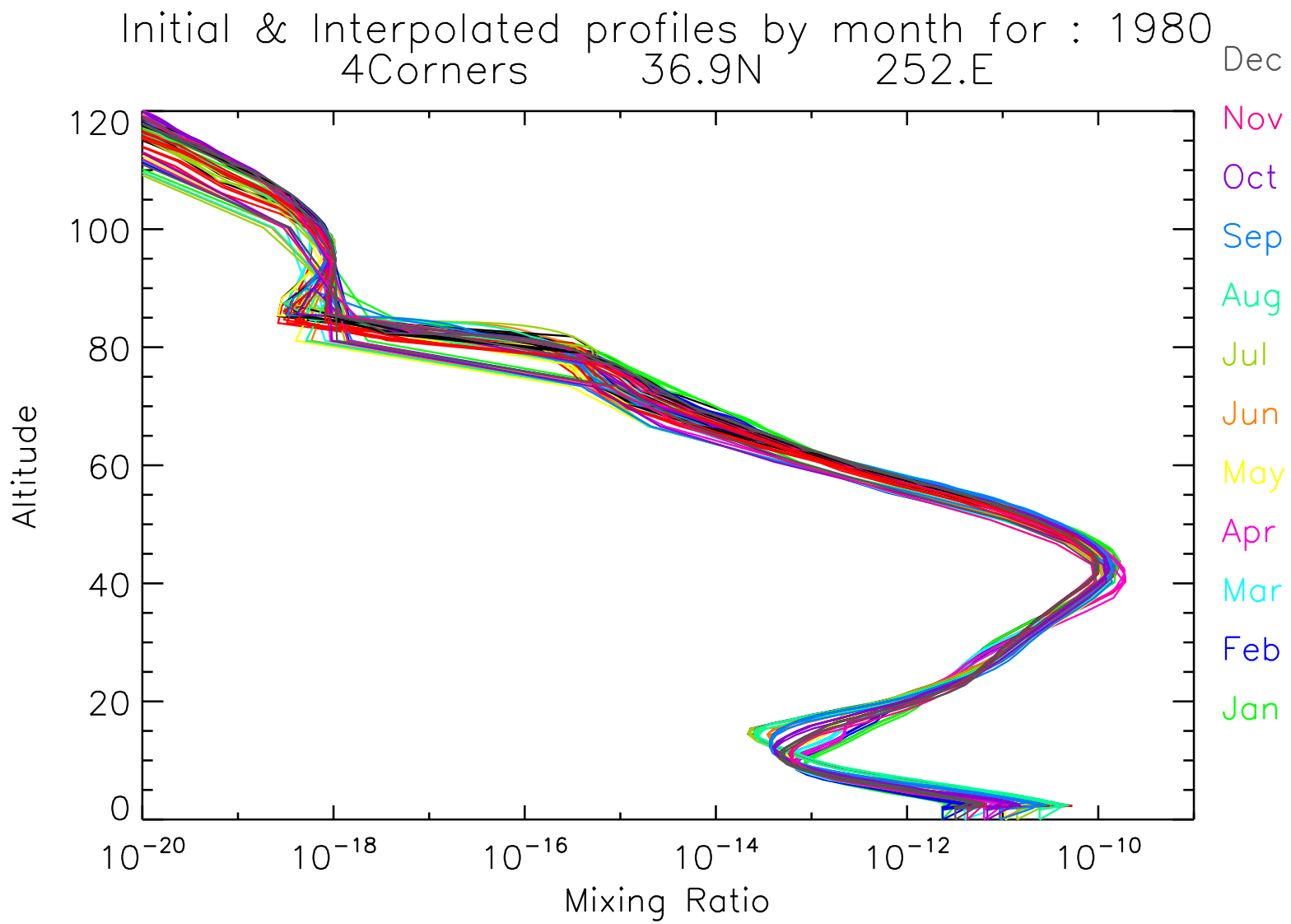
Initial & Interpolated profiles by month for : 1980
4Corners 36.9N 252.E
Altitude
120
100
80
60
40
20
0
10^{-20}
10^{-18}
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Mixing Ratio
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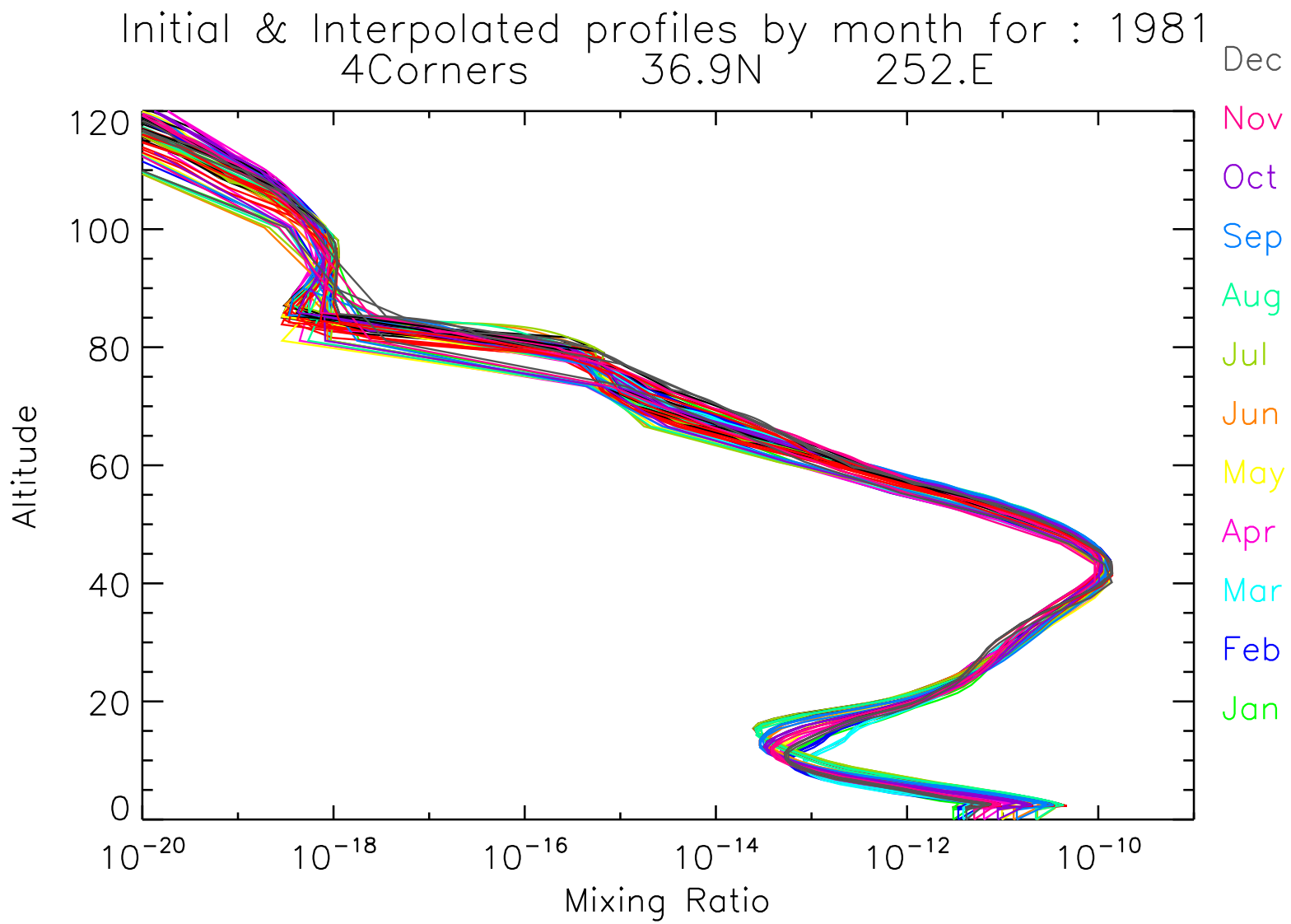
Initial & Interpolated profiles by month for : 1981
4Corners 36.9N 252.E
Dec
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Jun
May
Apr
Mar
Feb
Jan
120
100
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0
Altitude
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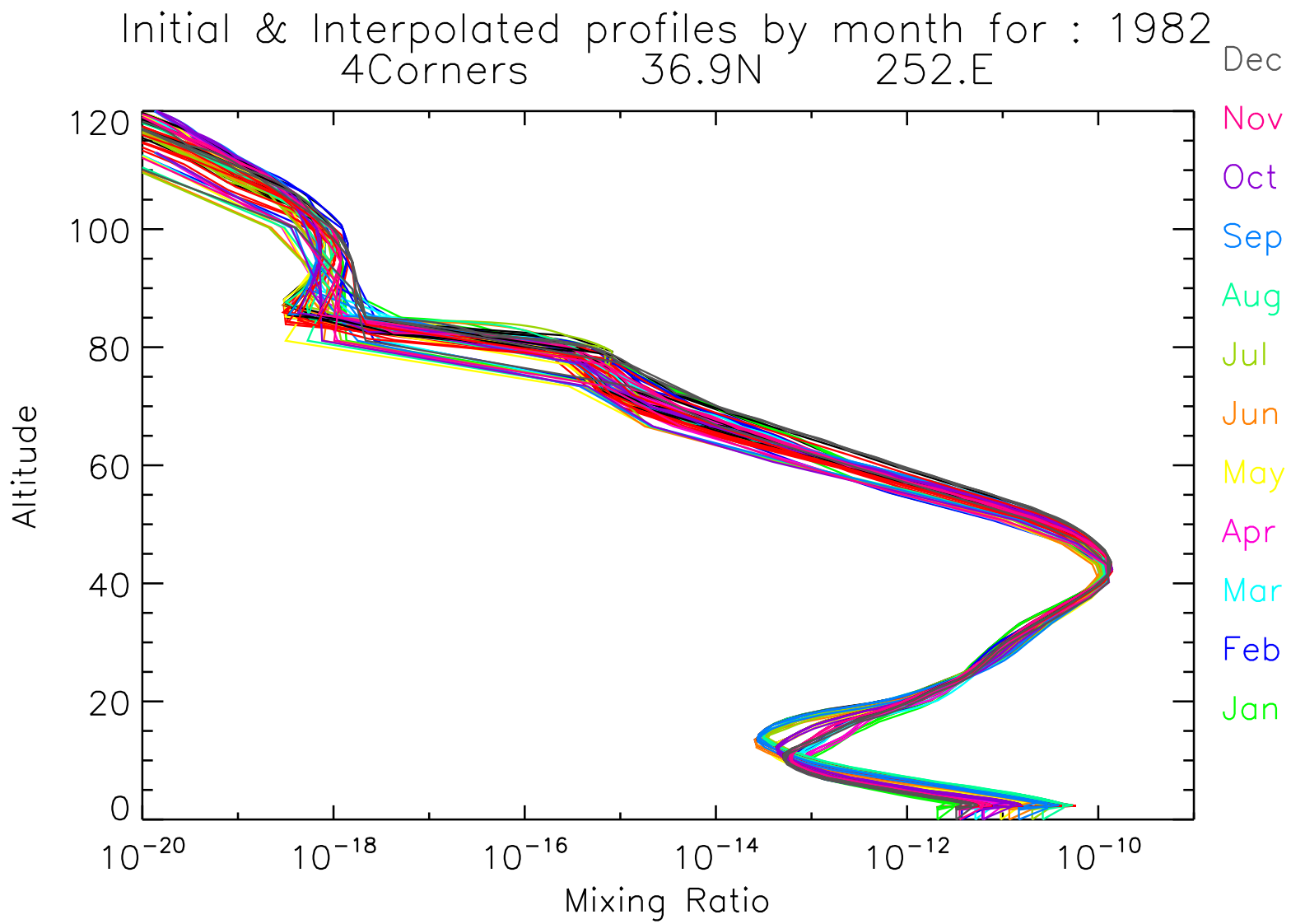
