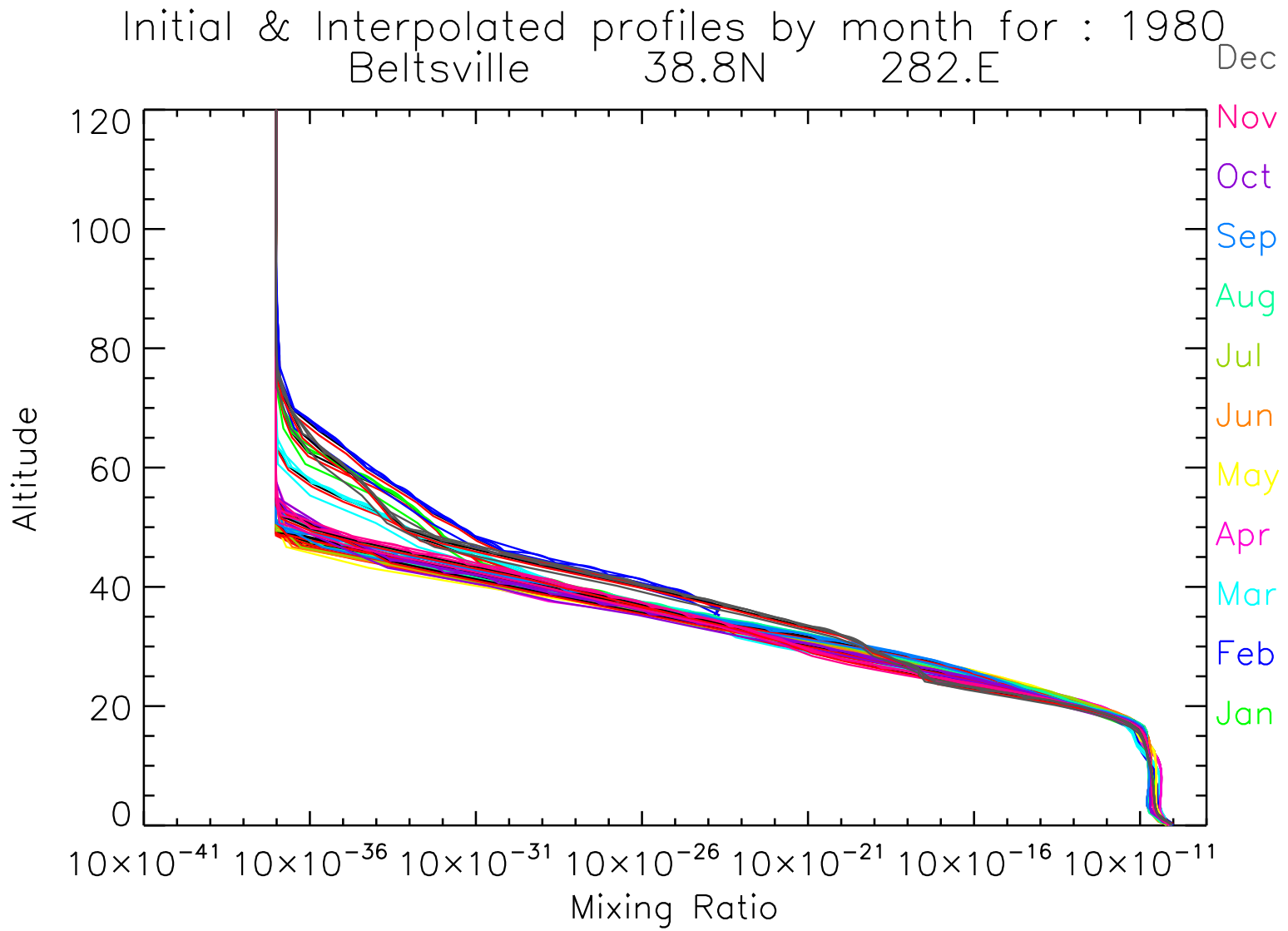
Initial & Interpolated profiles by month for : 1980
Beltsville 38.8N 282.E
Dec
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Altitude
120
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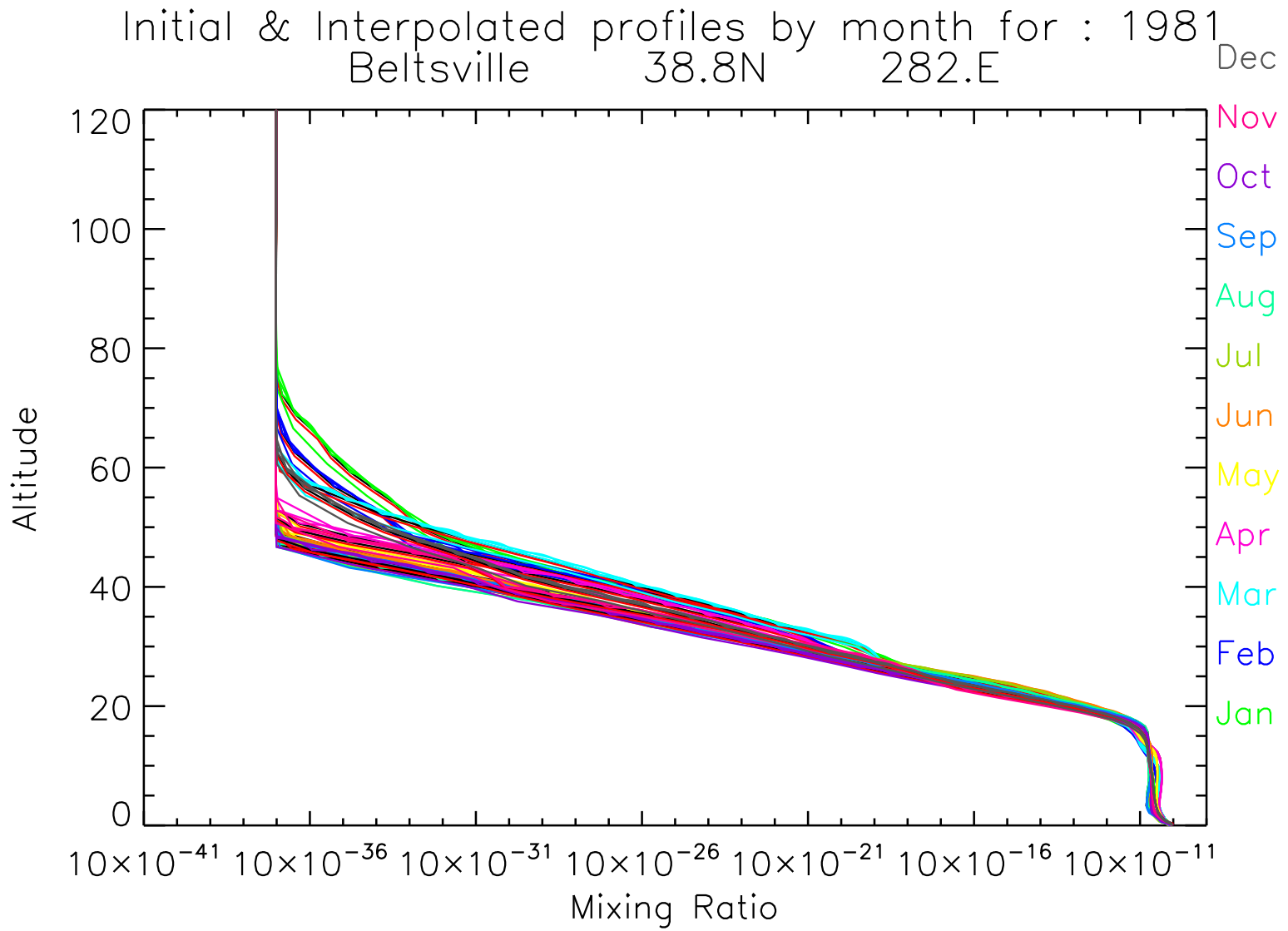
Mixing Ratio


Initial & Interpolated profiles by month for : 1981
Beltsville 38.8N 282.E
Dec
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Altitude
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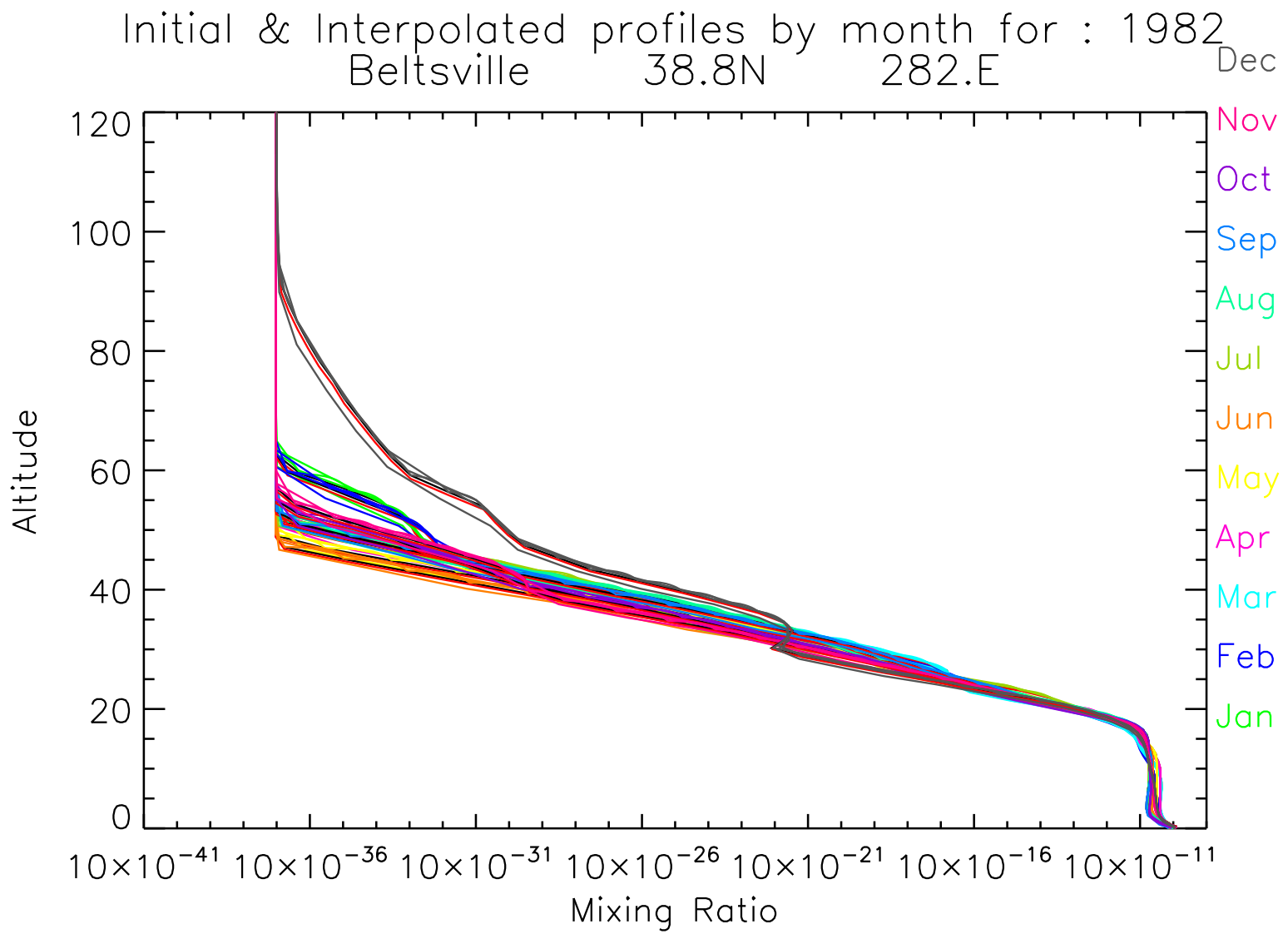
Mixing Ratio


Initial & Interpolated profiles by month for : 1982
Beltsville 38.8N 282.E
Dec
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Altitude
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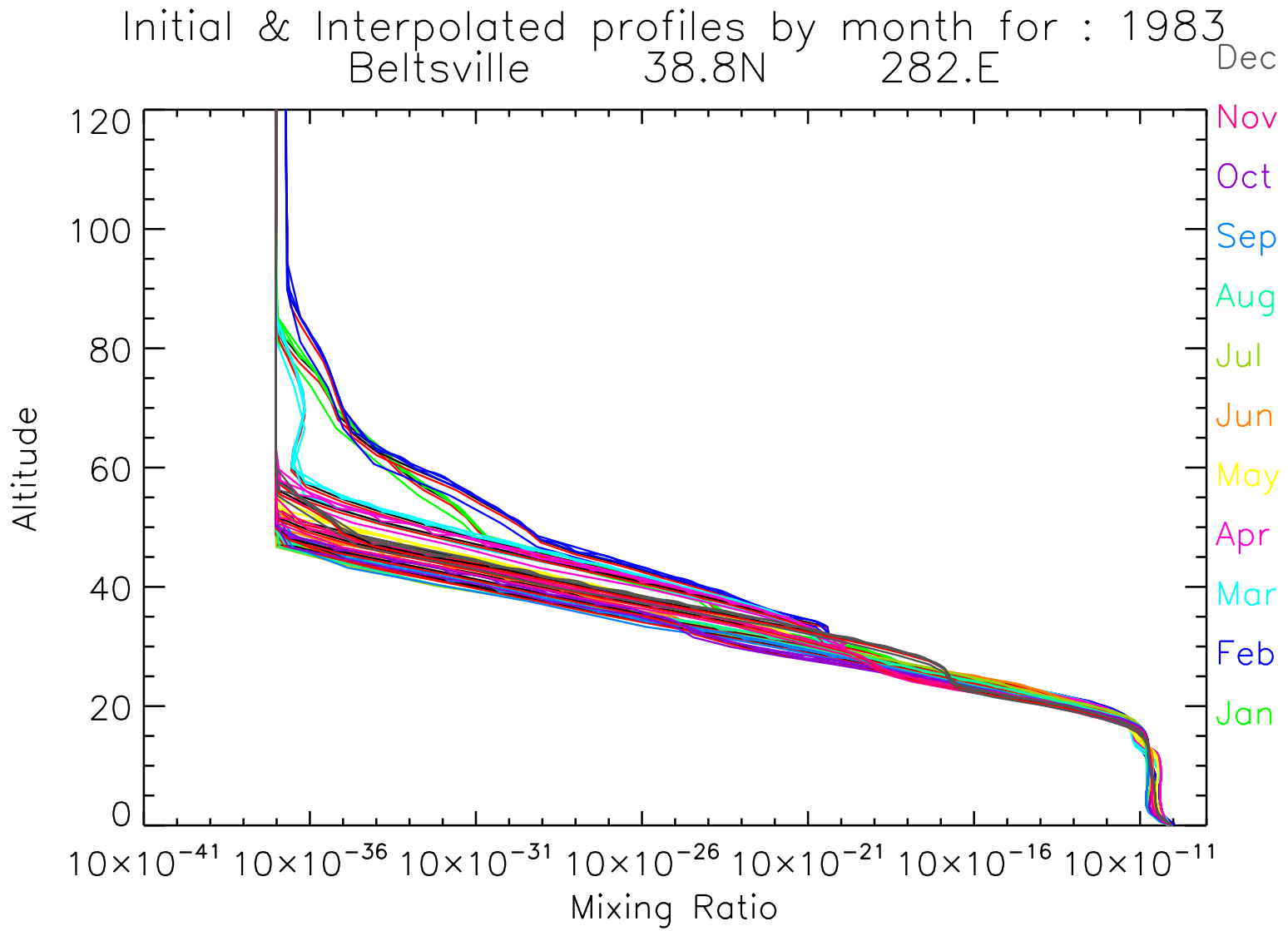
Mixing Ratio


Initial & Interpolated profiles by month for : 1983
Beltsville 38.8N 282.E
Dec
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Altitude
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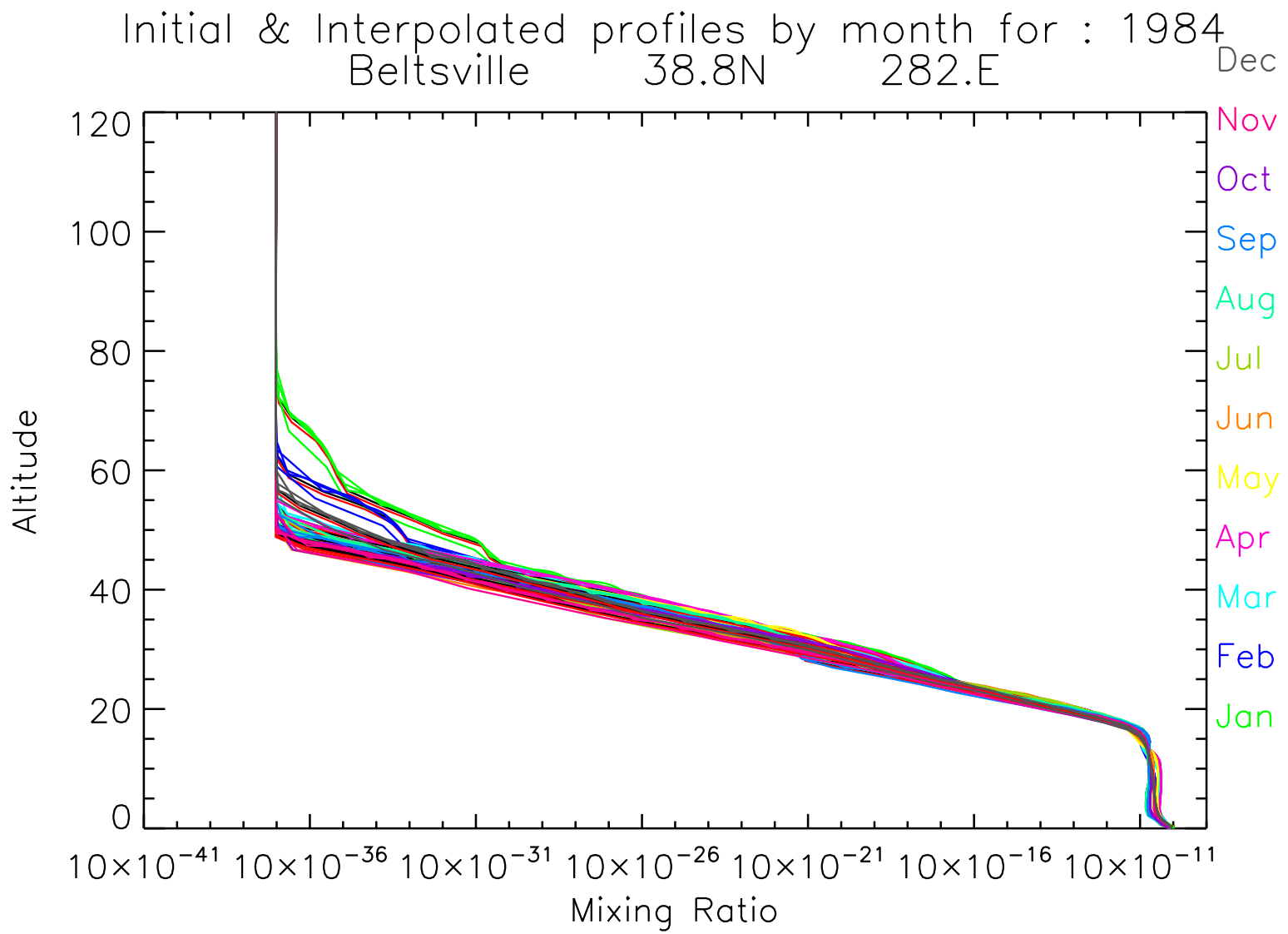
Mixing Ratio


Initial & Interpolated profiles by month for : 1984
Beltsville 38.8N 282.E
Dec
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Altitude
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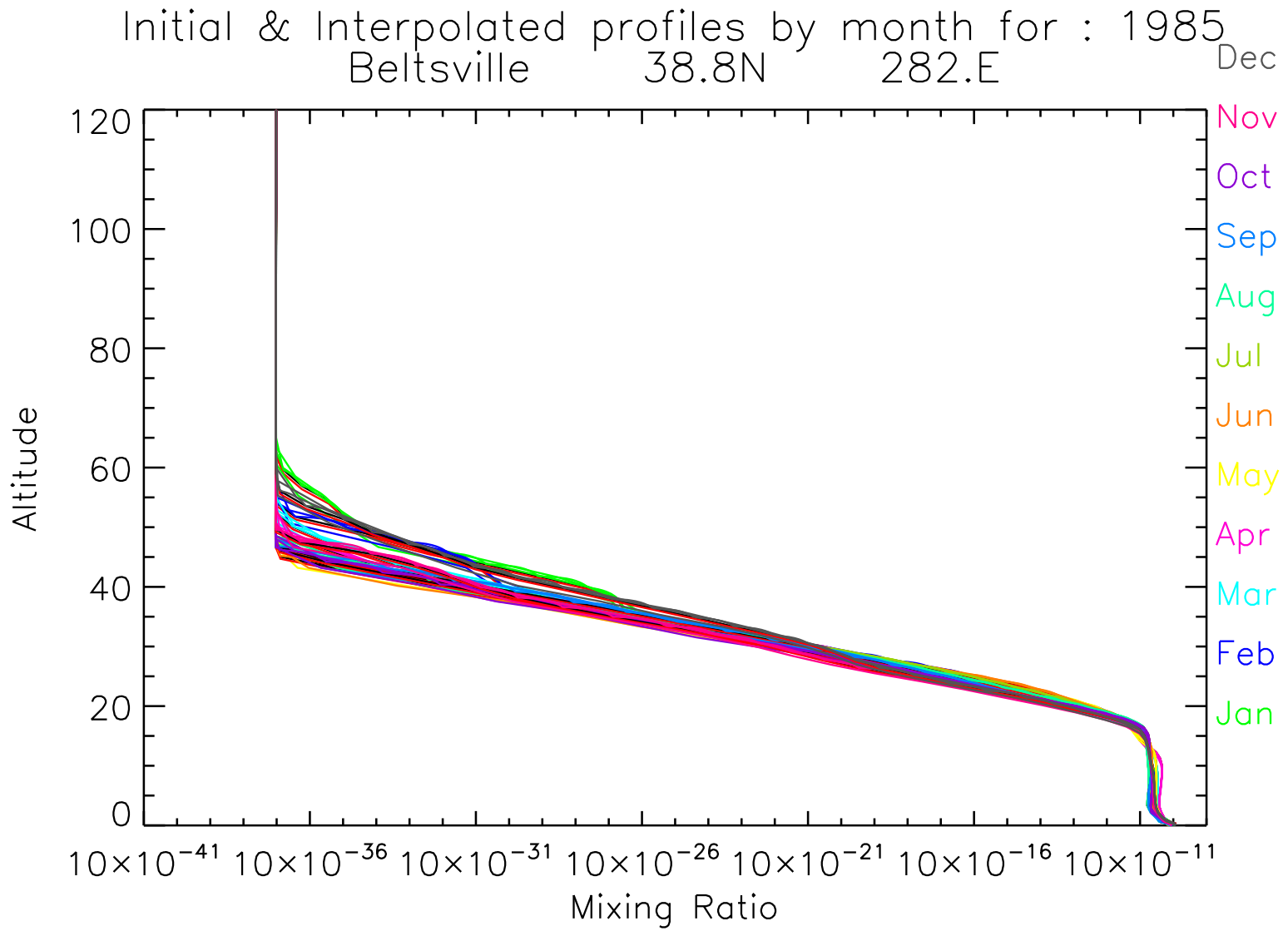
Mixing Ratio


