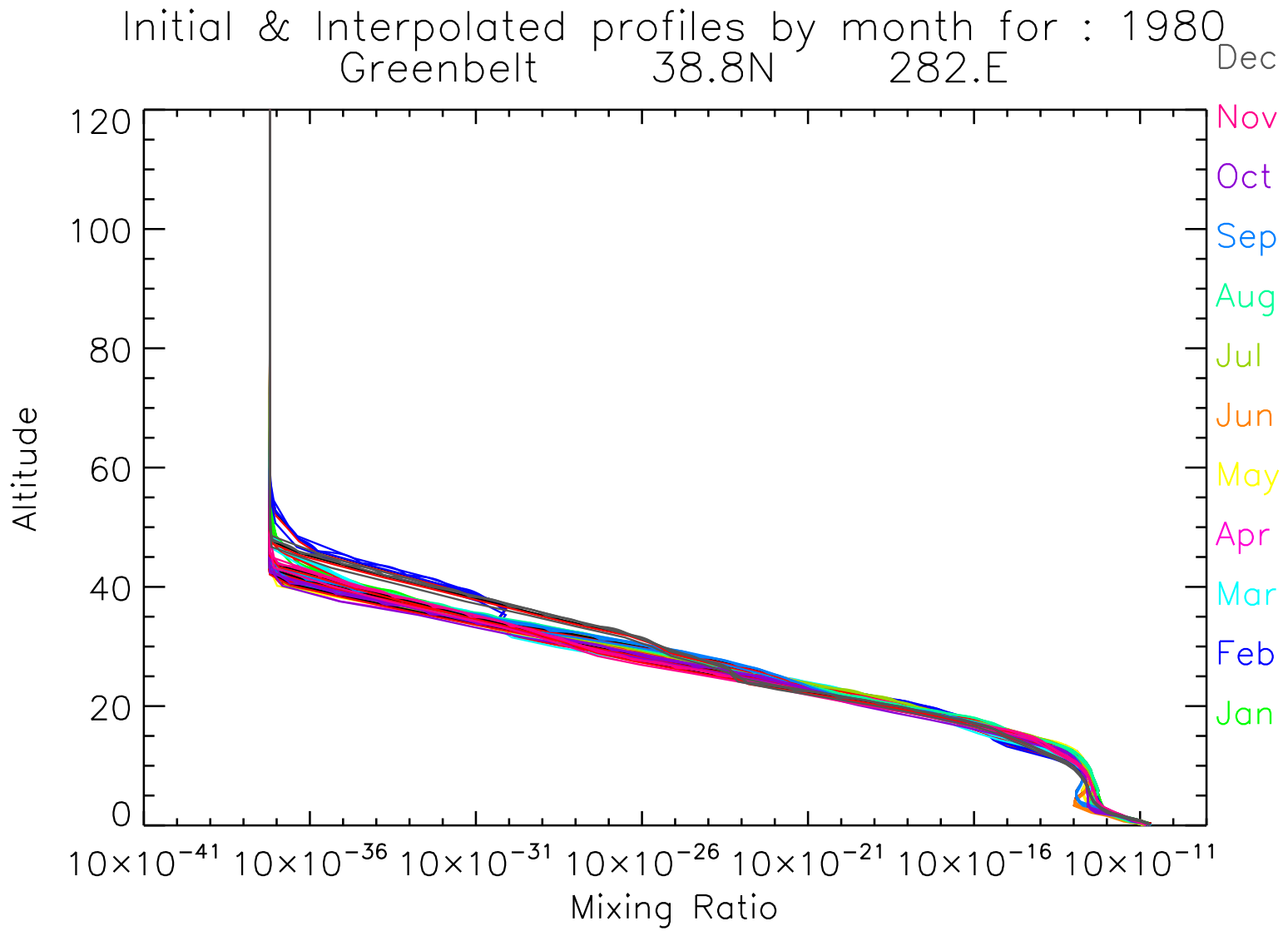
Initial & Interpolated profiles by month for : 1980
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
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20
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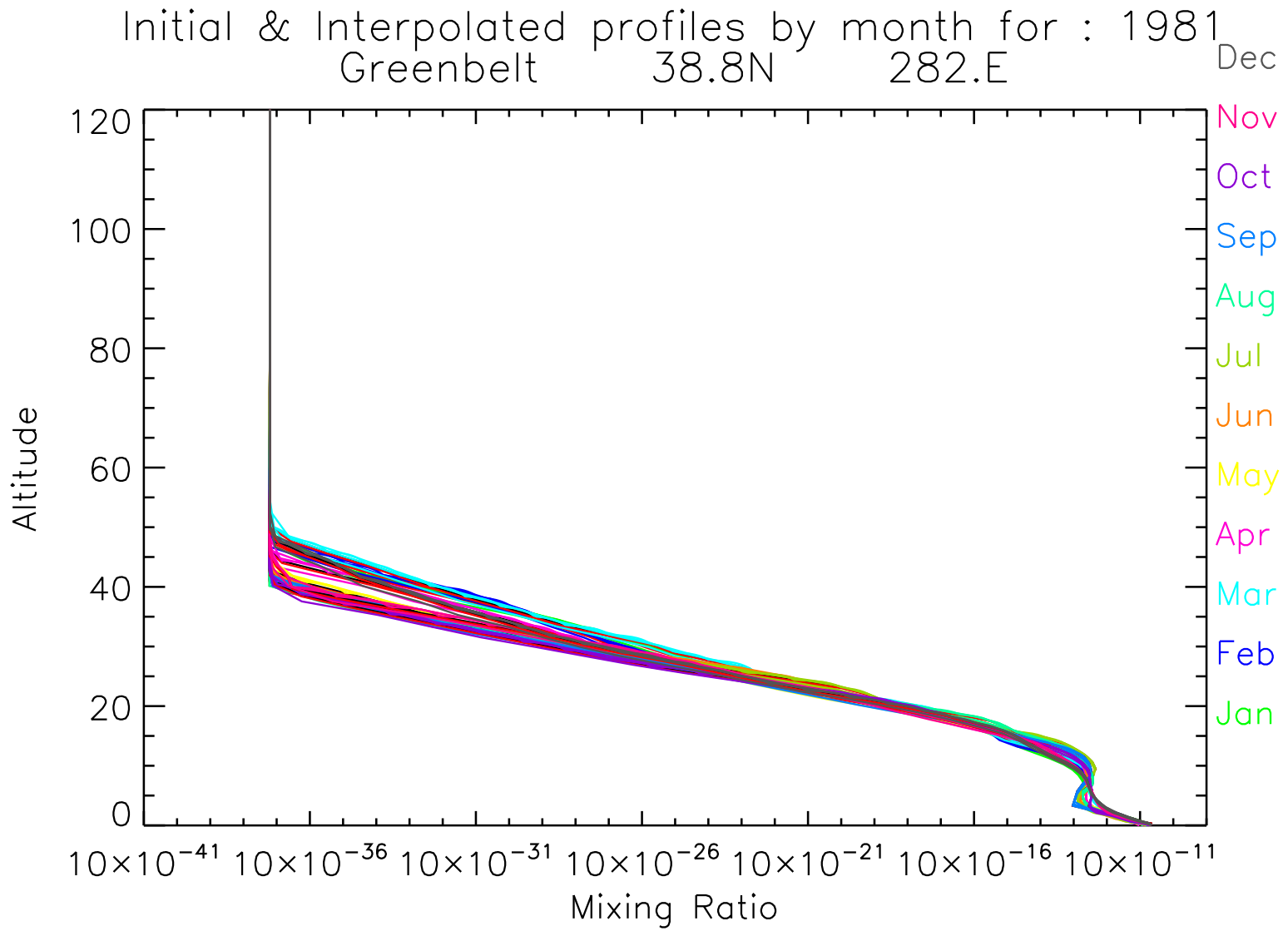
Mixing Ratio


Initial & Interpolated profiles by month for : 1981
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
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20
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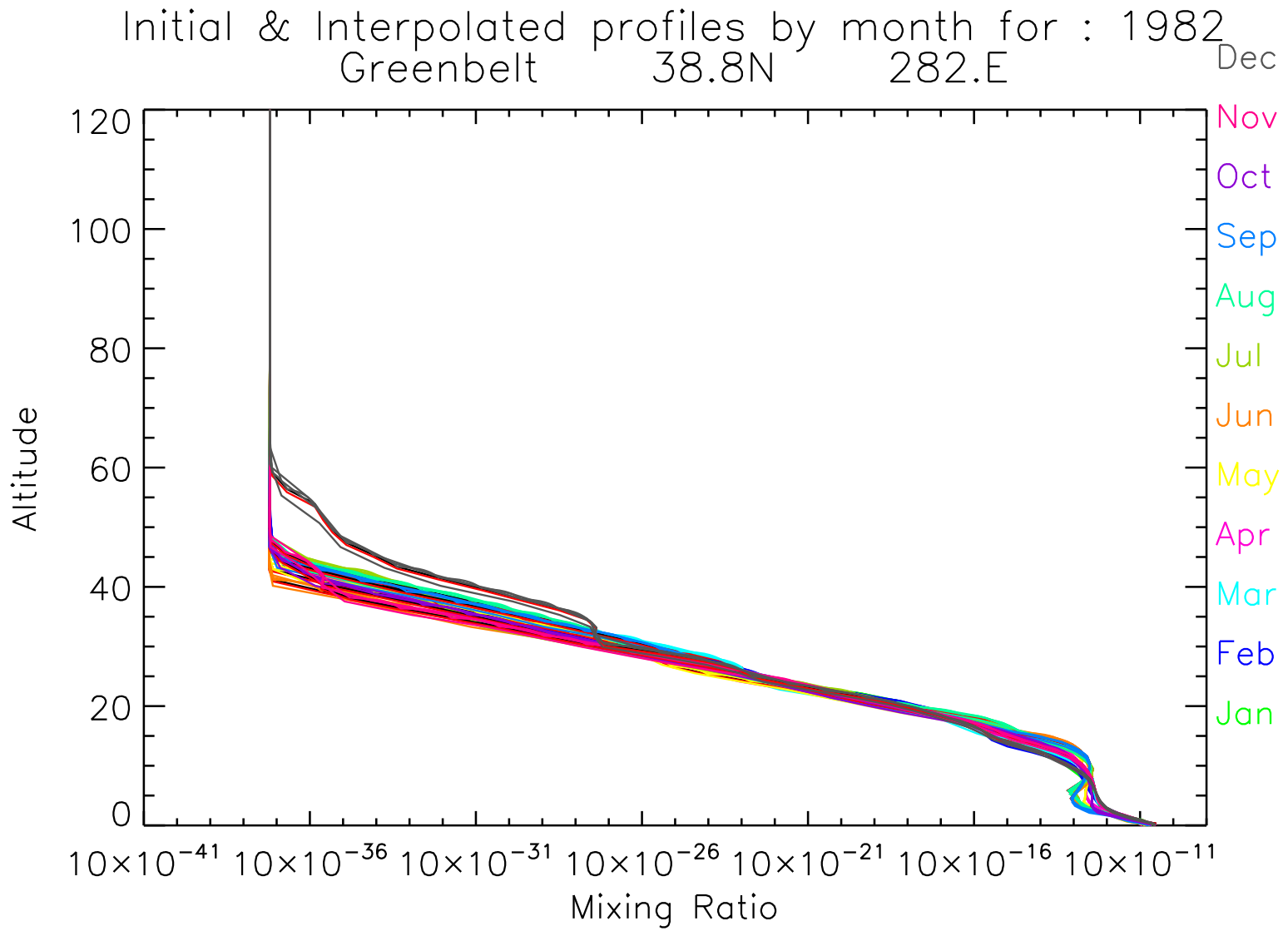
Mixing Ratio


Initial & Interpolated profiles by month for : 1982
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
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20
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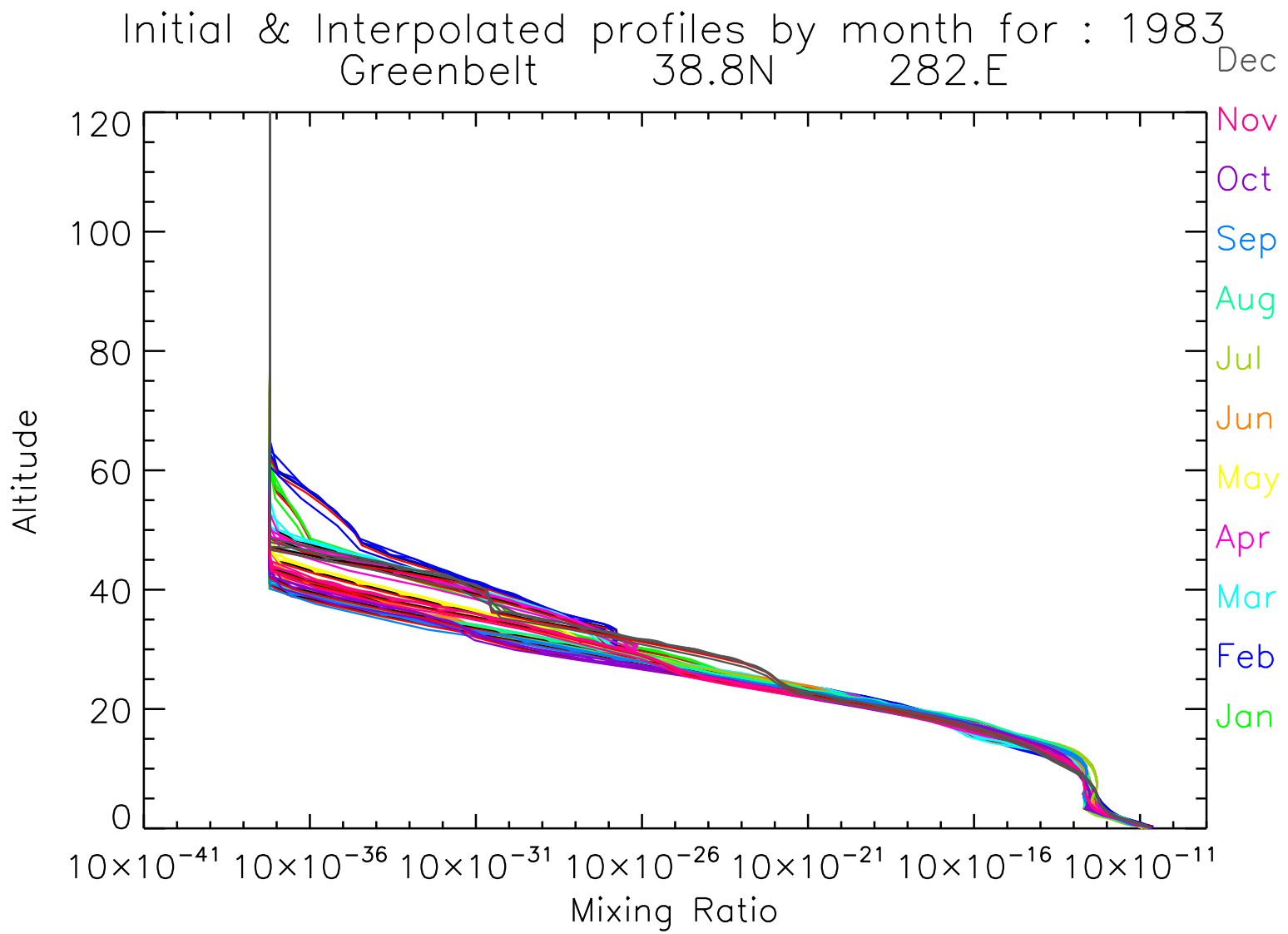
Mixing Ratio


Initial & Interpolated profiles by month for : 1983
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
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20
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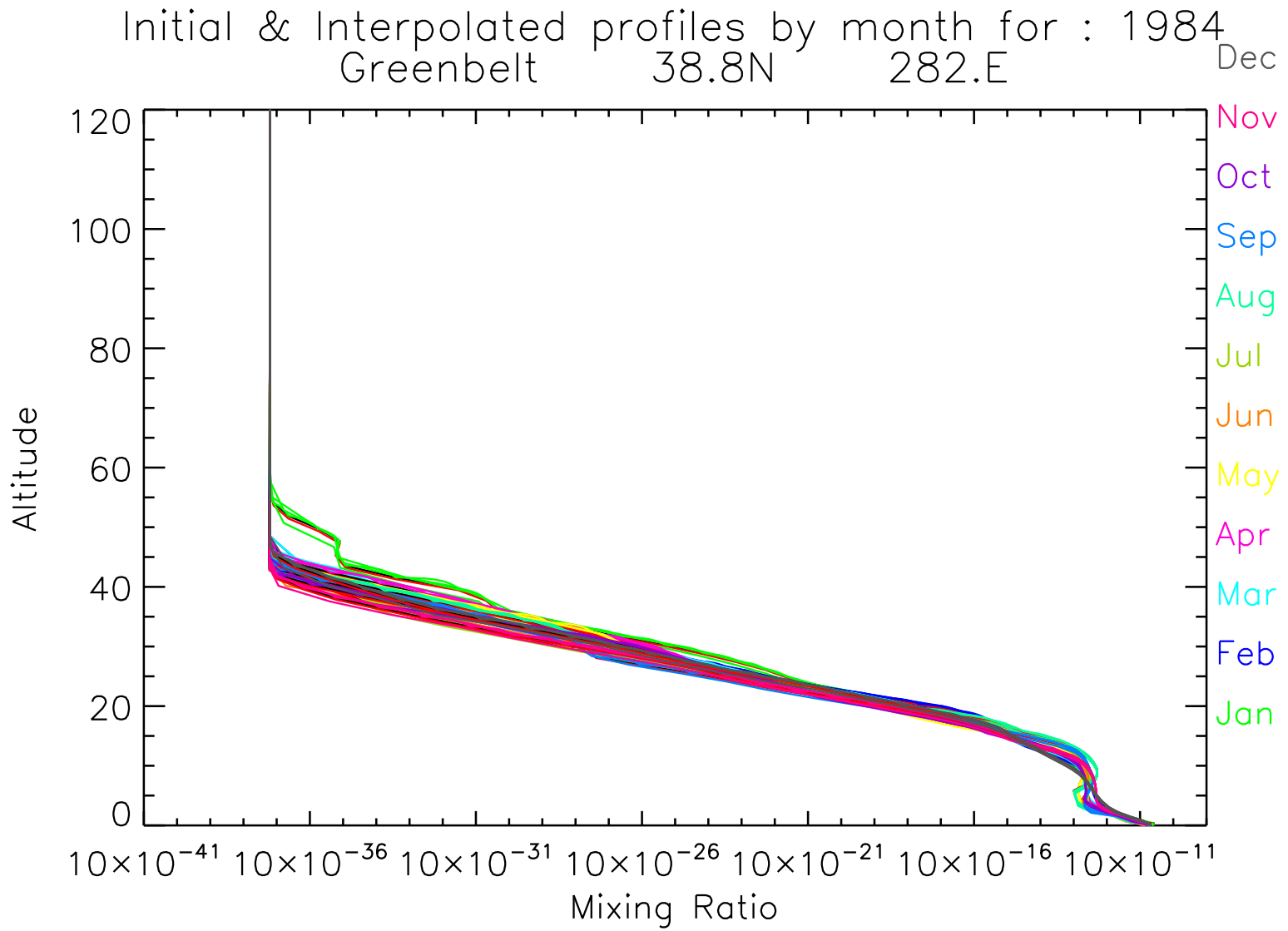
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 1984
Greenbelt 38.8N 282.E
Dec
Nov
Oct
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Aug
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Jun
May
Apr
Mar
Feb
Jan
Altitude
120
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20
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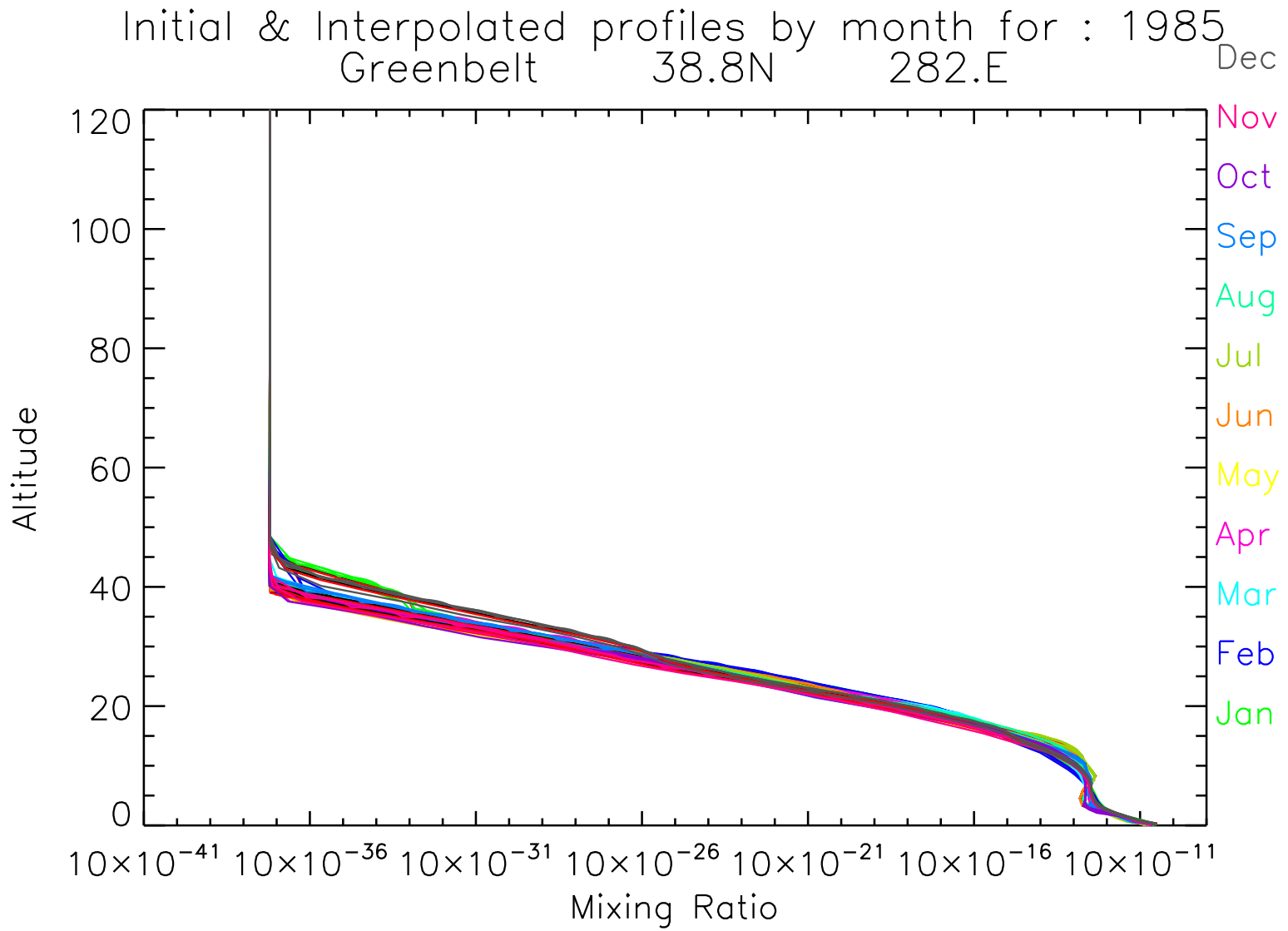
Mixing Ratio


