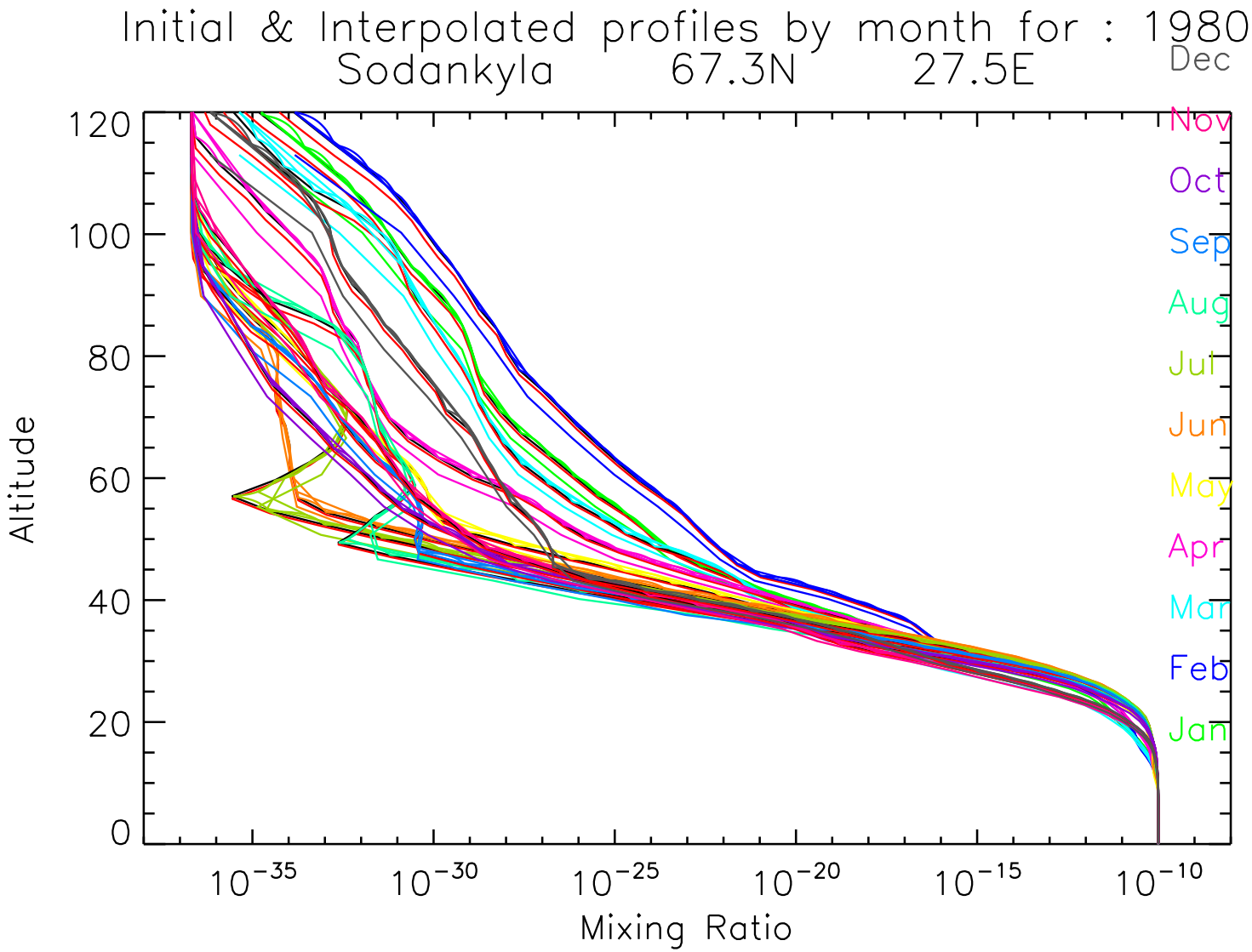
Initial & Interpolated profiles by month for : 1980
Sodankyla 67.3N 27.5E
Dec
Nov
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Altitude
120
100
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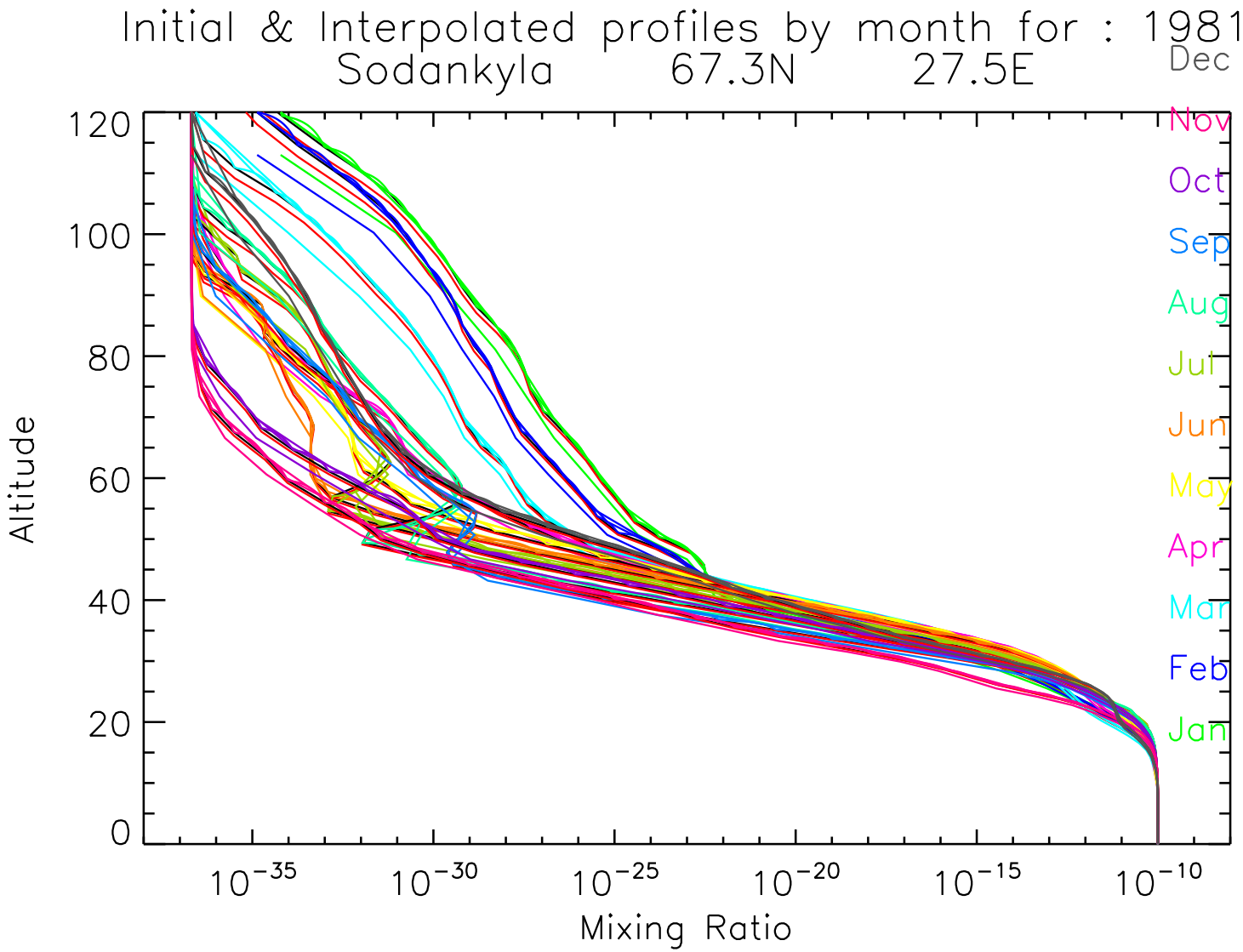
Mixing Ratio


Initial & Interpolated profiles by month for : 1981
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
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Apr
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Feb
Jan
Altitude
120
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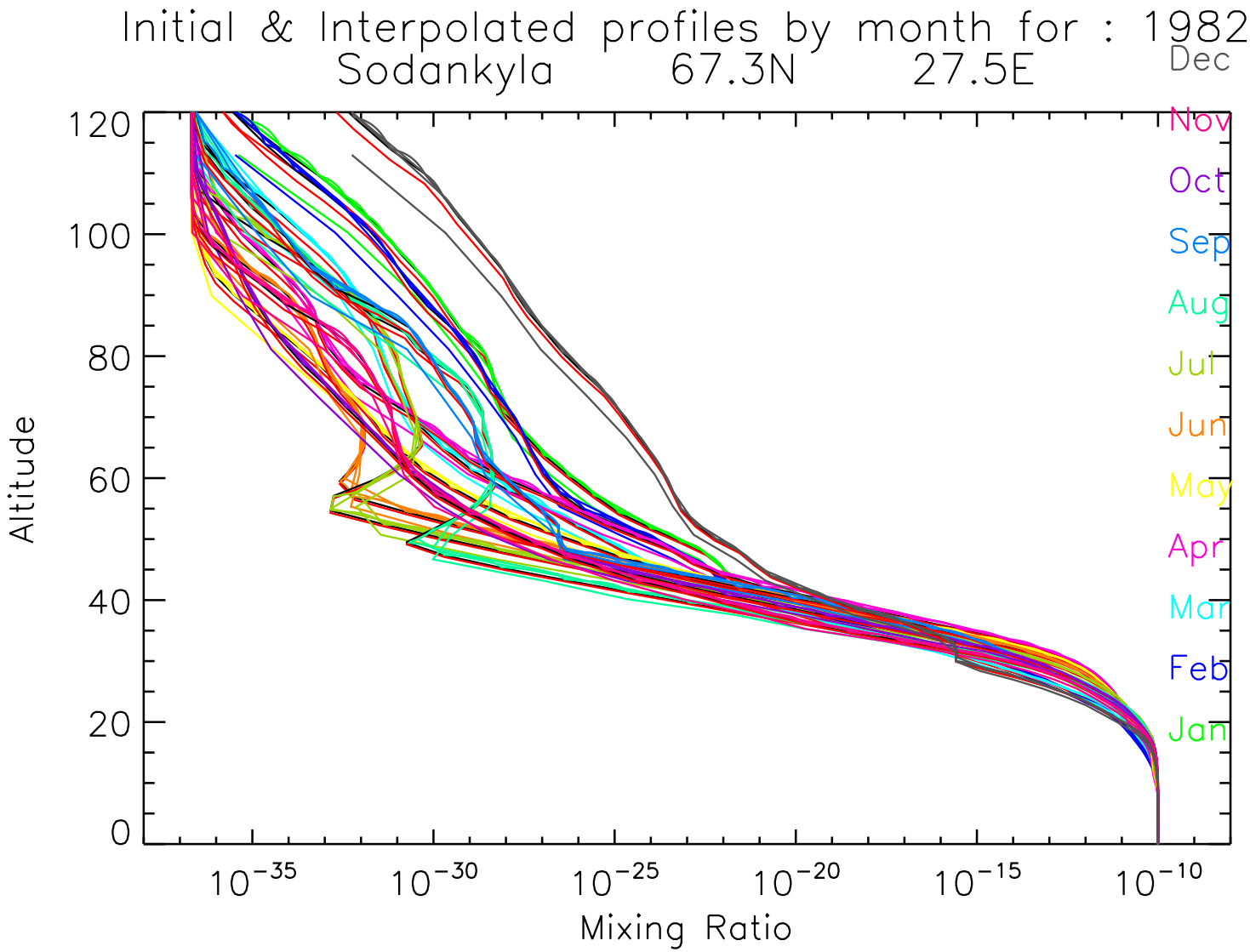
Mixing Ratio


Initial & Interpolated profiles by month for : 1982
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
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Altitude
120
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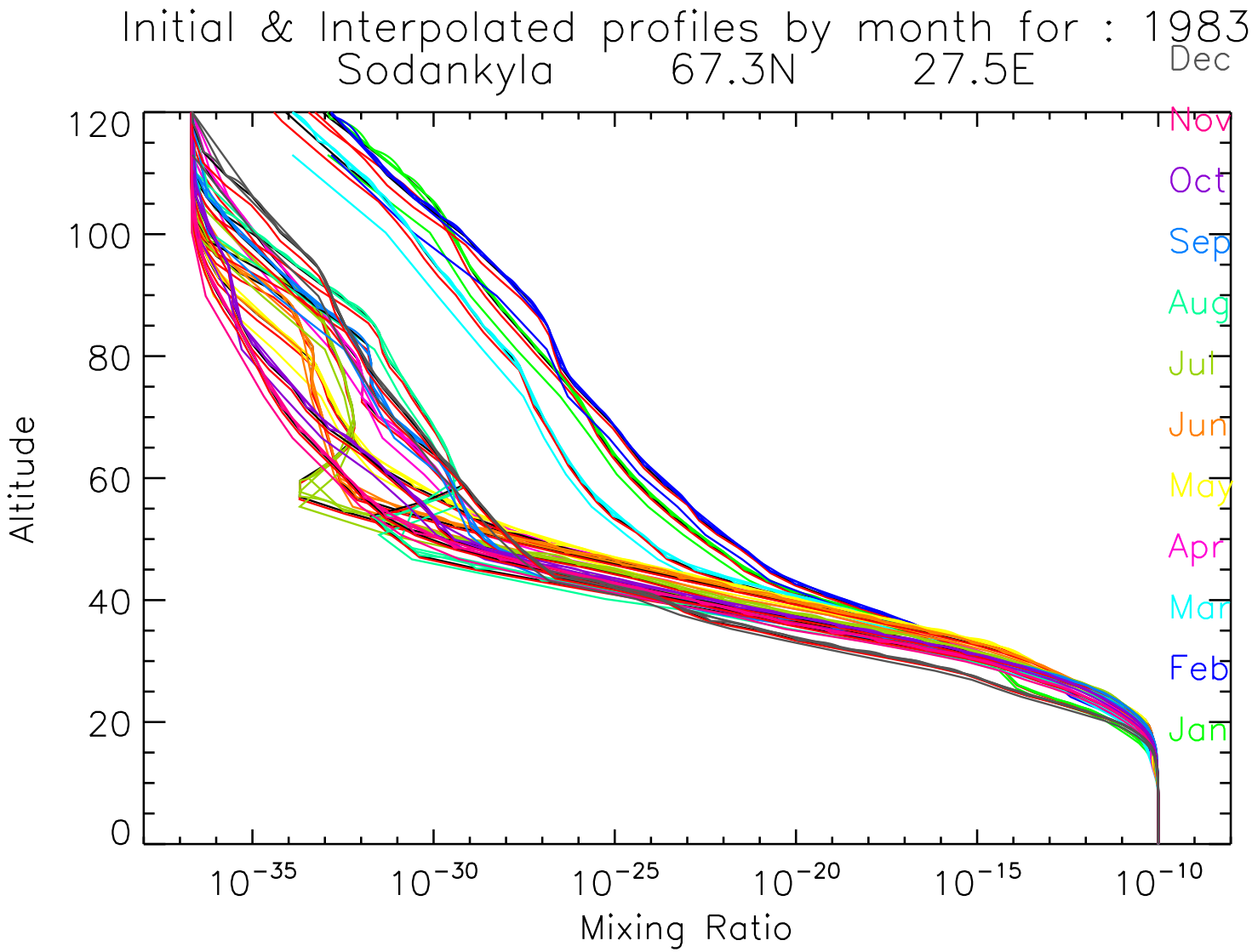
$10^{-10}$
Mixing Ratio


Initial & Interpolated profiles by month for : 1983
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
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Altitude
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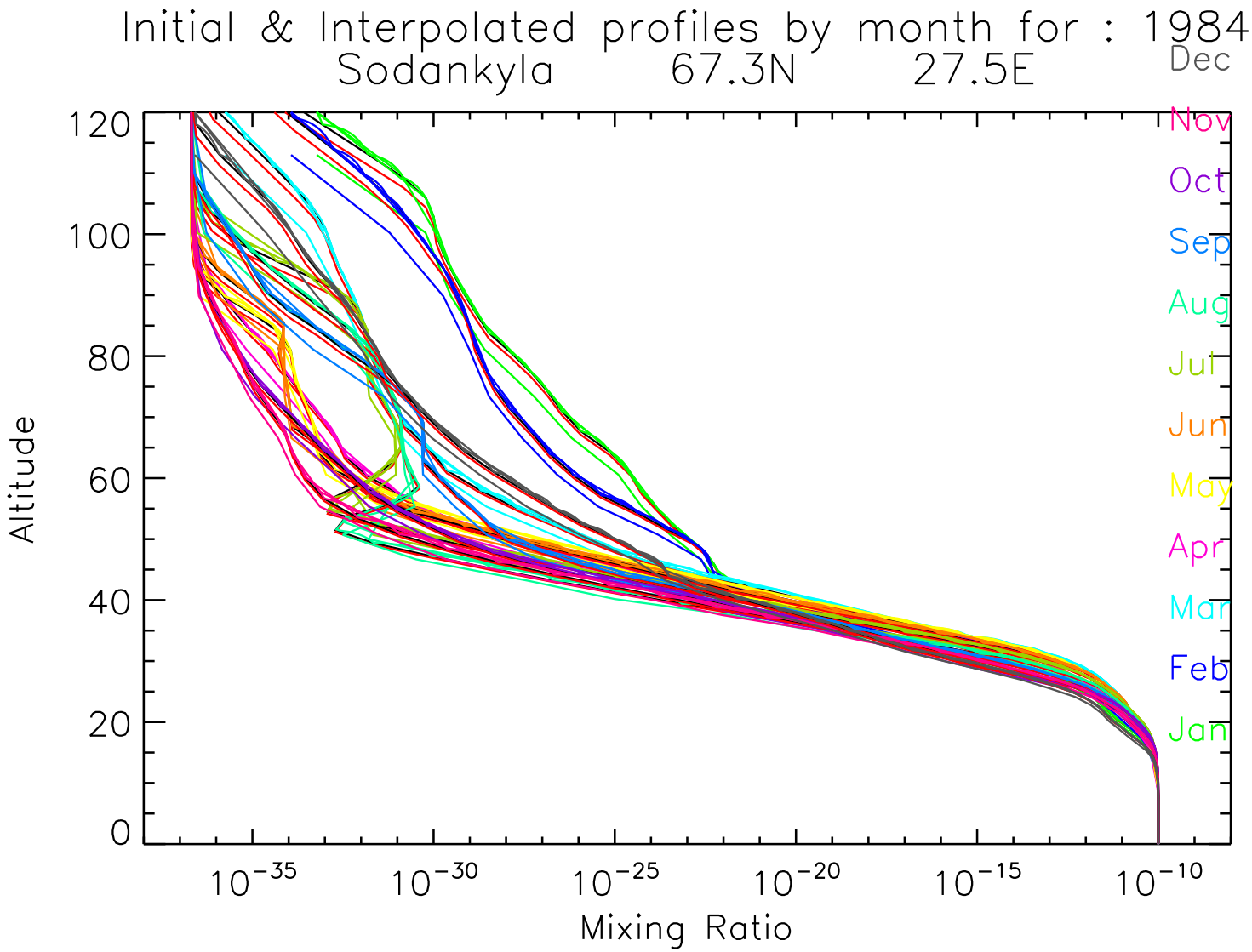
Mixing Ratio


Initial & Interpolated profiles by month for : 1984
Sodankyla 67.3N 27.5E
Dec
Nov
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Altitude
120
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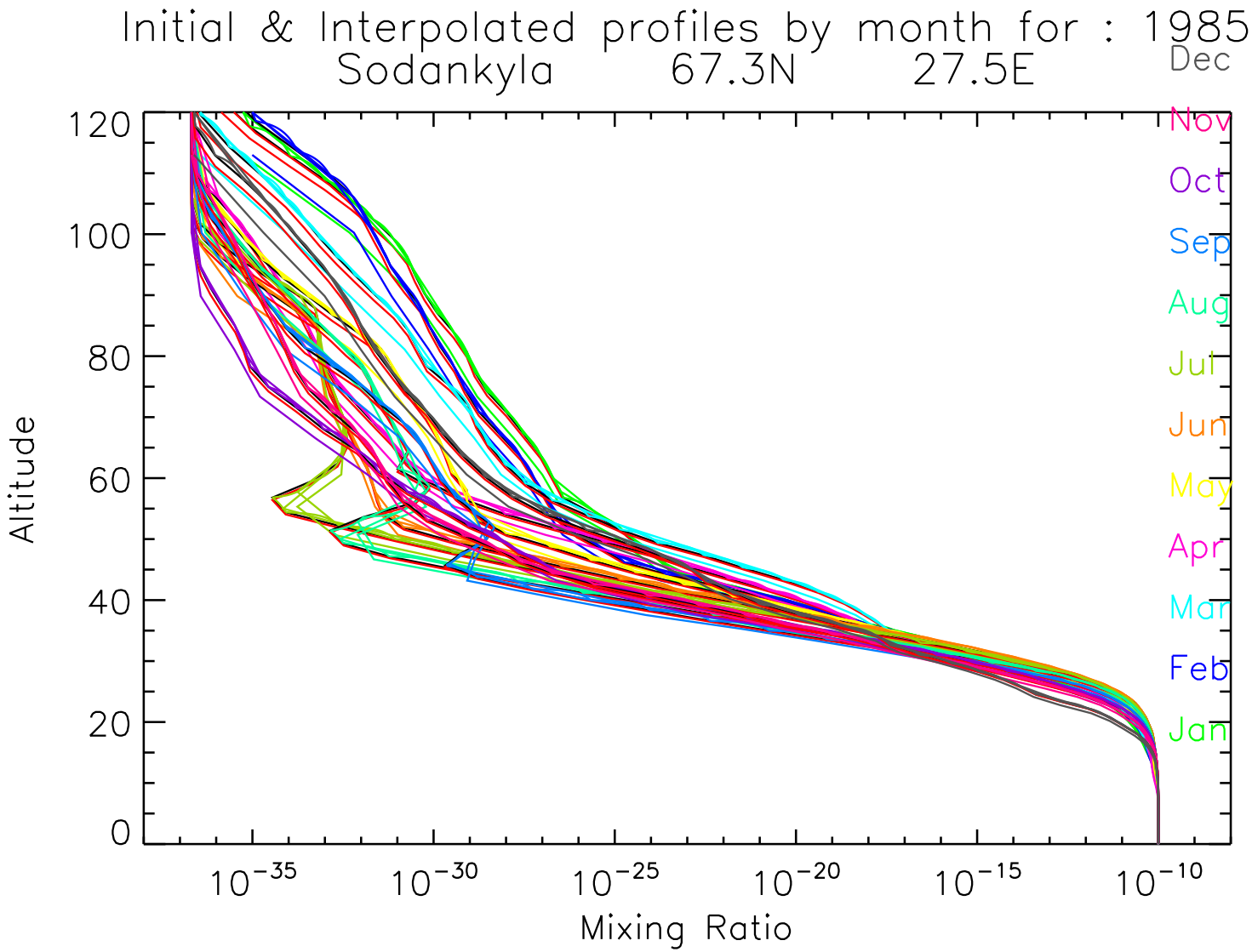
$10^{-10}$
Mixing Ratio


