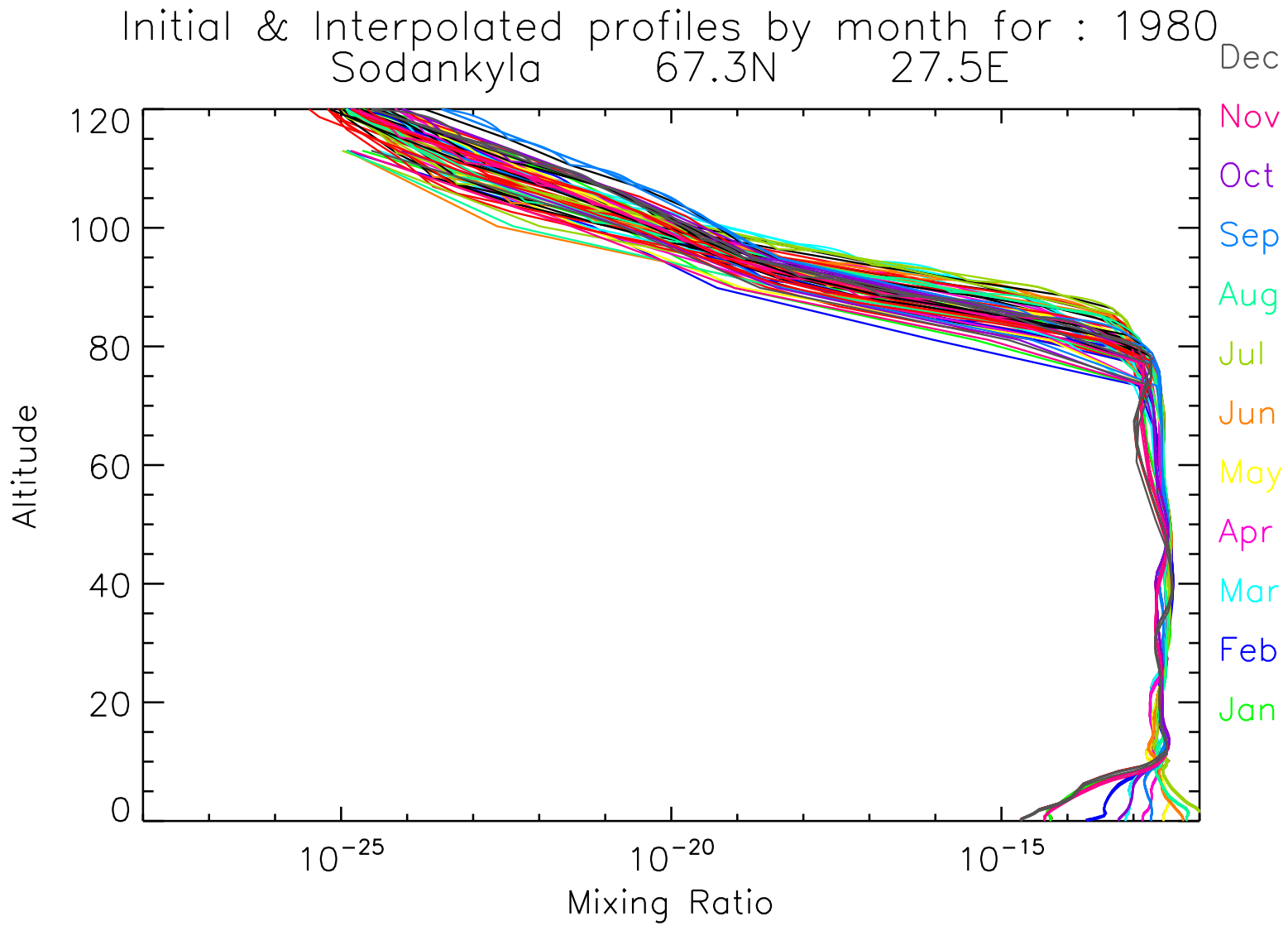
Initial & Interpolated profiles by month for : 1980
Sodankyla 67.3N 27.5E
Dec
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120
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Altitude
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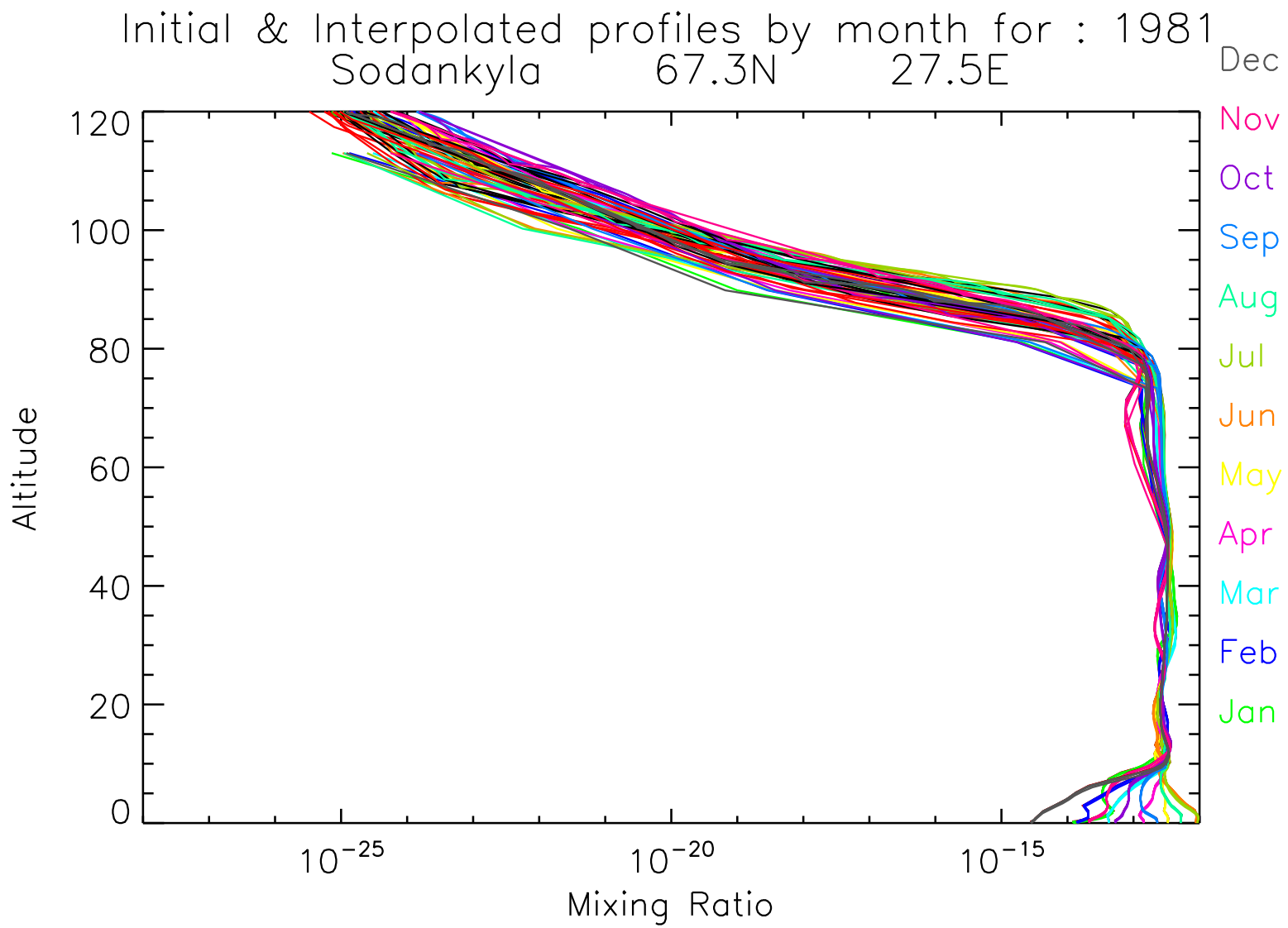
10^{-20}
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1981
Sodankyla 67.3N 27.5E
Dec
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120
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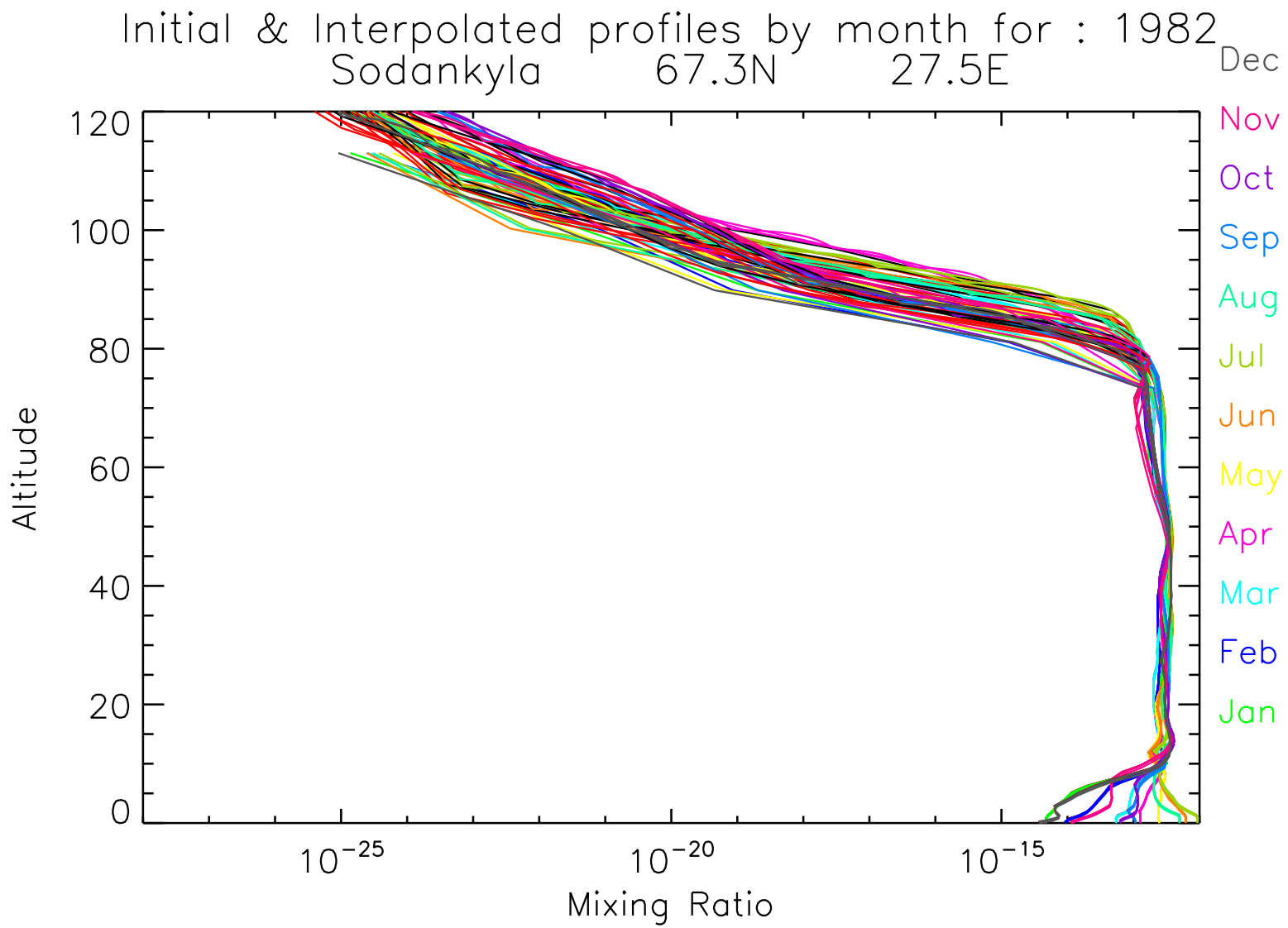
10^{-20}
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1982
Sodankyla 67.3N 27.5E
Dec
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120
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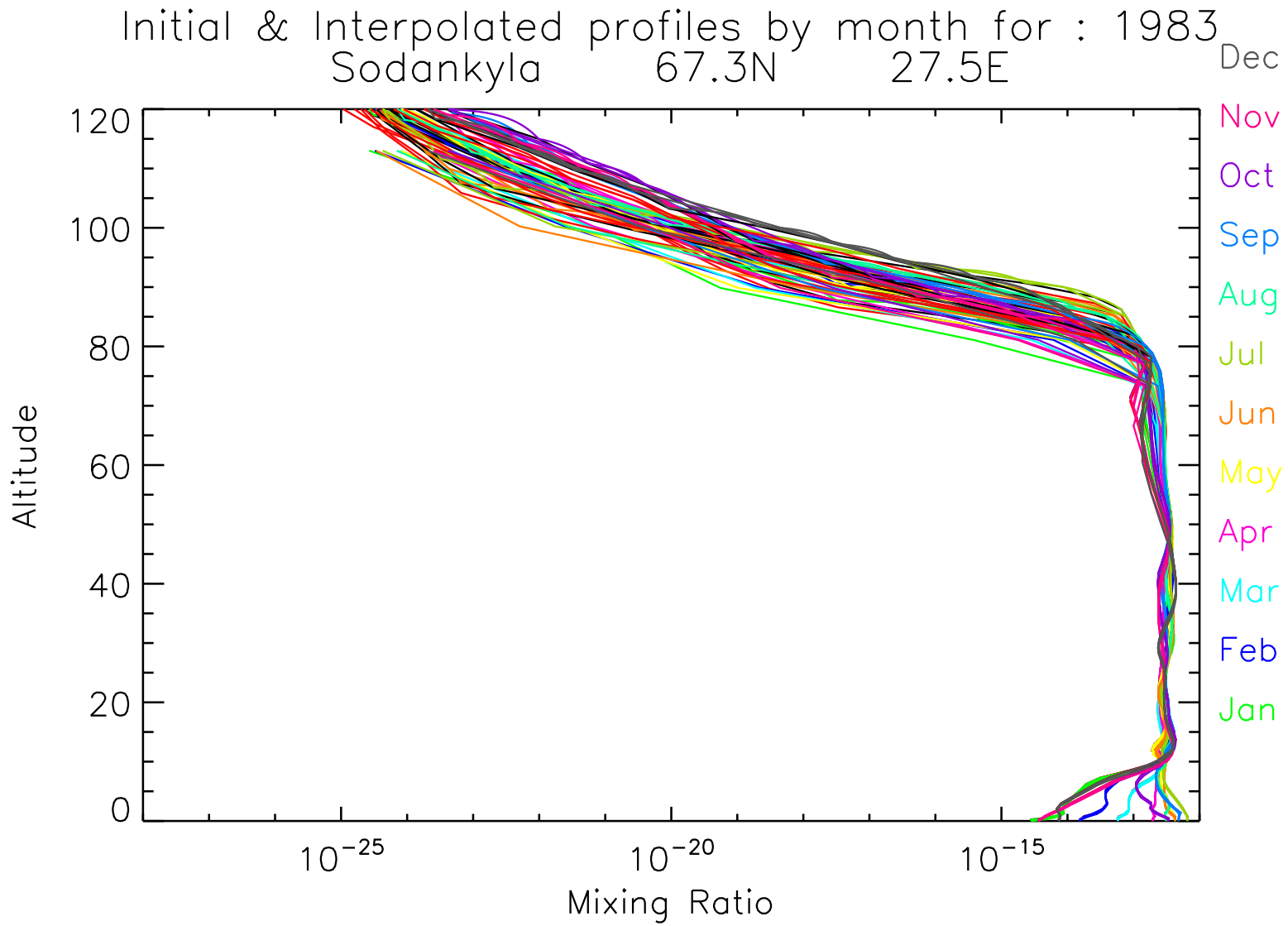
20
0
Altitude
10^{-25}
10^{-20}
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1983
Sodankyla 67.3N 27.5E
Dec
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0
Altitude
10^{-25}
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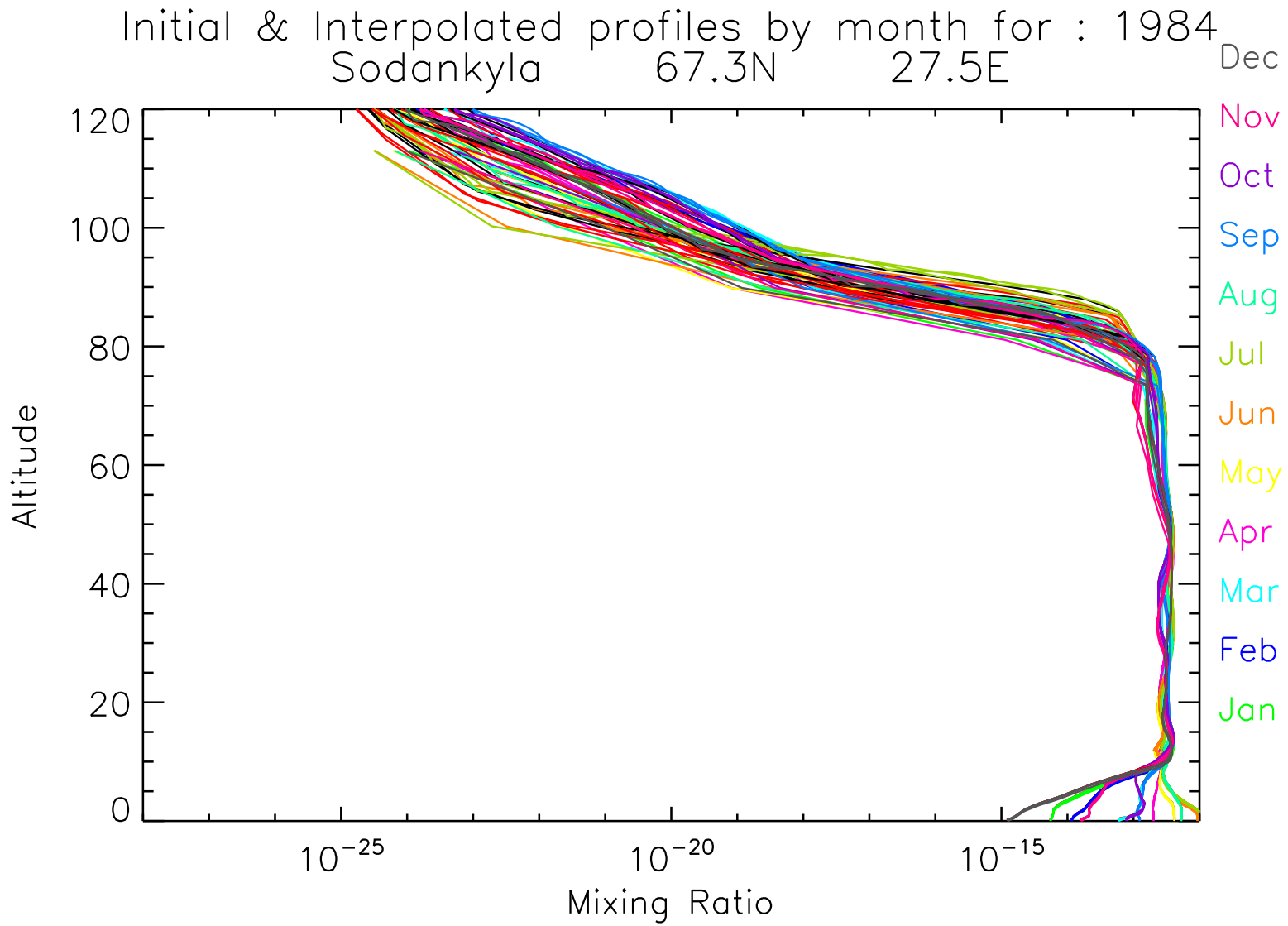
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1984
Sodankyla 67.3N 27.5E
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Altitude
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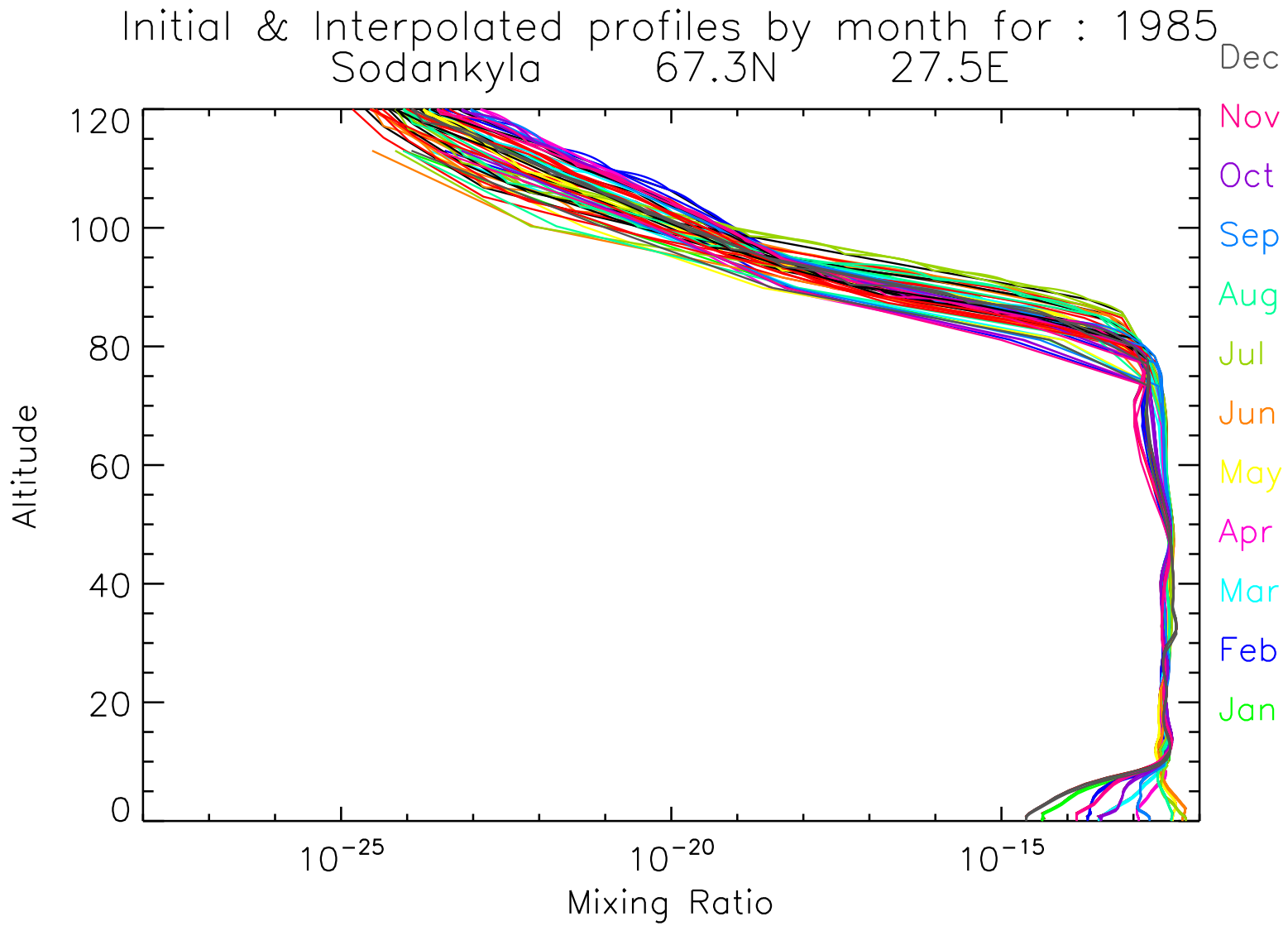
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1985
