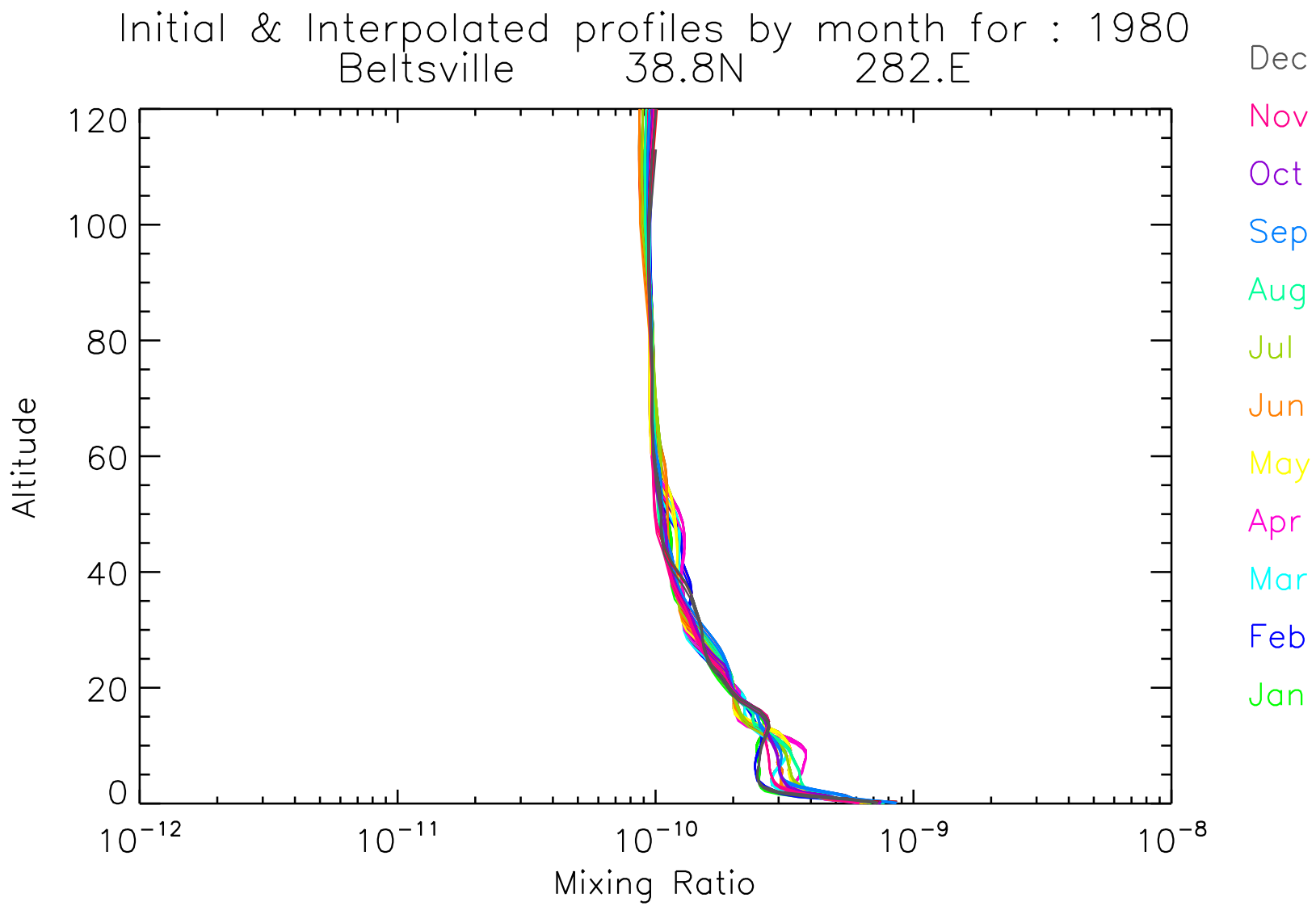
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Altitude
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Mixing Ratio
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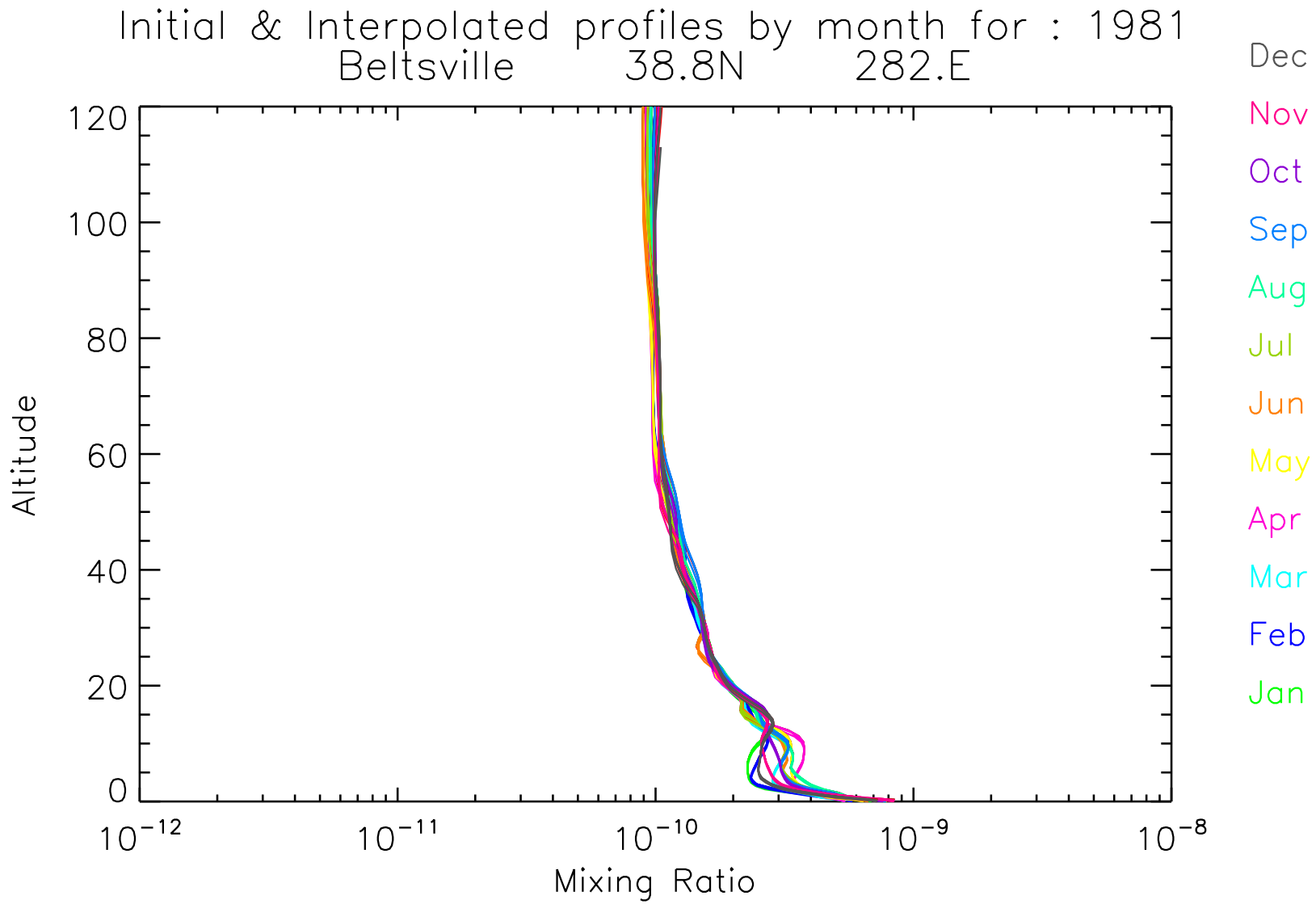
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Altitude
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Mixing Ratio
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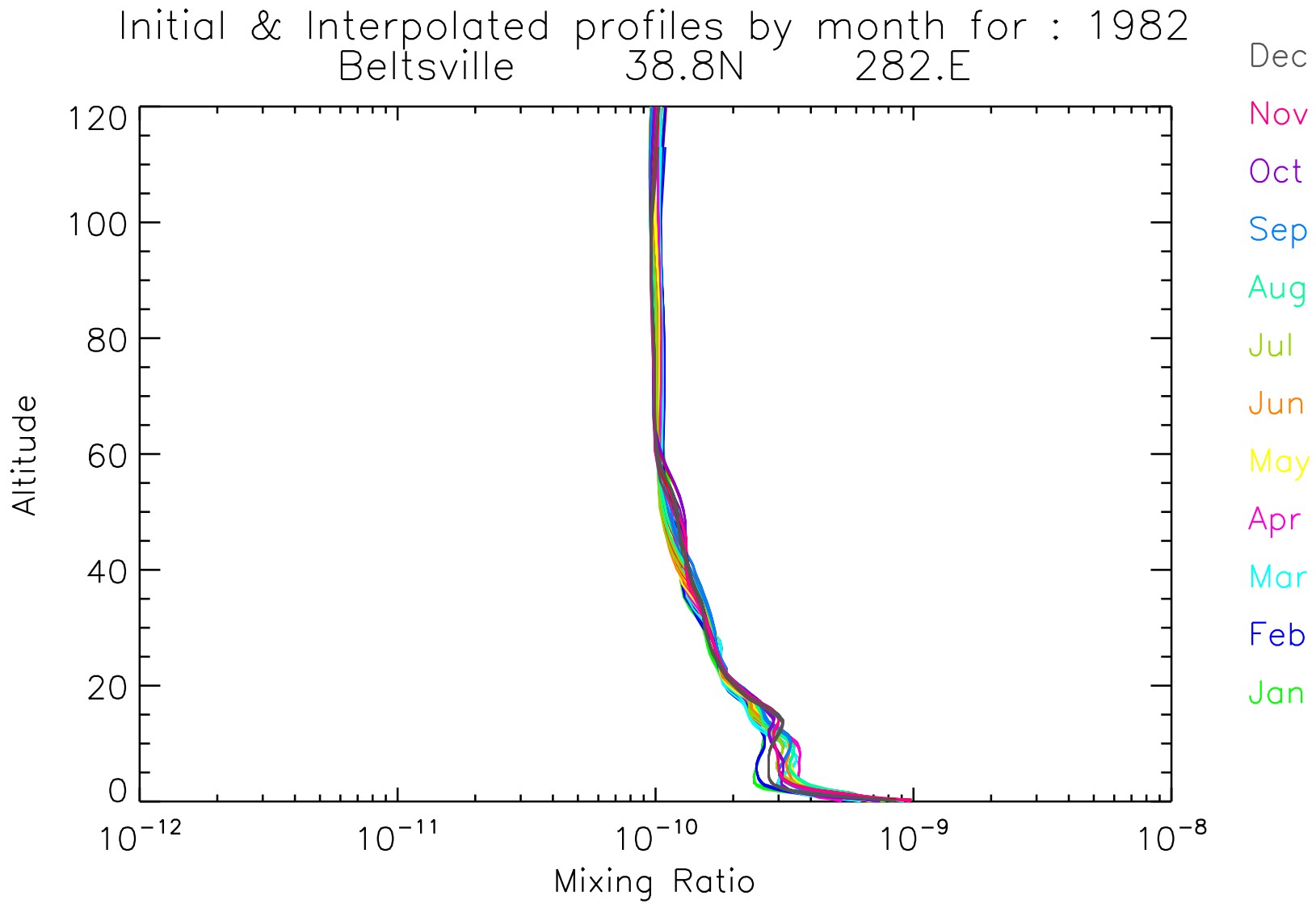
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Mixing Ratio
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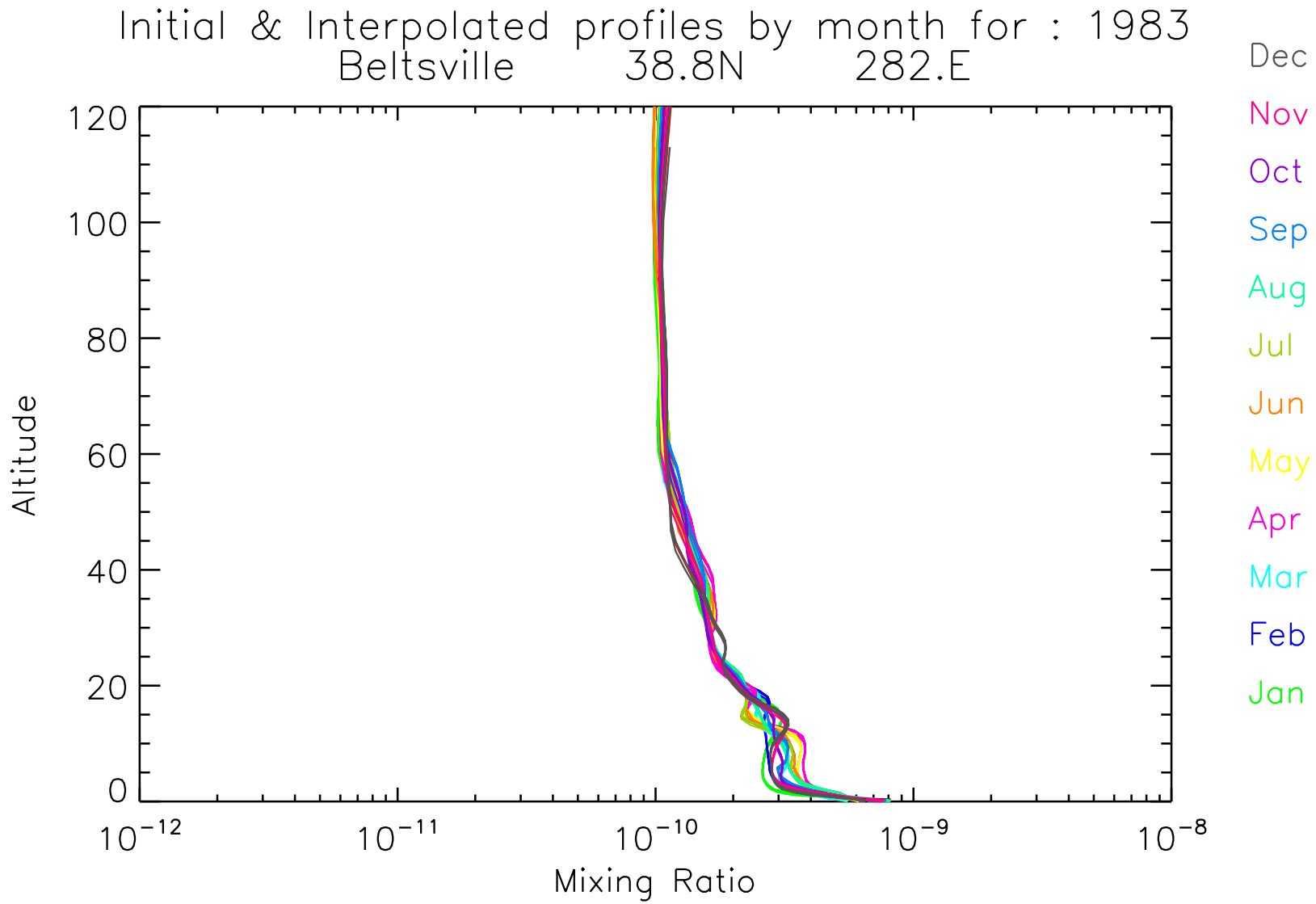
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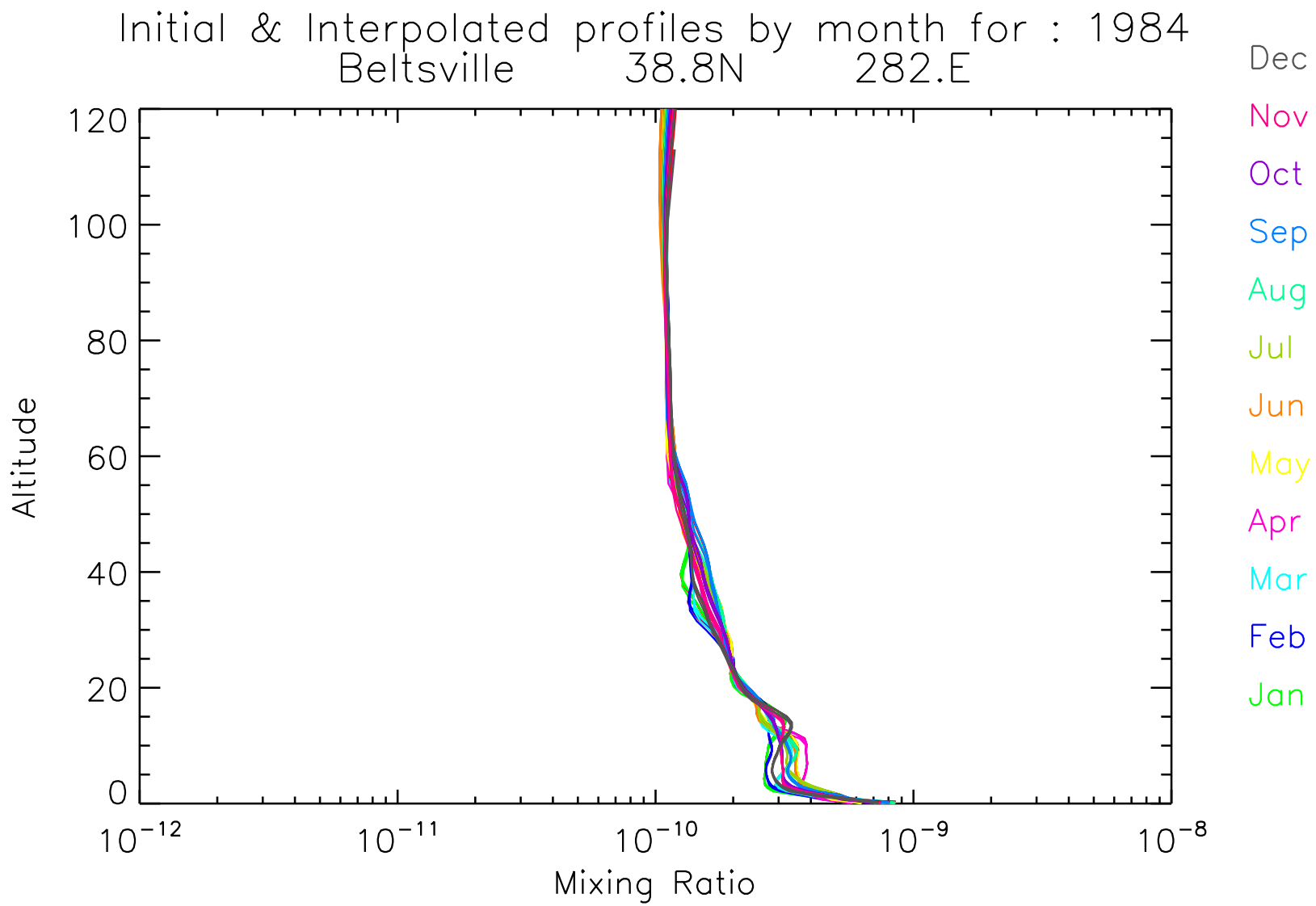
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Altitude
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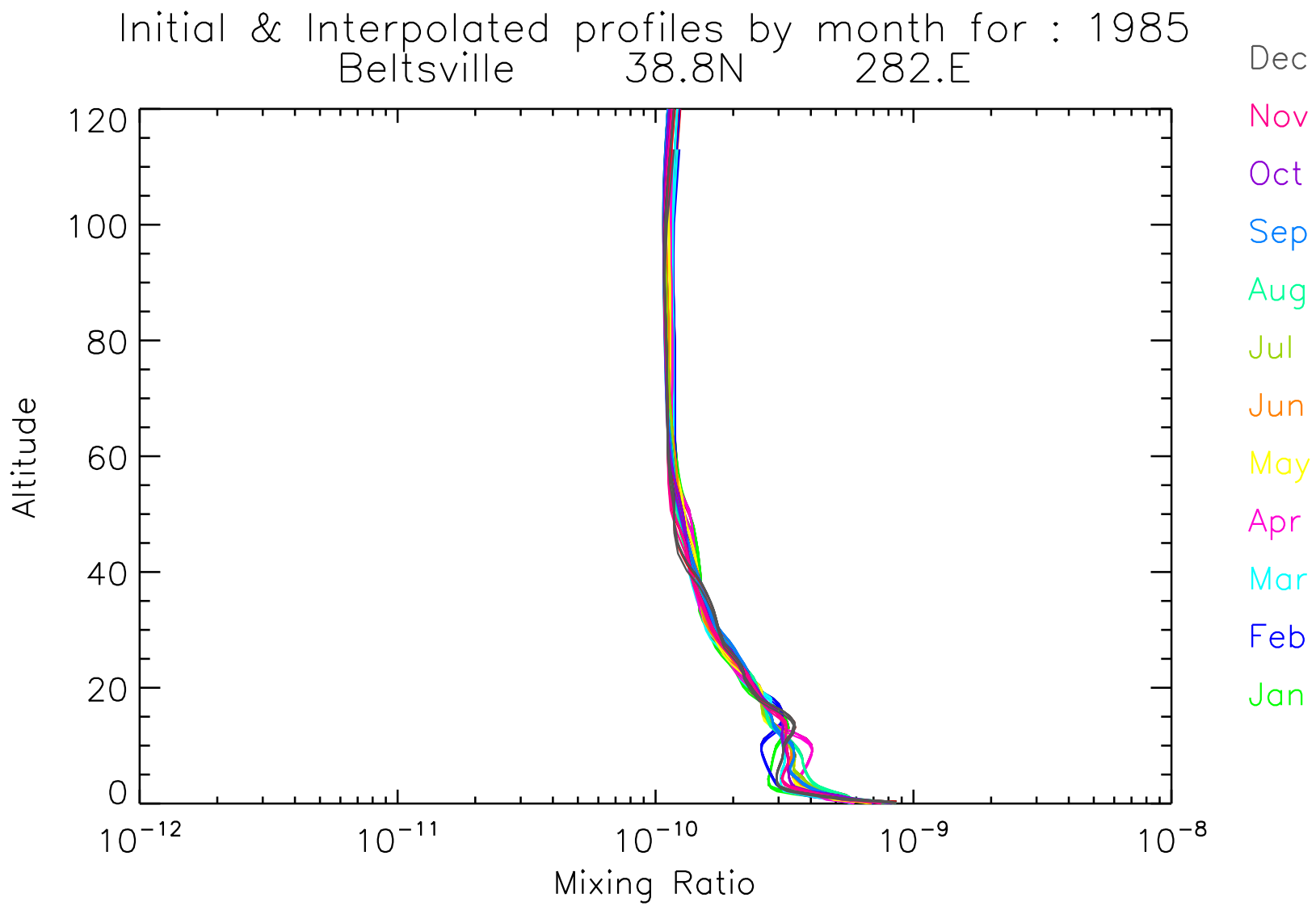
Initial & Interpolated profiles by month for : 1985
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Altitude
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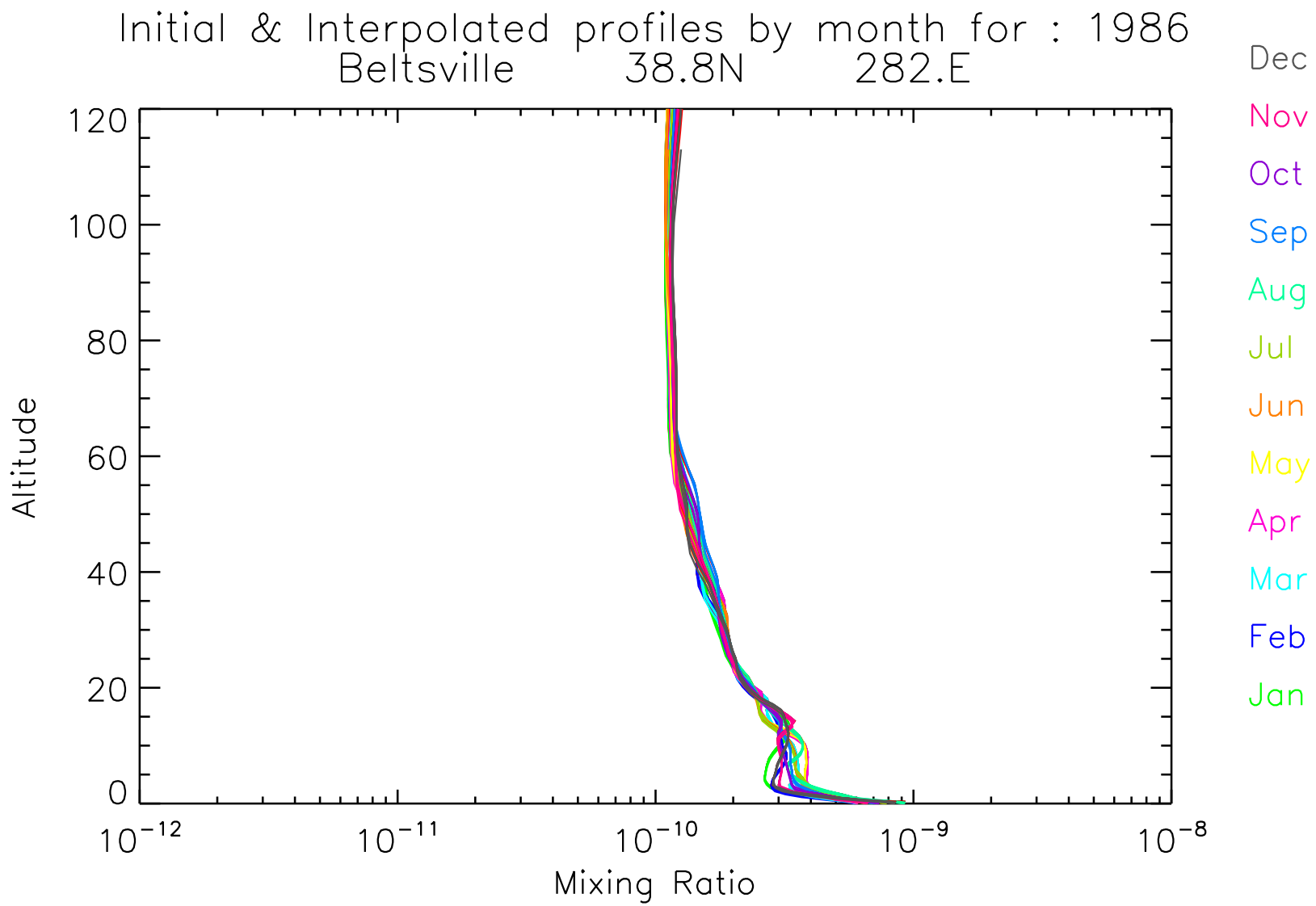
