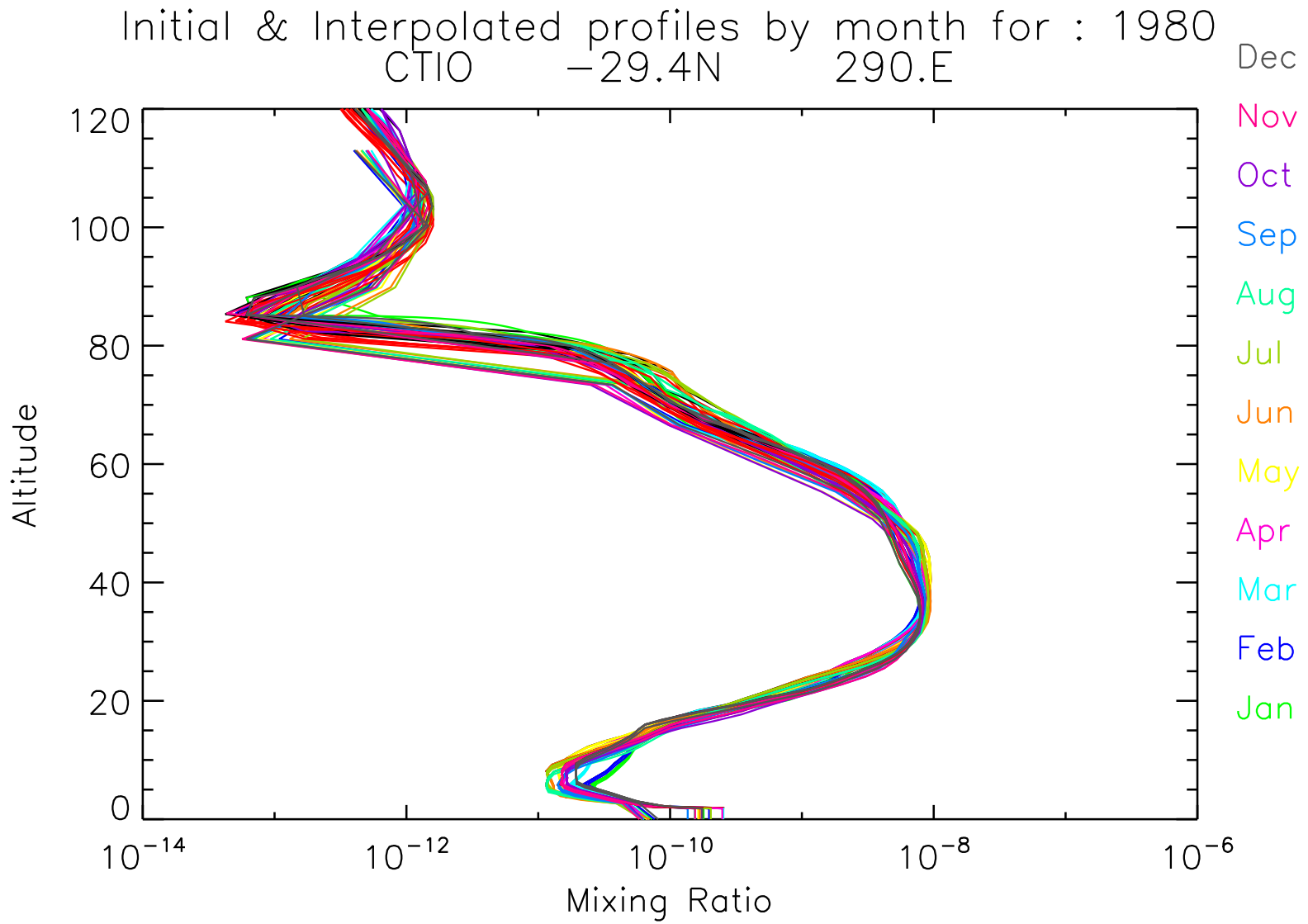
Initial & Interpolated profiles by month for : 1980
CTIO −29.4N 290.E
Dec
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Altitude
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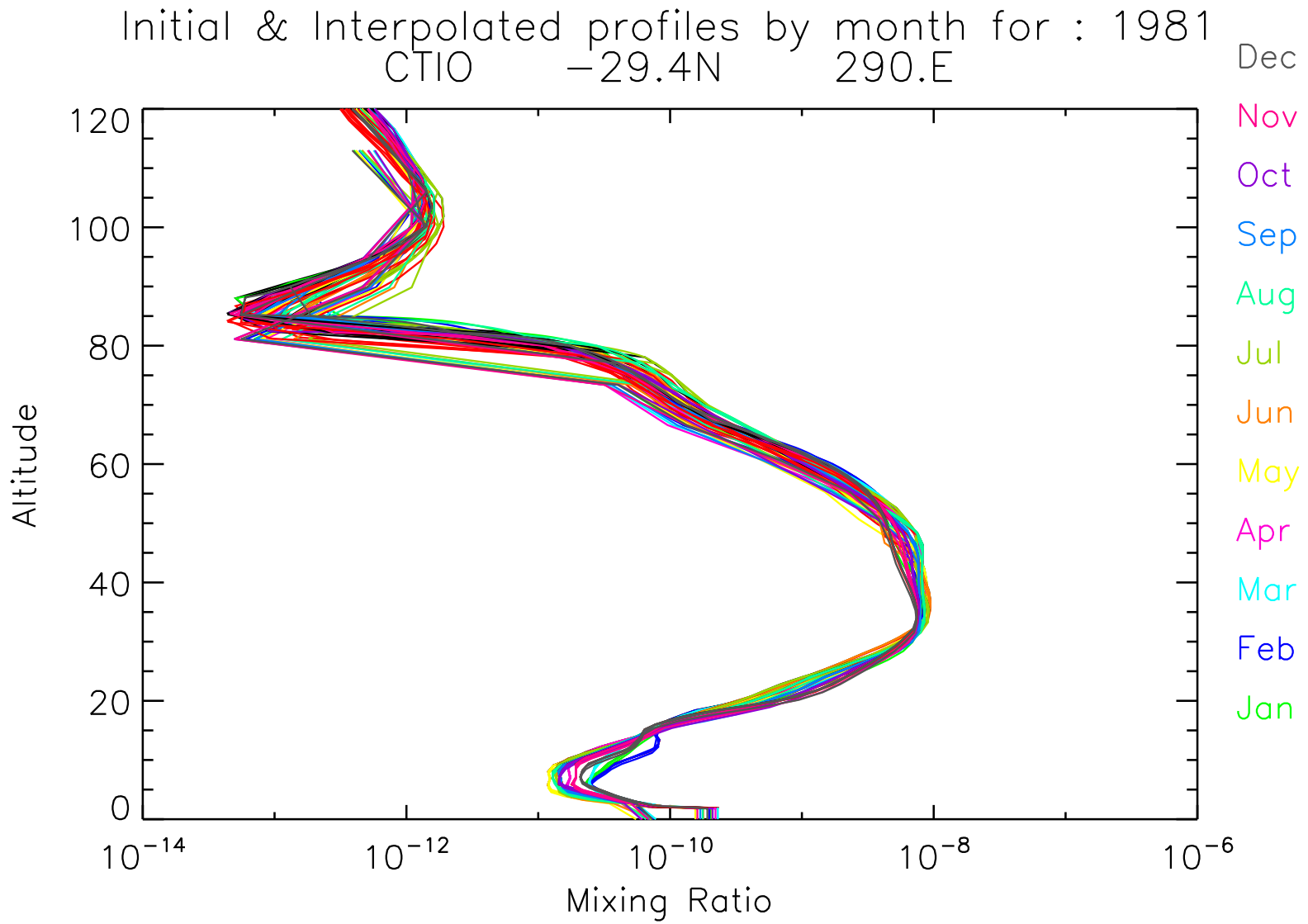
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 1981
CTIO −29.4N 290.E
Dec
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Altitude
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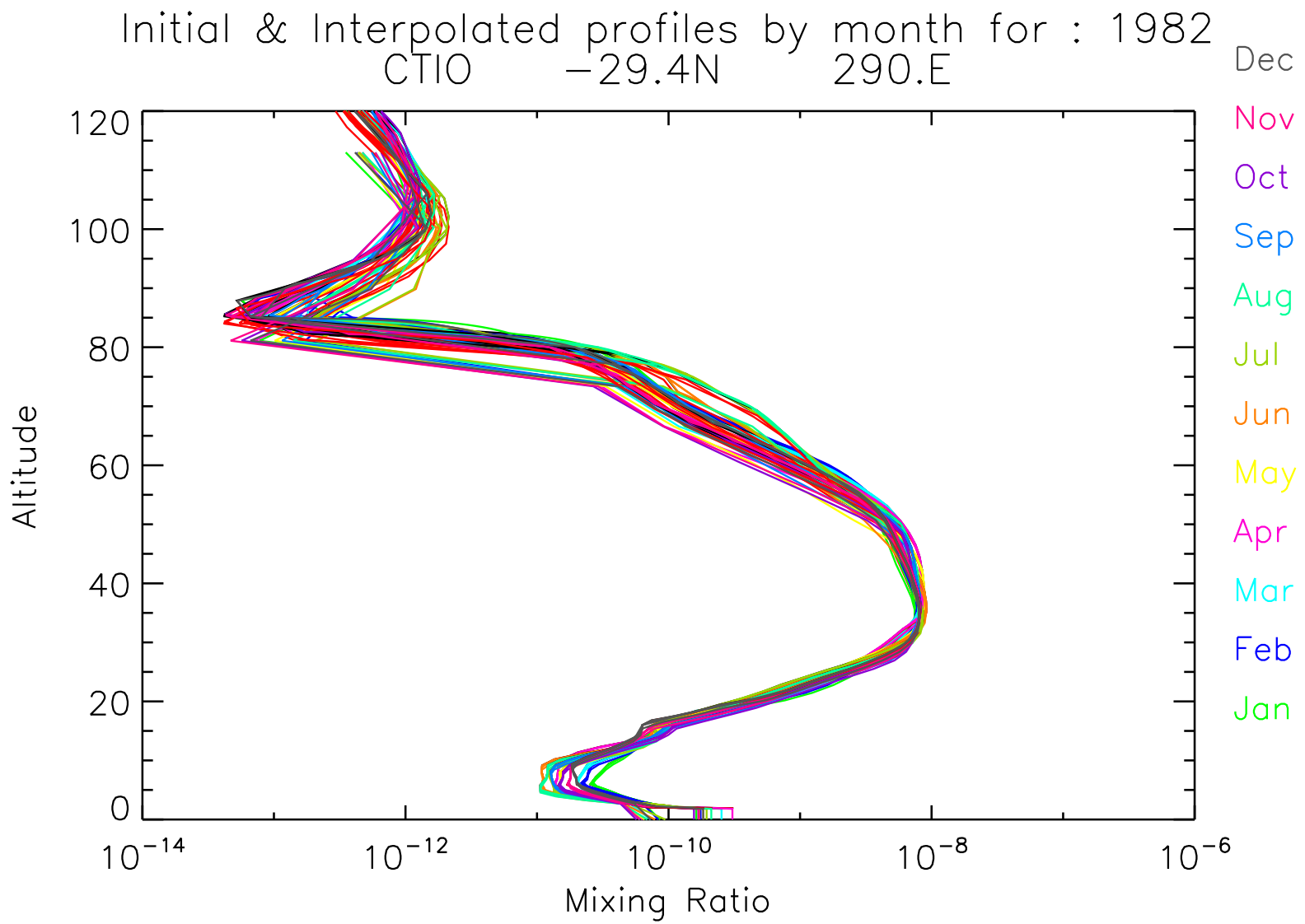
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 1982
CTIO −29.4N 290.E
Dec
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Altitude
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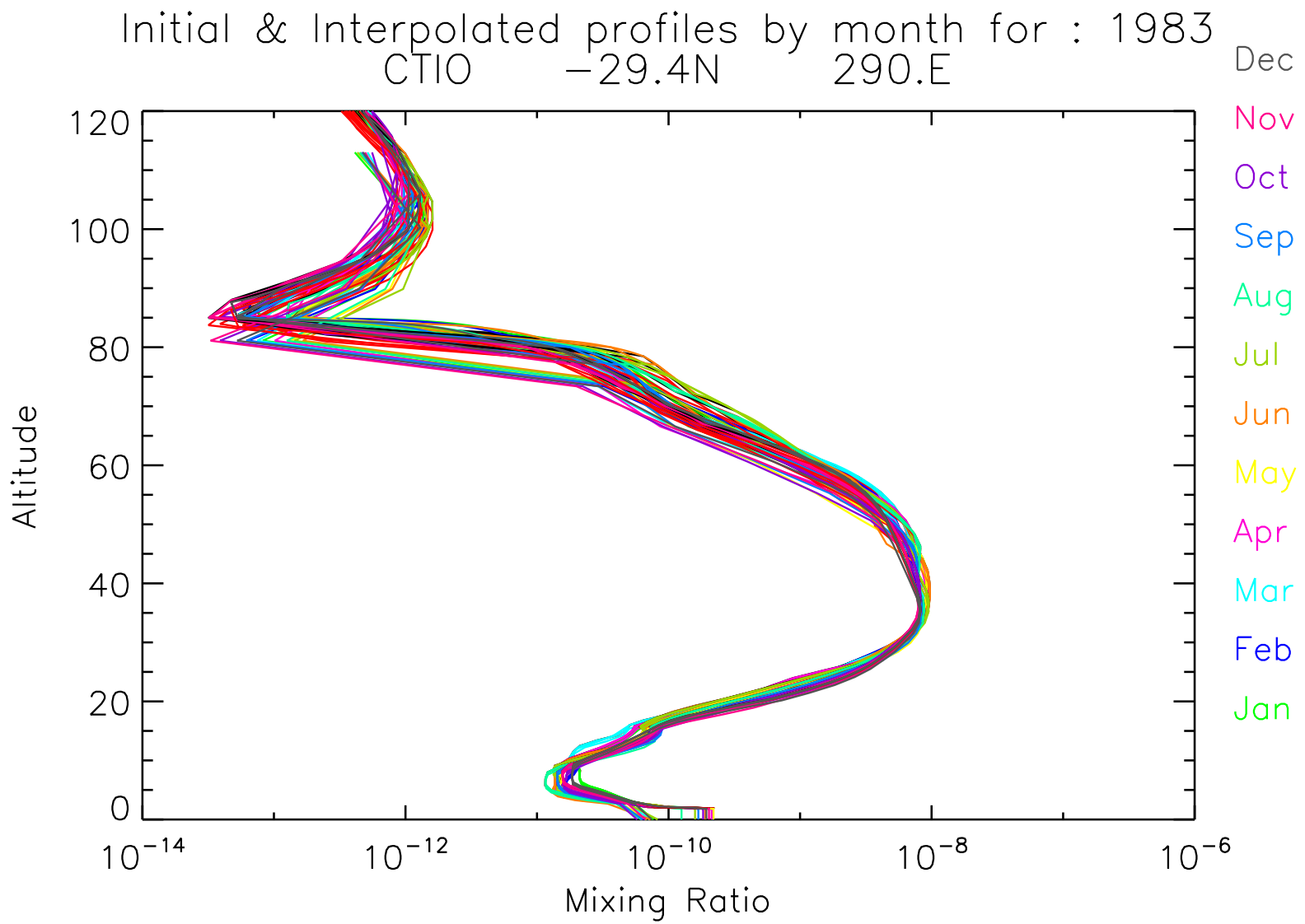
10^{-8}
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 1983
CTIO −29.4N 290.E
Dec
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Altitude
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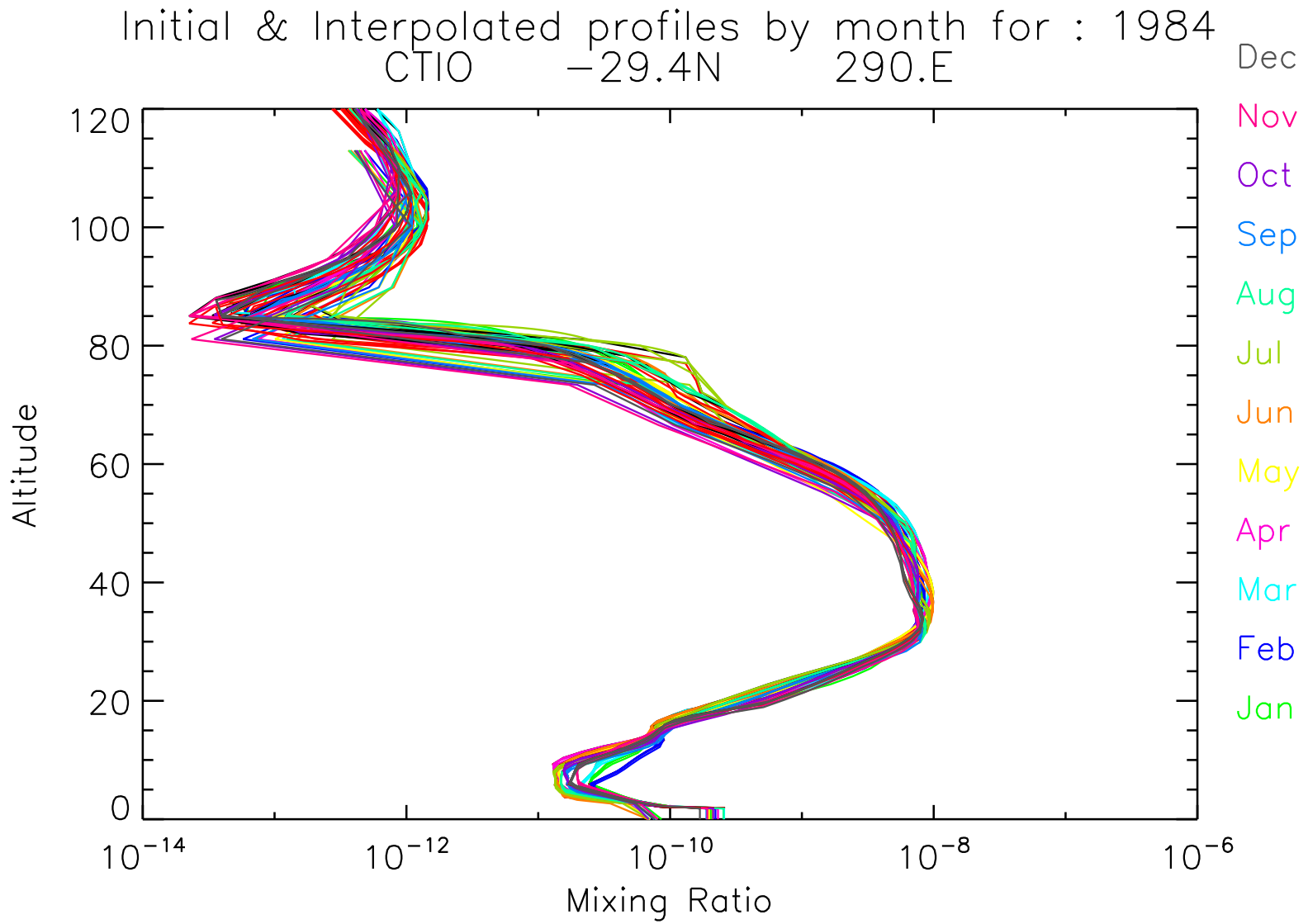
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 1984
CTIO −29.4N 290.E
Dec
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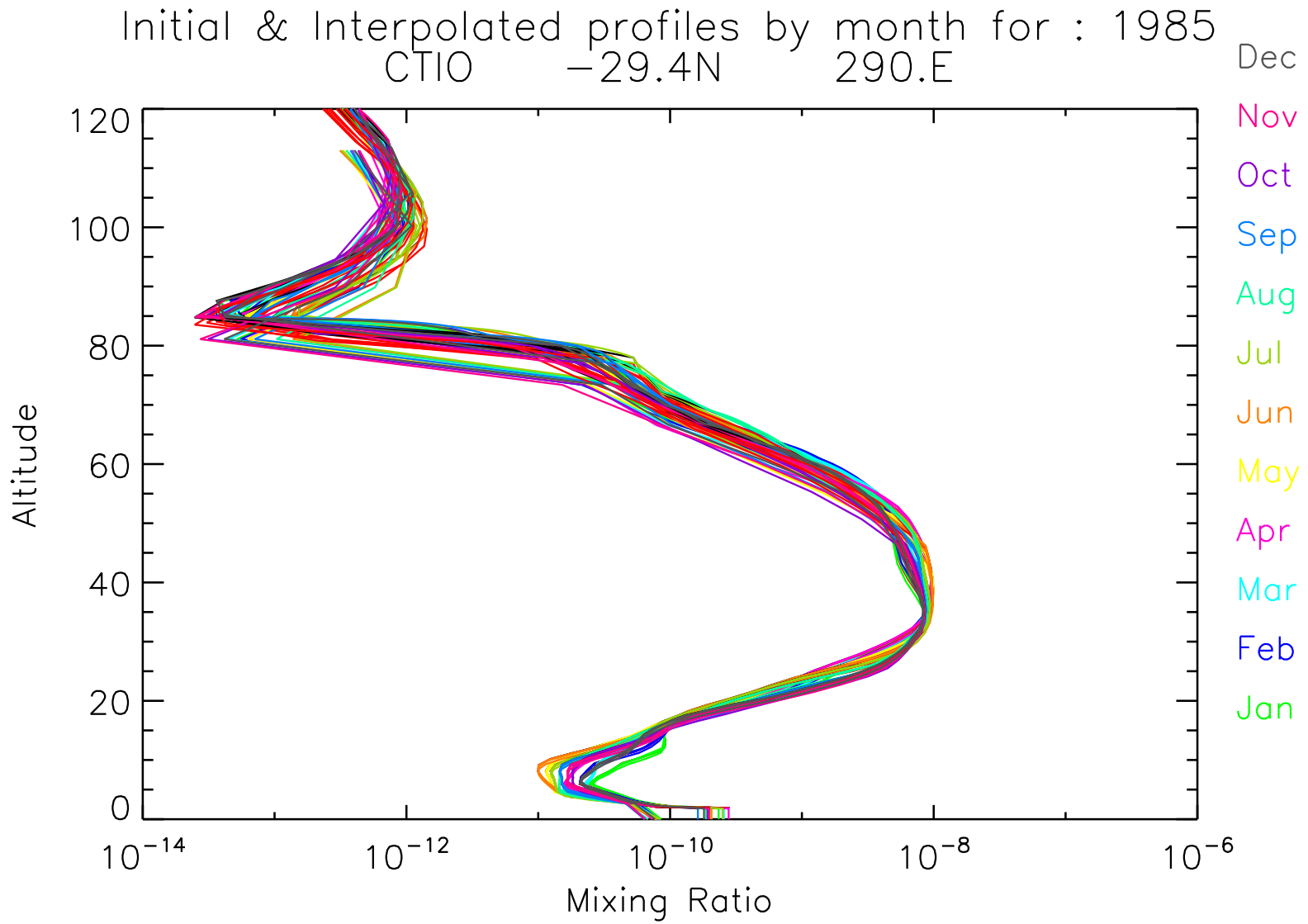
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 1985
CTIO −29.4N 290.E
Dec
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Altitude
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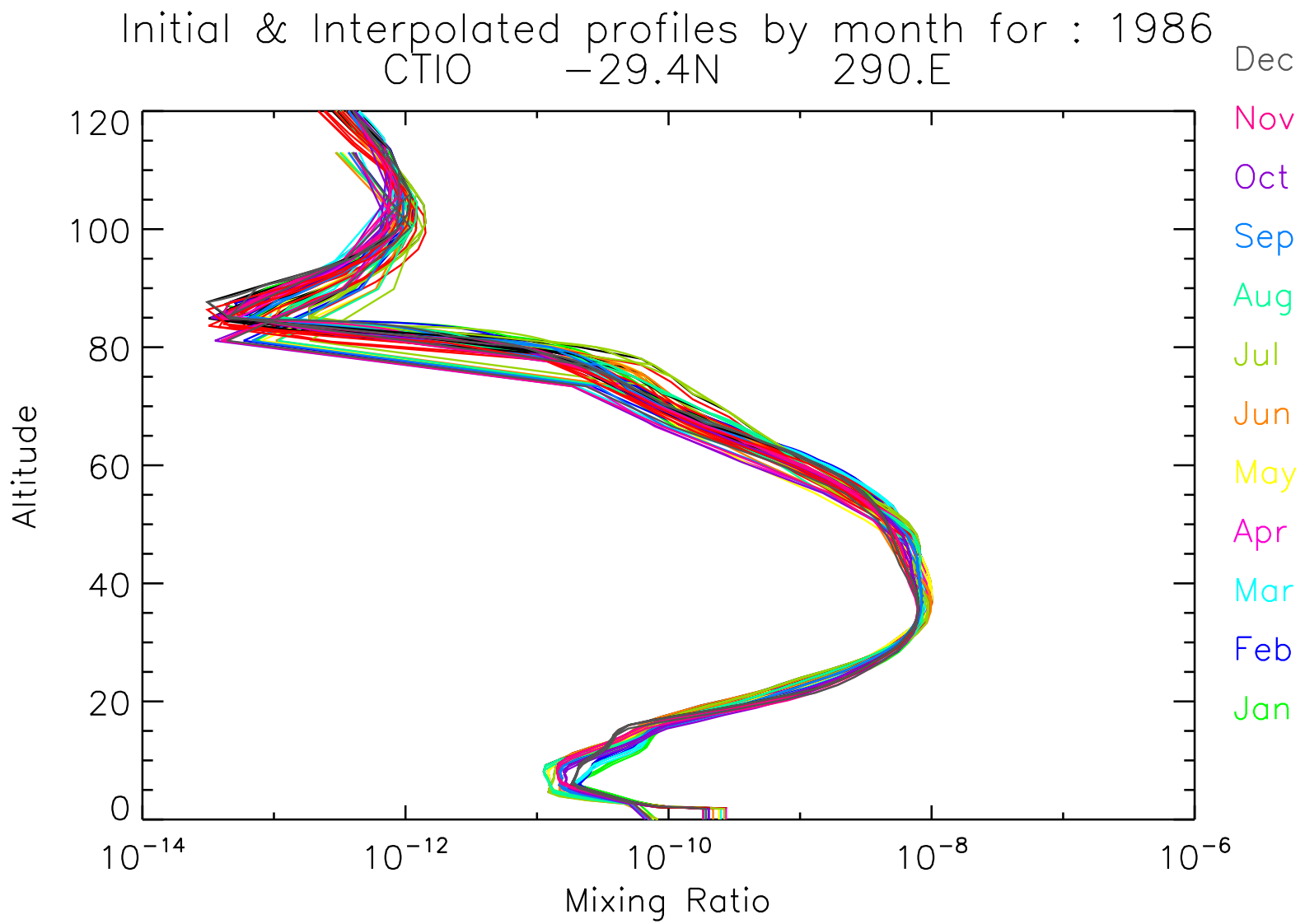
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 1986
CTIO −29.4N 290.E
Dec
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Altitude
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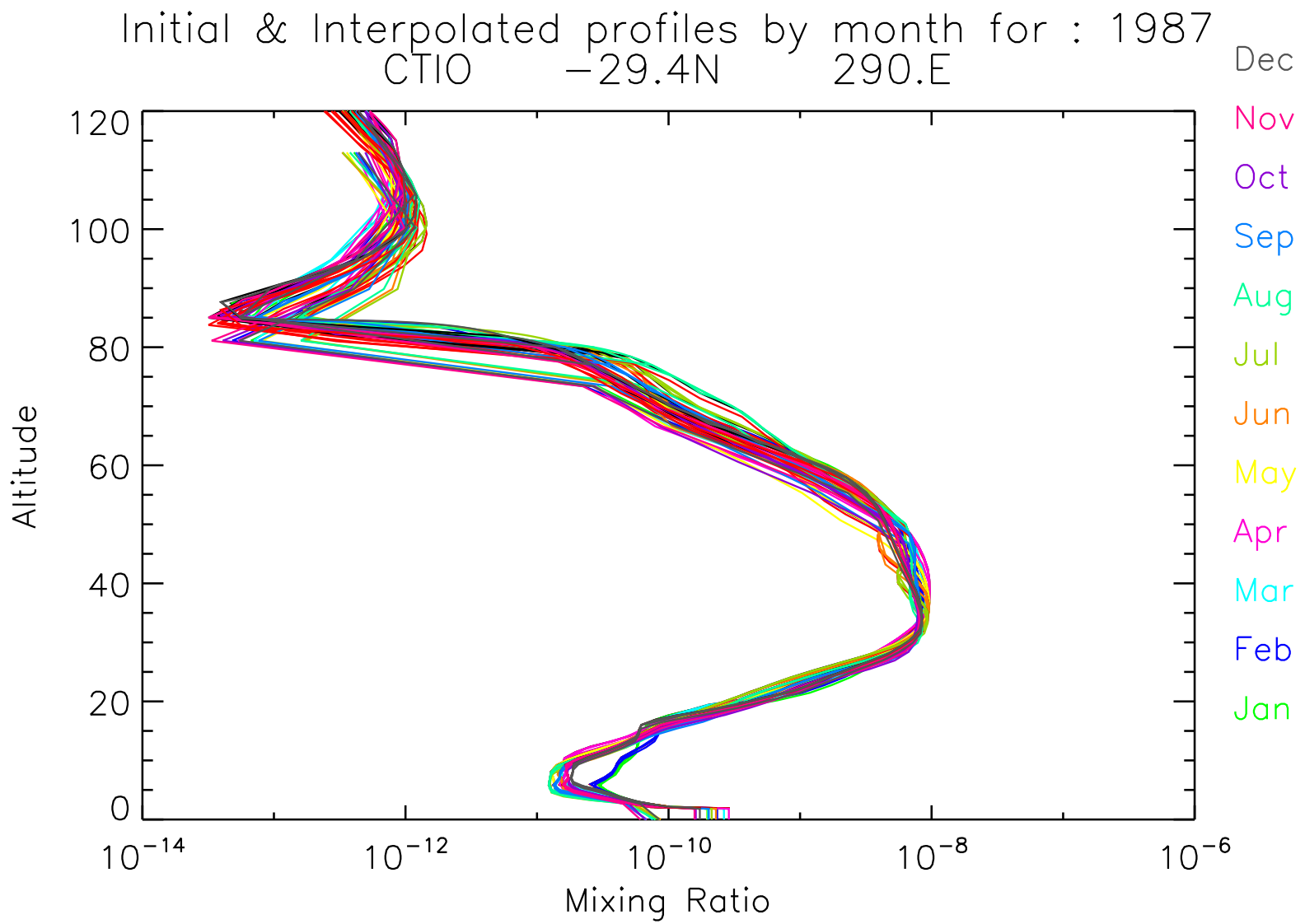
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 1987
CTIO −29.4N 290.E
Dec
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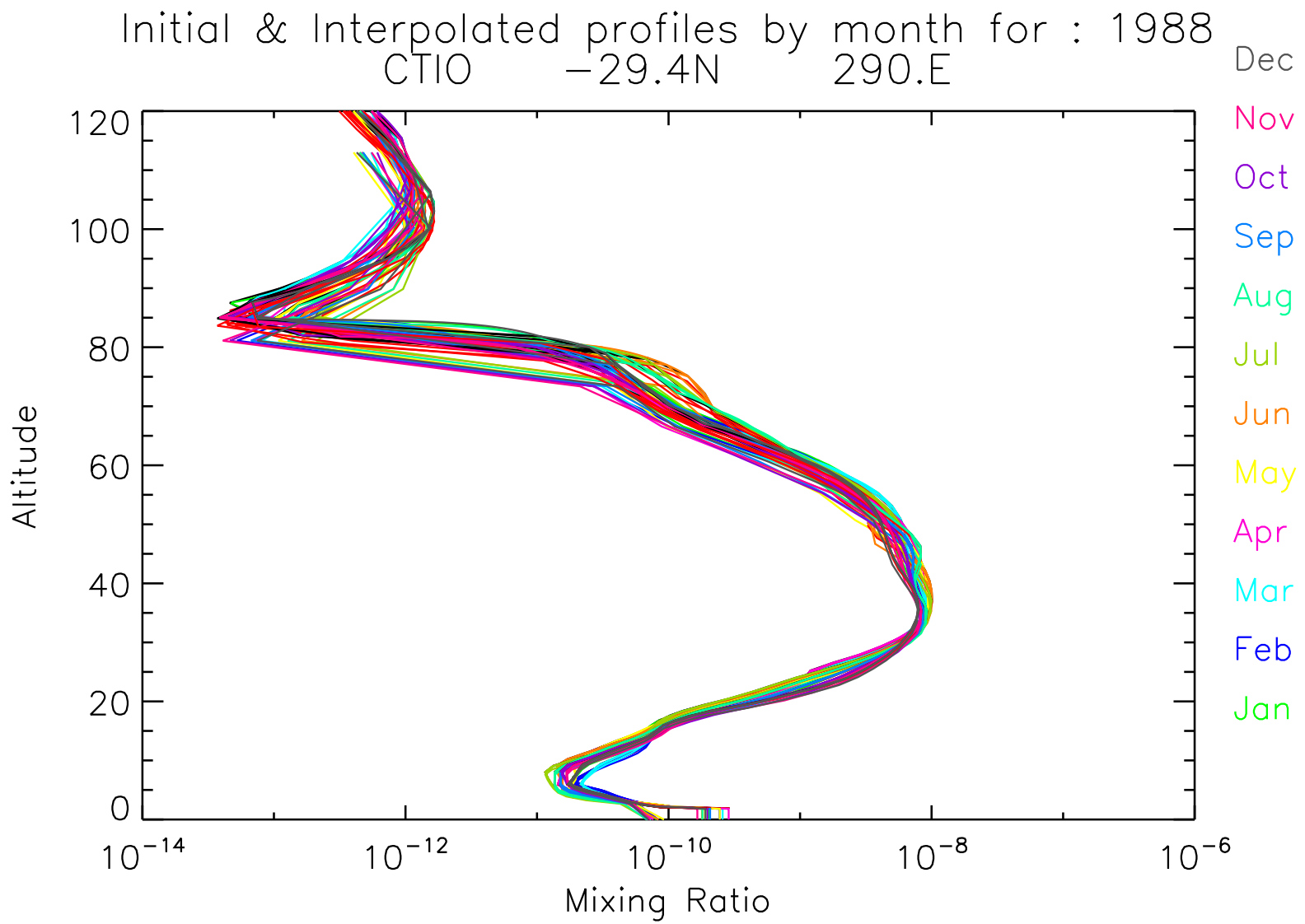
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 1988
CTIO −29.4N 290.E
Dec
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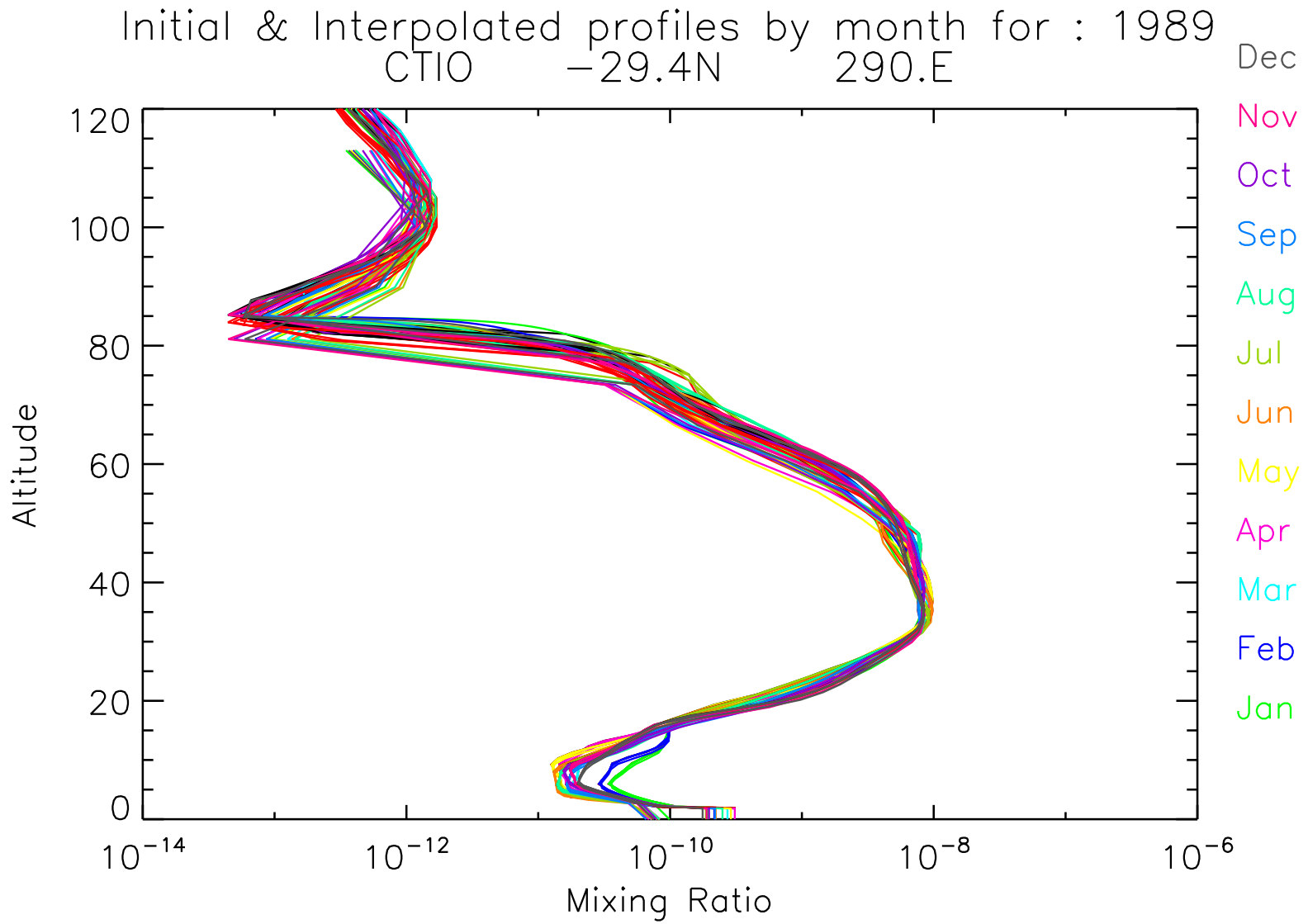
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 1989
CTIO −29.4N 290.E
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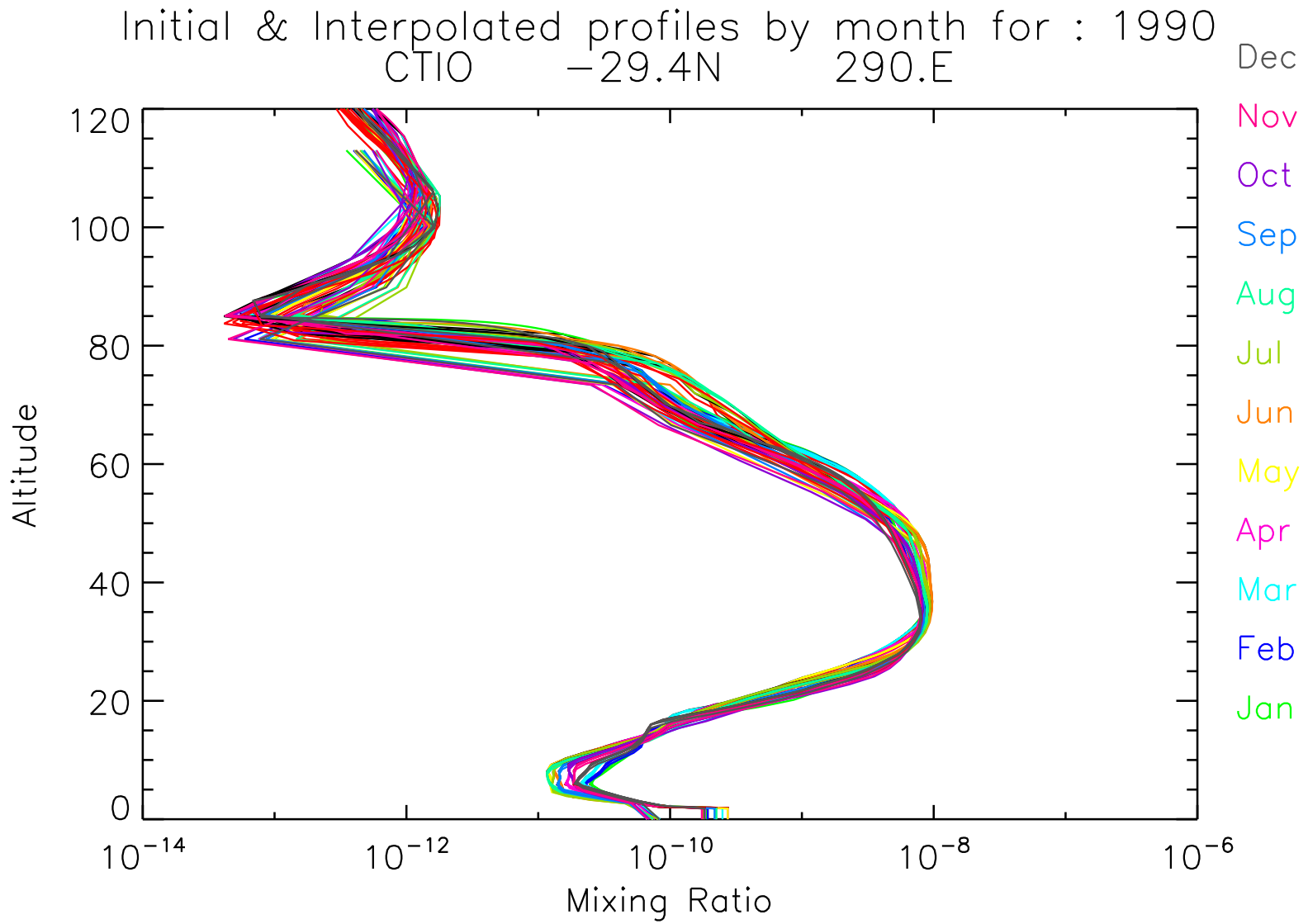
Mixing Ratio


