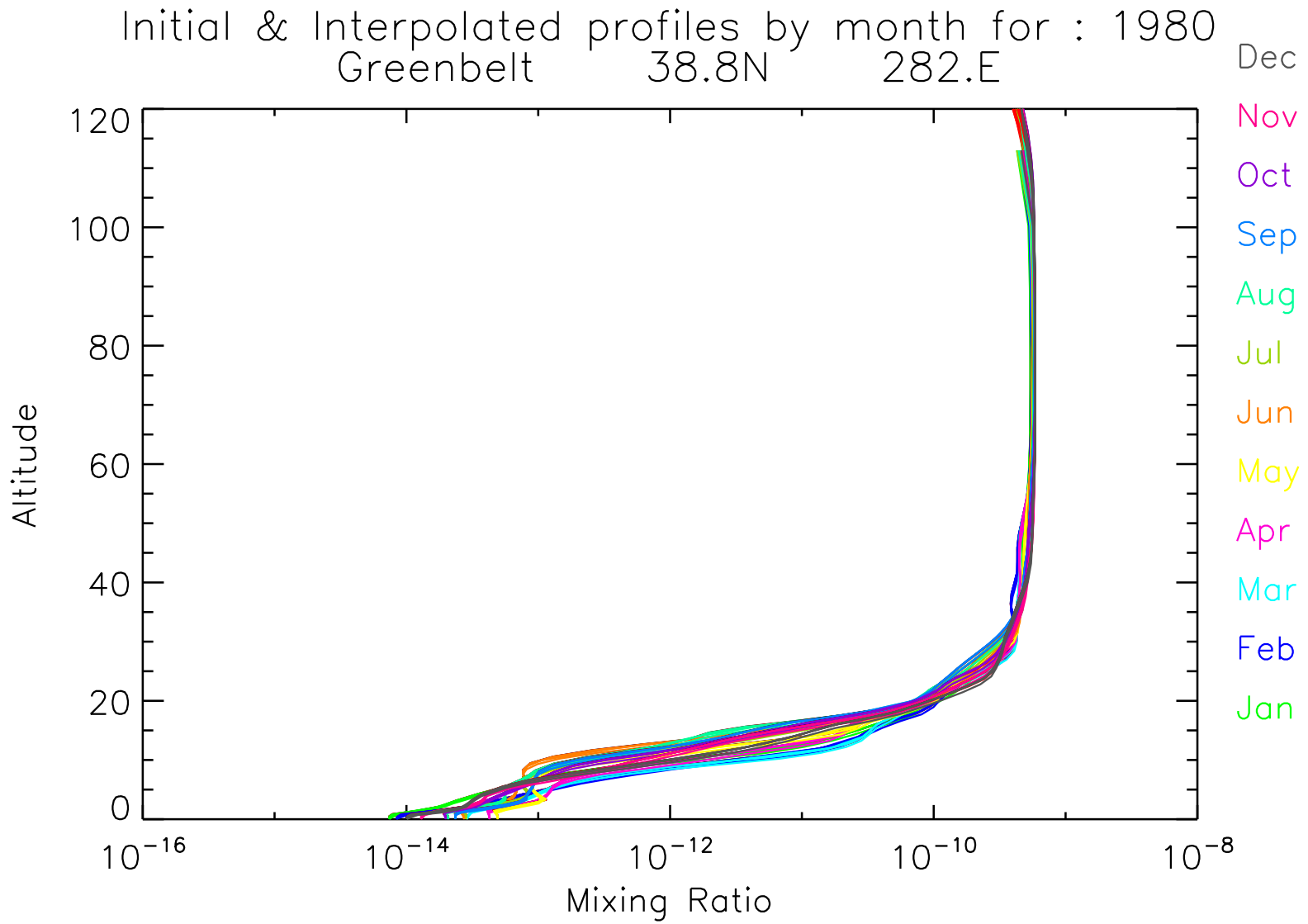
Initial & Interpolated profiles by month for : 1980
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Altitude
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Mixing Ratio
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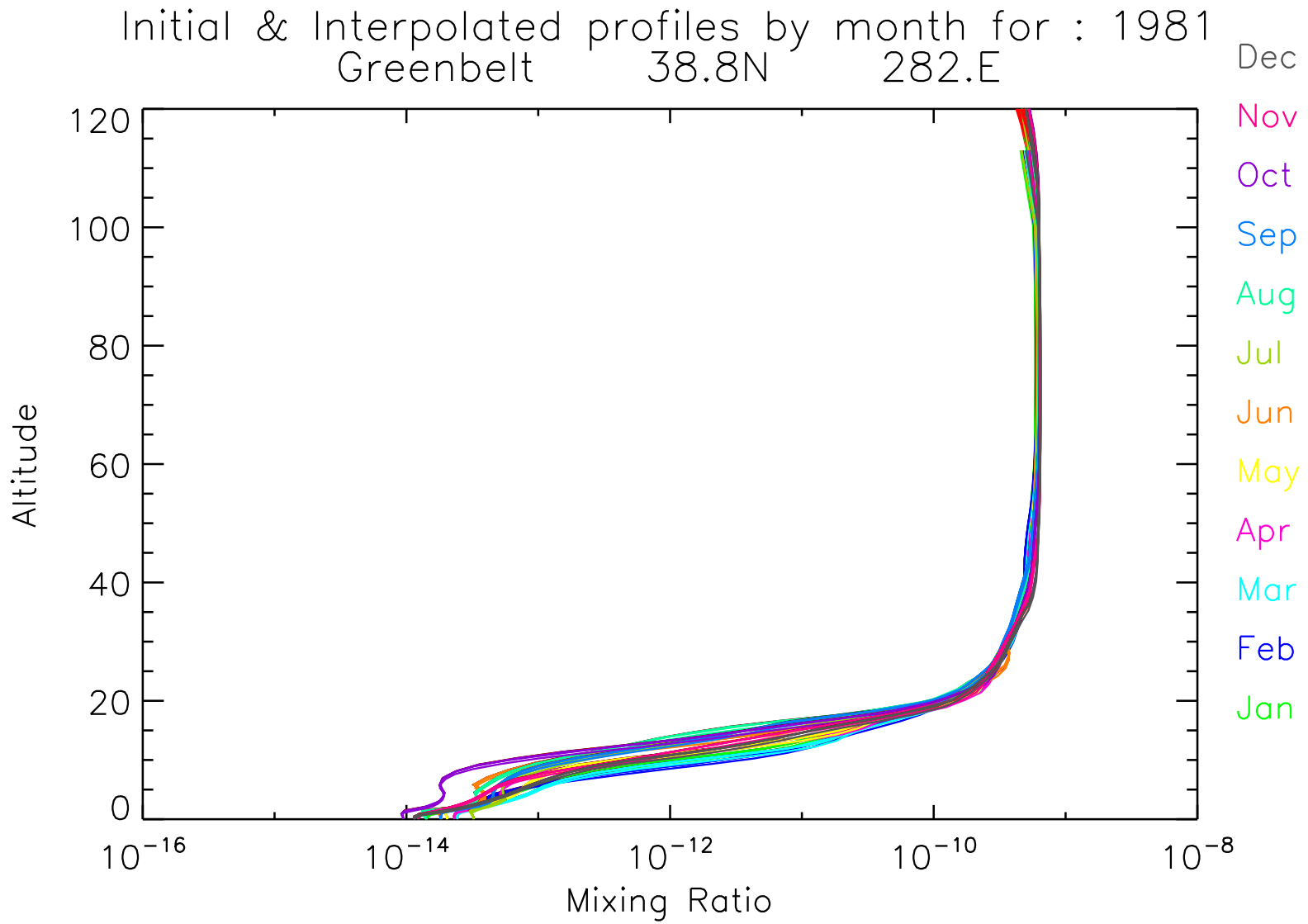
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Altitude
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Mixing Ratio
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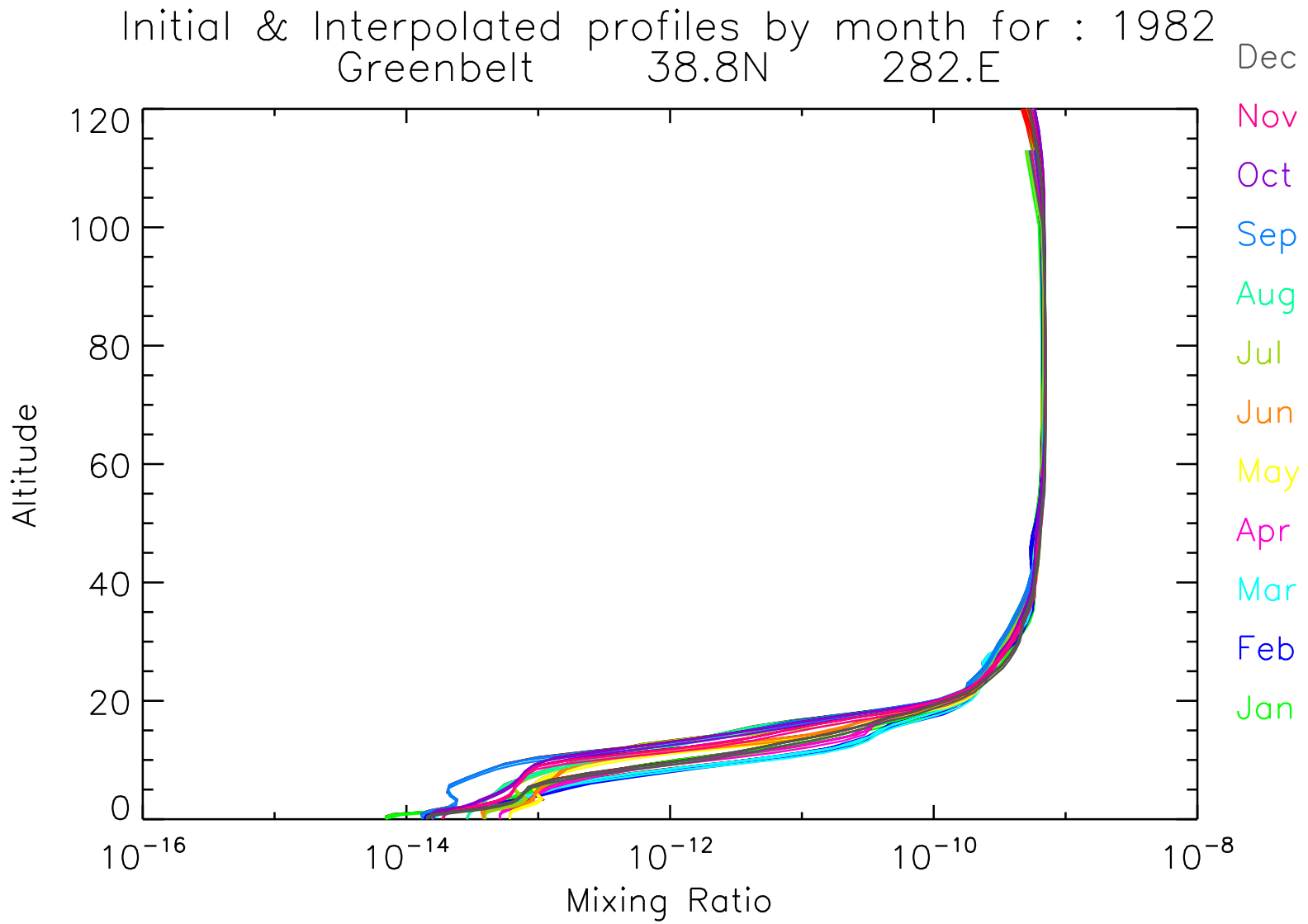
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Altitude
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Mixing Ratio
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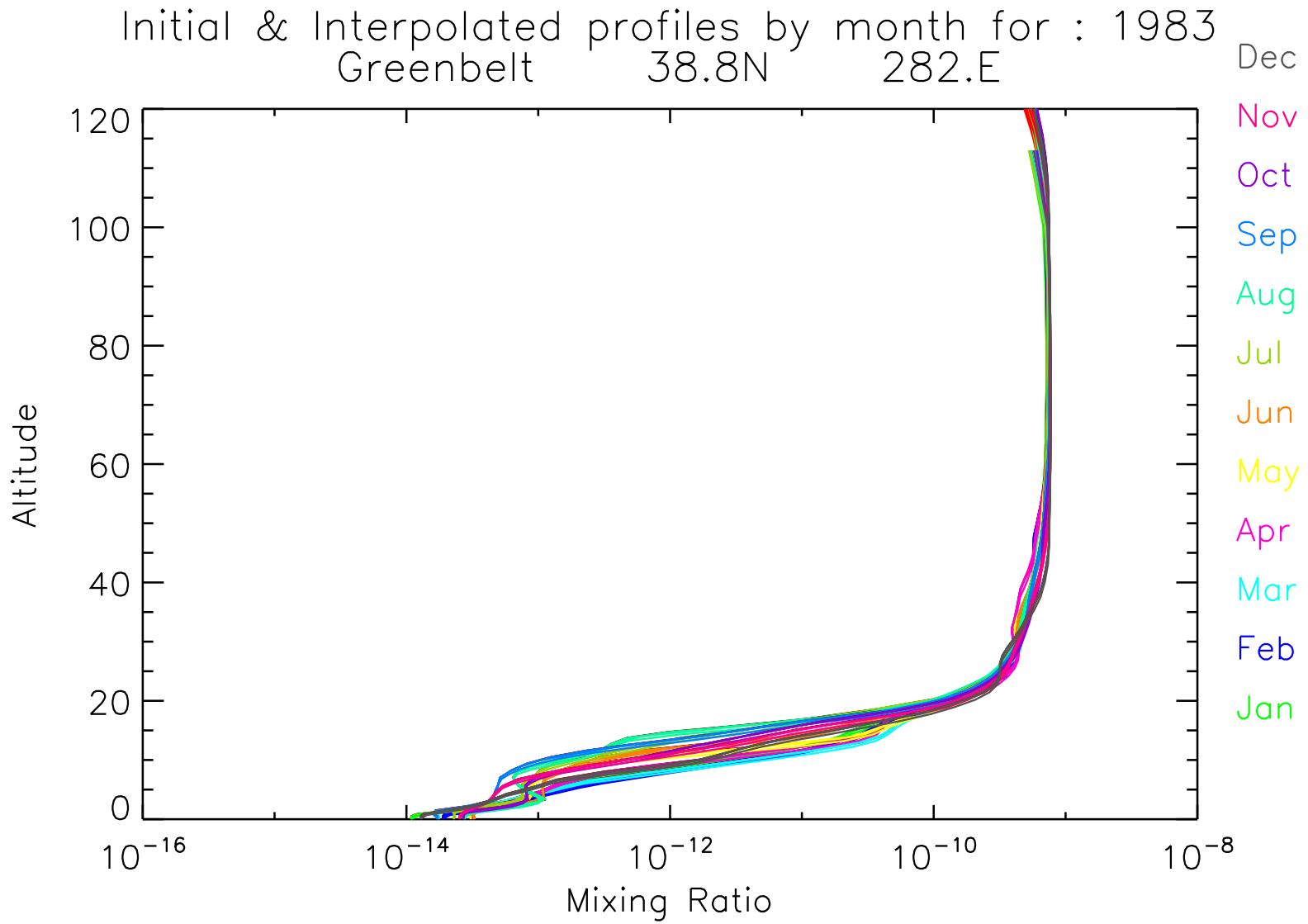
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Altitude
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Mixing Ratio
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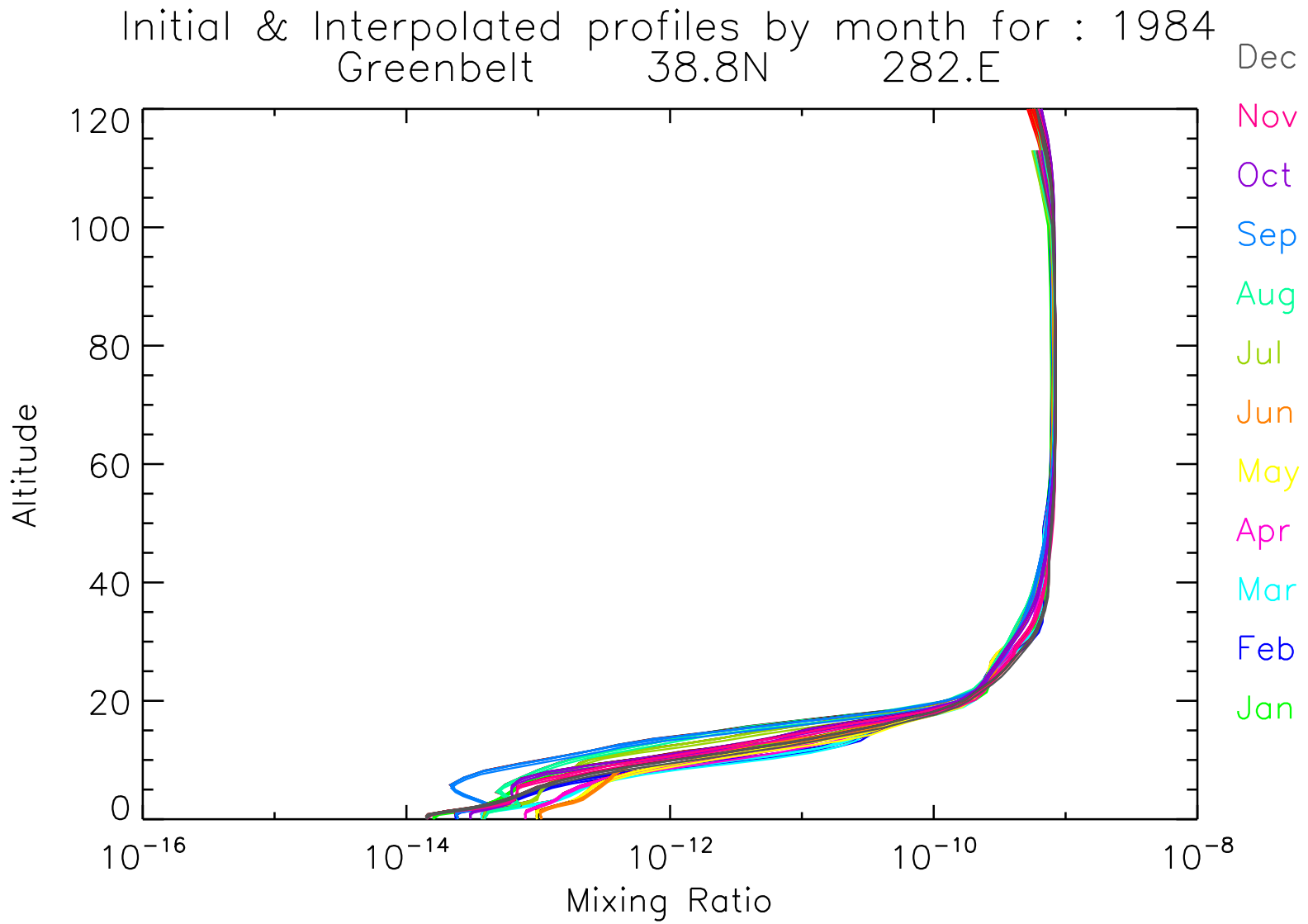
Initial & Interpolated profiles by month for : 1984
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Altitude
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Mixing Ratio
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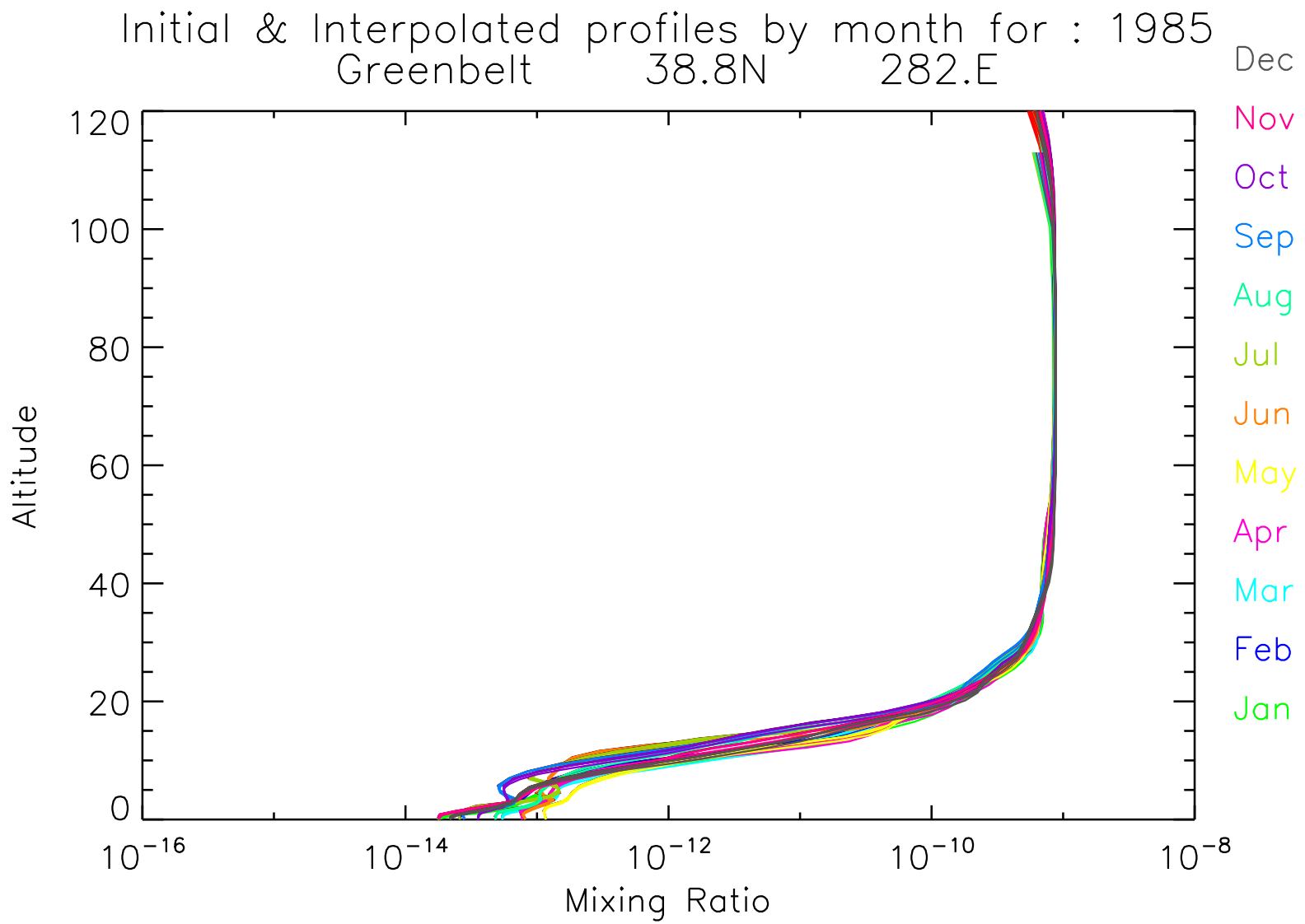
