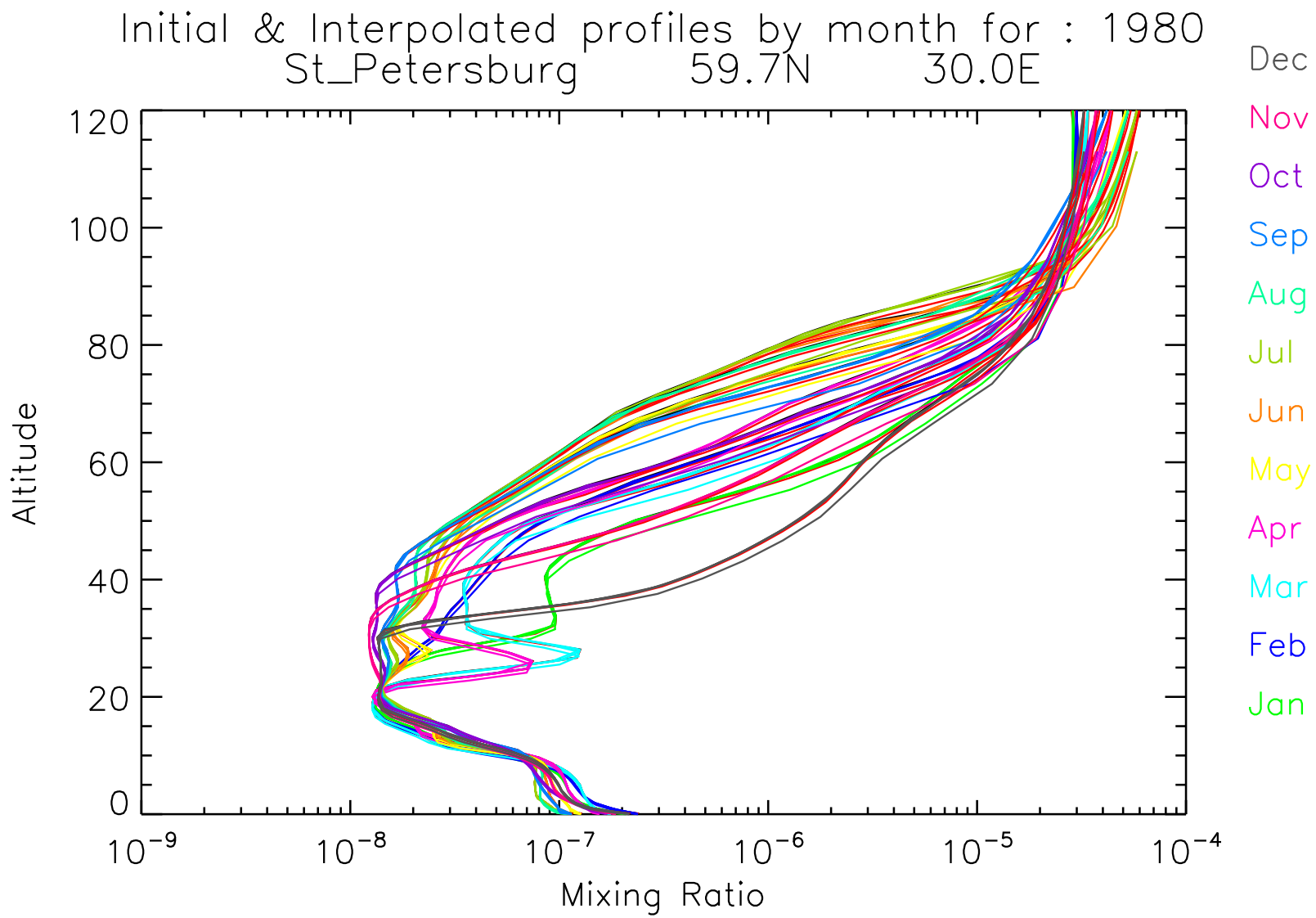
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Altitude
120
100
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Mixing Ratio
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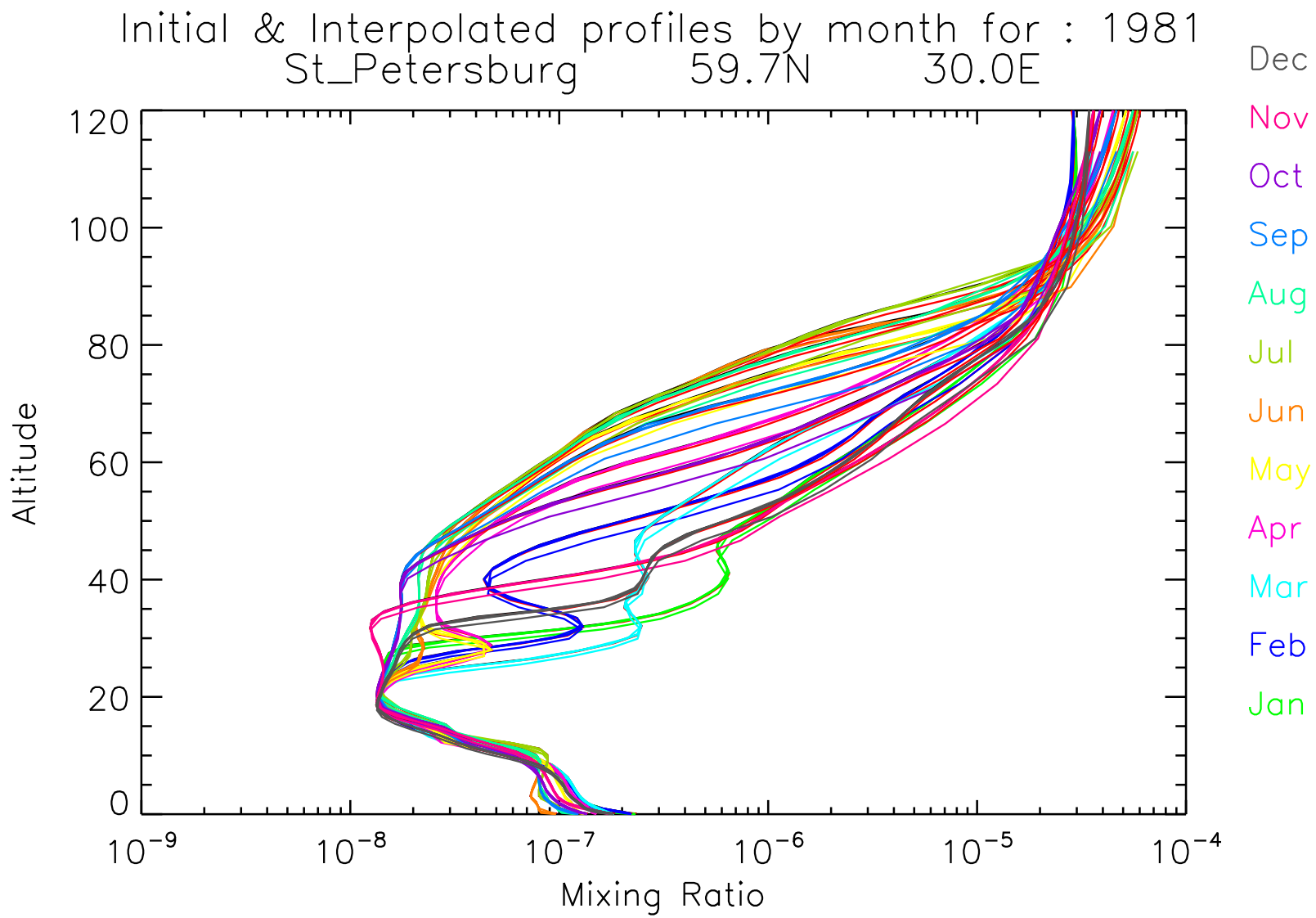
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Altitude
120
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Mixing Ratio
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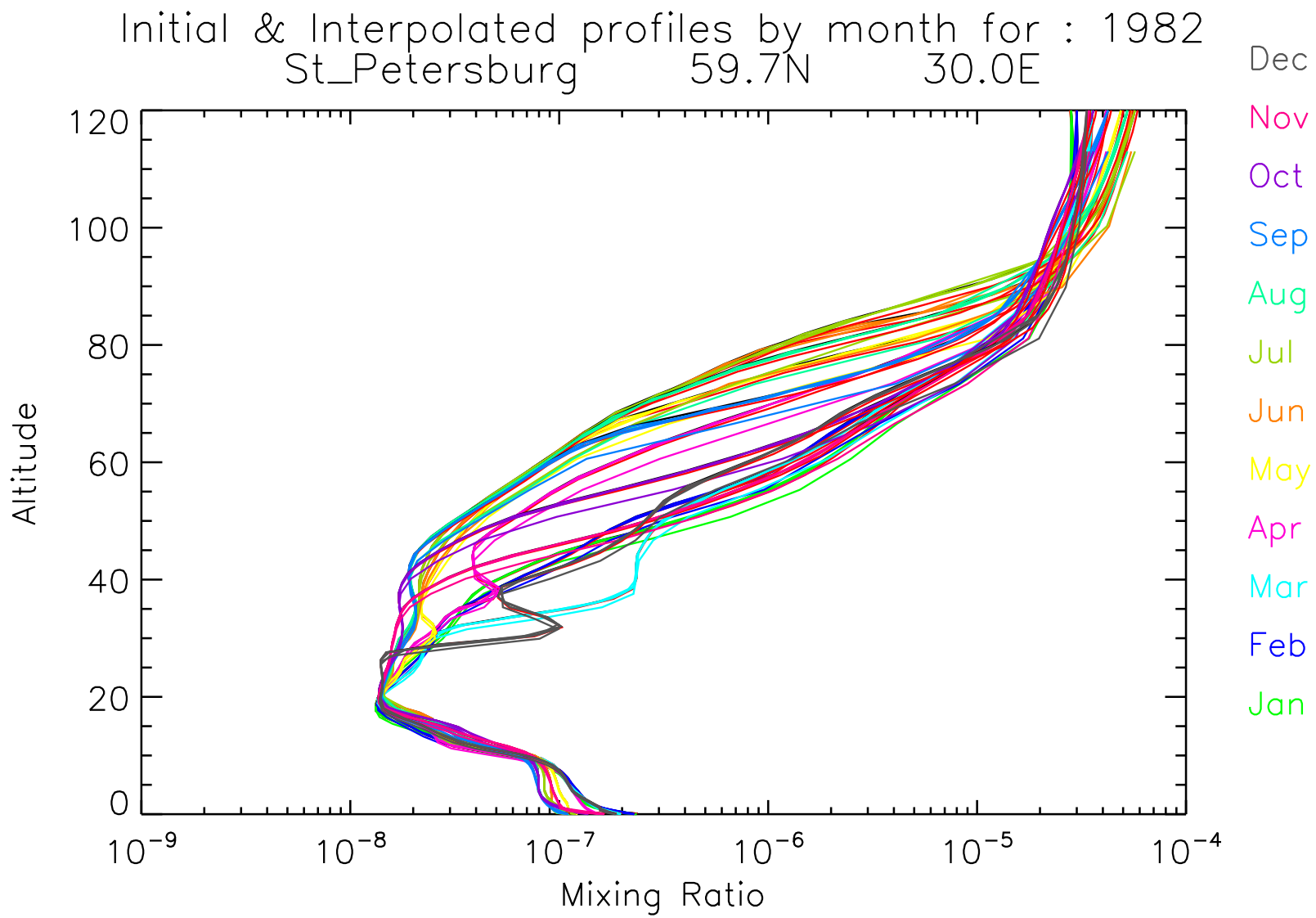
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Altitude
120
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Mixing Ratio
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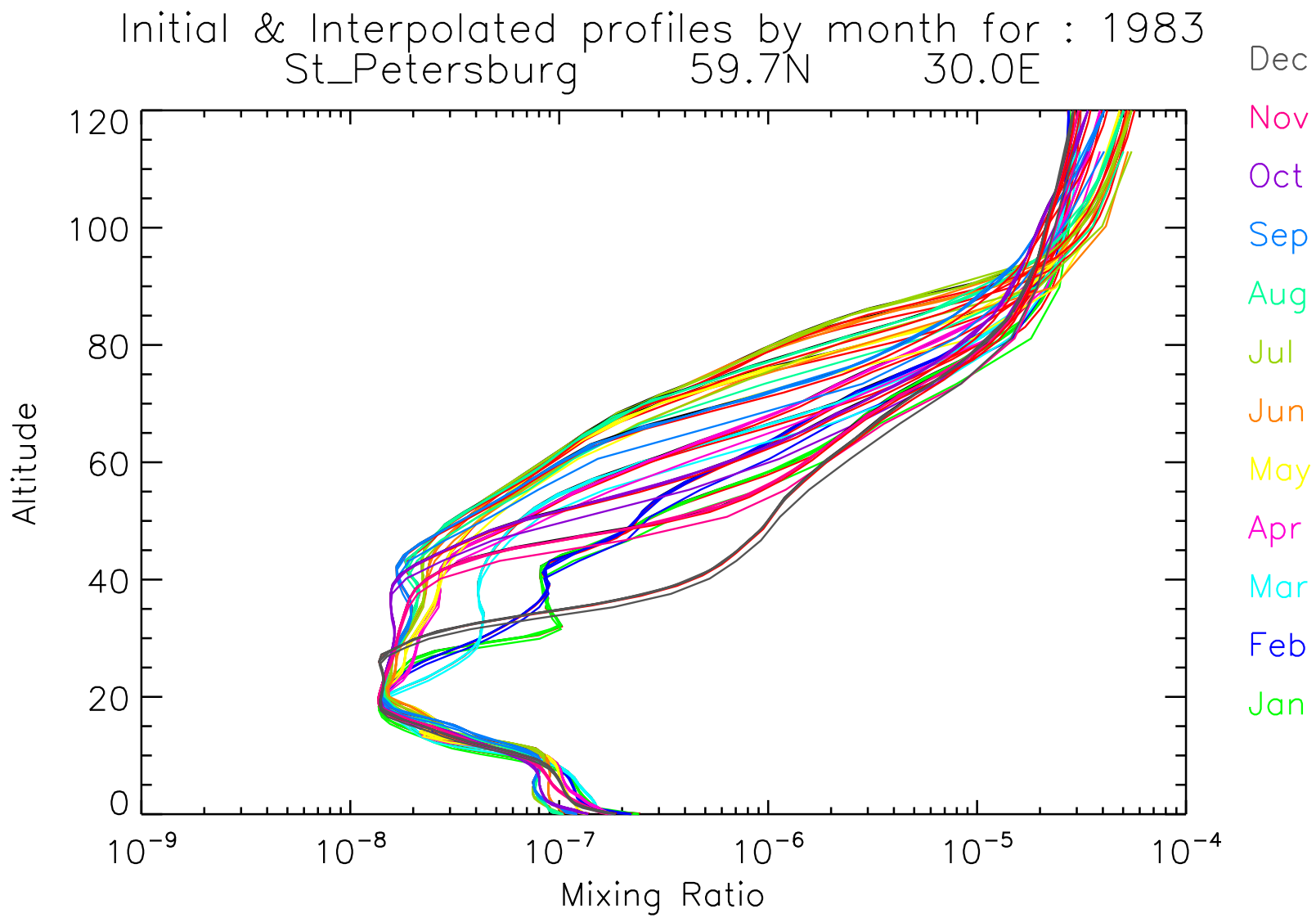
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St_Petersburg 59.7N 30.0E
Altitude
120
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Mixing Ratio
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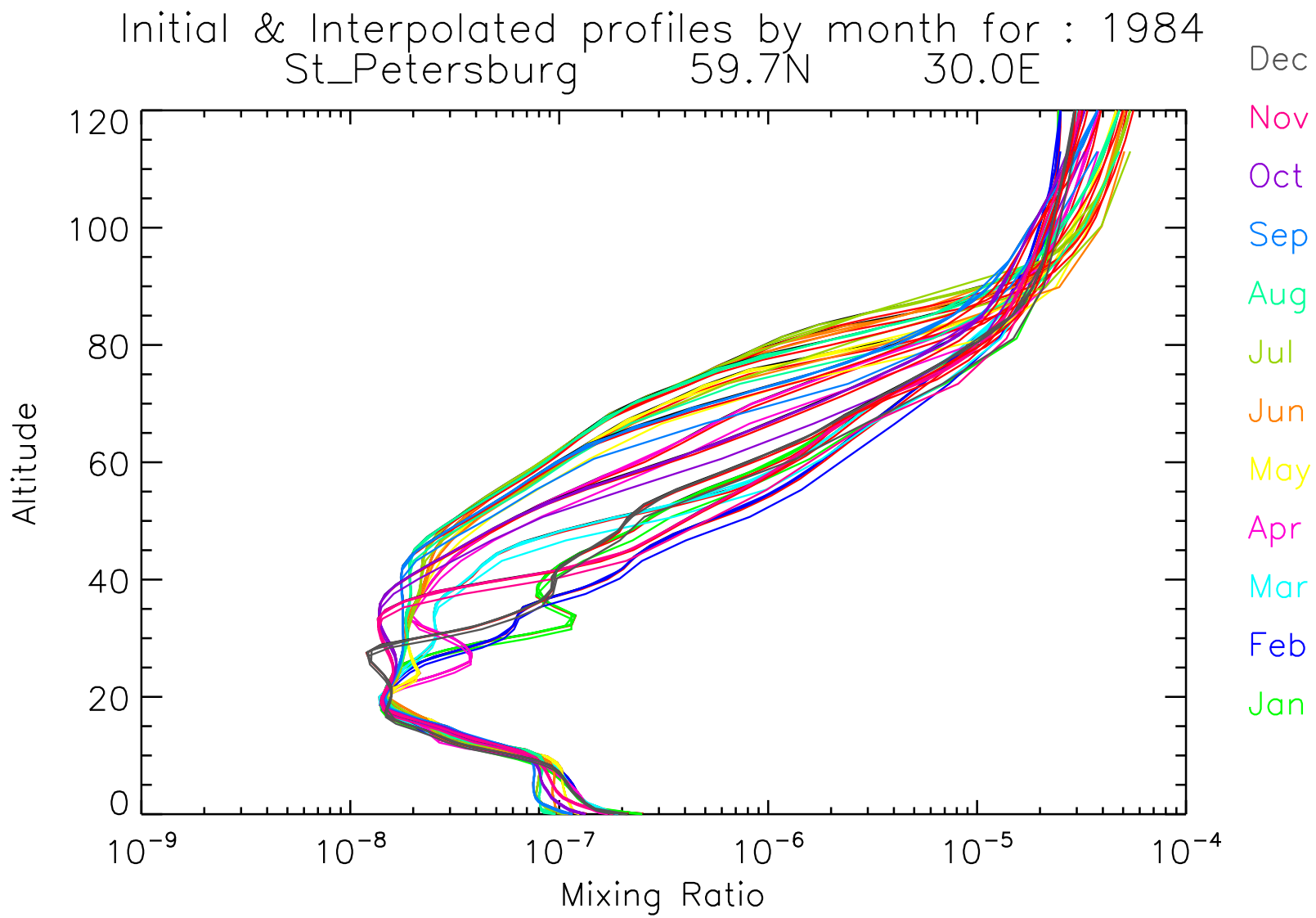
Initial & Interpolated profiles by month for : 1984
St_Petersburg 59.7N 30.0E
Altitude
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Mixing Ratio
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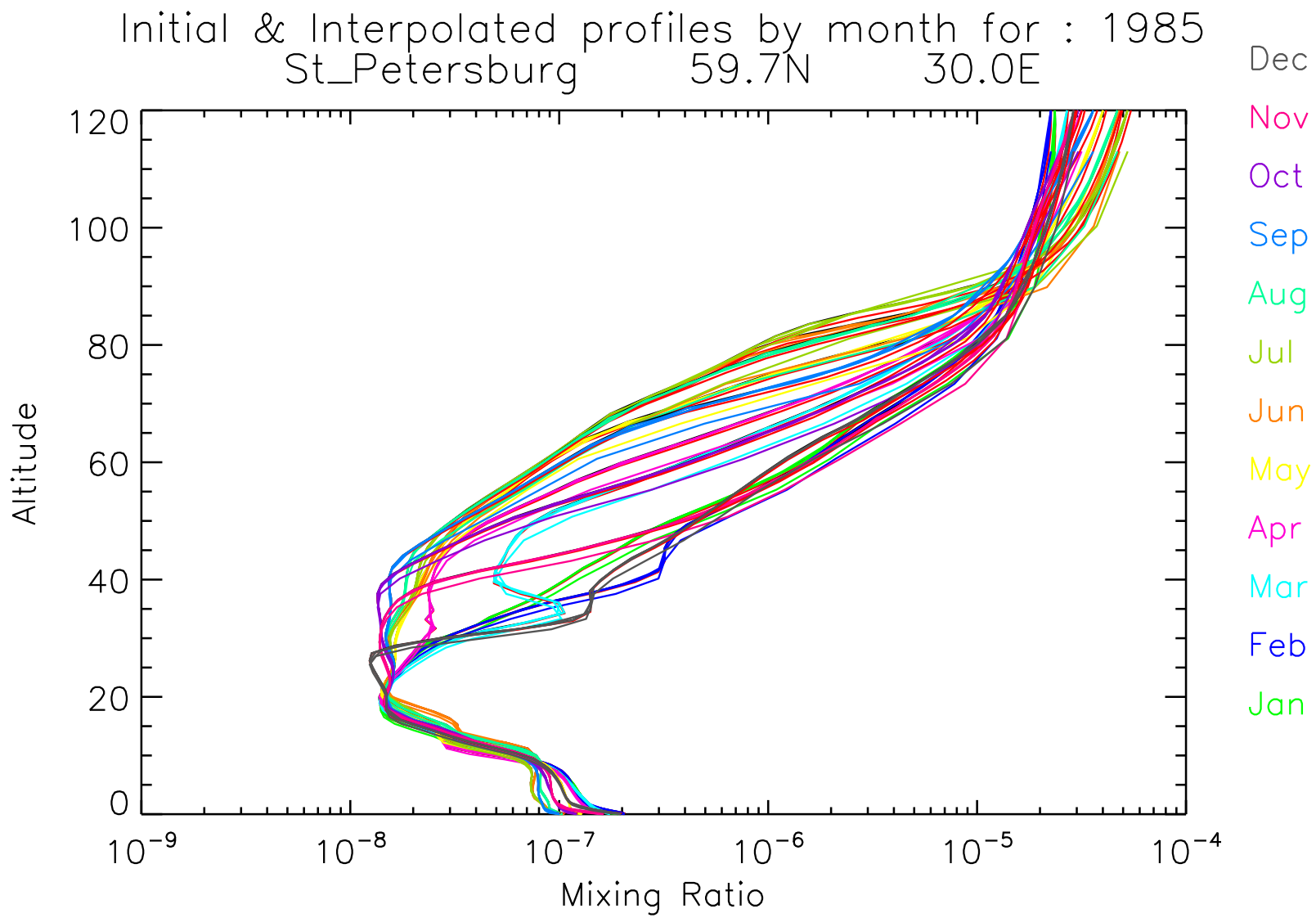
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St_Petersburg 59.7N 30.0E