Initial & Interpolated profiles by month for : 1990
CTIO −29.4N 290.E
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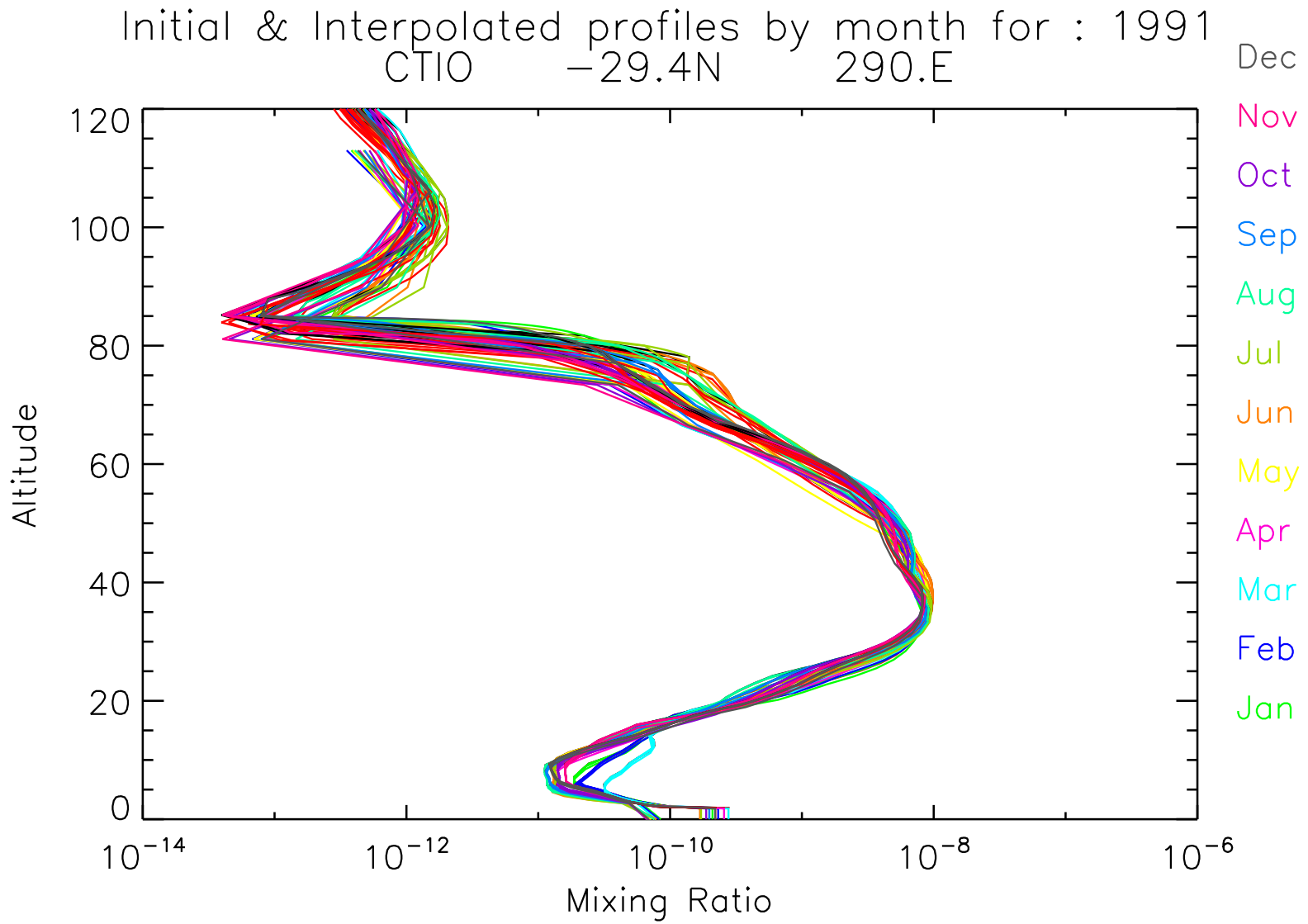
Mixing Ratio