Initial & Interpolated profiles by month for : 1985
Greenbelt 38.8N 282.E
Dec
Nov
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Aug
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May
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Mar
Feb
Jan
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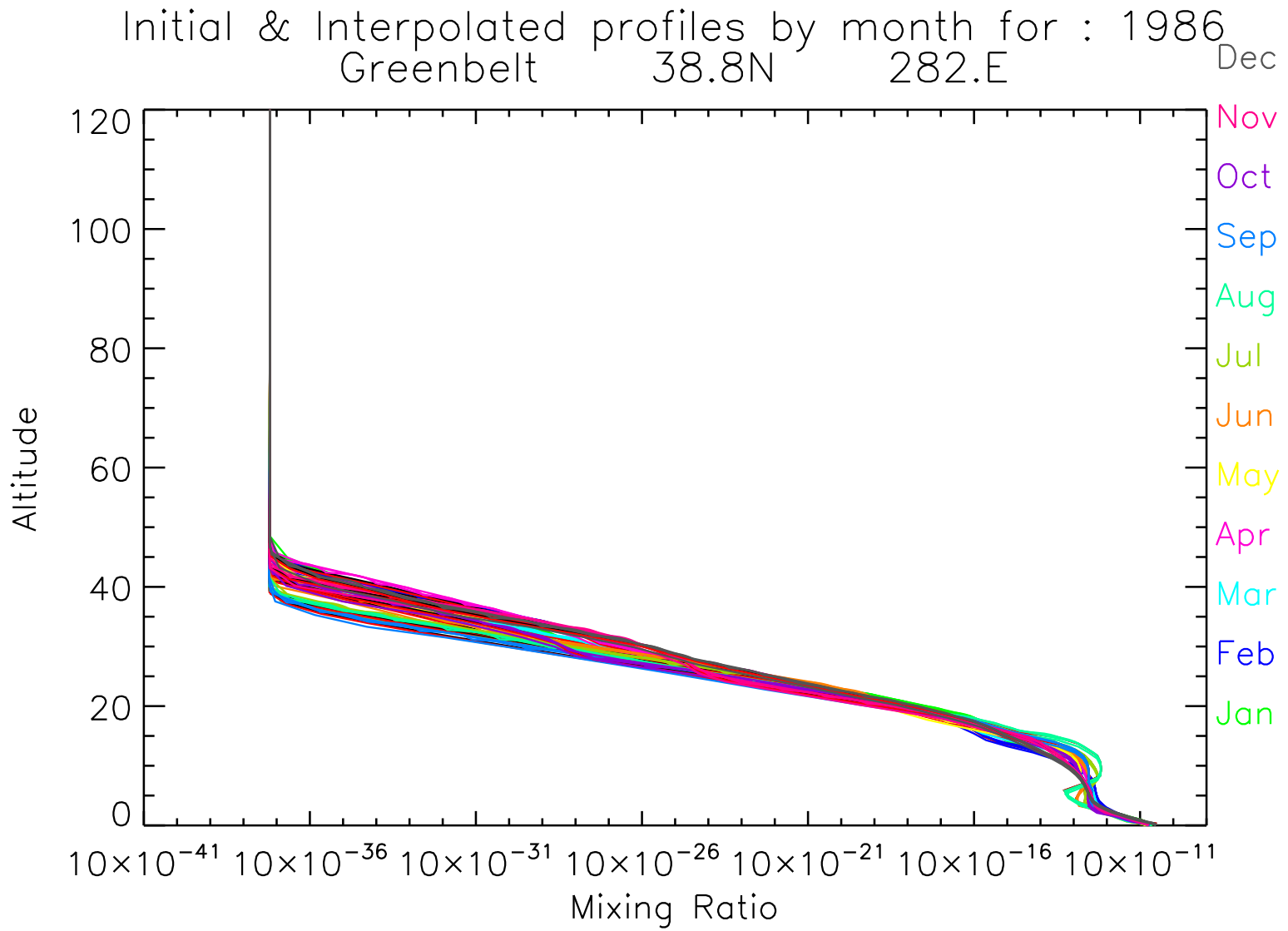
Altitude
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 1986
Greenbelt 38.8N 282.E
Dec
Nov
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120
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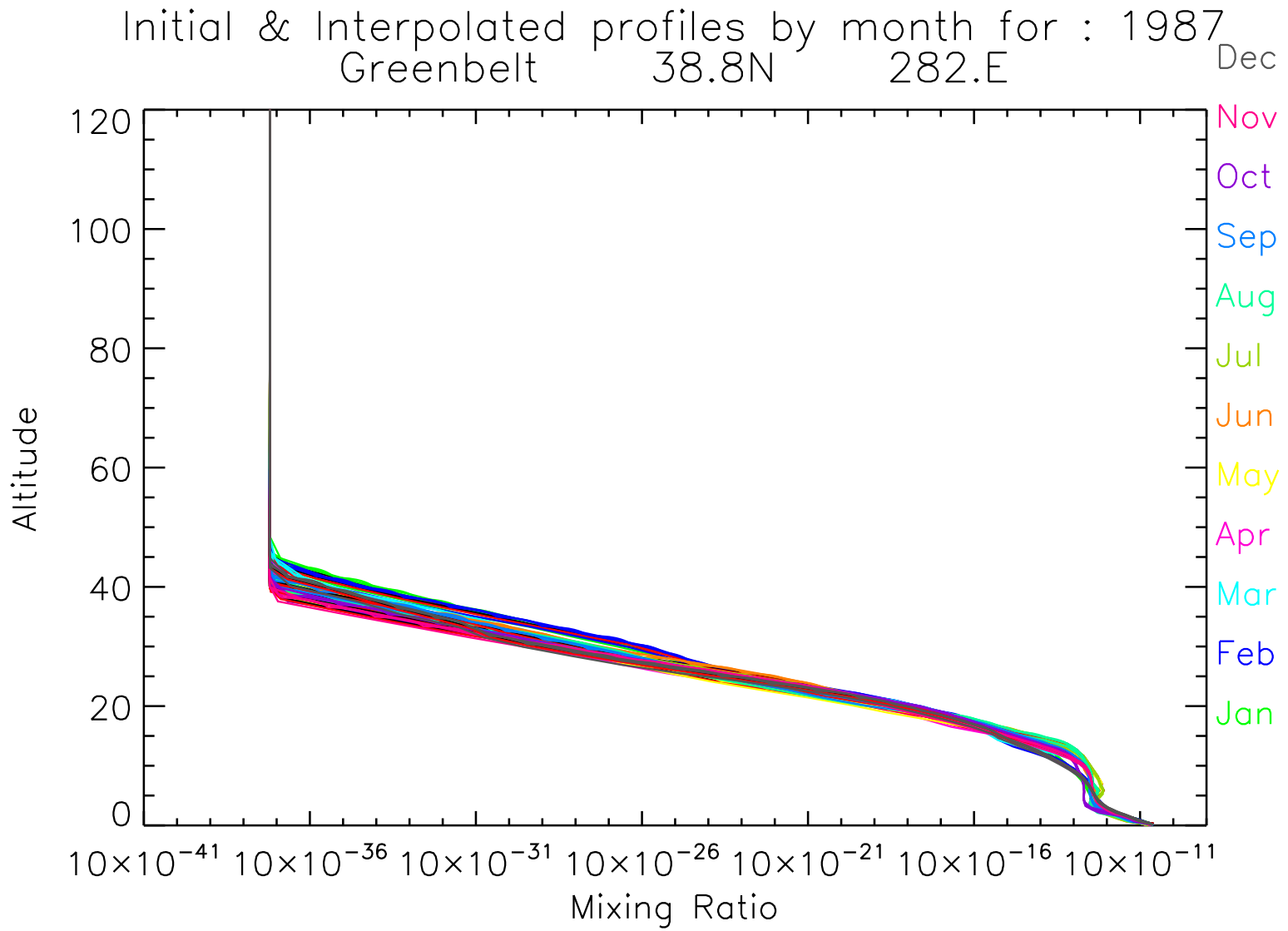
Altitude
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 1987
Greenbelt 38.8N 282.E
Dec
Nov
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Altitude
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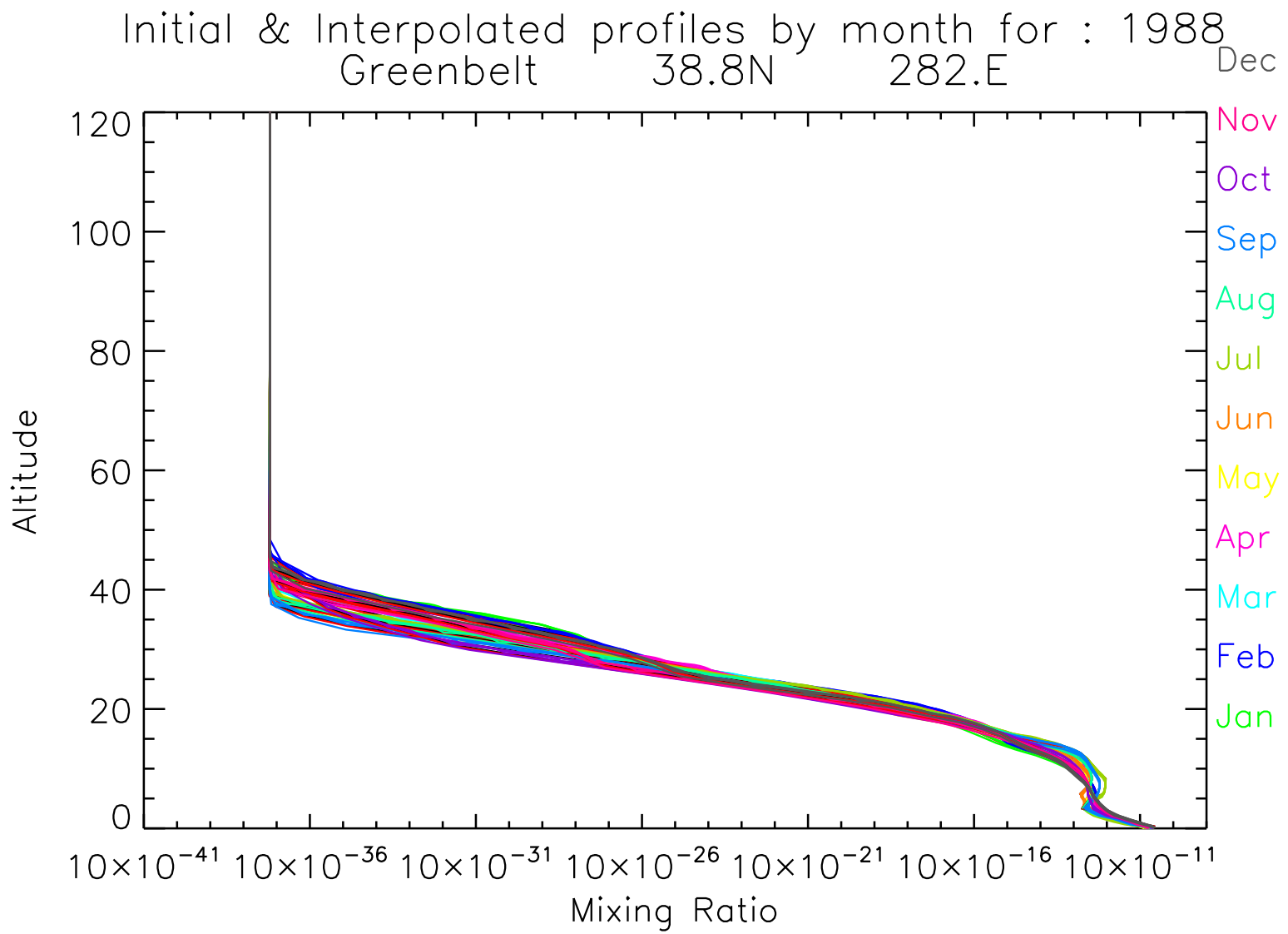
Mixing Ratio


Initial & Interpolated profiles by month for : 1988
Greenbelt 38.8N 282.E
Dec
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Altitude
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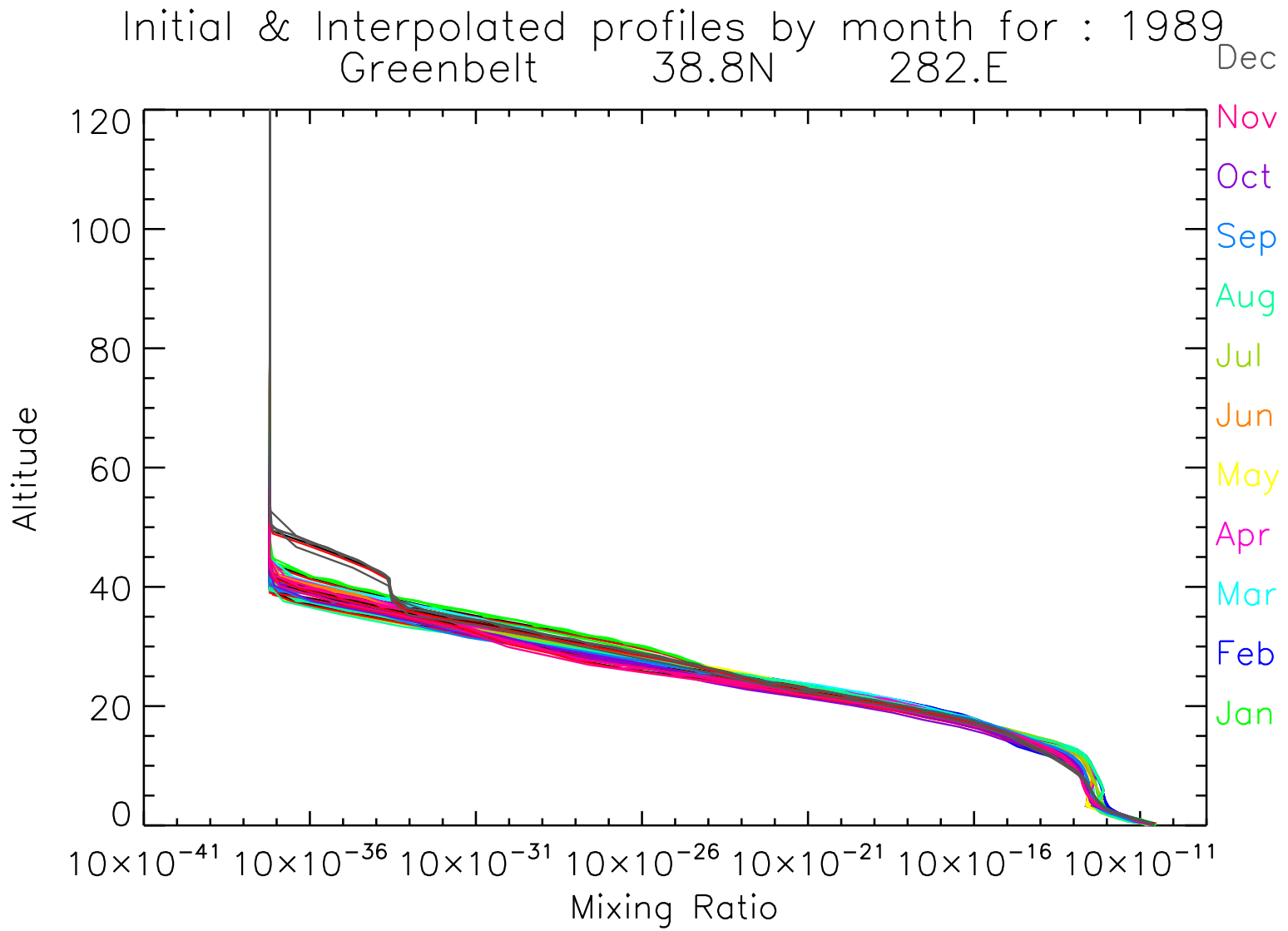
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 1989
Greenbelt 38.8N 282.E
Dec
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Altitude
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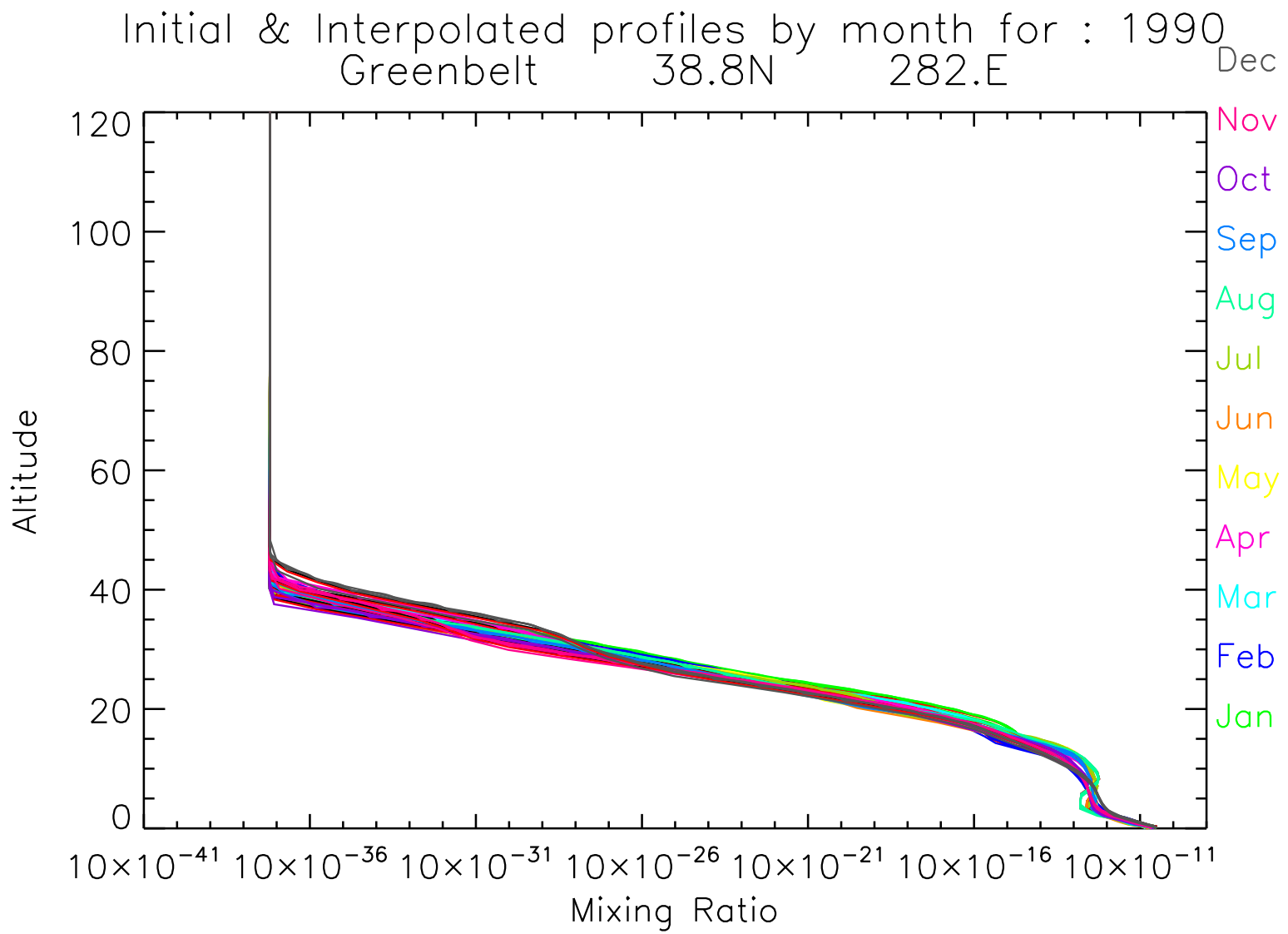
Mixing Ratio


