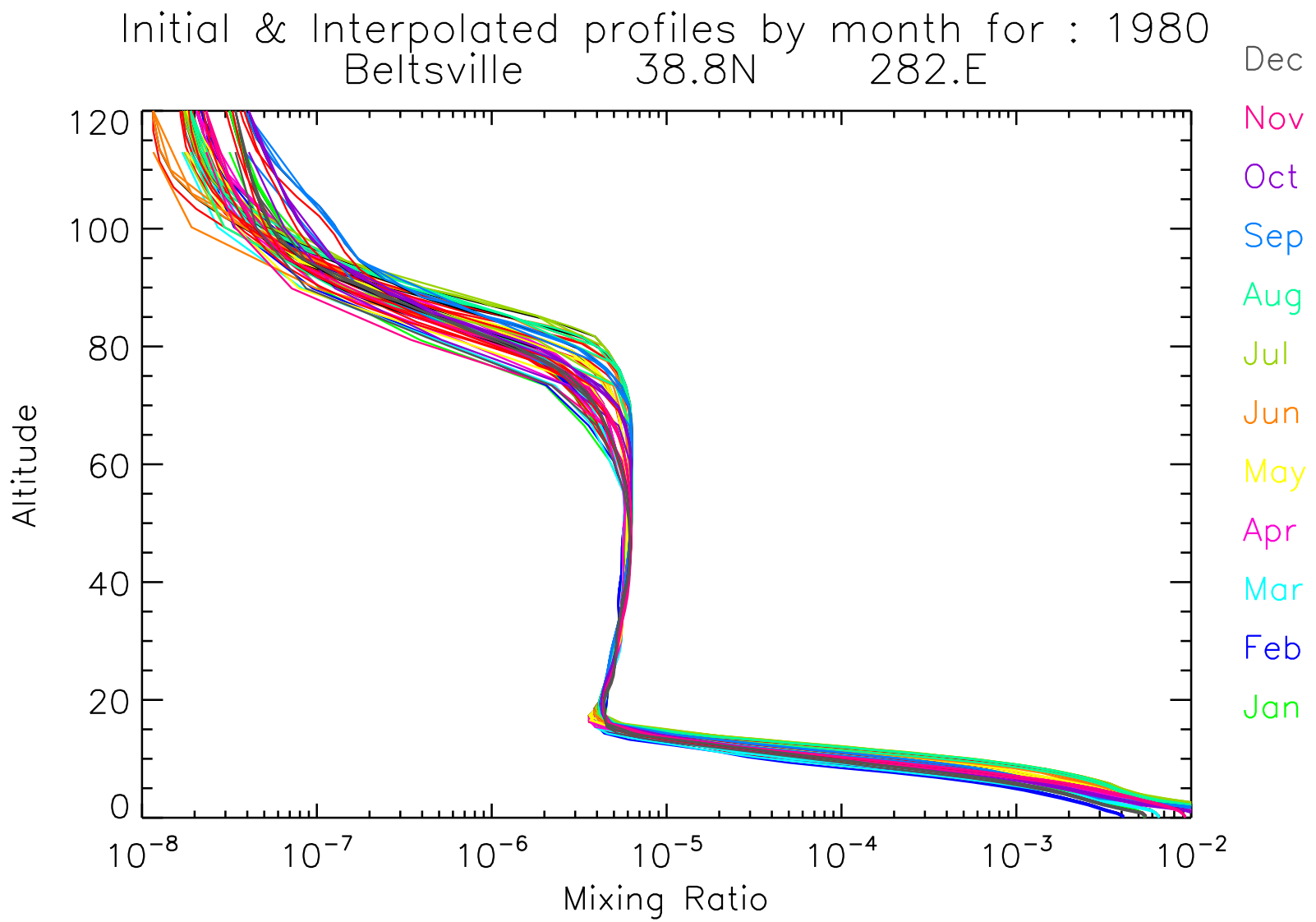
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Altitude
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Mixing Ratio
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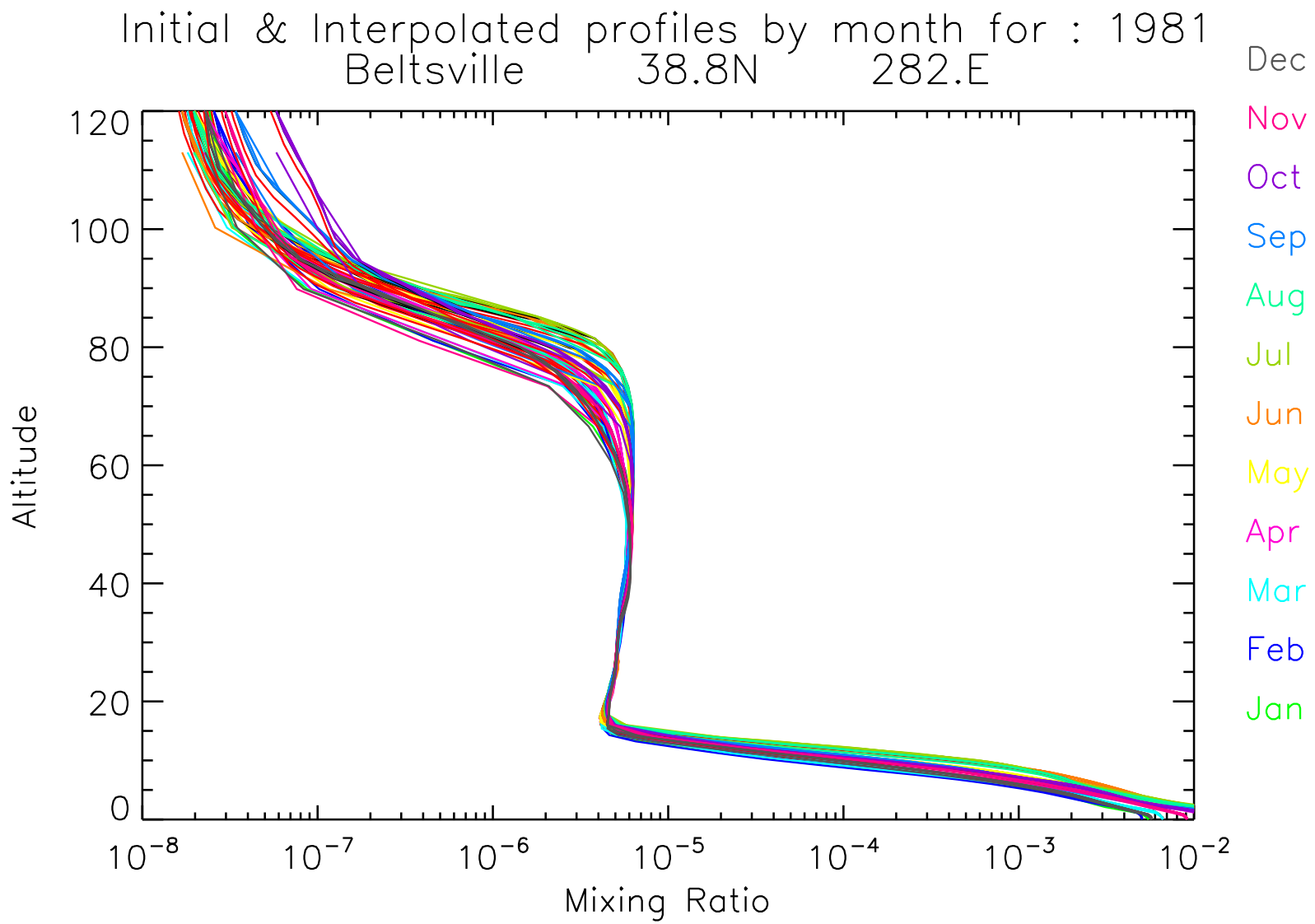
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Mixing Ratio
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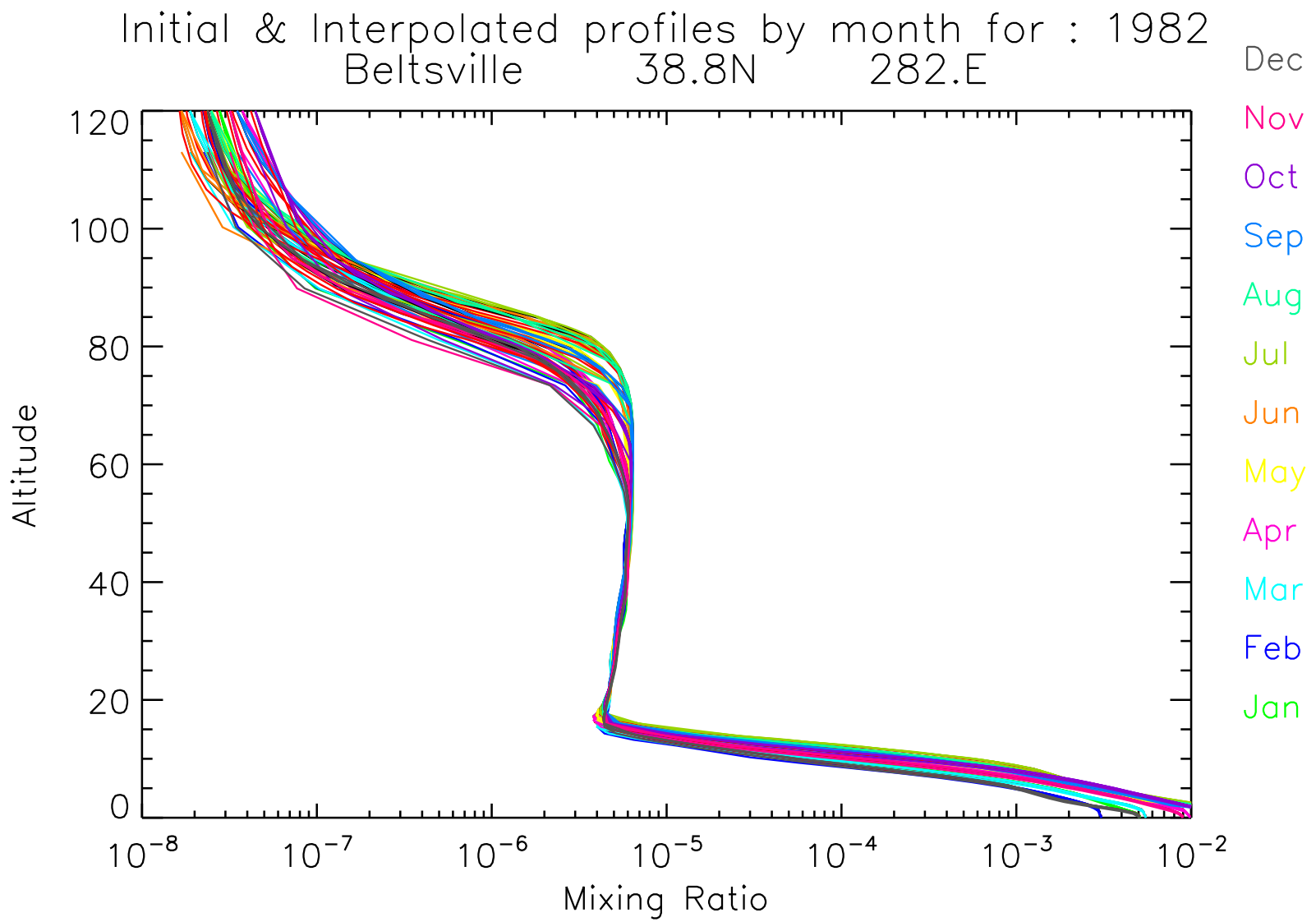
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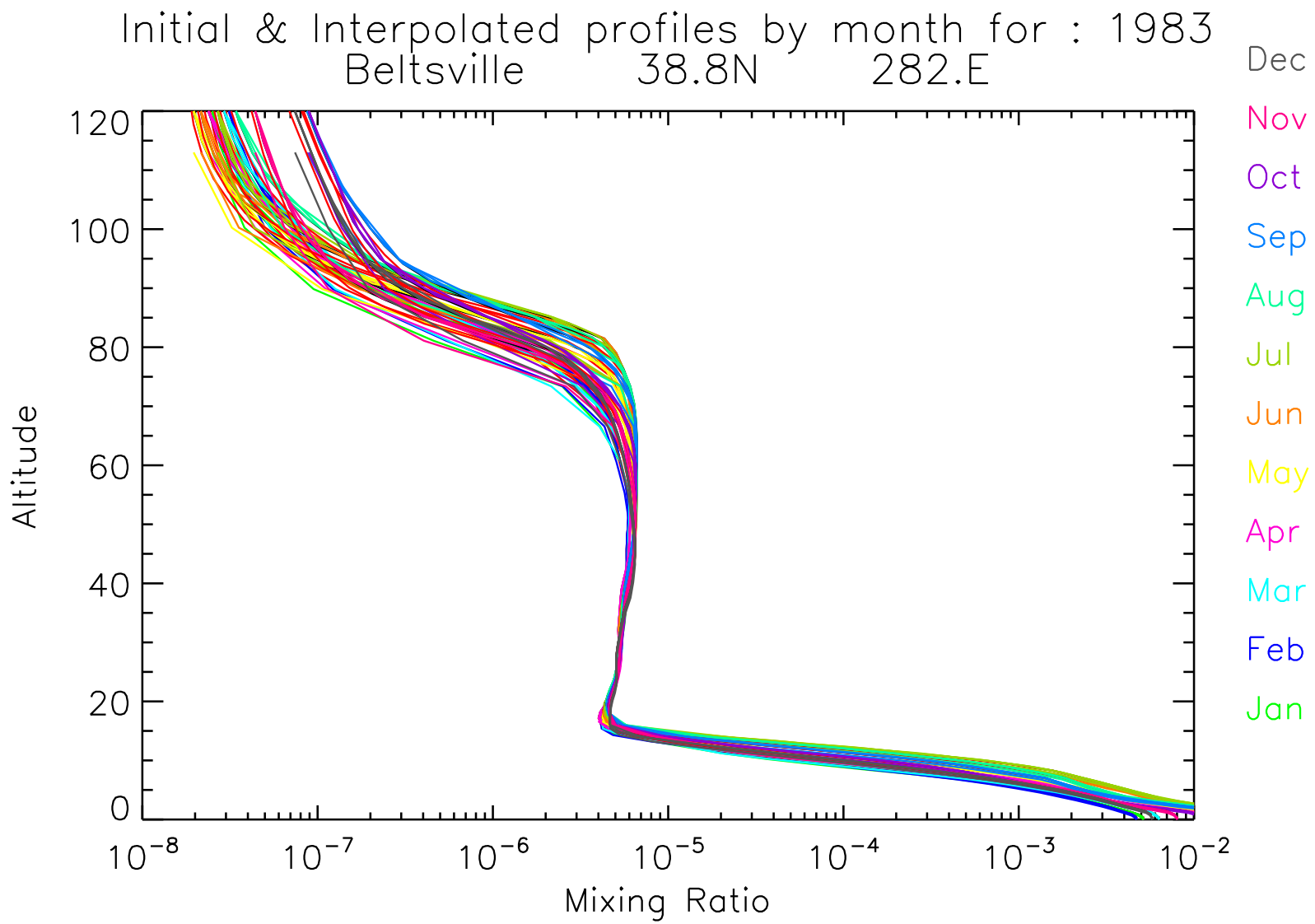
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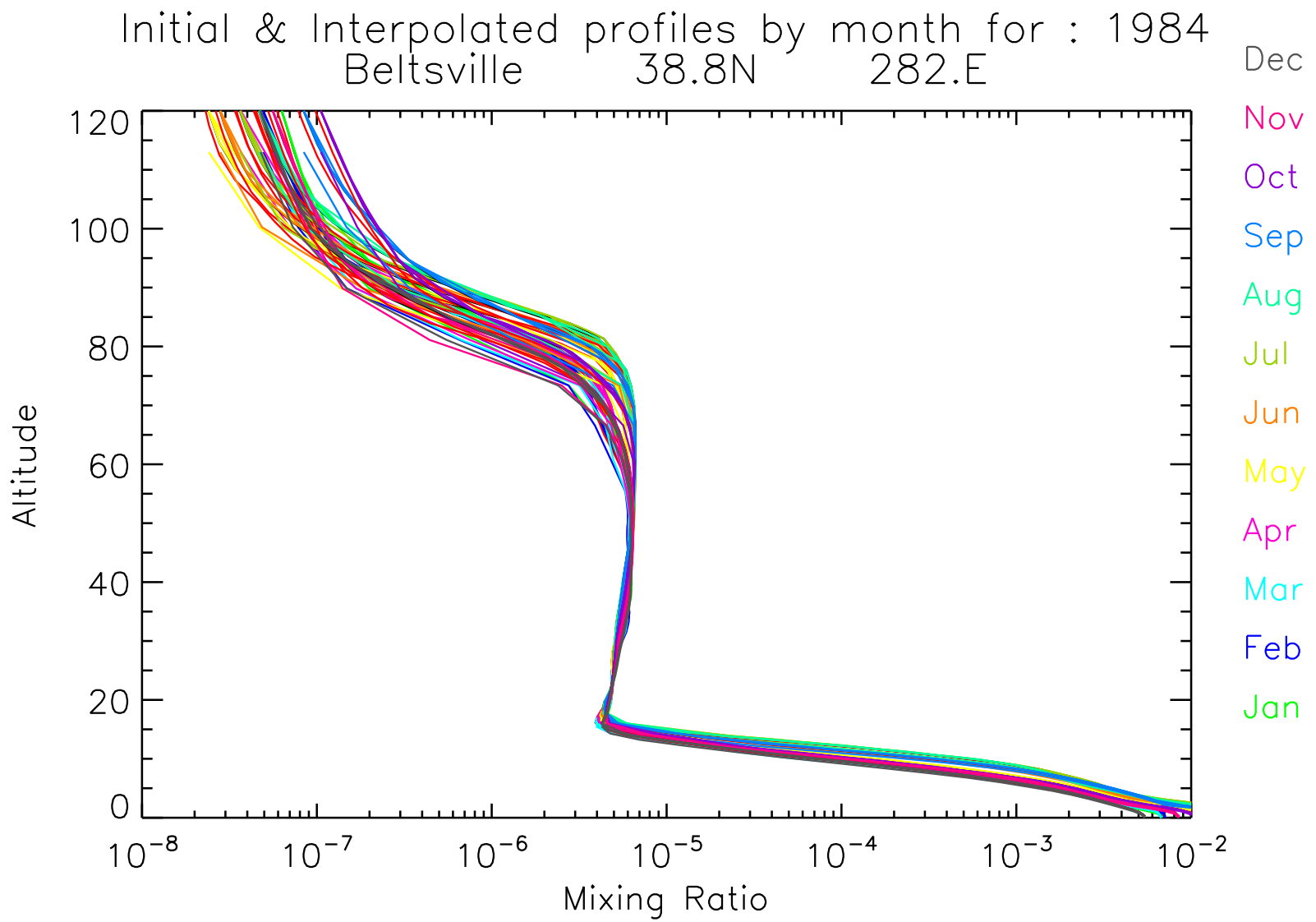
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Beltsville 38.8N 282.E
Altitude
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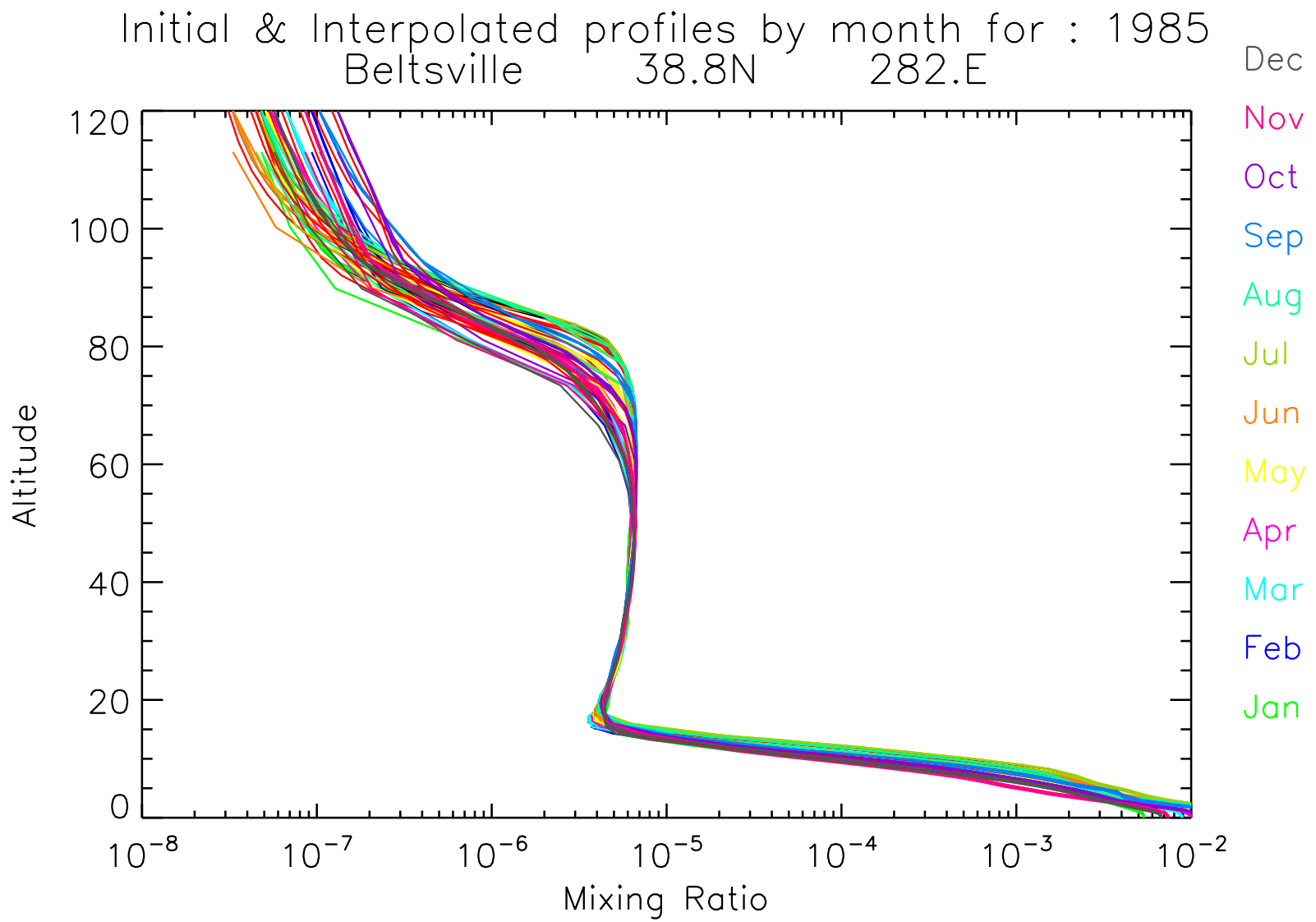
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Altitude
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Mixing Ratio
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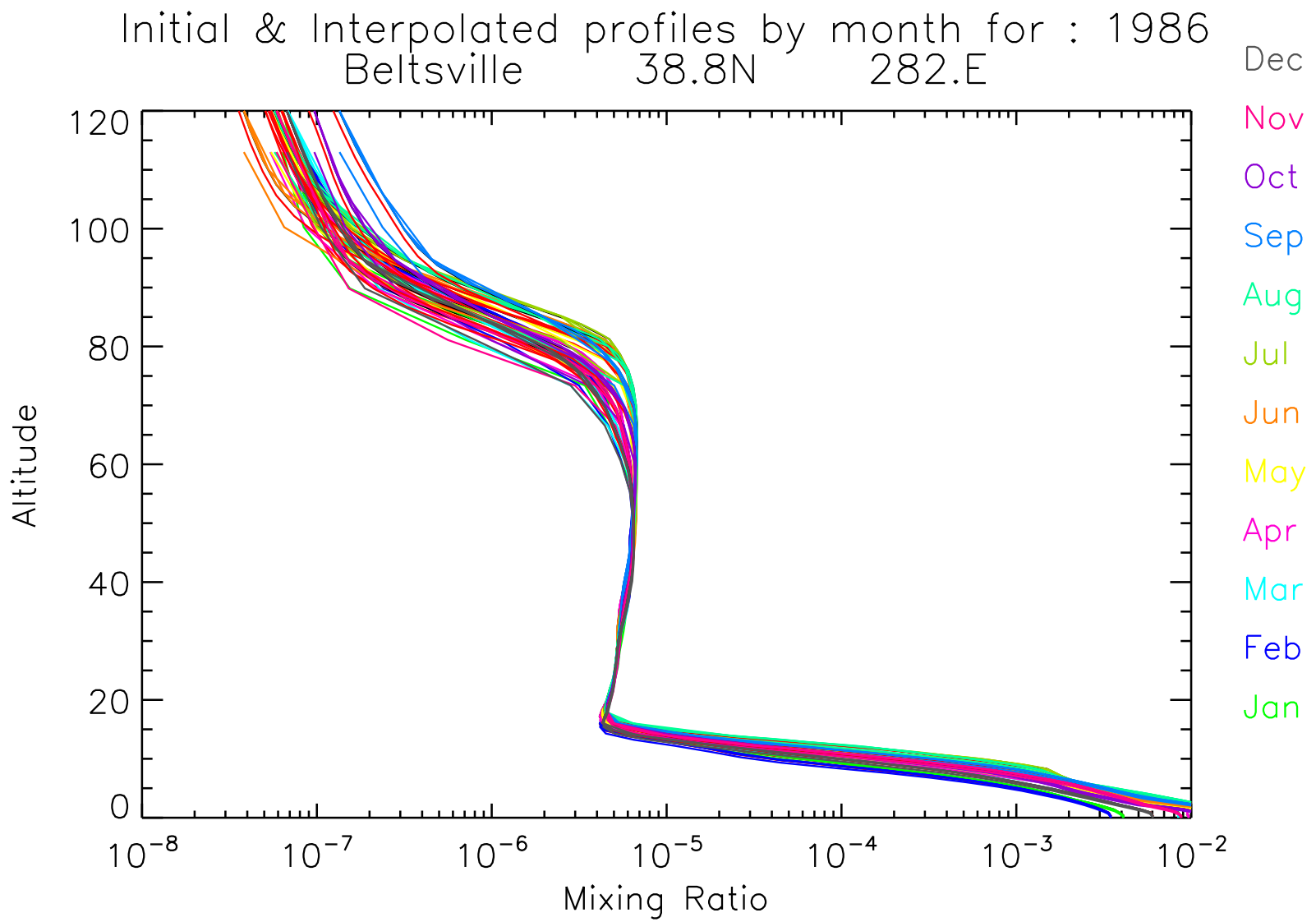
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Altitude
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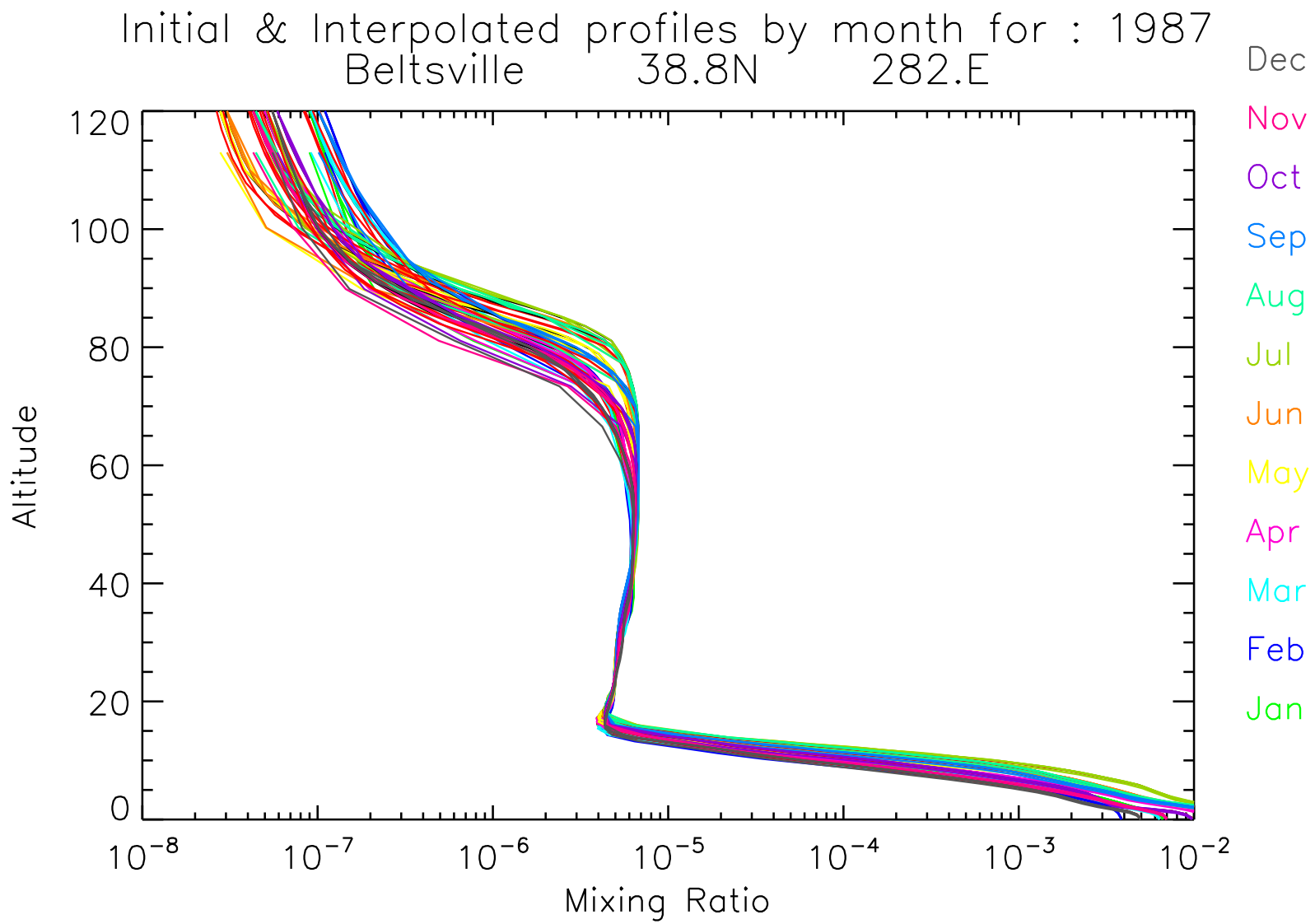
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Altitude
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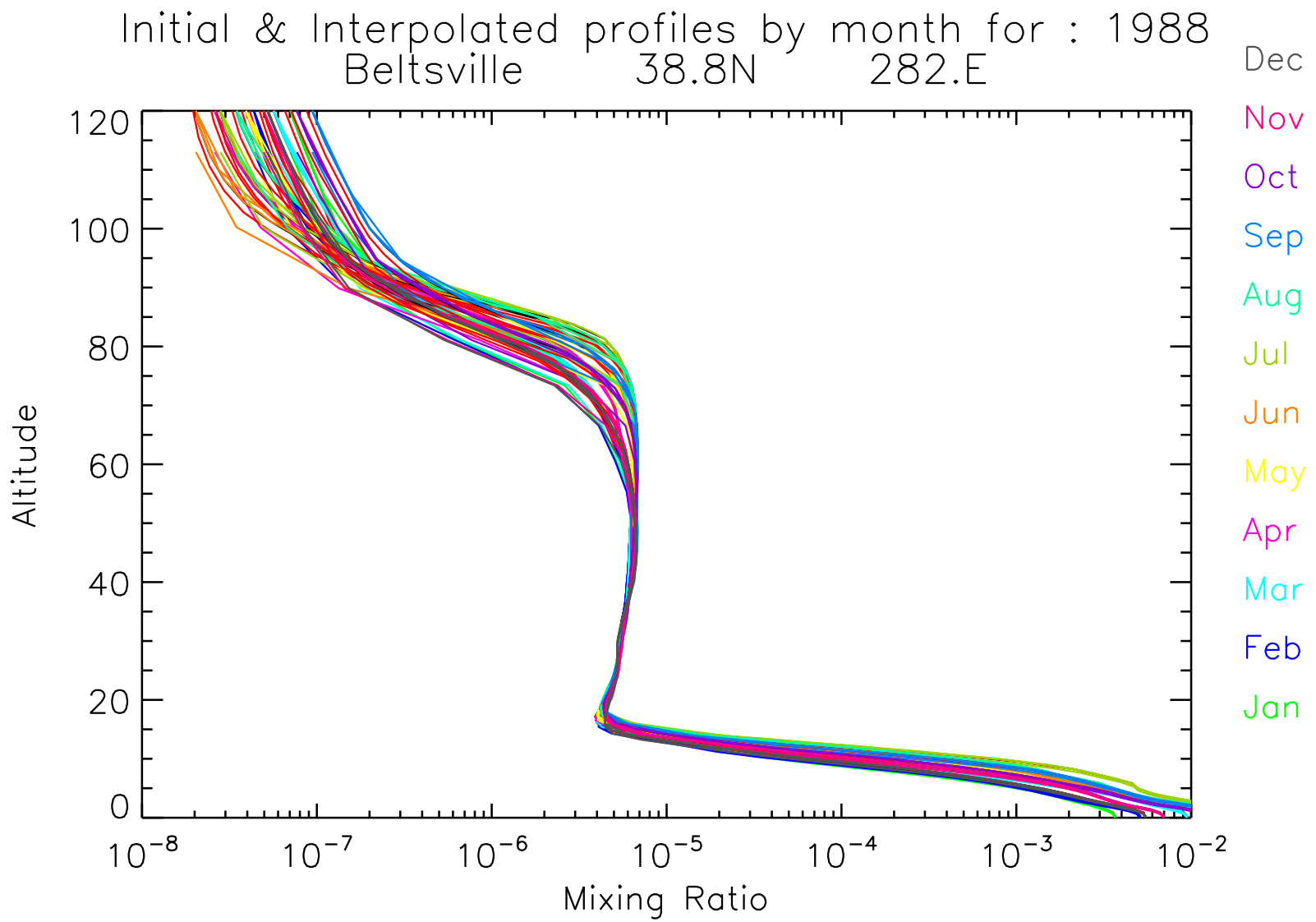
Initial & Interpolated profiles by month for : 1988
Beltsville 38.8N 282.E
Altitude
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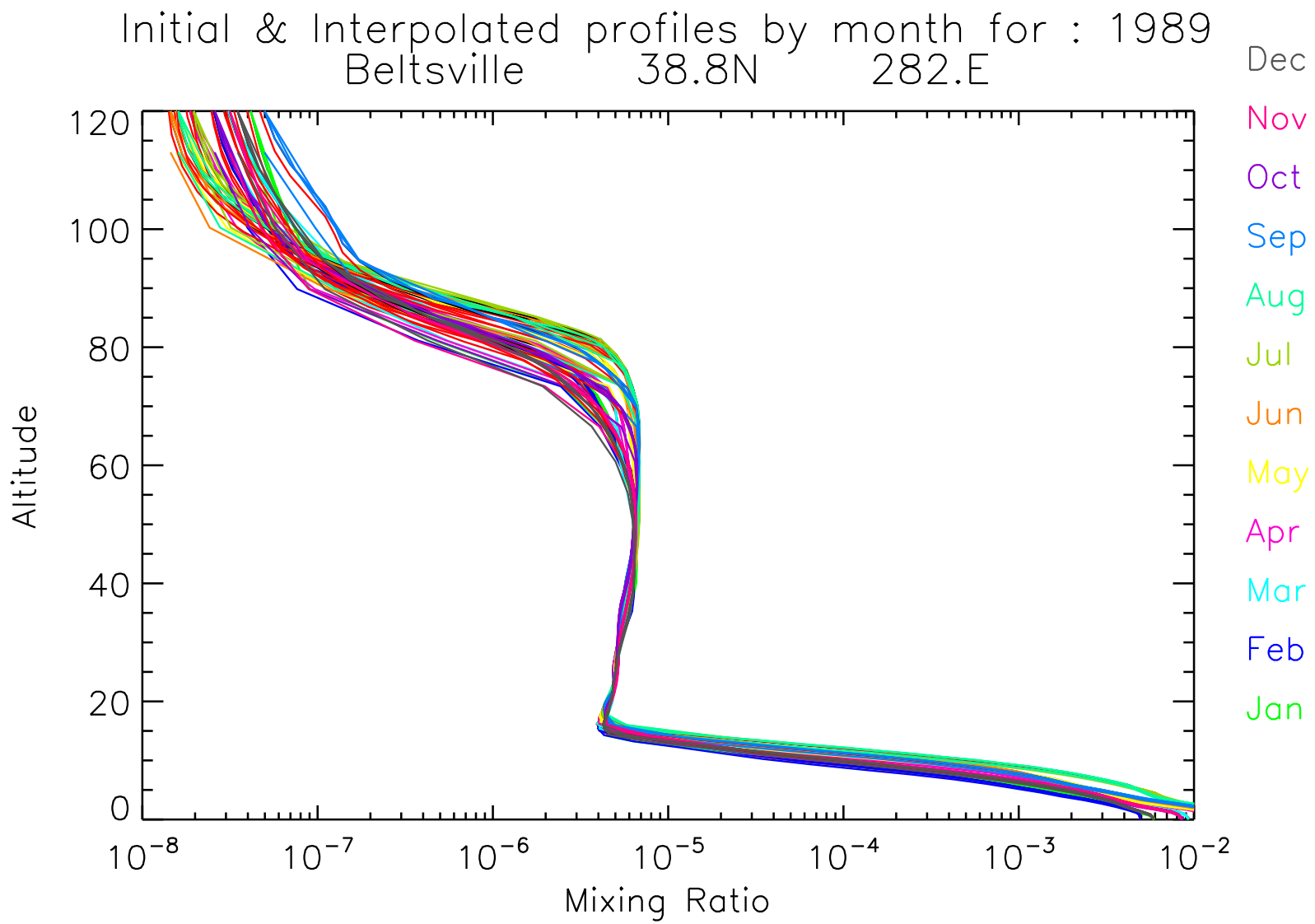
Initial & Interpolated profiles by month for : 1989
Beltsville 38.8N 282.E
Altitude
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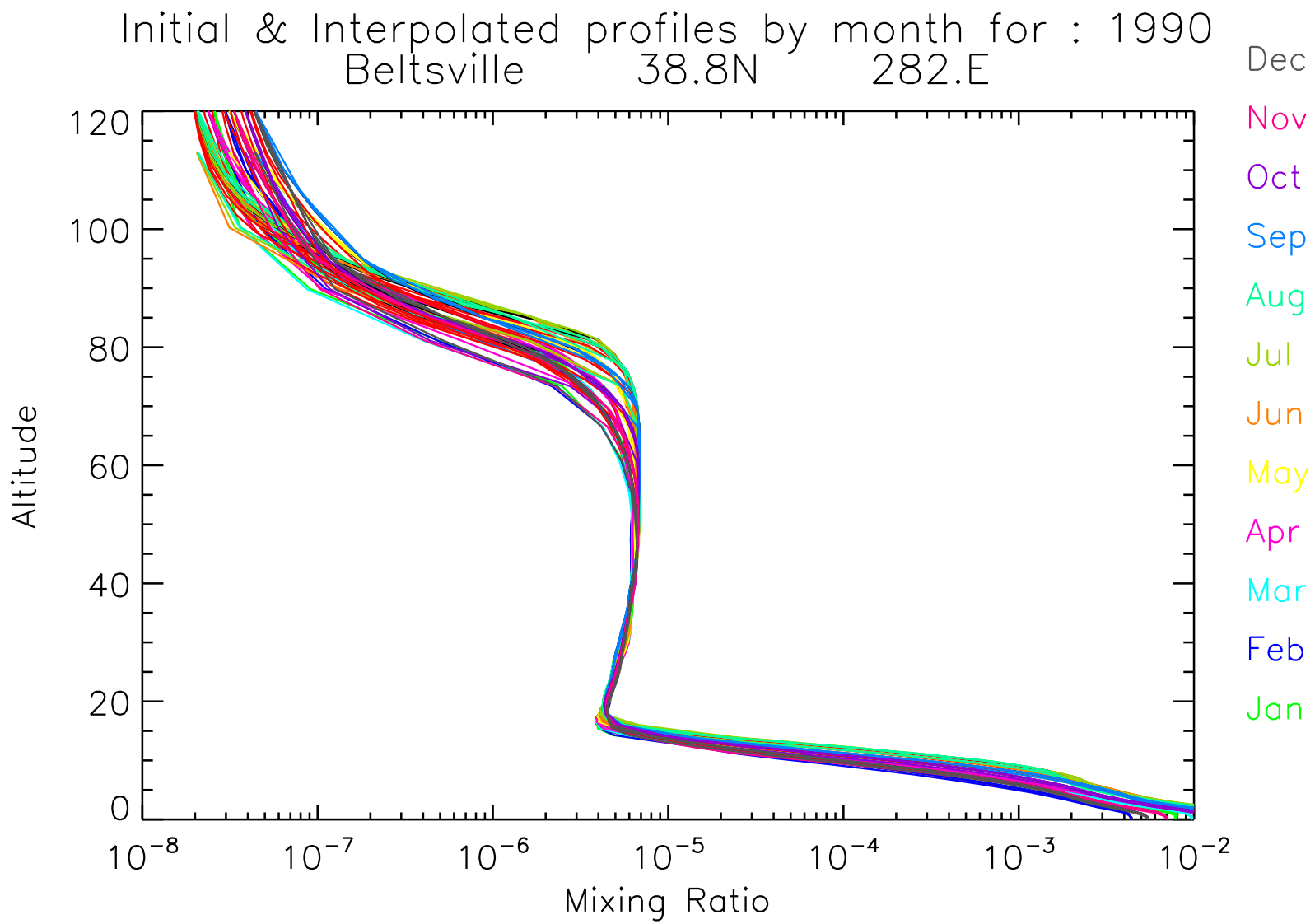
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Altitude
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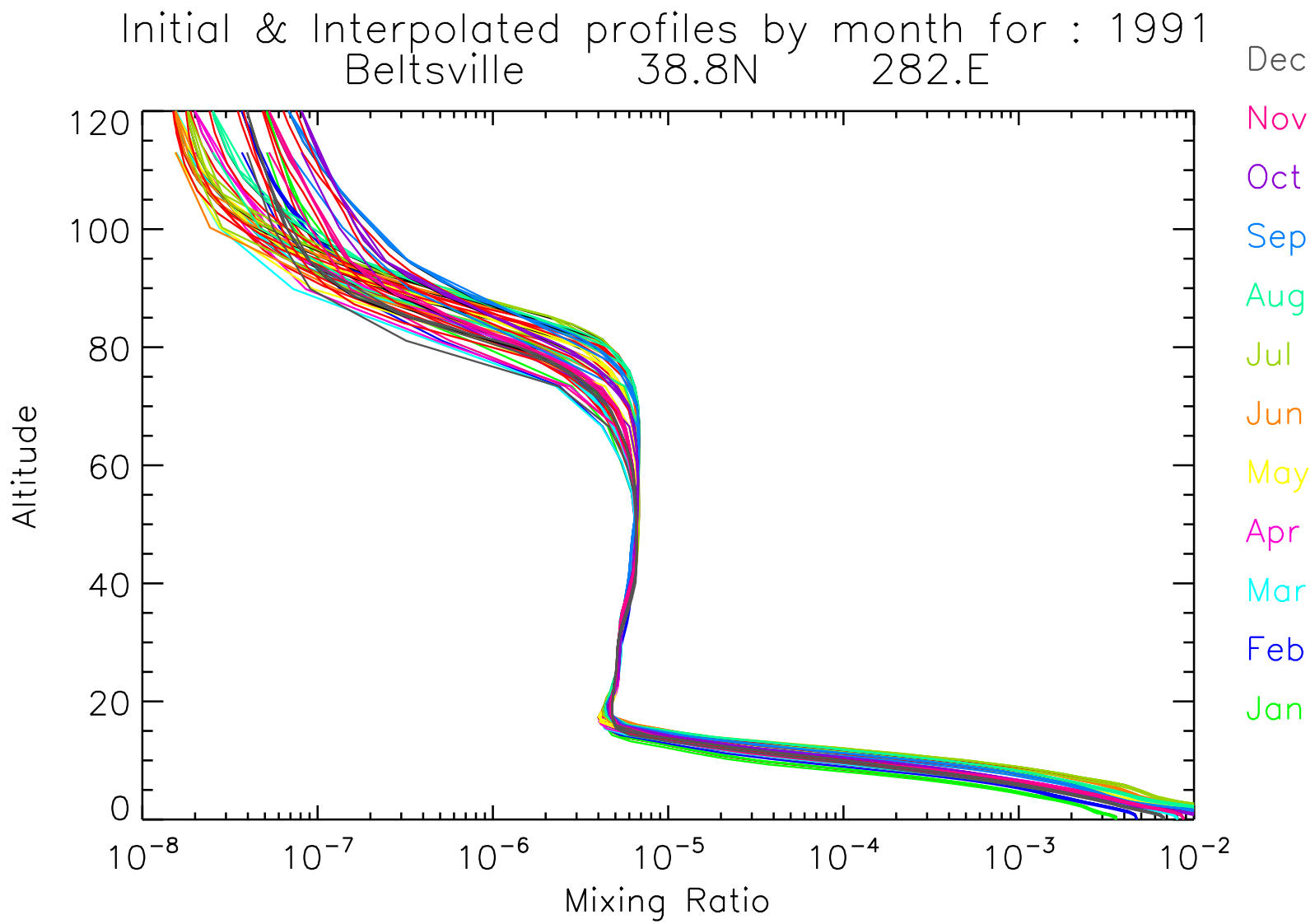
Initial & Interpolated profiles by month for : 1991
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Altitude
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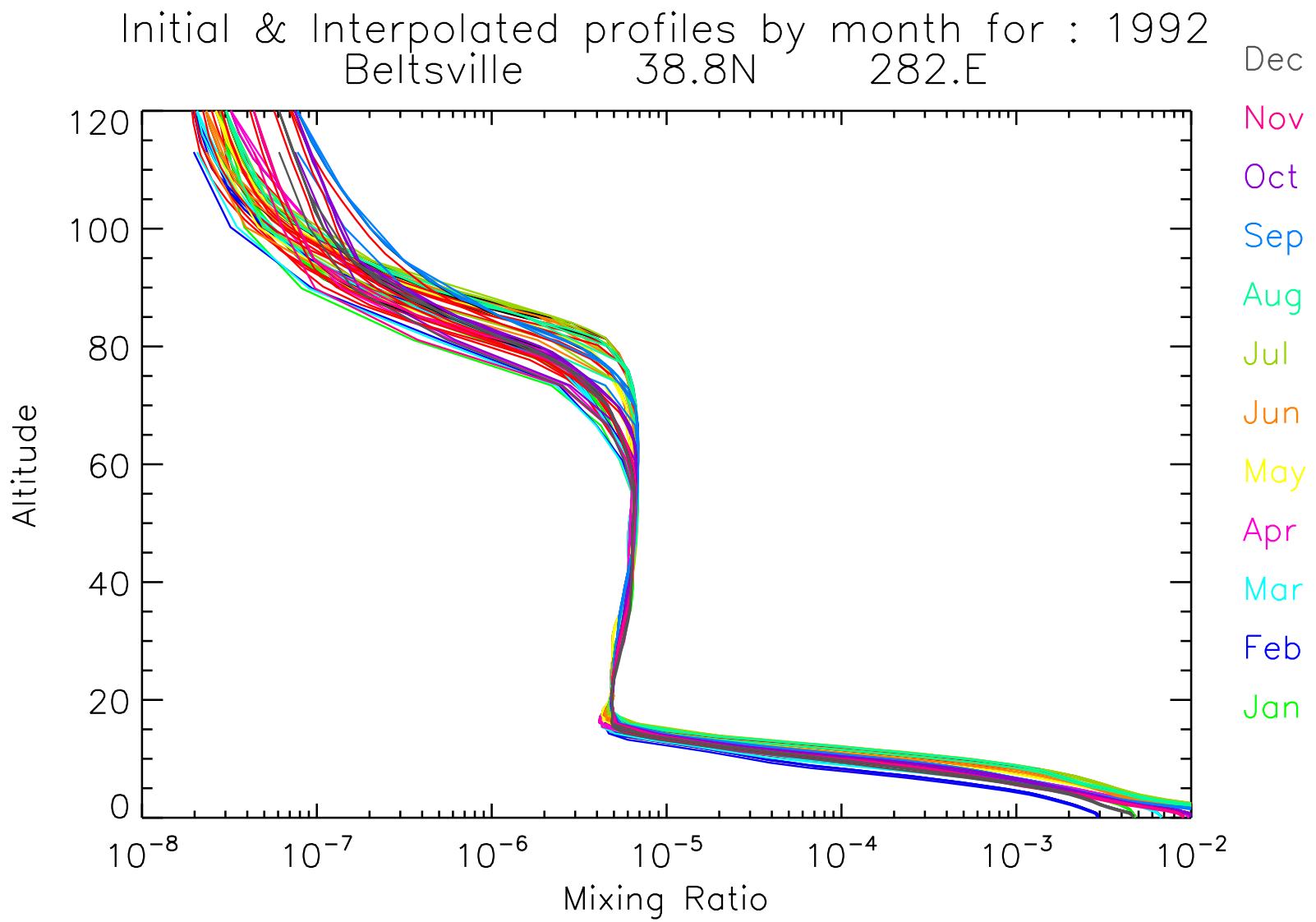
Initial & Interpolated profiles by month for : 1992
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Altitude
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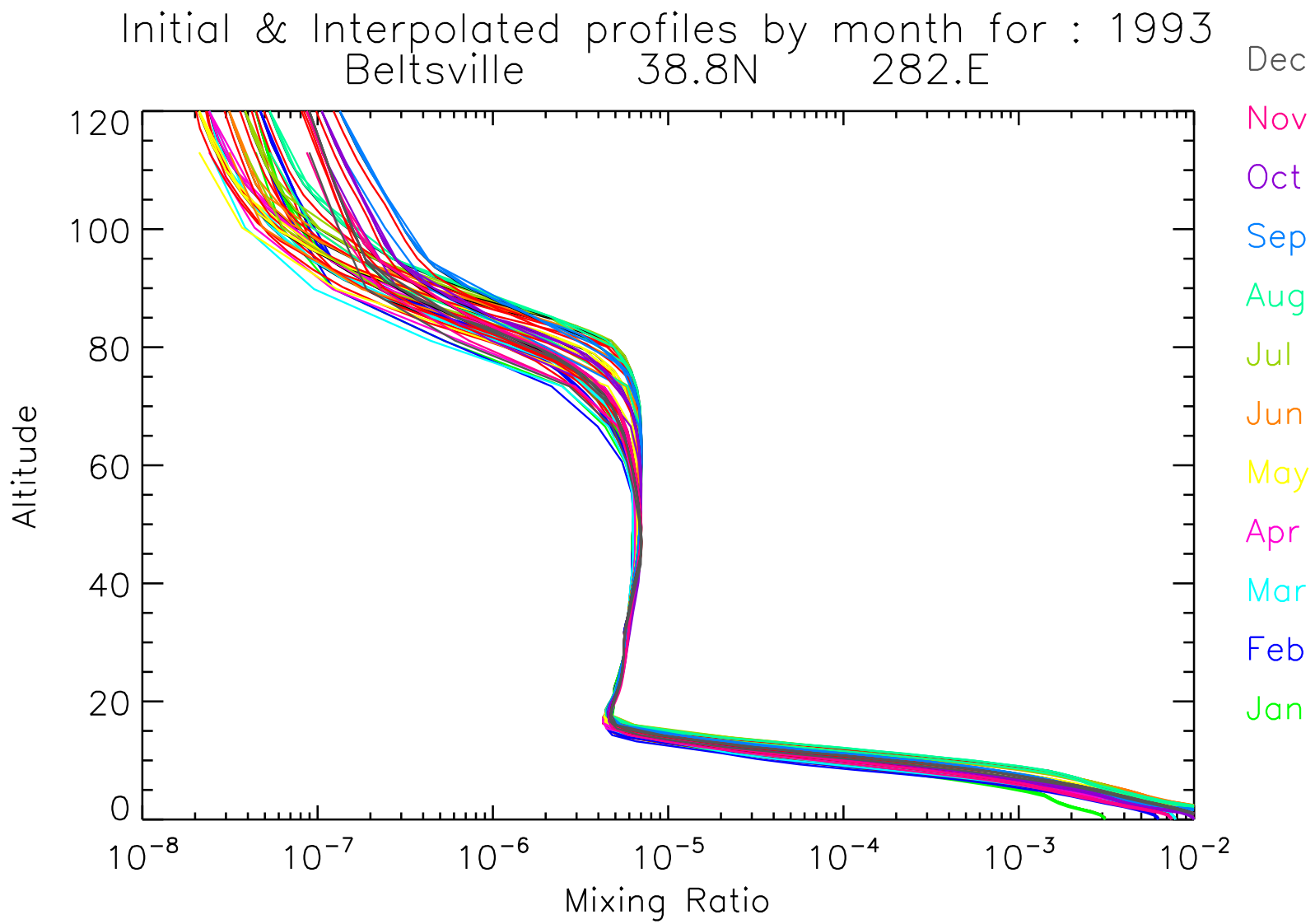
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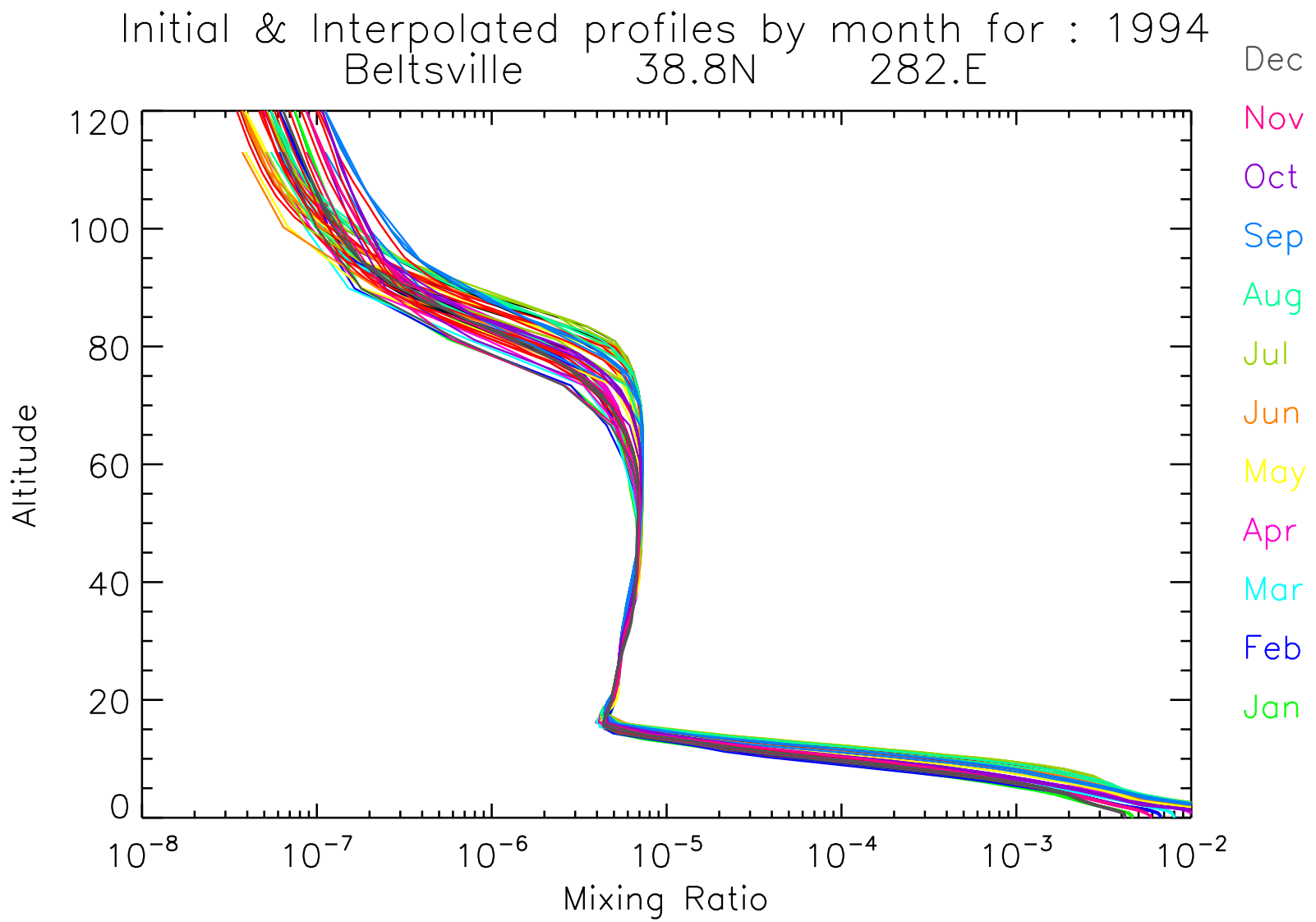
Initial & Interpolated profiles by month for : 1994
Beltsville 38.8N 282.E
Altitude
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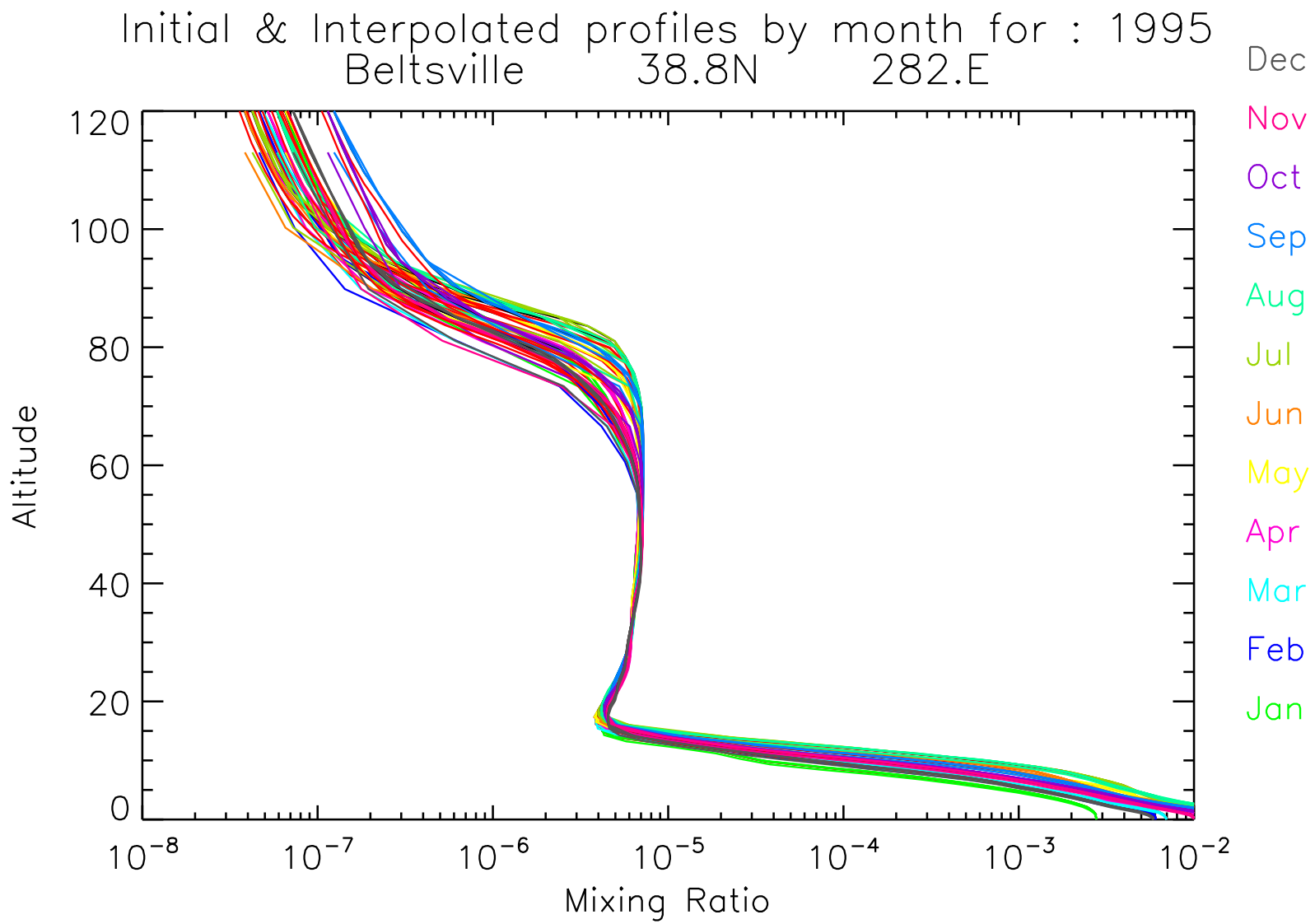
Initial & Interpolated profiles by month for : 1995
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Altitude
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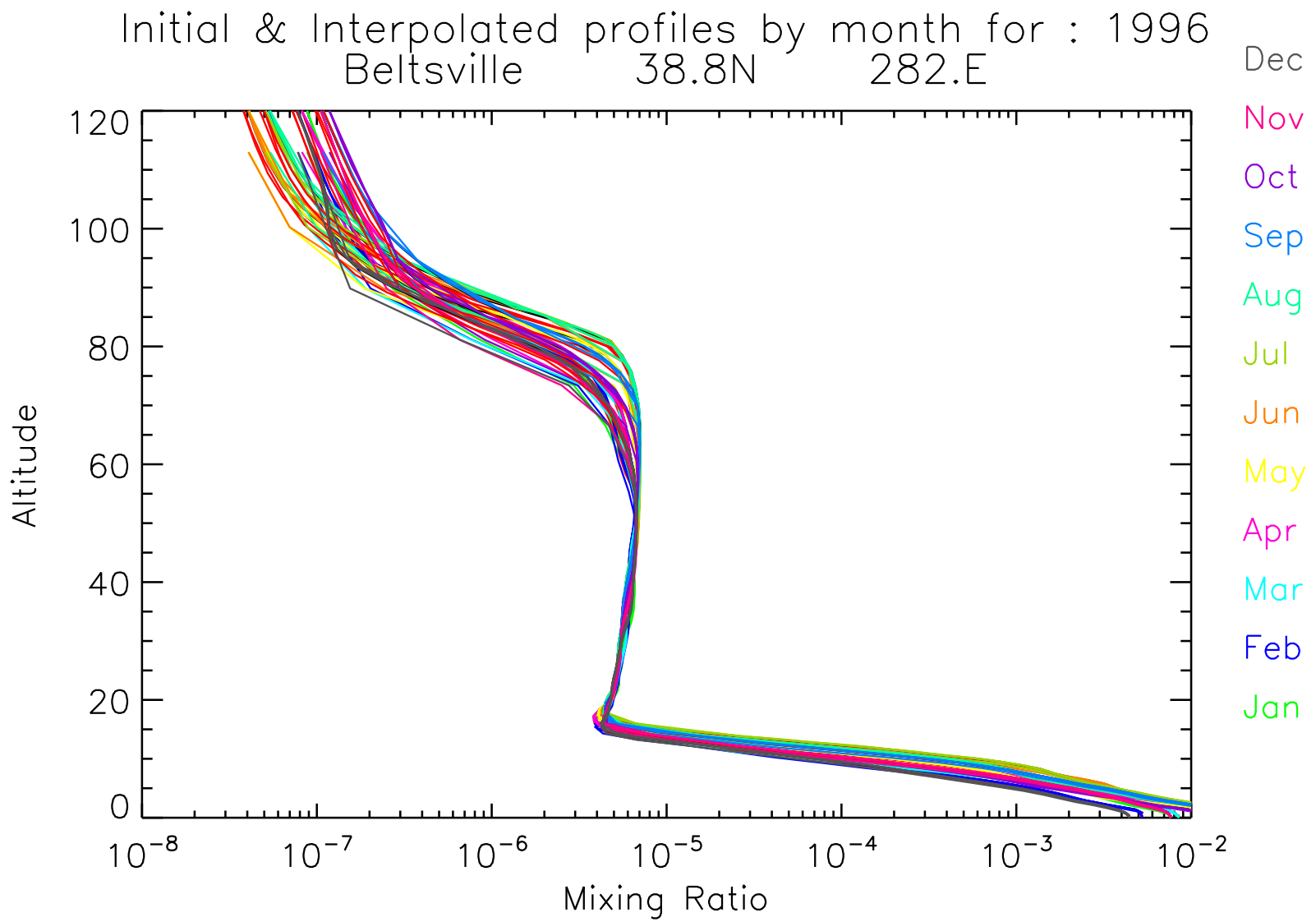
Initial & Interpolated profiles by month for : 1996
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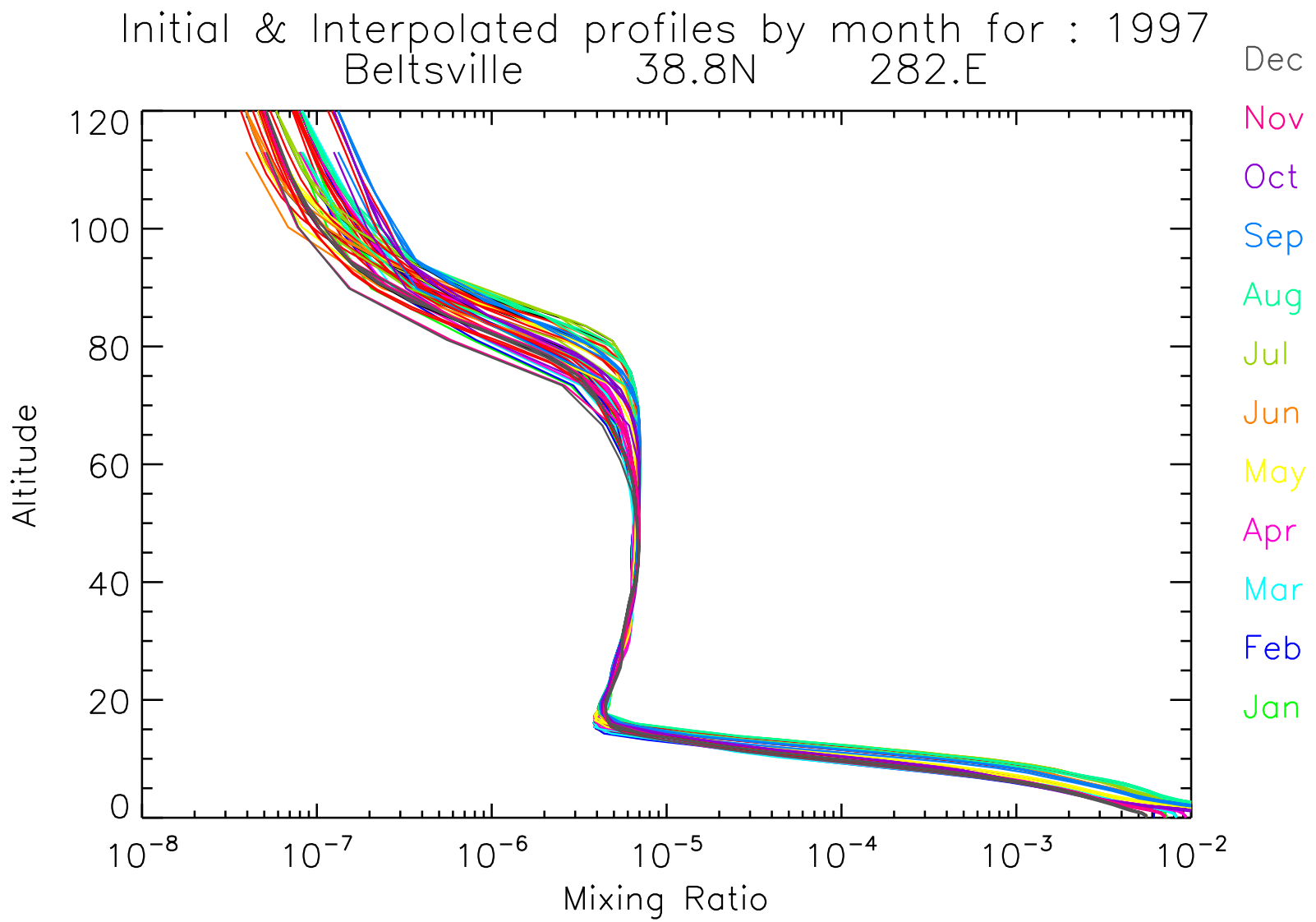
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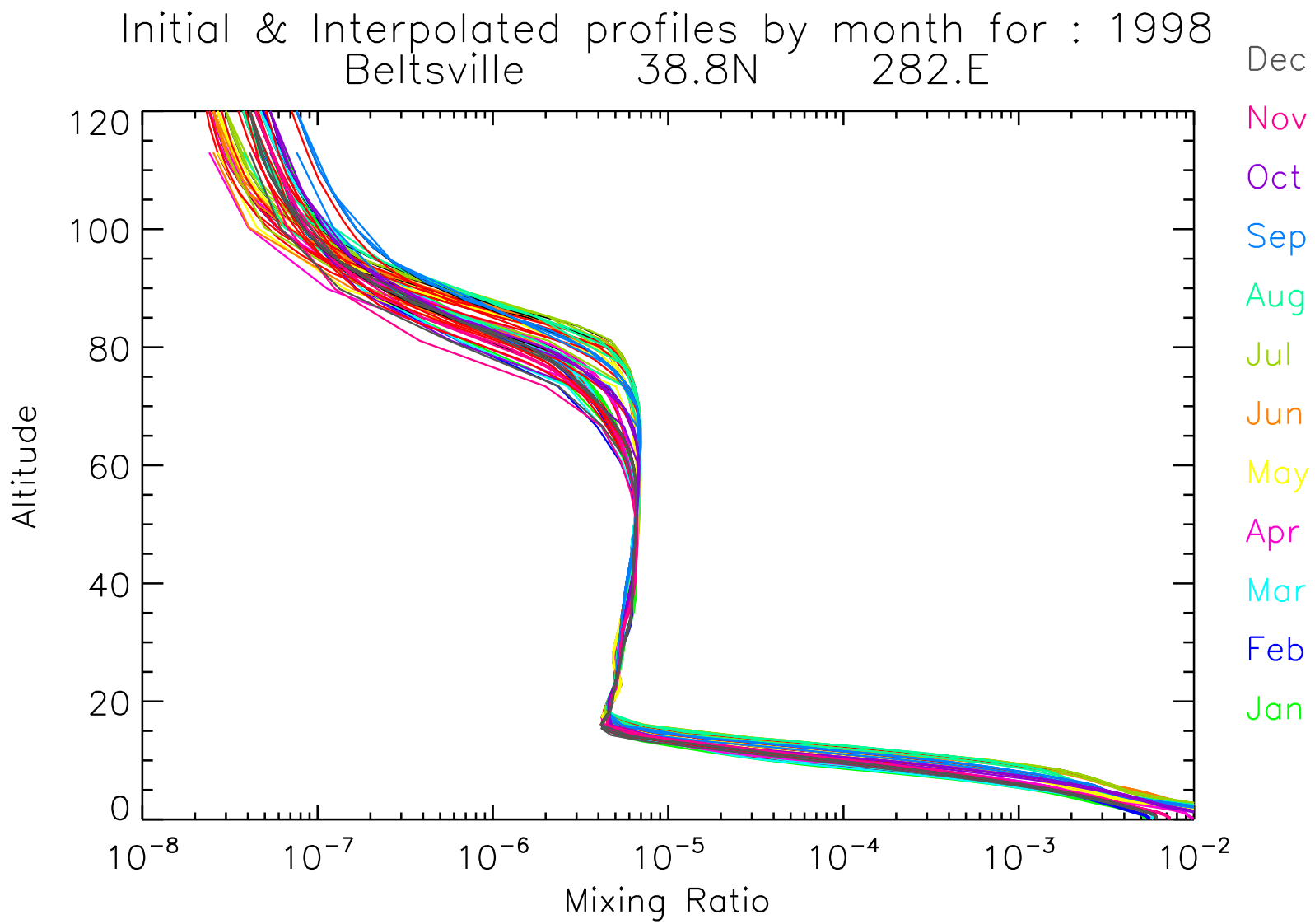
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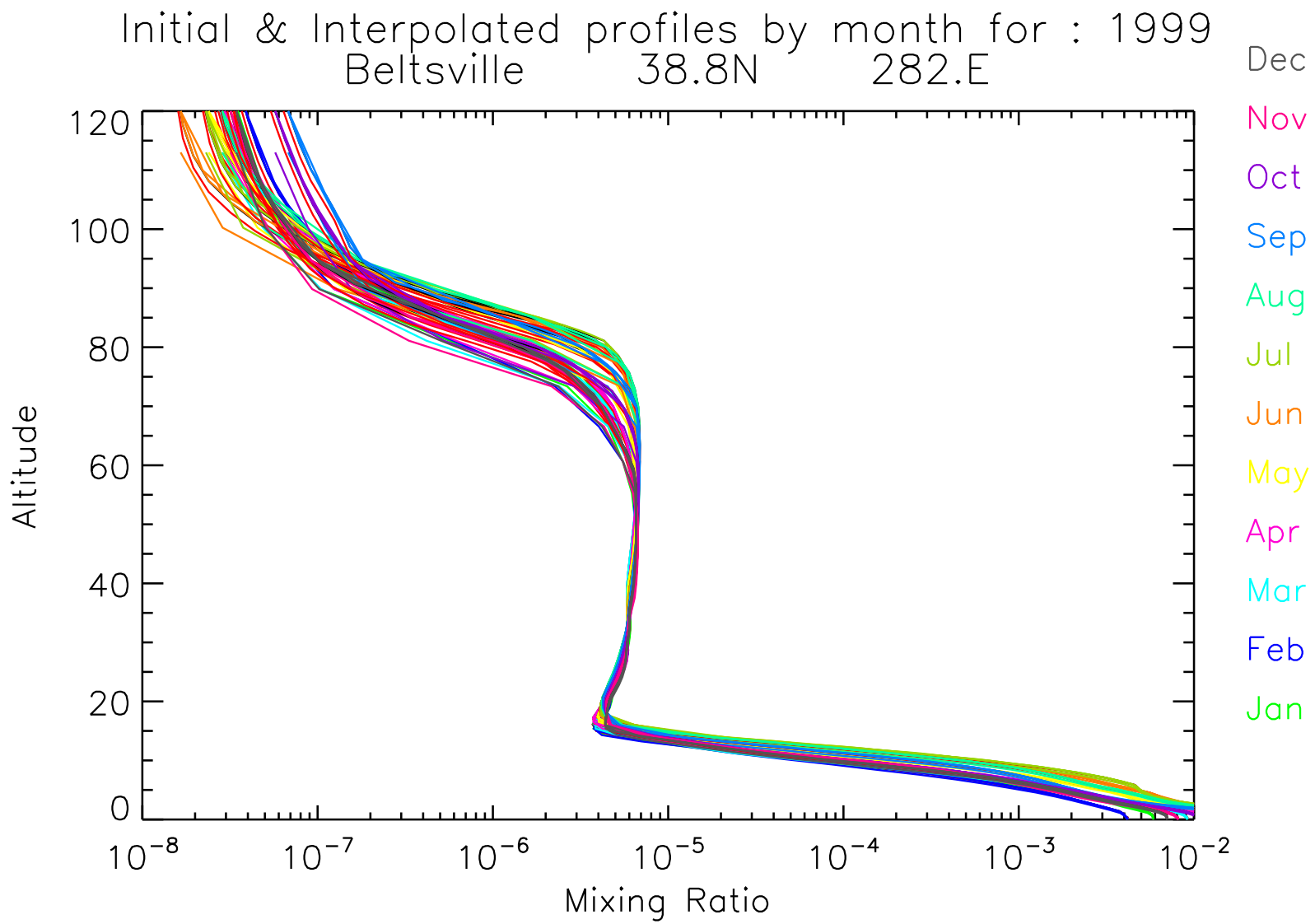
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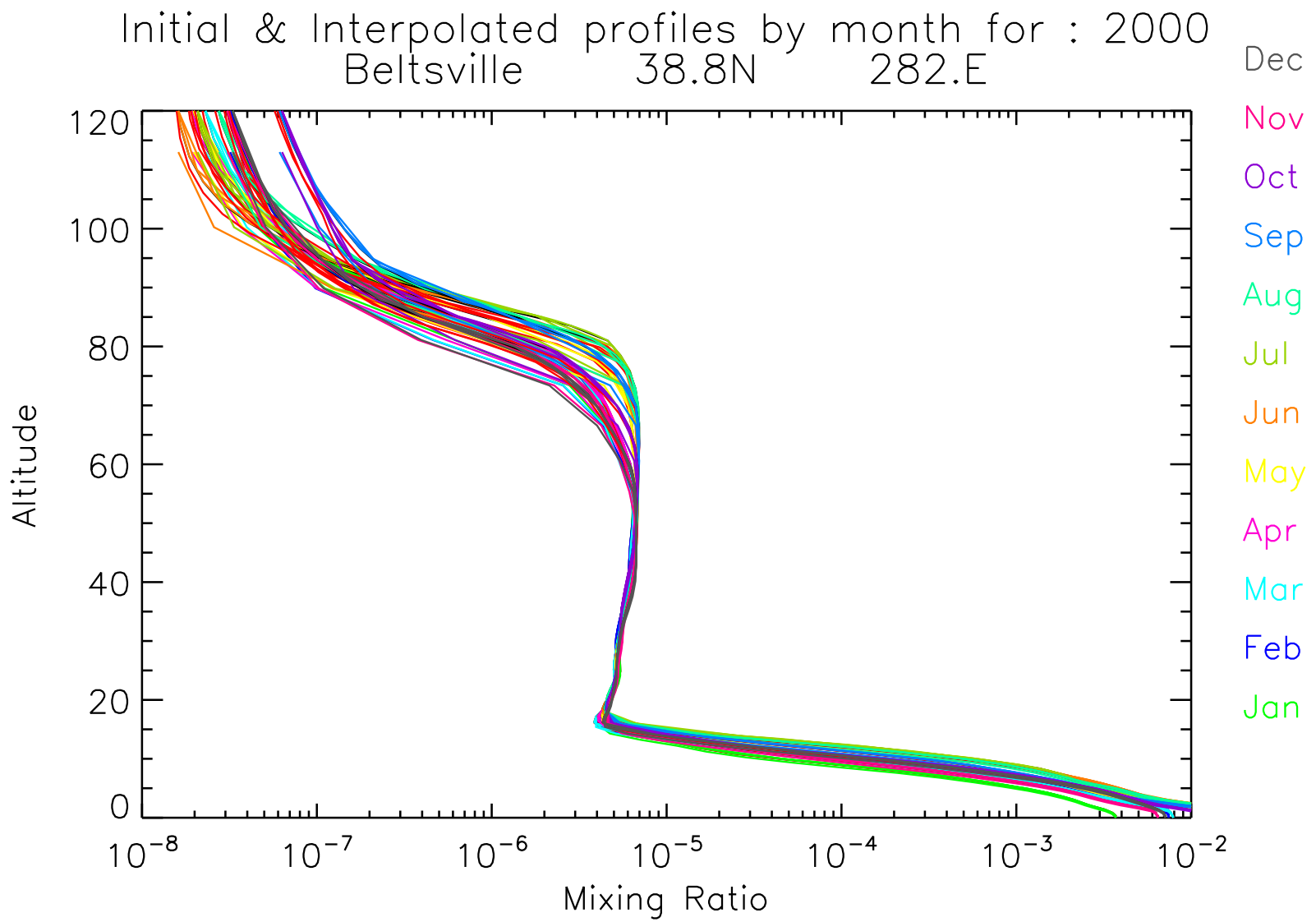
Initial & Interpolated profiles by month for : 2000
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Altitude
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Mixing Ratio
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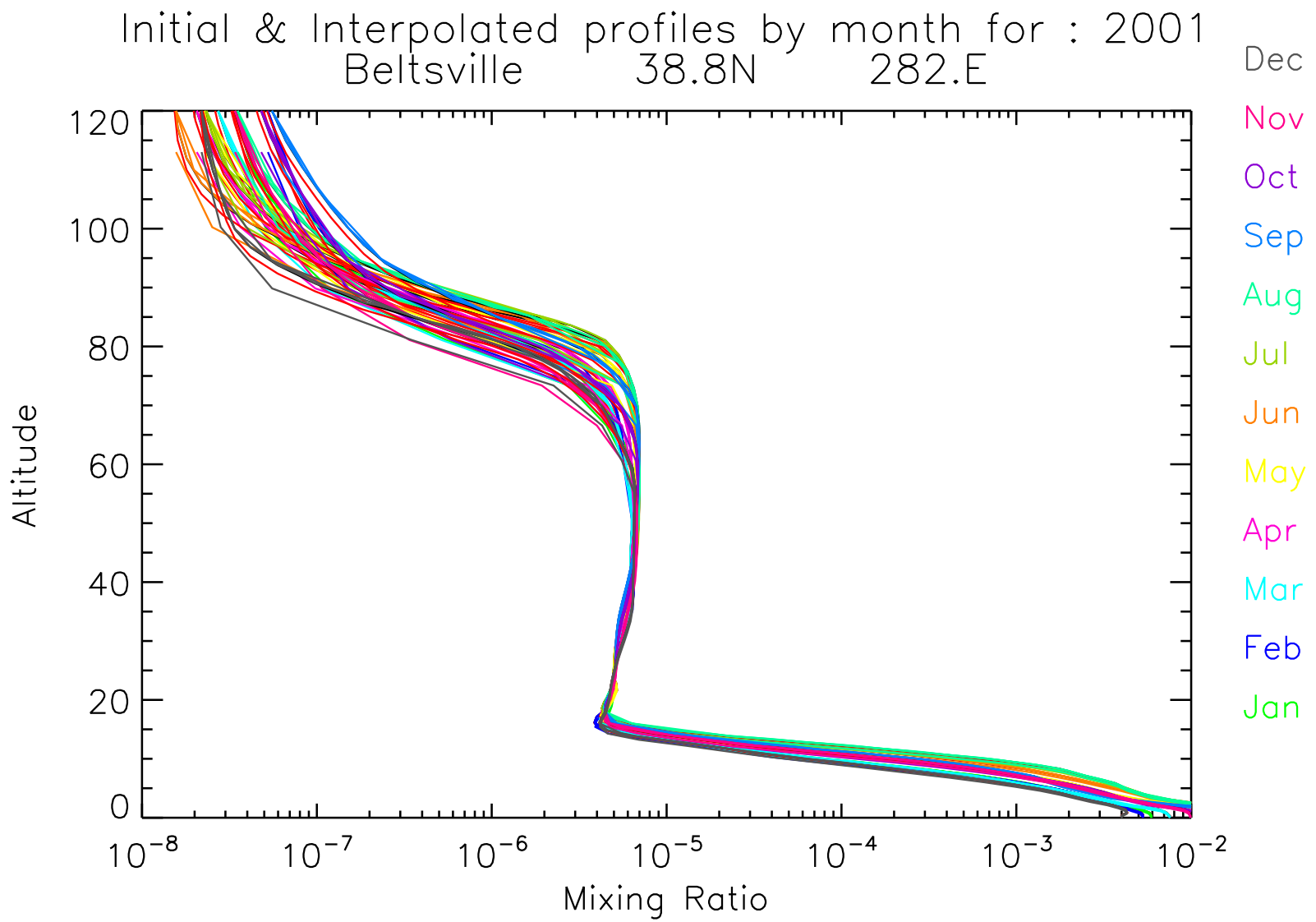
Initial & Interpolated profiles by month for : 2001
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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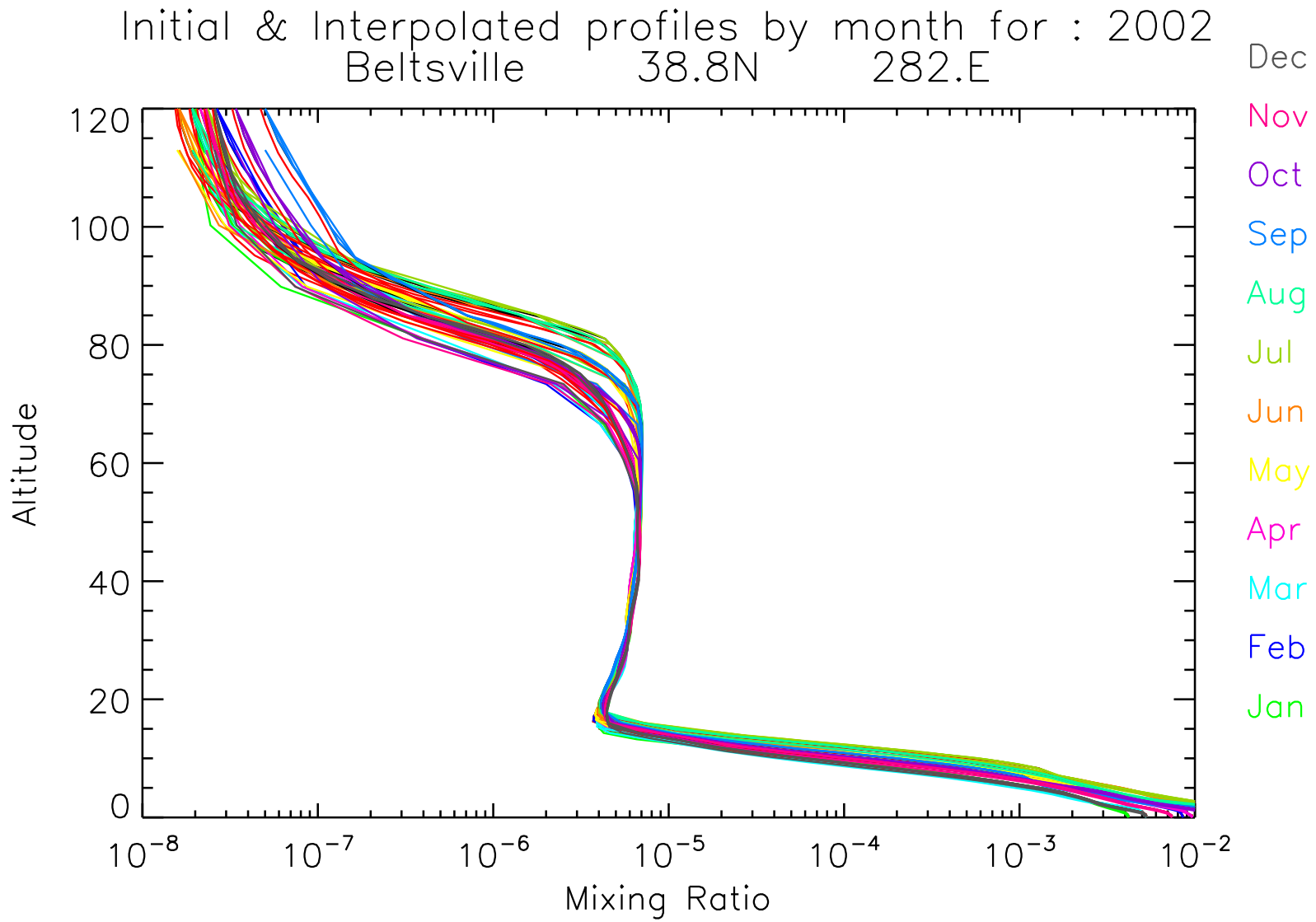
Initial & Interpolated profiles by month for : 2002
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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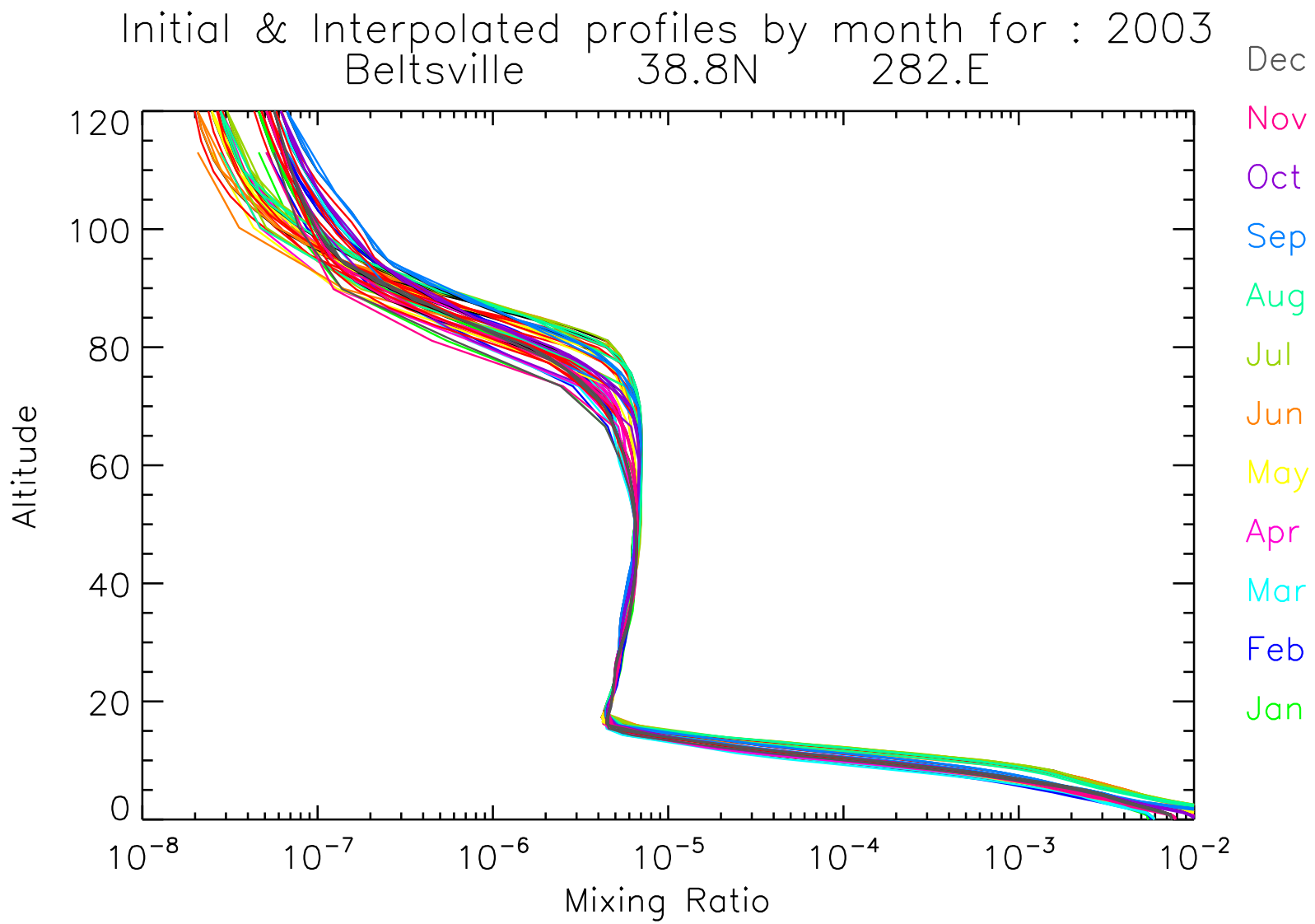
Initial & Interpolated profiles by month for : 2003
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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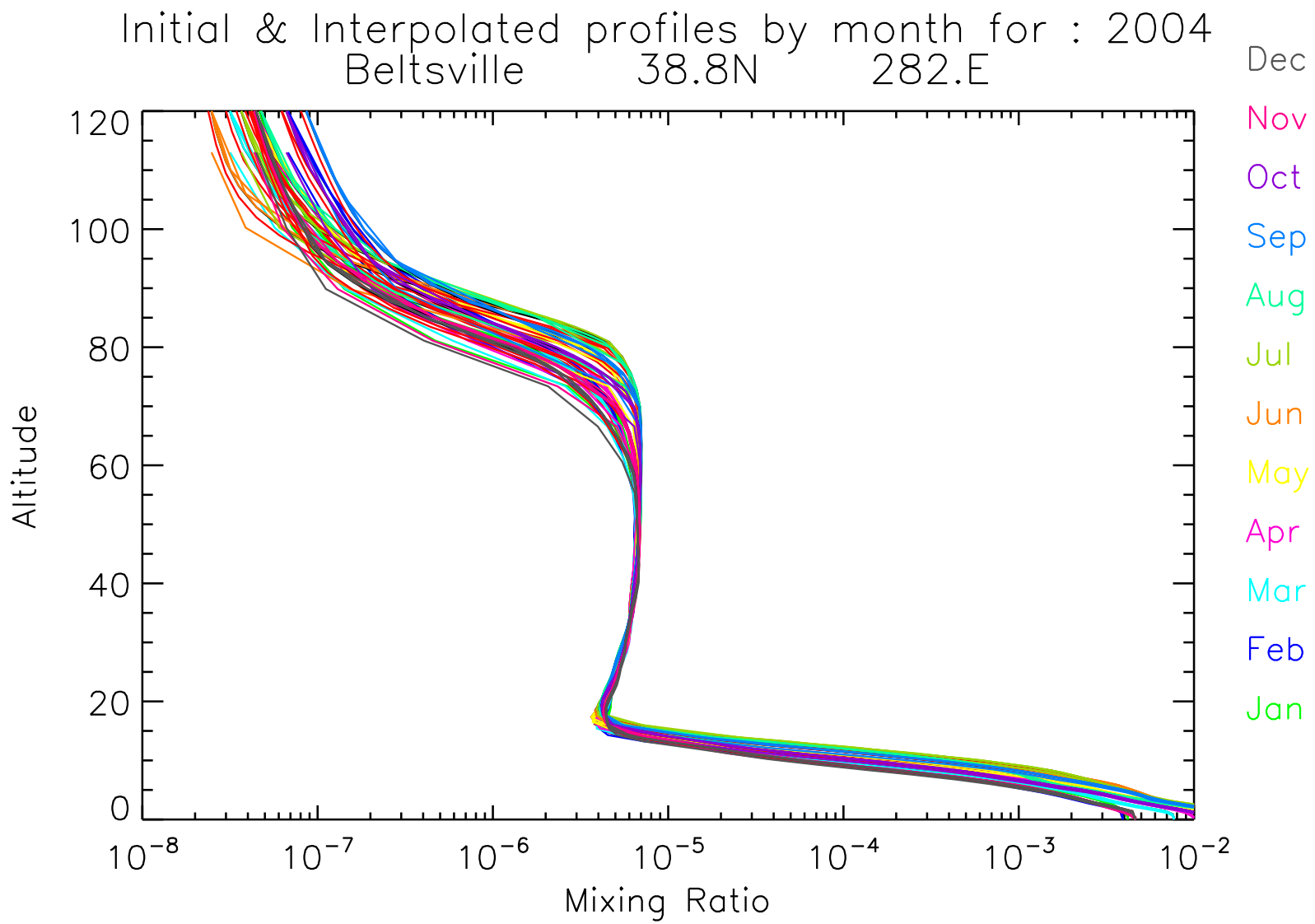
Initial & Interpolated profiles by month for : 2004
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Altitude
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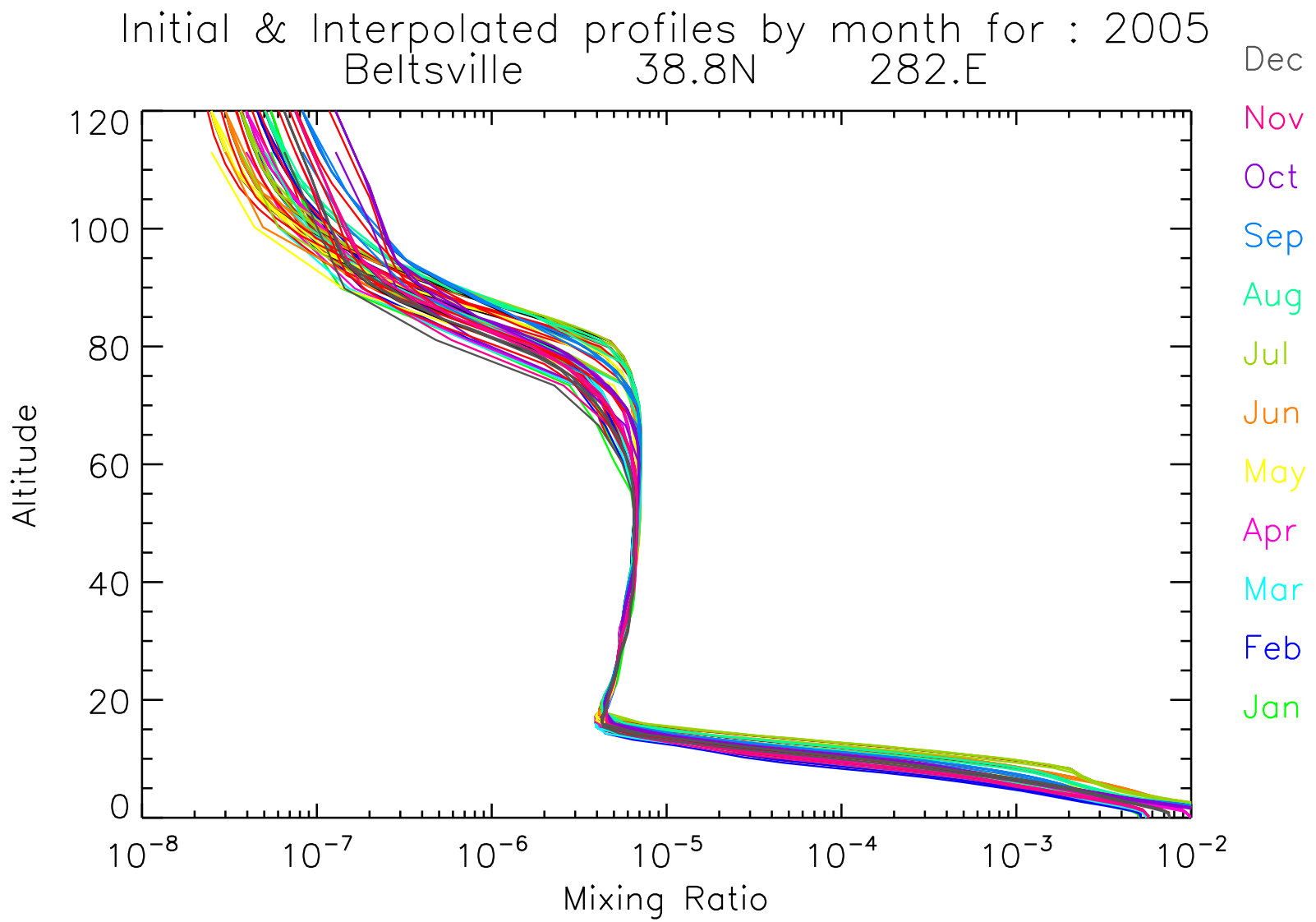
Initial & Interpolated profiles by month for : 2005
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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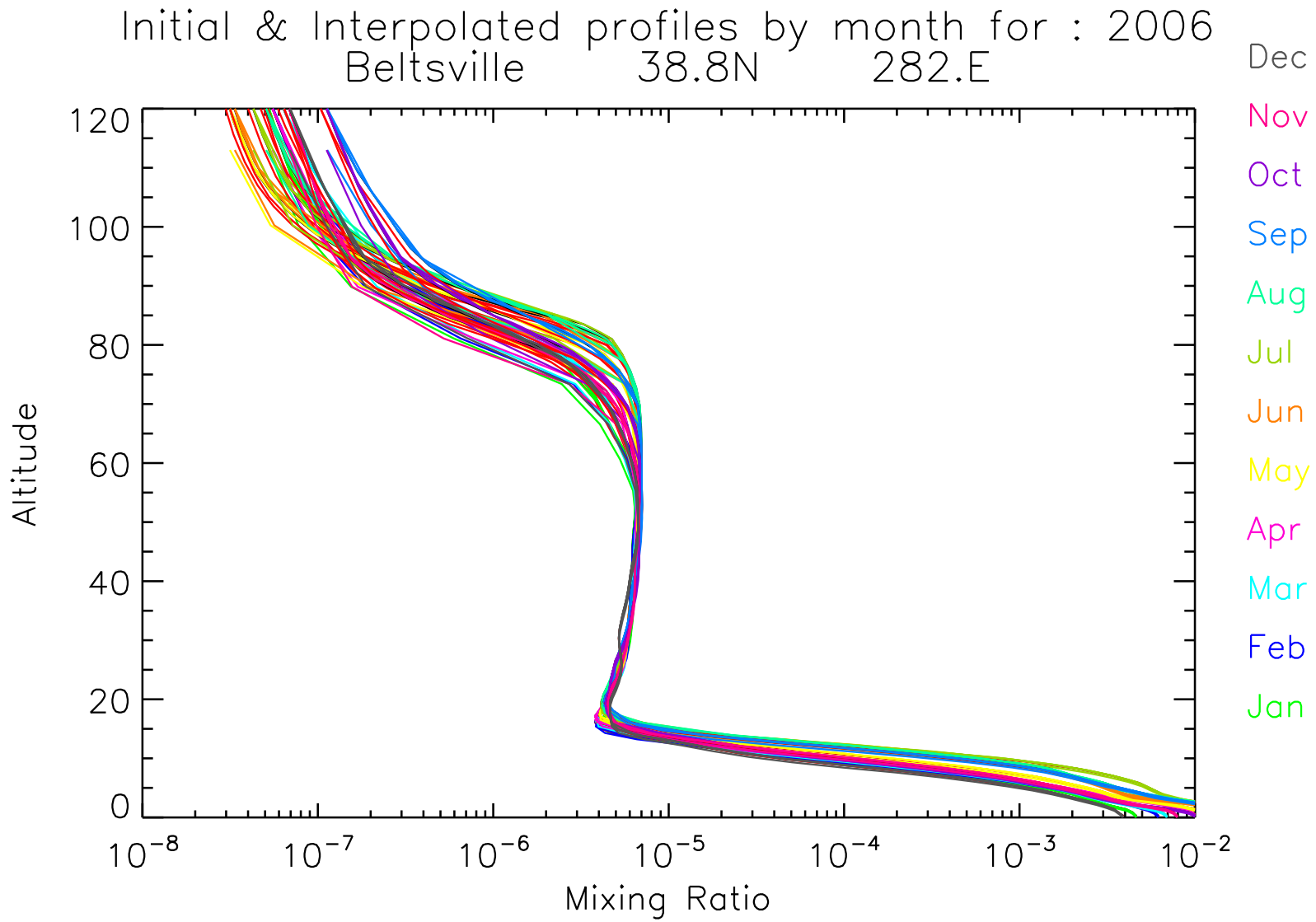
Initial & Interpolated profiles by month for : 2006
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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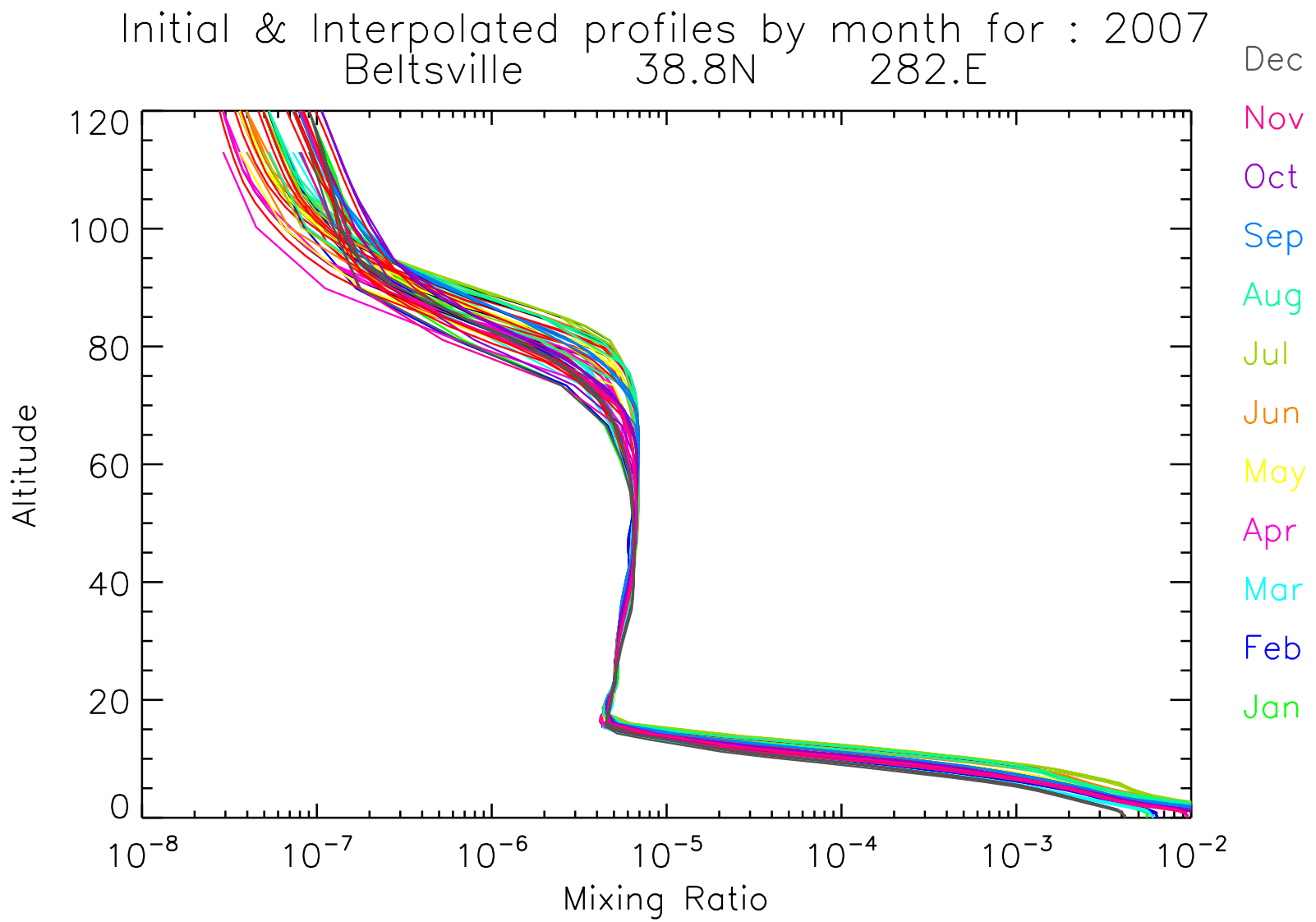
Initial & Interpolated profiles by month for : 2007
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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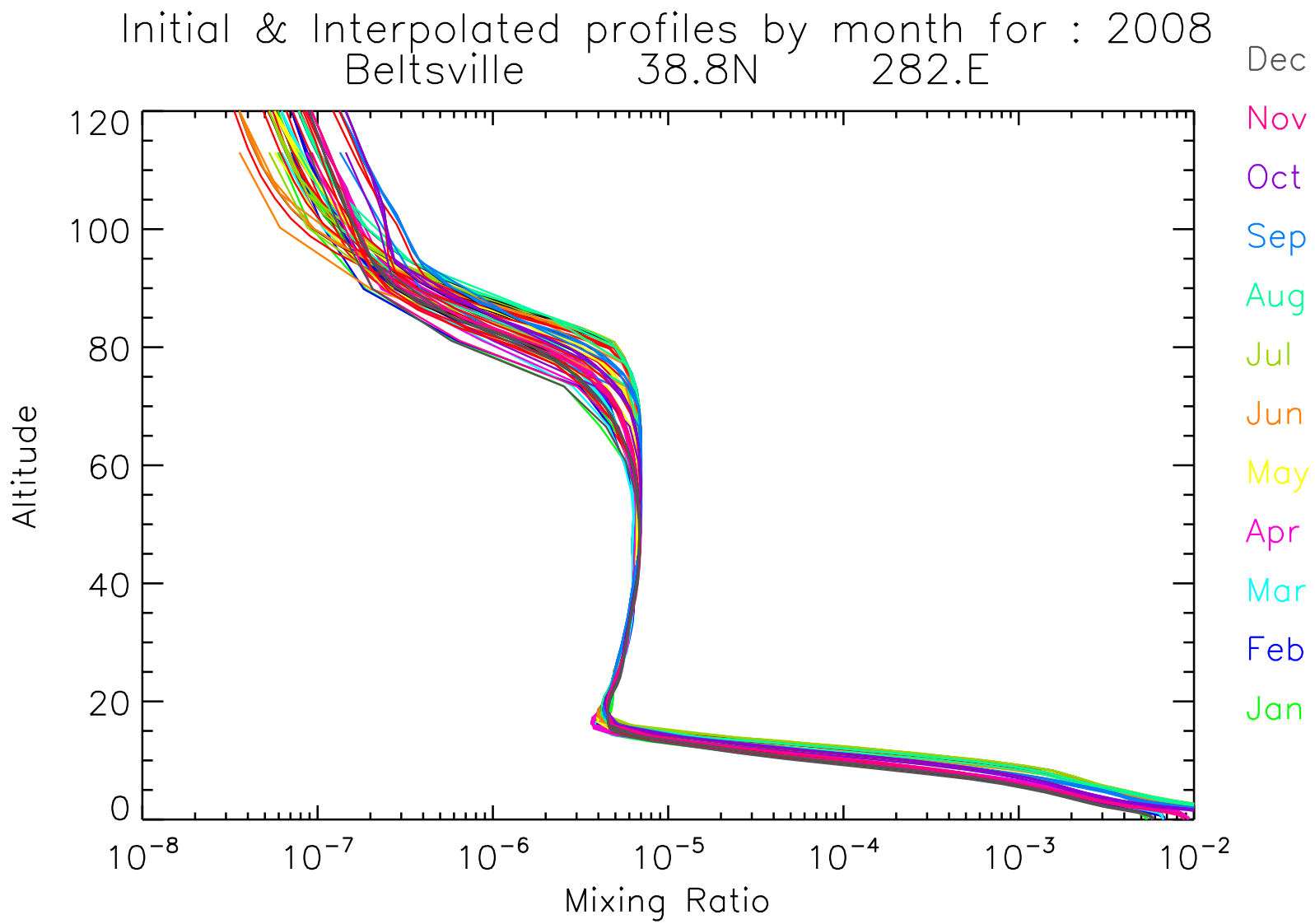
Initial & Interpolated profiles by month for : 2008
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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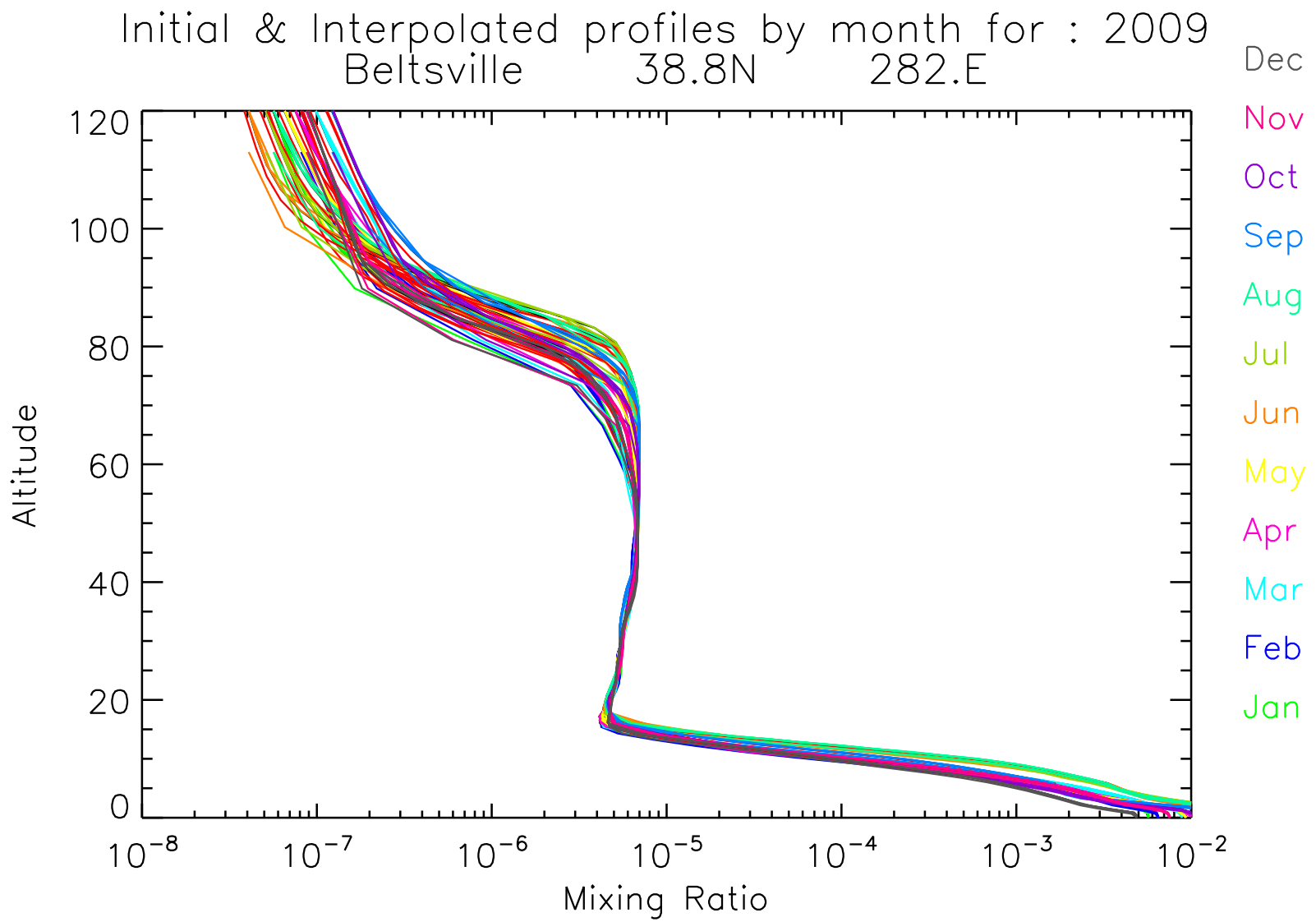
Initial & Interpolated profiles by month for : 2009
Beltsville 38.8N 282.E
Altitude
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Mixing Ratio
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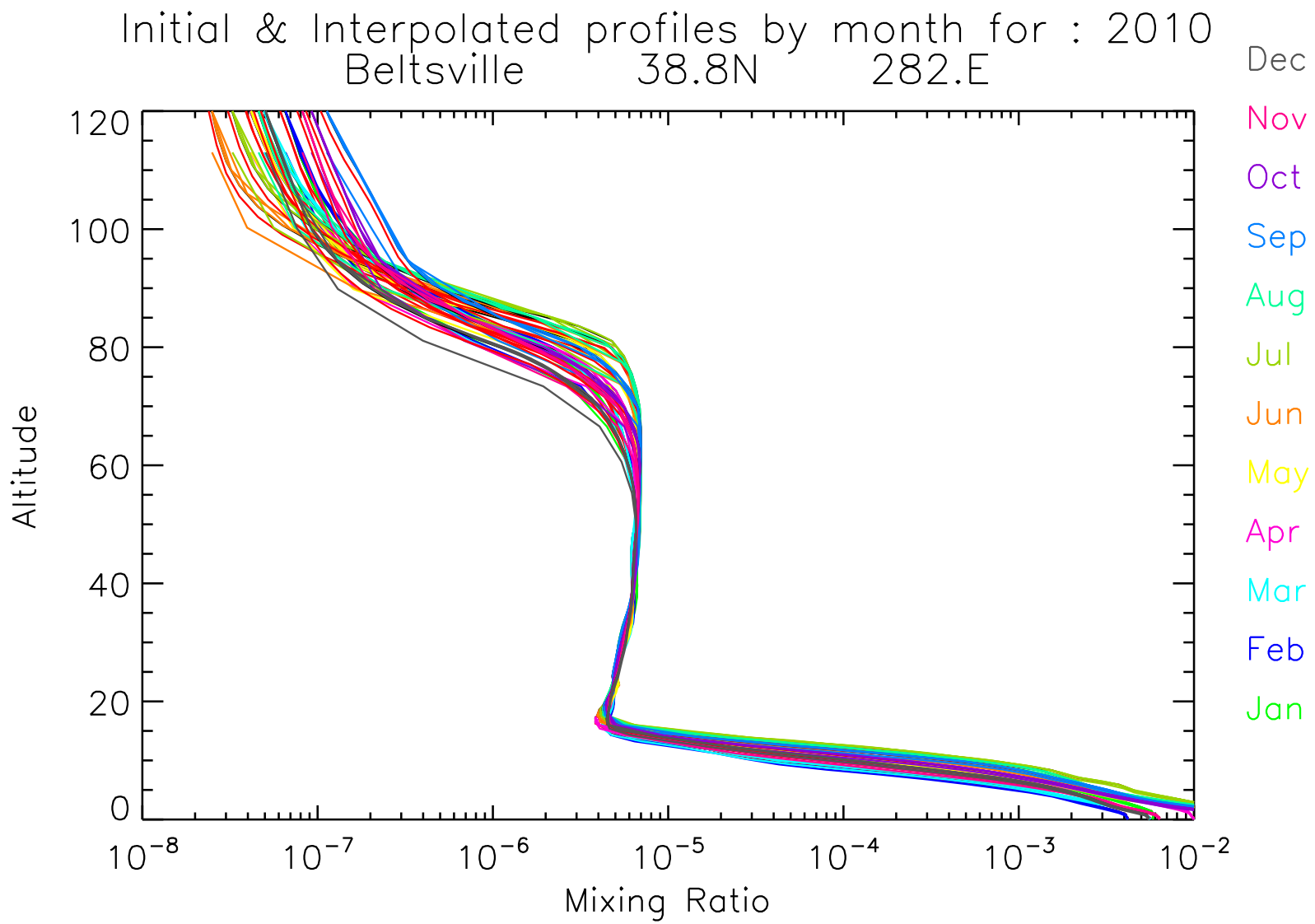
Initial & Interpolated profiles by month for : 2010
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Altitude
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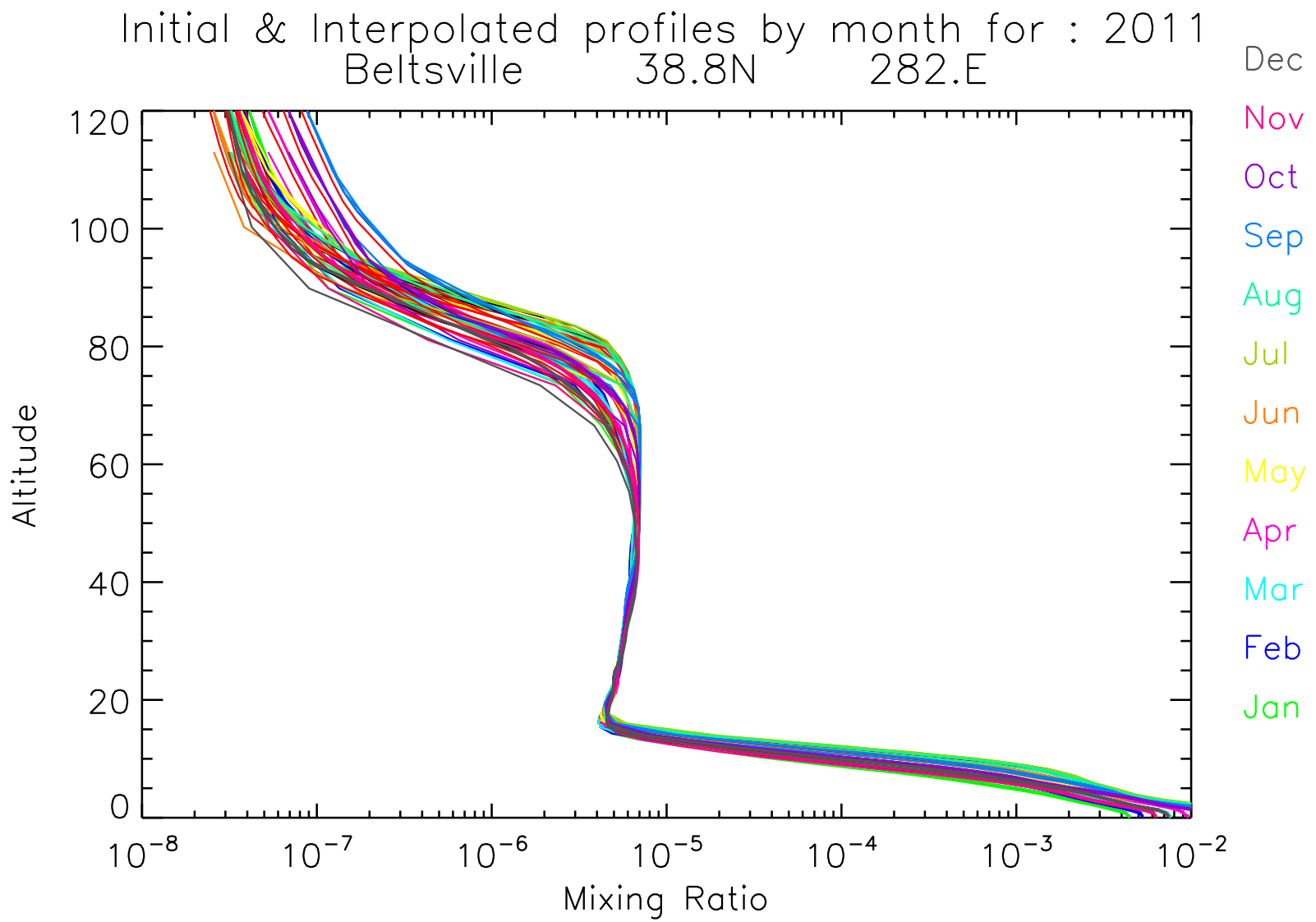
10^{-2}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan


