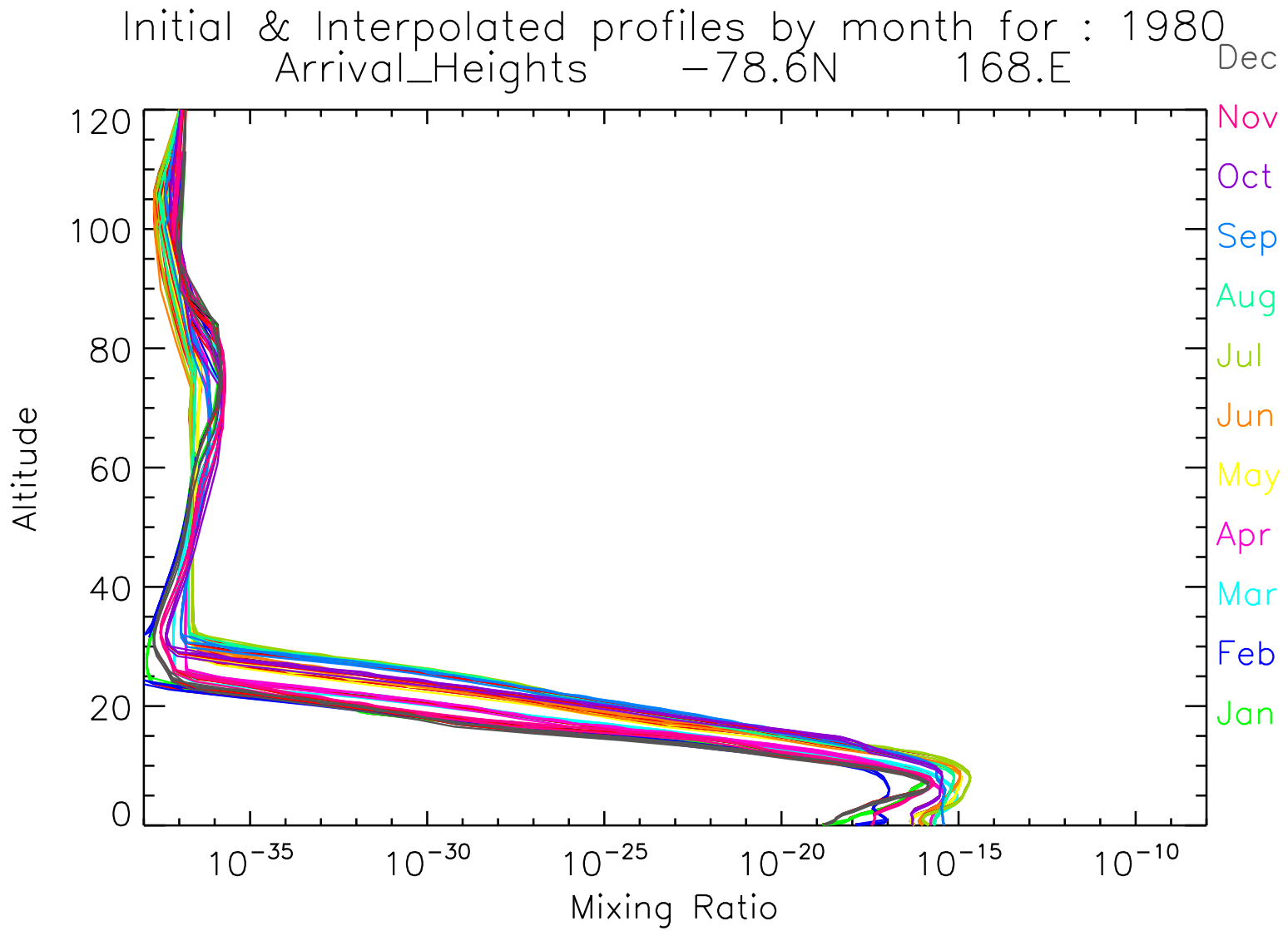
Initial & Interpolated profiles by month for : 1980
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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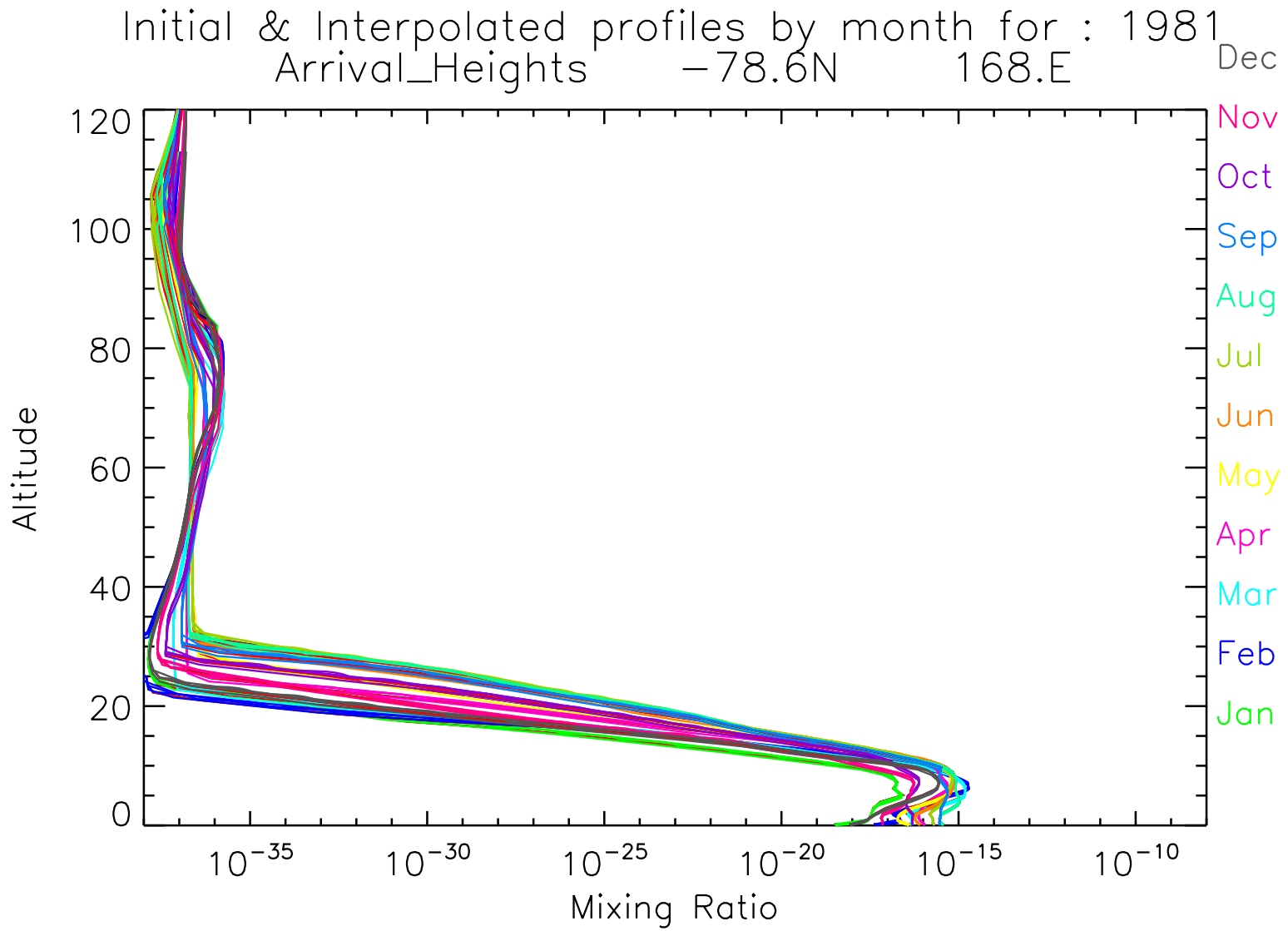
Mixing Ratio


Initial & Interpolated profiles by month for : 1981
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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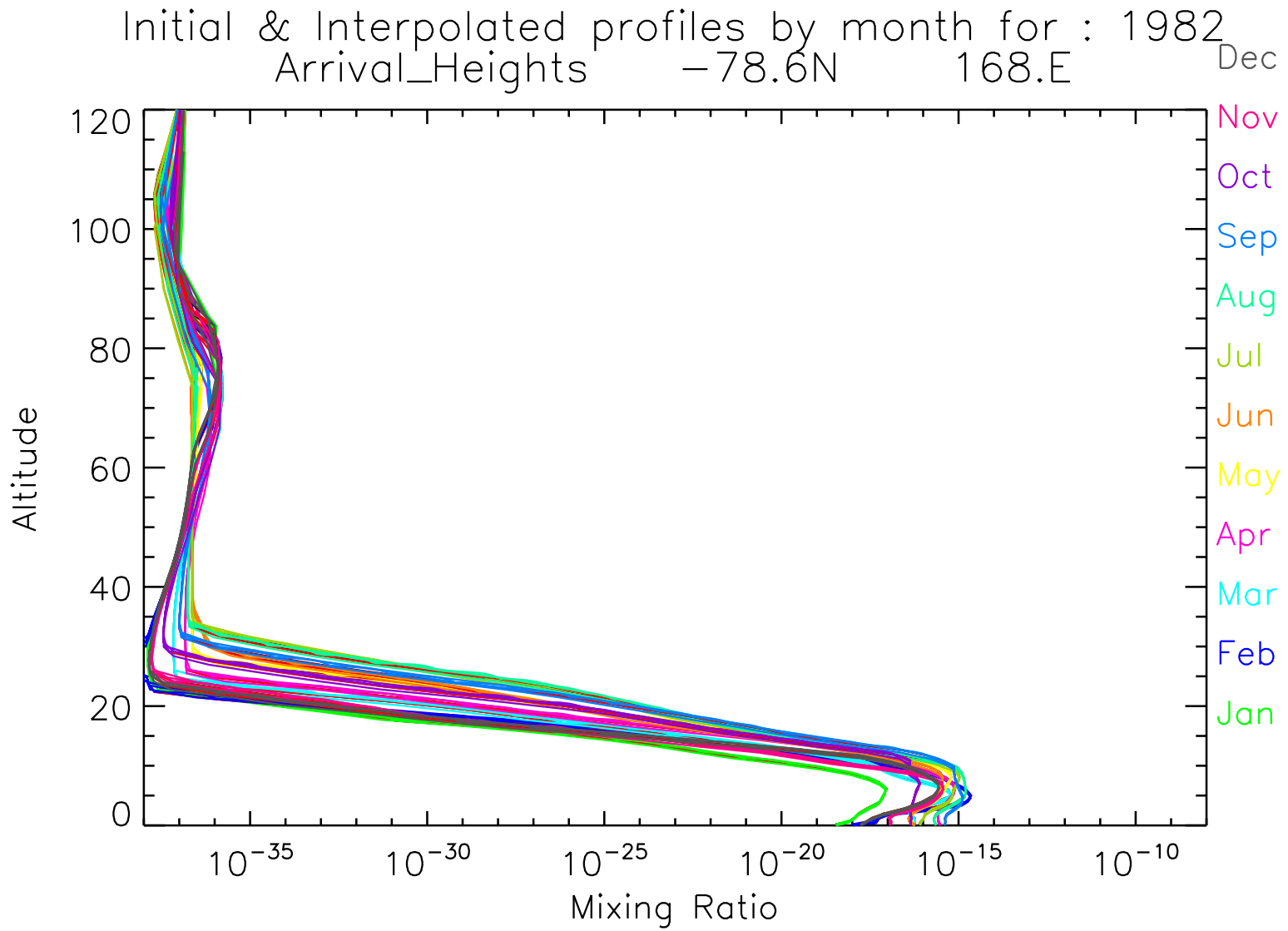
Mixing Ratio


Initial & Interpolated profiles by month for : 1982
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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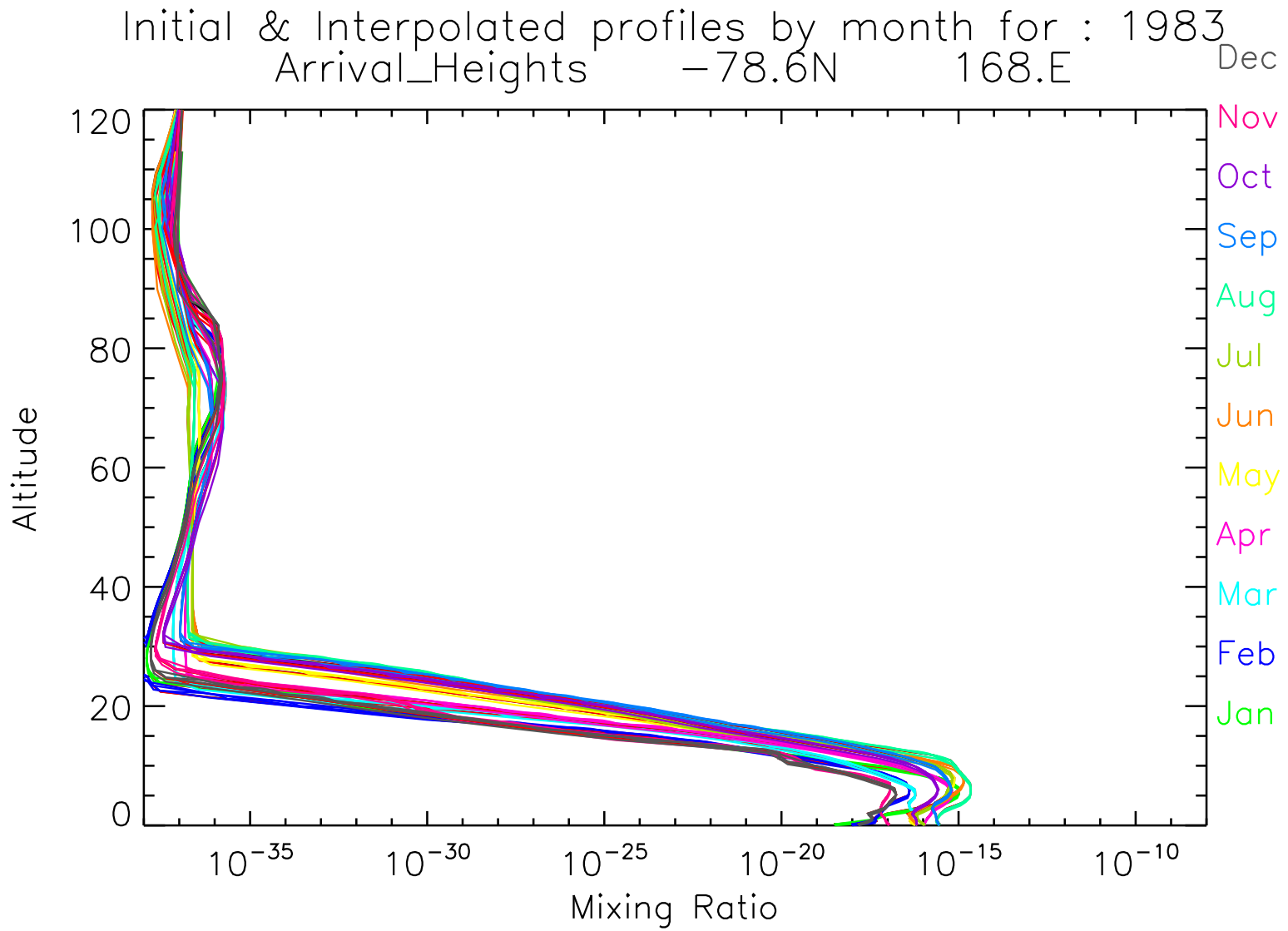
Mixing Ratio


Initial & Interpolated profiles by month for : 1983
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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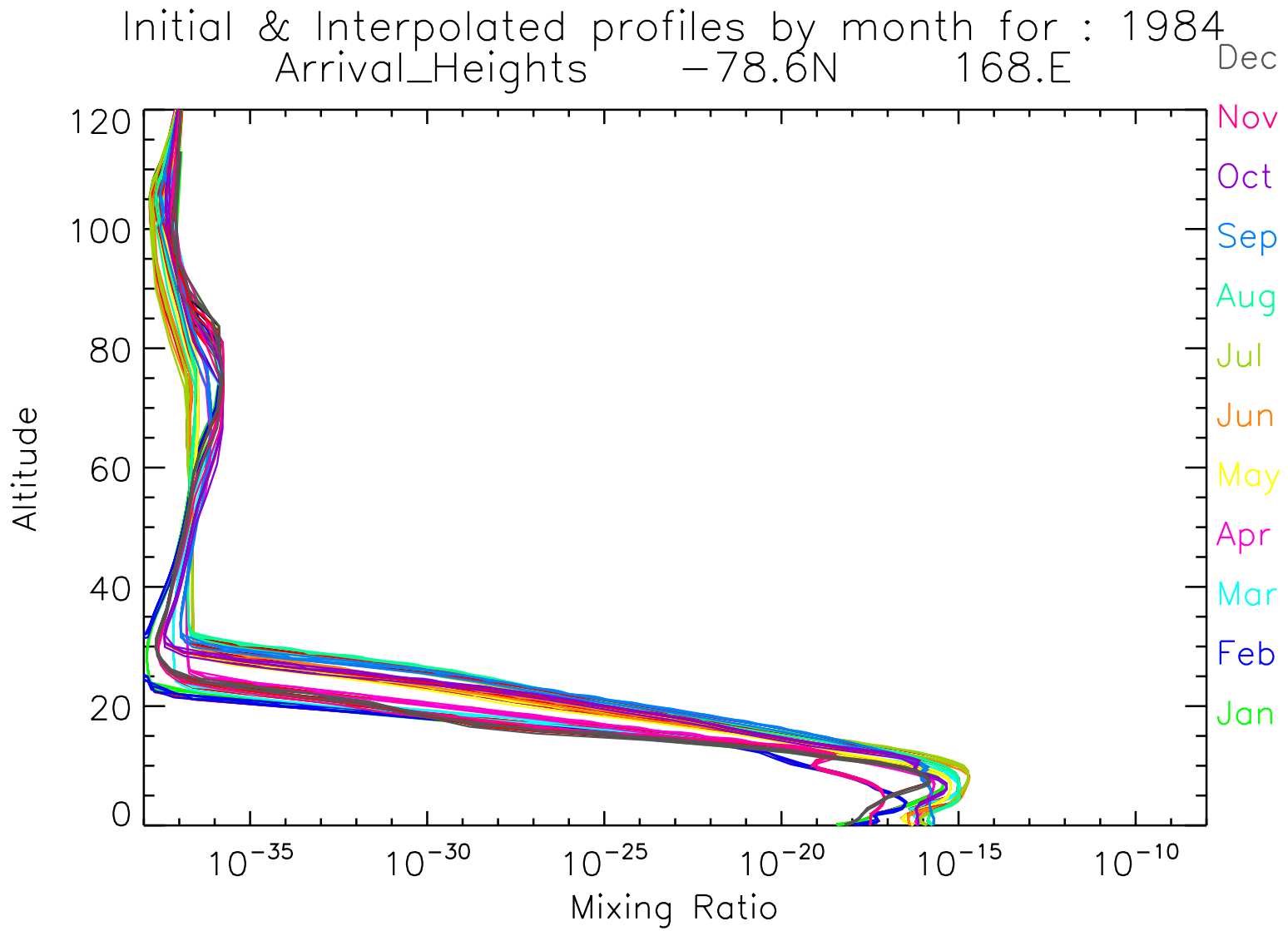
Mixing Ratio


