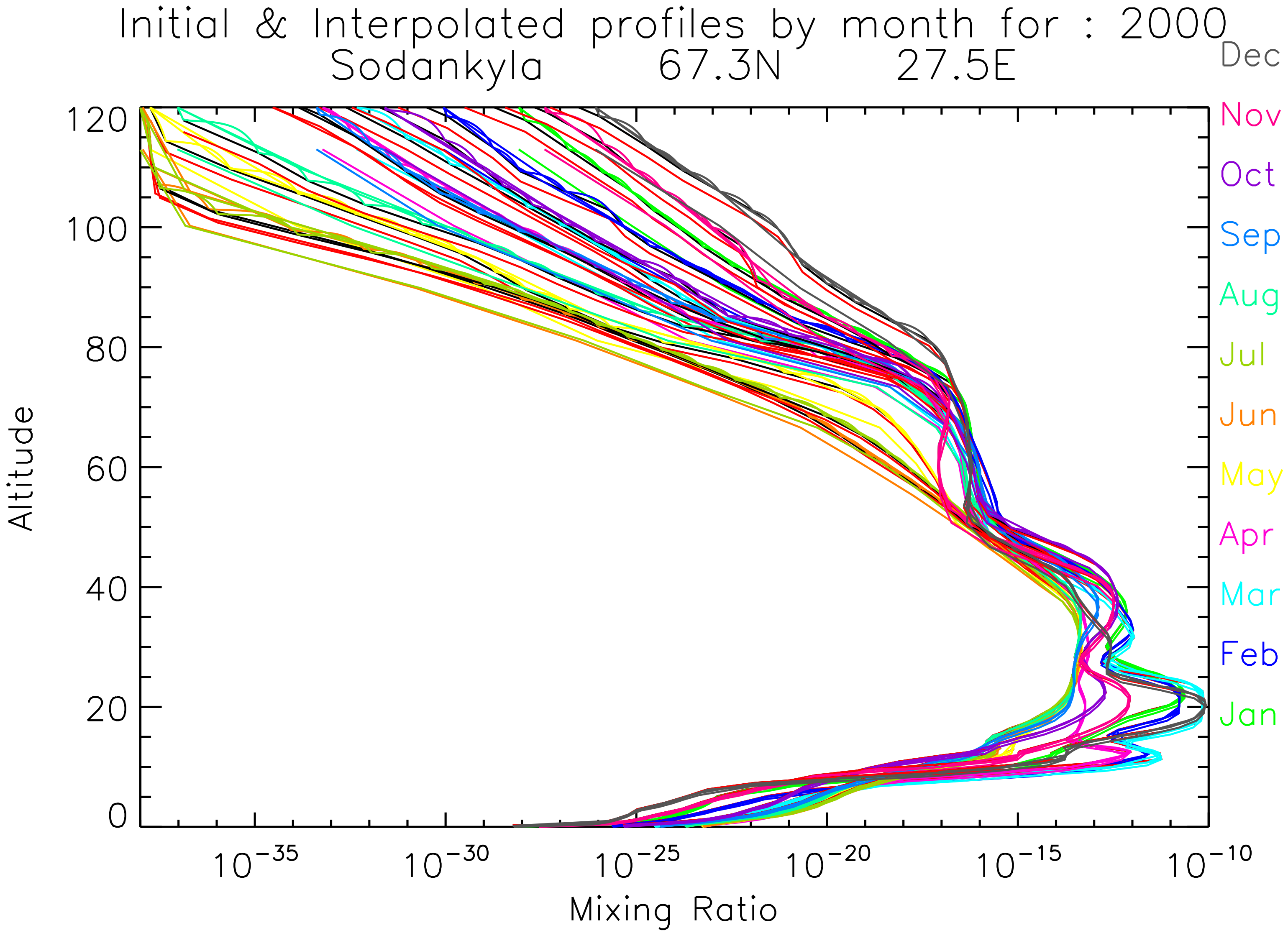

Initial & Interpolated profiles by month for : 1996
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1997
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
0
20
40
60
80
100
120
Mixing Ratio
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}

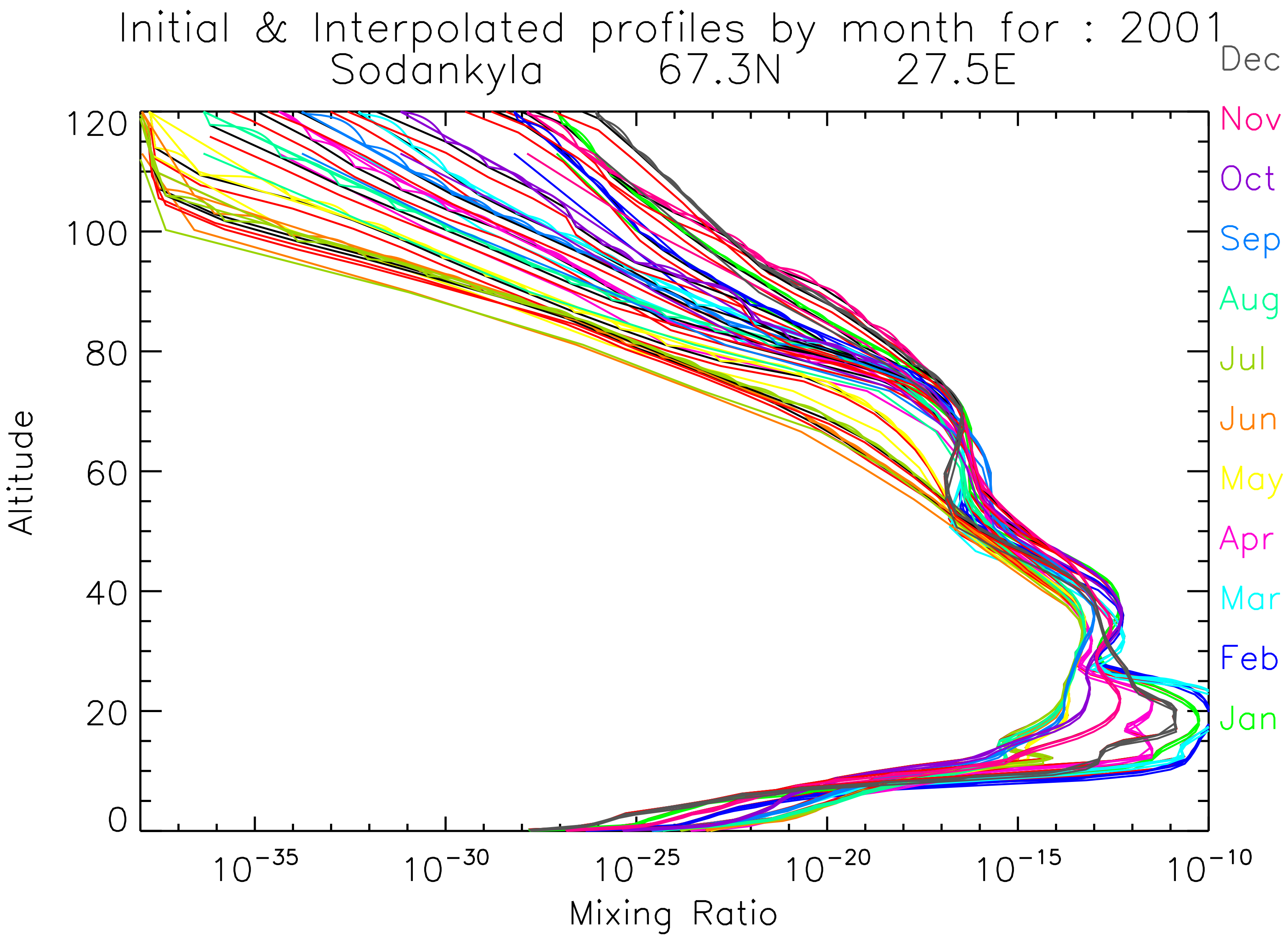

Initial & Interpolated profiles by month for : 1998
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio



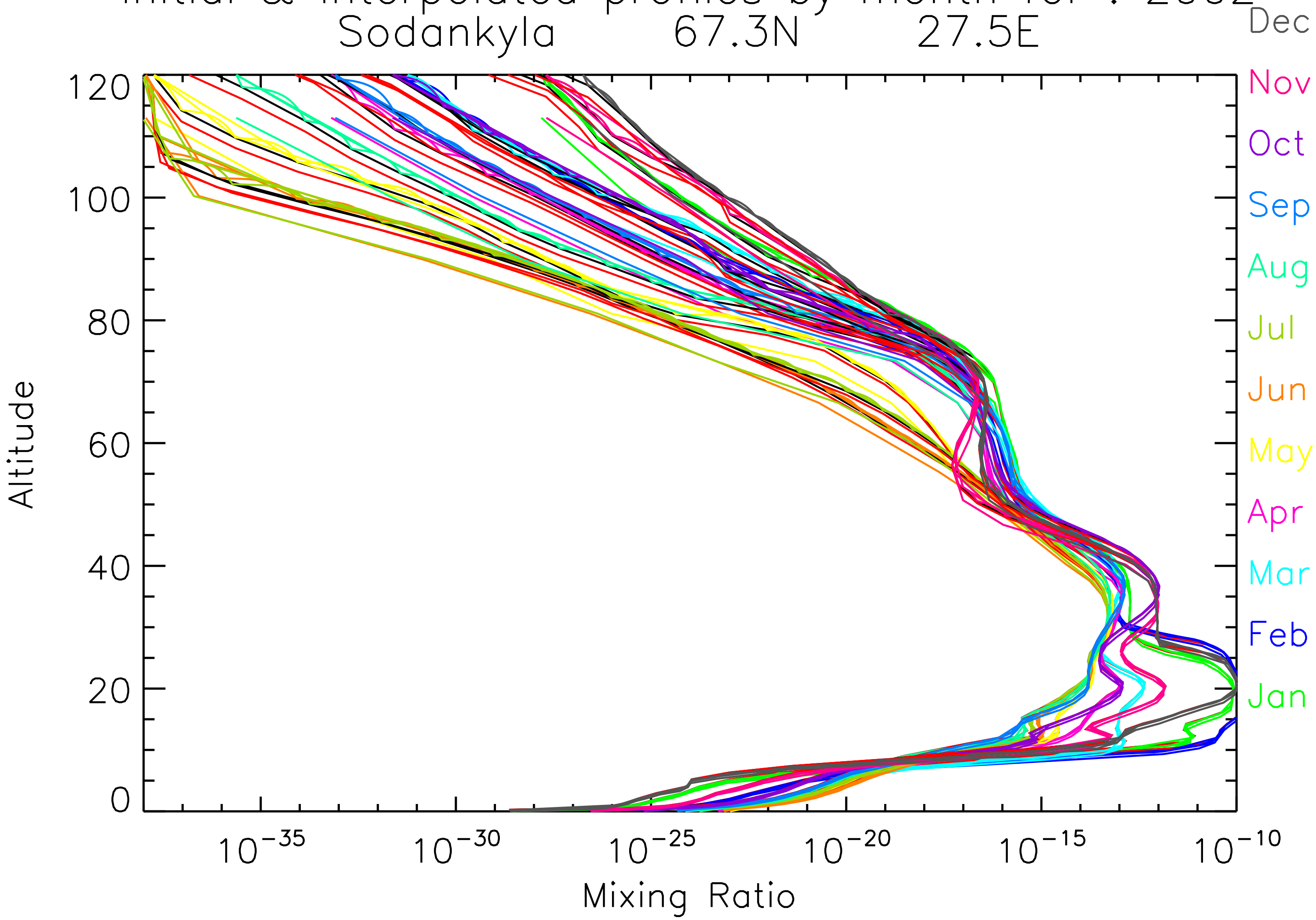
Initial & Interpolated profiles by month for : 1999
Sodankyla 67.3N 27.5E