Initial & Interpolated profiles by month for : 2011
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
10^{-3}
10^{-2}
Mixing Ratio
Dec
Nov
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Apr
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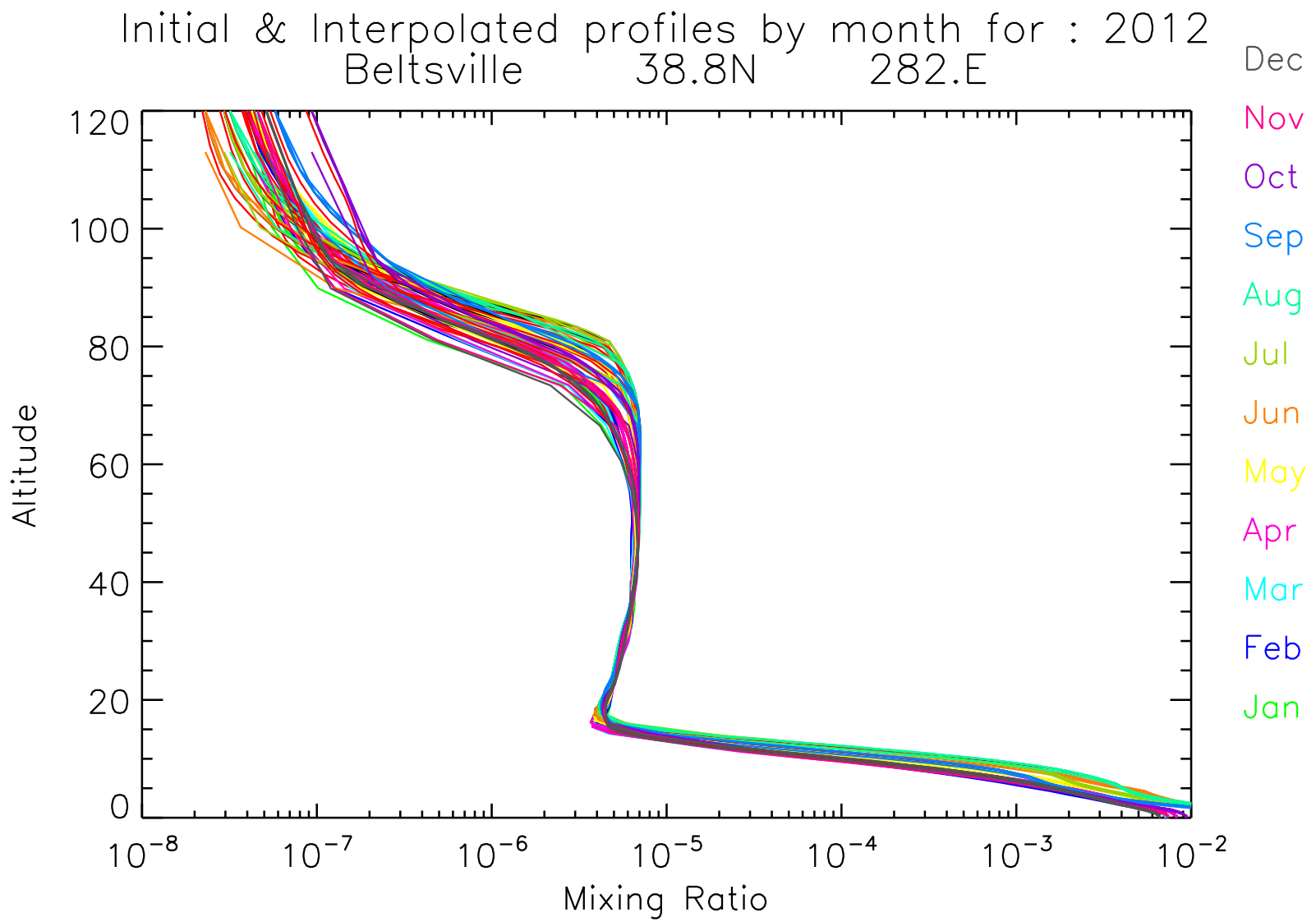
Feb
Jan