Initial & Interpolated profiles by month for : 1984
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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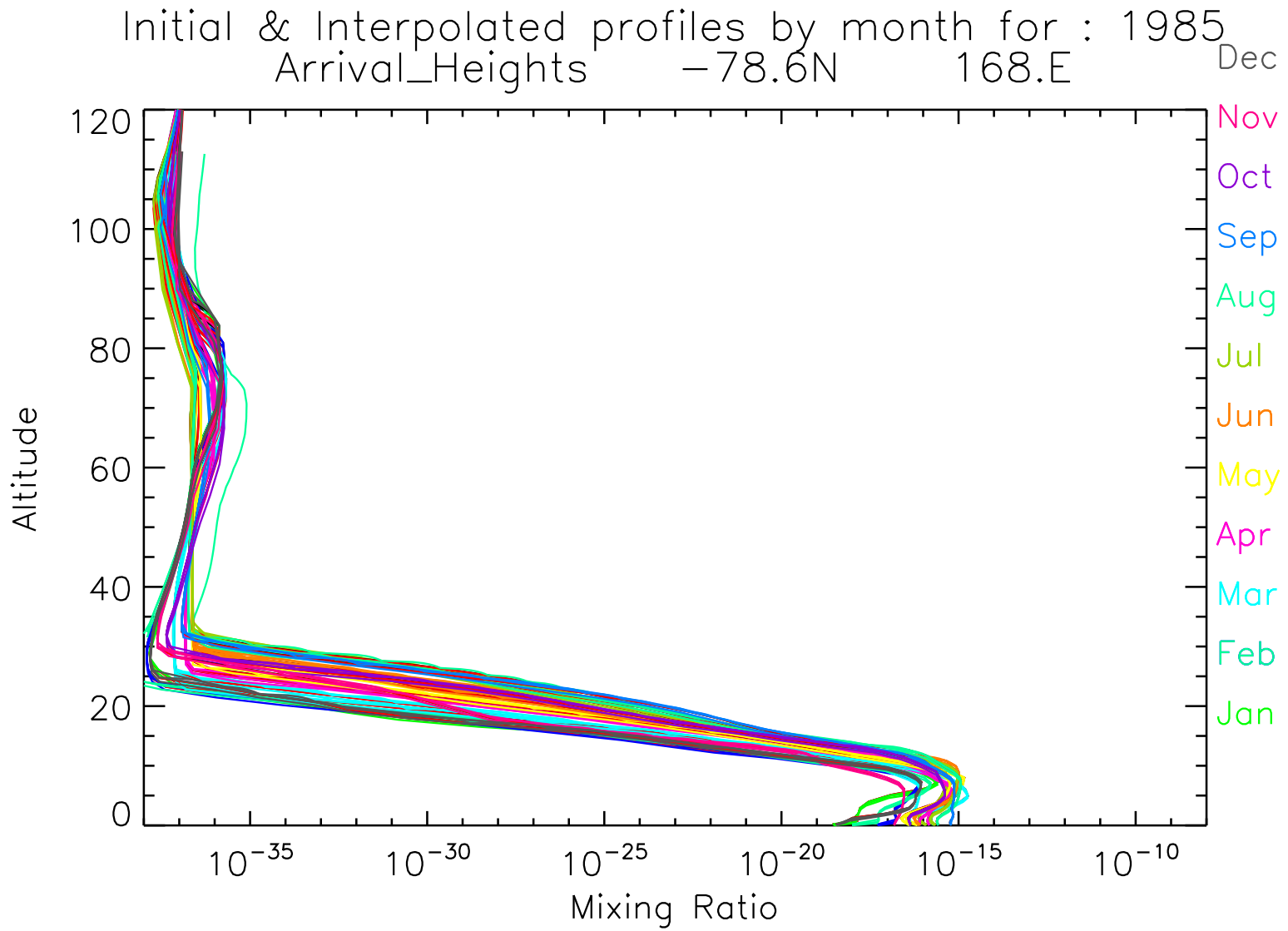
Mixing Ratio


Initial & Interpolated profiles by month for : 1985
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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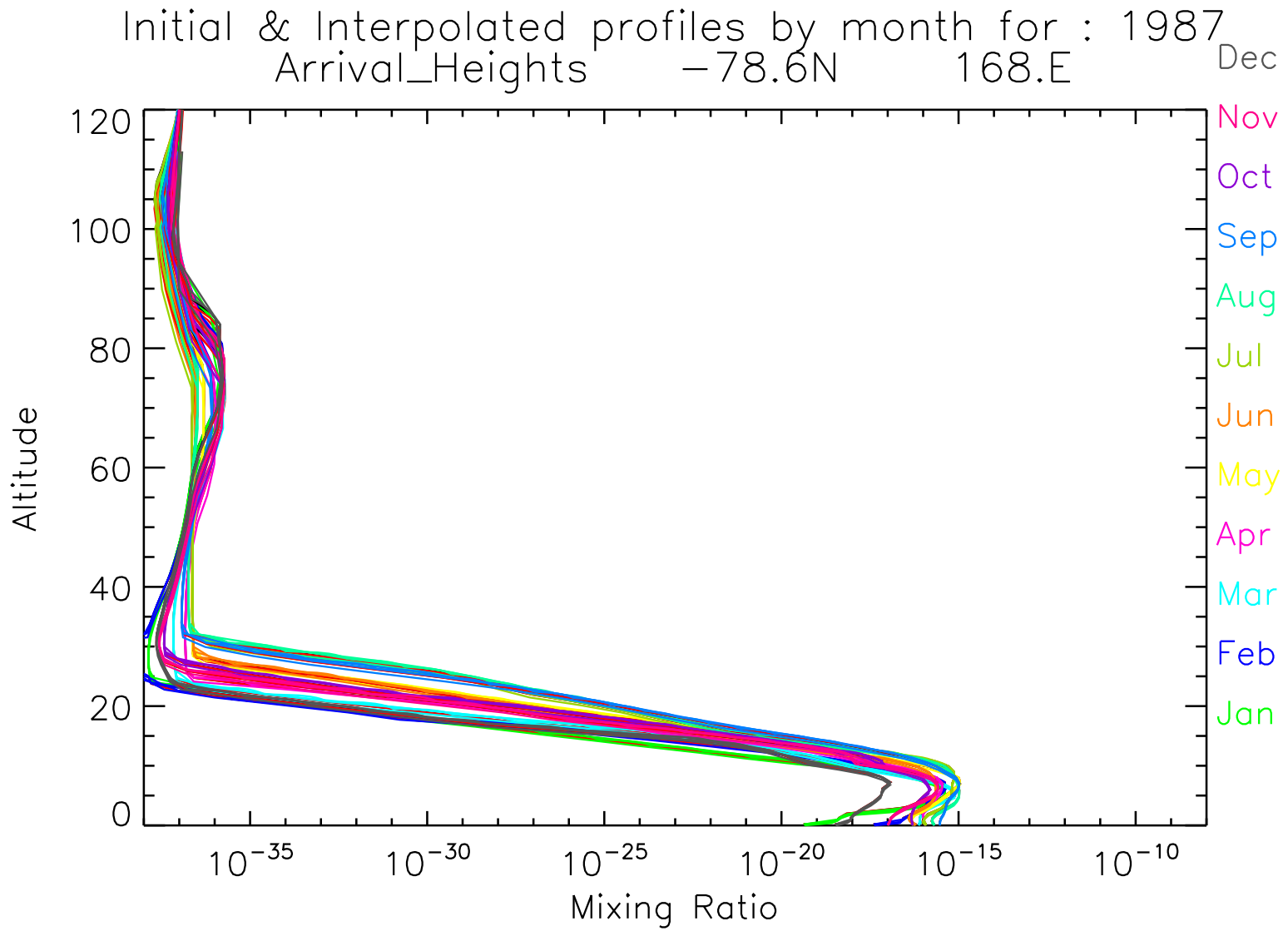
Mixing Ratio


Initial & Interpolated profiles by month for : 1987
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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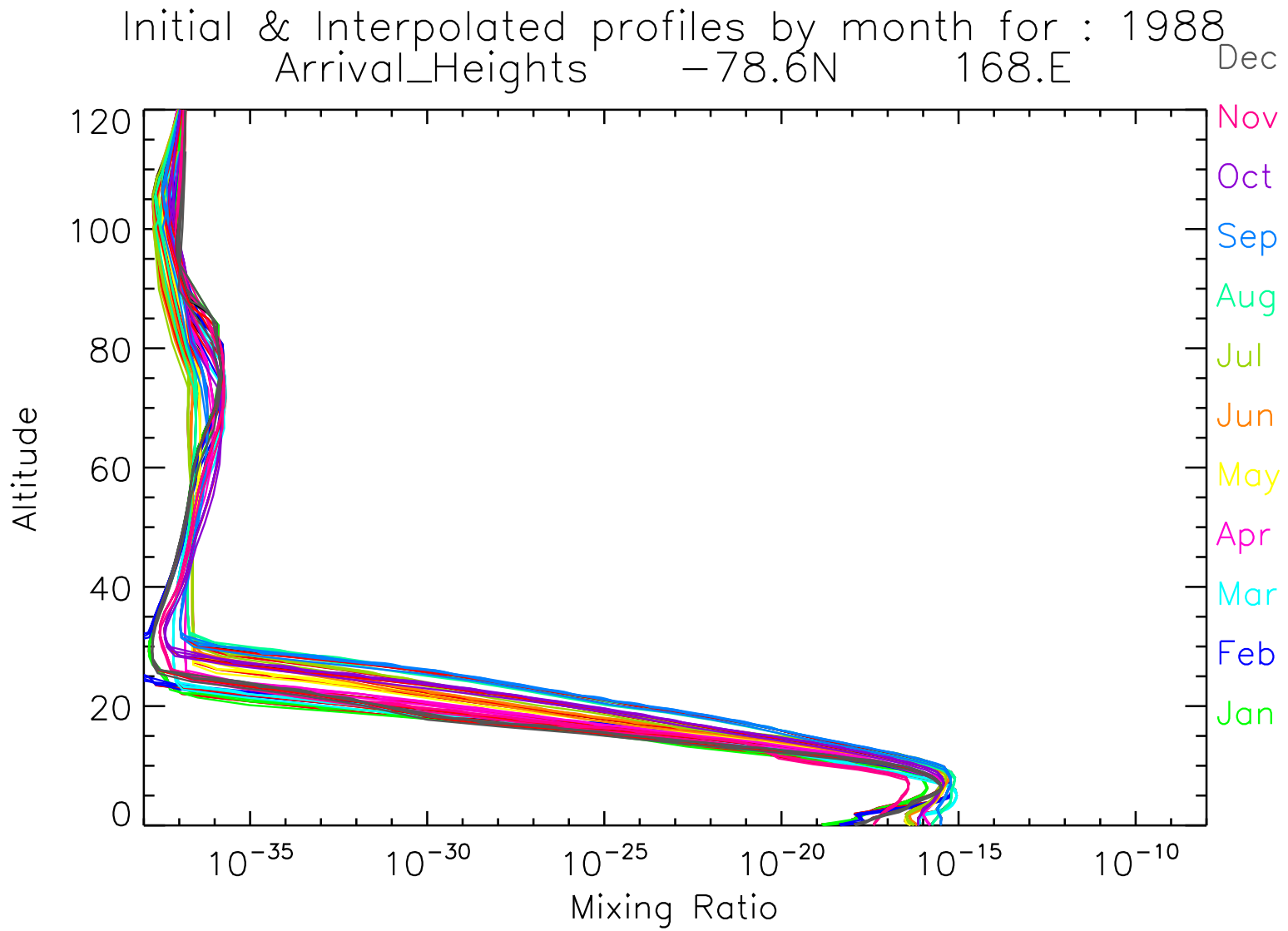
Mixing Ratio


Initial & Interpolated profiles by month for : 1988
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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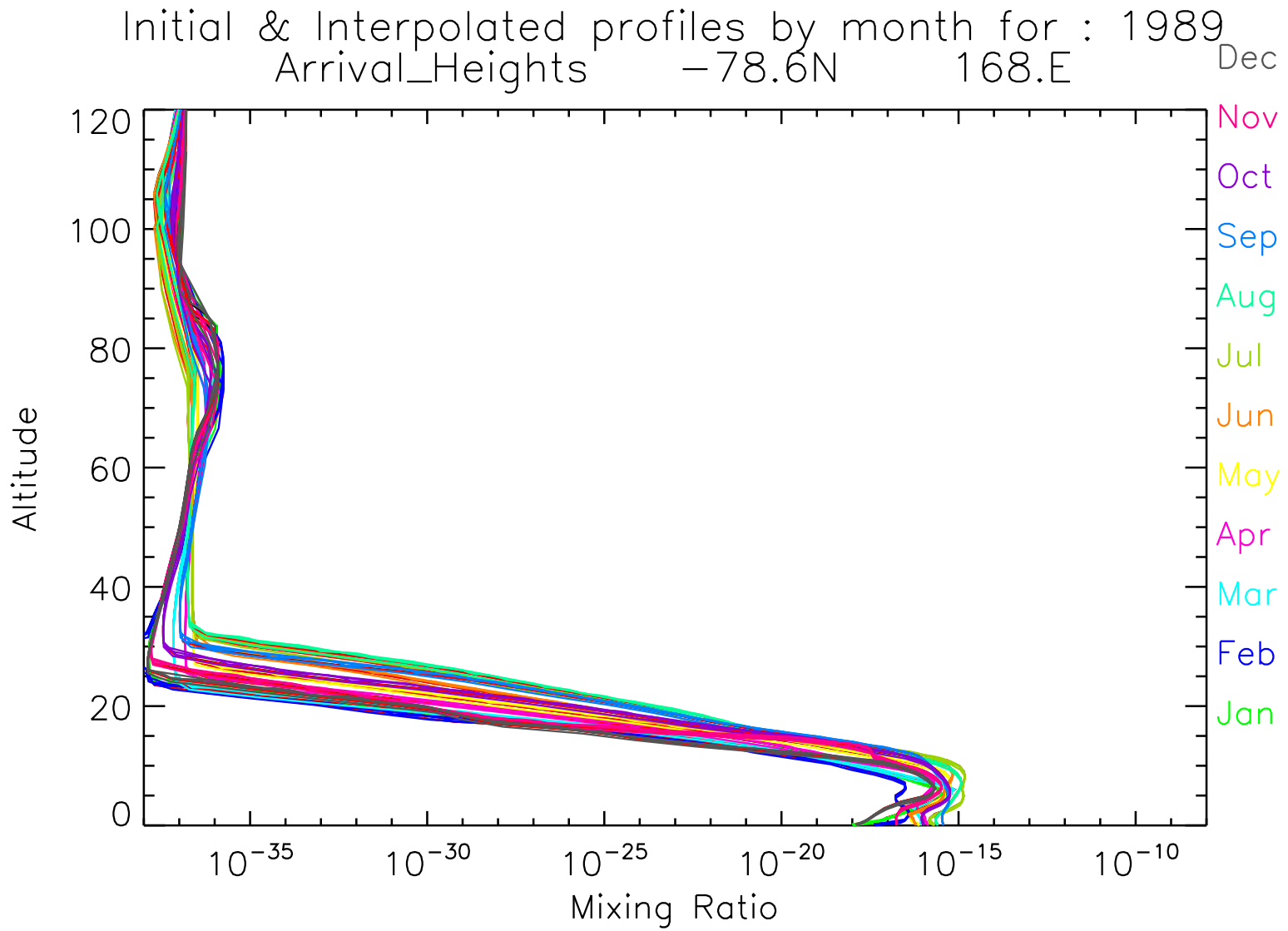
Mixing Ratio


Initial & Interpolated profiles by month for : 1989
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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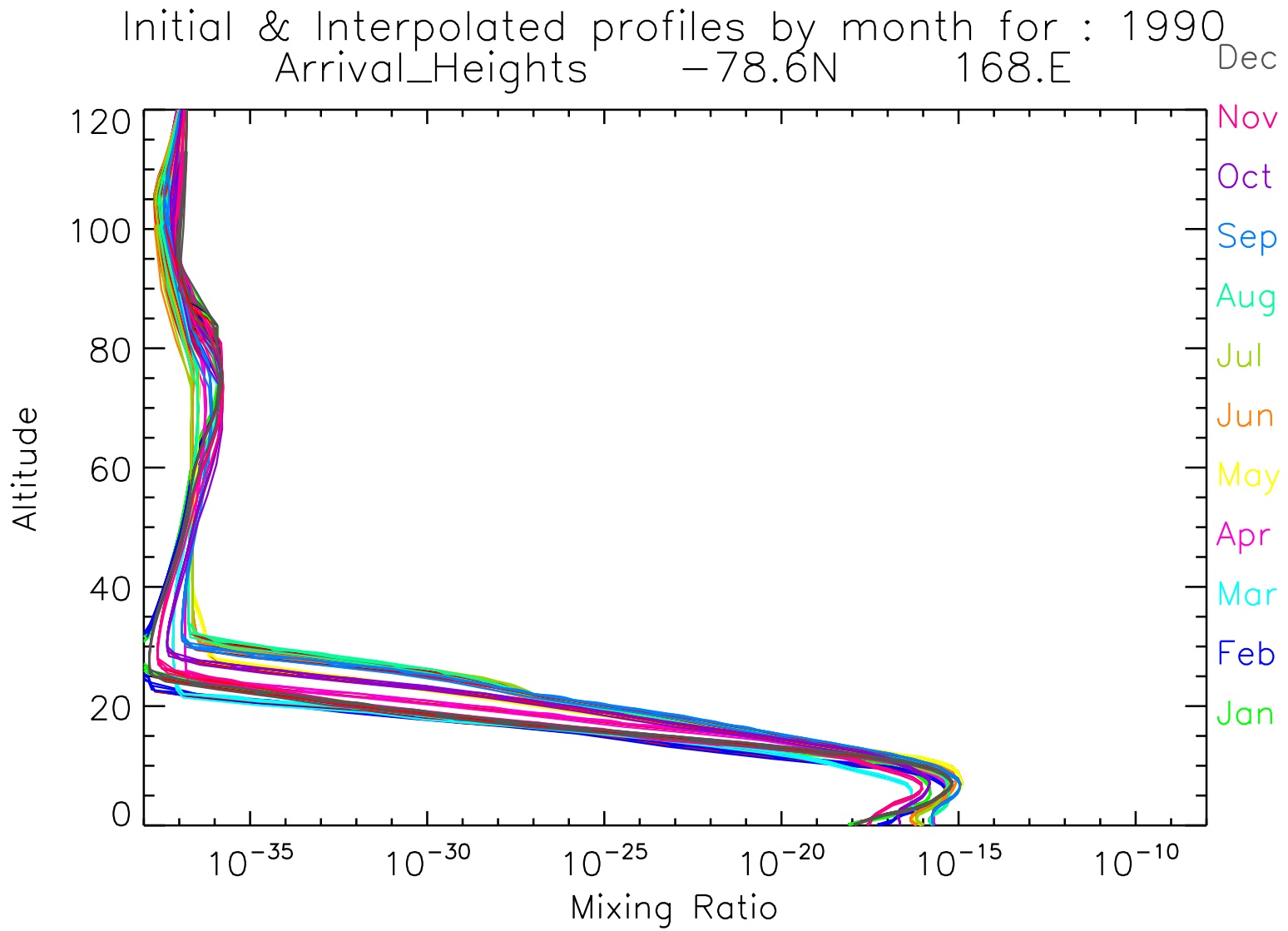
Mixing Ratio


Initial & Interpolated profiles by month for : 1990
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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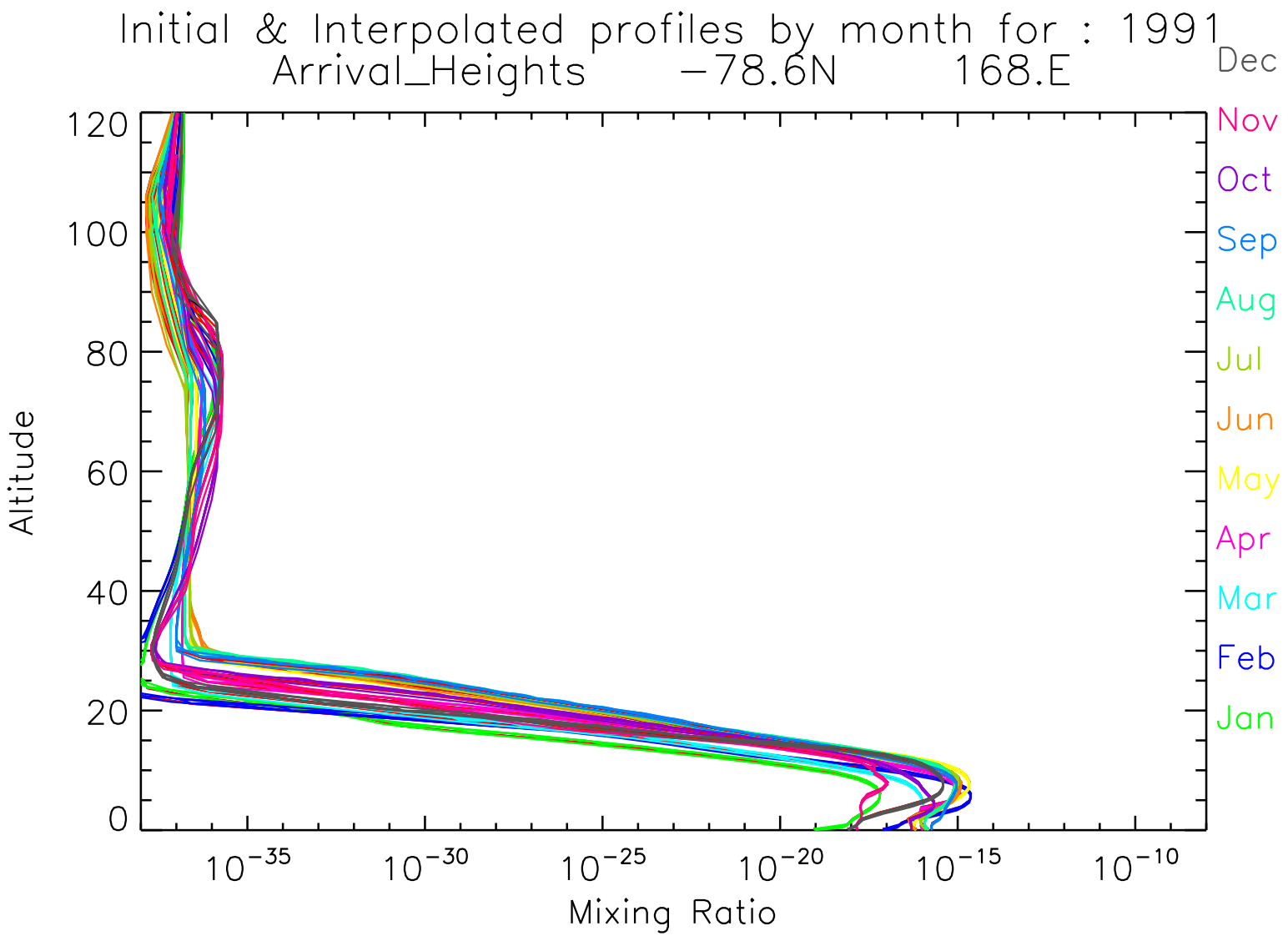
Mixing Ratio


