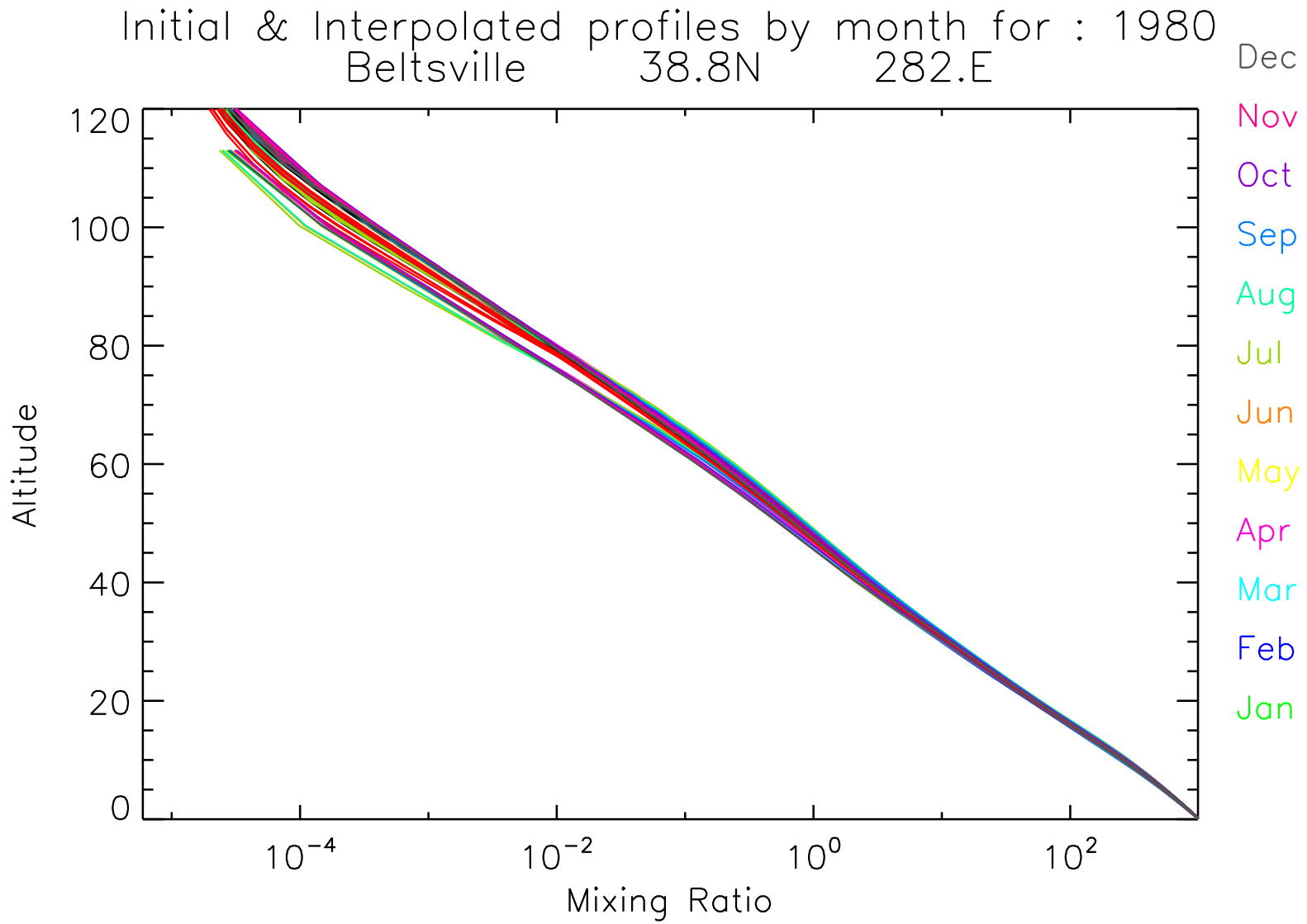
Initial & Interpolated profiles by month for : 1980
Beltsville 38.8N 282.E
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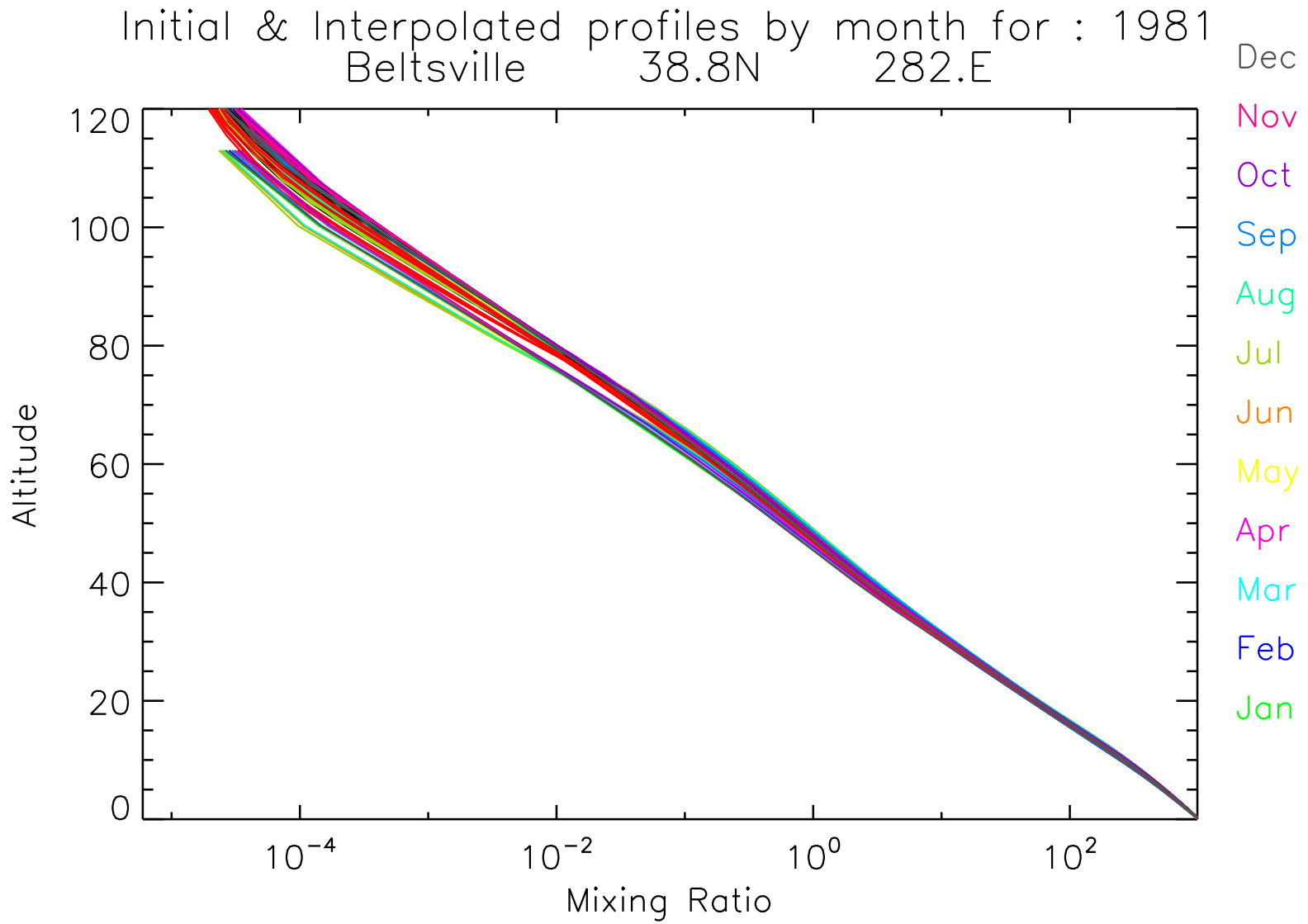
10^{2}
Mixing Ratio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Altitude
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Mixing Ratio
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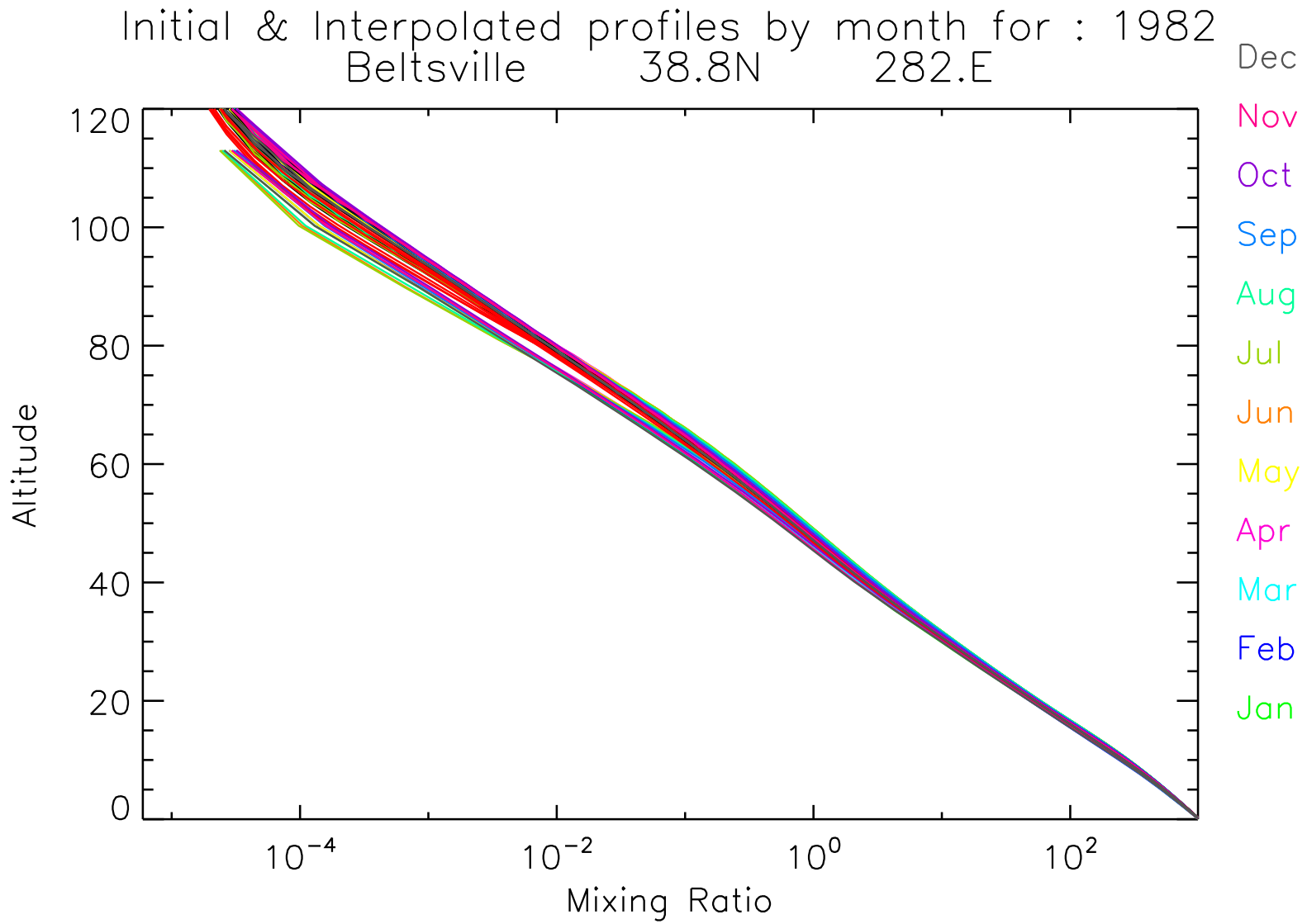
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Altitude
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Mixing Ratio
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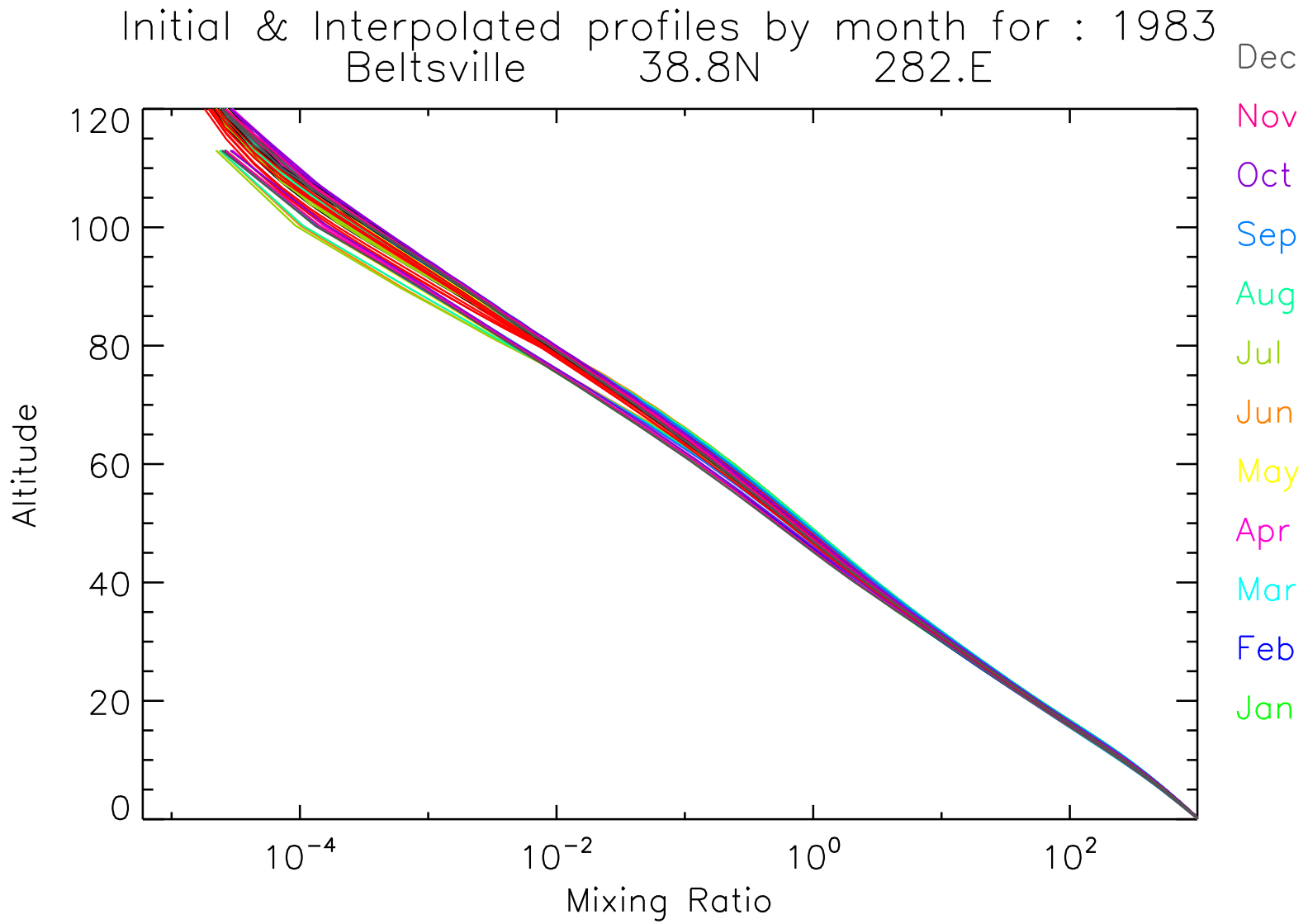
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Altitude
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Mixing Ratio
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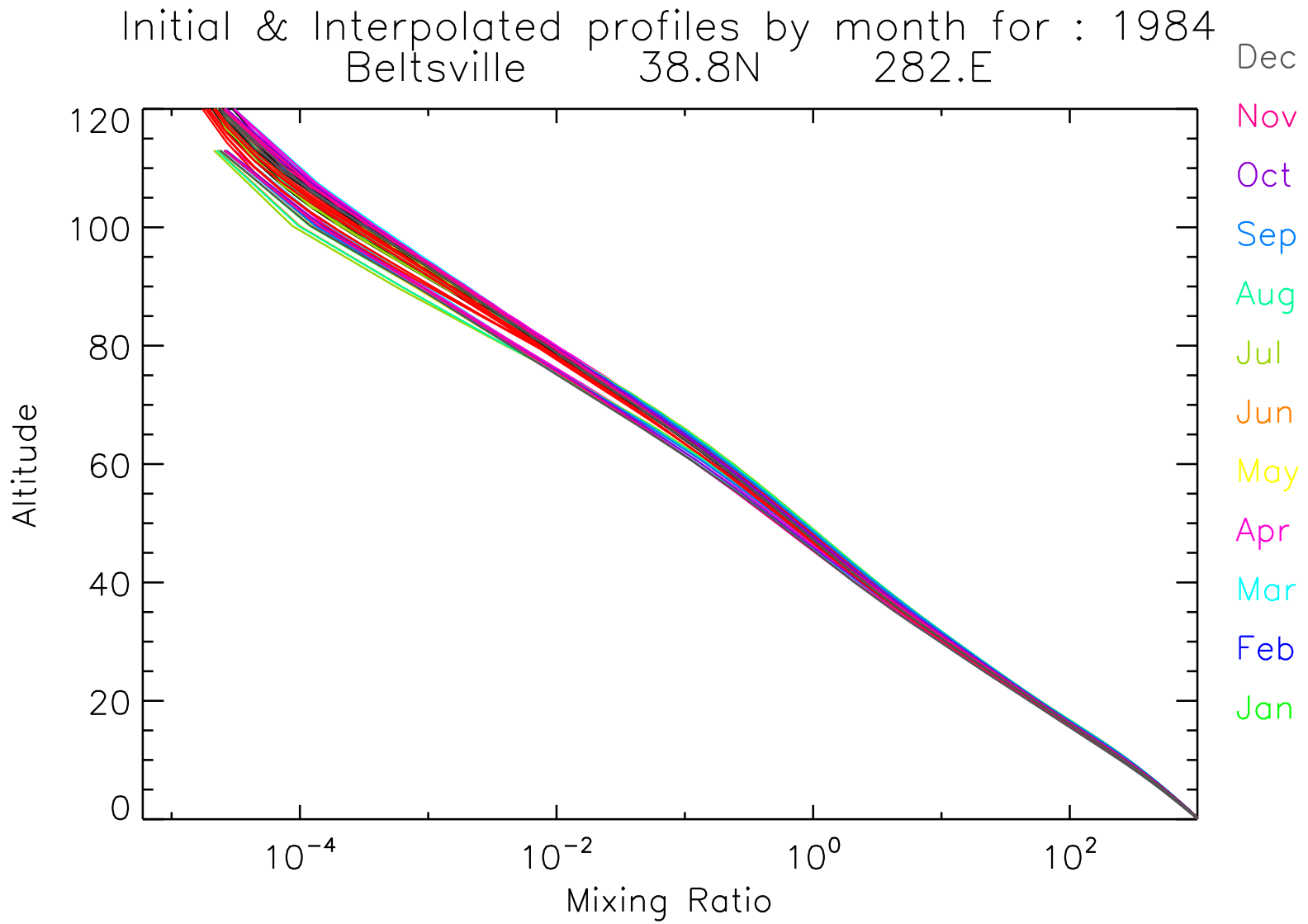
Initial & Interpolated profiles by month for : 1984
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Altitude
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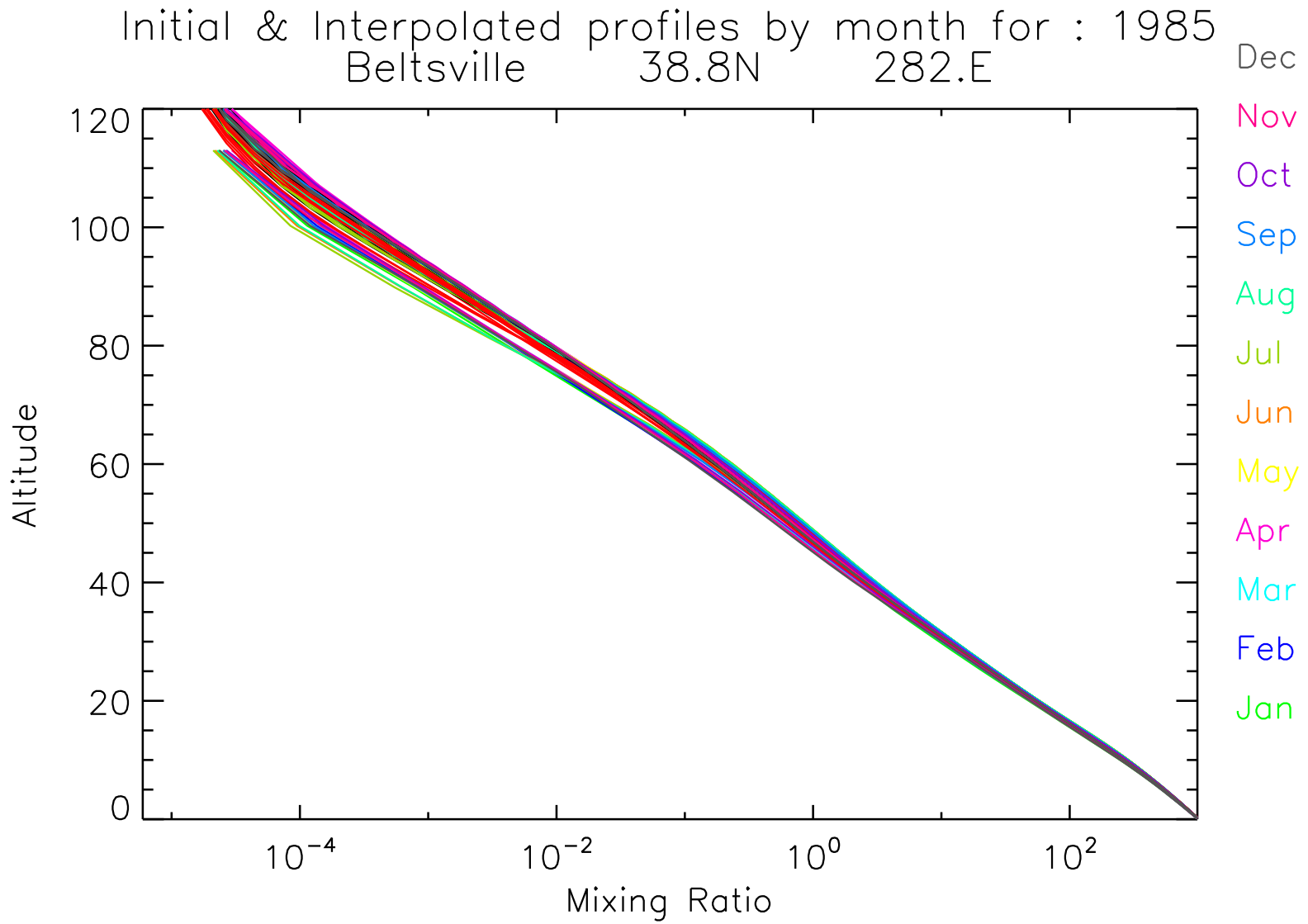
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Altitude
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Mixing Ratio
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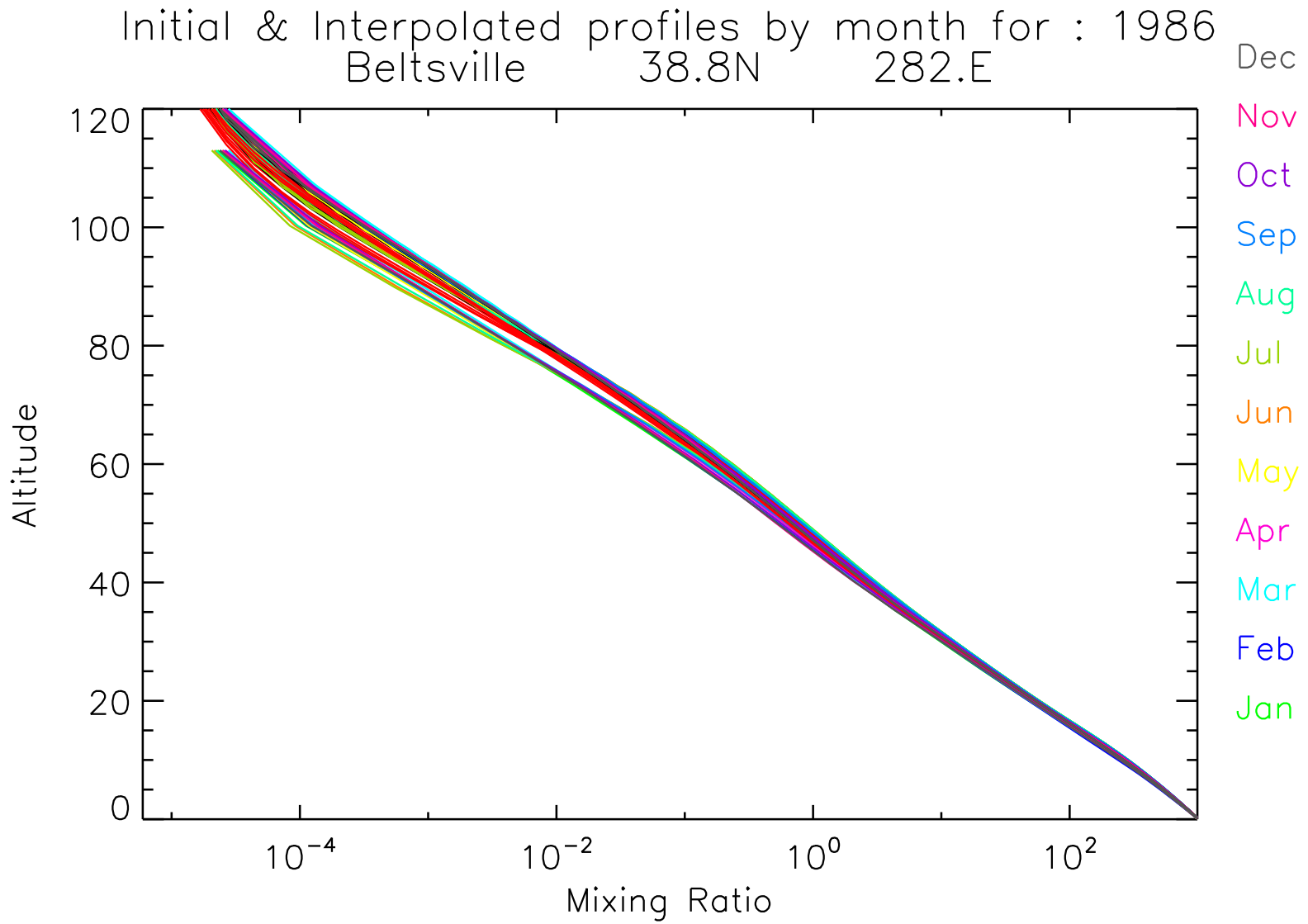
Initial & Interpolated profiles by month for : 1986
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Altitude
