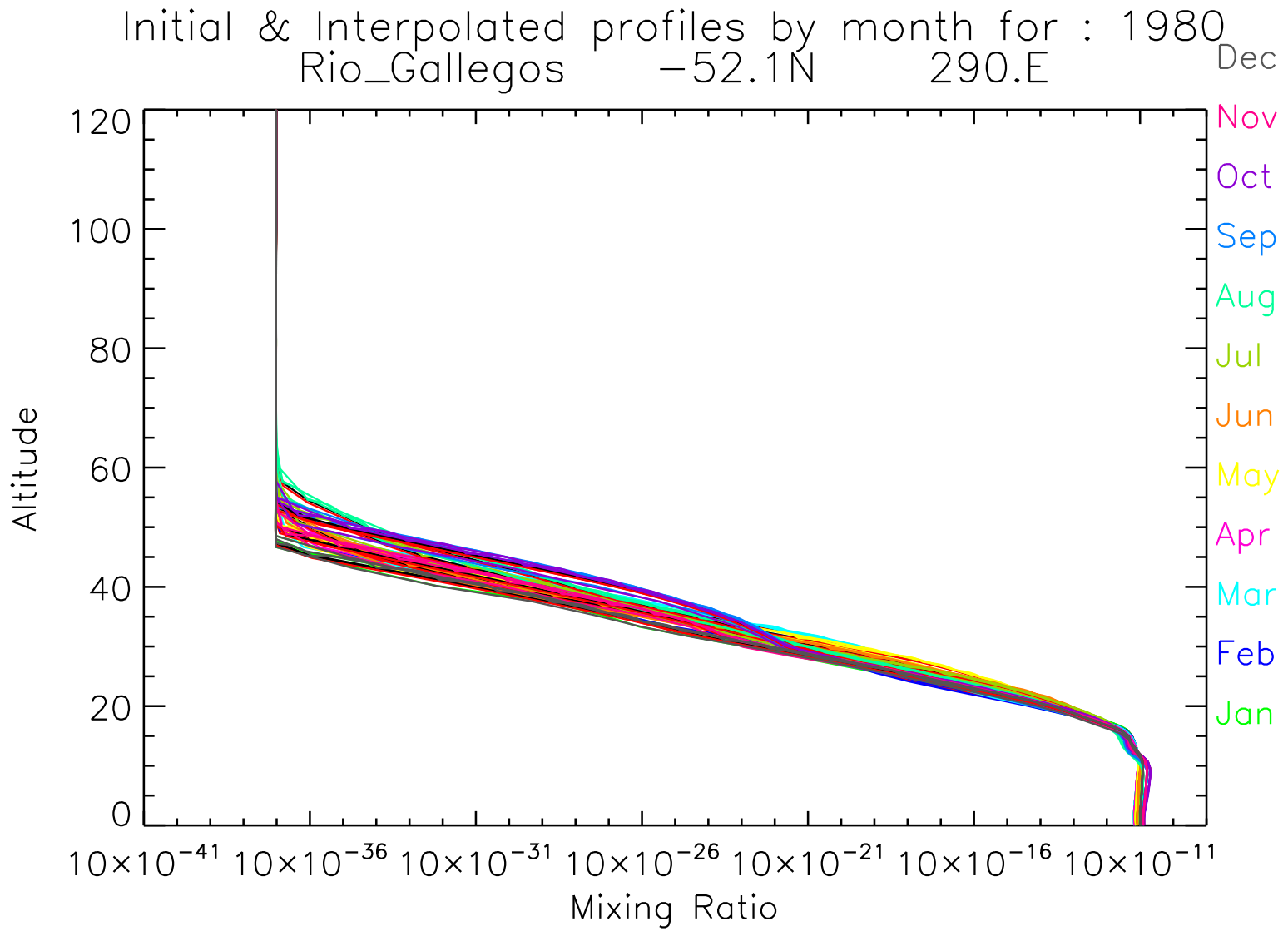
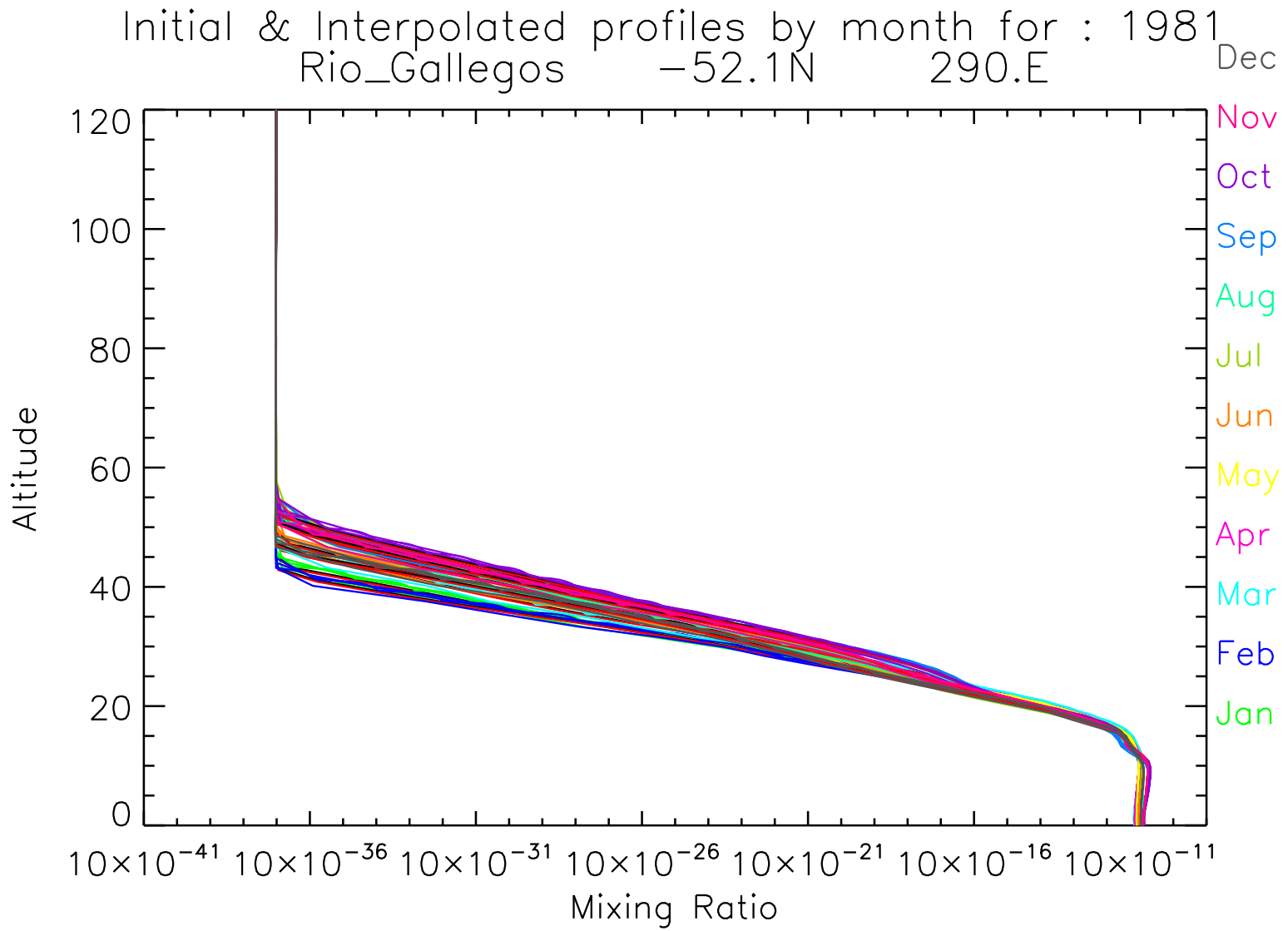
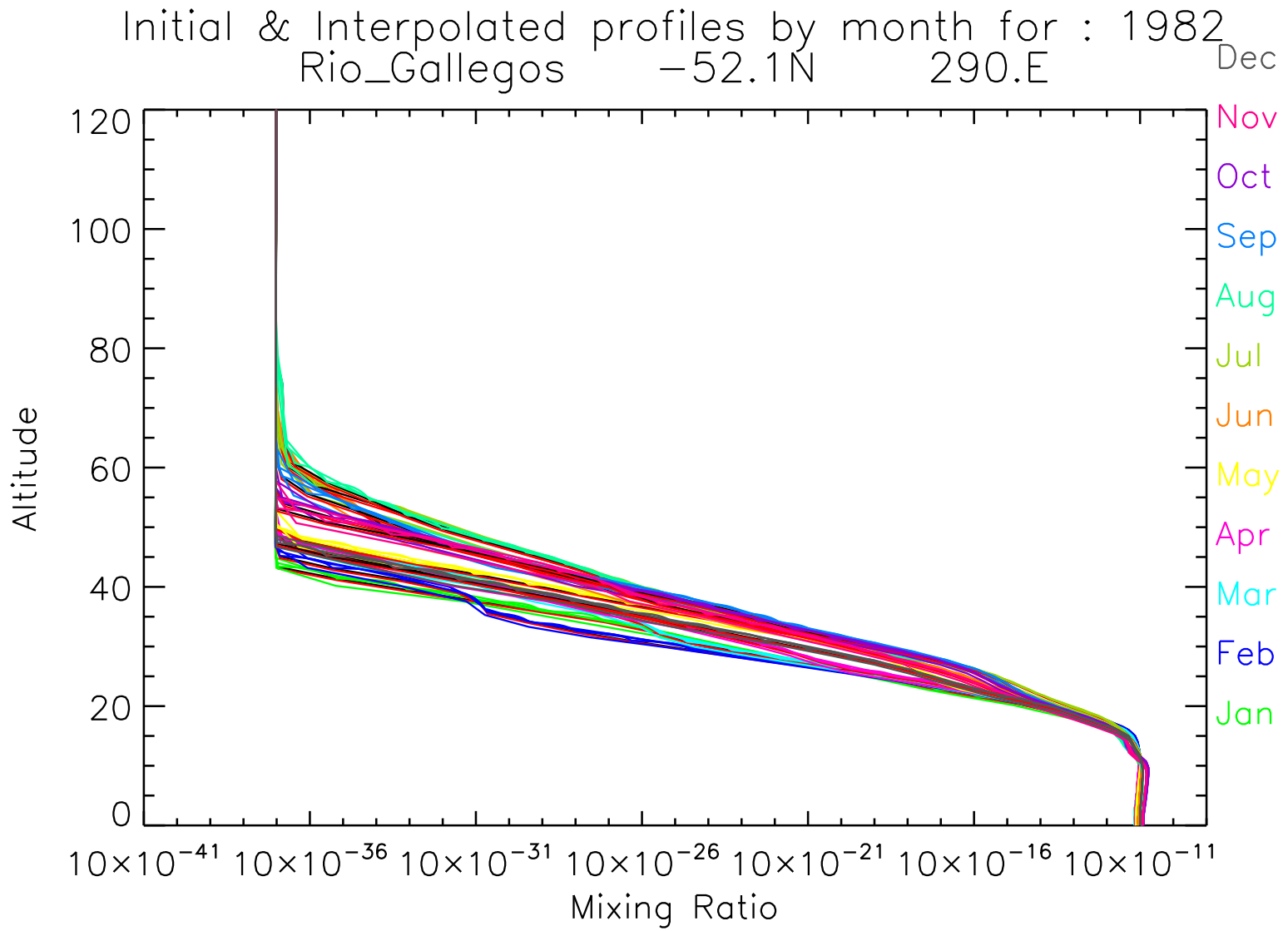
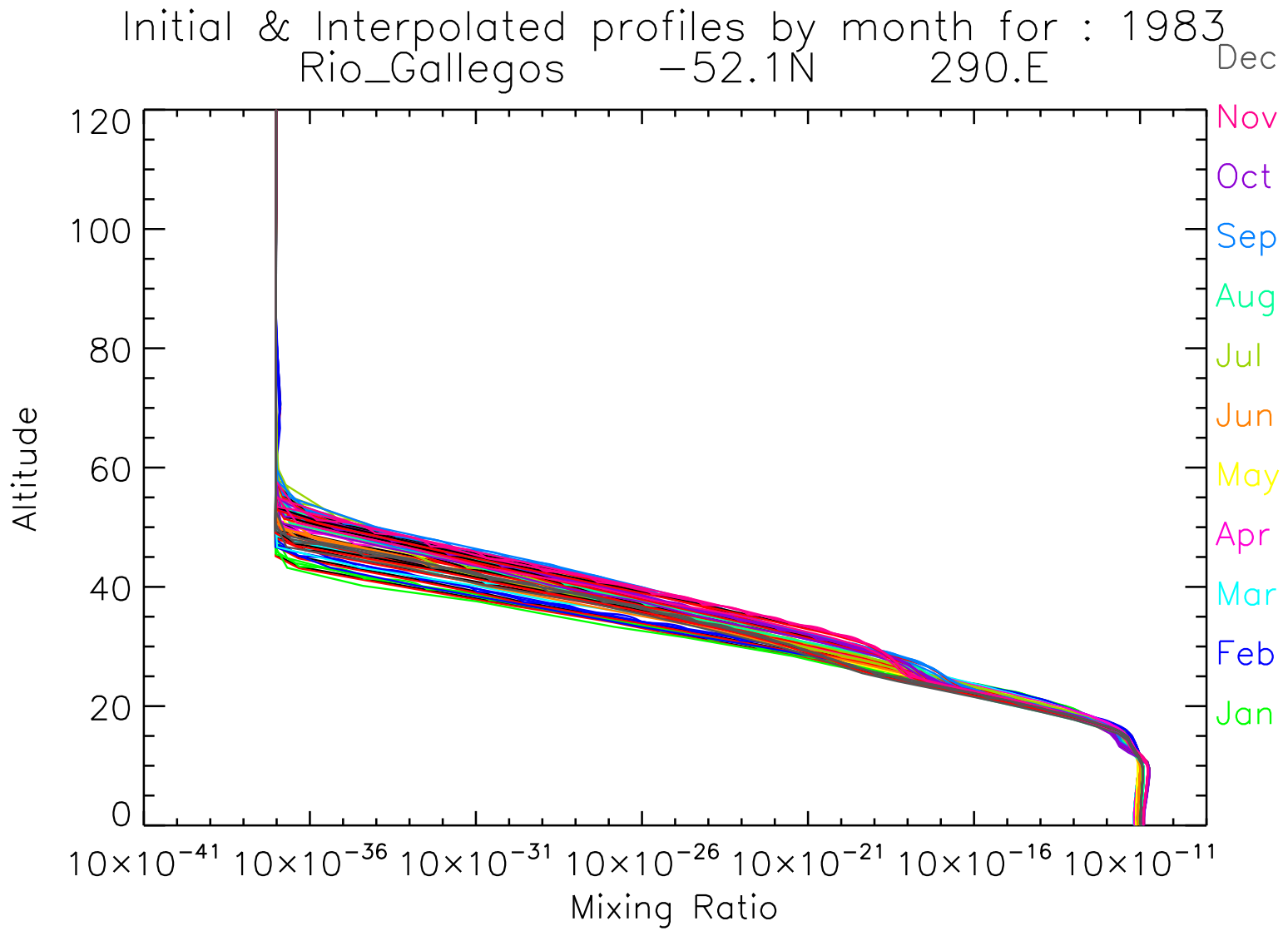
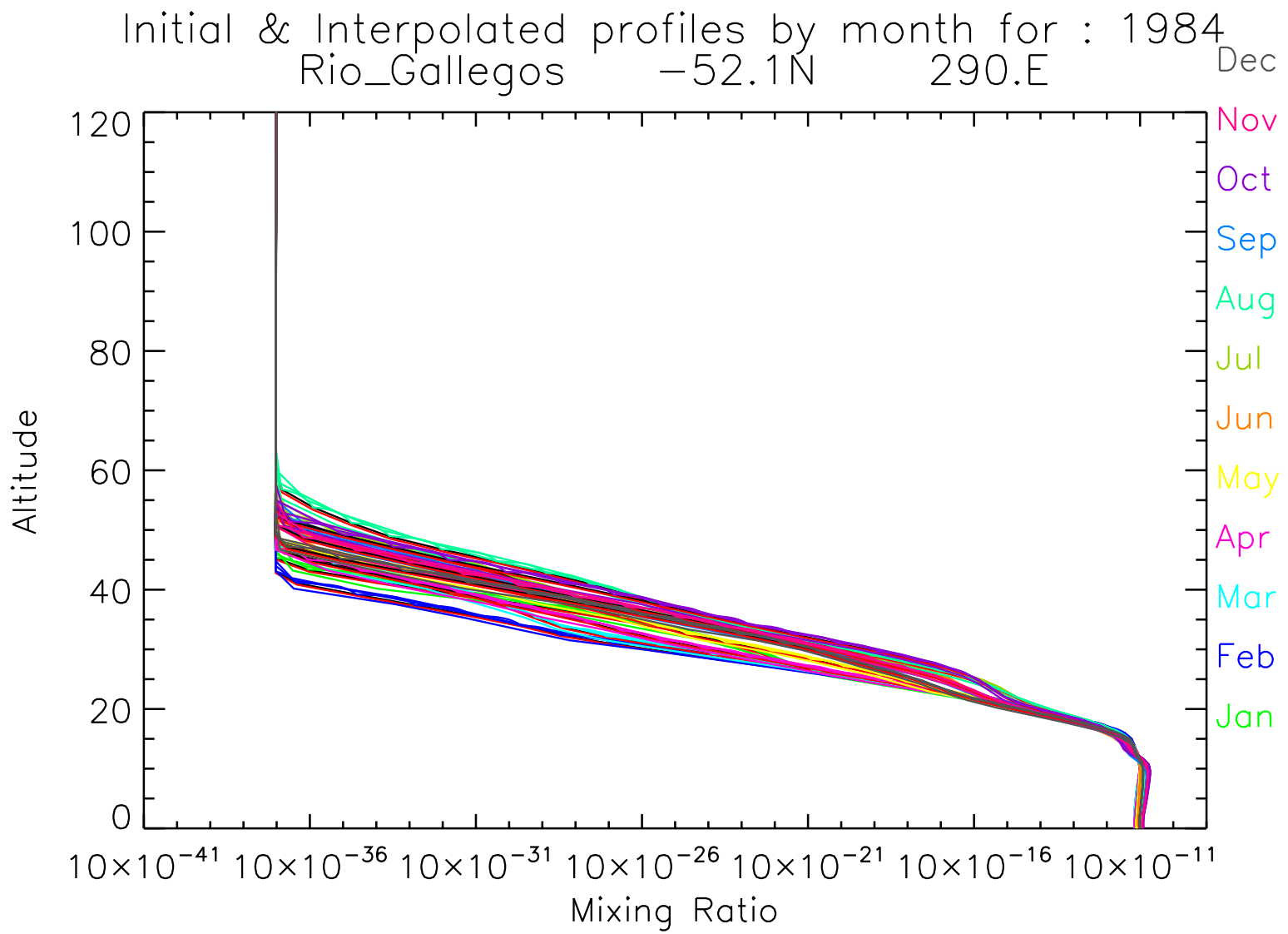
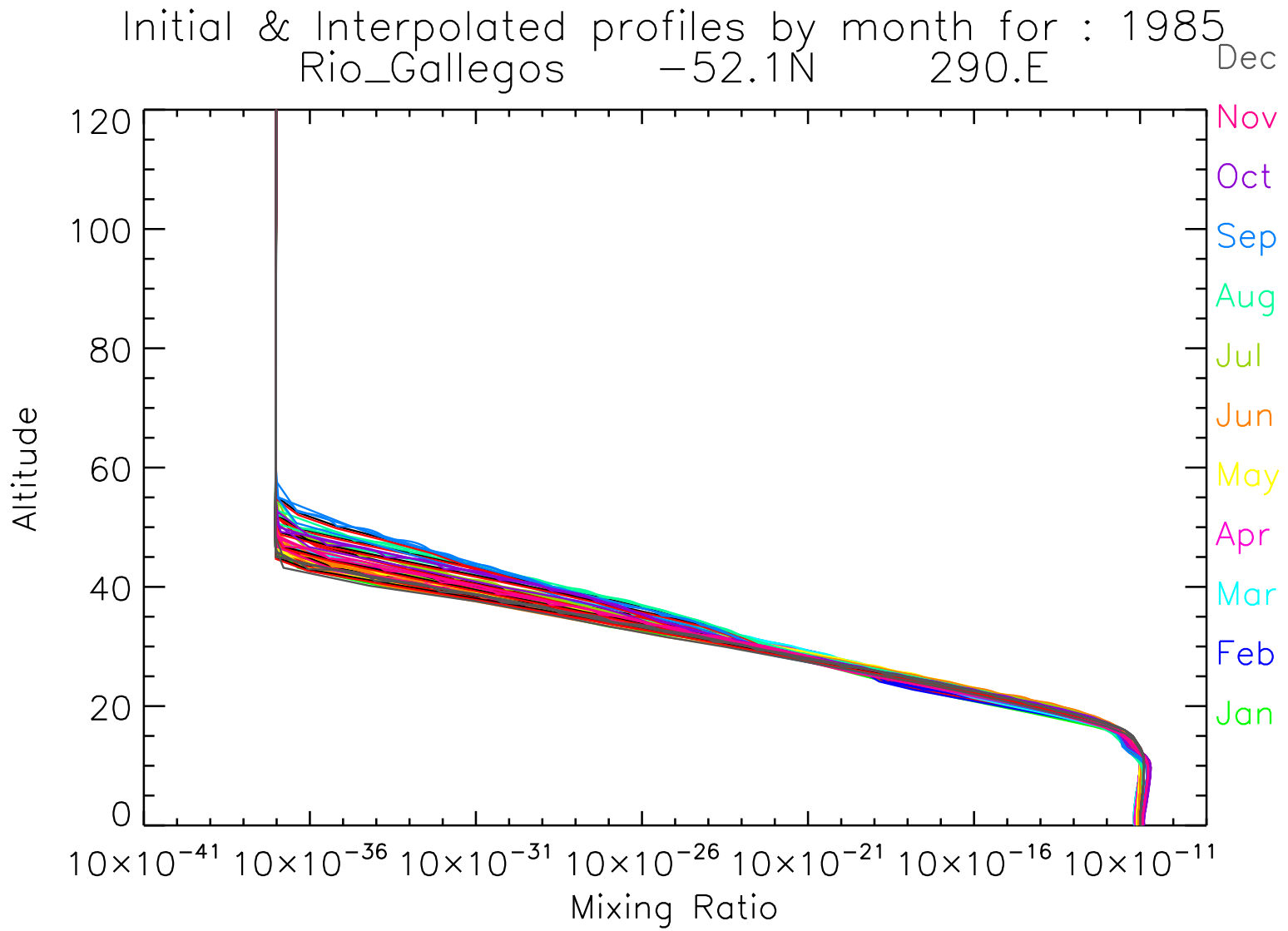