Initial & Interpolated profiles by month for : 1990
Greenbelt 38.8N 282.E
Dec
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Altitude
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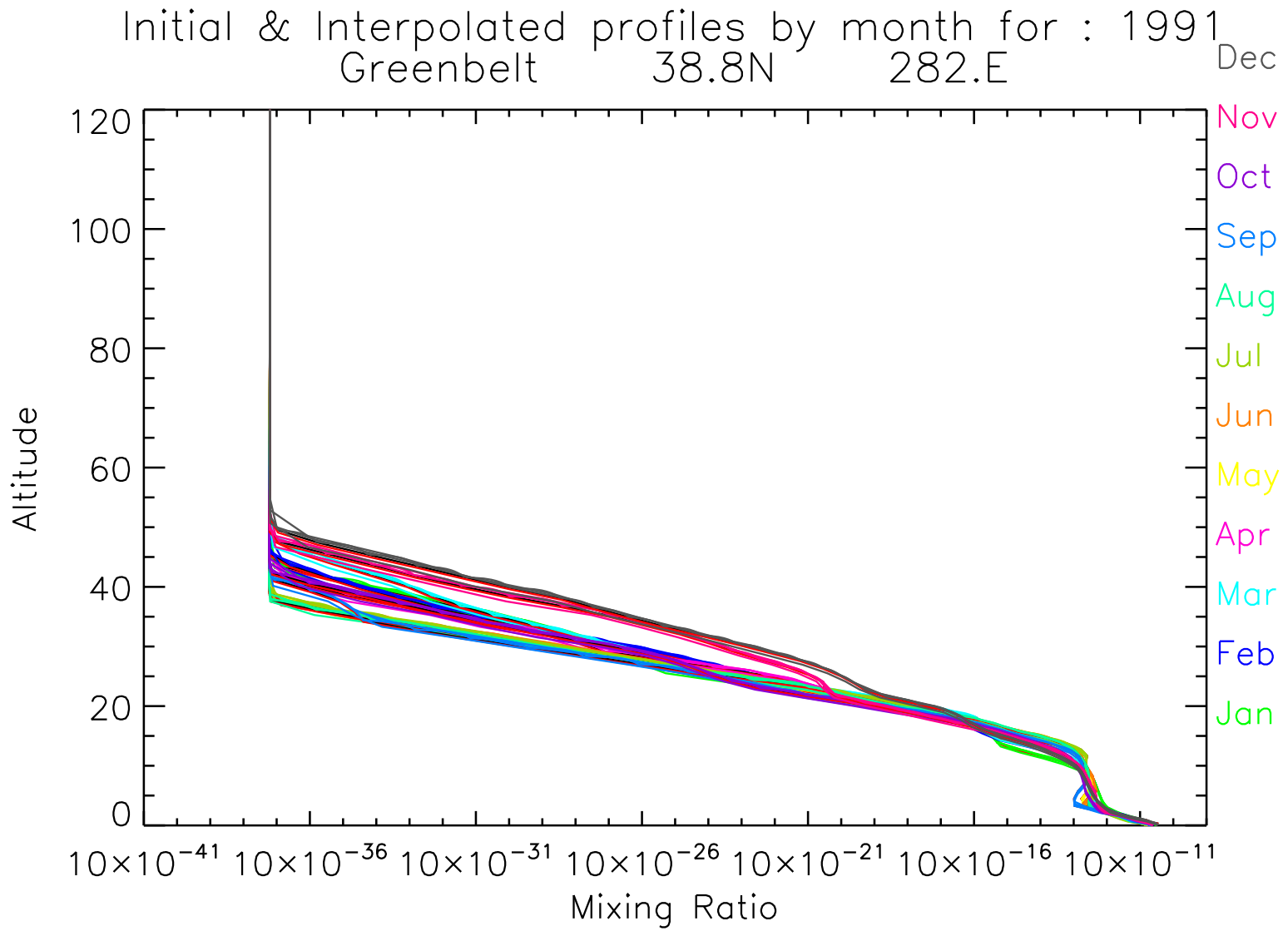
Mixing Ratio


Initial & Interpolated profiles by month for : 1991
Greenbelt 38.8N 282.E
Dec
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Jan
120
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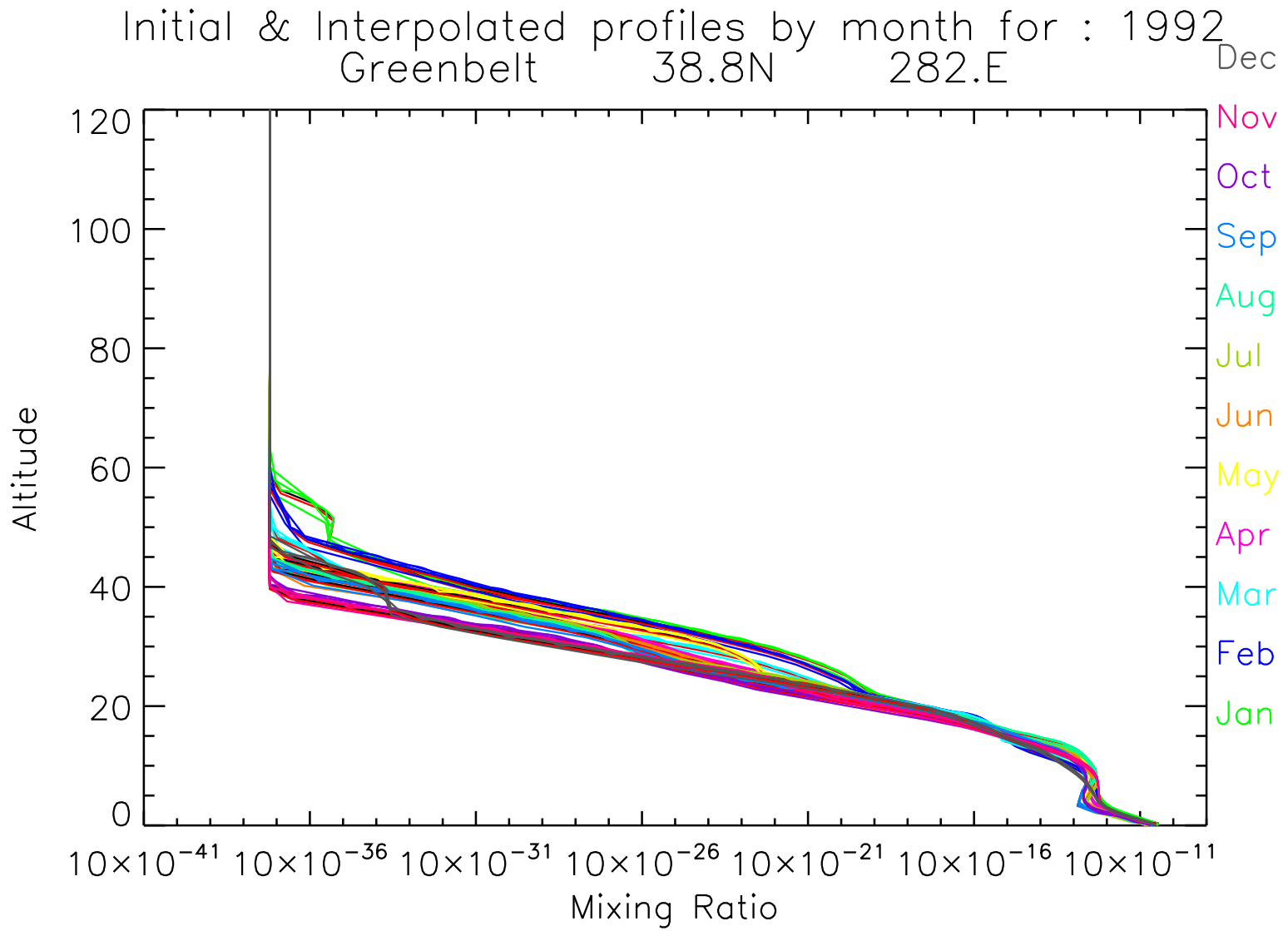
Altitude
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 1992
Greenbelt 38.8N 282.E
Dec
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Altitude
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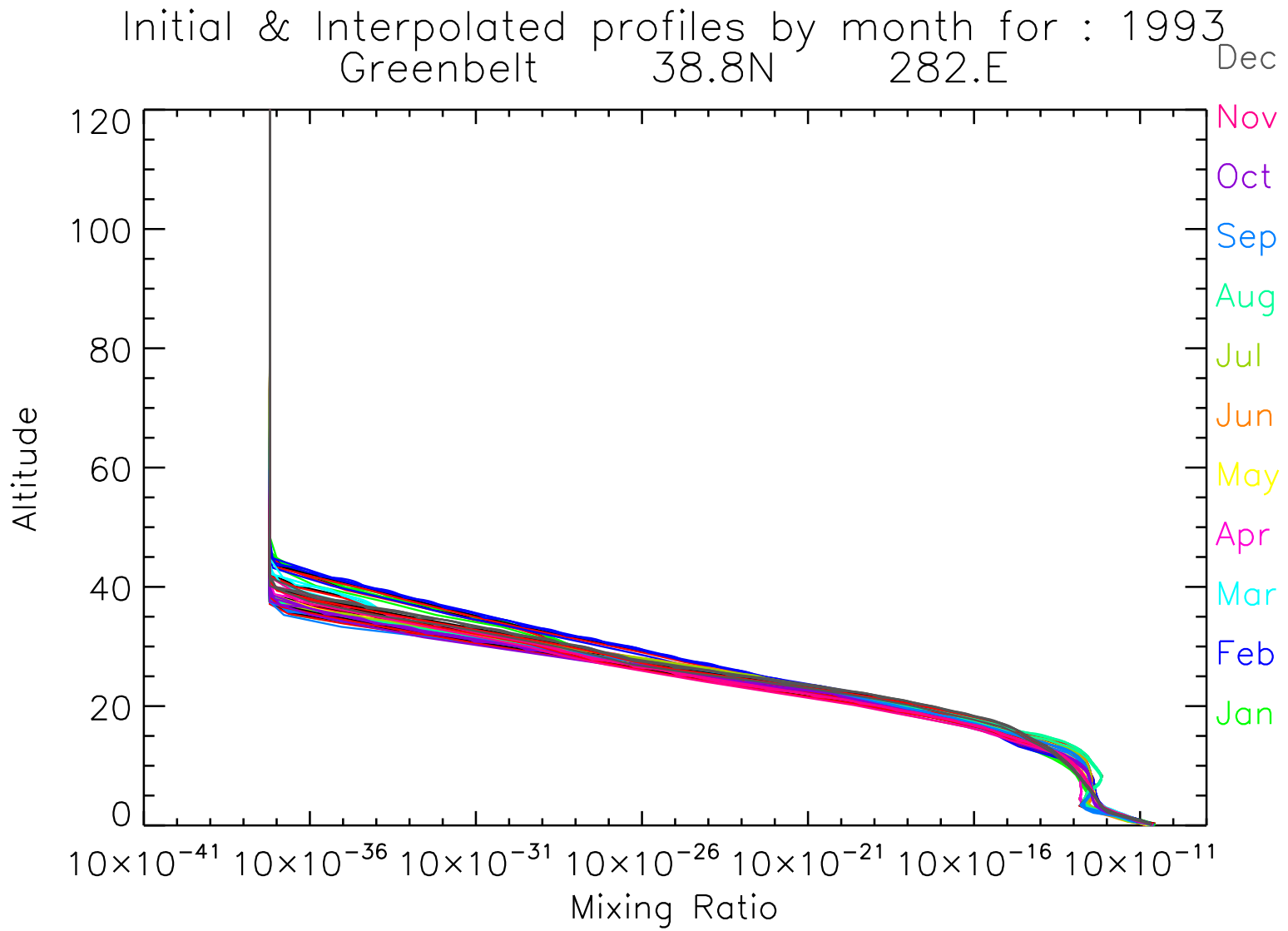
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 1993
Greenbelt 38.8N 282.E
Dec
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Altitude
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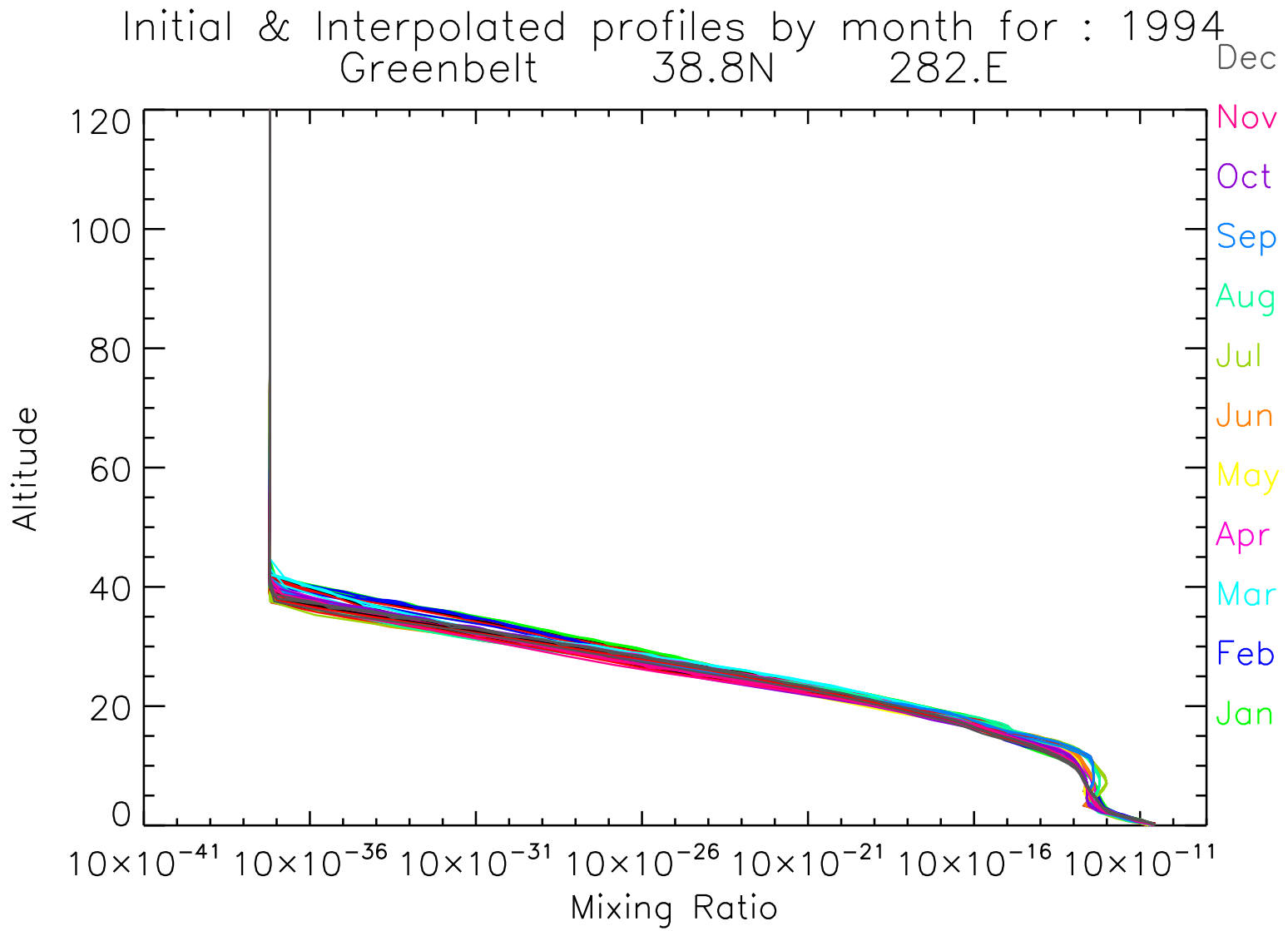
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 1994
Greenbelt 38.8N 282.E
Dec
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Altitude
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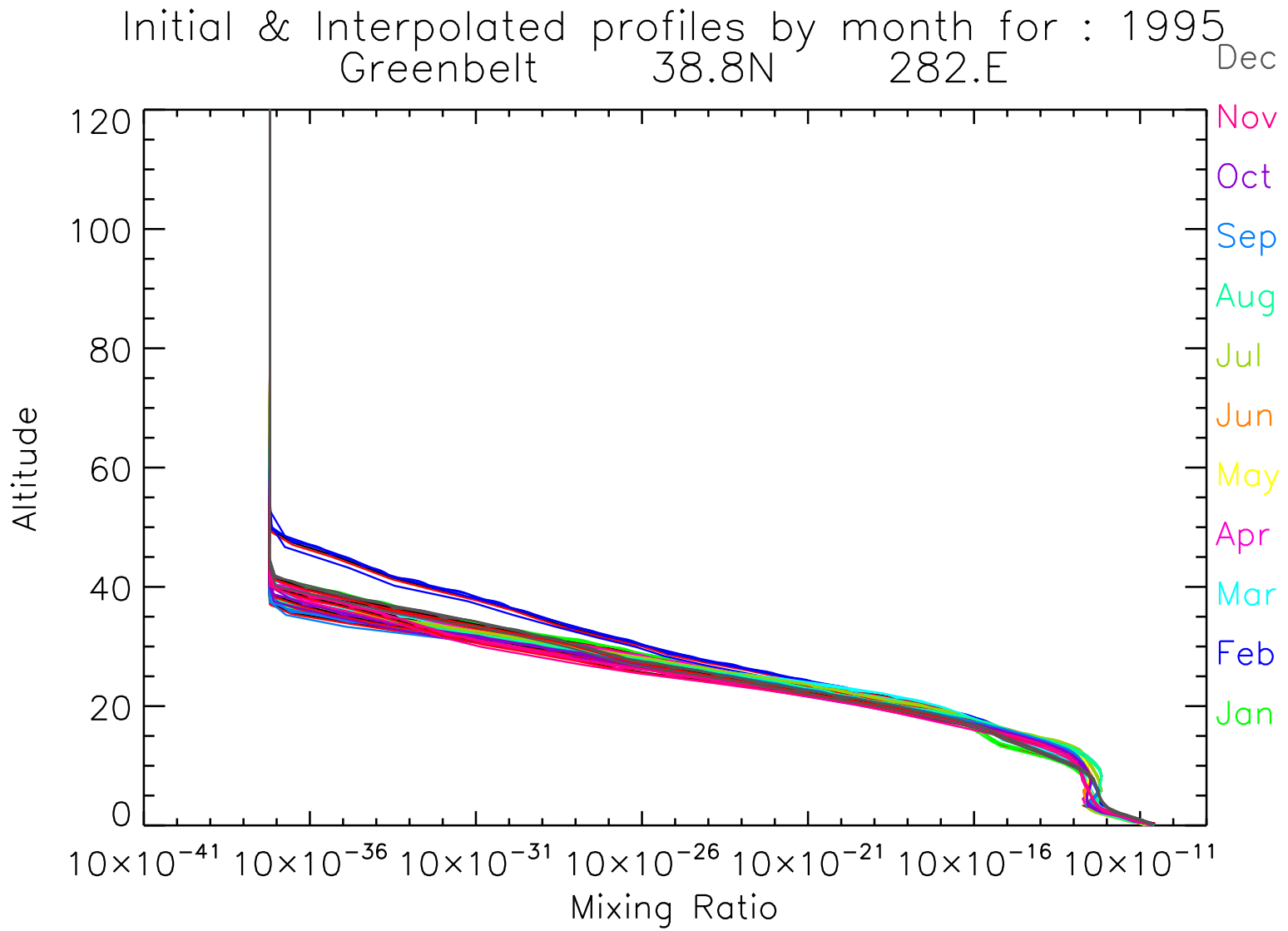
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 1995
Greenbelt 38.8N 282.E
Dec
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Altitude
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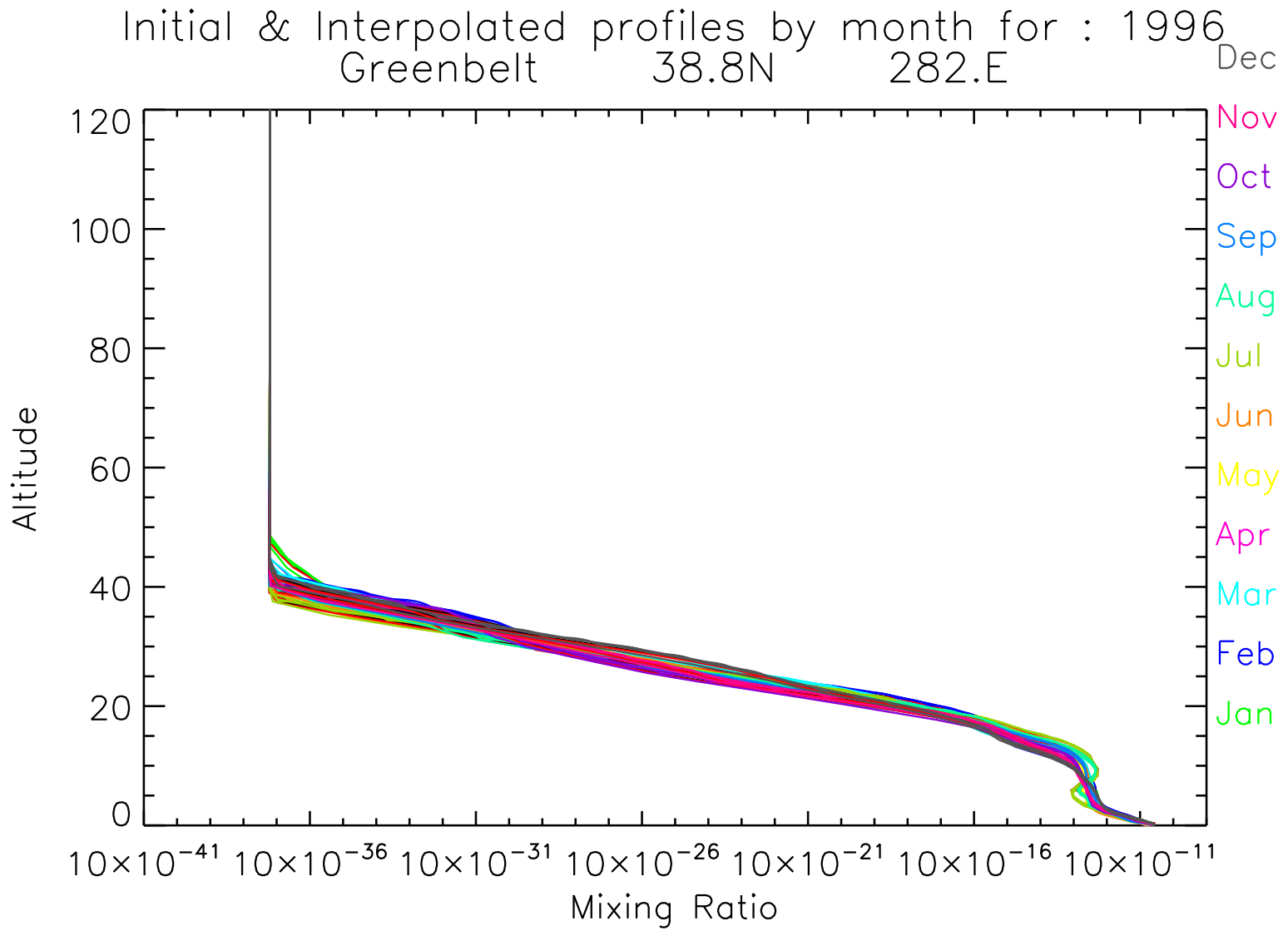
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 1996
Greenbelt 38.8N 282.E
Dec
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Altitude
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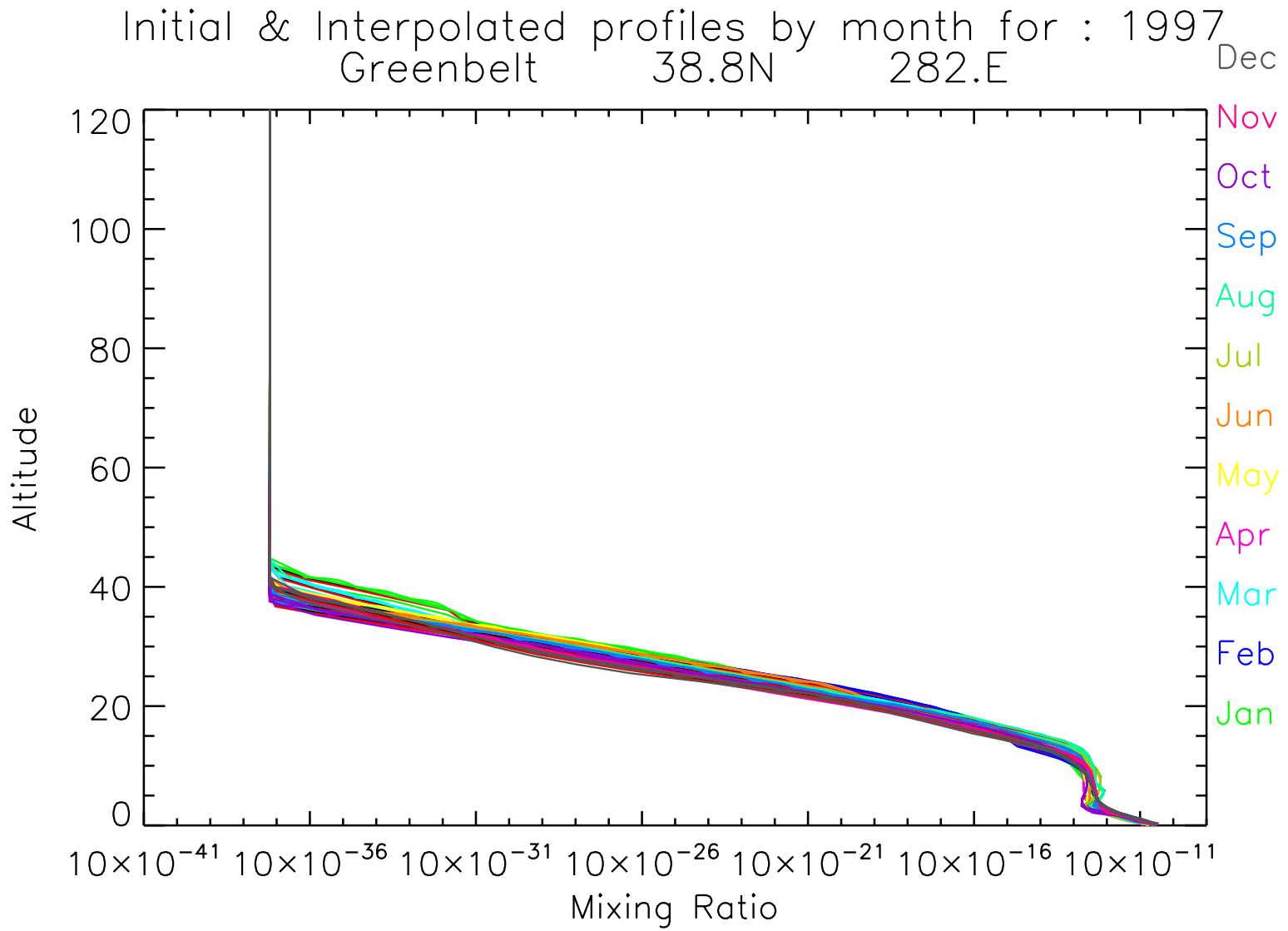
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 1997
Greenbelt 38.8N 282.E
Dec
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May
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Feb
Jan
Altitude
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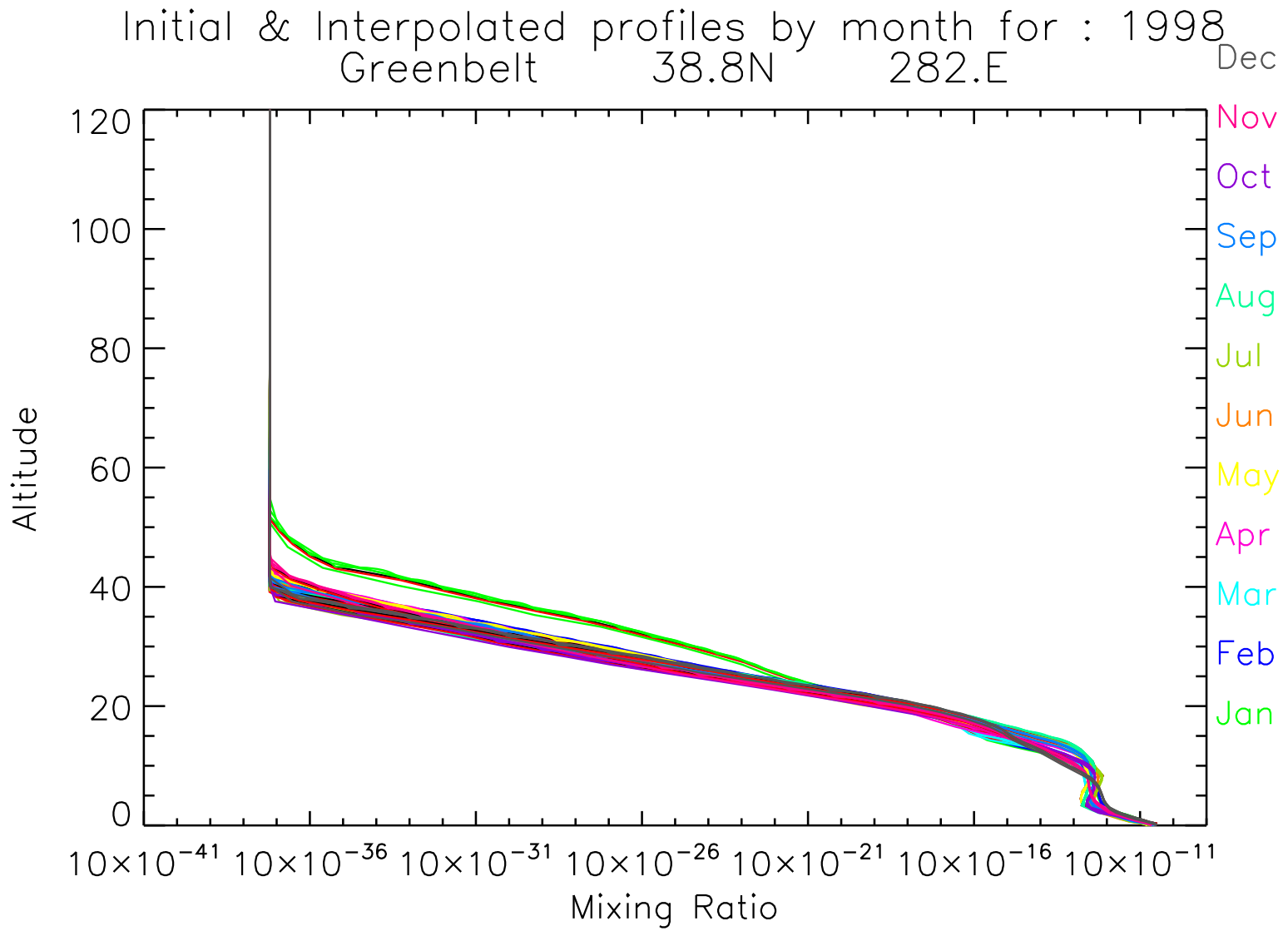
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 1998
Greenbelt 38.8N 282.E
Dec
Nov
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May
Apr
Mar
Feb
Jan
Altitude
120
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0
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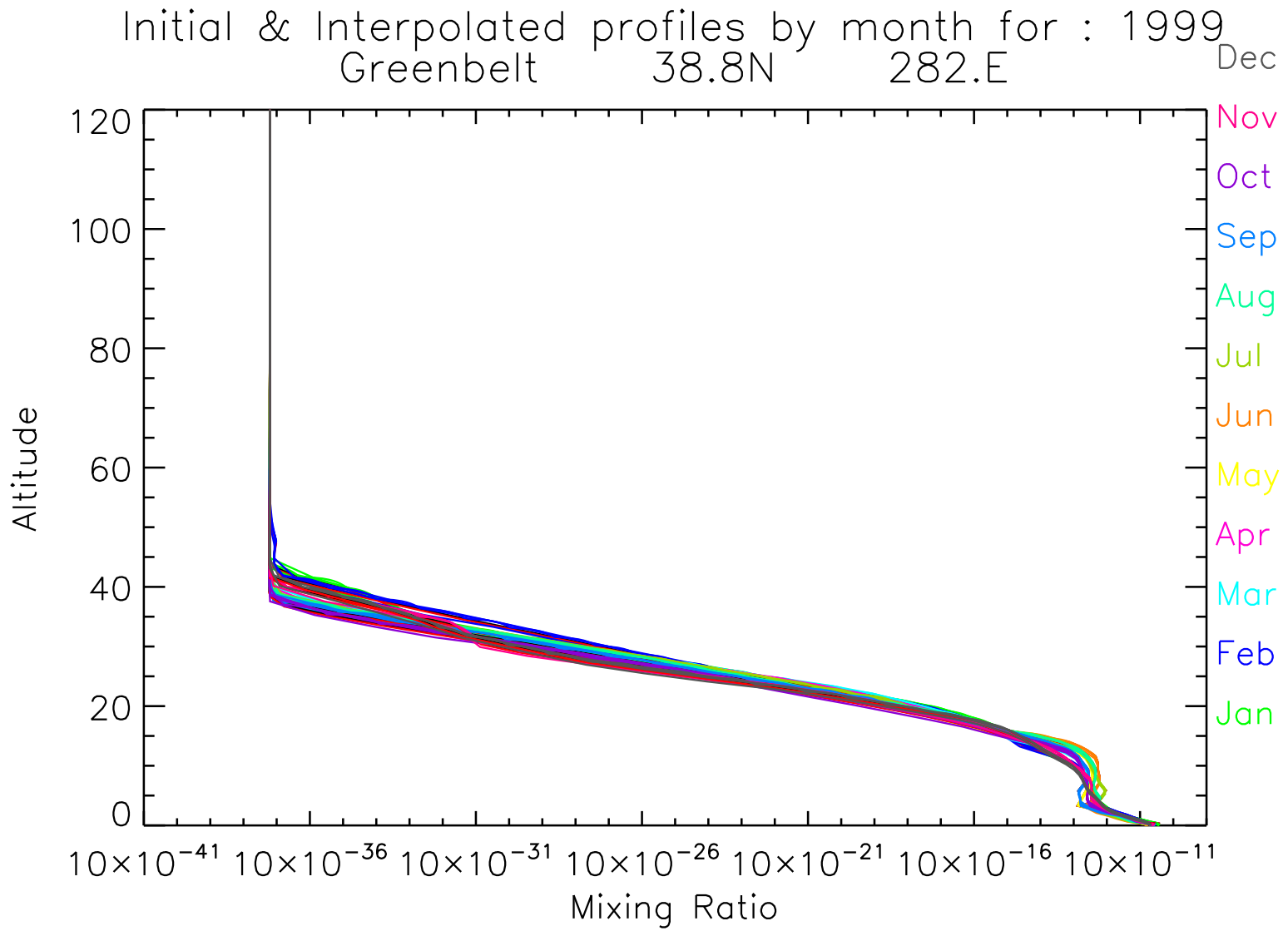
Mixing Ratio


