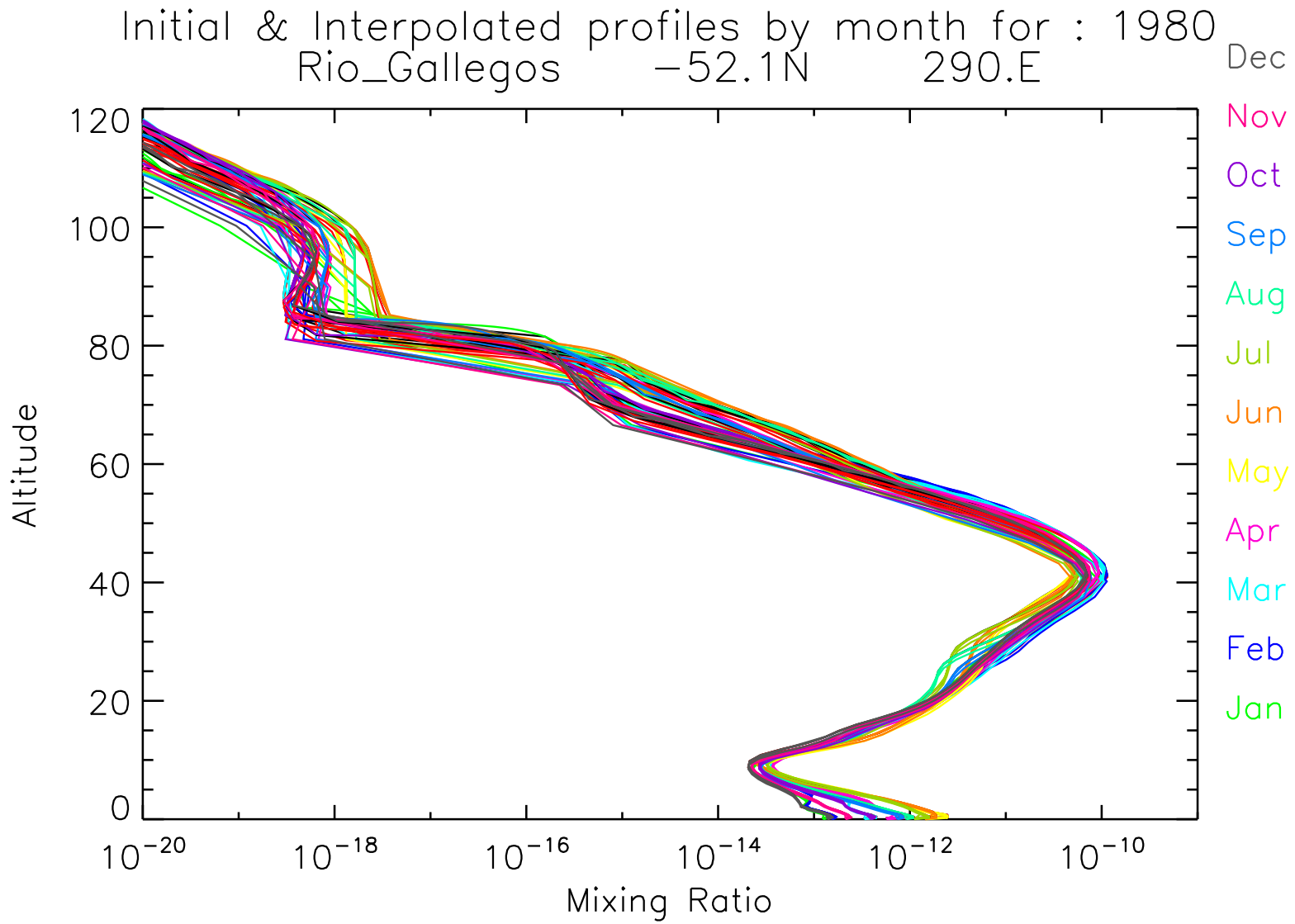
Initial & Interpolated profiles by month for : 1980
Rio_Gallegos −52.1N 290.E
Dec
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120
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Altitude
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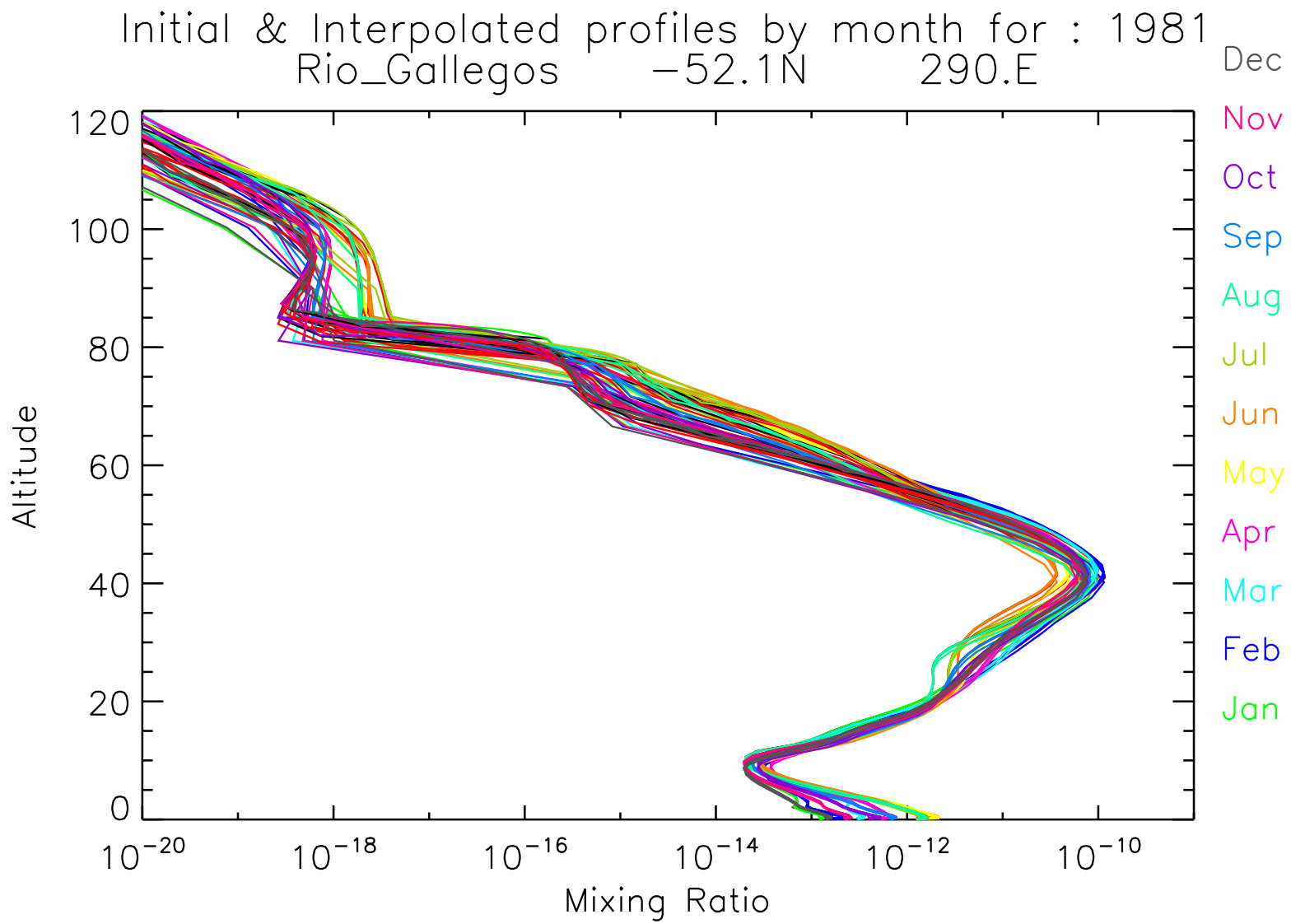
Mixing Ratio


Initial & Interpolated profiles by month for : 1981
Rio_Gallegos −52.1N 290.E
Dec
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Altitude
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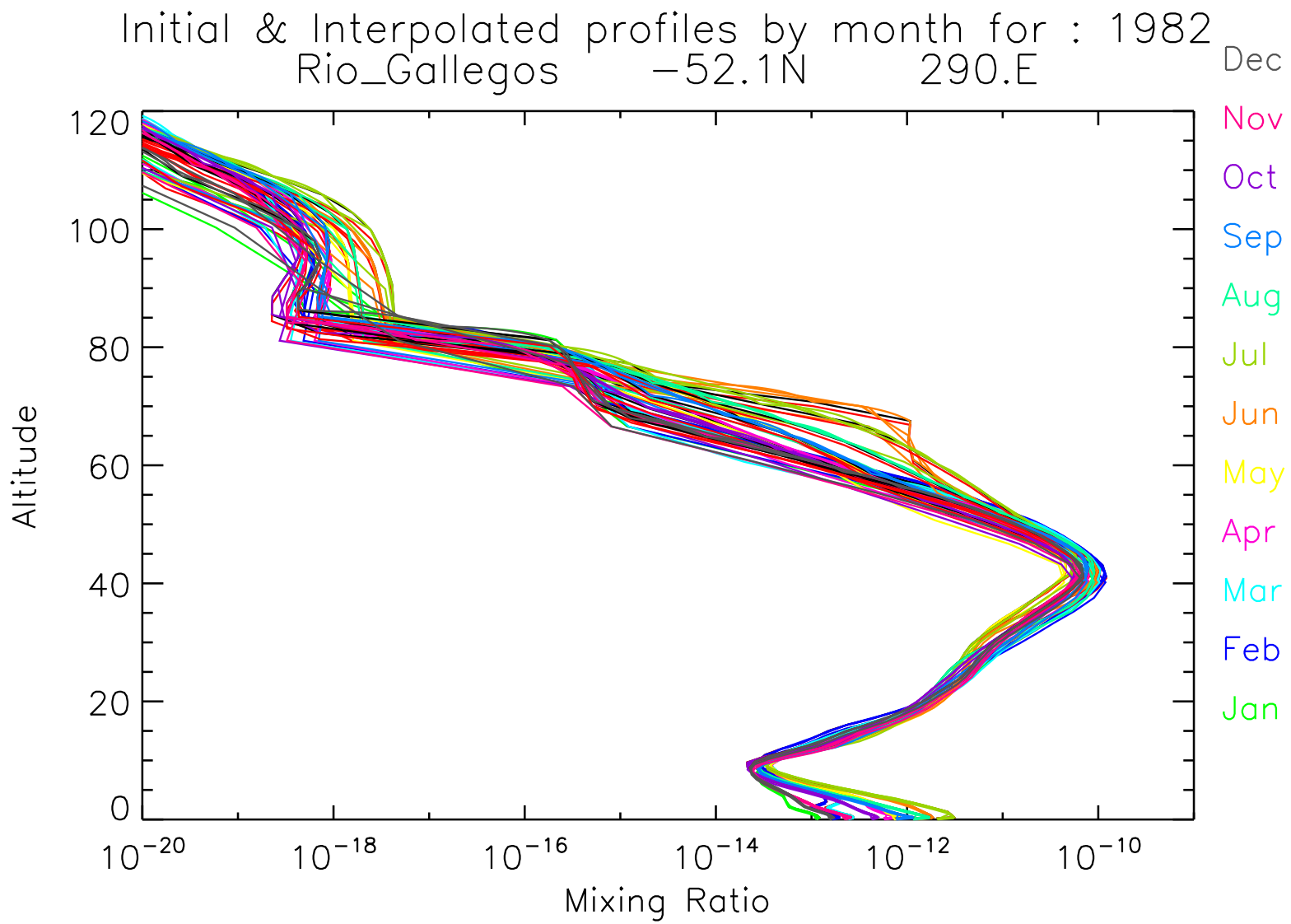
Mixing Ratio


Initial & Interpolated profiles by month for : 1982
Rio_Gallegos −52.1N 290.E
Dec
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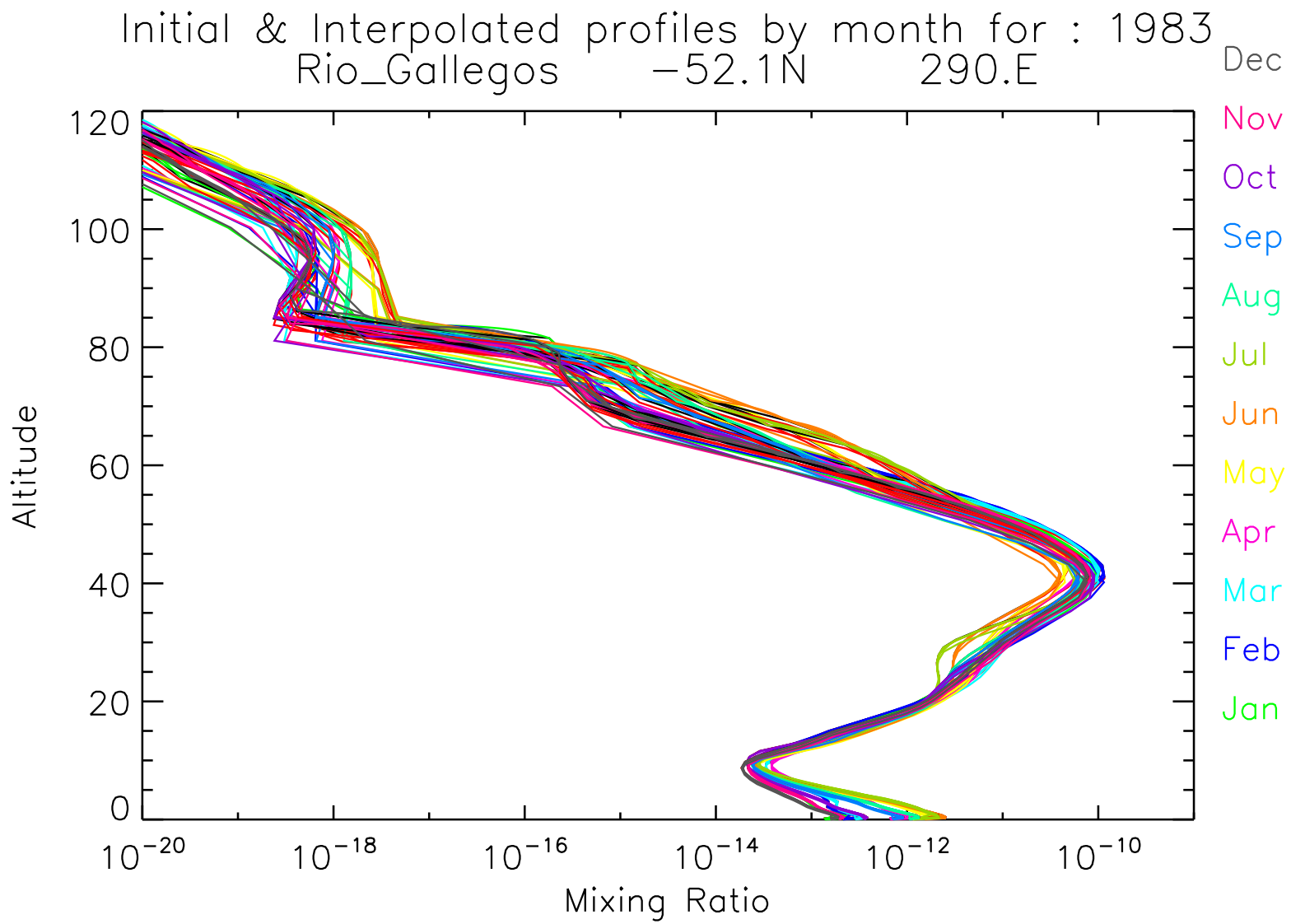
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1983
Rio_Gallegos −52.1N 290.E
Dec
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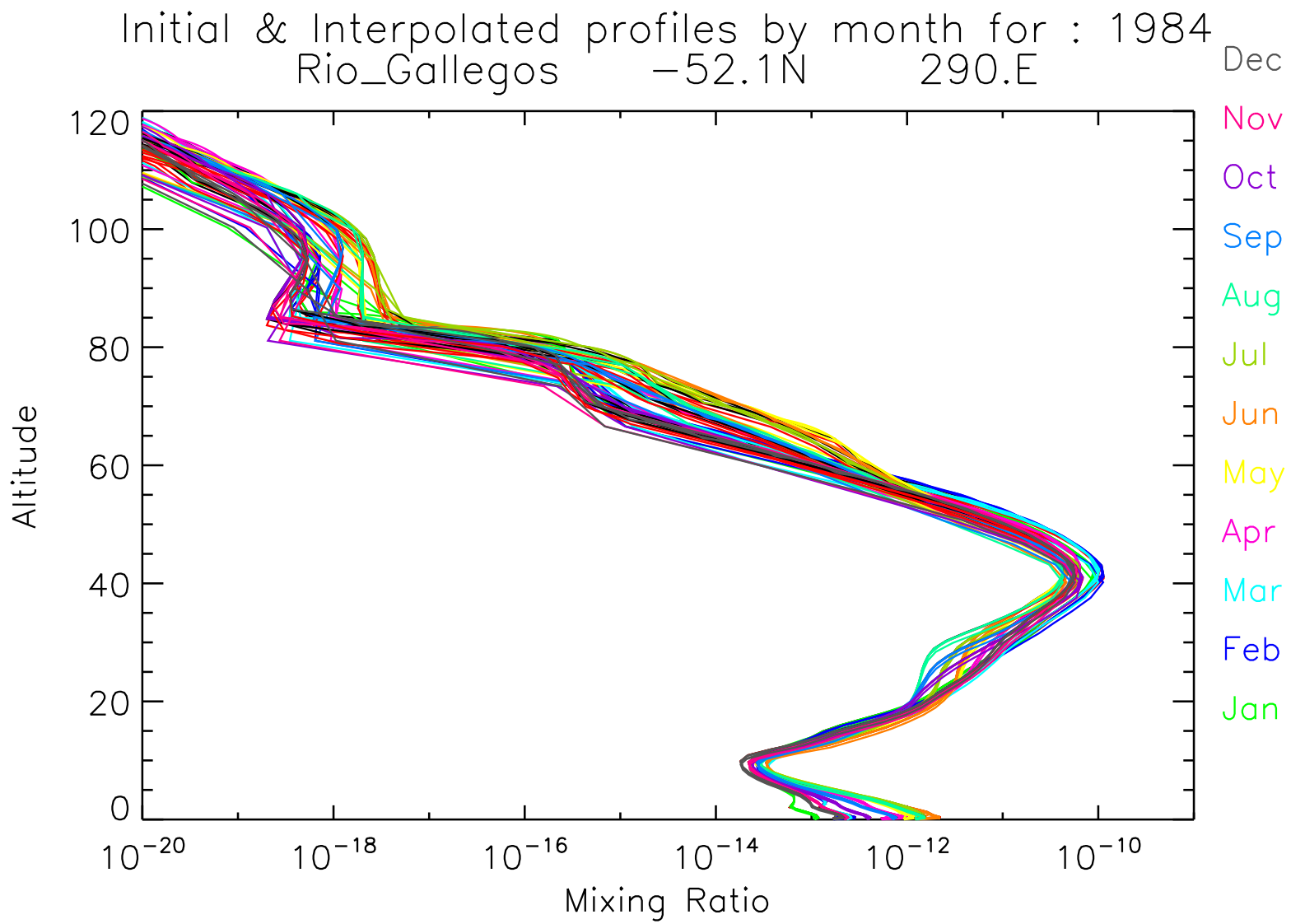
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1984
Rio_Gallegos −52.1N 290.E
Dec
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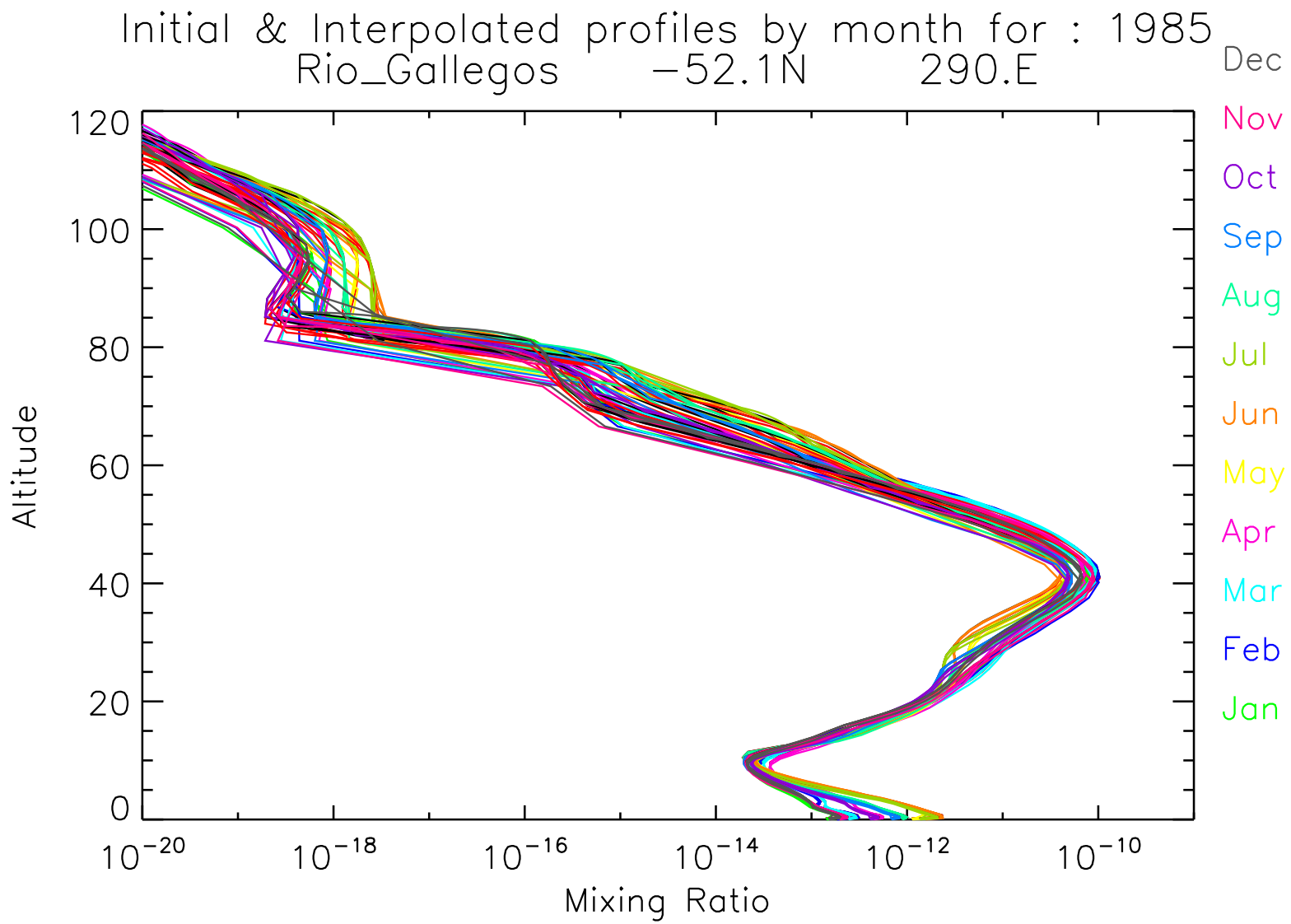
Mixing Ratio


