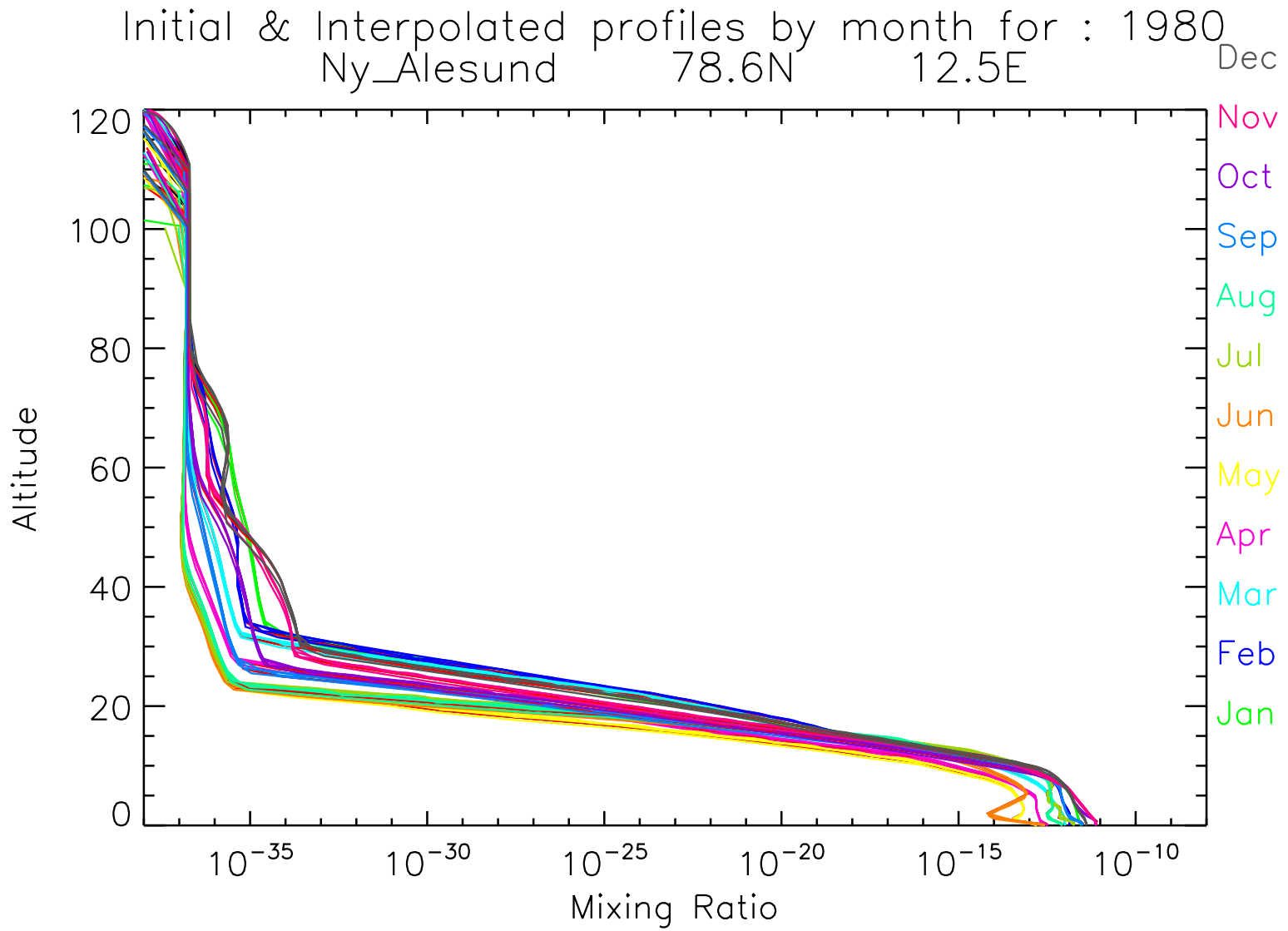
Initial & Interpolated profiles by month for : 1980
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
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May
Apr
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Feb
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Altitude
120
100
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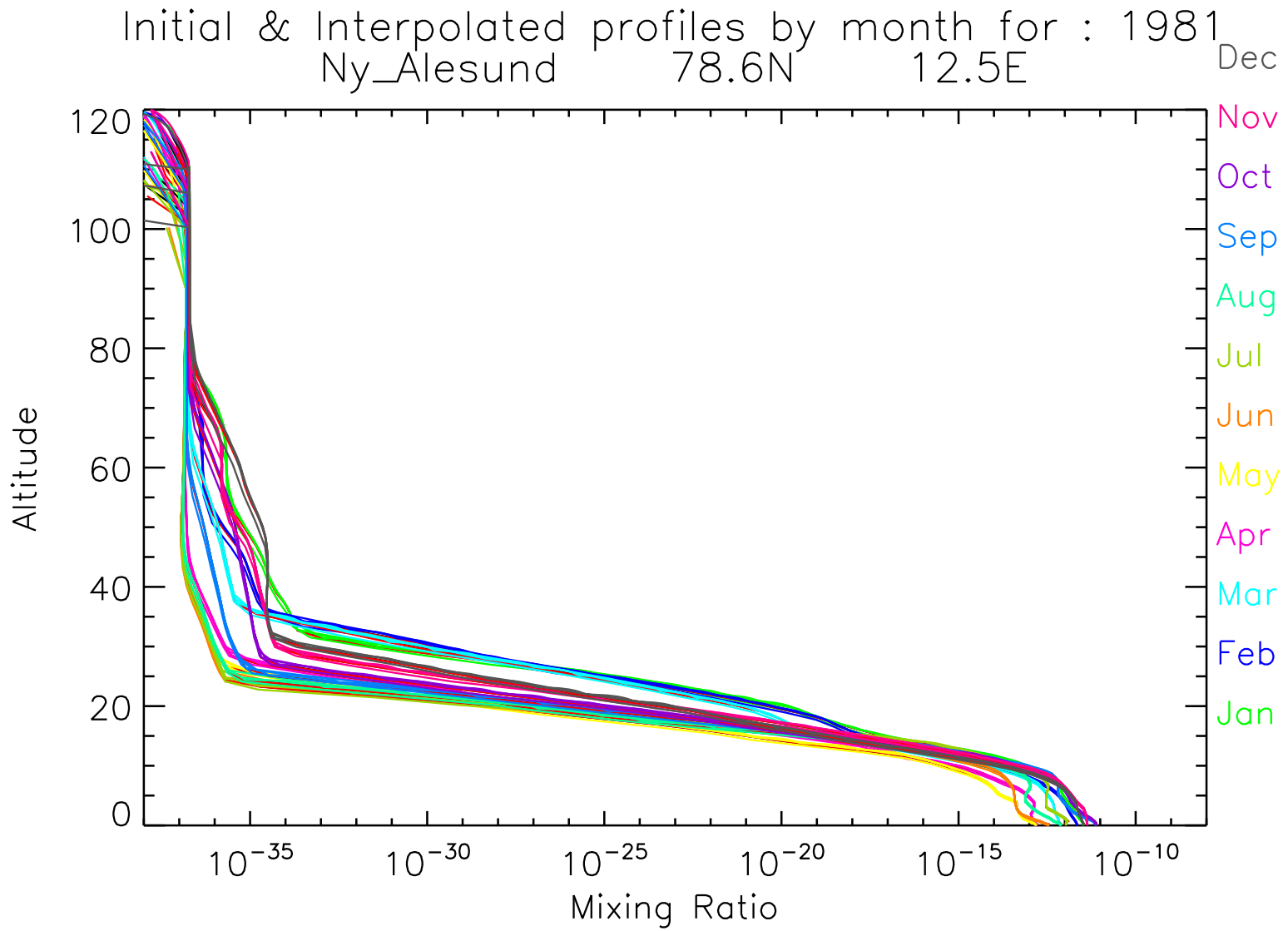
Mixing Ratio


Initial & Interpolated profiles by month for : 1981
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
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Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
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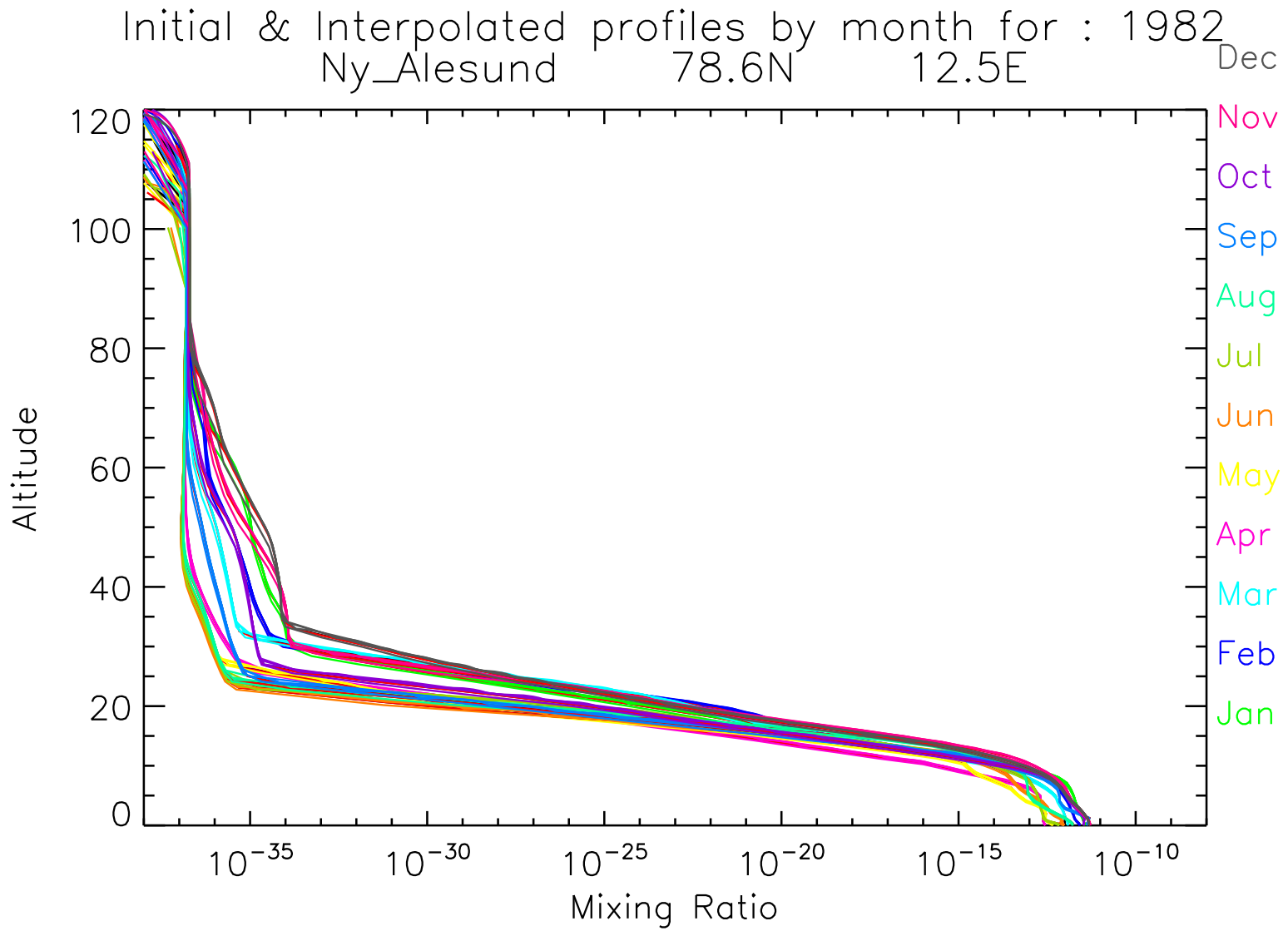
Mixing Ratio


Initial & Interpolated profiles by month for : 1982
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
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Jul
Jun
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Apr
Mar
Feb
Jan
Altitude
120
100
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$10^{-20}$
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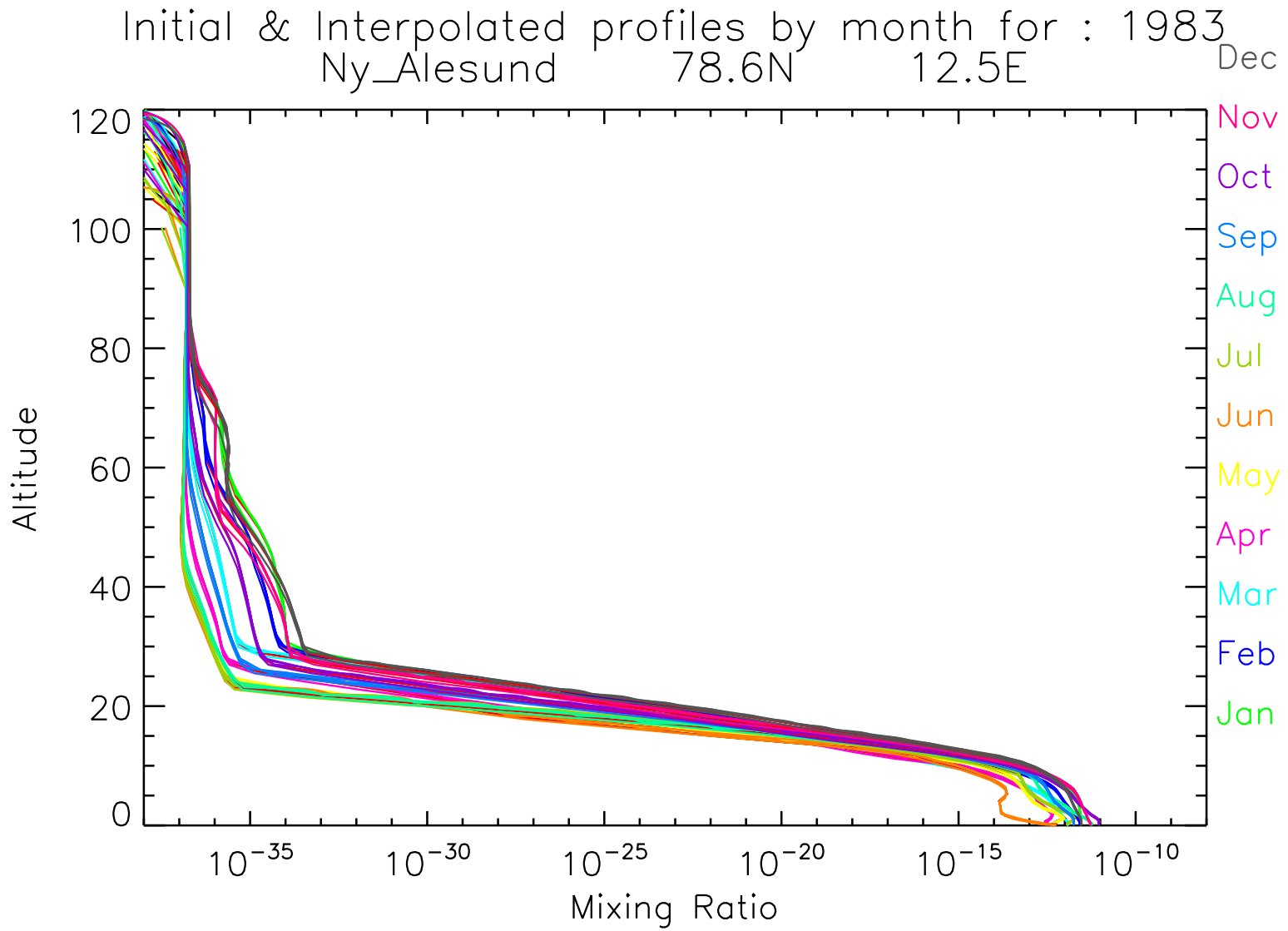
Mixing Ratio


Initial & Interpolated profiles by month for : 1983
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
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Jul
Jun
May
Apr
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Feb
Jan
Altitude
120
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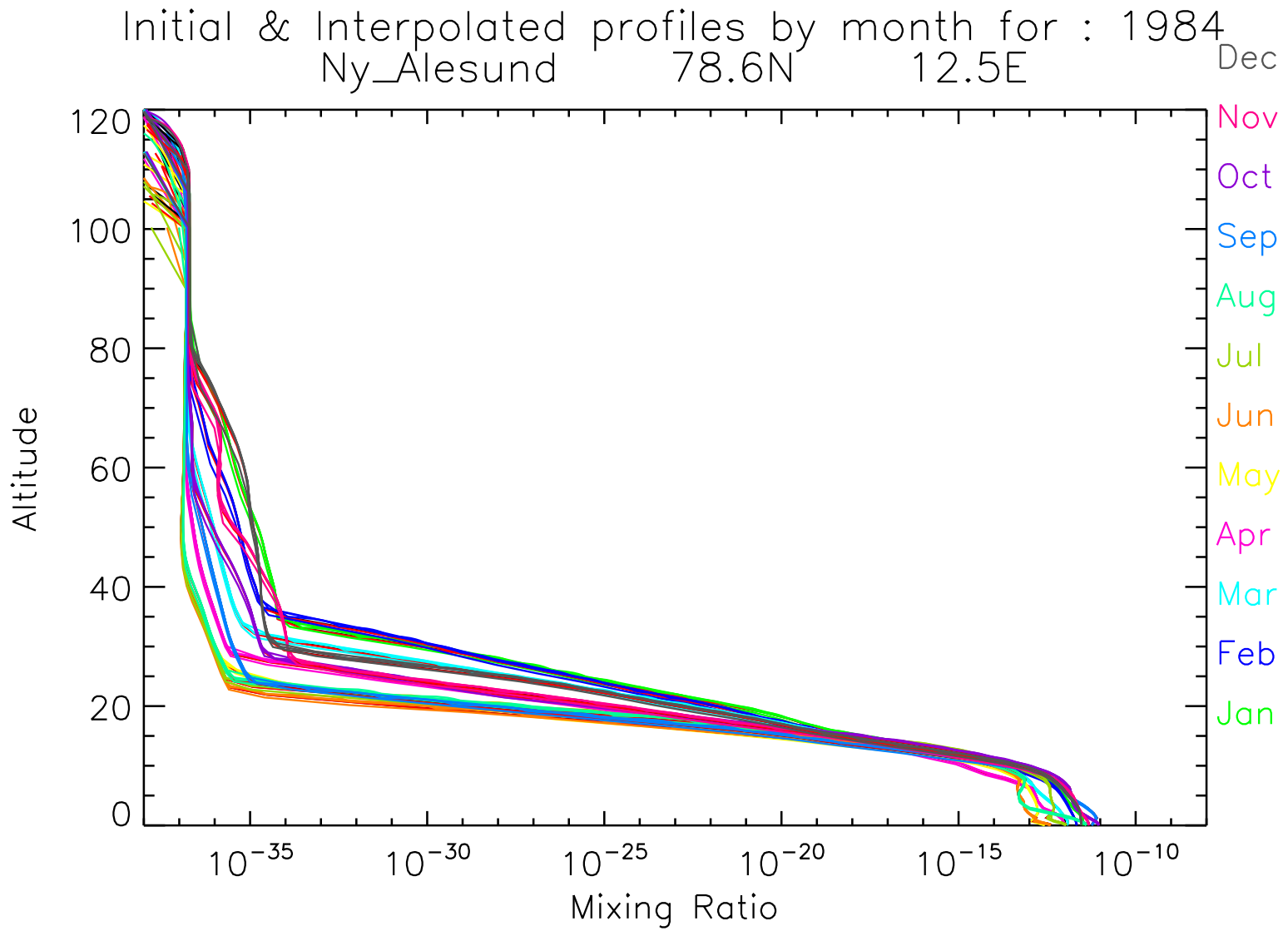
Mixing Ratio


Initial & Interpolated profiles by month for : 1984
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
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May
Apr
Mar
Feb
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Altitude
120
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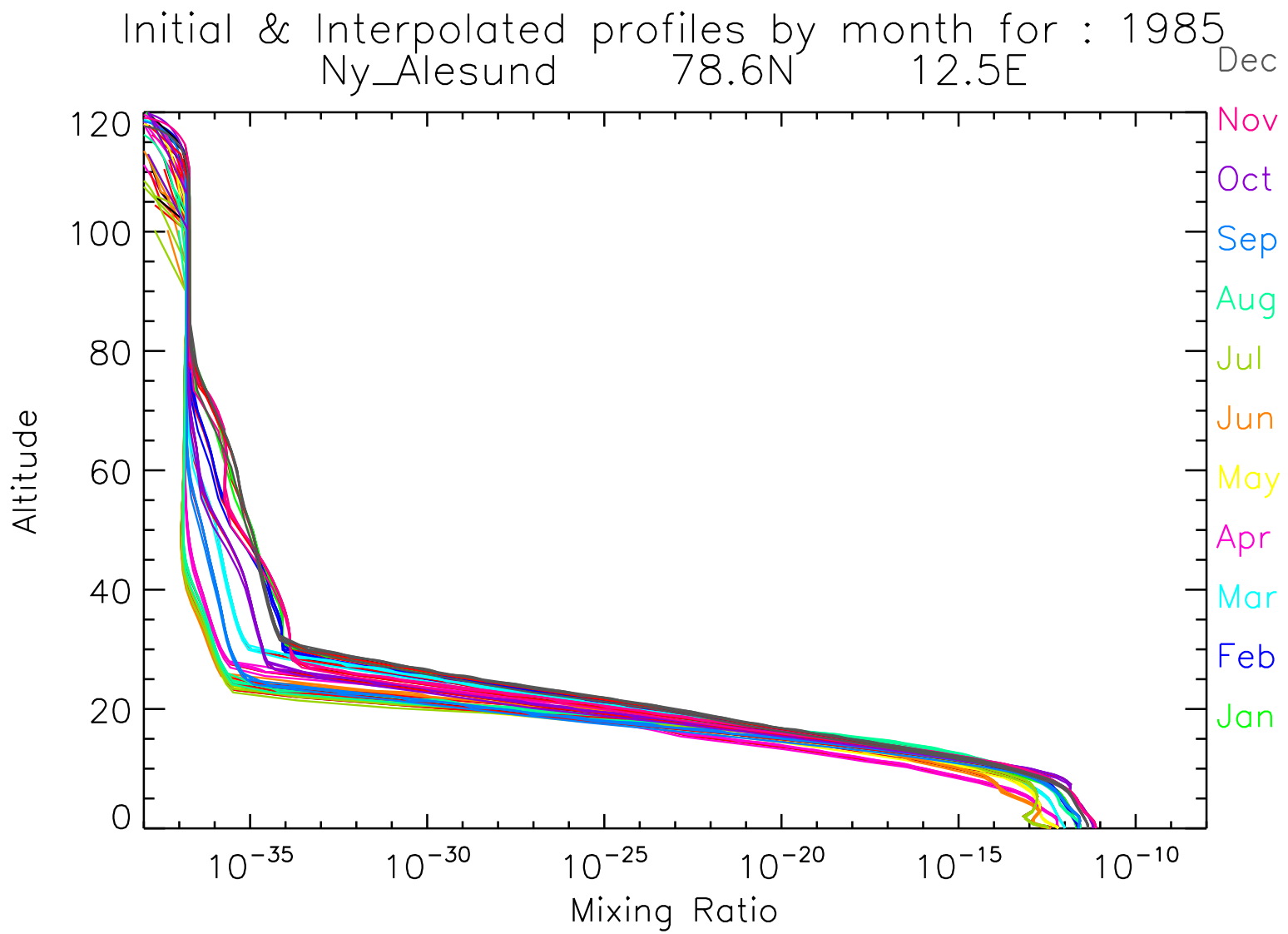
Mixing Ratio