Initial & Interpolated profiles by month for : 1985
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Altitude
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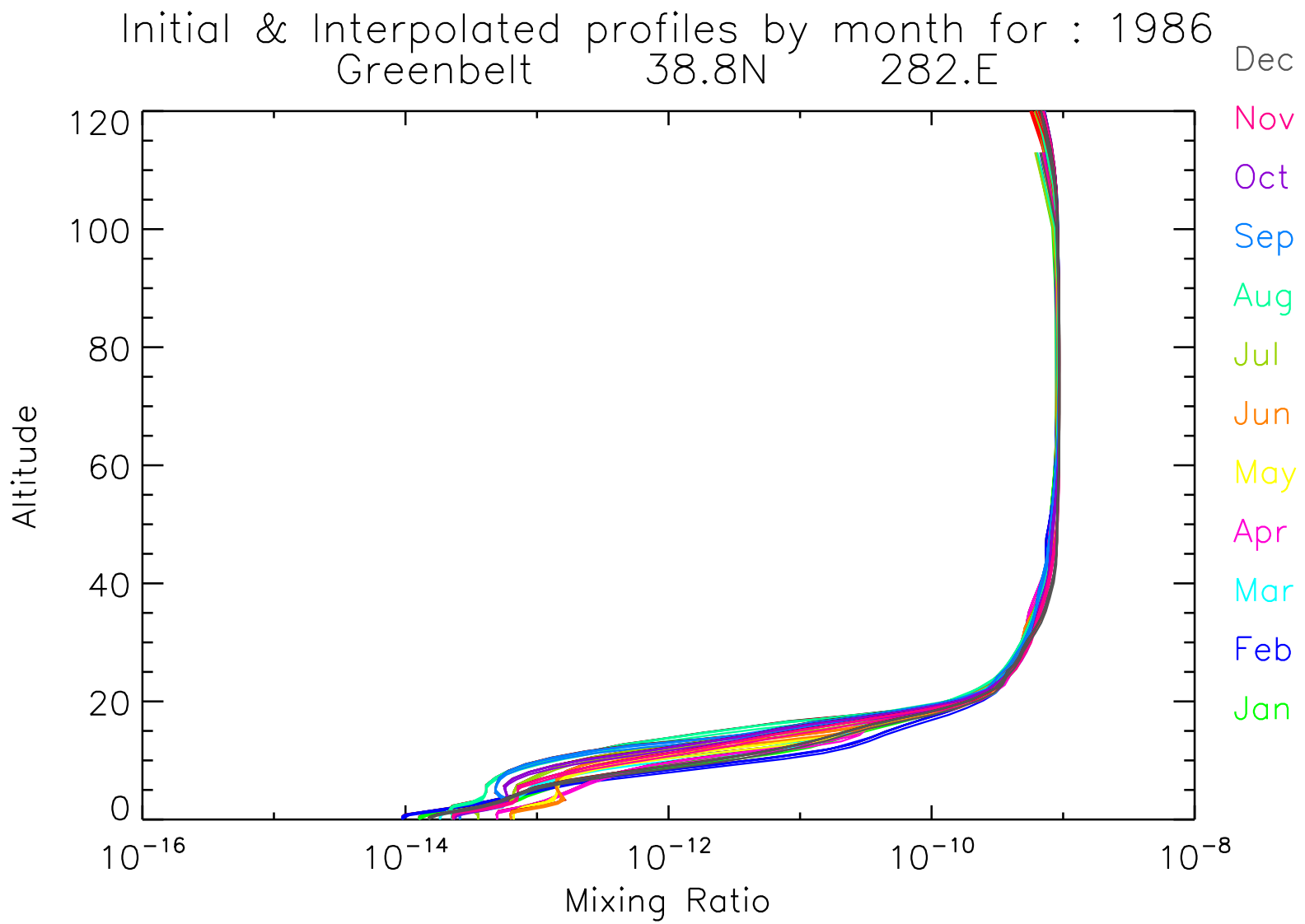
Initial & Interpolated profiles by month for : 1986
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Altitude
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Mixing Ratio
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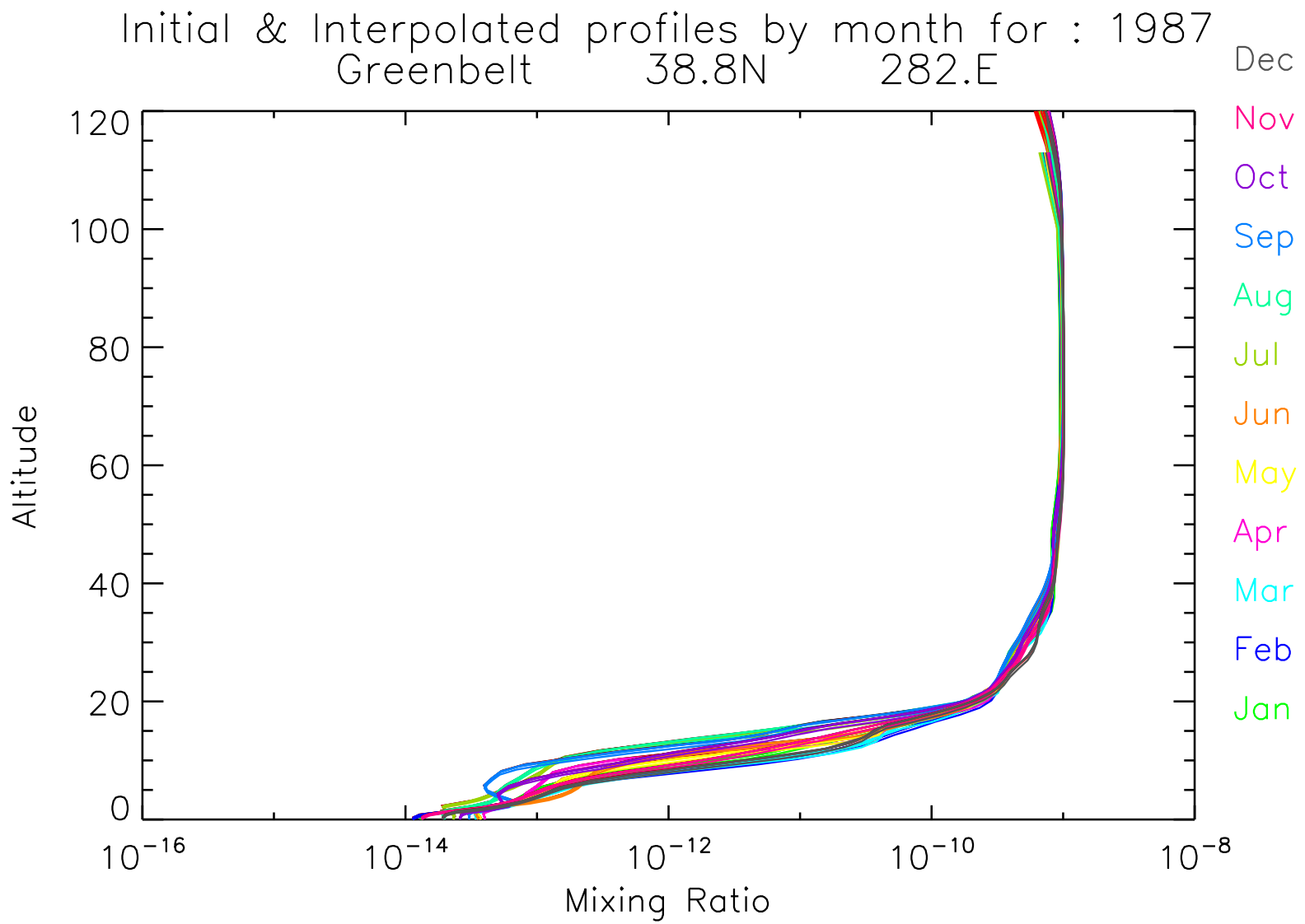
Initial & Interpolated profiles by month for : 1987
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Altitude
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Mixing Ratio
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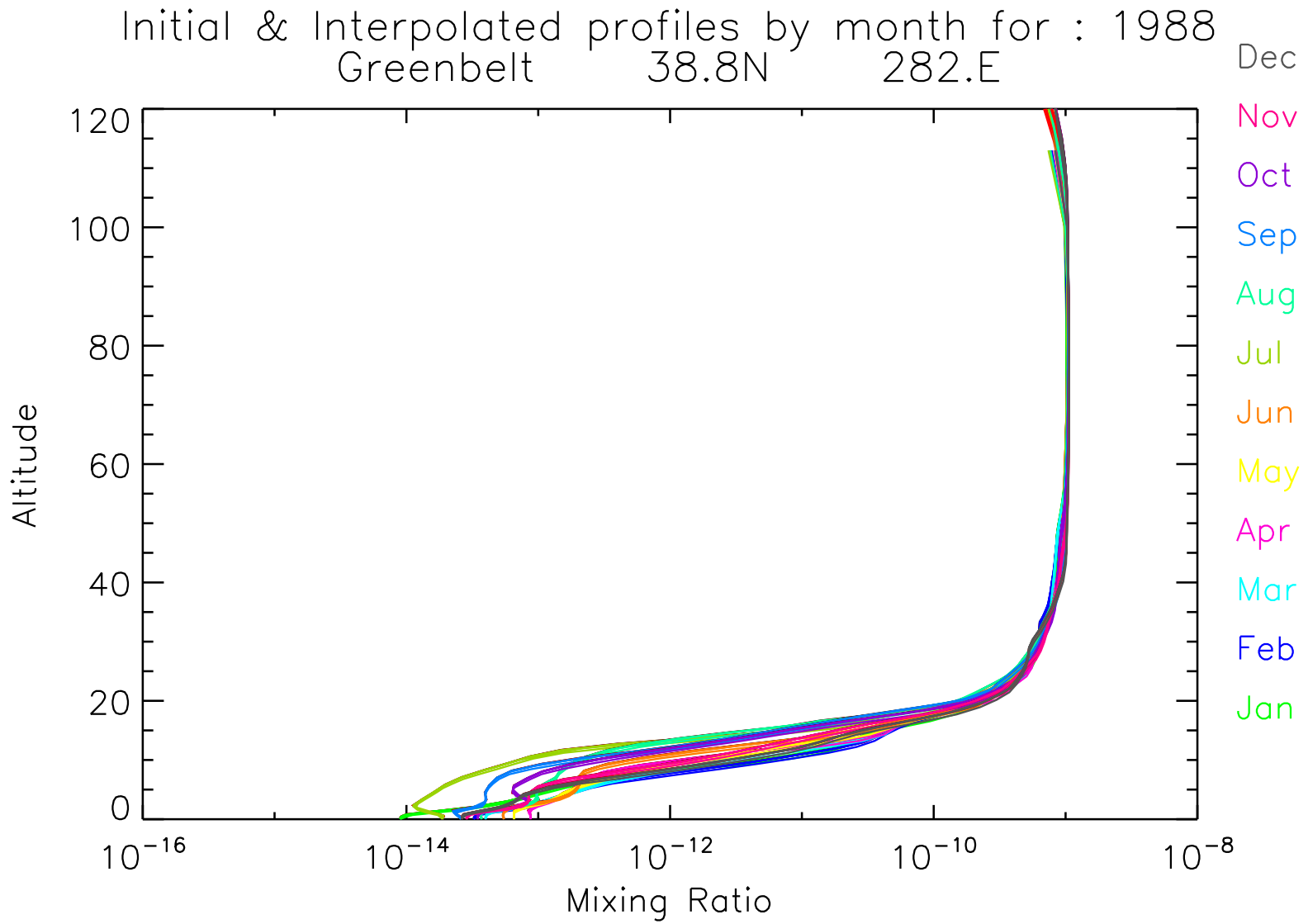
Initial & Interpolated profiles by month for : 1988
Greenbelt 38.8N 282.E
Altitude
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Mixing Ratio
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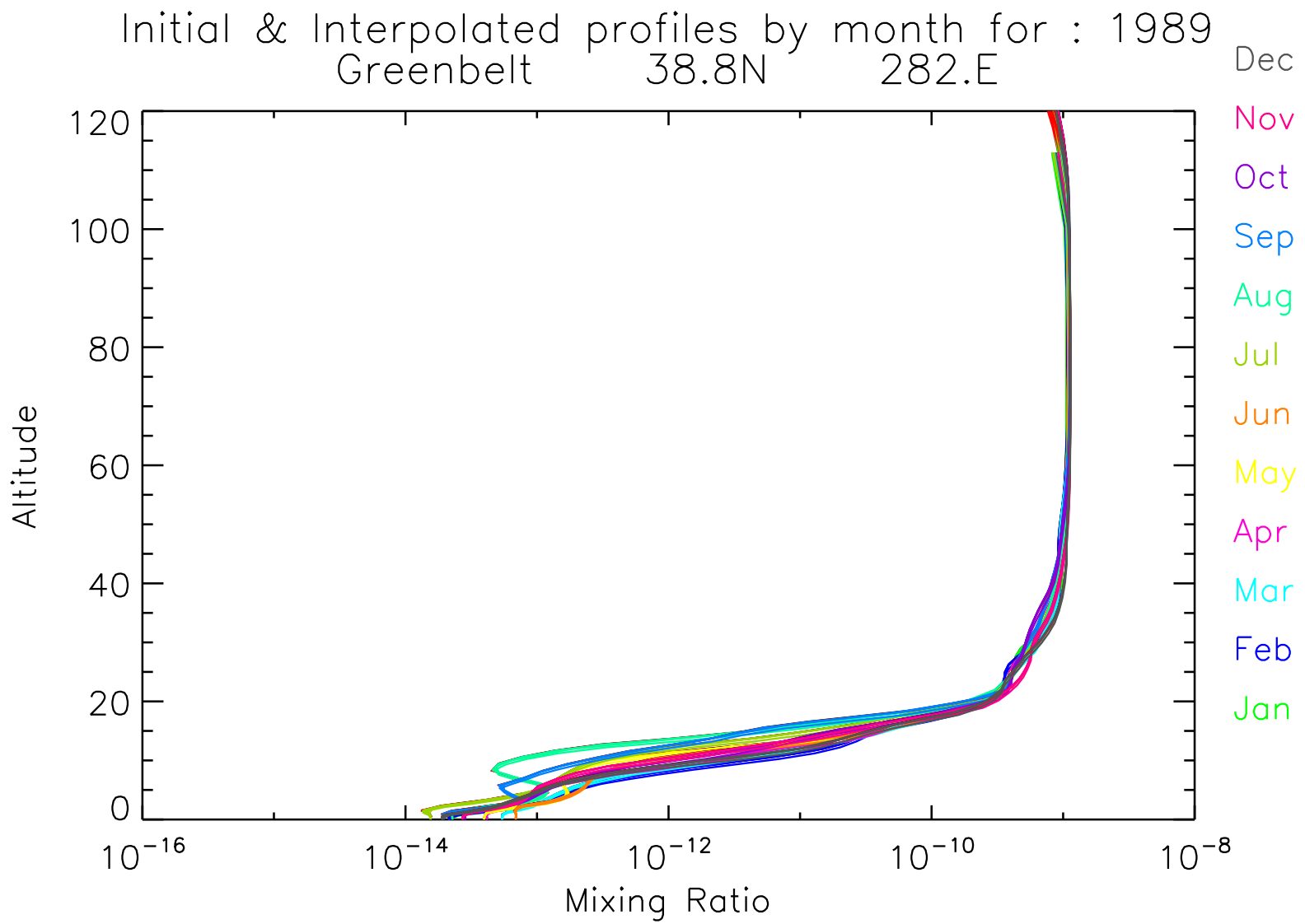
Initial & Interpolated profiles by month for : 1989
Greenbelt 38.8N 282.E
Altitude
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Mixing Ratio
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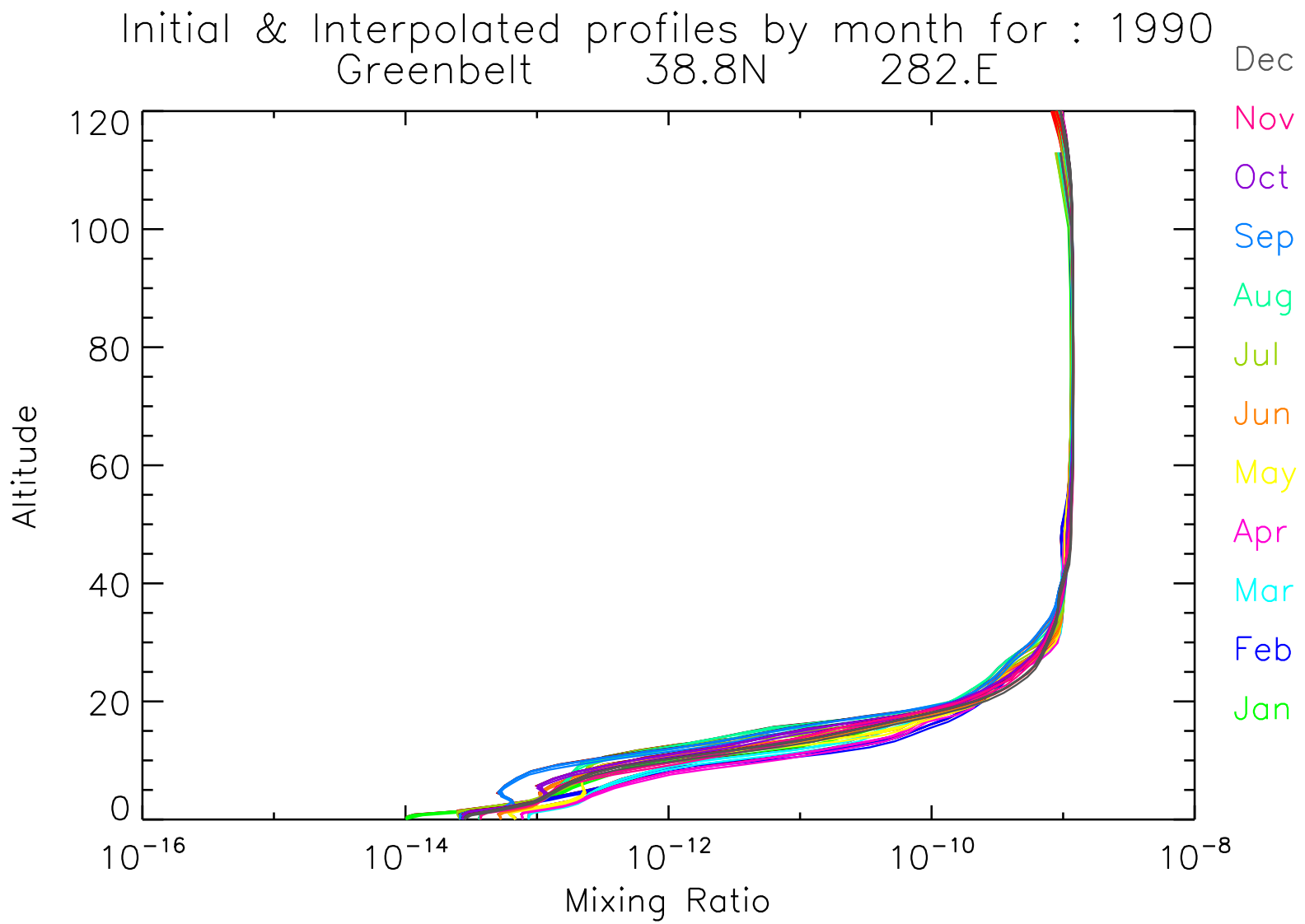
Initial & Interpolated profiles by month for : 1990
