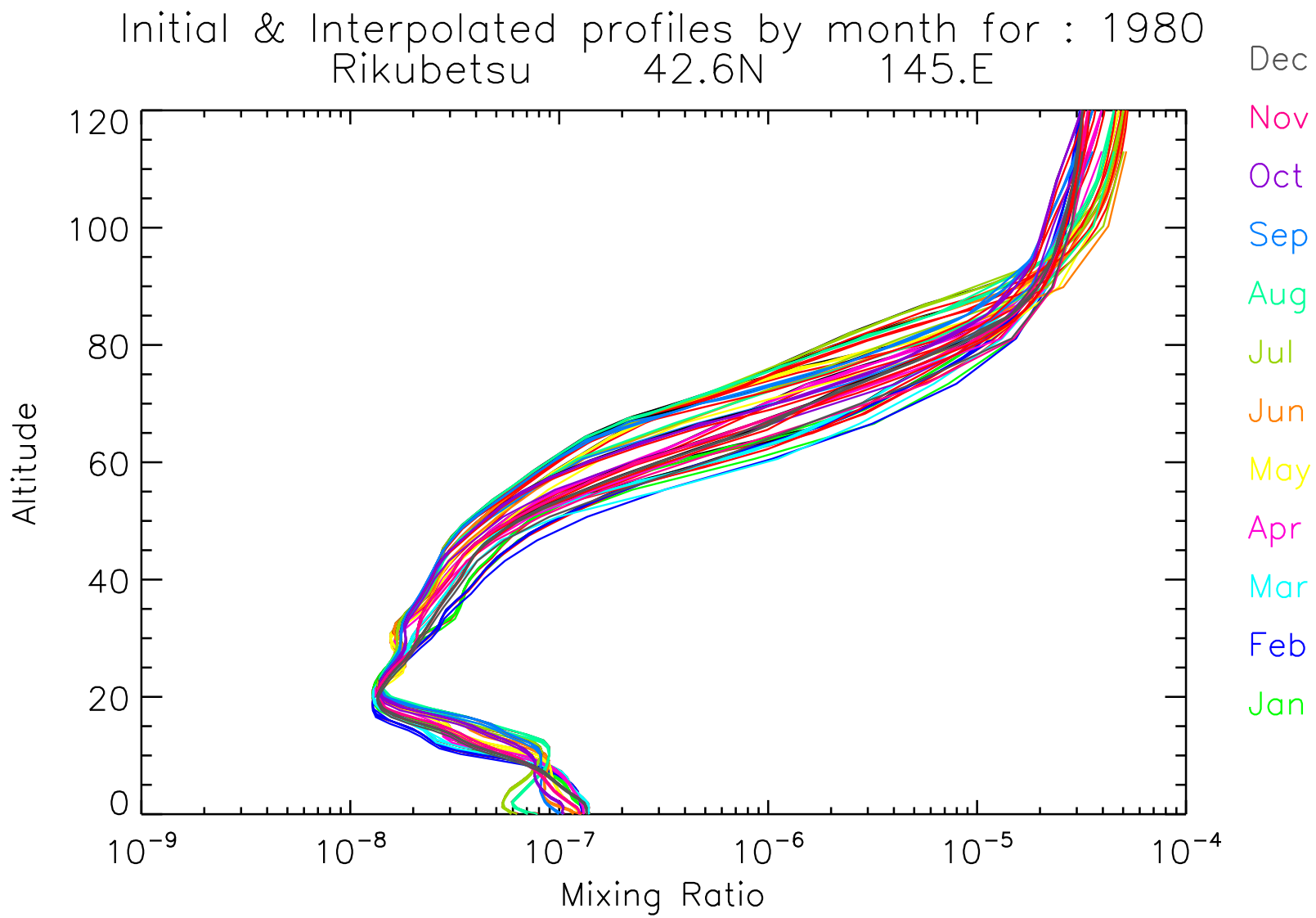
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Mixing Ratio
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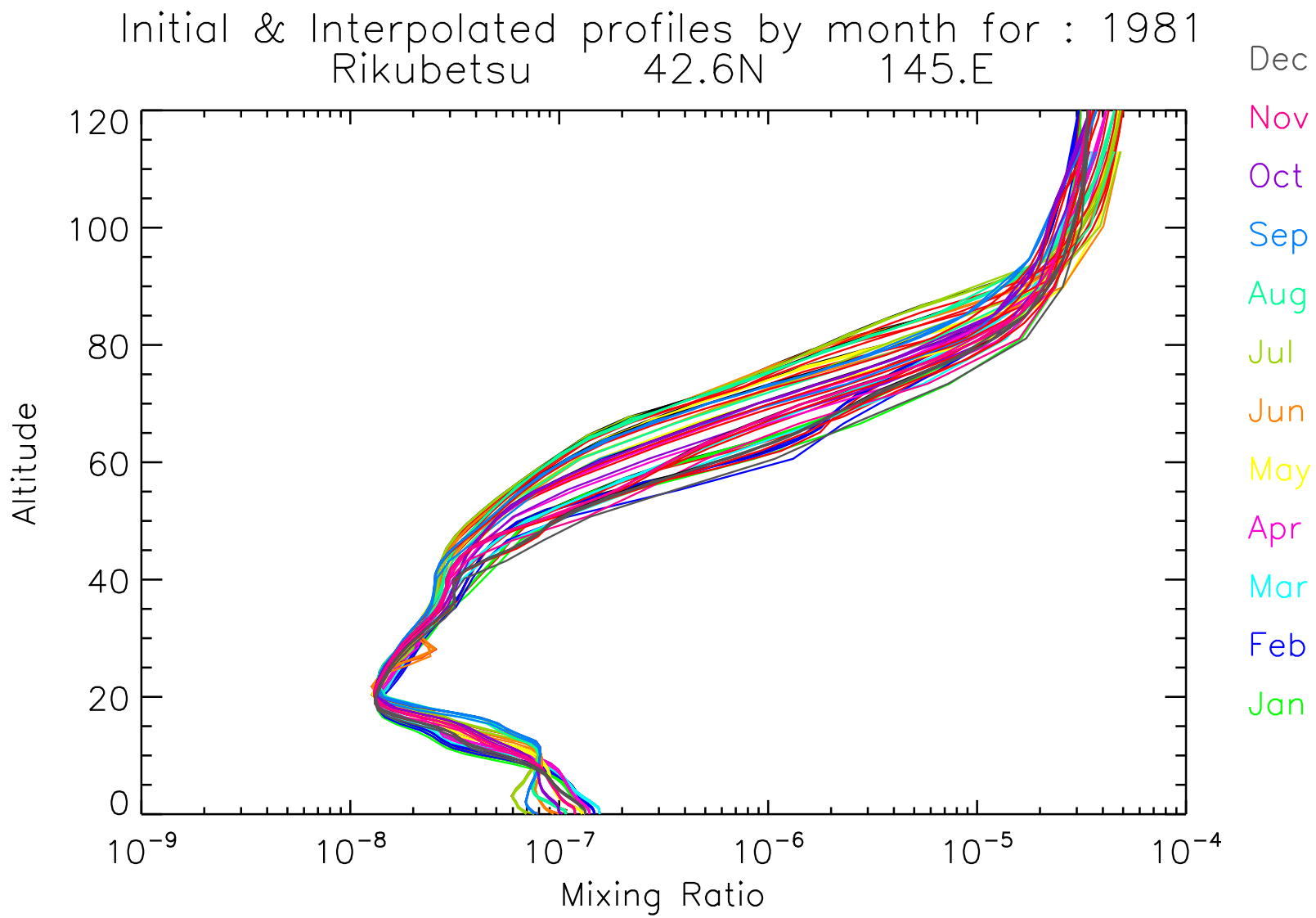
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Mixing Ratio
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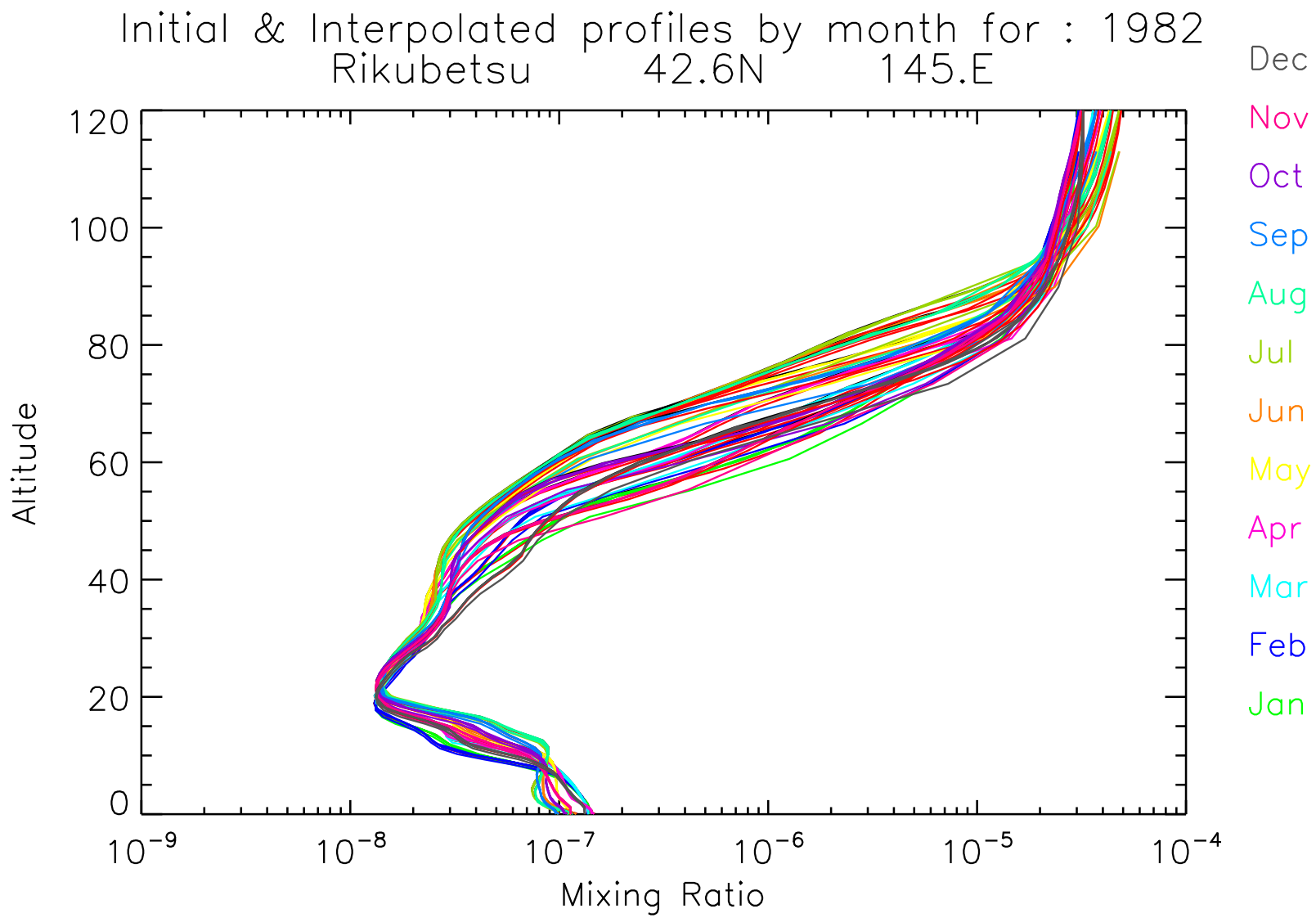
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Mixing Ratio
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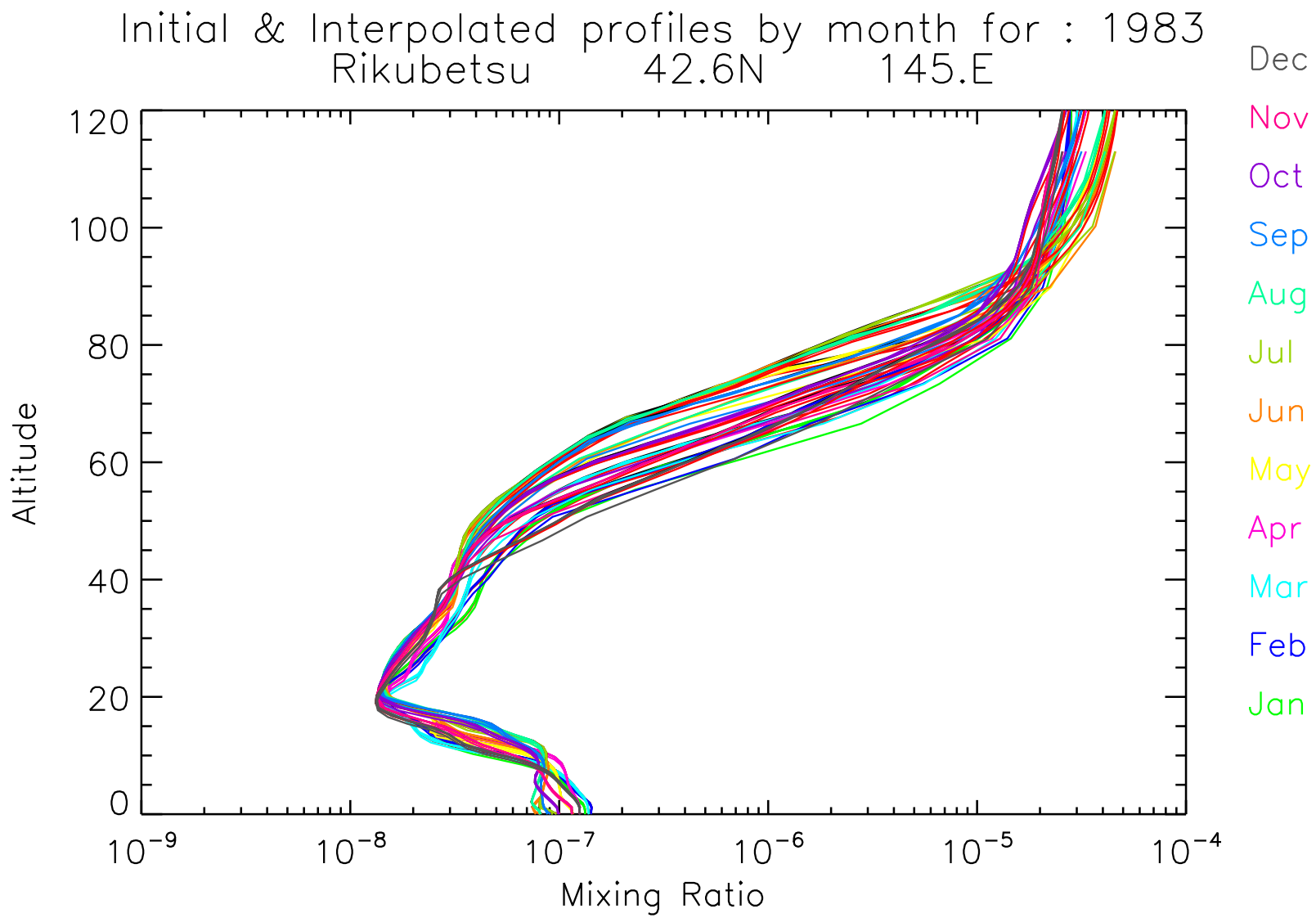
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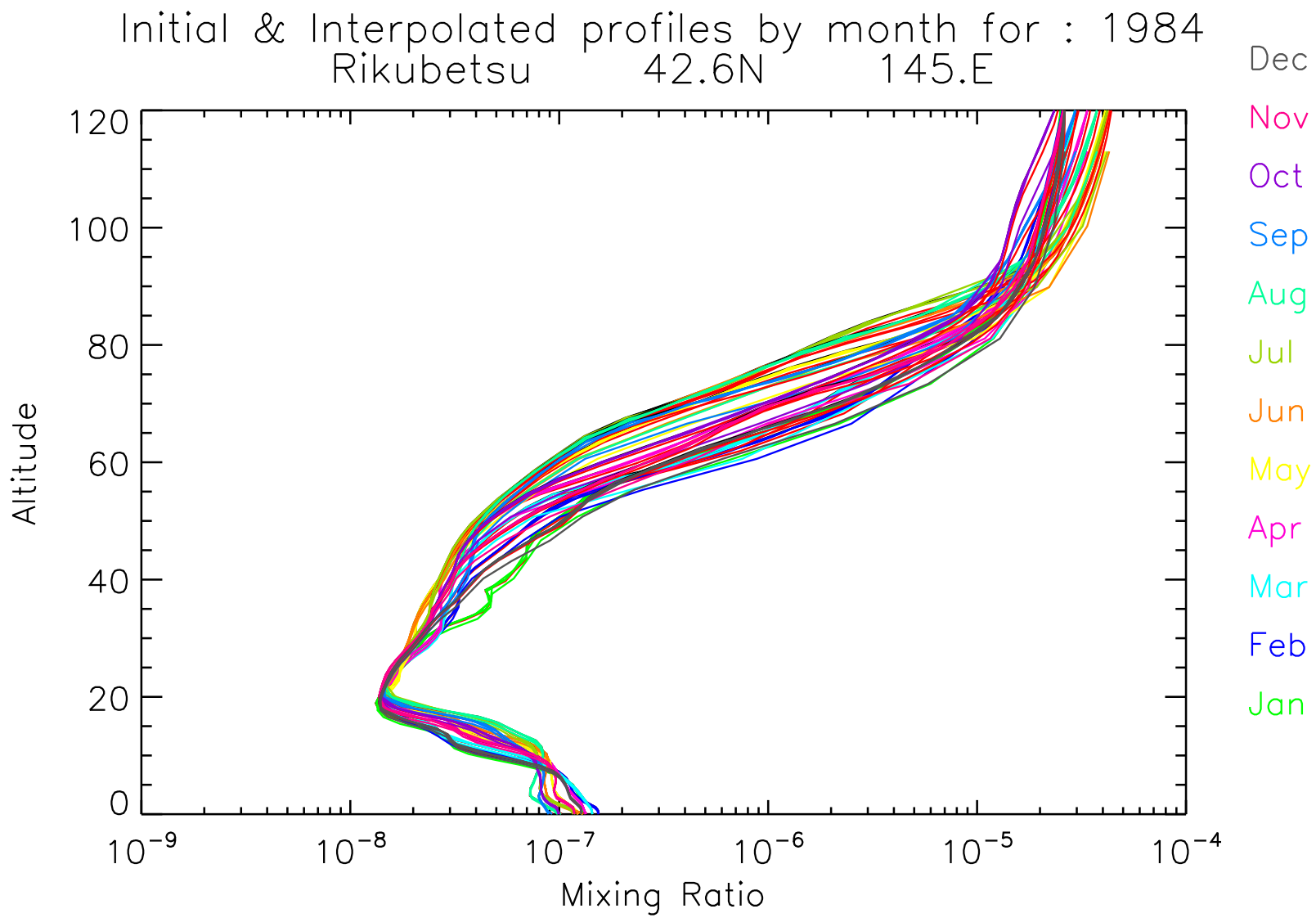
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Mixing Ratio
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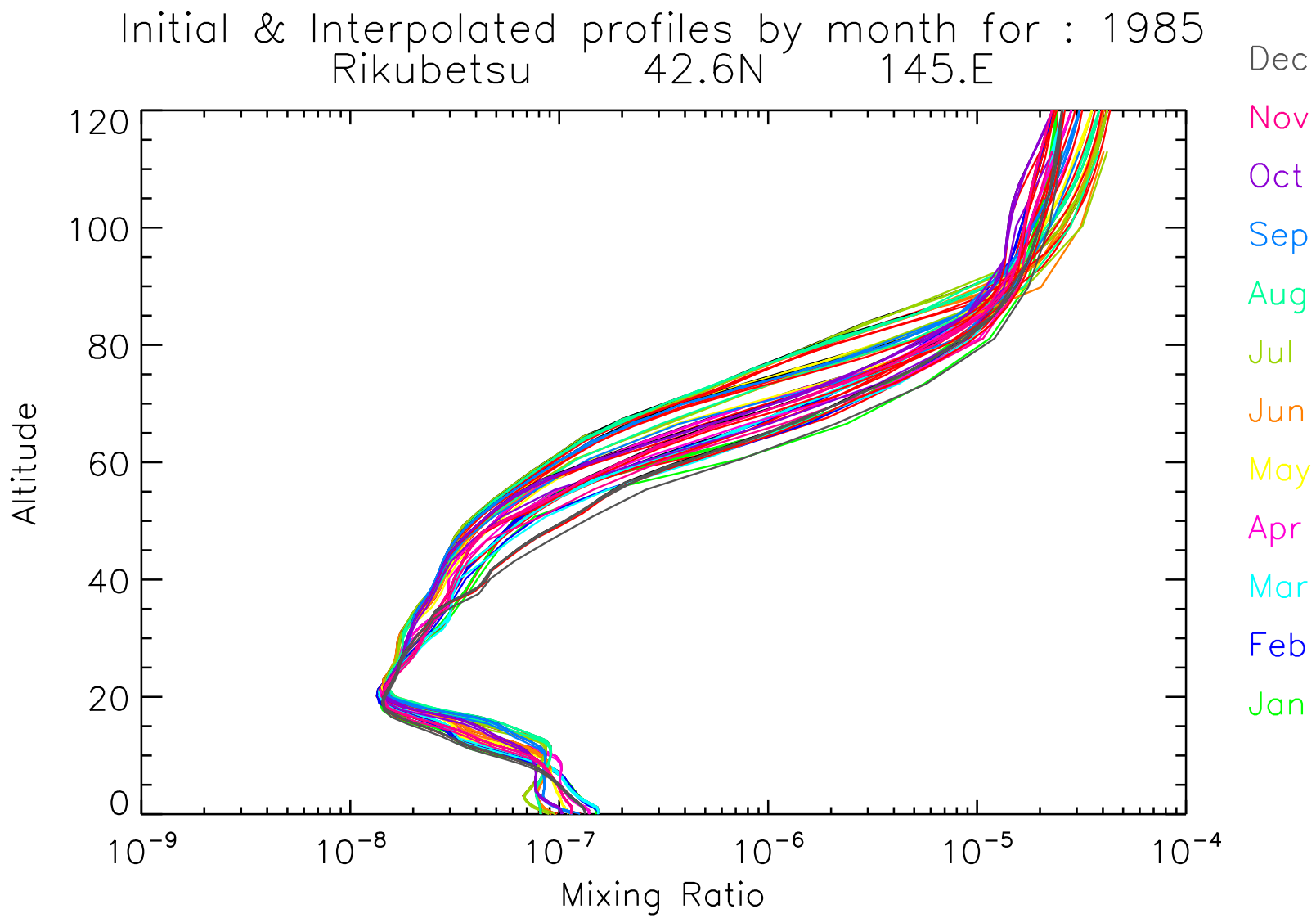
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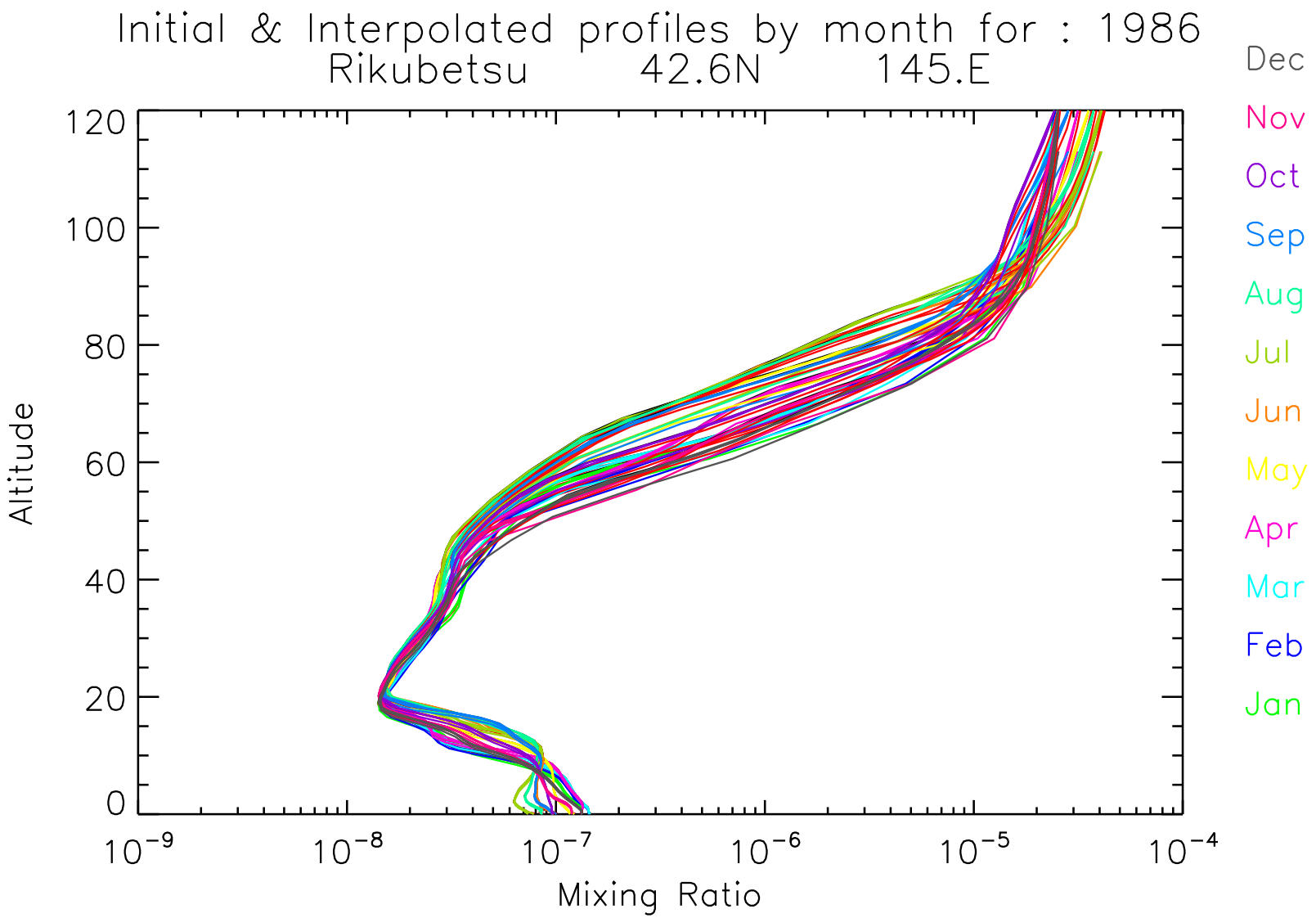
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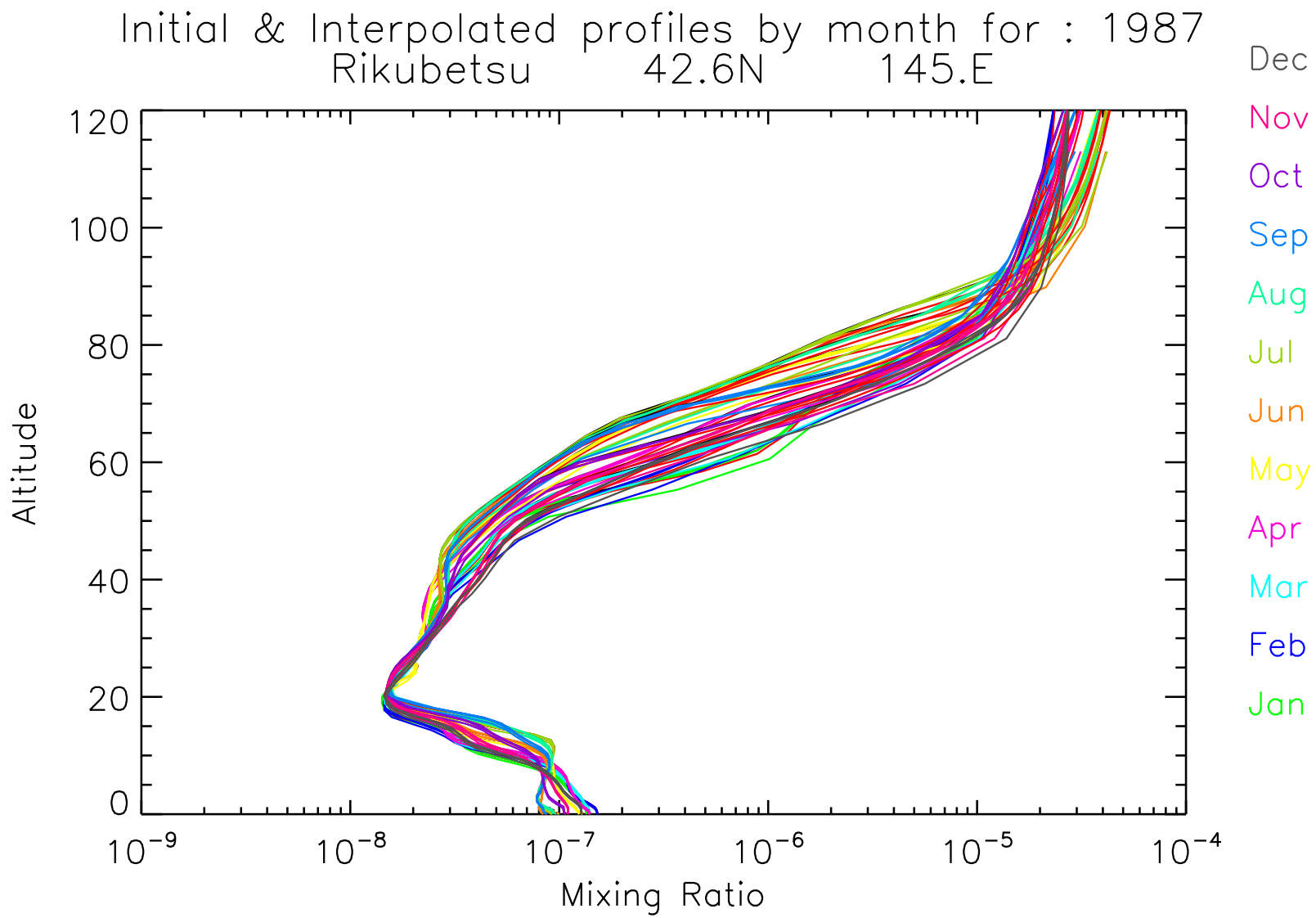