Initial & Interpolated profiles by month for : 1985
Rio_Gallegos −52.1N 290.E
Dec
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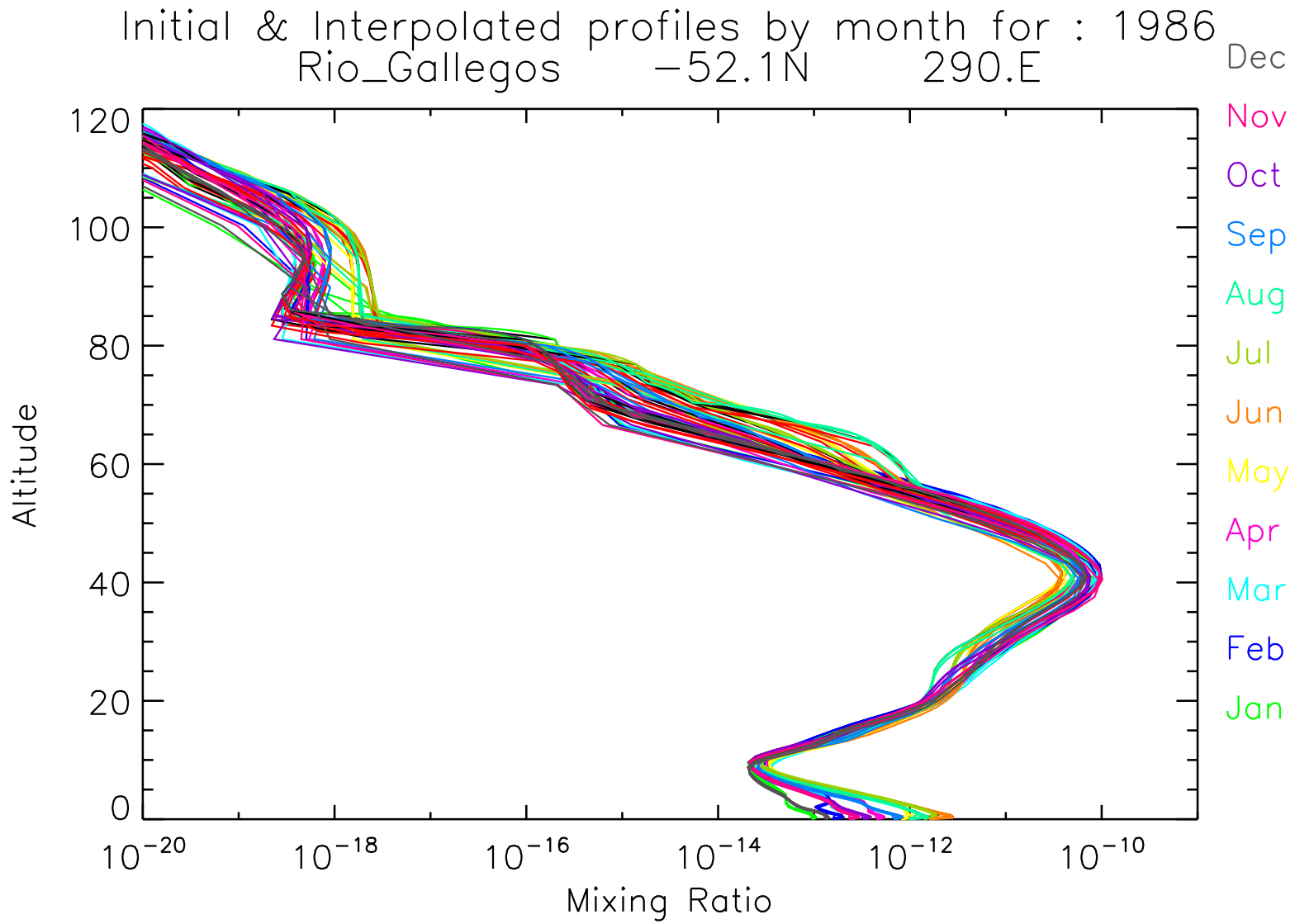
Mixing Ratio


Initial & Interpolated profiles by month for : 1986
Rio_Gallegos −52.1N 290.E
Altitude
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Mixing Ratio
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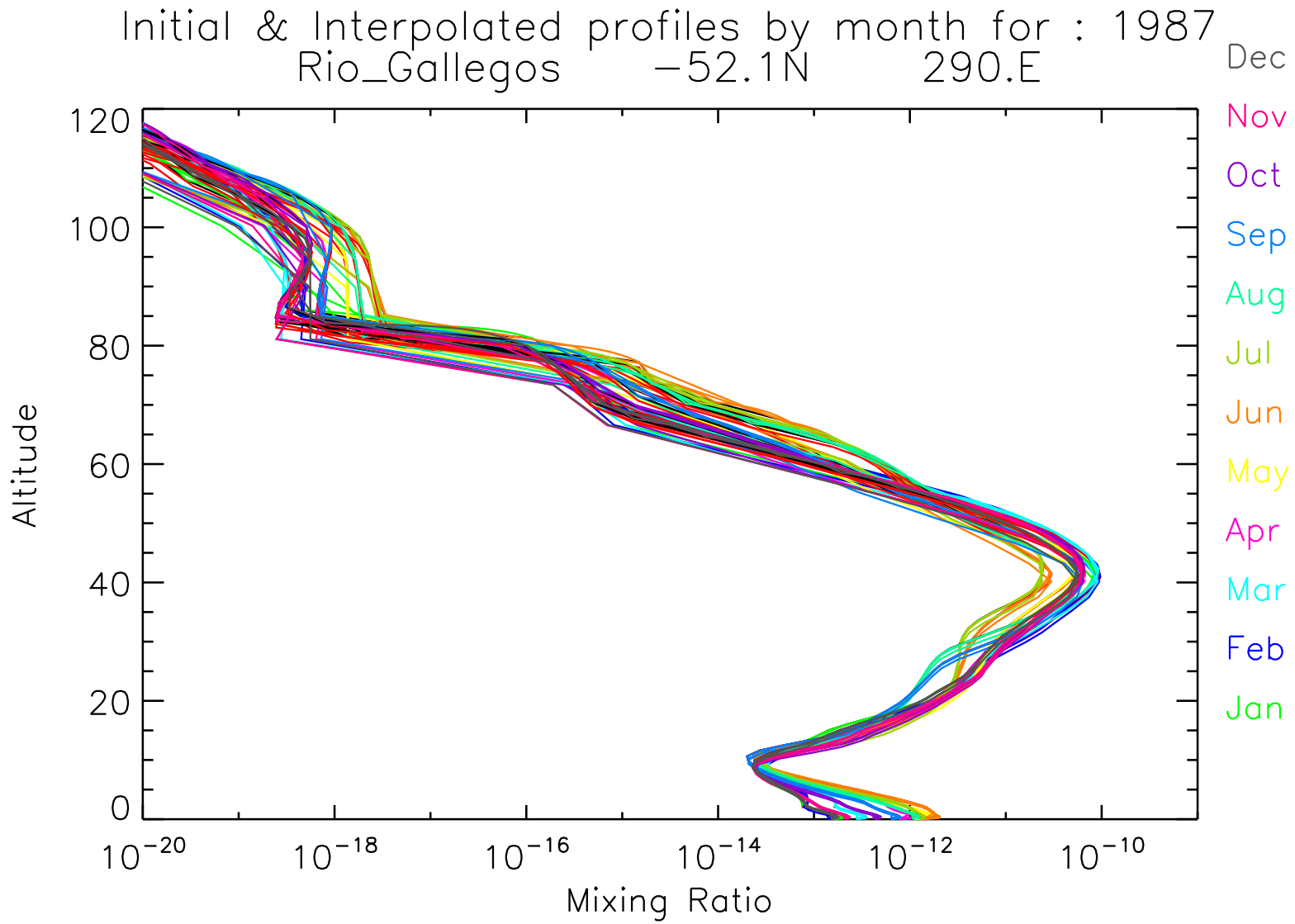
Initial & Interpolated profiles by month for : 1987
Rio_Gallegos −52.1N 290.E
Dec
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Altitude
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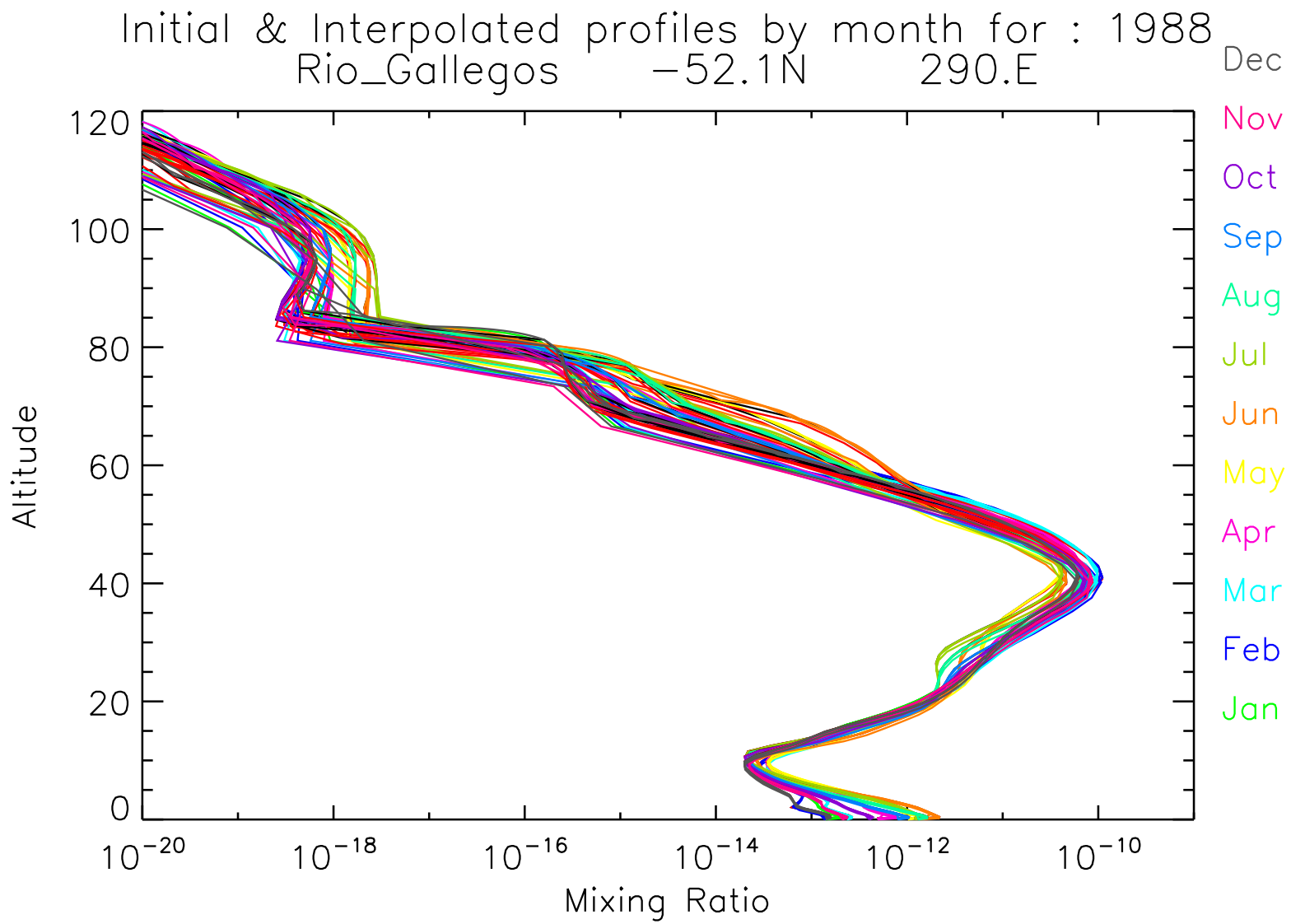
Mixing Ratio


Initial & Interpolated profiles by month for : 1988
Rio_Gallegos −52.1N 290.E
Dec
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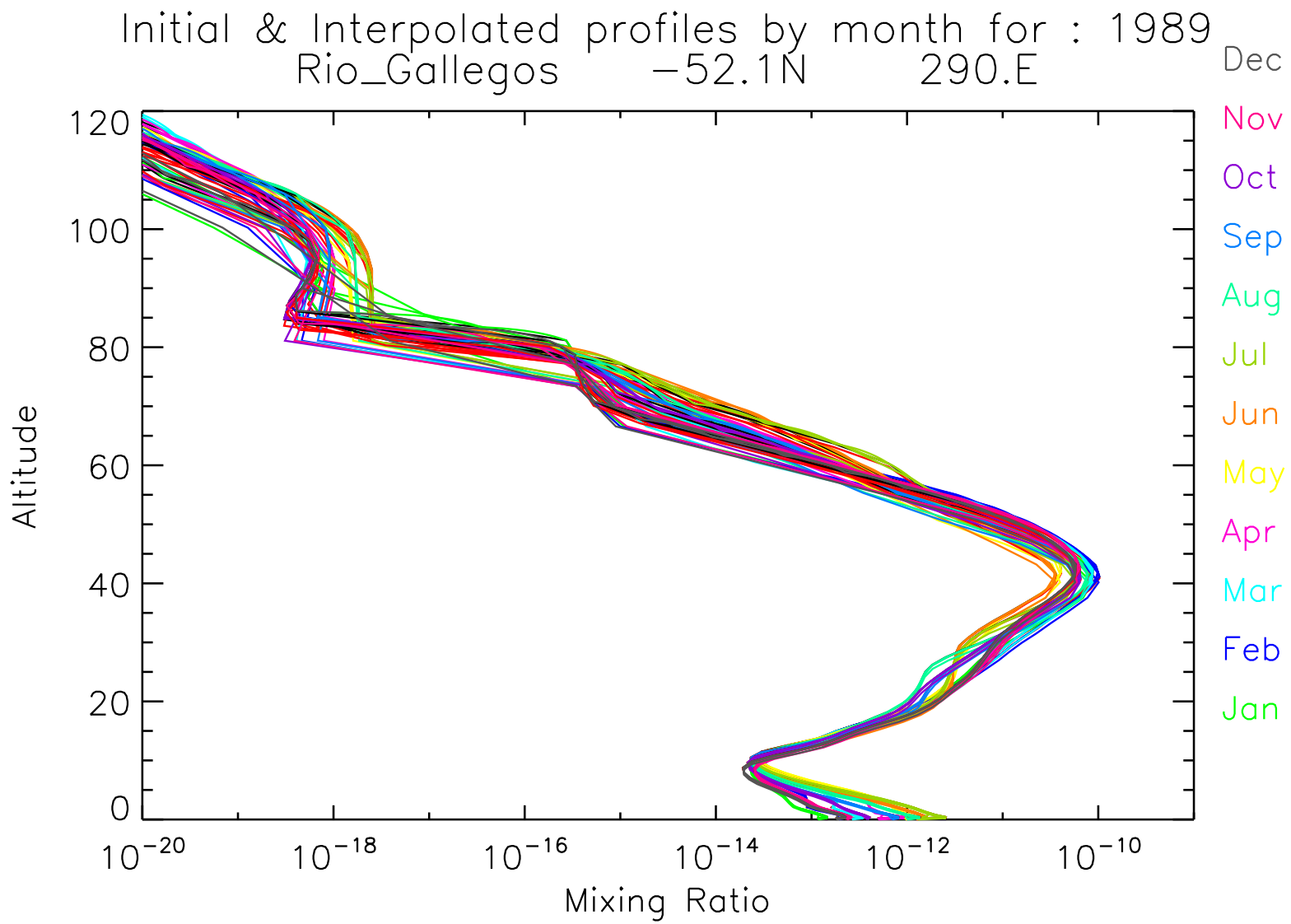
Mixing Ratio


Initial & Interpolated profiles by month for : 1989
Rio_Gallegos −52.1N 290.E
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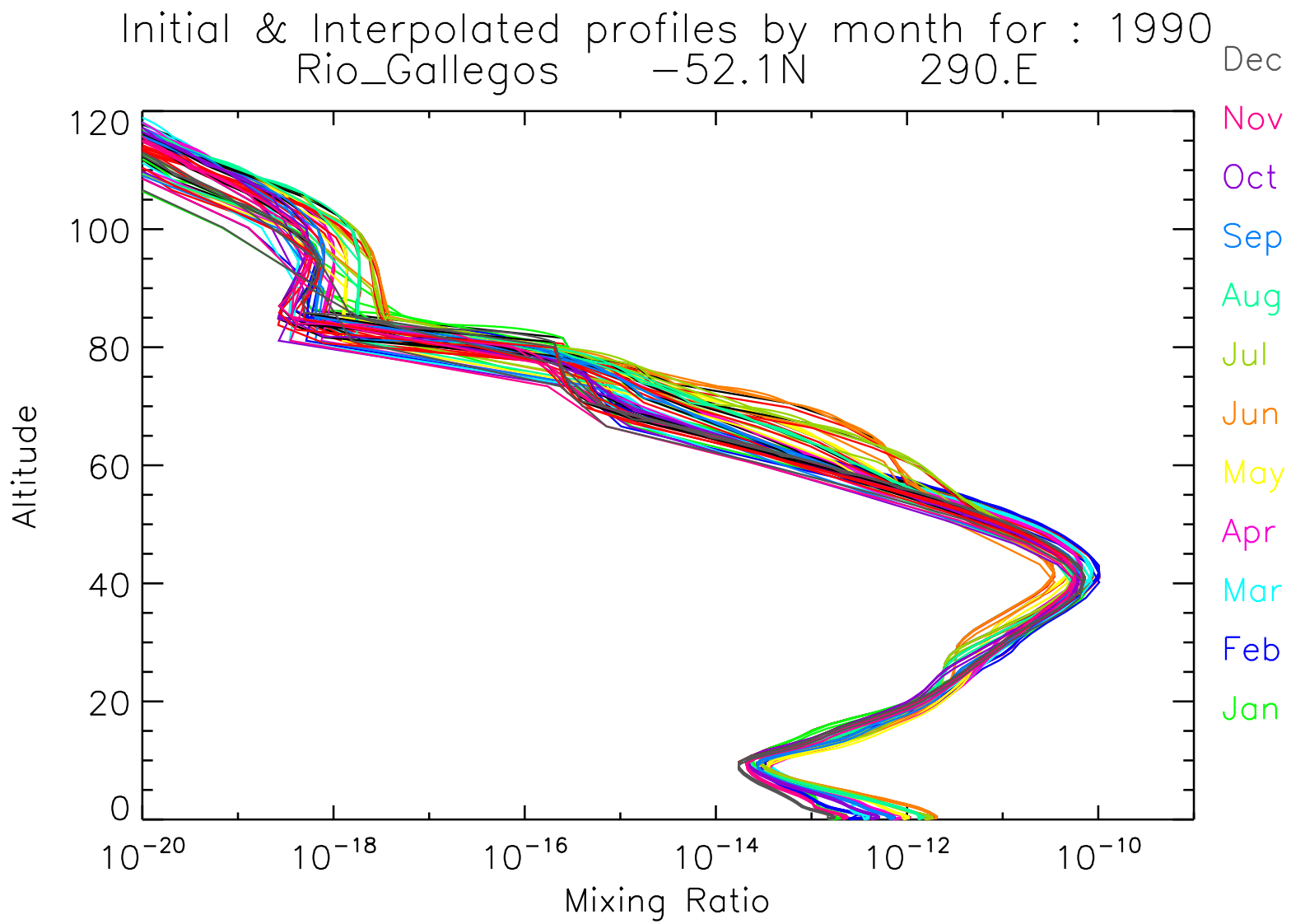
Mixing Ratio


Initial & Interpolated profiles by month for : 1990
Rio_Gallegos −52.1N 290.E
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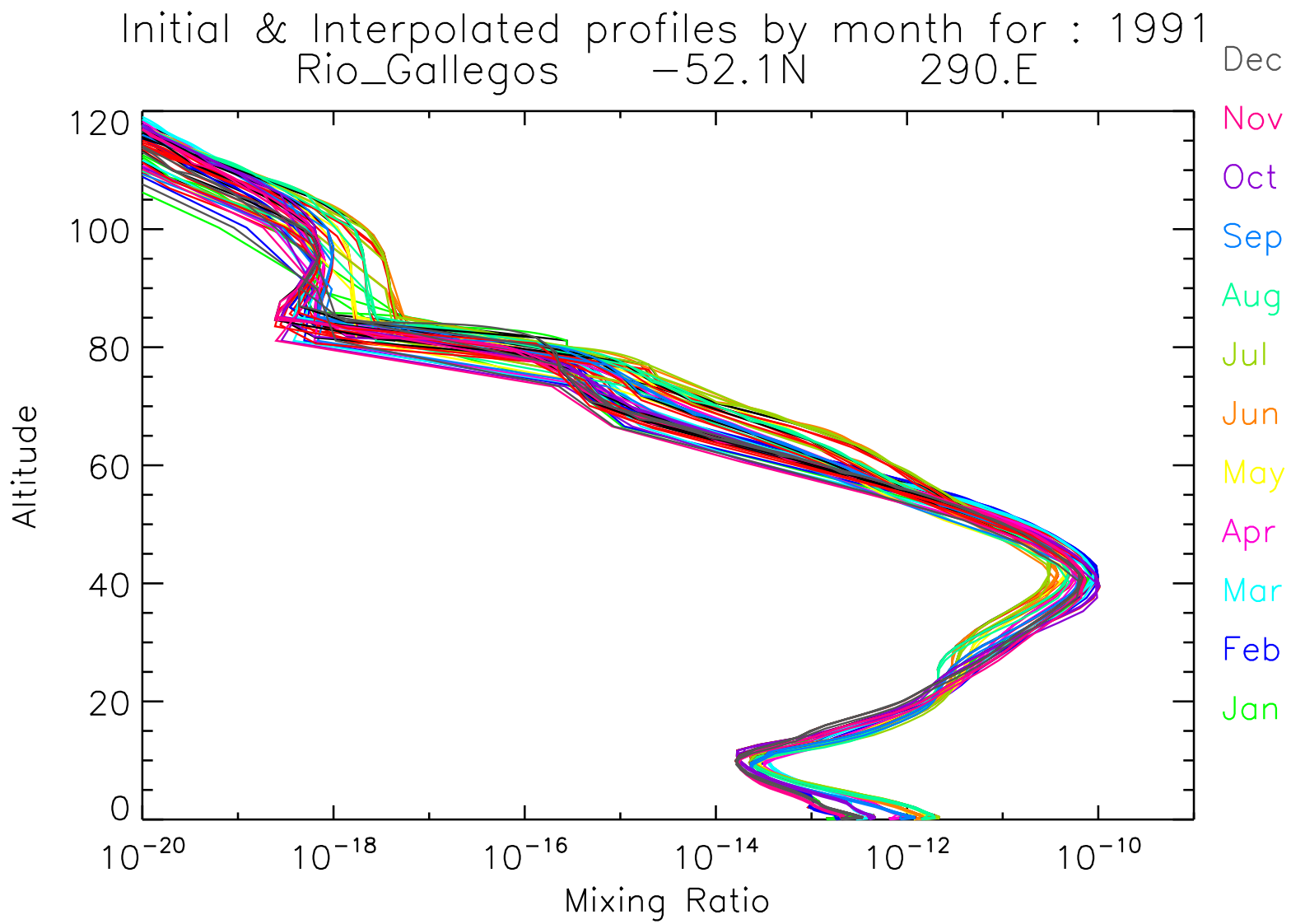
Mixing Ratio