Initial & Interpolated profiles by month for : 1991
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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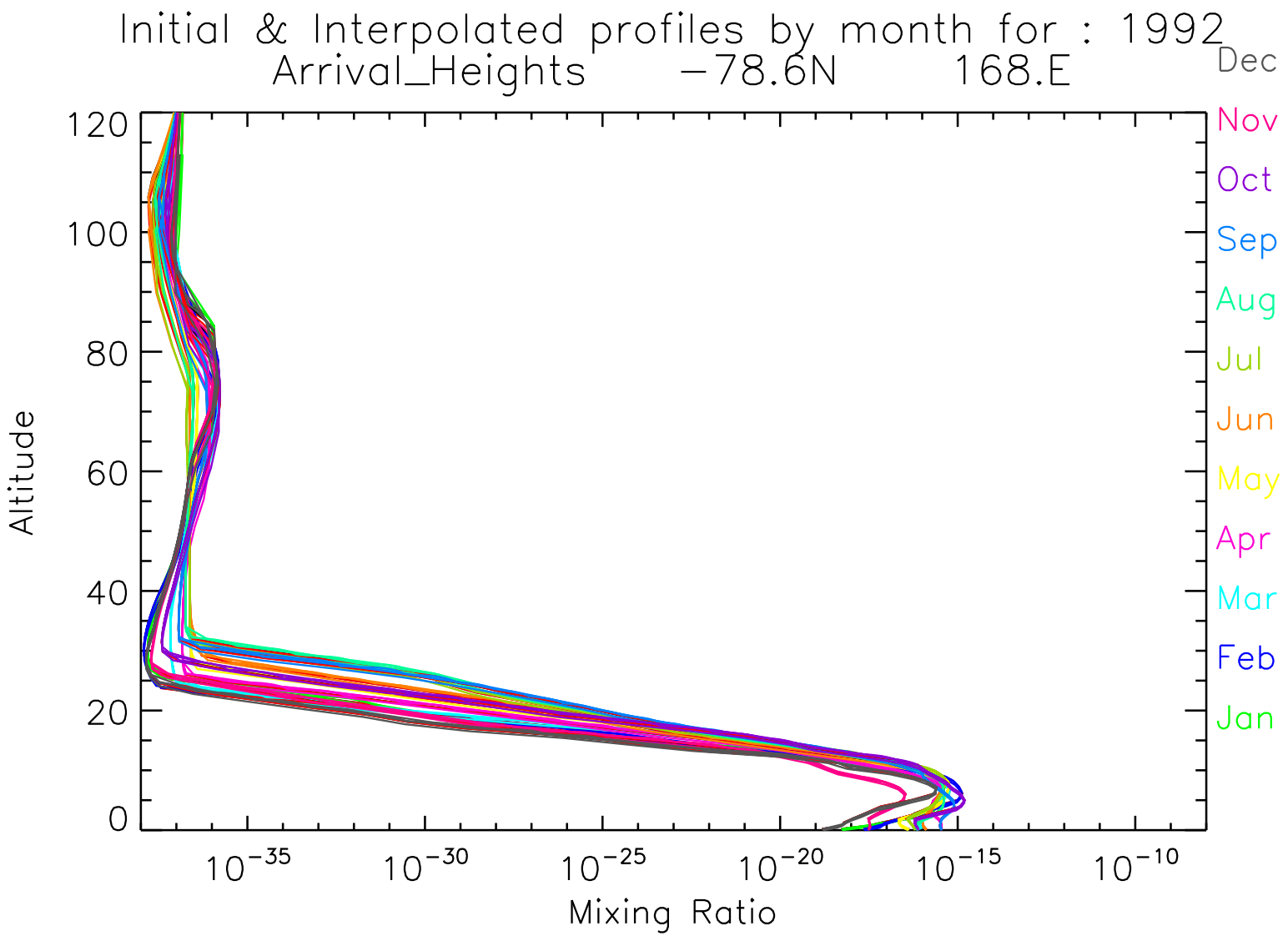
Mixing Ratio


Initial & Interpolated profiles by month for : 1992
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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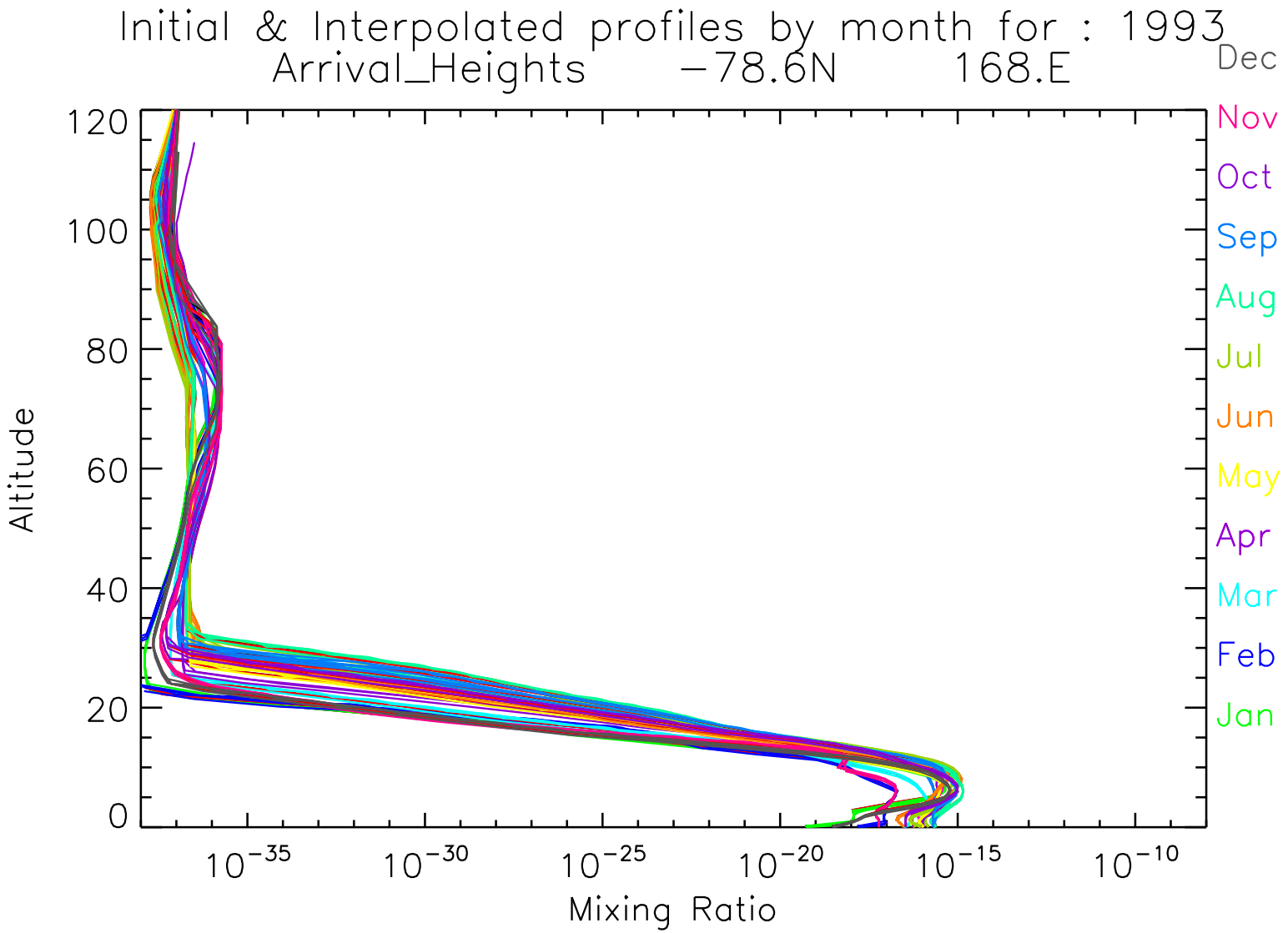
Mixing Ratio


Initial & Interpolated profiles by month for : 1993
Arrival_Heights −78.6N 168.E
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Altitude
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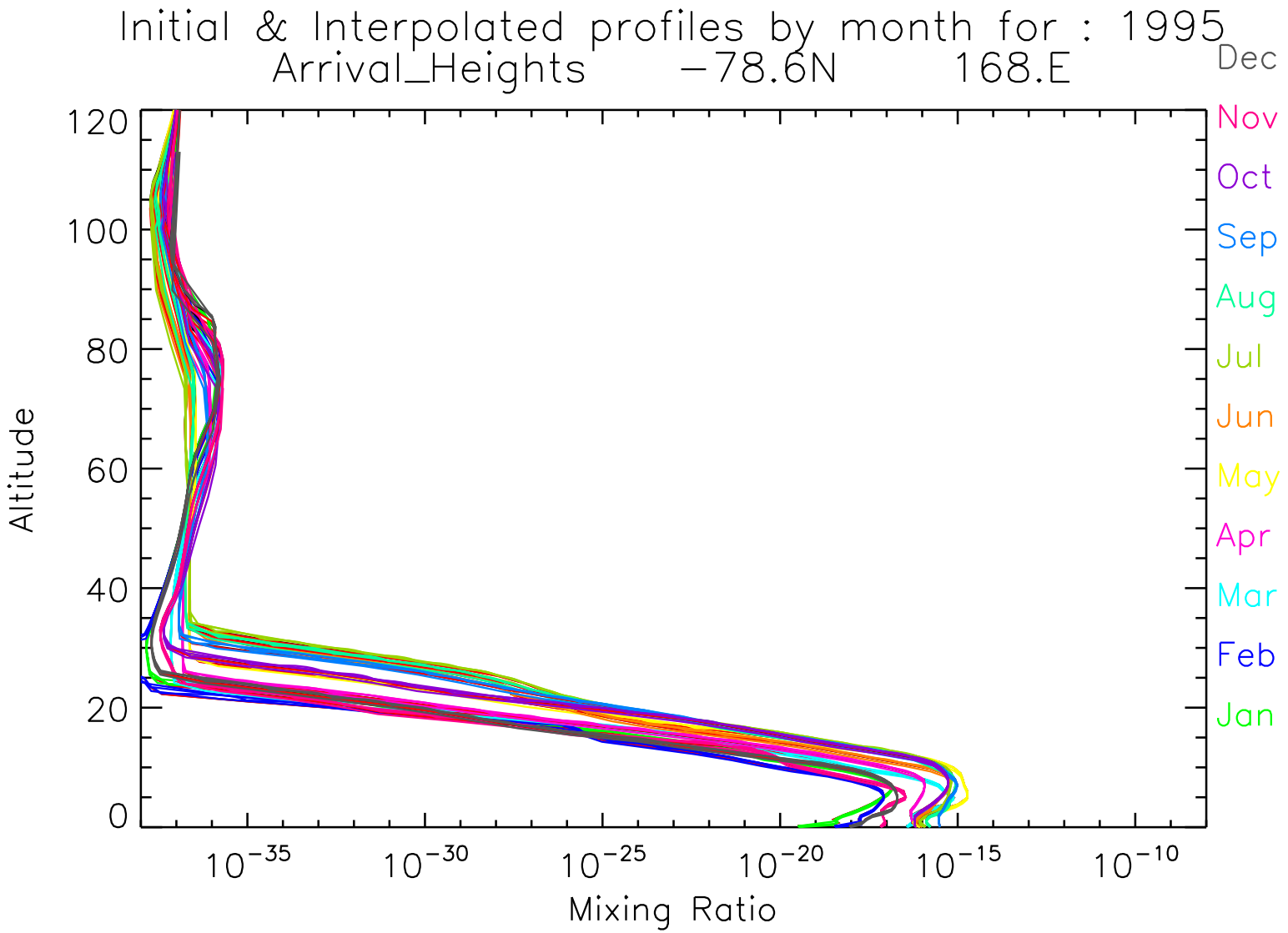
Mixing Ratio


Initial & Interpolated profiles by month for : 1995
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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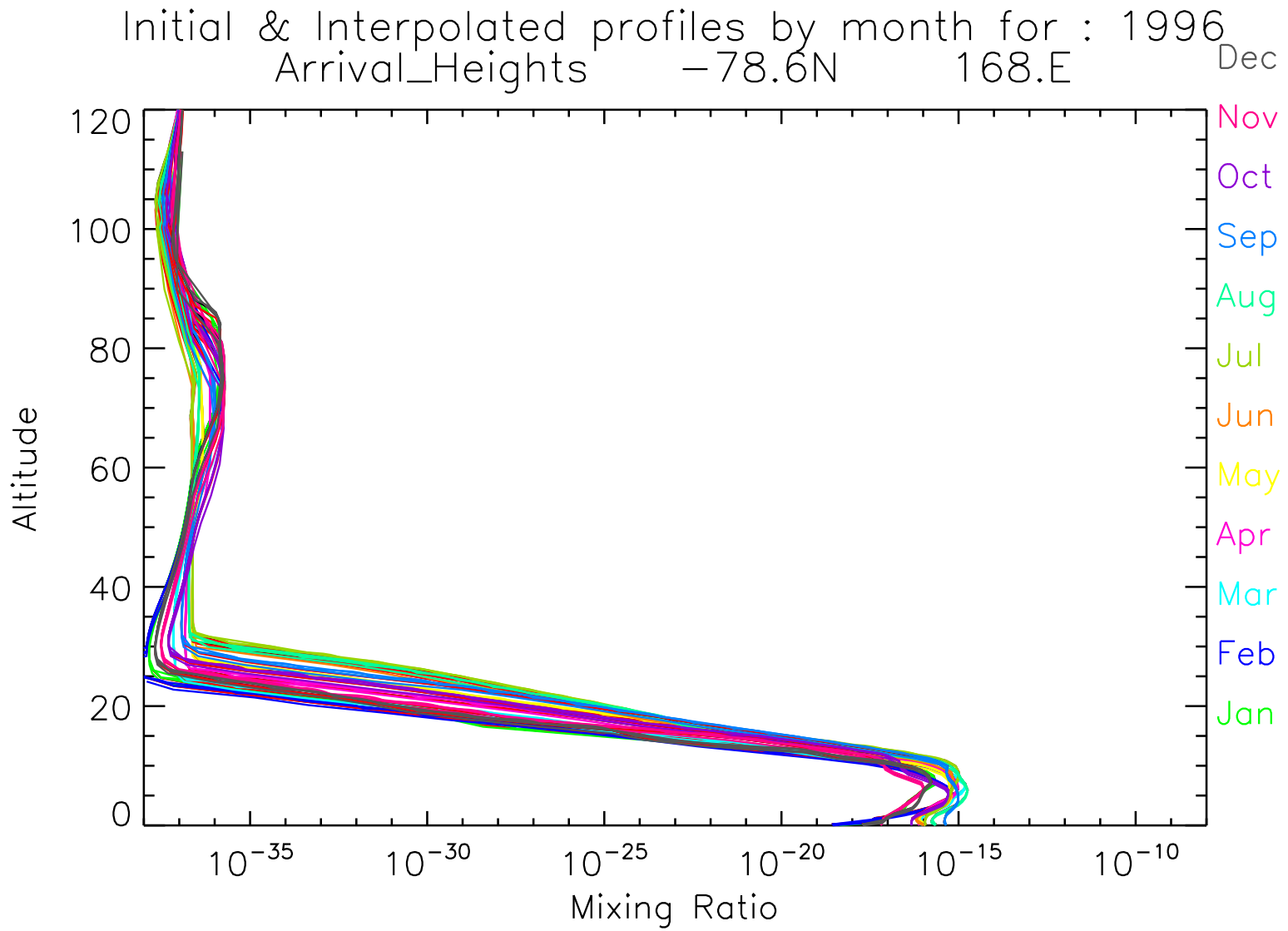
Mixing Ratio


Initial & Interpolated profiles by month for : 1996
Arrival_Heights −78.6N 168.E
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Altitude
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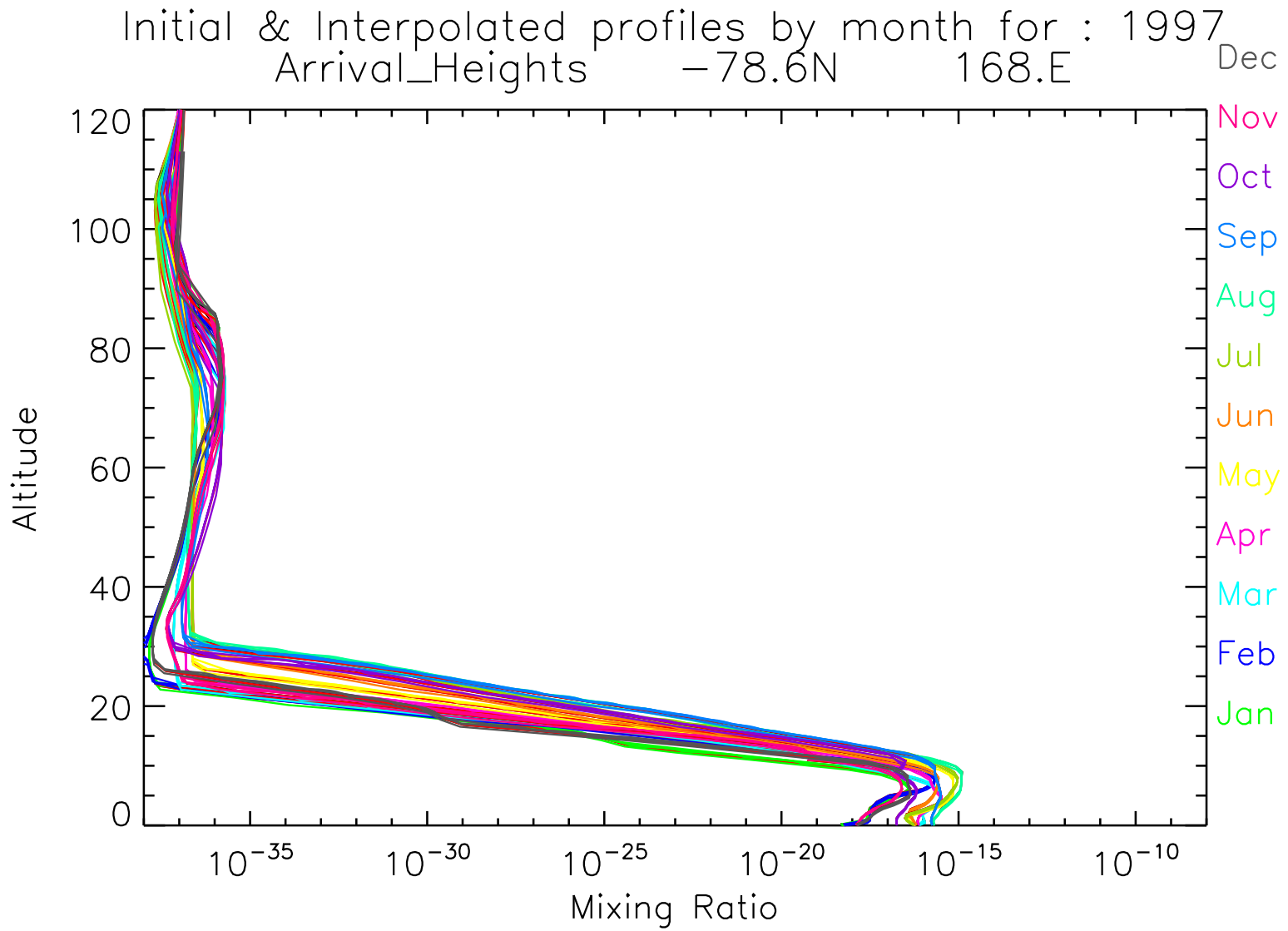
Mixing Ratio