Initial & Interpolated profiles by month for : 1986
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Altitude
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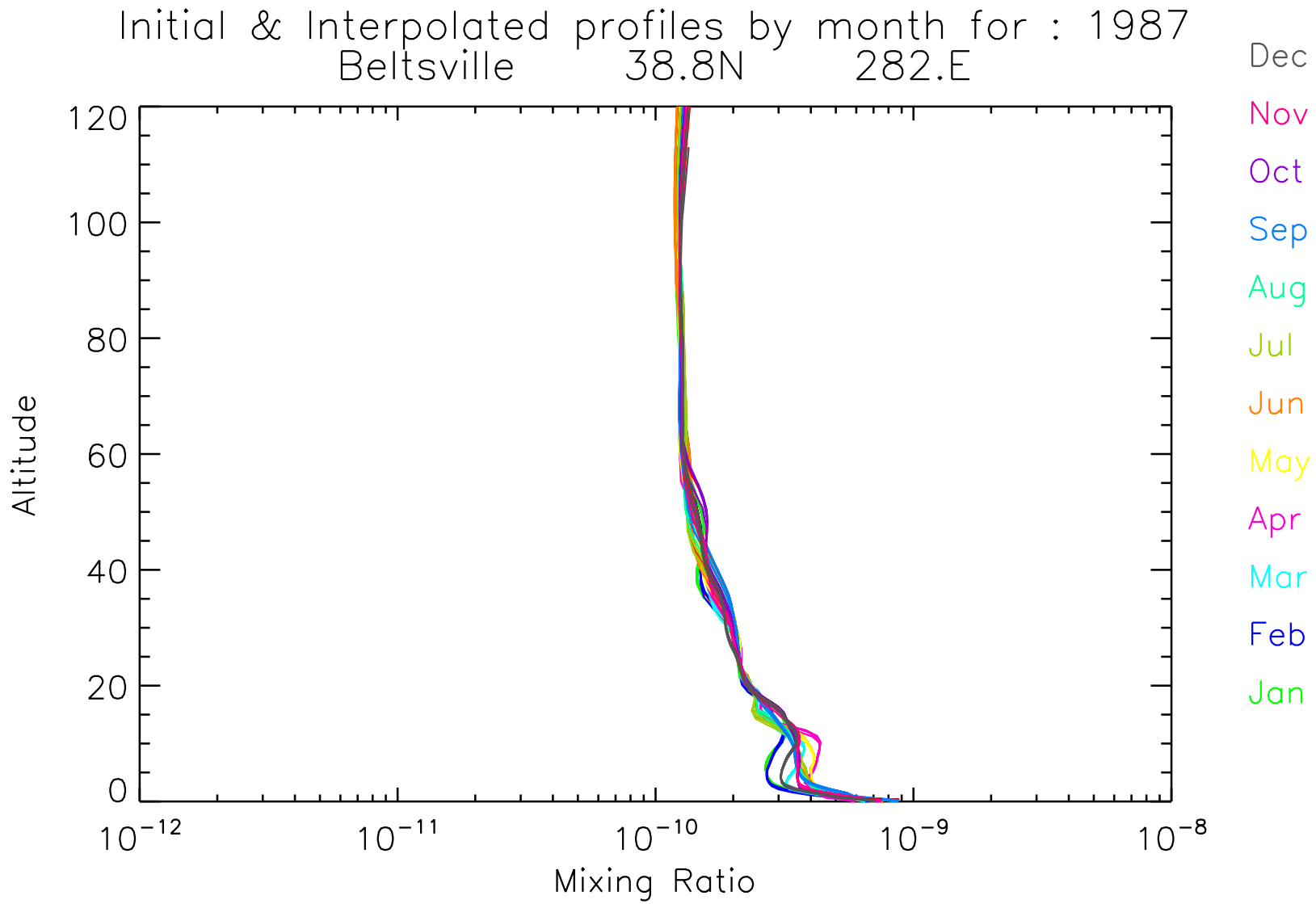
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Mixing Ratio
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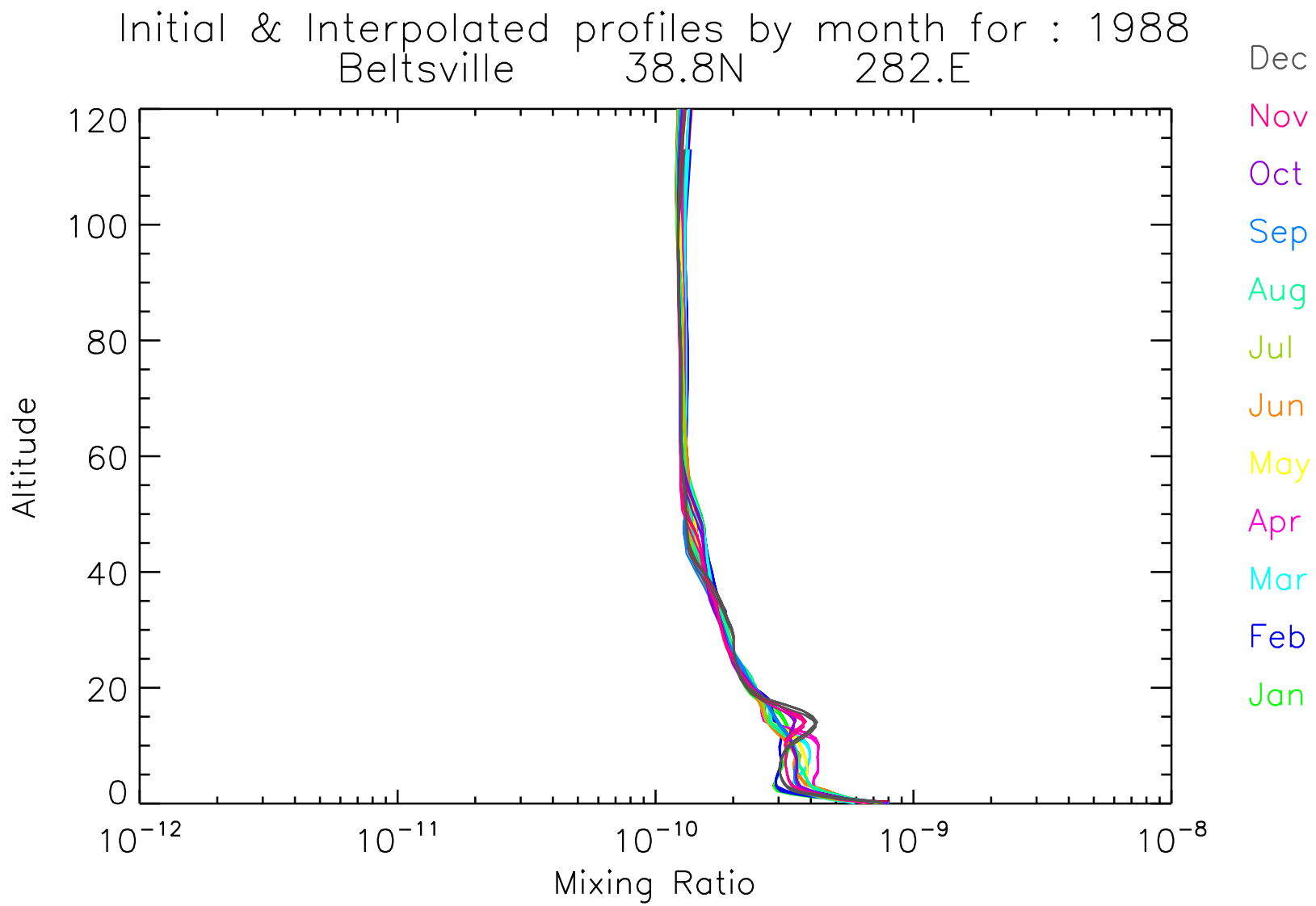
Initial & Interpolated profiles by month for : 1988
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Altitude
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Mixing Ratio
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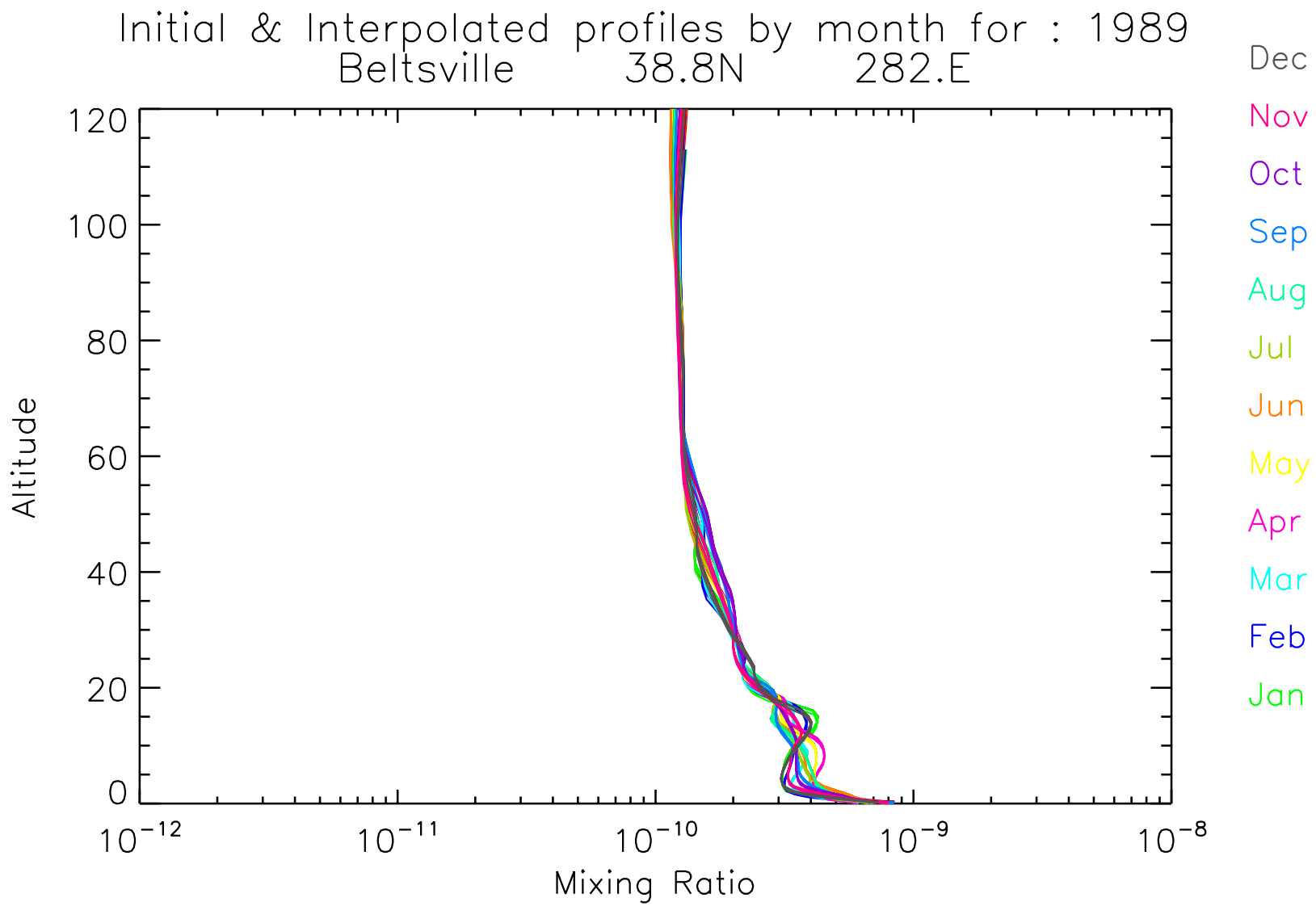
Initial & Interpolated profiles by month for : 1989
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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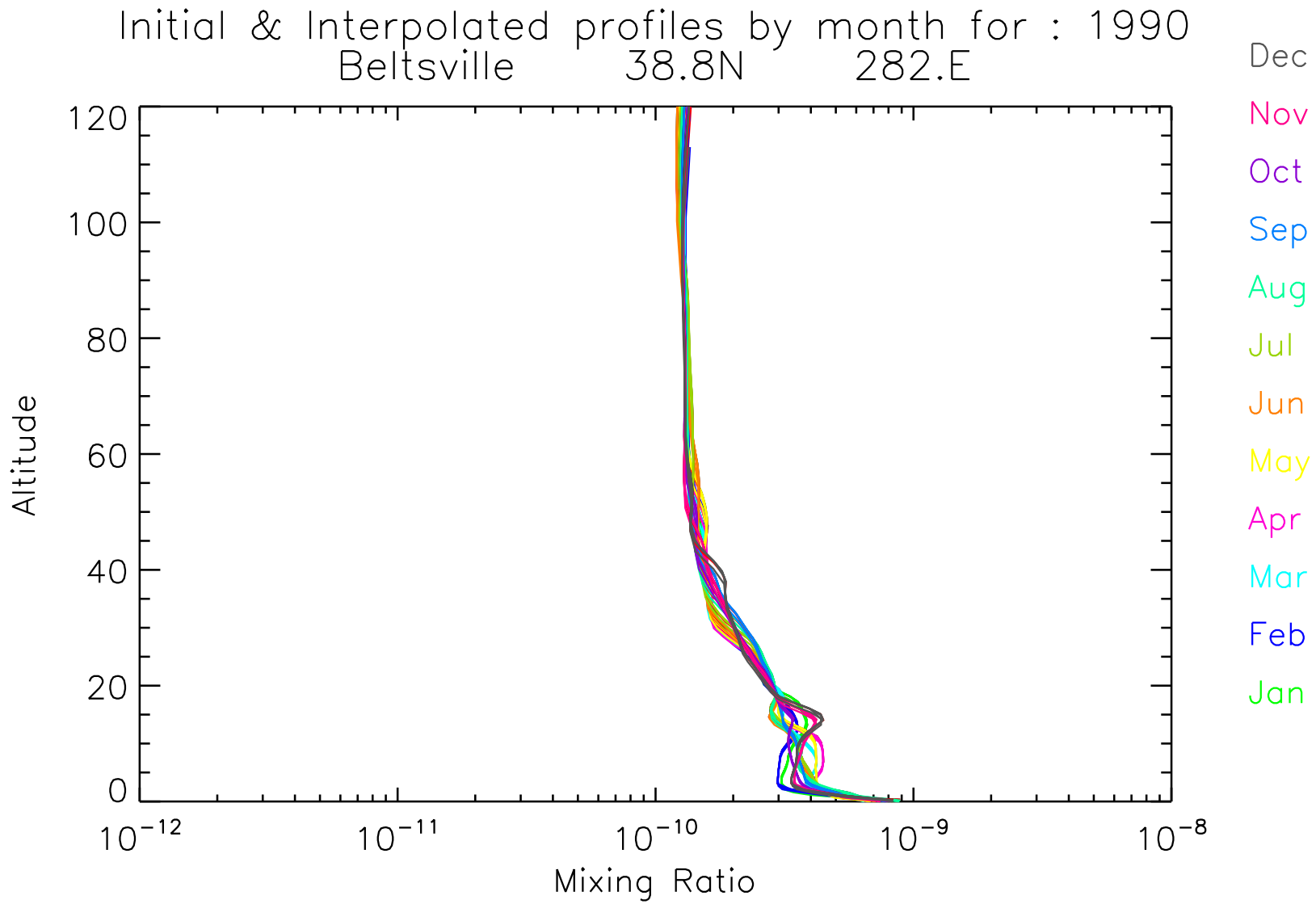
Initial & Interpolated profiles by month for : 1990
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Altitude
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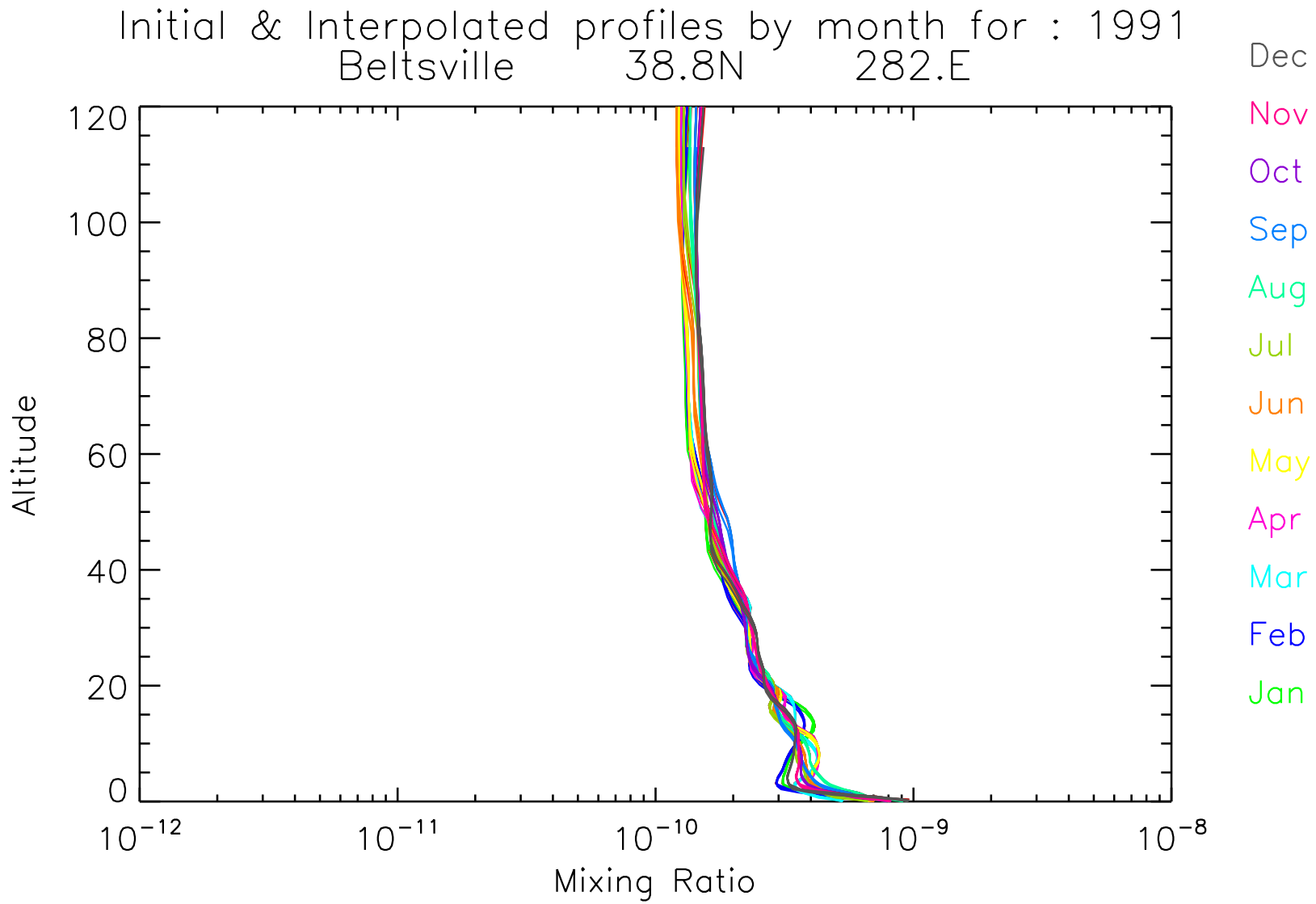