Initial & Interpolated profiles by month for : 1985
Beltsville 38.8N 282.E
Dec
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Altitude
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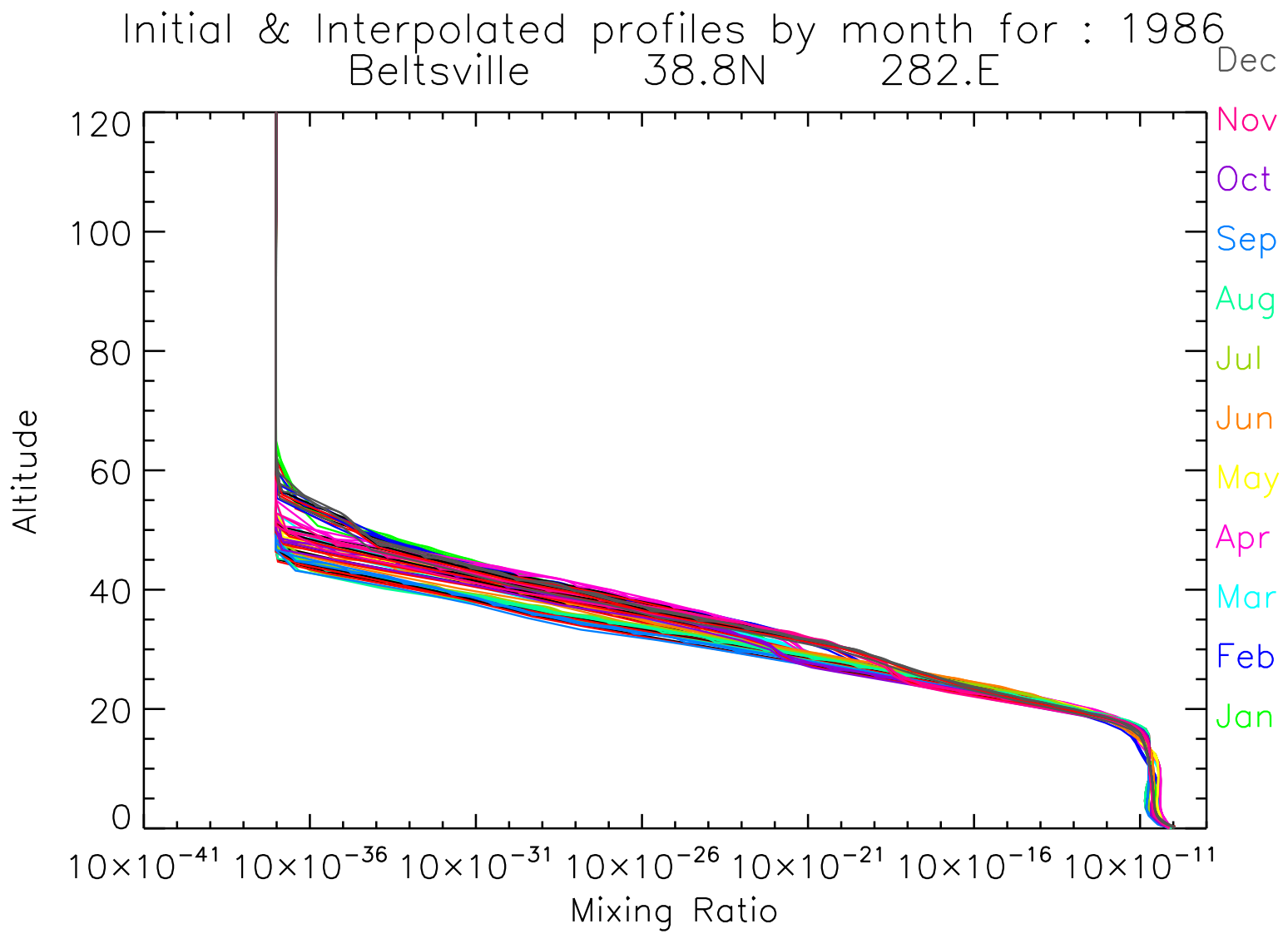
Mixing Ratio


Initial & Interpolated profiles by month for : 1986
Beltsville 38.8N 282.E
Dec
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Altitude
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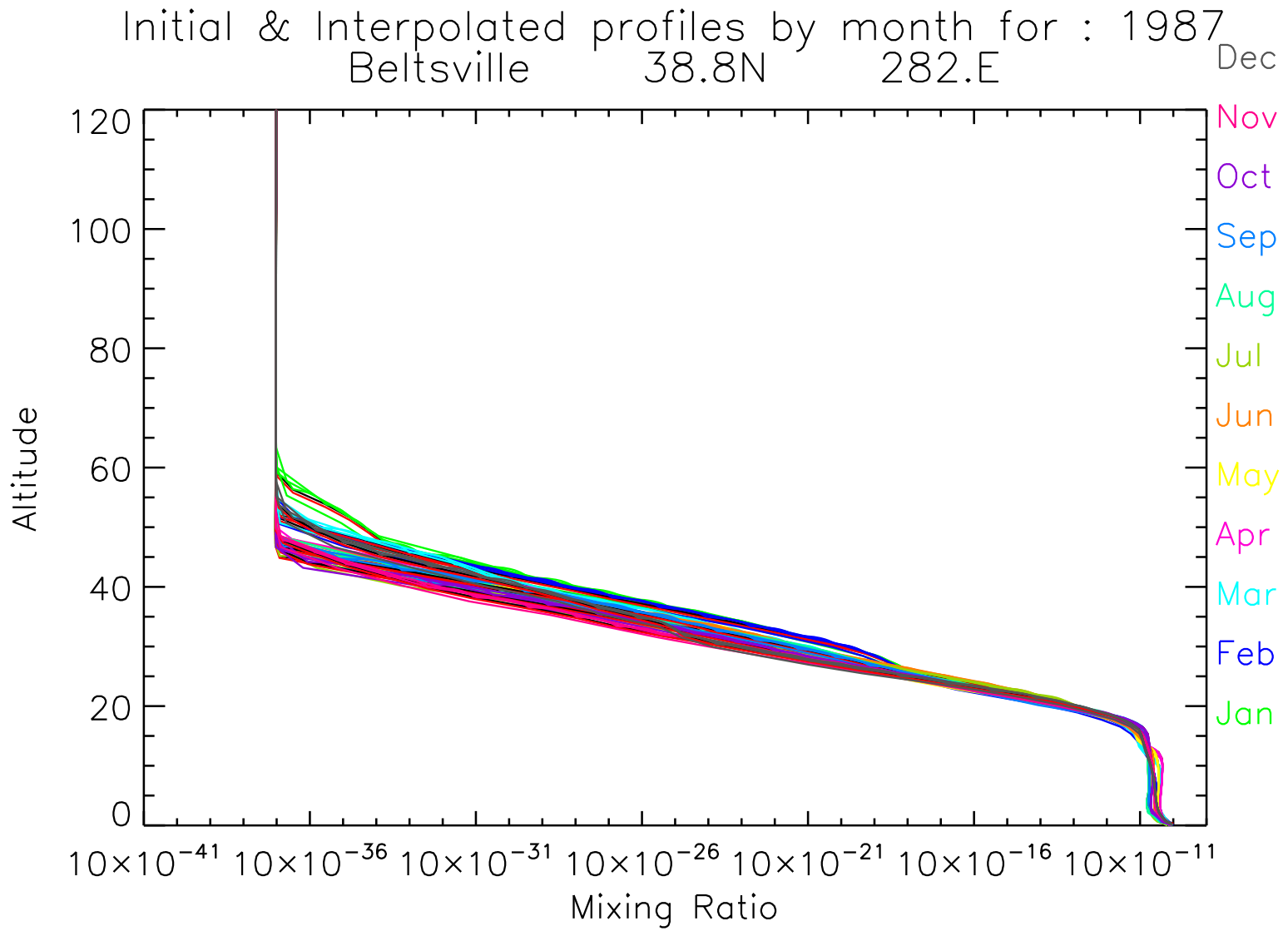
Mixing Ratio


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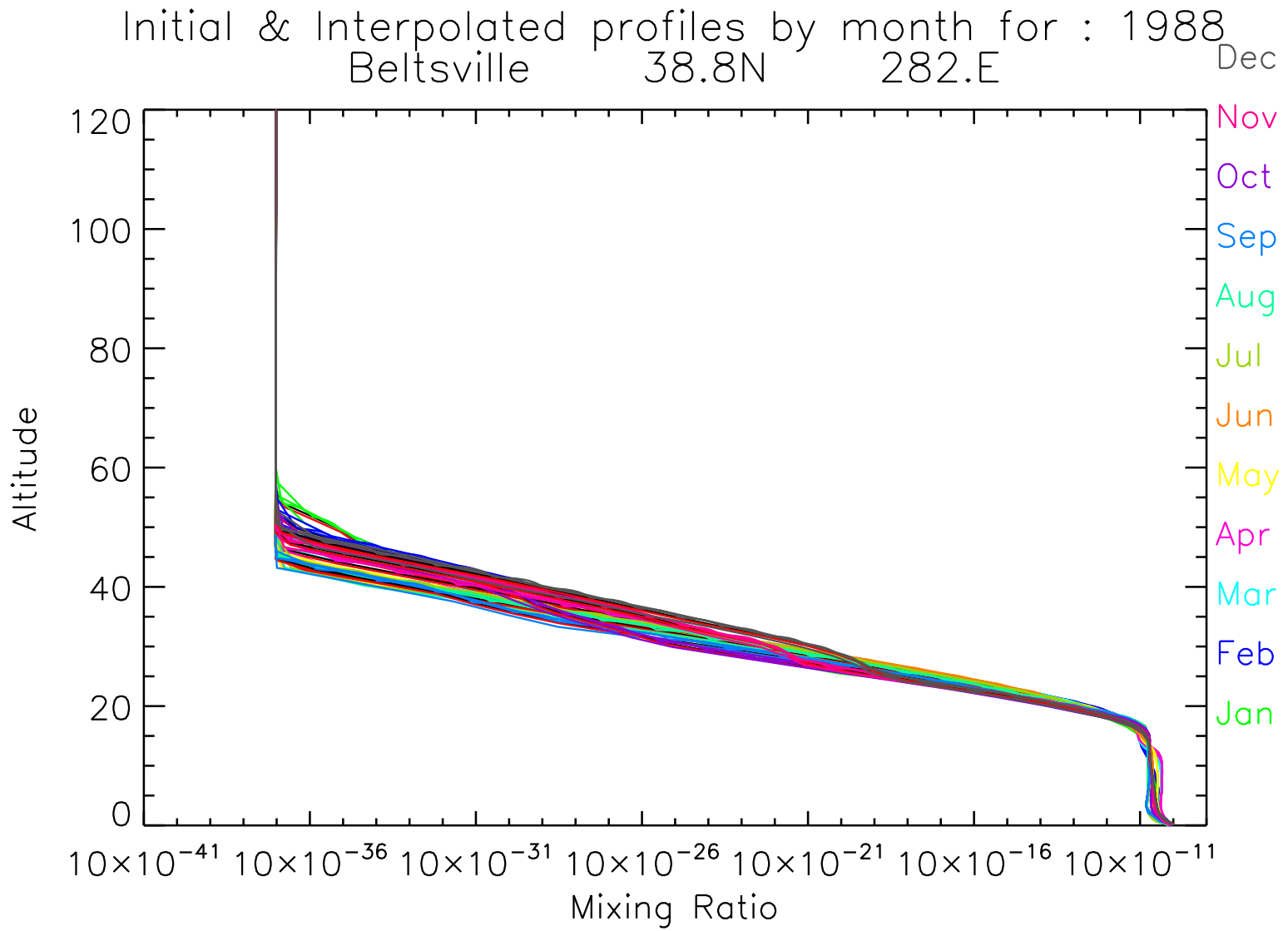
Mixing Ratio


Initial & Interpolated profiles by month for : 1988
Beltsville 38.8N 282.E
Dec
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Altitude
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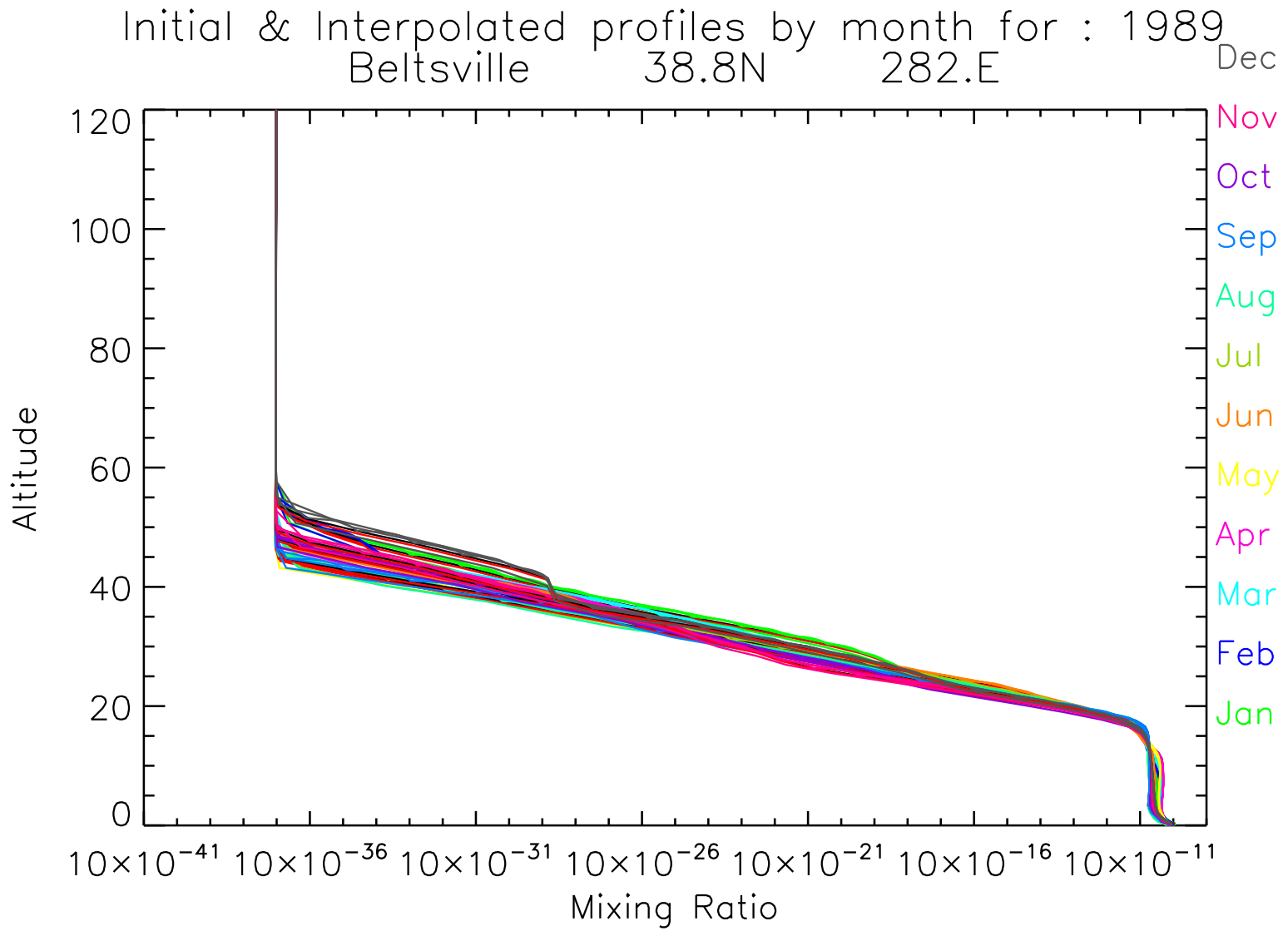
Mixing Ratio


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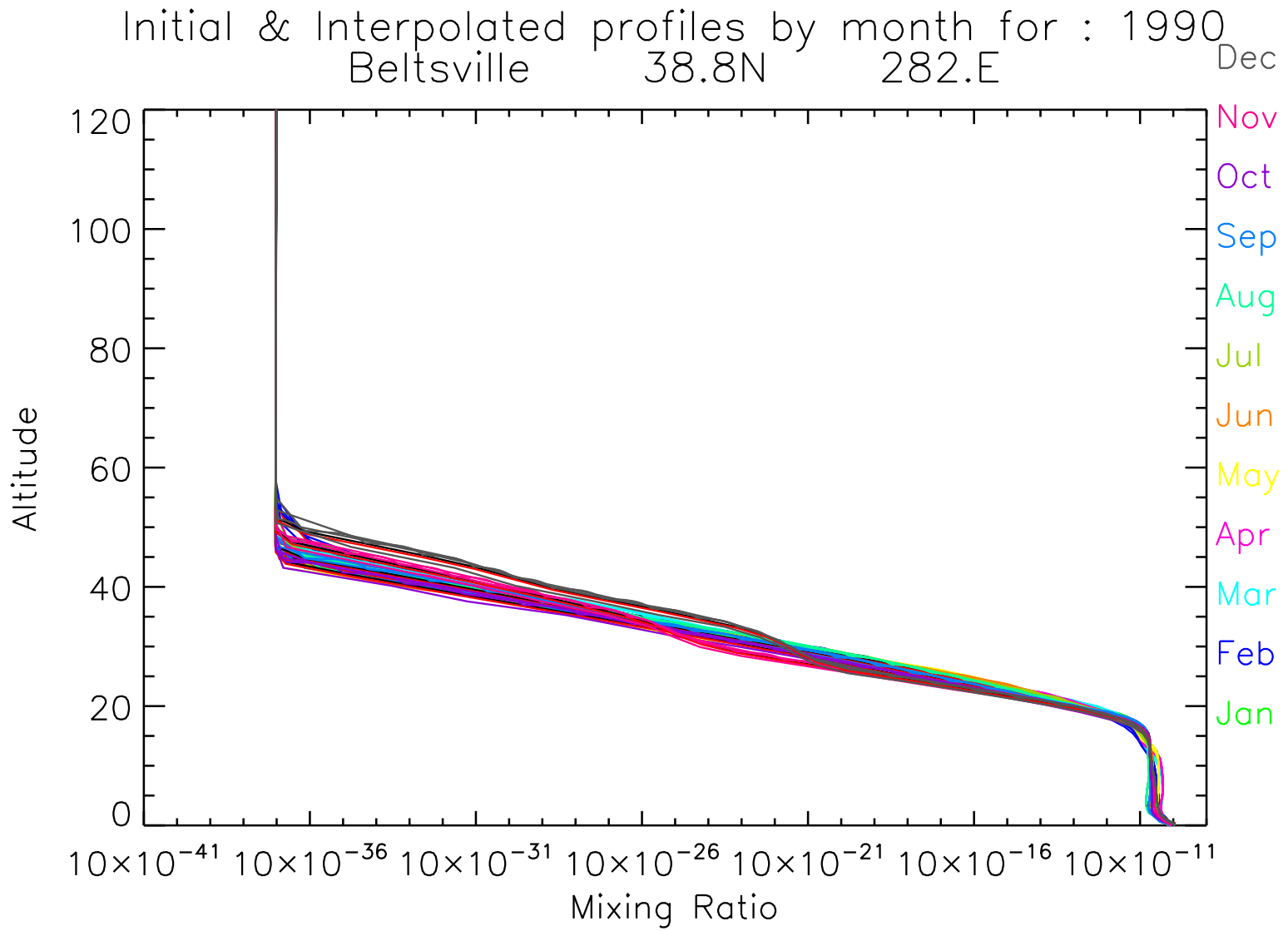
Mixing Ratio