Initial & Interpolated profiles by month for : 1985
Sodankyla 67.3N 27.5E
Dec
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Altitude
120
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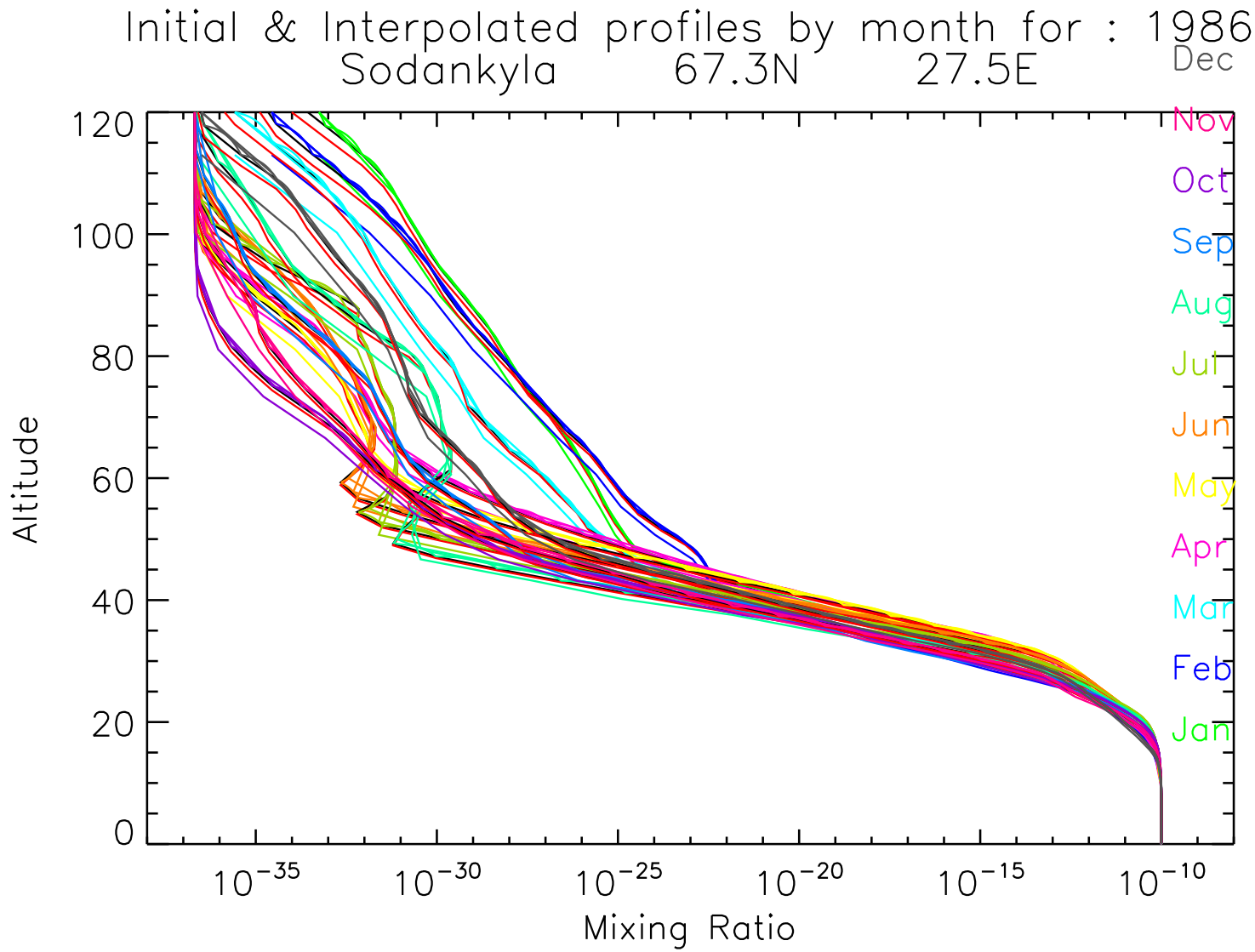
$10^{-10}$
Mixing Ratio


Initial & Interpolated profiles by month for : 1986
Sodankyla 67.3N 27.5E
Dec
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Altitude
120
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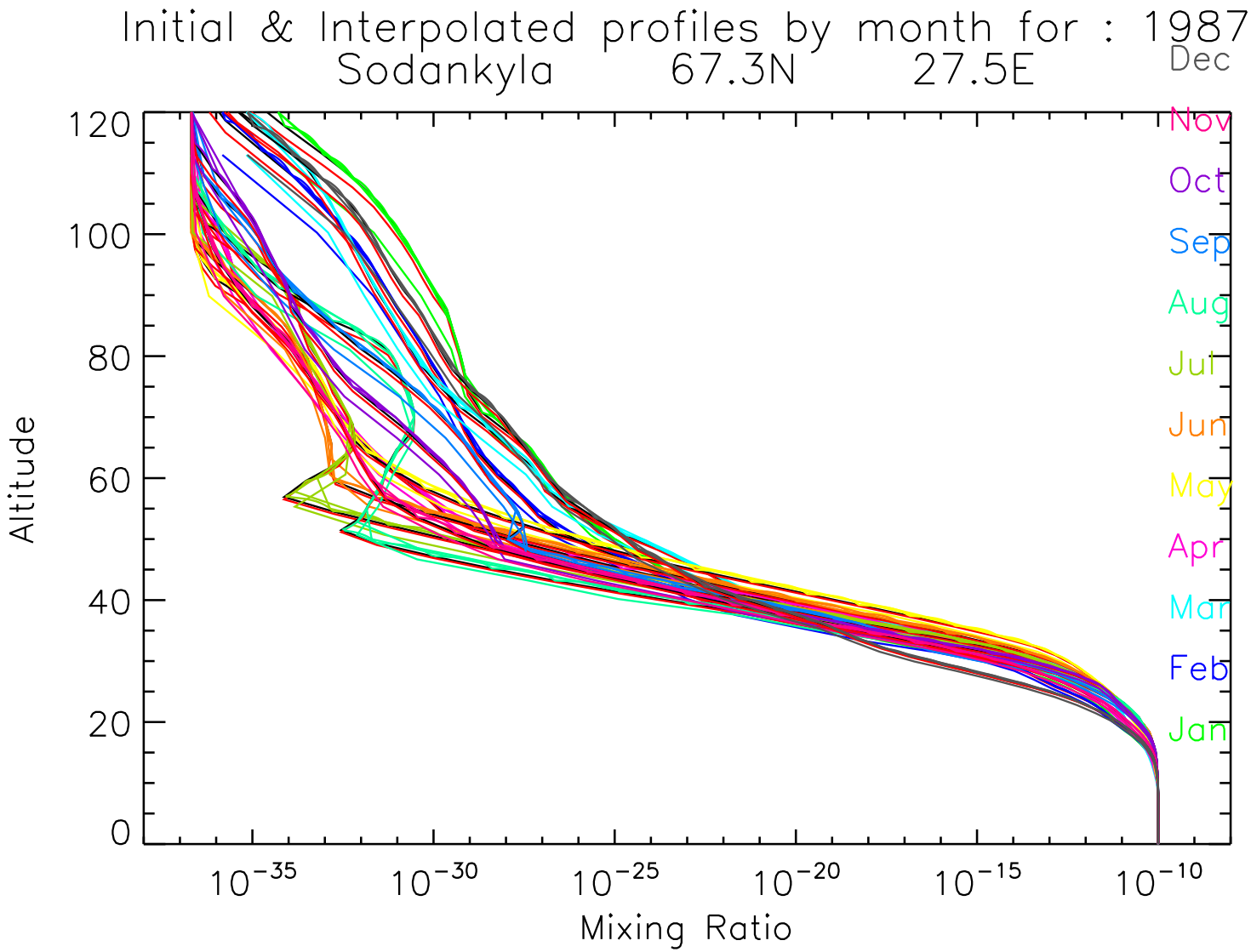
Mixing Ratio


Initial & Interpolated profiles by month for : 1987
Sodankyla 67.3N 27.5E
Dec
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Altitude
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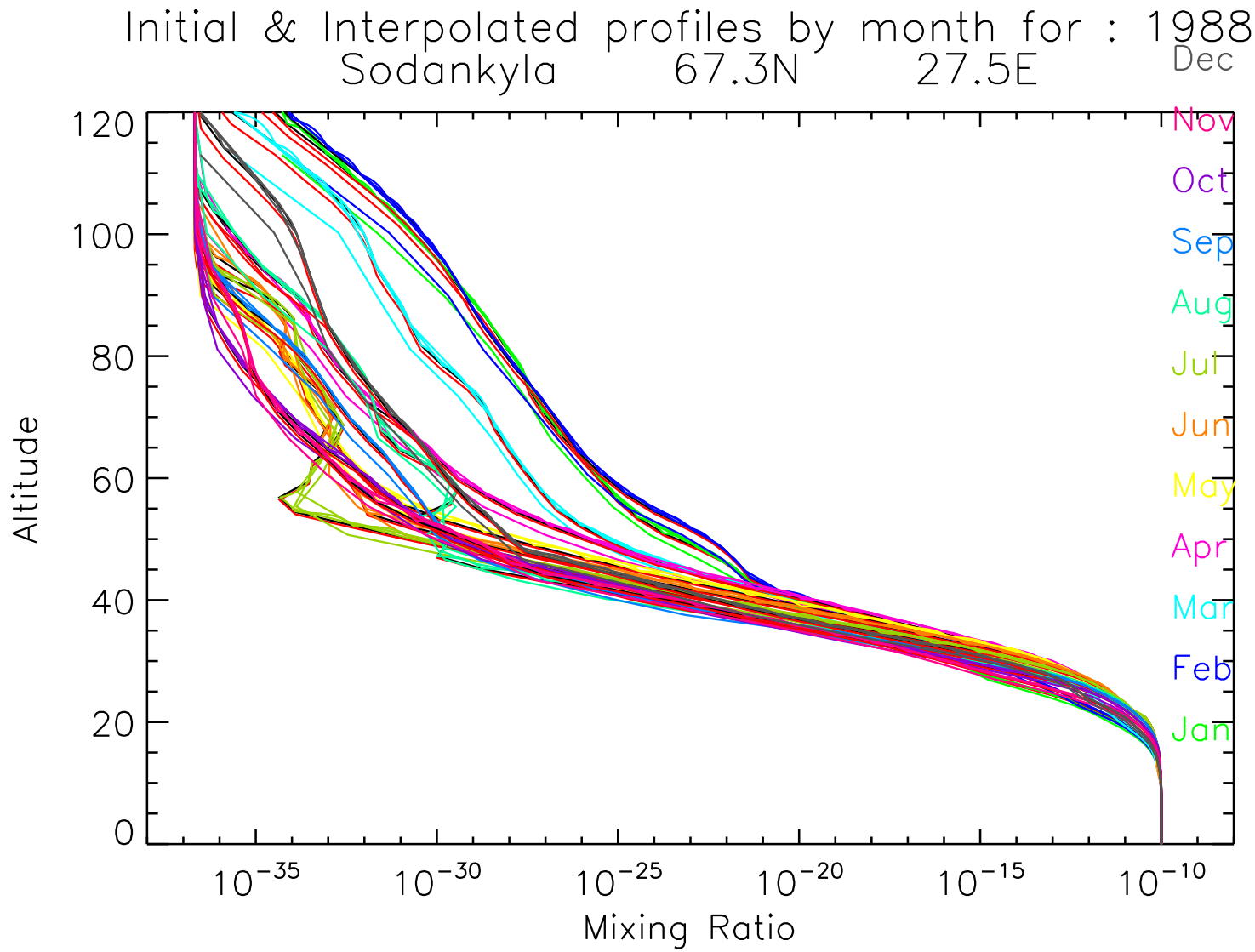
Mixing Ratio


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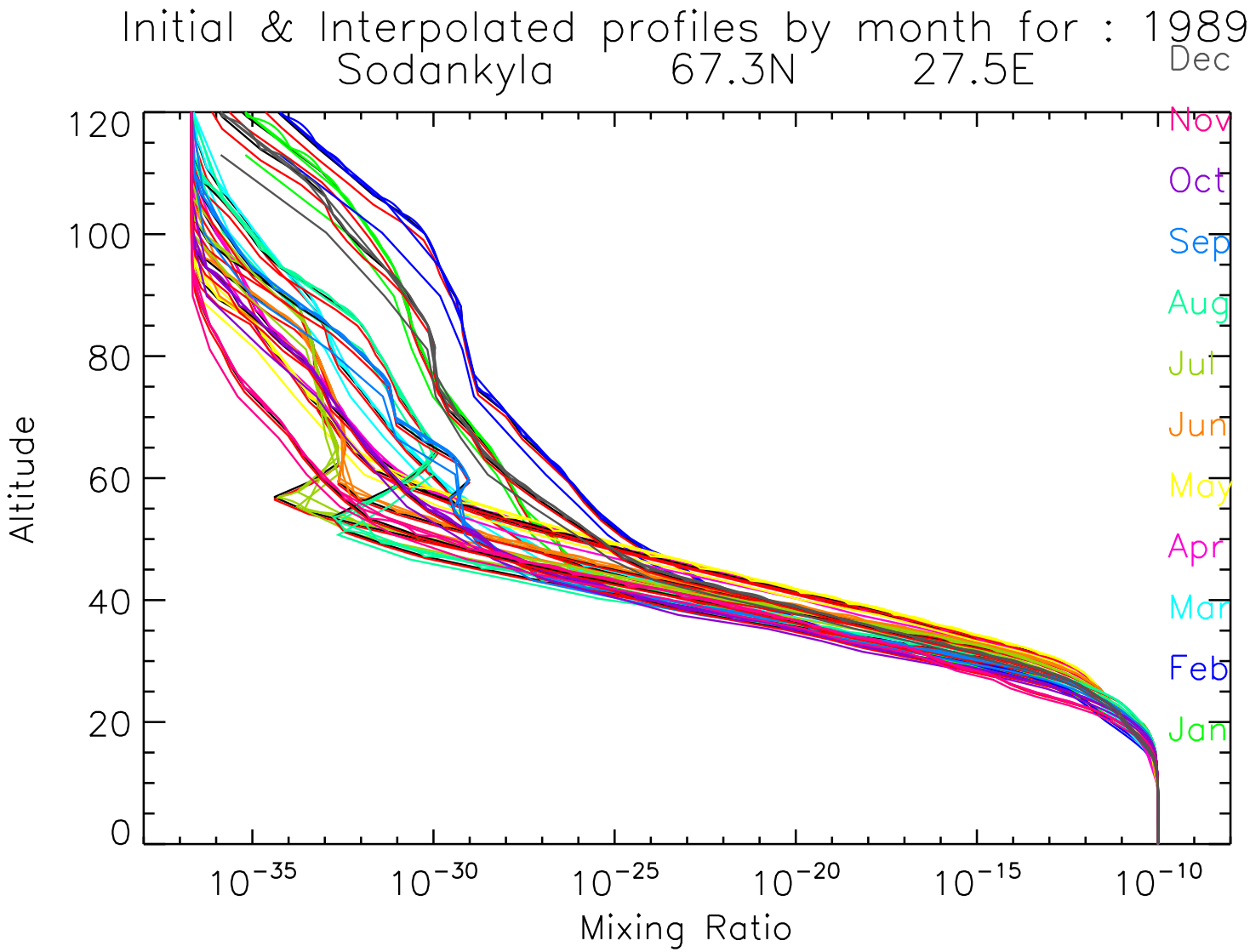
$10^{-10}$
Mixing Ratio


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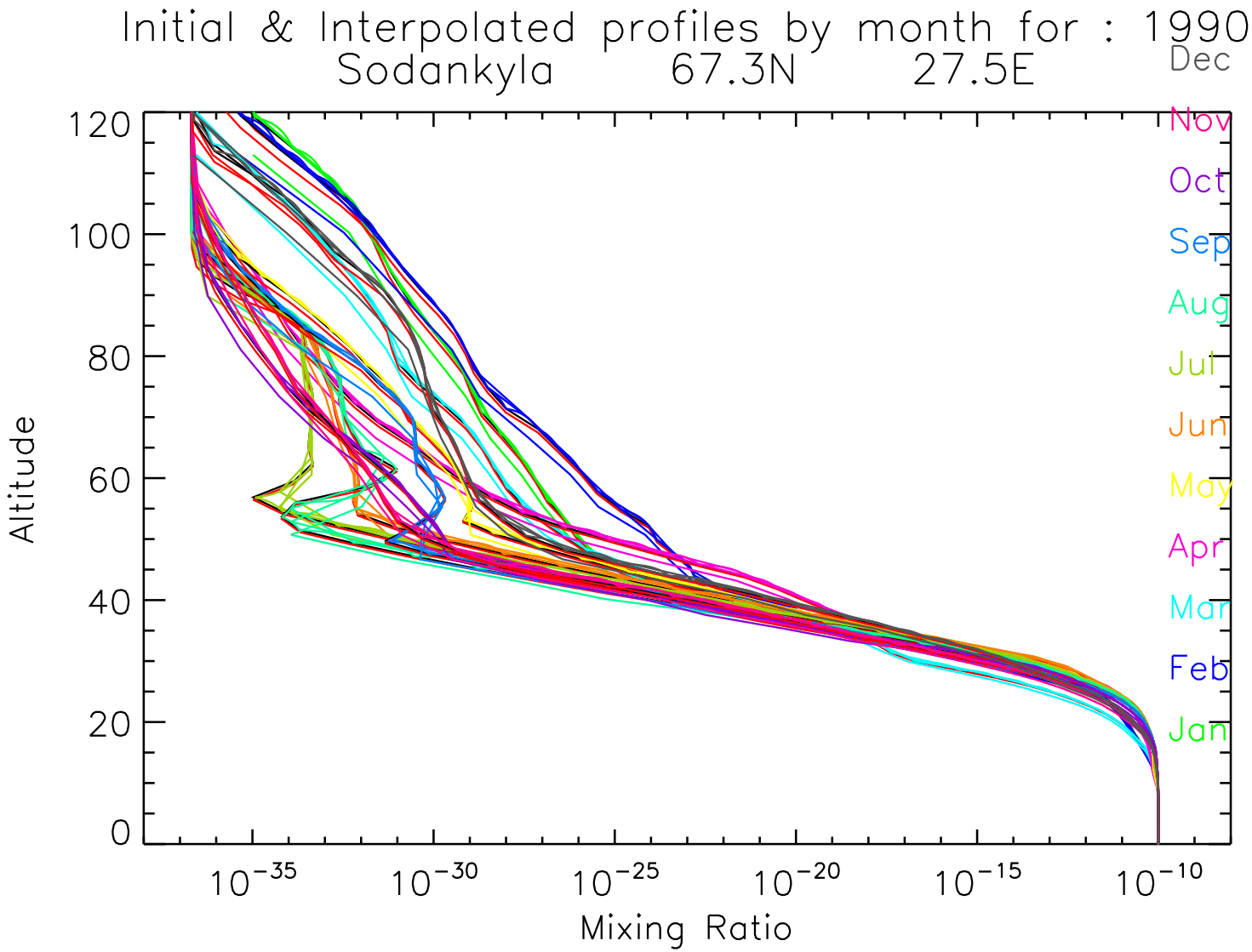
$10^{-10}$
Mixing Ratio


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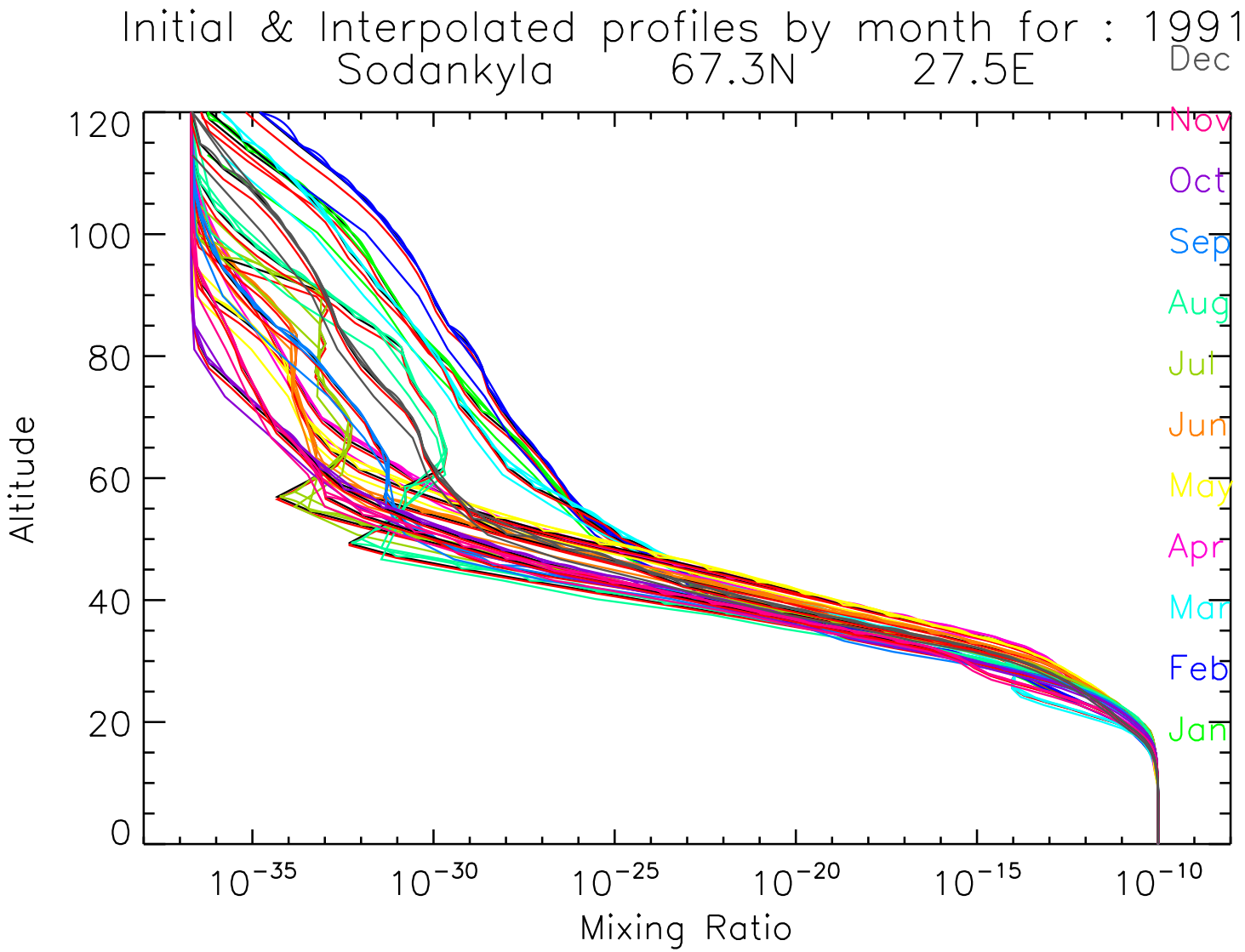
Mixing Ratio