Initial & Interpolated profiles by month for : 1991
Beltsville 38.8N 282.E
Altitude
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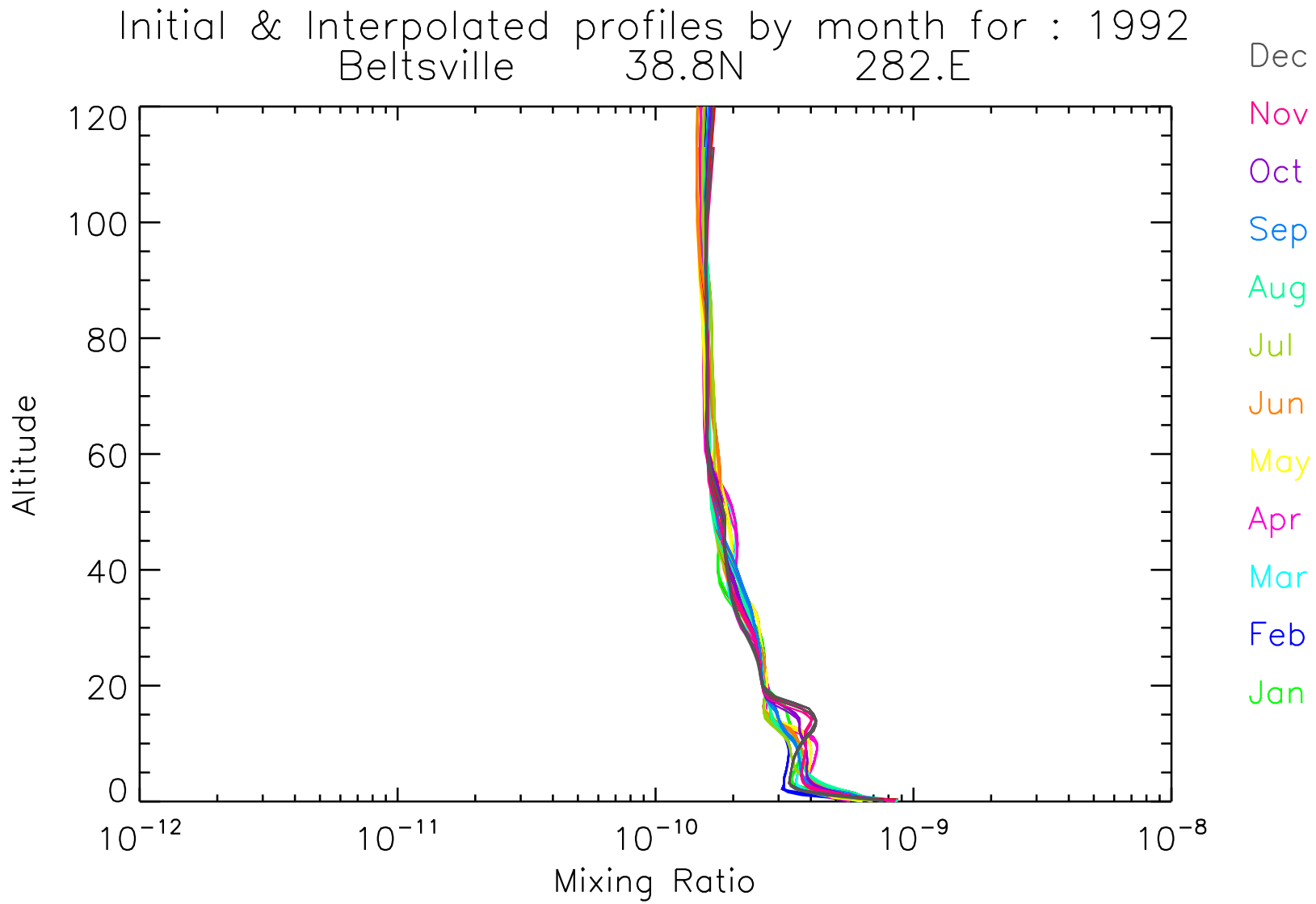
Initial & Interpolated profiles by month for : 1992
Beltsville 38.8N 282.E
Altitude
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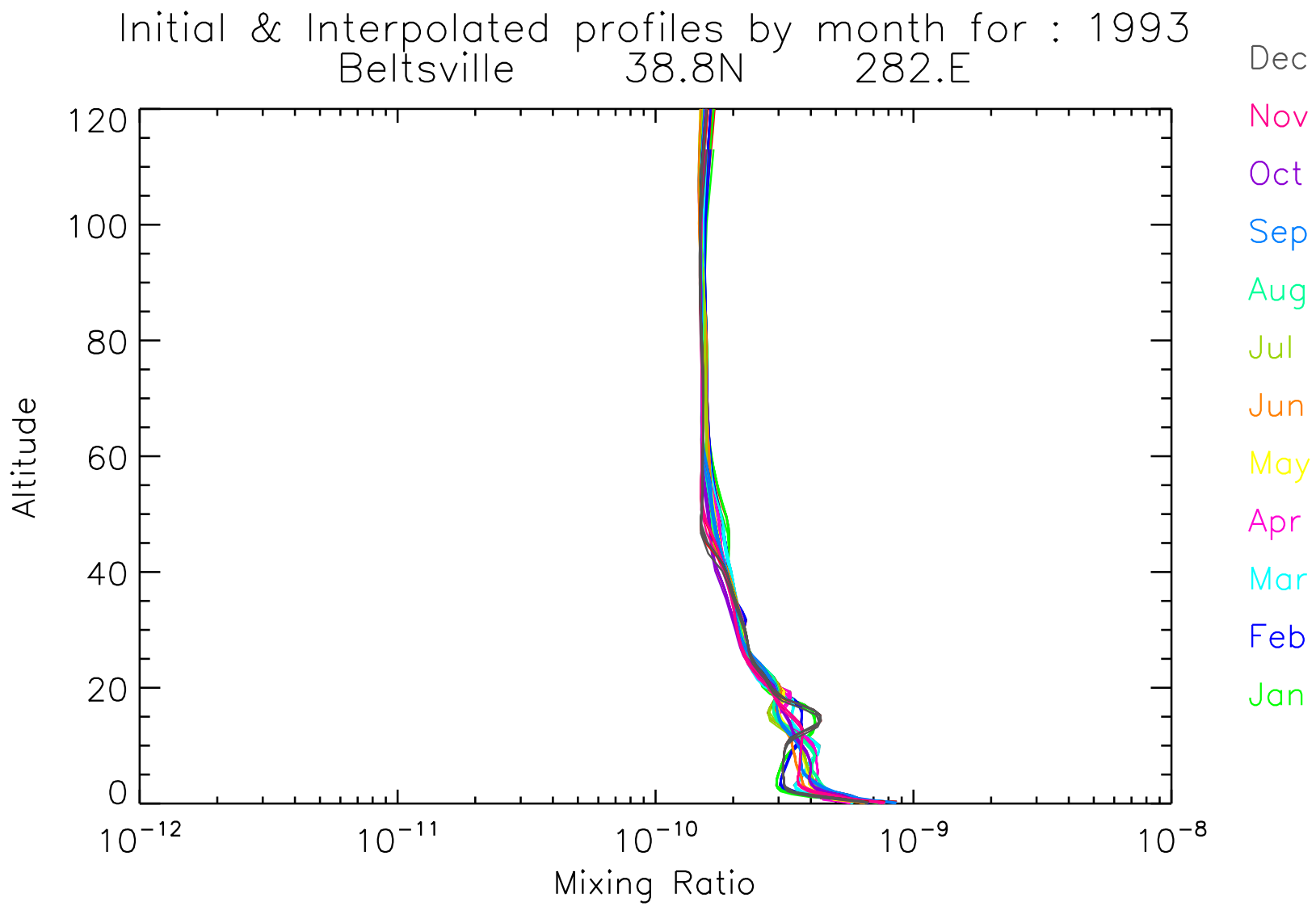
Initial & Interpolated profiles by month for : 1993
Beltsville 38.8N 282.E
Altitude
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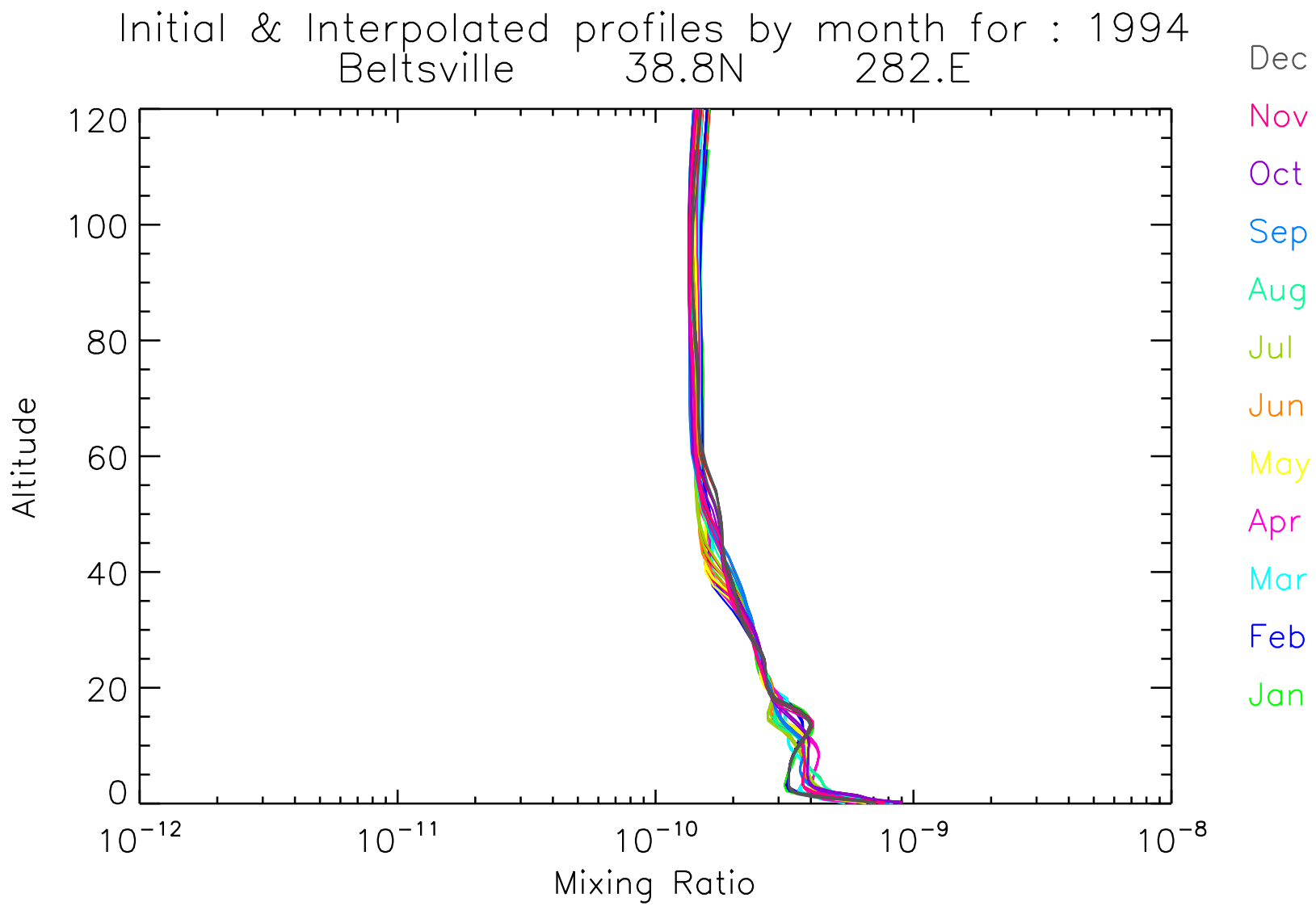
Initial & Interpolated profiles by month for : 1994
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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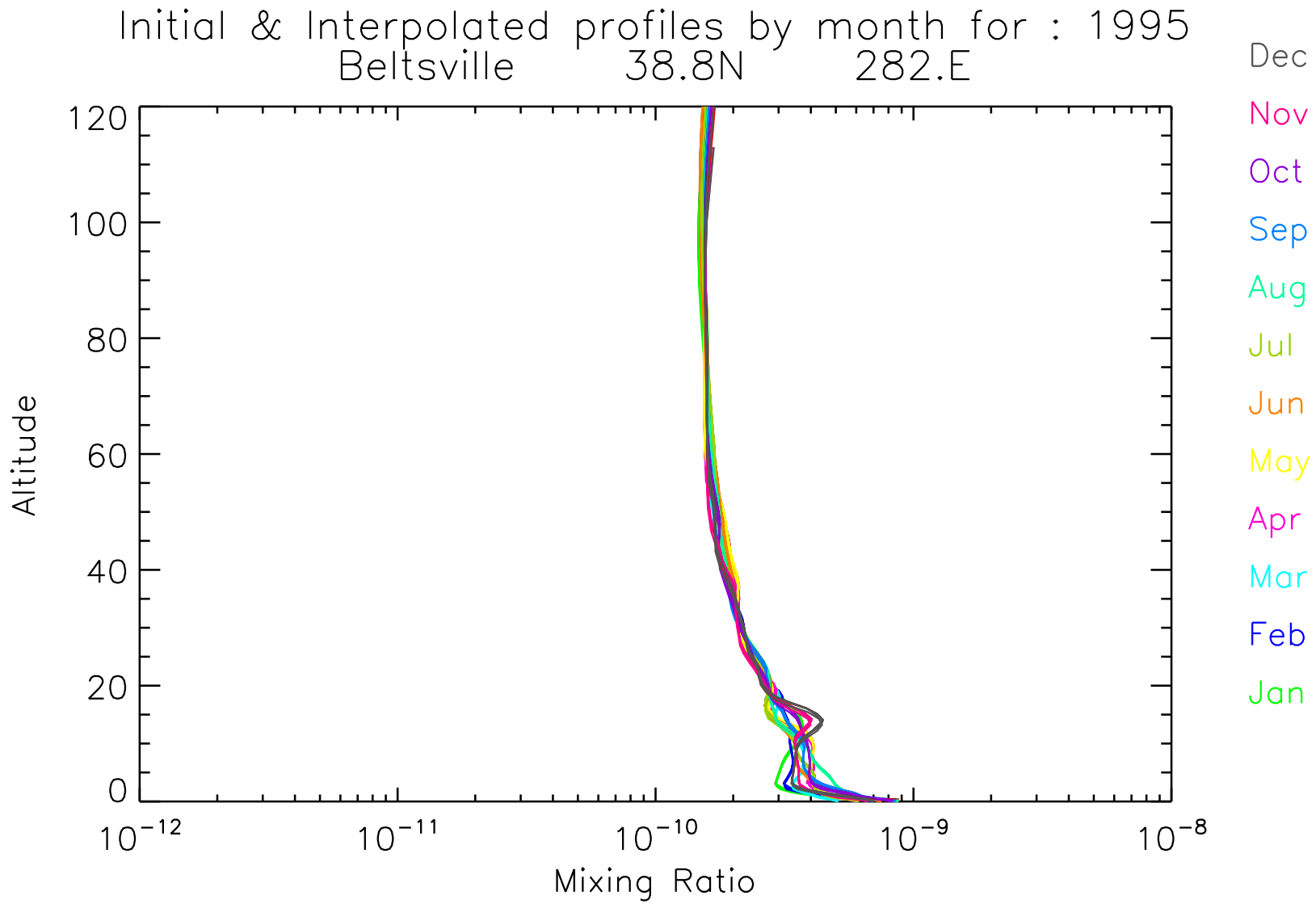
Initial & Interpolated profiles by month for : 1995
Beltsville 38.8N 282.E
Altitude
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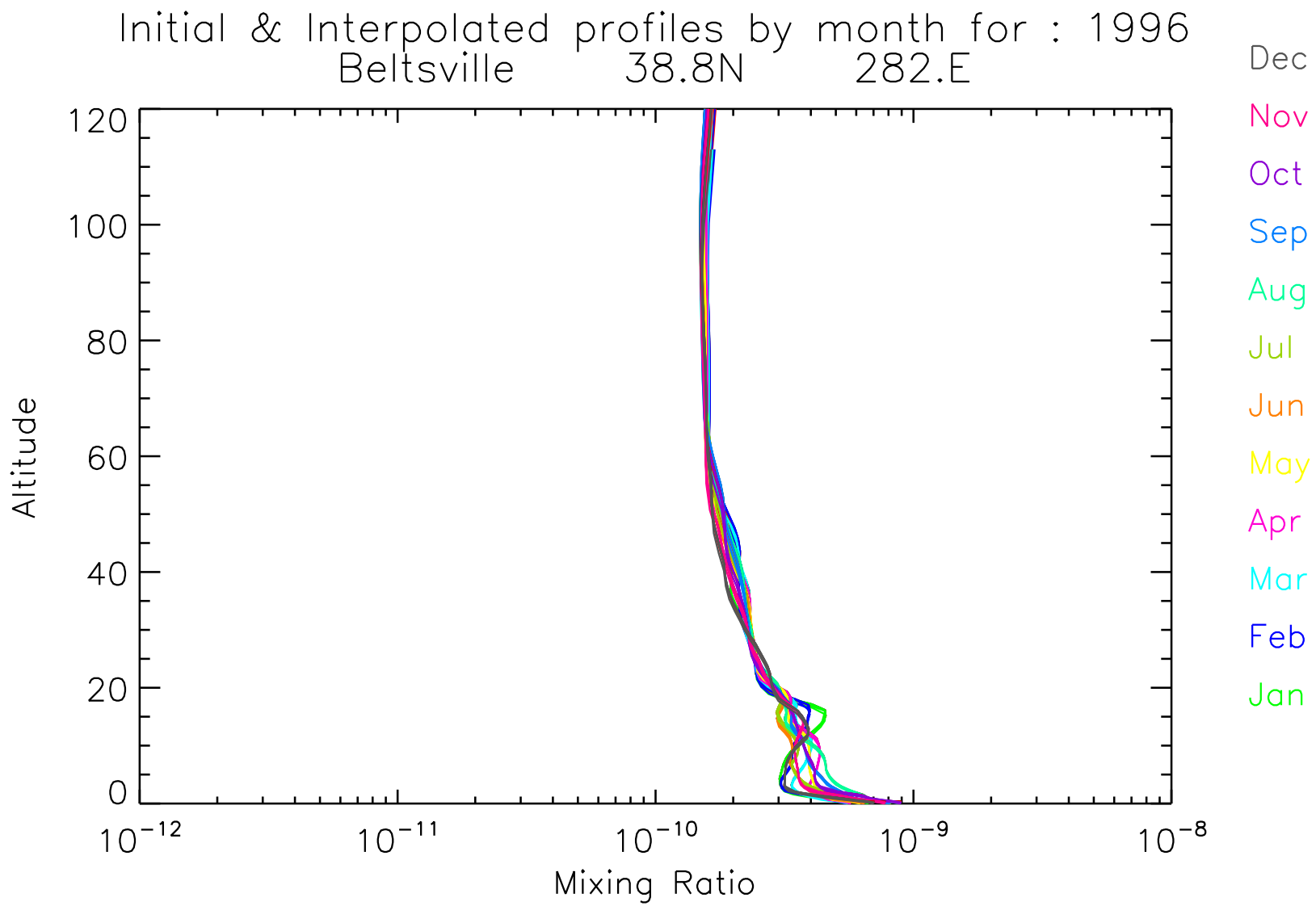
Initial & Interpolated profiles by month for : 1996
Beltsville 38.8N 282.E
Altitude
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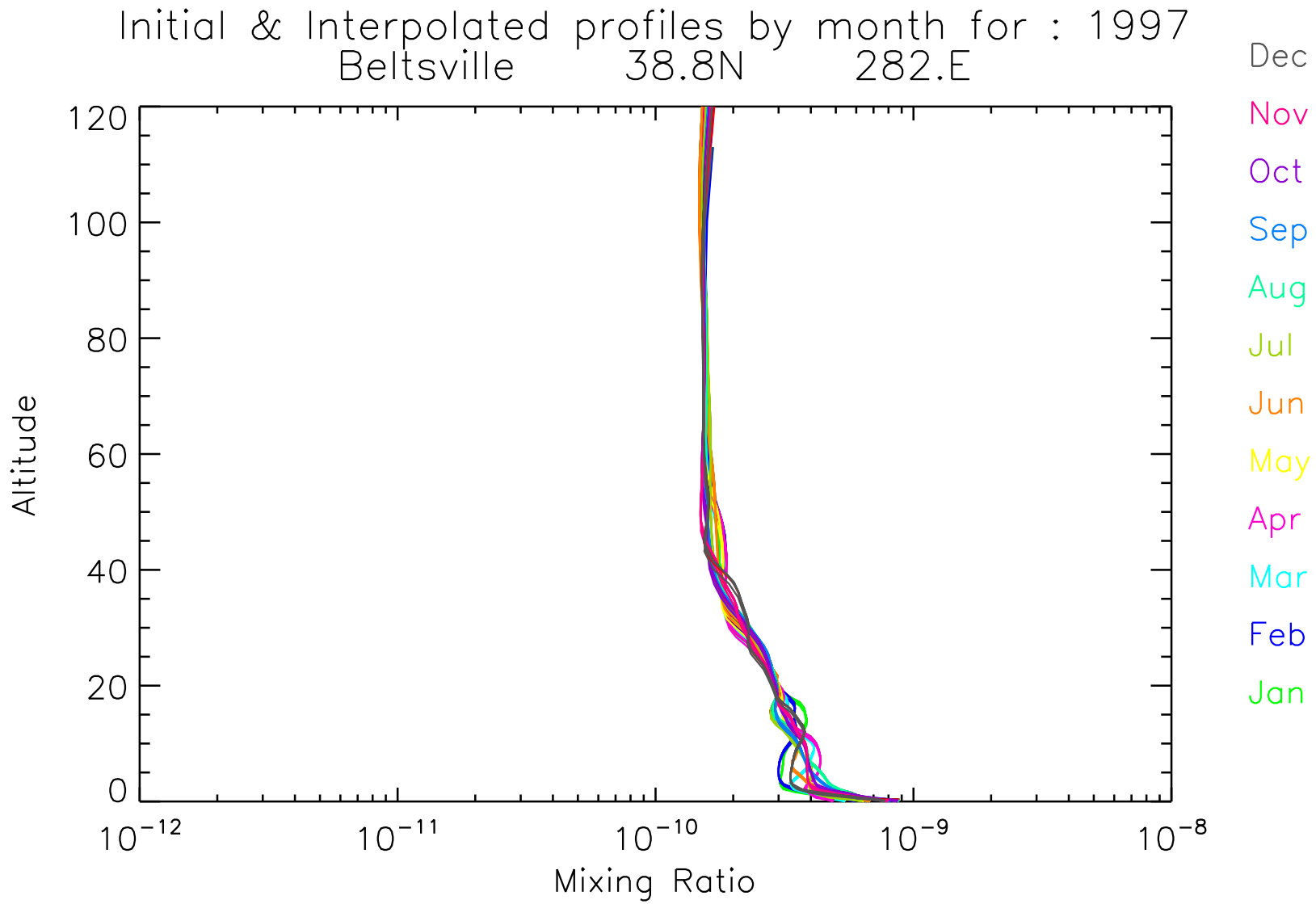
