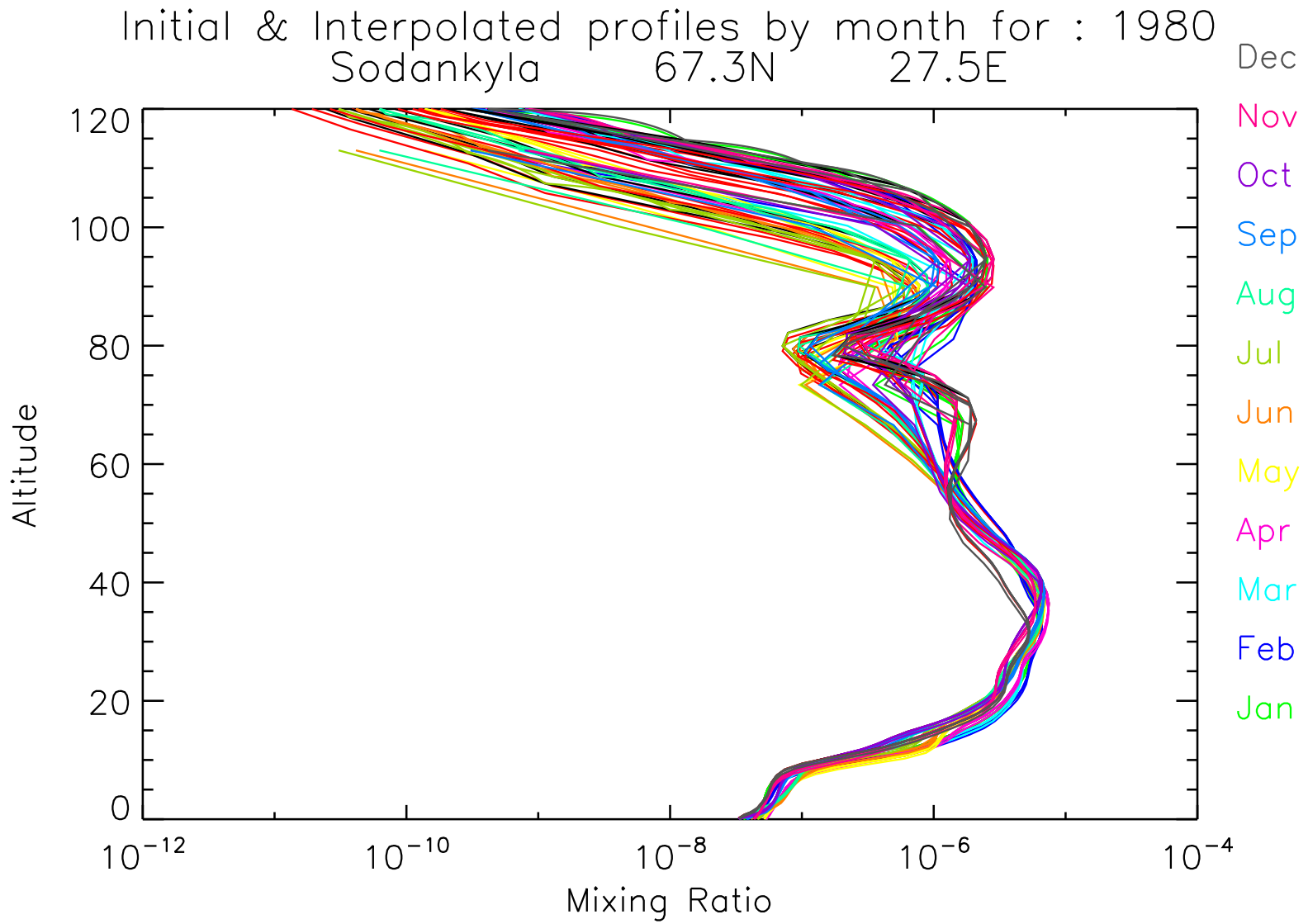
Initial & Interpolated profiles by month for : 1980
Sodankyla 67.3N 27.5E
Altitude
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100
80
60
40
20
0
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Mixing Ratio
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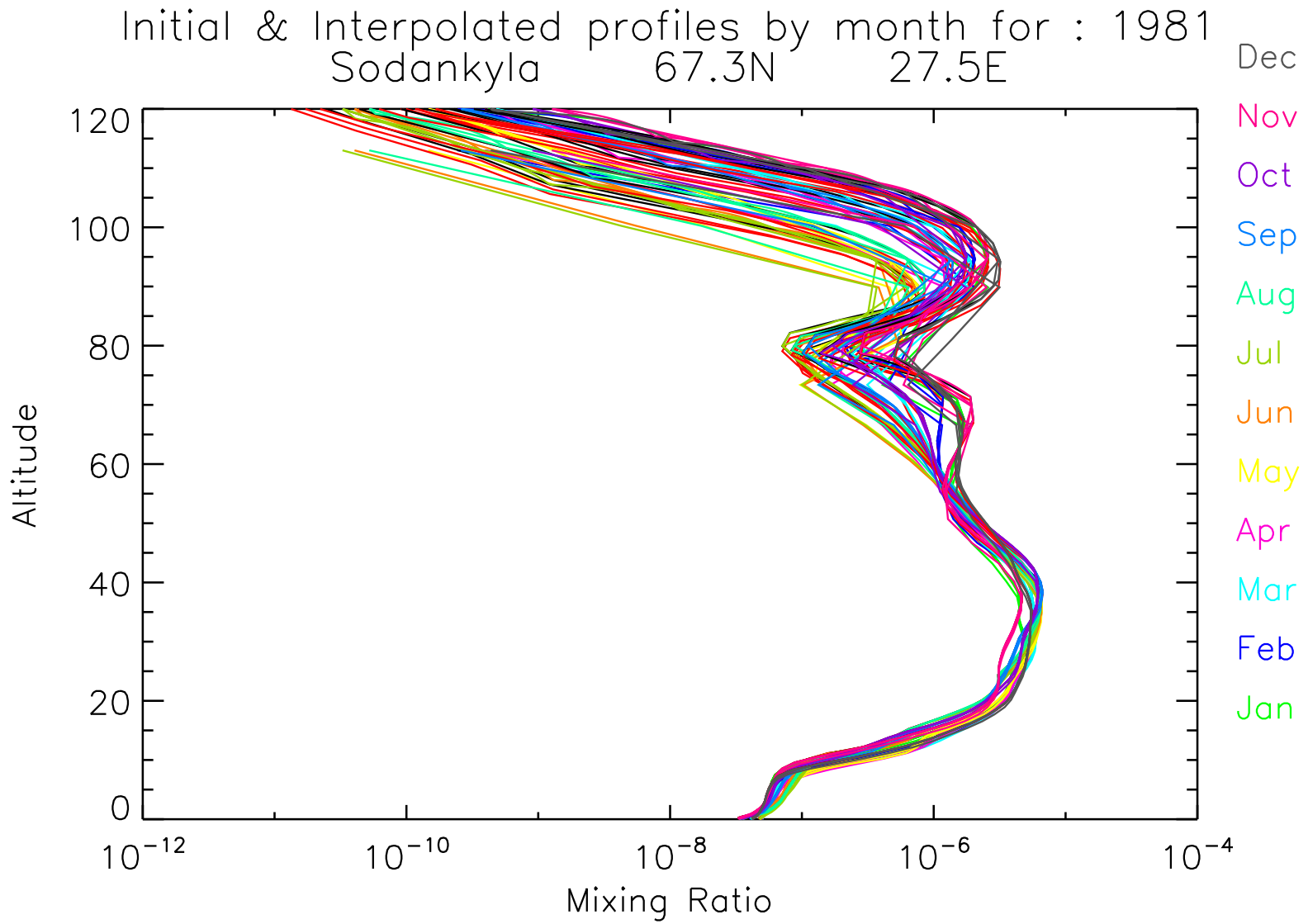
Initial & Interpolated profiles by month for : 1981
Sodankyla 67.3N 27.5E
Altitude
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Mixing Ratio
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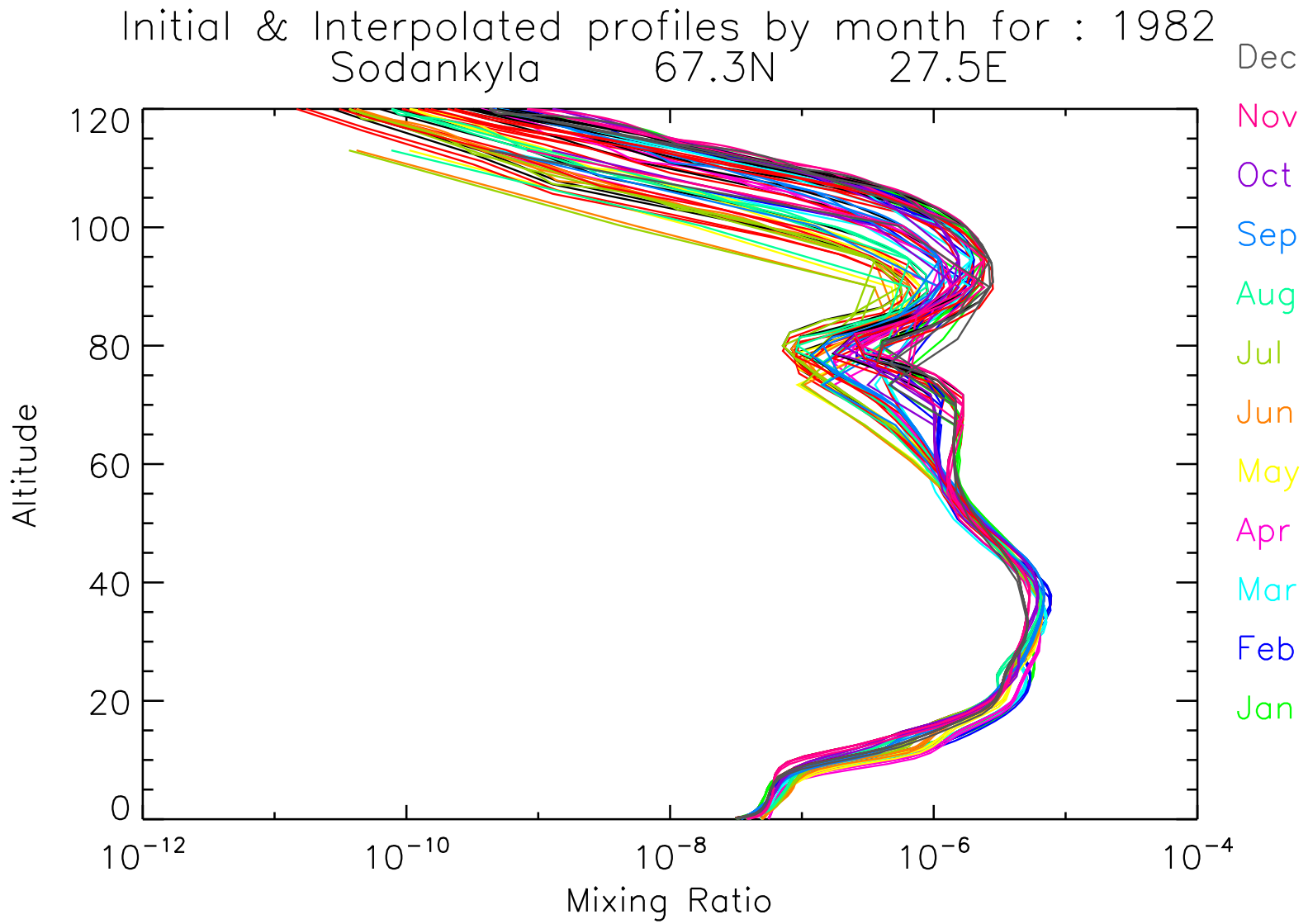
Initial & Interpolated profiles by month for : 1982
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Dec
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Feb
Jan
120
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Altitude
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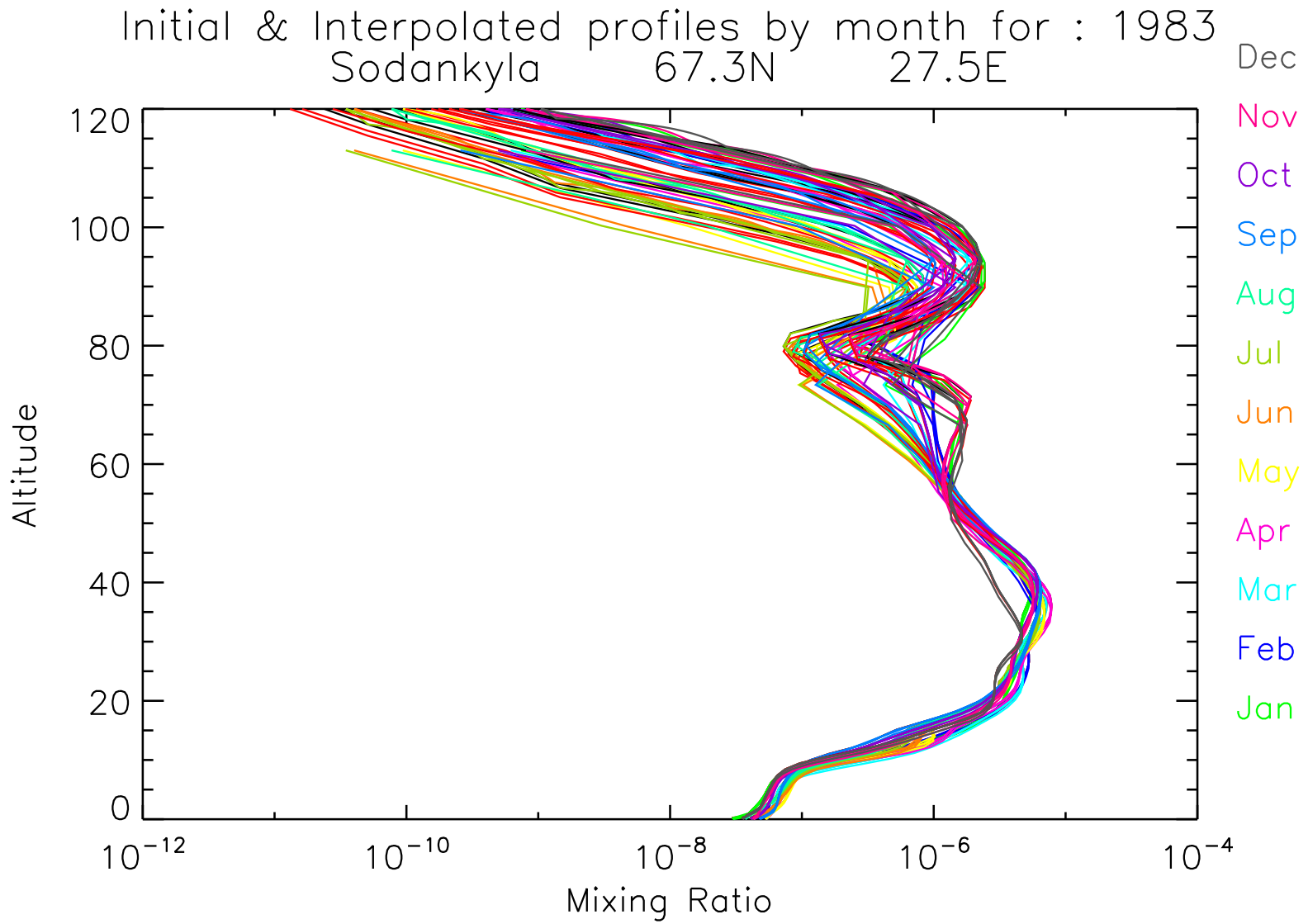
10^{-8}
10^{-6}
10^{-4}
Mixing Ratio


