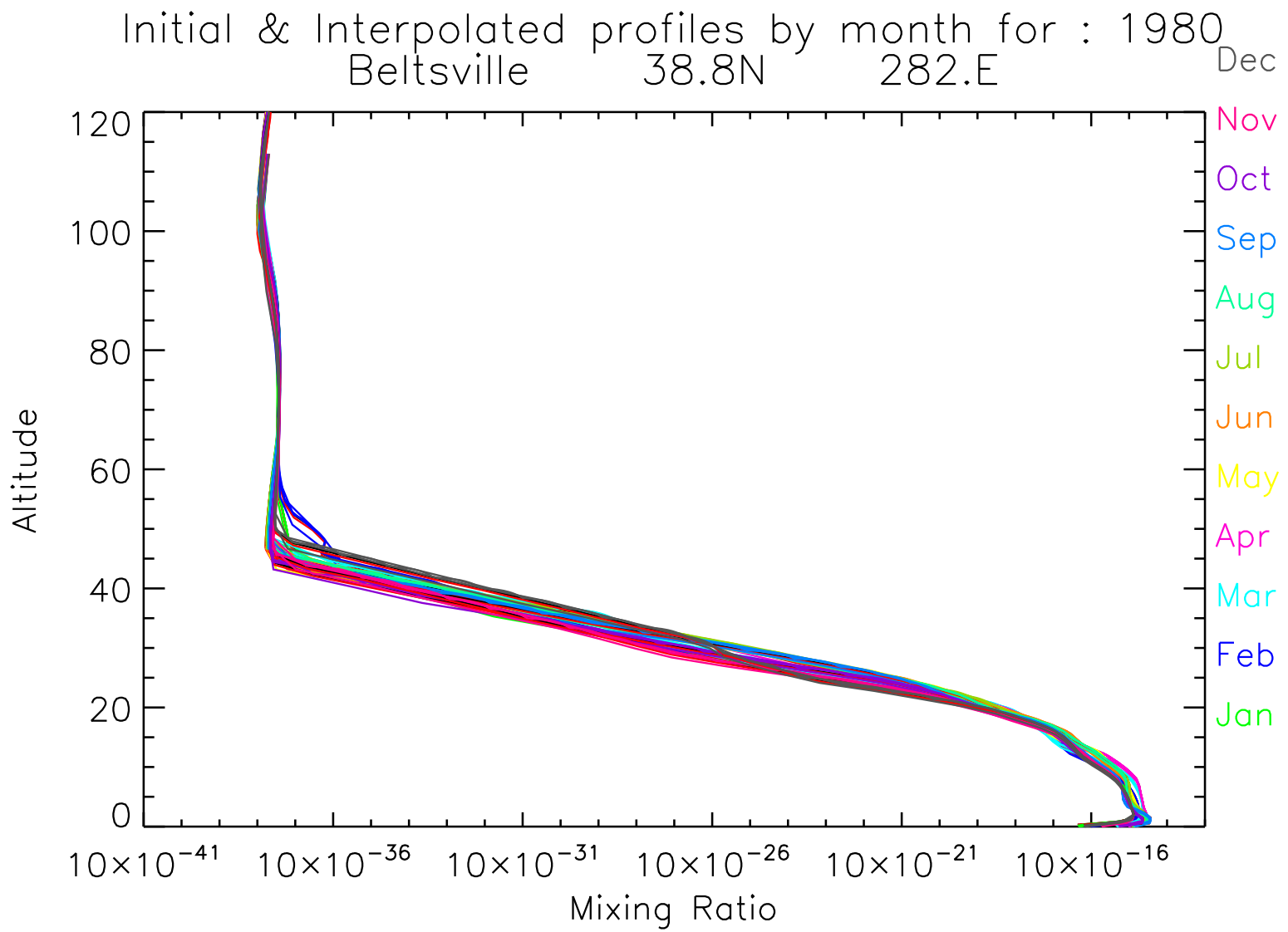
Initial & Interpolated profiles by month for : 1980
Beltsville 38.8N 282.E
Dec
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Altitude
120
100
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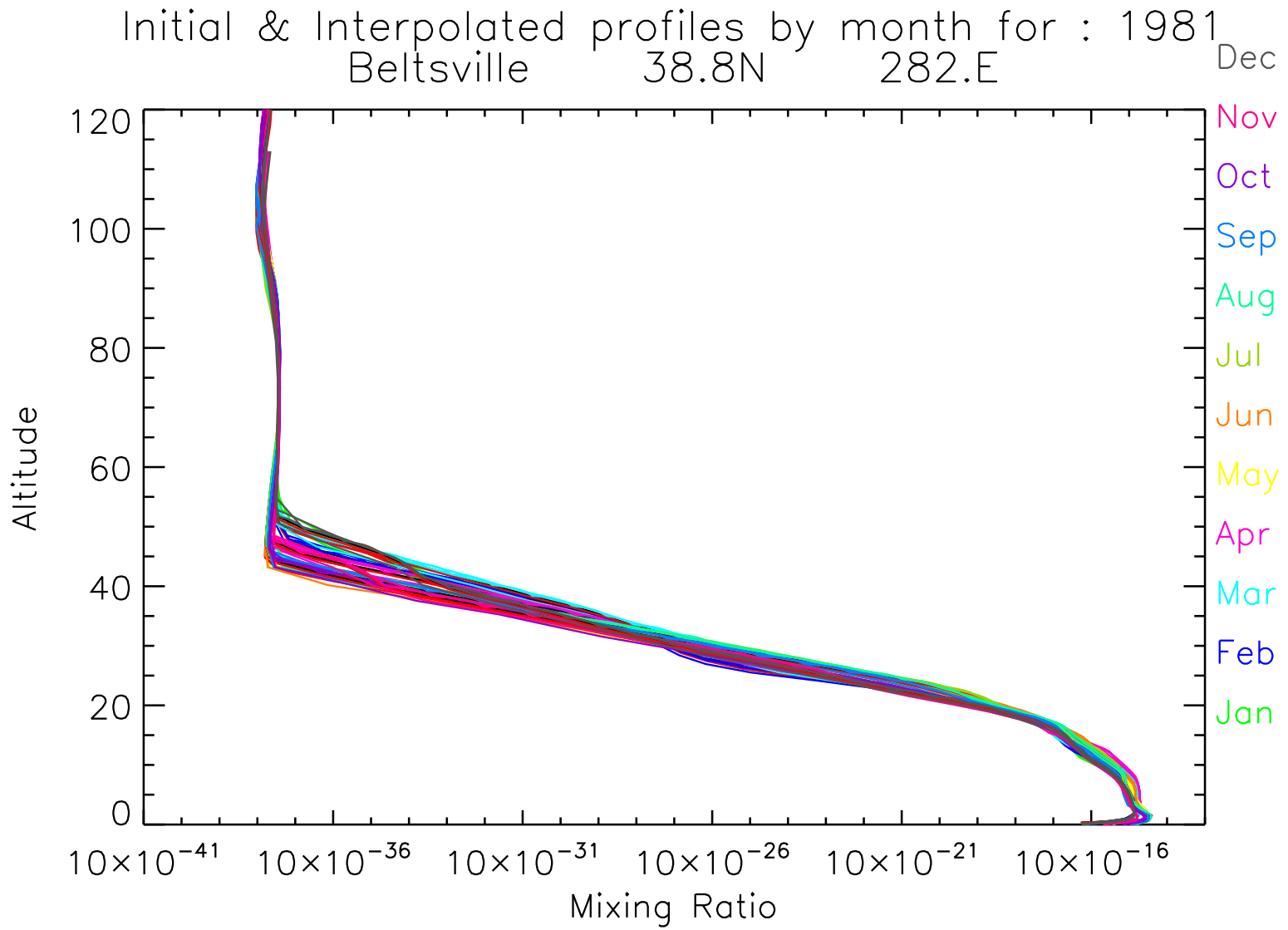
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 1981
Beltsville 38.8N 282.E
Dec
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Altitude
120
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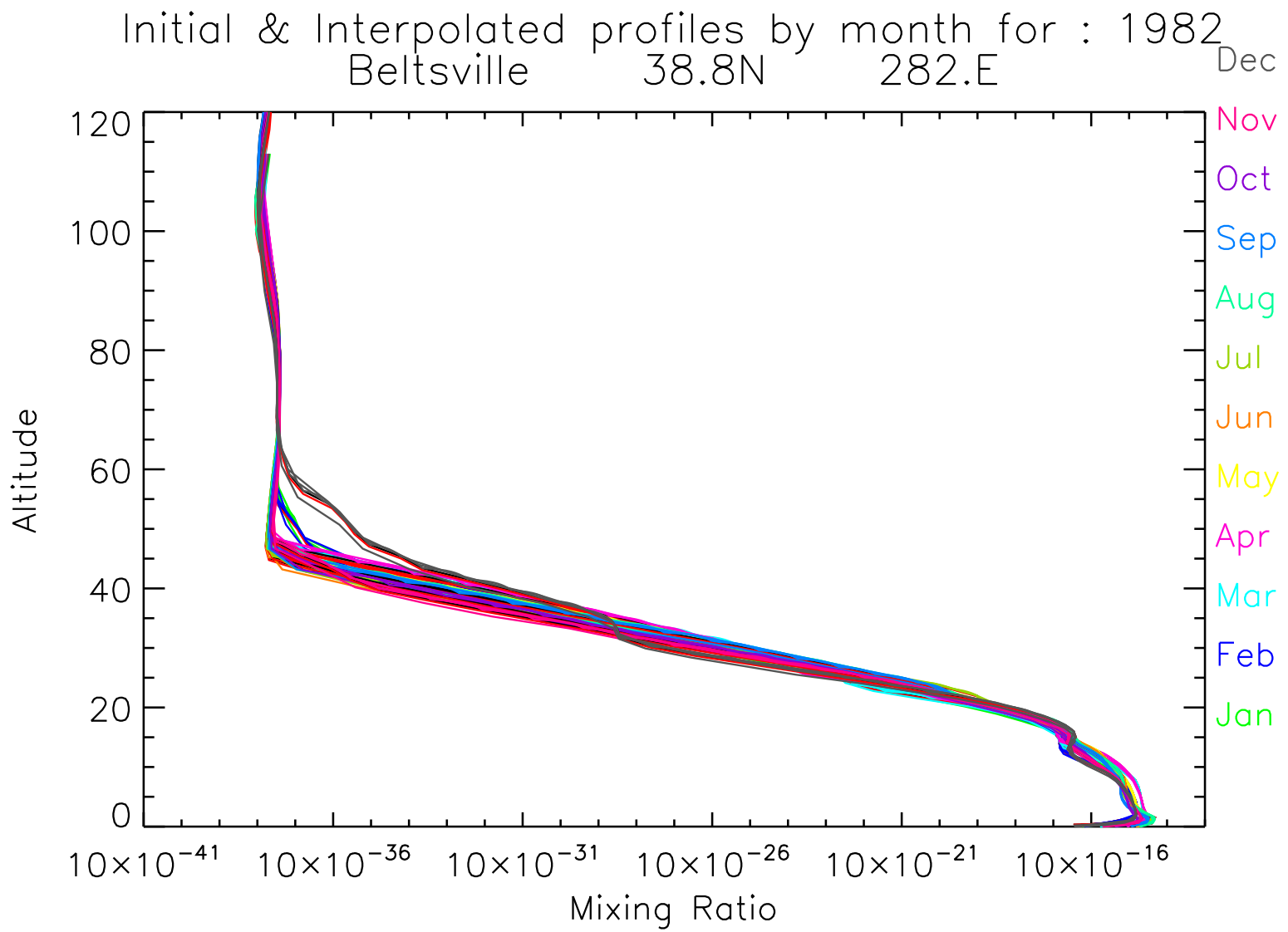
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 1982
Beltsville 38.8N 282.E
Dec
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Altitude
120
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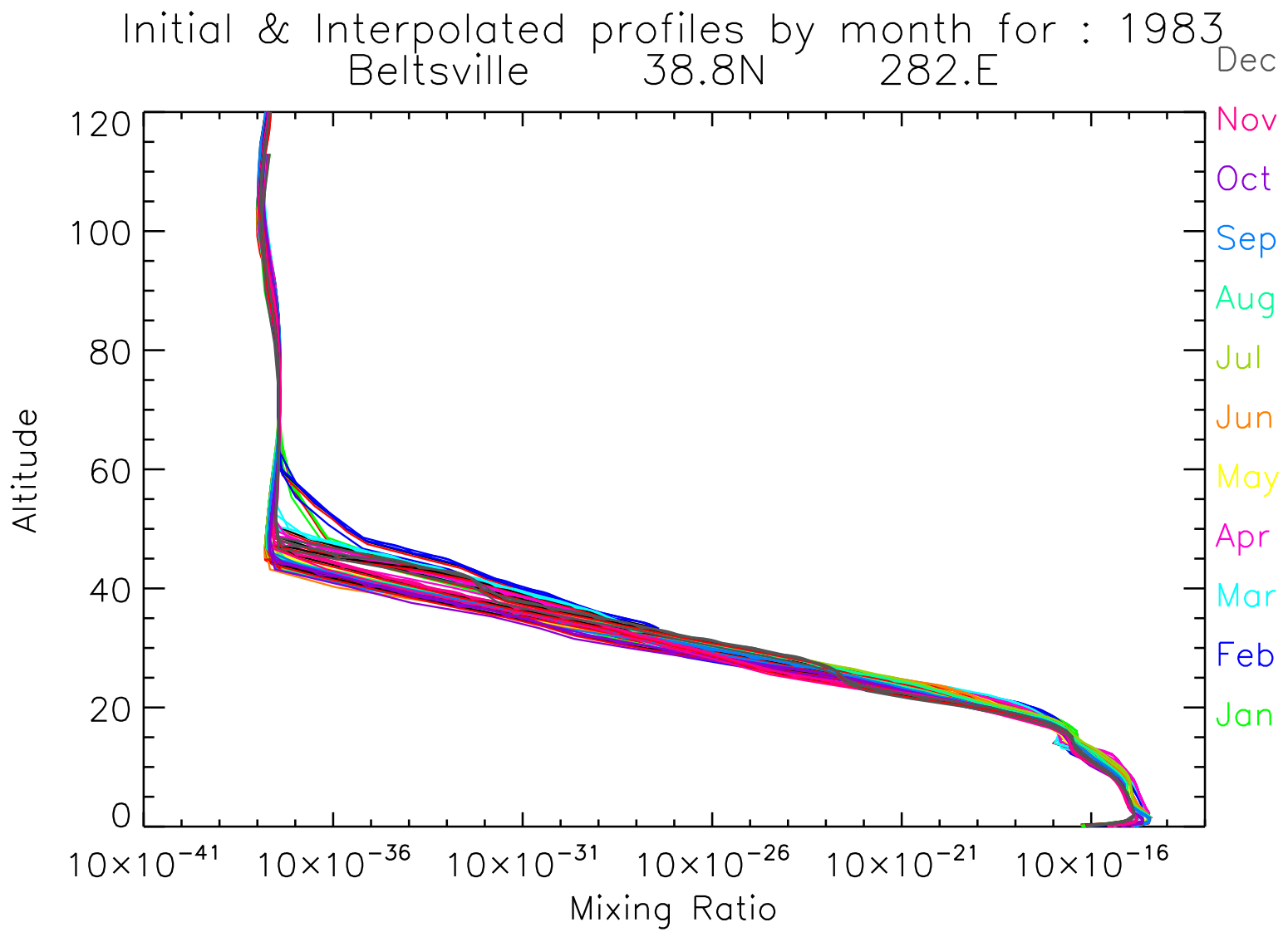
10×10^-31
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 1983
Beltsville 38.8N 282.E
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Altitude
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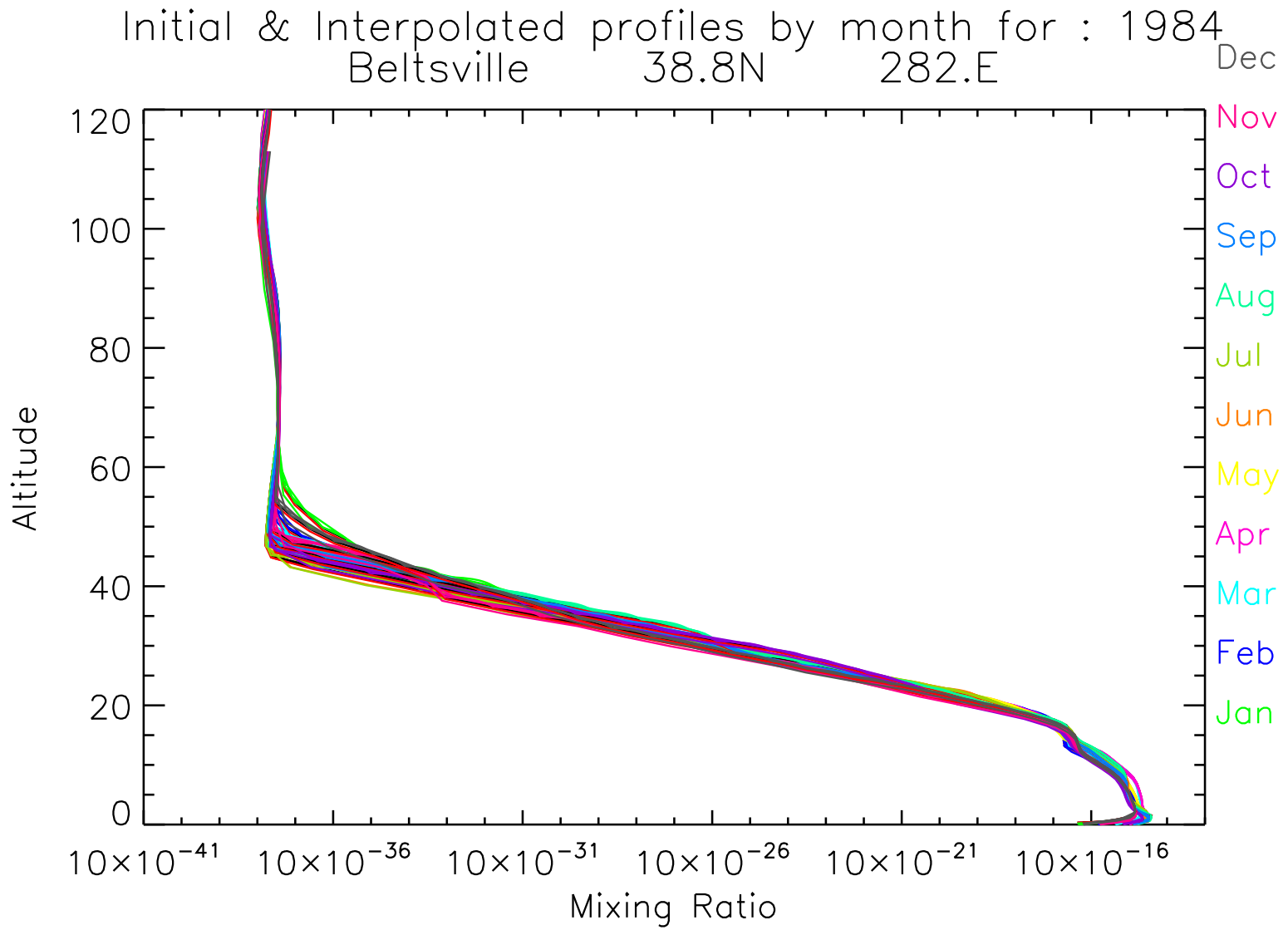
10×10−31
10×10−26
10×10−21
10×10−16
Mixing Ratio