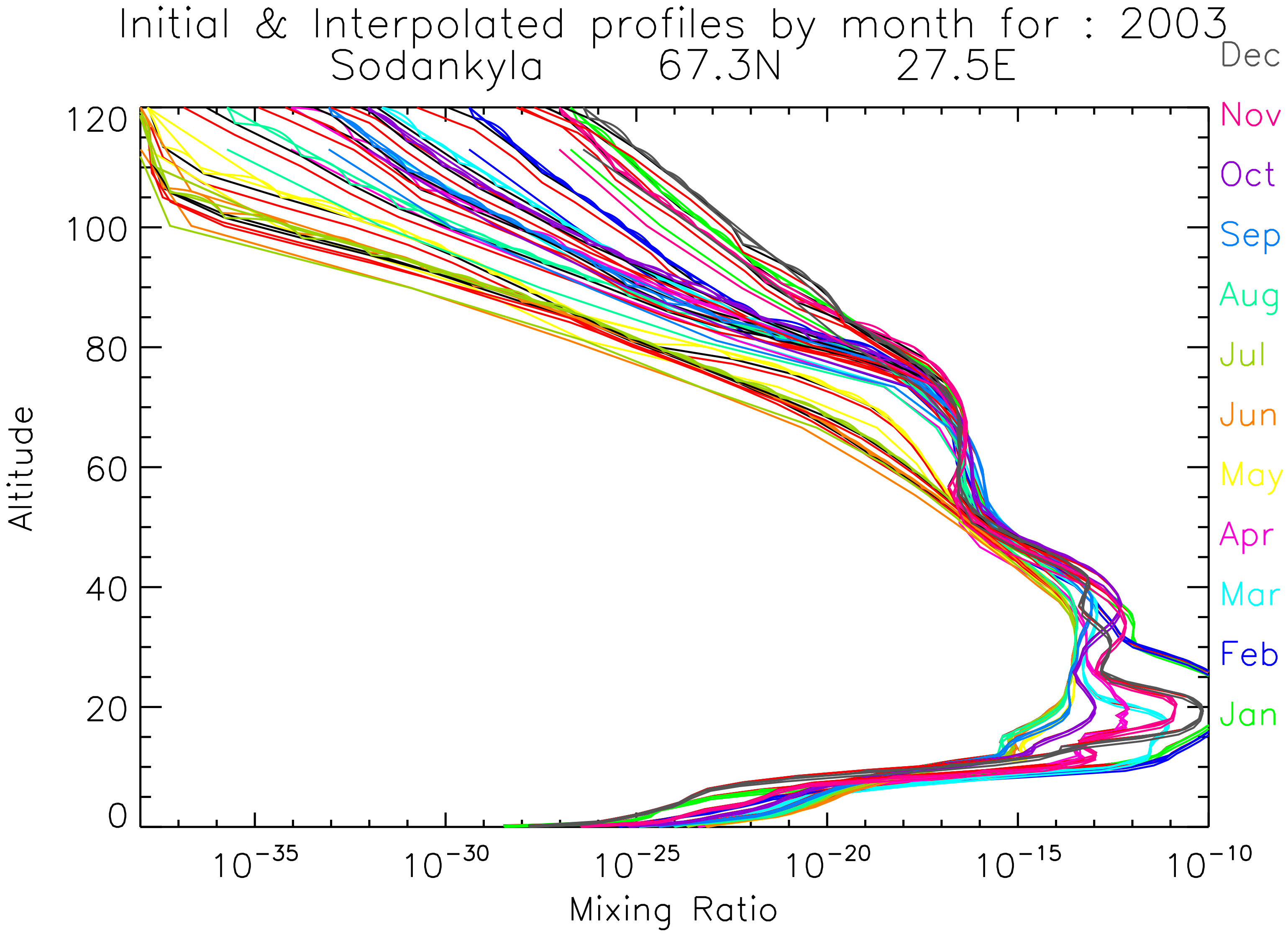


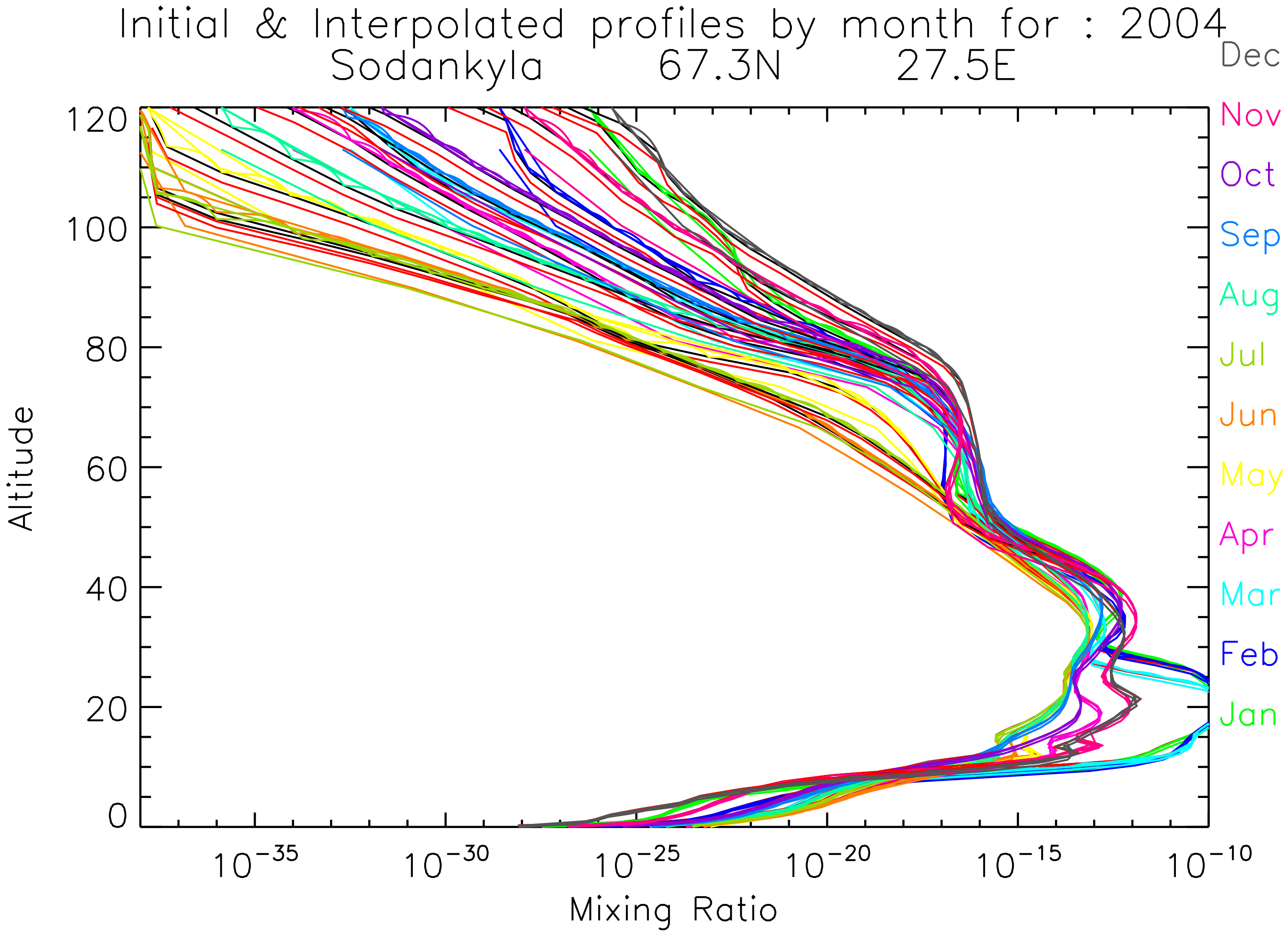
Initial & Interpolated profiles by month for : 2000
Sodankyla 67.3N 27.5E

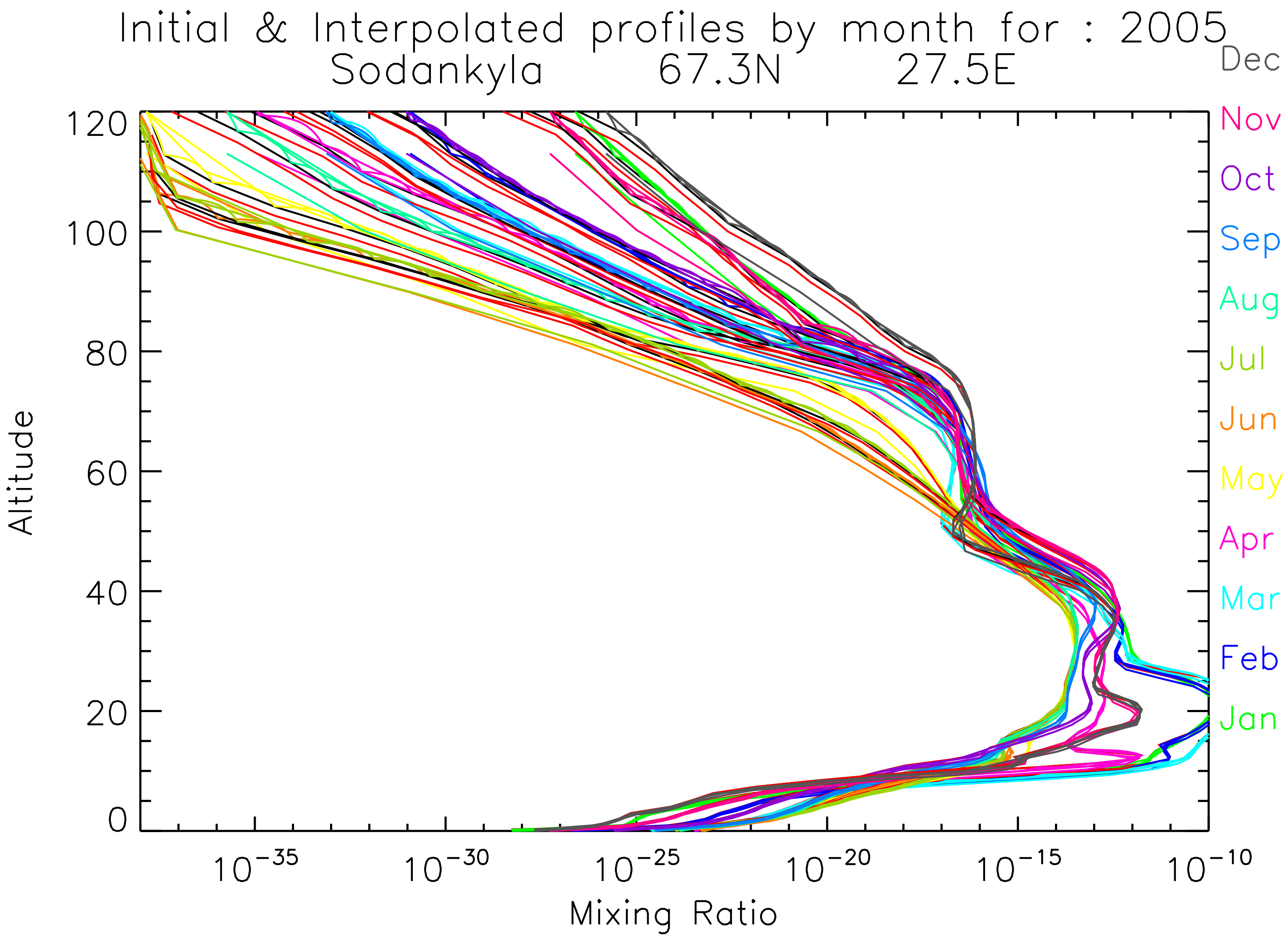
Initial & Interpolated profiles by month for : 2001
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

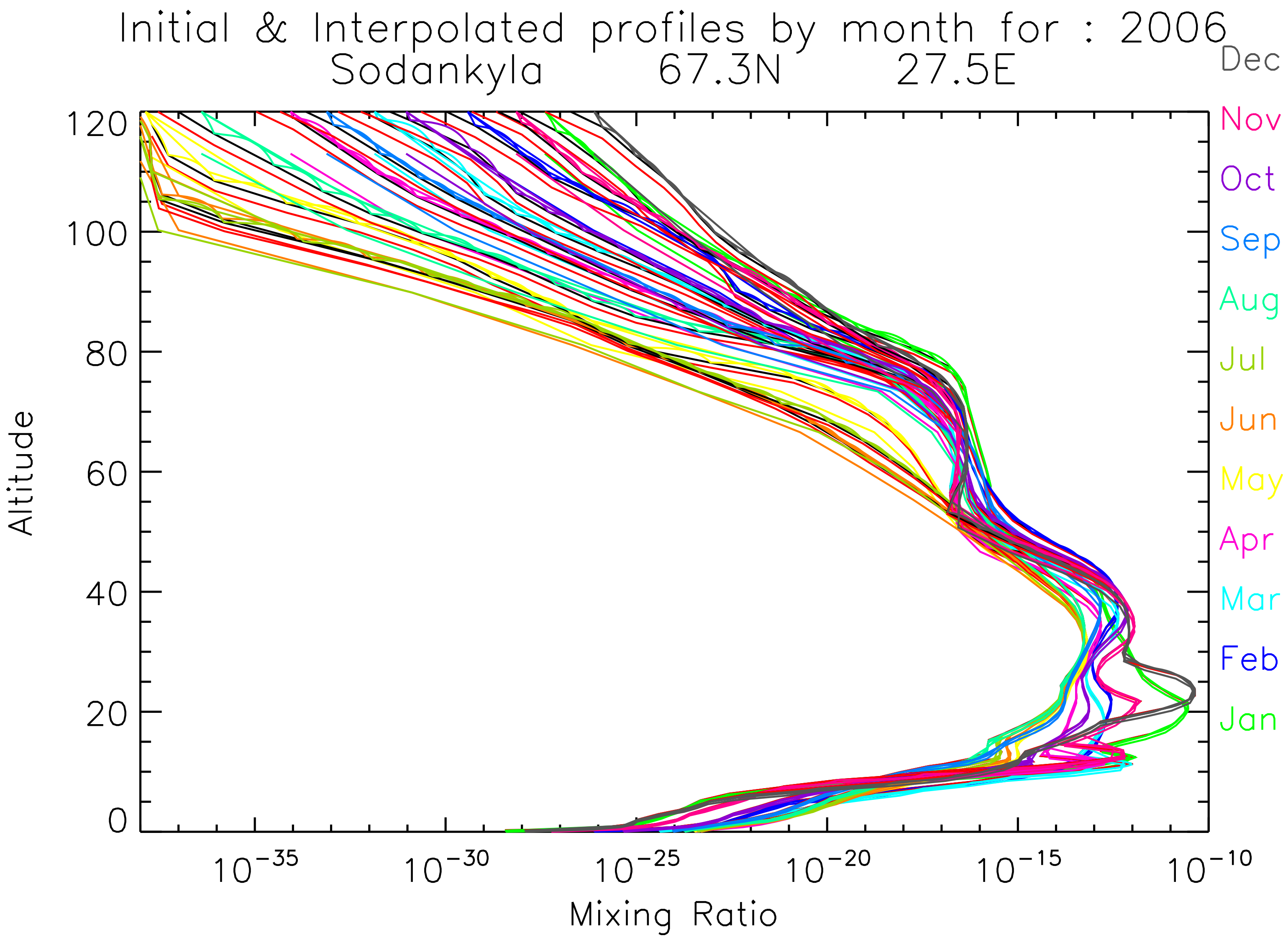
Initial & Interpolated profiles by month for : 2002
Sodankyla 67.3N 27.5E