Initial & Interpolated profiles by month for : 1980
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

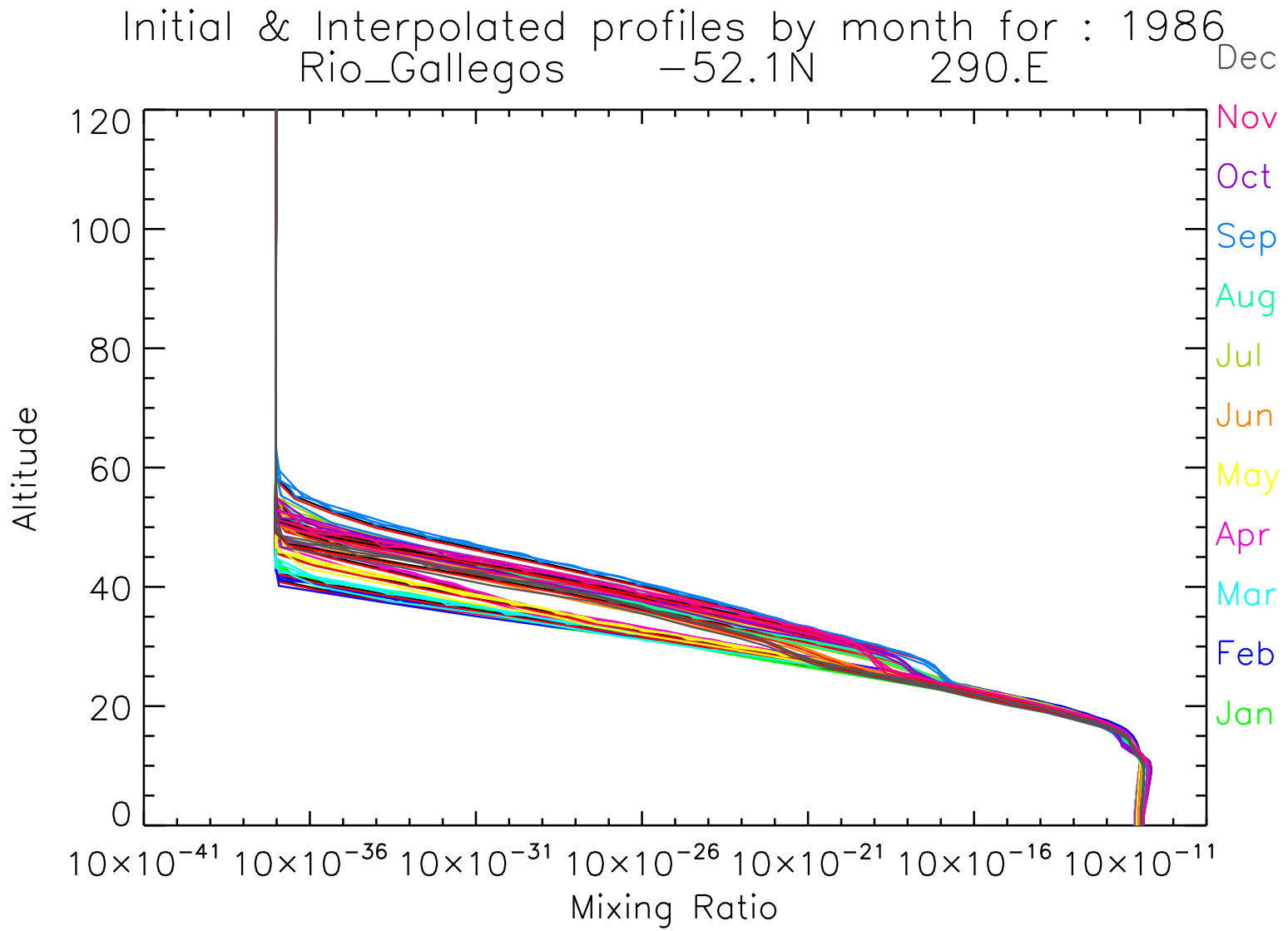

Initial & Interpolated profiles by month for : 1981
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

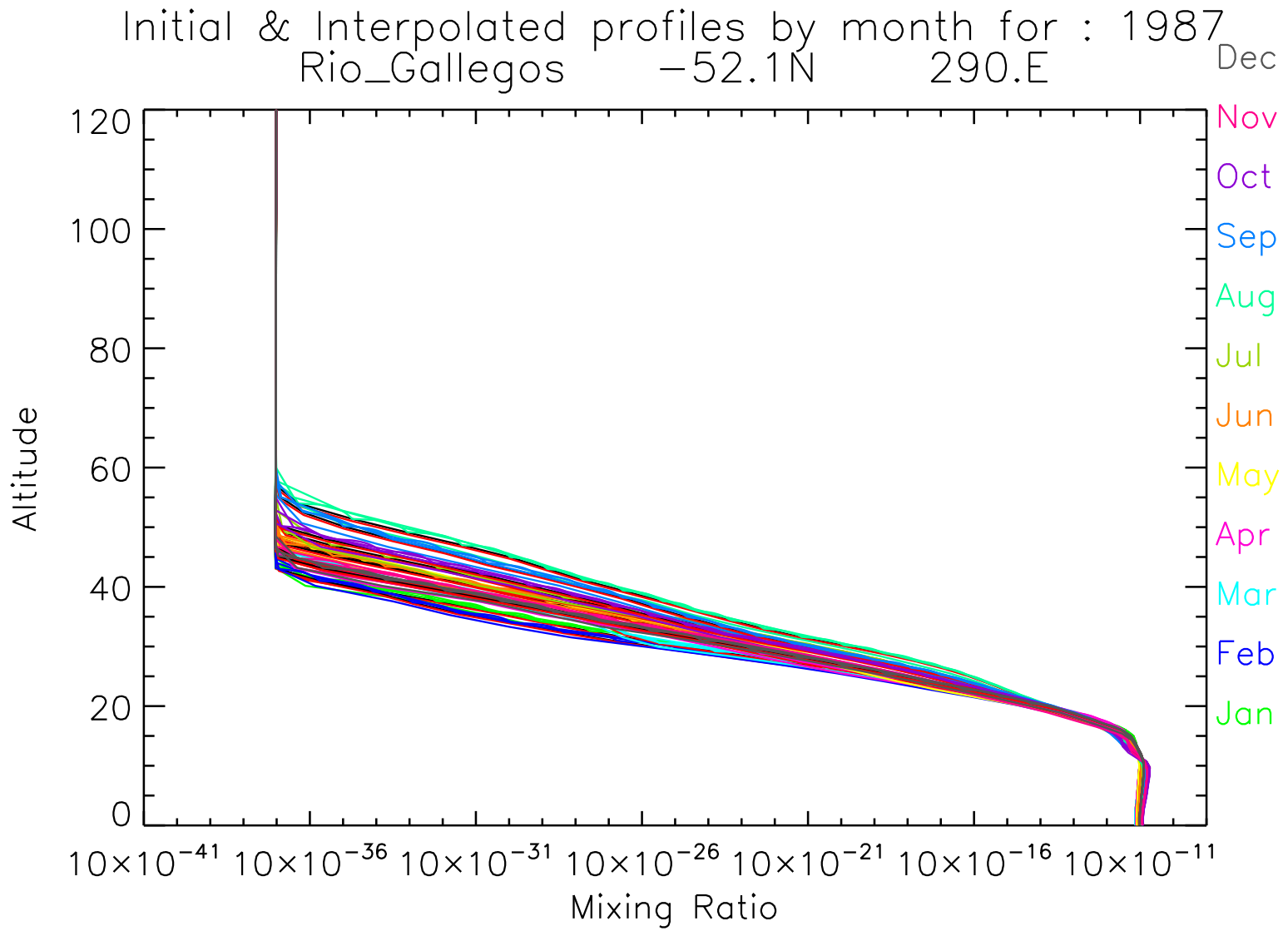

Initial & Interpolated profiles by month for : 1982
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

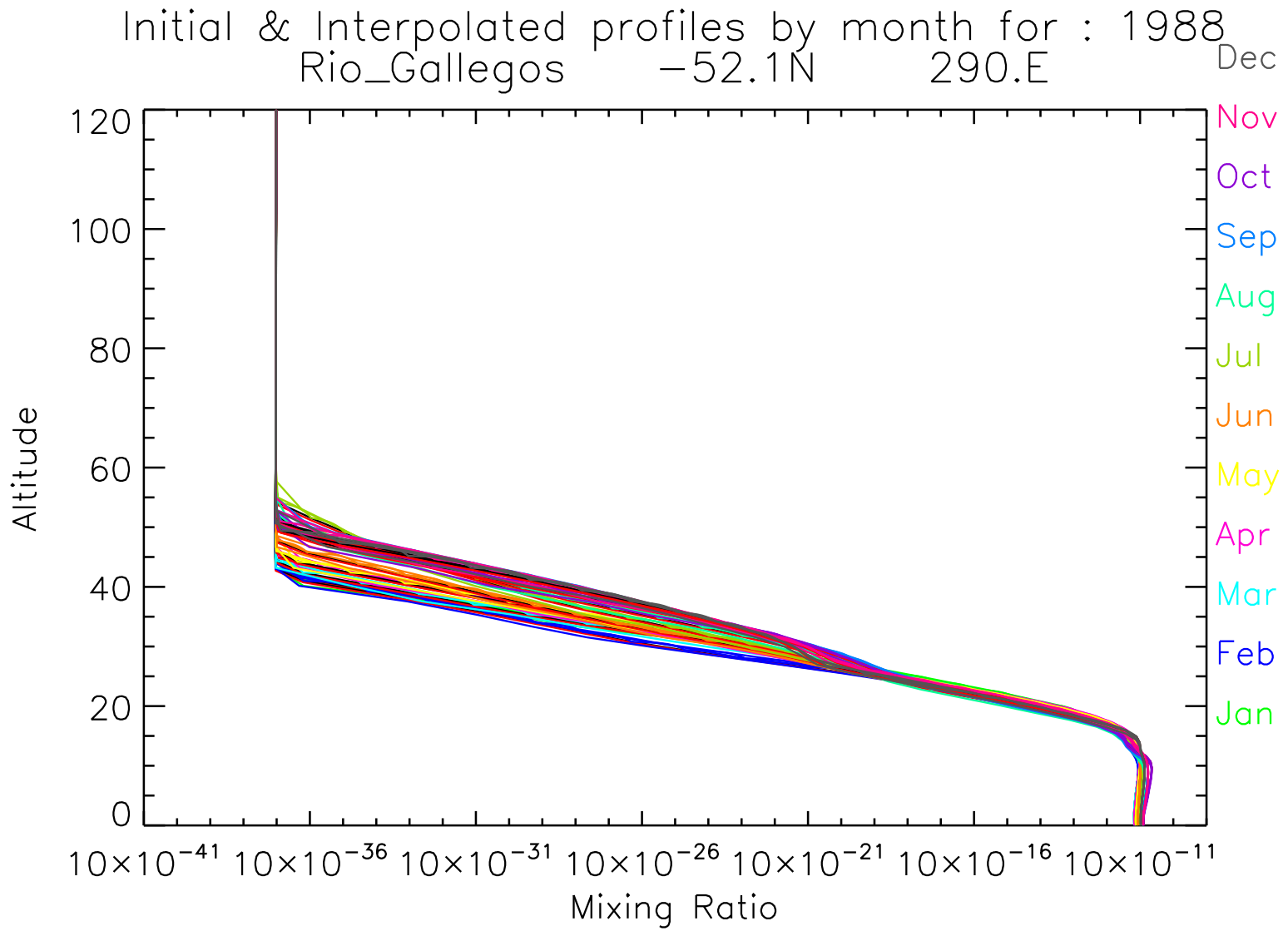

Initial & Interpolated profiles by month for : 1983
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

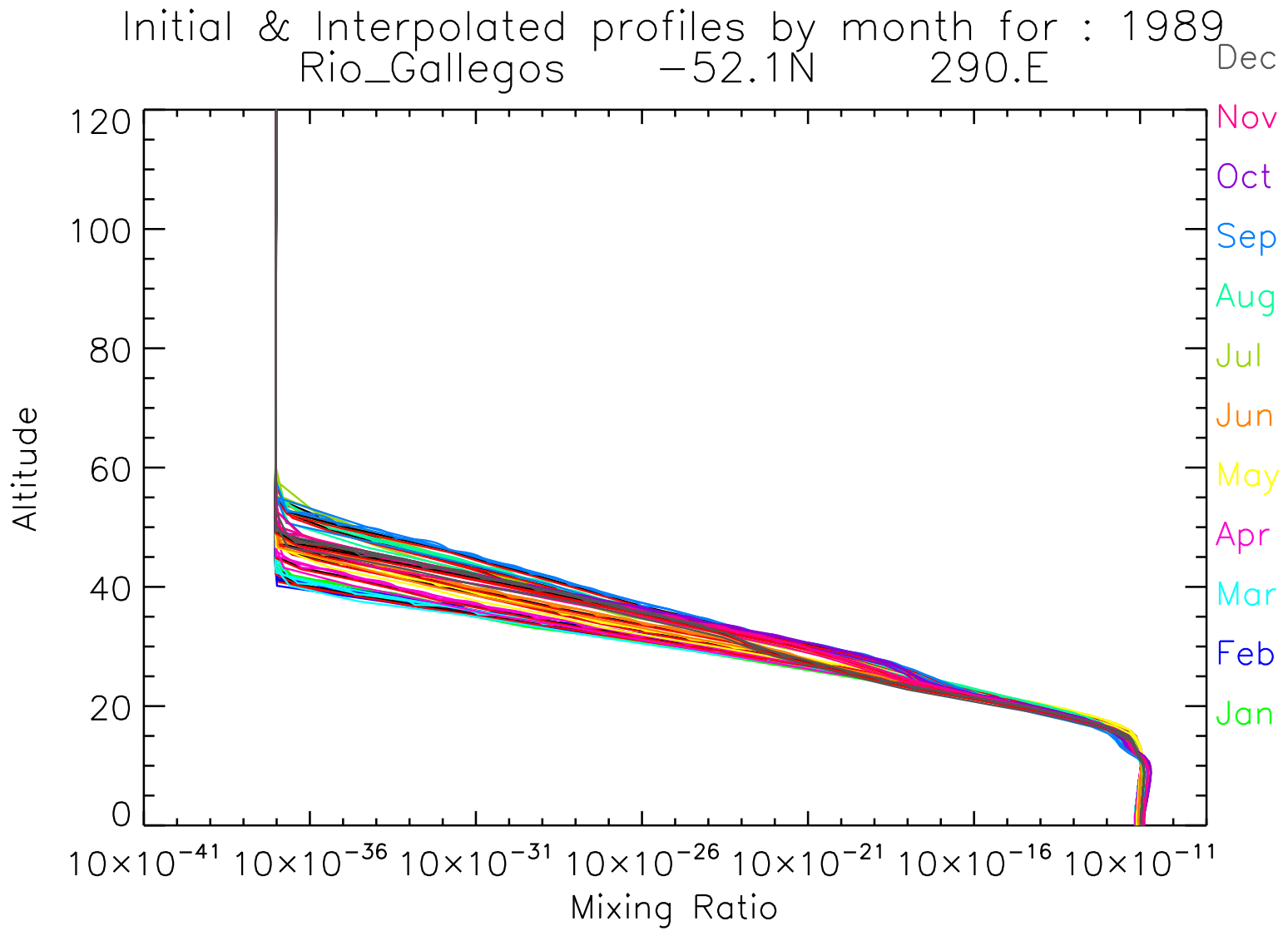

Initial & Interpolated profiles by month for : 1984
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

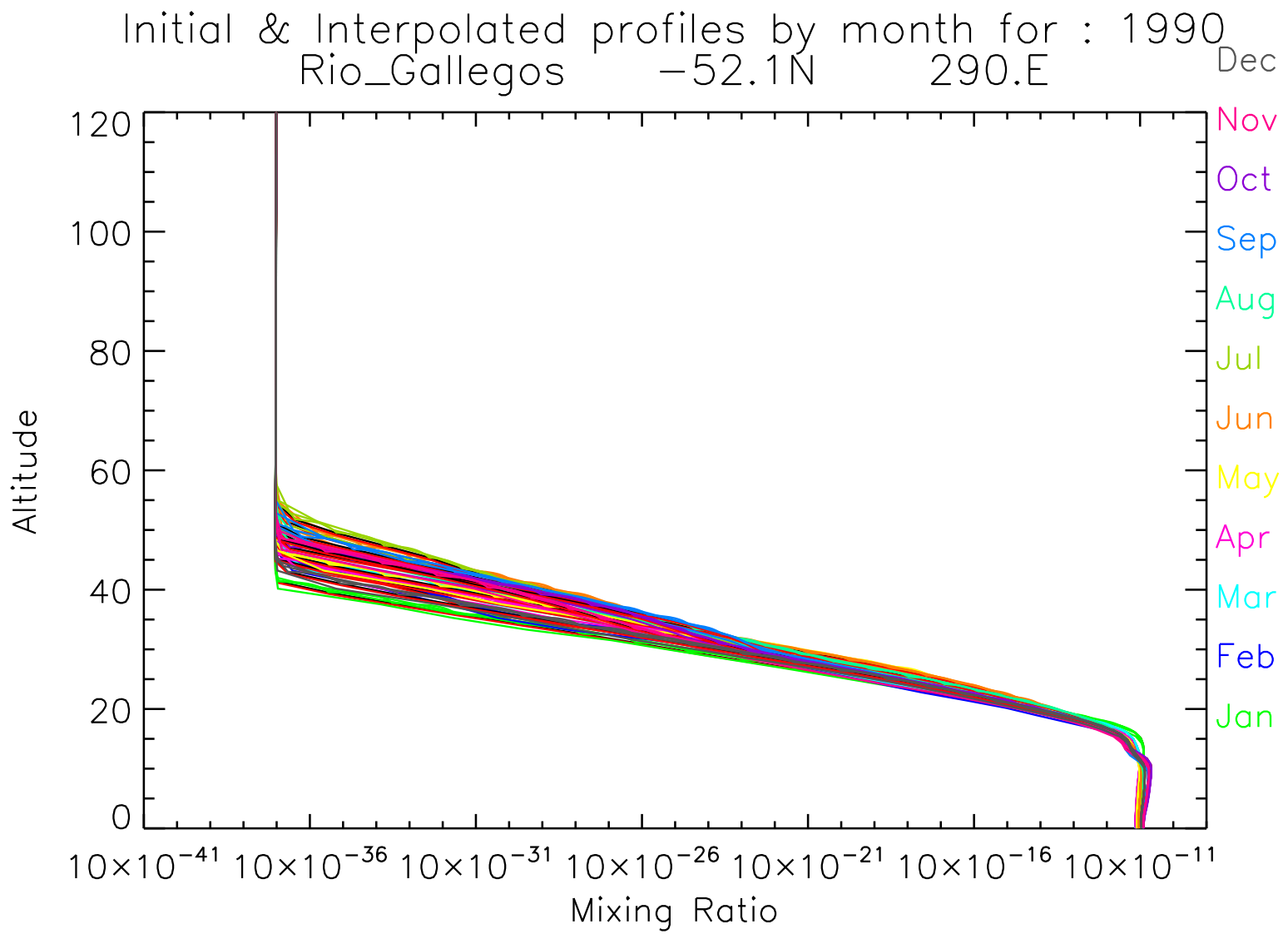

Initial & Interpolated profiles by month for : 1985
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