Initial & Interpolated profiles by month for : 1991
Rio_Gallegos −52.1N 290.E
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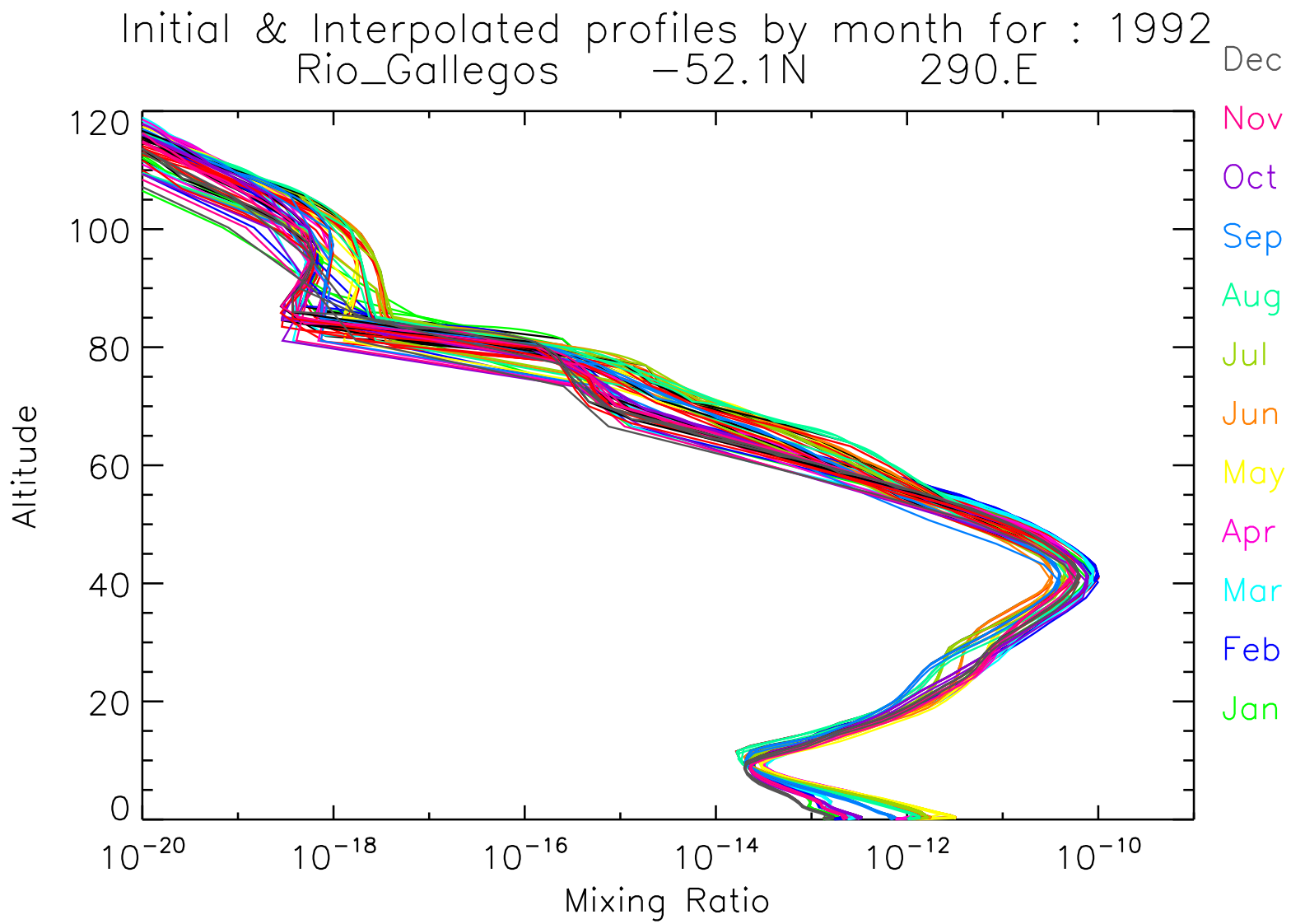
Mixing Ratio


Initial & Interpolated profiles by month for : 1992
Rio_Gallegos −52.1N 290.E
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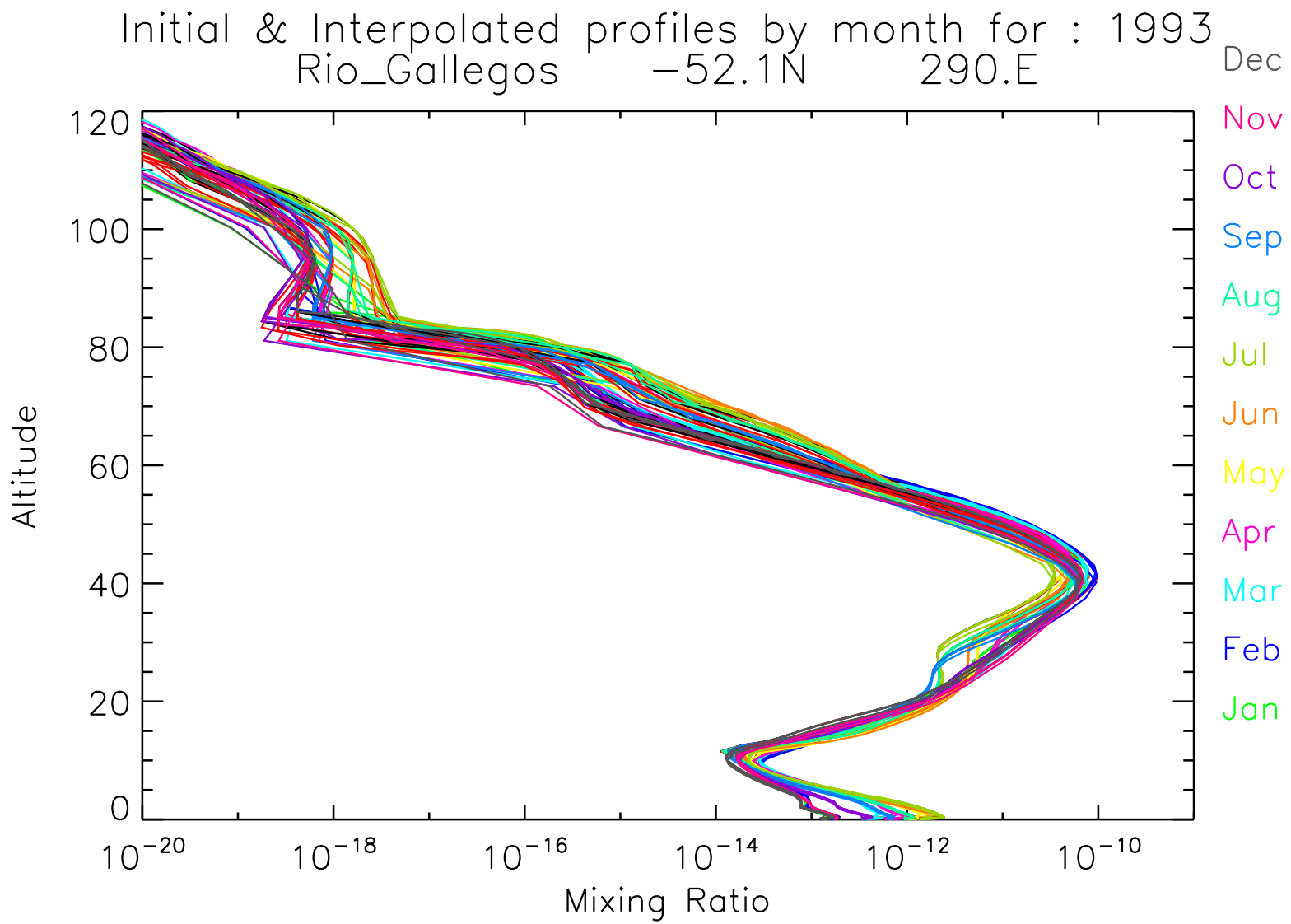
Mixing Ratio


Initial & Interpolated profiles by month for : 1993
Rio_Gallegos −52.1N 290.E
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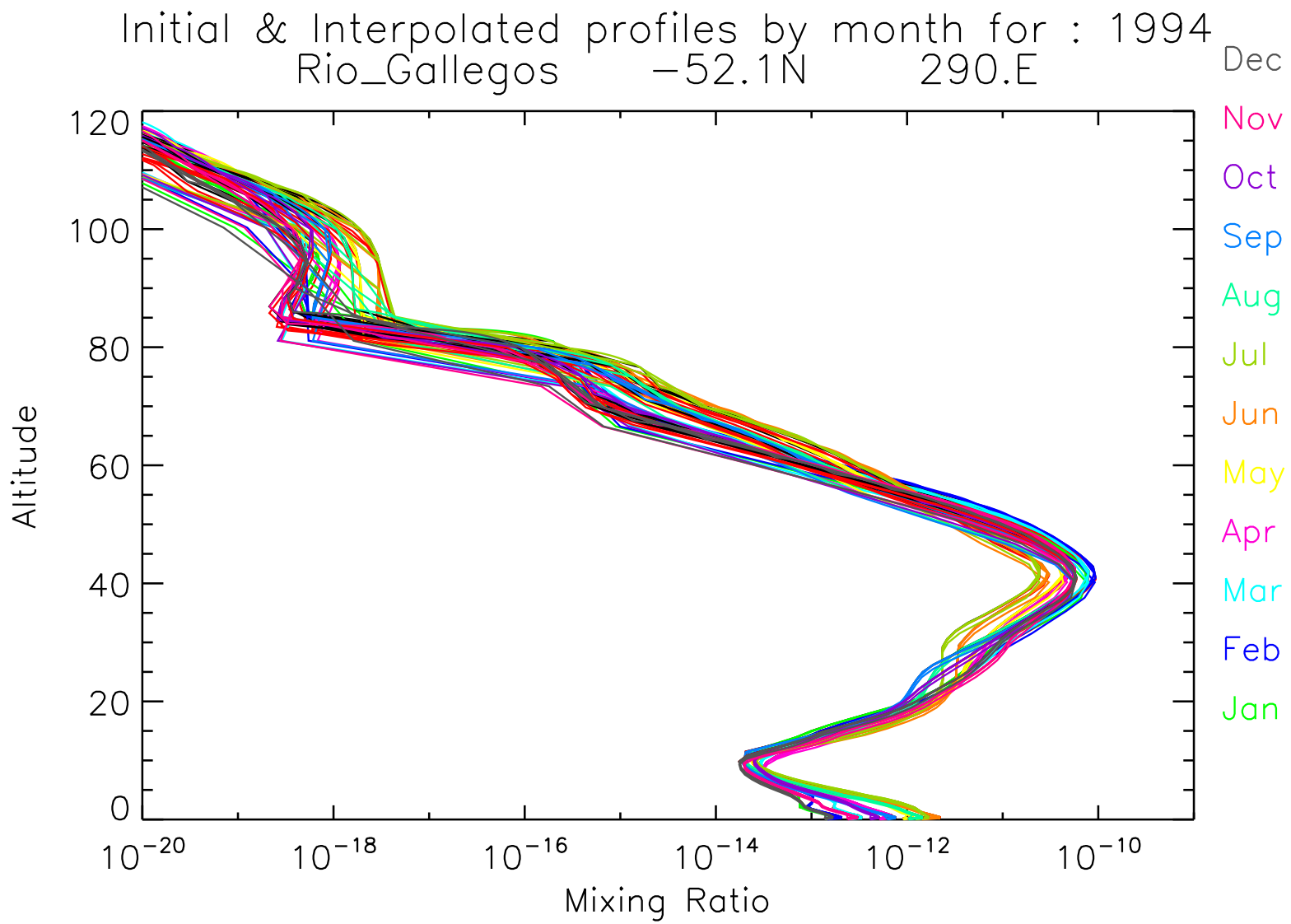
Mixing Ratio


Initial & Interpolated profiles by month for : 1994
Rio_Gallegos −52.1N 290.E
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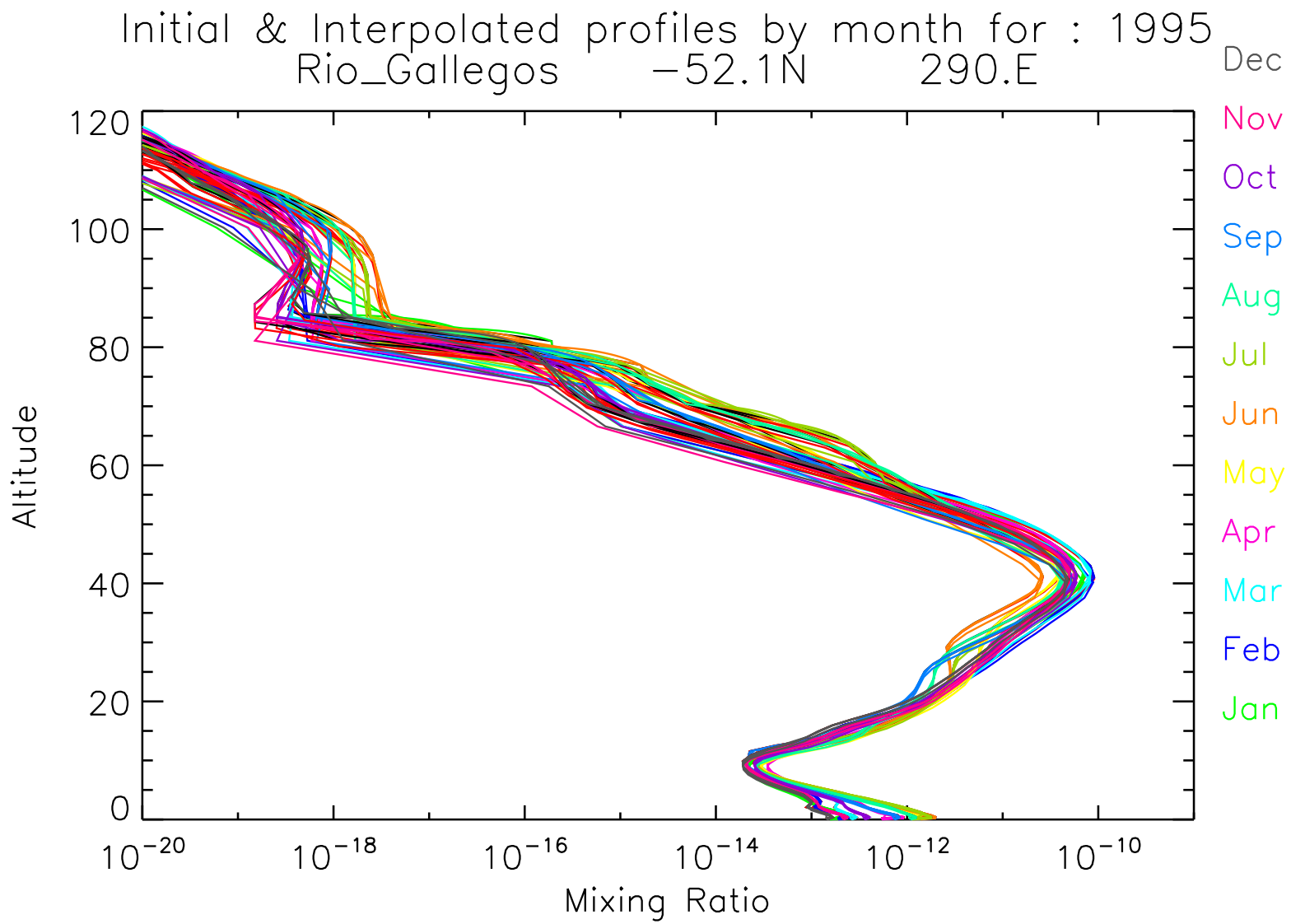
Mixing Ratio


Initial & Interpolated profiles by month for : 1995
Rio_Gallegos −52.1N 290.E
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Altitude
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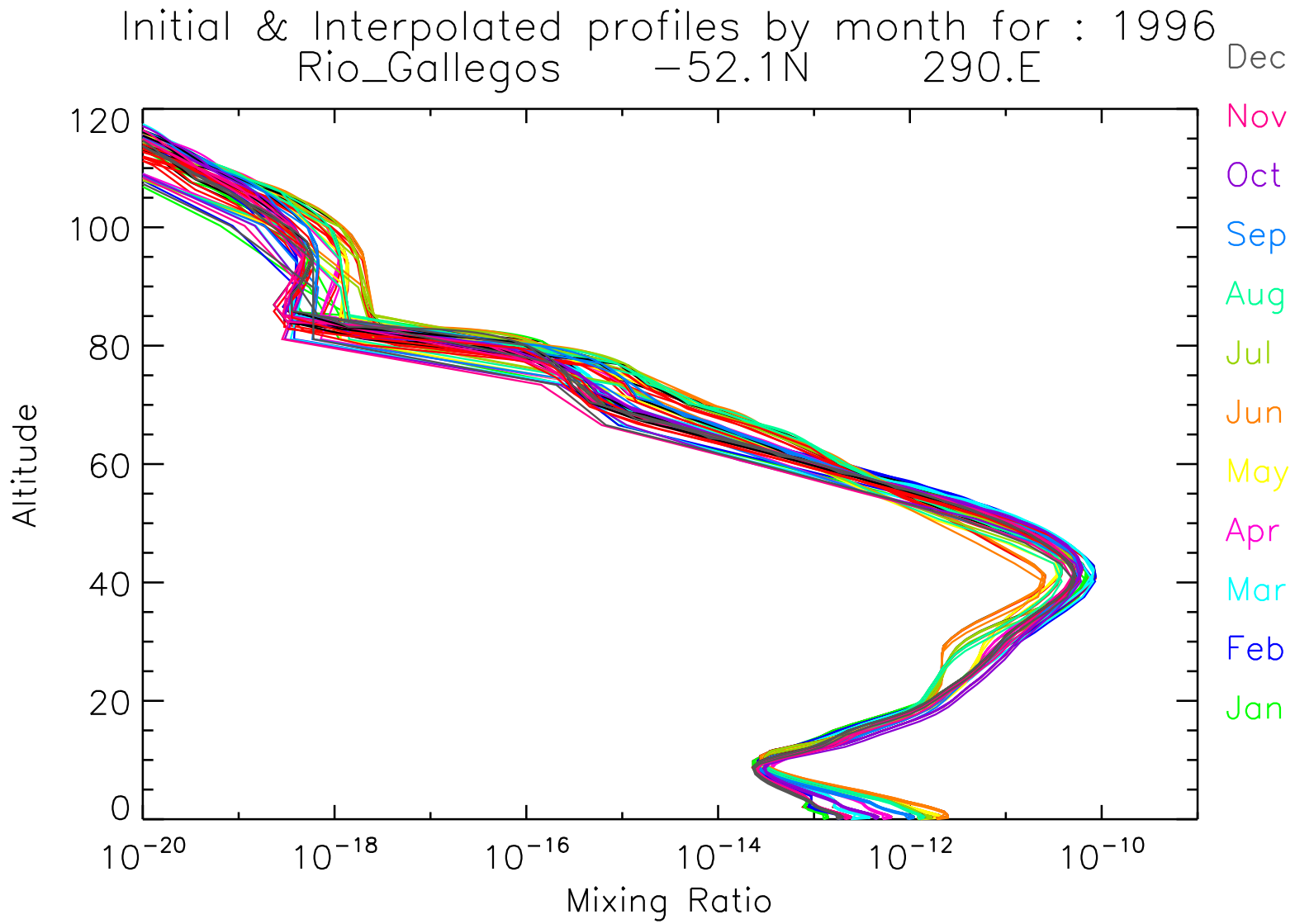
Mixing Ratio


Initial & Interpolated profiles by month for : 1996
Rio_Gallegos −52.1N 290.E
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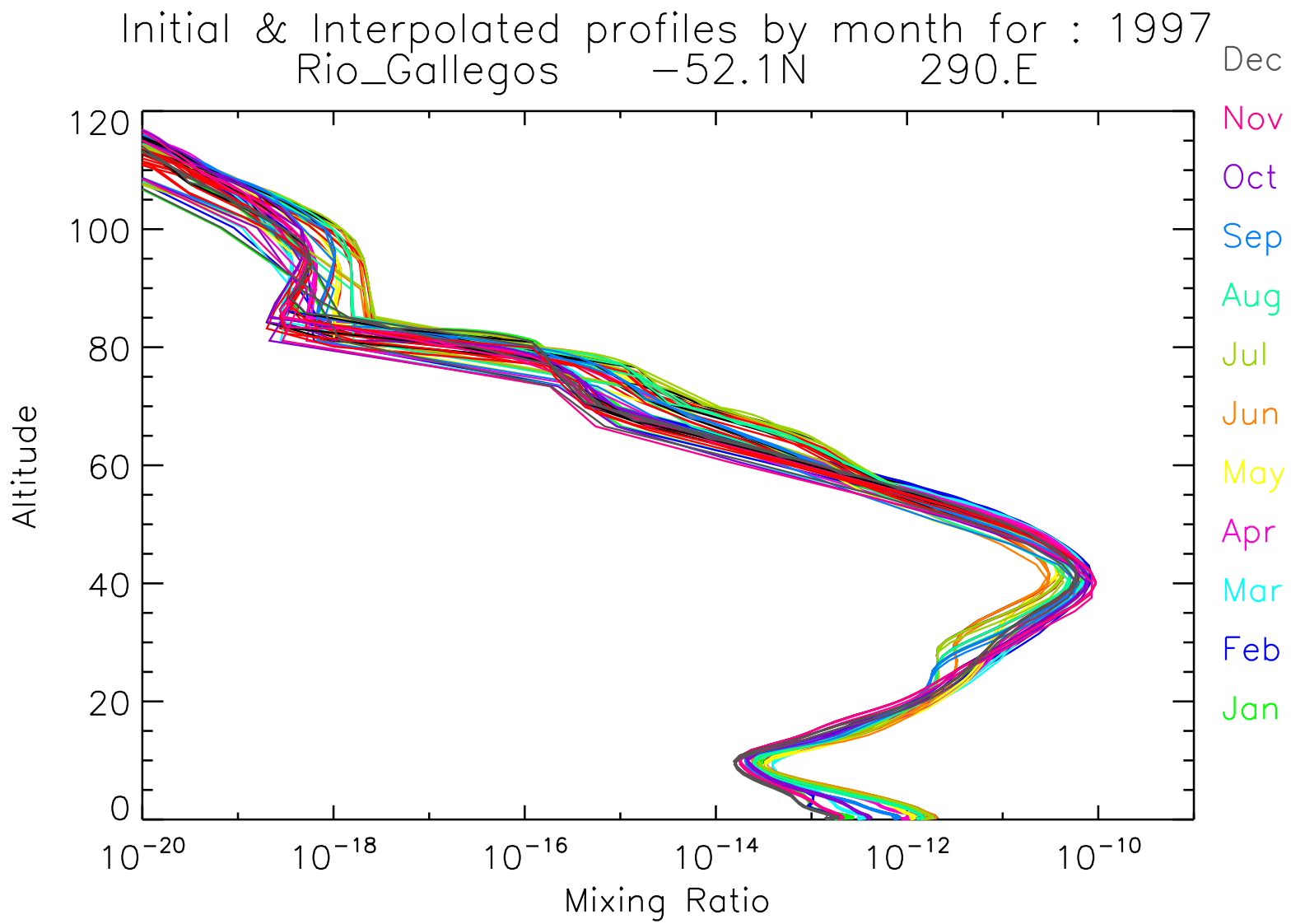
Mixing Ratio