Altitude
120
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Mixing Ratio
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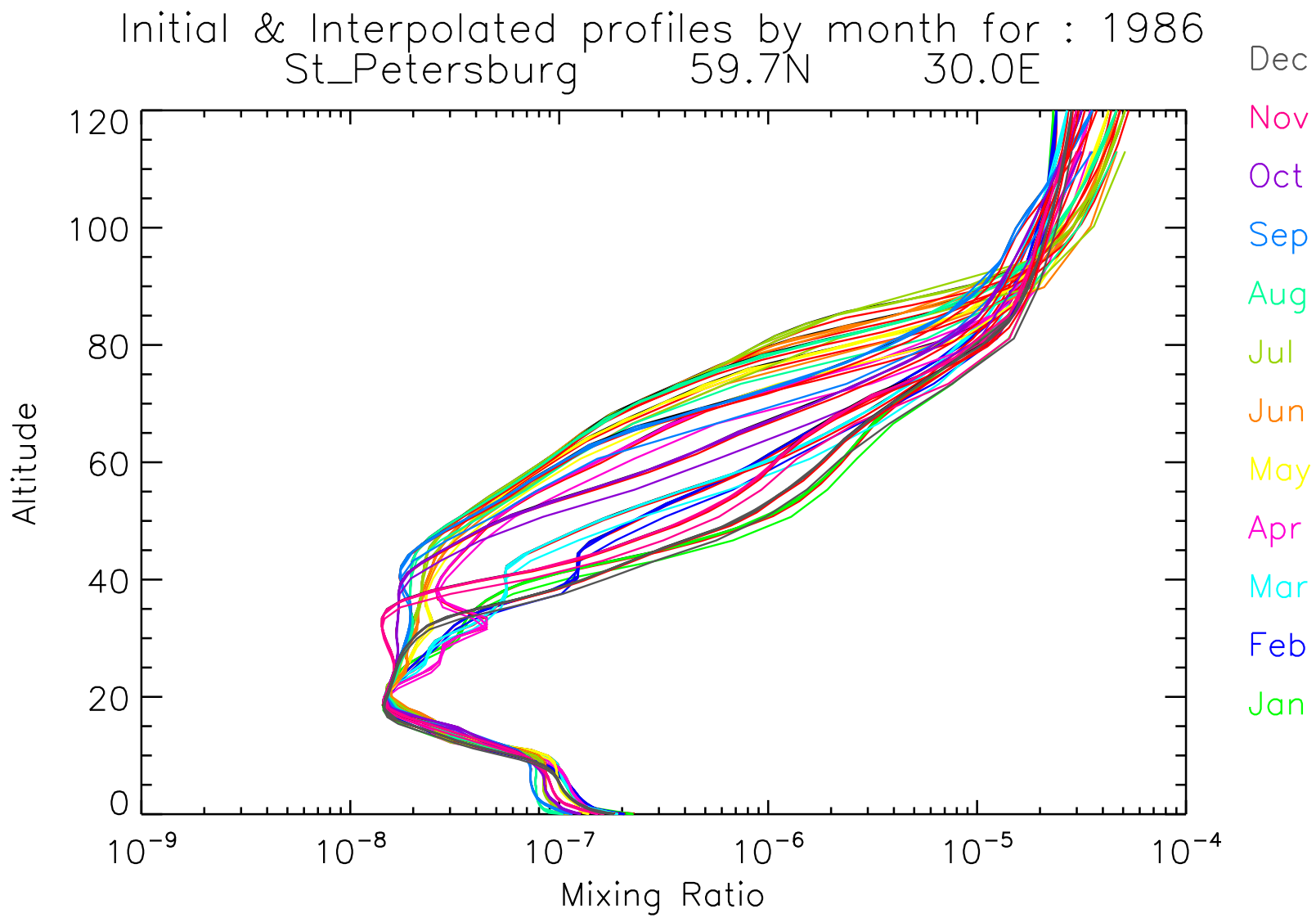
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Mixing Ratio
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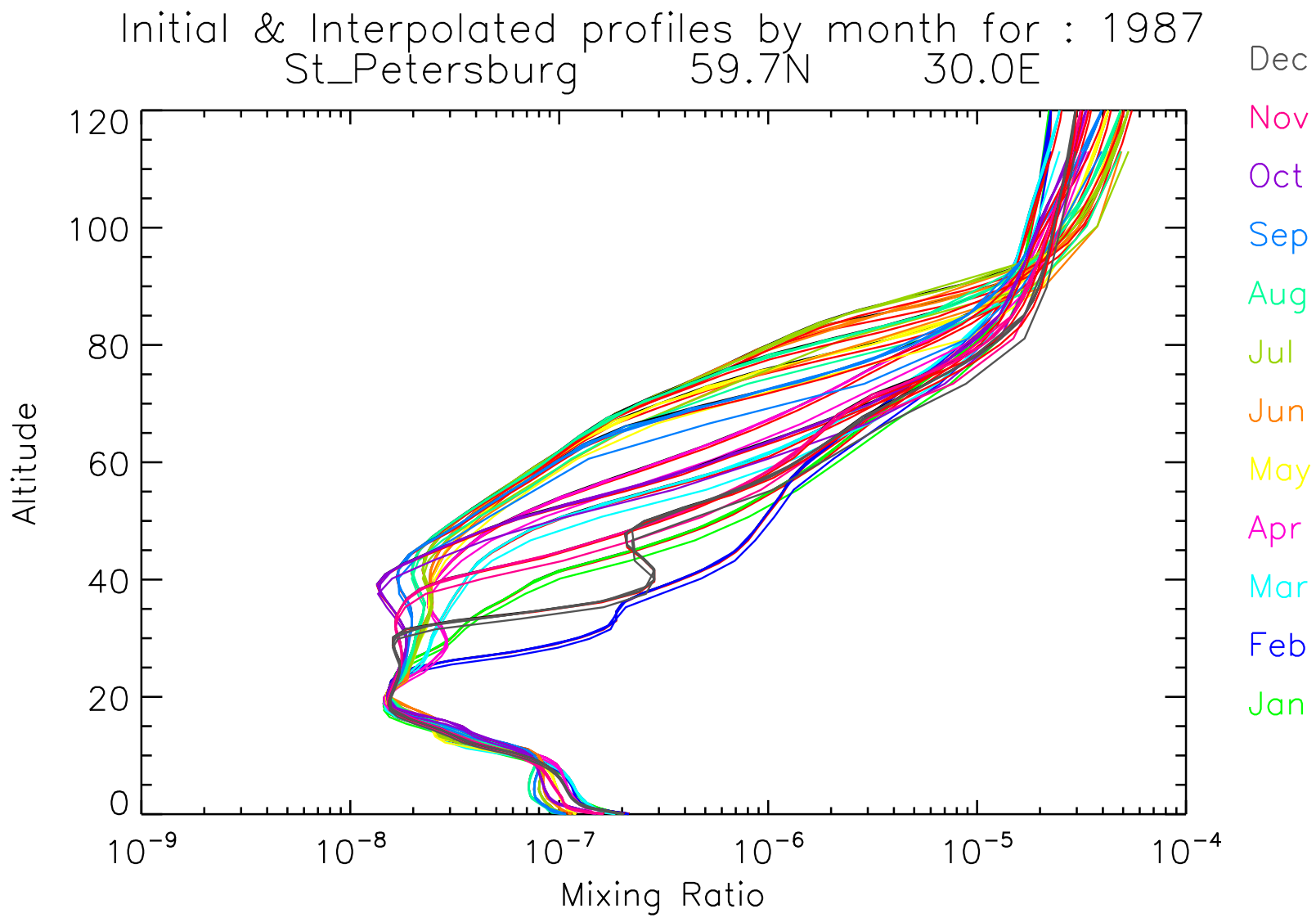
Initial & Interpolated profiles by month for : 1987
St_Petersburg 59.7N 30.0E
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Mixing Ratio
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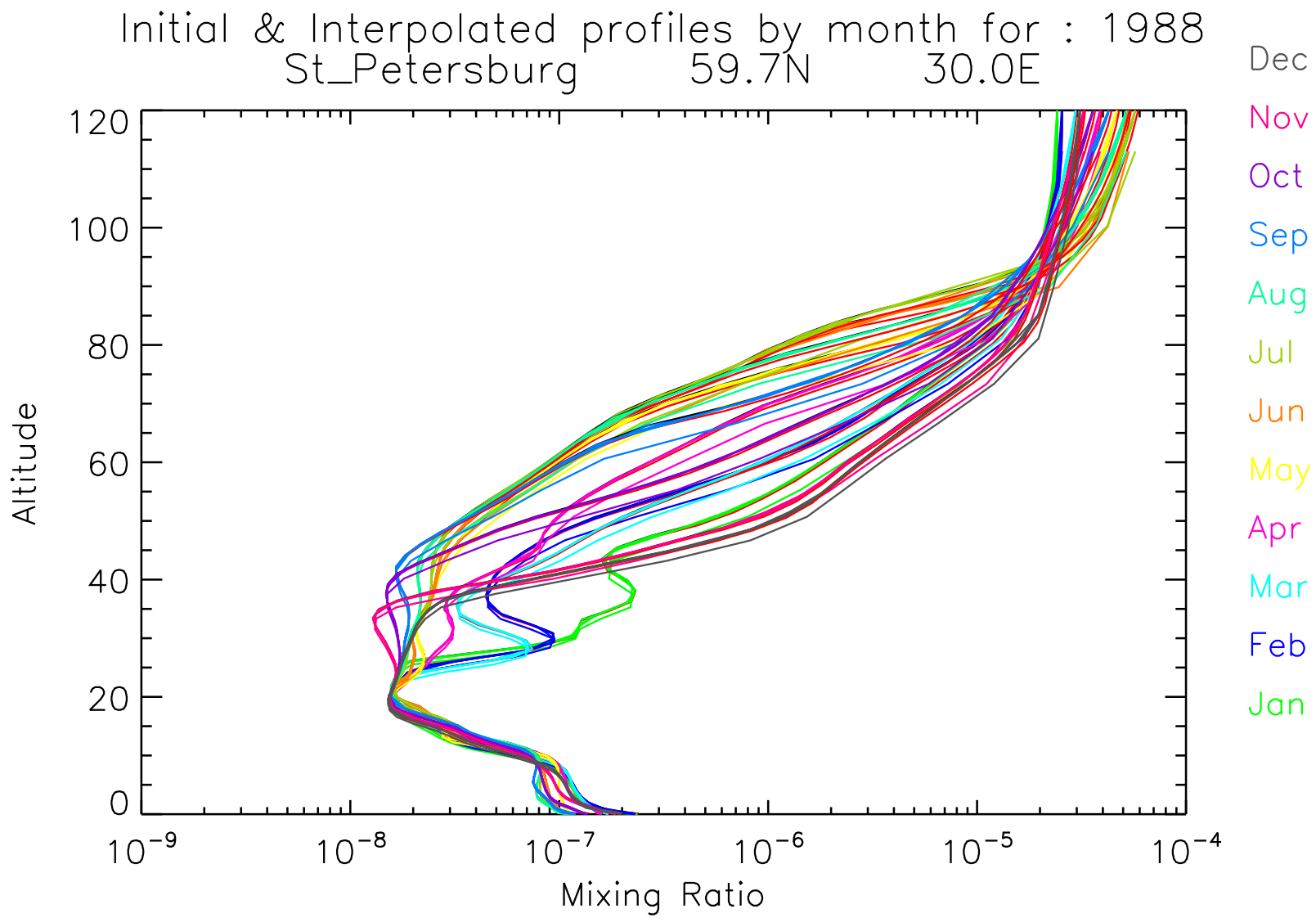
Initial & Interpolated profiles by month for : 1988
St_Petersburg 59.7N 30.0E
Altitude
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Mixing Ratio
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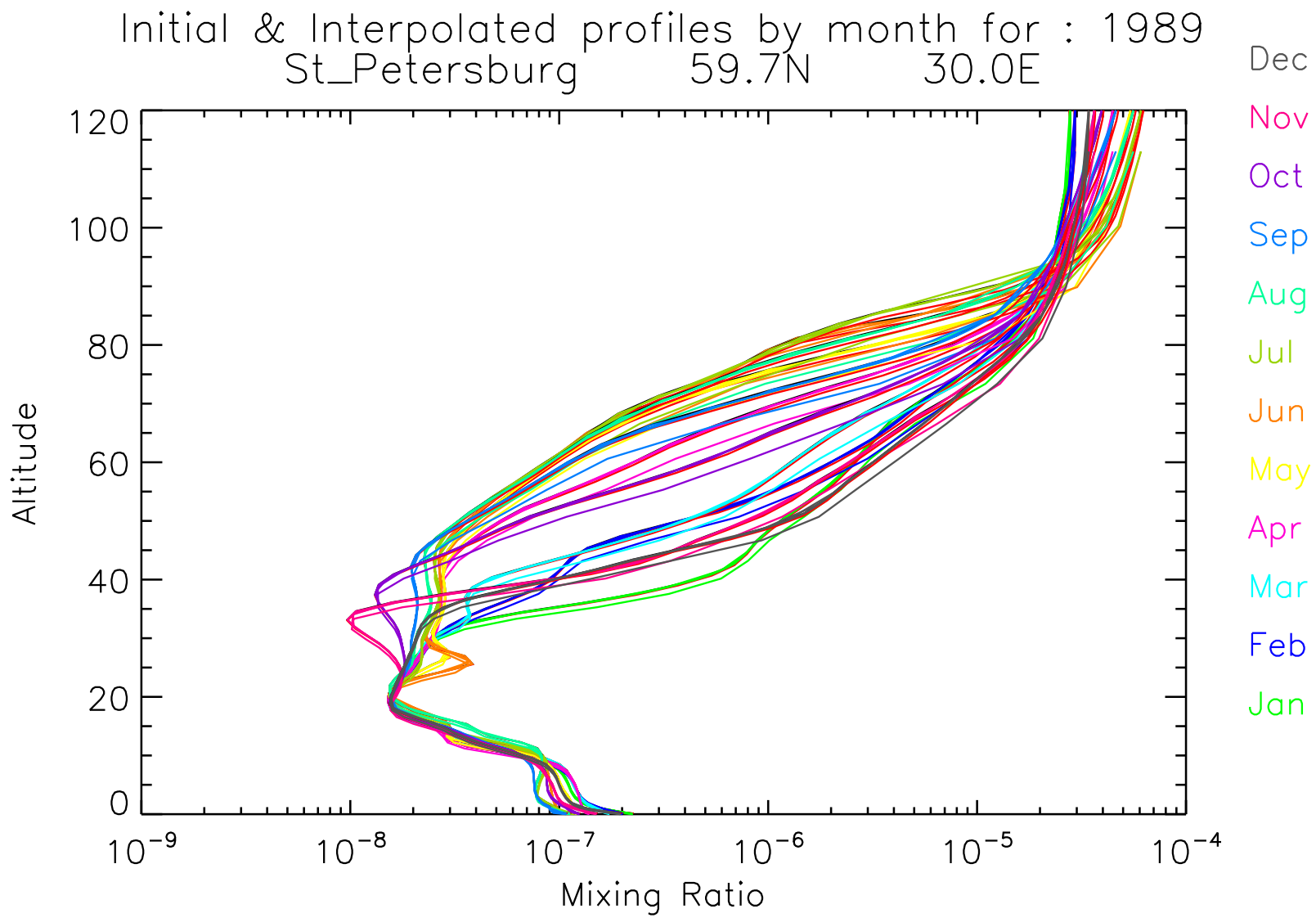
Initial & Interpolated profiles by month for : 1989
St_Petersburg 59.7N 30.0E
Altitude
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Mixing Ratio
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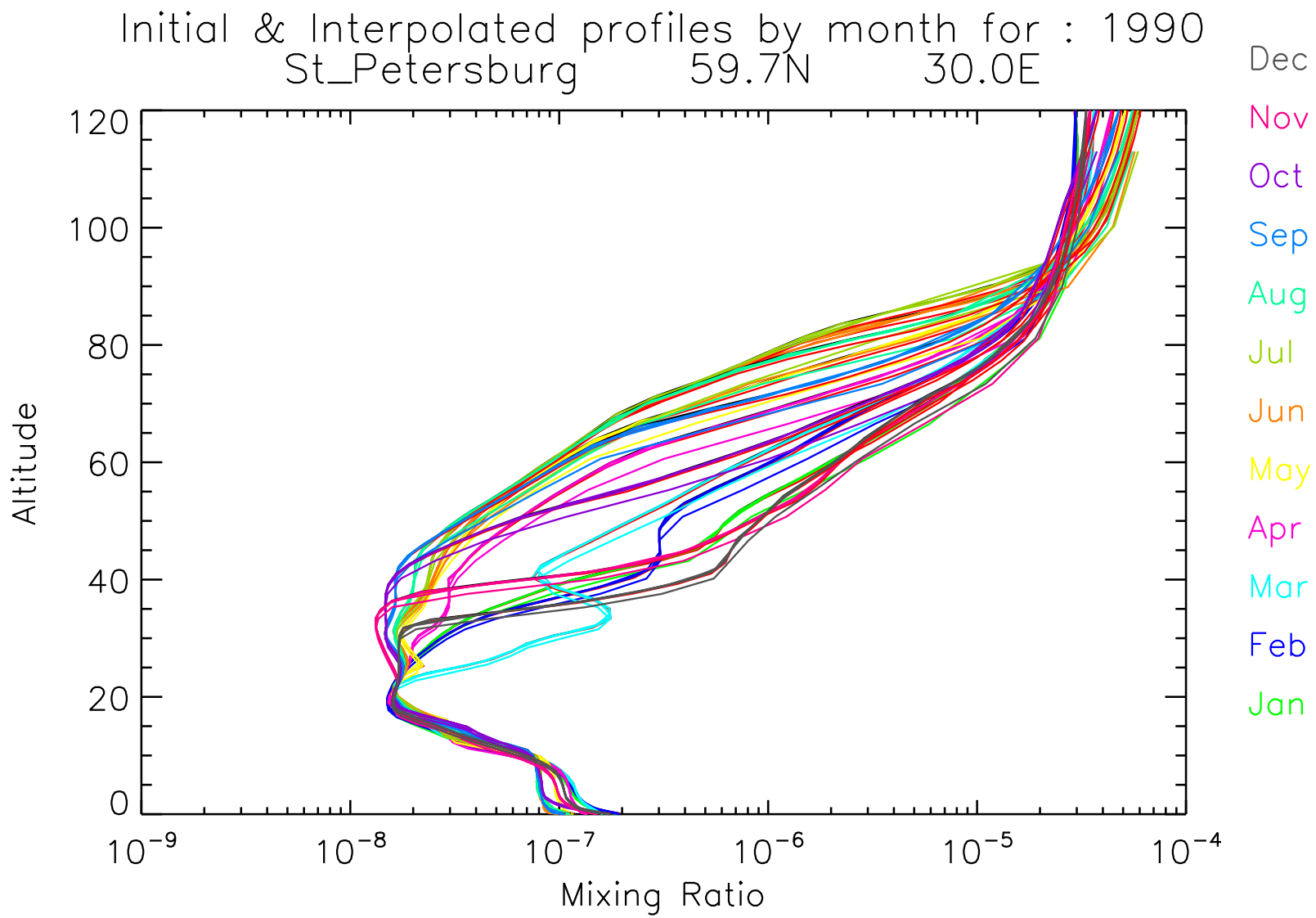
Initial & Interpolated profiles by month for : 1990
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Altitude
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Mixing Ratio