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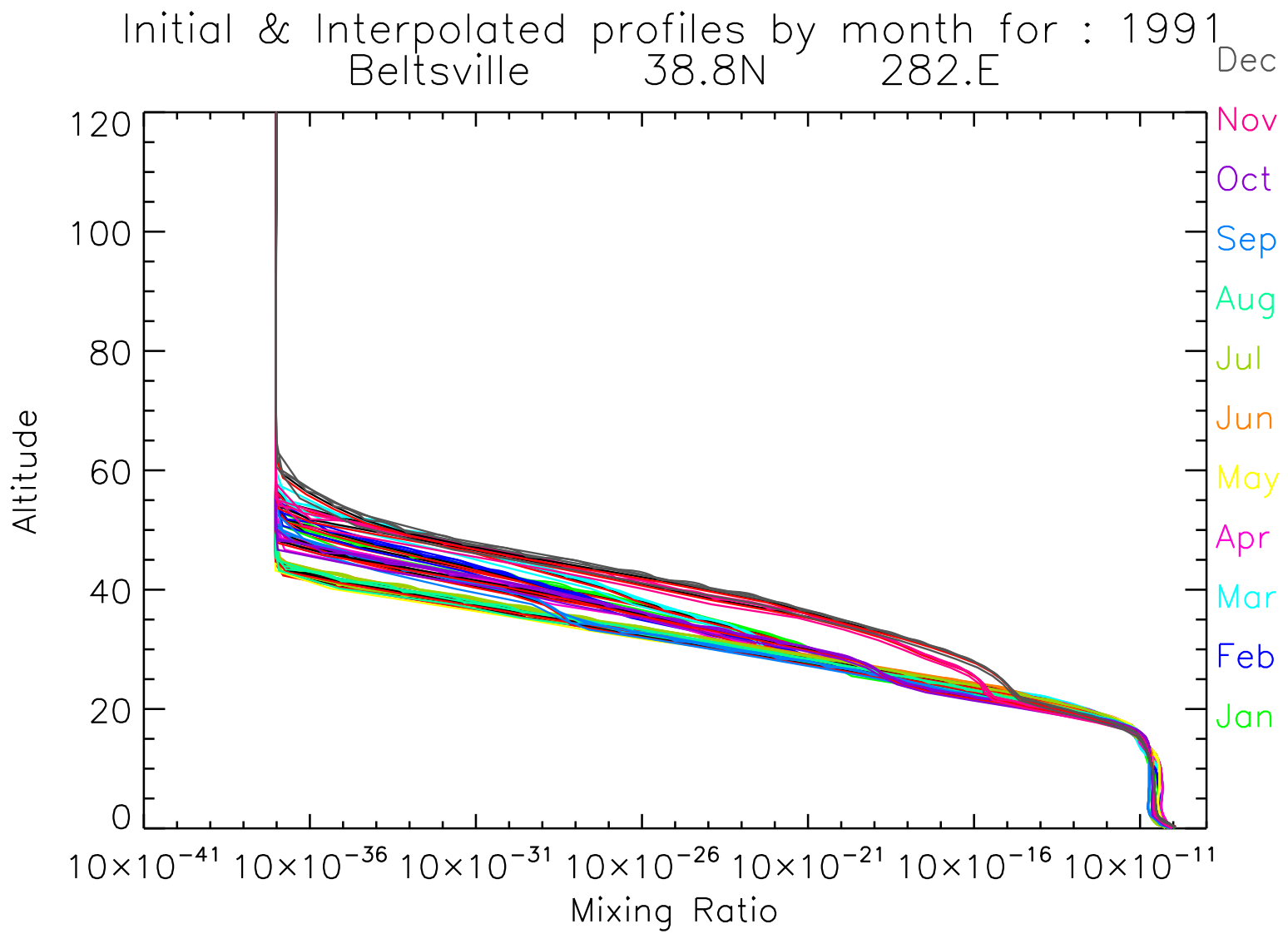
Mixing Ratio


Initial & Interpolated profiles by month for : 1991
Beltsville 38.8N 282.E
Dec
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Altitude
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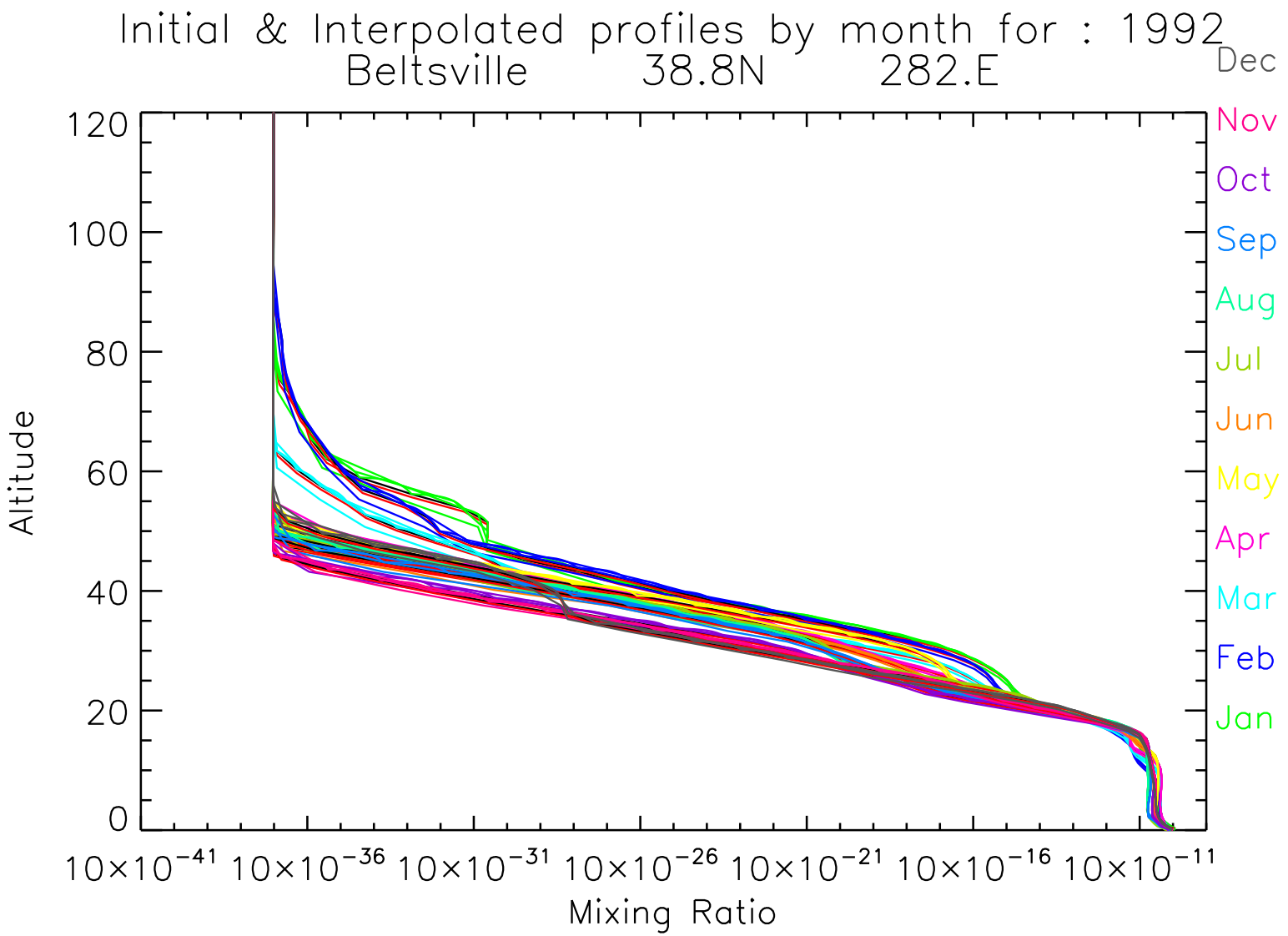
Mixing Ratio


Initial & Interpolated profiles by month for : 1992
Beltsville 38.8N 282.E
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Altitude
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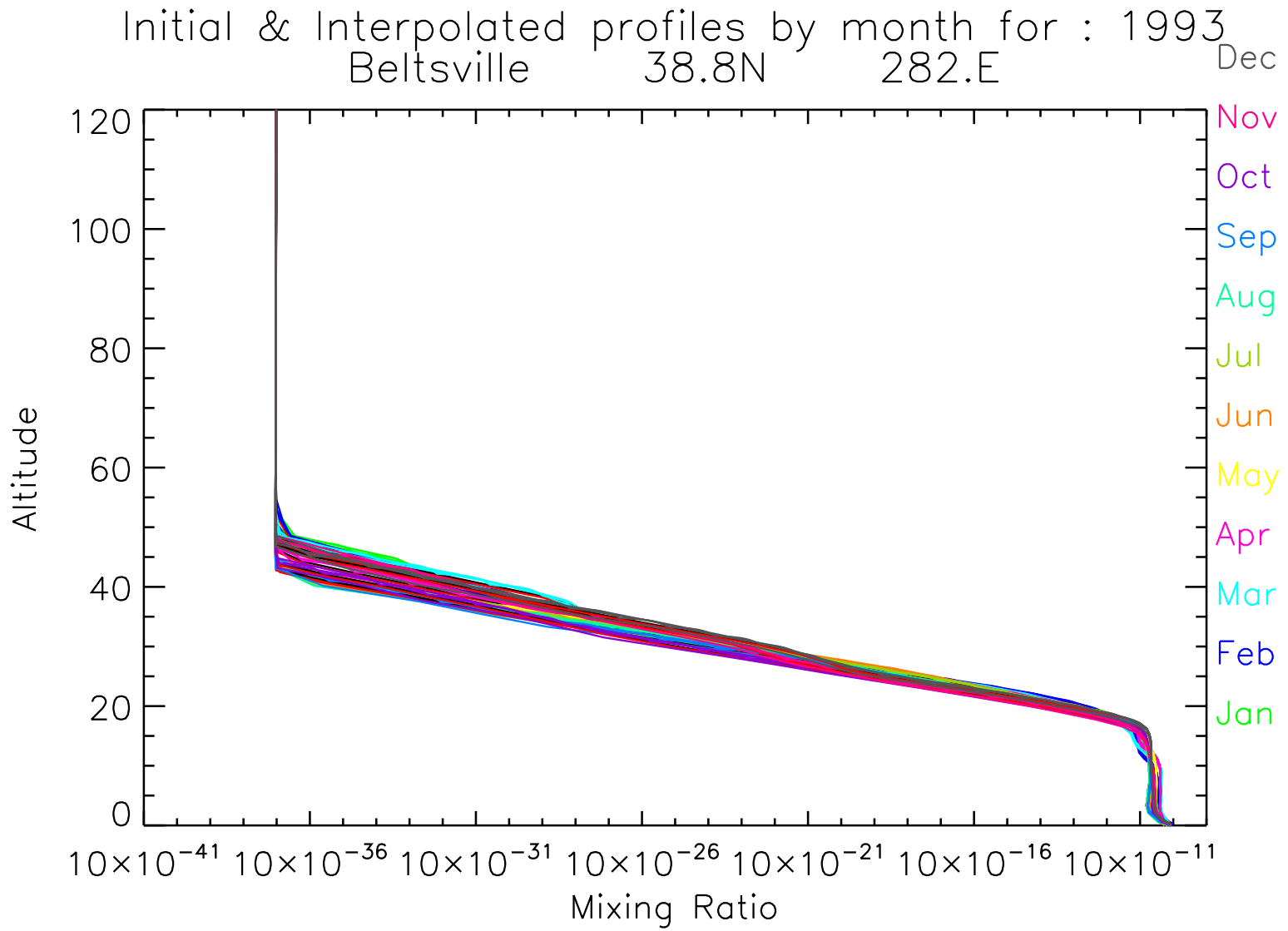
Mixing Ratio


Initial & Interpolated profiles by month for : 1993
Beltsville 38.8N 282.E
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Altitude
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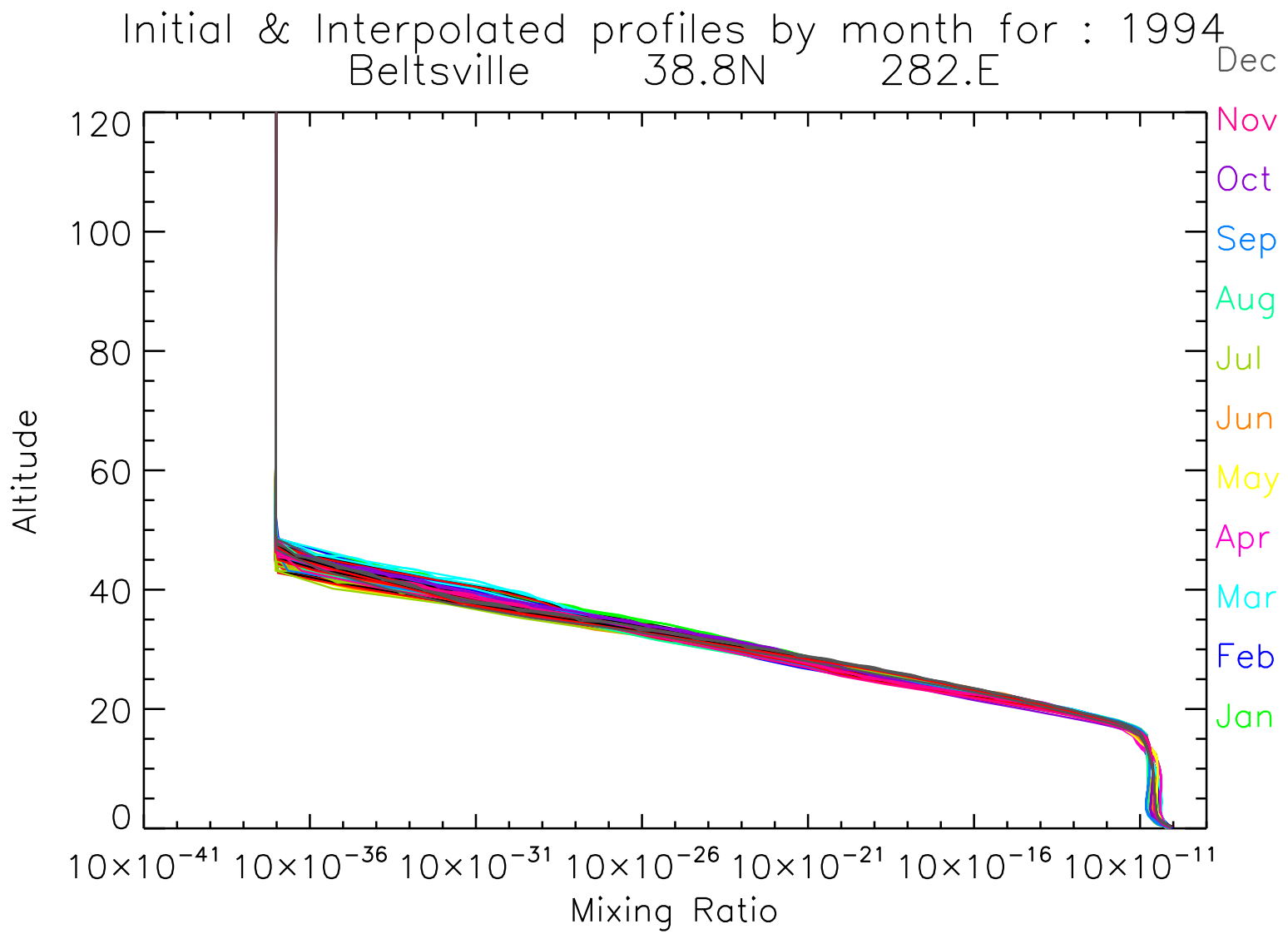
Mixing Ratio


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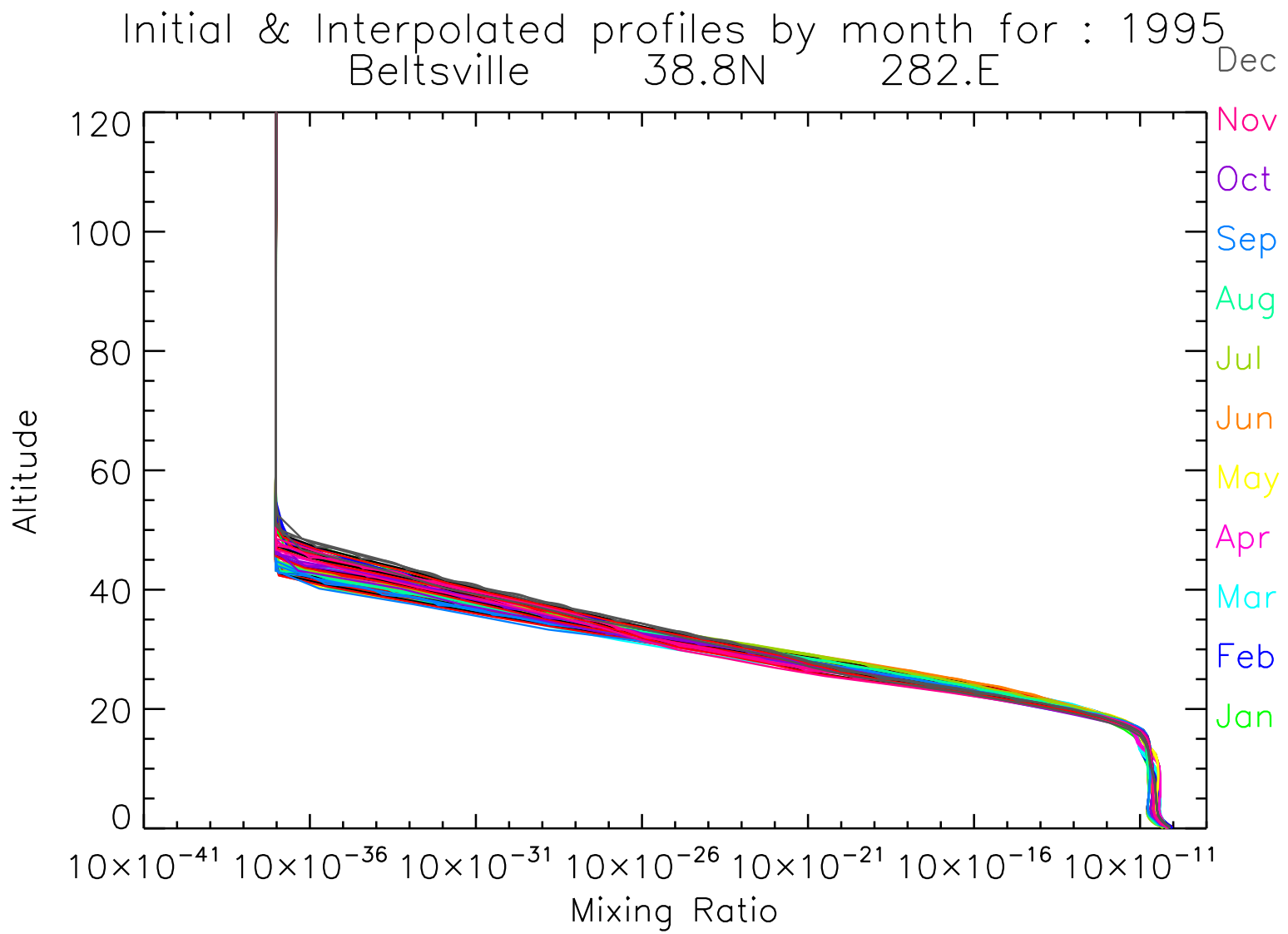
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 1995
Beltsville 38.8N 282.E
Dec
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Altitude
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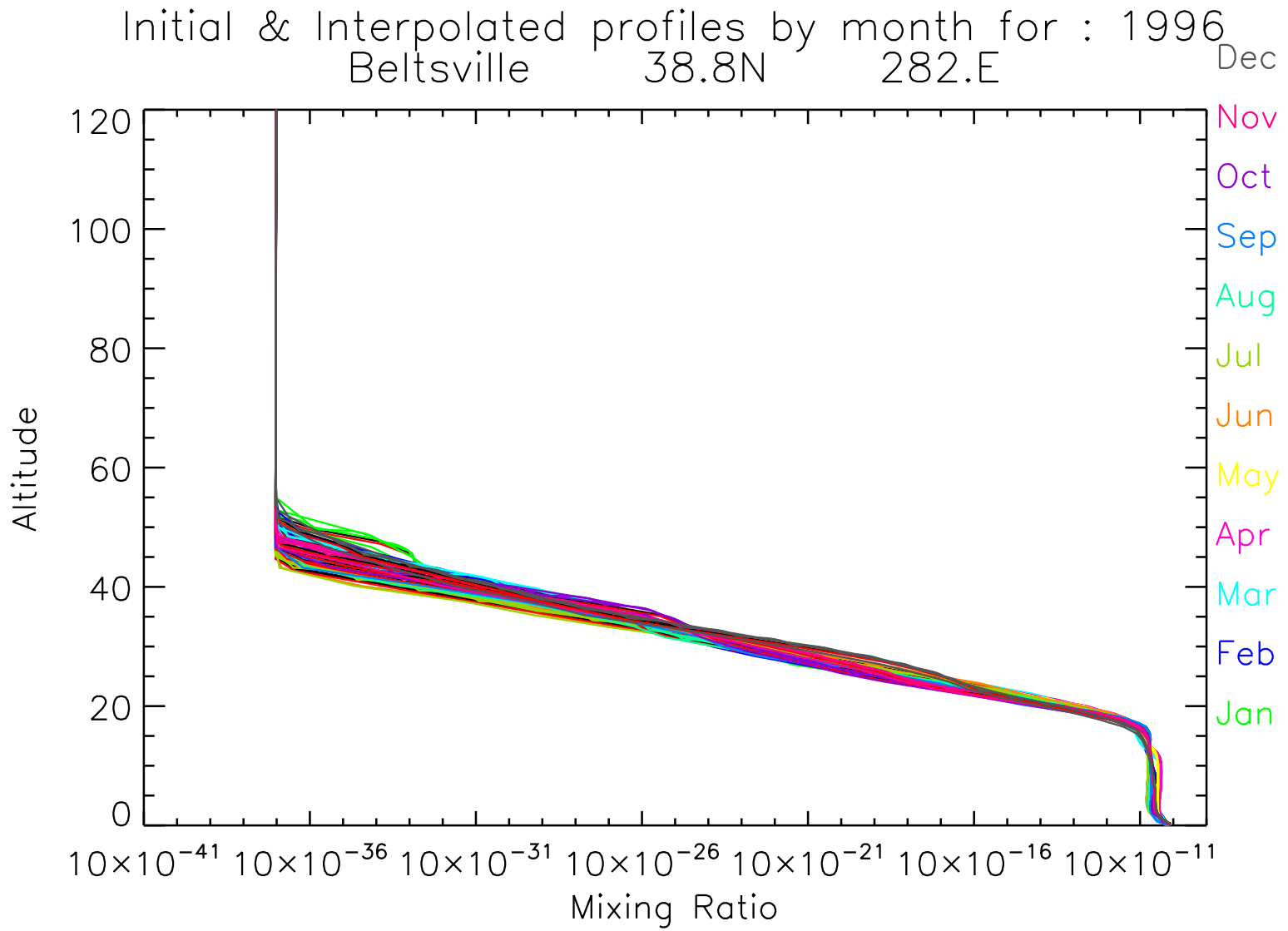
Mixing Ratio