Sodankyla 67.3N 27.5E
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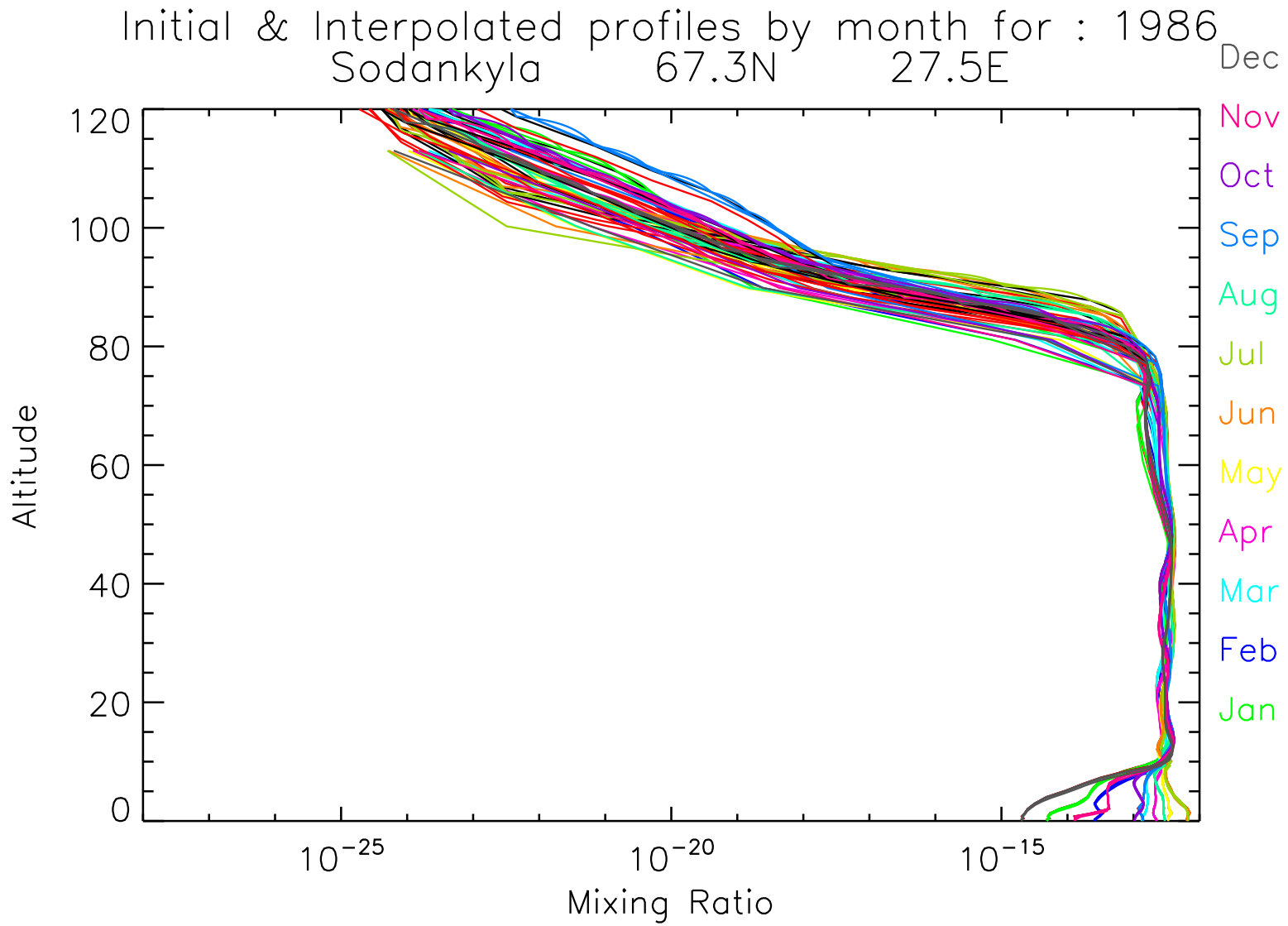
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1986
Sodankyla 67.3N 27.5E
Dec
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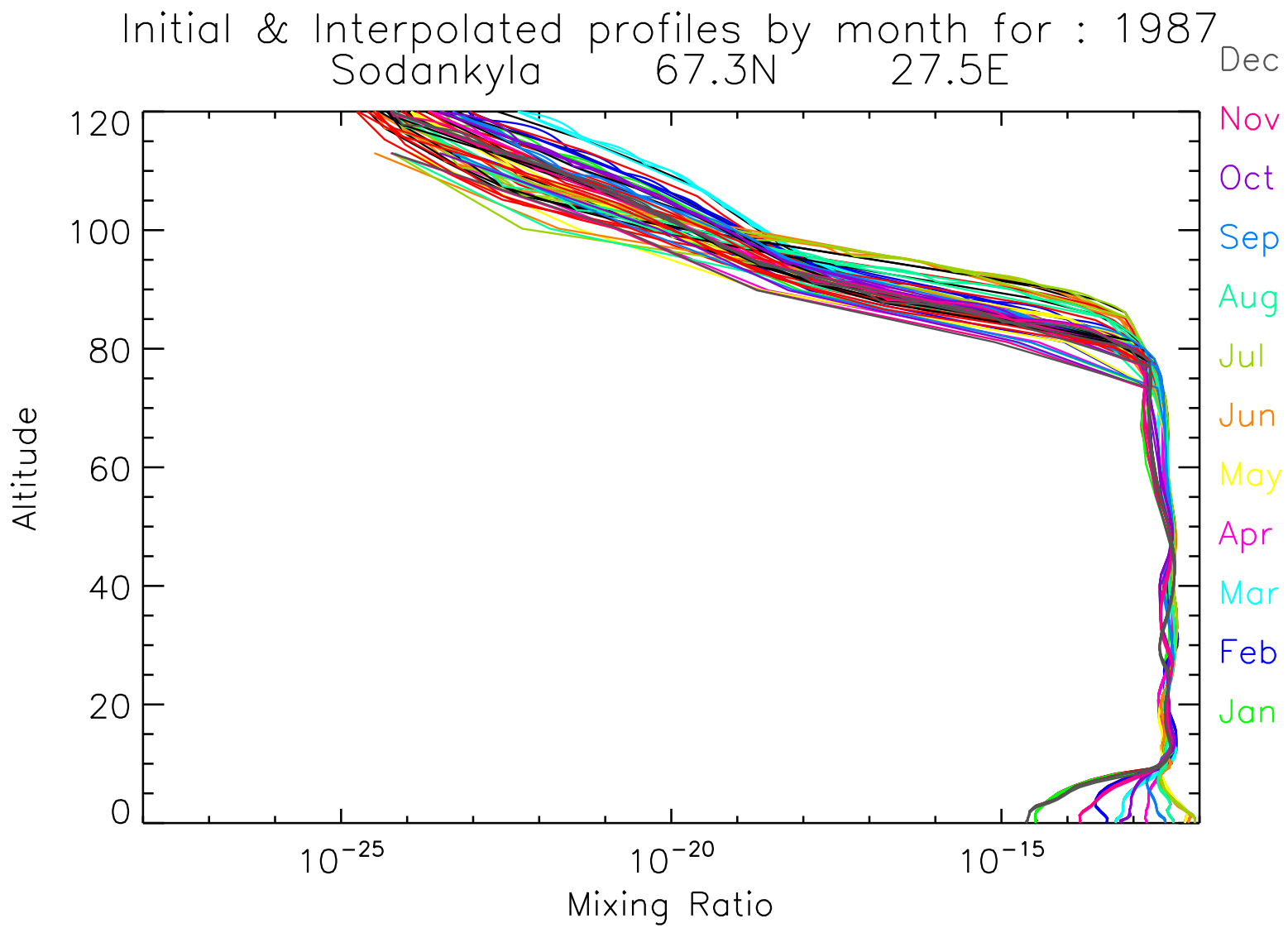
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1987
Sodankyla 67.3N 27.5E
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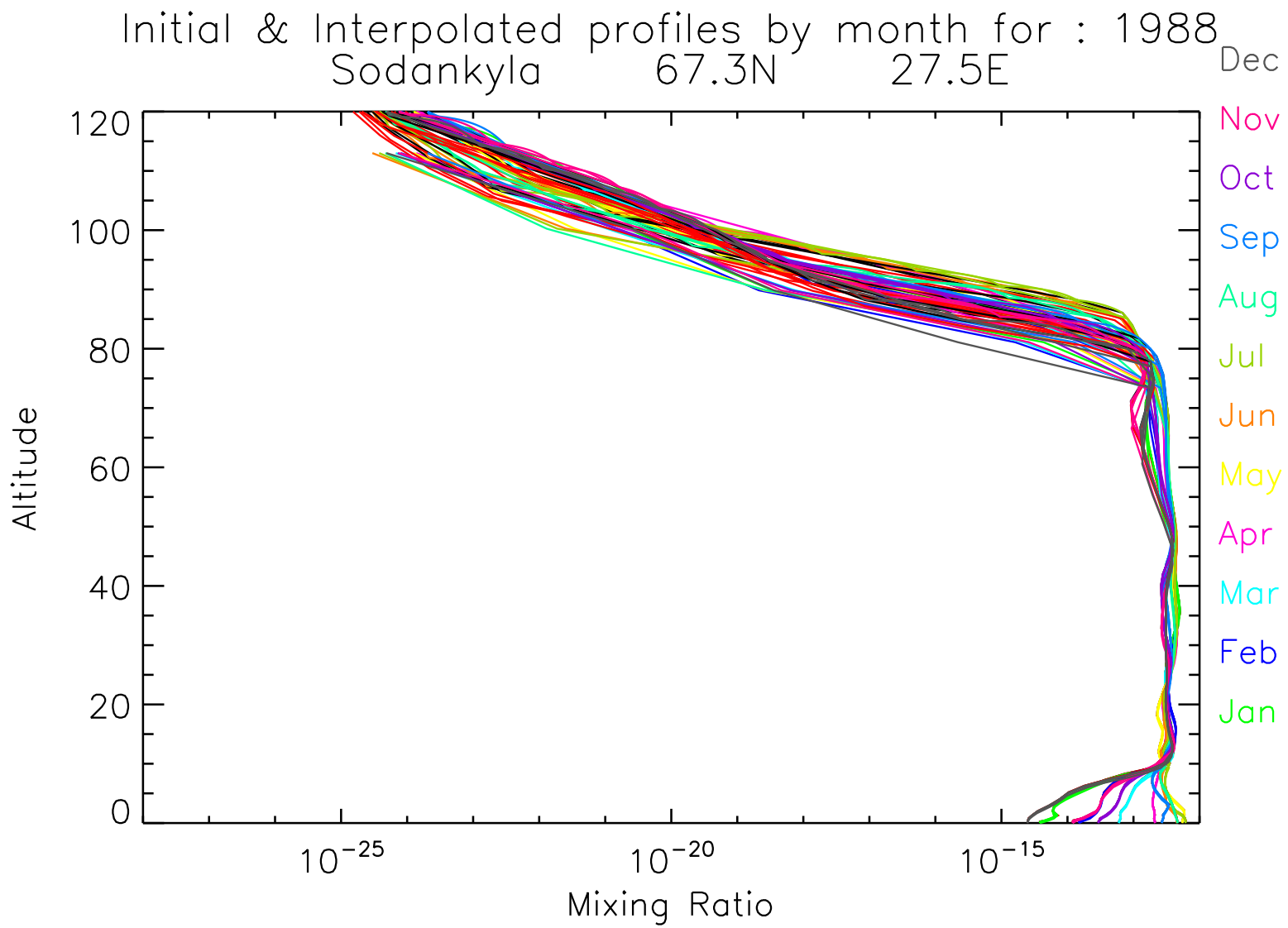
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1988
Sodankyla 67.3N 27.5E
Dec
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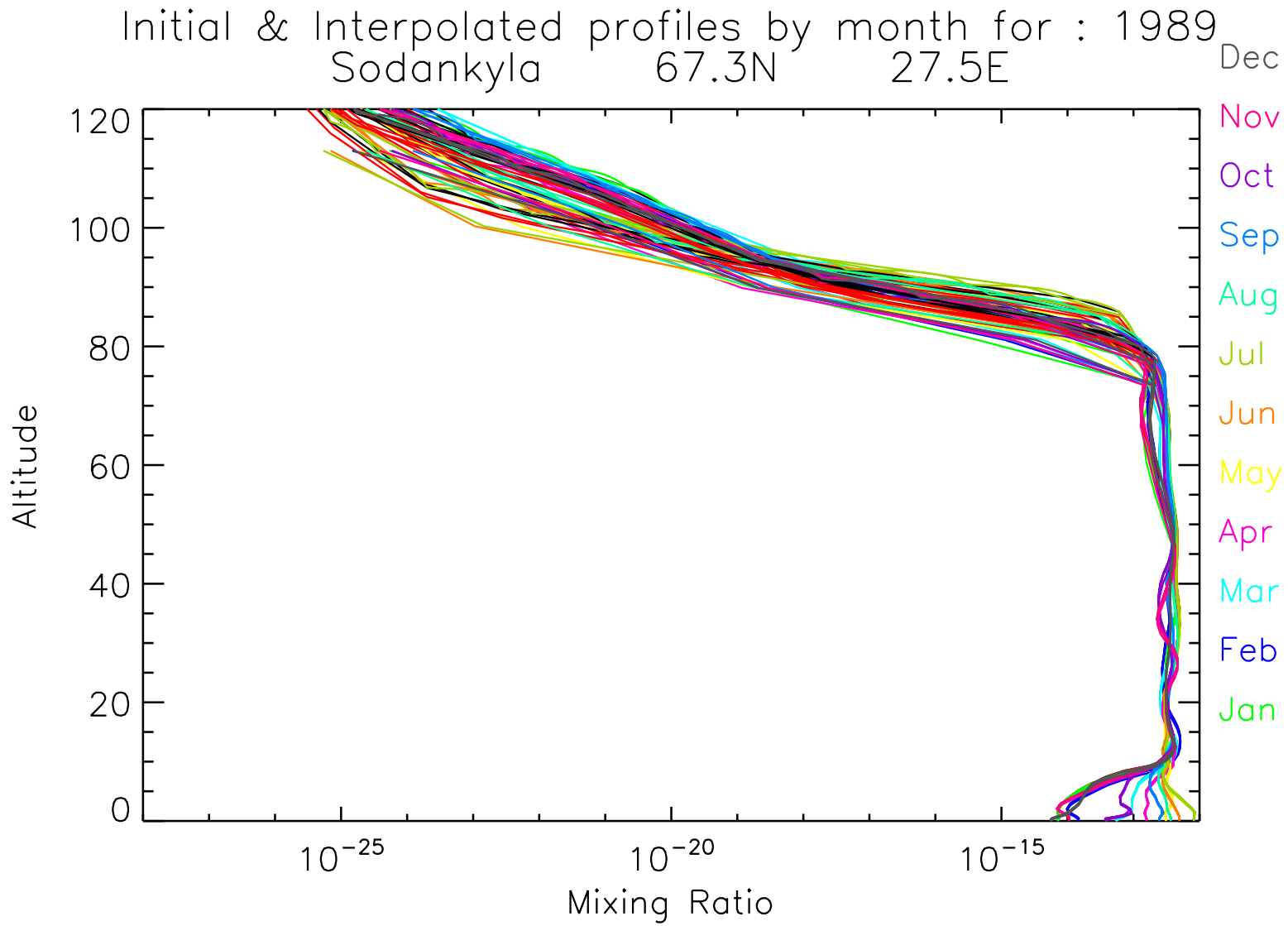
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1989
Sodankyla 67.3N 27.5E
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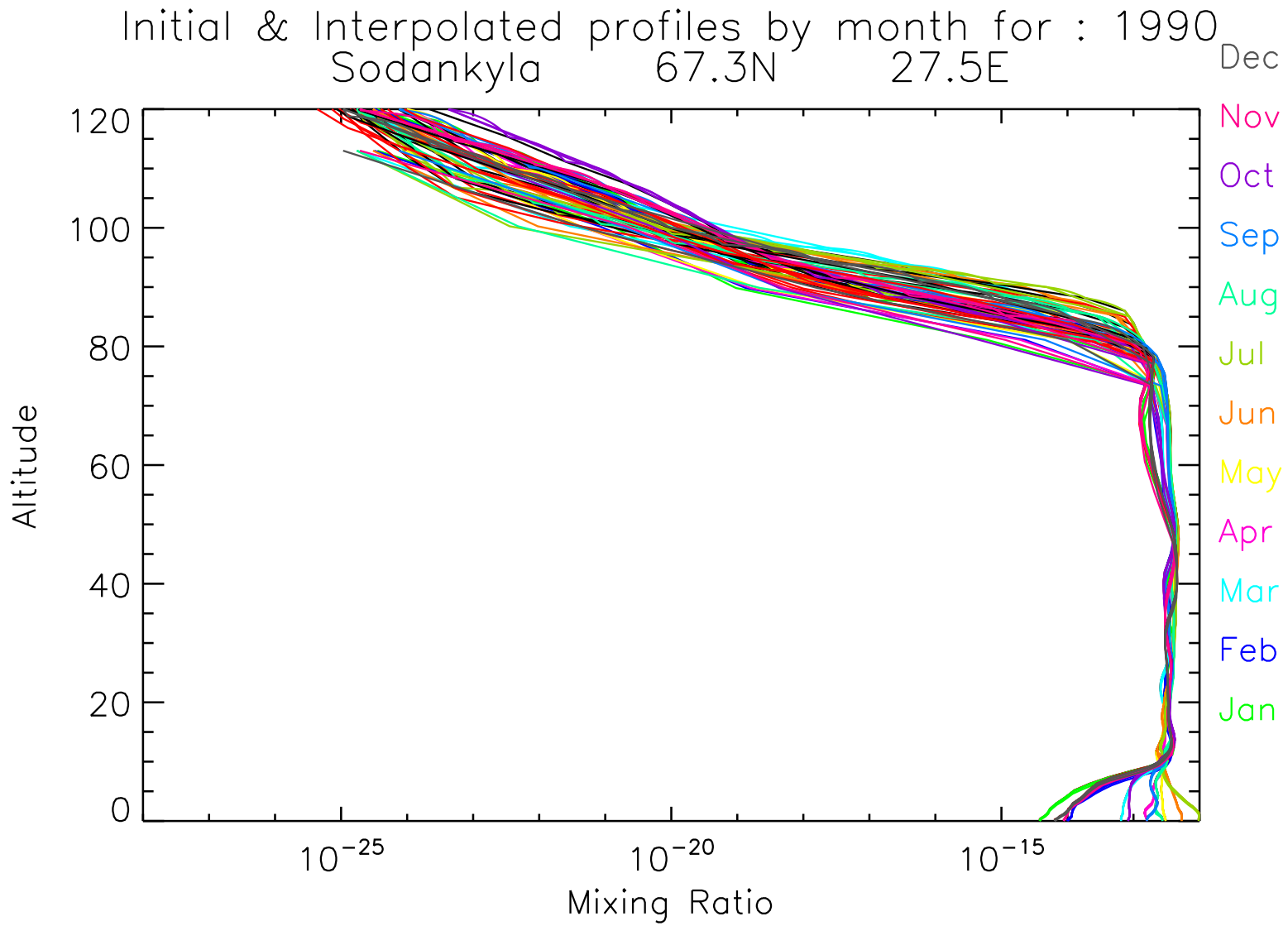
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1990
Sodankyla 67.3N 27.5E
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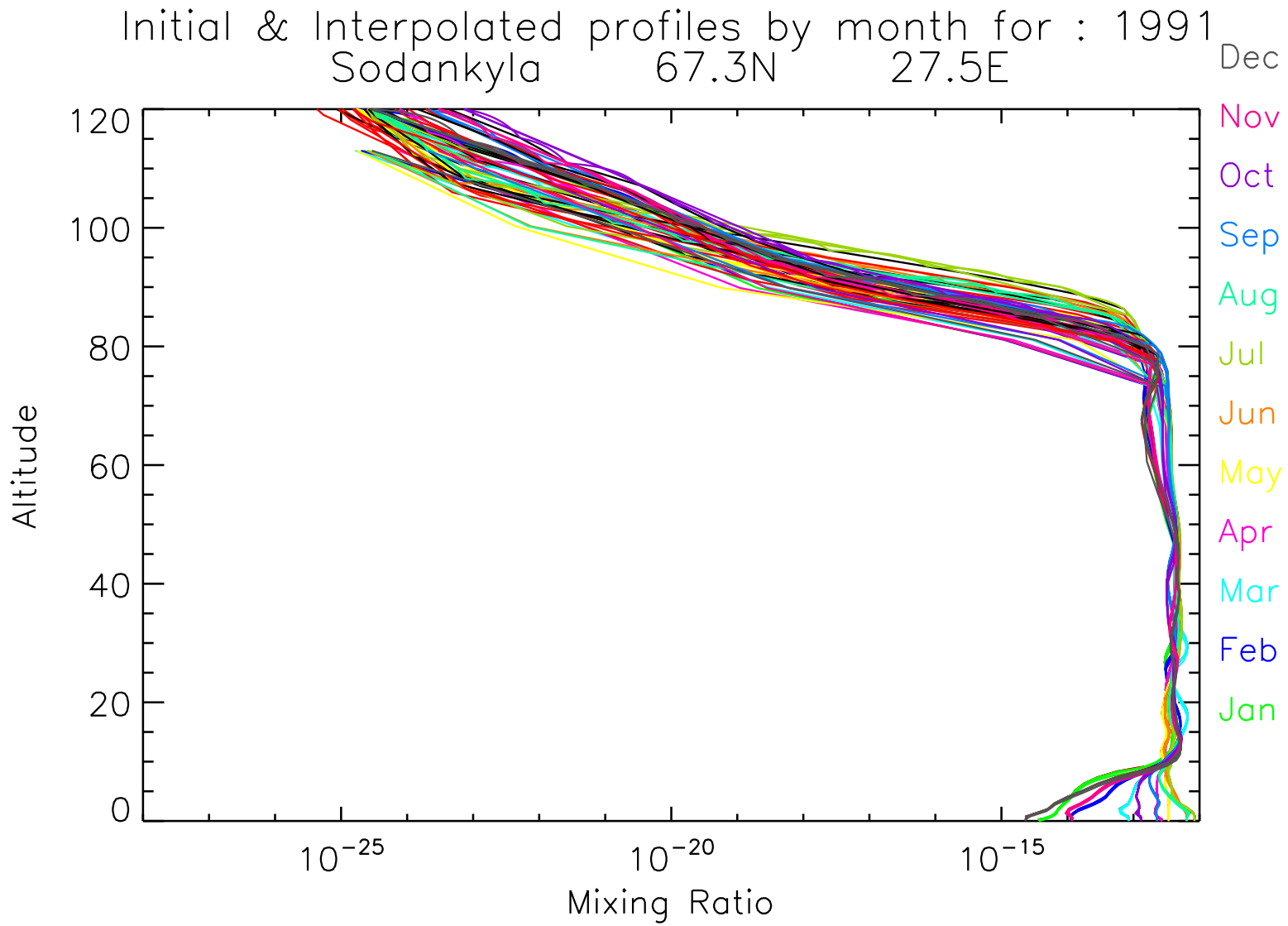
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1991
Sodankyla 67.3N 27.5E
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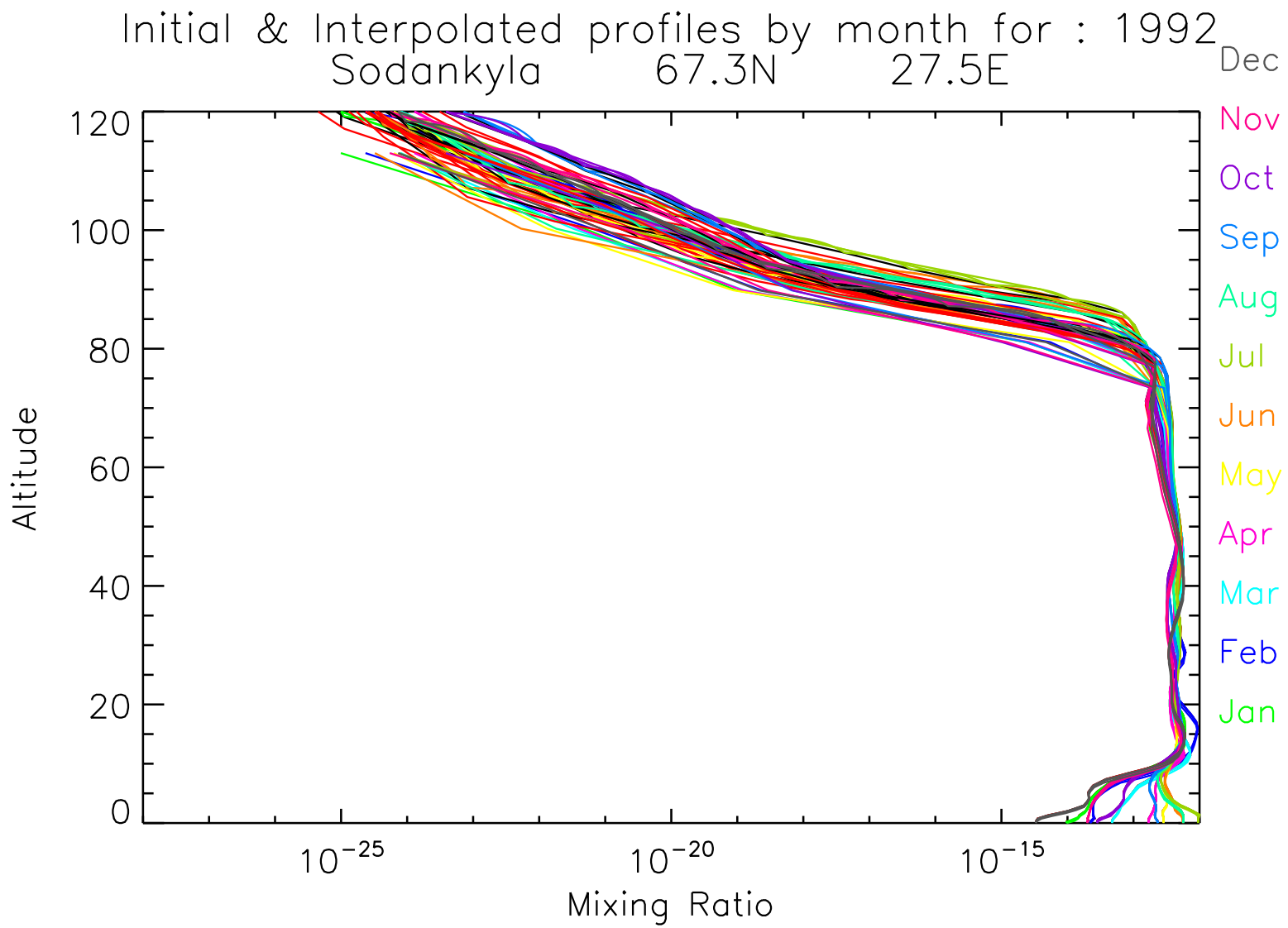
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1992
Sodankyla 67.3N 27.5E
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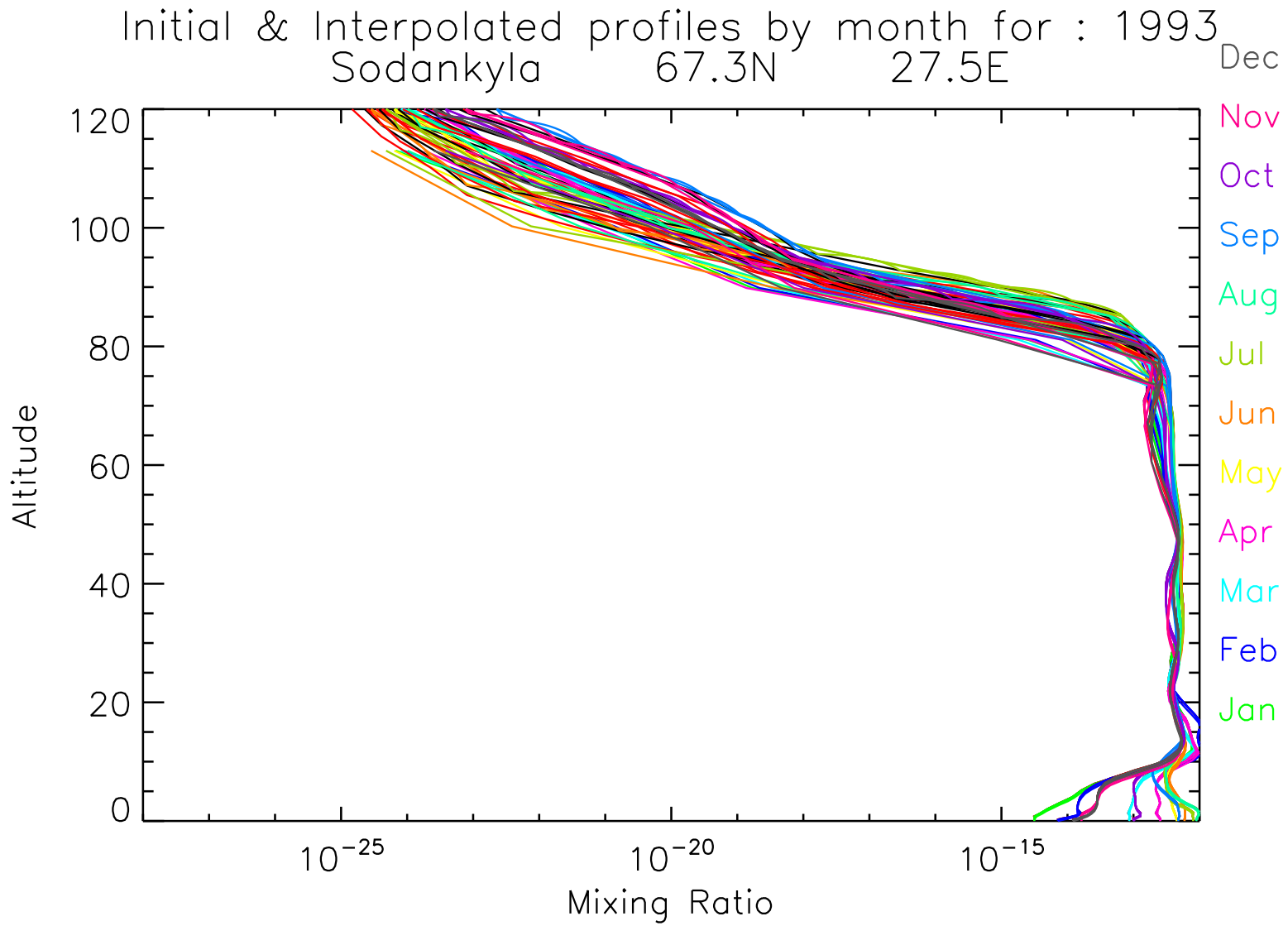
Mixing Ratio