Initial & Interpolated profiles by month for : 1984
Beltsville 38.8N 282.E
Dec
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Altitude
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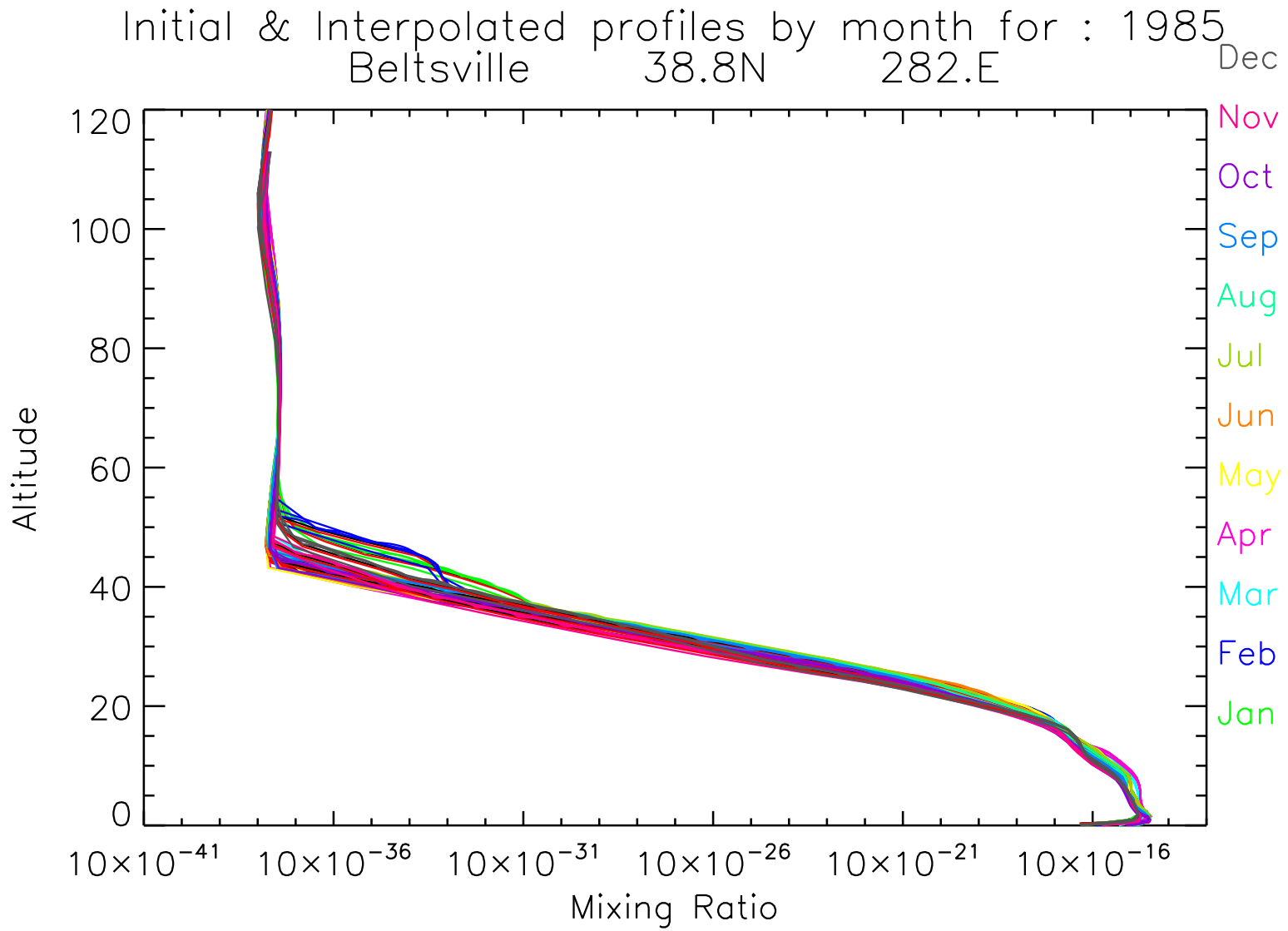
10×10^-21
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 1985
Beltsville 38.8N 282.E
Dec
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Altitude
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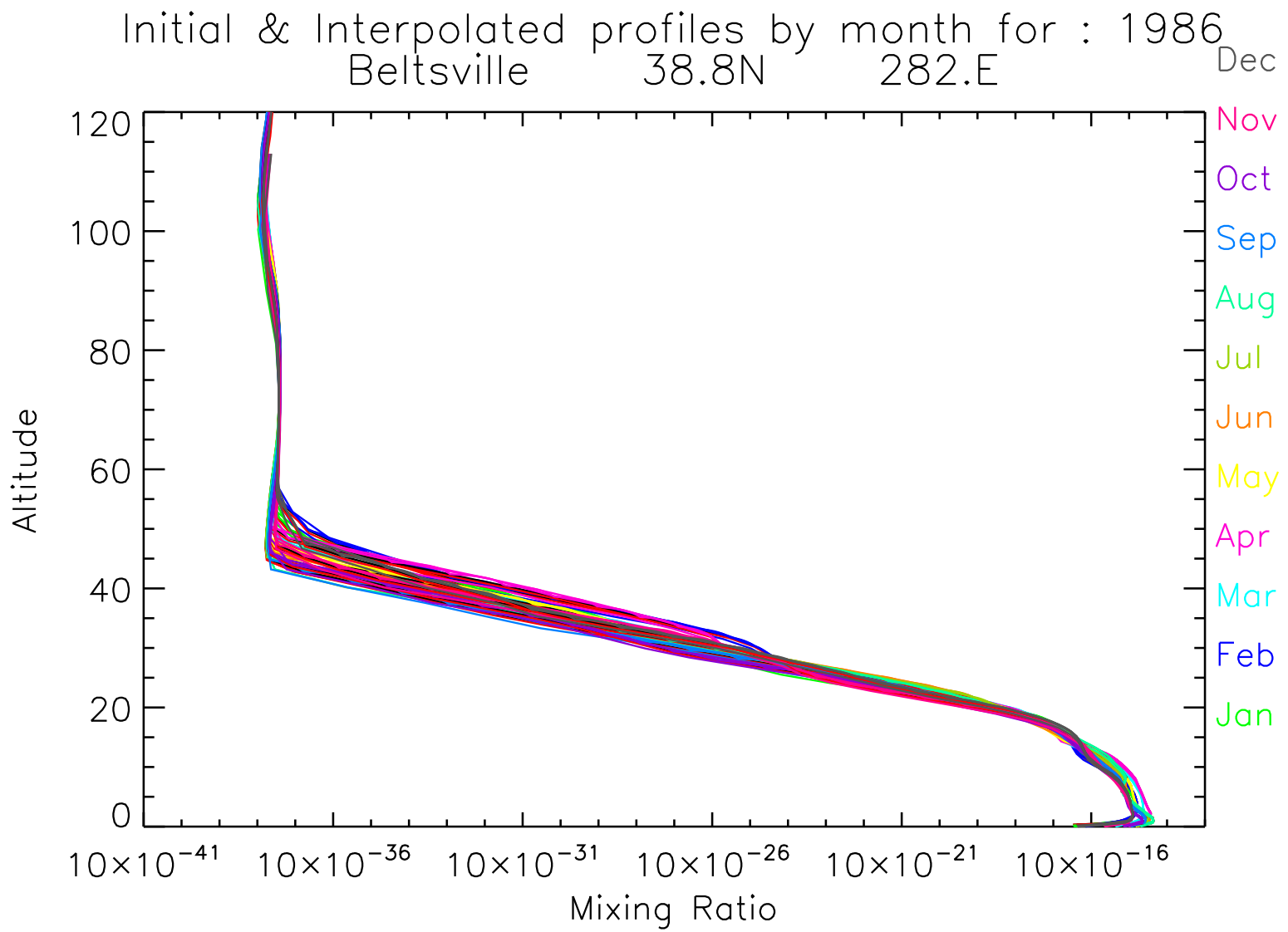
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 1986
Beltsville 38.8N 282.E
Dec
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Altitude
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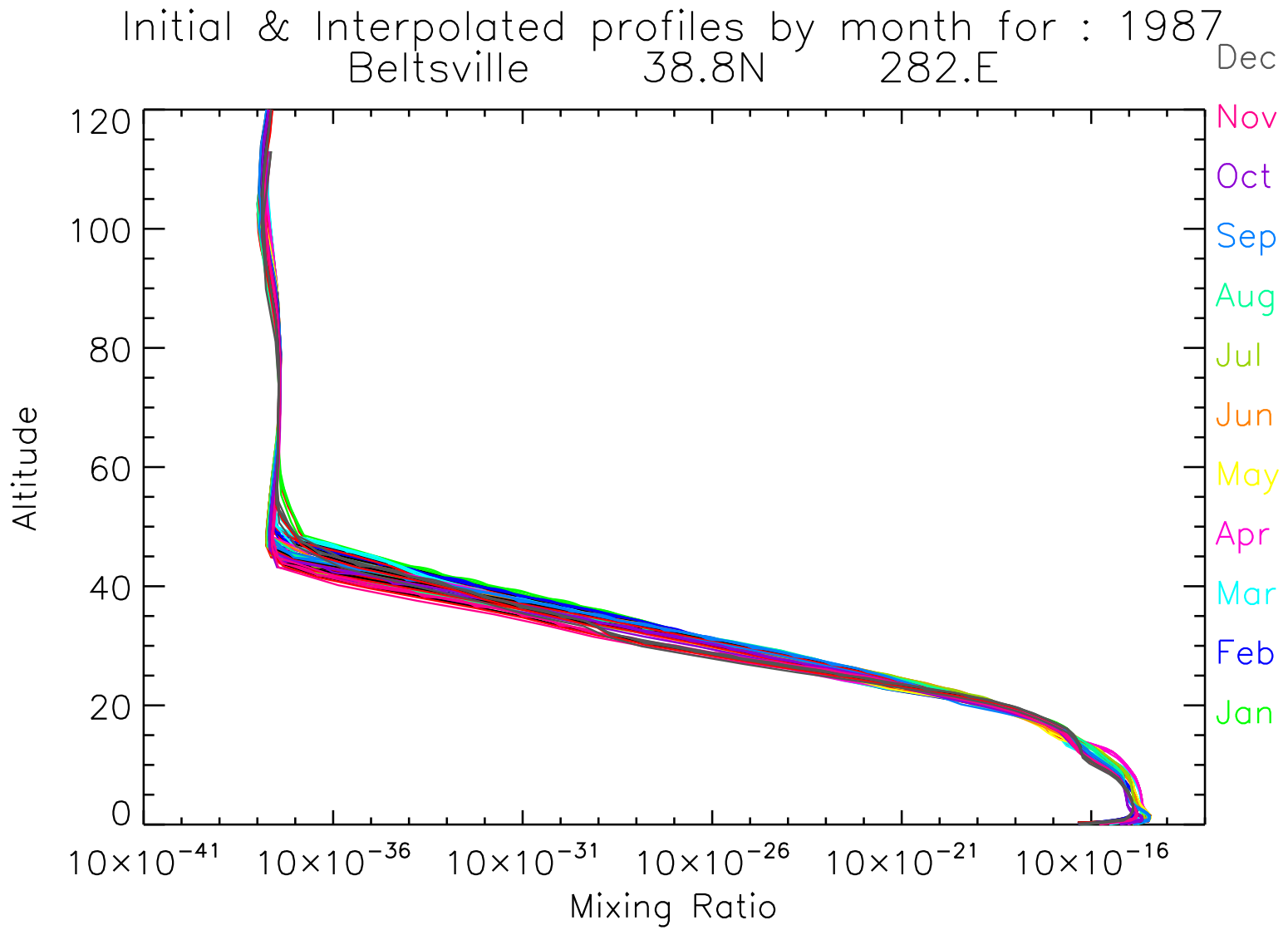
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 1987
Beltsville 38.8N 282.E
Dec
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Altitude
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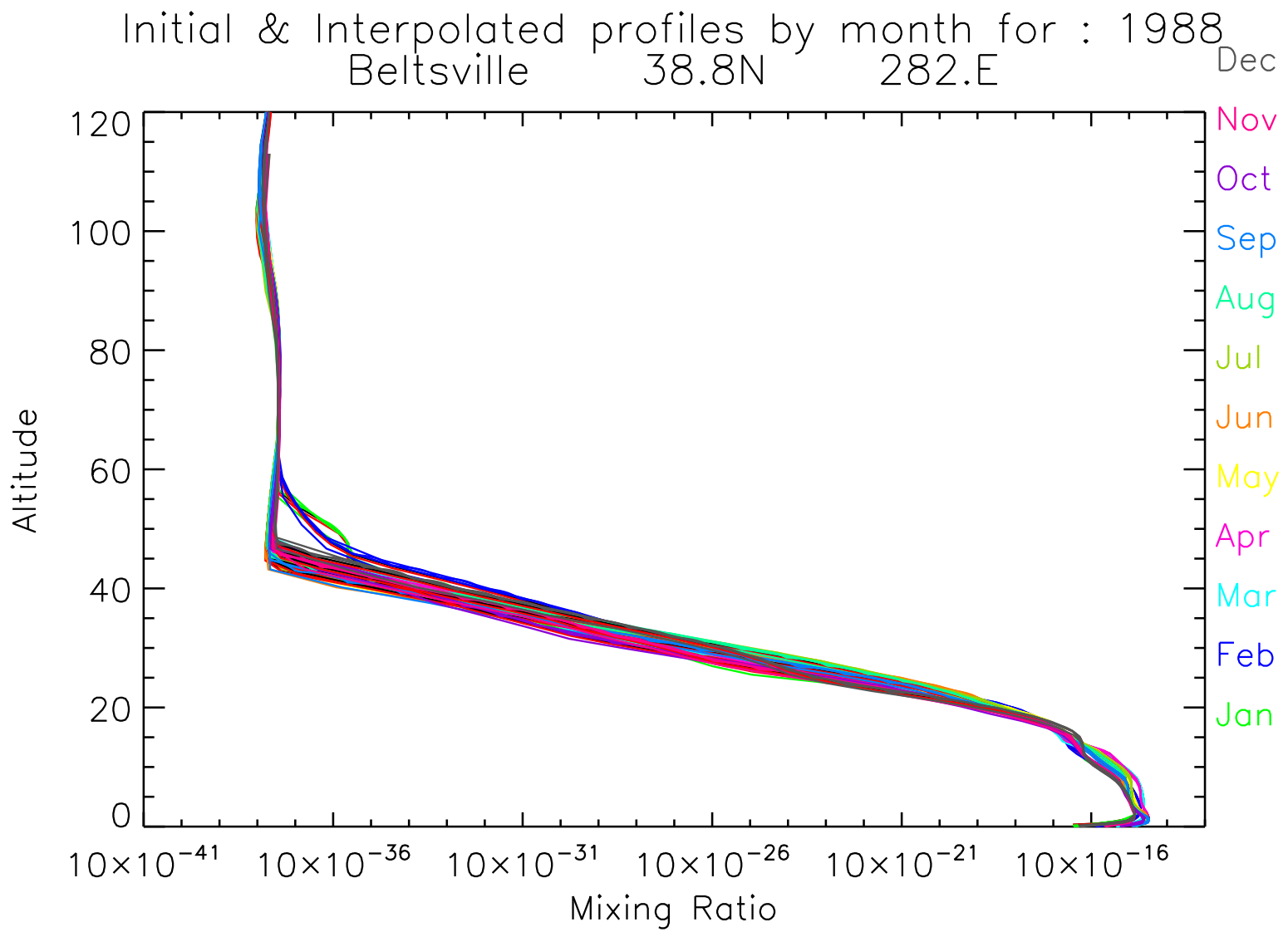
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 1988
Beltsville 38.8N 282.E
Dec
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Altitude
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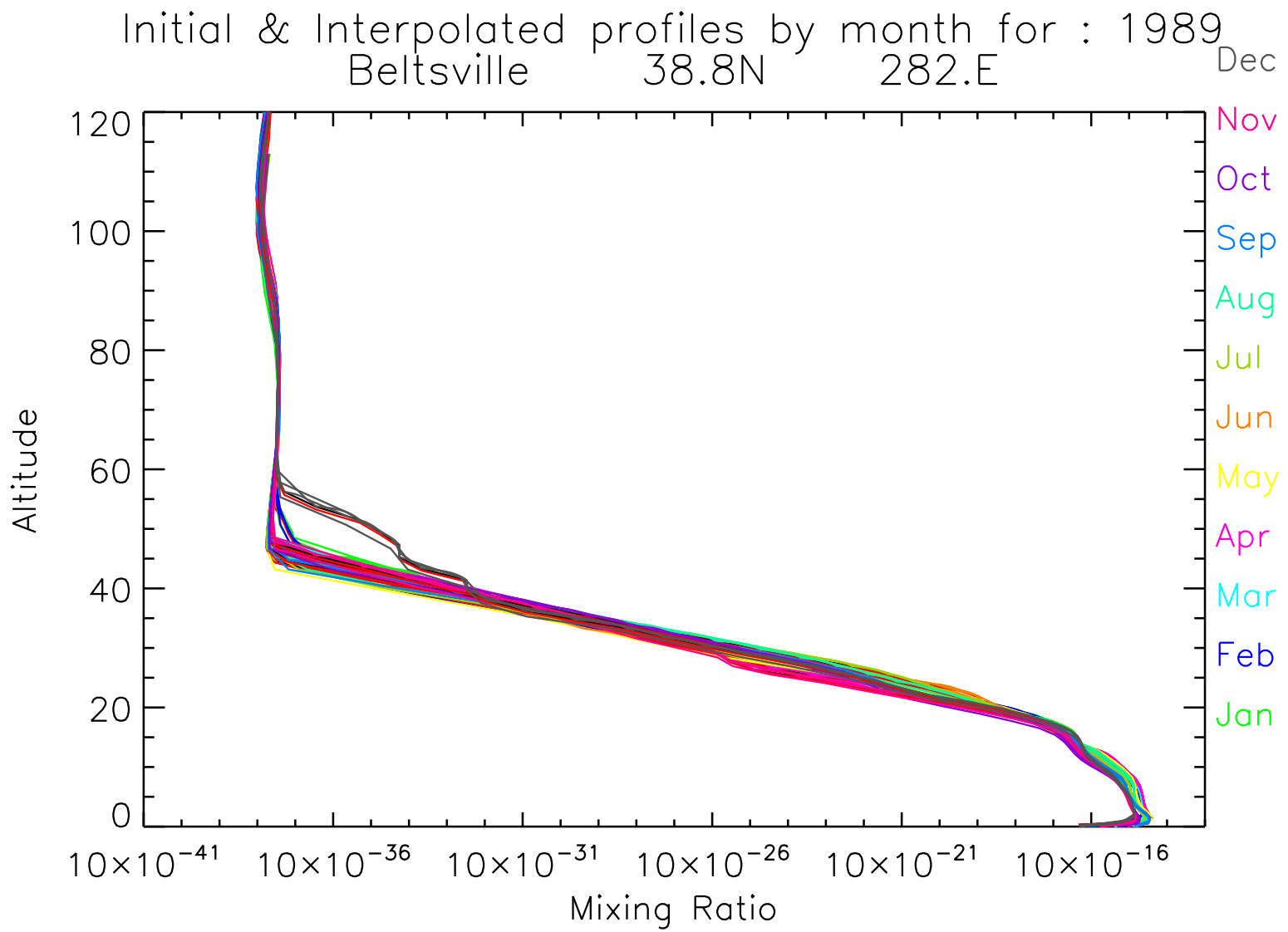
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 1989
Beltsville 38.8N 282.E
Dec
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Altitude
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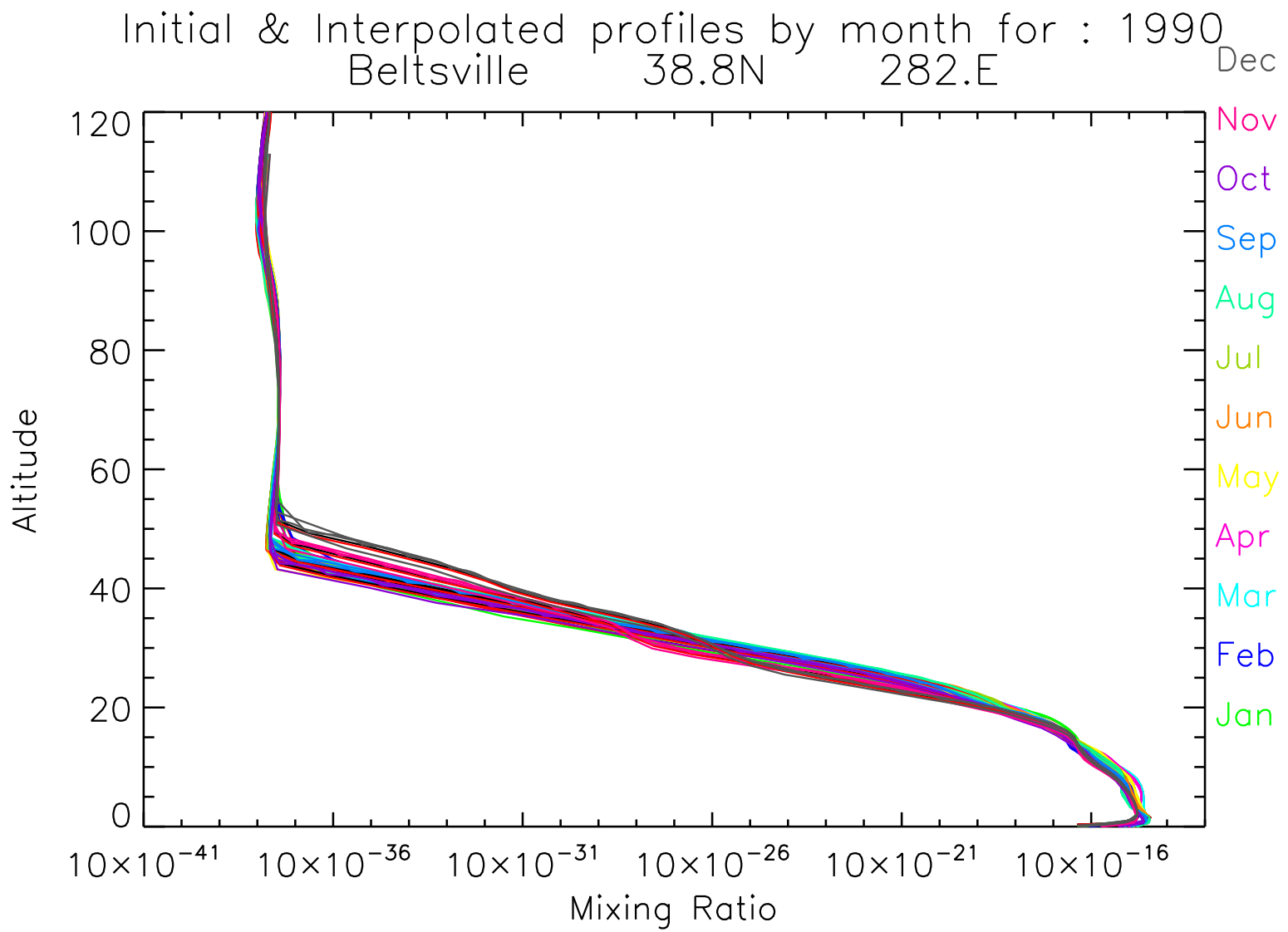
10×10^-21
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 1990
Beltsville 38.8N 282.E
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Altitude
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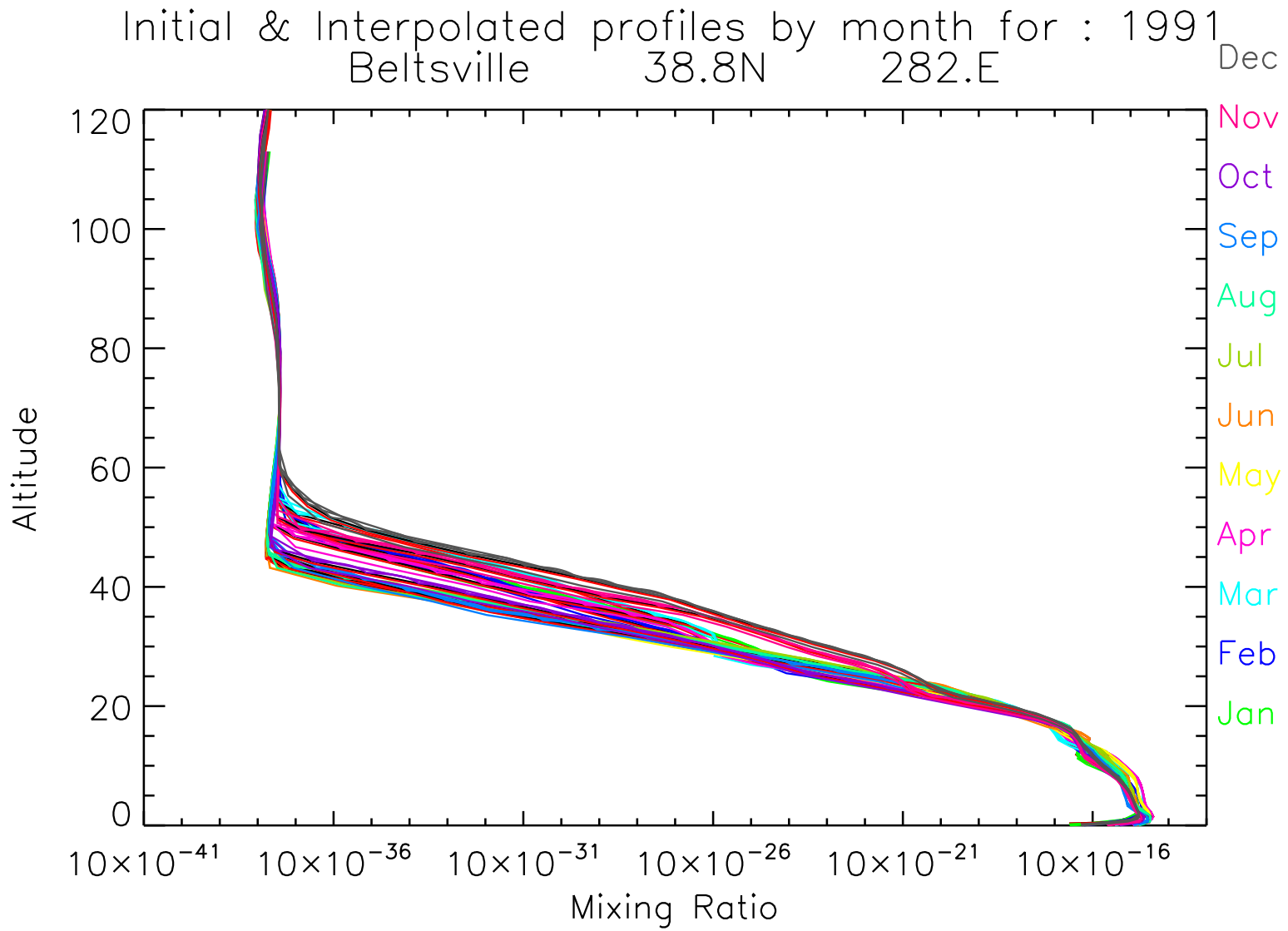
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 1991
Beltsville 38.8N 282.E
Dec
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Altitude
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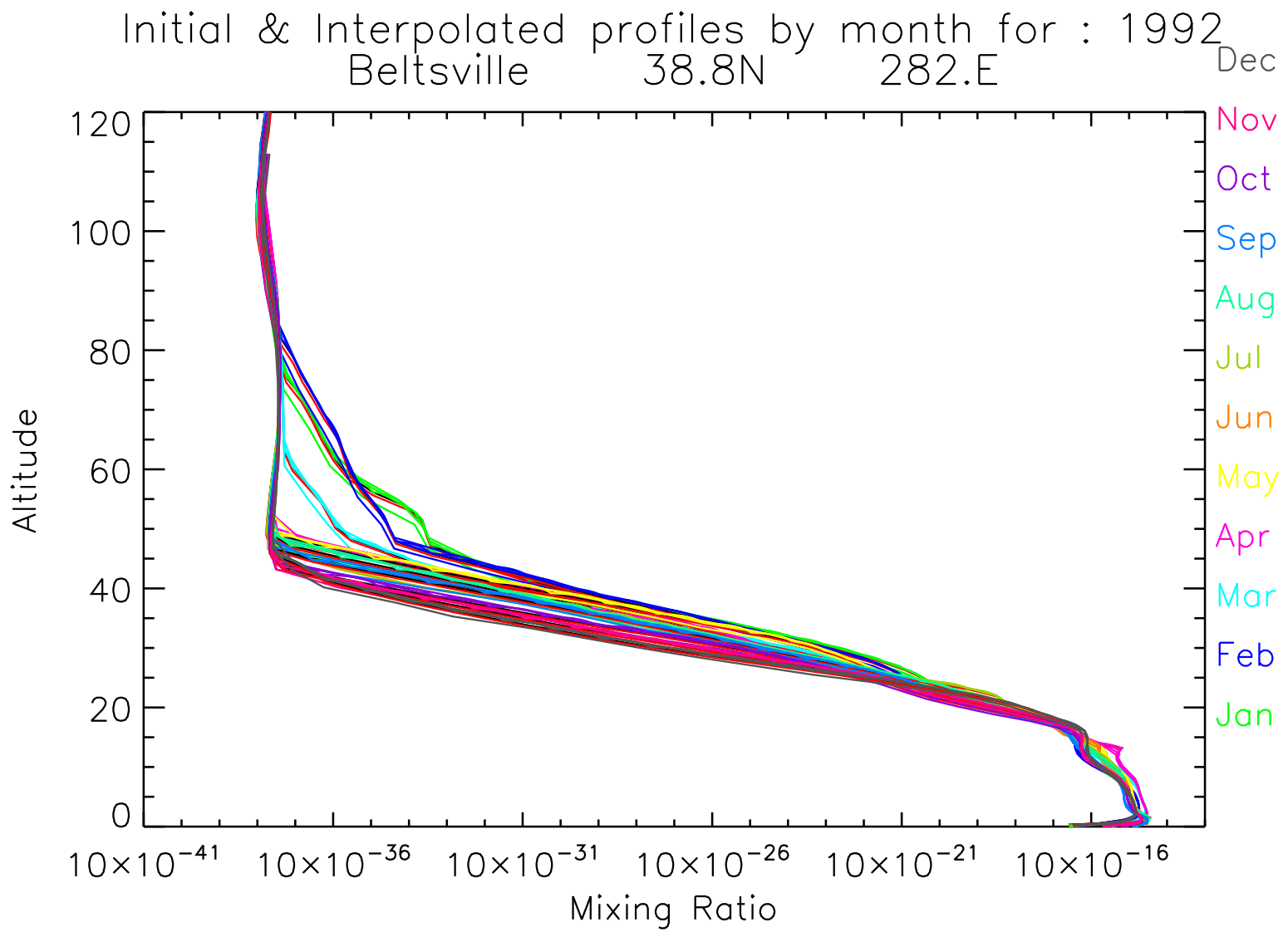
10×10^-21
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 1992
Beltsville 38.8N 282.E
Dec
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Altitude
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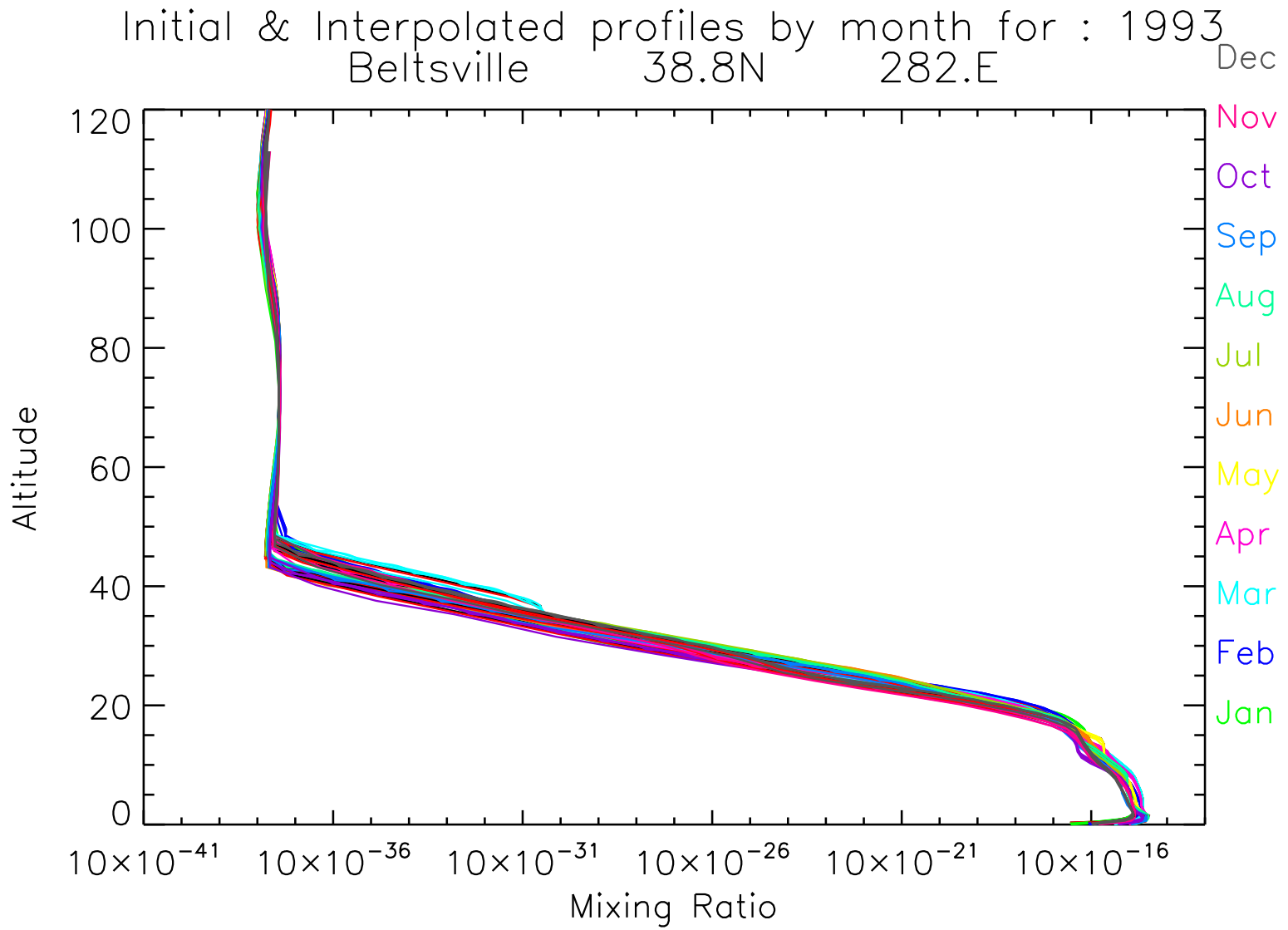
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 1993
Beltsville 38.8N 282.E
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Altitude
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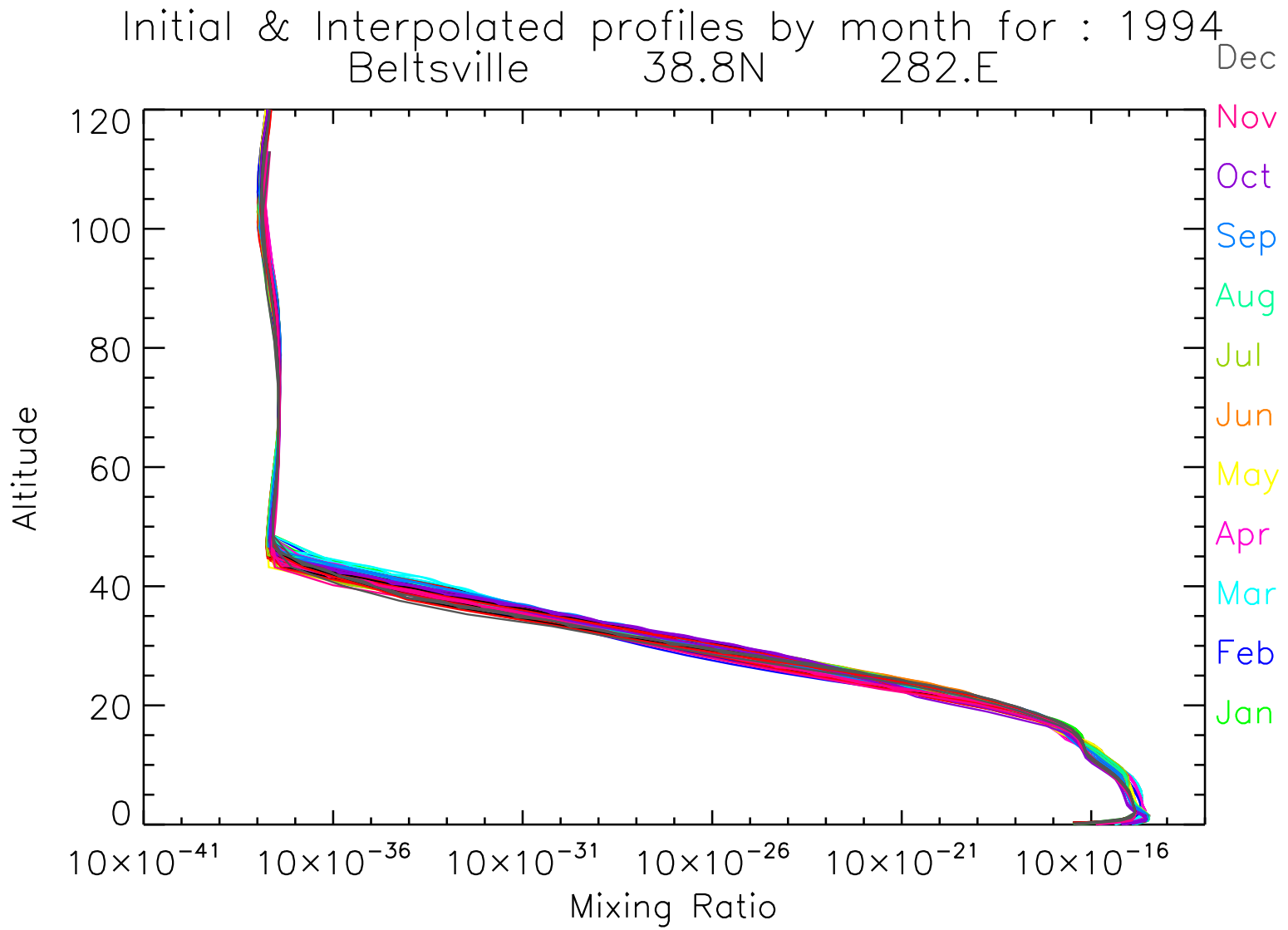
10×10^-21
10×10^-16
Mixing Ratio