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Mixing Ratio
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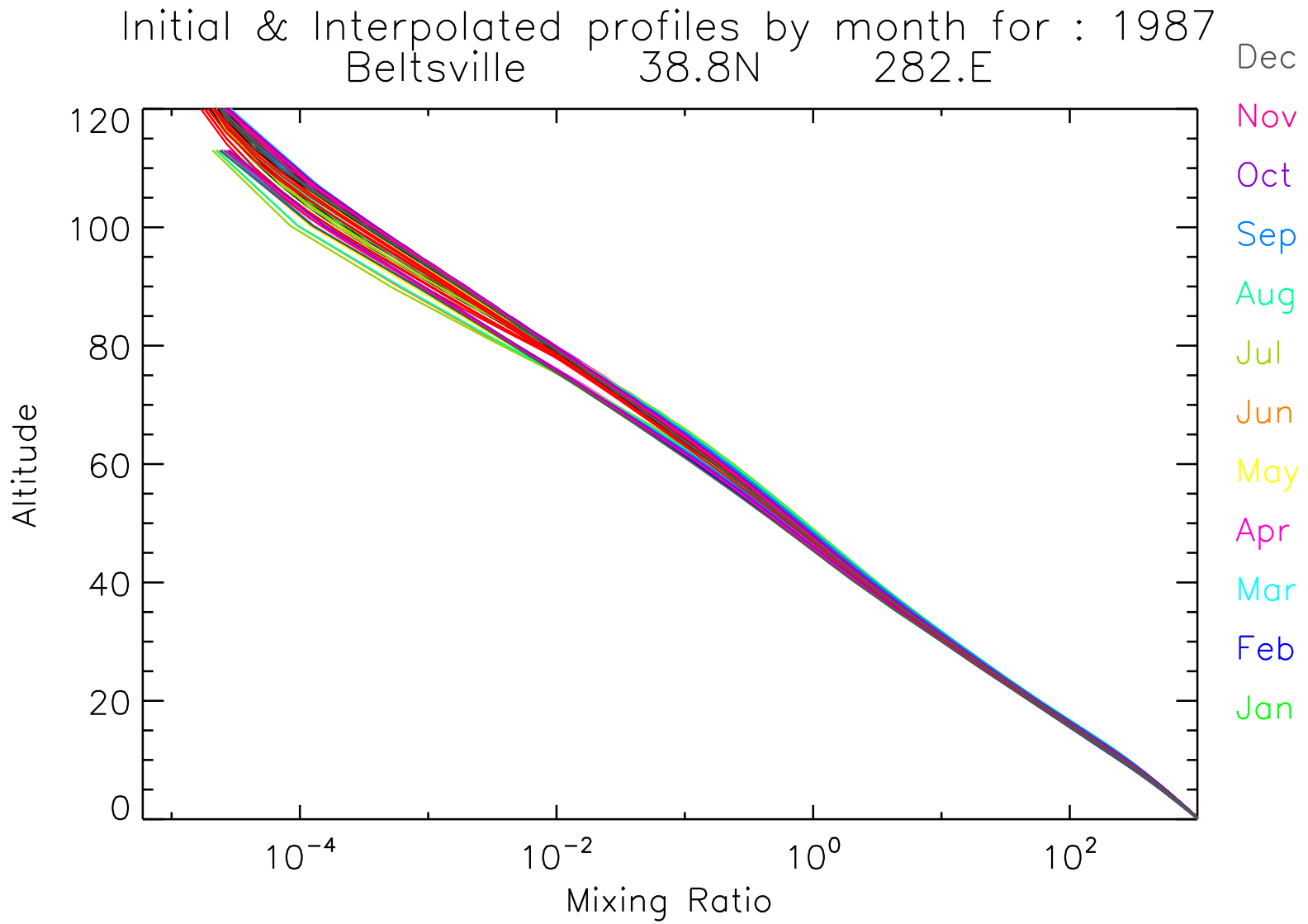
Initial & Interpolated profiles by month for : 1987
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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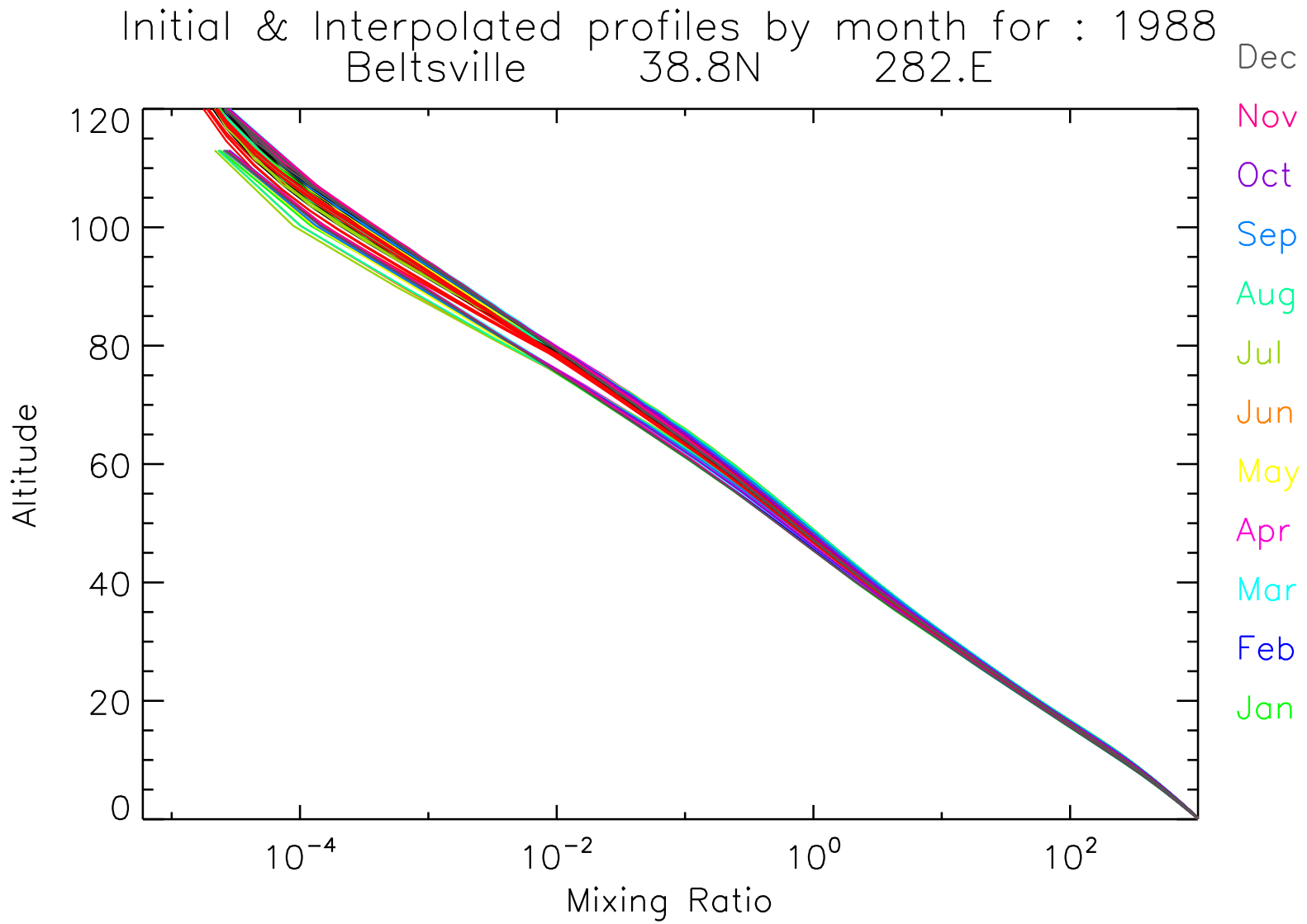
Initial & Interpolated profiles by month for : 1988
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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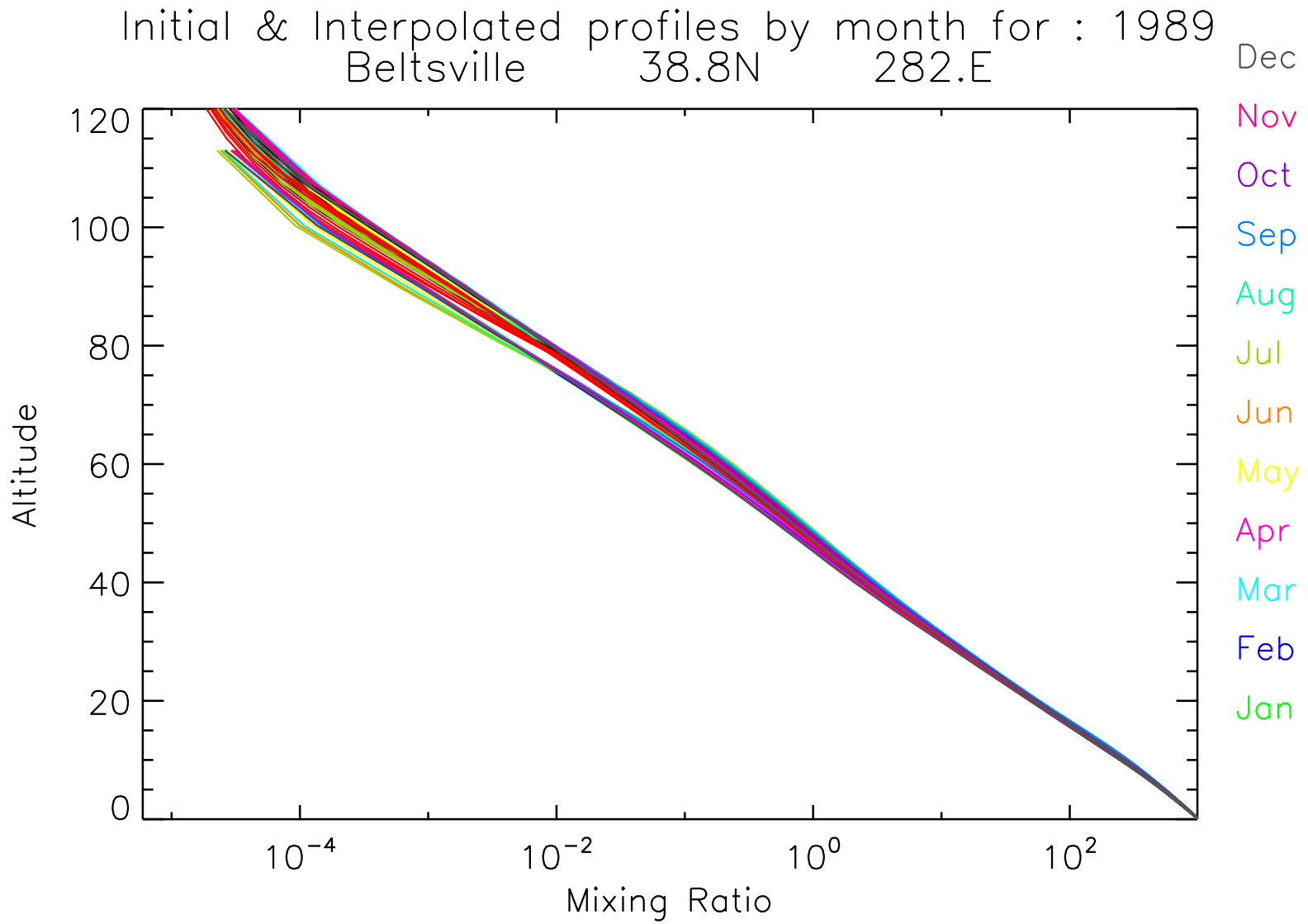
Initial & Interpolated profiles by month for : 1989
Beltsville 38.8N 282.E
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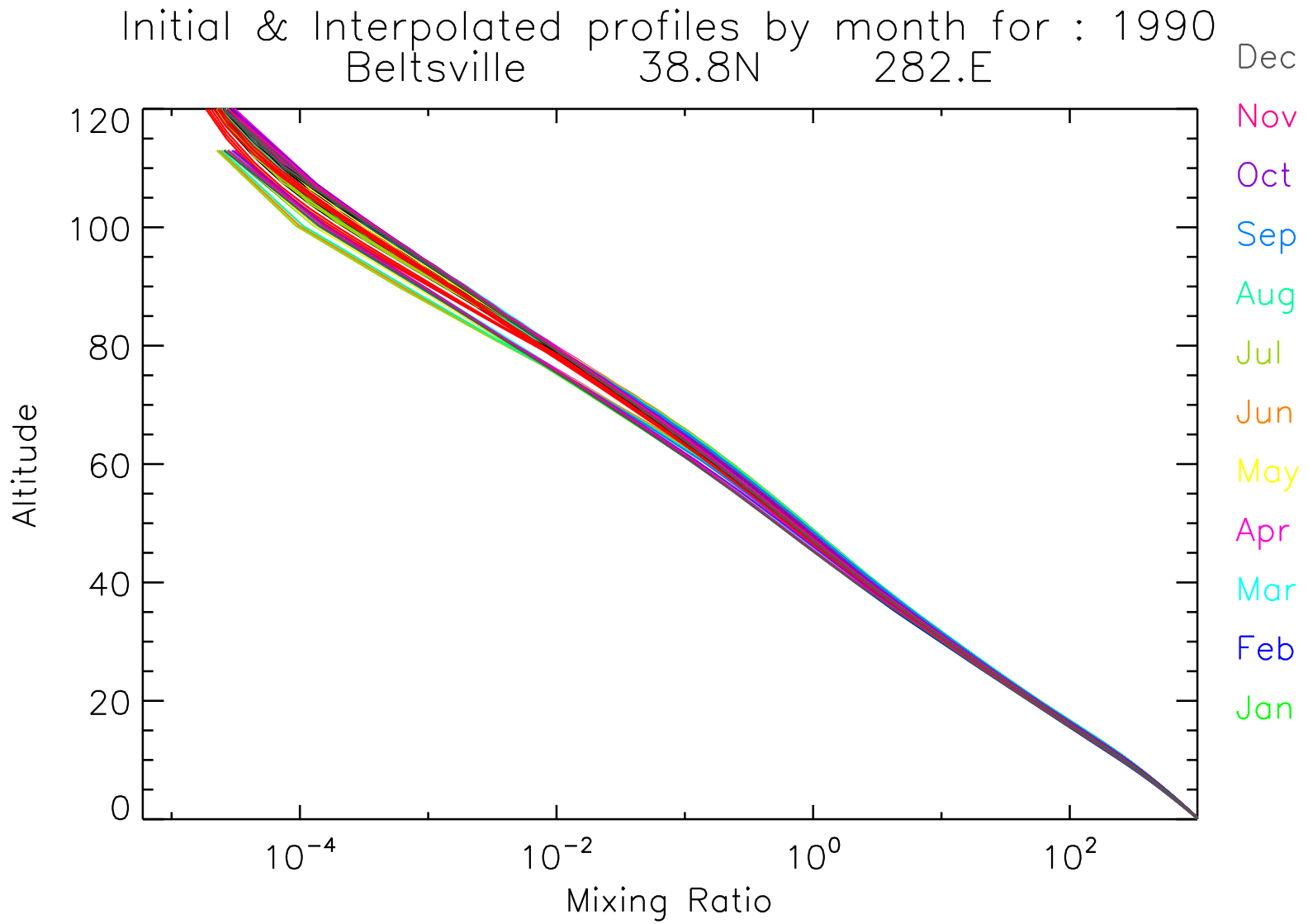
Initial & Interpolated profiles by month for : 1990
Beltsville 38.8N 282.E
Altitude
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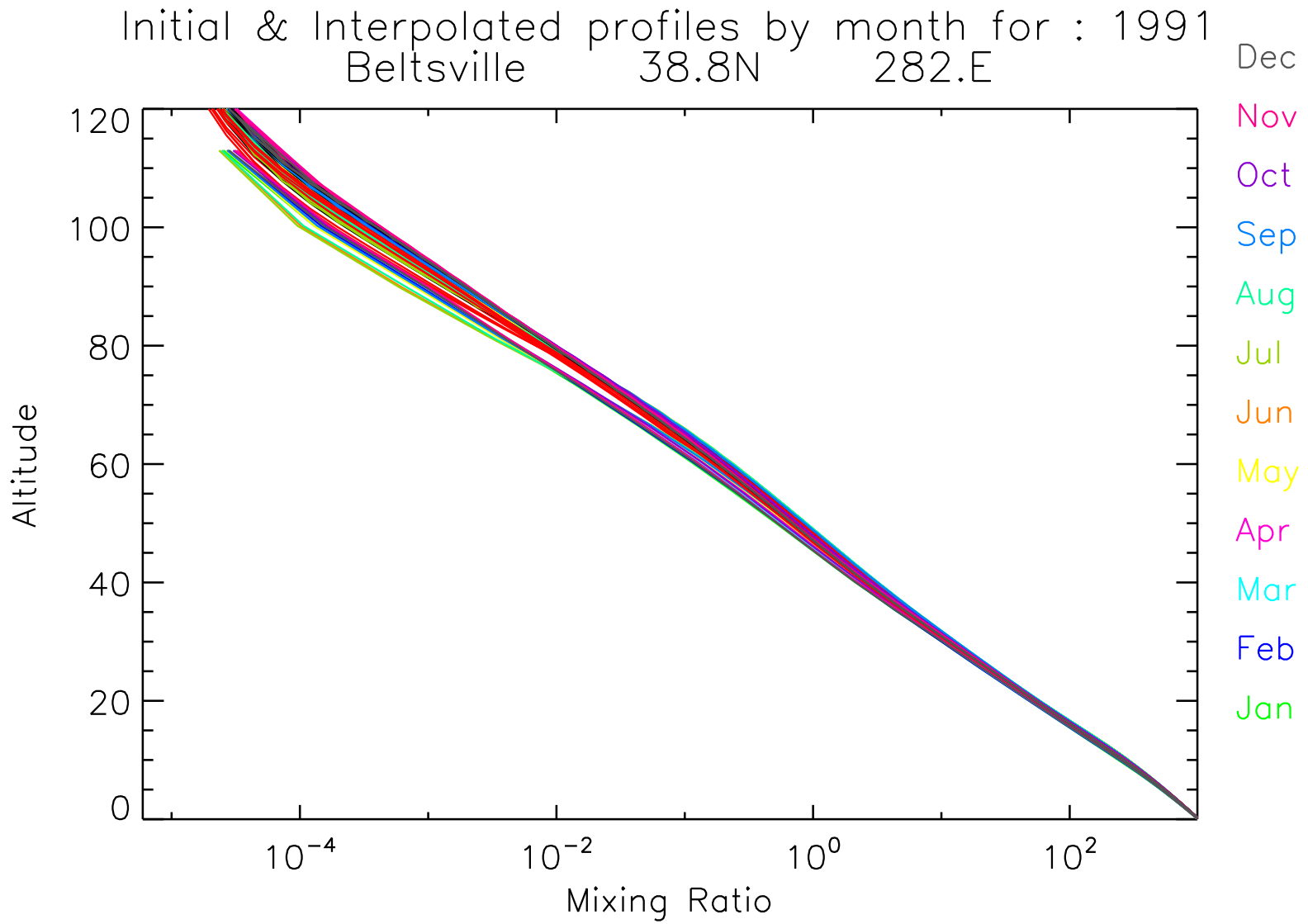
Initial & Interpolated profiles by month for : 1991
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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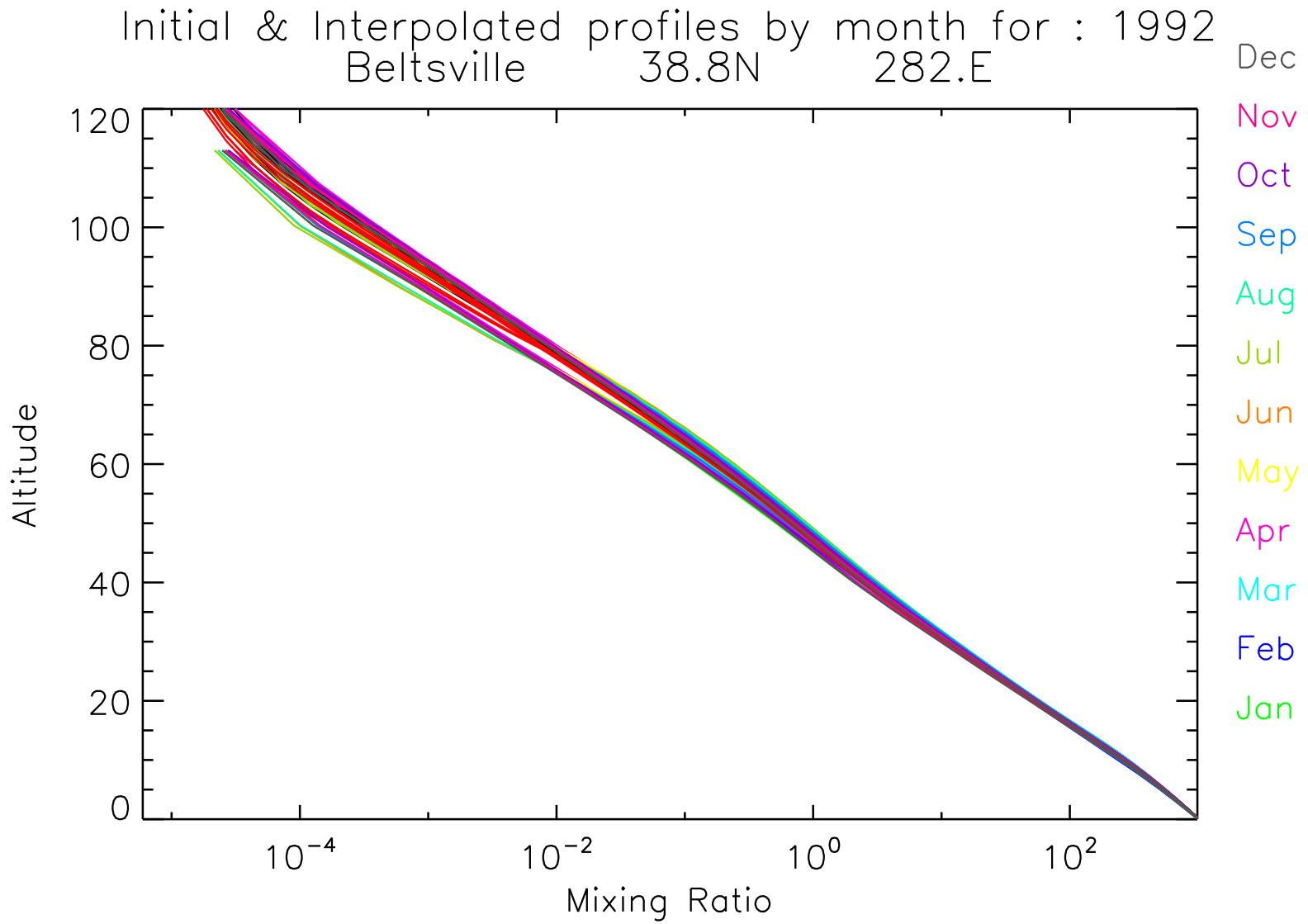
Initial & Interpolated profiles by month for : 1992
Beltsville 38.8N 282.E
Altitude
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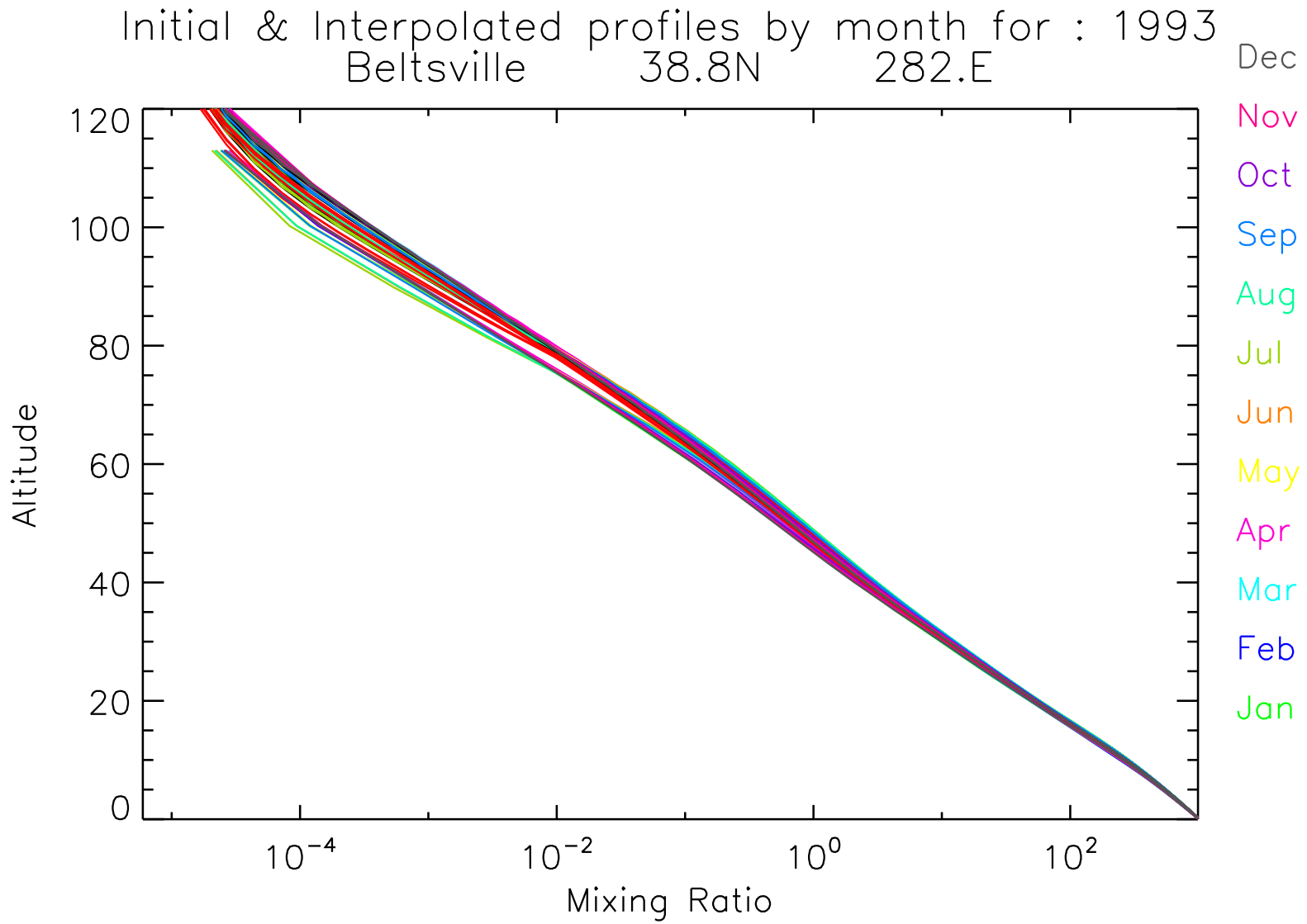
Initial & Interpolated profiles by month for : 1993
Beltsville 38.8N 282.E
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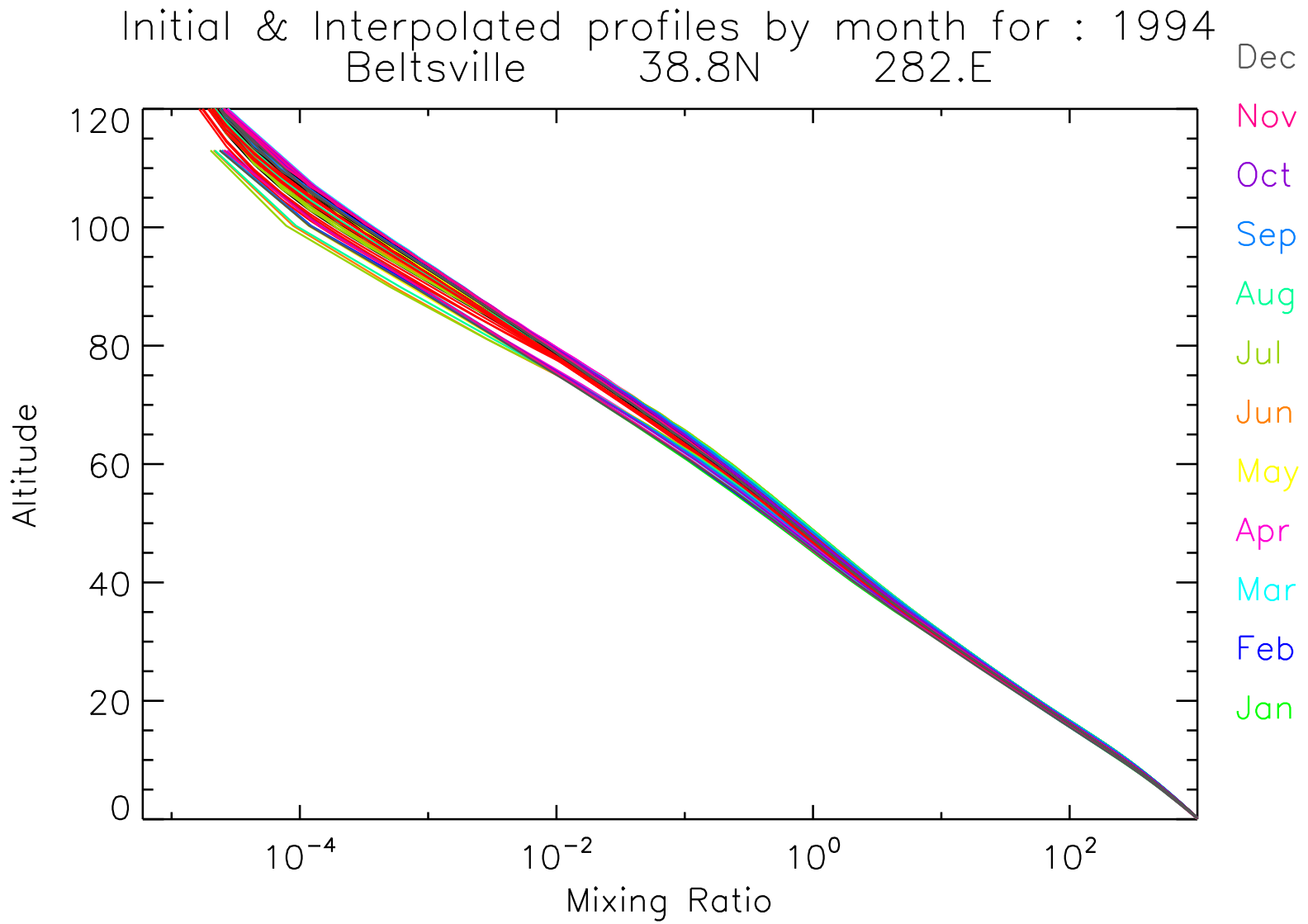
Mixing Ratio