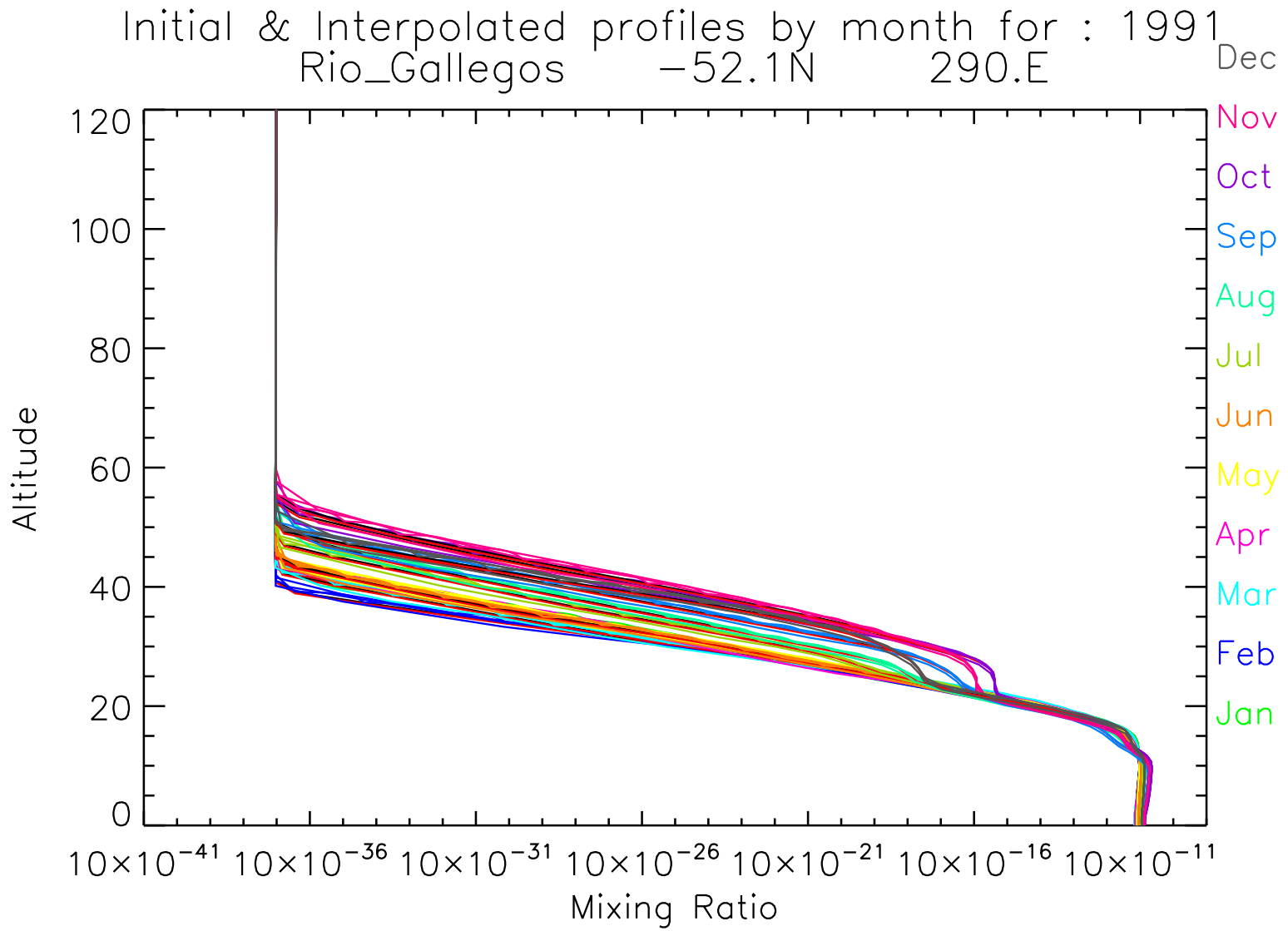

Initial & Interpolated profiles by month for : 1986
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

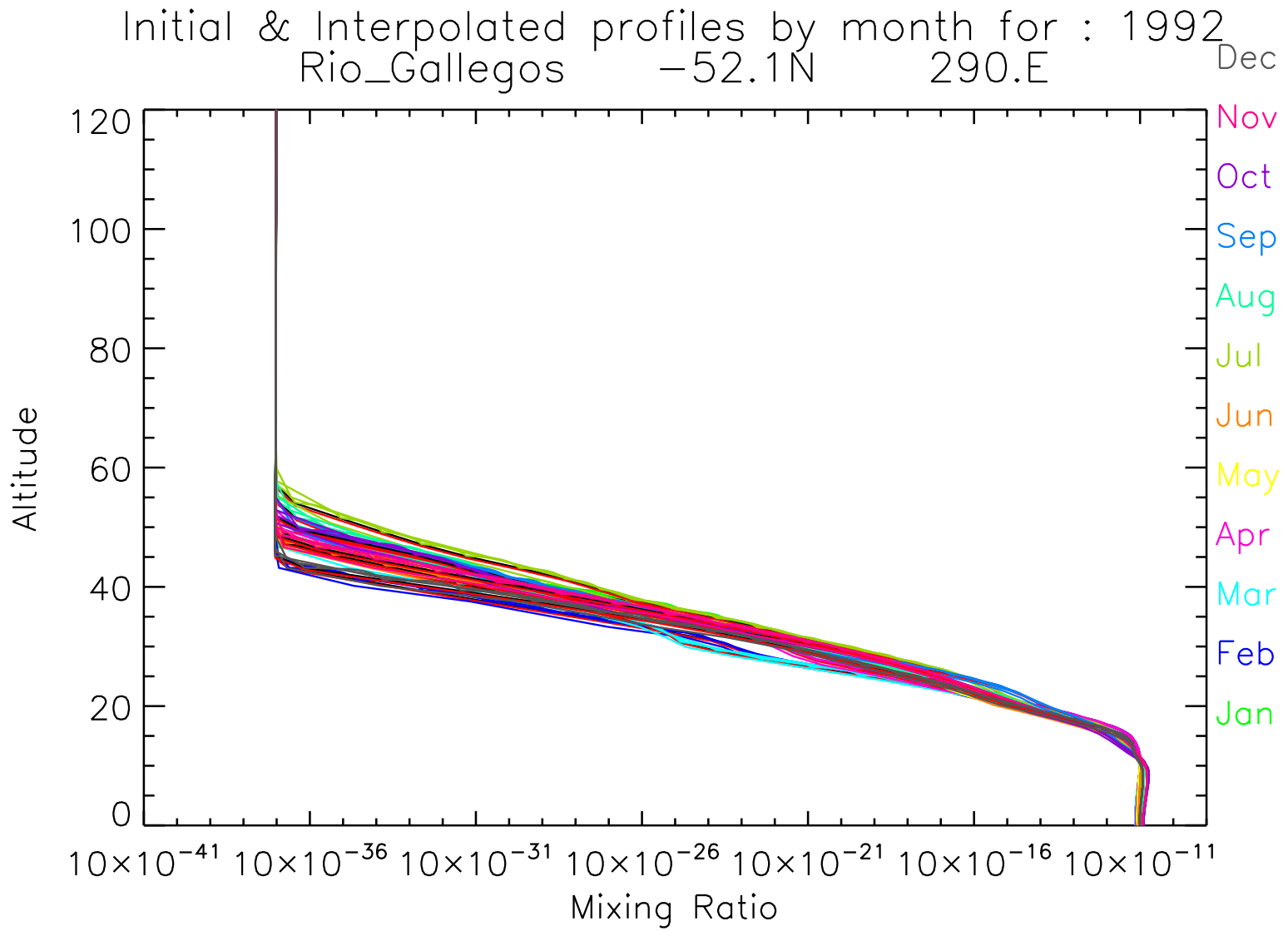

Initial & Interpolated profiles by month for : 1987
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

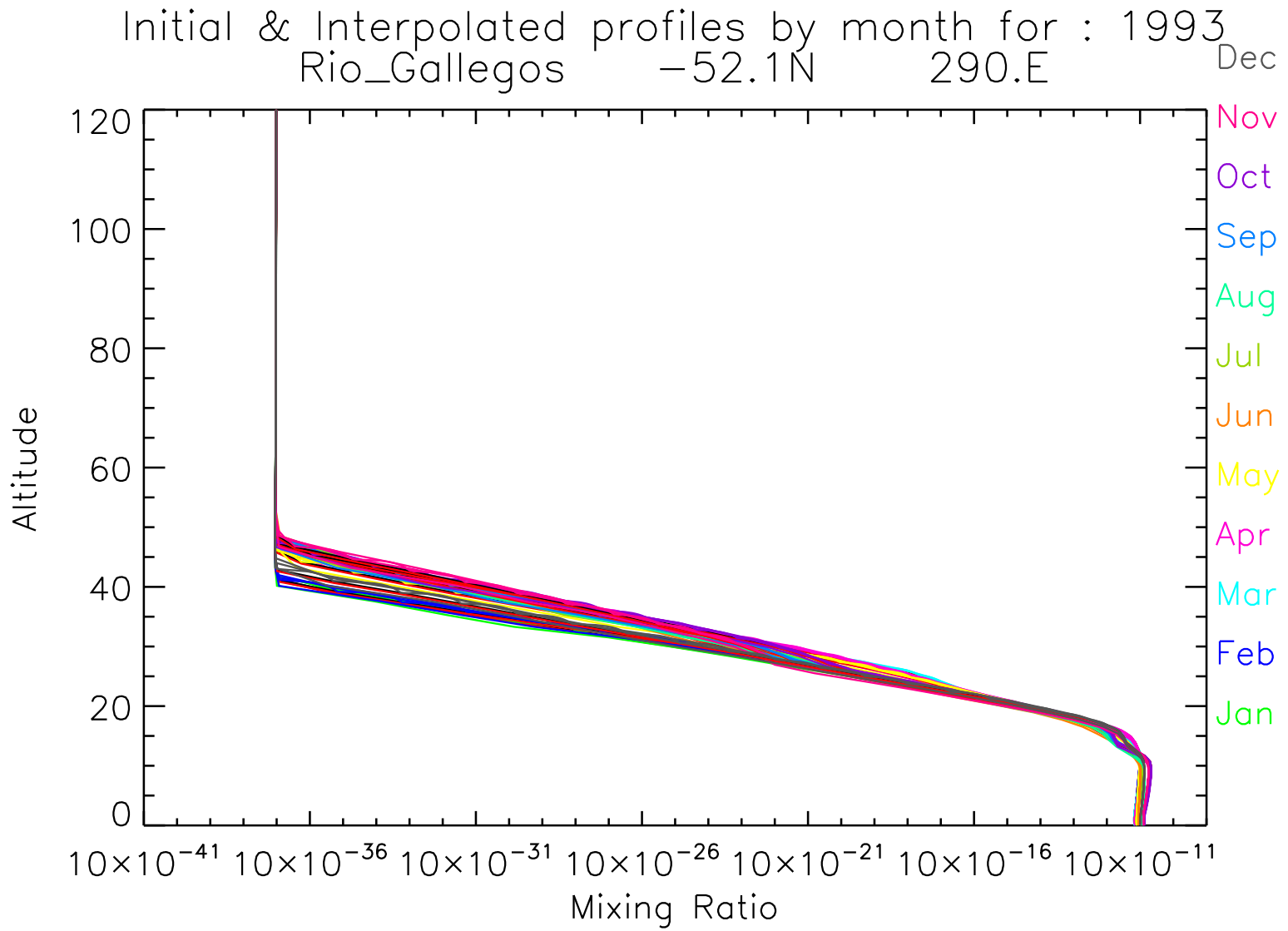

Initial & Interpolated profiles by month for : 1988
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

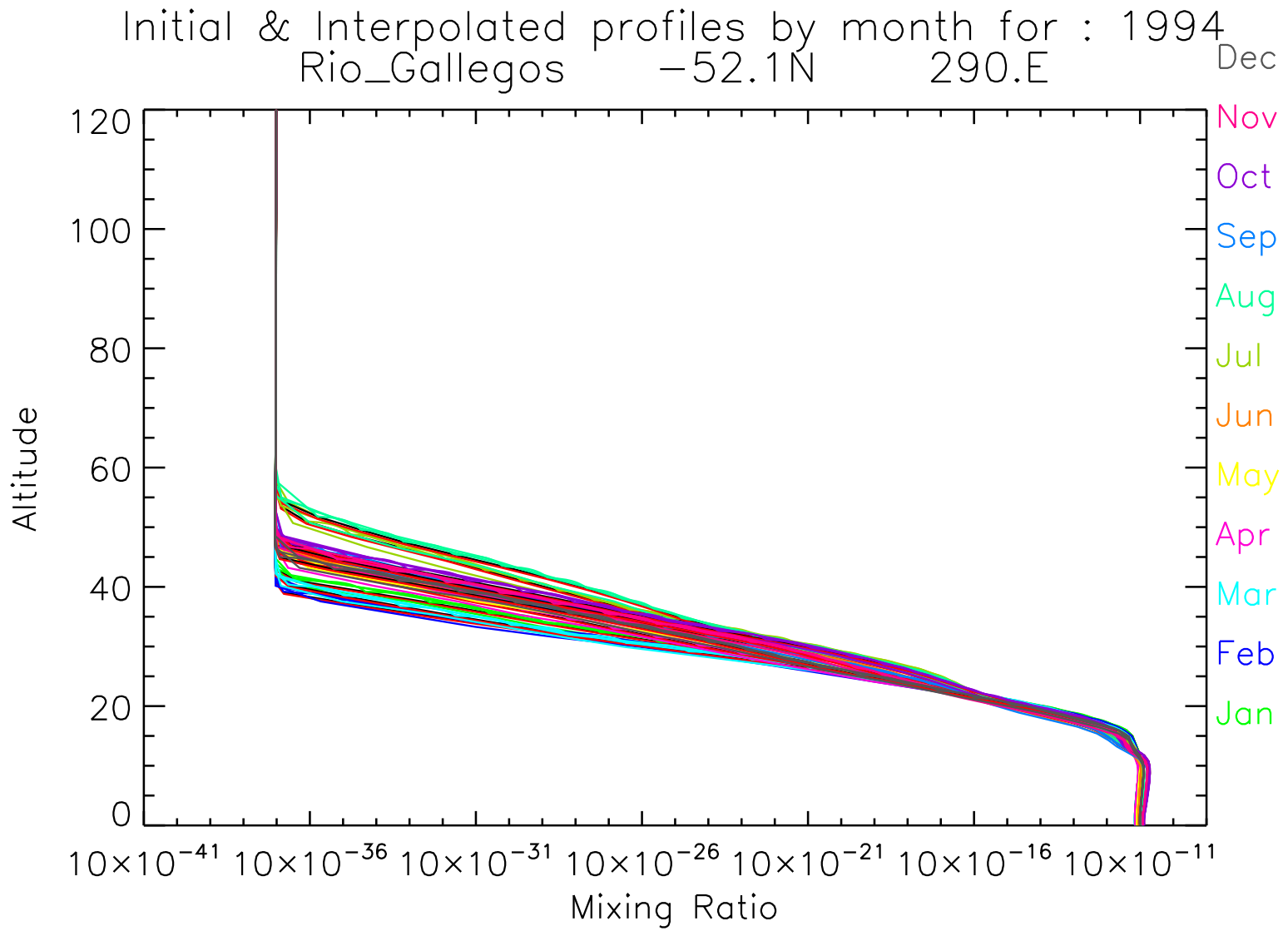

Initial & Interpolated profiles by month for : 1989
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

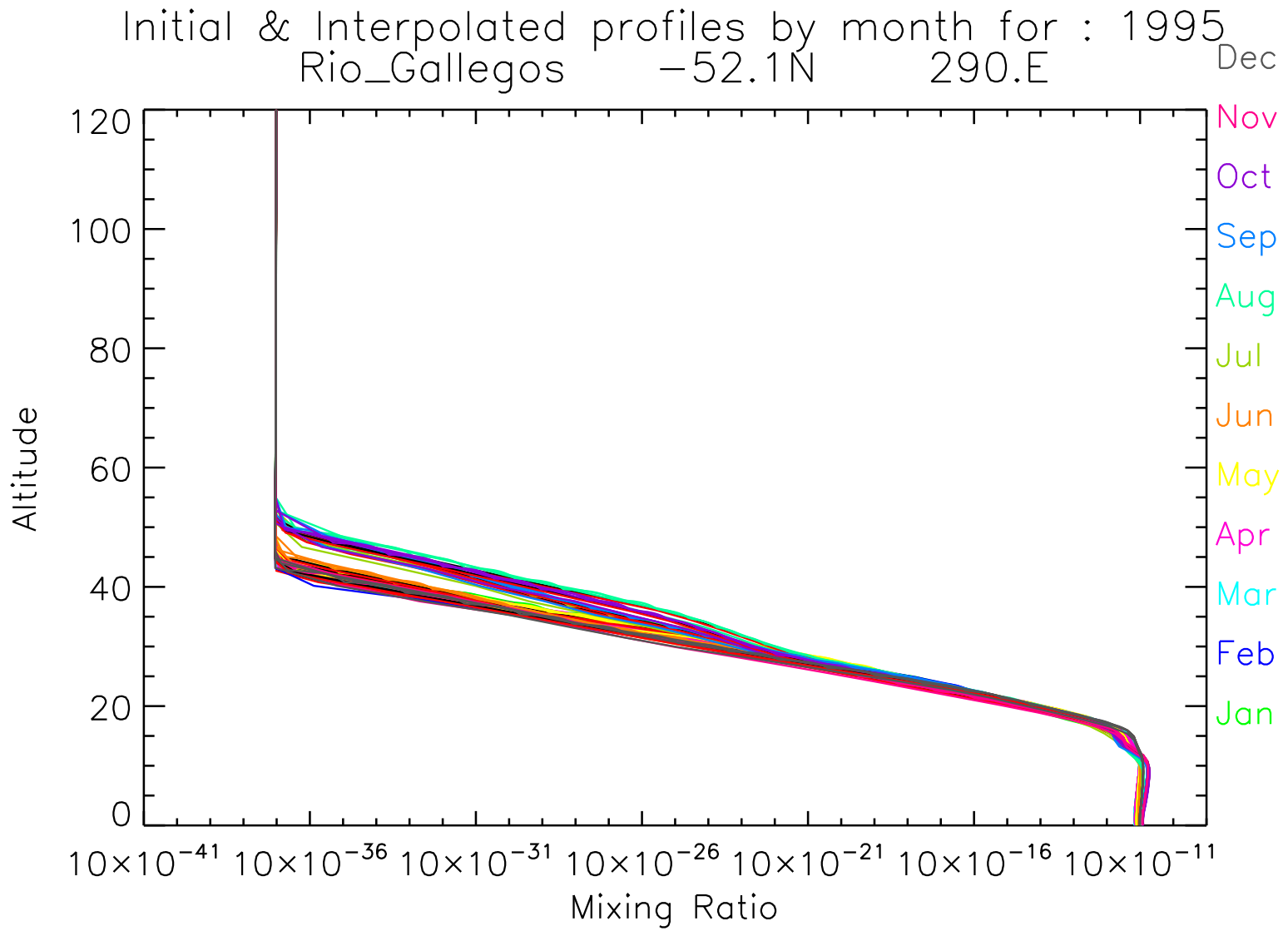

Initial & Interpolated profiles by month for : 1990
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

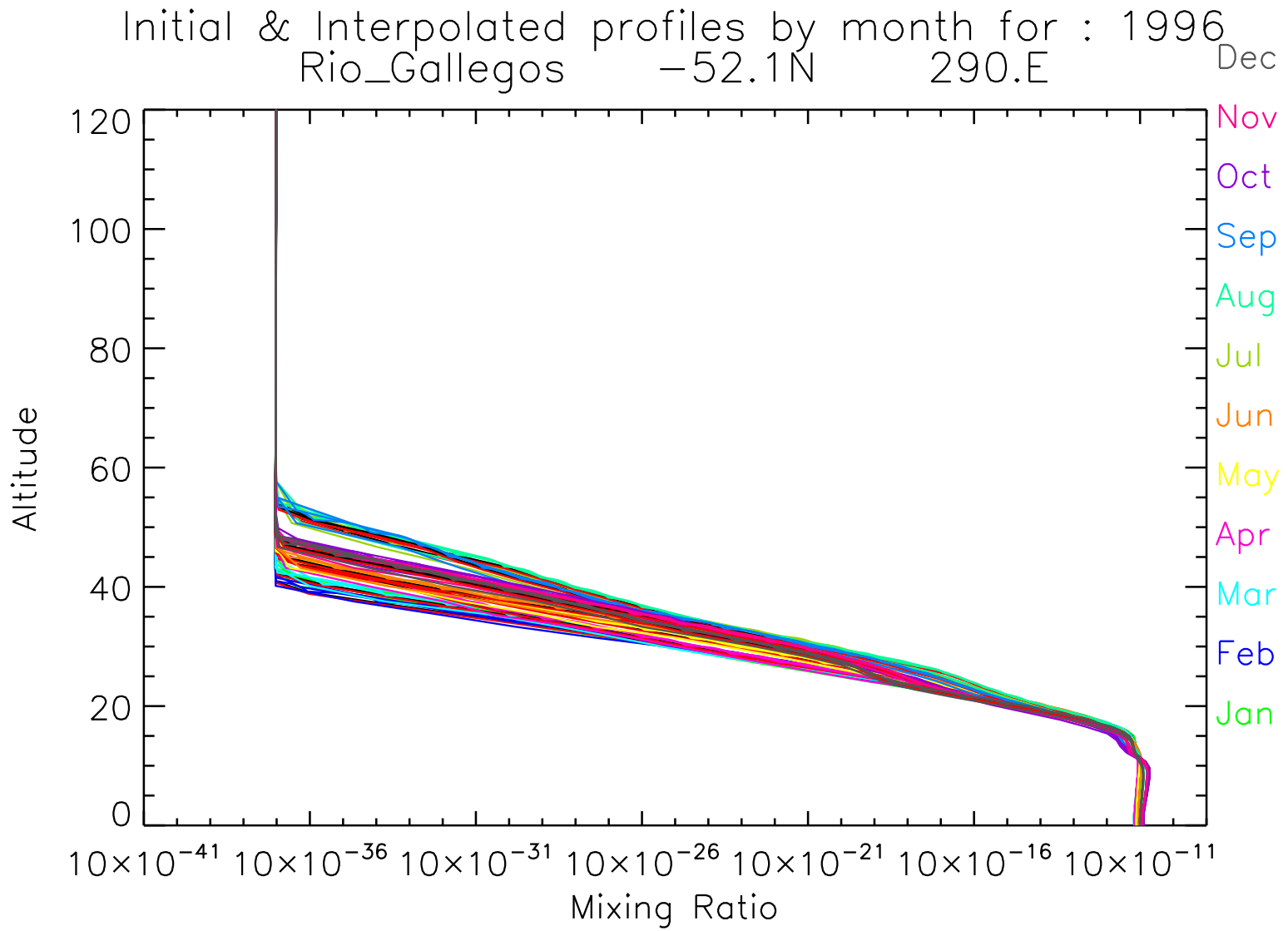

Initial & Interpolated profiles by month for : 1991
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