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Mixing Ratio
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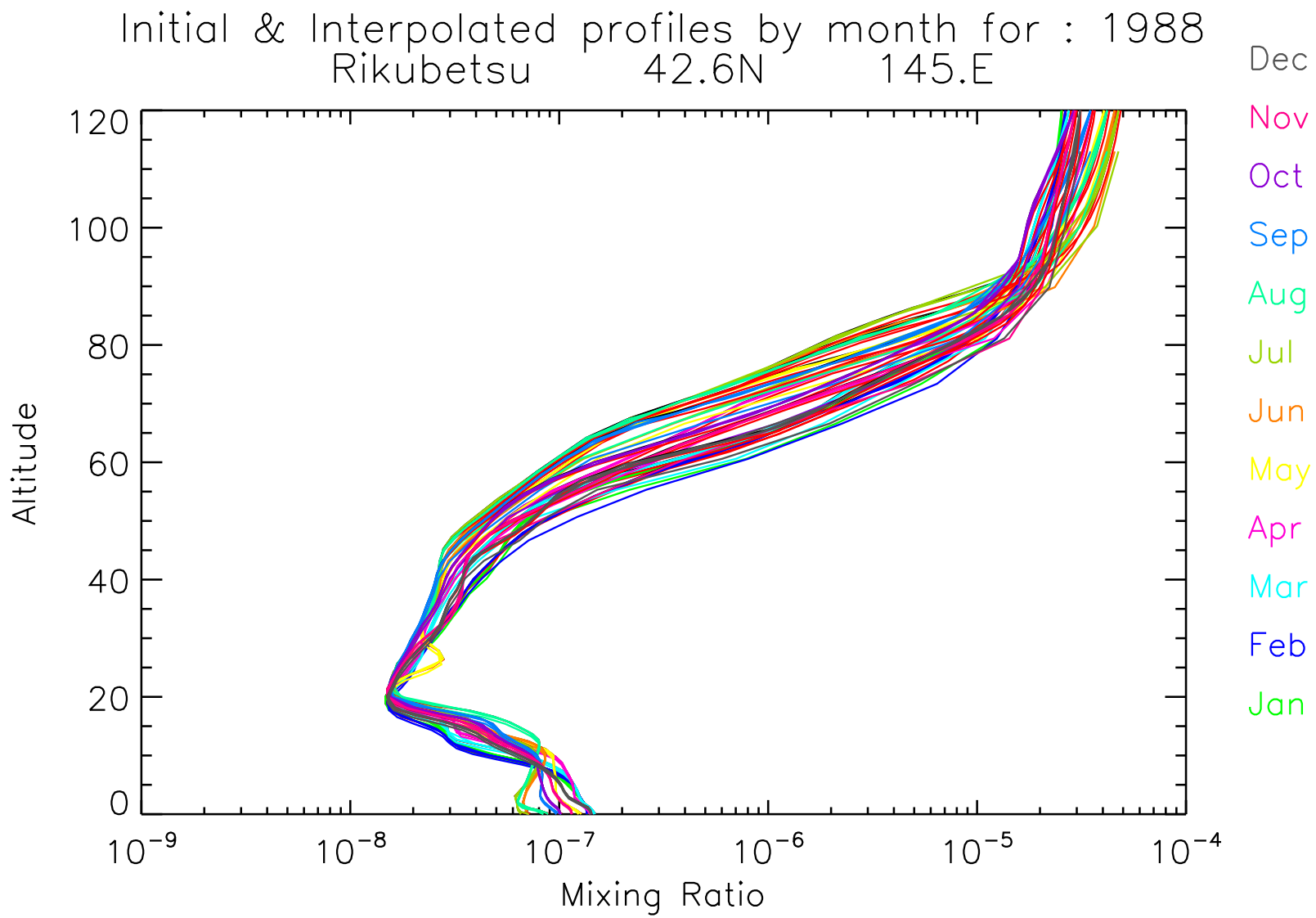
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Altitude
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Mixing Ratio
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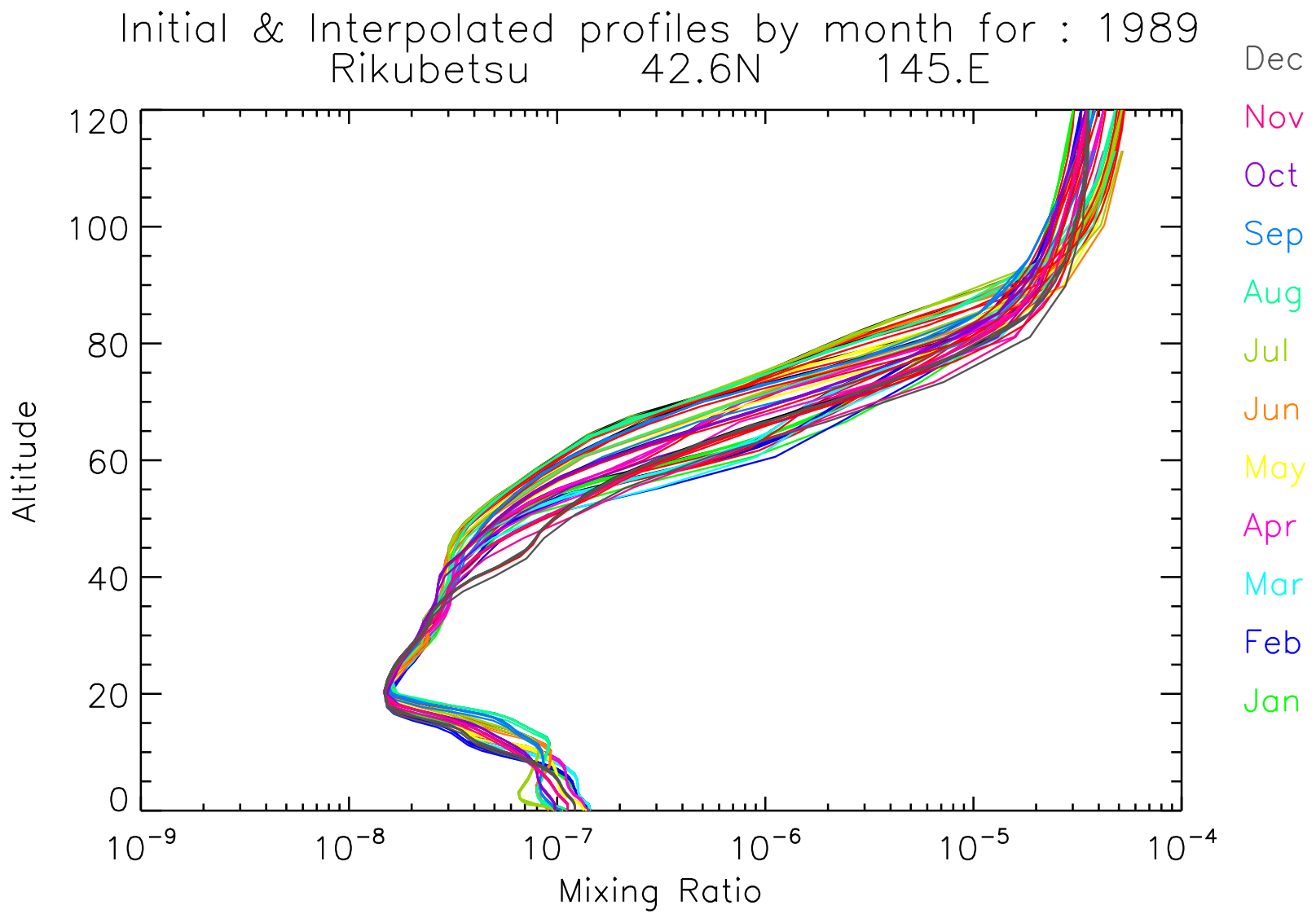
Initial & Interpolated profiles by month for : 1989
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Altitude
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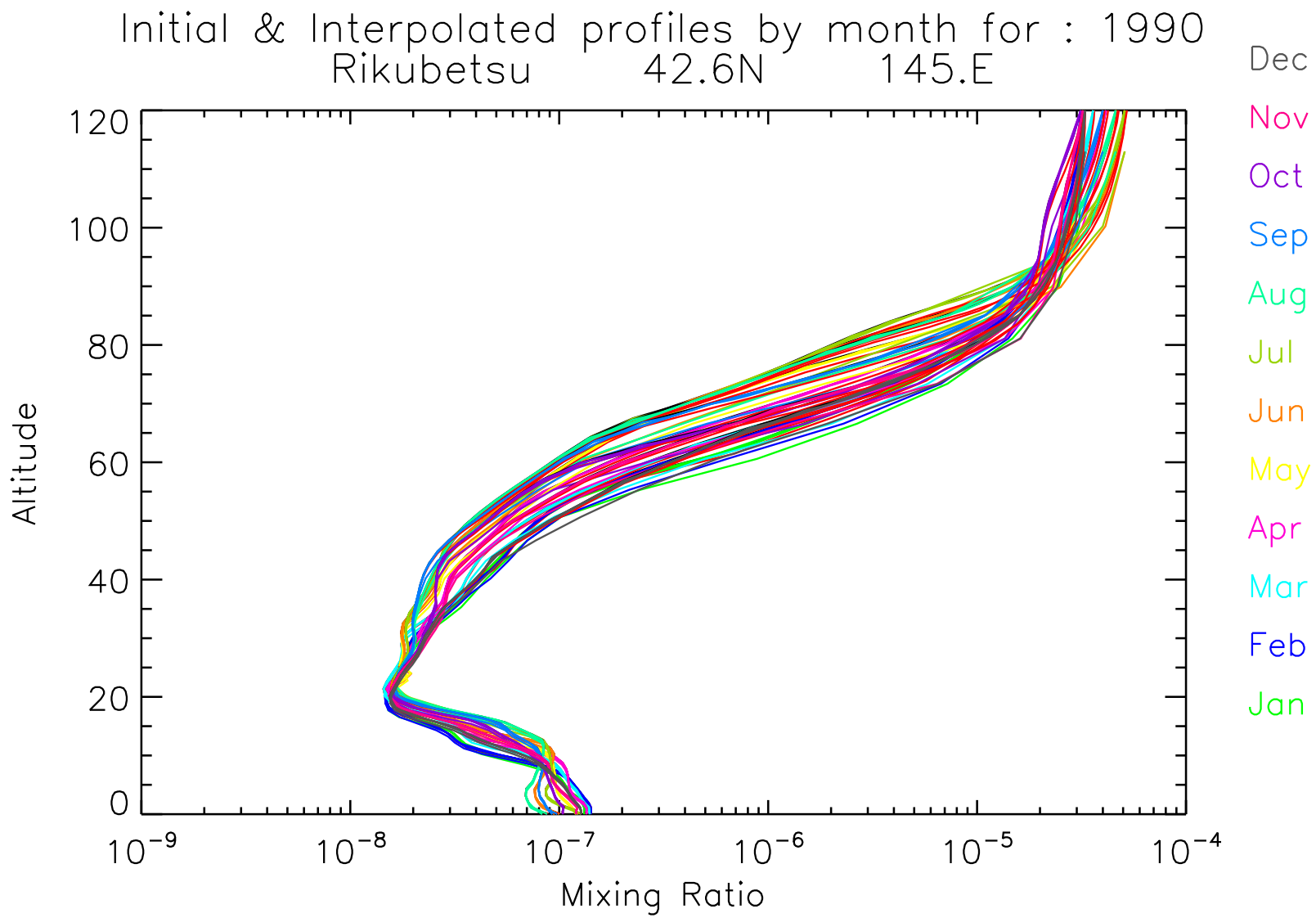
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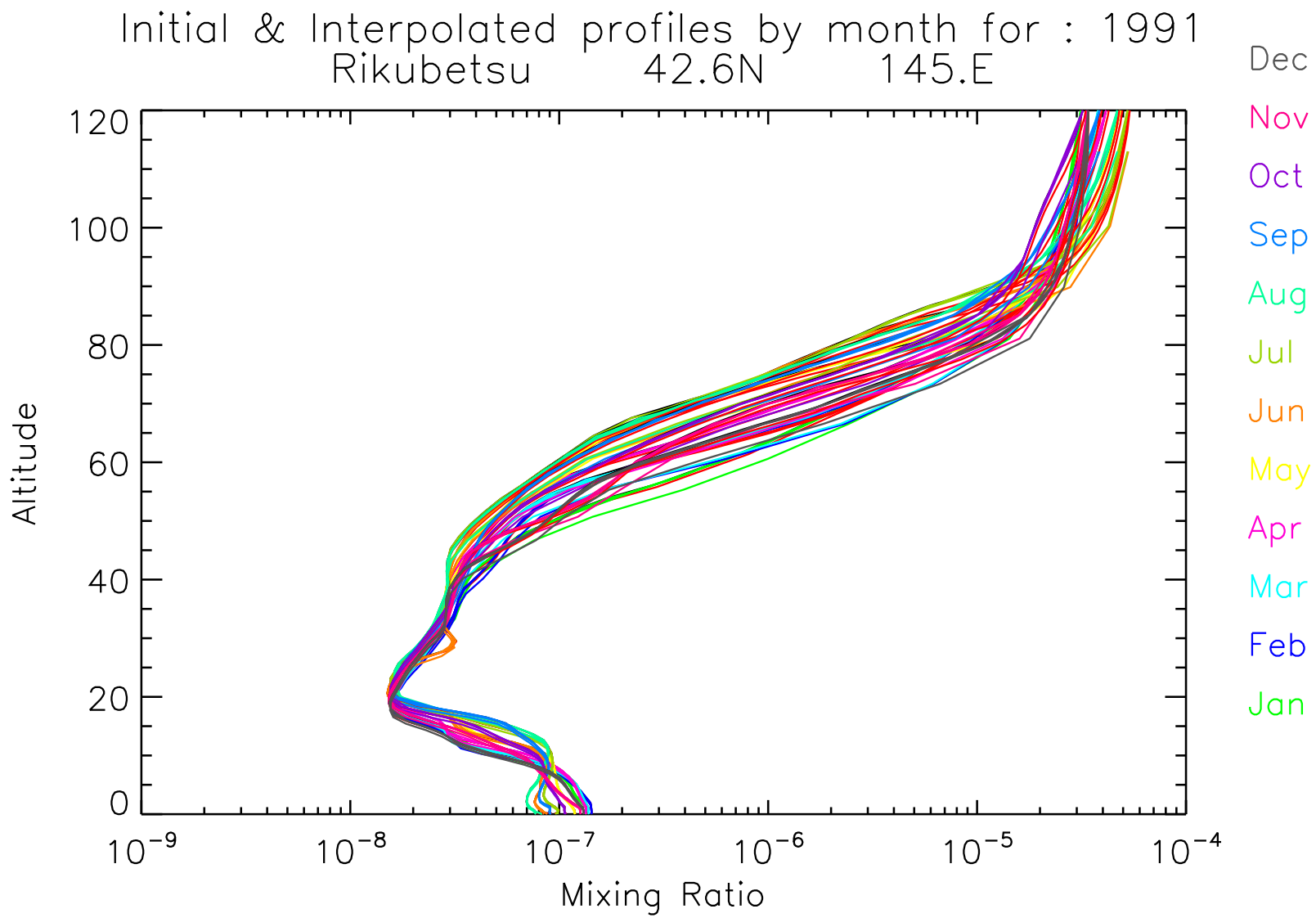
Initial & Interpolated profiles by month for : 1991
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Mixing Ratio
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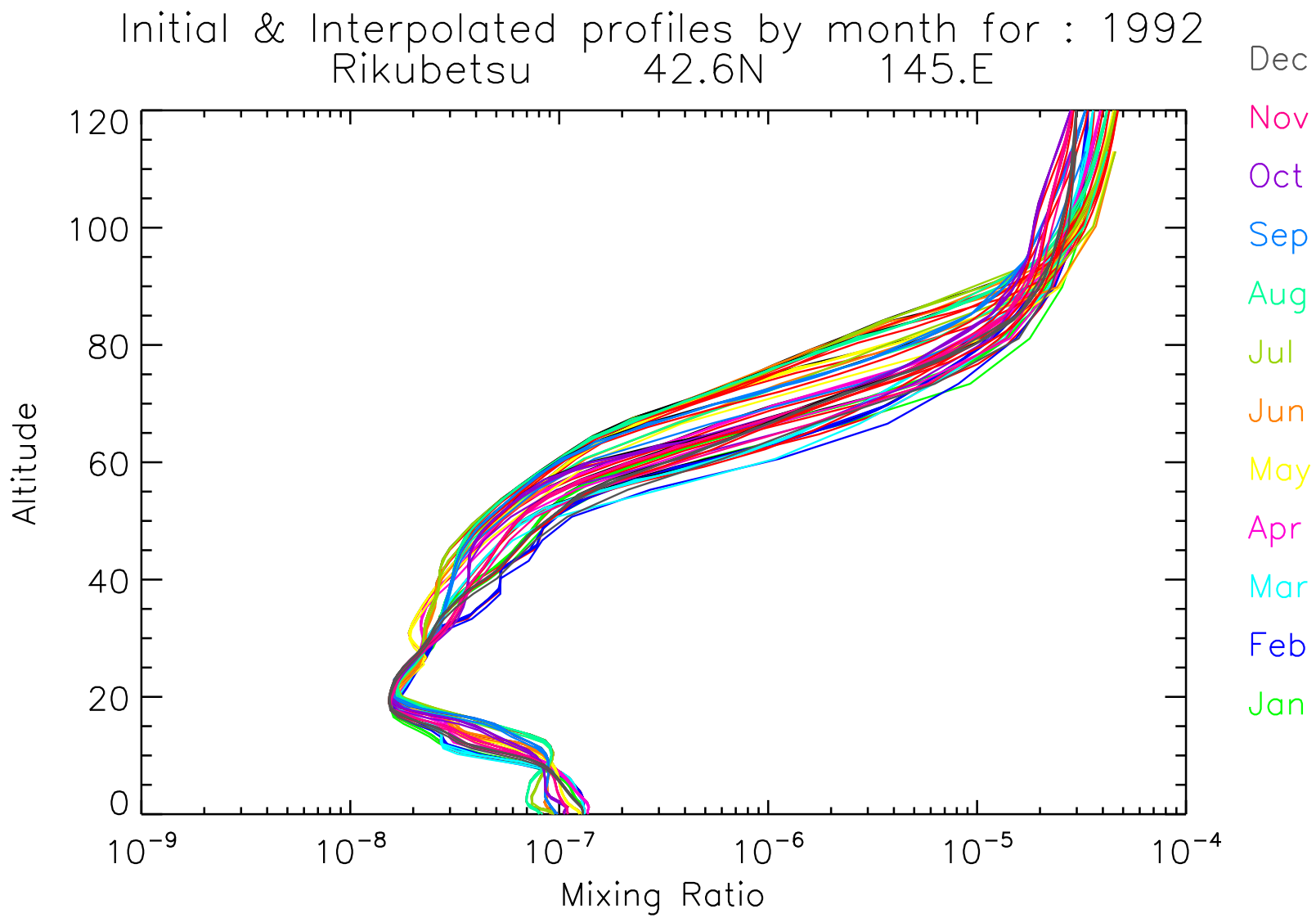