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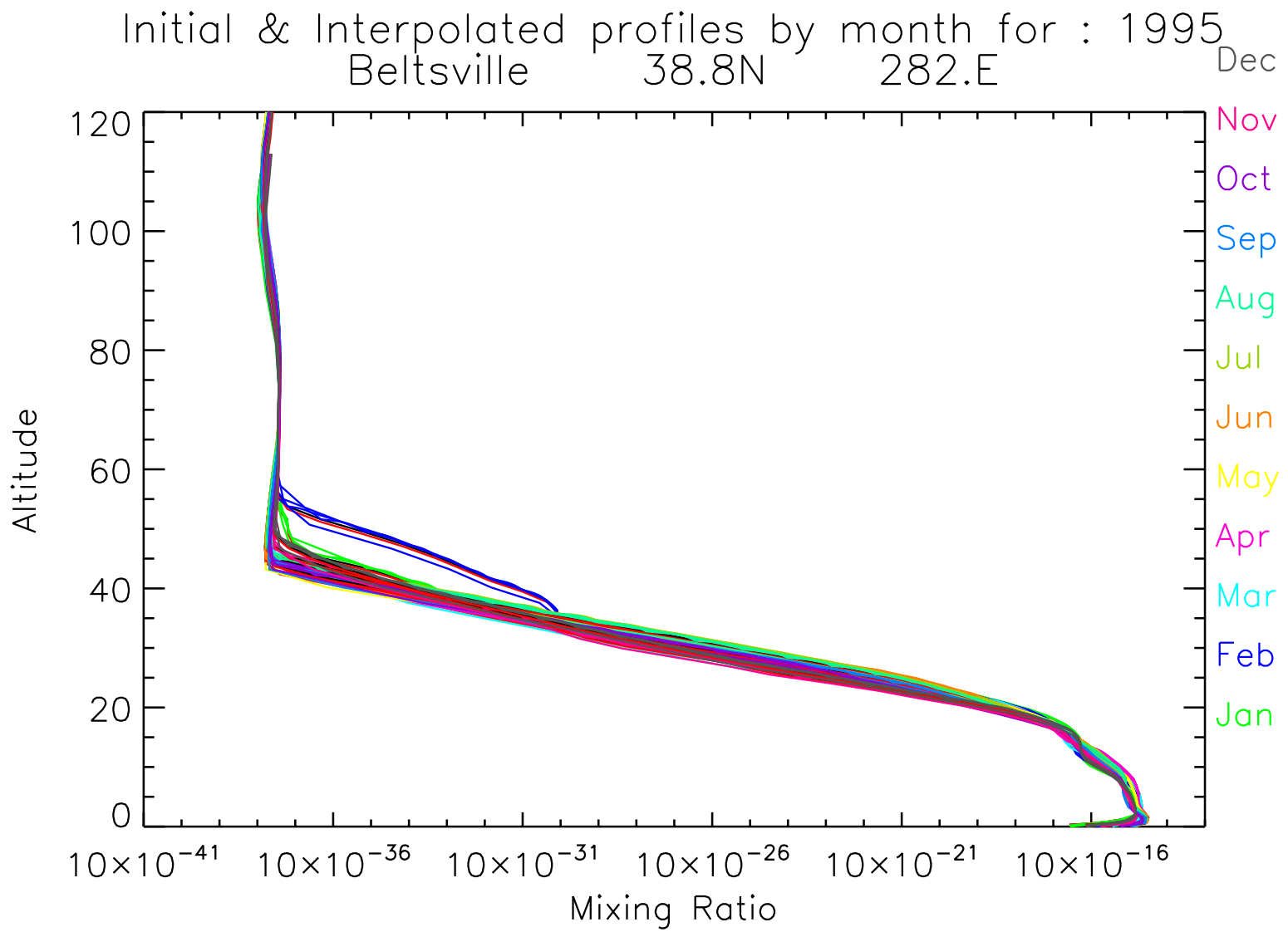
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 1995
Beltsville 38.8N 282.E
Dec
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Altitude
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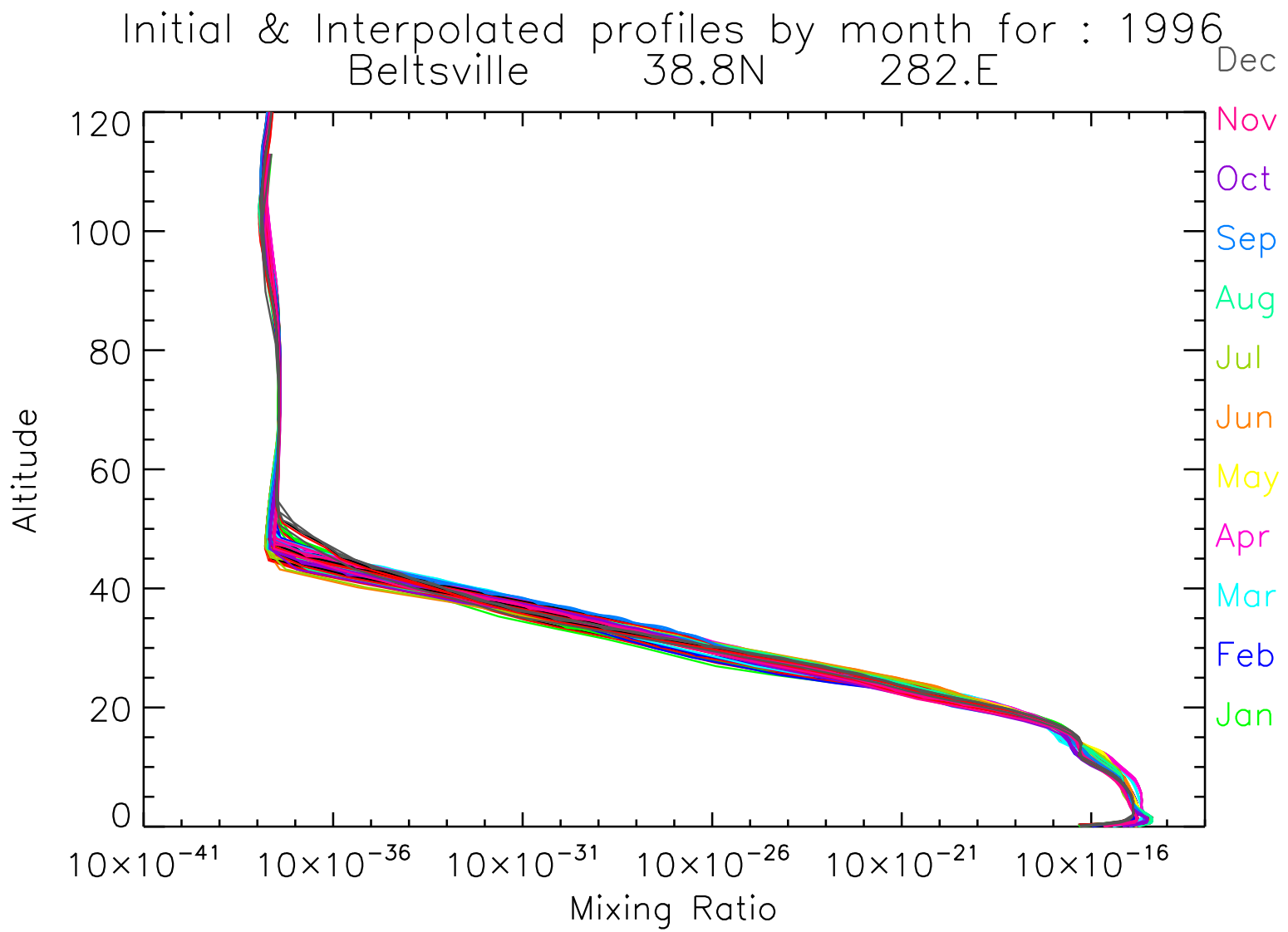
10×10^-21
10×10^-16
Mixing Ratio