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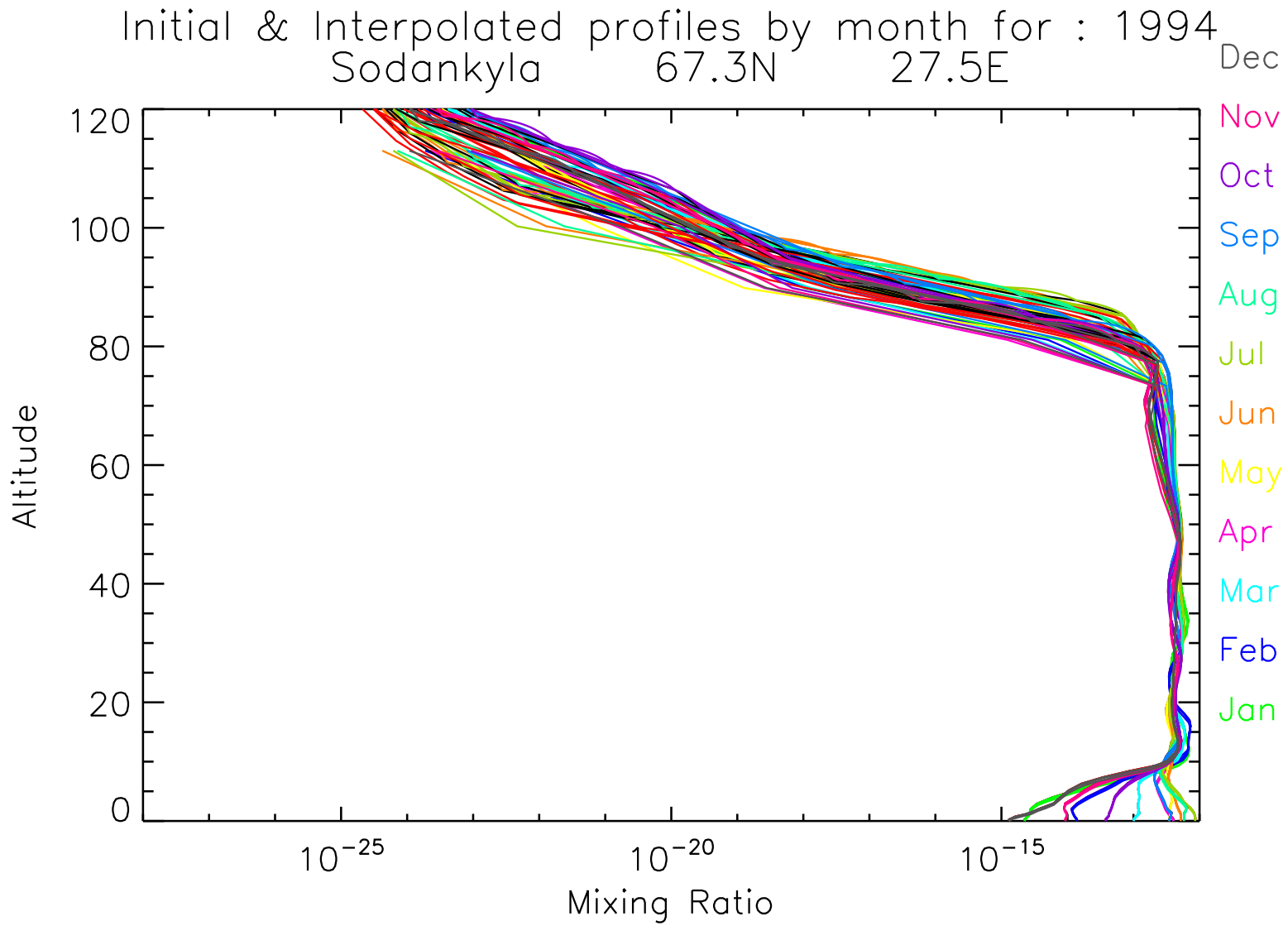
Mixing Ratio