Initial & Interpolated profiles by month for : 1997
Arrival_Heights −78.6N 168.E
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Altitude
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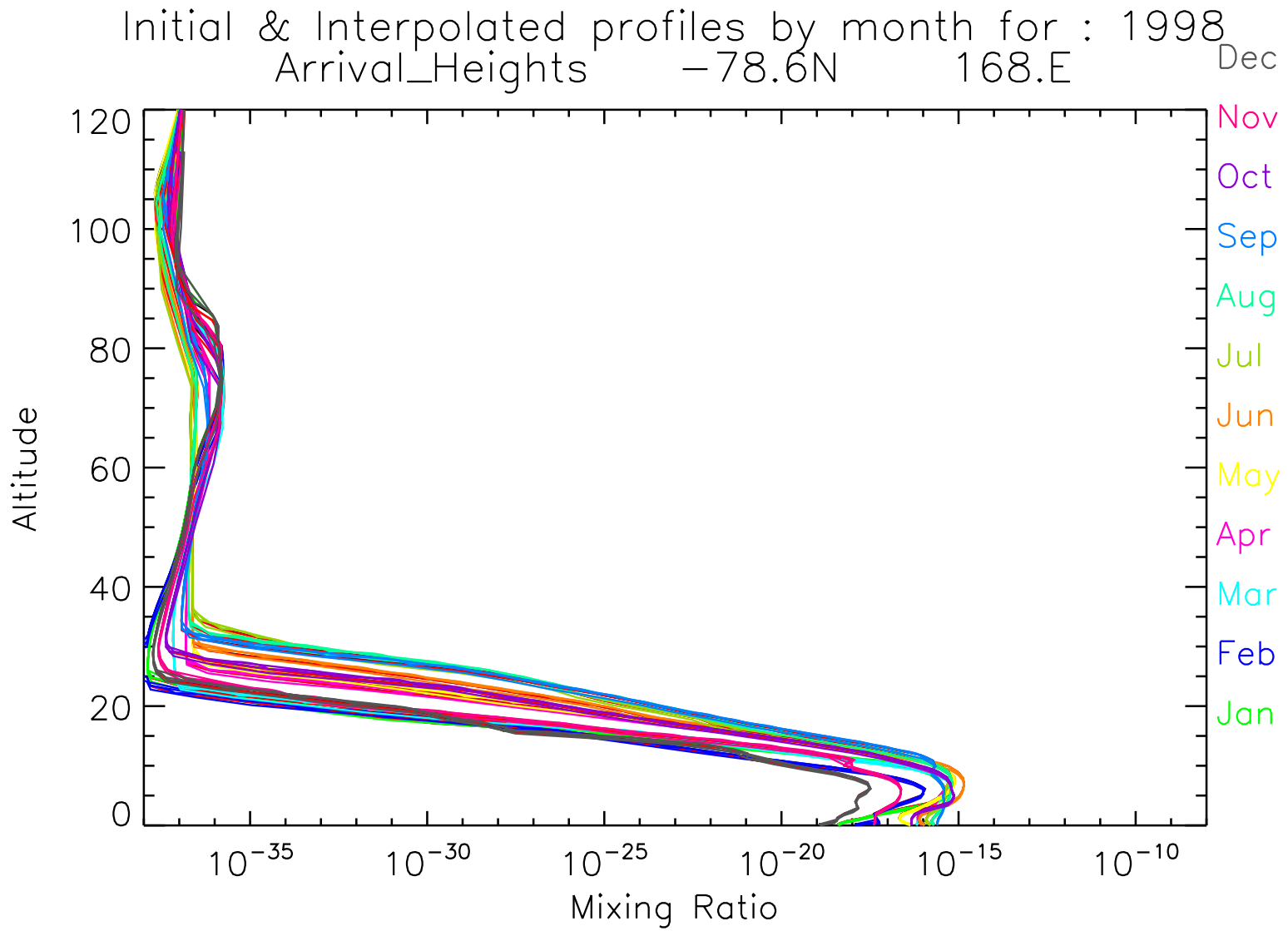
Mixing Ratio


Initial & Interpolated profiles by month for : 1998
Arrival_Heights −78.6N 168.E
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Altitude
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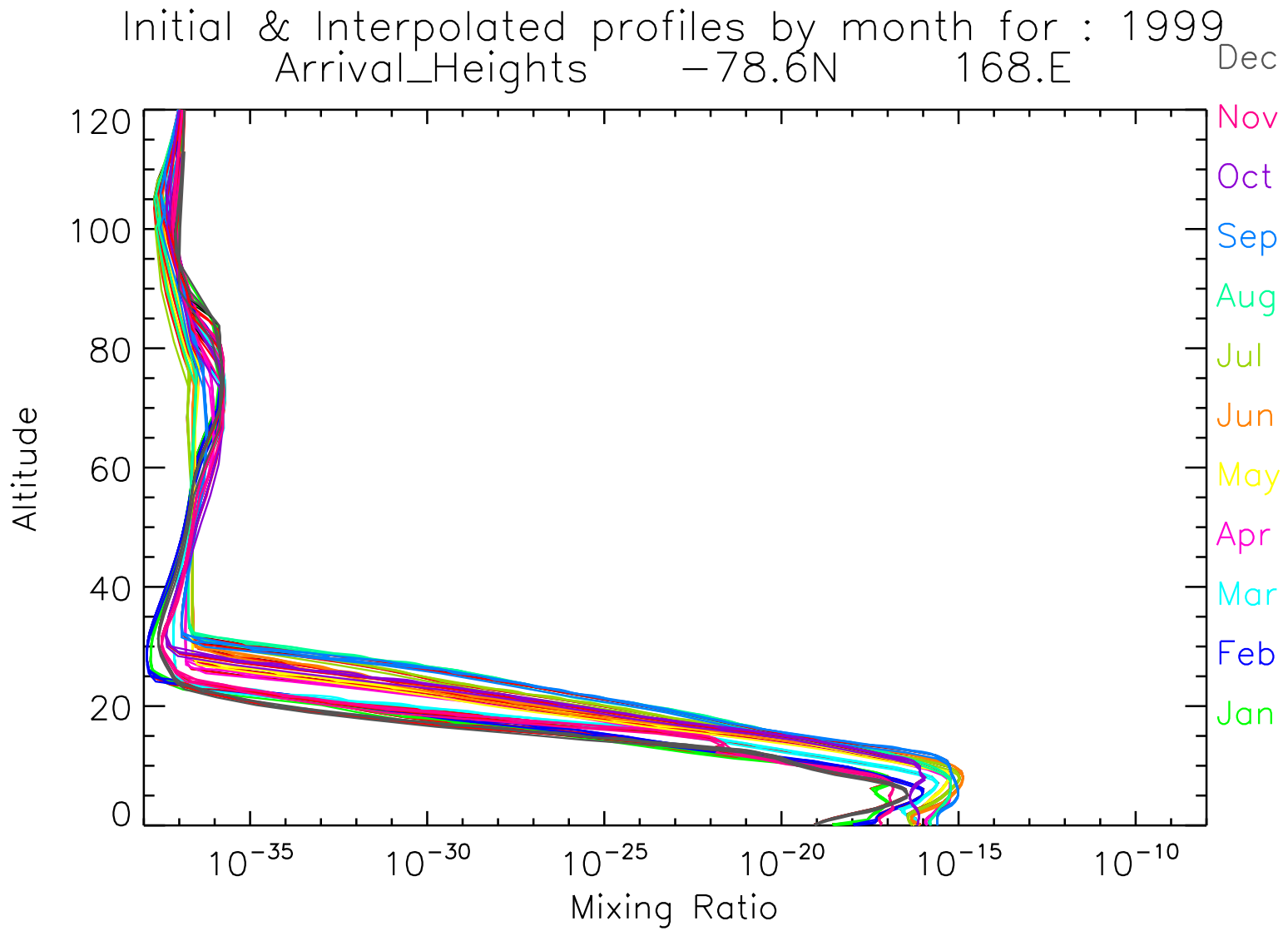
Mixing Ratio


Initial & Interpolated profiles by month for : 1999
Arrival_Heights −78.6N 168.E
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Altitude
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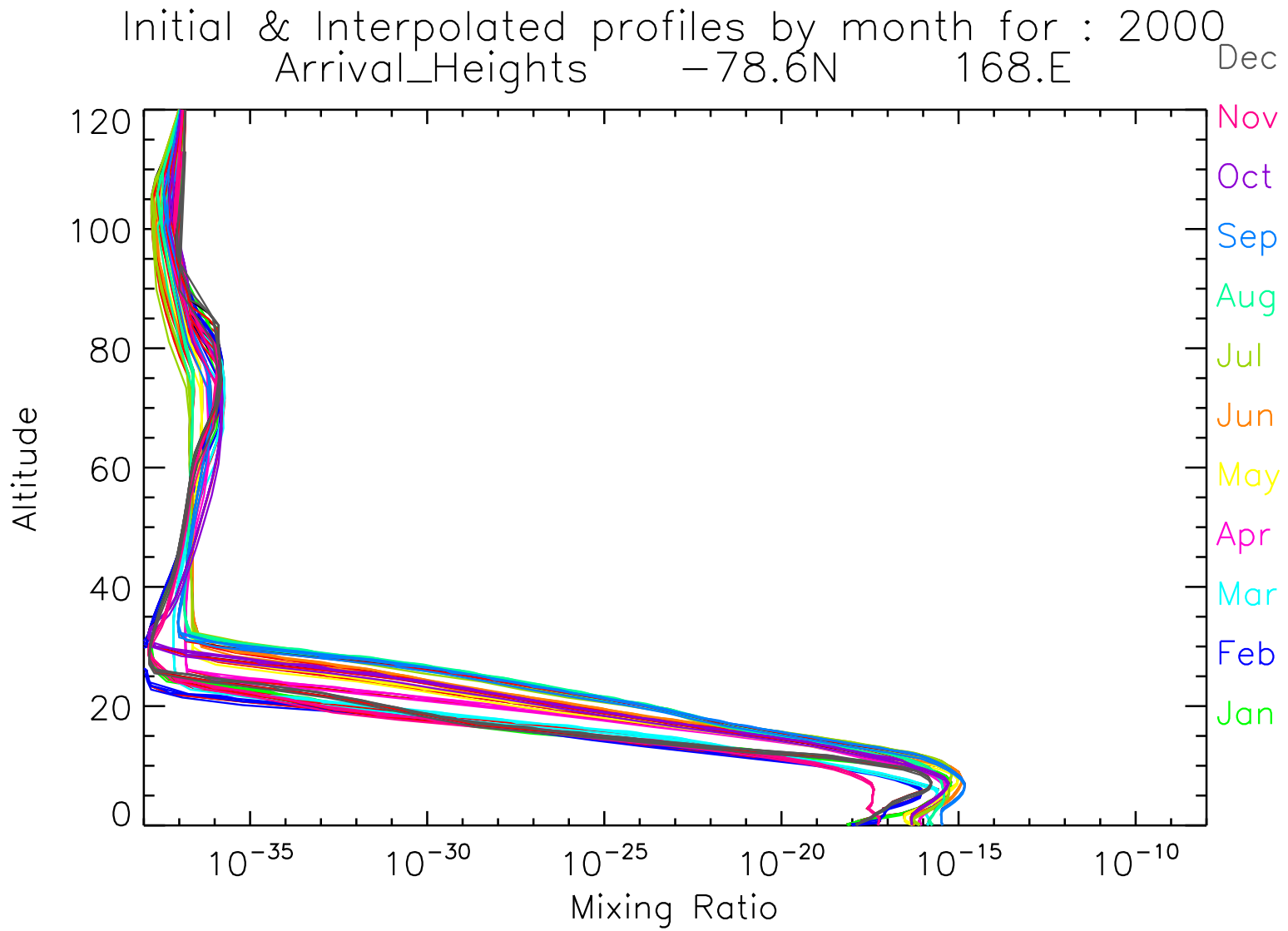
Mixing Ratio


Initial & Interpolated profiles by month for : 2000
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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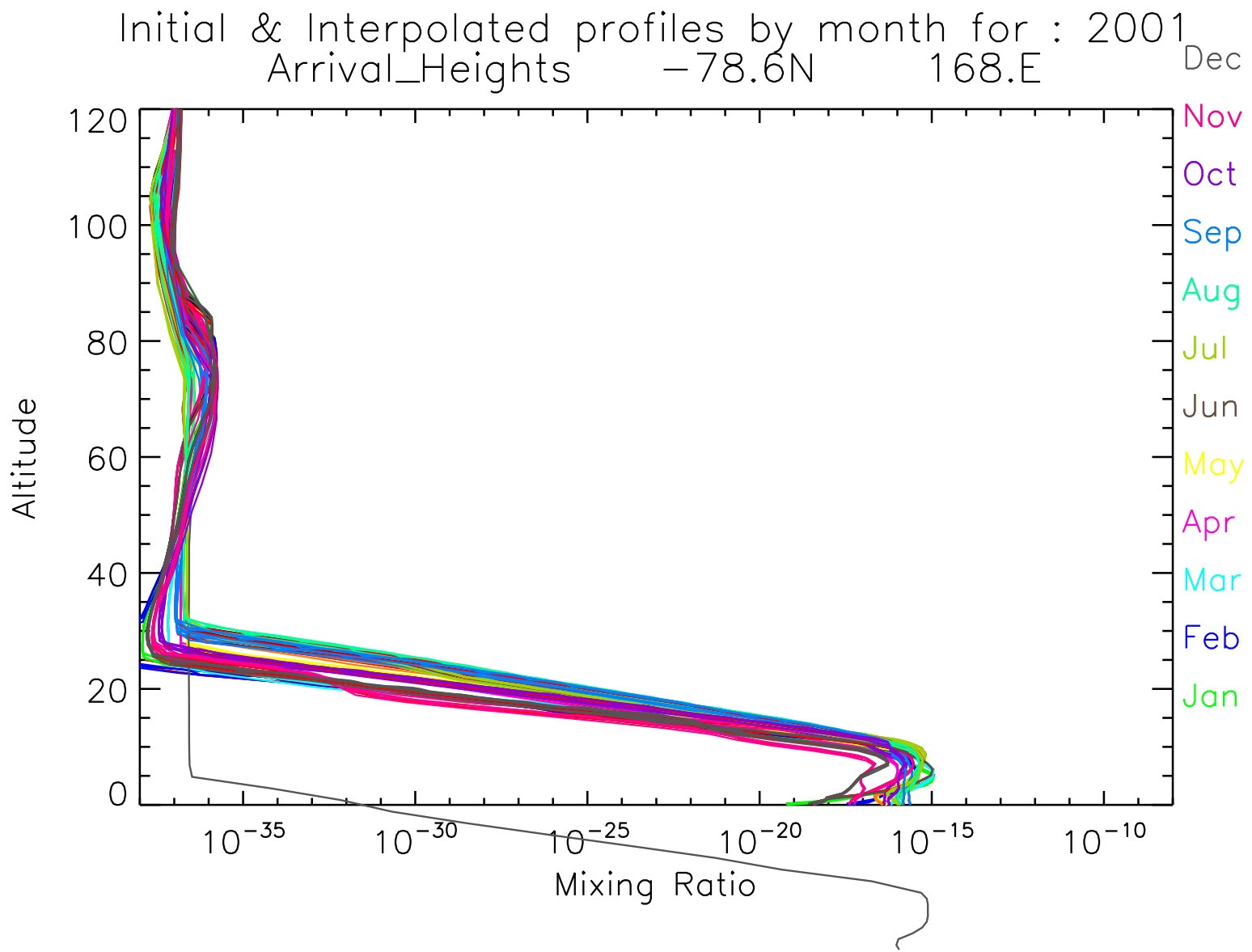
Mixing Ratio


Initial & Interpolated profiles by month for : 2001
Arrival_Heights −78.6N 168.E
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Altitude
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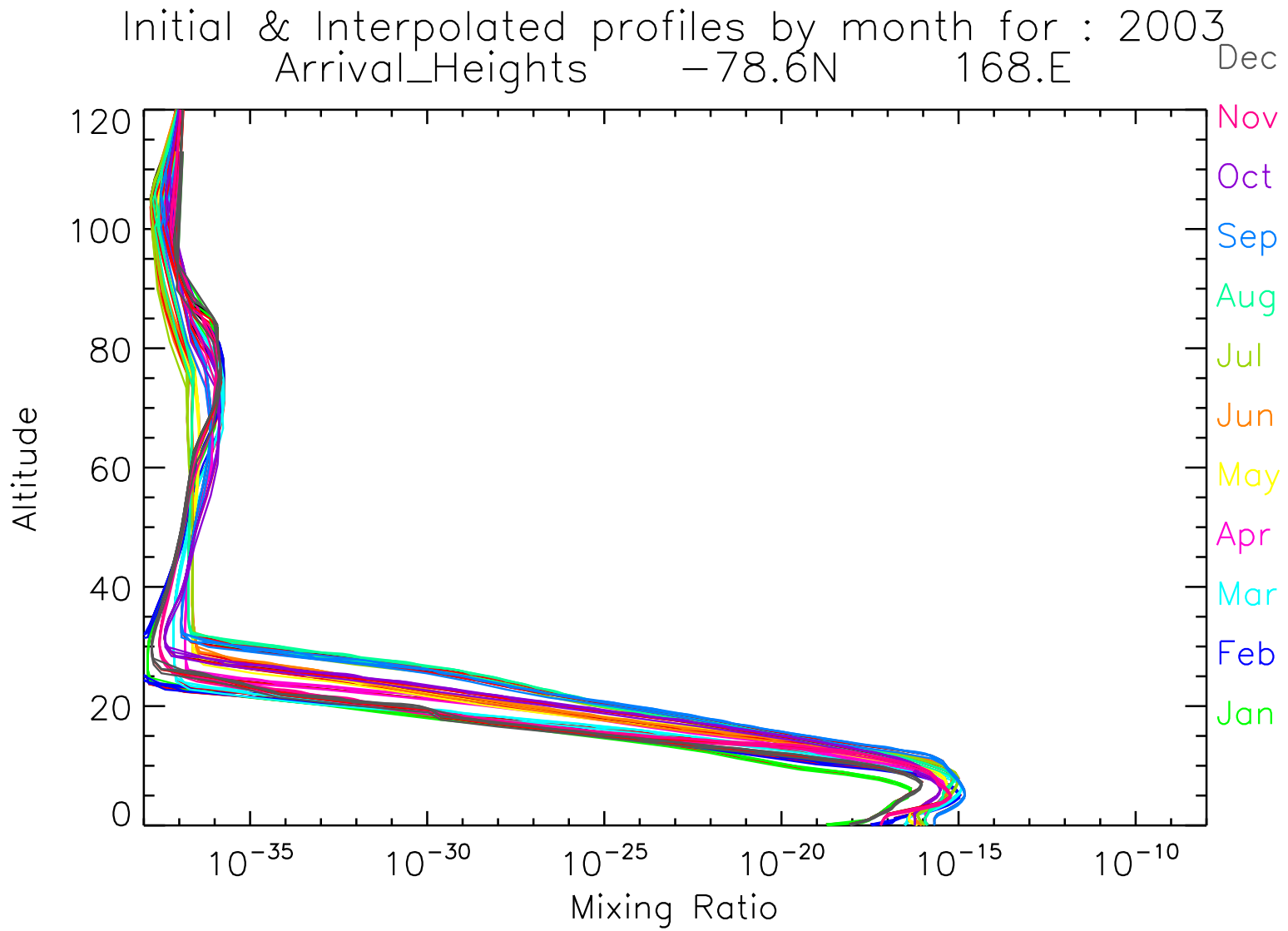
Mixing Ratio


