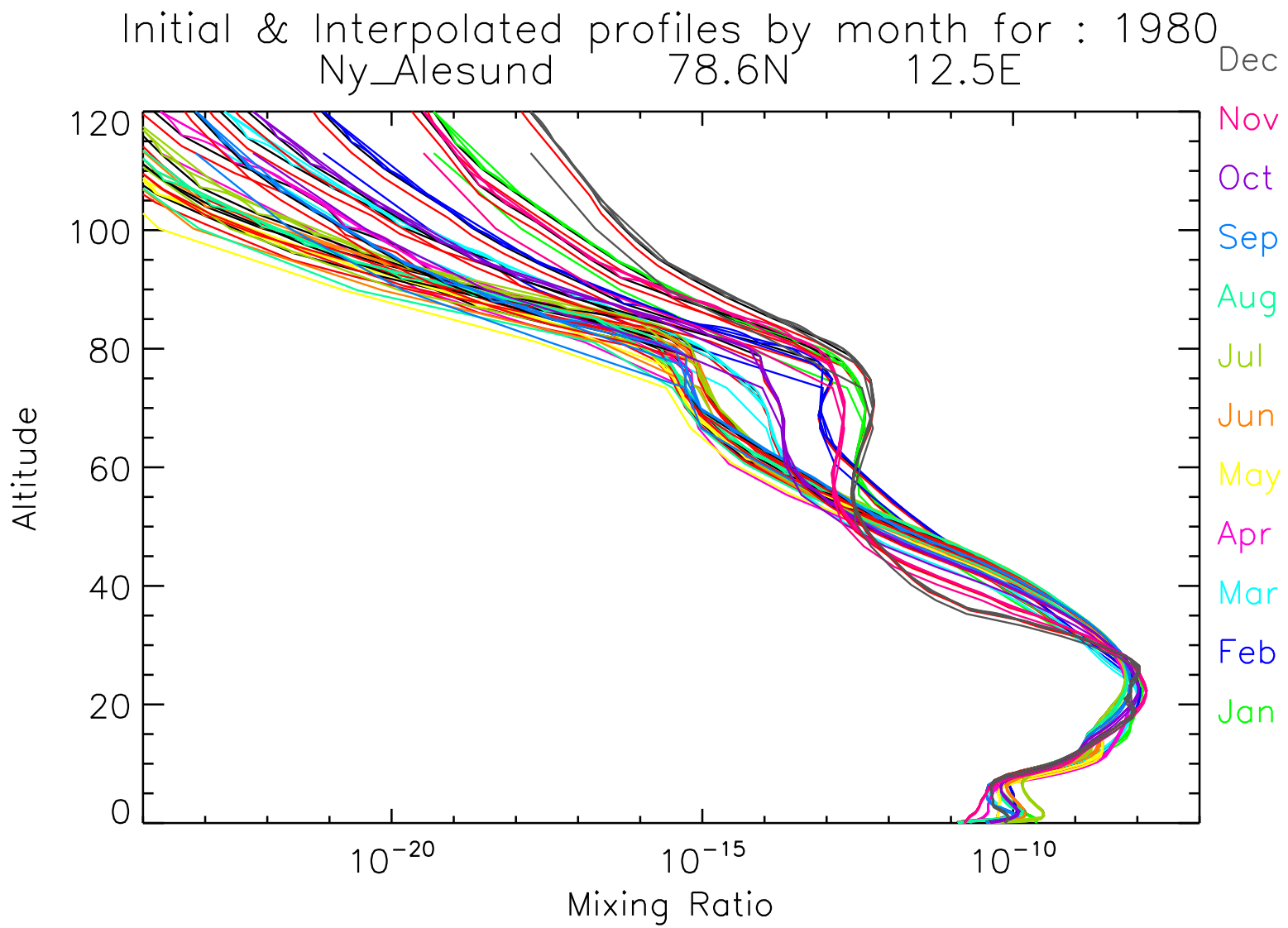
Initial & Interpolated profiles by month for : 1980
Ny_Alesund 78.6N 12.5E
Dec
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Altitude
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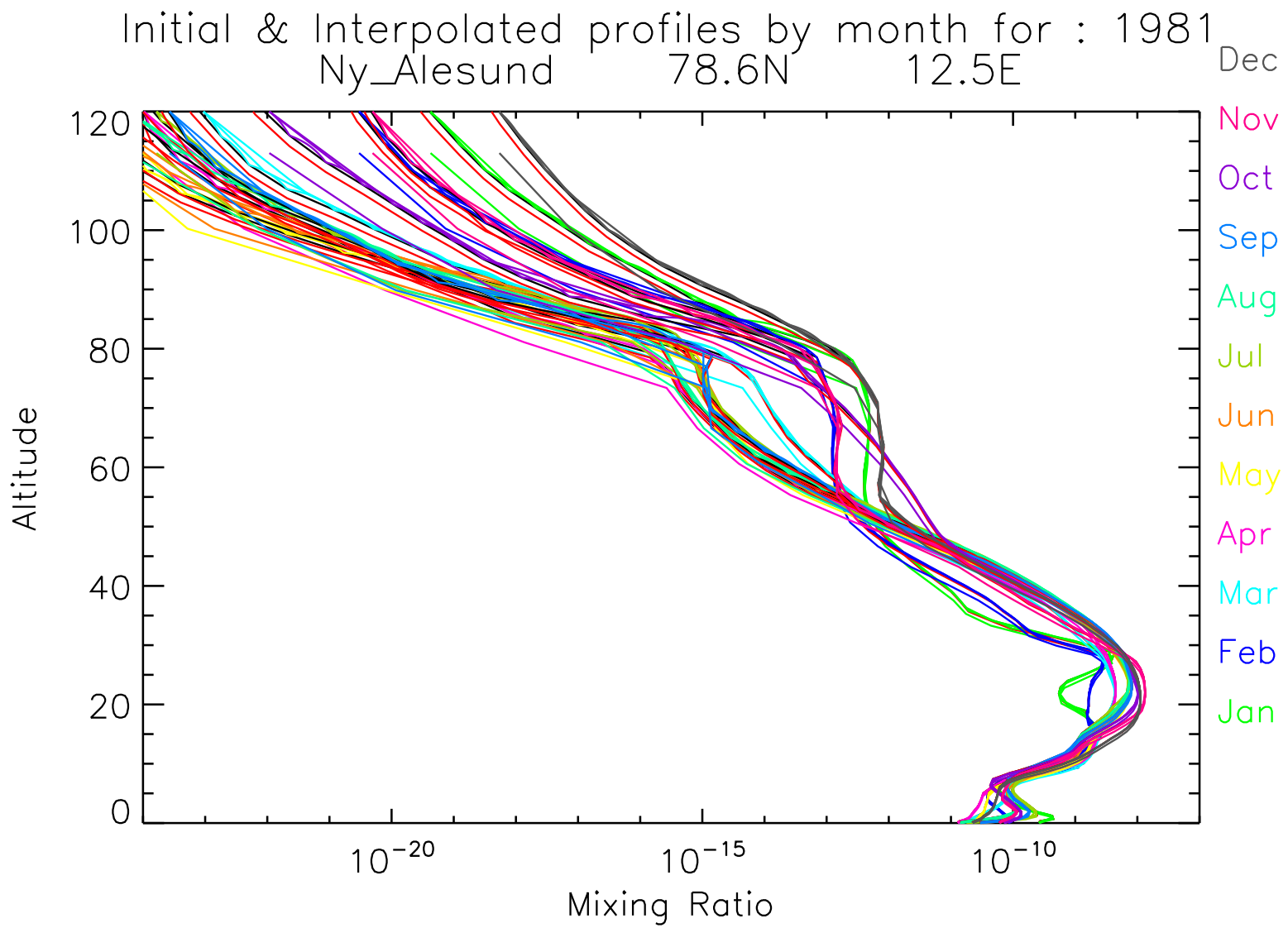
10^{-15}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1981
Ny_Alesund 78.6N 12.5E
Dec
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10^{-15}
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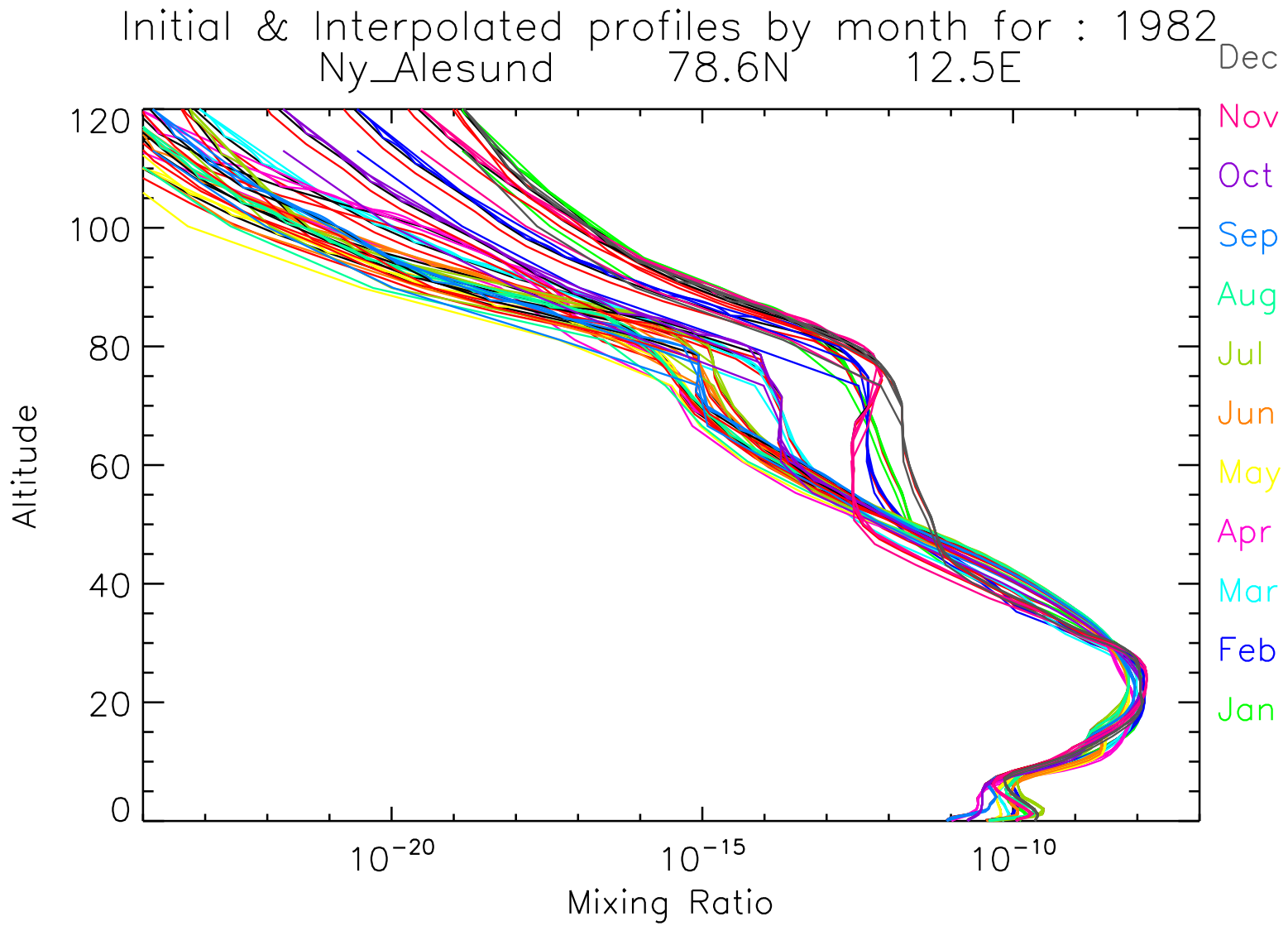
Mixing Ratio


Initial & Interpolated profiles by month for : 1982
Ny_Alesund 78.6N 12.5E
Dec
Nov
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0
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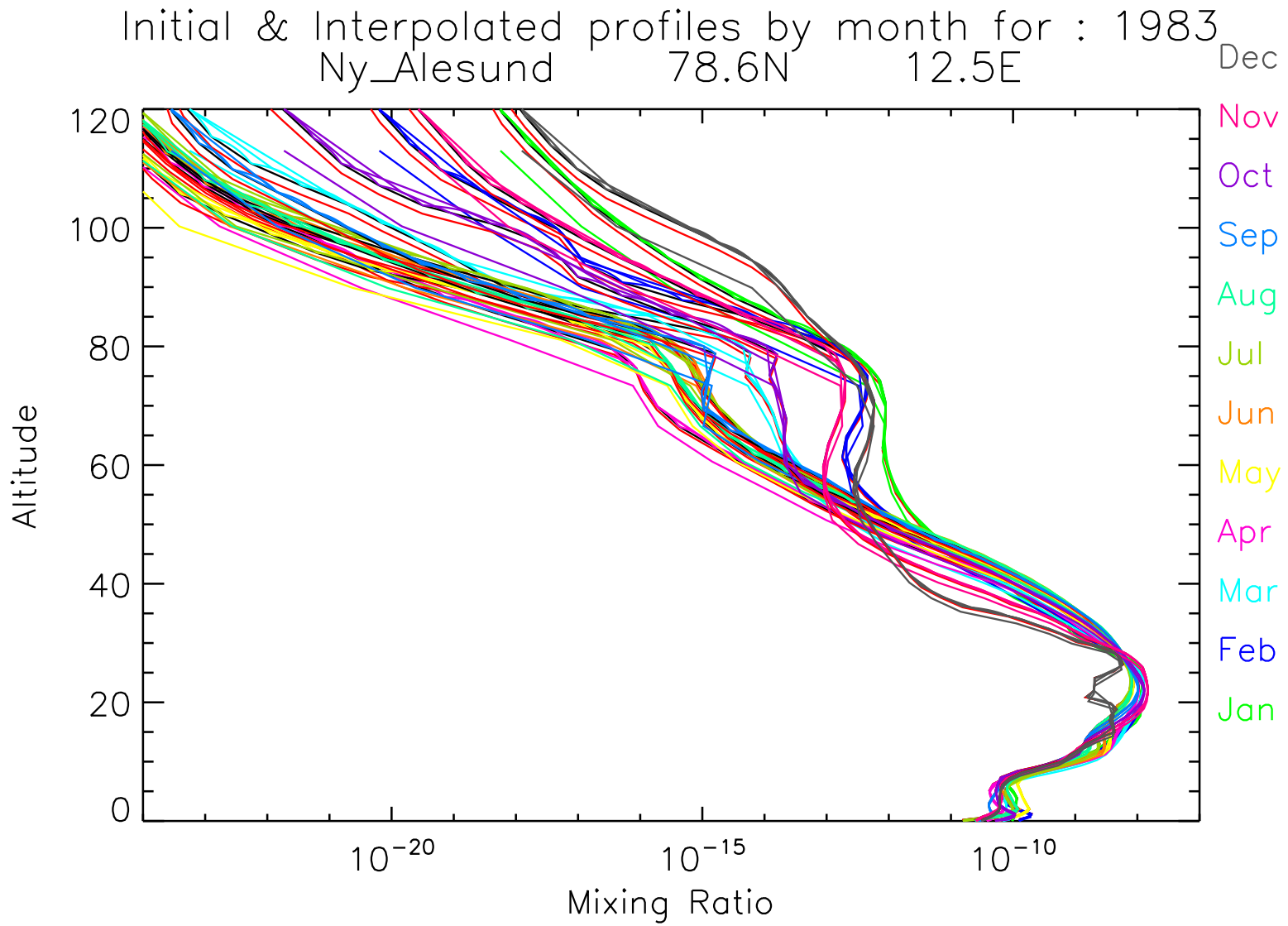
10^{-15}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1983
Ny_Alesund 78.6N 12.5E
Dec
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Altitude
10^{-20}
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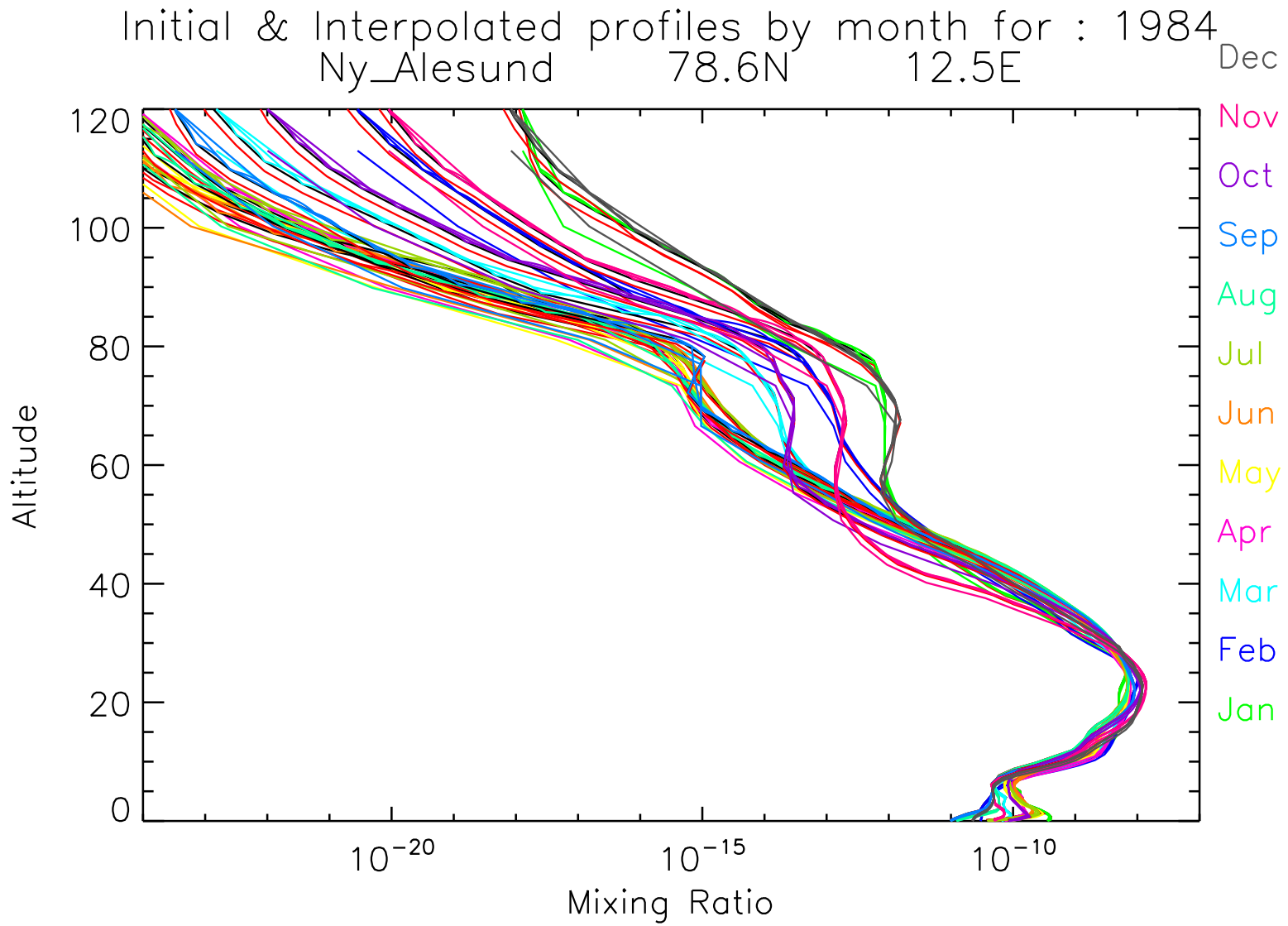
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1984
Ny_Alesund 78.6N 12.5E
Dec
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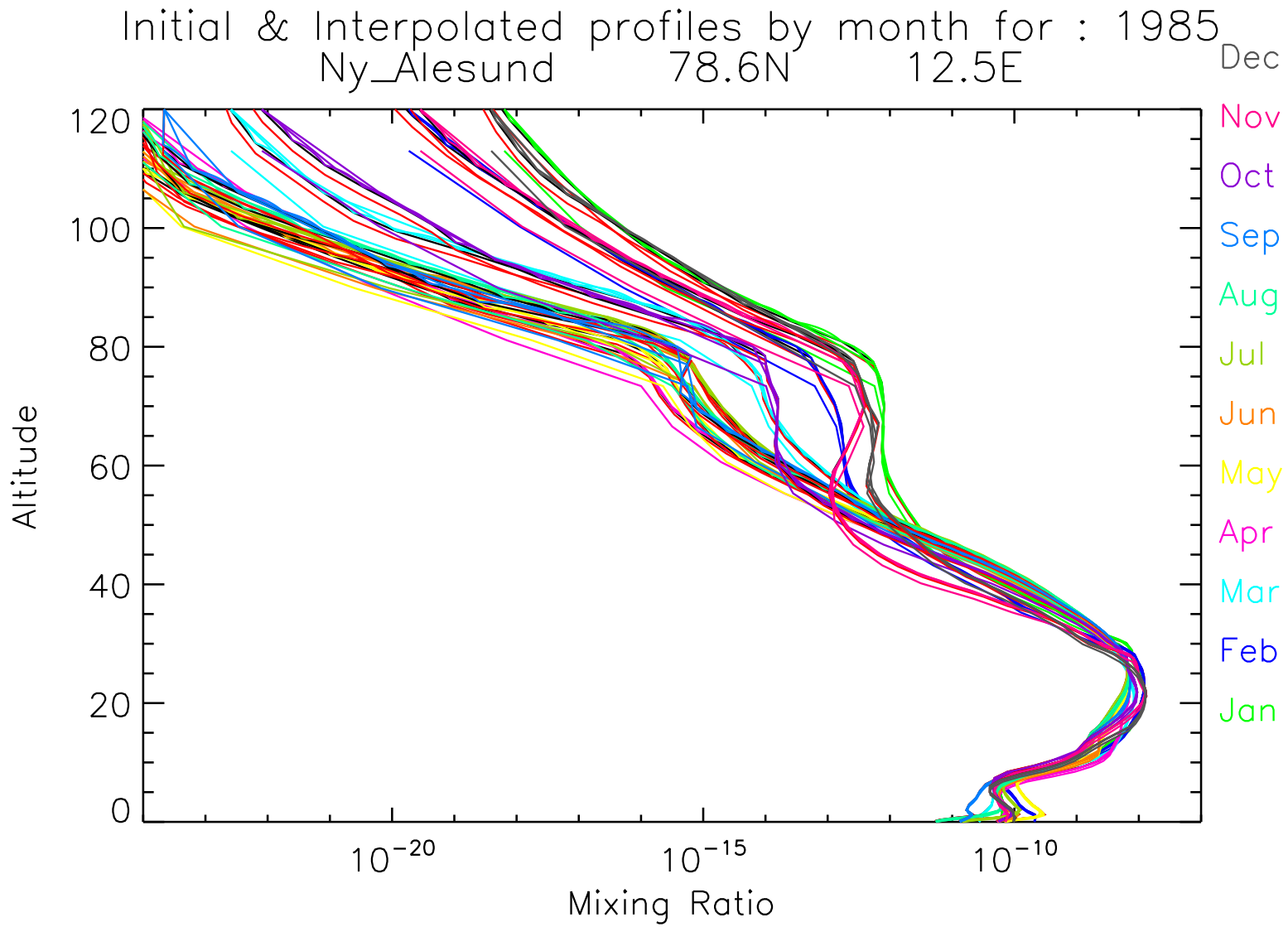
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1985
Ny_Alesund 78.6N 12.5E
Dec
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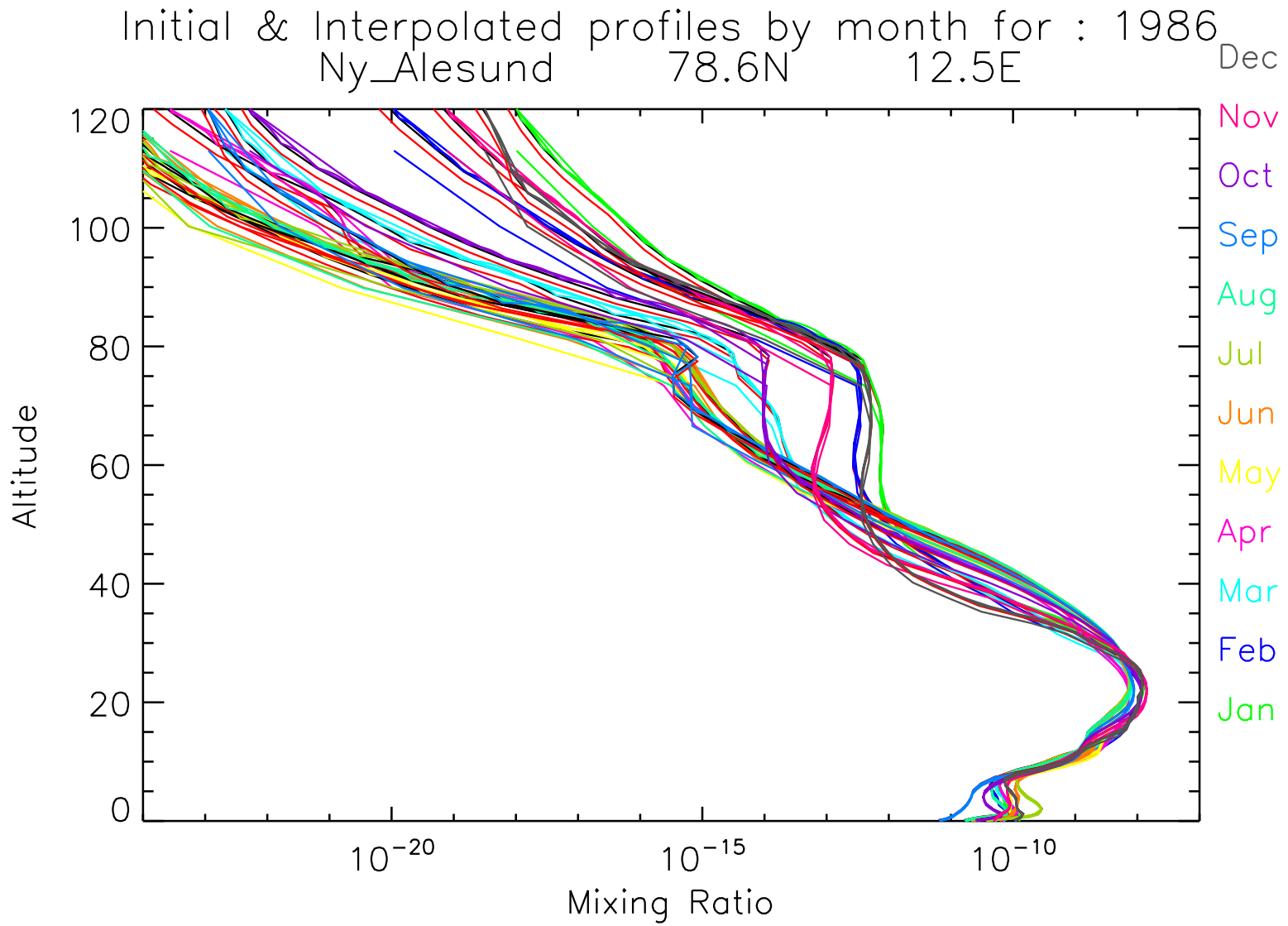
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1986
Ny_Alesund 78.6N 12.5E
Dec
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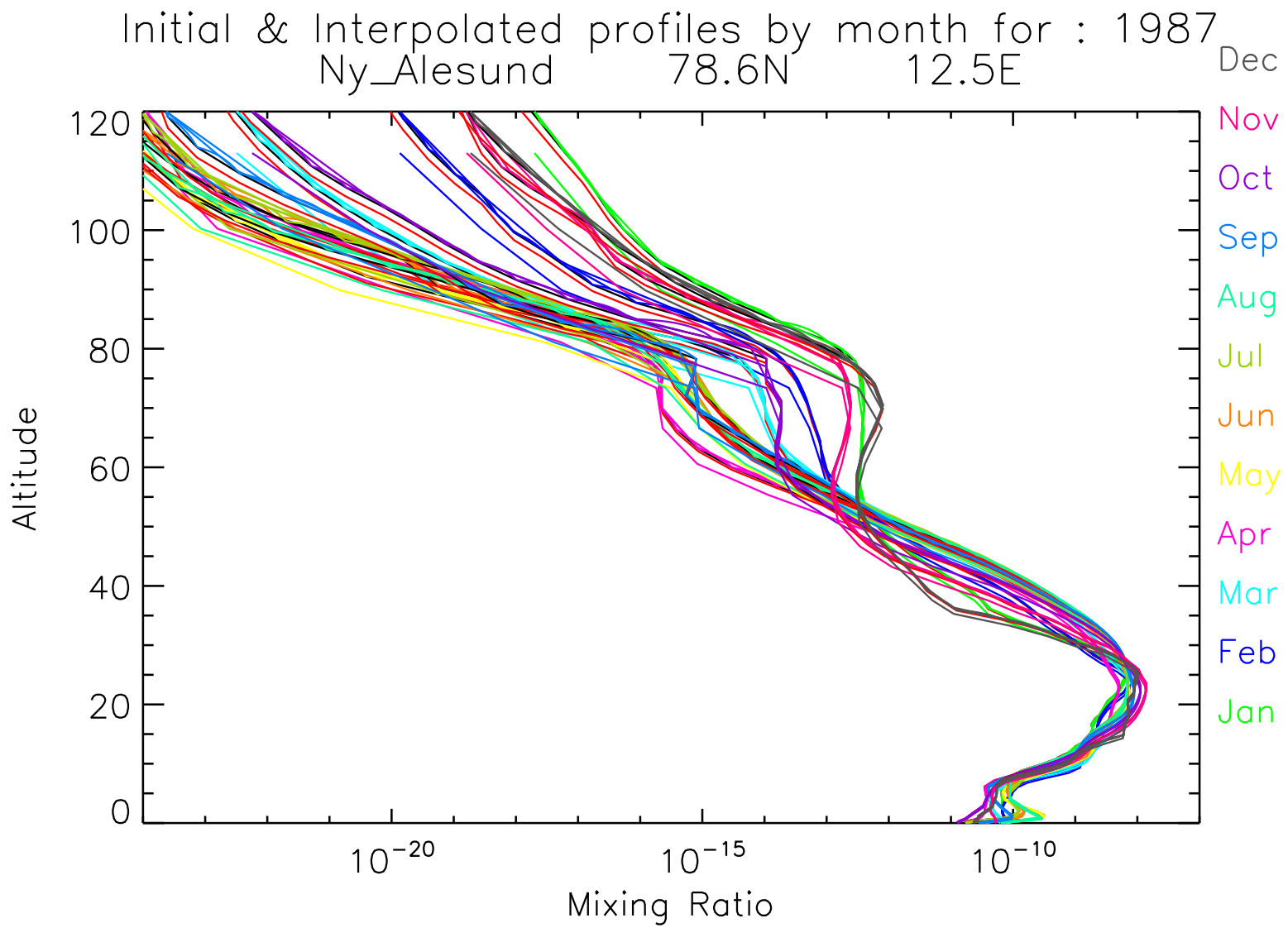
Mixing Ratio