Initial & Interpolated profiles by month for : 1991
Sodankyla 67.3N 27.5E
Dec
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Altitude
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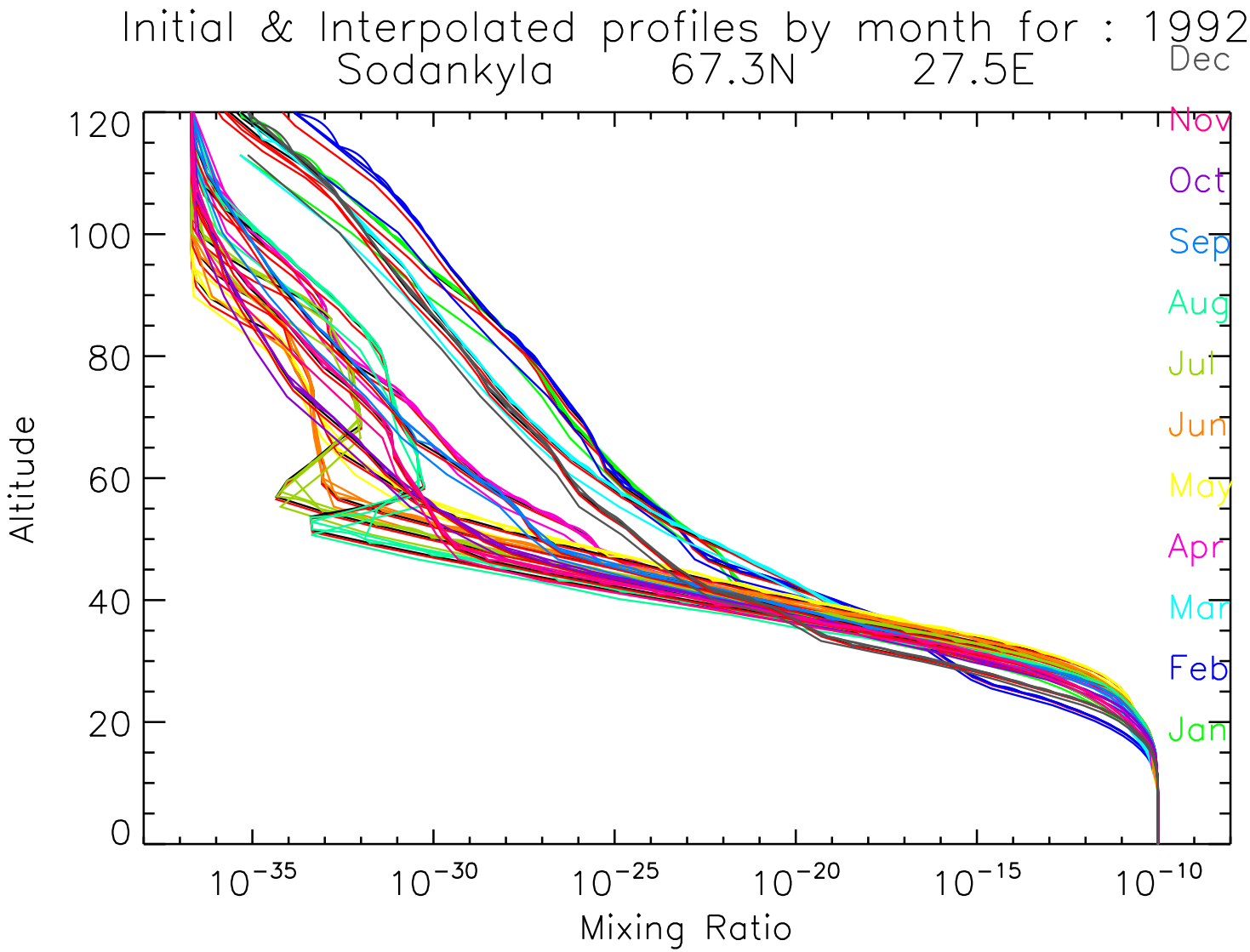
Mixing Ratio


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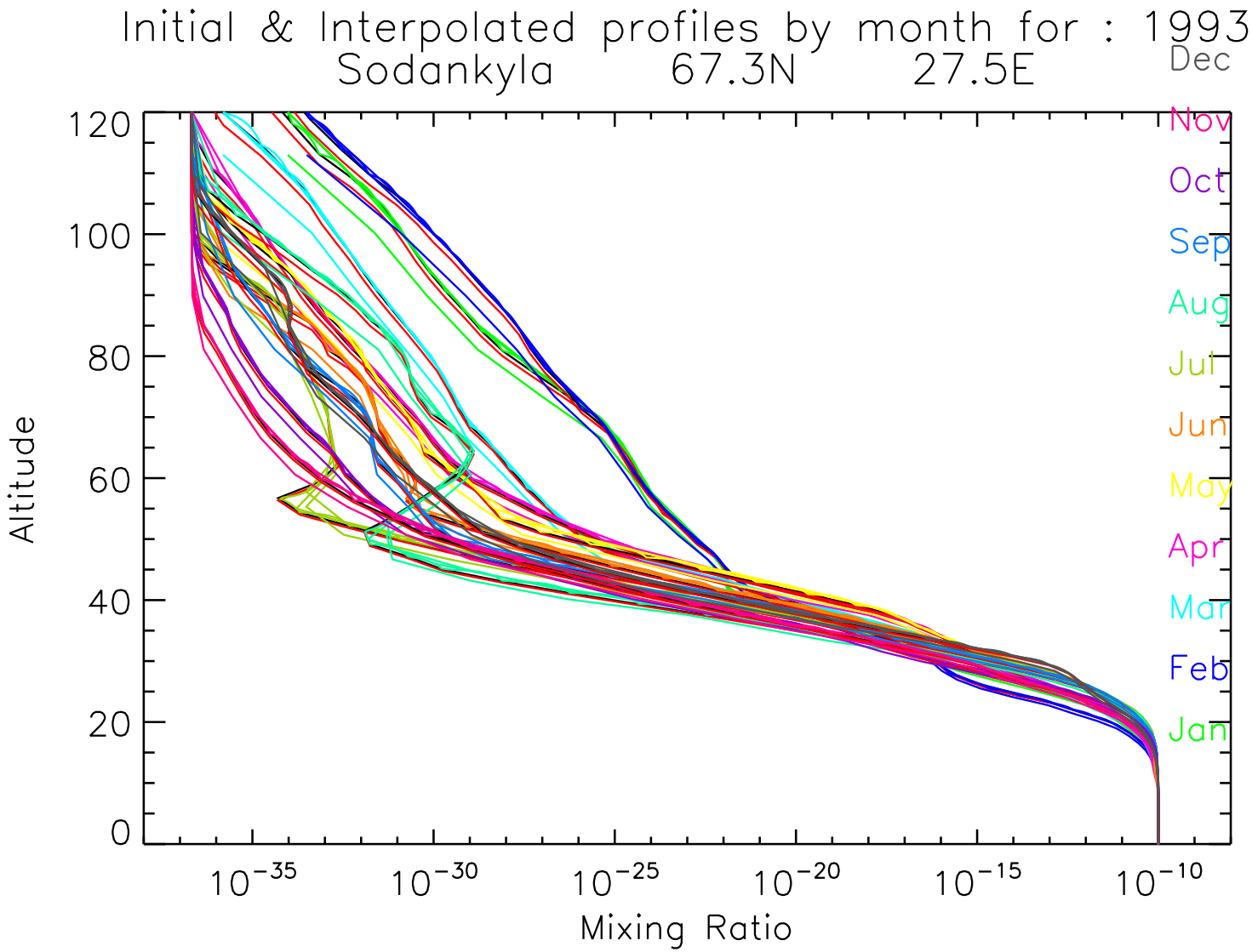
Mixing Ratio


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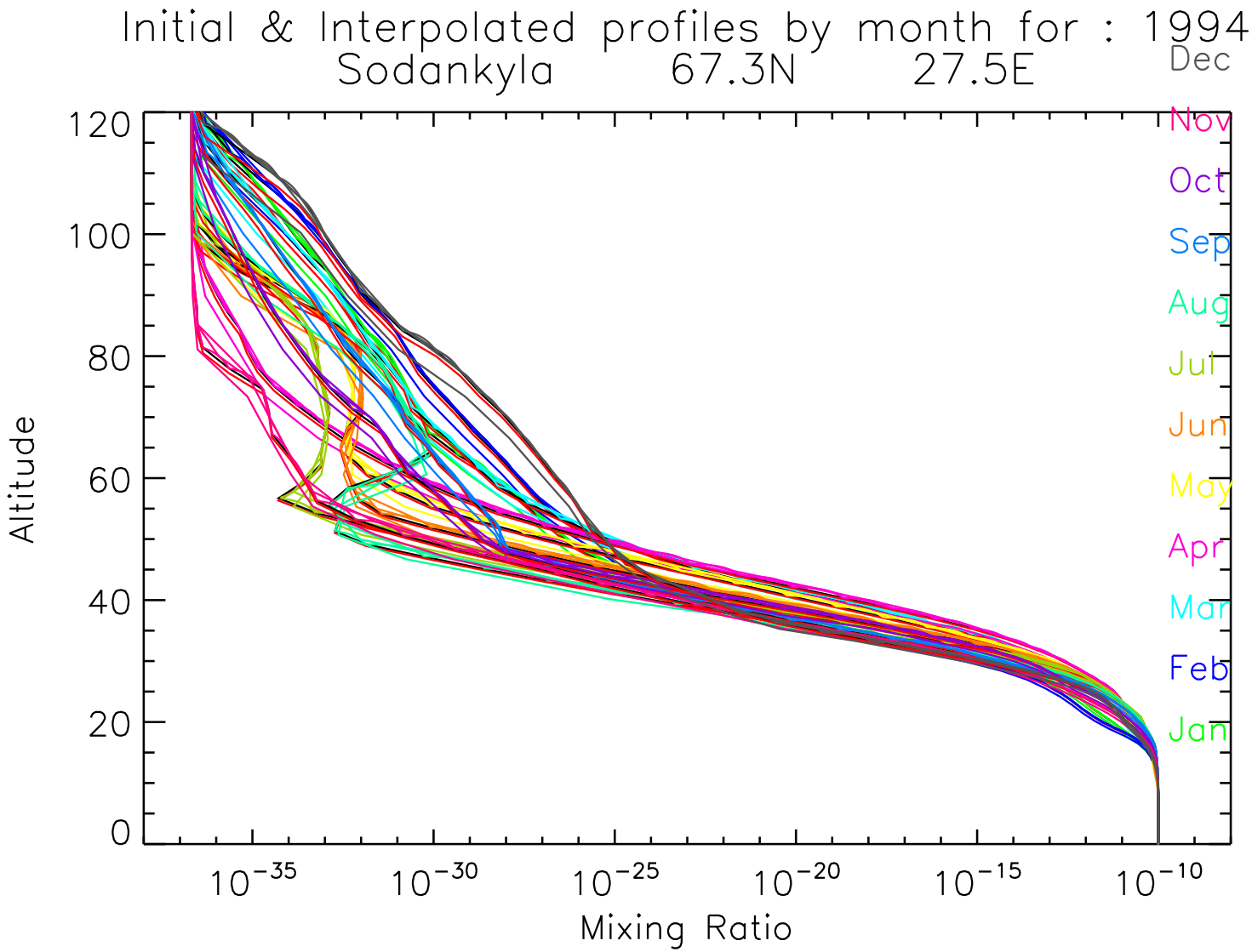
Mixing Ratio


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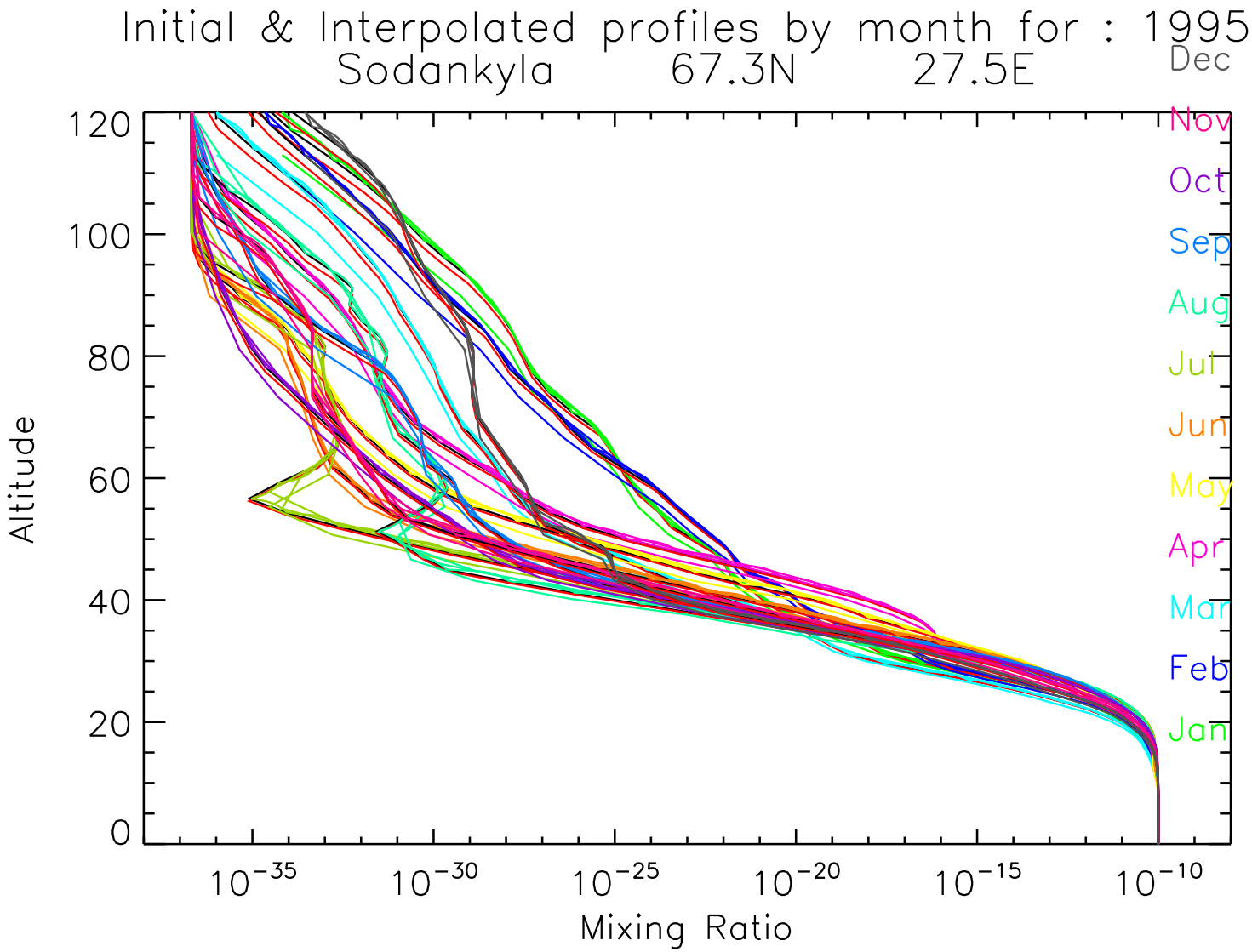
Mixing Ratio


Initial & Interpolated profiles by month for : 1995
Sodankyla 67.3N 27.5E
Dec
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Altitude
120
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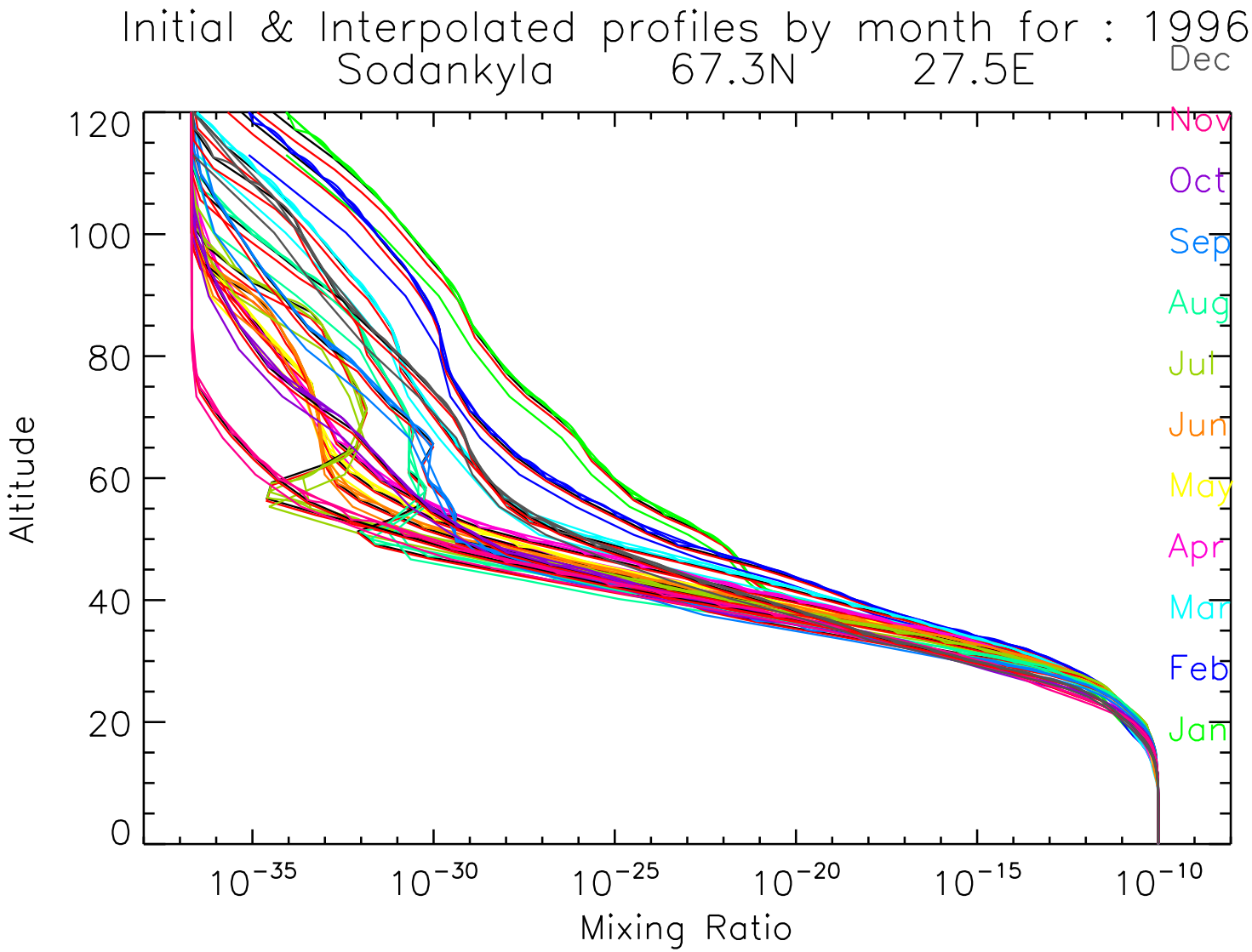
Mixing Ratio


Initial & Interpolated profiles by month for : 1996
Sodankyla 67.3N 27.5E
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Altitude
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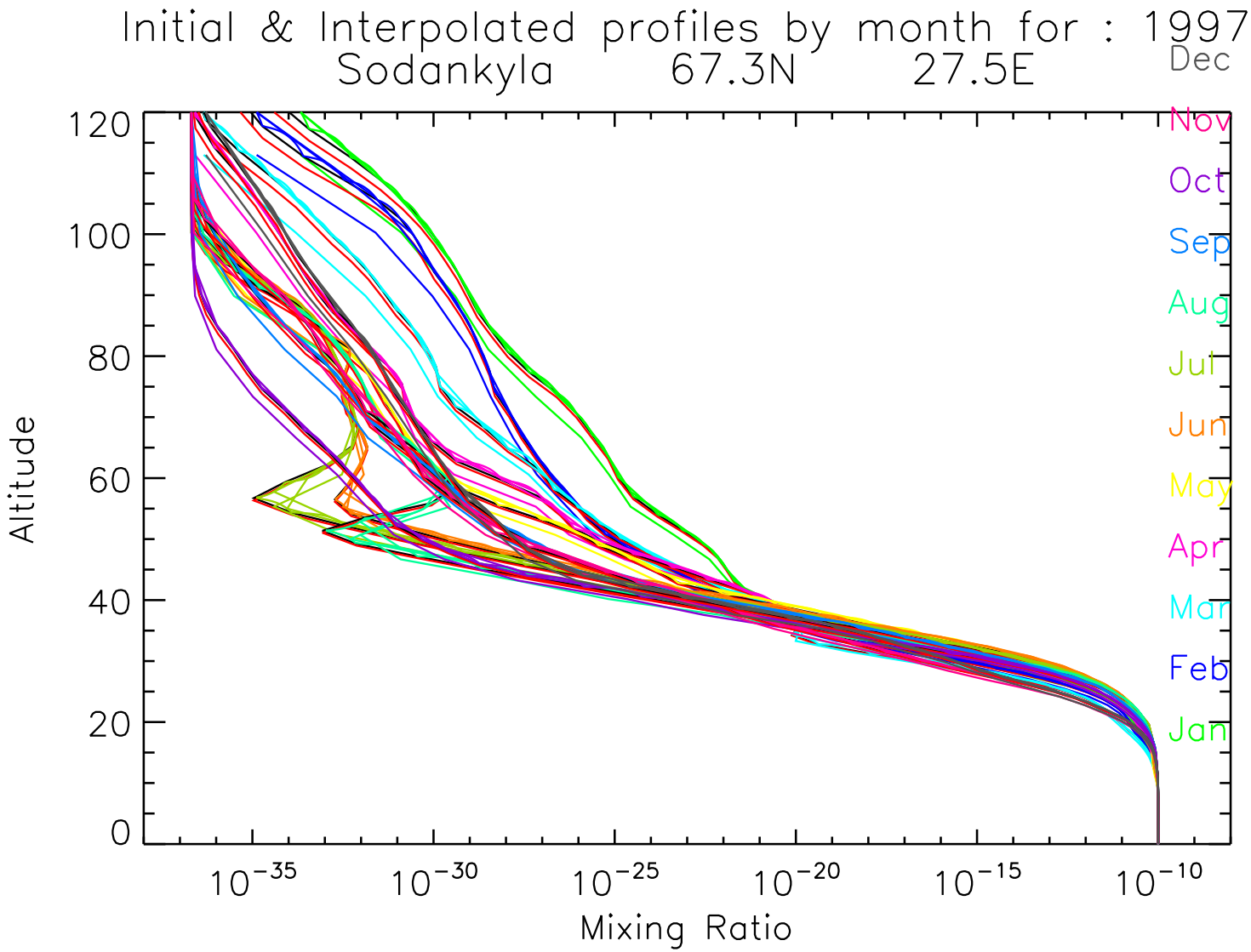
Mixing Ratio