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Altitude
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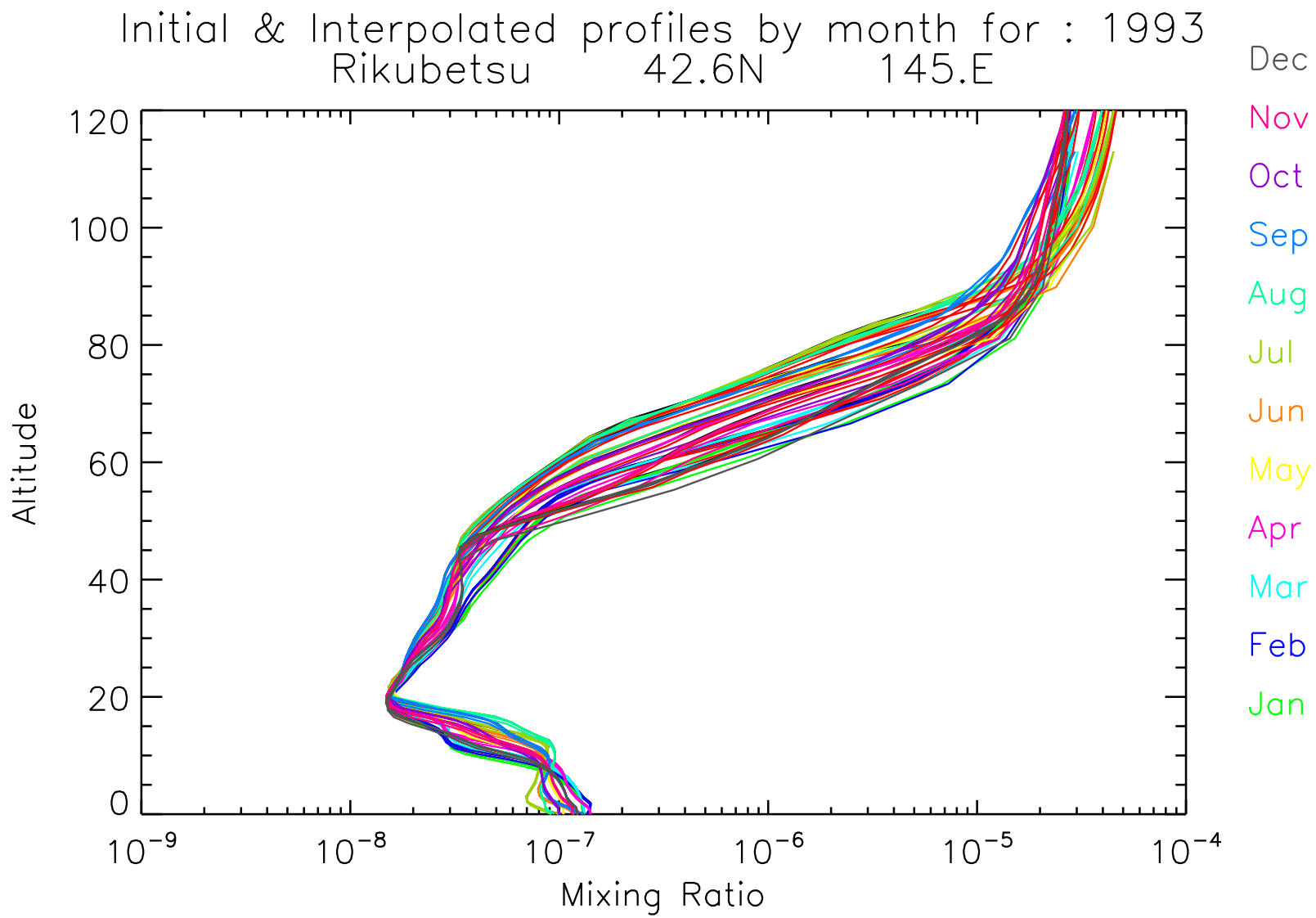
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Mixing Ratio
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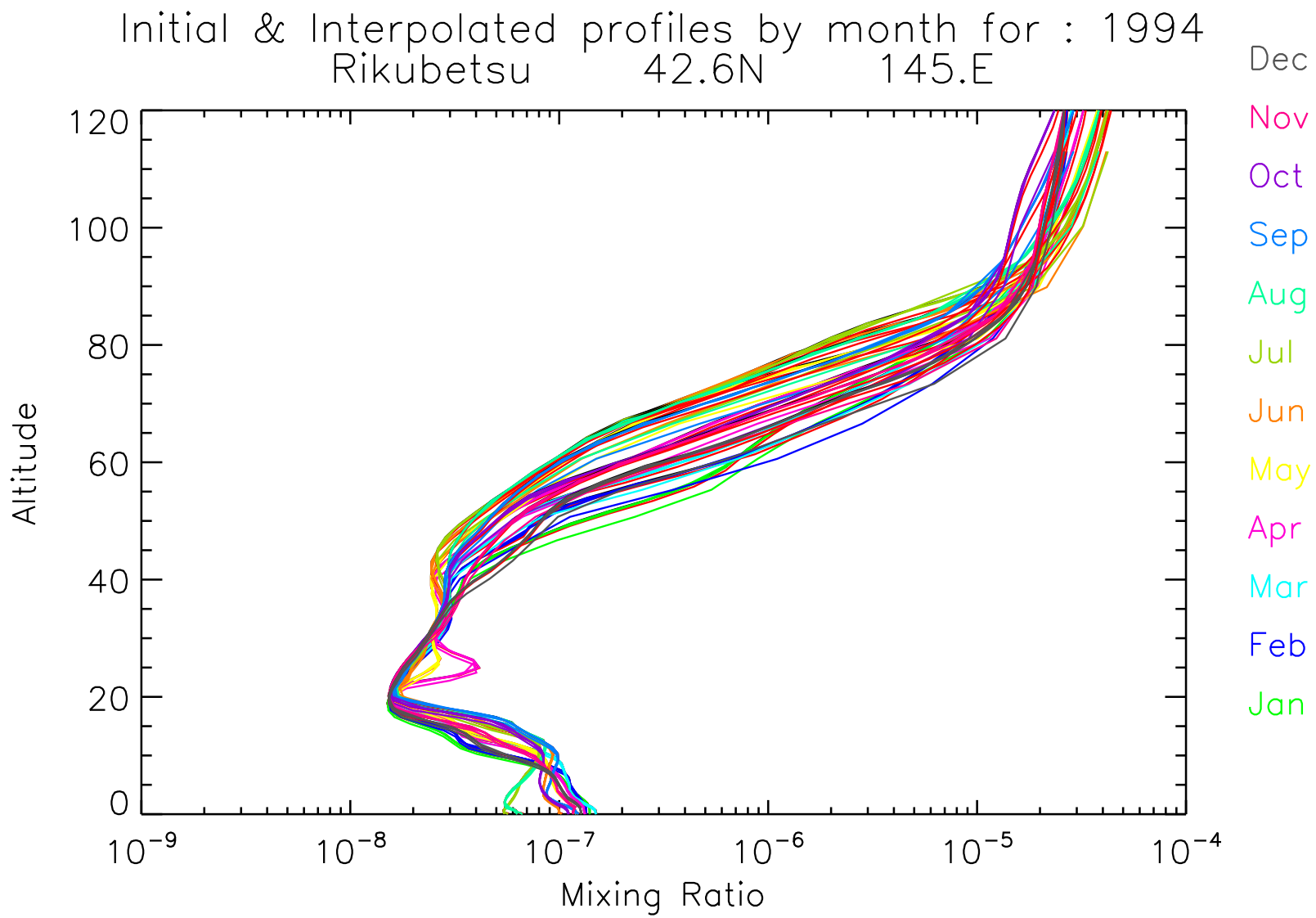
Initial & Interpolated profiles by month for : 1994
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Mixing Ratio
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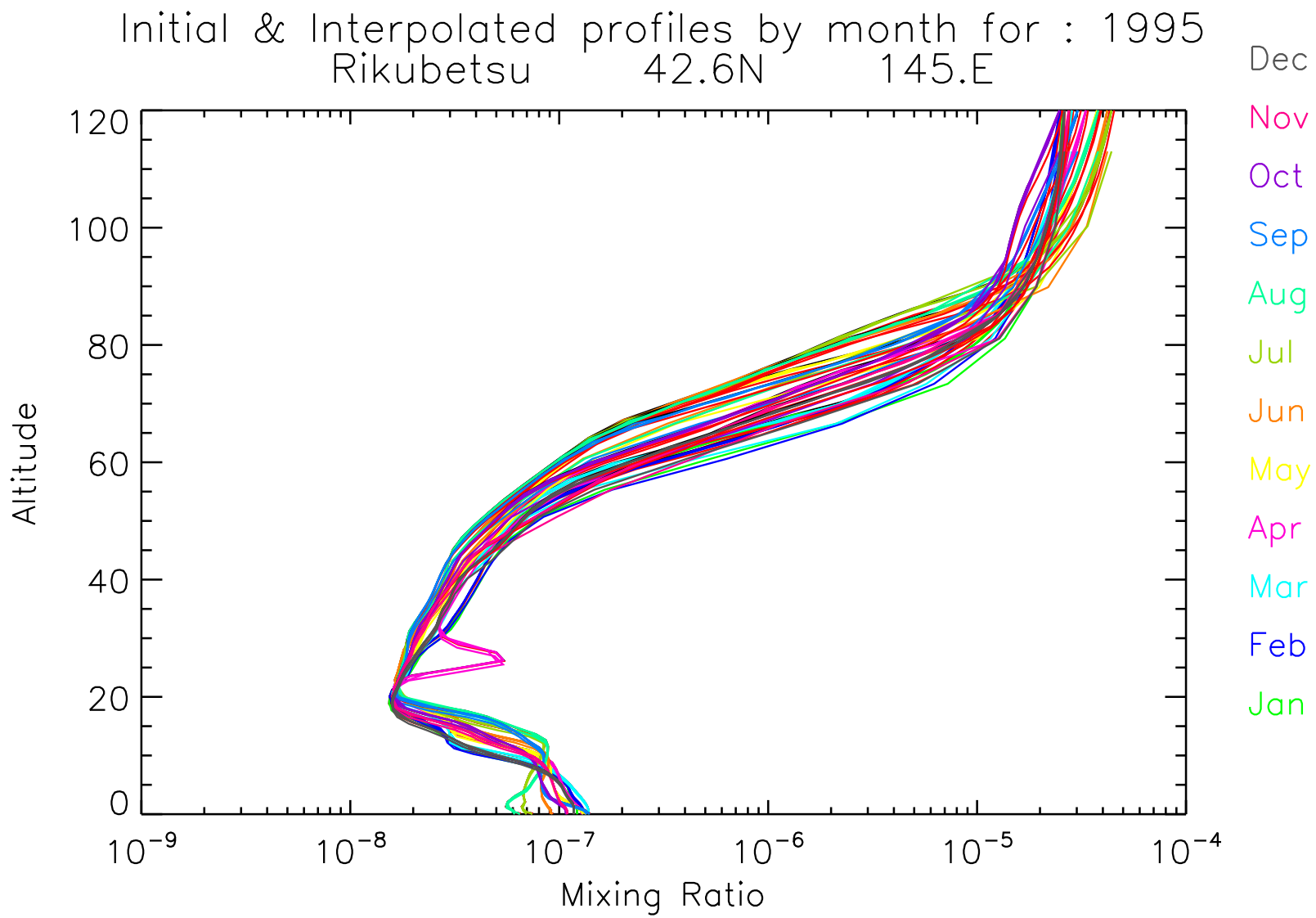
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Mixing Ratio
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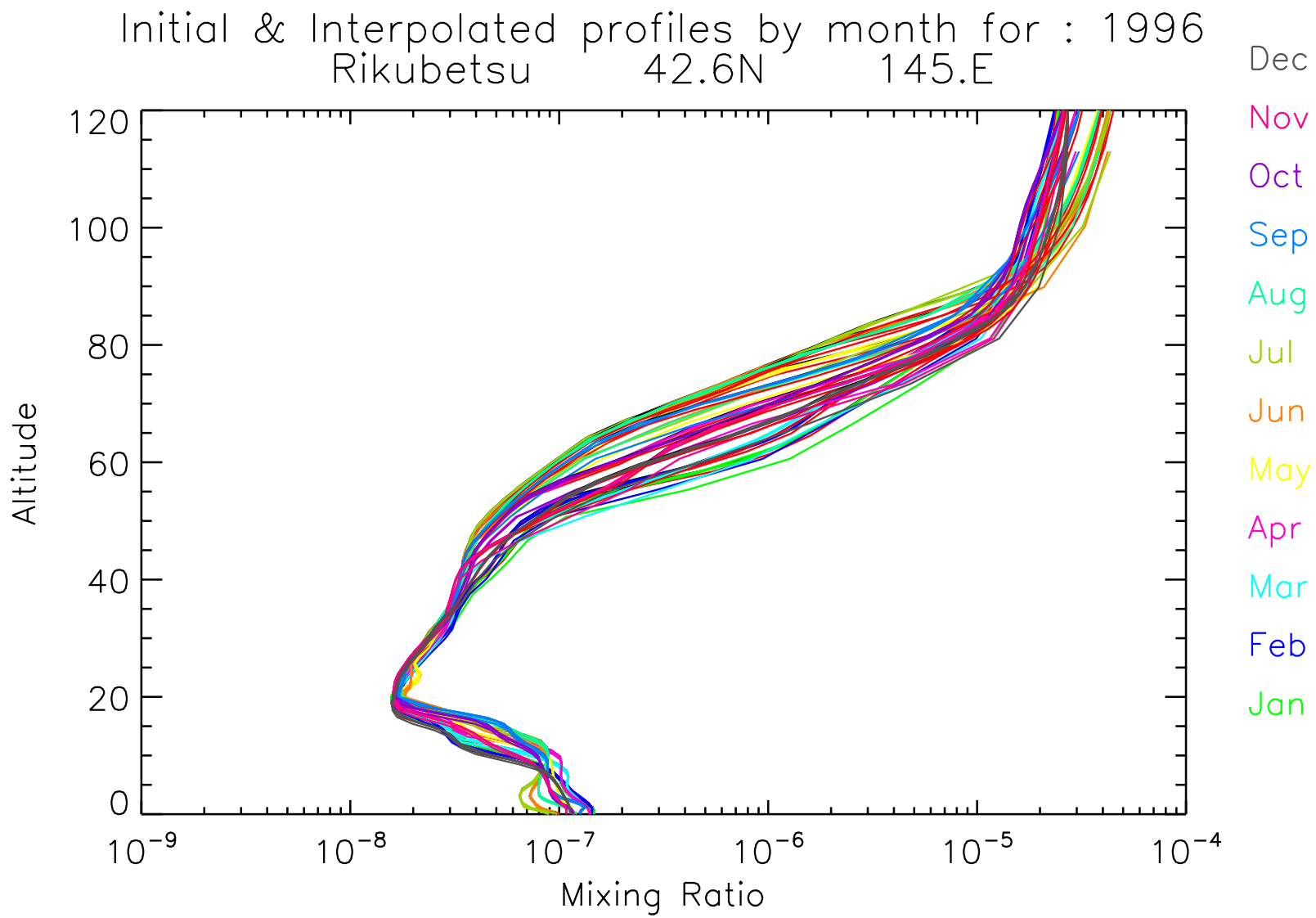
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Mixing Ratio
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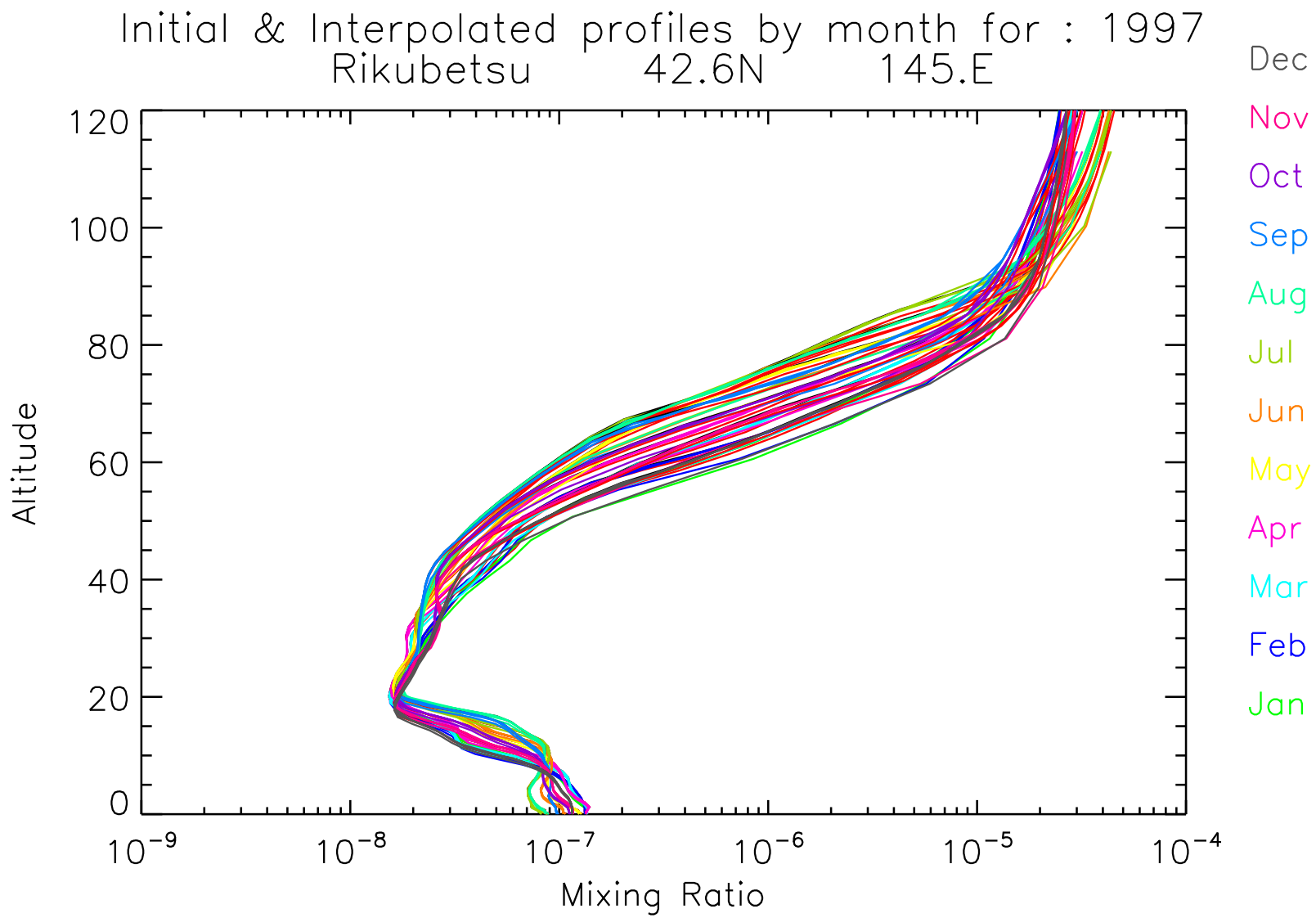
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Mixing Ratio