Initial & Interpolated profiles by month for : 1987
Ny_Alesund 78.6N 12.5E
Dec
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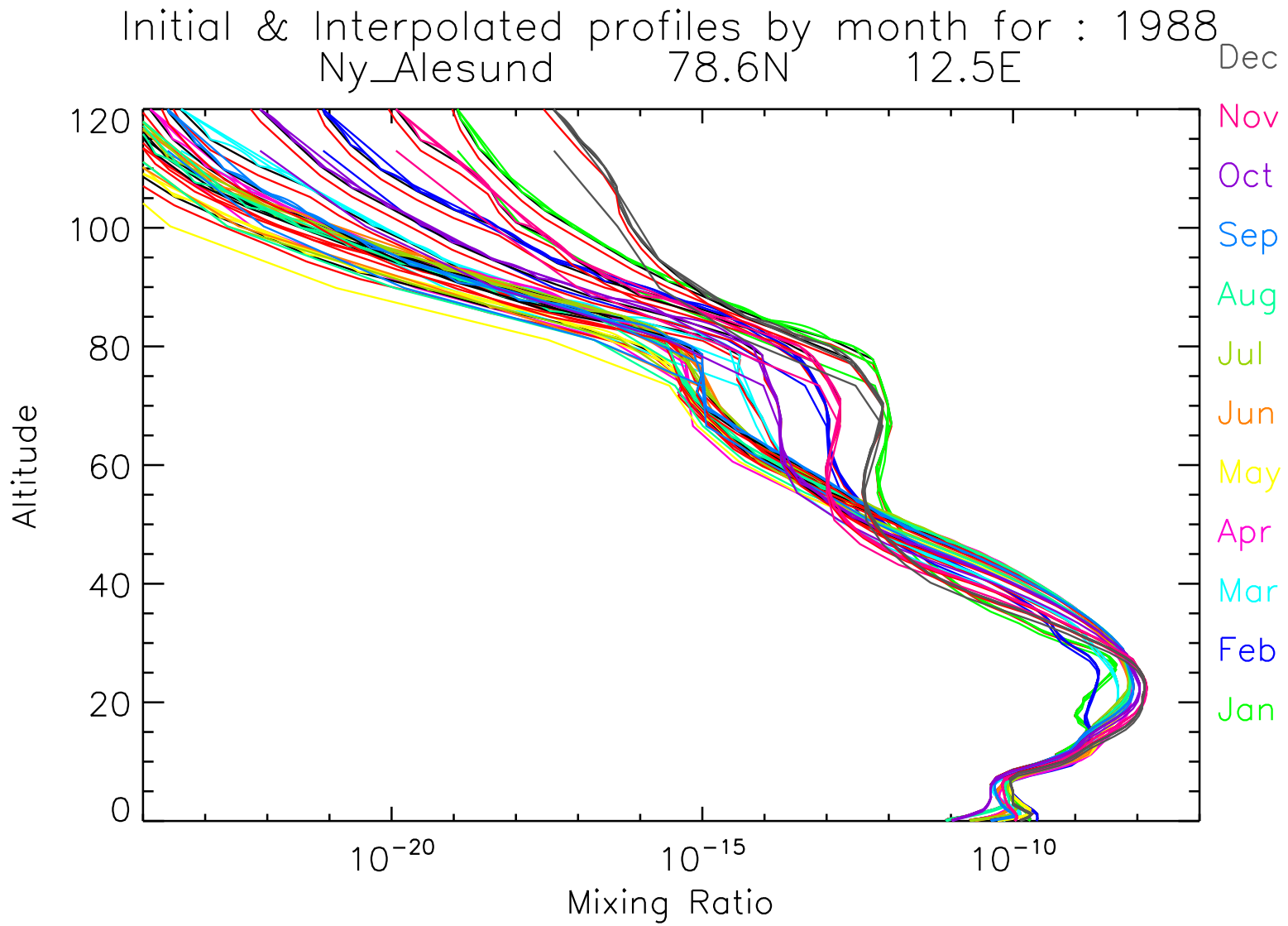
10^{-10}
Mixing Ratio


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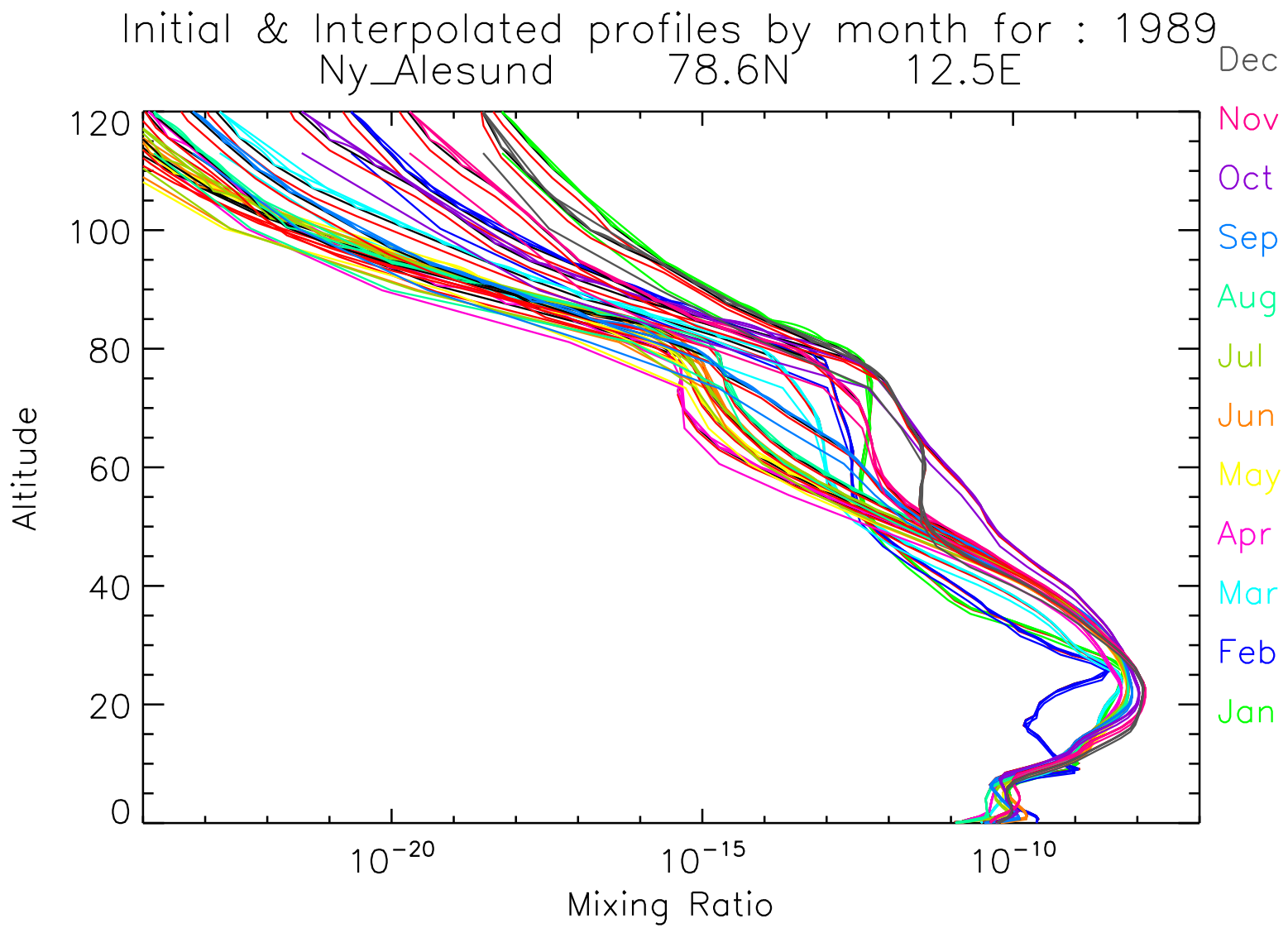
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1989
Ny_Alesund 78.6N 12.5E
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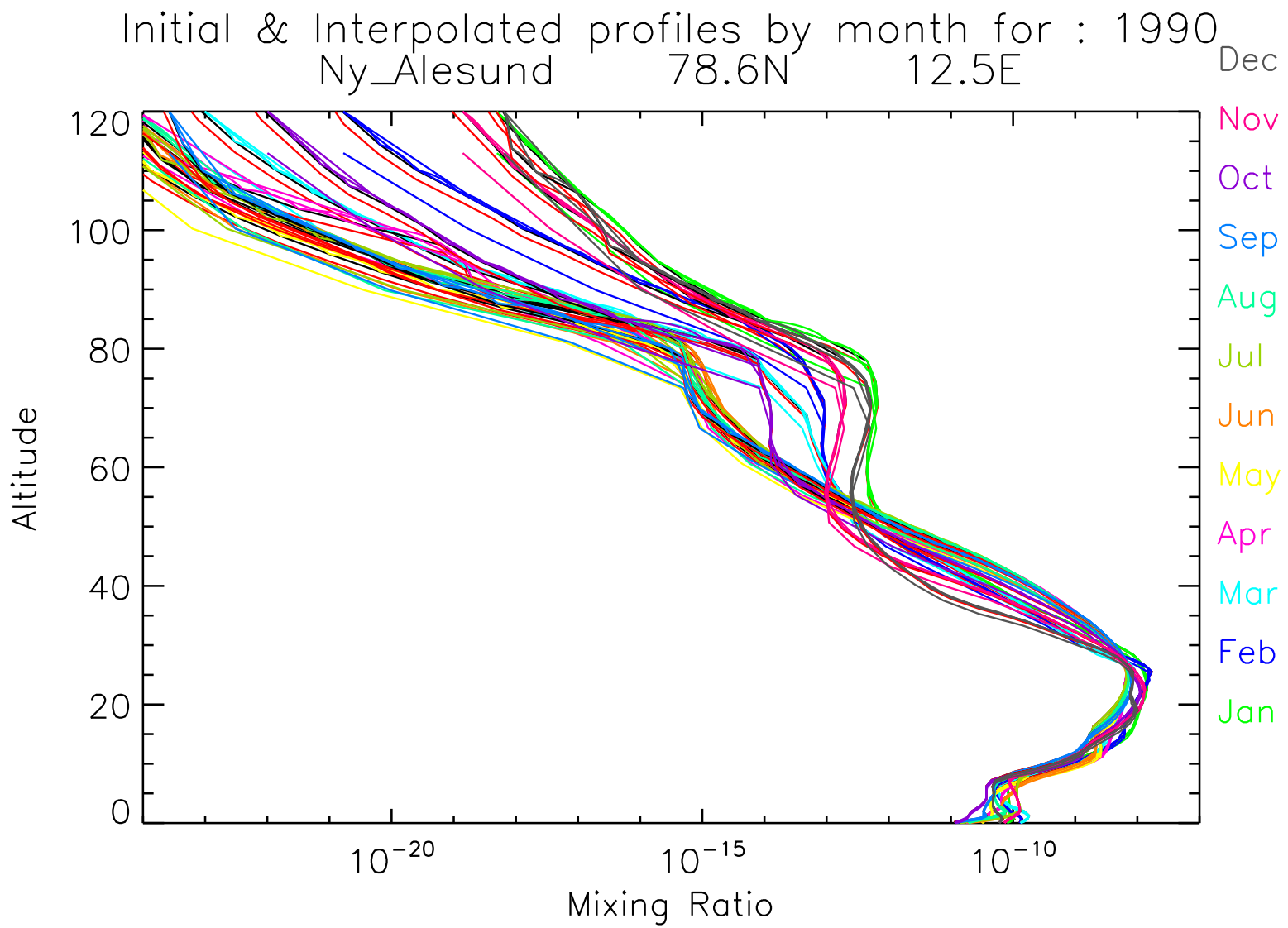
Mixing Ratio


Initial & Interpolated profiles by month for : 1990
Ny_Alesund 78.6N 12.5E
Dec
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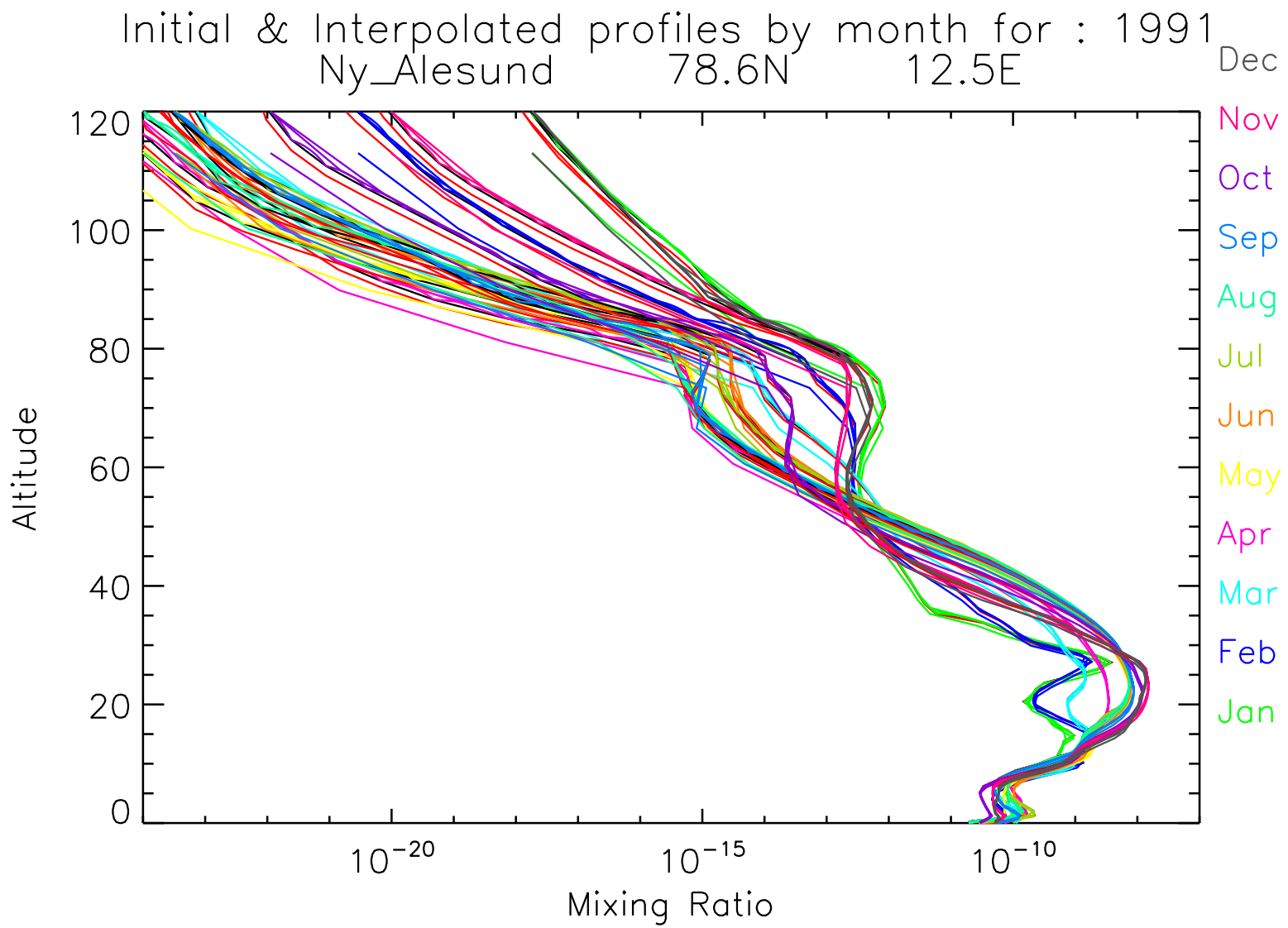
Mixing Ratio