Initial & Interpolated profiles by month for : 1983
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Altitude
120
100
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Mixing Ratio
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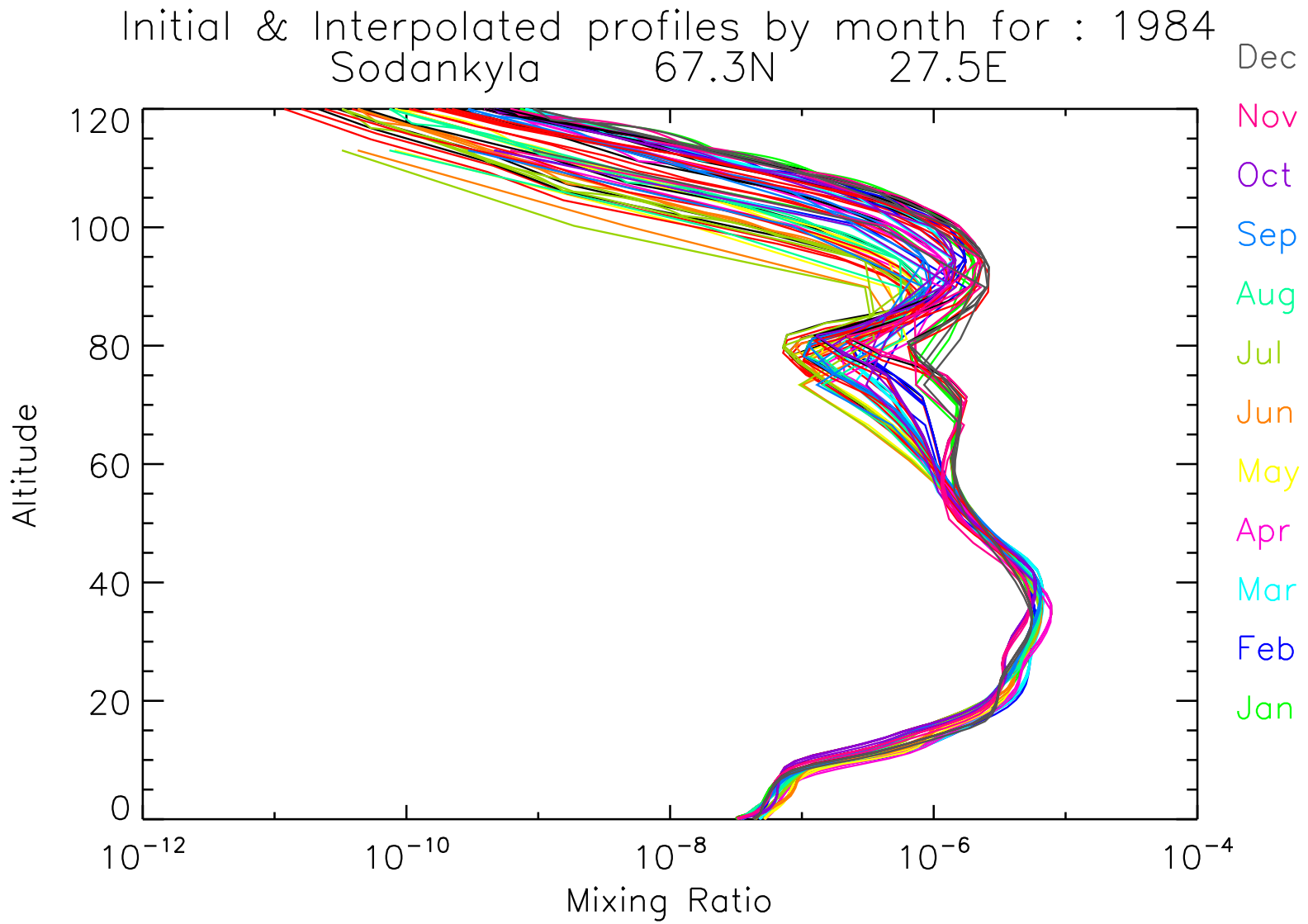
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Sodankyla 67.3N 27.5E
Altitude
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10^{-12}
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Mixing Ratio
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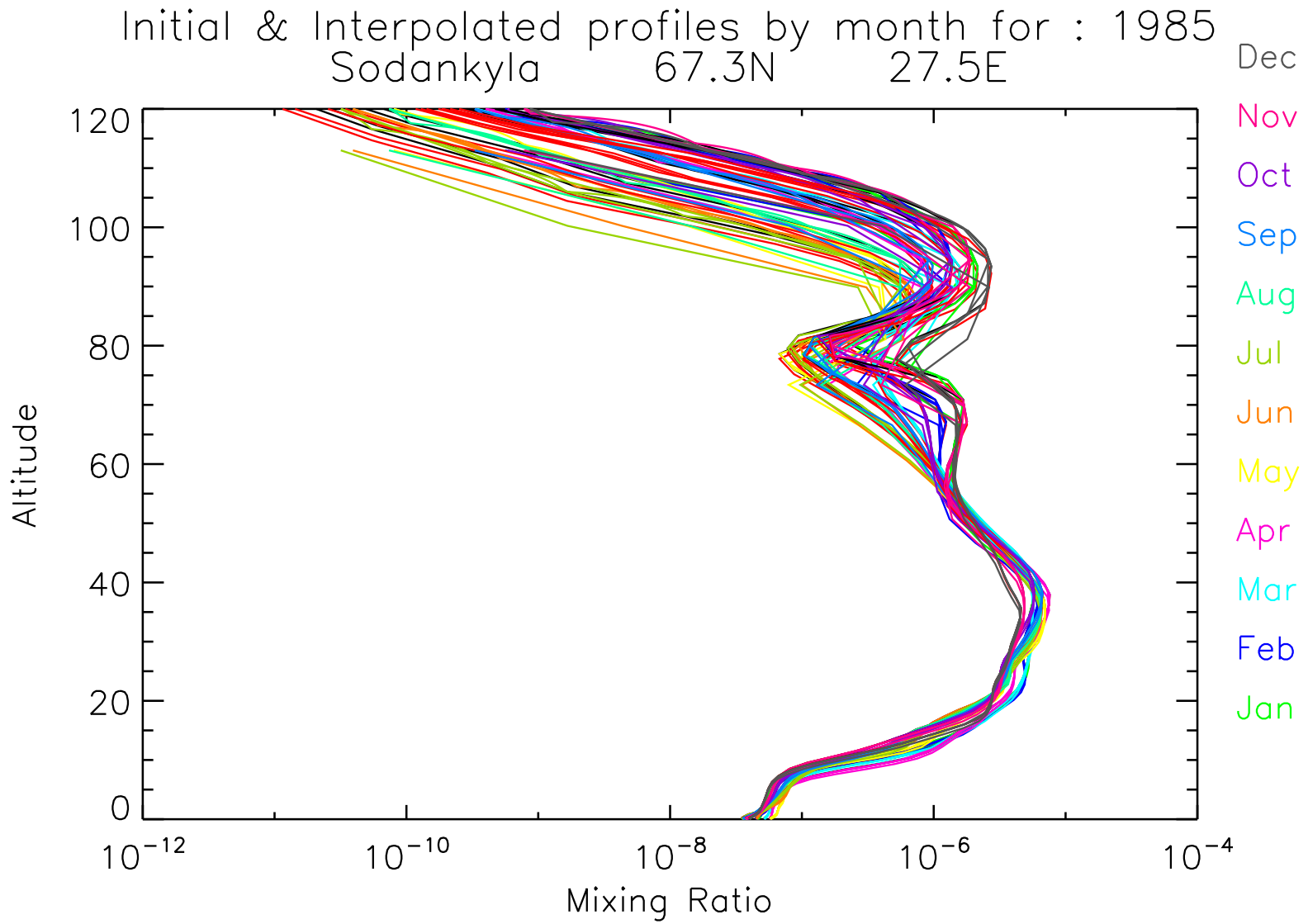
Initial & Interpolated profiles by month for : 1985
Sodankyla 67.3N 27.5E
Altitude
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10^{-12}
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Mixing Ratio
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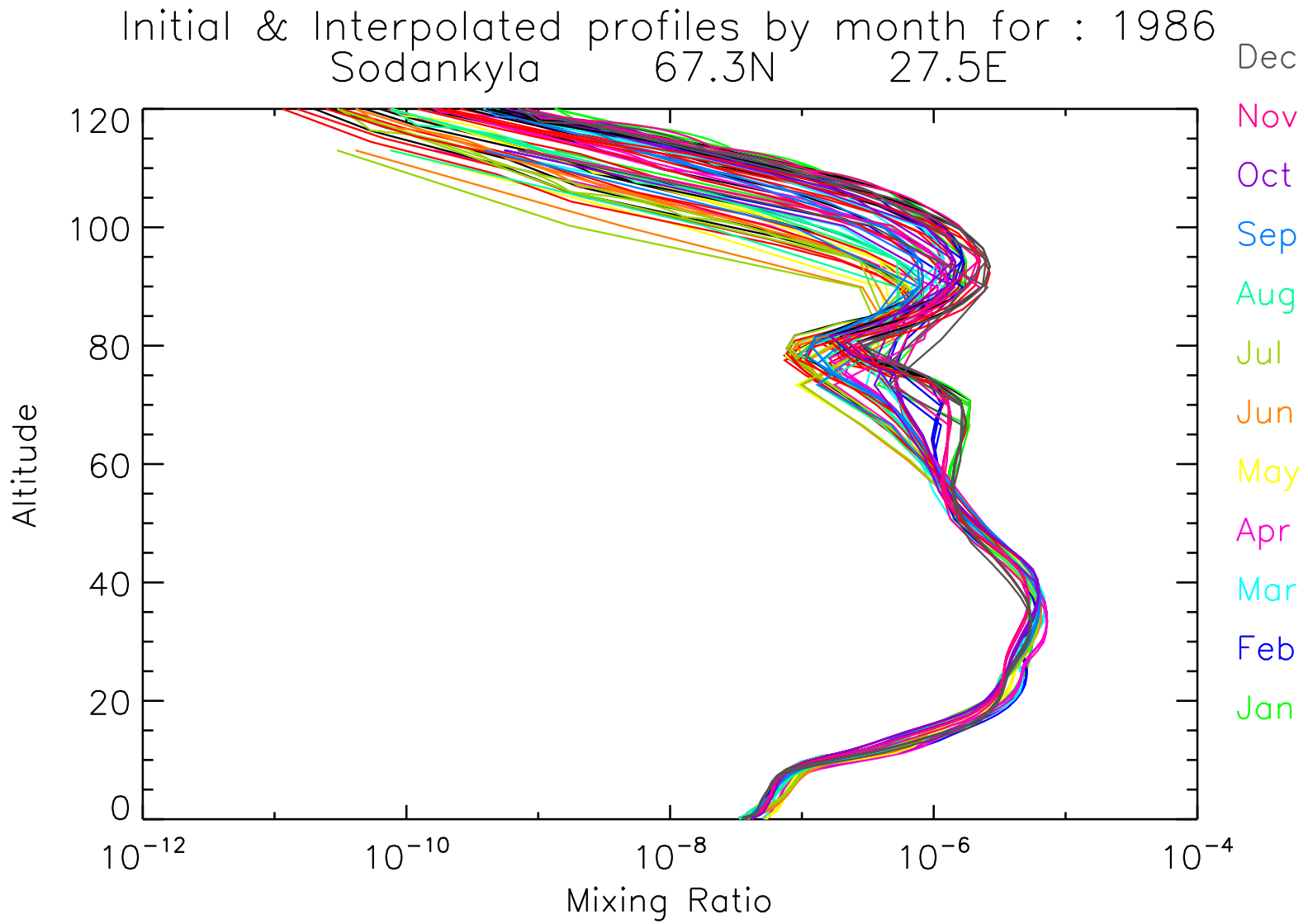
Initial & Interpolated profiles by month for : 1986
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Altitude
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Mixing Ratio
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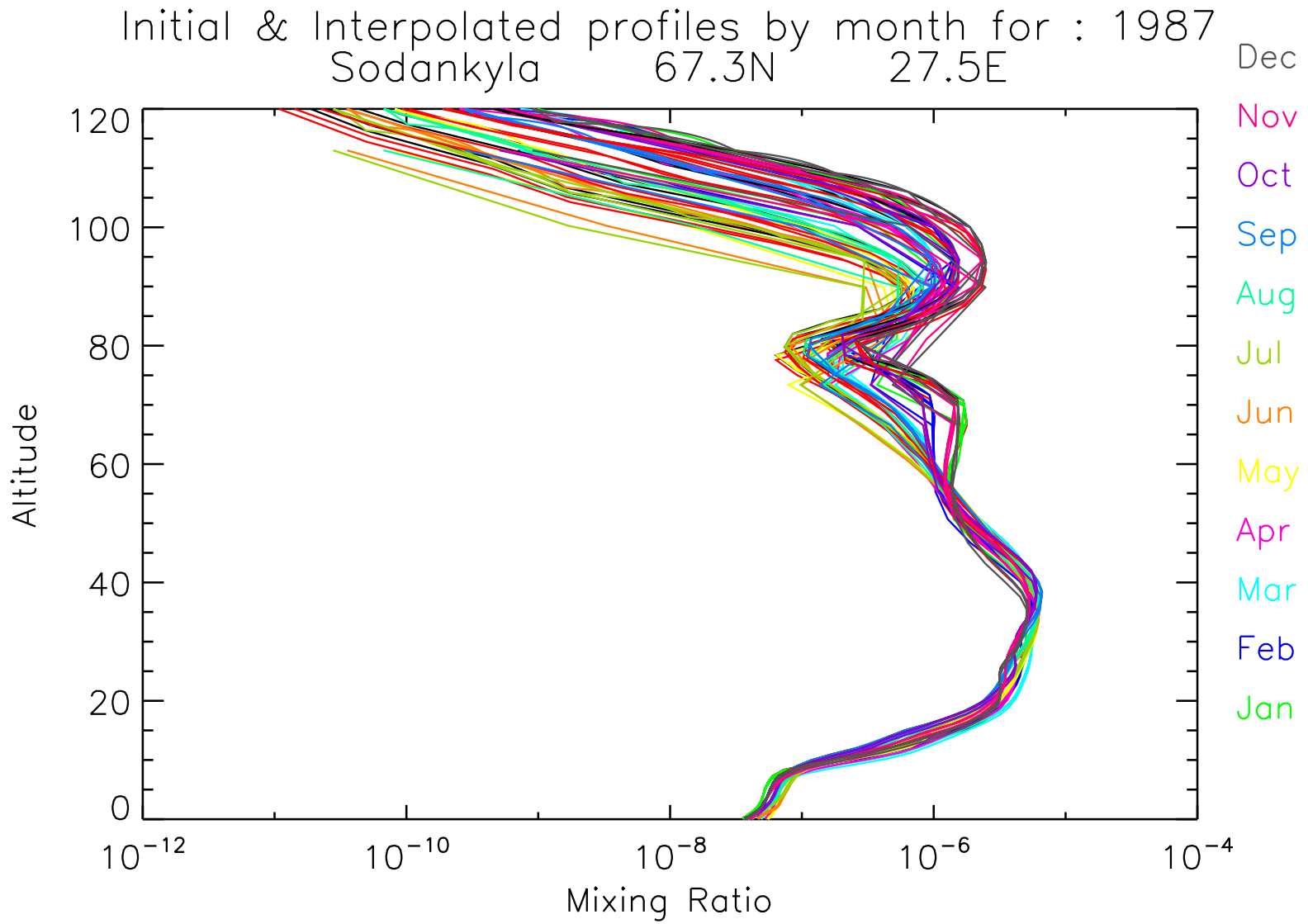
Initial & Interpolated profiles by month for : 1987
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Dec
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Altitude
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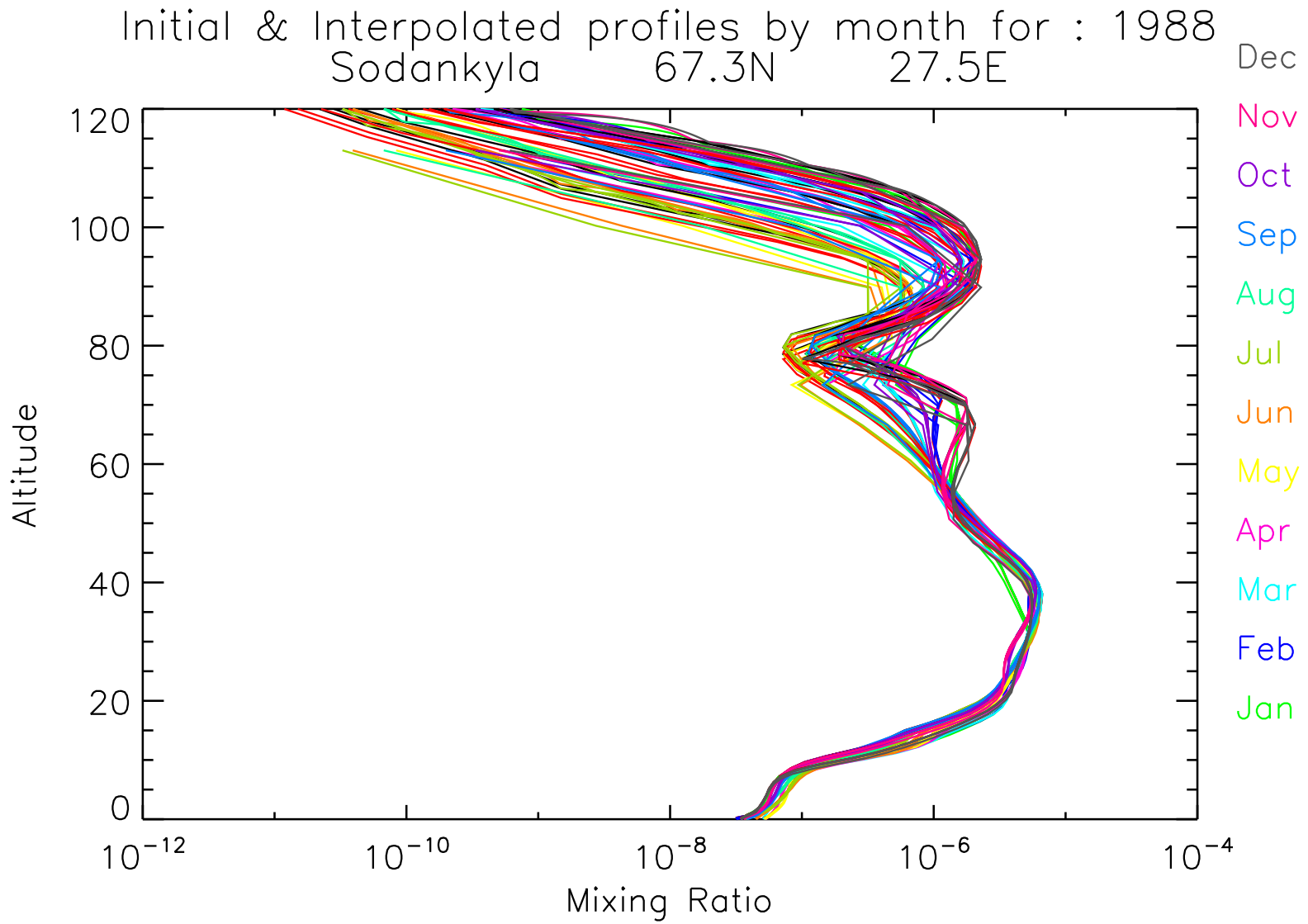
10^{-4}
Mixing Ratio


Initial & Interpolated profiles by month for : 1988
Sodankyla 67.3N 27.5E
Altitude
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Mixing Ratio
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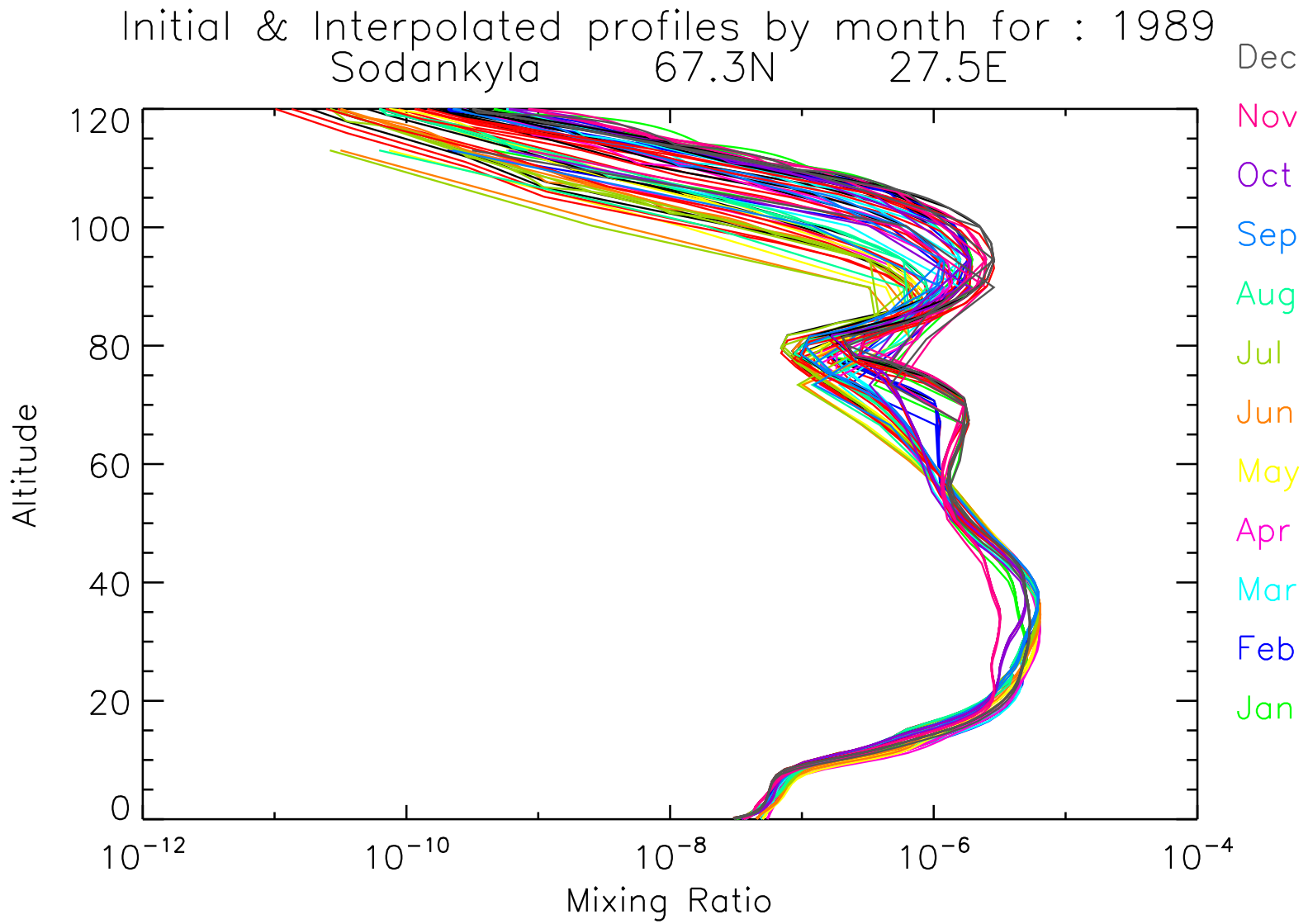
Initial & Interpolated profiles by month for : 1989
Sodankyla 67.3N 27.5E
Altitude
120
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Mixing Ratio
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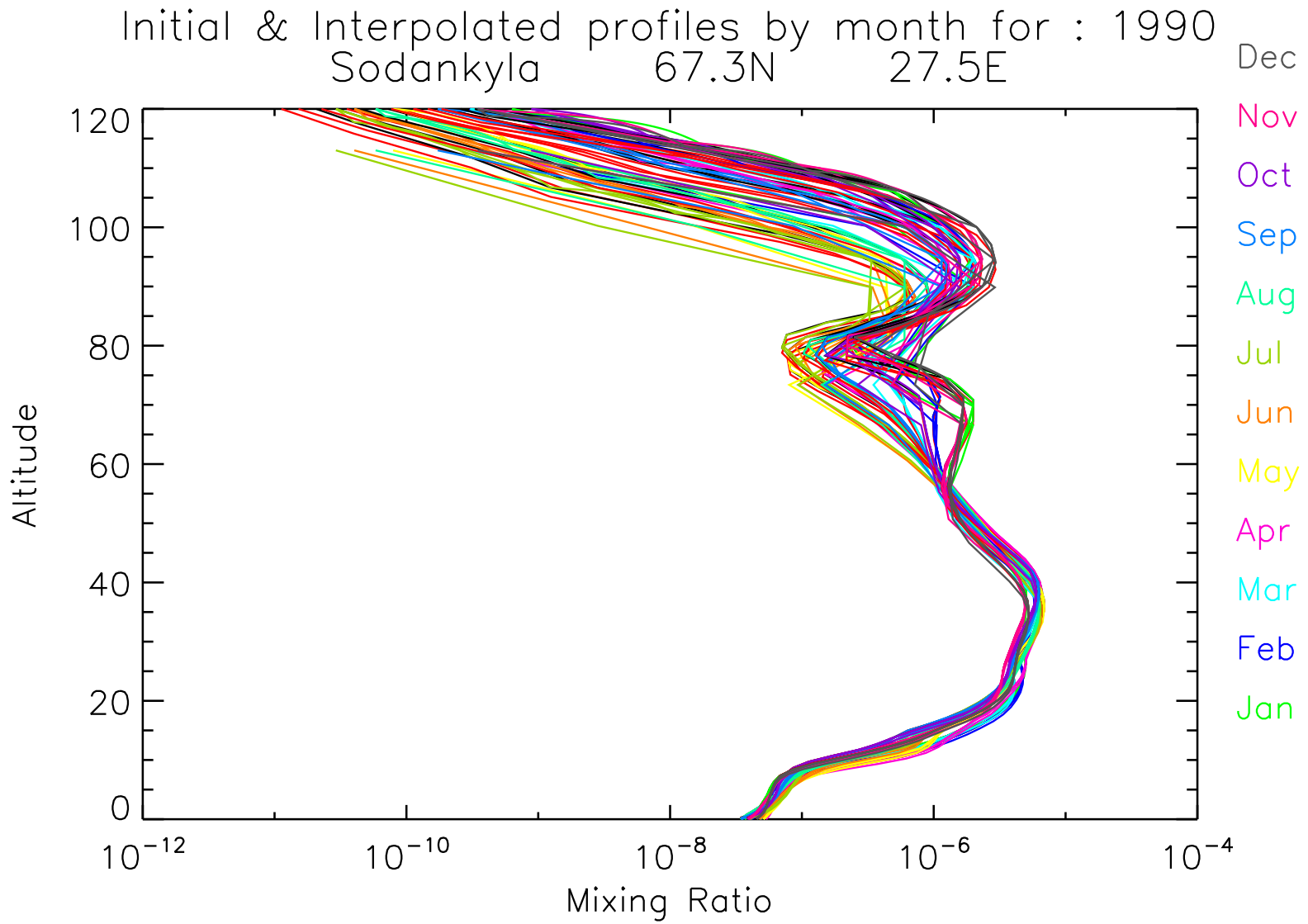
Initial & Interpolated profiles by month for : 1990
Sodankyla 67.3N 27.5E
Altitude
120
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10^{-12}
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Mixing Ratio
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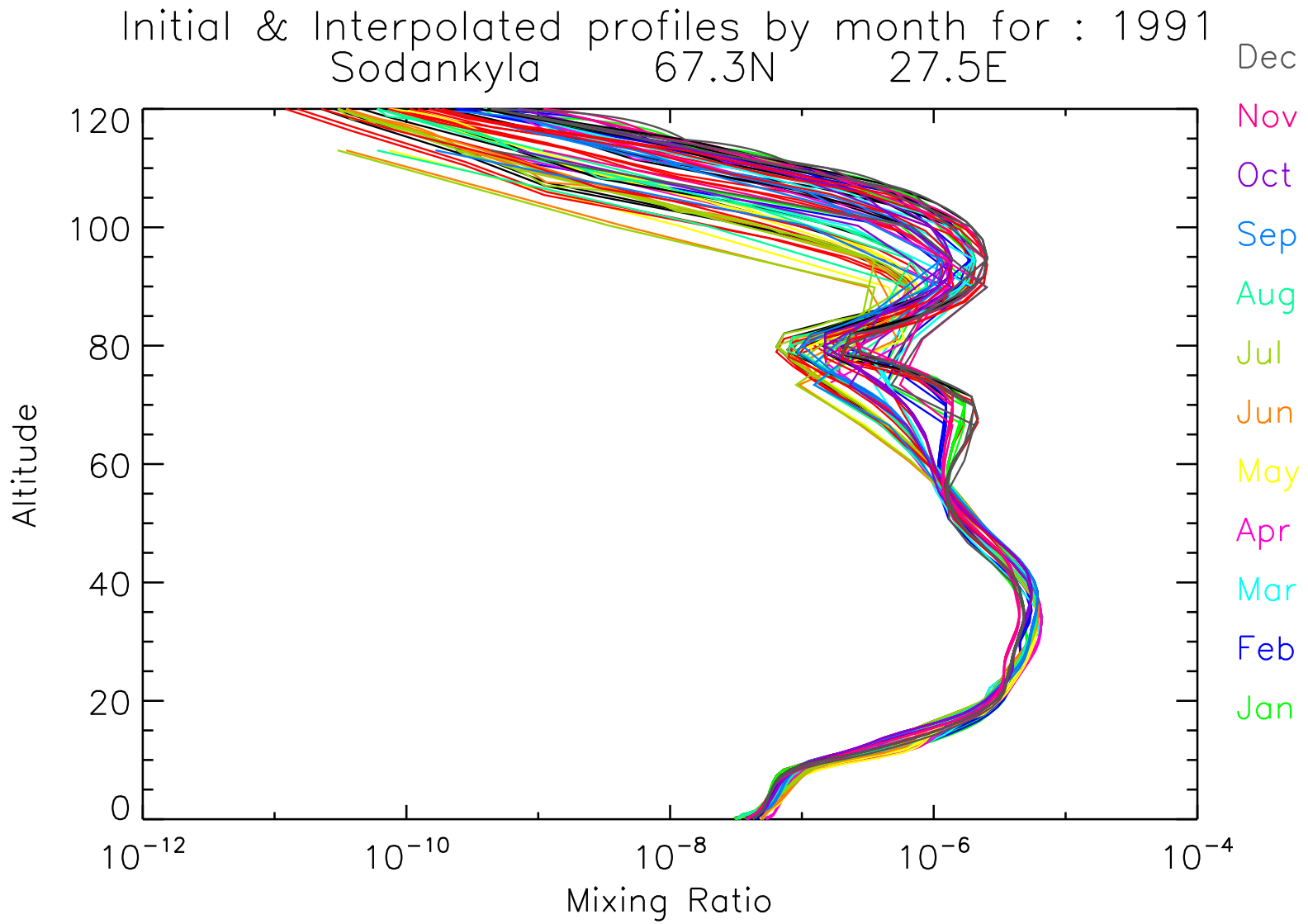
Initial & Interpolated profiles by month for : 1991
Sodankyla 67.3N 27.5E
Altitude
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Mixing Ratio
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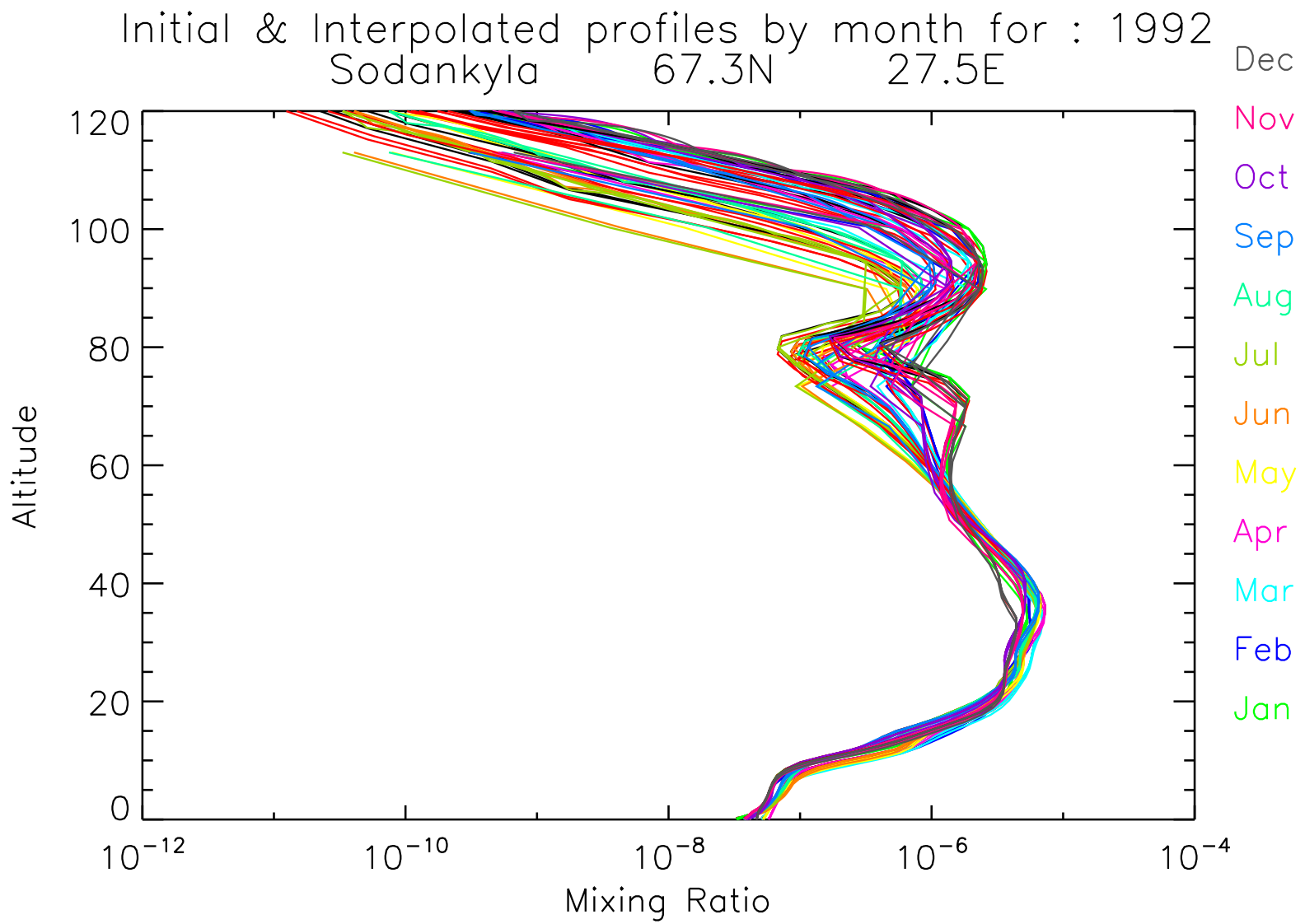
Initial & Interpolated profiles by month for : 1992
Sodankyla 67.3N 27.5E
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Altitude
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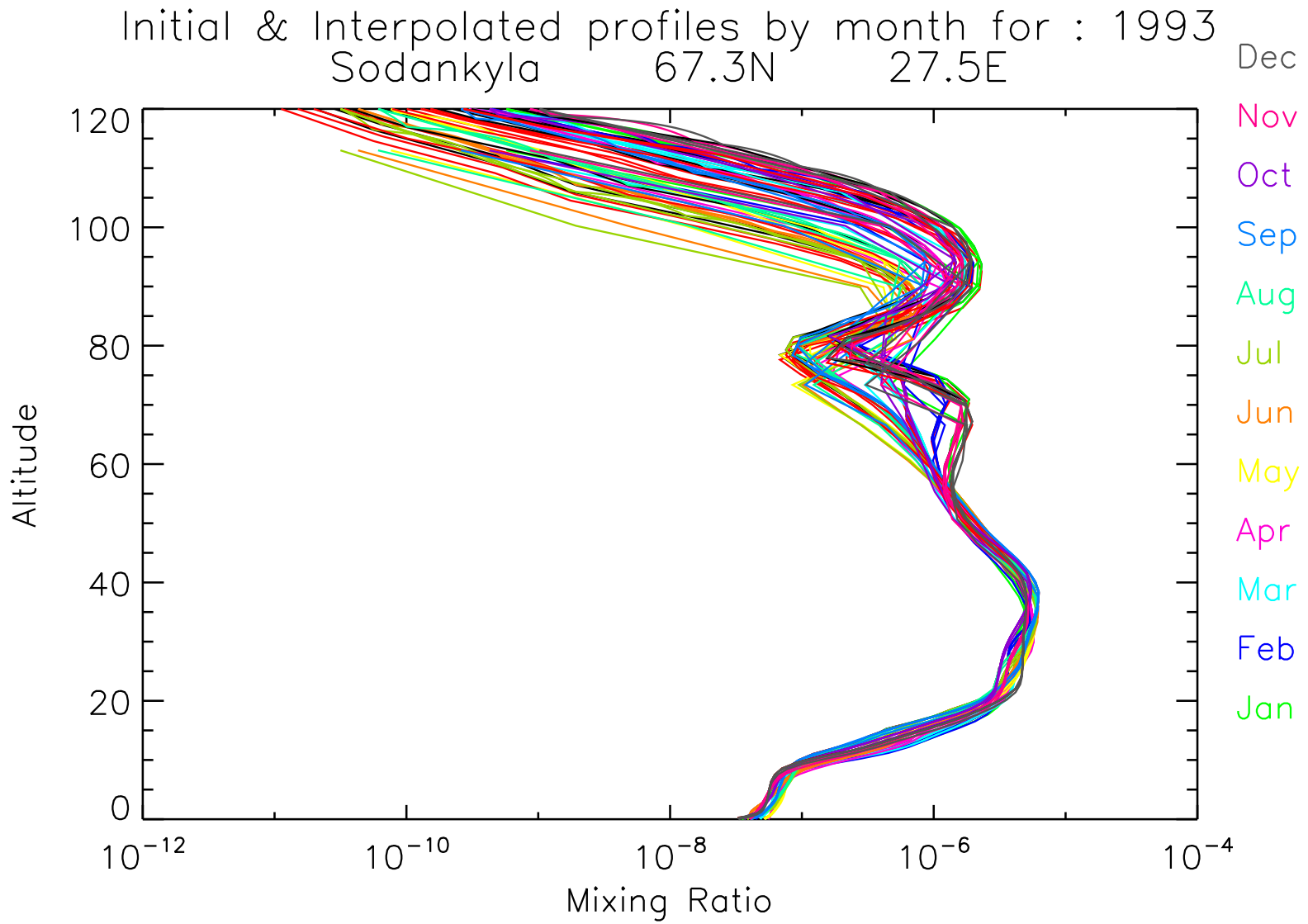
Mixing Ratio