Initial & Interpolated profiles by month for : 1985
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
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Jul
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May
Apr
Mar
Feb
Jan
Altitude
120
100
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$10^{-20}$
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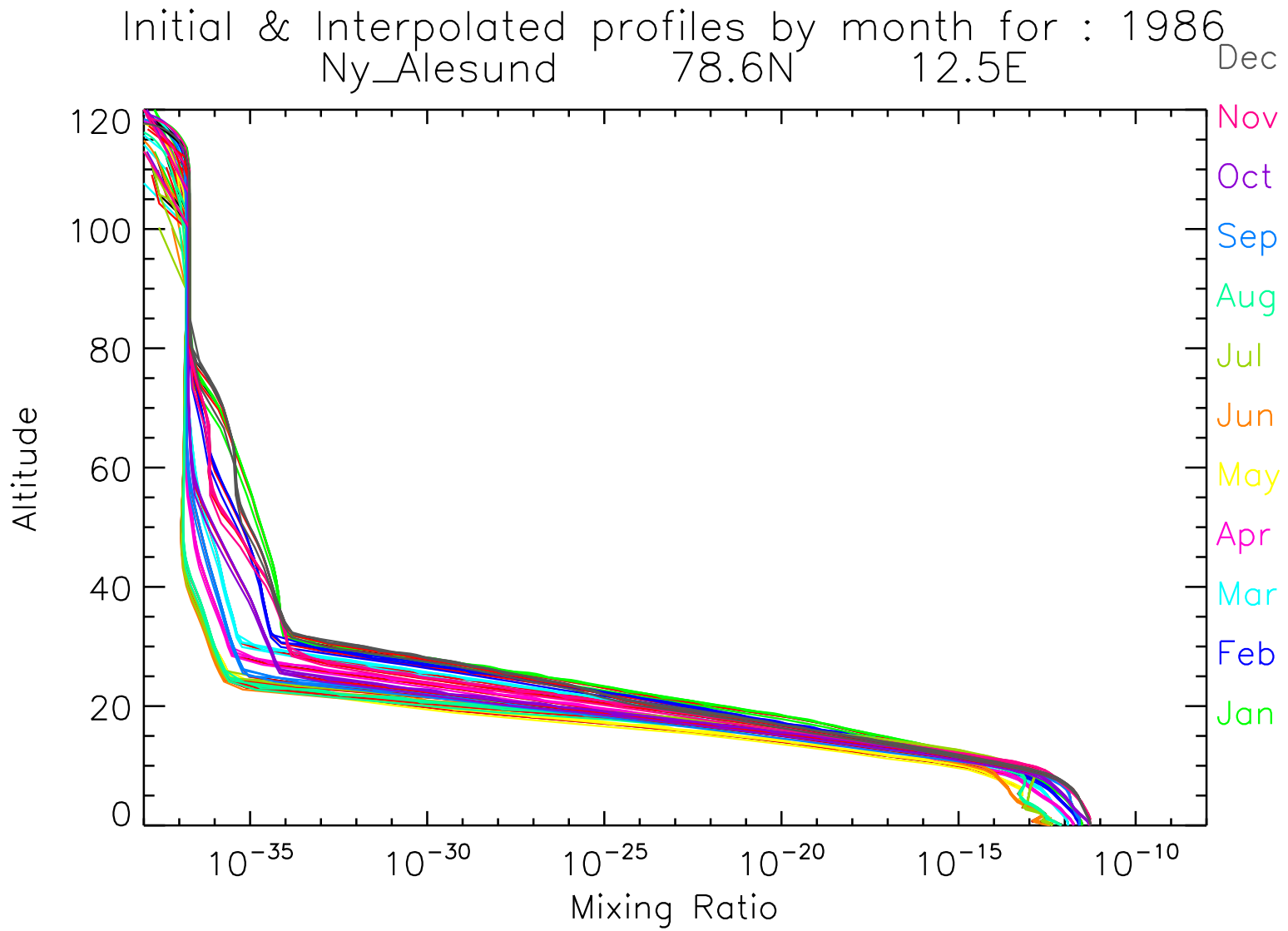
Mixing Ratio


Initial & Interpolated profiles by month for : 1986
Ny_Alesund 78.6N 12.5E
Dec
Nov
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May
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Feb
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Altitude
120
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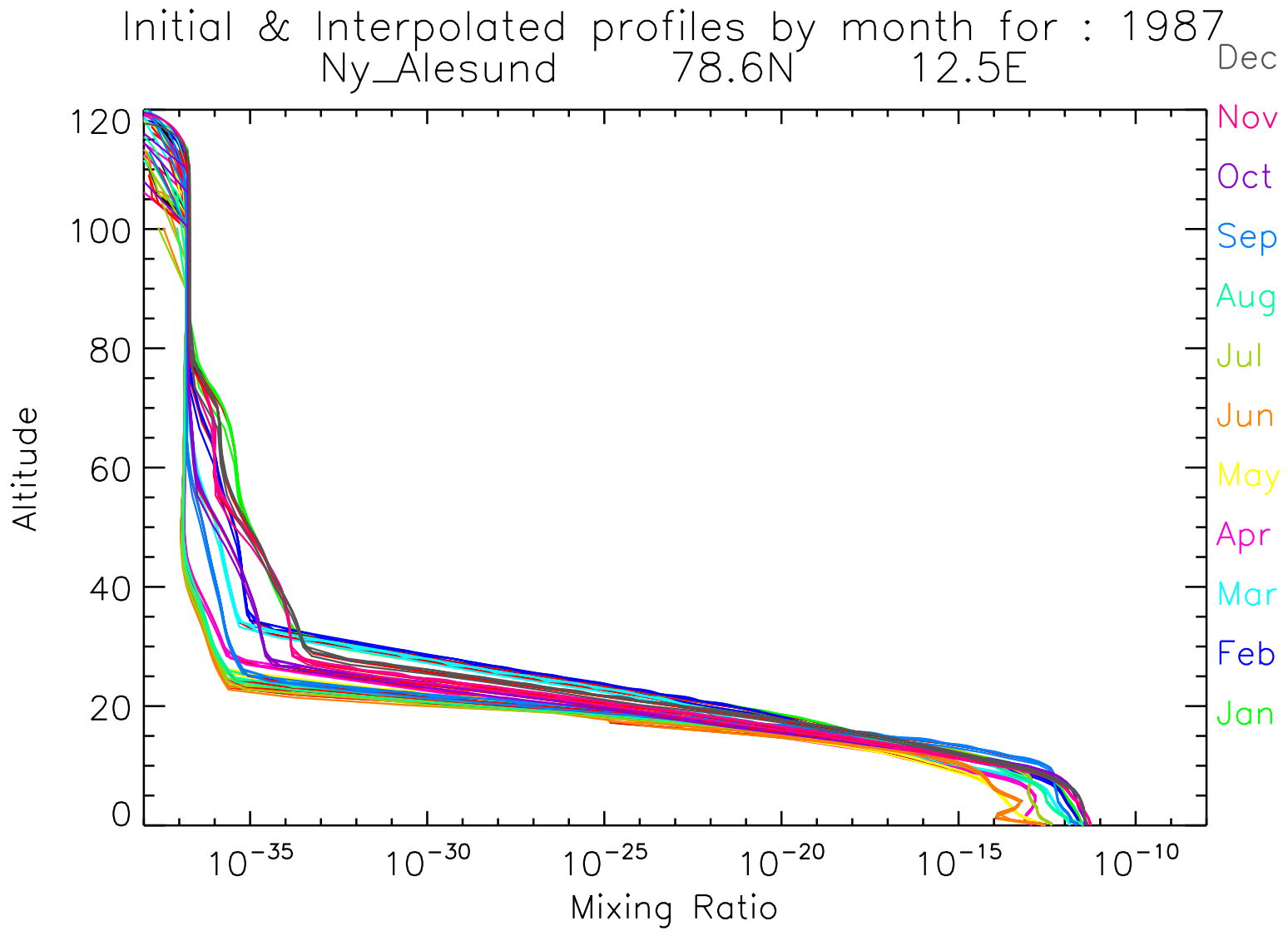
$10^{-10}$
Mixing Ratio


Initial & Interpolated profiles by month for : 1987
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
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Altitude
120
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$10^{-20}$
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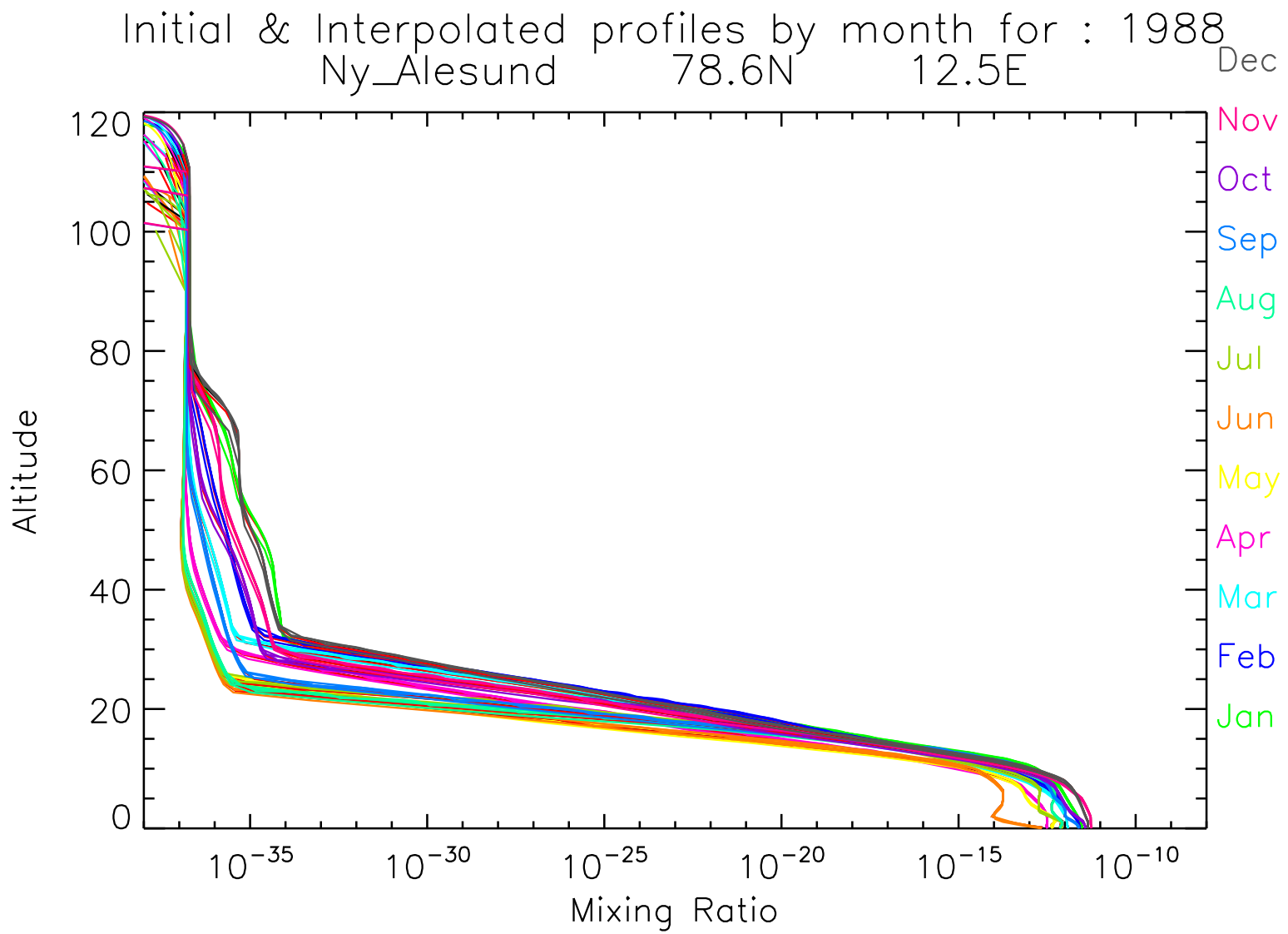
$10^{-10}$
Mixing Ratio


Initial & Interpolated profiles by month for : 1988
Ny_Alesund 78.6N 12.5E
Dec
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Altitude
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$10^{-35}$
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$10^{-25}$
$10^{-20}$
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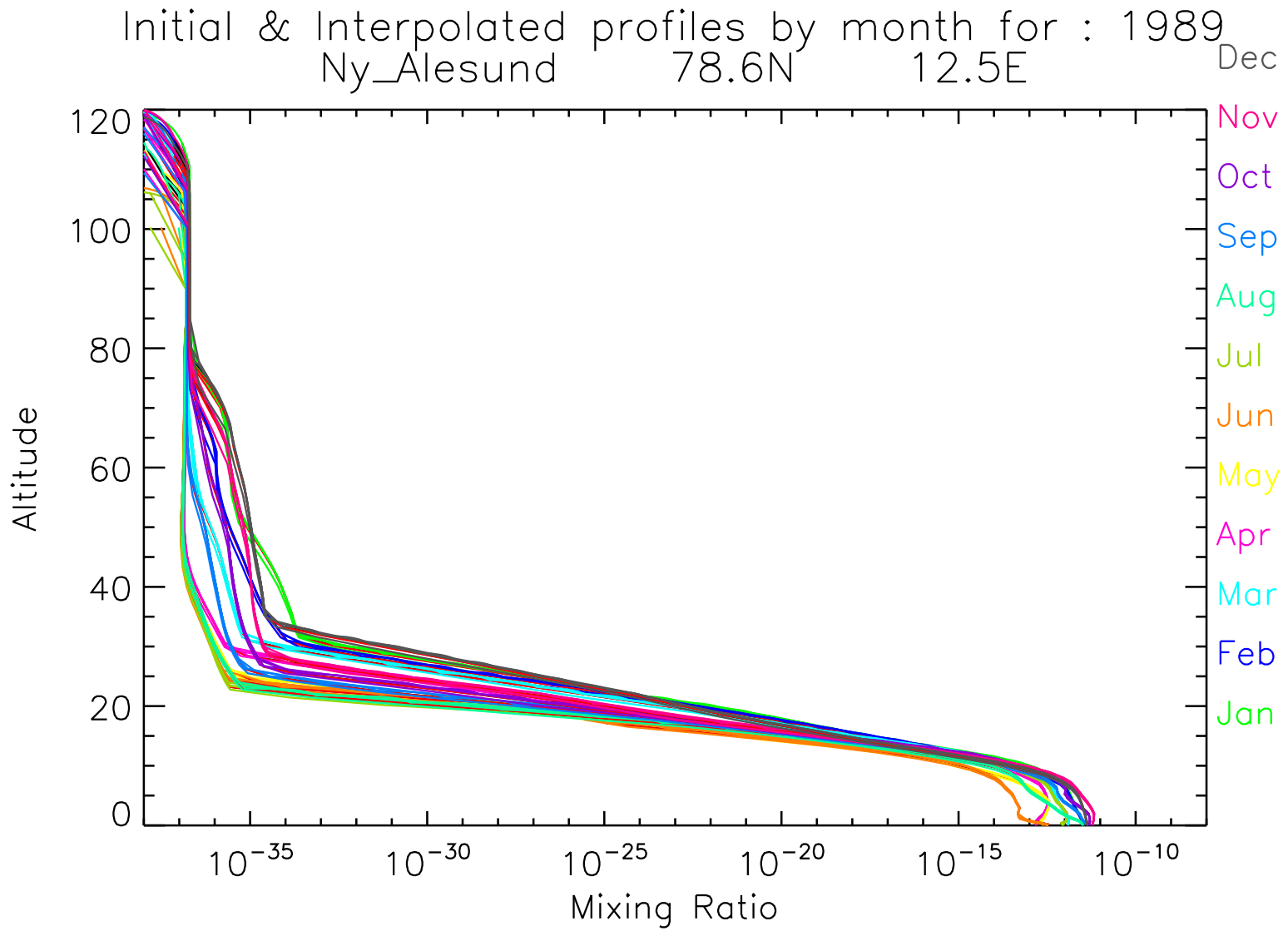
$10^{-10}$
Mixing Ratio


Initial & Interpolated profiles by month for : 1989
Ny_Alesund 78.6N 12.5E
Dec
Nov
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Altitude
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$10^{-35}$
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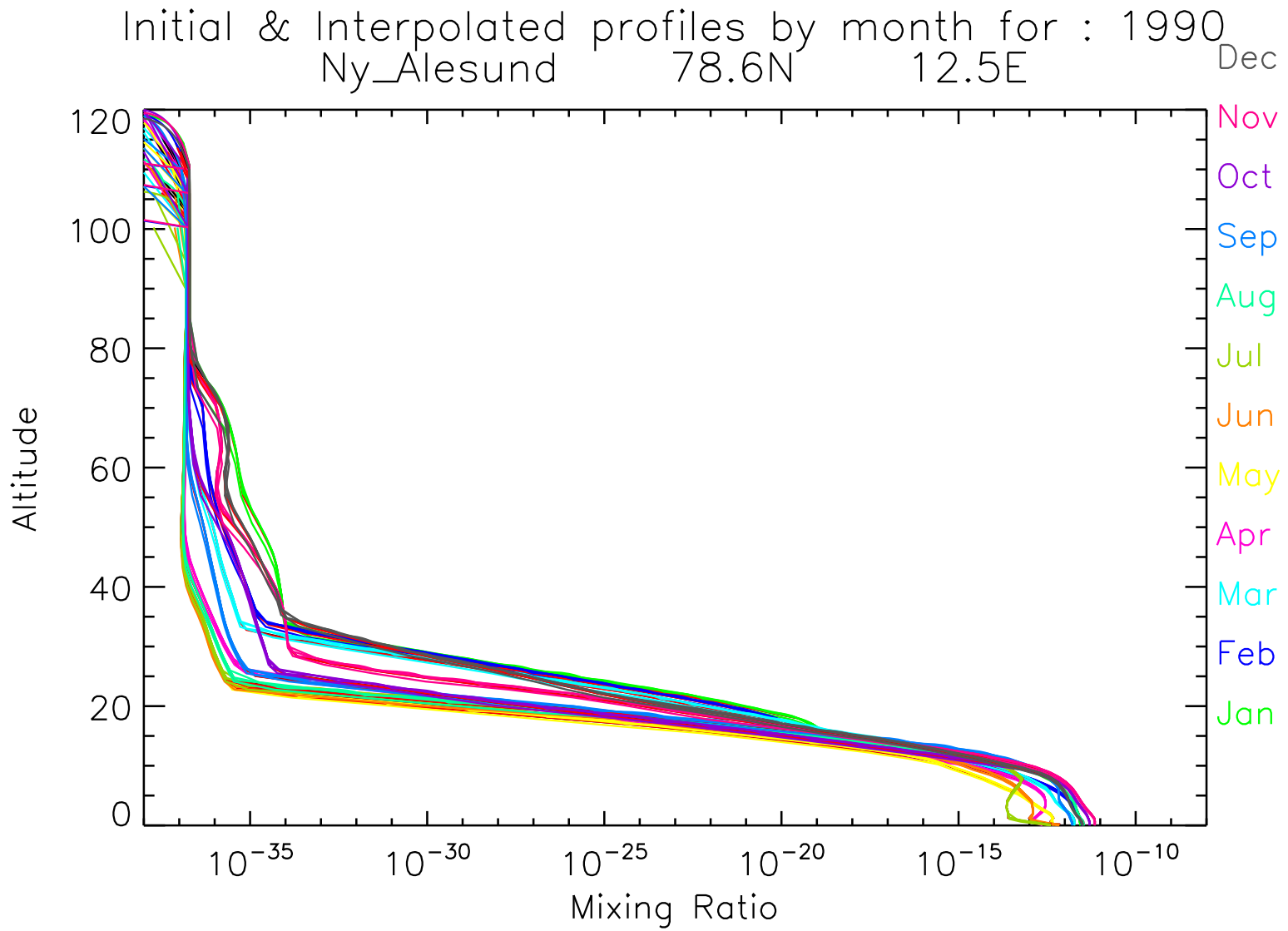
$10^{-15}$
$10^{-10}$
Mixing Ratio


Initial & Interpolated profiles by month for : 1990
Ny_Alesund 78.6N 12.5E
Dec
Nov
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Altitude
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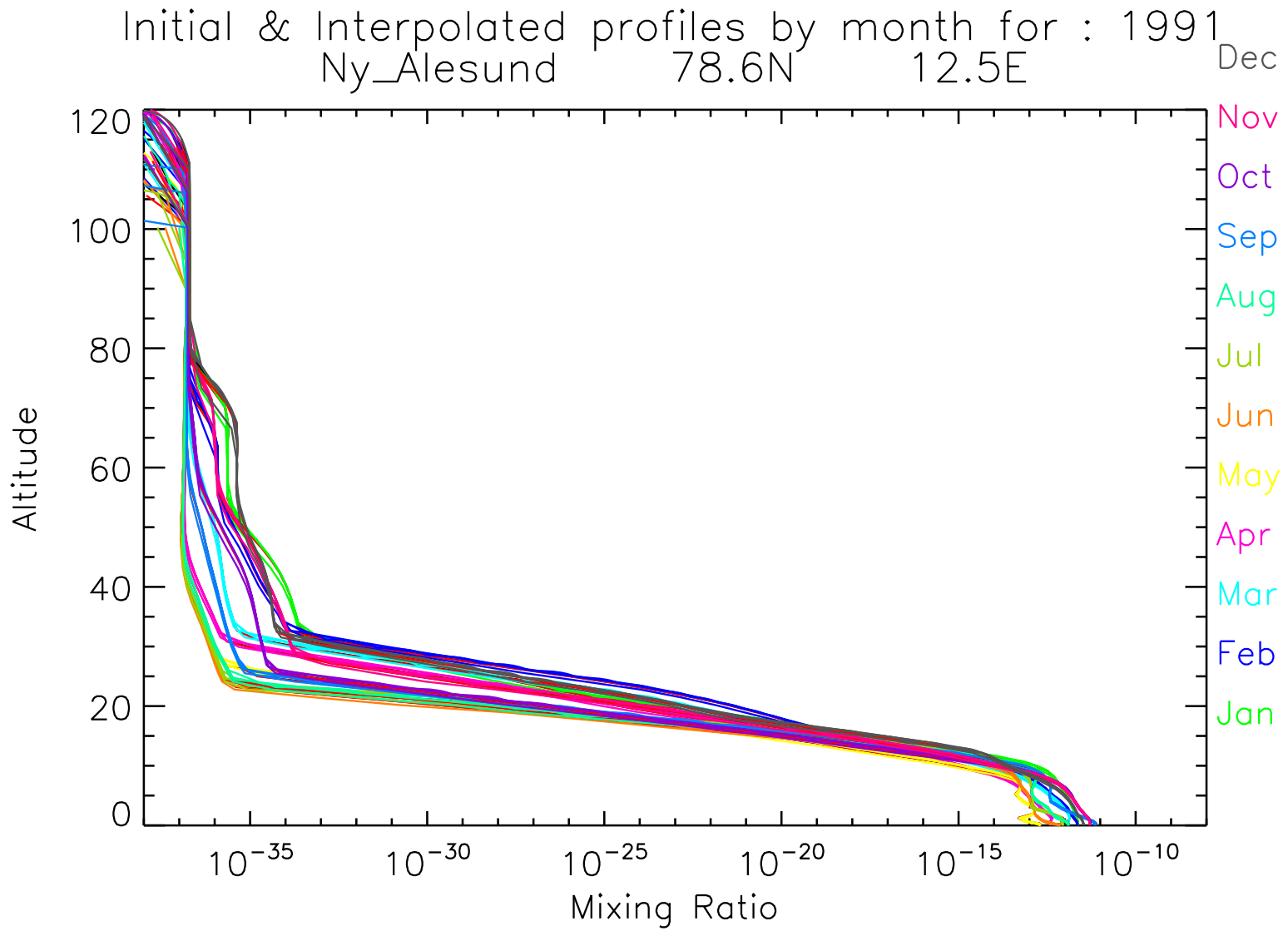
$10^{-10}$
Mixing Ratio