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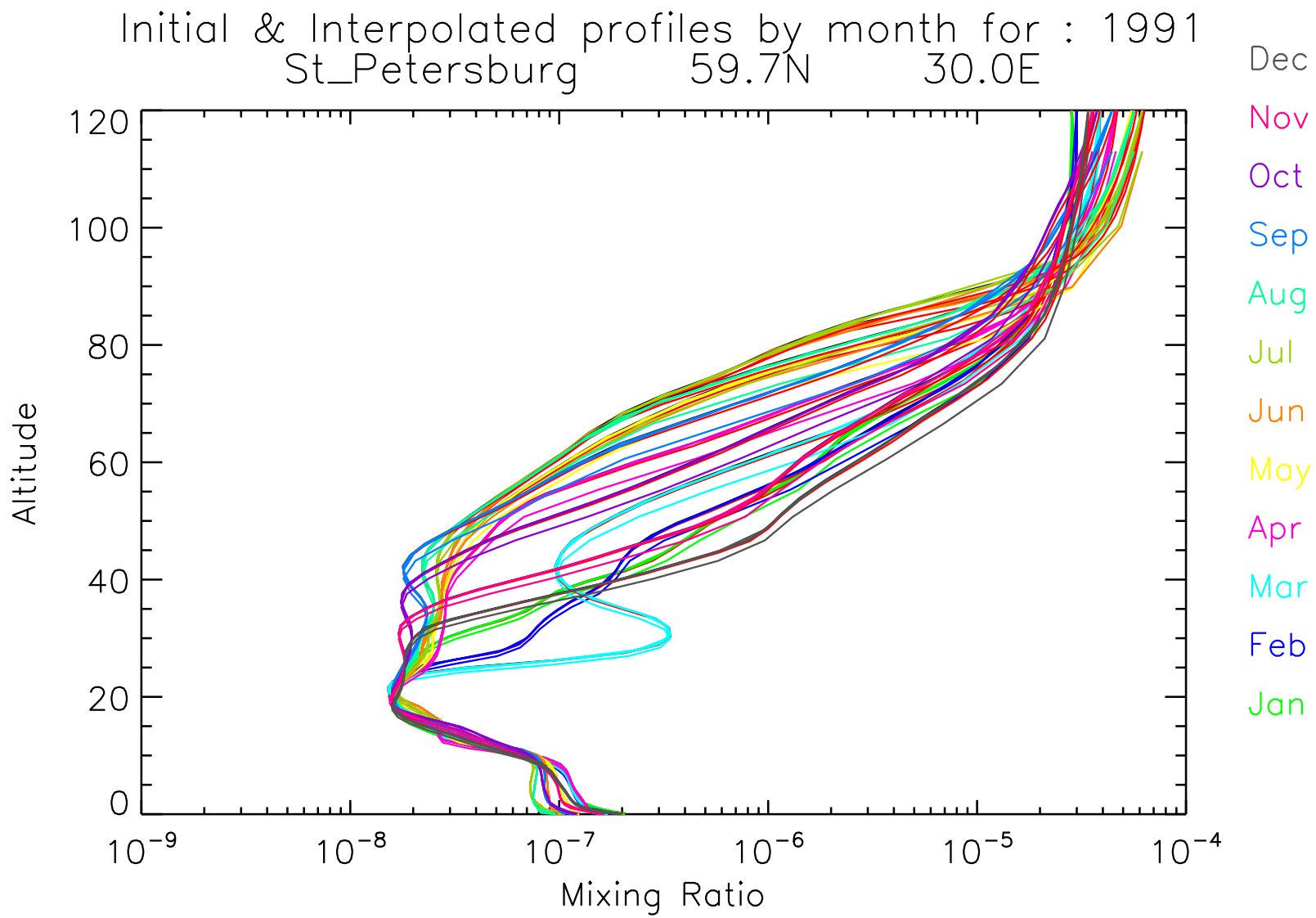
Initial & Interpolated profiles by month for : 1991
St_Petersburg 59.7N 30.0E
Altitude
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Mixing Ratio
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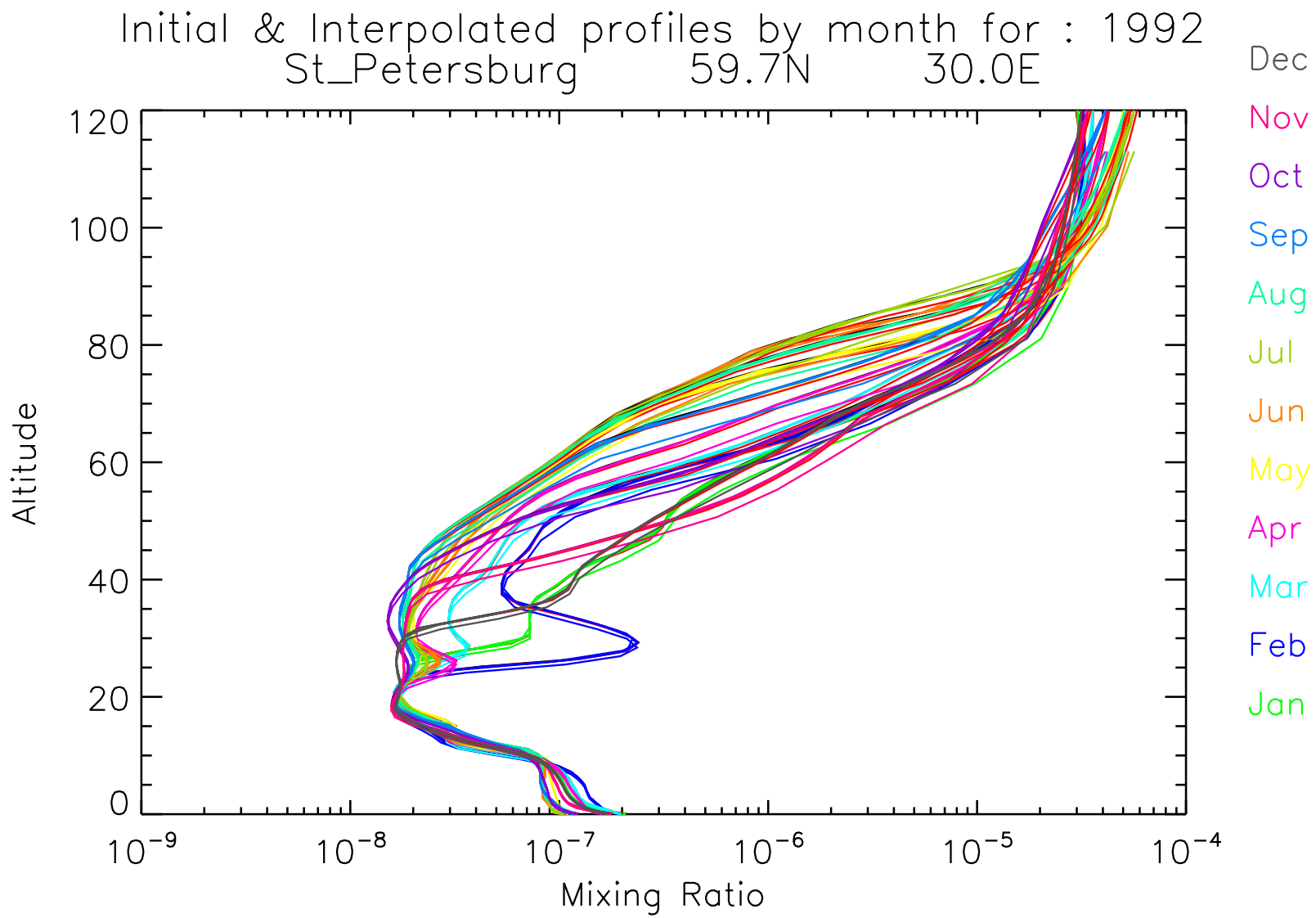
Initial & Interpolated profiles by month for : 1992
St_Petersburg 59.7N 30.0E
Altitude
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Mixing Ratio
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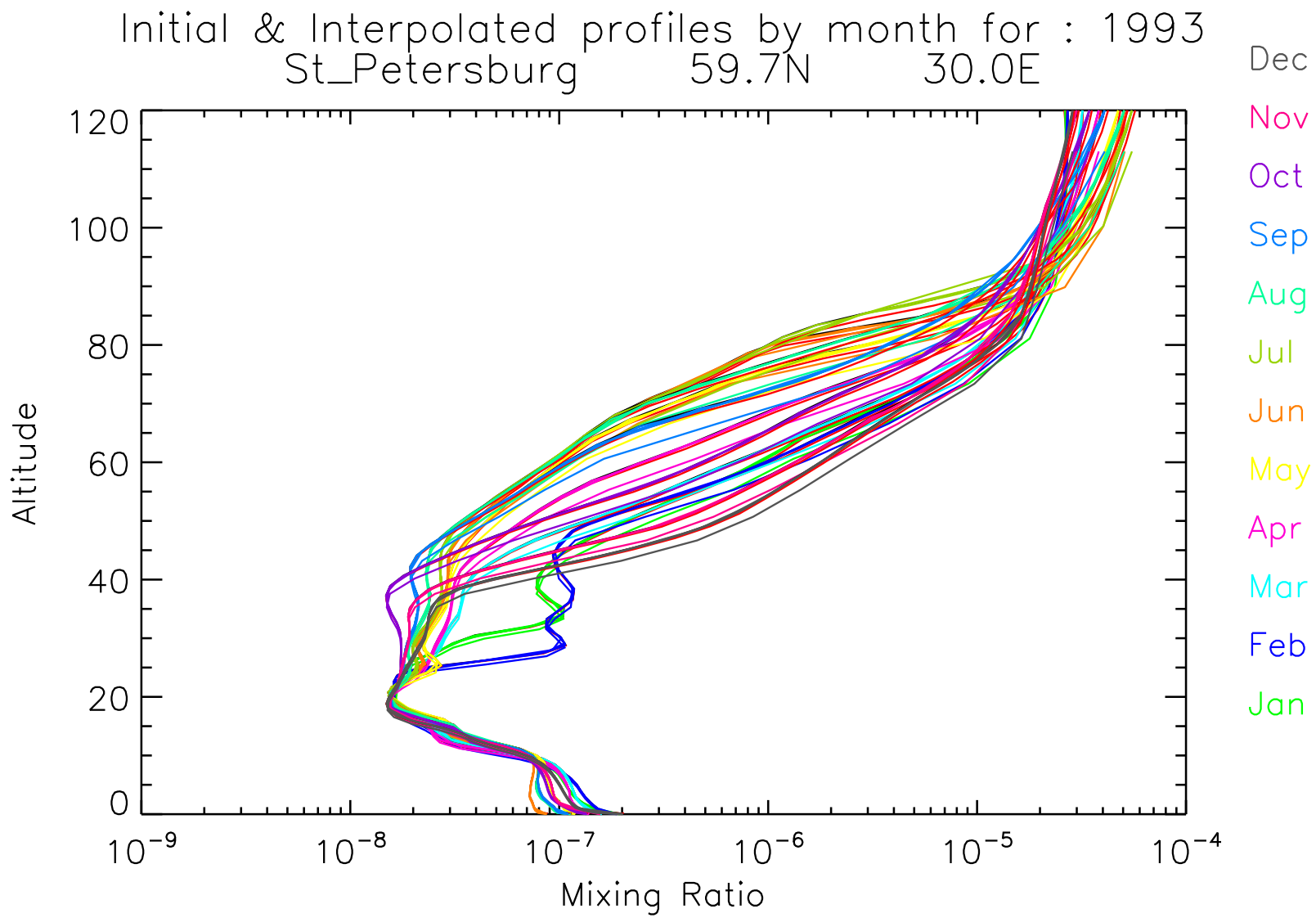
Initial & Interpolated profiles by month for : 1993
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Altitude
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Mixing Ratio
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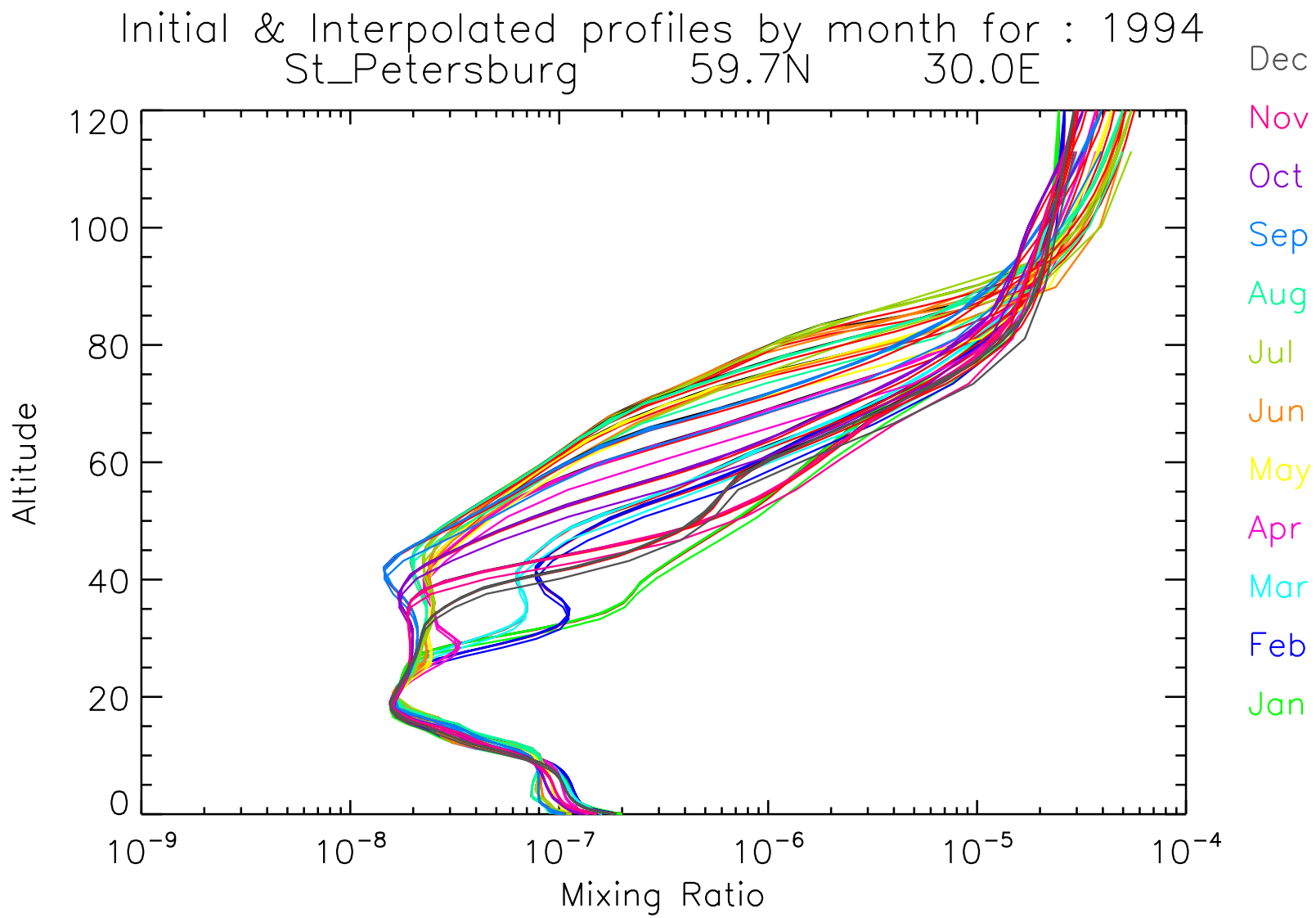
Initial & Interpolated profiles by month for : 1994
St_Petersburg 59.7N 30.0E
Altitude
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Mixing Ratio
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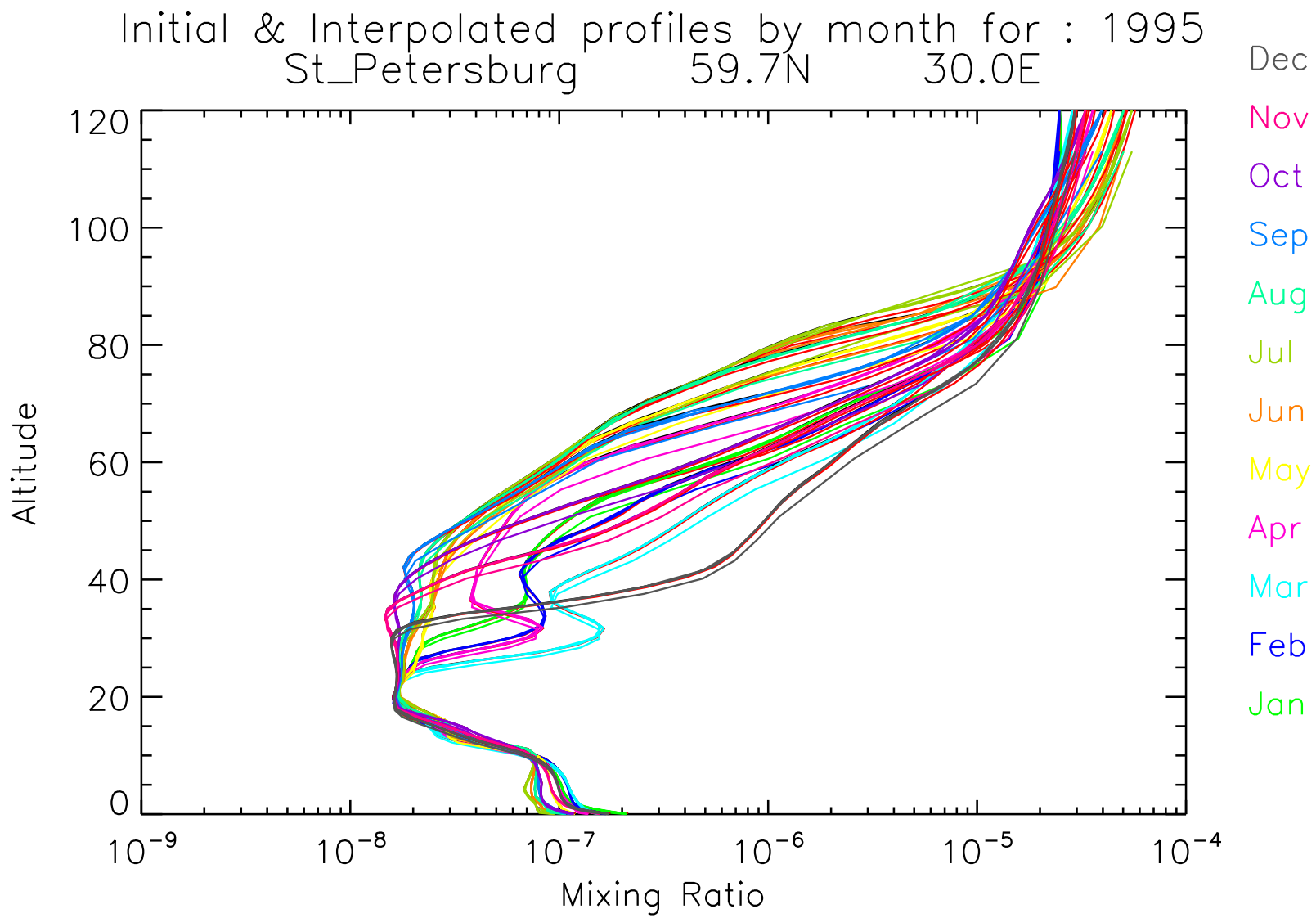
Initial & Interpolated profiles by month for : 1995
St_Petersburg 59.7N 30.0E
Altitude
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Mixing Ratio
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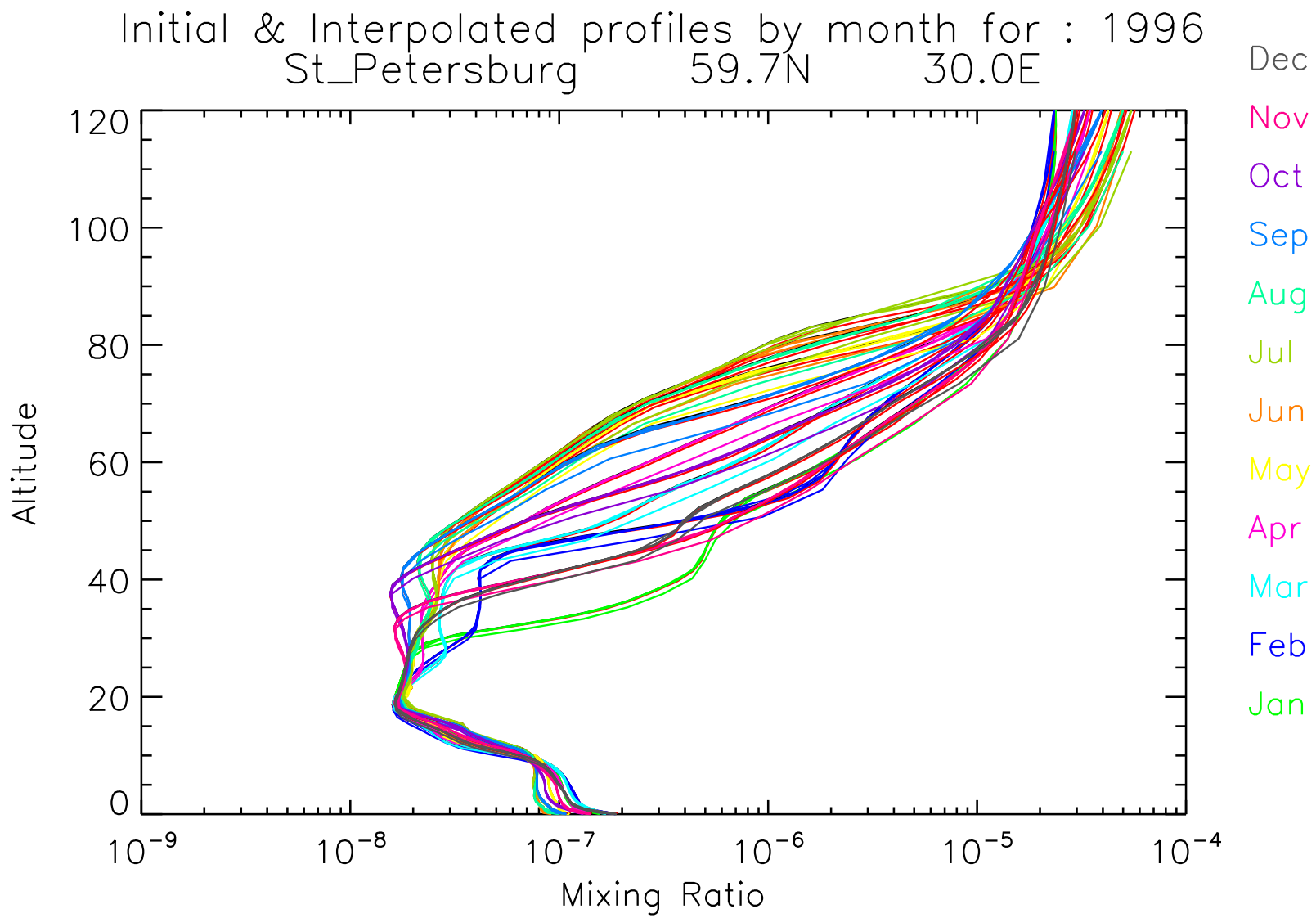