Initial & Interpolated profiles by month for : 1994
Sodankyla 67.3N 27.5E
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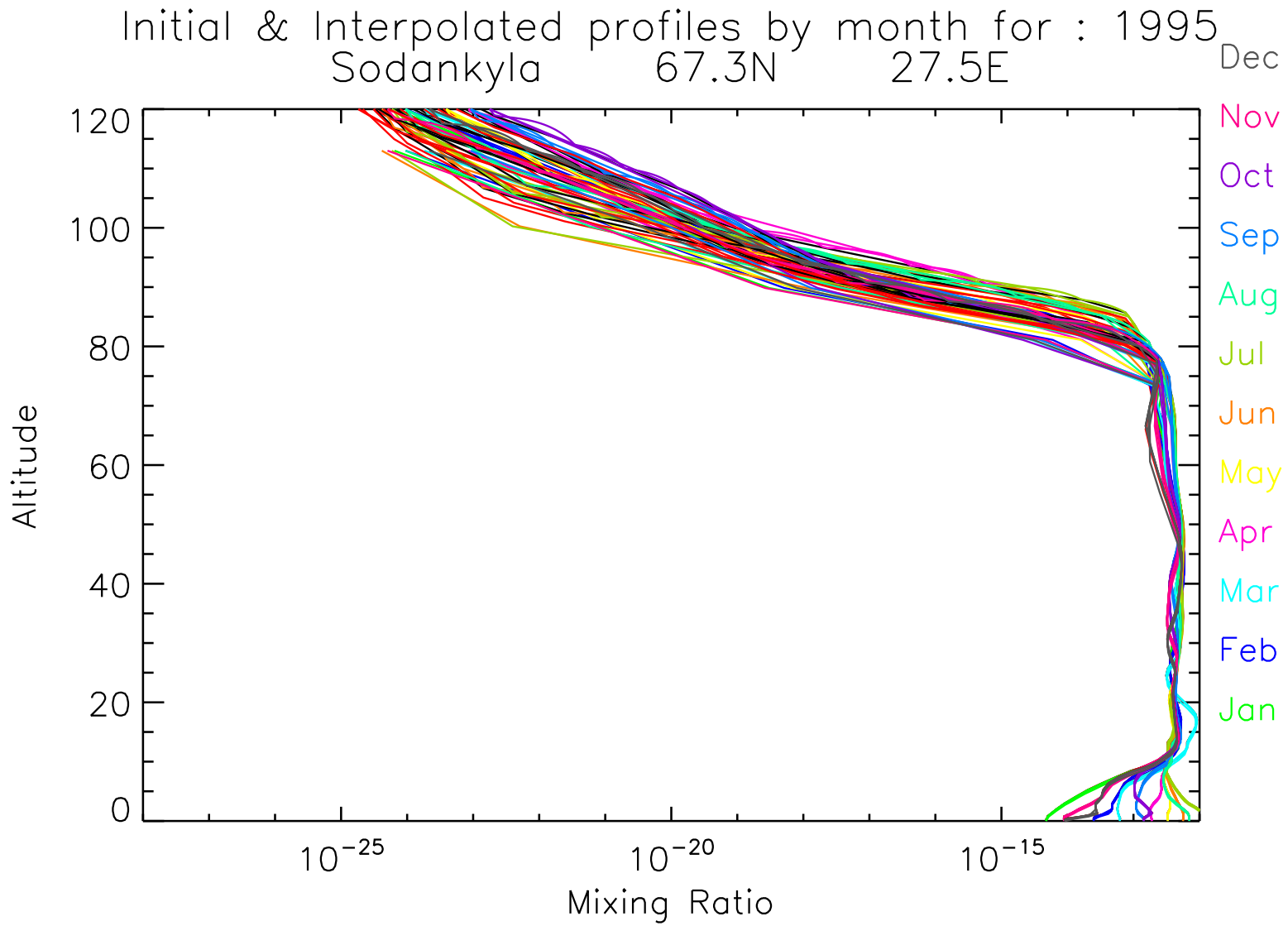
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1995
Sodankyla 67.3N 27.5E
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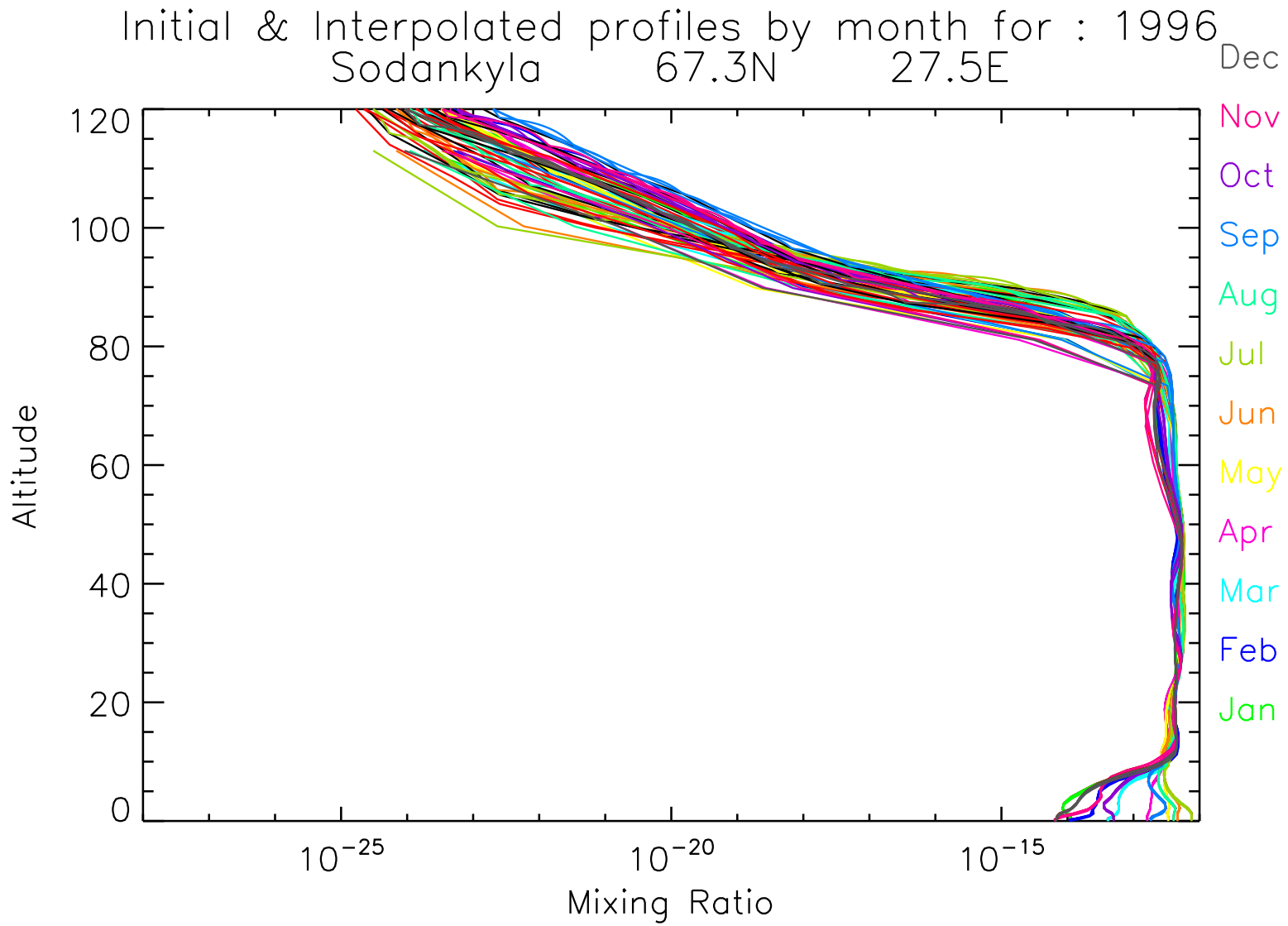
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1996
Sodankyla 67.3N 27.5E
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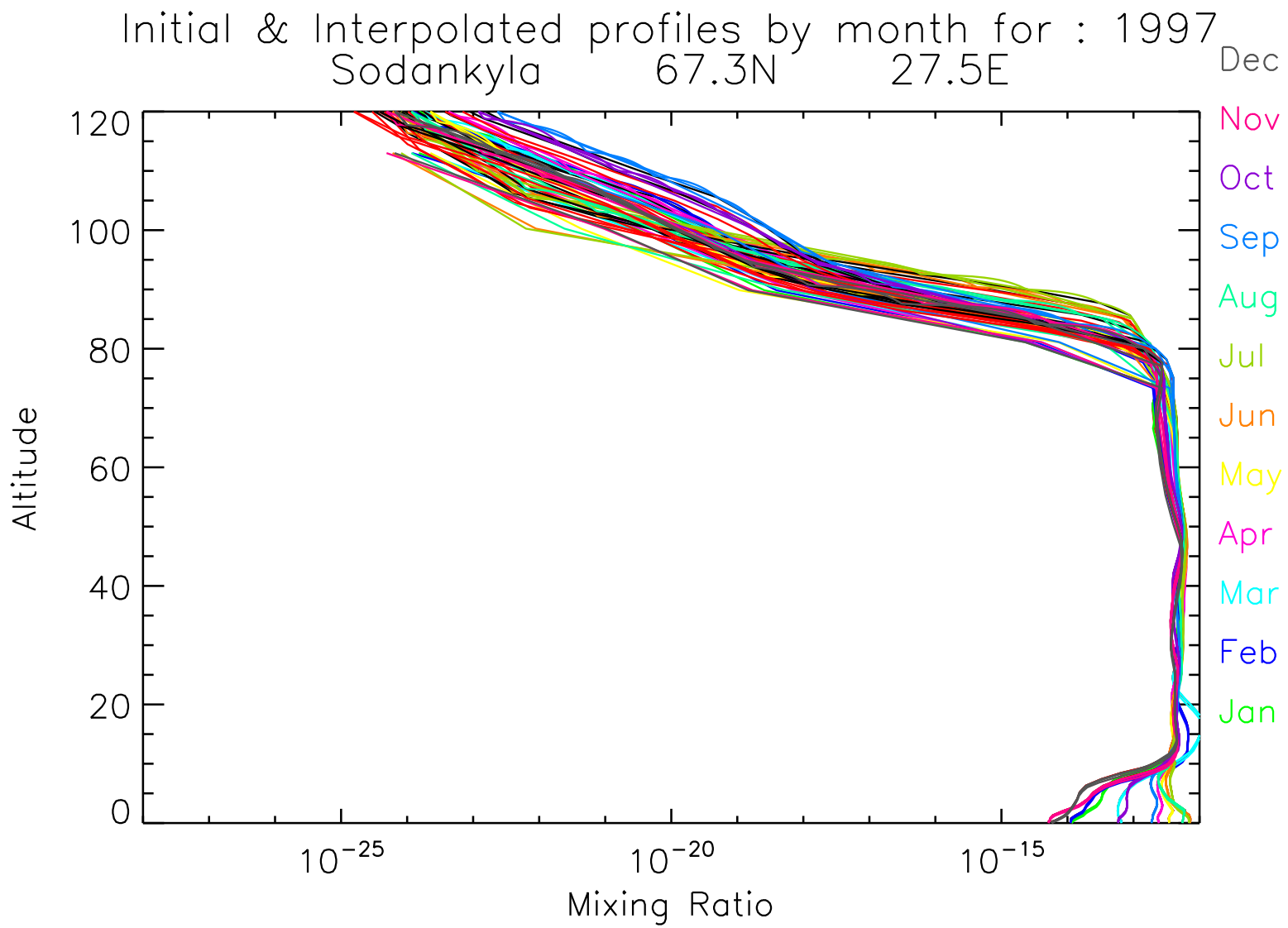
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1997
Sodankyla 67.3N 27.5E
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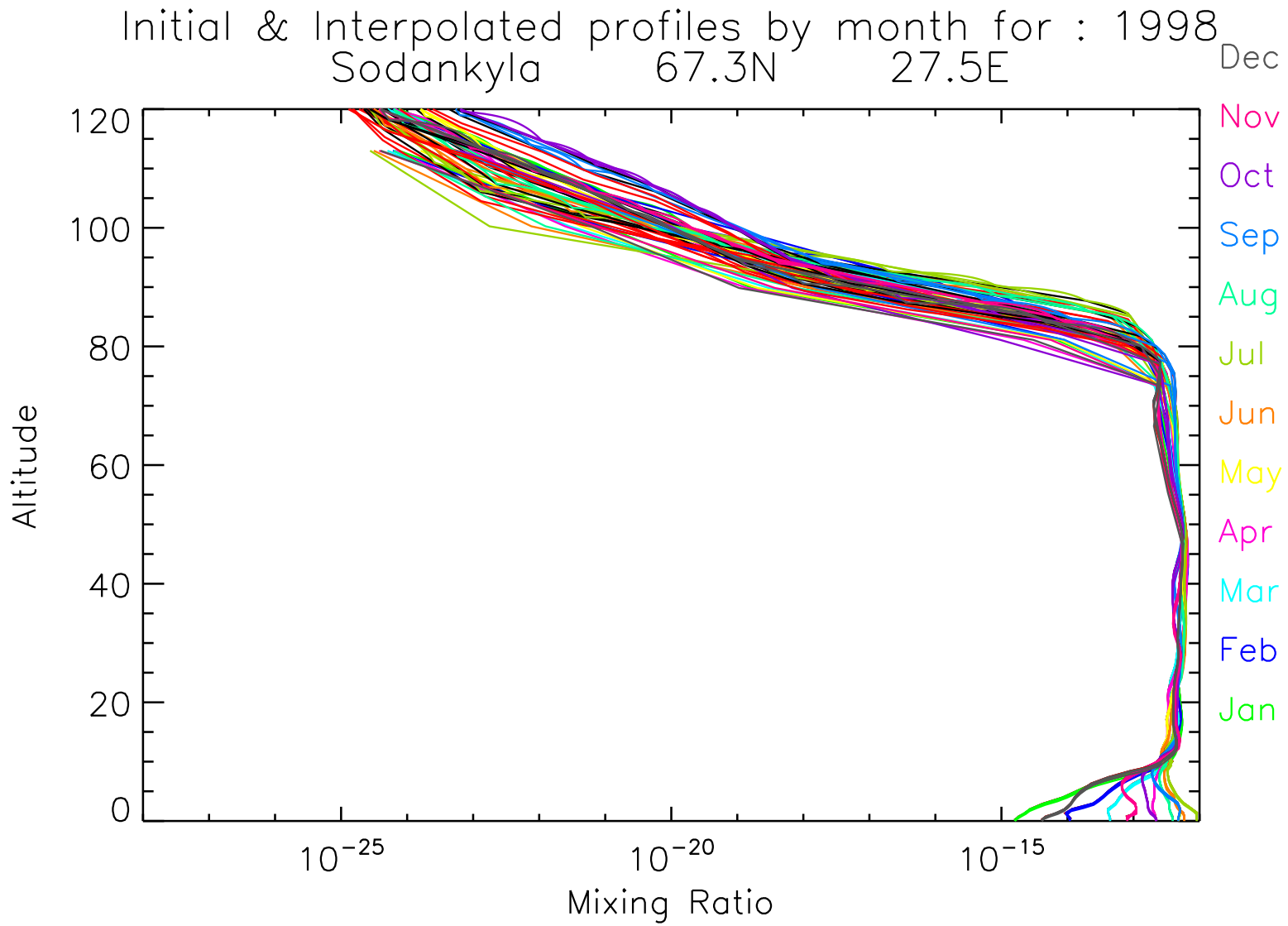
Altitude
10^{-25}
10^{-20}
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1998
Sodankyla 67.3N 27.5E
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10^{-25}
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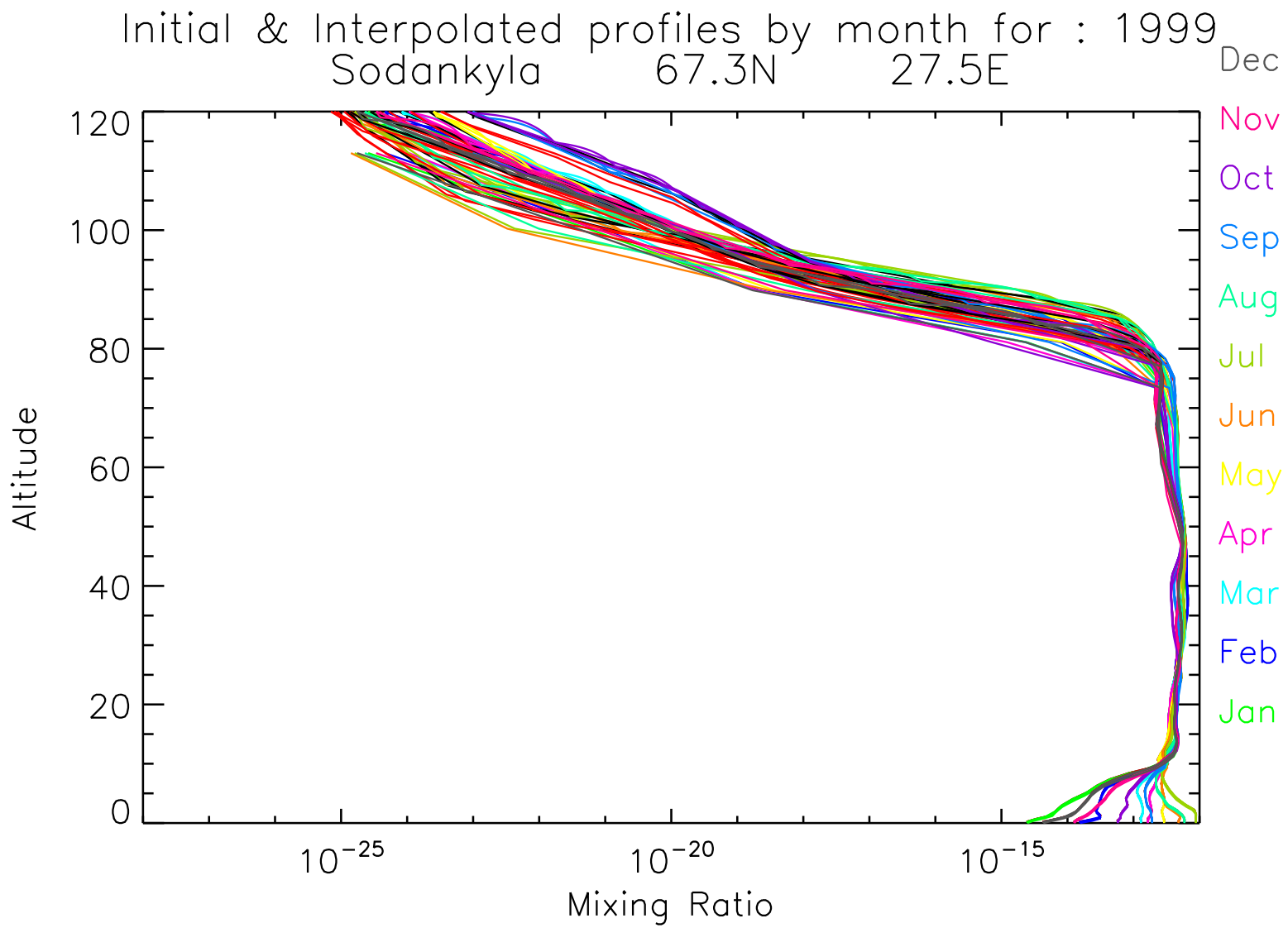
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 1999
Sodankyla 67.3N 27.5E
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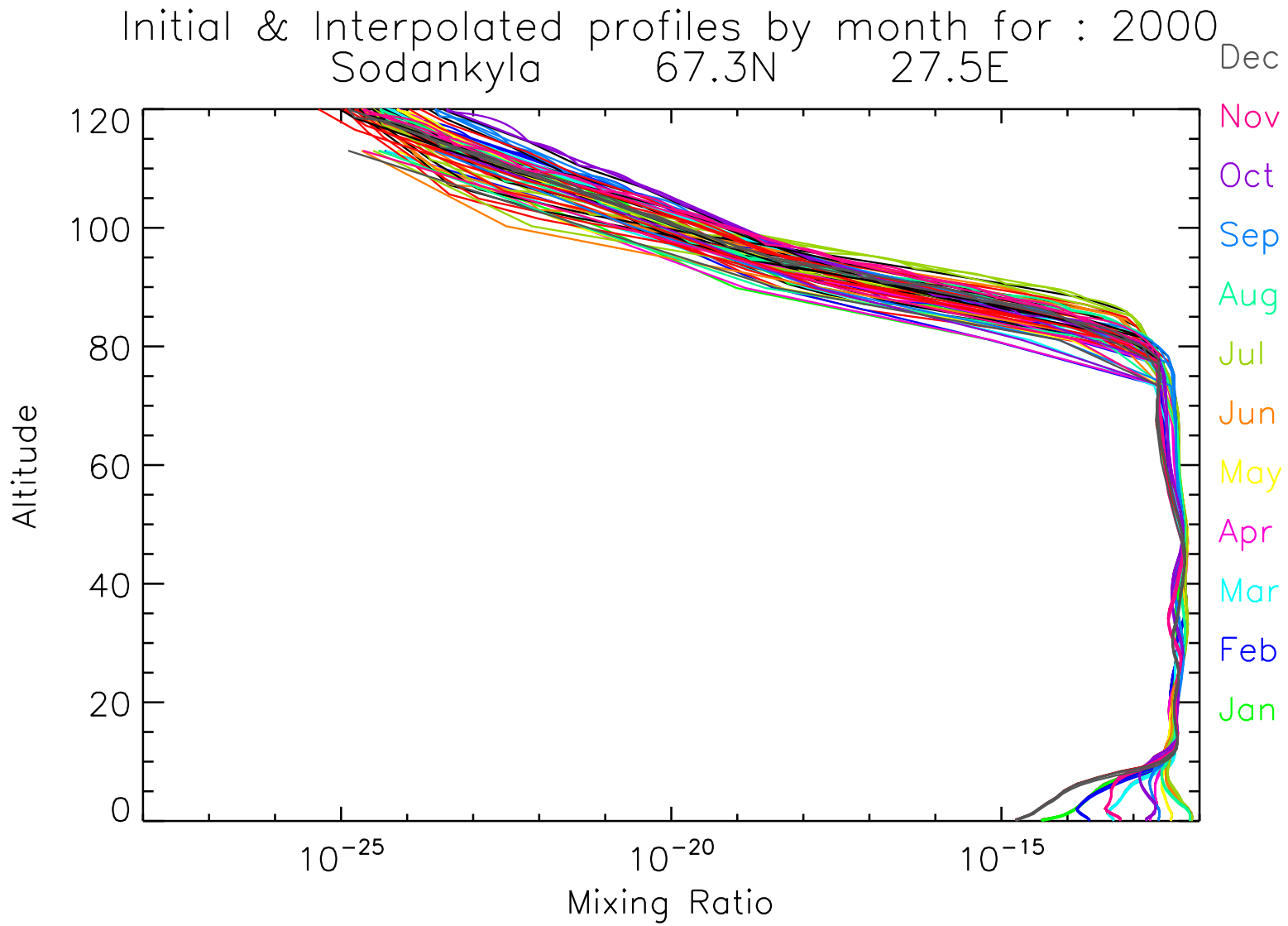
10^{-20}
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 2000
Sodankyla 67.3N 27.5E
Dec
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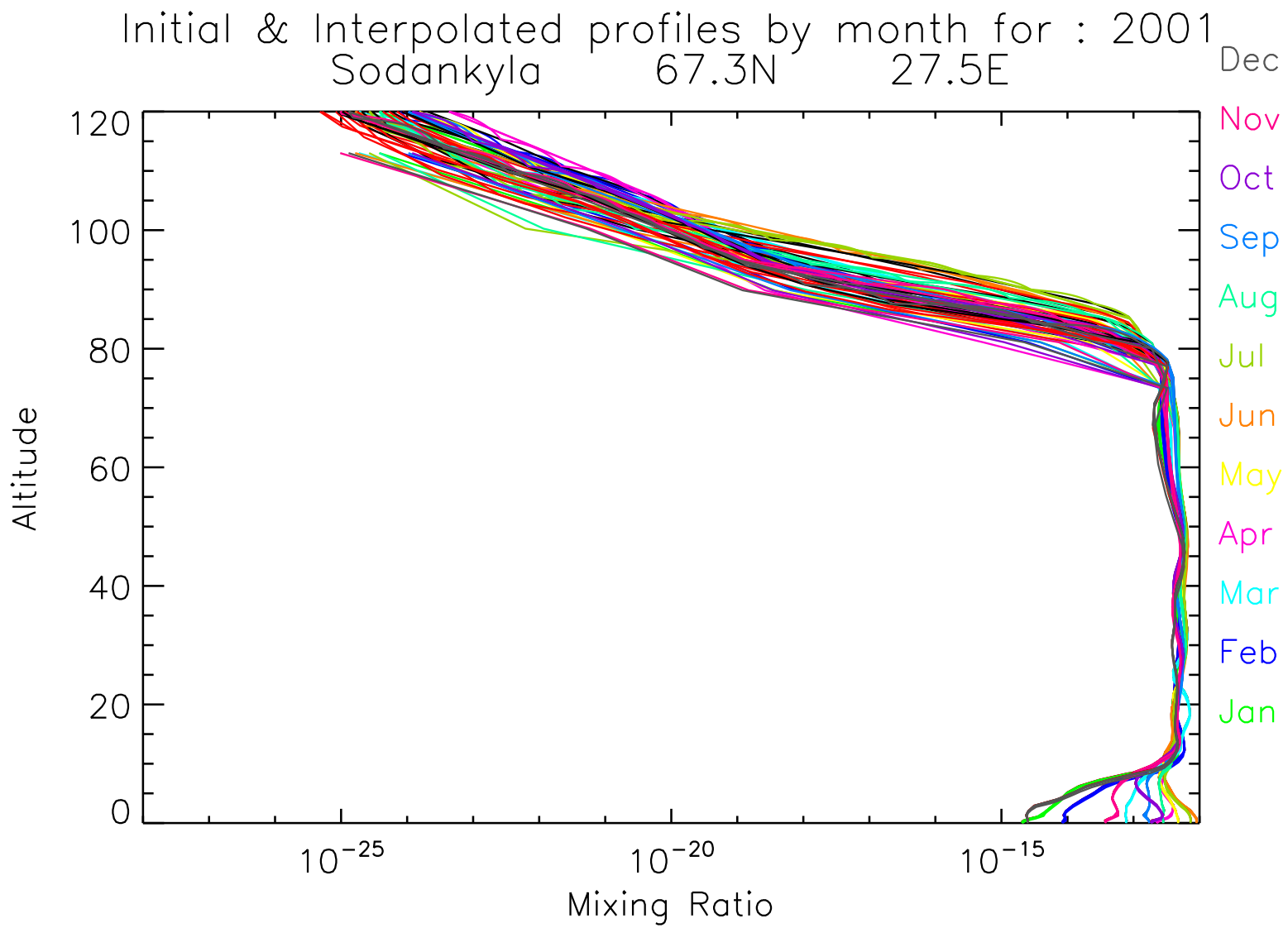
Altitude
10^{-25}
10^{-20}
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 2001
Sodankyla 67.3N 27.5E
Dec
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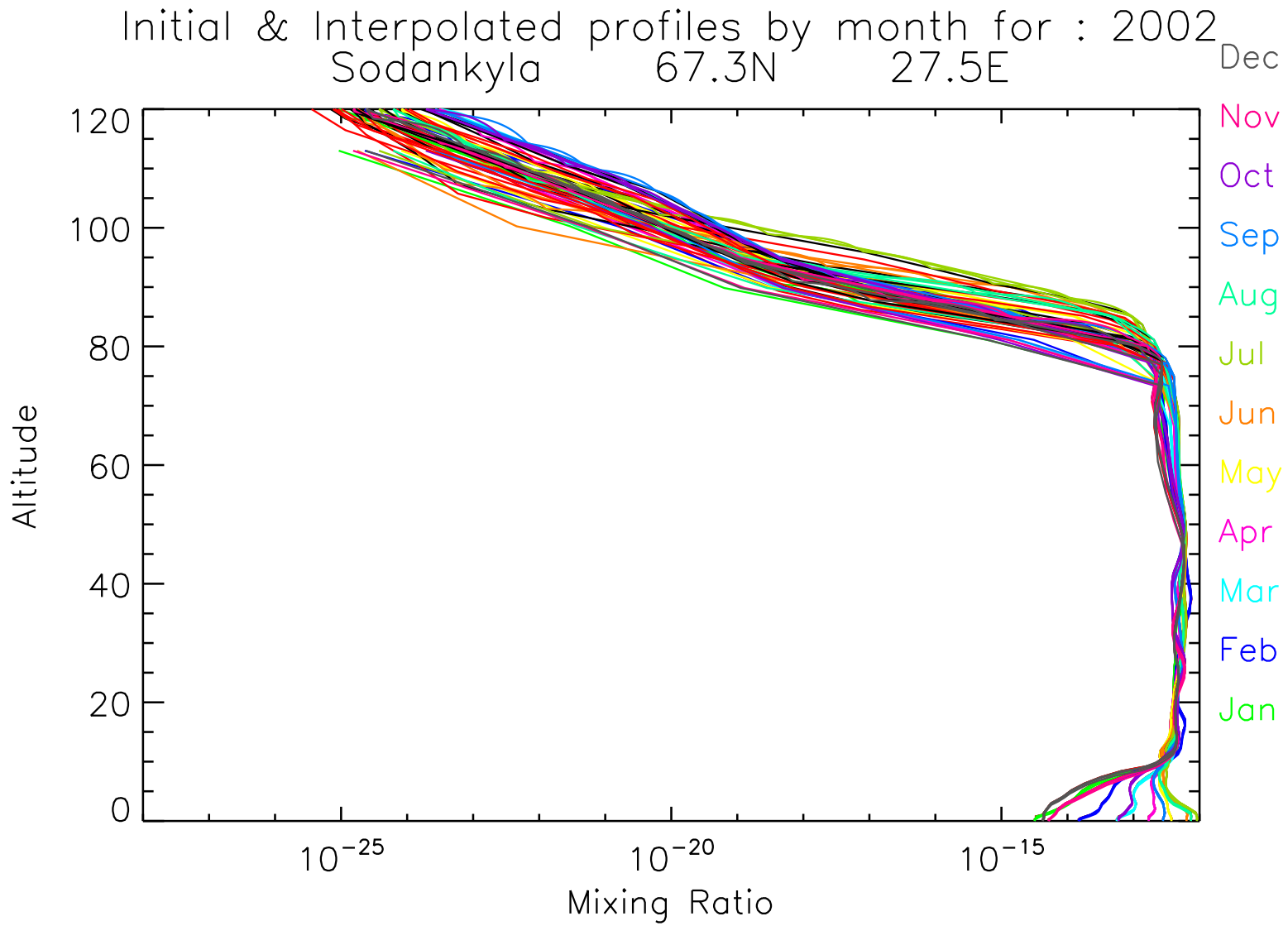
Altitude
10^{-25}
10^{-20}
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 2002
Sodankyla 67.3N 27.5E
Dec
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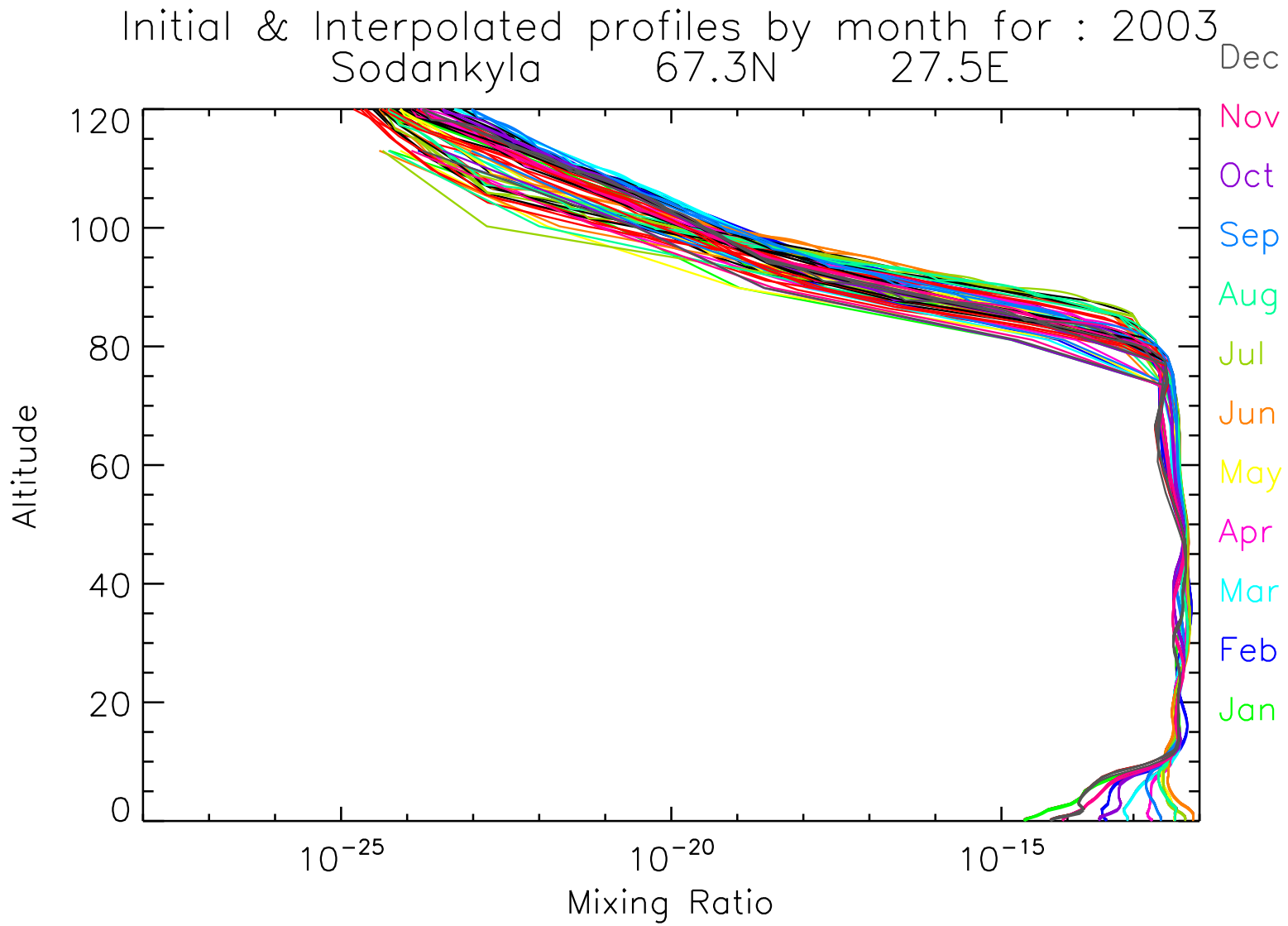
Altitude
10^{-25}
10^{-20}
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 2003
Sodankyla 67.3N 27.5E
Dec
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120
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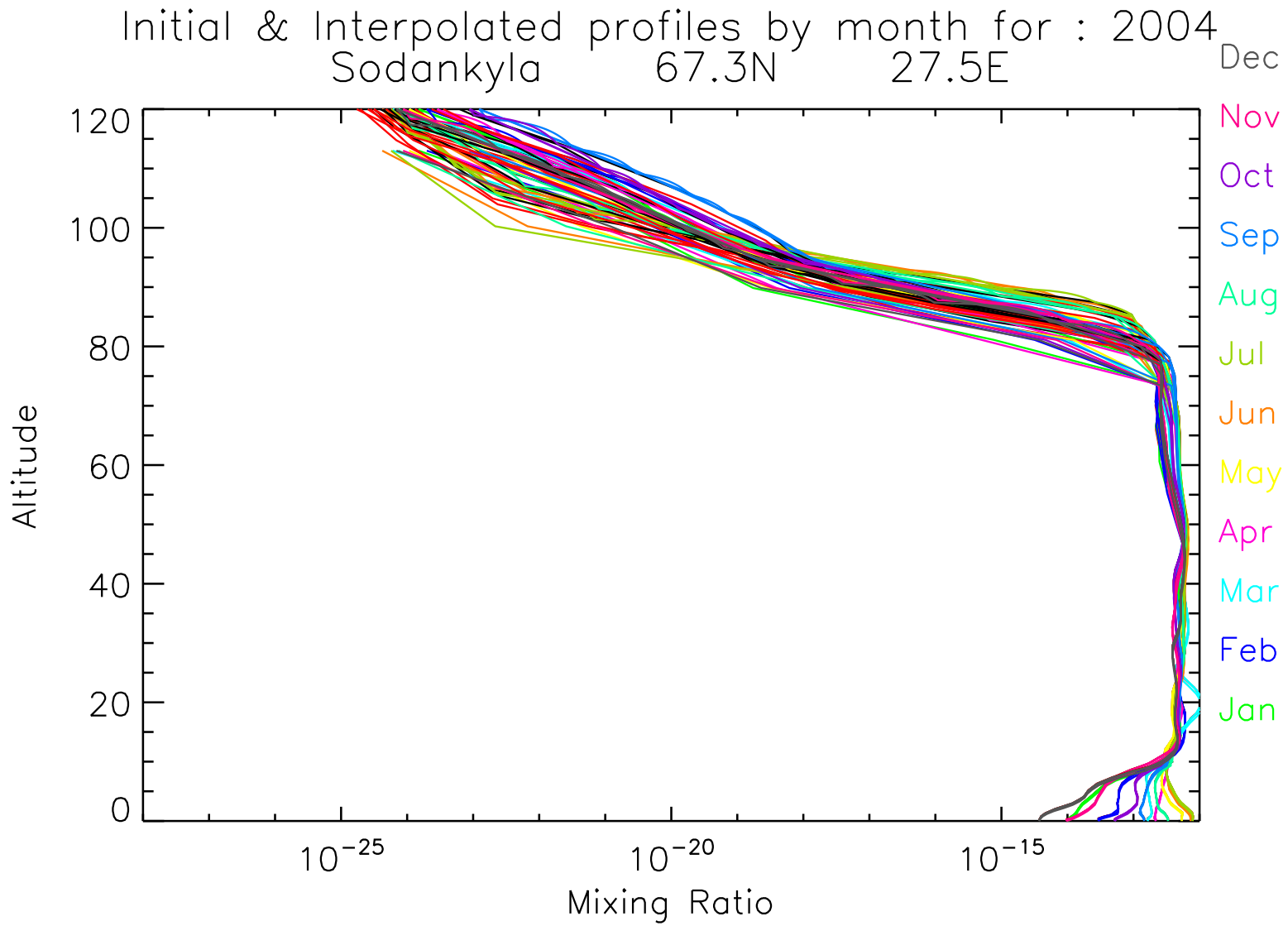