Initial & Interpolated profiles by month for : 1997
Rio_Gallegos −52.1N 290.E
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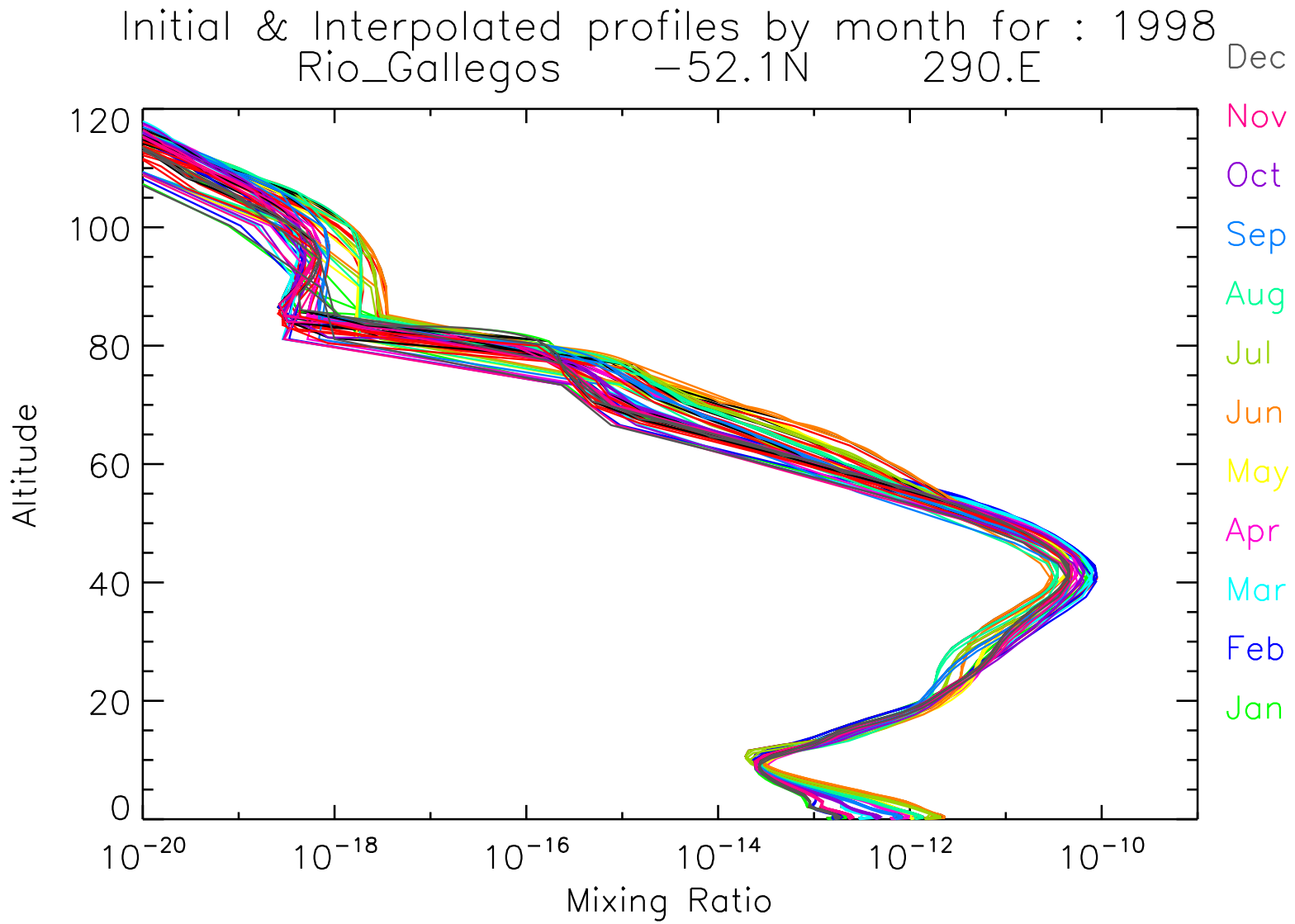
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1998
Rio_Gallegos −52.1N 290.E
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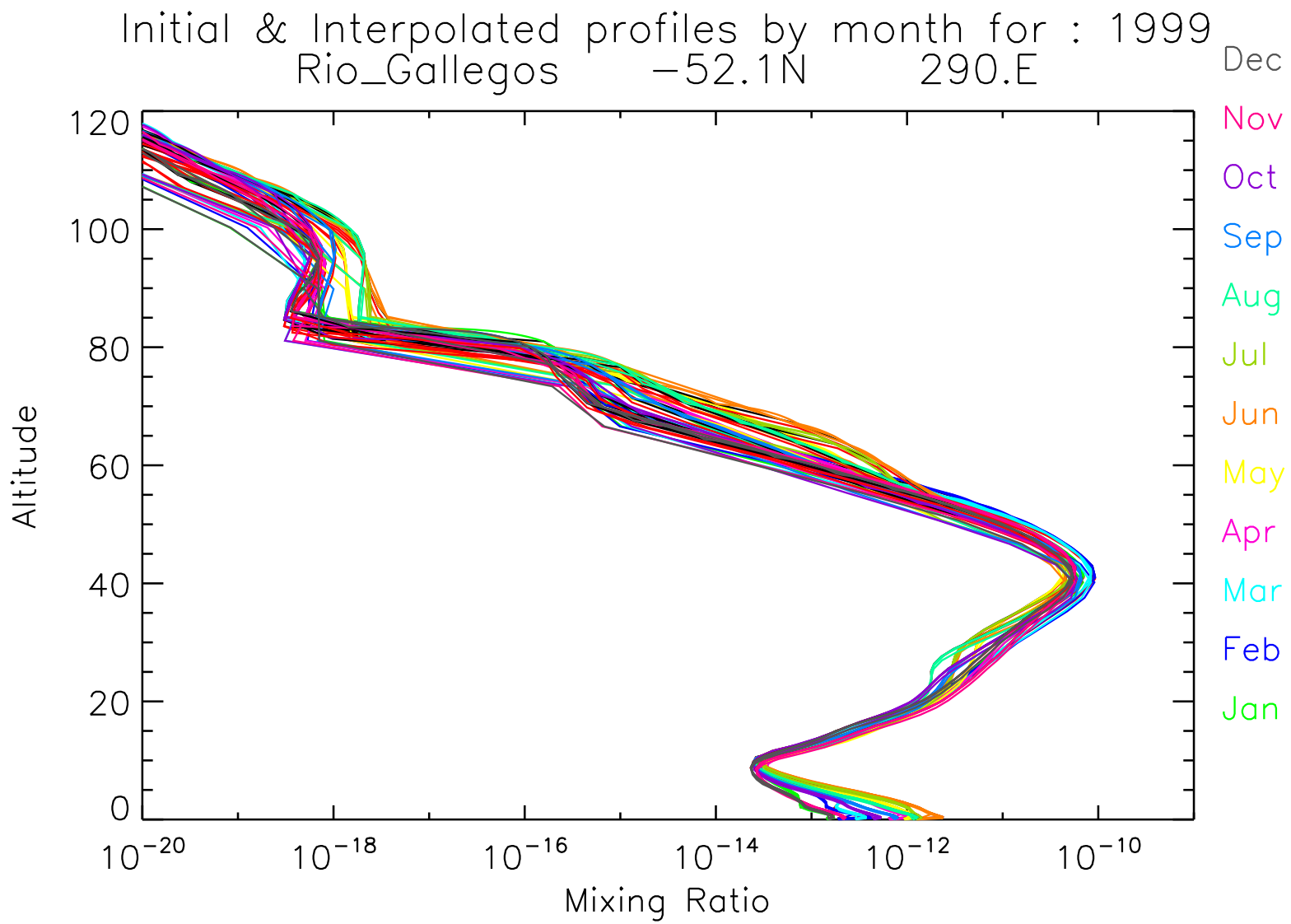
Mixing Ratio


Initial & Interpolated profiles by month for : 1999
Rio_Gallegos −52.1N 290.E
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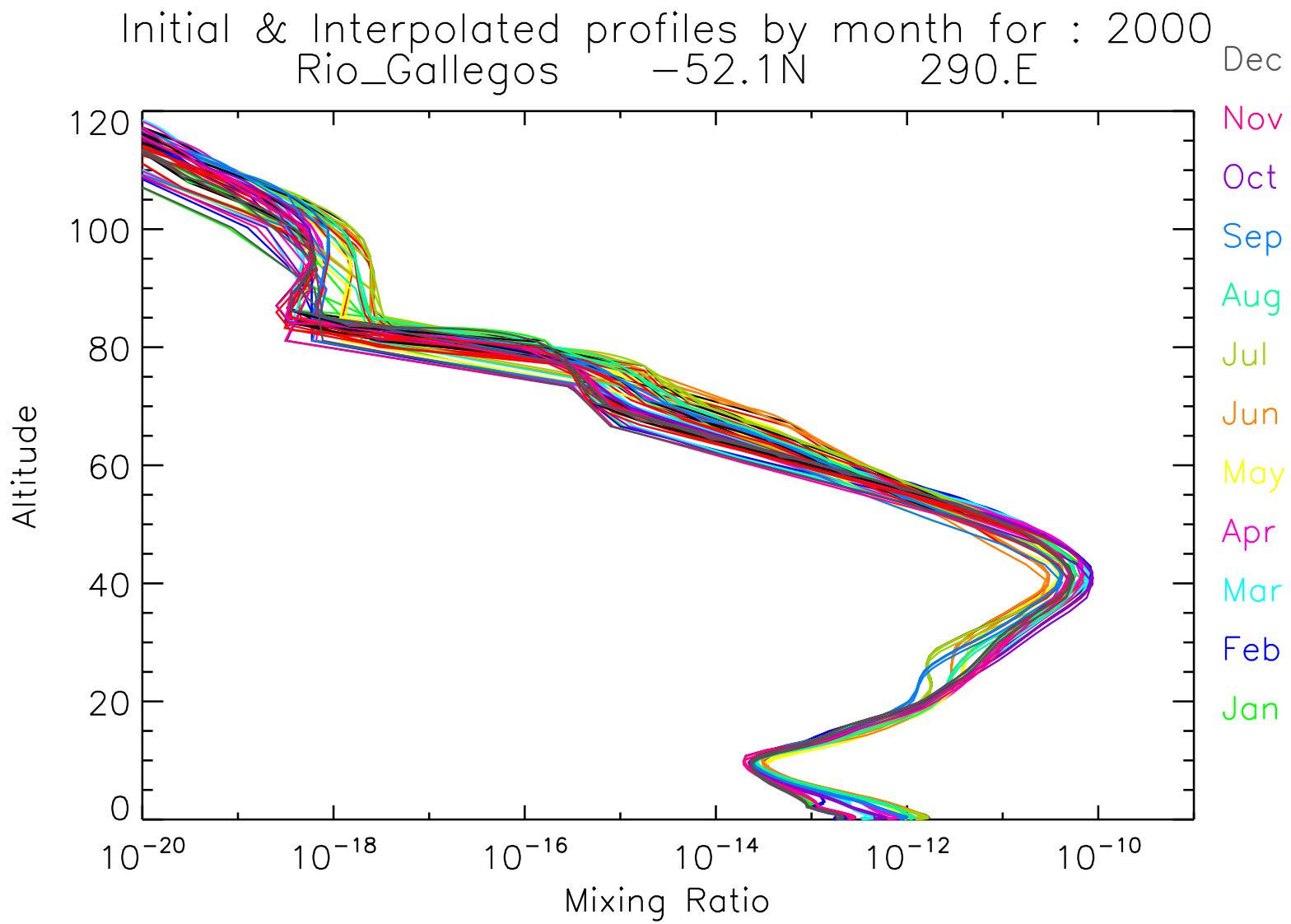
Mixing Ratio


Initial & Interpolated profiles by month for : 2000
Rio_Gallegos −52.1N 290.E
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Altitude
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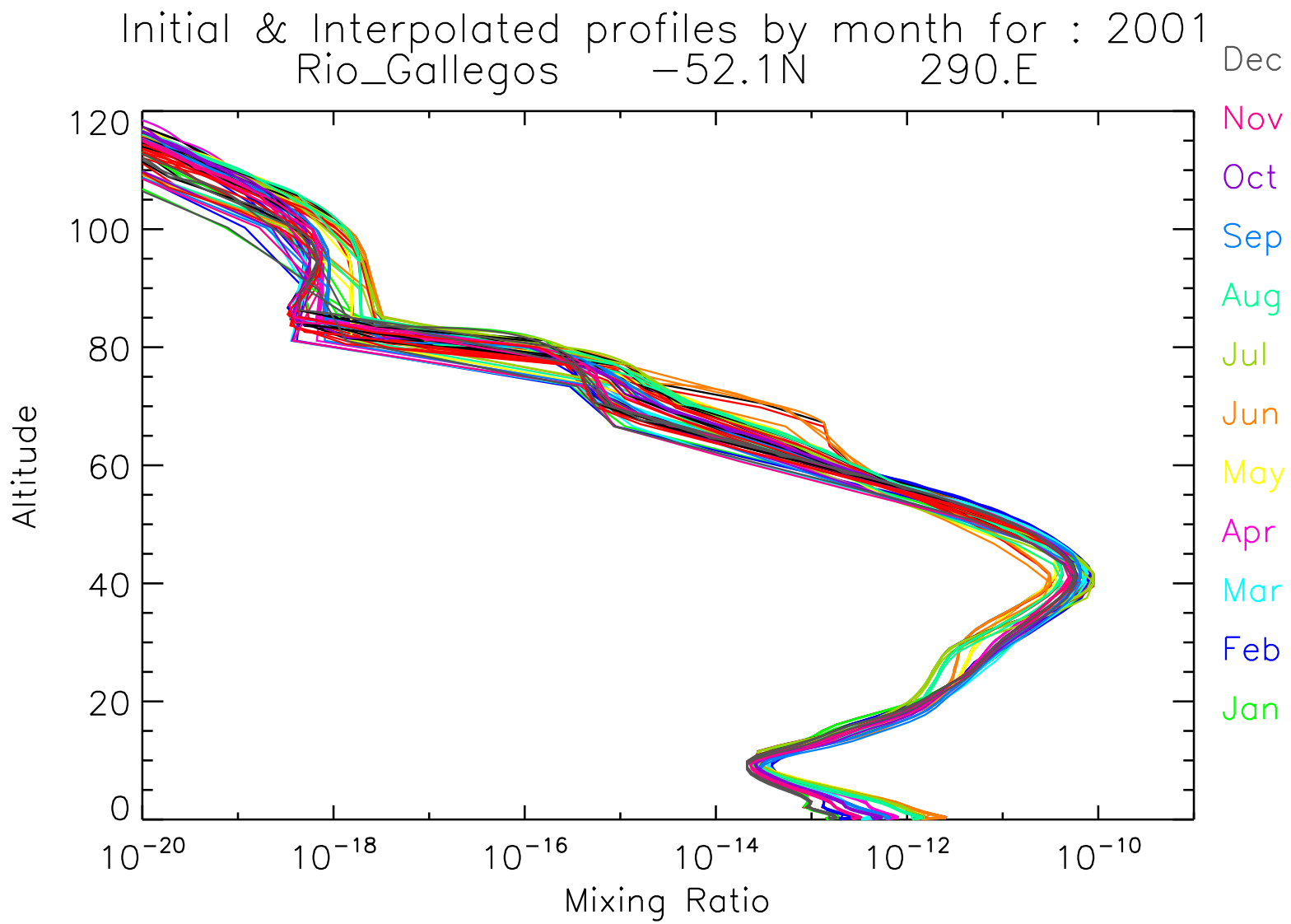
Mixing Ratio