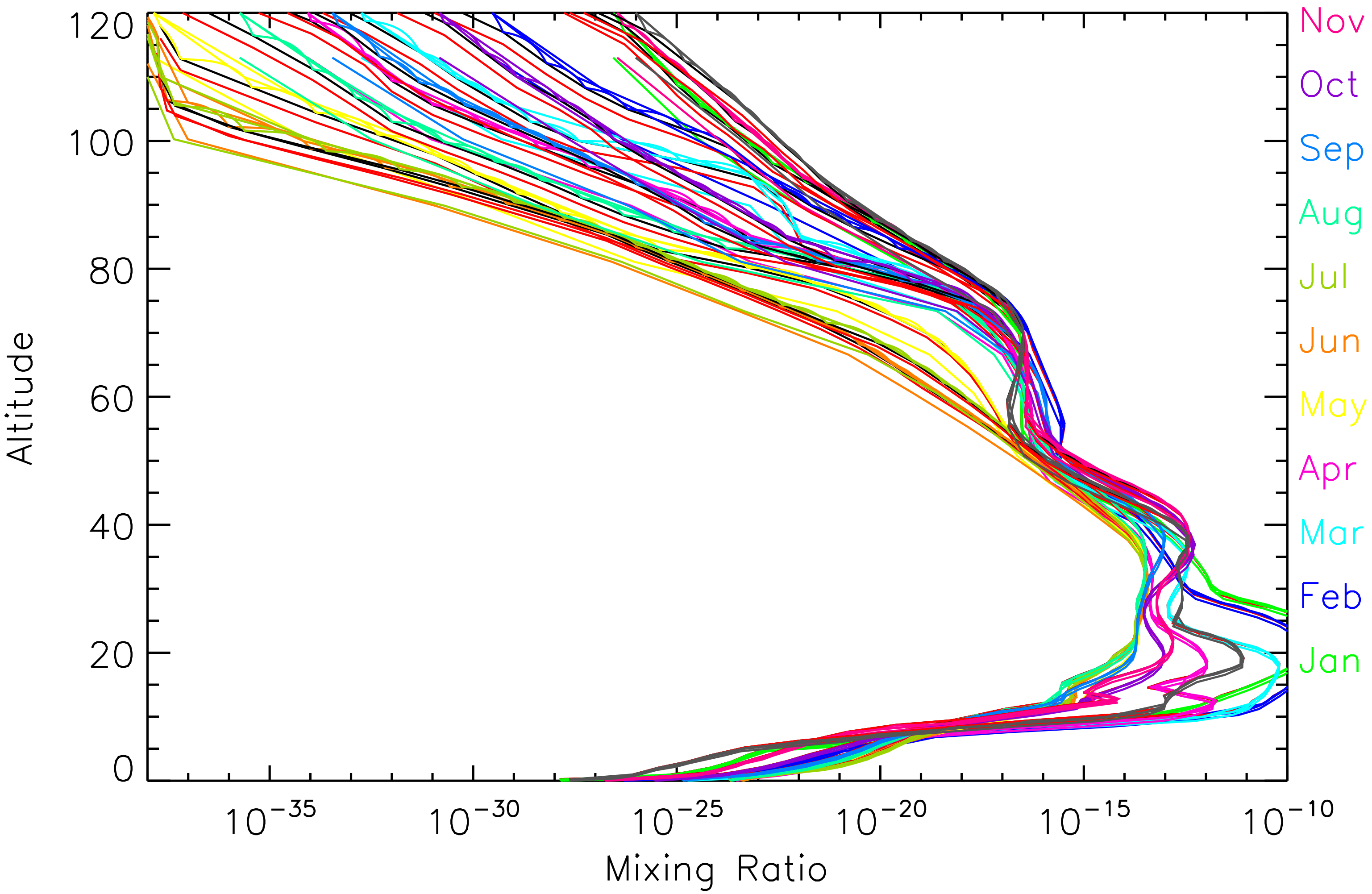

Initial & Interpolated profiles by month for : 2003
Sodankyla 67.3N 27.5E
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

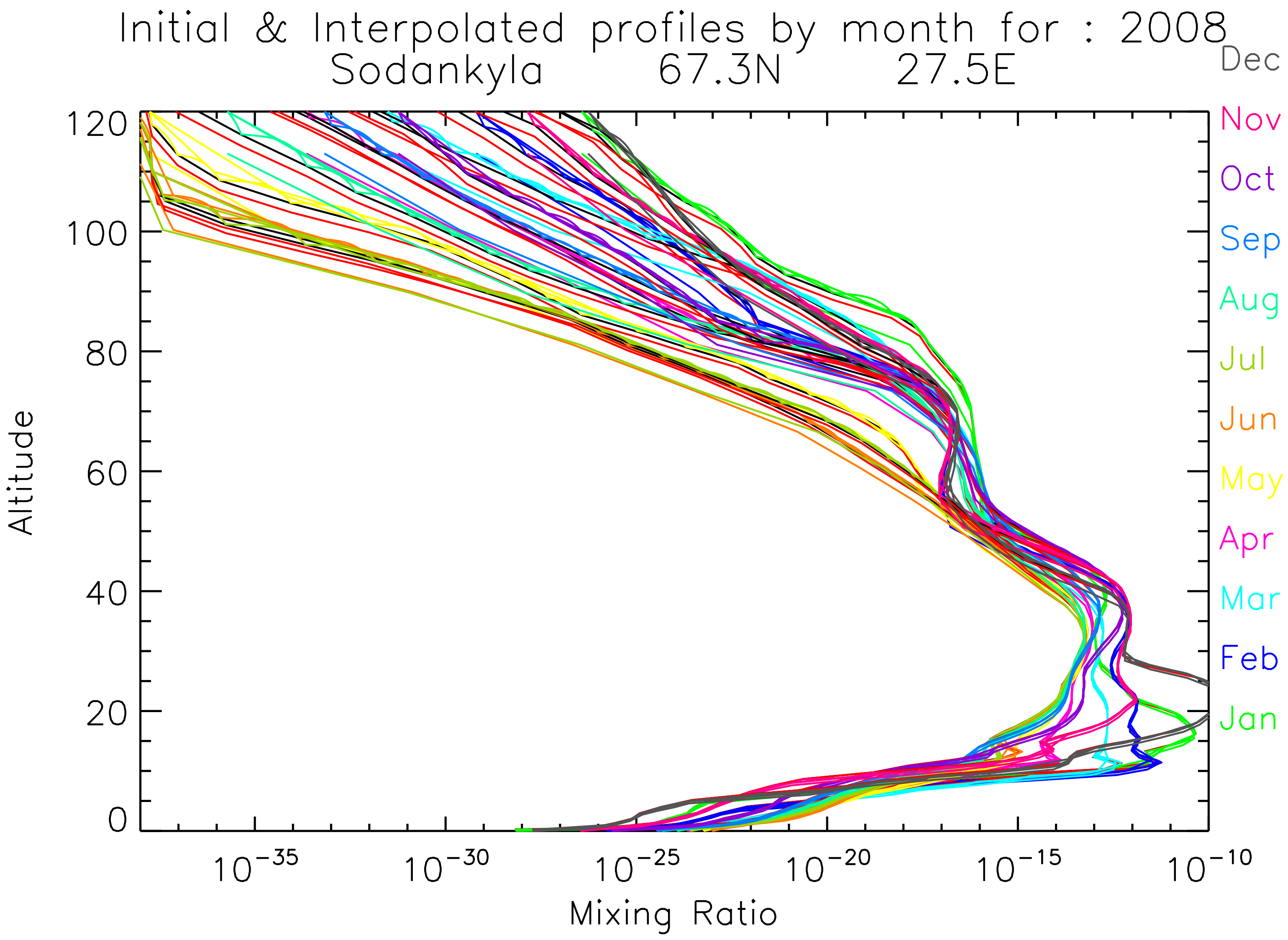

Initial & Interpolated profiles by month for : 2004
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