Initial & Interpolated profiles by month for : 1991
Ny_Alesund 78.6N 12.5E
Dec
Nov
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Altitude
120
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$10^{-35}$
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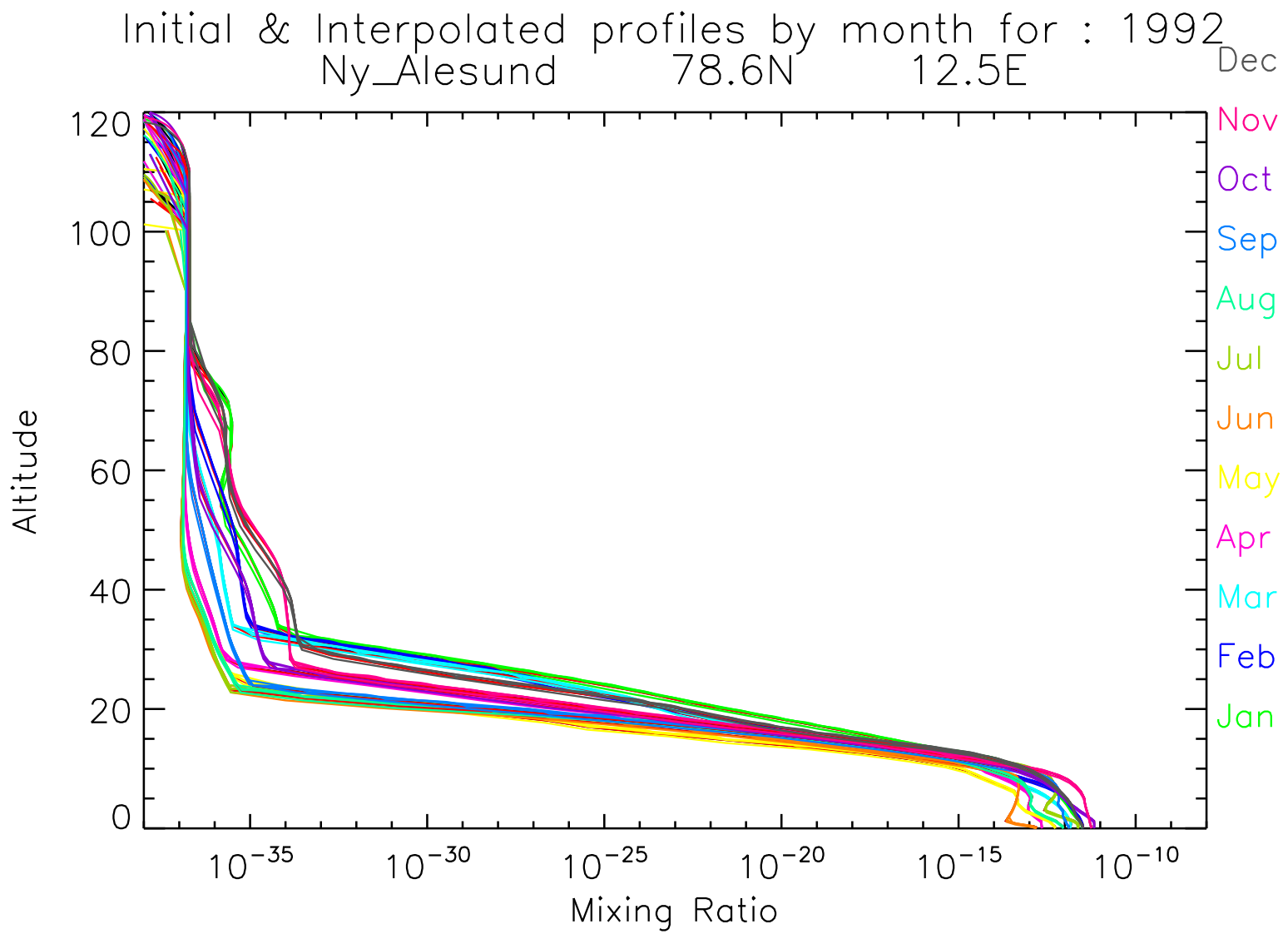
Mixing Ratio


Initial & Interpolated profiles by month for : 1992
Ny_Alesund 78.6N 12.5E
Dec
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Altitude
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$10^{-35}$
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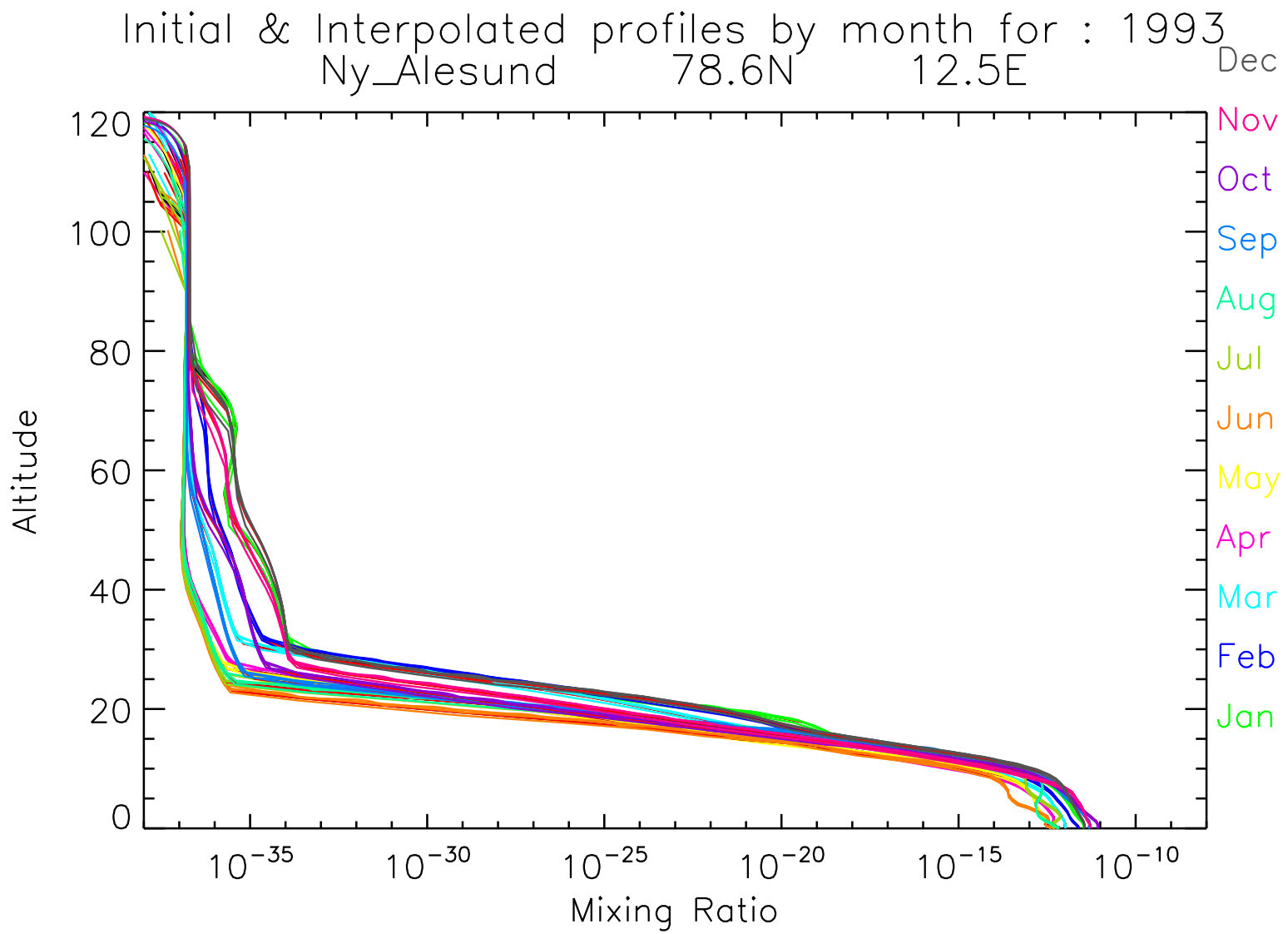
Mixing Ratio


Initial & Interpolated profiles by month for : 1993
Ny_Alesund 78.6N 12.5E
Dec
Nov
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Altitude
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$10^{-35}$
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$10^{-20}$
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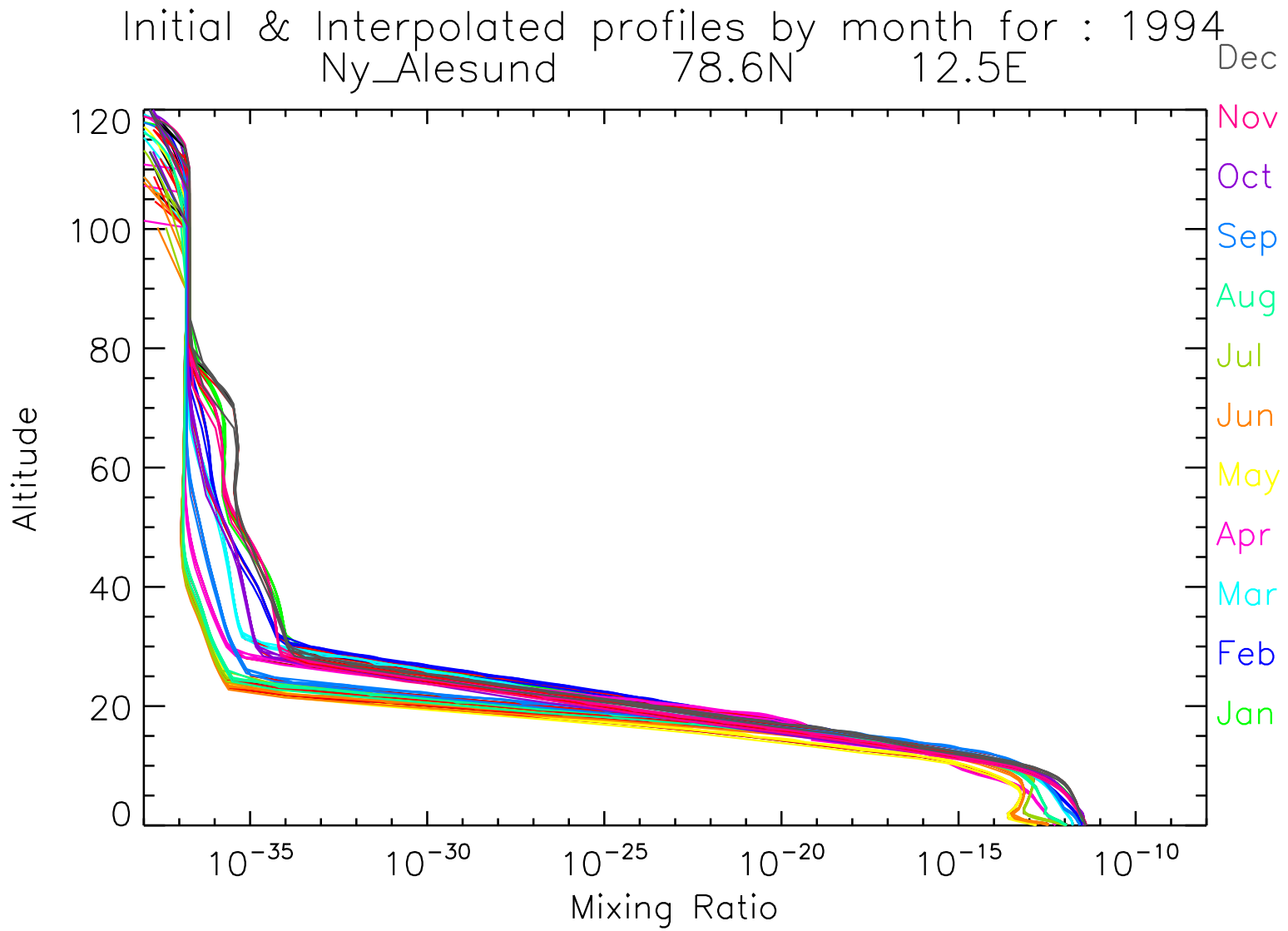
$10^{-10}$
Mixing Ratio


Initial & Interpolated profiles by month for : 1994
Ny_Alesund 78.6N 12.5E
Dec
Nov
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Altitude
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$10^{-35}$
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$10^{-25}$
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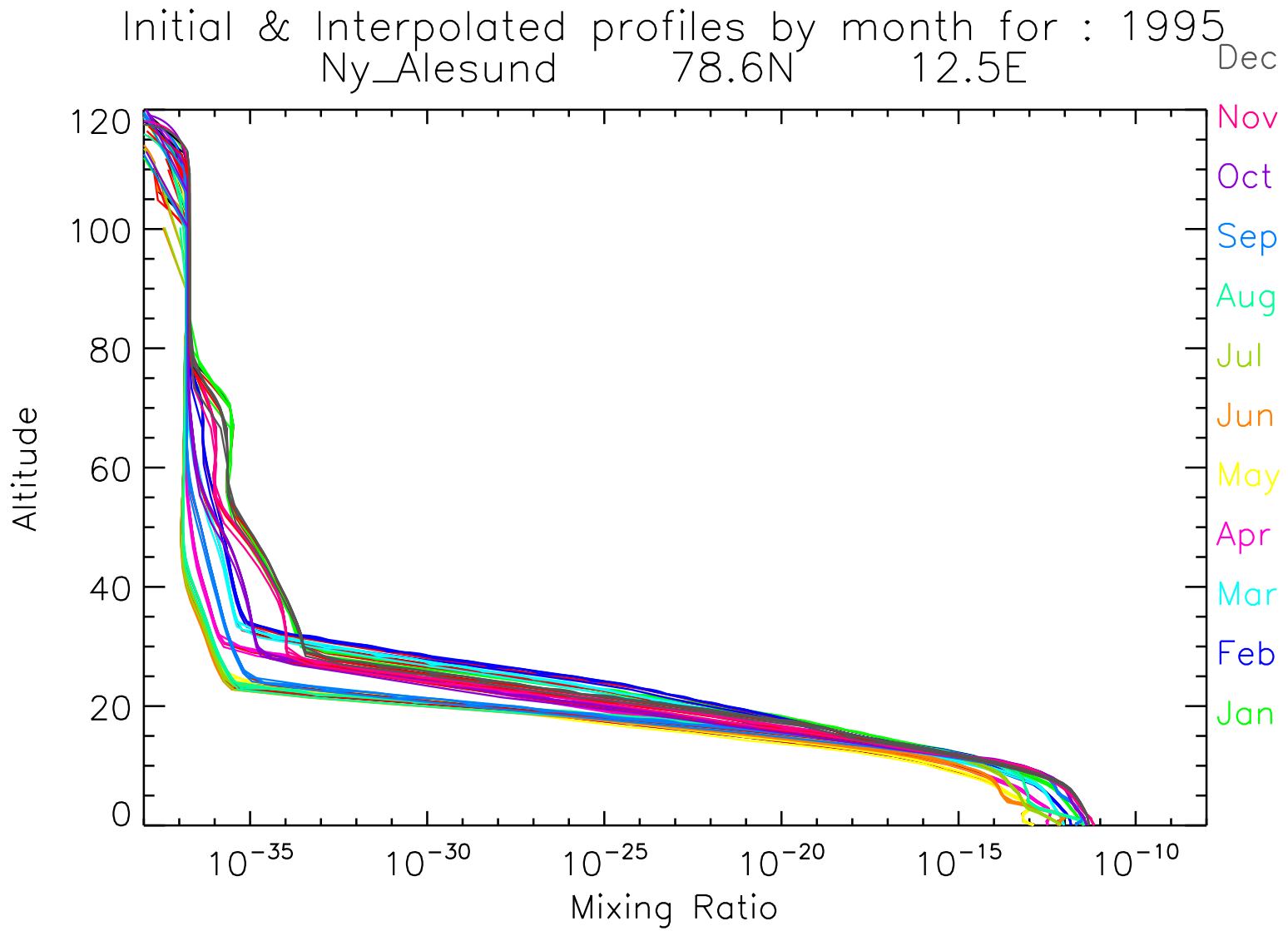
Mixing Ratio


Initial & Interpolated profiles by month for : 1995
Ny_Alesund 78.6N 12.5E
Dec
Nov
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Feb
Jan
Altitude
120
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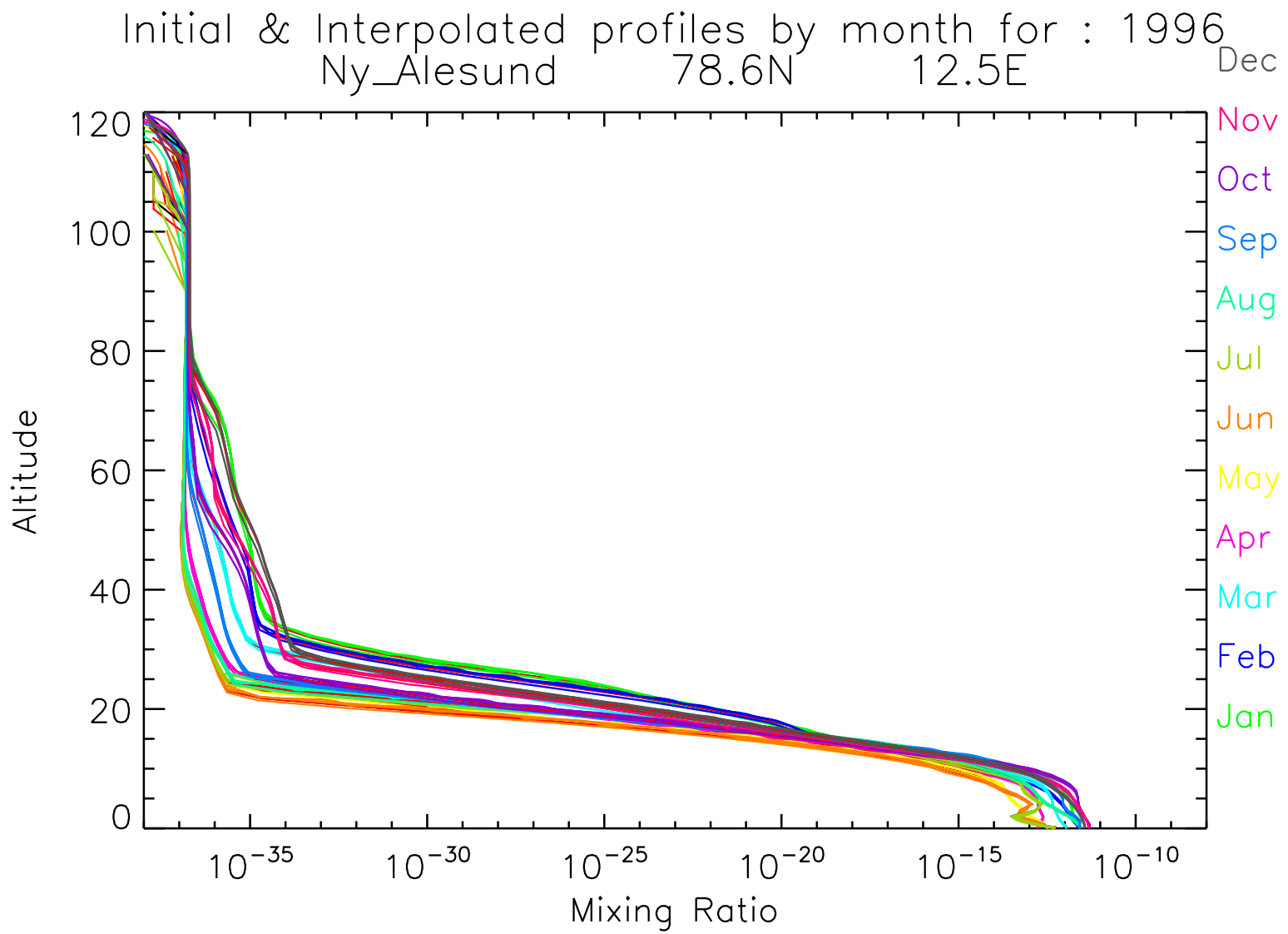
Mixing Ratio


Initial & Interpolated profiles by month for : 1996
Ny_Alesund 78.6N 12.5E
Dec
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Altitude
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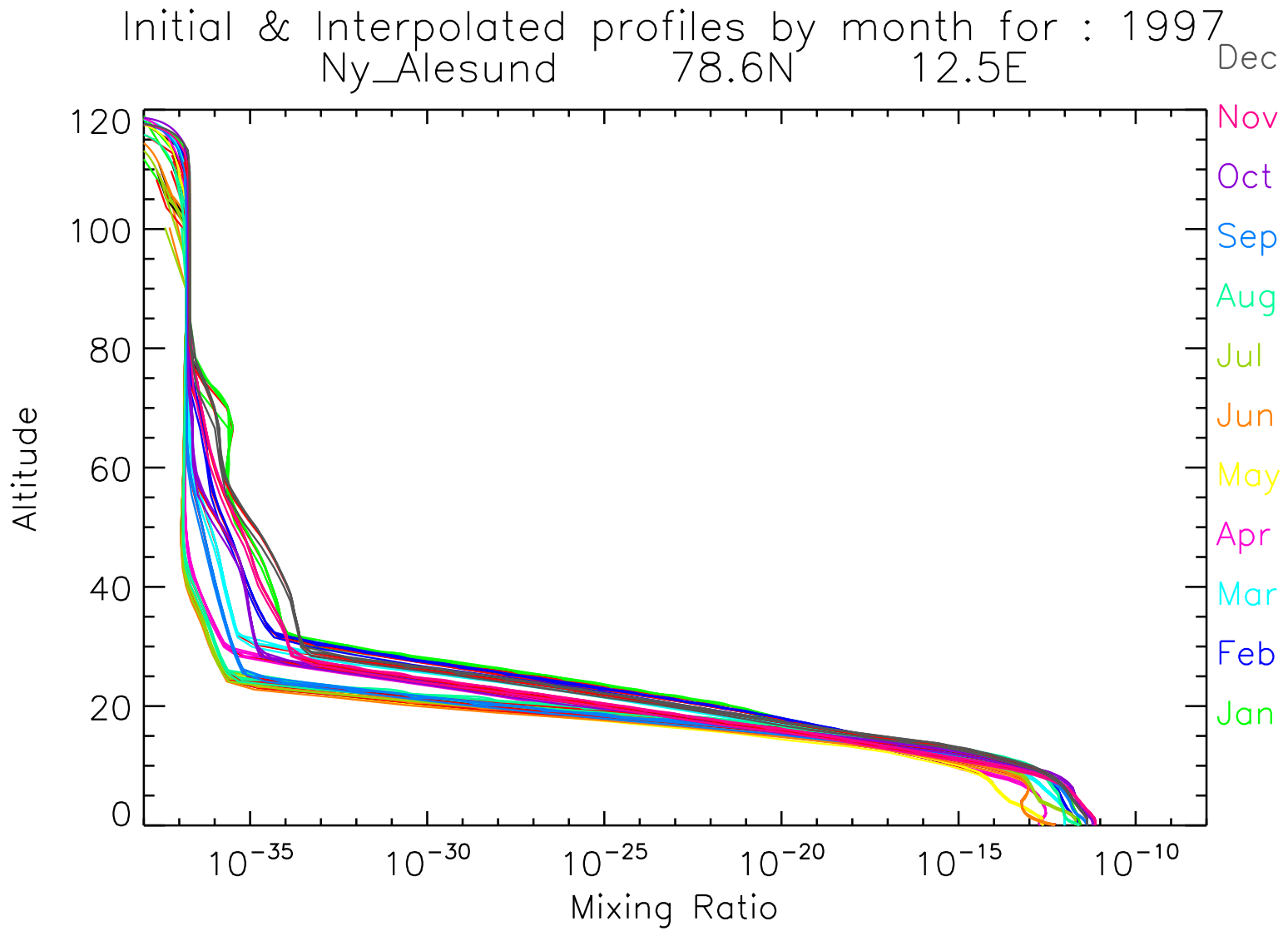
Mixing Ratio