Initial & Interpolated profiles by month for : 1997
Sodankyla 67.3N 27.5E
Dec
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Altitude
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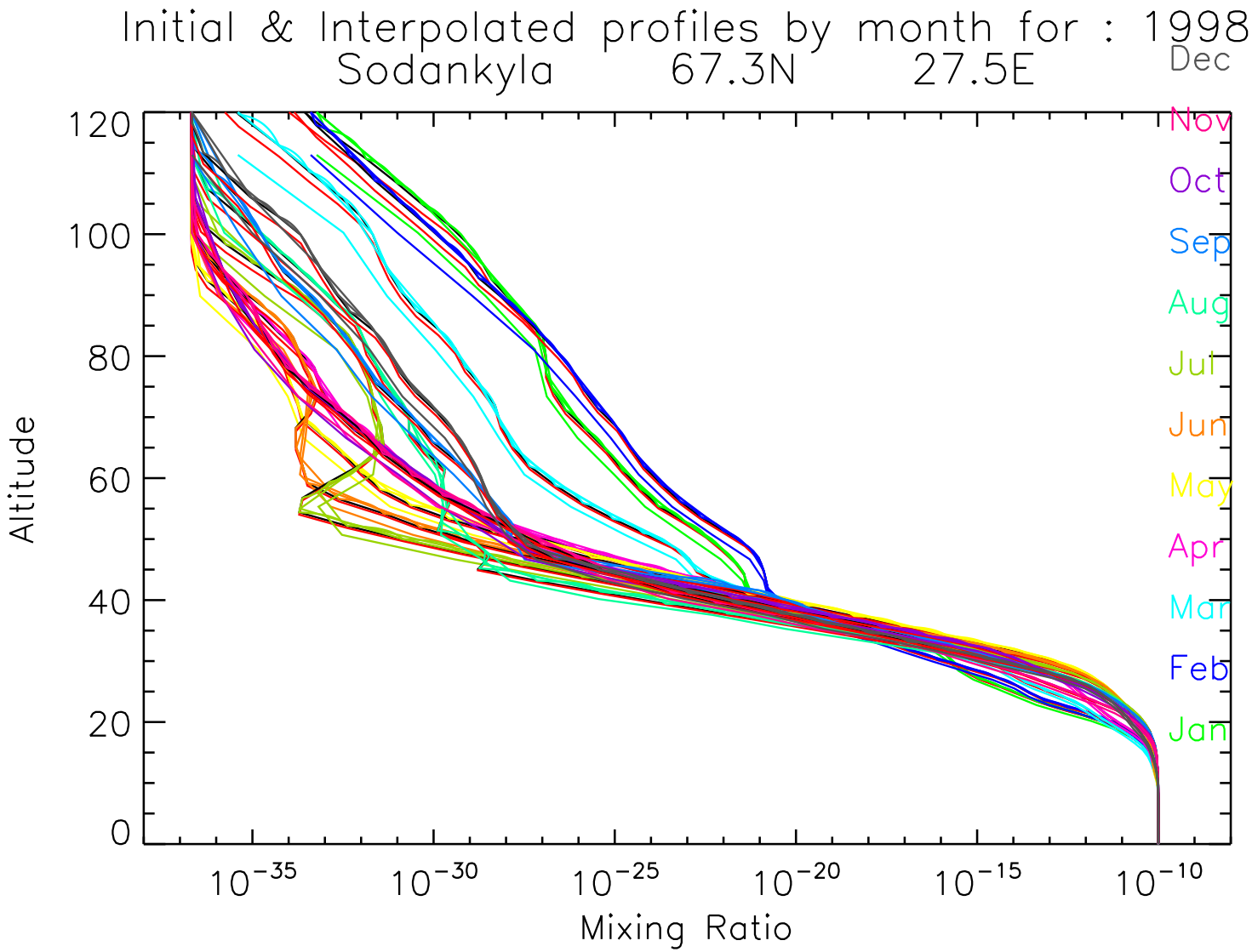
Mixing Ratio


Initial & Interpolated profiles by month for : 1998
Sodankyla 67.3N 27.5E
Dec
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Altitude
120
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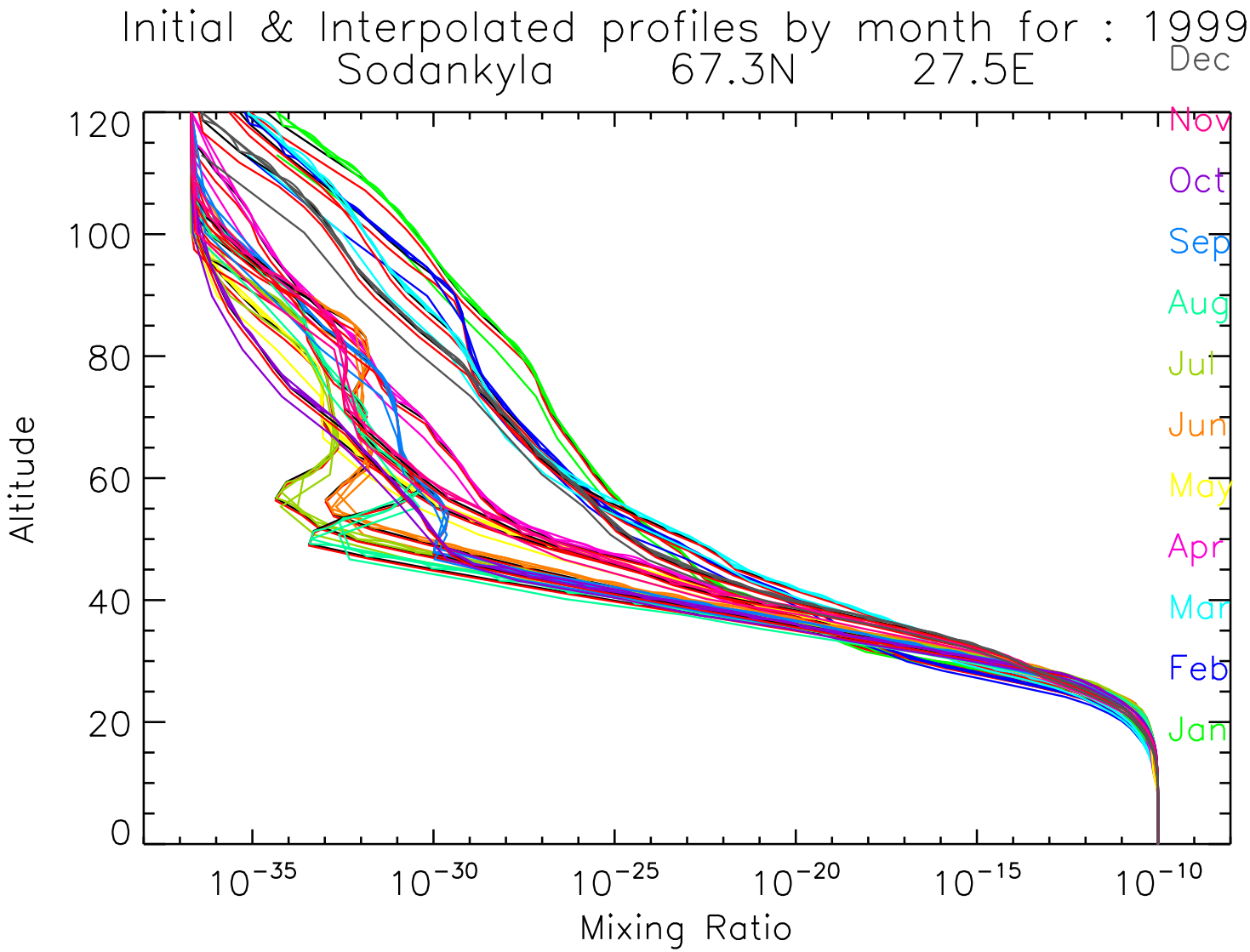
Mixing Ratio


Initial & Interpolated profiles by month for : 1999
Sodankyla 67.3N 27.5E
Dec
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Altitude
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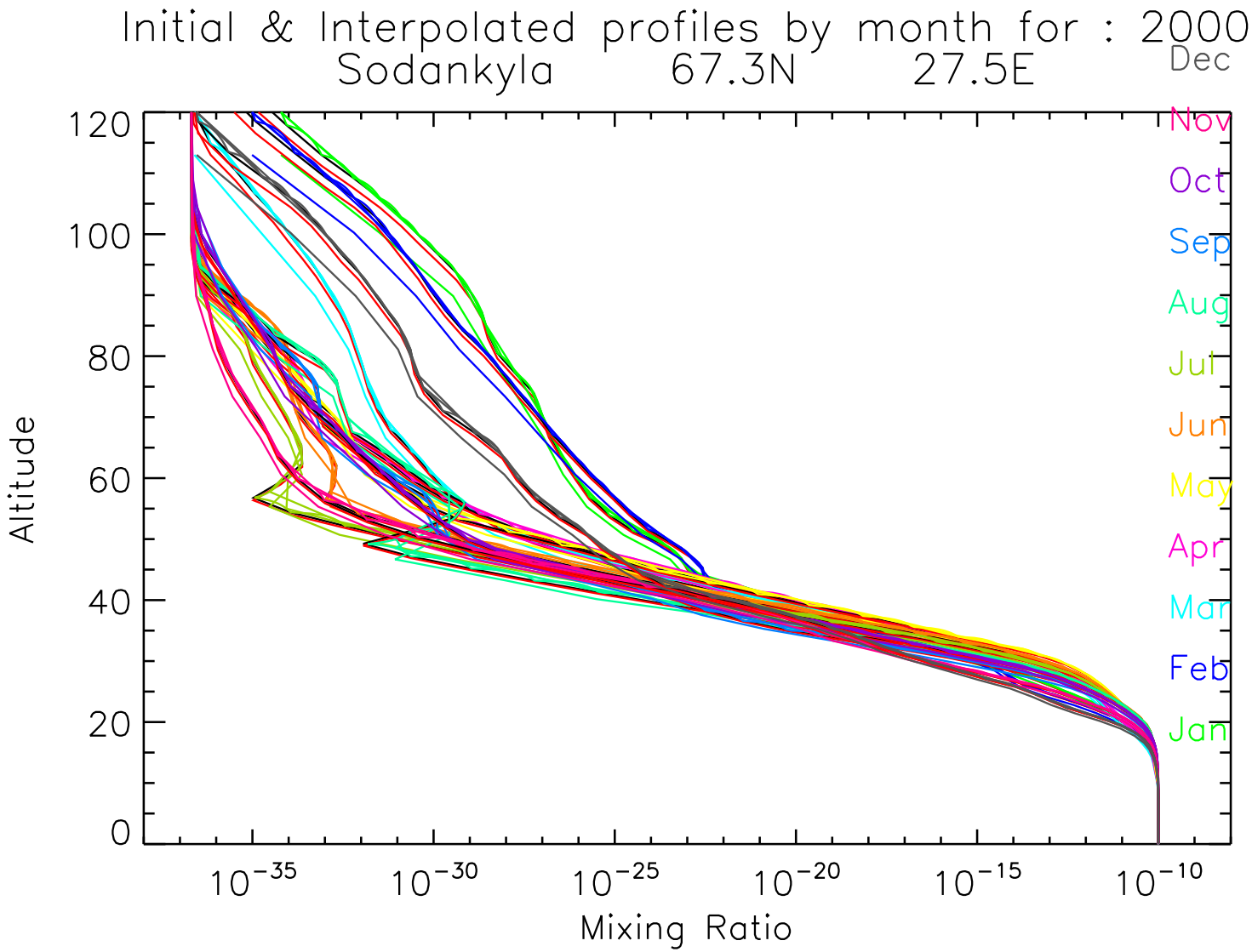
Mixing Ratio


Initial & Interpolated profiles by month for : 2000
Sodankyla 67.3N 27.5E
Dec
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Altitude
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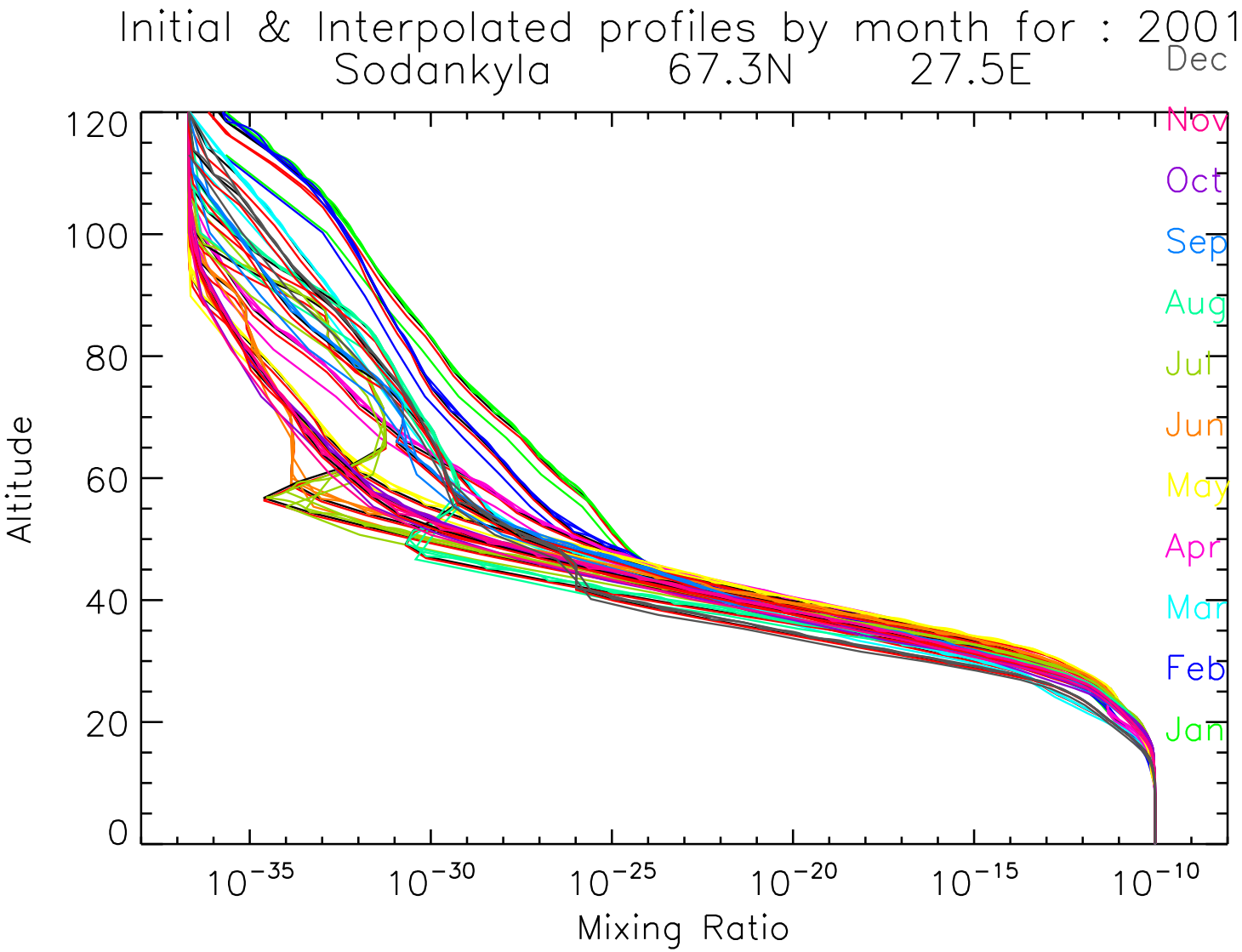
Mixing Ratio


Initial & Interpolated profiles by month for : 2001
Sodankyla 67.3N 27.5E
Dec
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Altitude
120
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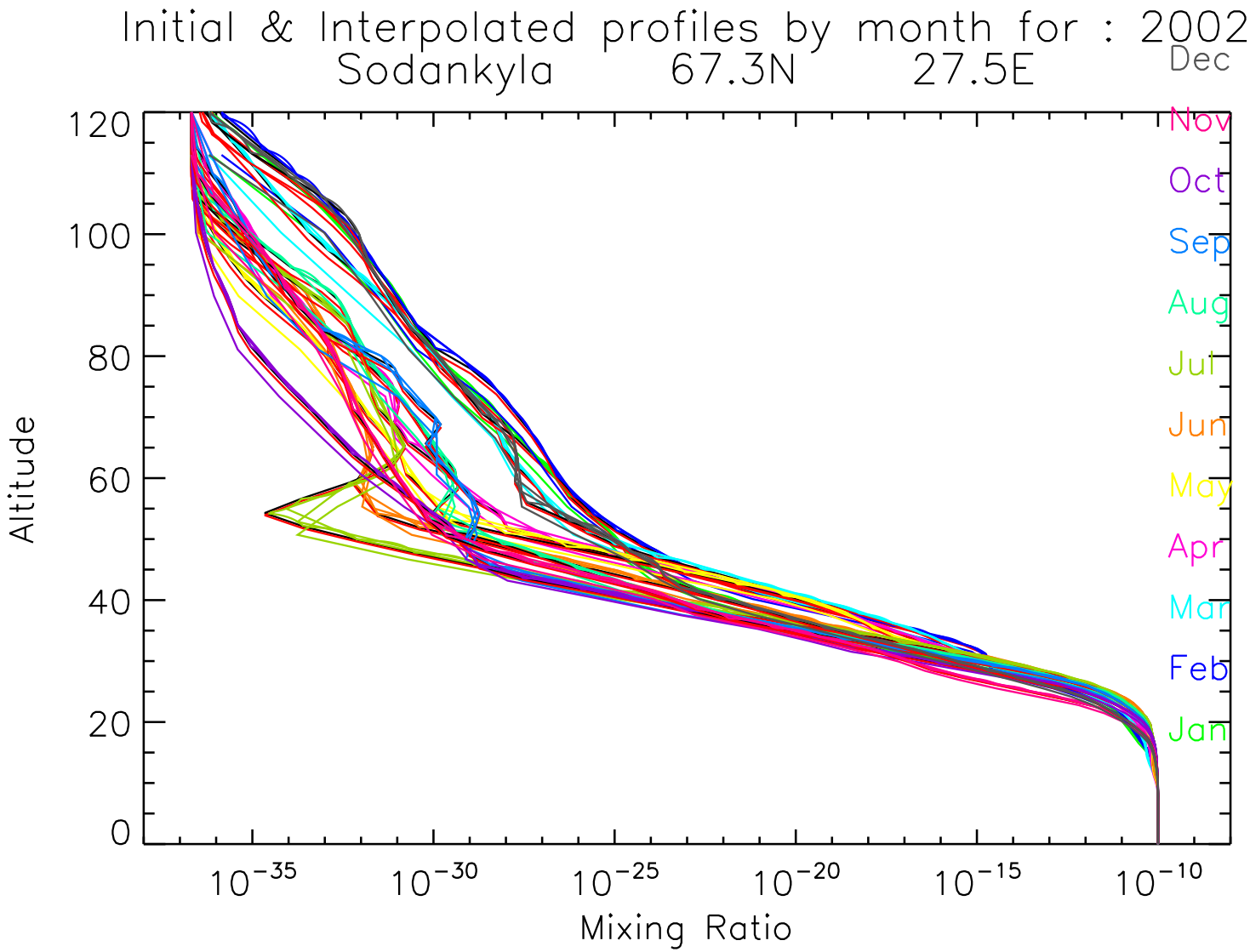
Mixing Ratio


Initial & Interpolated profiles by month for : 2002
Sodankyla 67.3N 27.5E
Dec
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Altitude
120
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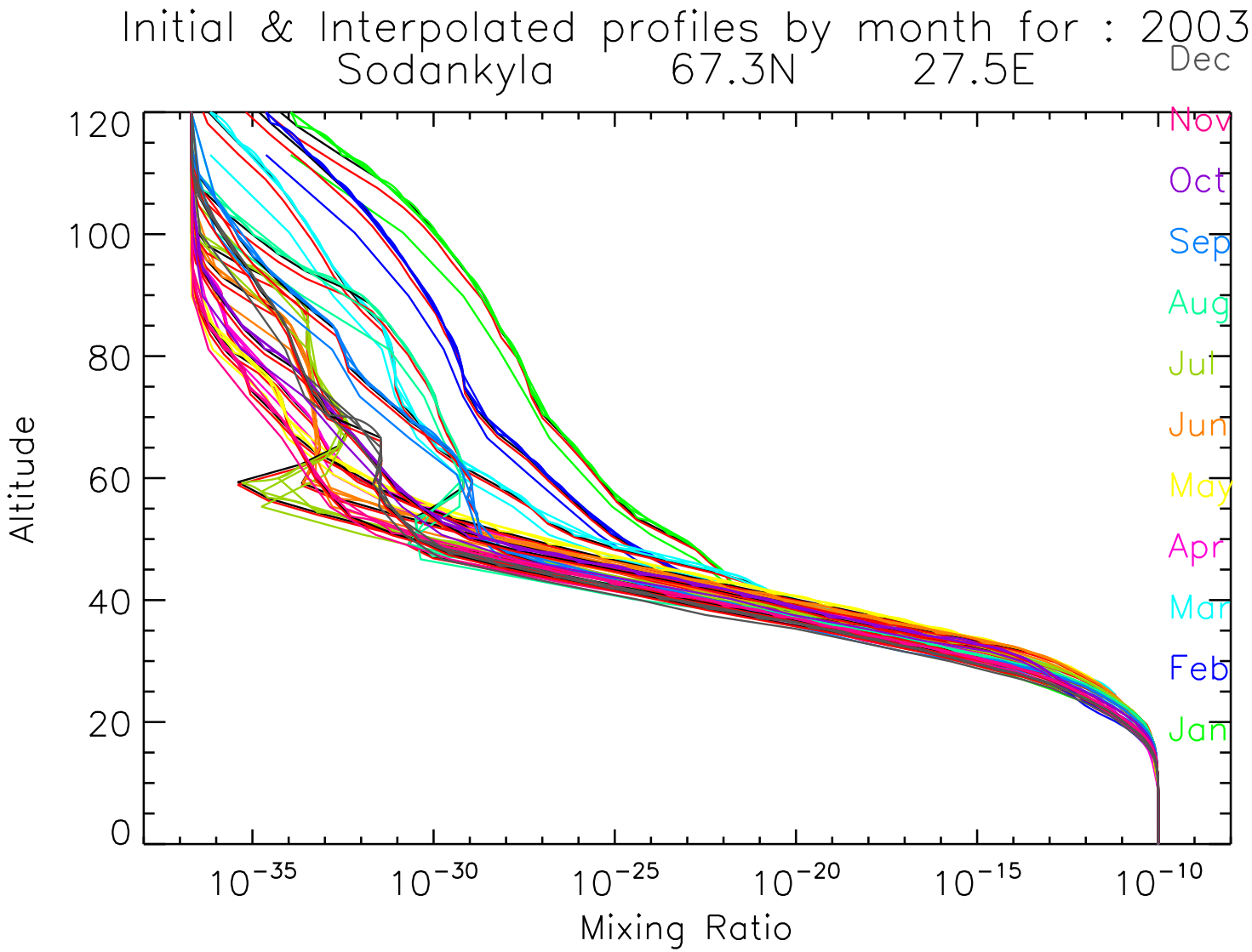
Mixing Ratio