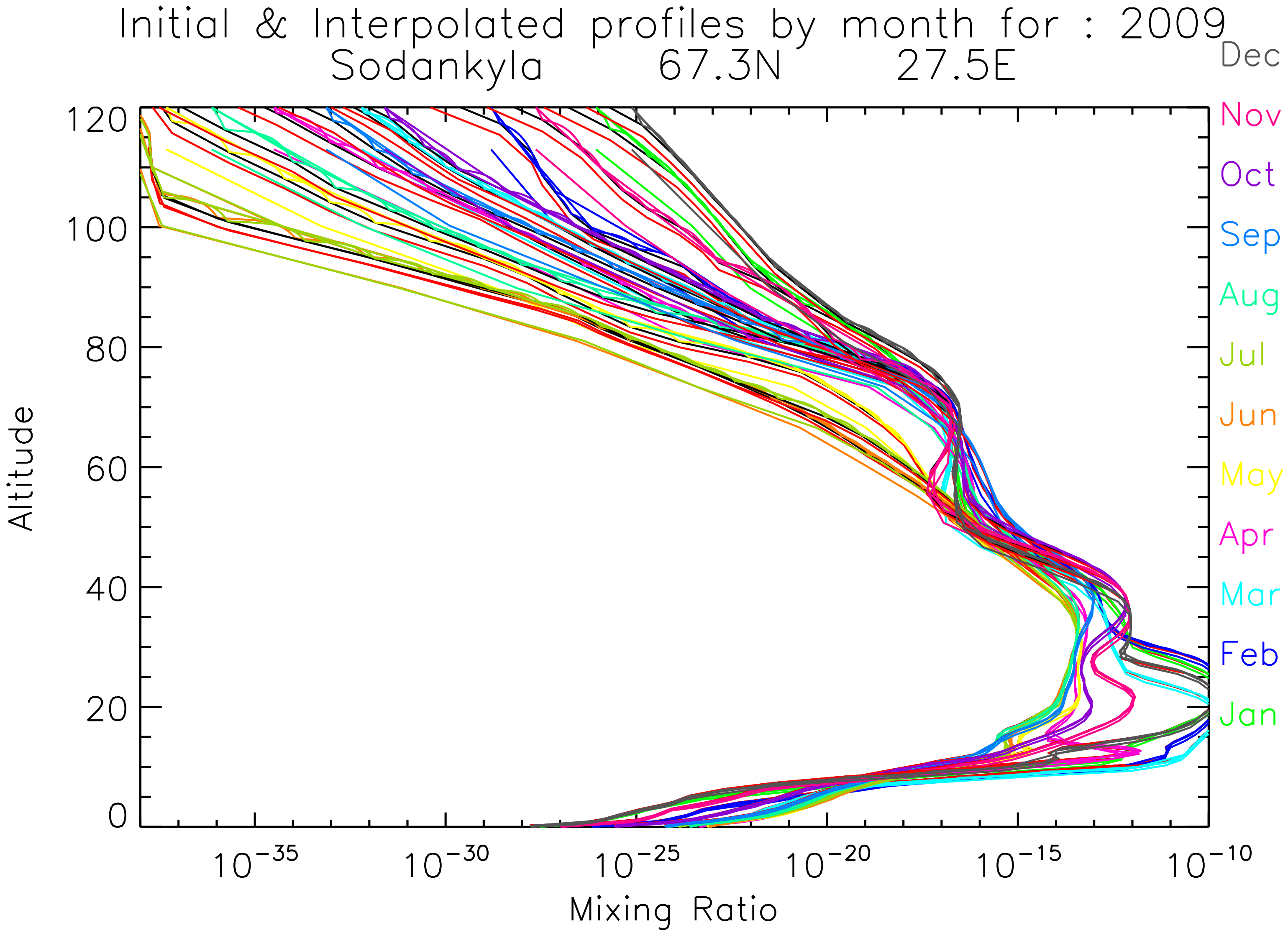

Initial & Interpolated profiles by month for : 2005
Sodankyla 67.3N 27.5E

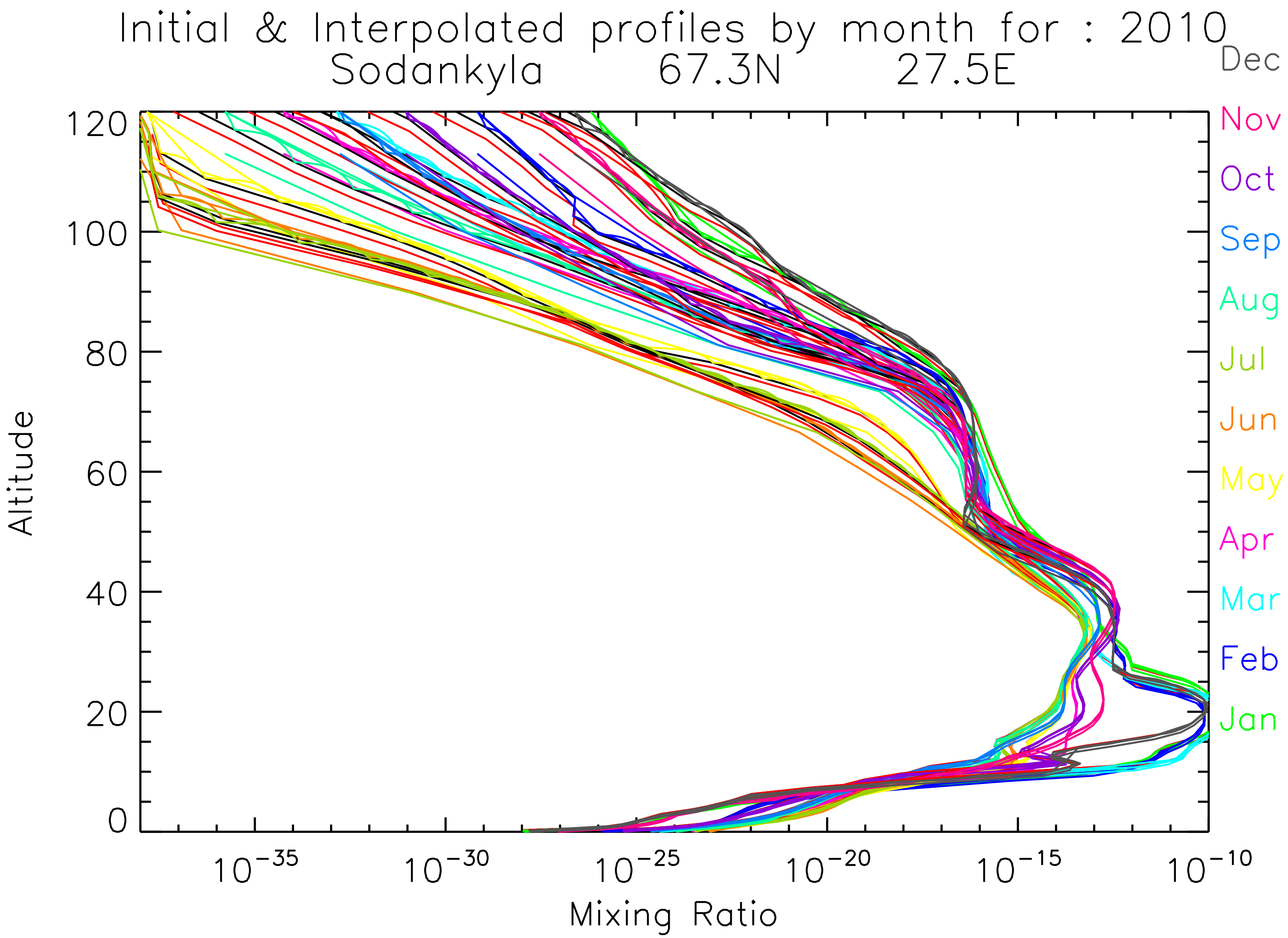

Initial & Interpolated profiles by month for : 2006
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

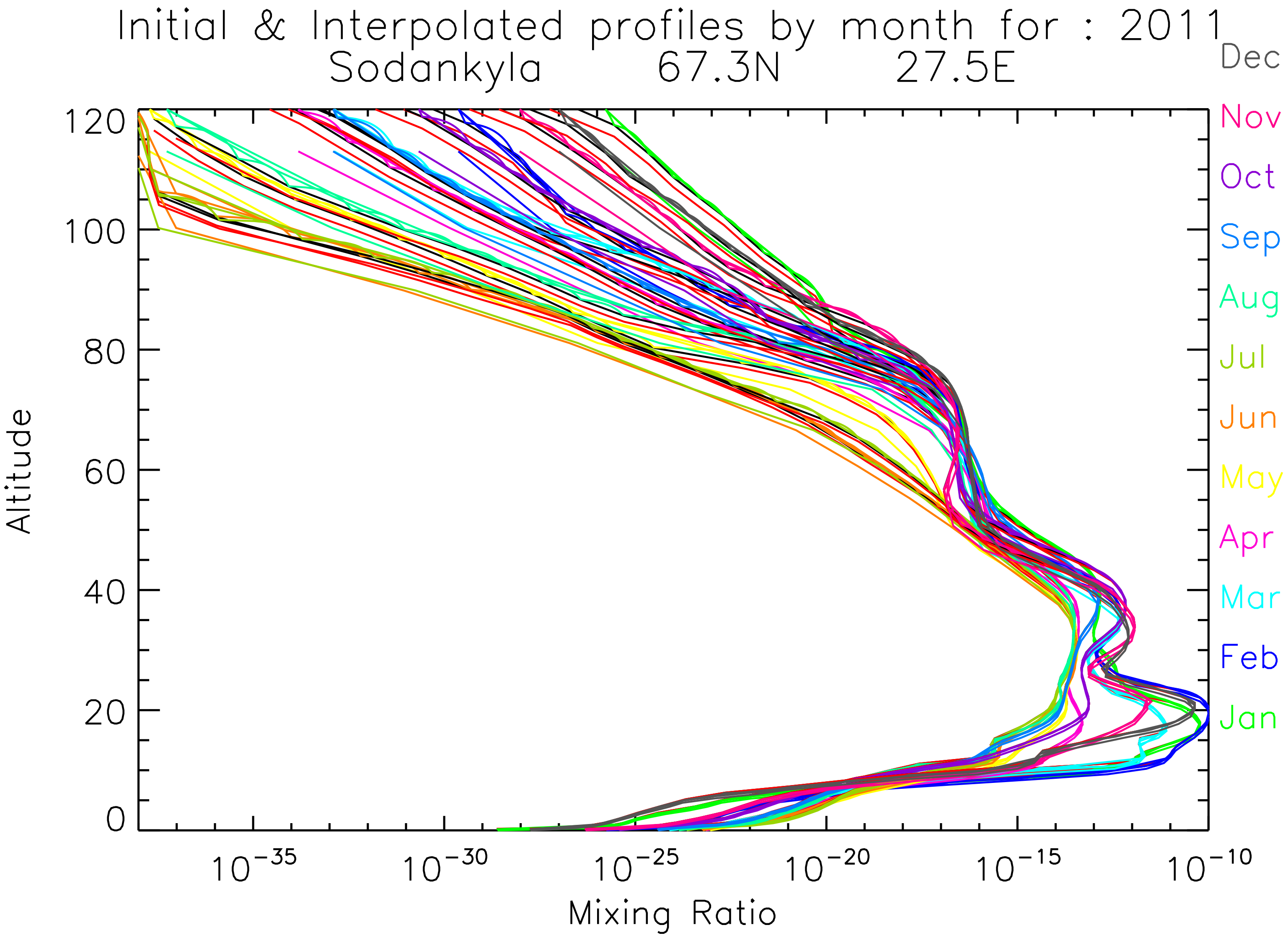
Initial & Interpolated profiles by month for : 2007
Sodankyla 67.3N 27.5E

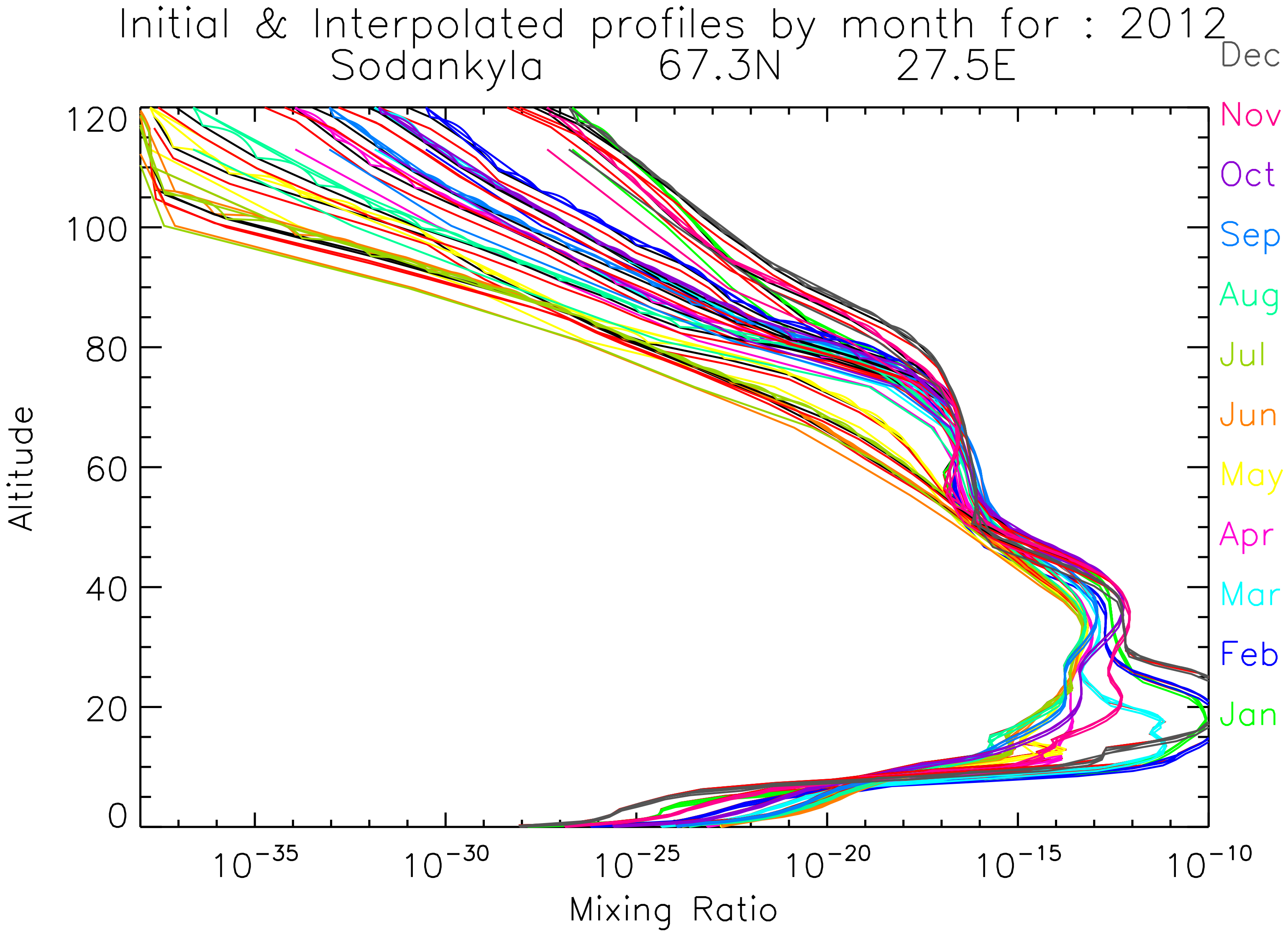


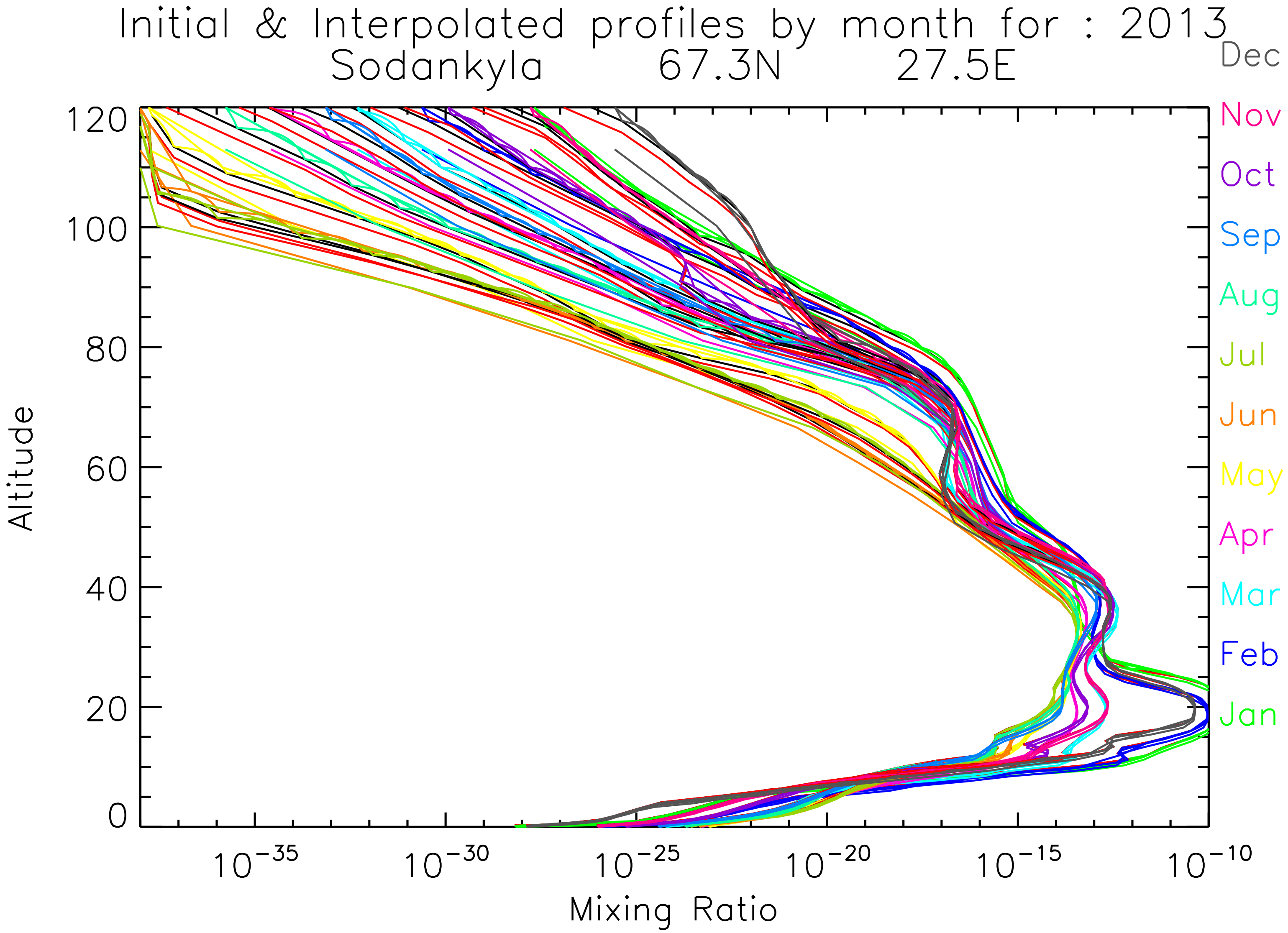

Initial & Interpolated profiles by month for : 2008
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