Initial & Interpolated profiles by month for : 1997
Beltsville 38.8N 282.E
Altitude
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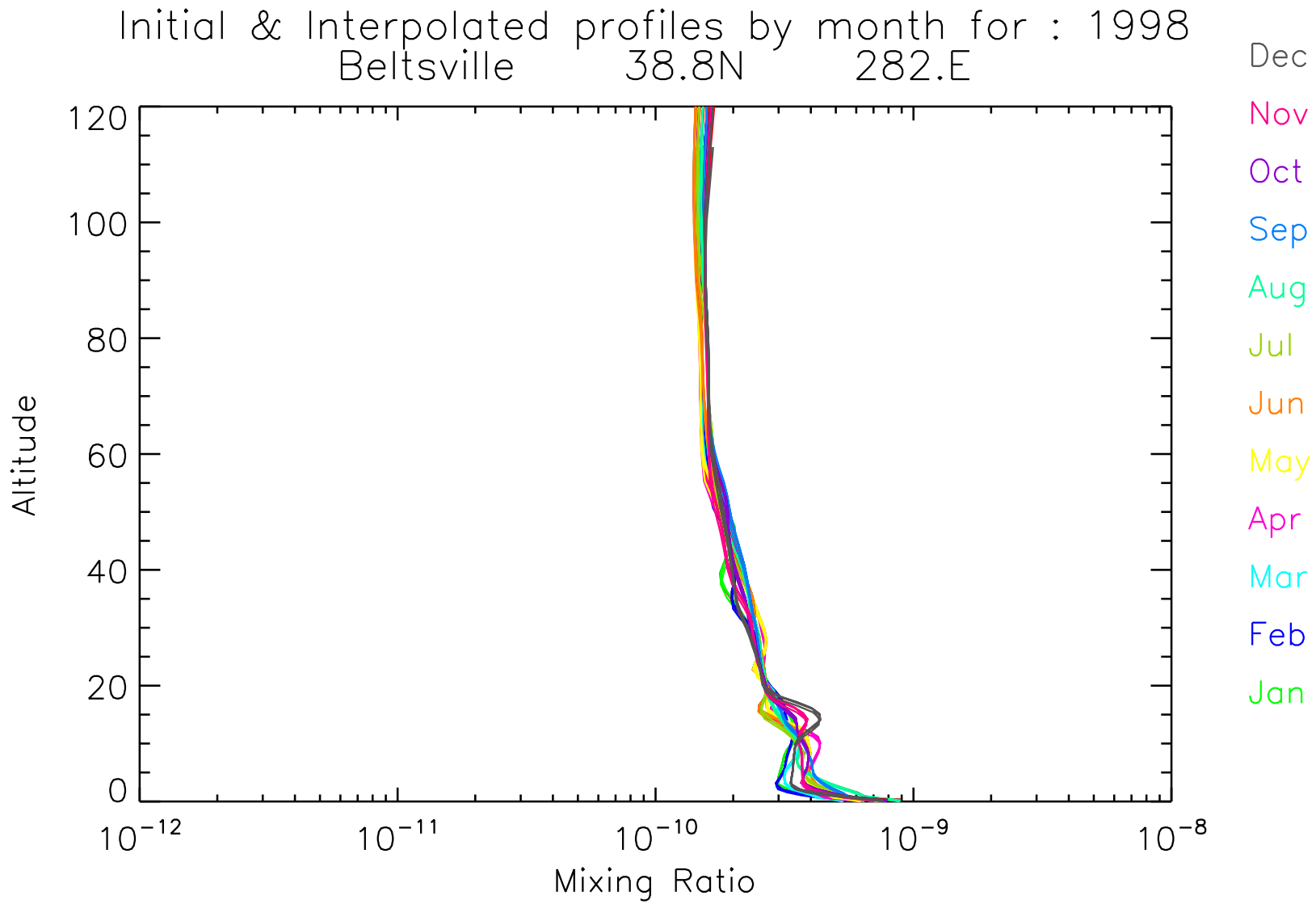
Initial & Interpolated profiles by month for : 1998
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Altitude
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Mixing Ratio
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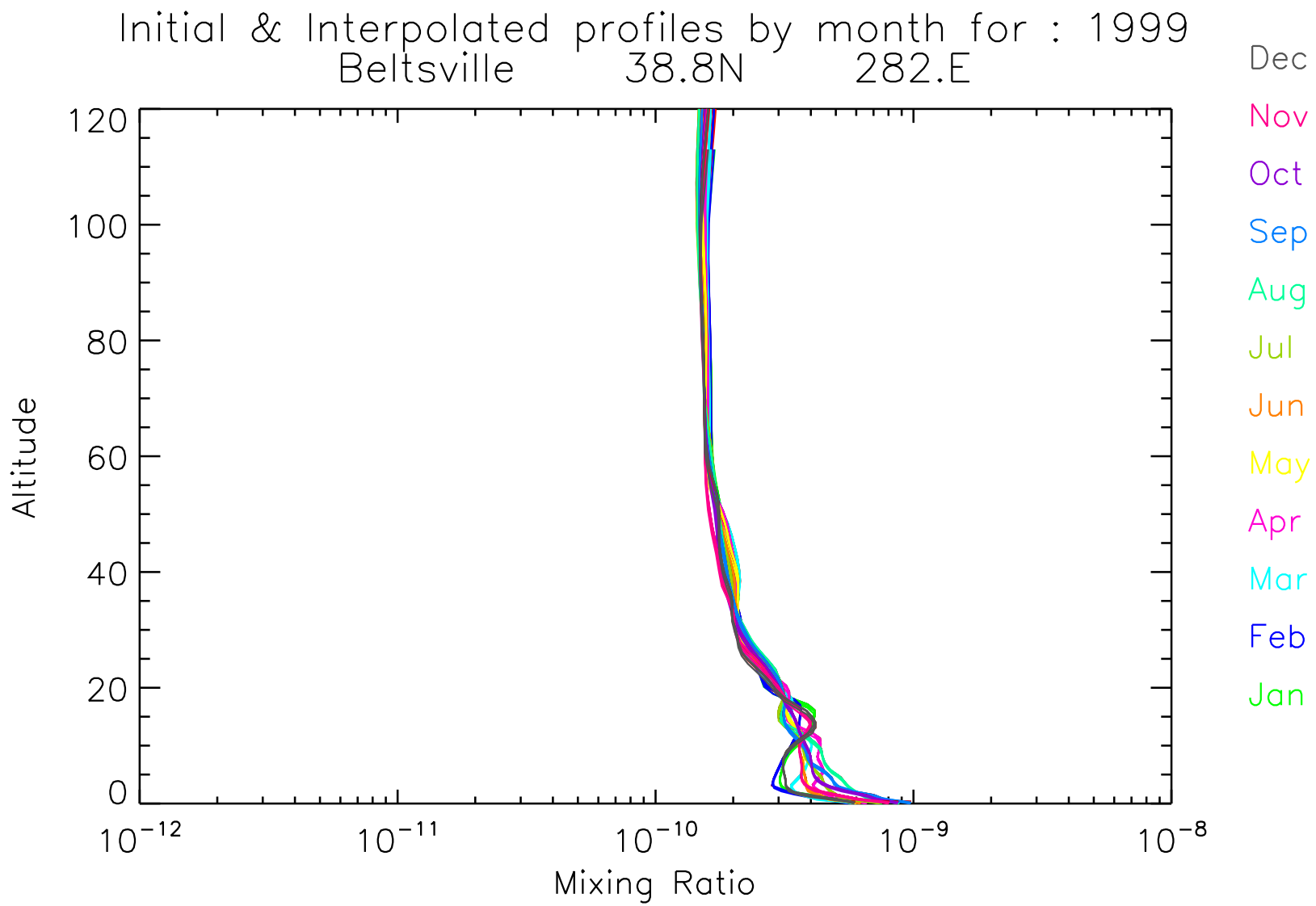
Initial & Interpolated profiles by month for : 1999
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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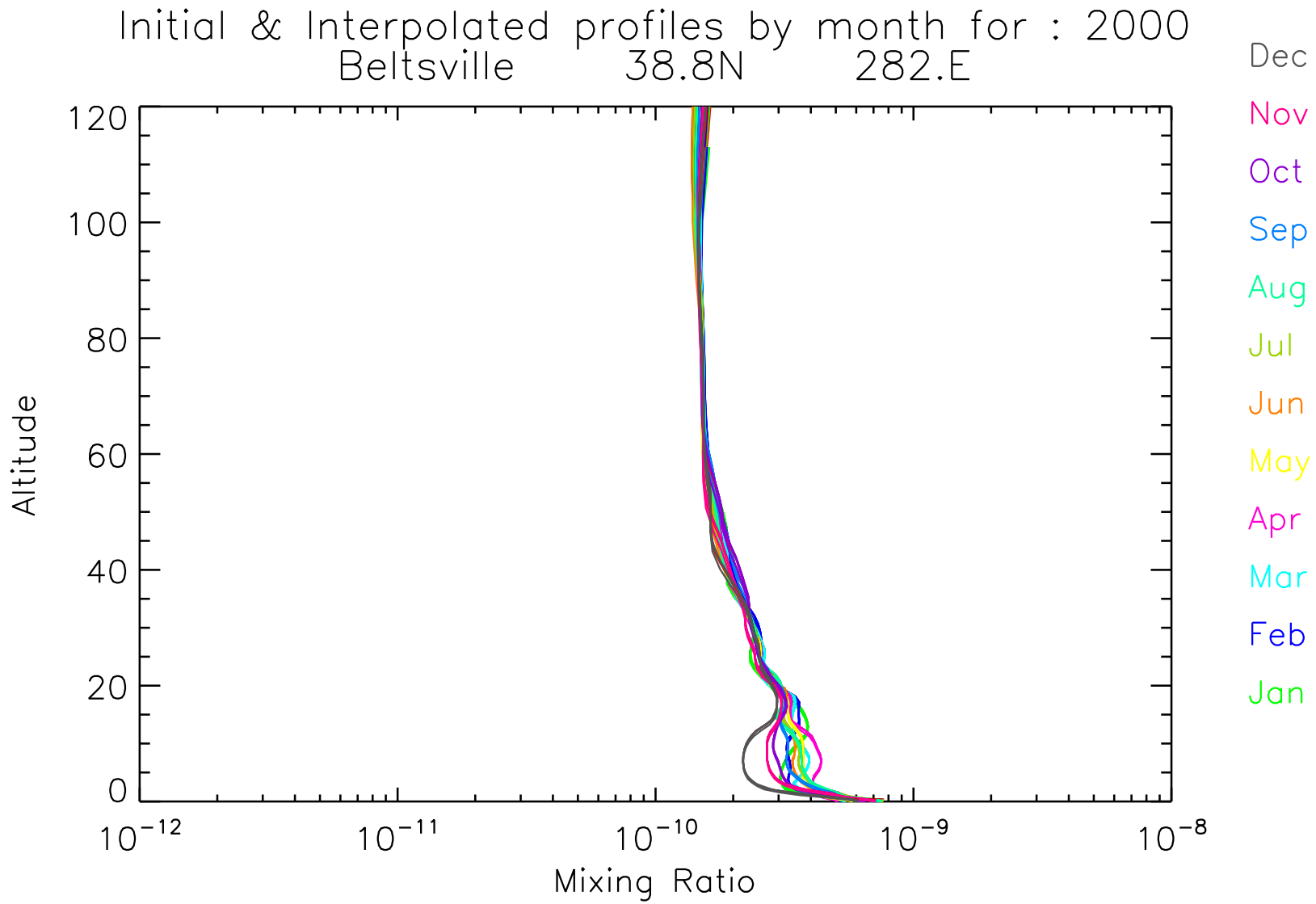
Initial & Interpolated profiles by month for : 2000
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Altitude
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Mixing Ratio
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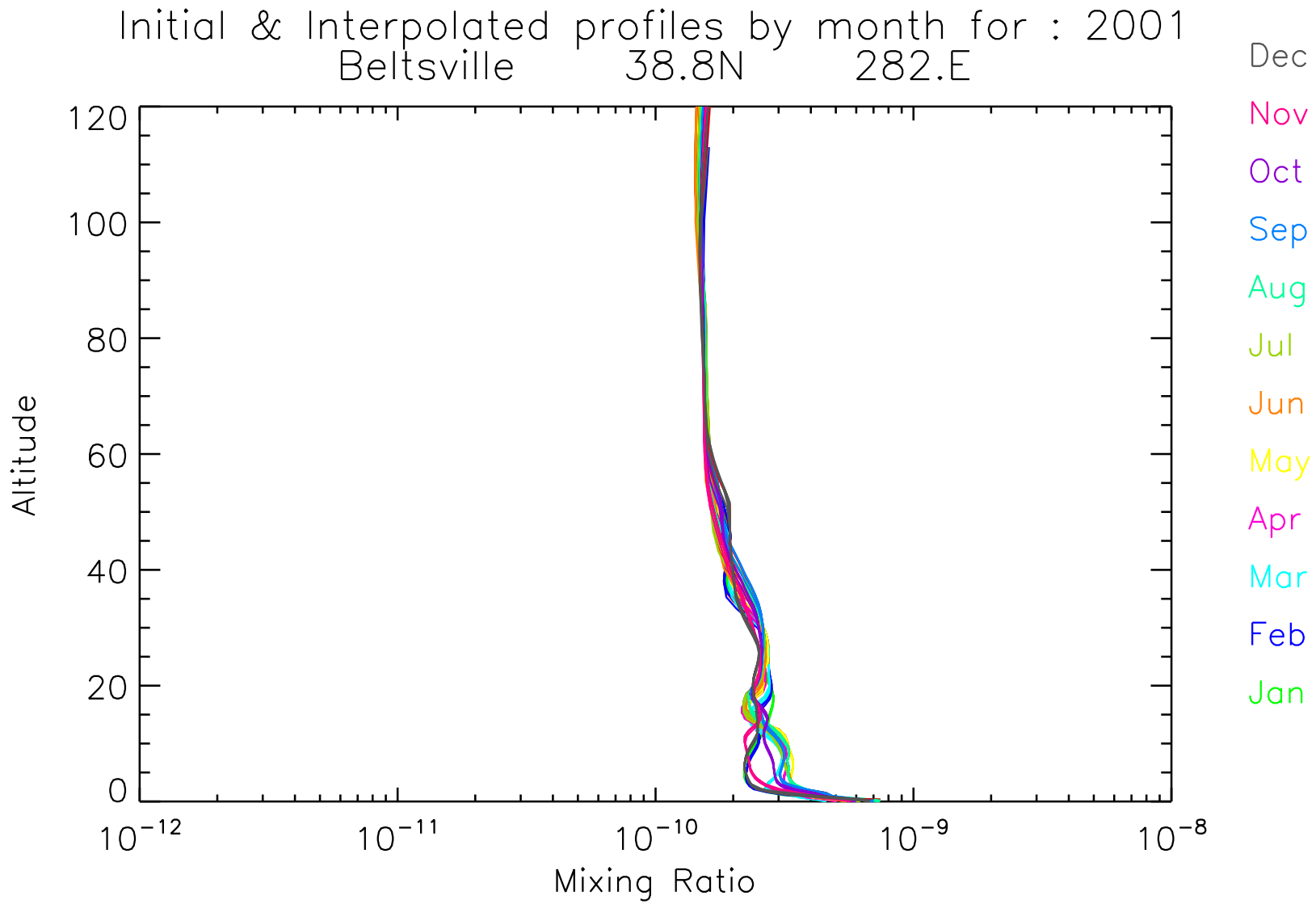
Initial & Interpolated profiles by month for : 2001
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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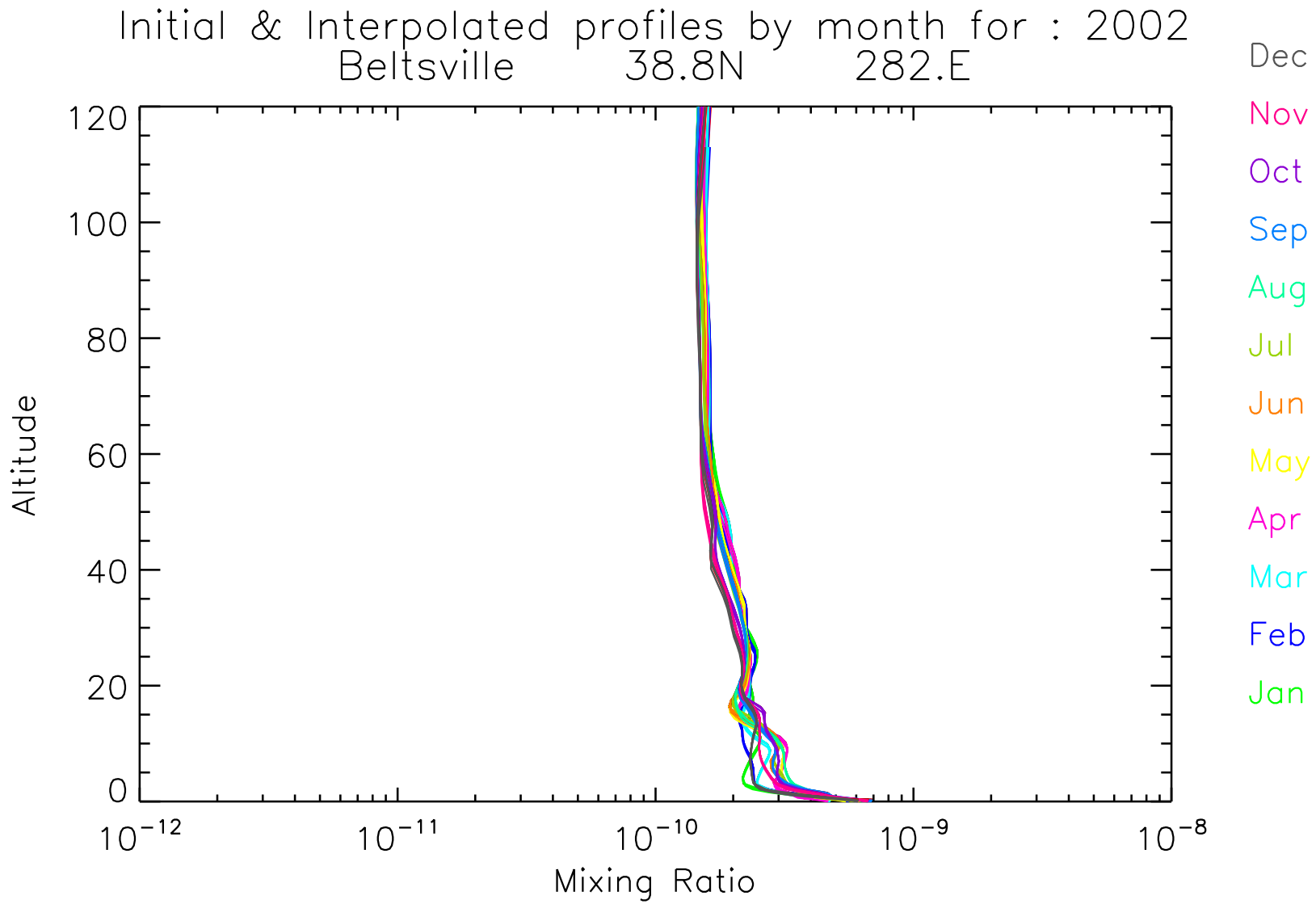