Initial & Interpolated profiles by month for : 1994
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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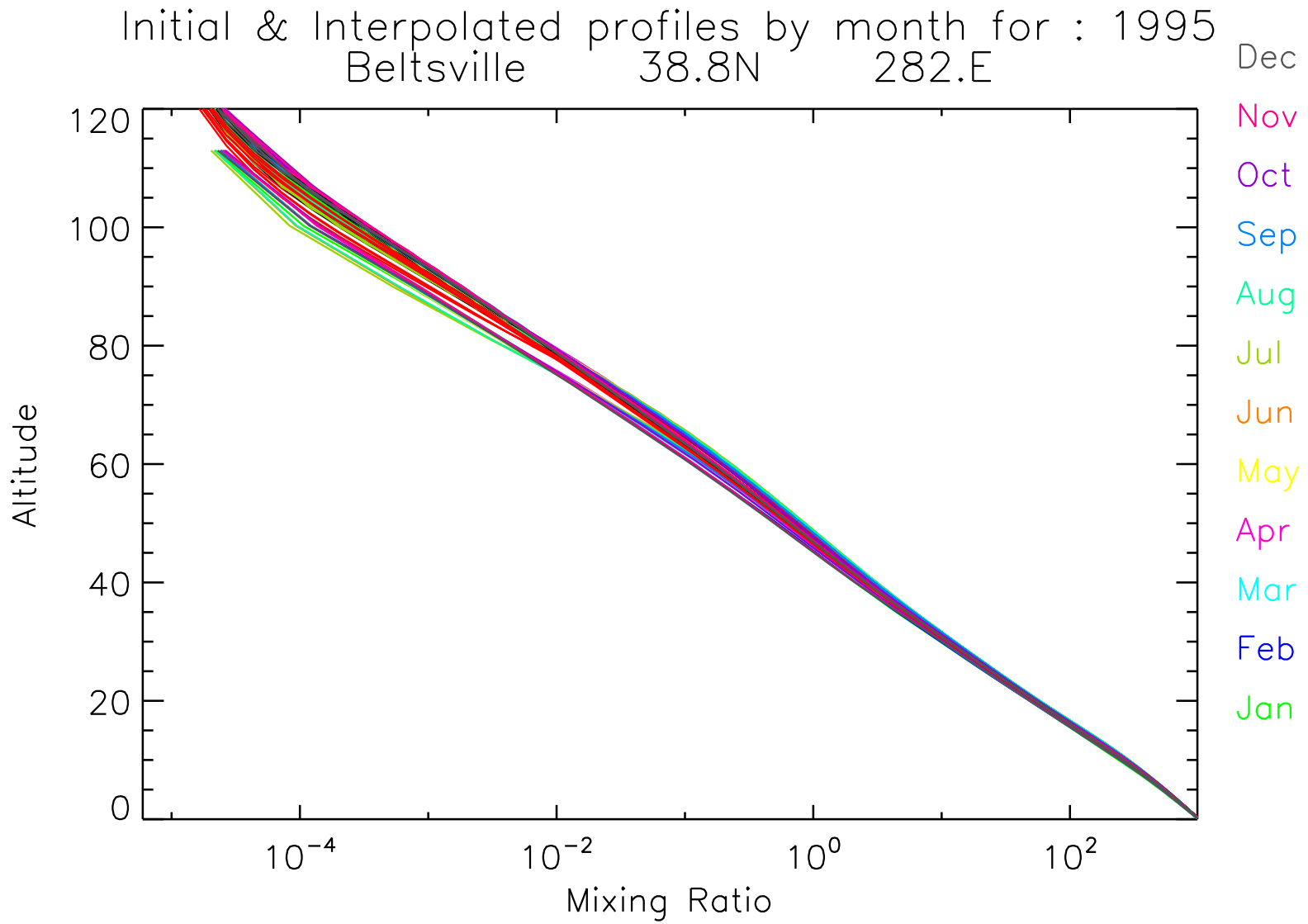
Initial & Interpolated profiles by month for : 1995
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Altitude
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Mixing Ratio
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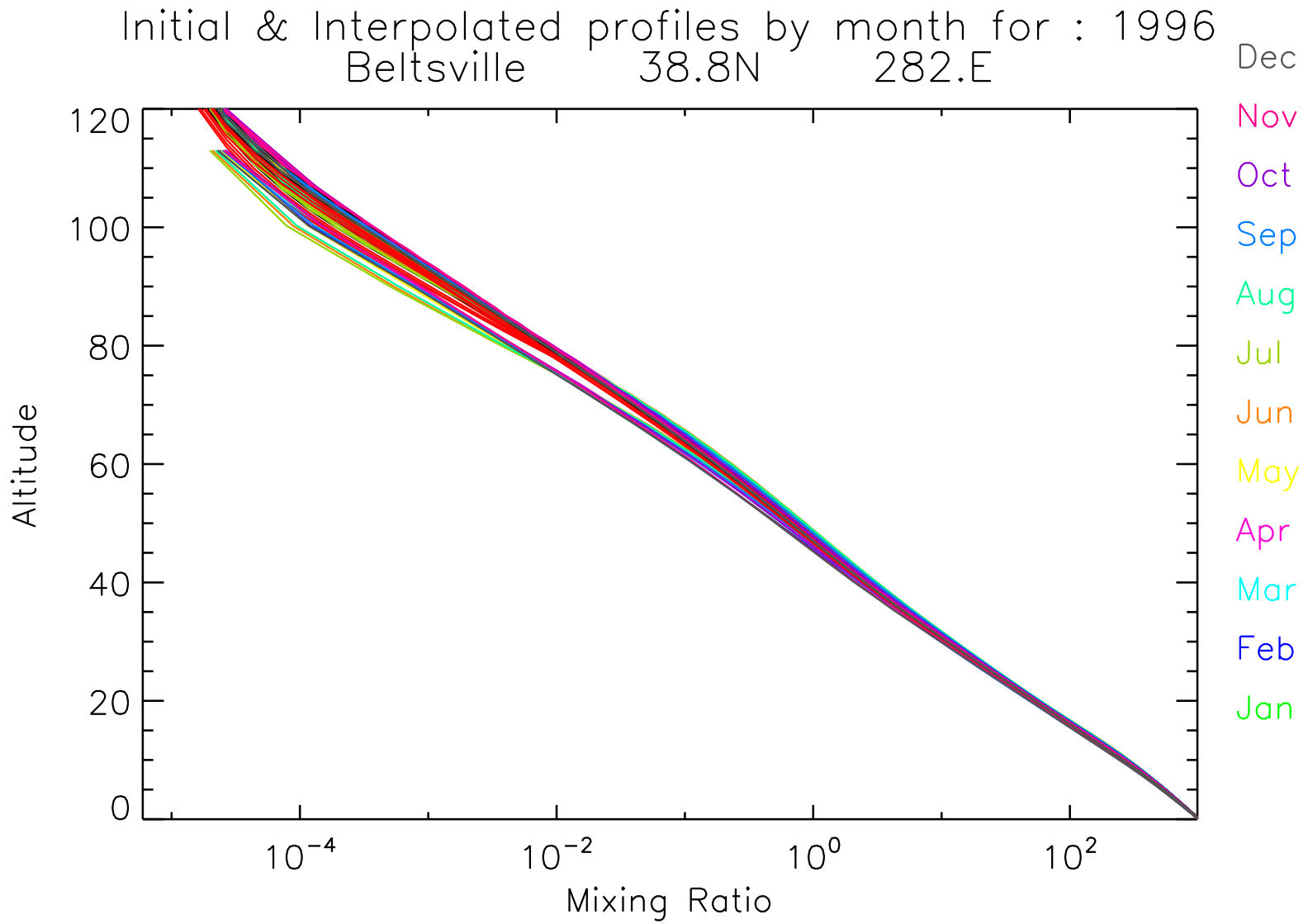
Initial & Interpolated profiles by month for : 1996
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Altitude
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Mixing Ratio
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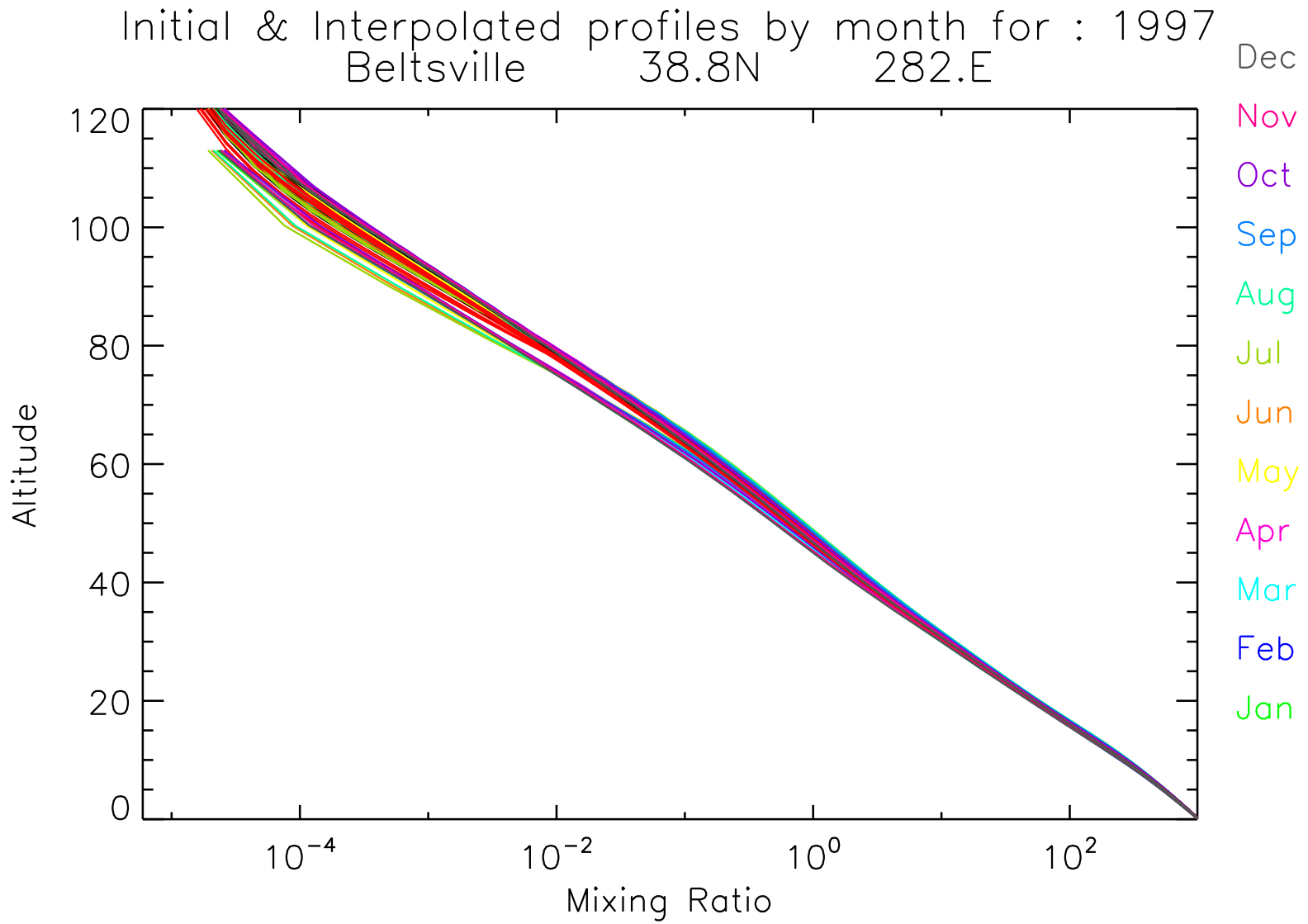
Initial & Interpolated profiles by month for : 1997
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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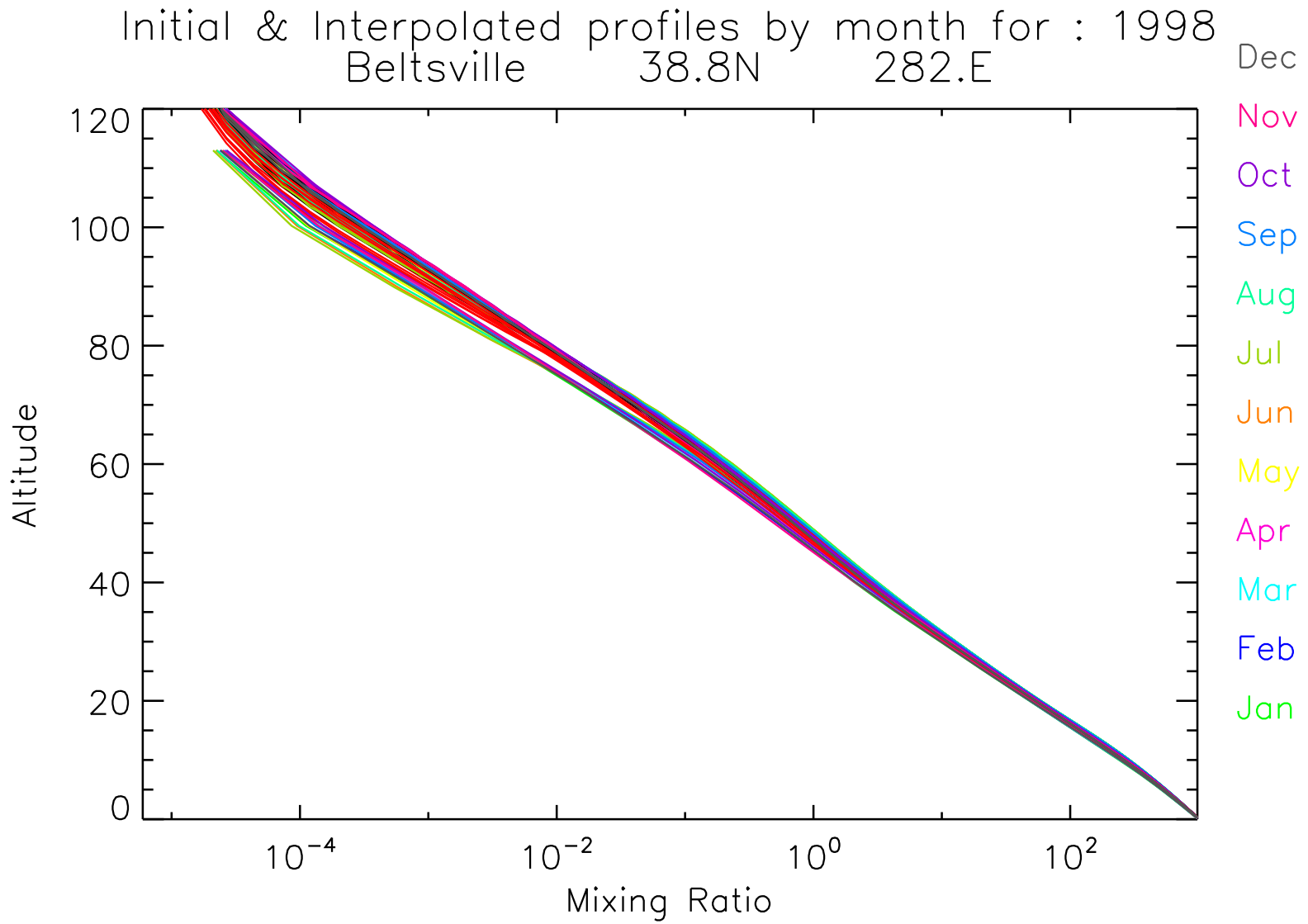
Initial & Interpolated profiles by month for : 1998