Initial & Interpolated profiles by month for : 2012
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
10^{-3}
10^{-2}
Mixing Ratio
Dec
Nov
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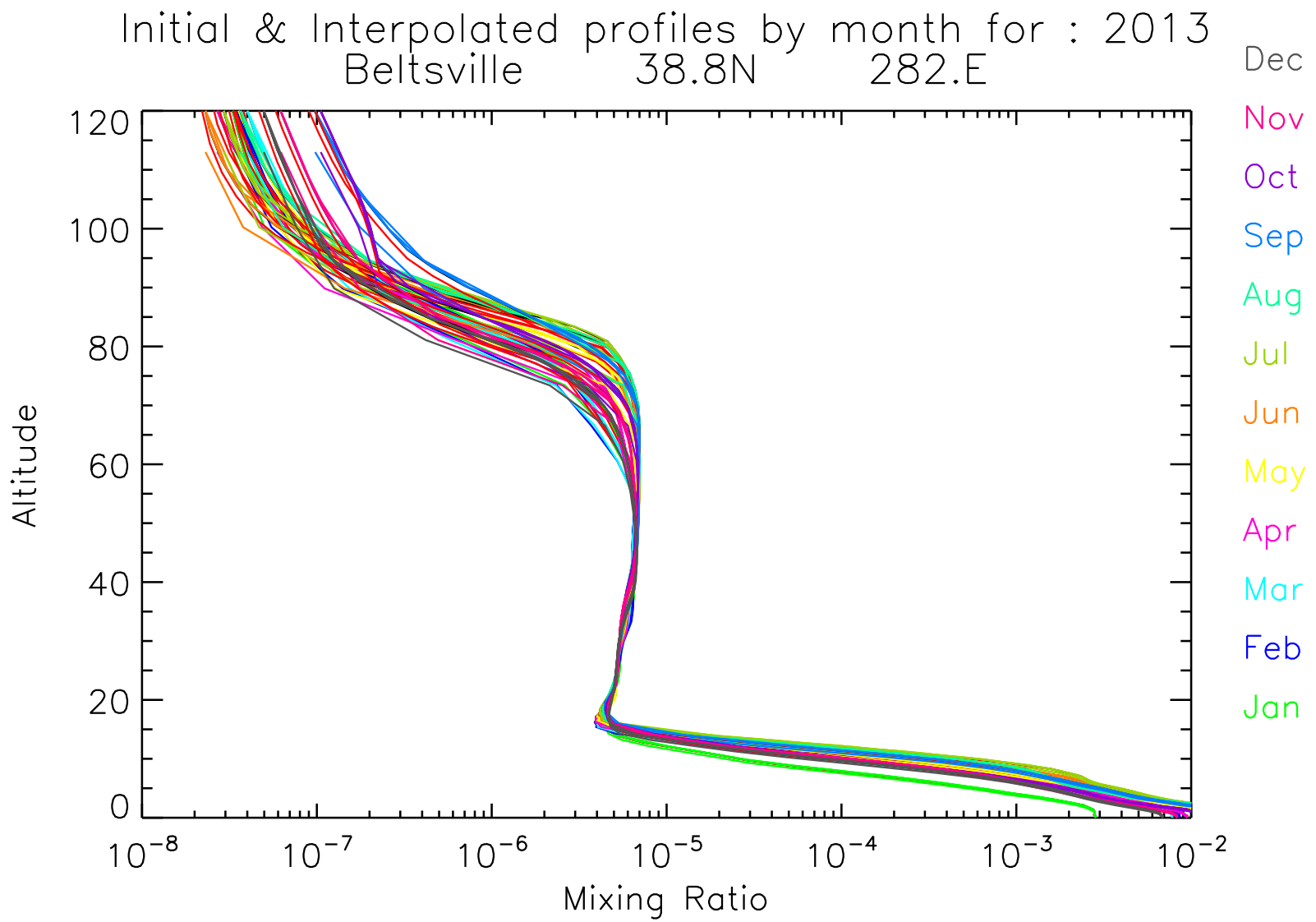
Feb
Jan