Greenbelt 38.8N 282.E
Altitude
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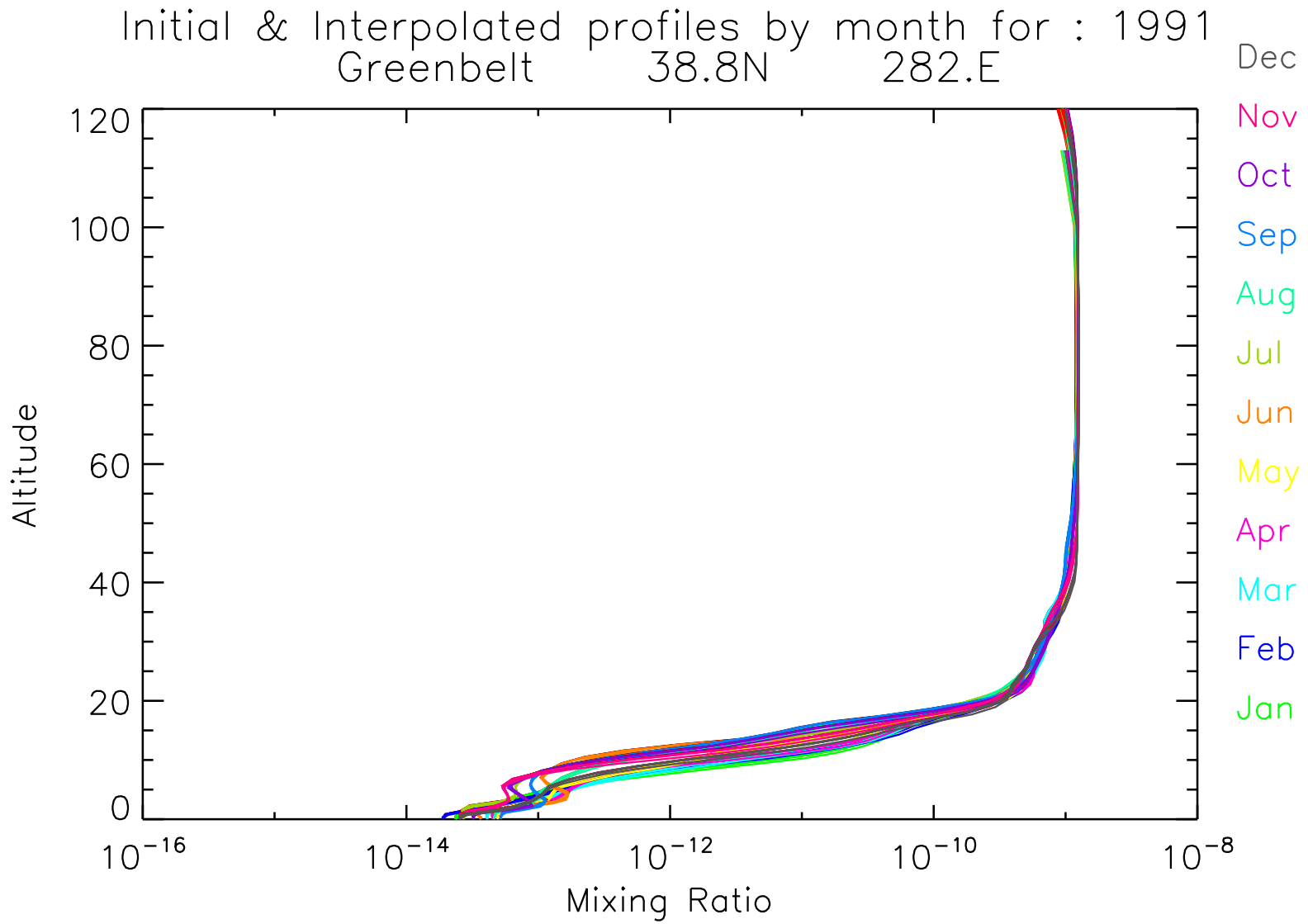
Initial & Interpolated profiles by month for : 1991
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Altitude
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Mixing Ratio
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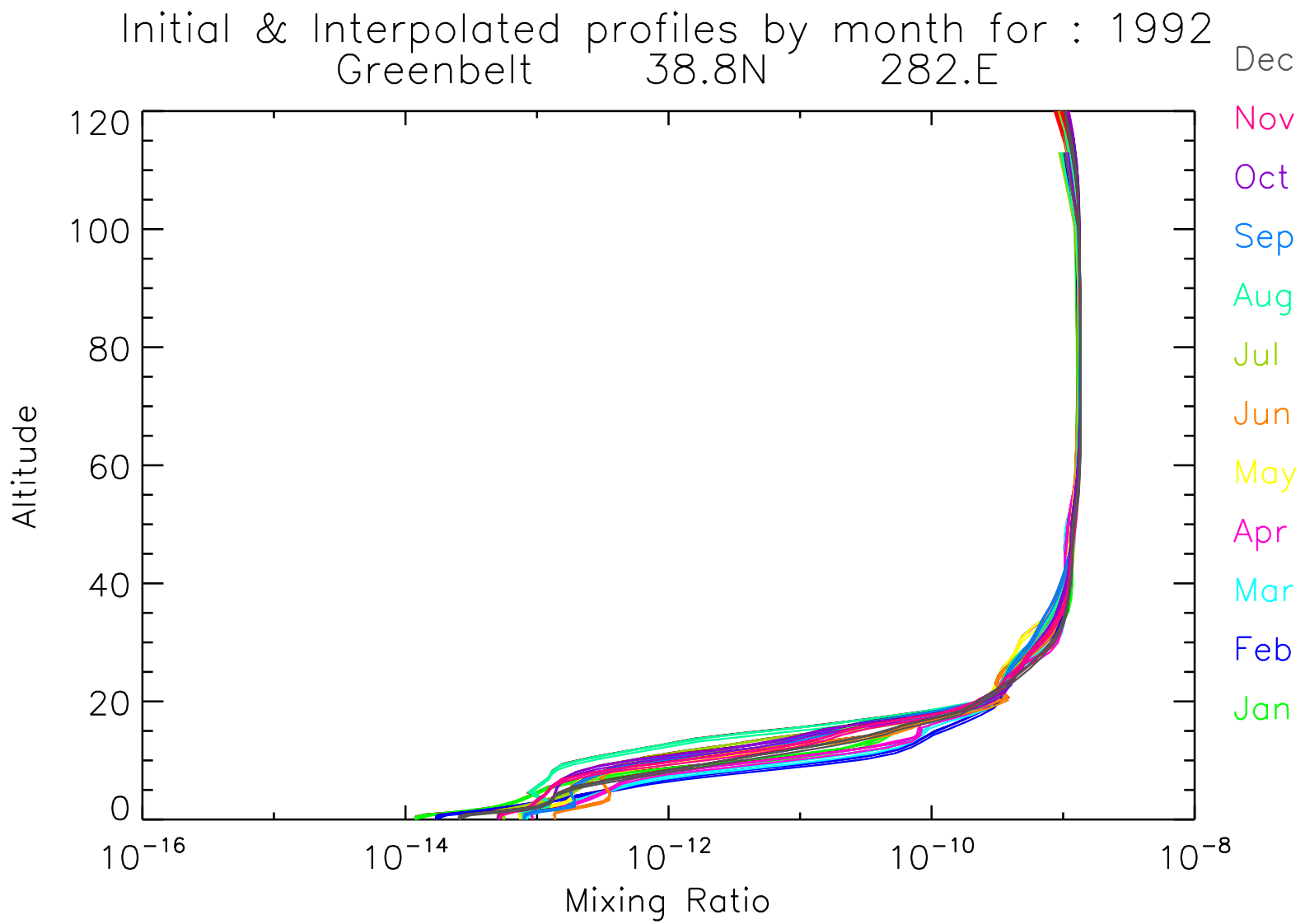
Initial & Interpolated profiles by month for : 1992
Greenbelt 38.8N 282.E
Altitude
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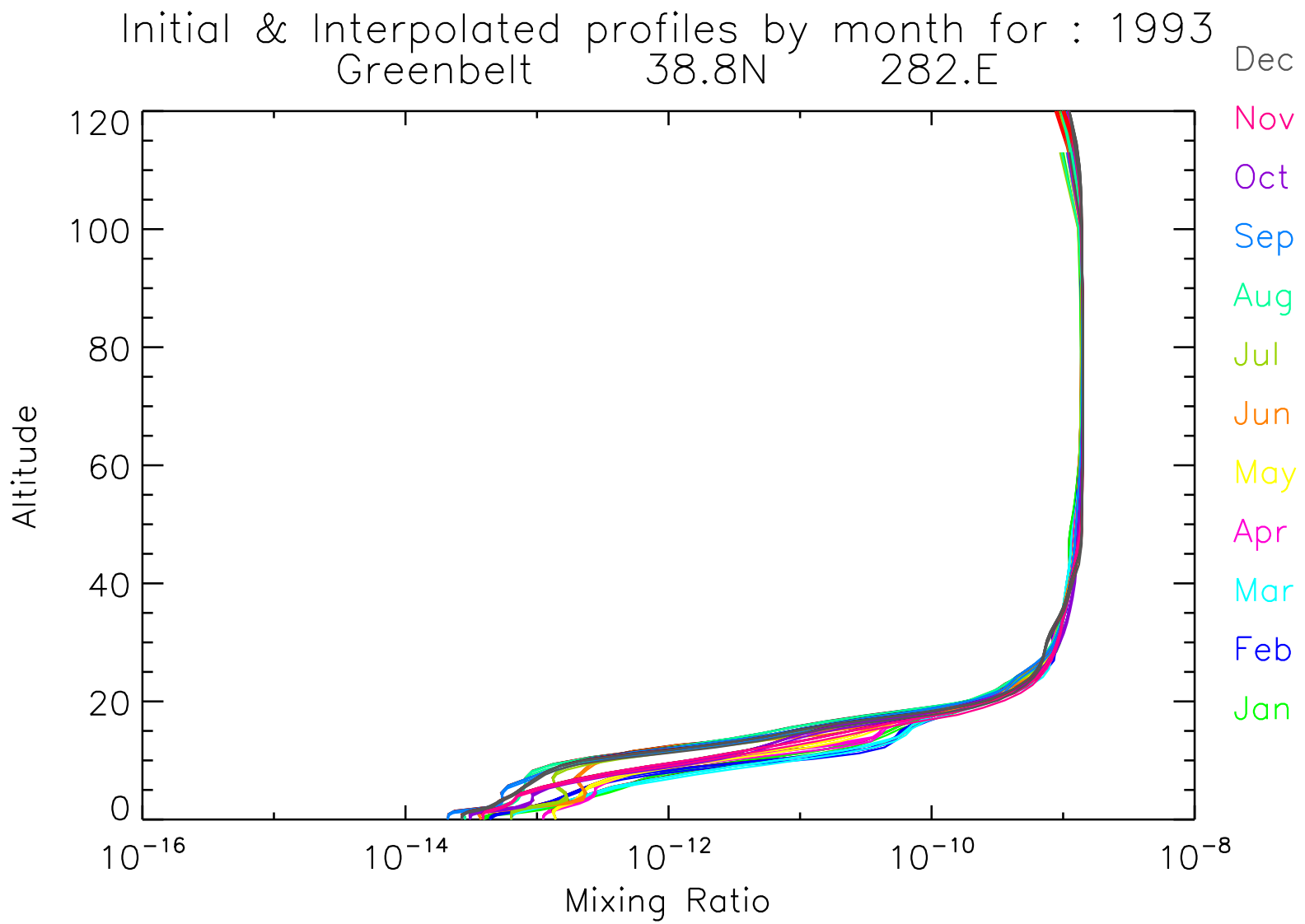
Initial & Interpolated profiles by month for : 1993
Greenbelt 38.8N 282.E
Altitude
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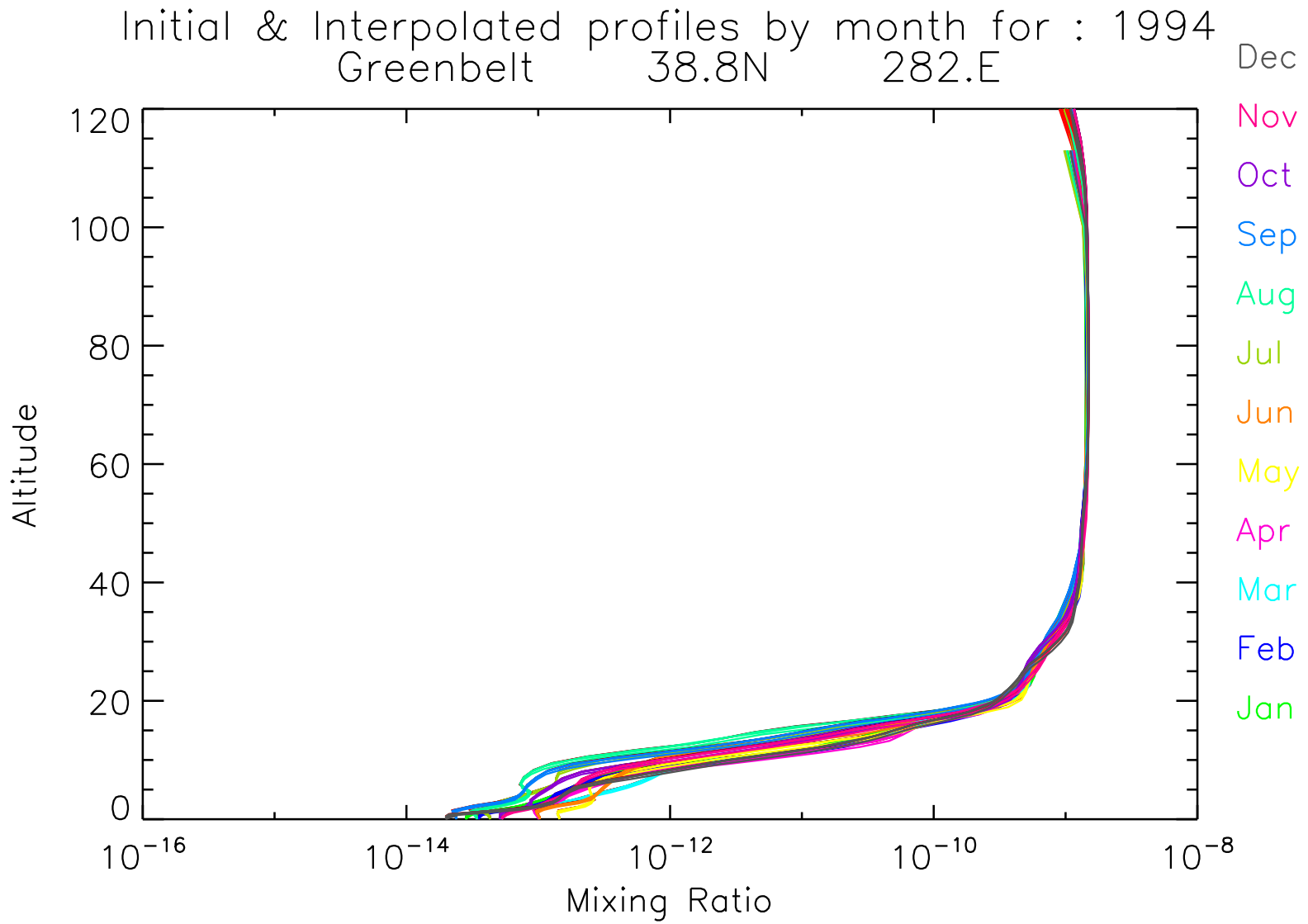
Initial & Interpolated profiles by month for : 1994
Greenbelt 38.8N 282.E
Altitude
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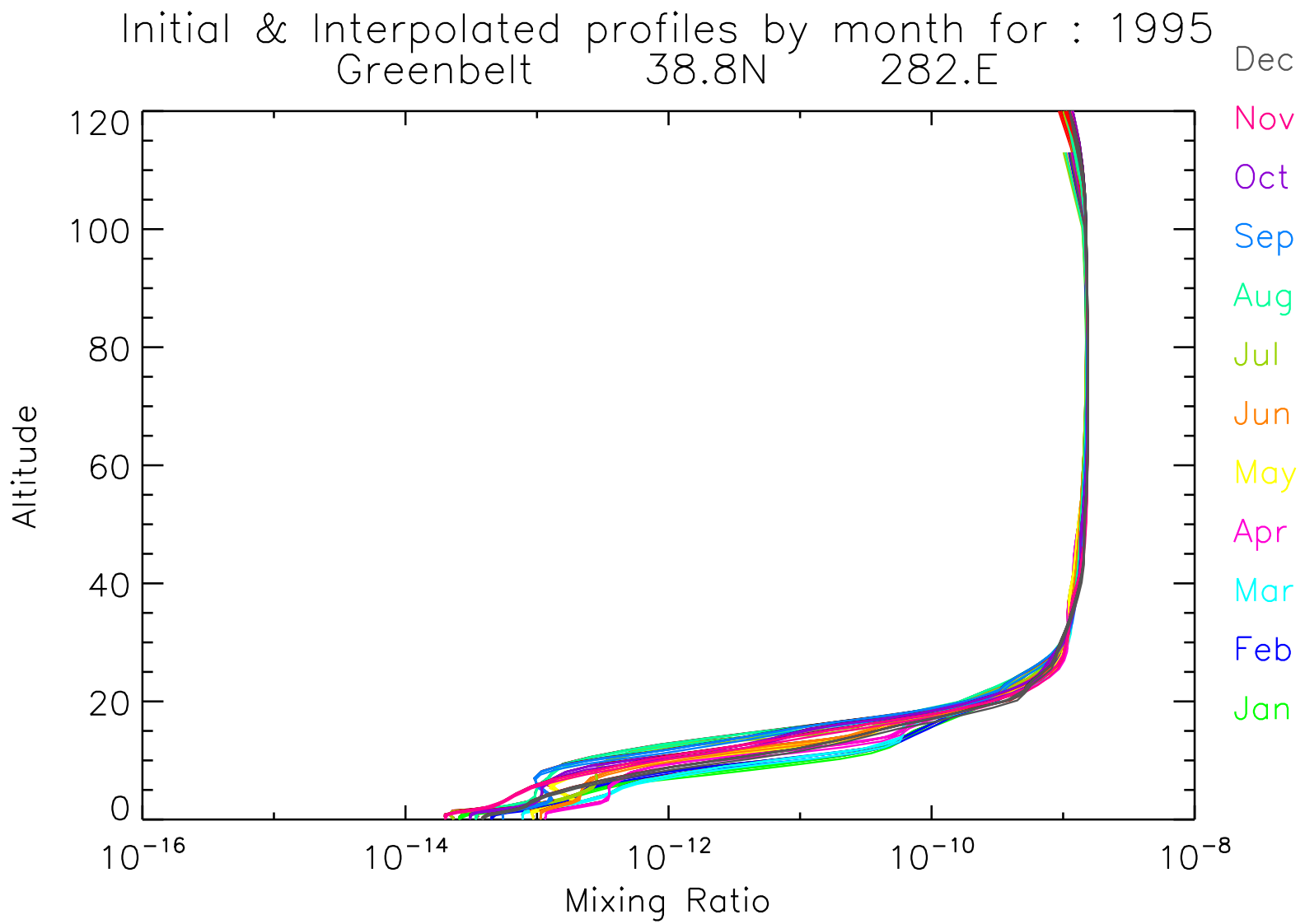
Initial & Interpolated profiles by month for : 1995
Greenbelt 38.8N 282.E
Altitude
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Mixing Ratio
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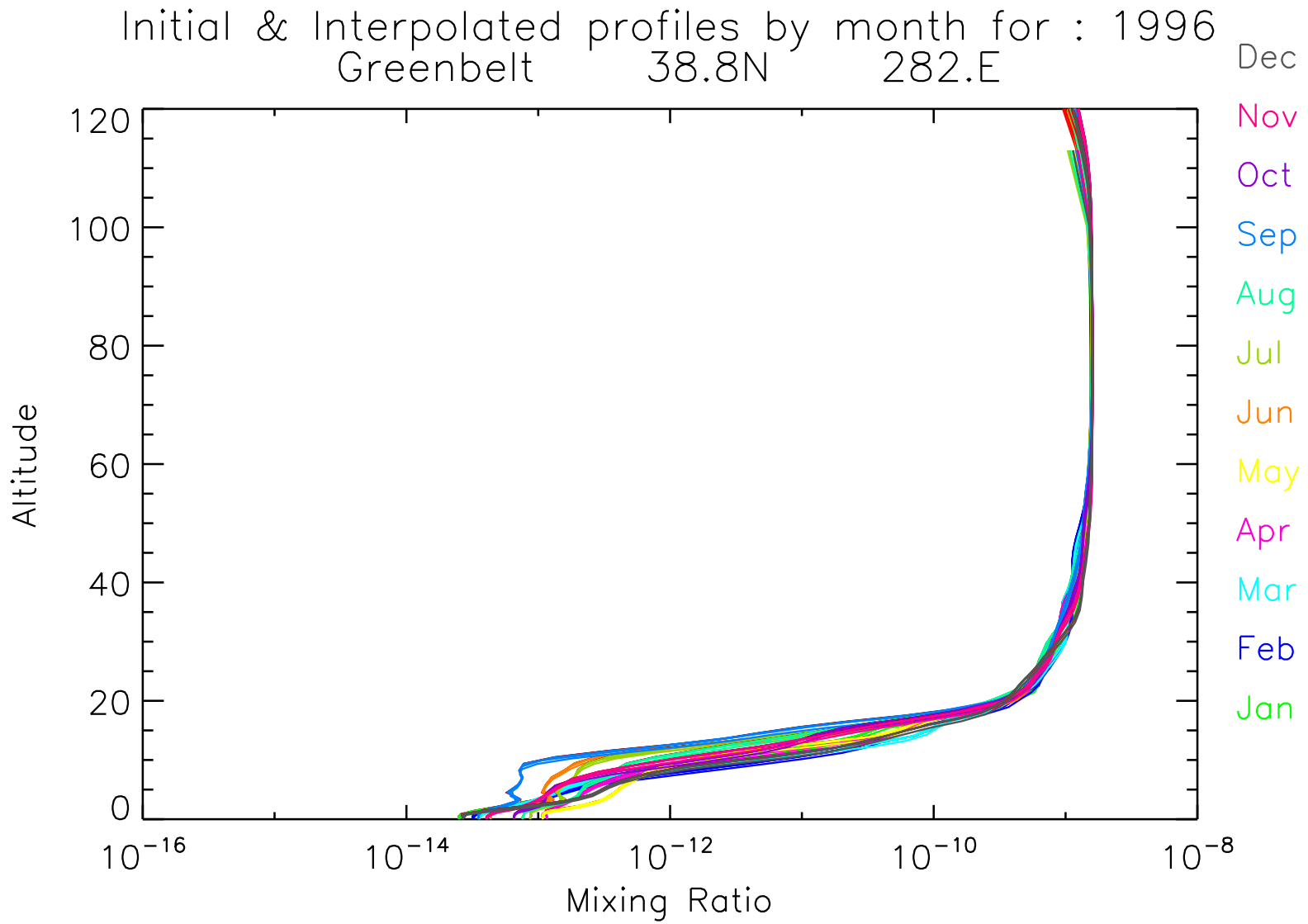
Initial & Interpolated profiles by month for : 1996
Greenbelt 38.8N 282.E
Altitude