Initial & Interpolated profiles by month for : 1991
CTIO −29.4N 290.E
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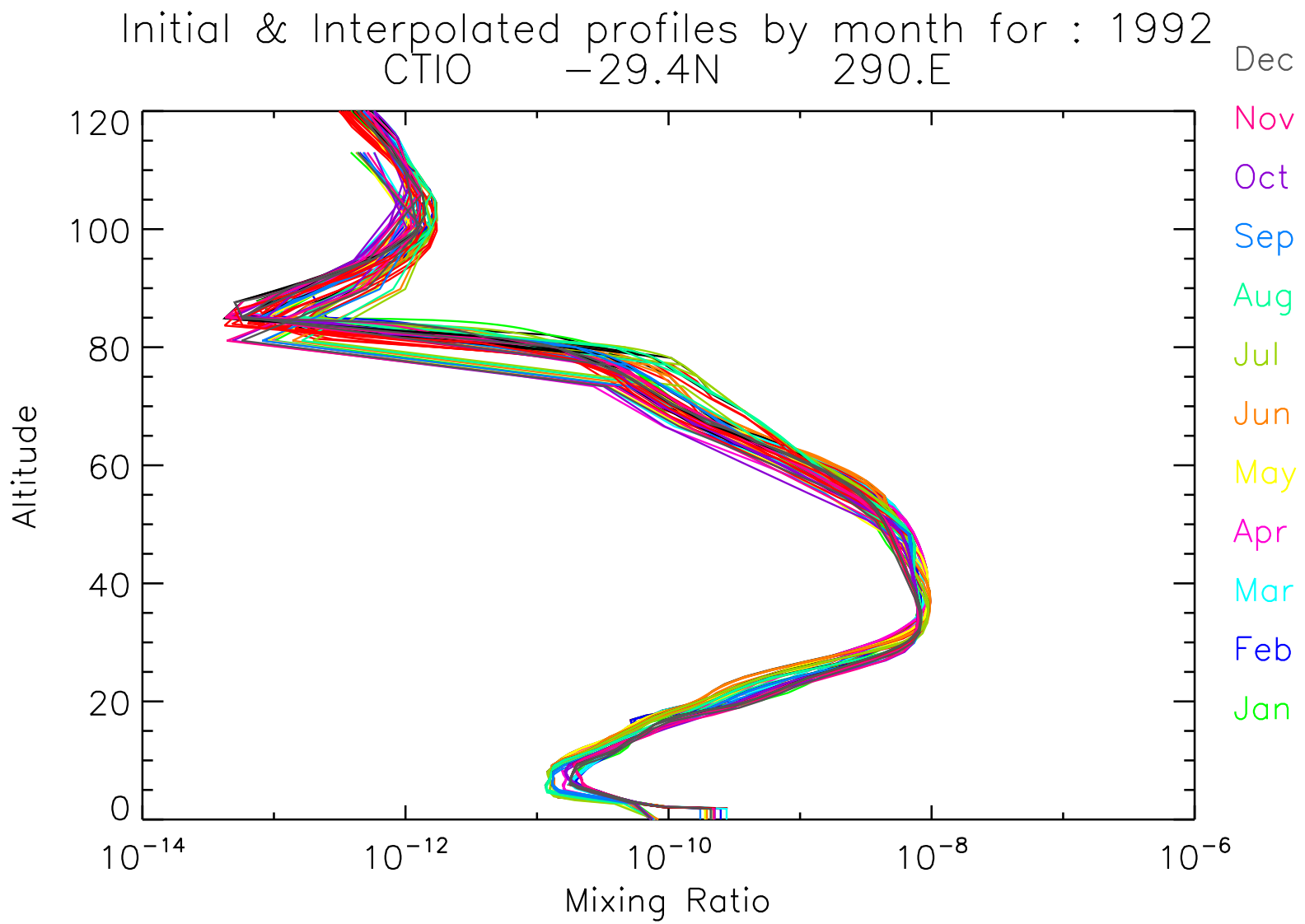
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 1992
CTIO −29.4N 290.E
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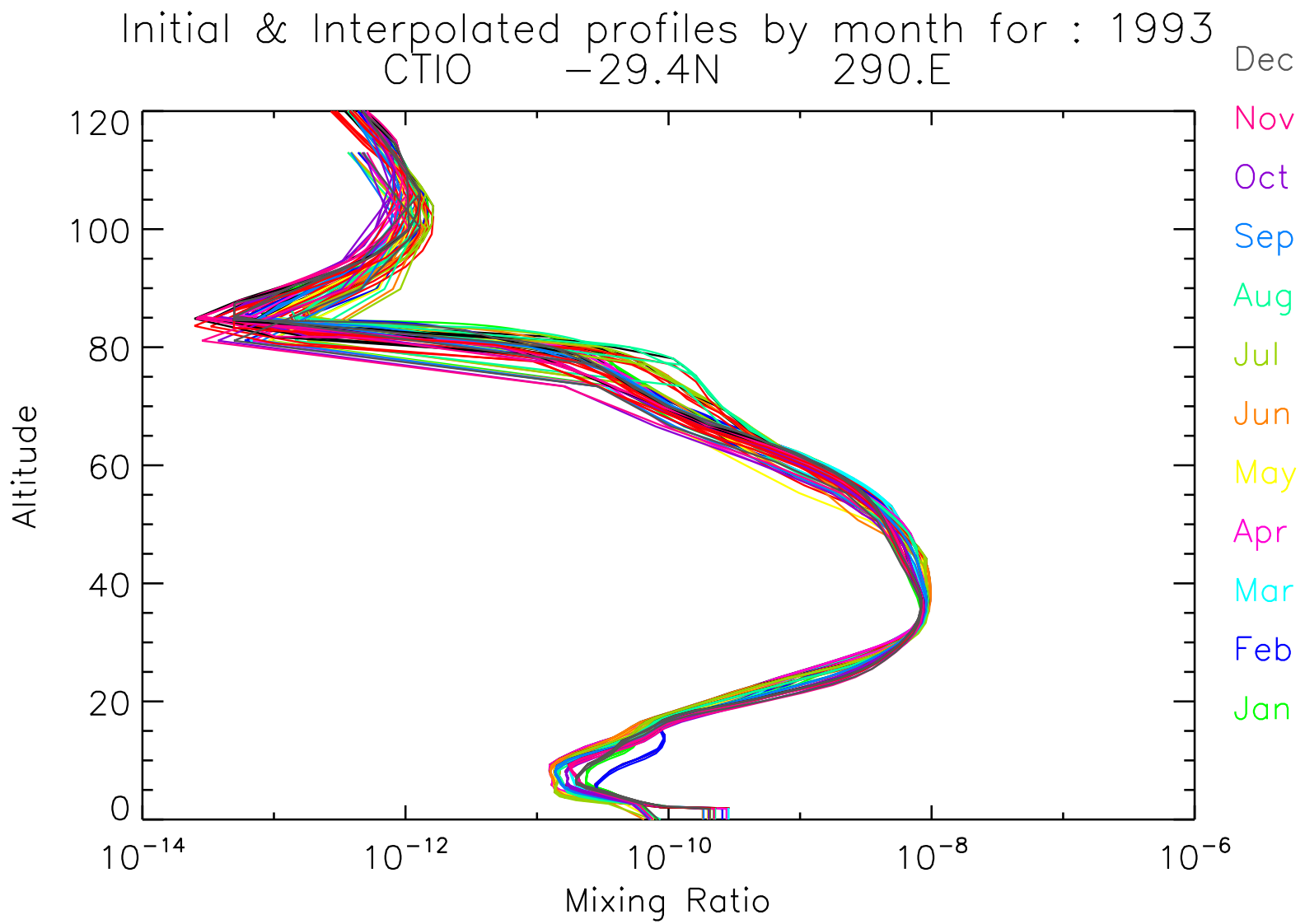
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 1993
CTIO −29.4N 290.E
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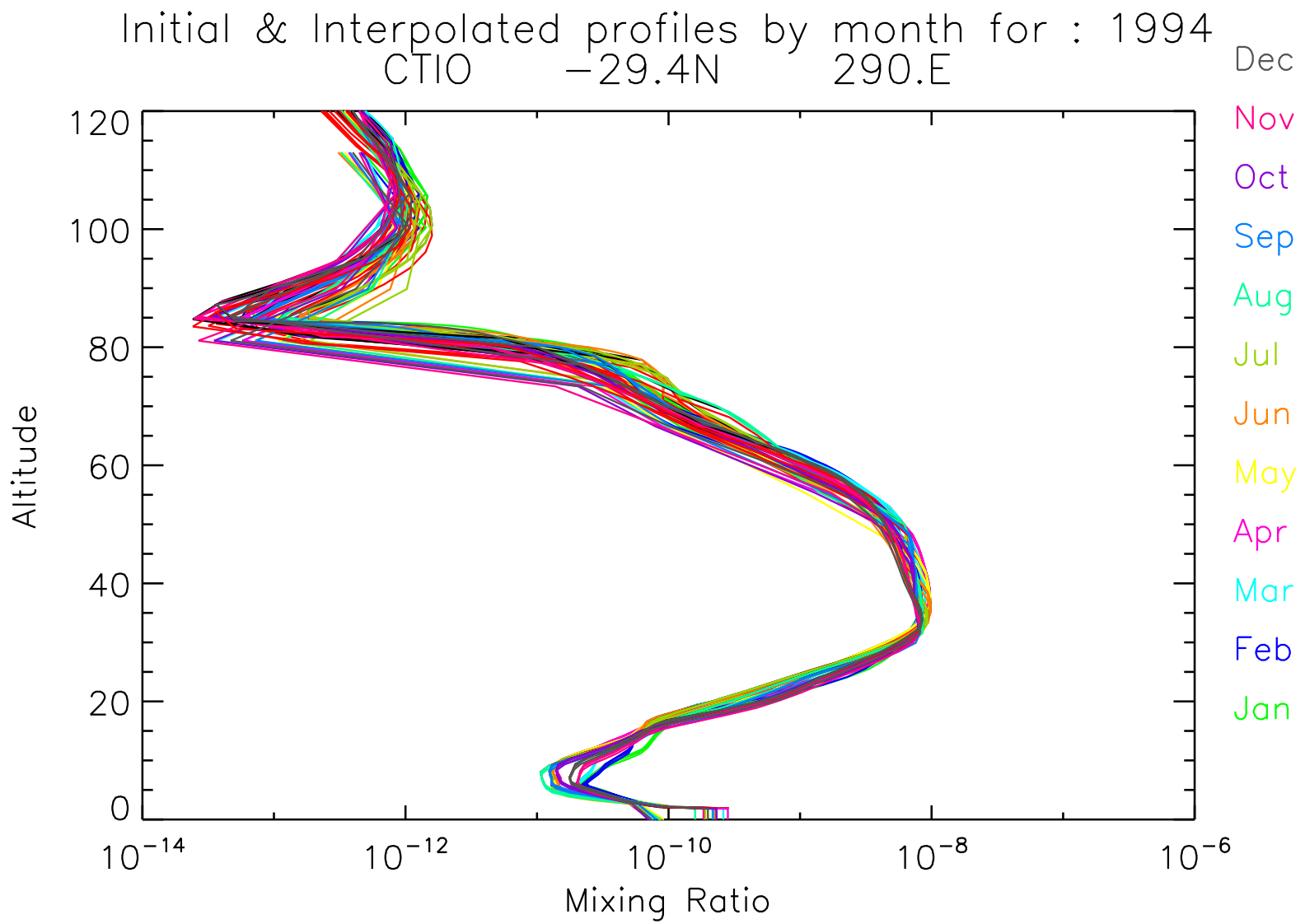
Mixing Ratio


Initial & Interpolated profiles by month for : 1994
CTIO −29.4N 290.E
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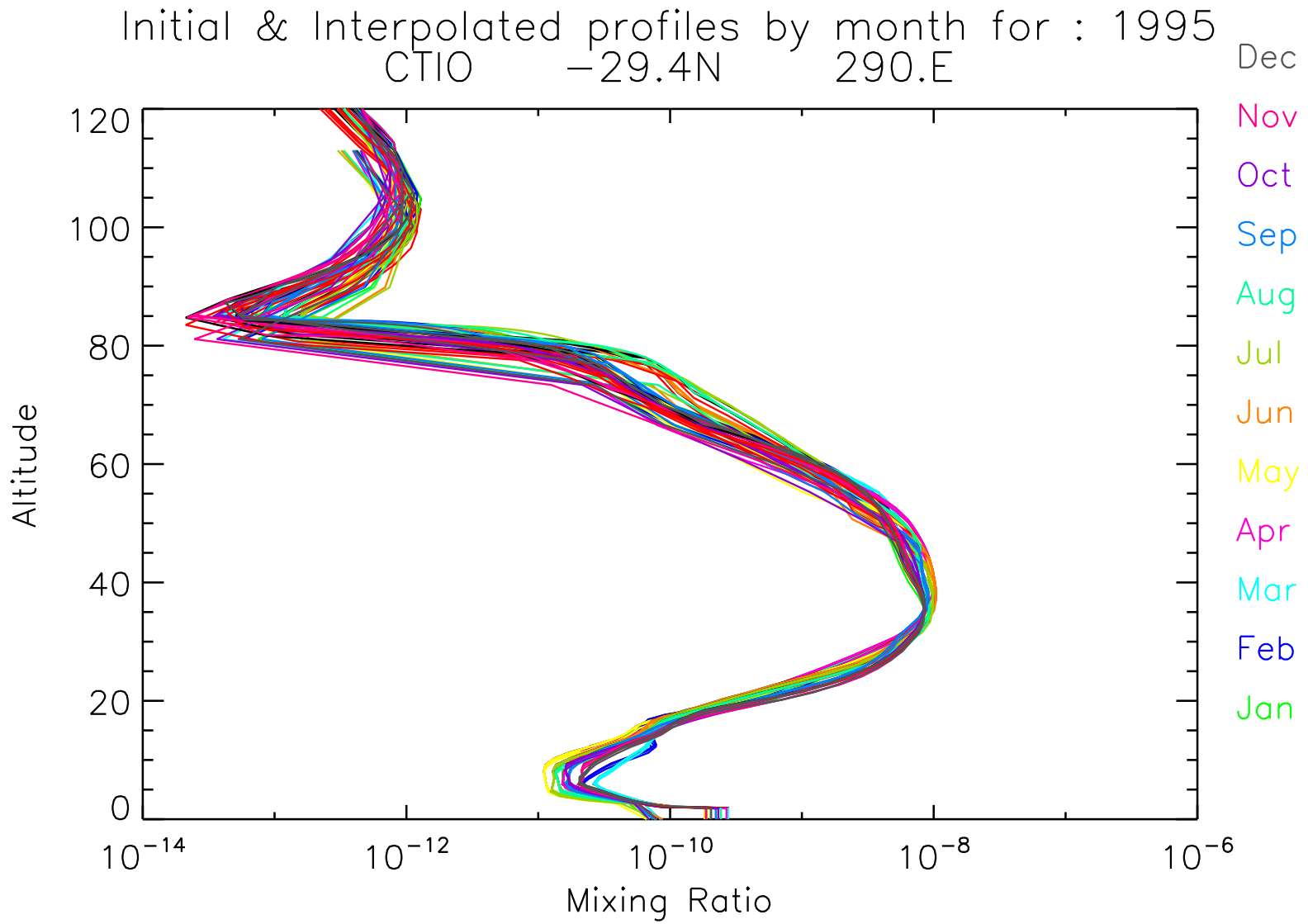
Mixing Ratio


Initial & Interpolated profiles by month for : 1995
CTIO −29.4N 290.E
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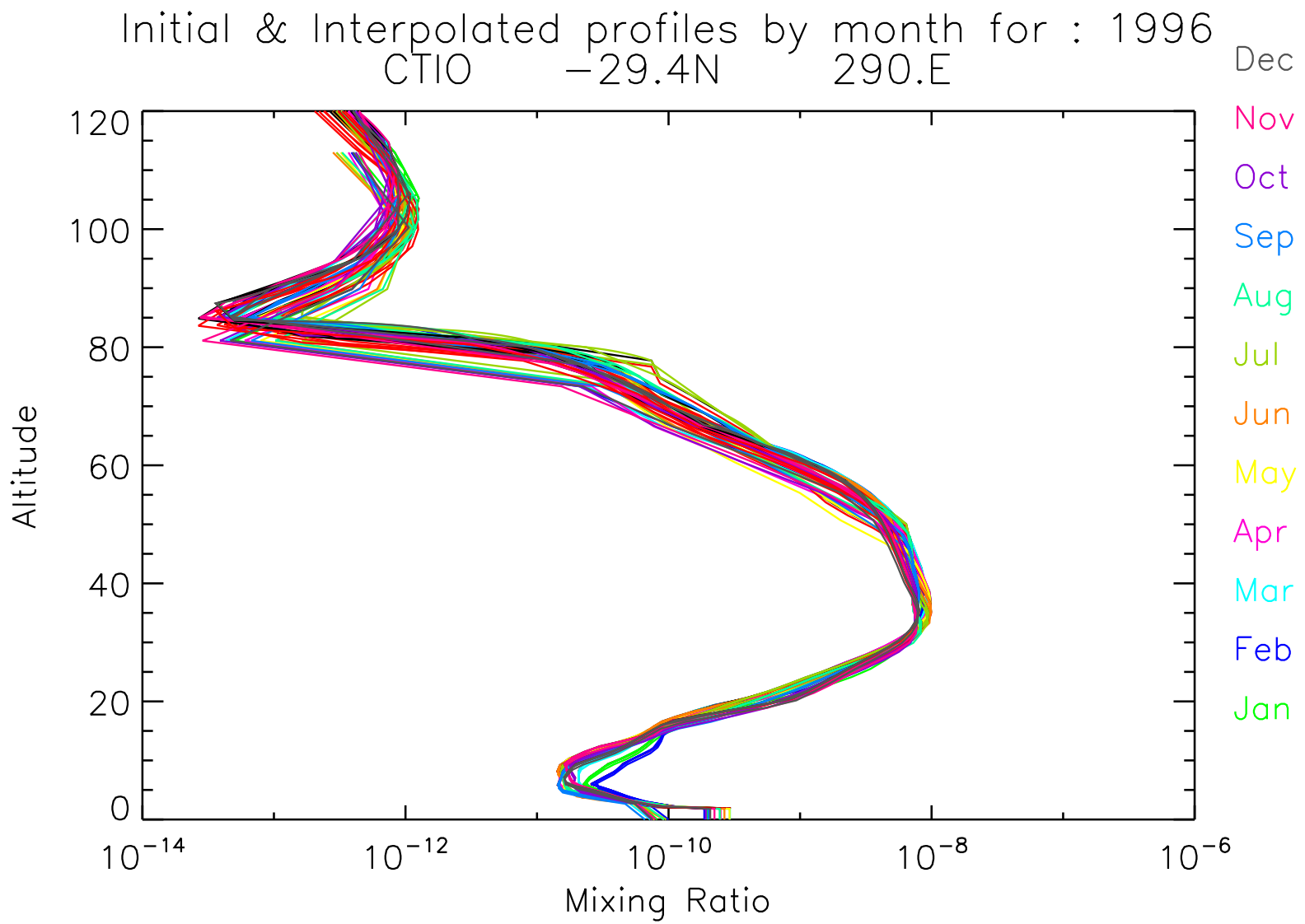
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 1996
CTIO −29.4N 290.E
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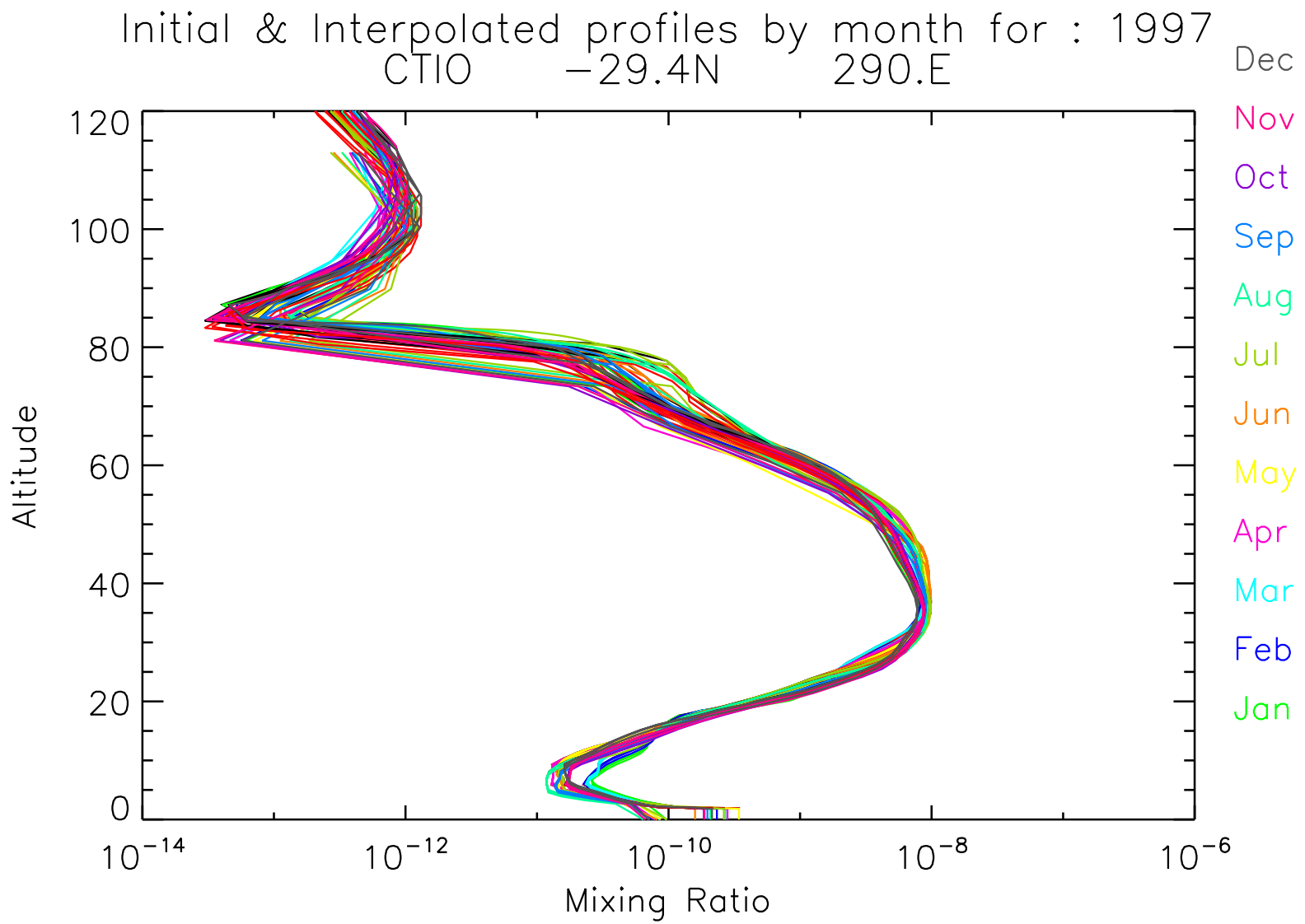
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 1997
CTIO −29.4N 290.E
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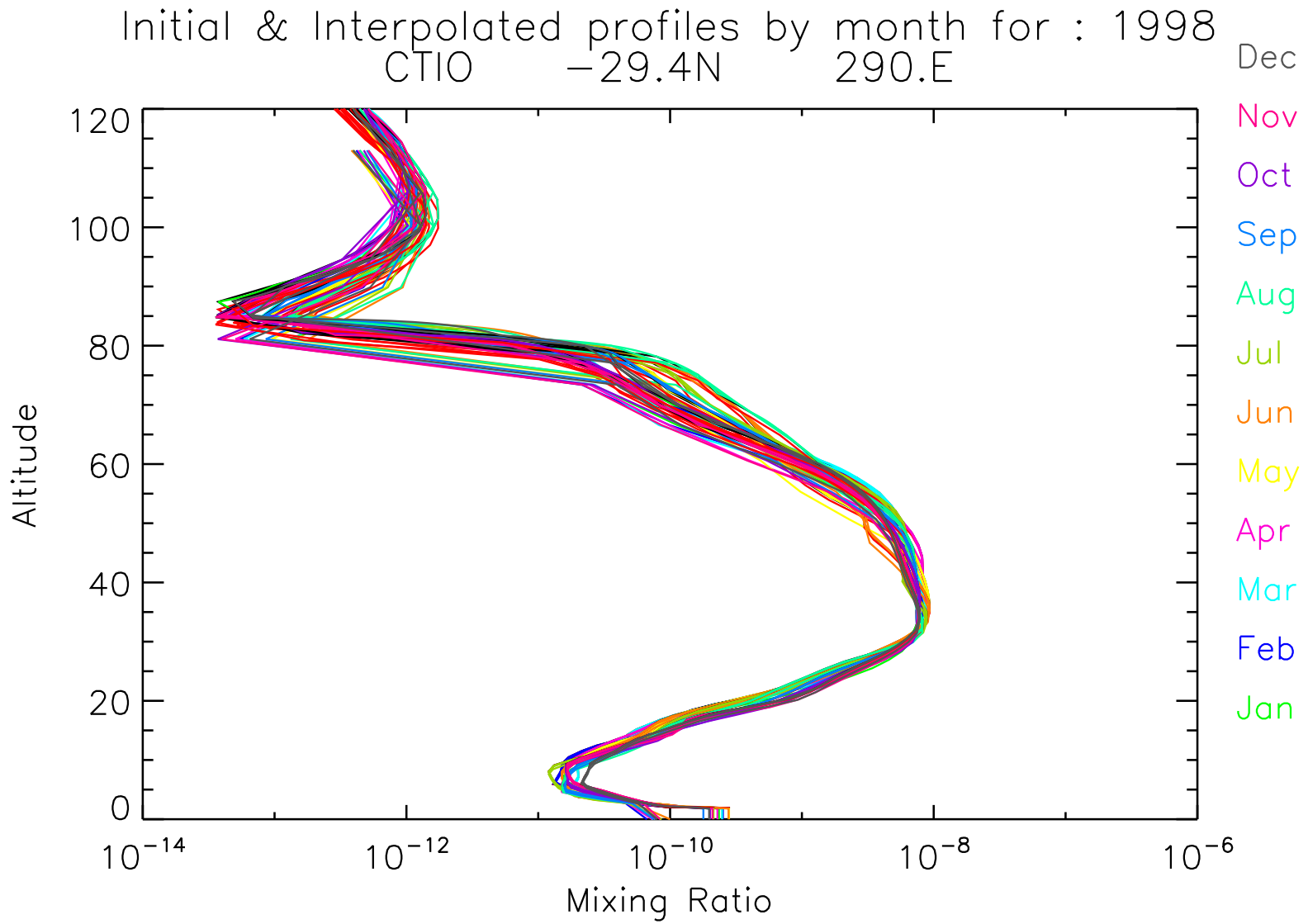
Mixing Ratio