Initial & Interpolated profiles by month for : 1999
Greenbelt 38.8N 282.E
Dec
Nov
Oct
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Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
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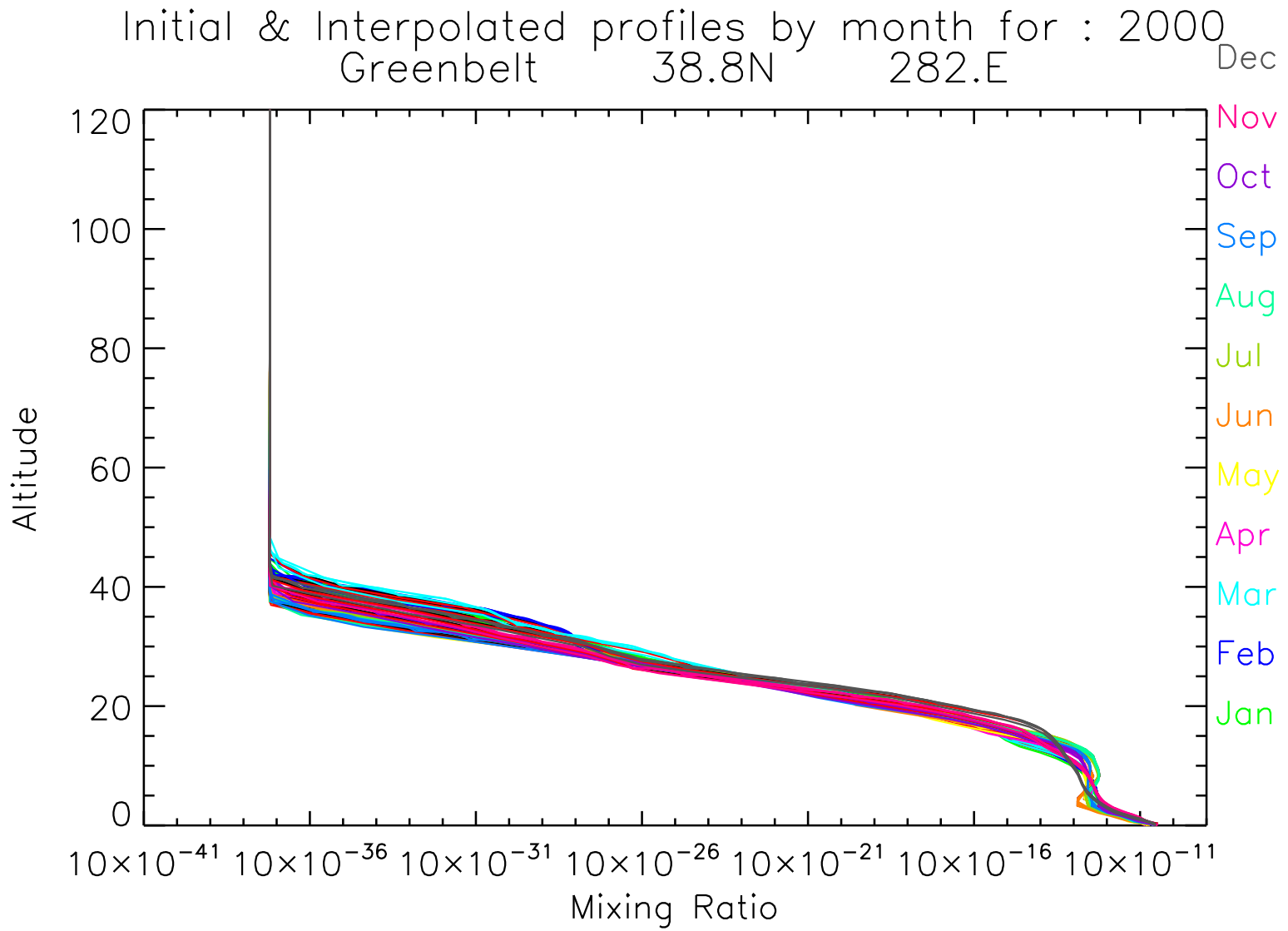
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2000
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
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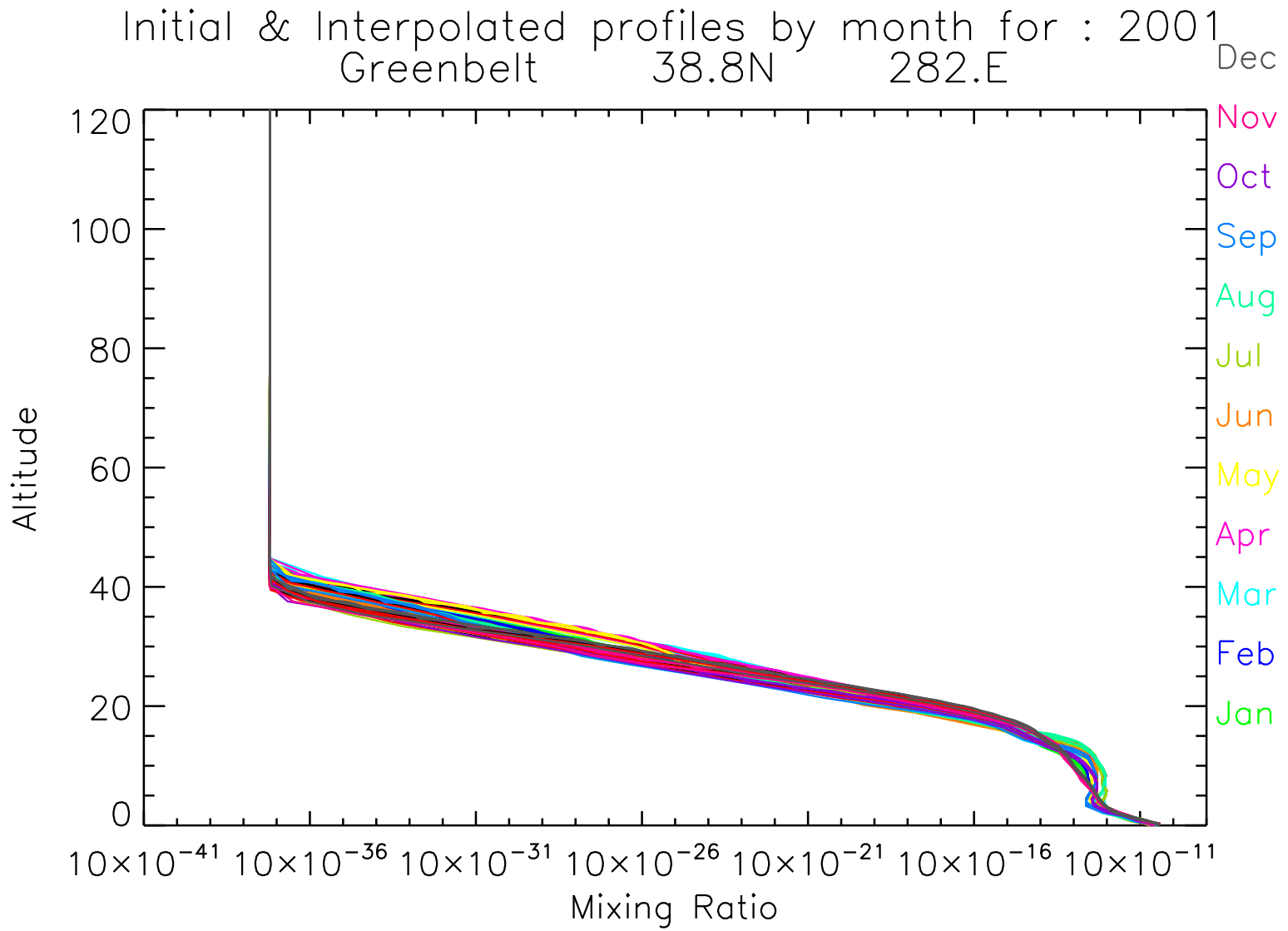
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2001
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
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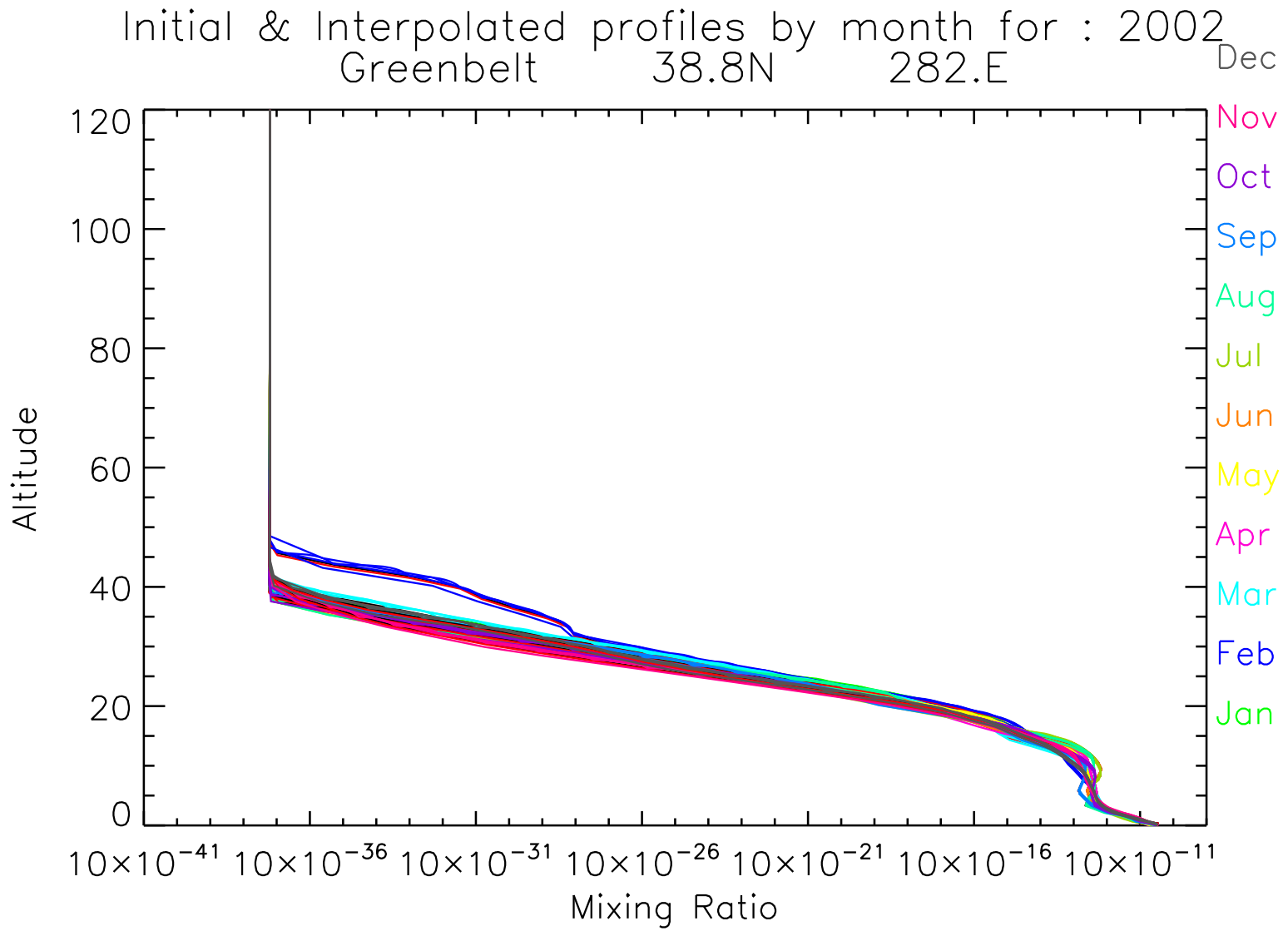
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2002
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
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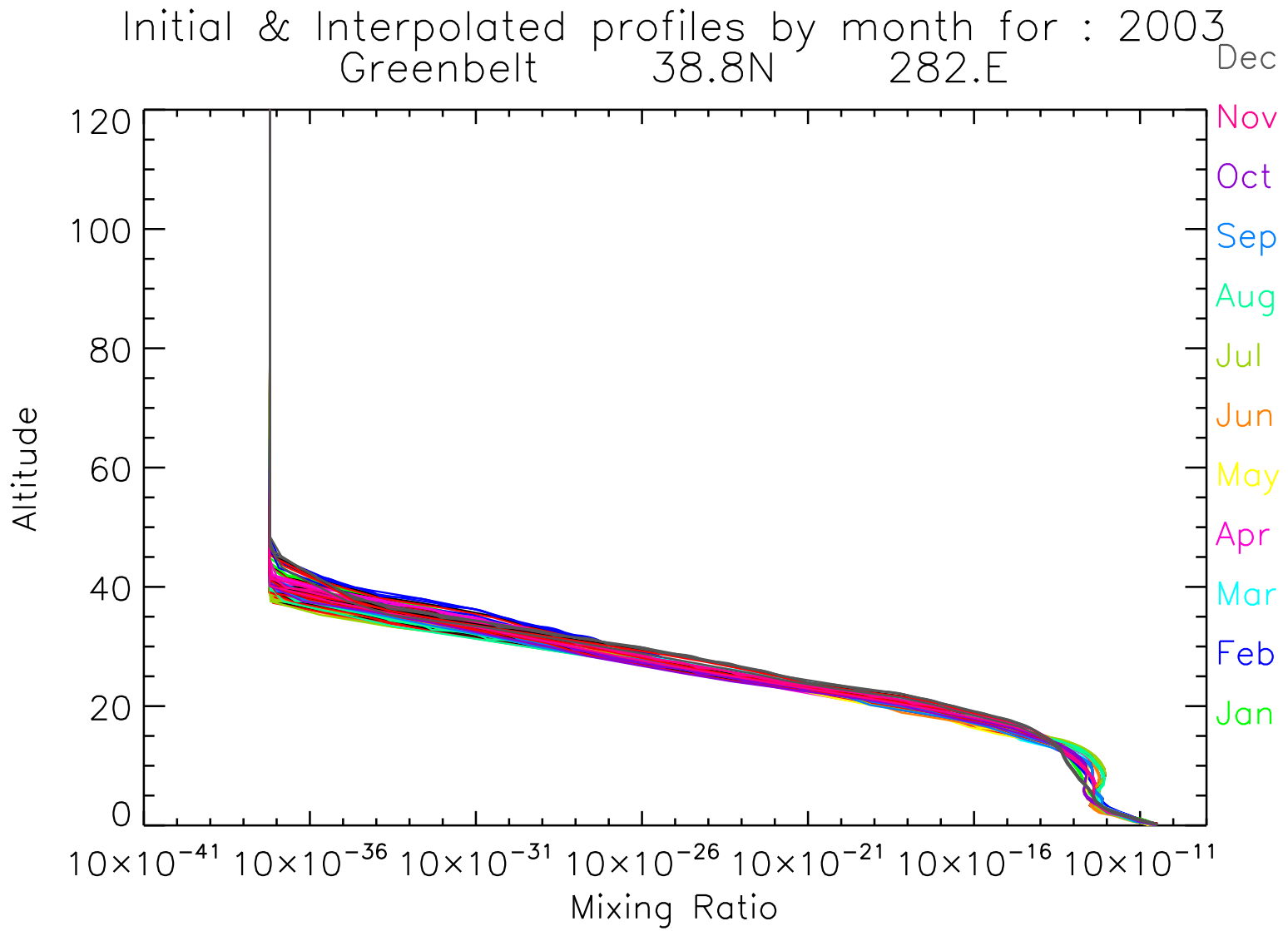
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2003
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
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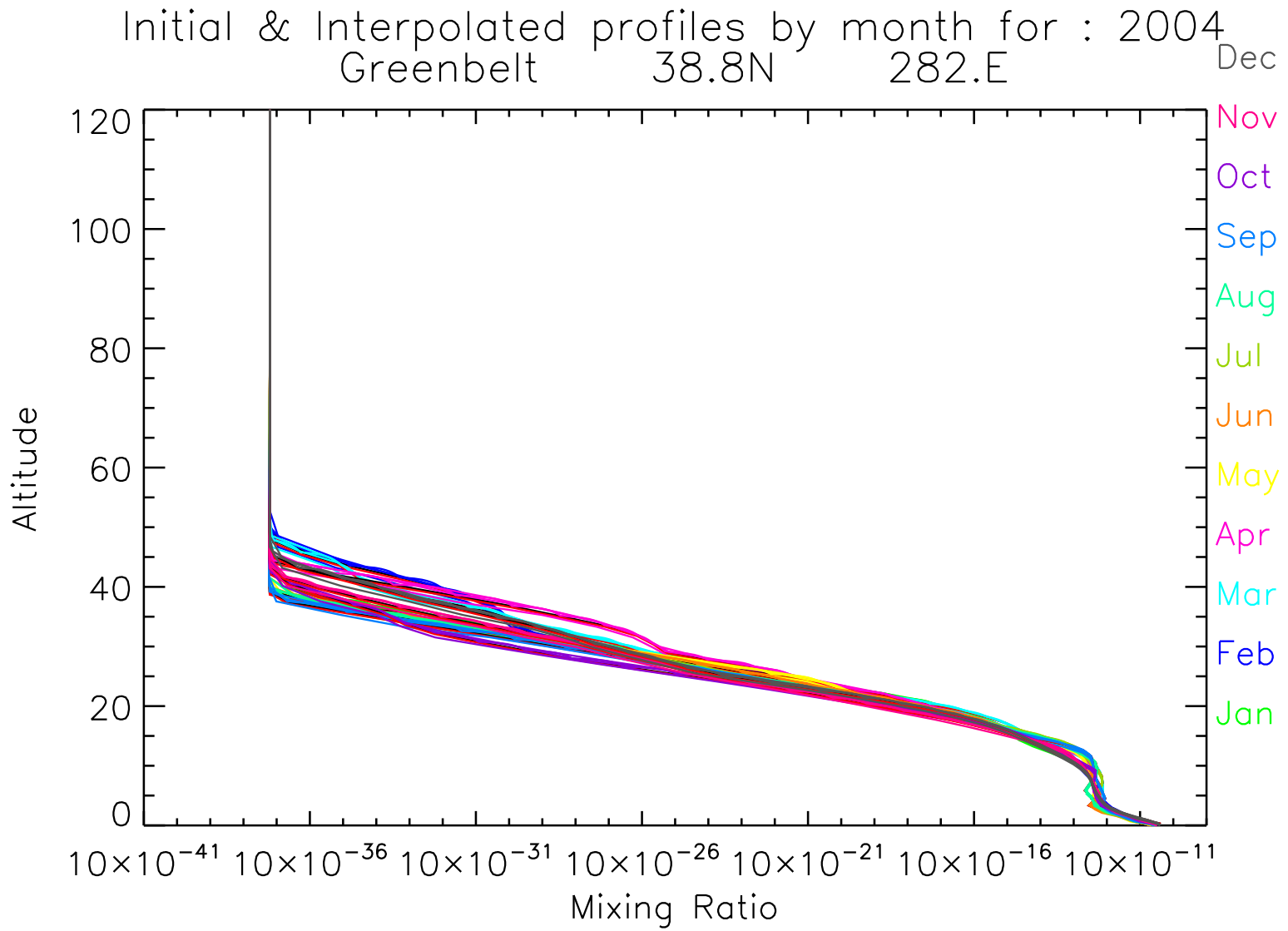