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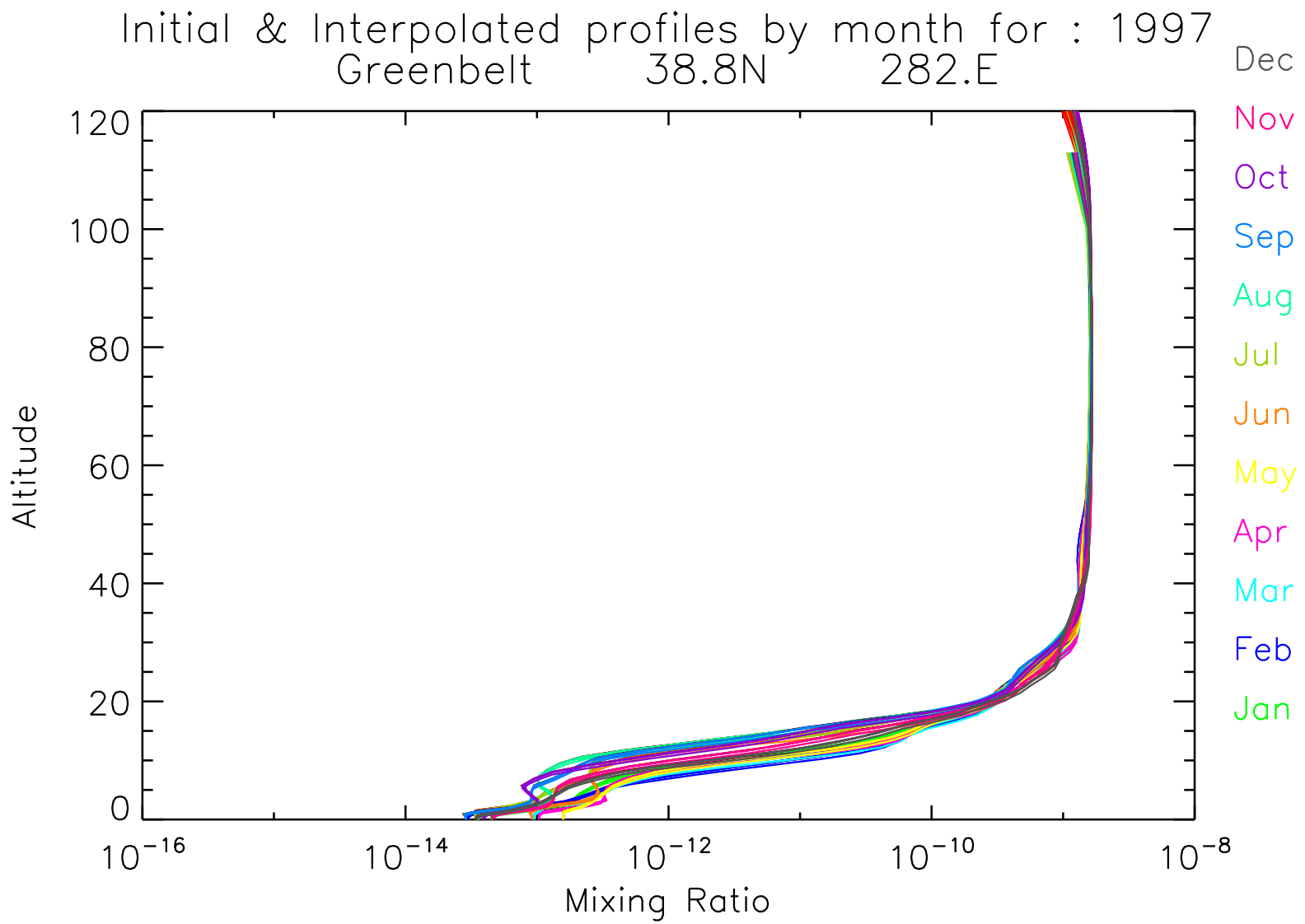
Initial & Interpolated profiles by month for : 1997
Greenbelt 38.8N 282.E
Altitude
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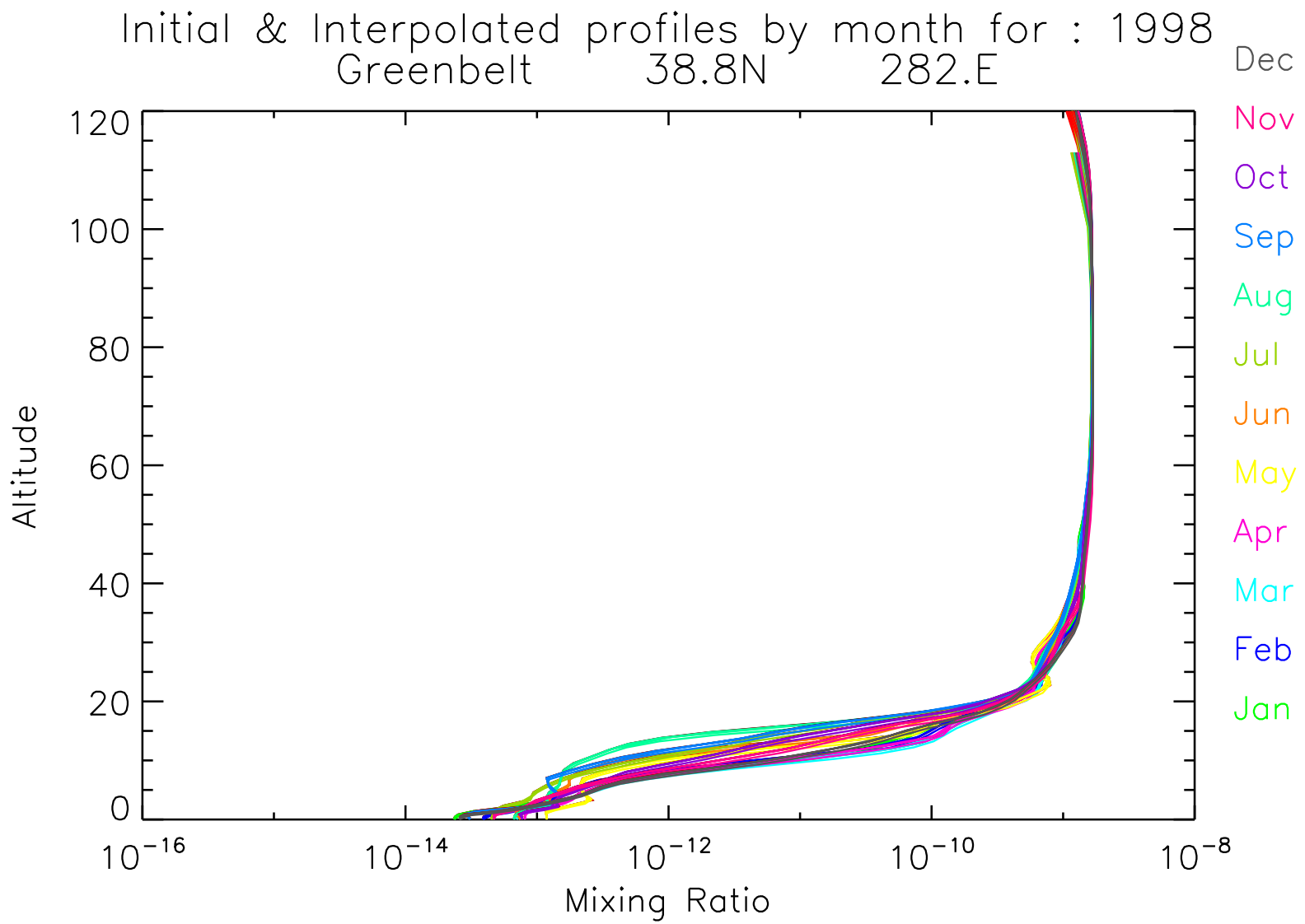
Initial & Interpolated profiles by month for : 1998
Greenbelt 38.8N 282.E
Altitude
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Mixing Ratio
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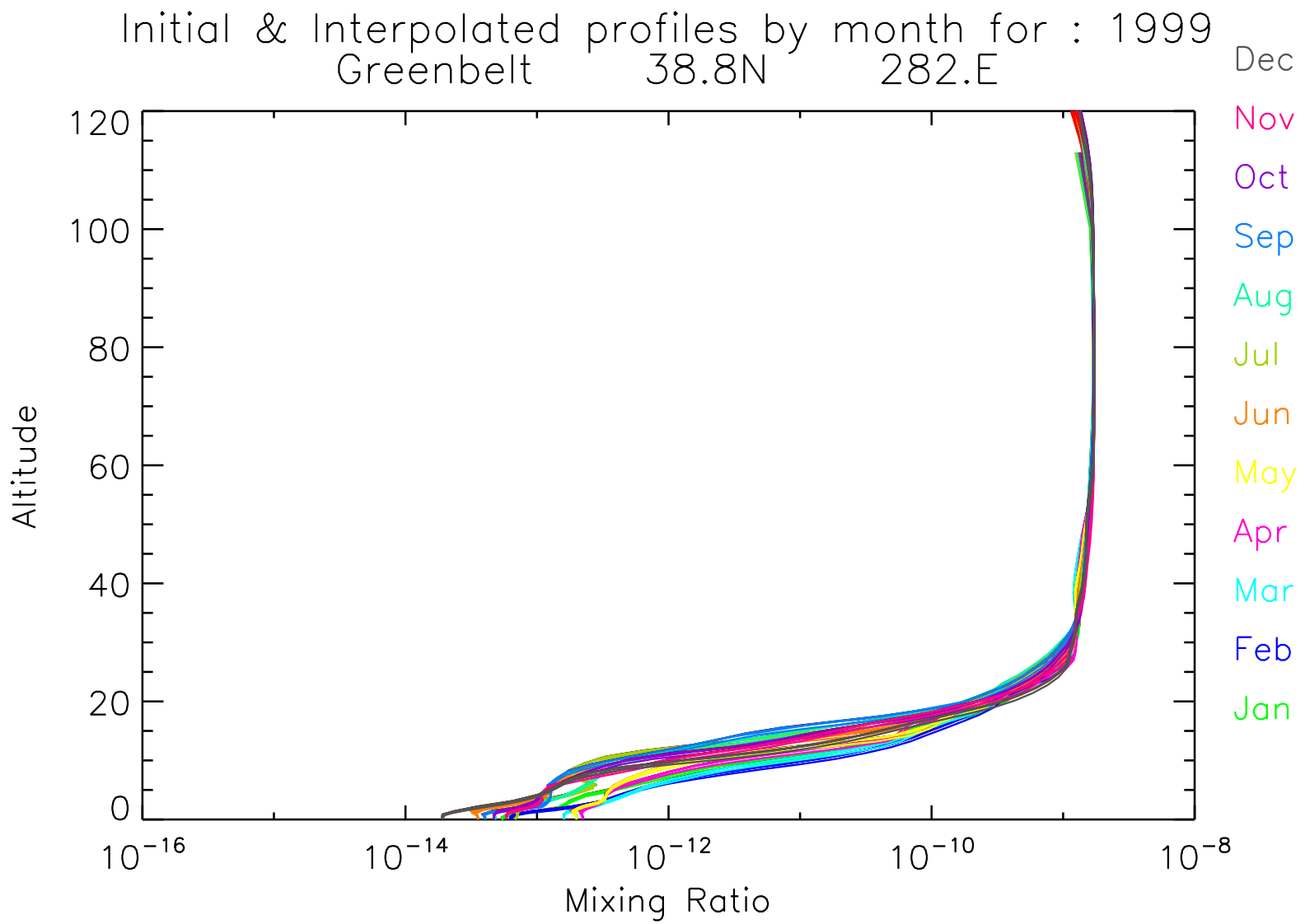
Initial & Interpolated profiles by month for : 1999
Greenbelt 38.8N 282.E
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Mixing Ratio
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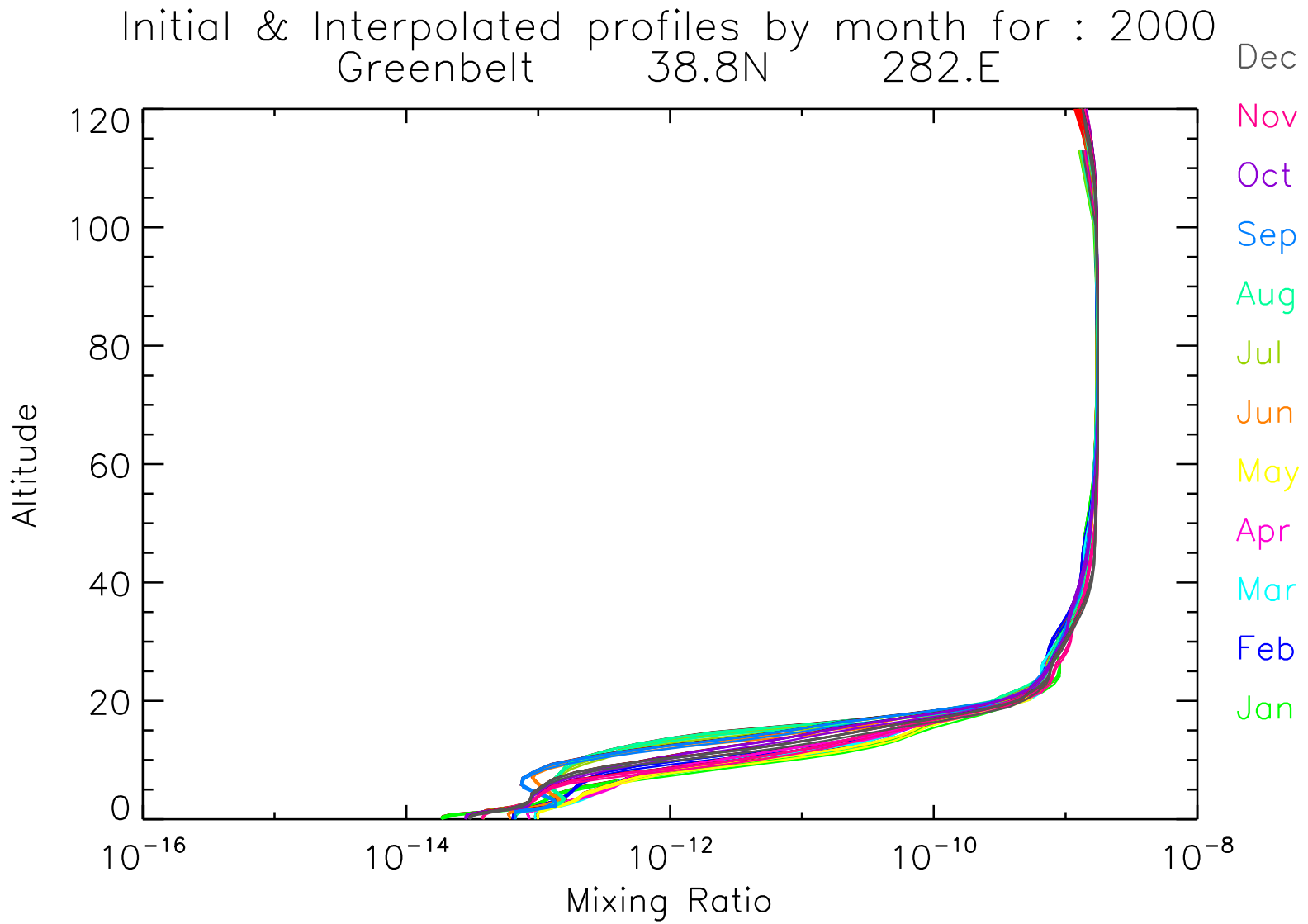
Initial & Interpolated profiles by month for : 2000
Greenbelt 38.8N 282.E
Altitude
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Mixing Ratio
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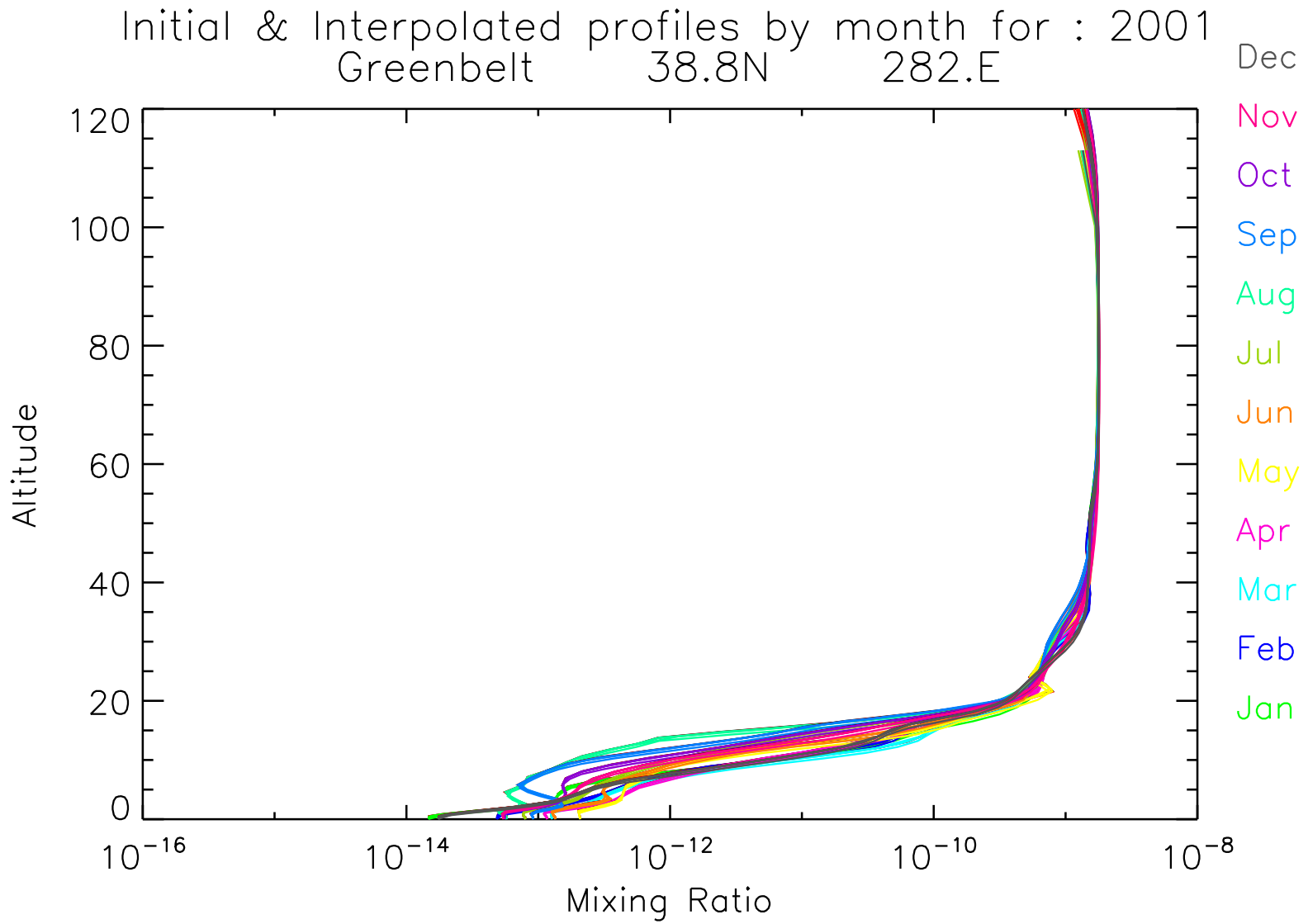
Initial & Interpolated profiles by month for : 2001
Greenbelt 38.8N 282.E
Altitude
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Mixing Ratio
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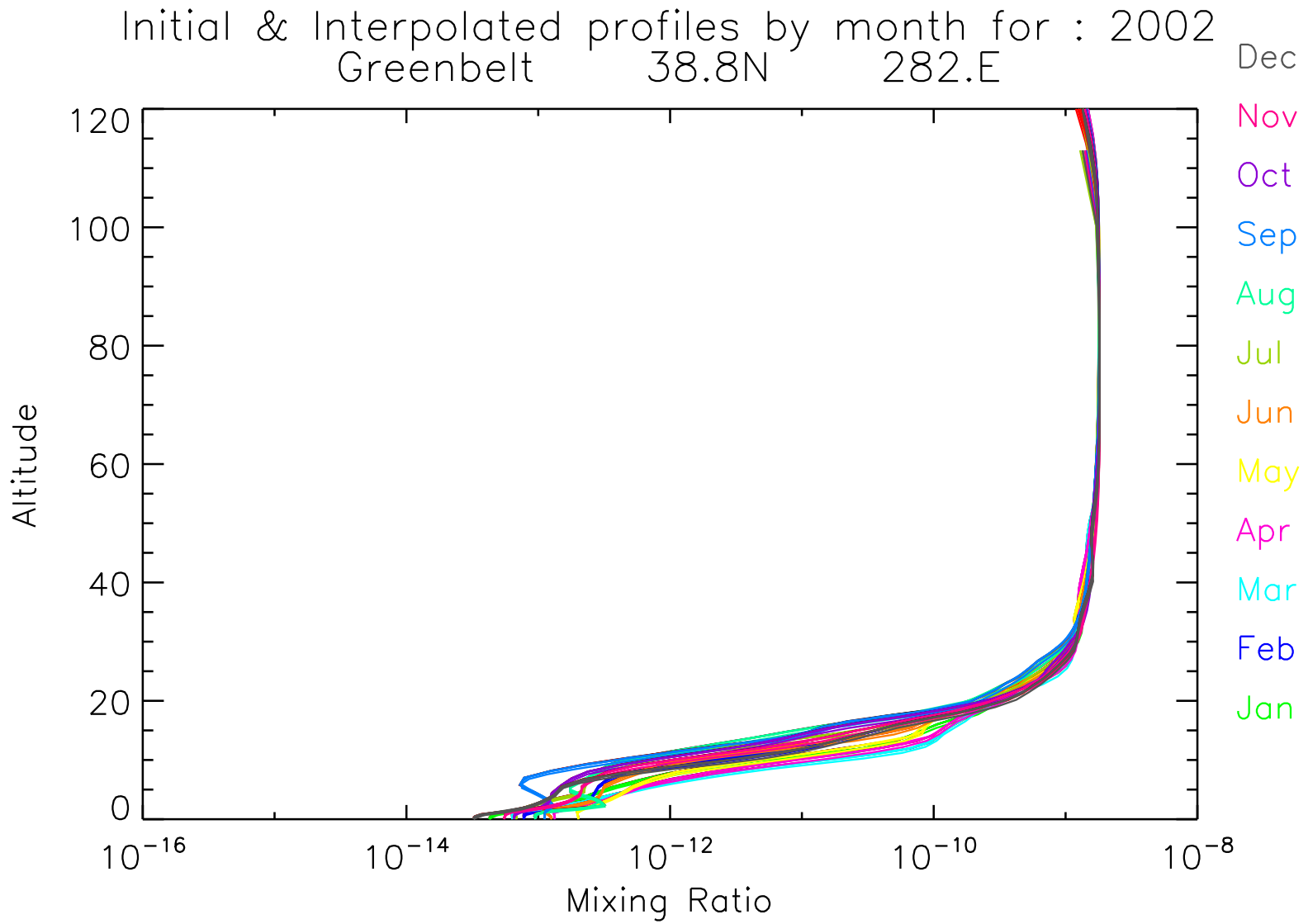
Initial & Interpolated profiles by month for : 2002
Greenbelt 38.8N 282.E
Altitude