Initial & Interpolated profiles by month for : 2013
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
10^{-3}
10^{-2}
Mixing Ratio
Dec
Nov
Oct
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Jul
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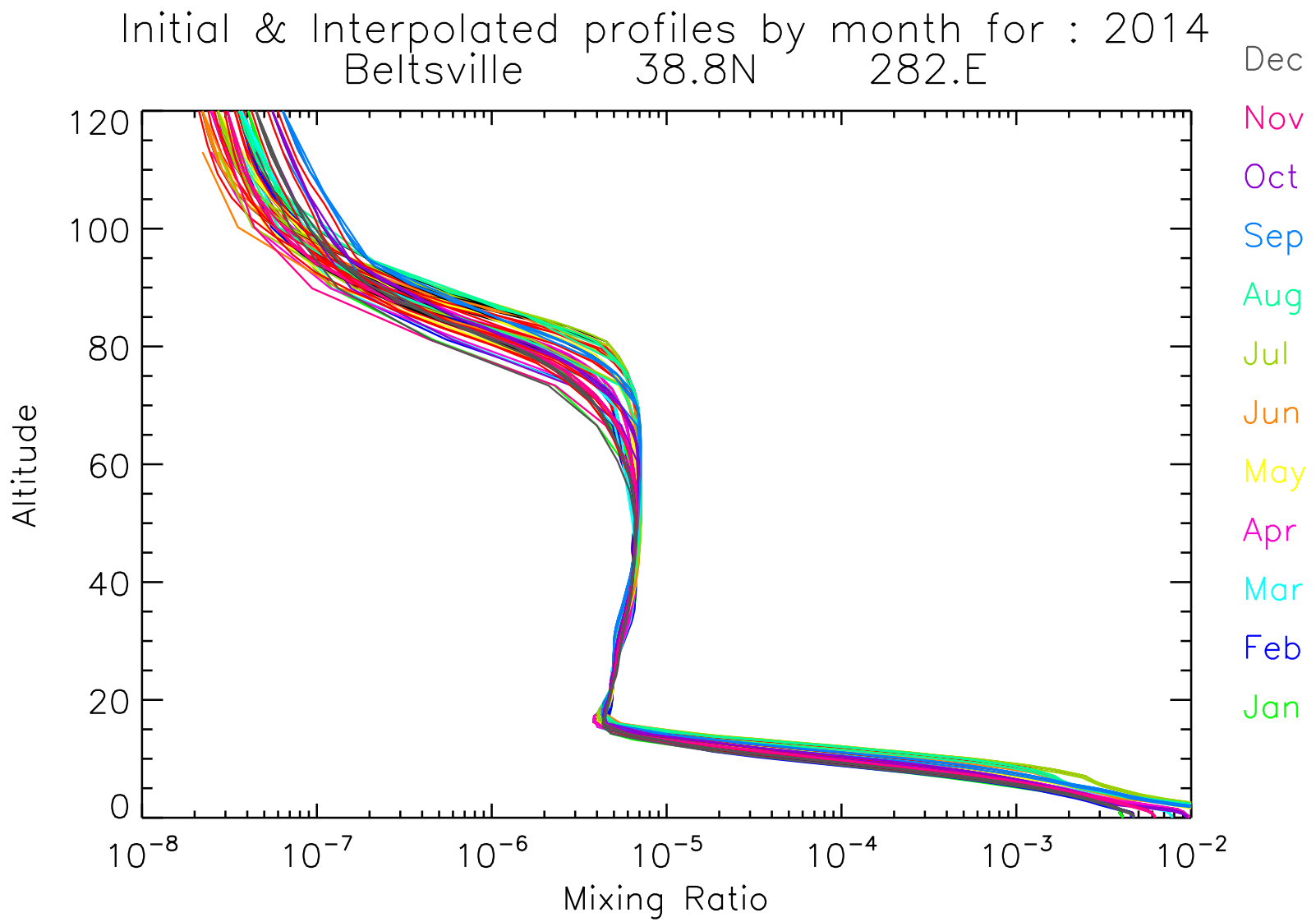
Feb
Jan