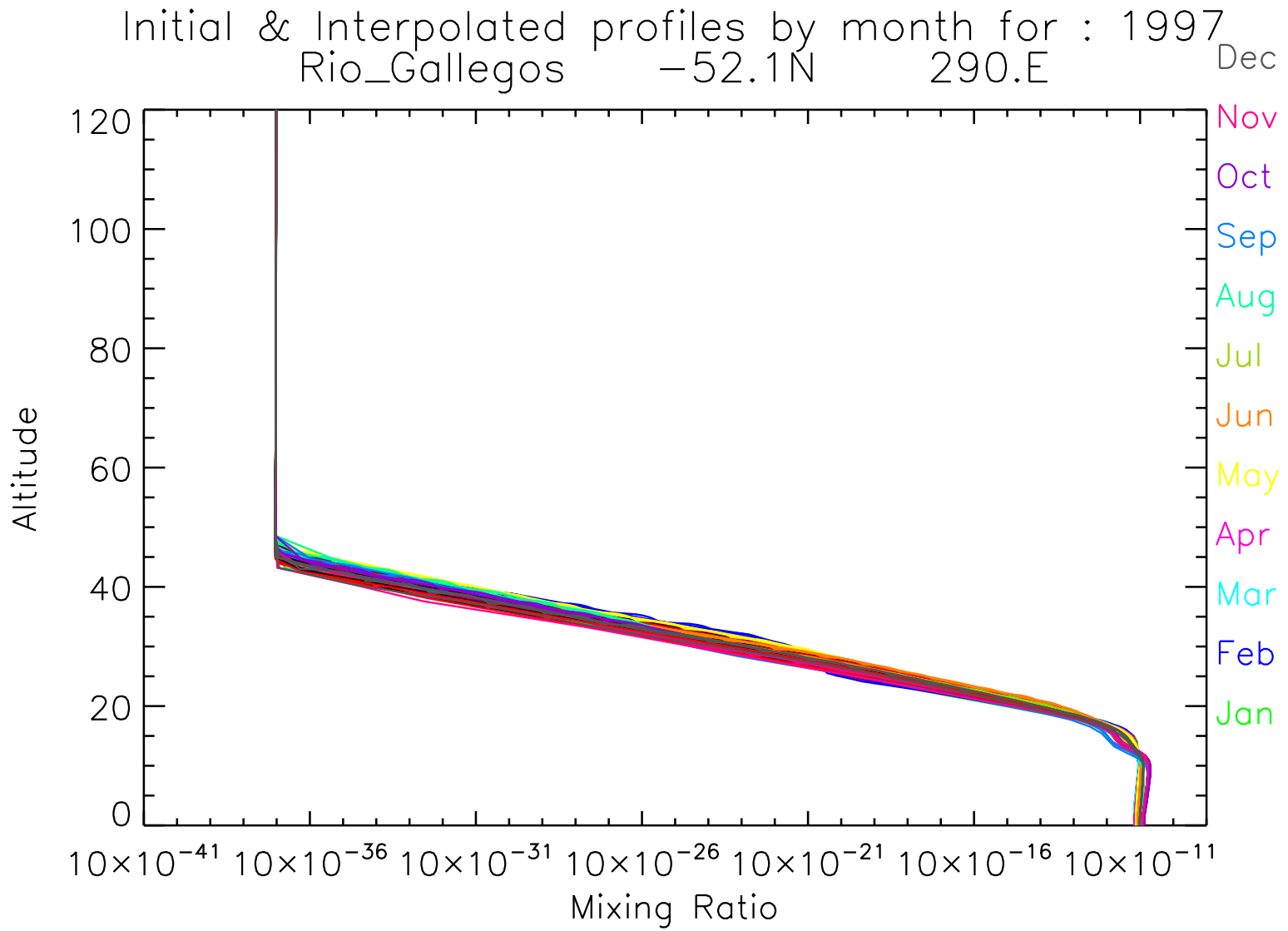

Initial & Interpolated profiles by month for : 1992
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

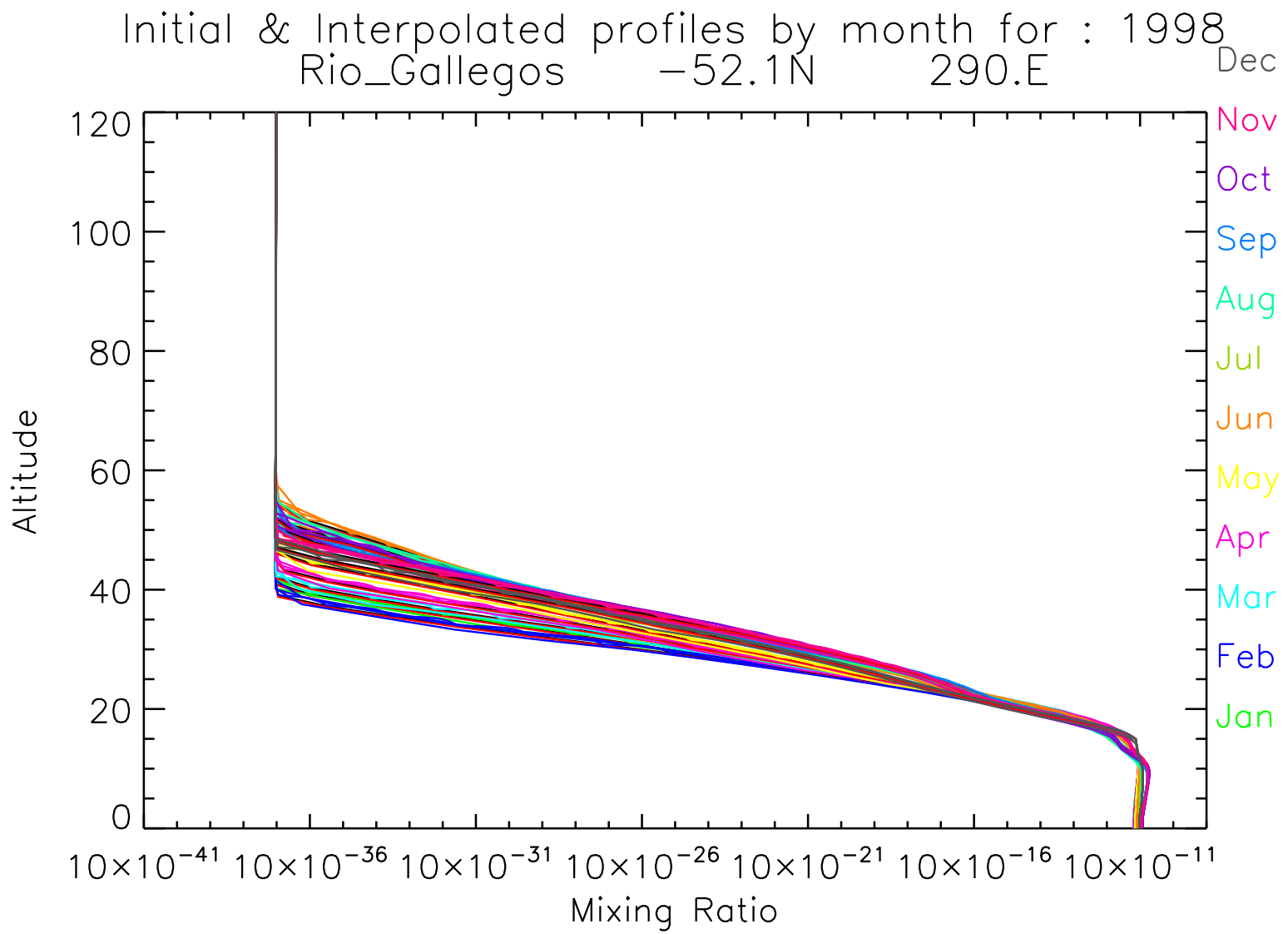

Initial & Interpolated profiles by month for : 1993
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

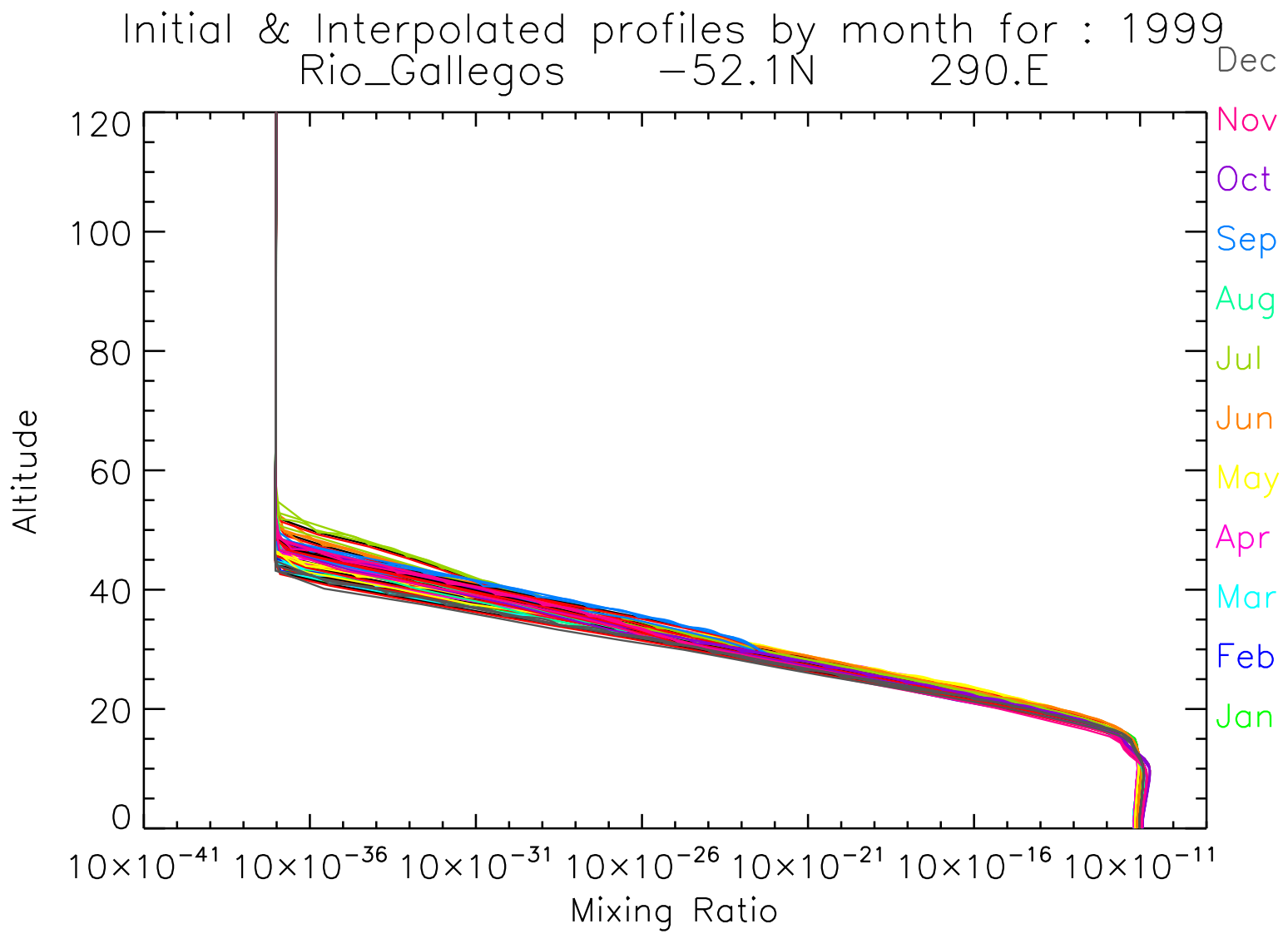

Initial & Interpolated profiles by month for : 1994
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

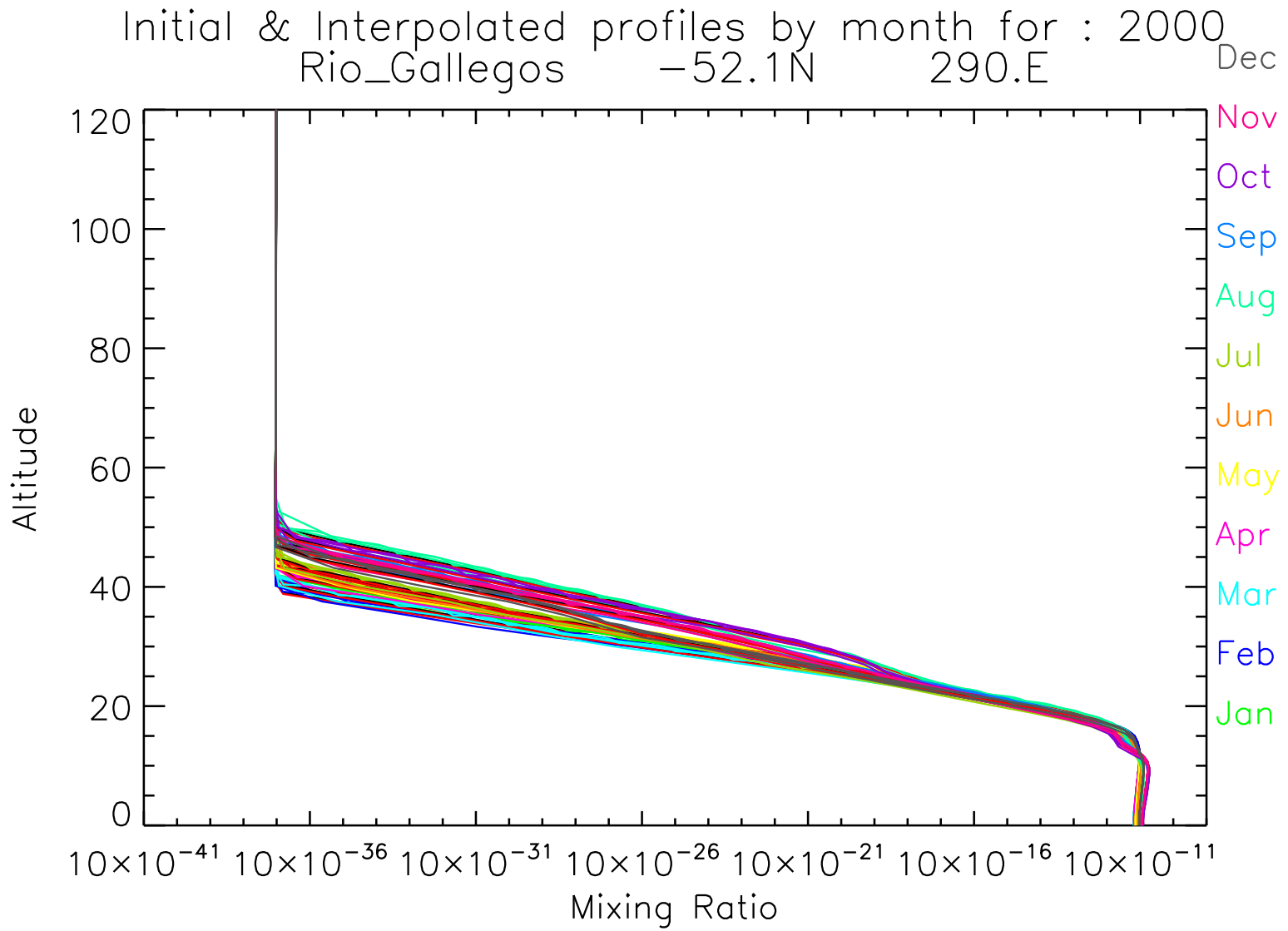

Initial & Interpolated profiles by month for : 1995
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

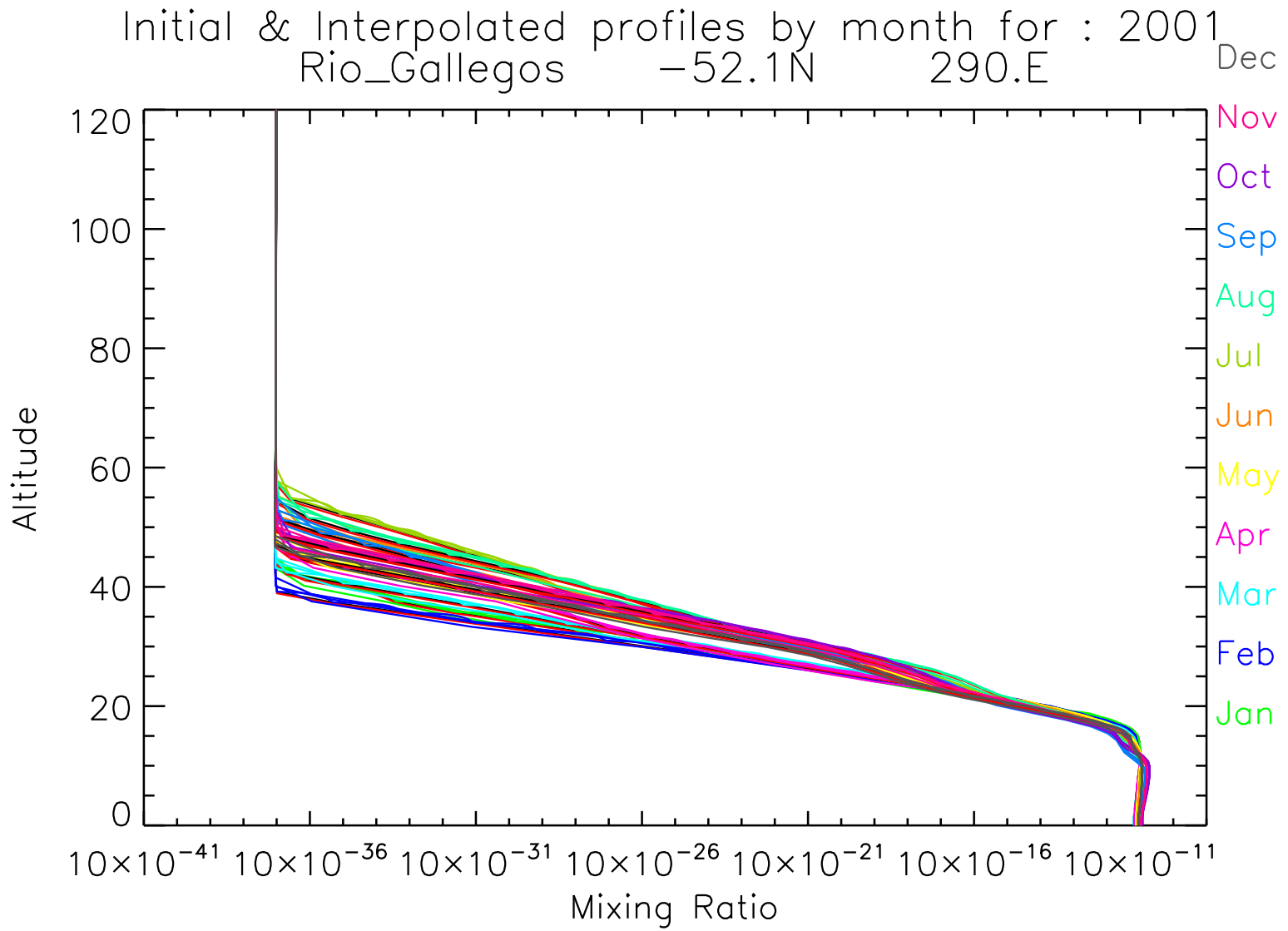

Initial & Interpolated profiles by month for : 1996
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

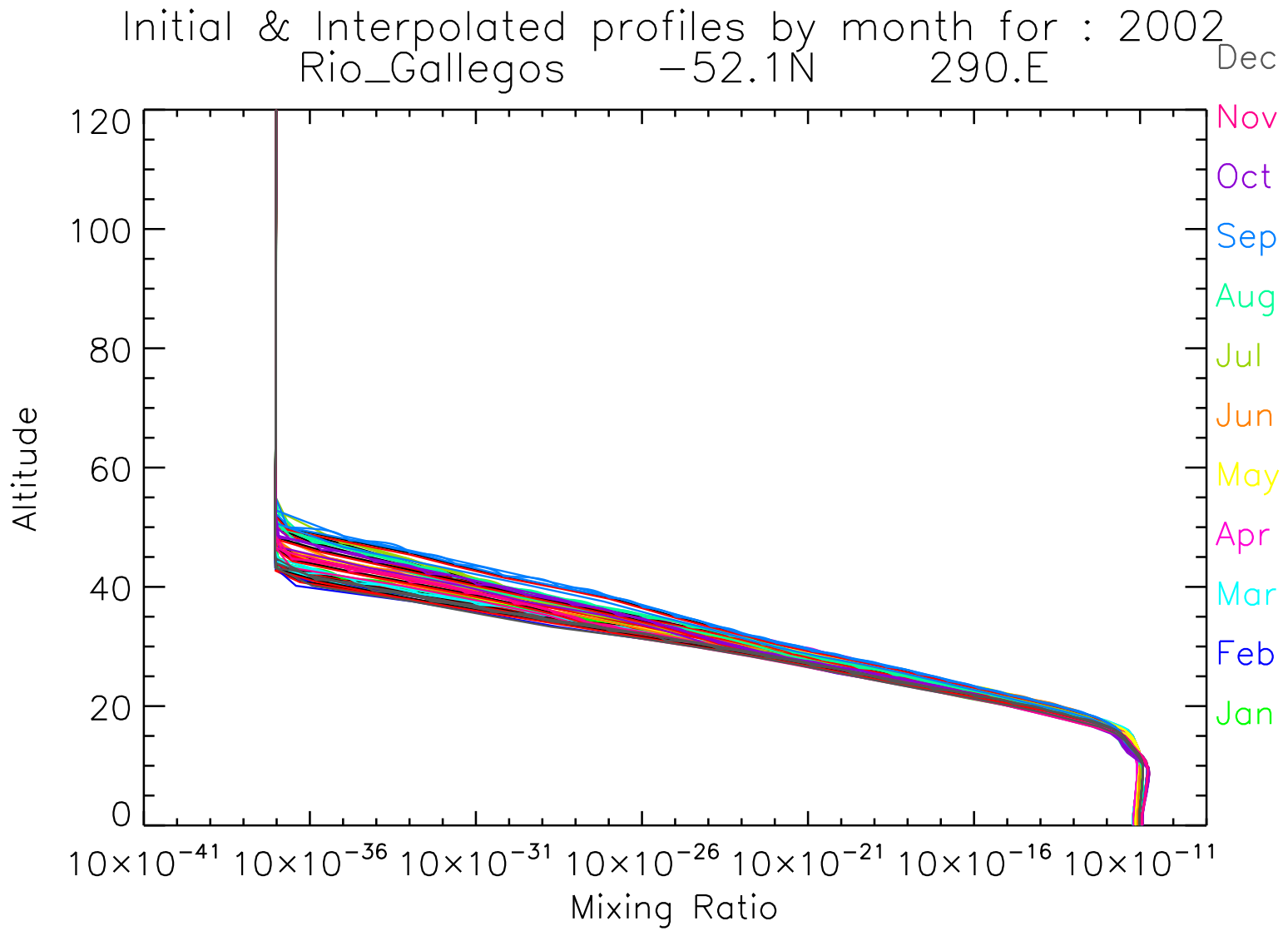

Initial & Interpolated profiles by month for : 1997
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

