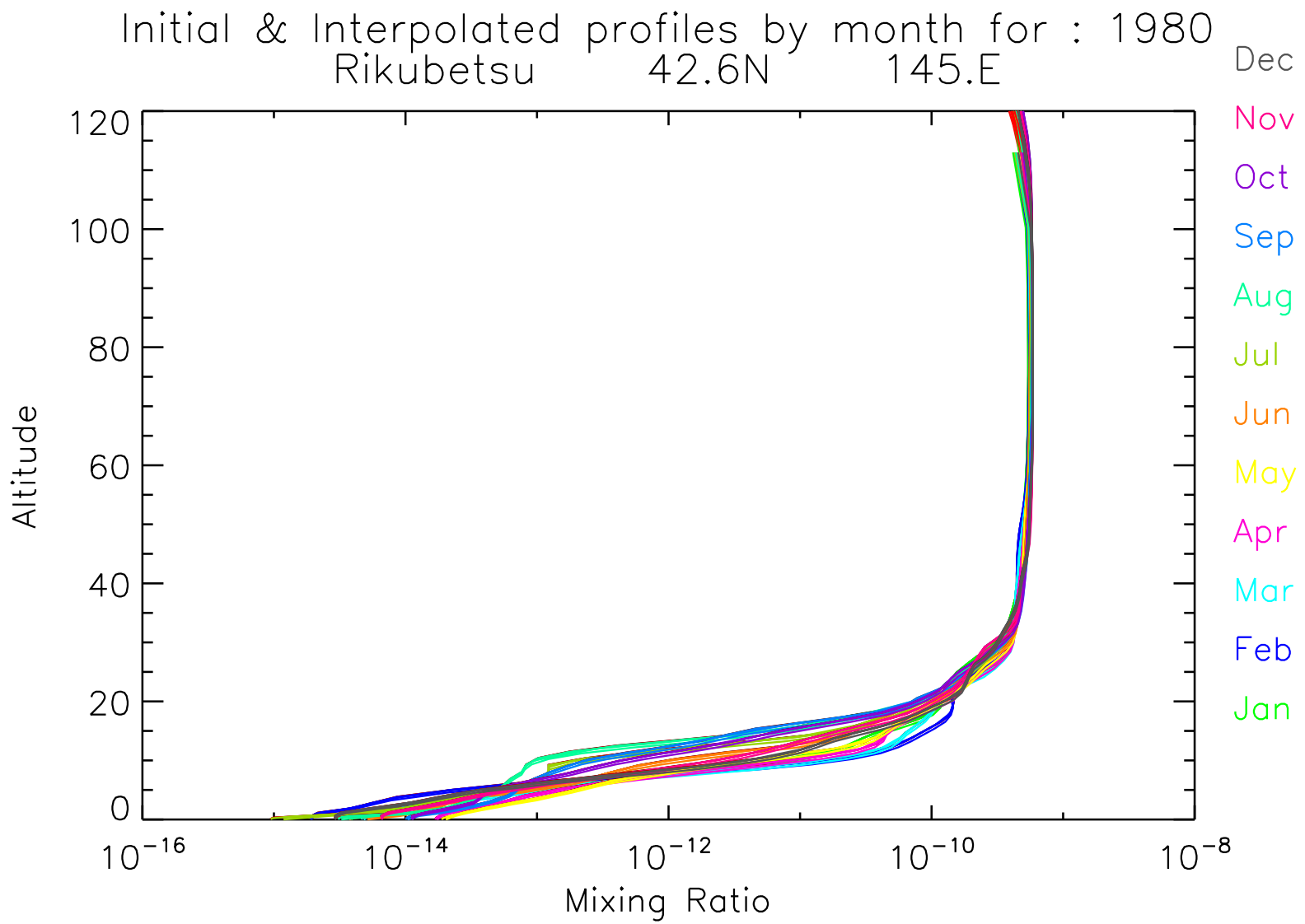
Initial & Interpolated profiles by month for : 1980
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Altitude
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Mixing Ratio
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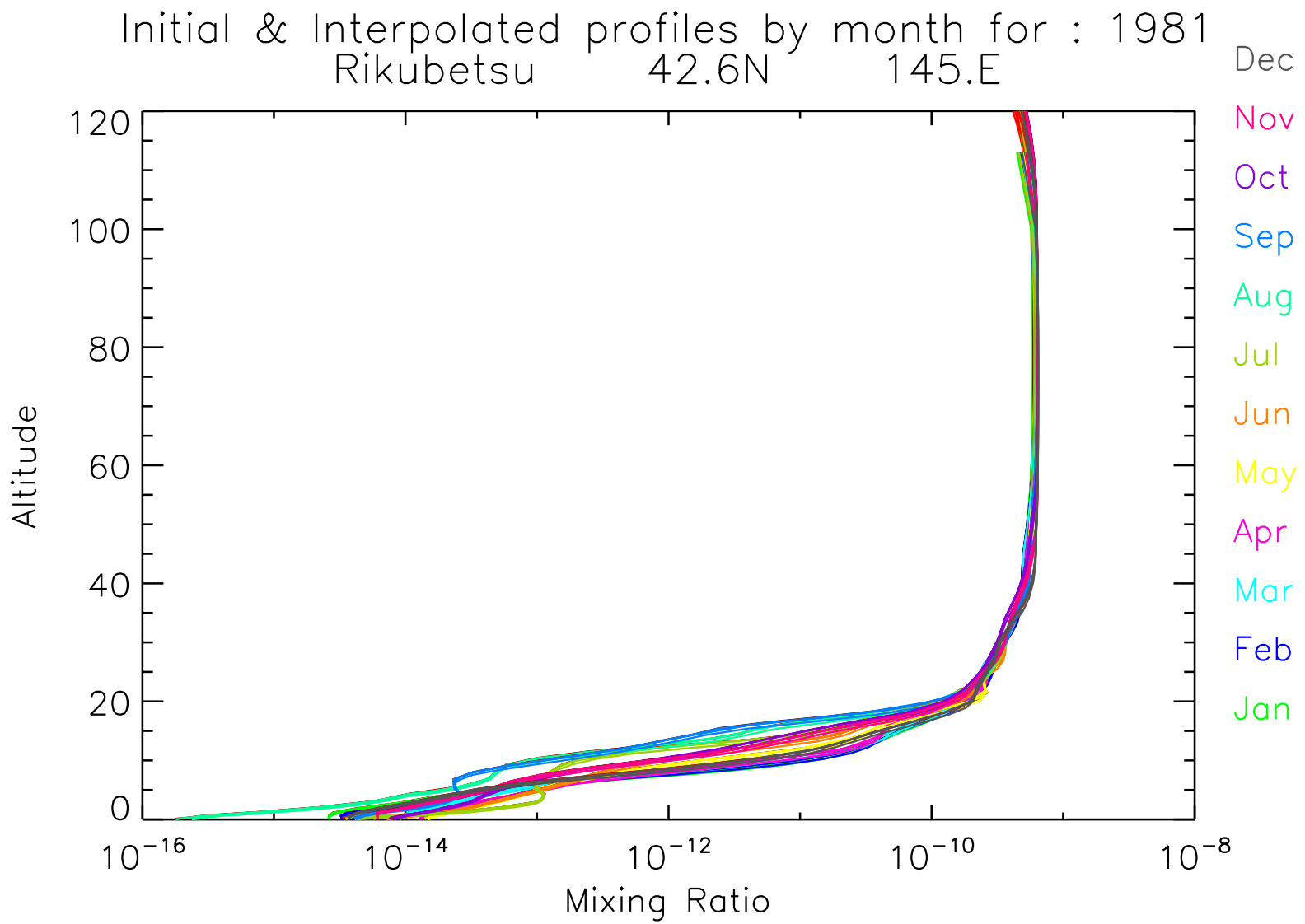
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Mixing Ratio
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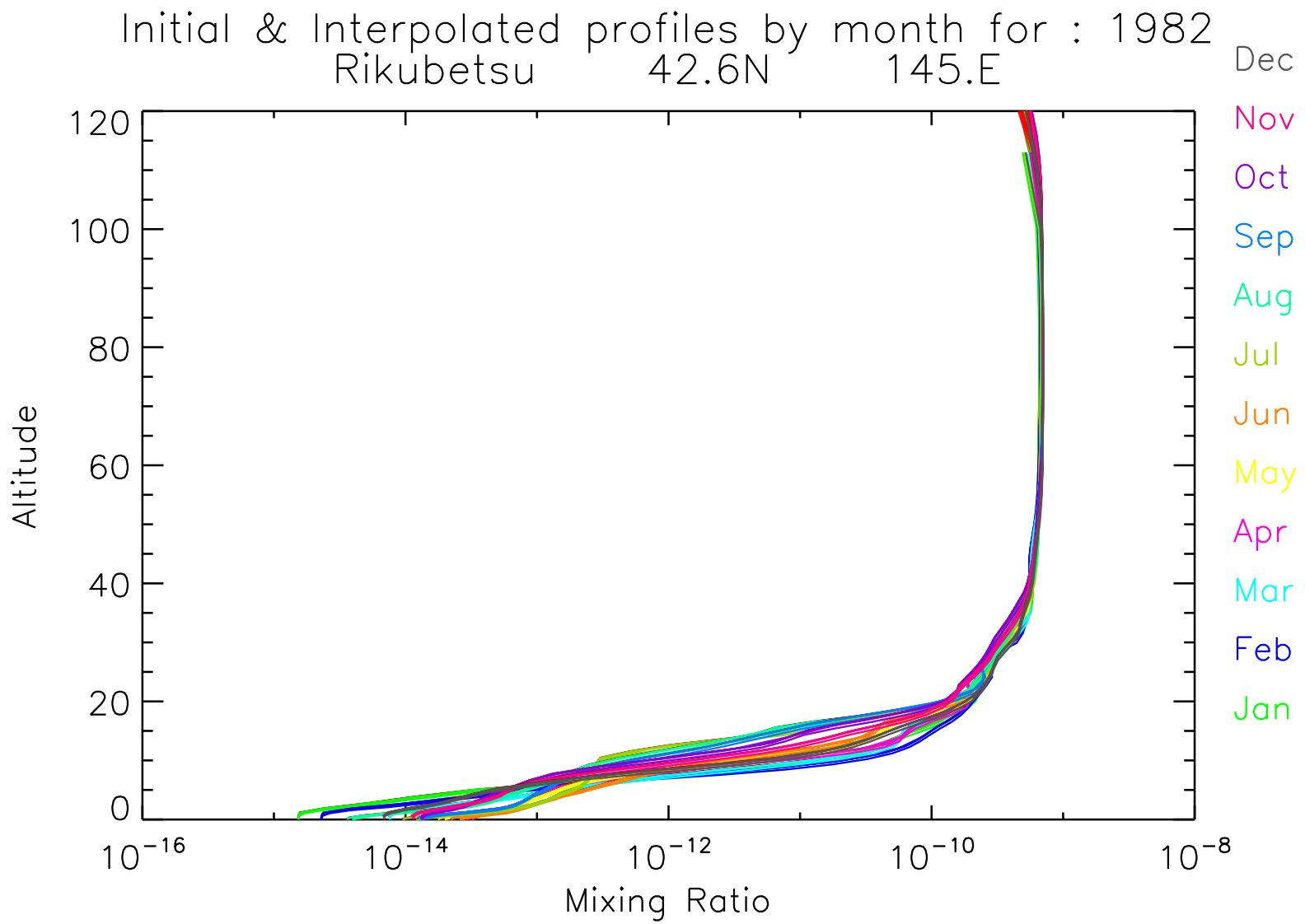
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Mixing Ratio
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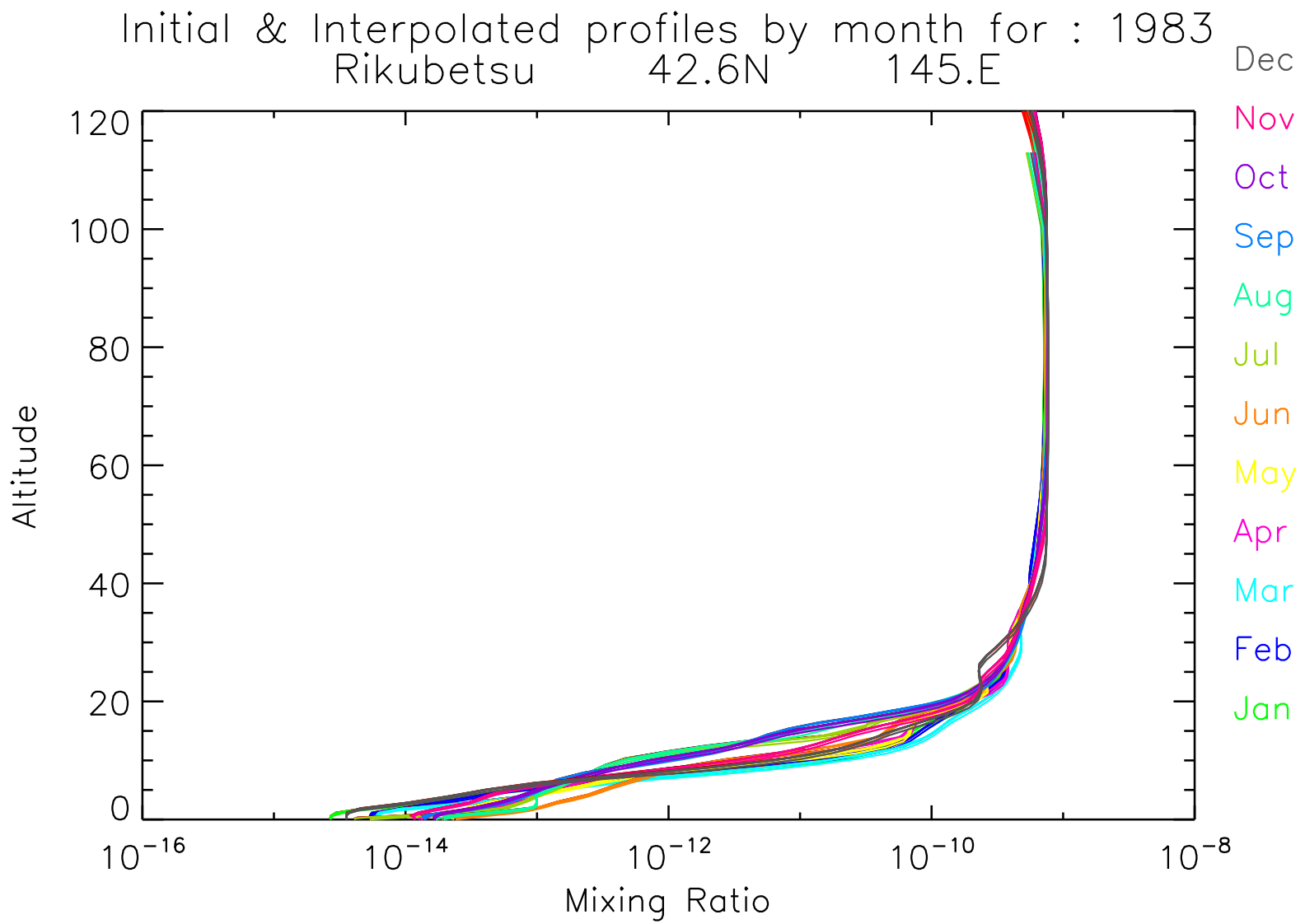
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Altitude
120
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Mixing Ratio
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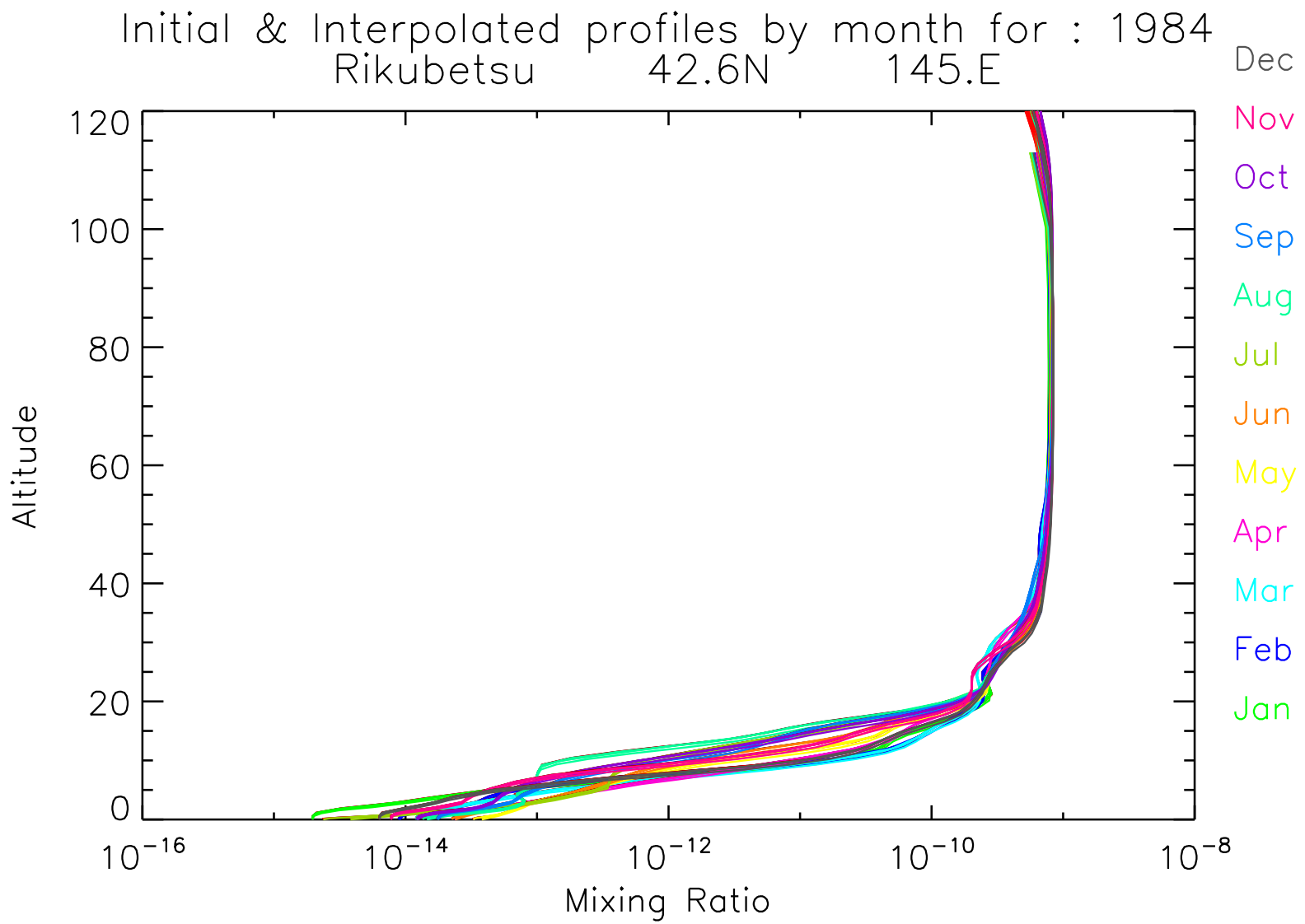
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Mixing Ratio
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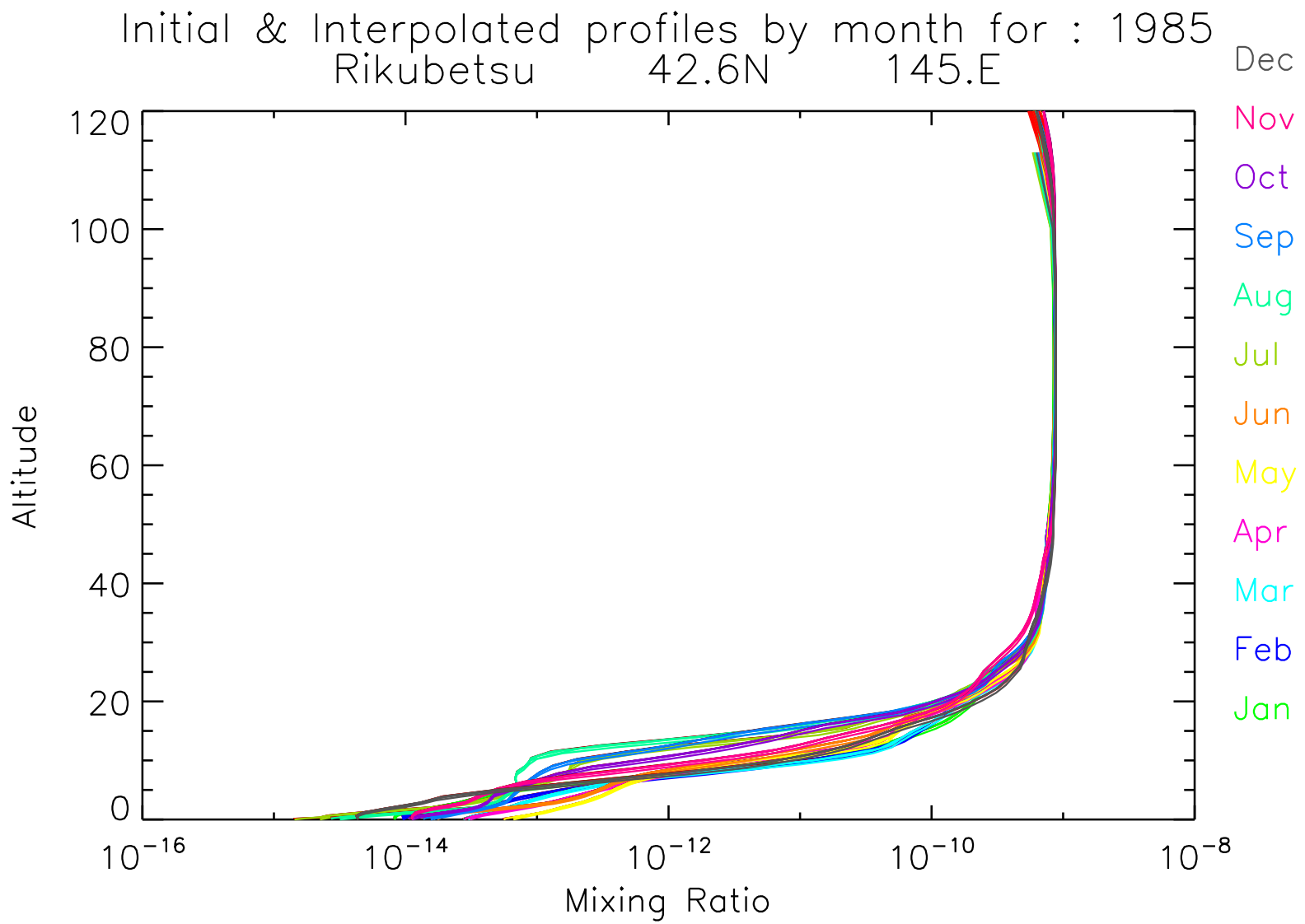
Initial & Interpolated profiles by month for : 1985
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Altitude
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Mixing Ratio
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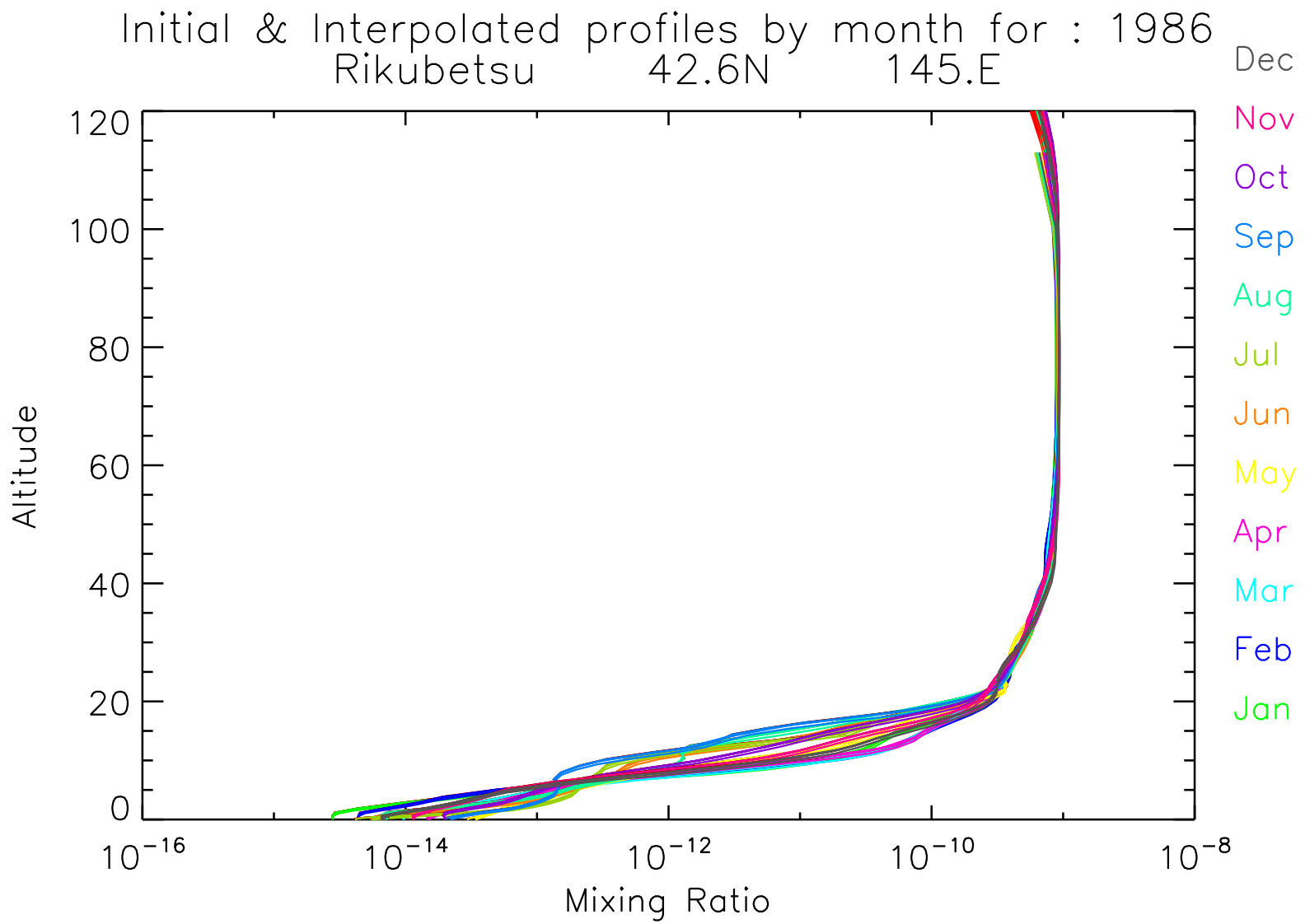
Initial & Interpolated profiles by month for : 1986
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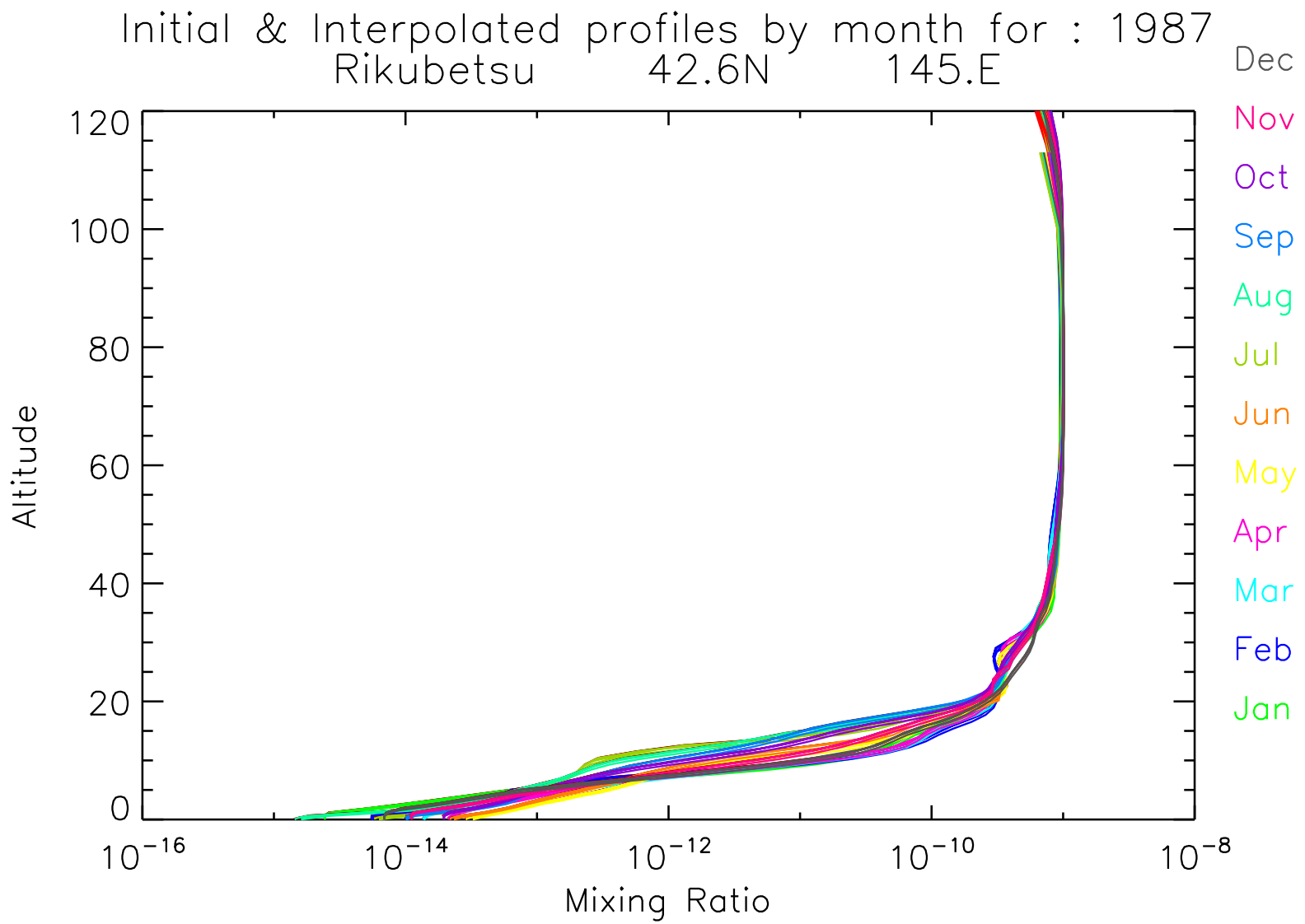
10^{-8}
Mixing Ratio