Initial & Interpolated profiles by month for : 1997
Ny_Alesund 78.6N 12.5E
Dec
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Feb
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Altitude
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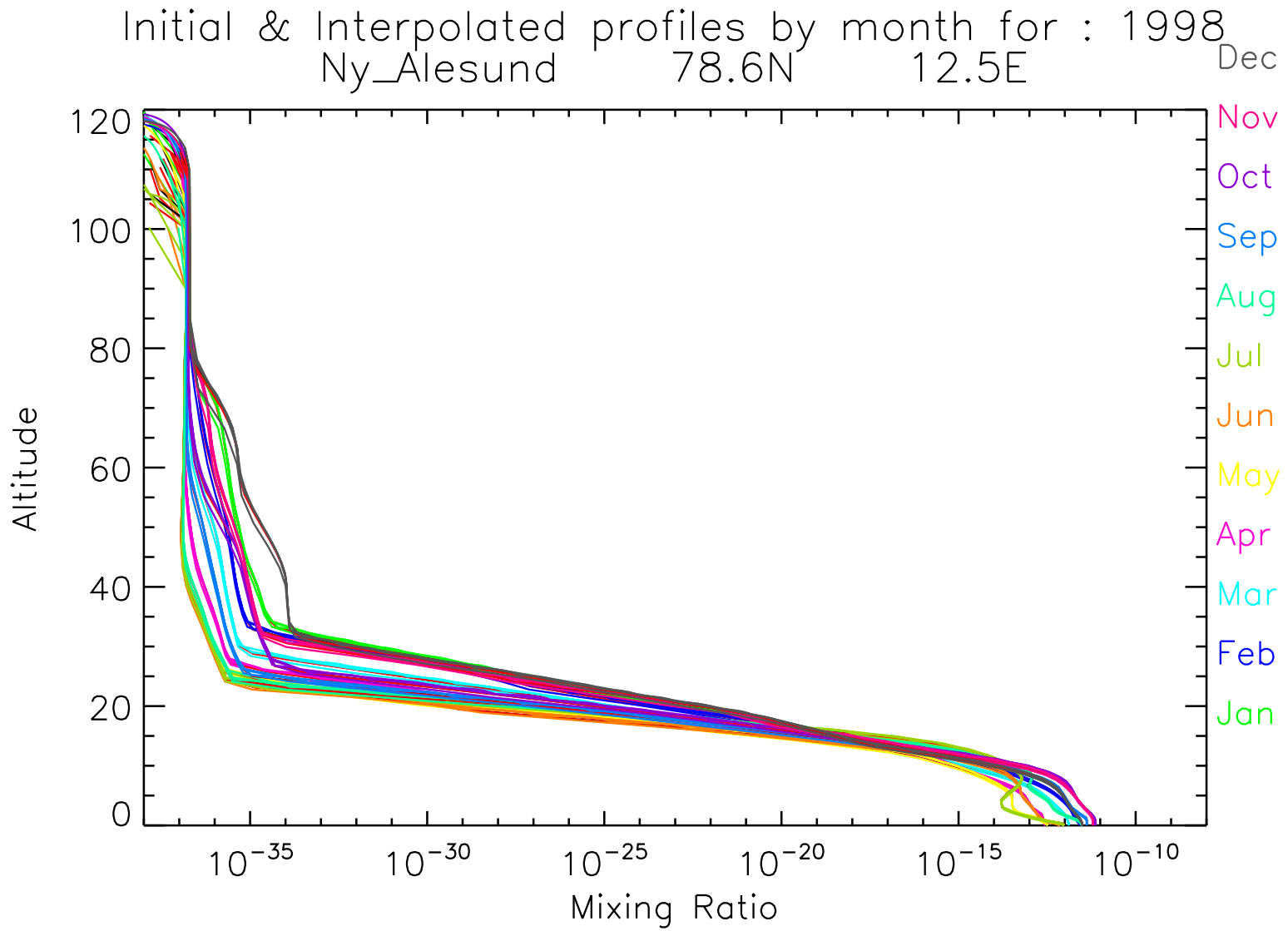
Mixing Ratio


Initial & Interpolated profiles by month for : 1998
Ny_Alesund 78.6N 12.5E
Dec
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Feb
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Altitude
120
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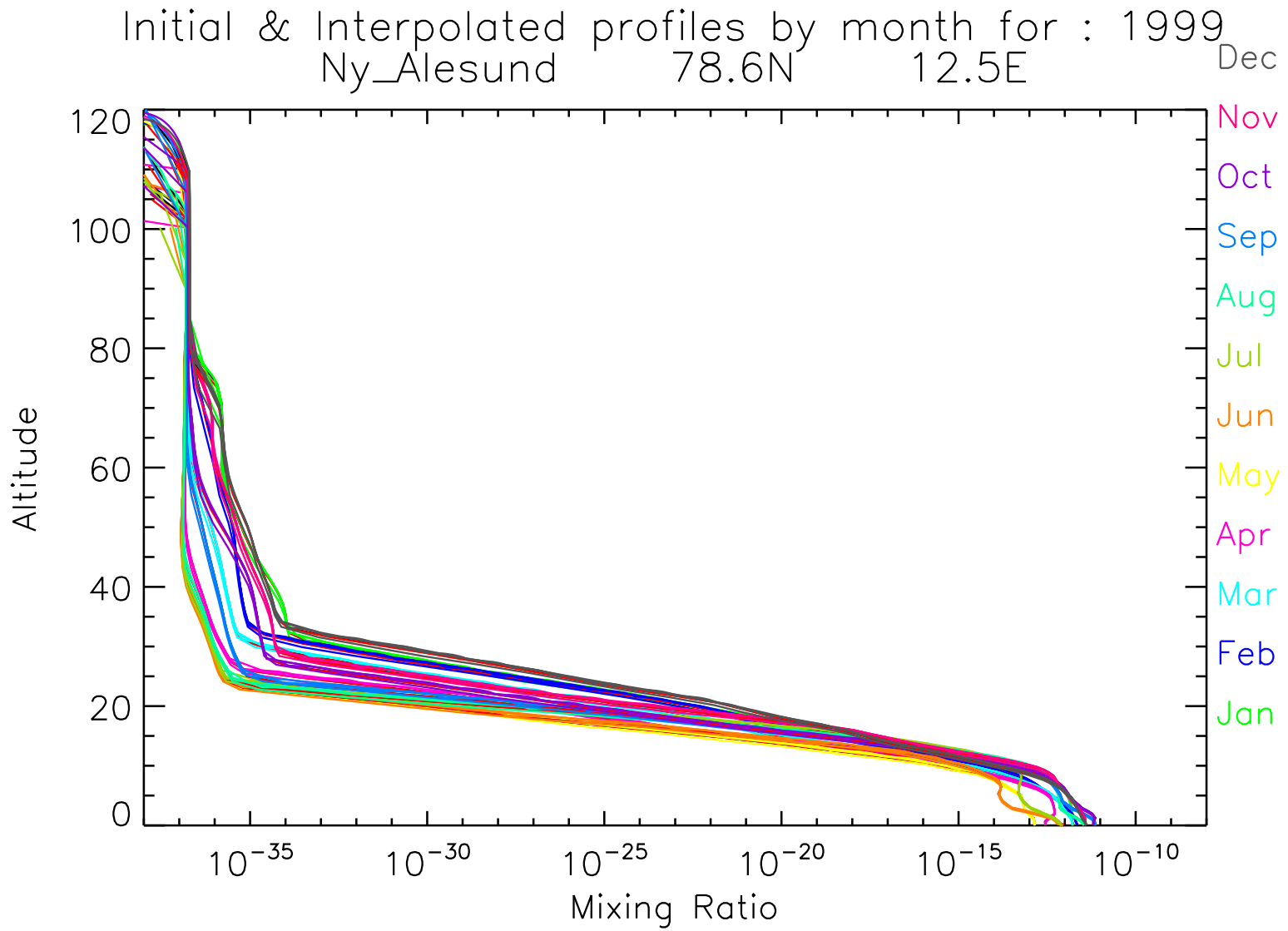
$10^{-10}$
Mixing Ratio


Initial & Interpolated profiles by month for : 1999
Ny_Alesund 78.6N 12.5E
Dec
Nov
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May
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Jan
Altitude
120
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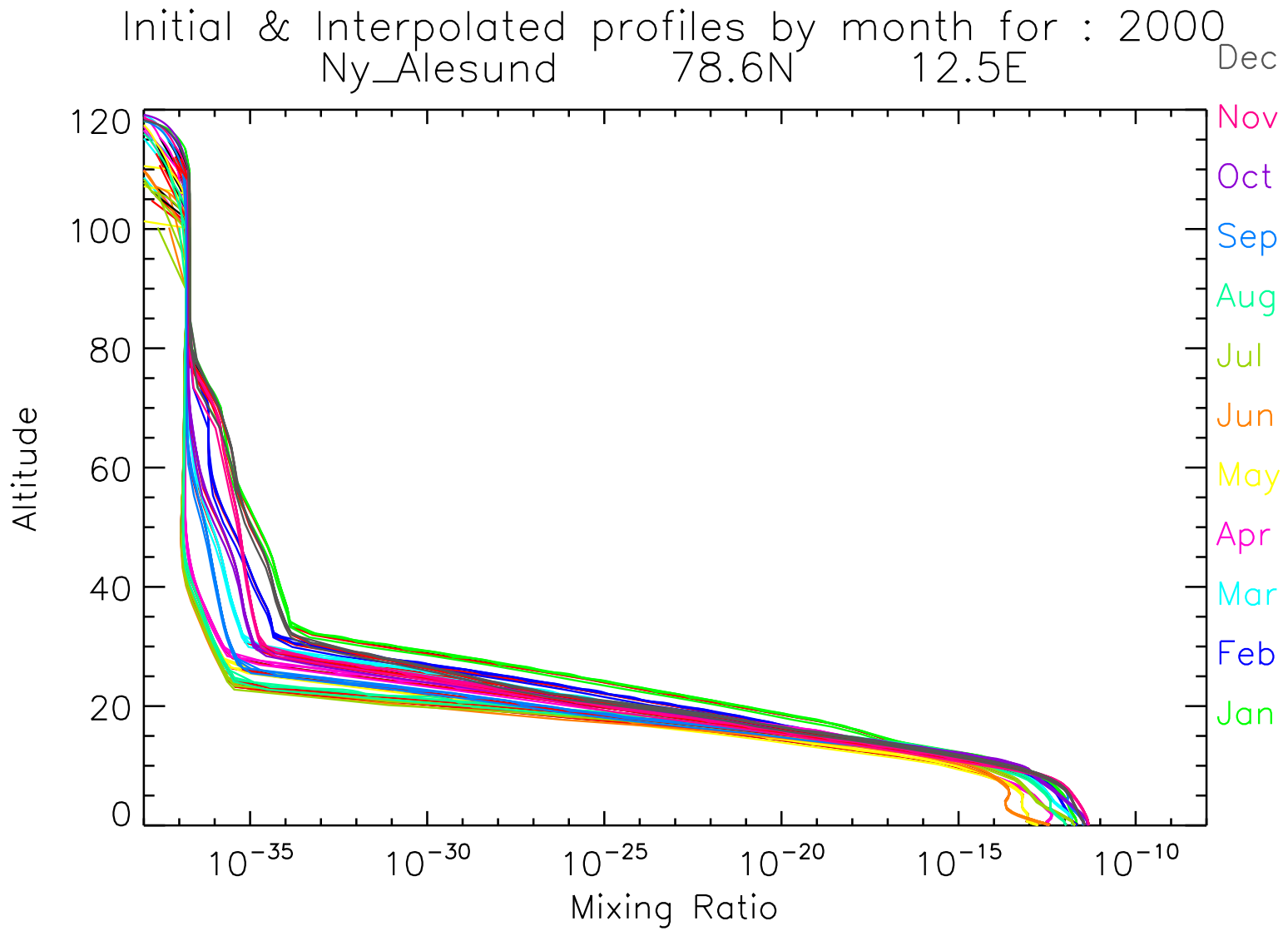
Mixing Ratio


Initial & Interpolated profiles by month for : 2000
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
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May
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Feb
Jan
Altitude
120
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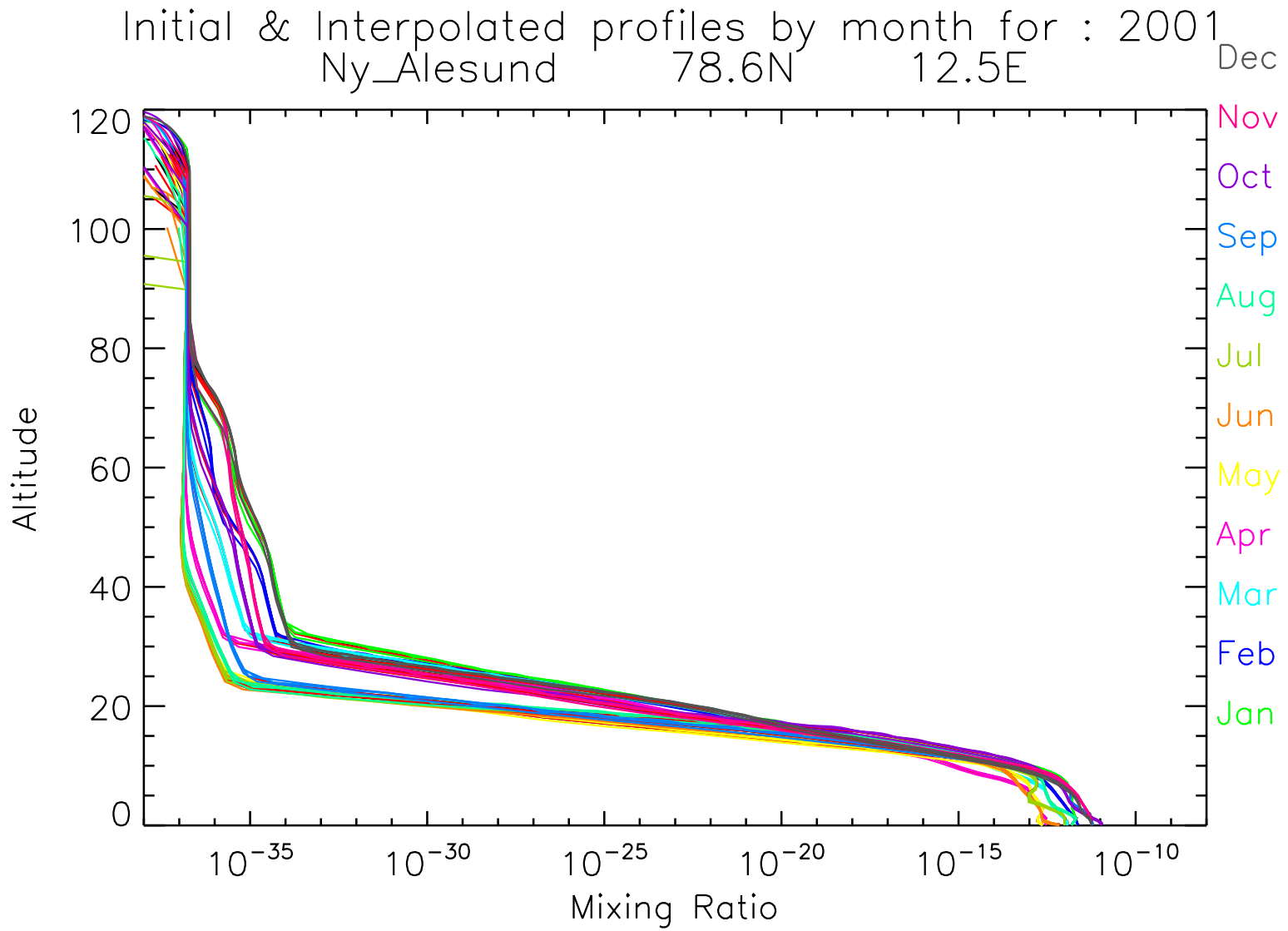
Mixing Ratio


Initial & Interpolated profiles by month for : 2001
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
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Jul
Jun
May
Apr
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Feb
Jan
Altitude
120
100
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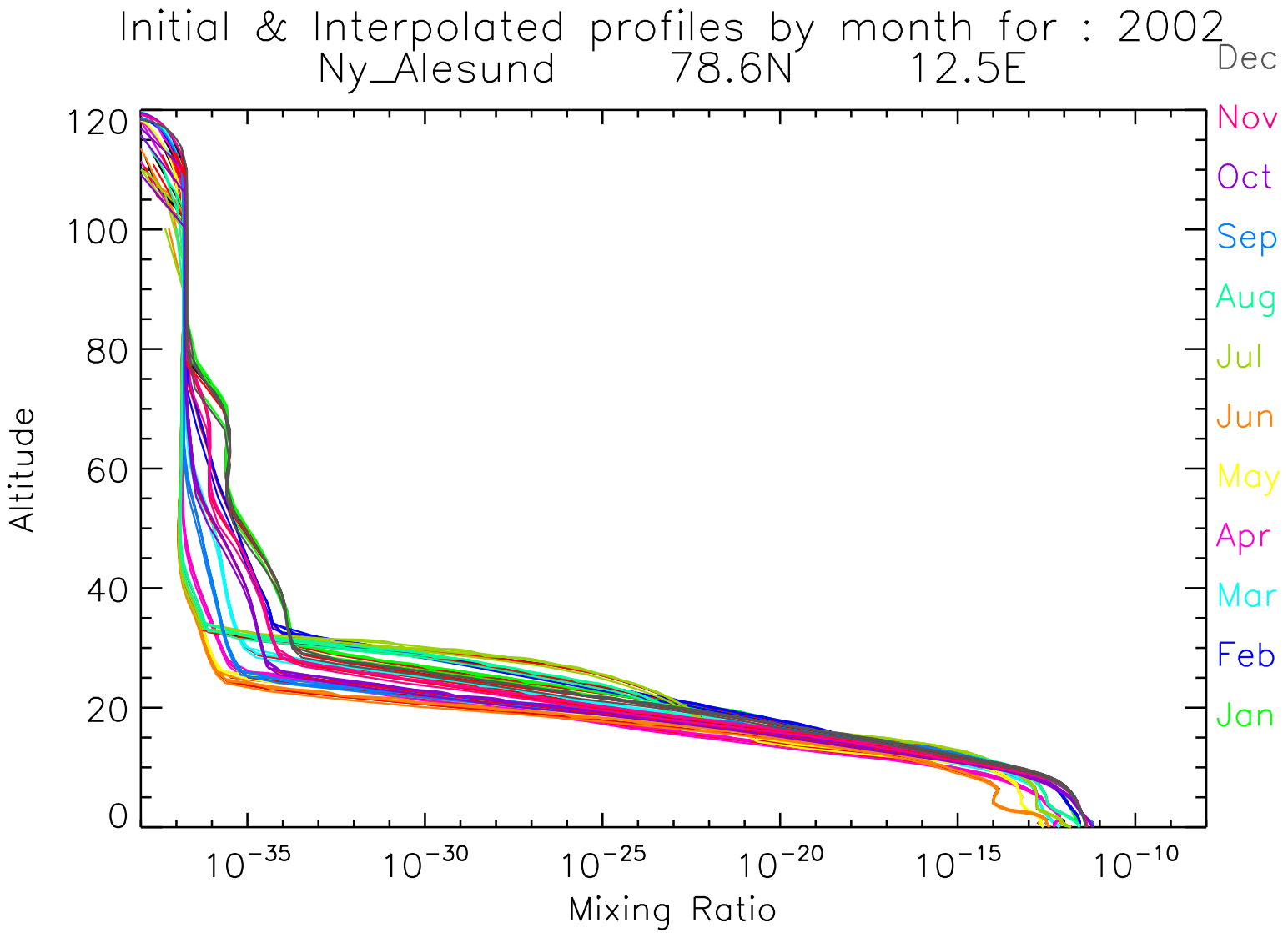
Mixing Ratio