Initial & Interpolated profiles by month for : 2003
Sodankyla 67.3N 27.5E
Dec
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Altitude
120
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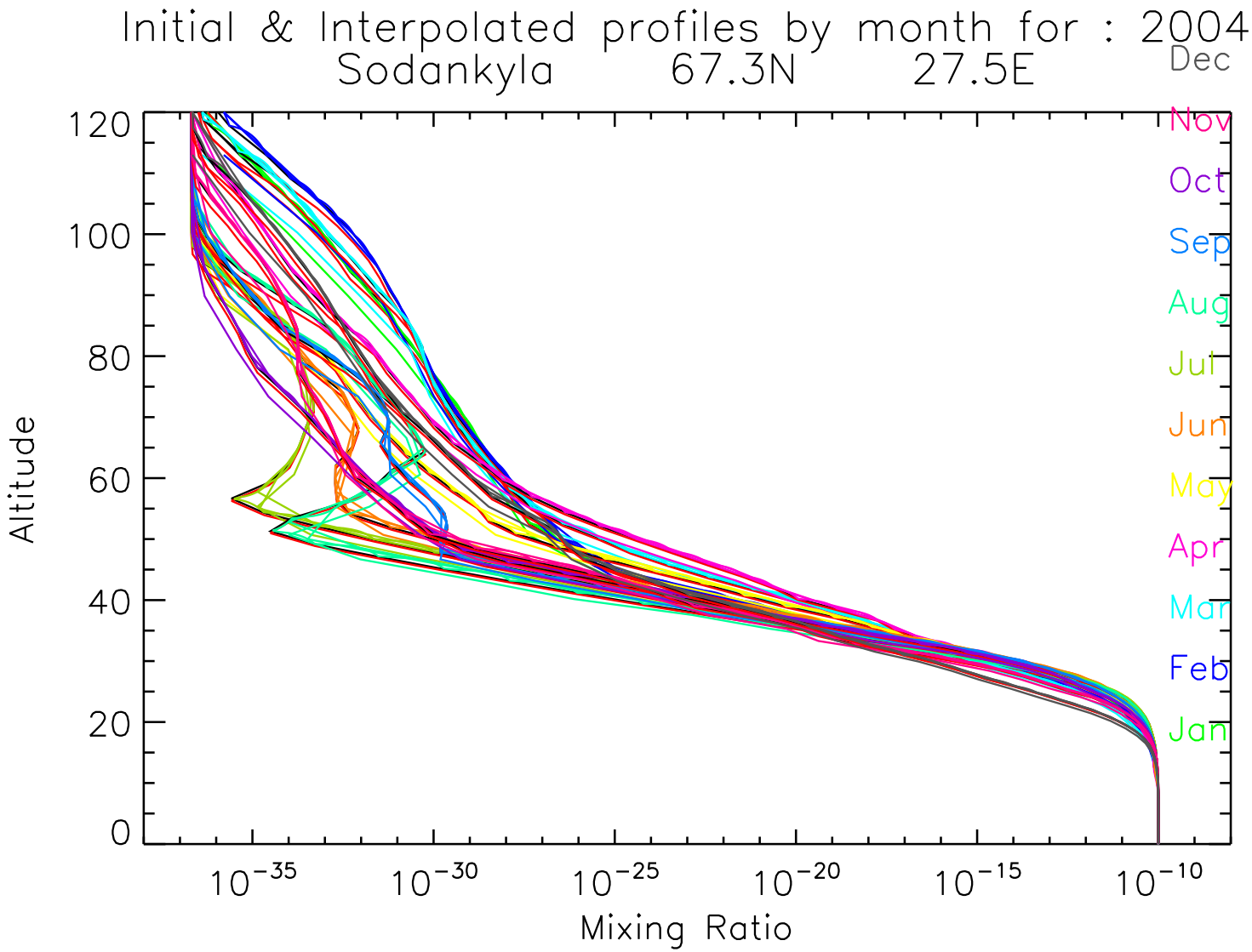
Mixing Ratio


Initial & Interpolated profiles by month for : 2004
Sodankyla 67.3N 27.5E
Dec
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Altitude
120
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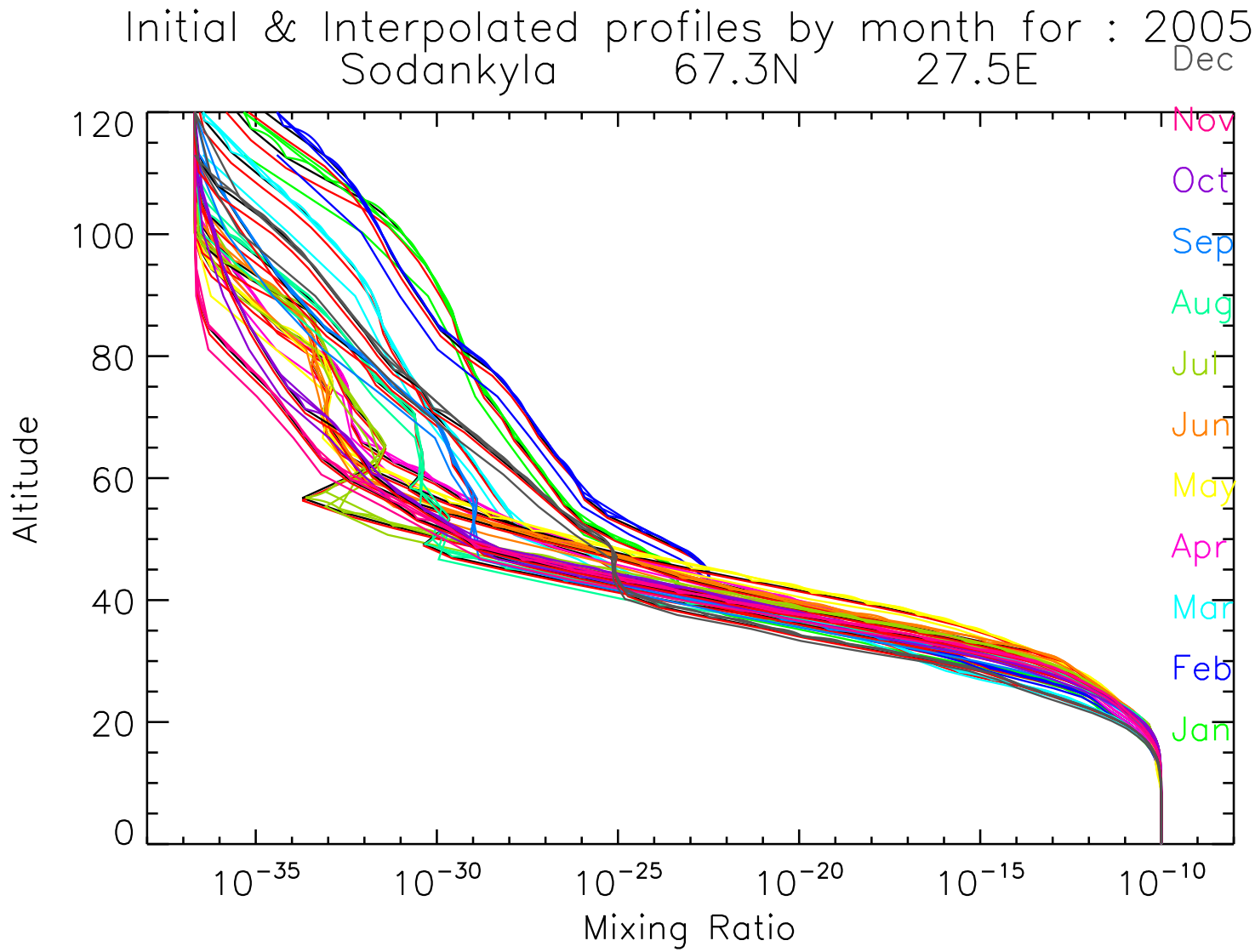
Mixing Ratio


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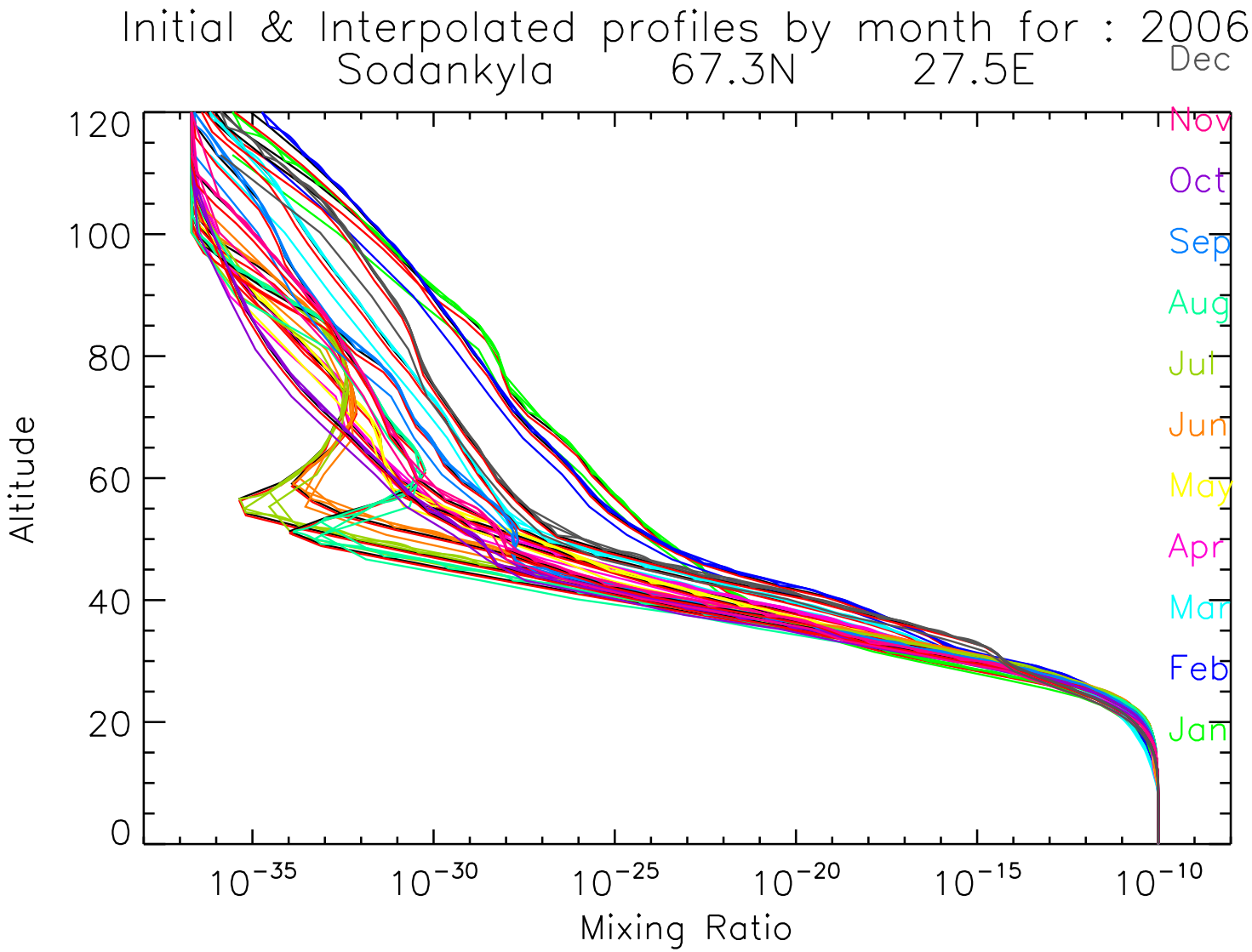
Mixing Ratio


Initial & Interpolated profiles by month for : 2006
Sodankyla 67.3N 27.5E
Dec
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Altitude
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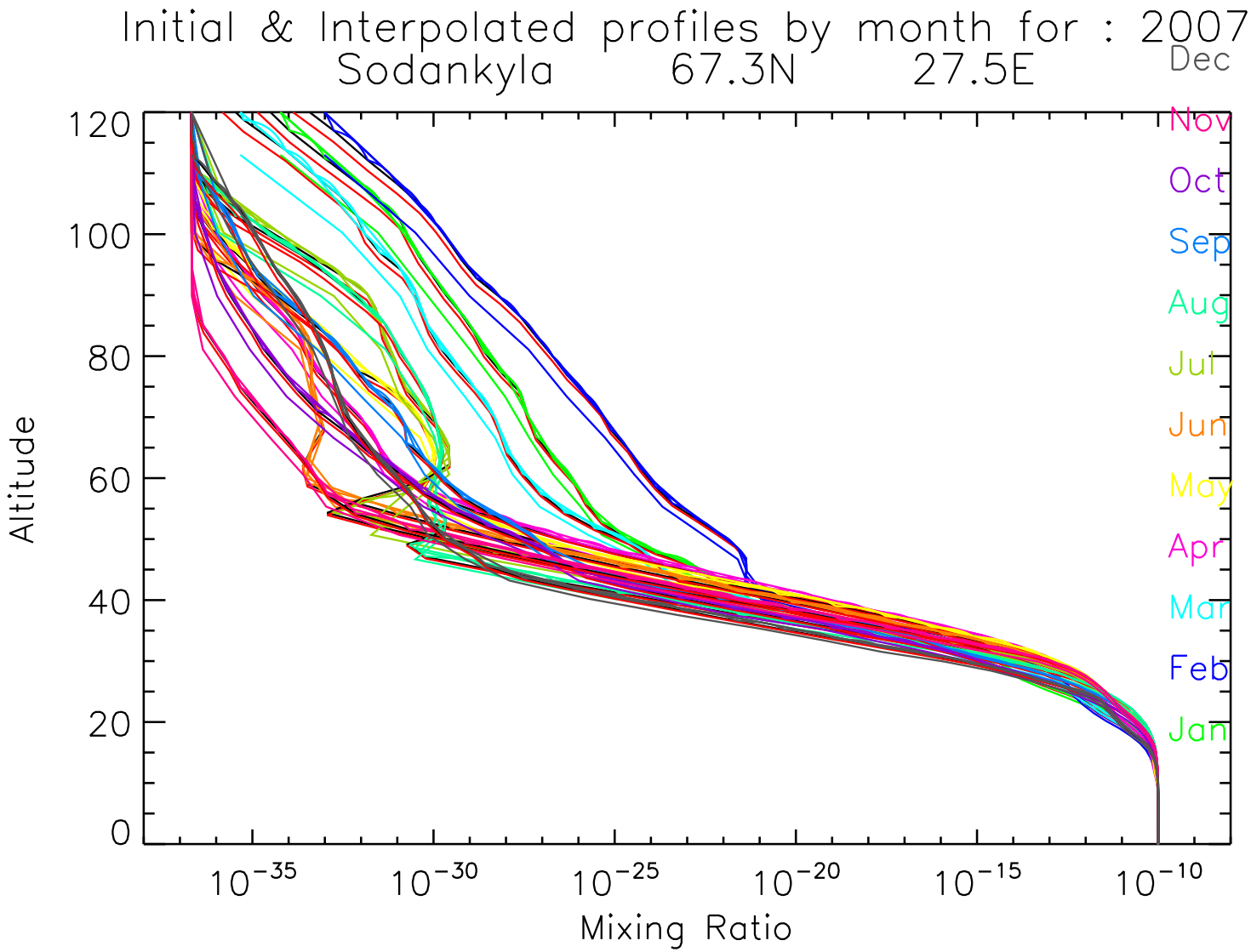
Mixing Ratio


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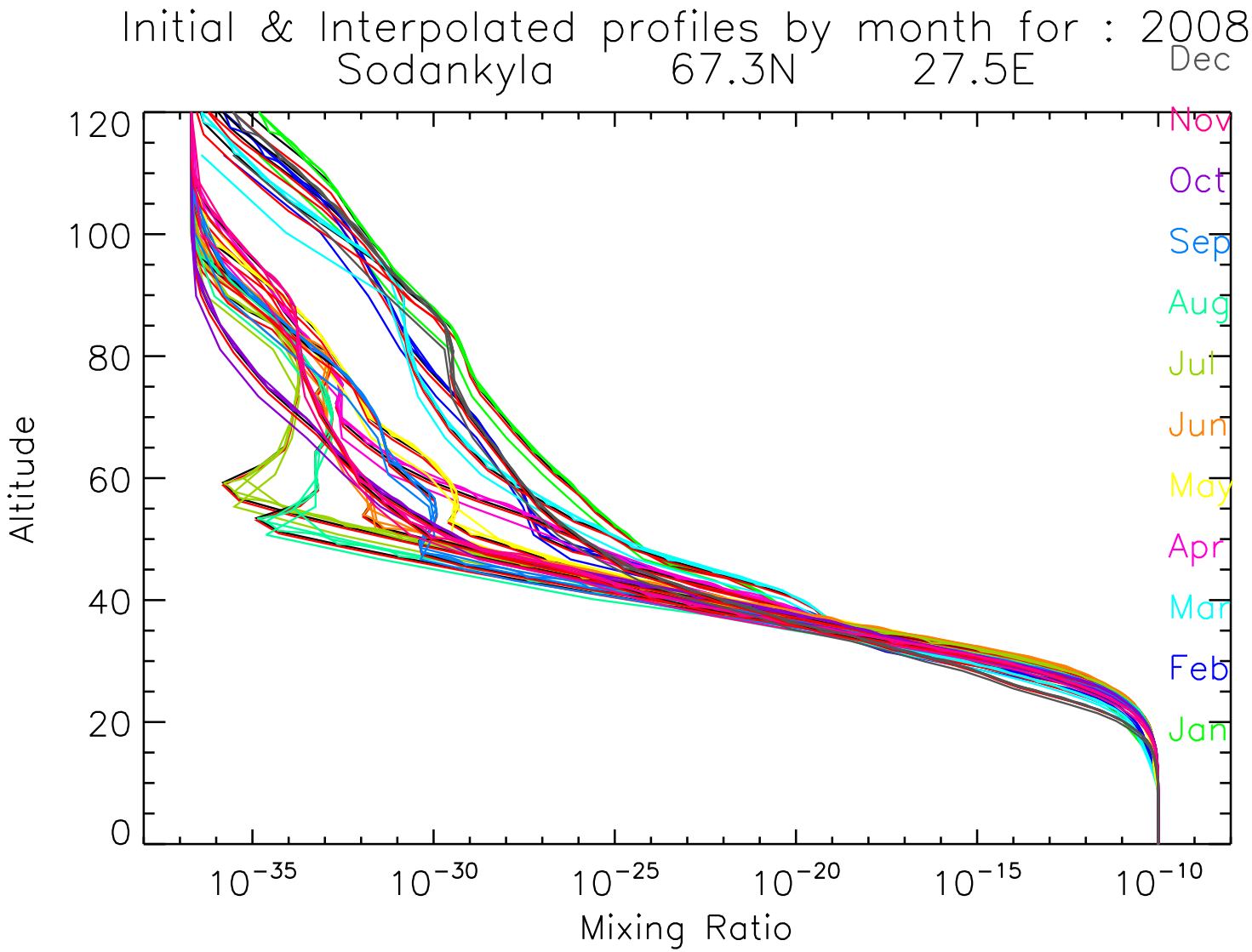
$10^{-10}$
Mixing Ratio