Initial & Interpolated profiles by month for : 2002
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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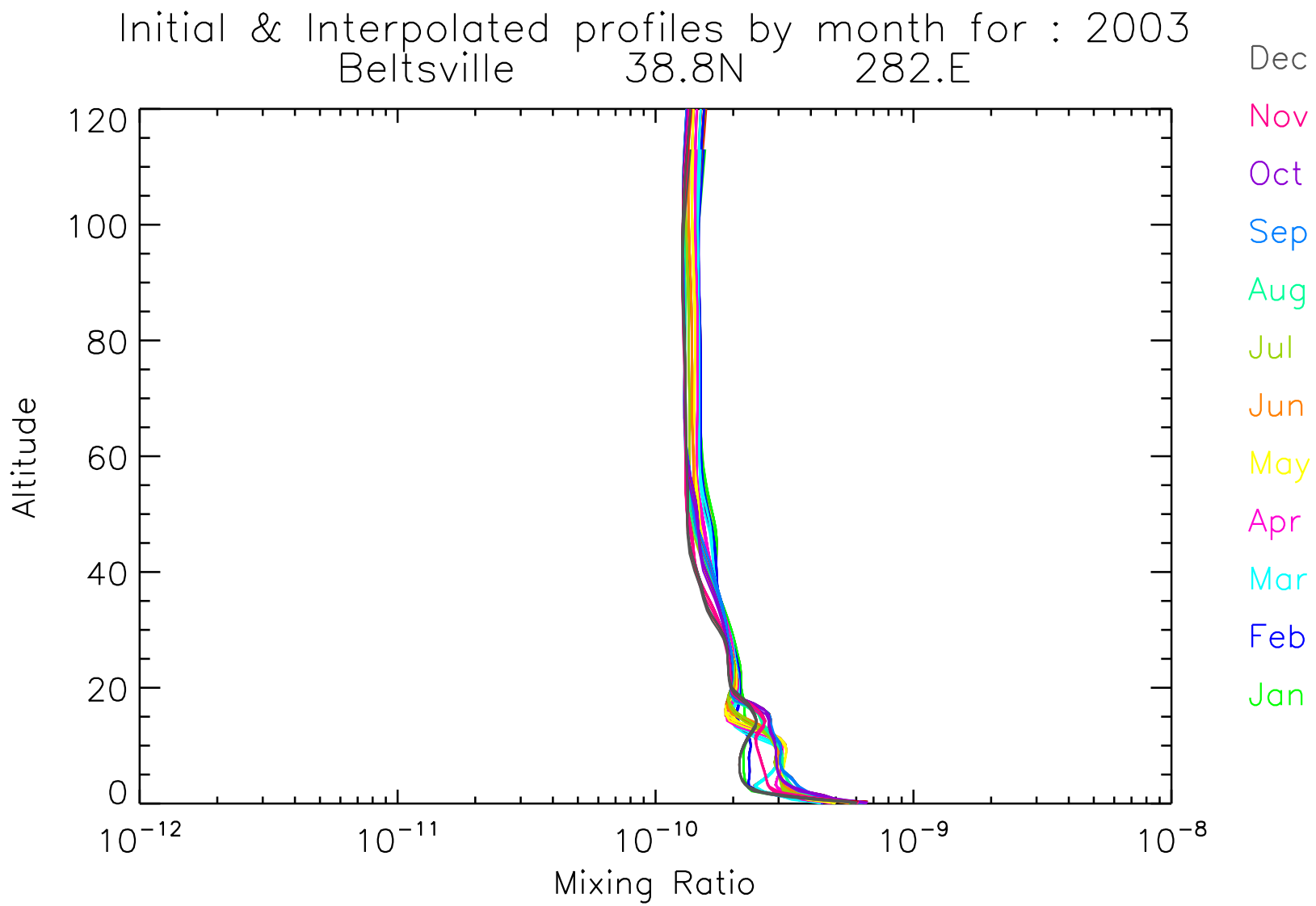
Initial & Interpolated profiles by month for : 2003
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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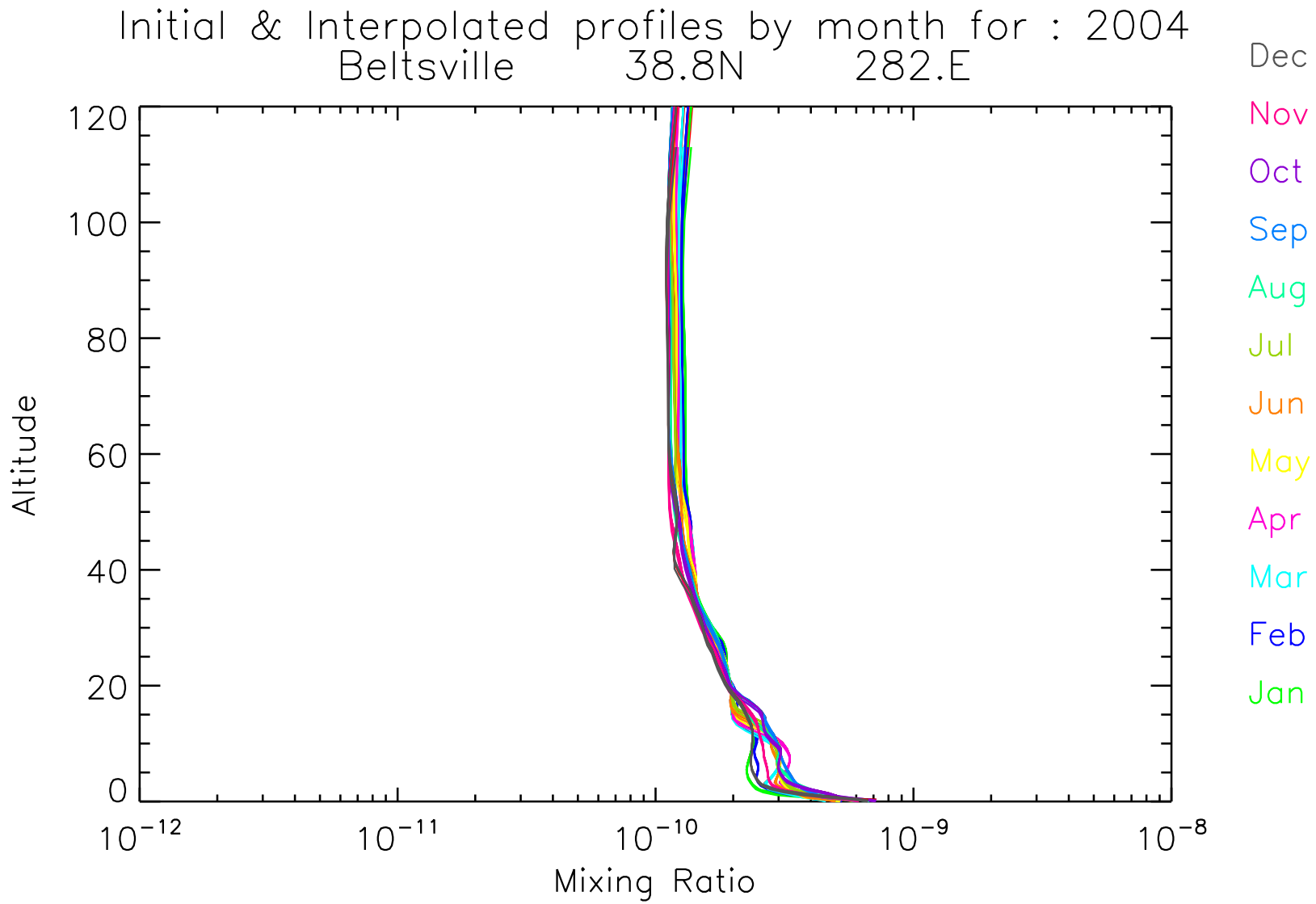
Initial & Interpolated profiles by month for : 2004
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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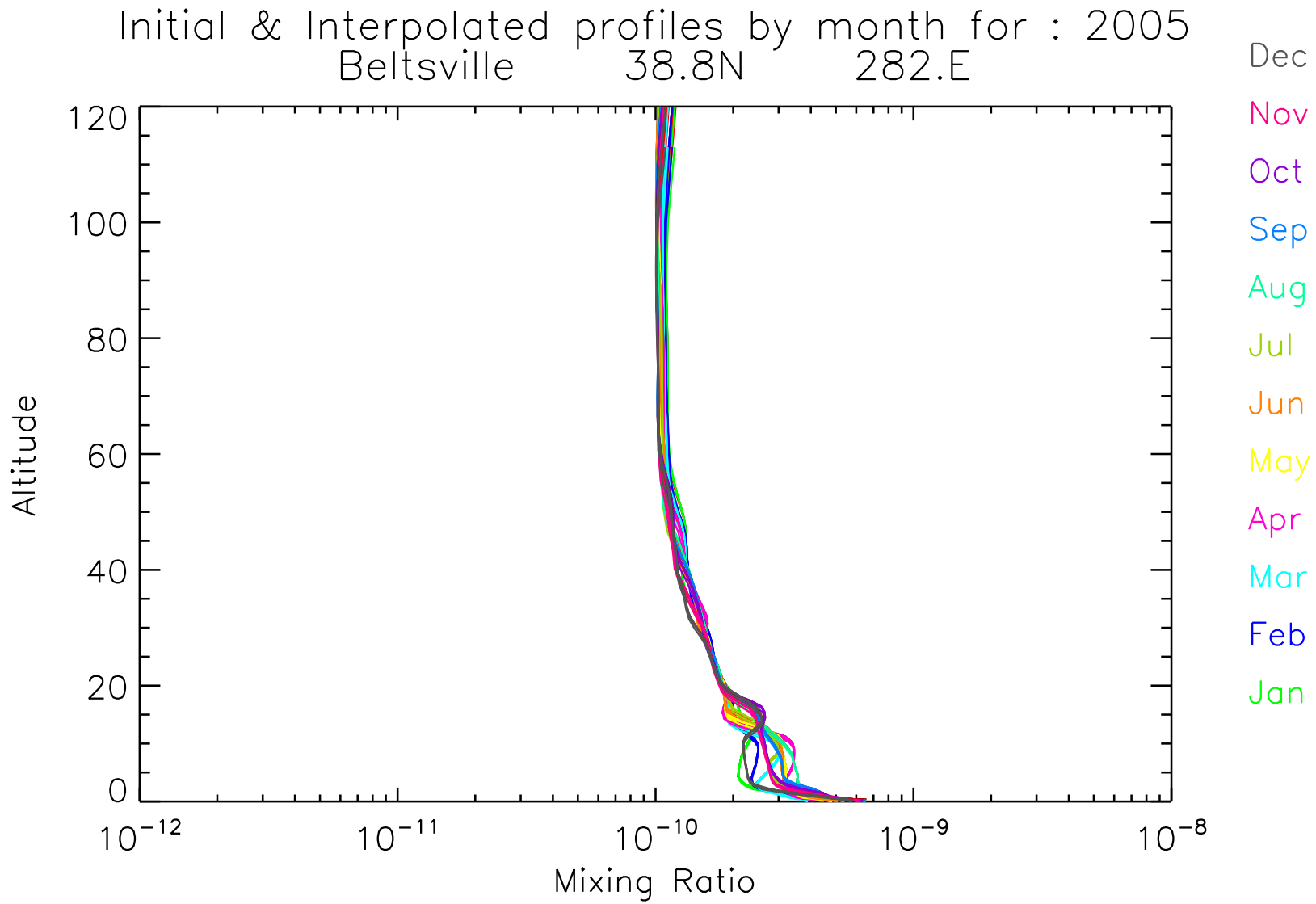
Initial & Interpolated profiles by month for : 2005
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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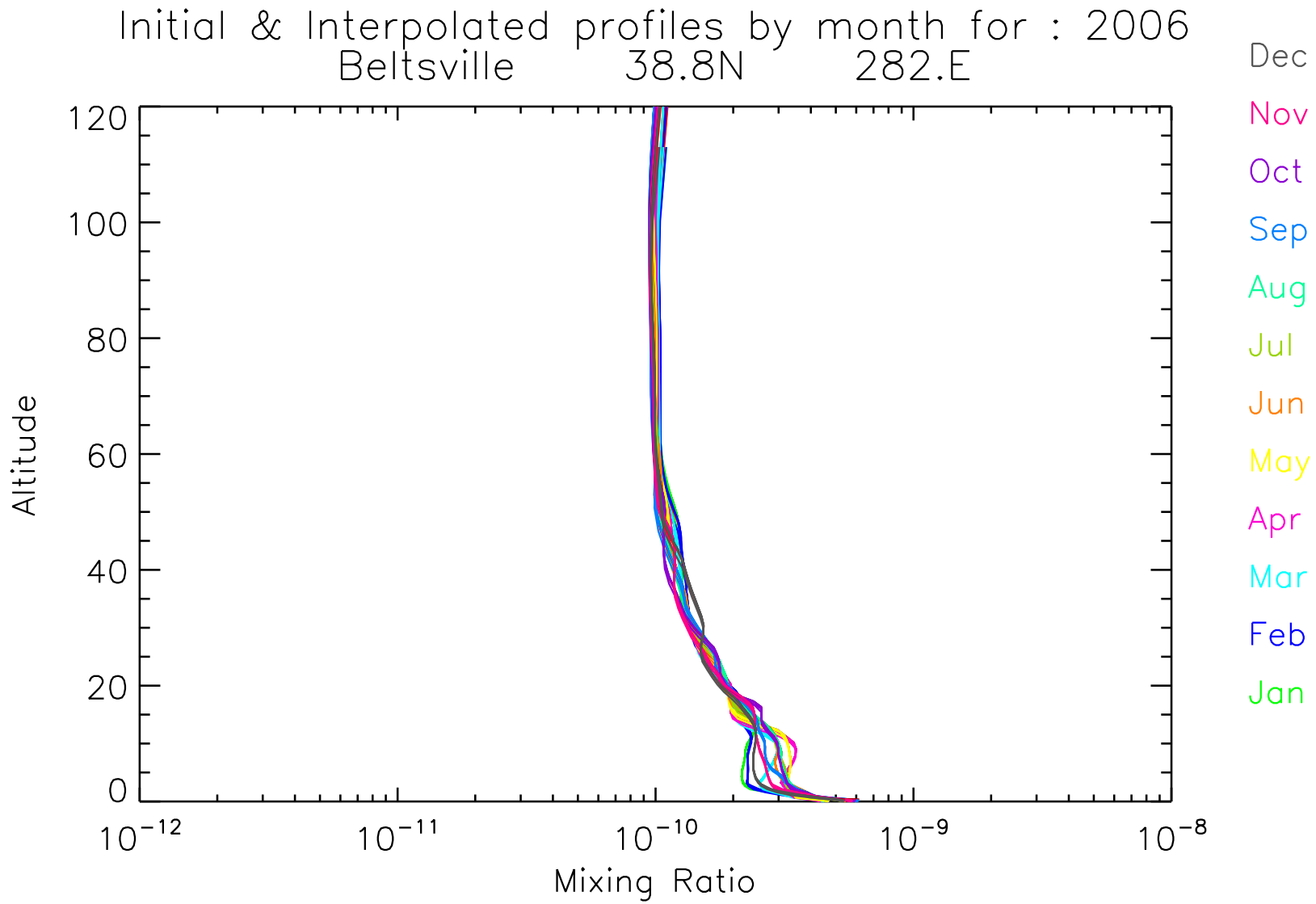
Initial & Interpolated profiles by month for : 2006
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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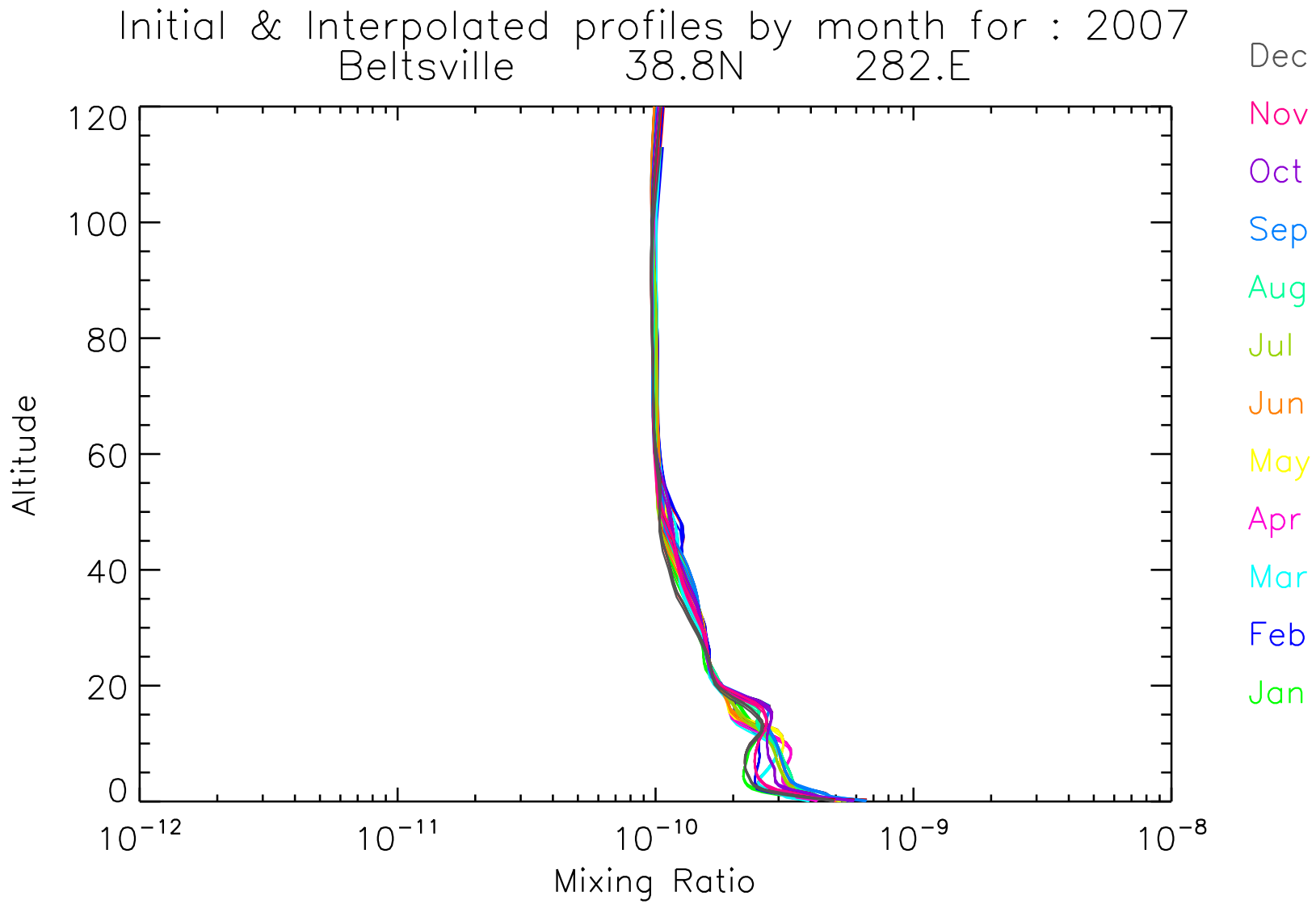
Initial & Interpolated profiles by month for : 2007