Initial & Interpolated profiles by month for : 1991
Ny_Alesund 78.6N 12.5E
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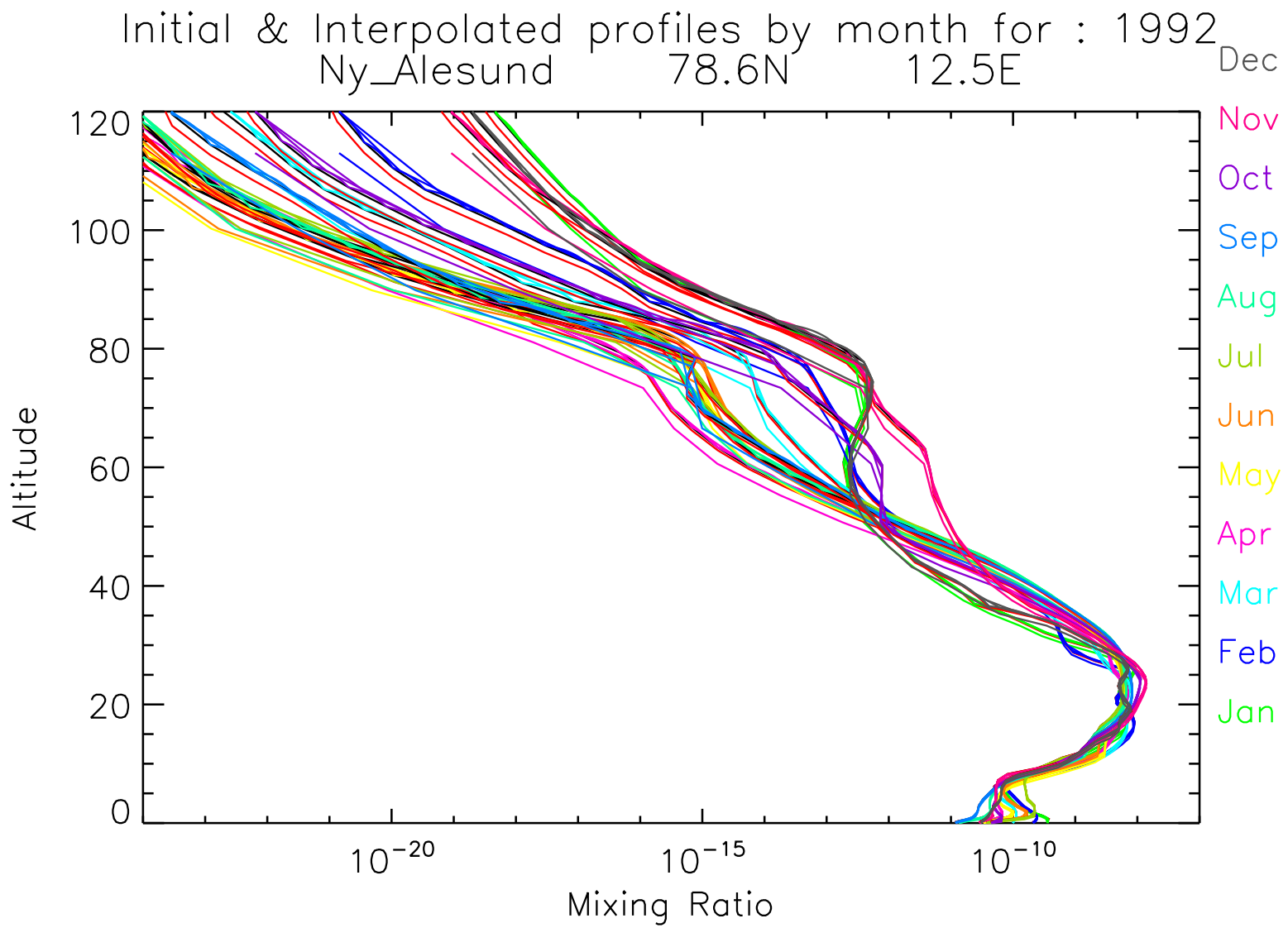
Mixing Ratio


Initial & Interpolated profiles by month for : 1992
Ny_Alesund 78.6N 12.5E
Dec
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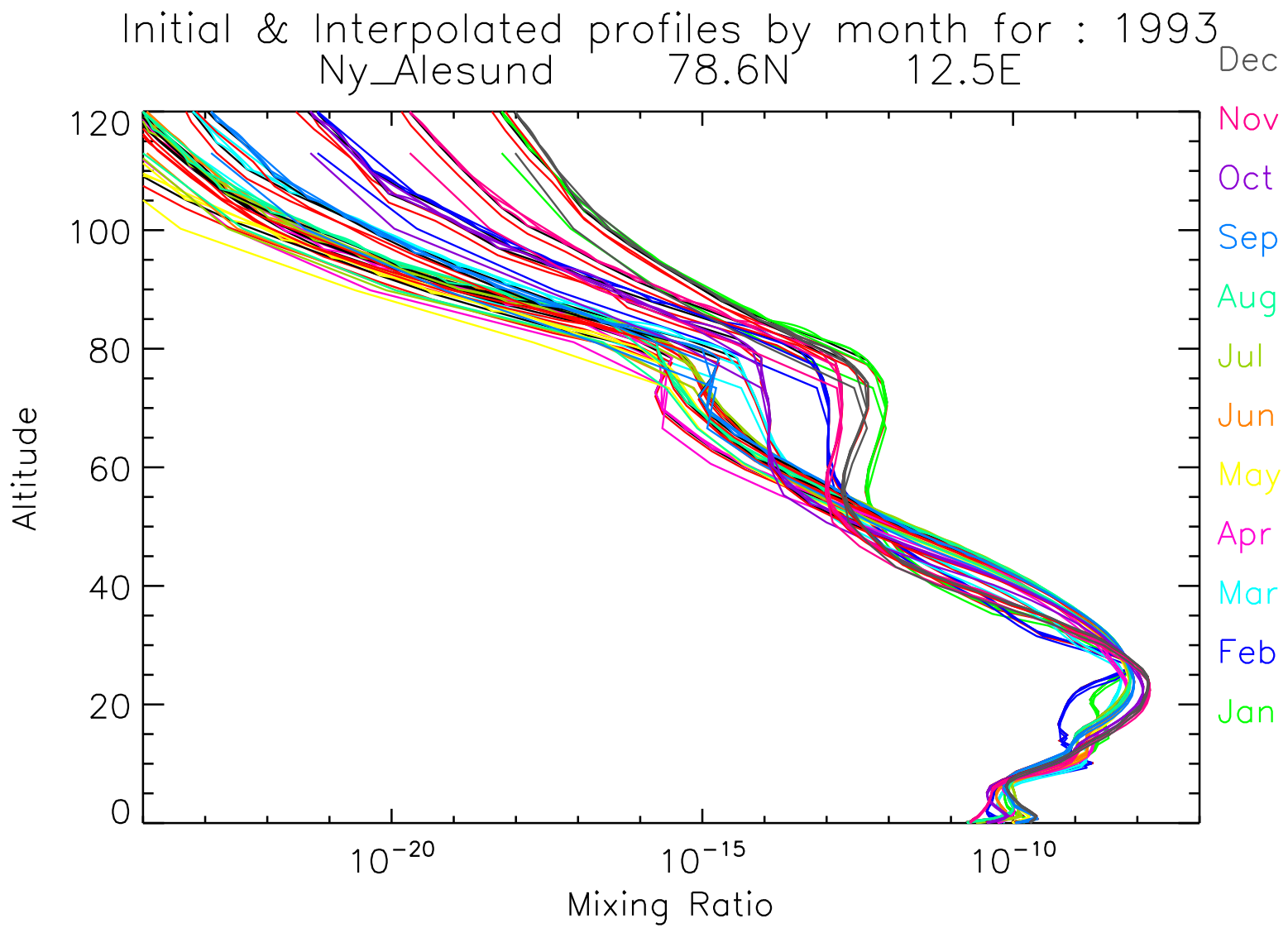
Mixing Ratio


Initial & Interpolated profiles by month for : 1993
Ny_Alesund 78.6N 12.5E
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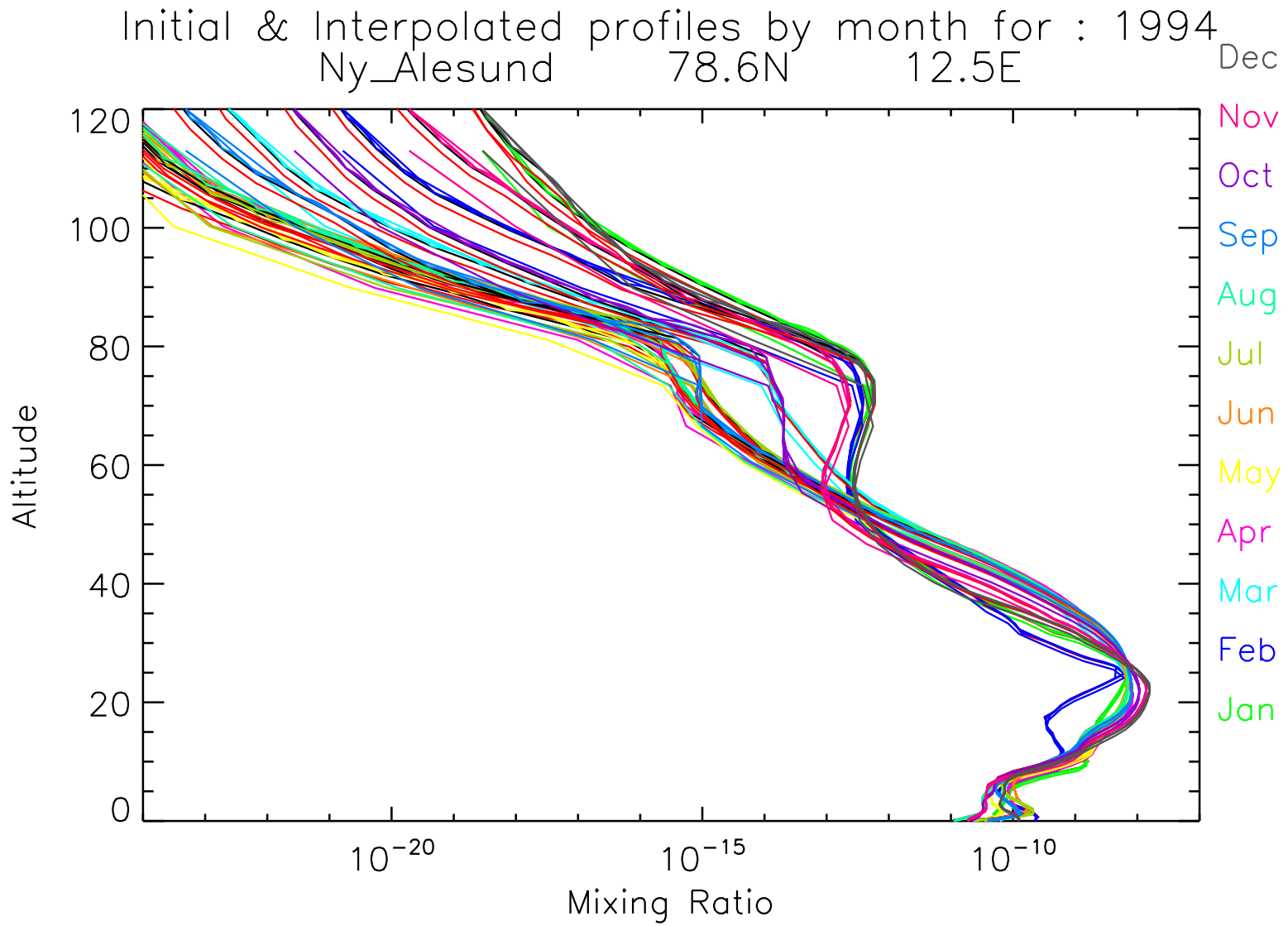
Mixing Ratio


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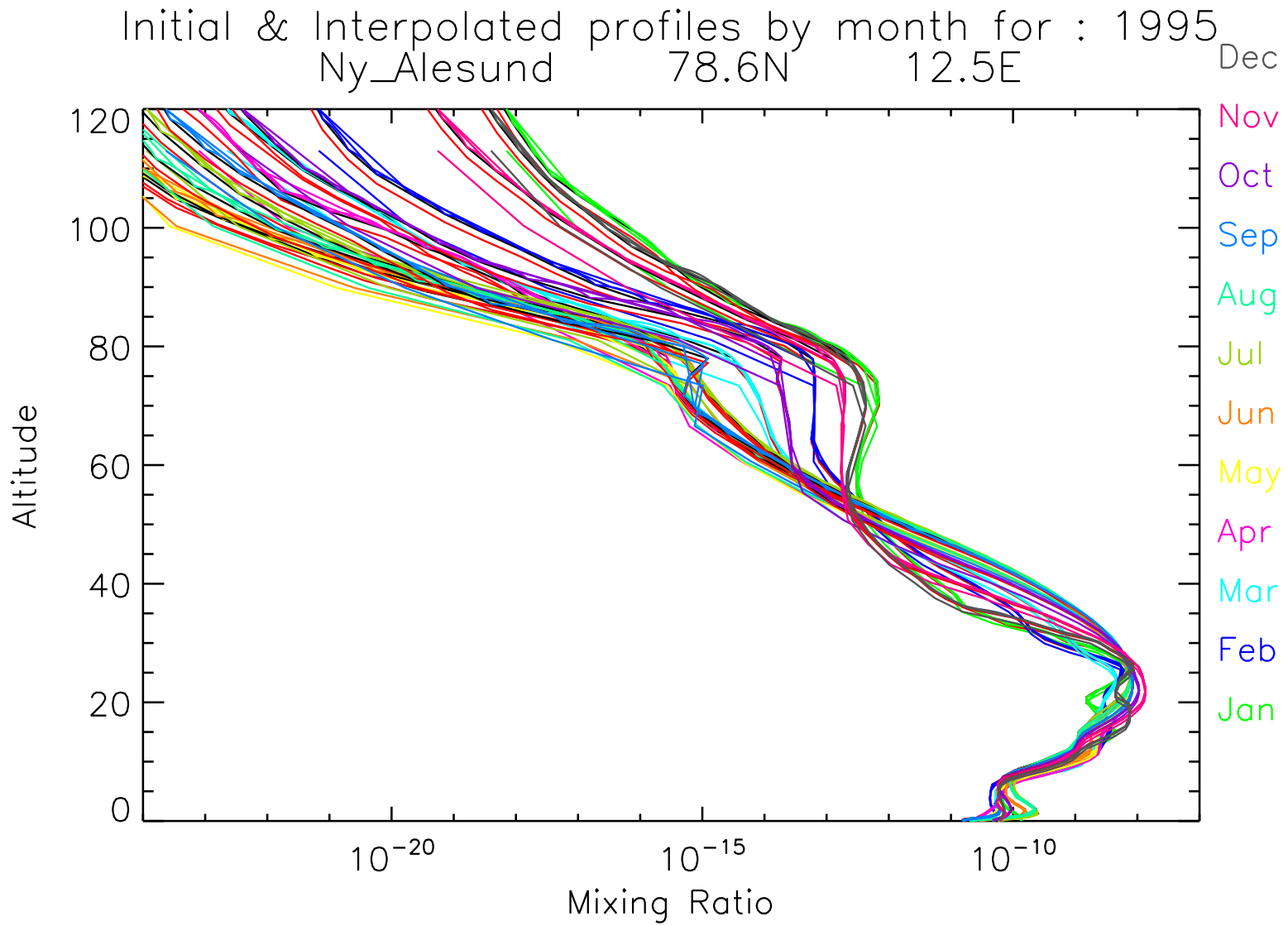
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1995
Ny_Alesund 78.6N 12.5E
Dec
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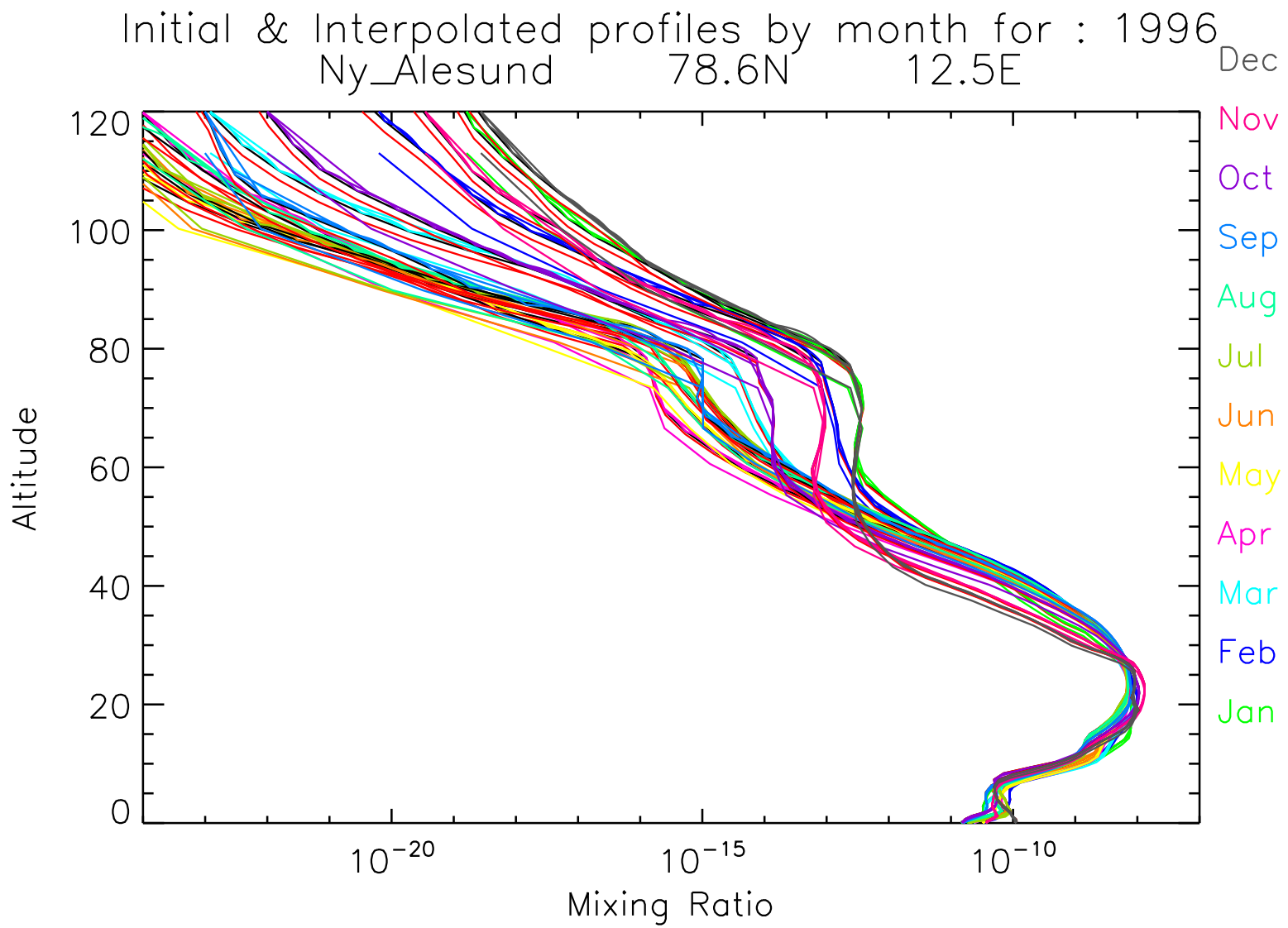
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1996
Ny_Alesund 78.6N 12.5E
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Altitude
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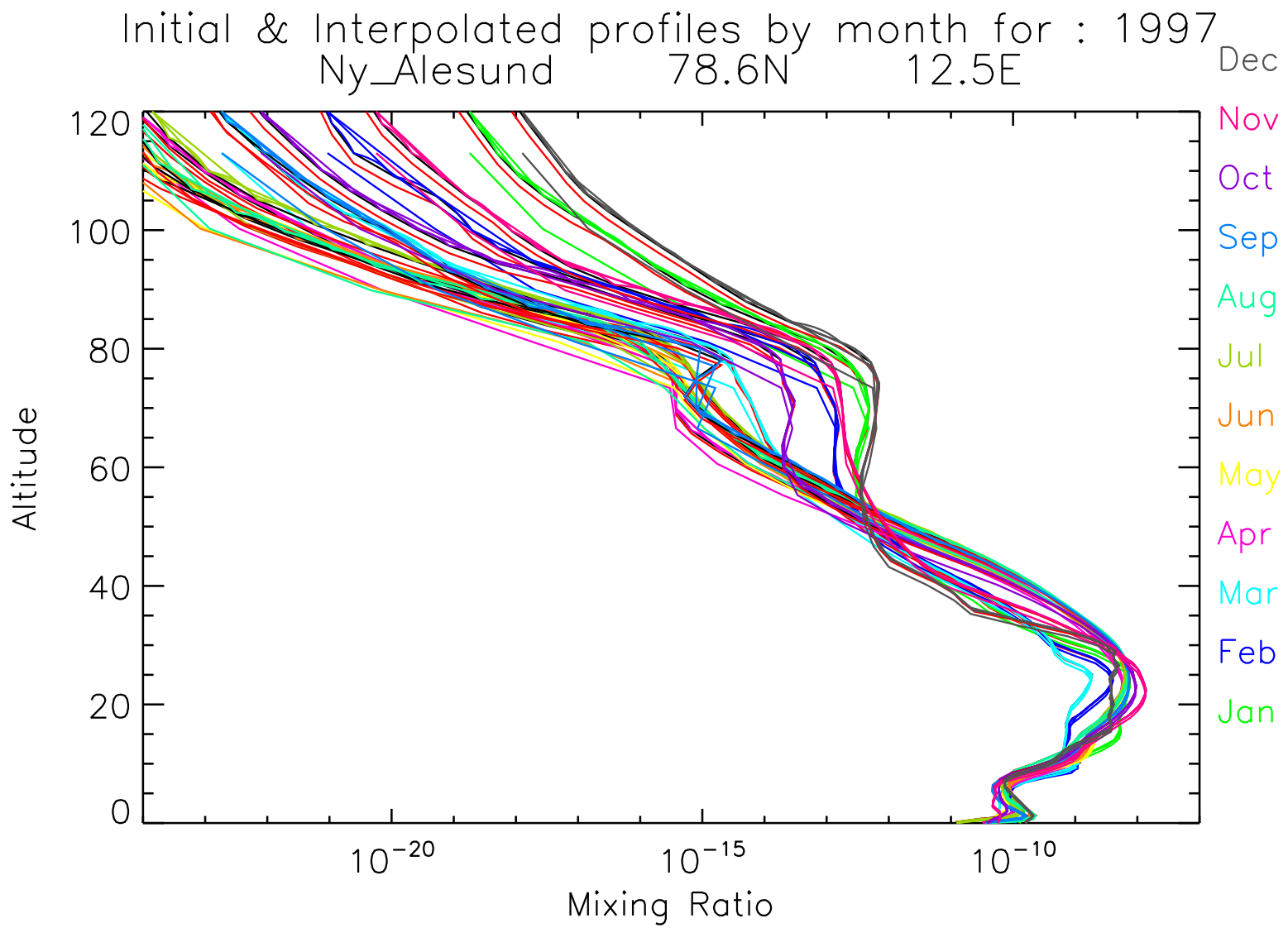
10^{-10}
Mixing Ratio