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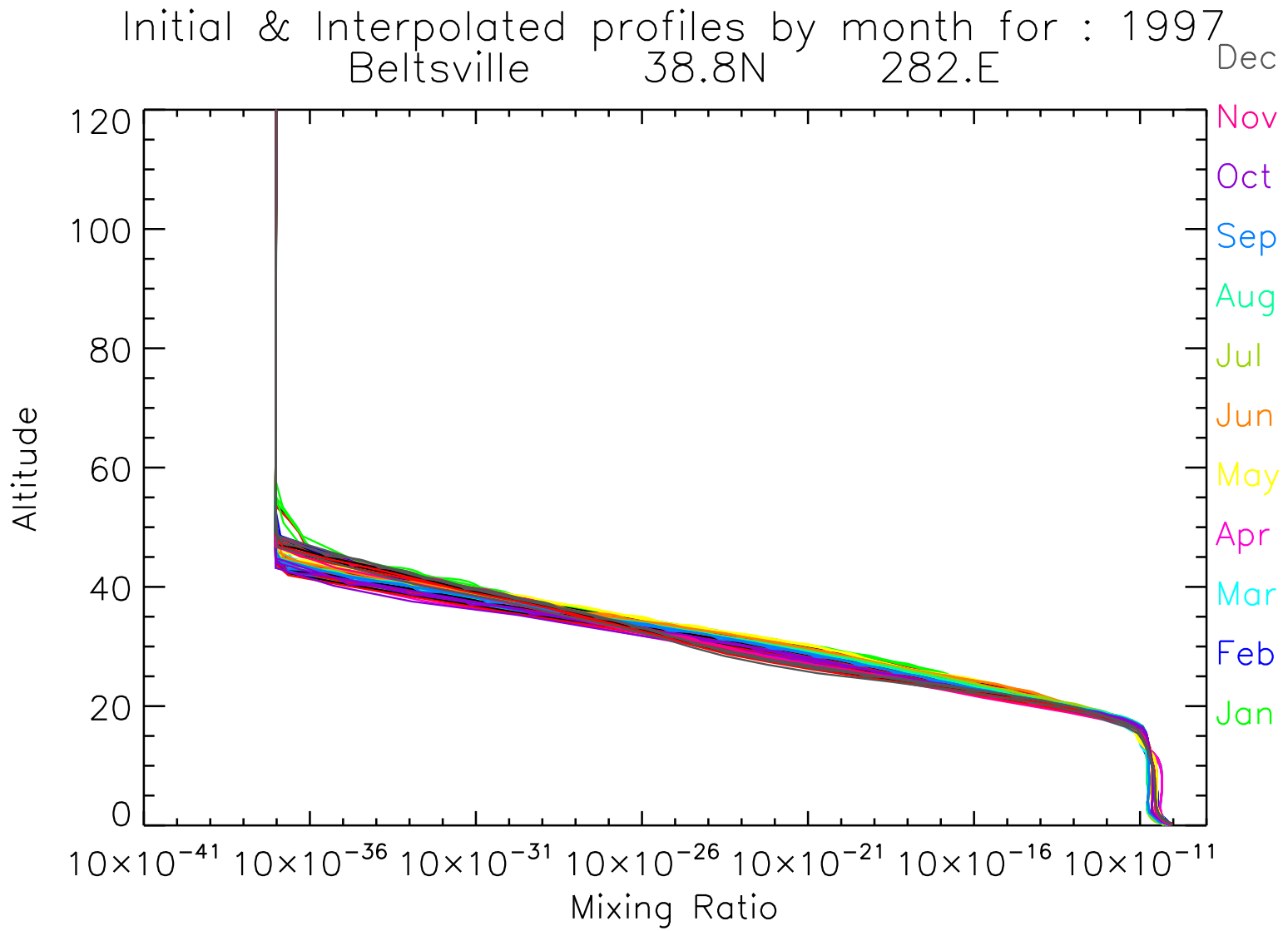
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 1997
Beltsville 38.8N 282.E
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Altitude
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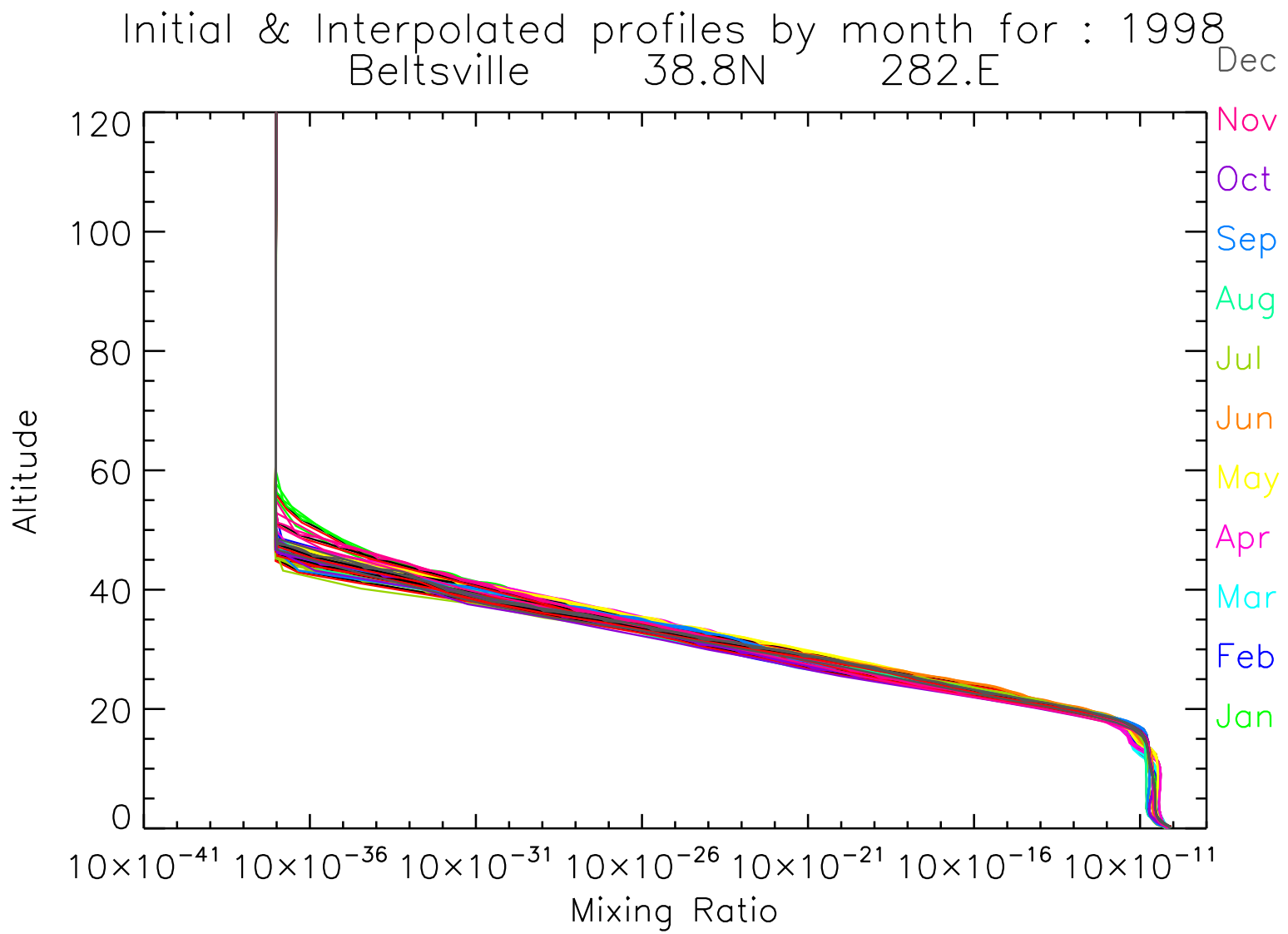
Mixing Ratio


Initial & Interpolated profiles by month for : 1998
Beltsville 38.8N 282.E
Dec
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Altitude
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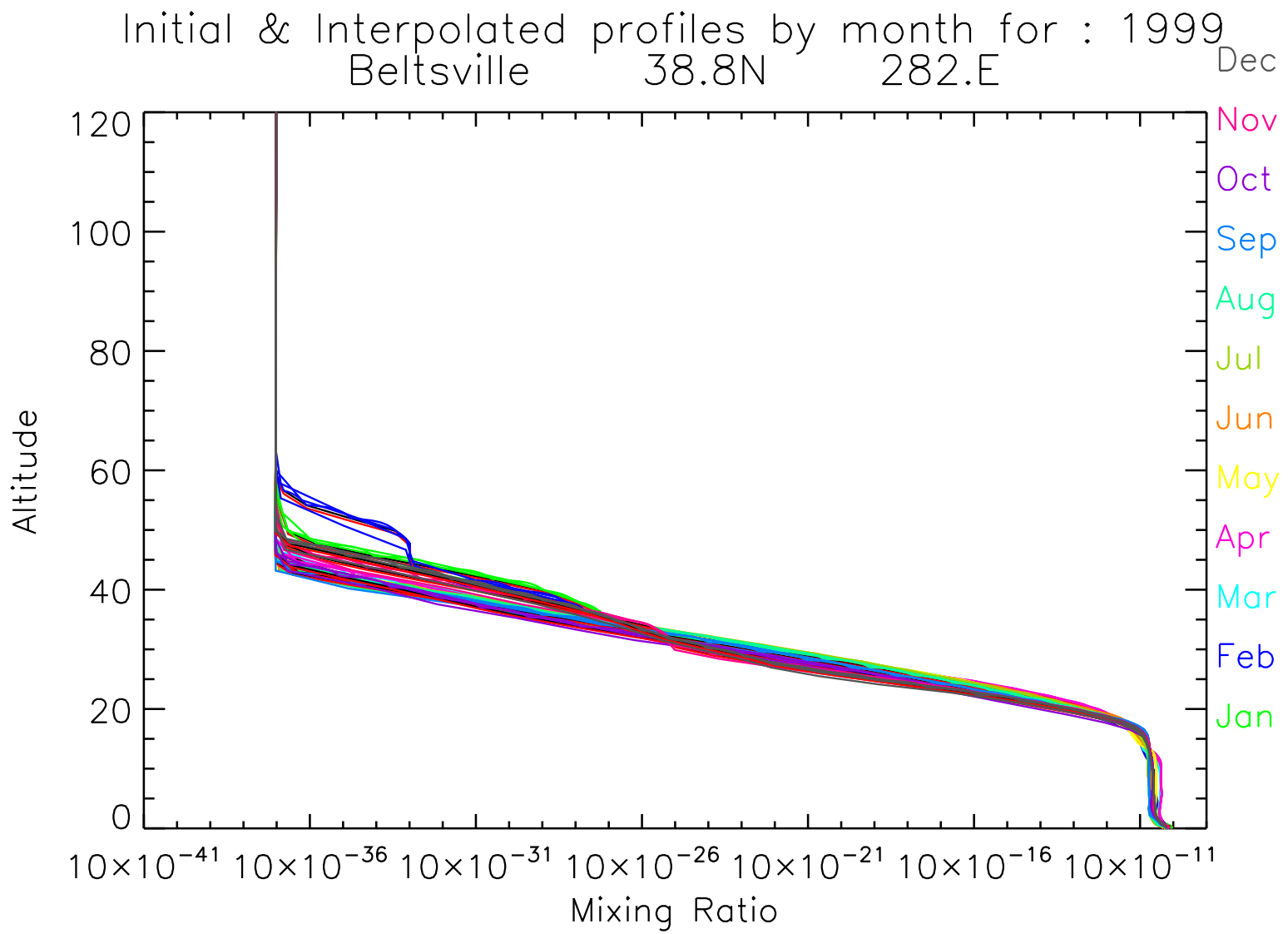
Mixing Ratio


Initial & Interpolated profiles by month for : 1999
Beltsville 38.8N 282.E
Dec
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Altitude
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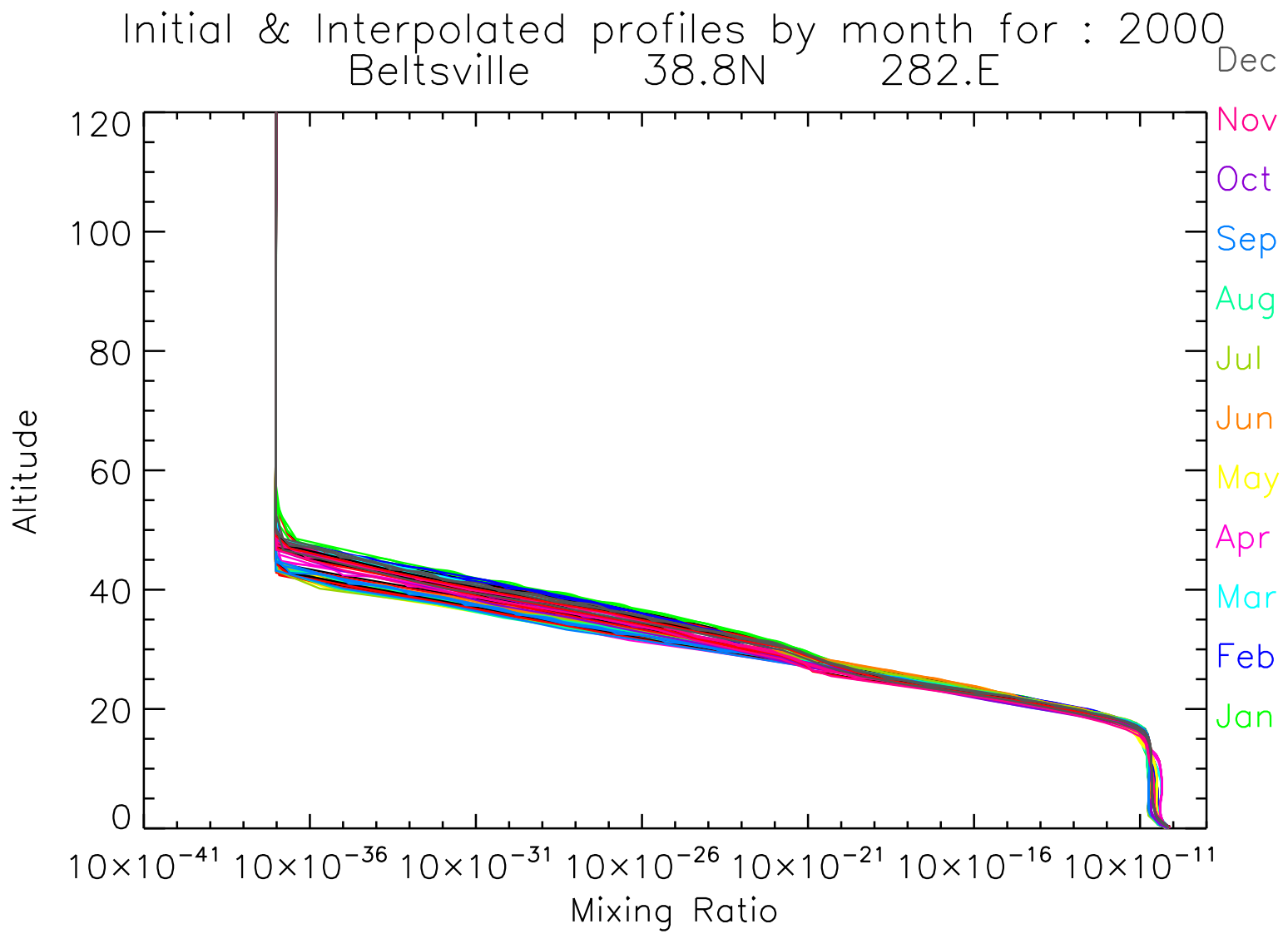
Mixing Ratio


Initial & Interpolated profiles by month for : 2000
Beltsville 38.8N 282.E
Dec
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Altitude
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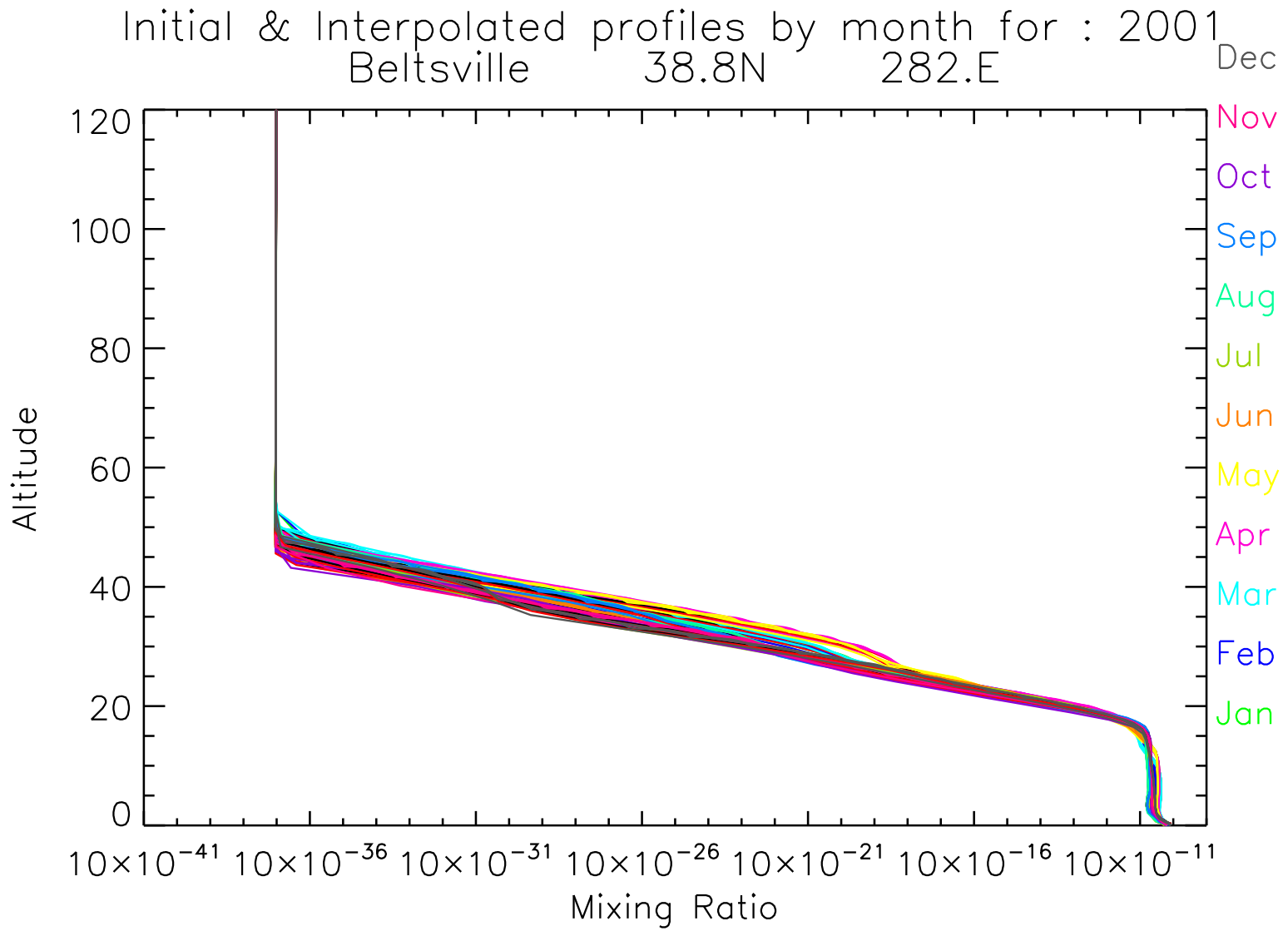
Mixing Ratio