Initial & Interpolated profiles by month for : 2014
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
10^{-3}
10^{-2}
Mixing Ratio
Dec
Nov
Oct
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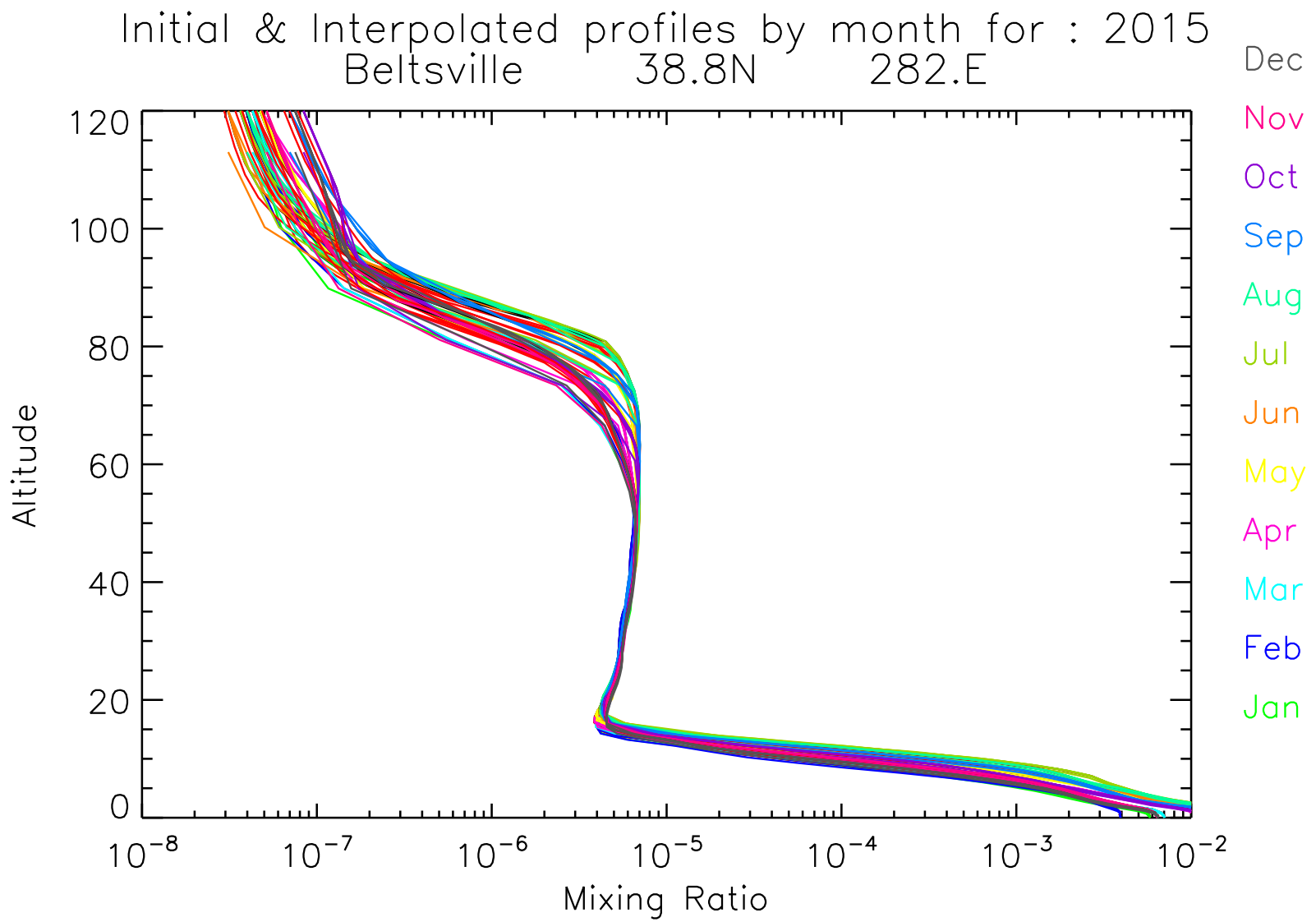
Mar
Feb
Jan