Initial & Interpolated profiles by month for : 1993
Sodankyla 67.3N 27.5E
Altitude
120
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Mixing Ratio
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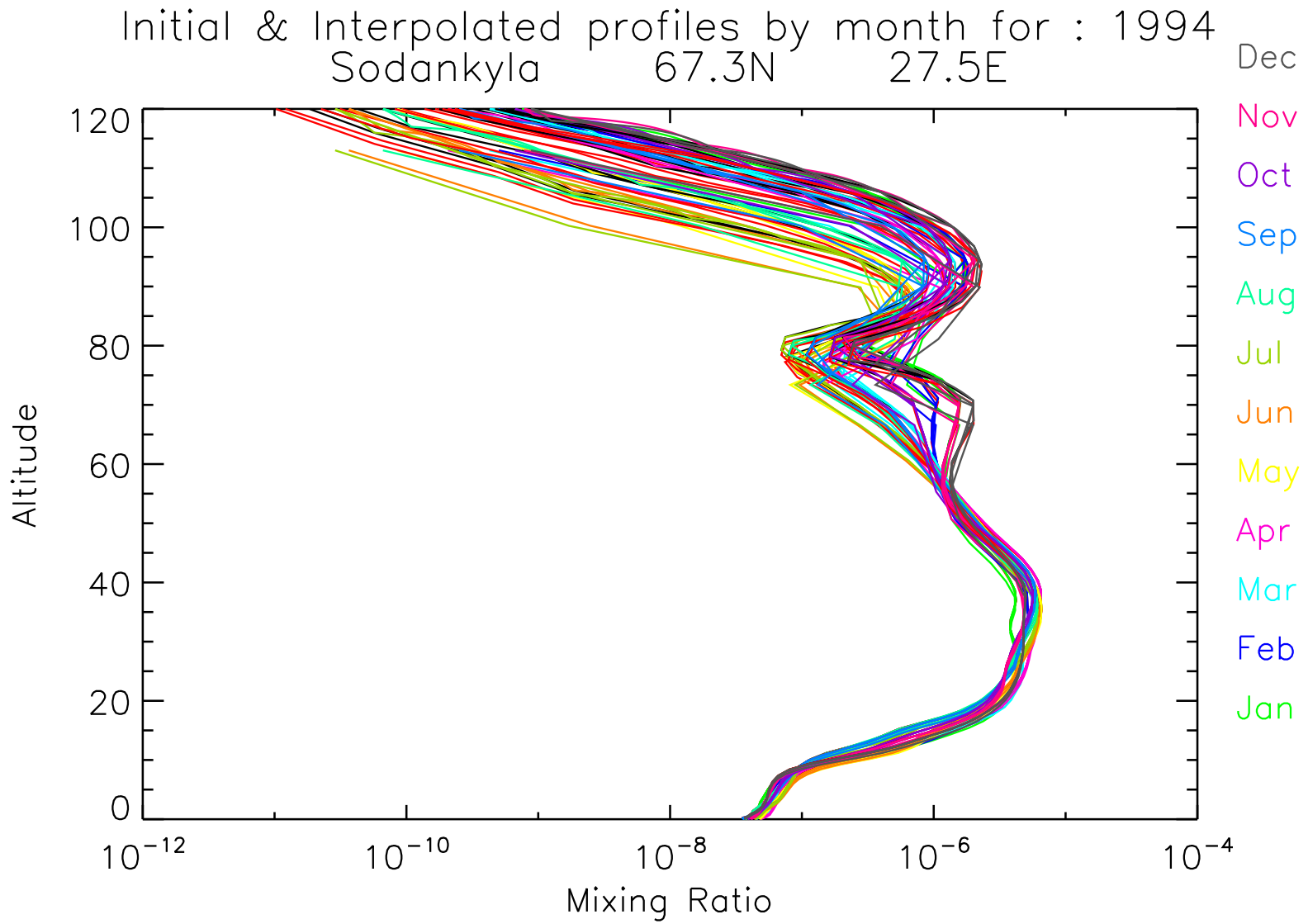
Initial & Interpolated profiles by month for : 1994
Sodankyla 67.3N 27.5E
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Altitude
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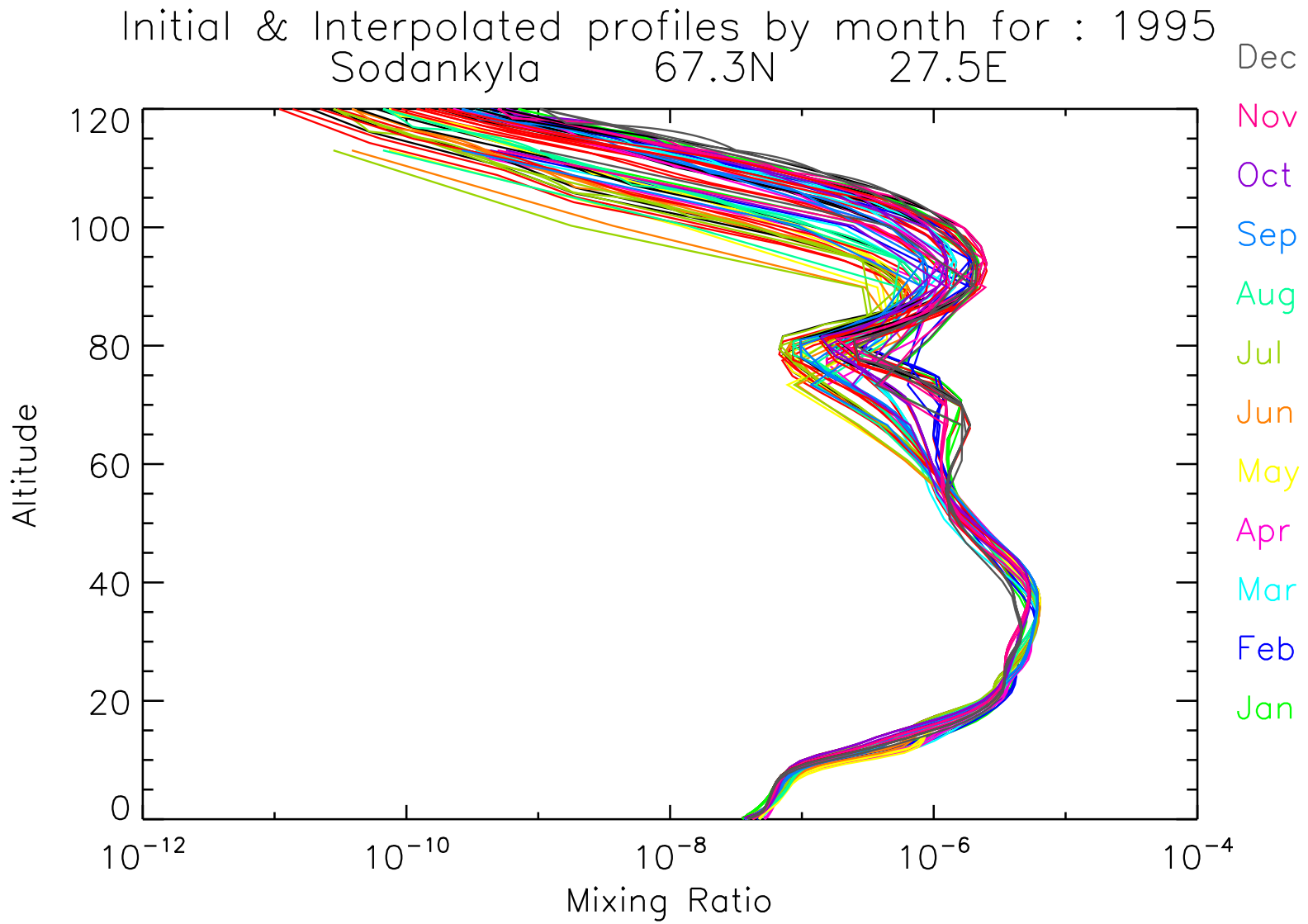
Mixing Ratio


Initial & Interpolated profiles by month for : 1995
Sodankyla 67.3N 27.5E
Altitude
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Mixing Ratio
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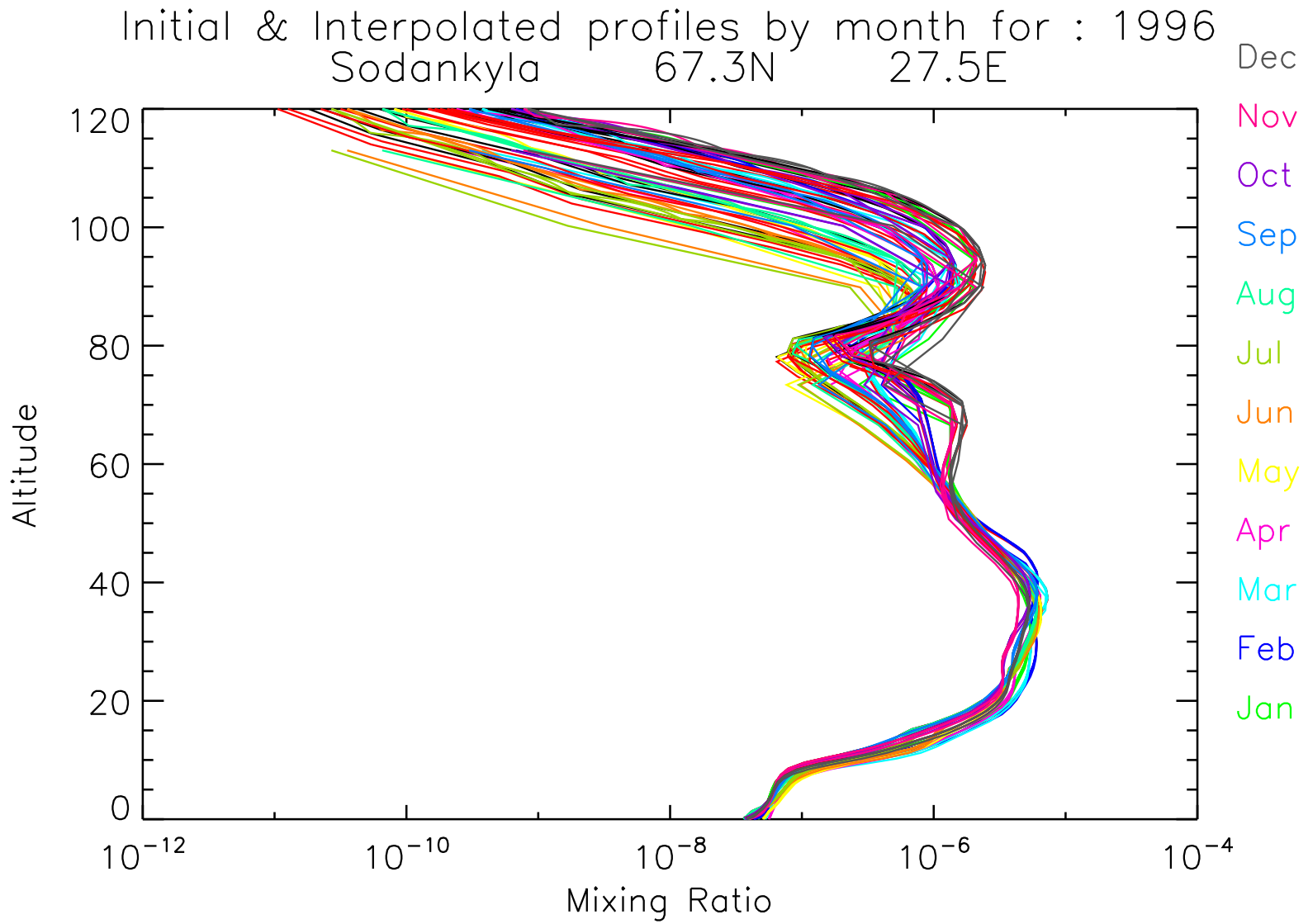
Initial & Interpolated profiles by month for : 1996
Sodankyla 67.3N 27.5E
Altitude
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Mixing Ratio
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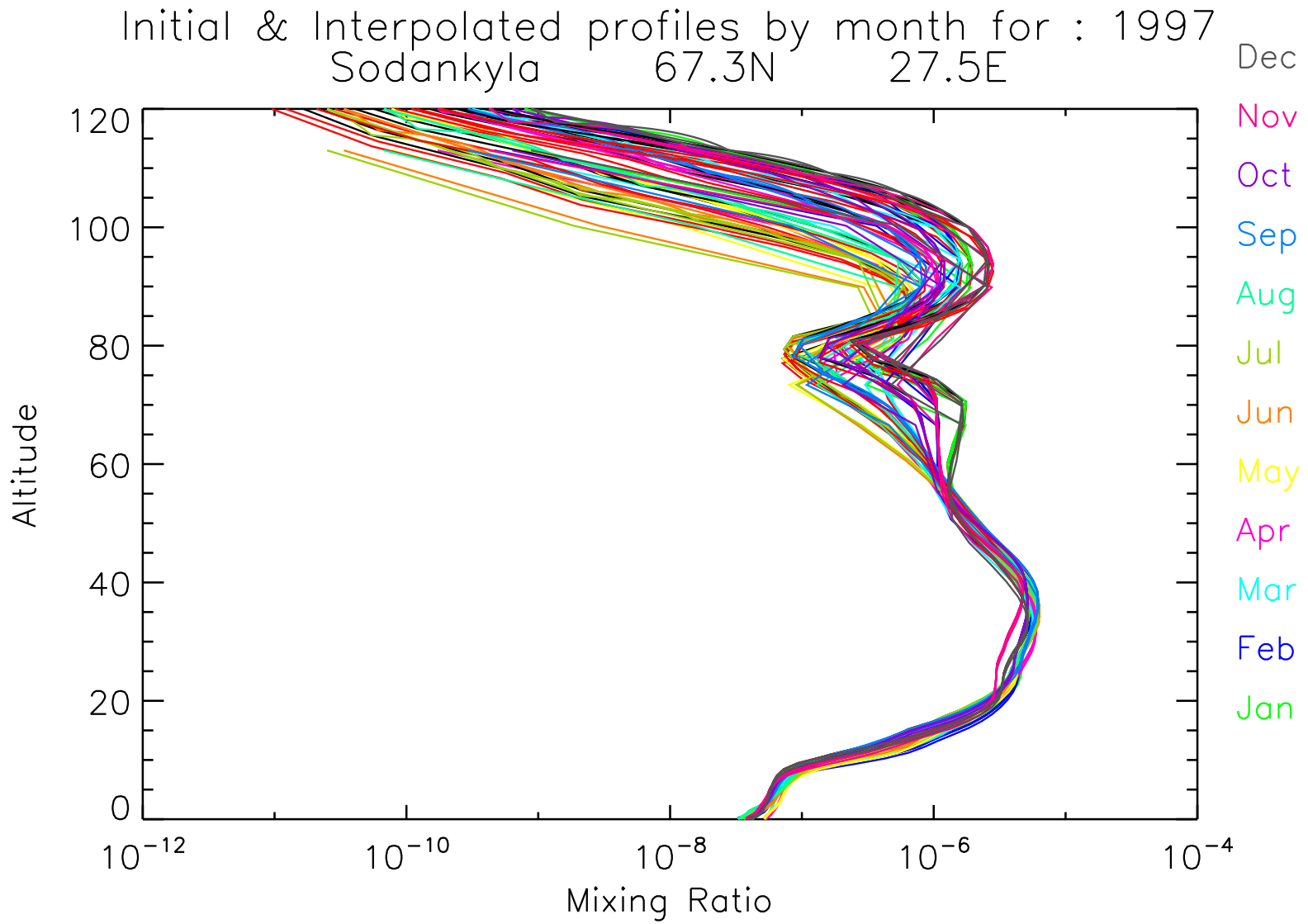
Initial & Interpolated profiles by month for : 1997
Sodankyla 67.3N 27.5E
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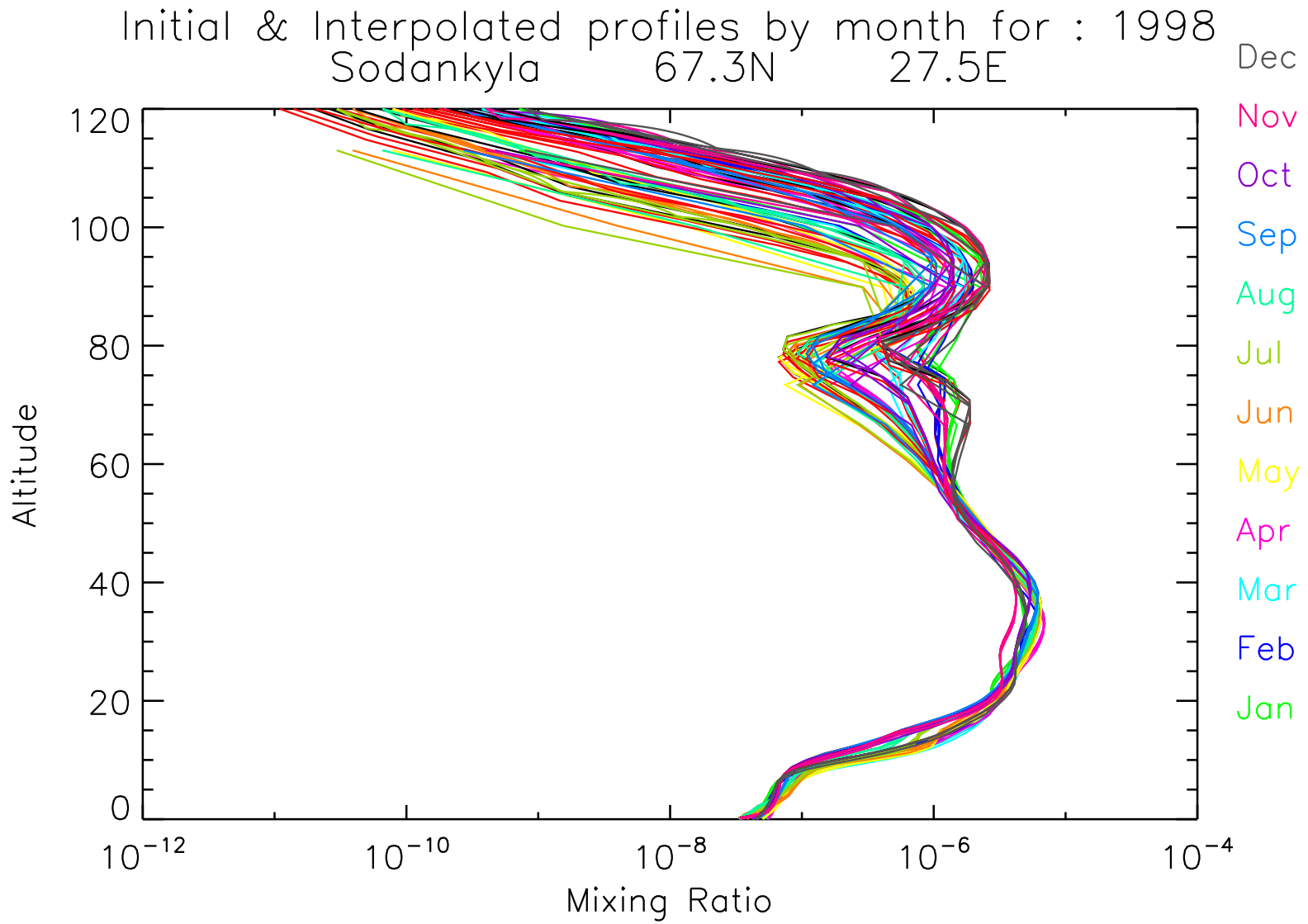
10^{-4}
Mixing Ratio