Initial & Interpolated profiles by month for : 2008
Sodankyla 67.3N 27.5E
Dec
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Altitude
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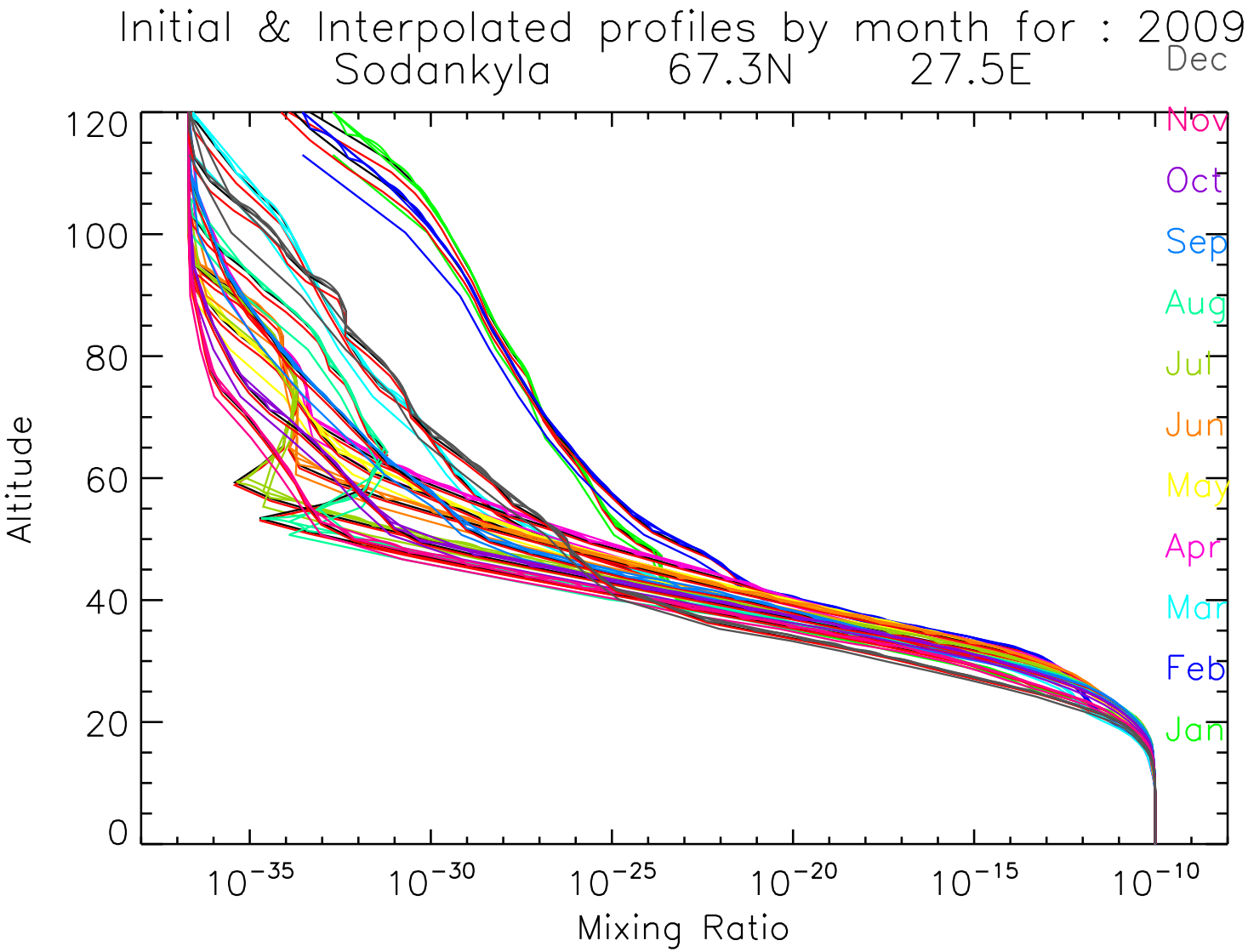
Mixing Ratio


Initial & Interpolated profiles by month for : 2009
Sodankyla 67.3N 27.5E
Dec
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Feb
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Altitude
120
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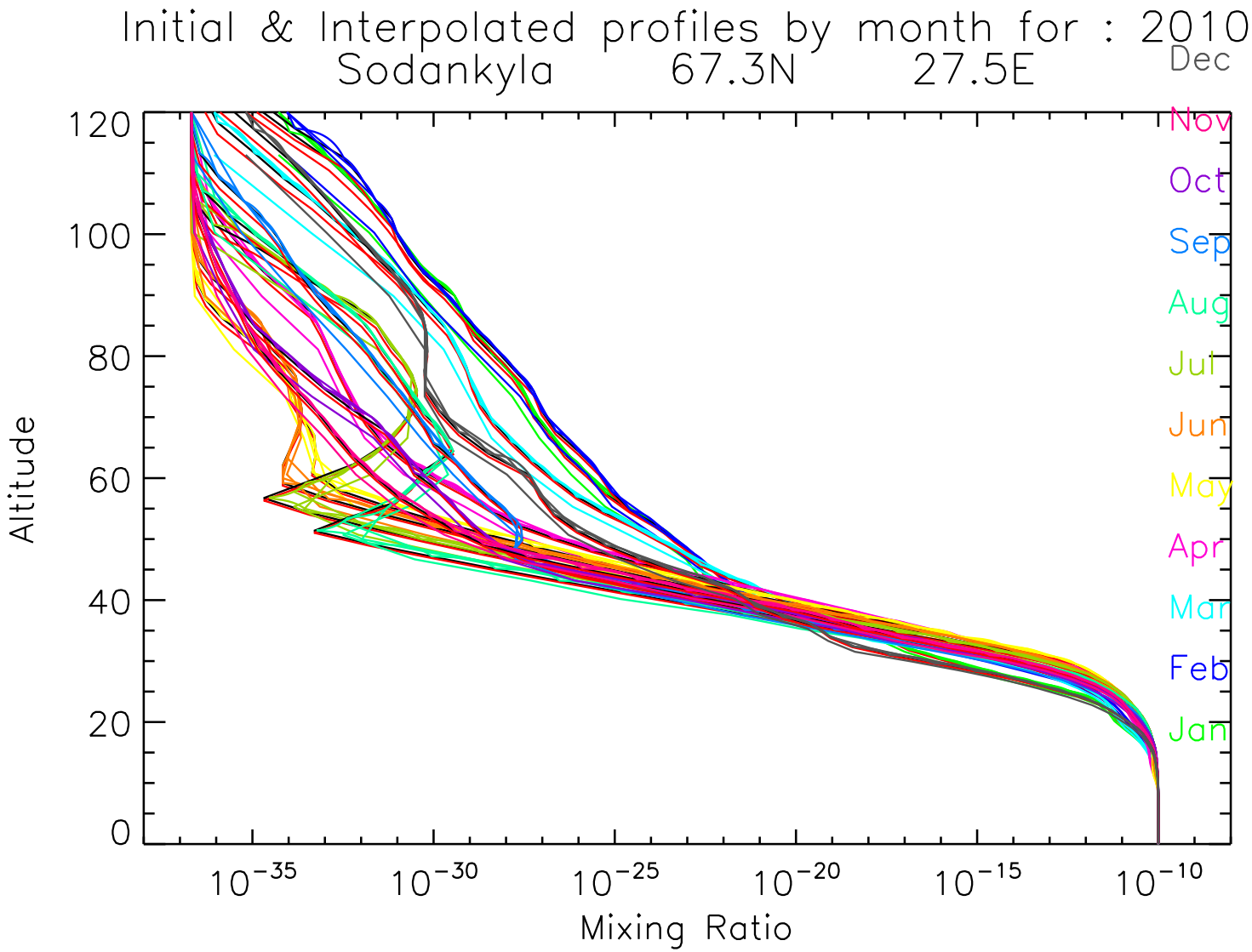
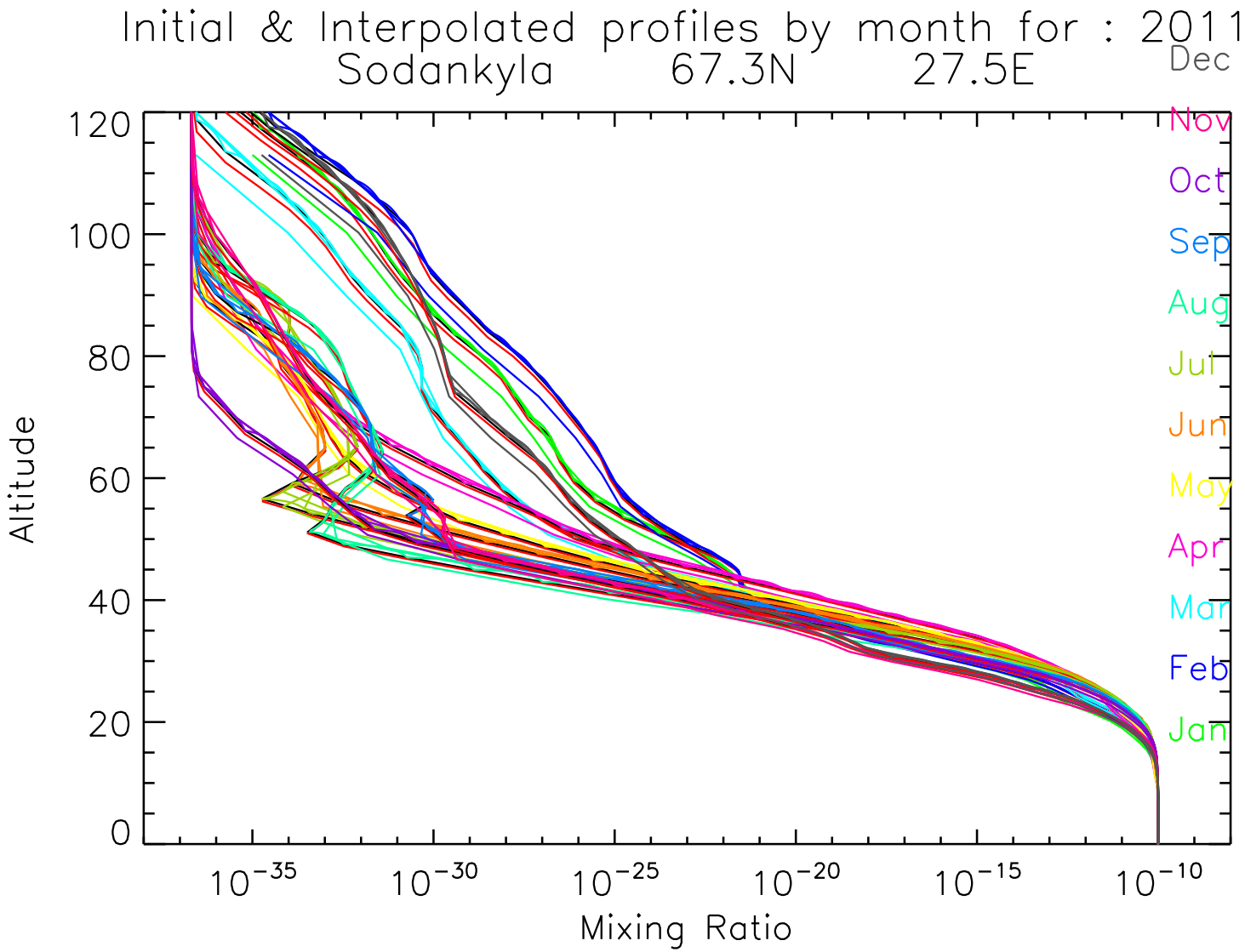
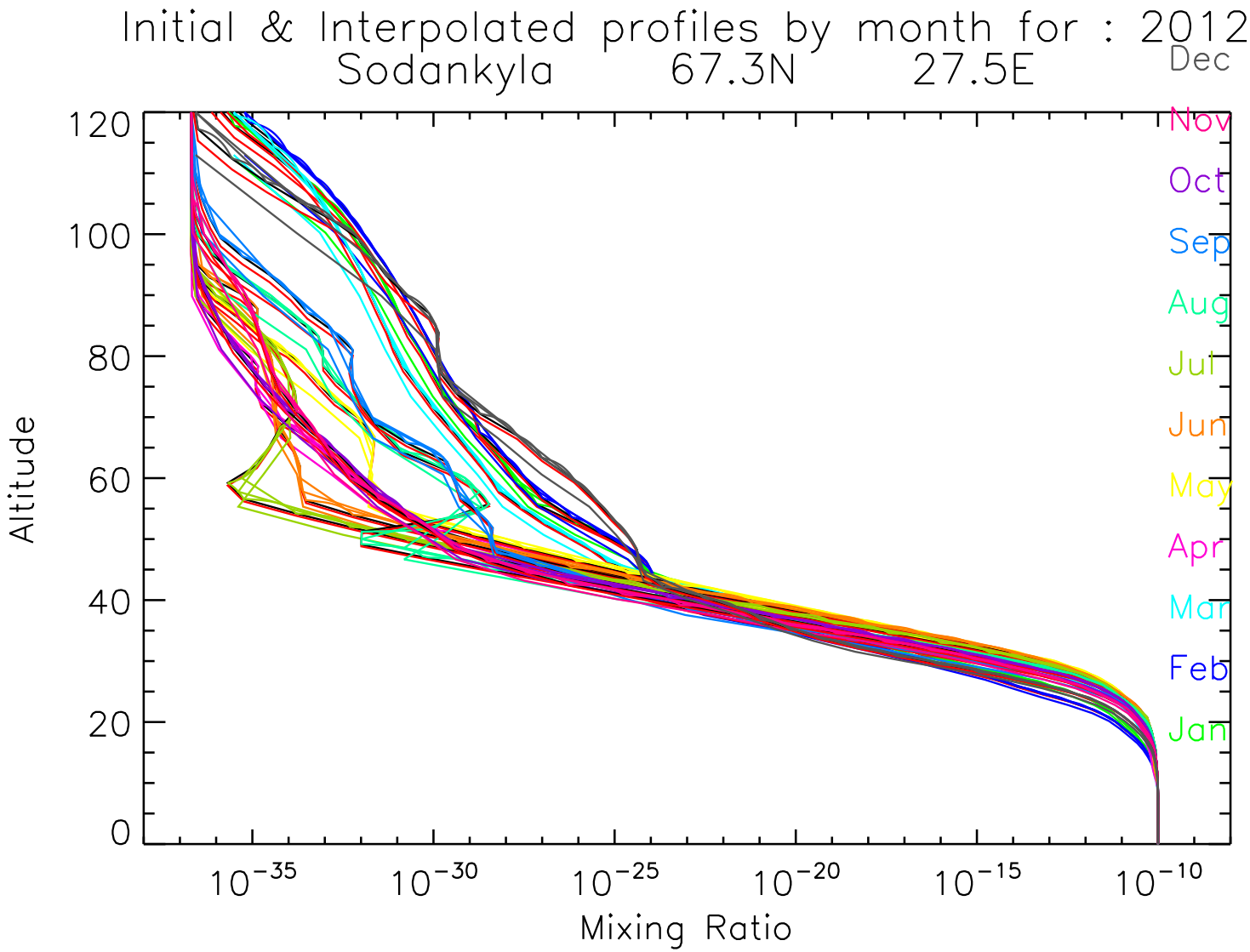
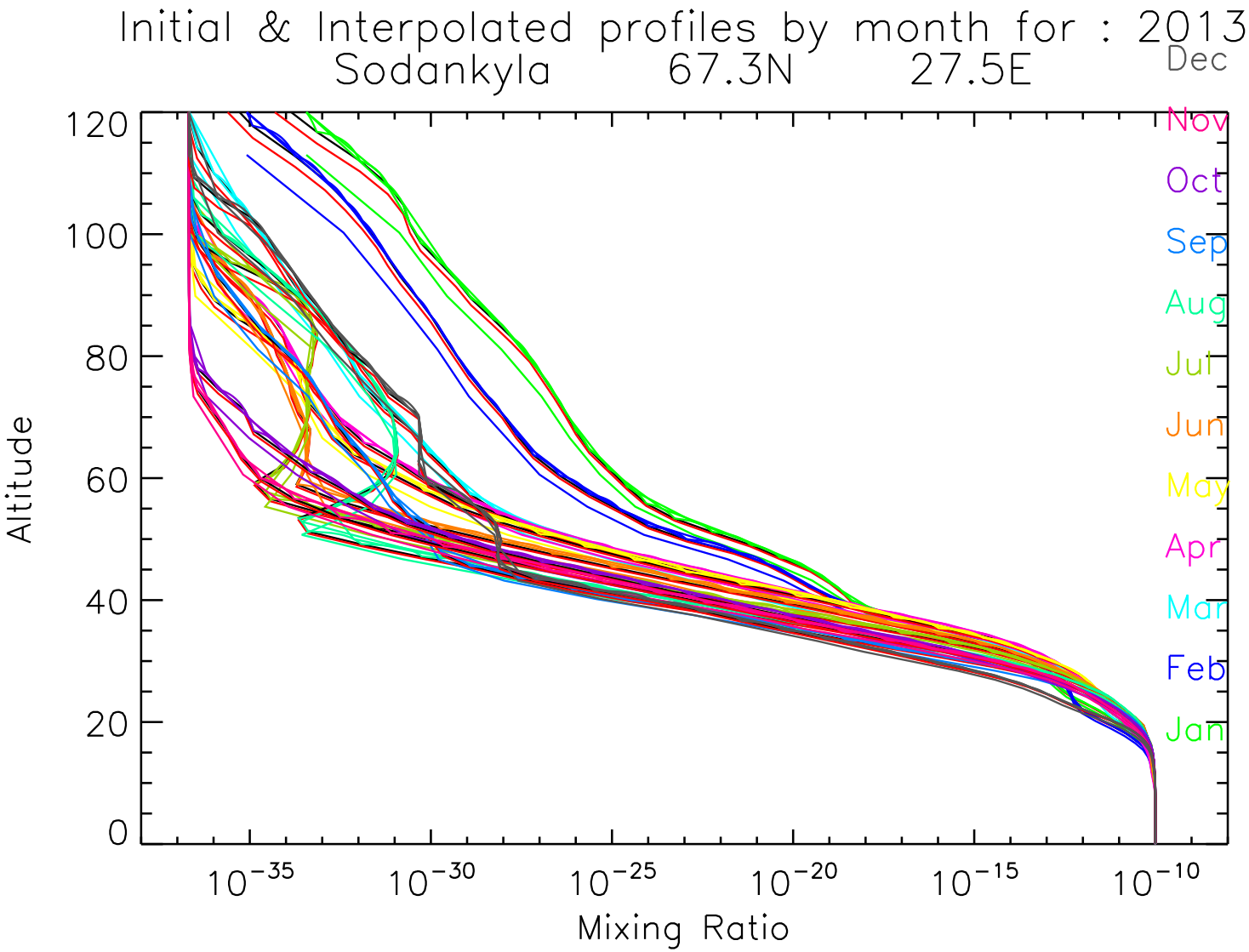
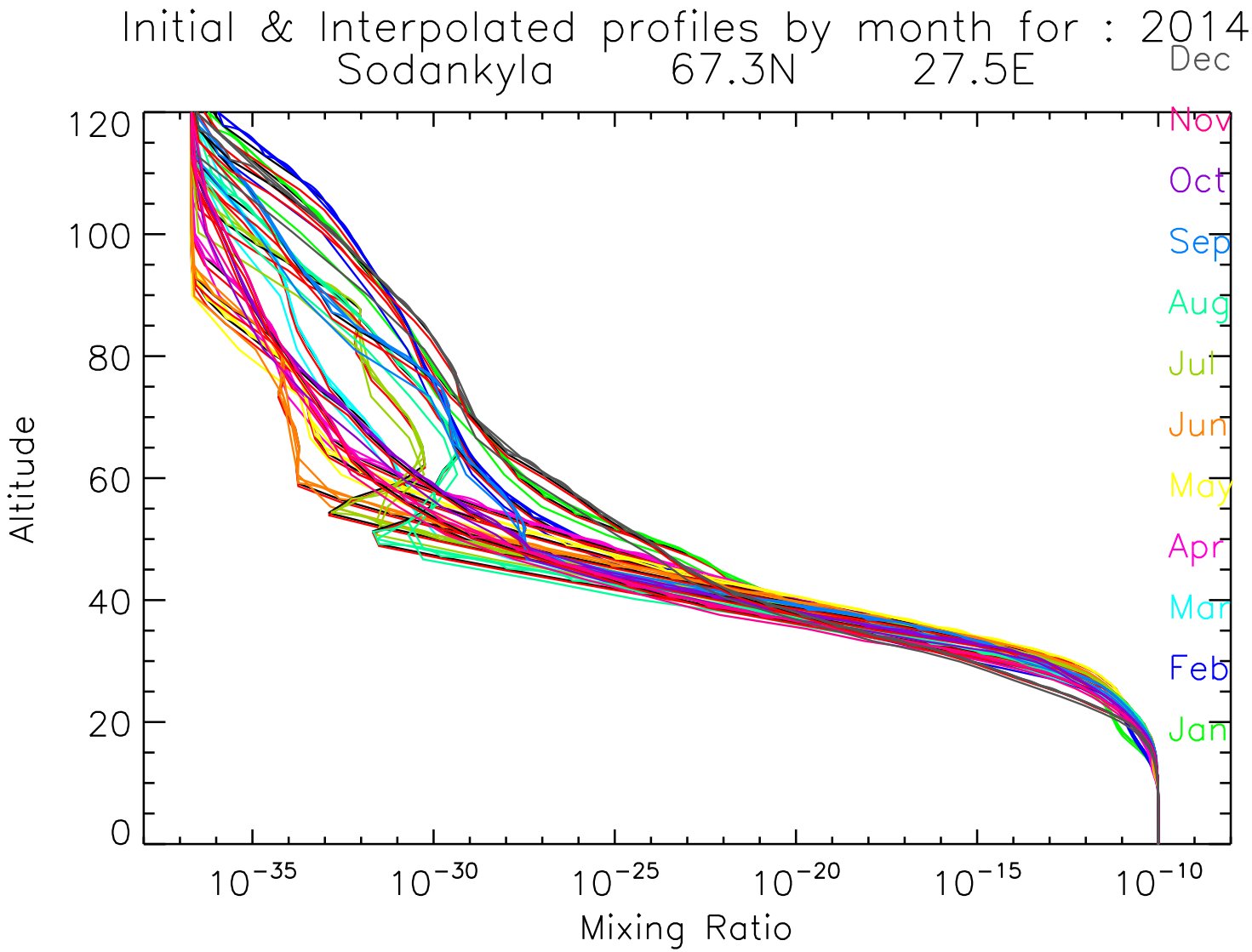
Mixing Ratio