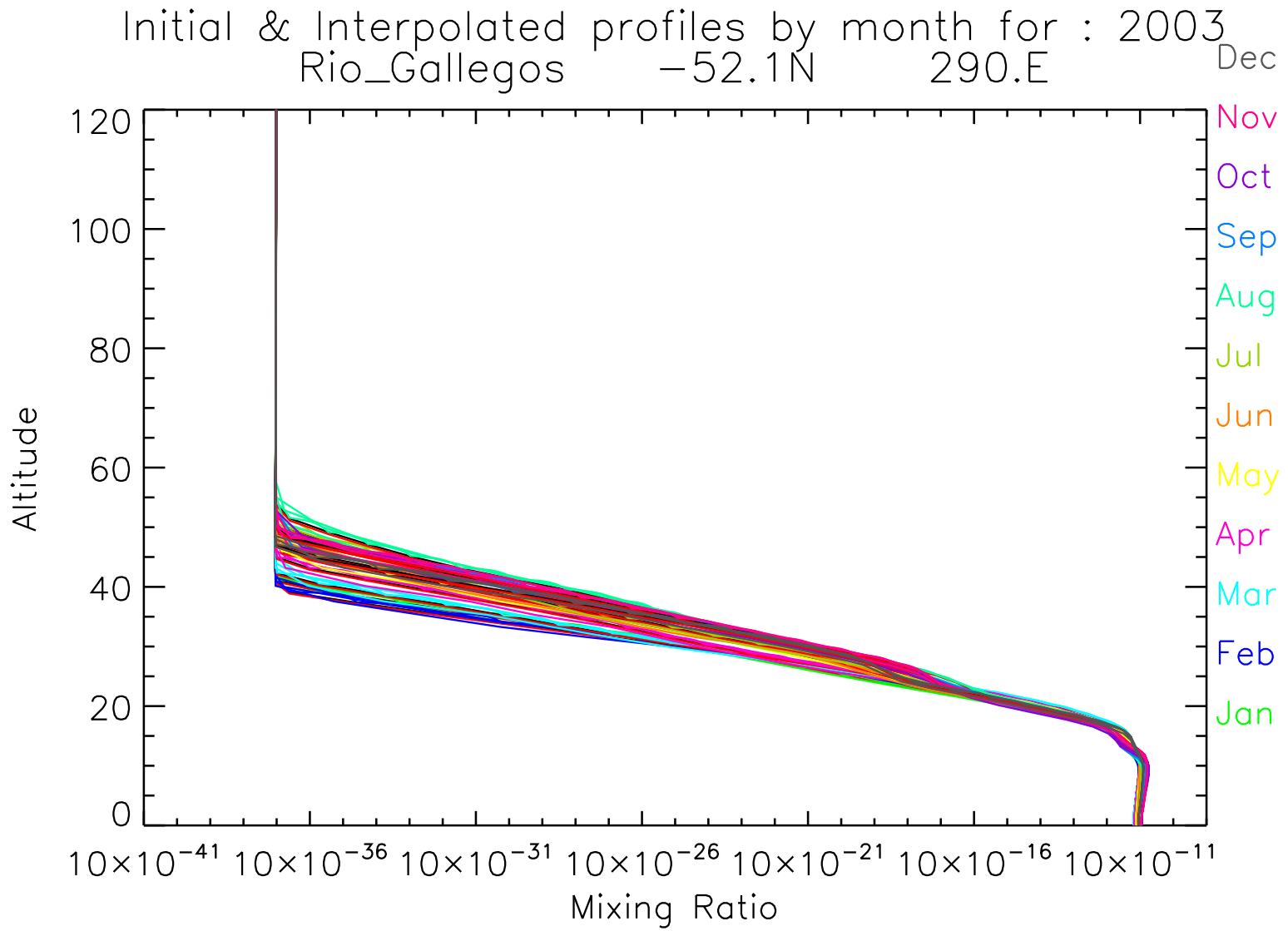

Initial & Interpolated profiles by month for : 1998
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

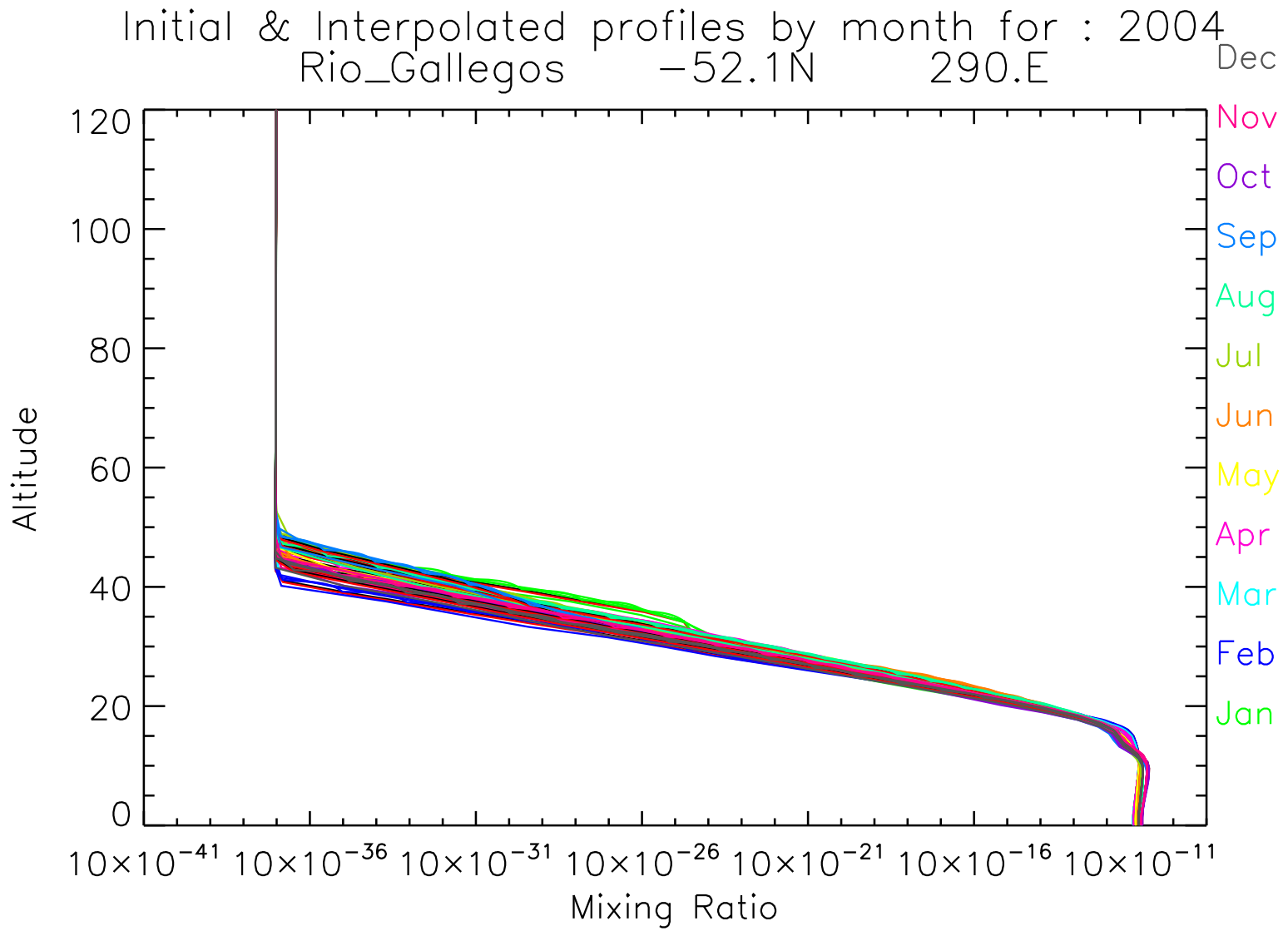

Initial & Interpolated profiles by month for : 1999
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

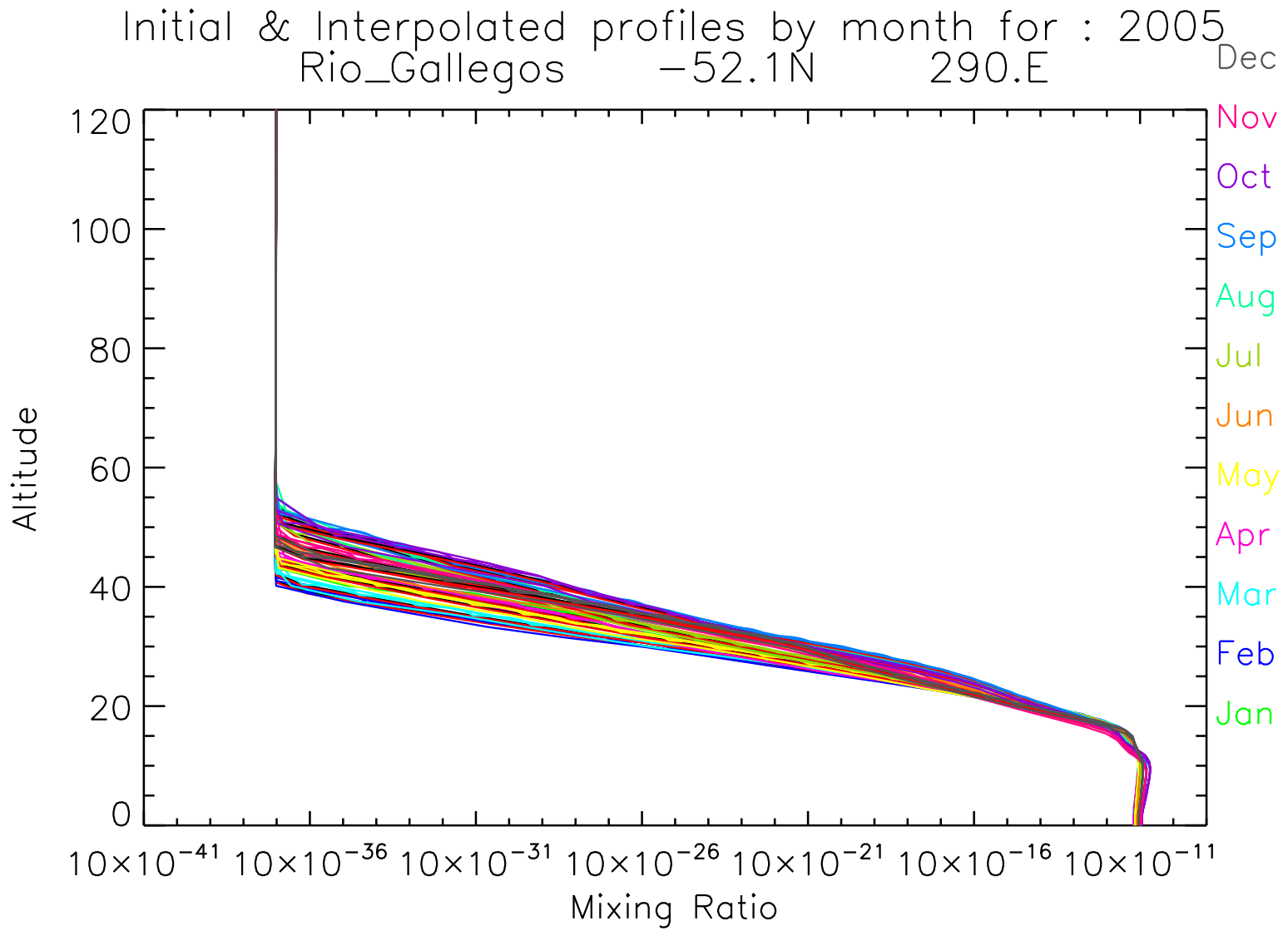

Initial & Interpolated profiles by month for : 2000
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

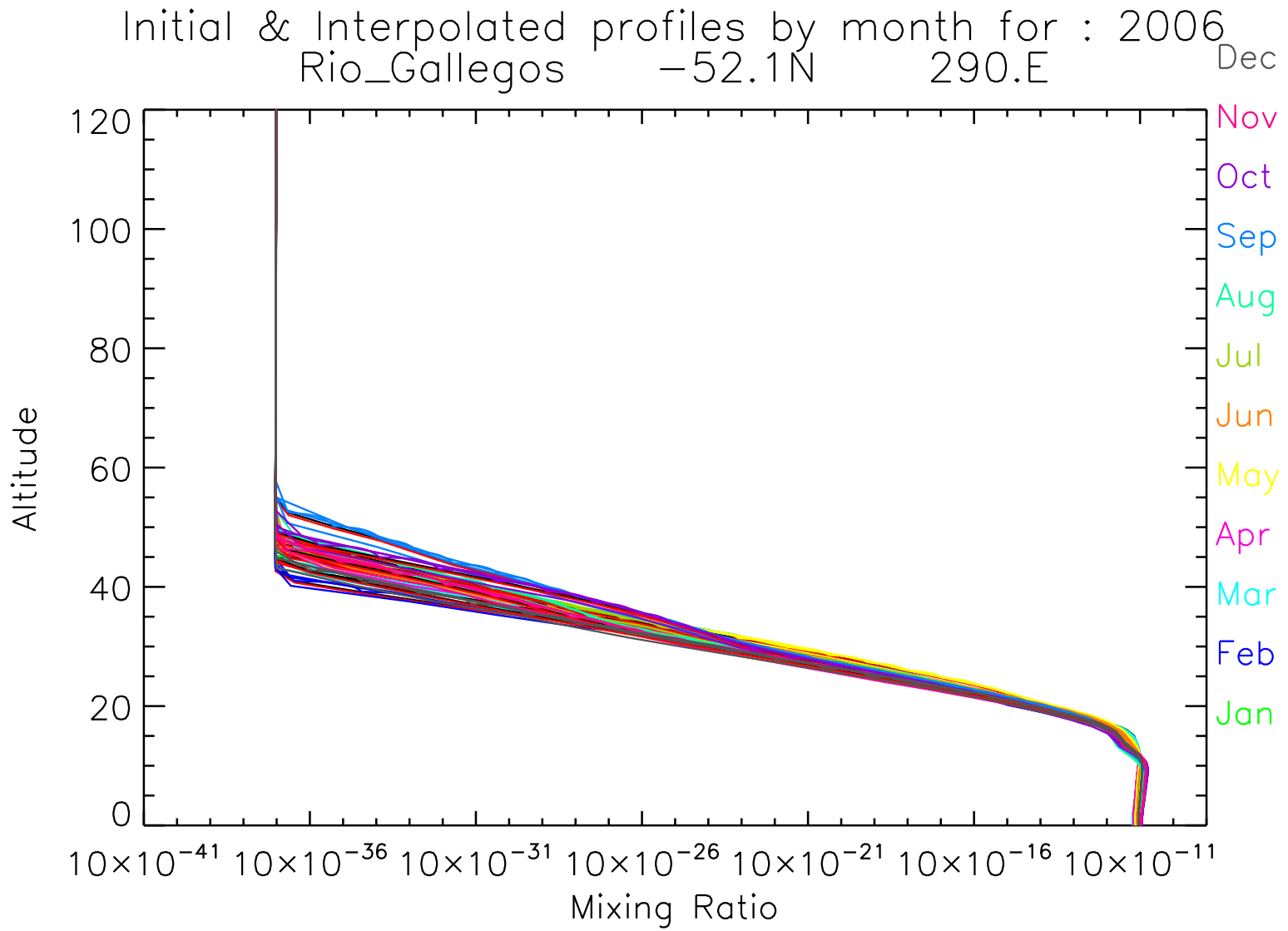

Initial & Interpolated profiles by month for : 2001
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

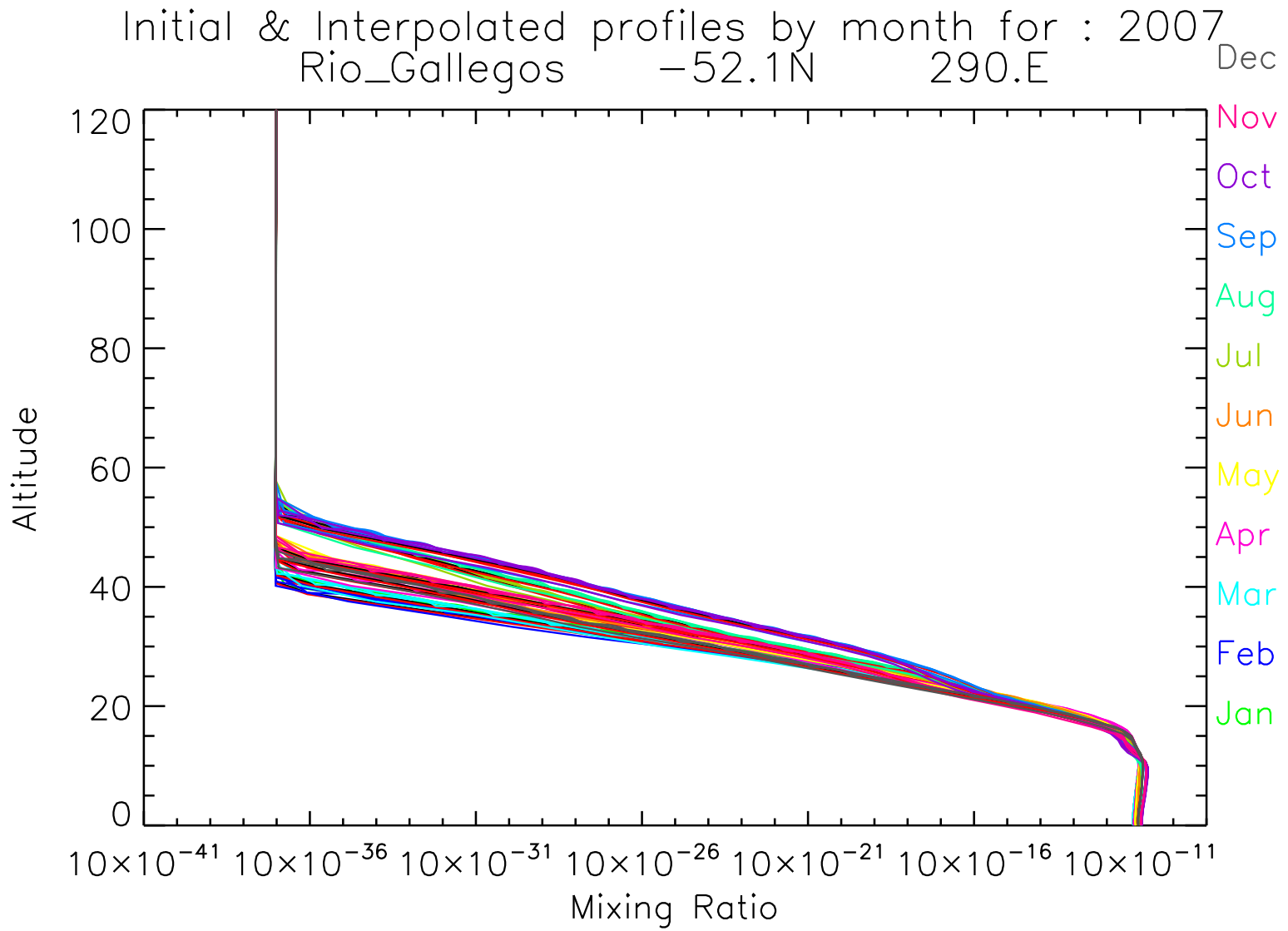

Initial & Interpolated profiles by month for : 2002
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