Initial & Interpolated profiles by month for : 1996
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Altitude
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Mixing Ratio
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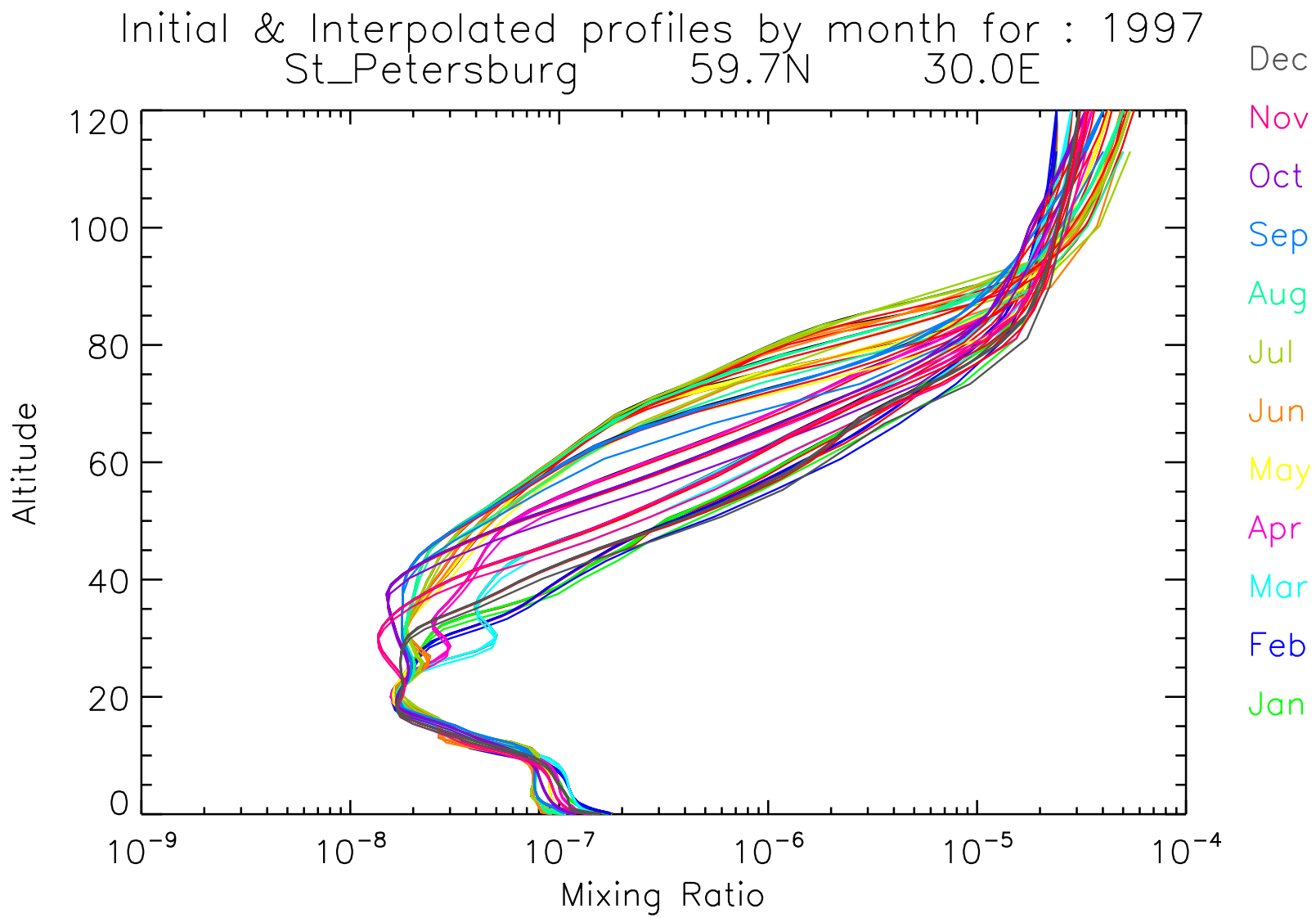
Initial & Interpolated profiles by month for : 1997
St_Petersburg 59.7N 30.0E
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Mixing Ratio
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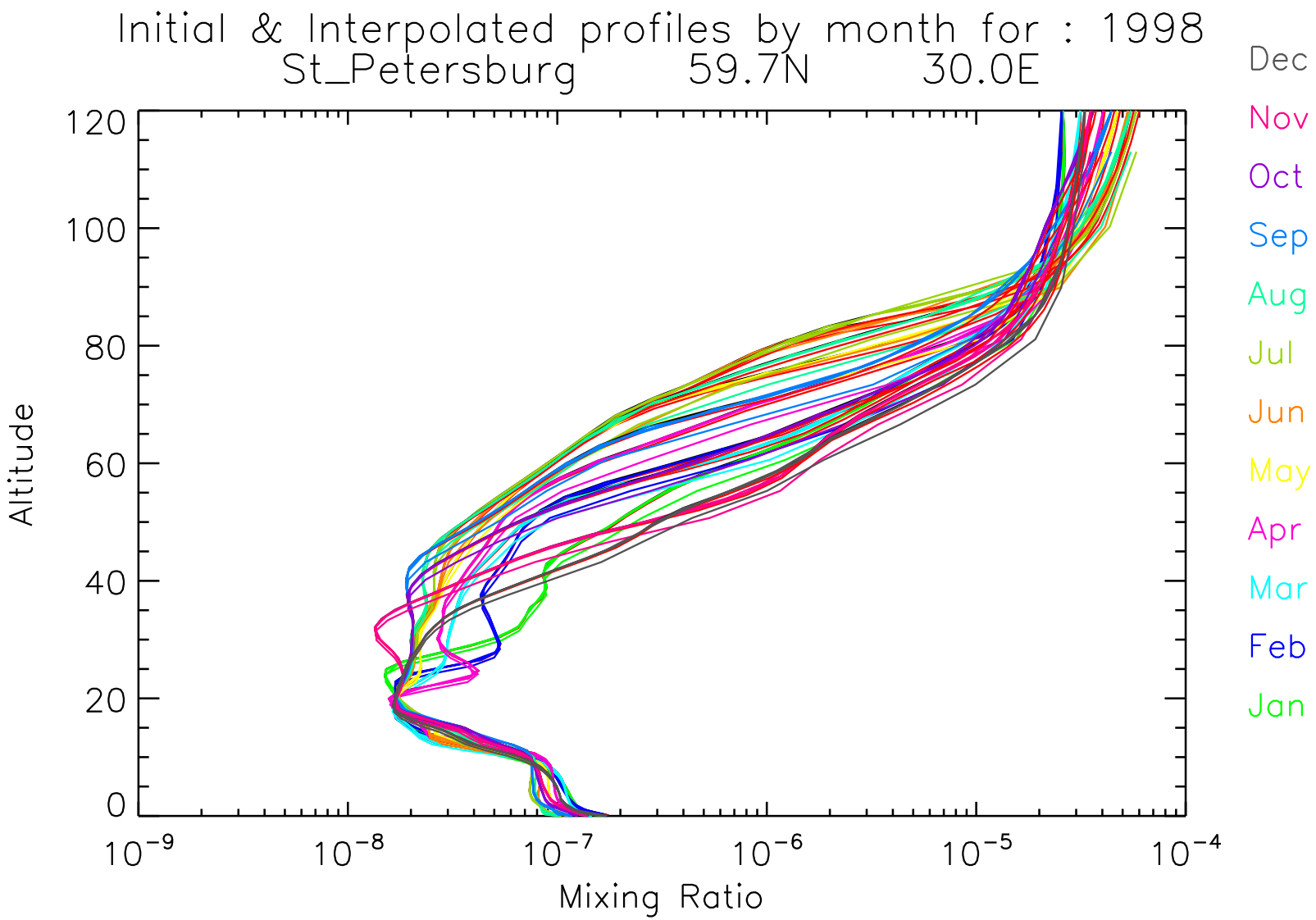
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Mixing Ratio
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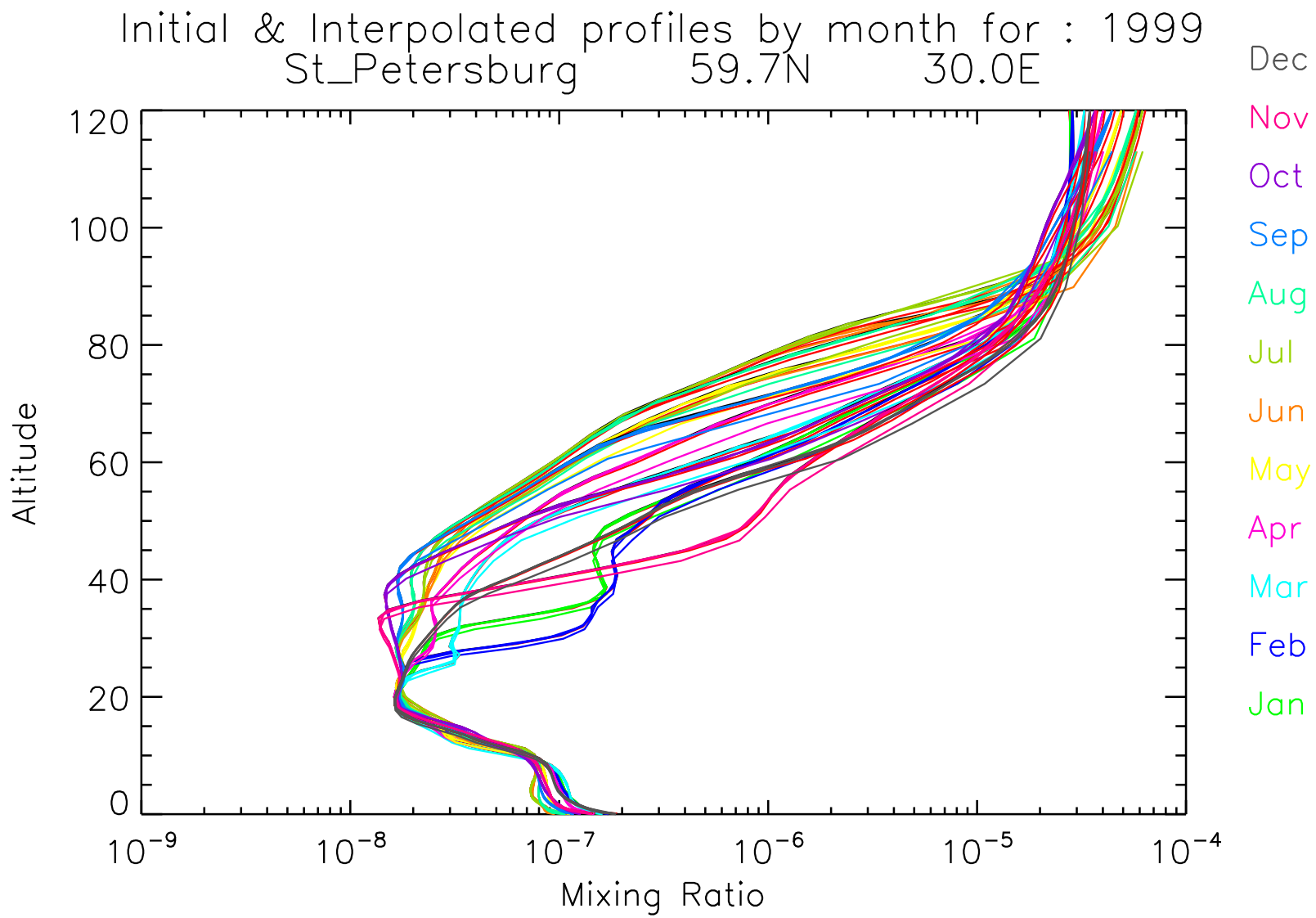
Initial & Interpolated profiles by month for : 1999
St_Petersburg 59.7N 30.0E
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Mixing Ratio
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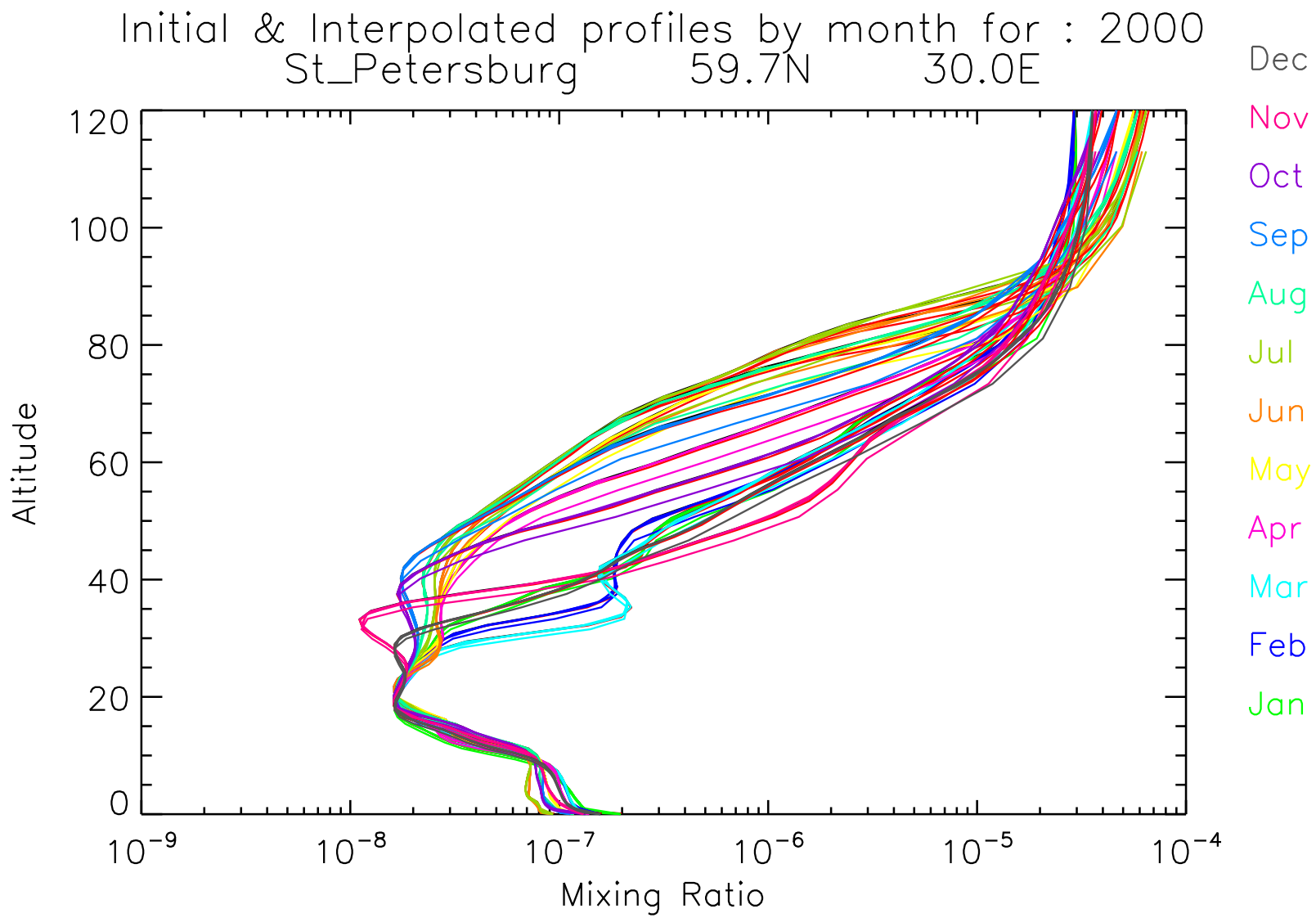
Initial & Interpolated profiles by month for : 2000
St_Petersburg 59.7N 30.0E
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Mixing Ratio
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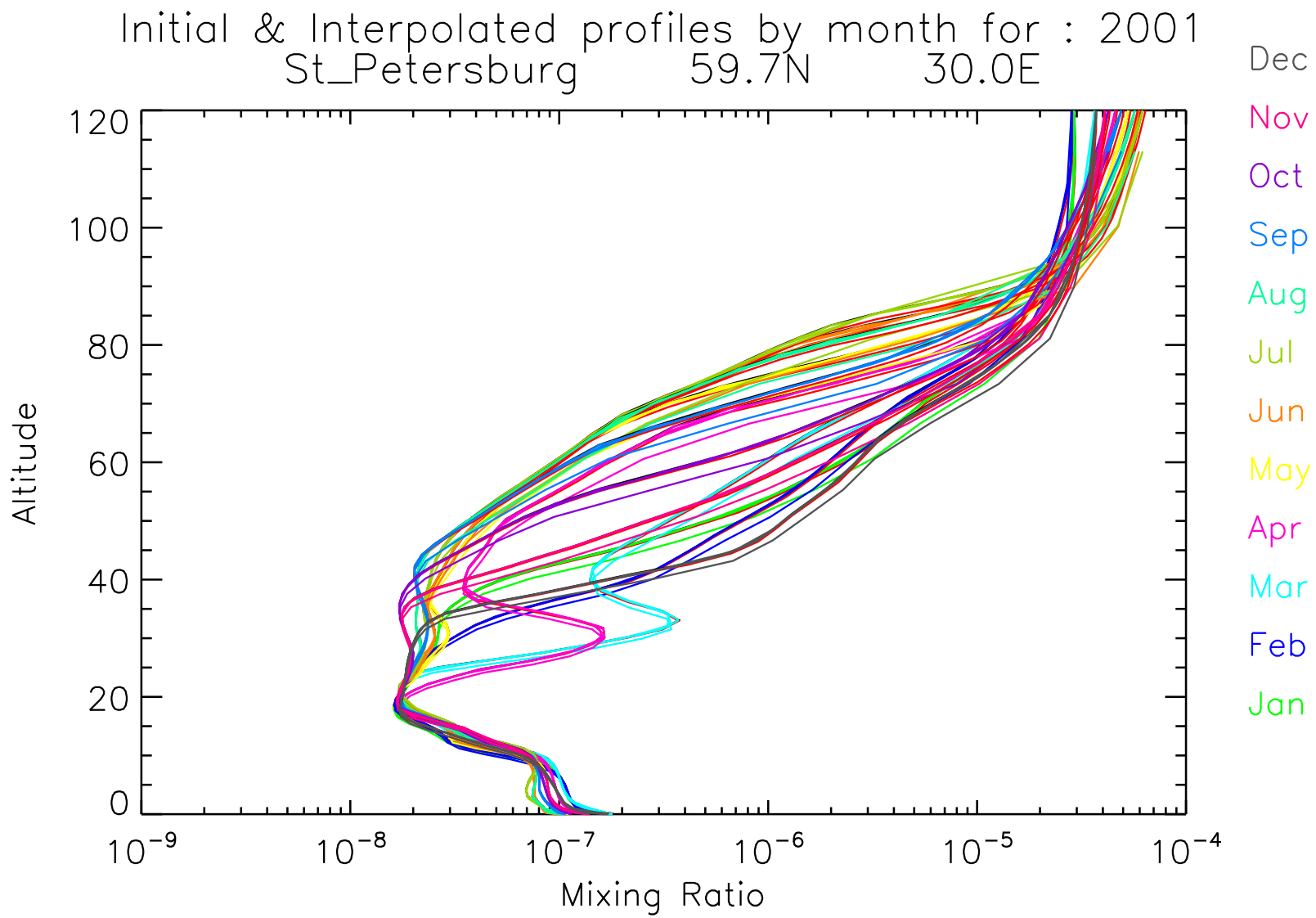
Initial & Interpolated profiles by month for : 2001
St_Petersburg 59.7N 30.0E
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Mixing Ratio