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1982
4Corners 36.9N 252.E
Altitude
120
100
80
60
40
20
0
10^{-20}
10^{-18}
10^{-16}
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Mixing Ratio
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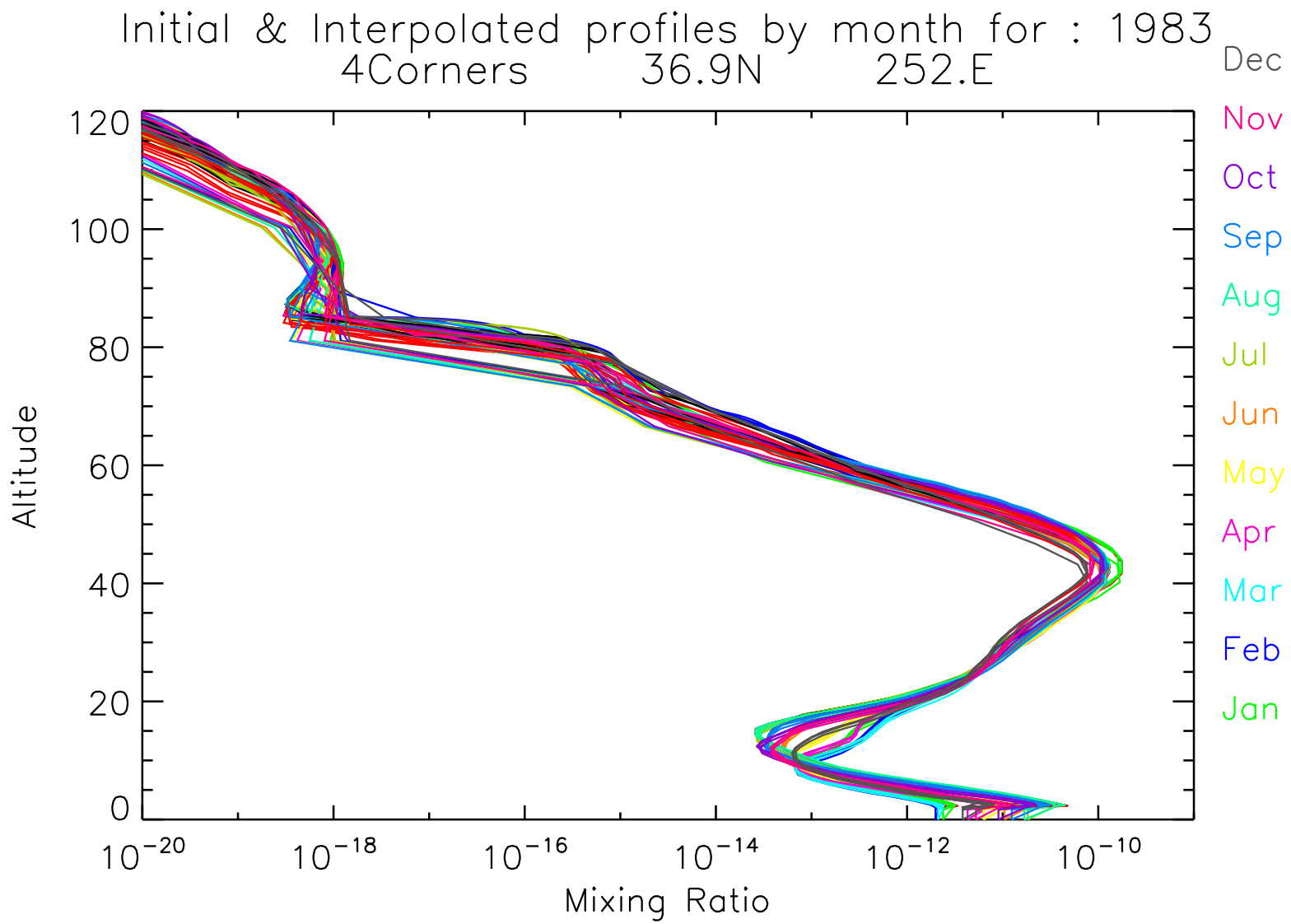
Initial & Interpolated profiles by month for : 1983
4Corners 36.9N 252.E
Dec
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Aug
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May
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Feb
Jan
120
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Altitude