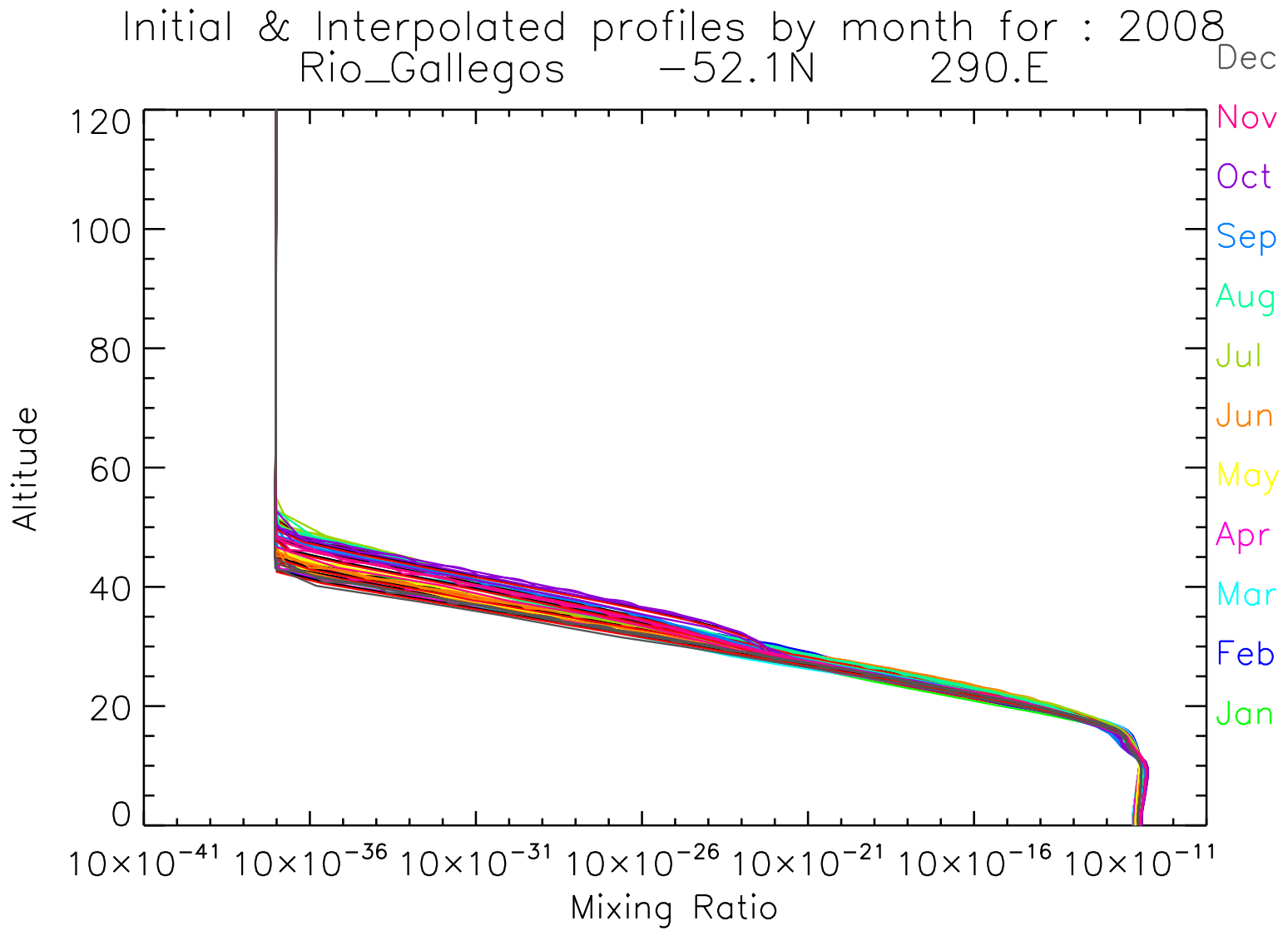

Initial & Interpolated profiles by month for : 2003
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

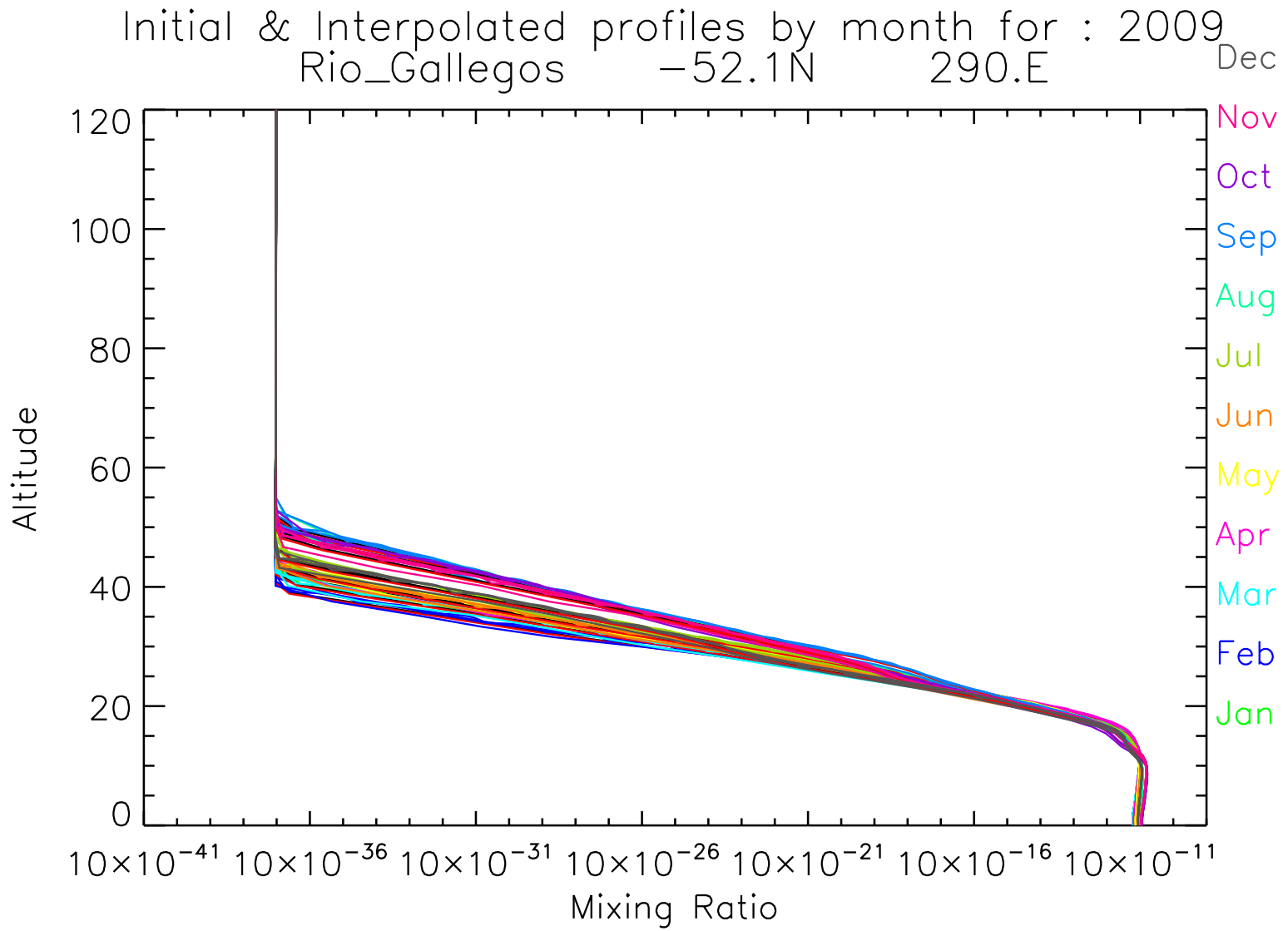

Initial & Interpolated profiles by month for : 2004
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

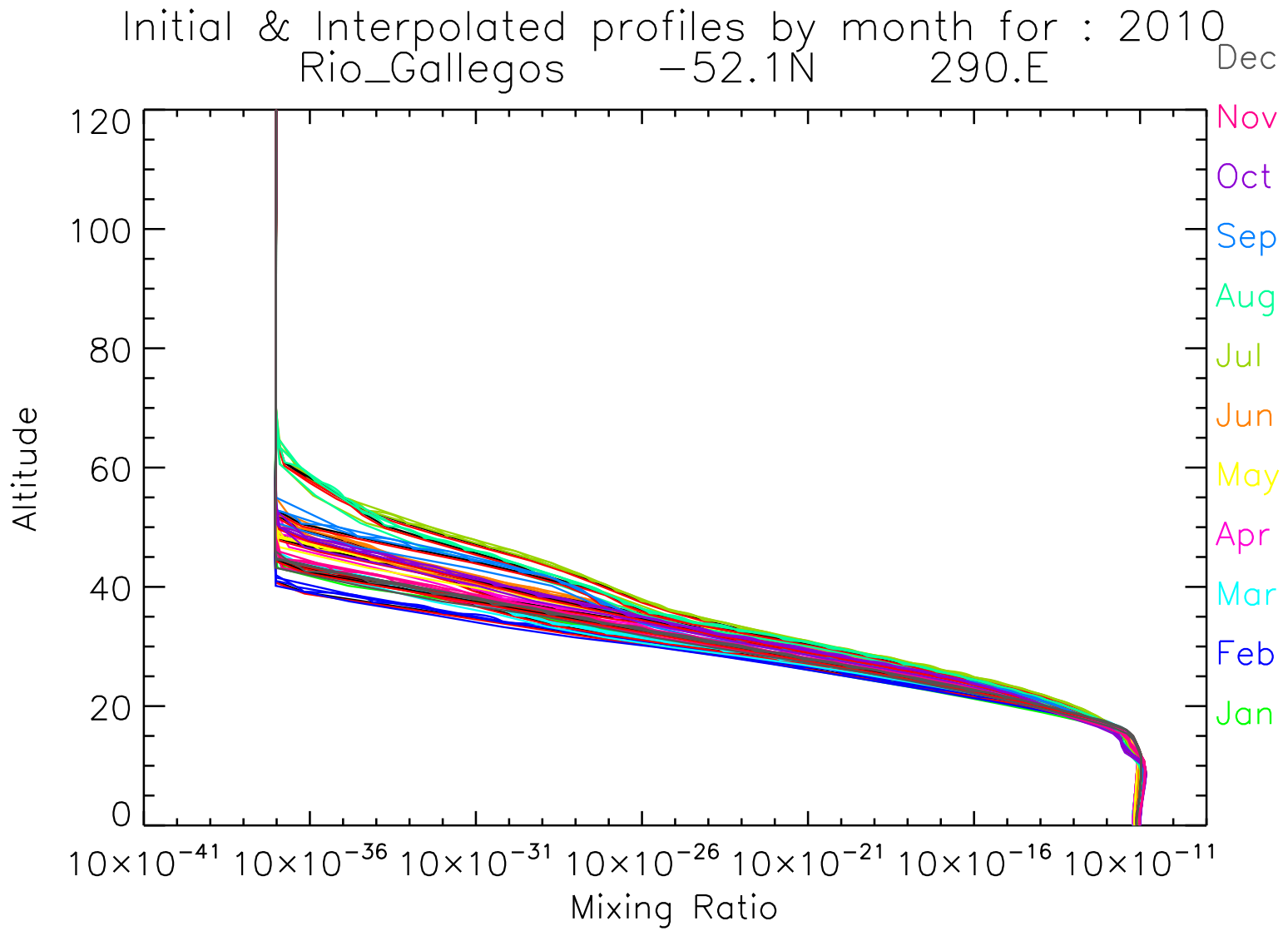

Initial & Interpolated profiles by month for : 2005
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

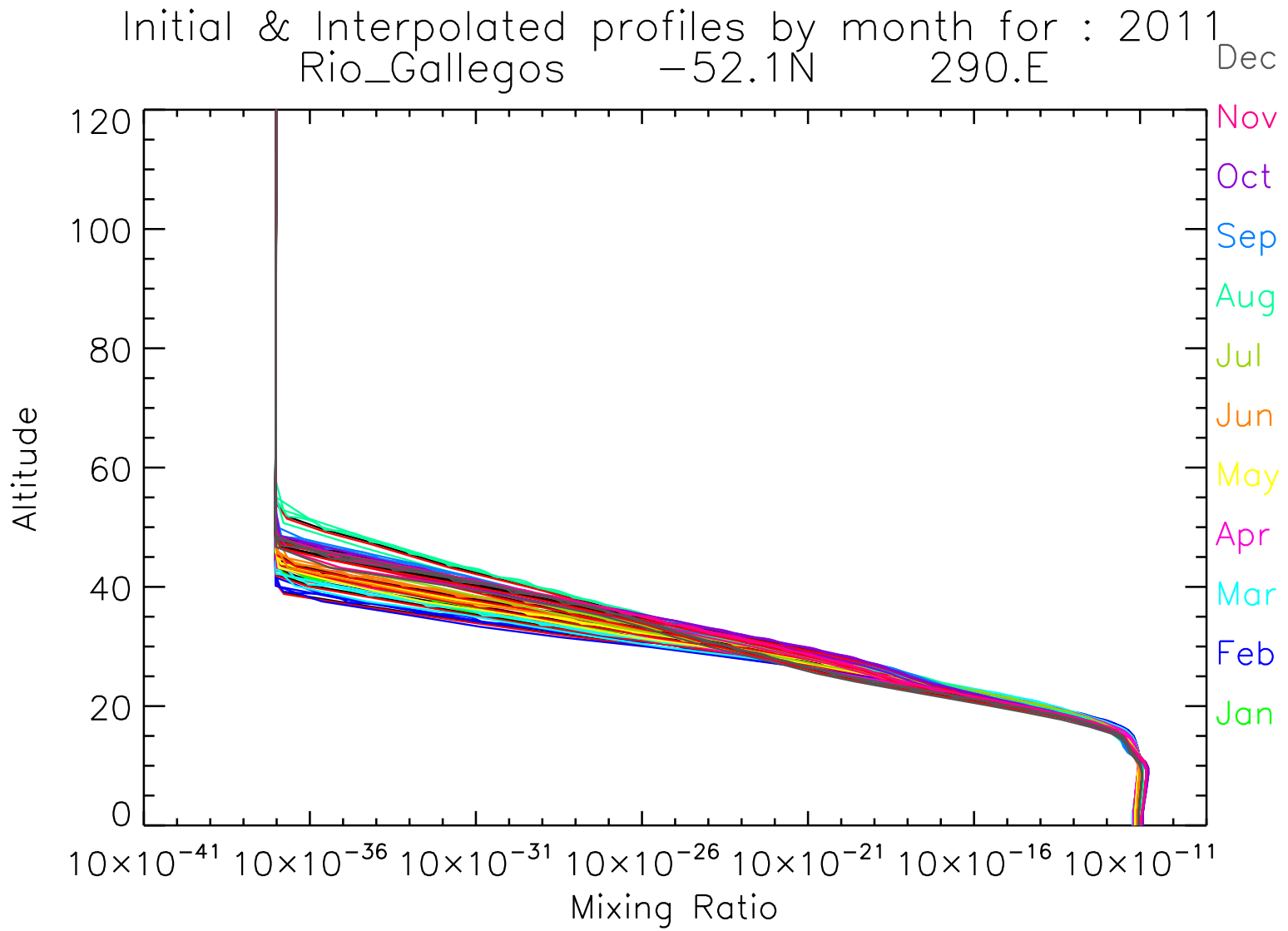

Initial & Interpolated profiles by month for : 2006
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

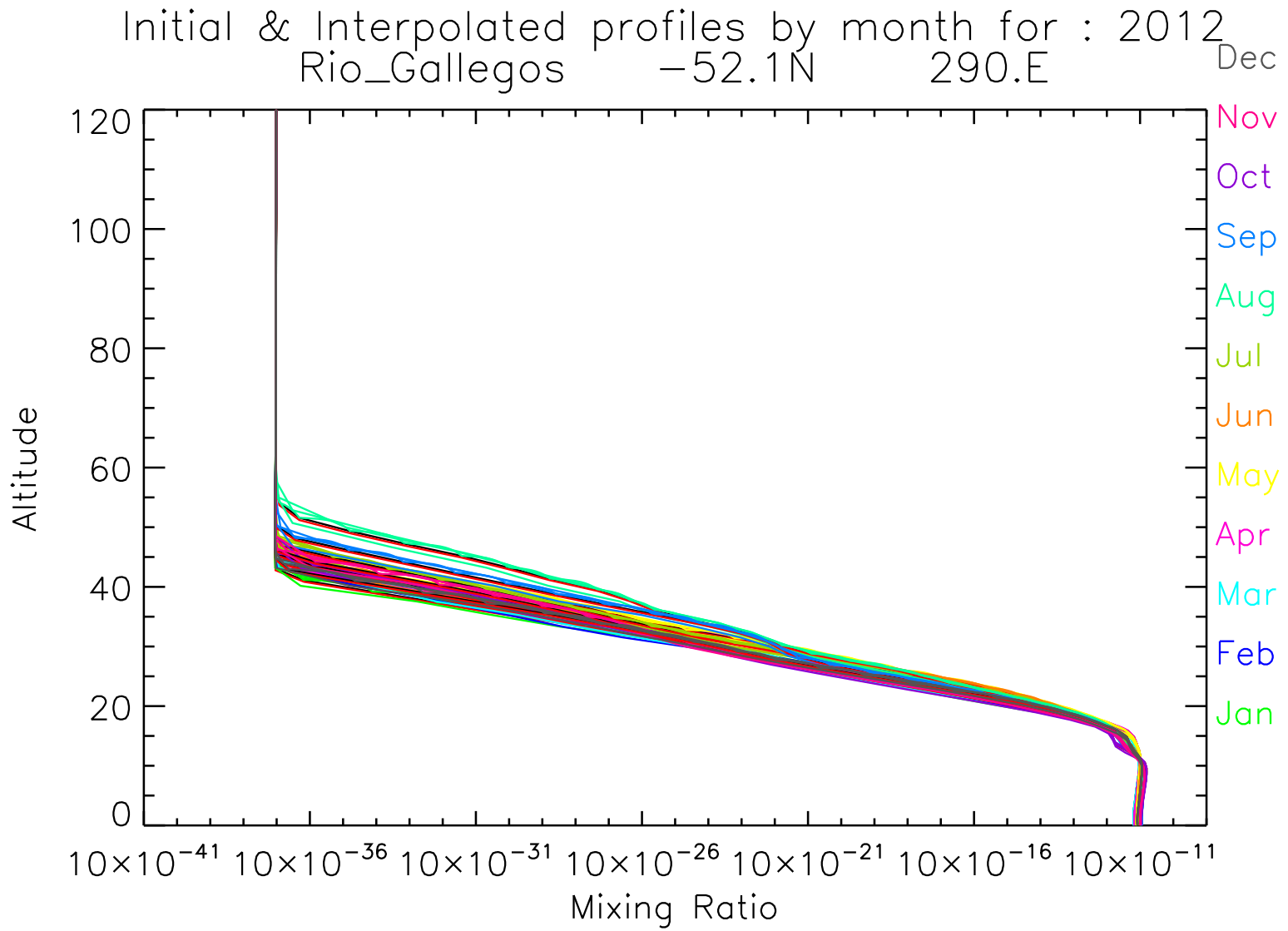

Initial & Interpolated profiles by month for : 2007
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

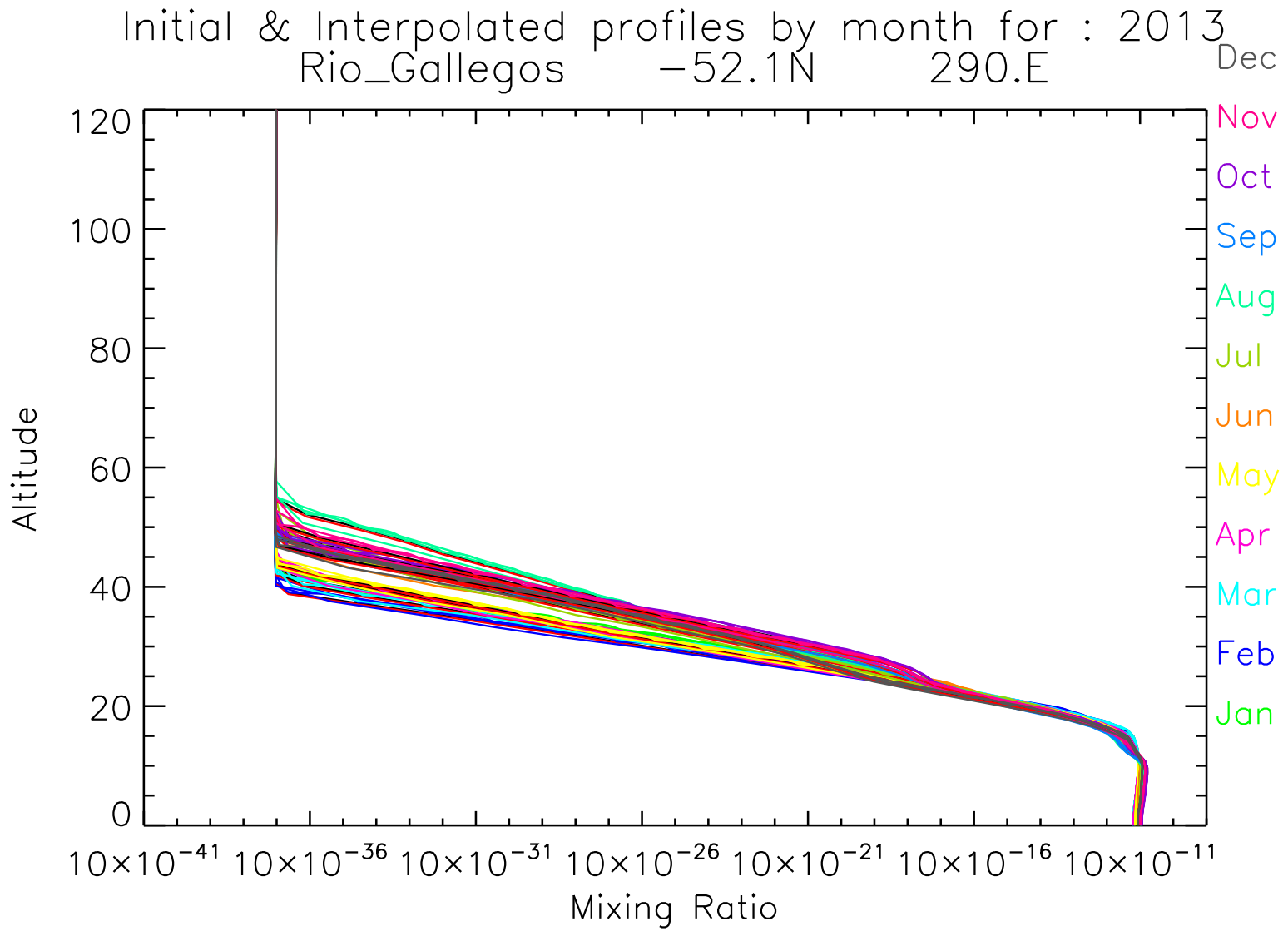

Initial & Interpolated profiles by month for : 2008
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