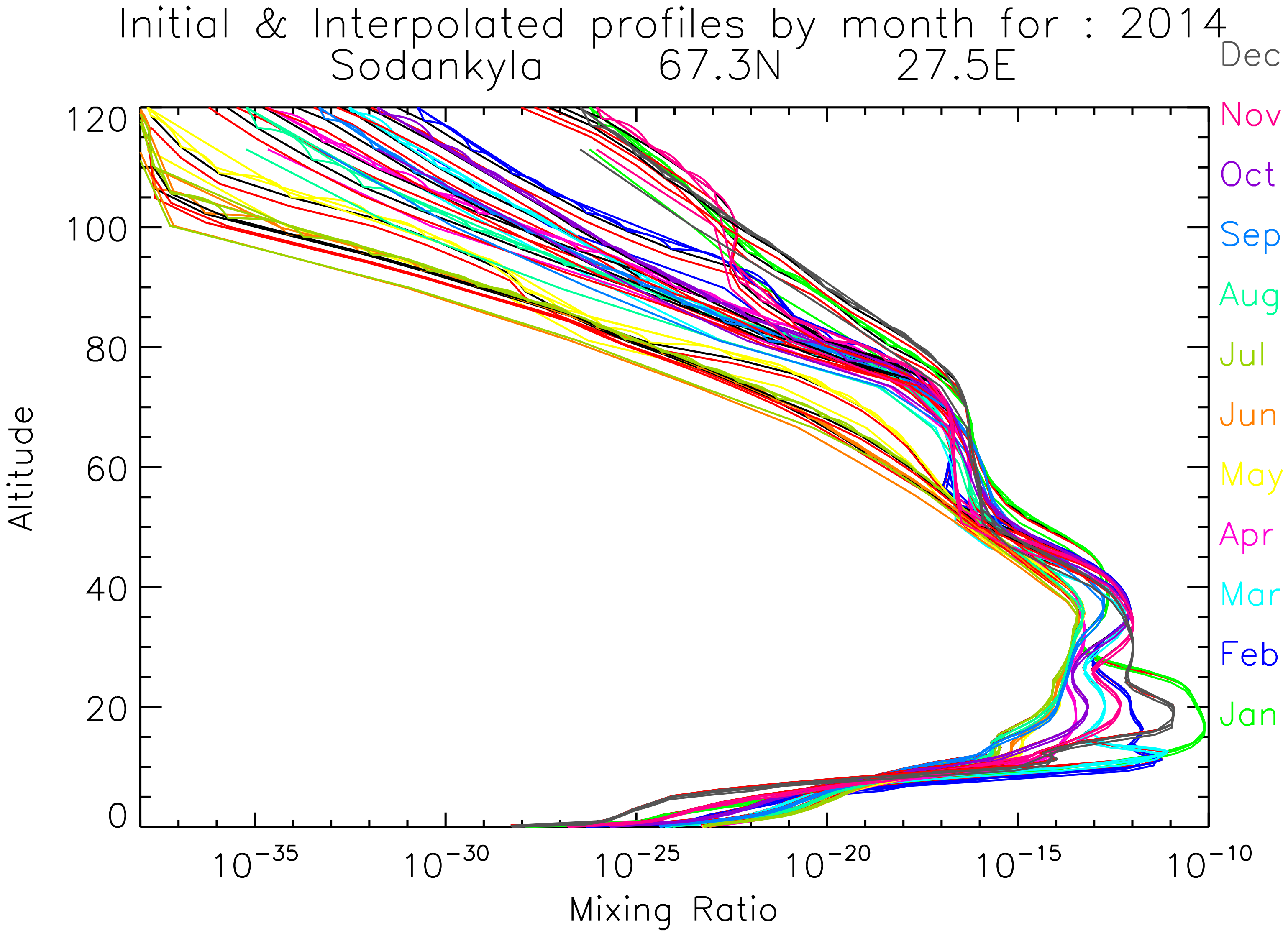

Initial & Interpolated profiles by month for : 2009
Sodankyla 67.3N 27.5E
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan


Initial & Interpolated profiles by month for : 2010
Sodankyla 67.3N 27.5E

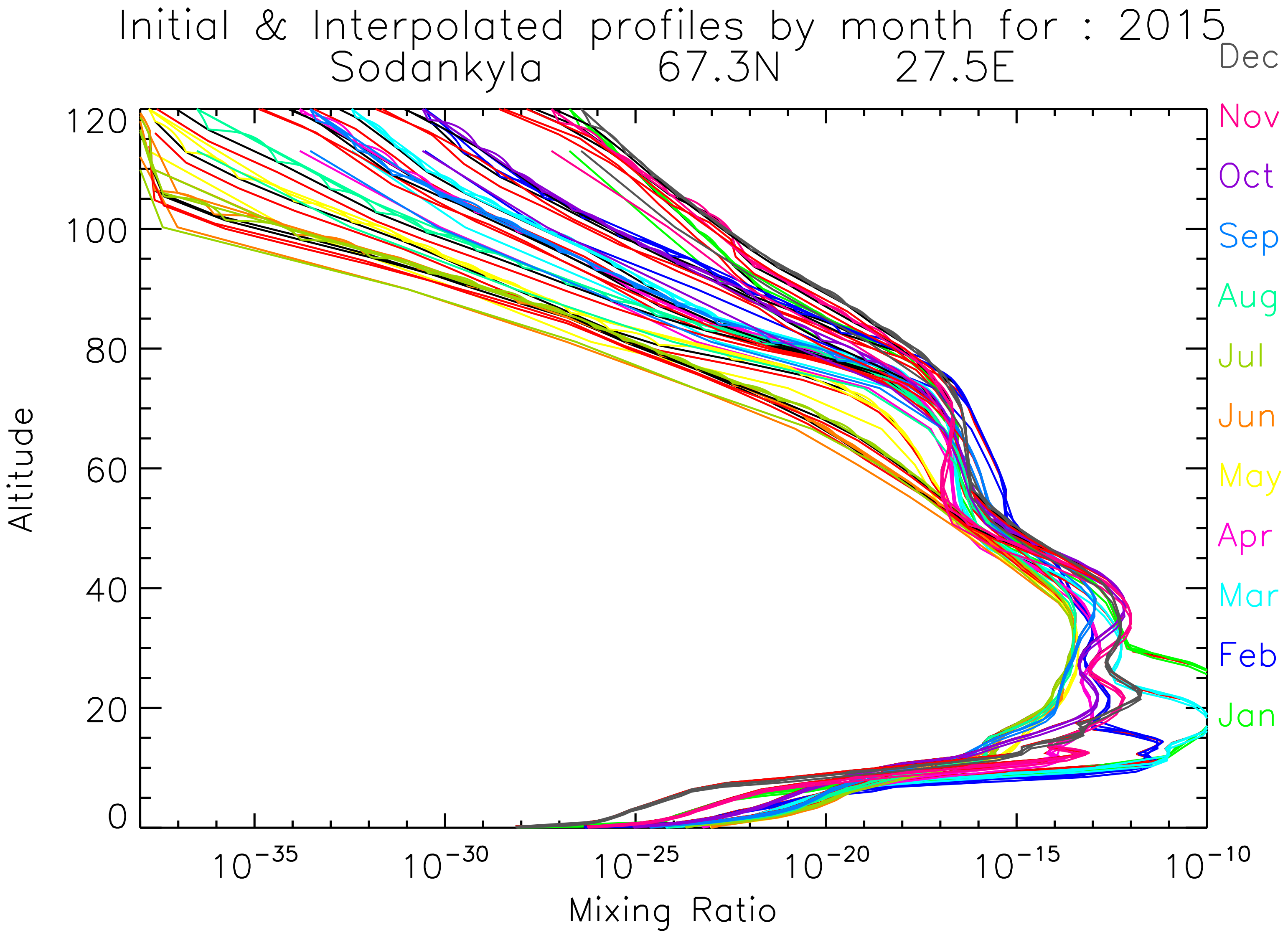

Initial & Interpolated profiles by month for : 2011
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

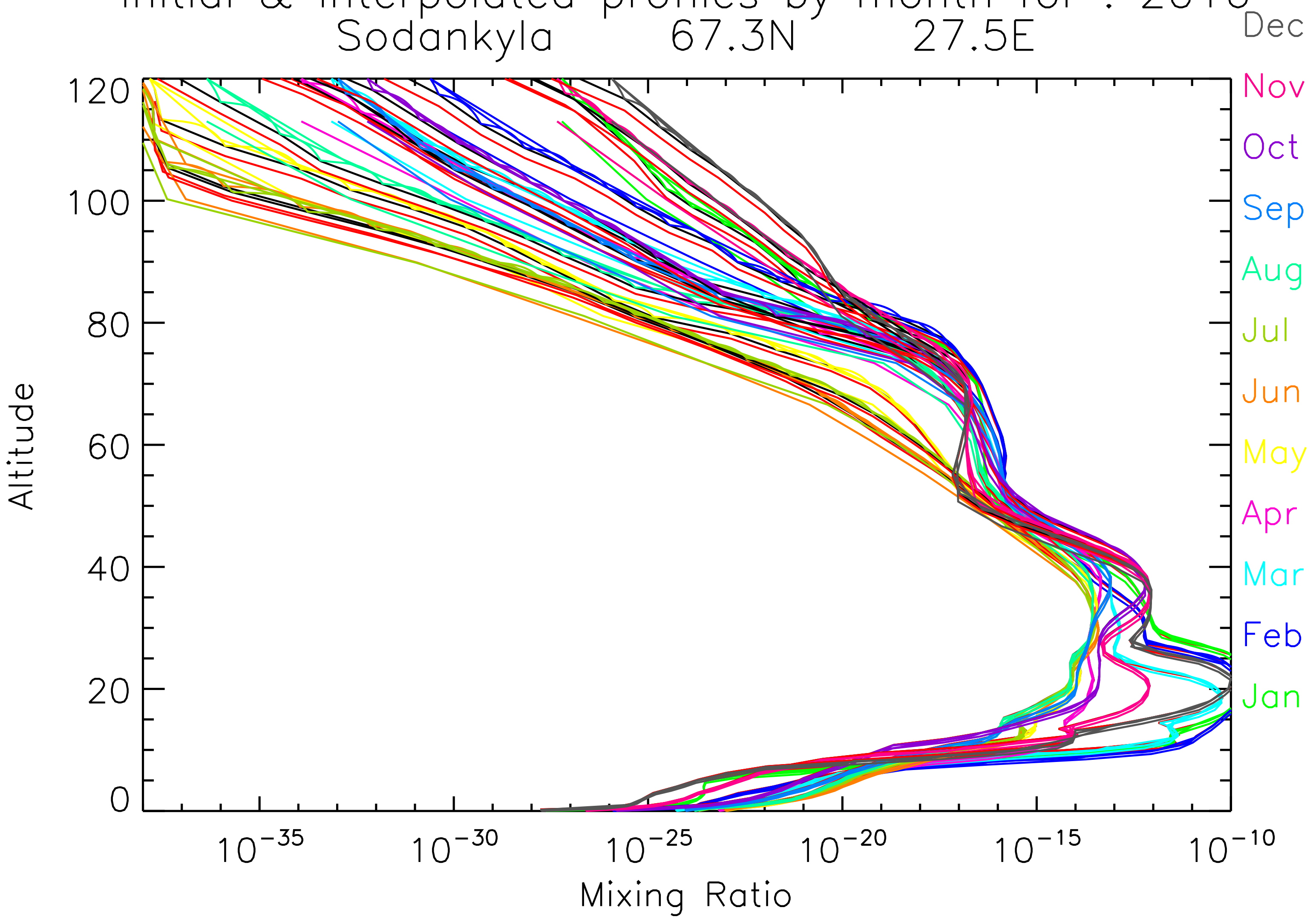

Initial & Interpolated profiles by month for : 2012
Sodankyla 67.3N 27.5E
Altitude
0
20
40
60
80
100
120
Mixing Ratio
10^-35
10^-30
10^-25
10^-20
10^-15
10^-10
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