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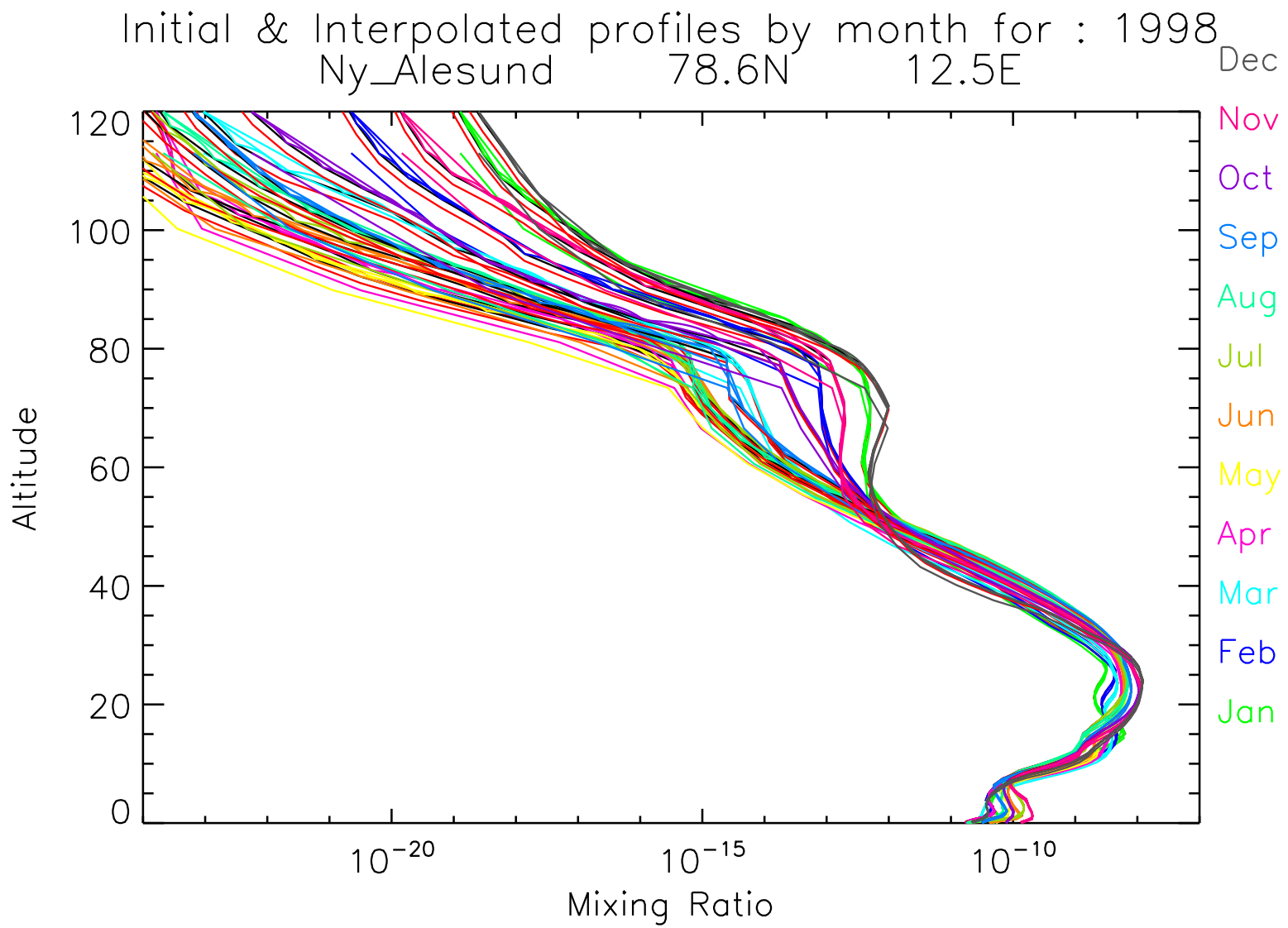
Mixing Ratio


Initial & Interpolated profiles by month for : 1998
Ny_Alesund 78.6N 12.5E
Dec
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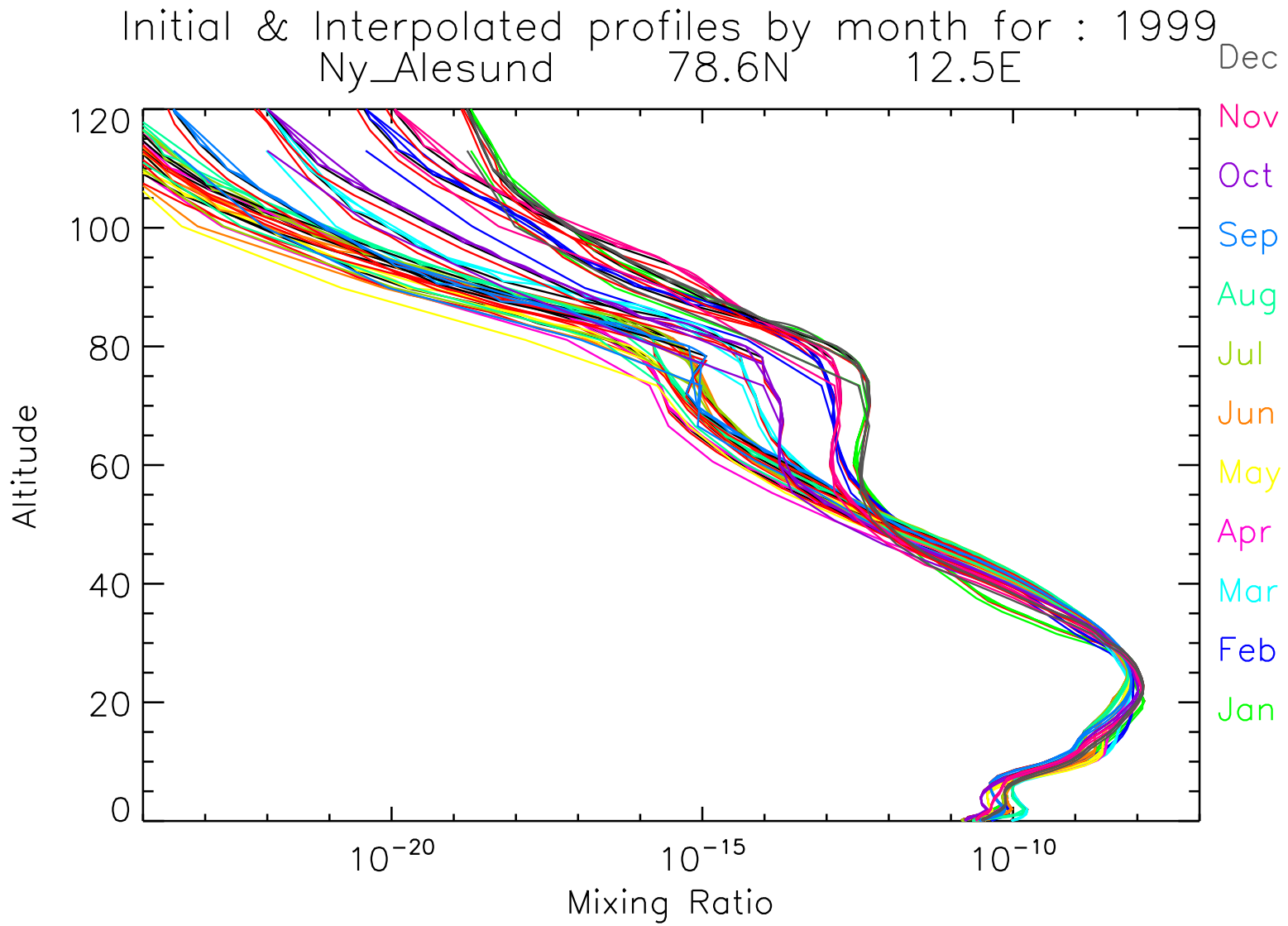
Mixing Ratio