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2004
Greenbelt 38.8N 282.E
Dec
Nov
Oct
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Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
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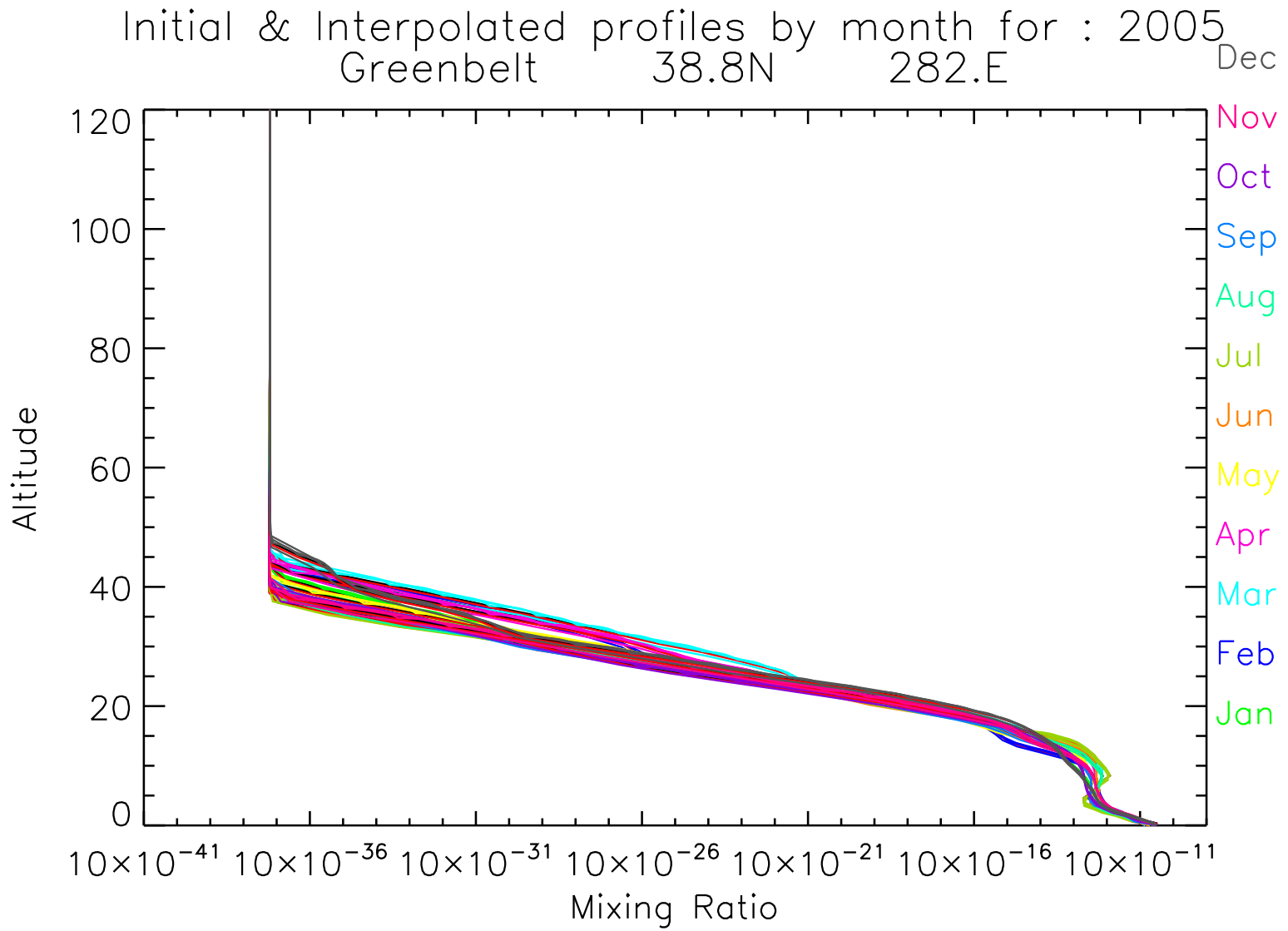
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2005
Greenbelt 38.8N 282.E
Dec
Nov
Oct
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Jun
May
Apr
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Feb
Jan
Altitude
120
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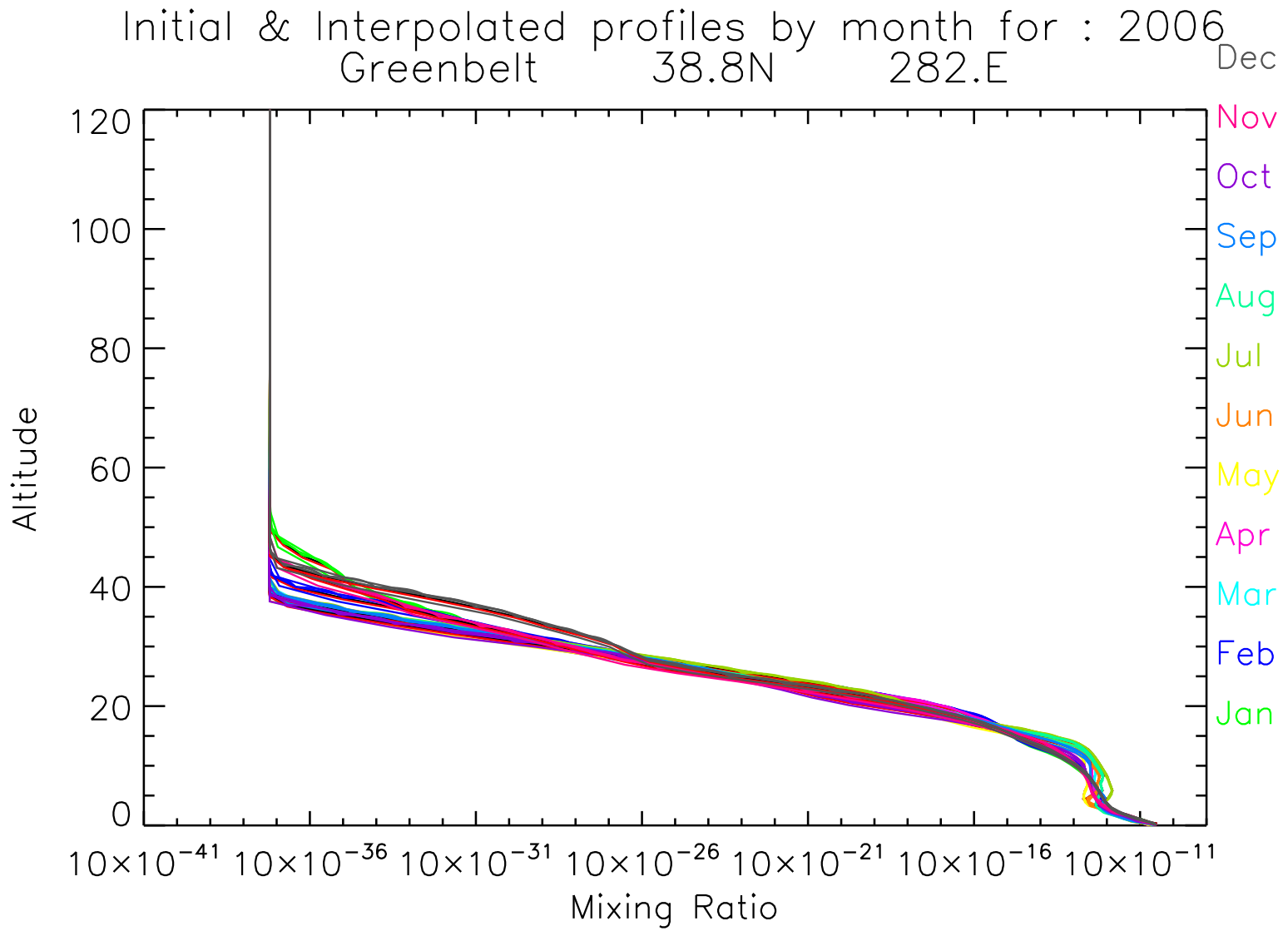
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2006
Greenbelt 38.8N 282.E
Dec
Nov
Oct
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Altitude
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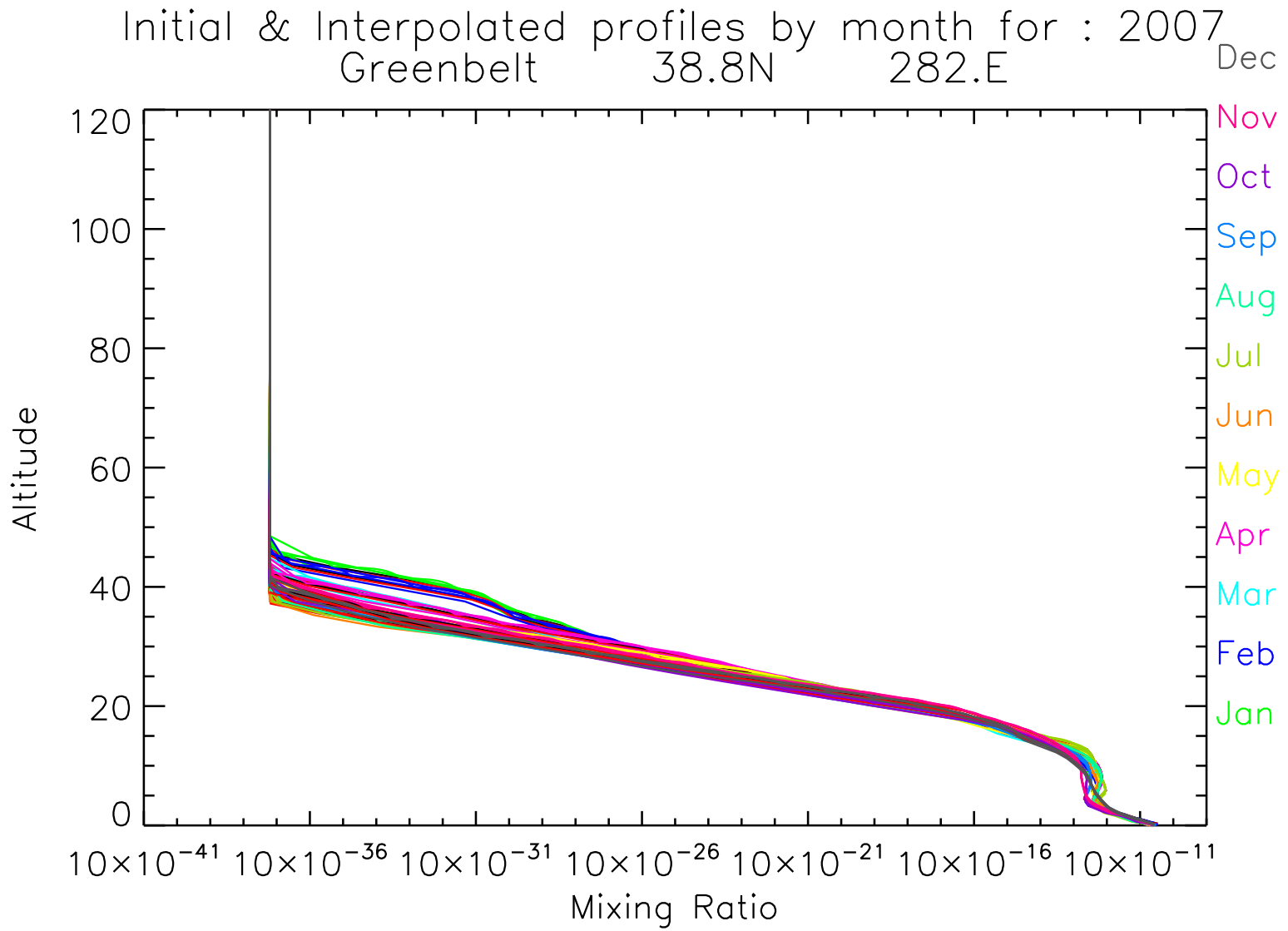
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2007
Greenbelt 38.8N 282.E
Dec
Nov
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May
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Feb
Jan
Altitude
120