Initial & Interpolated profiles by month for : 1998
CTIO −29.4N 290.E
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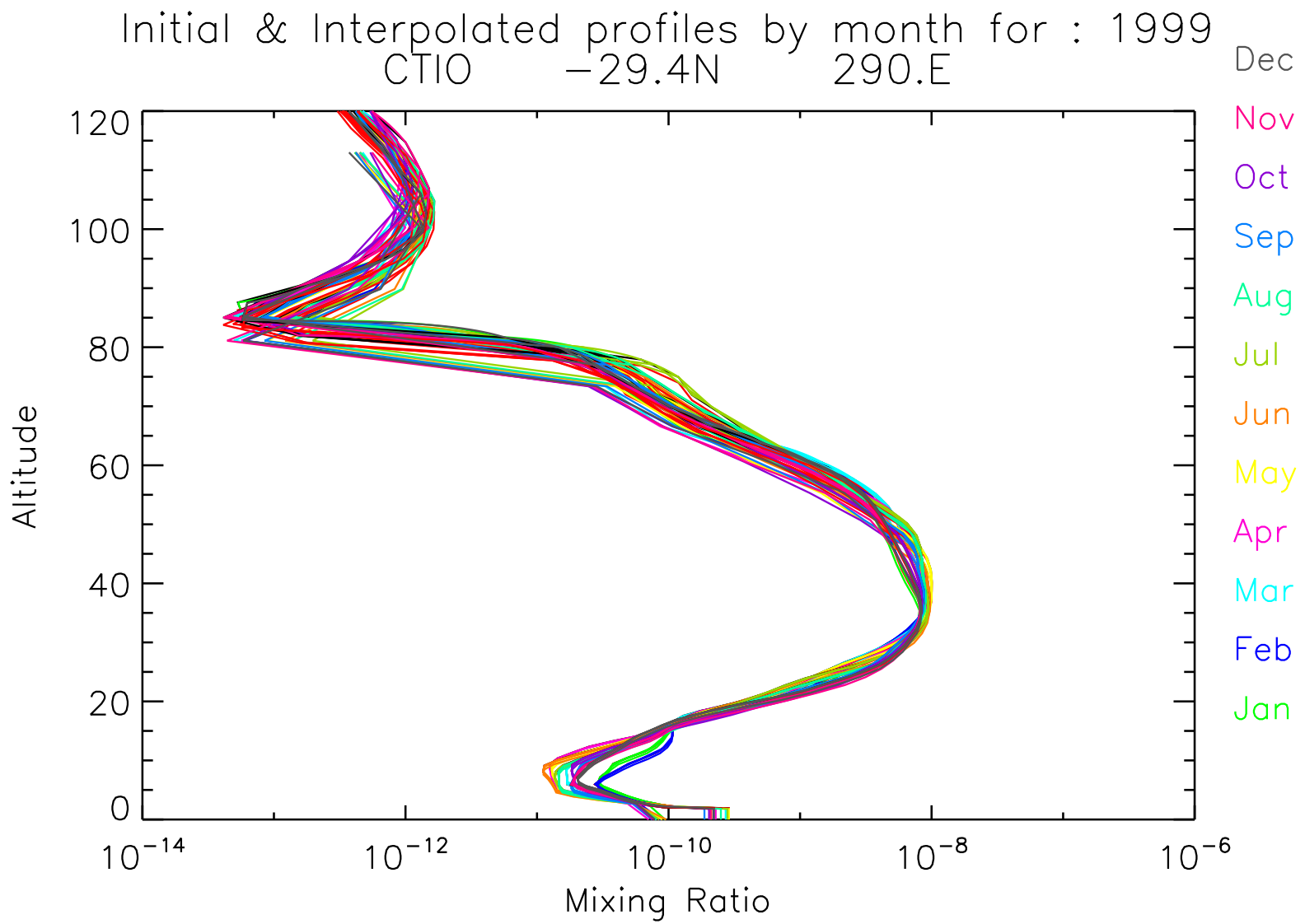
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 1999
CTIO −29.4N 290.E
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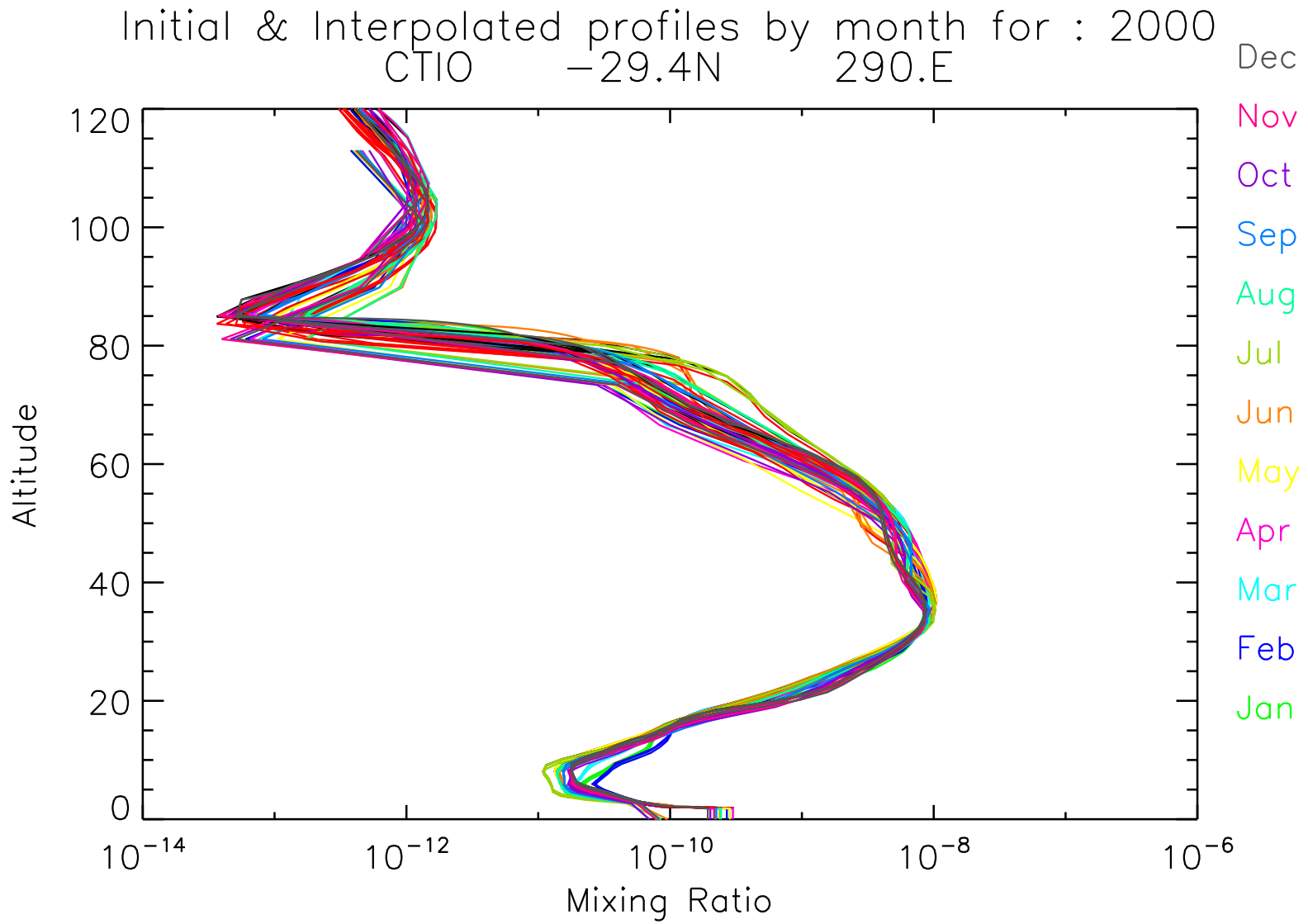
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 2000
CTIO −29.4N 290.E
Dec
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Altitude
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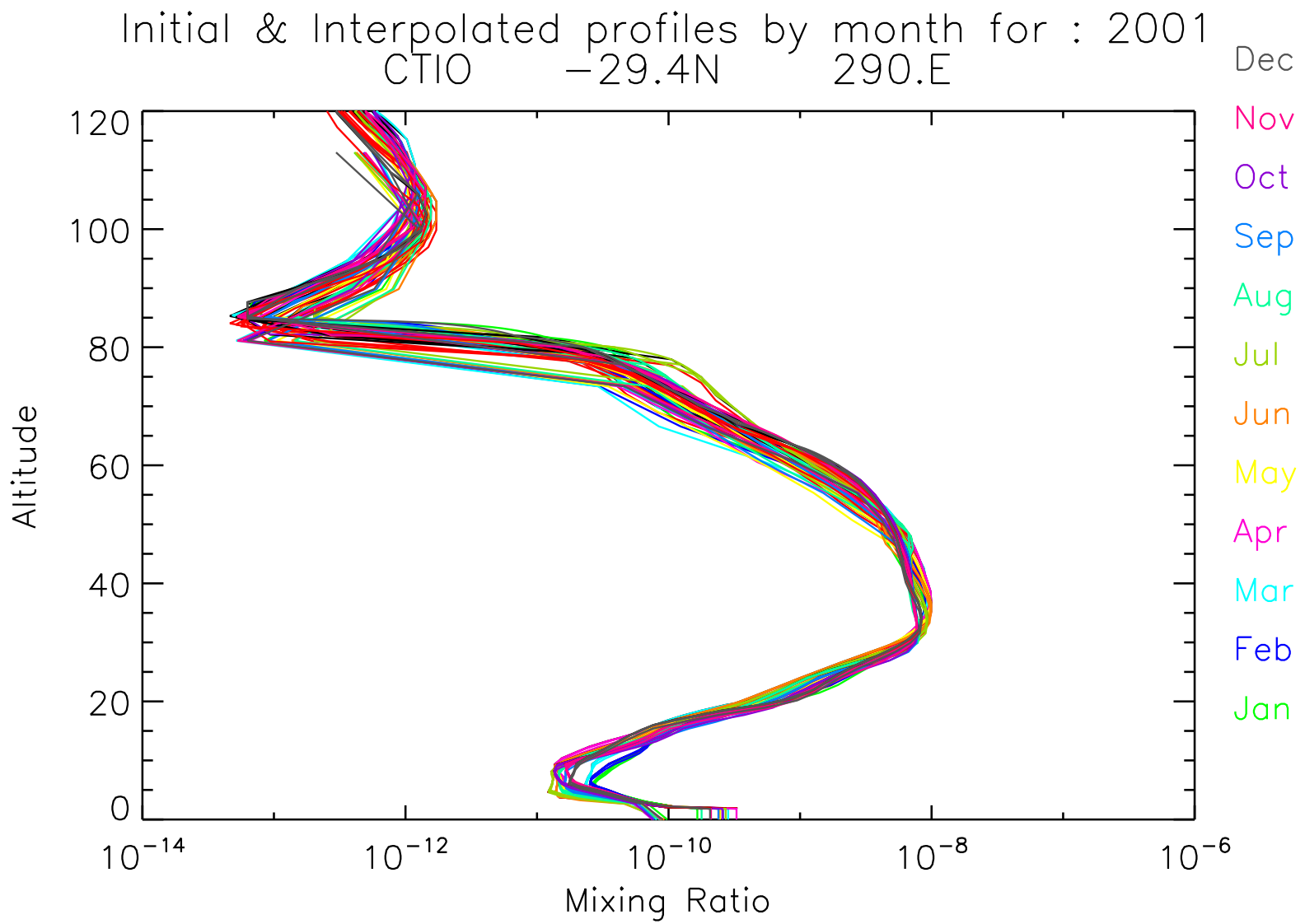
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 2001
CTIO −29.4N 290.E
Dec
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Altitude
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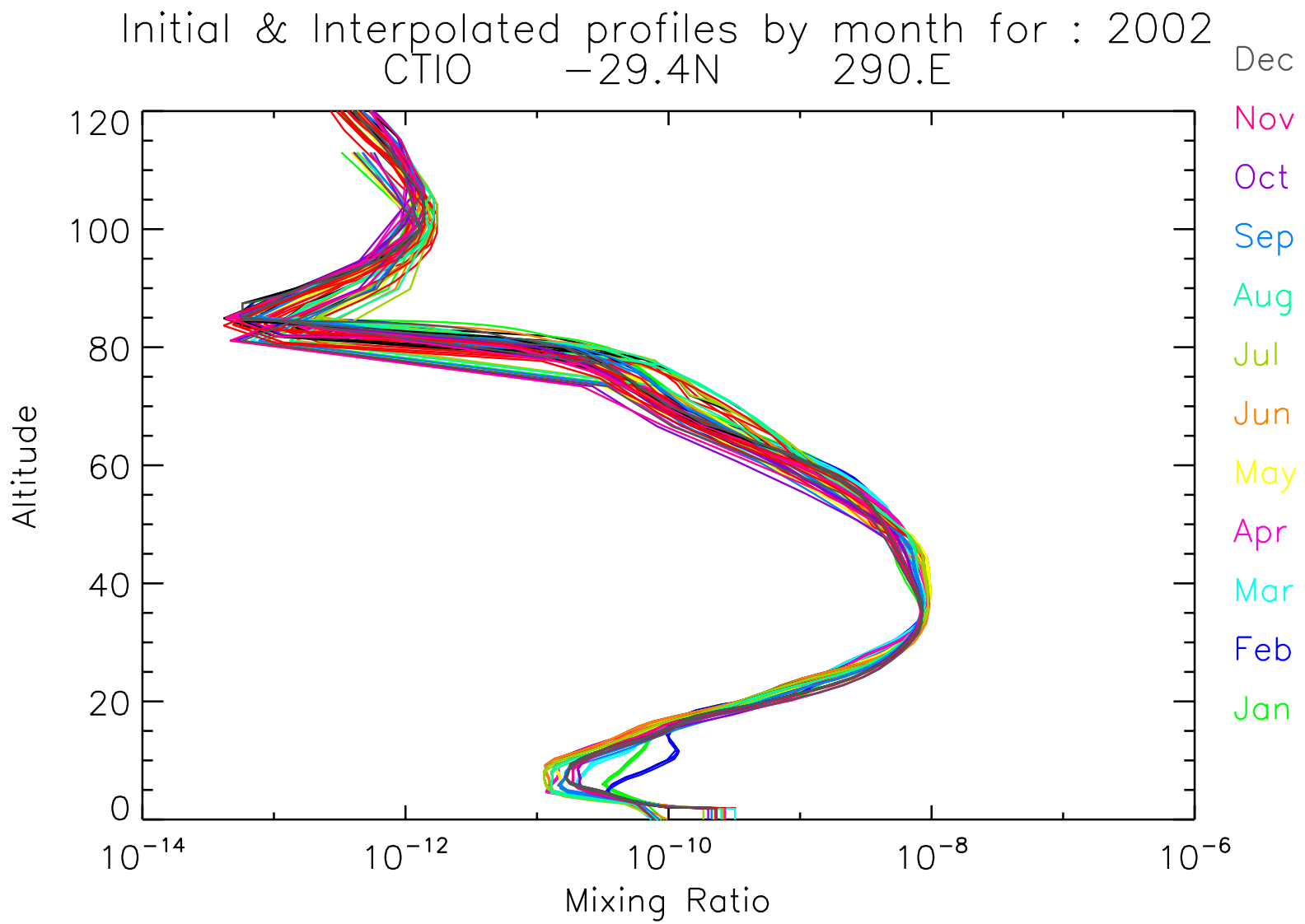
Mixing Ratio