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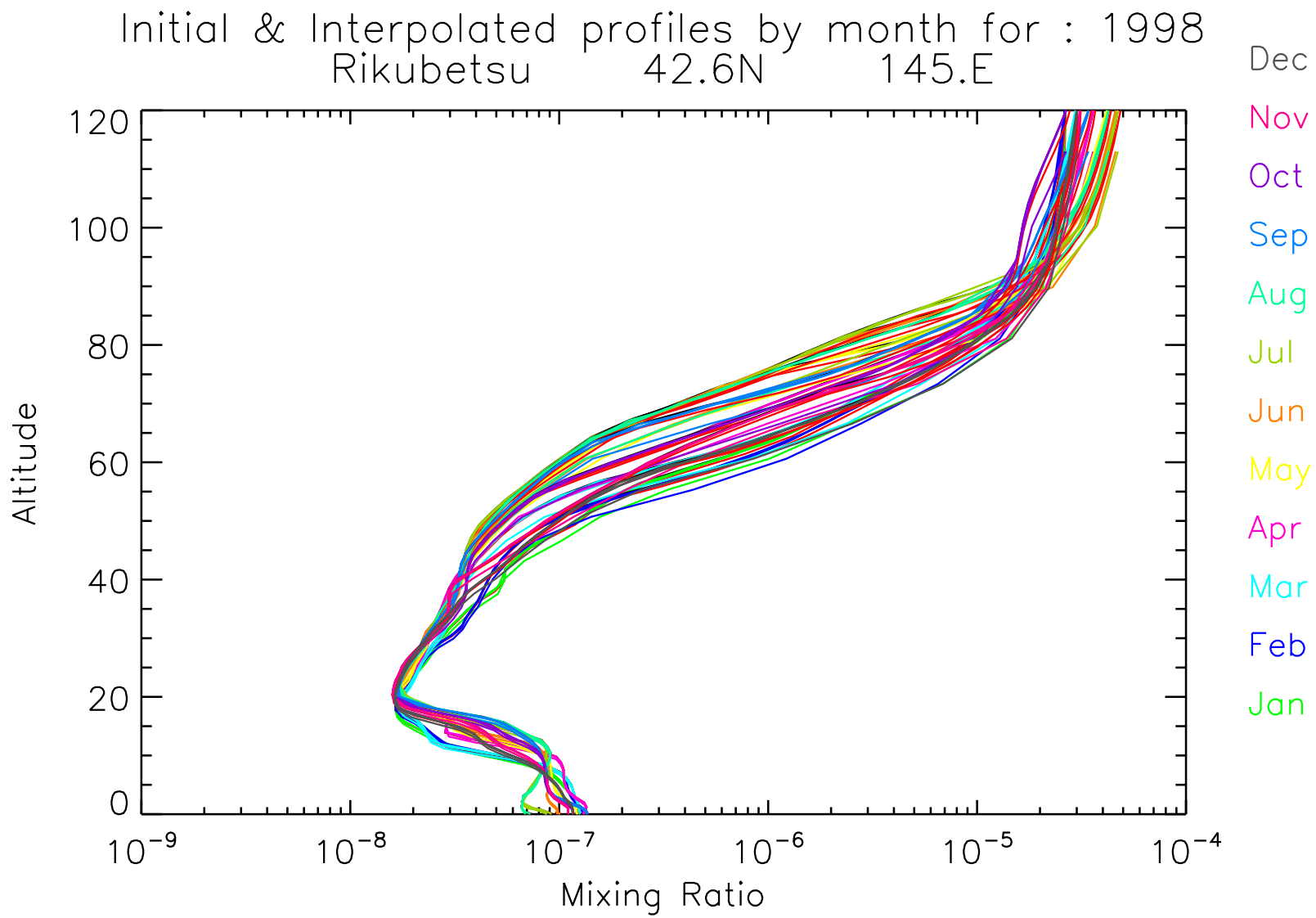
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Mixing Ratio
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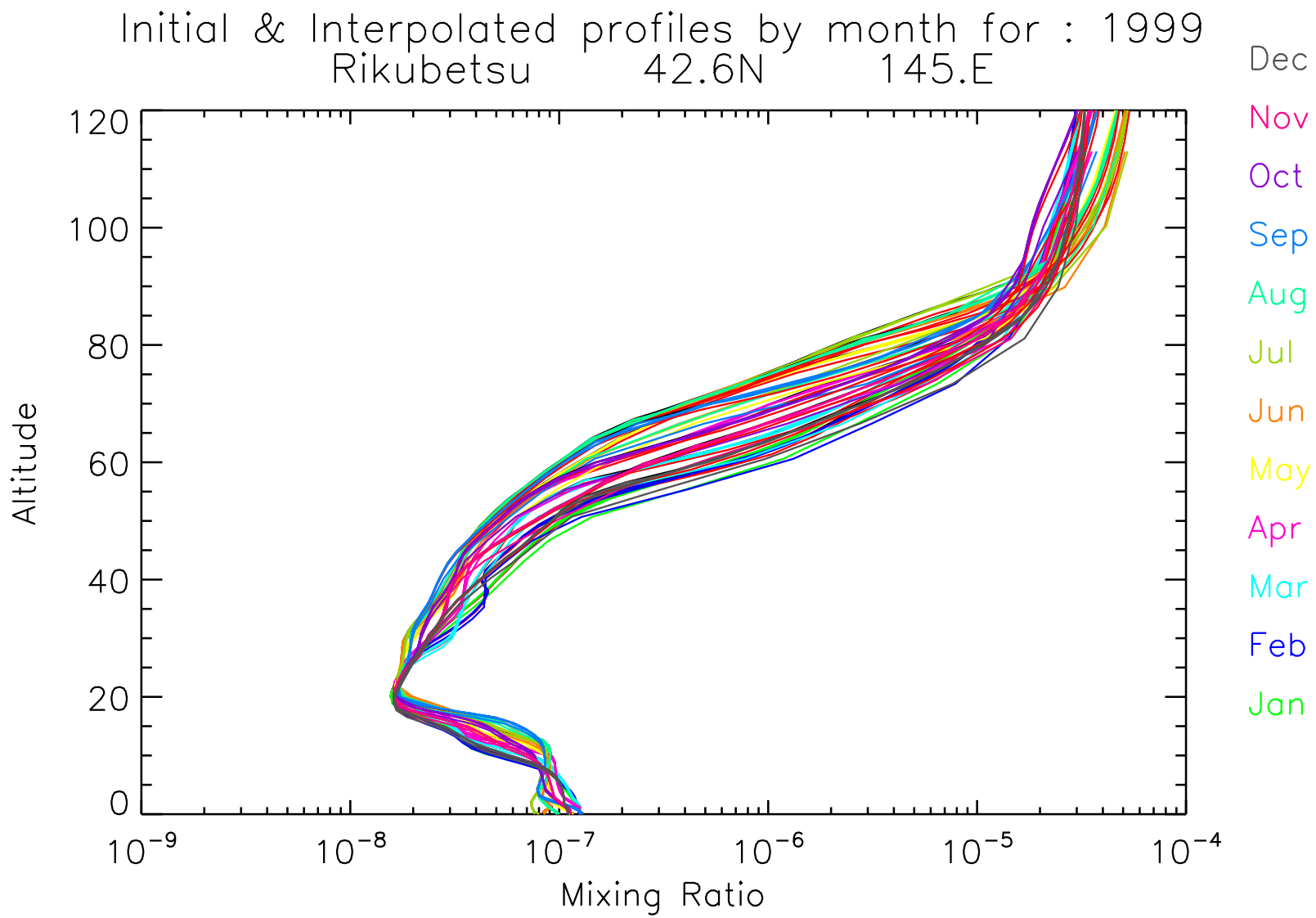
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Mixing Ratio
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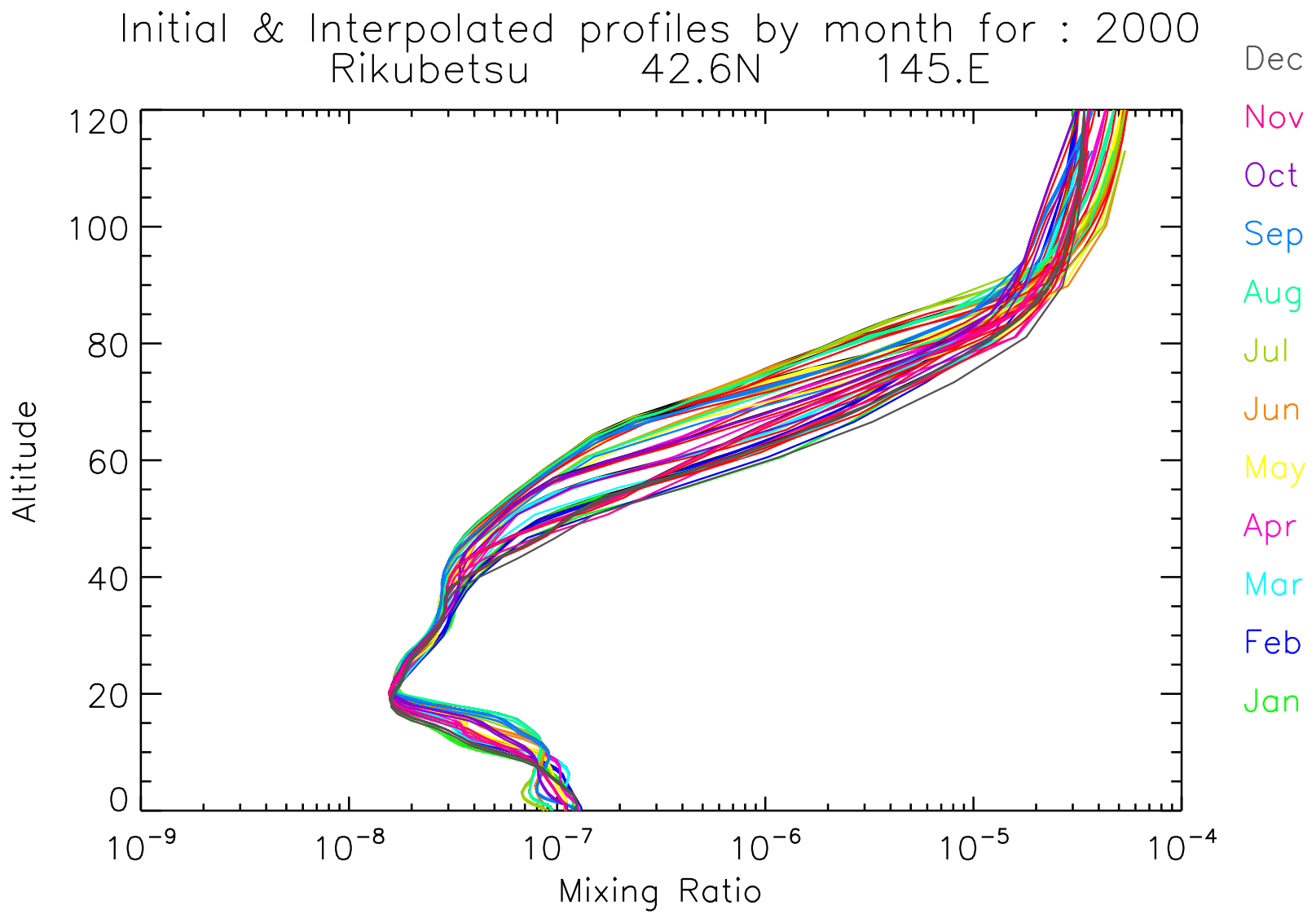
Initial & Interpolated profiles by month for : 2000
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Mixing Ratio
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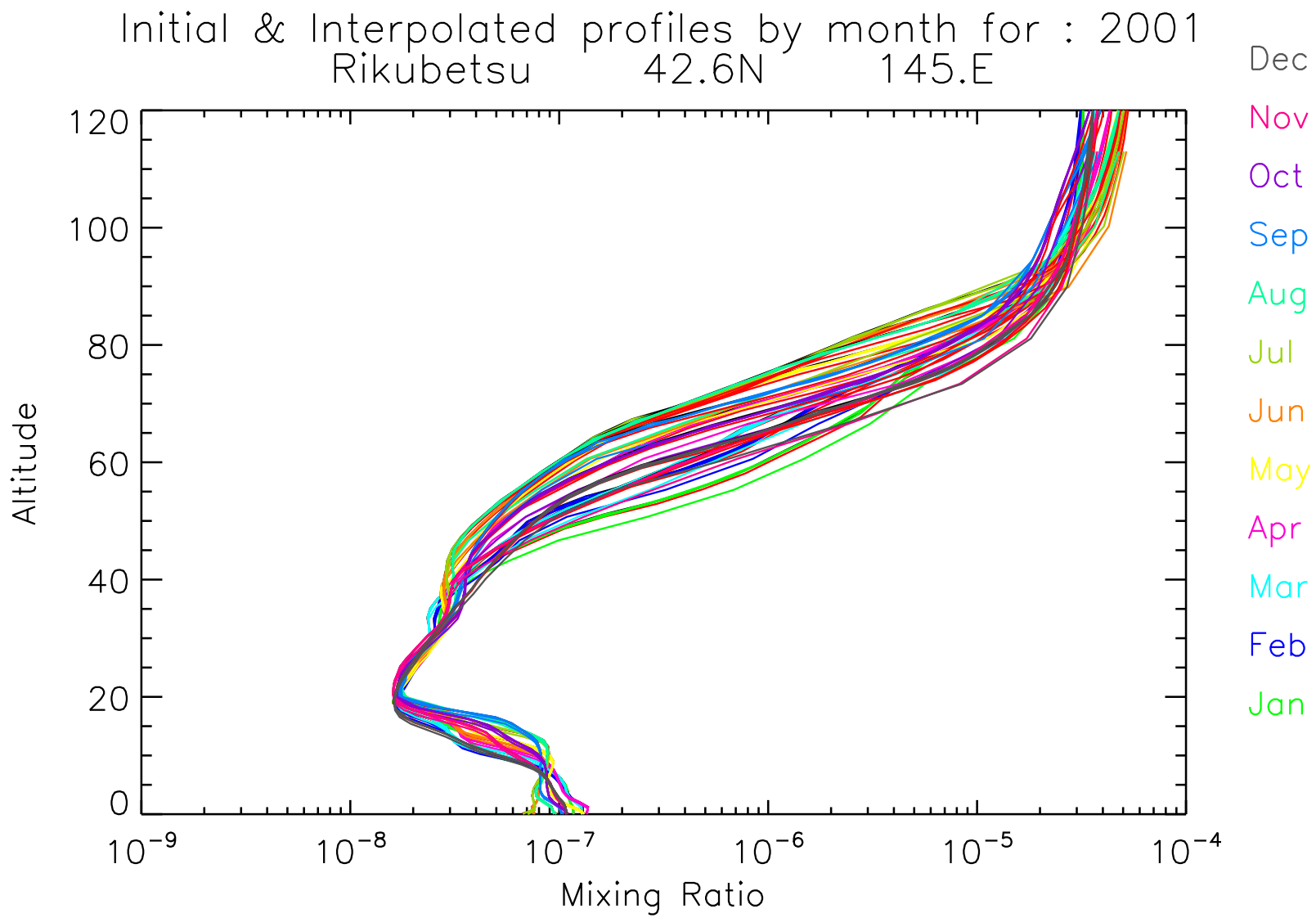
Initial & Interpolated profiles by month for : 2001
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Mixing Ratio
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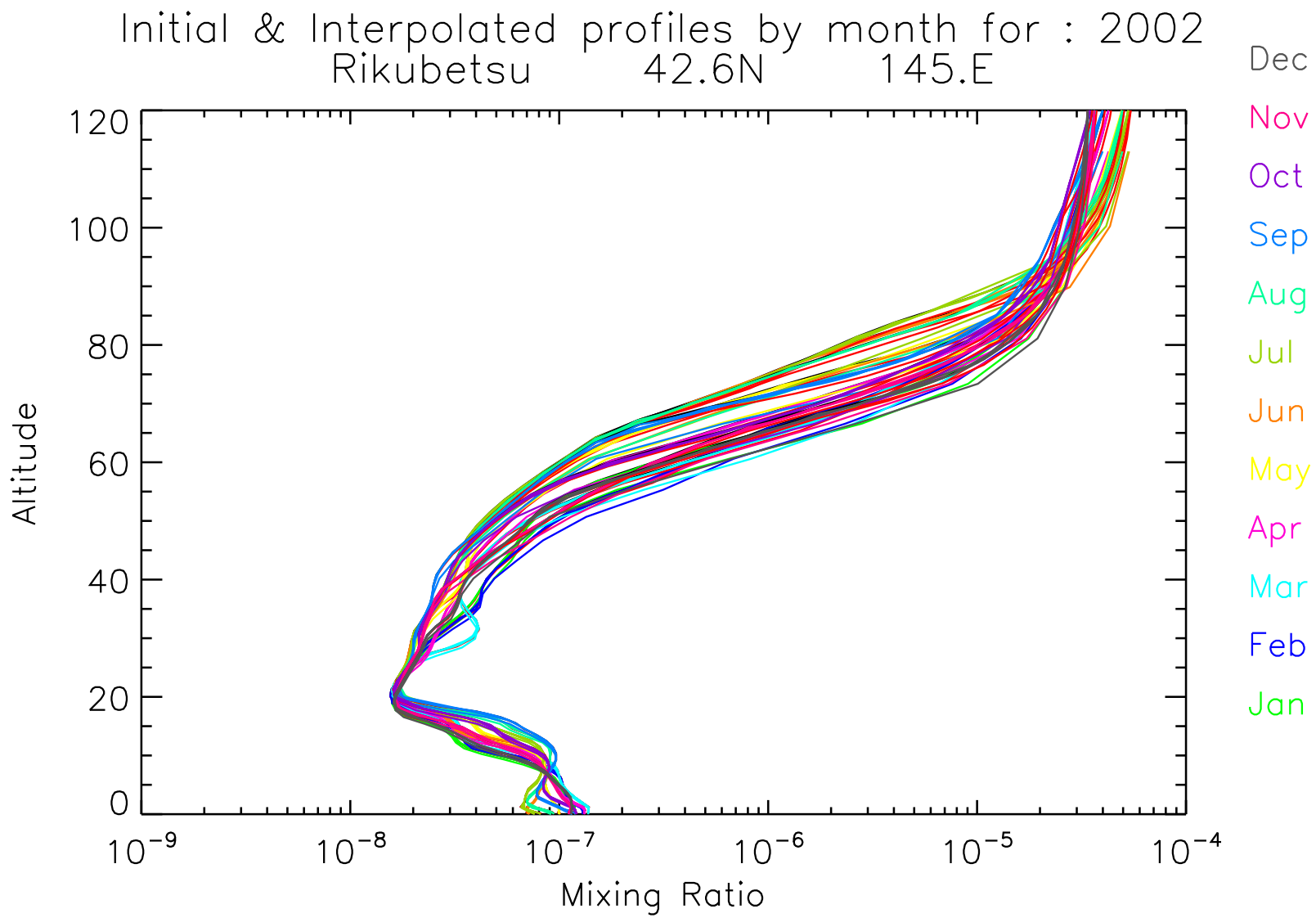
Initial & Interpolated profiles by month for : 2002
Rikubetsu 42.6N 145.E
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Mixing Ratio