Altitude
10^{-25}
10^{-20}
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 2004
Sodankyla 67.3N 27.5E
Dec
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Altitude
10^{-25}
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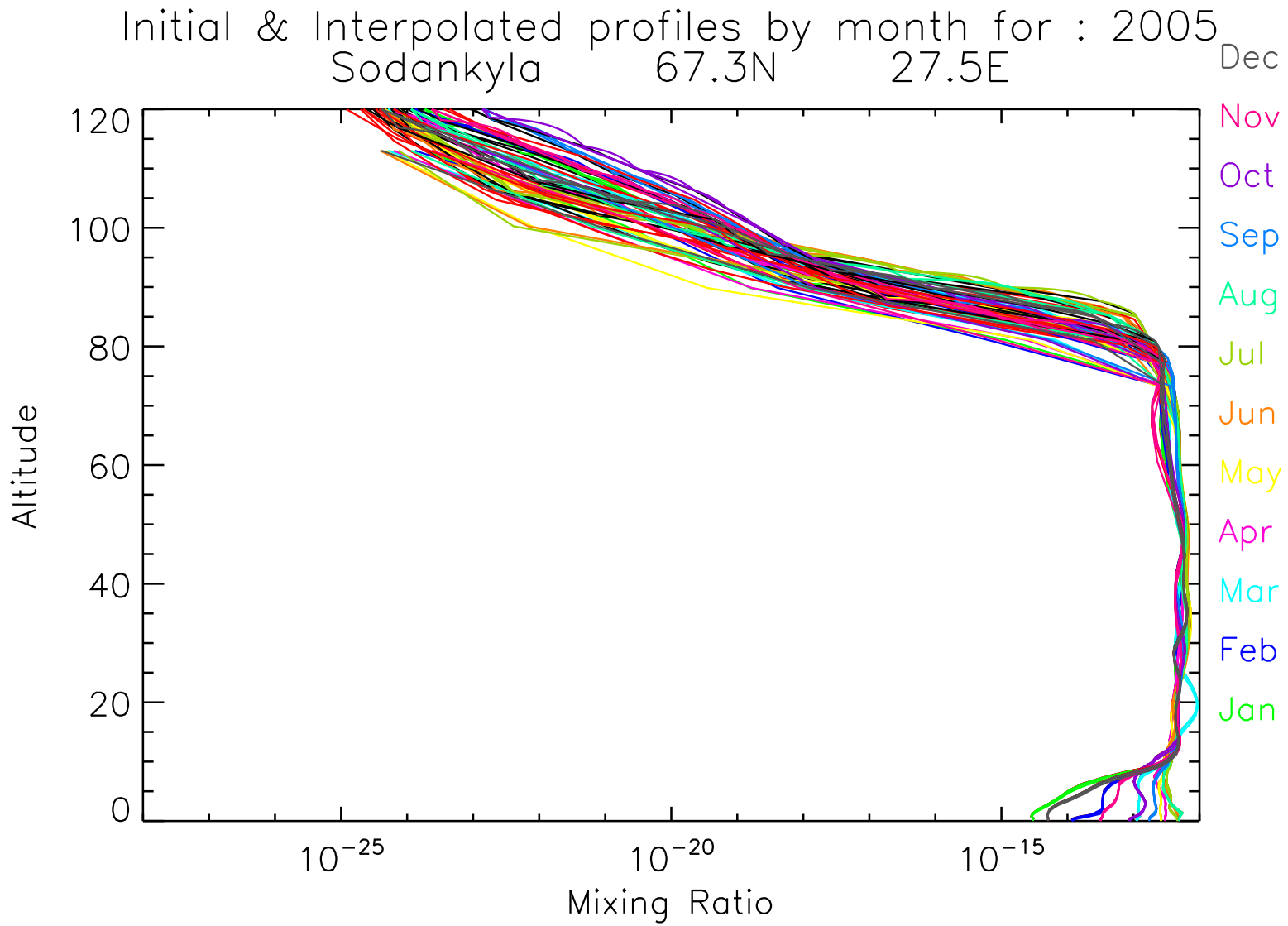
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 2005
Sodankyla 67.3N 27.5E
Dec
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Altitude
10^{-25}
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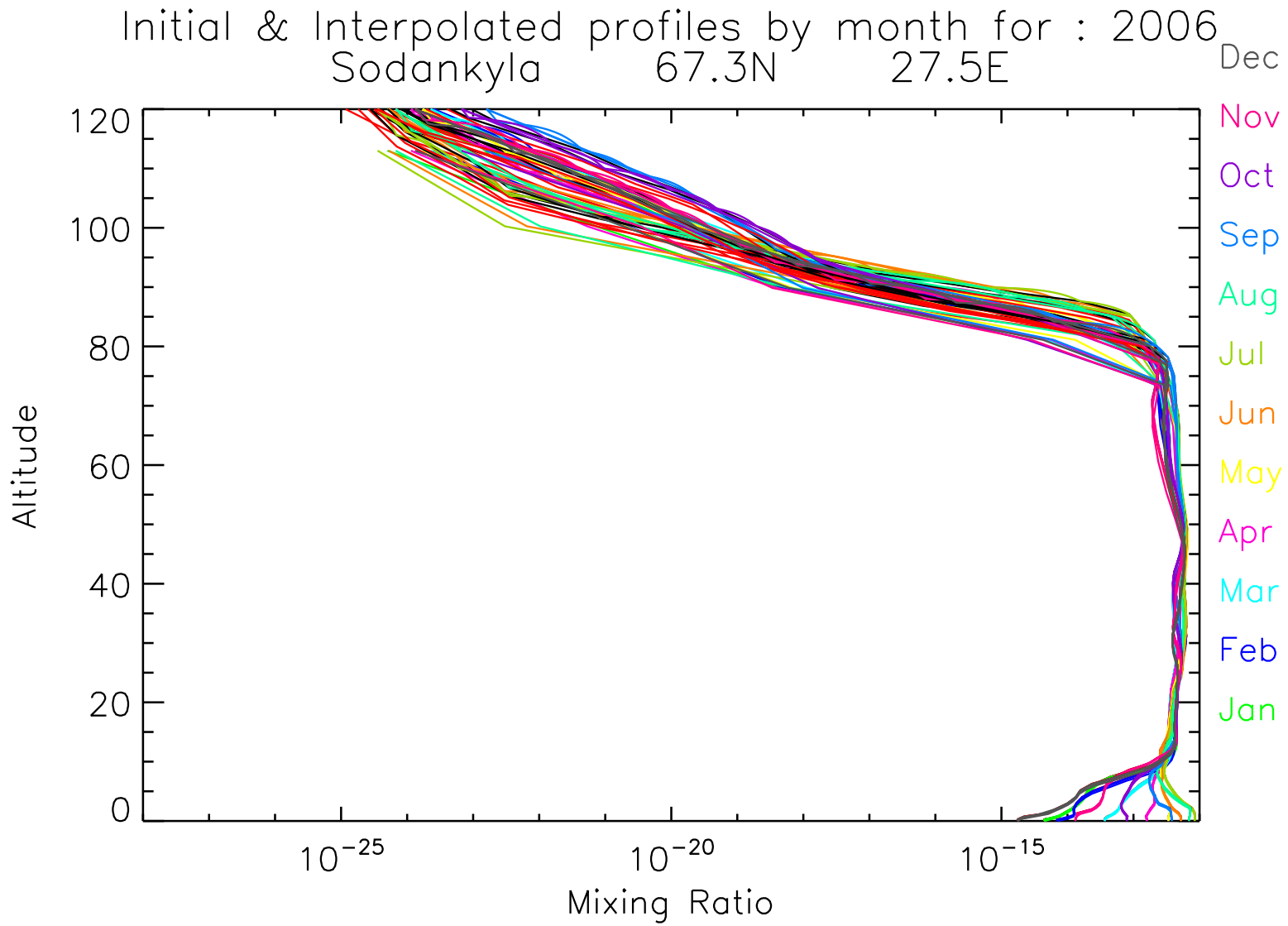
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 2006
Sodankyla 67.3N 27.5E
Dec
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Altitude
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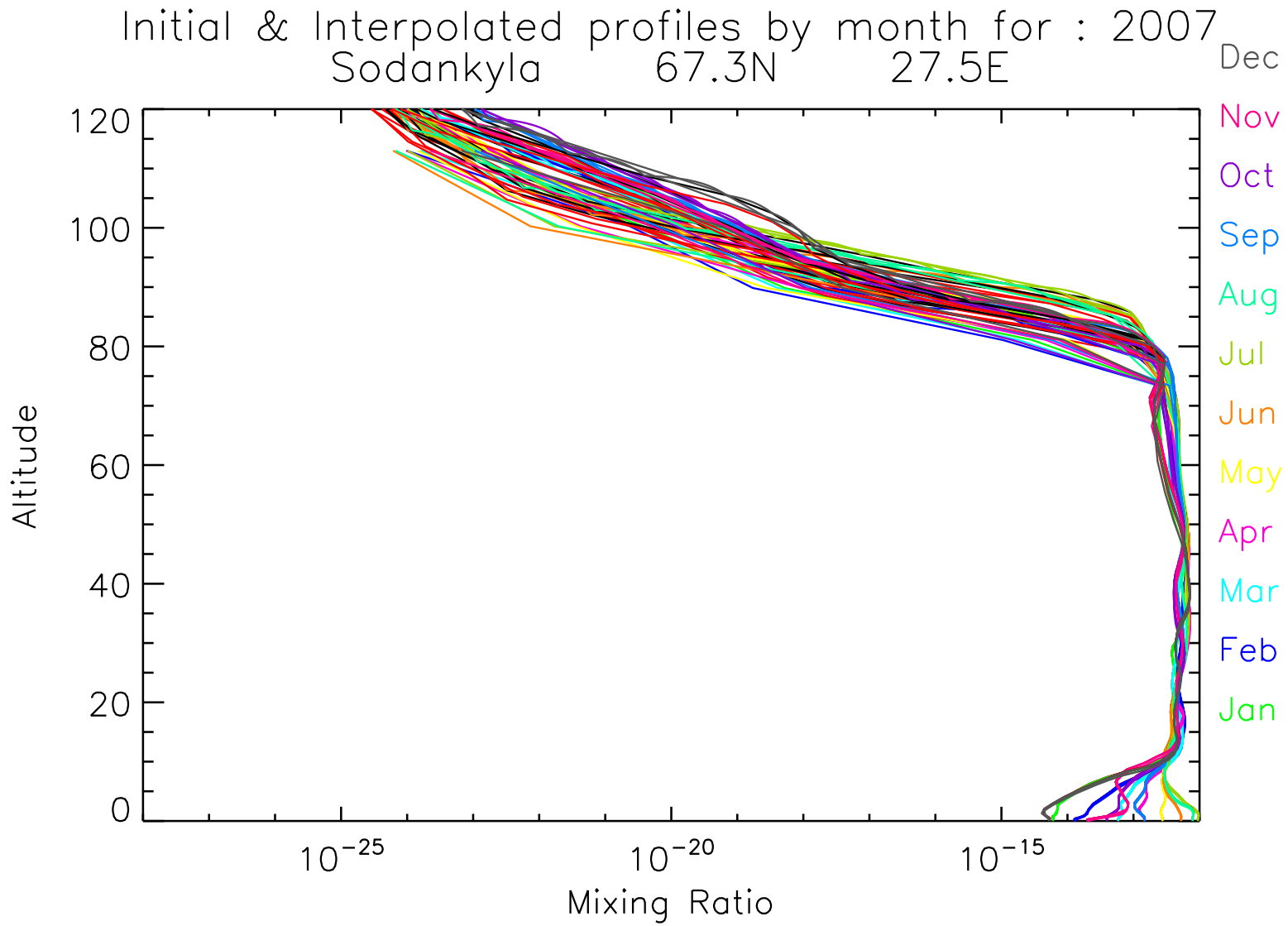
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 2007
Sodankyla 67.3N 27.5E
Dec
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Altitude
10^{-25}
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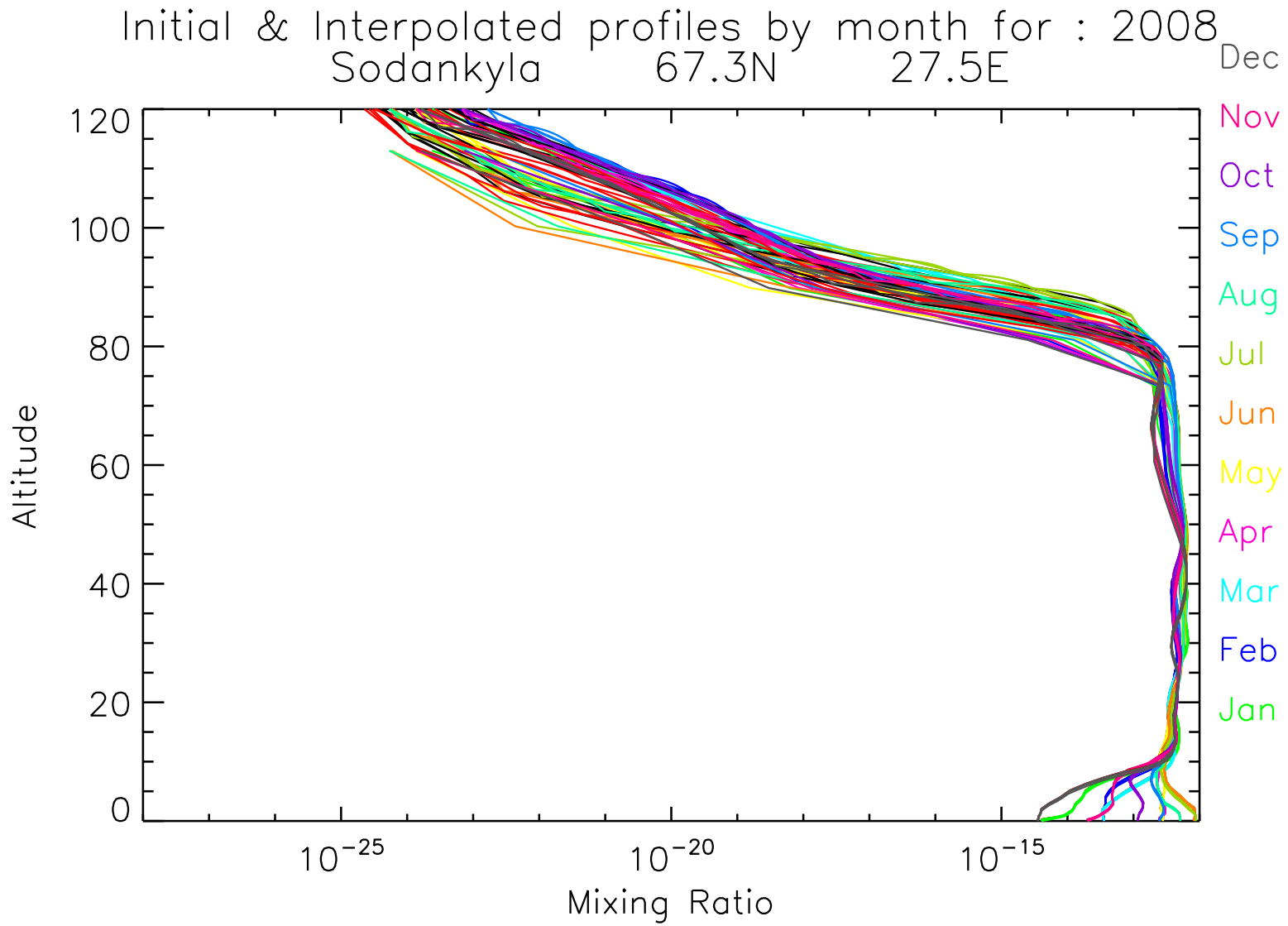
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 2008
Sodankyla 67.3N 27.5E
Dec
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Altitude
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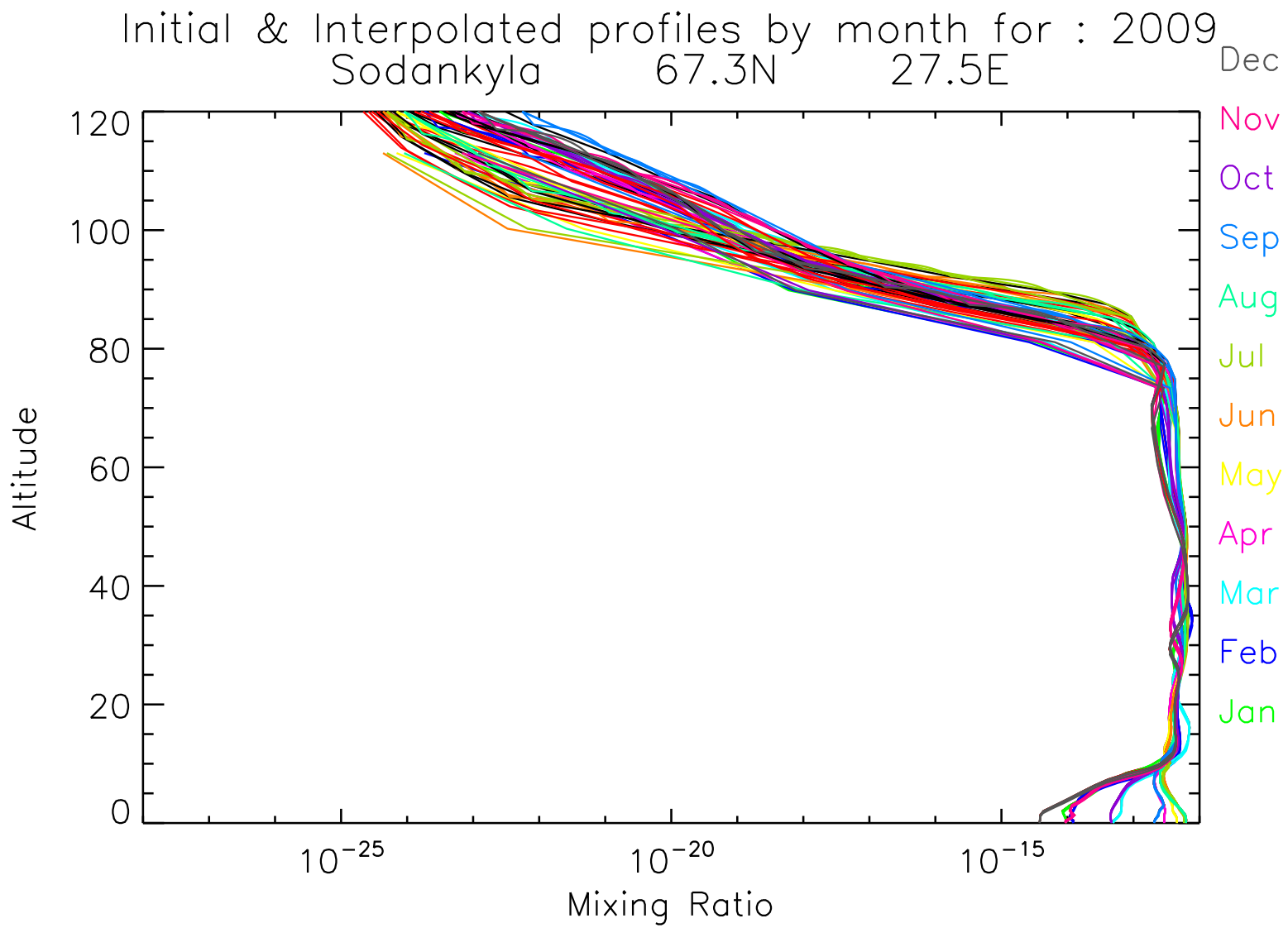
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 2009
Sodankyla 67.3N 27.5E
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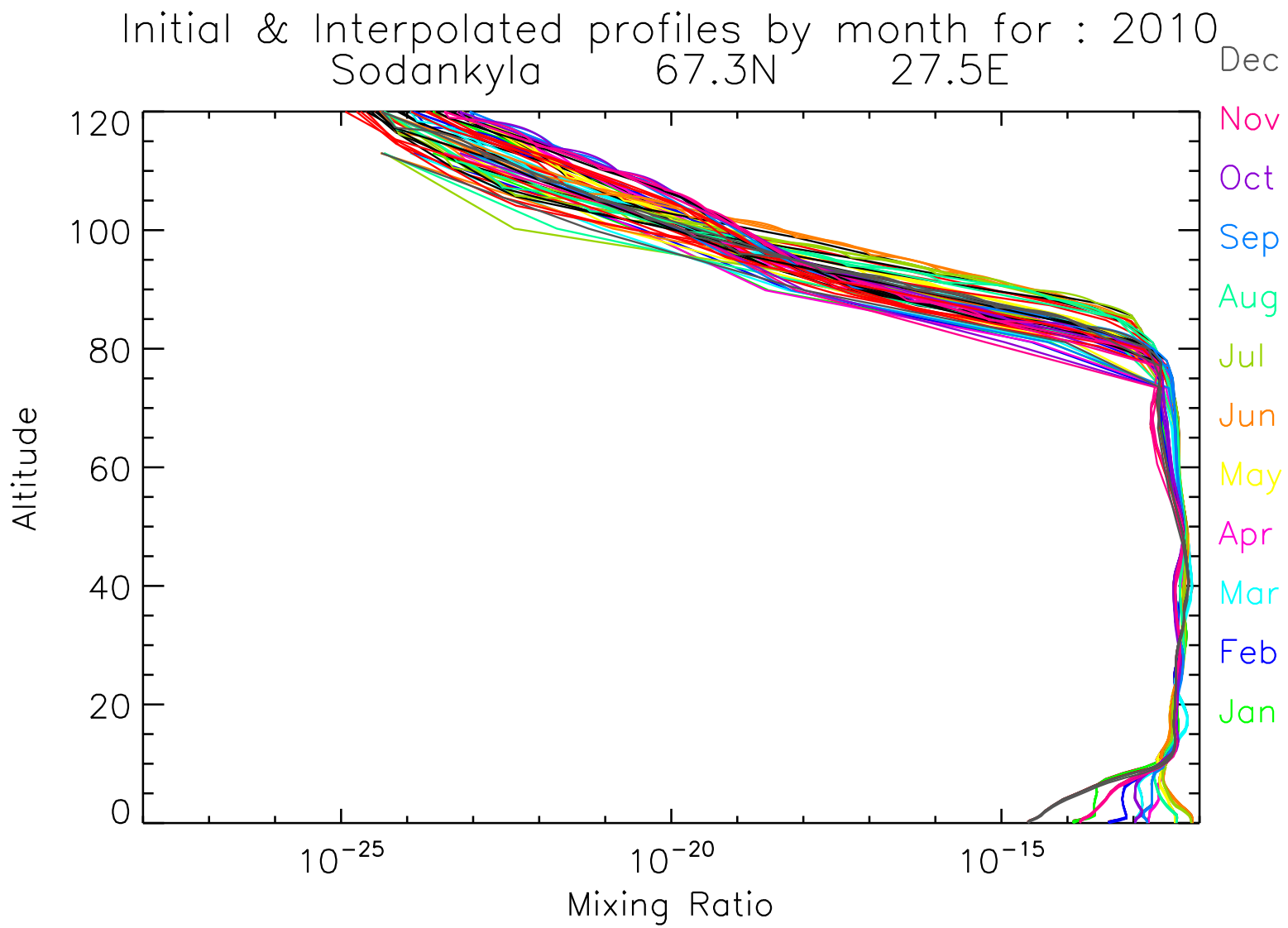
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 2010
Sodankyla 67.3N 27.5E
Dec
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Altitude
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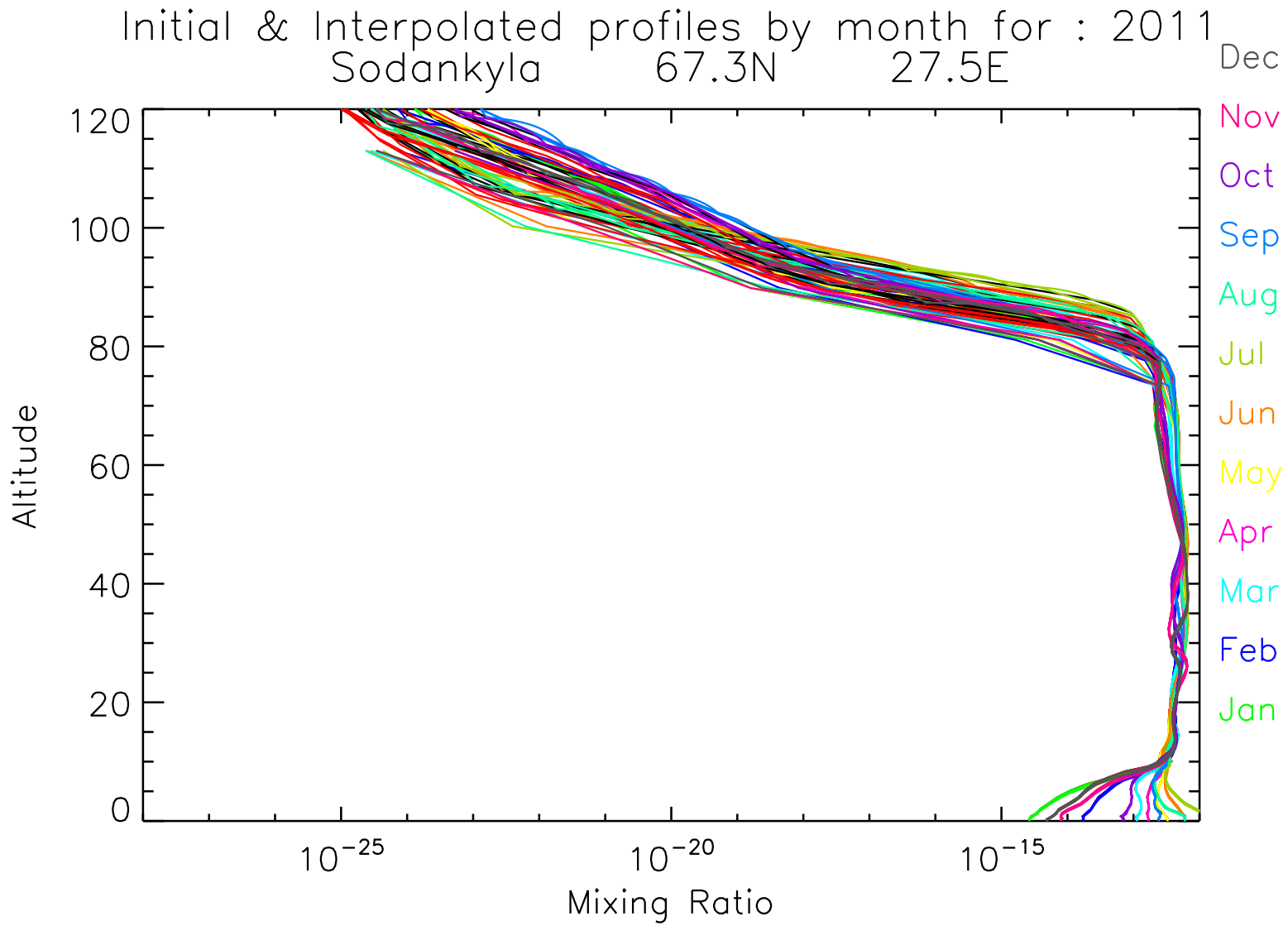
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 2011
Sodankyla 67.3N 27.5E
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Altitude
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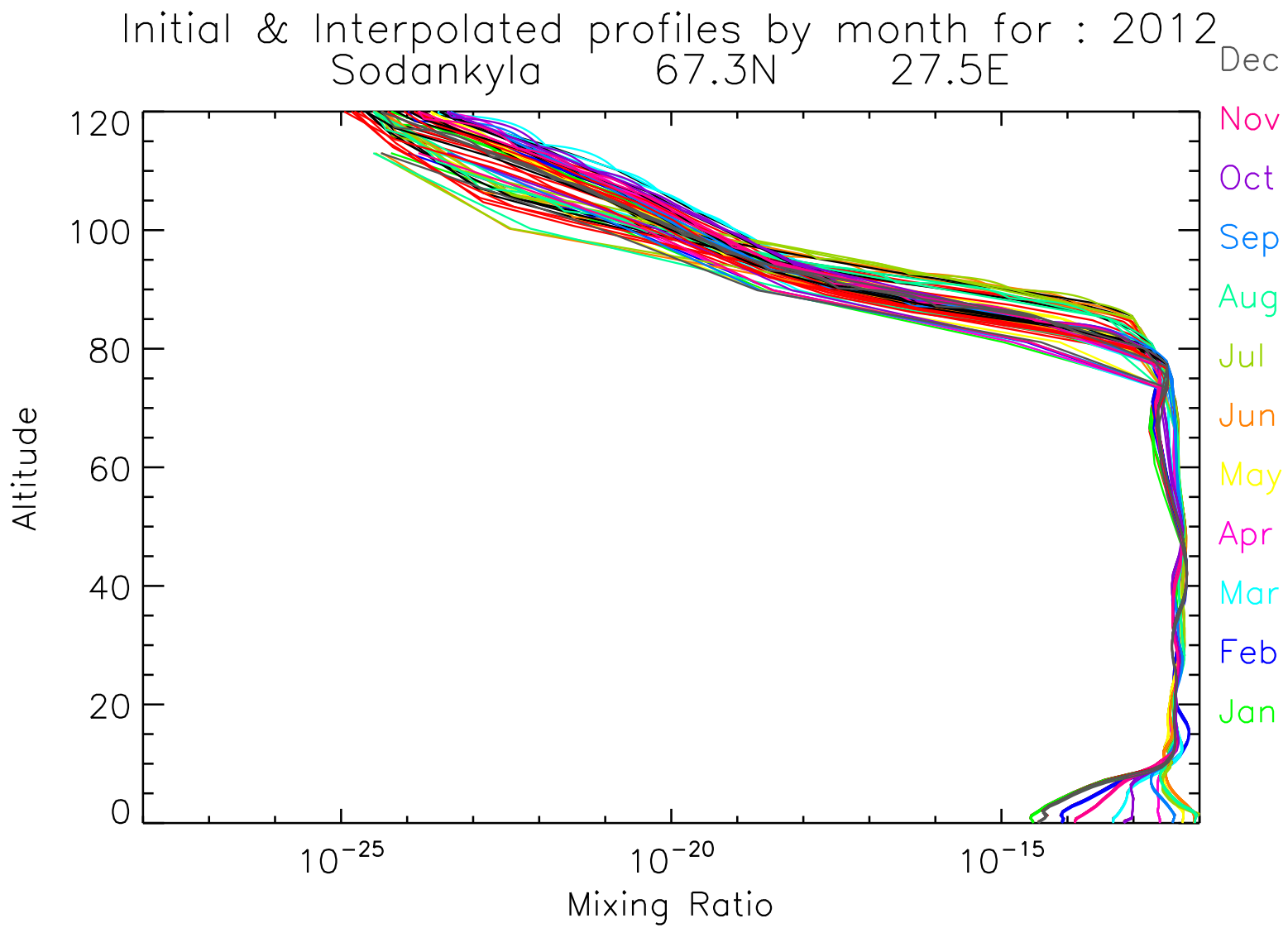
10^{-15}
Mixing Ratio