Initial & Interpolated profiles by month for : 1998
Sodankyla 67.3N 27.5E
Altitude
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Mixing Ratio
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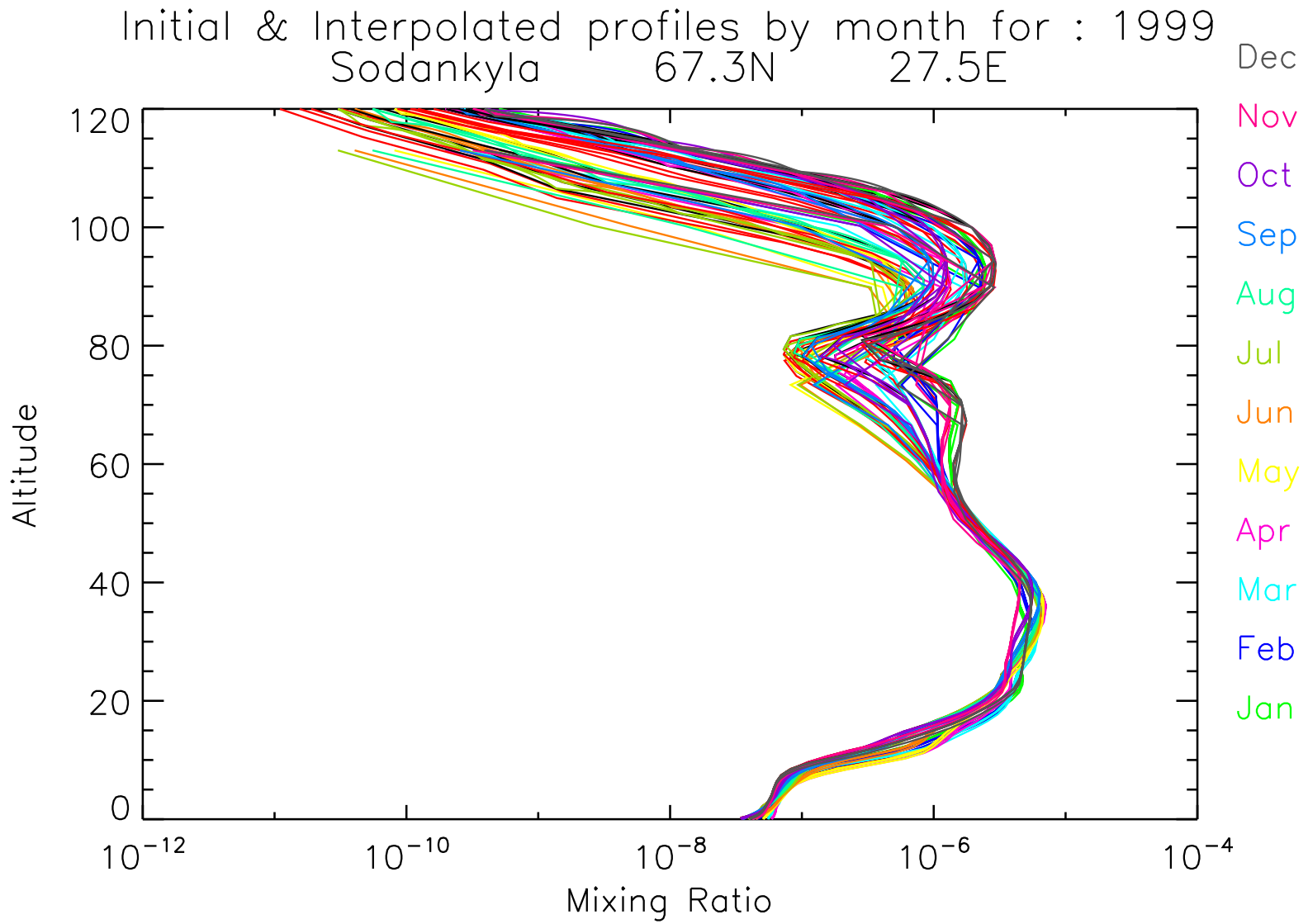
Initial & Interpolated profiles by month for : 1999
Sodankyla 67.3N 27.5E
Altitude
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Mixing Ratio
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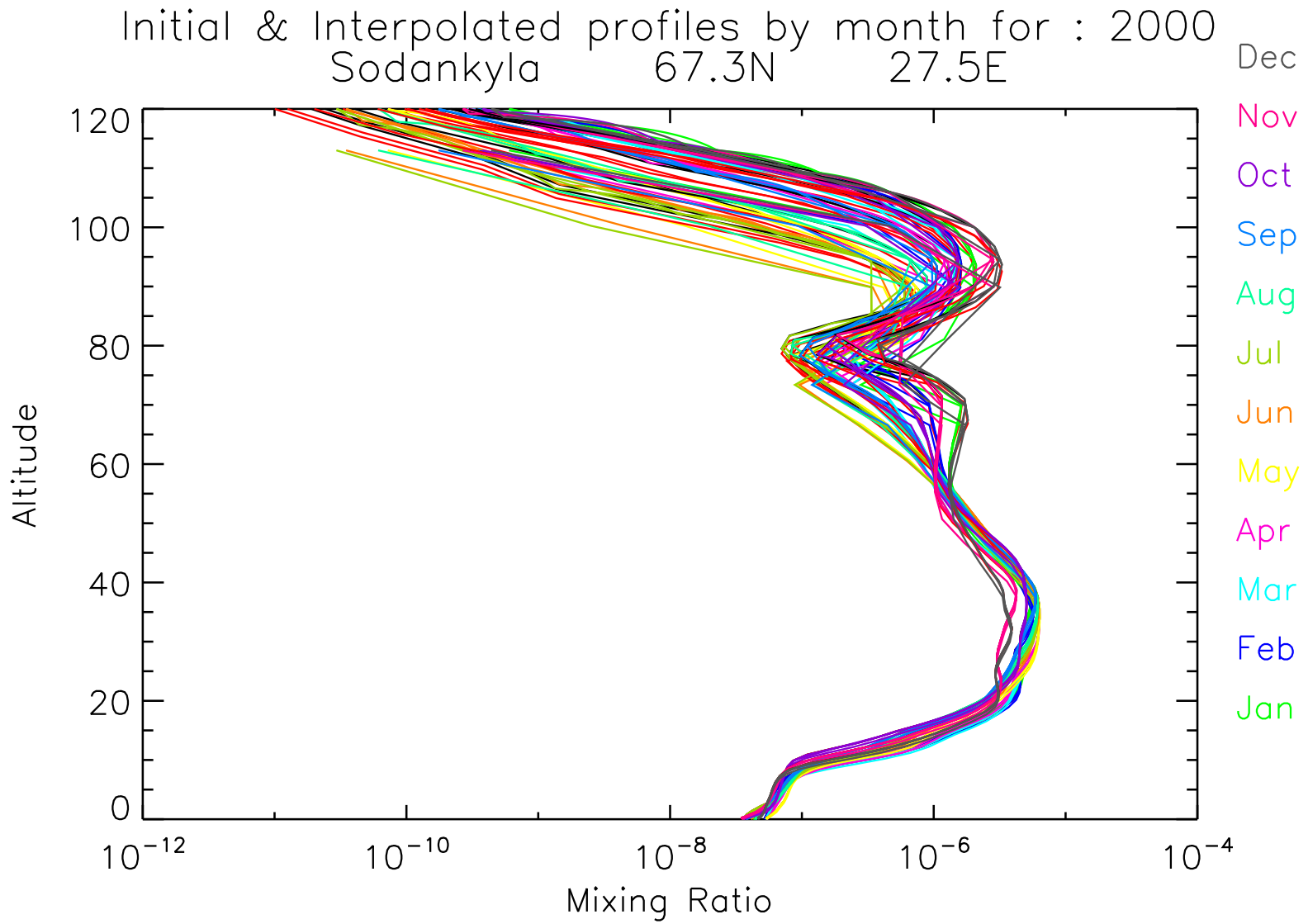
Initial & Interpolated profiles by month for : 2000
Sodankyla 67.3N 27.5E
Altitude
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Mixing Ratio
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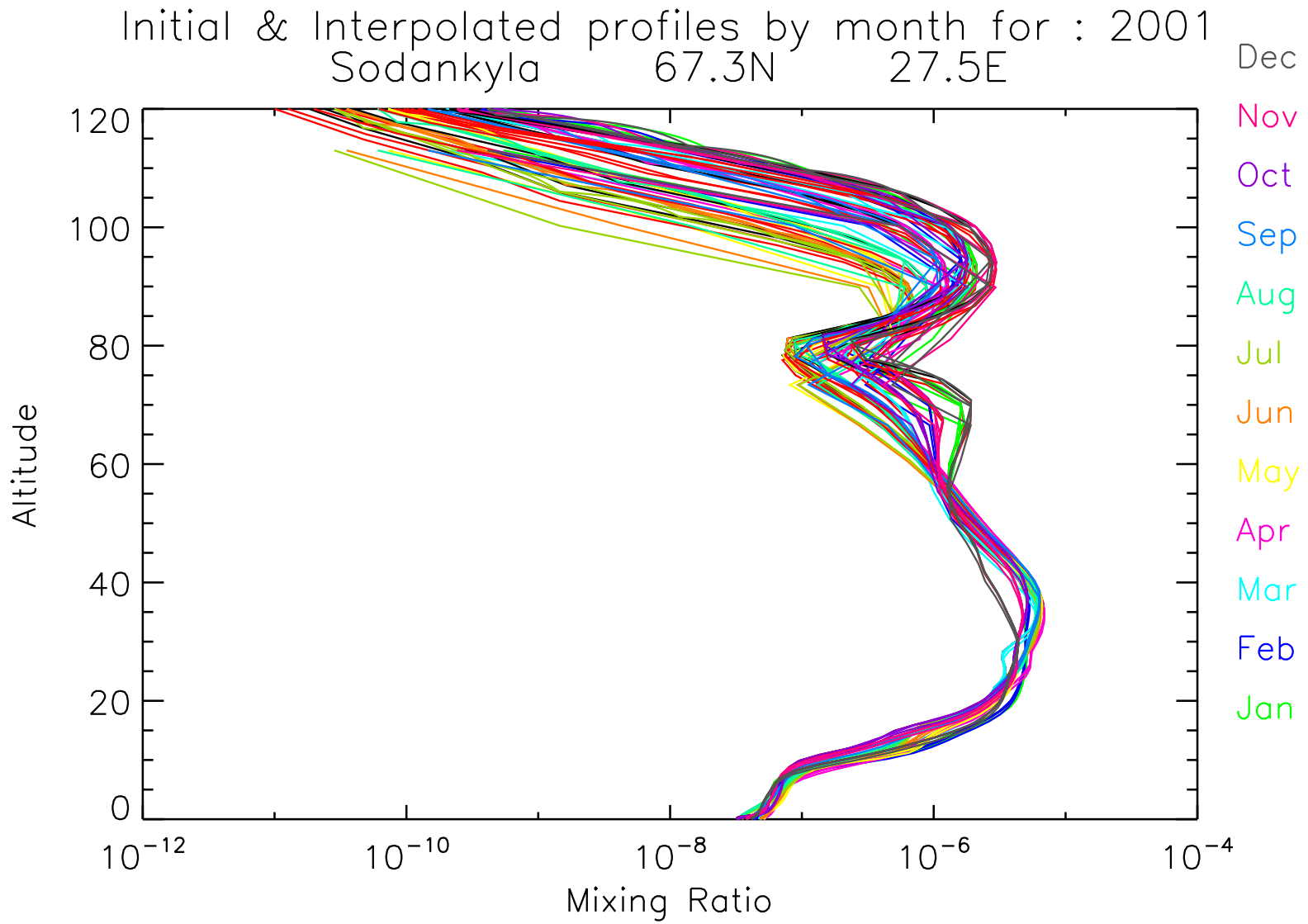
Initial & Interpolated profiles by month for : 2001
Sodankyla 67.3N 27.5E
Altitude
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Mixing Ratio
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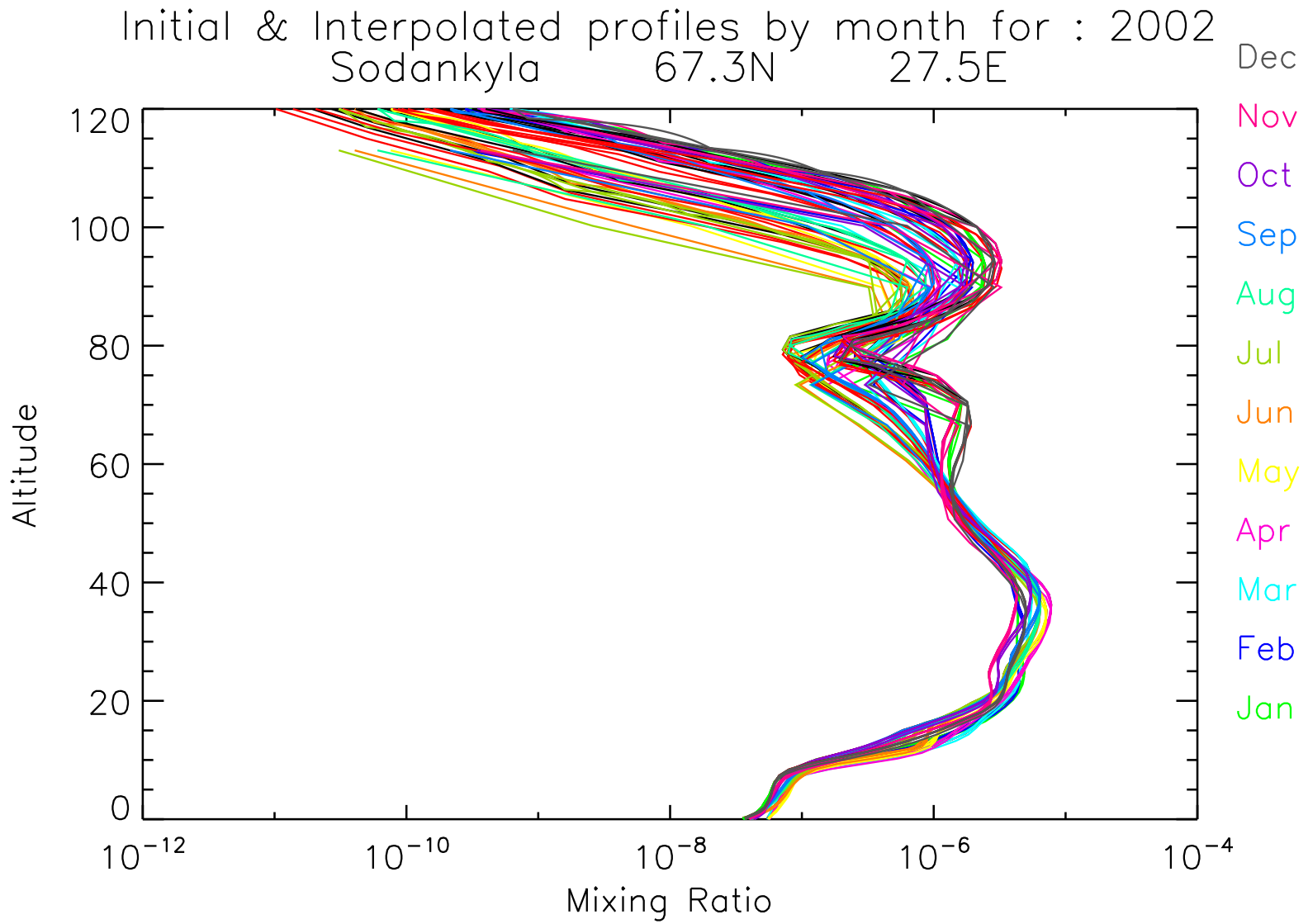
Initial & Interpolated profiles by month for : 2002
Sodankyla 67.3N 27.5E
Altitude
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Mixing Ratio
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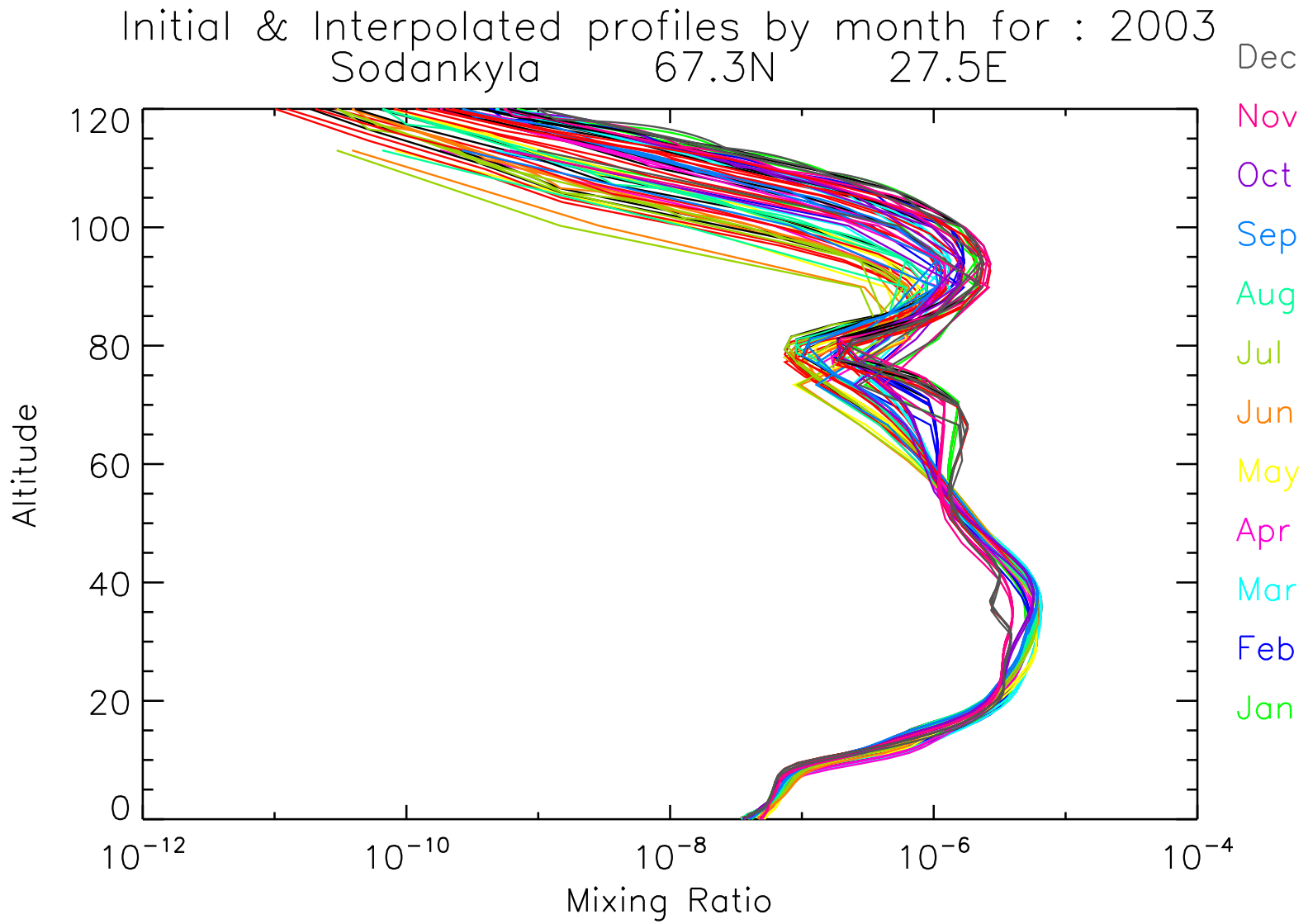