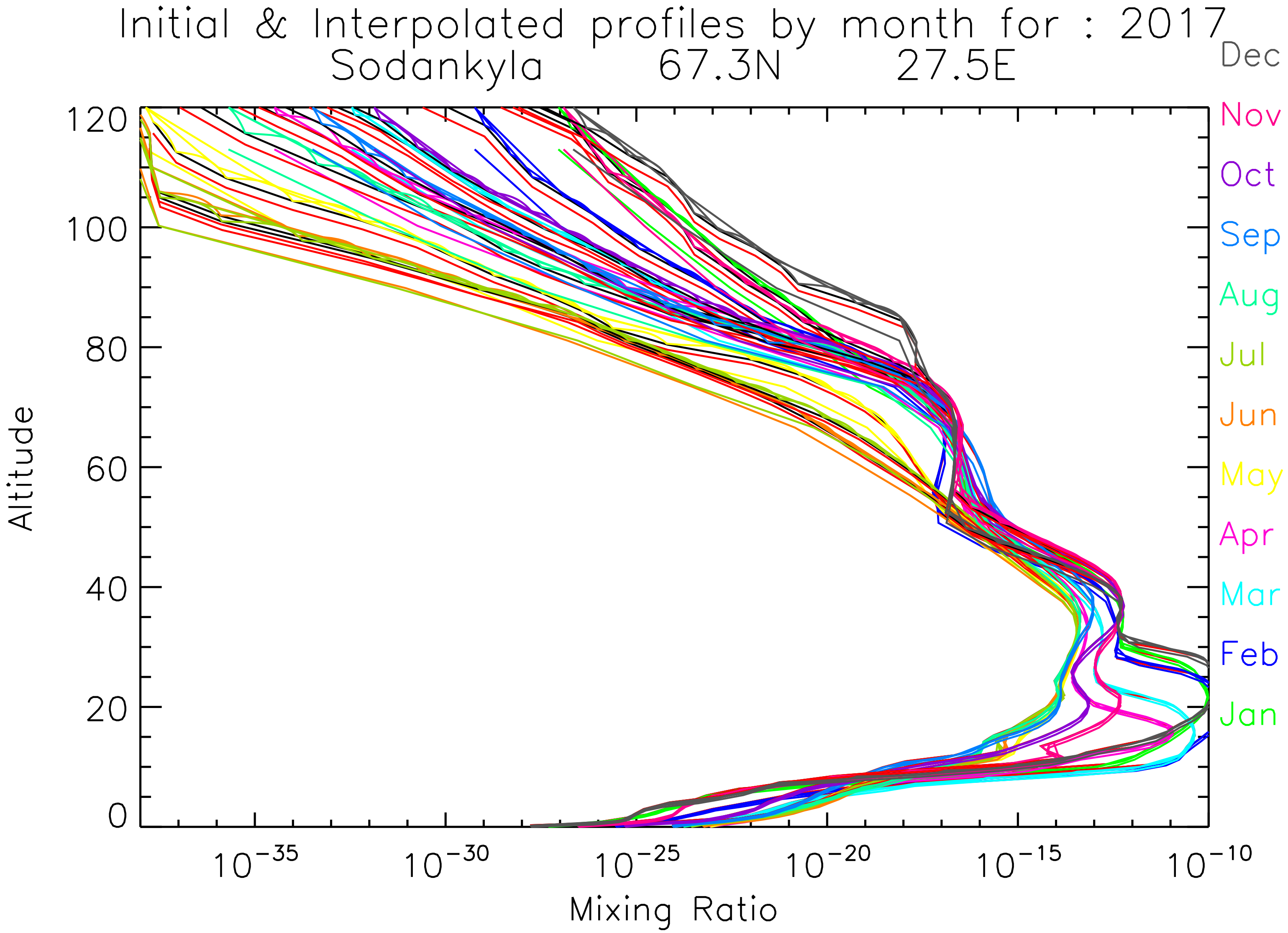

Initial & Interpolated profiles by month for : 2013
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

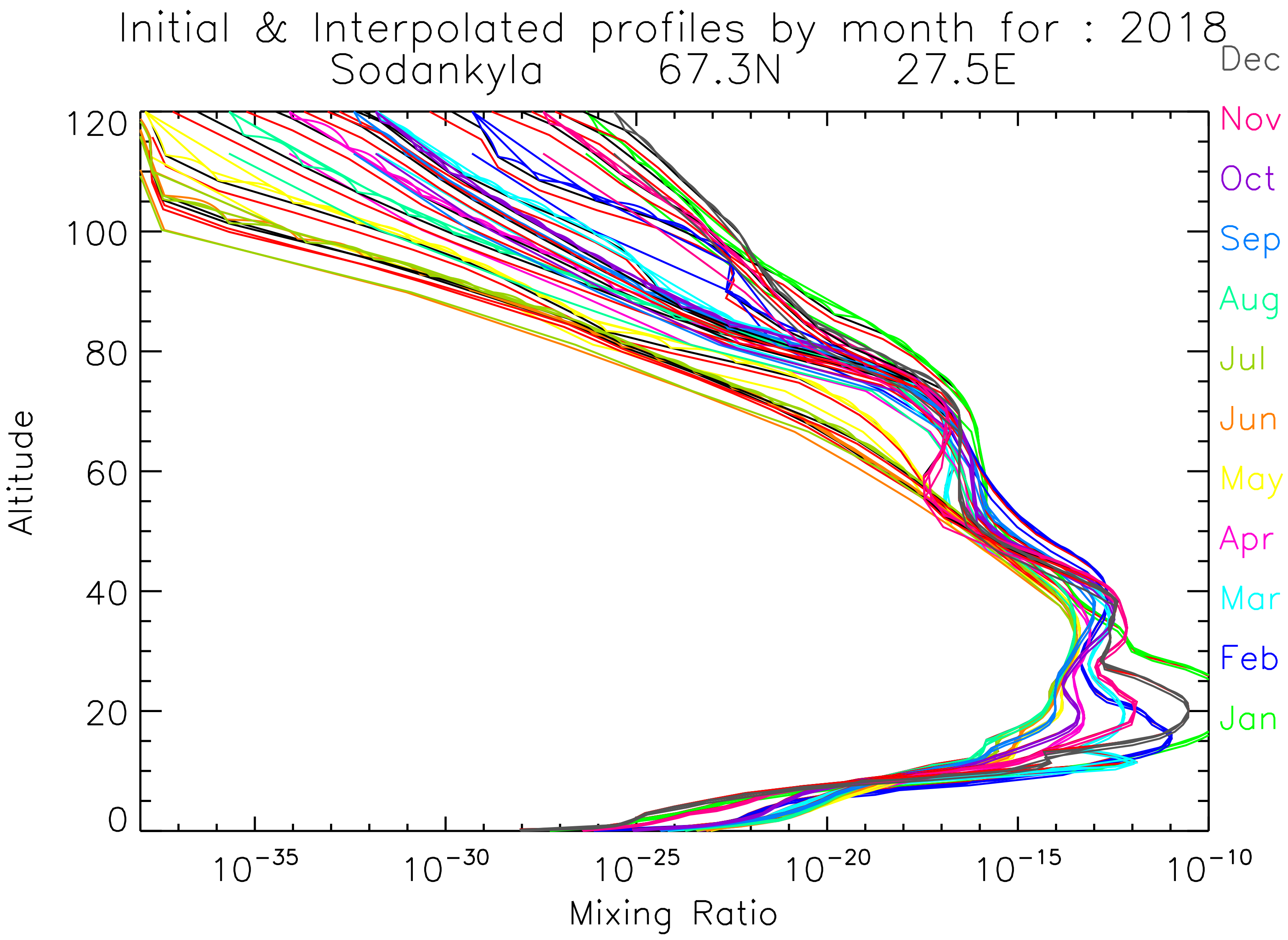


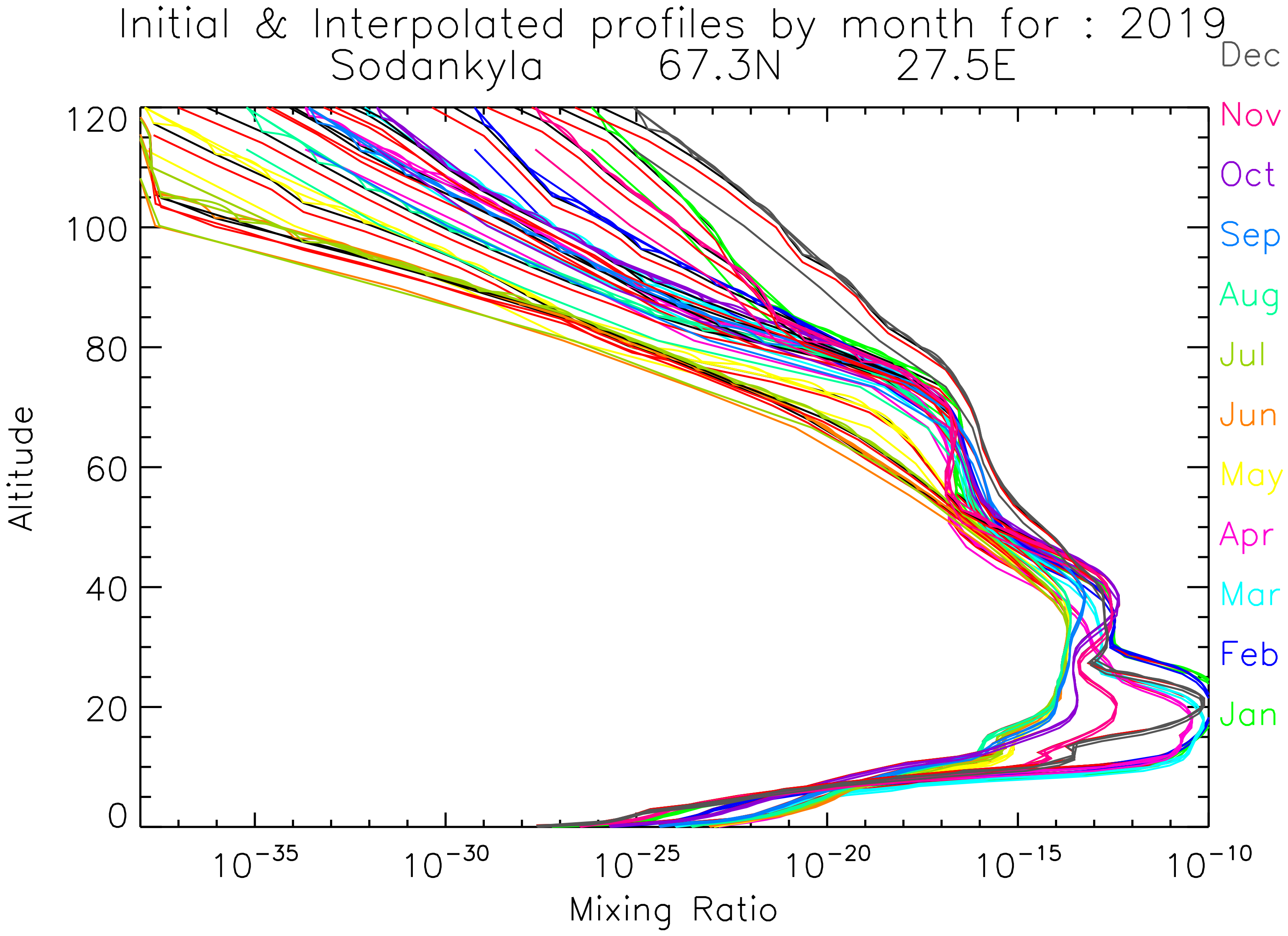
Initial & Interpolated profiles by month for : 2014
Sodankyla 67.3N 27.5E