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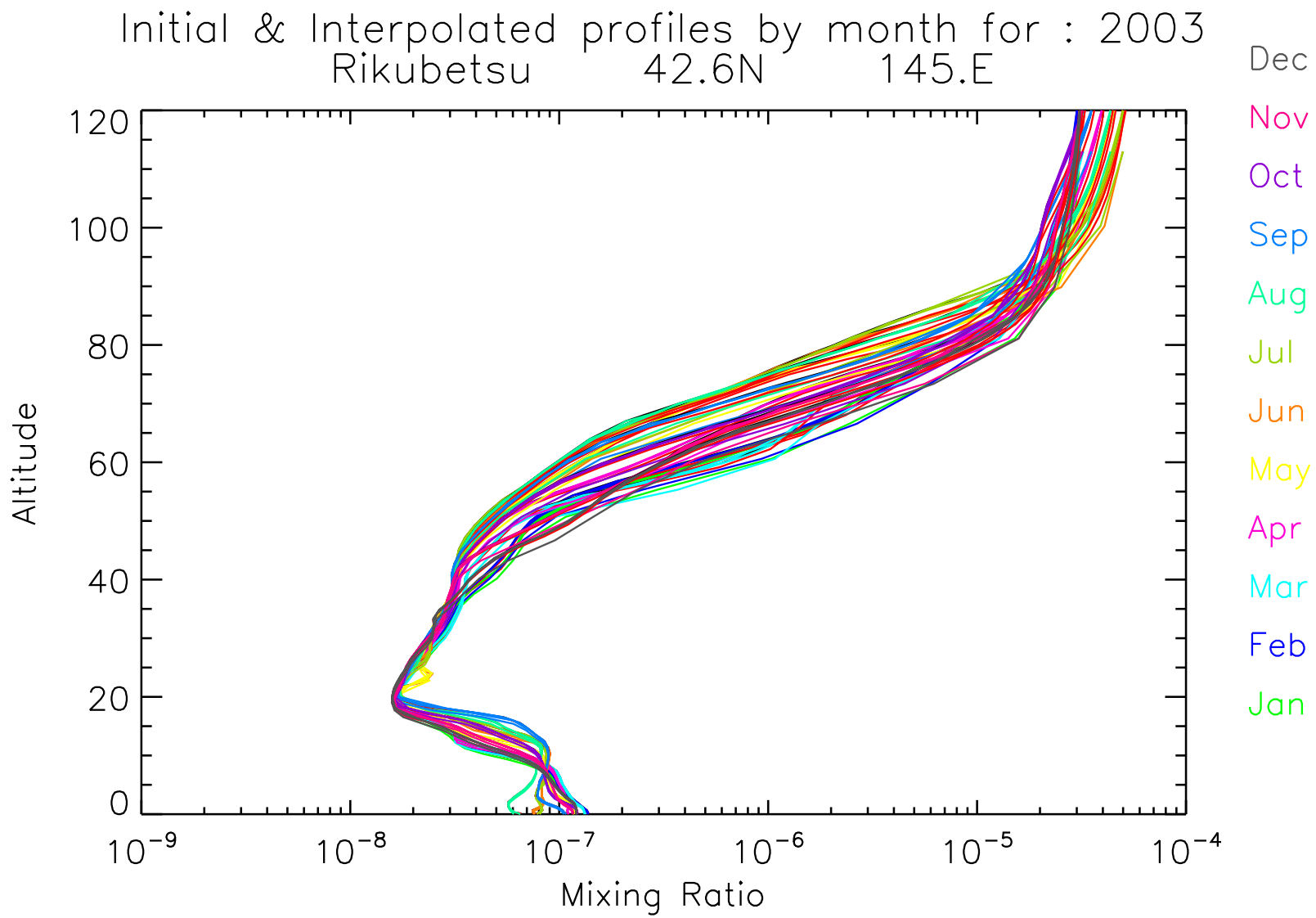
Initial & Interpolated profiles by month for : 2003
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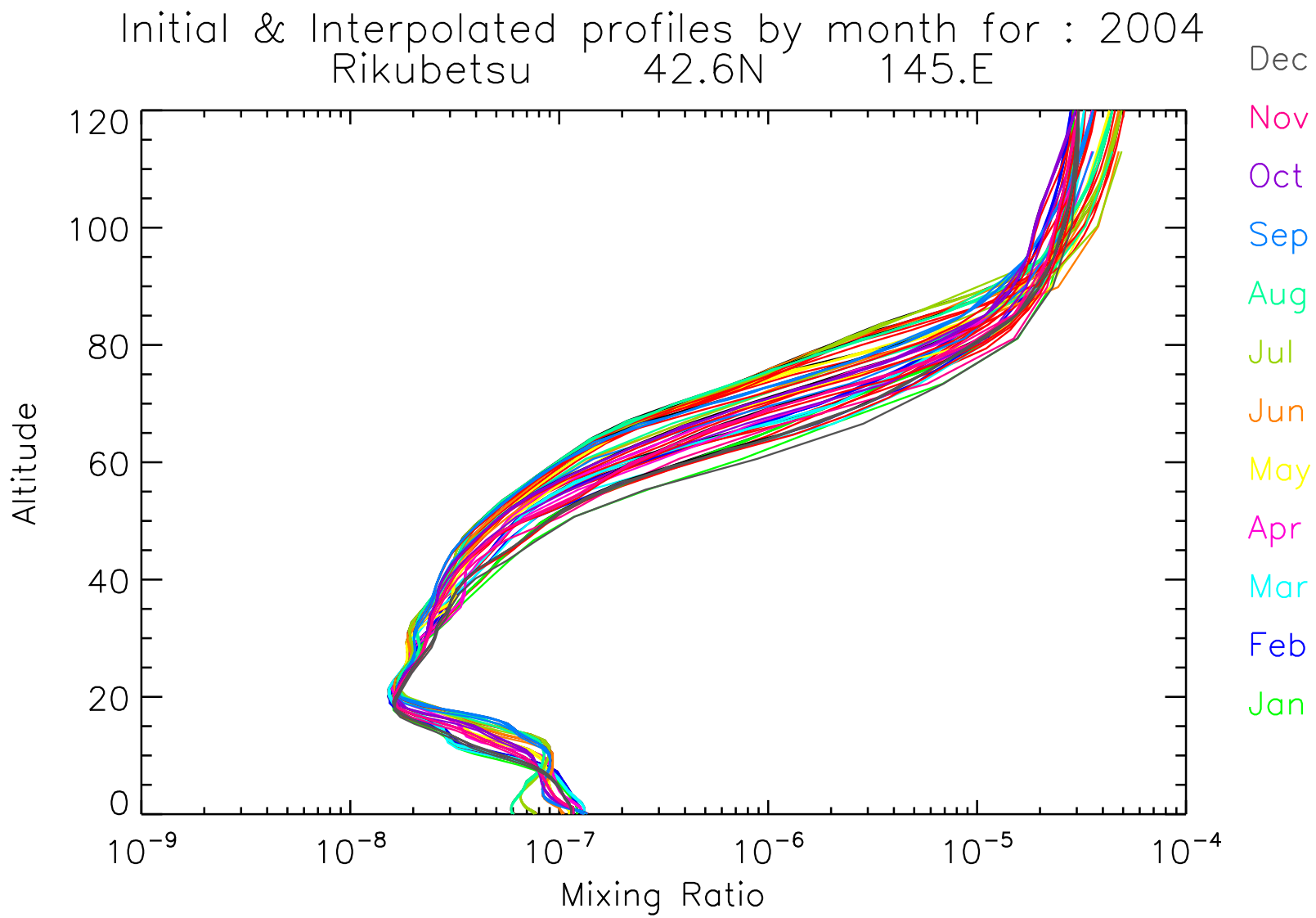
Initial & Interpolated profiles by month for : 2004
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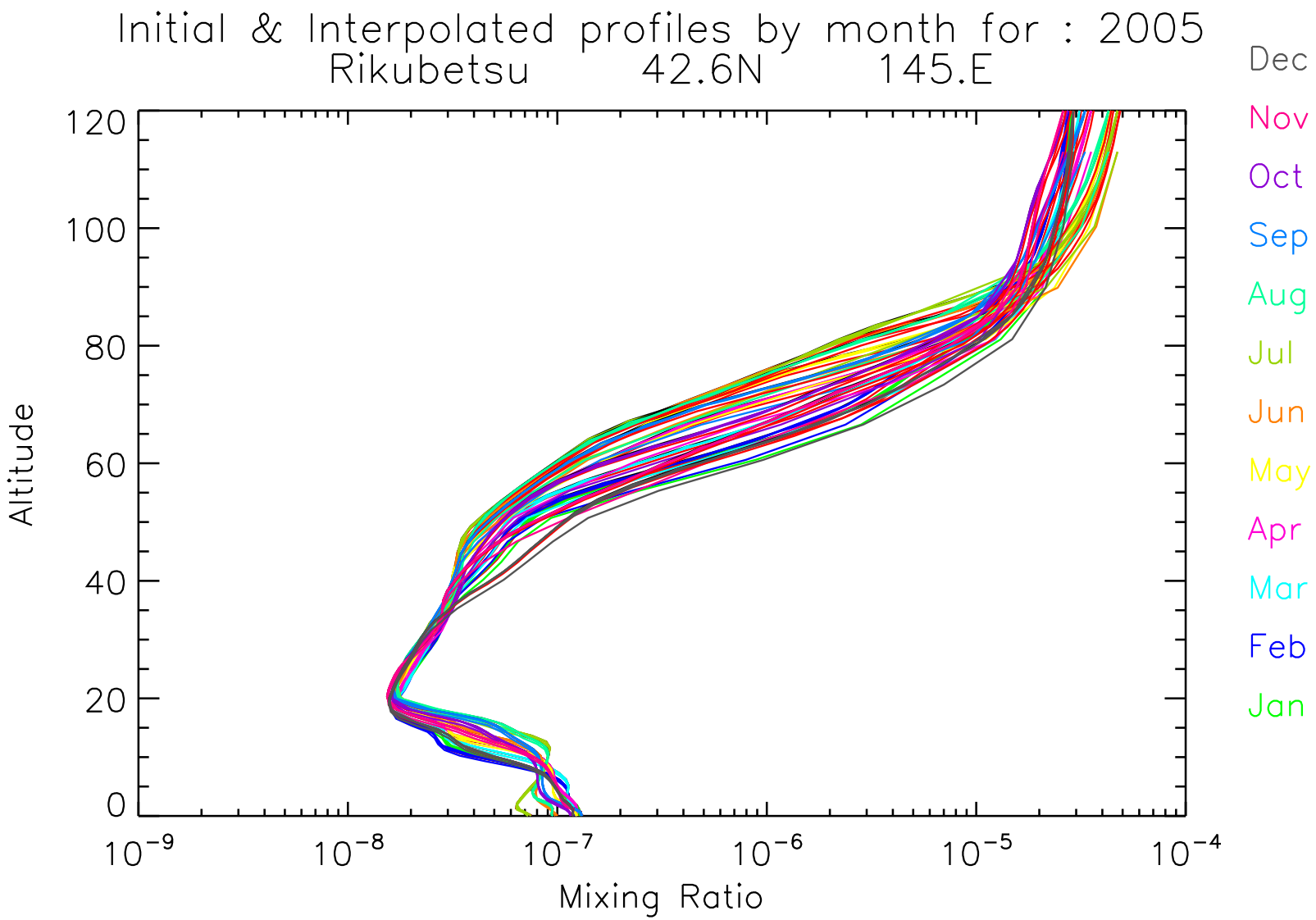
Initial & Interpolated profiles by month for : 2005
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Mixing Ratio
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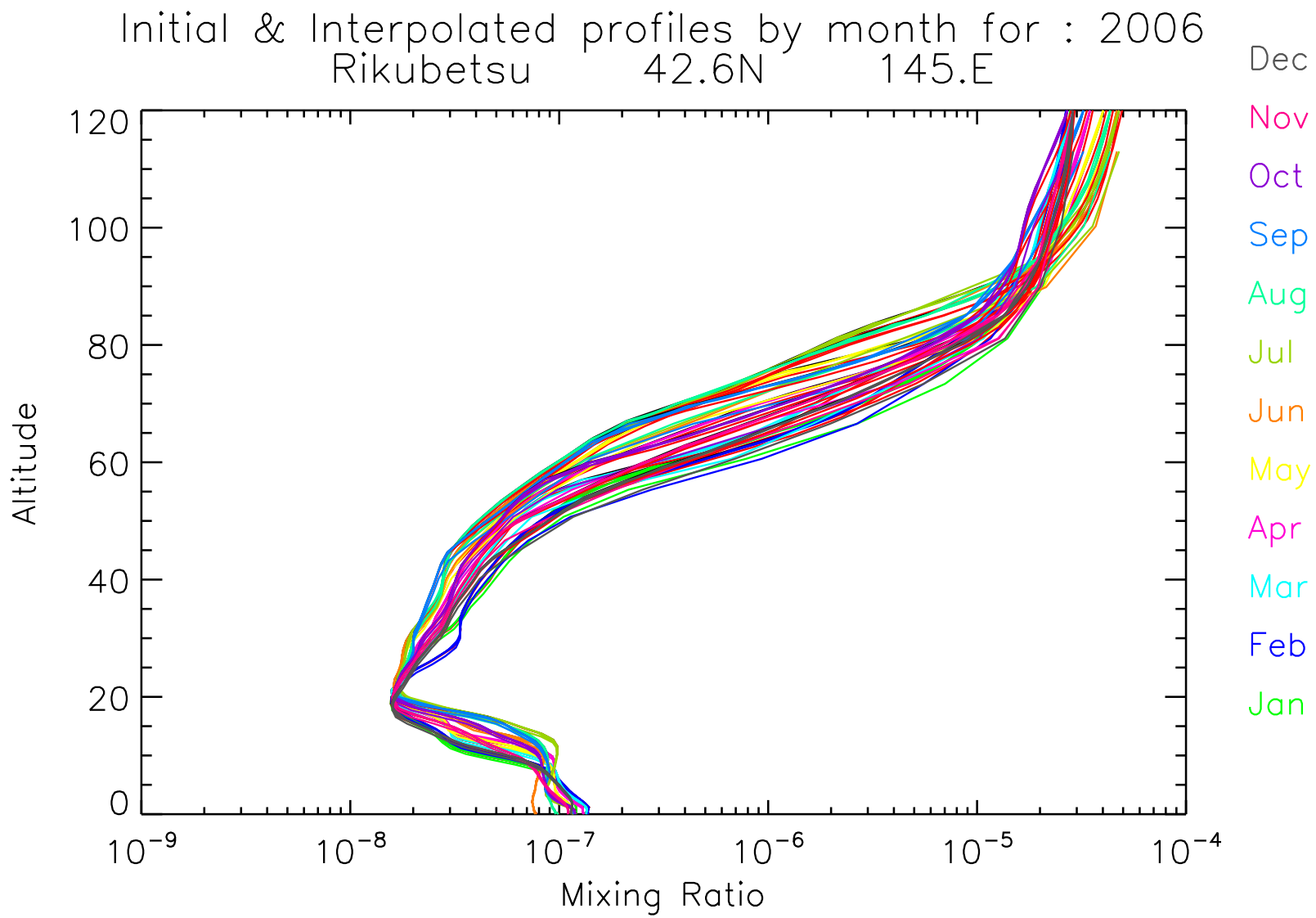
Initial & Interpolated profiles by month for : 2006
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Mixing Ratio
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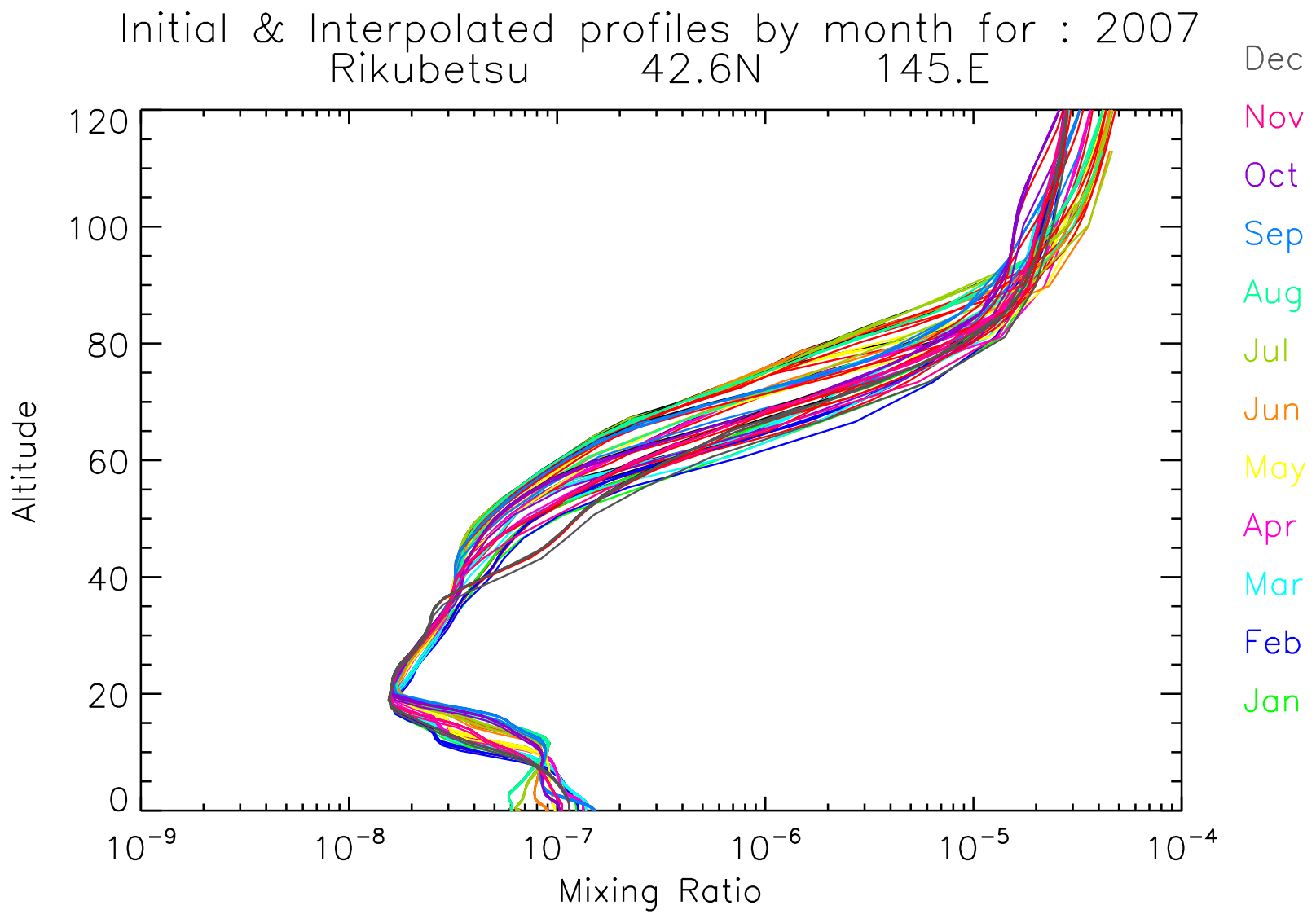
Initial & Interpolated profiles by month for : 2007
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Mixing Ratio