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Mixing Ratio
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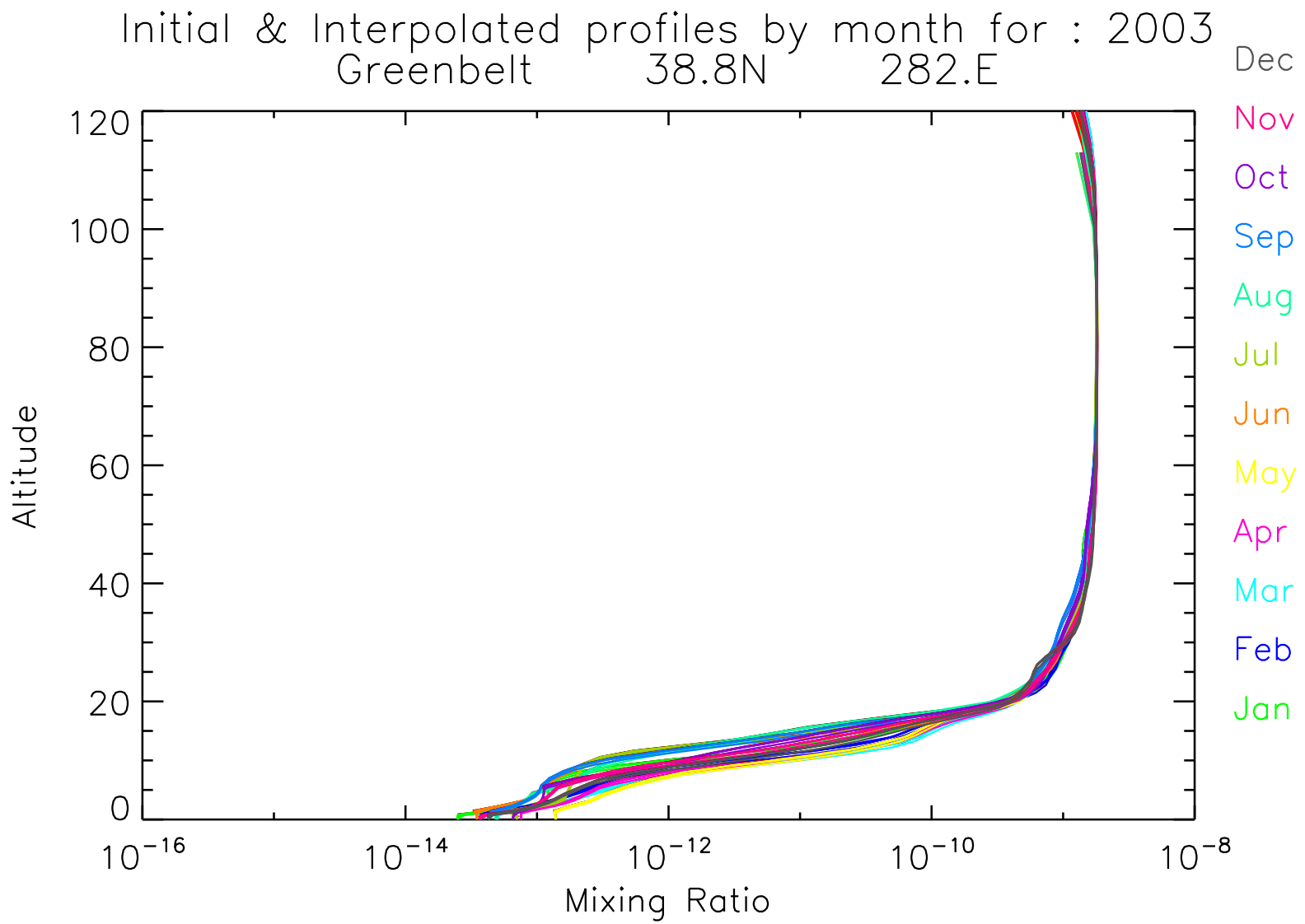
Initial & Interpolated profiles by month for : 2003
Greenbelt 38.8N 282.E
Altitude
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Mixing Ratio
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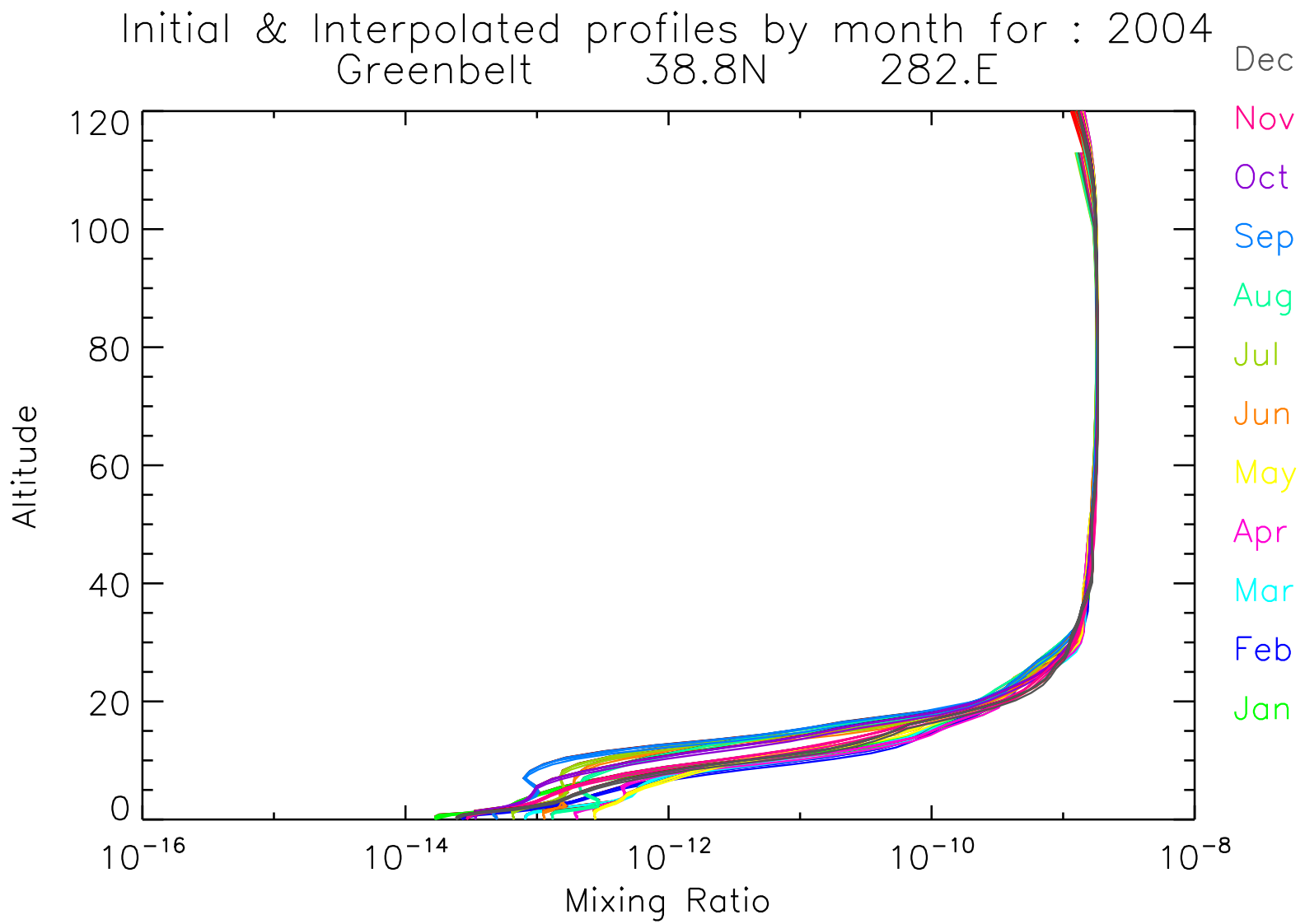
Initial & Interpolated profiles by month for : 2004
Greenbelt 38.8N 282.E
Altitude
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Mixing Ratio
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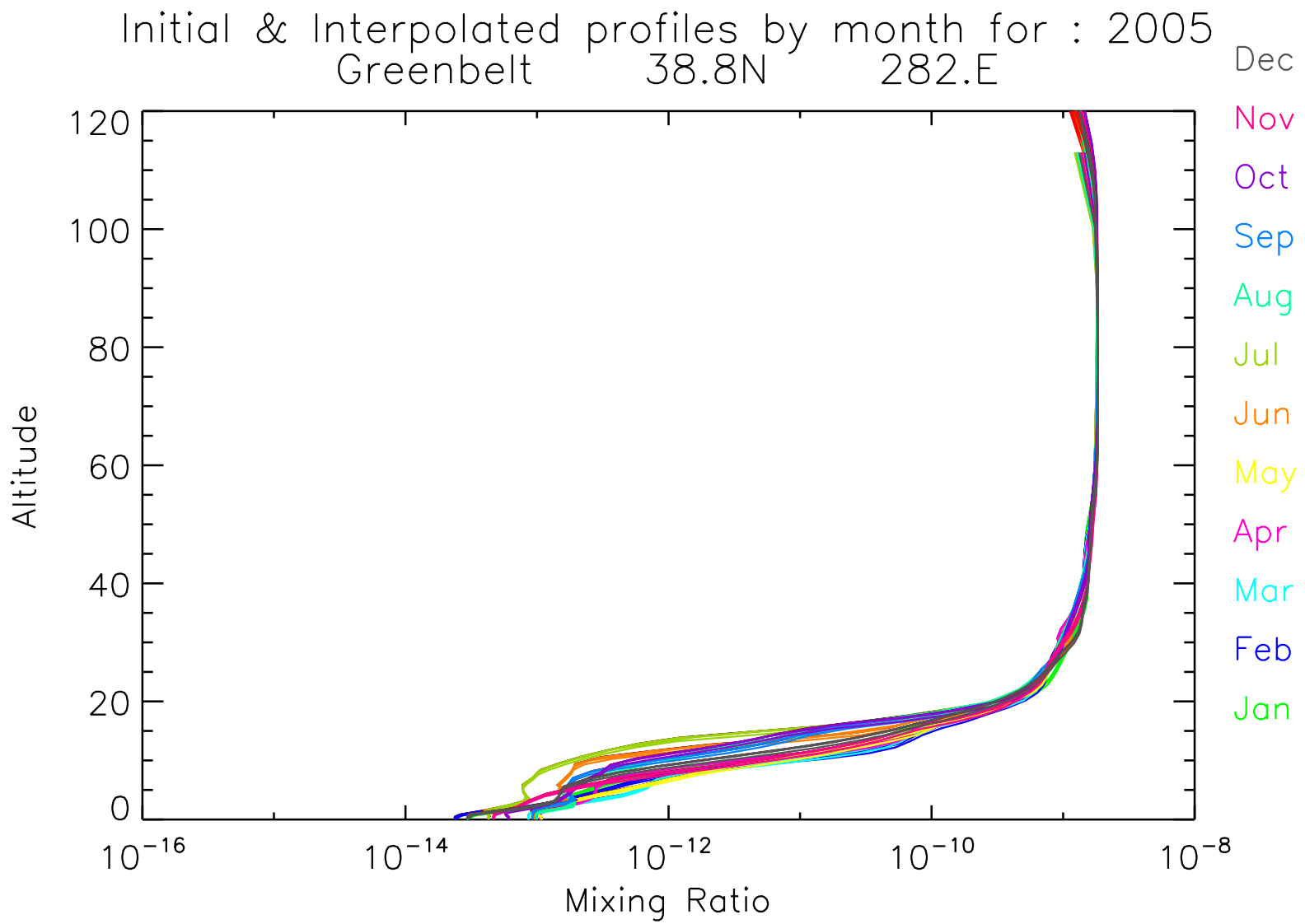
Initial & Interpolated profiles by month for : 2005
Greenbelt 38.8N 282.E
Altitude
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Mixing Ratio
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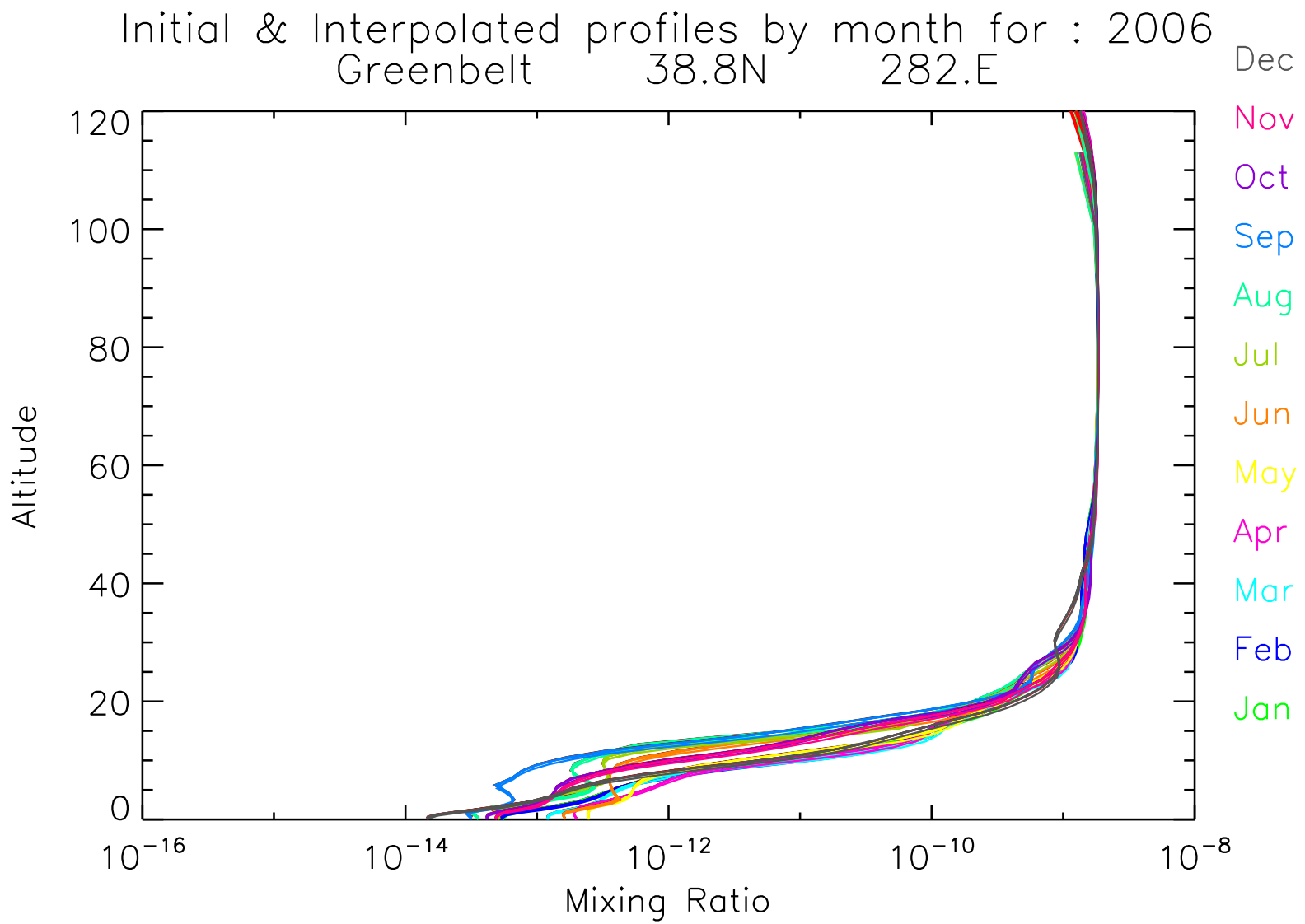
Initial & Interpolated profiles by month for : 2006
Greenbelt 38.8N 282.E
Altitude
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Mixing Ratio
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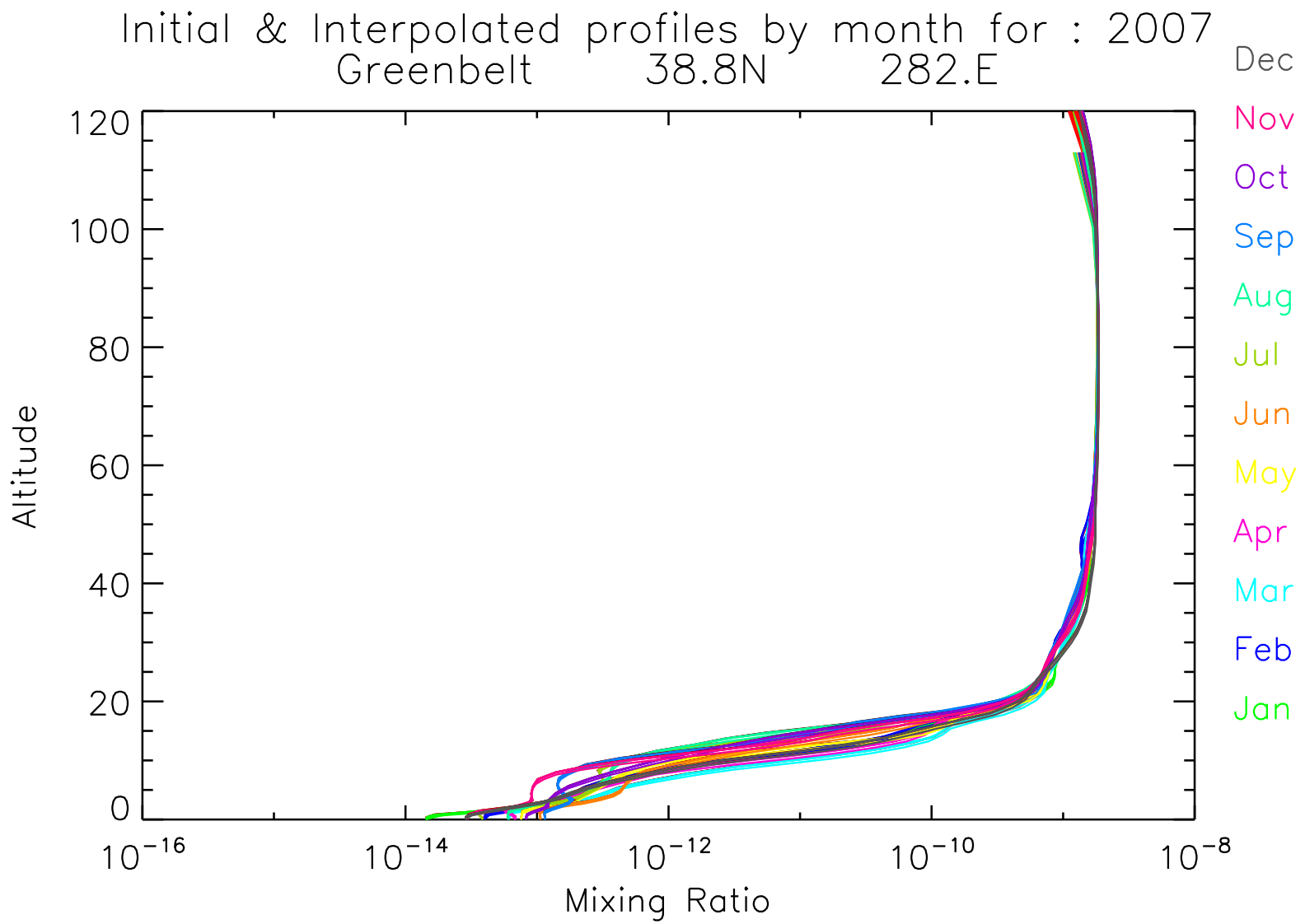
Initial & Interpolated profiles by month for : 2007
Greenbelt 38.8N 282.E
Altitude
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Mixing Ratio