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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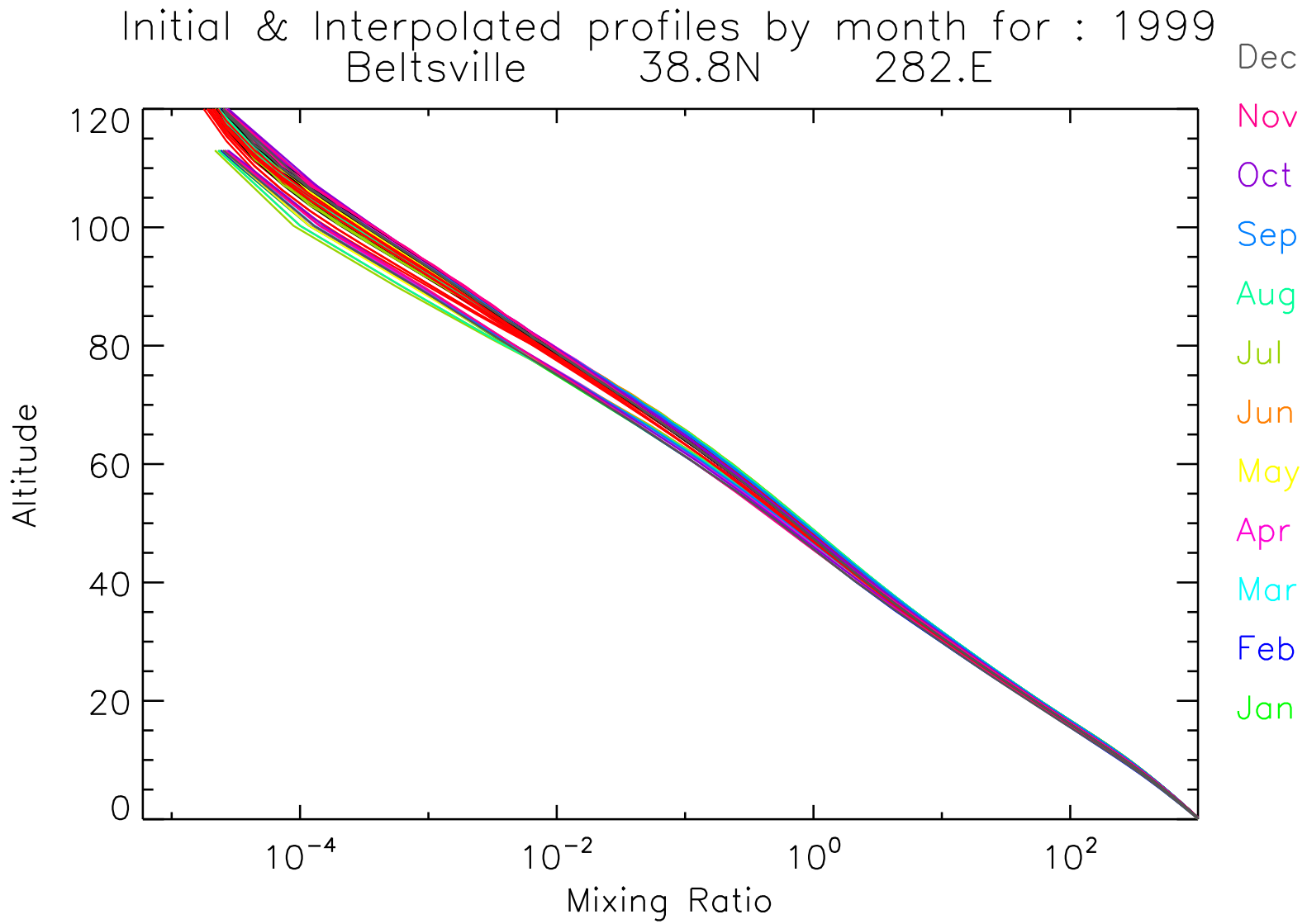
Initial & Interpolated profiles by month for : 1999
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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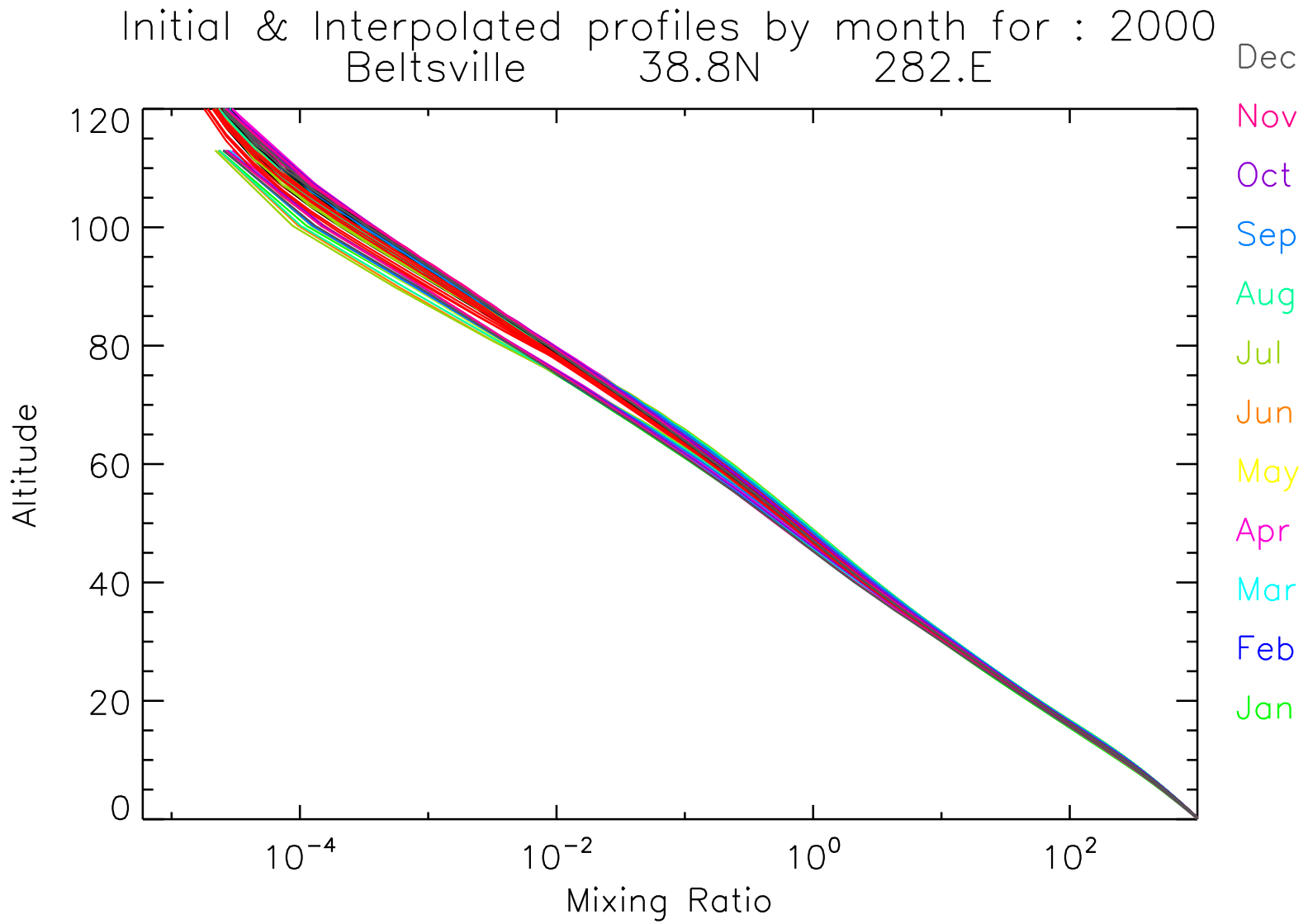
Initial & Interpolated profiles by month for : 2000
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Altitude
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Mixing Ratio
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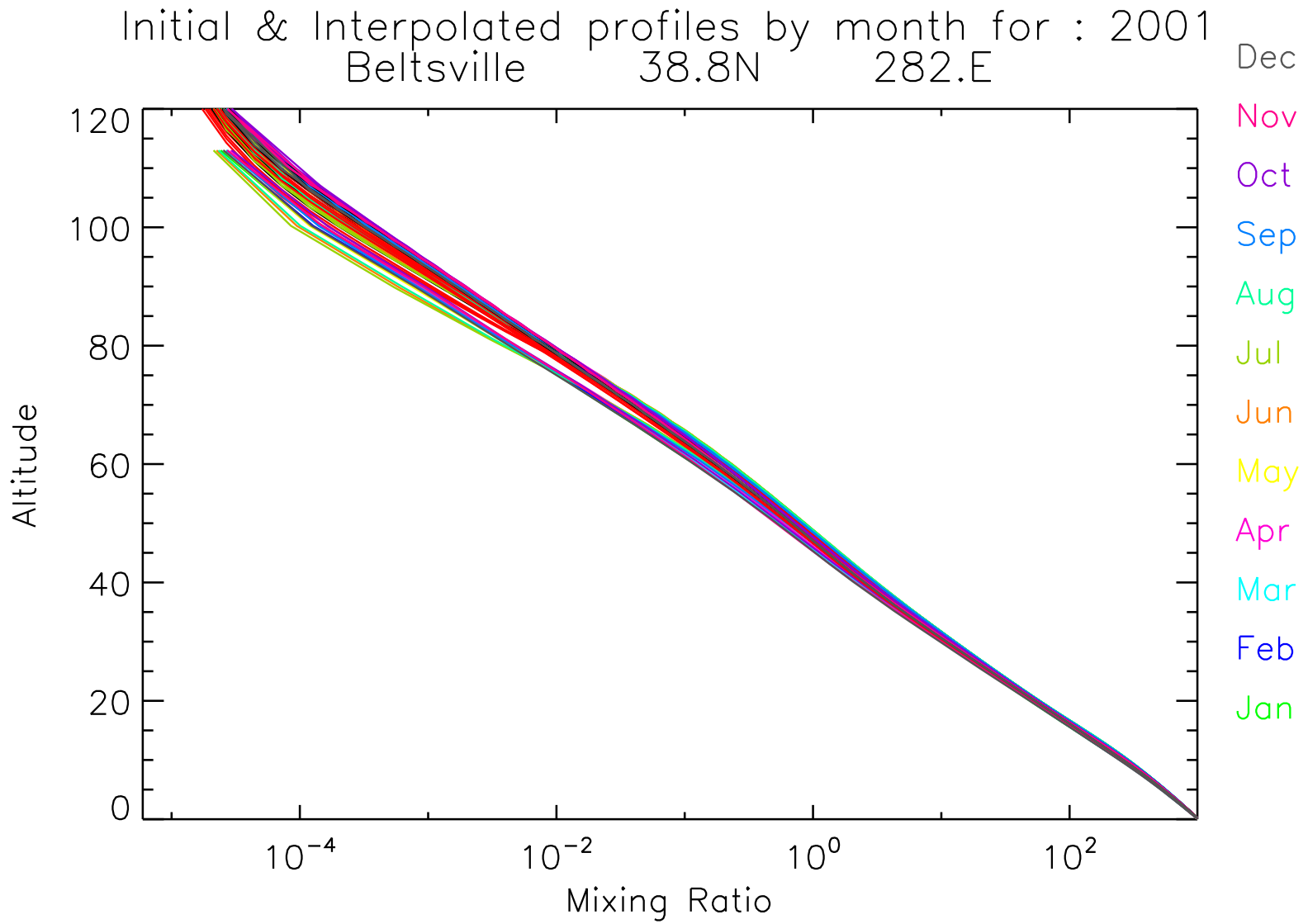
Initial & Interpolated profiles by month for : 2001
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Altitude
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Mixing Ratio
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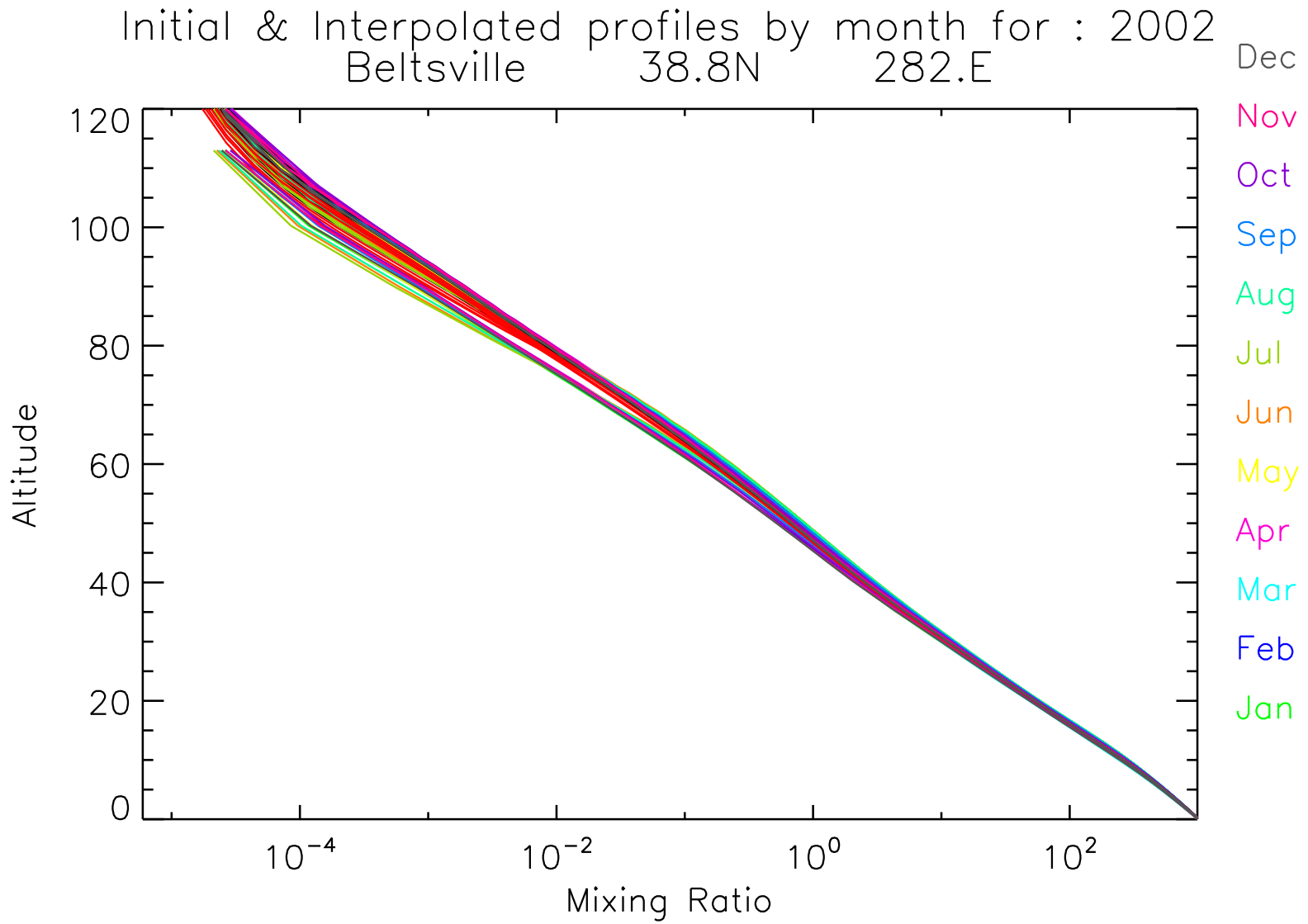
Initial & Interpolated profiles by month for : 2002
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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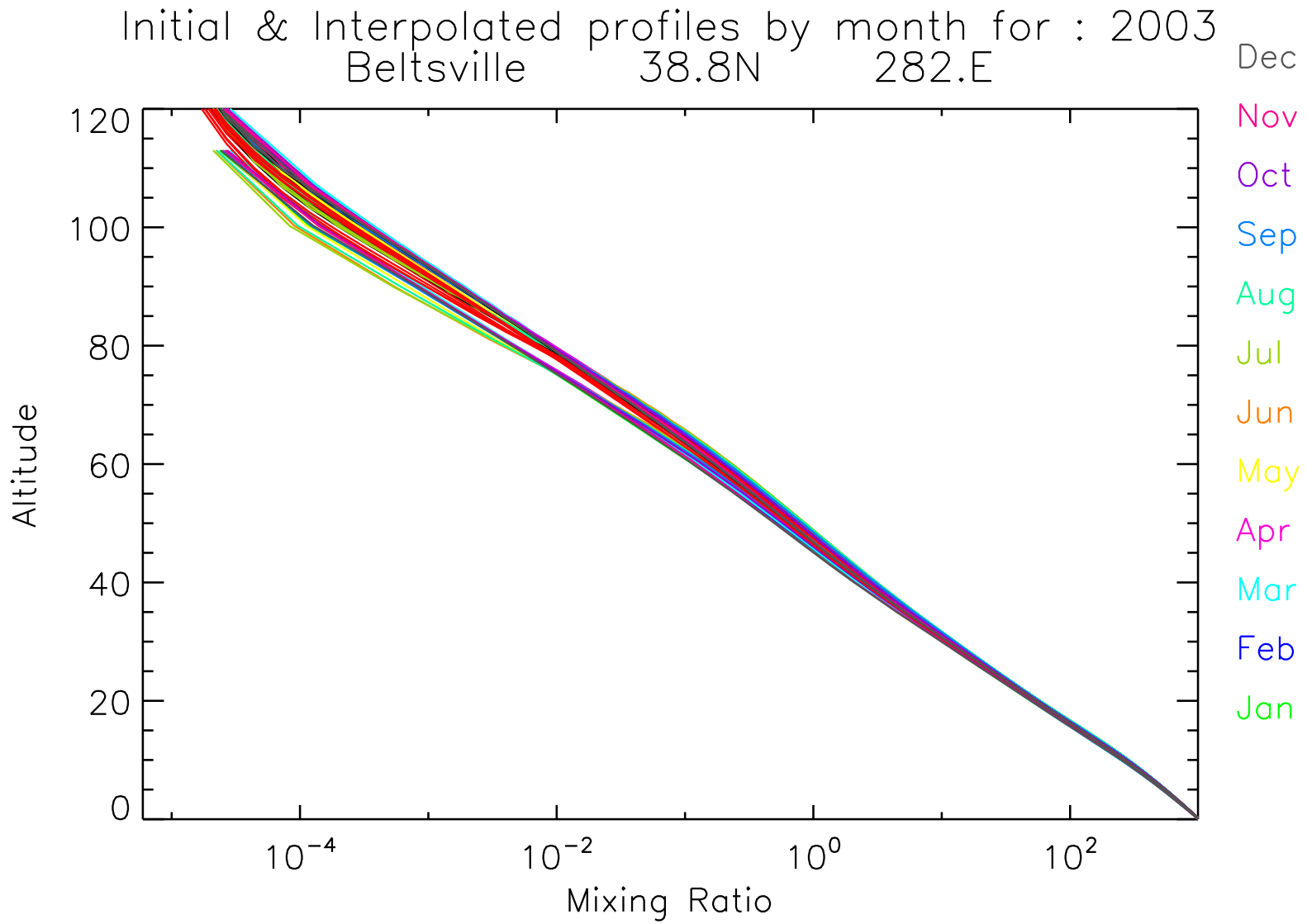
Initial & Interpolated profiles by month for : 2003