Initial & Interpolated profiles by month for : 2001
Beltsville 38.8N 282.E
Dec
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Altitude
120
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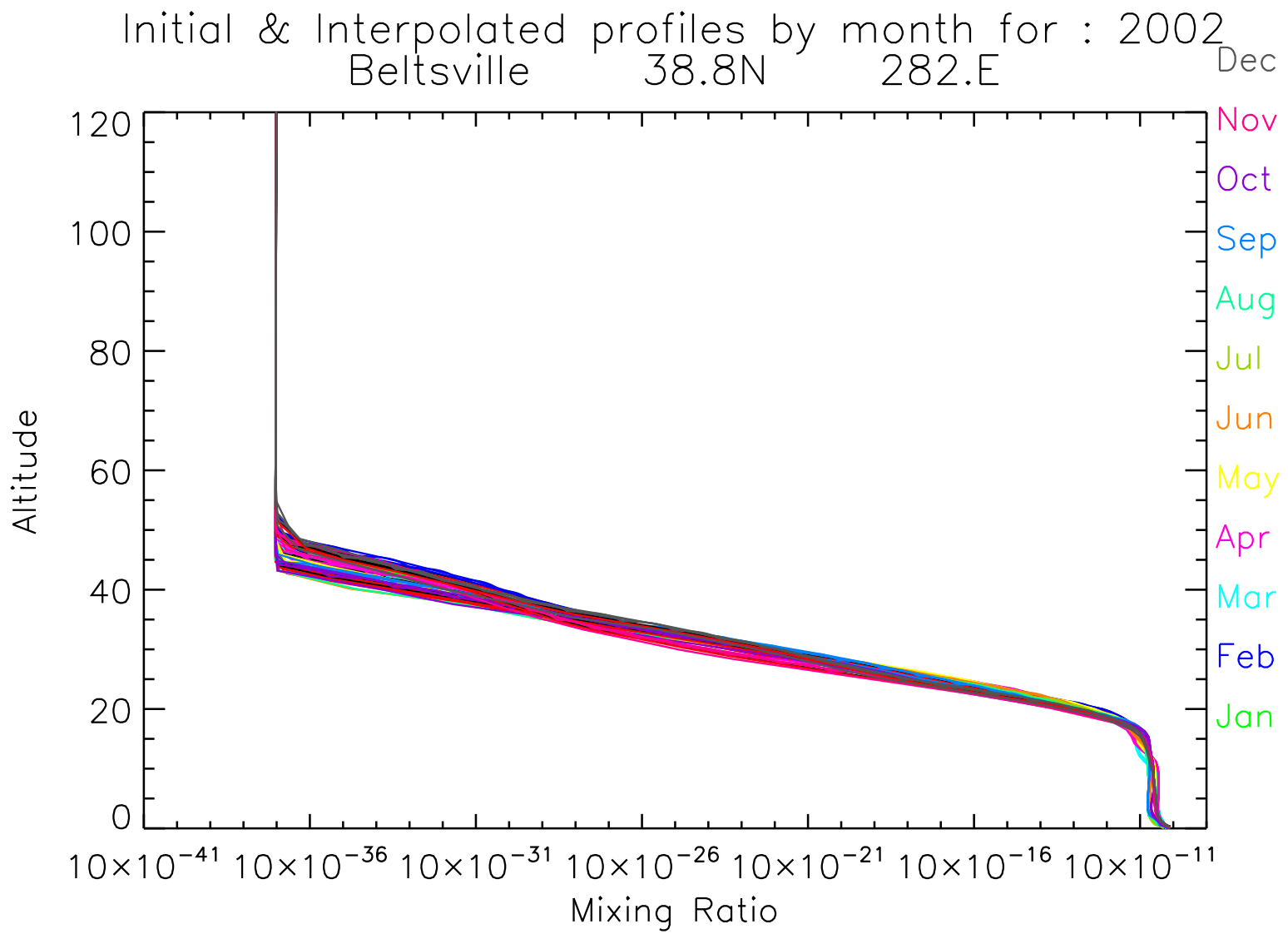
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2002
Beltsville 38.8N 282.E
Dec
Nov
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Altitude
120
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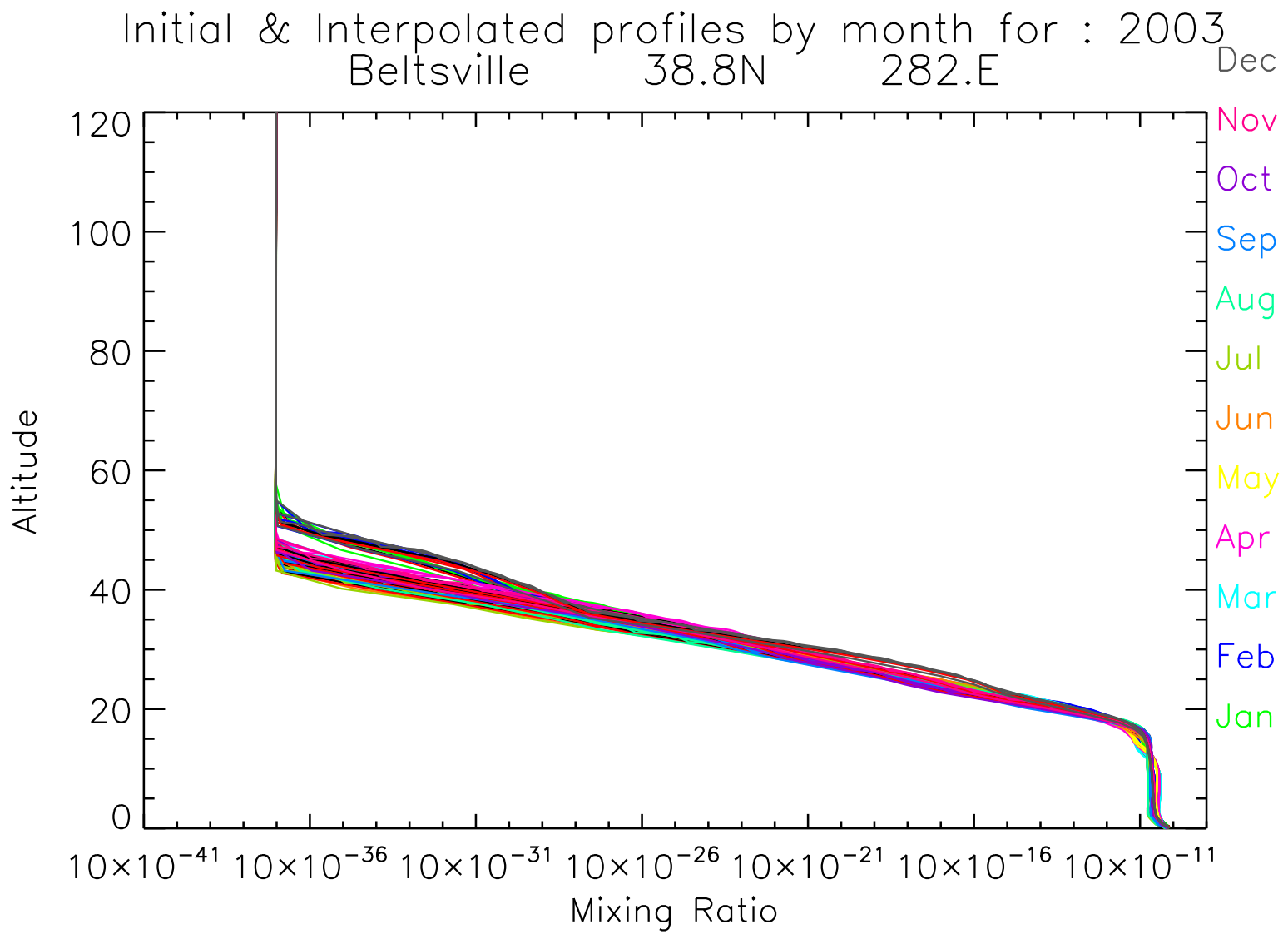
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2003
Beltsville 38.8N 282.E
Dec
Nov
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Altitude
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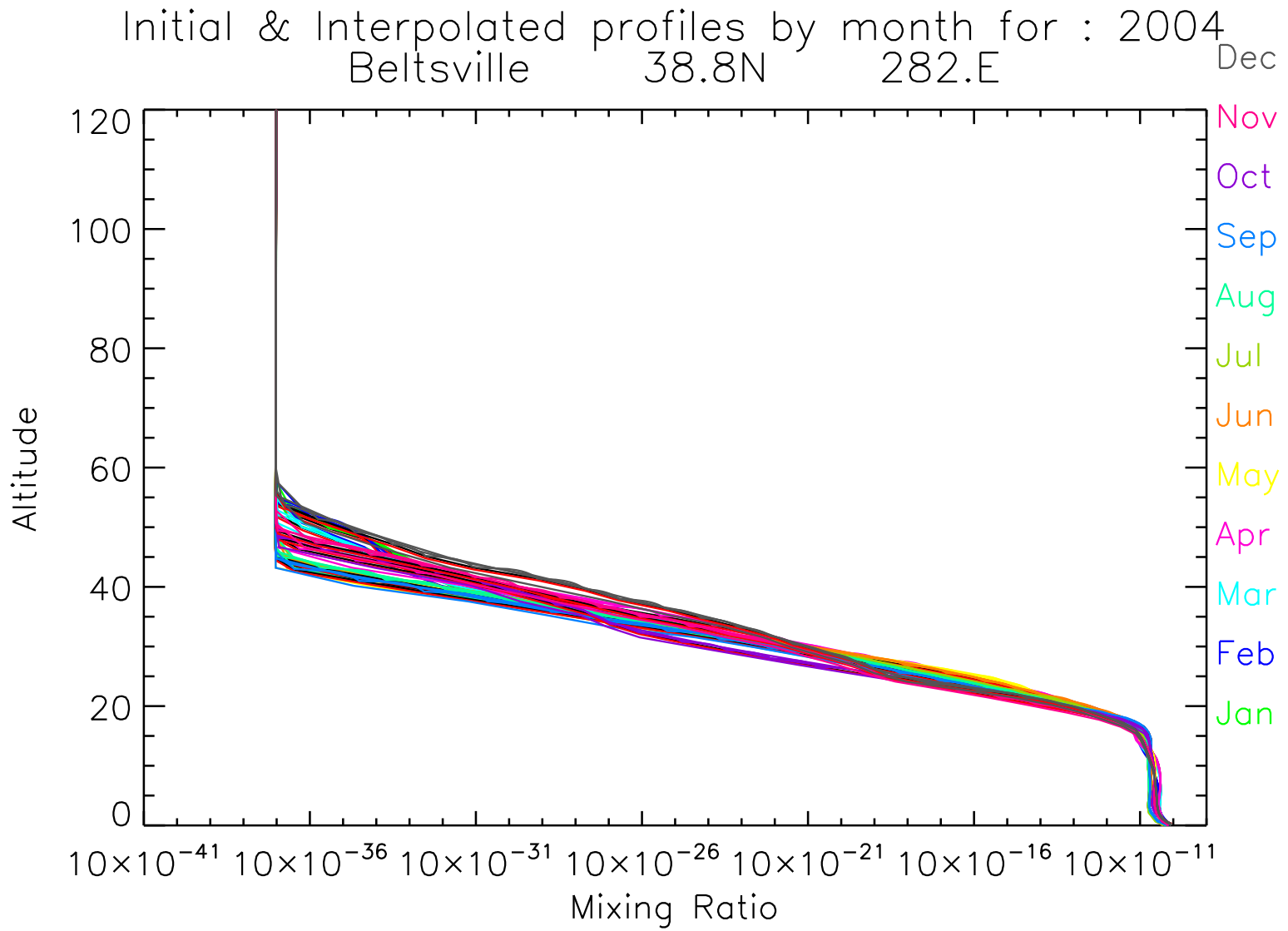
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2004
Beltsville 38.8N 282.E
Dec
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Altitude
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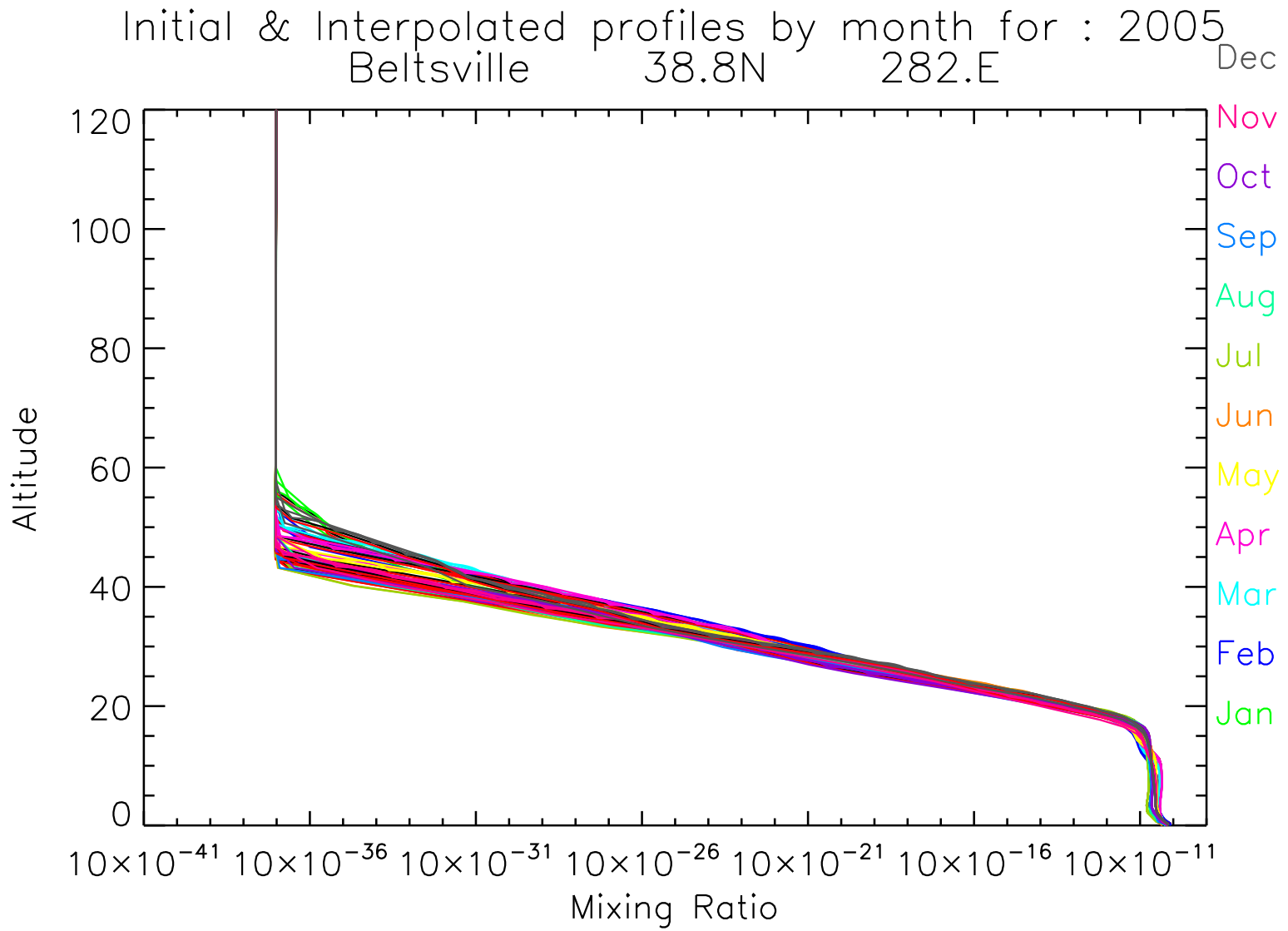
Mixing Ratio


Initial & Interpolated profiles by month for : 2005
Beltsville 38.8N 282.E
Dec
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Altitude
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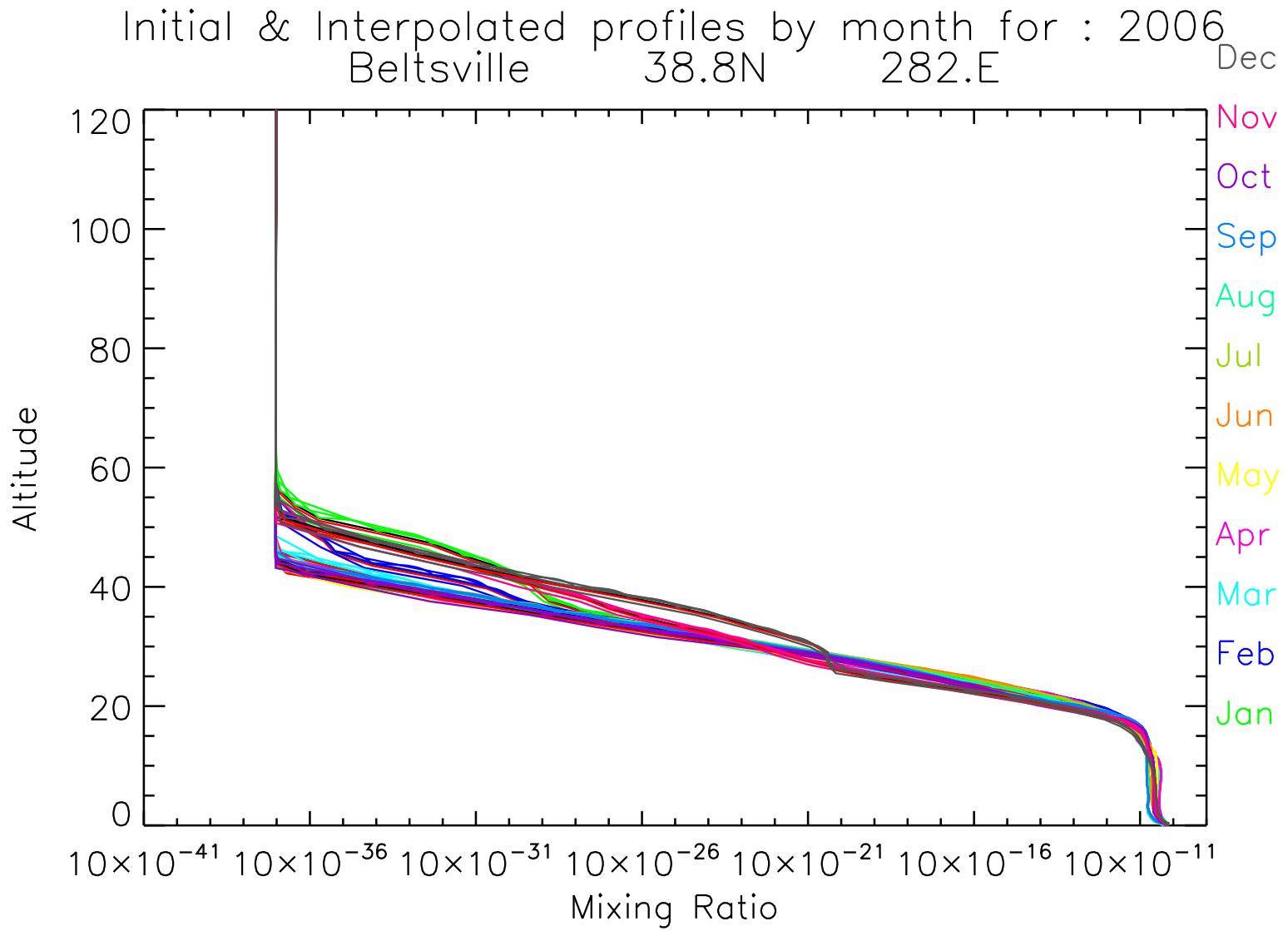
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


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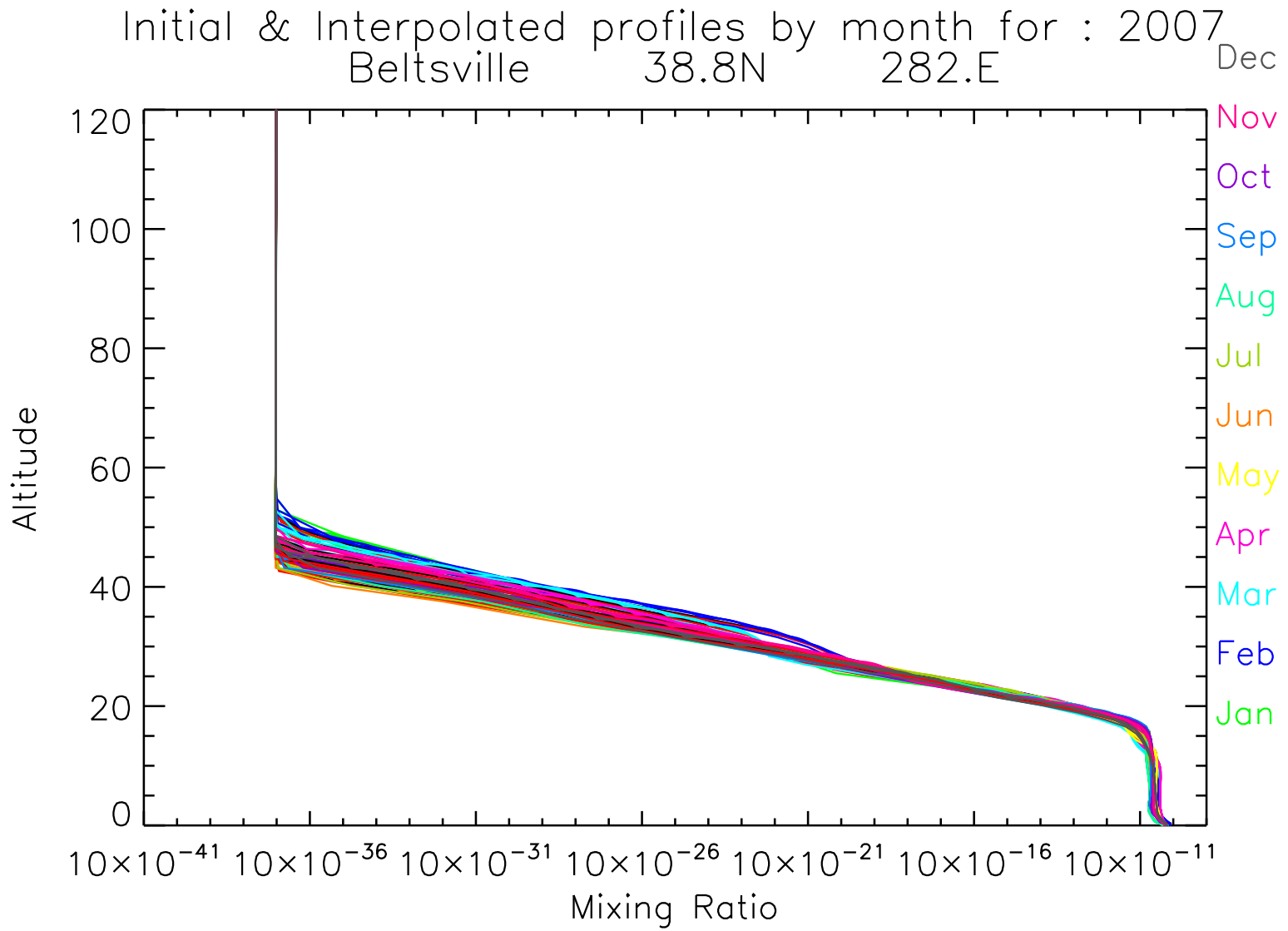
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