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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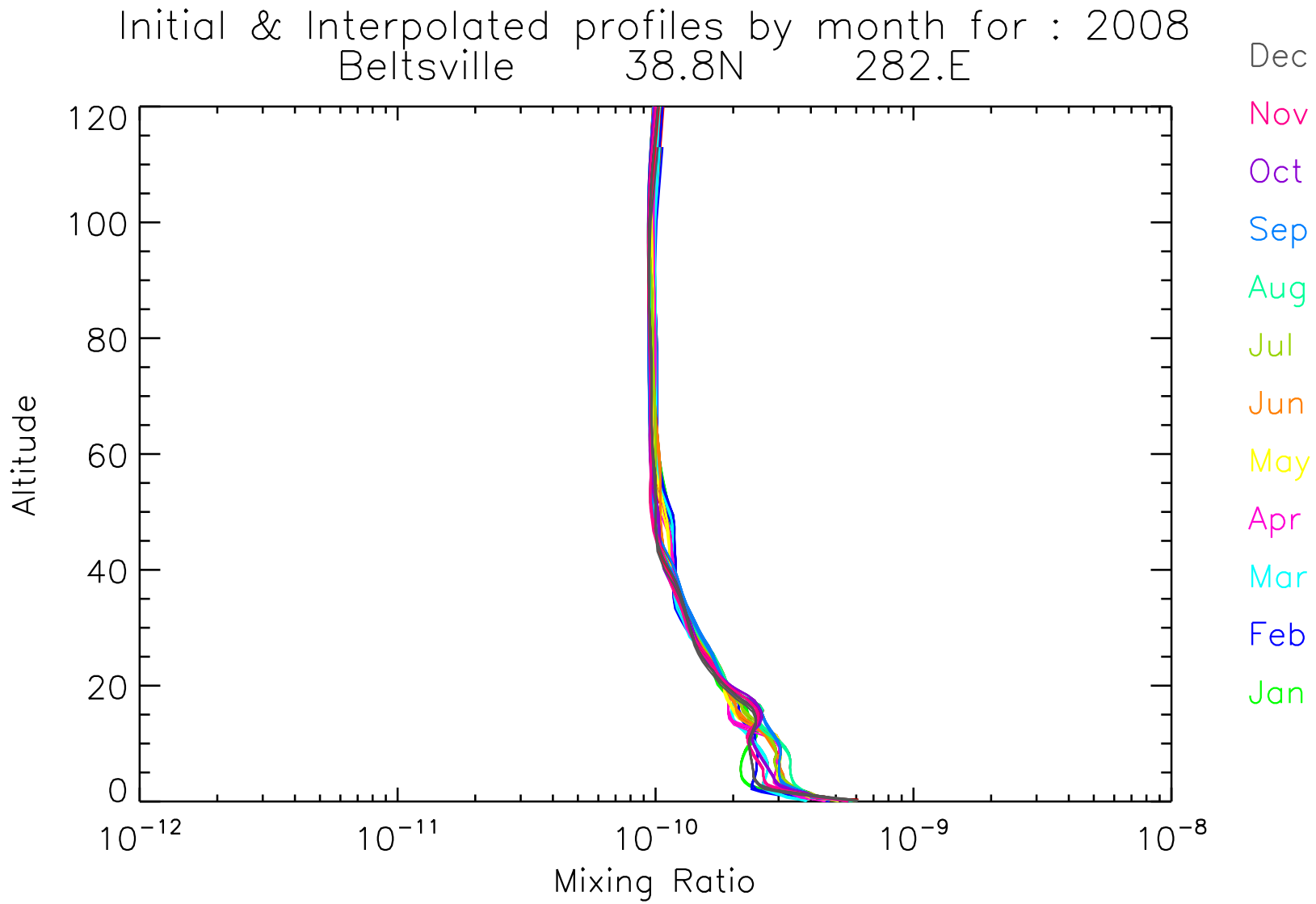
Initial & Interpolated profiles by month for : 2008
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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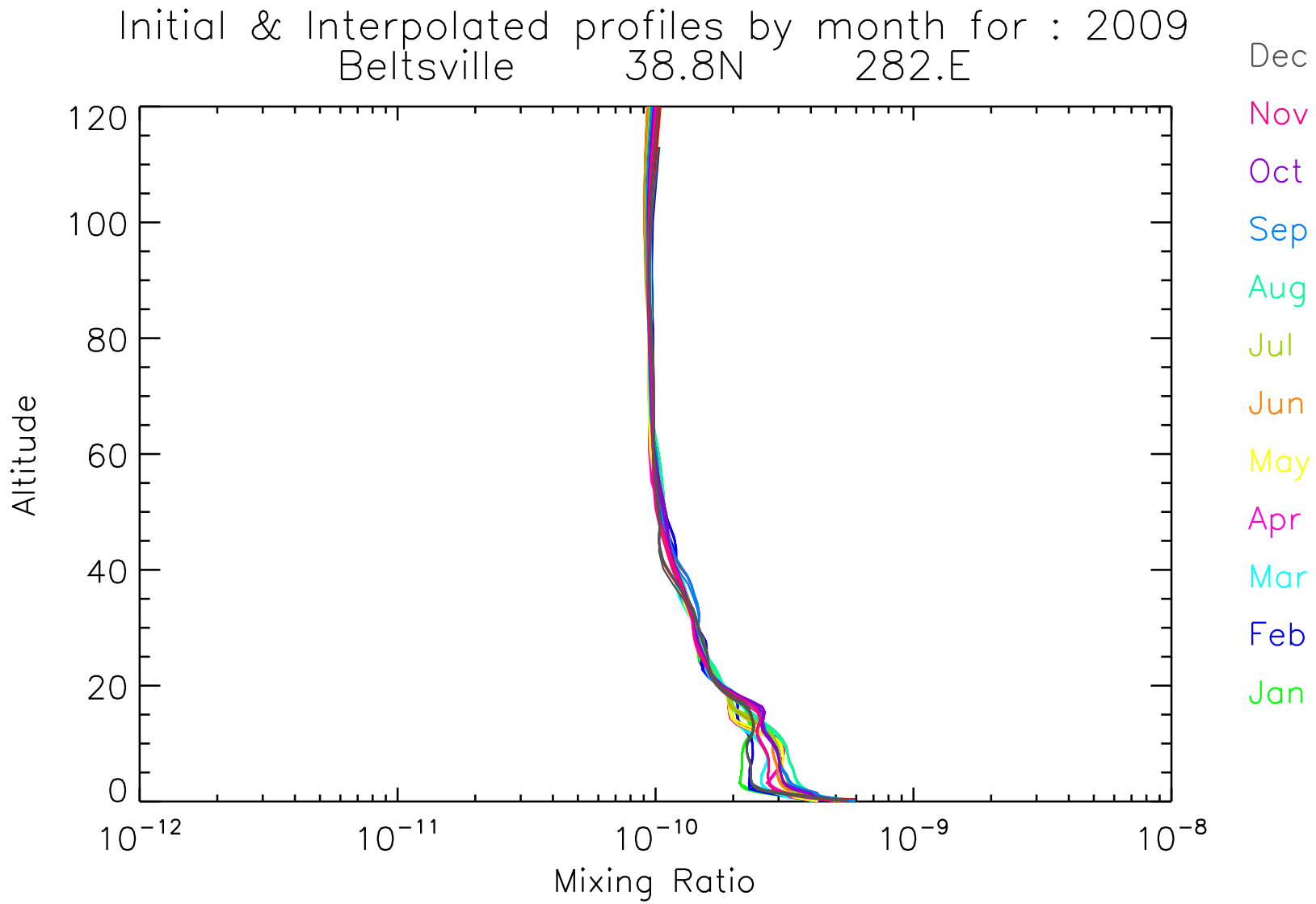
Initial & Interpolated profiles by month for : 2009
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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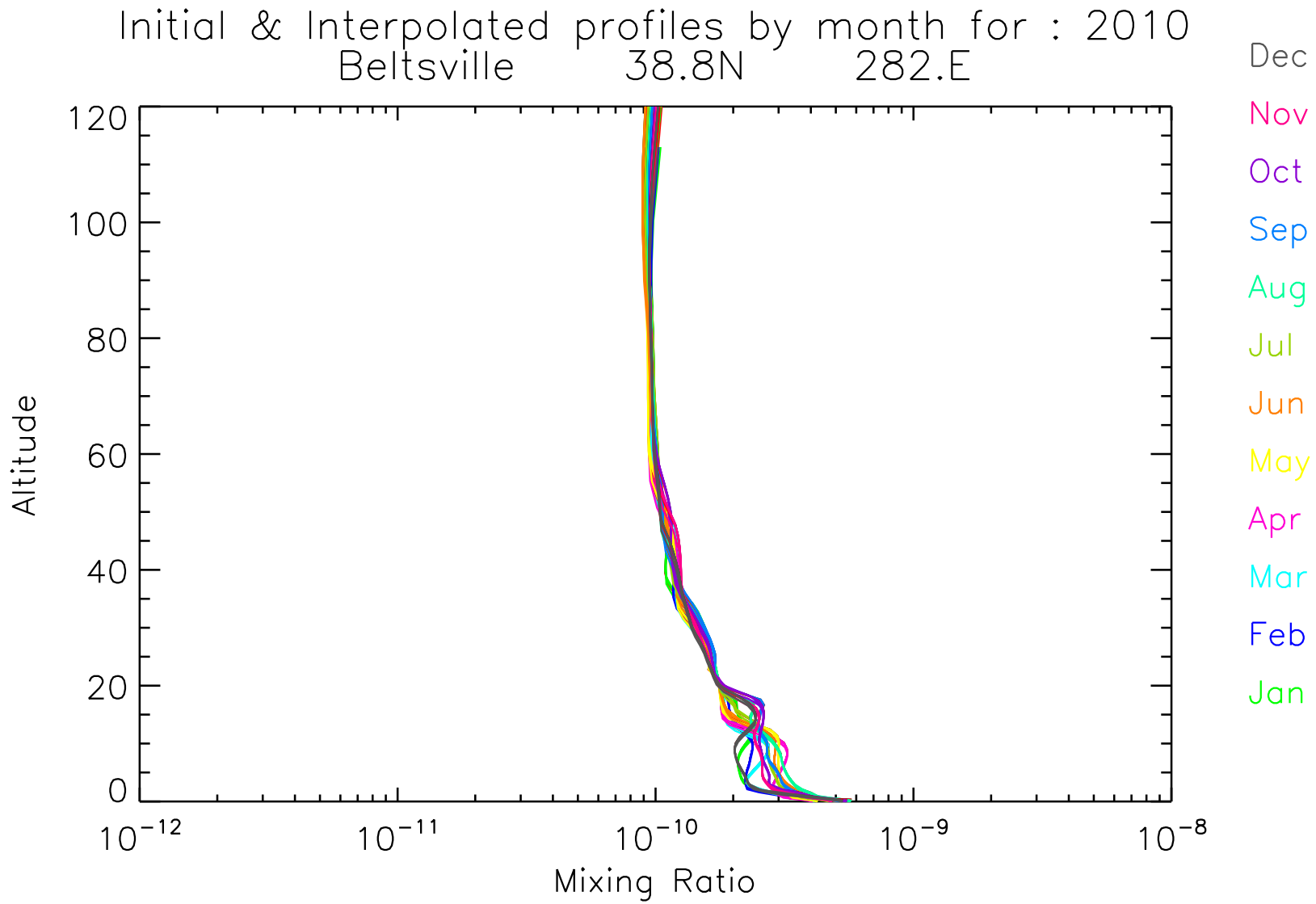
Initial & Interpolated profiles by month for : 2010
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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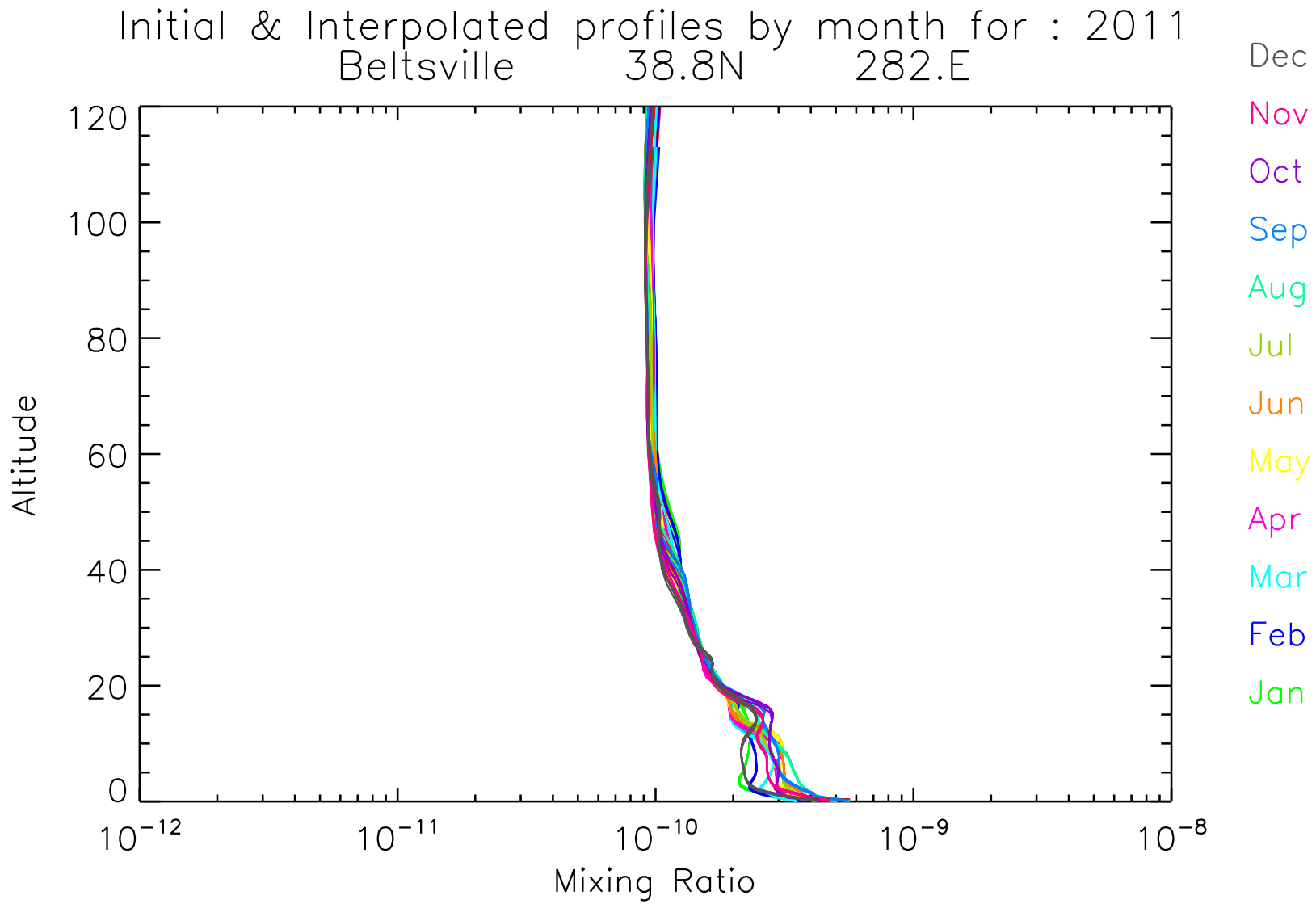
Initial & Interpolated profiles by month for : 2011
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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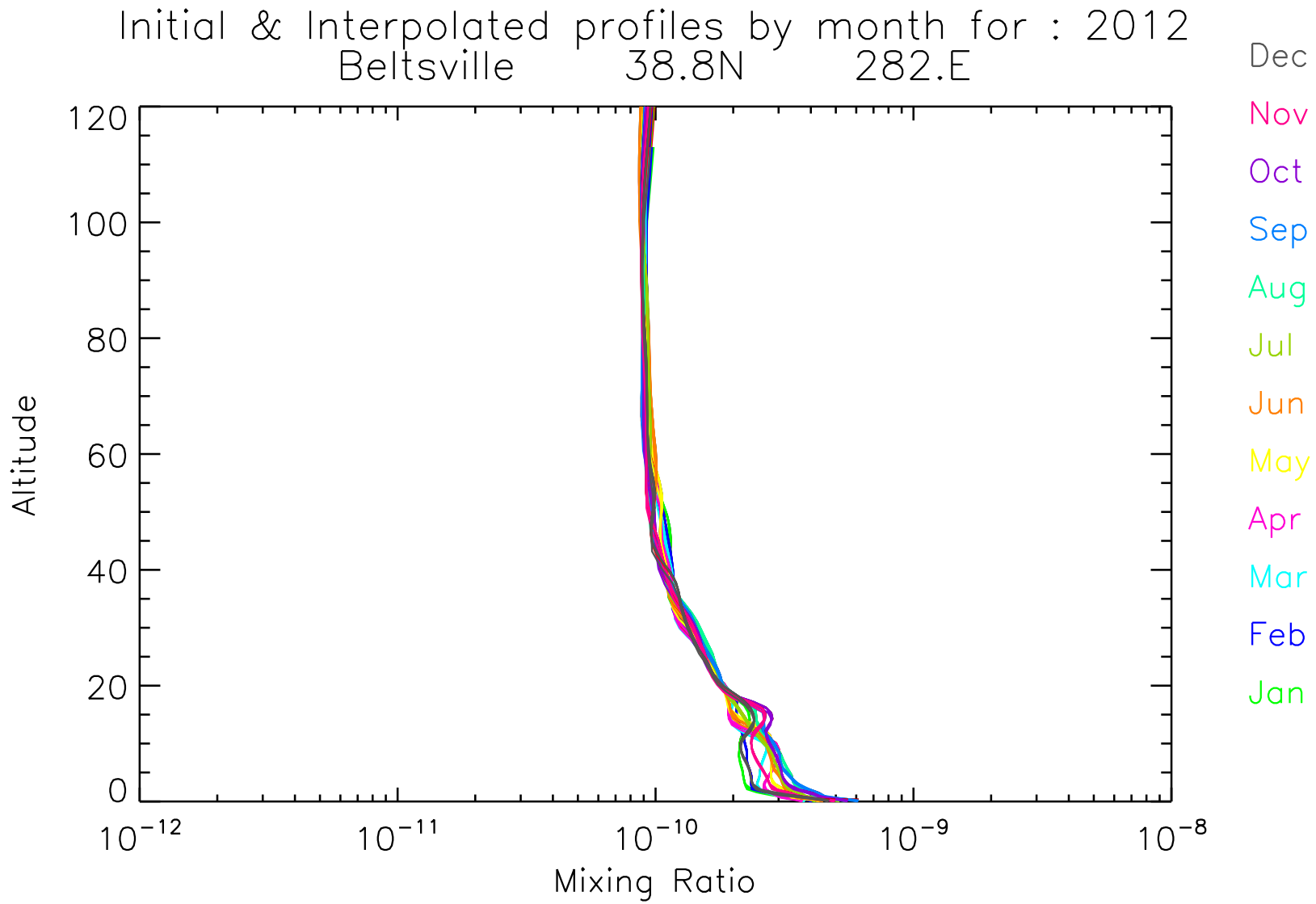
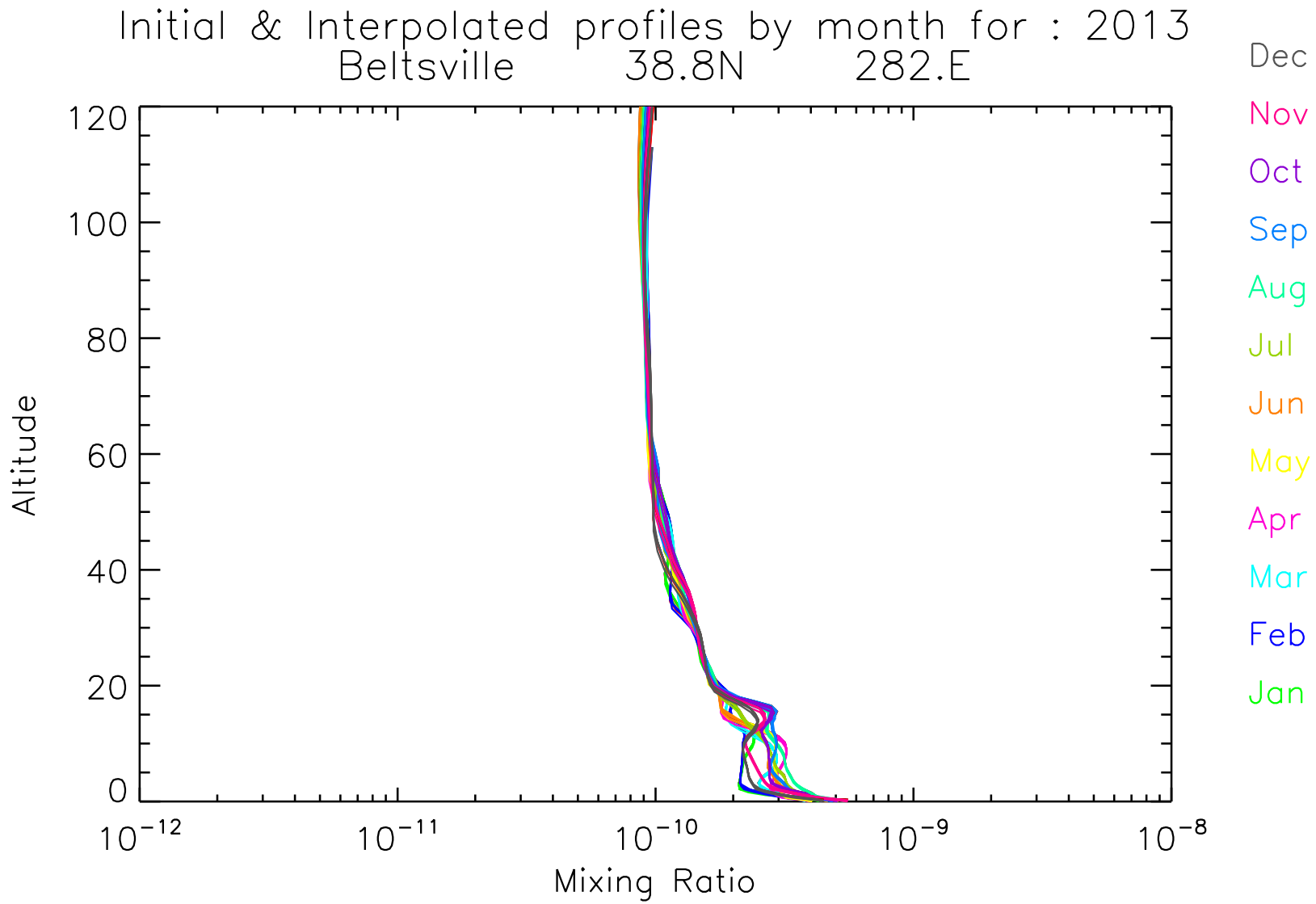
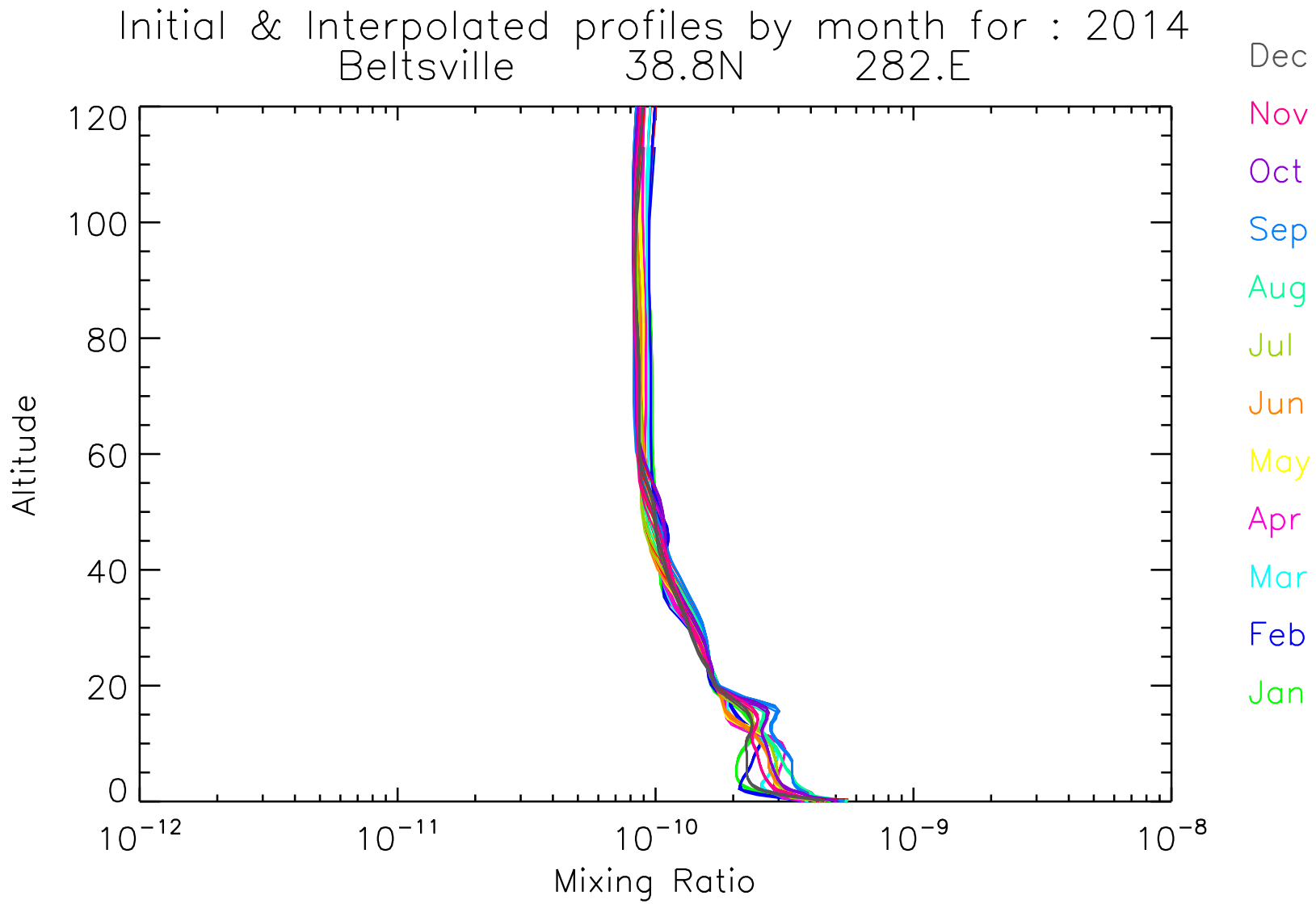
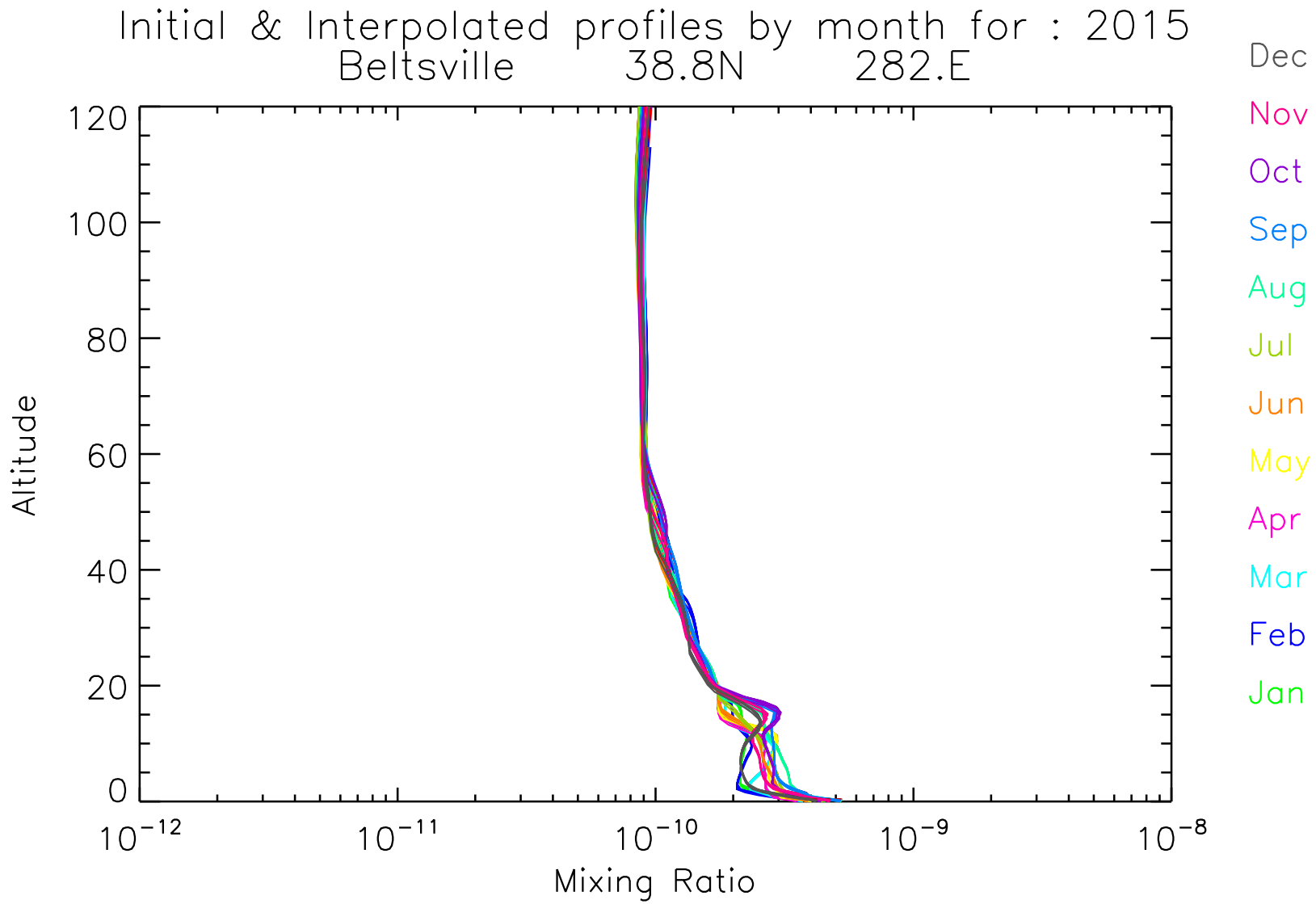
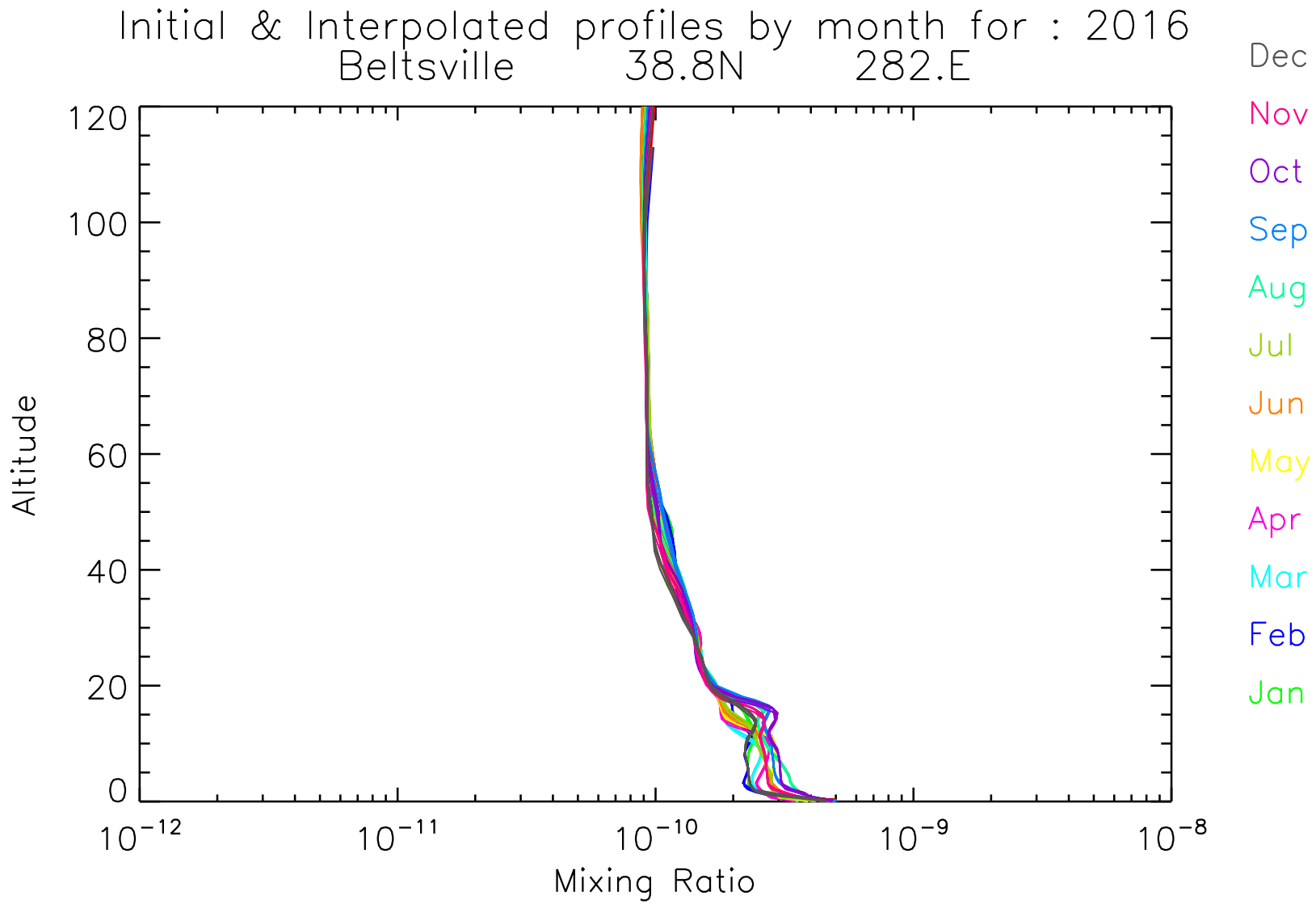
Feb
Jan