Initial & Interpolated profiles by month for : 2015
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
10^{-3}
10^{-2}
Mixing Ratio
Dec
Nov
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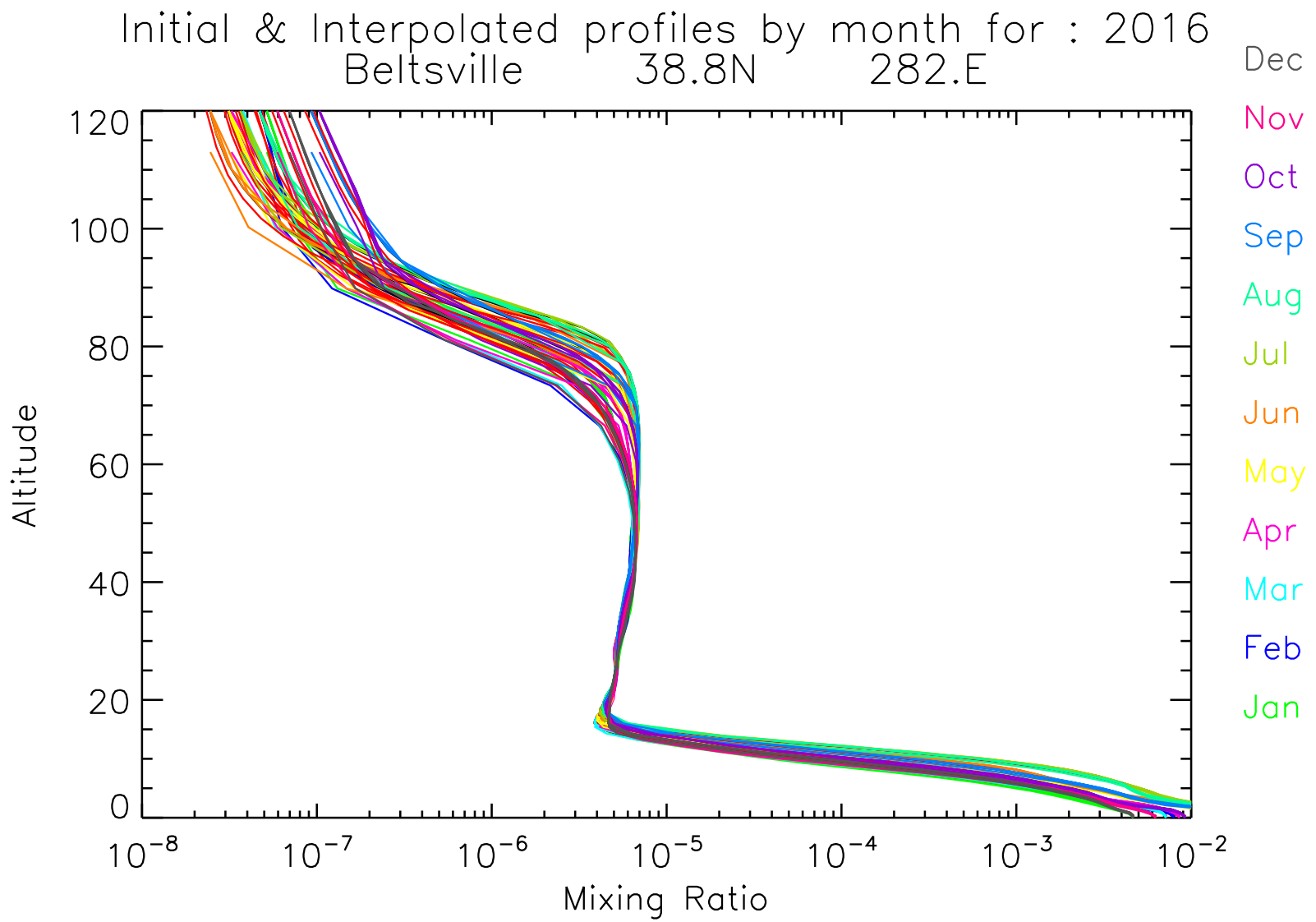
Feb
Jan