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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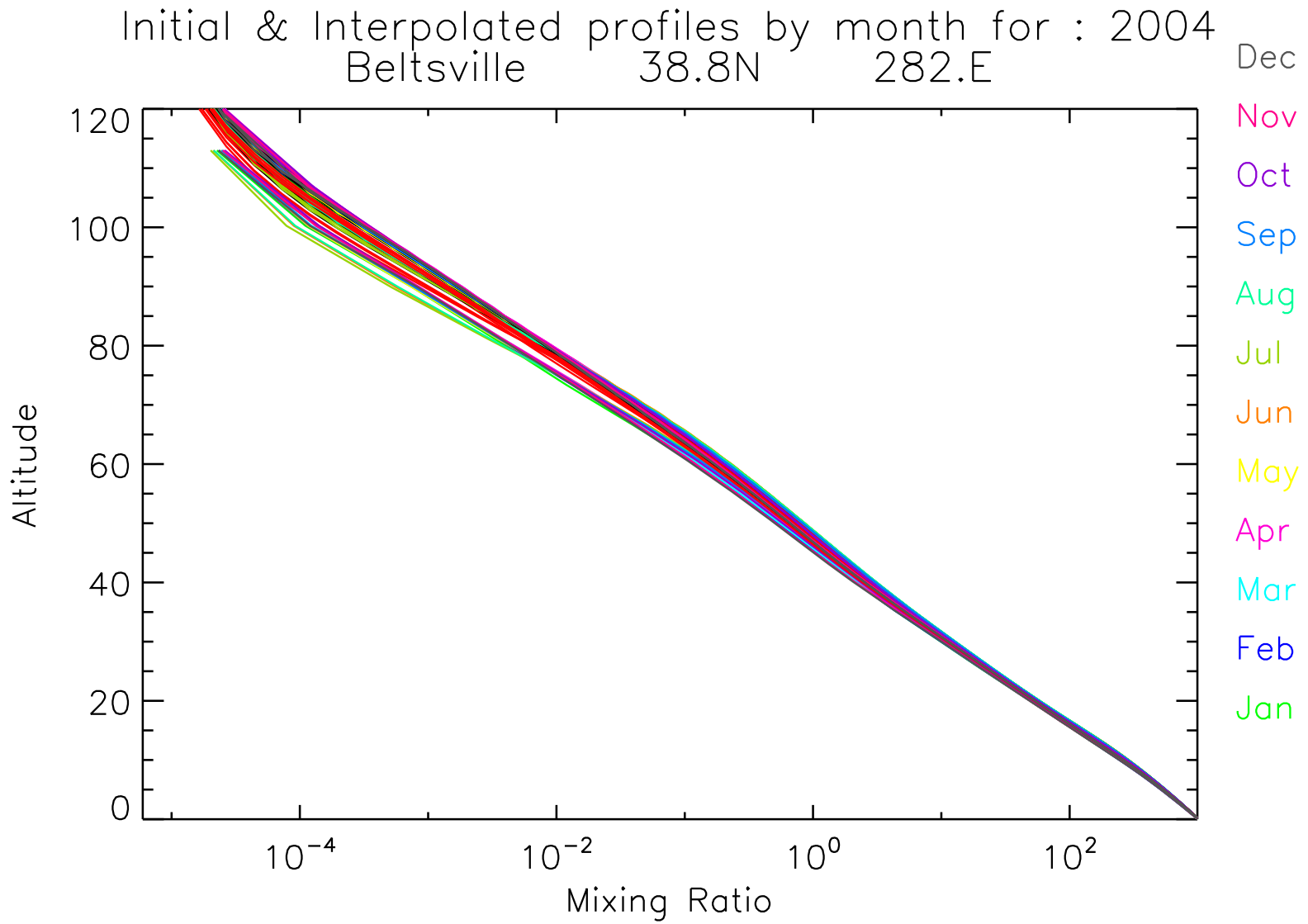
Initial & Interpolated profiles by month for : 2004
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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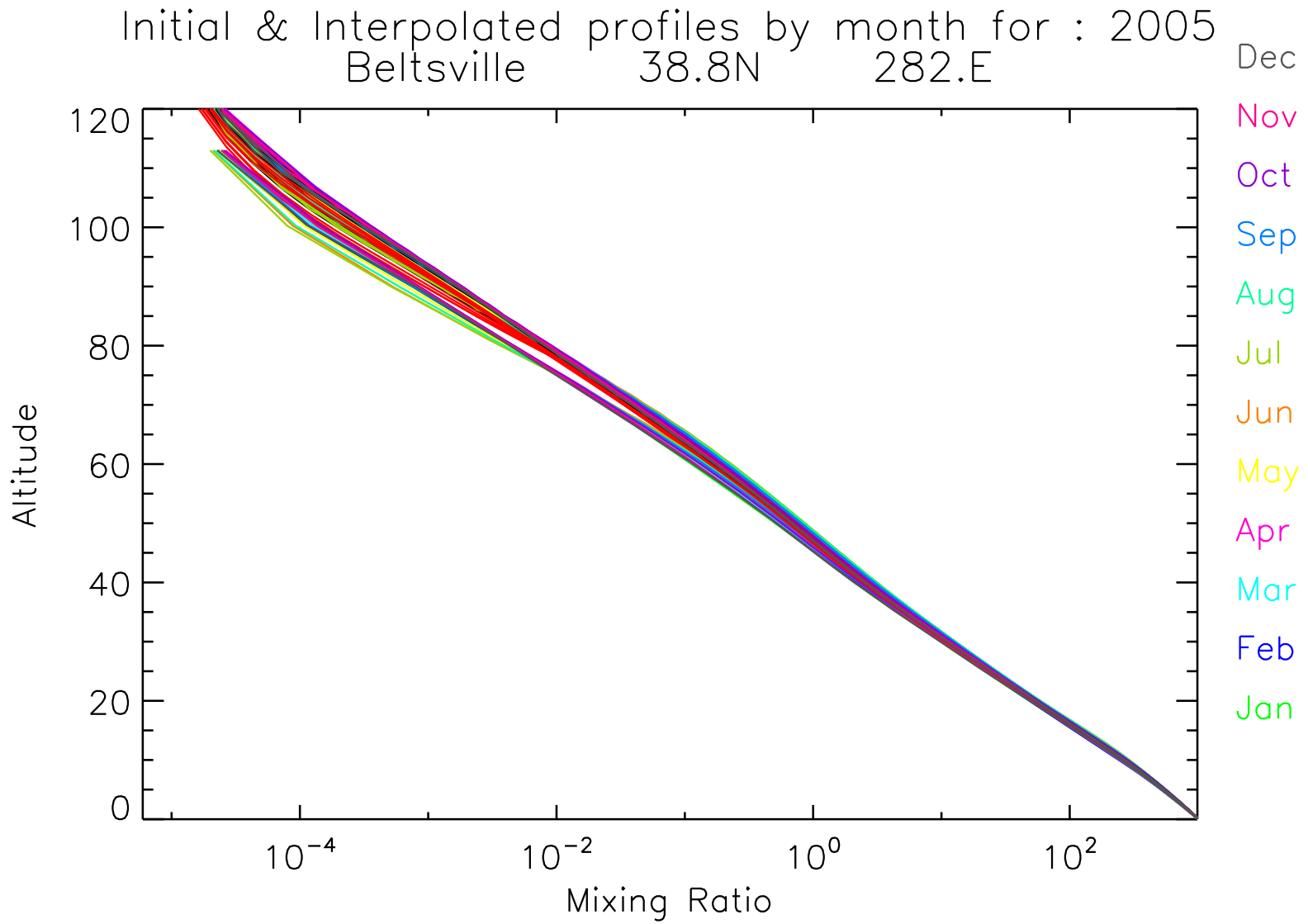
Initial & Interpolated profiles by month for : 2005
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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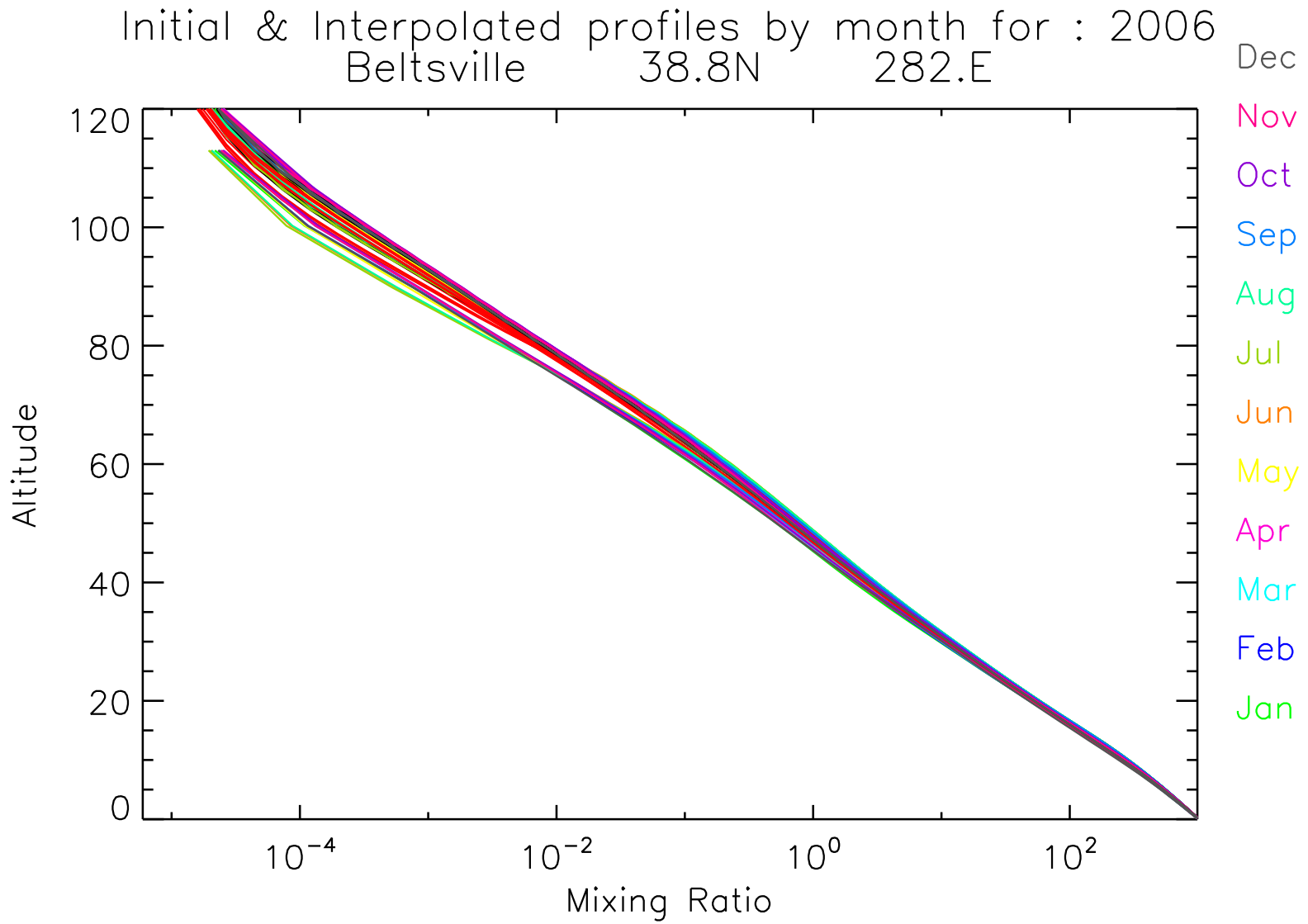
Initial & Interpolated profiles by month for : 2006
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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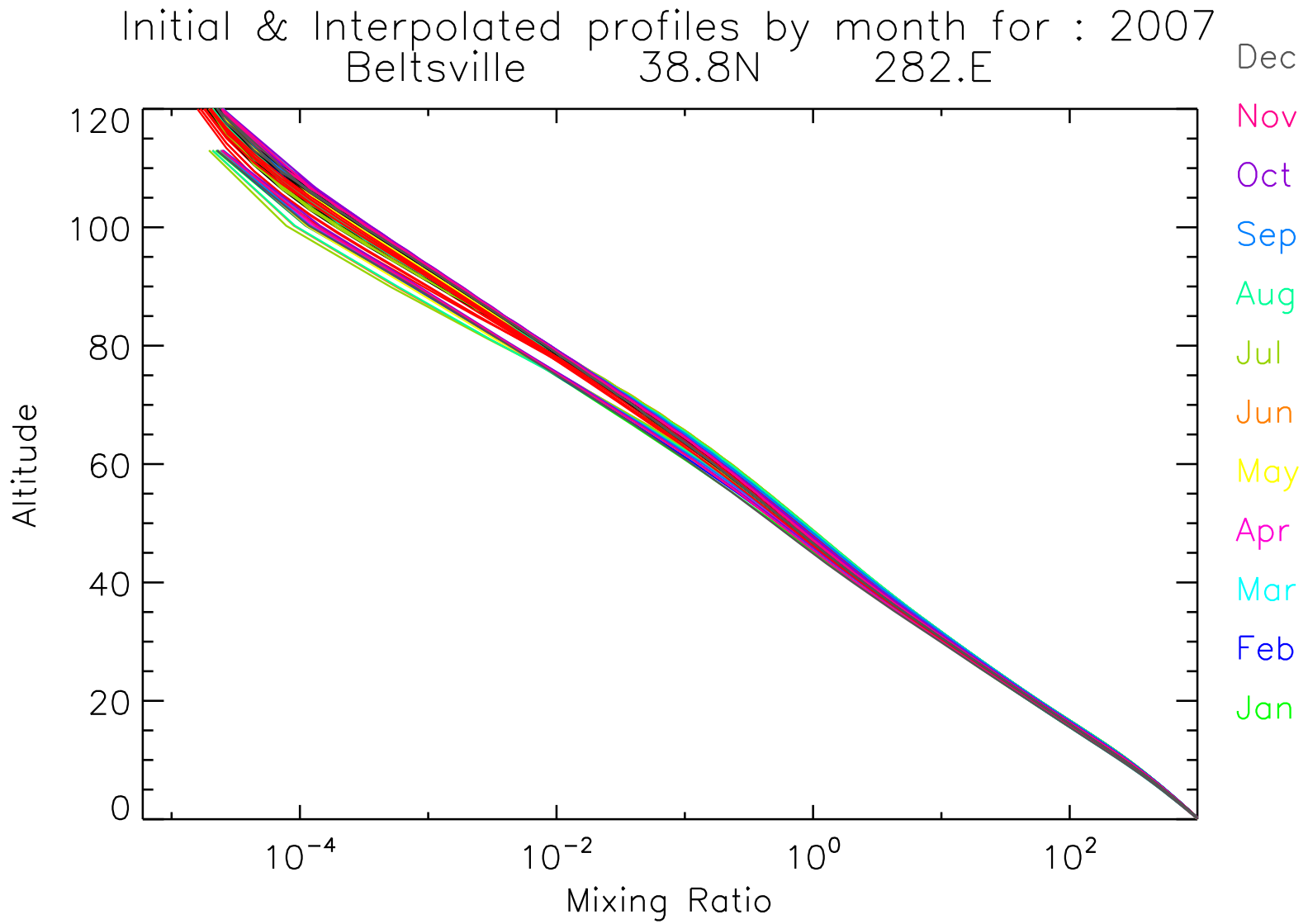
Initial & Interpolated profiles by month for : 2007
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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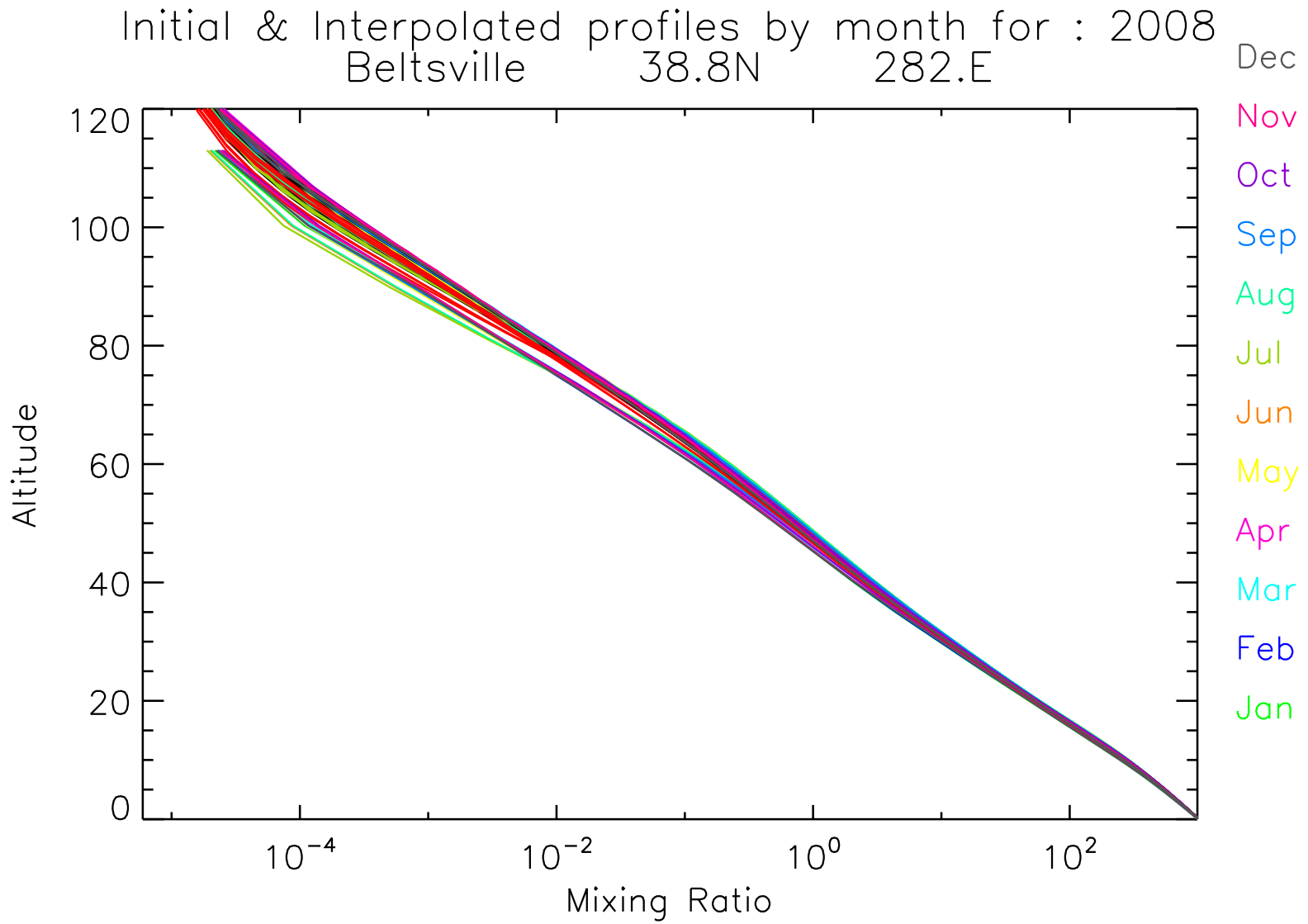
Initial & Interpolated profiles by month for : 2008