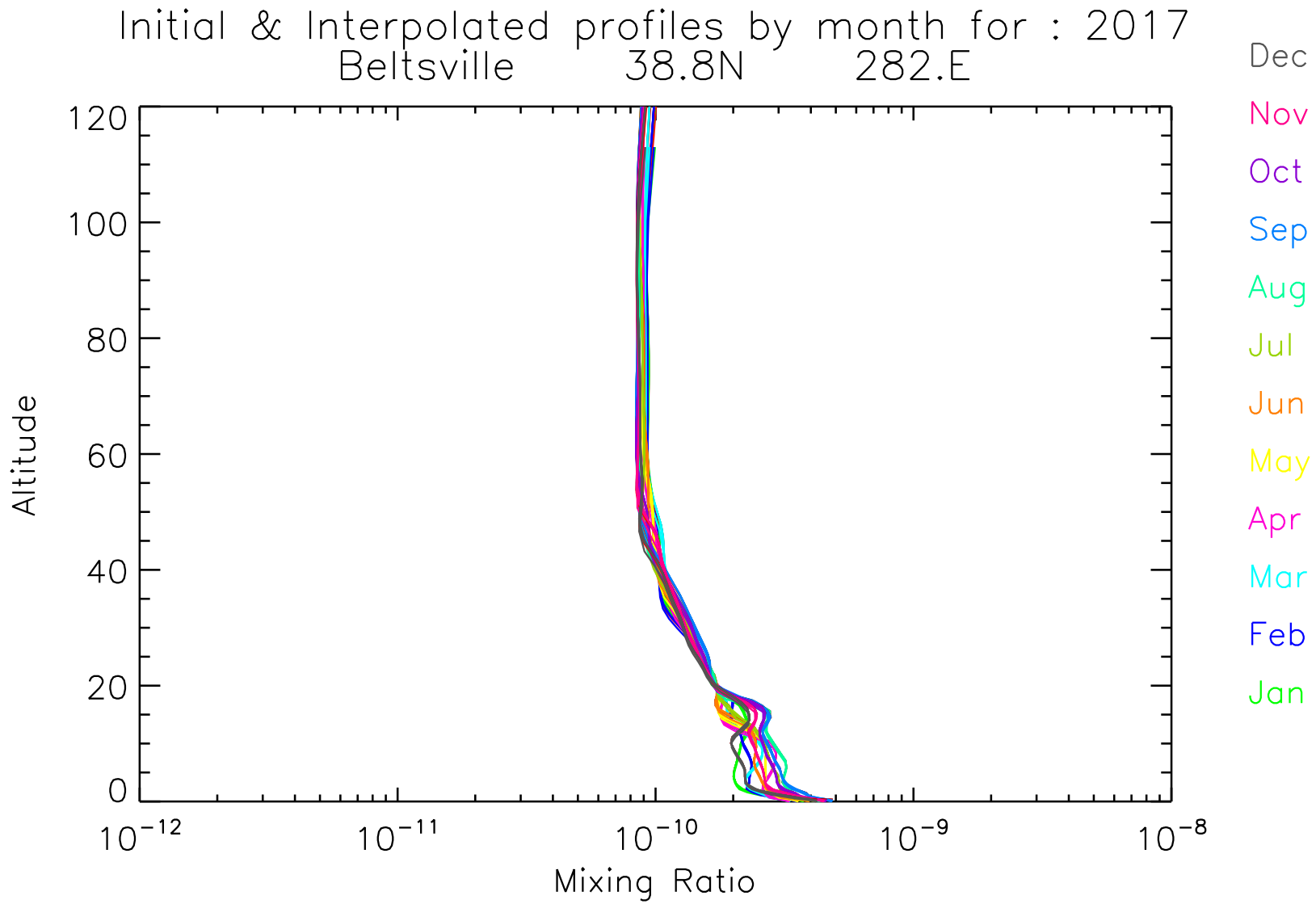

Initial & Interpolated profiles by month for : 2012
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

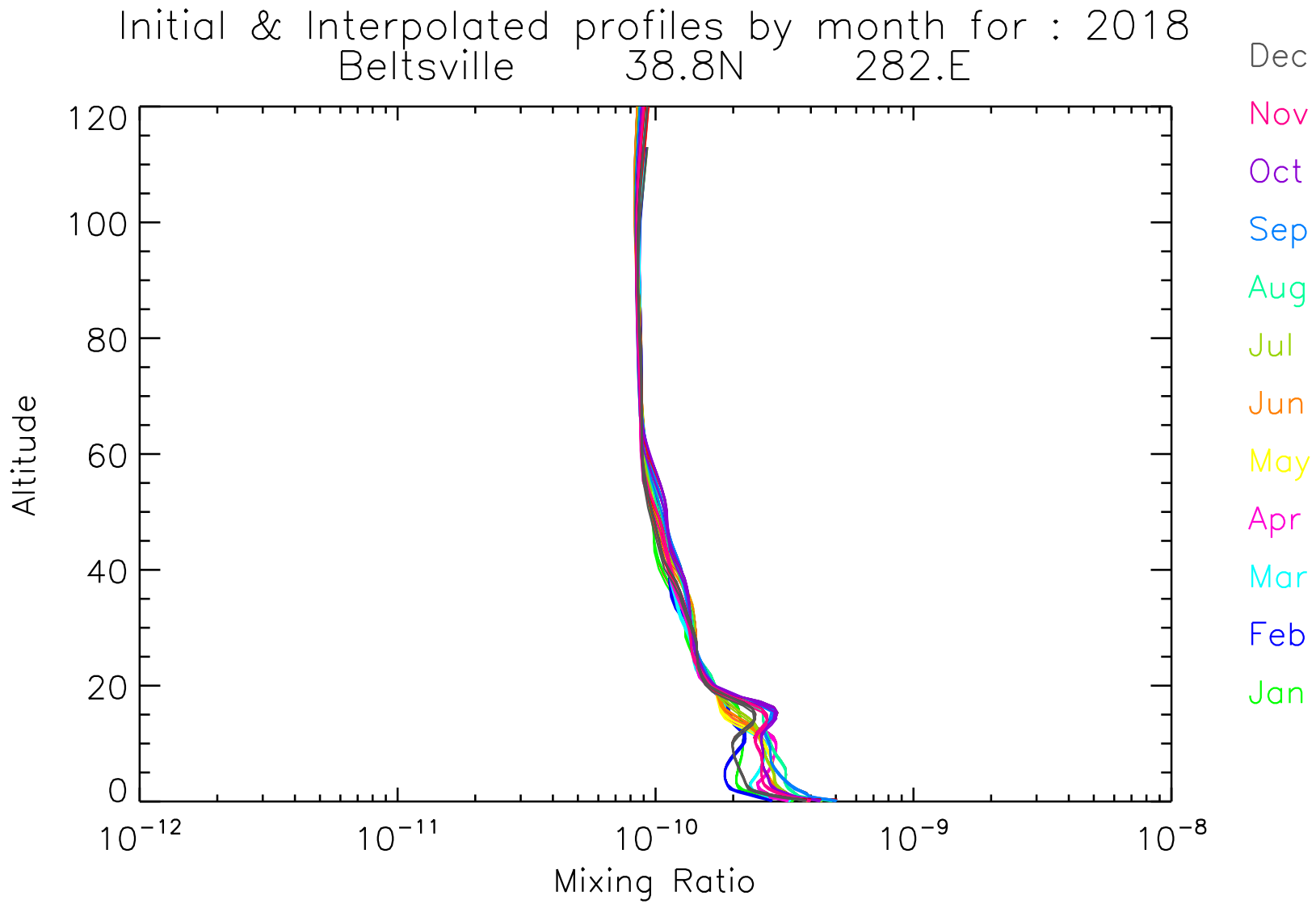

Initial & Interpolated profiles by month for : 2013
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

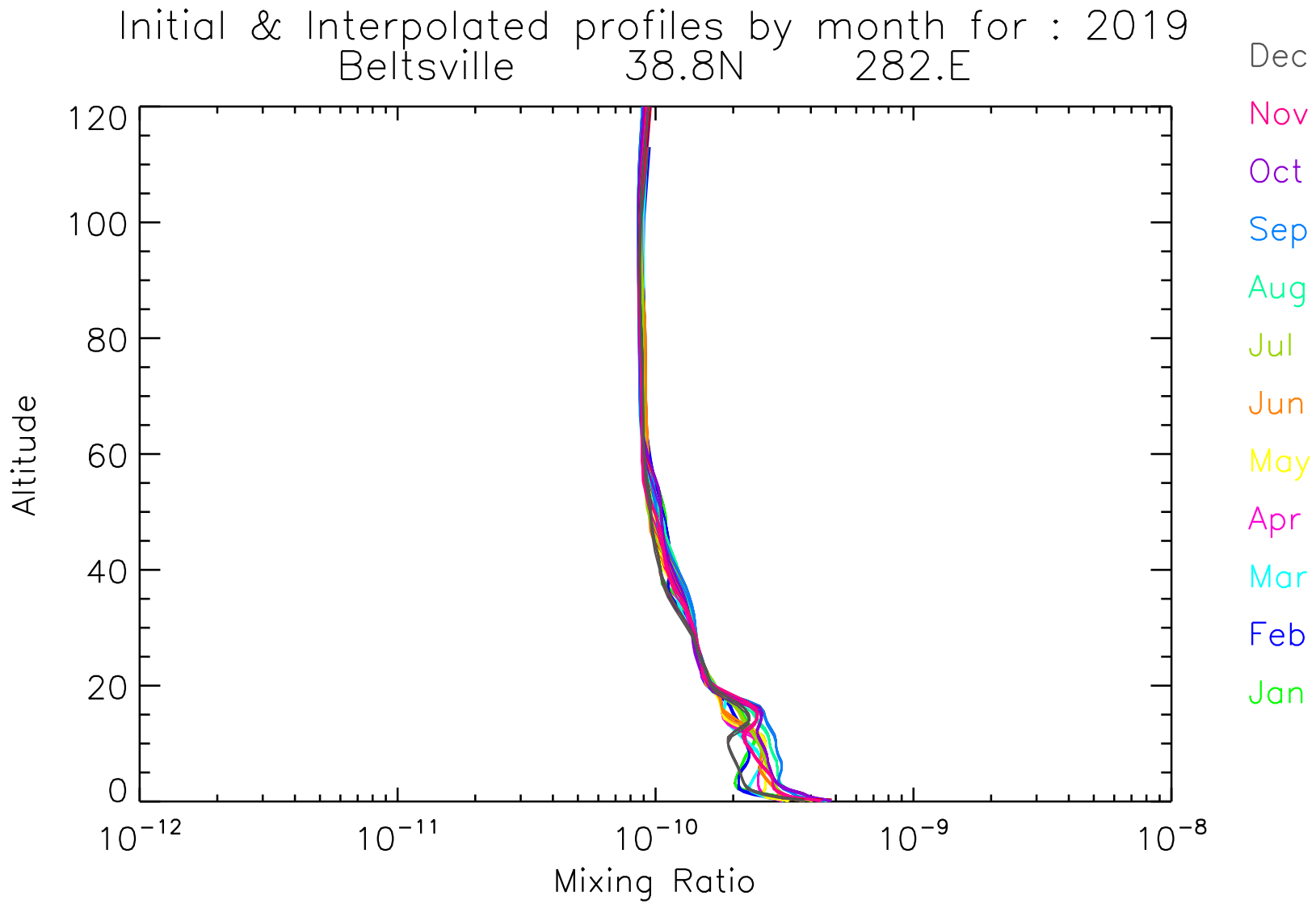

Initial & Interpolated profiles by month for : 2014
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