Initial & Interpolated profiles by month for : 2003
Sodankyla 67.3N 27.5E
Altitude
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Mixing Ratio
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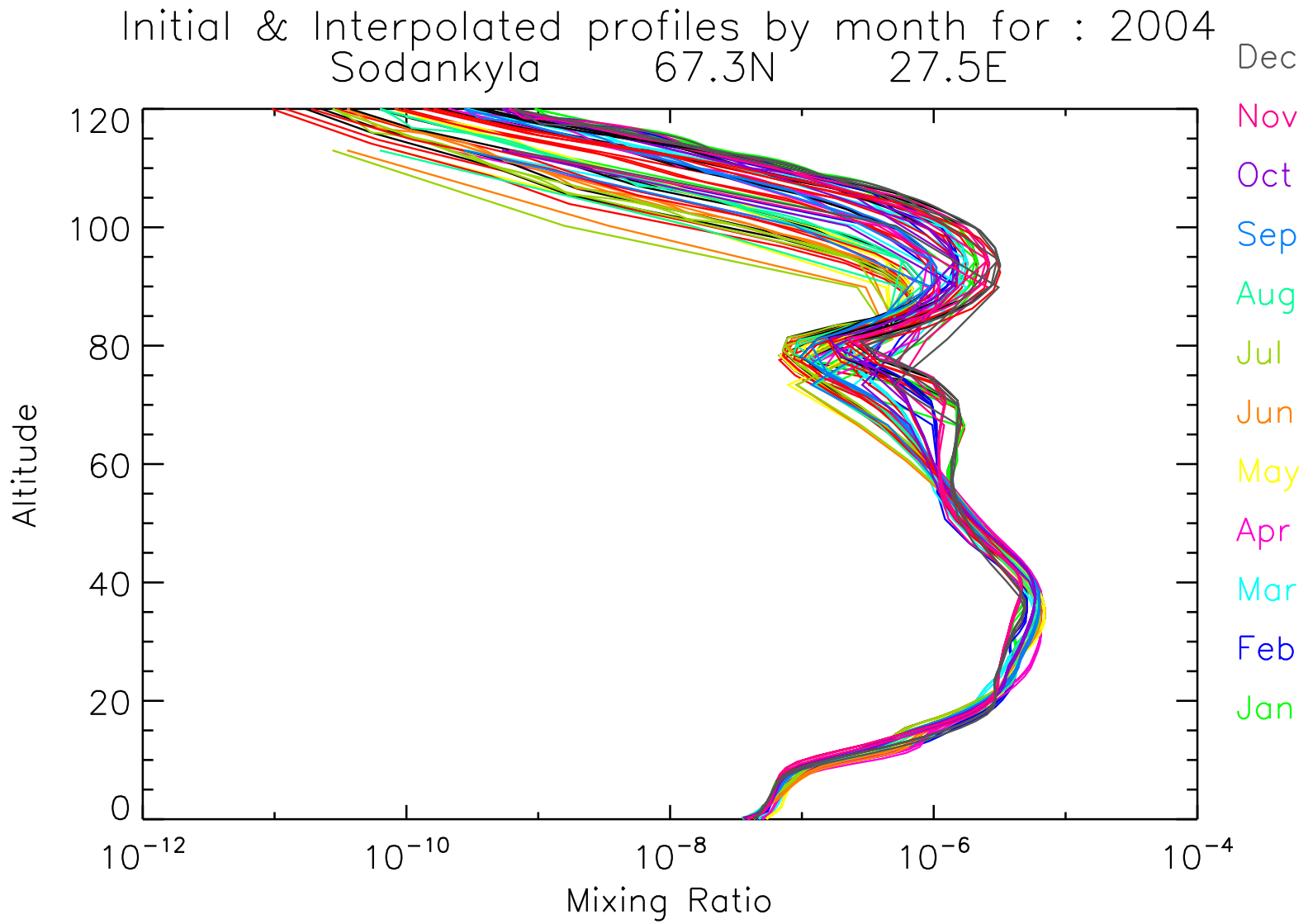
Initial & Interpolated profiles by month for : 2004
Sodankyla 67.3N 27.5E
Altitude
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Mixing Ratio
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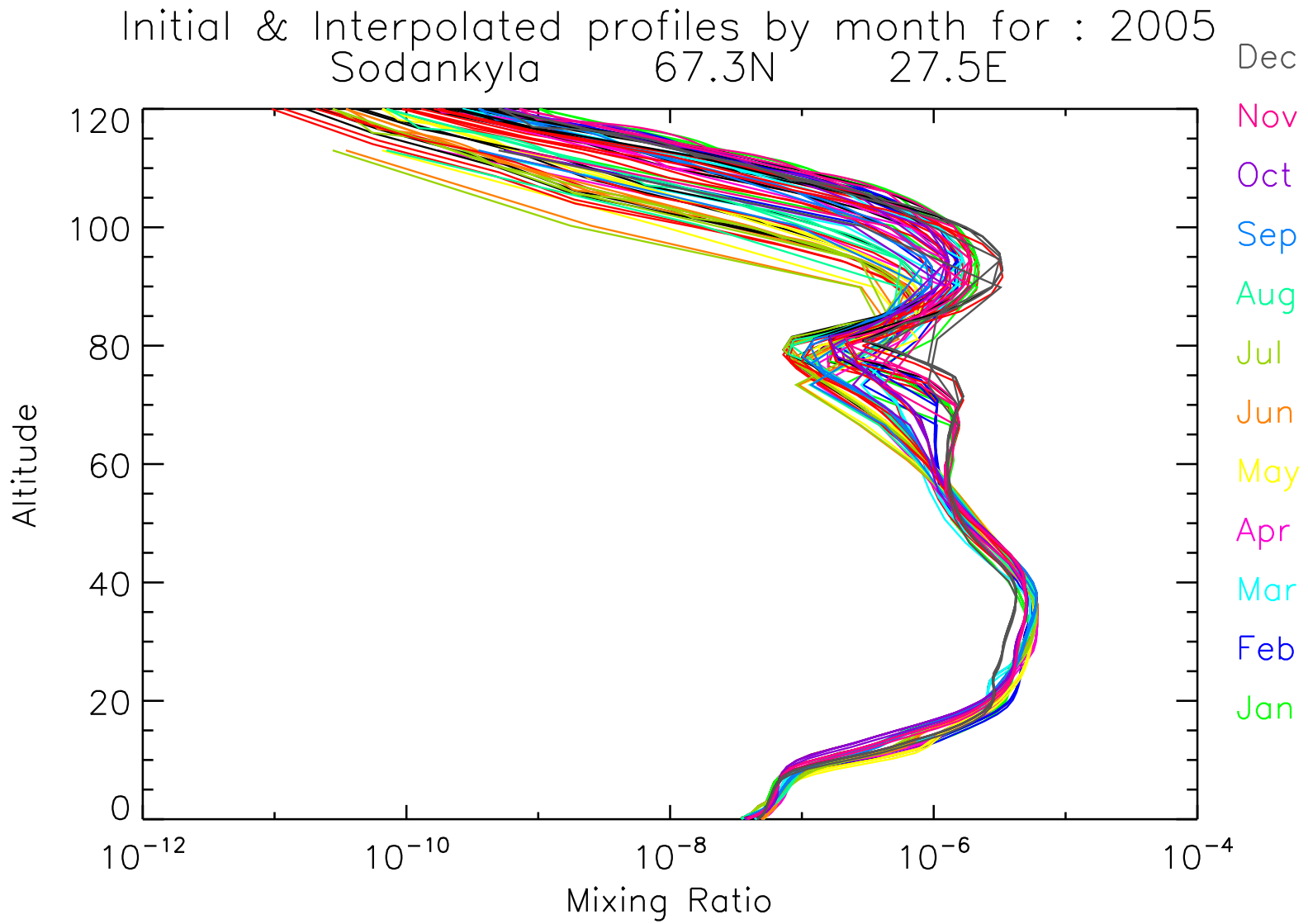
Initial & Interpolated profiles by month for : 2005
Sodankyla 67.3N 27.5E
Altitude
120
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Mixing Ratio
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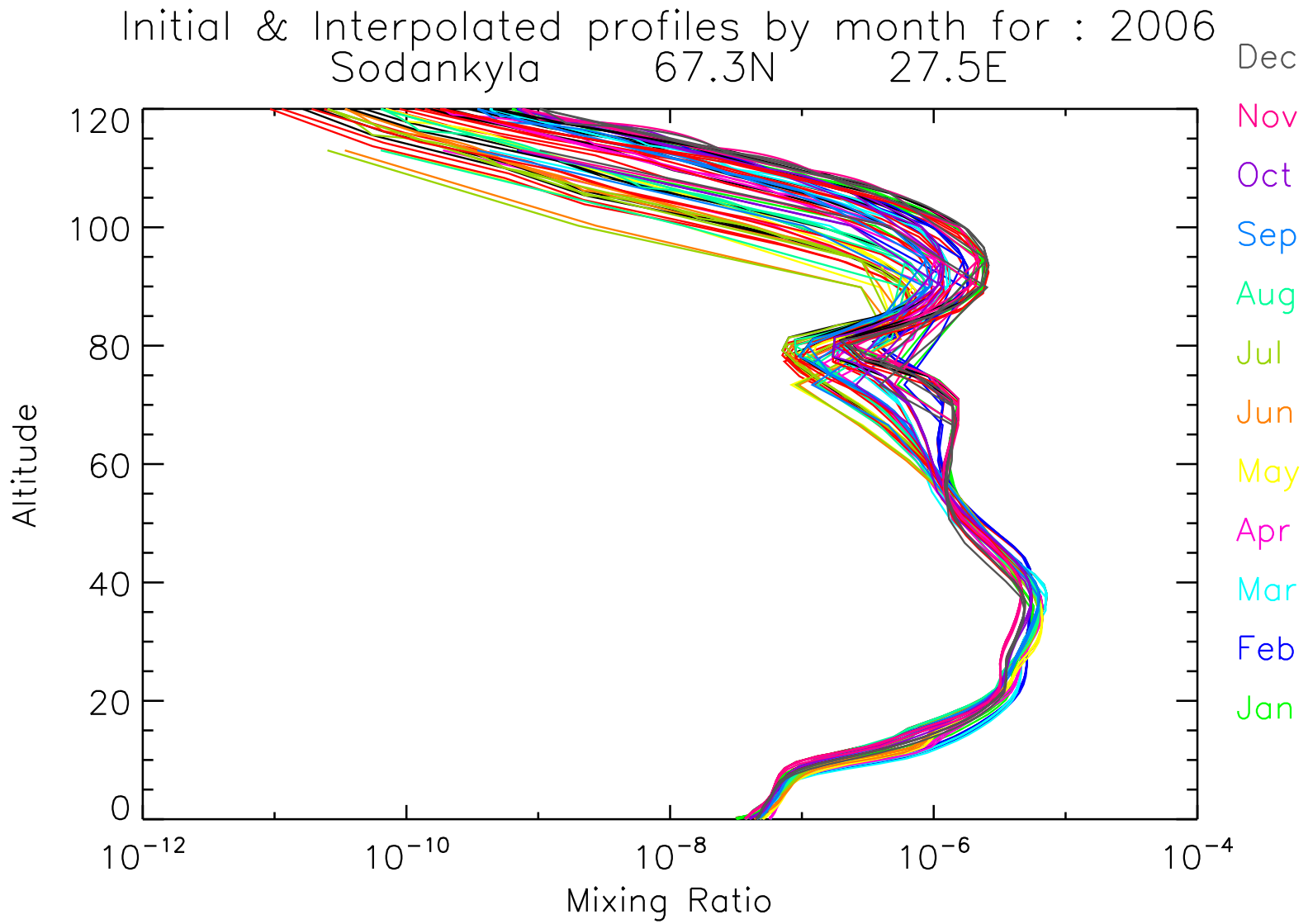
Initial & Interpolated profiles by month for : 2006
Sodankyla 67.3N 27.5E
Altitude
120
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Mixing Ratio
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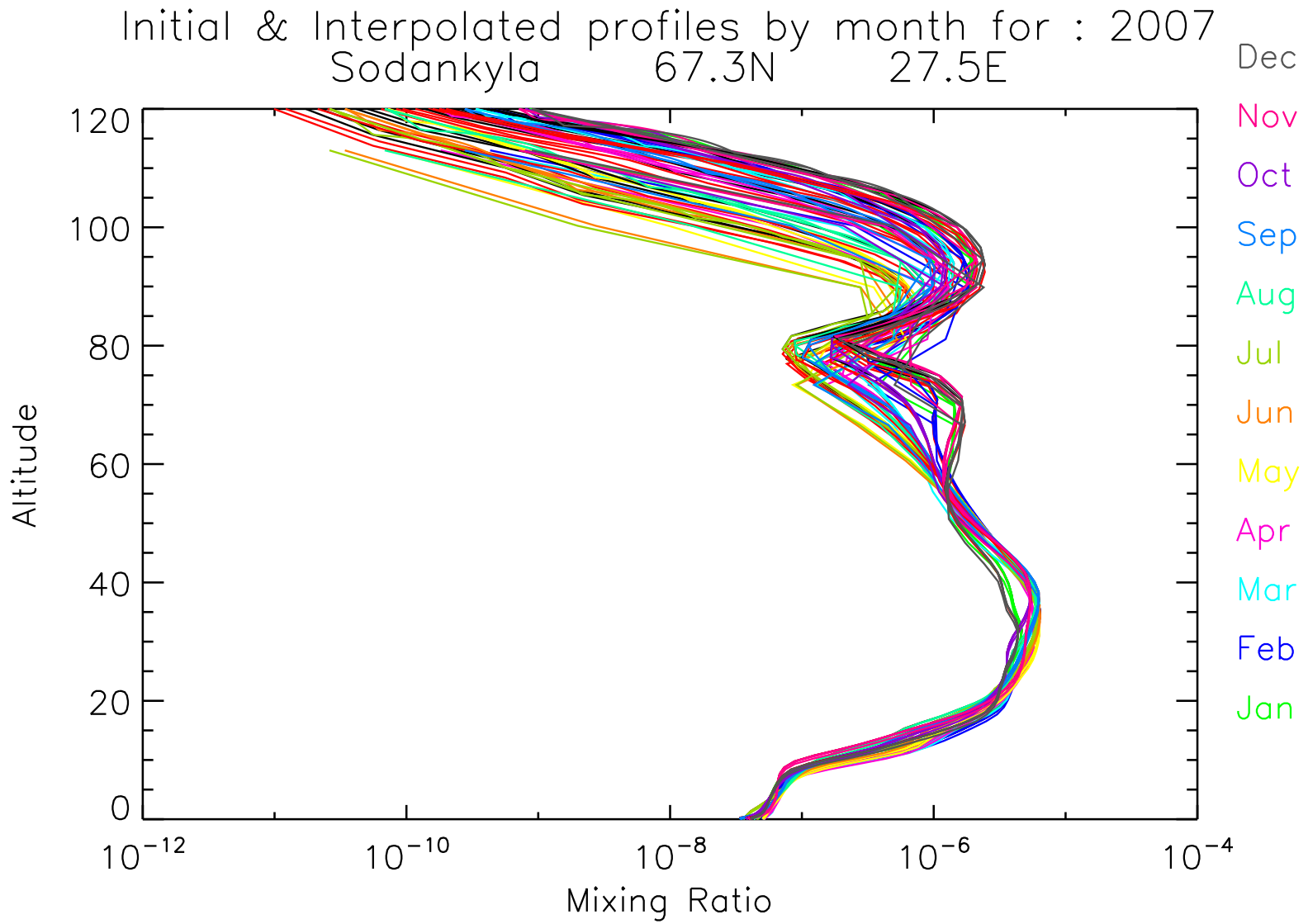
Initial & Interpolated profiles by month for : 2007
Sodankyla 67.3N 27.5E
Altitude
120
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10^{-4}
Mixing Ratio
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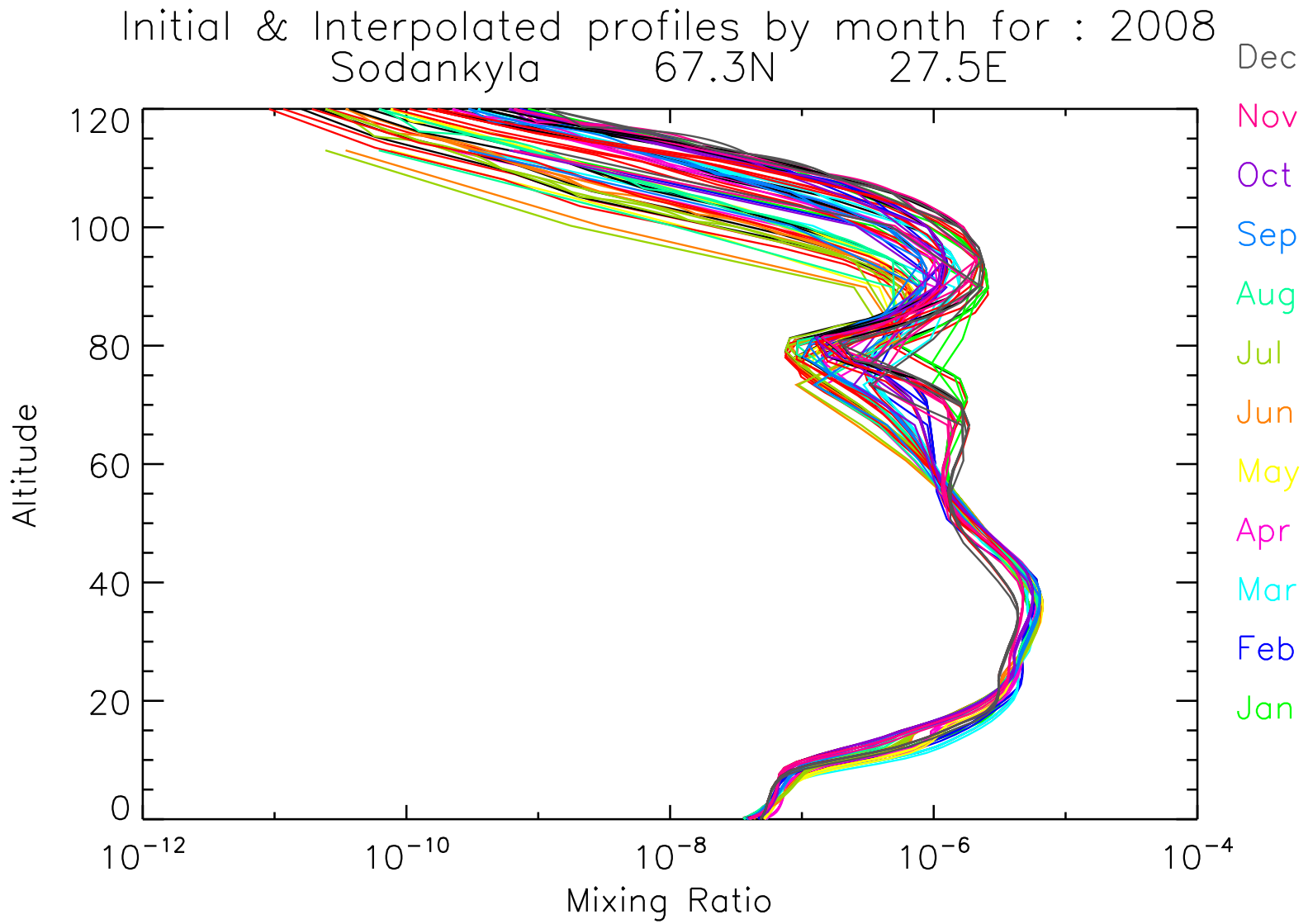