Initial & Interpolated profiles by month for : 1987
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Altitude
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Mixing Ratio
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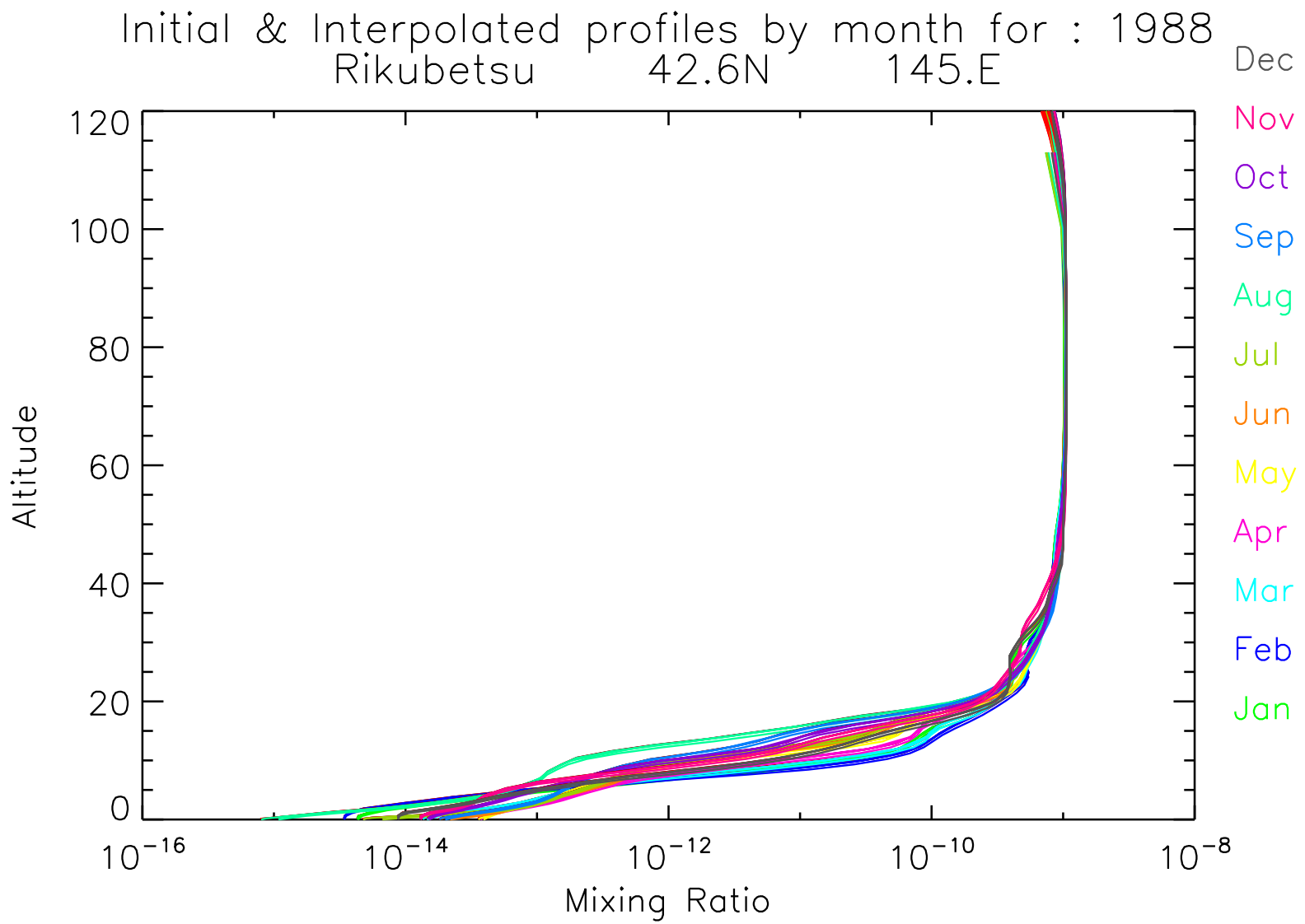
Initial & Interpolated profiles by month for : 1988
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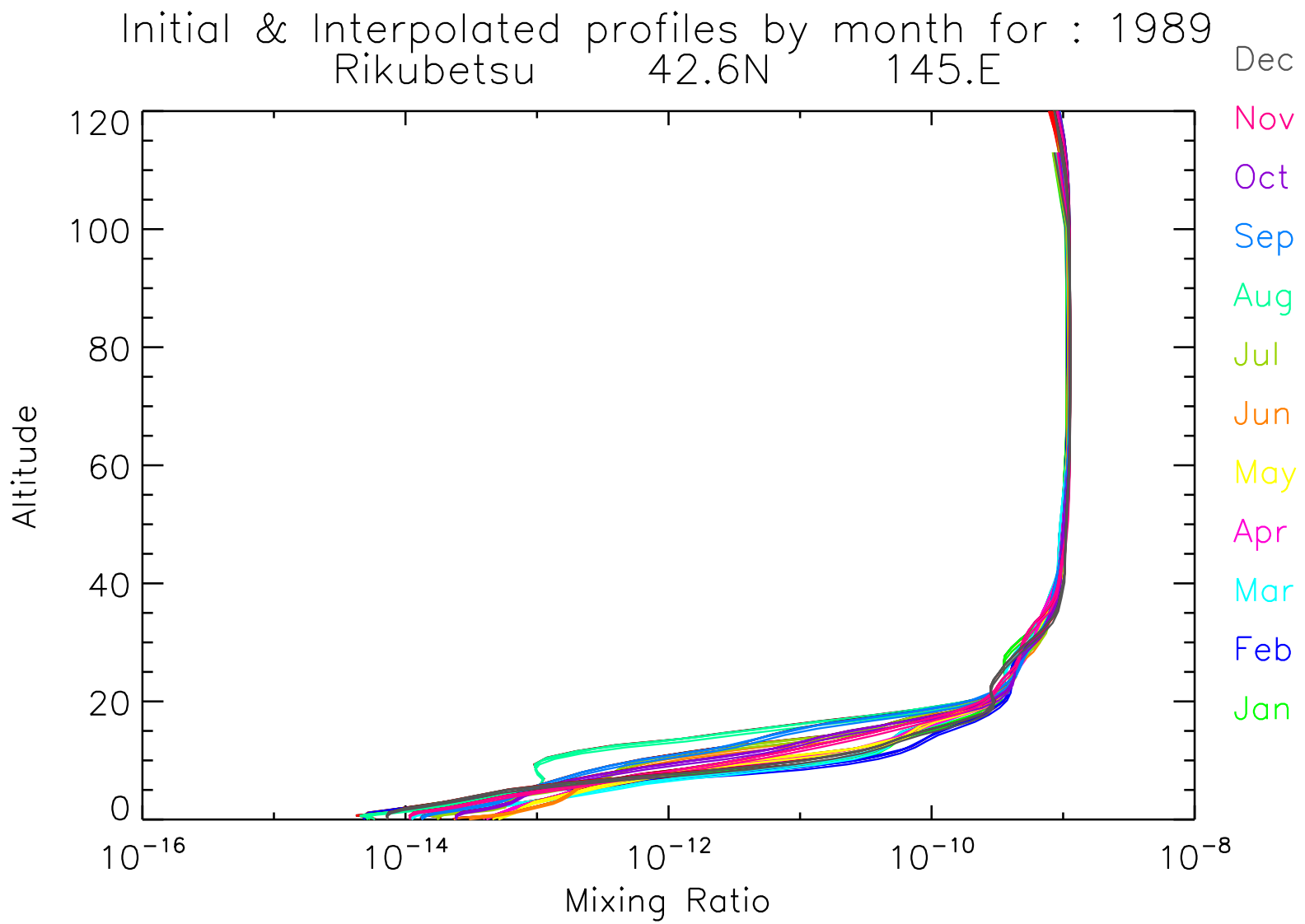
10^{-8}
Mixing Ratio