Initial & Interpolated profiles by month for : 2001
Rio_Gallegos −52.1N 290.E
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Altitude
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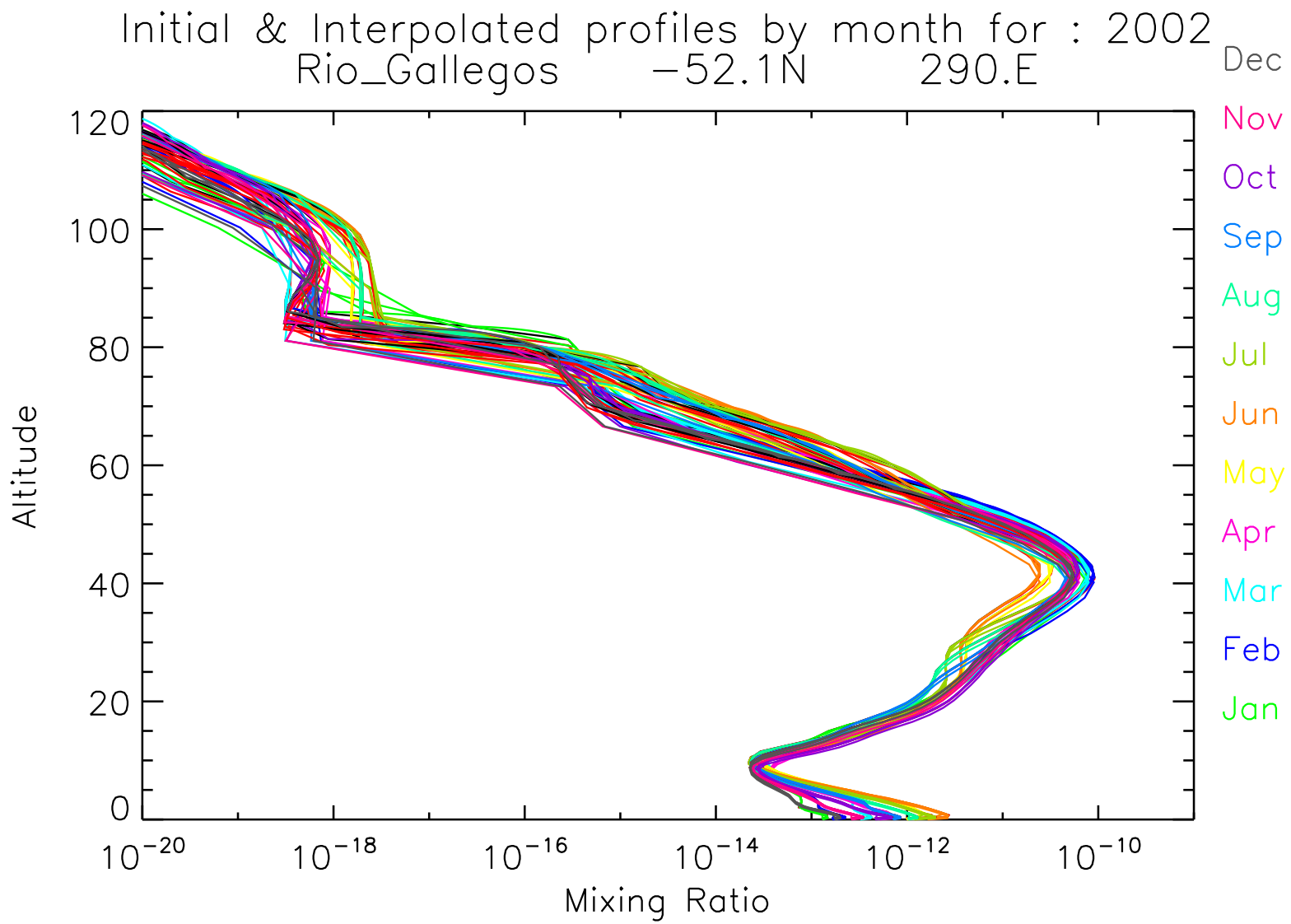
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2002
Rio_Gallegos −52.1N 290.E
Dec
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Altitude
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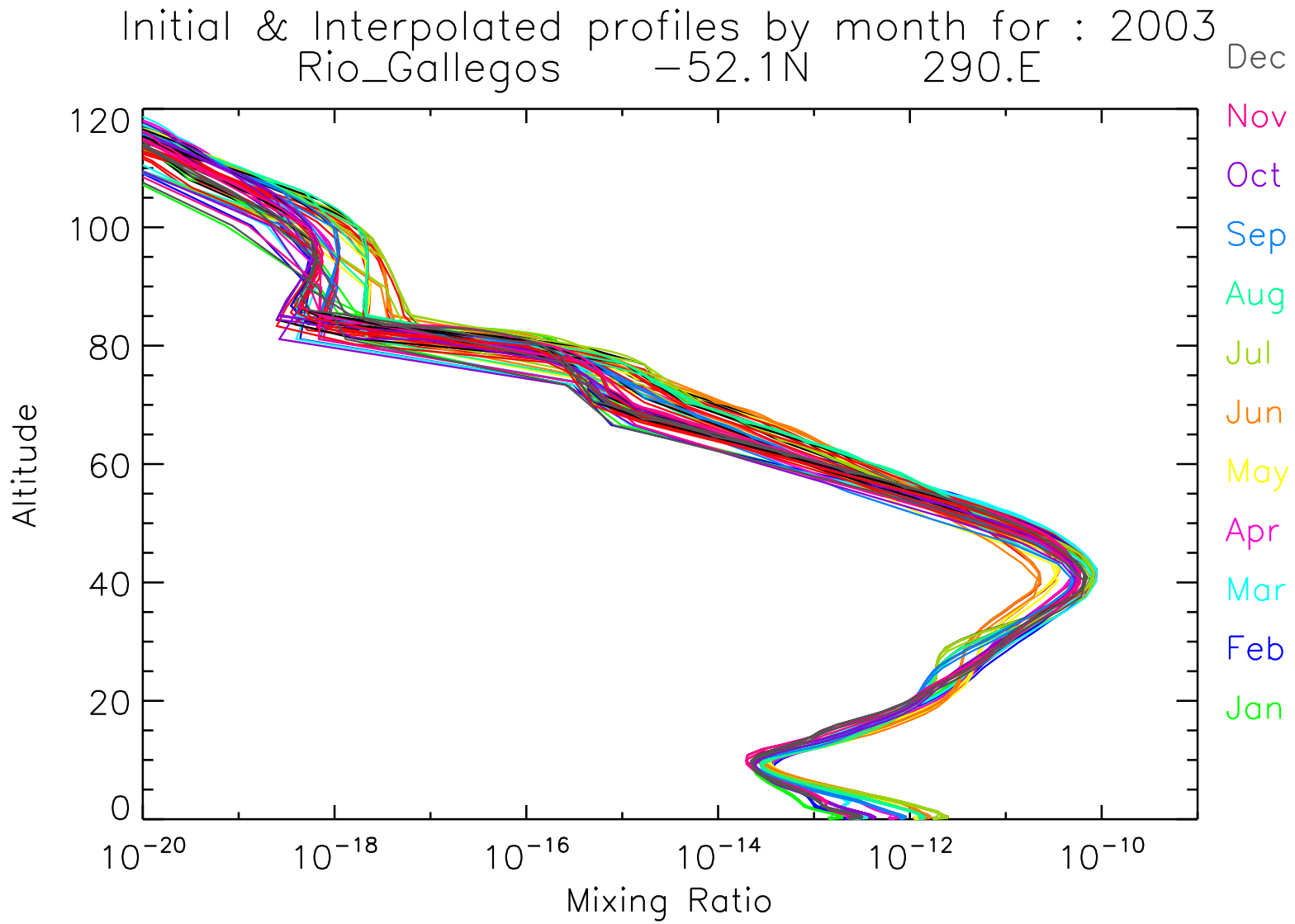
10^{-12}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2003
Rio_Gallegos −52.1N 290.E
Dec
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Altitude
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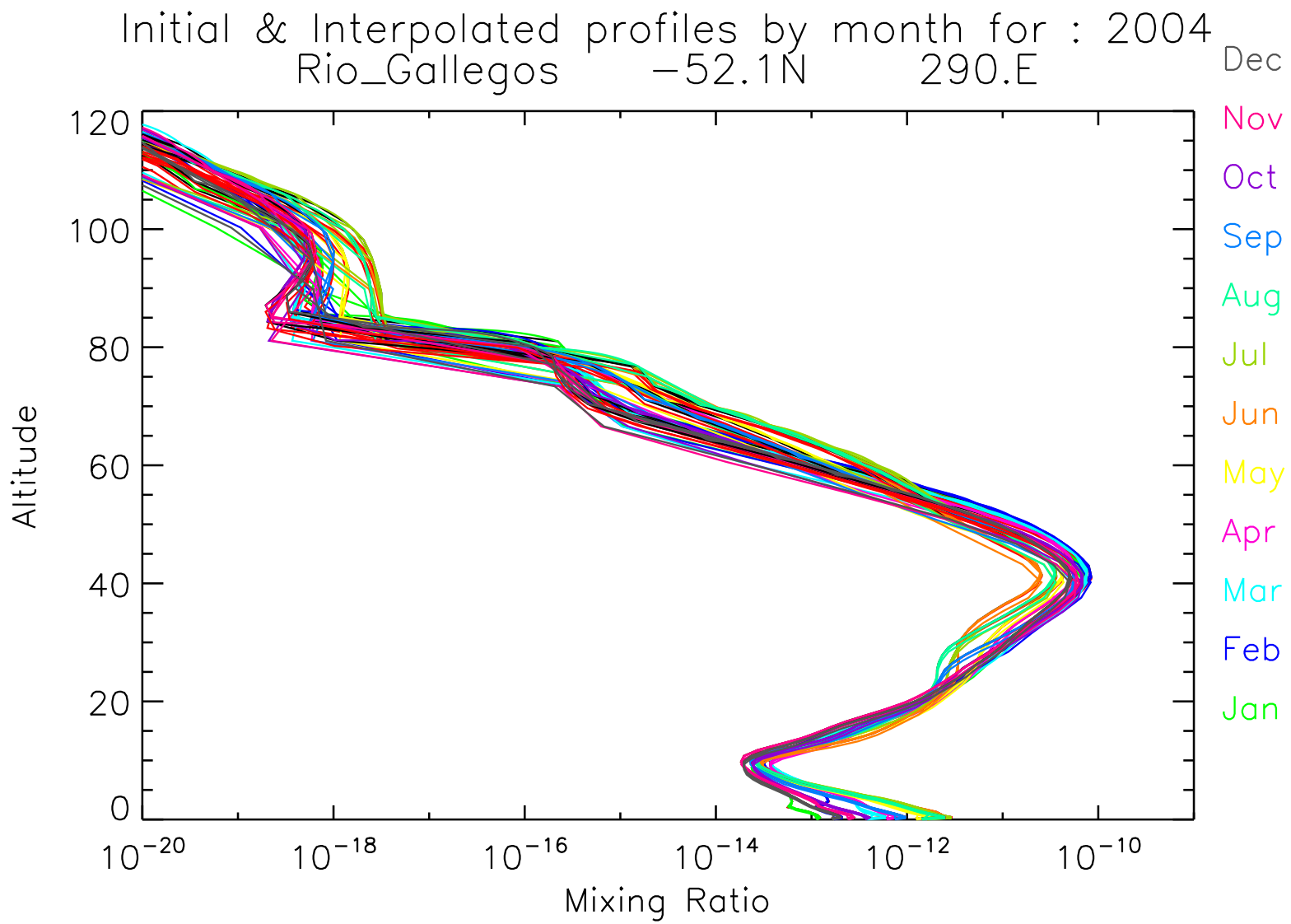
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2004
Rio_Gallegos −52.1N 290.E
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Altitude
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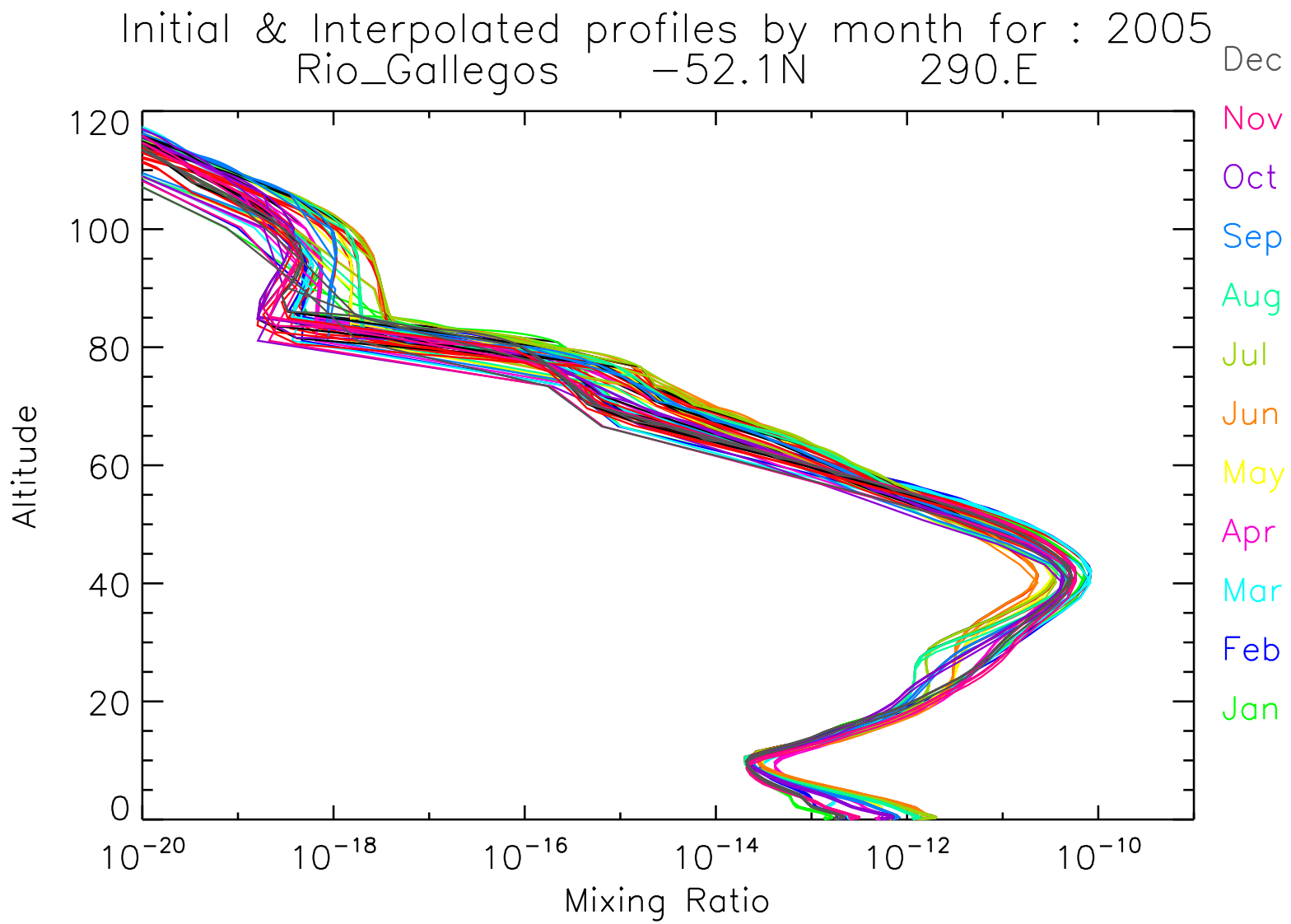
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2005
Rio_Gallegos −52.1N 290.E
Dec
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Altitude
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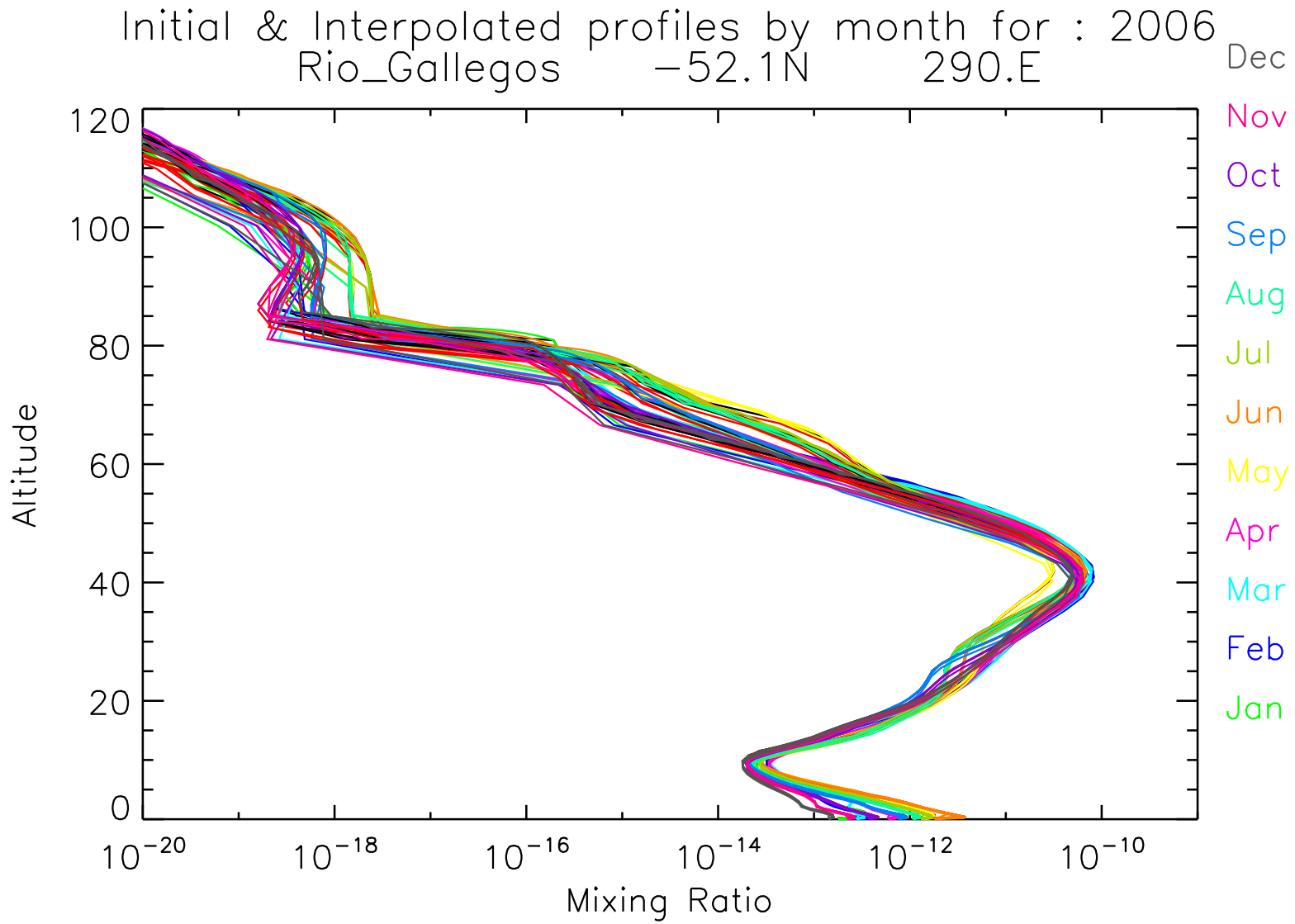
Mixing Ratio


Initial & Interpolated profiles by month for : 2006
Rio_Gallegos −52.1N 290.E
Dec
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Altitude
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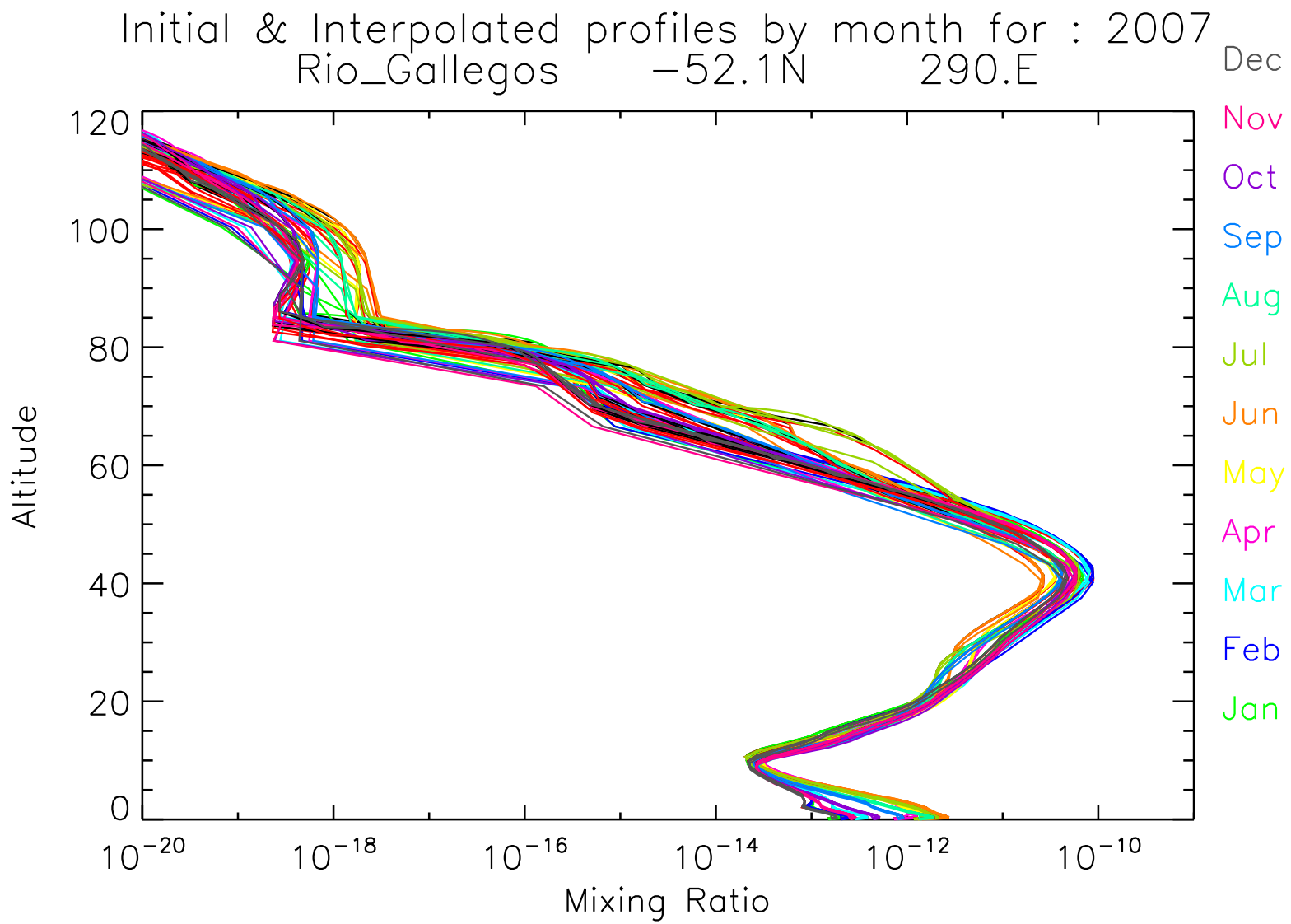
Mixing Ratio