Initial & Interpolated profiles by month for : 2008
Sodankyla 67.3N 27.5E
Altitude
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Mixing Ratio
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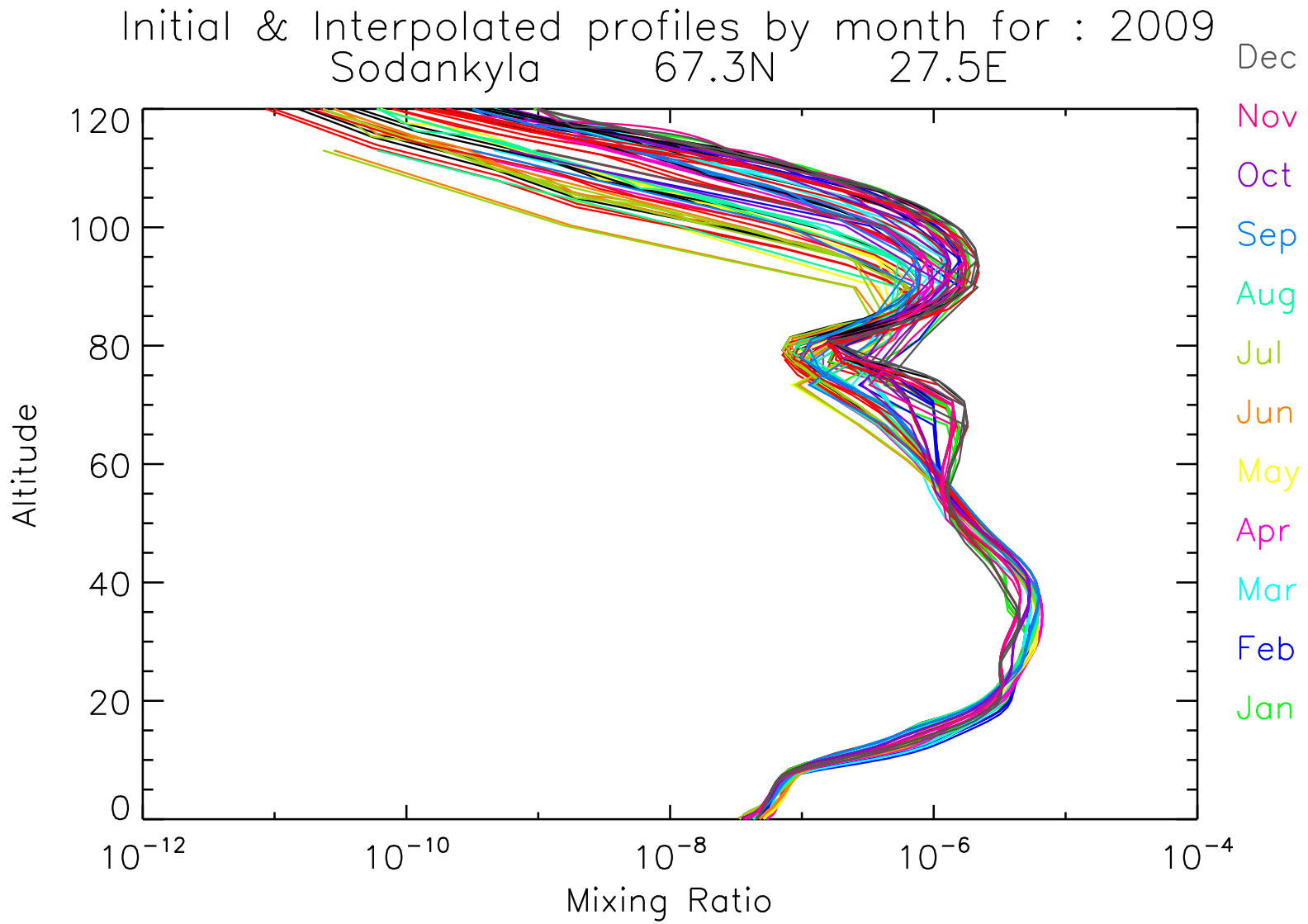
Initial & Interpolated profiles by month for : 2009
Sodankyla 67.3N 27.5E
Altitude
120
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Mixing Ratio
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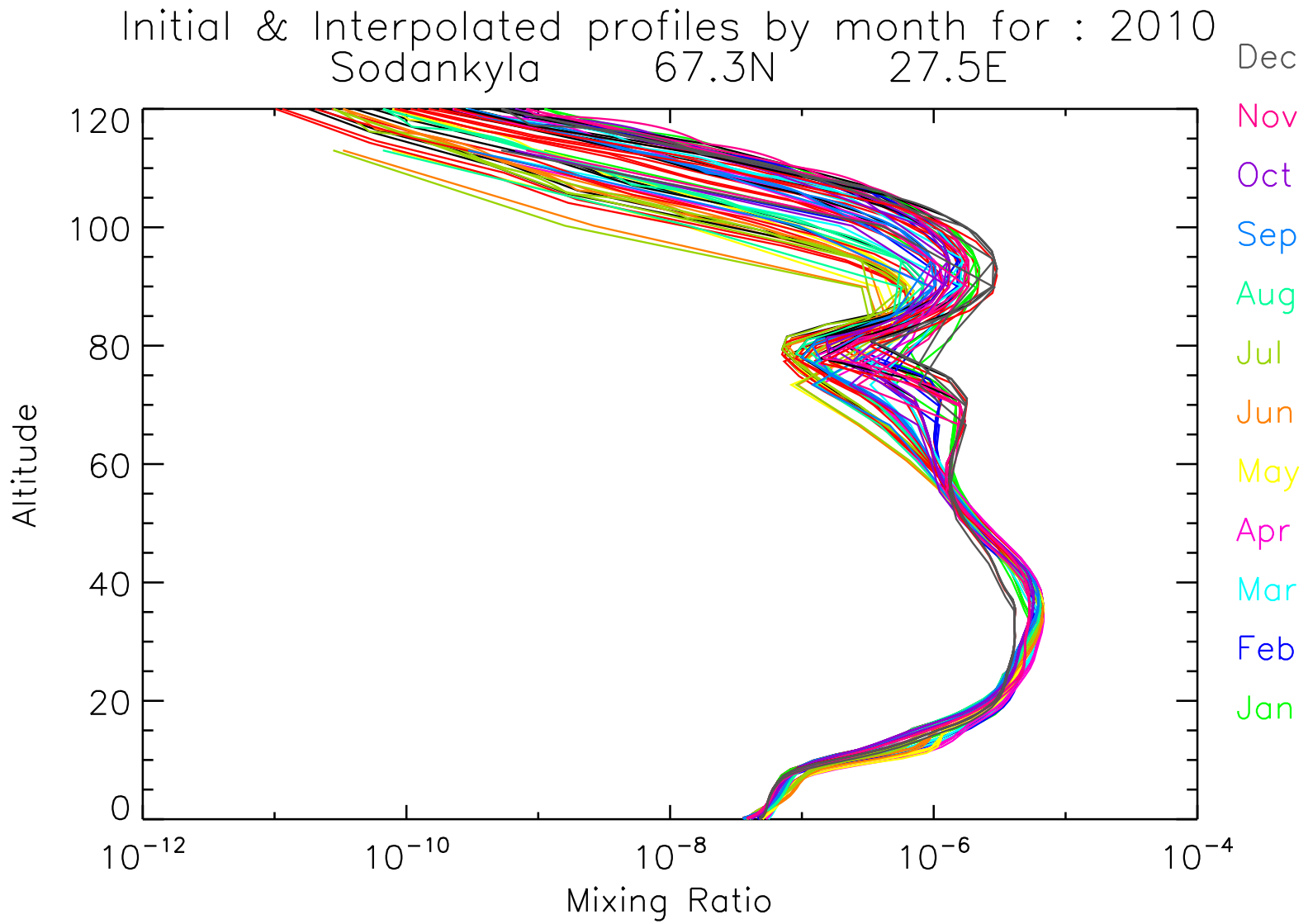
Initial & Interpolated profiles by month for : 2010
Sodankyla 67.3N 27.5E
Altitude
120
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10^{-4}
Mixing Ratio
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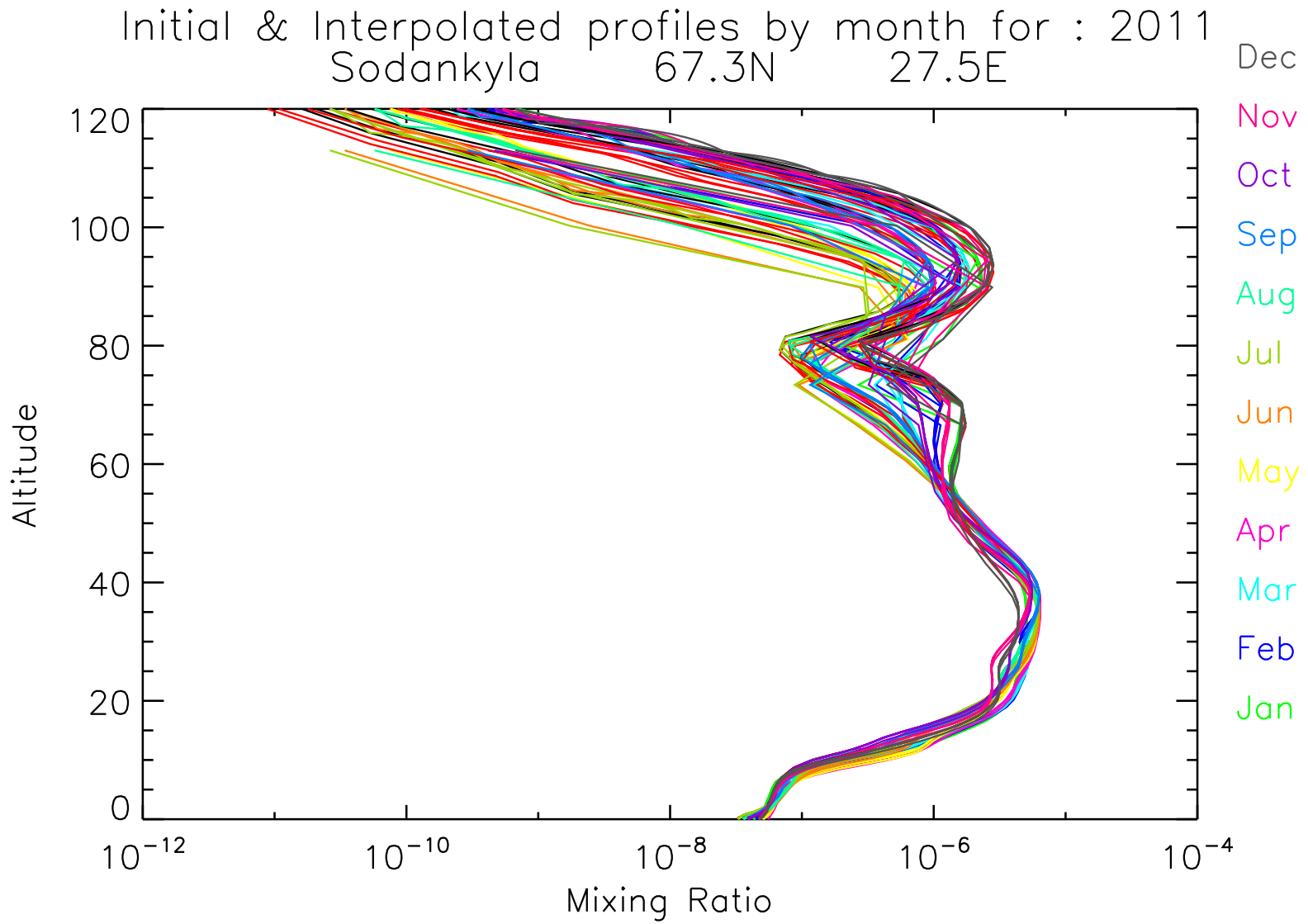
Initial & Interpolated profiles by month for : 2011
Sodankyla 67.3N 27.5E
Altitude
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10^{-4}
Mixing Ratio
Dec
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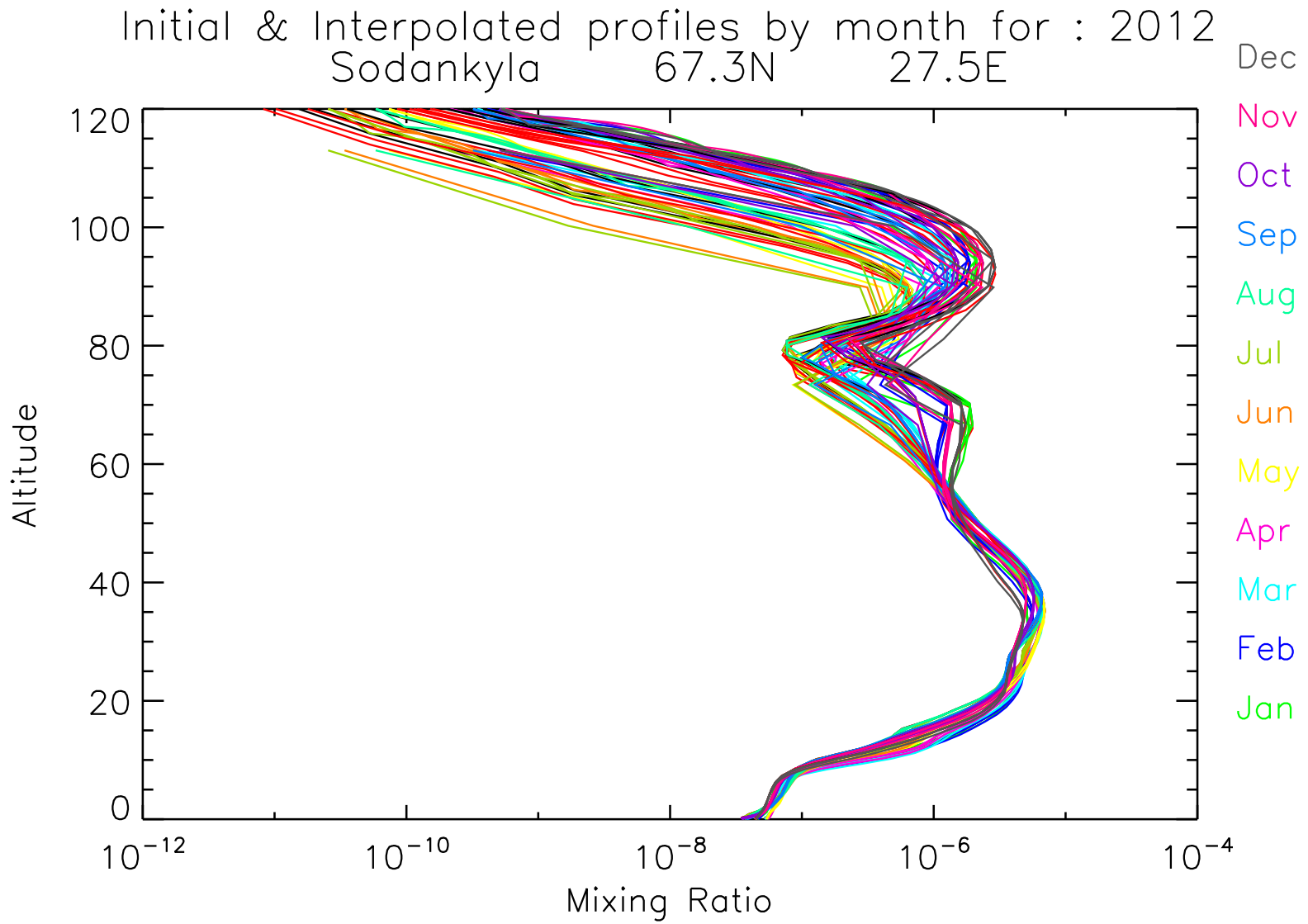
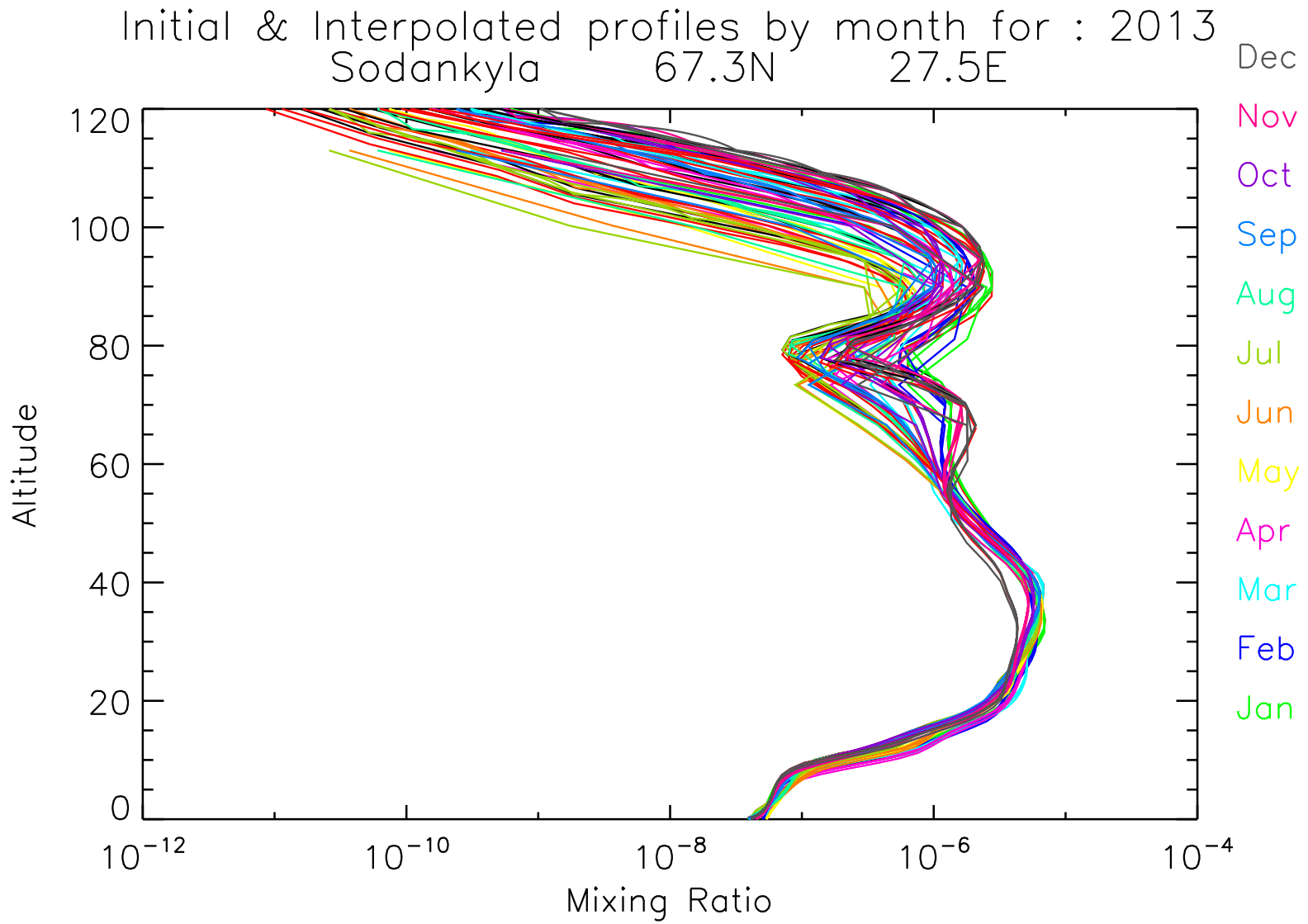
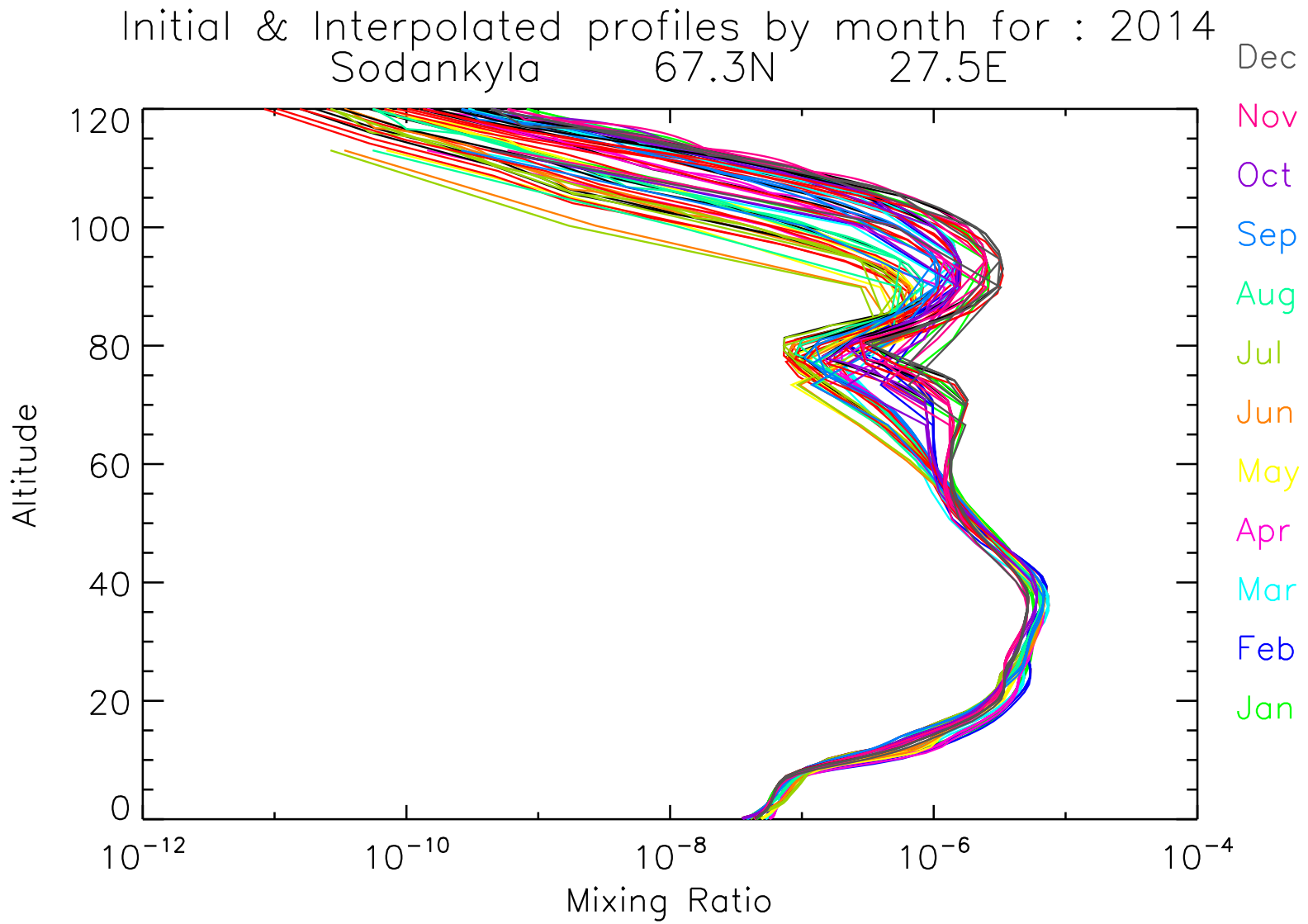
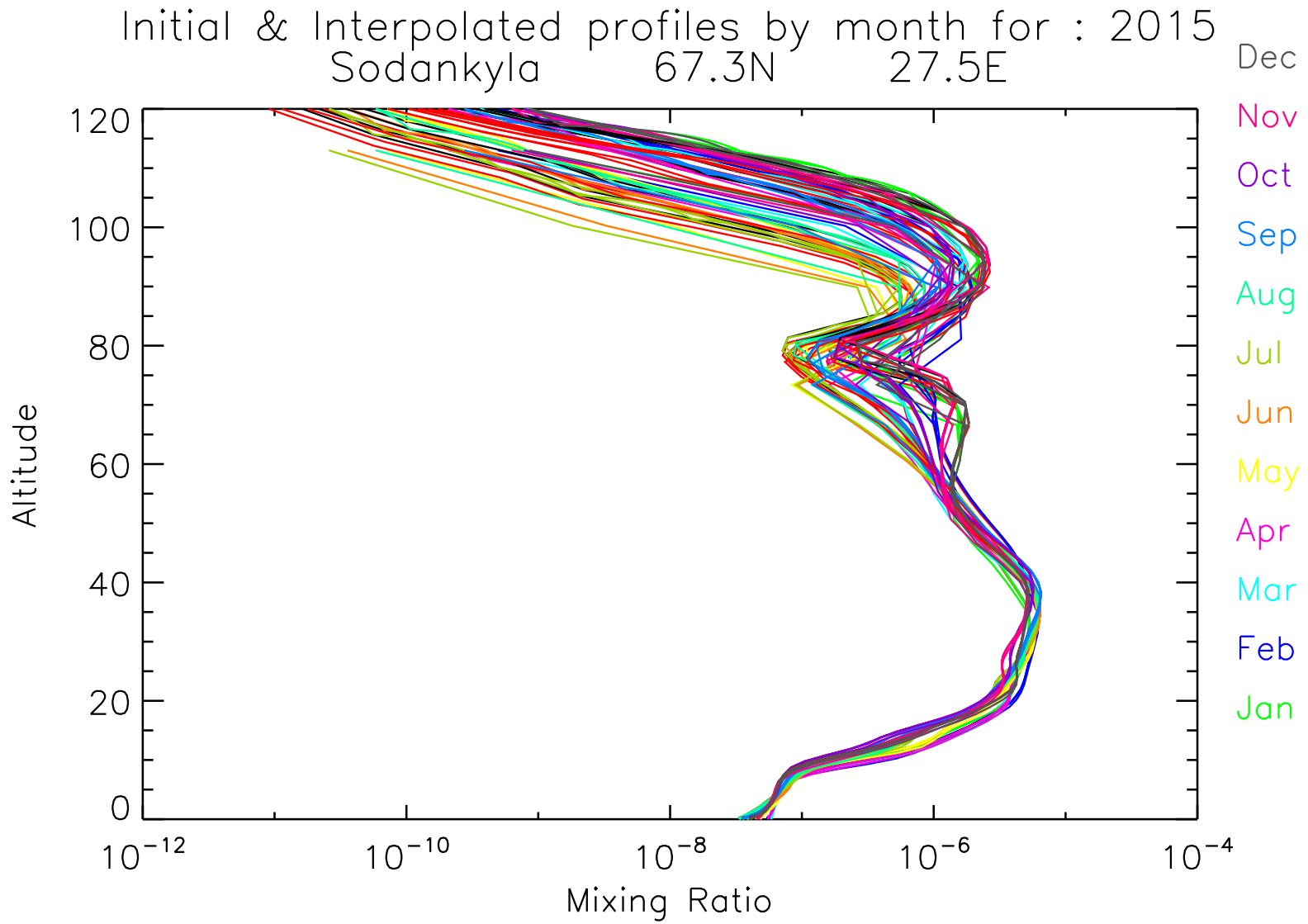
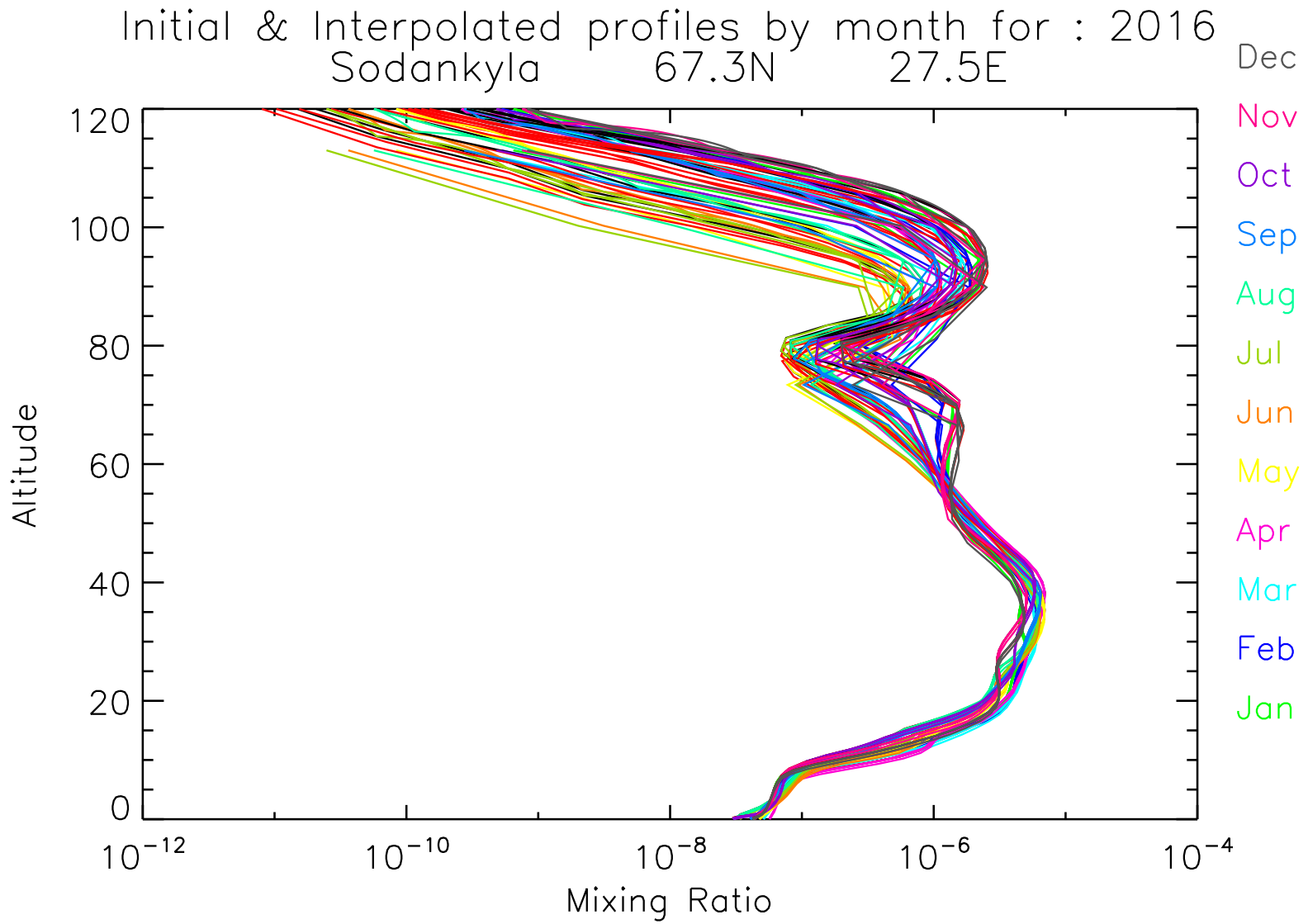
Apr
Mar
Feb
Jan