Initial & Interpolated profiles by month for : 2003
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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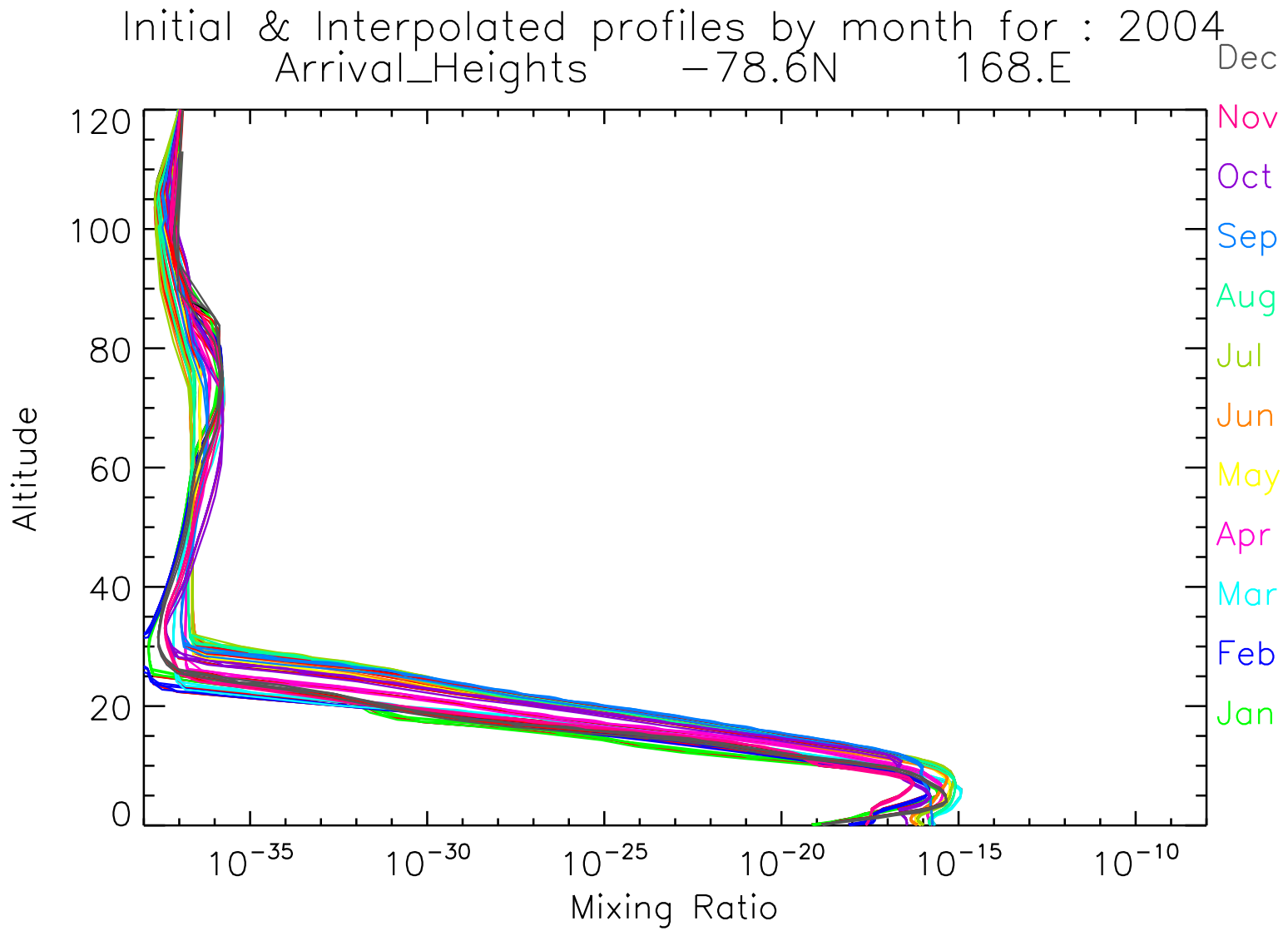
Mixing Ratio


Initial & Interpolated profiles by month for : 2004
Arrival_Heights −78.6N 168.E
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Altitude
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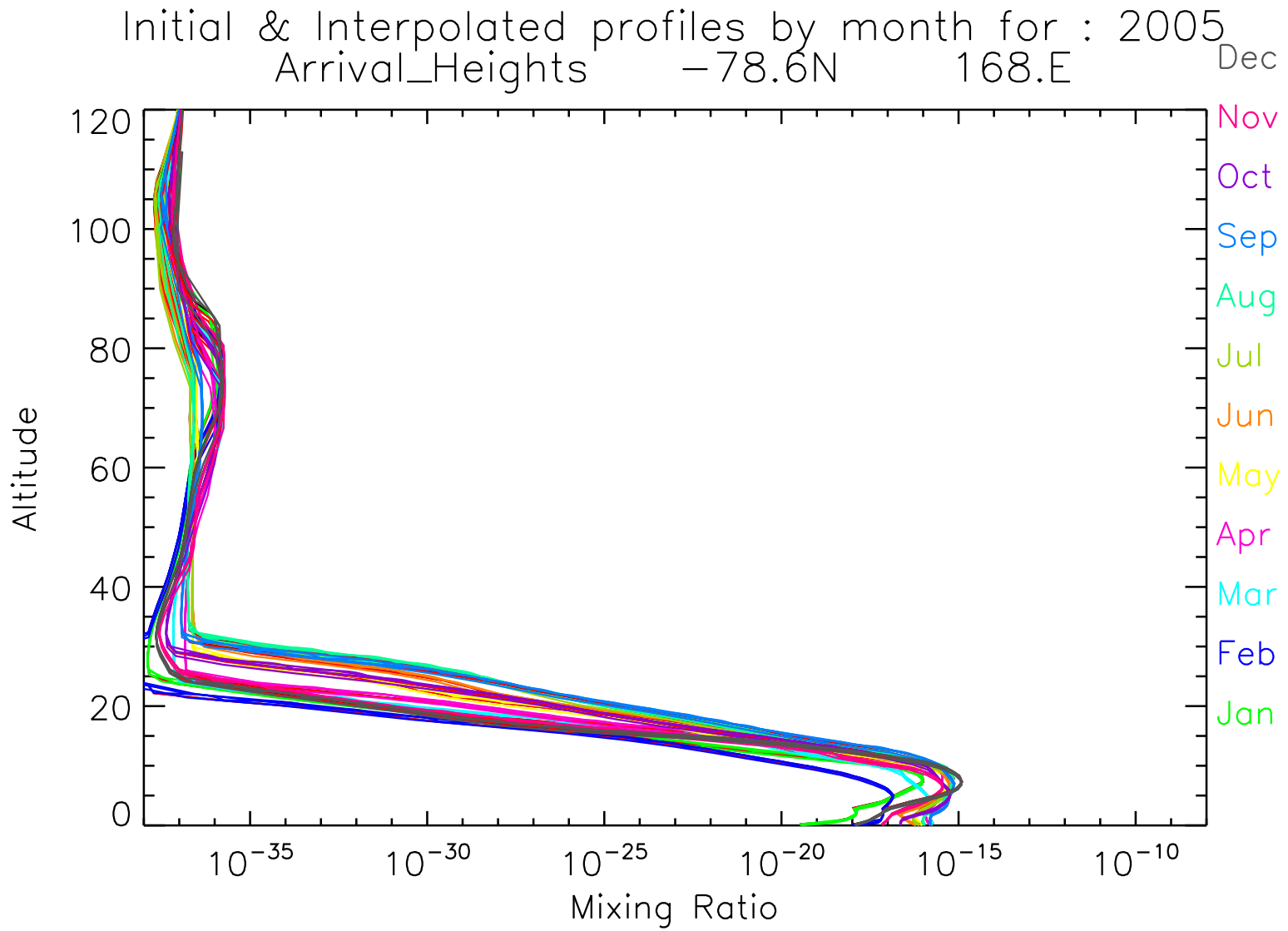
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2005
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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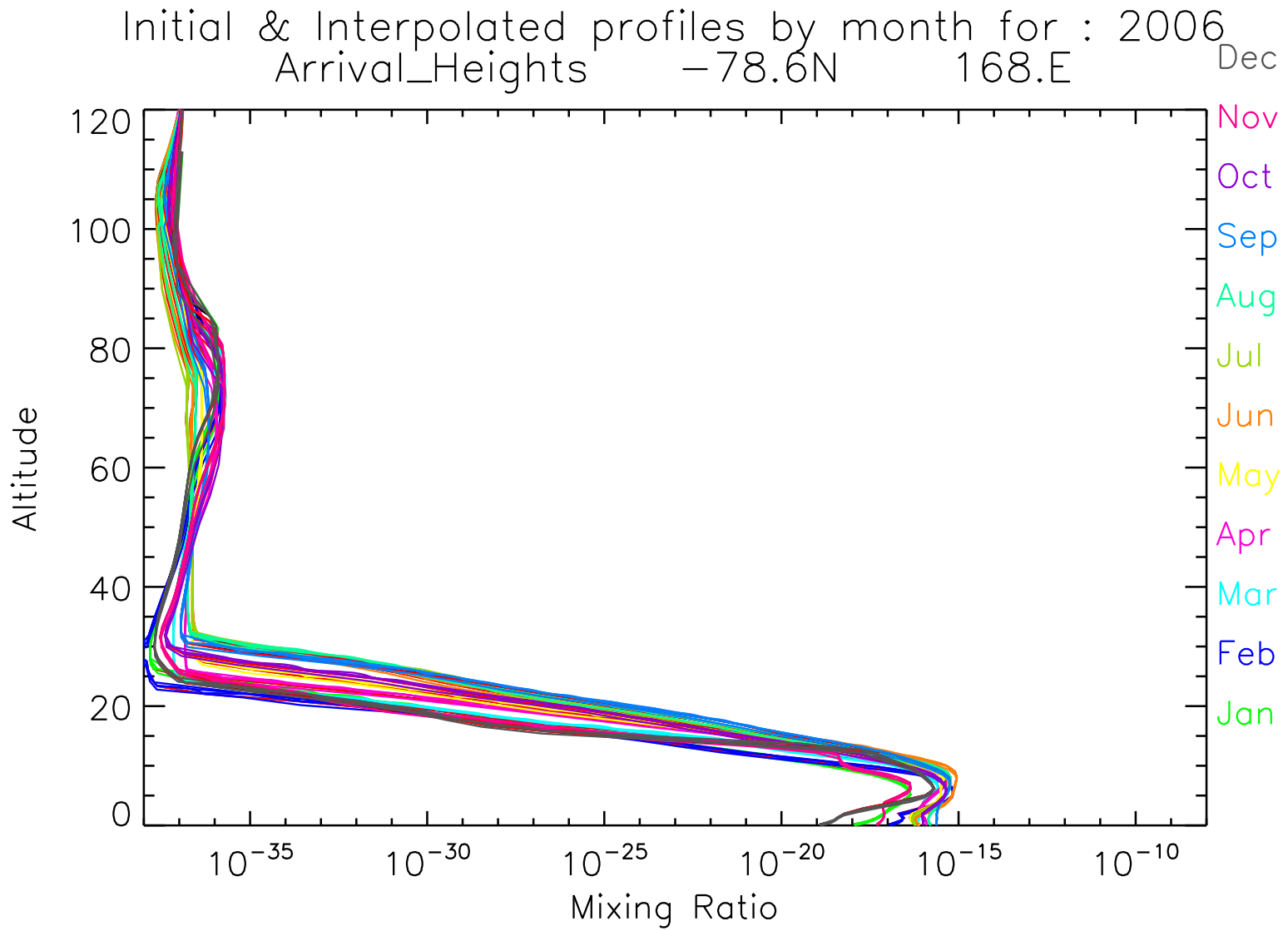
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2006
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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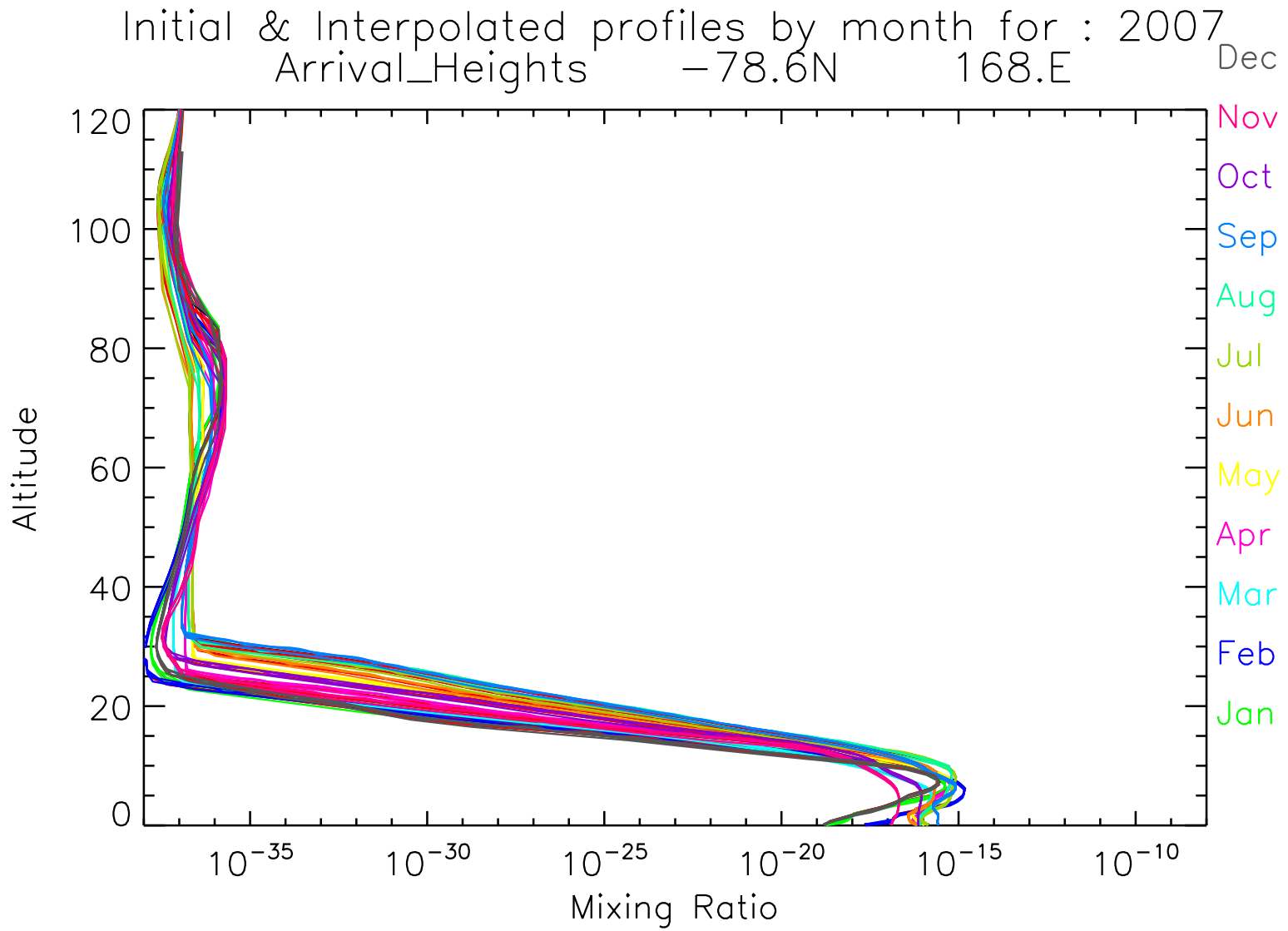
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2007
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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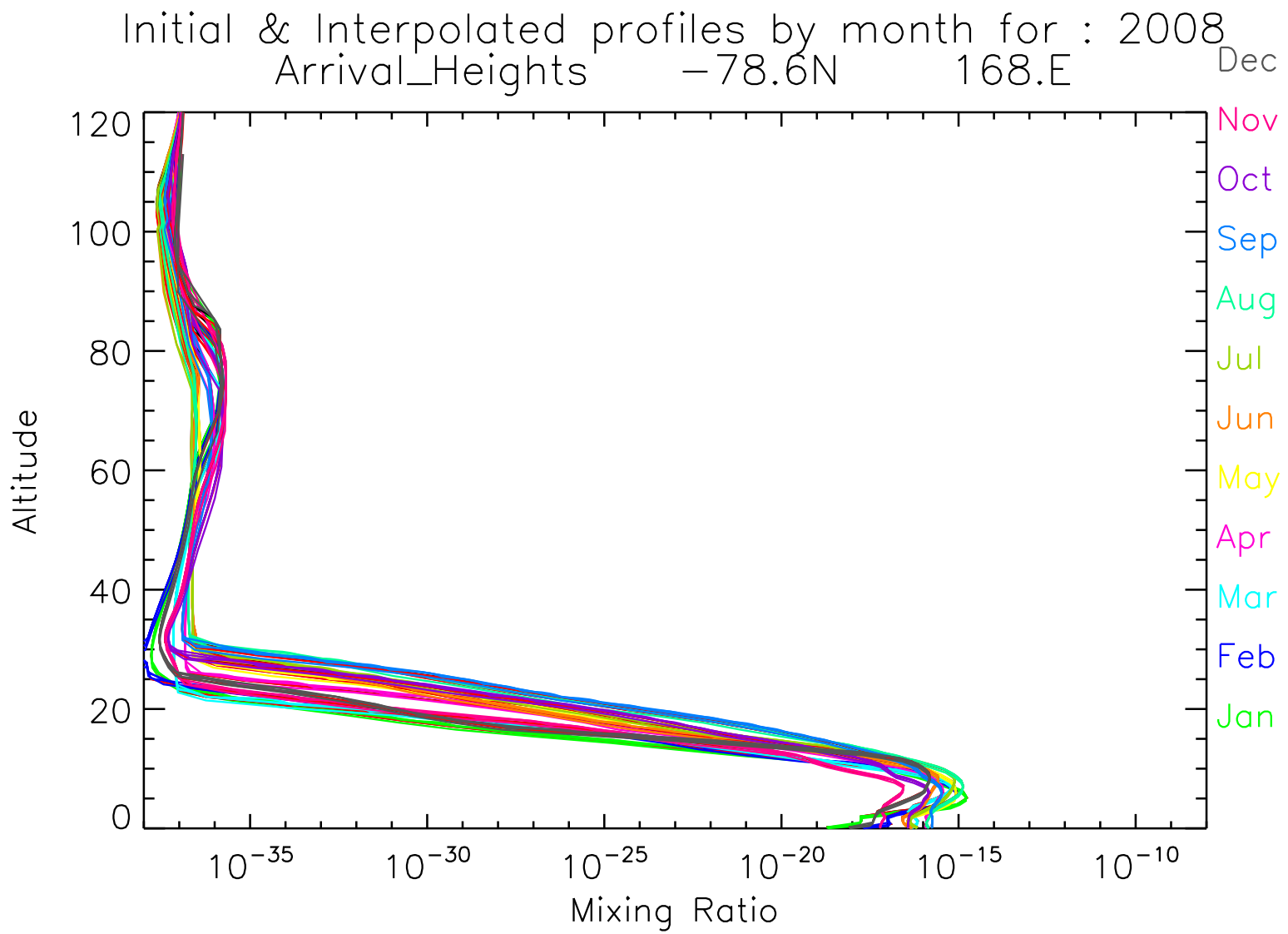
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2008
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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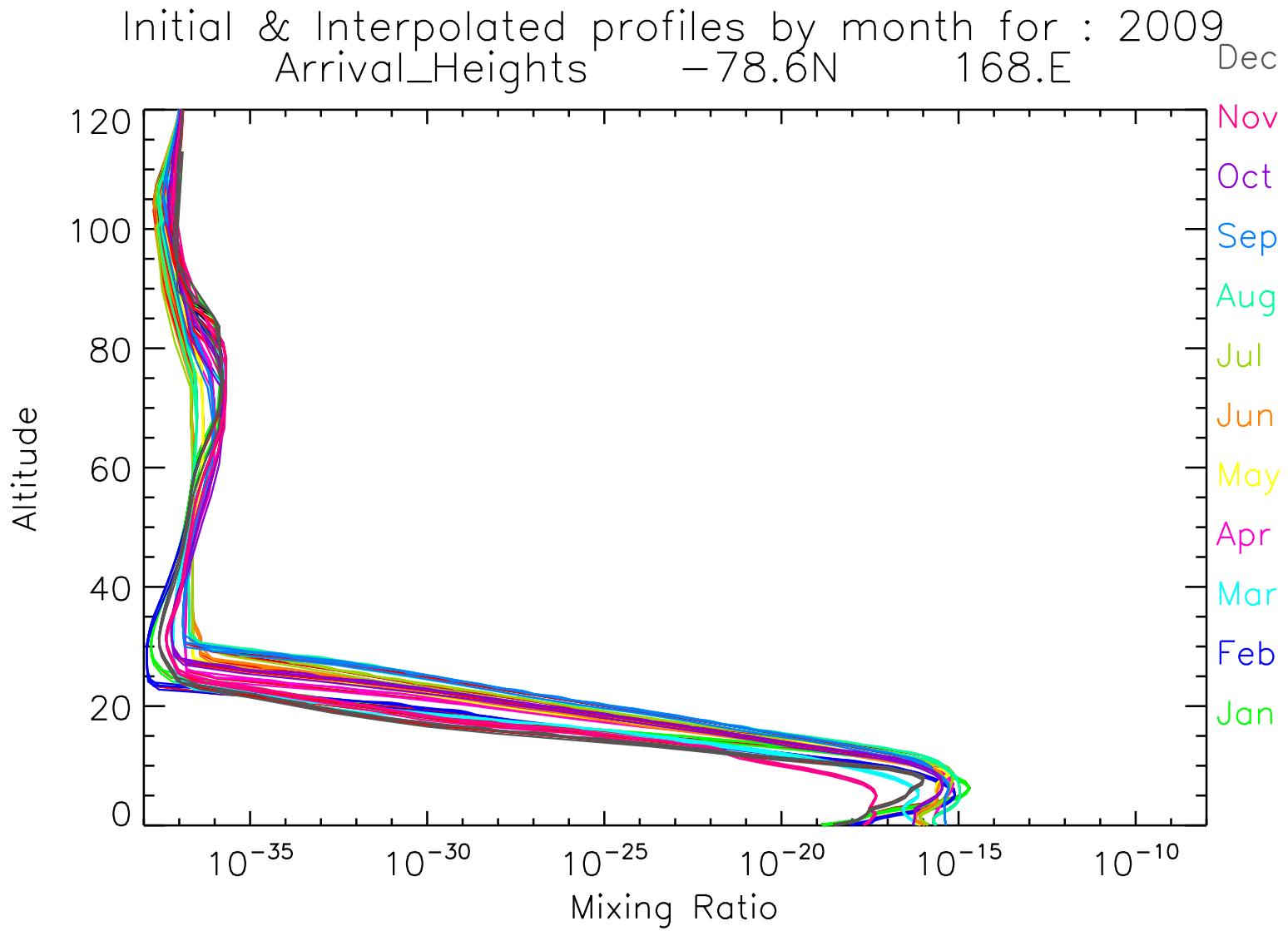
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2009
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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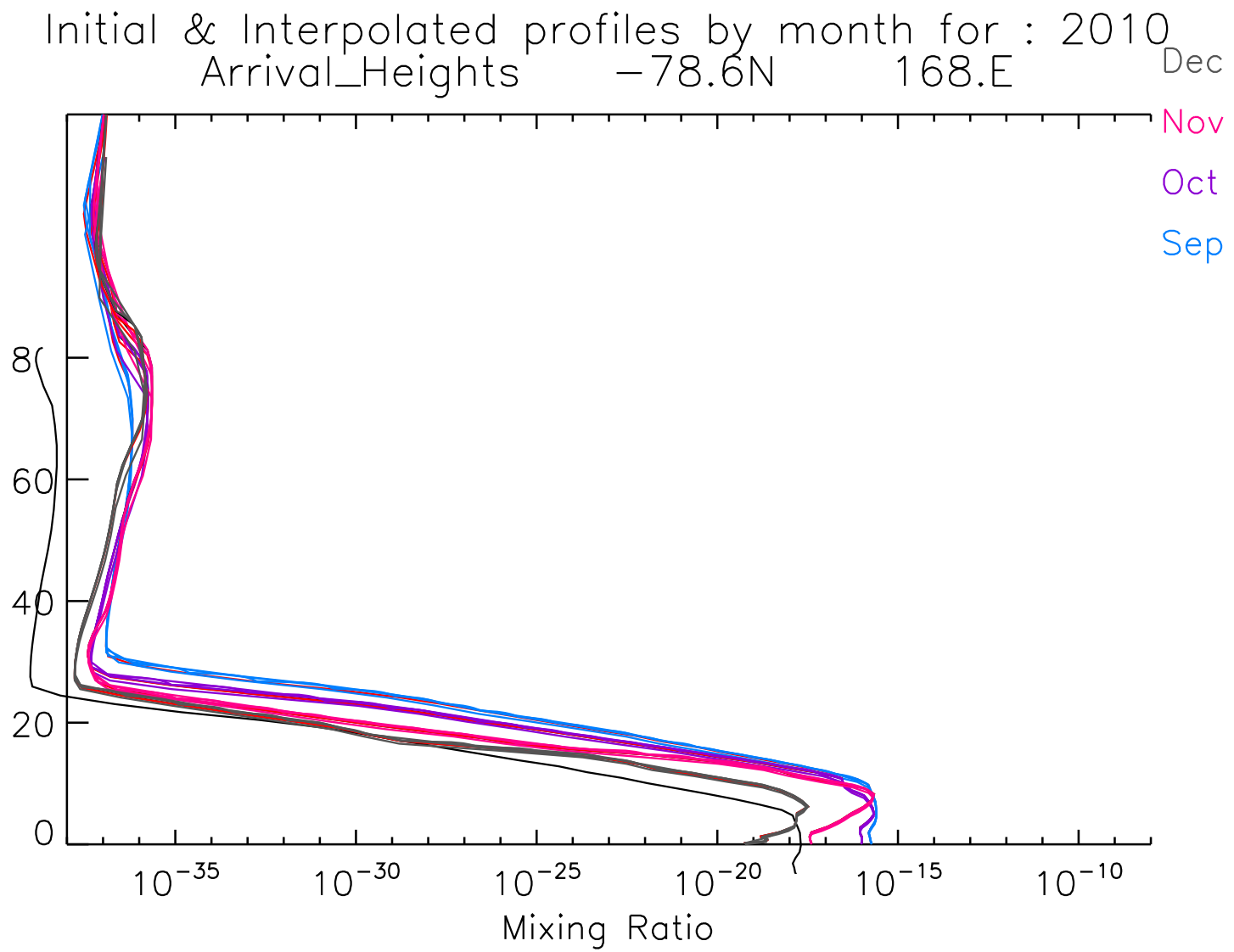
Mixing Ratio