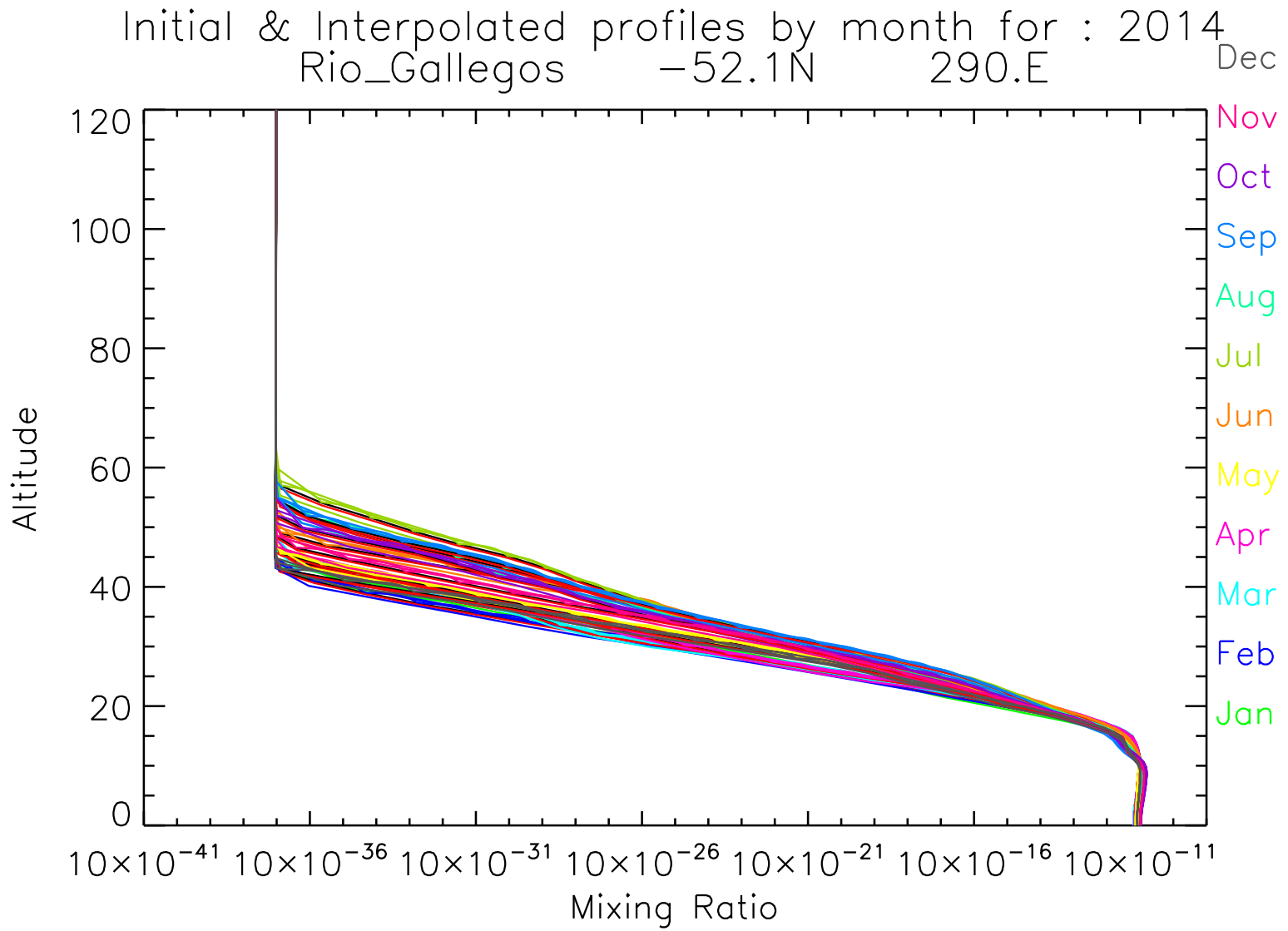

Initial & Interpolated profiles by month for : 2009
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

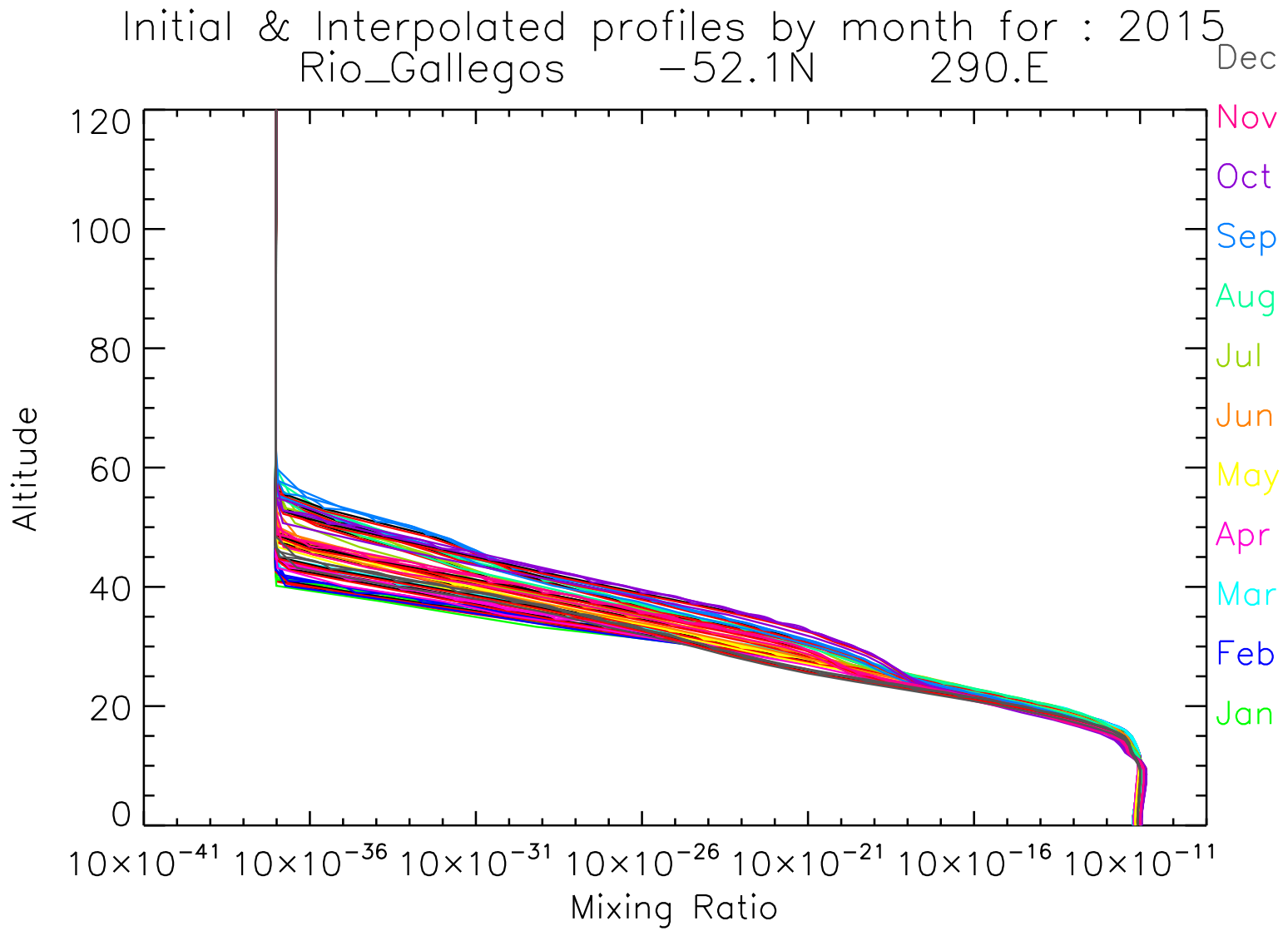

Initial & Interpolated profiles by month for : 2010
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

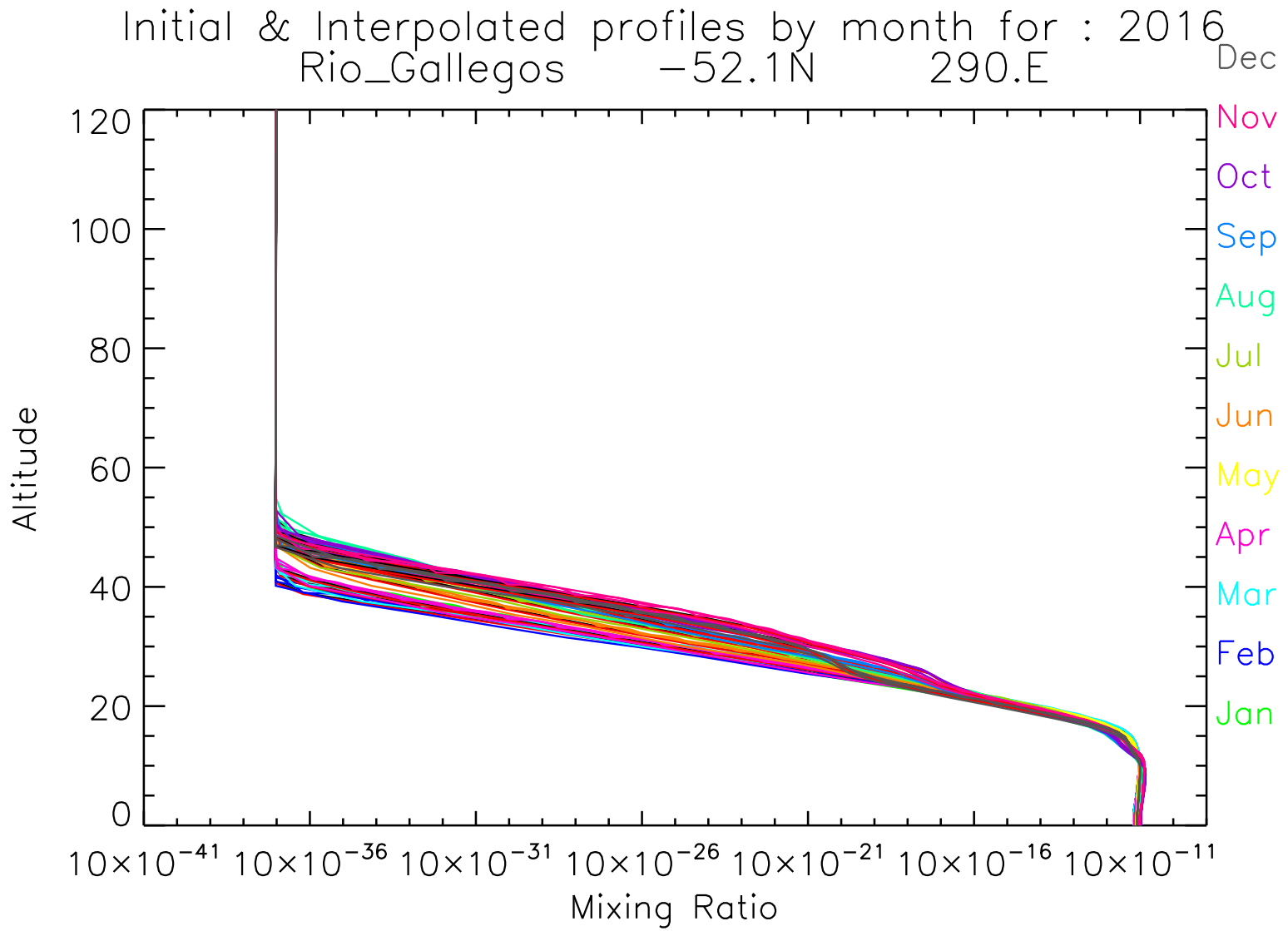

Initial & Interpolated profiles by month for : 2011
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

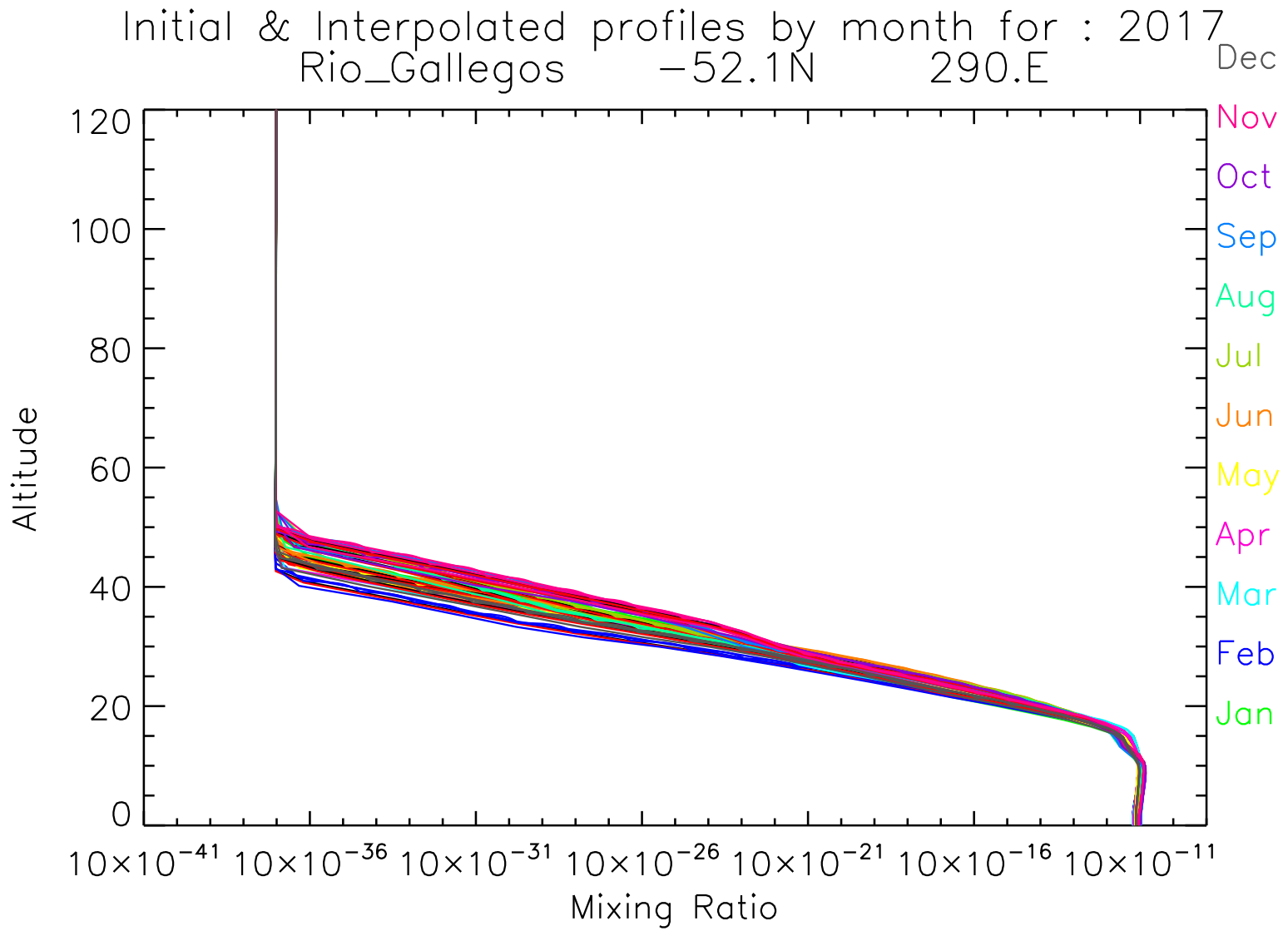

Initial & Interpolated profiles by month for : 2012
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

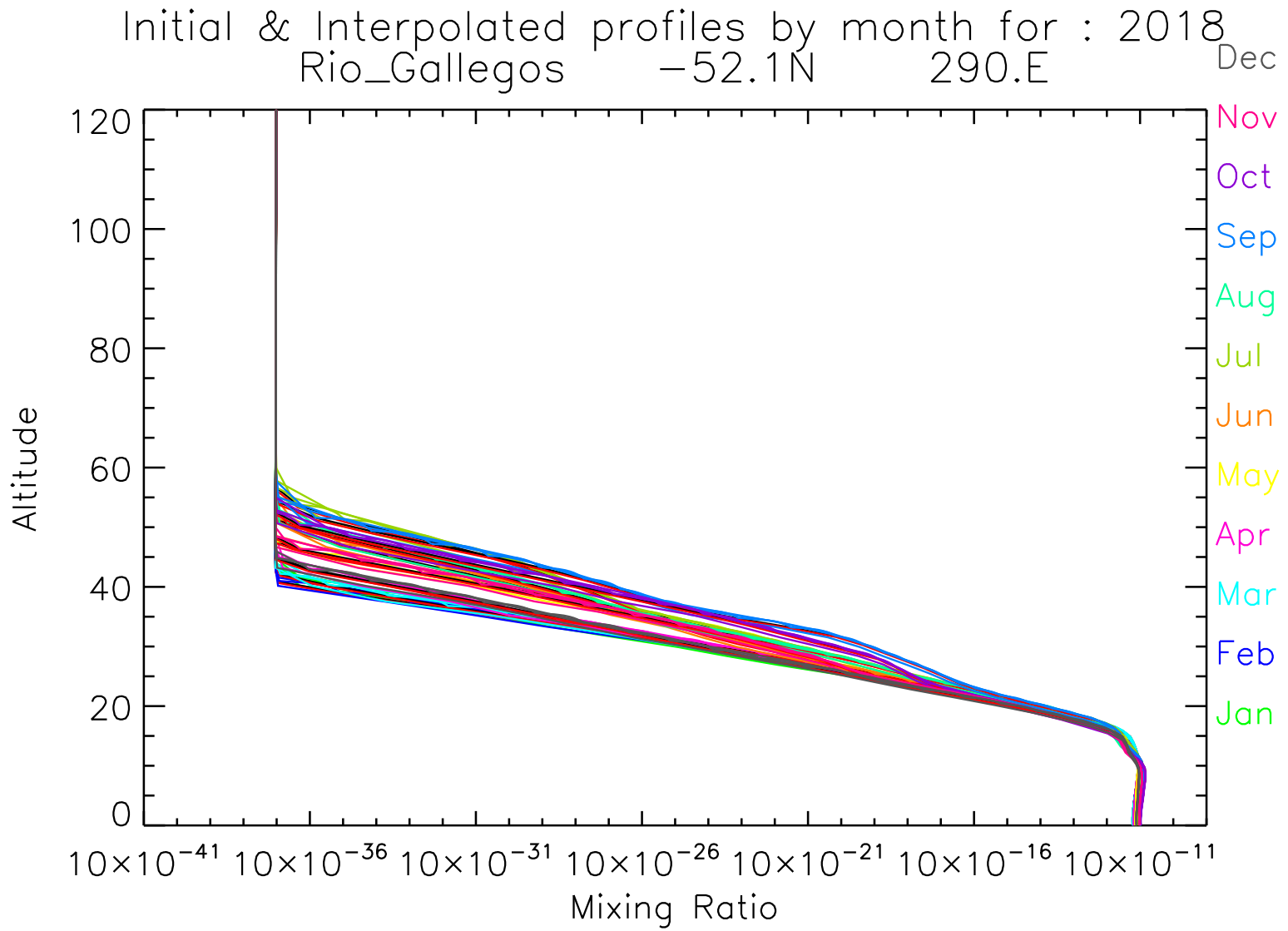

Initial & Interpolated profiles by month for : 2013
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

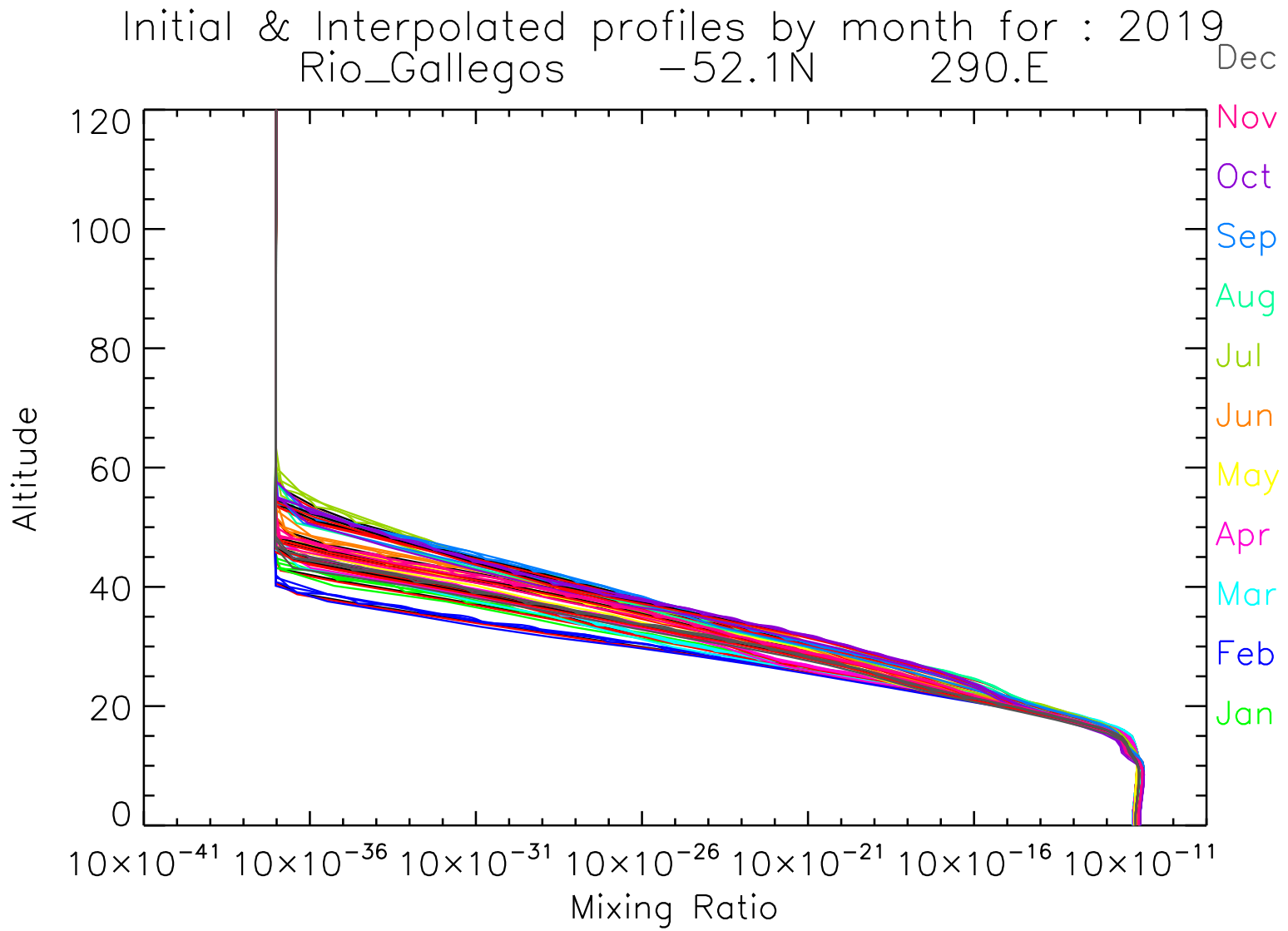

Initial & Interpolated profiles by month for : 2014
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