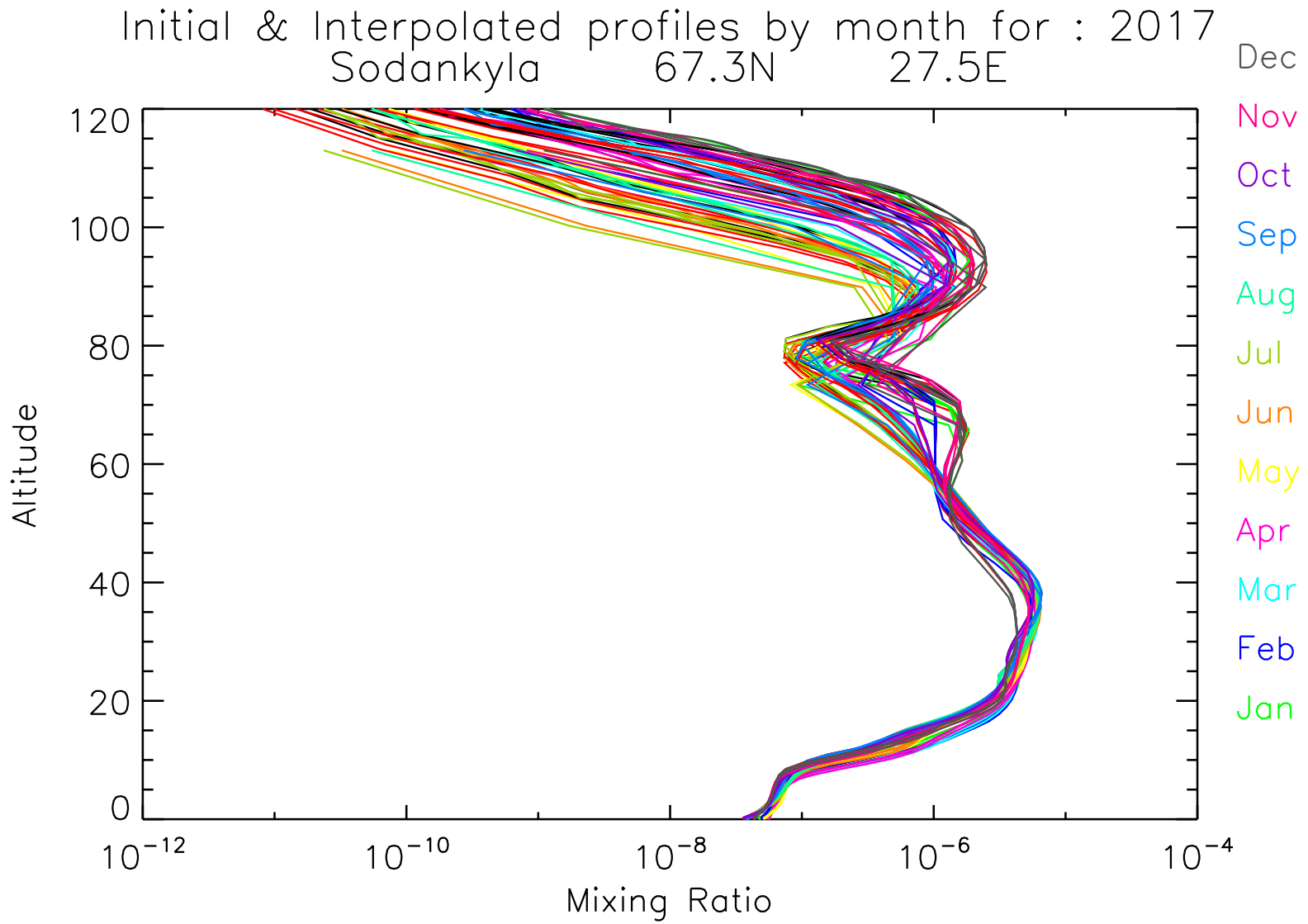

Initial & Interpolated profiles by month for : 2012
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-12}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
Mixing Ratio

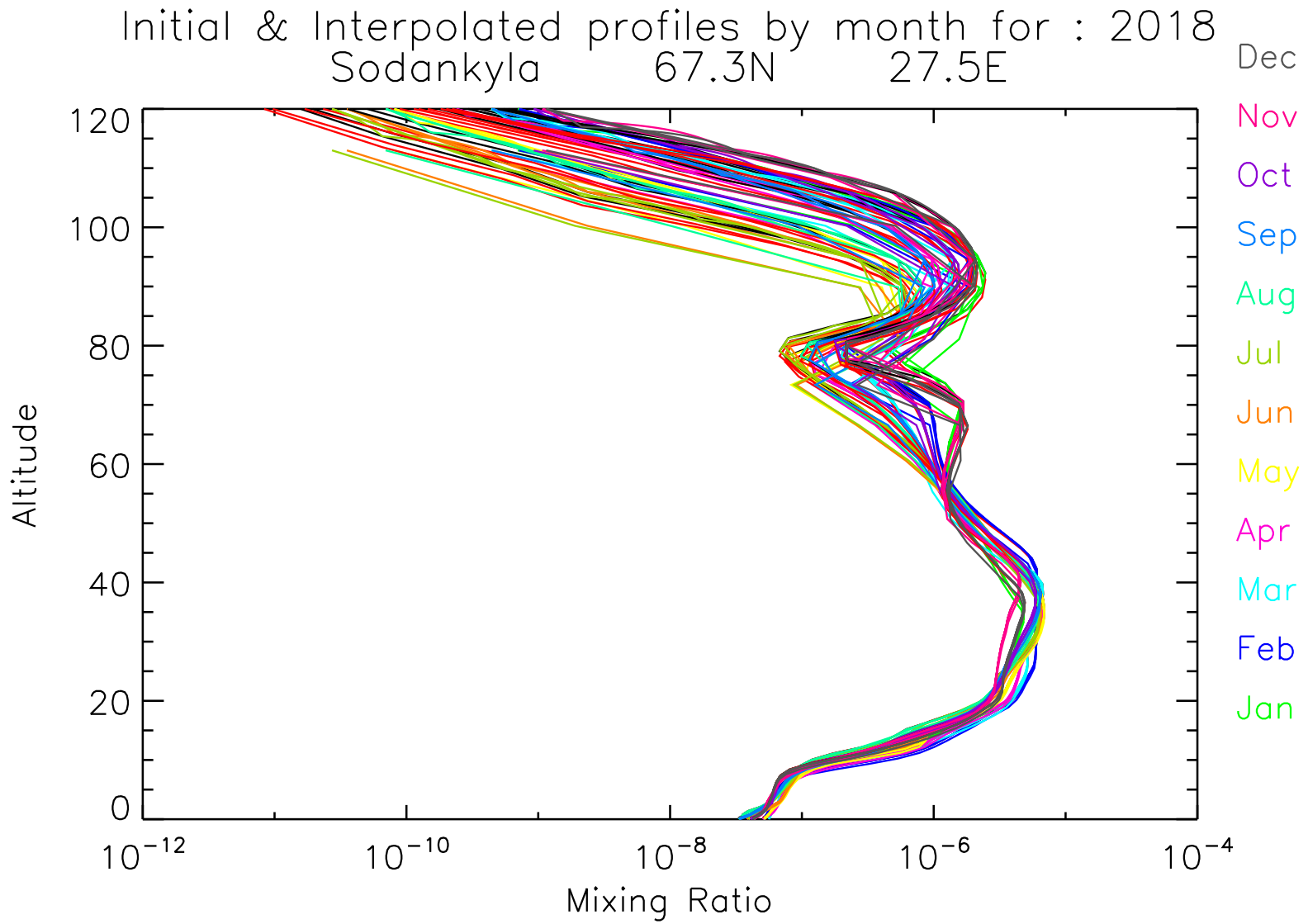

Initial & Interpolated profiles by month for : 2013
Sodankyla 67.3N 27.5E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

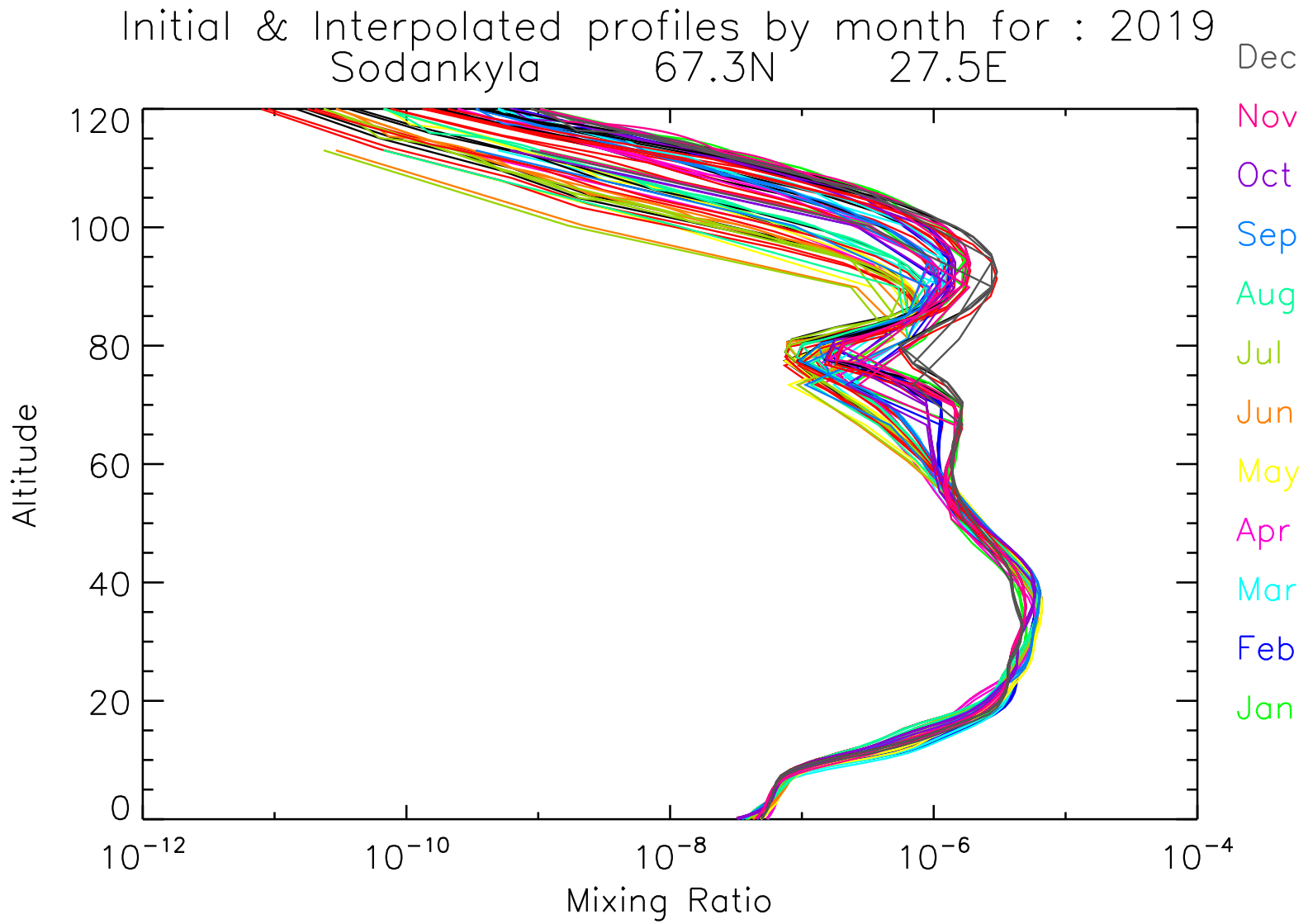

Initial & Interpolated profiles by month for : 2014
Sodankyla 67.3N 27.5E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

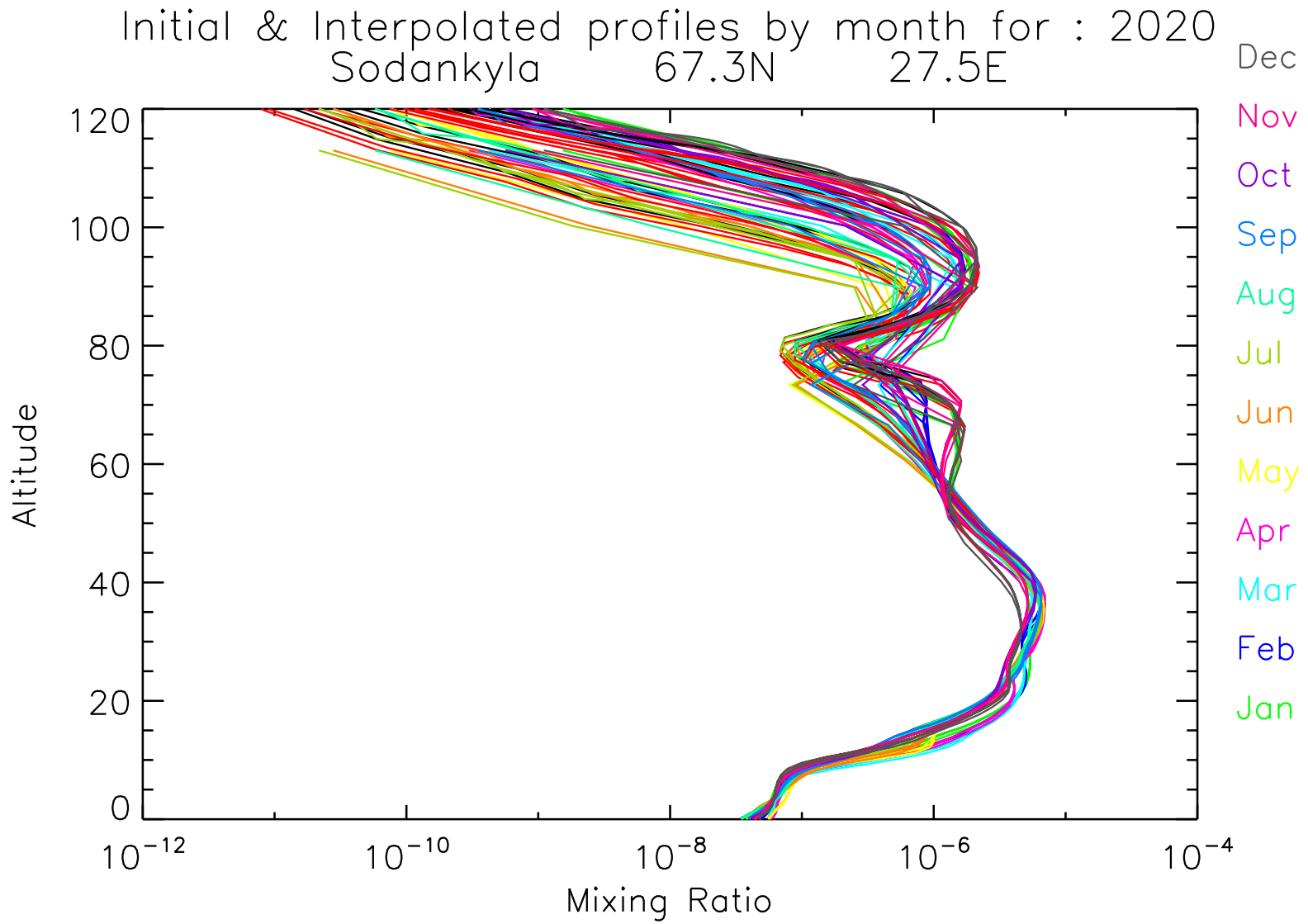

Initial & Interpolated profiles by month for : 2015
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-12}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
Mixing Ratio