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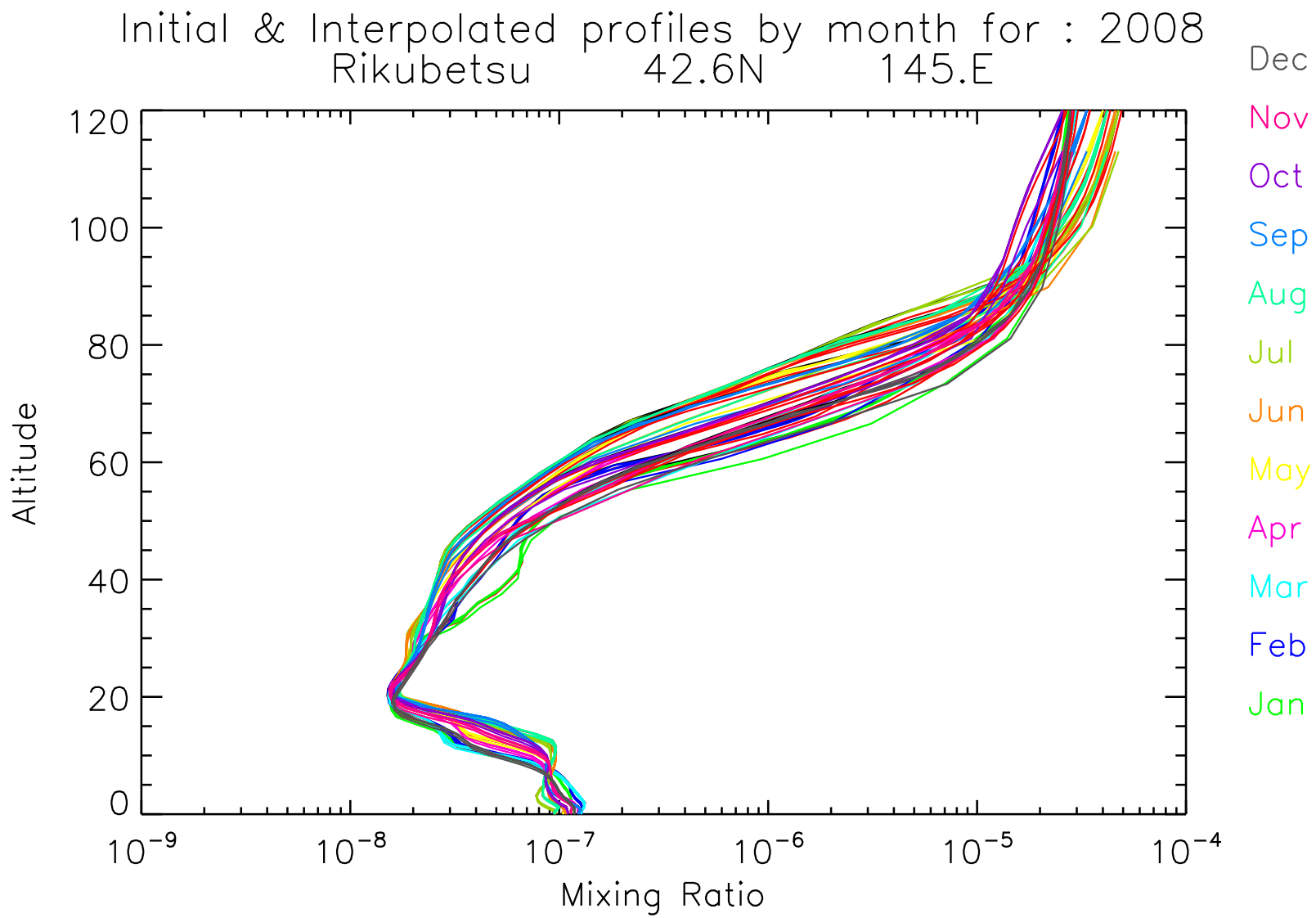
Initial & Interpolated profiles by month for : 2008
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Mixing Ratio
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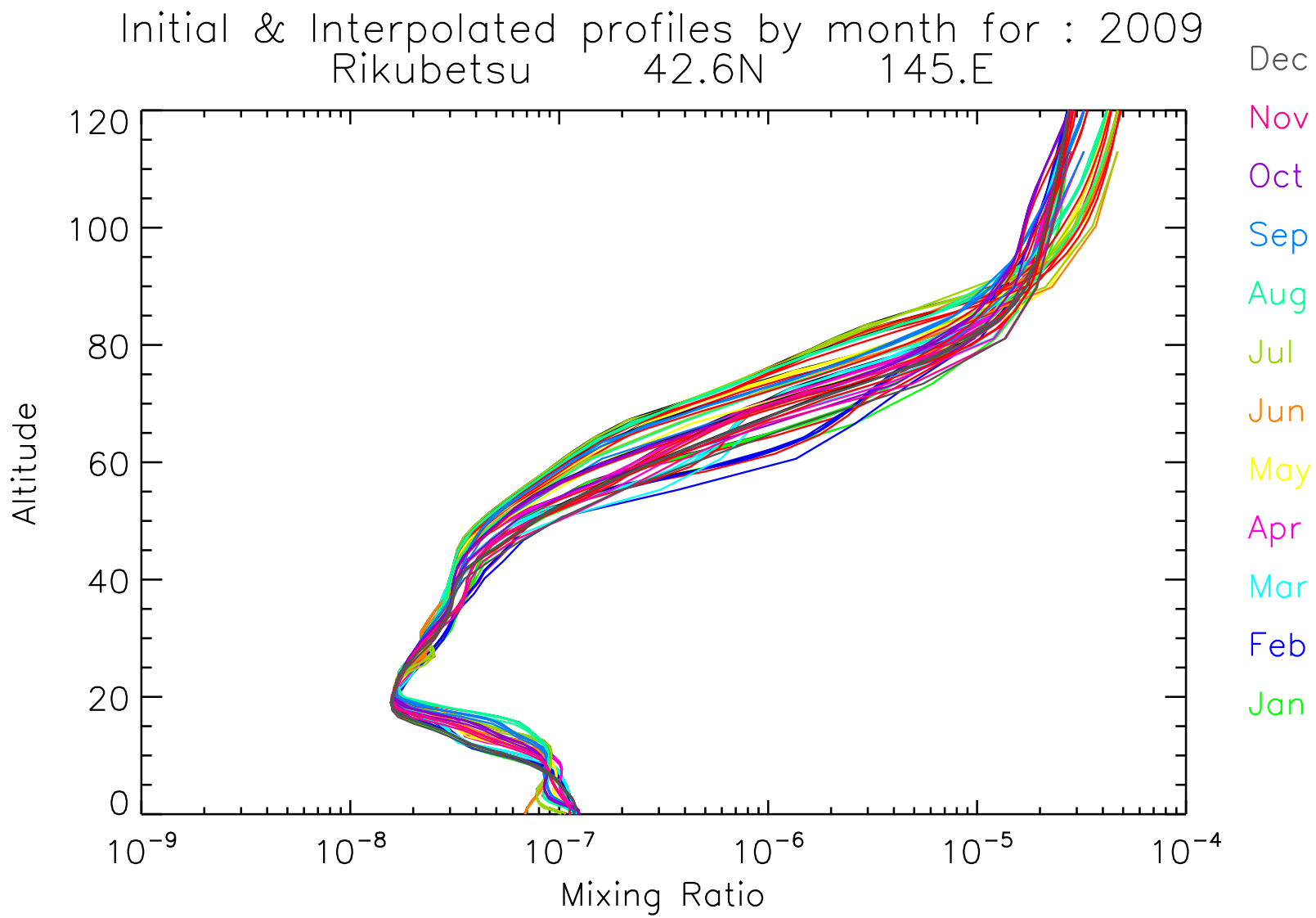
Initial & Interpolated profiles by month for : 2009
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Mixing Ratio
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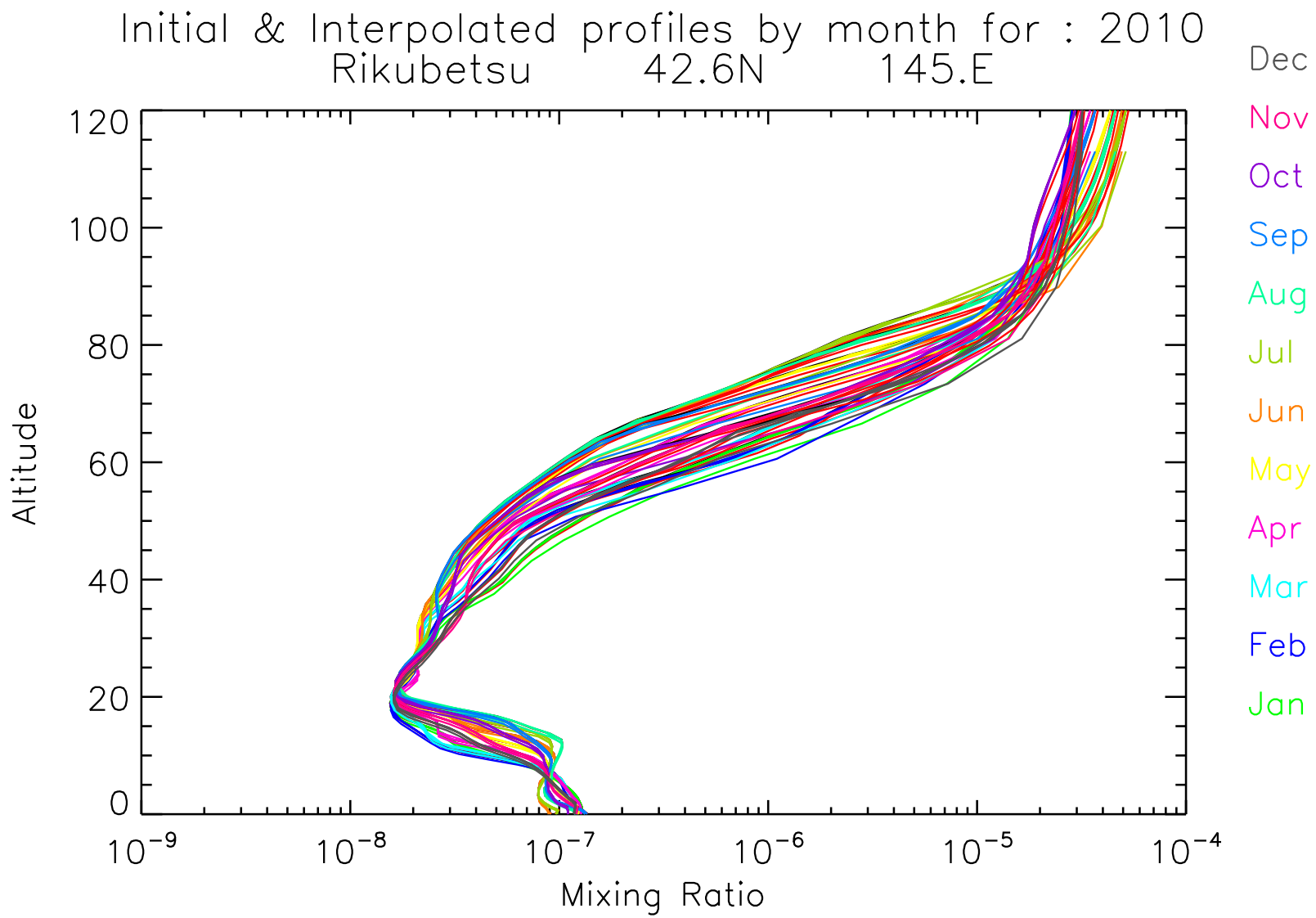
Initial & Interpolated profiles by month for : 2010
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Mixing Ratio
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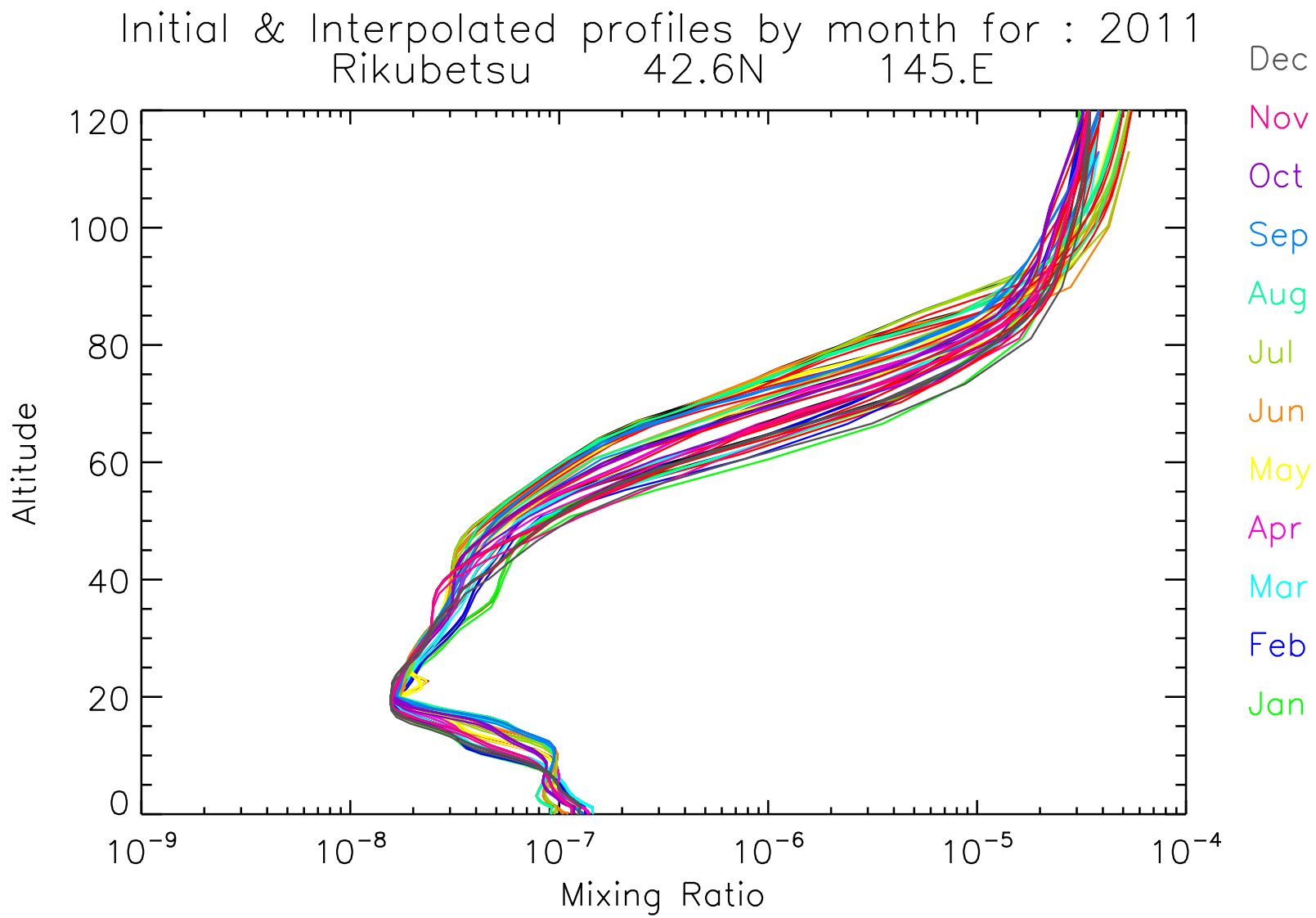
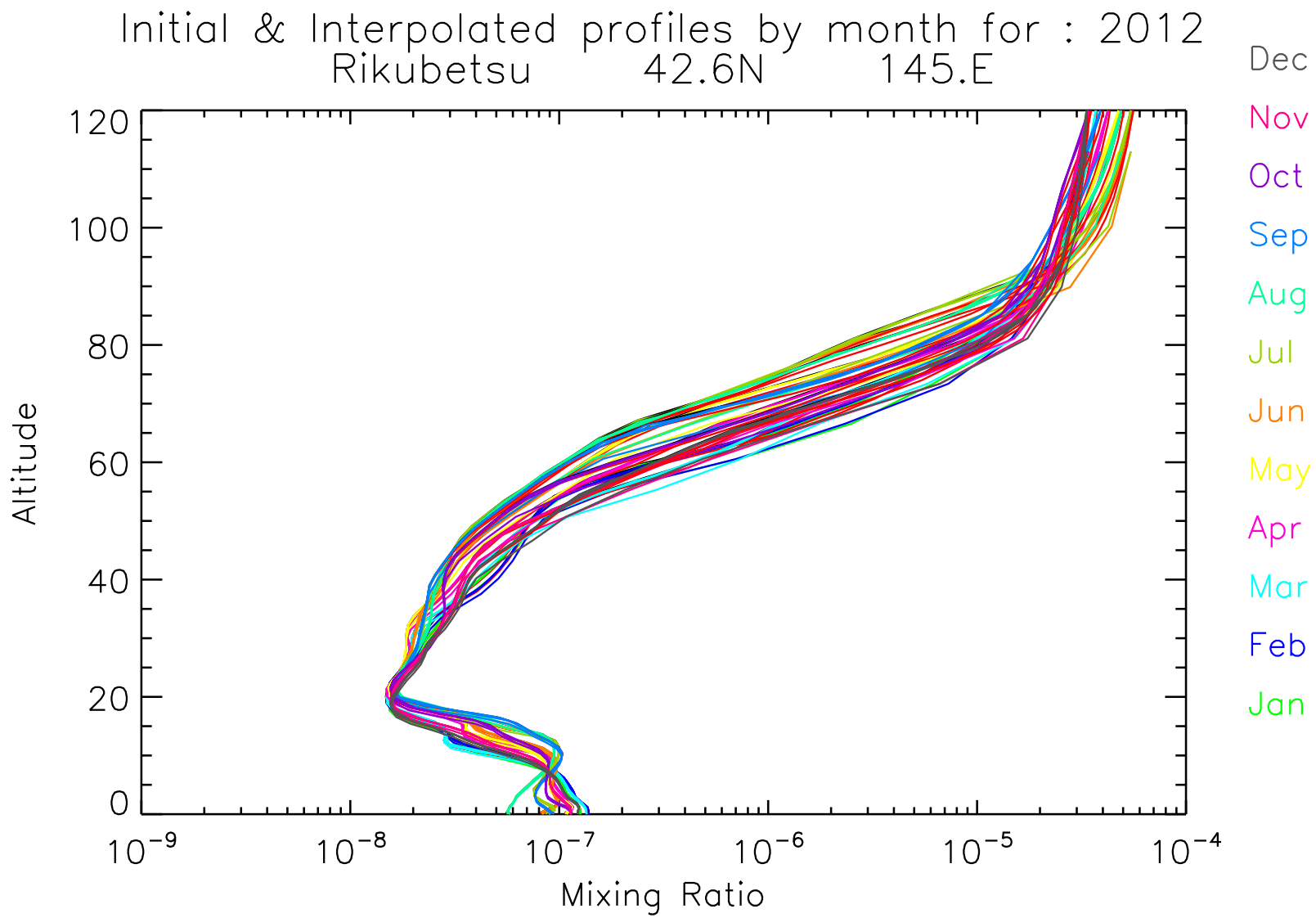
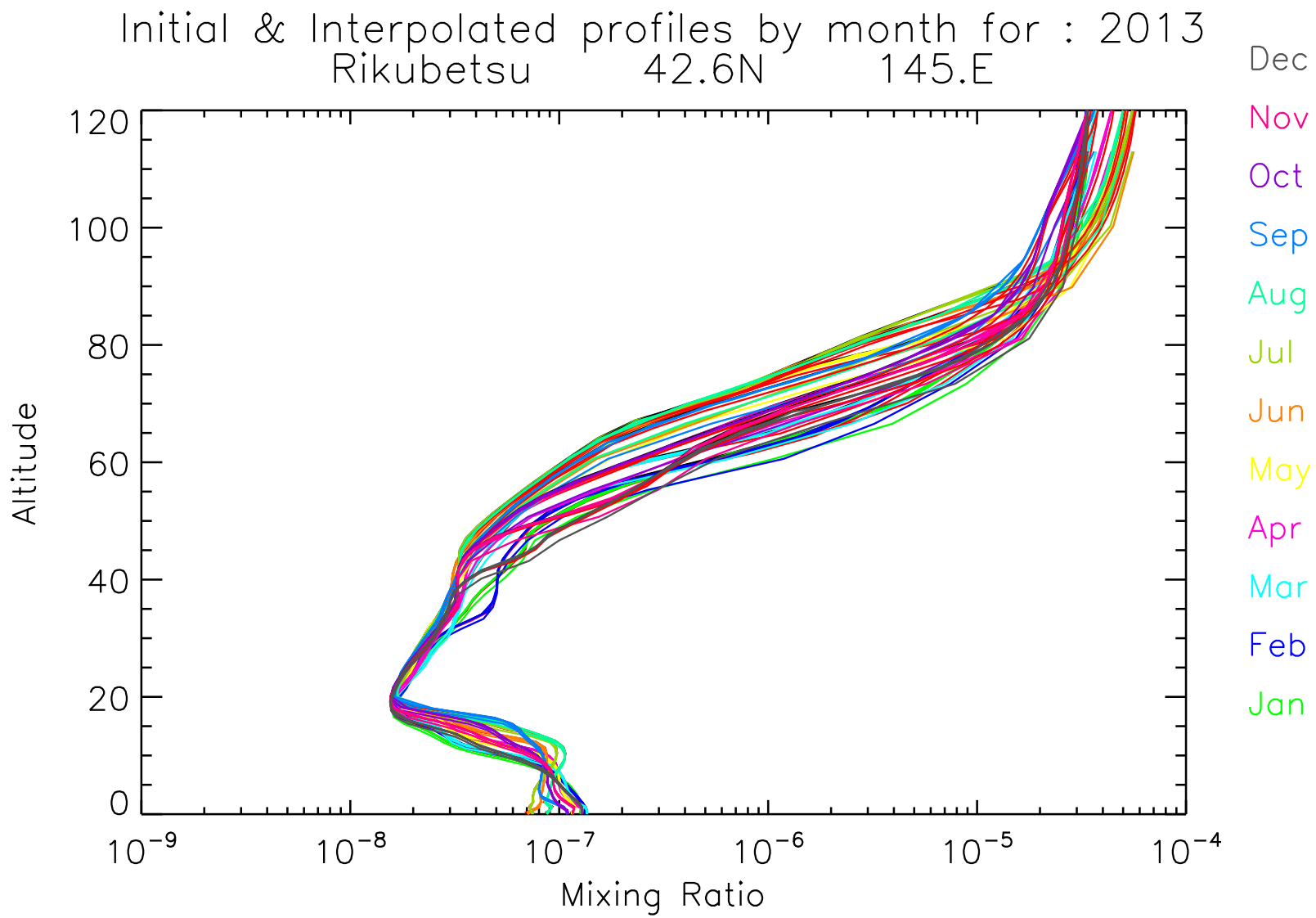
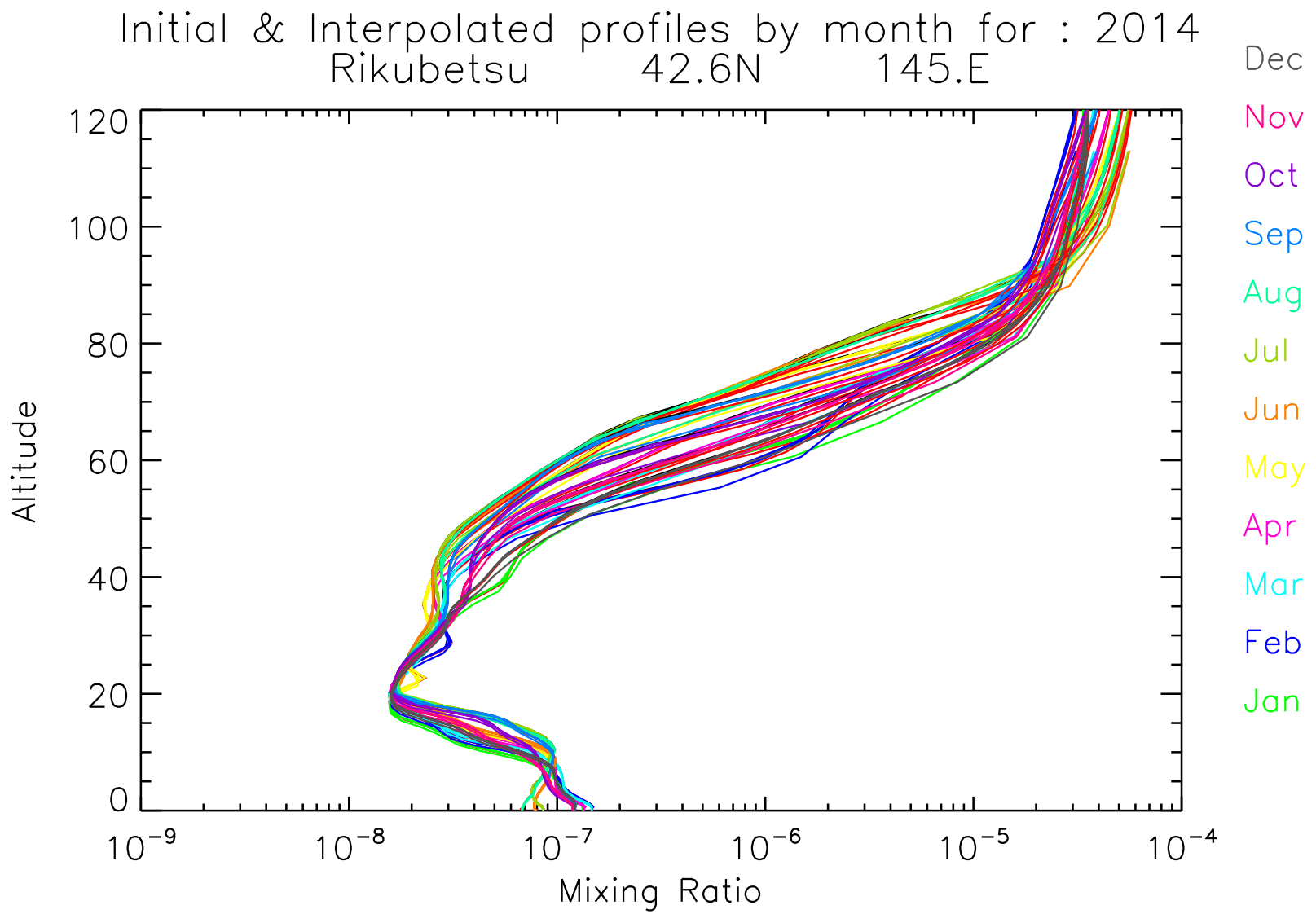
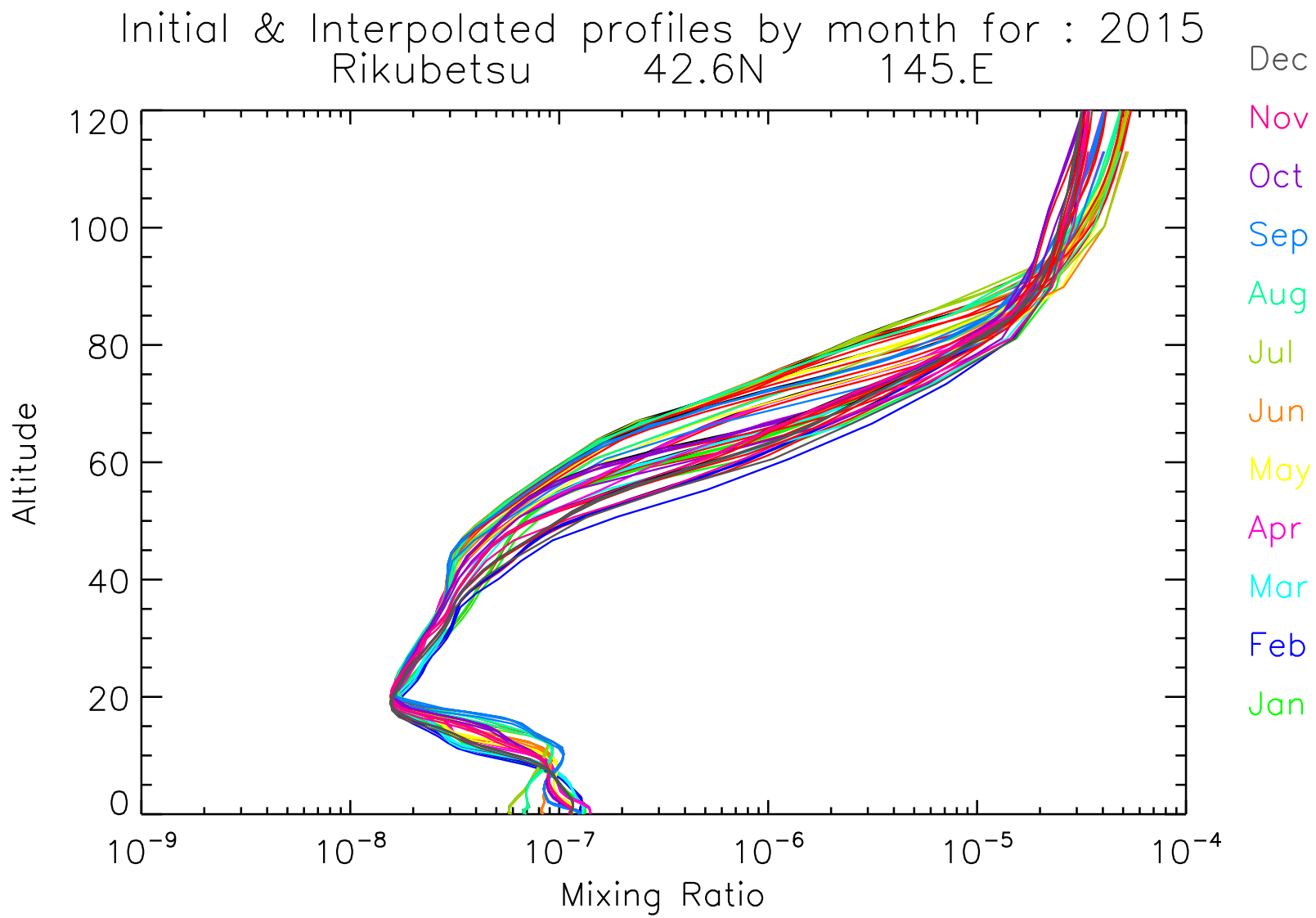
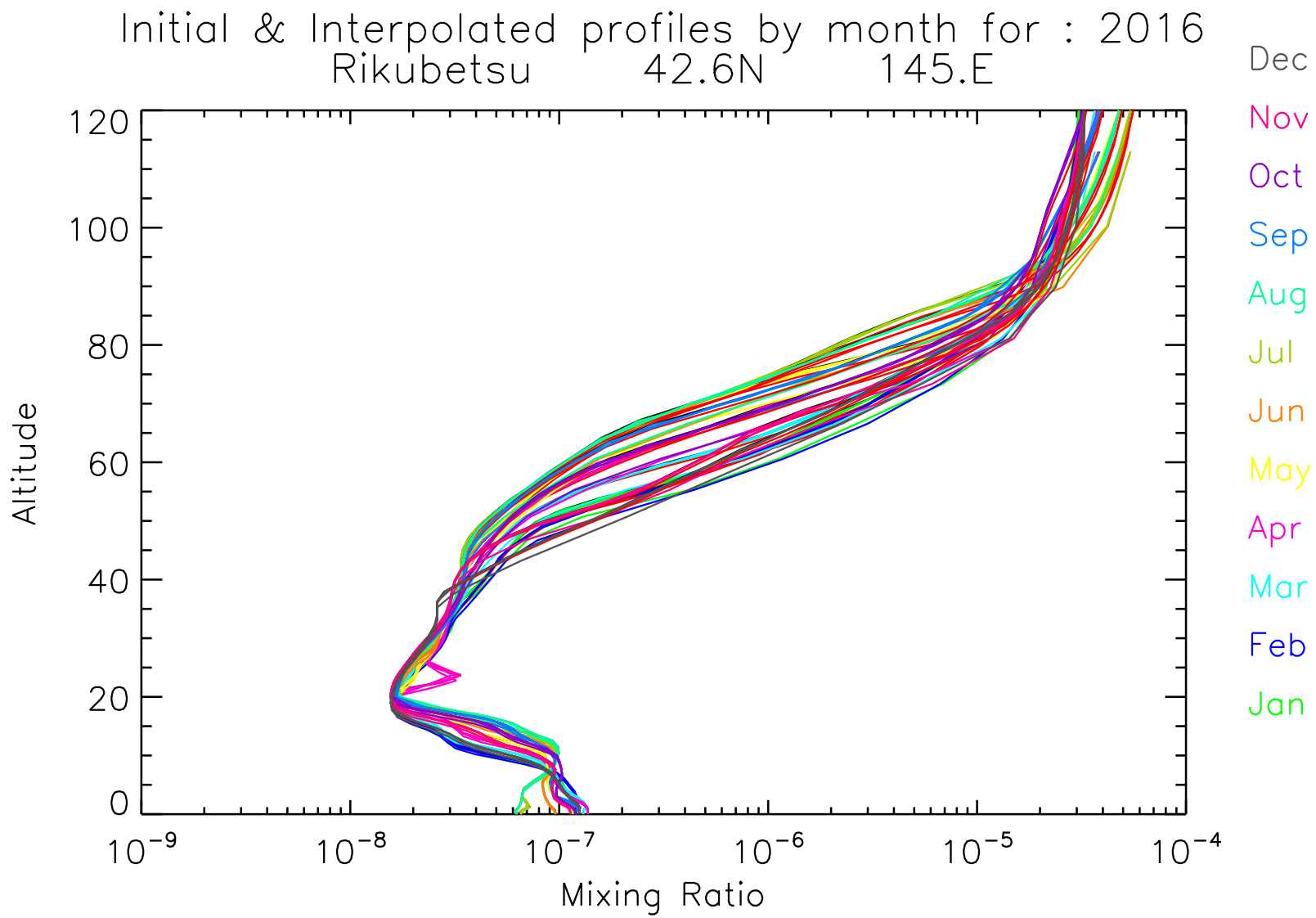