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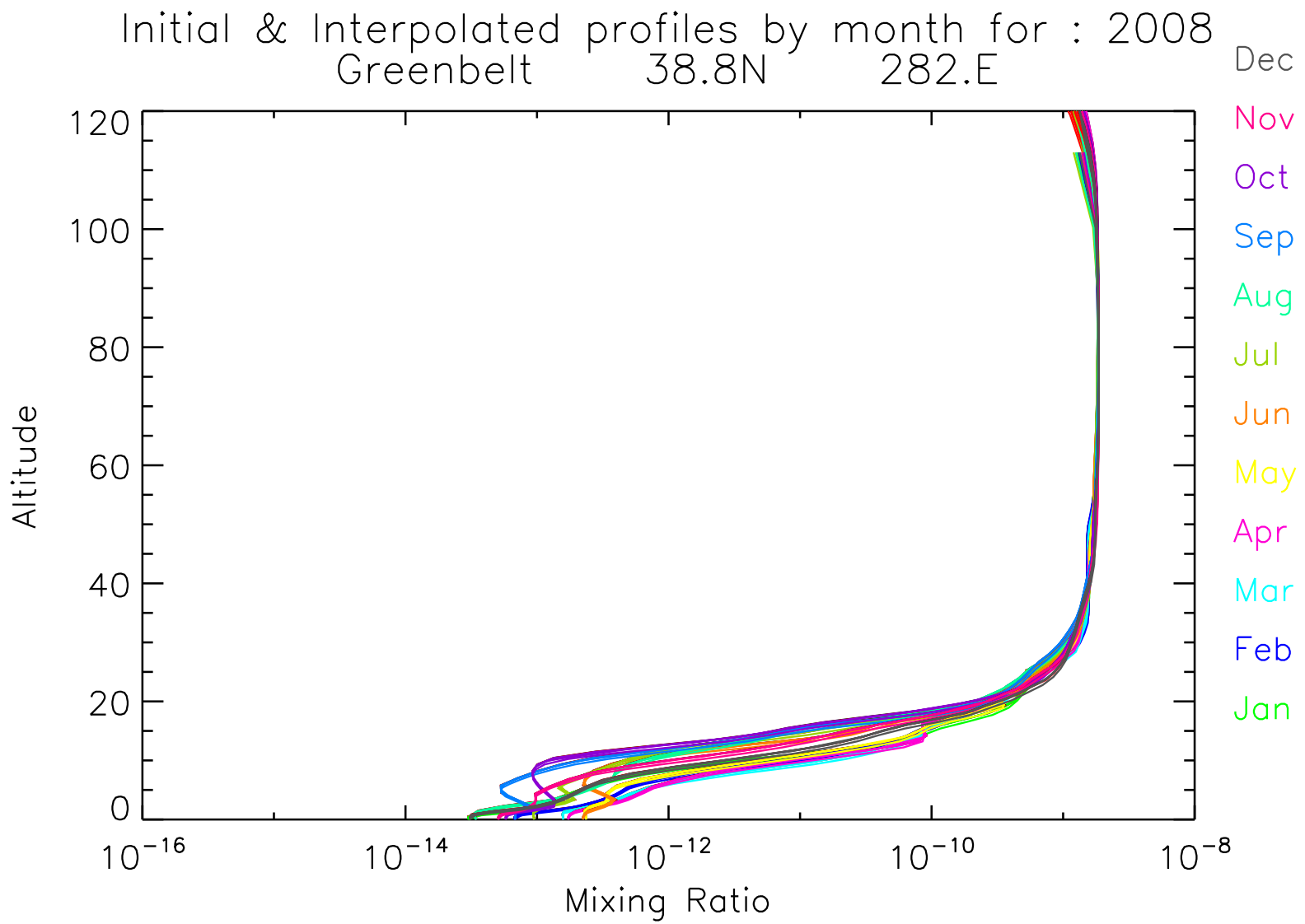
Initial & Interpolated profiles by month for : 2008
Greenbelt 38.8N 282.E
Altitude
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Mixing Ratio
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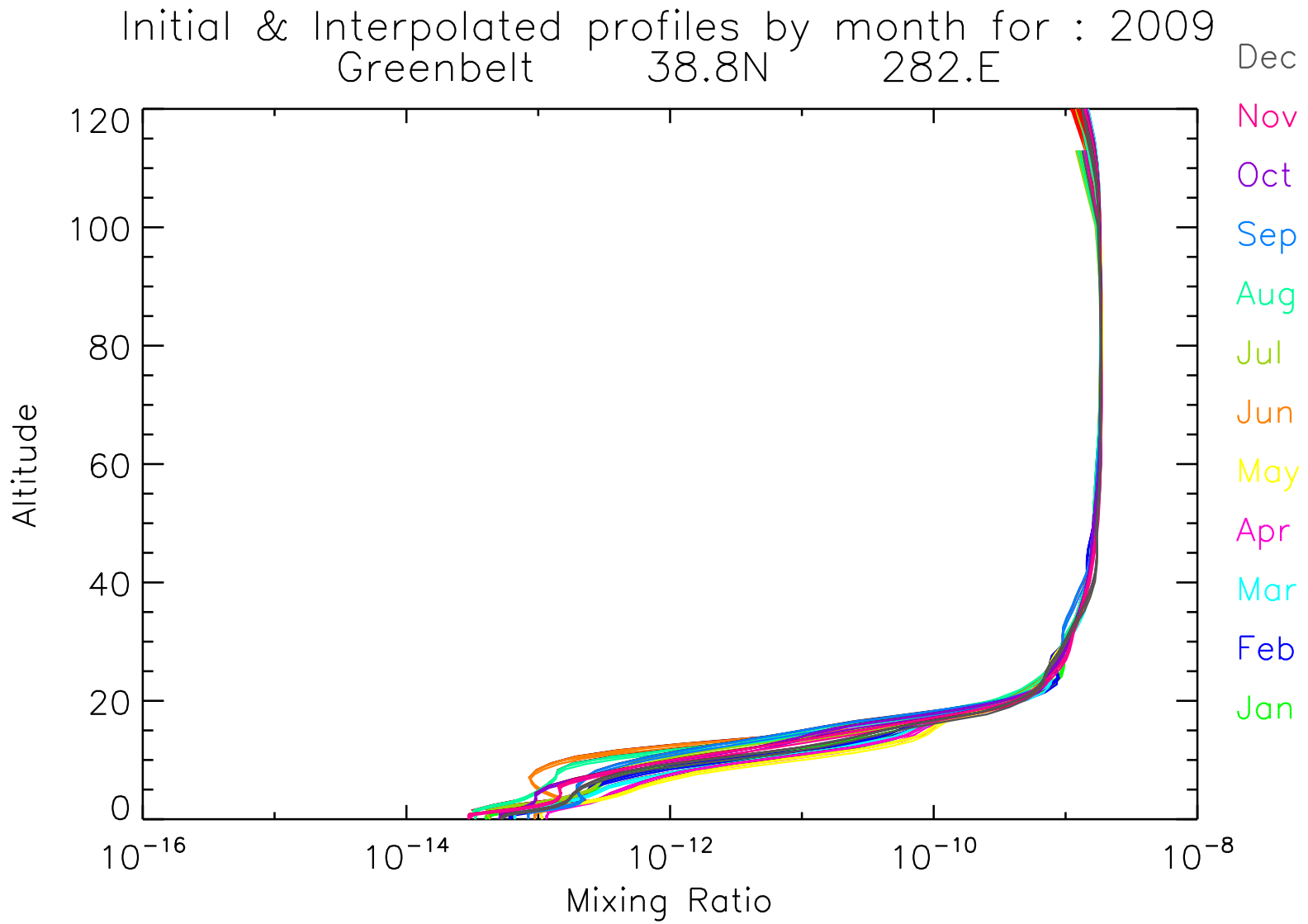
Initial & Interpolated profiles by month for : 2009
Greenbelt 38.8N 282.E
Altitude
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Mixing Ratio
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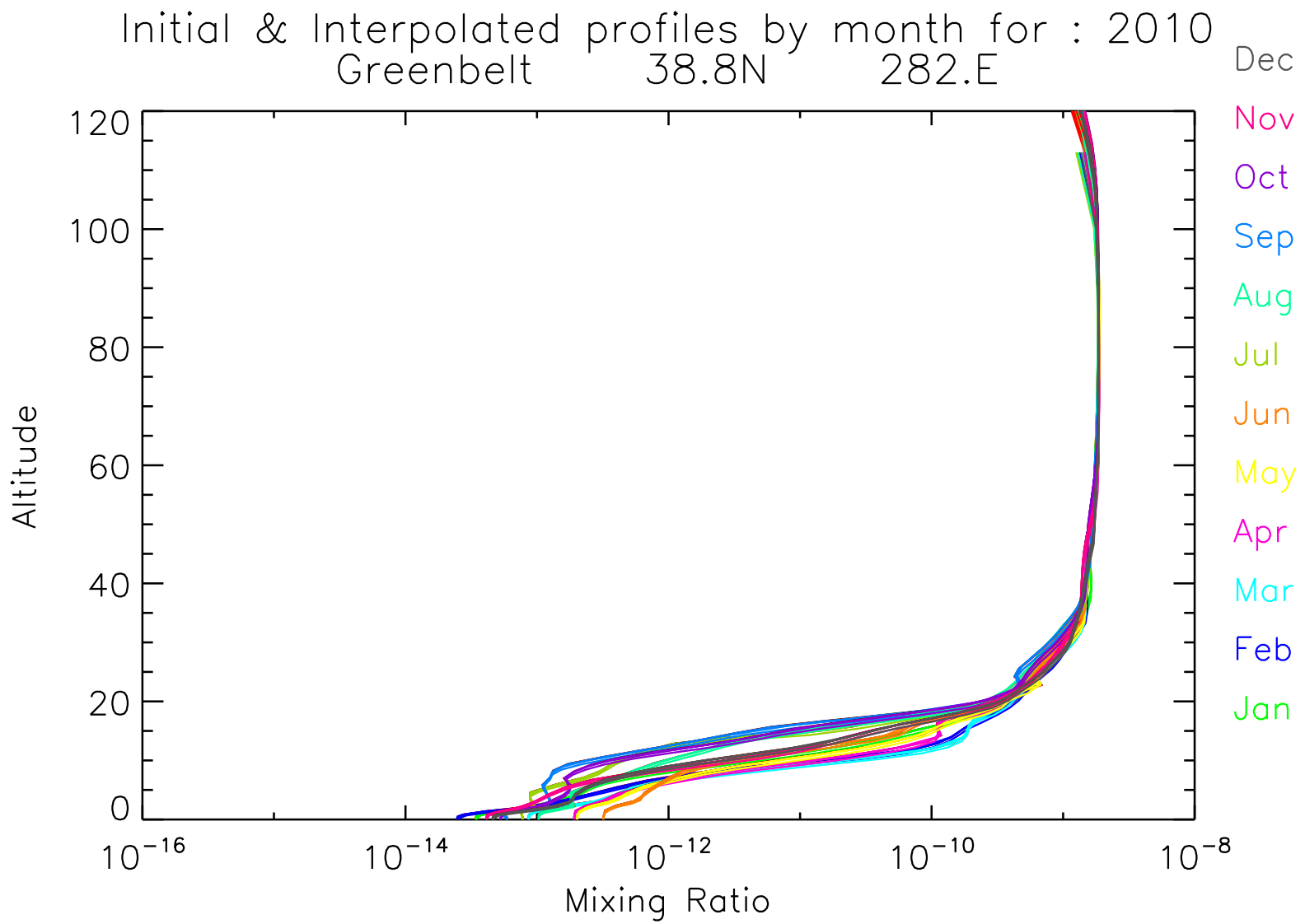
Initial & Interpolated profiles by month for : 2010
Greenbelt 38.8N 282.E
Altitude
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Mixing Ratio
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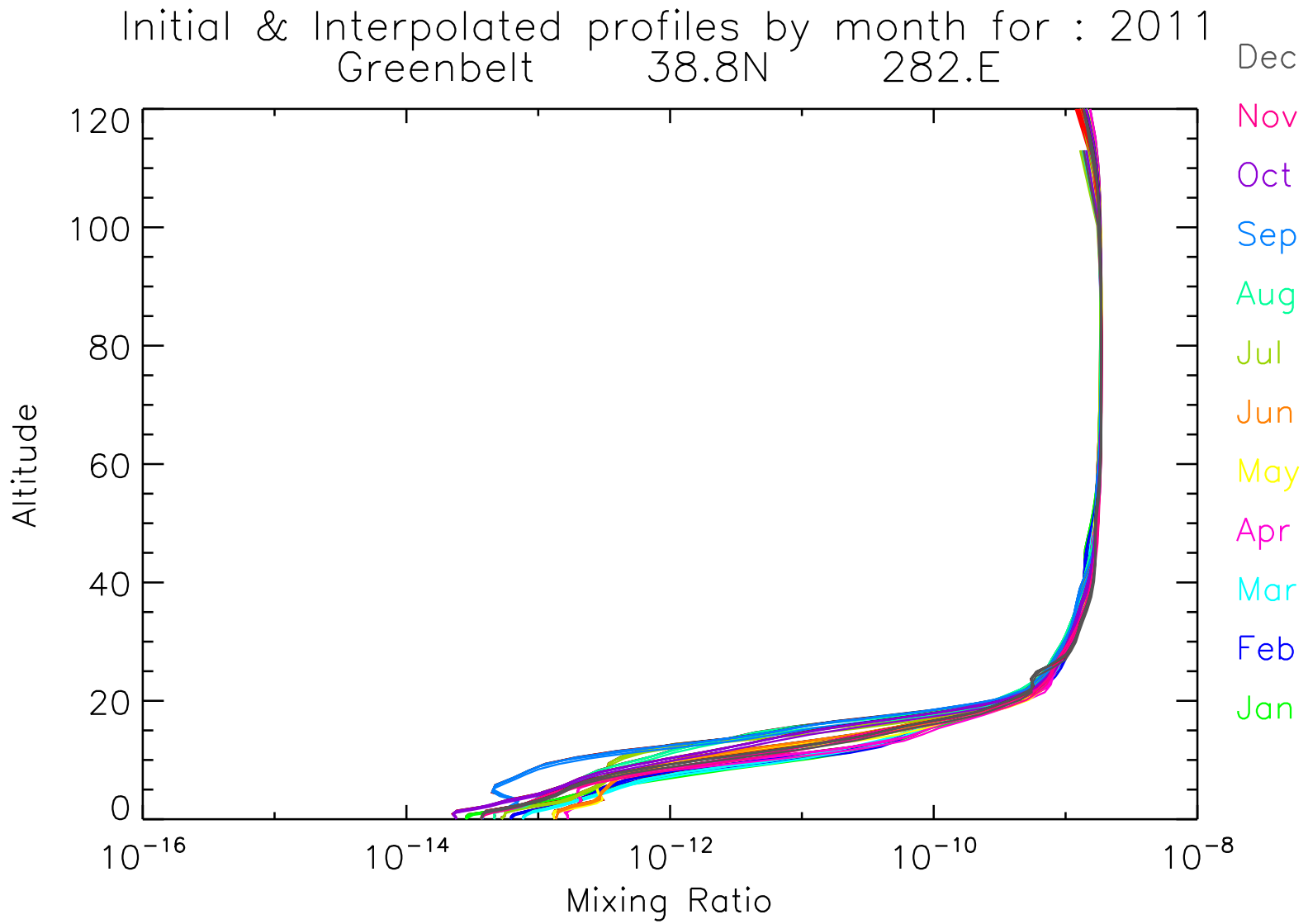
Initial & Interpolated profiles by month for : 2011
Greenbelt 38.8N 282.E
Altitude
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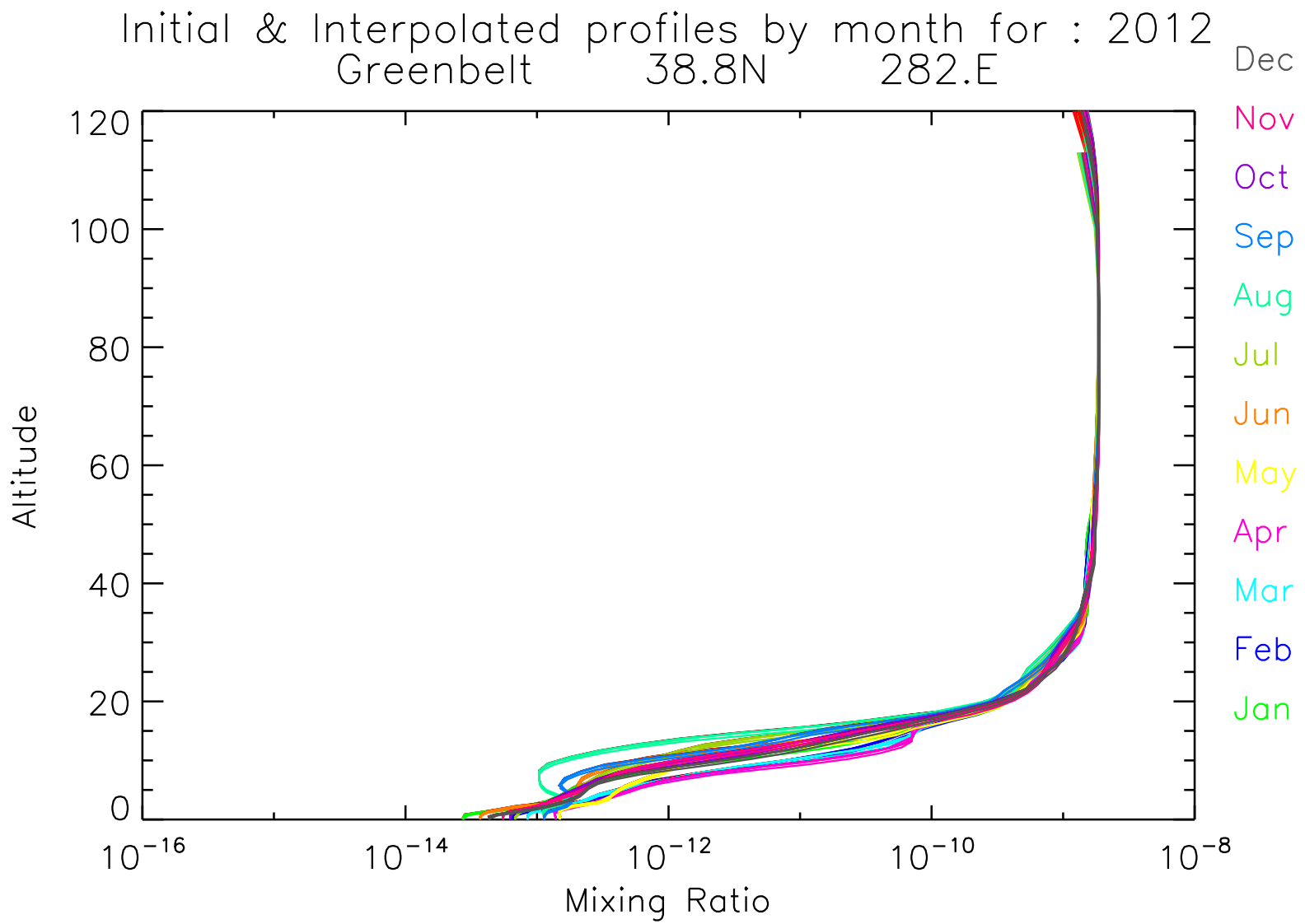
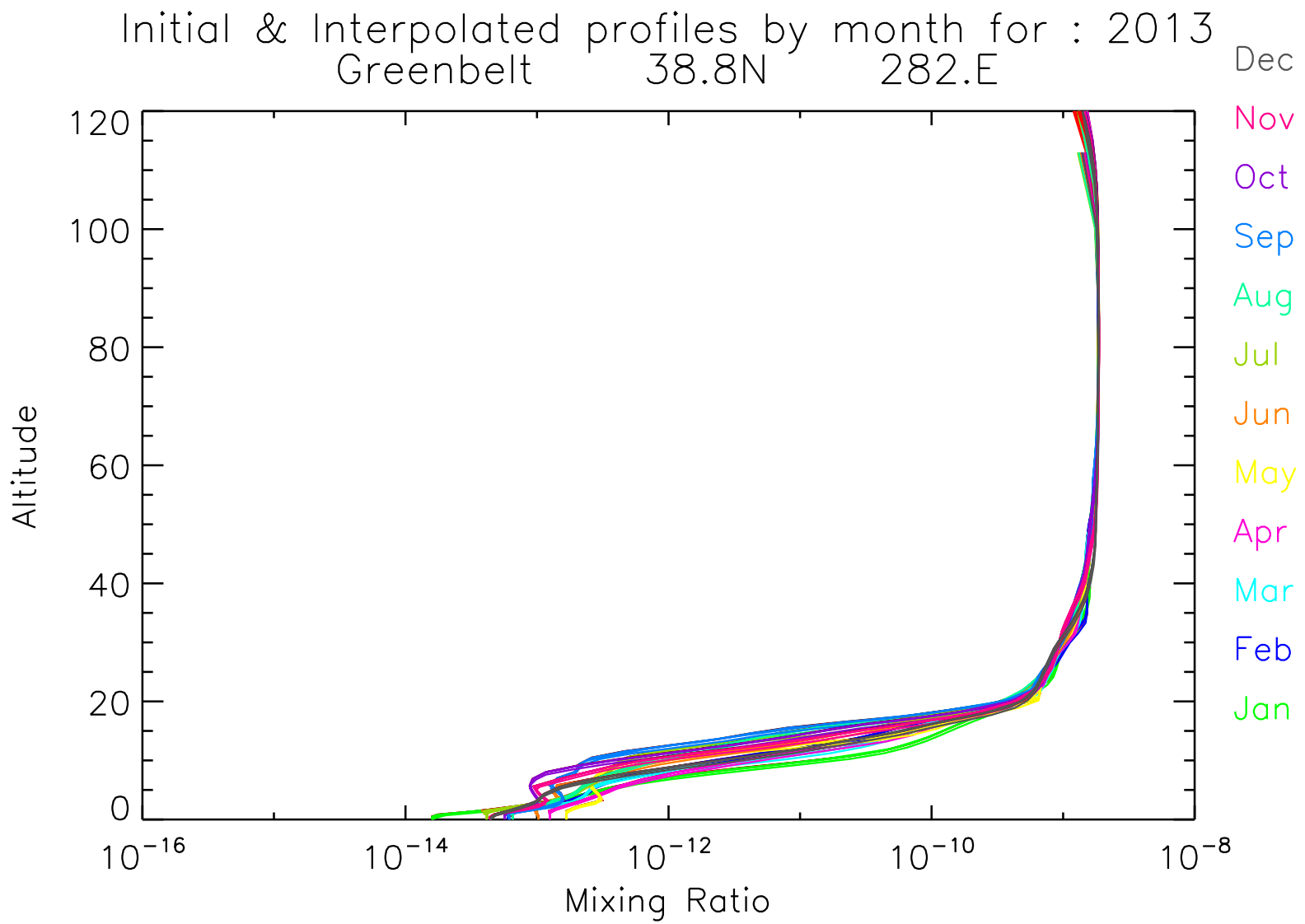
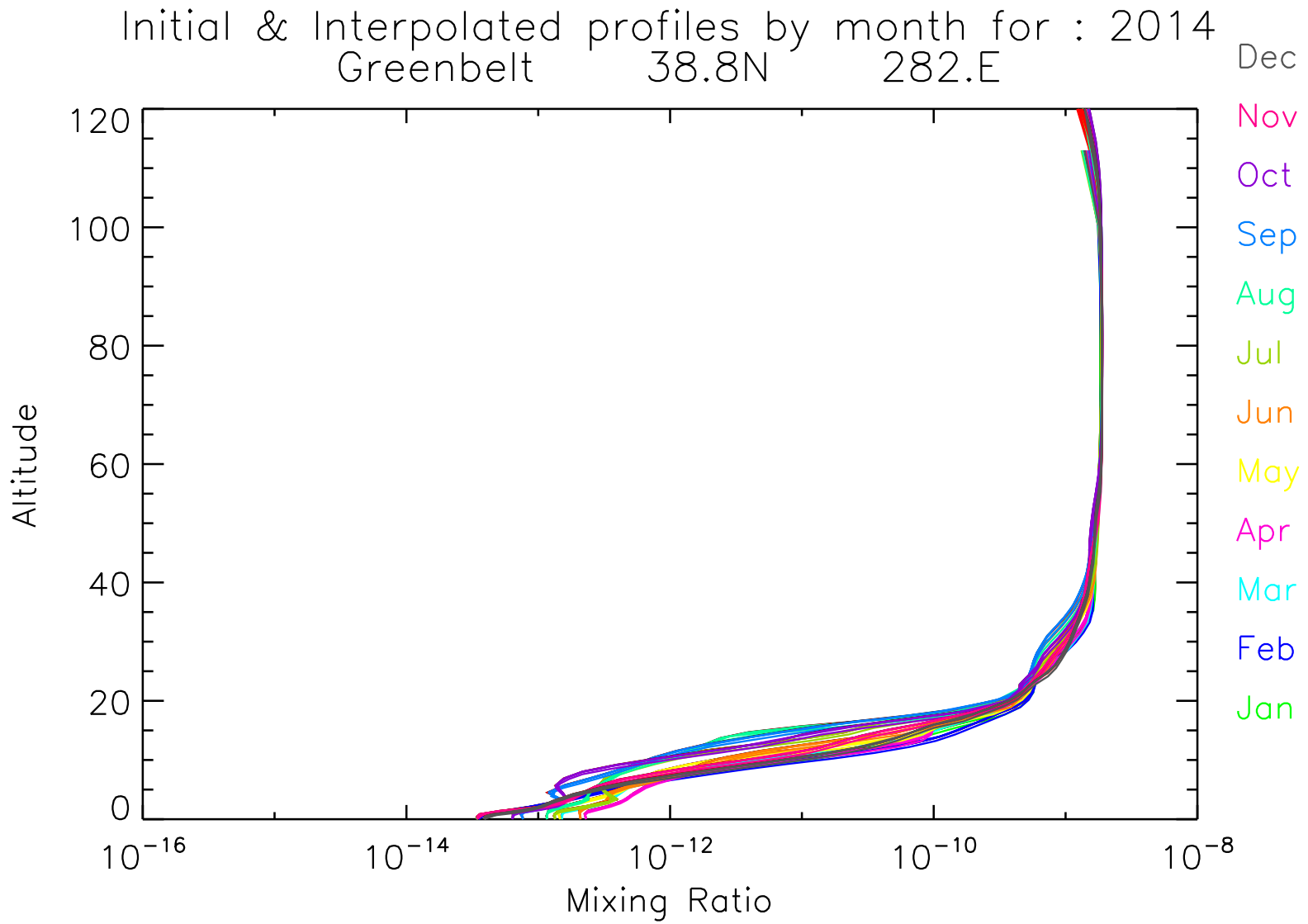
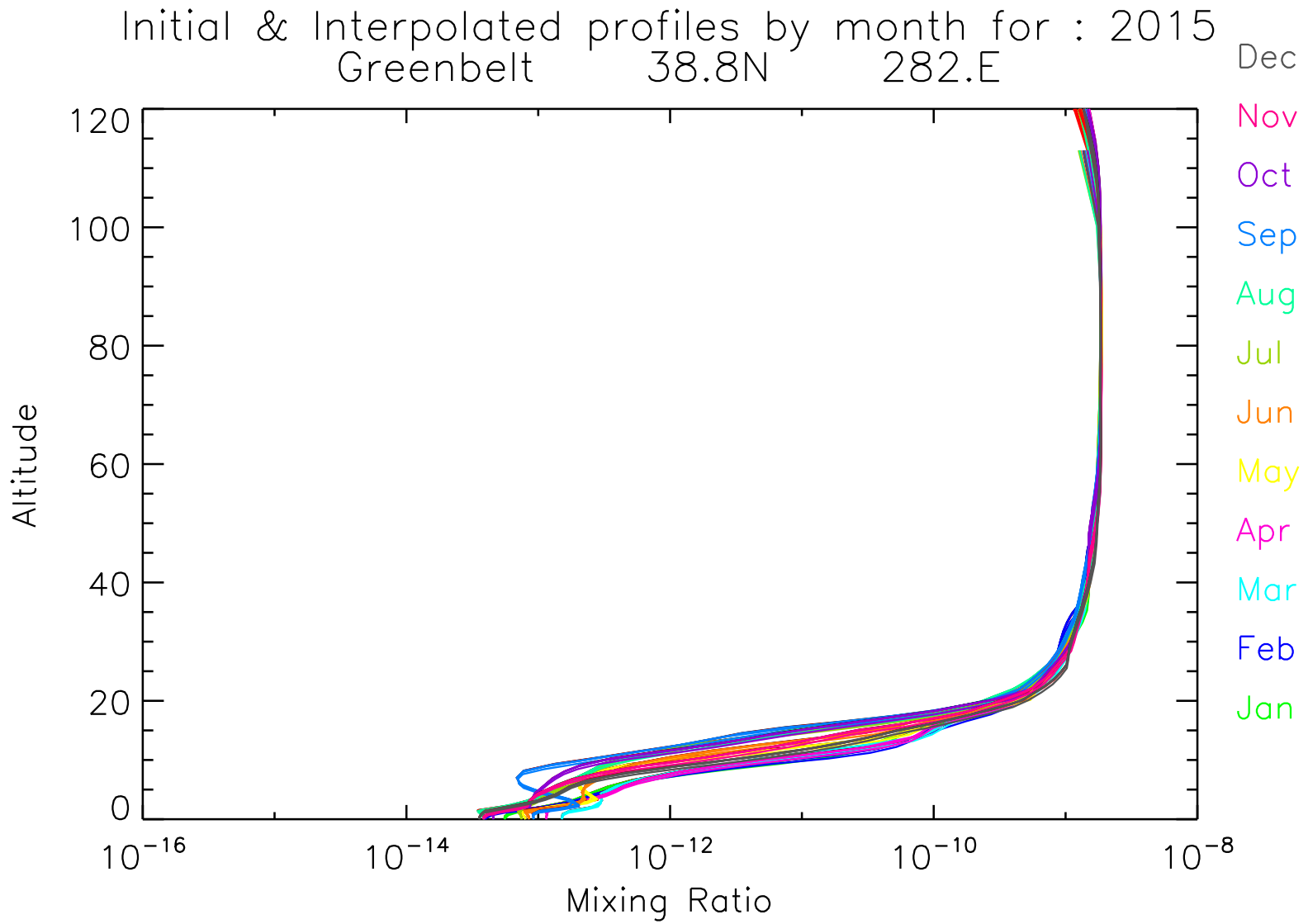
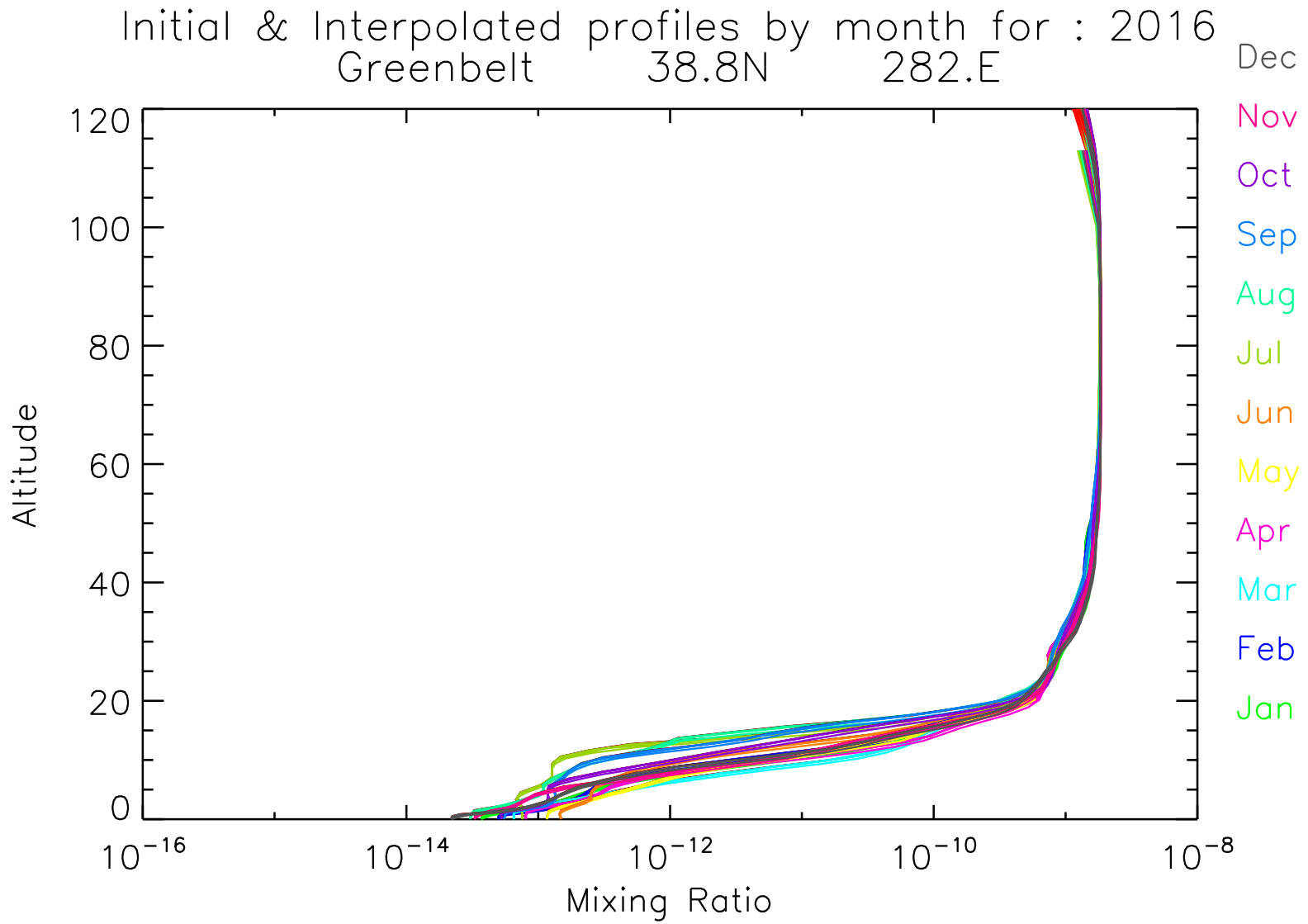
0
$10^{-16}$
$10^{-14}$
$10^{-12}$
$10^{-10}$
$10^{-8}$
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