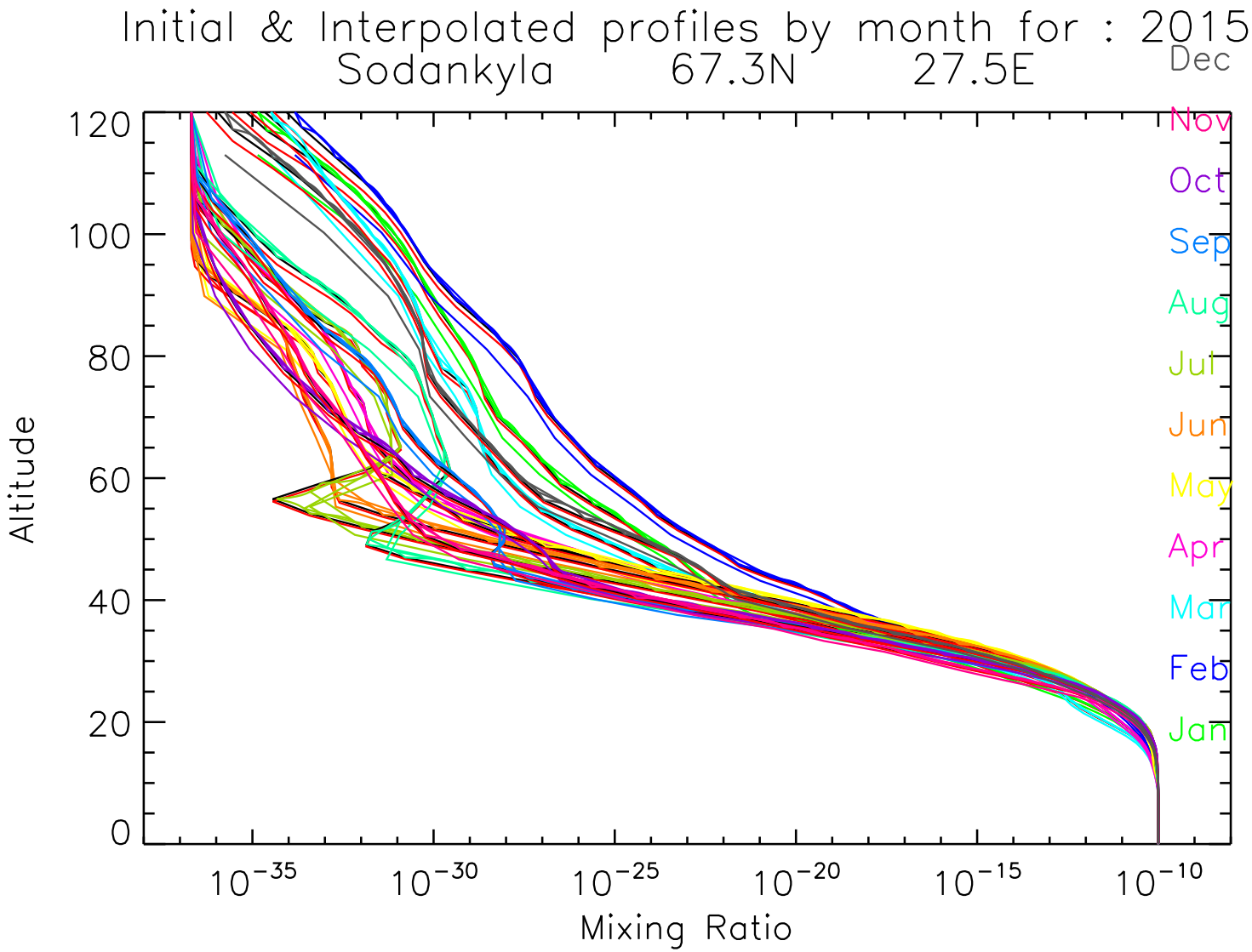

Initial & Interpolated profiles by month for : 2010
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

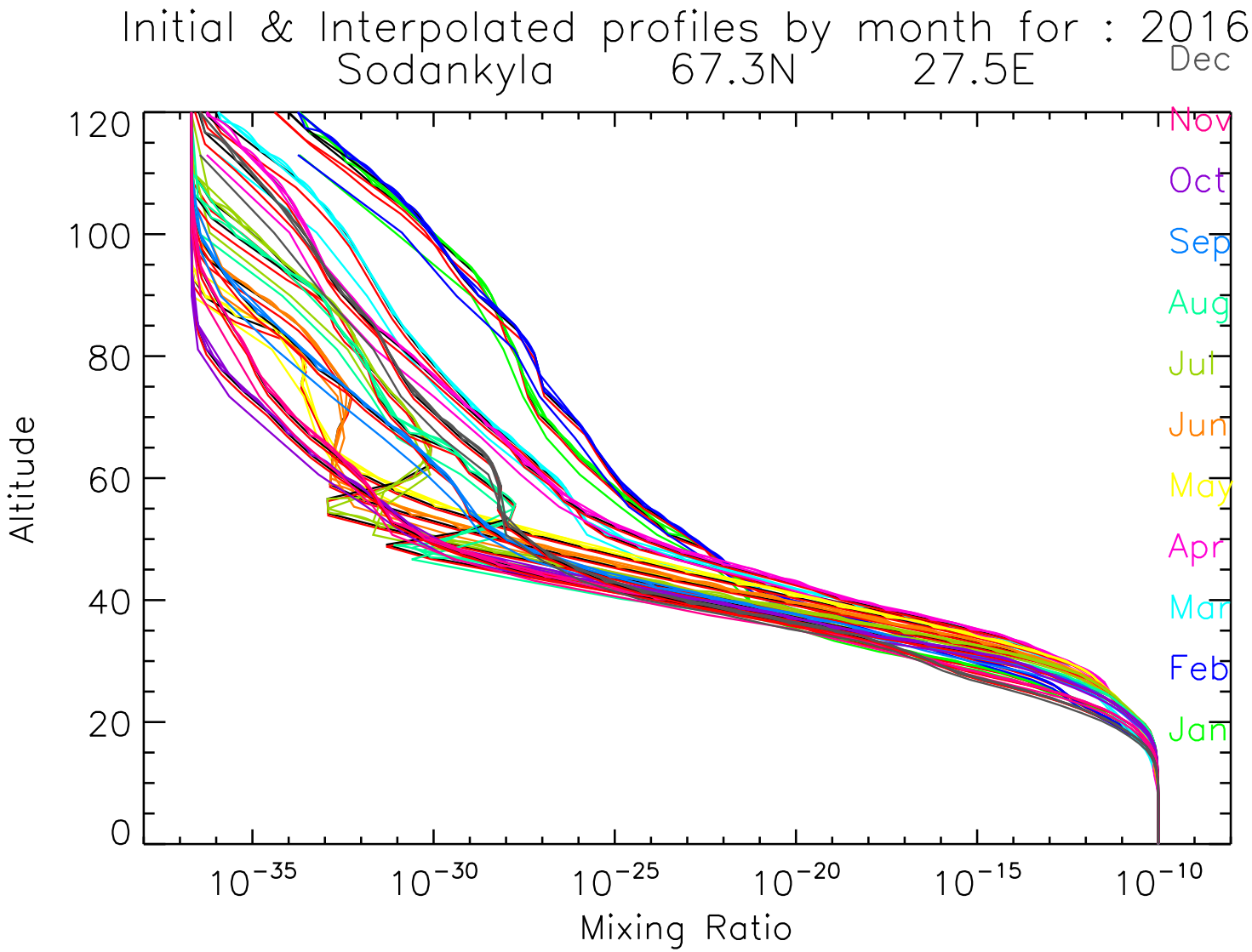

Initial & Interpolated profiles by month for : 2011
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

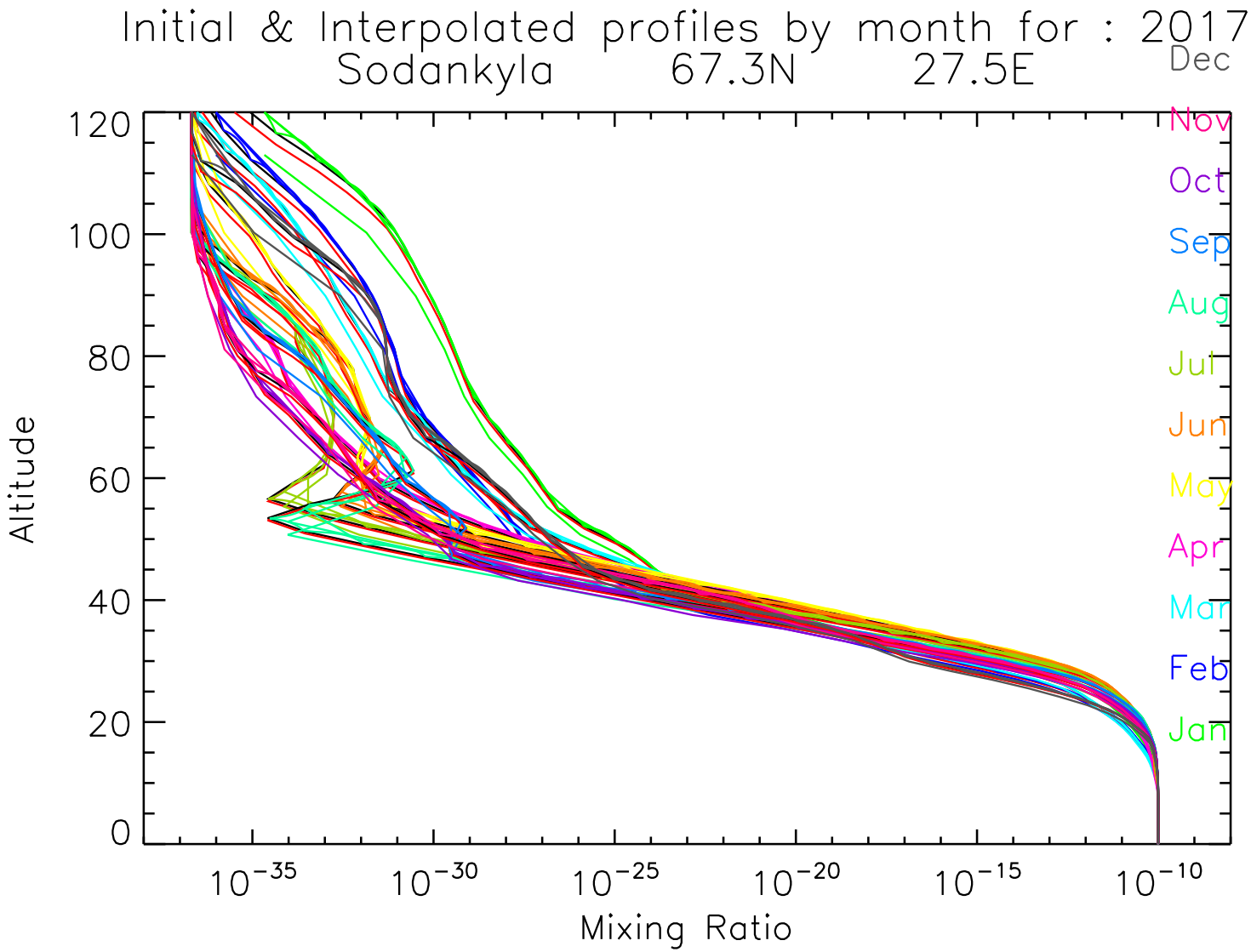

Initial & Interpolated profiles by month for : 2012
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

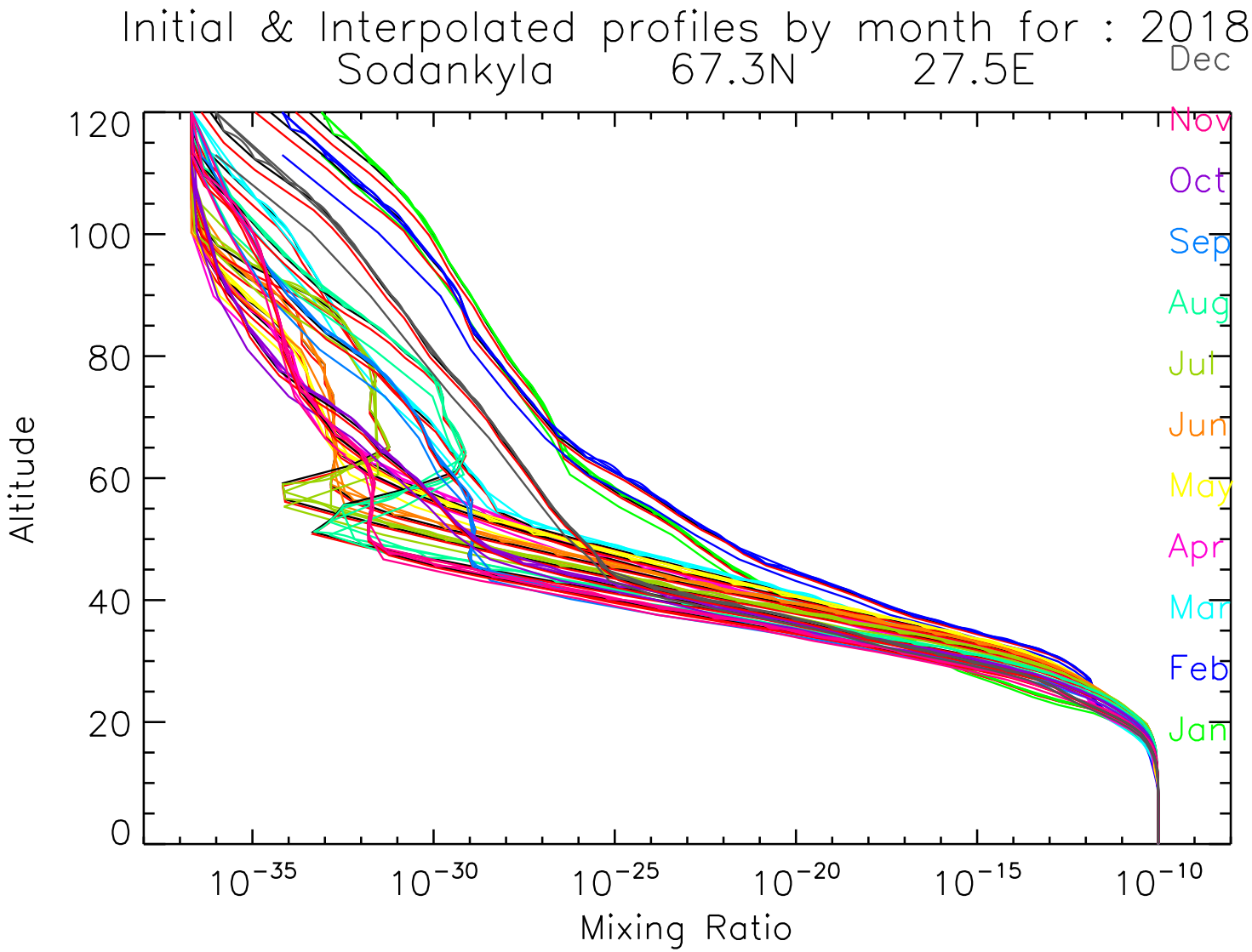

Initial & Interpolated profiles by month for : 2013
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

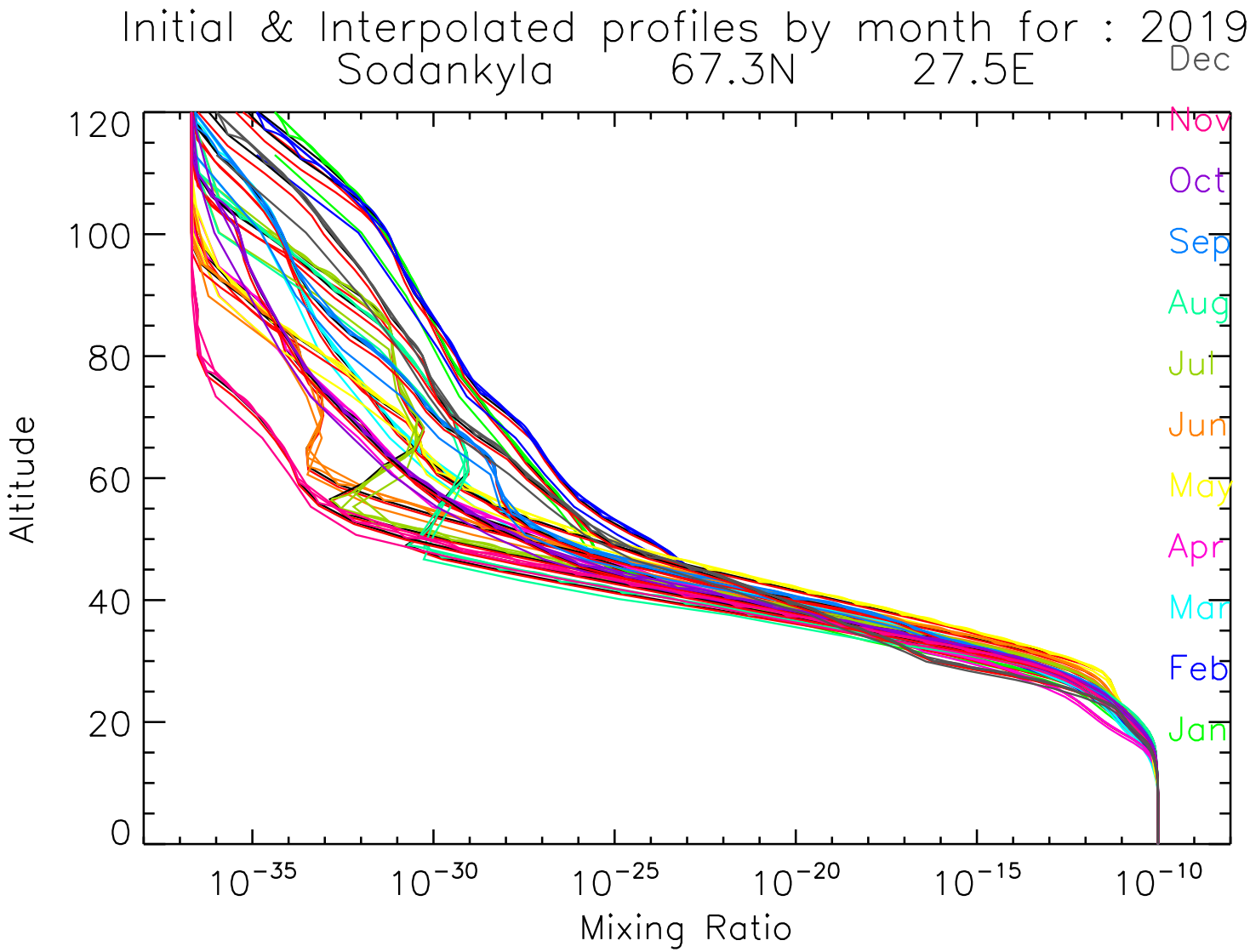

Initial & Interpolated profiles by month for : 2014
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

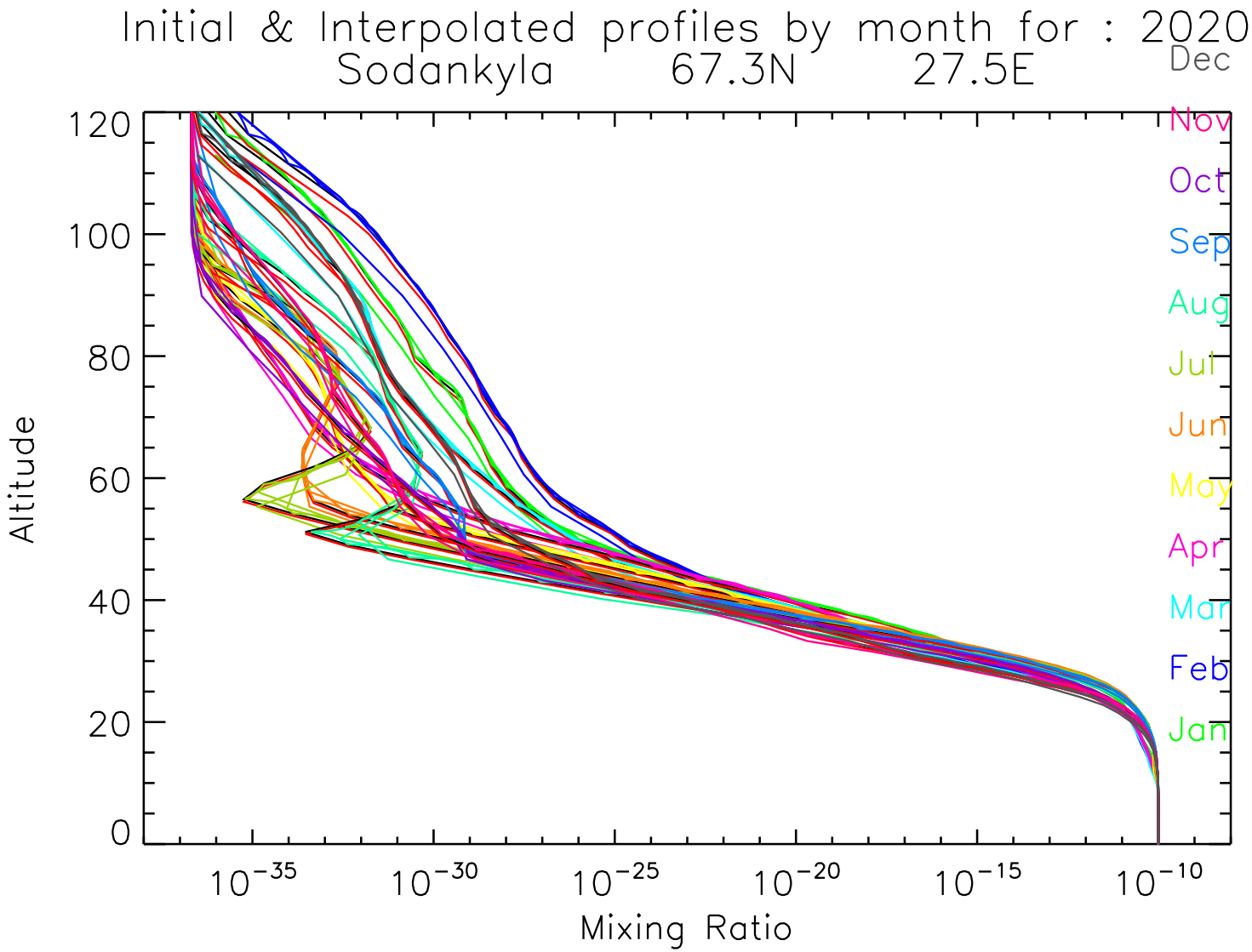

Initial & Interpolated profiles by month for : 2015
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