Initial & Interpolated profiles by month for : 1989
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Altitude
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Mixing Ratio
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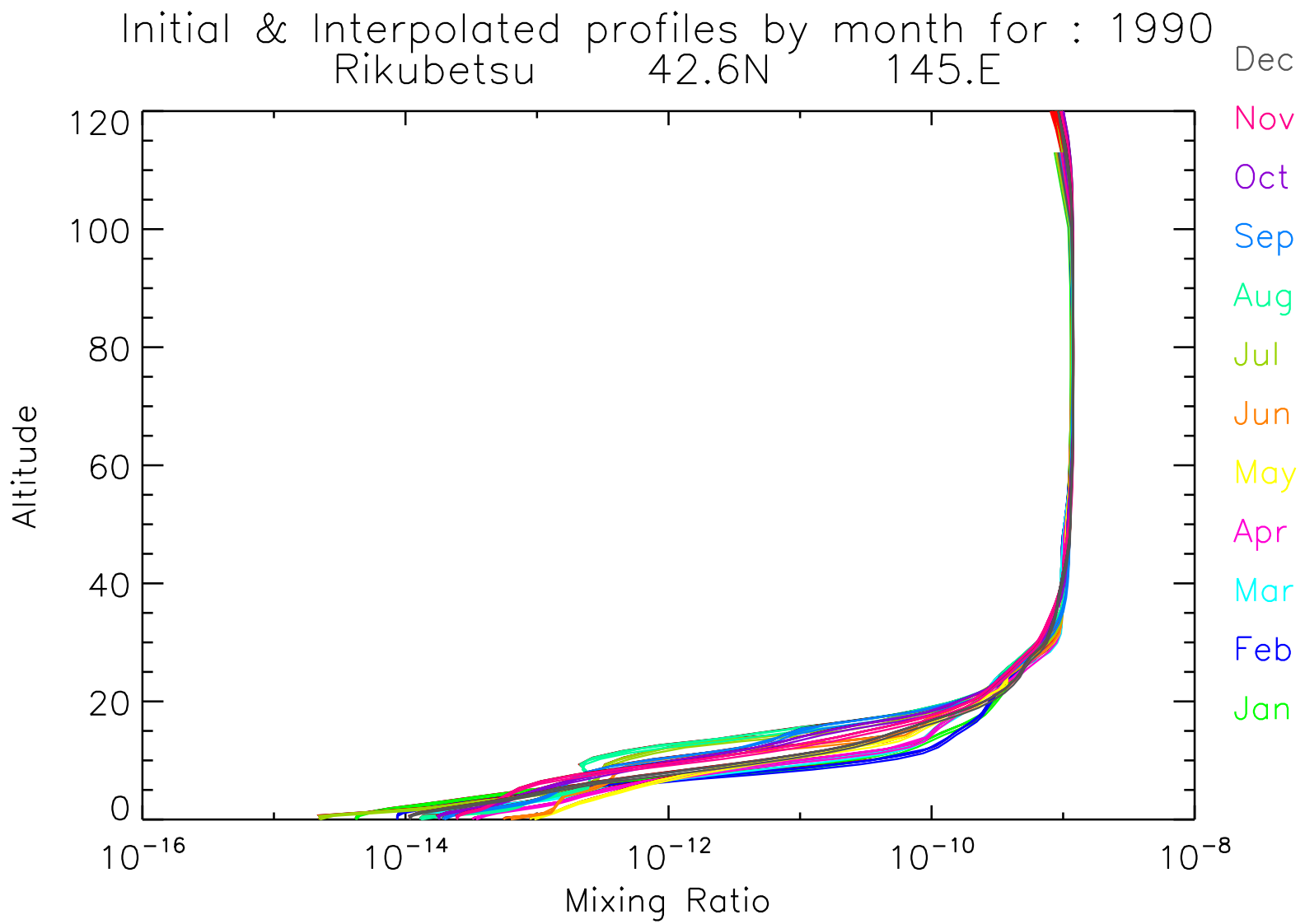
Initial & Interpolated profiles by month for : 1990
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Altitude
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Mixing Ratio
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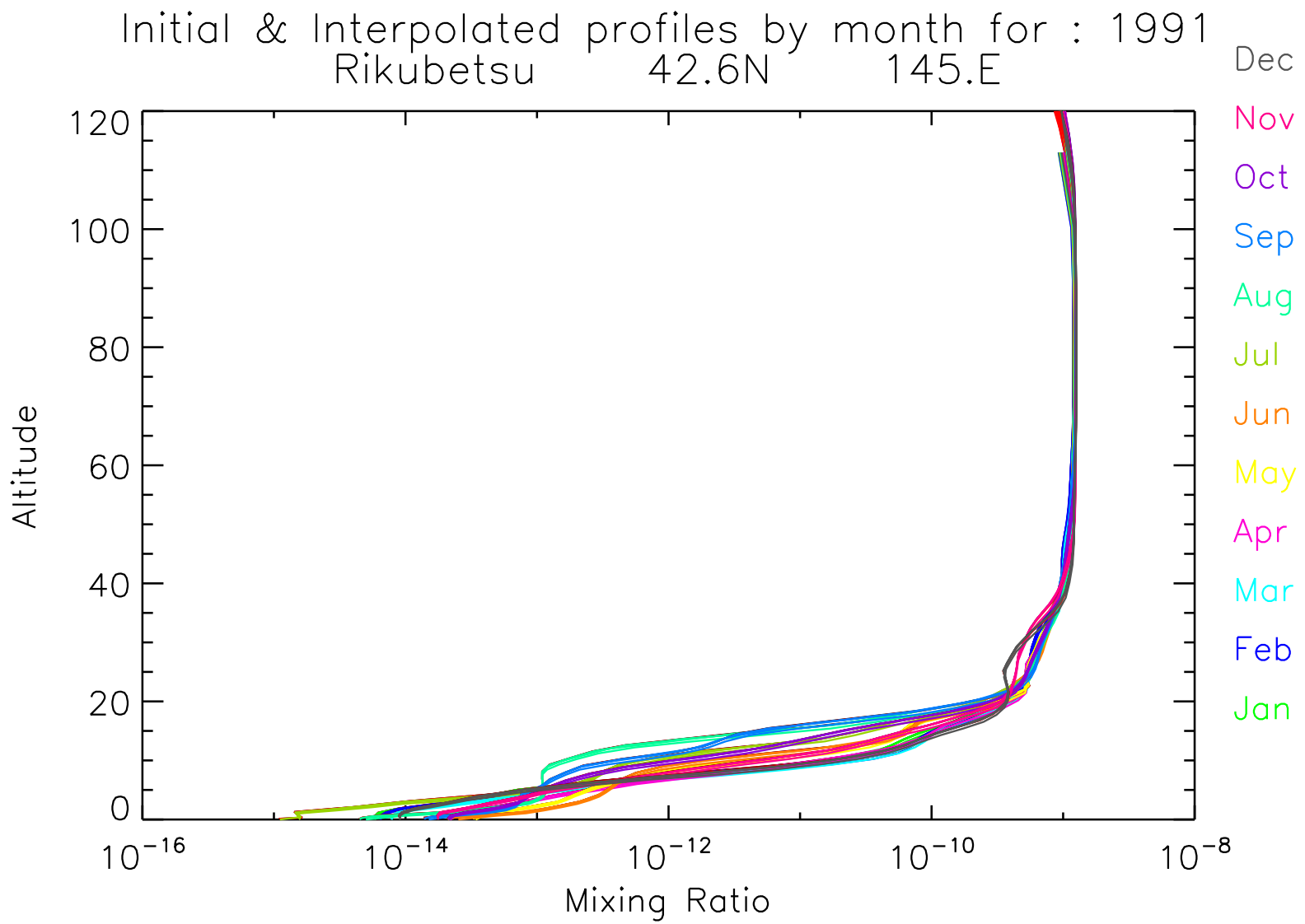
Initial & Interpolated profiles by month for : 1991
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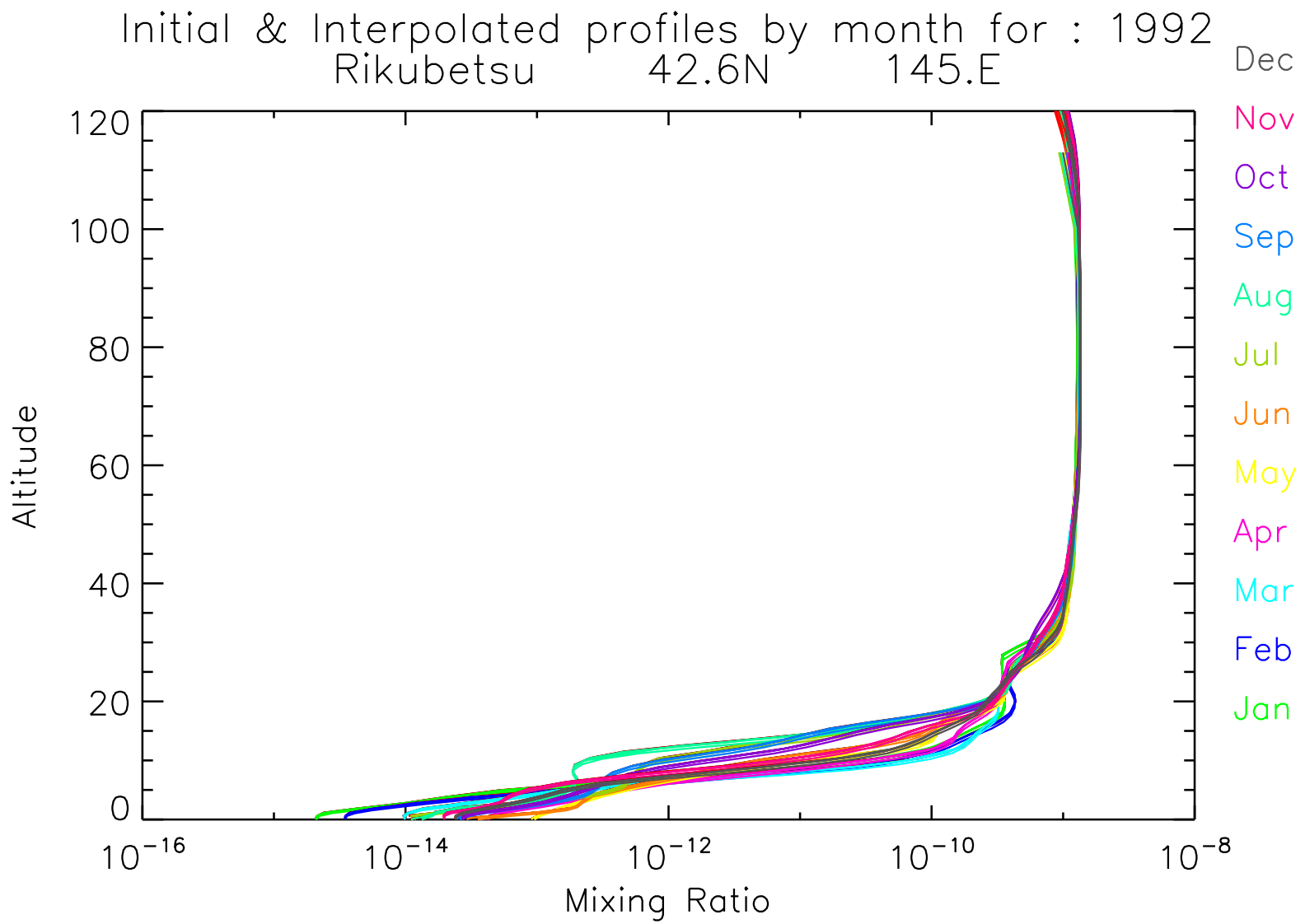
10^{-8}
Mixing Ratio