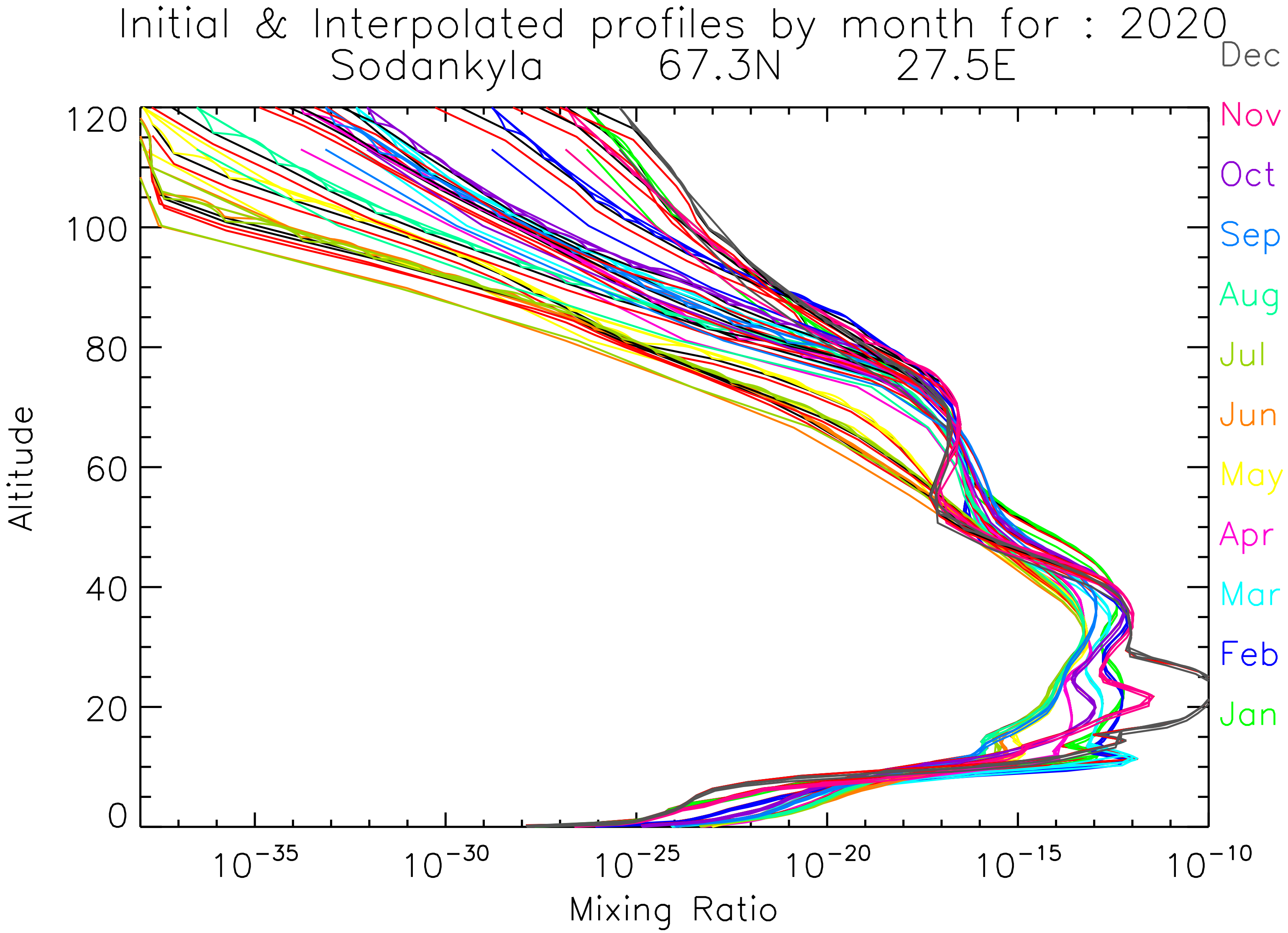

Initial & Interpolated profiles by month for : 2015
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

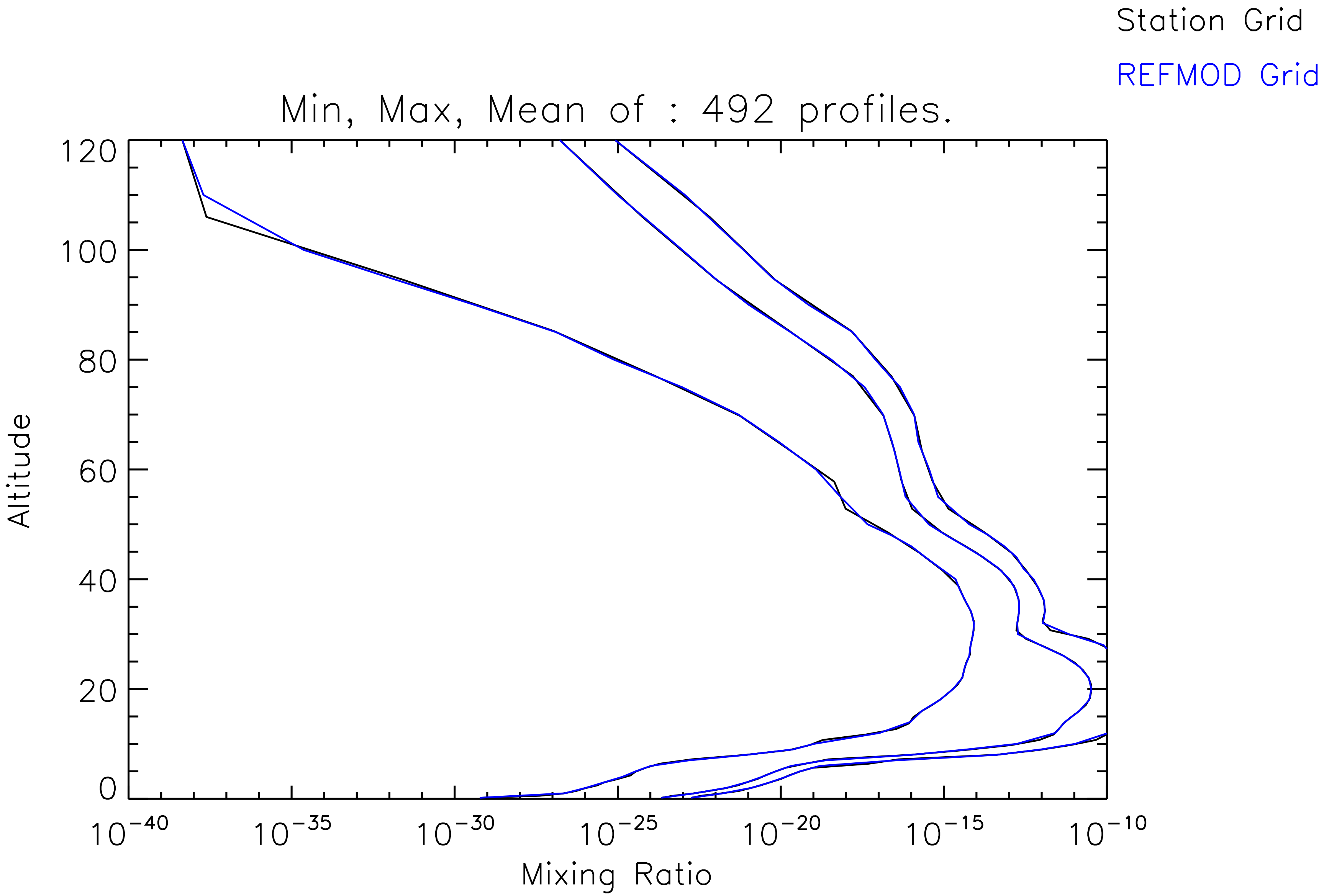

Initial & Interpolated profiles by month for : 2016
Sodankyla 67.3N 27.5E

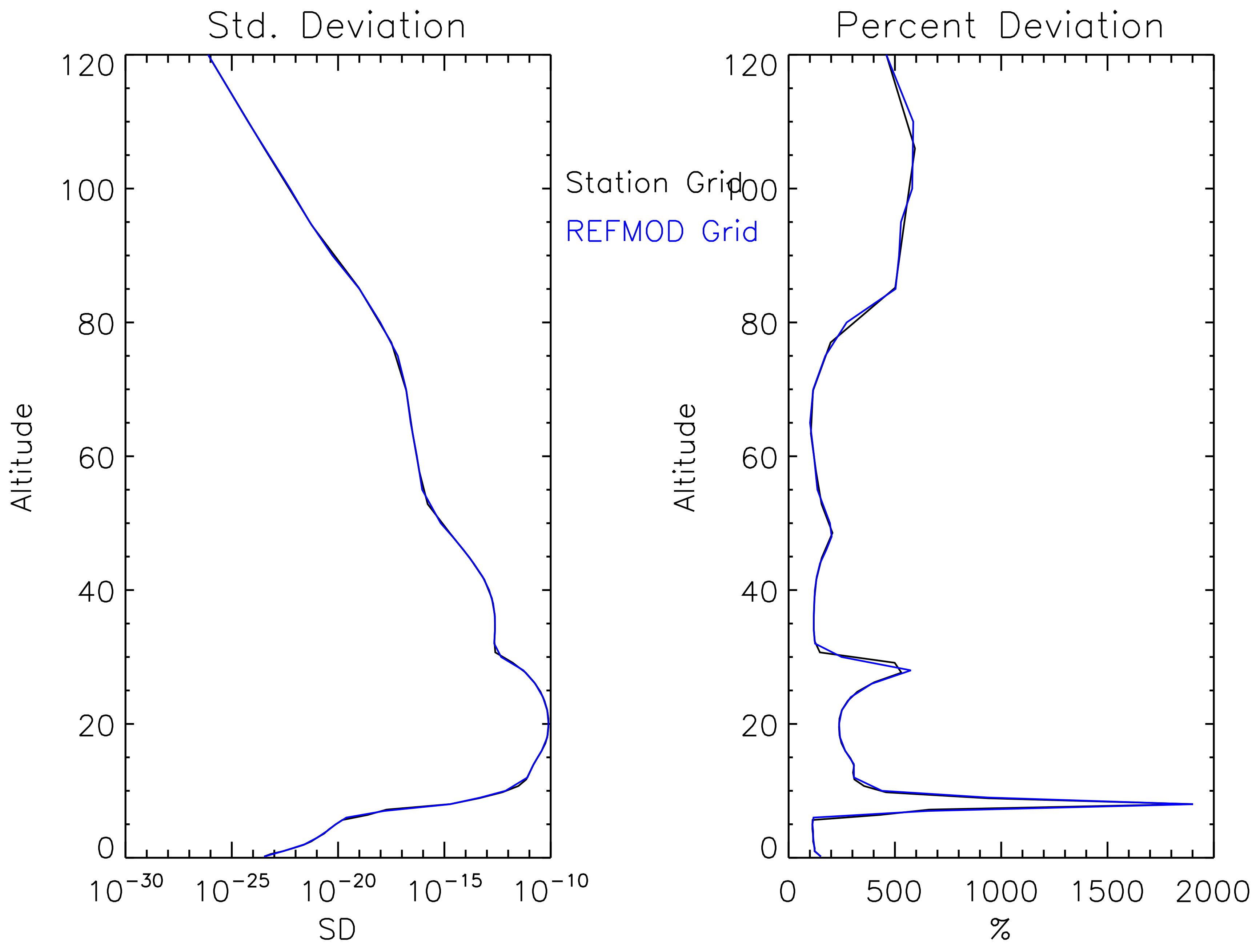

Initial & Interpolated profiles by month for : 2017
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