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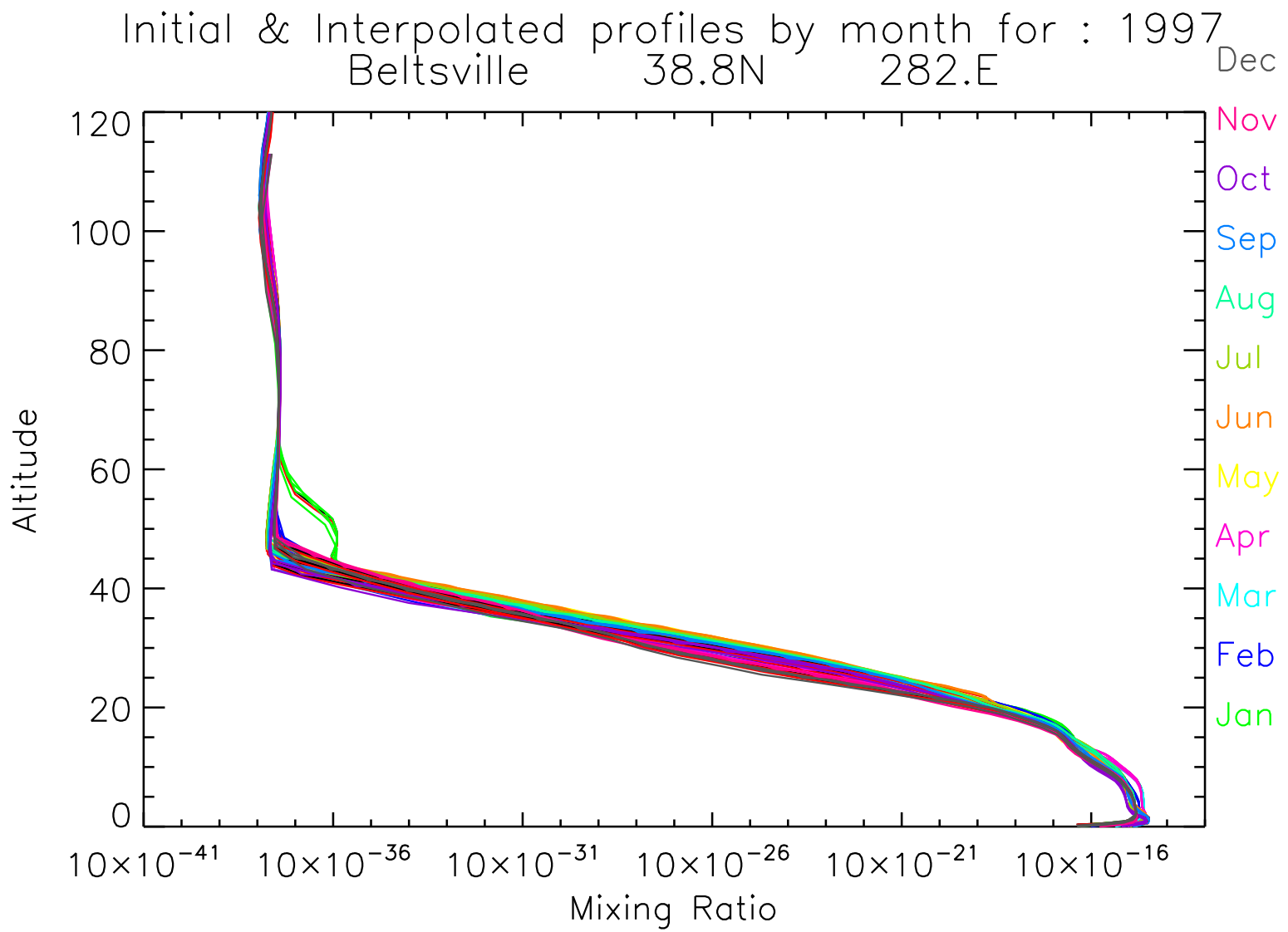
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 1997
Beltsville 38.8N 282.E
Dec
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Altitude
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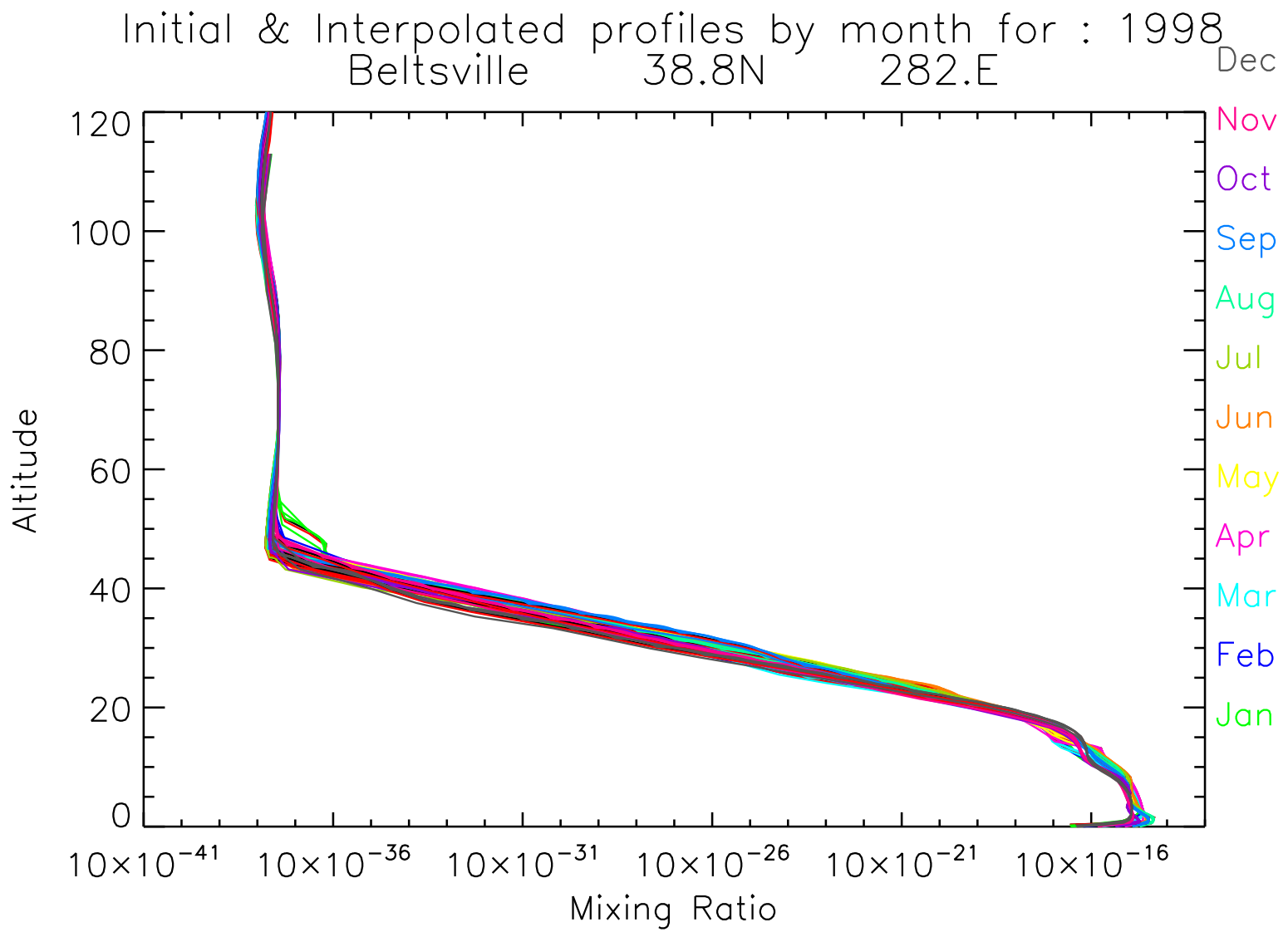
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 1998
Beltsville 38.8N 282.E
Dec
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Altitude
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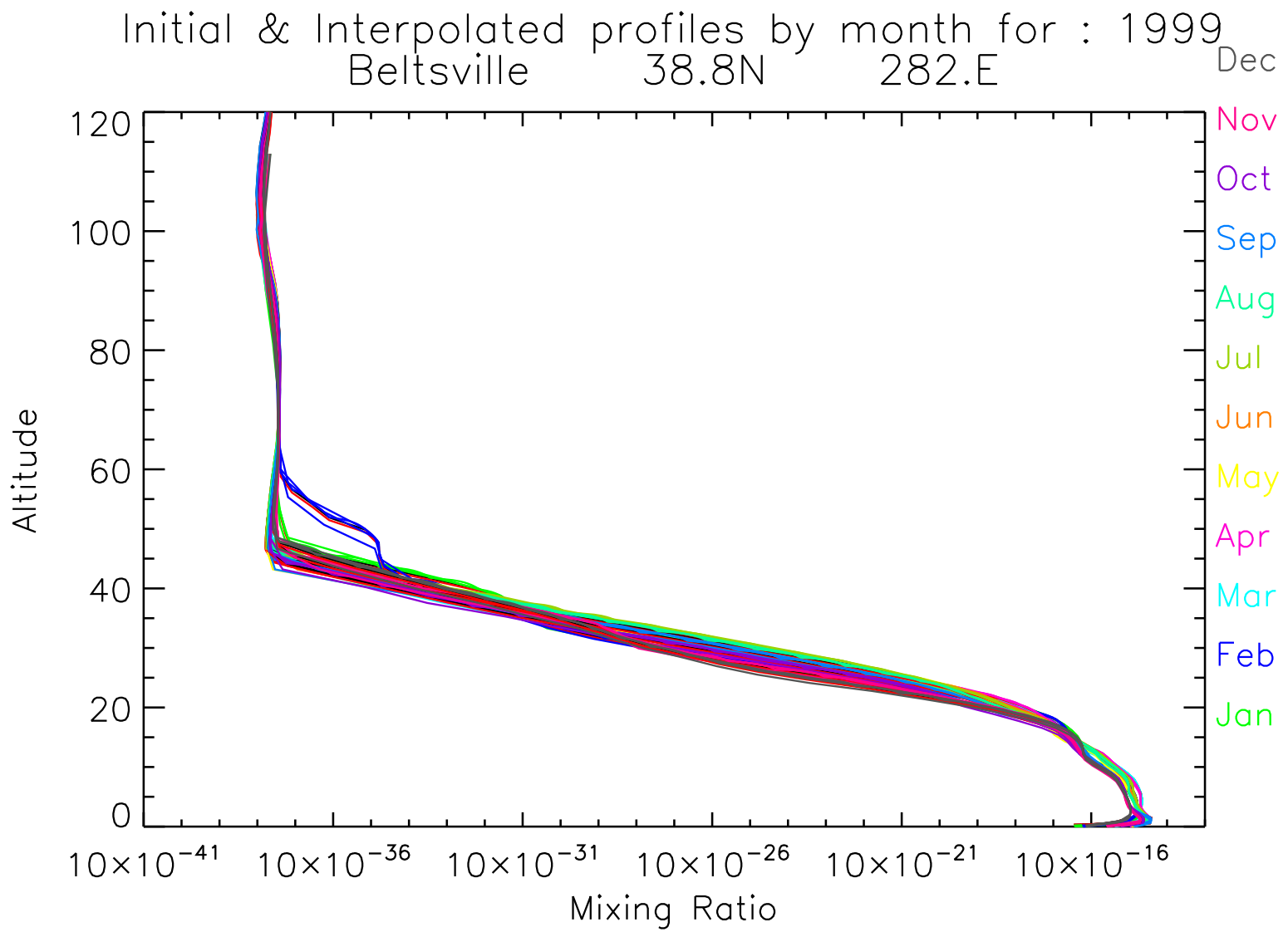
10×10^-21
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 1999
Beltsville 38.8N 282.E
Dec
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Altitude
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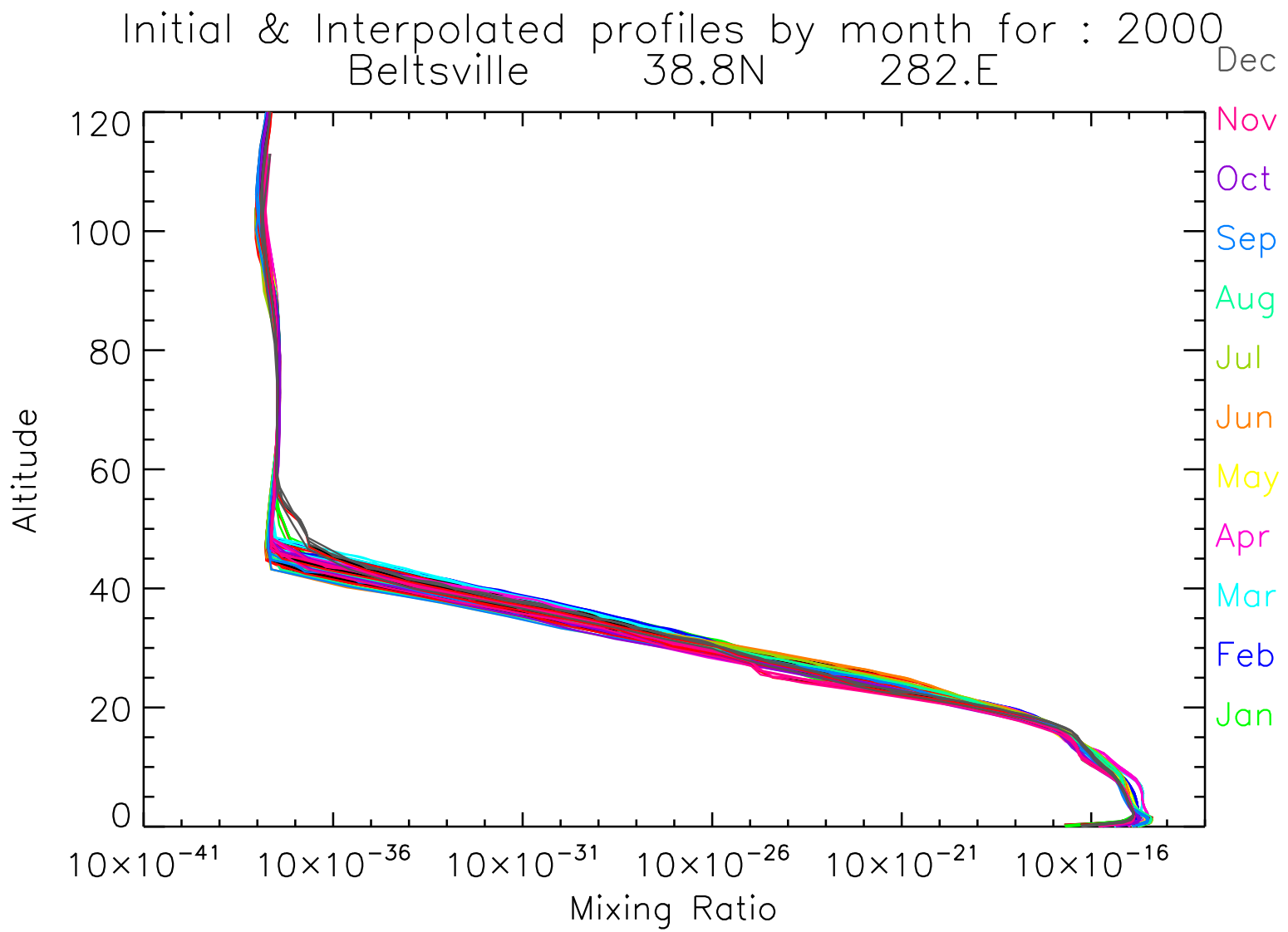
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 2000
Beltsville 38.8N 282.E
Dec
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Altitude
120
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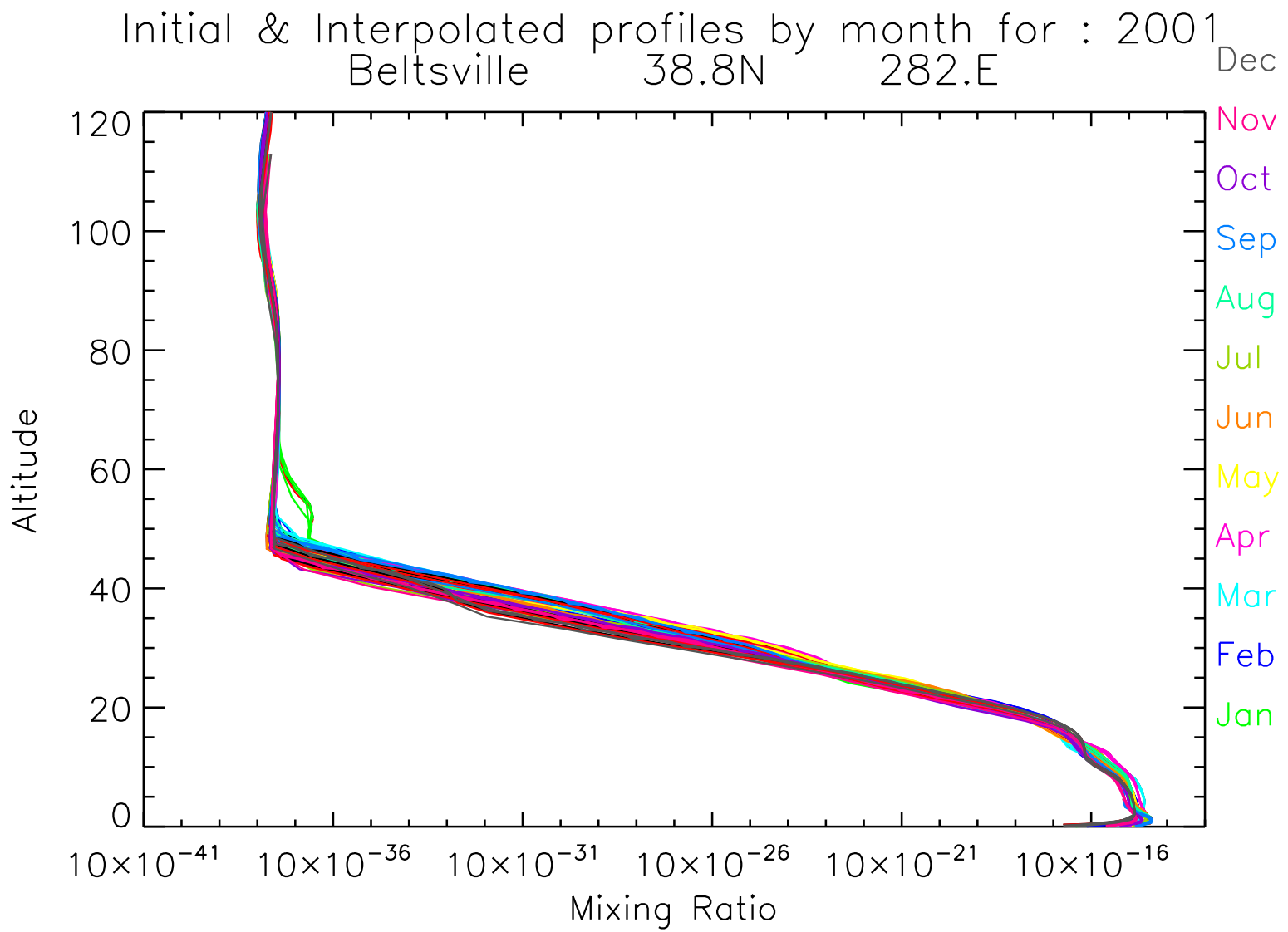
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio


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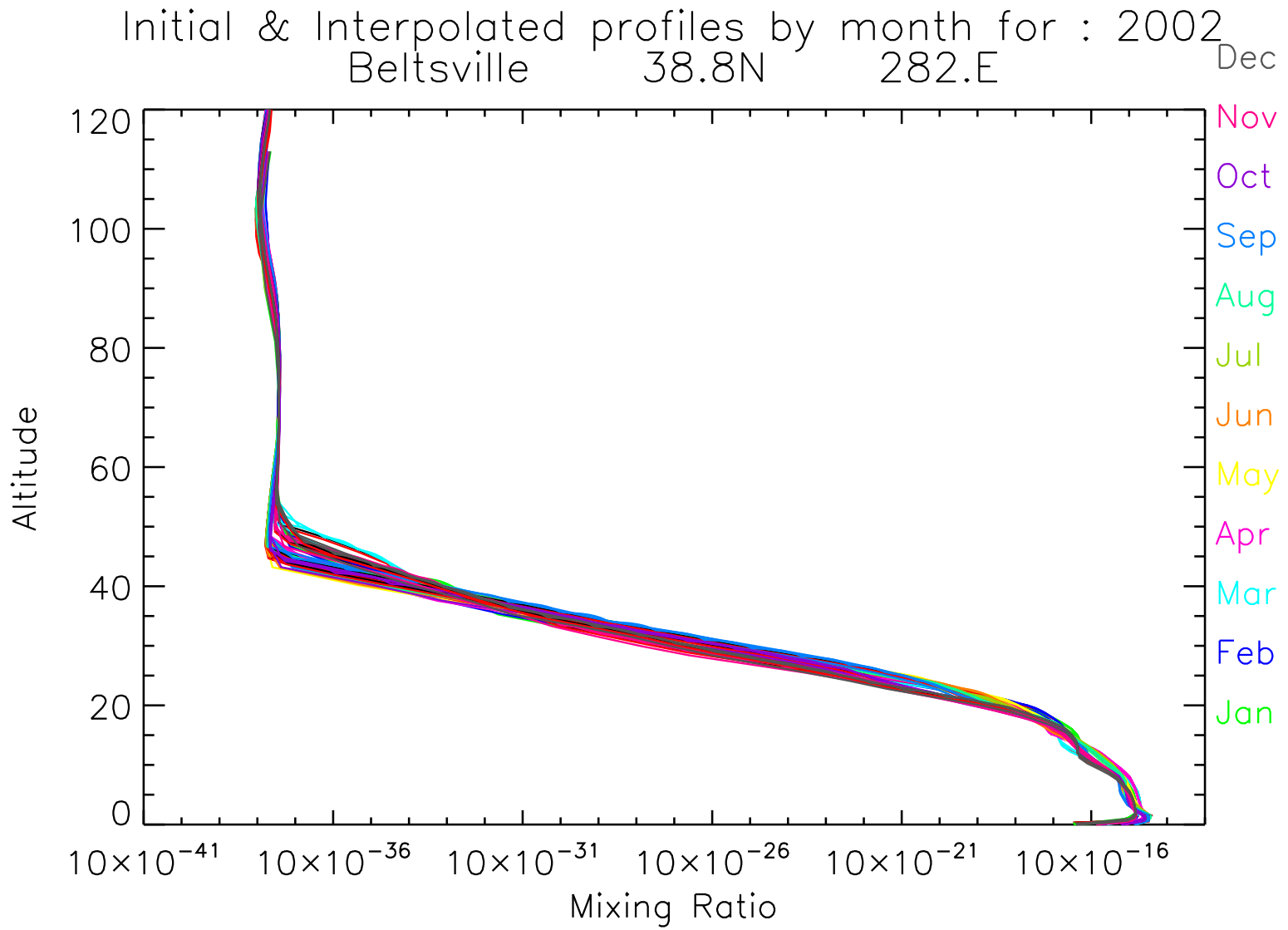
10×10^-31
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio


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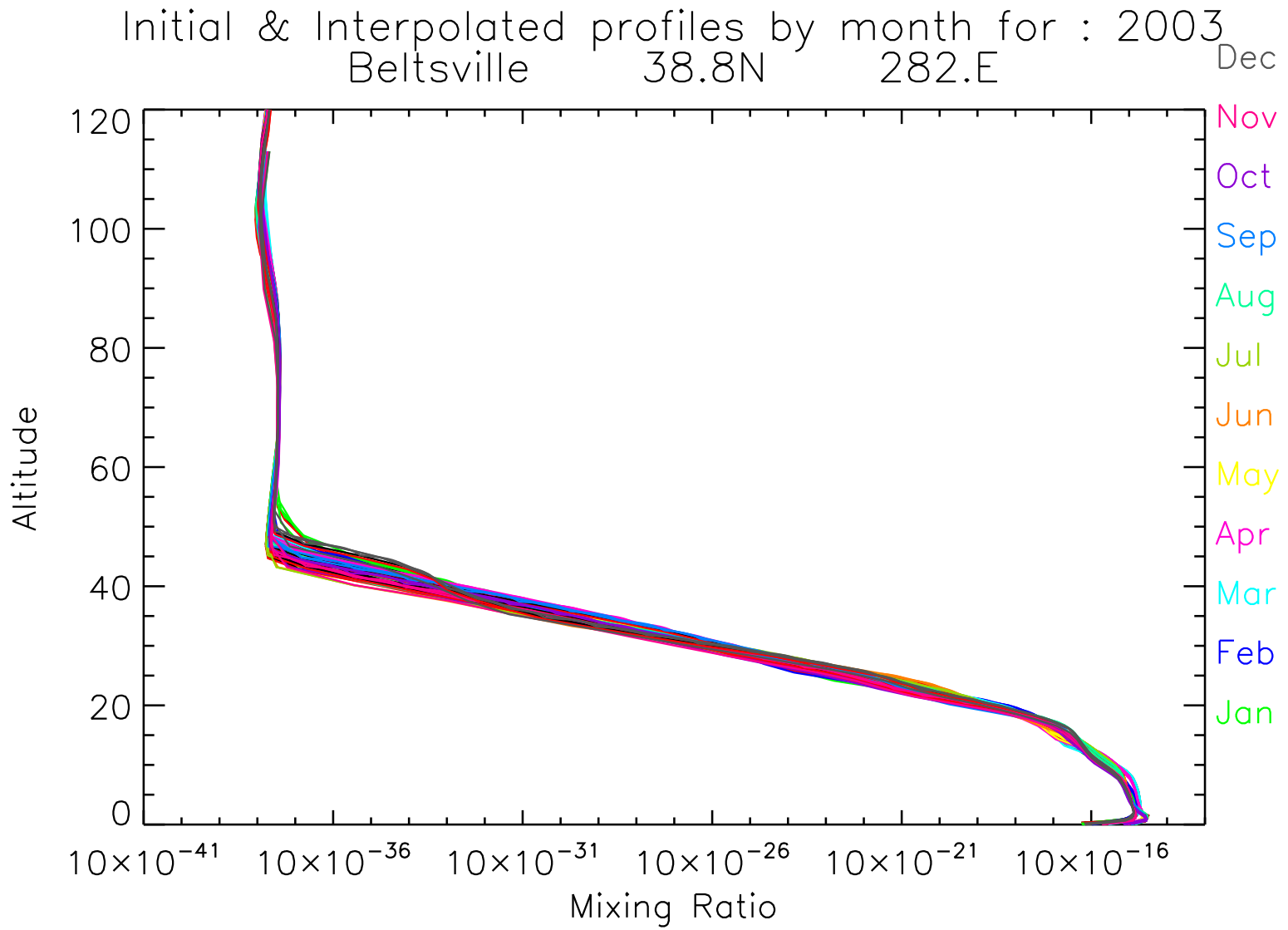
10×10^-31
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 2003
Beltsville 38.8N 282.E
Dec
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Feb
Jan
Altitude
120
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10×10^-36
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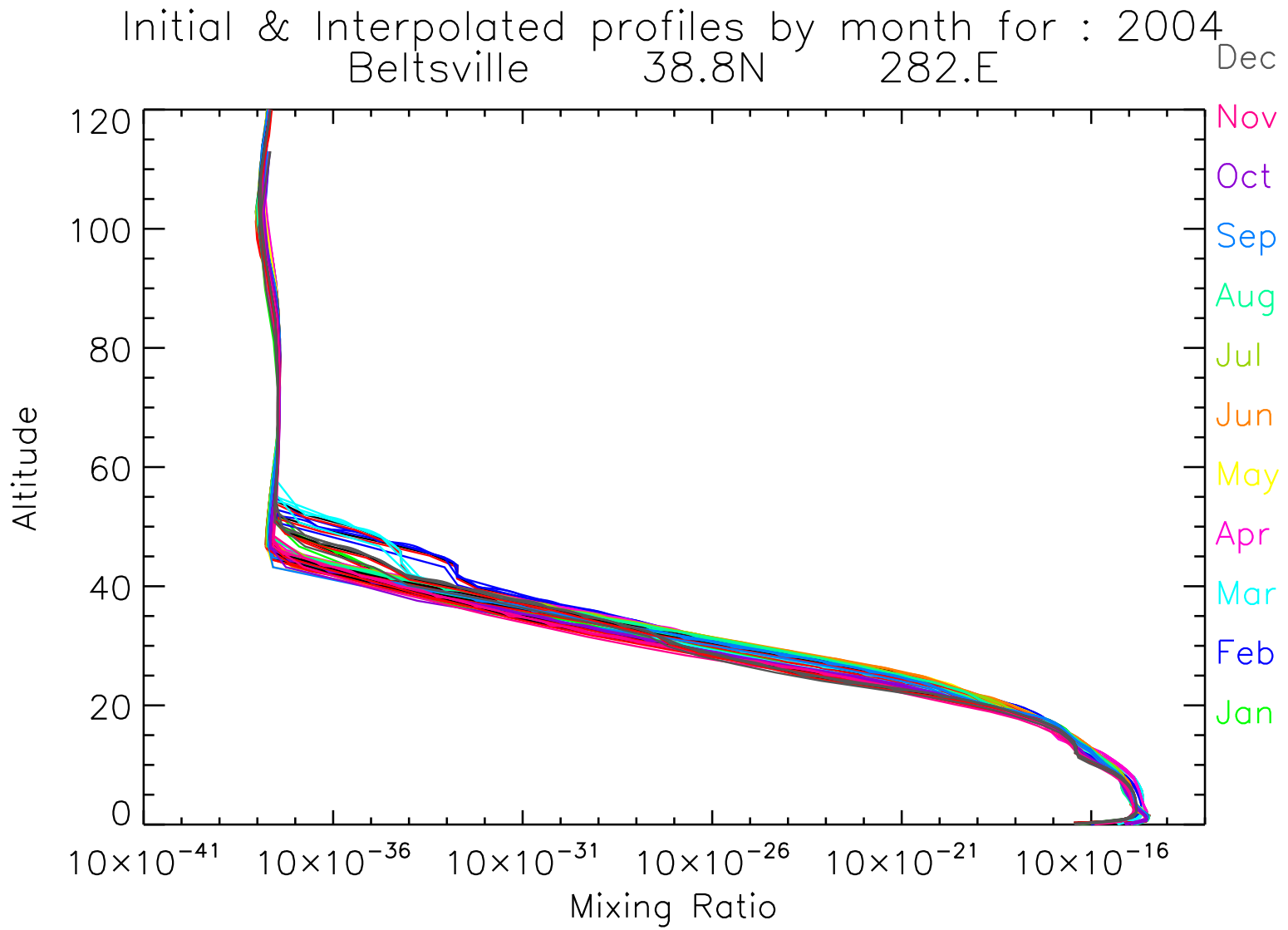
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 2004
Beltsville 38.8N 282.E
Dec
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Feb
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Altitude
120
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10×10^-31
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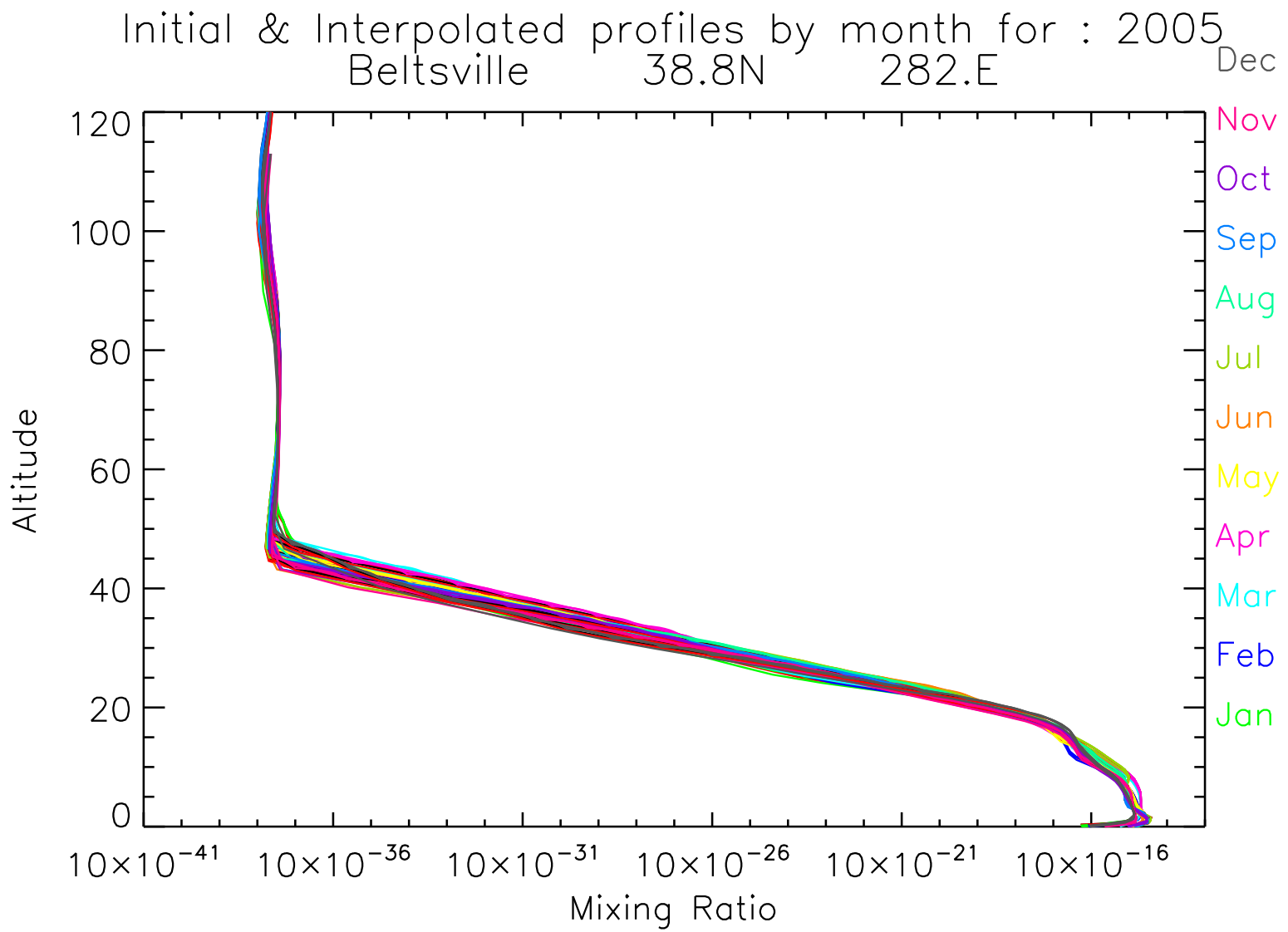
10×10^-21
10×10^-16
Mixing Ratio


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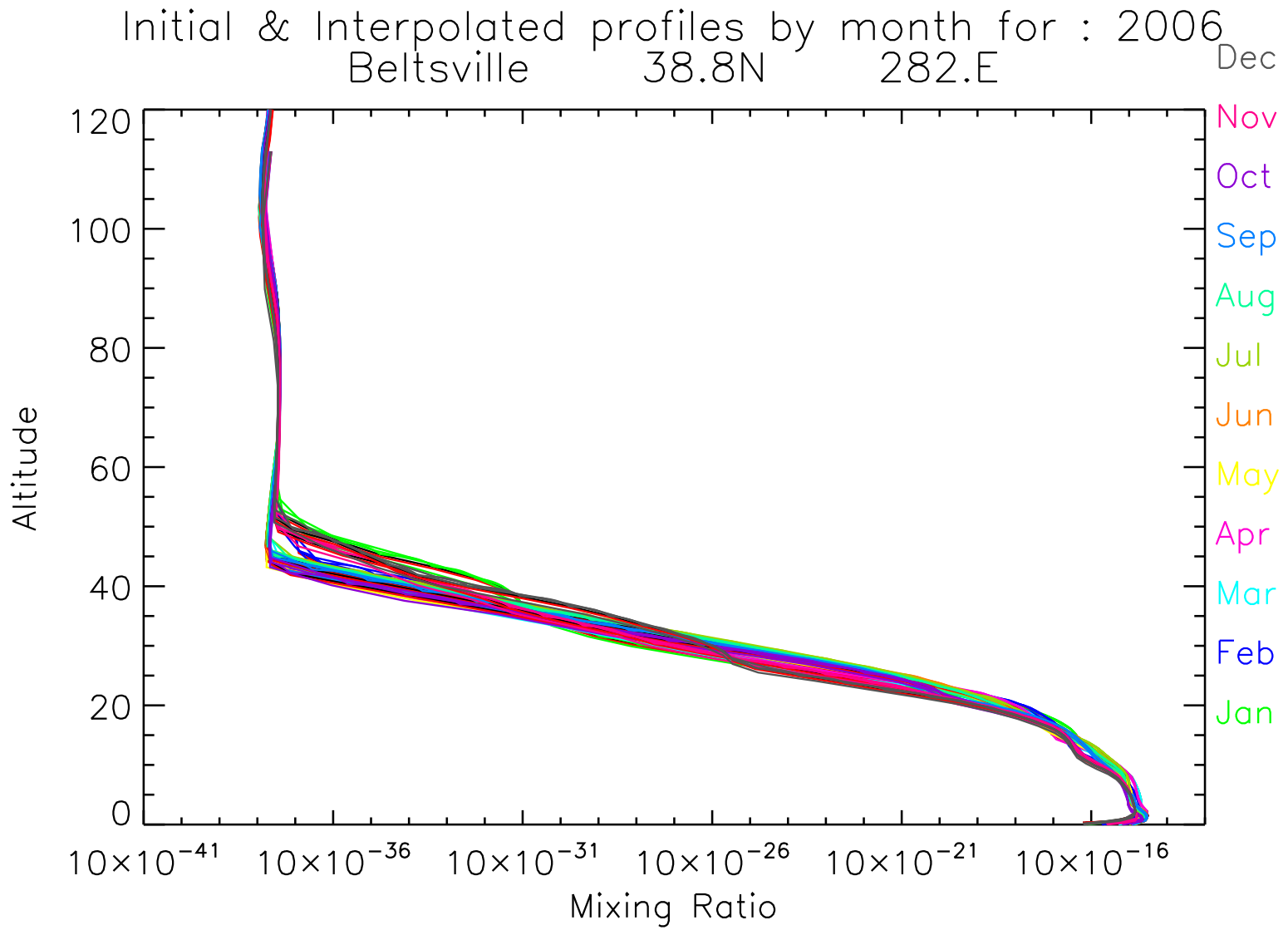
10×10^-31
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio


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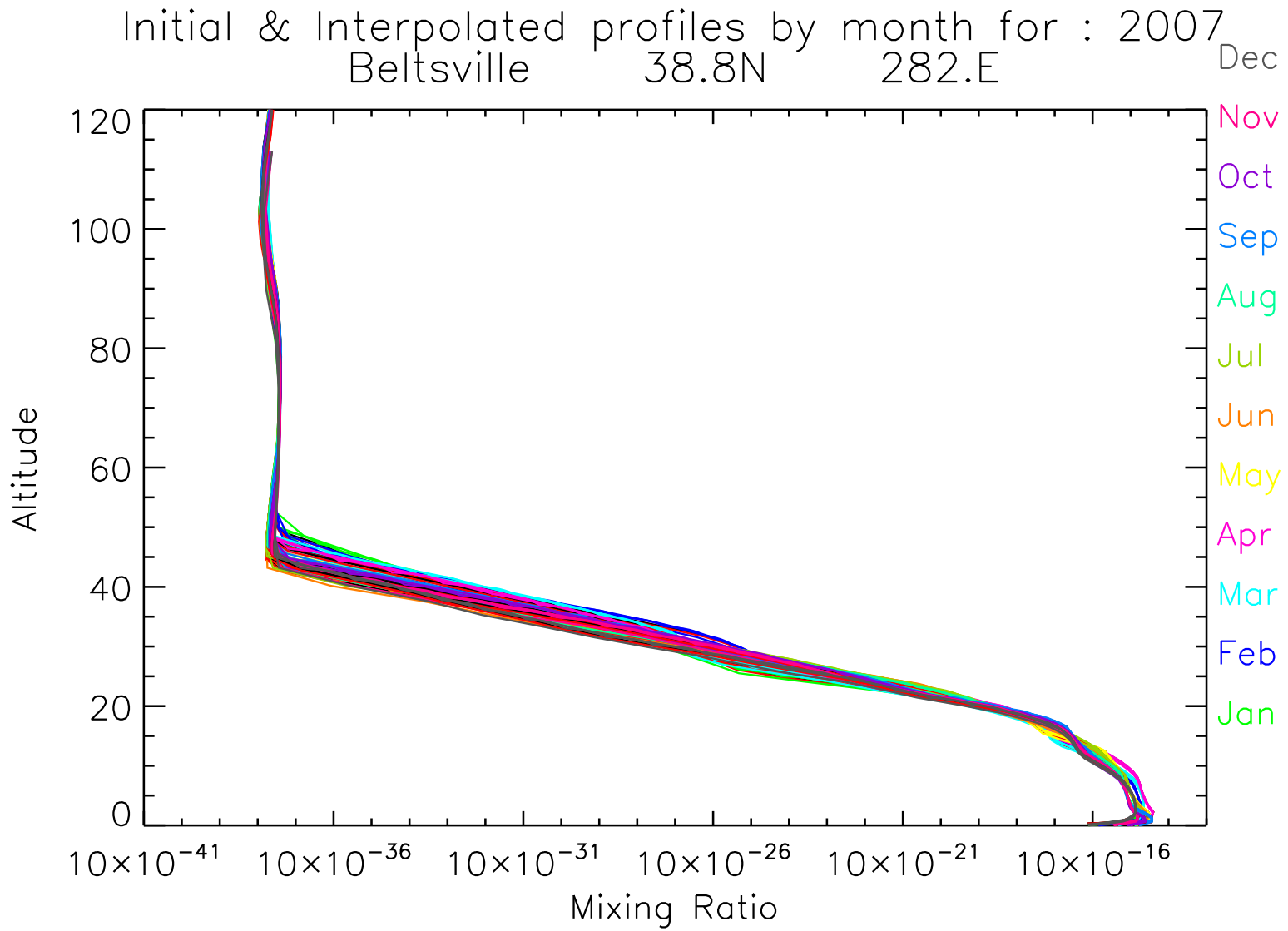
10×10^-21
10×10^-16
Mixing Ratio