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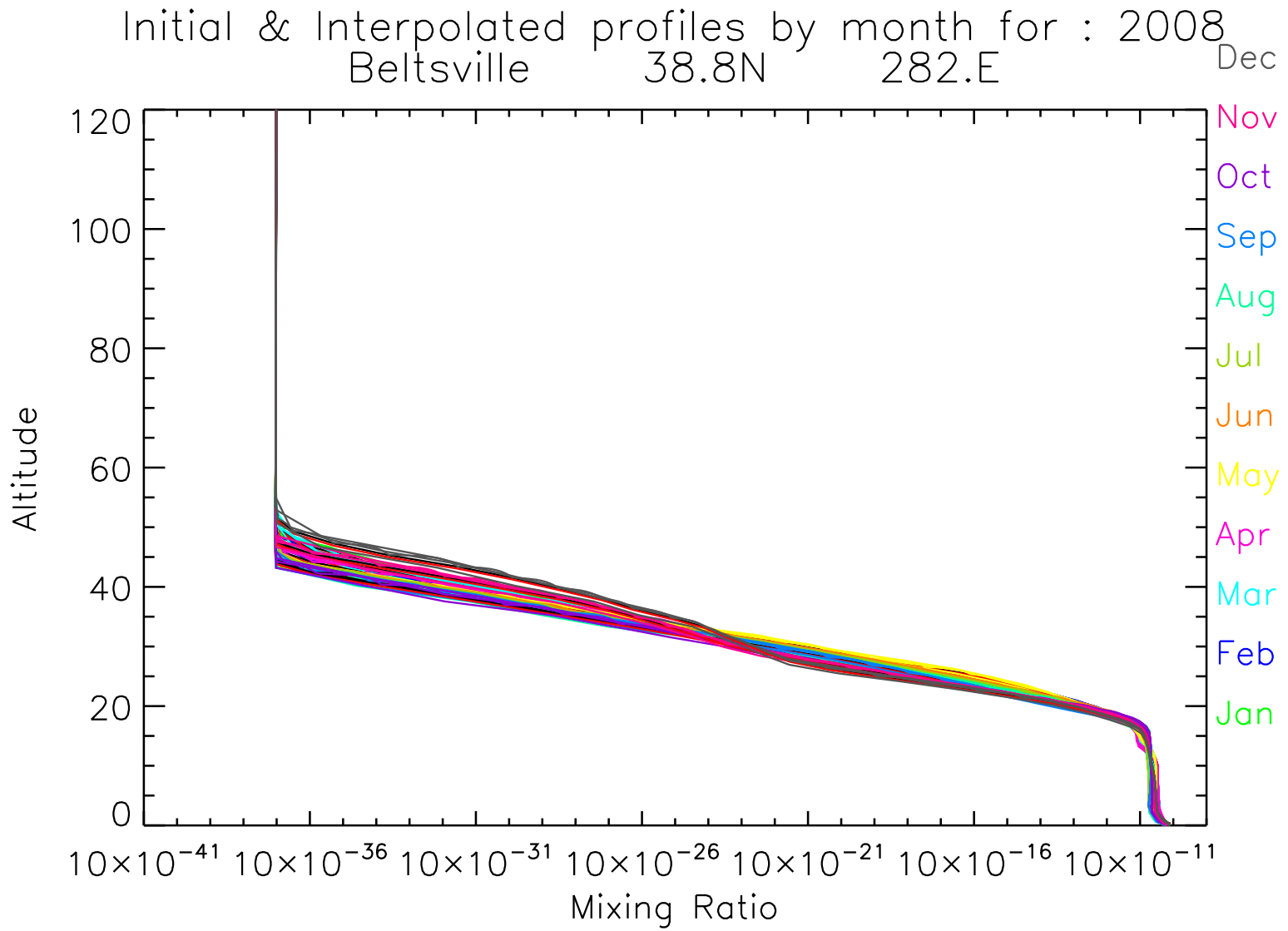
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2008
Beltsville 38.8N 282.E
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Altitude
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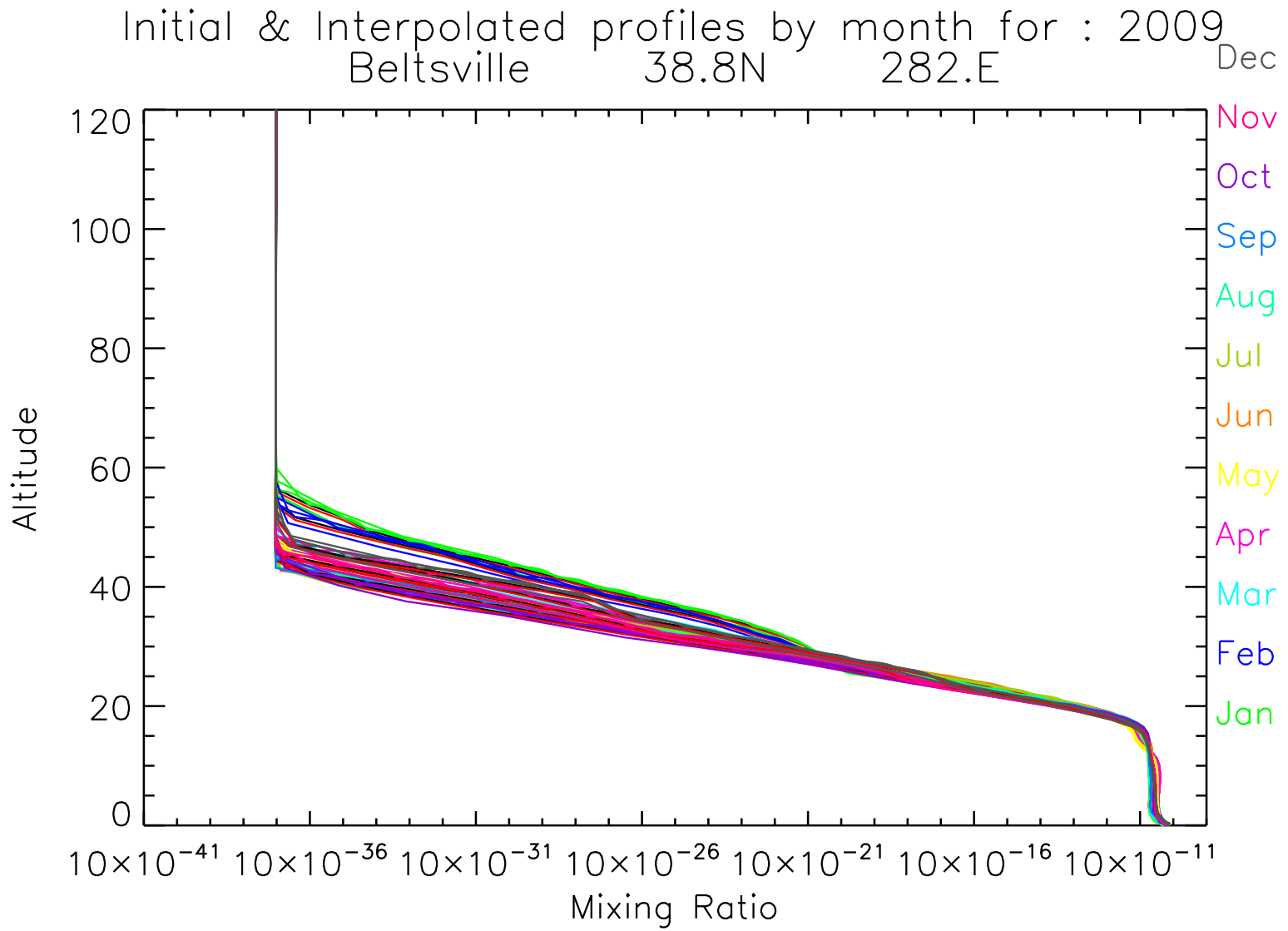
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2009
Beltsville 38.8N 282.E
Dec
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Altitude
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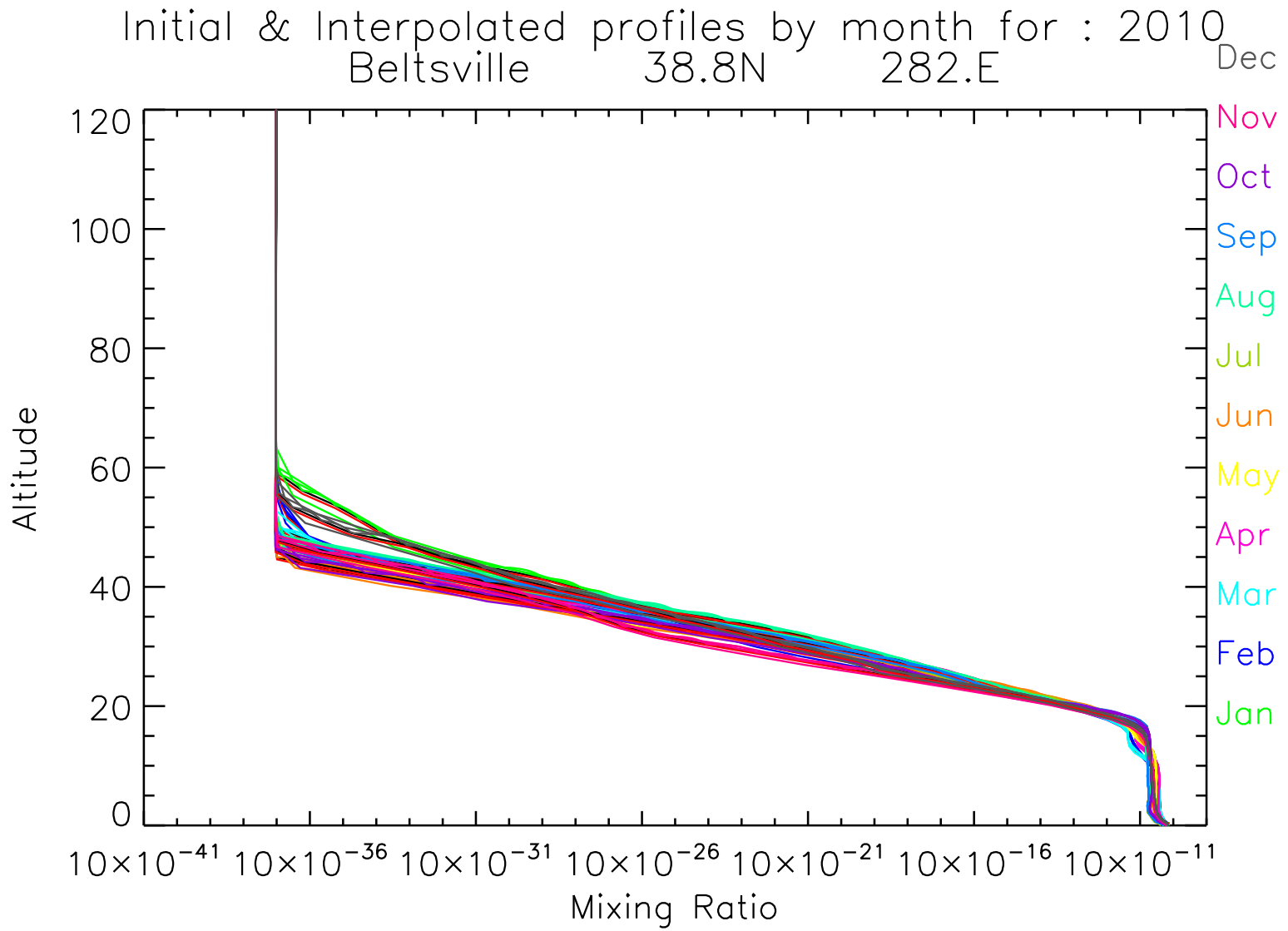
Mixing Ratio


Initial & Interpolated profiles by month for : 2010
Beltsville 38.8N 282.E
Dec
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Jan
Altitude
120
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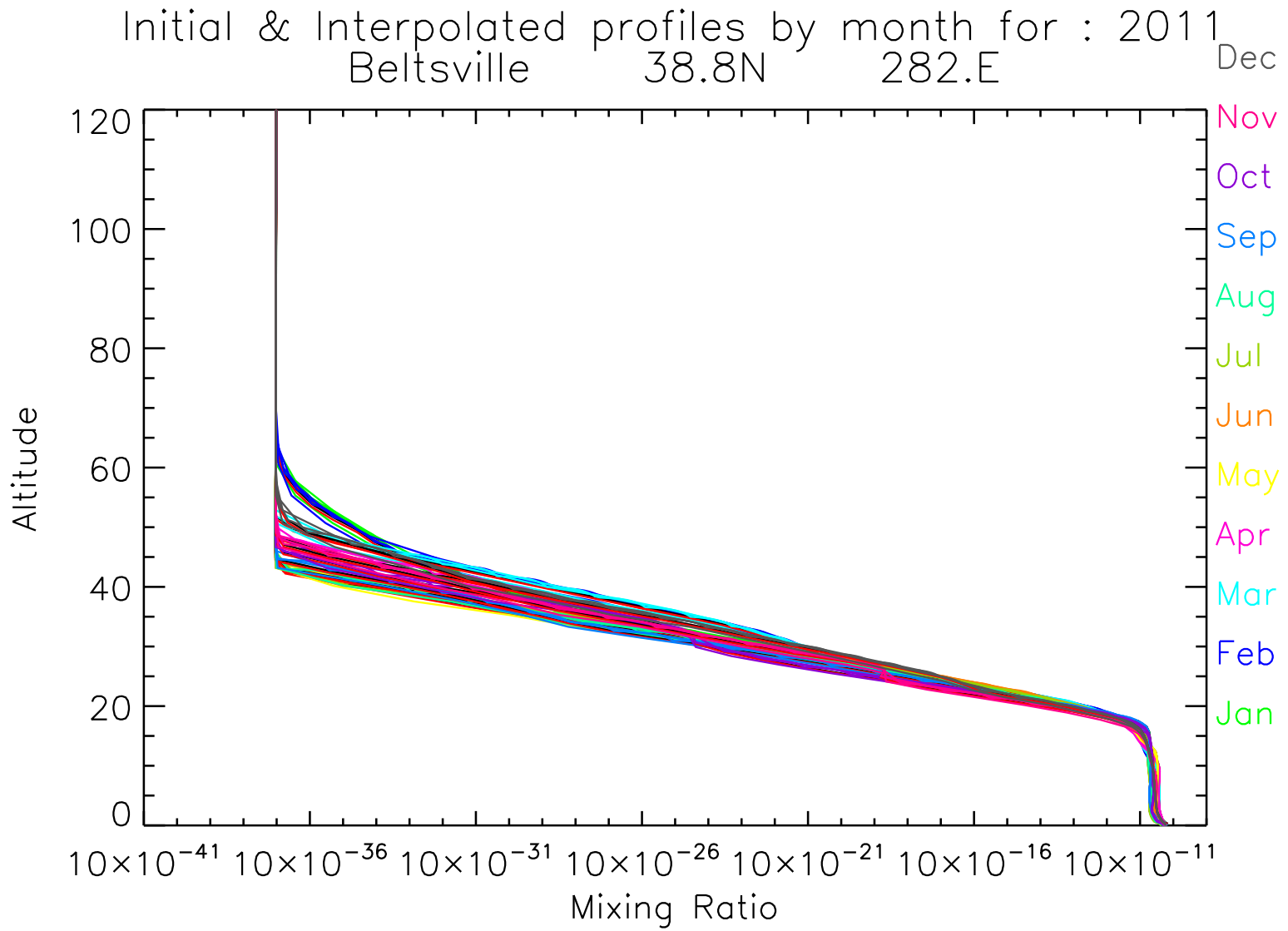
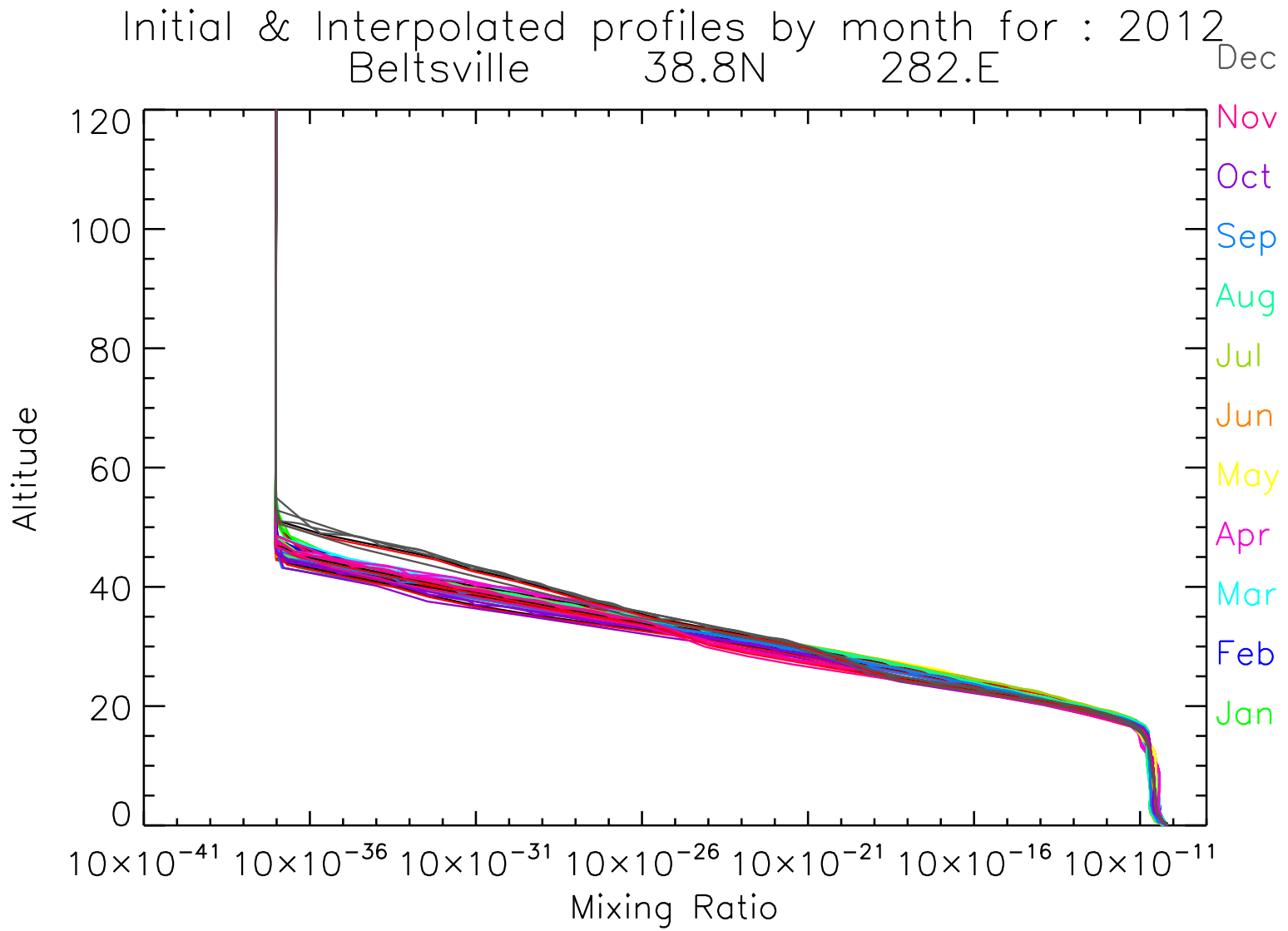
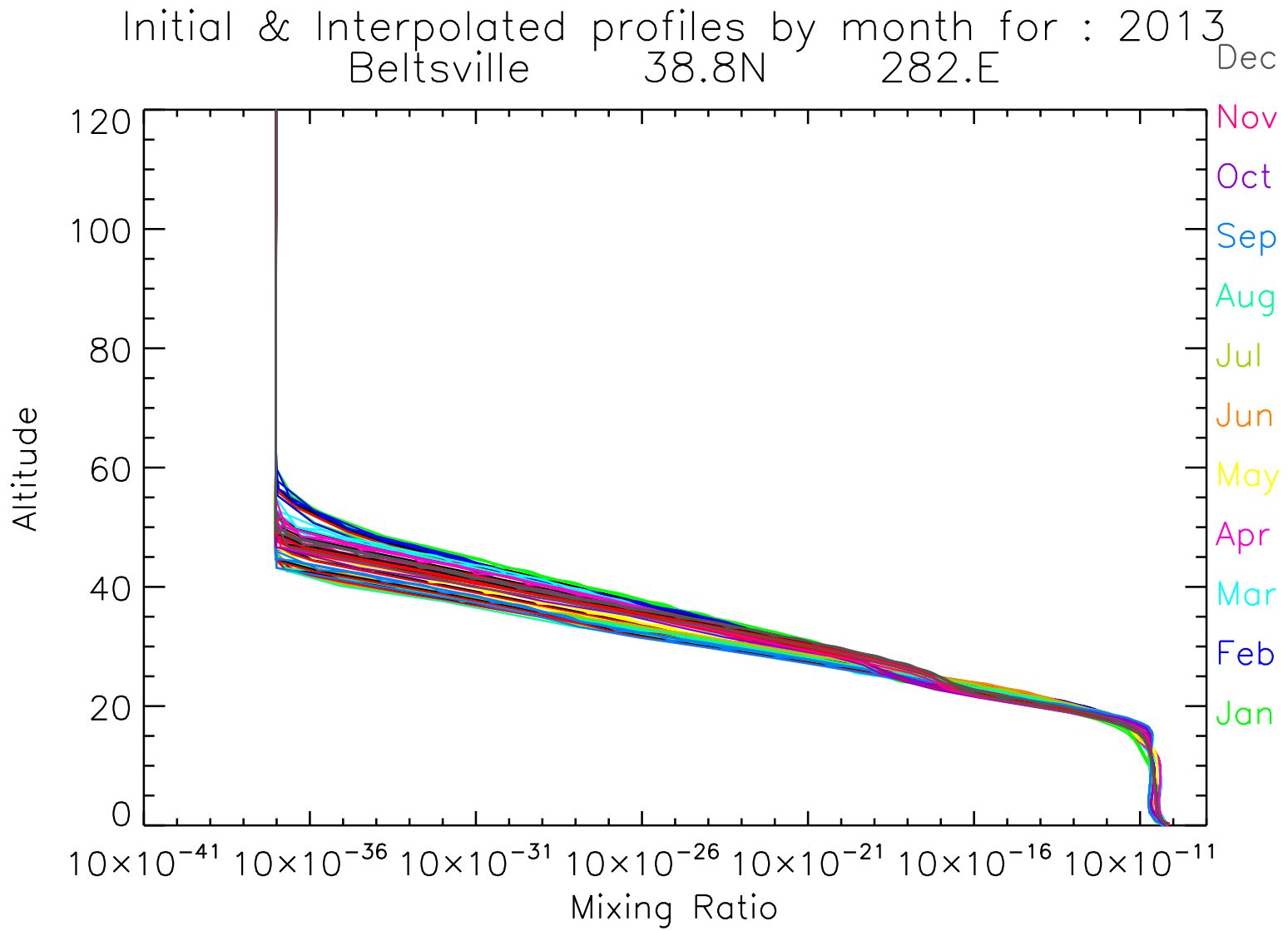
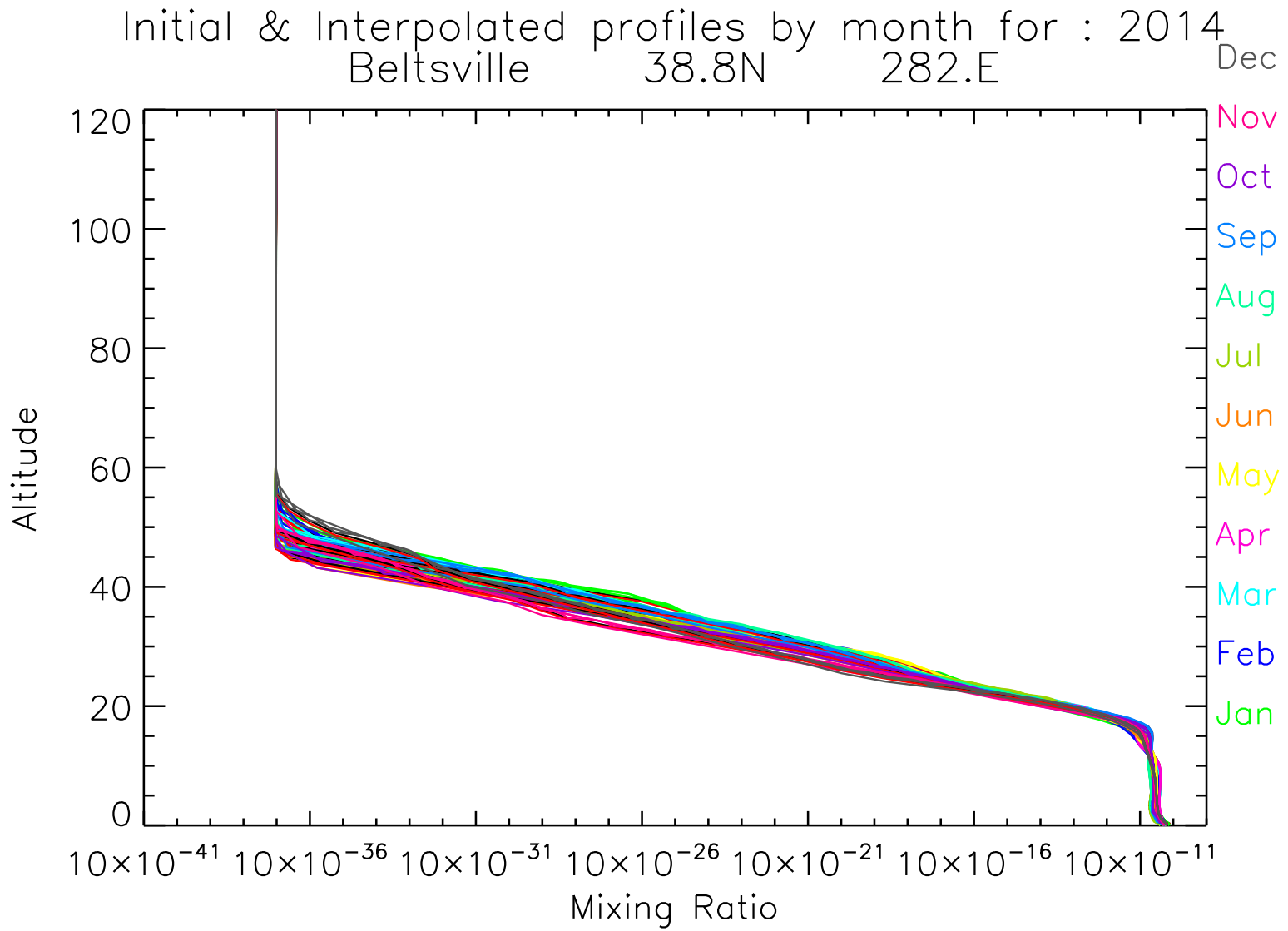
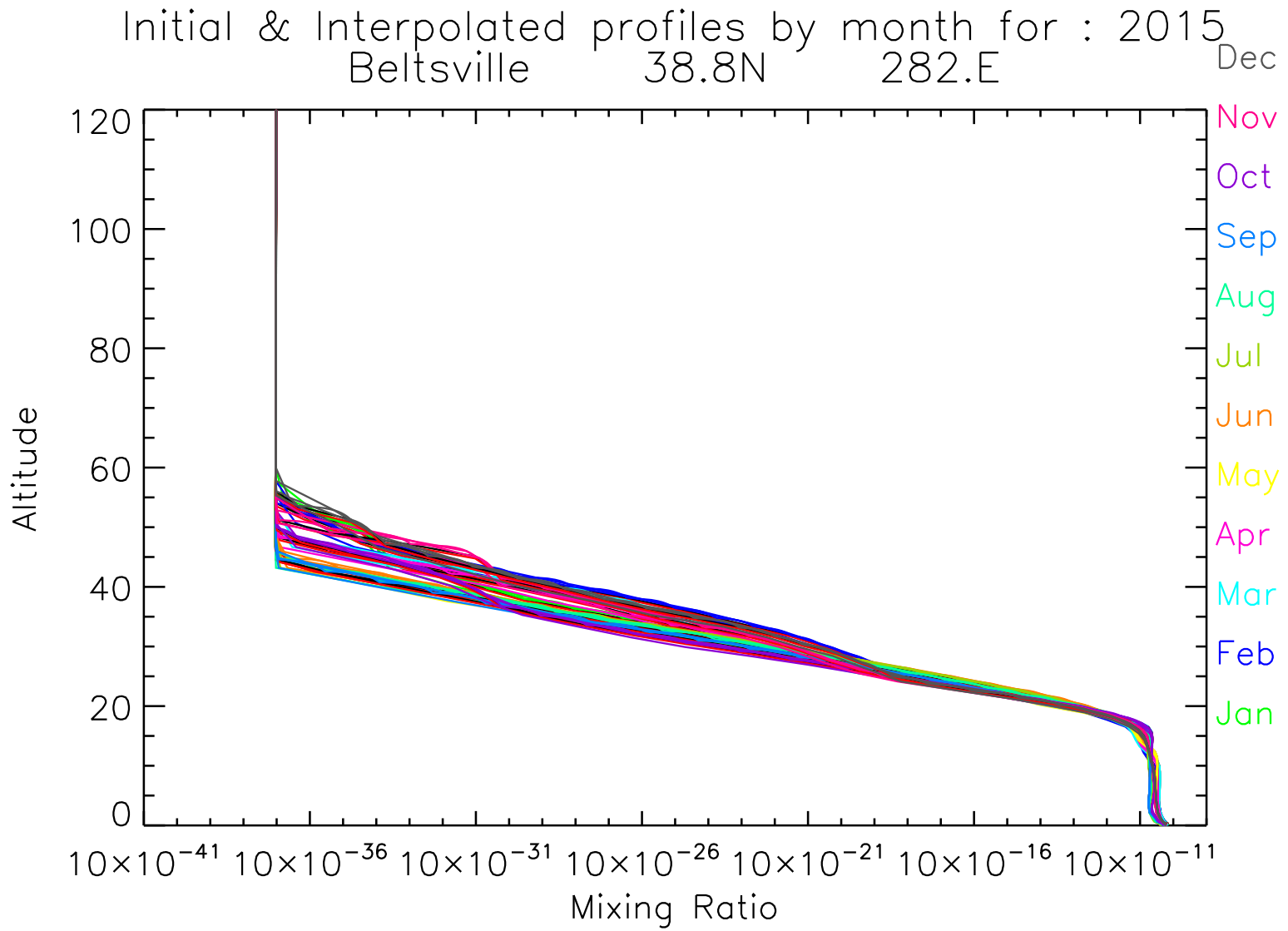
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