Initial & Interpolated profiles by month for : 2012
Sodankyla 67.3N 27.5E
Dec
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Altitude
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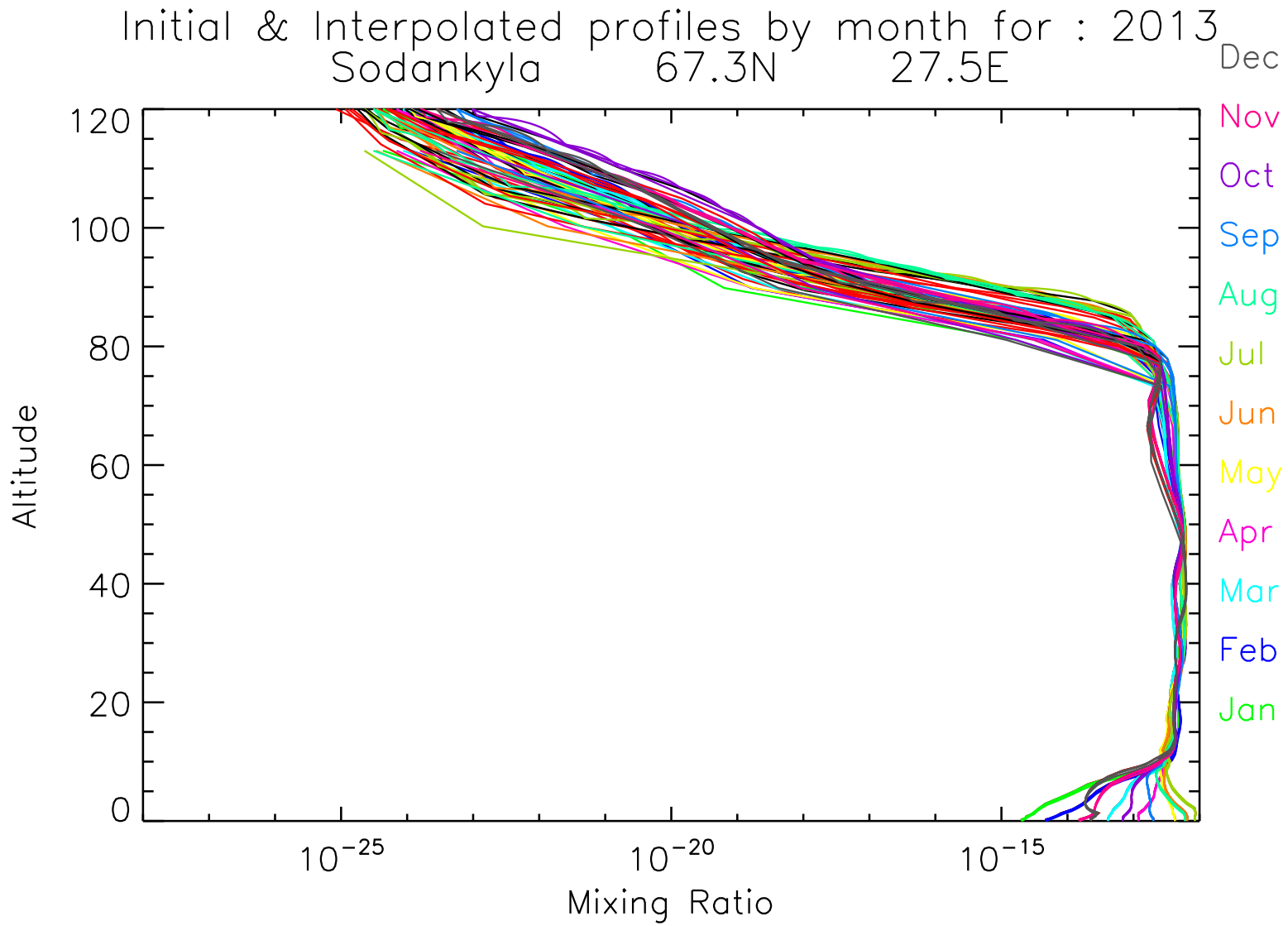
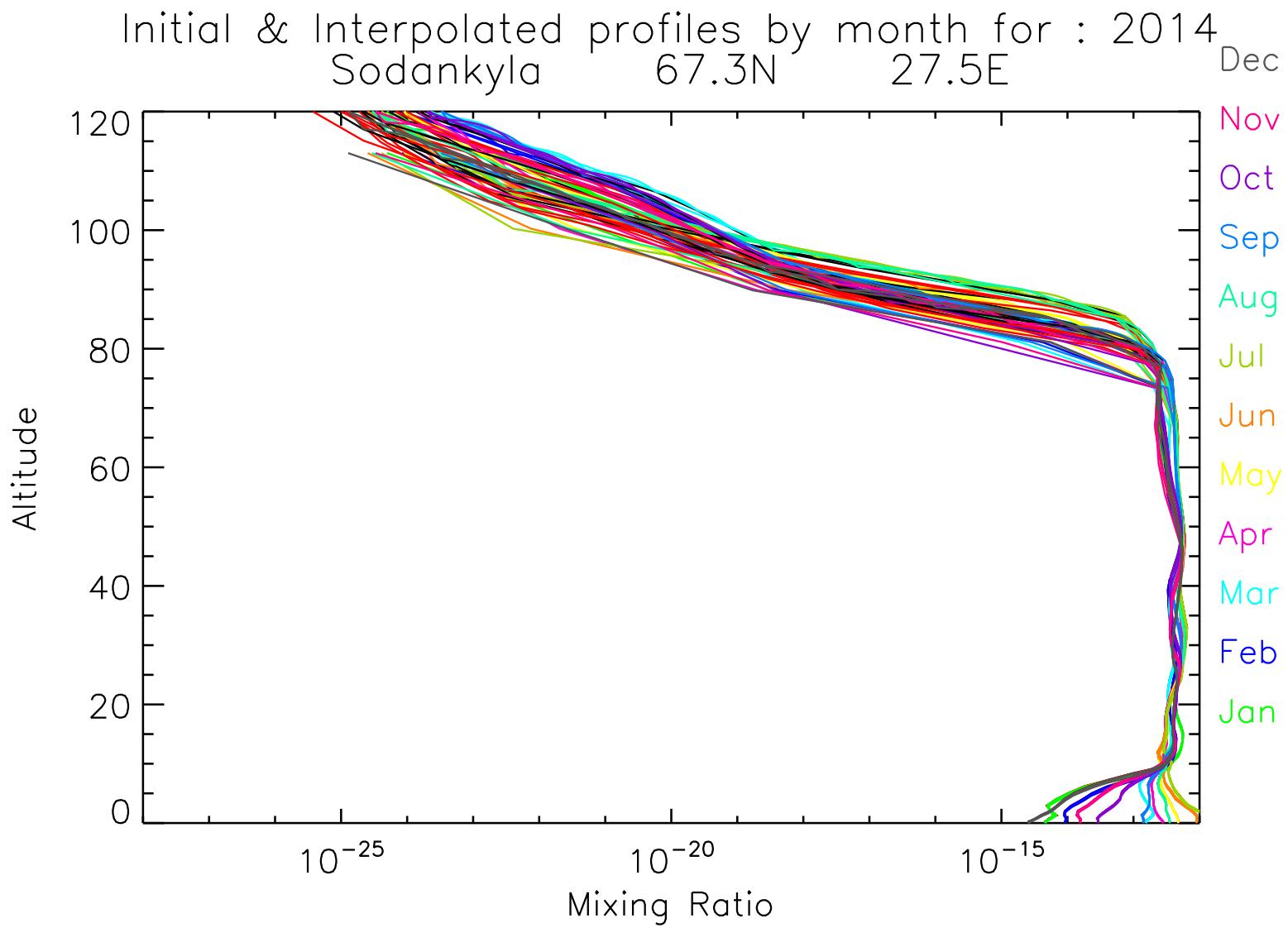
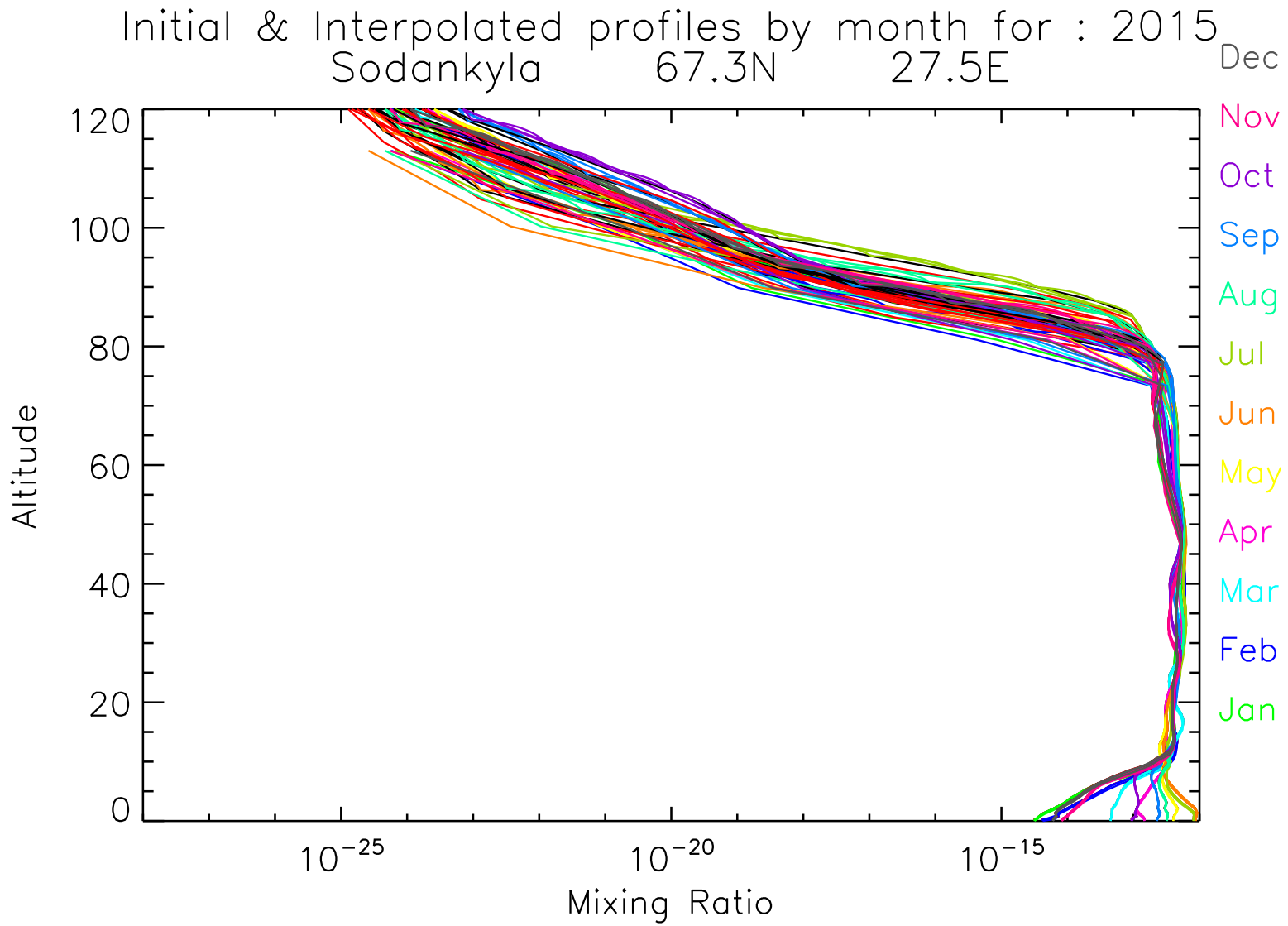
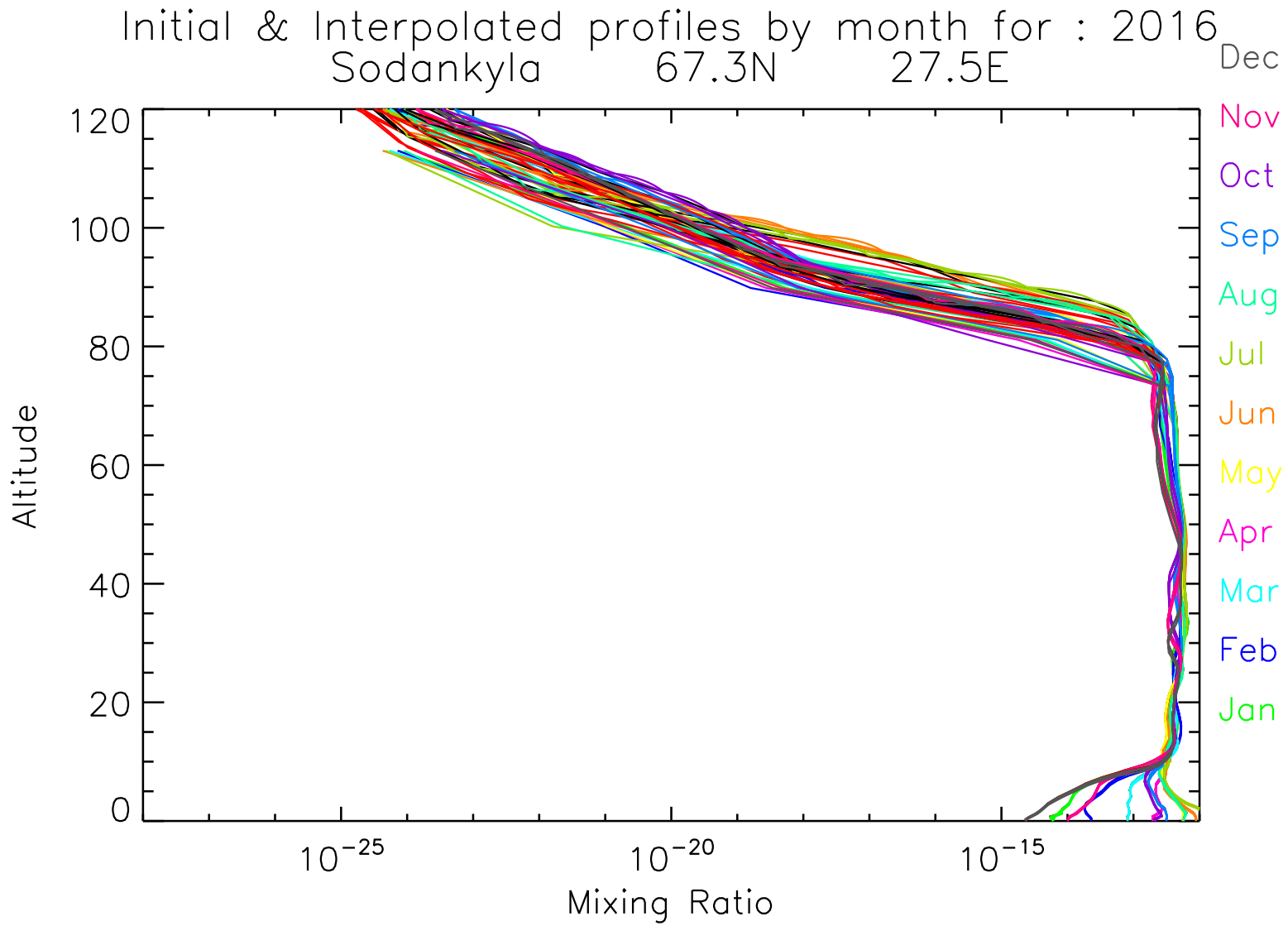
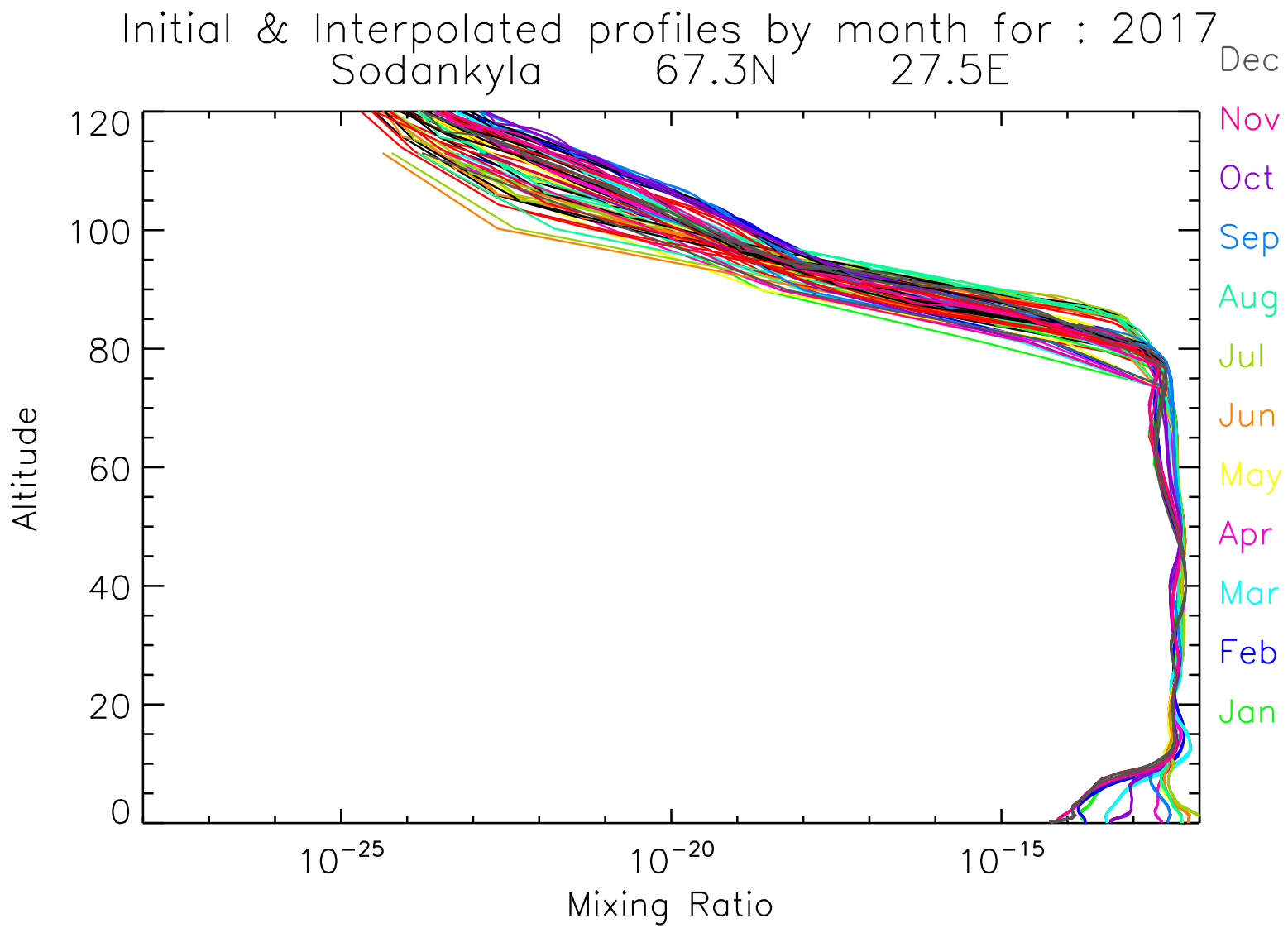
10^{-15}
Mixing Ratio