Initial & Interpolated profiles by month for : 1999
Ny_Alesund 78.6N 12.5E
Dec
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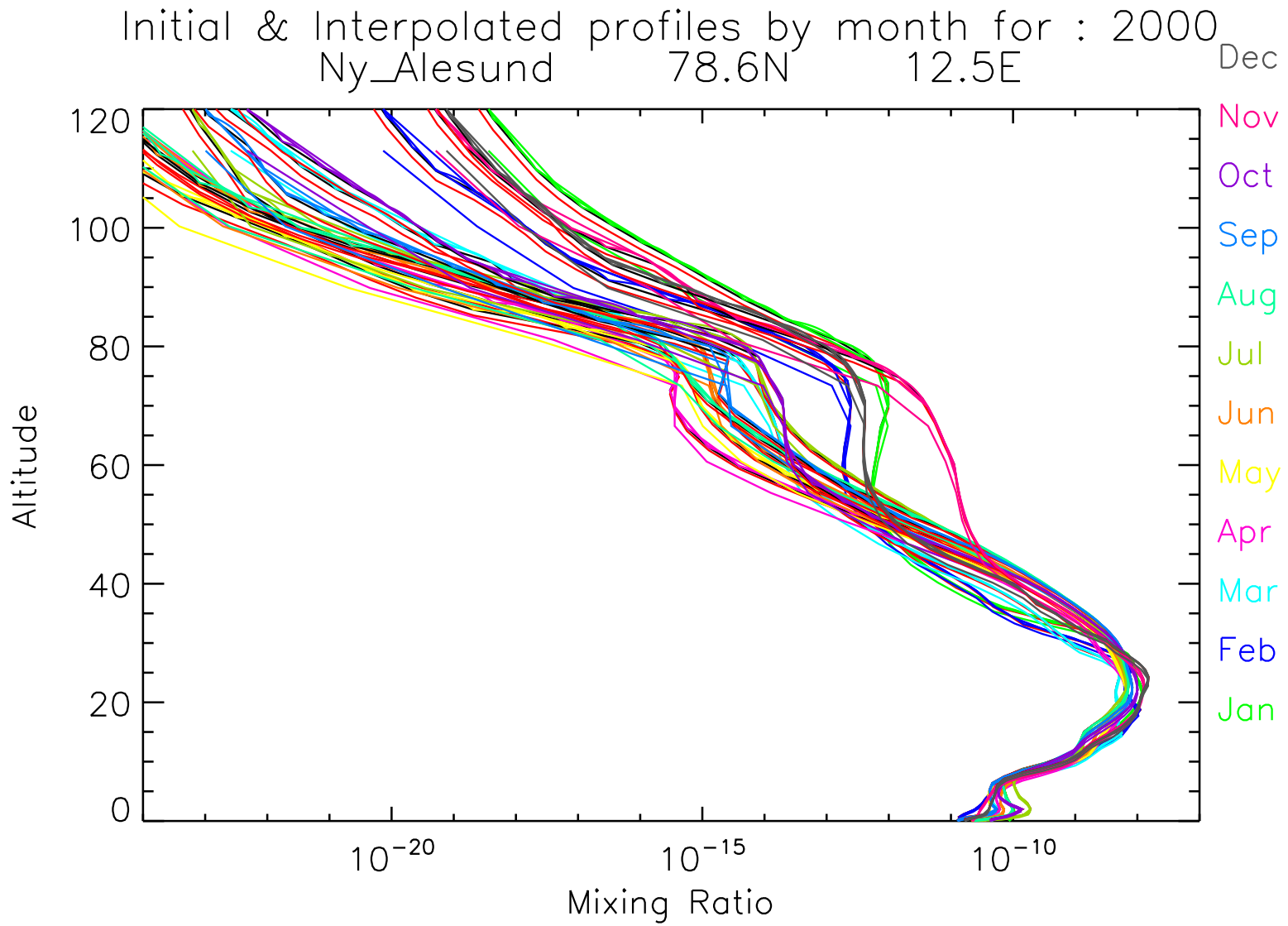
Altitude
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2000
Ny_Alesund 78.6N 12.5E
Dec
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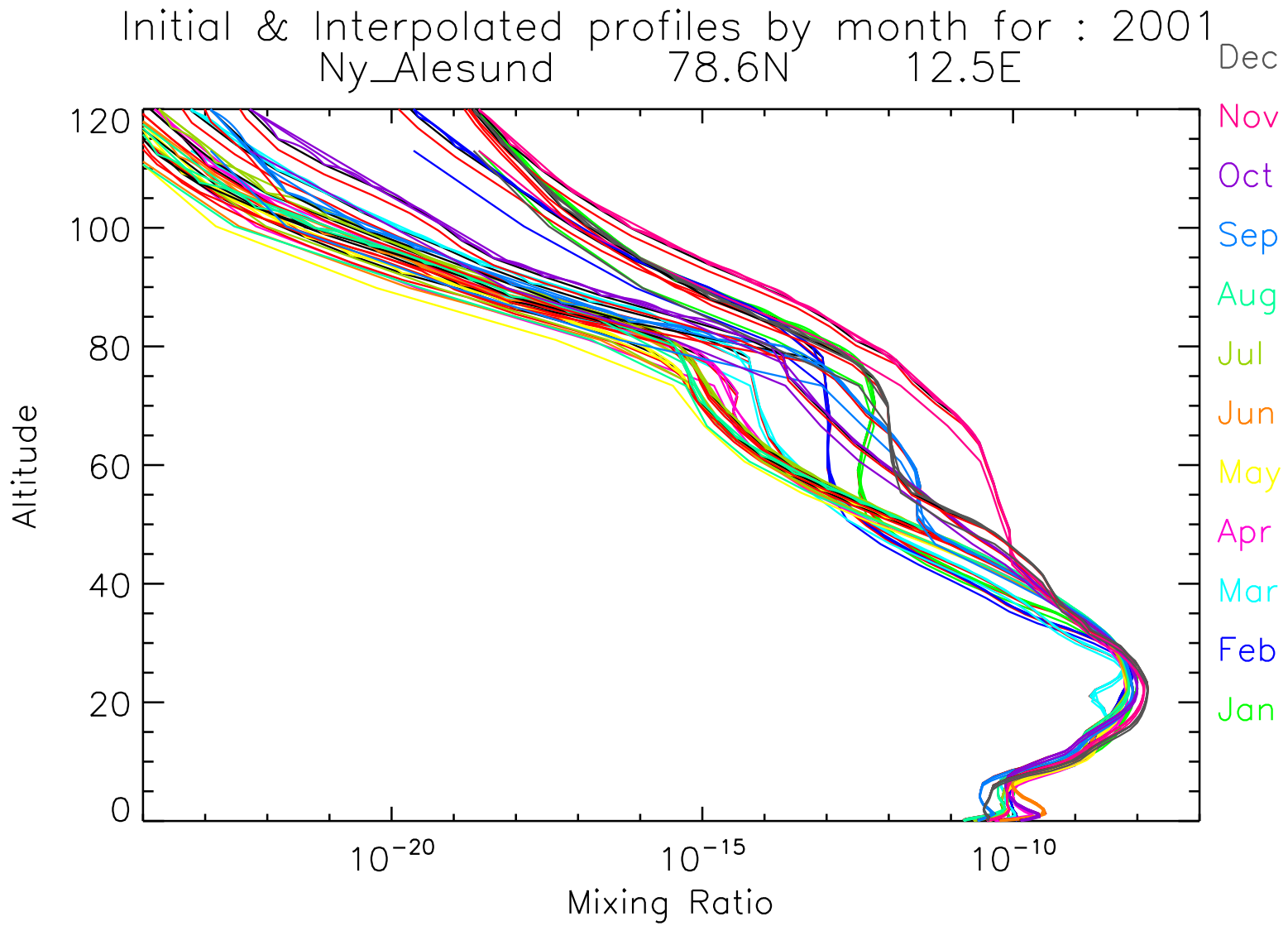
Altitude
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2001
Ny_Alesund 78.6N 12.5E
Dec
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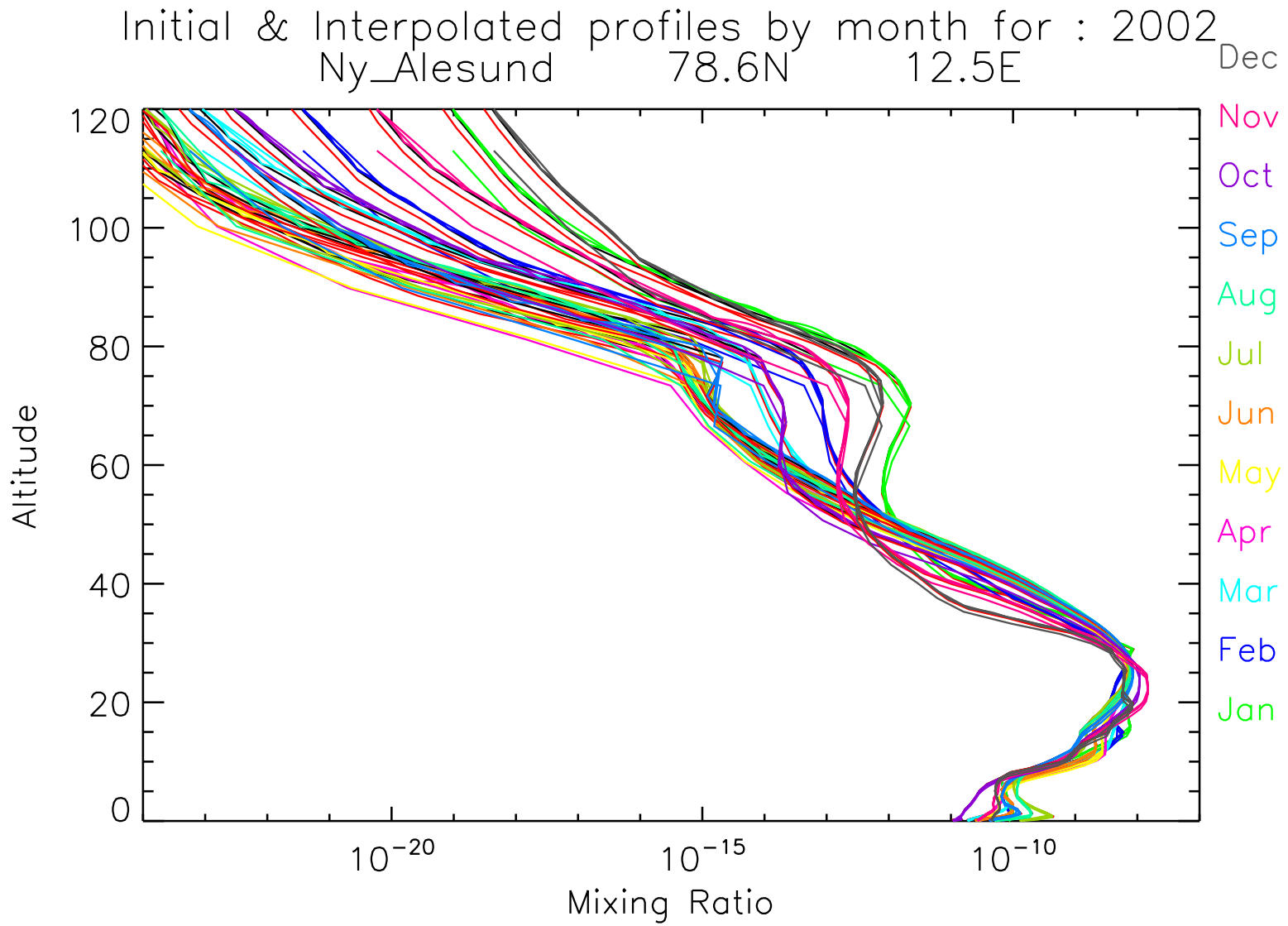
Altitude
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2002
Ny_Alesund 78.6N 12.5E
Dec
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120
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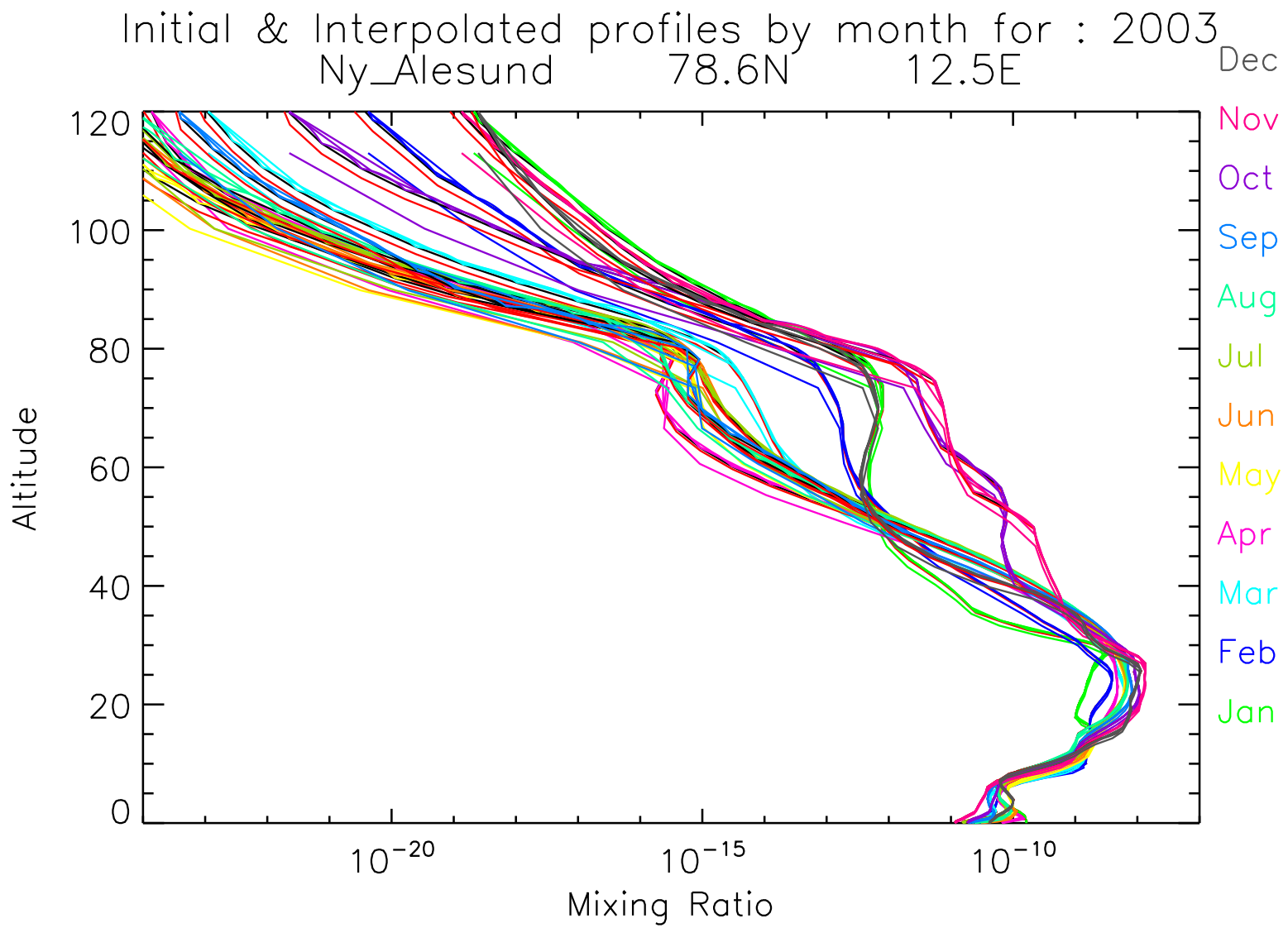
Altitude
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2003
Ny_Alesund 78.6N 12.5E
Dec
Nov
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Jan
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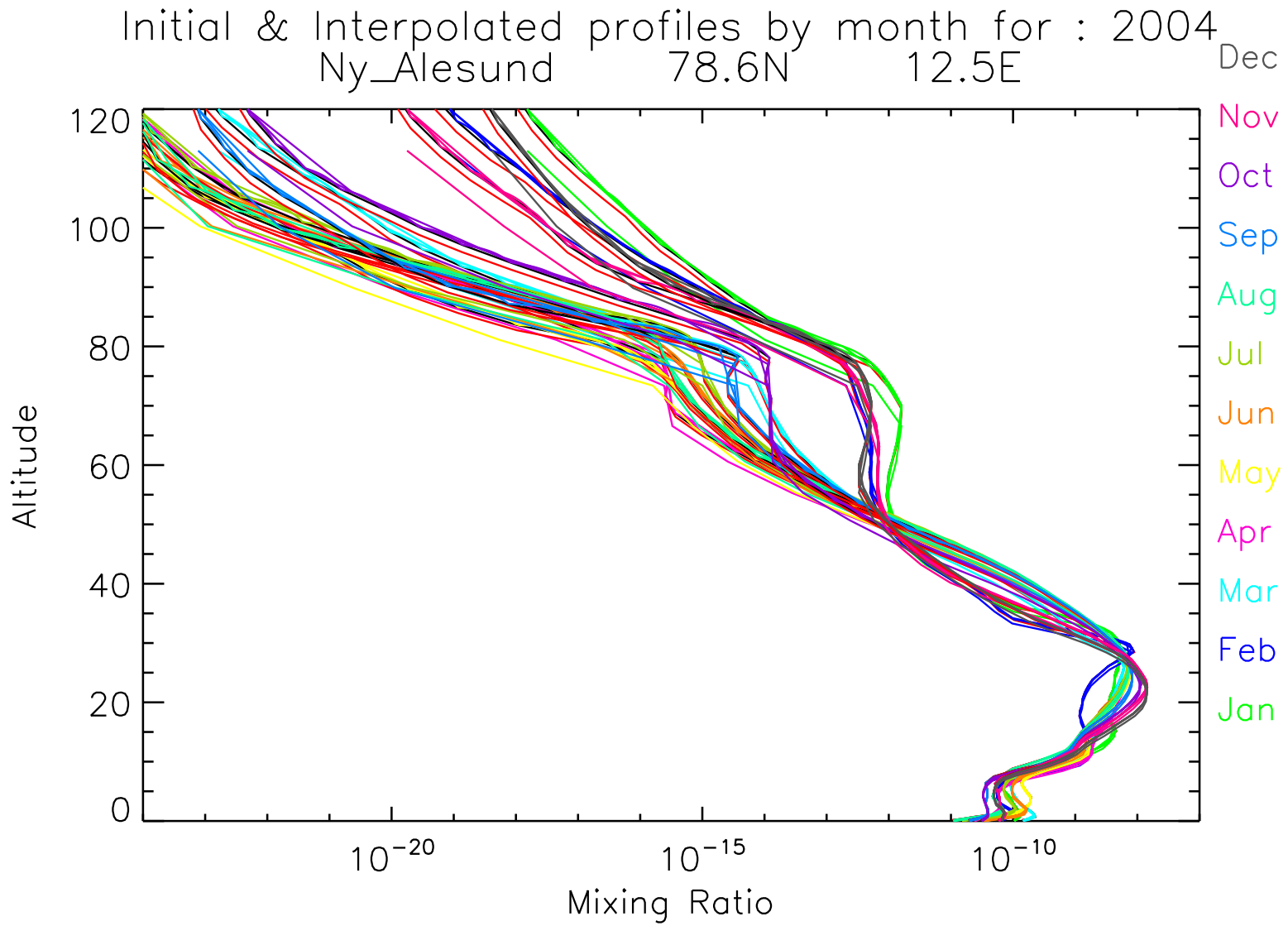
Altitude
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2004
Ny_Alesund 78.6N 12.5E
Dec
Nov
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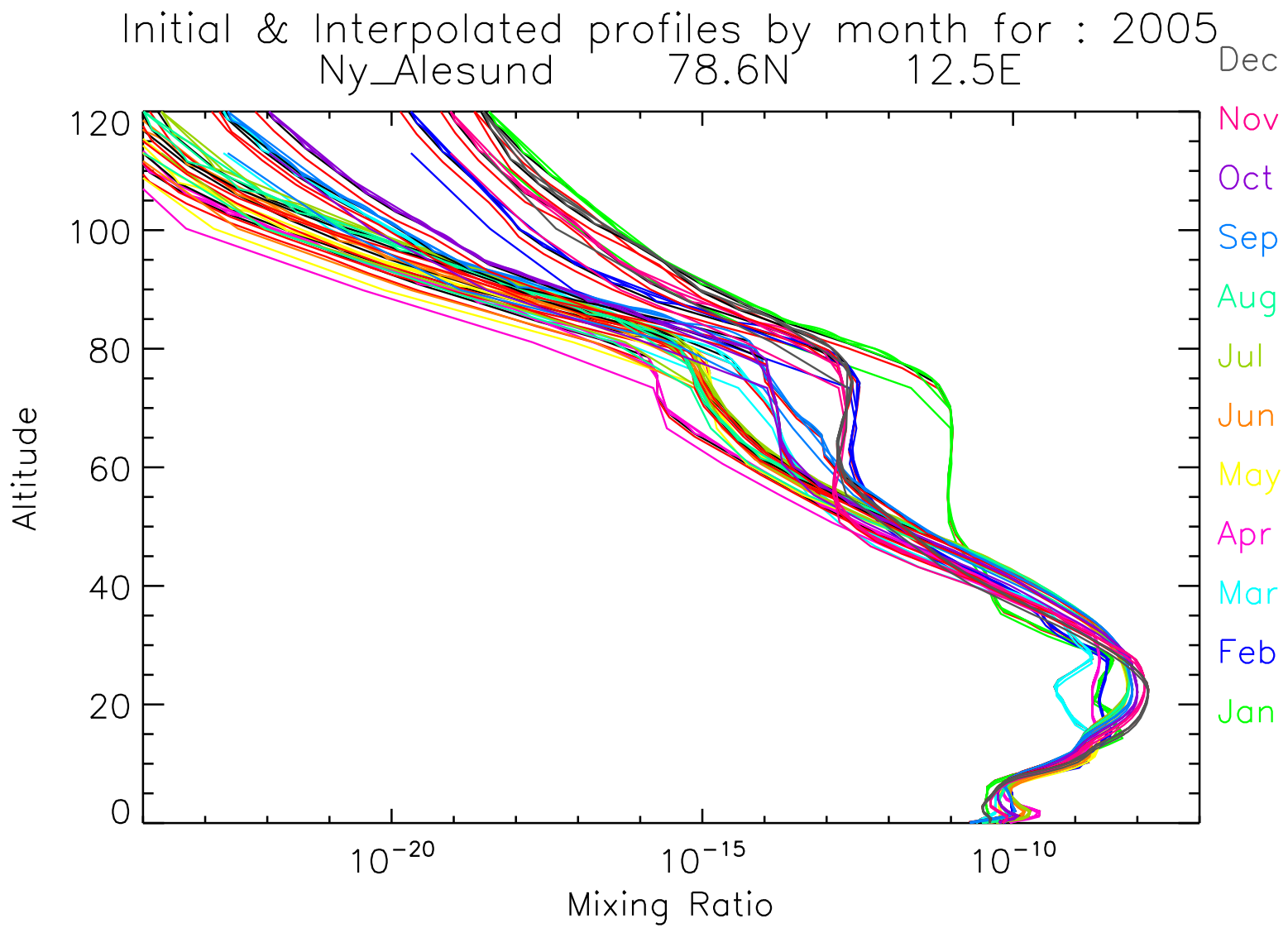
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2005
Ny_Alesund 78.6N 12.5E
Dec
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120
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Altitude
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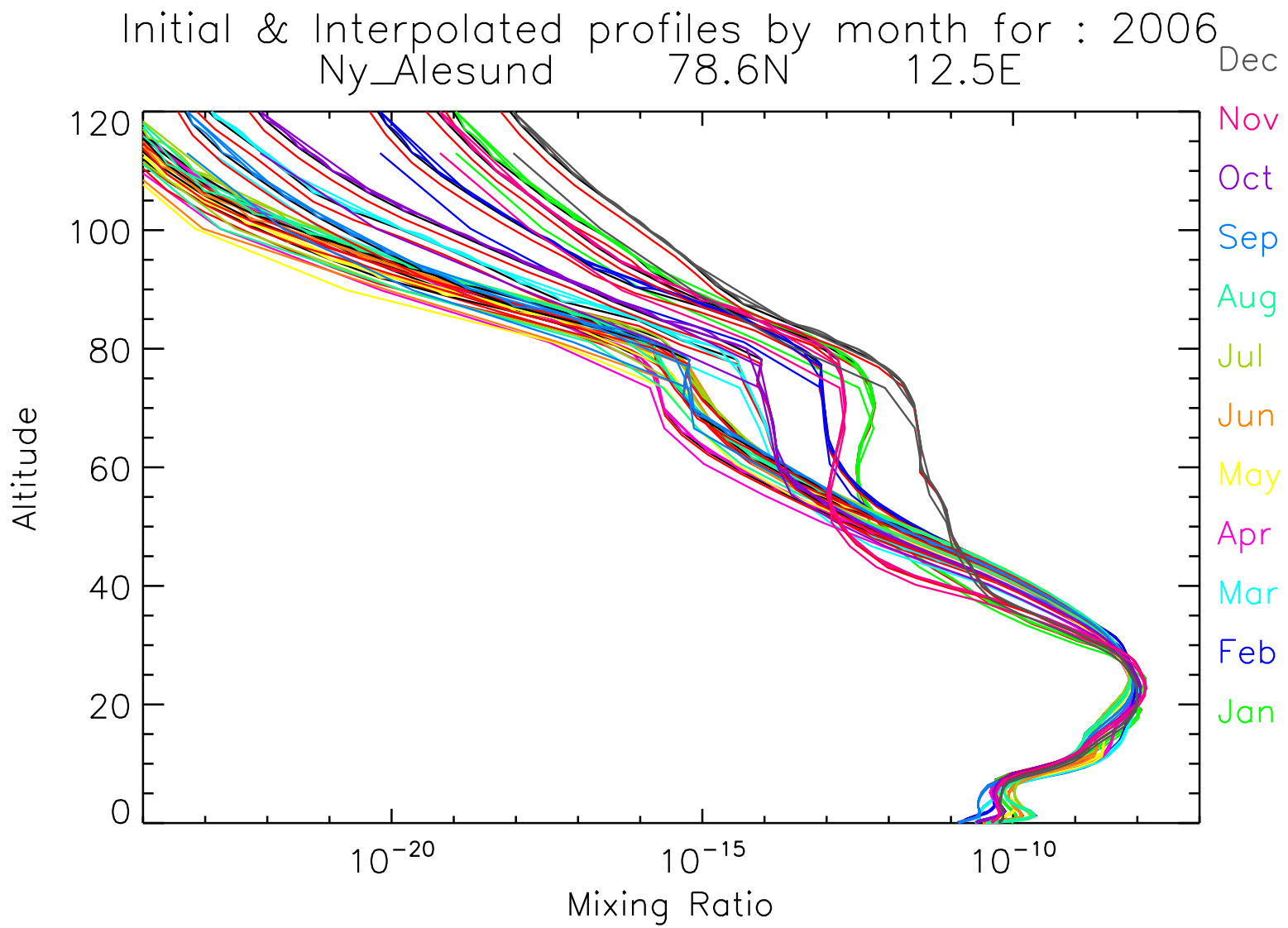
10^{-15}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2006
Ny_Alesund 78.6N 12.5E
Dec
Nov
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120
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Altitude
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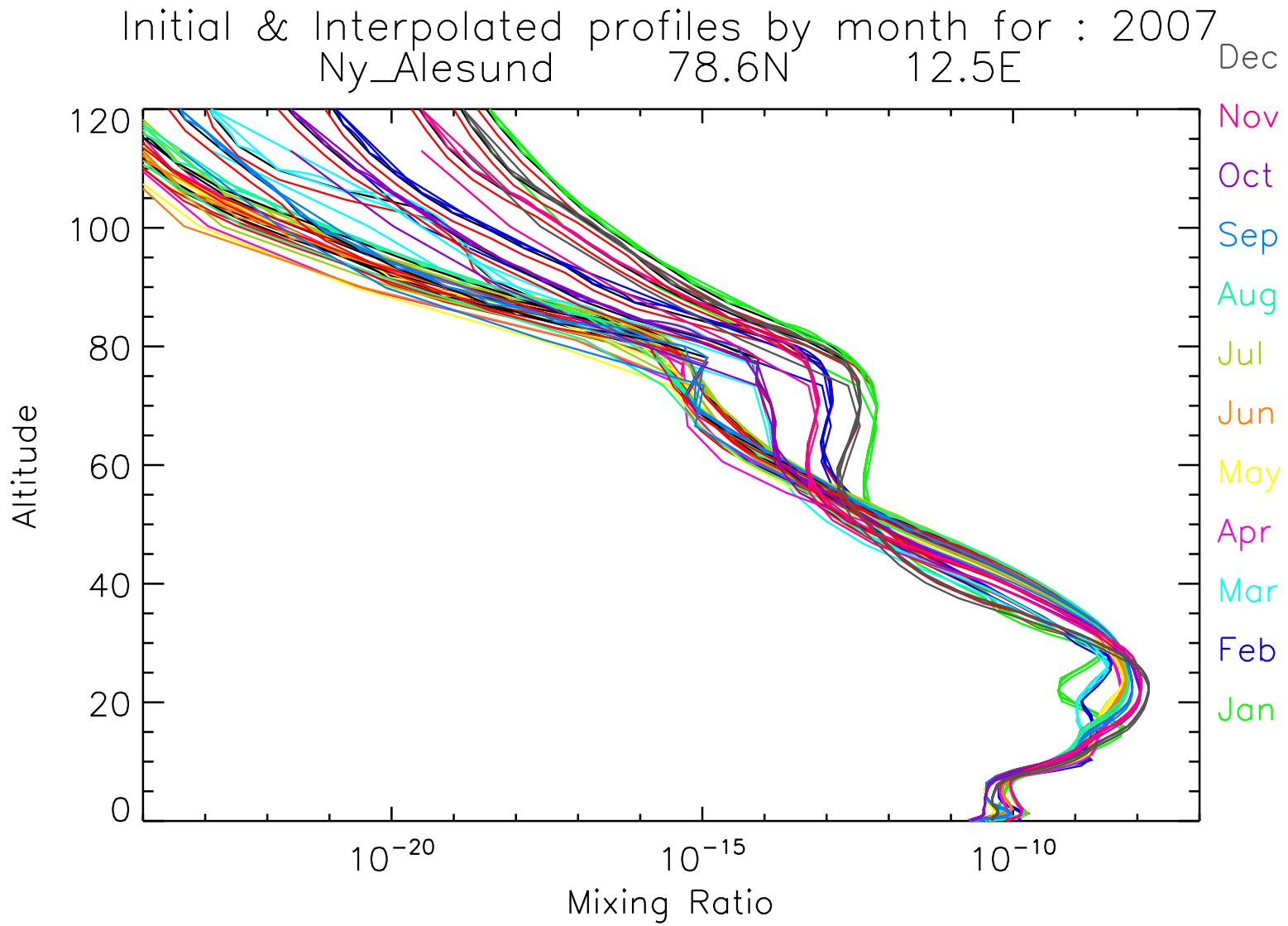
10^{-15}
10^{-10}
Mixing Ratio