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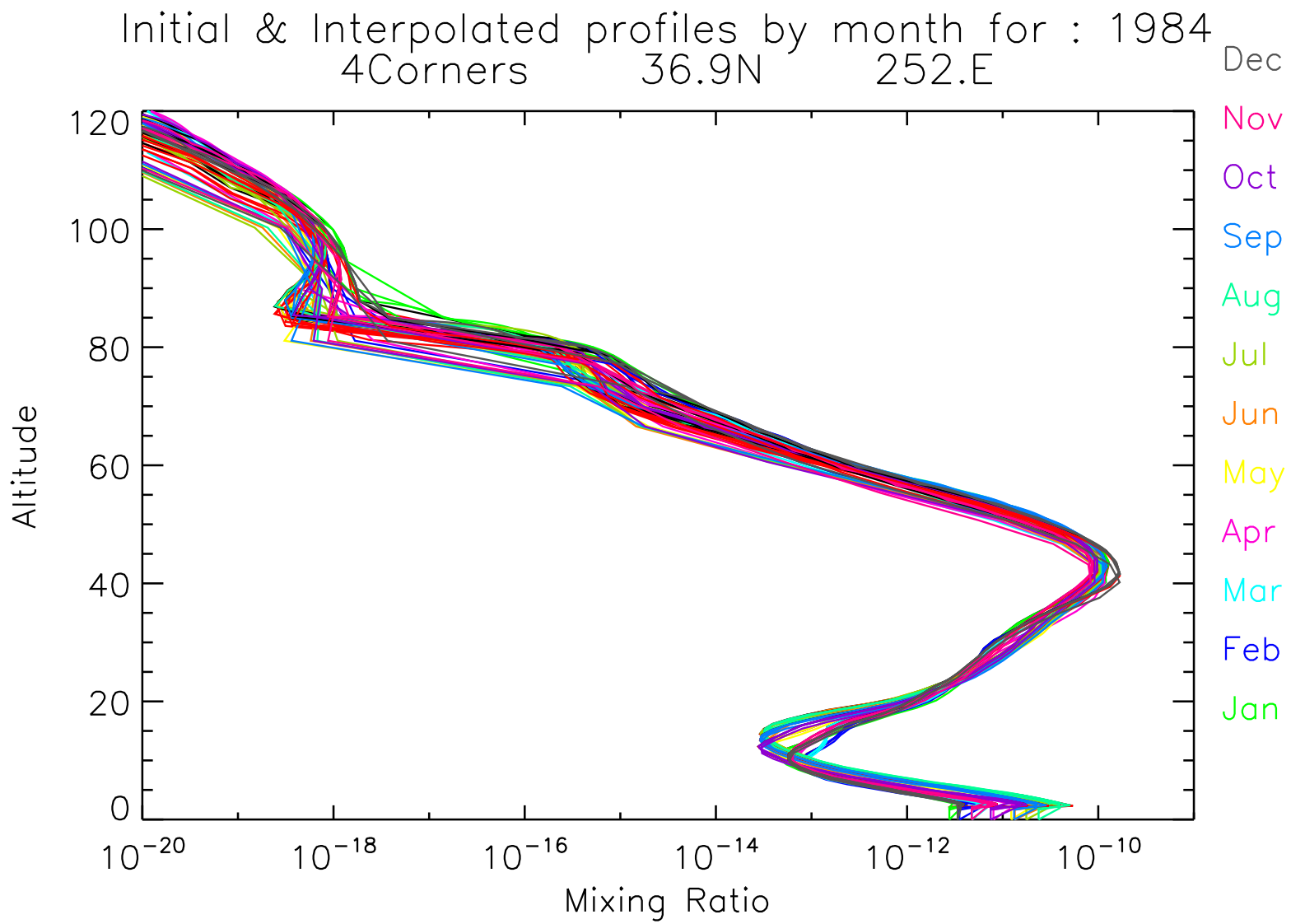
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1984
4Corners 36.9N 252.E
Dec
Nov
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Jan
120
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Altitude
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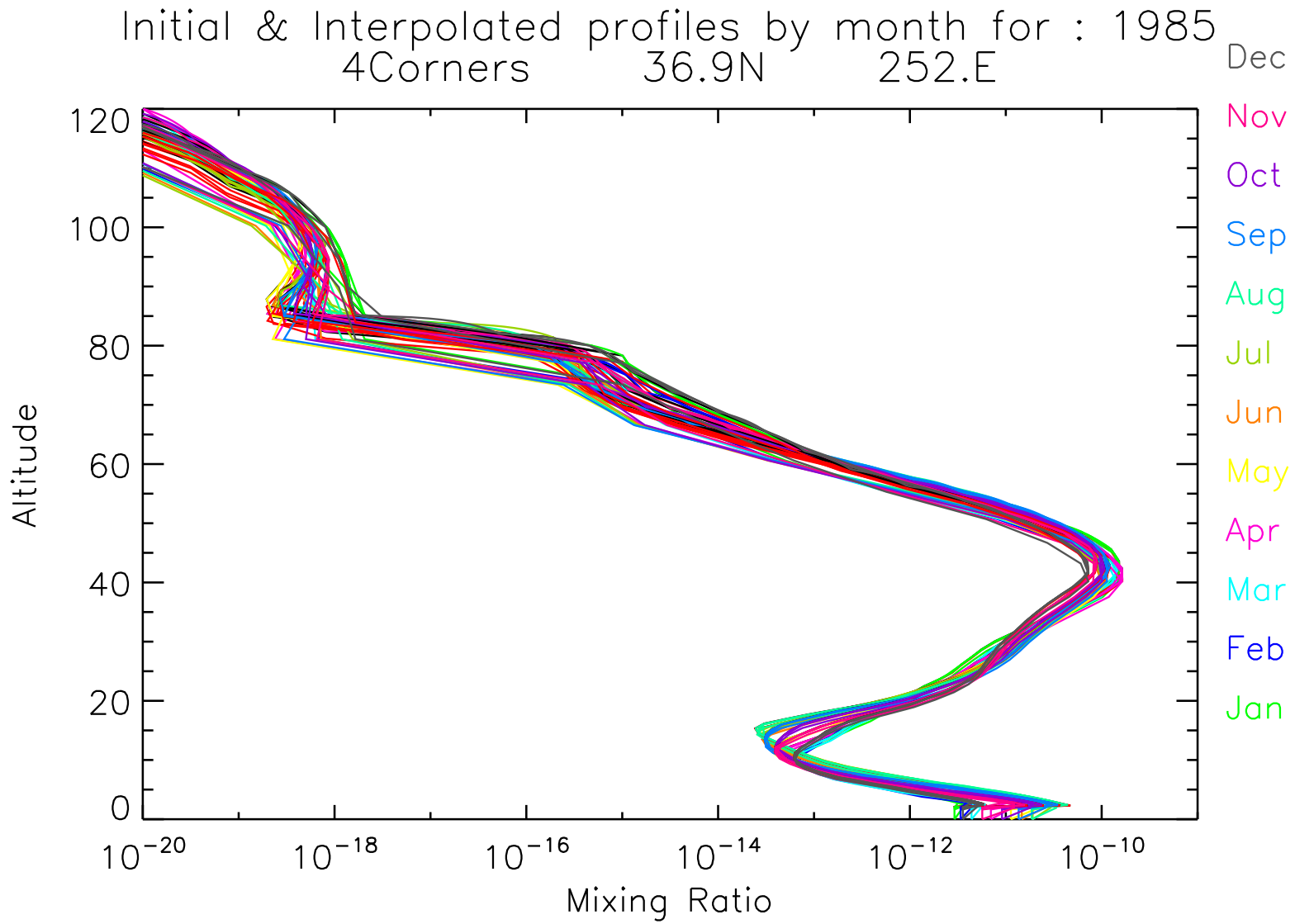
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1985
4Corners 36.9N 252.E
Dec
Nov
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May
Apr
Mar
Feb
Jan
Altitude
120
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10^{-16}