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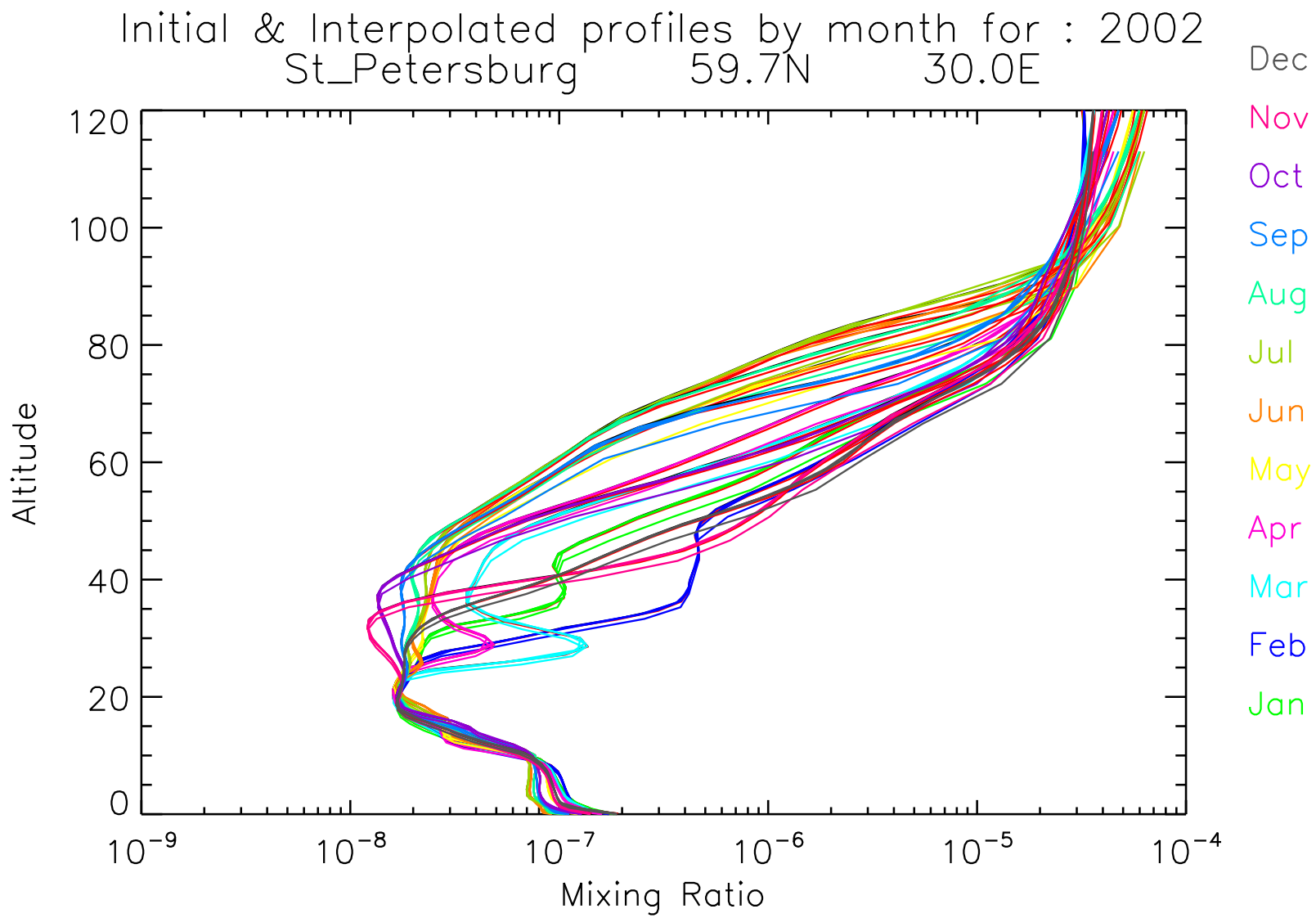
Initial & Interpolated profiles by month for : 2002
St_Petersburg 59.7N 30.0E
Altitude
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100
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Mixing Ratio
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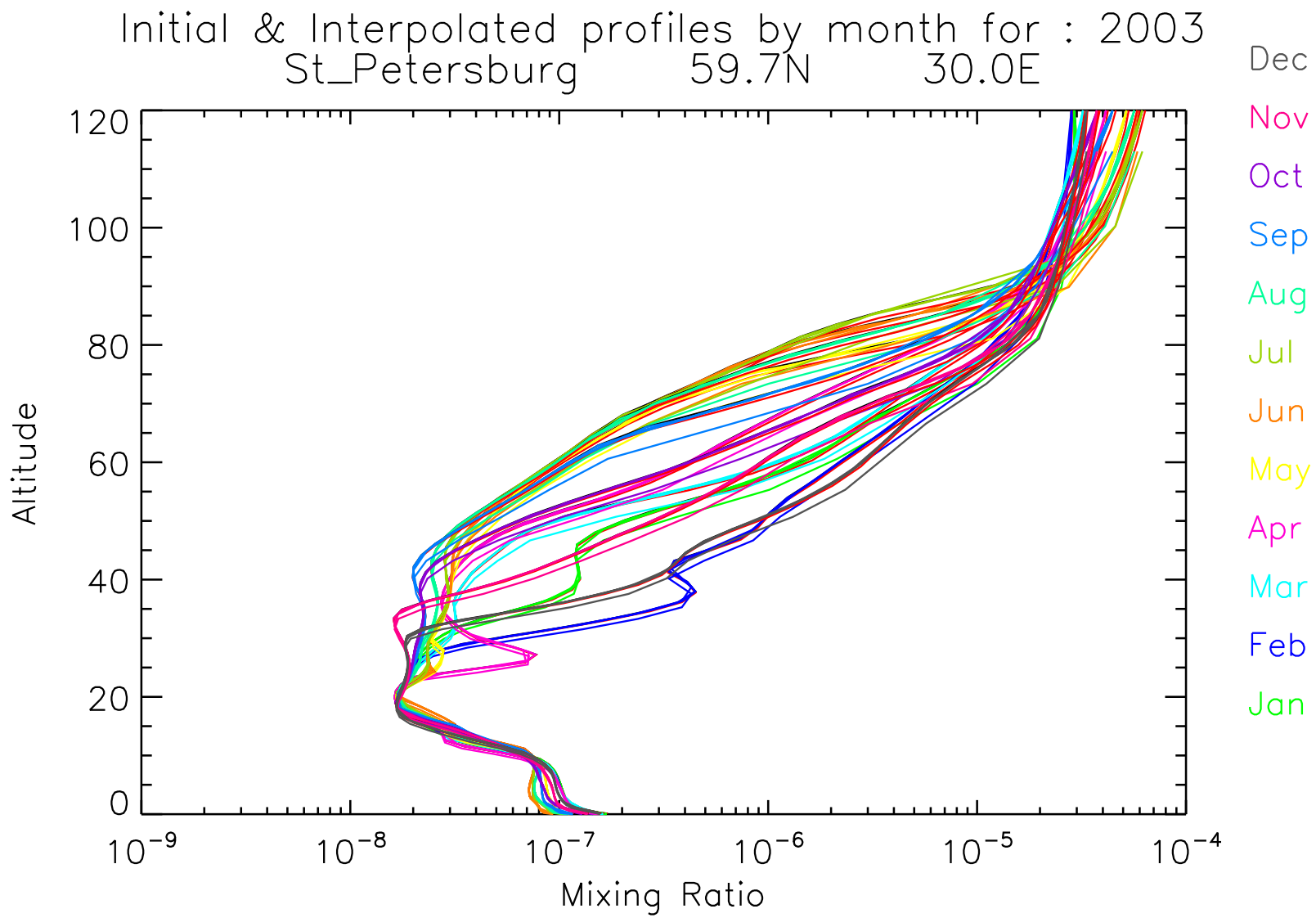
Initial & Interpolated profiles by month for : 2003
St_Petersburg 59.7N 30.0E
Altitude
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Mixing Ratio
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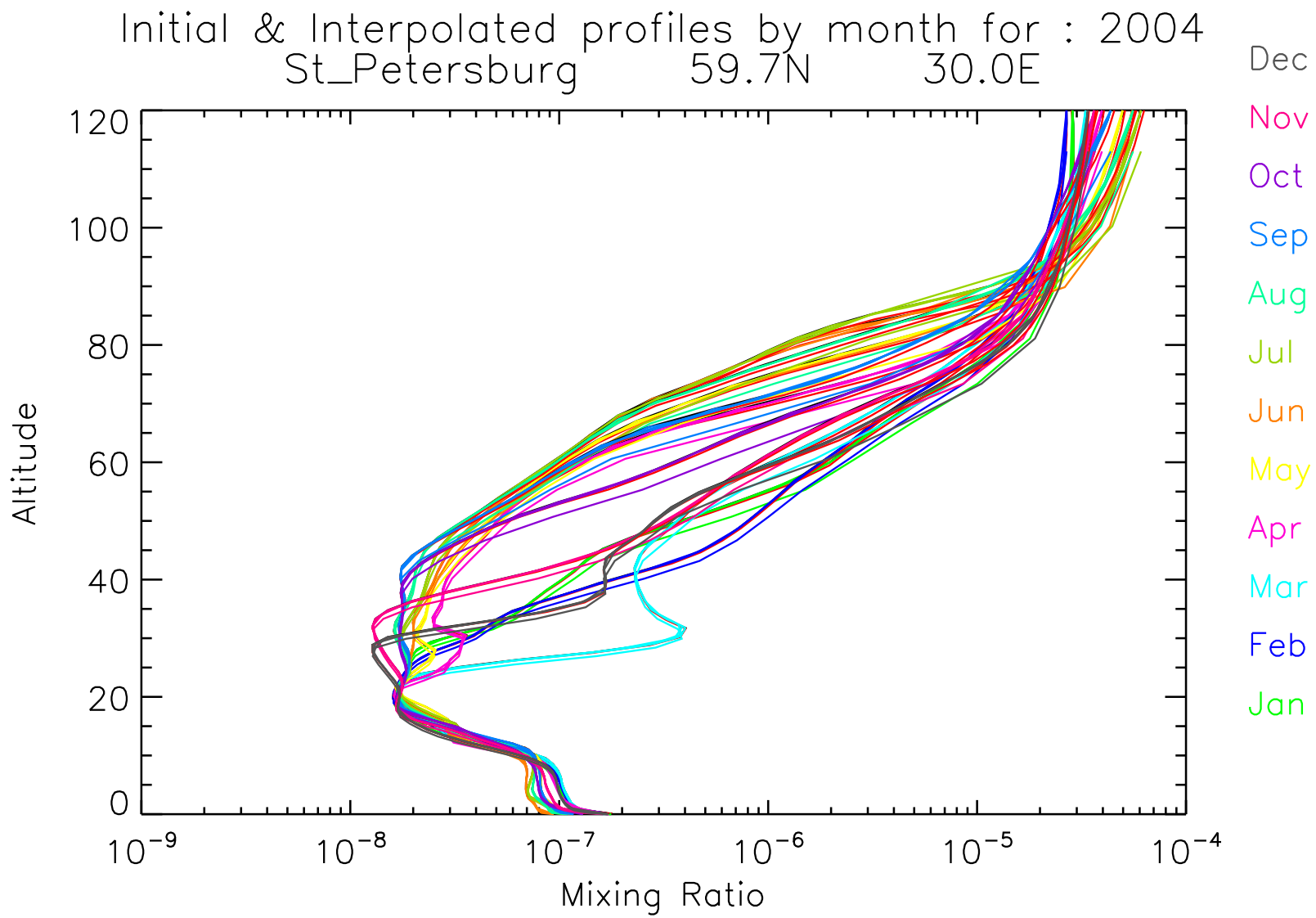
Initial & Interpolated profiles by month for : 2004
St_Petersburg 59.7N 30.0E
Altitude
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Mixing Ratio
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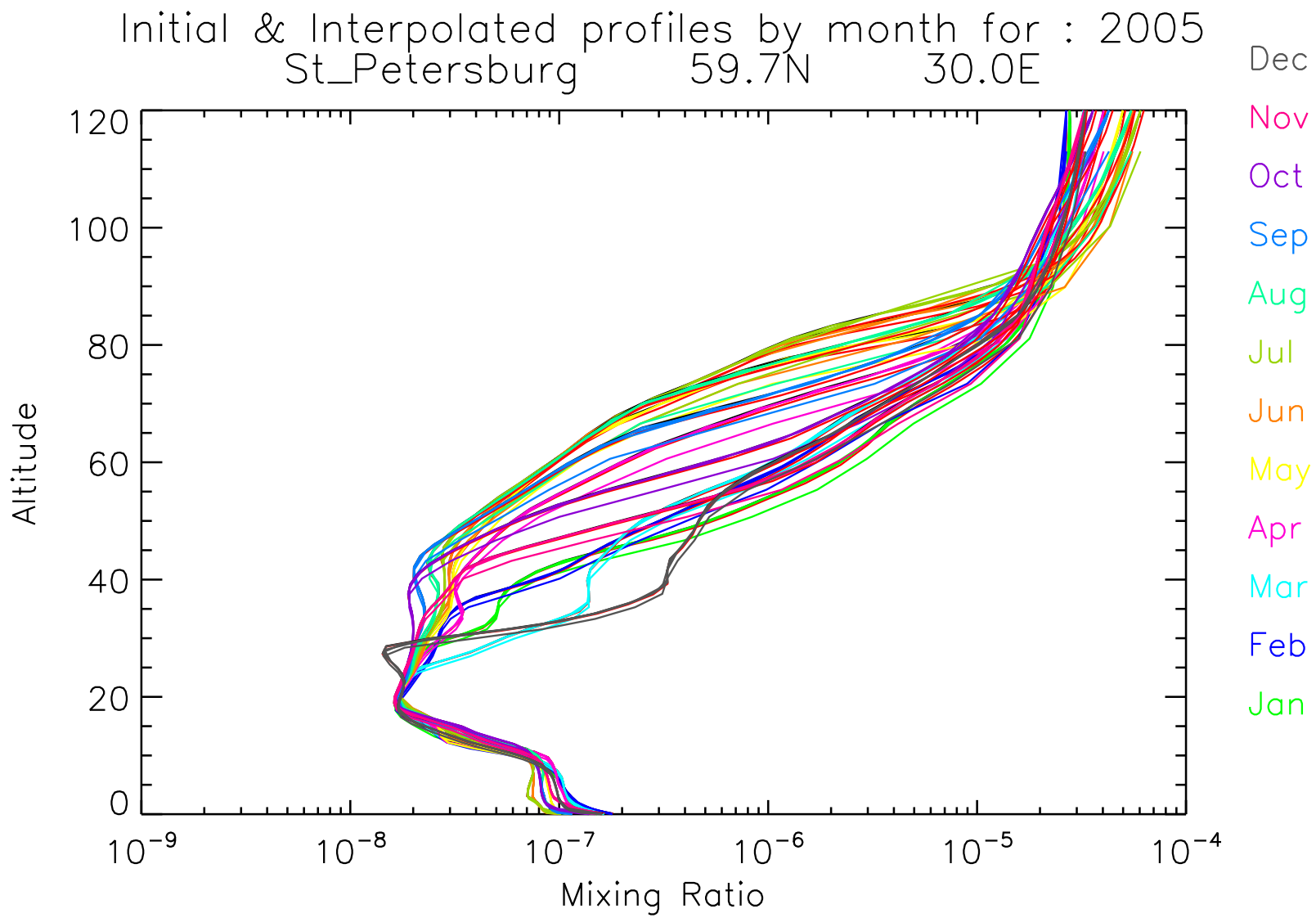
Initial & Interpolated profiles by month for : 2005
St_Petersburg 59.7N 30.0E
Altitude
120
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Mixing Ratio
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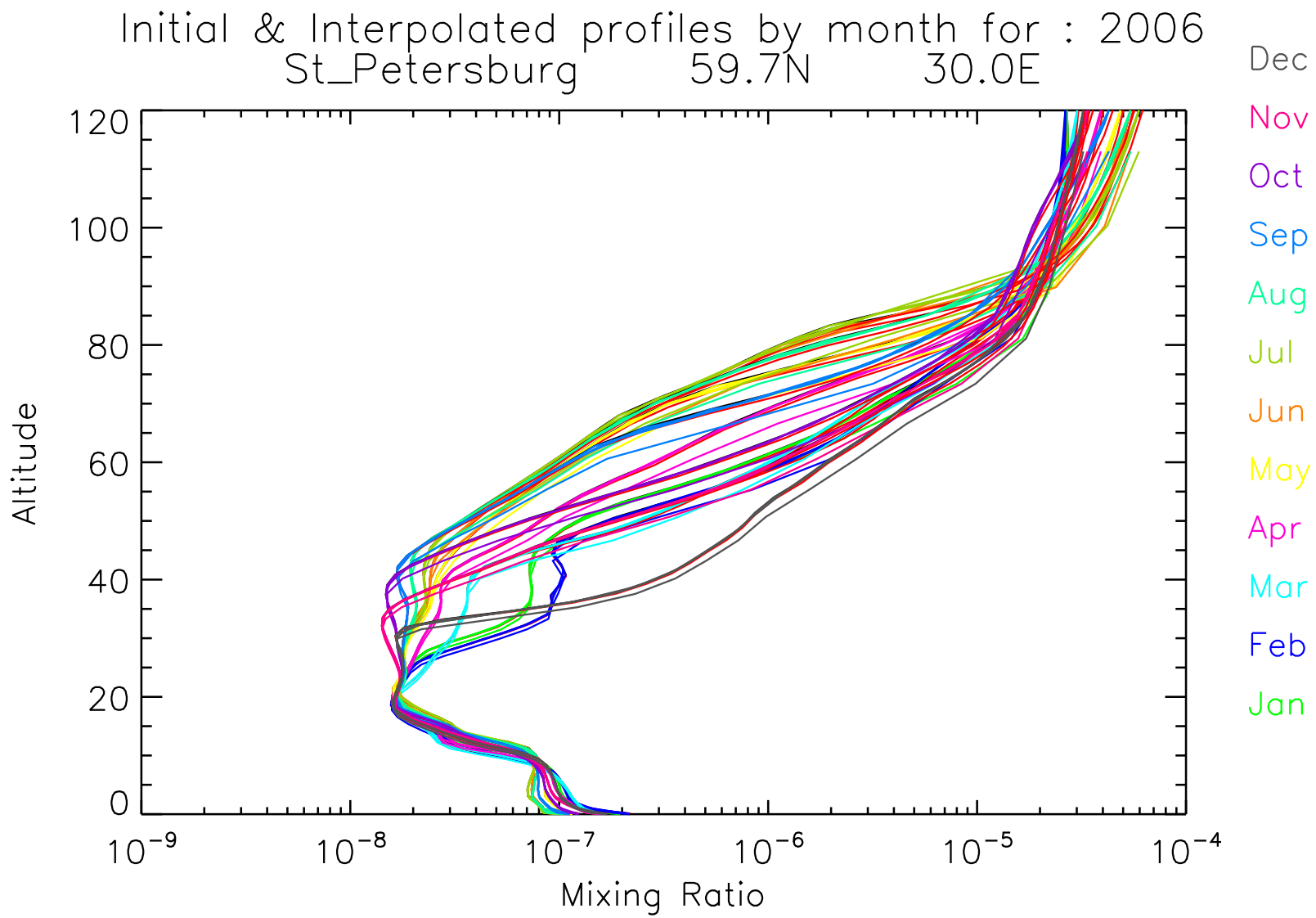
Initial & Interpolated profiles by month for : 2006
St_Petersburg 59.7N 30.0E
Altitude
120
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10^{-4}