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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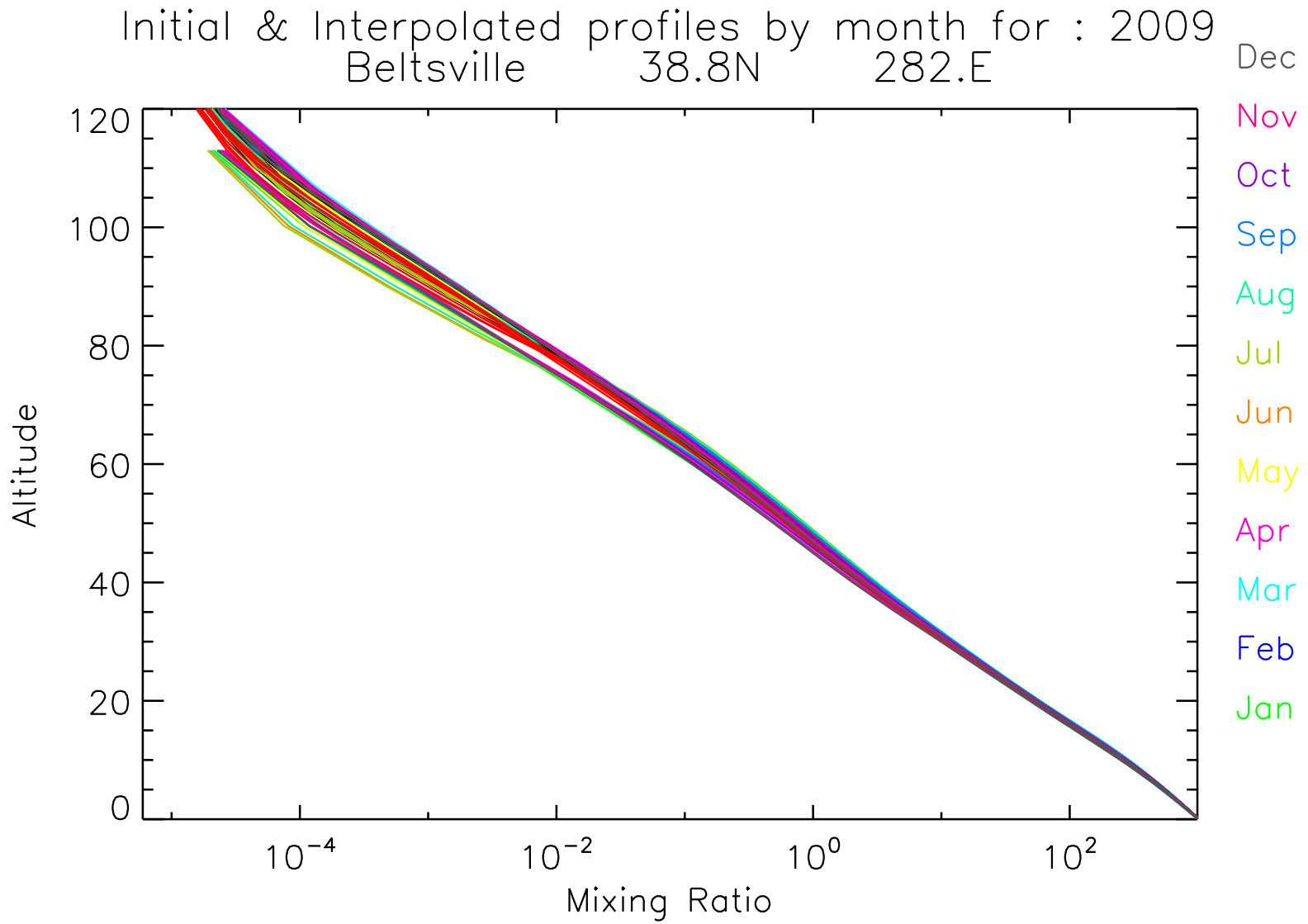
Initial & Interpolated profiles by month for : 2009
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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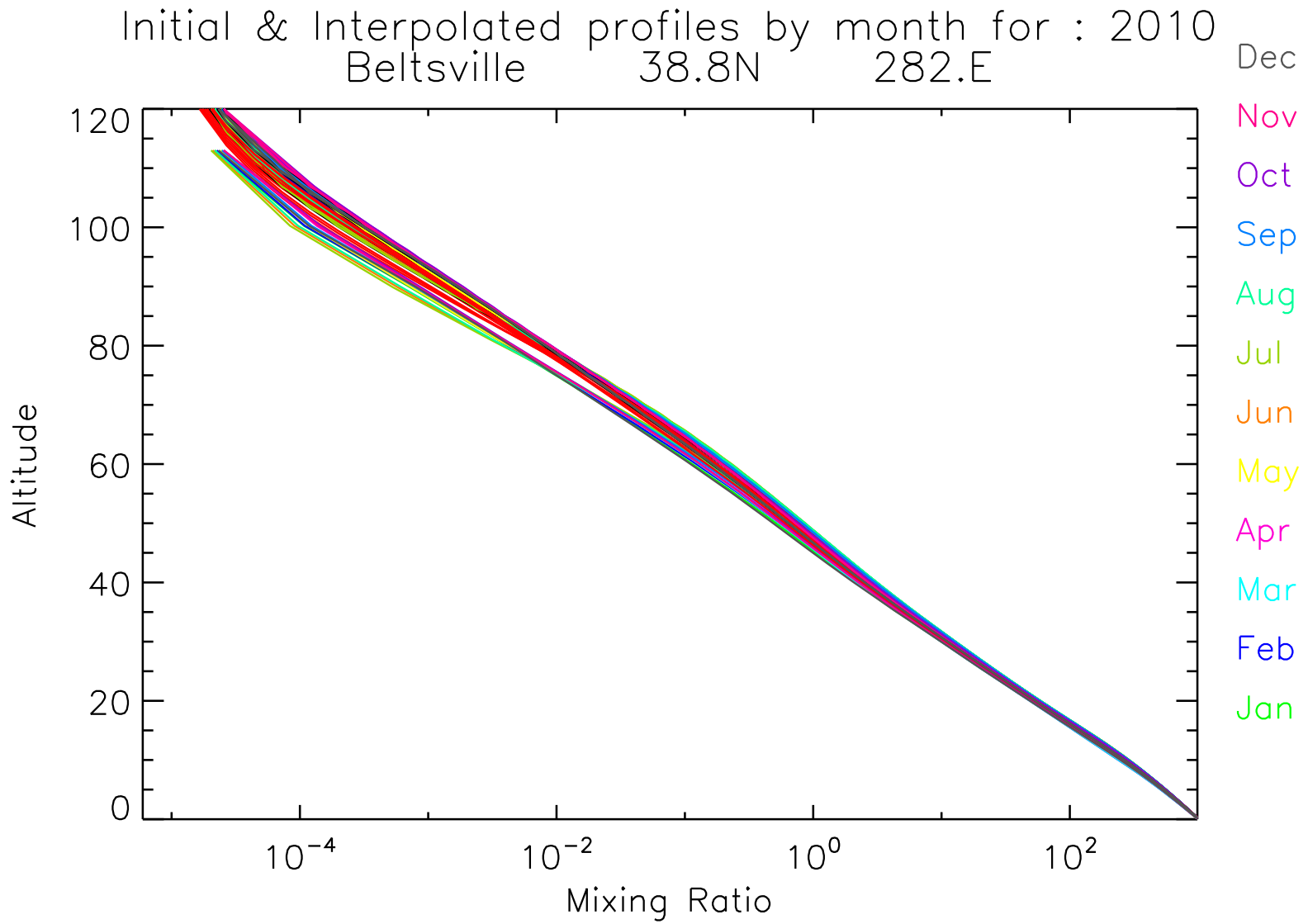
Initial & Interpolated profiles by month for : 2010
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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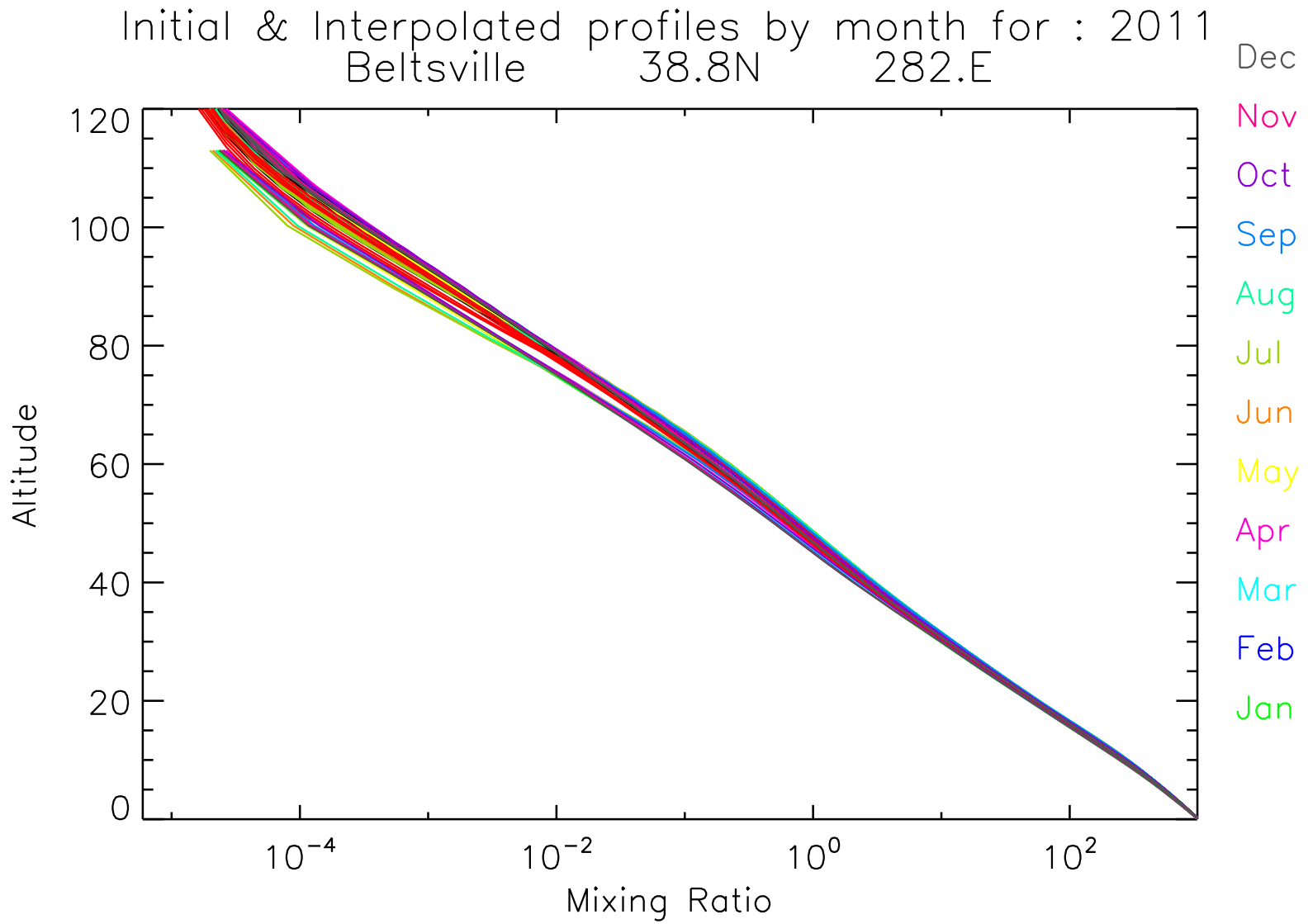
Initial & Interpolated profiles by month for : 2011
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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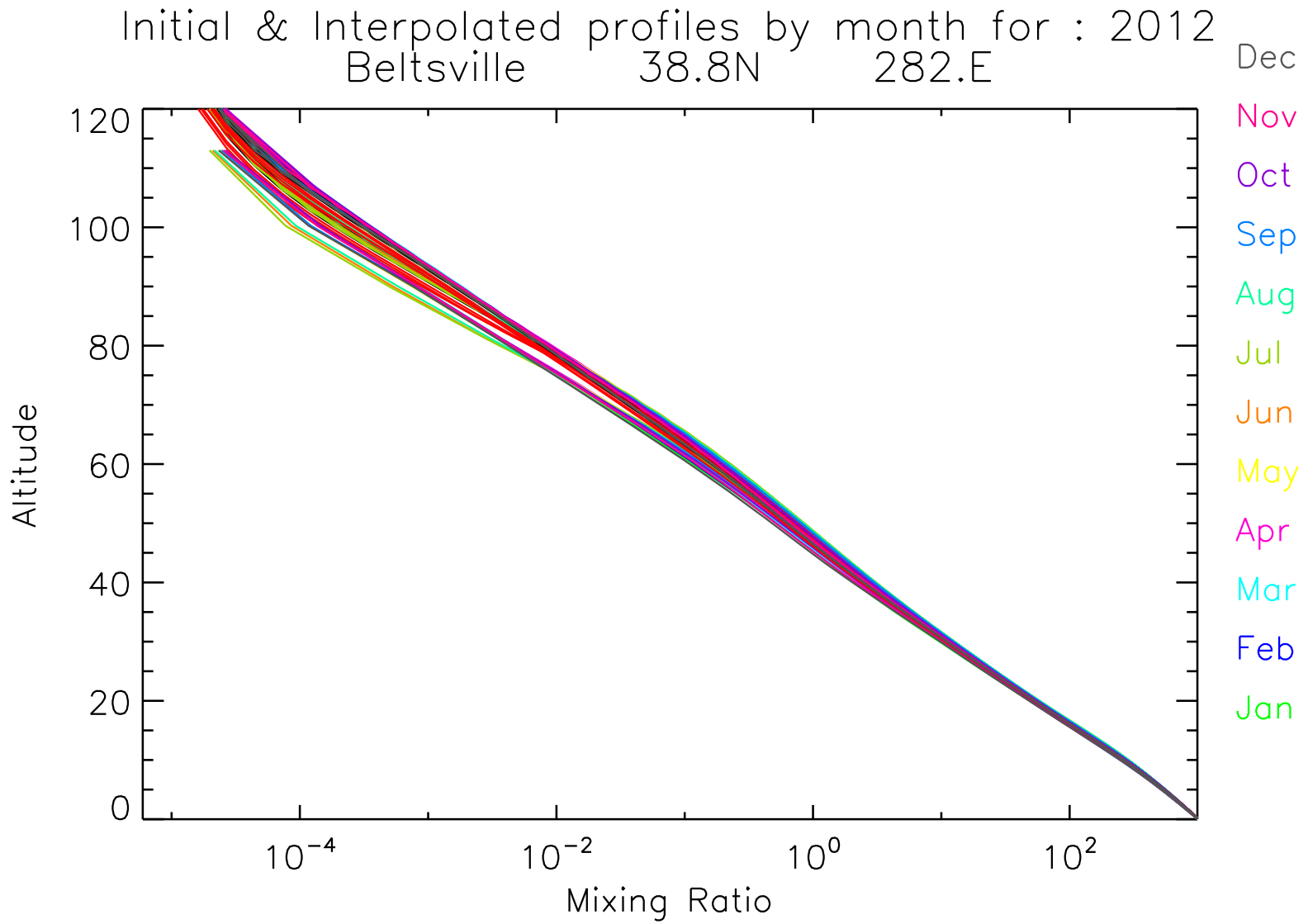
Initial & Interpolated profiles by month for : 2012
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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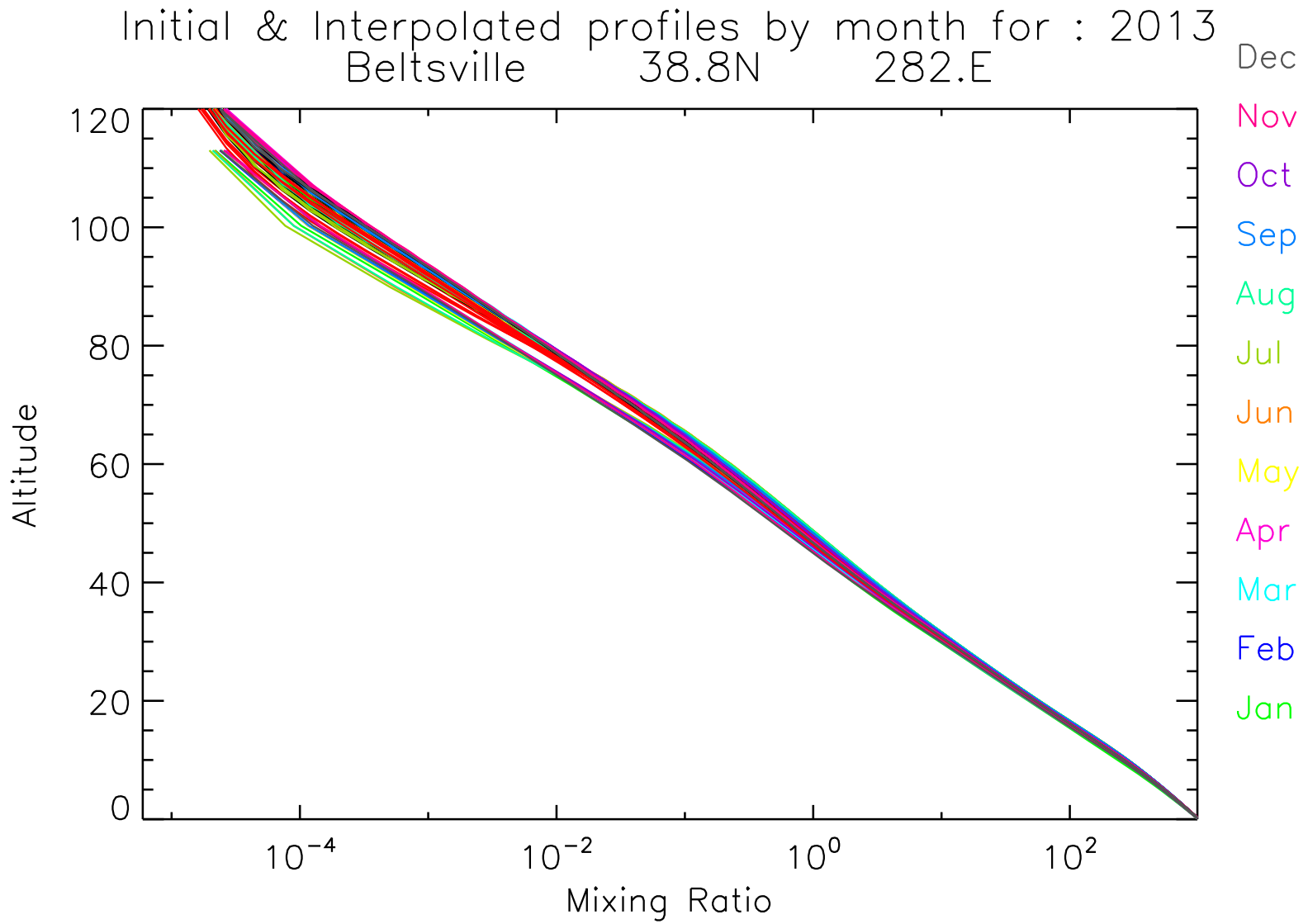
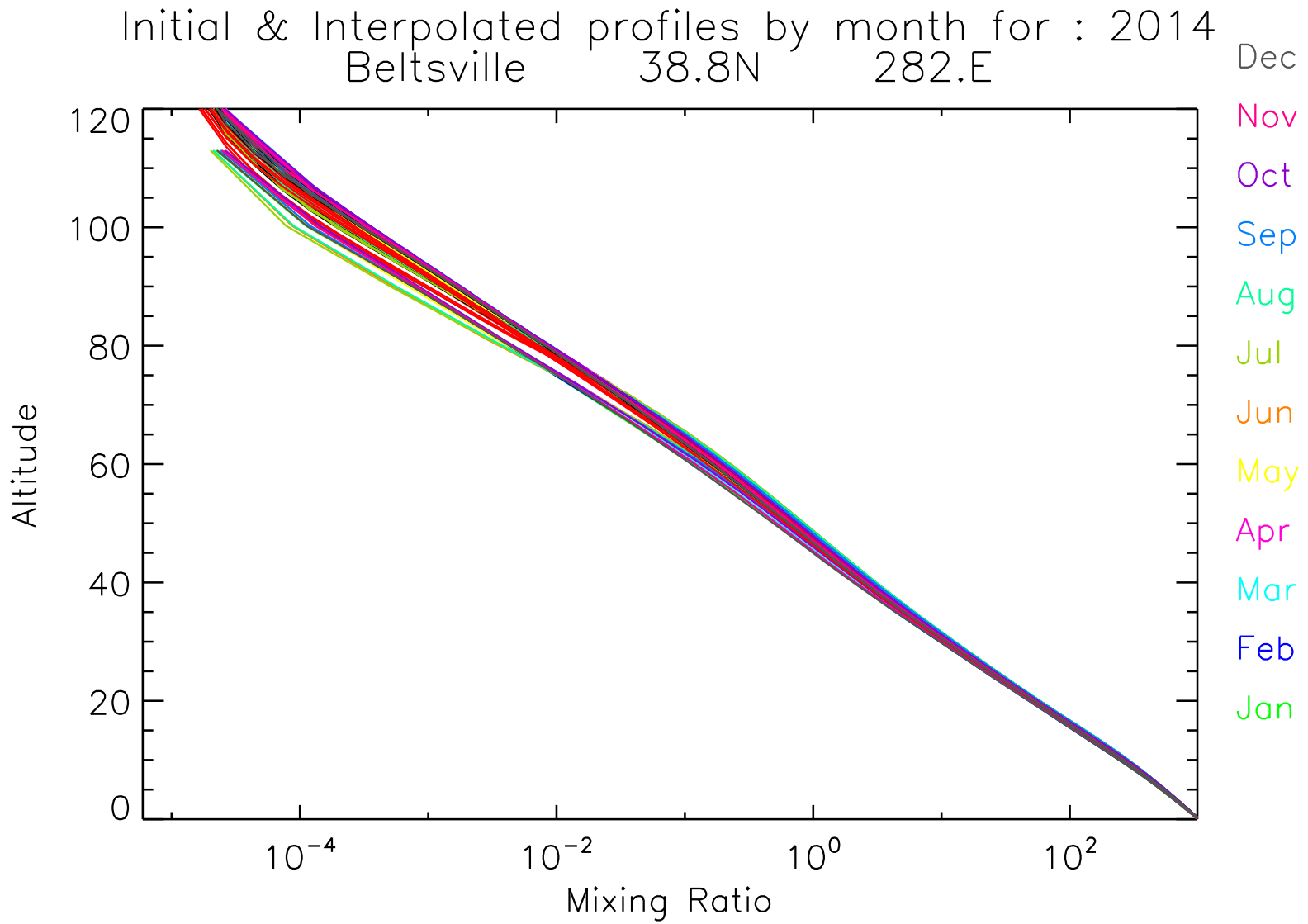
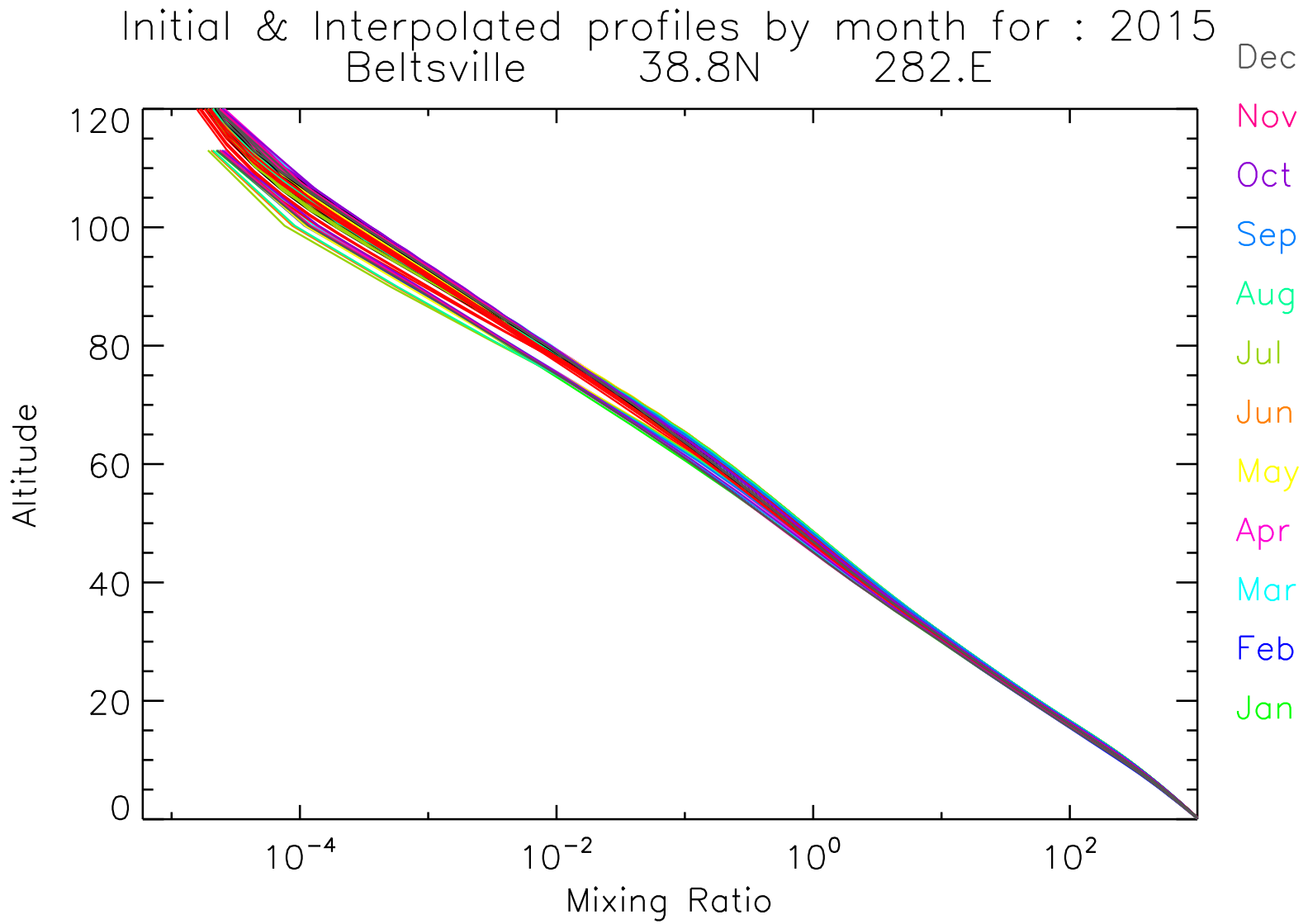
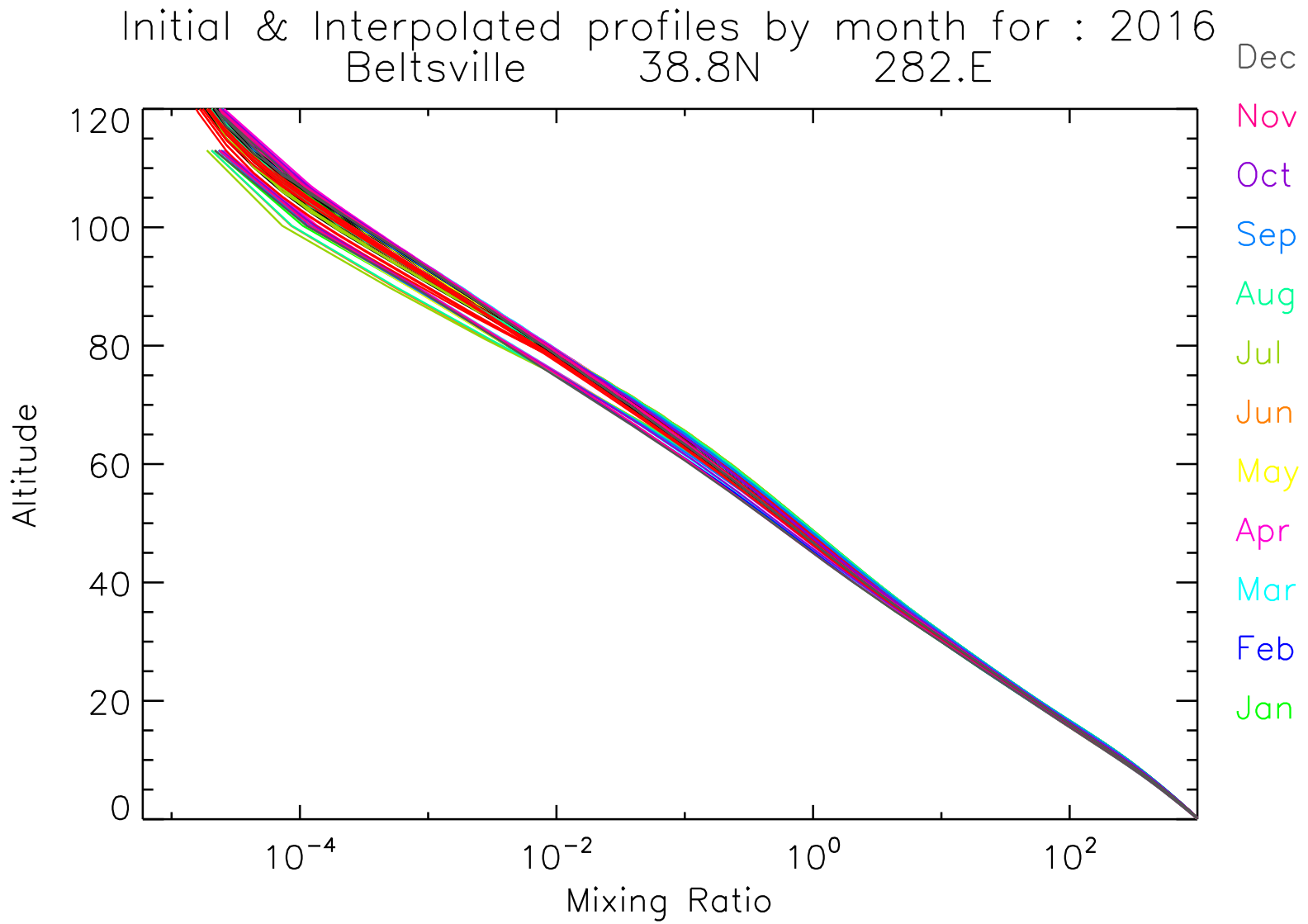
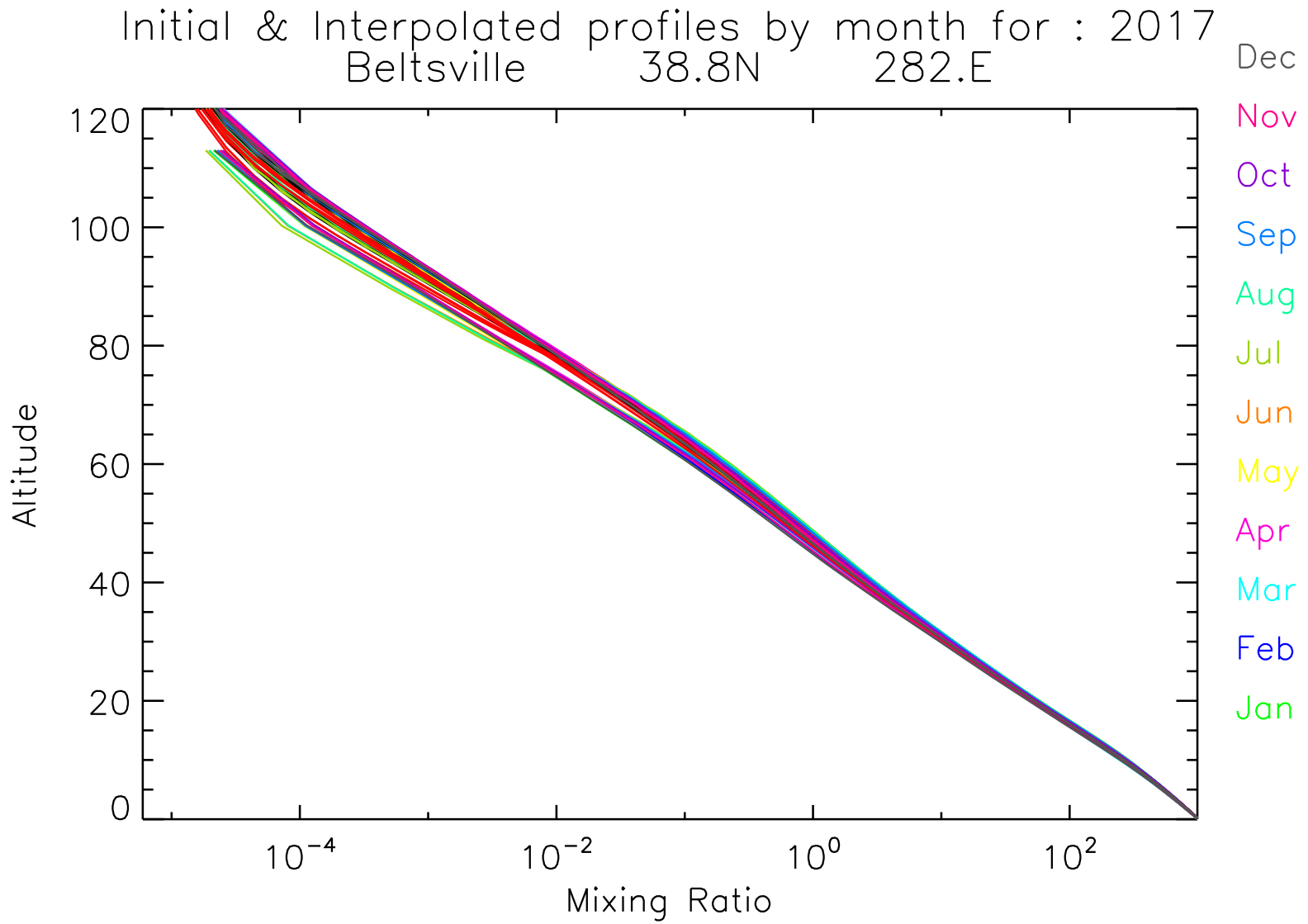
Feb
Jan