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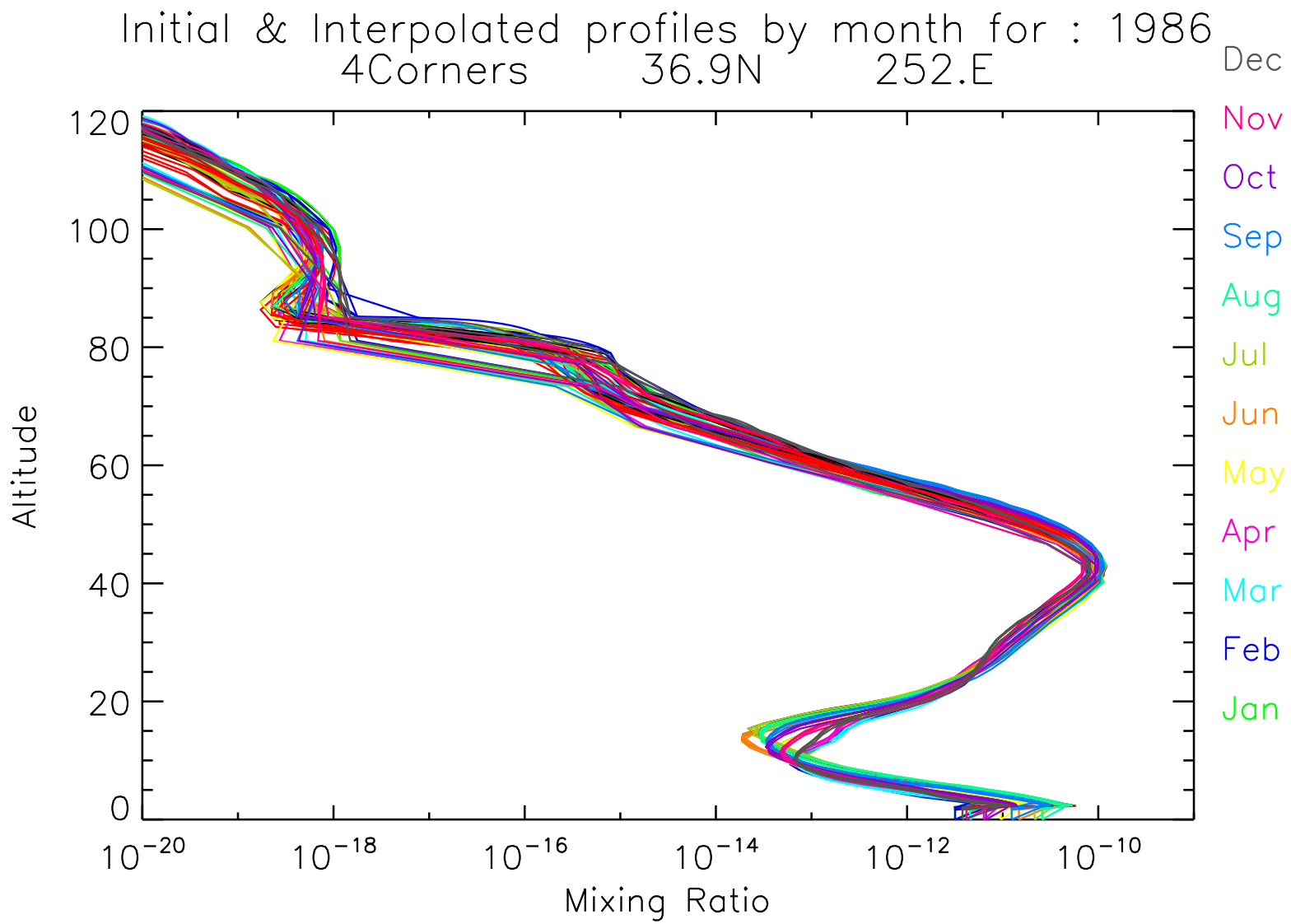
10^{-12}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1986
4Corners 36.9N 252.E
Altitude
120
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10^{-20}
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Mixing Ratio
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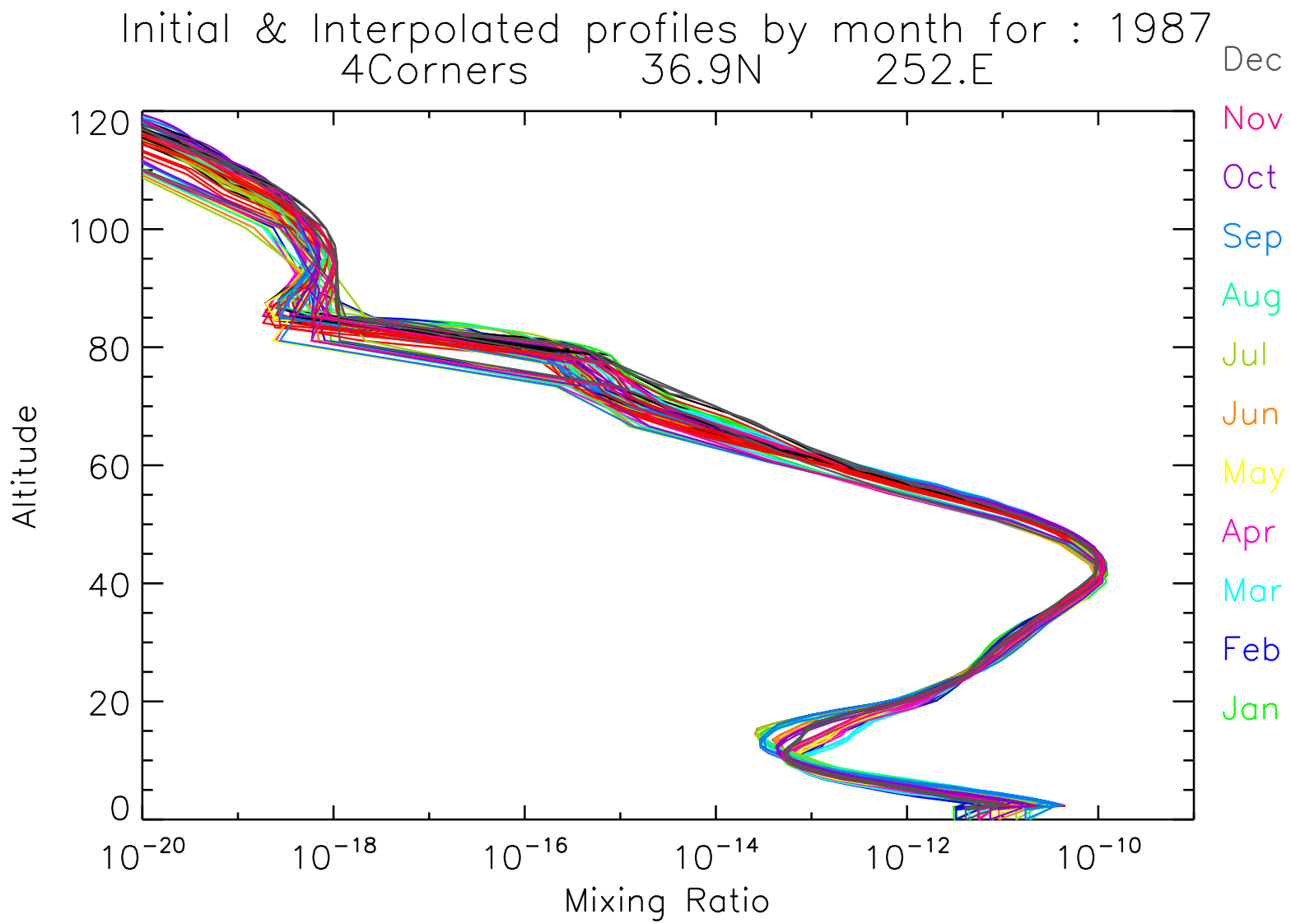
Initial & Interpolated profiles by month for : 1987
4Corners 36.9N 252.E
Dec
Nov
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120
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Altitude
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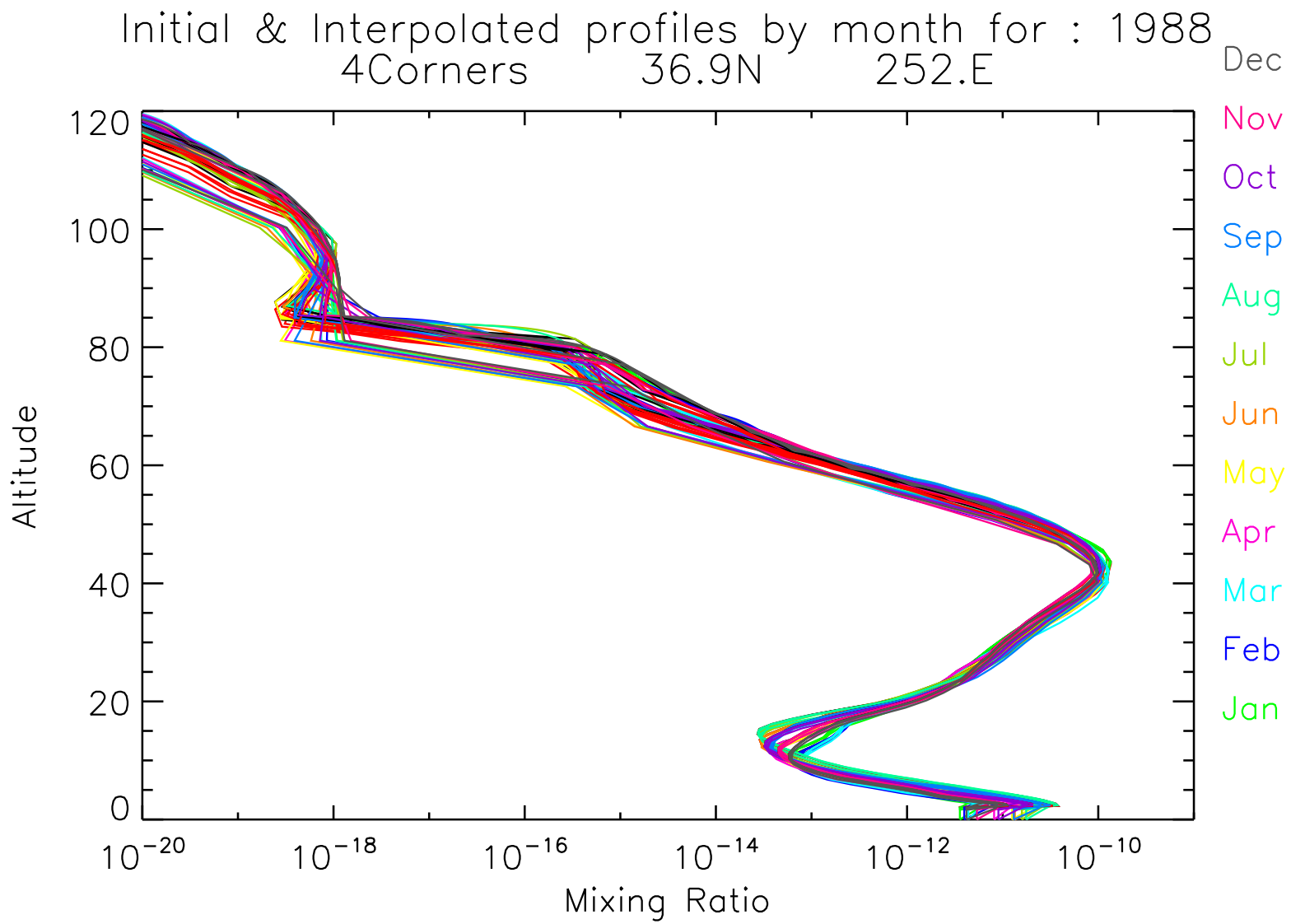