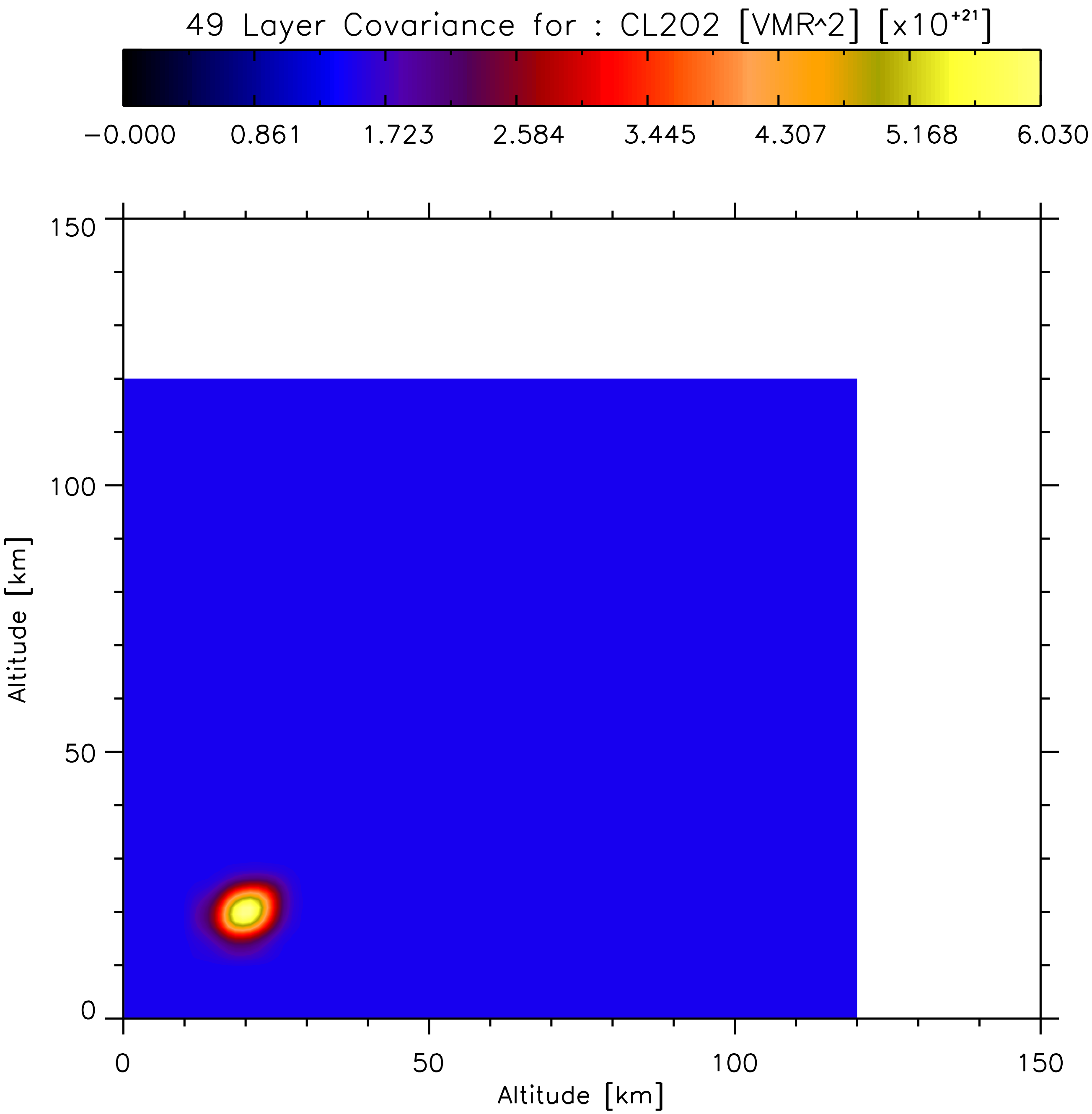

Initial & Interpolated profiles by month for : 2018
Sodankyla 67.3N 27.5E

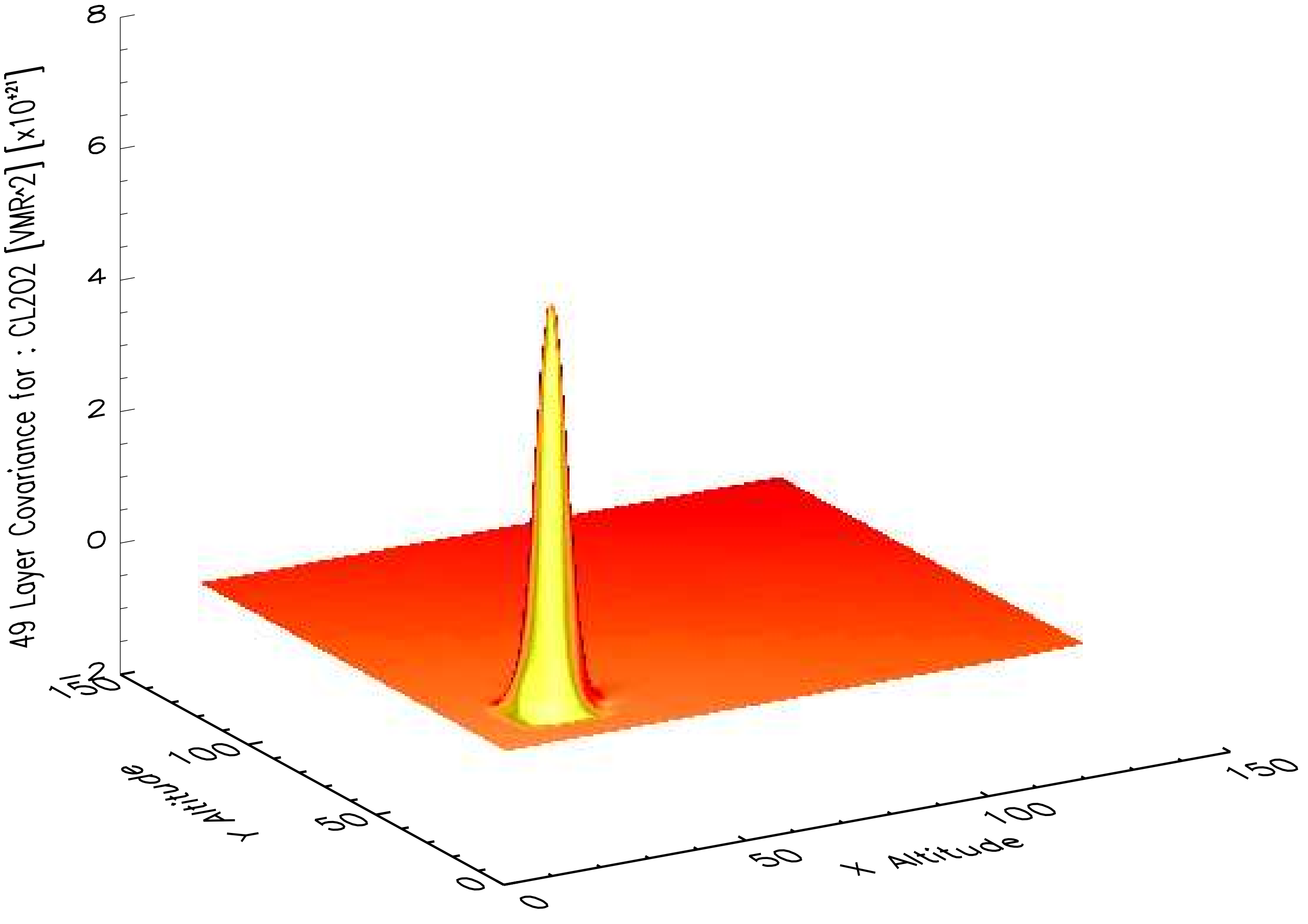

Initial & Interpolated profiles by month for : 2019
Sodankyla 67.3N 27.5E
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

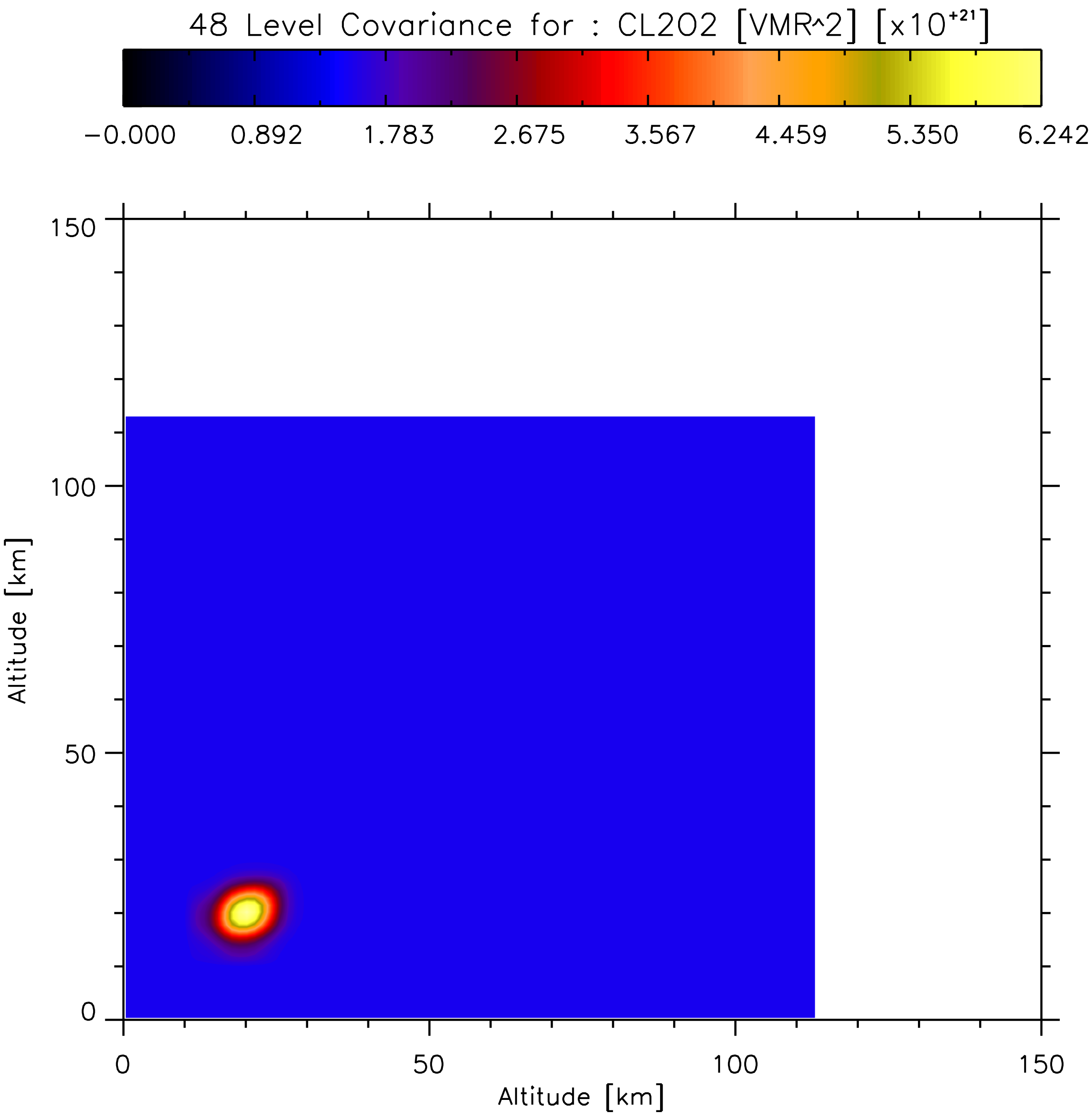

Initial & Interpolated profiles by month for : 2020
Sodankyla 67.3N 27.5E
Altitude
0
20
40
60
80
100
120
Mixing Ratio
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

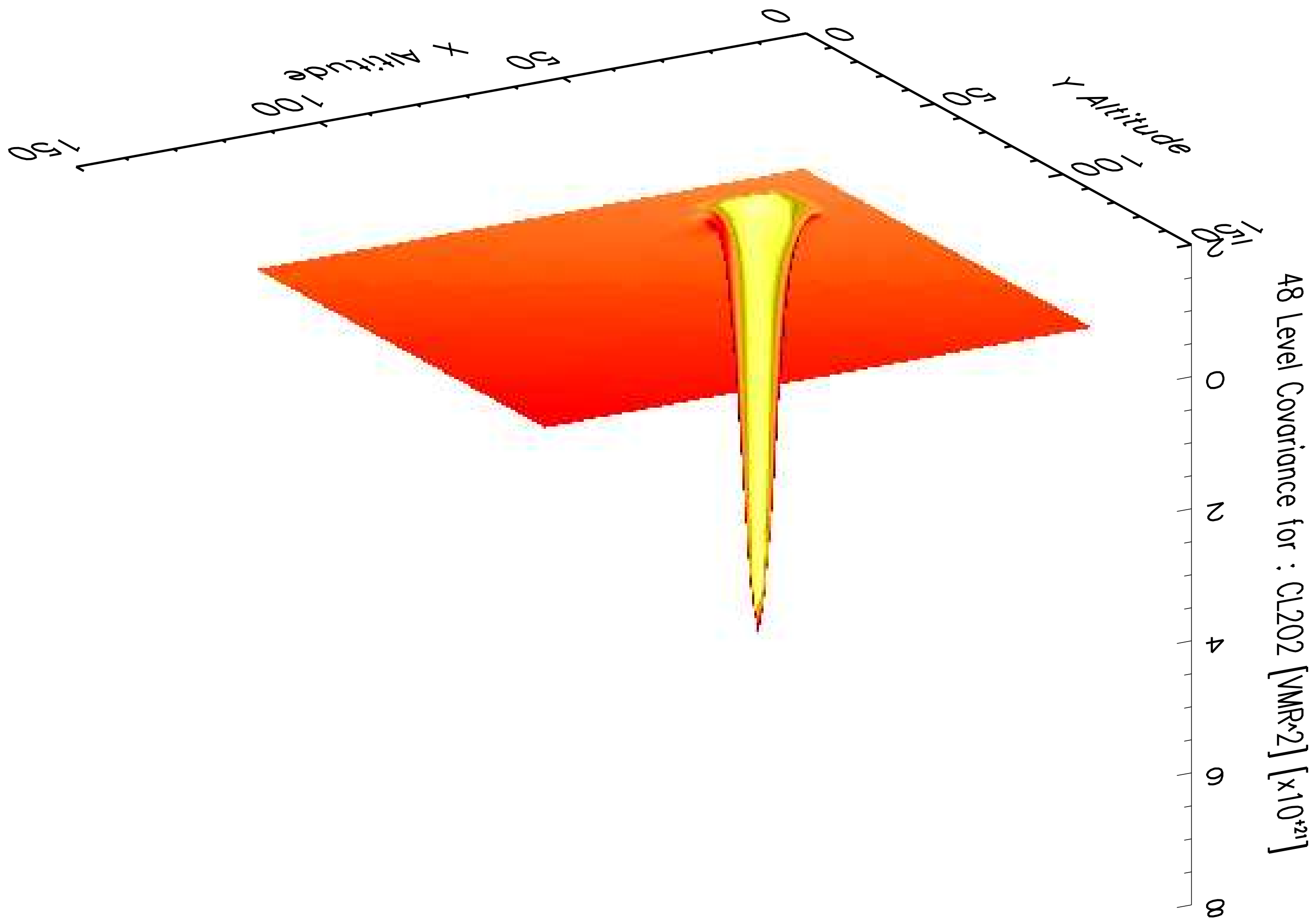

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
Altitude
0
20
40
60
80
100
120
10^{-40}
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Std. Deviation
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
SD
Station Grid
REFMOD Grid
Percent Deviation
Altitude
120
100
80
60
40
20
0
0
500
1000
1500
2000
%


49 Layer Covariance for : CL2O2 [VMR^2] [x10^{+21}]
−0.000
0.861
1.723
2.584
3.445
4.307
5.168
6.030
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


49 Layer Covariance for : CL2O2 [VMR^2] [x10^+21]
8
6
4
2
0
-2
Y Altitude
150
100
50
0
X Altitude
0
50
100
150


48 Level Covariance for : CL2O2 [VMR^2] [x10^{+21}]
−0.000
0.892
1.783
2.675
3.567
4.459
5.350
6.242
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


48 Level Covariance for : CL2O2 [VMR^2] [x10^+21]
X Altitude
0
50
100
150
Y Altitude
0
50
100
150
-2
0
2
4
6
8