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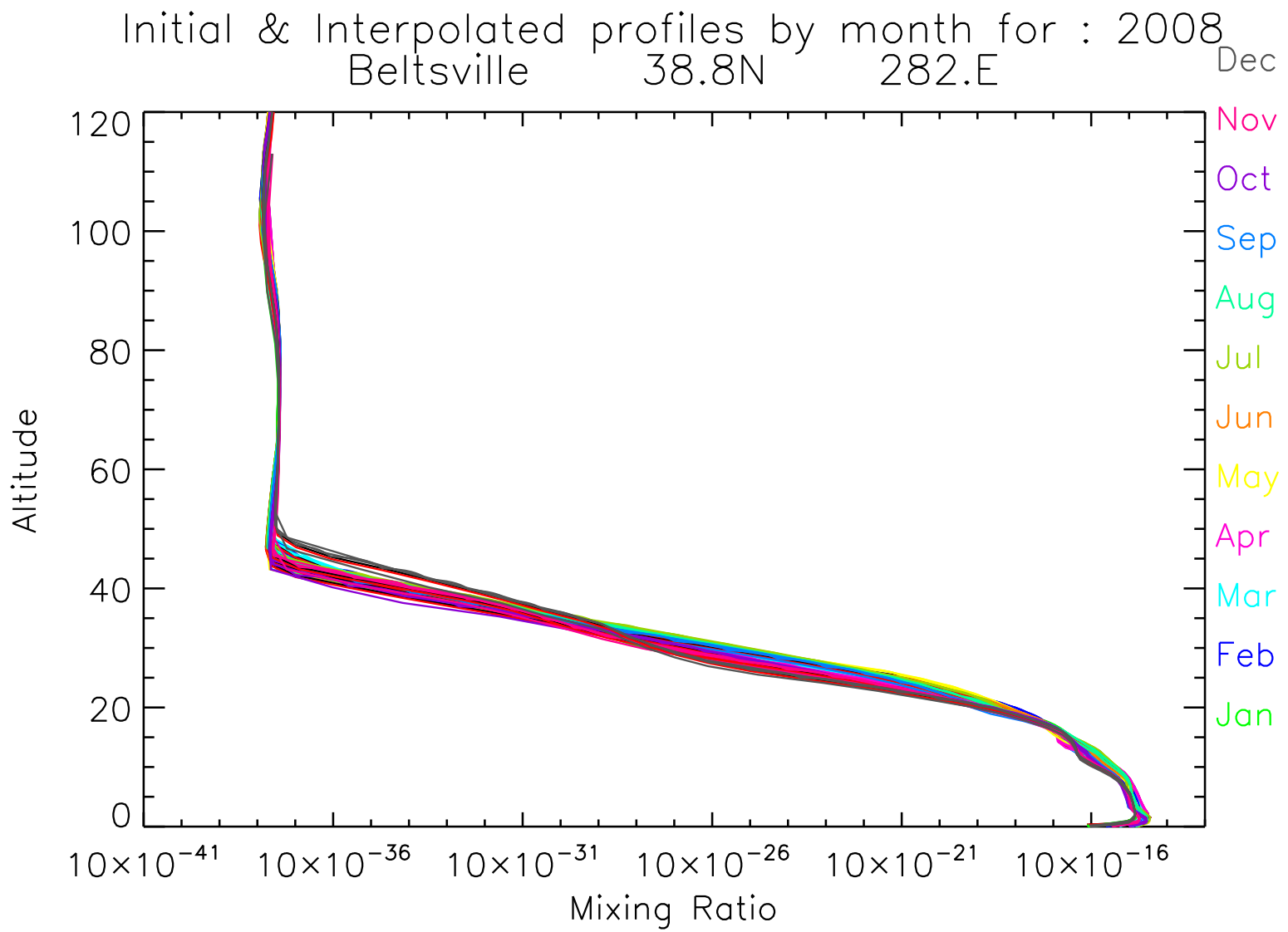
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio


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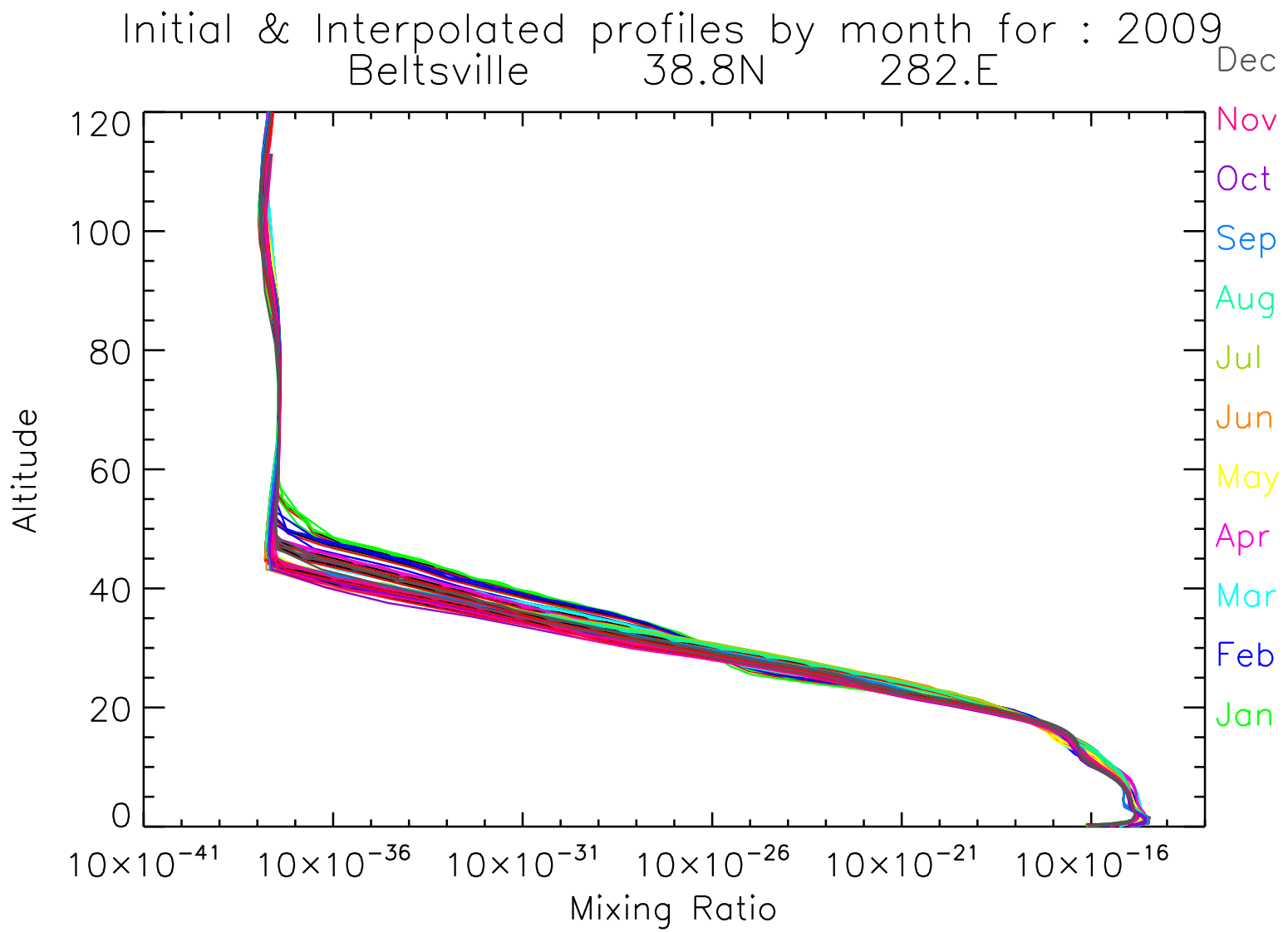
10×10^-16
Mixing Ratio


Initial & Interpolated profiles by month for : 2009
Beltsville 38.8N 282.E
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Altitude
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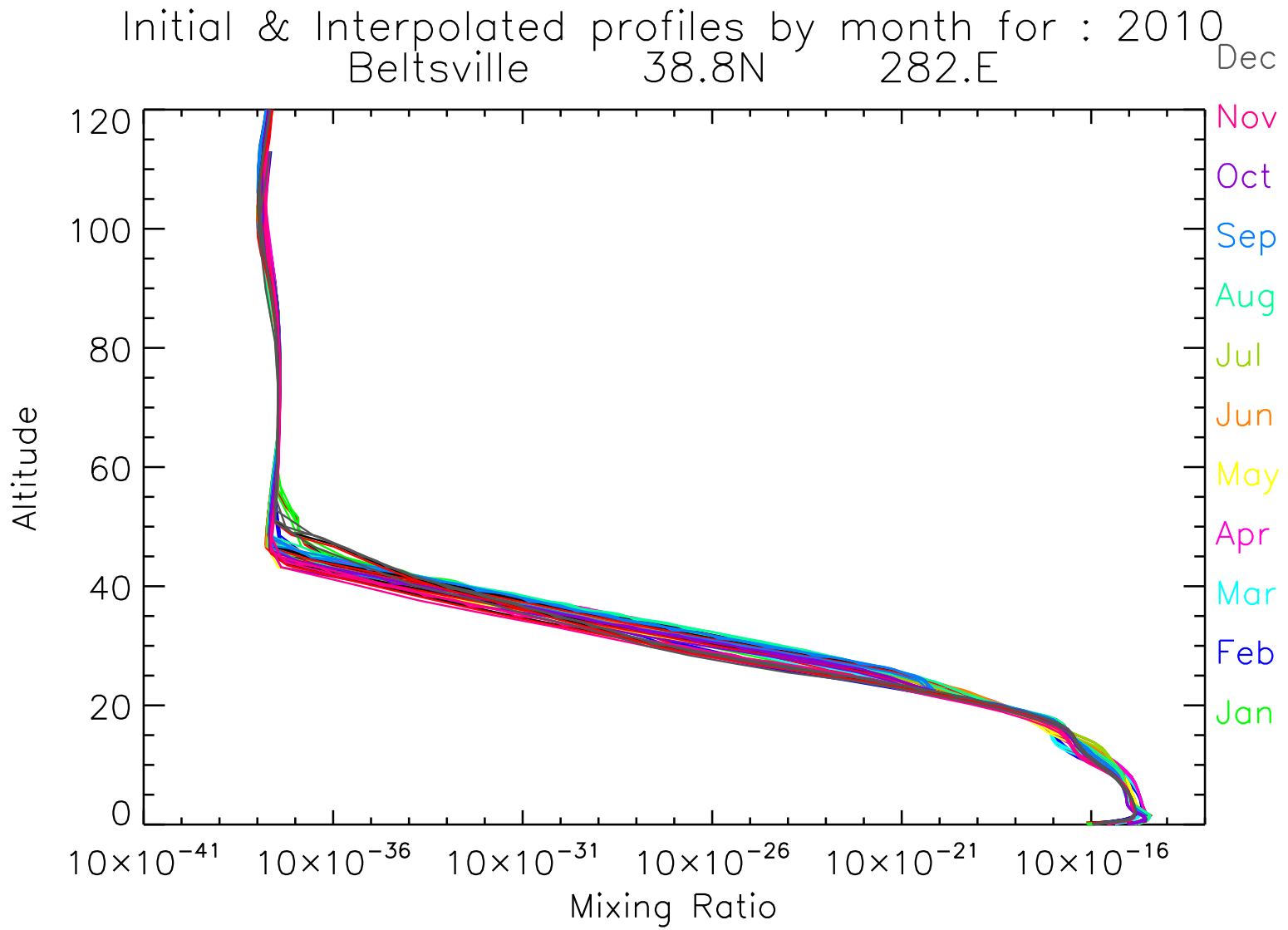
10×10^-21
10×10^-16
Mixing Ratio


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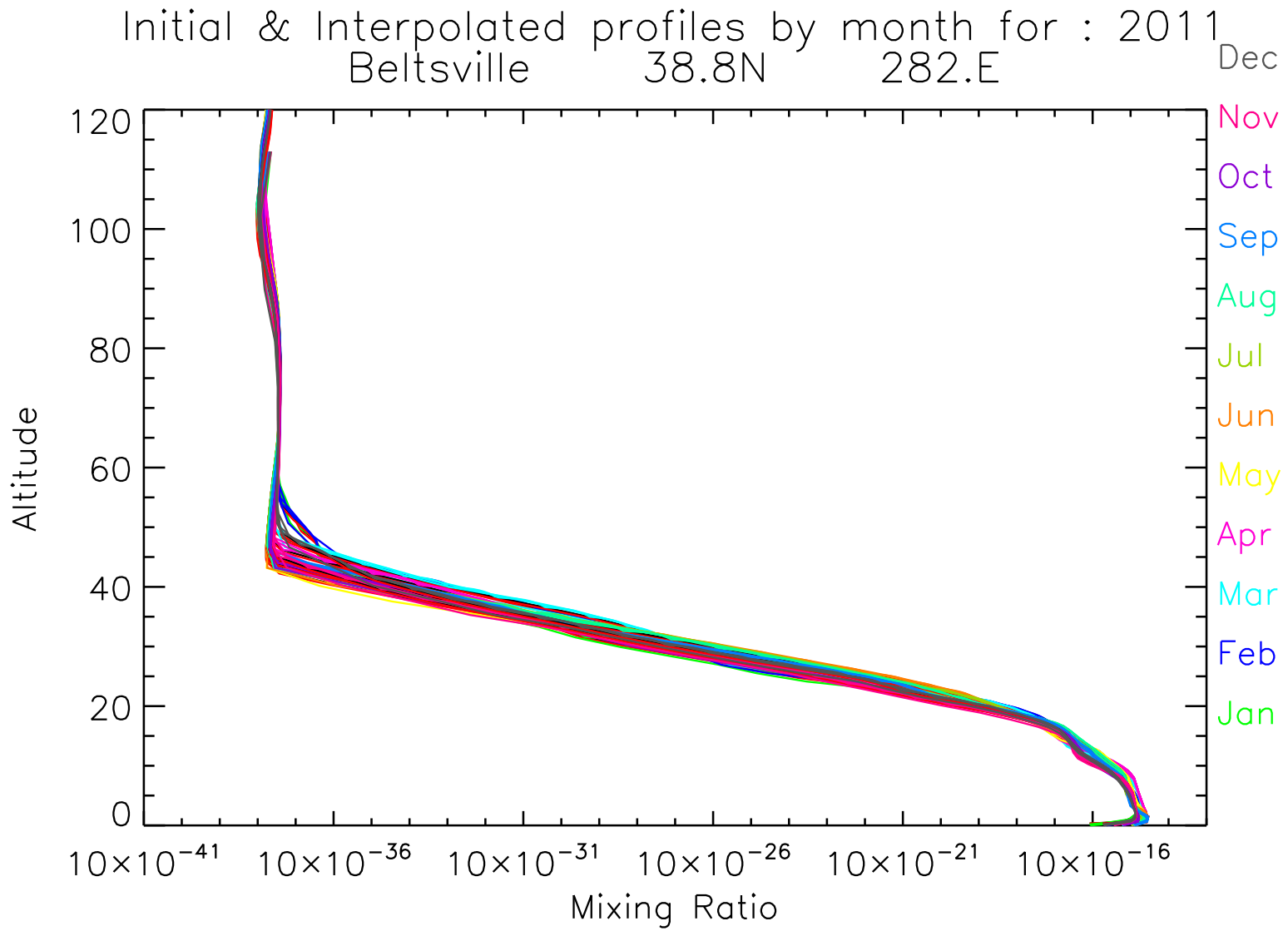
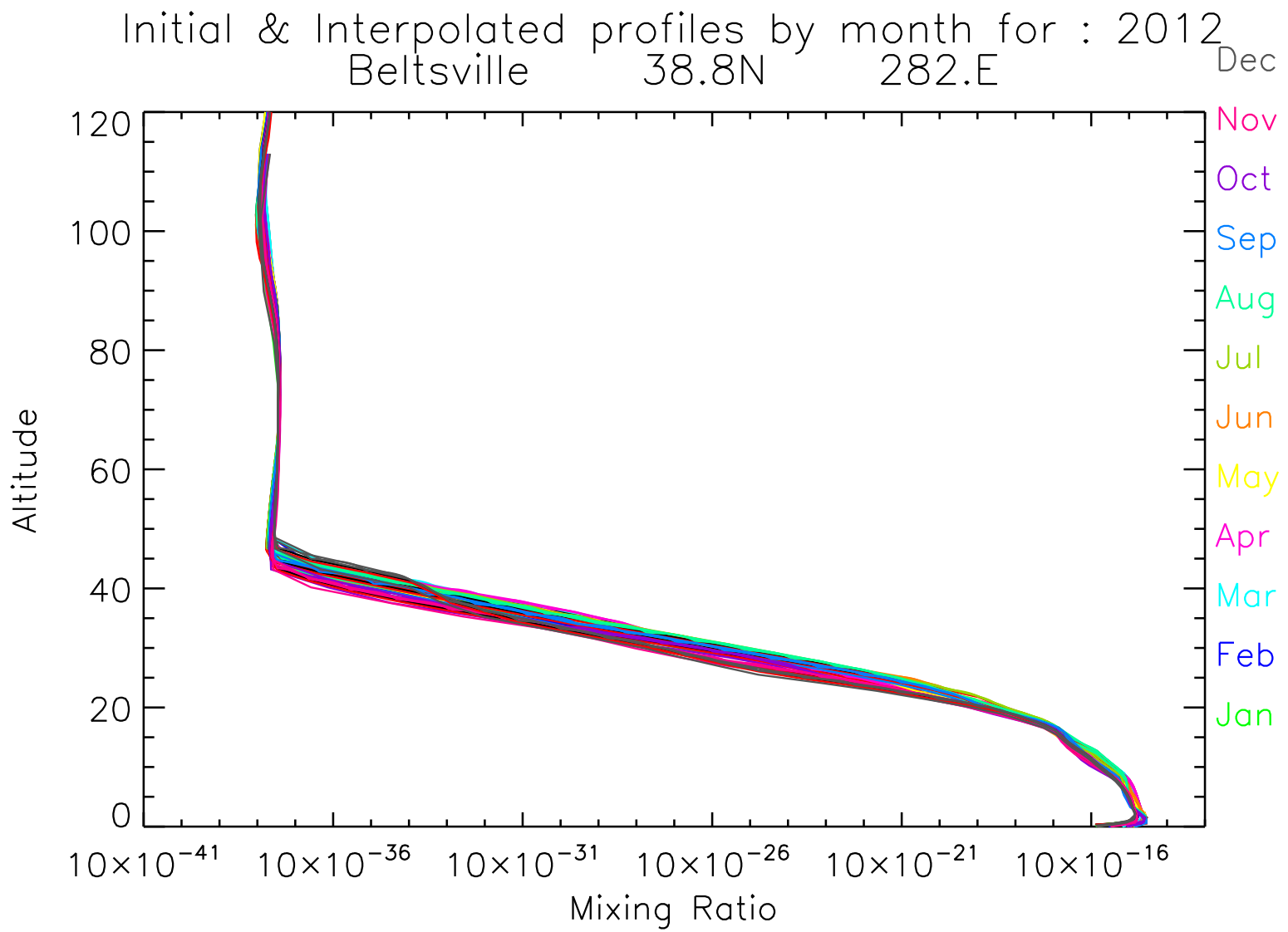
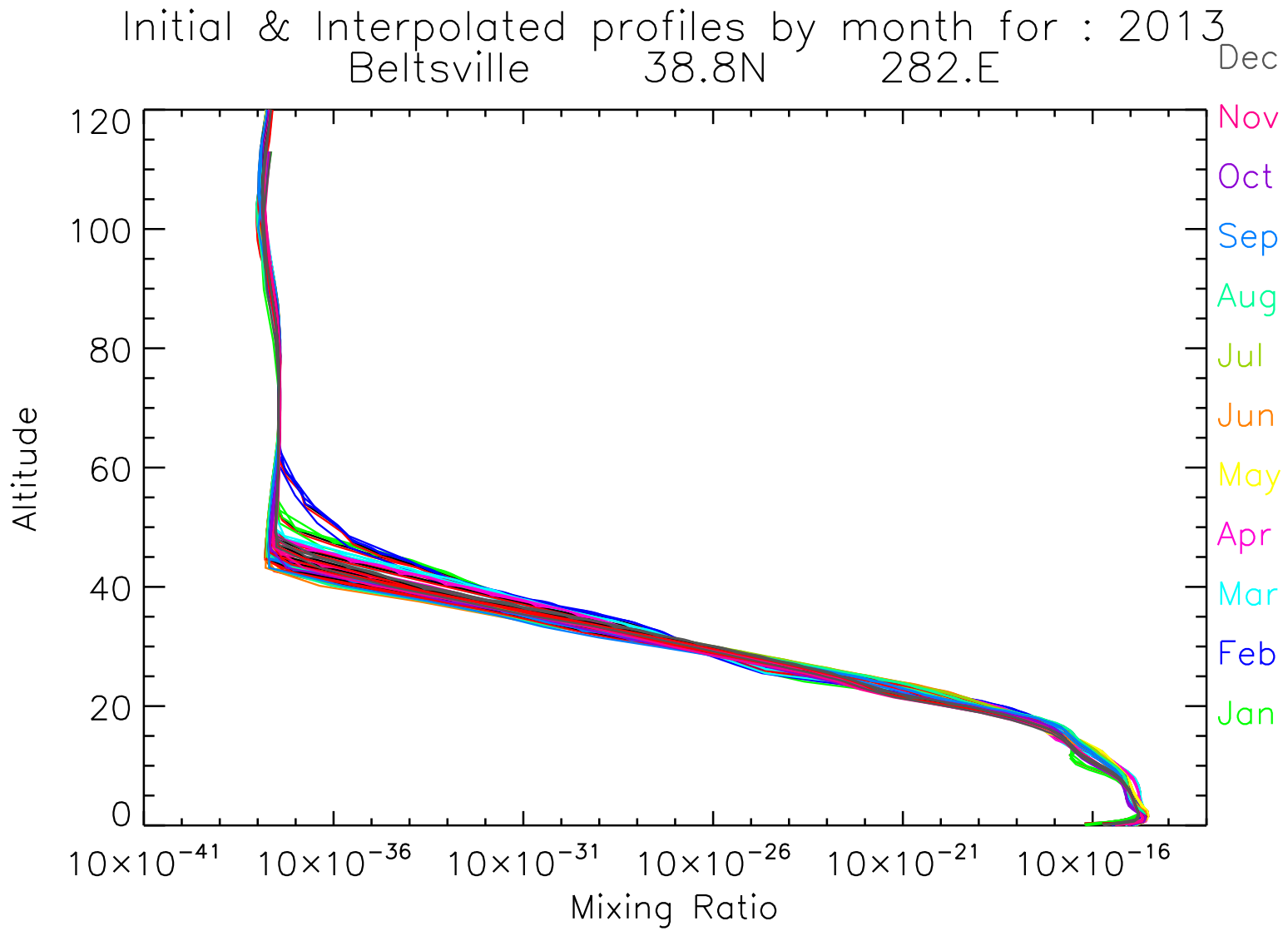
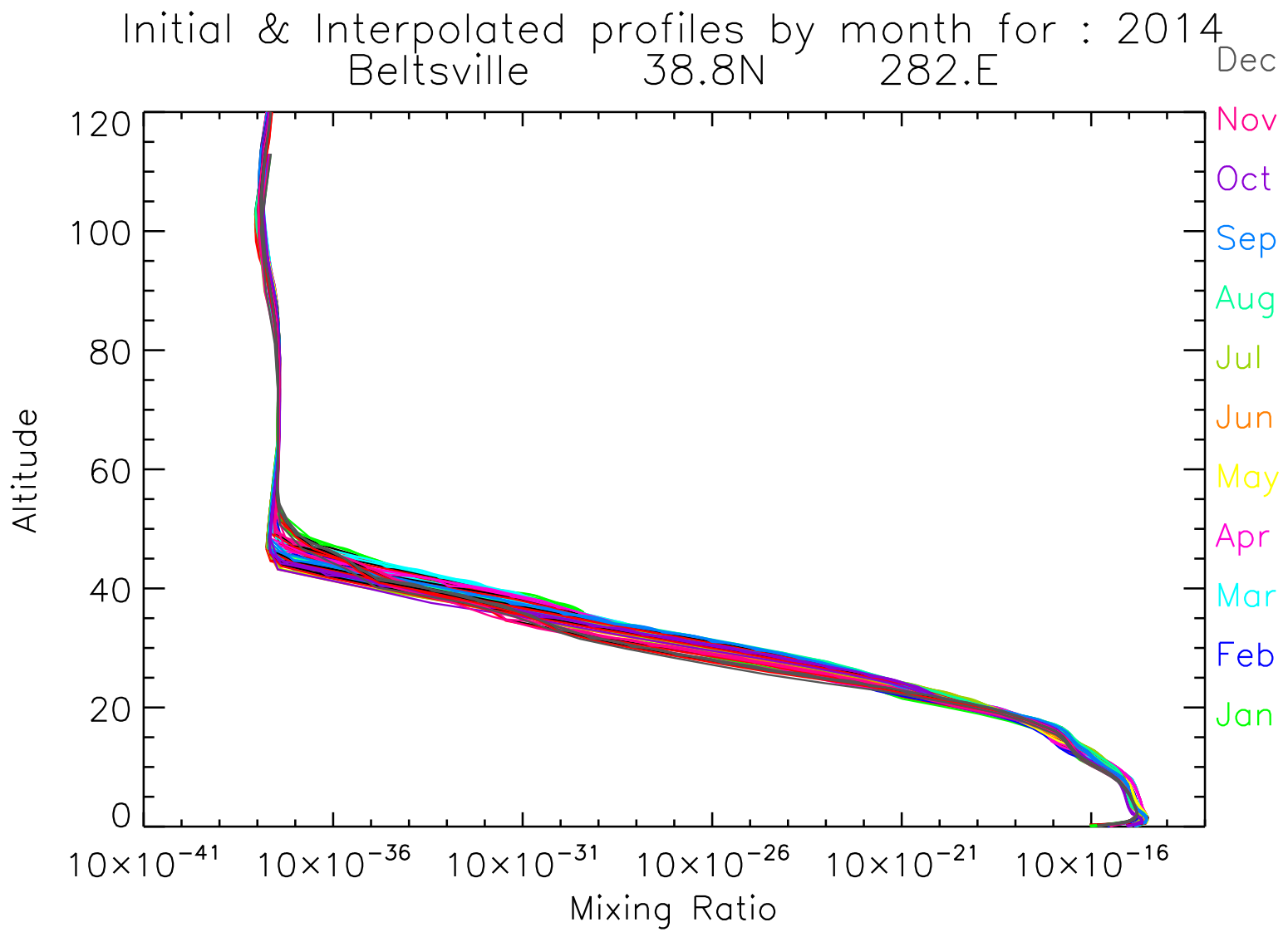
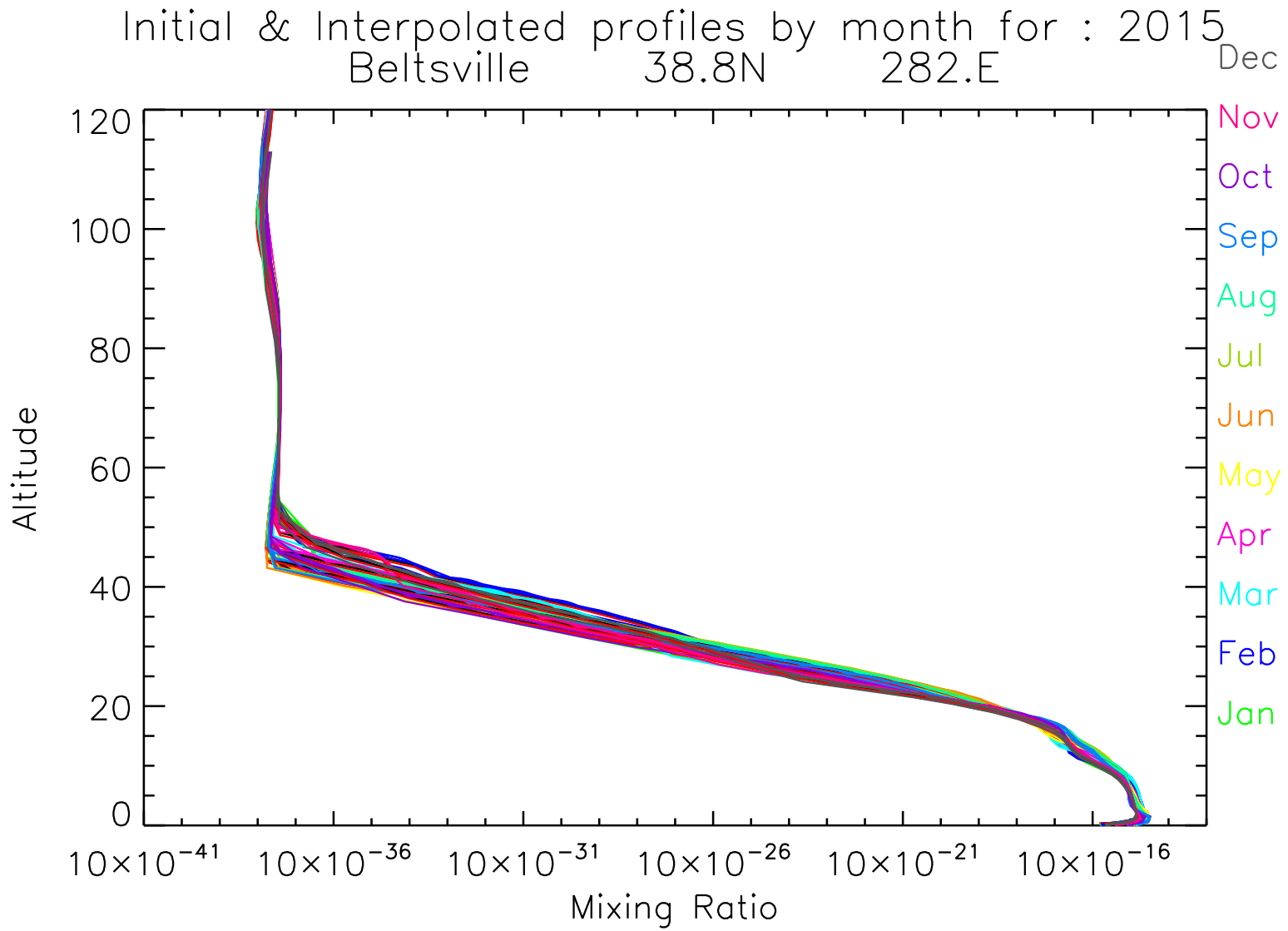
0
10×10^-41
10×10^-36
10×10^-31
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio