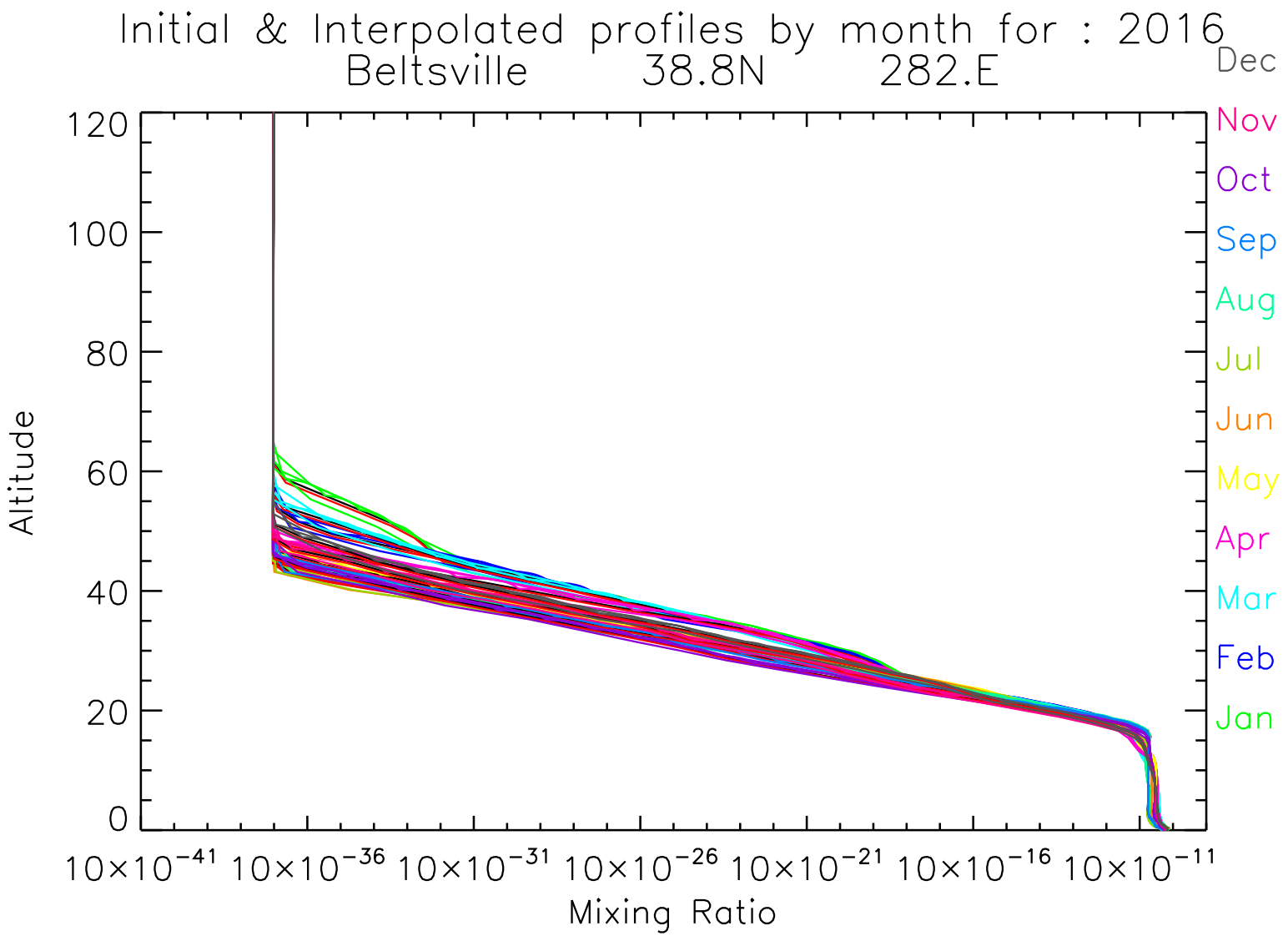

Initial & Interpolated profiles by month for : 2011
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

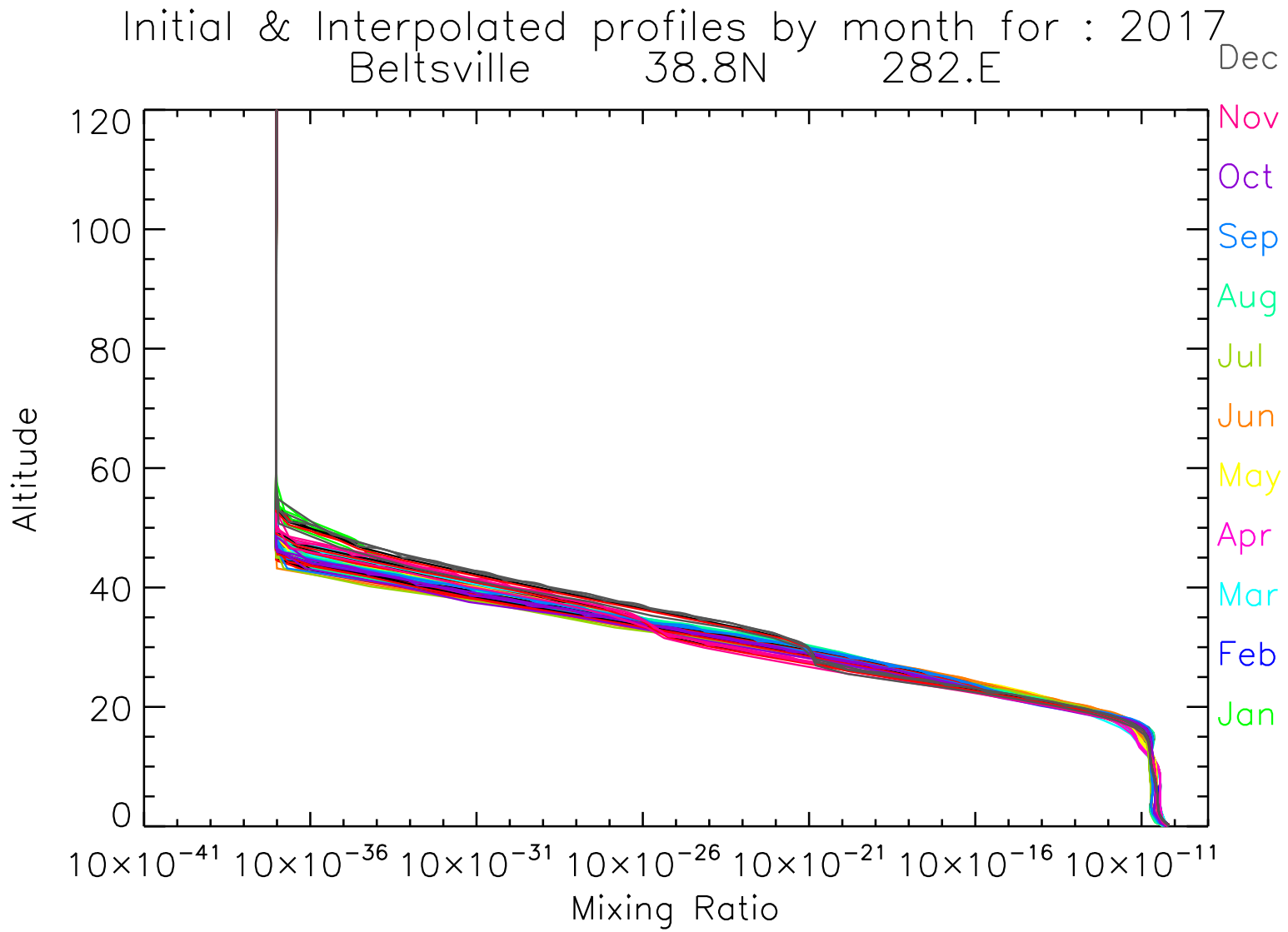

Initial & Interpolated profiles by month for : 2012
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

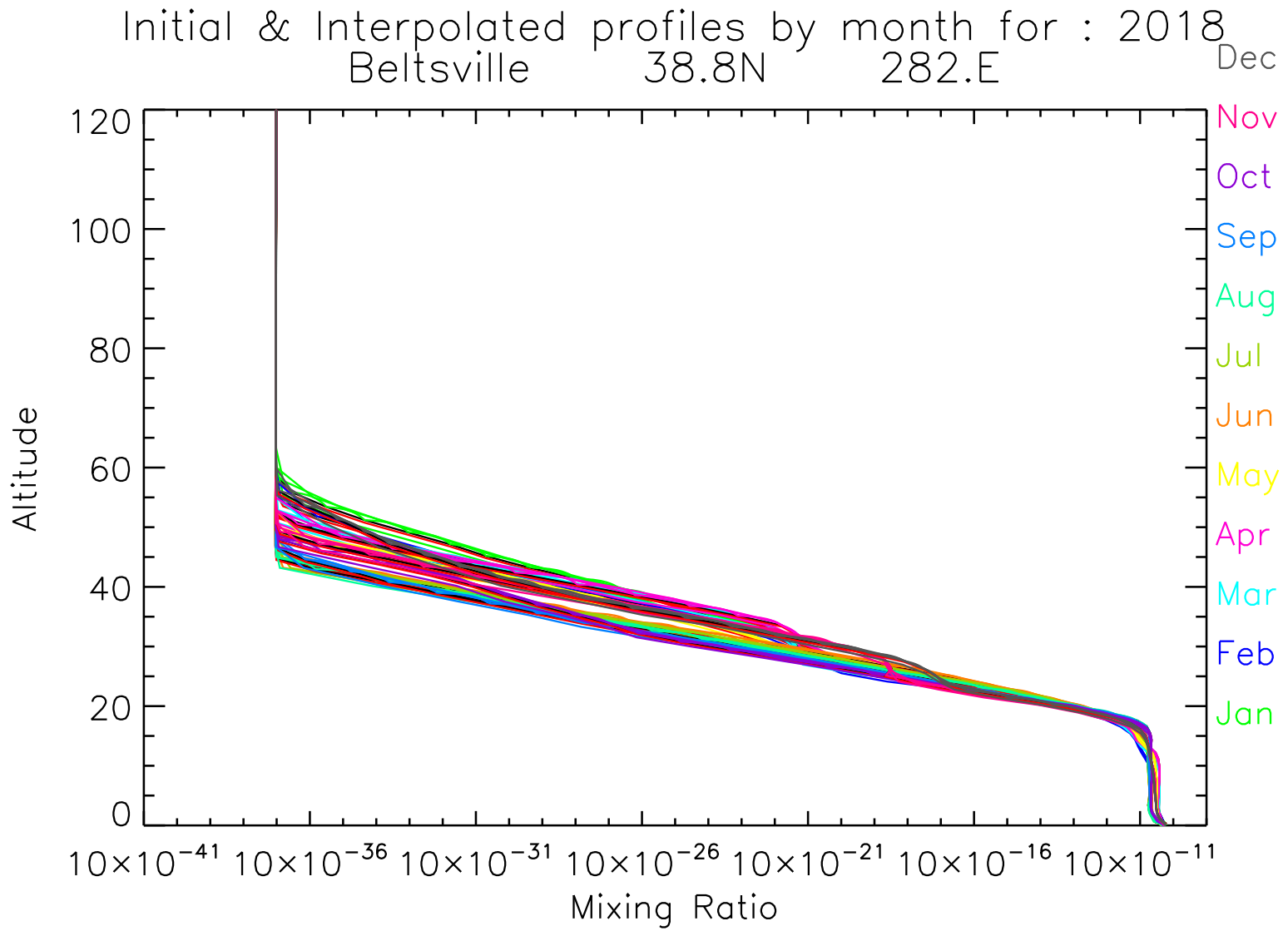

Initial & Interpolated profiles by month for : 2013
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

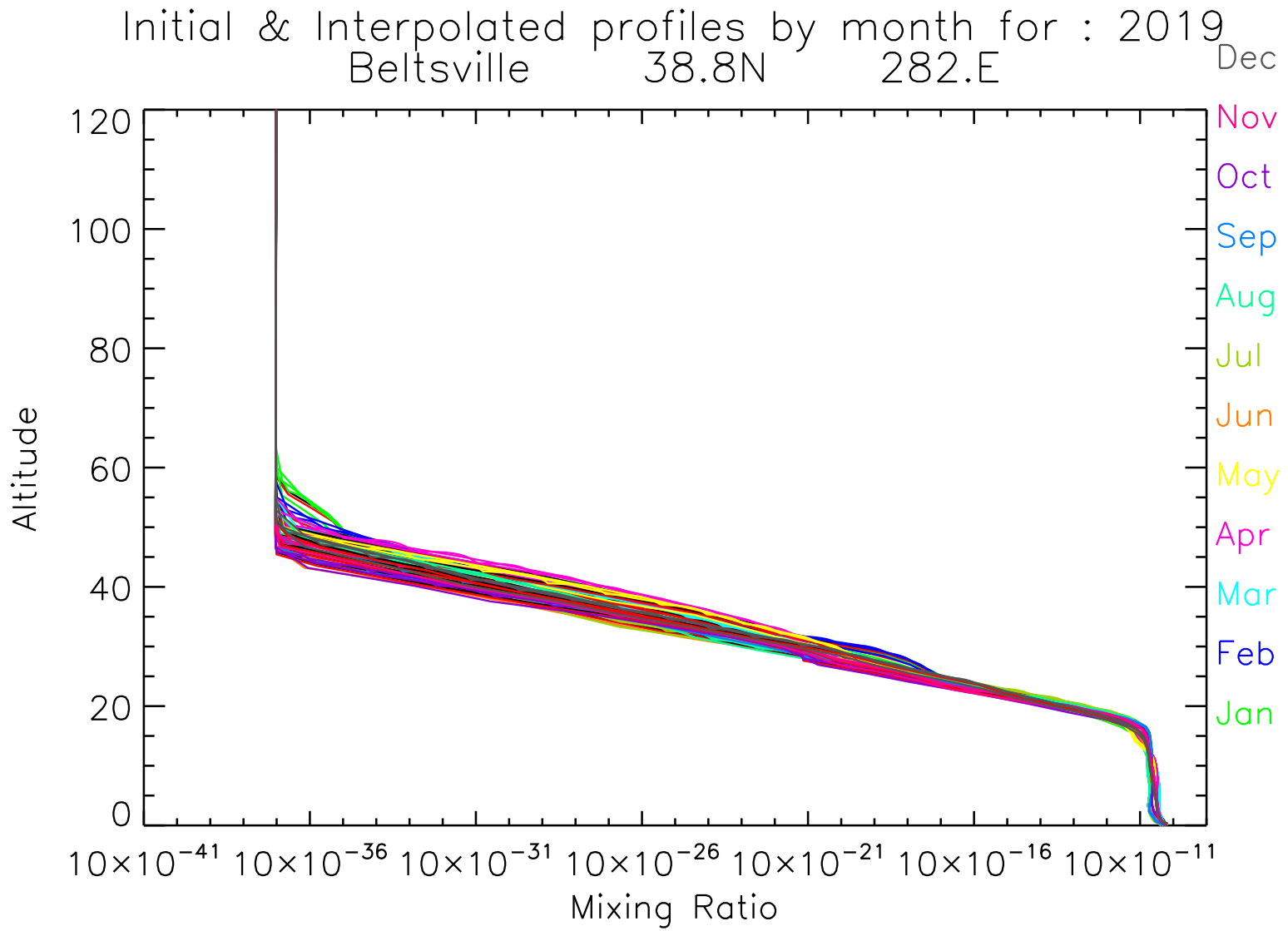

Initial & Interpolated profiles by month for : 2014
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