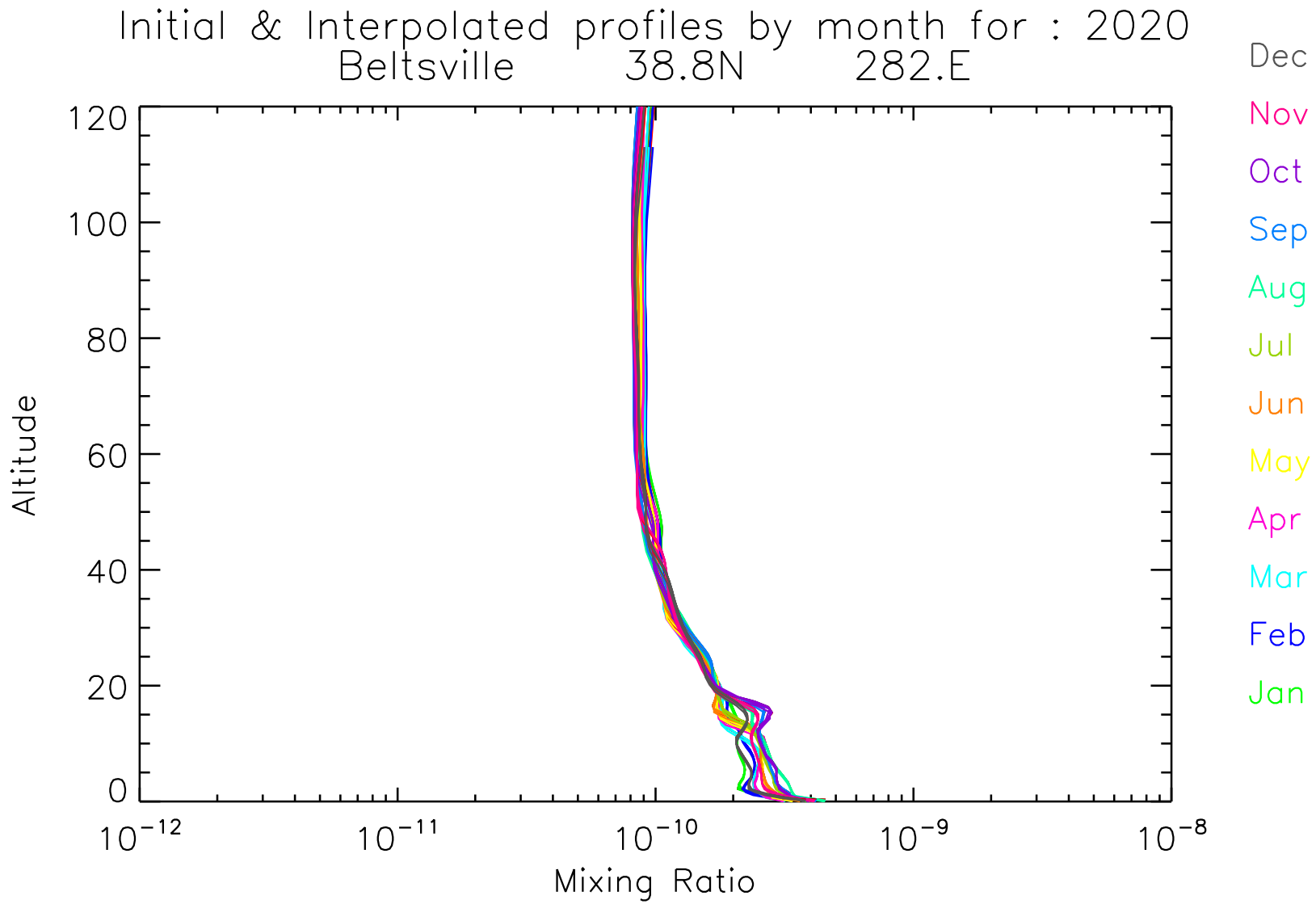

Initial & Interpolated profiles by month for : 2015
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

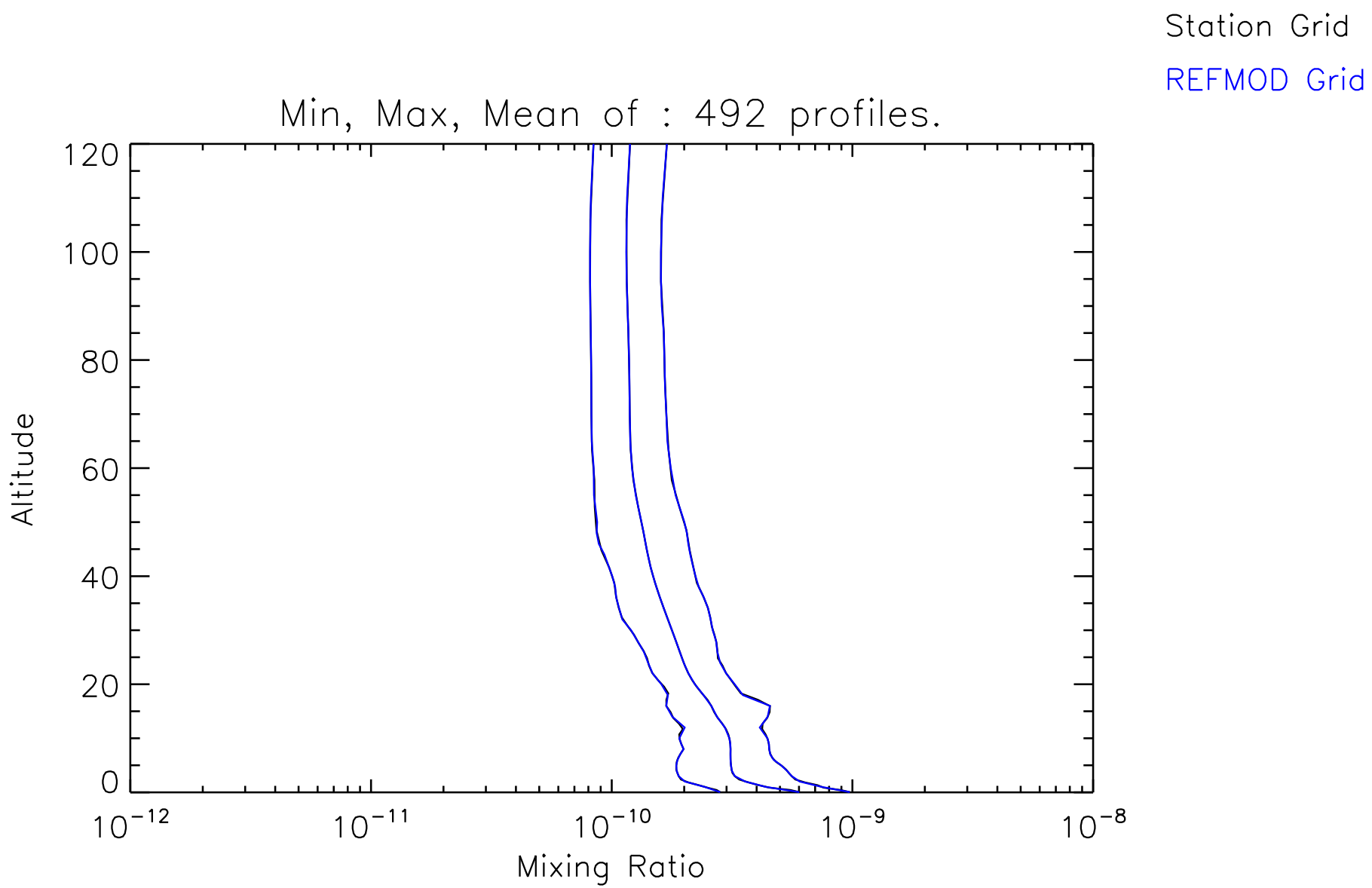

Initial & Interpolated profiles by month for : 2016
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

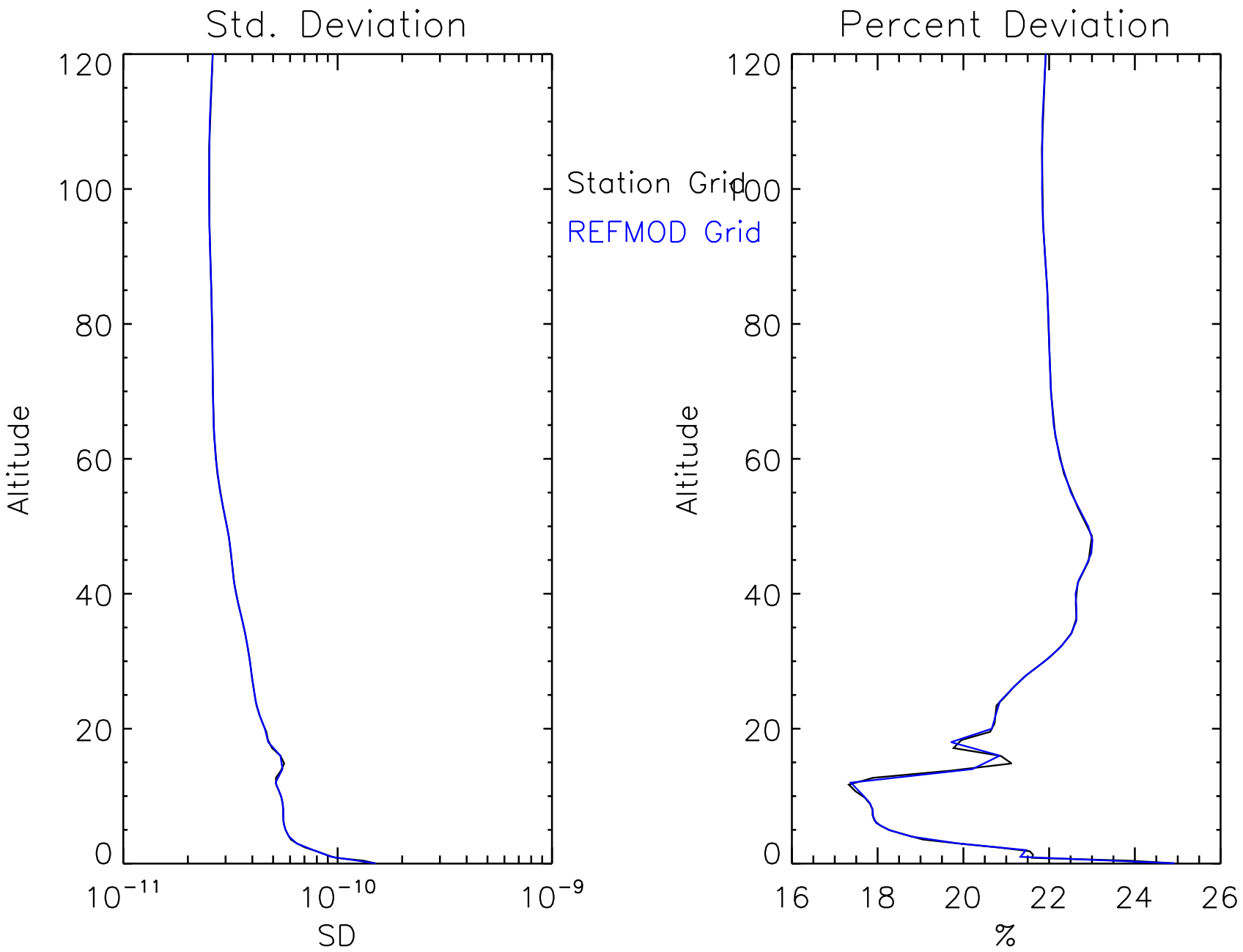

Initial & Interpolated profiles by month for : 2017
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

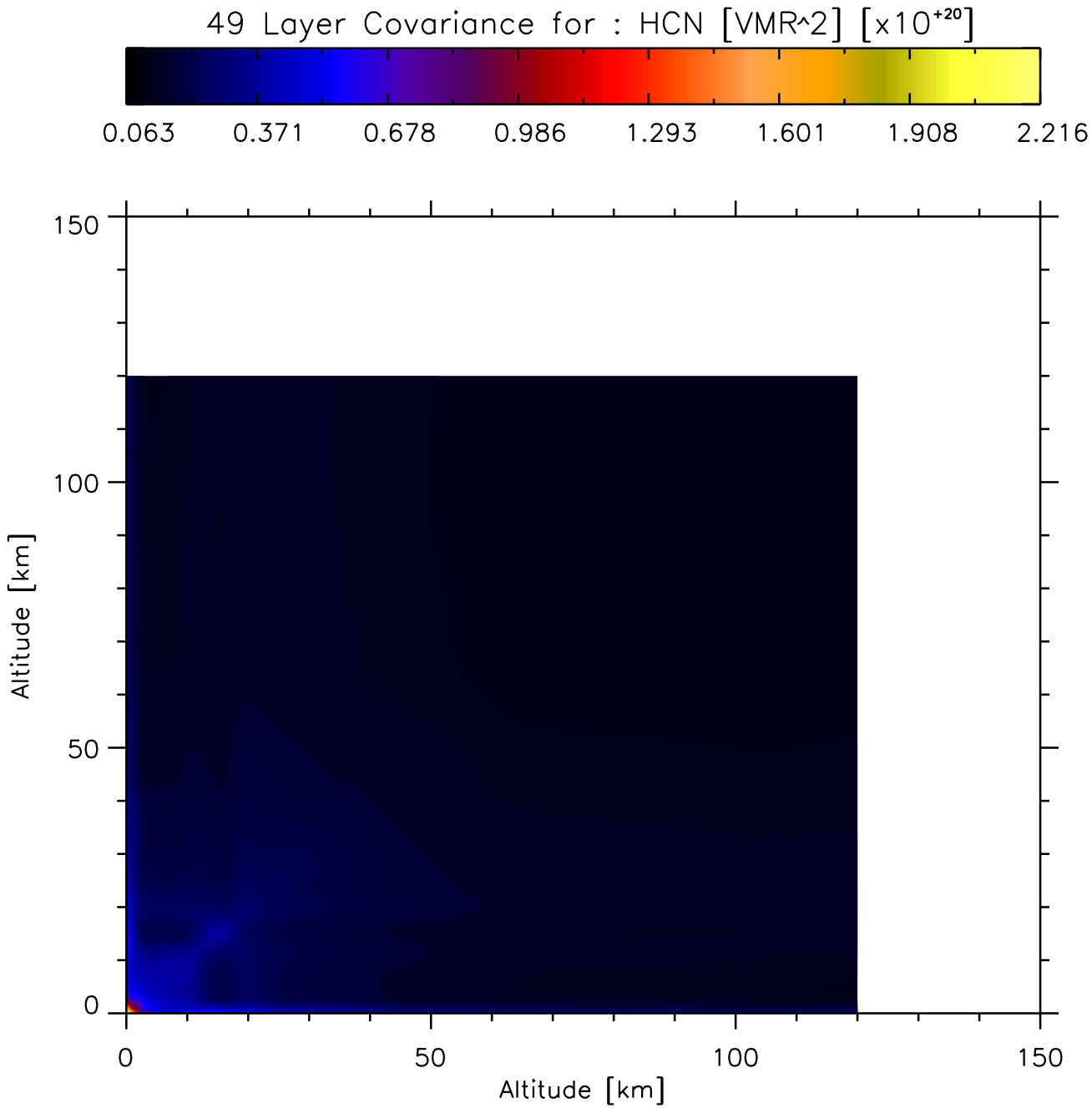

Initial & Interpolated profiles by month for : 2018
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan


Initial & Interpolated profiles by month for : 2019
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

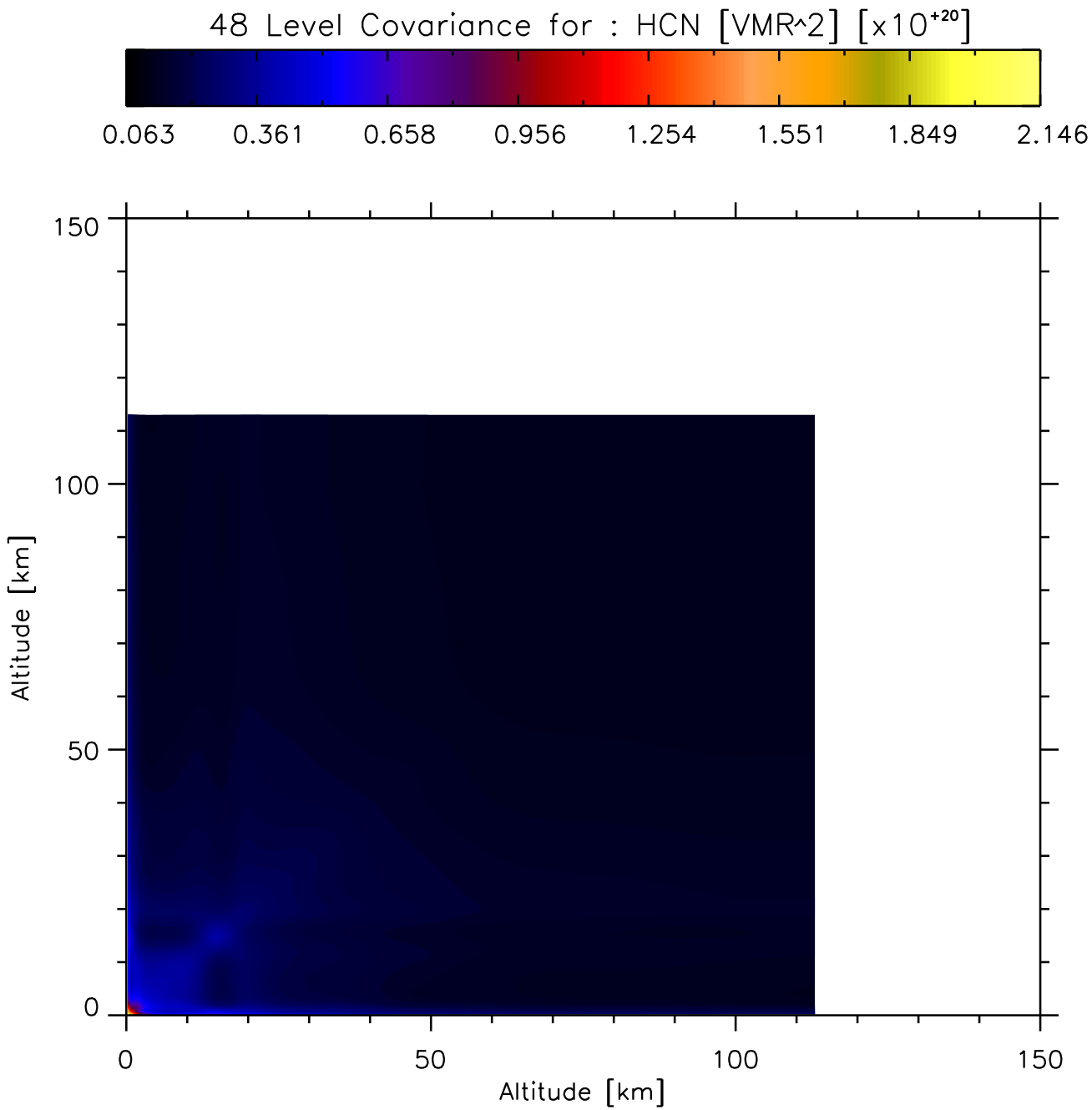

Initial & Interpolated profiles by month for : 2020
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

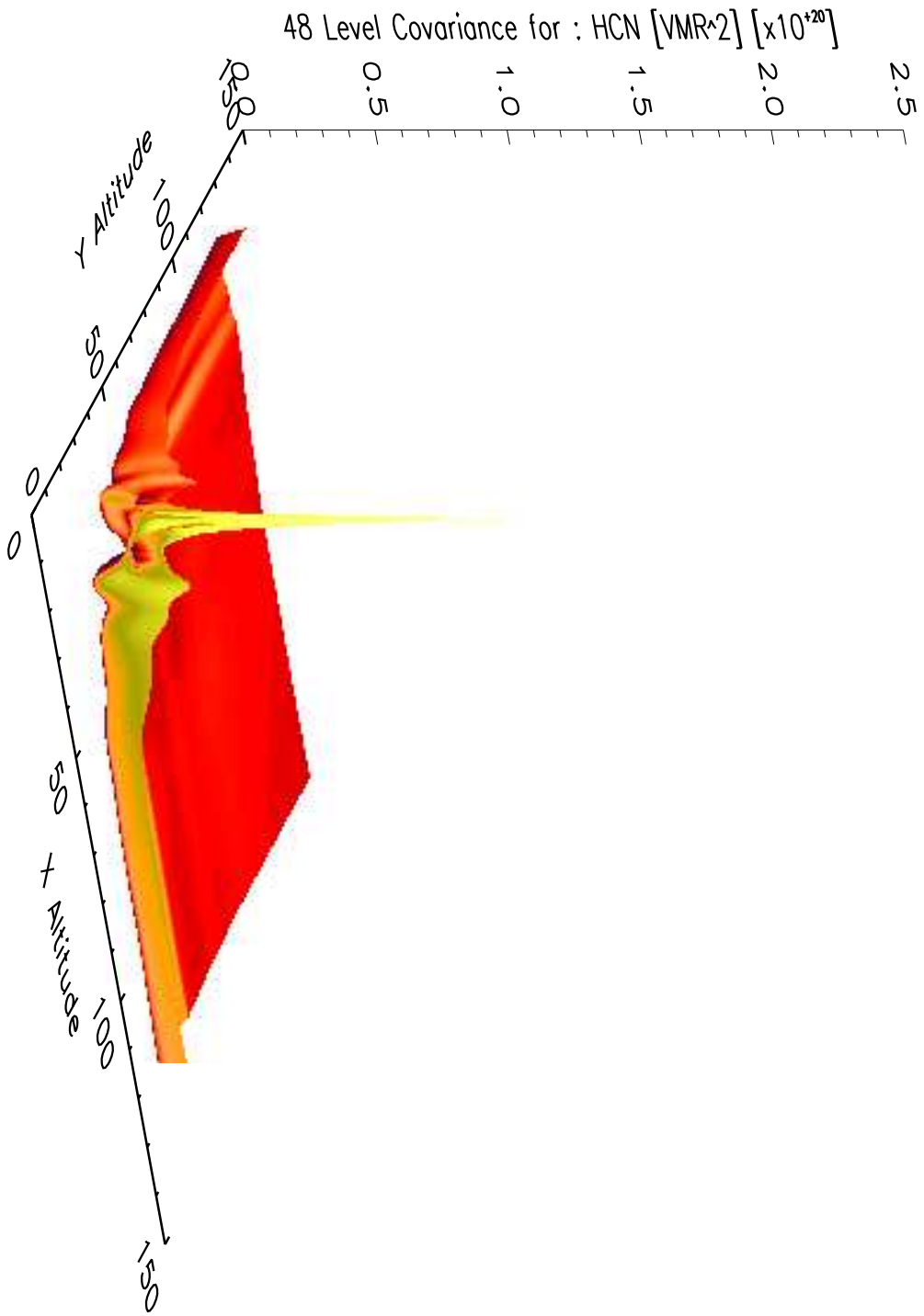

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
10^{-11}
10^{-10}
10^{-9}
SD
16
18
20
22
24
26
%


49 Layer Covariance for : HCN [VMR^2] [x10^+20]
0.063
0.371
0.678
0.986
1.293
1.601
1.908
2.216
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

49 Layer Covariance for : HCN [VMR^2] [x10^20]
Y Altitude
X Altitude
0
50
100
150
0
50
100
150
0.5
0.4
0.3
0.2
0.1
0.0


48 Level Covariance for : HCN [VMR^2] [x10^+20]
0.063
0.361
0.658
0.956
1.254
1.551
1.849
2.146
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


48 Level Covariance for : HCN [VMR^2] [x10^+20]
0.0
0.5
1.0
1.5
2.0
2.5
Y Altitude
0
50
100
0
50
X Altitude
100