Mixing Ratio
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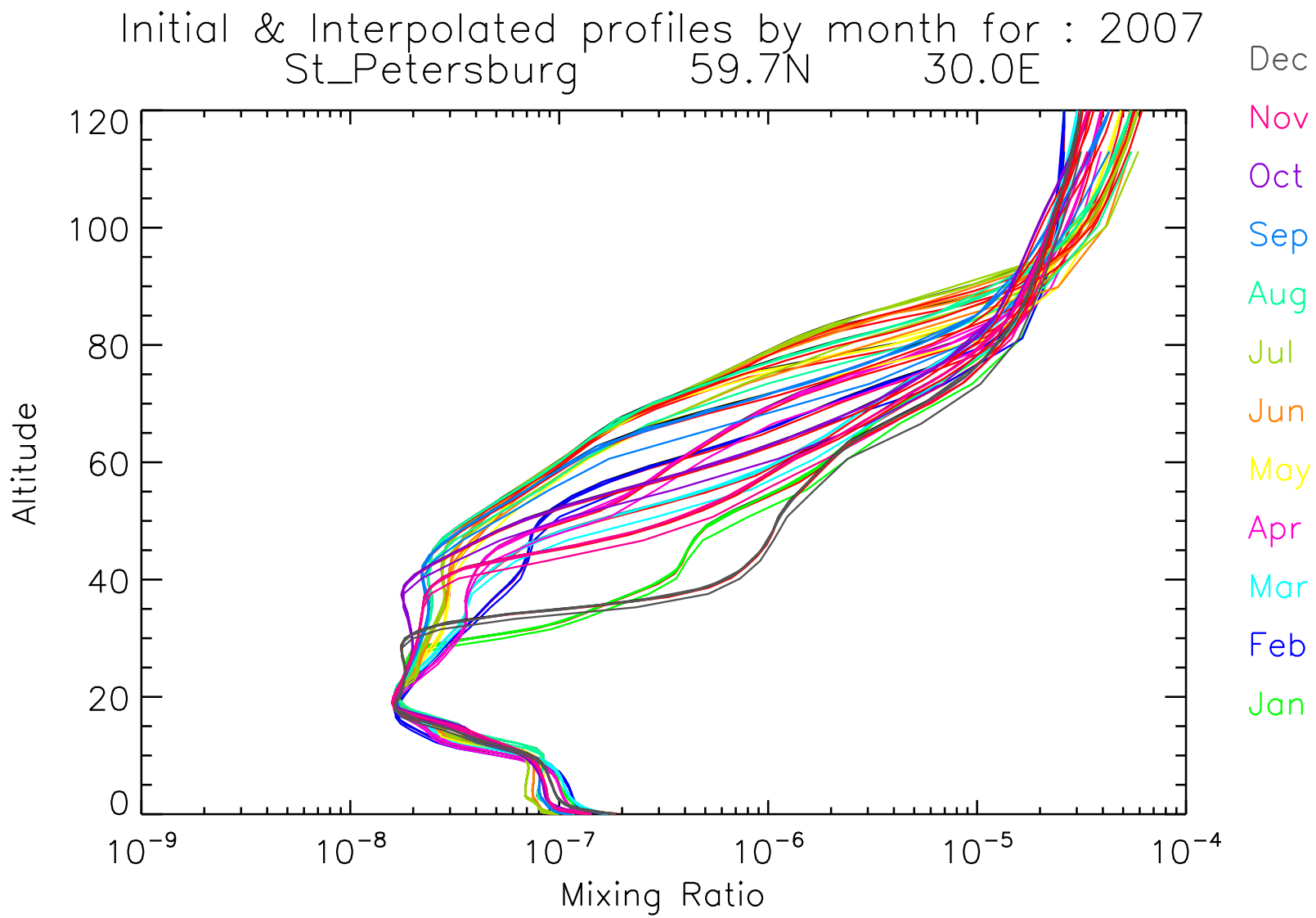
Initial & Interpolated profiles by month for : 2007
St_Petersburg 59.7N 30.0E
Altitude
120
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10^{-4}
Mixing Ratio
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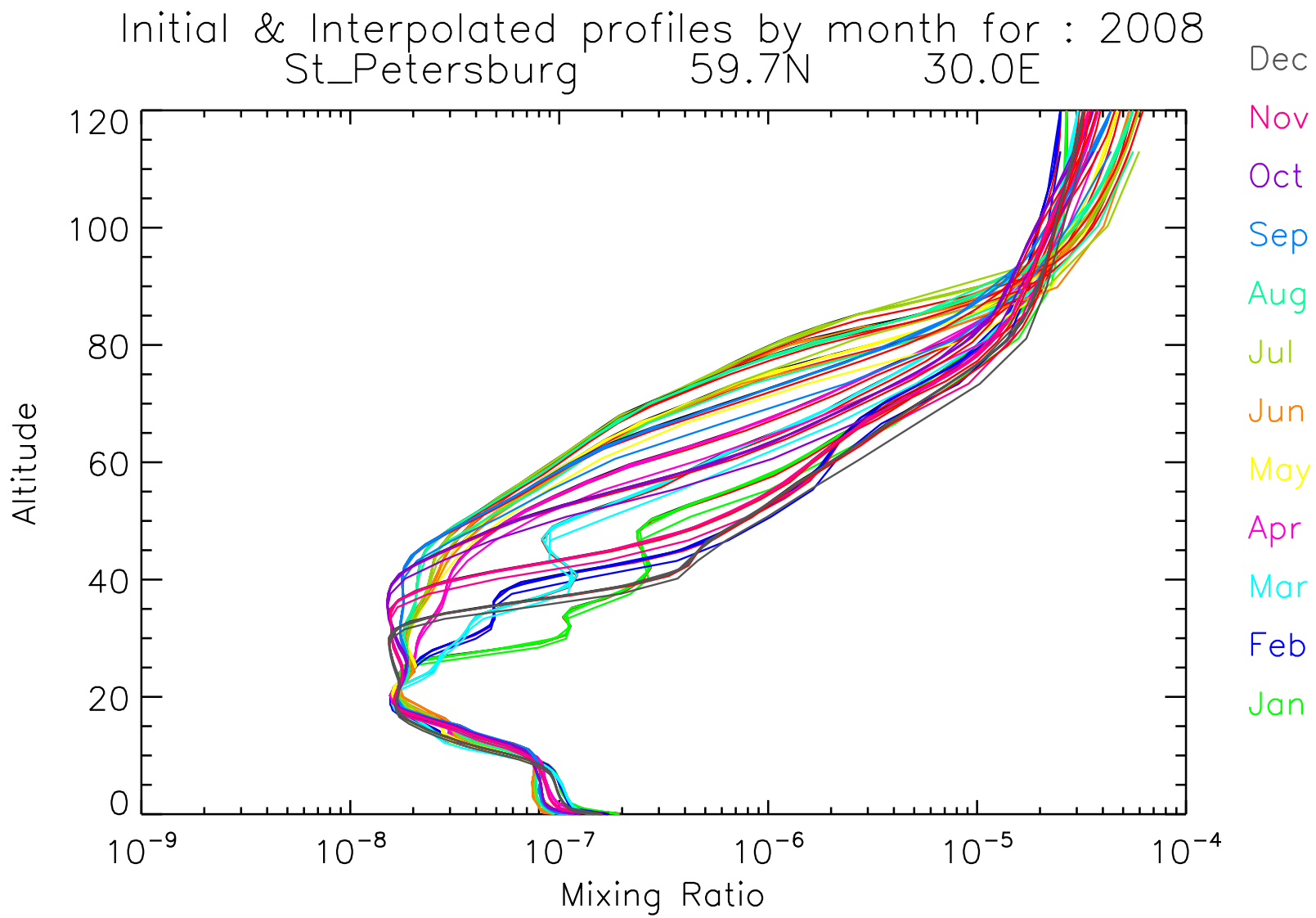
Initial & Interpolated profiles by month for : 2008
St_Petersburg 59.7N 30.0E
Altitude
120
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Mixing Ratio
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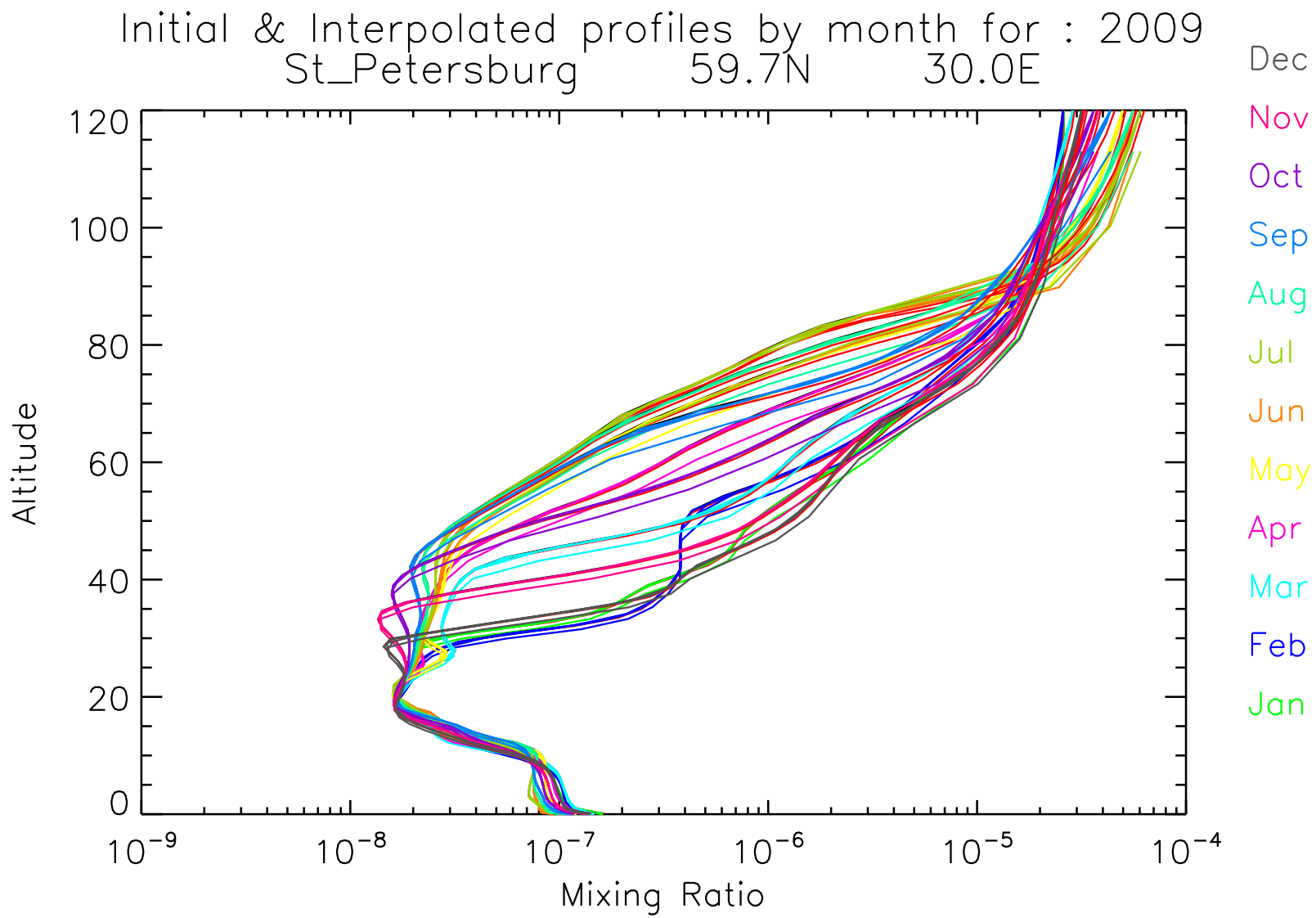
Initial & Interpolated profiles by month for : 2009
St_Petersburg 59.7N 30.0E
Altitude
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Mixing Ratio
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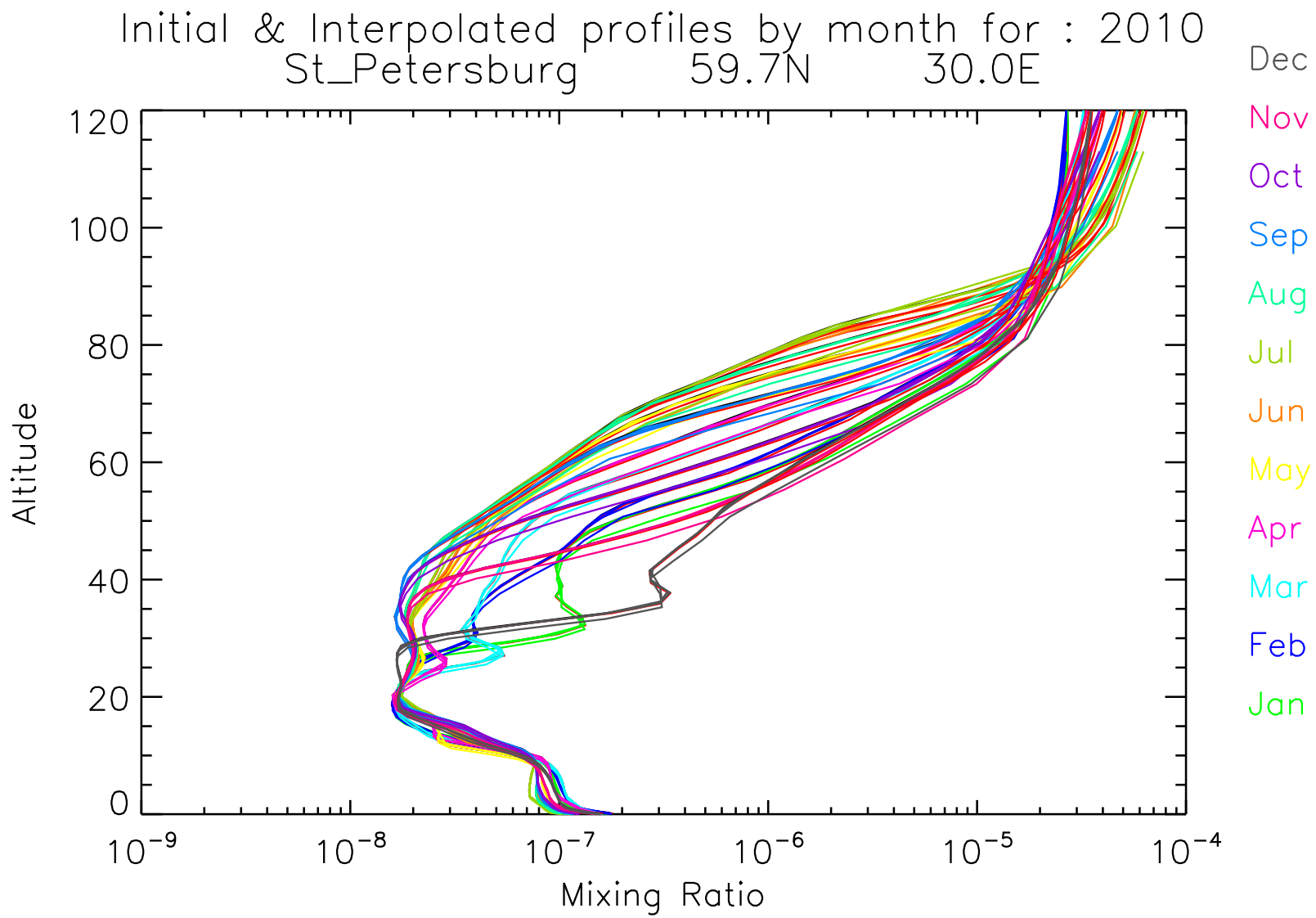
Initial & Interpolated profiles by month for : 2010
St_Petersburg 59.7N 30.0E
Altitude
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Mixing Ratio
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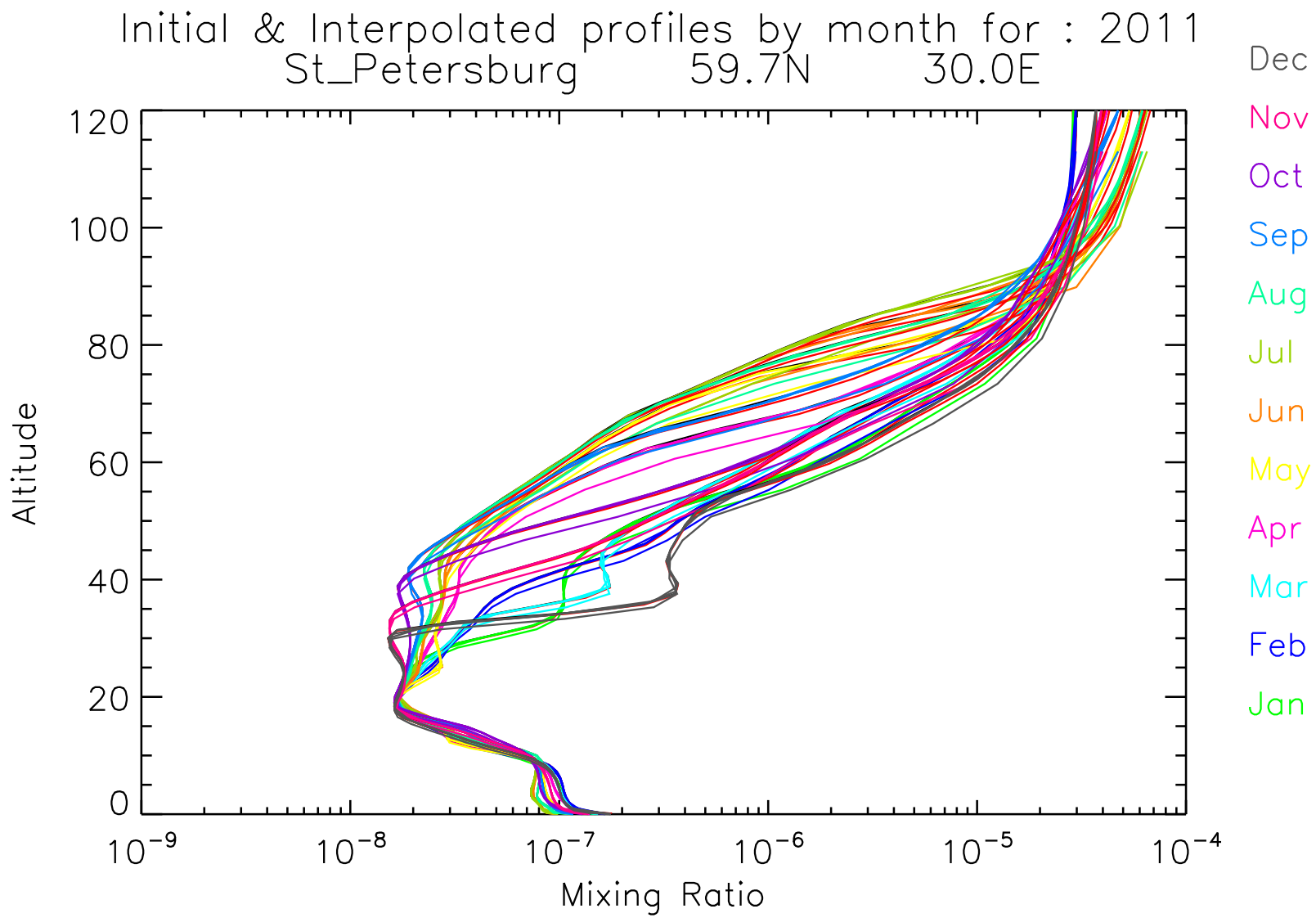
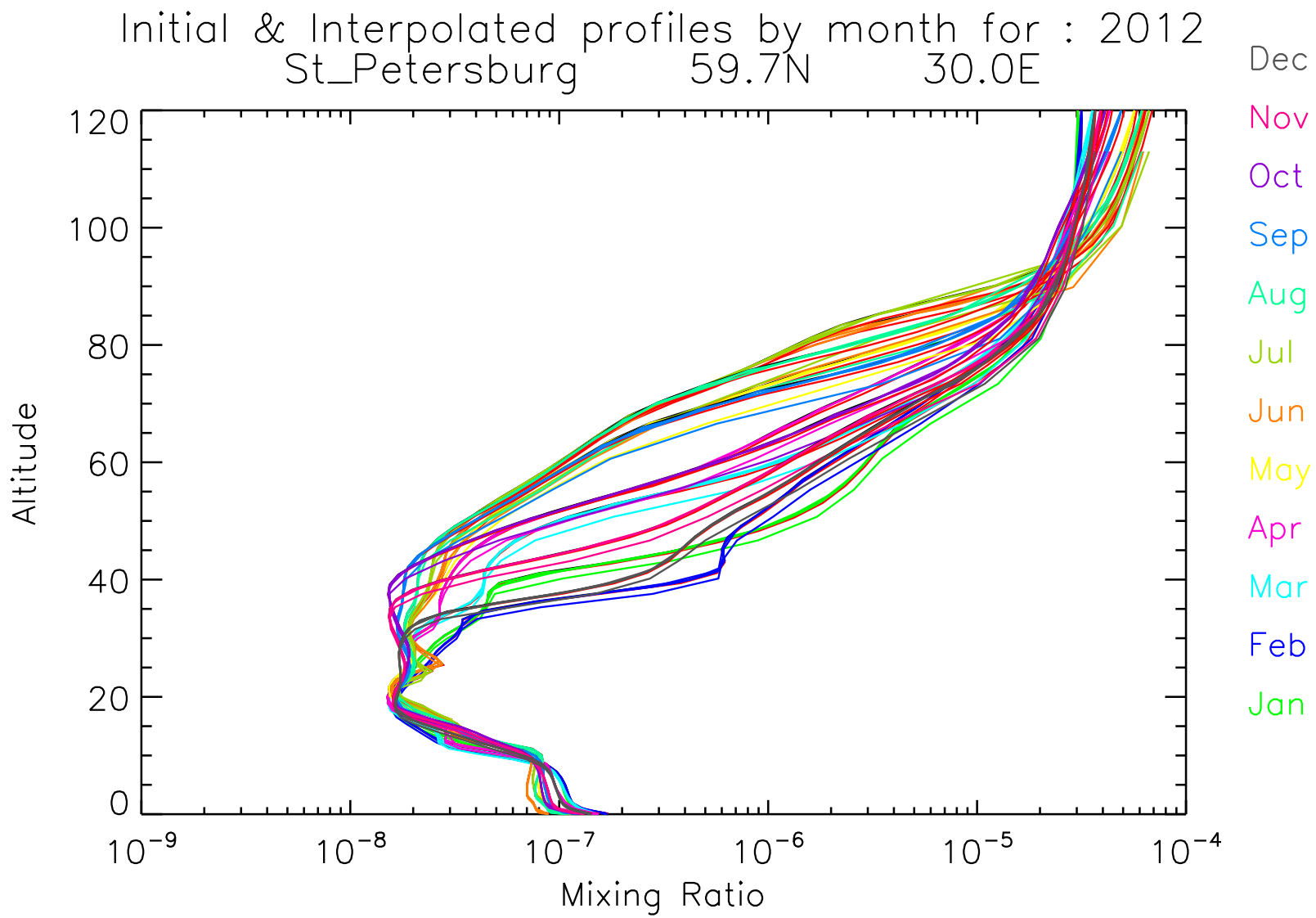
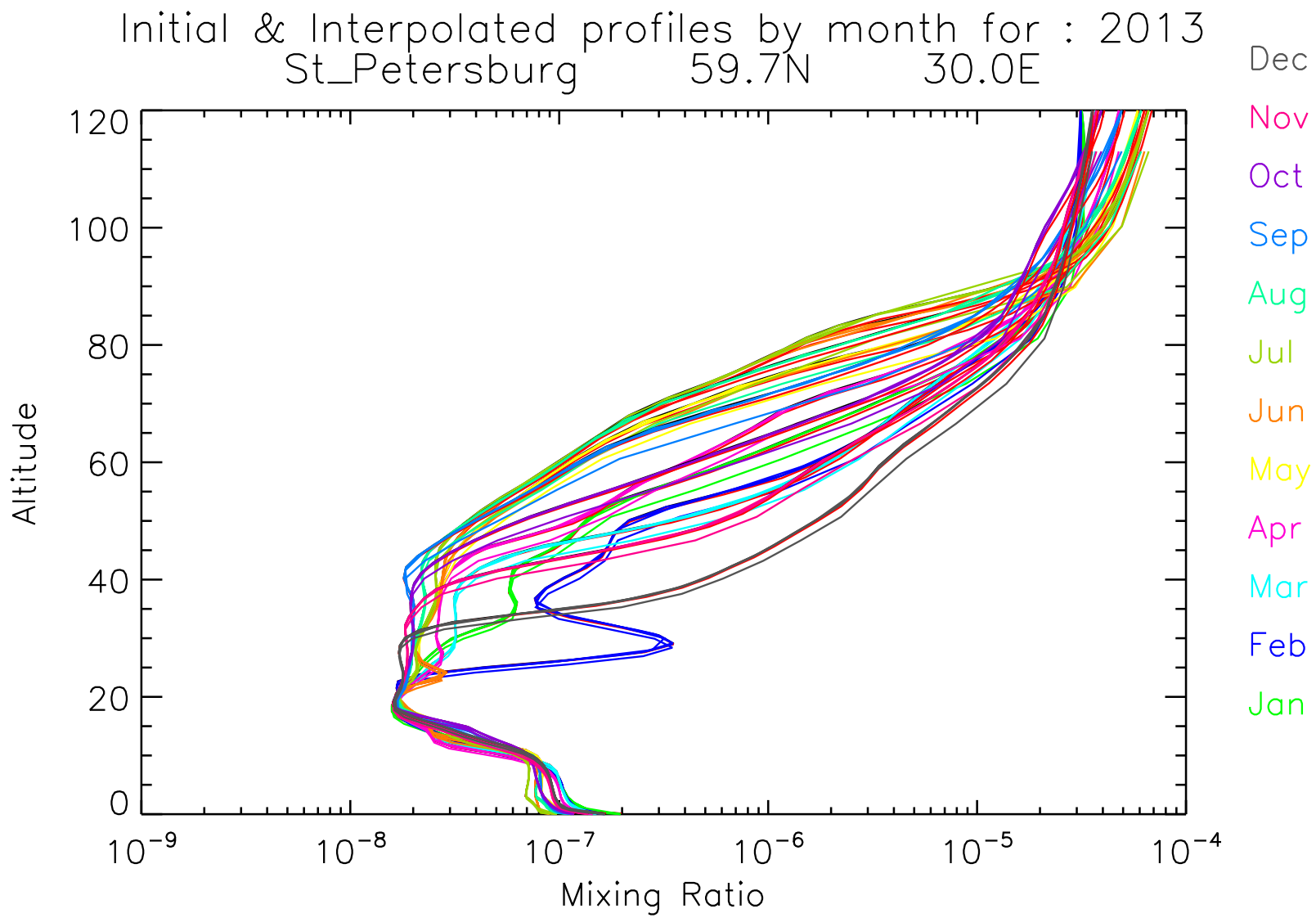
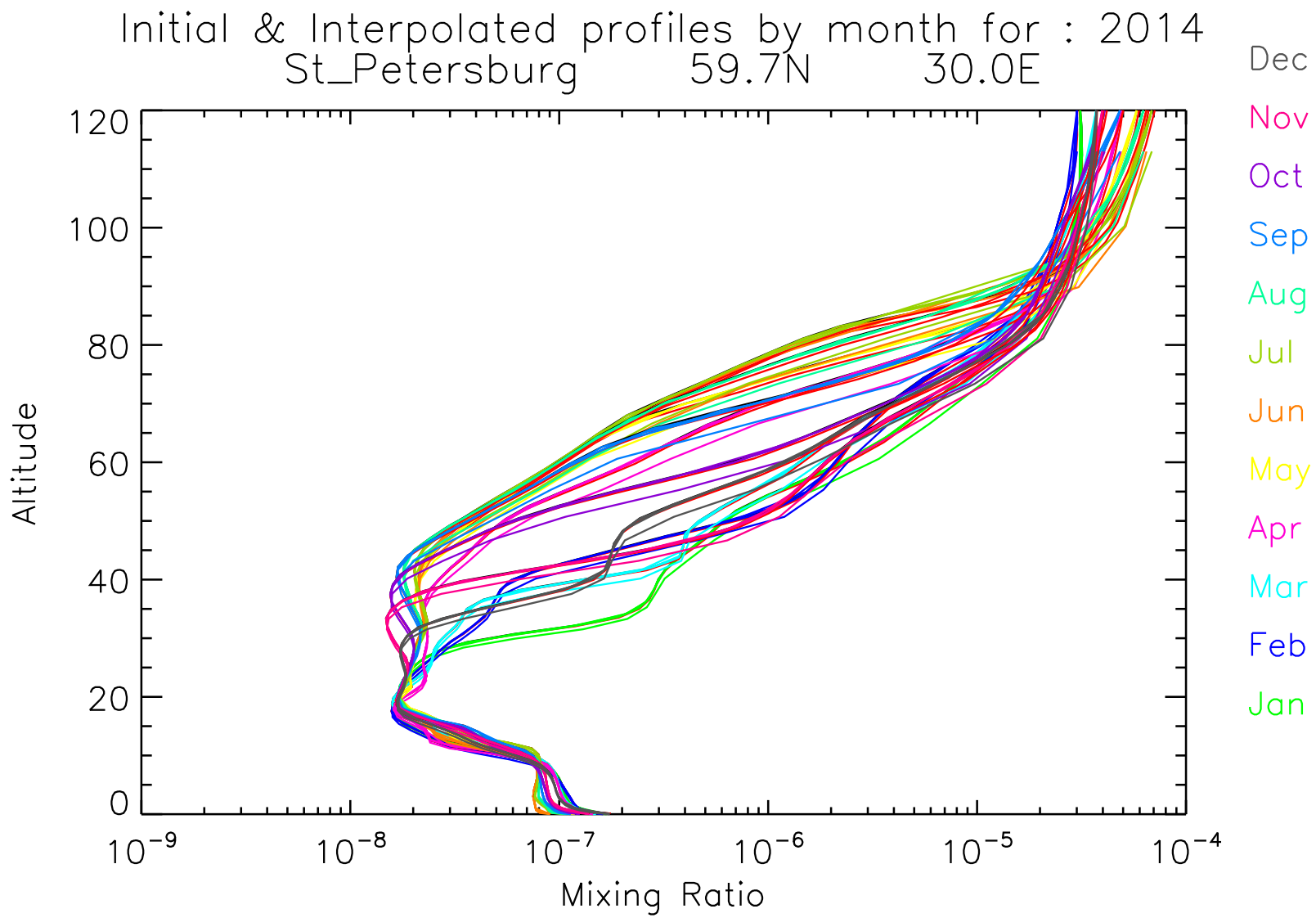
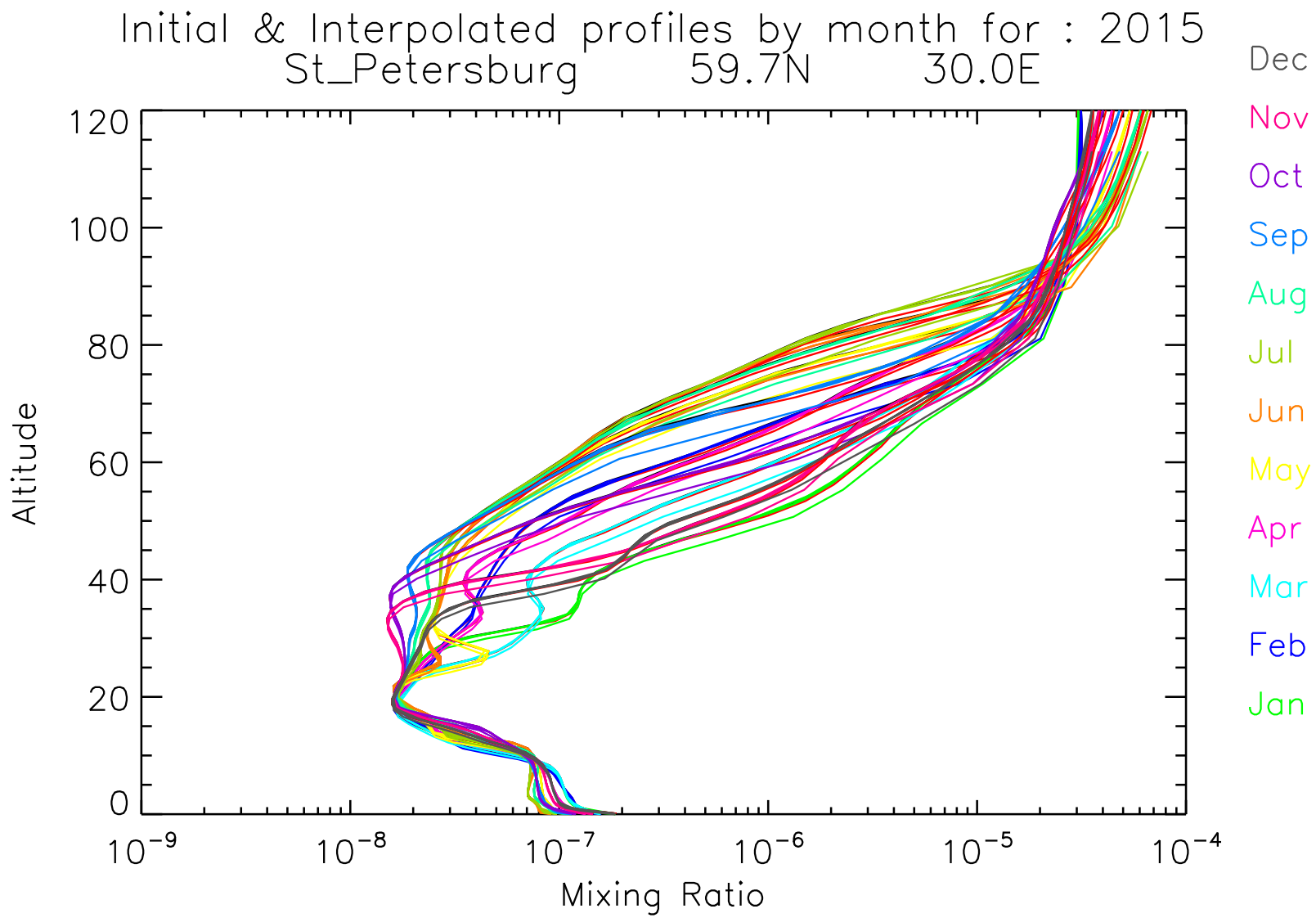
Feb
Jan