Initial & Interpolated profiles by month for : 2002
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
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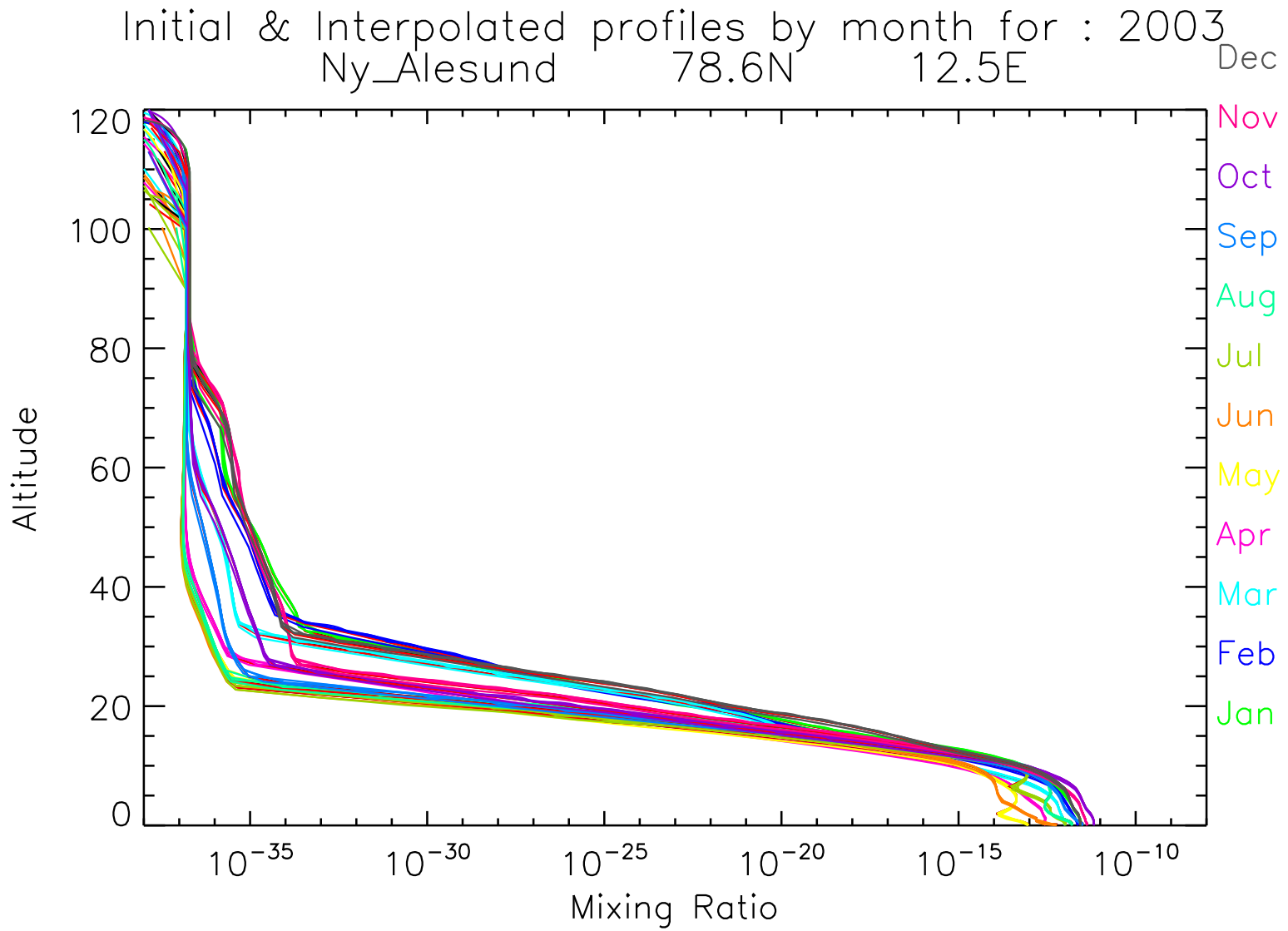
Mixing Ratio


Initial & Interpolated profiles by month for : 2003
Ny_Alesund 78.6N 12.5E
Dec
Nov
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May
Apr
Mar
Feb
Jan
Altitude
120
100
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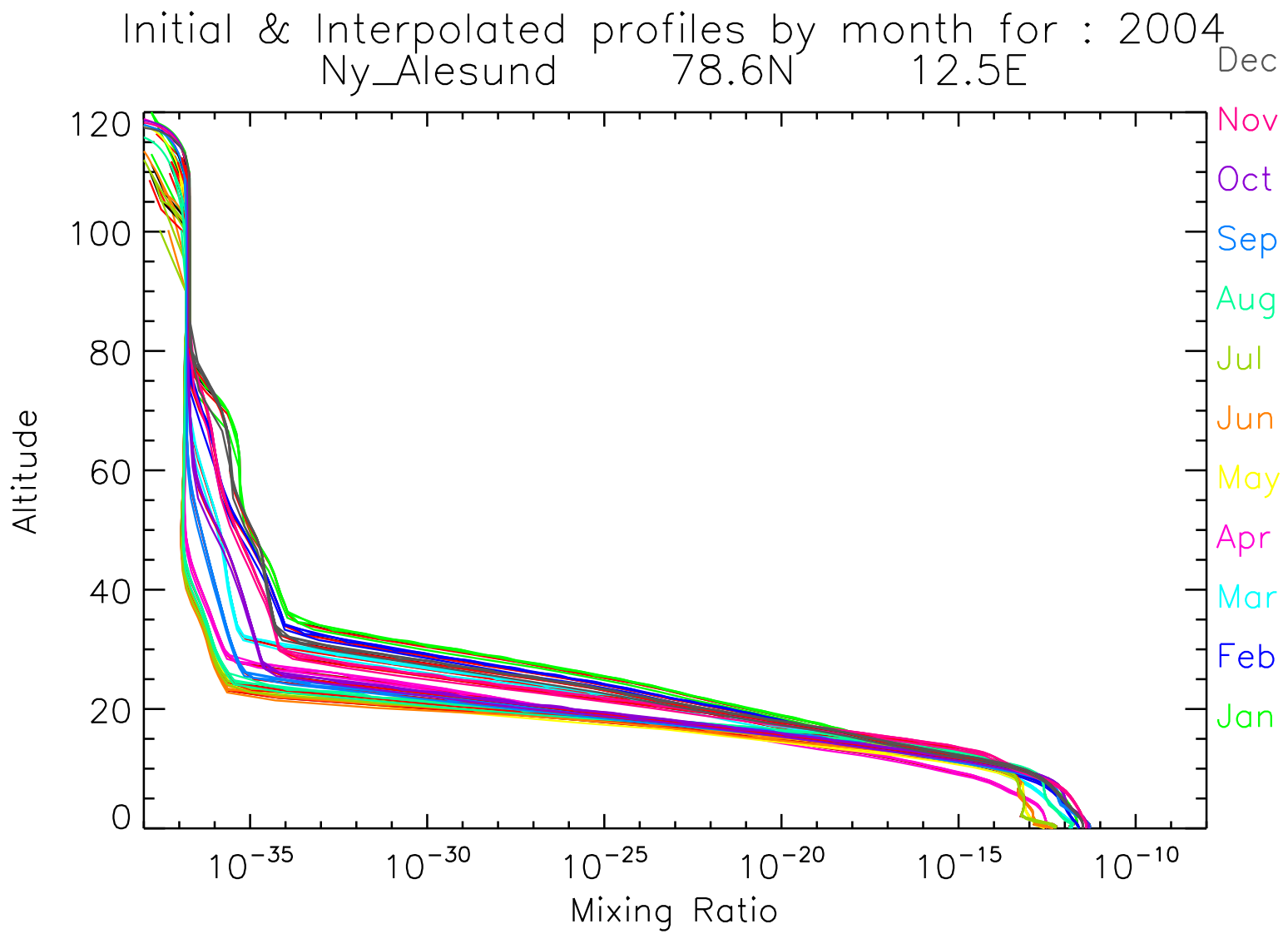
Mixing Ratio


Initial & Interpolated profiles by month for : 2004
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
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May
Apr
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Feb
Jan
Altitude
120
100
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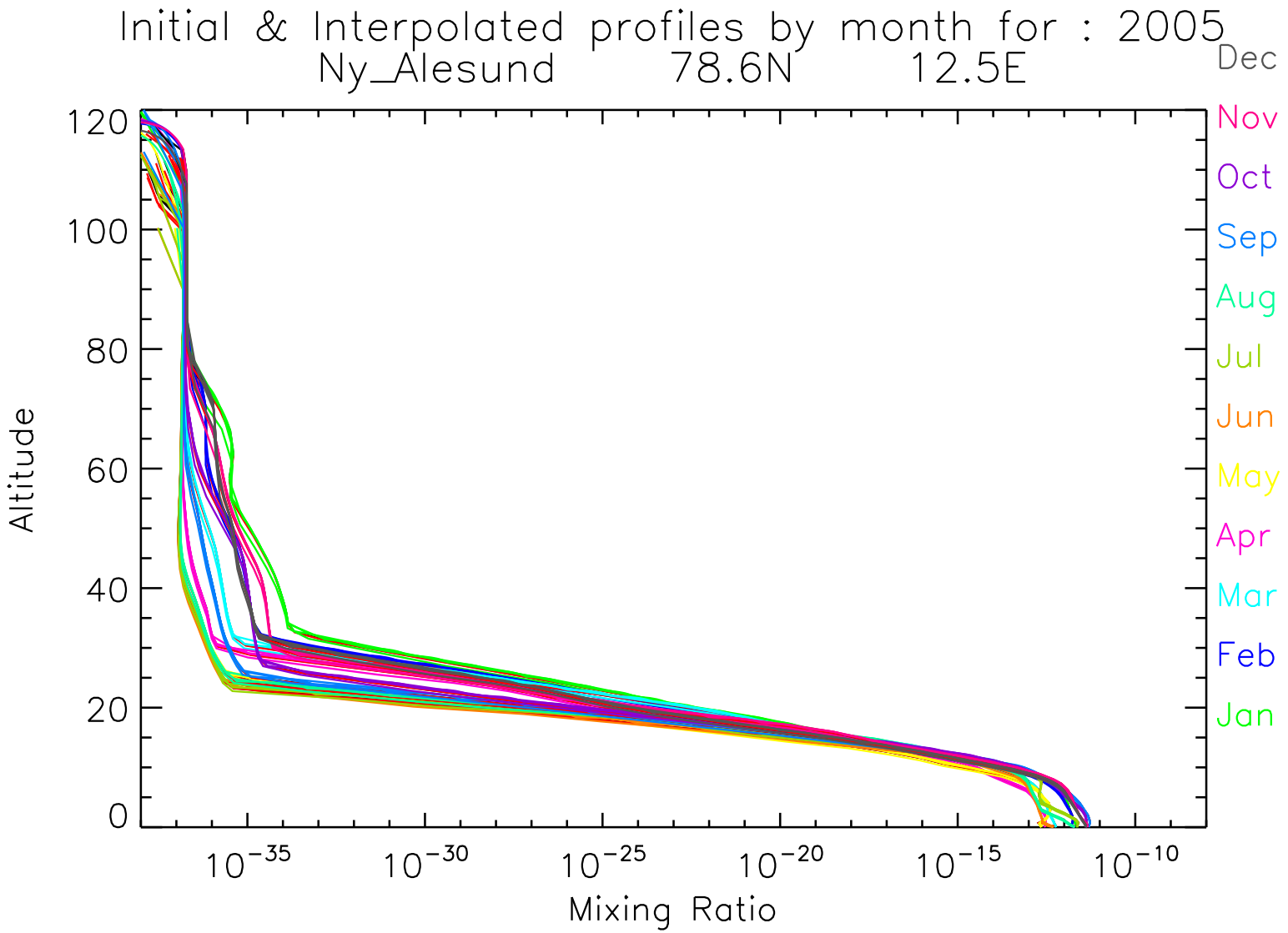
Mixing Ratio


Initial & Interpolated profiles by month for : 2005
Ny_Alesund 78.6N 12.5E
Dec
Nov
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May
Apr
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Feb
Jan
Altitude
120
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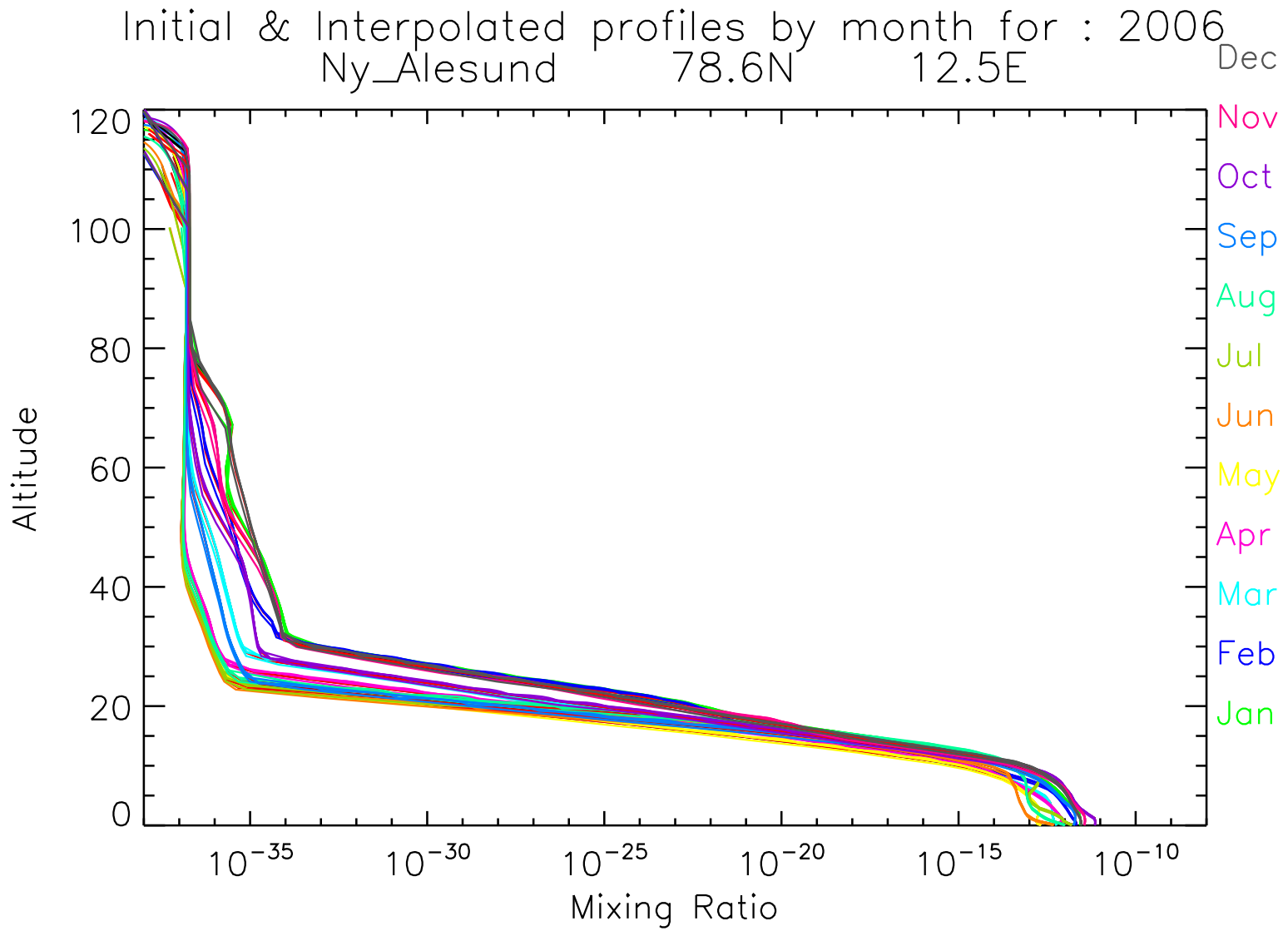
Mixing Ratio


Initial & Interpolated profiles by month for : 2006
Ny_Alesund 78.6N 12.5E
Dec
Nov
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May
Apr
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Feb
Jan
Altitude
120
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$10^{-35}$
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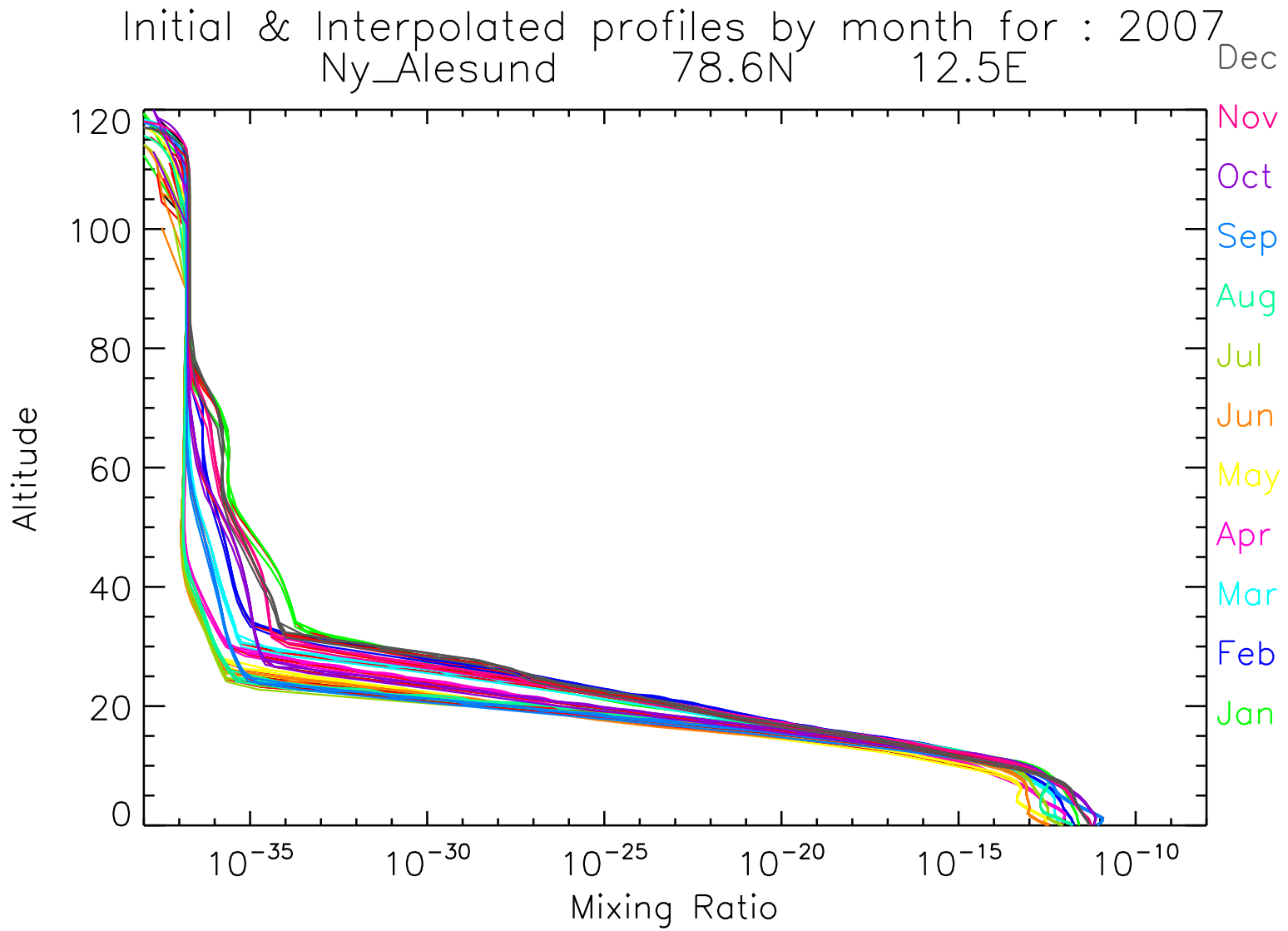
$10^{-10}$
Mixing Ratio


Initial & Interpolated profiles by month for : 2007
Ny_Alesund 78.6N 12.5E
Dec
Nov
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May
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Feb
Jan
Altitude
120
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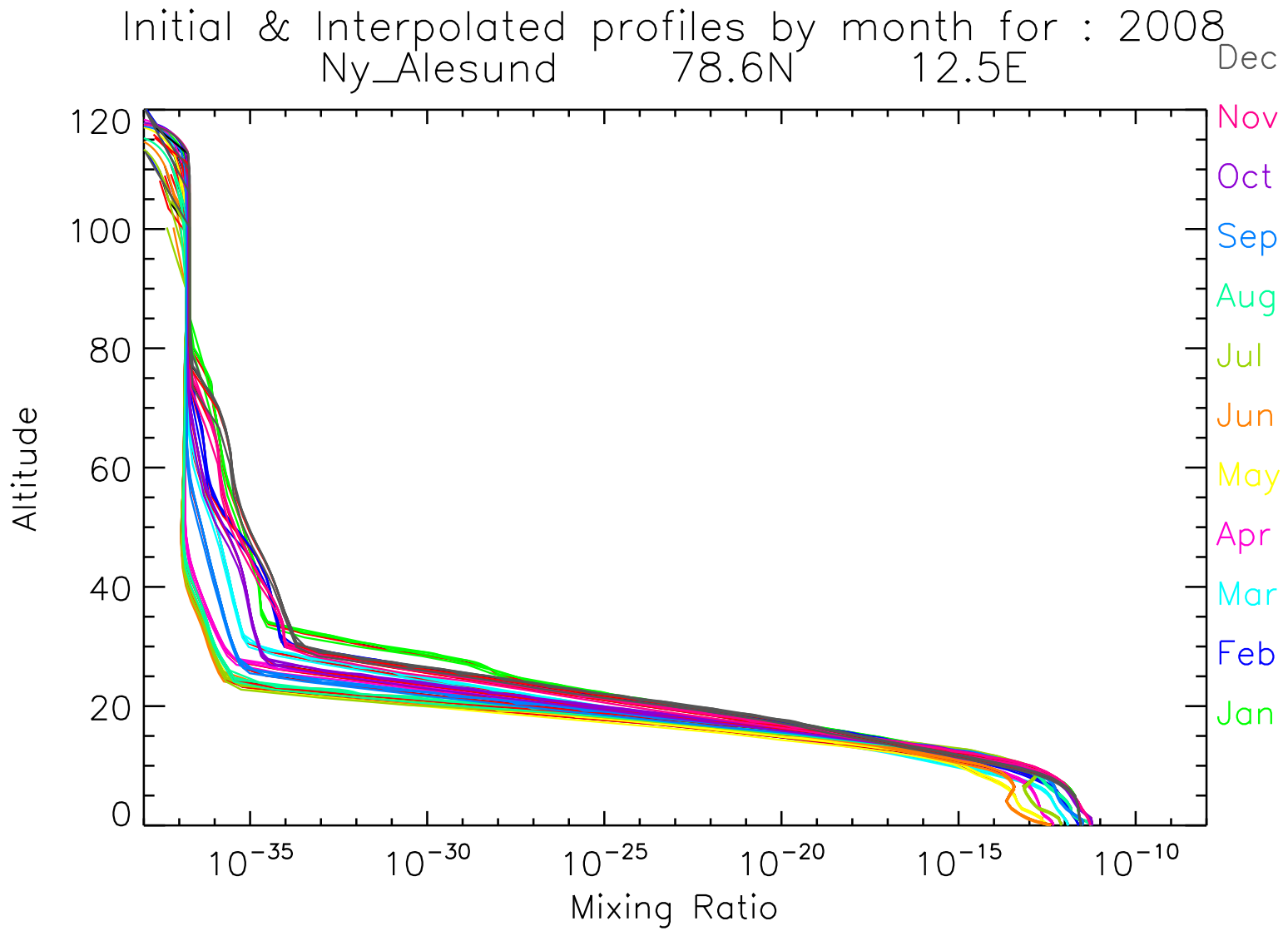
$10^{-10}$
Mixing Ratio