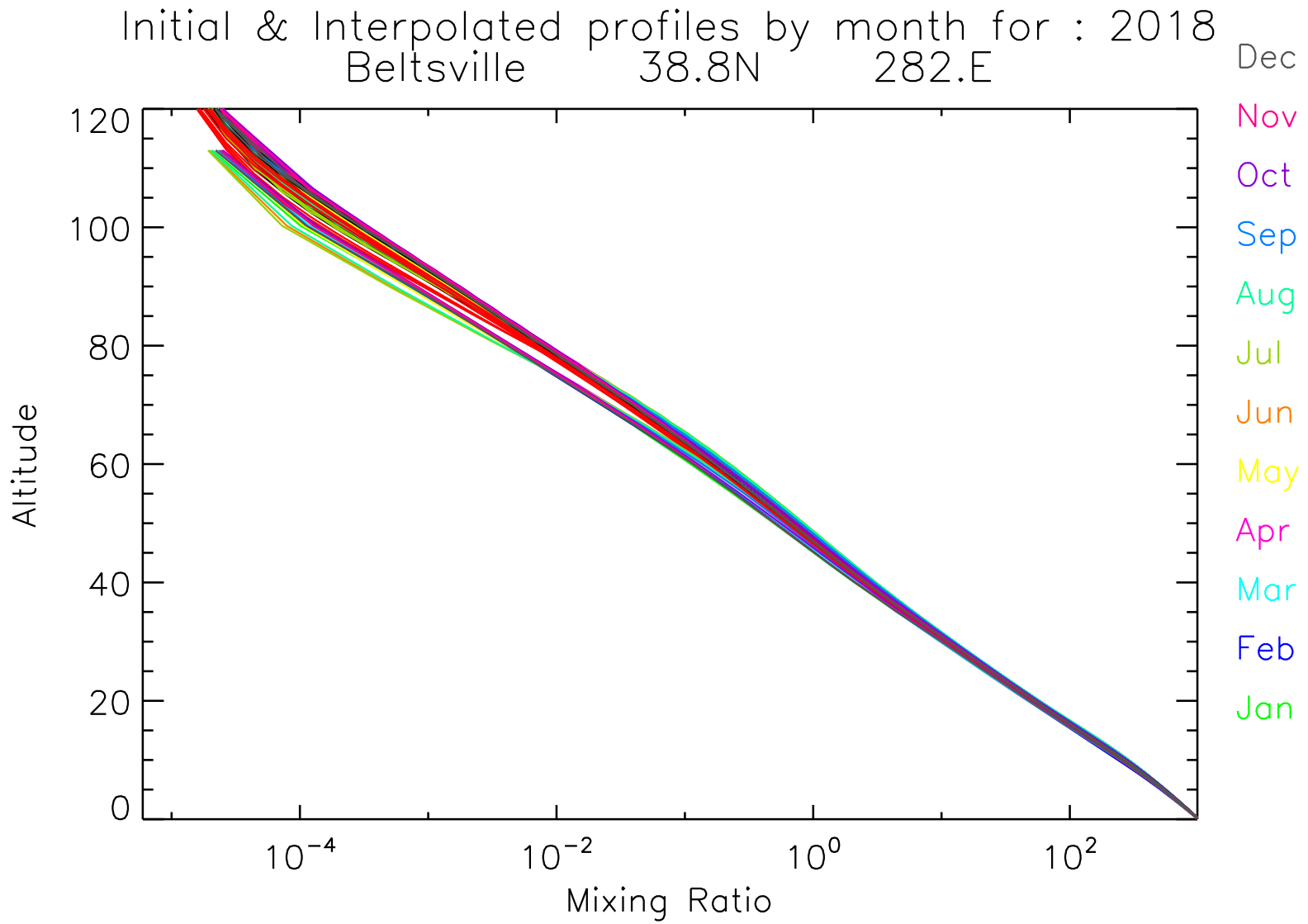

Initial & Interpolated profiles by month for : 2013
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-4}
10^{-2}
10^{0}
10^{2}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

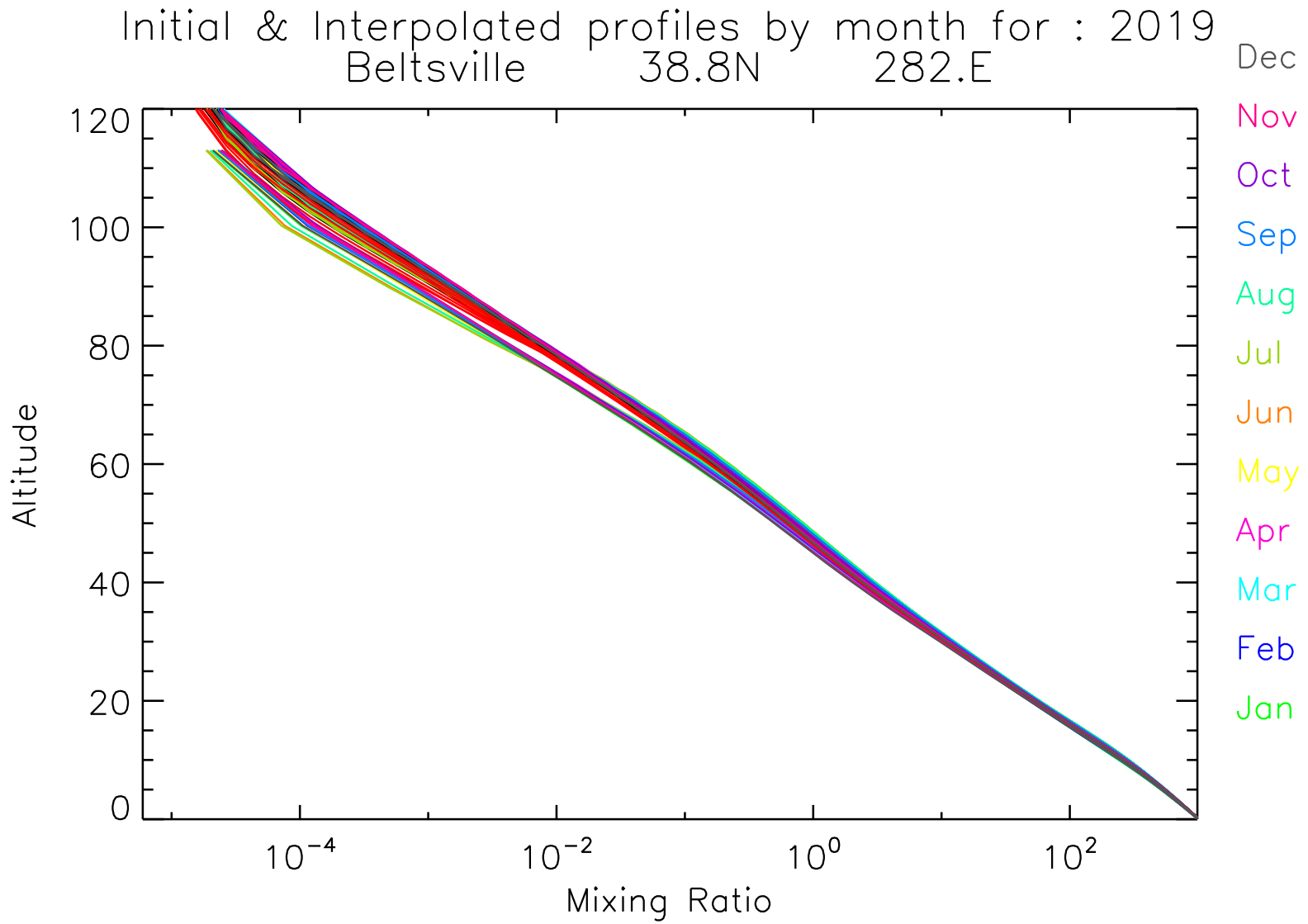

Initial & Interpolated profiles by month for : 2014
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-4}
10^{-2}
10^{0}
10^{2}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

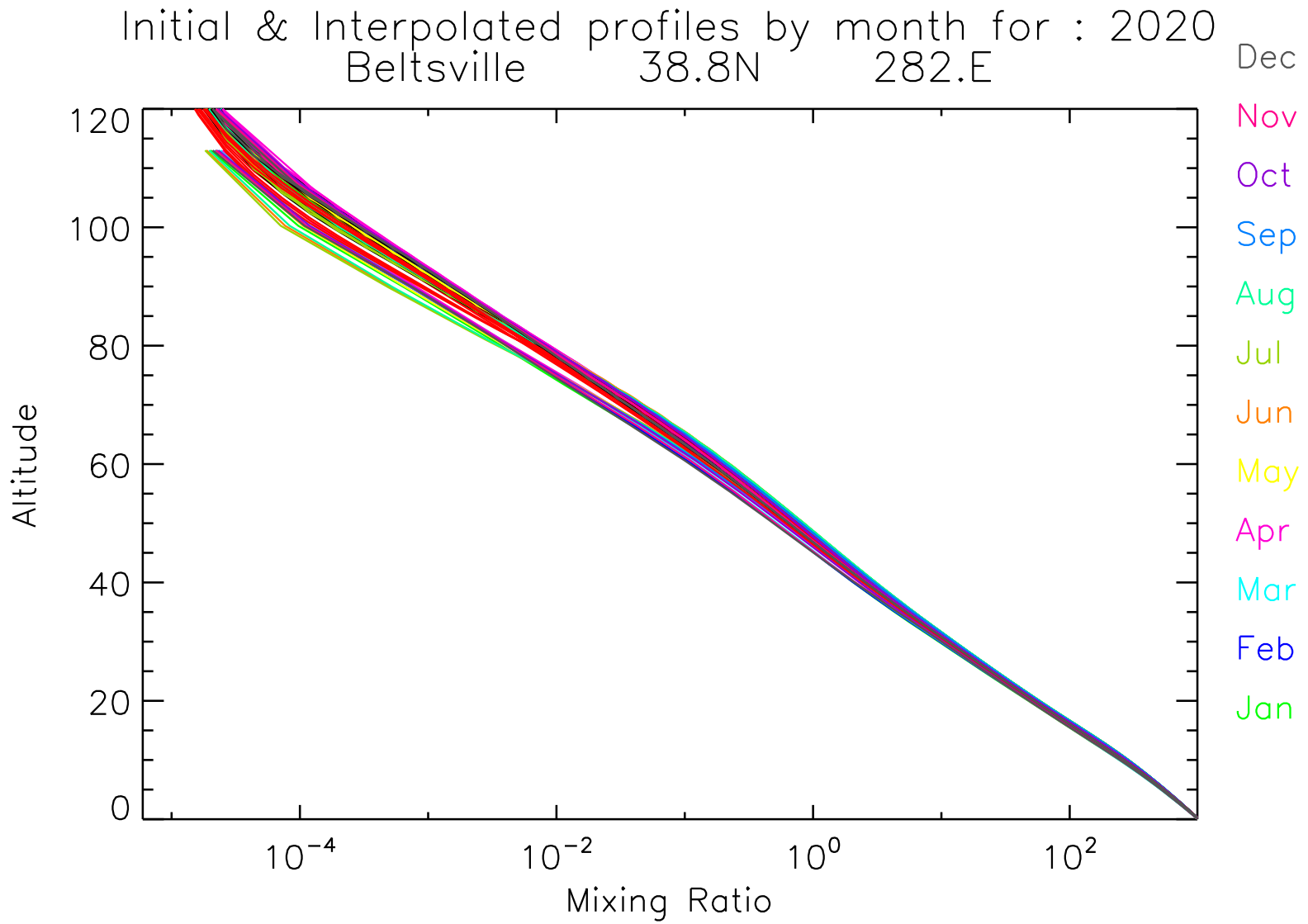

Initial & Interpolated profiles by month for : 2015
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-4}
10^{-2}
10^{0}
10^{2}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