Initial & Interpolated profiles by month for : 2002
CTIO −29.4N 290.E
Dec
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Altitude
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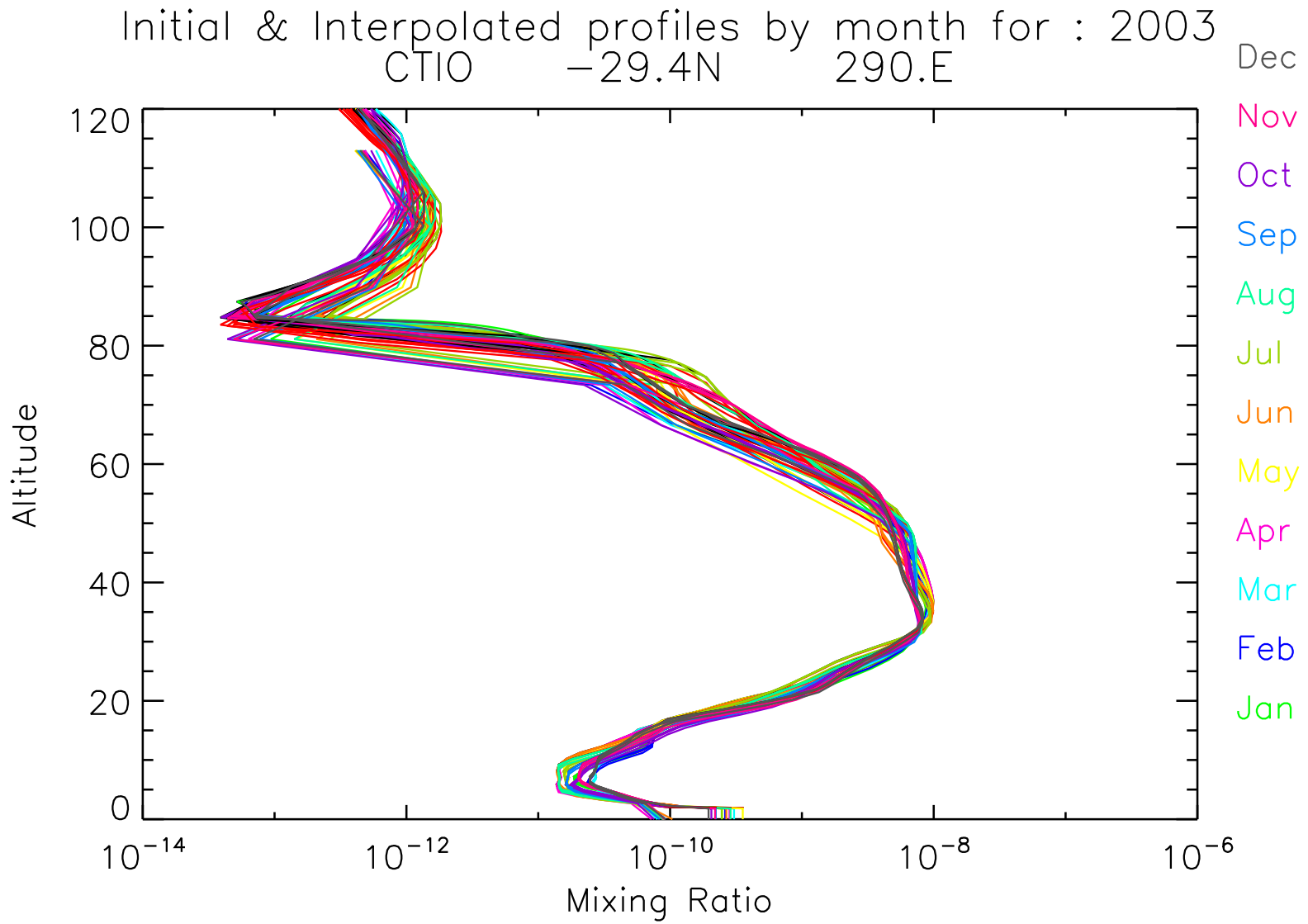
10^{-8}
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 2003
CTIO −29.4N 290.E
Dec
Nov
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Altitude
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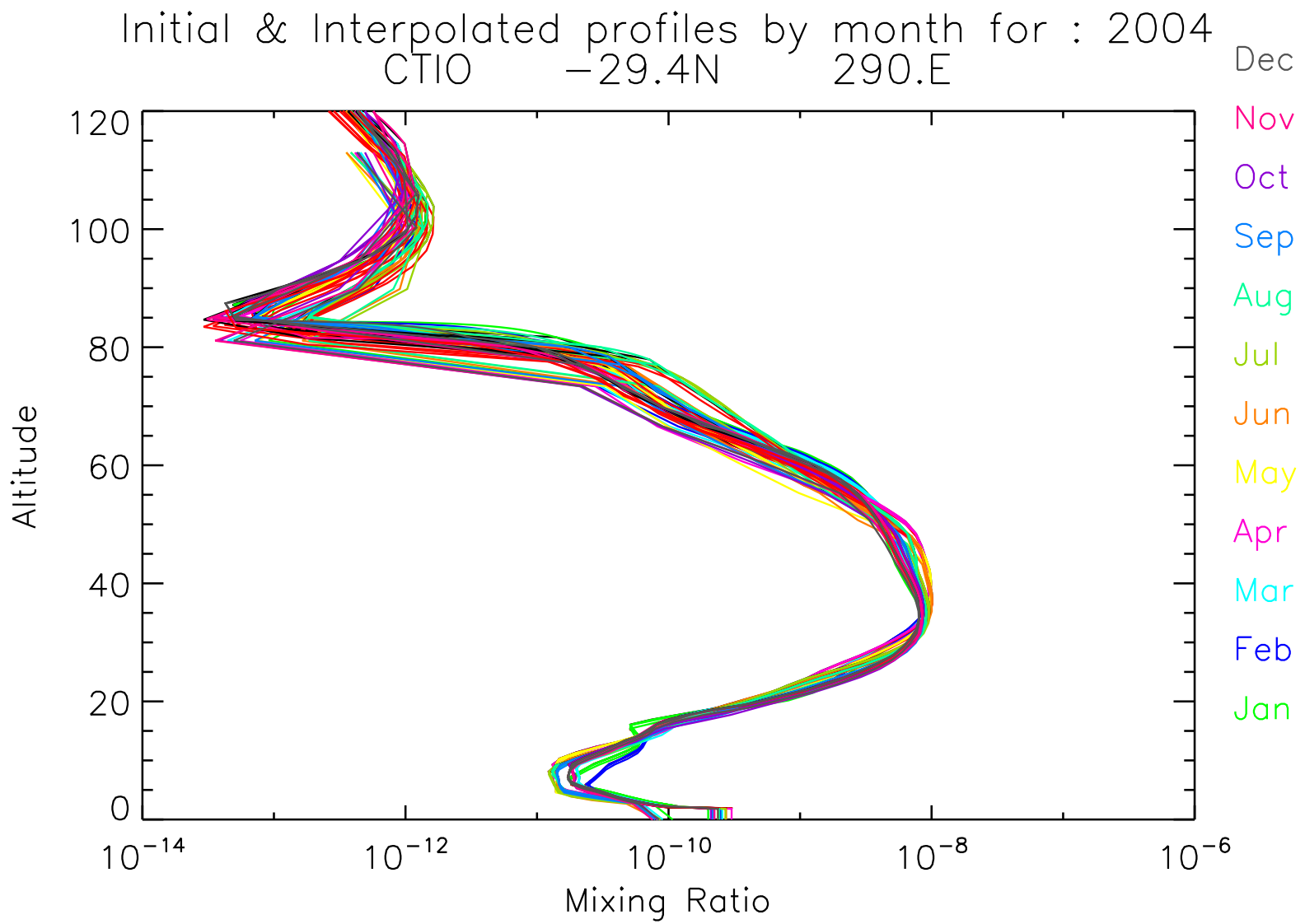
10^{-10}
10^{-8}
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 2004
CTIO −29.4N 290.E
Dec
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Altitude
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10^{-10}
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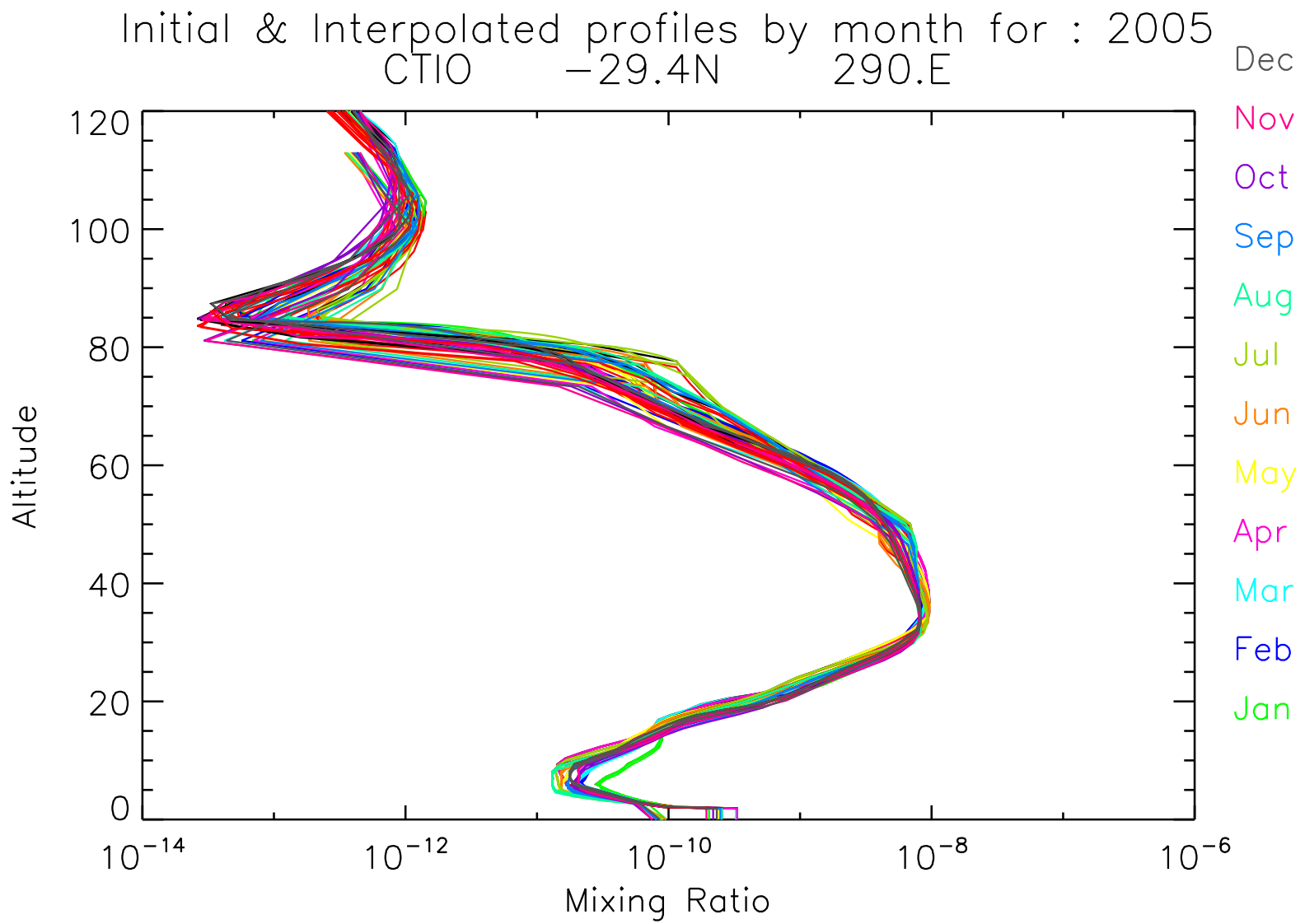
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 2005
CTIO −29.4N 290.E
Dec
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Altitude
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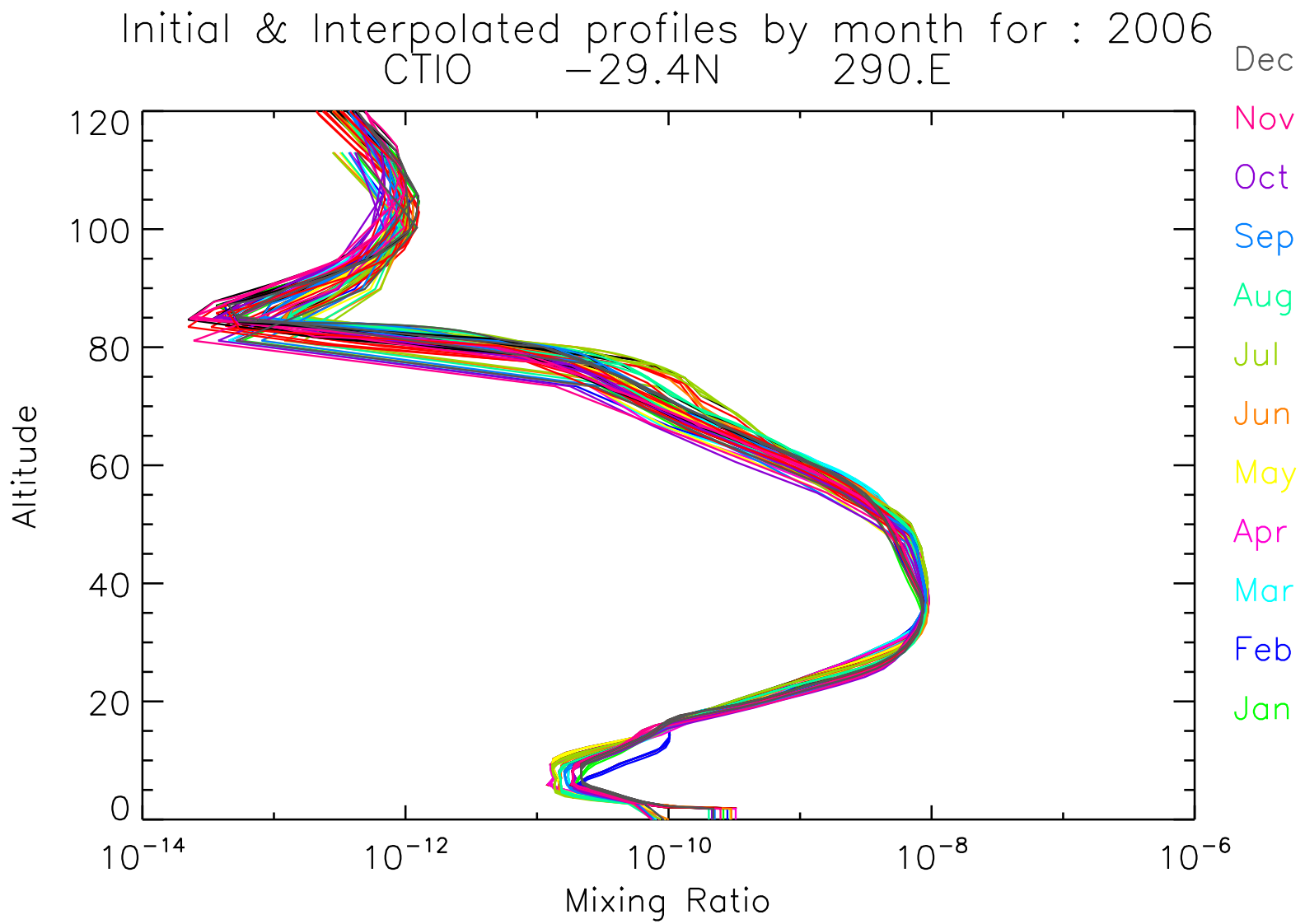
10^{-8}
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 2006
CTIO −29.4N 290.E
Altitude
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Mixing Ratio
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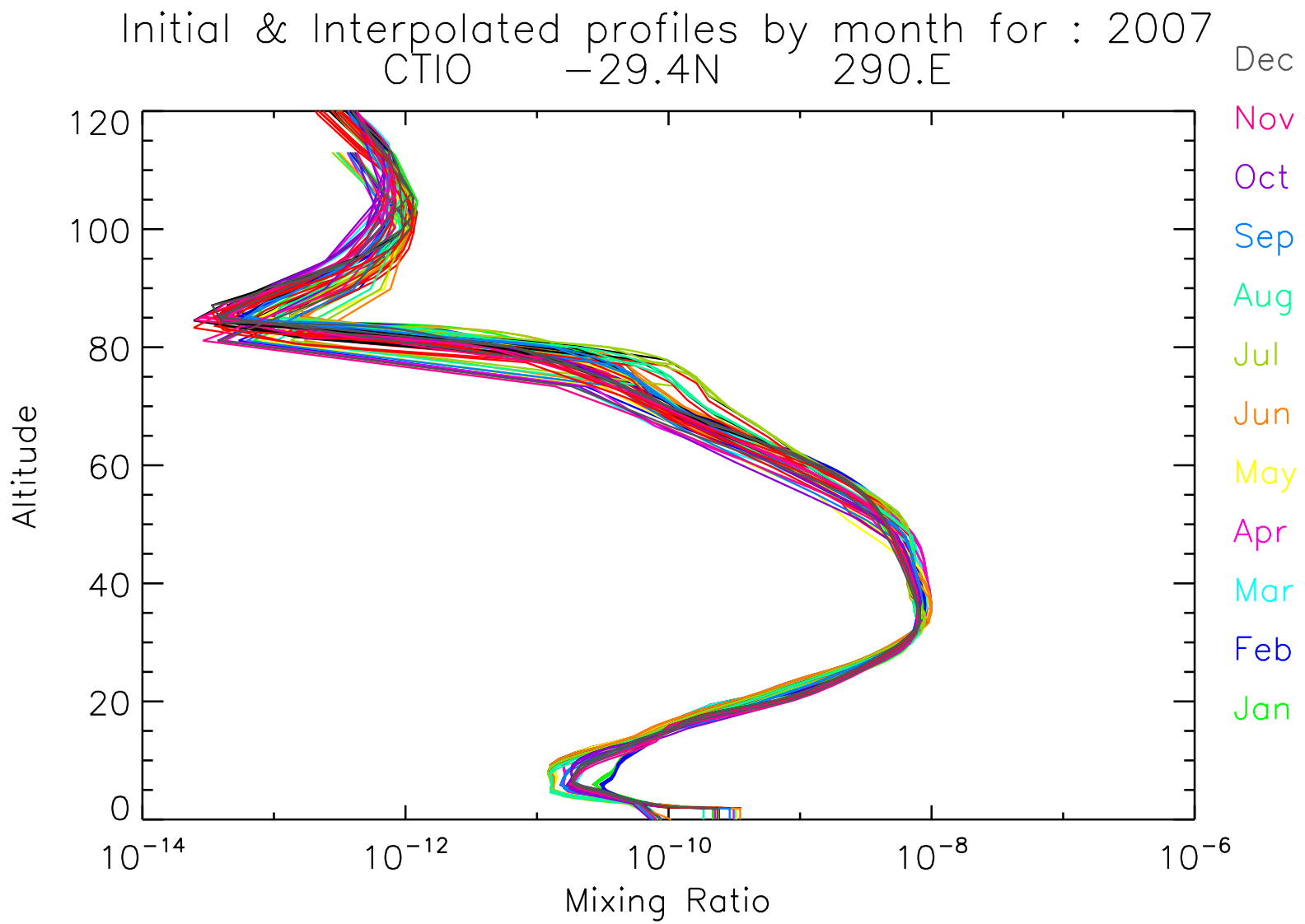
Initial & Interpolated profiles by month for : 2007
CTIO −29.4N 290.E
Dec
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Altitude
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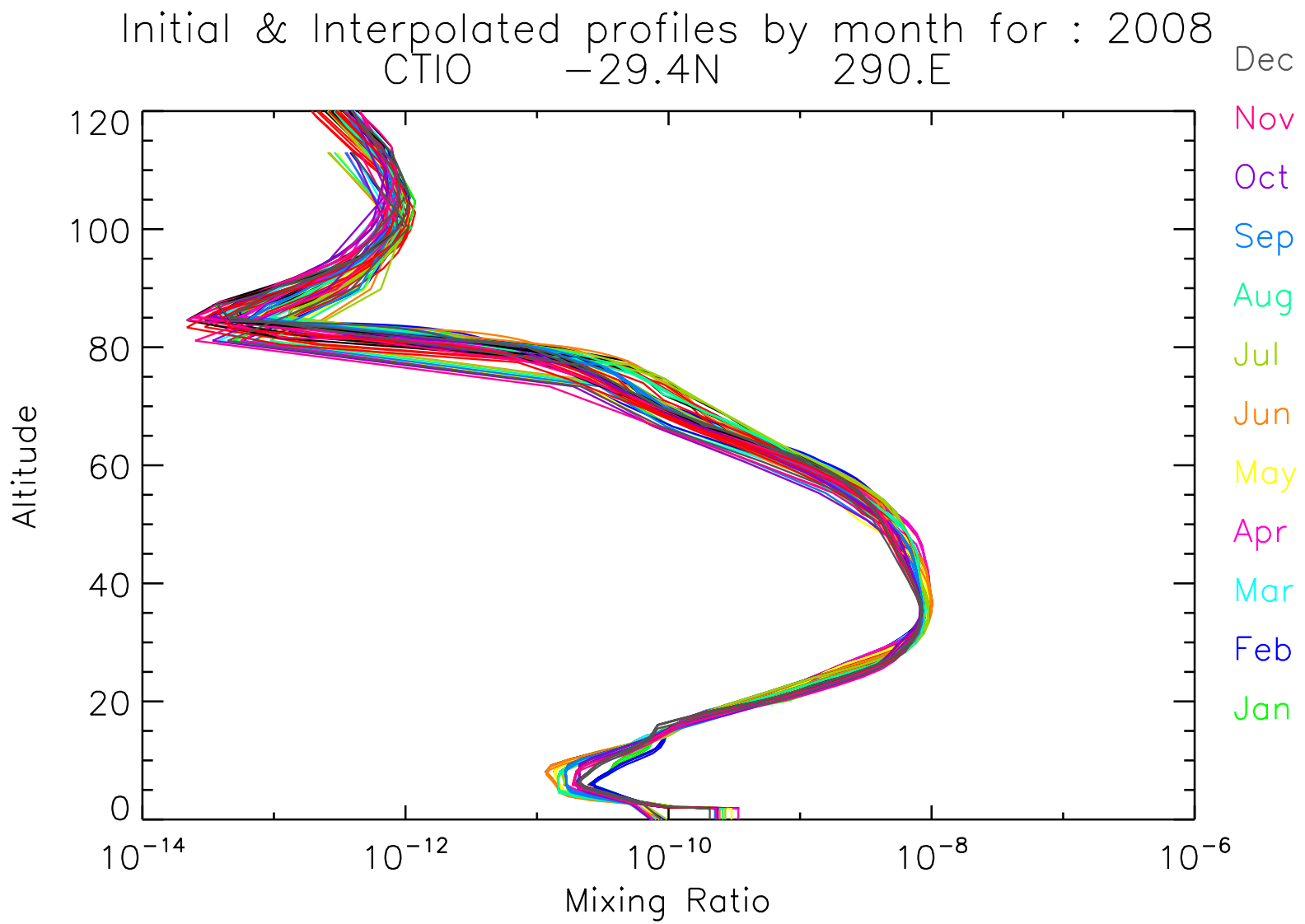
10^{-8}
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 2008
CTIO −29.4N 290.E
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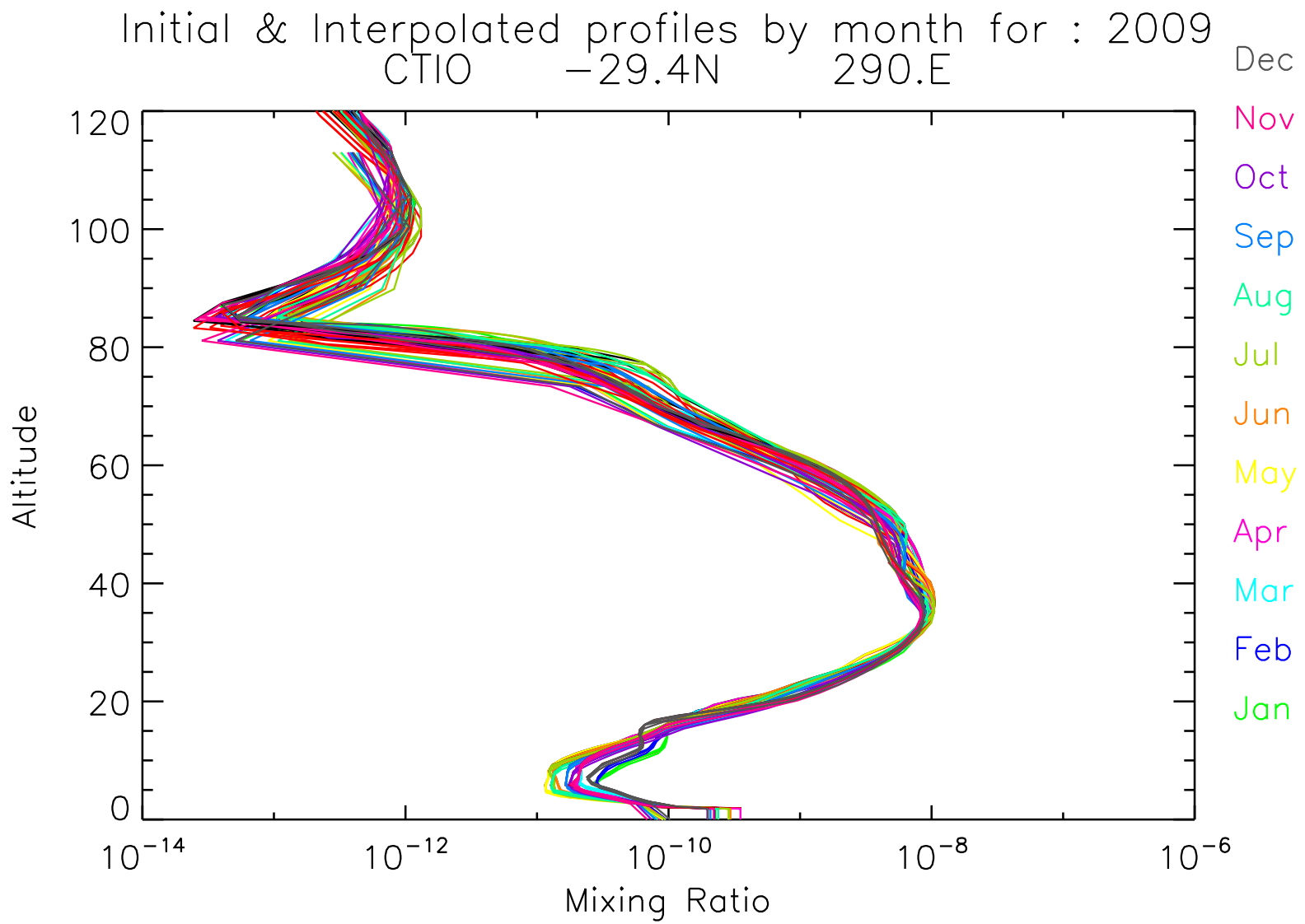
10^{-8}
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 2009
CTIO −29.4N 290.E
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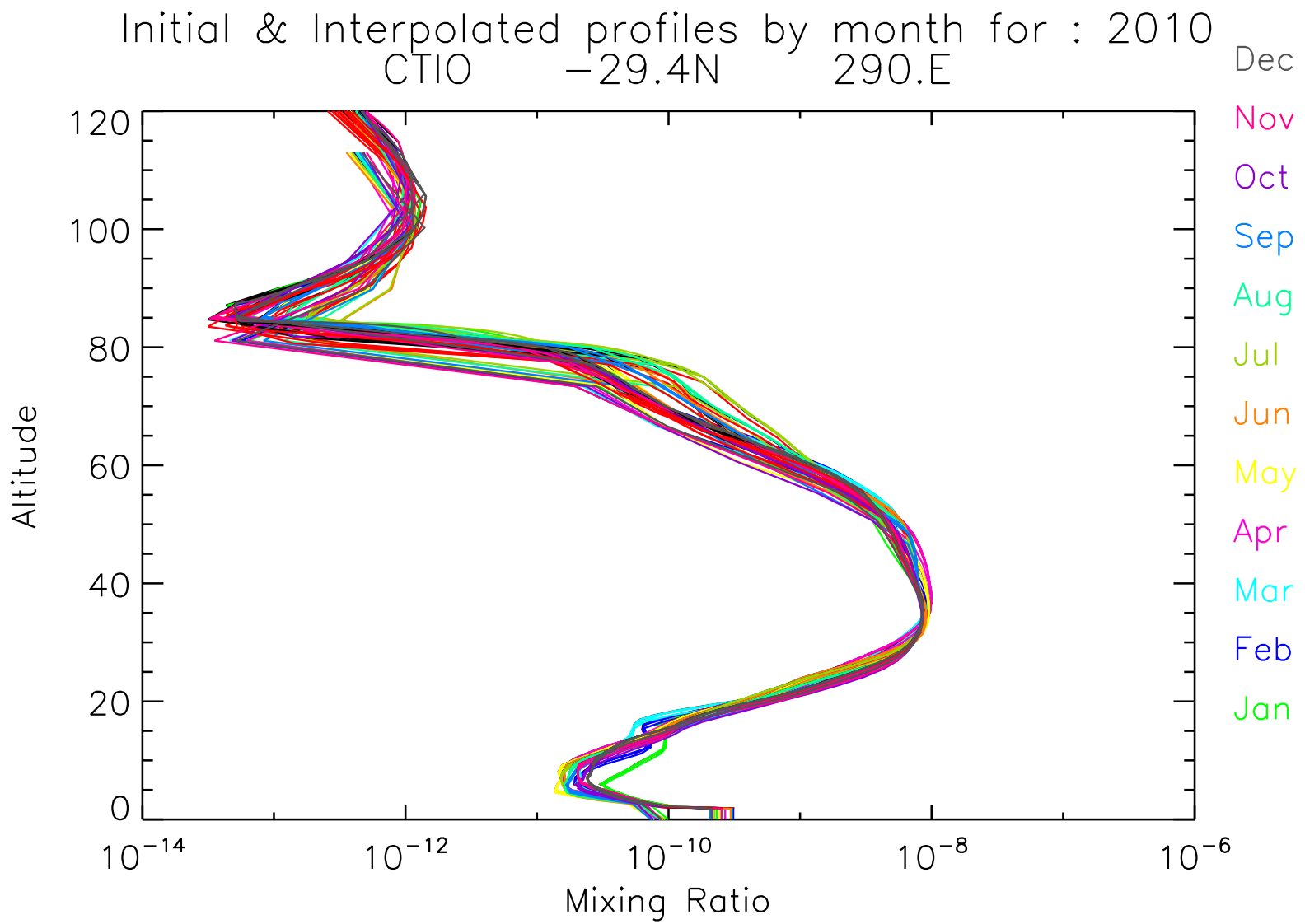
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 2010
CTIO −29.4N 290.E
Dec
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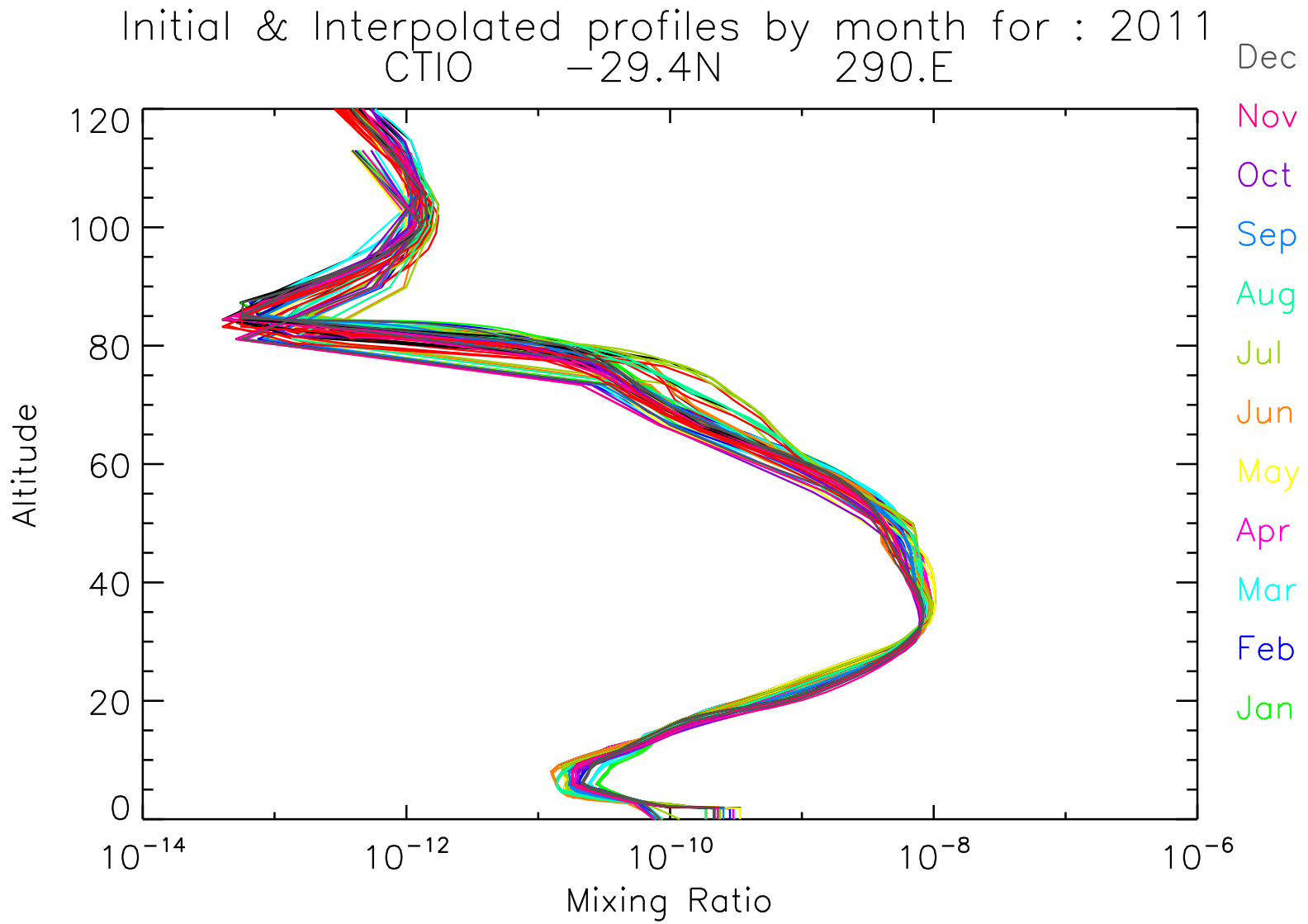
10^{-6}
Mixing Ratio