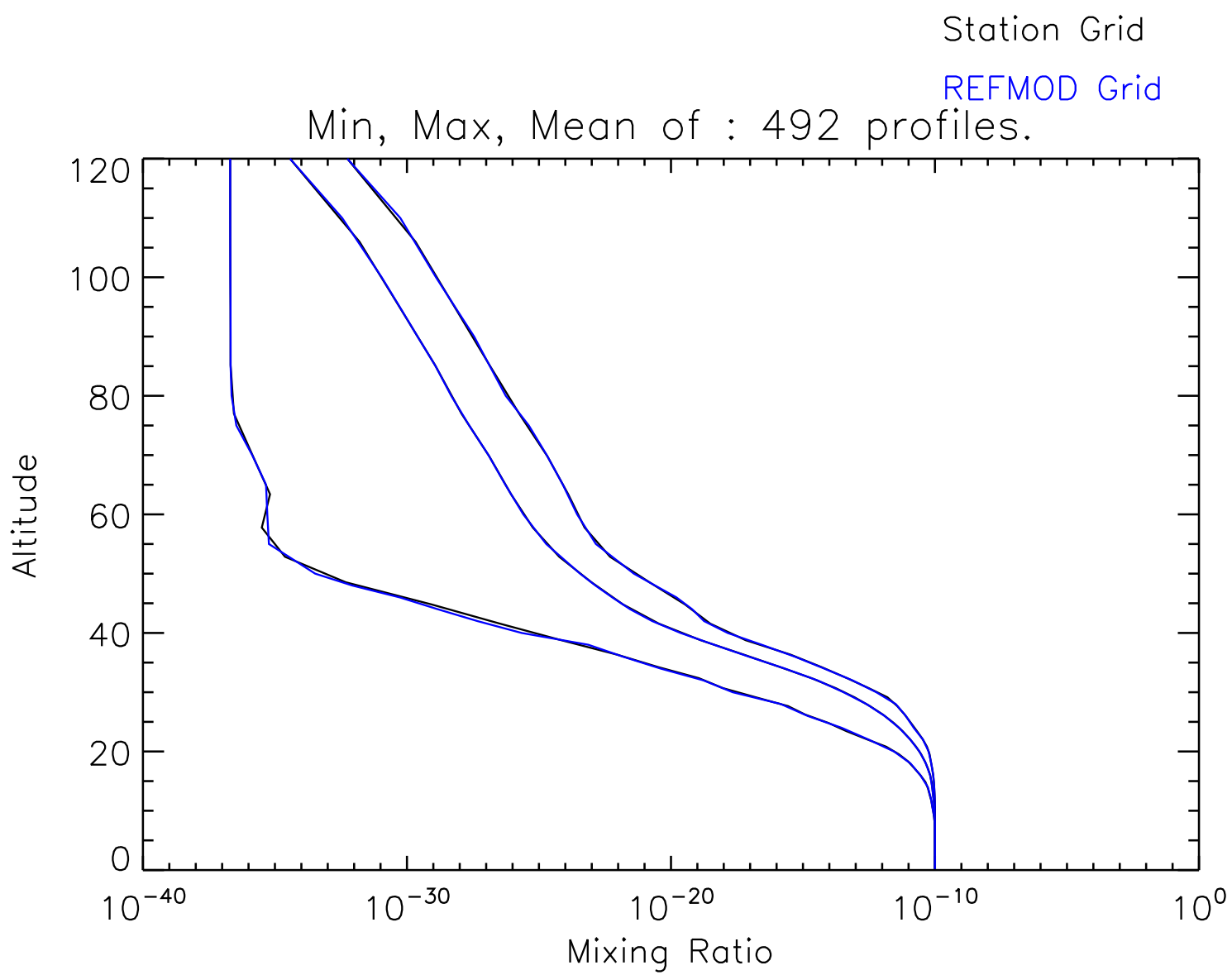

Initial & Interpolated profiles by month for : 2016
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

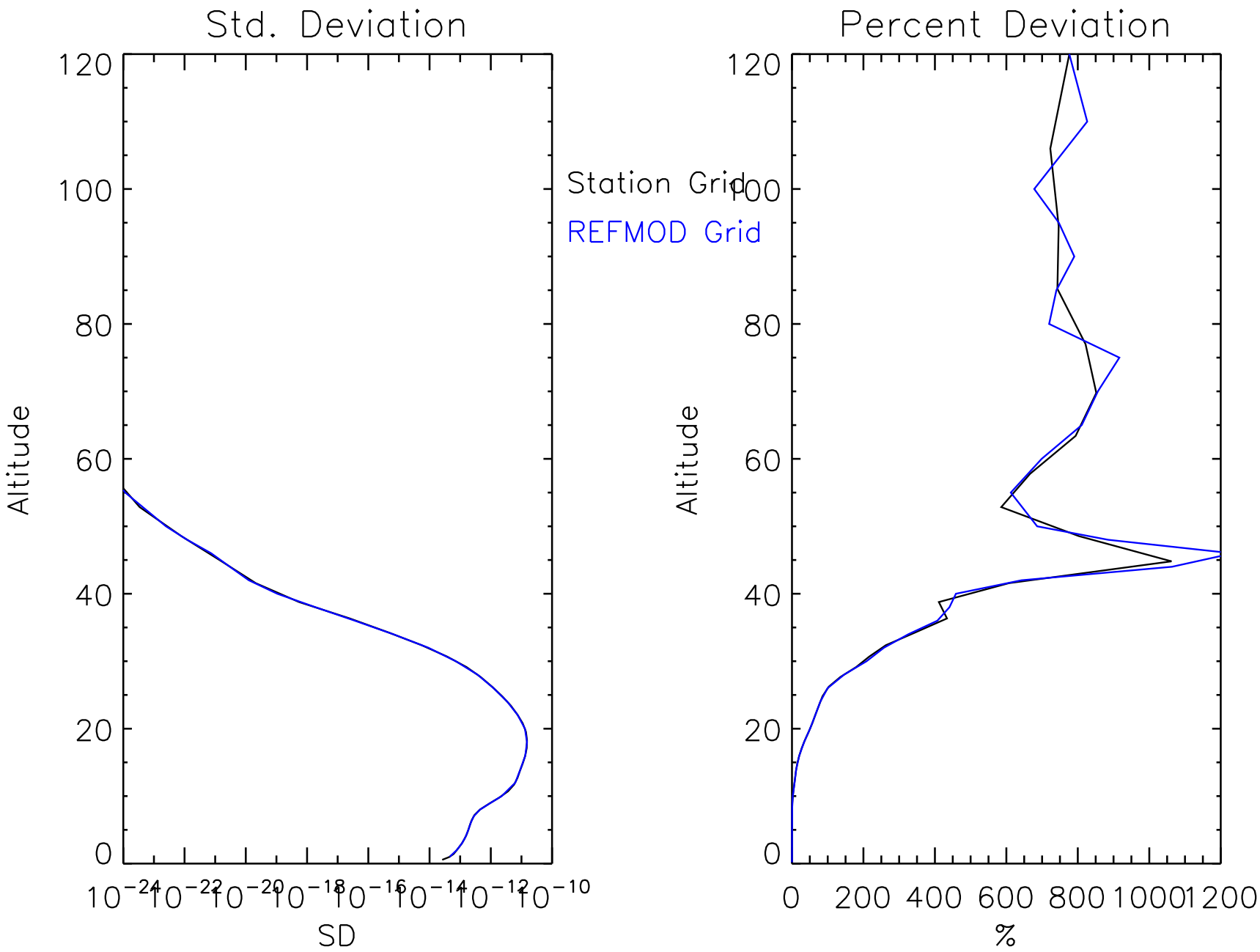

Initial & Interpolated profiles by month for : 2017
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

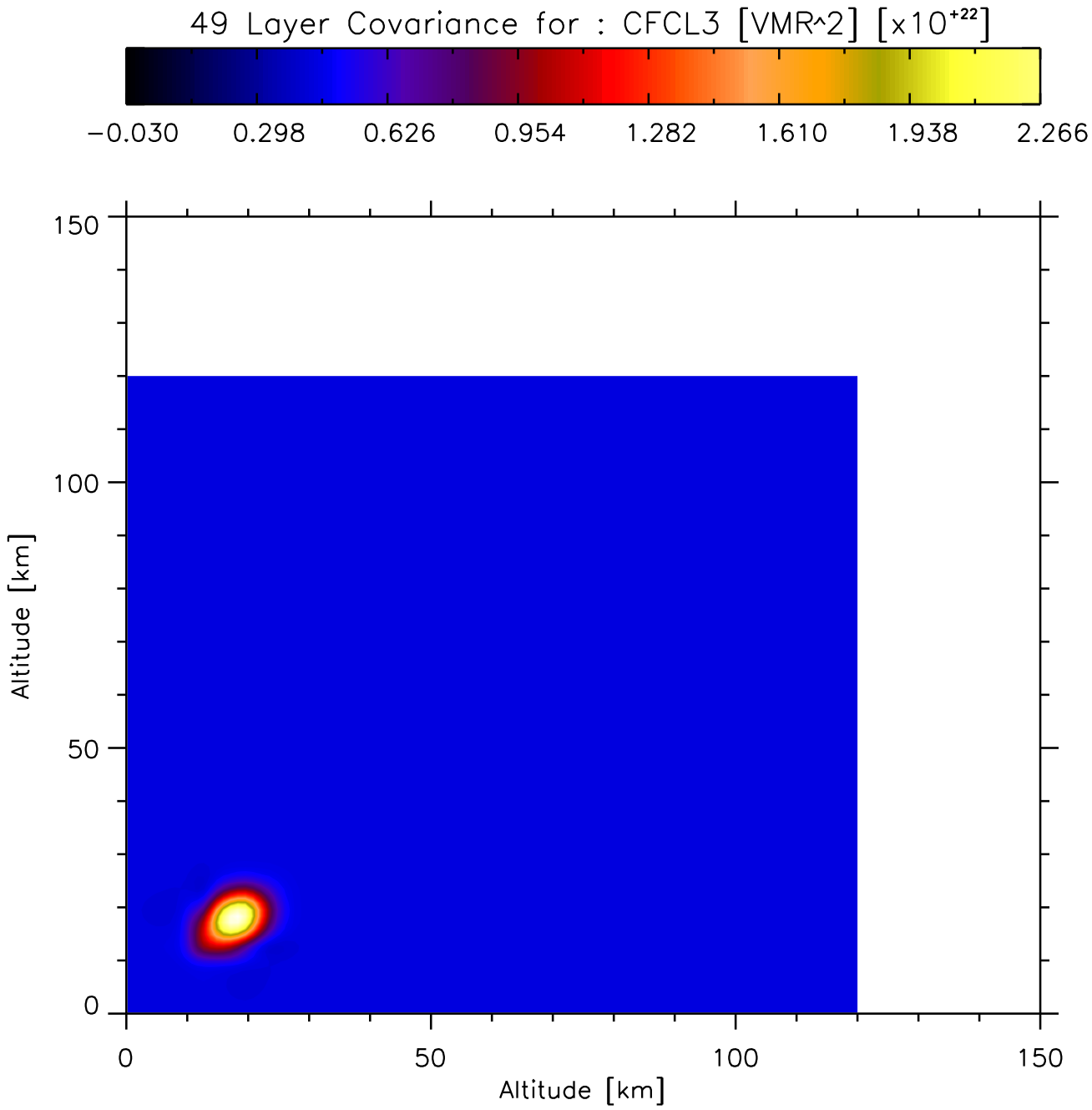

Initial & Interpolated profiles by month for : 2018
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

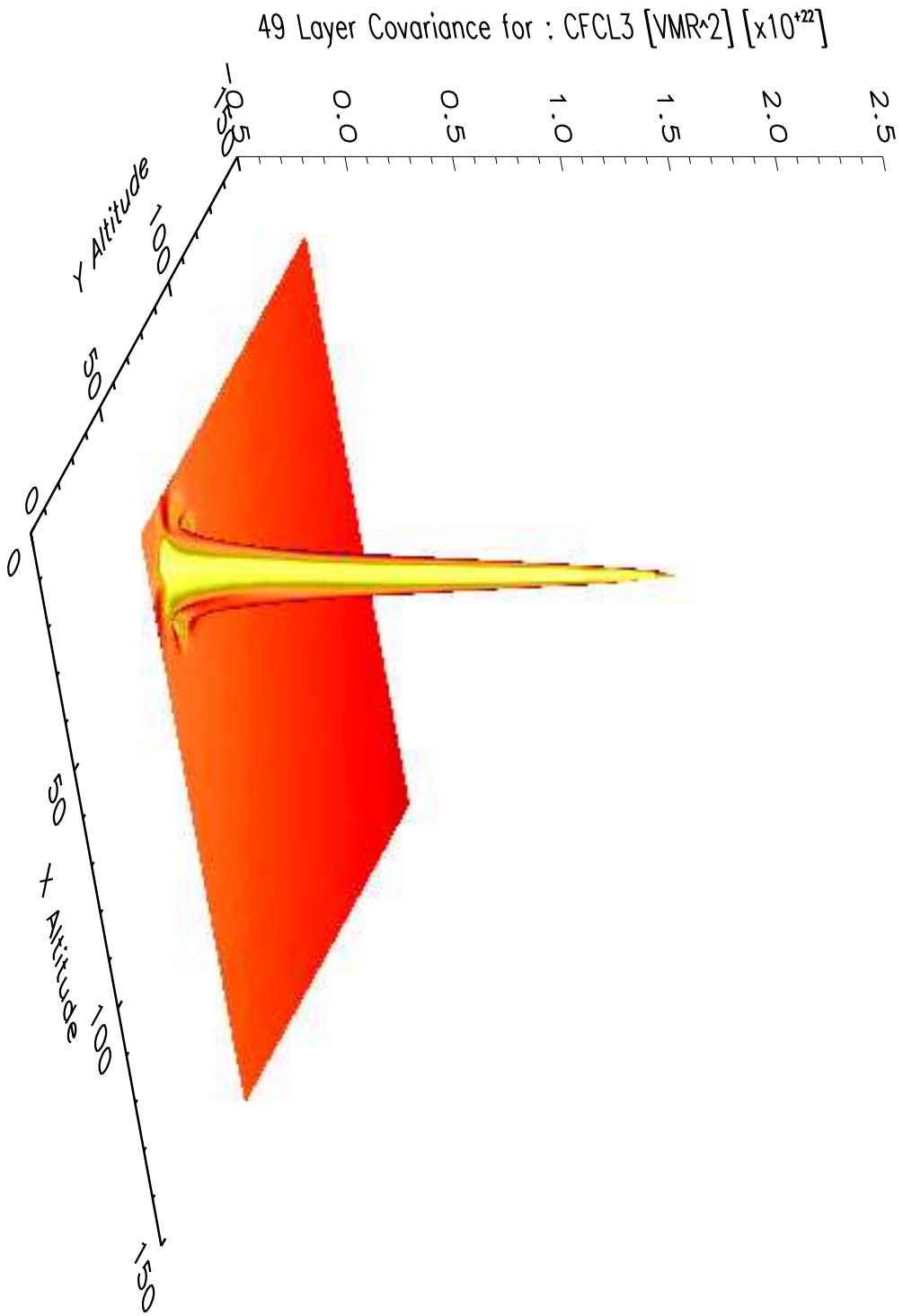

Initial & Interpolated profiles by month for : 2019
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

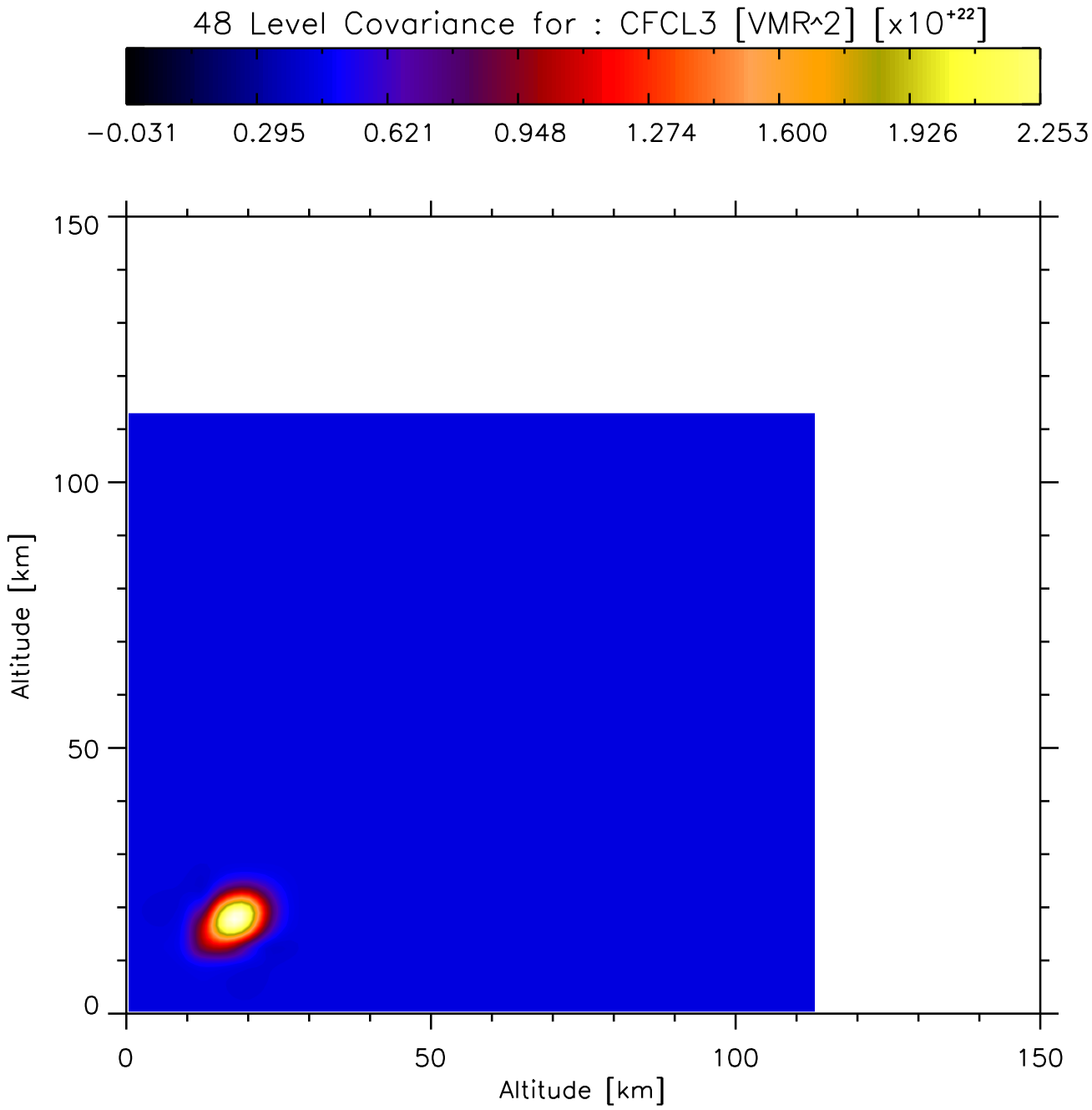

Initial & Interpolated profiles by month for : 2020
Sodankyla 67.3N 27.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

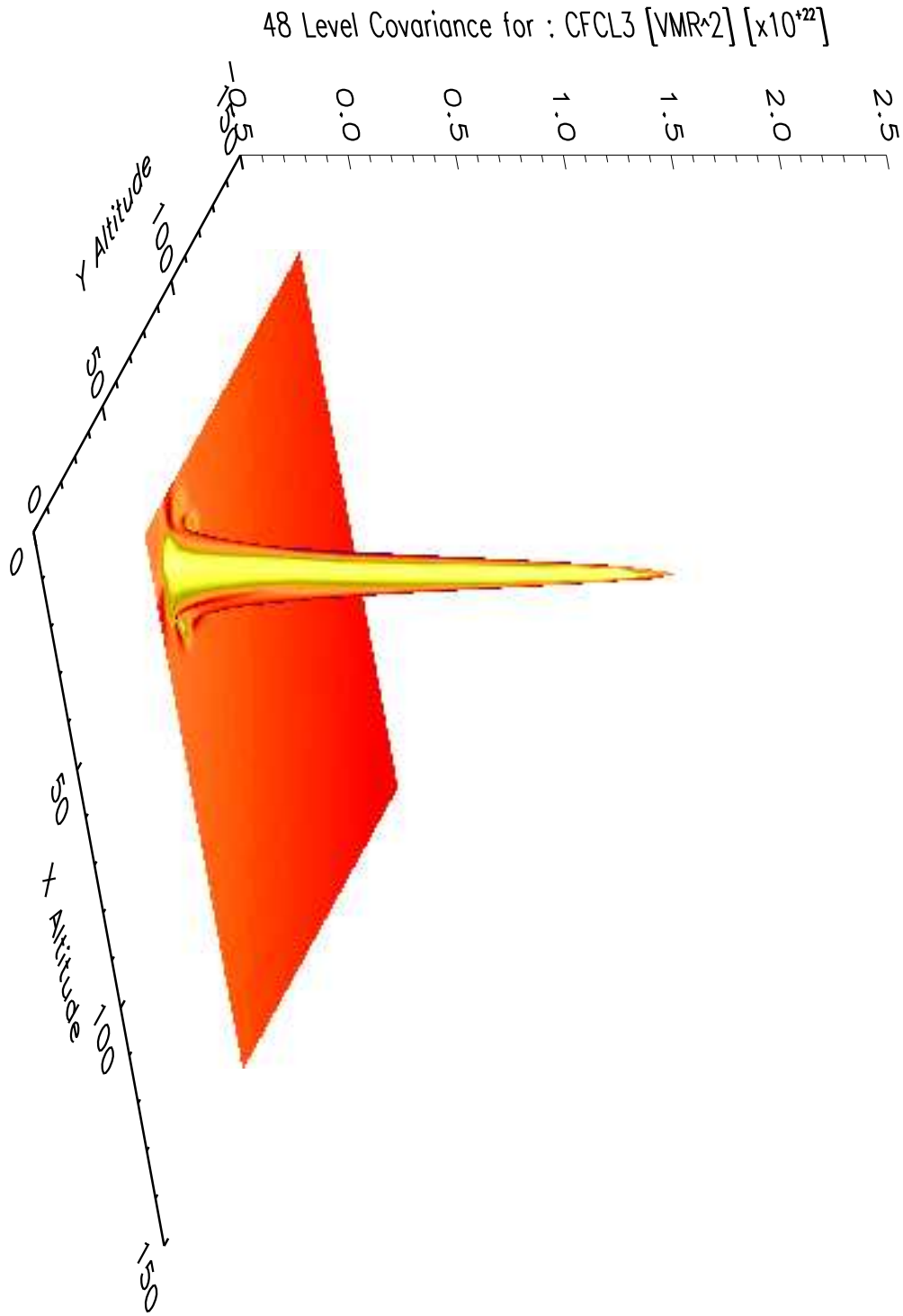

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
120
100
80
60
40
20
0
Altitude
$10^{-40}$
$10^{-30}$
$10^{-20}$
$10^{-10}$
$10^{0}$
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
$10^{-24}$ $10^{-22}$ $10^{-20}$ $10^{-18}$ $10^{-16}$ $10^{-14}$ $10^{-12}$ $10^{-10}$
SD
0 200 400 600 800 1000 1200
%


49 Layer Covariance for : CFCL3 [VMR^2] [x10^+22]
−0.030
0.298
0.626
0.954
1.282
1.610
1.938
2.266
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


49 Layer Covariance for : CFCL3 [VMR^2] [x10^+22]
-0.5
0.0
0.5
1.0
1.5
2.0
2.5
Y Altitude
0
50
100
0
50
100
X Altitude


48 Level Covariance for : CFCL3 [VMR^2] [x10^+22]
−0.031
0.295
0.621
0.948
1.274
1.600
1.926
2.253
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


48 Level Covariance for : CFCL3 [VMR^2] [x10^+22]
-0.5
0.0
0.5
1.0
1.5
2.0
2.5
Y Altitude
0
50
100
150
X Altitude
0
50
100
150