Initial & Interpolated profiles by month for : 2011
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

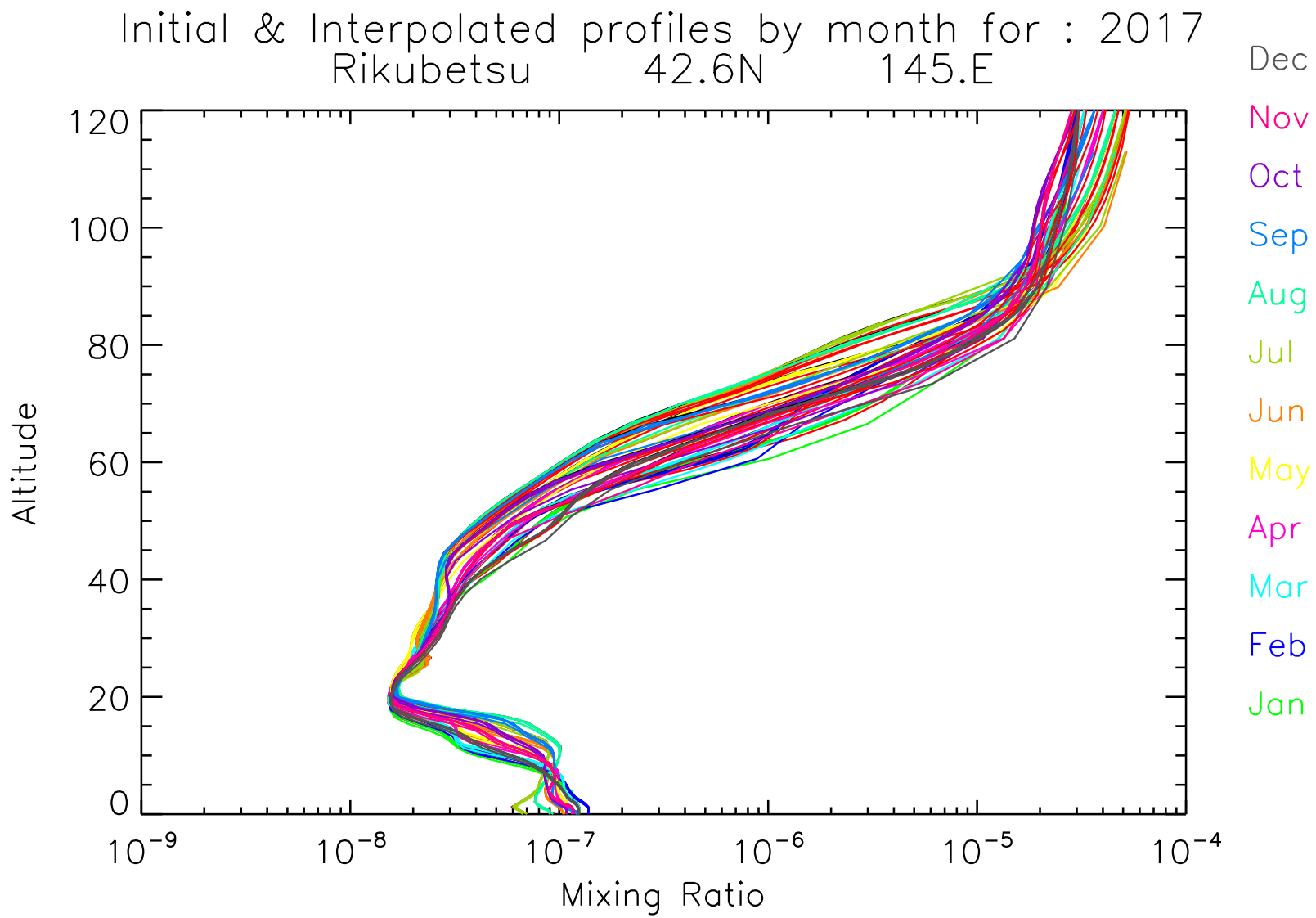

Initial & Interpolated profiles by month for : 2012
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

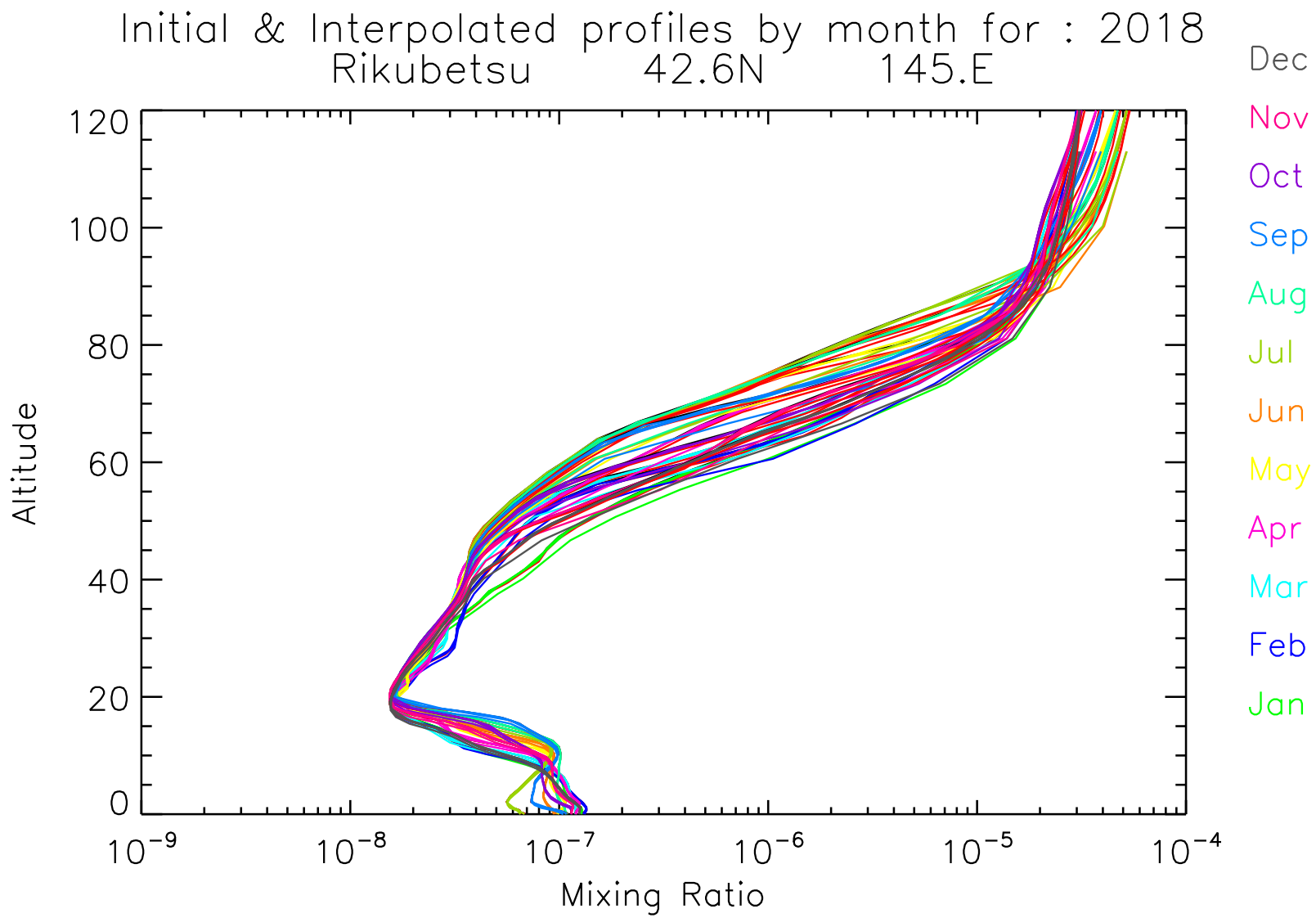

Initial & Interpolated profiles by month for : 2013
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

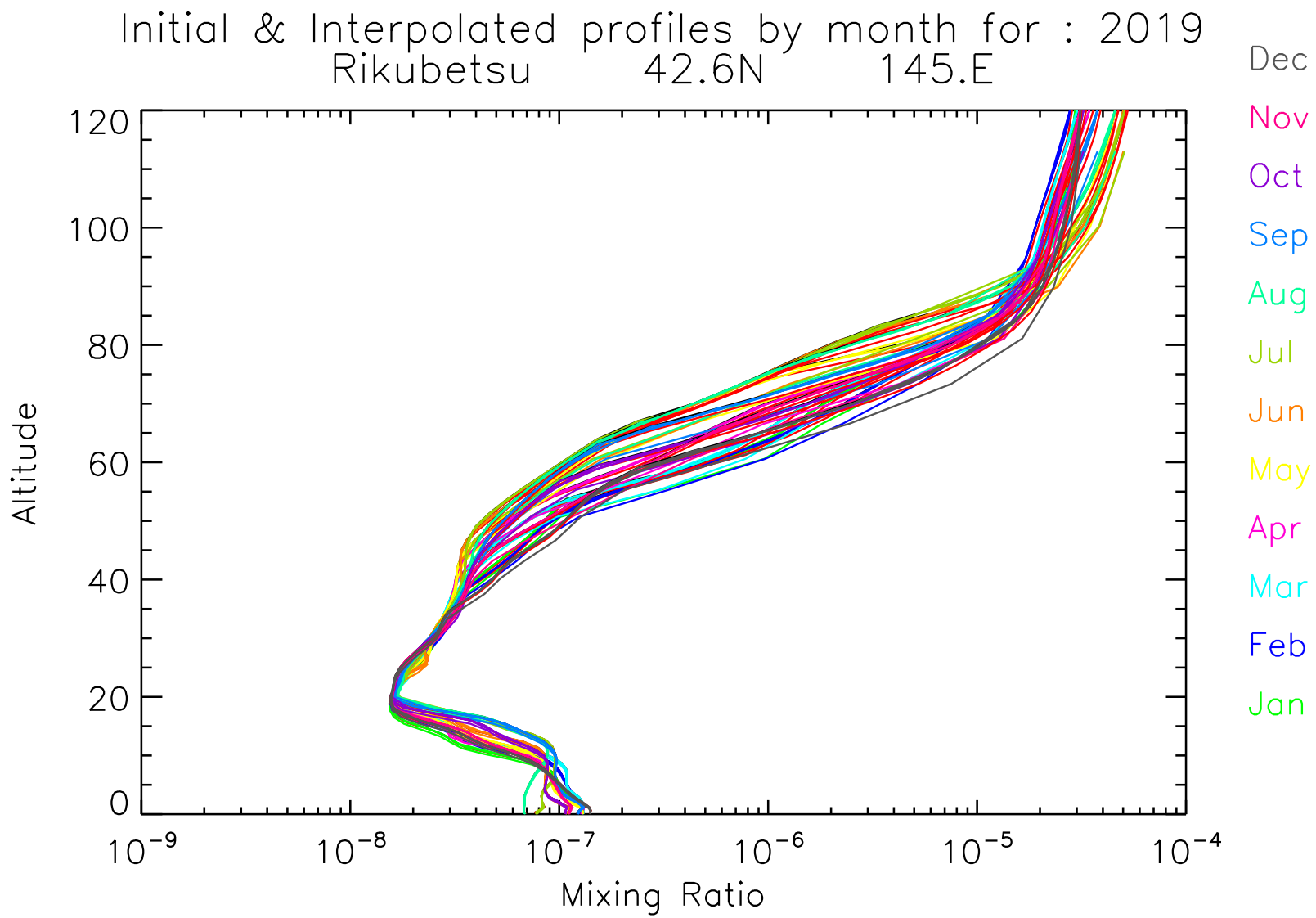

Initial & Interpolated profiles by month for : 2014
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

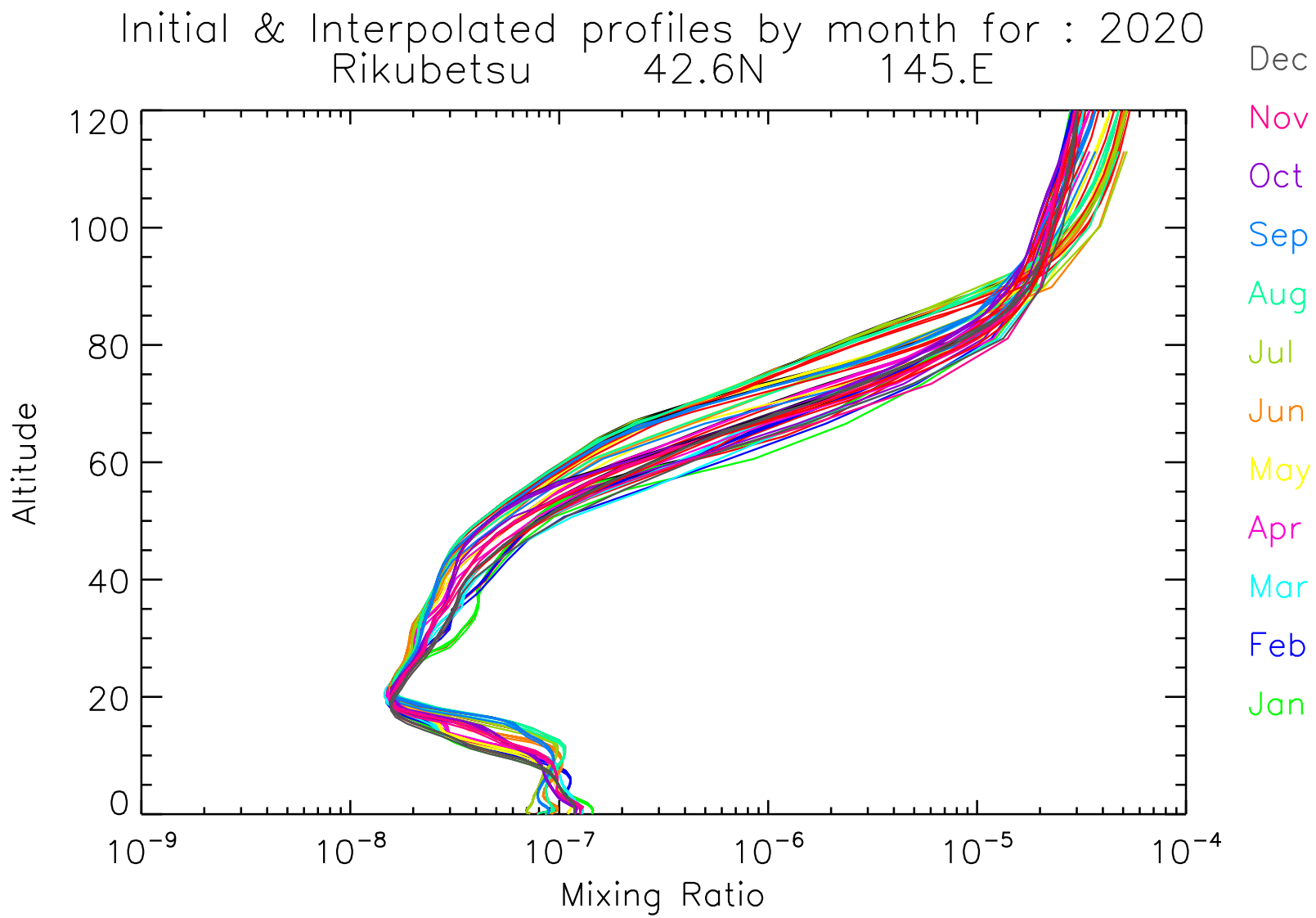

Initial & Interpolated profiles by month for : 2015
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