Initial & Interpolated profiles by month for : 1992
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Altitude
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Mixing Ratio
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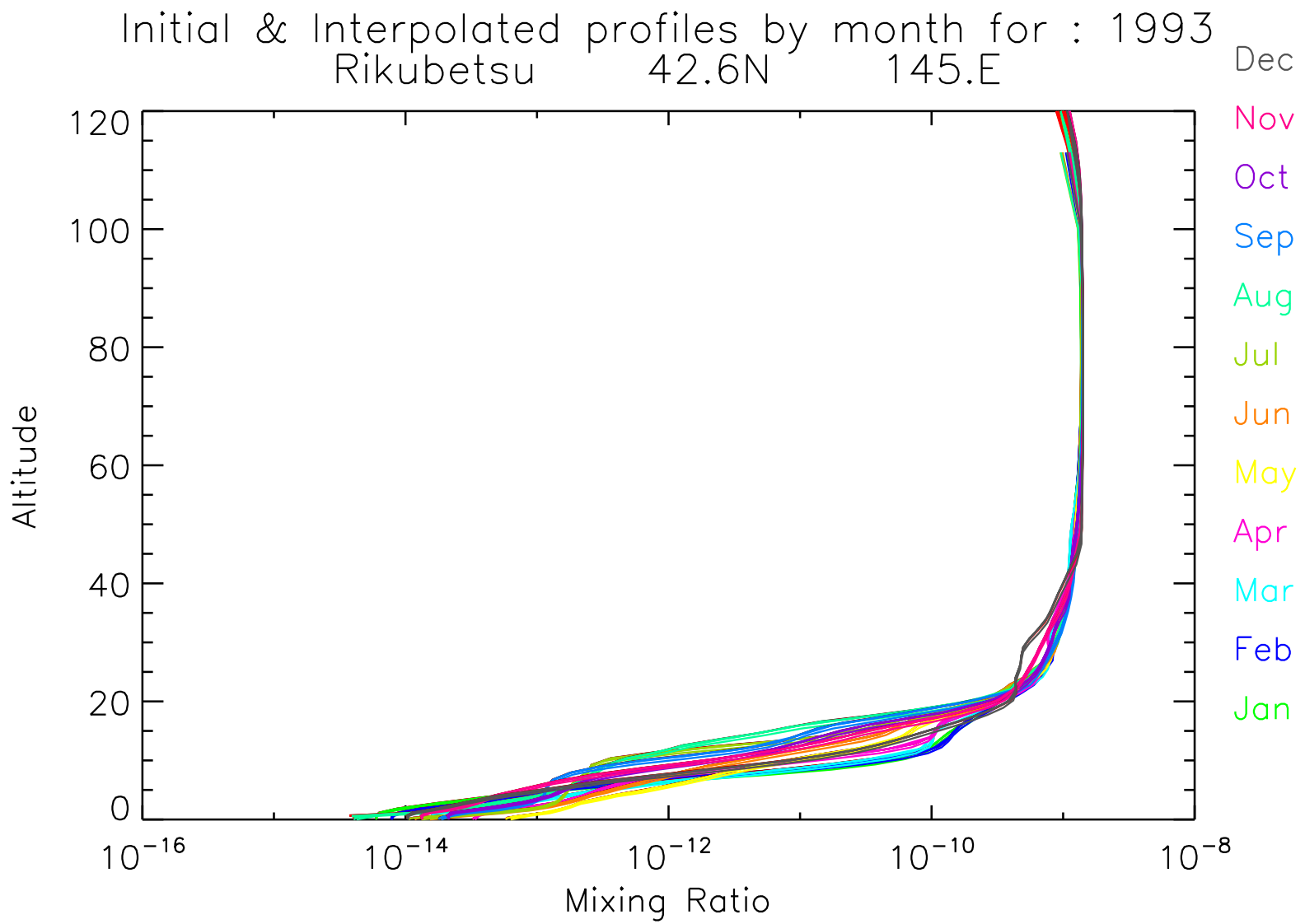
Initial & Interpolated profiles by month for : 1993
Rikubetsu 42.6N 145.E
Altitude
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Mixing Ratio
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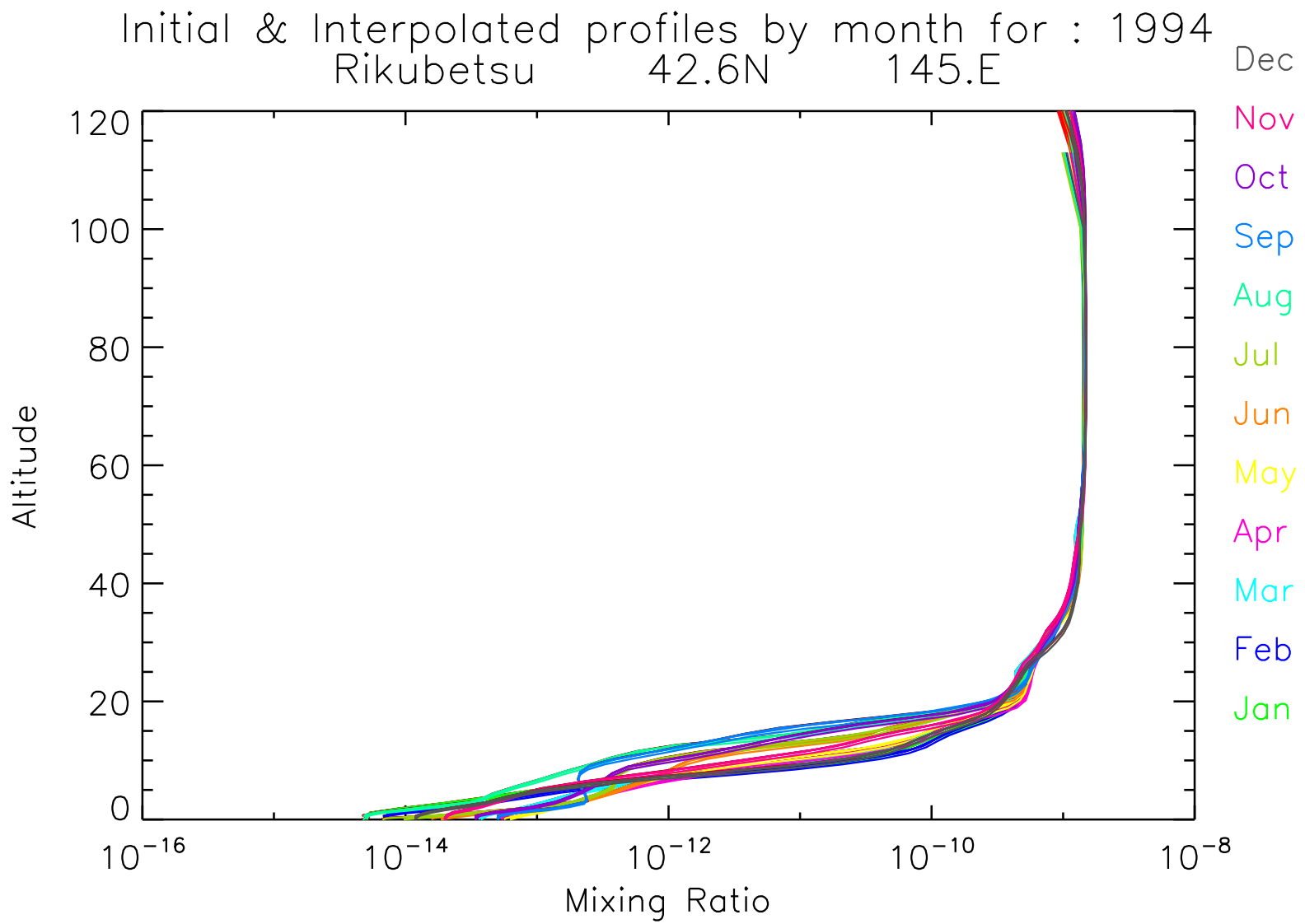
Initial & Interpolated profiles by month for : 1994
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Altitude
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Mixing Ratio
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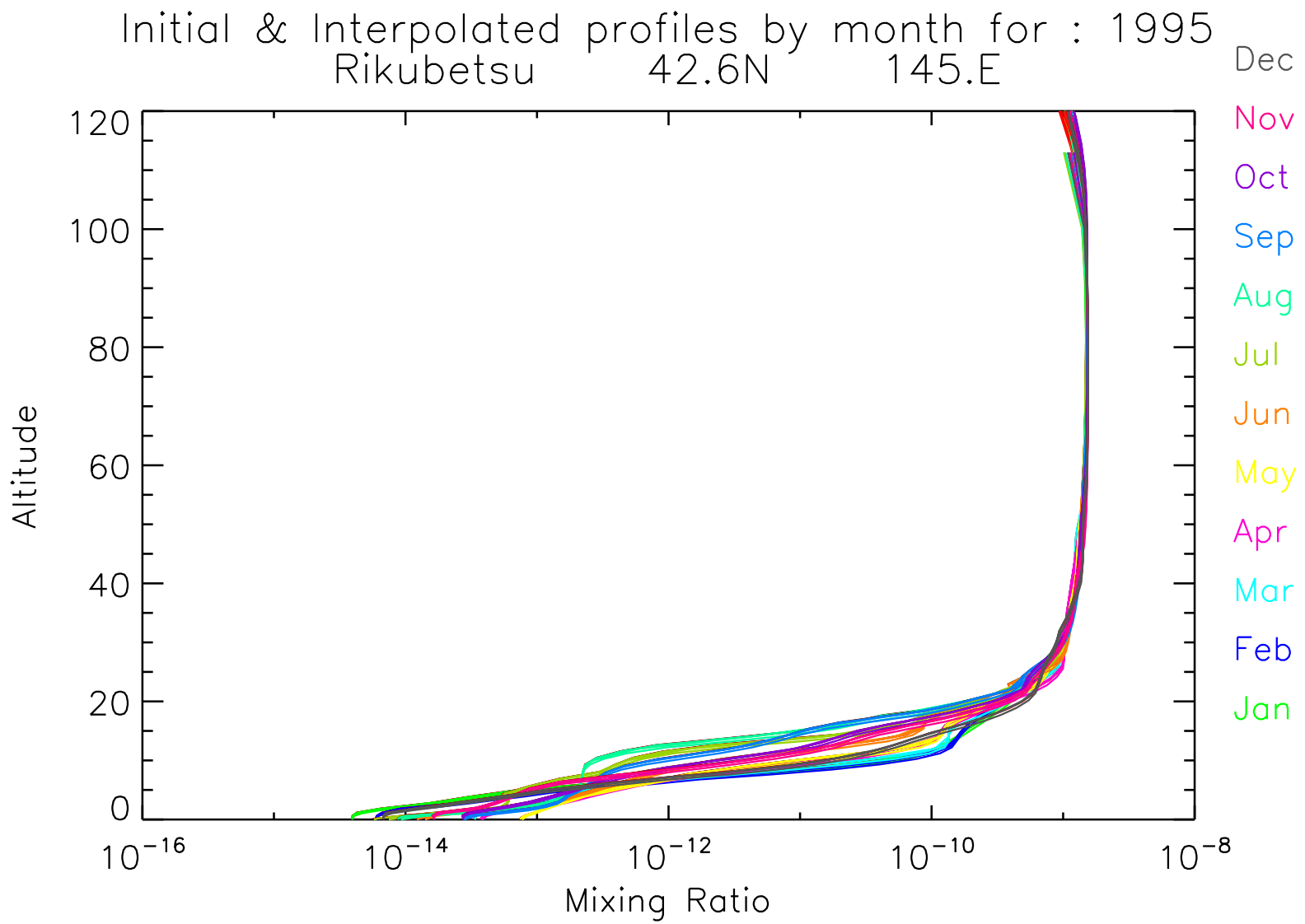
Initial & Interpolated profiles by month for : 1995
Rikubetsu 42.6N 145.E
Altitude
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Mixing Ratio
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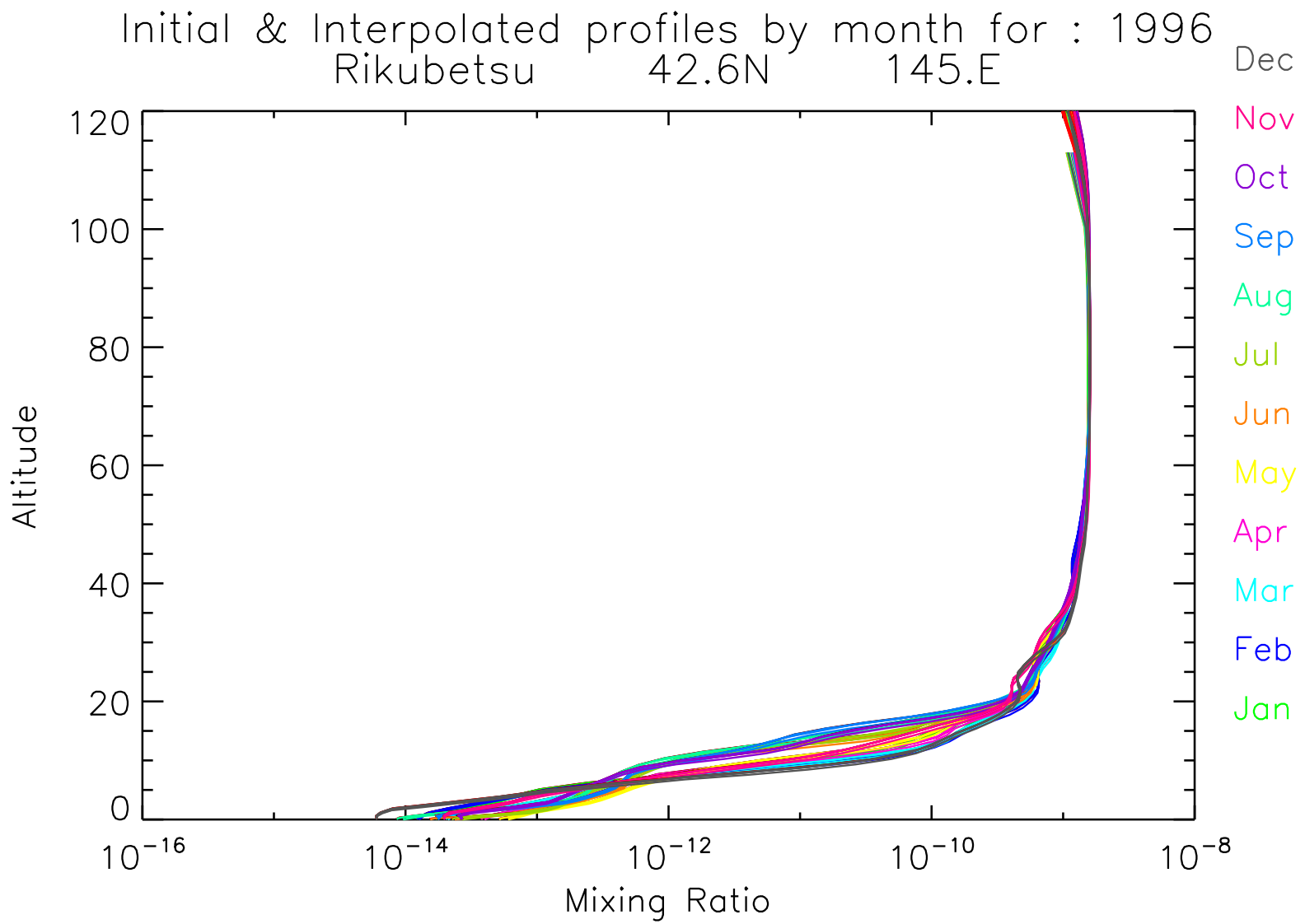
Initial & Interpolated profiles by month for : 1996
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Altitude
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Mixing Ratio
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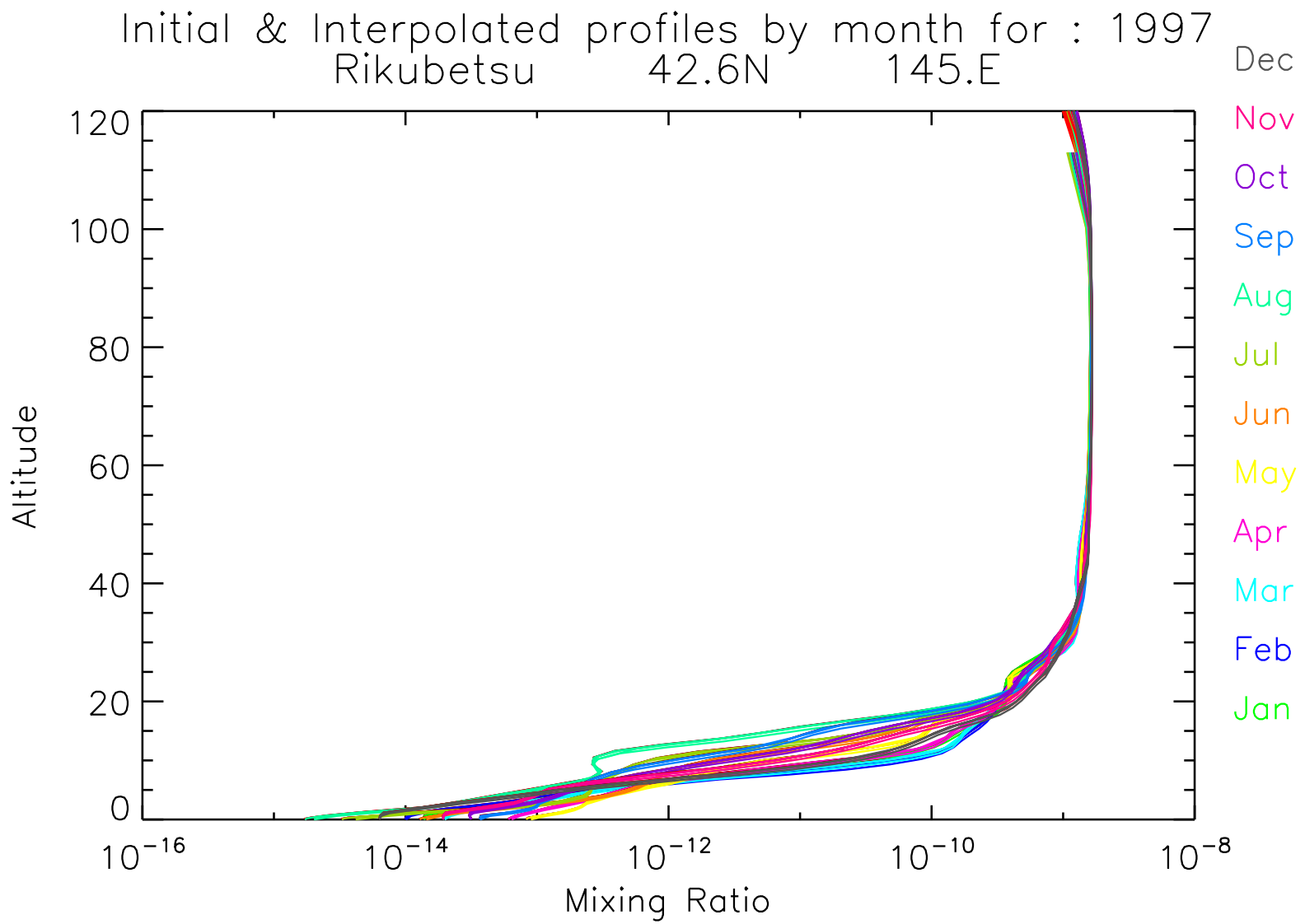
Initial & Interpolated profiles by month for : 1997
Rikubetsu 42.6N 145.E
Altitude
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Mixing Ratio
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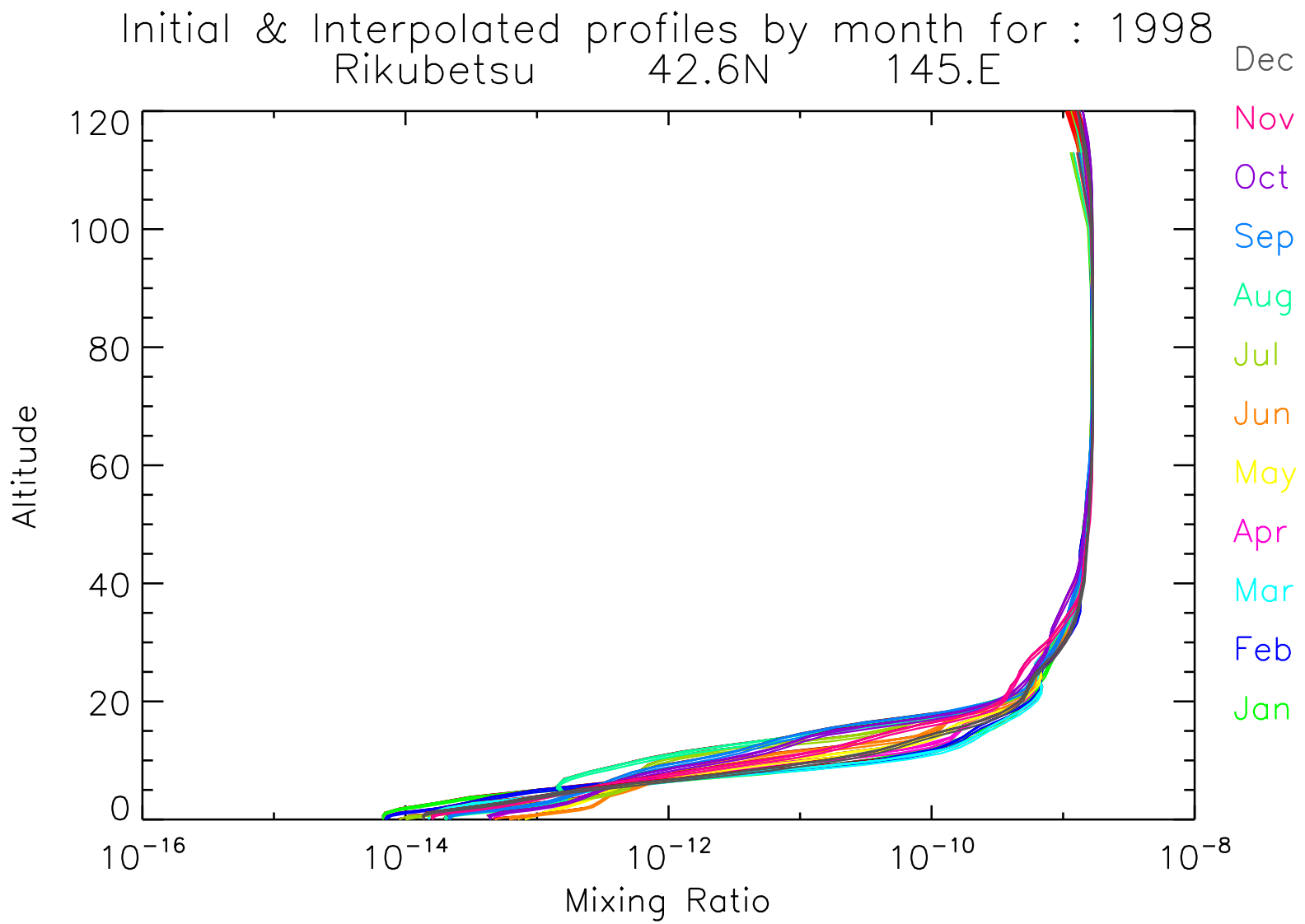
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Altitude
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Mixing Ratio