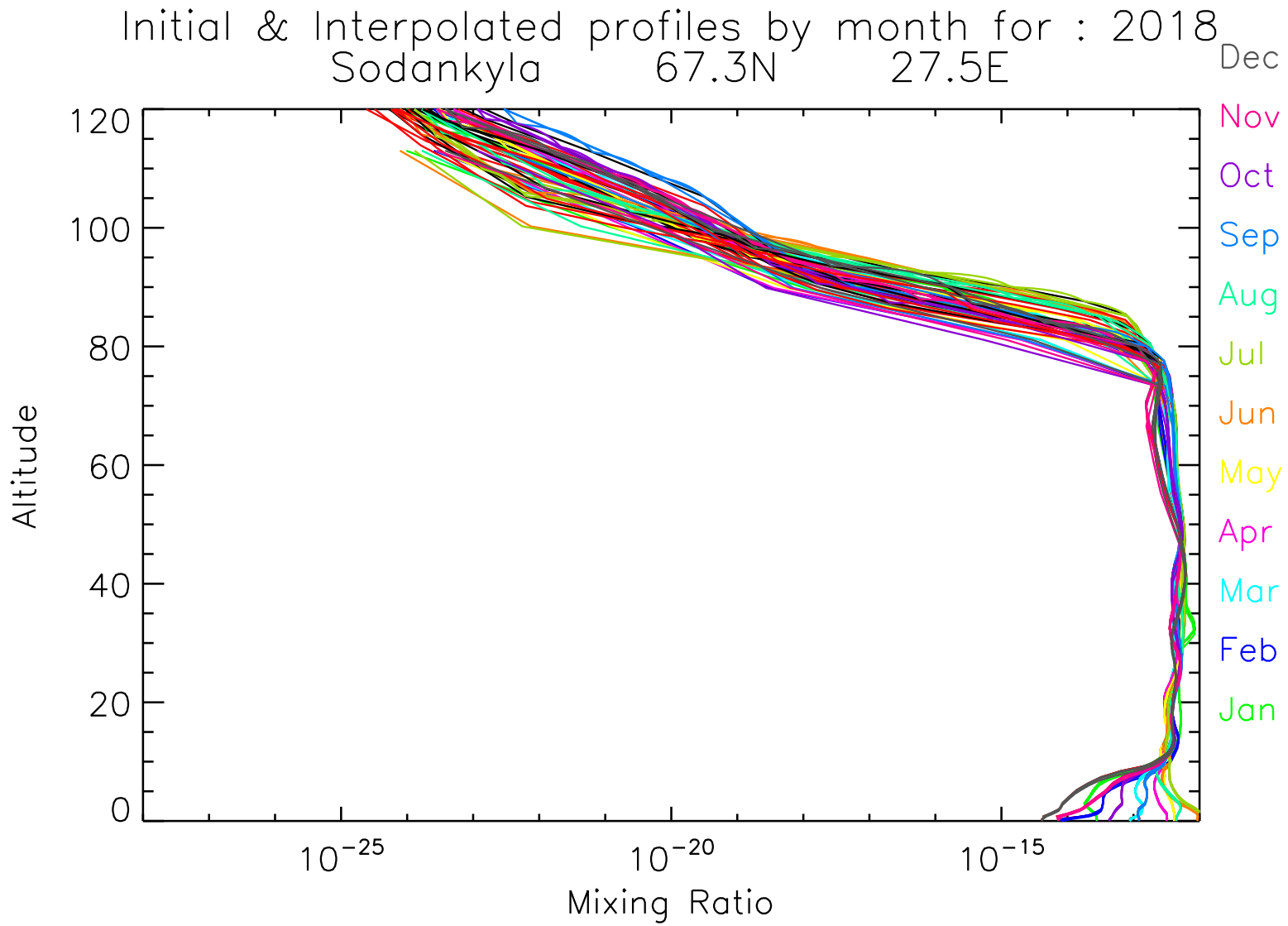

Initial & Interpolated profiles by month for : 2013
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-25}
10^{-20}
10^{-15}
Mixing Ratio

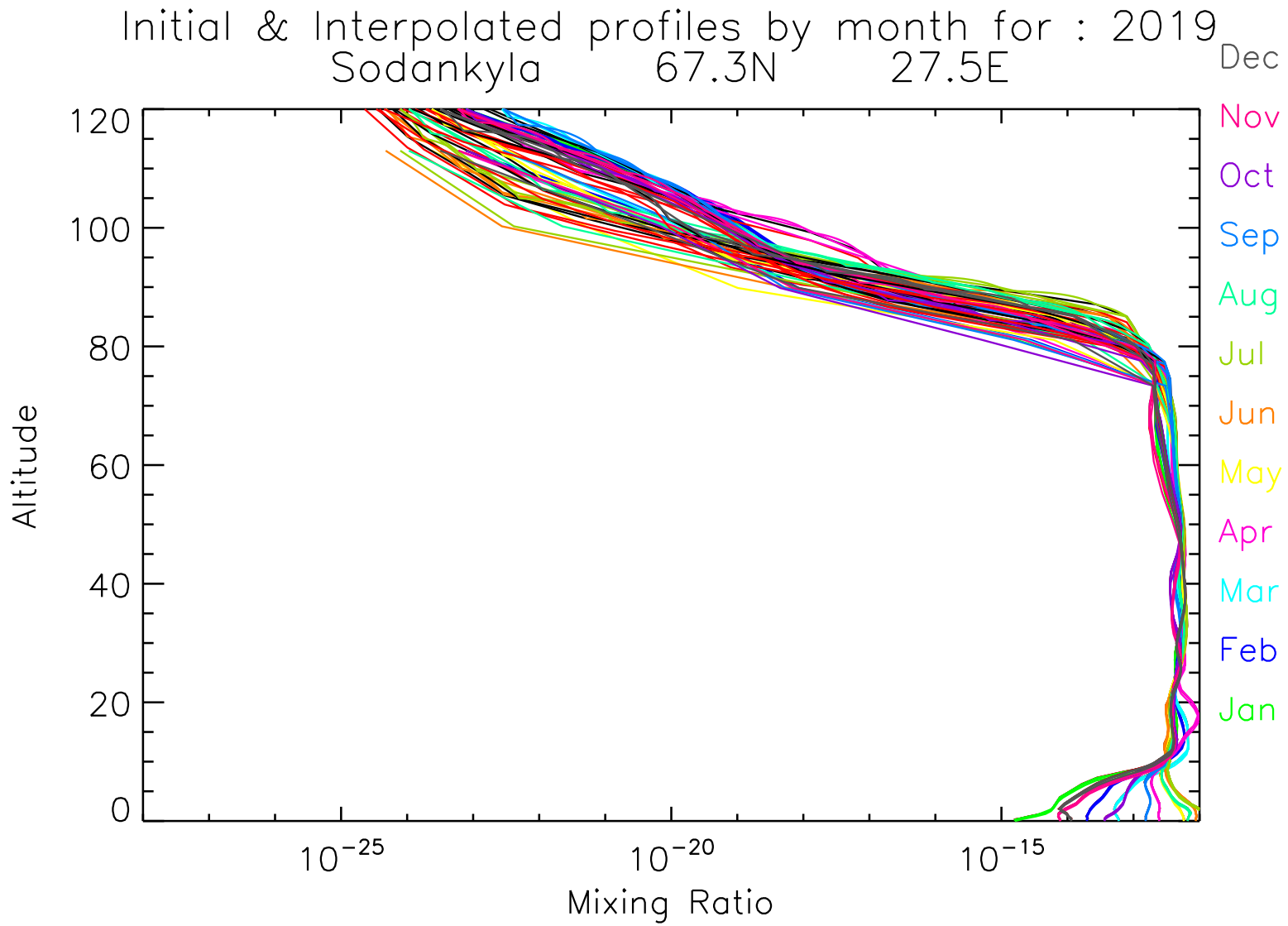

Initial & Interpolated profiles by month for : 2014
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-25}
10^{-20}
10^{-15}
Mixing Ratio

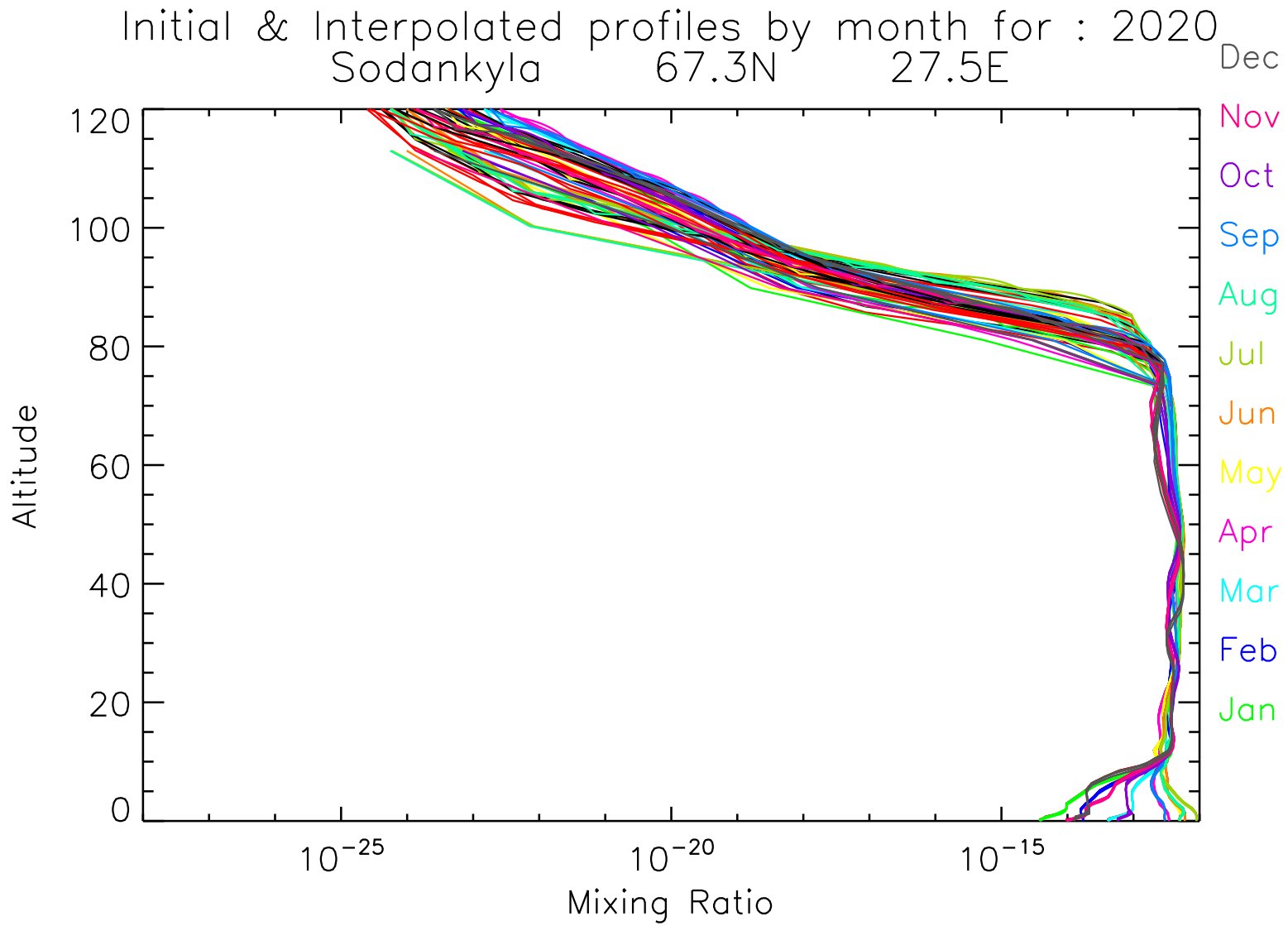

Initial & Interpolated profiles by month for : 2015
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-25}
10^{-20}
10^{-15}
Mixing Ratio