Initial & Interpolated profiles by month for : 2016
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
10^{-3}
10^{-2}
Mixing Ratio
Dec
Nov
Oct
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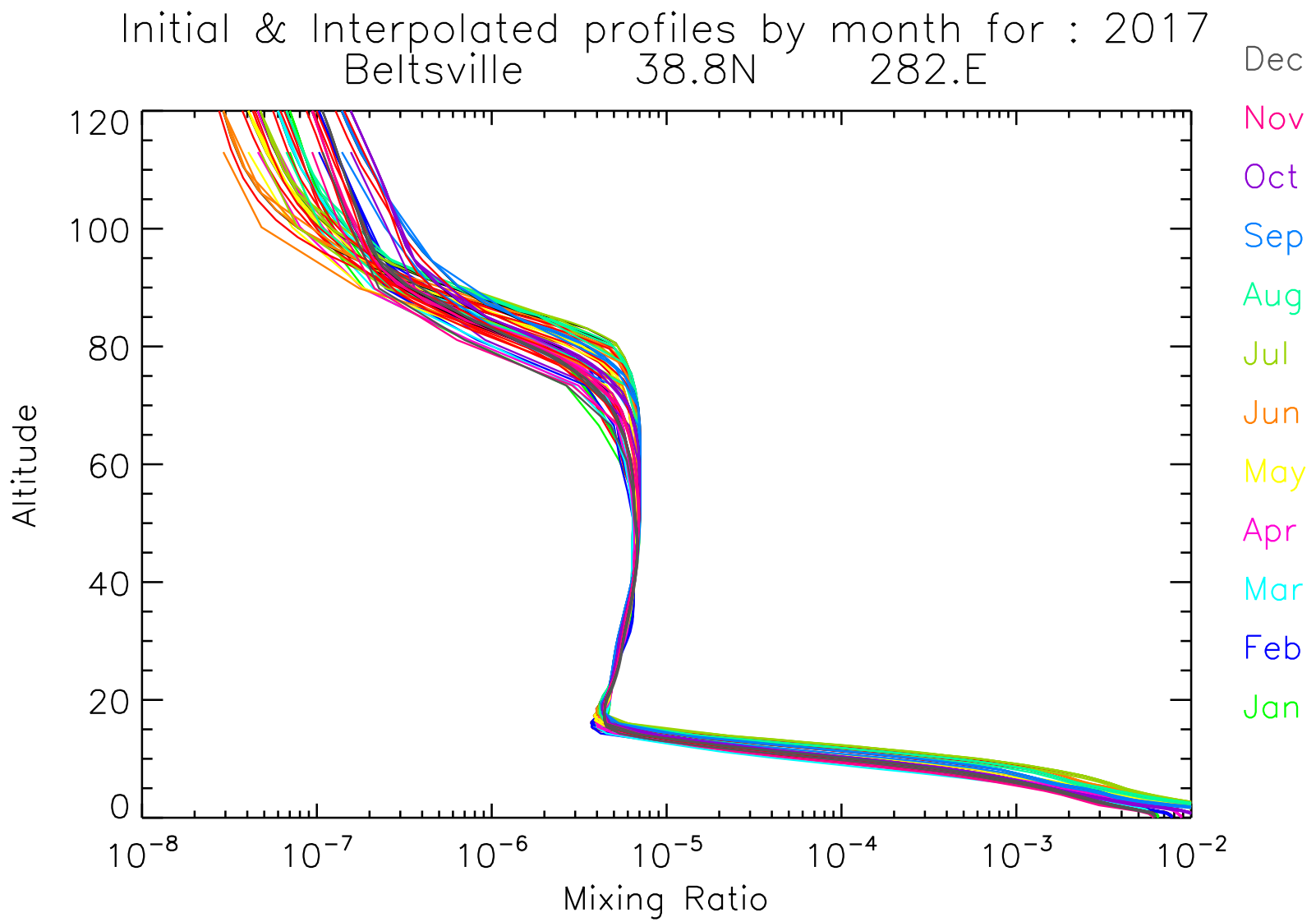
Feb
Jan


Initial & Interpolated profiles by month for : 2017
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
10^{-3}
10^{-2}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
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Apr
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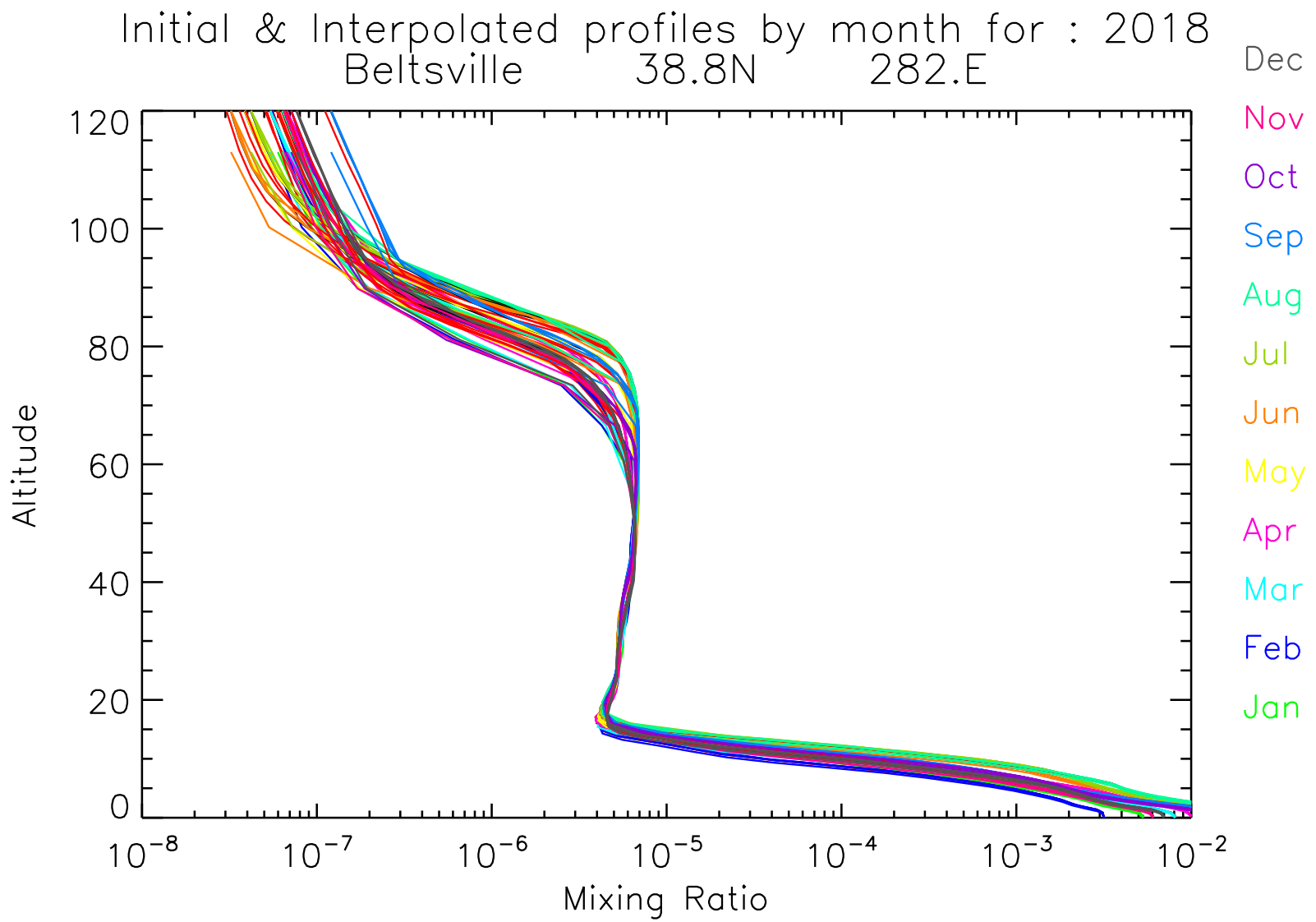
Feb
Jan


Initial & Interpolated profiles by month for : 2018
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
10^{-3}
10^{-2}
Mixing Ratio
Dec
Nov
Oct
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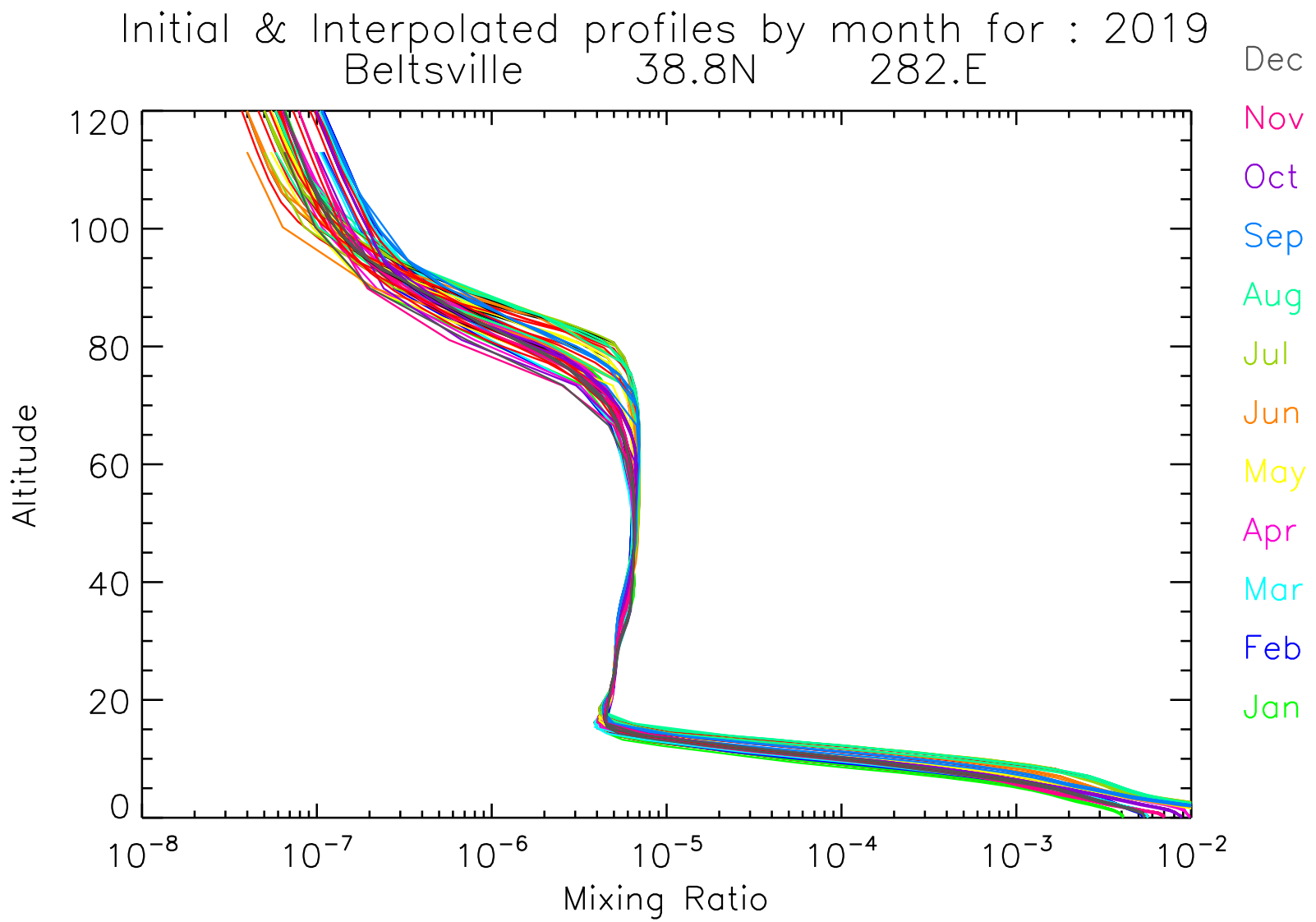
Jan