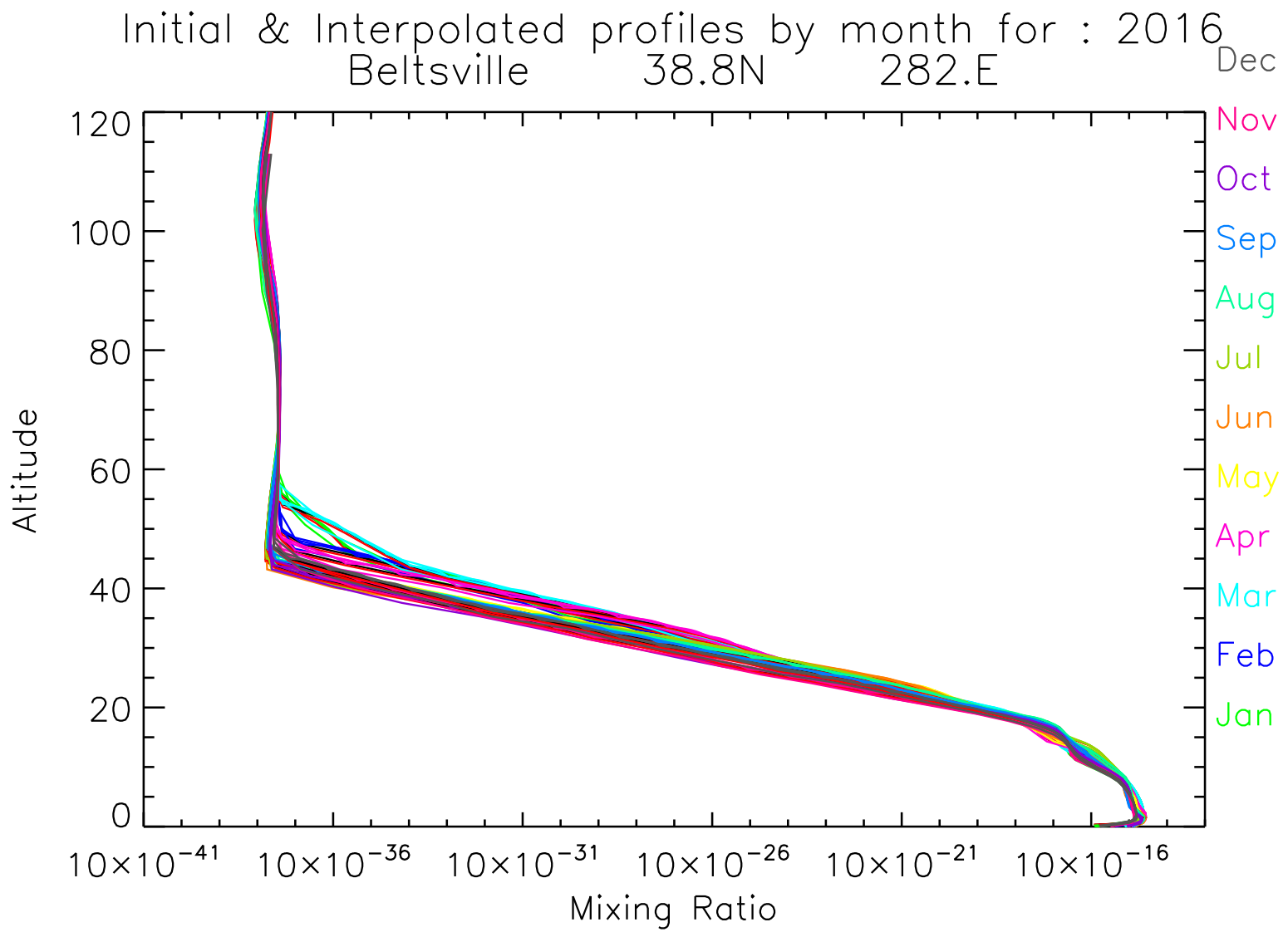

Initial & Interpolated profiles by month for : 2011
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41
10×10^-36
10×10^-31
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio

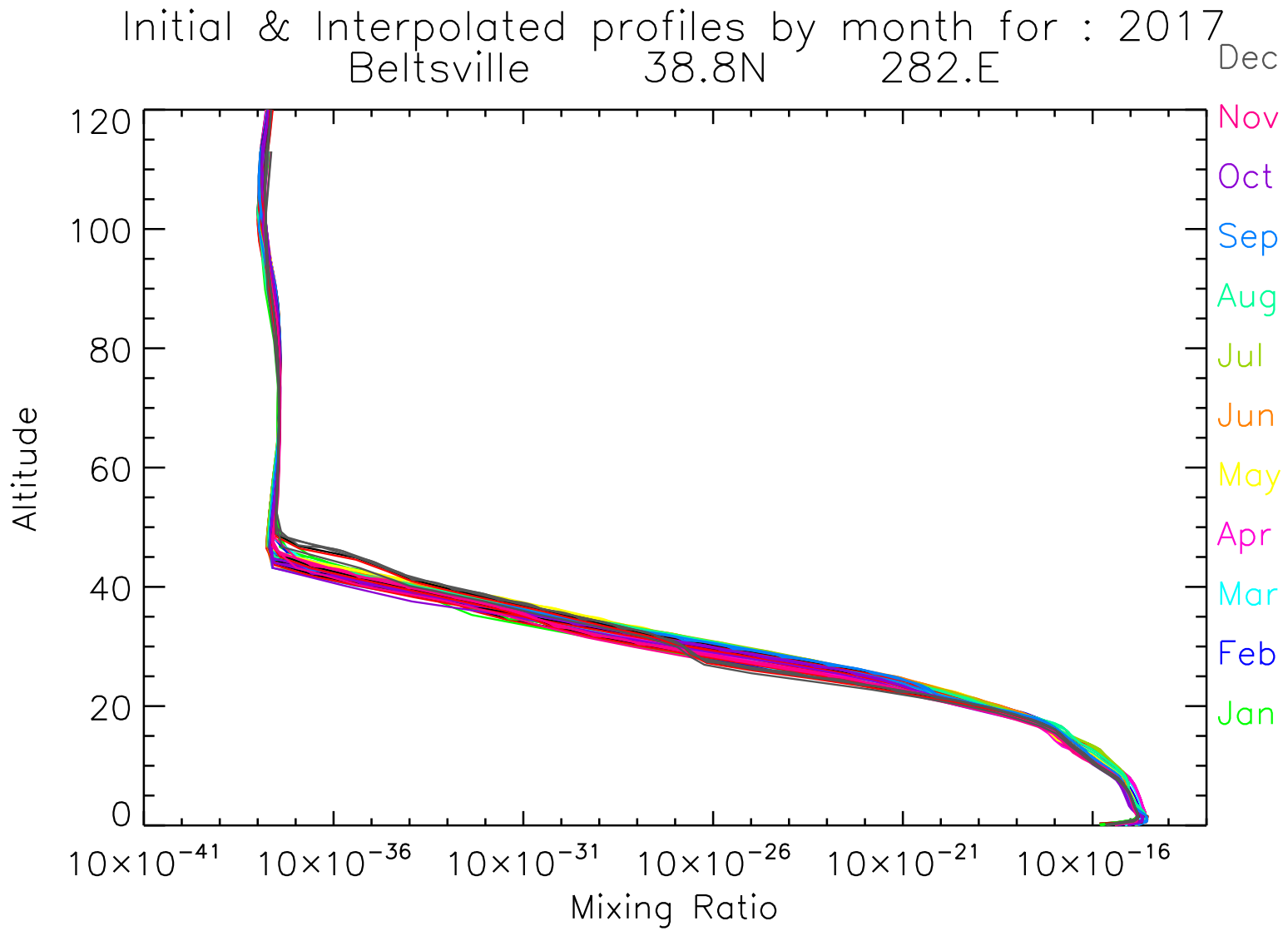

Initial & Interpolated profiles by month for : 2012
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41
10×10^-36
10×10^-31
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio

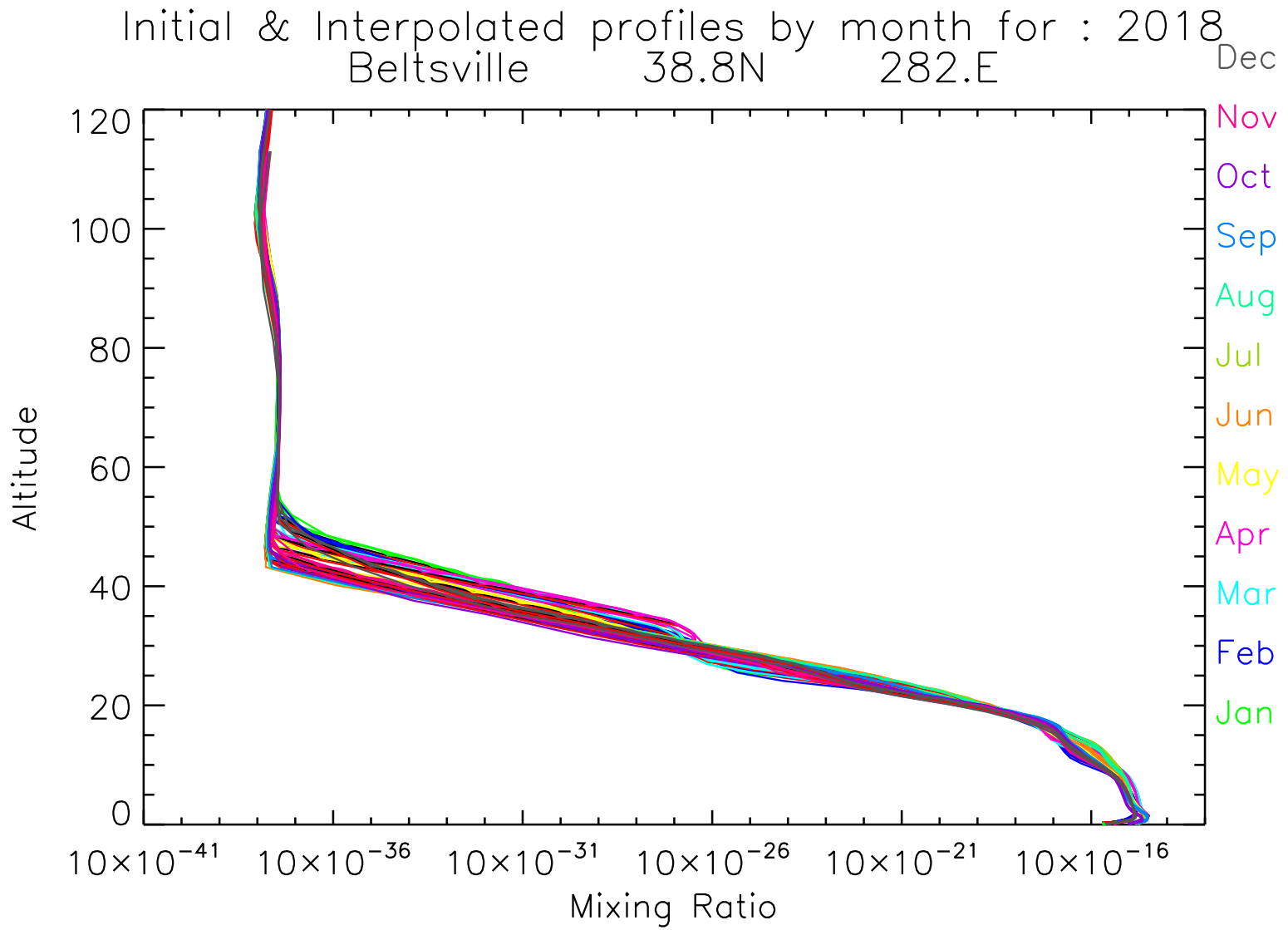

Initial & Interpolated profiles by month for : 2013
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41
10×10^-36
10×10^-31
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio

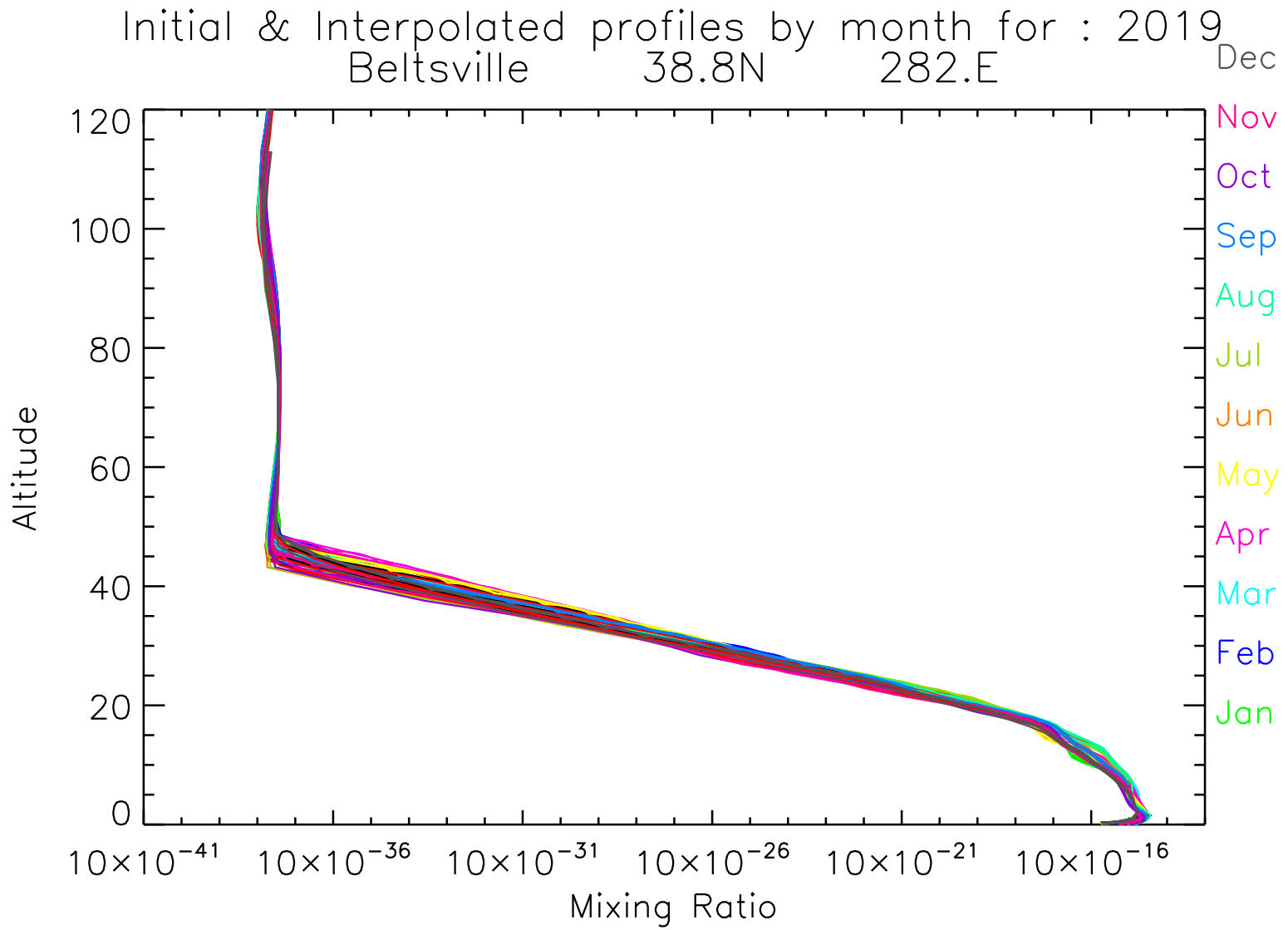

Initial & Interpolated profiles by month for : 2014
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41
10×10^-36
10×10^-31
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio