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1988
4Corners 36.9N 252.E
Altitude
120
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10^{-20}
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Mixing Ratio
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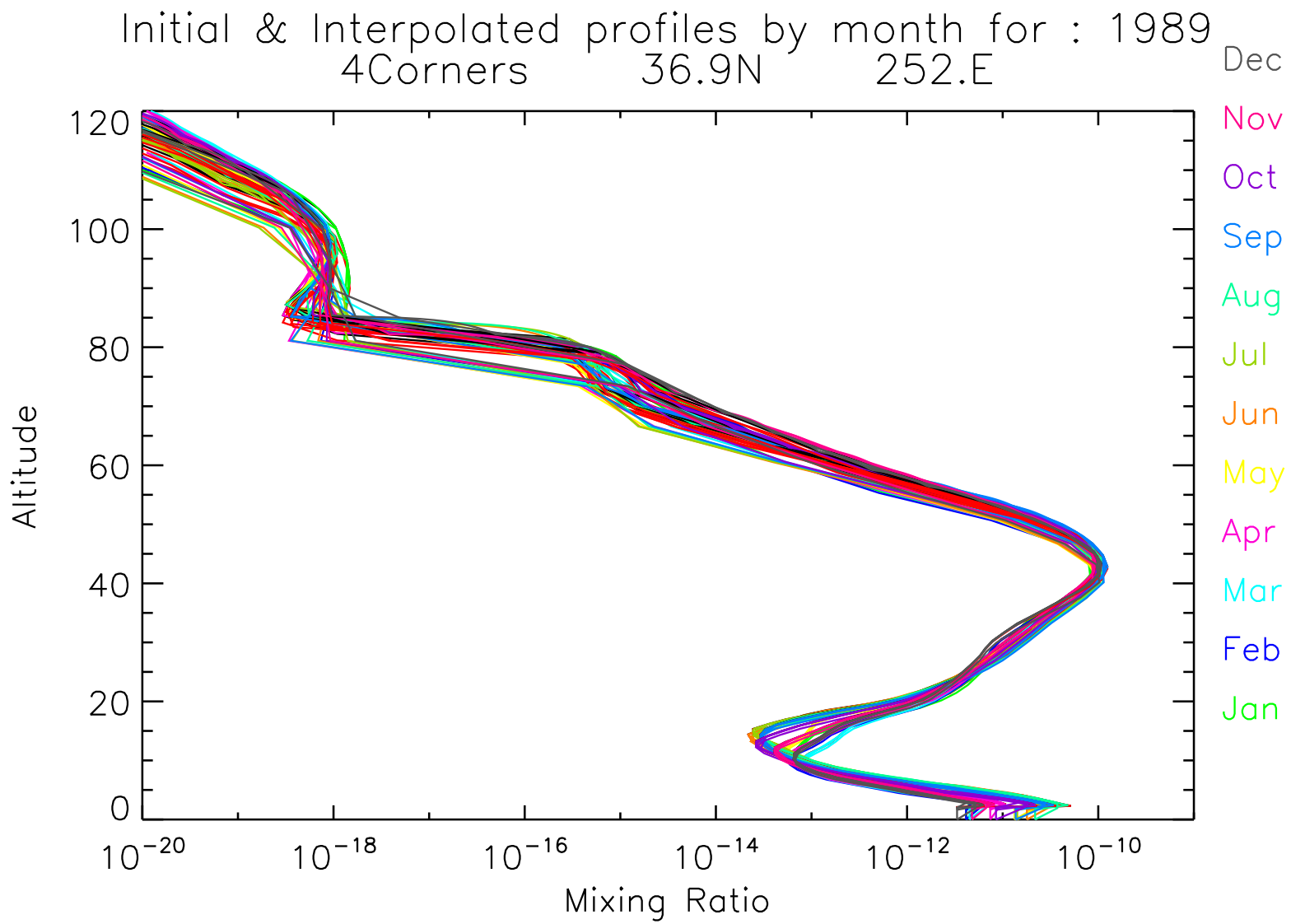
Initial & Interpolated profiles by month for : 1989
4Corners 36.9N 252.E
Dec
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120
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Altitude
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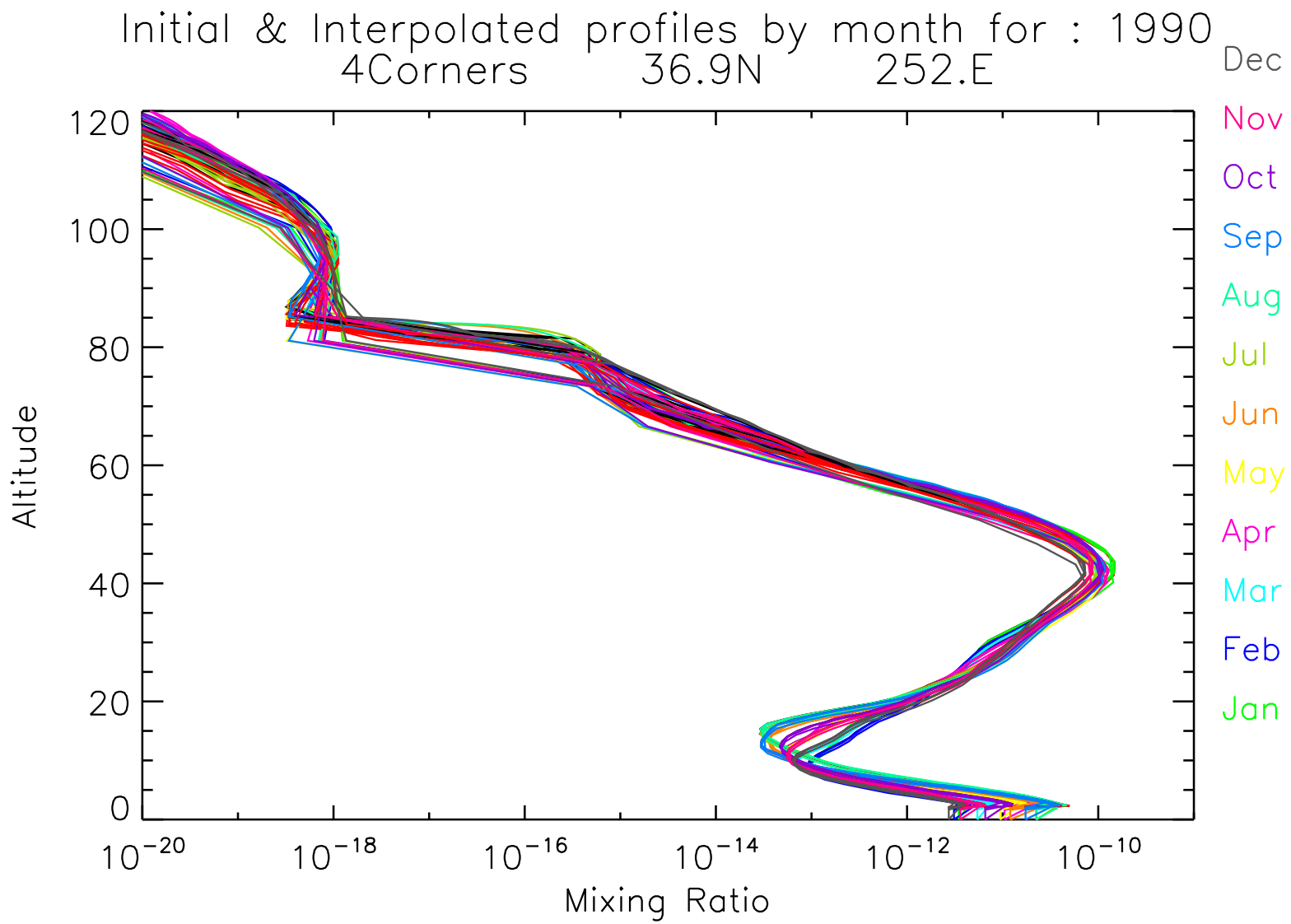