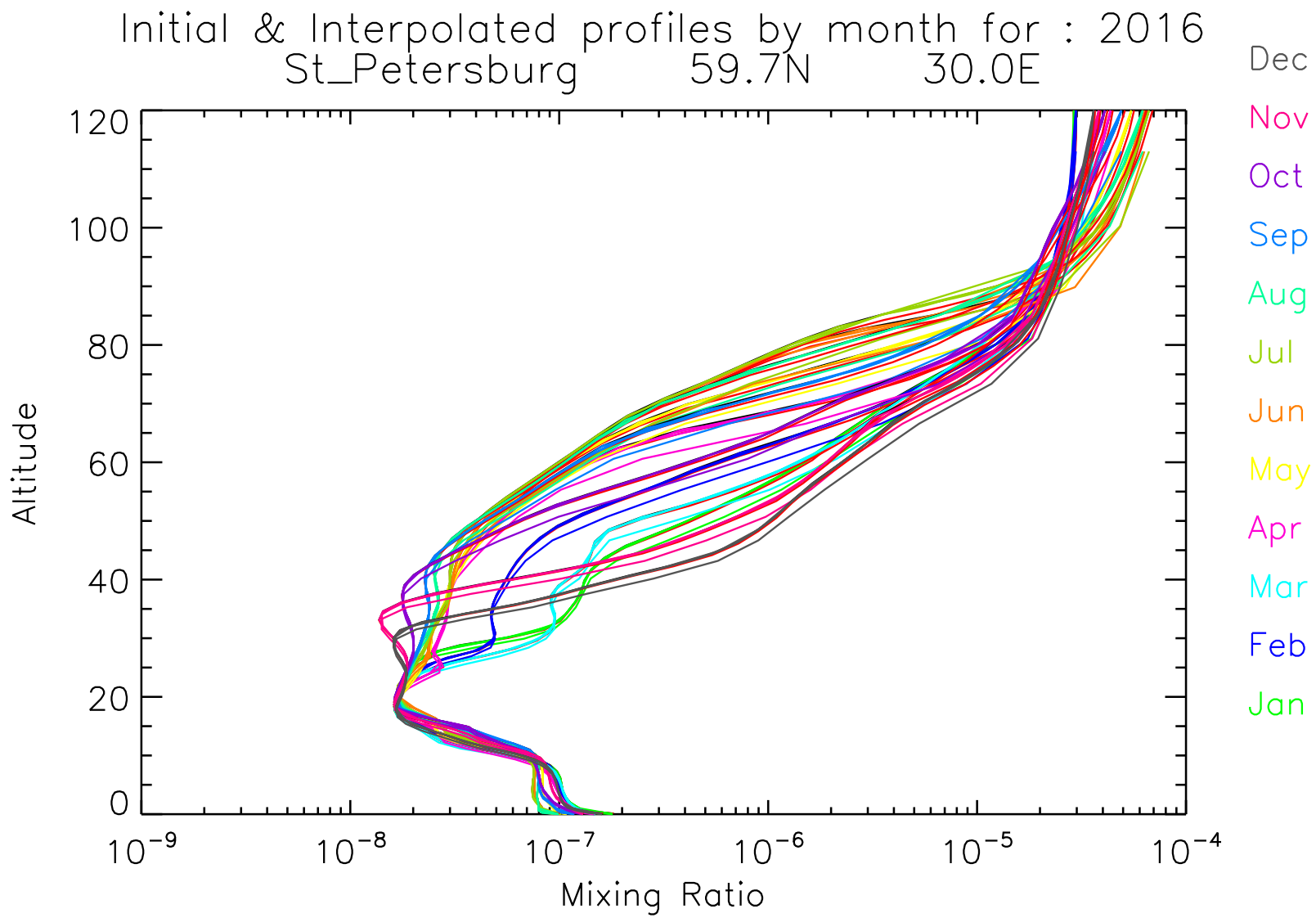

Initial & Interpolated profiles by month for : 2011
St_Petersburg 59.7N 30.0E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

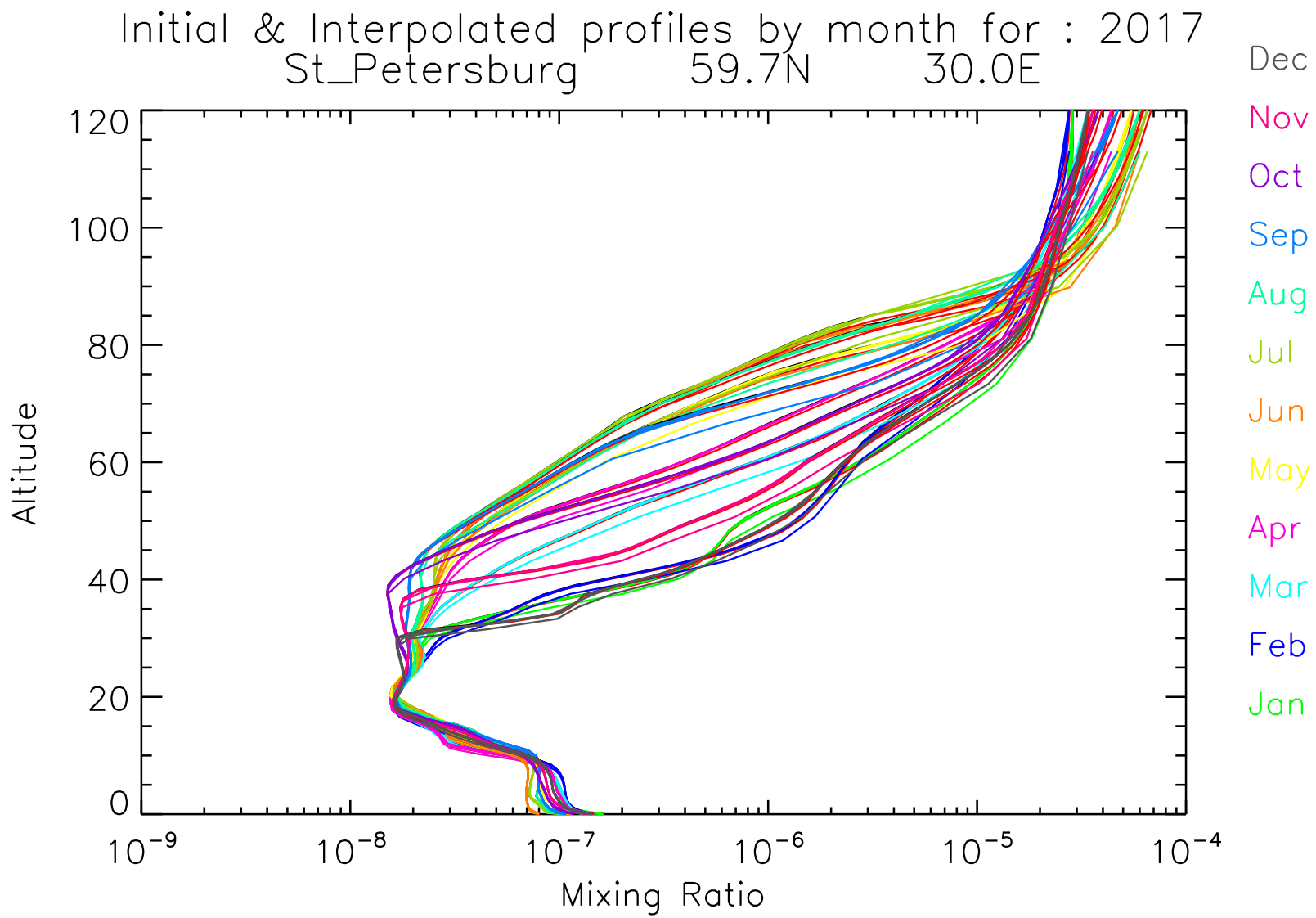

Initial & Interpolated profiles by month for : 2012
St_Petersburg 59.7N 30.0E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

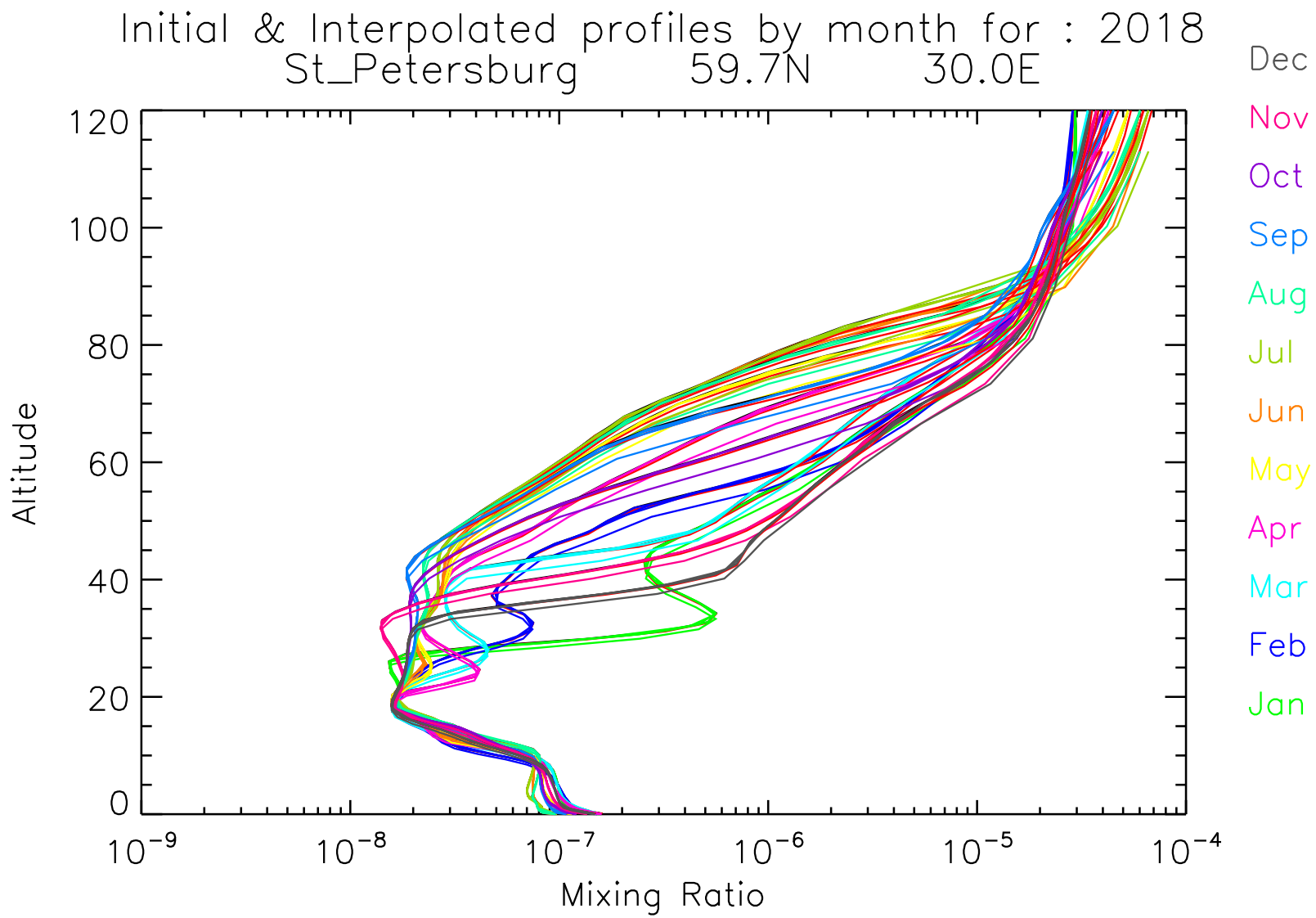

Initial & Interpolated profiles by month for : 2013
St_Petersburg 59.7N 30.0E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

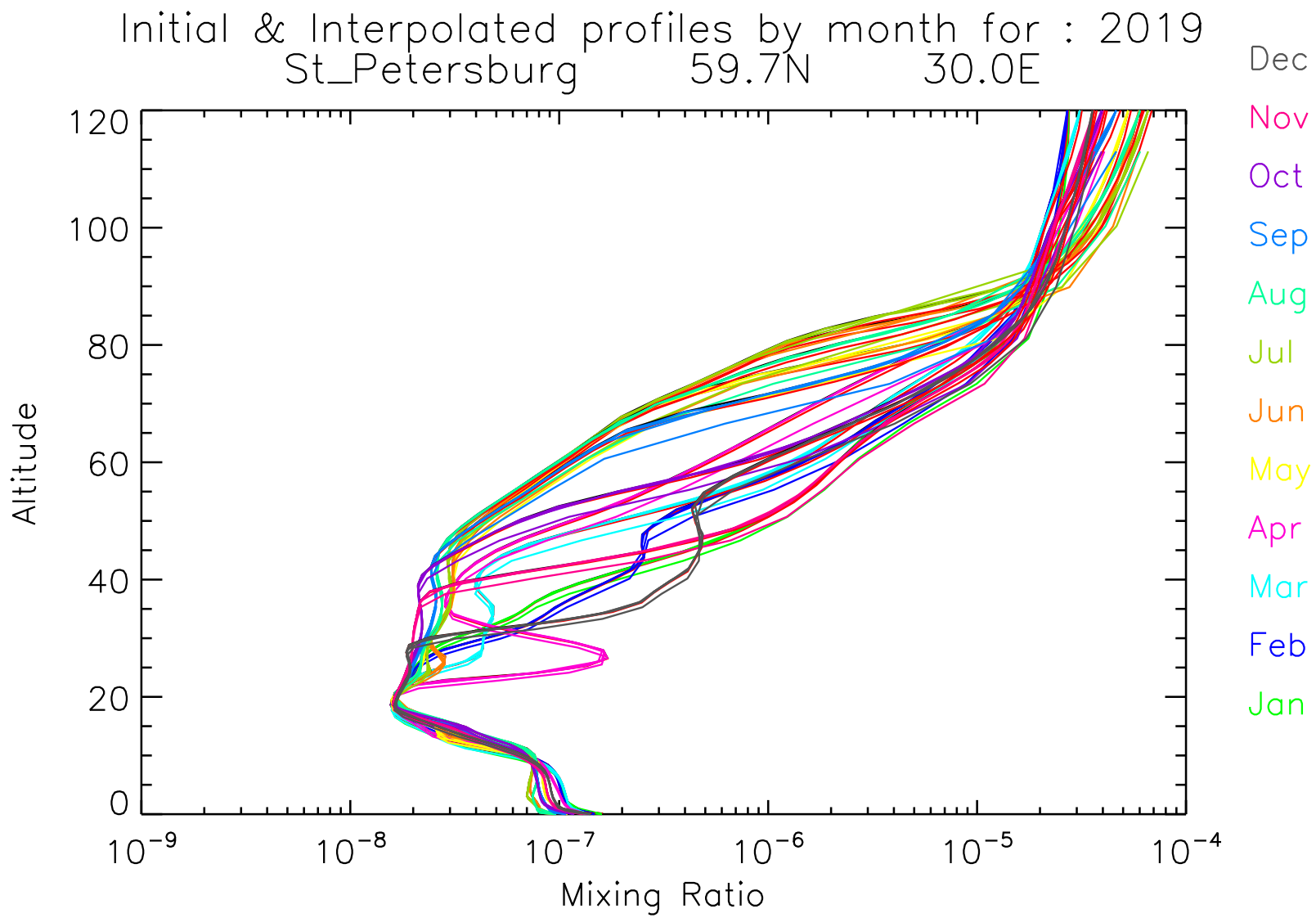

Initial & Interpolated profiles by month for : 2014
St_Petersburg 59.7N 30.0E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