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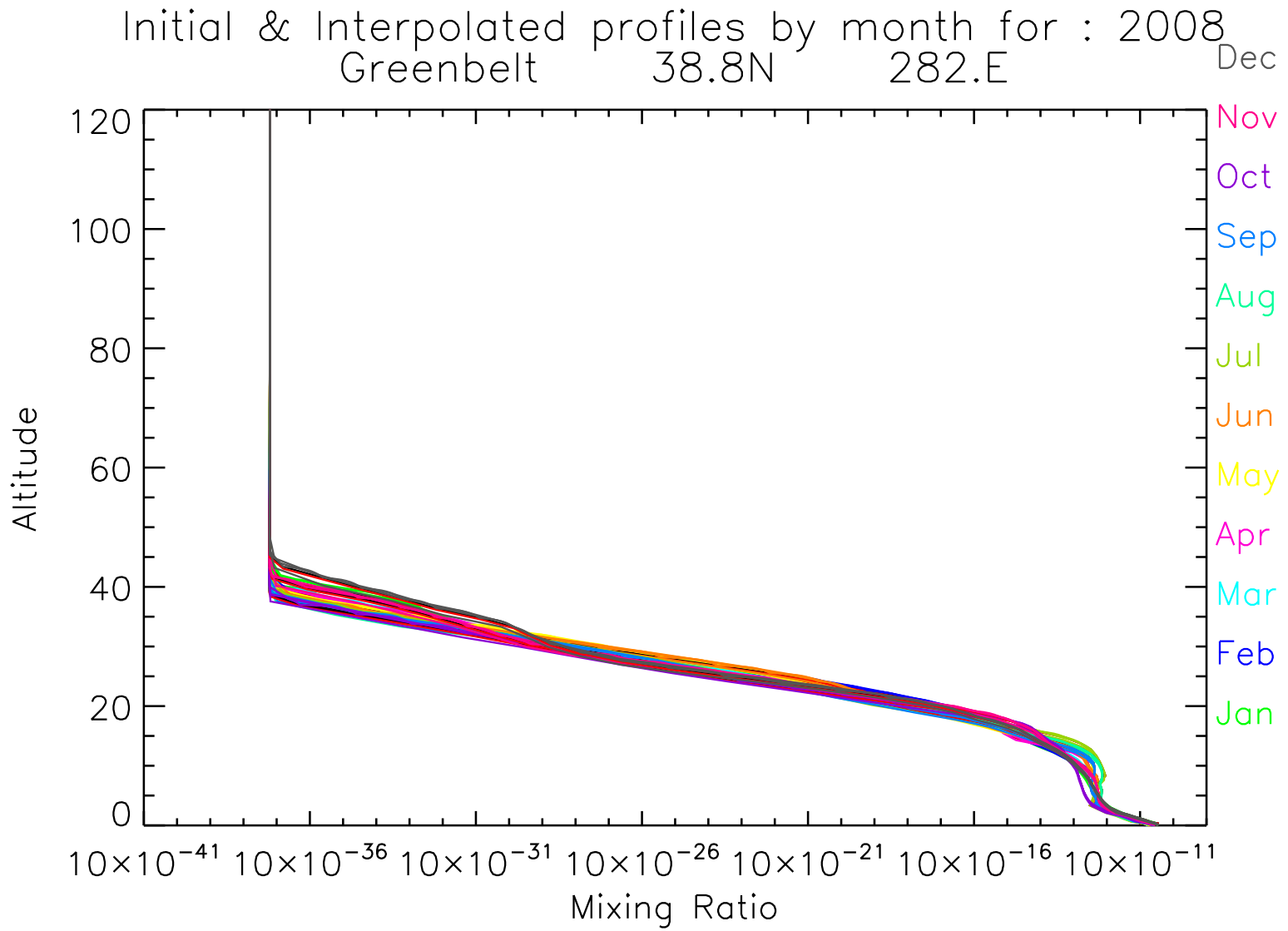
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2008
Greenbelt 38.8N 282.E
Dec
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May
Apr
Mar
Feb
Jan
Altitude
120
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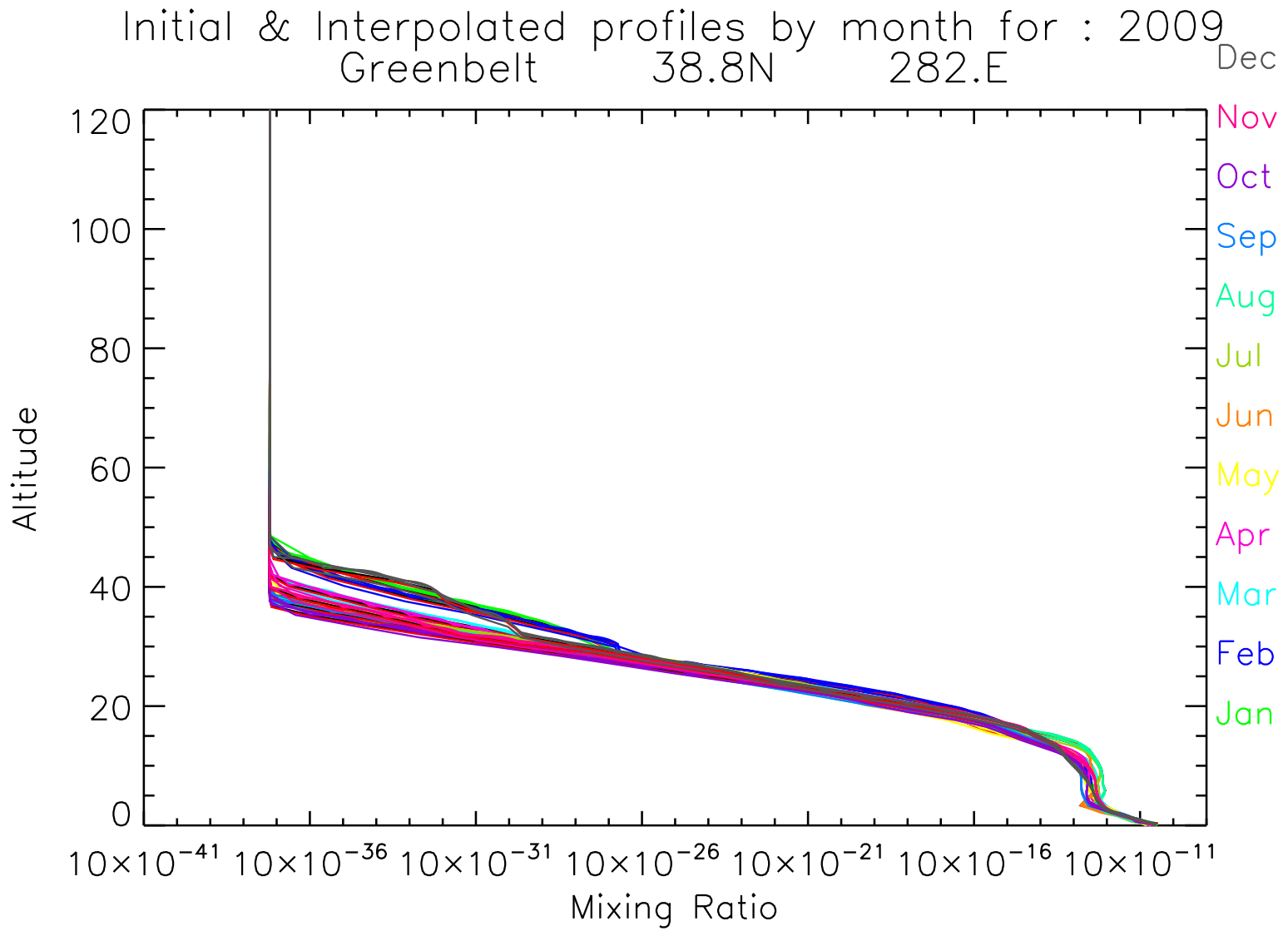
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2009
Greenbelt 38.8N 282.E
Dec
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May
Apr
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Feb
Jan
Altitude
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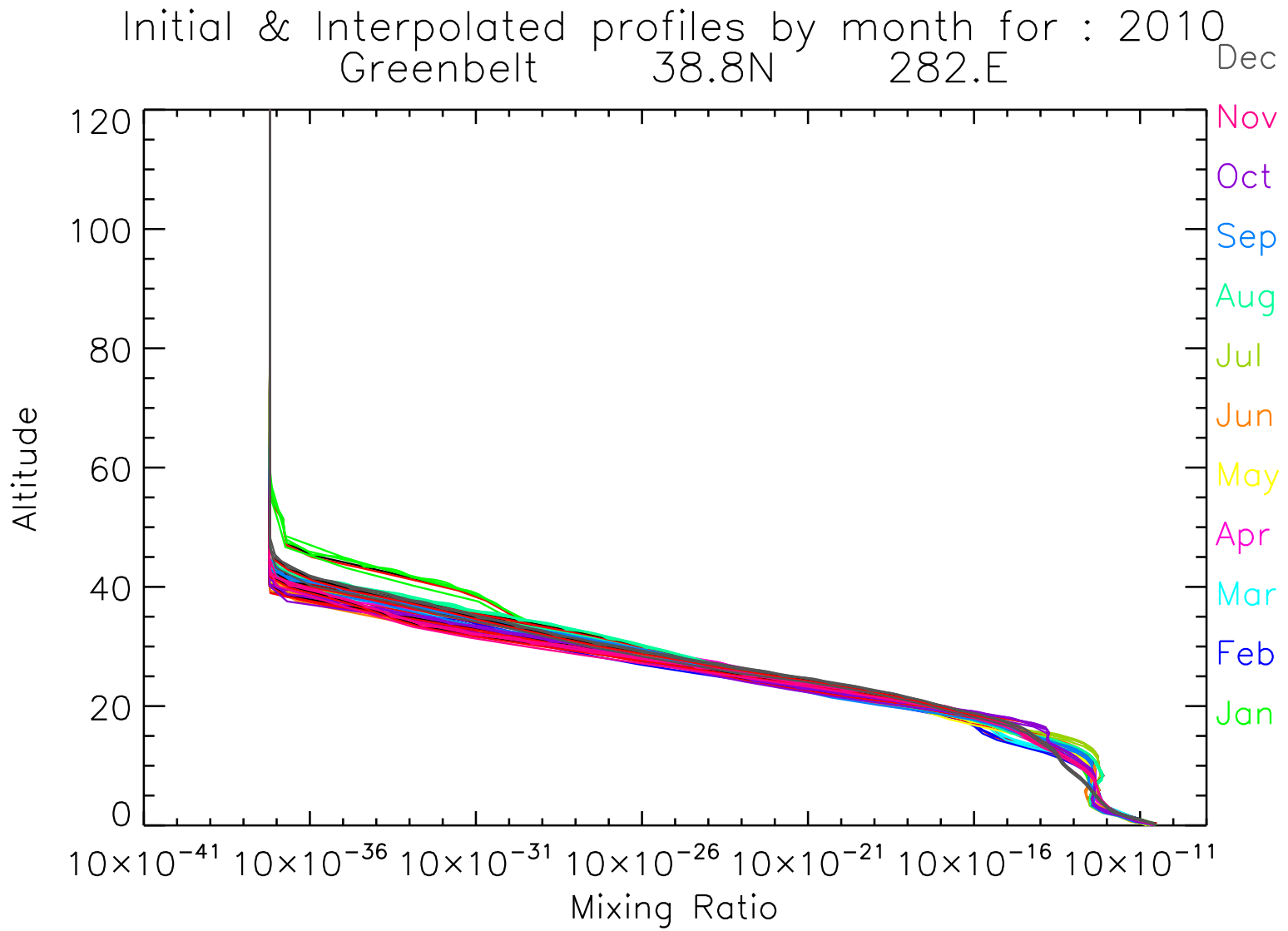
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2010
Greenbelt 38.8N 282.E
Dec
Nov
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May
Apr
Mar
Feb
Jan
Altitude
120
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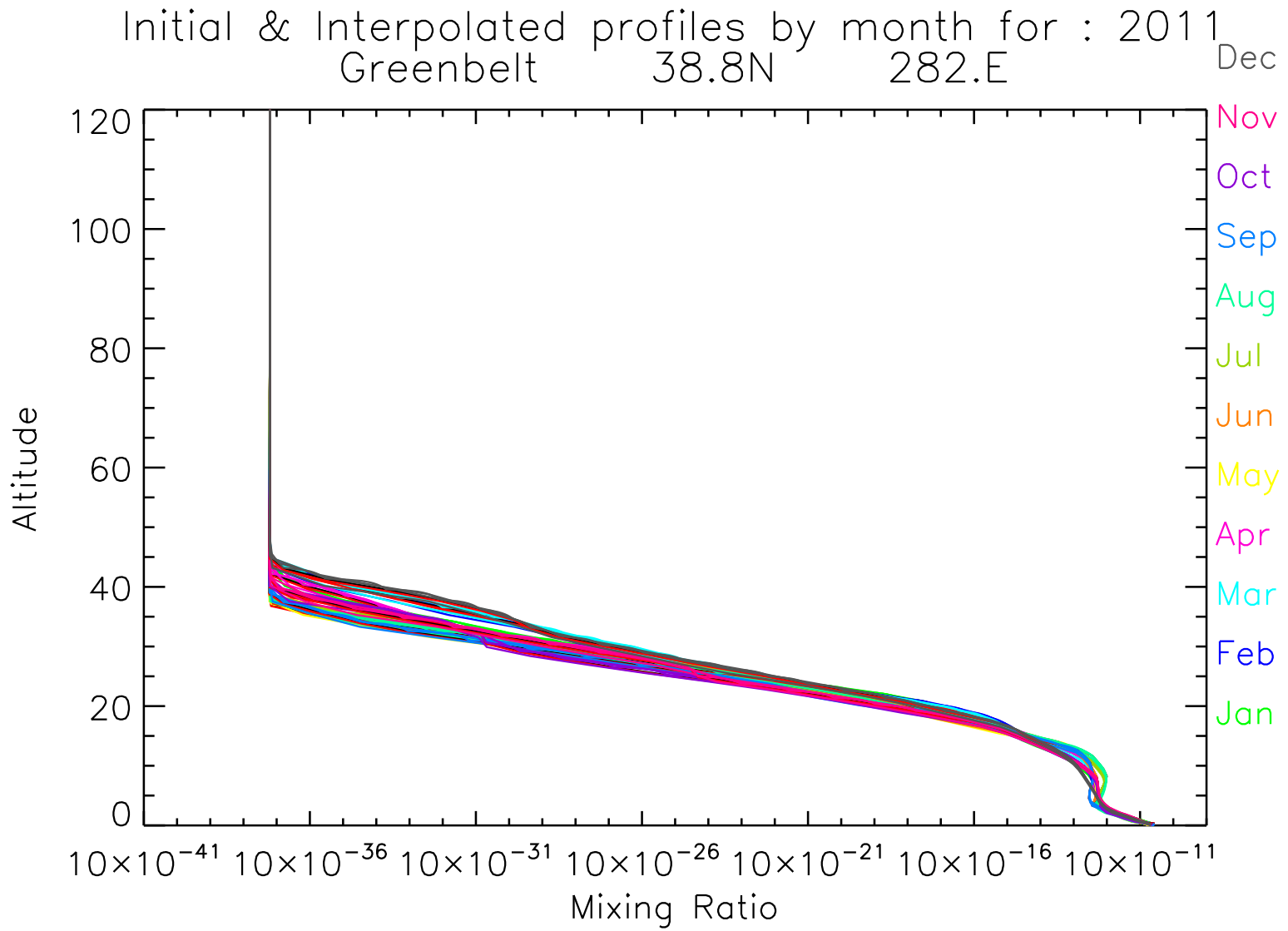
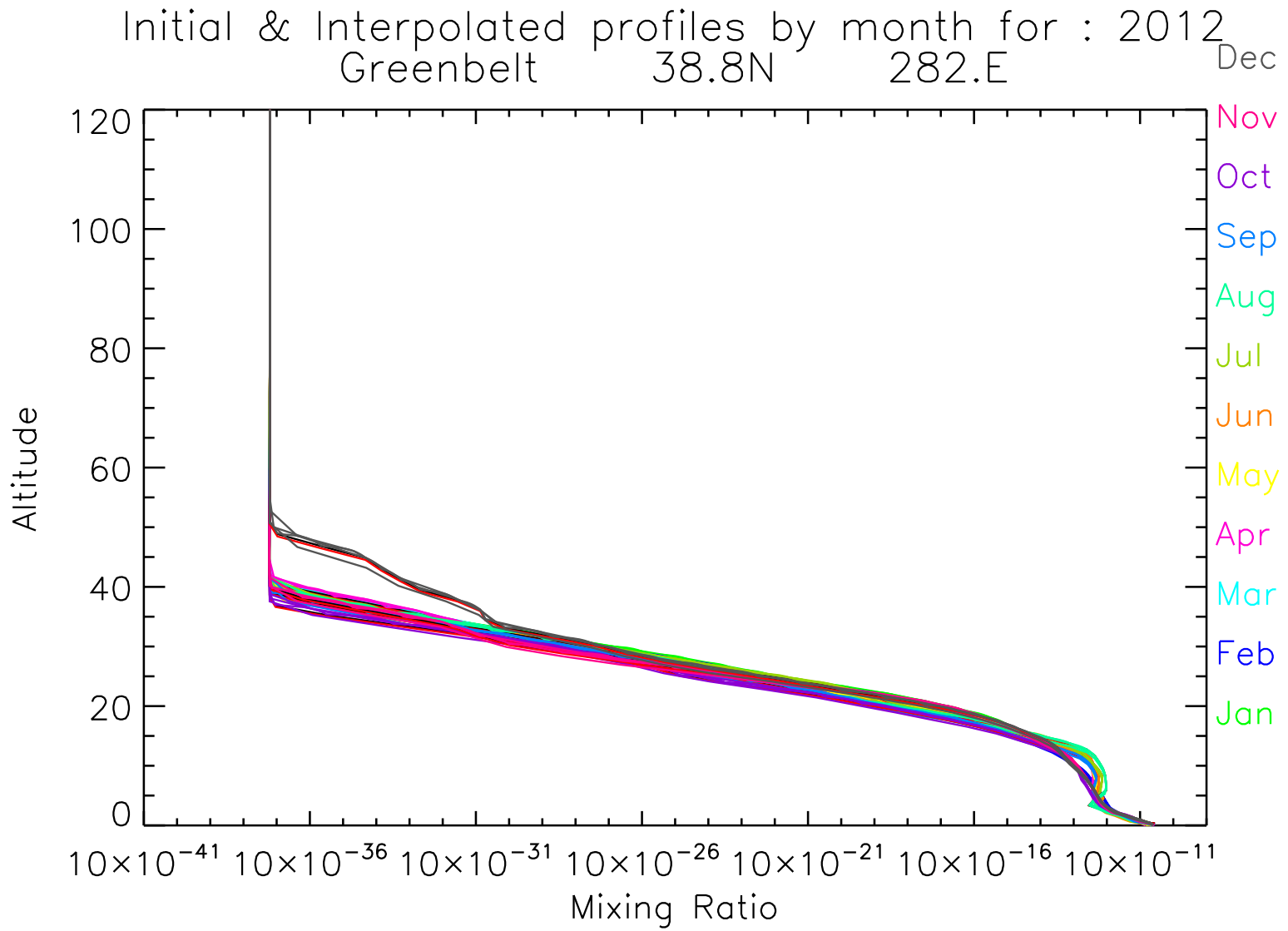
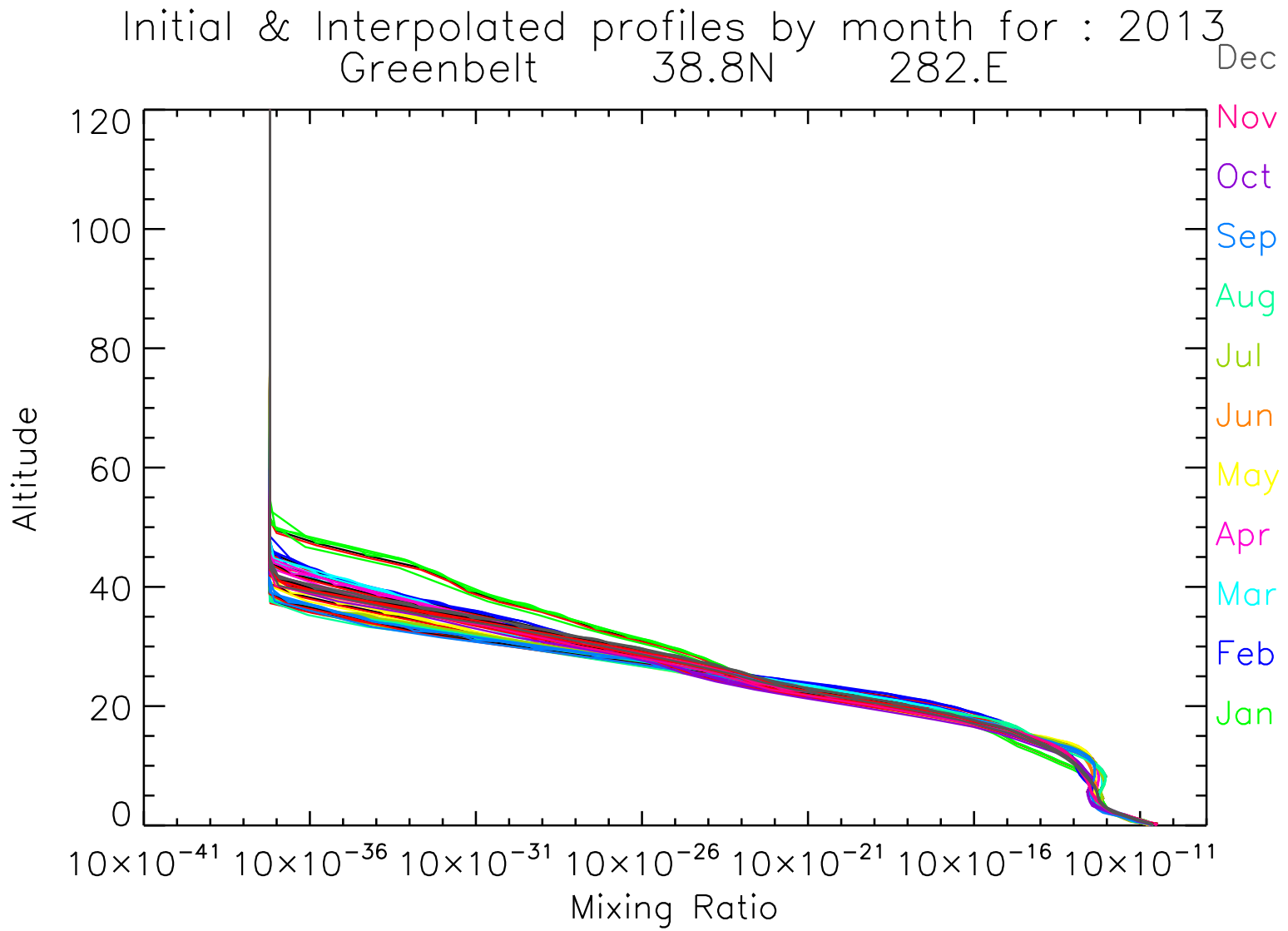
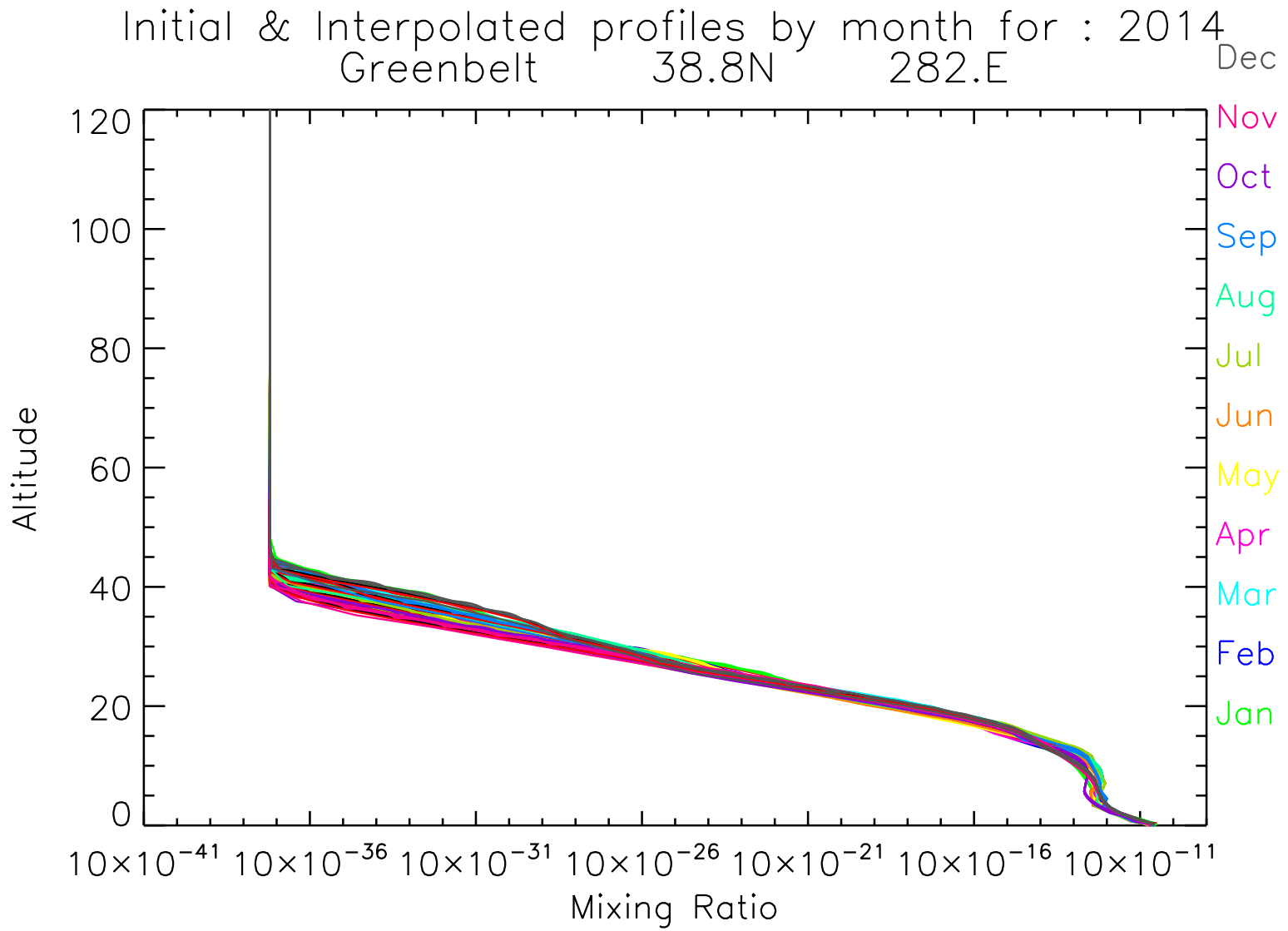
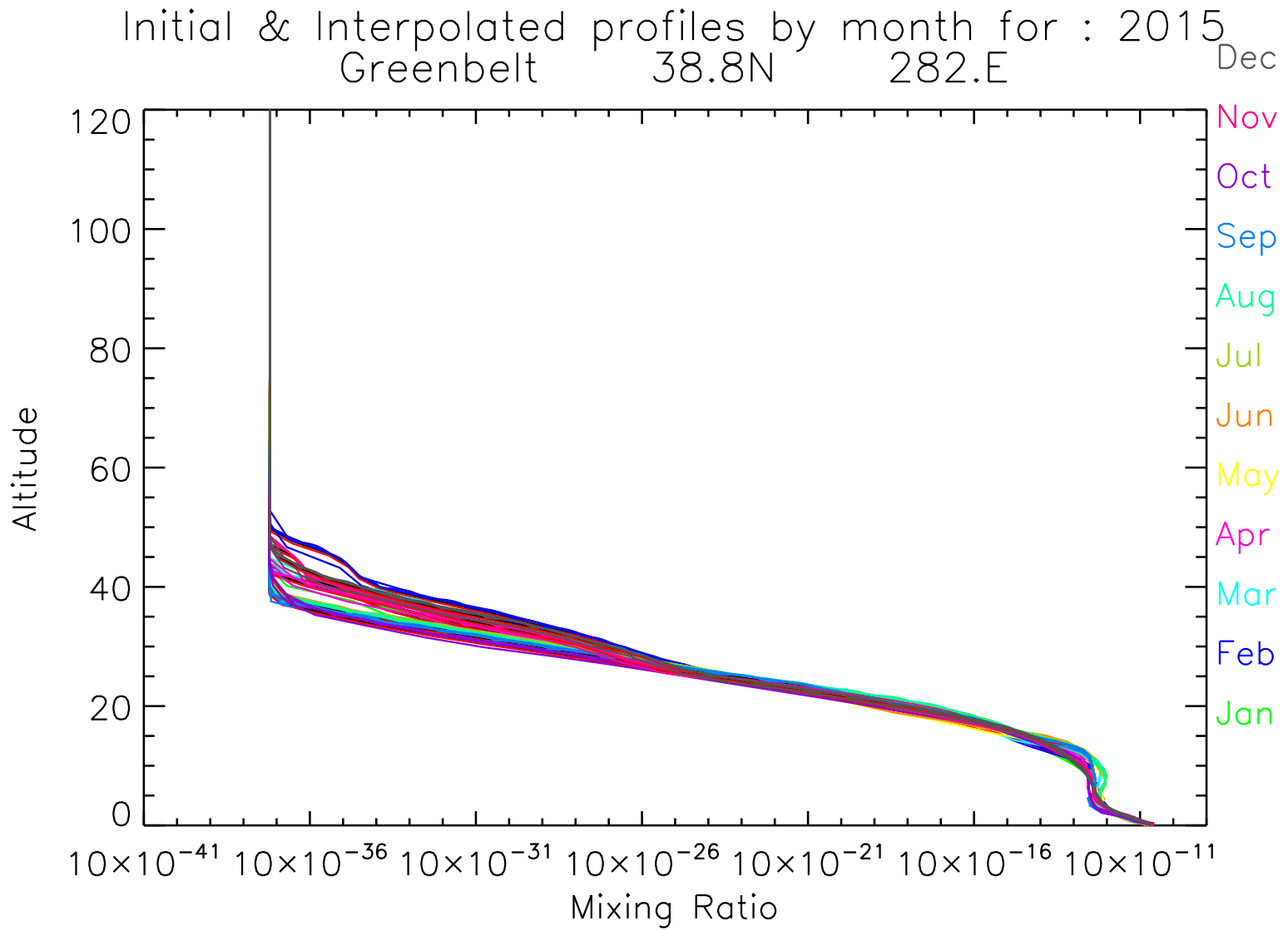
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