Initial & Interpolated profiles by month for : 2007
Rio_Gallegos −52.1N 290.E
Dec
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Altitude
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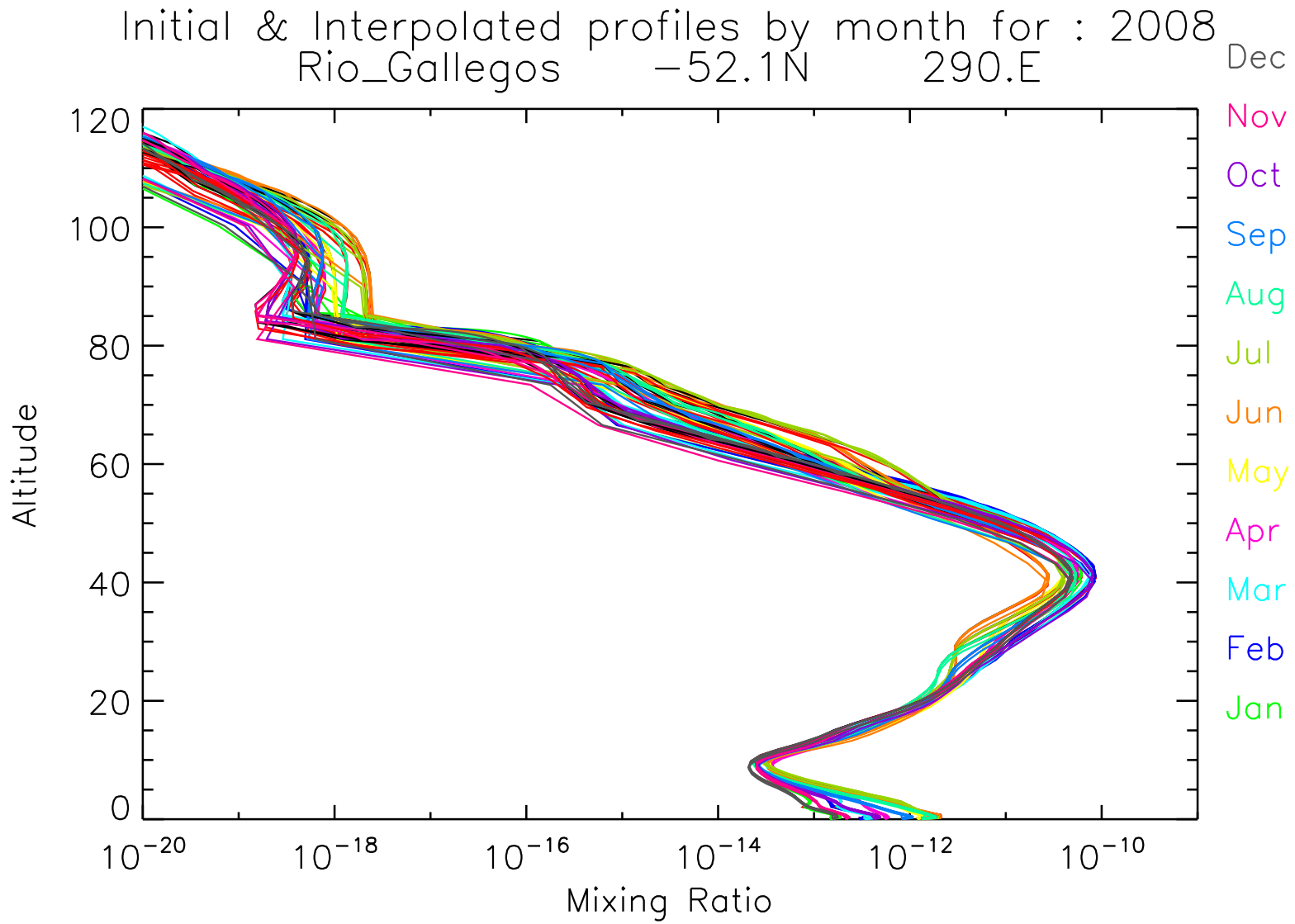
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2008
Rio_Gallegos −52.1N 290.E
Altitude
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Mixing Ratio
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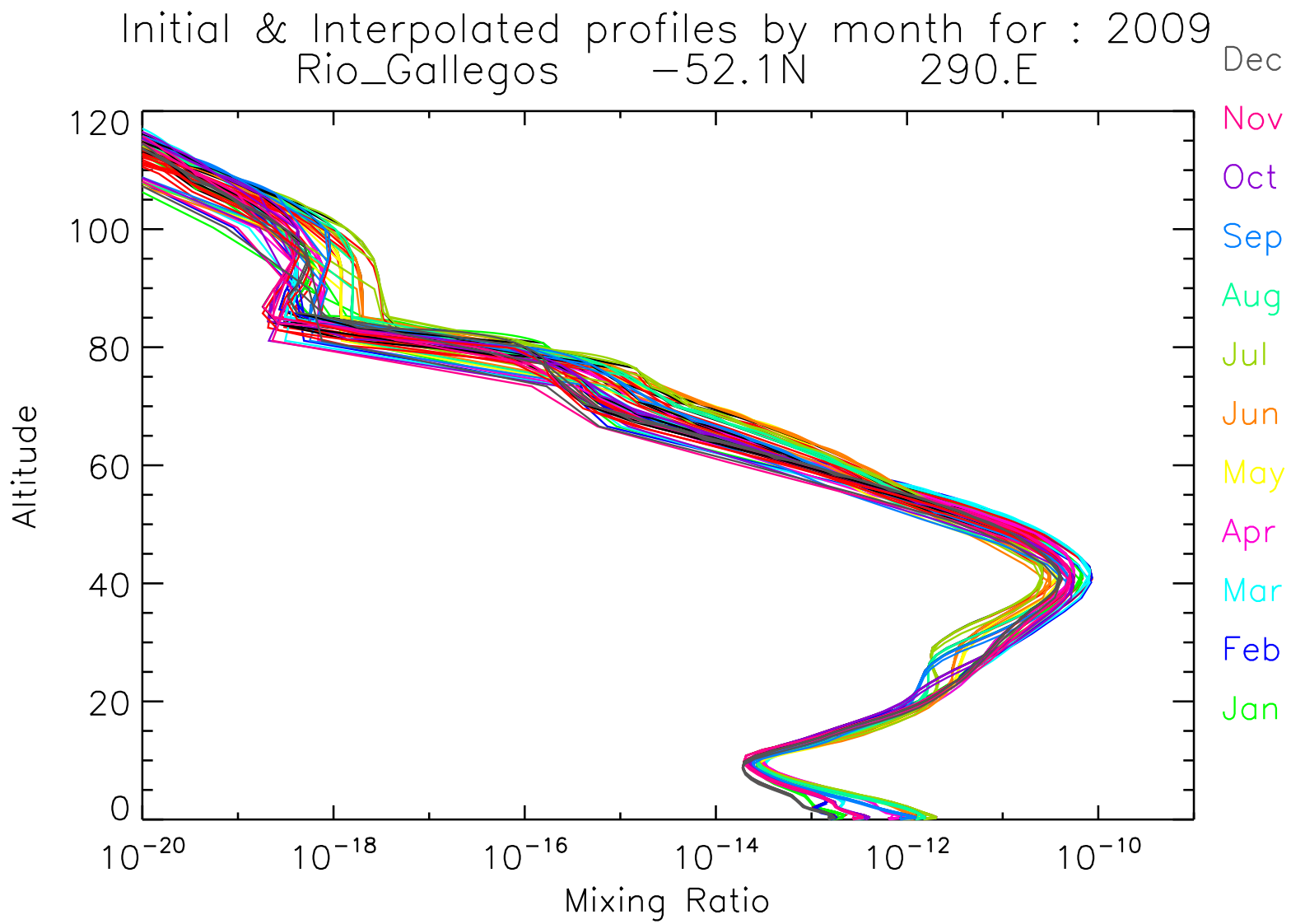
Initial & Interpolated profiles by month for : 2009
Rio_Gallegos −52.1N 290.E
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Altitude
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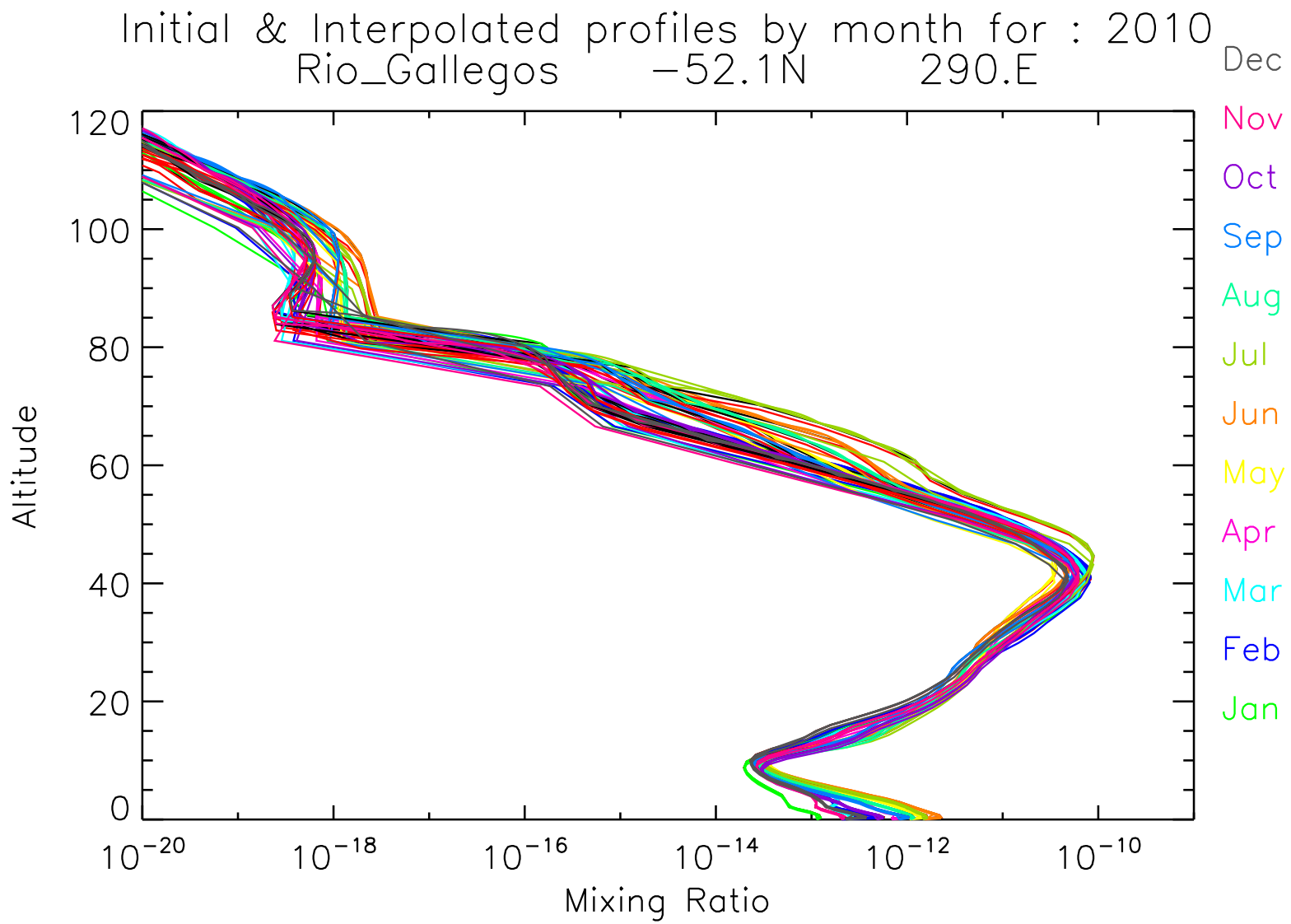
Mixing Ratio


Initial & Interpolated profiles by month for : 2010
Rio_Gallegos −52.1N 290.E
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Altitude
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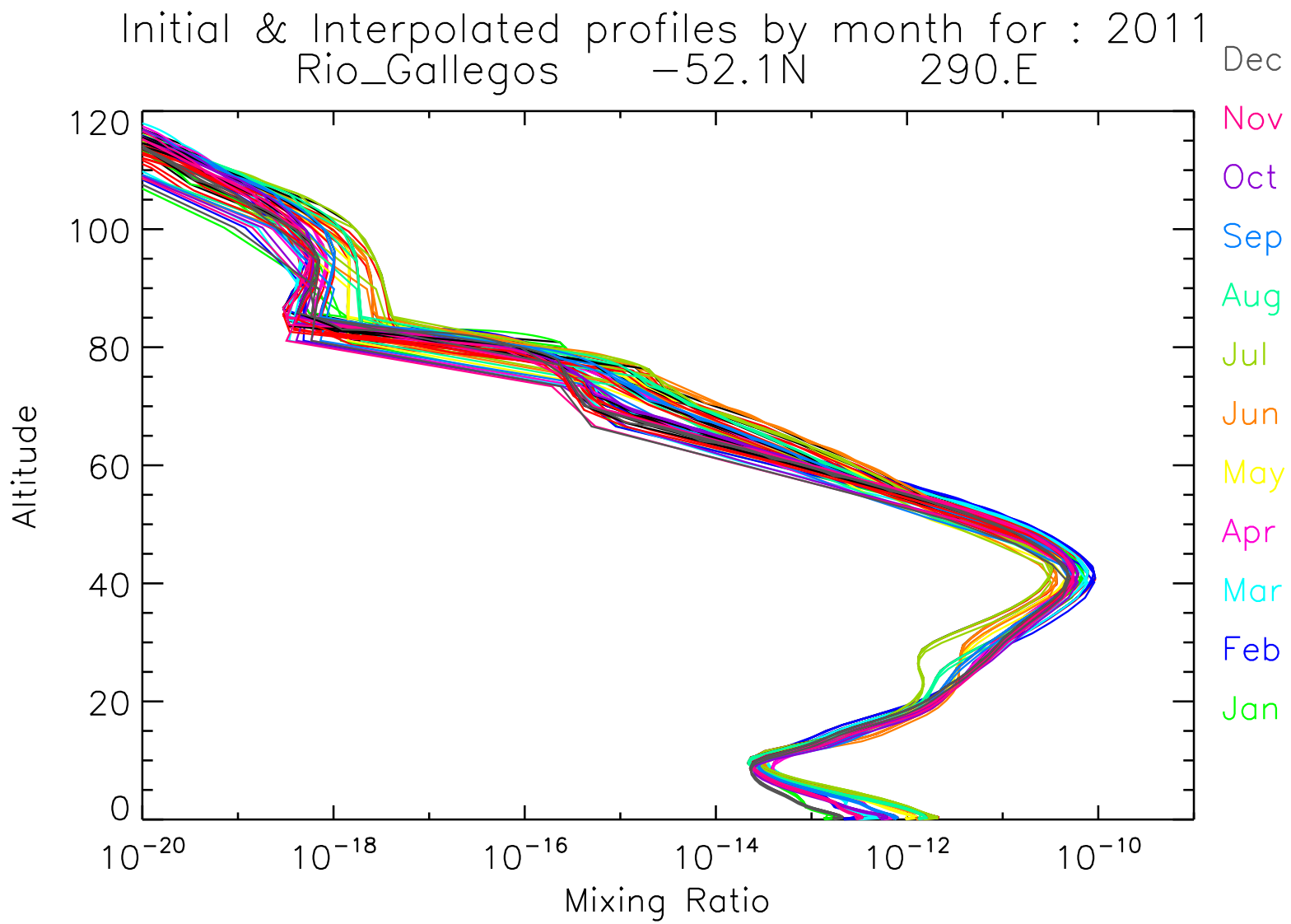
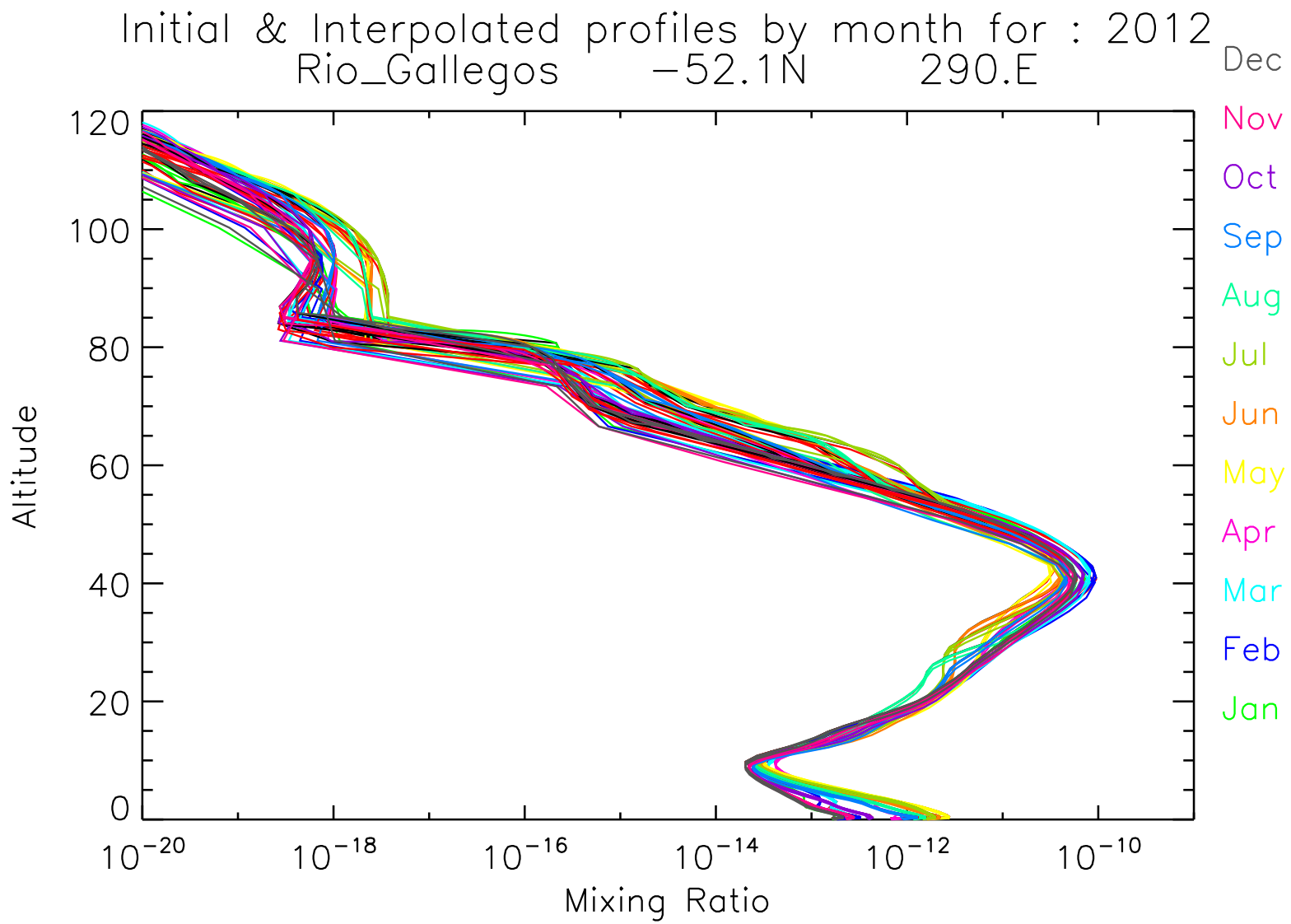
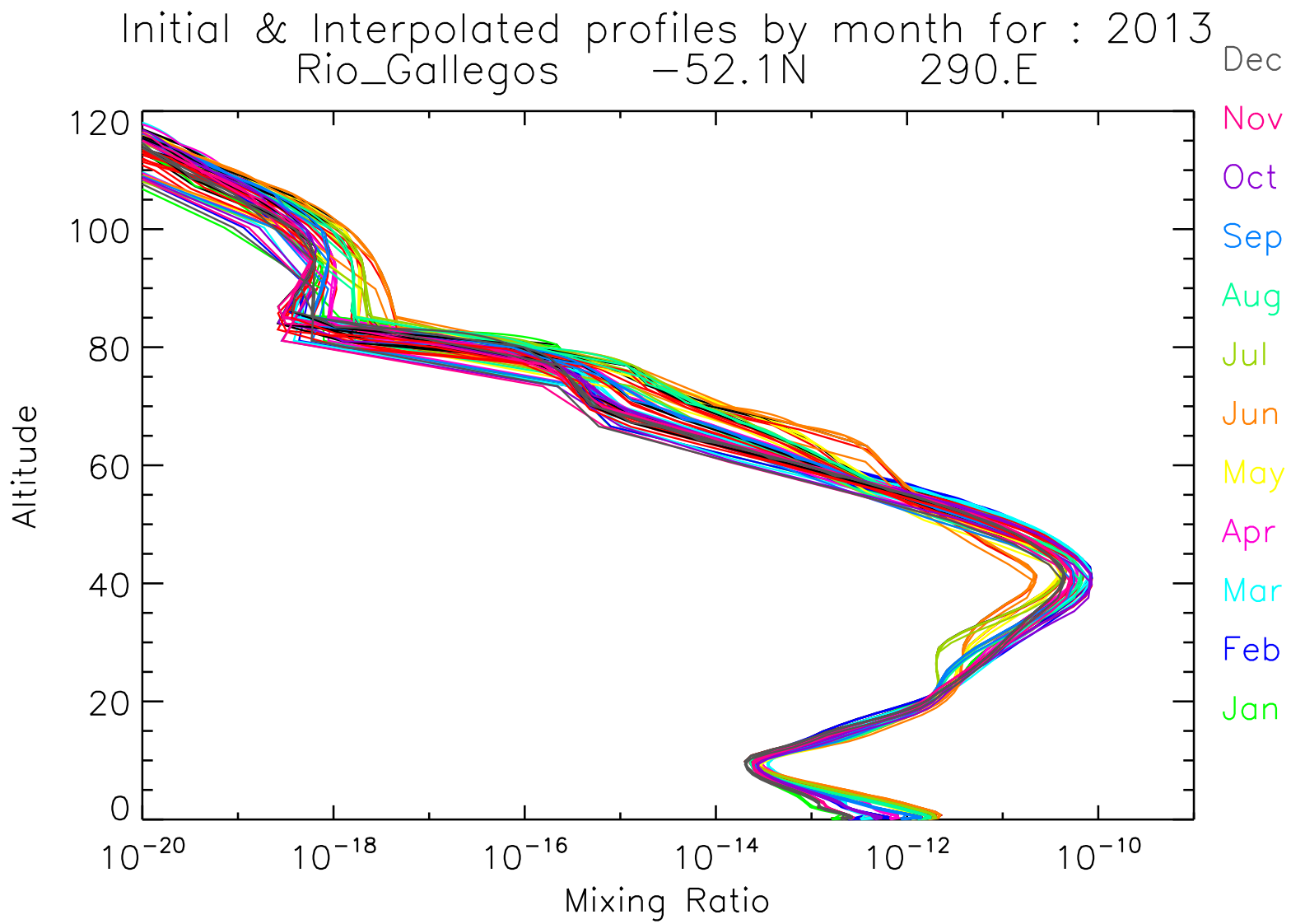
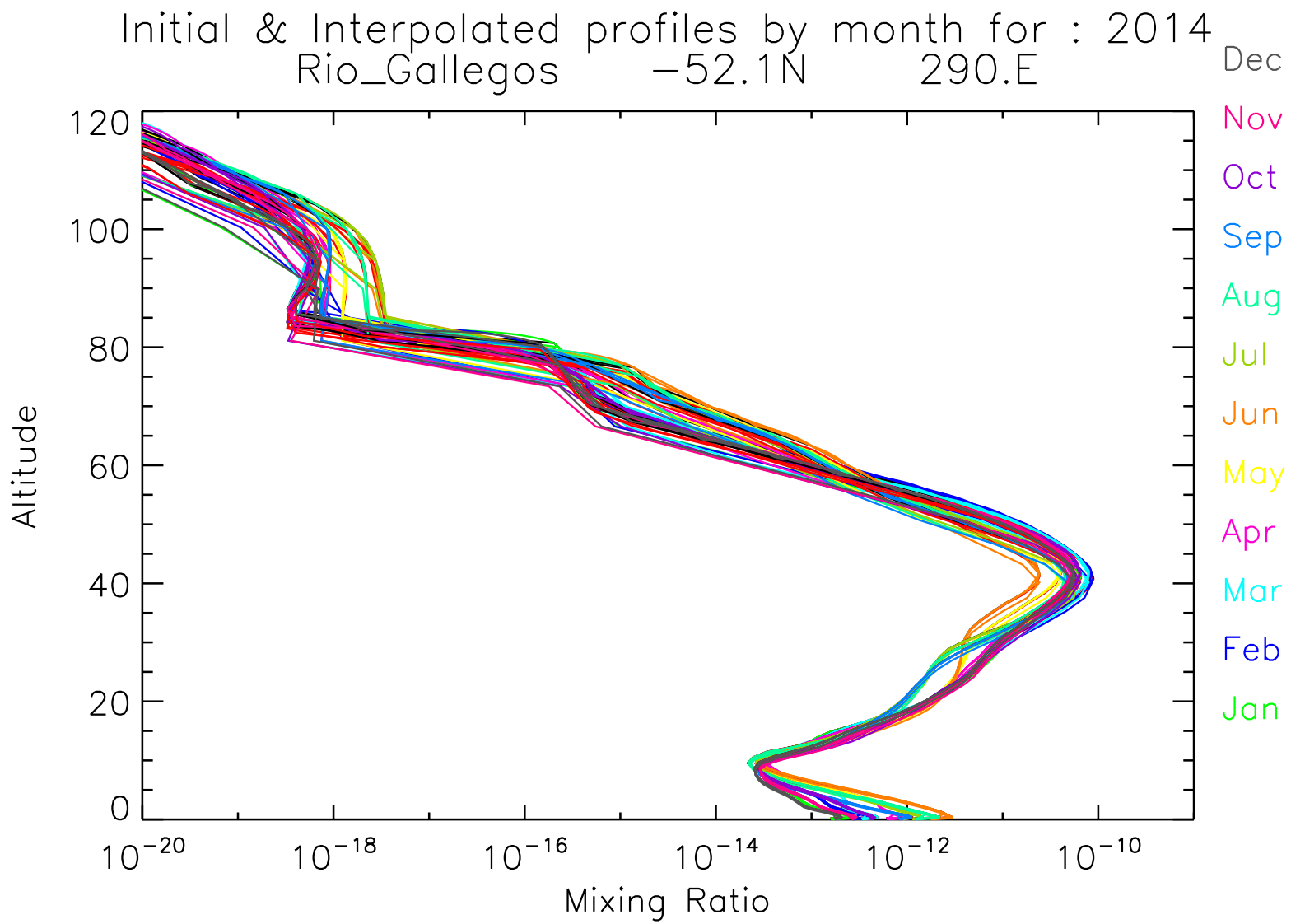
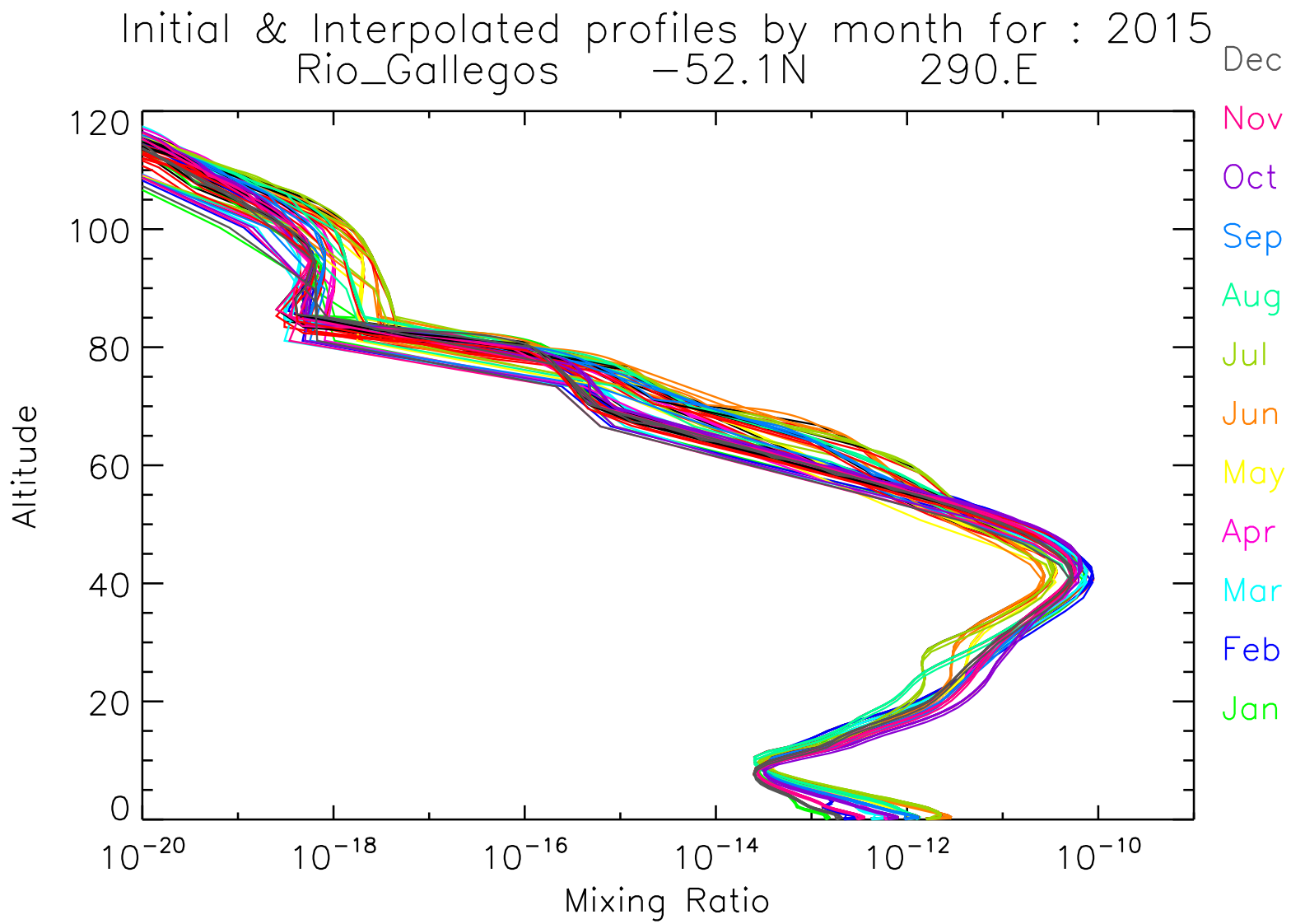
10^{-10}
Mixing Ratio