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1990
4Corners 36.9N 252.E
Dec
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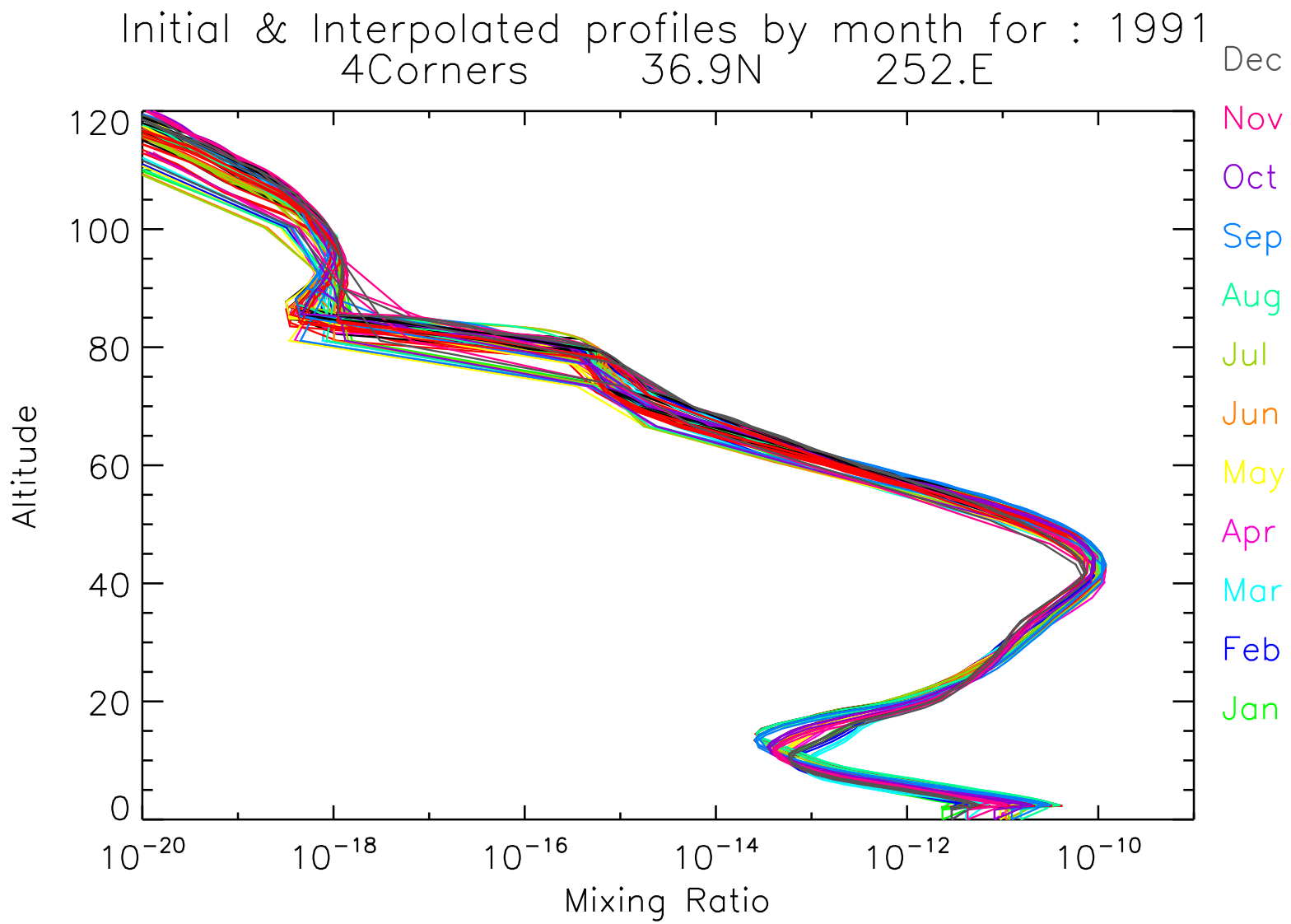
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1991
4Corners 36.9N 252.E
Altitude
120
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10^{-20}
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Mixing Ratio
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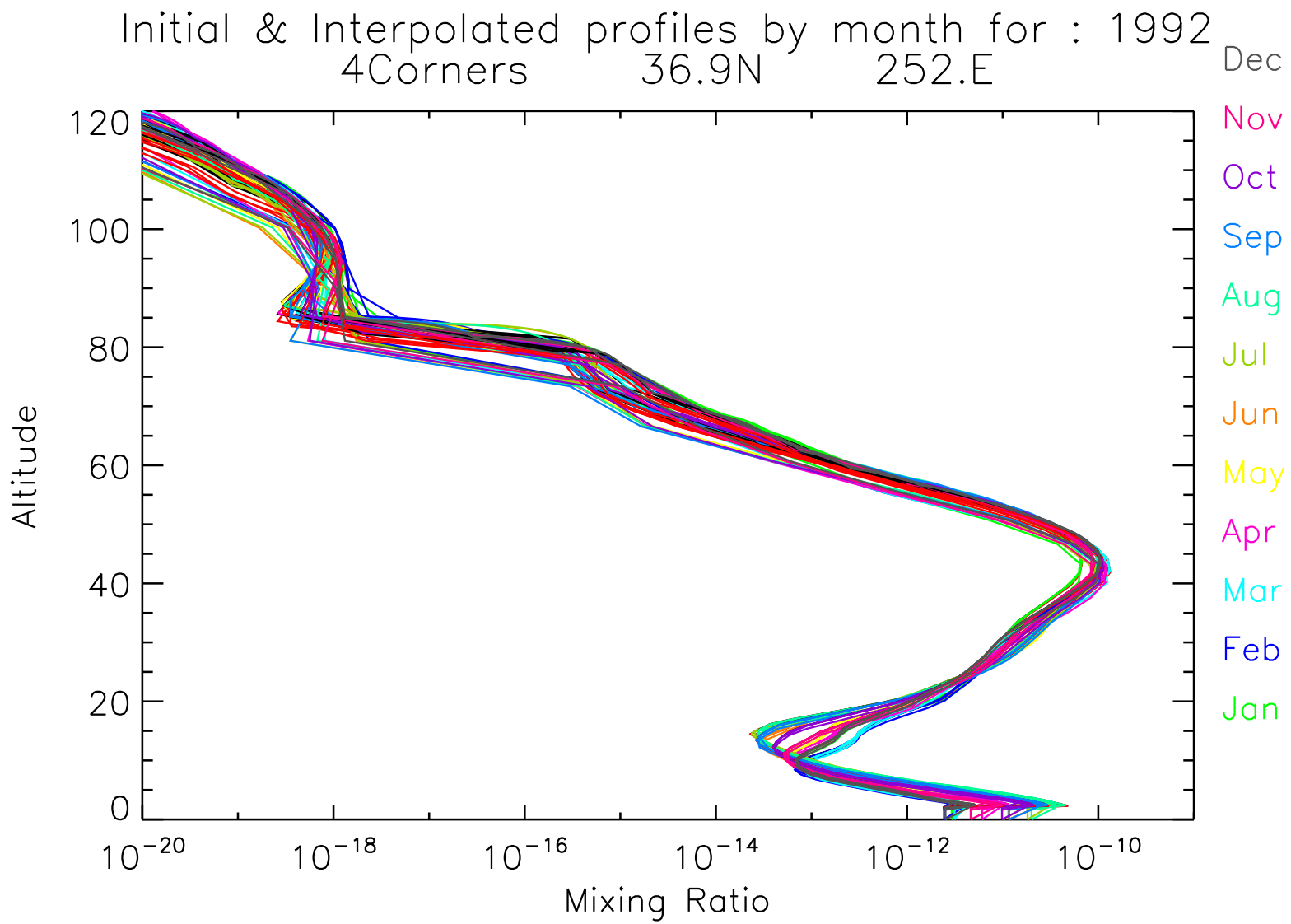
Initial & Interpolated profiles by month for : 1992
4Corners 36.9N 252.E
Altitude
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Mixing Ratio