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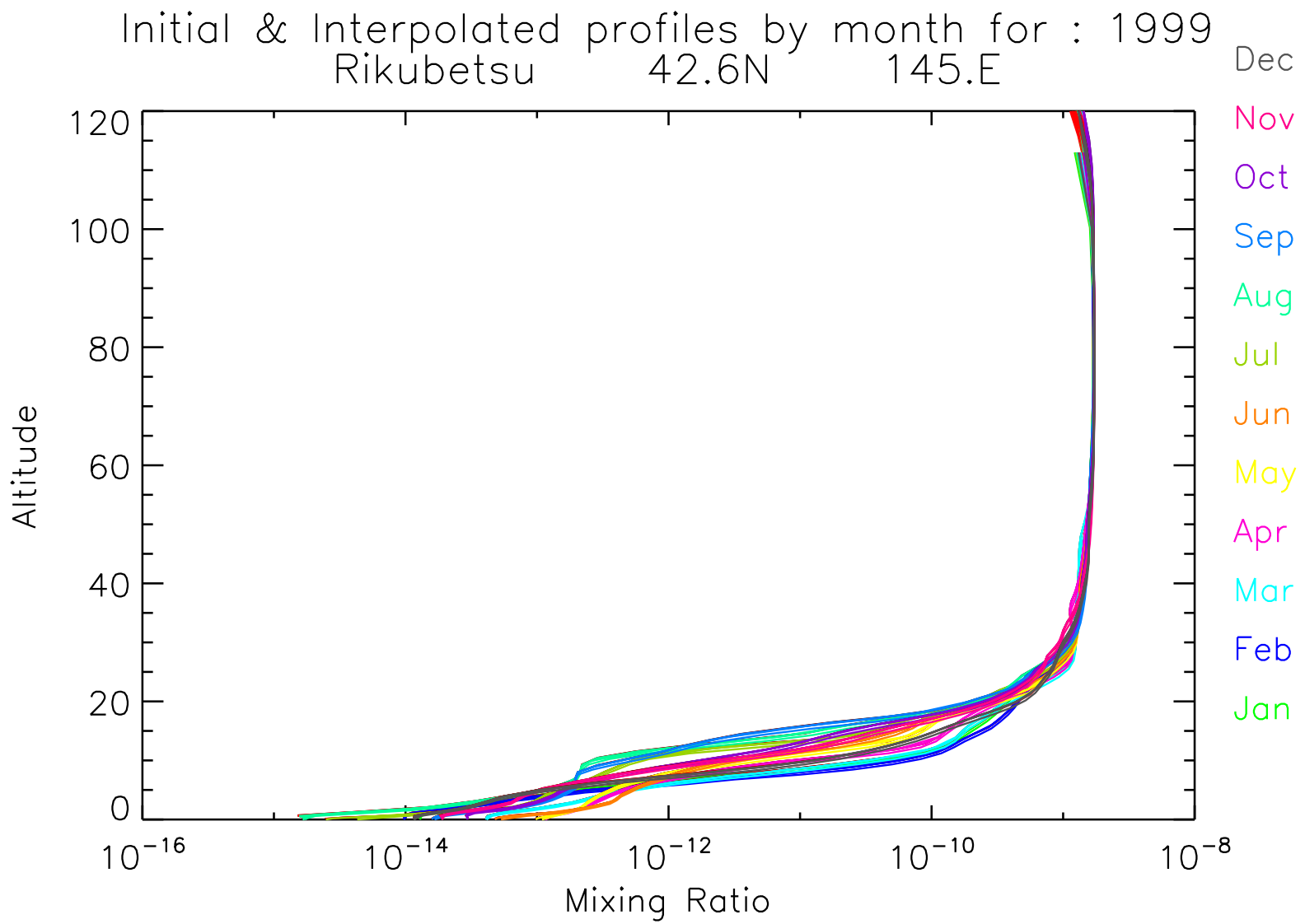
Initial & Interpolated profiles by month for : 1999
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Altitude
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Mixing Ratio
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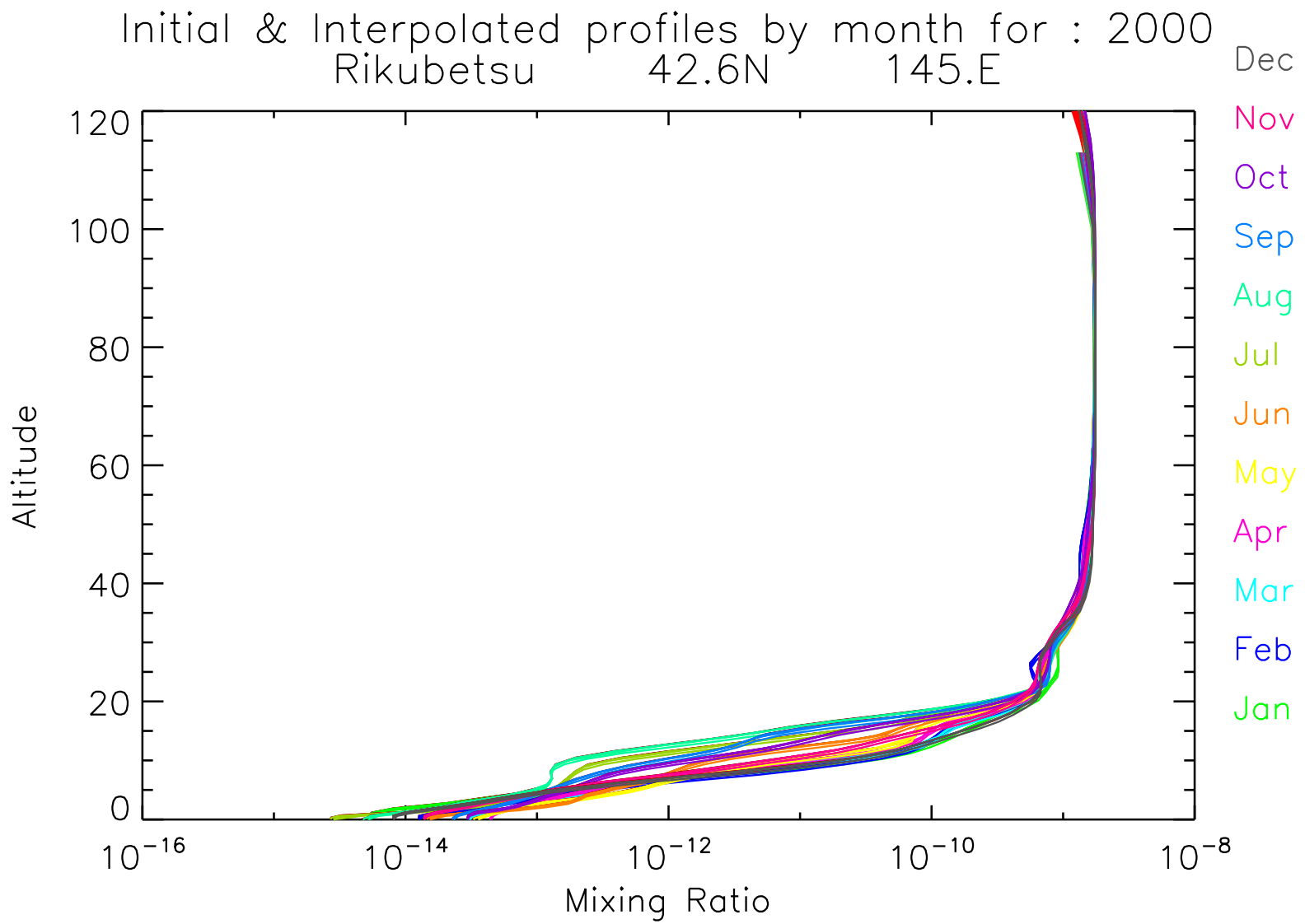
Initial & Interpolated profiles by month for : 2000
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Mixing Ratio
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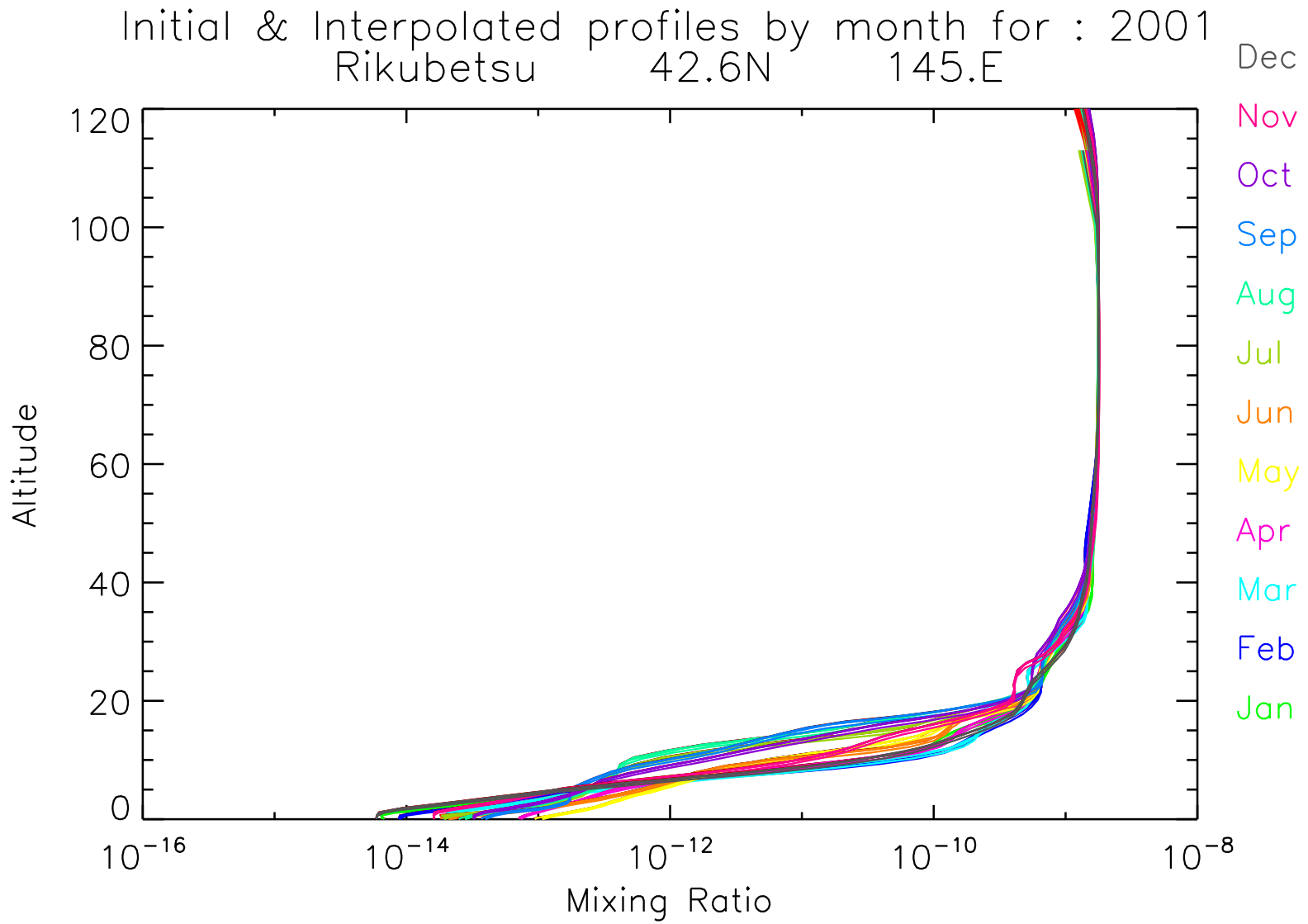
Initial & Interpolated profiles by month for : 2001
Rikubetsu 42.6N 145.E
Altitude
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Mixing Ratio
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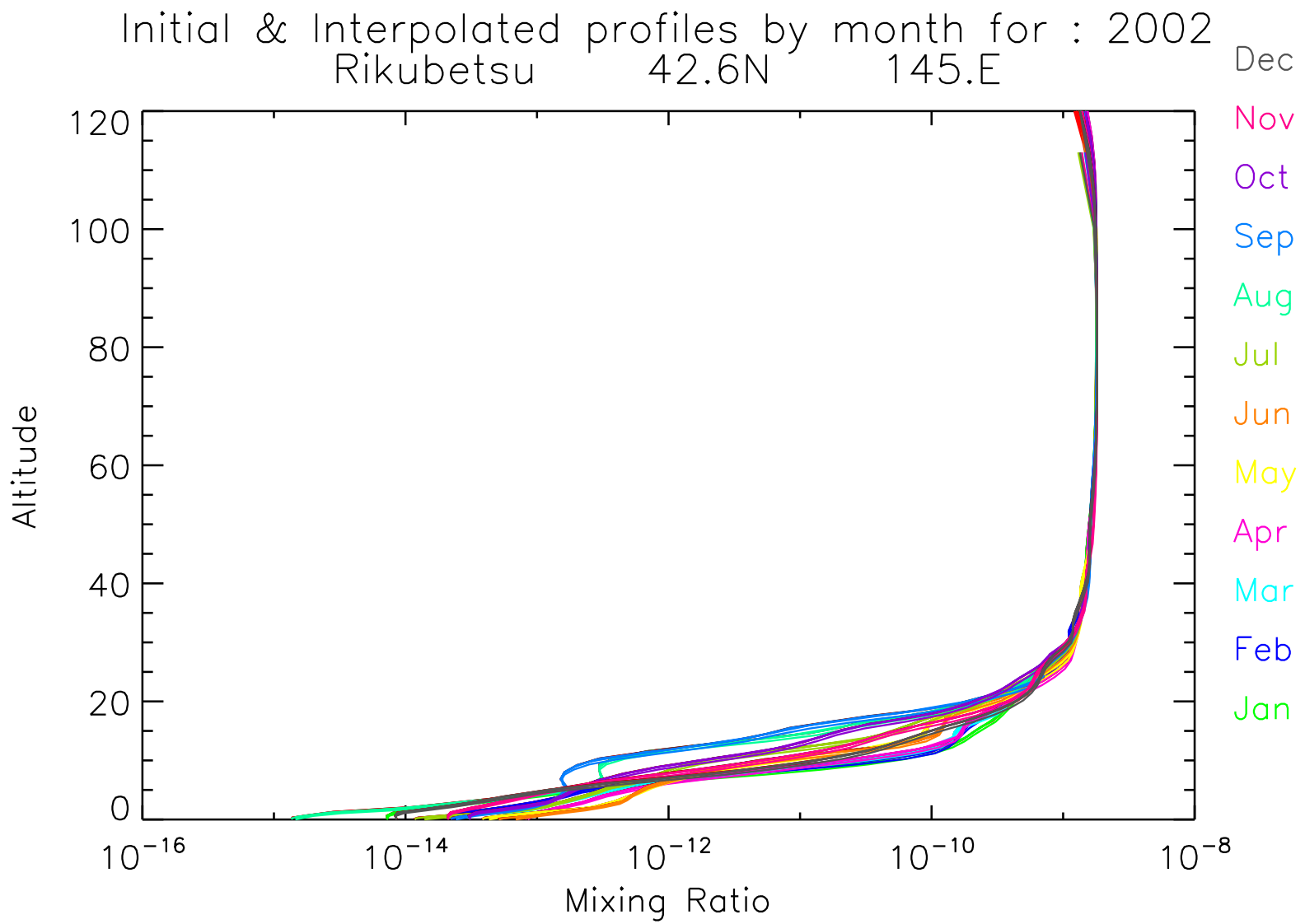
Initial & Interpolated profiles by month for : 2002
Rikubetsu 42.6N 145.E
Altitude
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Mixing Ratio
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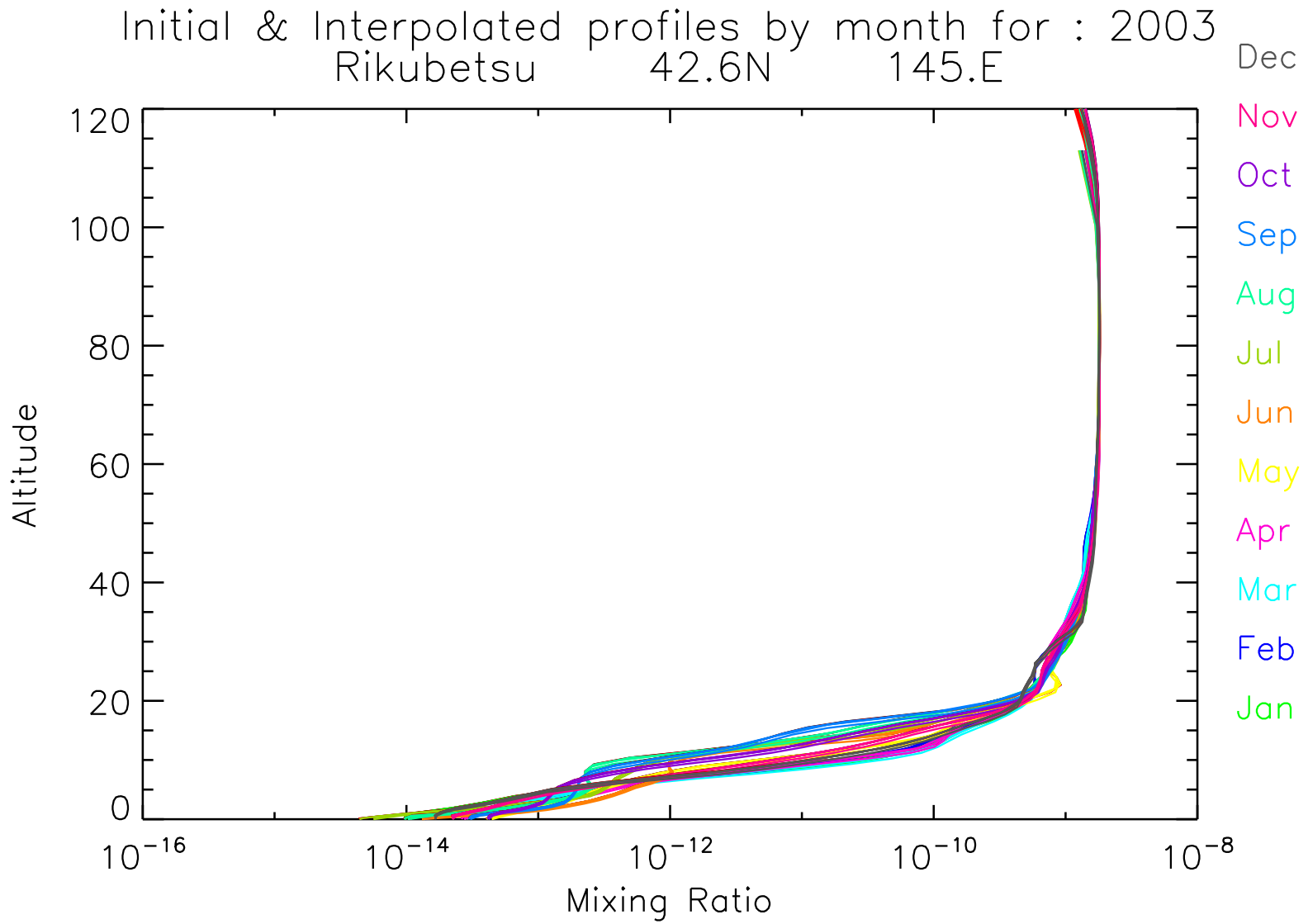
Initial & Interpolated profiles by month for : 2003
Rikubetsu 42.6N 145.E
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Mixing Ratio
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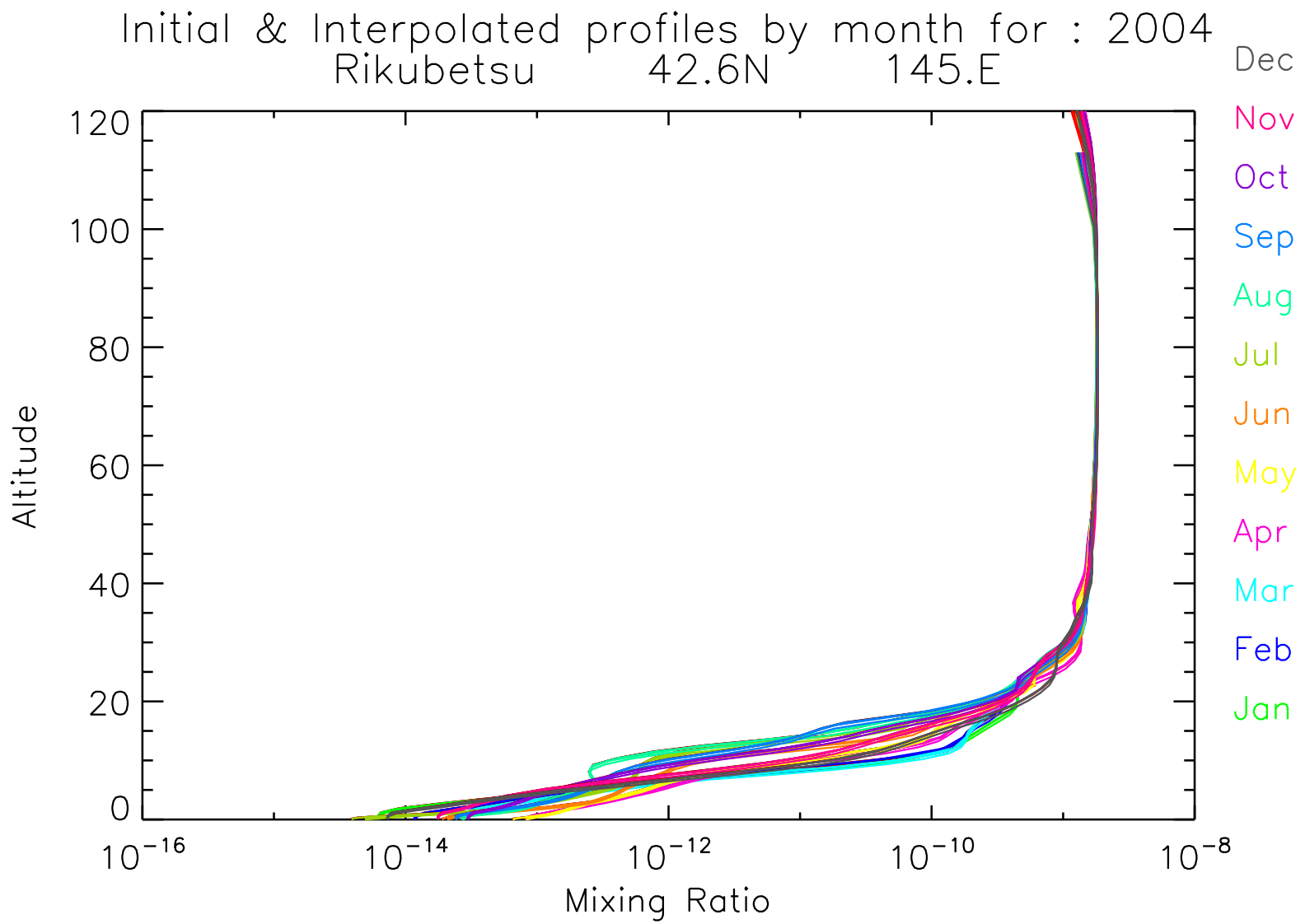
Initial & Interpolated profiles by month for : 2004
Rikubetsu 42.6N 145.E
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Mixing Ratio
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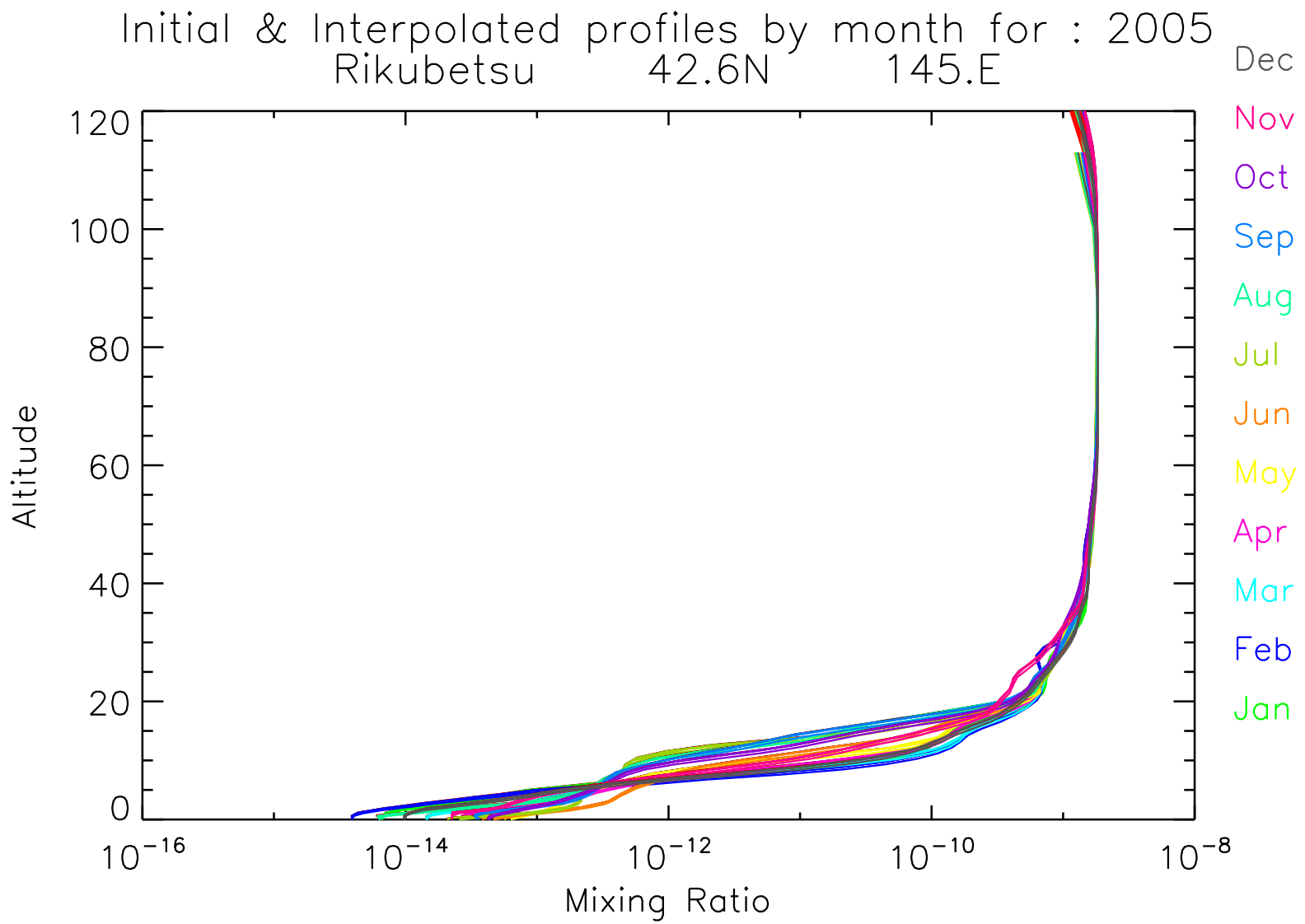
Initial & Interpolated profiles by month for : 2005
Rikubetsu 42.6N 145.E
Altitude
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Mixing Ratio
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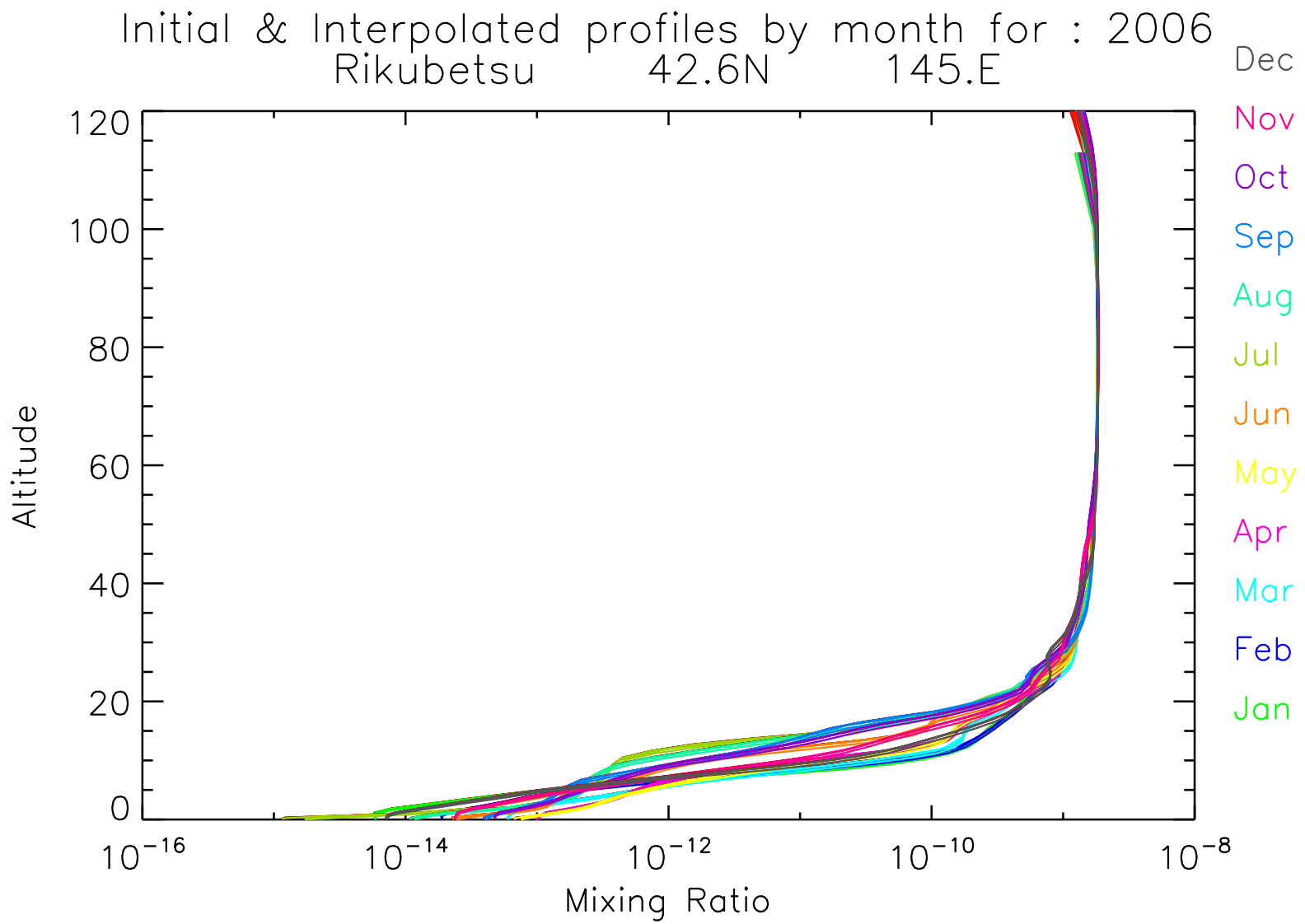