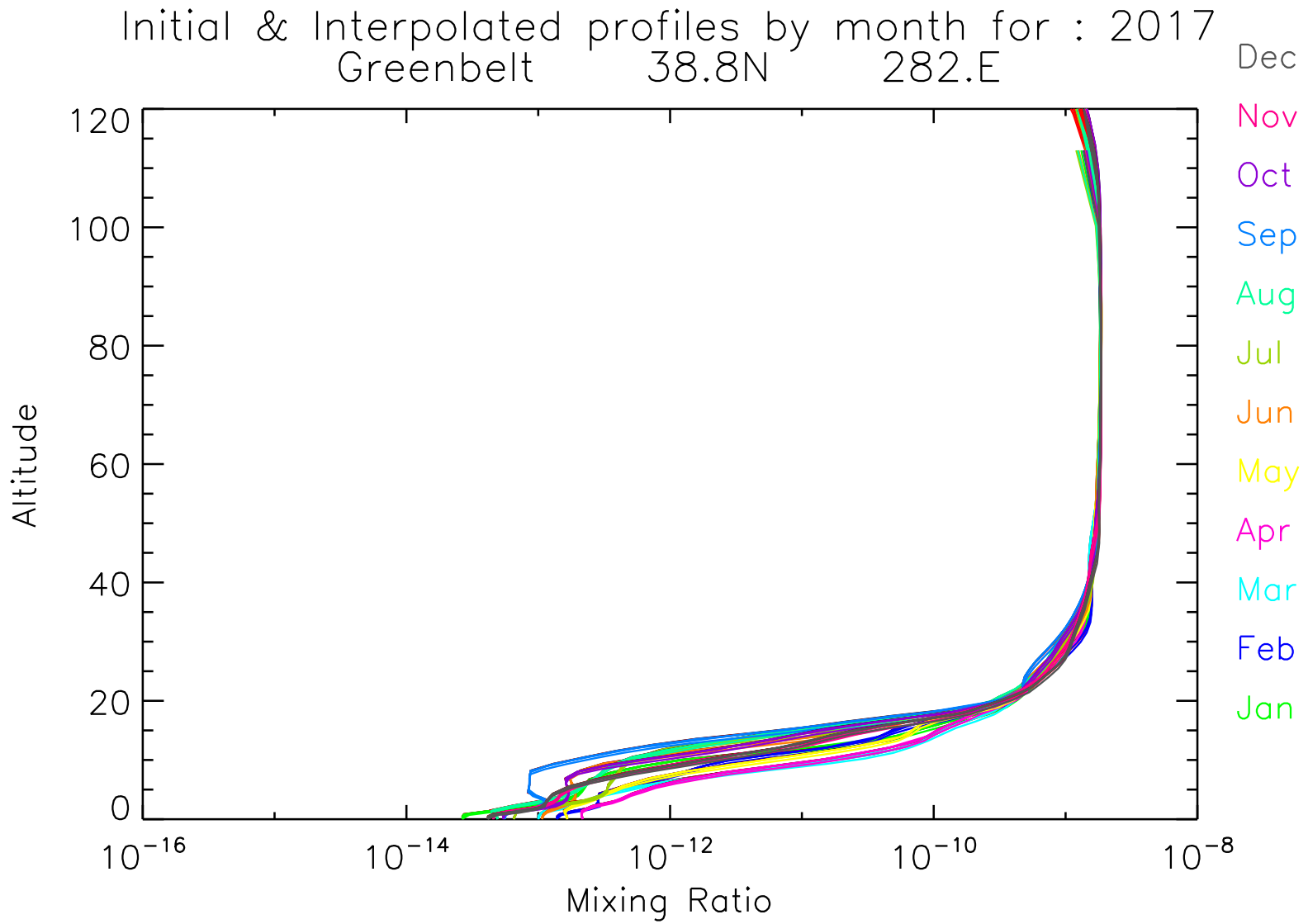

Initial & Interpolated profiles by month for : 2012
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
$10^{-16}$
$10^{-14}$
$10^{-12}$
$10^{-10}$
$10^{-8}$
Mixing Ratio

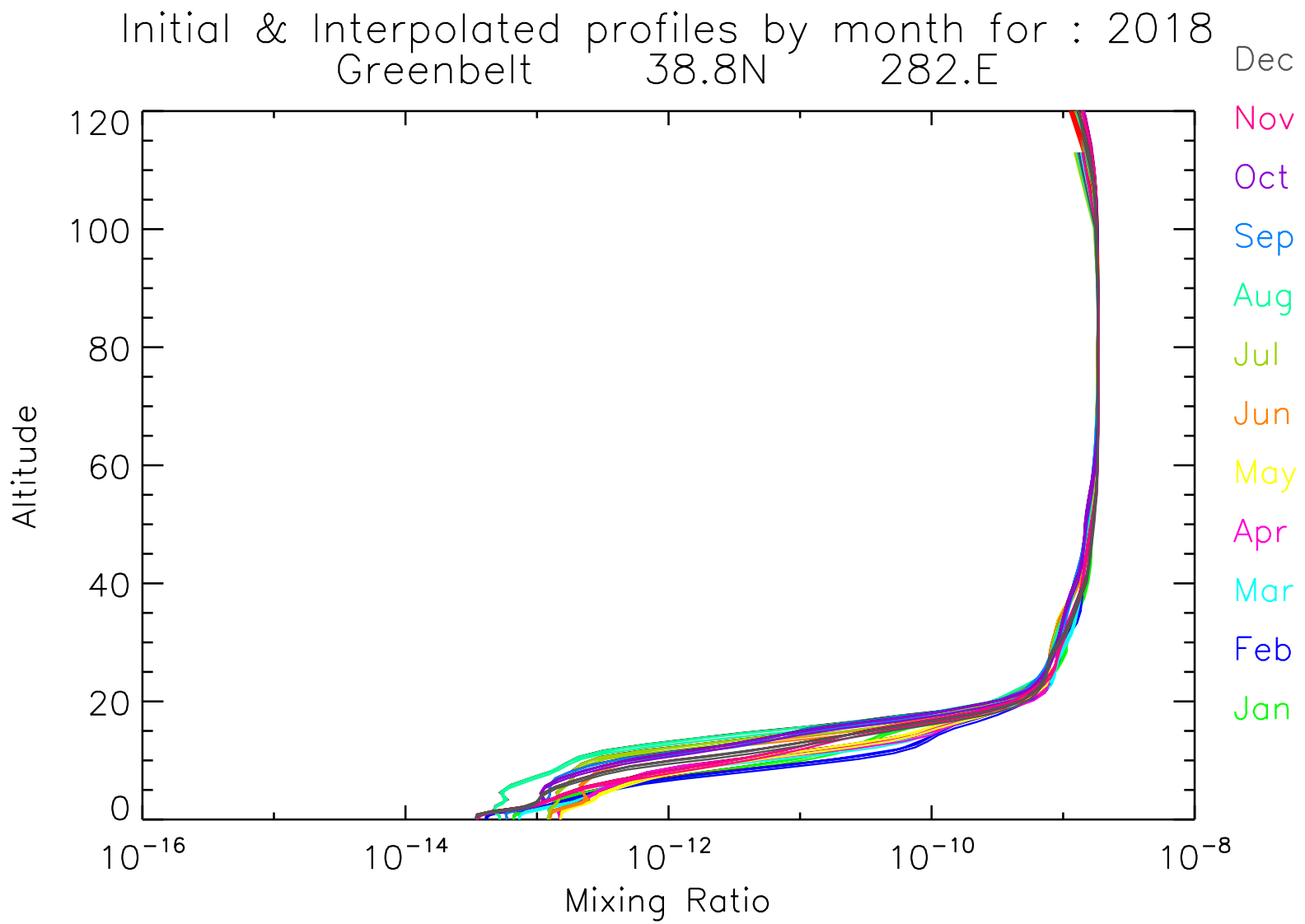

Initial & Interpolated profiles by month for : 2013
Greenbelt 38.8N 282.E
Altitude
120
100
80
60
40
20
0
$10^{-16}$
$10^{-14}$
$10^{-12}$
$10^{-10}$
$10^{-8}$
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

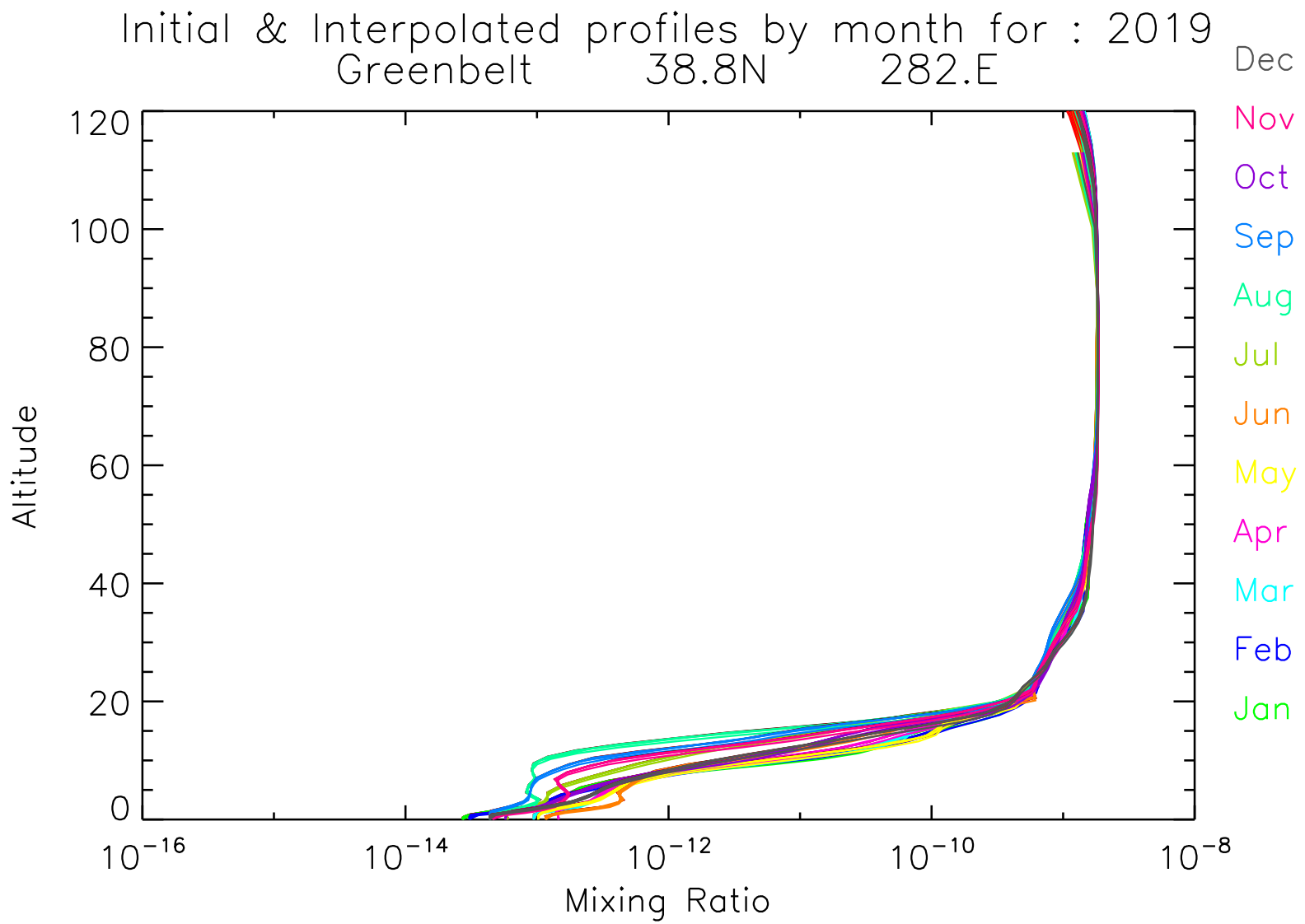

Initial & Interpolated profiles by month for : 2014
Greenbelt 38.8N 282.E
Altitude
120
100
80
60
40
20
0
$10^{-16}$
$10^{-14}$
$10^{-12}$
$10^{-10}$
$10^{-8}$
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

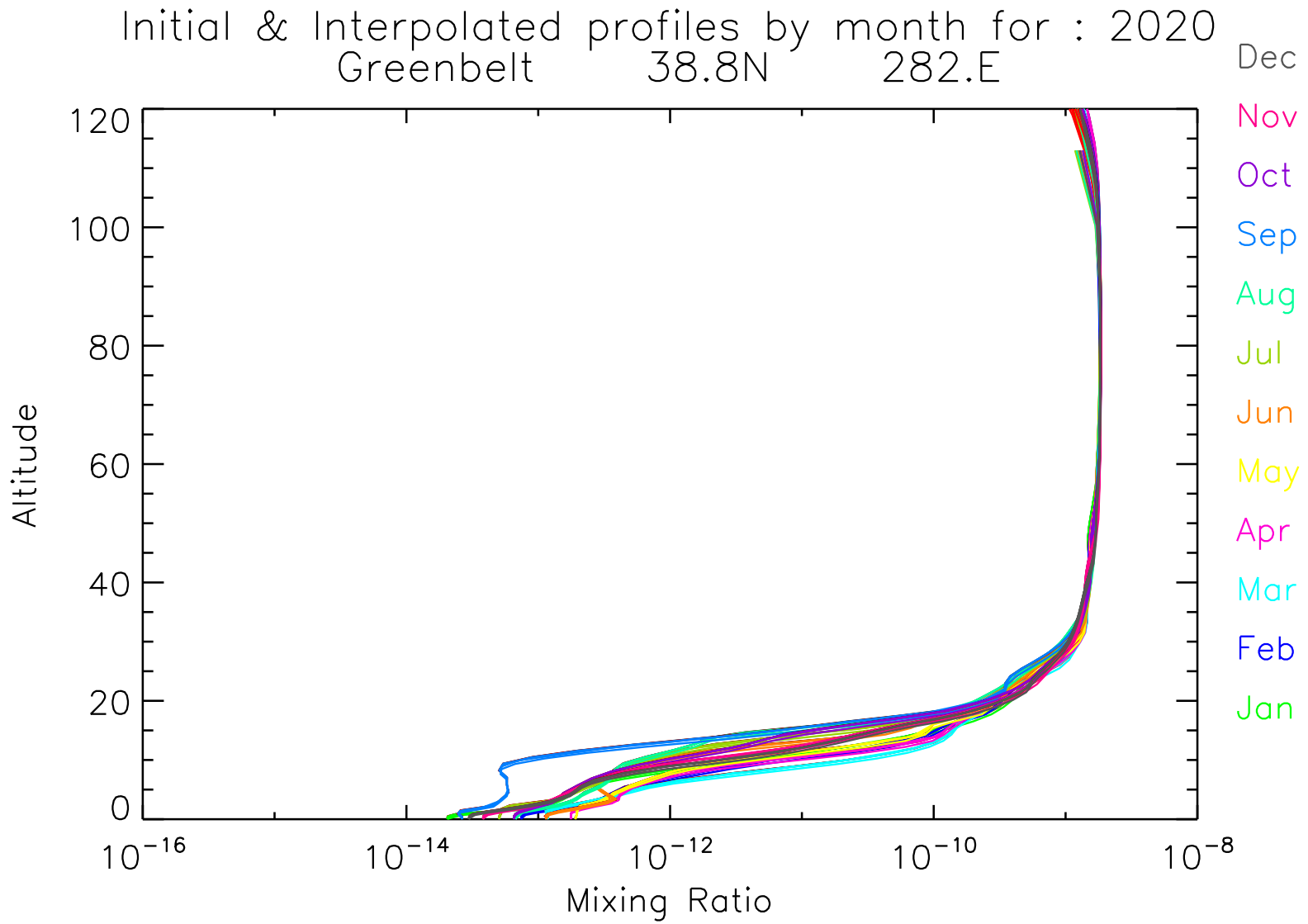

Initial & Interpolated profiles by month for : 2015
Greenbelt 38.8N 282.E
Altitude
120
100
80
60
40
20
0
$10^{-16}$
$10^{-14}$
$10^{-12}$
$10^{-10}$
$10^{-8}$
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