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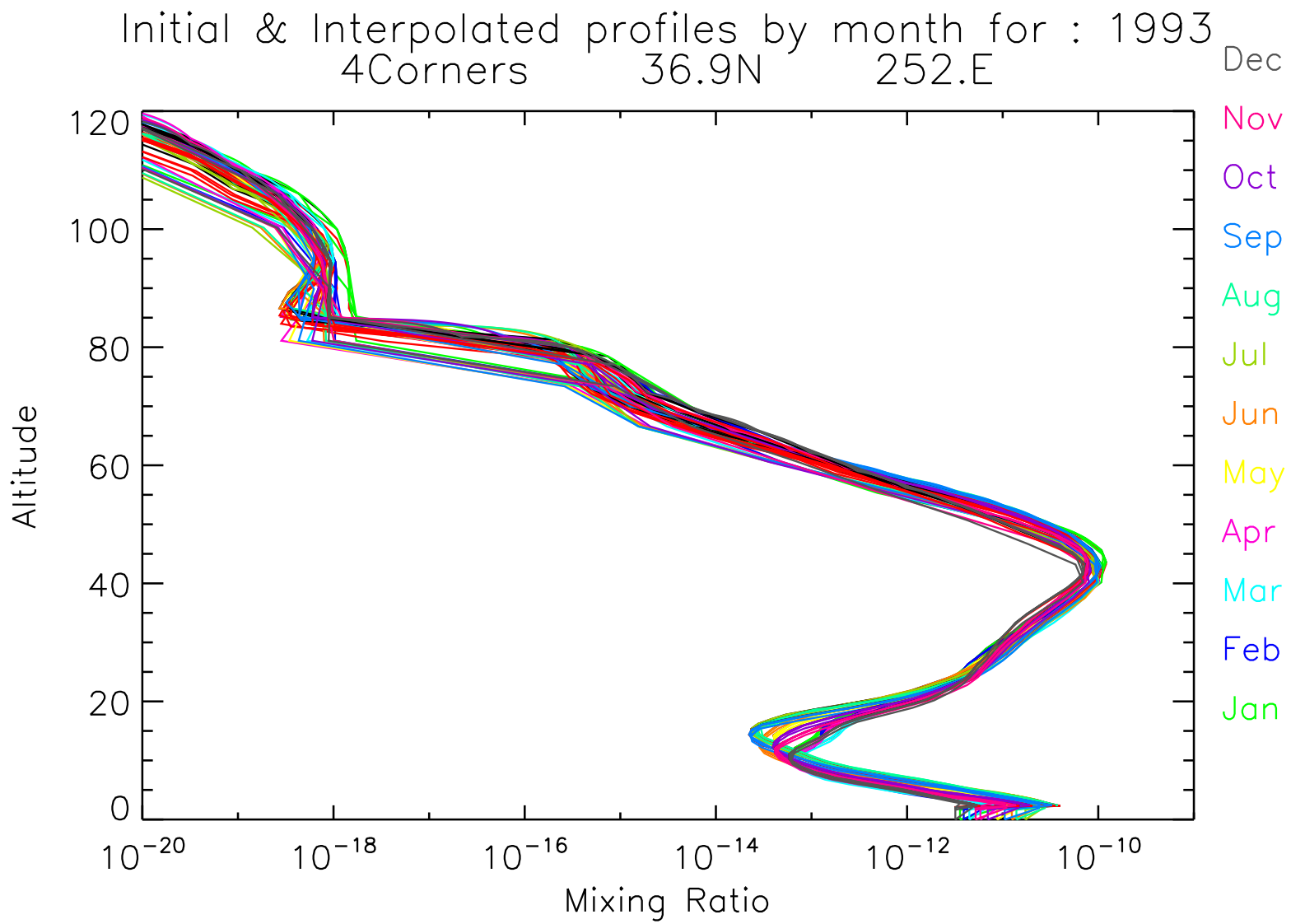
Initial & Interpolated profiles by month for : 1993
4Corners 36.9N 252.E
Dec
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120
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Altitude
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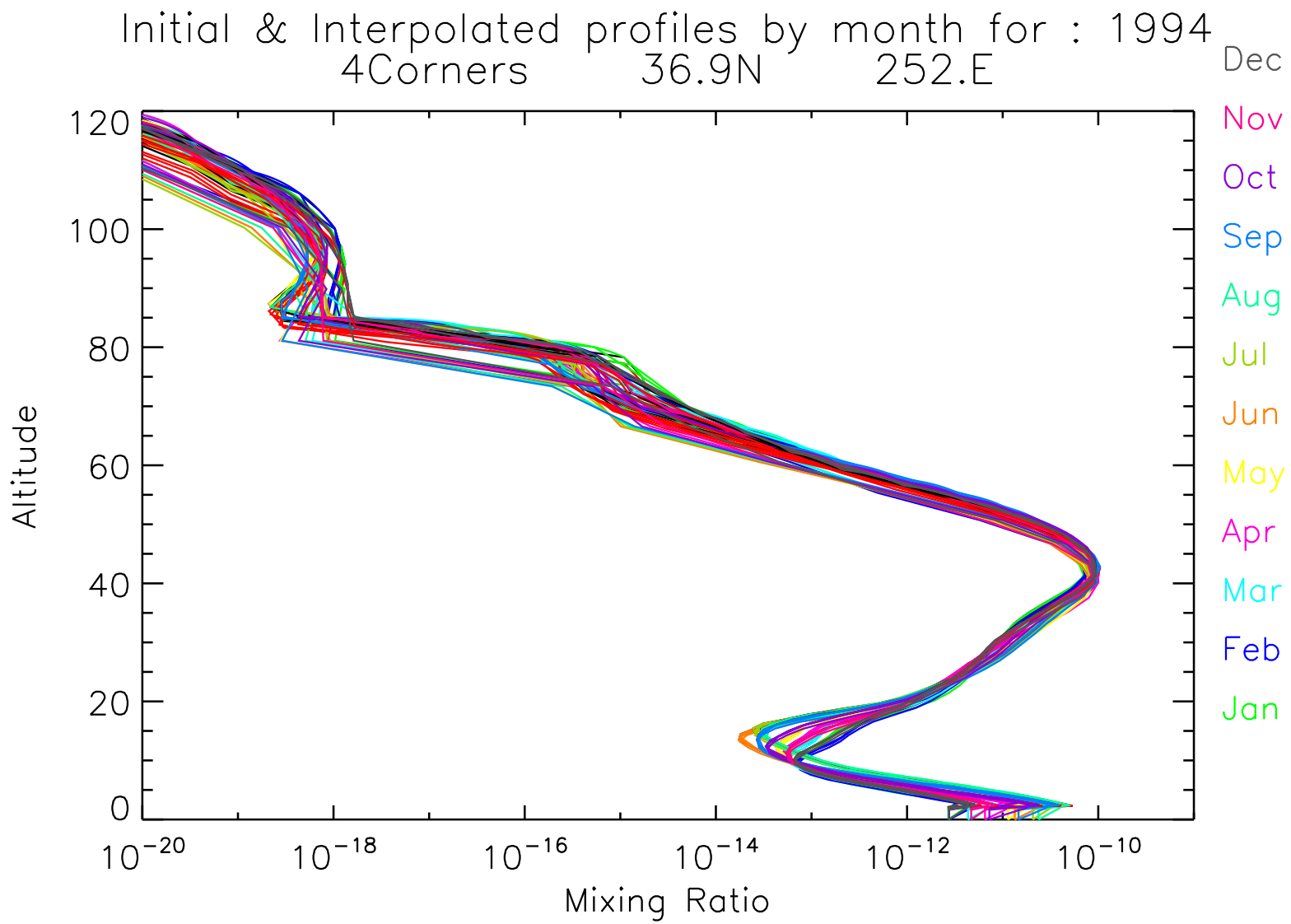
10^{-12}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1994
4Corners 36.9N 252.E
Altitude
120
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10^{-20}
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Mixing Ratio