Initial & Interpolated profiles by month for : 2006
Rikubetsu 42.6N 145.E
Altitude
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Mixing Ratio
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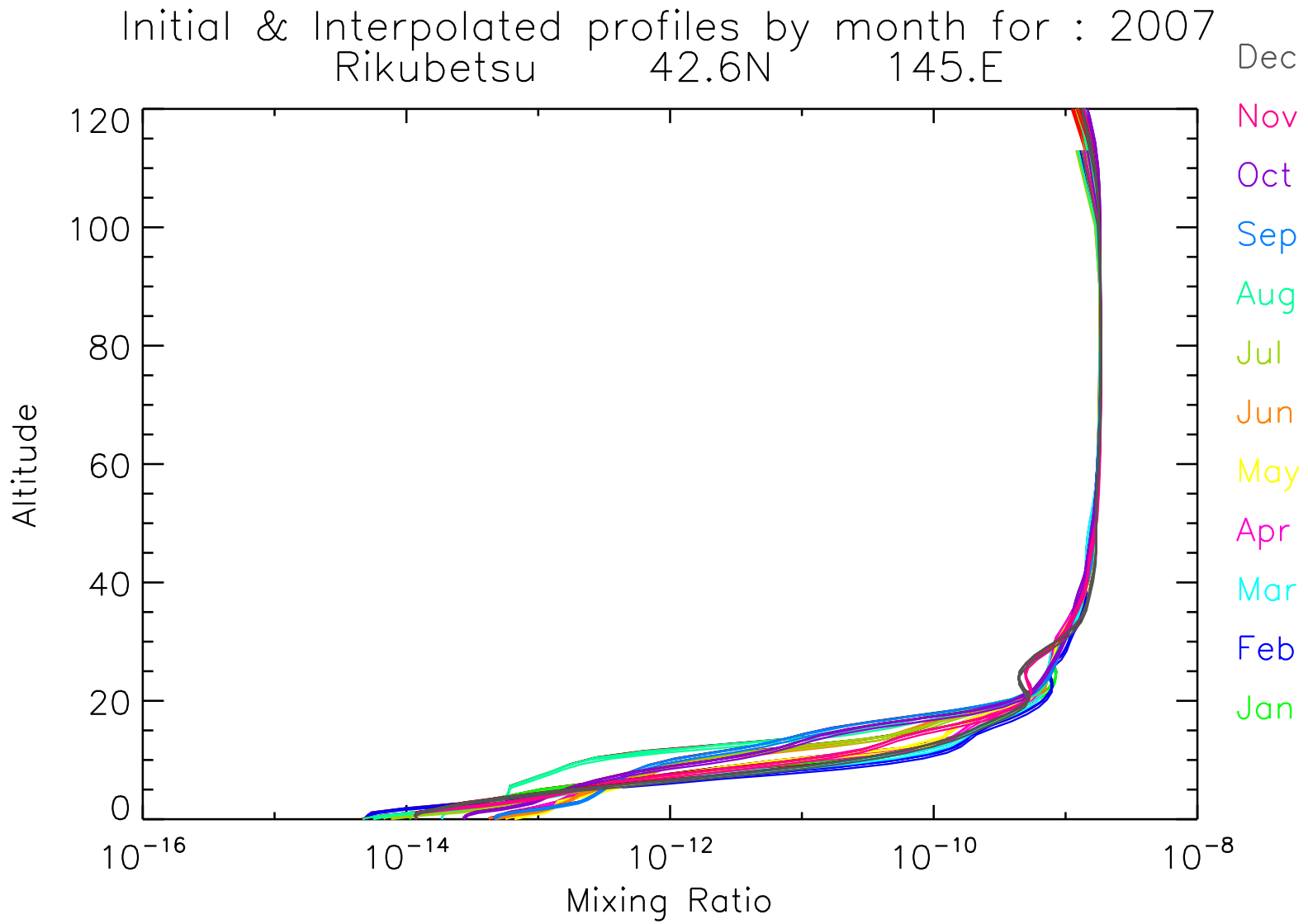
Initial & Interpolated profiles by month for : 2007
Rikubetsu 42.6N 145.E
Altitude
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Mixing Ratio
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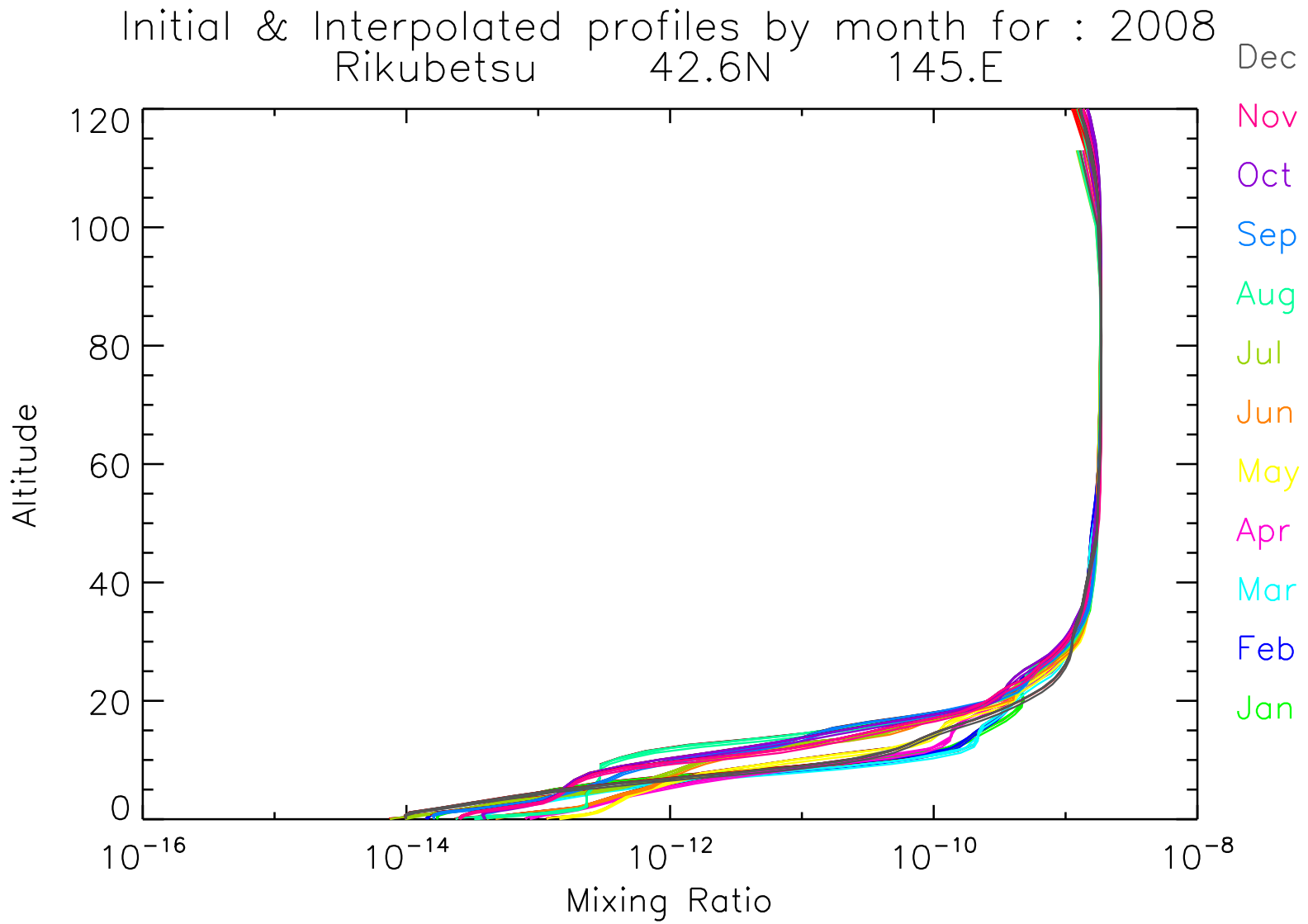
Initial & Interpolated profiles by month for : 2008
Rikubetsu 42.6N 145.E
Altitude
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Mixing Ratio
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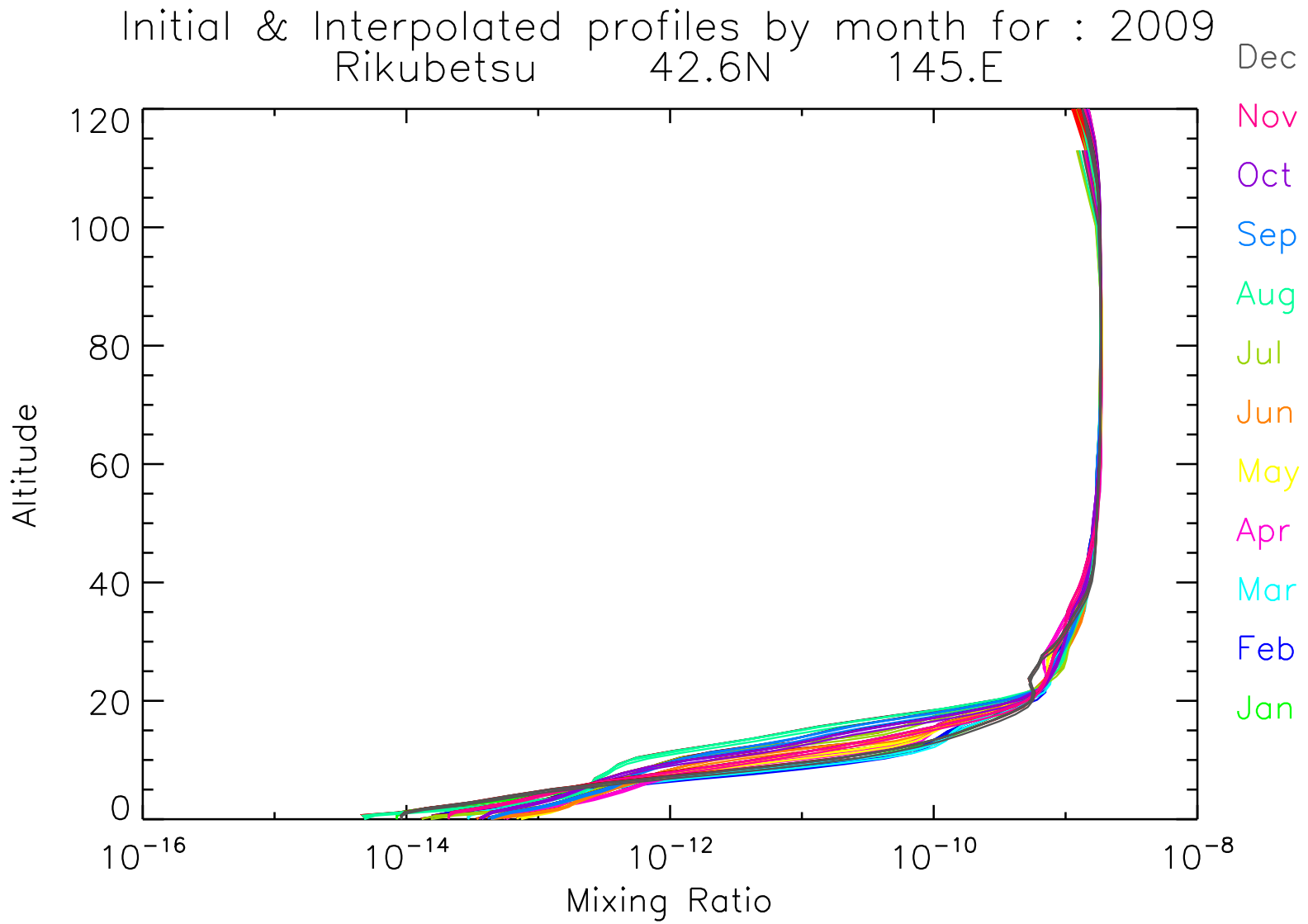
Initial & Interpolated profiles by month for : 2009
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Altitude
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Mixing Ratio
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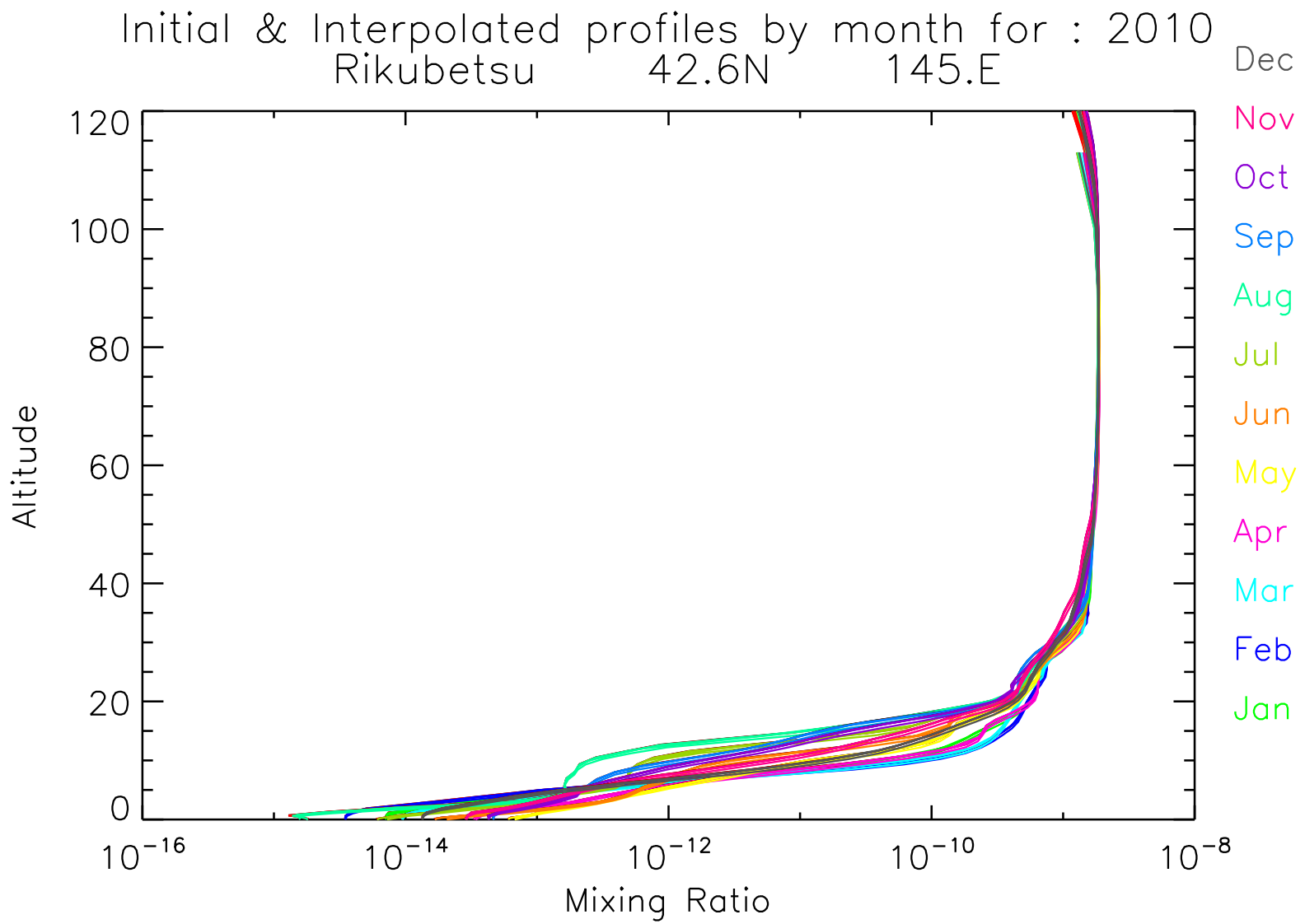
Initial & Interpolated profiles by month for : 2010
Rikubetsu 42.6N 145.E
Altitude
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Mixing Ratio
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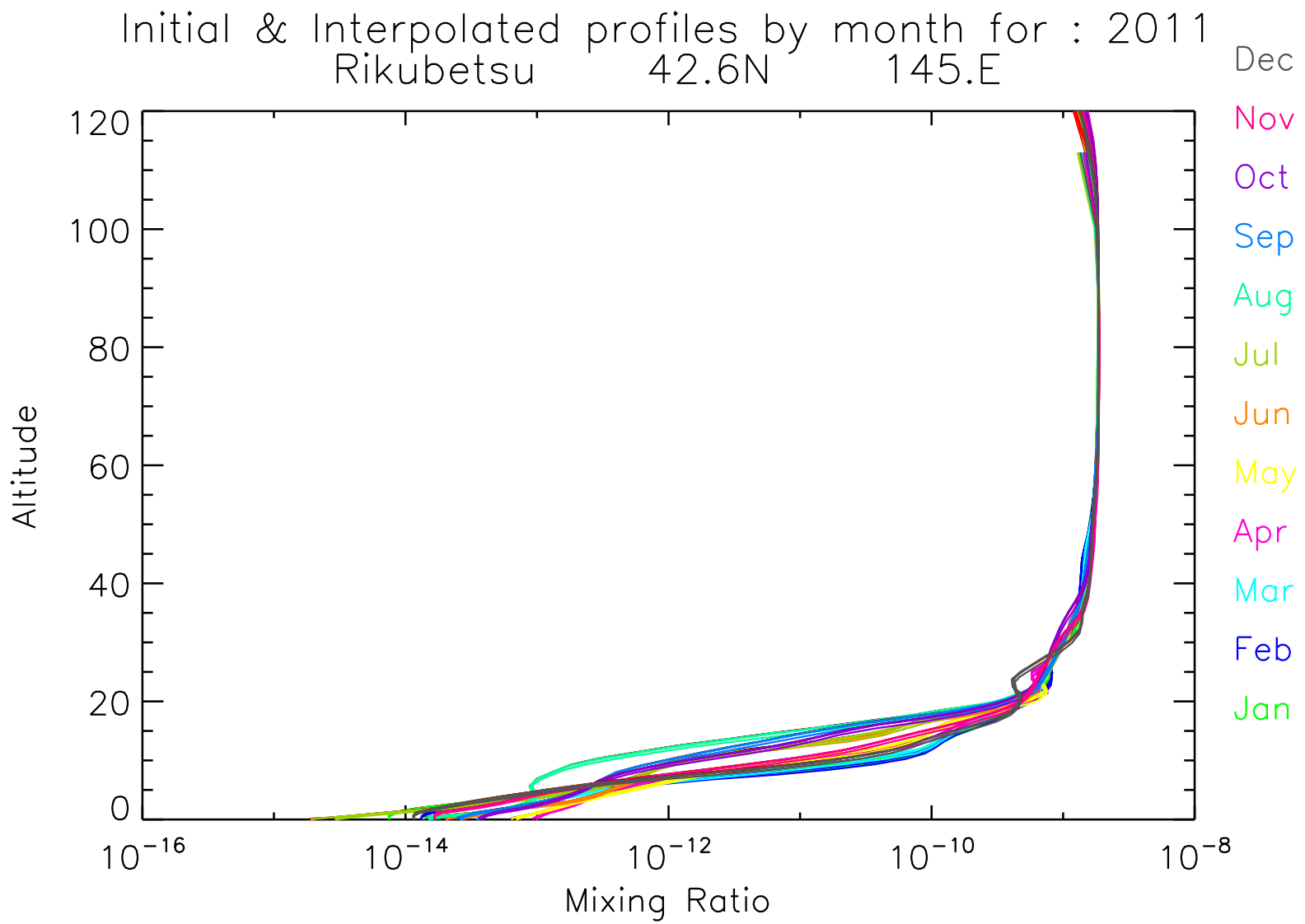
Initial & Interpolated profiles by month for : 2011
Rikubetsu 42.6N 145.E
Altitude
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Mixing Ratio
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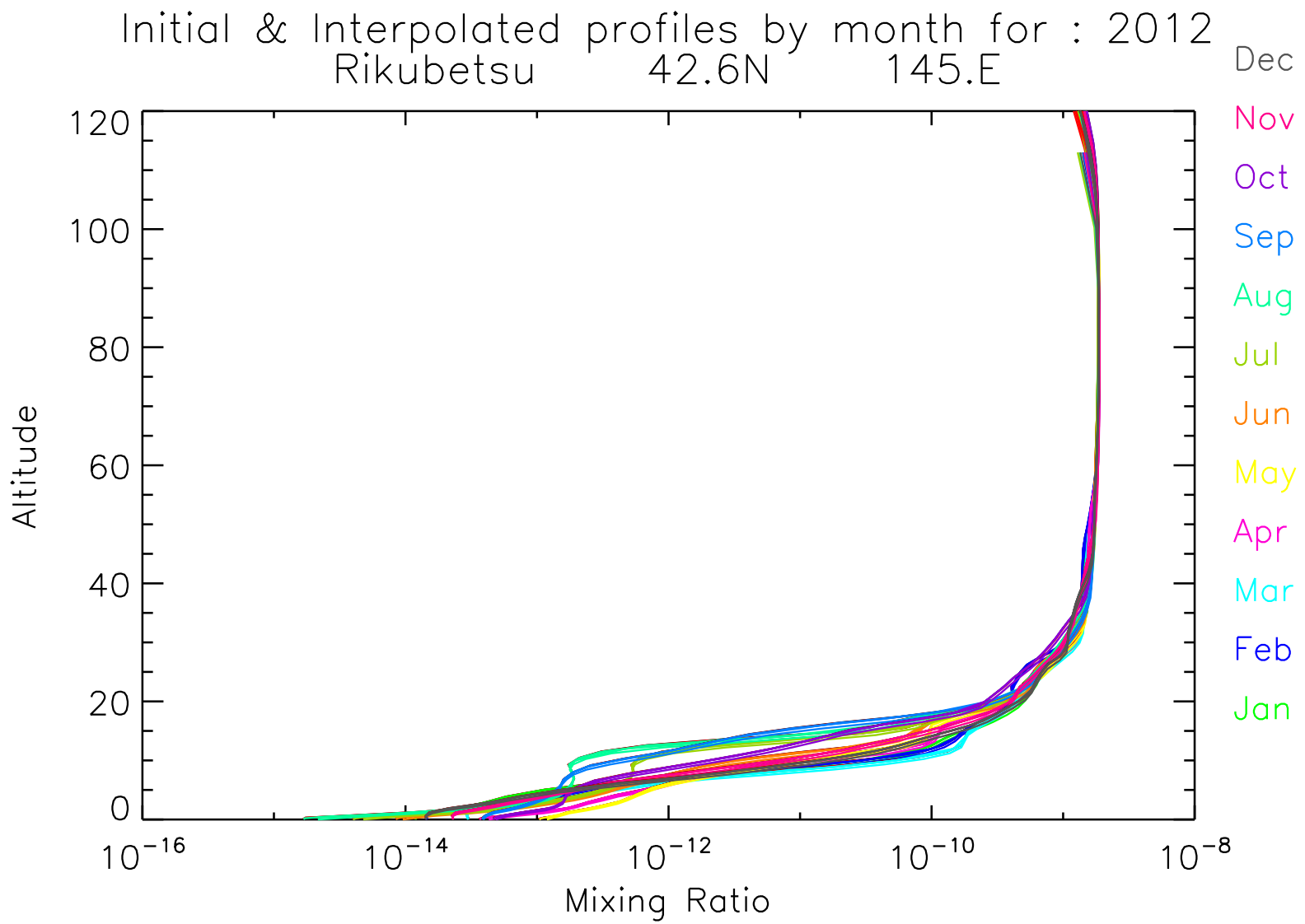
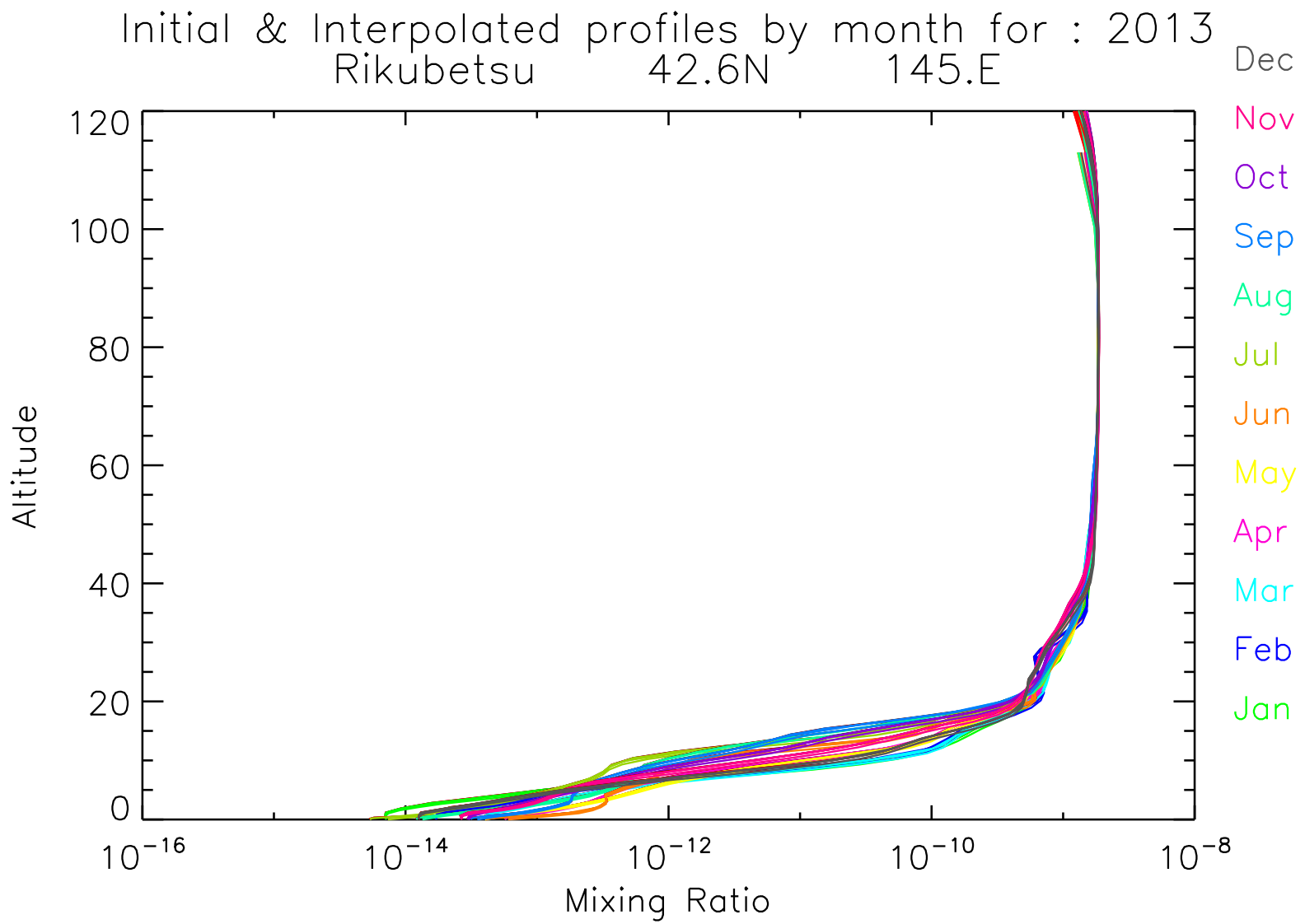
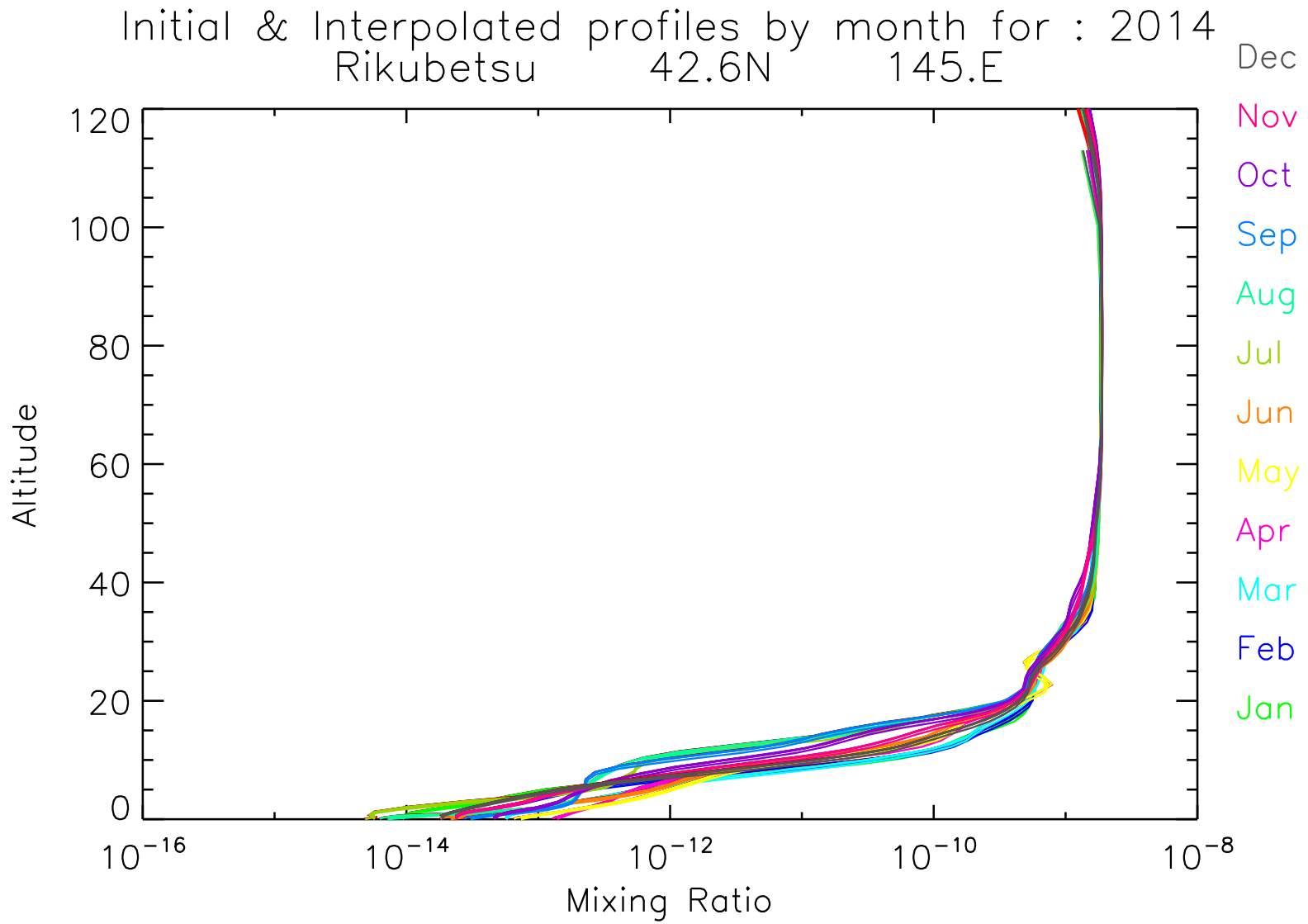
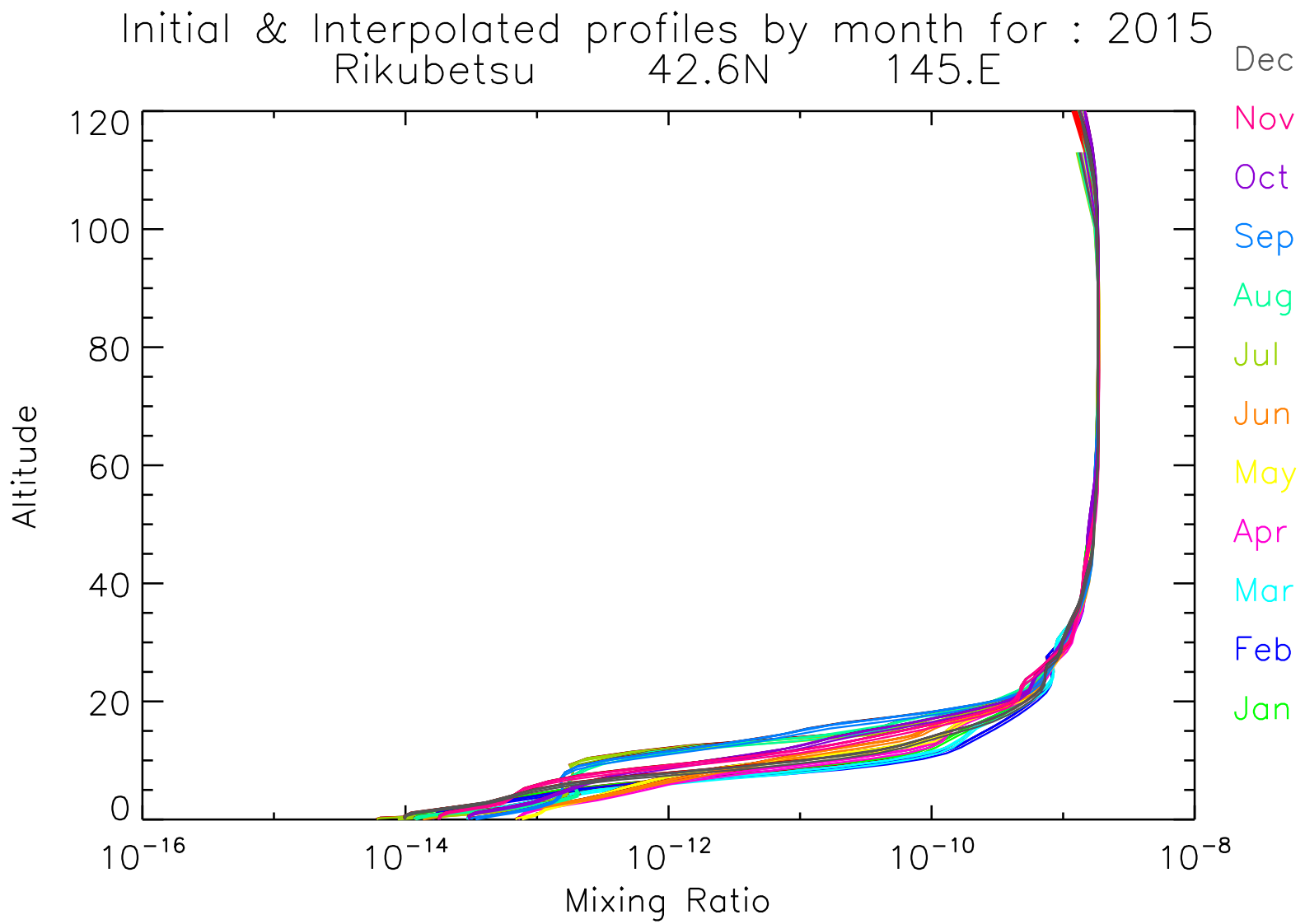
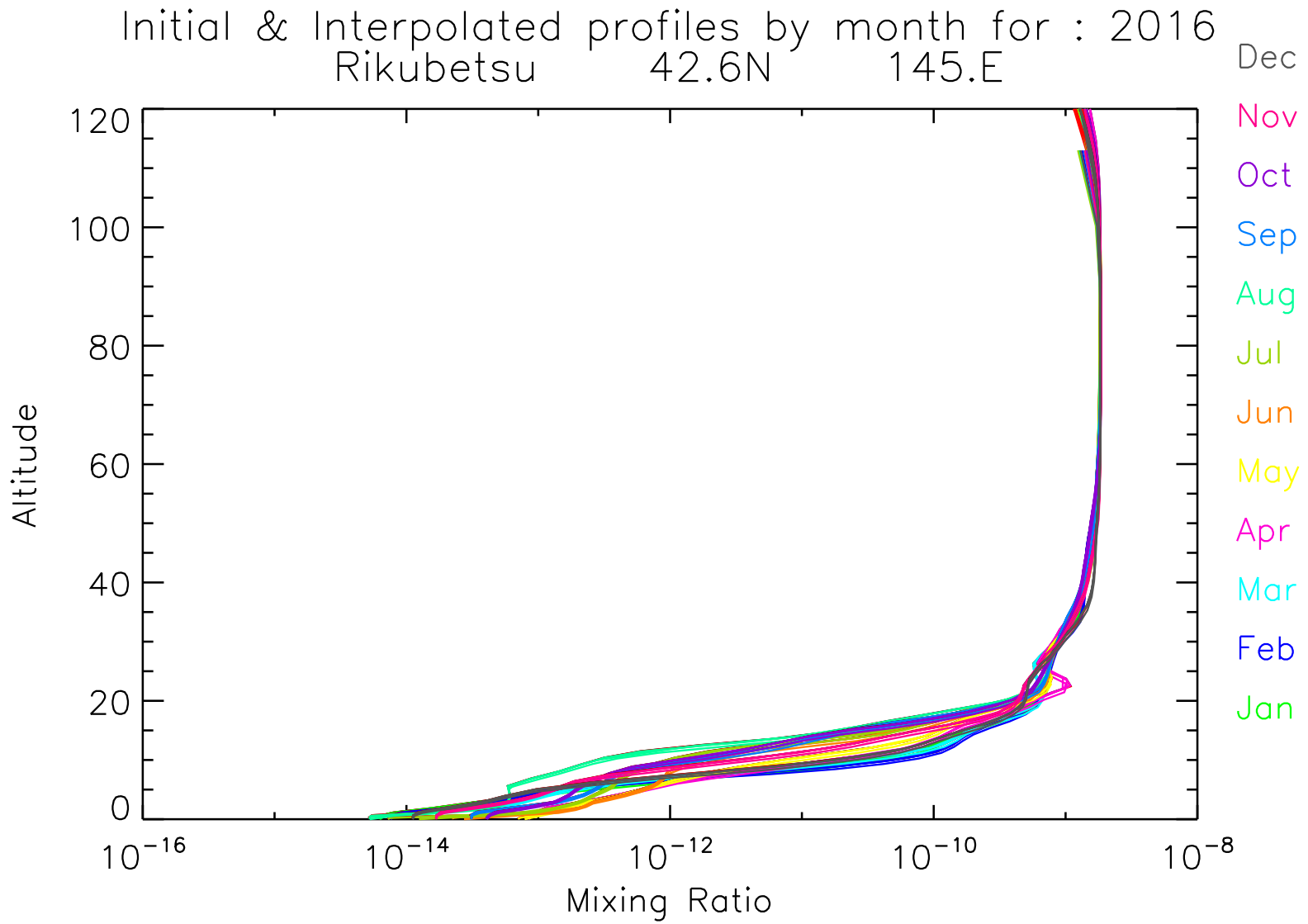
May
Apr
Mar
Feb
Jan