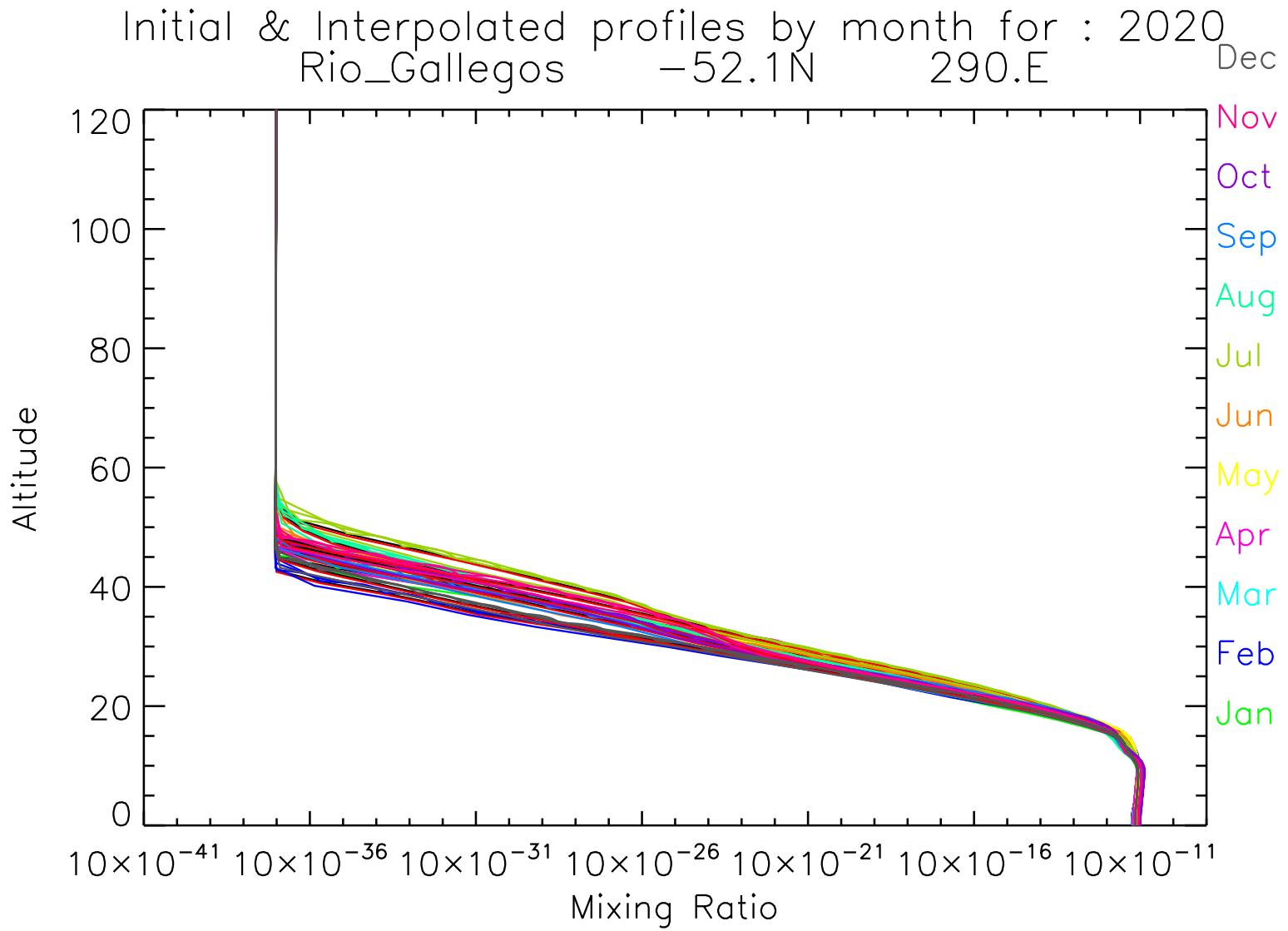

Initial & Interpolated profiles by month for : 2015
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

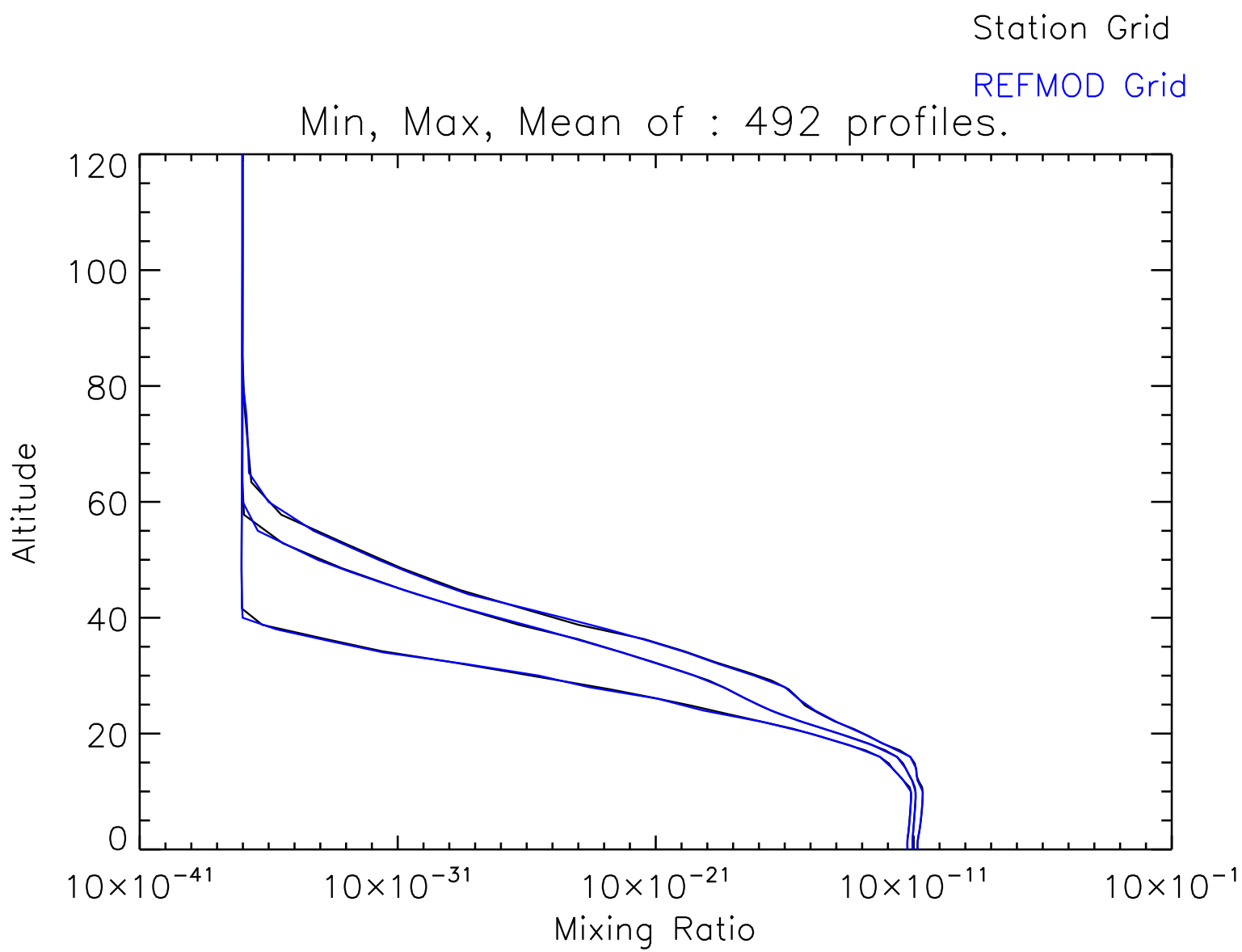

Initial & Interpolated profiles by month for : 2016
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

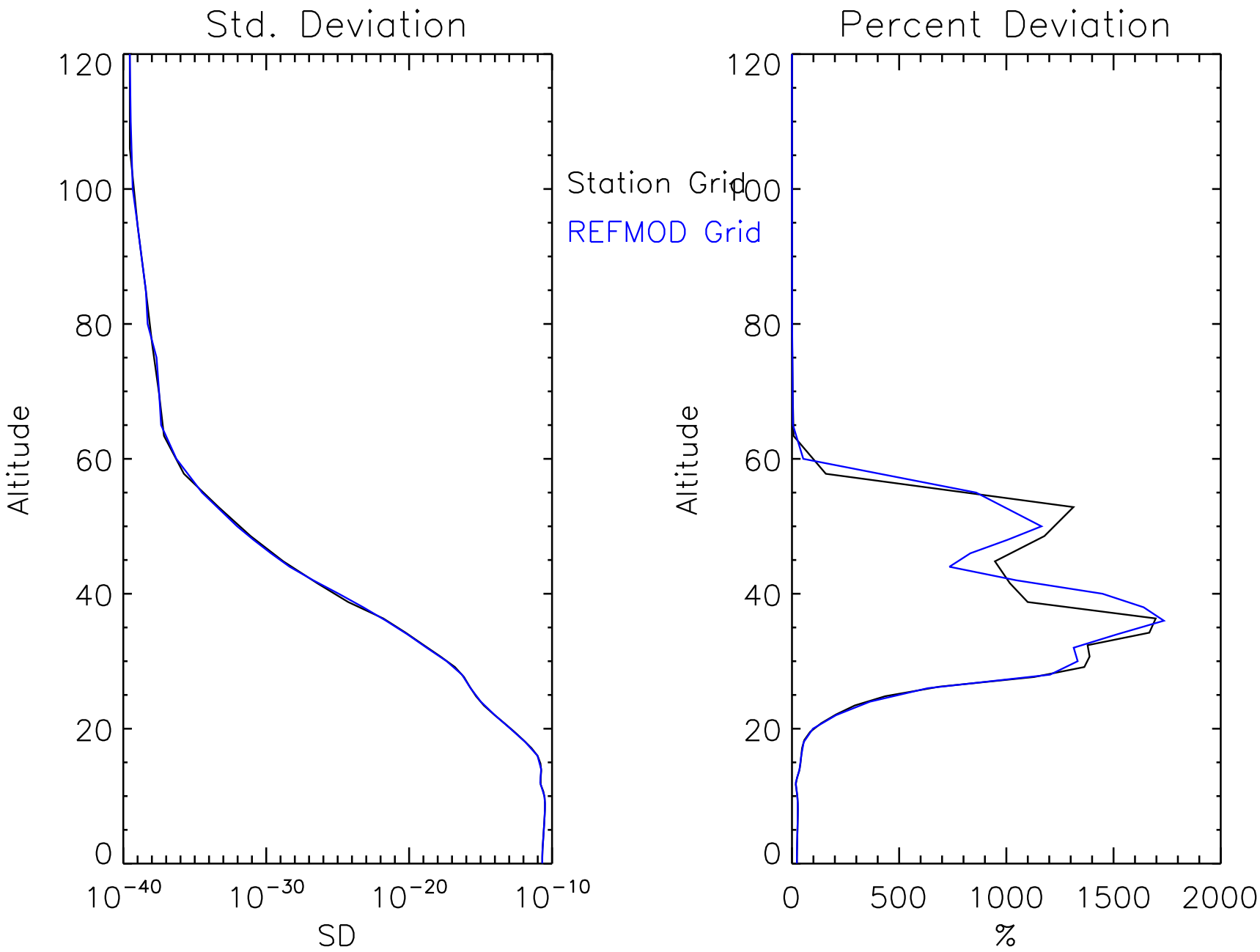

Initial & Interpolated profiles by month for : 2017
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

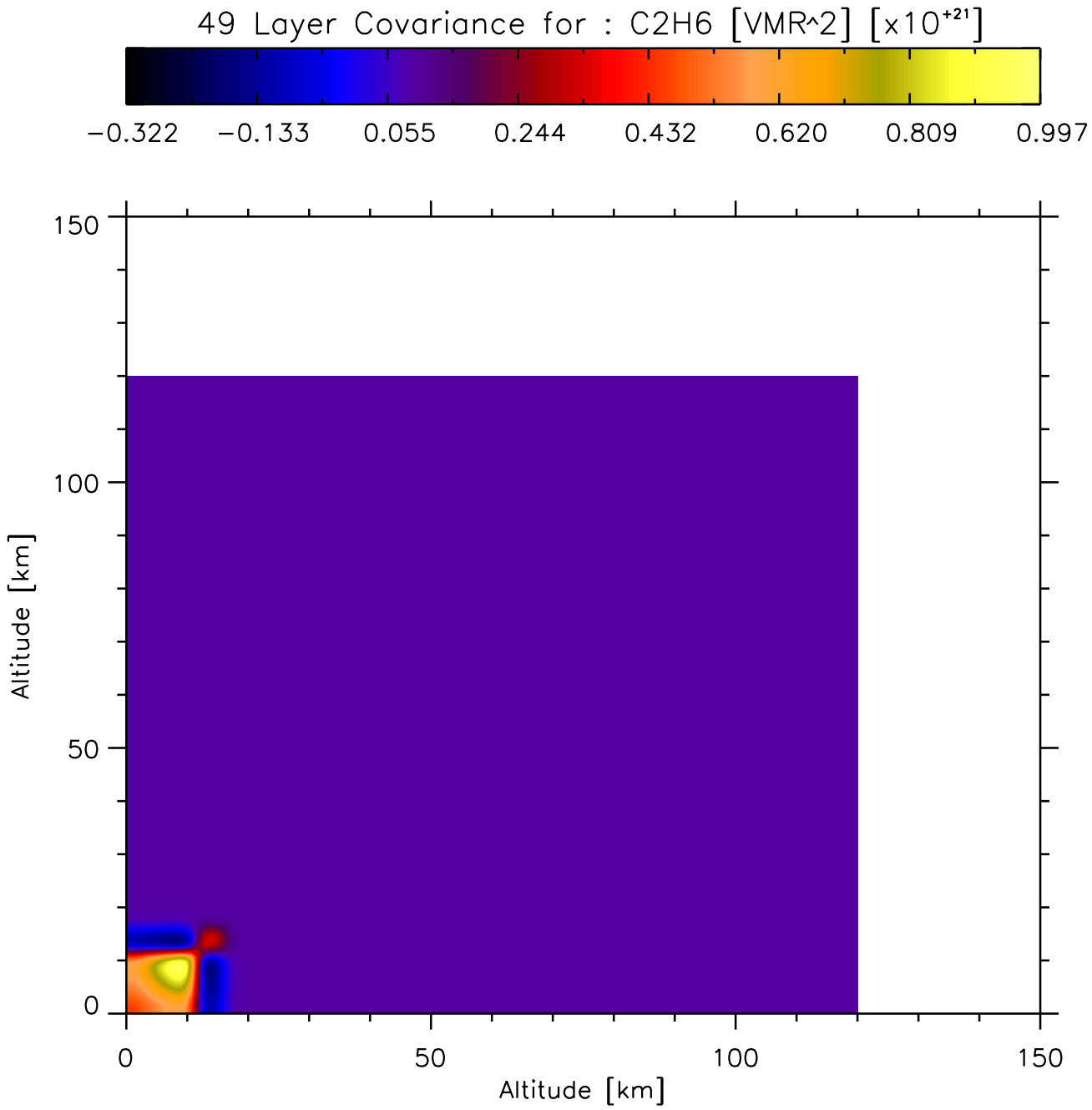

Initial & Interpolated profiles by month for : 2018
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio


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
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio

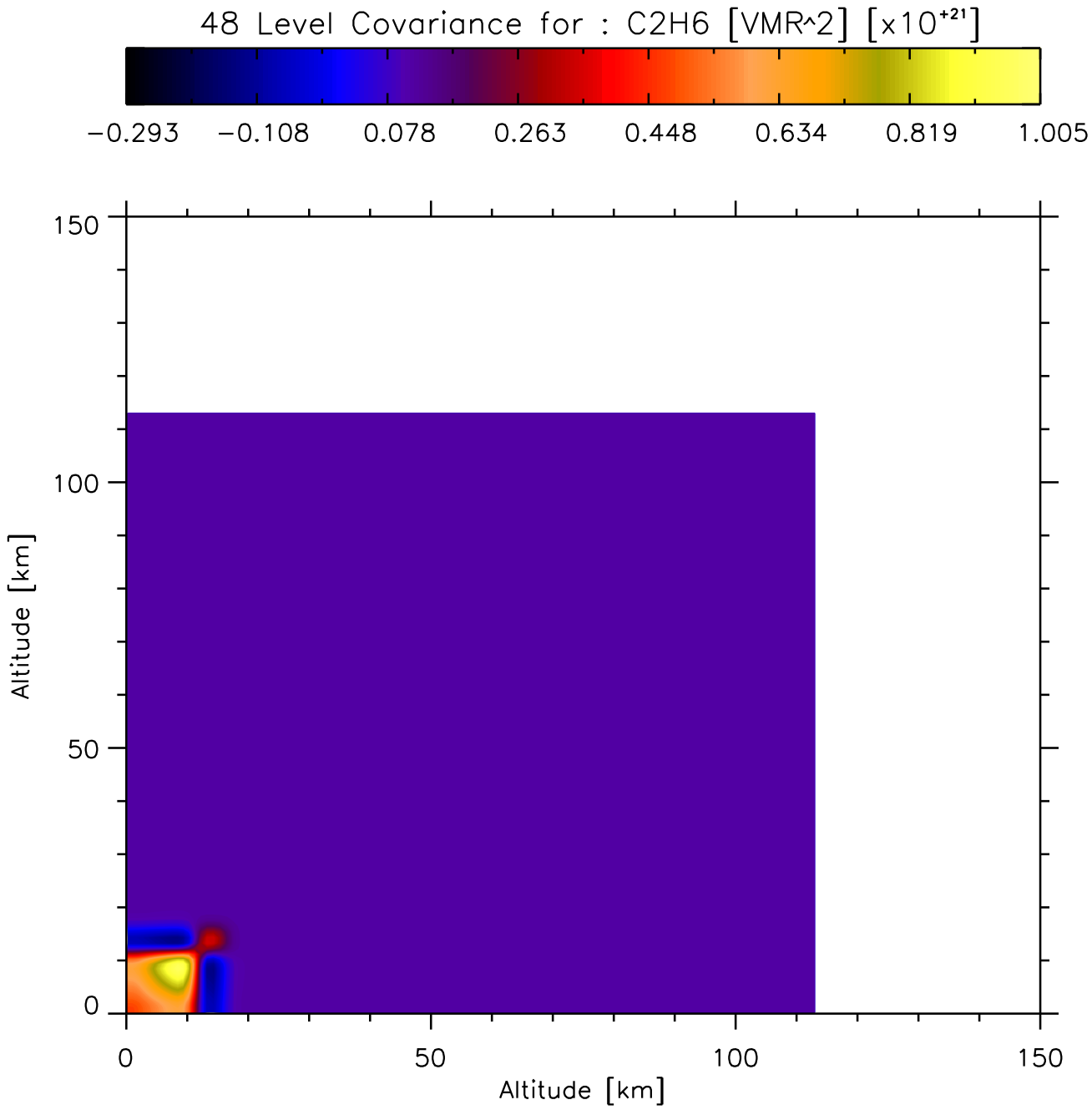

Initial & Interpolated profiles by month for : 2020
Rio_Gallegos −52.1N 290.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10×10−41 10×10−36 10×10−31 10×10−26 10×10−21 10×10−16 10×10−11
Mixing Ratio


Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
120
100
80
60
40
20
0
Altitude
10×10^-41
10×10^-31
10×10^-21
10×10^-11
10×10^-1
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
10^{-40}
10^{-30}
10^{-20}
10^{-10}
SD
0
500
1000
1500
2000
%


49 Layer Covariance for : C2H6 [VMR^2] [x10^+21]
−0.322
−0.133
0.055
0.244
0.432
0.620
0.809
0.997
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

49 Layer Covariance for : C2H6 [VMR^2] [x10^21]
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
Y Altitude
0
20
40
60
80
100
120
140
160
X Altitude
0
50
100
150


48 Level Covariance for : C2H6 [VMR^2] [x10^+21]
−0.293
−0.108
0.078
0.263
0.448
0.634
0.819
1.005
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]

48 Level Covariance for : C2H6 [VMR^2] [x10^21]
Y Altitude
X Altitude
0
50
100
150
0
50
100
150
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5