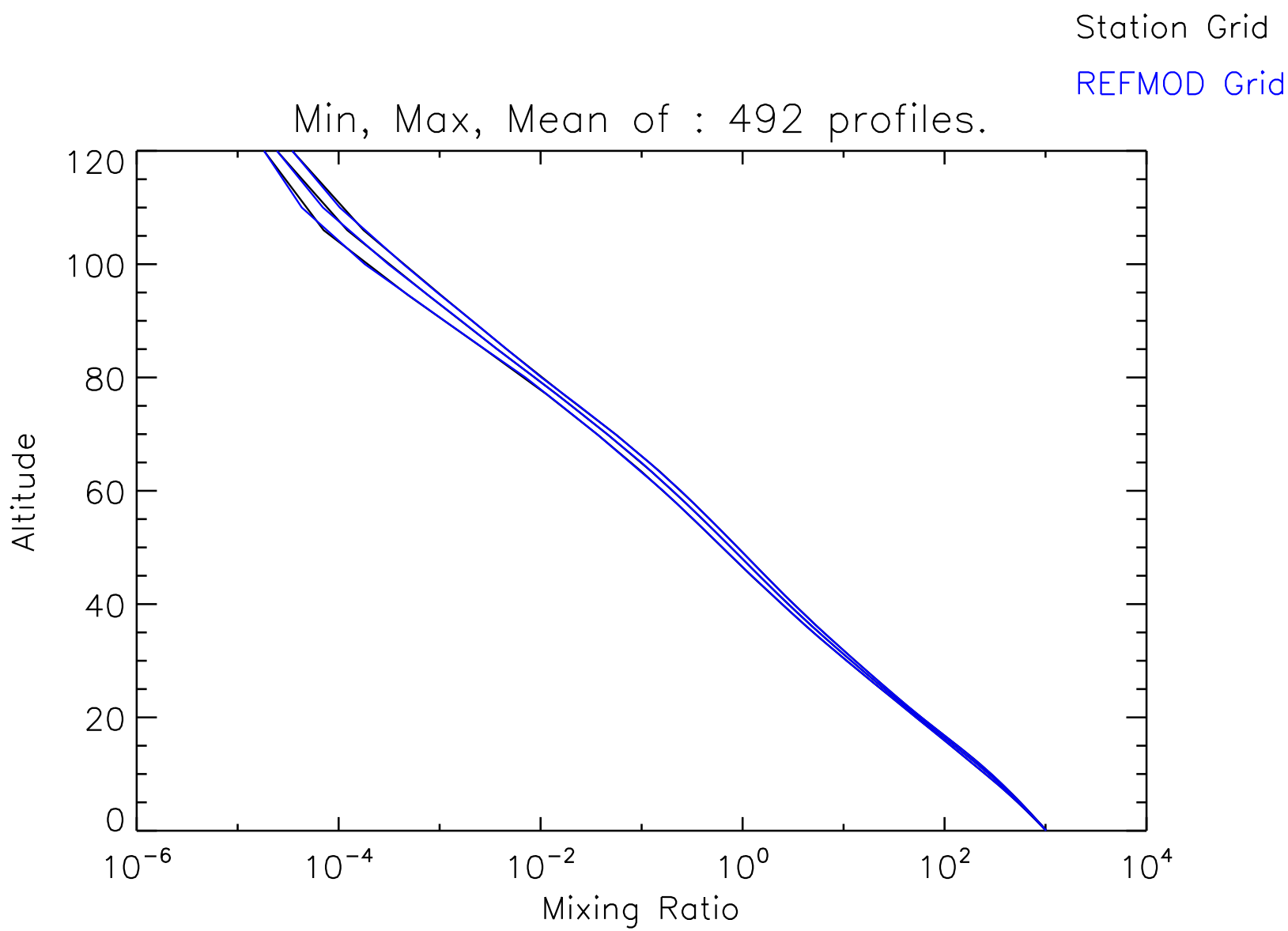

Initial & Interpolated profiles by month for : 2016
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-4}
10^{-2}
10^{0}
10^{2}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

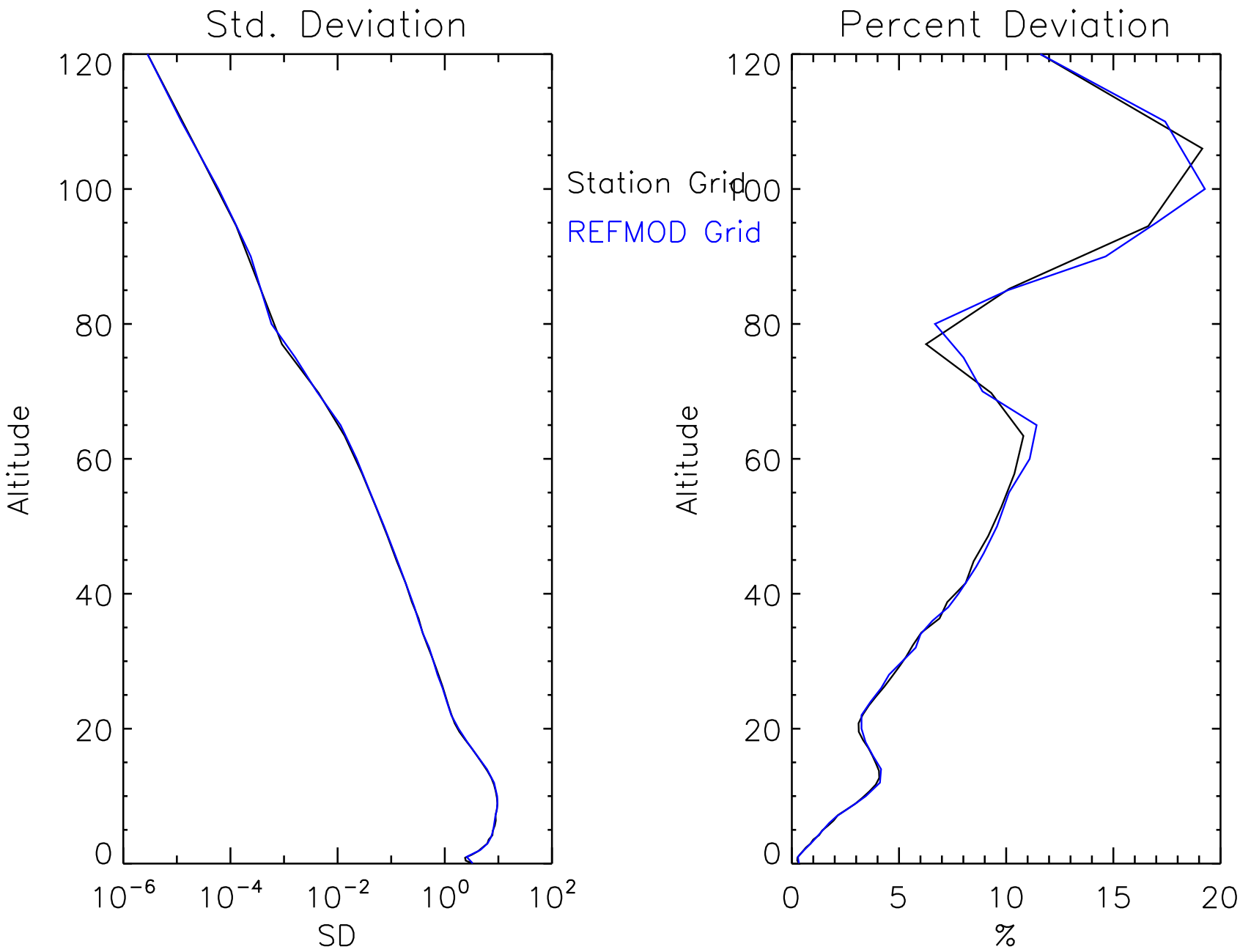

Initial & Interpolated profiles by month for : 2017
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-4}
10^{-2}
10^{0}
10^{2}
Mixing Ratio

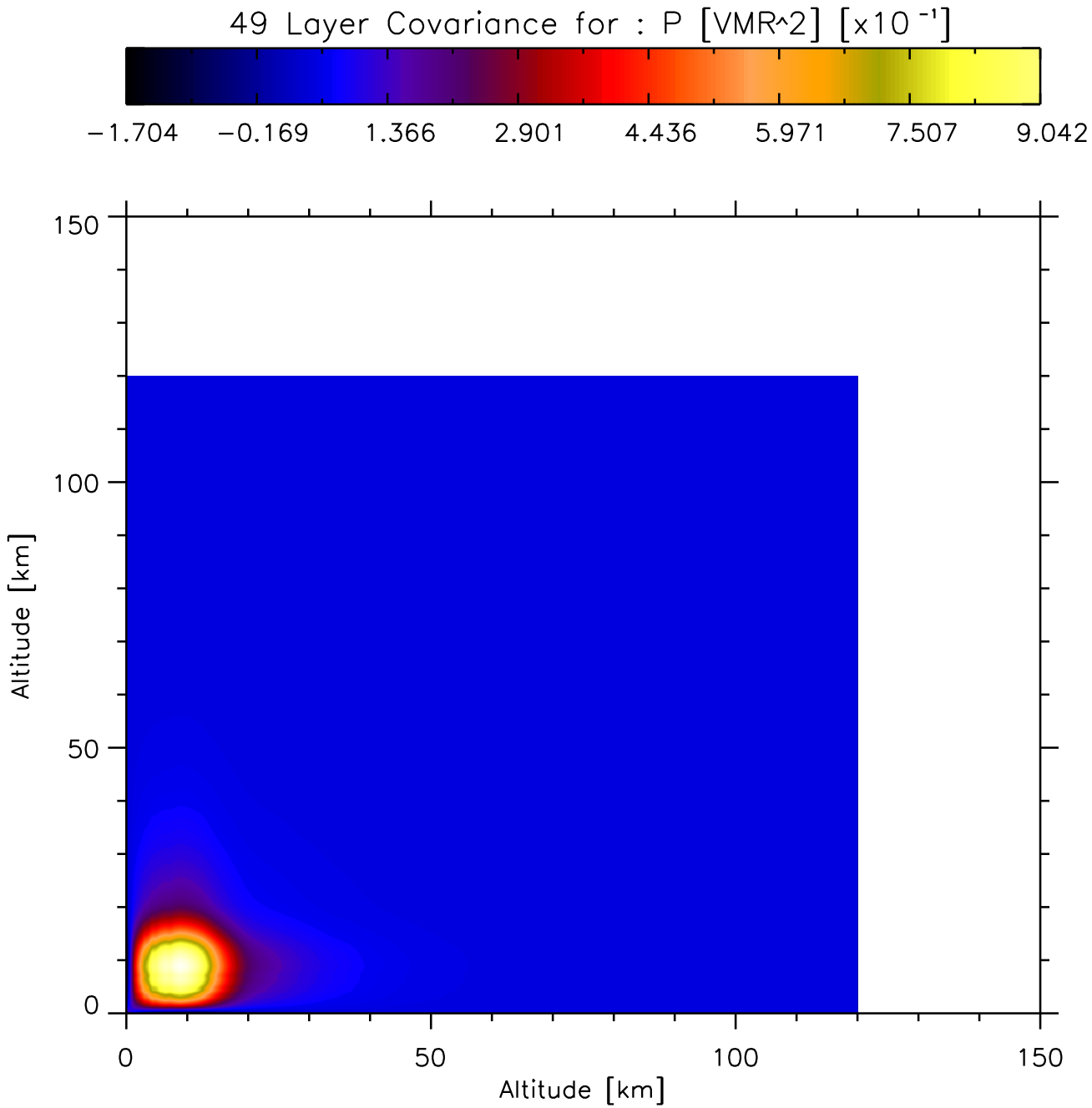

Initial & Interpolated profiles by month for : 2018
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-4}
10^{-2}
10^{0}
10^{2}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan


Initial & Interpolated profiles by month for : 2019
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-4}
10^{-2}
10^{0}
10^{2}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

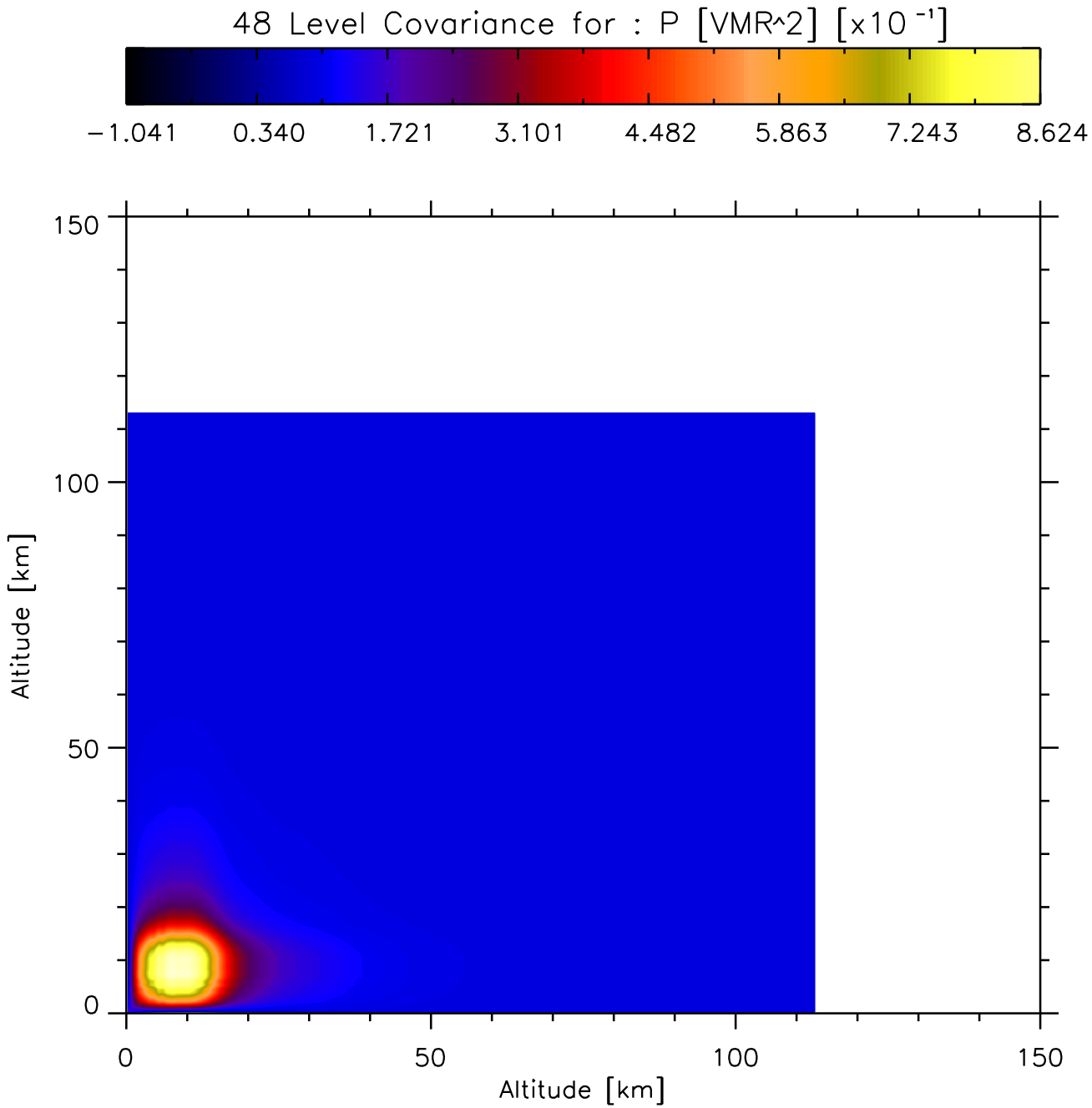

Initial & Interpolated profiles by month for : 2020
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-4}
10^{-2}
10^{0}
10^{2}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

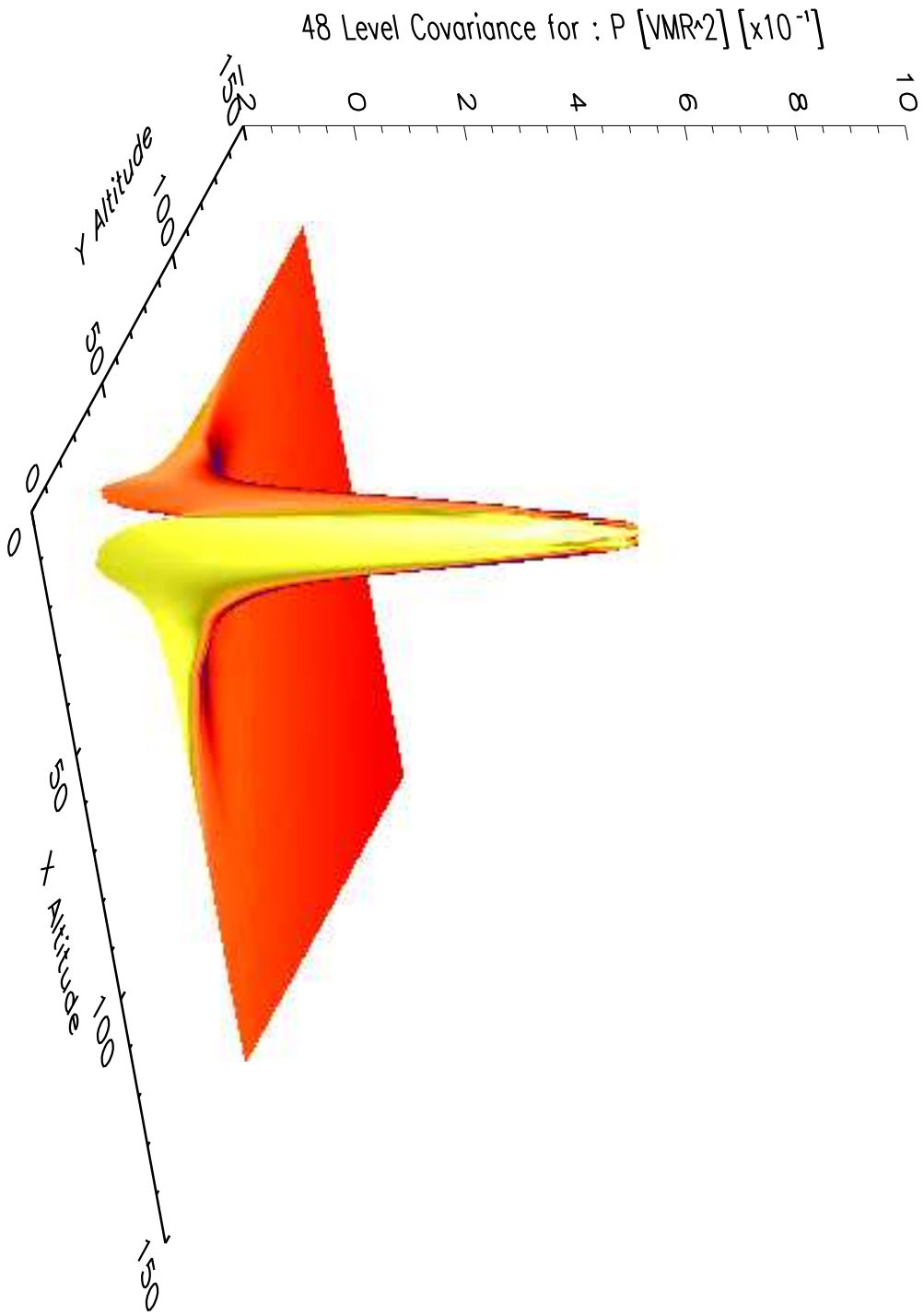

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
120
100
80
60
40
20
0
Altitude
10^{-6}
10^{-4}
10^{-2}
10^{0}
10^{2}
10^{4}
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
10^{-6}
10^{-4}
10^{-2}
10^{0}
10^{2}
SD
0
5
10
15
20
%


49 Layer Covariance for : P [VMR^2] [x10 -1]
−1.704
−0.169
1.366
2.901
4.436
5.971
7.507
9.042
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

49 Layer Covariance for : P [VMR^2] [x10^-1]
Y Altitude
X Altitude
0
50
100
150
0
2
4
6
8
10
12


48 Level Covariance for : P [VMR^2] [x10 -1]
-1.041
0.340
1.721
3.101
4.482
5.863
7.243
8.624
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


48 Level Covariance for : P [VMR^2] [x10^-1]
0
2
4
6
8
10
Y Altitude
0
50
100
150
0
50
100
150
X Altitude