Initial & Interpolated profiles by month for : 2011
CTIO −29.4N 290.E
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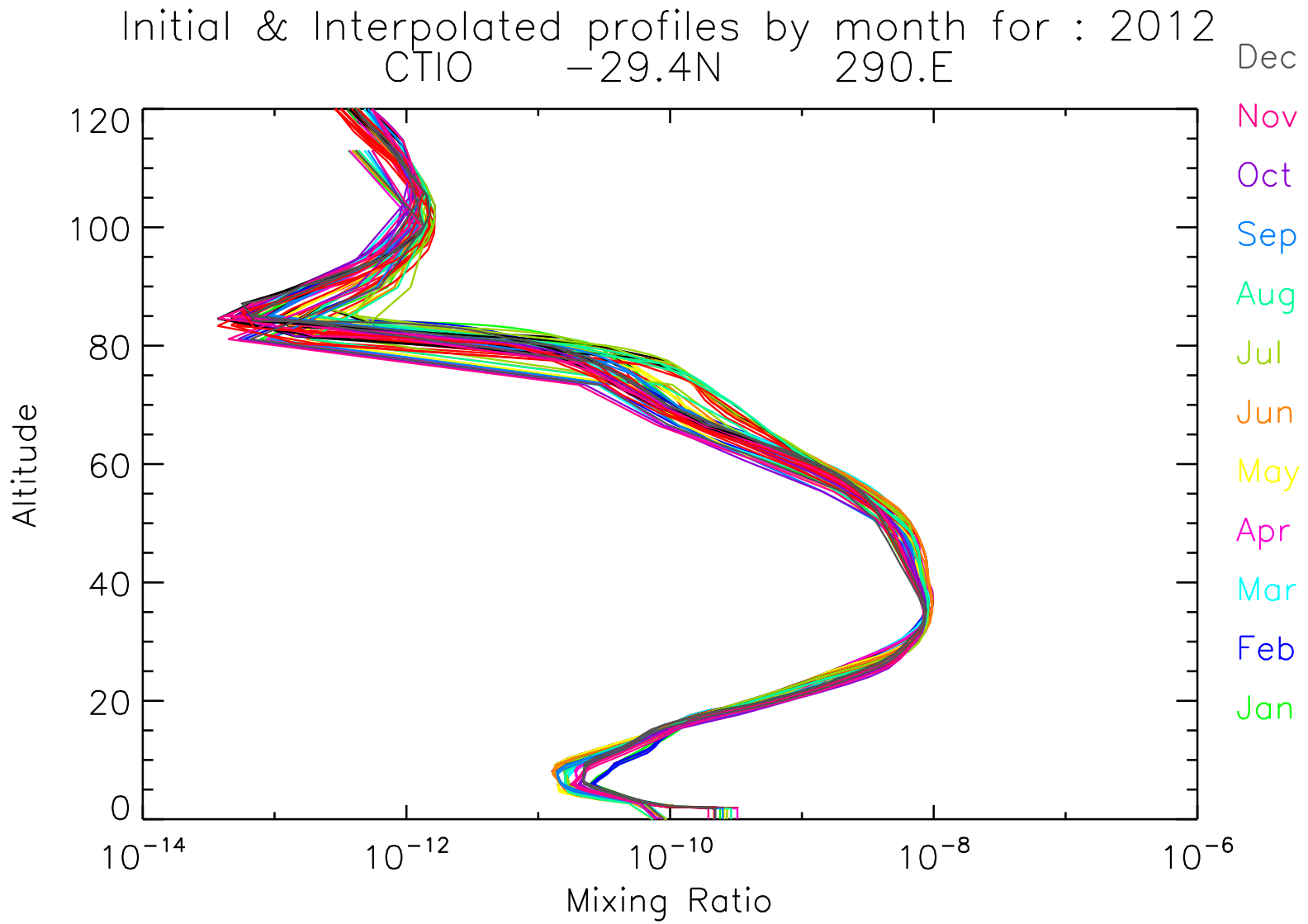
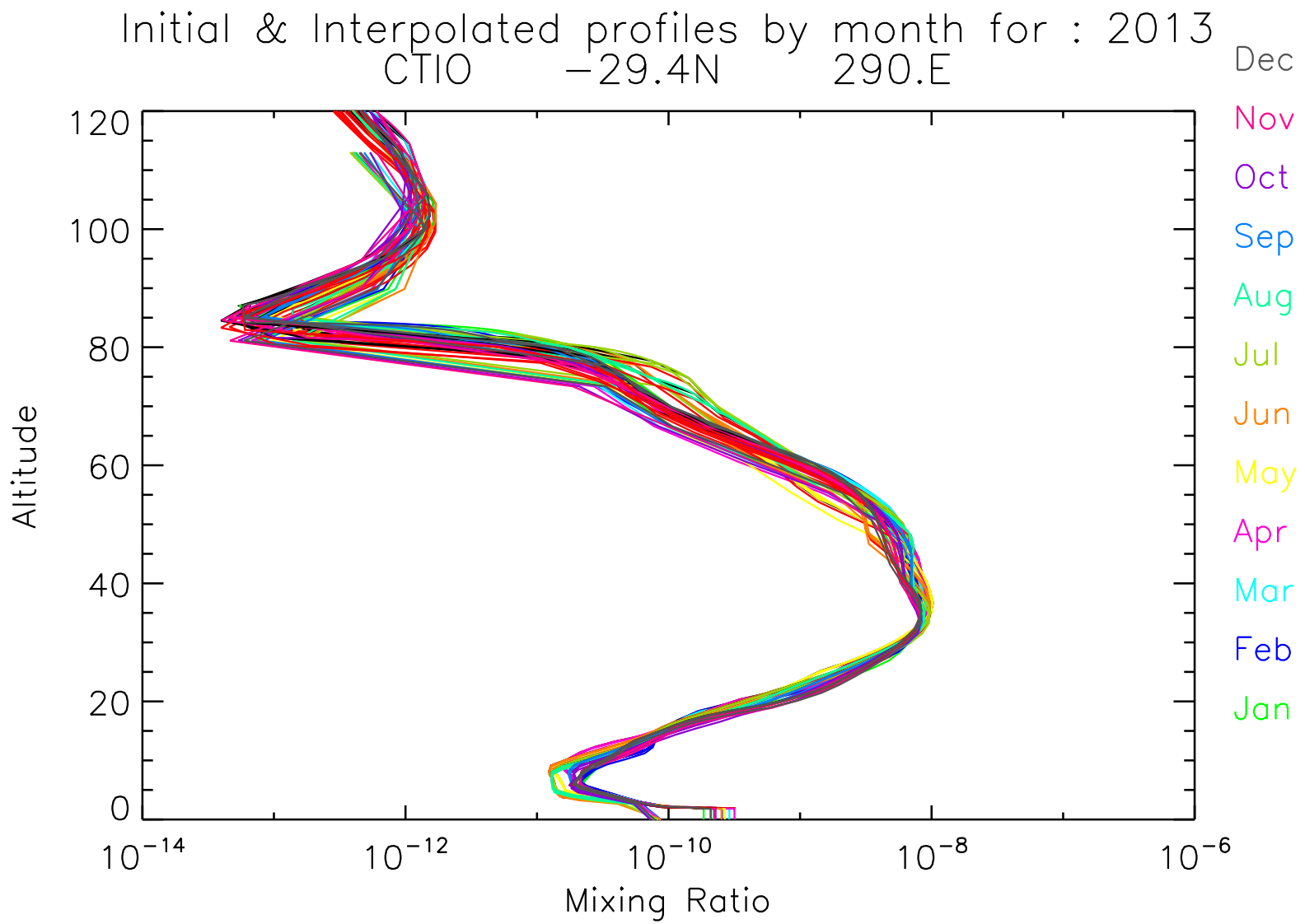
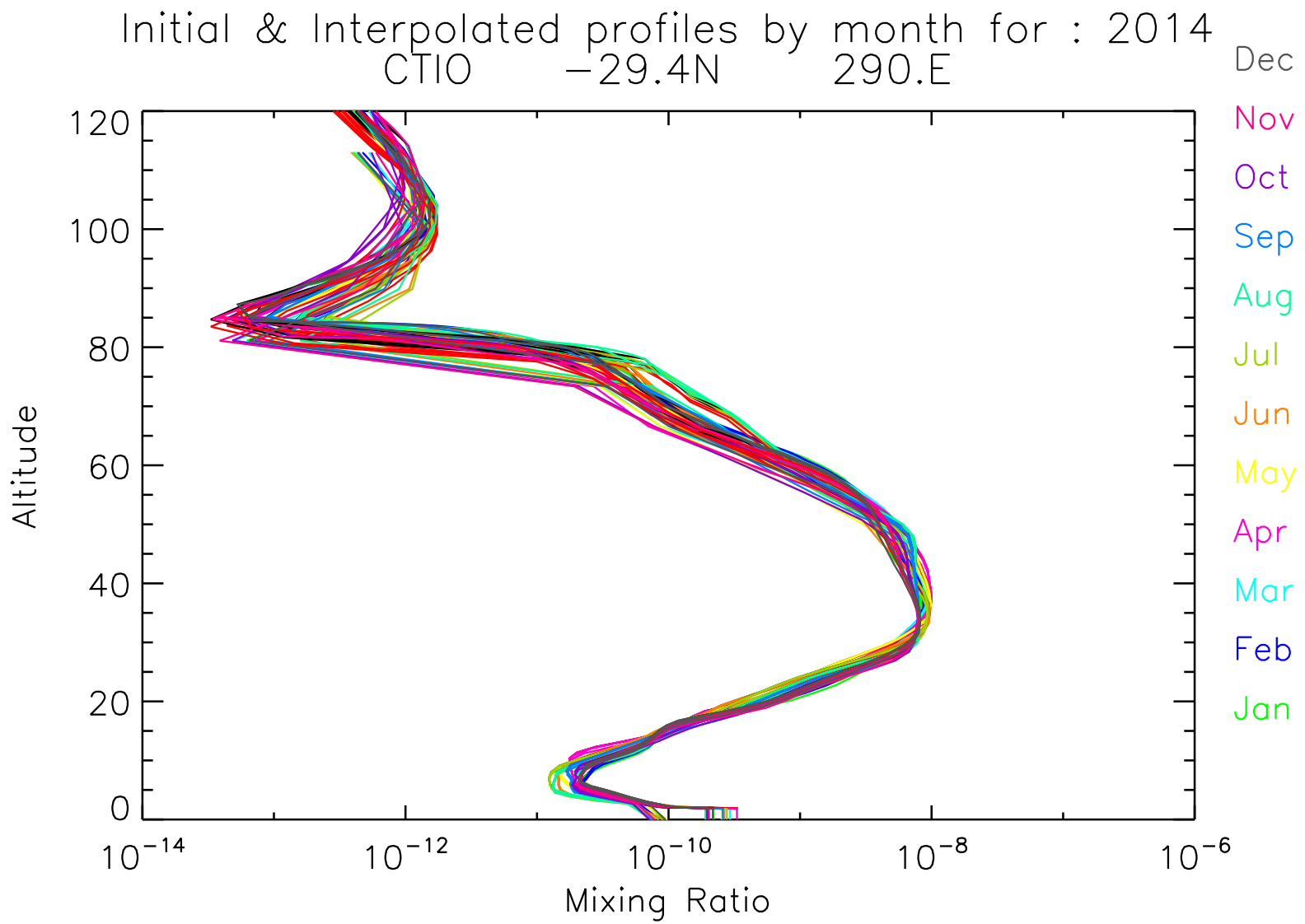
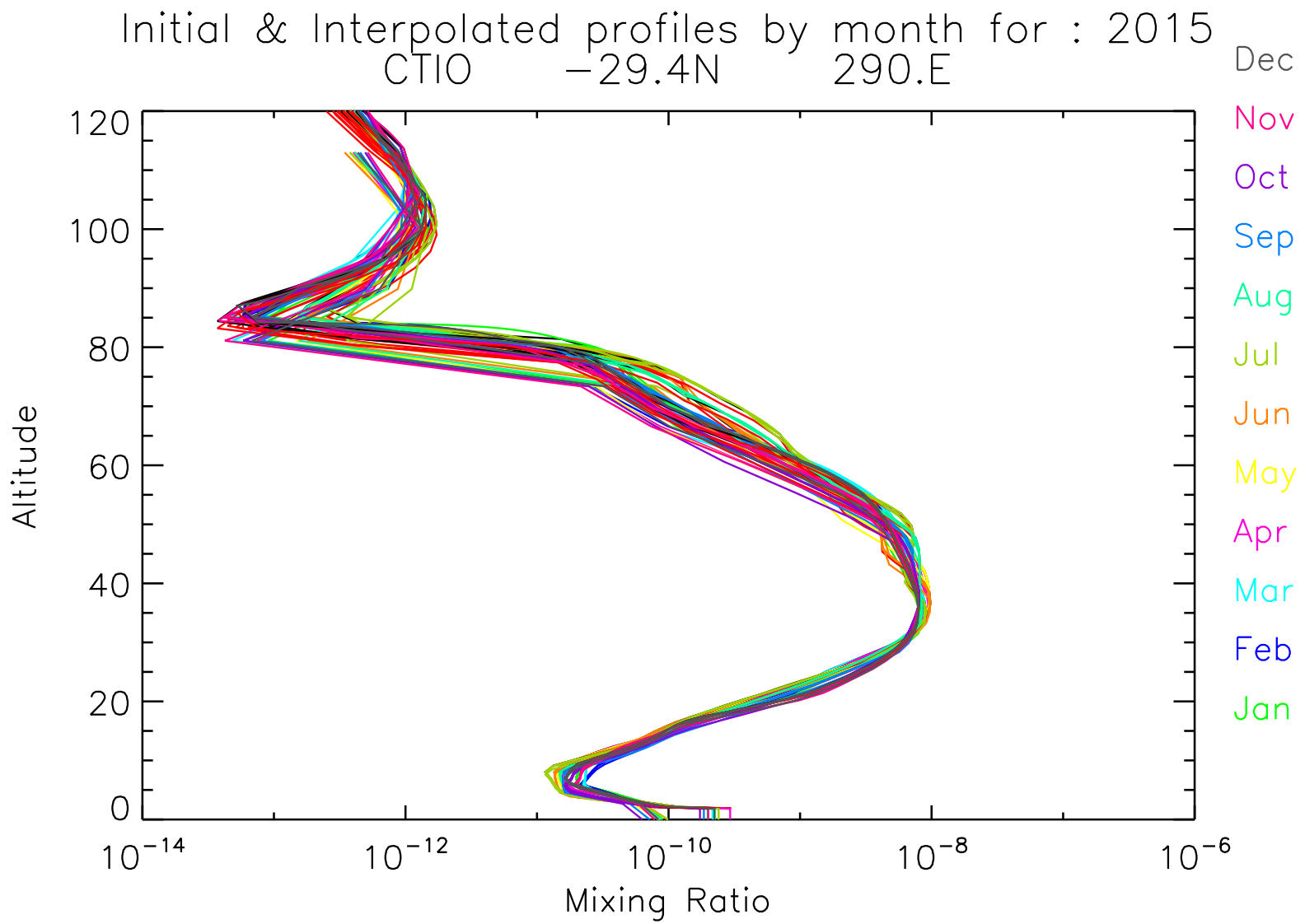
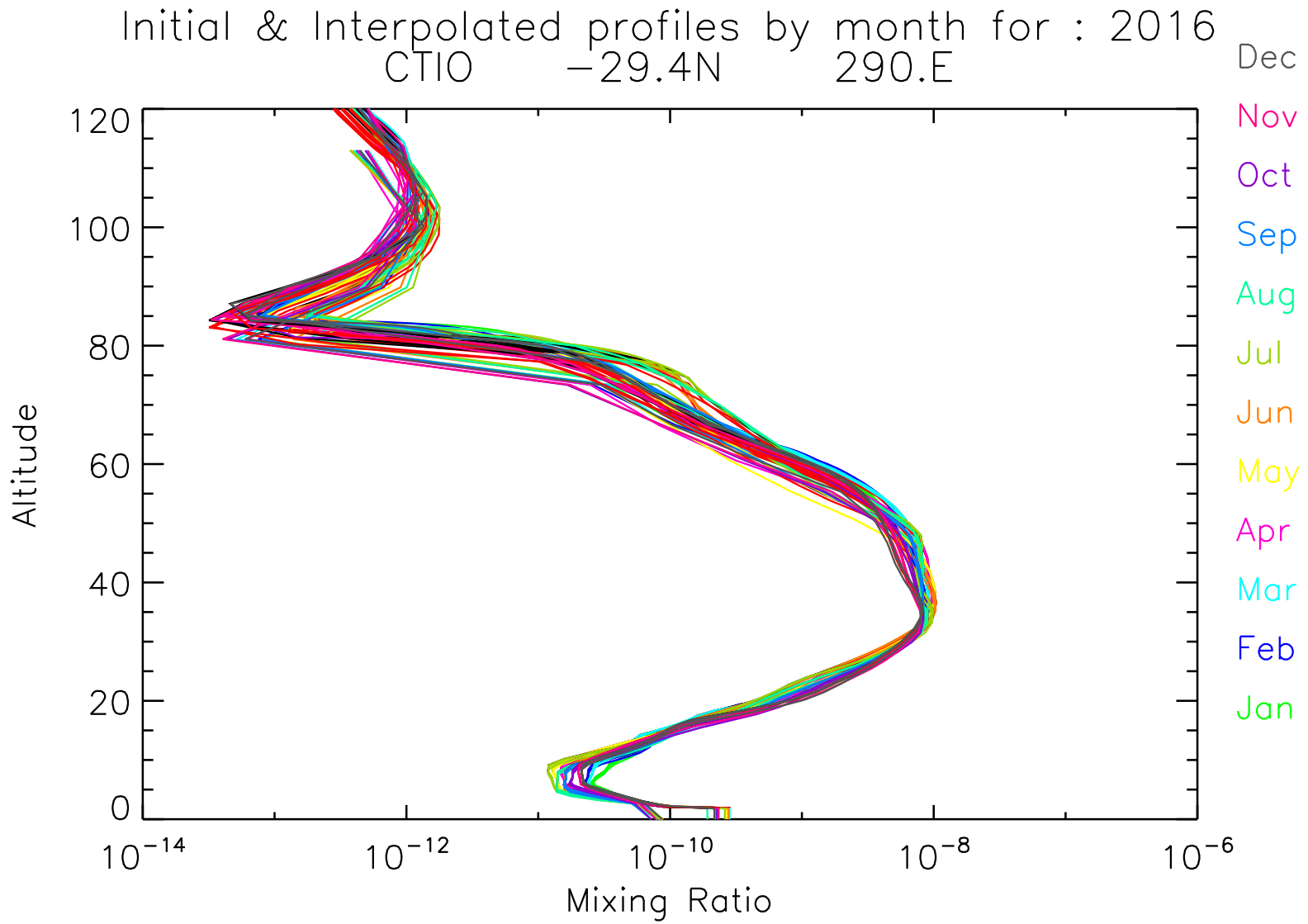
10^{-6}
Mixing Ratio