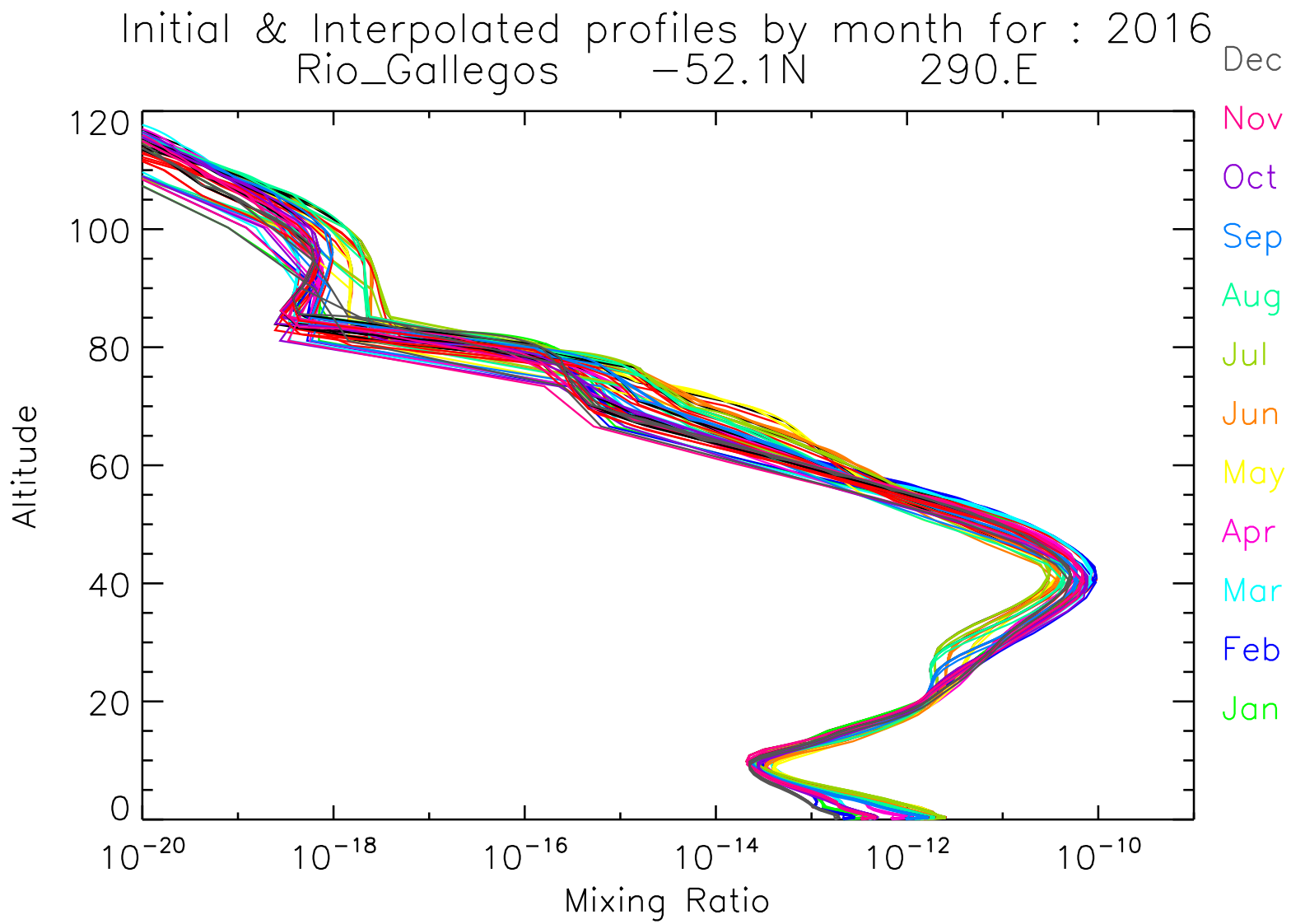

Initial & Interpolated profiles by month for : 2011
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio

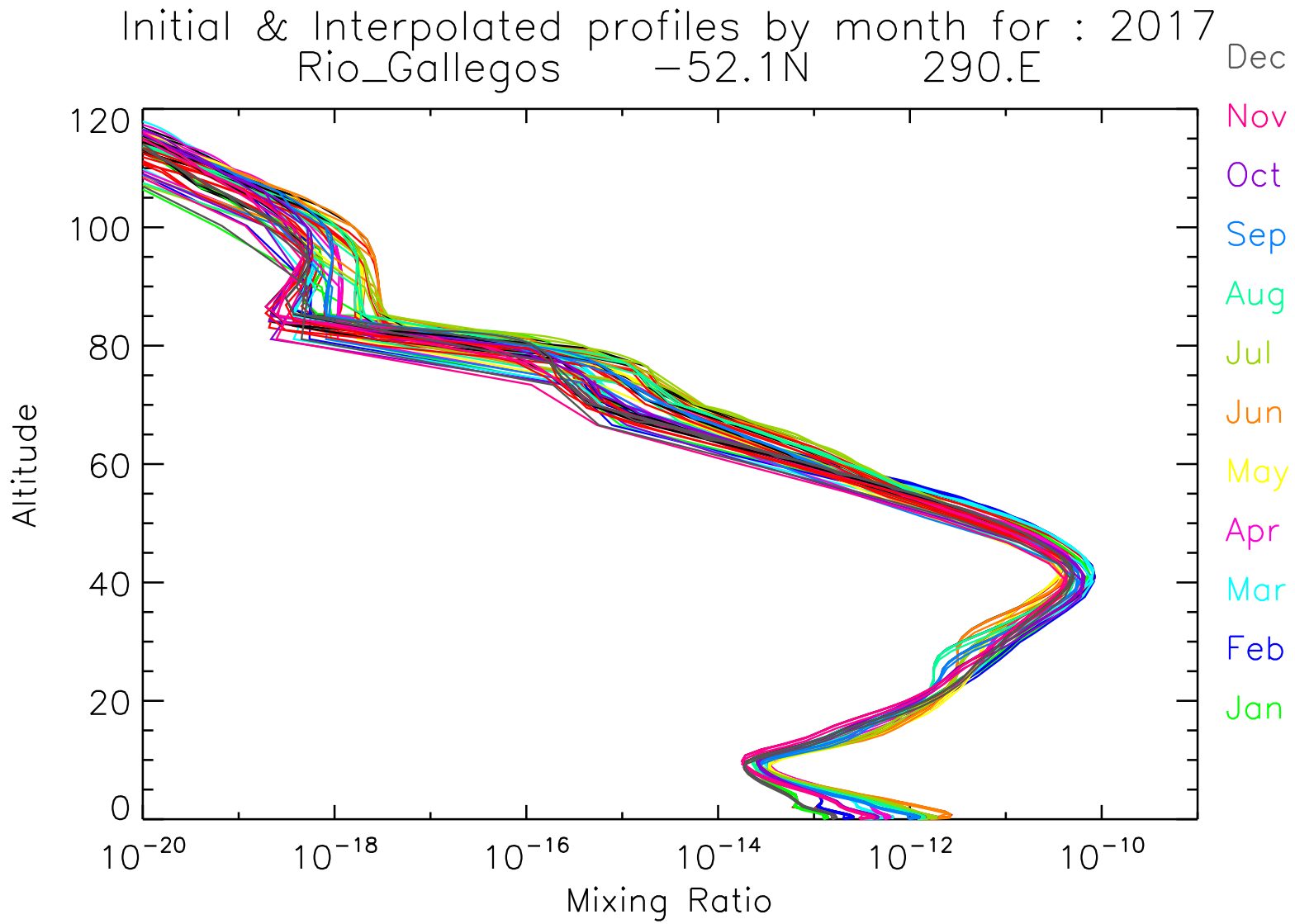

Initial & Interpolated profiles by month for : 2012
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio

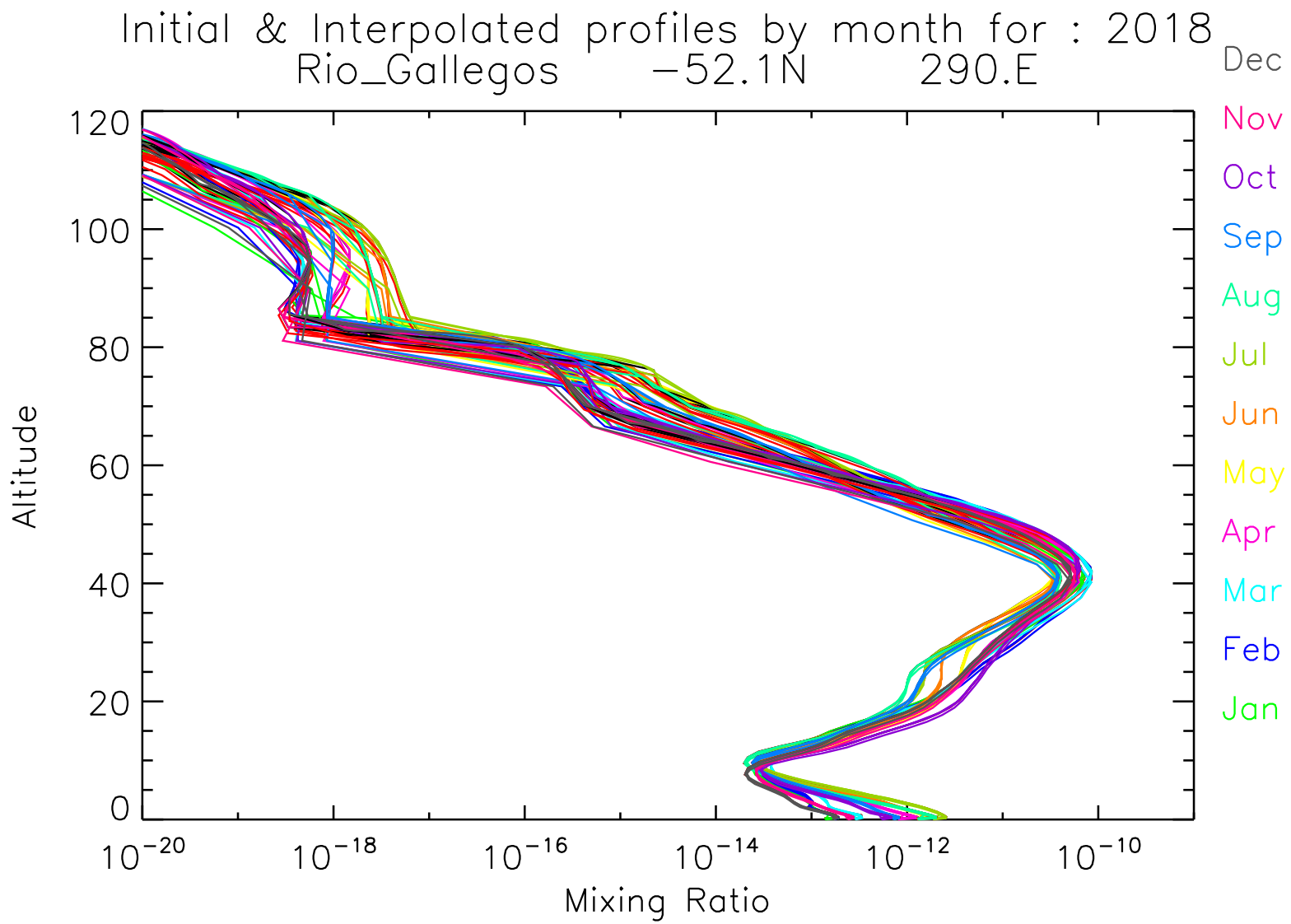

Initial & Interpolated profiles by month for : 2013
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio

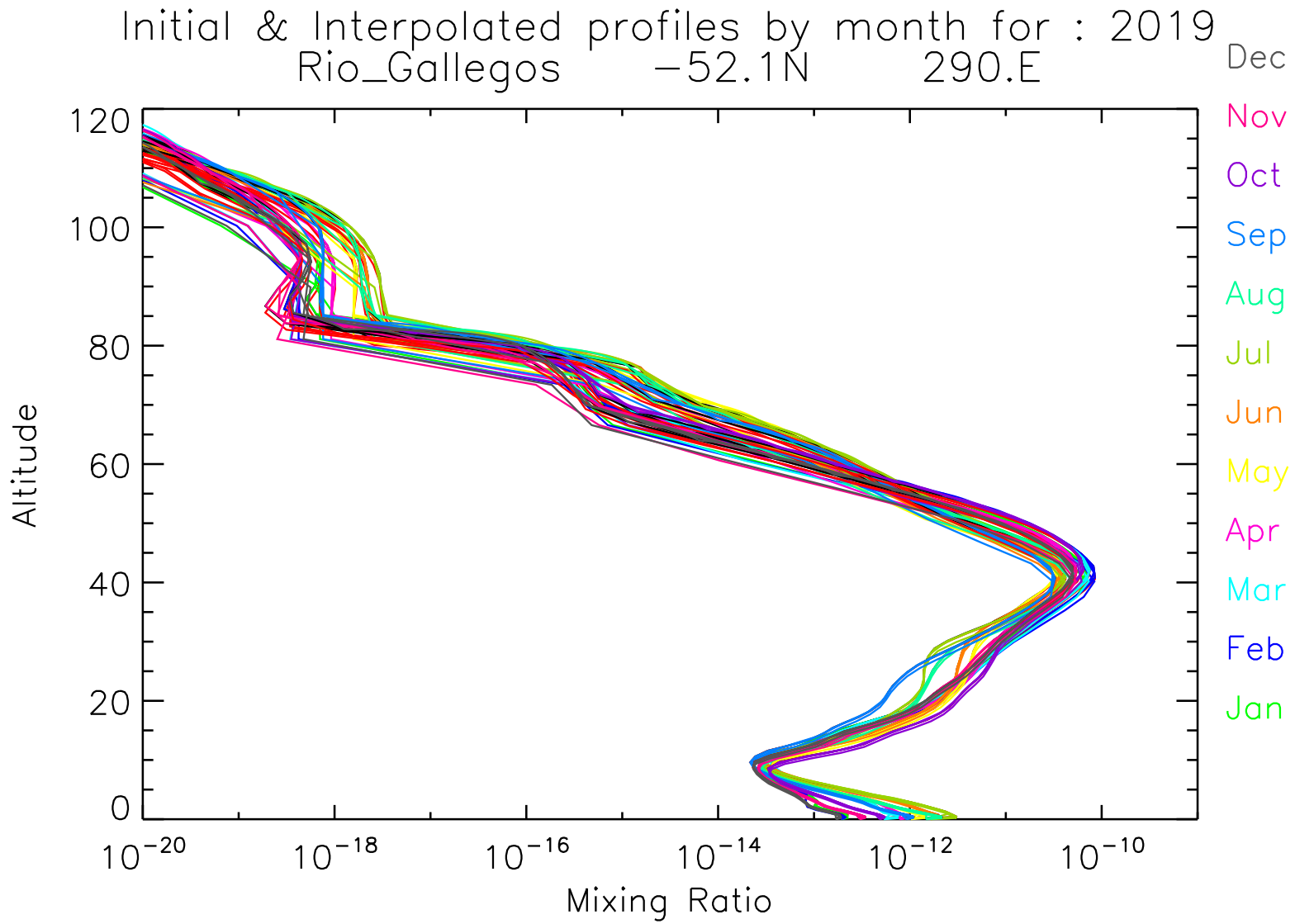

Initial & Interpolated profiles by month for : 2014
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio

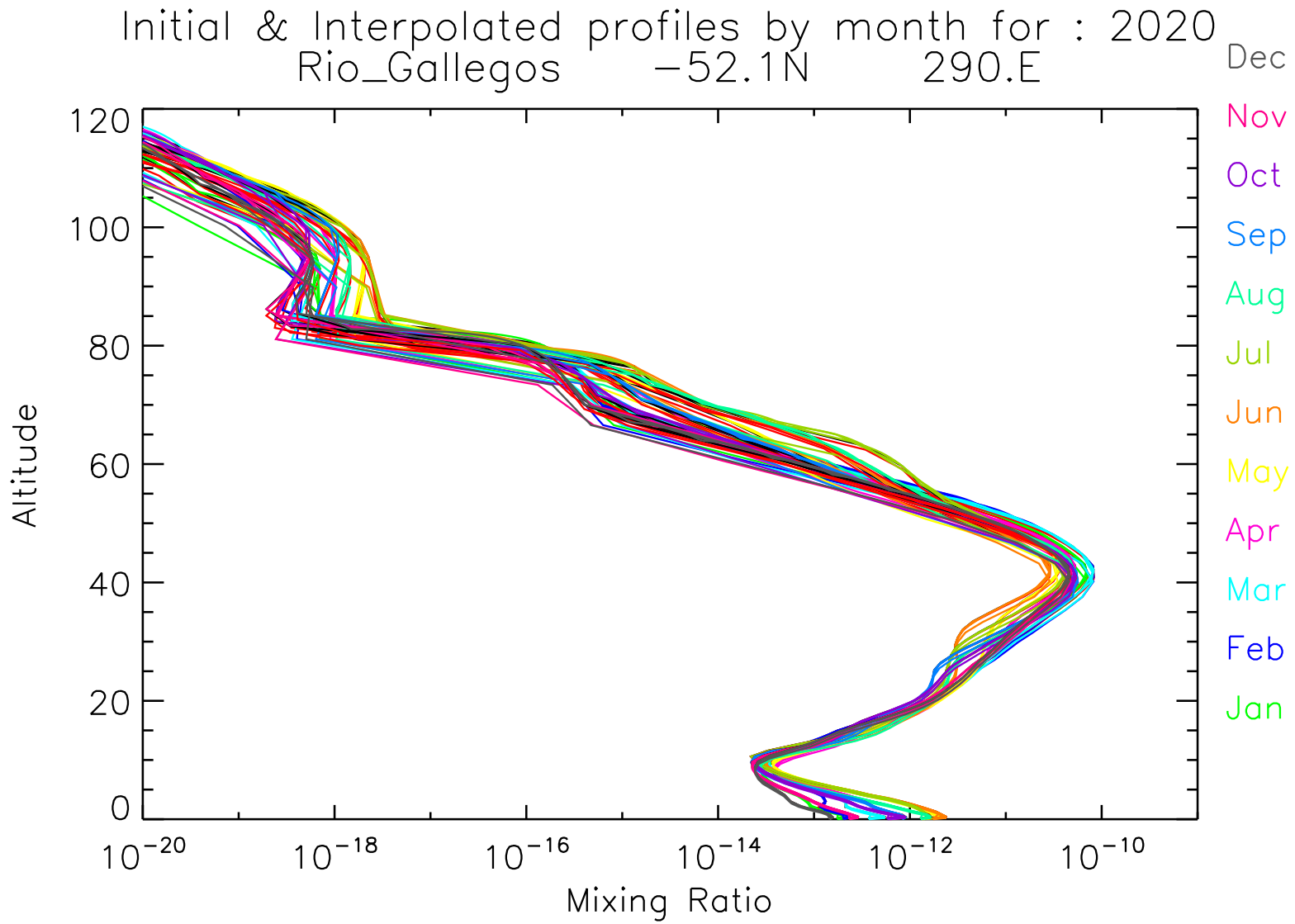

Initial & Interpolated profiles by month for : 2015
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio