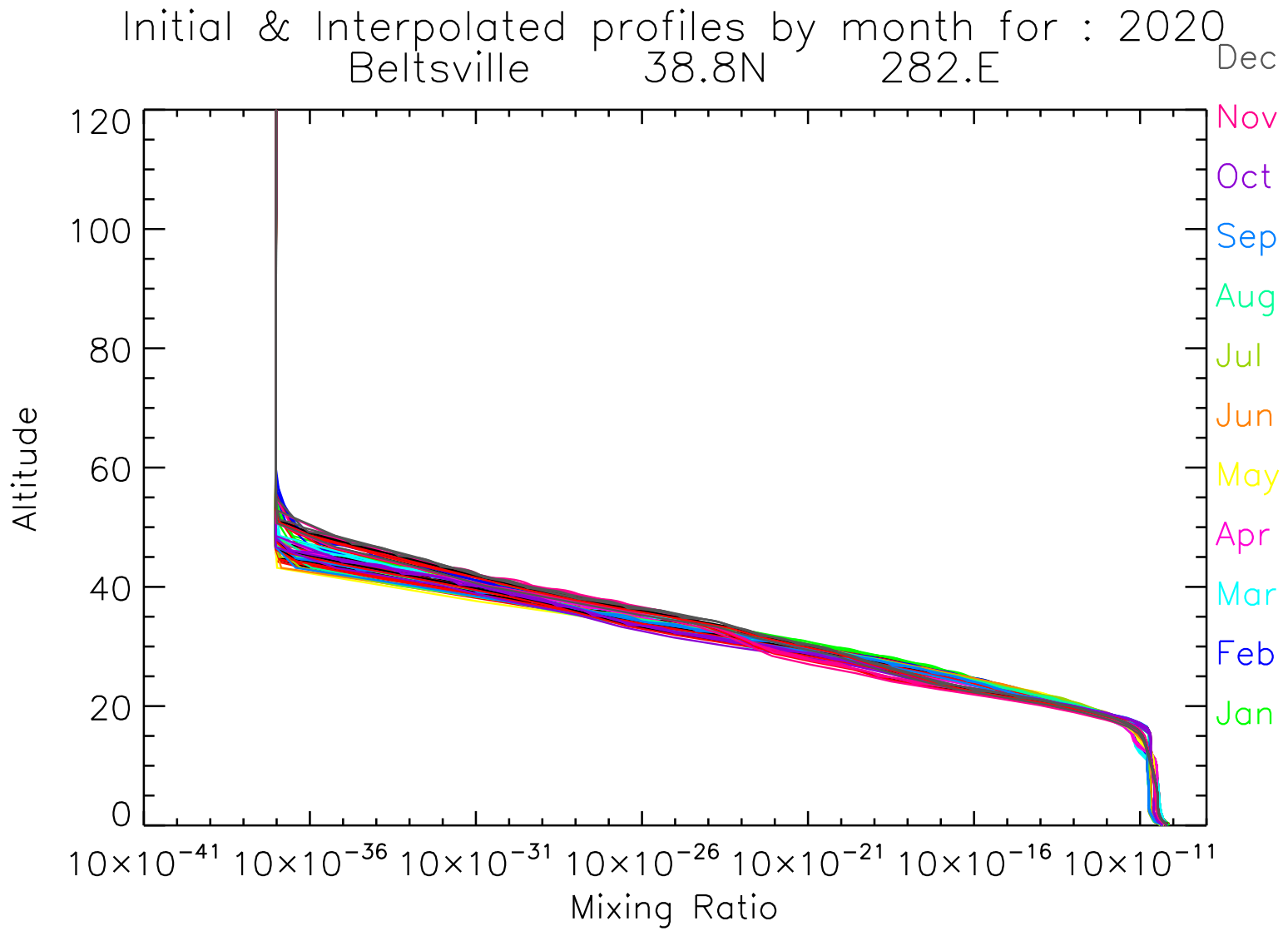

Initial & Interpolated profiles by month for : 2015
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

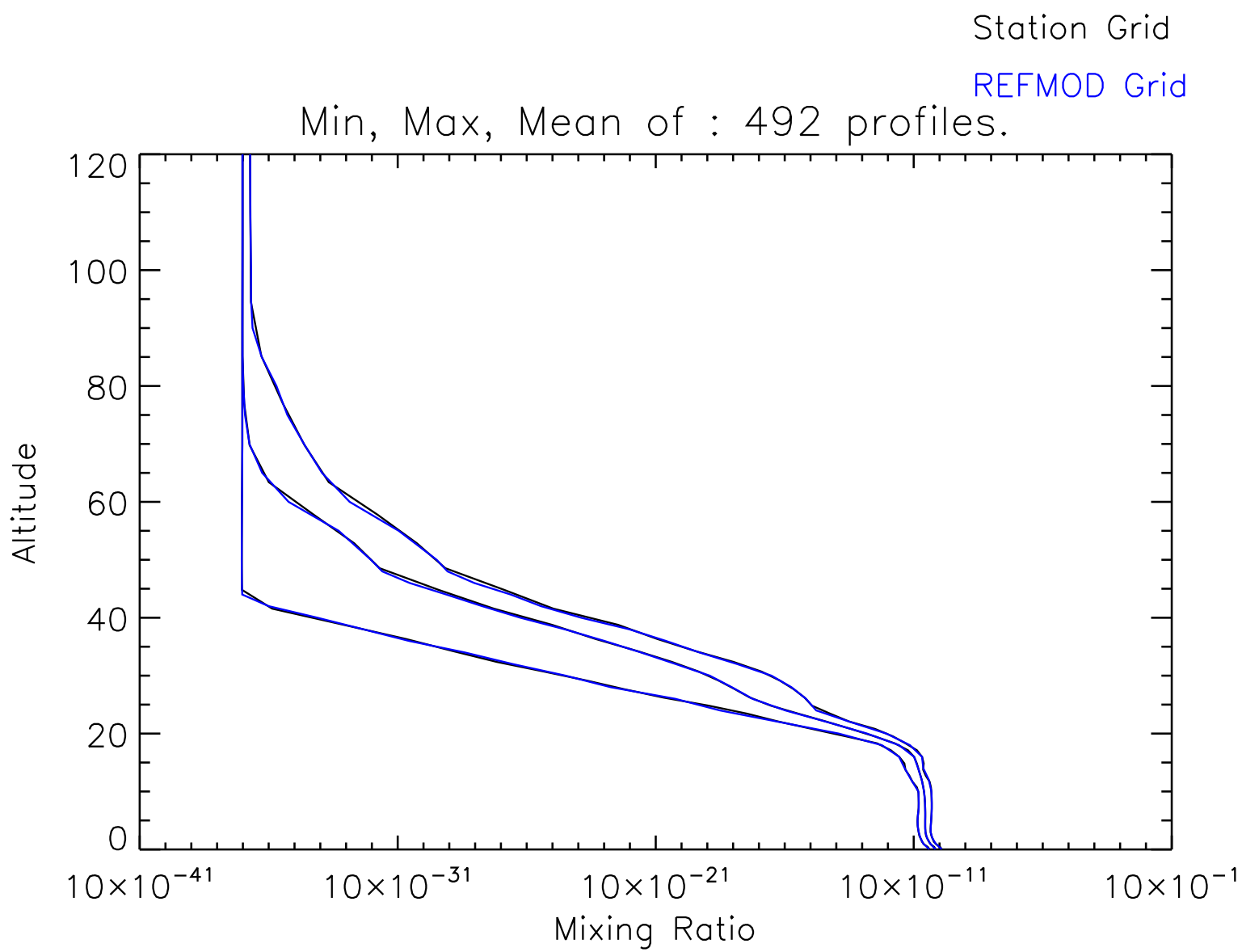

Initial & Interpolated profiles by month for : 2016
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

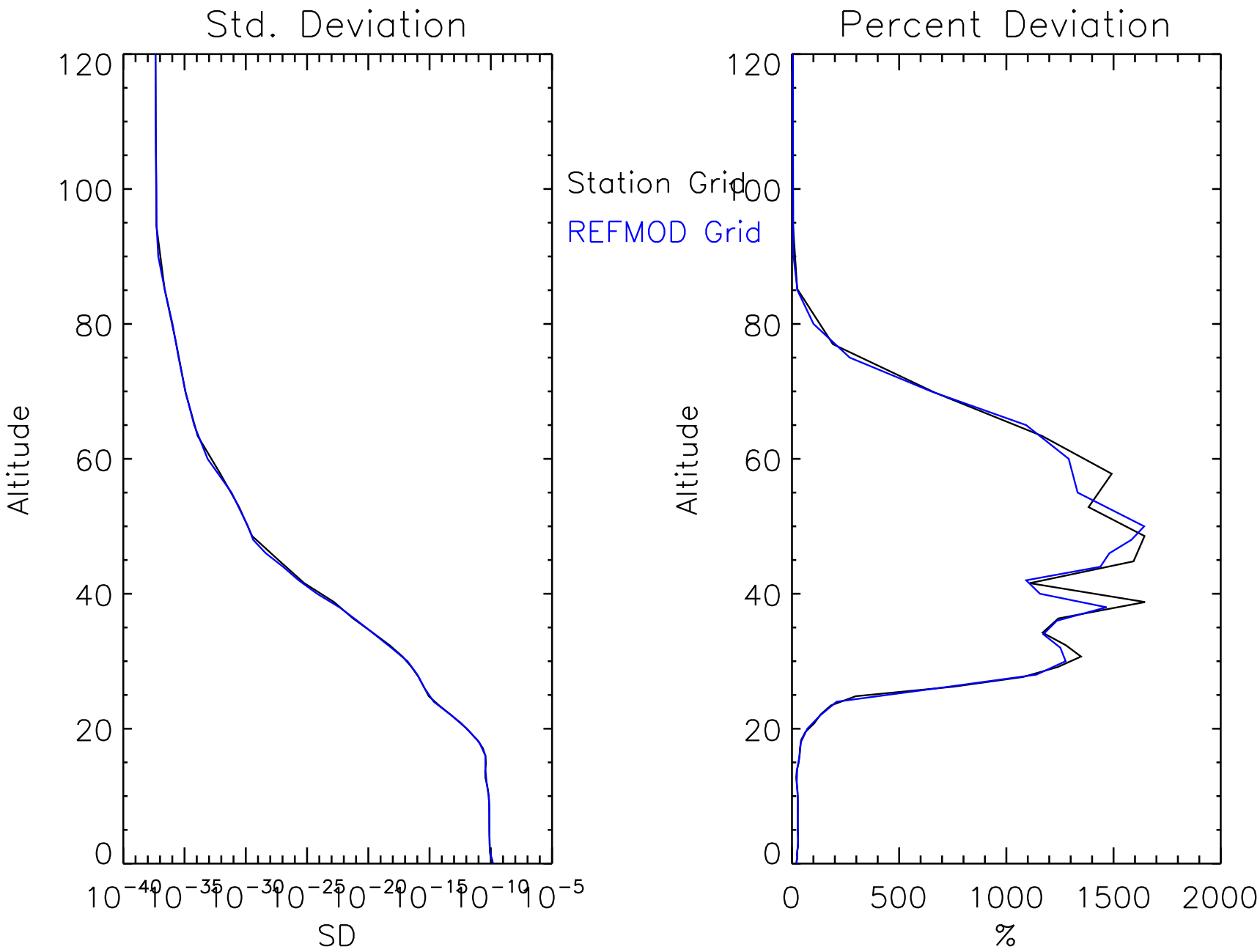

Initial & Interpolated profiles by month for : 2017
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio

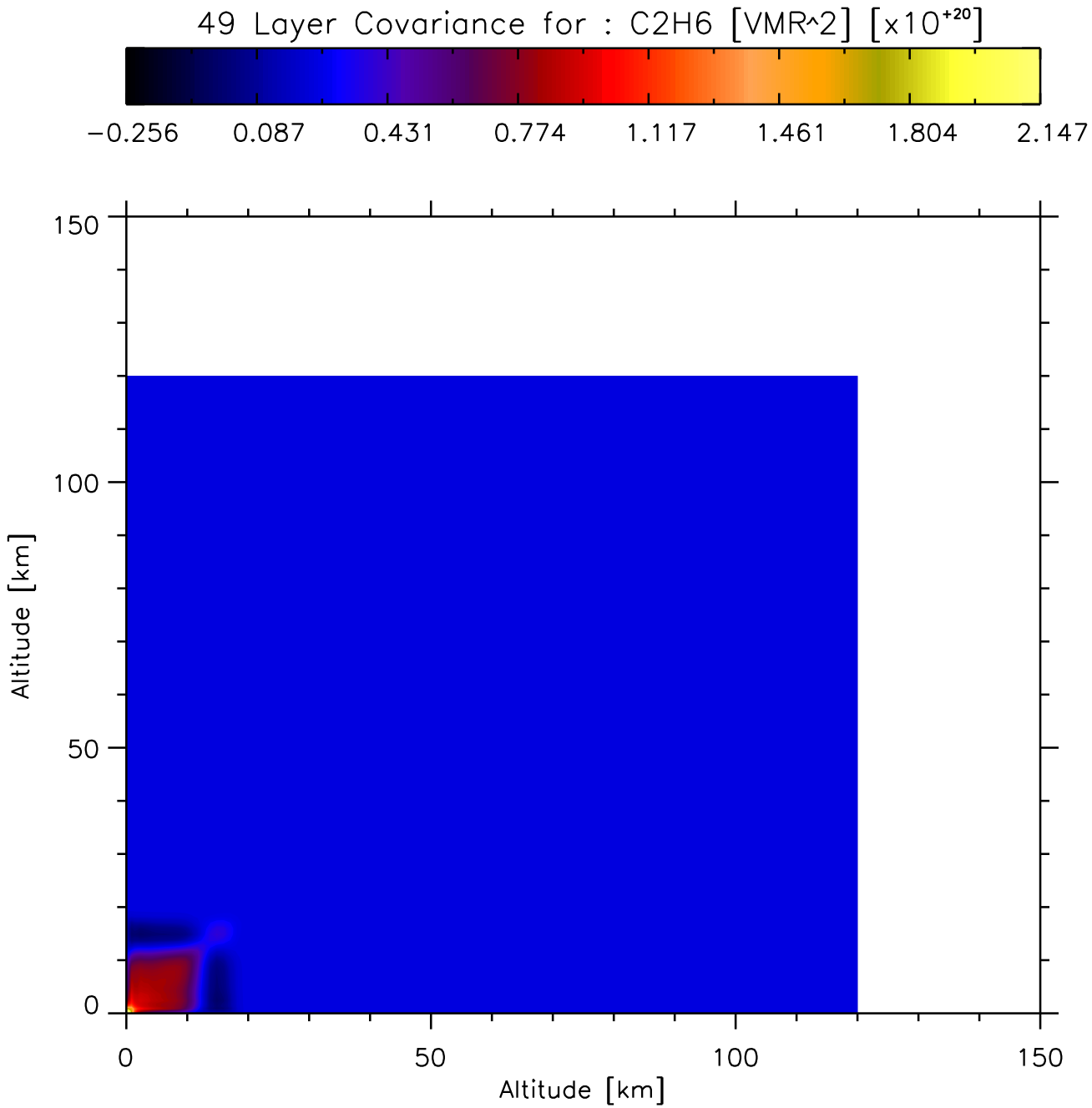

Initial & Interpolated profiles by month for : 2018
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


Initial & Interpolated profiles by month for : 2019
Beltsville 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

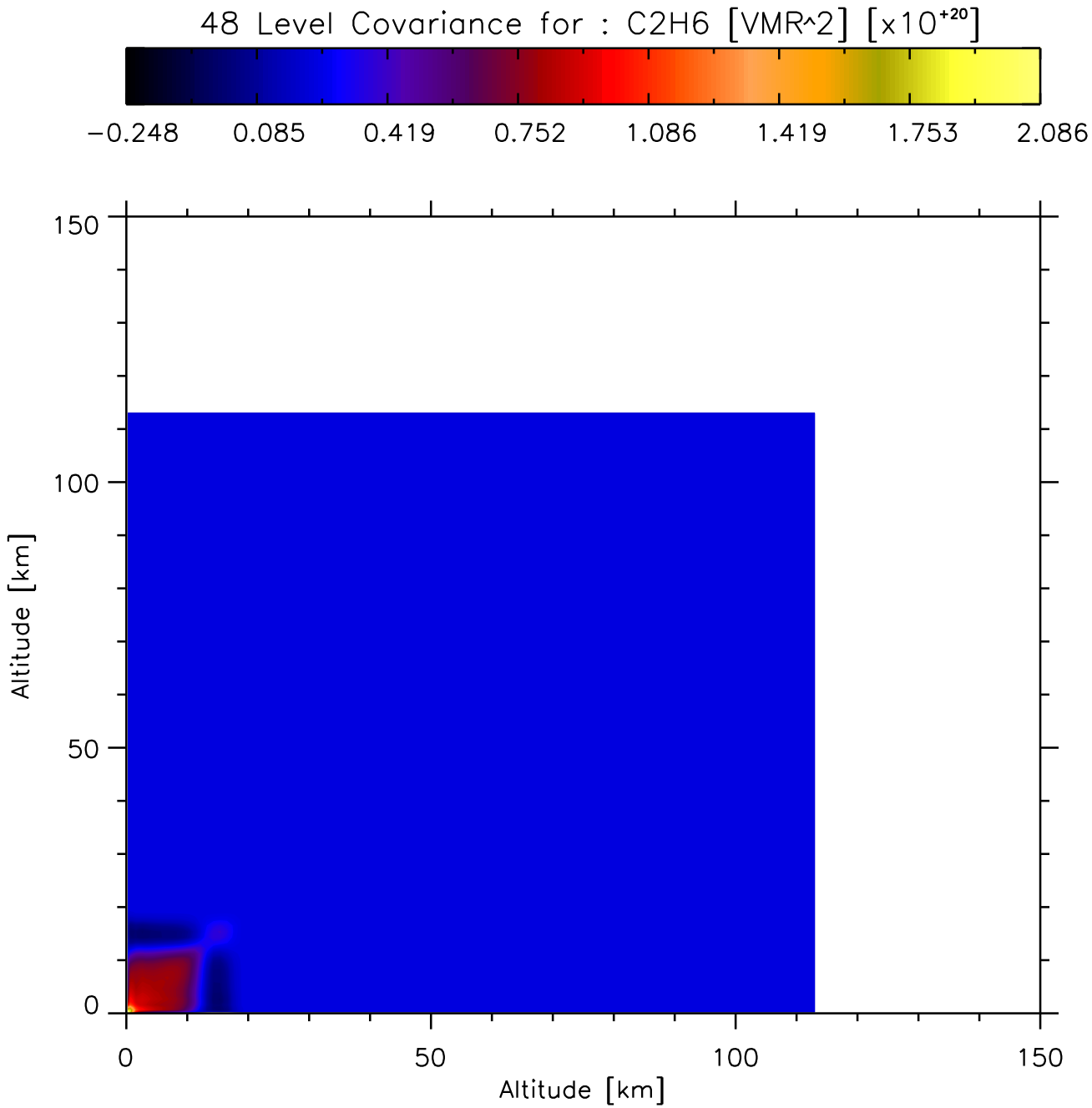

Initial & Interpolated profiles by month for : 2020
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41 10×10^-36 10×10^-31 10×10^-26 10×10^-21 10×10^-16 10×10^-11
Mixing Ratio


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^{-40} 10^{-35} 10^{-30} 10^{-25} 10^{-20} 10^{-15} 10^{-10} 10^{-5}
SD
0 500 1000 1500 2000
%


49 Layer Covariance for : C2H6 [VMR^2] [x10^+20]
−0.256
0.087
0.431
0.774
1.117
1.461
1.804
2.147
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

49 Layer Covariance for : C2H6 [VMR^2] [x10^+20]
2.5
2.0
1.5
1.0
0.5
0.0
Y Altitude
0
10
20
30
40
X Altitude
0
50
100
150


48 Level Covariance for : C2H6 [VMR^2] [x10^+20]
−0.248
0.085
0.419
0.752
1.086
1.419
1.753
2.086
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

48 Level Covariance for : C2H6 [VMR^2] [x10^+20]
2.5
2.0
1.5
1.0
0.5
0.0
Y Altitude
0
20
40
60
80
100
X Altitude
0
50
100
150