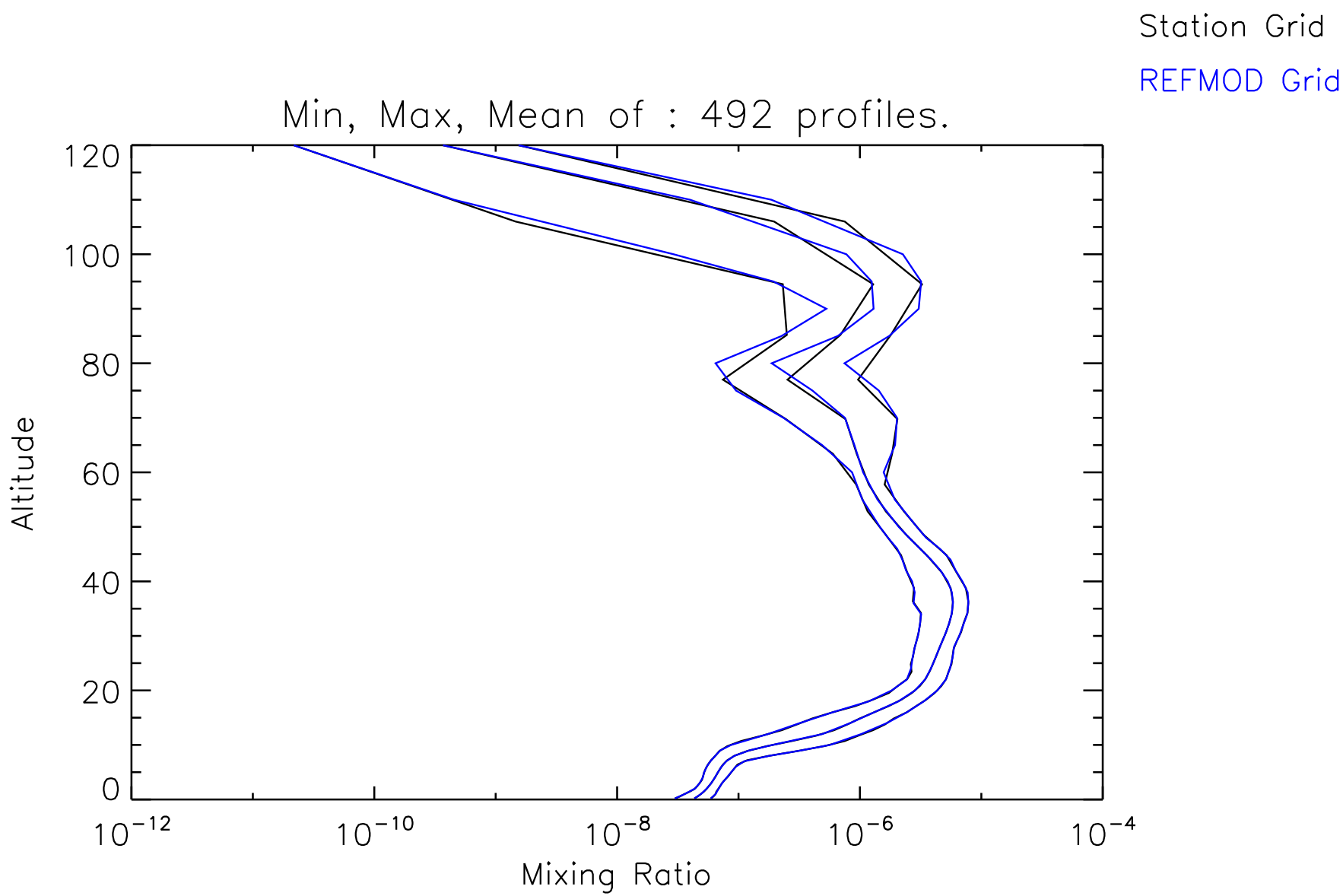

Initial & Interpolated profiles by month for : 2016
Sodankyla 67.3N 27.5E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

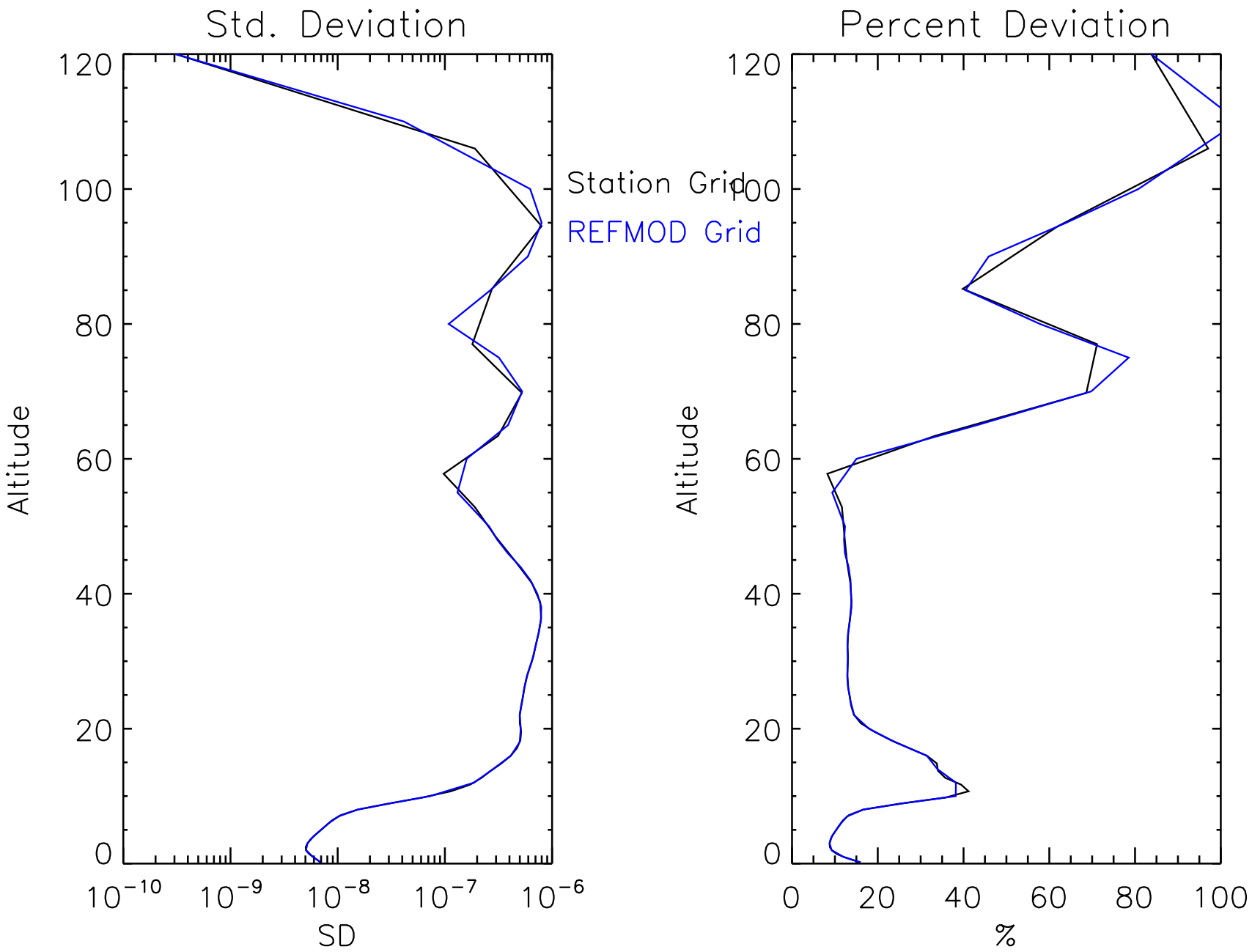

Initial & Interpolated profiles by month for : 2017
Sodankyla 67.3N 27.5E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

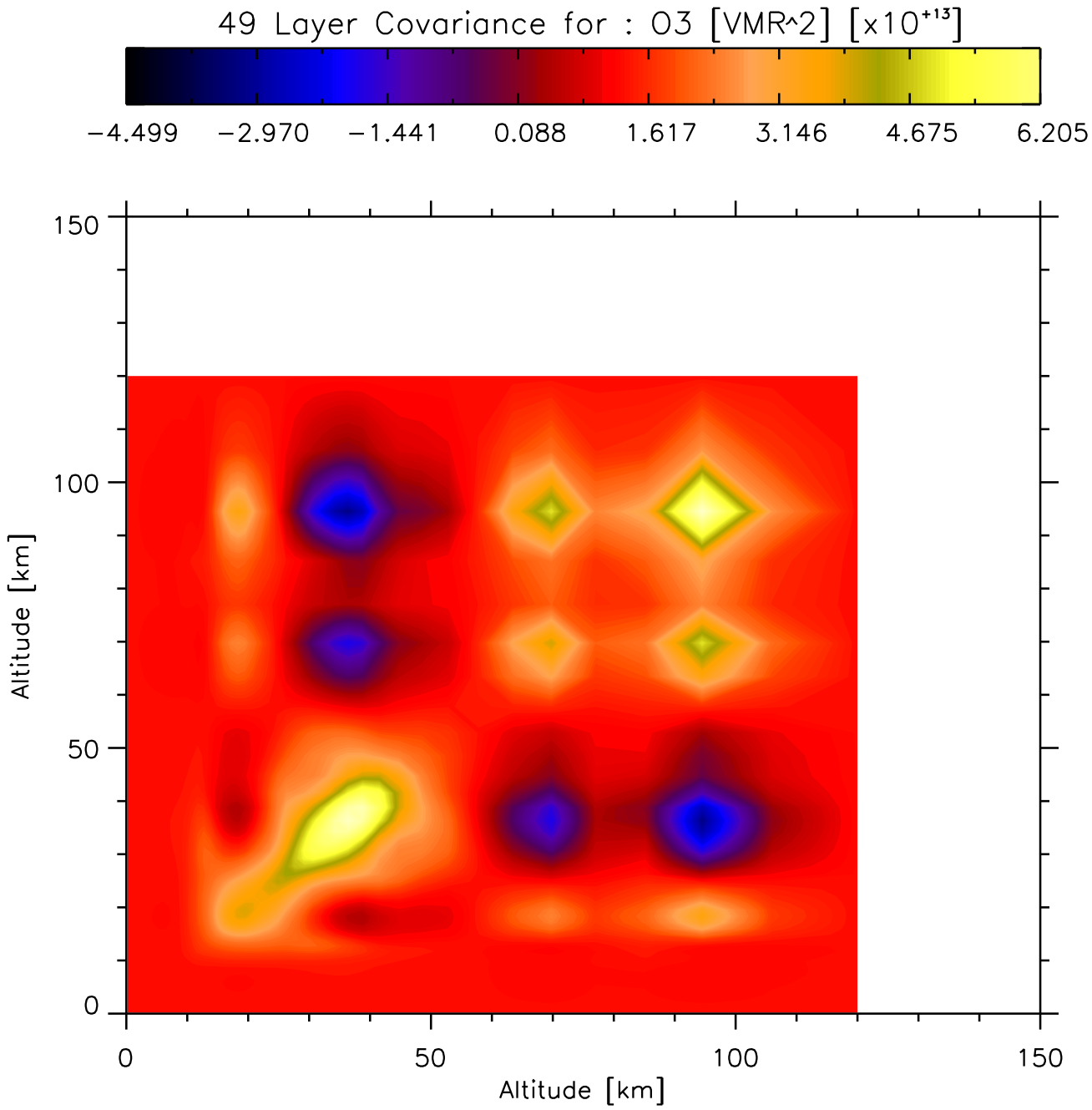

Initial & Interpolated profiles by month for : 2018
Sodankyla 67.3N 27.5E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

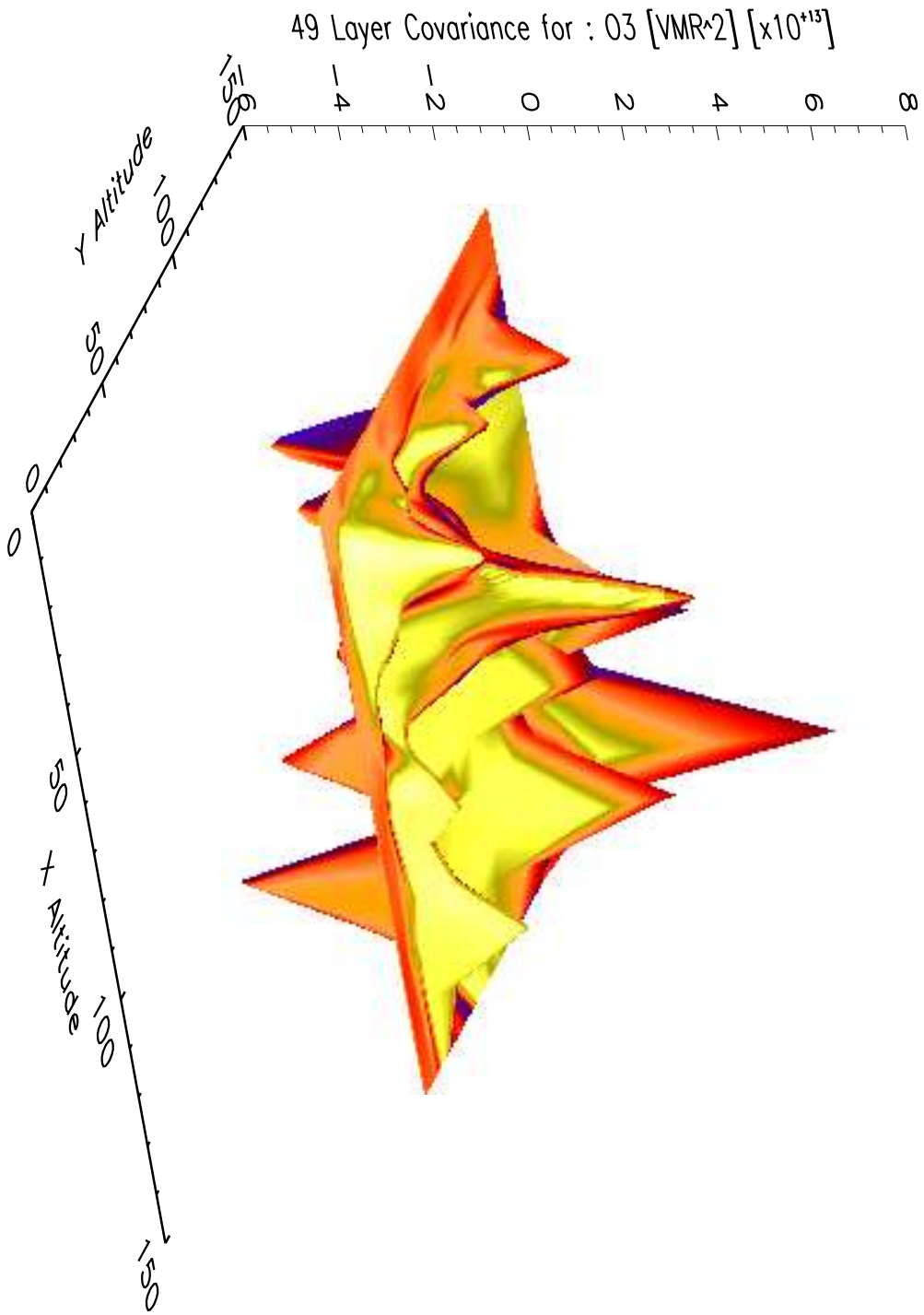

Initial & Interpolated profiles by month for : 2019
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-12}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
Mixing Ratio

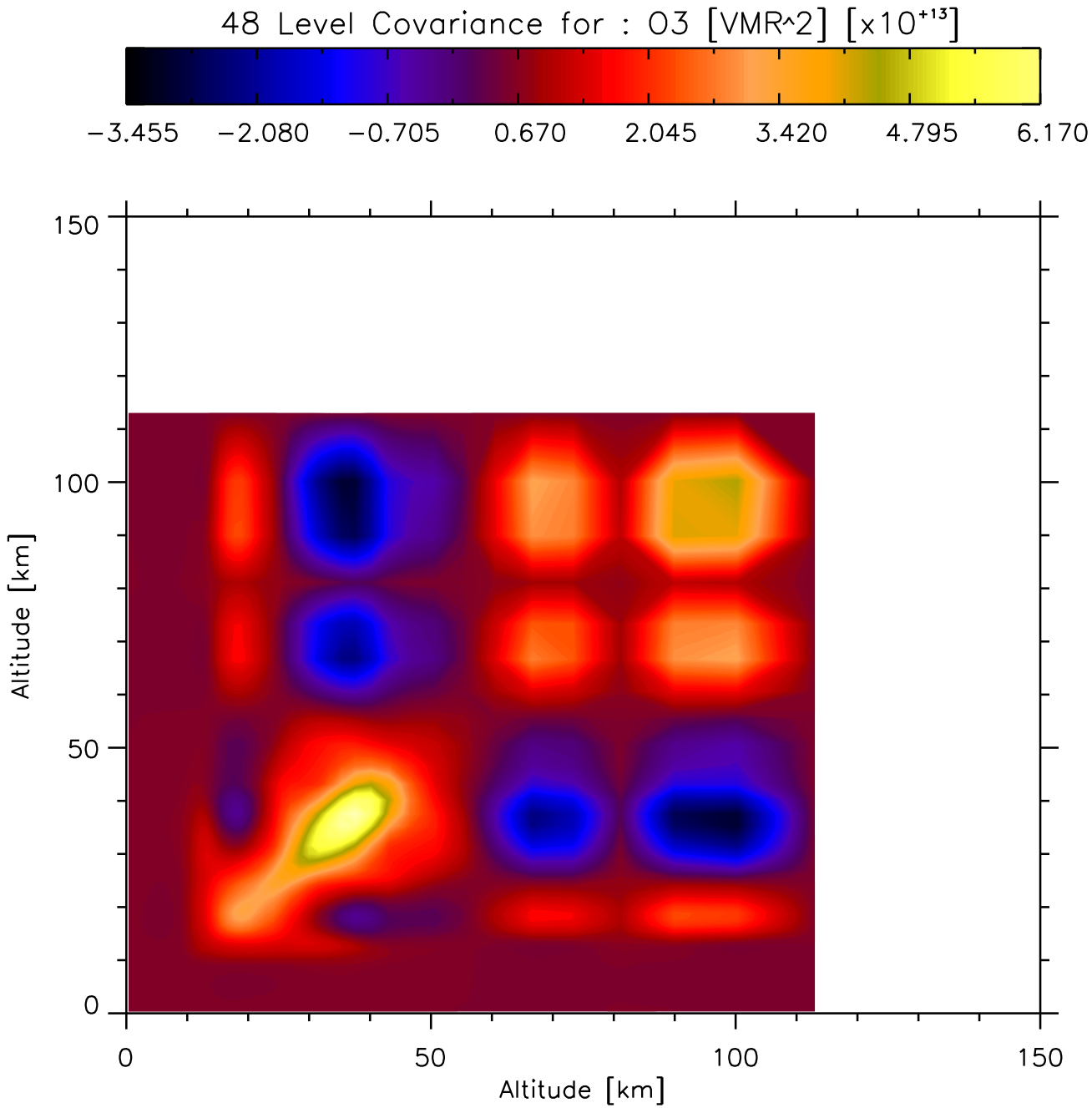

Initial & Interpolated profiles by month for : 2020
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-12}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
Mixing Ratio

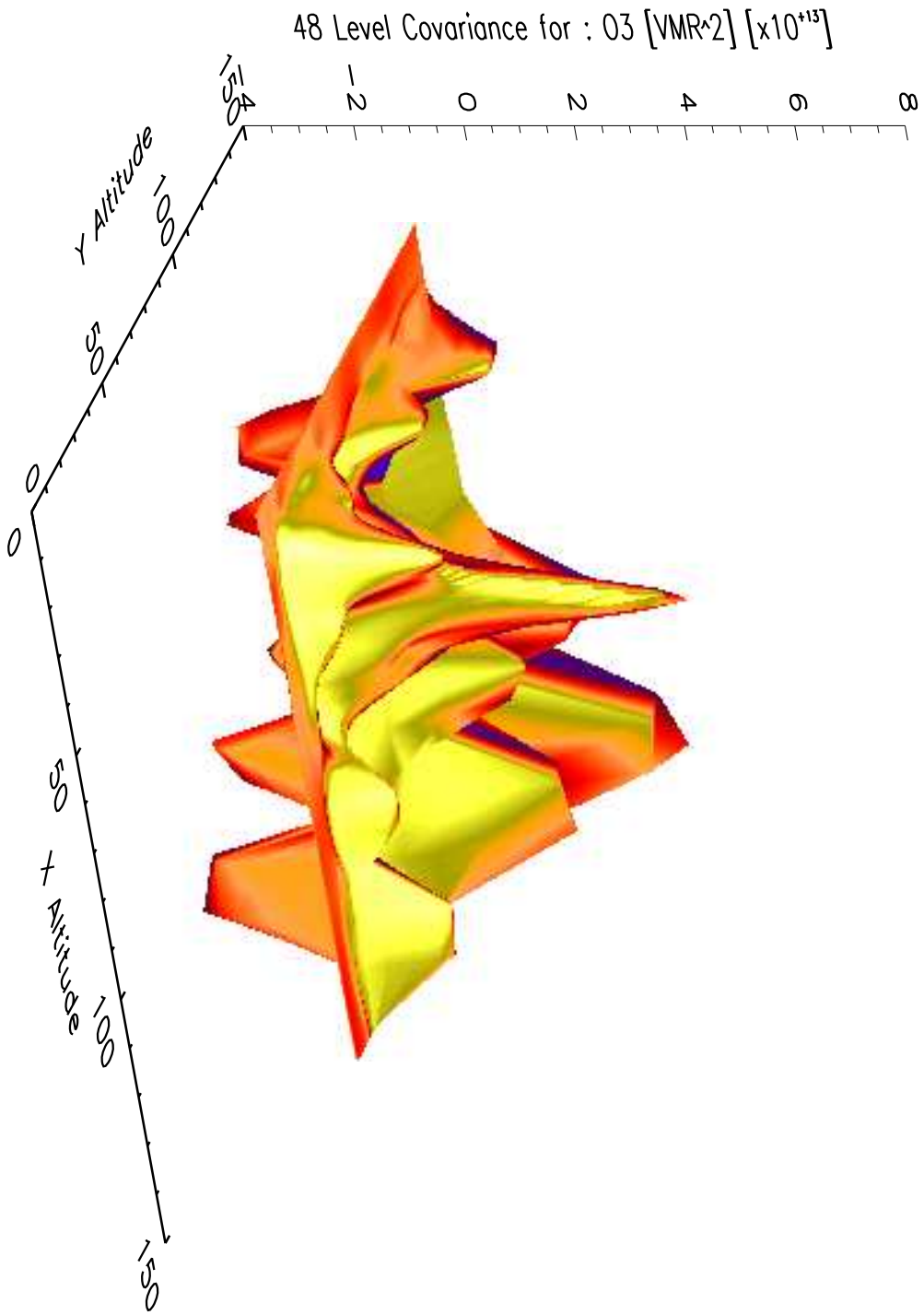

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
SD
0
20
40
60
80
100
%


49 Layer Covariance for : O3 [VMR^2] [x10^+13]
−4.499
−2.970
−1.441
0.088
1.617
3.146
4.675
6.205
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


49 Layer Covariance for : O3 [VMR^2] [x10^+13]
-6
-4
-2
0
2
4
6
8
Y Altitude
150
100
50
0
X Altitude
0
50
100
150


48 Level Covariance for : O3 [VMR^2] [x10^+13]
−3.455
−2.080
−0.705
0.670
2.045
3.420
4.795
6.170
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


48 Level Covariance for : O3 [VMR^2] [x10^+13]
-14
-12
-10
-8
-6
-4
-2
0
2
4
6
8
Y Altitude
0
20
40
60
80
100
120
X Altitude
0
20
40
60
80
100
120