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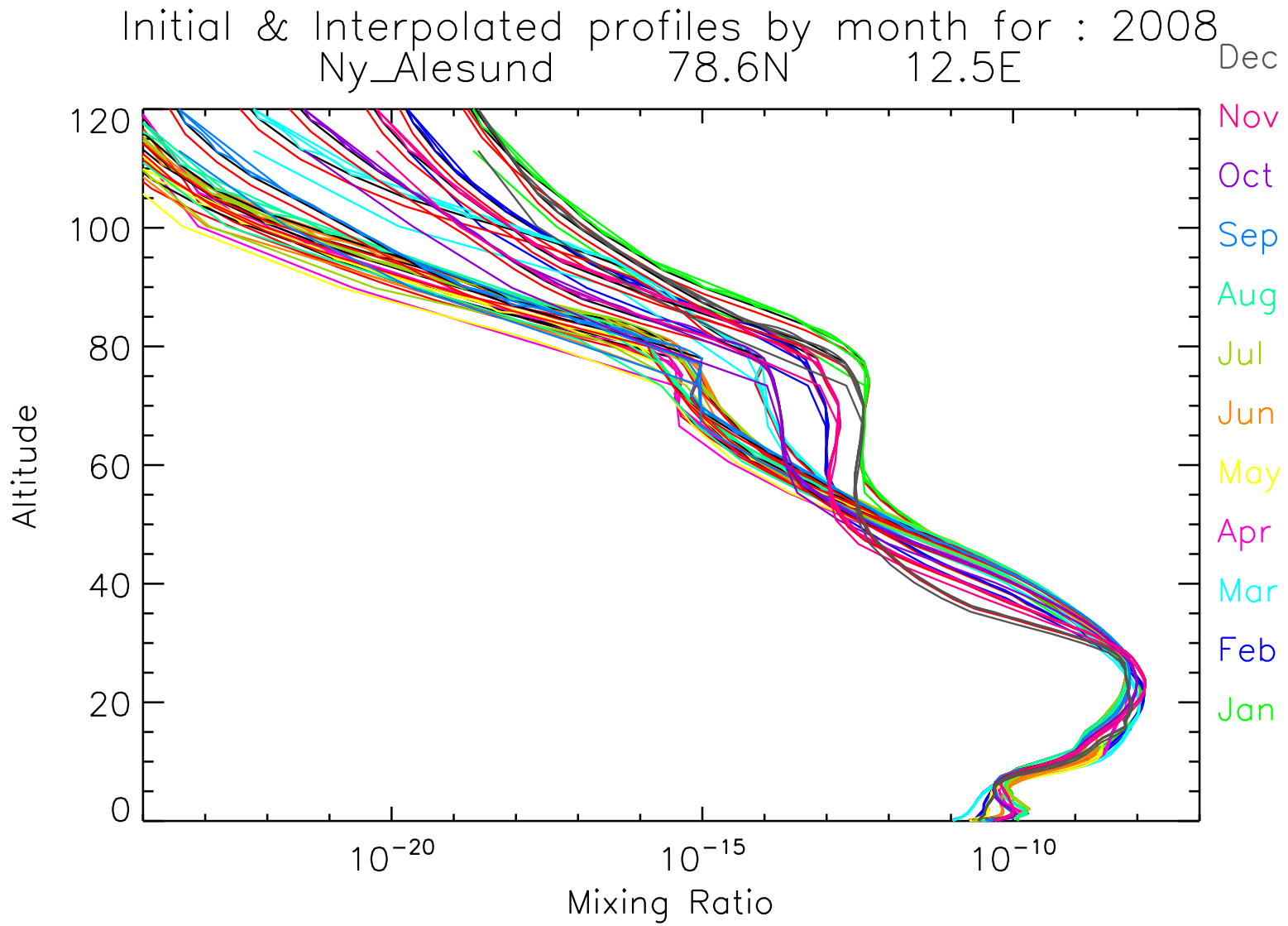
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2008
Ny_Alesund 78.6N 12.5E
Dec
Nov
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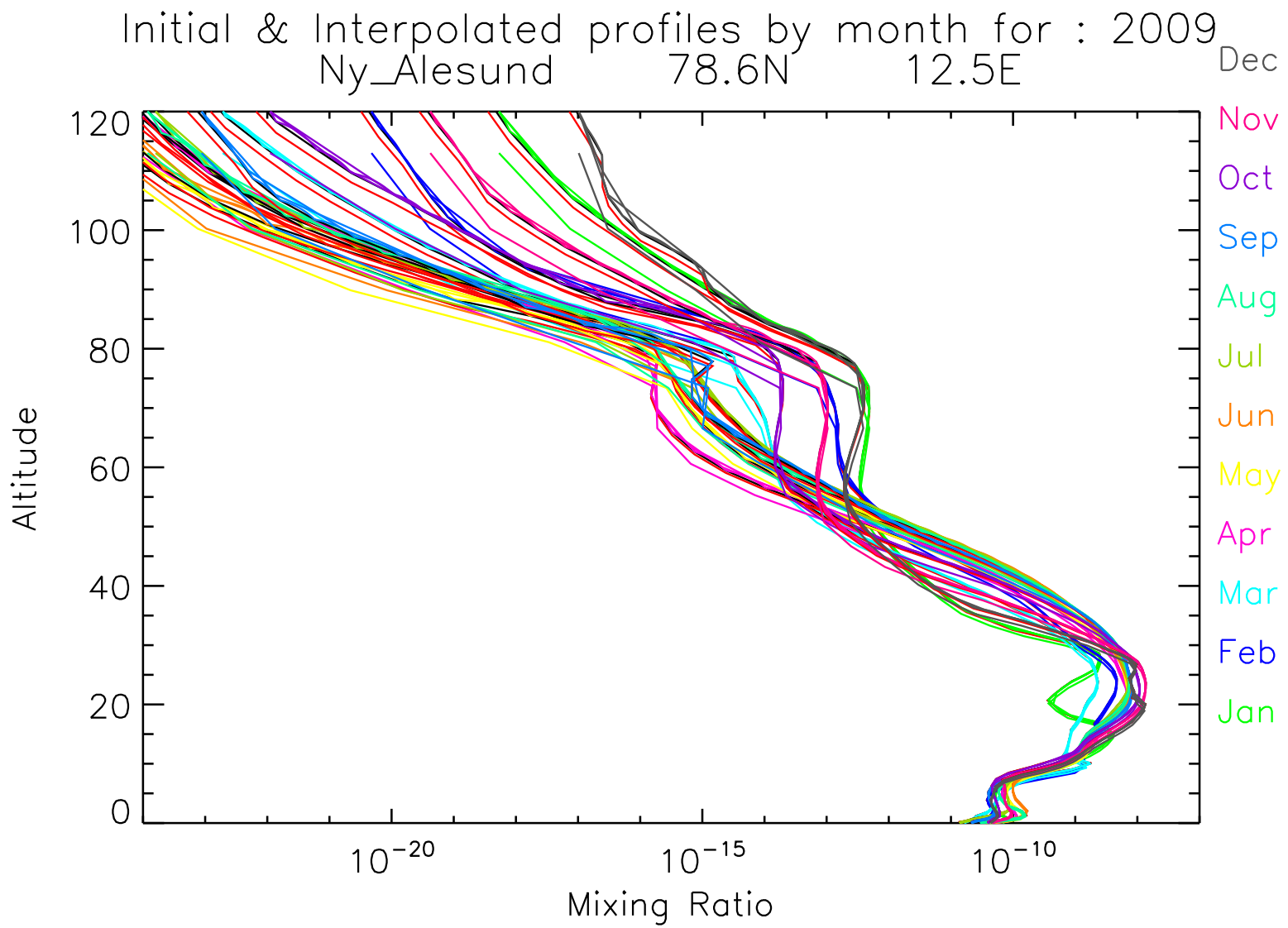
Altitude
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2009
Ny_Alesund 78.6N 12.5E
Dec
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Altitude
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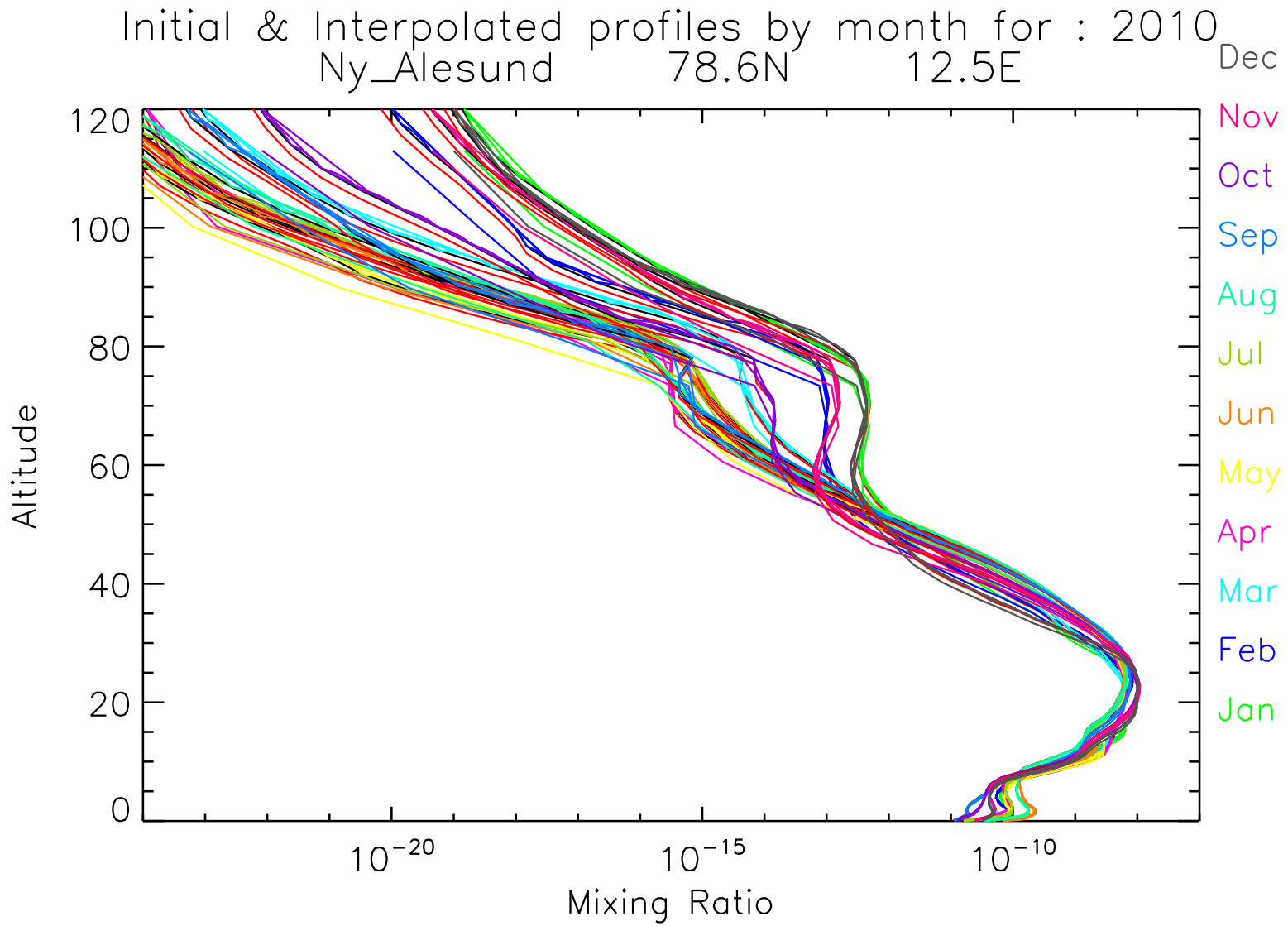
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2010
Ny_Alesund 78.6N 12.5E
Dec
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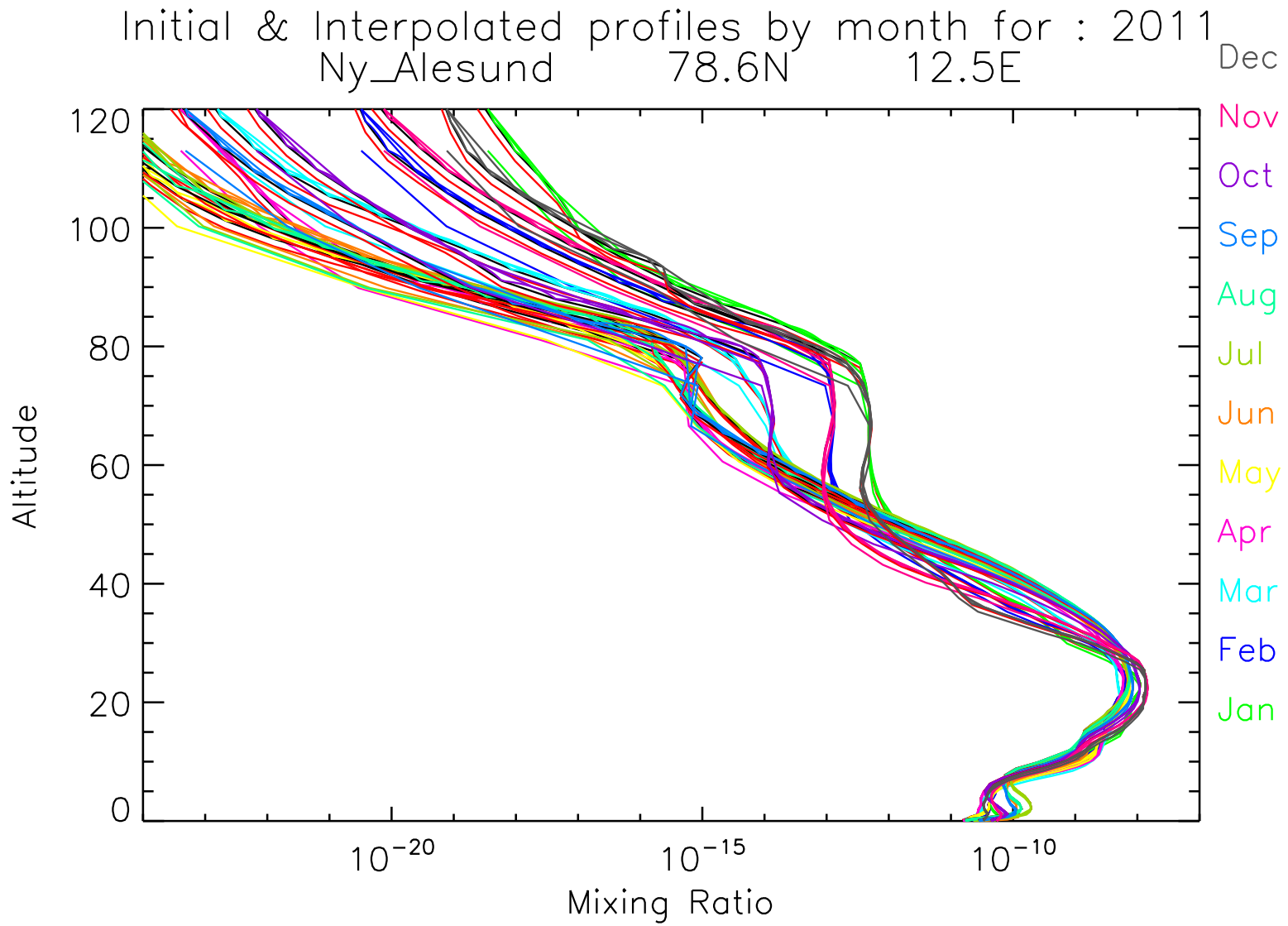
Mixing Ratio