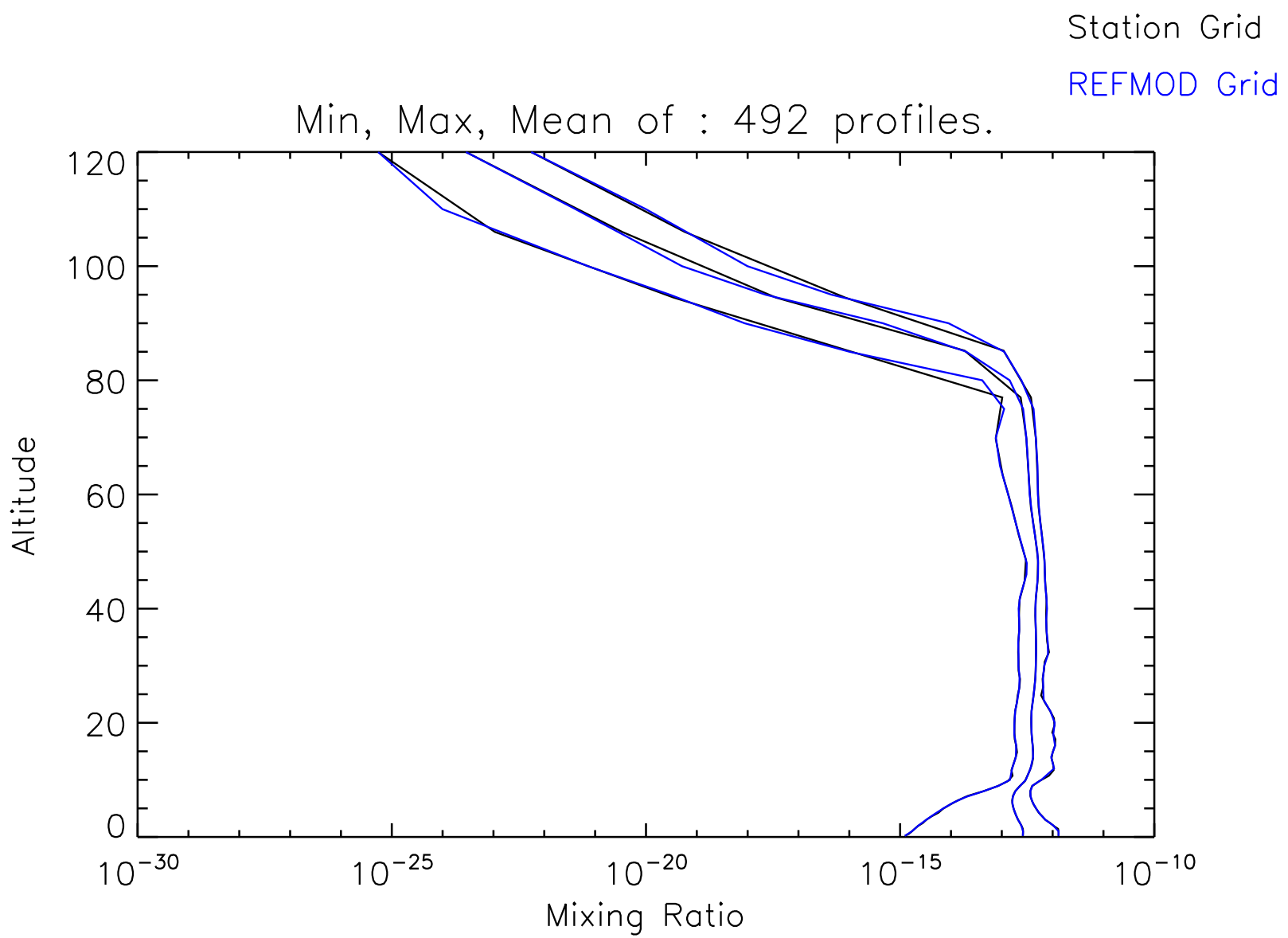

Initial & Interpolated profiles by month for : 2016
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-25}
10^{-20}
10^{-15}
Mixing Ratio

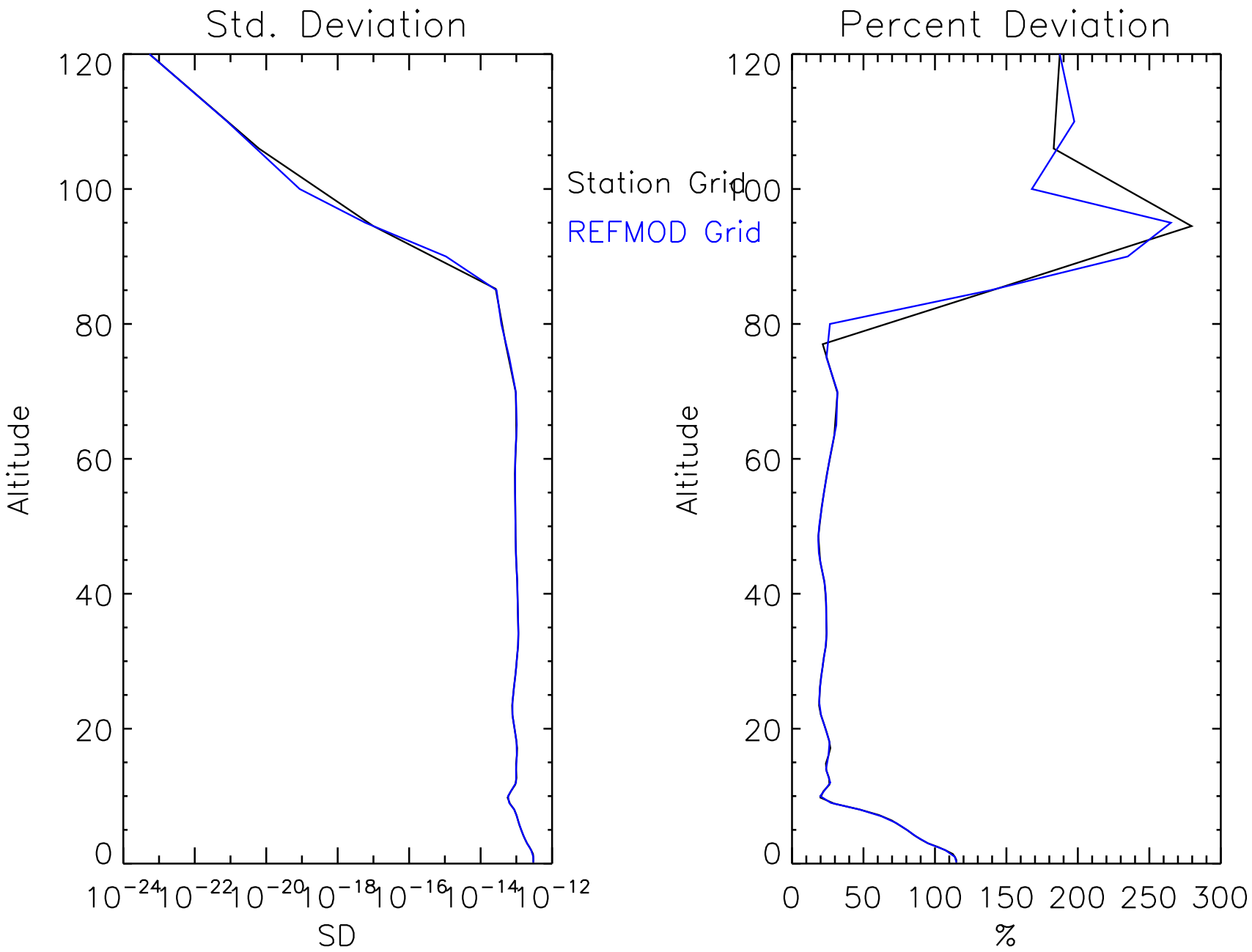

Initial & Interpolated profiles by month for : 2017
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-25}
10^{-20}
10^{-15}
Mixing Ratio

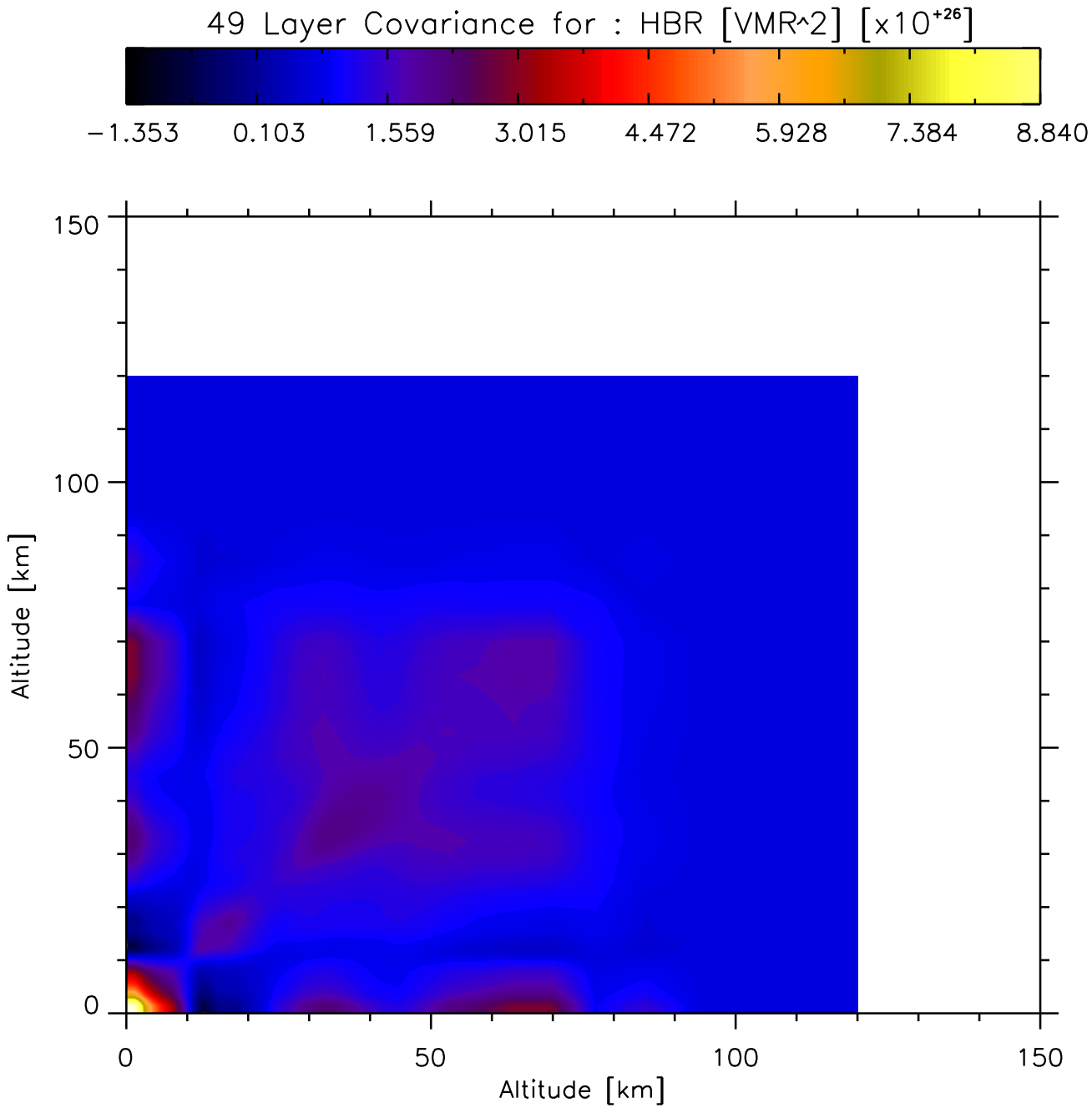

Initial & Interpolated profiles by month for : 2018
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-25}
10^{-20}
10^{-15}
Mixing Ratio

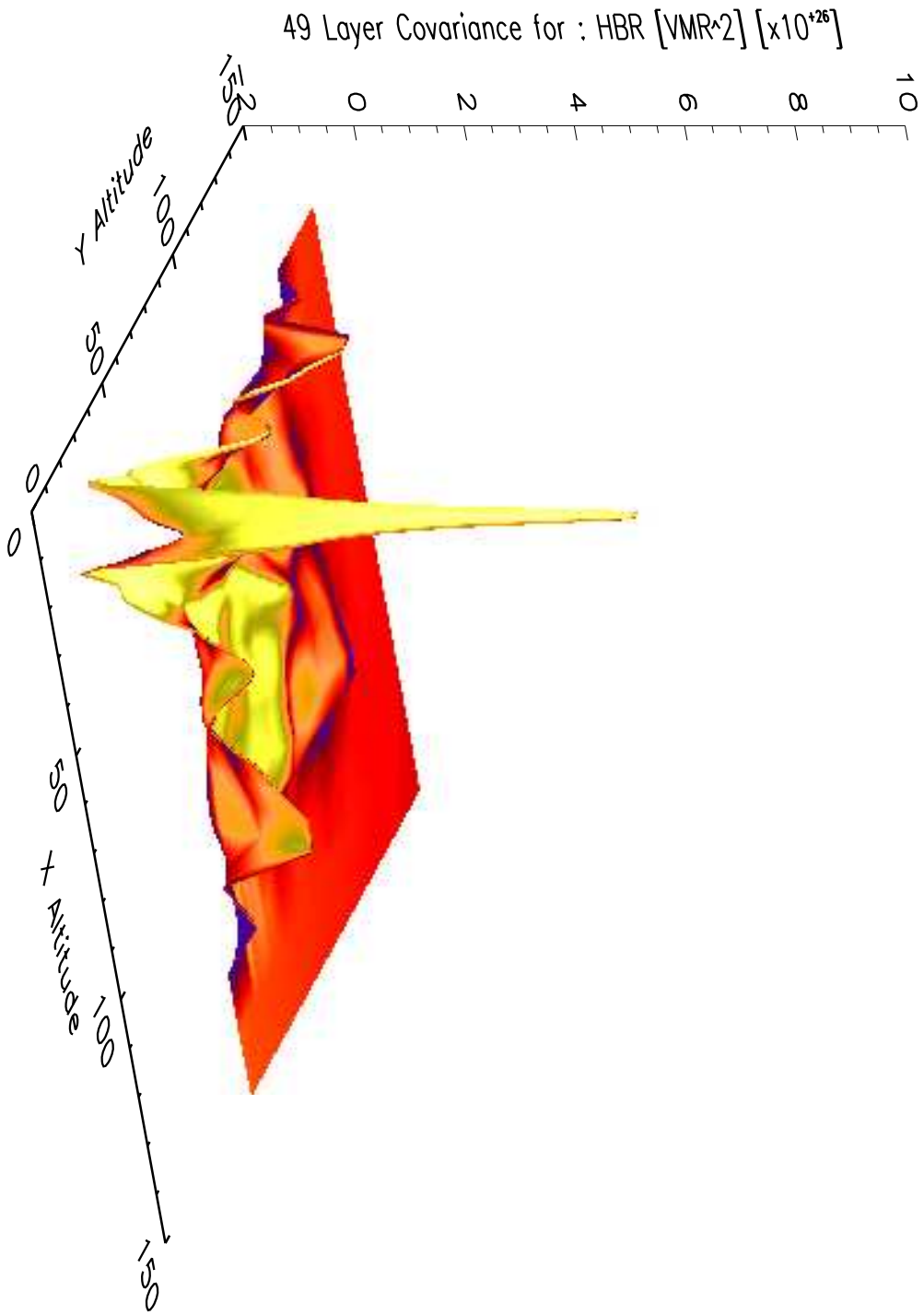

Initial & Interpolated profiles by month for : 2019
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-25}
10^{-20}
10^{-15}
Mixing Ratio

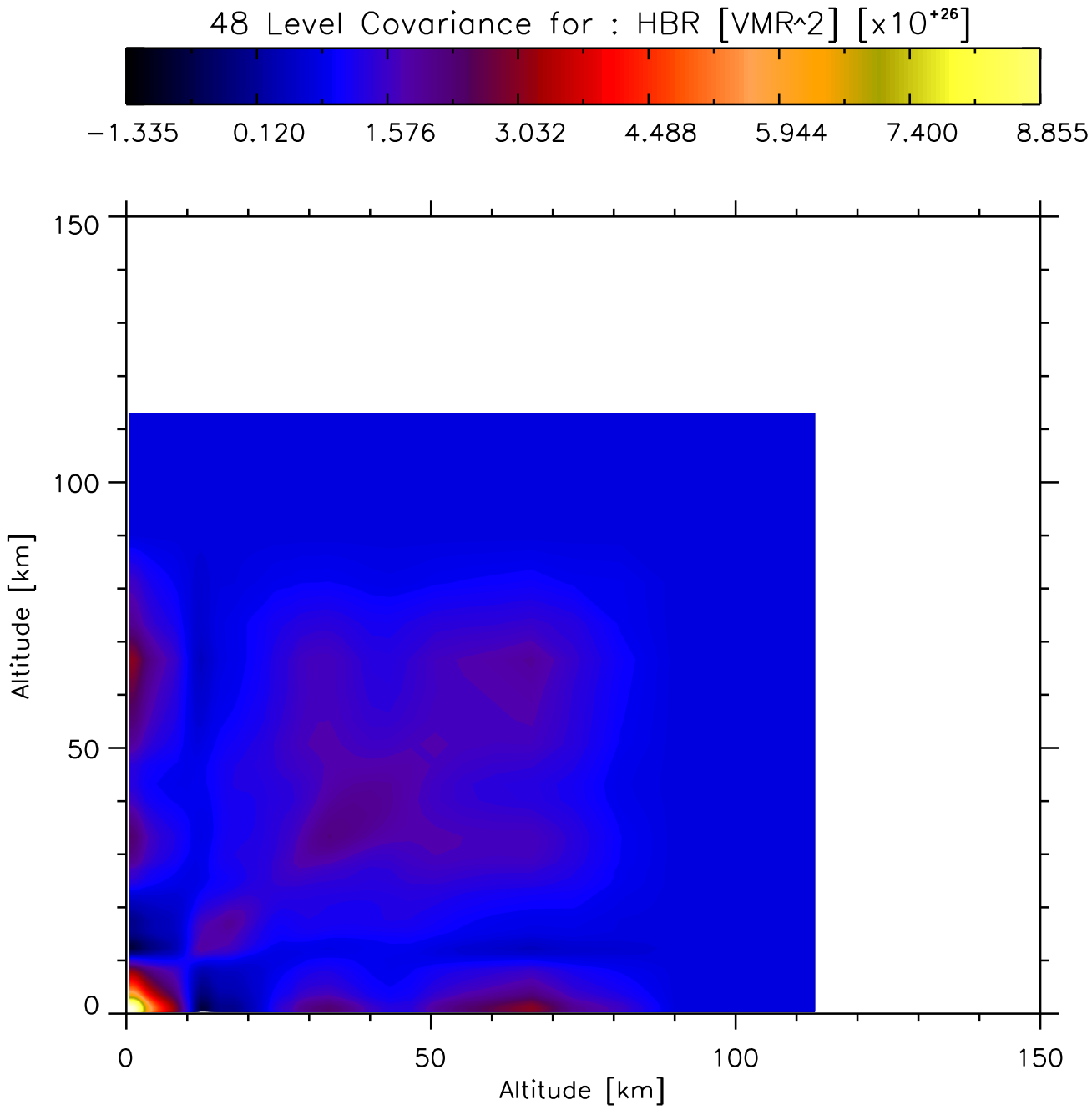

Initial & Interpolated profiles by month for : 2020
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-25}
10^{-20}
10^{-15}
Mixing Ratio

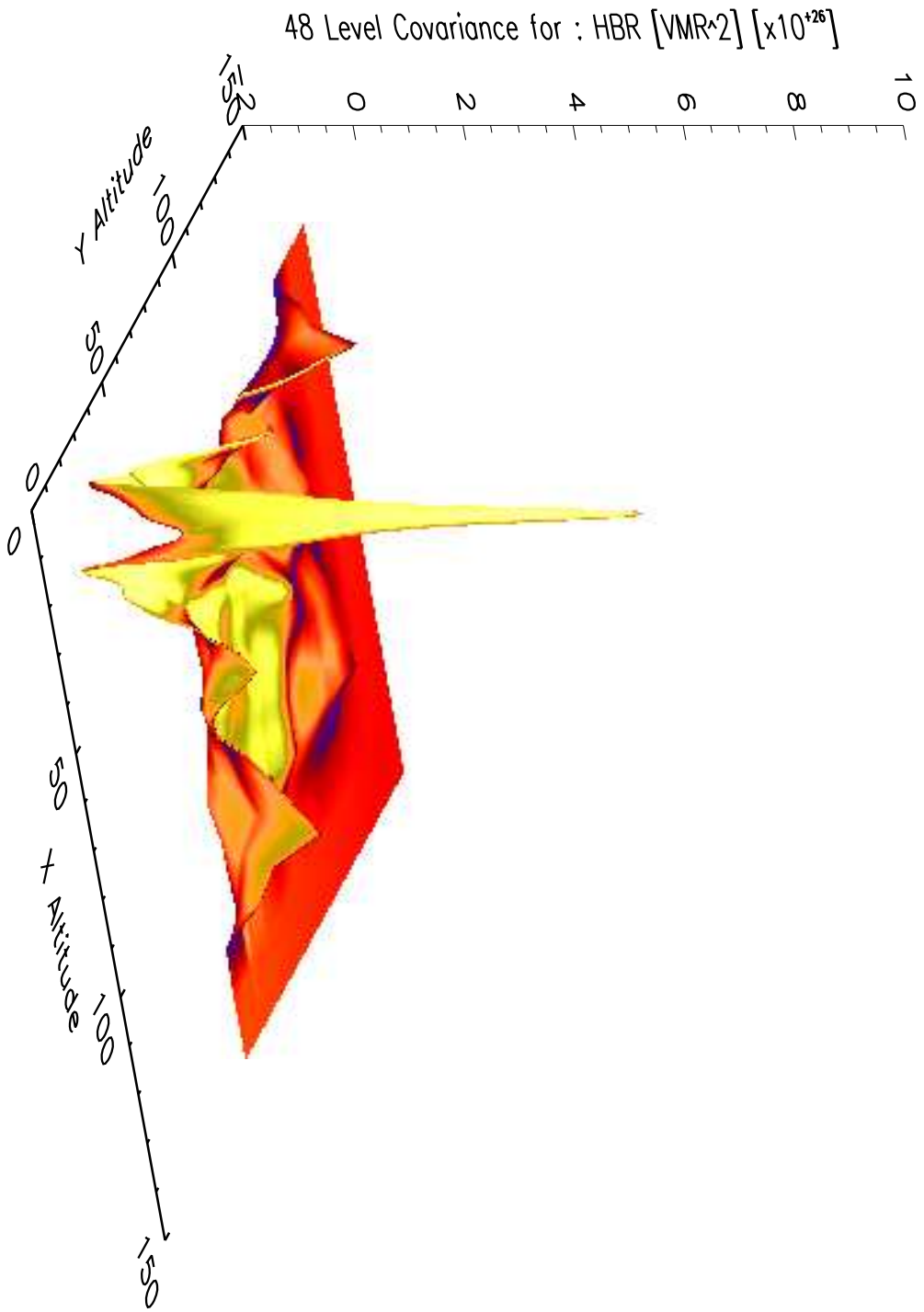

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
10^{-24} 10^{-22} 10^{-20} 10^{-18} 10^{-16} 10^{-14} 10^{-12}
SD
0 50 100 150 200 250 300
%


49 Layer Covariance for : HBR [VMR^2] [x10^+26]
−1.353
0.103
1.559
3.015
4.472
5.928
7.384
8.840
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


49 Layer Covariance for : HBR [VMR^2] [x10^+26]
150
0
2
4
6
8
10
Y Altitude
100
50
0
0
50
X Altitude
100
150


48 Level Covariance for : HBR [VMR^2] [x10^+26]
−1.335
0.120
1.576
3.032
4.488
5.944
7.400
8.855
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


48 Level Covariance for : HBR [VMR^2] [x10^+26]
-150
0
2
4
6
8
10
Y Altitude
100
50
0
0
50
X Altitude
100
150