Initial & Interpolated profiles by month for : 2010
Arrival_Heights −78.6N 168.E
Dec
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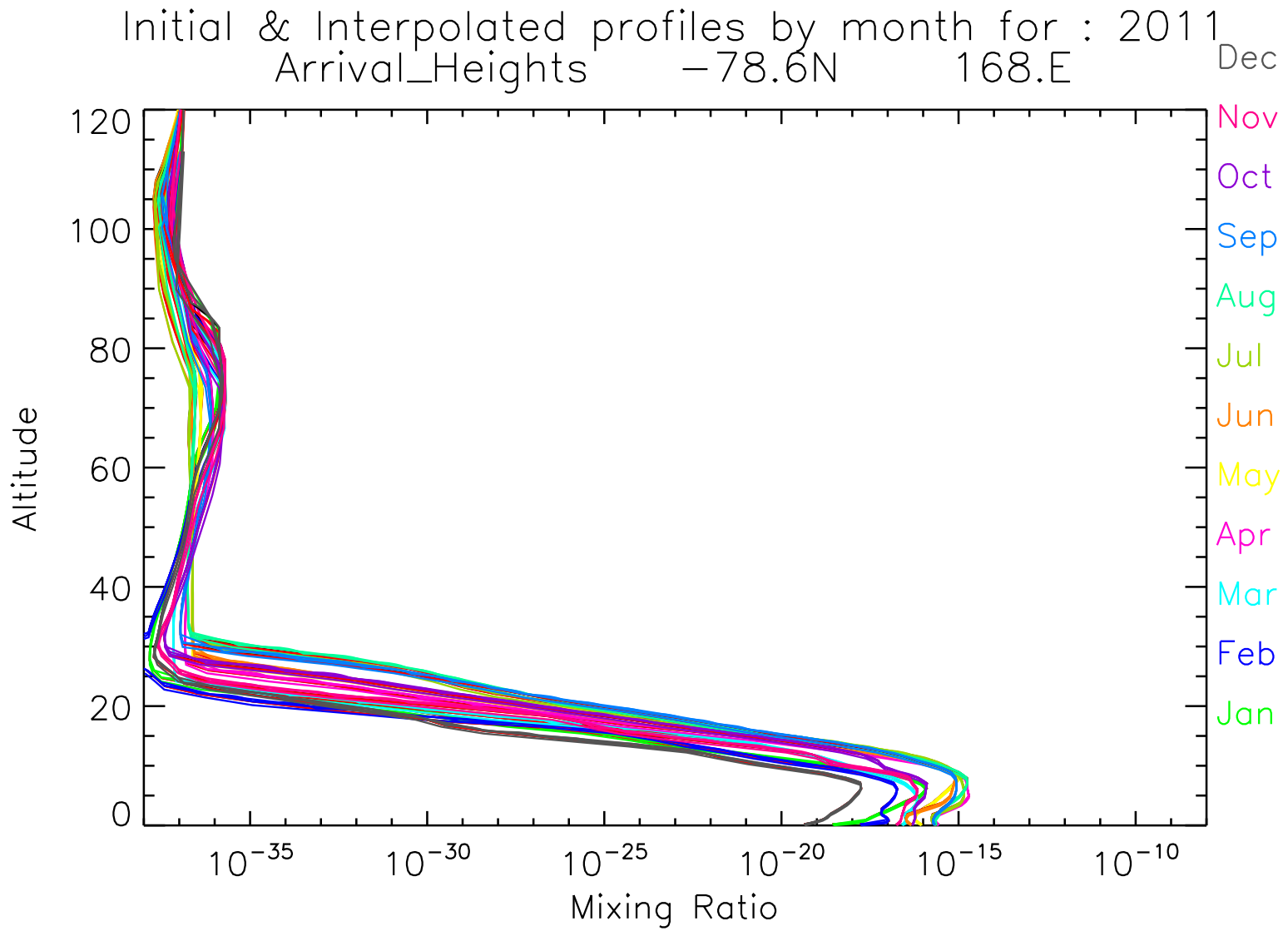
Mixing Ratio