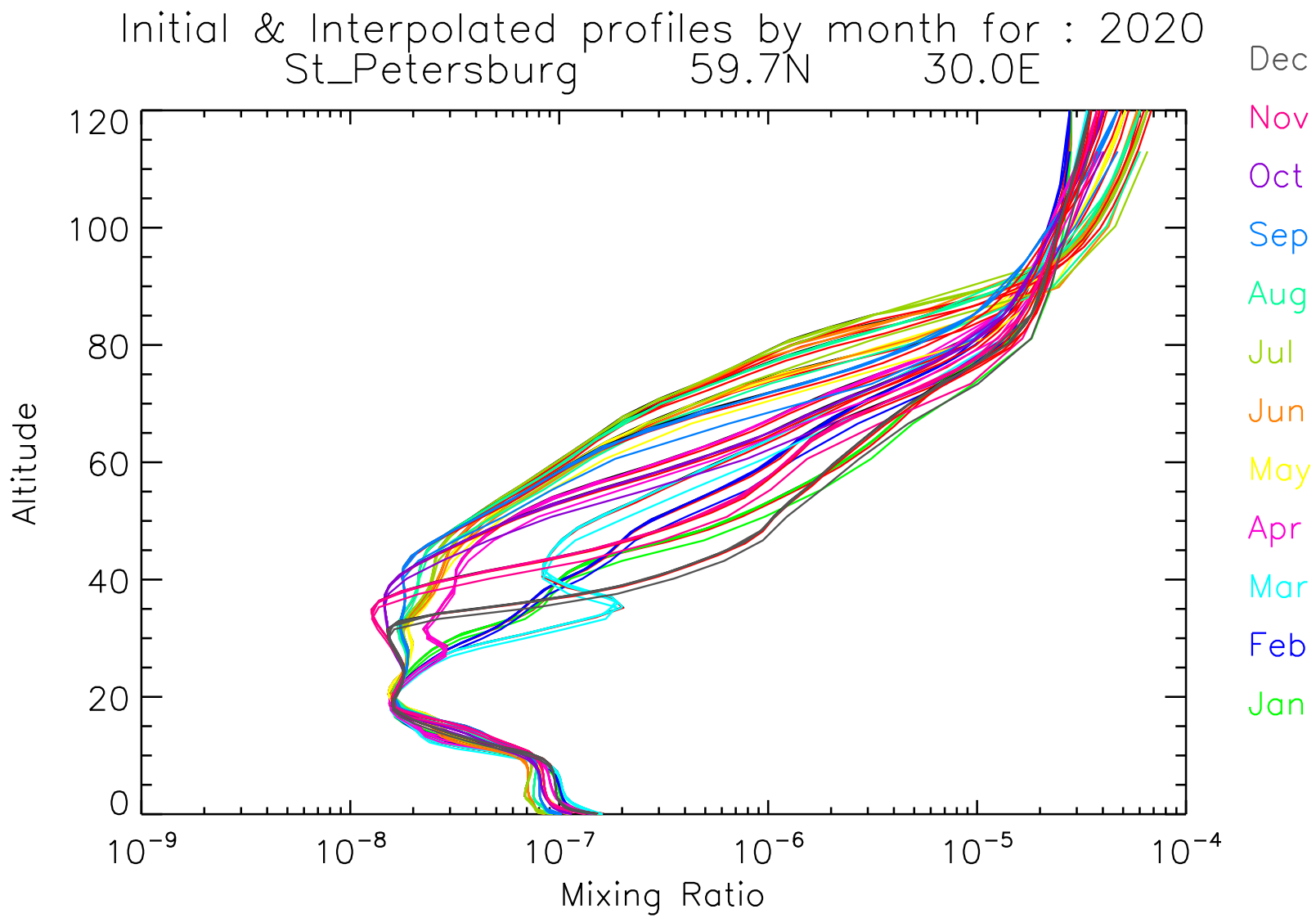

Initial & Interpolated profiles by month for : 2015
St_Petersburg 59.7N 30.0E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

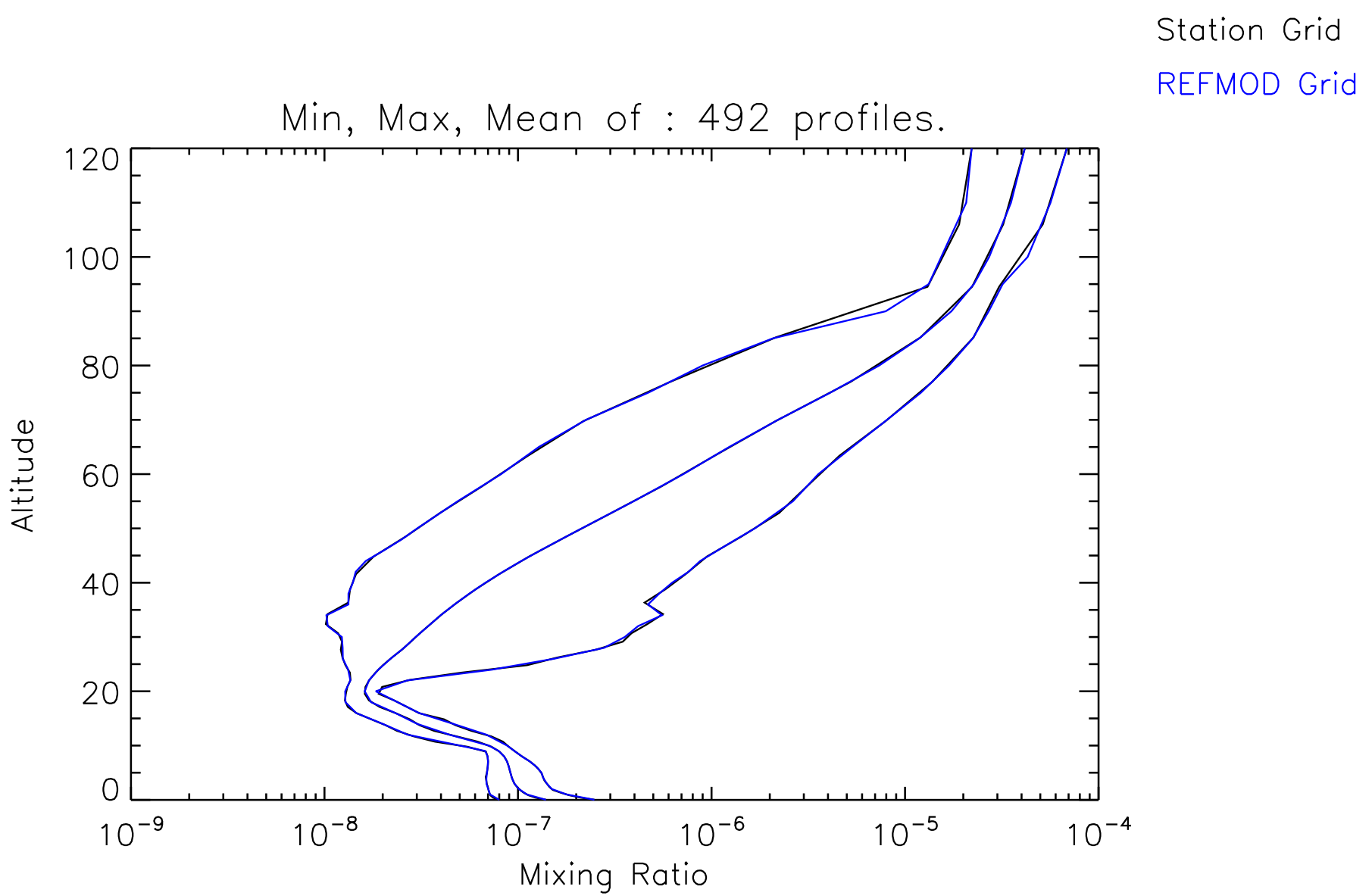

Initial & Interpolated profiles by month for : 2016
St_Petersburg 59.7N 30.0E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

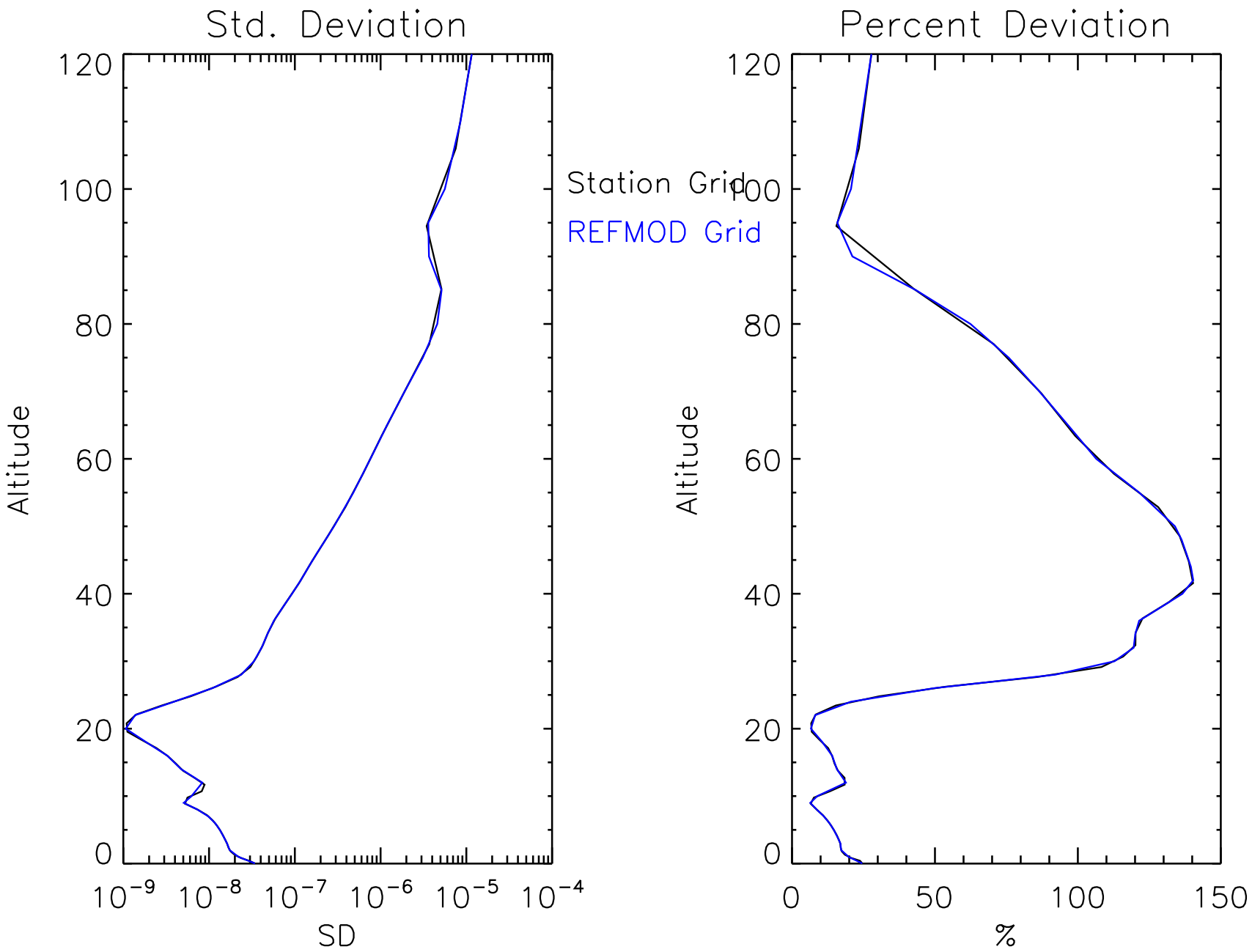

Initial & Interpolated profiles by month for : 2017
St_Petersburg 59.7N 30.0E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

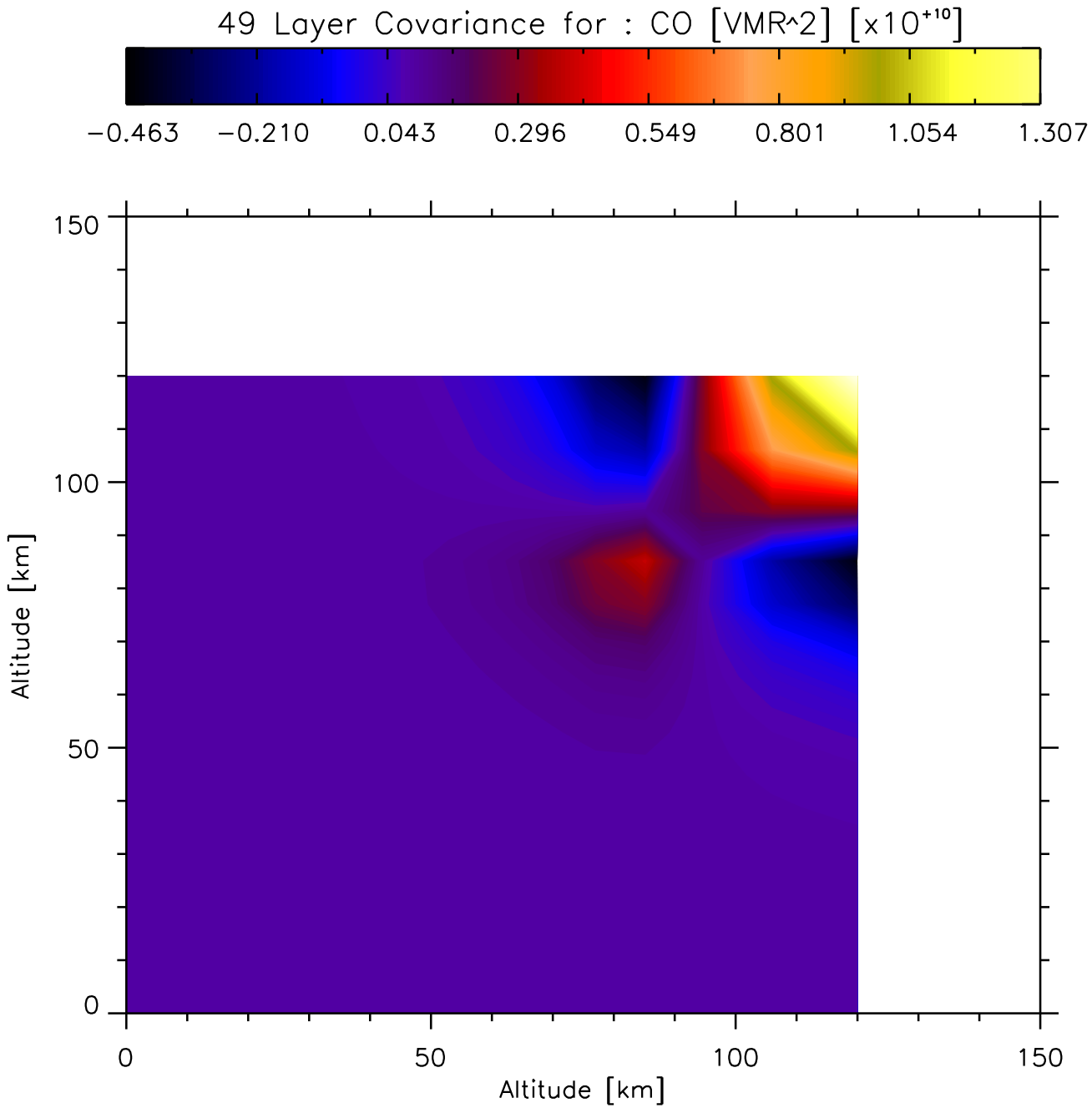

Initial & Interpolated profiles by month for : 2018
St_Petersburg 59.7N 30.0E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan


Initial & Interpolated profiles by month for : 2019
St_Petersburg 59.7N 30.0E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

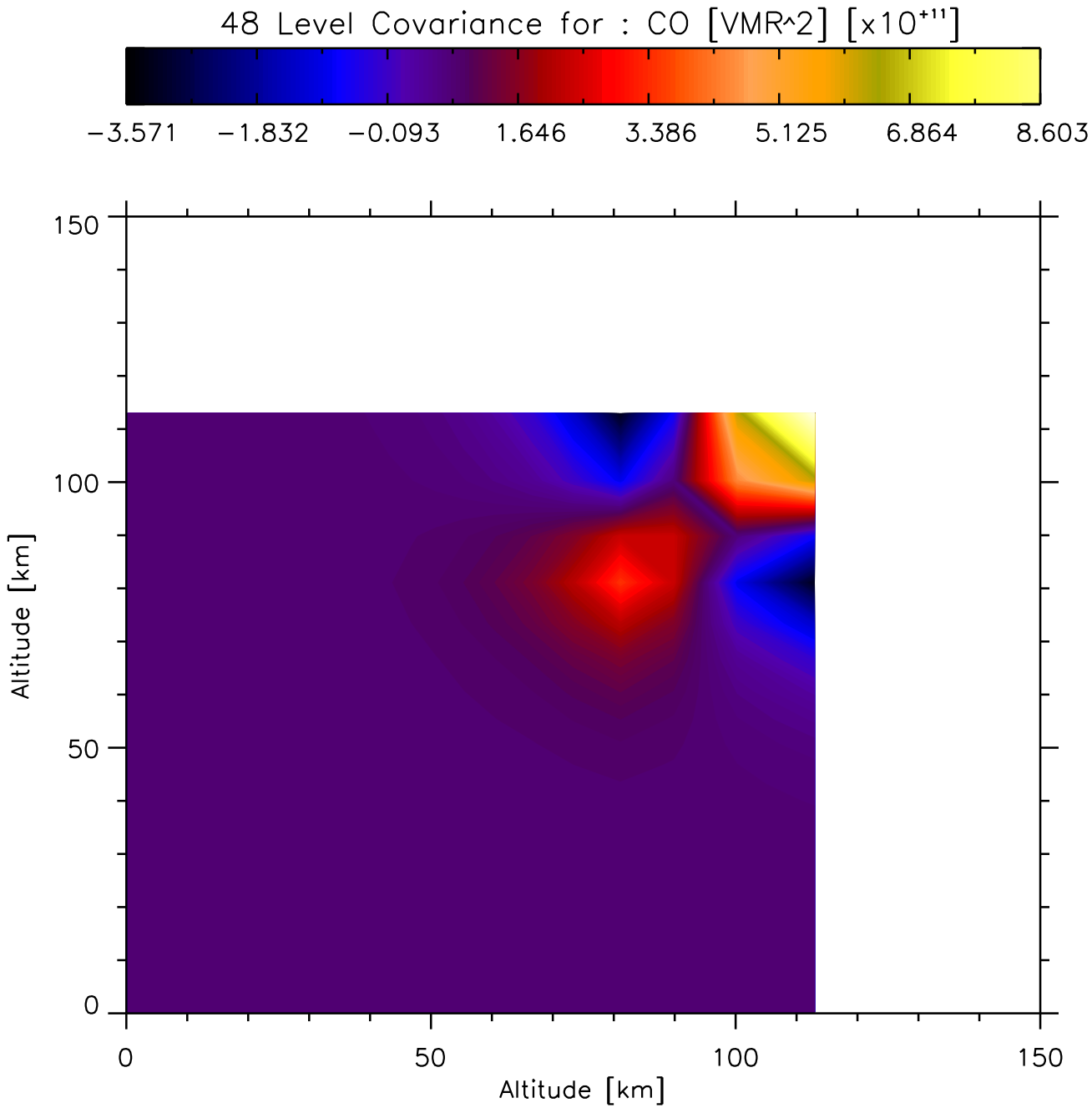

Initial & Interpolated profiles by month for : 2020
St_Petersburg 59.7N 30.0E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

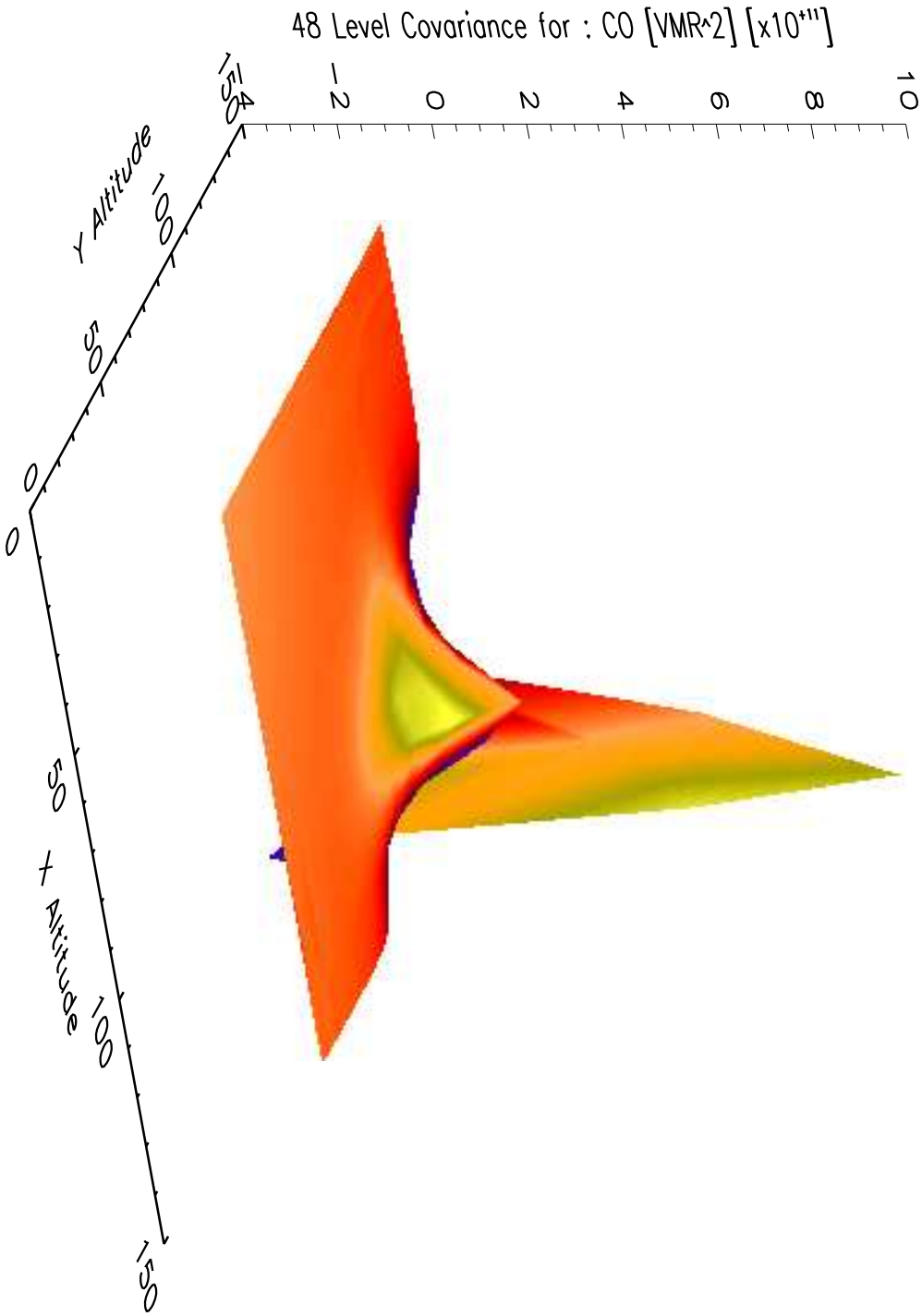

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
10^{-9} 10^{-8} 10^{-7} 10^{-6} 10^{-5} 10^{-4}
SD
0
50
100
150
%


49 Layer Covariance for : CO [VMR^2] [x10^+10]
−0.463
−0.210
0.043
0.296
0.549
0.801
1.054
1.307
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

49 Layer Covariance for : CO [VMR^2] [x10^+10]
1.5
1.0
0.5
0.0
Y Altitude
0
20
40
60
X Altitude
0
50
100
150


48 Level Covariance for : CO [VMR^2] [x10^+11]
−3.571
−1.832
−0.093
1.646
3.386
5.125
6.864
8.603
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


48 Level Covariance for : CO [VMR^2] [x10^+11]
-4
-2
0
2
4
6
8
10
Y Altitude
0
50
100
150
X Altitude
0
50
100
150