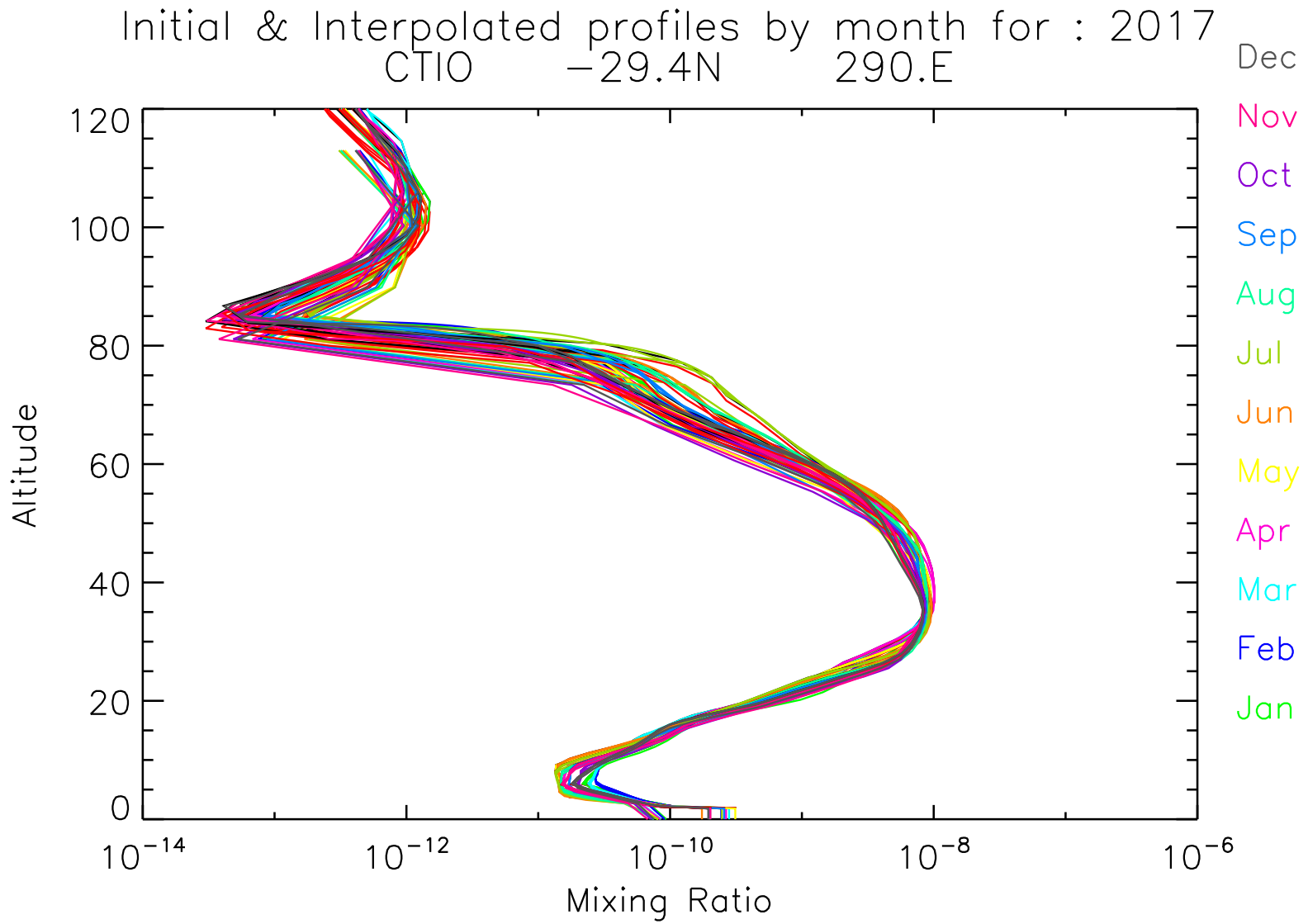

Initial & Interpolated profiles by month for : 2012
CTIO −29.4N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-14}
10^{-12}
10^{-10}
10^{-8}
10^{-6}
Mixing Ratio

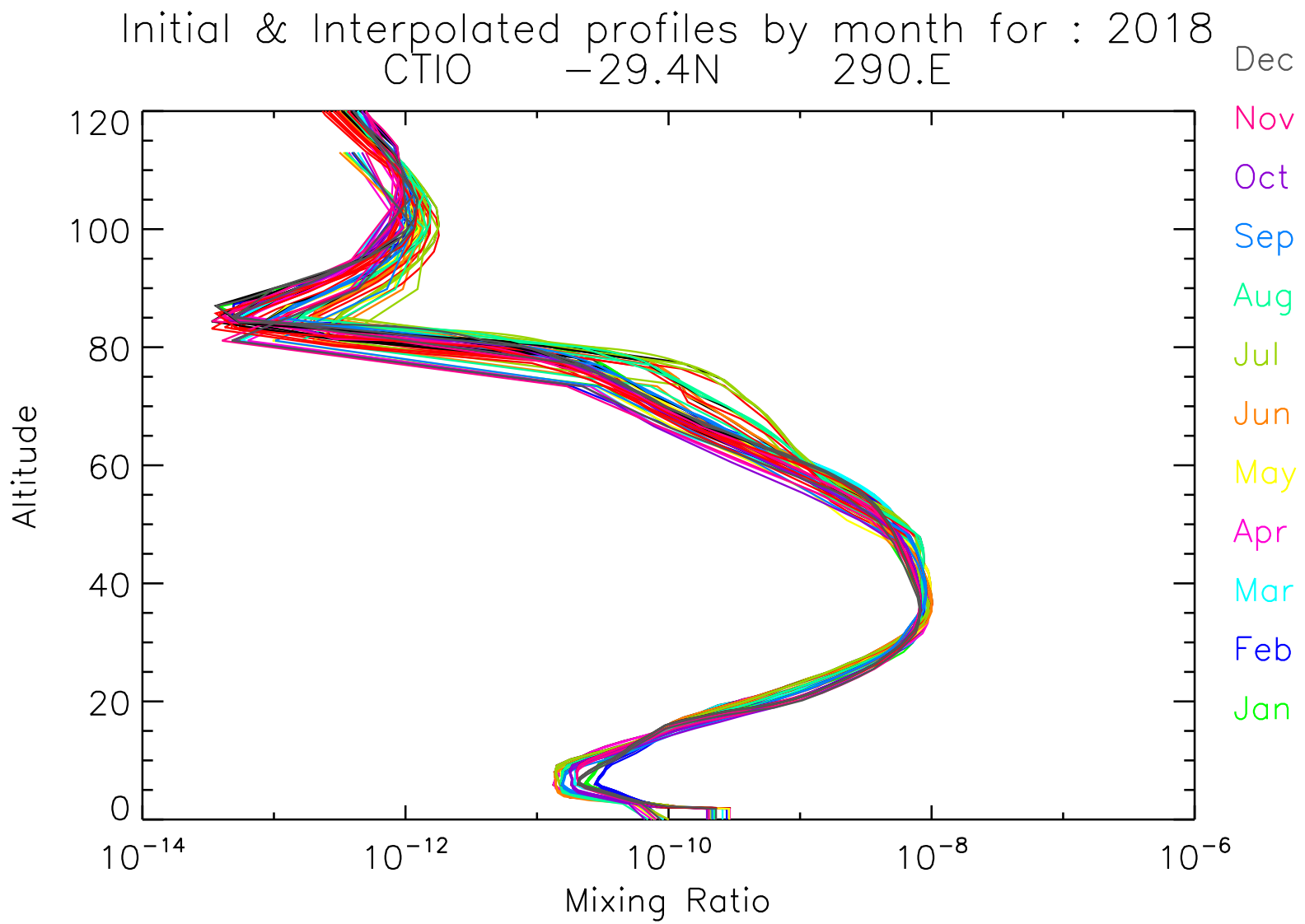

Initial & Interpolated profiles by month for : 2013
CTIO −29.4N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-14}
10^{-12}
10^{-10}
10^{-8}
10^{-6}
Mixing Ratio

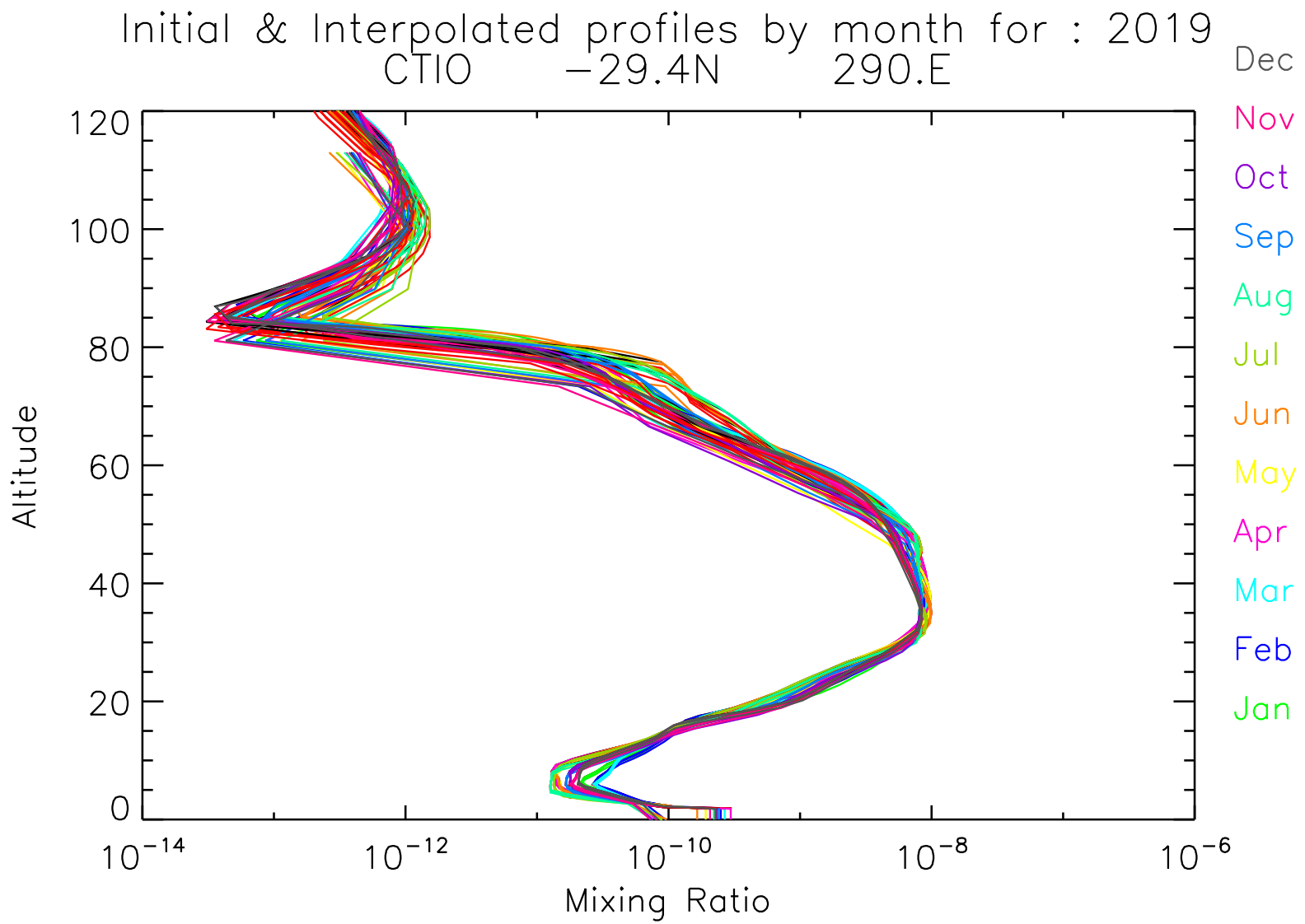

Initial & Interpolated profiles by month for : 2014
CTIO −29.4N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-14}
10^{-12}
10^{-10}
10^{-8}
10^{-6}
Mixing Ratio

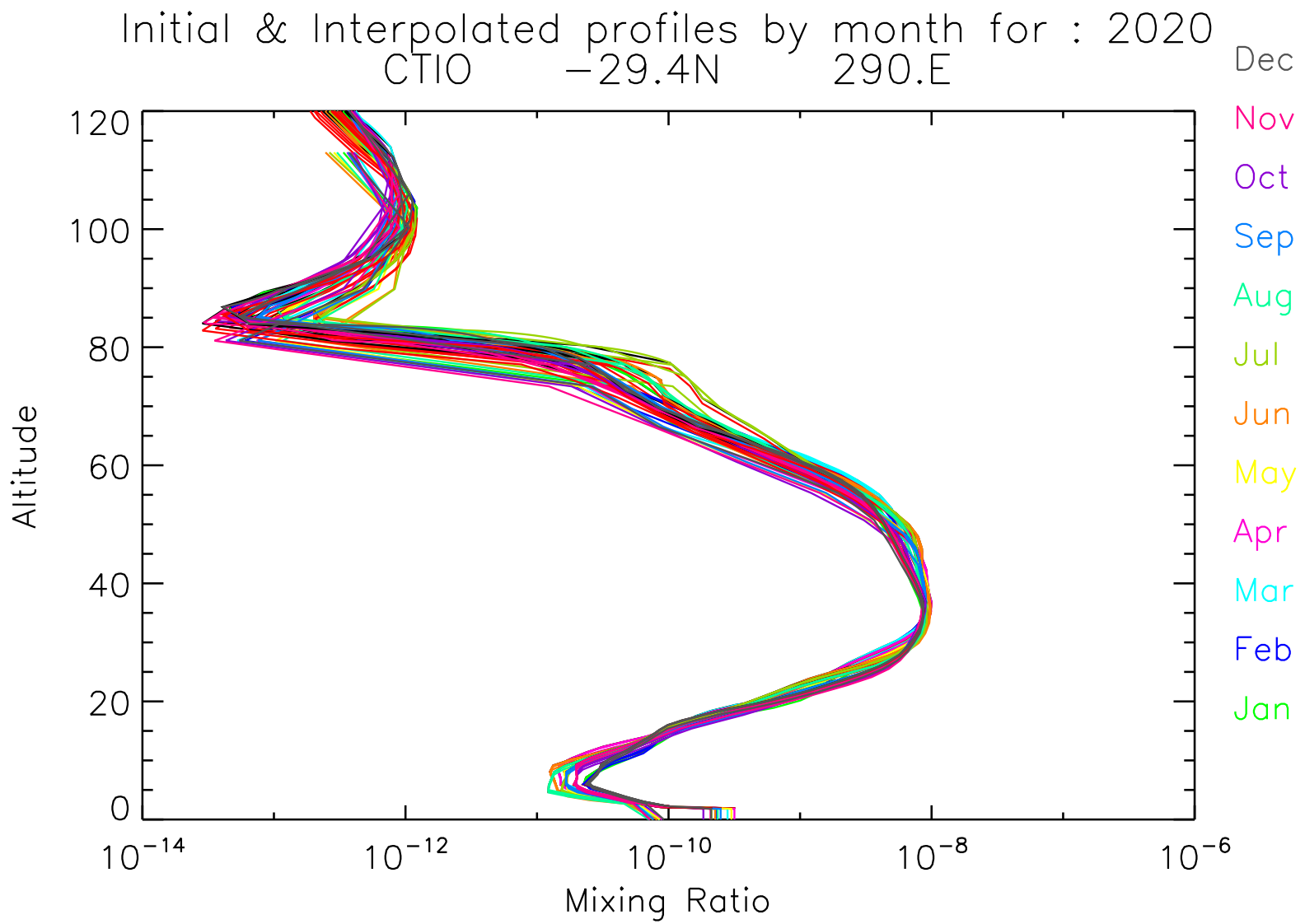

Initial & Interpolated profiles by month for : 2015
CTIO −29.4N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-14}
10^{-12}
10^{-10}
10^{-8}
10^{-6}
Mixing Ratio