Initial & Interpolated profiles by month for : 2011
Arrival_Heights −78.6N 168.E
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Altitude
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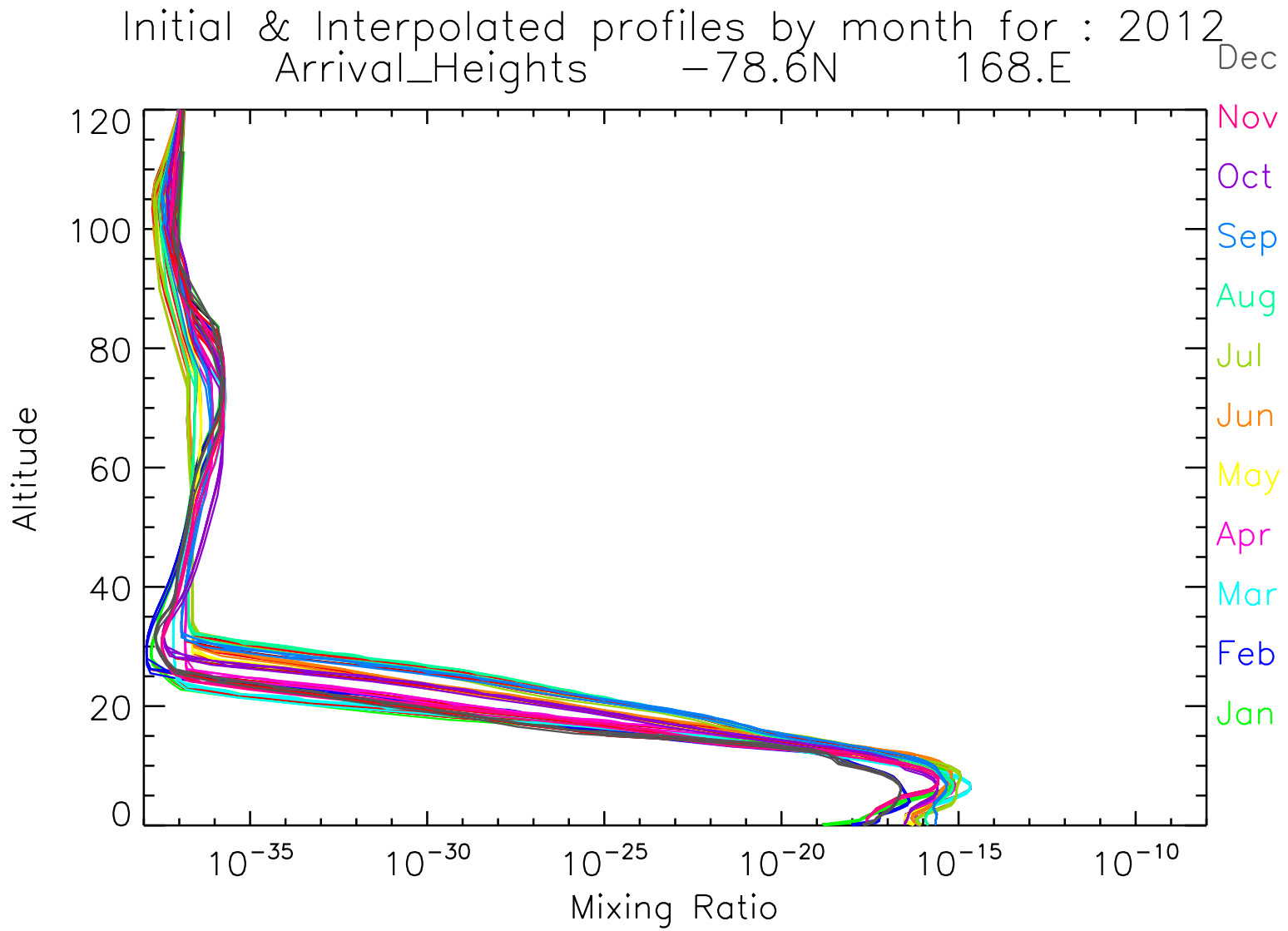
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2012
Arrival_Heights −78.6N 168.E
Dec
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Altitude
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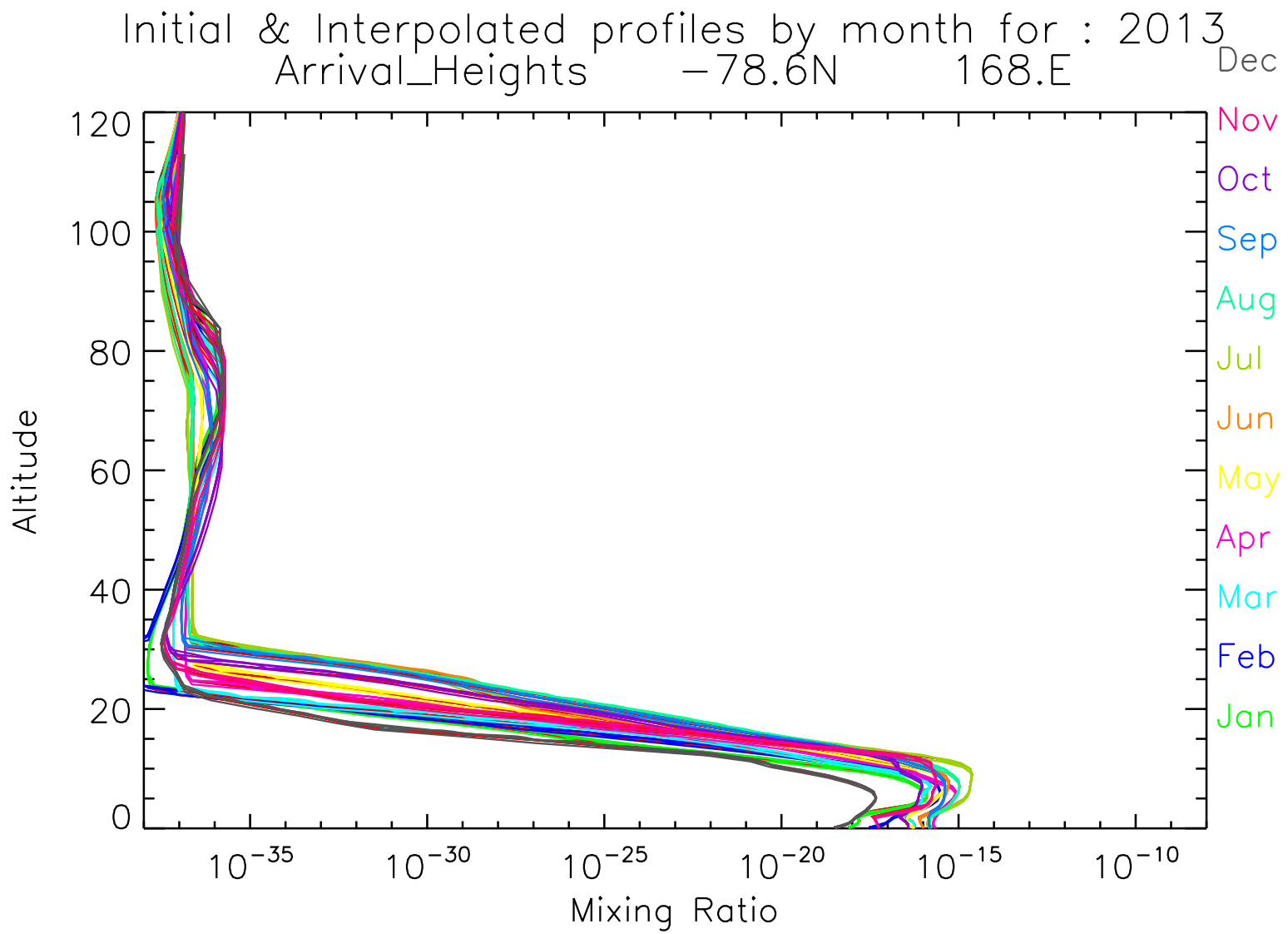
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2013
Arrival_Heights −78.6N 168.E
Dec
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Jan
Altitude
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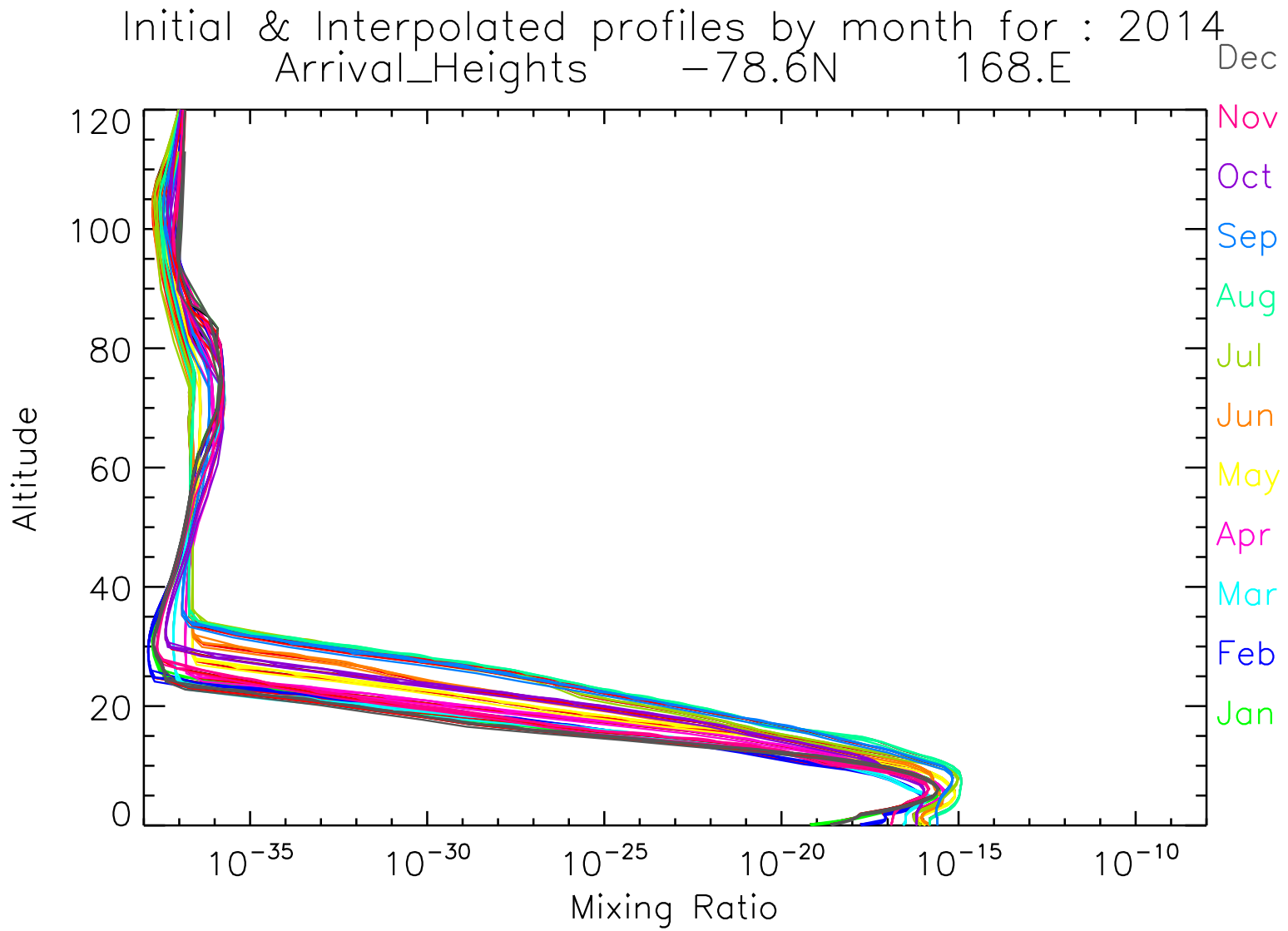
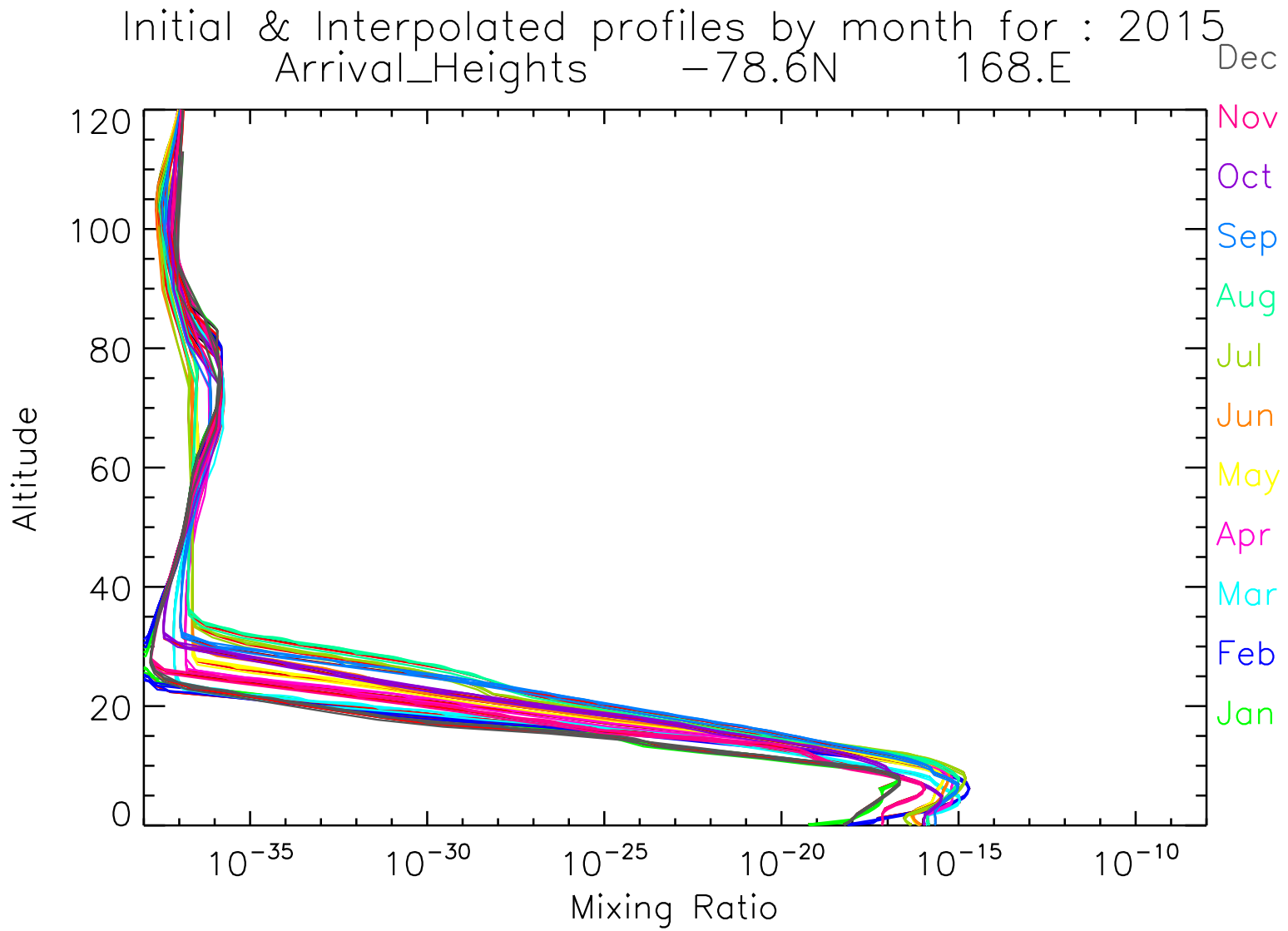
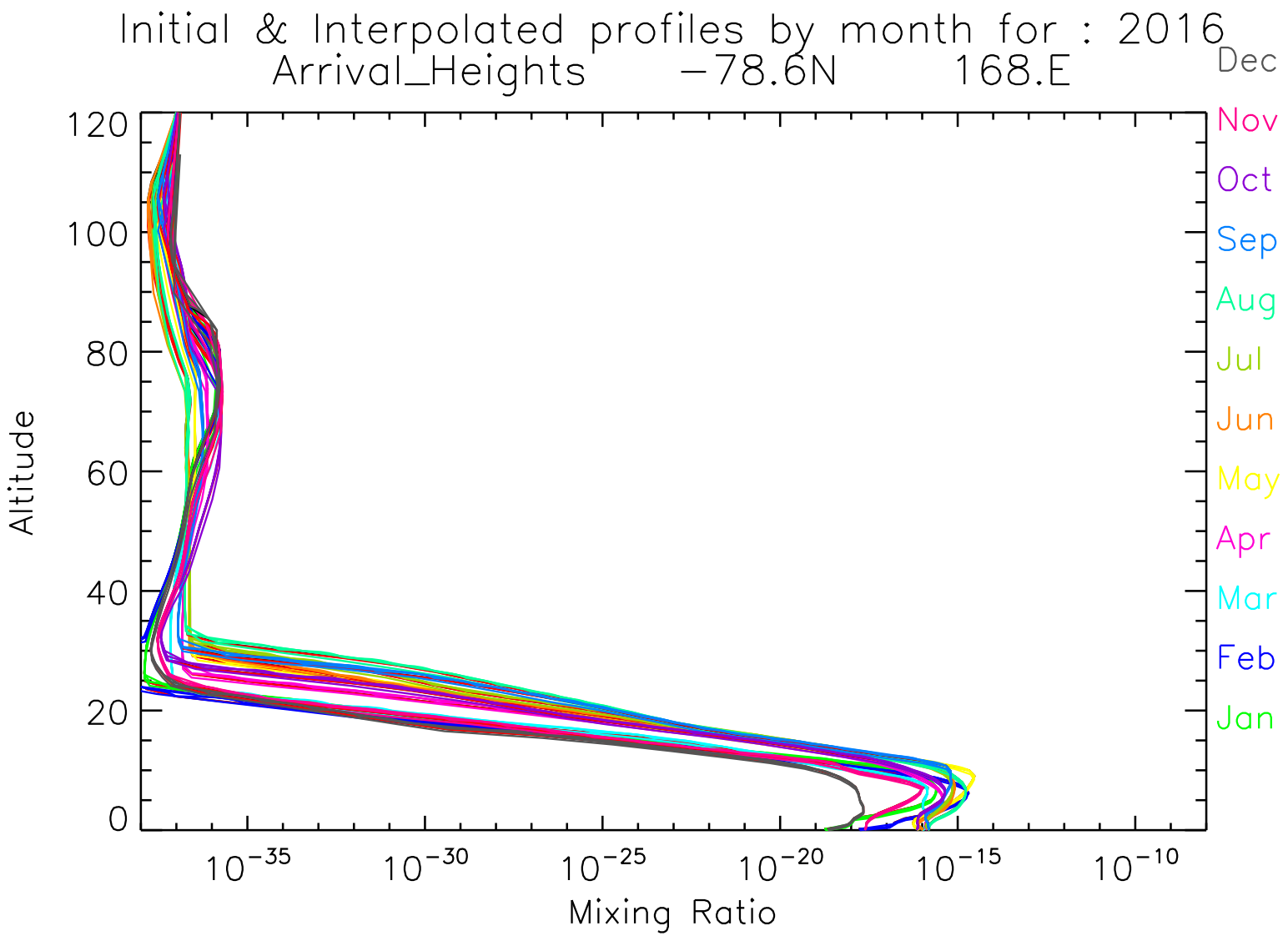
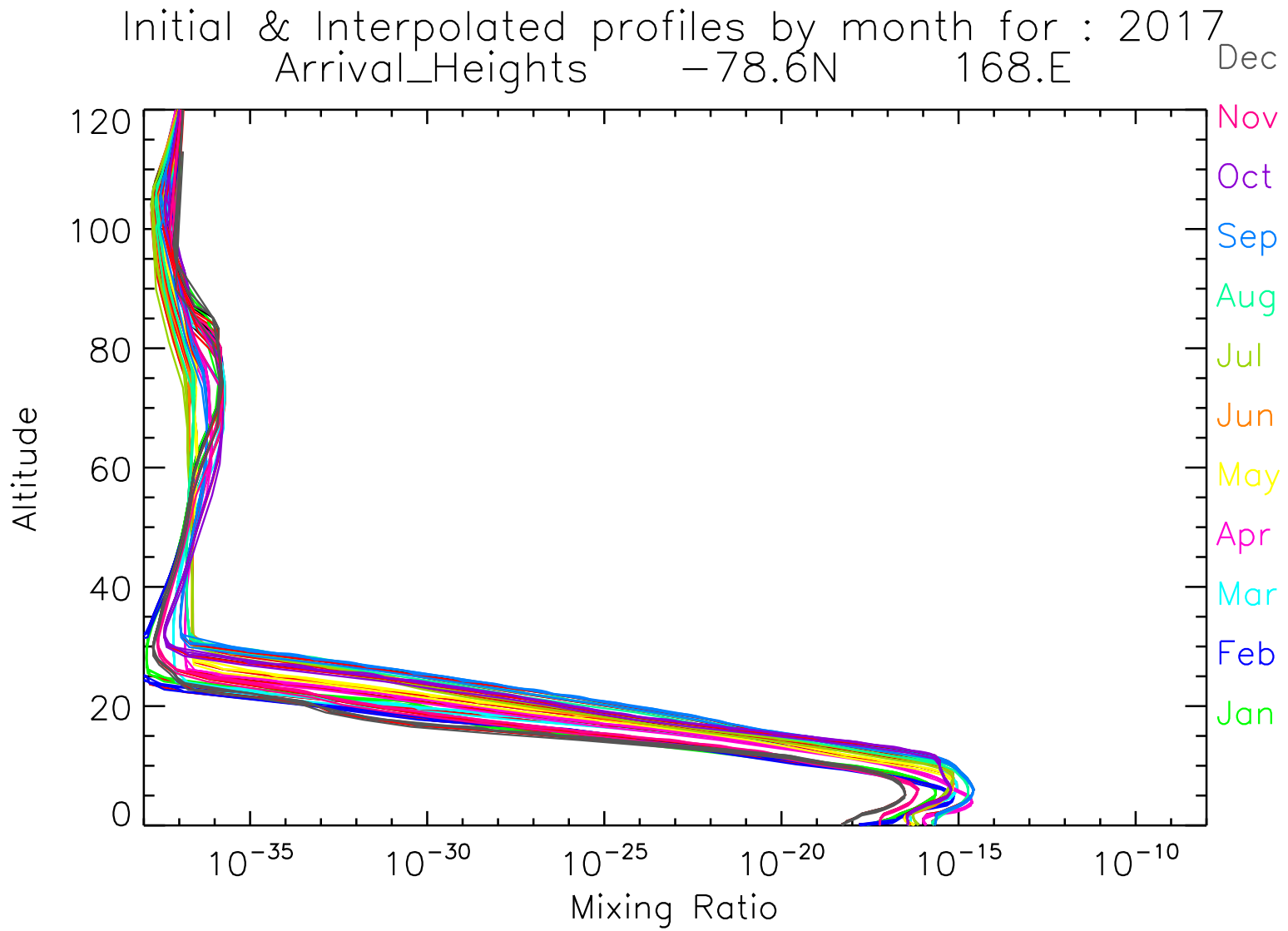
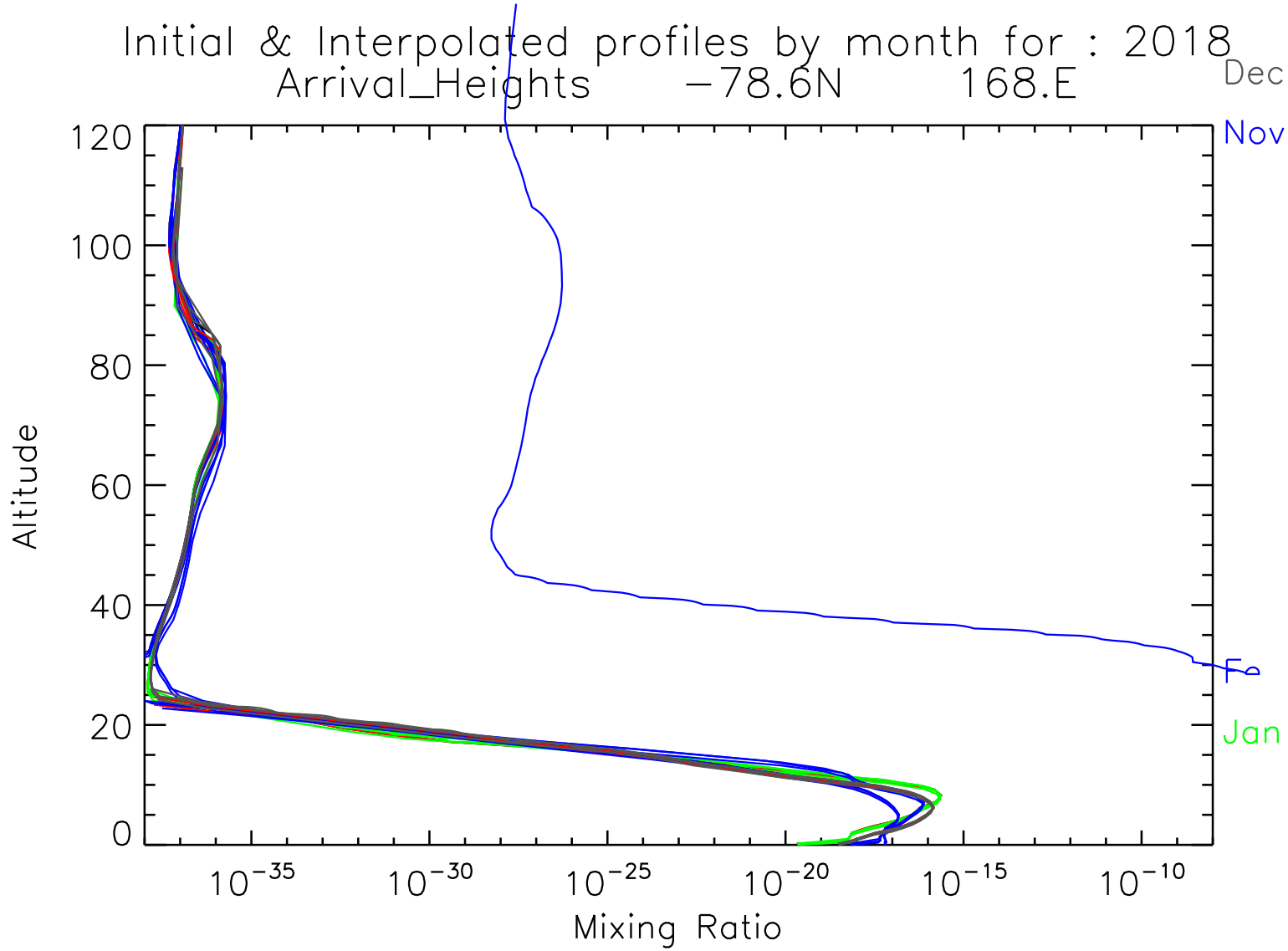
10^{-15}
10^{-10}
Mixing Ratio

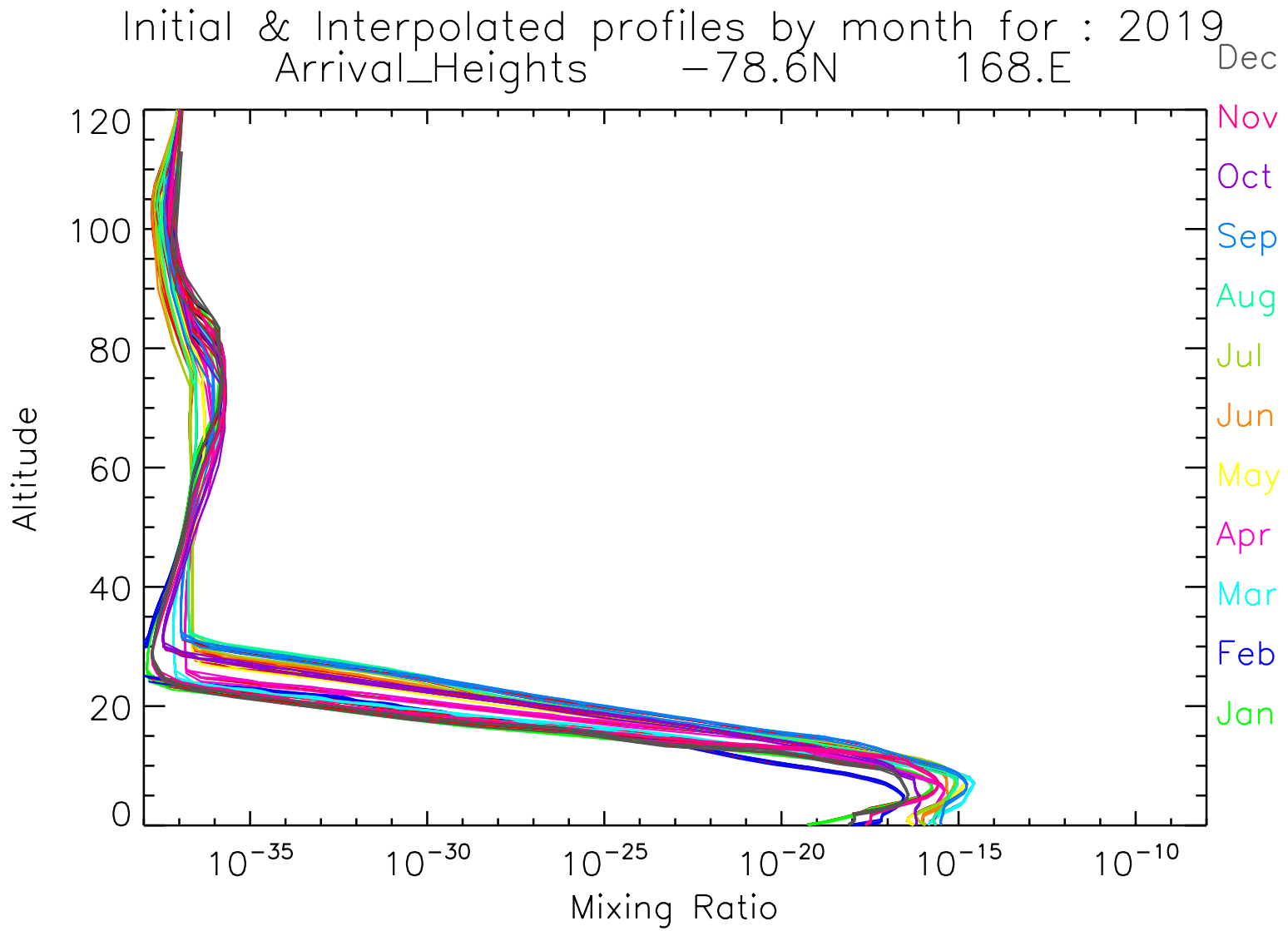

Initial & Interpolated profiles by month for : 2014
Arrival_Heights −78.6N 168.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