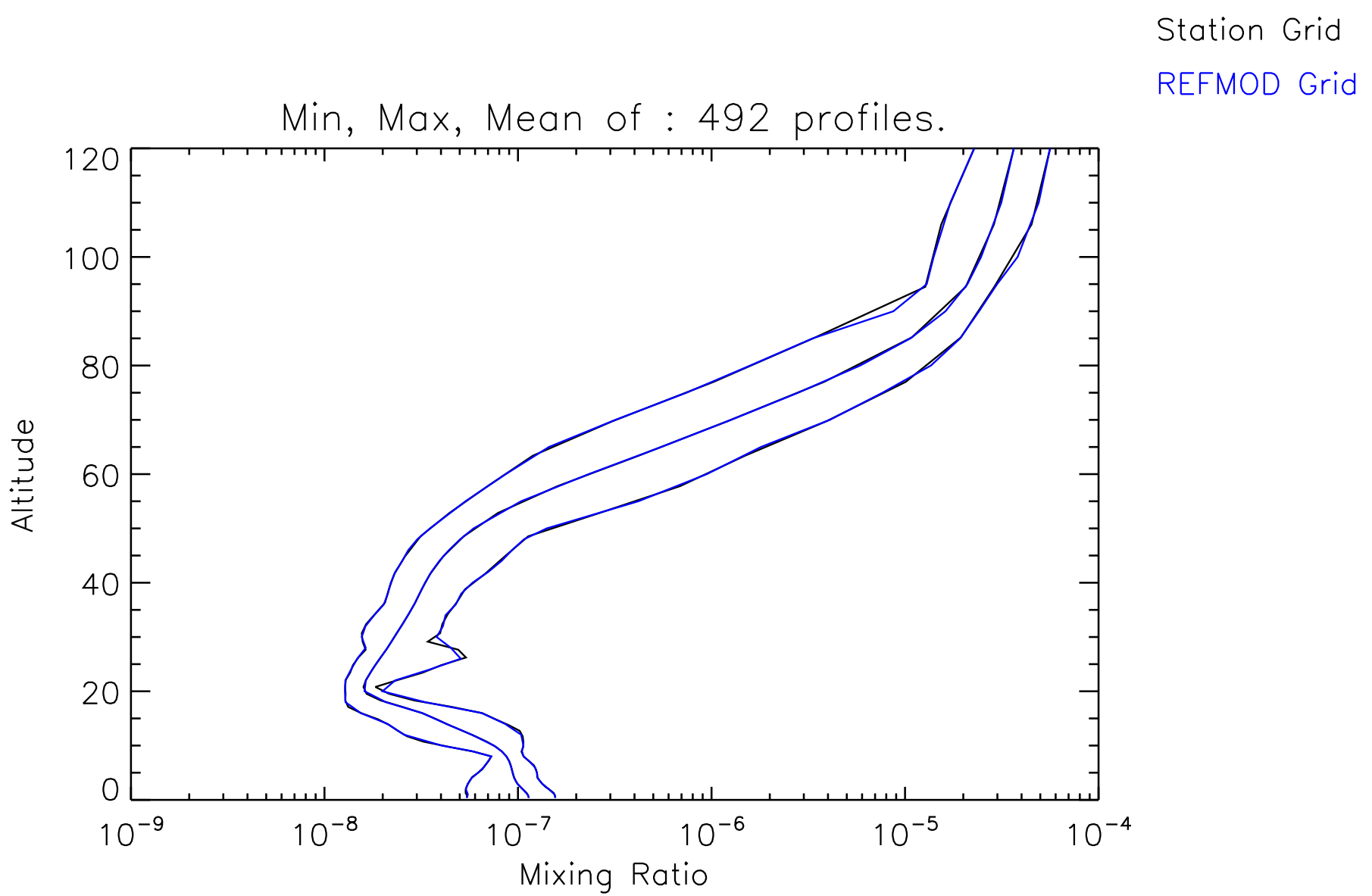

Initial & Interpolated profiles by month for : 2016
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

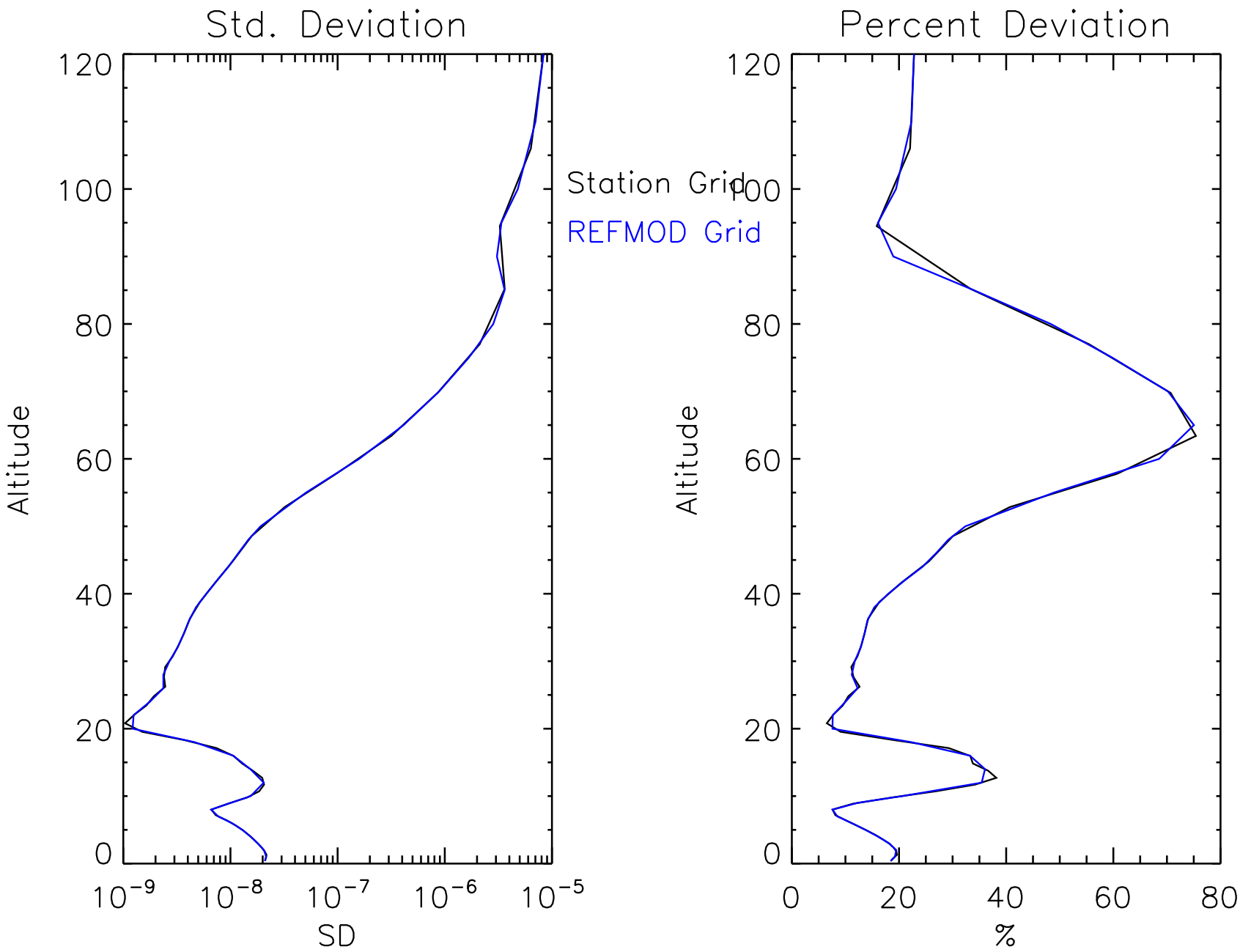

Initial & Interpolated profiles by month for : 2017
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

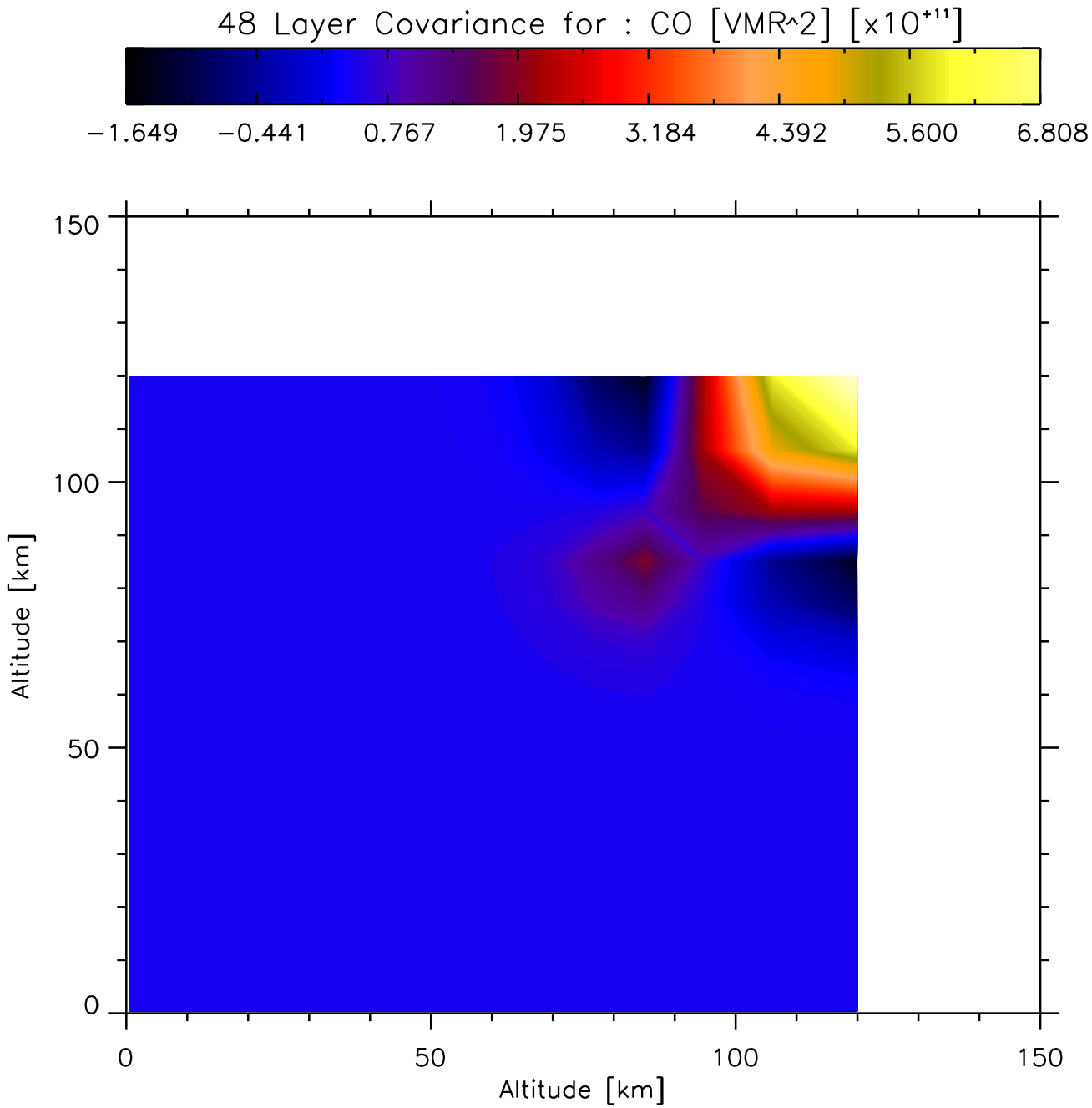

Initial & Interpolated profiles by month for : 2018
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

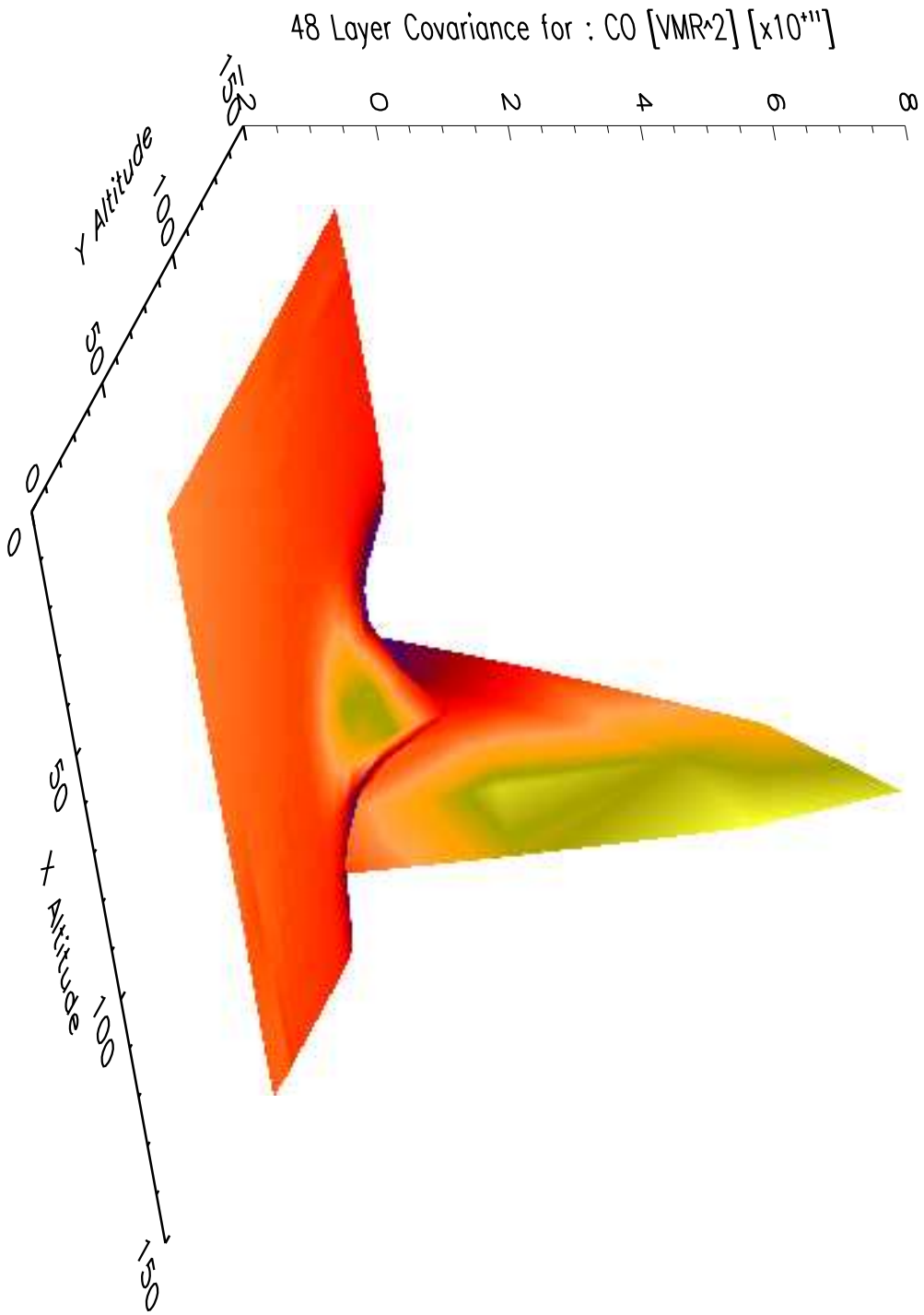

Initial & Interpolated profiles by month for : 2019
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

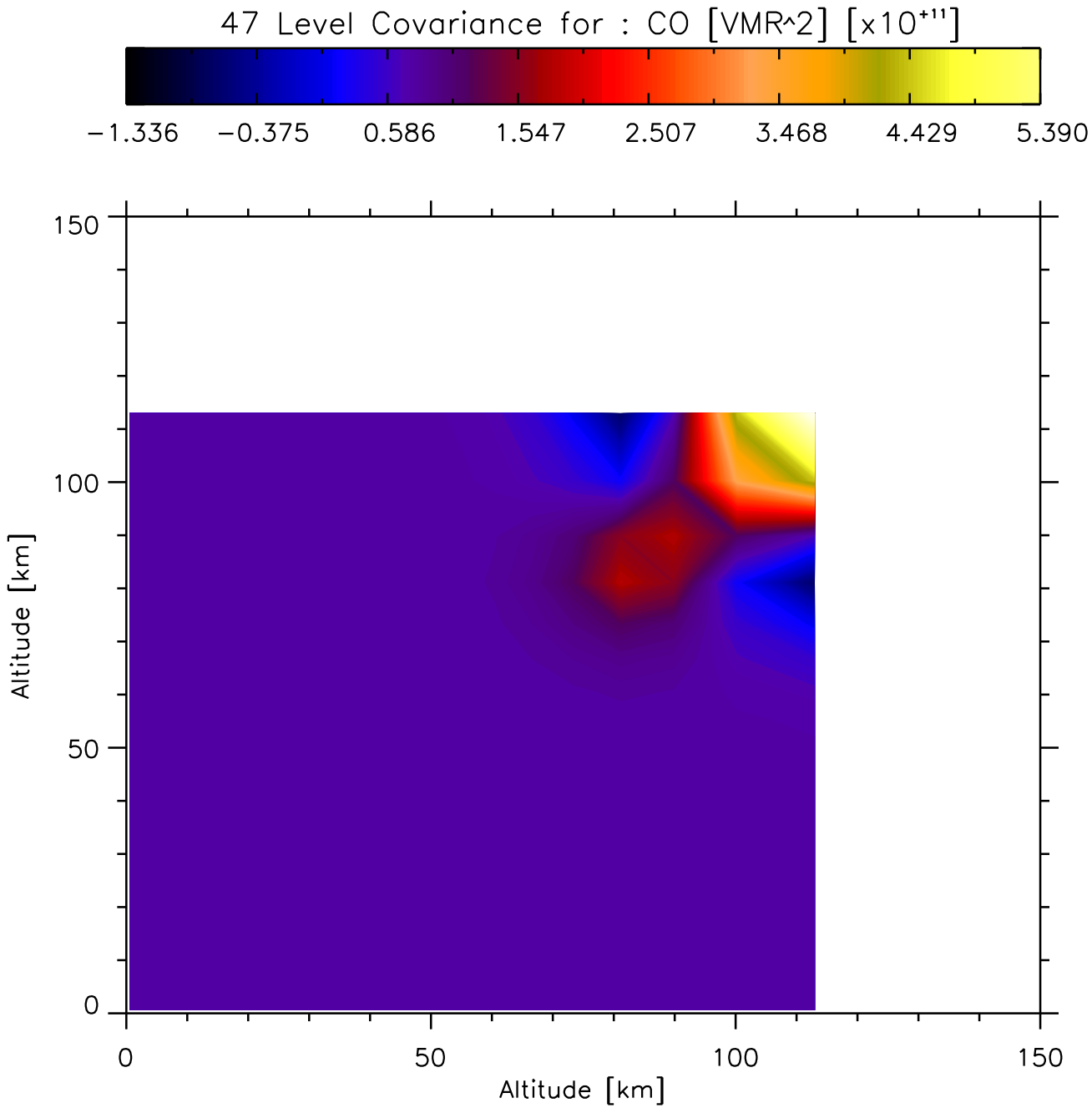

Initial & Interpolated profiles by month for : 2020
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

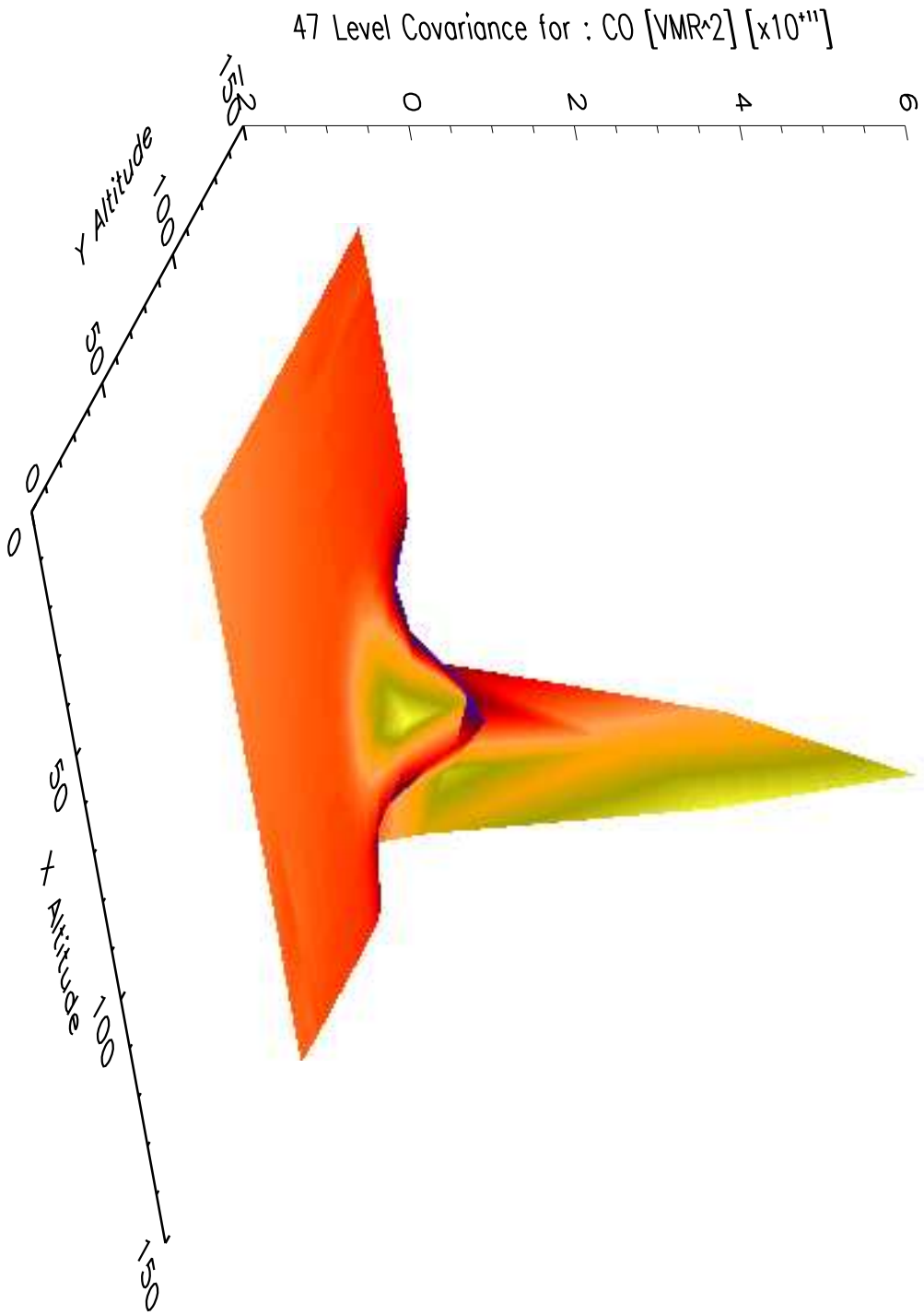

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
Altitude
120
100
80
60
40
20
0
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
10^{-4}
Mixing Ratio


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}
SD
0
20
40
60
80
%


48 Layer Covariance for : CO [VMR^2] [x10^+11]
−1.649
−0.441
0.767
1.975
3.184
4.392
5.600
6.808
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


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


47 Level Covariance for : CO [VMR^2] [x10^+11]
−1.336
−0.375
0.586
1.547
2.507
3.468
4.429
5.390
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


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