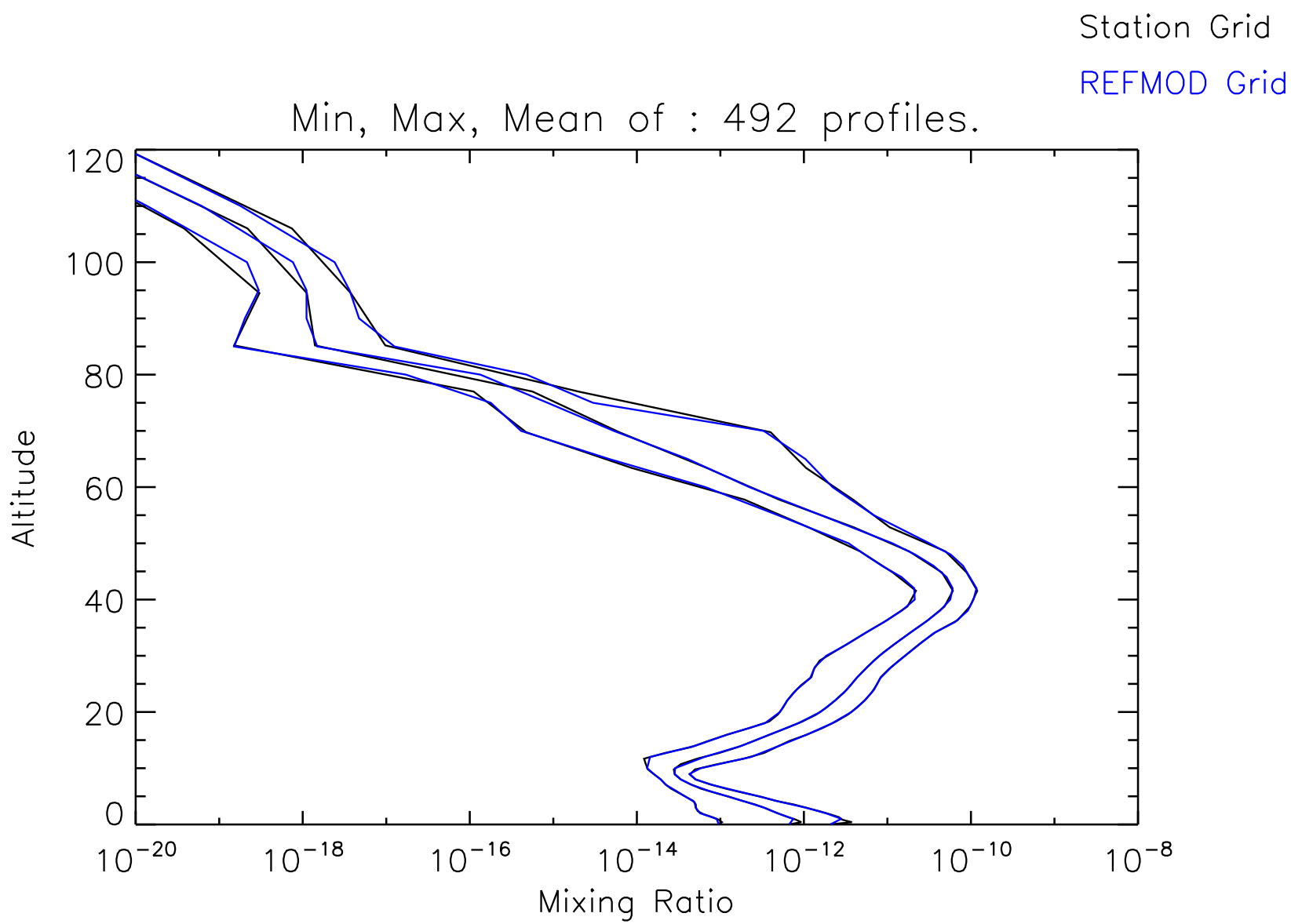

Initial & Interpolated profiles by month for : 2016
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio

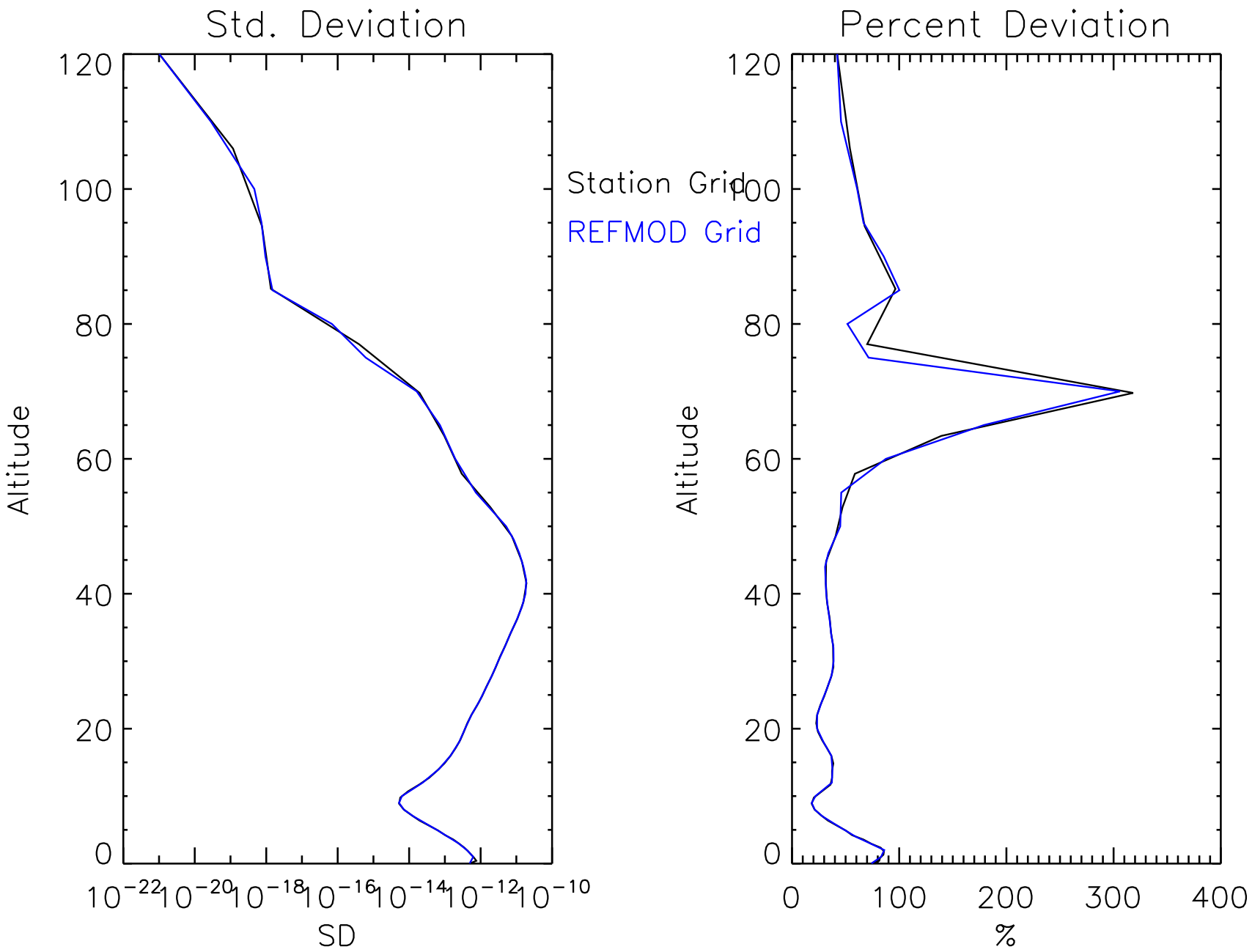

Initial & Interpolated profiles by month for : 2017
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio

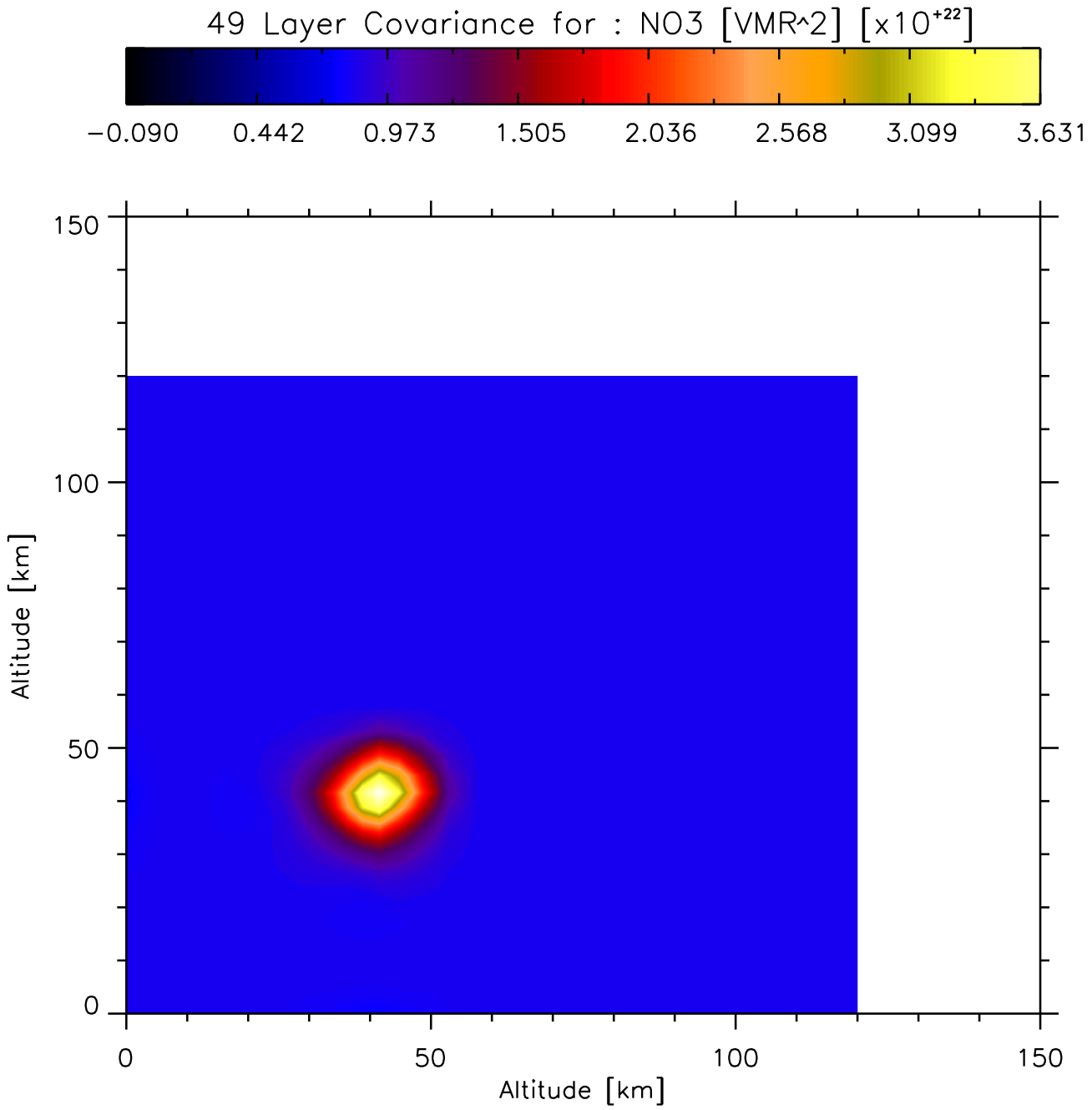

Initial & Interpolated profiles by month for : 2018
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio

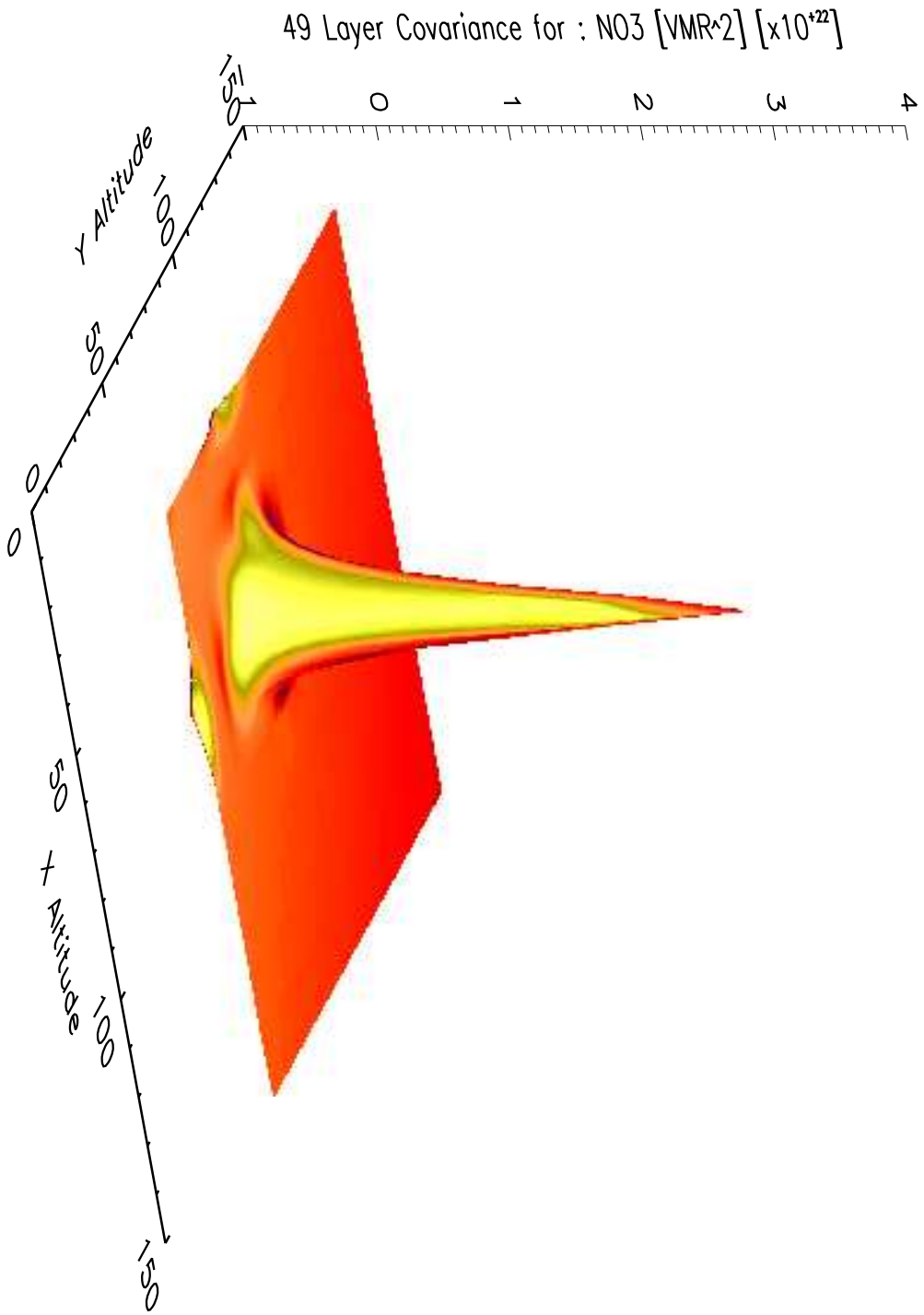

Initial & Interpolated profiles by month for : 2019
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio

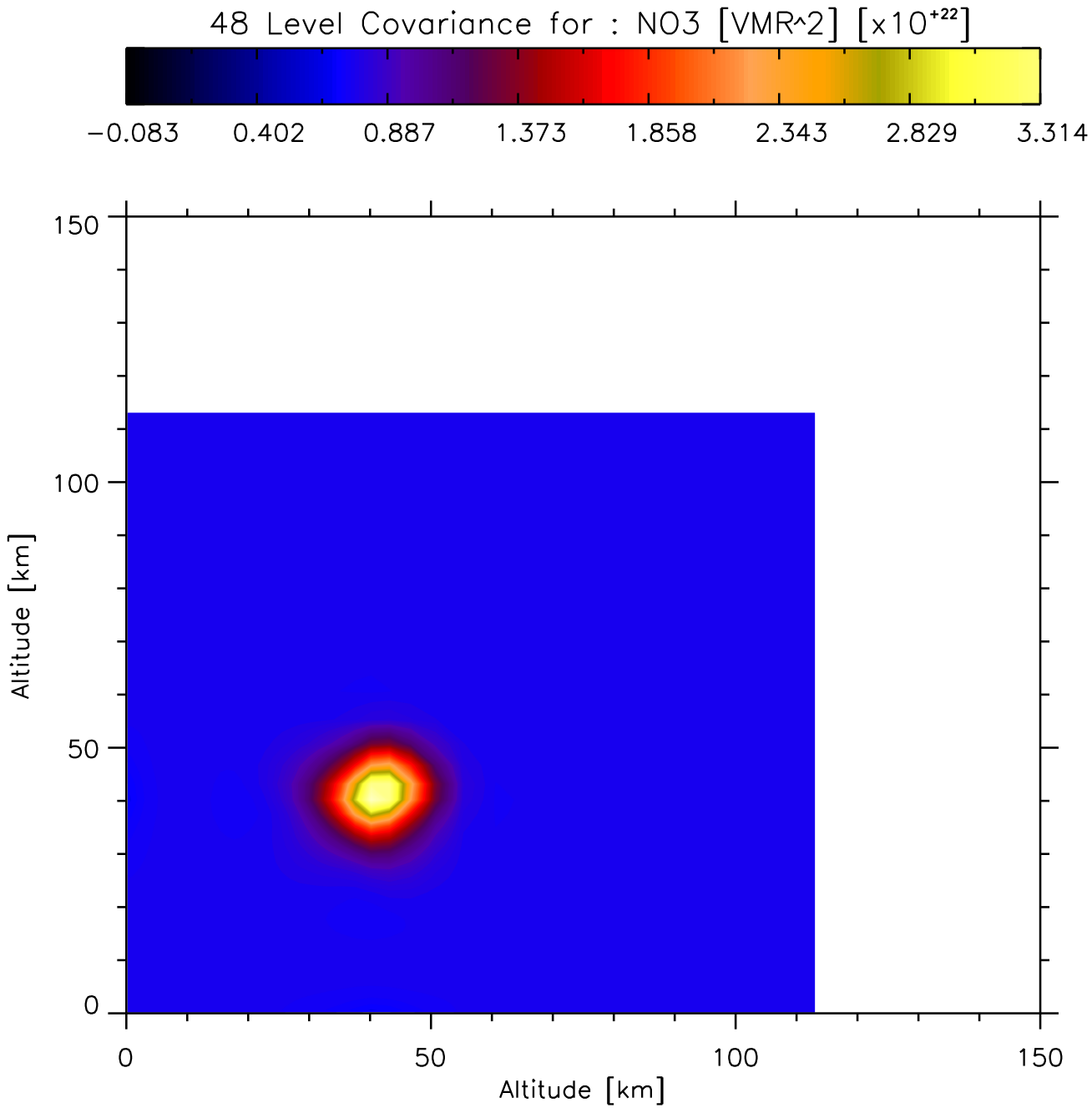

Initial & Interpolated profiles by month for : 2020
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio

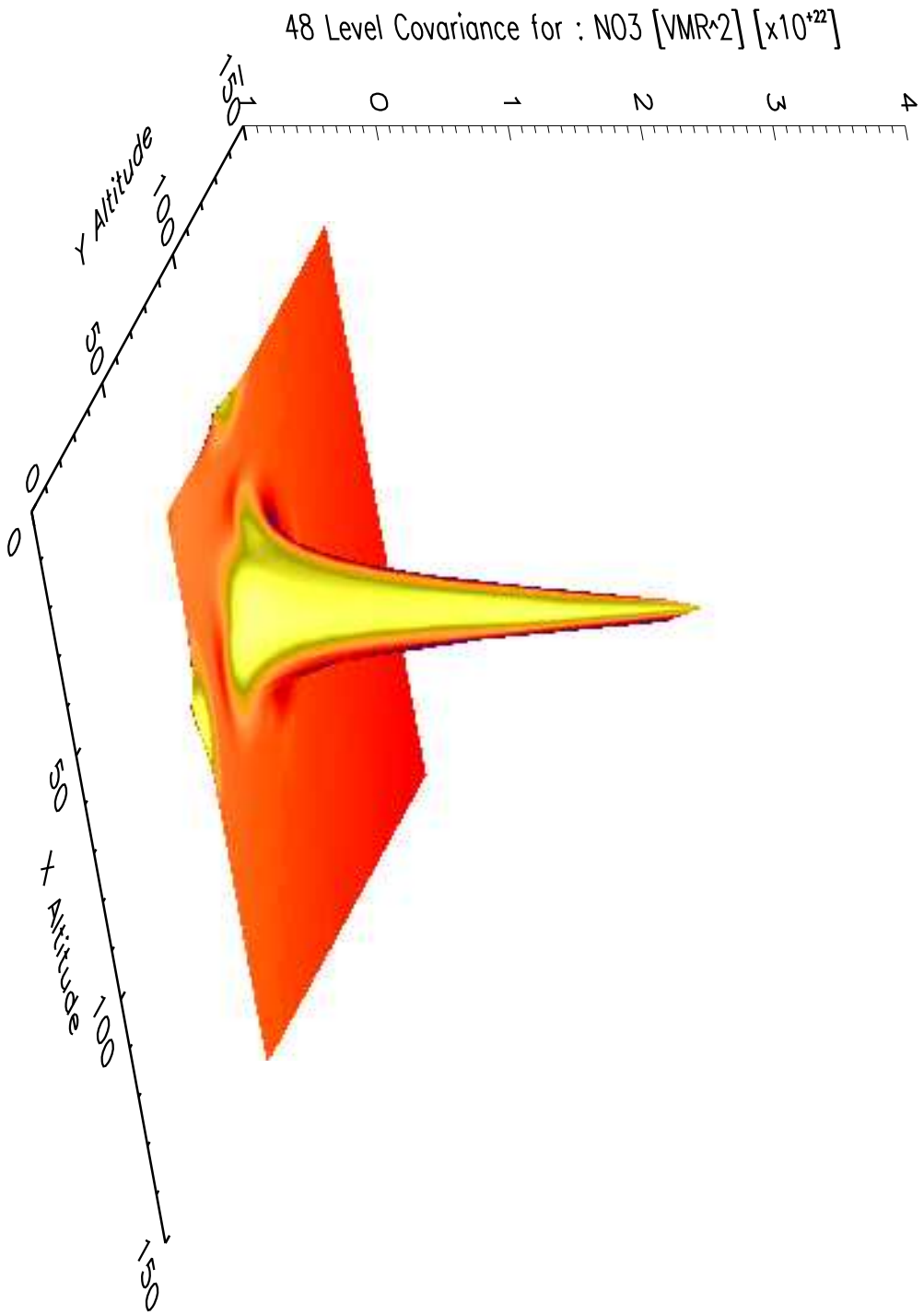

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
Altitude
120
100
80
60
40
20
0
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
10^{-8}
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
10^{-22} 10^{-20} 10^{-18} 10^{-16} 10^{-14} 10^{-12} 10^{-10}
SD
0
100
200
300
400
%


49 Layer Covariance for : NO3 [VMR^2] [x10+22]
−0.090
0.442
0.973
1.505
2.036
2.568
3.099
3.631
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


49 Layer Covariance for : NO3 [VMR^2] [x10^+22]
0
1
2
3
4
Y Altitude
0
50
100
150
X Altitude
0
50
100
150


48 Level Covariance for : NO3 [VMR^2] [x10^+22]
−0.083
0.402
0.887
1.373
1.858
2.343
2.829
3.314
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


48 Level Covariance for : NO3 [VMR^2] [x10^+22]
0
1
2
3
4
Y Altitude
0
50
100
150
X Altitude
0
50
100
150