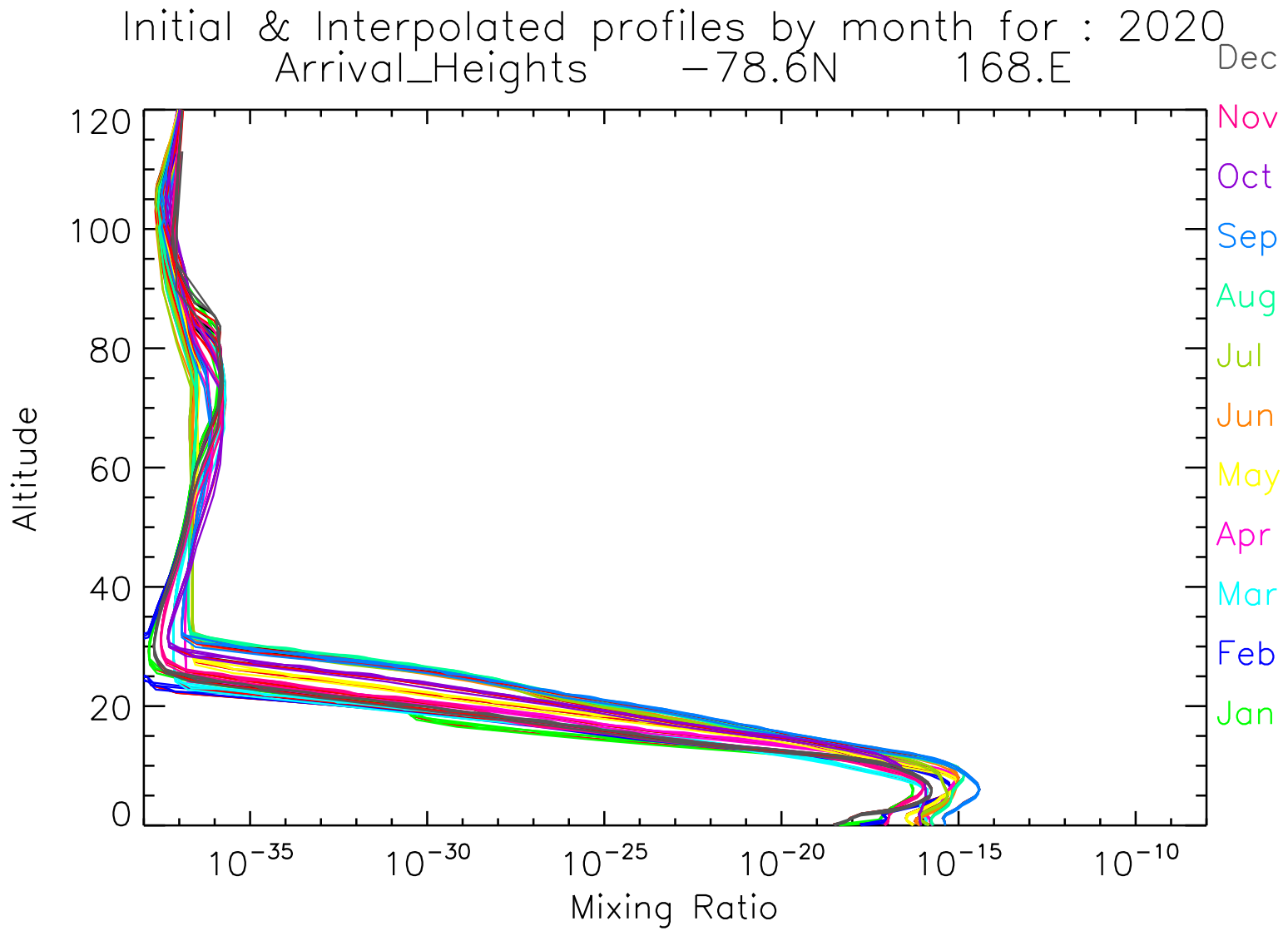

Initial & Interpolated profiles by month for : 2015
Arrival_Heights −78.6N 168.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

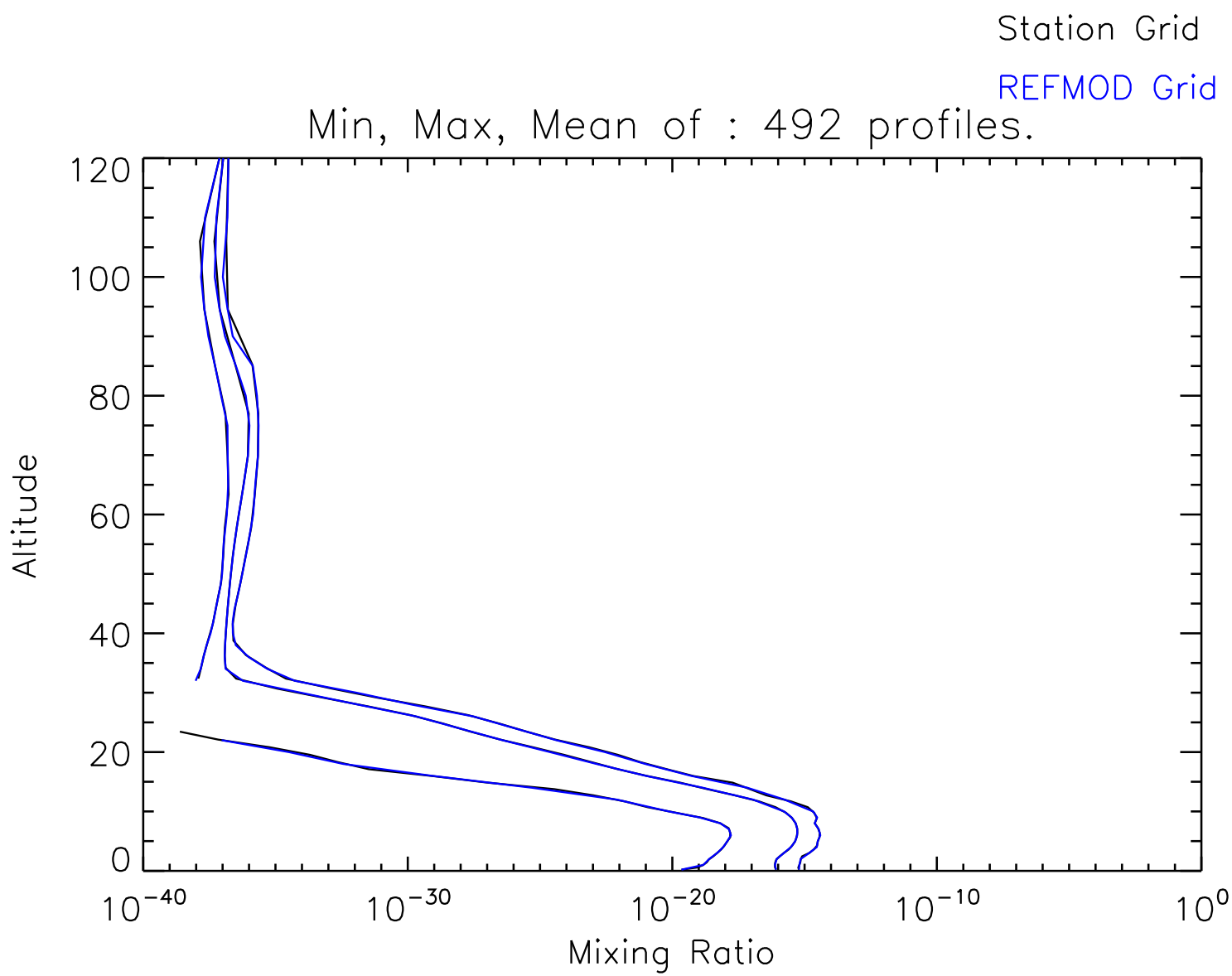

Initial & Interpolated profiles by month for : 2016
Arrival_Heights −78.6N 168.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

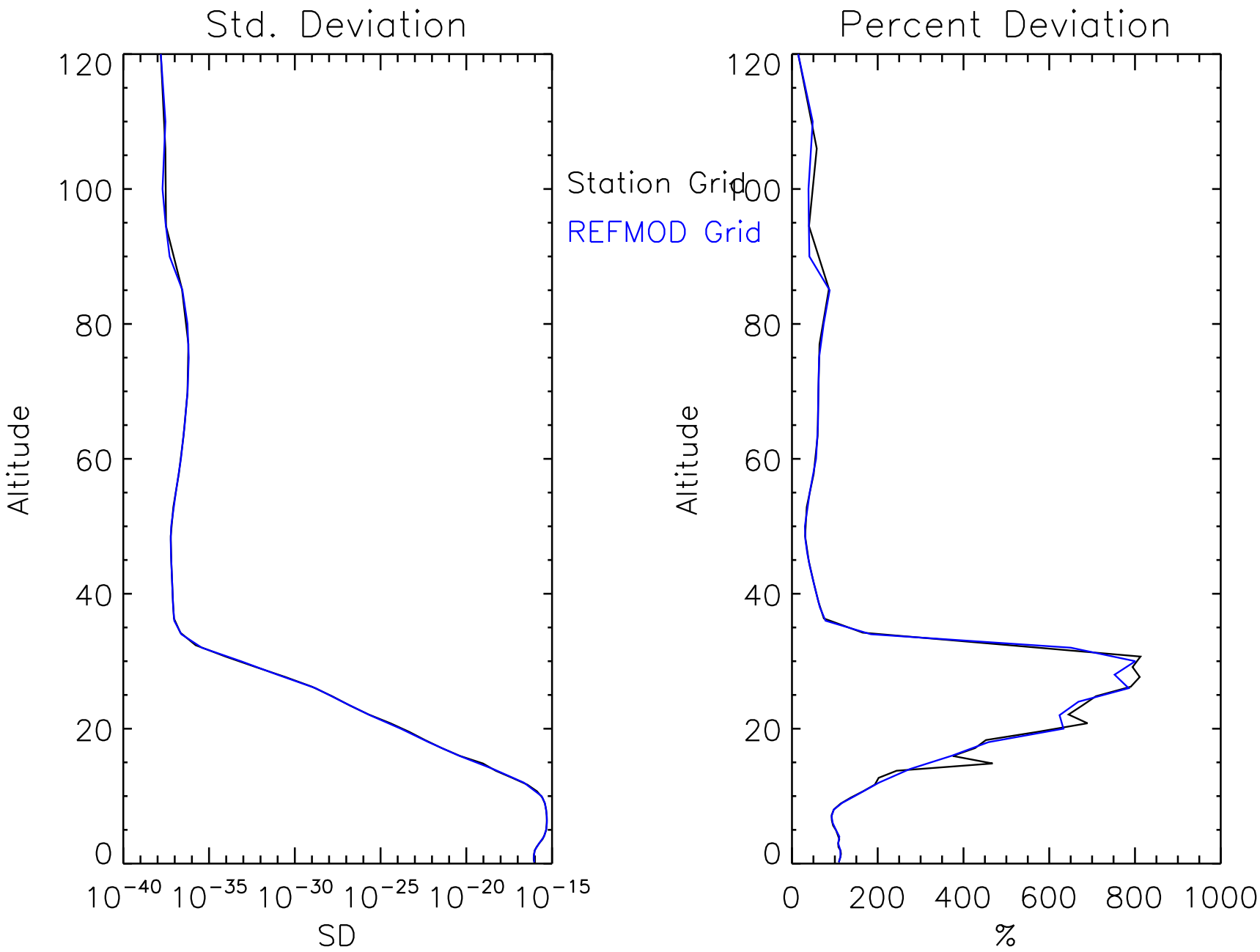

Initial & Interpolated profiles by month for : 2017
Arrival_Heights −78.6N 168.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

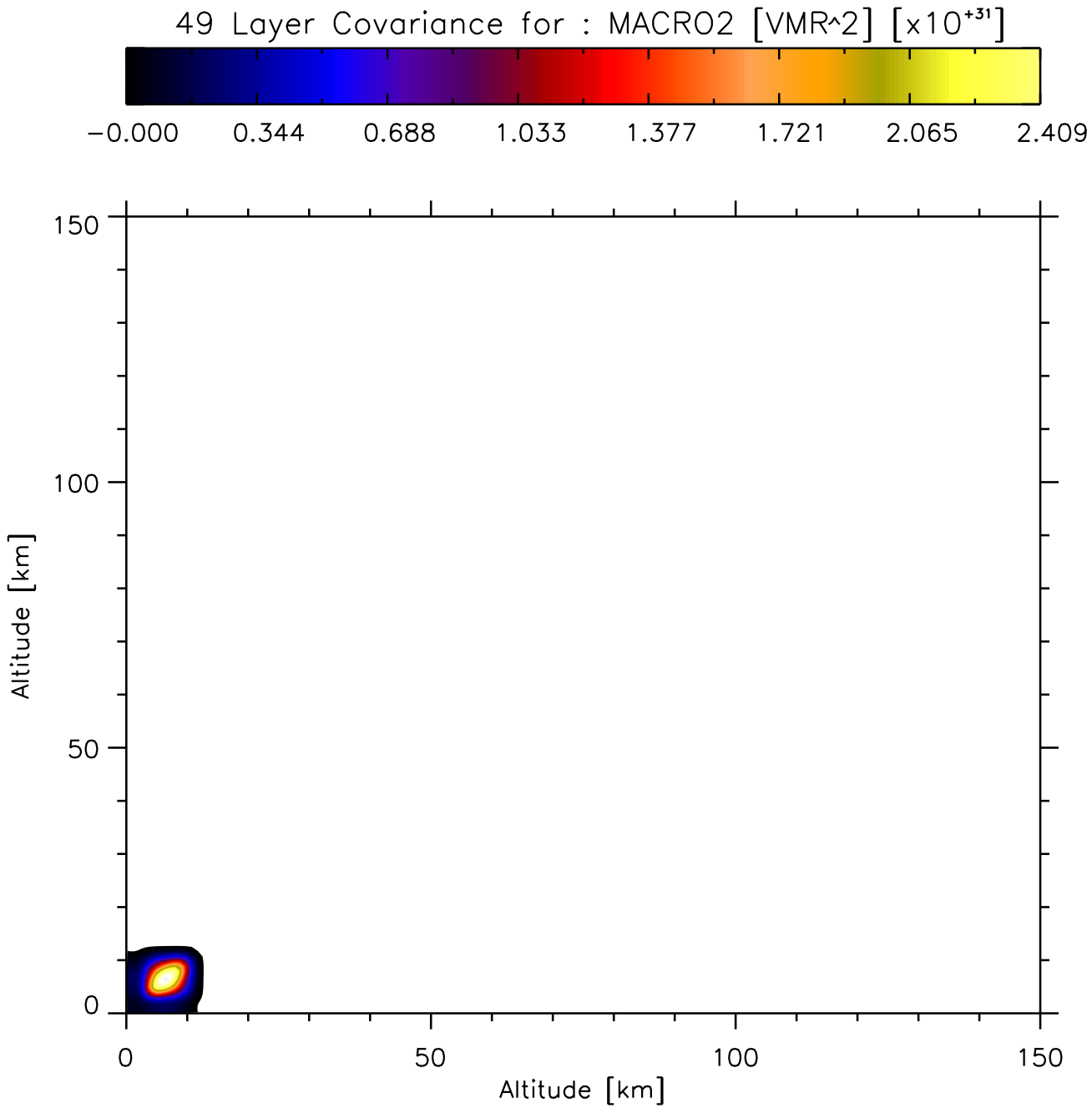

Initial & Interpolated profiles by month for : 2018
Arrival_Heights −78.6N 168.E
Dec
Nov
Fe
Jan
Altitude
120
100
80
60
40
20
0
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2019
Arrival_Heights −78.6N 168.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

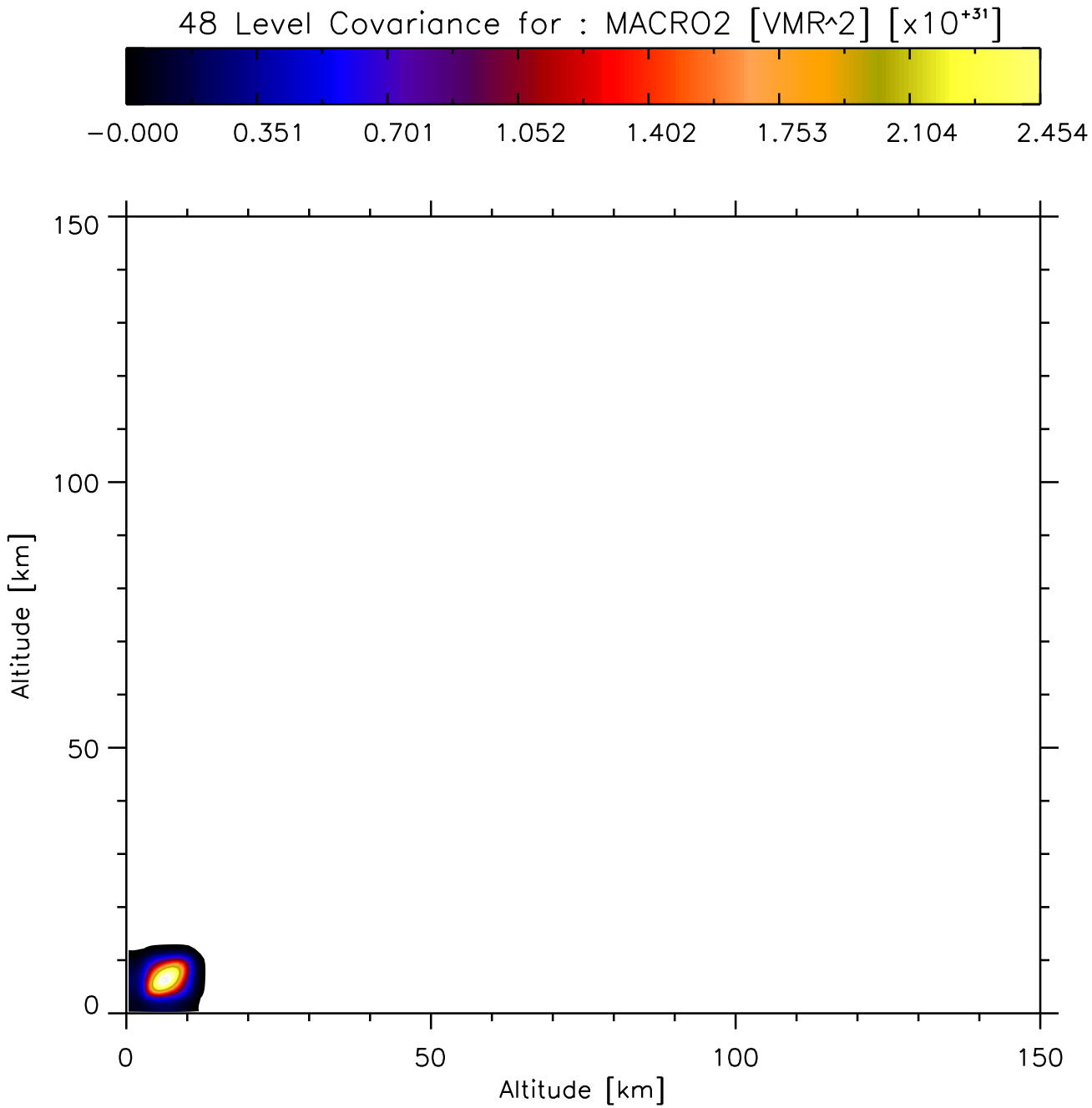

Initial & Interpolated profiles by month for : 2020
Arrival_Heights −78.6N 168.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
Altitude
120
100
80
60
40
20
0
10^{-40}
10^{-30}
10^{-20}
10^{-10}
10^{0}
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}
SD
0 200 400 600 800 1000
%


49 Layer Covariance for : MACRO2 [VMR^2] [x10^+31]
−0.000
0.344
0.688
1.033
1.377
1.721
2.065
2.409
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

49 Layer Covariance for : MACRO2 [VMR^2] [x10^+31]
0.0
0.5
1.0
1.5
2.0
2.5
Y Altitude
0
50
100
0
50
X Altitude
100


48 Level Covariance for : MACRO2 [VMR^2] [x10^+31]
−0.000
0.351
0.701
1.052
1.402
1.753
2.104
2.454
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

48 Level Covariance for : MACRO2 [VMR^2] [x10^+31]
0.0
0.5
1.0
1.5
2.0
2.5
Y Altitude
0
50
100
0
50
100
X Altitude