Initial & Interpolated profiles by month for : 2019
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
10^{-3}
10^{-2}
Mixing Ratio
Dec
Nov
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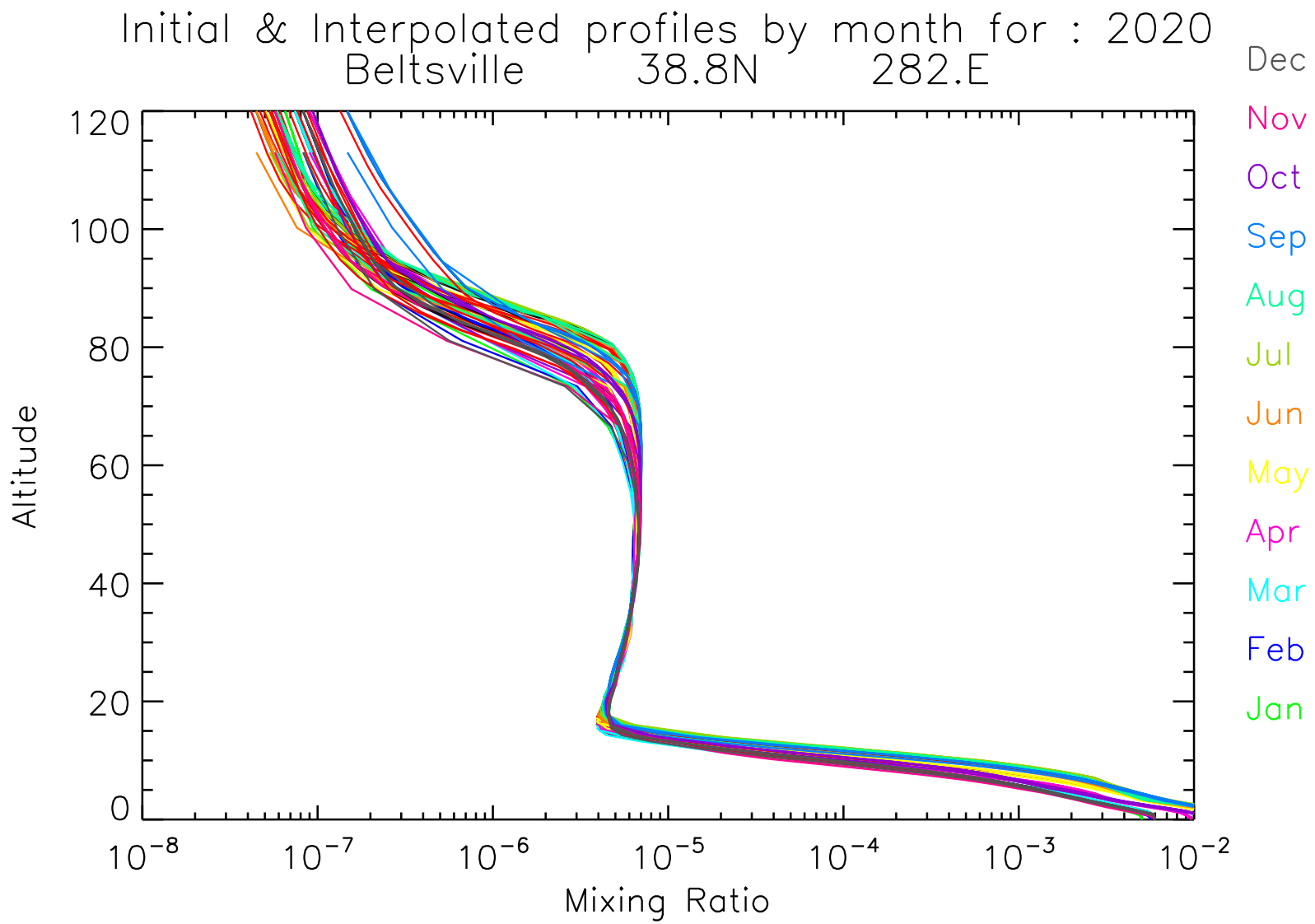
Initial & Interpolated profiles by month for : 2020
Beltsville 38.8N 282.E
Altitude
120
100
80
60
40
20
0
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
10^{-3}
10^{-2}
Mixing Ratio
Dec
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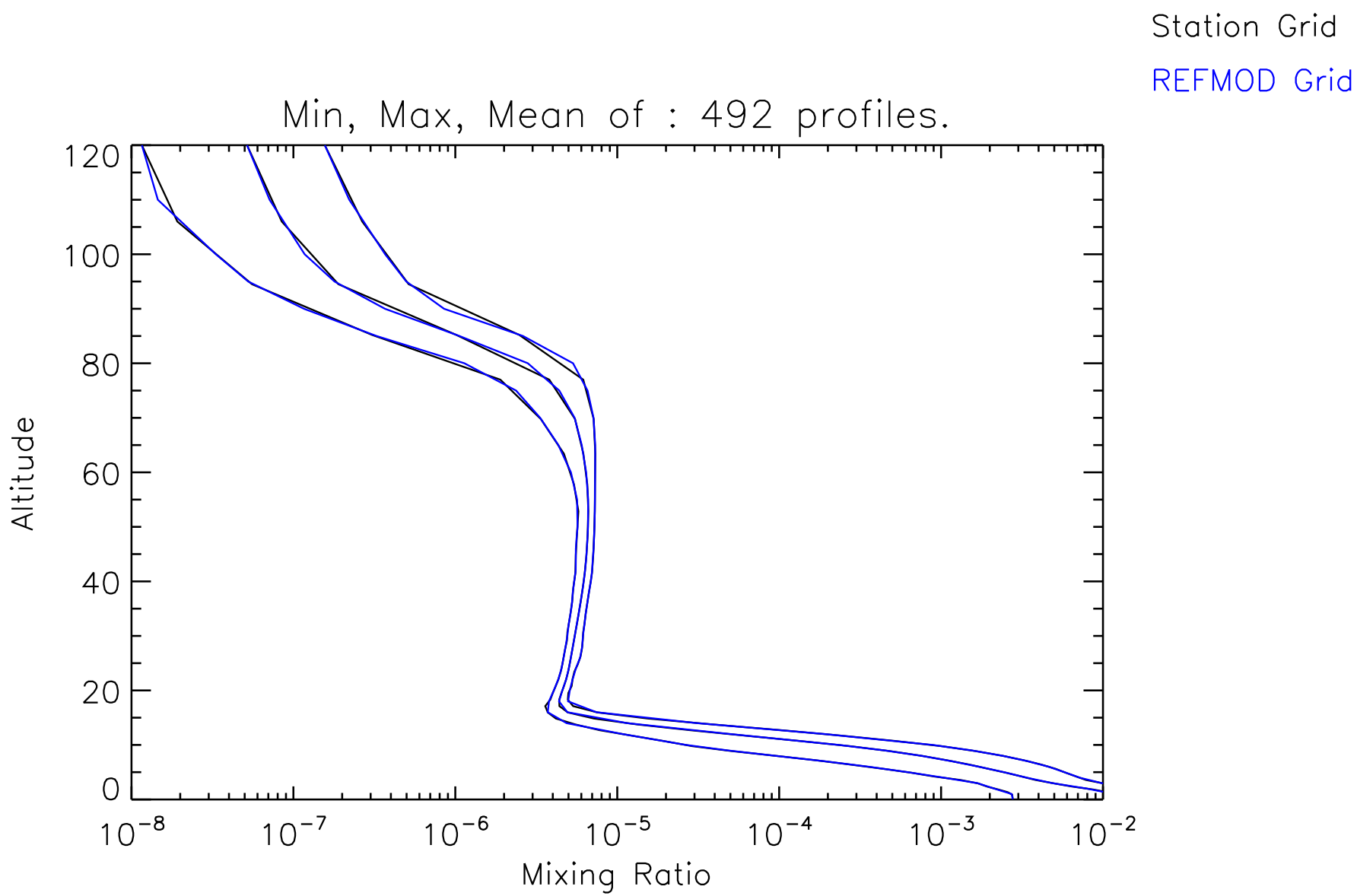
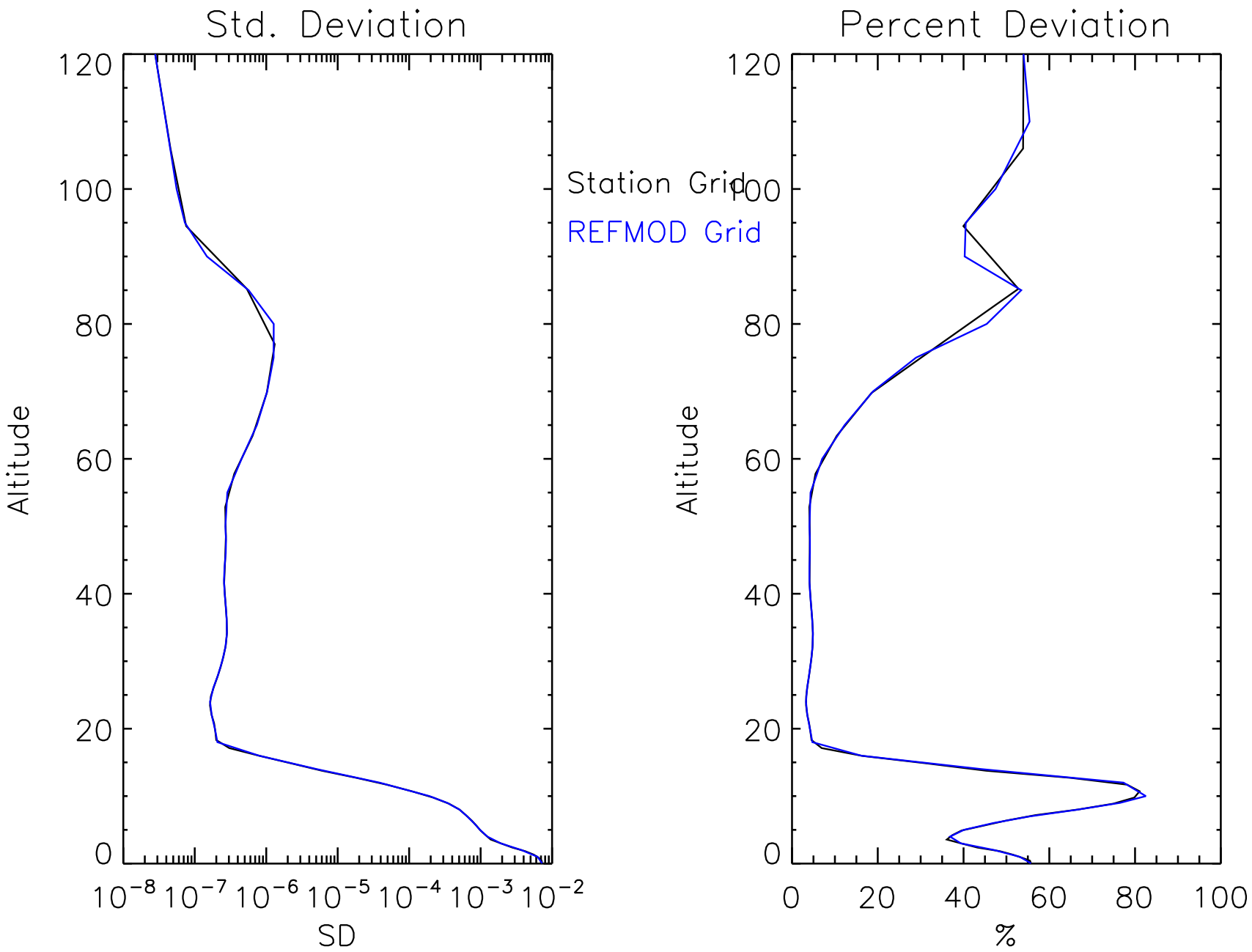
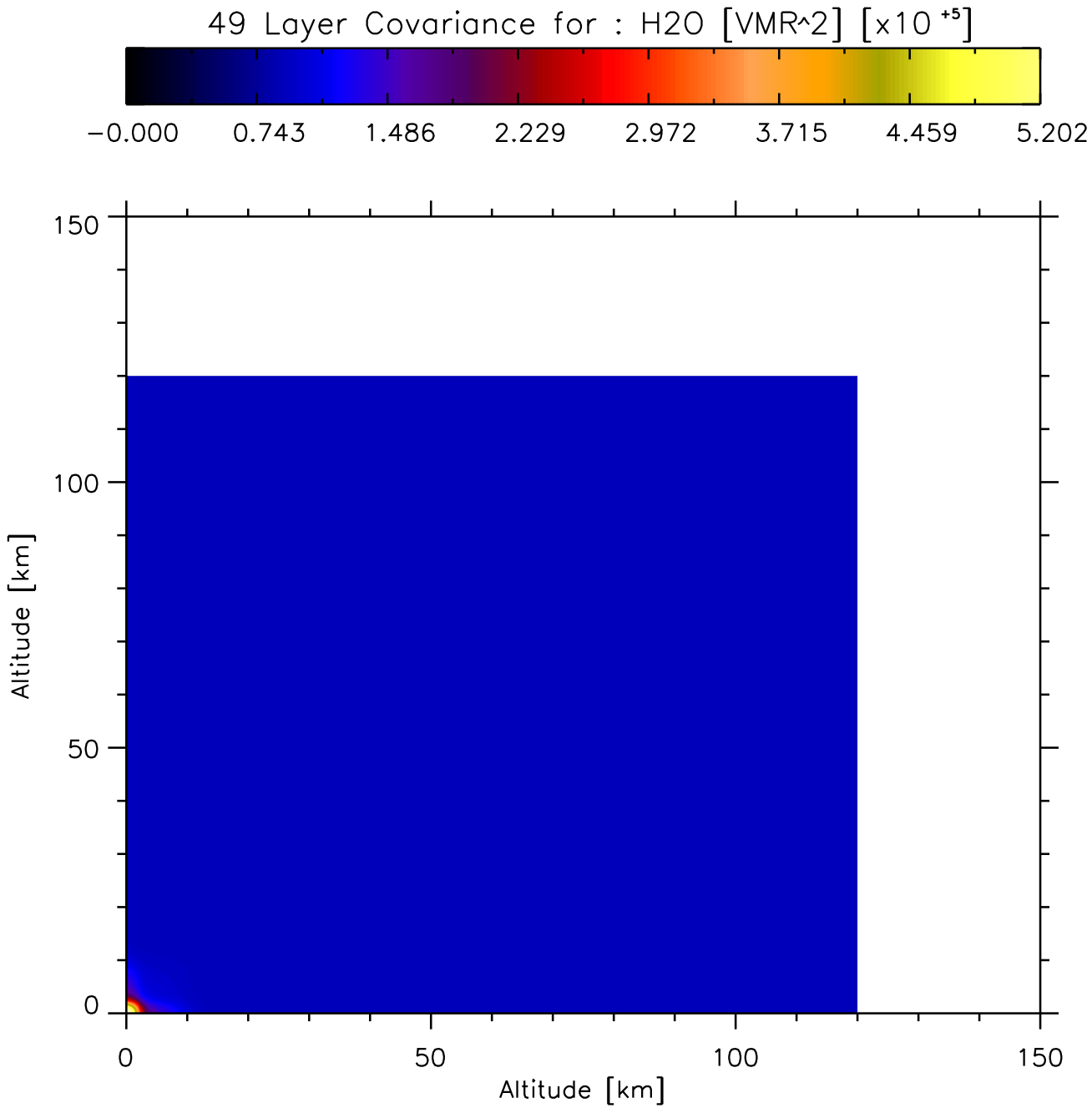
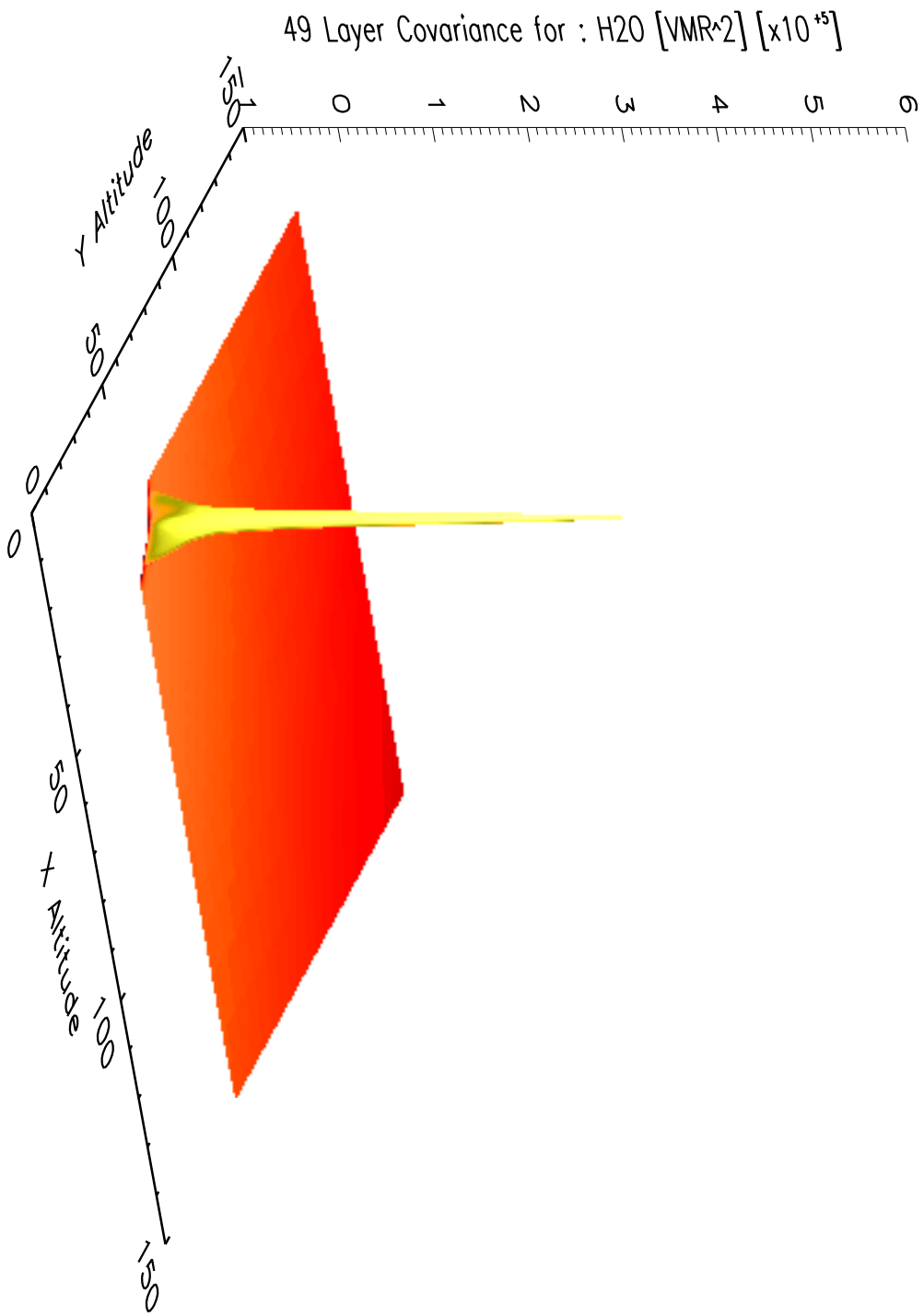
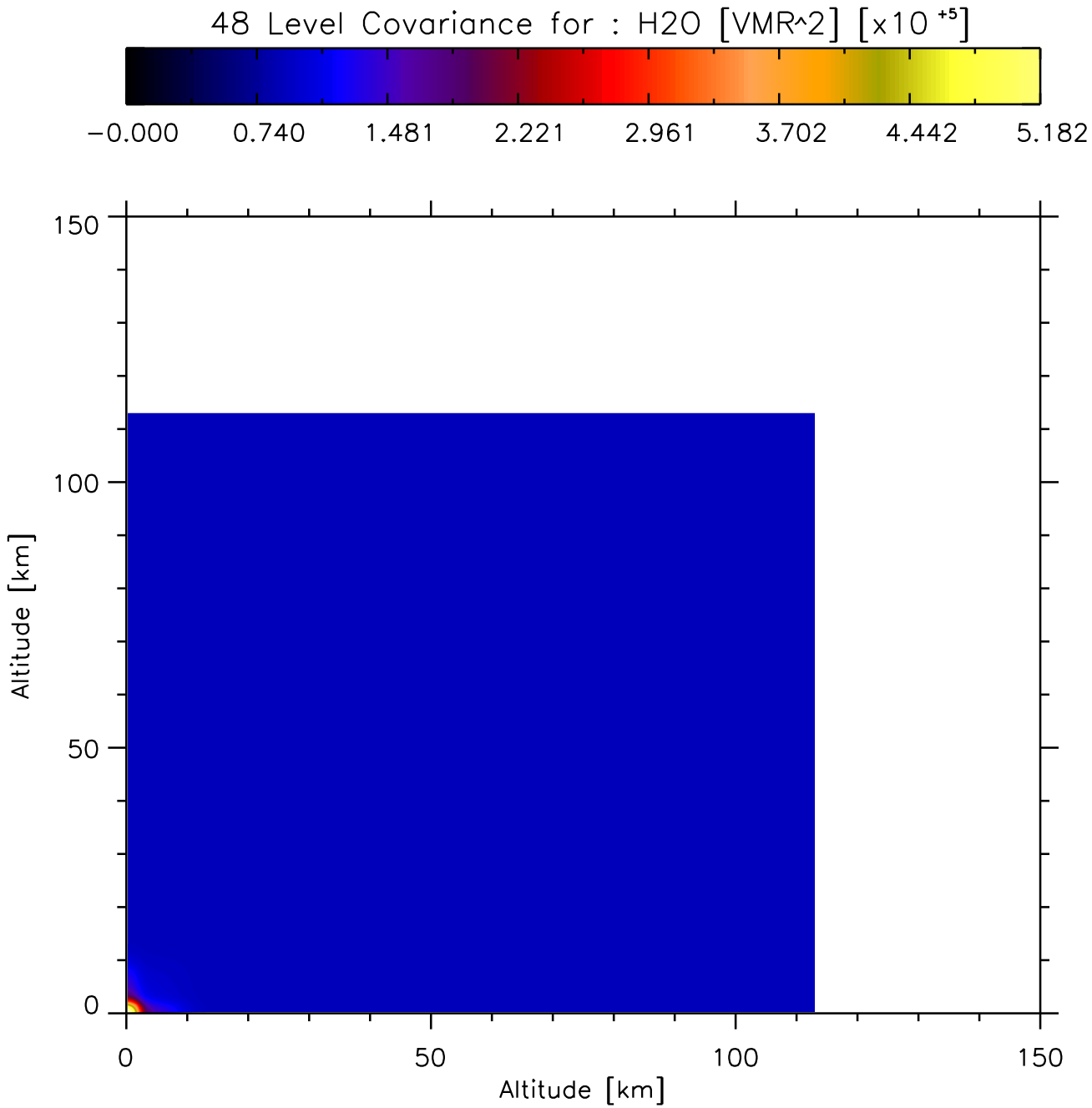
Jan

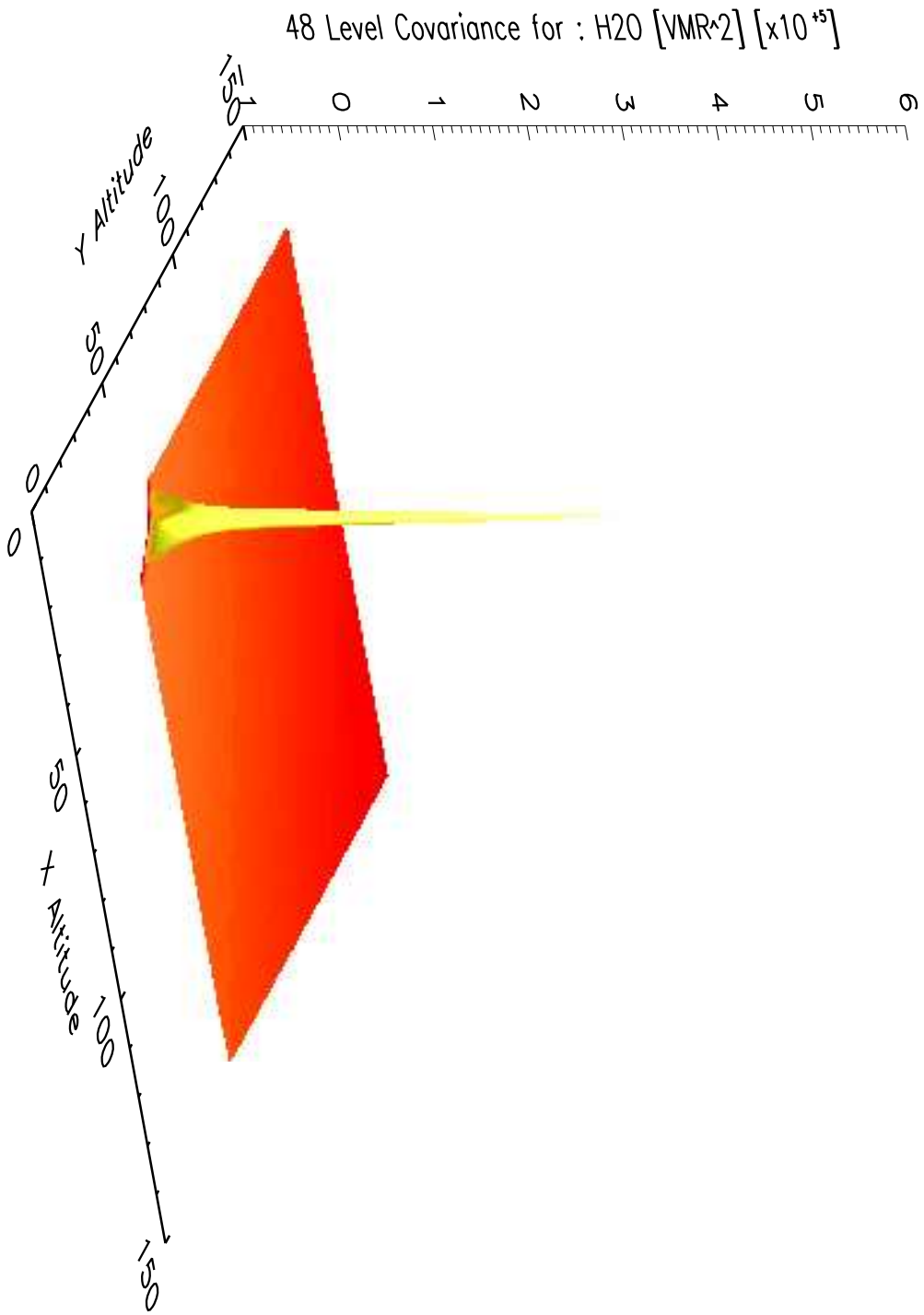

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
Altitude
120
100
80
60
40
20
0
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
10^{-3}
10^{-2}
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
10^{-8} 10^{-7} 10^{-6} 10^{-5} 10^{-4} 10^{-3} 10^{-2}
SD
0 20 40 60 80 100
%


49 Layer Covariance for : H2O [VMR^2] [x10 +5]
−0.000
0.743
1.486
2.229
2.972
3.715
4.459
5.202
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


49 Layer Covariance for : H2O [VMR^2] [x10^-5]
0
1
2
3
4
5
6
Y Altitude
0
50
100
150
0
50
100
150
X Altitude


48 Level Covariance for : H2O [VMR^2] [x10 +5]
−0.000
0.740
1.481
2.221
2.961
3.702
4.442
5.182
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


48 Level Covariance for : H20 [VMR^2] [x10^-5]
0
1
2
3
4
5
6
Y Altitude
150
100
50
0
0
50
100
150
X Altitude