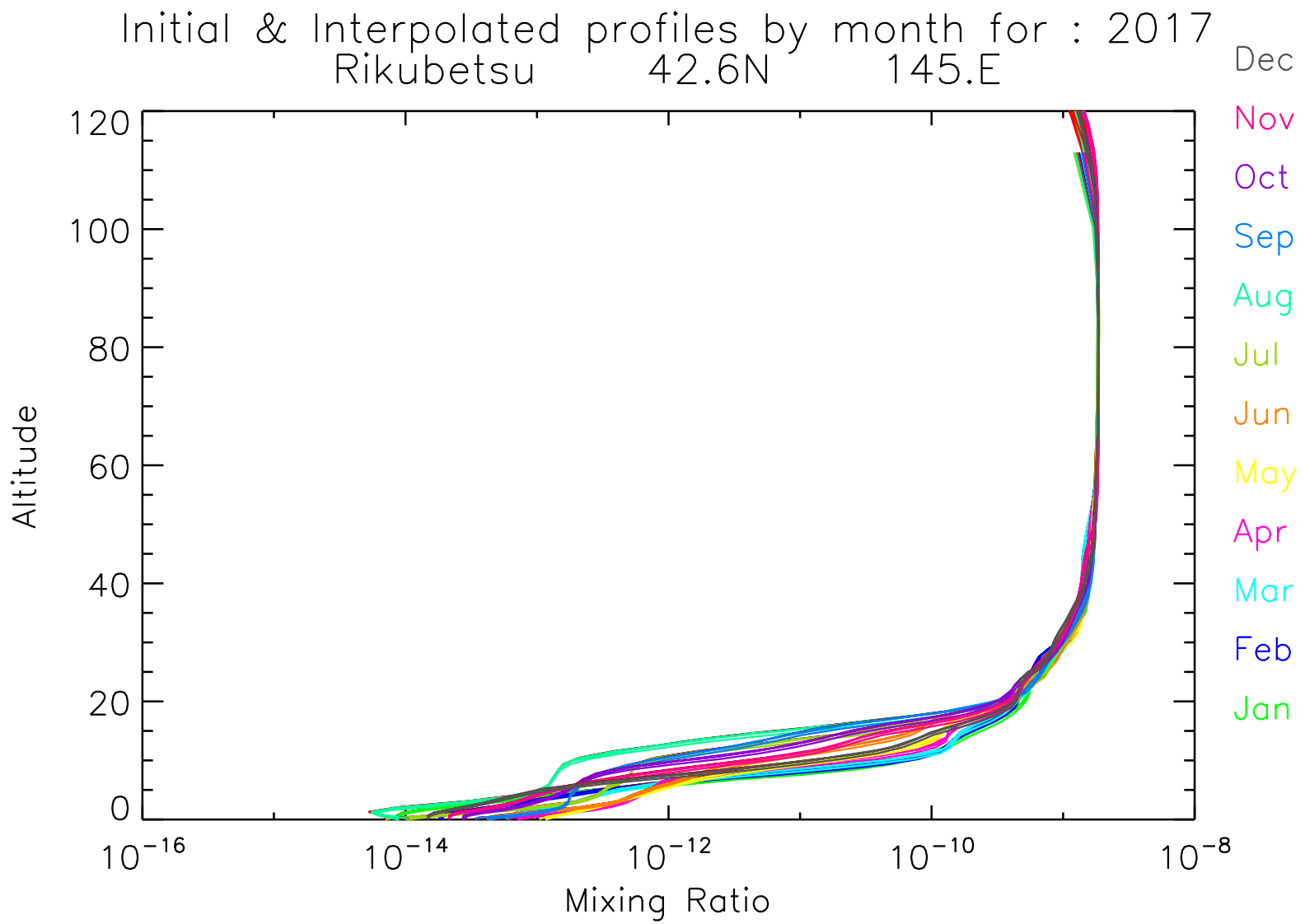

Initial & Interpolated profiles by month for : 2012
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-16}
10^{-14}
10^{-12}
10^{-10}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

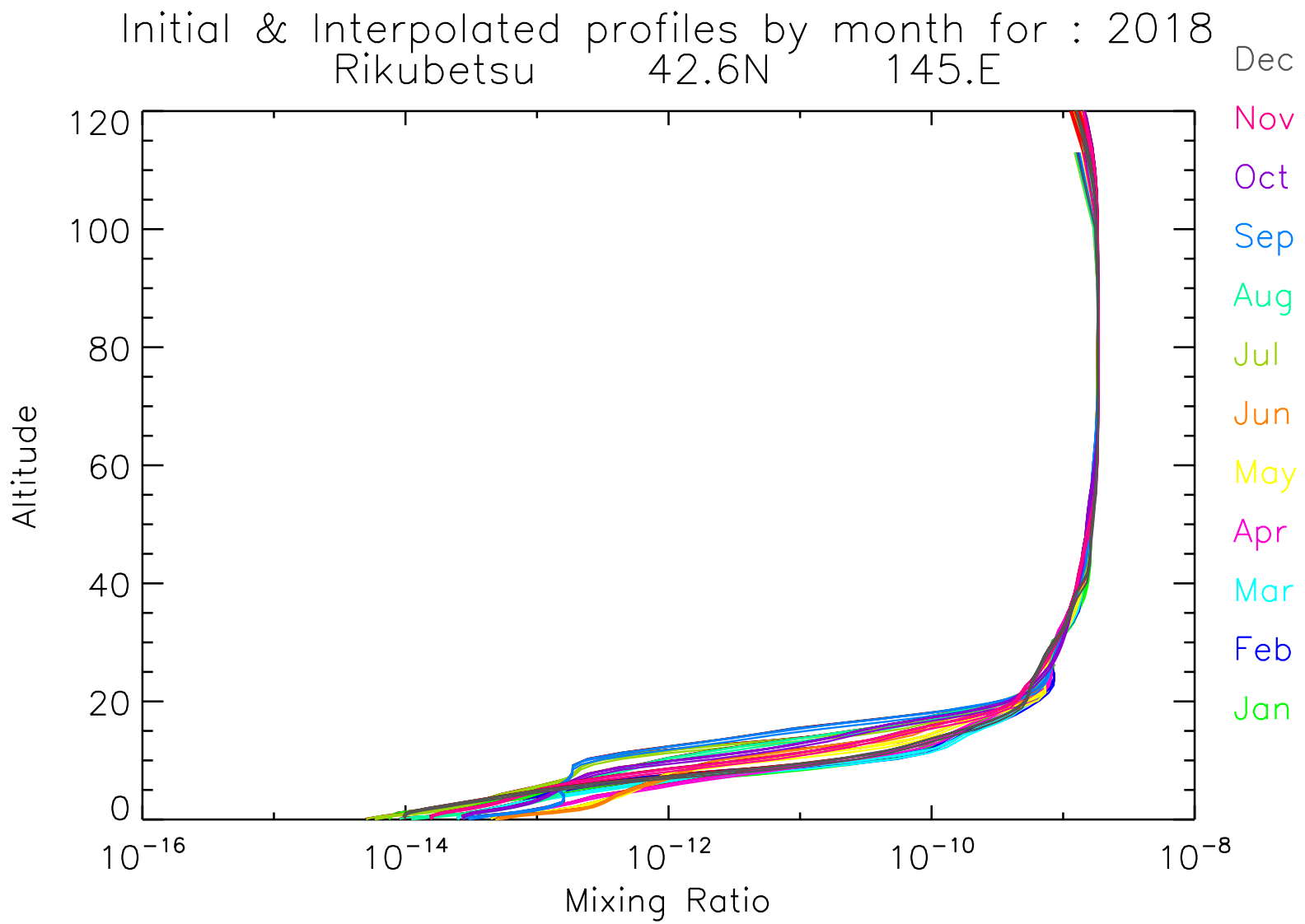

Initial & Interpolated profiles by month for : 2013
Rikubetsu 42.6N 145.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-16}
10^{-14}
10^{-12}
10^{-10}
10^{-8}
Mixing Ratio

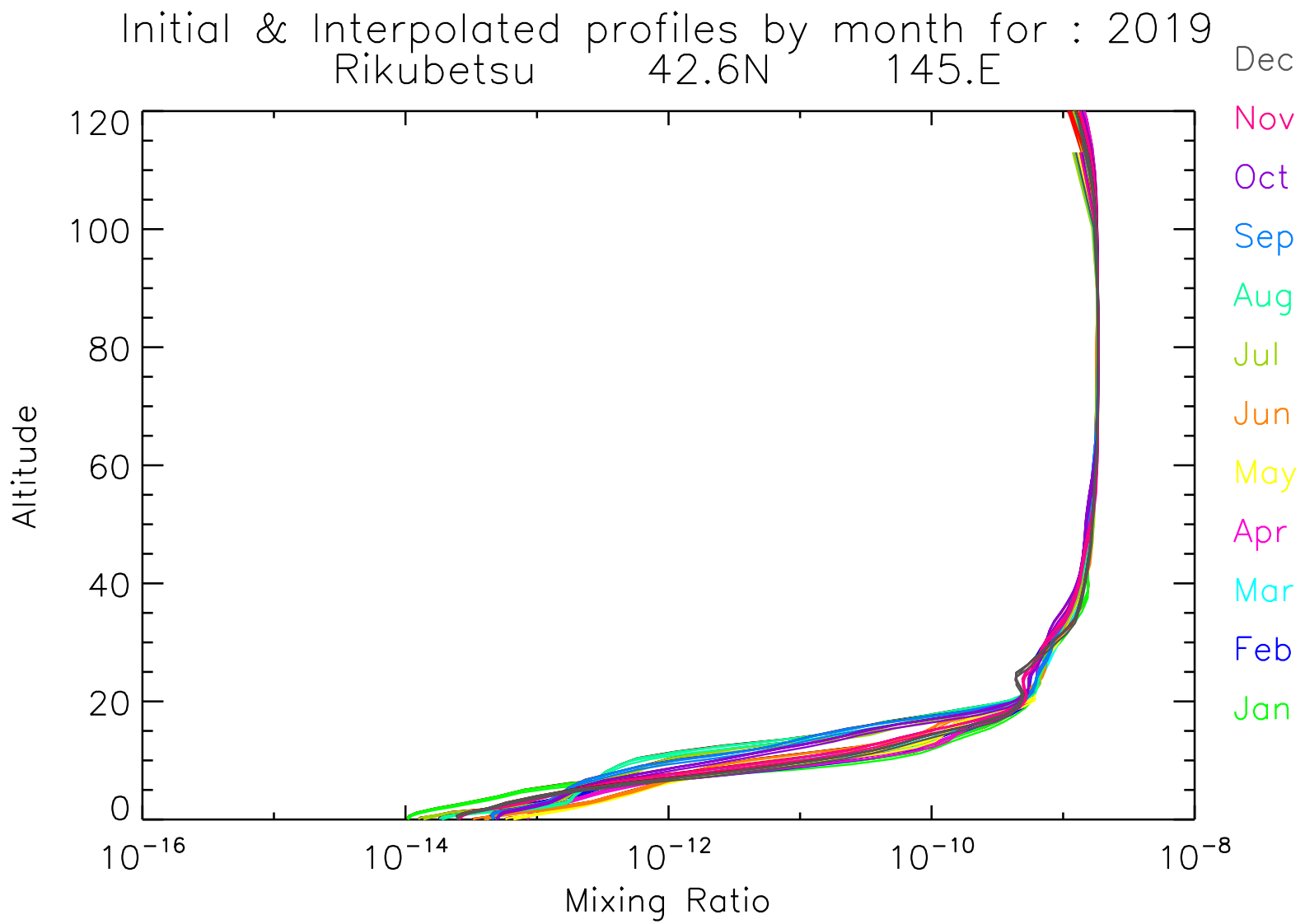

Initial & Interpolated profiles by month for : 2014
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-16}
10^{-14}
10^{-12}
10^{-10}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