Initial & Interpolated profiles by month for : 2008
Ny_Alesund 78.6N 12.5E
Dec
Nov
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May
Apr
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Feb
Jan
Altitude
120
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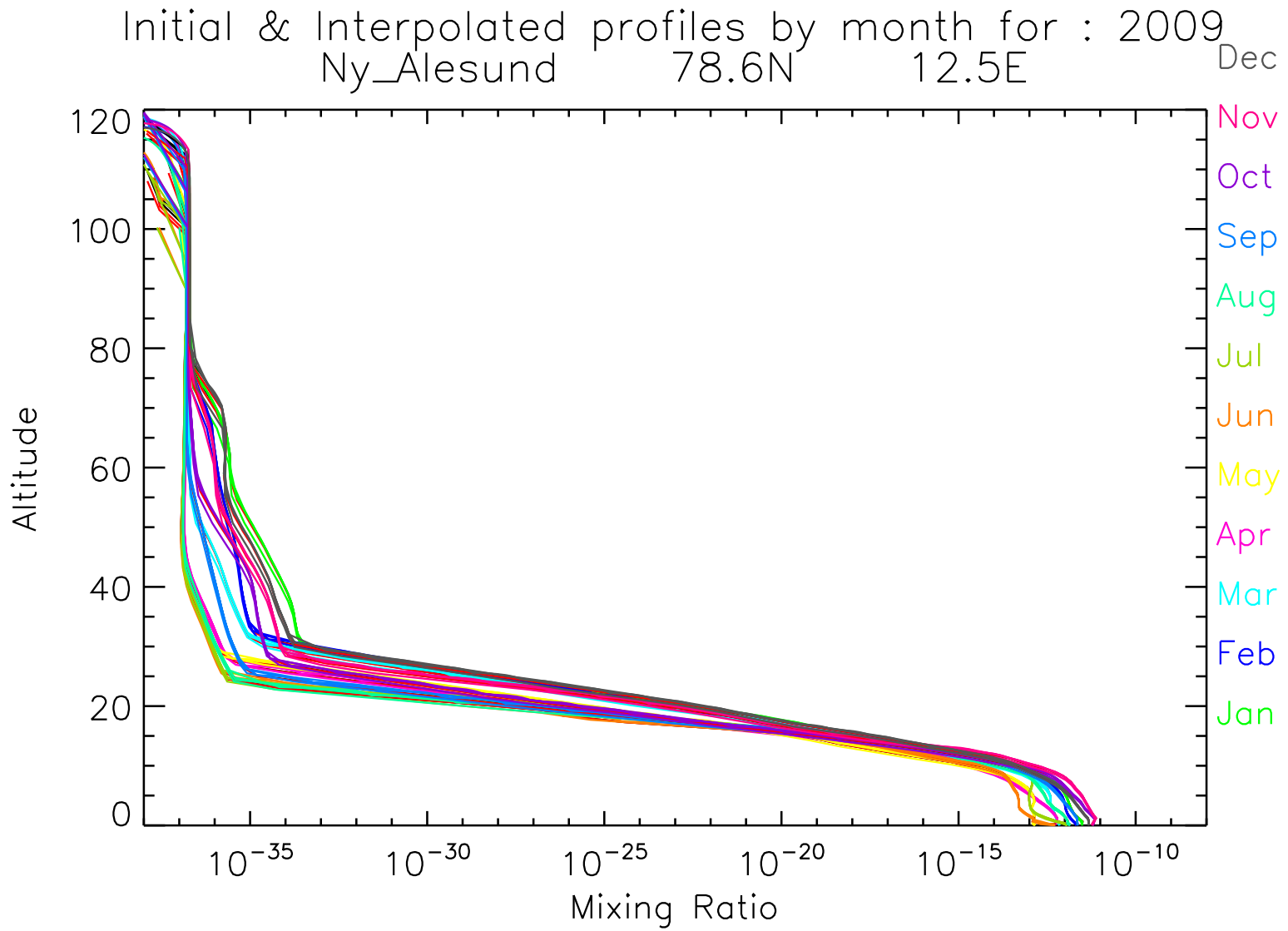
$10^{-10}$
Mixing Ratio


Initial & Interpolated profiles by month for : 2009
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
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May
Apr
Mar
Feb
Jan
Altitude
120
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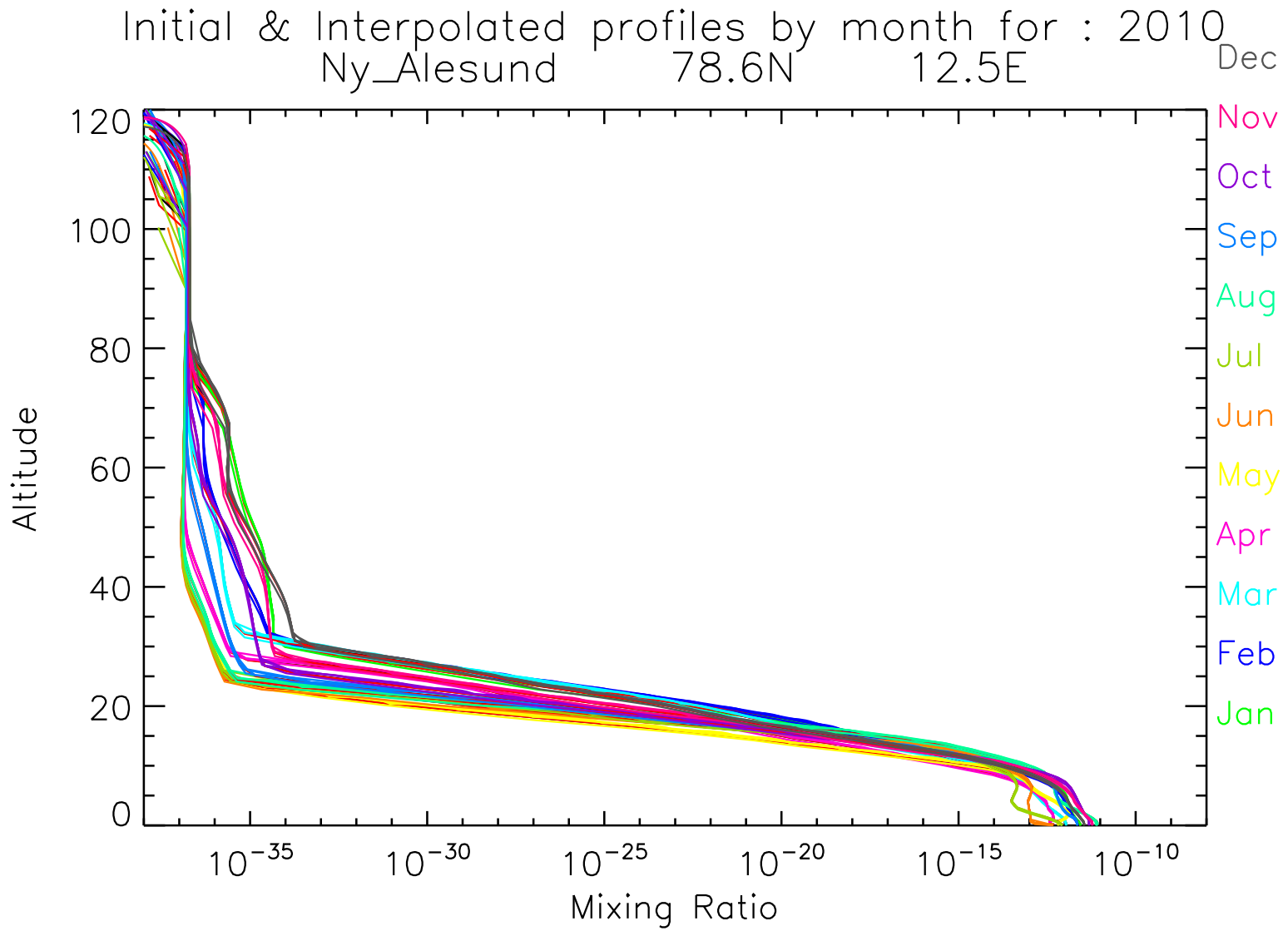
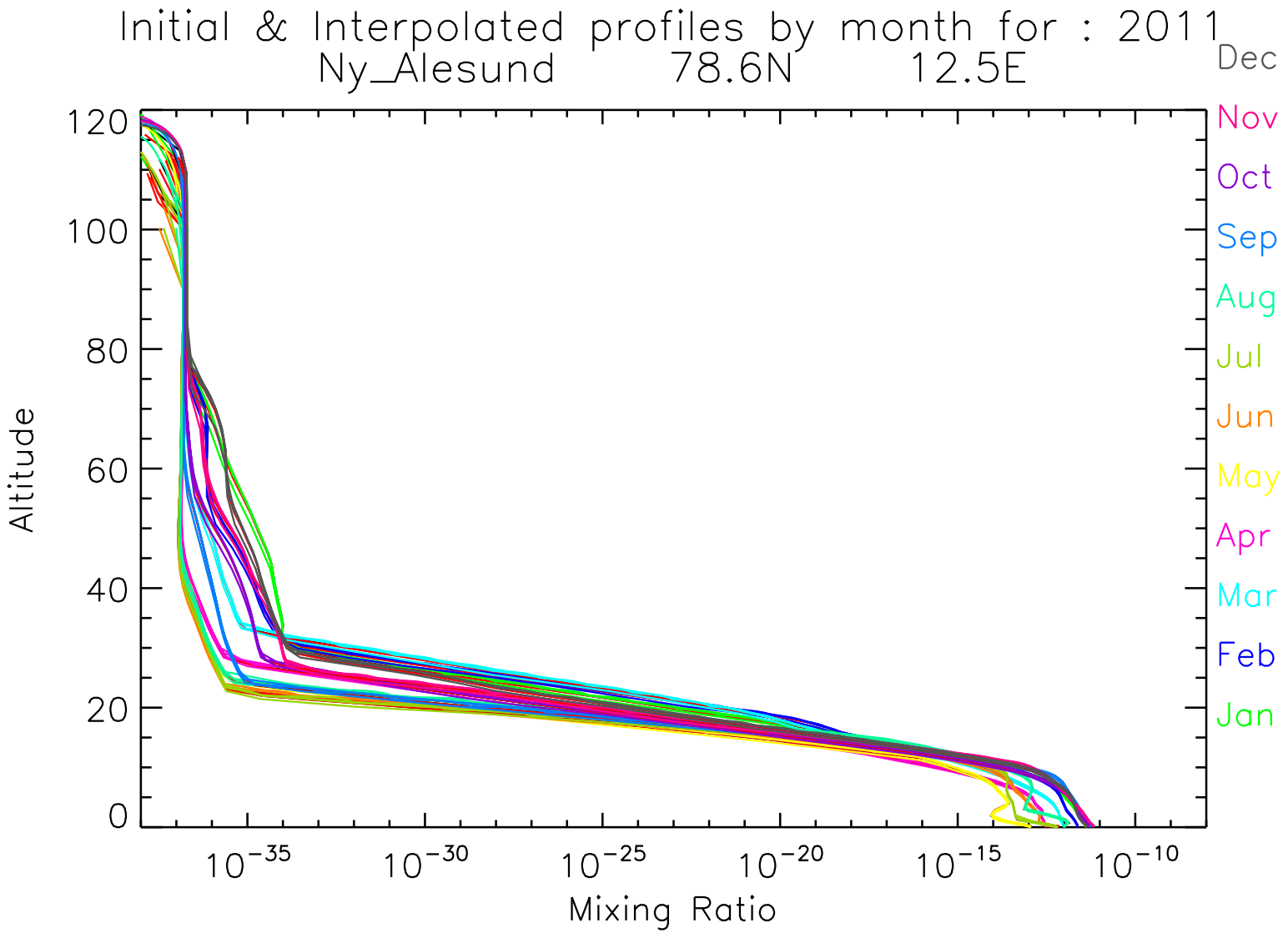
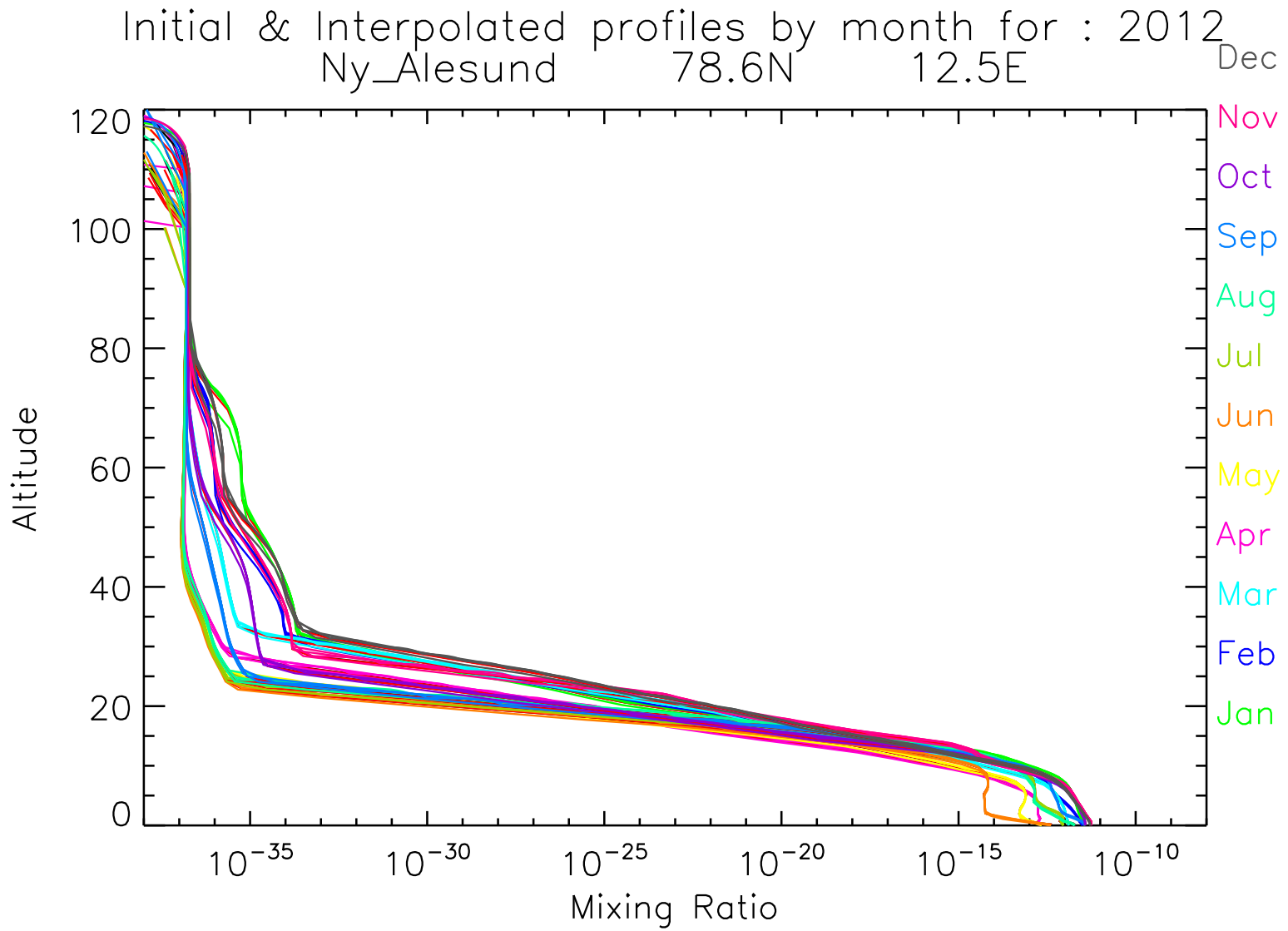
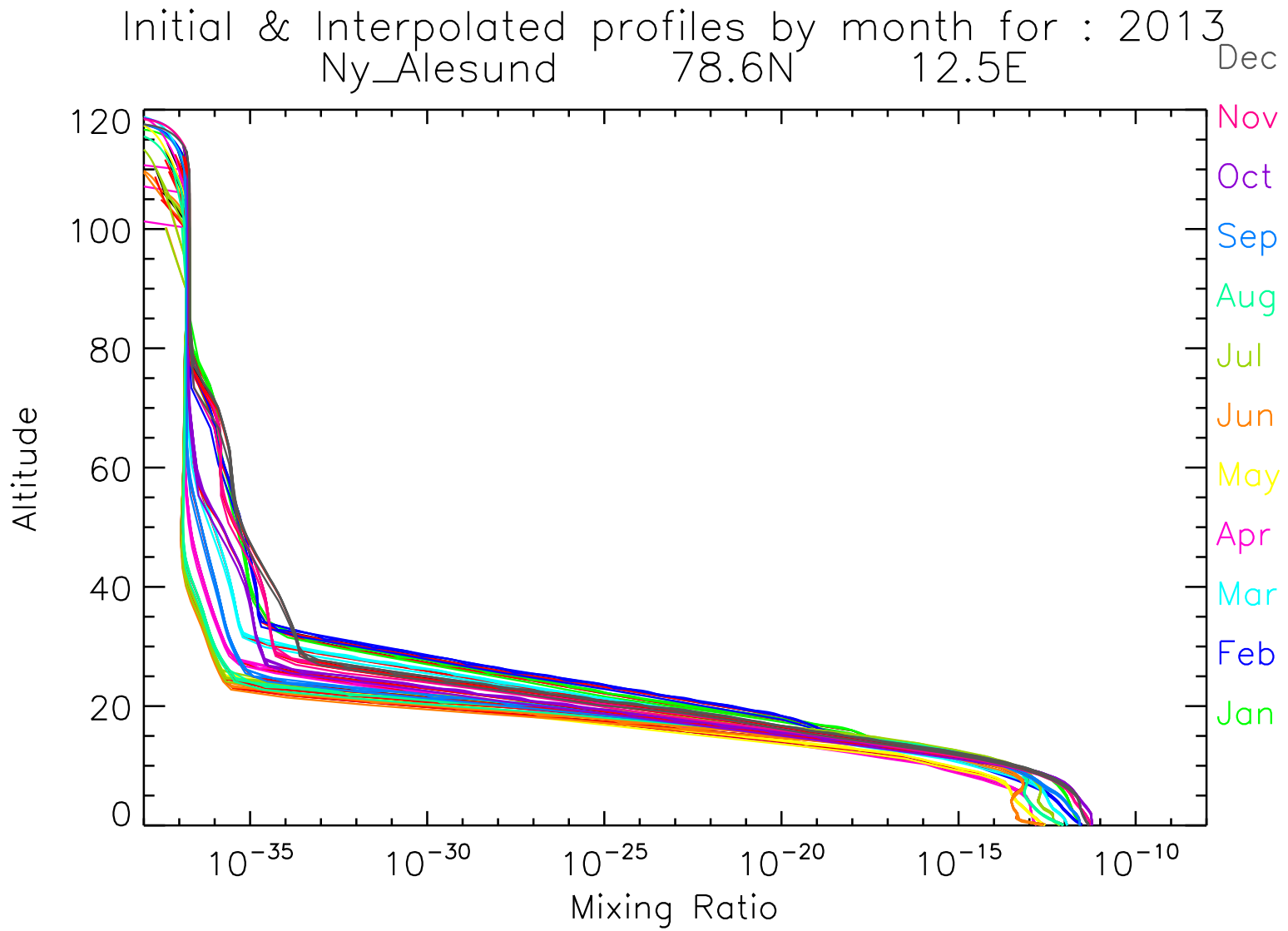
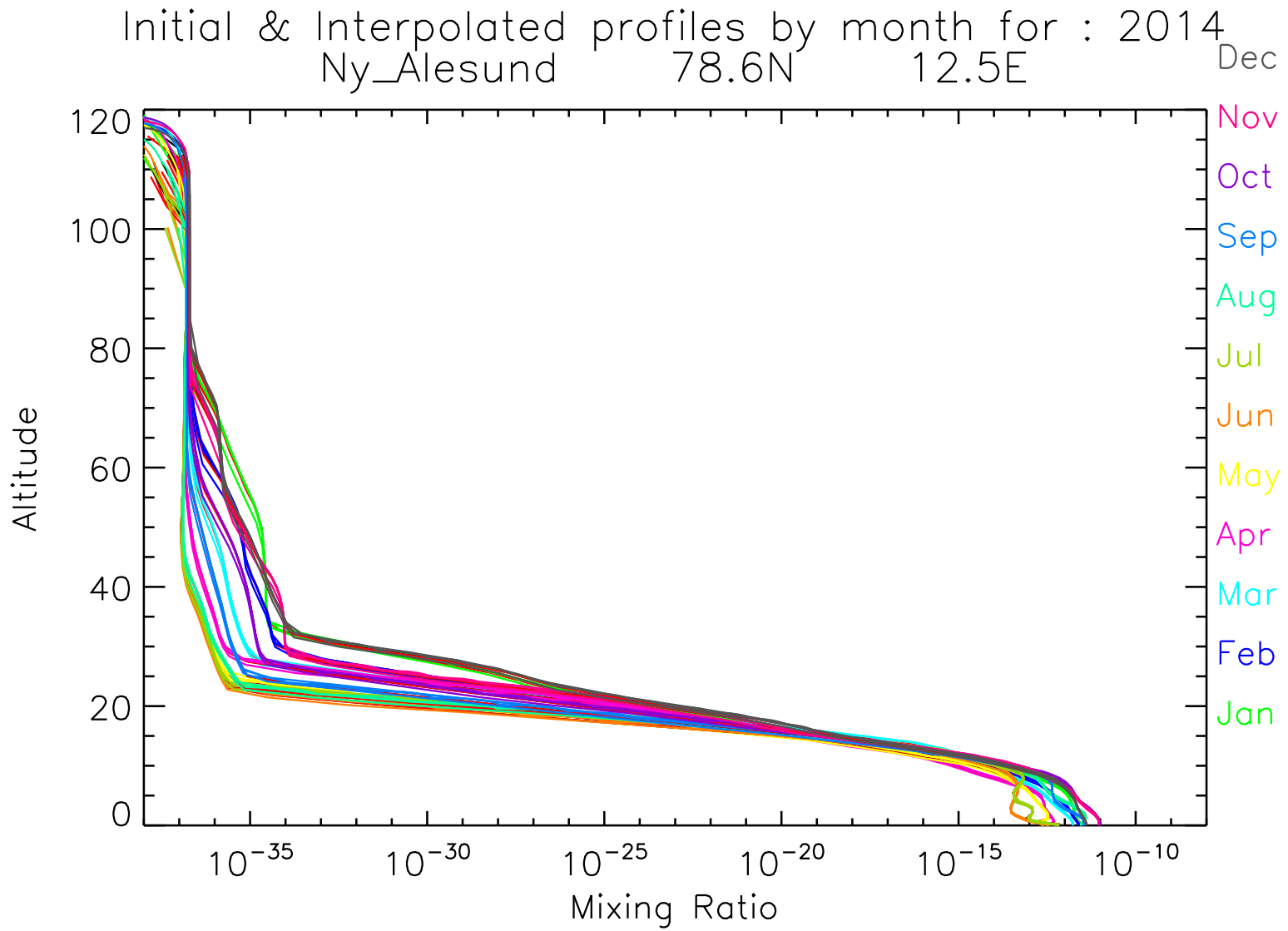
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