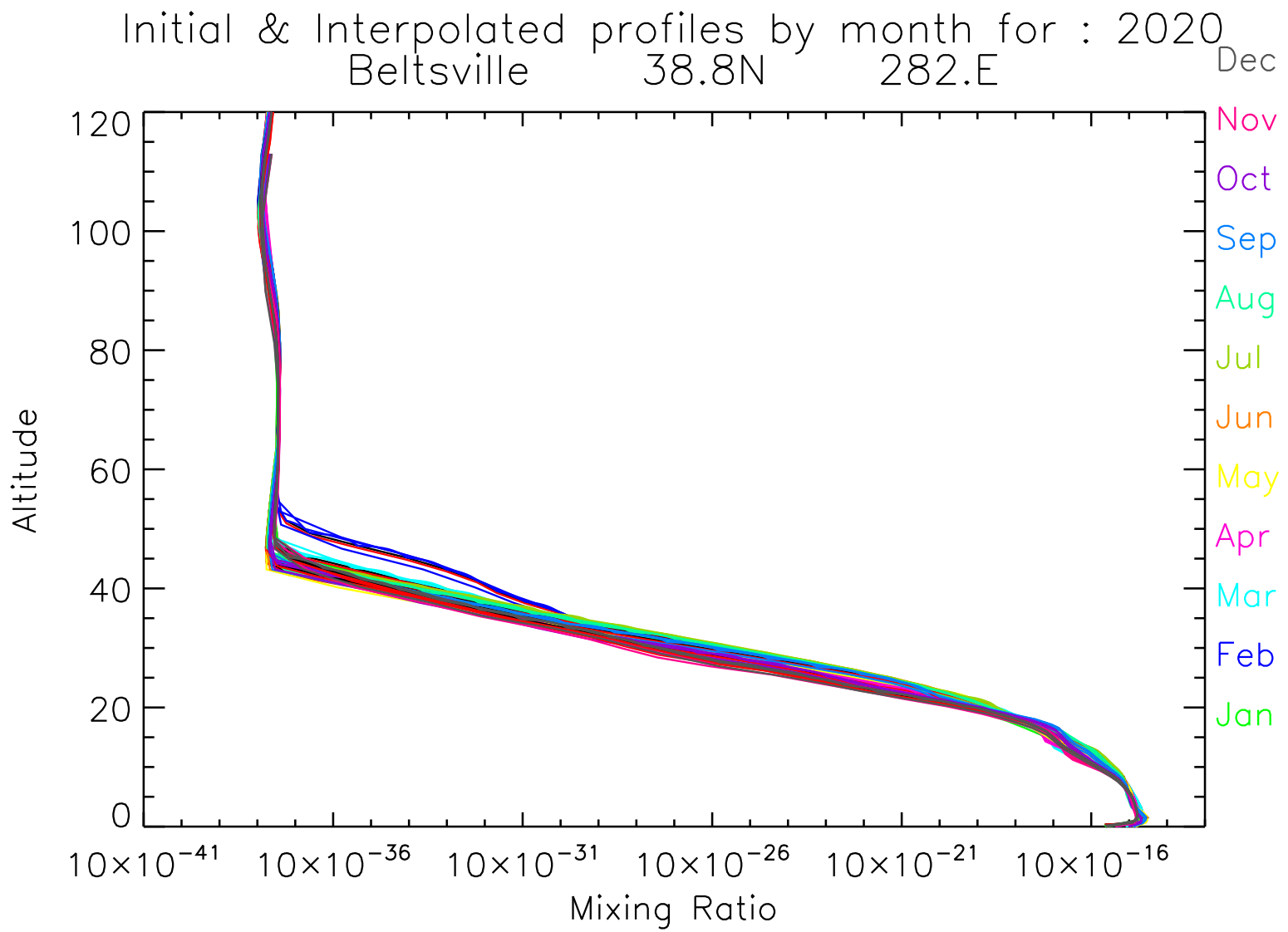

Initial & Interpolated profiles by month for : 2015
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41
10×10^-36
10×10^-31
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio

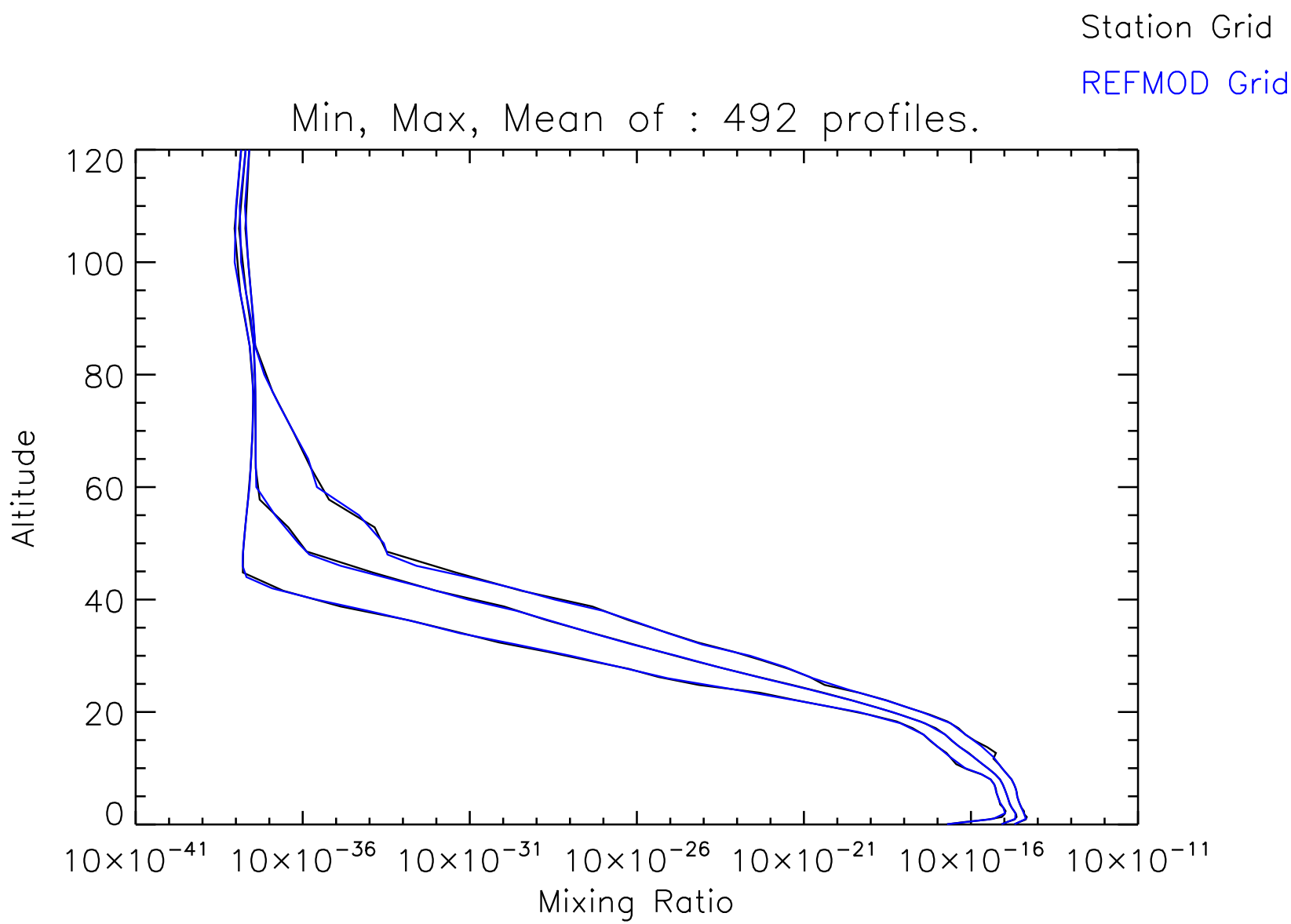

Initial & Interpolated profiles by month for : 2016
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41
10×10^-36
10×10^-31
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio

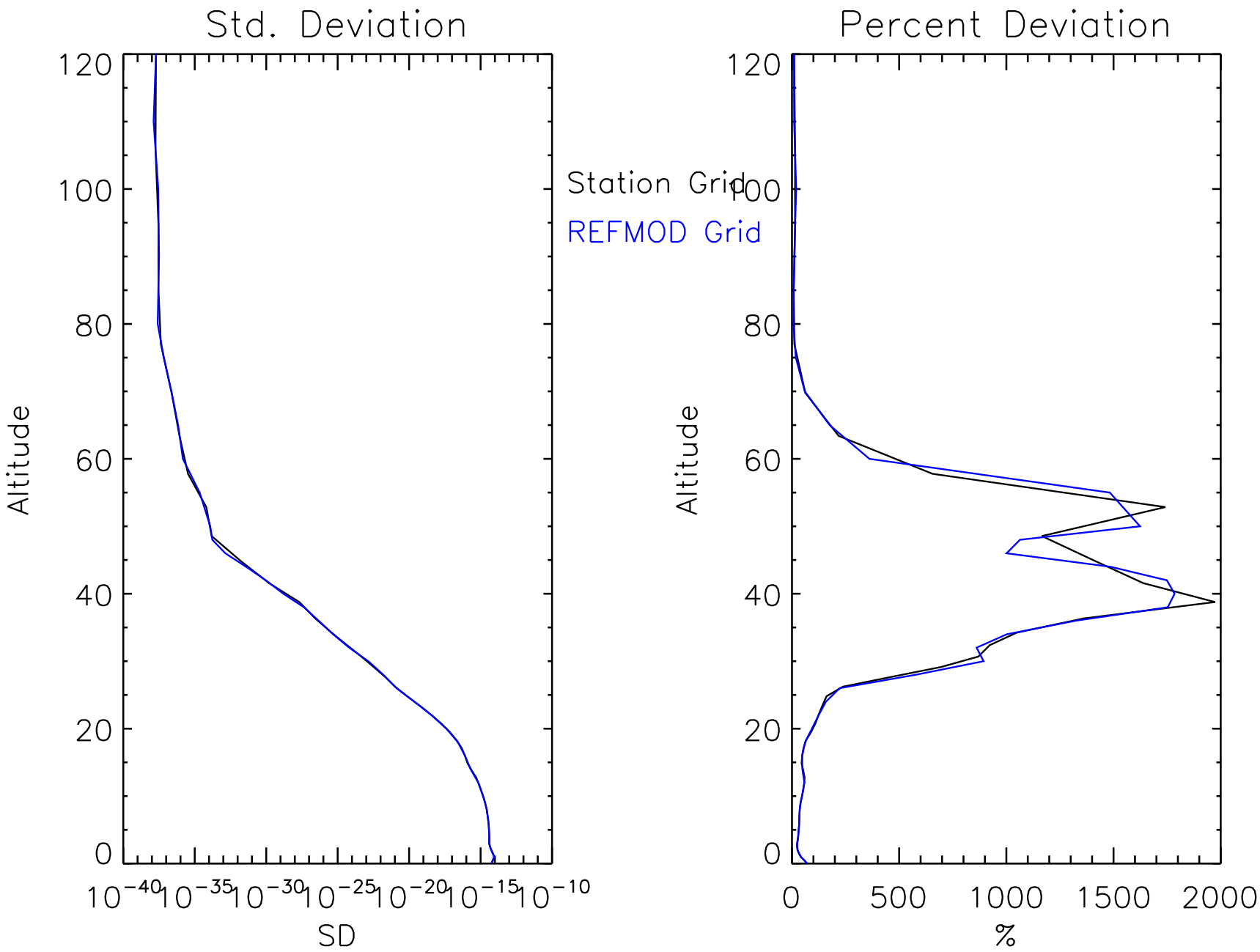

Initial & Interpolated profiles by month for : 2017
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41
10×10^-36
10×10^-31
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio

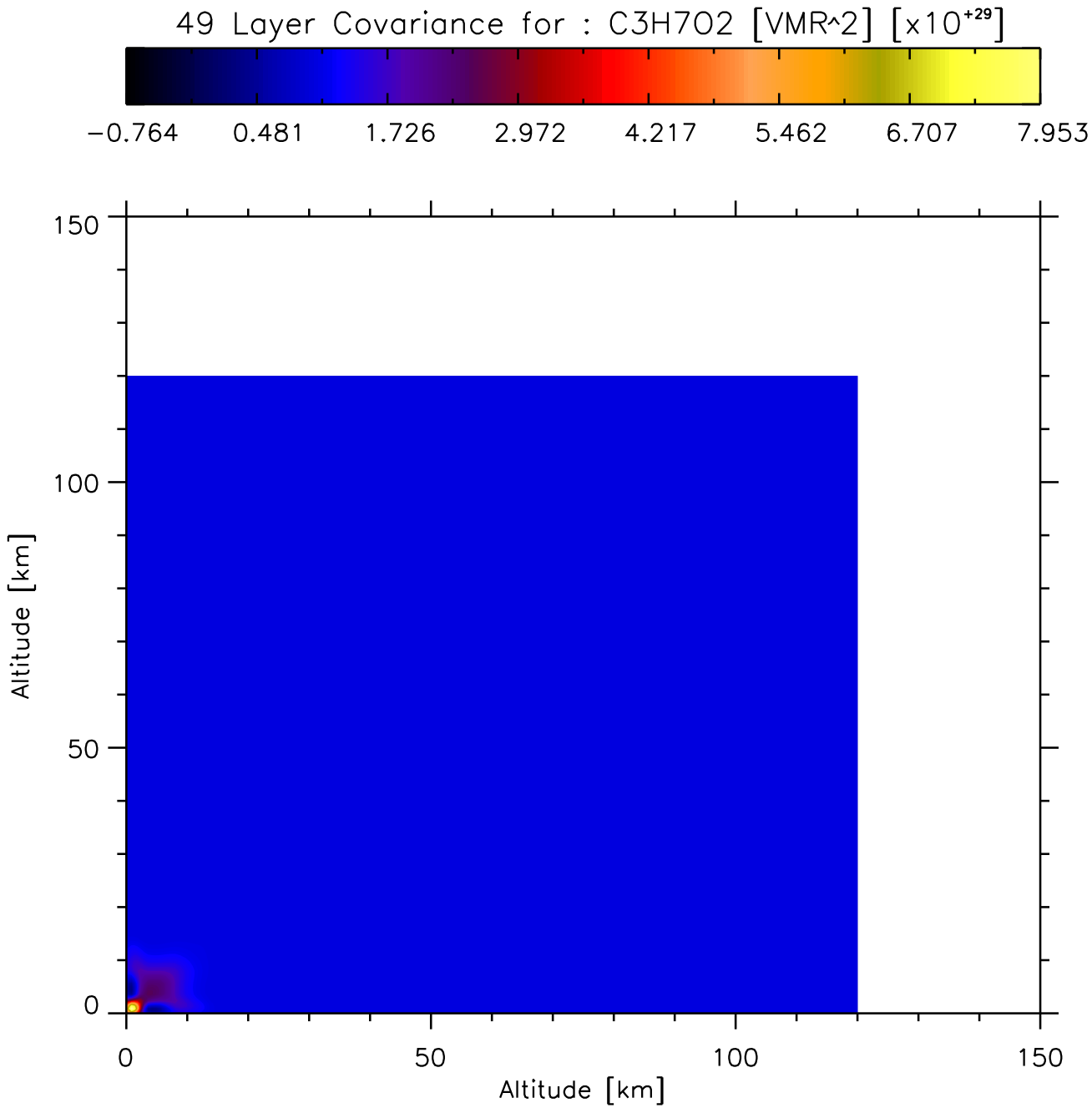

Initial & Interpolated profiles by month for : 2018
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41
10×10^-36
10×10^-31
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio


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
Mixing Ratio

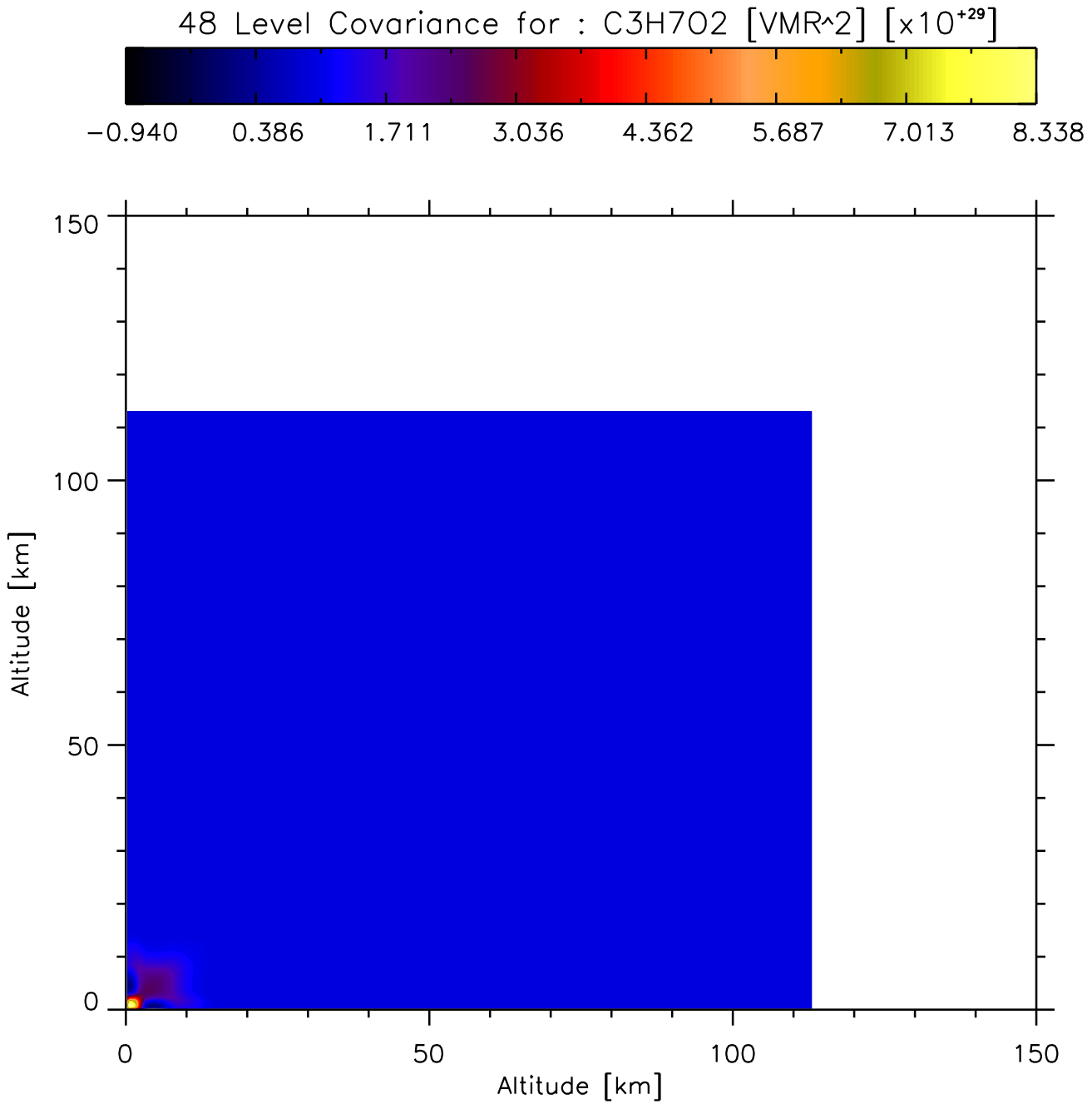

Initial & Interpolated profiles by month for : 2020
Beltsville 38.8N 282.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10^-41
10×10^-36
10×10^-31
10×10^-26
10×10^-21
10×10^-16
Mixing Ratio


Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
120
100
80
60
40
20
0
Altitude
10×10^-41
10×10^-36
10×10^-31
10×10^-26
10×10^-21
10×10^-16
10×10^-11
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
$10^{-40}$ $10^{-35}$ $10^{-30}$ $10^{-25}$ $10^{-20}$ $10^{-15}$ $10^{-10}$
SD
0
500
1000
1500
2000
%


49 Layer Covariance for : C3H7O2 [VMR^2] [x10^+29]
−0.764
0.481
1.726
2.972
4.217
5.462
6.707
7.953
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

49 Layer Covariance for : C3H7O2 [VMR^2] [x10^+29]
Y Altitude
X Altitude
0
50
100
150
0
2
4
6
8
10
12


48 Level Covariance for : C3H7O2 [VMR^2] [x10^+29]
−0.940
0.386
1.711
3.036
4.362
5.687
7.013
8.338
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

48 Level Covariance for : C3H7O2 [VMR^2] [x10^-23]
Y Altitude
X Altitude
0
50
100
150
0
2
4
6
8
10
12