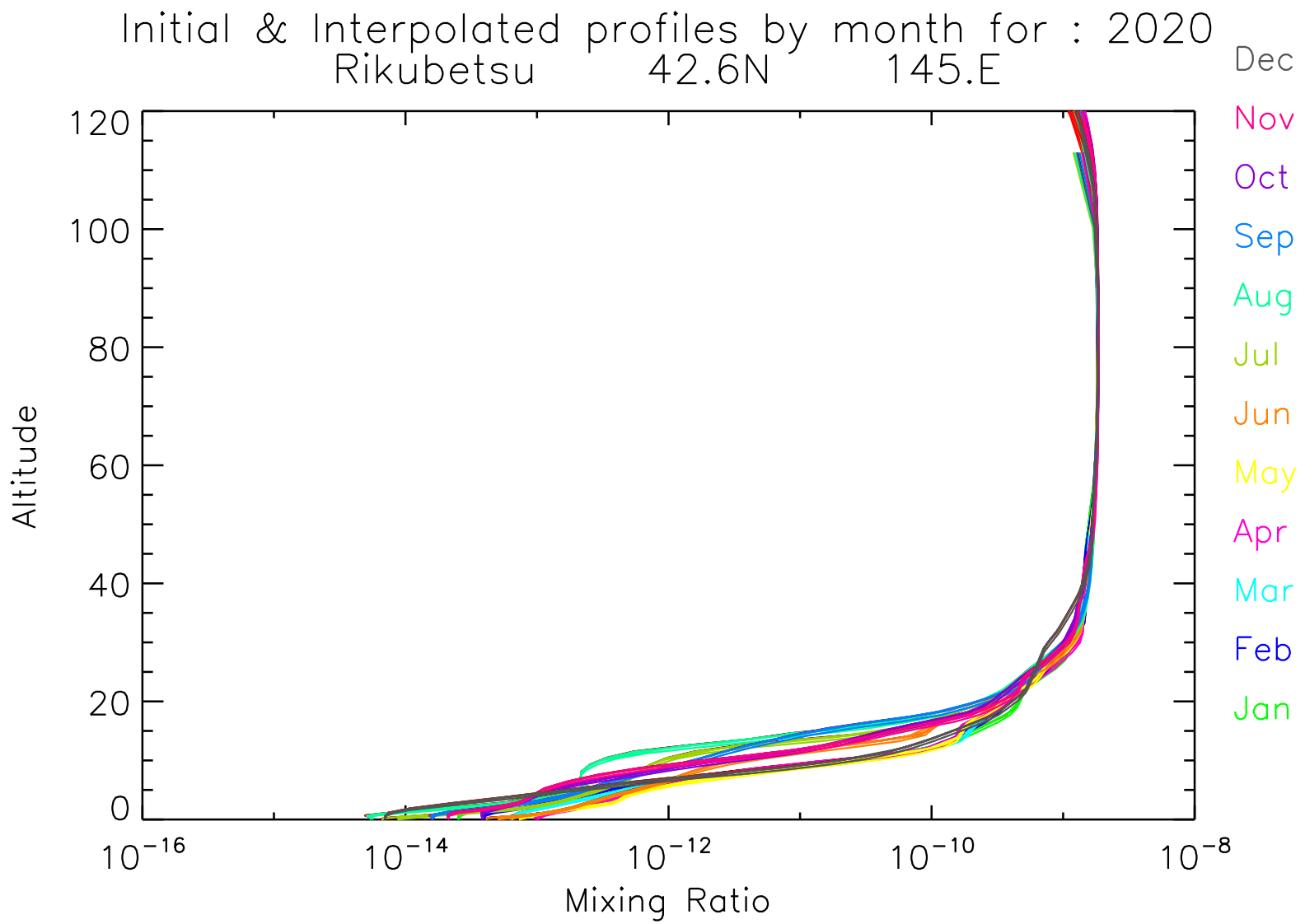

Initial & Interpolated profiles by month for : 2015
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-16}
10^{-14}
10^{-12}
10^{-10}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

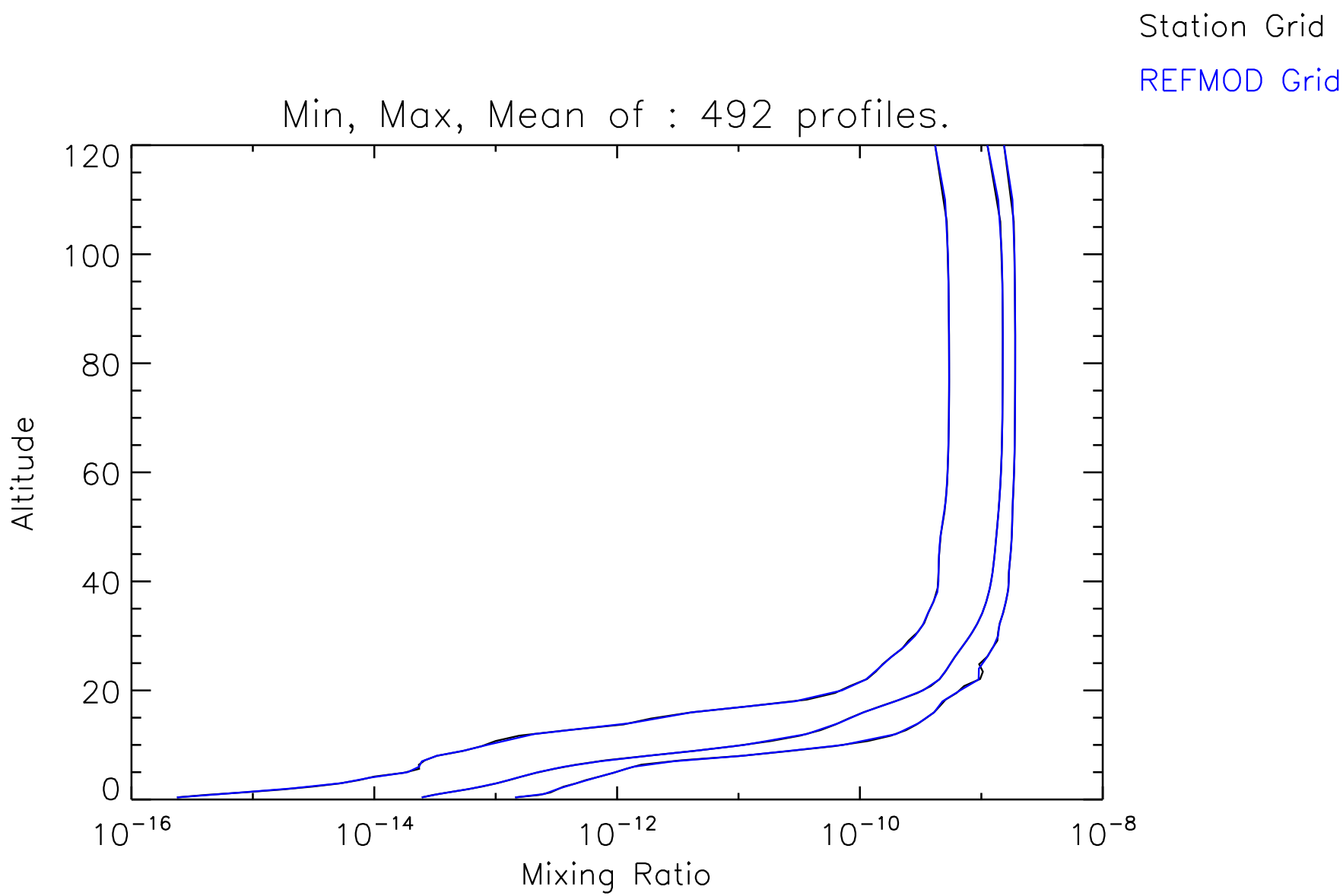

Initial & Interpolated profiles by month for : 2016
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-16}
10^{-14}
10^{-12}
10^{-10}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

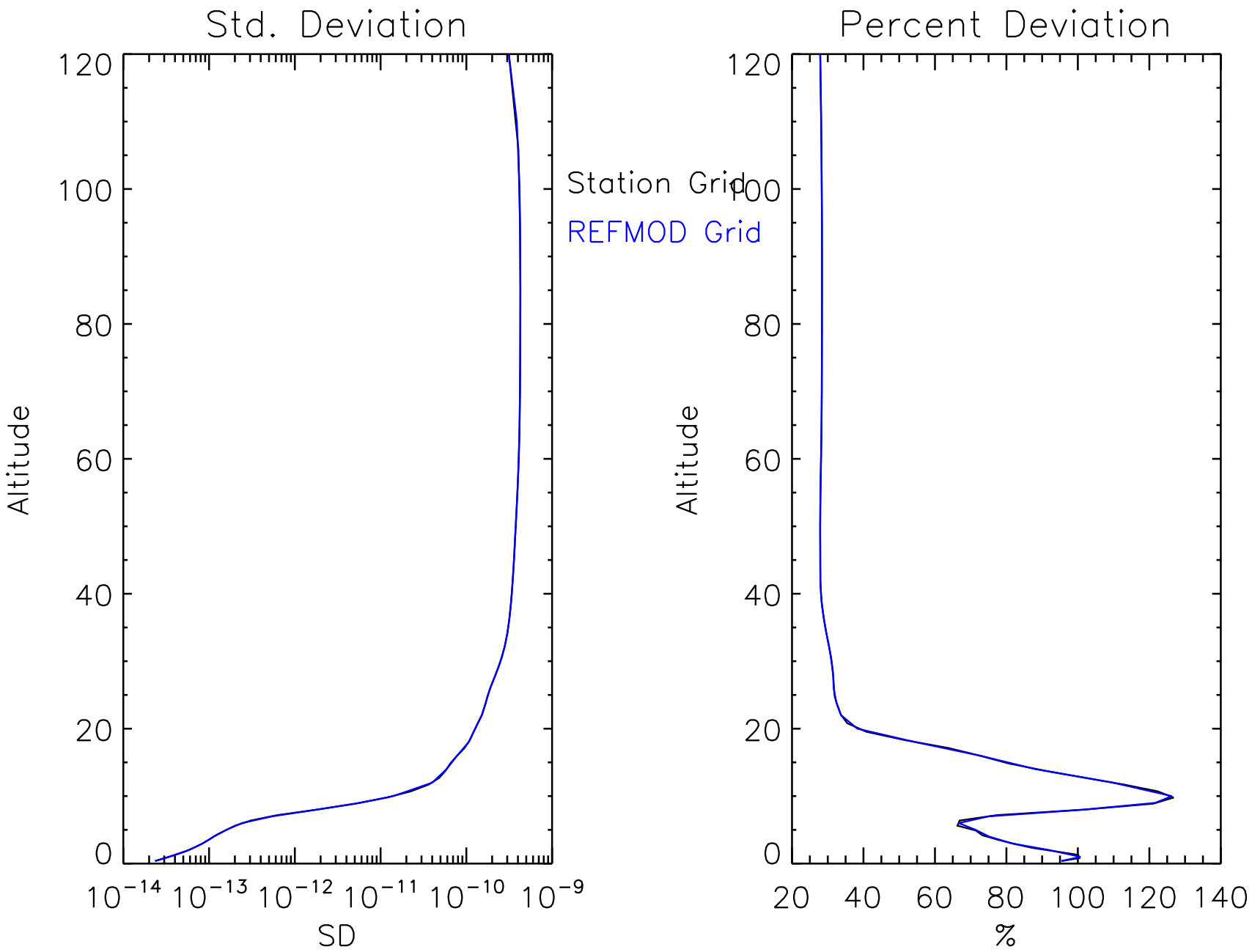

Initial & Interpolated profiles by month for : 2017
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-16}
10^{-14}
10^{-12}
10^{-10}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

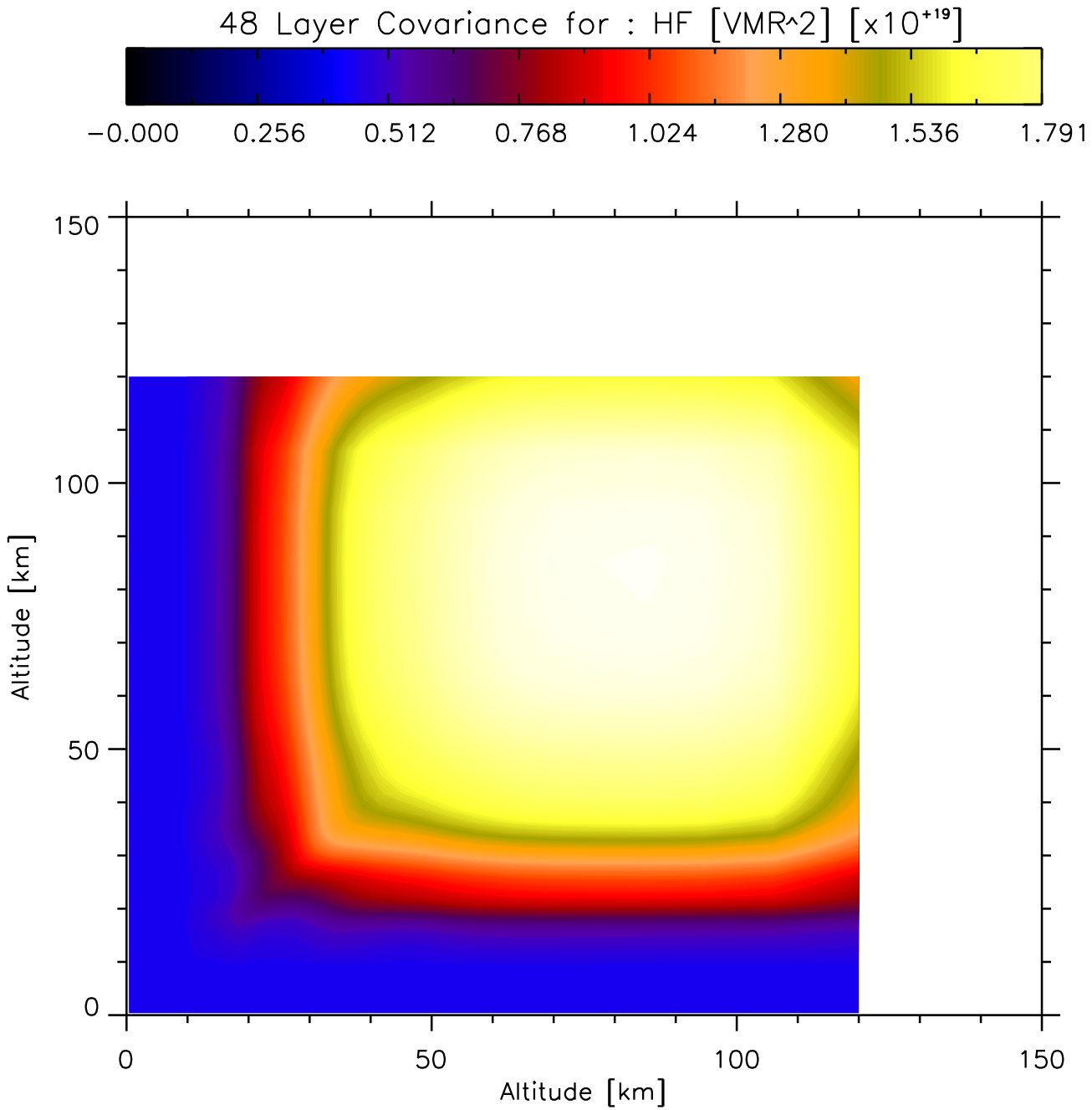

Initial & Interpolated profiles by month for : 2018
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-16}
10^{-14}
10^{-12}
10^{-10}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan


Initial & Interpolated profiles by month for : 2019
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-16}
10^{-14}
10^{-12}
10^{-10}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

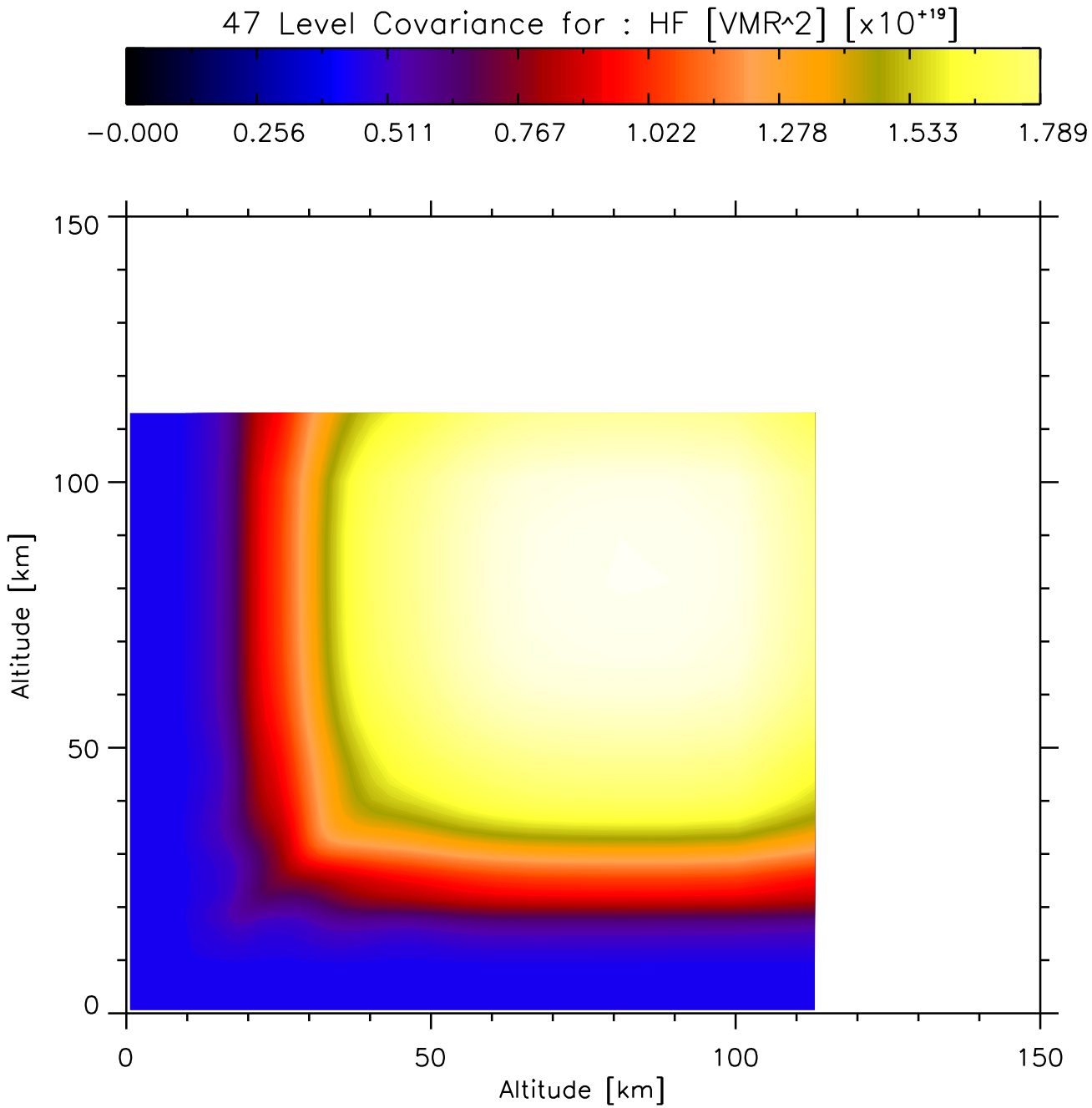

Initial & Interpolated profiles by month for : 2020
Rikubetsu 42.6N 145.E
Altitude
120
100
80
60
40
20
0
10^{-16}
10^{-14}
10^{-12}
10^{-10}
10^{-8}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan


Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
120
100
80
60
40
20
0
Altitude
10^{-16}
10^{-14}
10^{-12}
10^{-10}
10^{-8}
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
10^{-14} 10^{-13} 10^{-12} 10^{-11} 10^{-10} 10^{-9}
SD
20 40 60 80 100 120 140
%


48 Layer Covariance for : HF [VMR^2] [x10^+19]
−0.000
0.256
0.512
0.768
1.024
1.280
1.536
1.791
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

48 Layer Covariance for : HF [VMR^2] [x10^+19]
2.0
1.5
1.0
0.5
0.0
Y Altitude
0
30
60
90
120
X Altitude
0
50
100
150


47 Level Covariance for : HF [VMR^2] [x10^+19]
−0.000
0.256
0.511
0.767
1.022
1.278
1.533
1.789
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

47 Level Covariance for : HF [VMR^2] [x10^+19]
0.0
0.5
1.0
1.5
2.0
Y Altitude
0
30
60
90
120
X Altitude
0
50
100
150