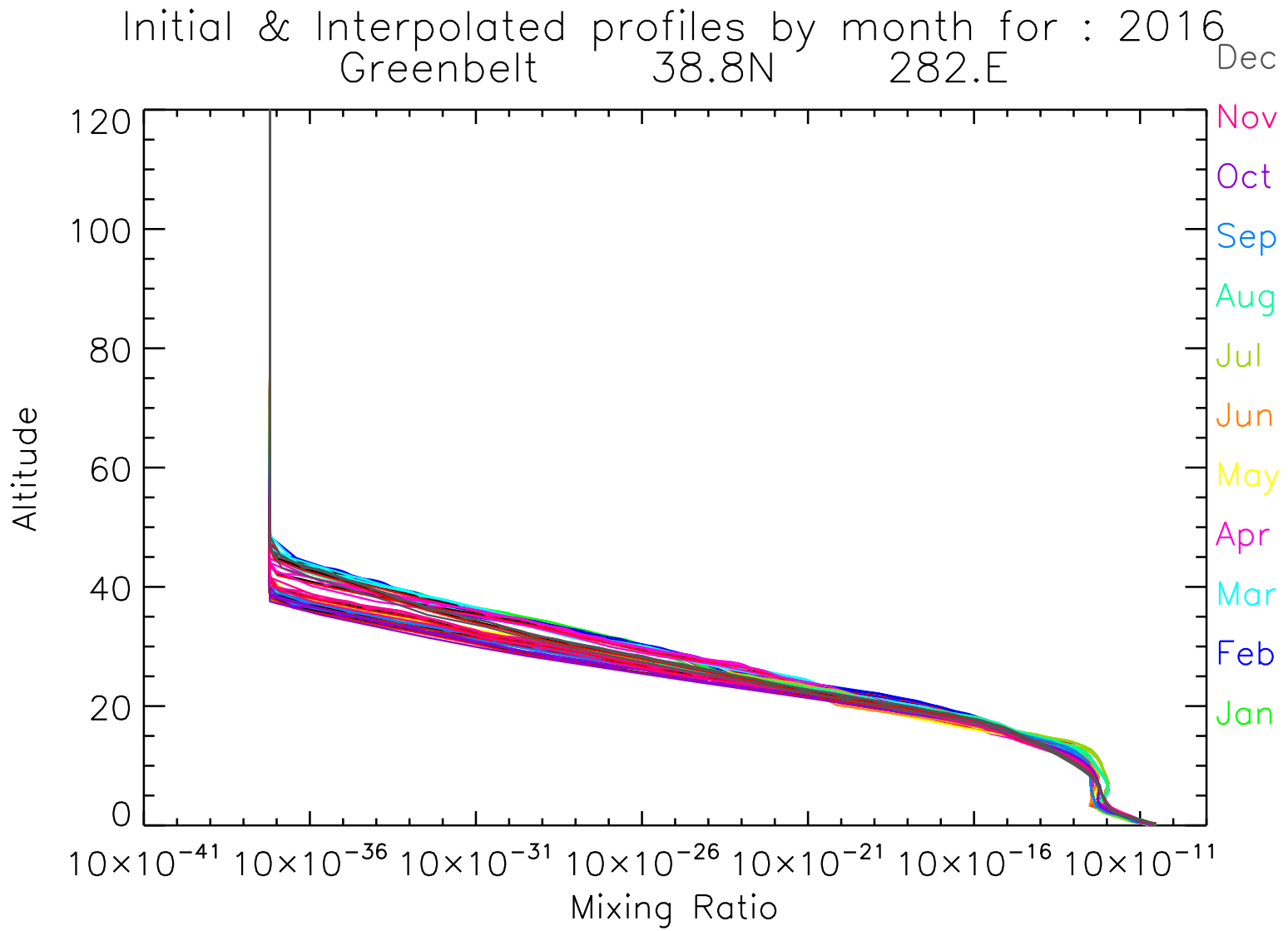

Initial & Interpolated profiles by month for : 2011
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

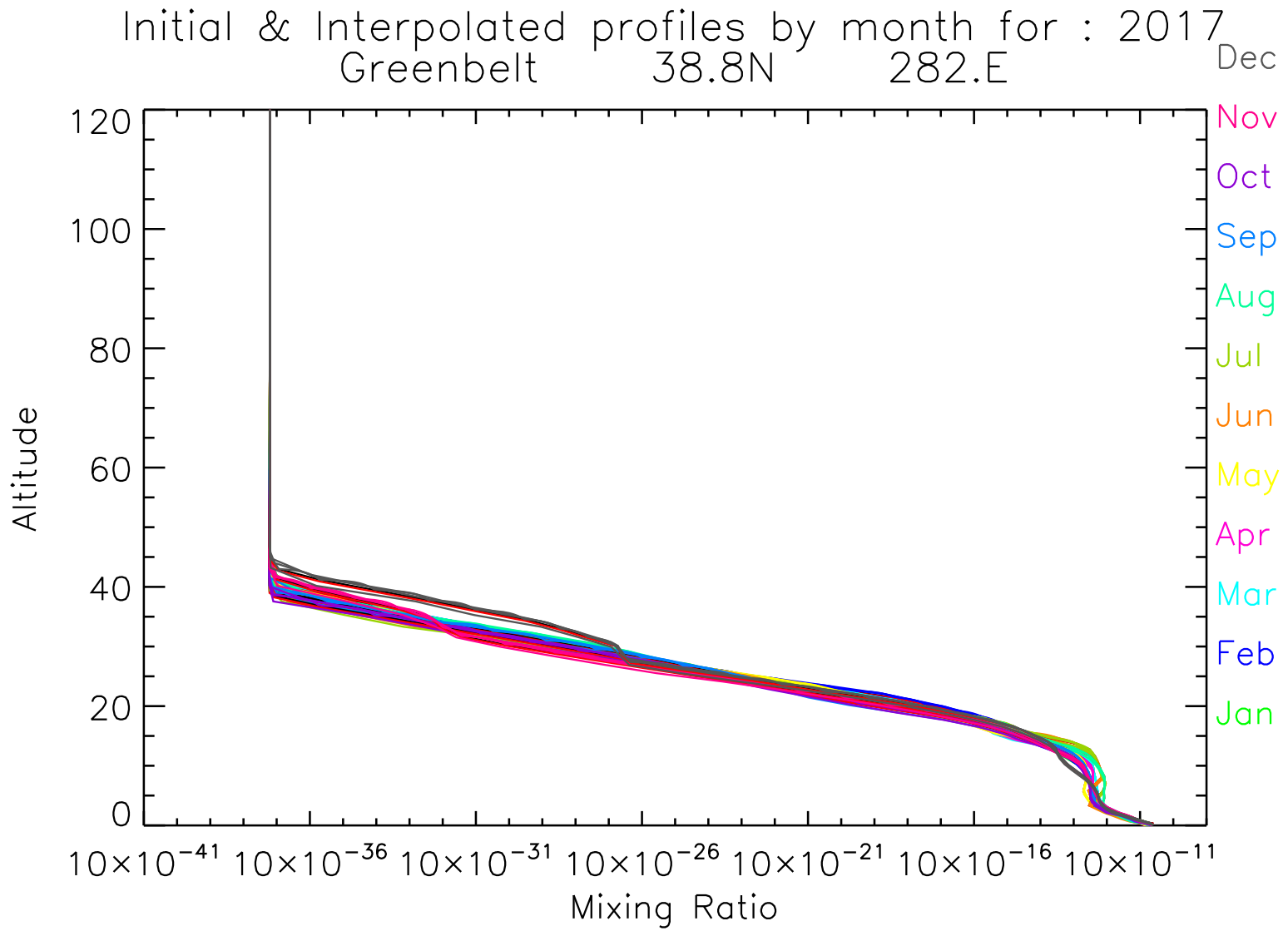

Initial & Interpolated profiles by month for : 2012
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

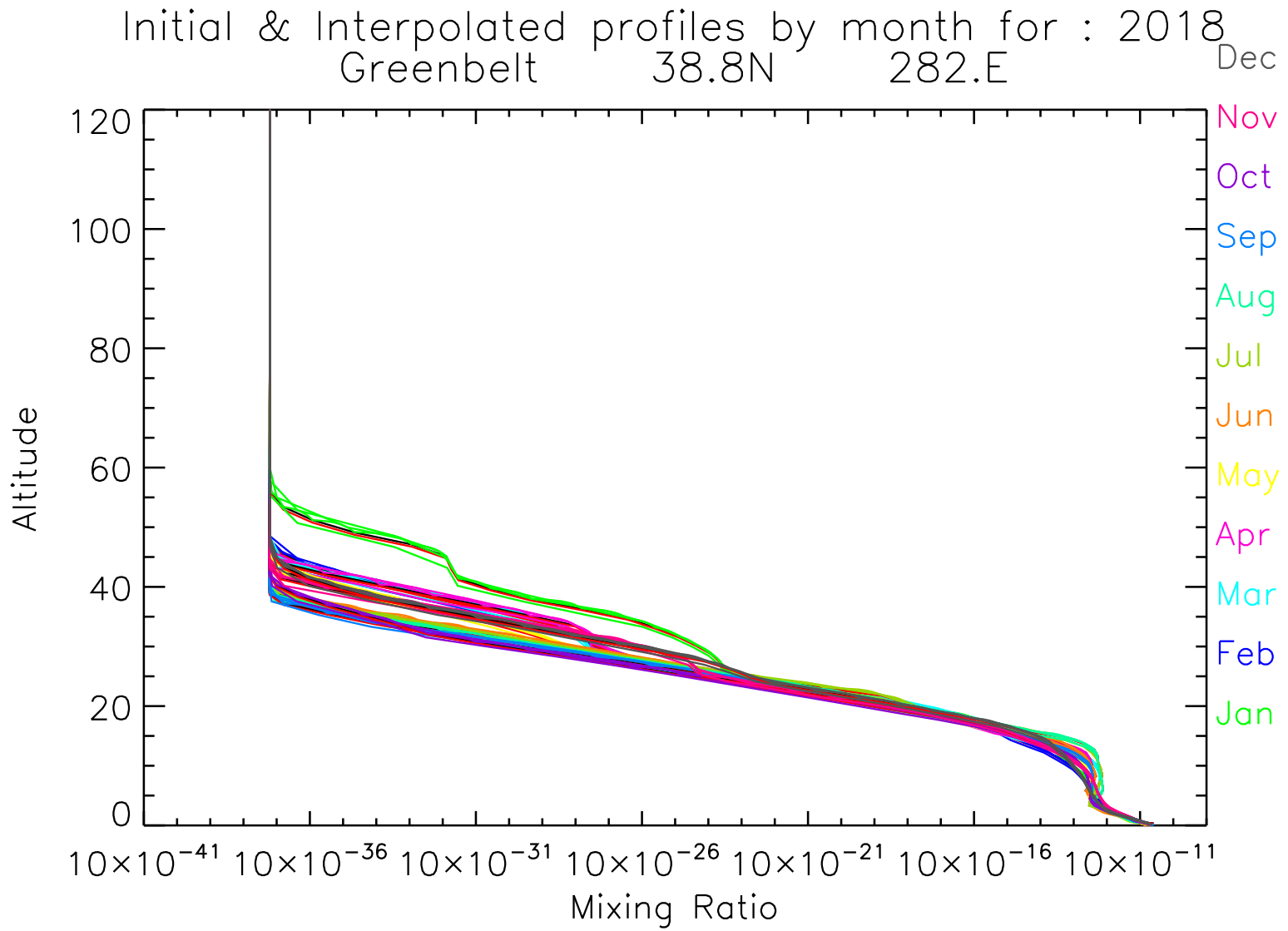

Initial & Interpolated profiles by month for : 2013
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

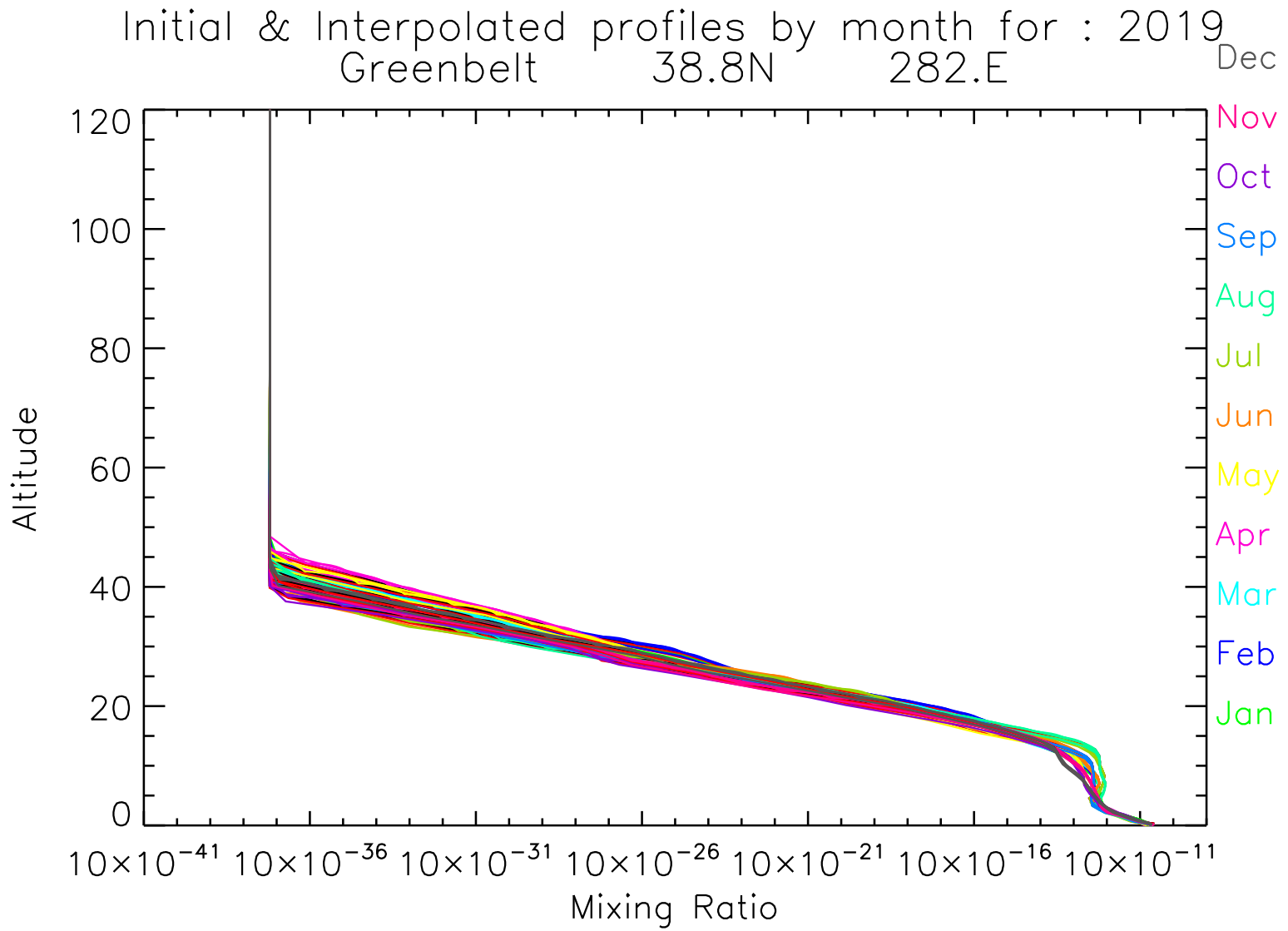

Initial & Interpolated profiles by month for : 2014
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