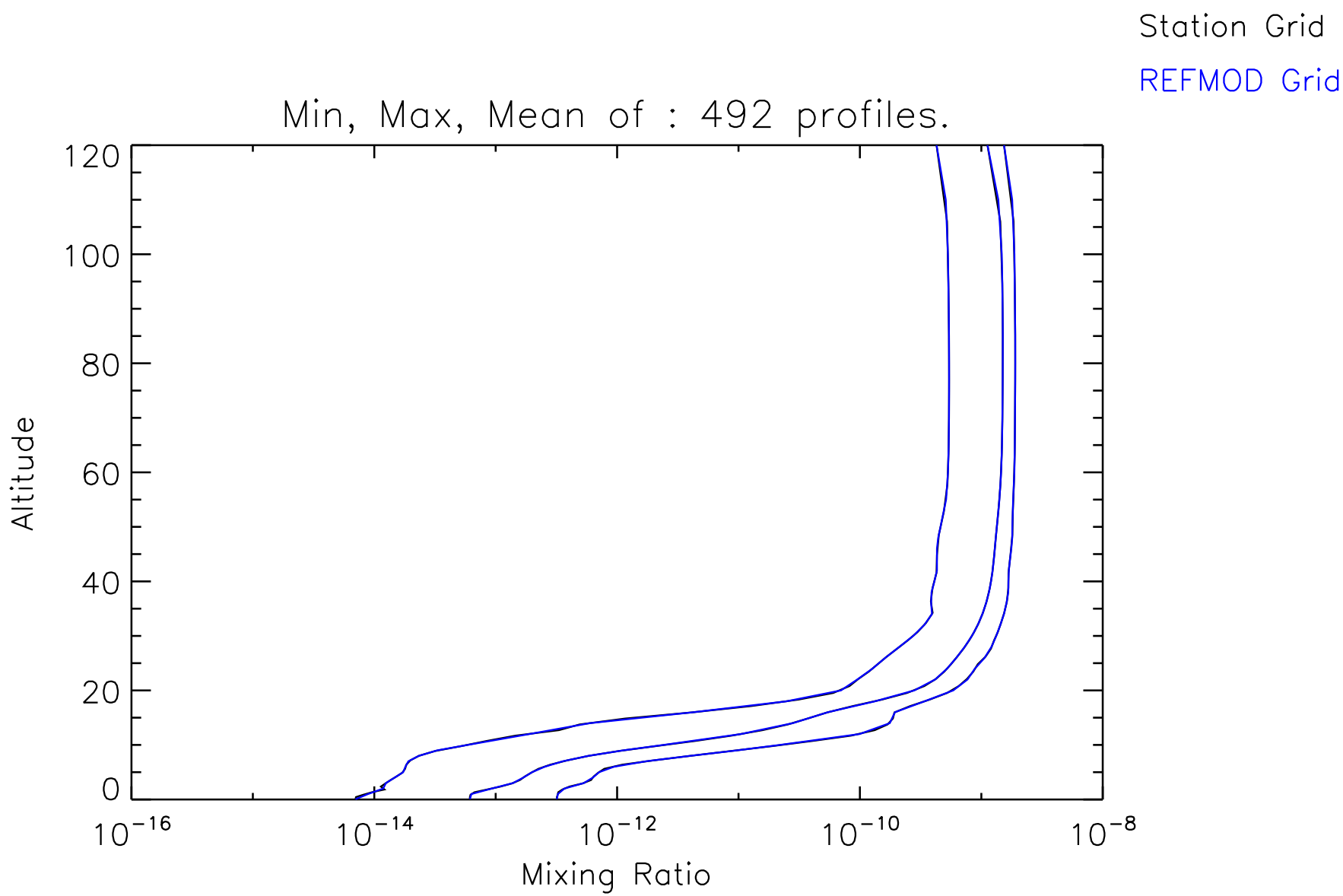

Initial & Interpolated profiles by month for : 2016
Greenbelt 38.8N 282.E
Altitude
120
100
80
60
40
20
0
$10^{-16}$
$10^{-14}$
$10^{-12}$
$10^{-10}$
$10^{-8}$
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

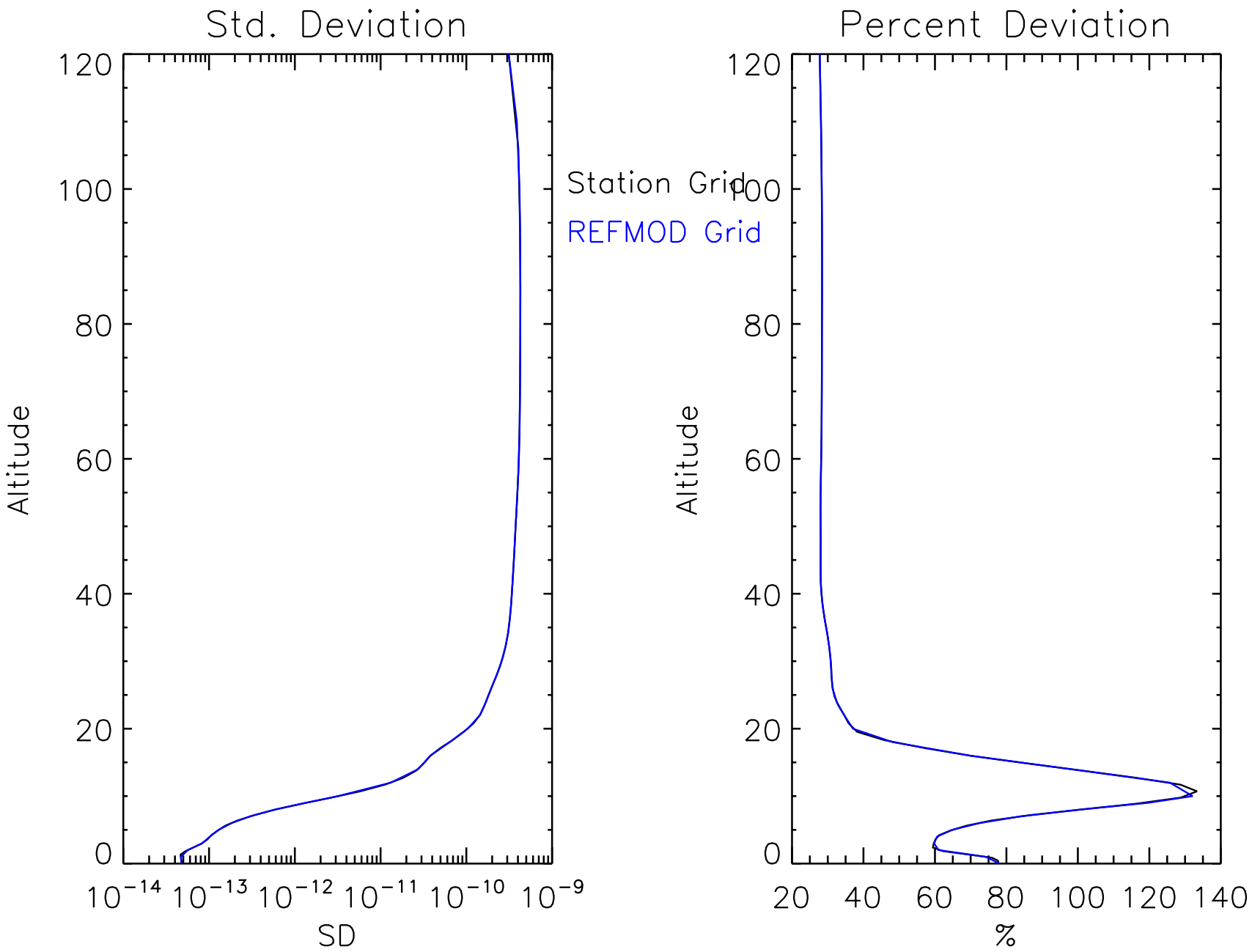

Initial & Interpolated profiles by month for : 2017
Greenbelt 38.8N 282.E
Altitude
120
100
80
60
40
20
0
$10^{-16}$
$10^{-14}$
$10^{-12}$
$10^{-10}$
$10^{-8}$
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

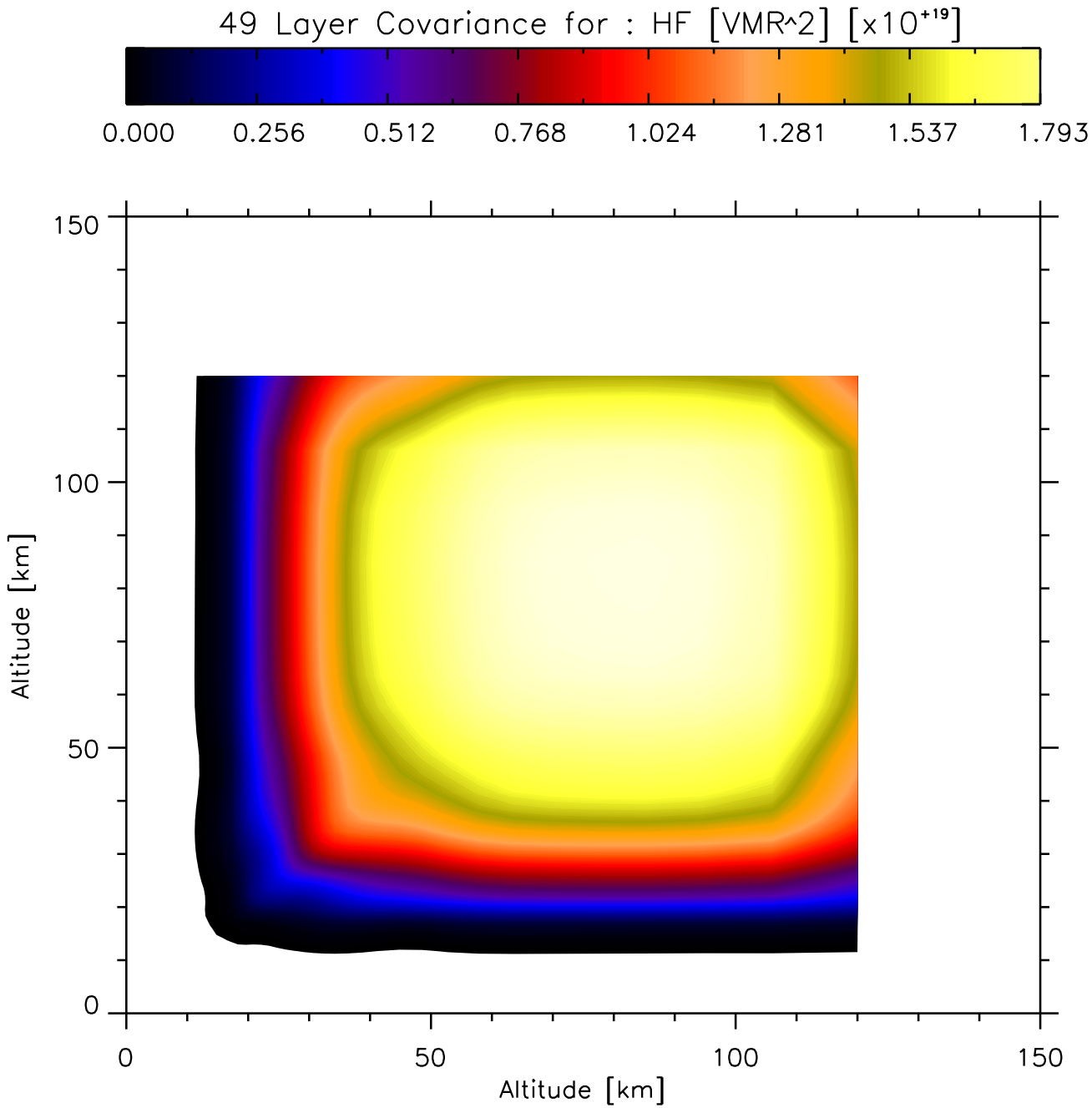

Initial & Interpolated profiles by month for : 2018
Greenbelt 38.8N 282.E
Altitude
120
100
80
60
40
20
0
$10^{-16}$
$10^{-14}$
$10^{-12}$
$10^{-10}$
$10^{-8}$
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

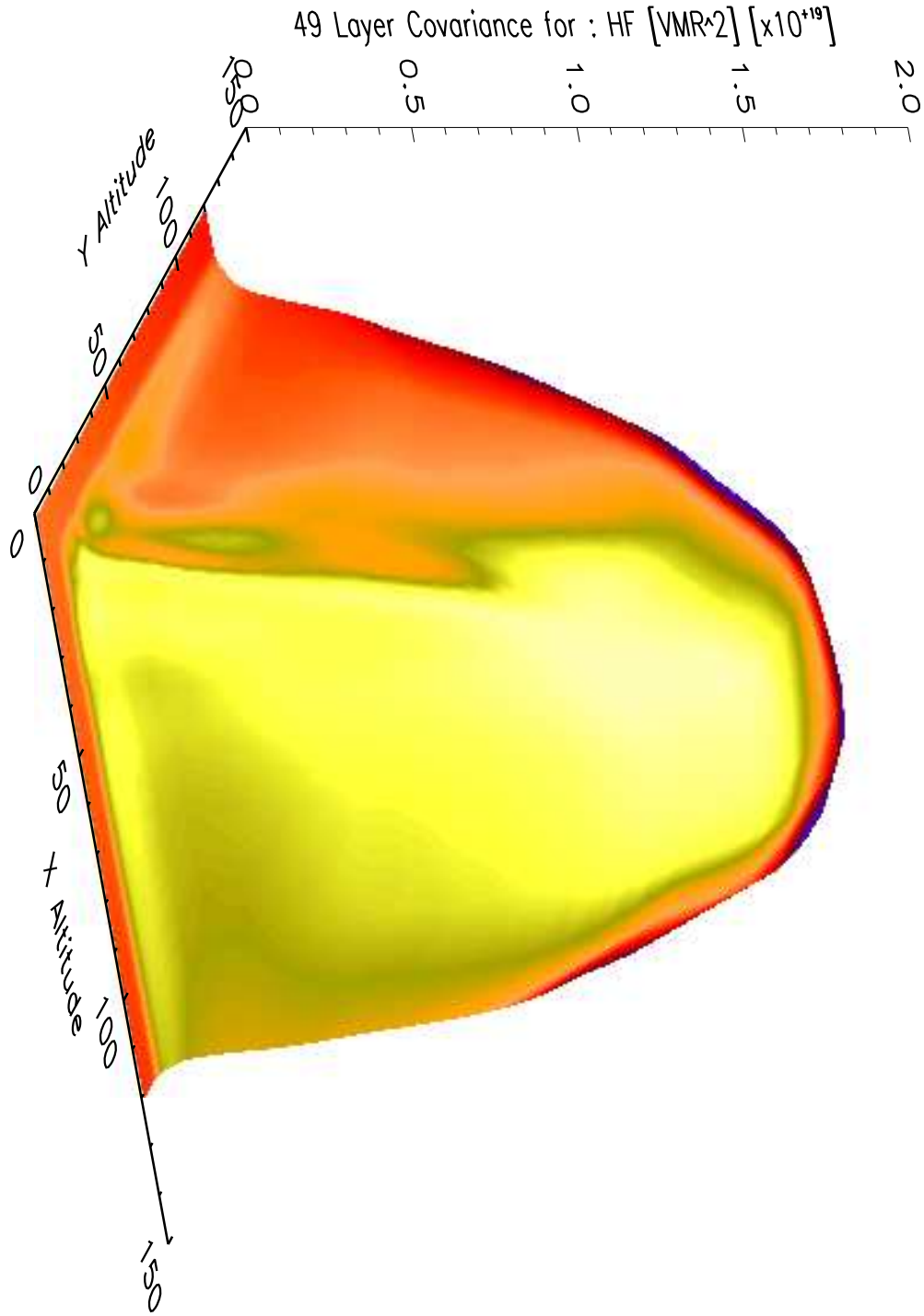

Initial & Interpolated profiles by month for : 2019
Greenbelt 38.8N 282.E
Altitude
120
100
80
60
40
20
0
$10^{-16}$
$10^{-14}$
$10^{-12}$
$10^{-10}$
$10^{-8}$
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

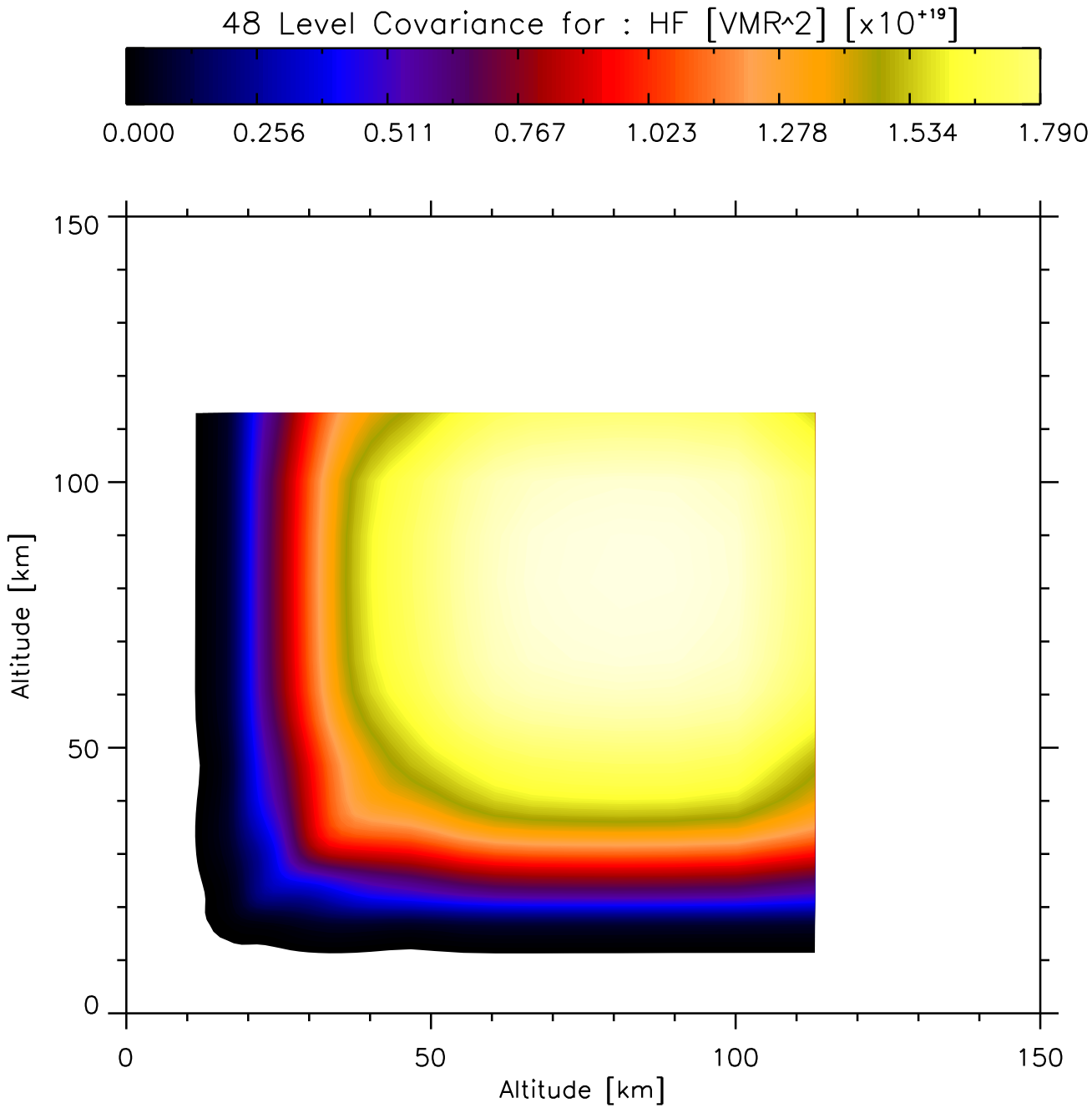

Initial & Interpolated profiles by month for : 2020
Greenbelt 38.8N 282.E
Altitude
120
100
80
60
40
20
0
$10^{-16}$
$10^{-14}$
$10^{-12}$
$10^{-10}$
$10^{-8}$
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan


Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
120
100
80
60
40
20
0
Altitude
$10^{-16}$
$10^{-14}$
$10^{-12}$
$10^{-10}$
$10^{-8}$
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
$10^{-14}$ $10^{-13}$ $10^{-12}$ $10^{-11}$ $10^{-10}$ $10^{-9}$
SD
20 40 60 80 100 120 140
%


49 Layer Covariance for : HF [VMR^2] [x10^+19]
0.000
0.256
0.512
0.768
1.024
1.281
1.537
1.793
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


49 Layer Covariance for : HF [VMR^2] [x10^+19]
0.0
0.5
1.0
1.5
2.0
Y Altitude
150
100
50
0
X Altitude
0
50
100
150


48 Level Covariance for : HF [VMR^2] [x10^+19]
0.000
0.256
0.511
0.767
1.023
1.278
1.534
1.790
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

48 Level Covariance for : HF [VMR^2] [x10^-9]
X Altitude
0
50
100
150
Y Altitude
0
30
60
90
0.0
0.5
1.0
1.5
2.0