Initial & Interpolated profiles by month for : 2011
Ny_Alesund 78.6N 12.5E
Dec
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Altitude
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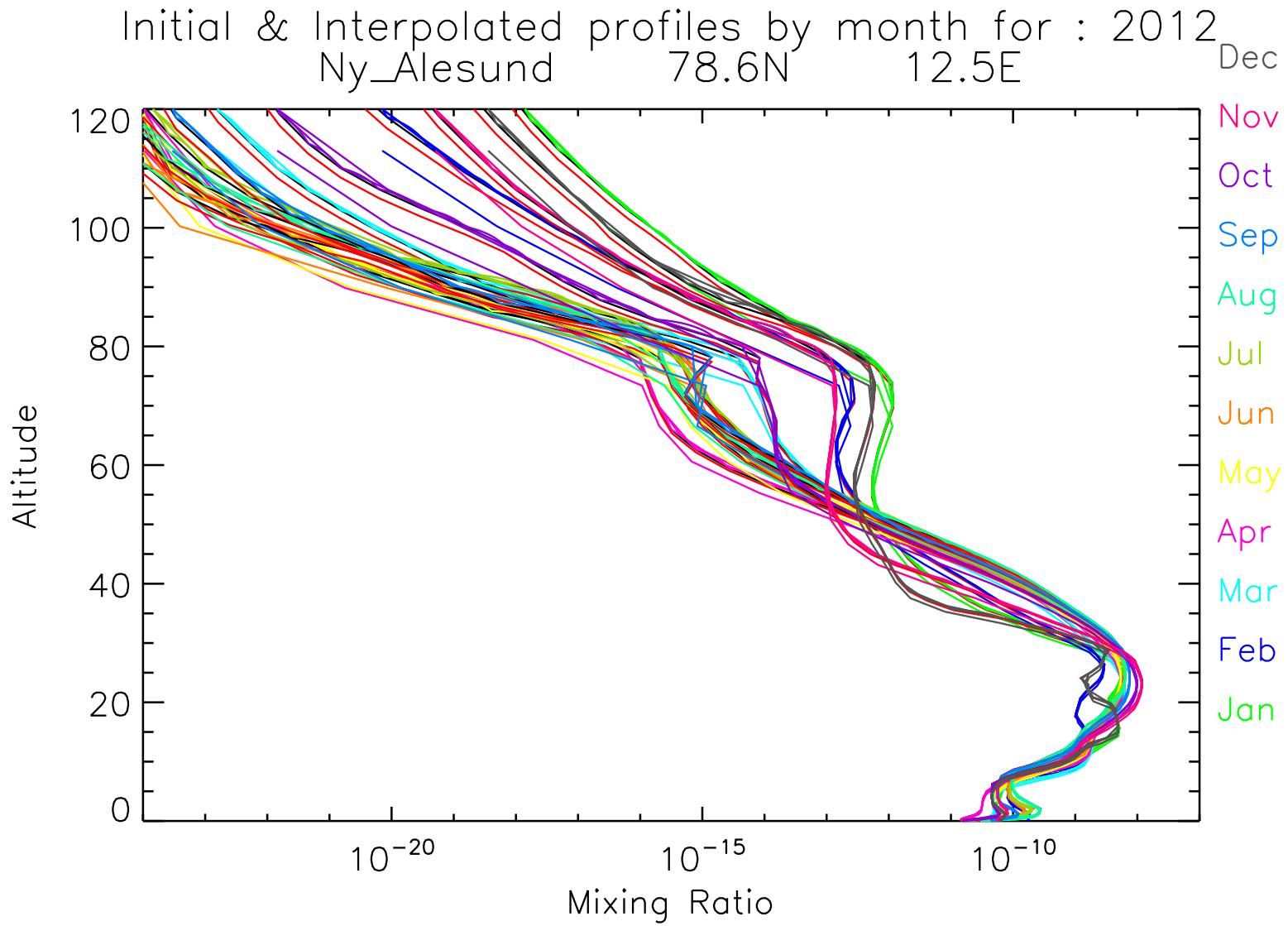
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2012
Ny_Alesund 78.6N 12.5E
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Jan
120
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Altitude
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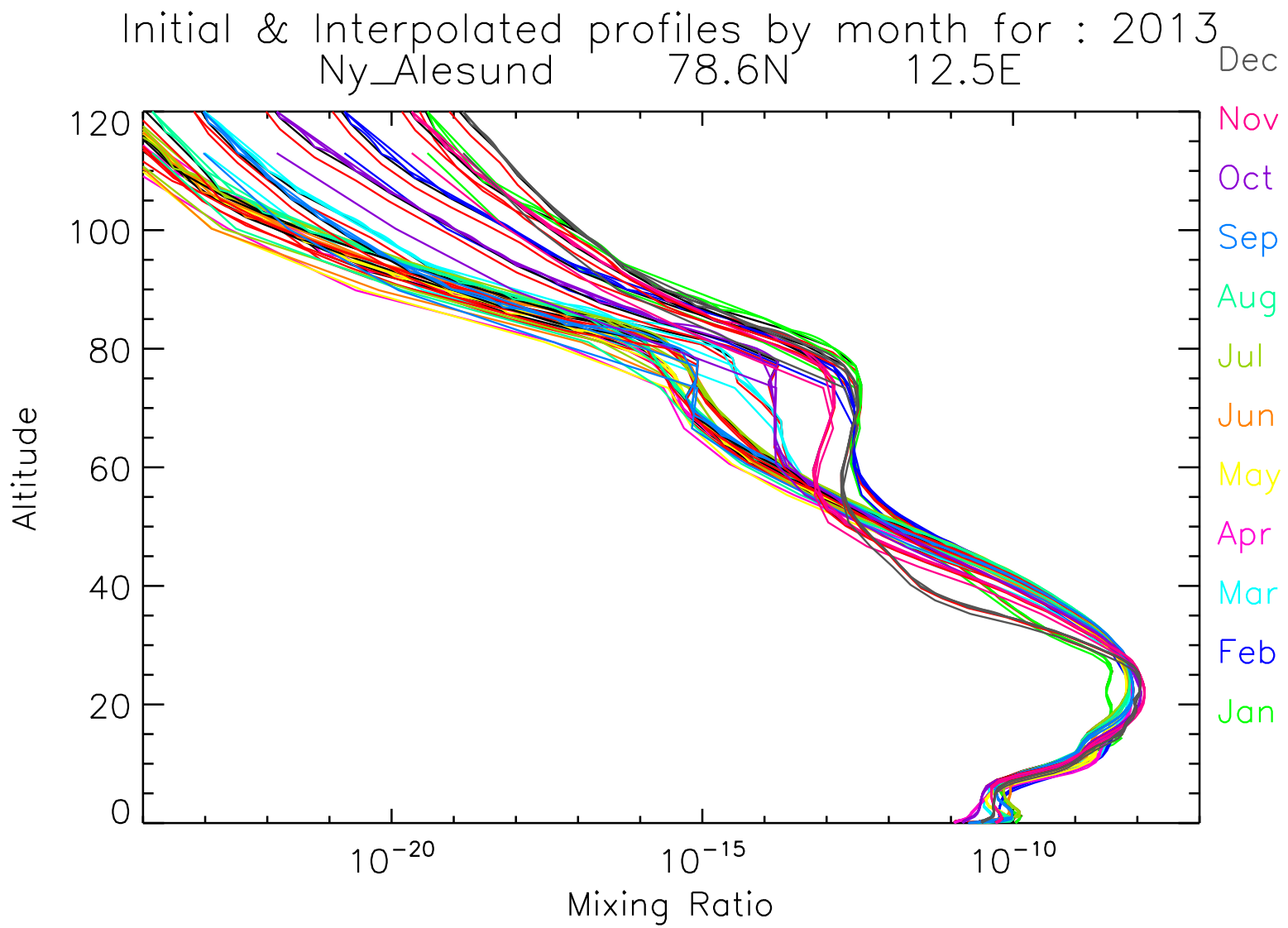
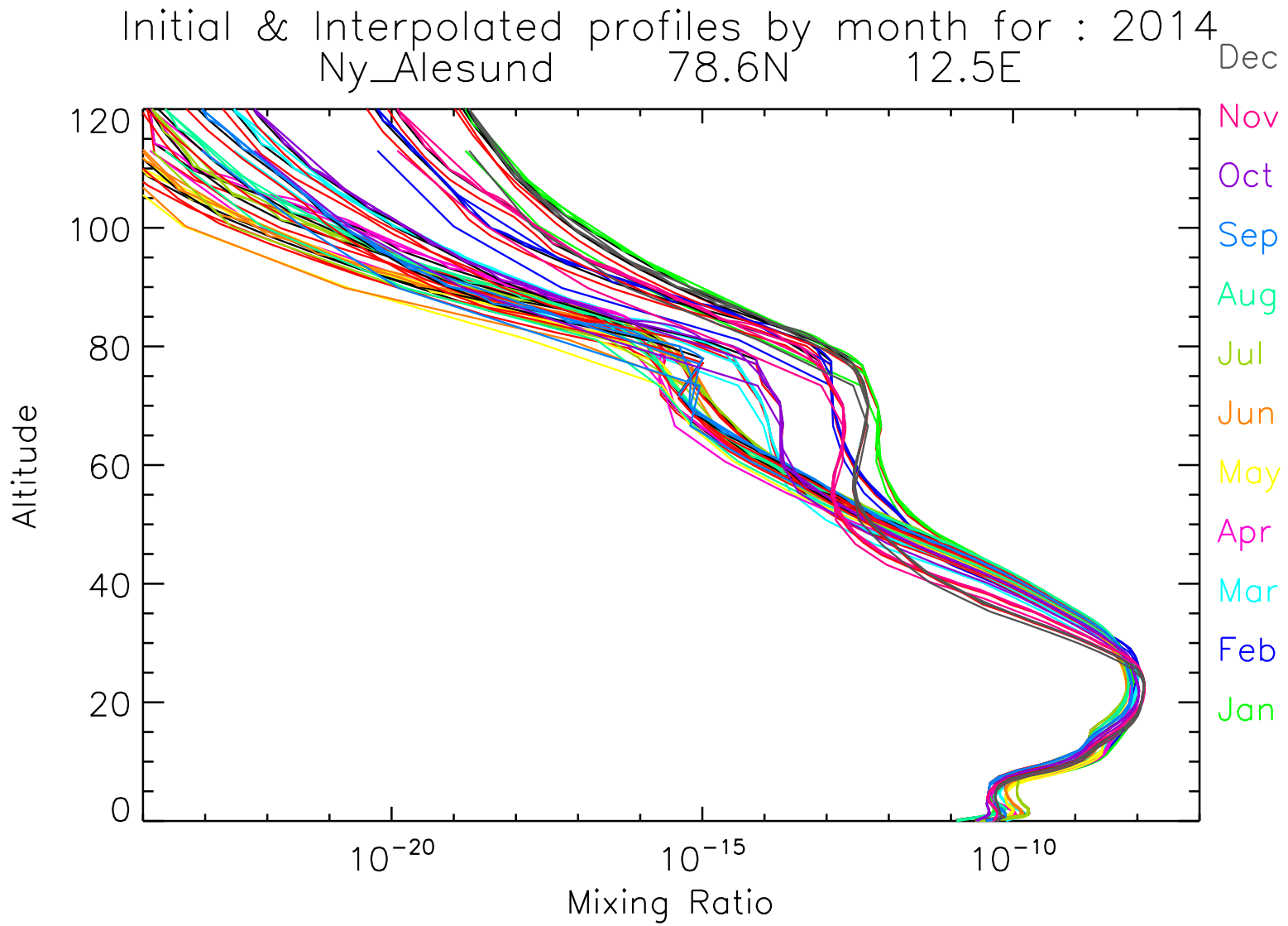
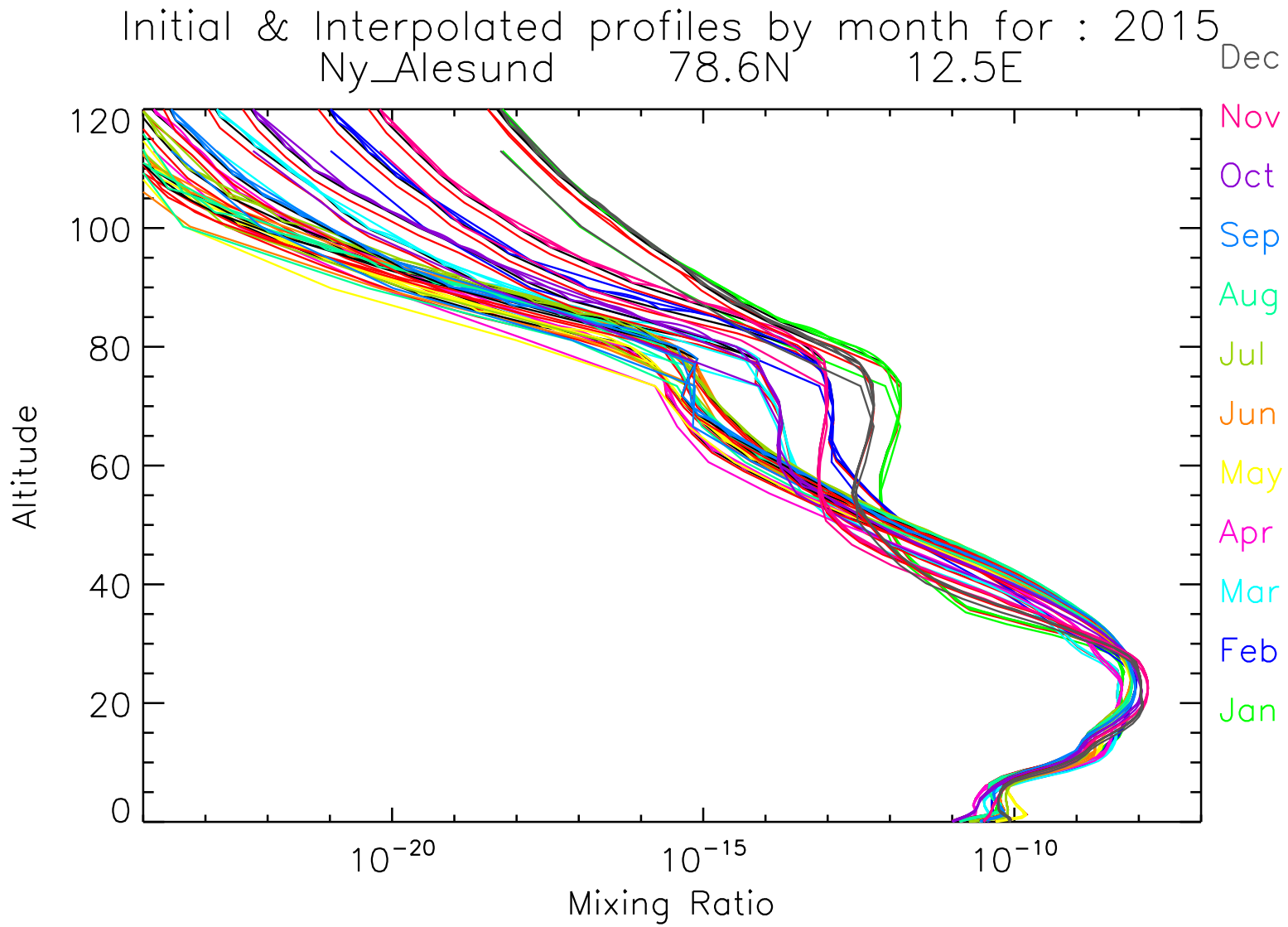
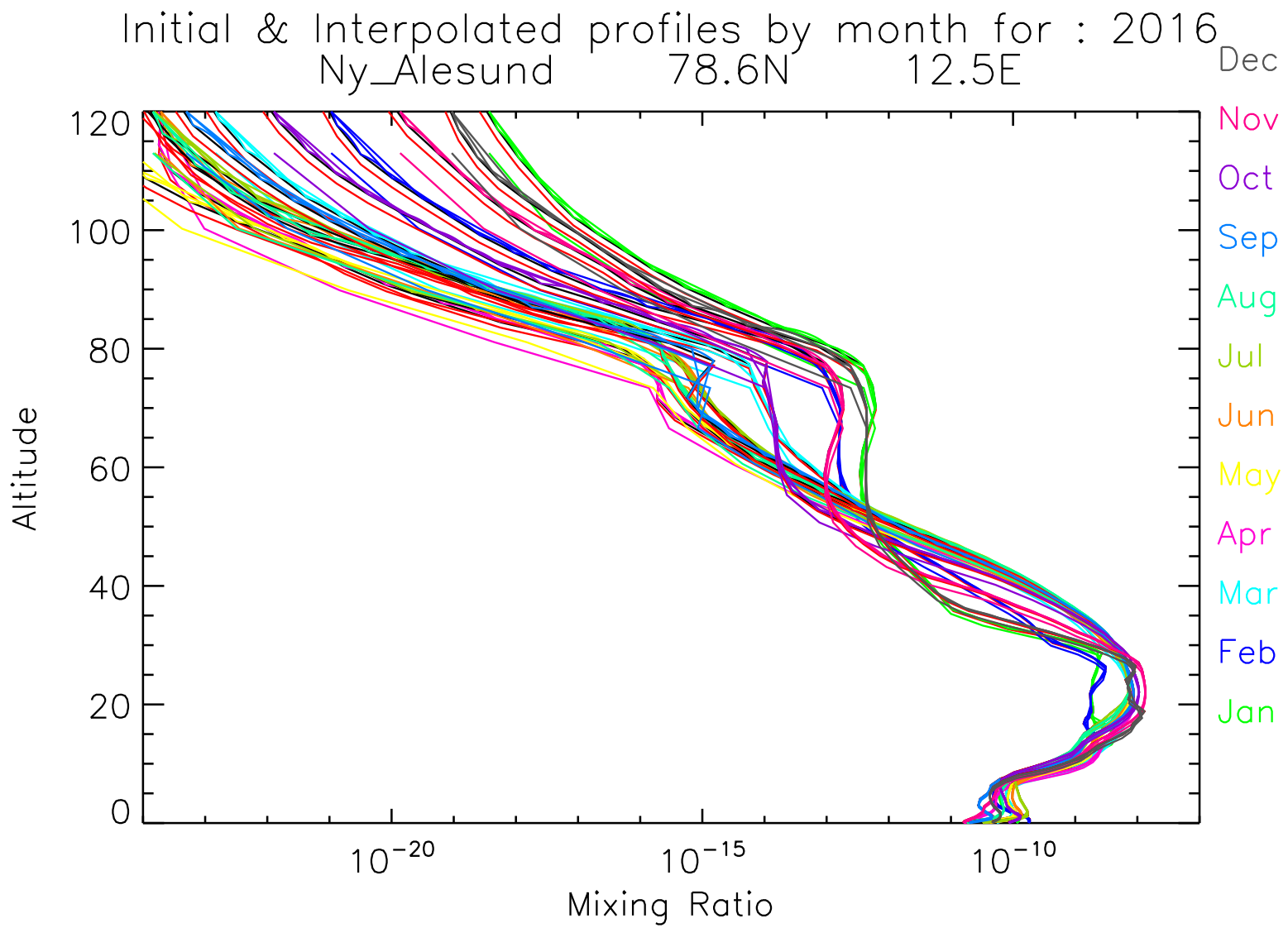
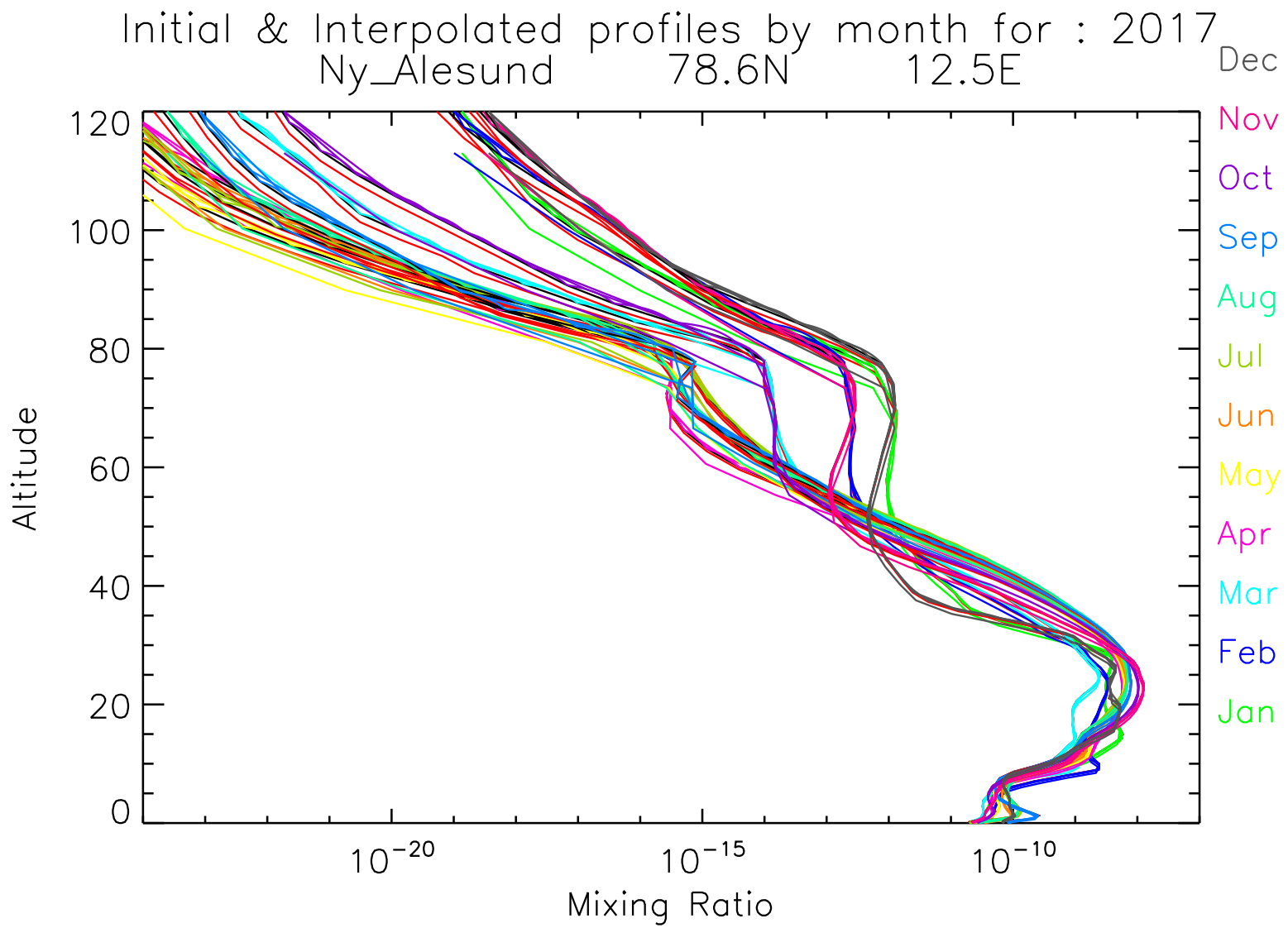
10^{-10}
Mixing Ratio

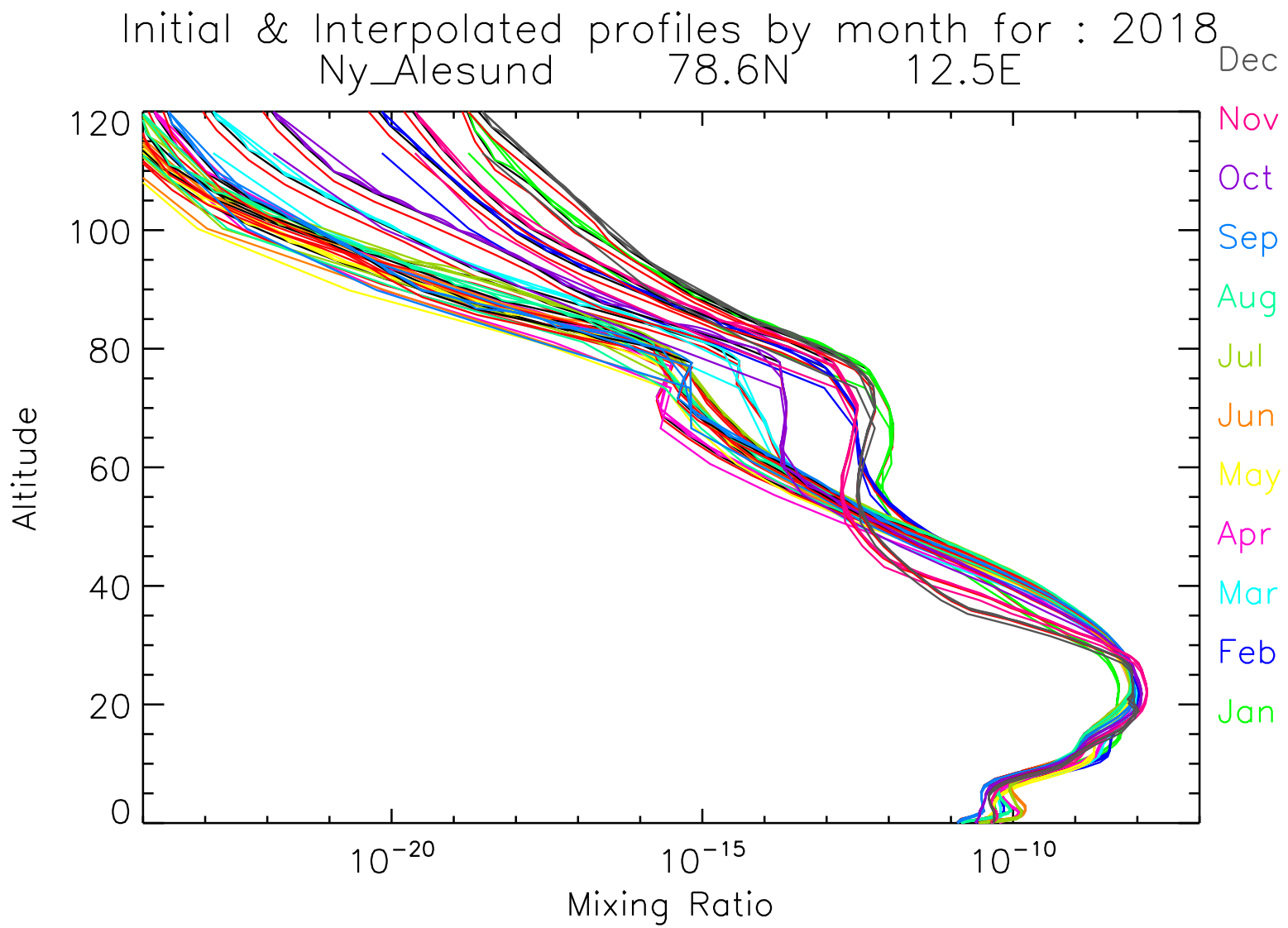

Initial & Interpolated profiles by month for : 2013
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

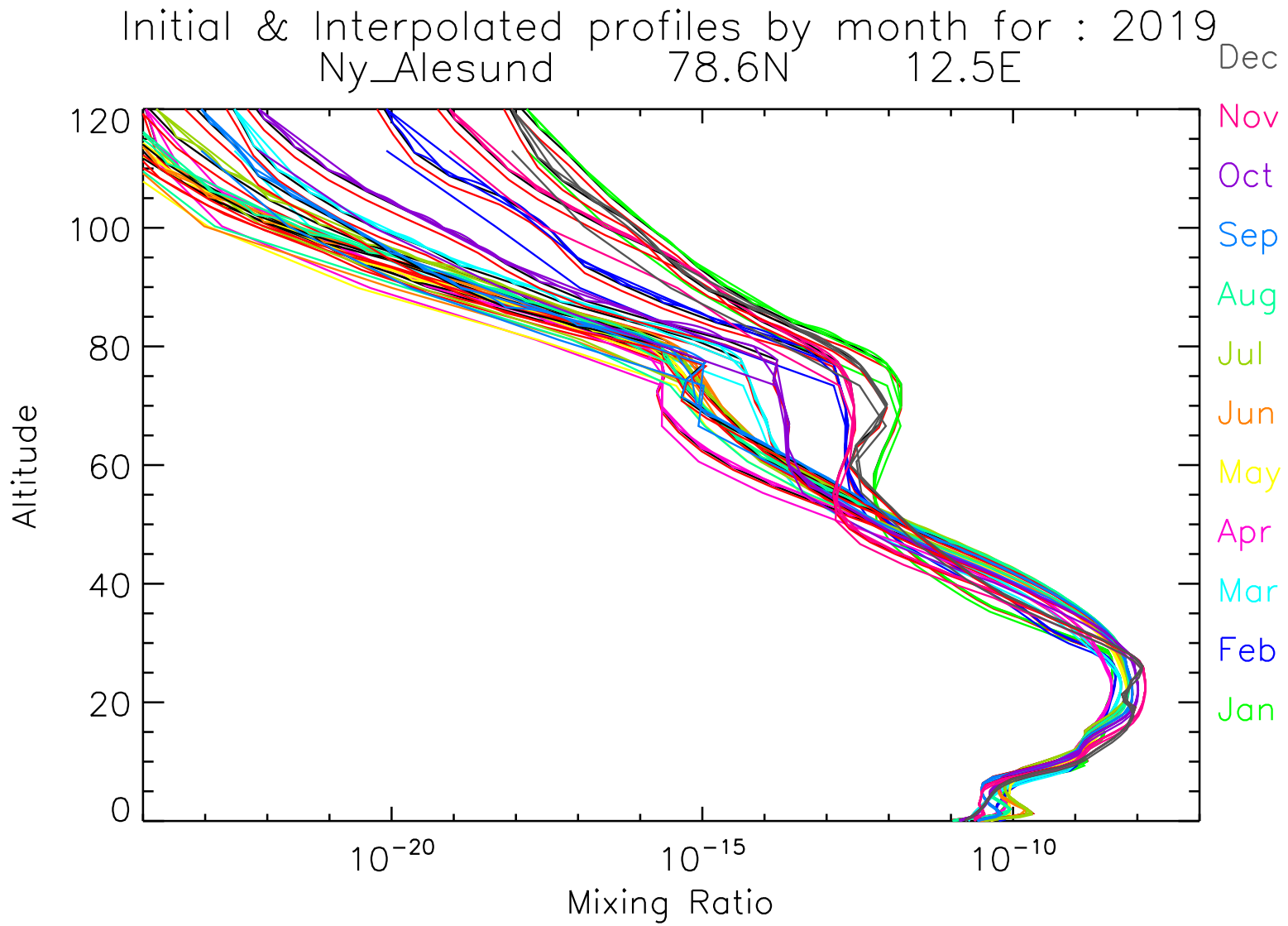

Initial & Interpolated profiles by month for : 2014
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