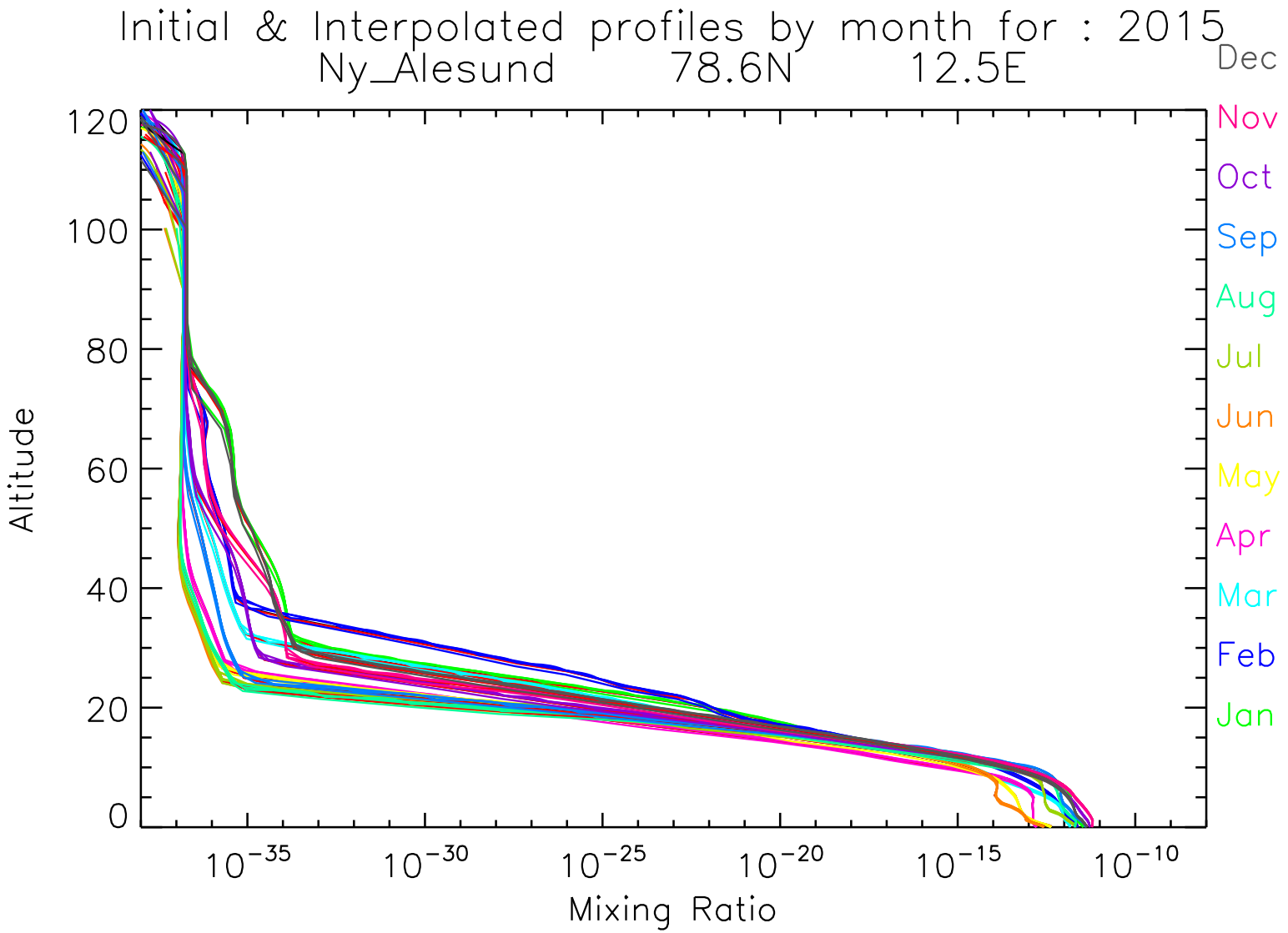

Initial & Interpolated profiles by month for : 2010
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

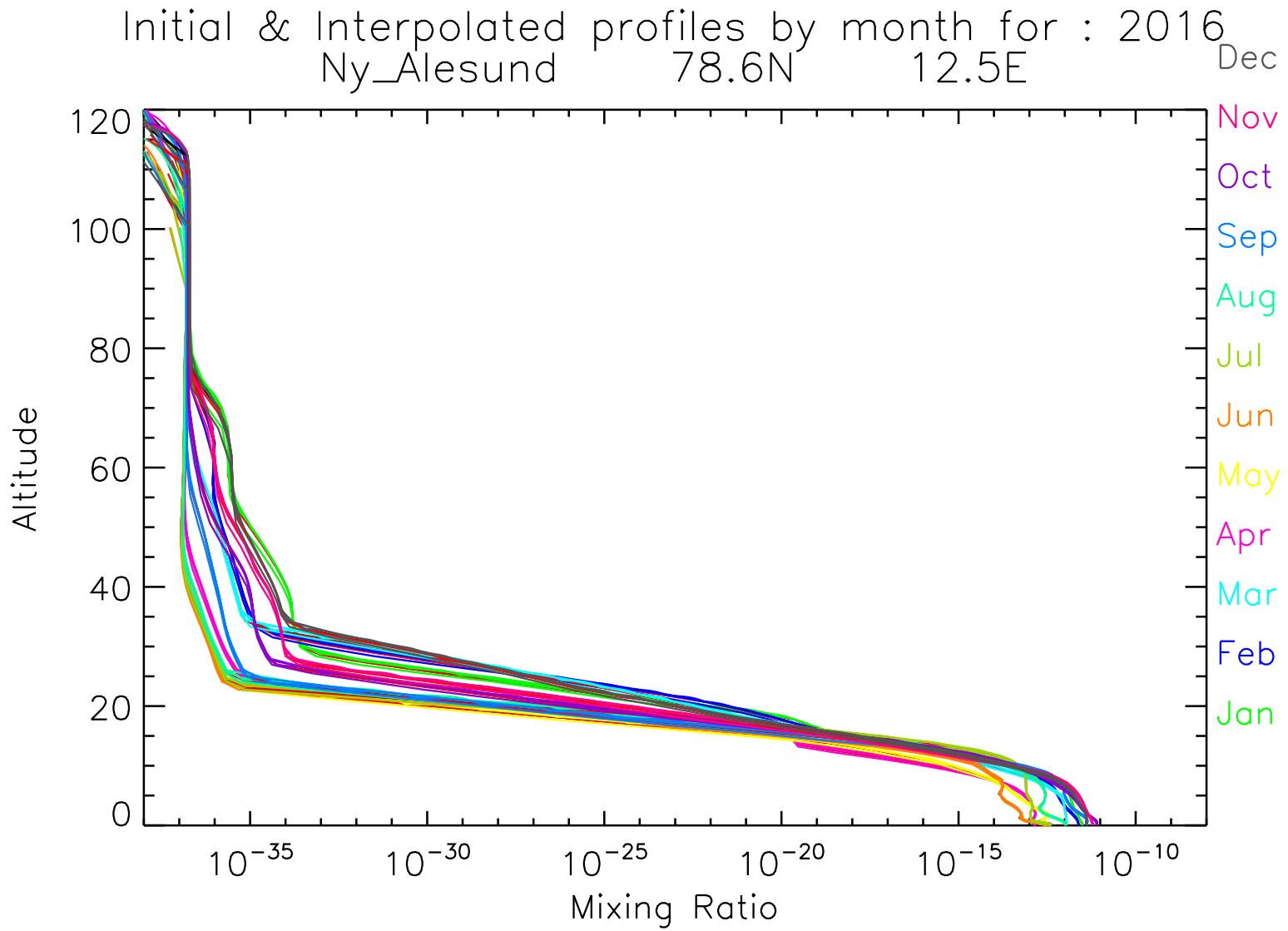

Initial & Interpolated profiles by month for : 2011
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

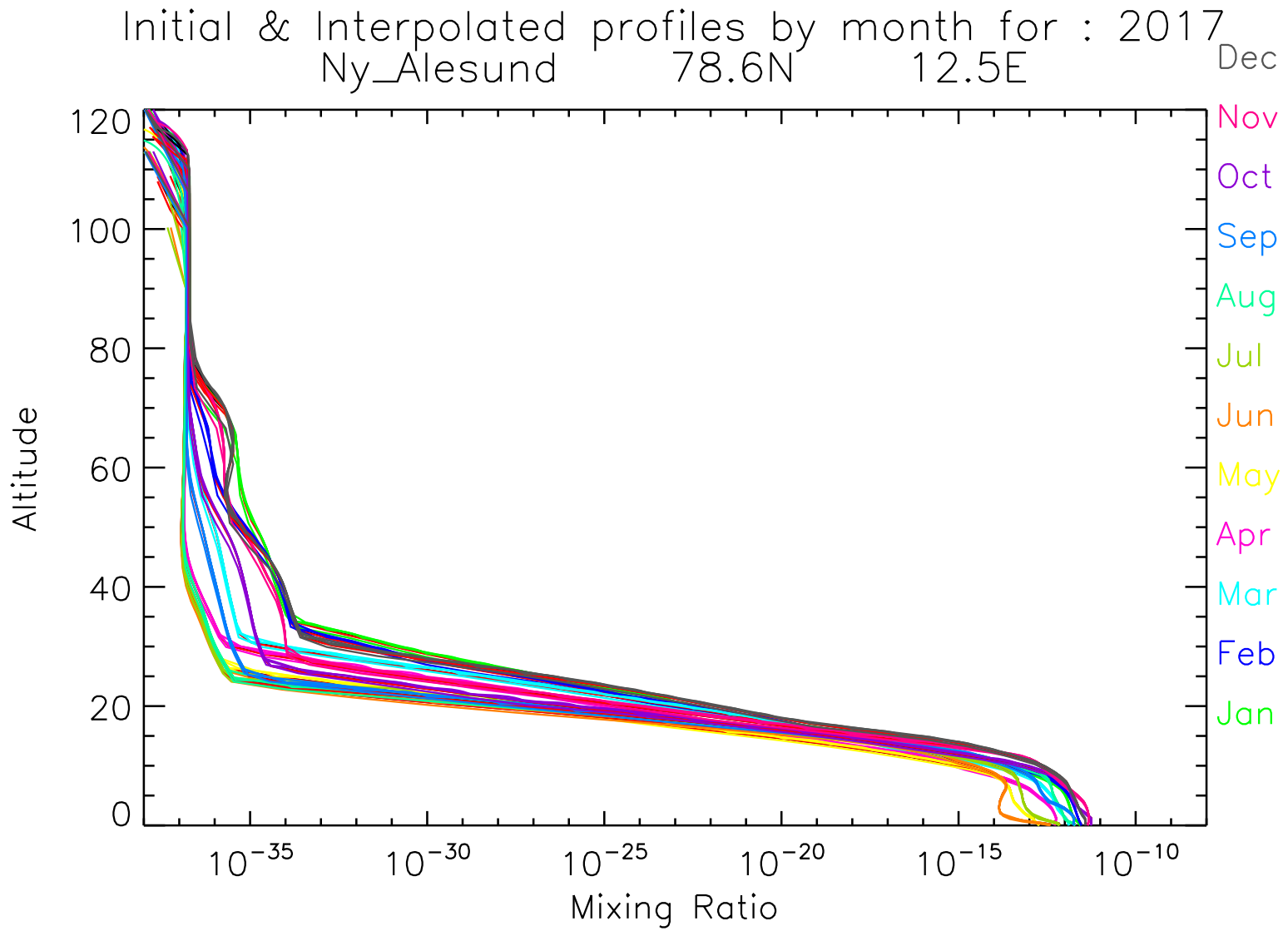

Initial & Interpolated profiles by month for : 2012
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

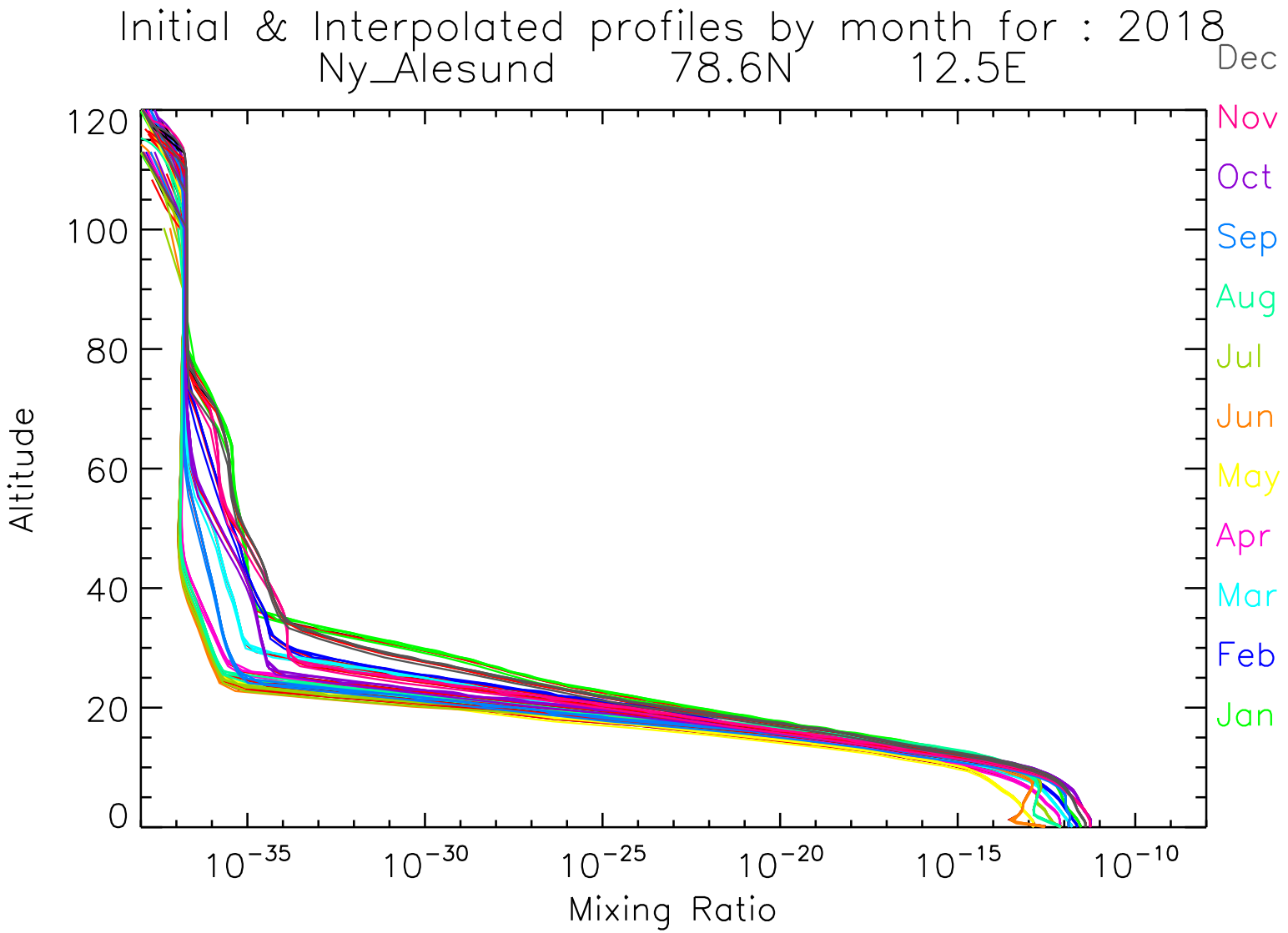

Initial & Interpolated profiles by month for : 2013
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

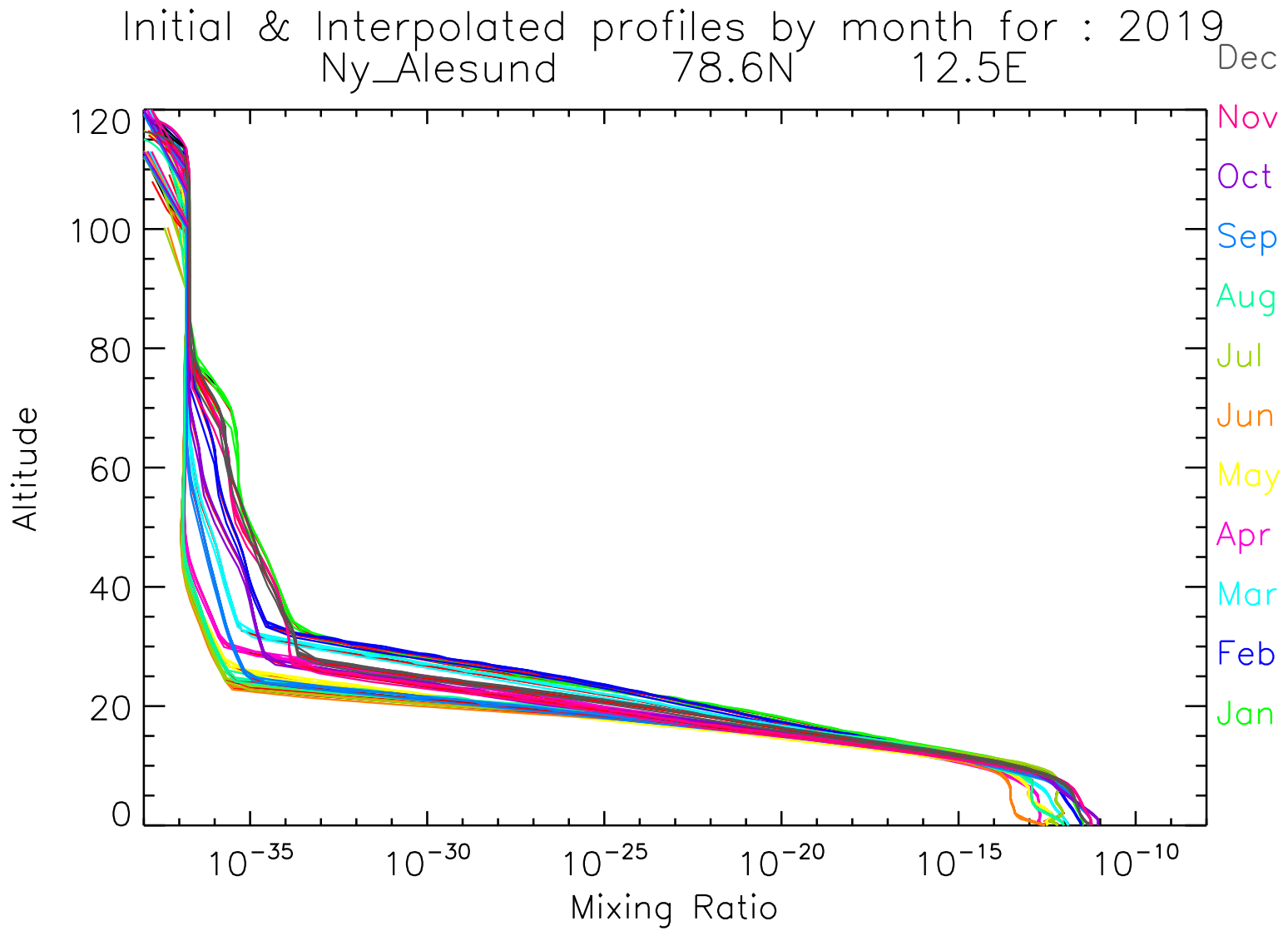

Initial & Interpolated profiles by month for : 2014
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

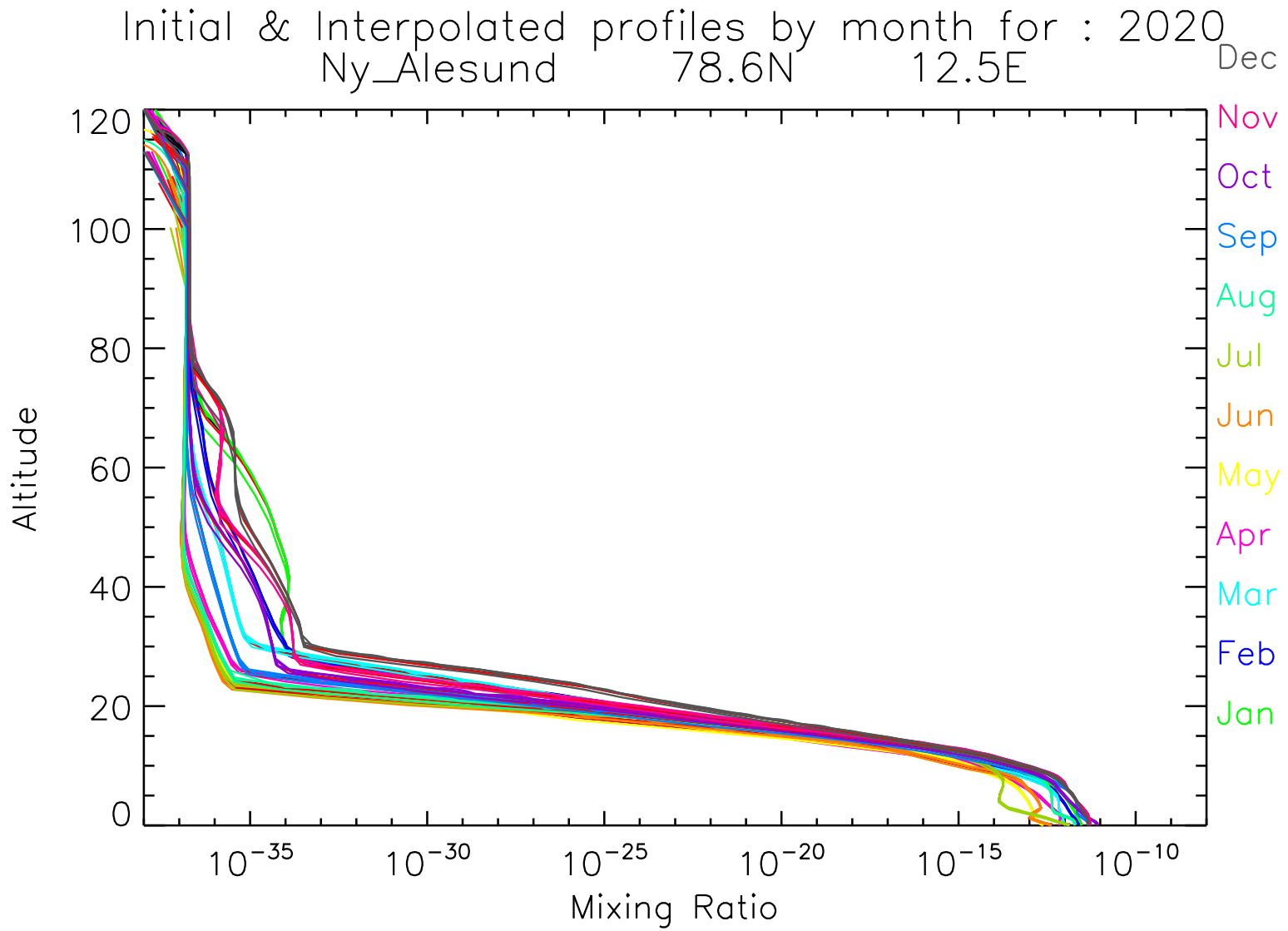

Initial & Interpolated profiles by month for : 2015
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