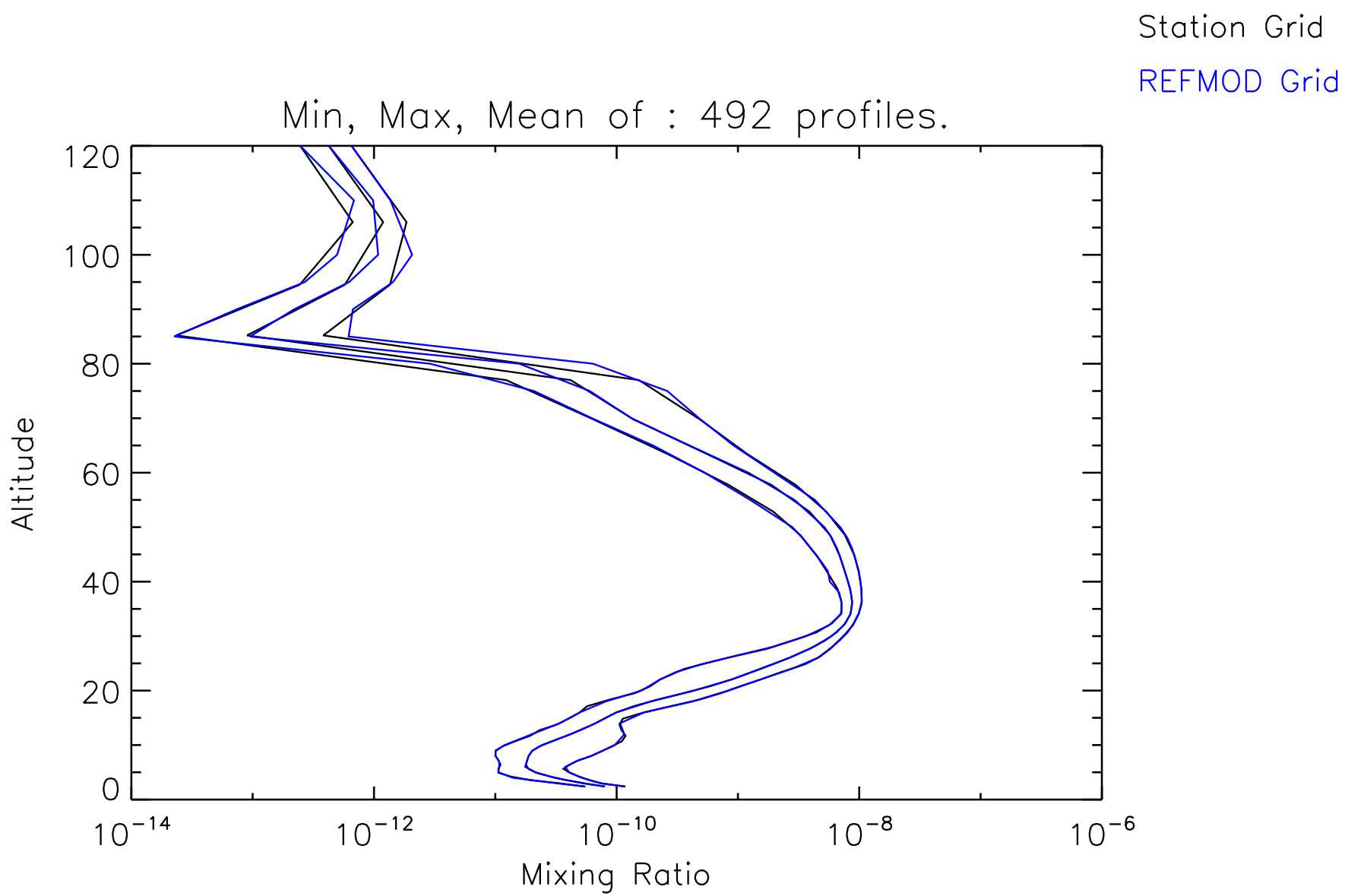

Initial & Interpolated profiles by month for : 2016
CTIO −29.4N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-14}
10^{-12}
10^{-10}
10^{-8}
10^{-6}
Mixing Ratio

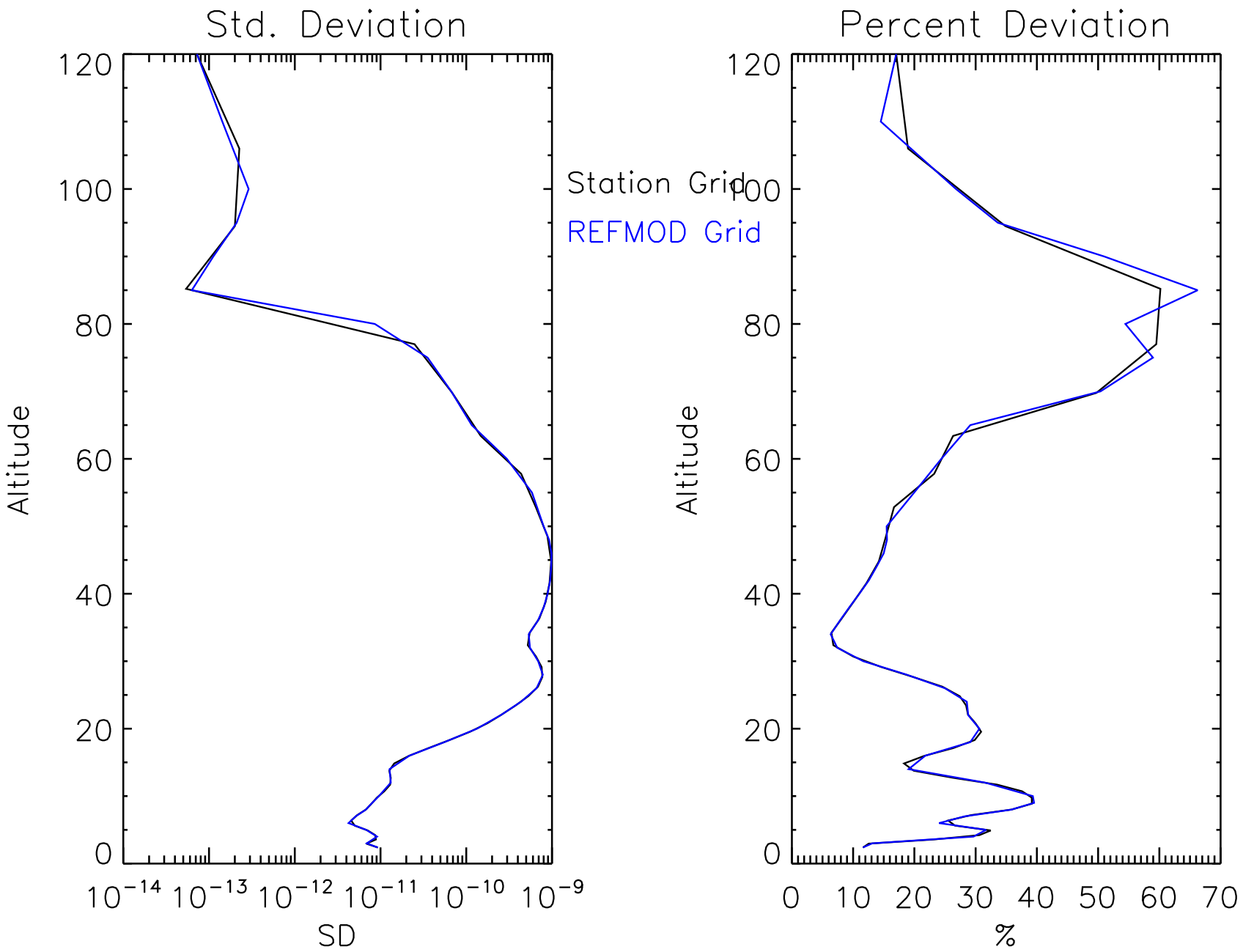

Initial & Interpolated profiles by month for : 2017
CTIO −29.4N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-14}
10^{-12}
10^{-10}
10^{-8}
10^{-6}
Mixing Ratio

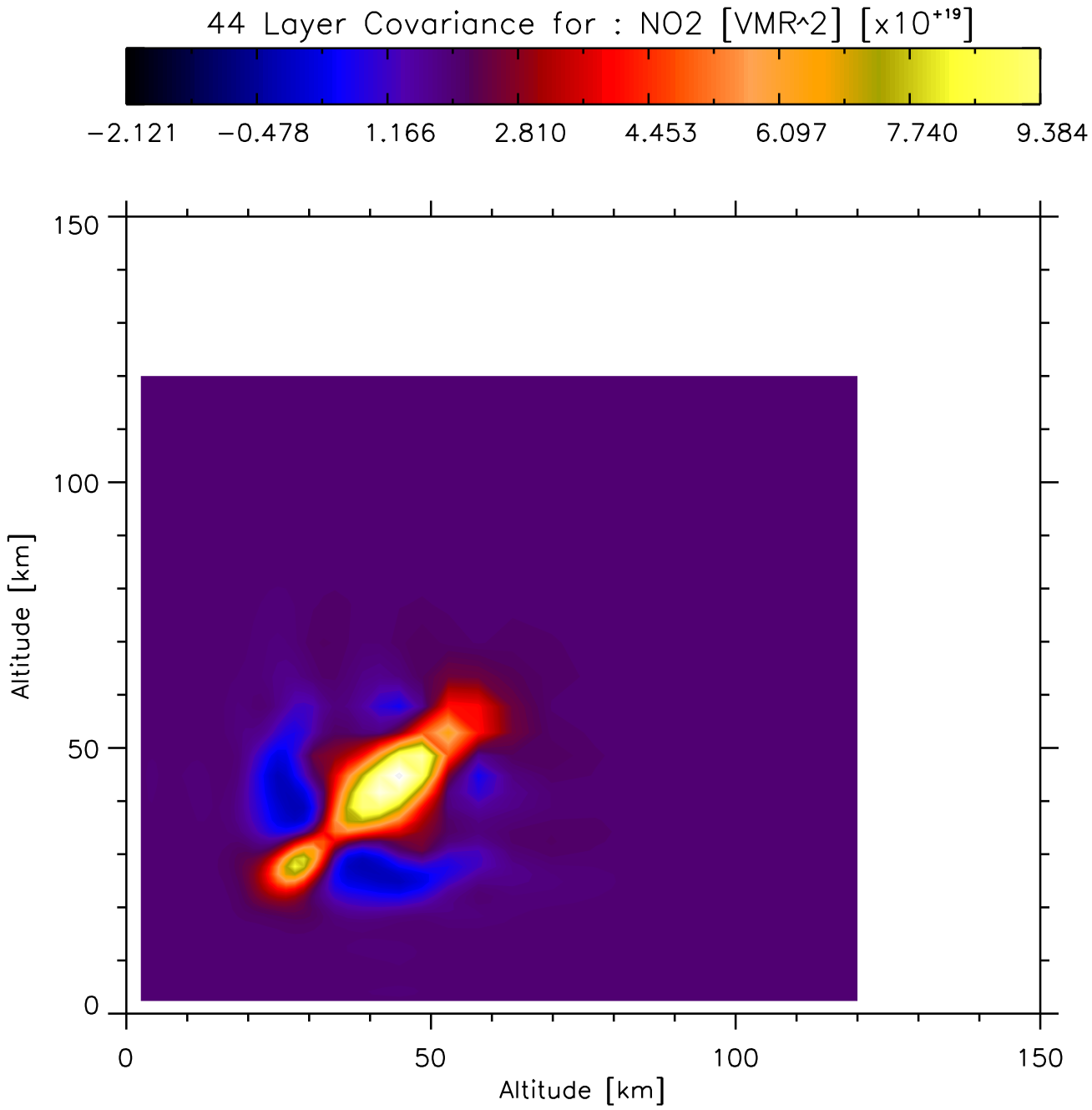

Initial & Interpolated profiles by month for : 2018
CTIO −29.4N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-14}
10^{-12}
10^{-10}
10^{-8}
10^{-6}
Mixing Ratio

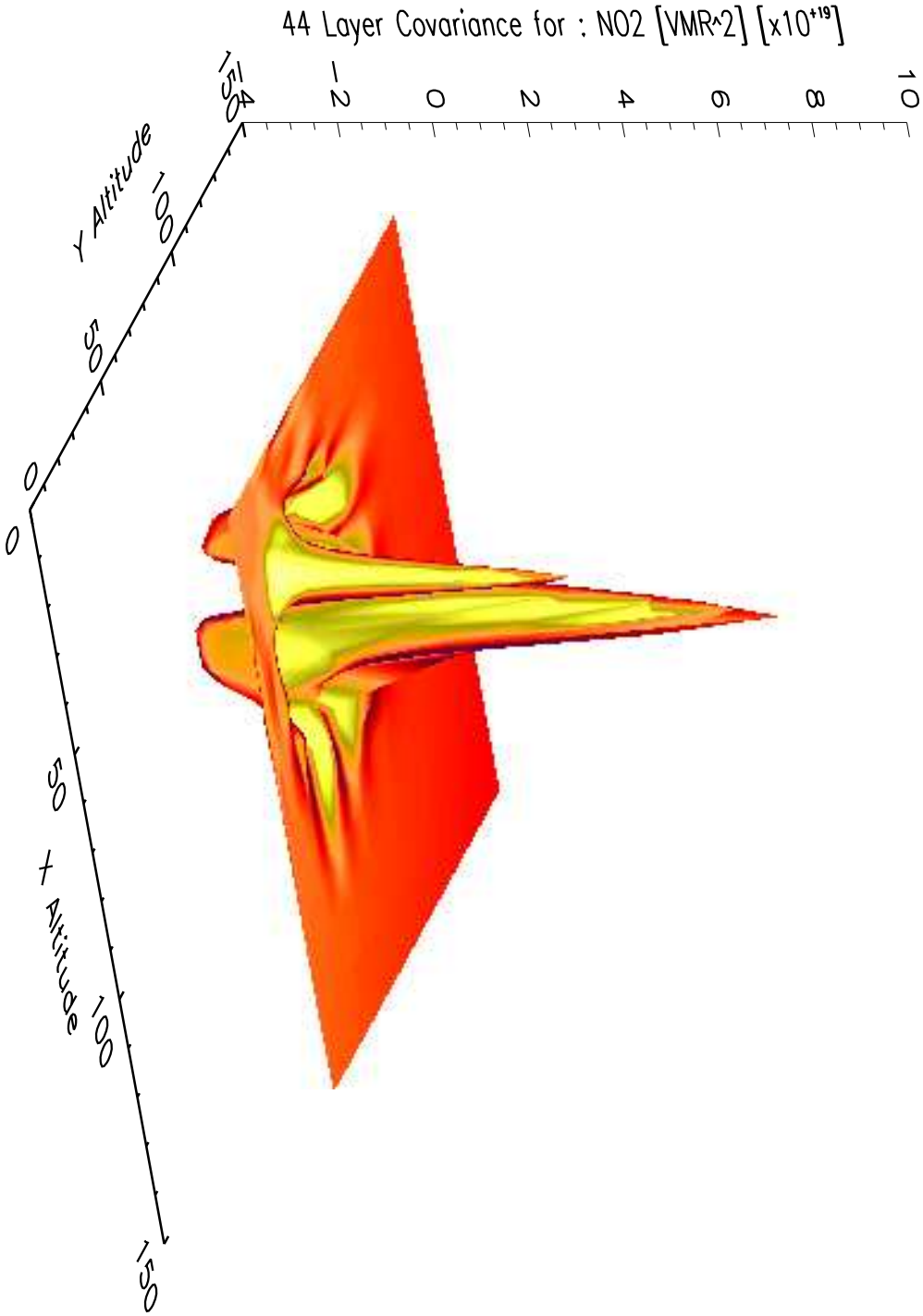

Initial & Interpolated profiles by month for : 2019
CTIO −29.4N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-14}
10^{-12}
10^{-10}
10^{-8}
10^{-6}
Mixing Ratio

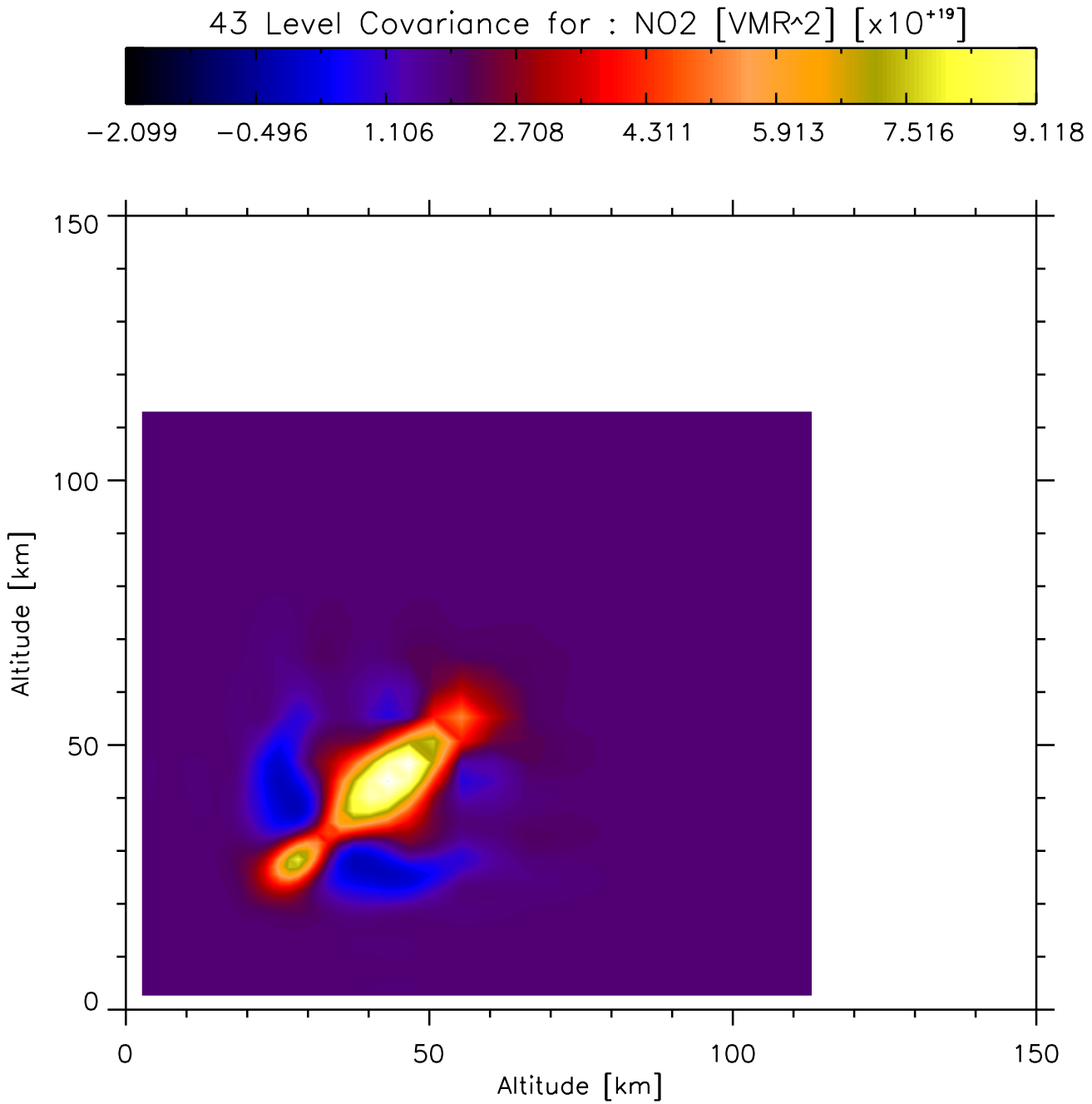

Initial & Interpolated profiles by month for : 2020
CTIO −29.4N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-14}
10^{-12}
10^{-10}
10^{-8}
10^{-6}
Mixing Ratio

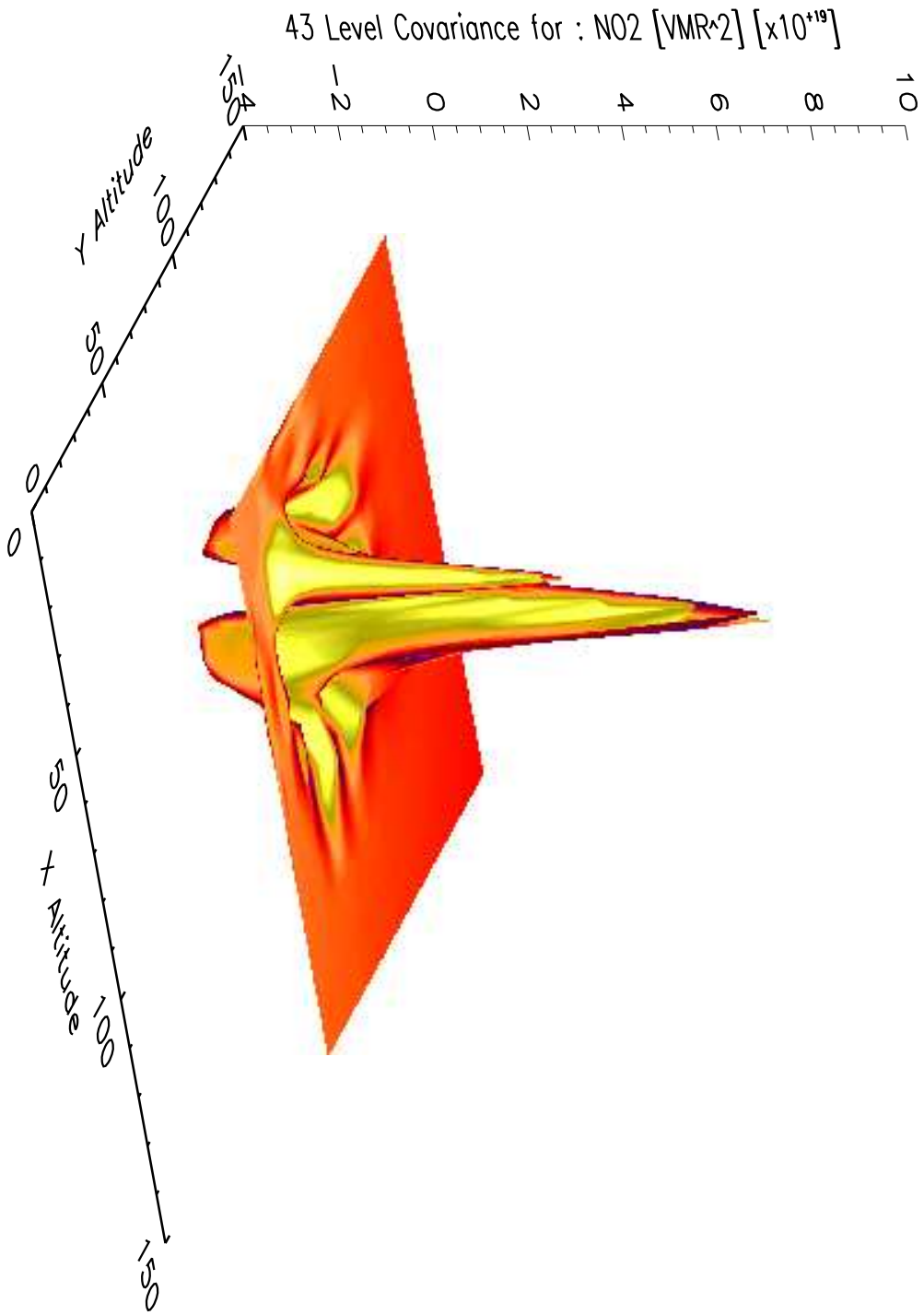

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
Altitude
120
100
80
60
40
20
0
10^{-14}
10^{-12}
10^{-10}
10^{-8}
10^{-6}
Mixing Ratio


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
0 10 20 30 40 50 60 70
%


44 Layer Covariance for : NO2 [VMR^2] [x10^+19]
−2.121
−0.478
1.166
2.810
4.453
6.097
7.740
9.384
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


44 Layer Covariance for : NO2 [VMR^2] [x10^+19]
-4
-2
0
2
4
6
8
10
Y Altitude
150
100
50
0
X Altitude
0
50
100
150


43 Level Covariance for : NO2 [VMR^2] [x10^+19]
−2.099
−0.496
1.106
2.708
4.311
5.913
7.516
9.118
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


43 Level Covariance for : NO2 [VMR^2] [x10^+19]
-14
-12
-10
-8
-6
-4
-2
0
2
4
6
8
10
Y Altitude
0
50
100
0
50
100
X Altitude