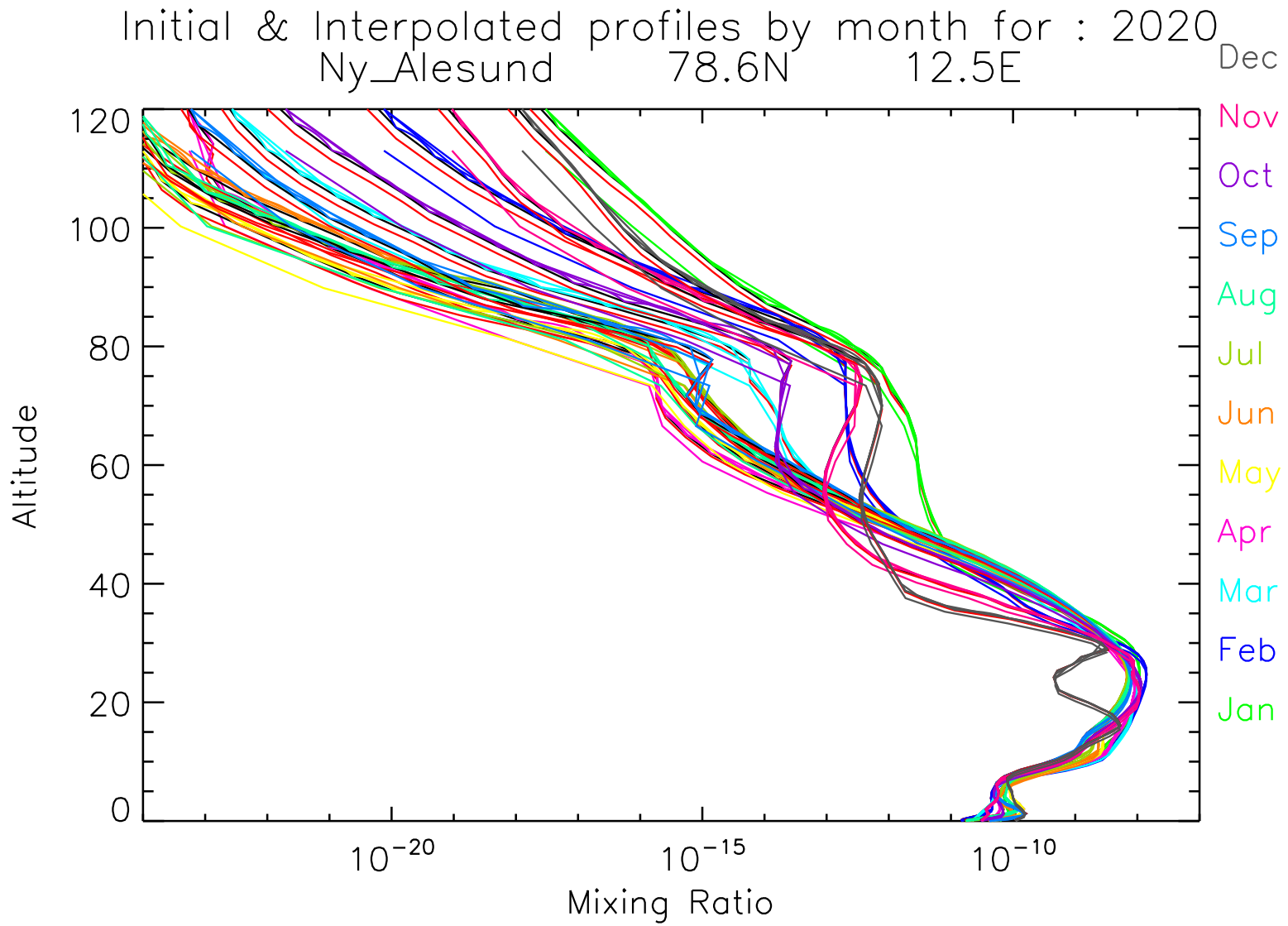

Initial & Interpolated profiles by month for : 2015
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

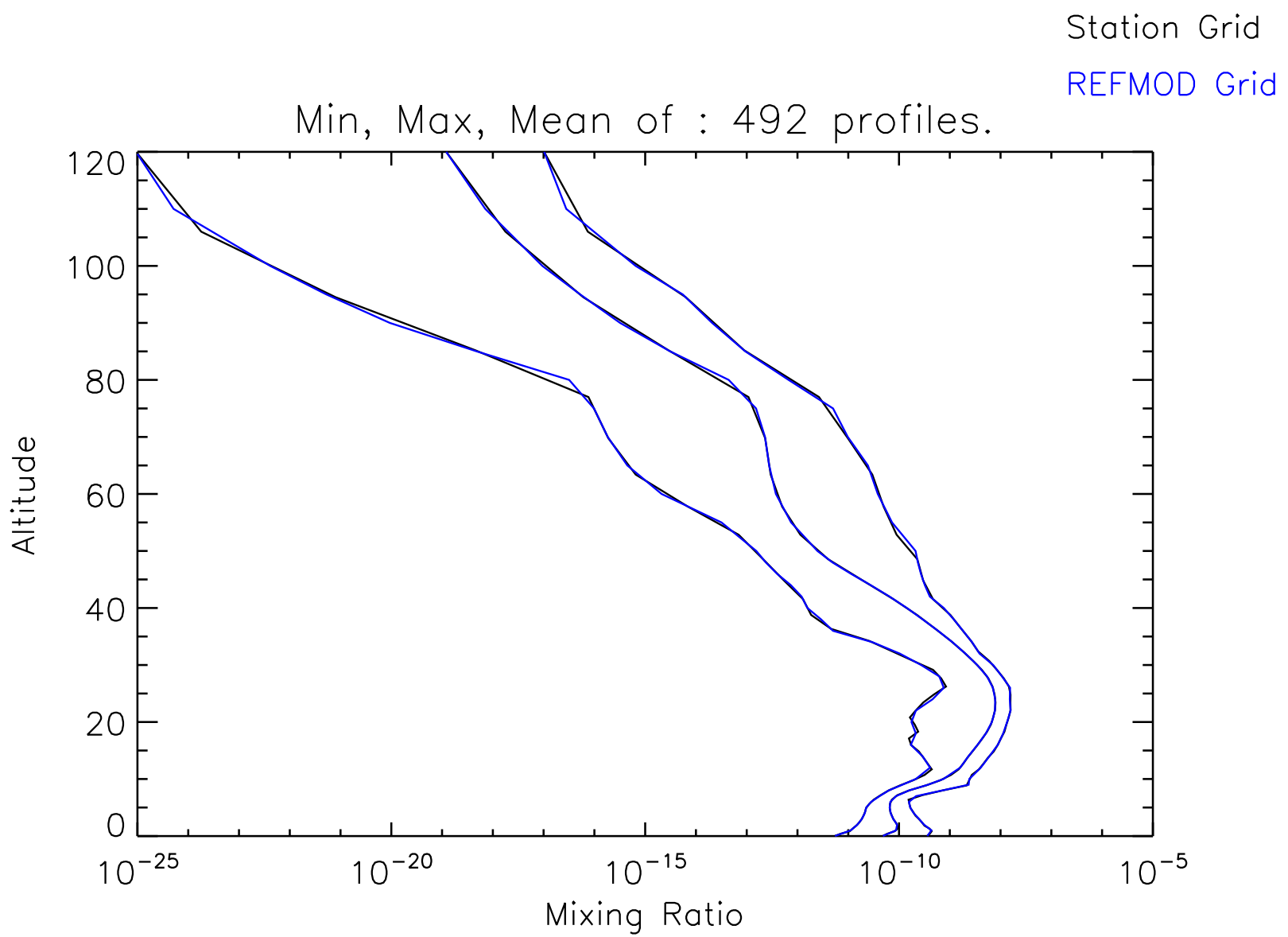

Initial & Interpolated profiles by month for : 2016
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

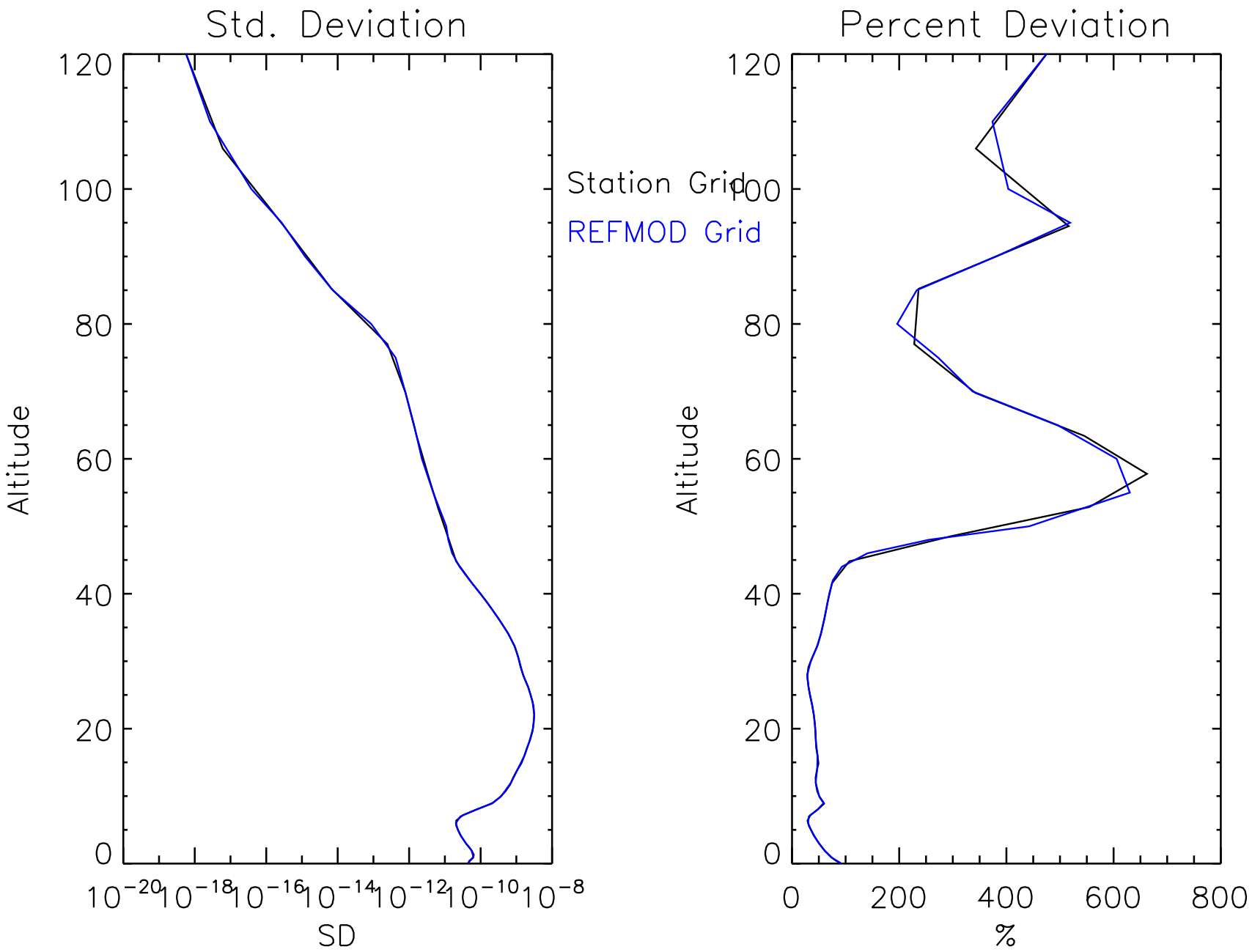

Initial & Interpolated profiles by month for : 2017
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

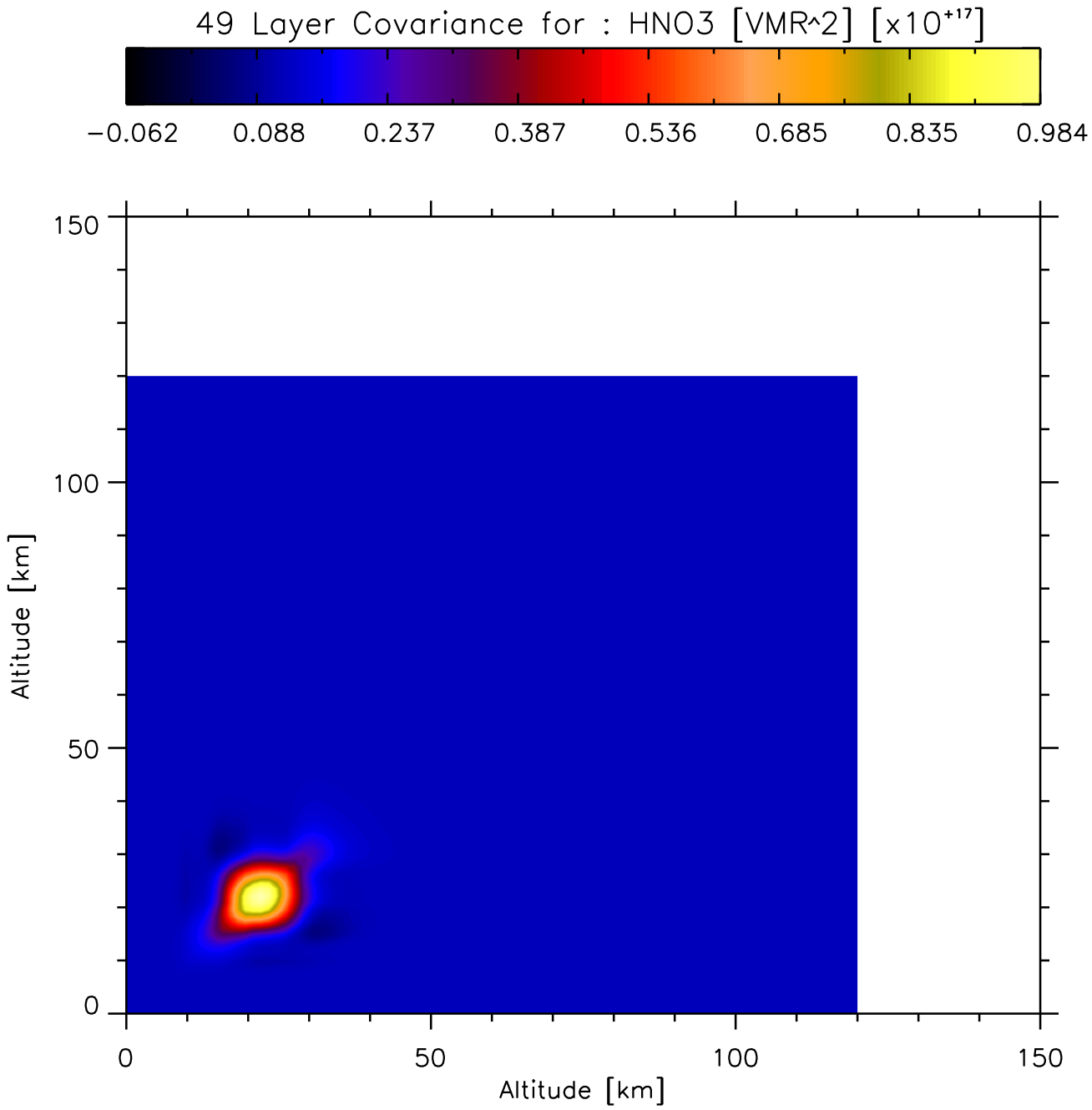

Initial & Interpolated profiles by month for : 2018
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


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
120
100
80
60
40
20
0
Altitude
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

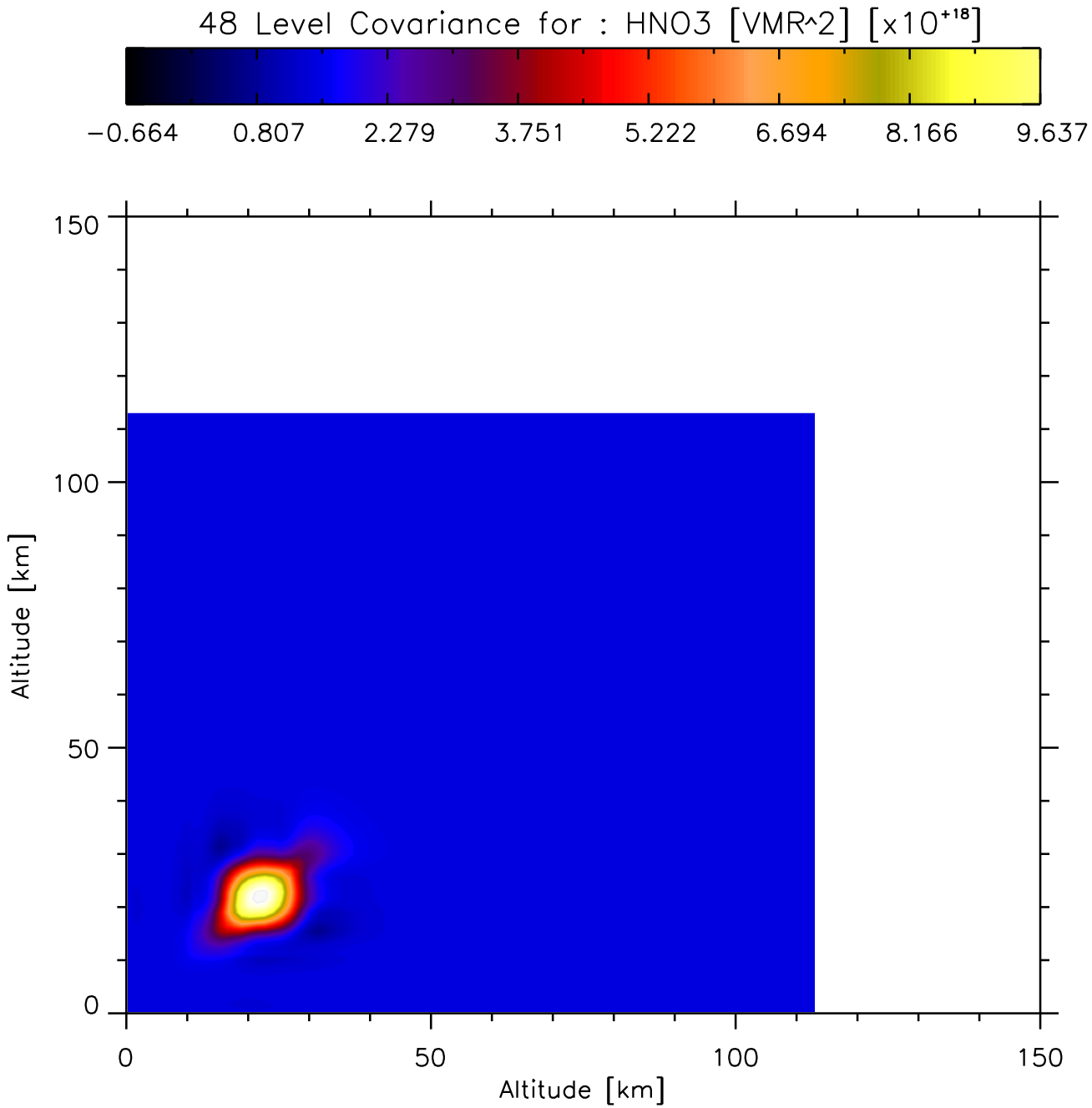

Initial & Interpolated profiles by month for : 2020
Ny_Alesund 78.6N 12.5E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

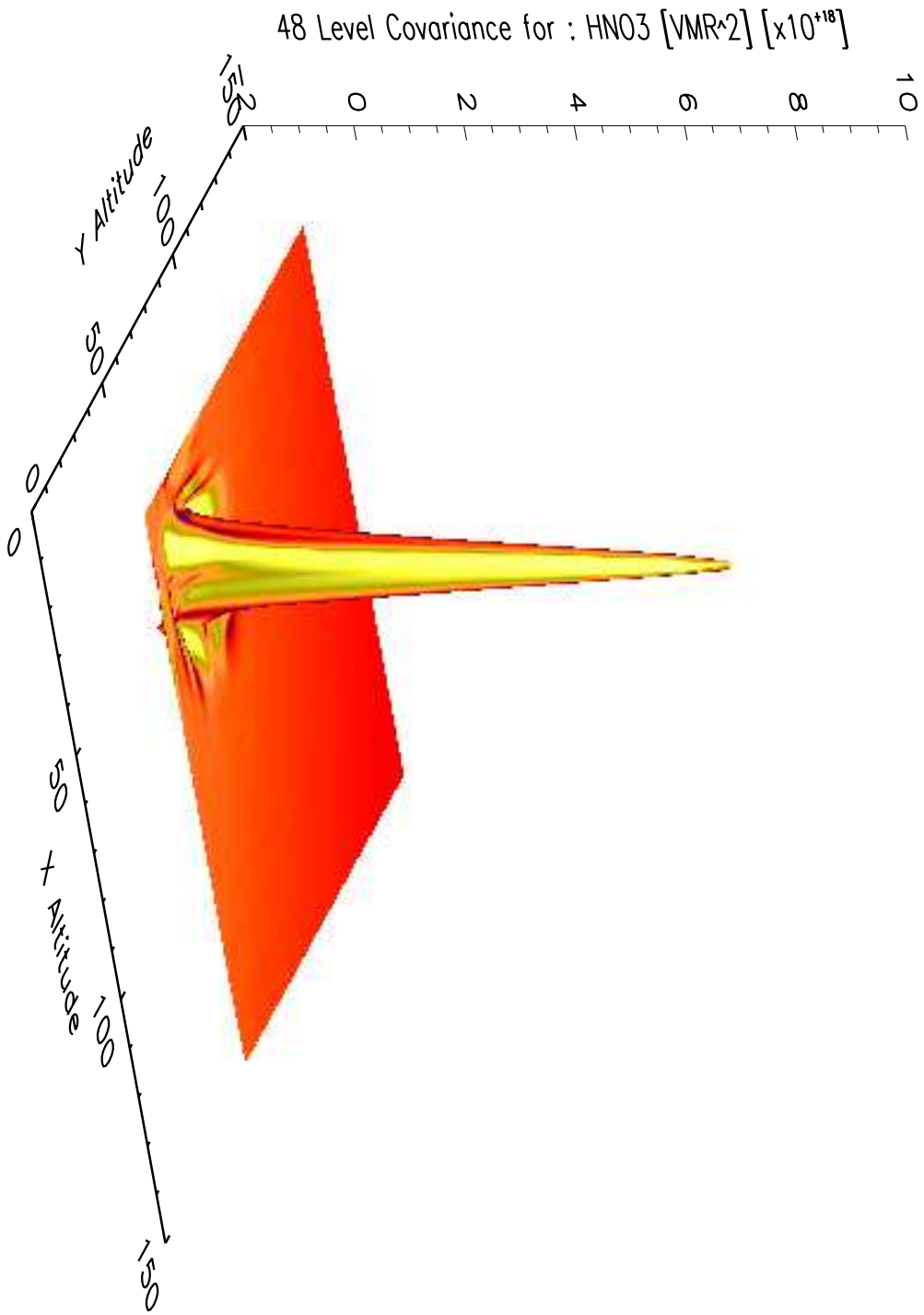

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
120
100
80
60
40
20
0
Altitude
10^{-25}
10^{-20}
10^{-15}
10^{-10}
10^{-5}
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
10^{-20} 10^{-18} 10^{-16} 10^{-14} 10^{-12} 10^{-10} 10^{-8}
SD
0
200
400
600
800
%


49 Layer Covariance for : HNO3 [VMR^2] [x10^+17]
−0.062
0.088
0.237
0.387
0.536
0.685
0.835
0.984
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

49 Layer Covariance for : HNO3 [VMR^2] [x10^-7]
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Y Altitude
0
5
10
15
X Altitude
0
50
100
150


48 Level Covariance for : HNO3 [VMR^2] [x10^+18]
−0.664
0.807
2.279
3.751
5.222
6.694
8.166
9.637
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


48 Level Covariance for : HNO3 [VMR^2] [x10^+18]
0
2
4
6
8
10
Y Altitude
0
50
100
150
X Altitude
0
50
100
150