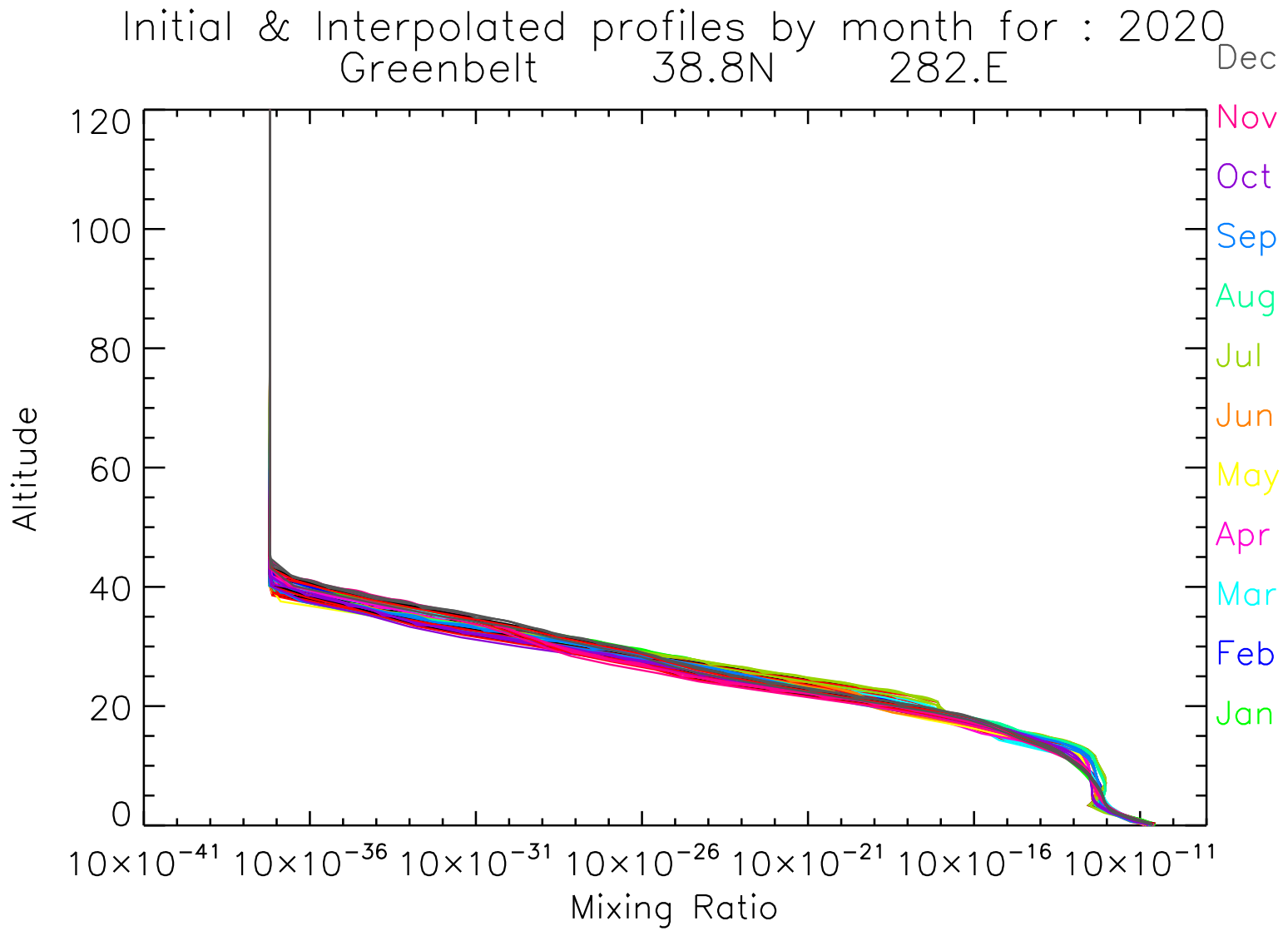

Initial & Interpolated profiles by month for : 2015
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

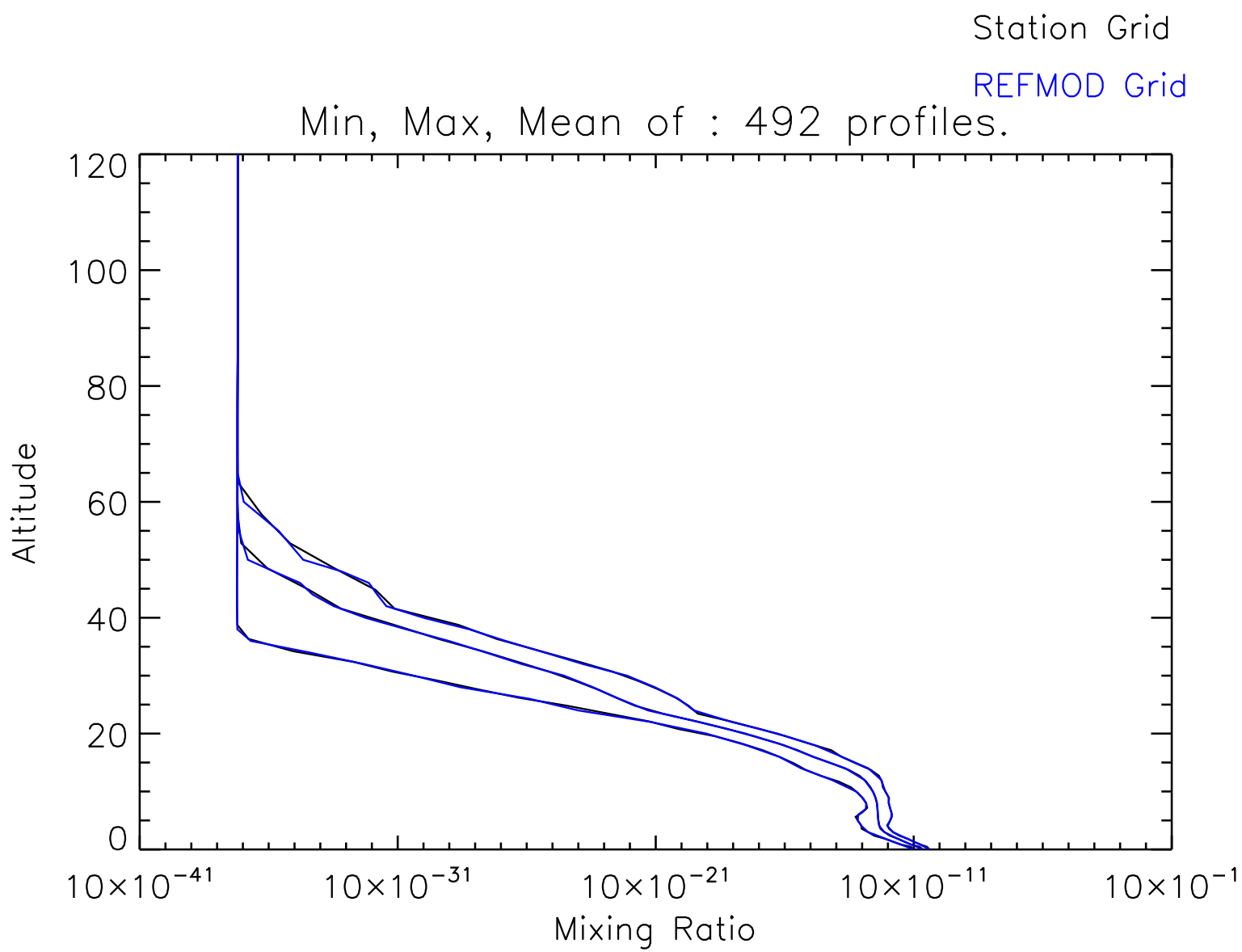

Initial & Interpolated profiles by month for : 2016
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

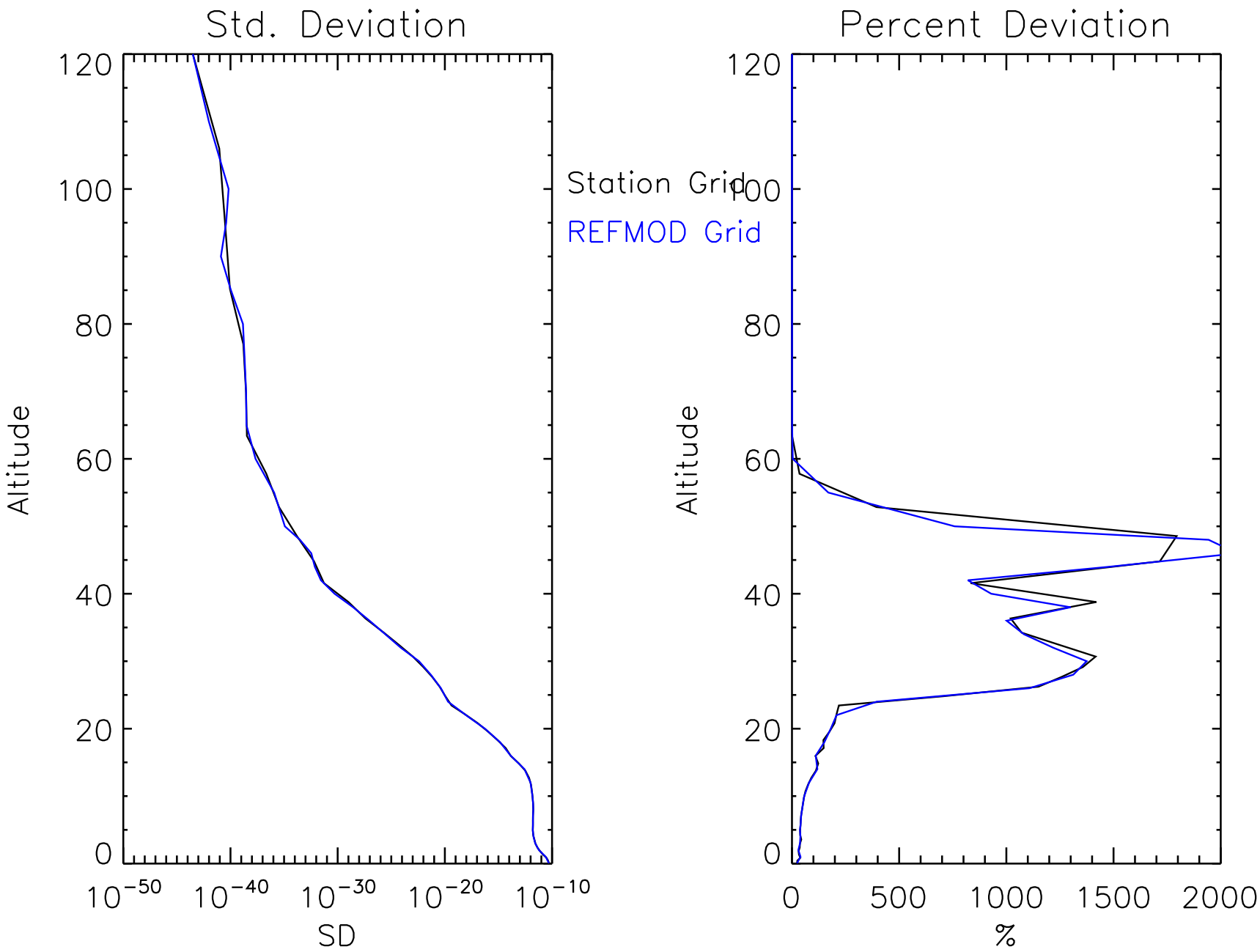

Initial & Interpolated profiles by month for : 2017
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

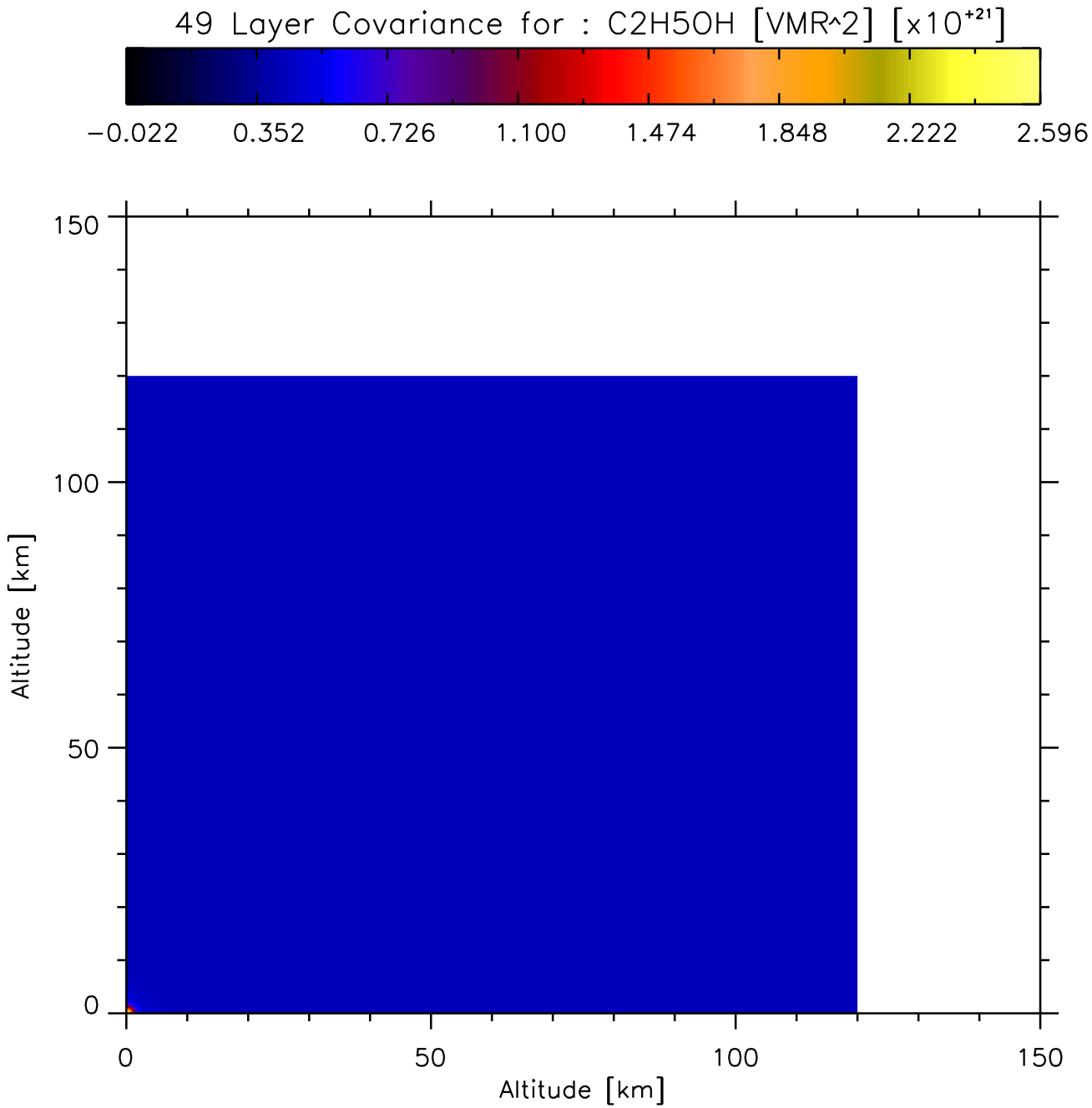

Initial & Interpolated profiles by month for : 2018
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2019
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
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

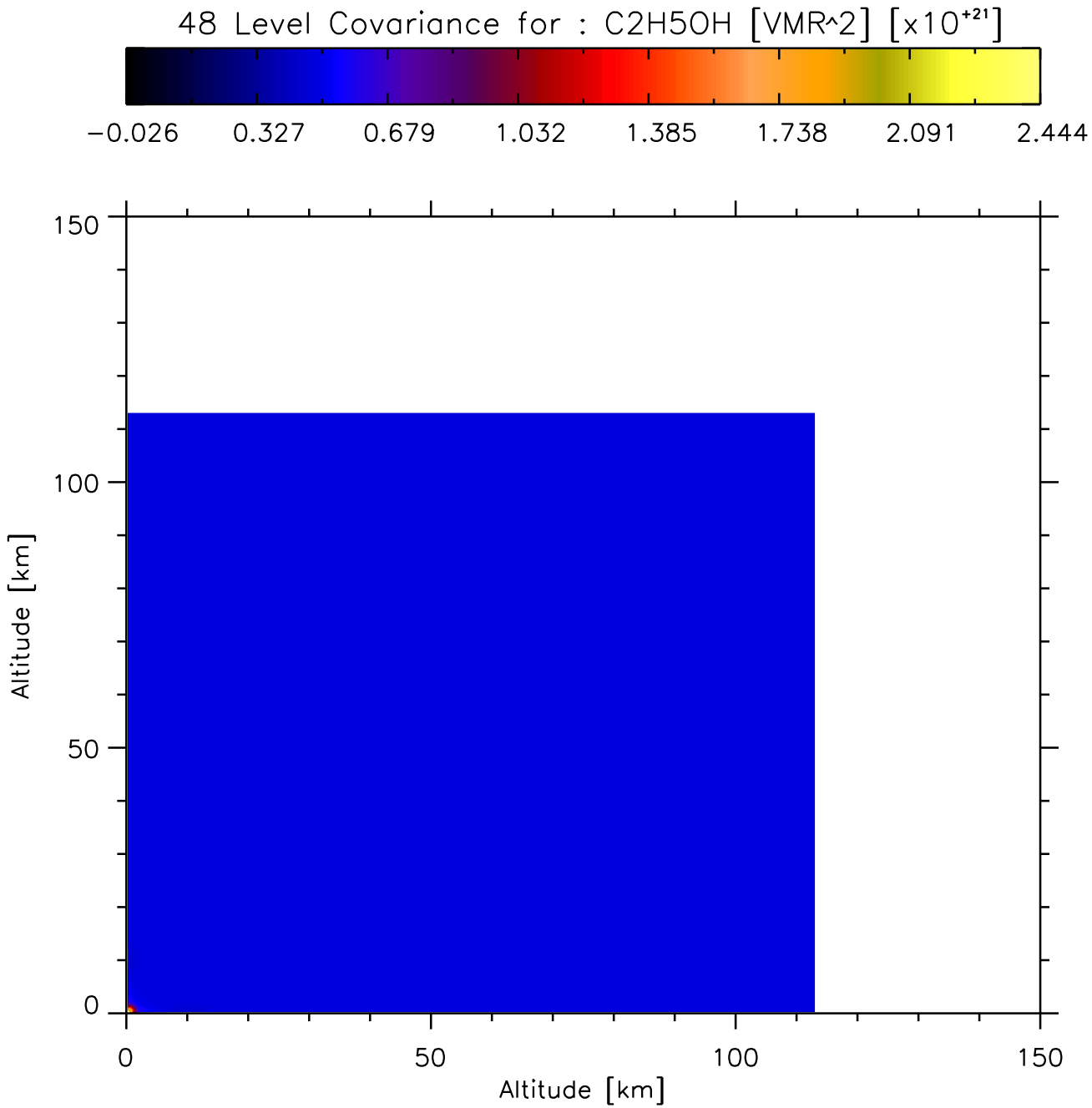

Initial & Interpolated profiles by month for : 2020
Greenbelt 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
120
100
80
60
40
20
0
Altitude
10×10^-41
10×10^-31
10×10^-21
10×10^-11
10×10^-1
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
10^{-50}
10^{-40}
10^{-30}
10^{-20}
10^{-10}
SD
0
500
1000
1500
2000
%


49 Layer Covariance for : C2H5OH [VMR^2] [x10^+21]
−0.022
0.352
0.726
1.100
1.474
1.848
2.222
2.596
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

49 Layer Covariance for : C2H5OH [VMR^2] [x10^-21]
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Y Altitude
0
20
40
60
80
100
120
140
X Altitude
0
50
100
150


48 Level Covariance for : C2H5OH [VMR^2] [x10^+21]
−0.026
0.327
0.679
1.032
1.385
1.738
2.091
2.444
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

48 Level Covariance for : C2H5OH [VMR^2] [x10^21]
2.5
2.0
1.5
1.0
0.5
0.0
Y Altitude
0
20
40
60
X Altitude
0
50
100
150