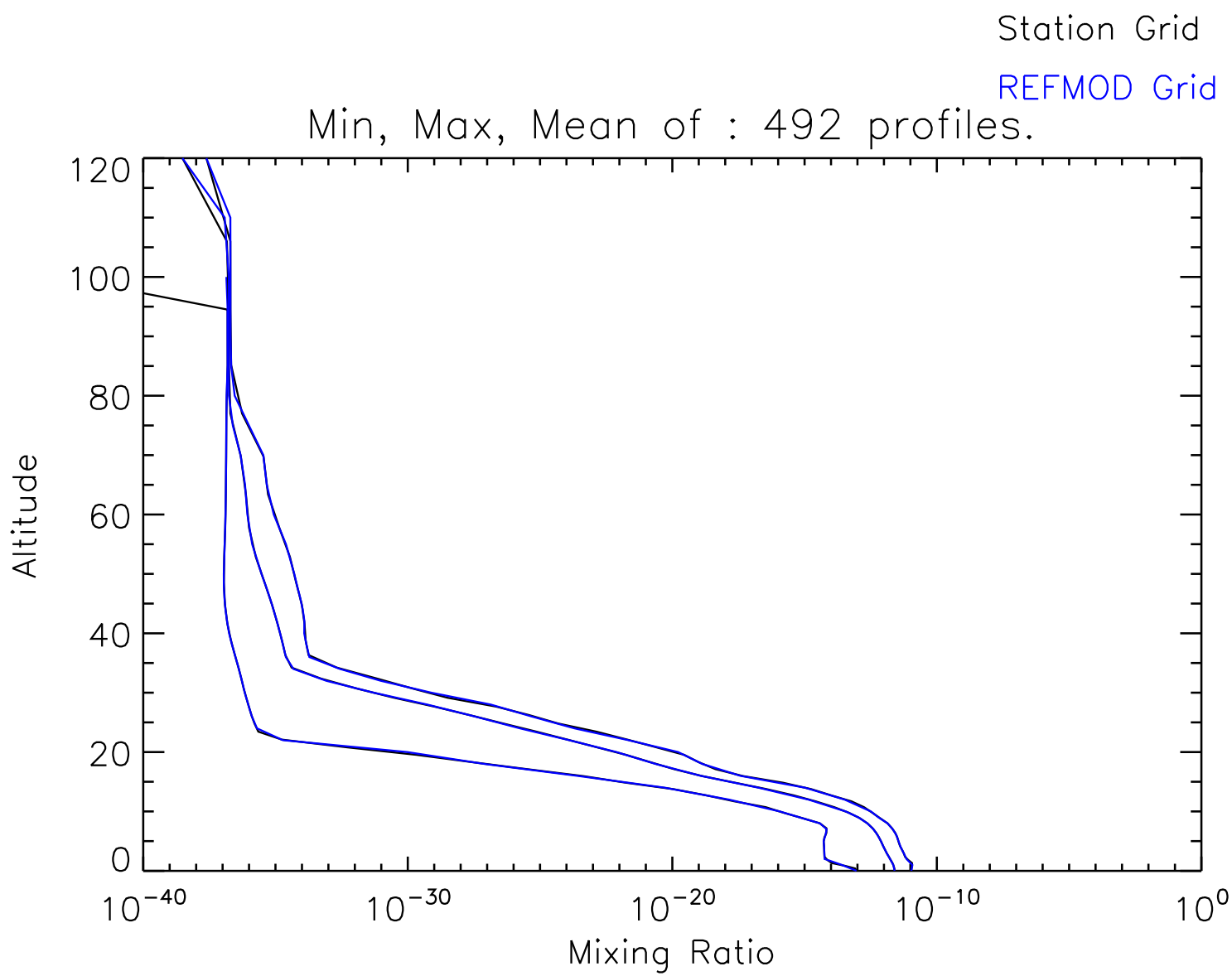

Initial & Interpolated profiles by month for : 2016
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

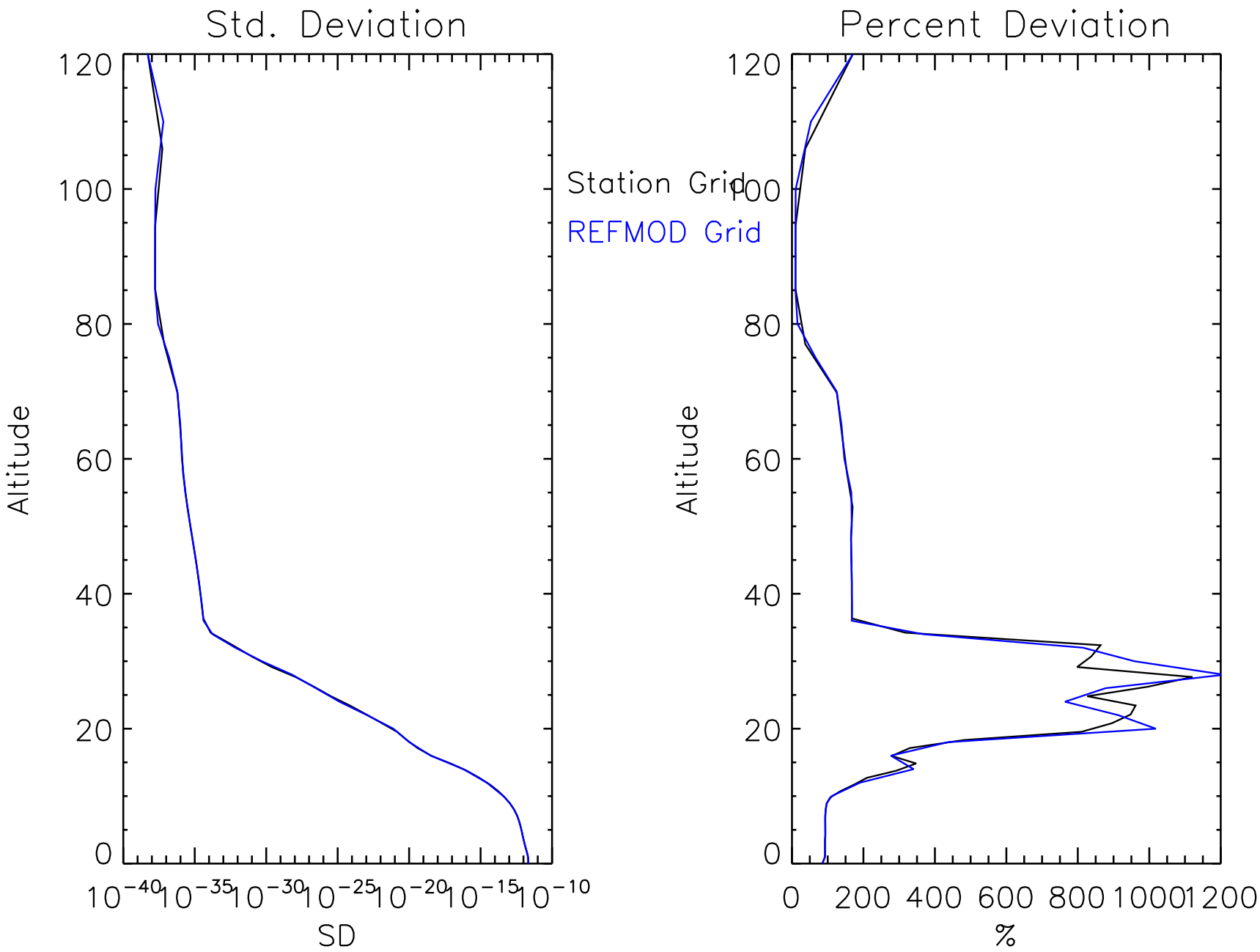

Initial & Interpolated profiles by month for : 2017
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

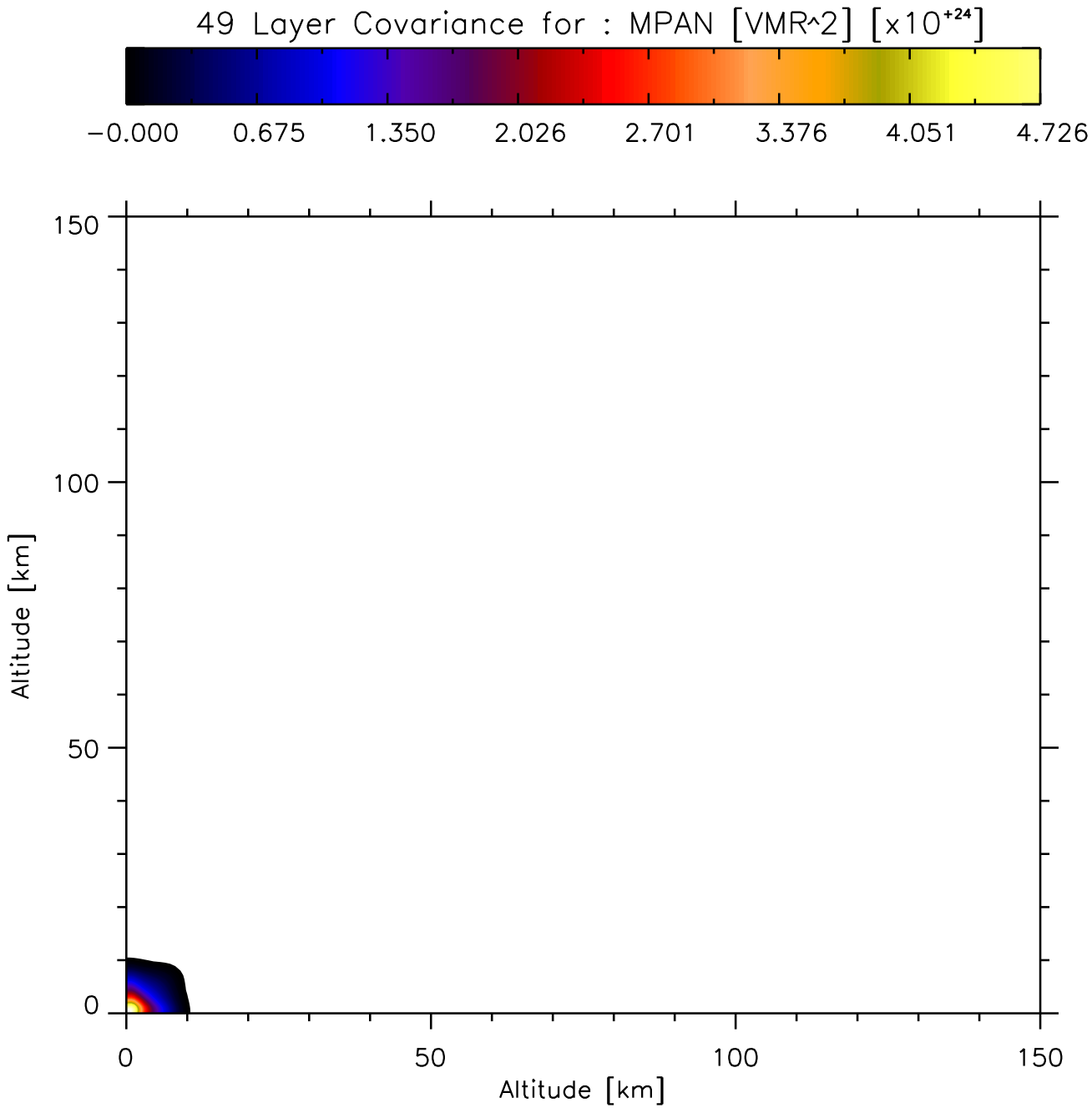

Initial & Interpolated profiles by month for : 2018
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

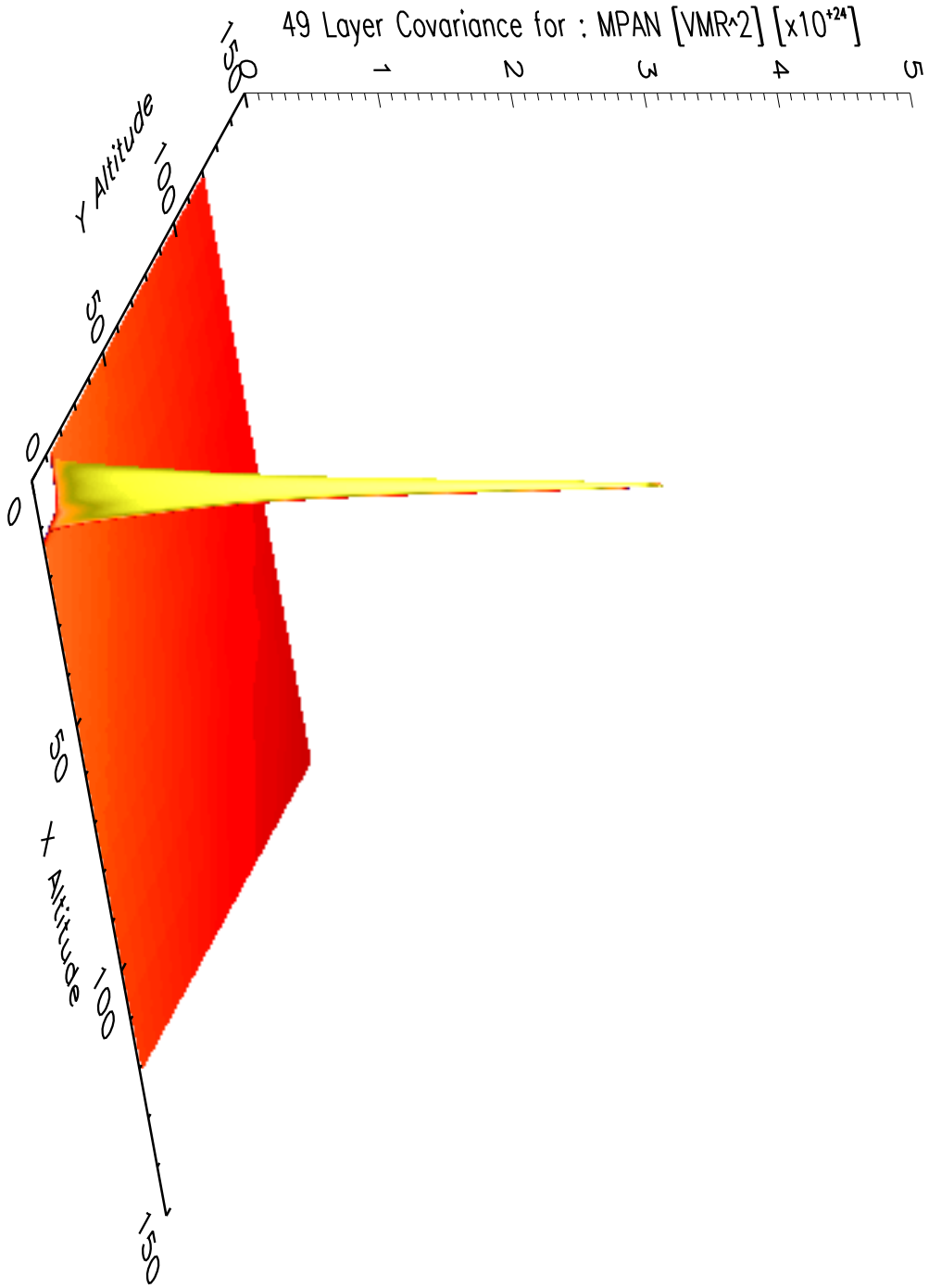

Initial & Interpolated profiles by month for : 2019
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

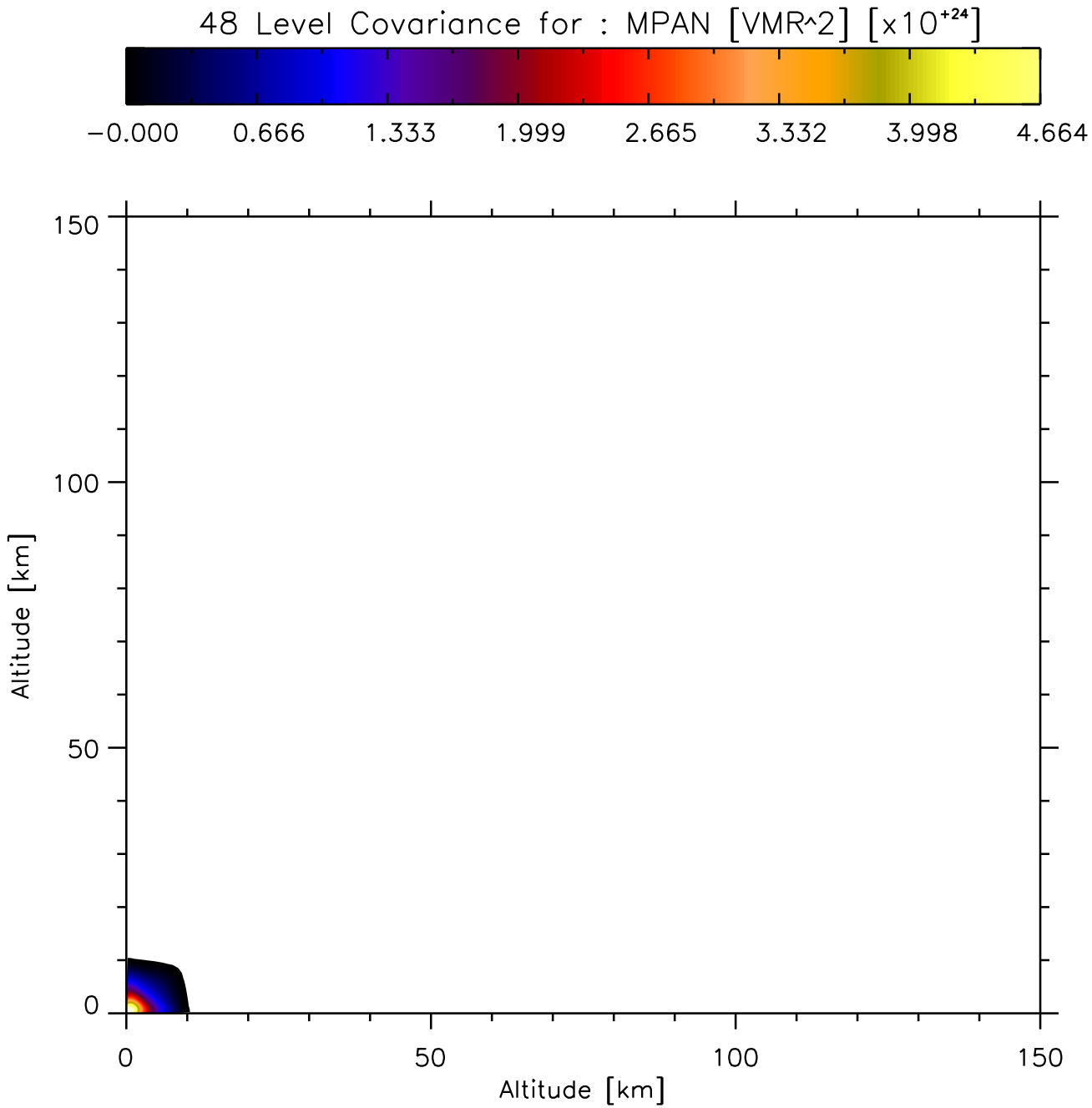

Initial & Interpolated profiles by month for : 2020
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
$10^{-35}$
$10^{-30}$
$10^{-25}$
$10^{-20}$
$10^{-15}$
$10^{-10}$
Mixing Ratio

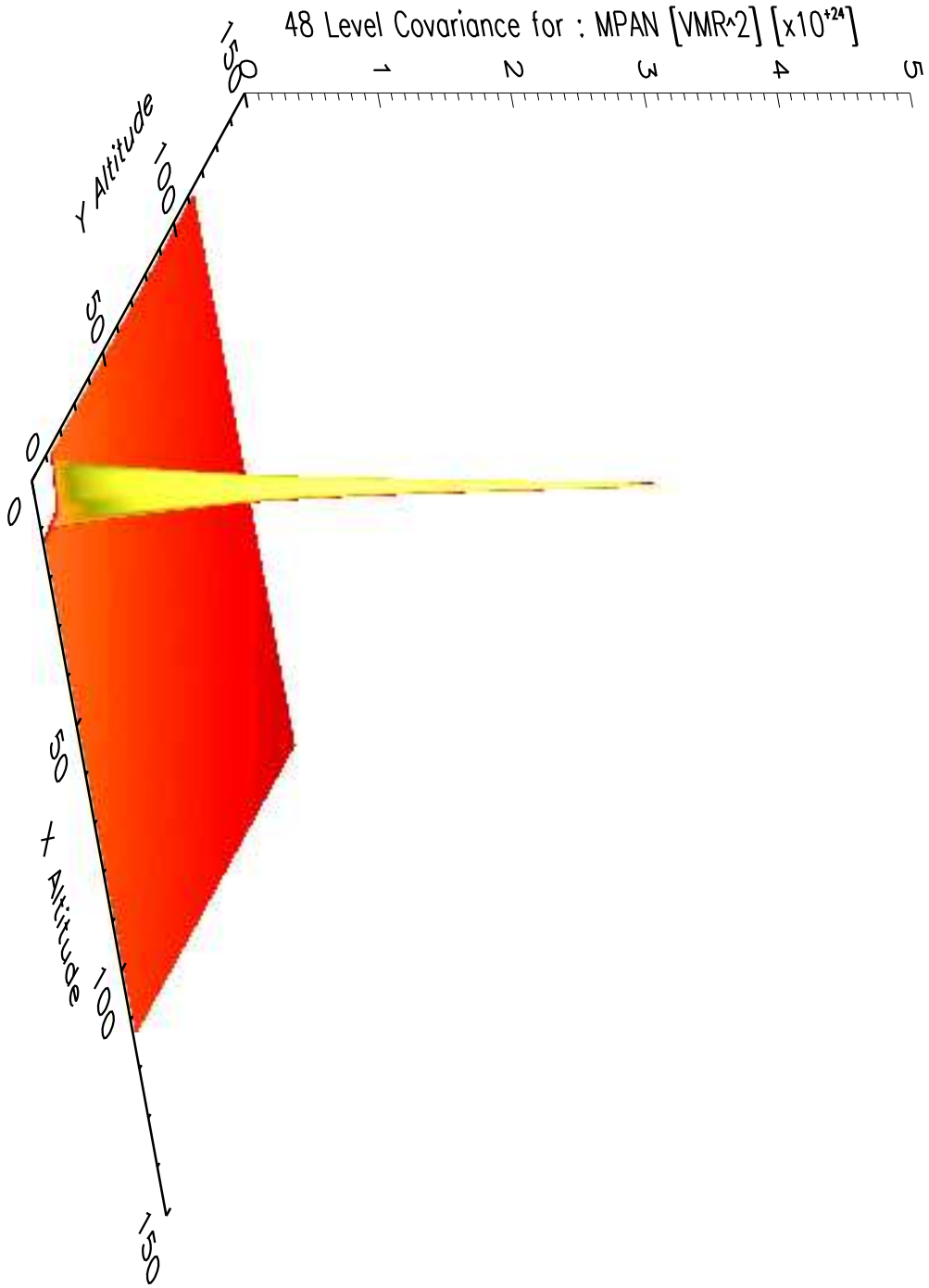

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
120
100
80
60
40
20
0
Altitude
$10^{-40}$
$10^{-30}$
$10^{-20}$
$10^{-10}$
$10^{0}$
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
$10^{-40}$ $10^{-35}$ $10^{-30}$ $10^{-25}$ $10^{-20}$ $10^{-15}$ $10^{-10}$
SD
0 200 400 600 800 1000 1200
%


49 Layer Covariance for : MPAN [VMR^2] [x10^+24]
−0.000
0.675
1.350
2.026
2.701
3.376
4.051
4.726
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


49 Layer Covariance for : MPAN [VMR^2] [x10^+24]
150
1
2
3
4
5
Y Altitude
100
50
0
0
50
X Altitude
100
150


48 Level Covariance for : MPAN [VMR^2] [x10^+24]
−0.000
0.666
1.333
1.999
2.665
3.332
3.998
4.664
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


48 Level Covariance for : MPAN [VMR^2] [x10^+24]
150
100
50
0
1
2
3
4
5
Y Altitude
0
50
100
150
X Altitude