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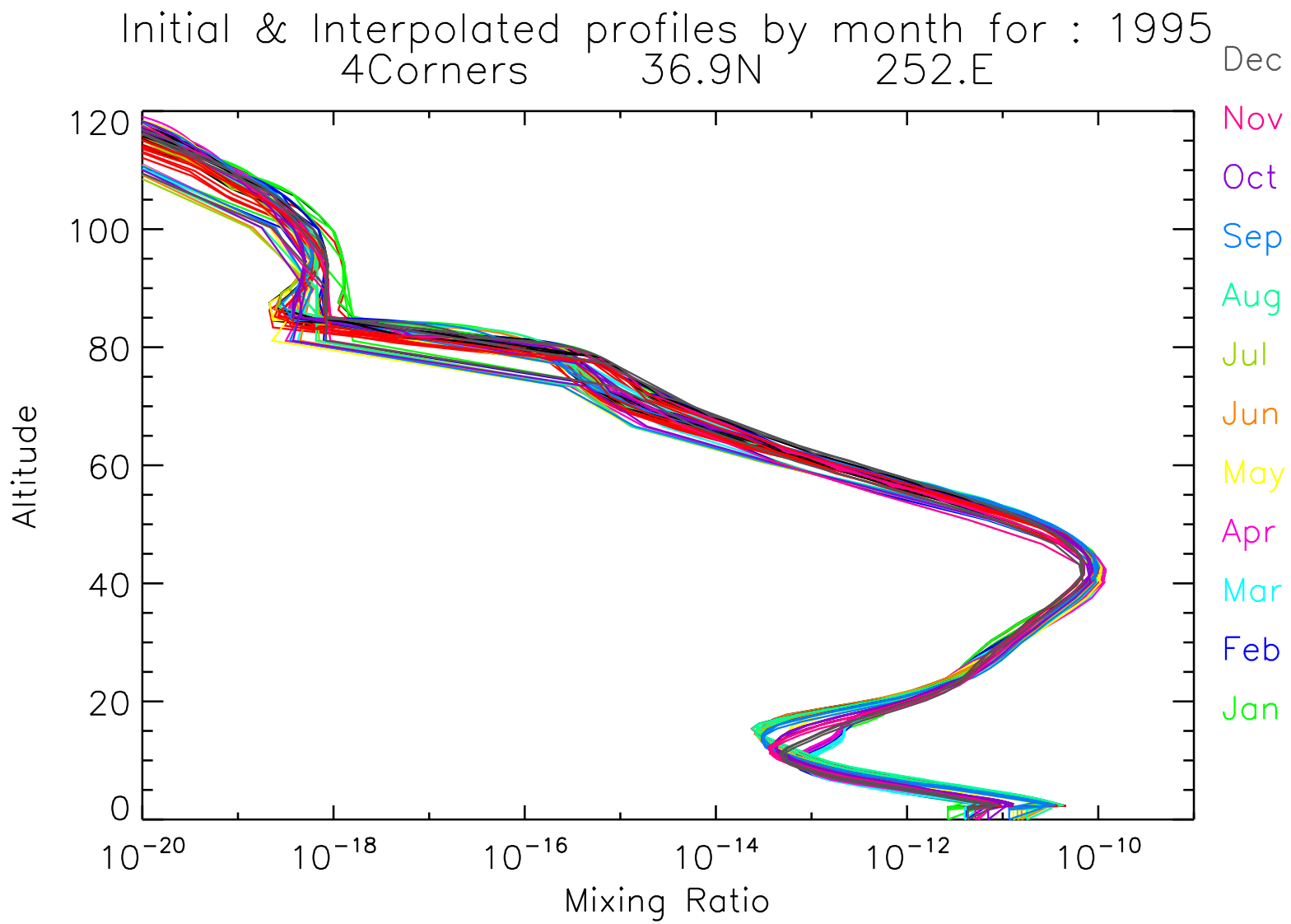
Initial & Interpolated profiles by month for : 1995
4Corners 36.9N 252.E
Dec
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120
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Altitude
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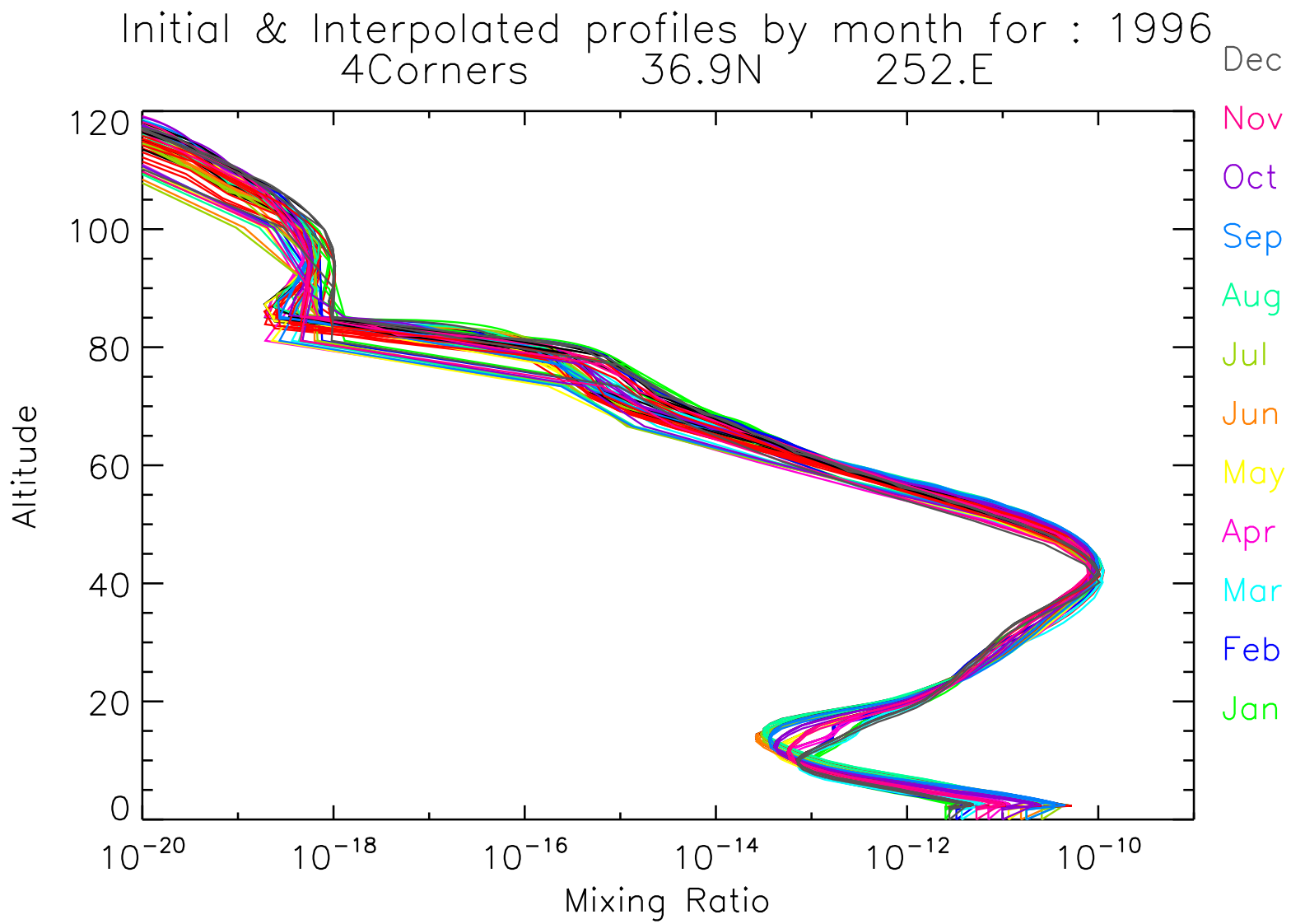
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1996
4Corners 36.9N 252.E
Altitude
120
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10^{-20}
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Mixing Ratio
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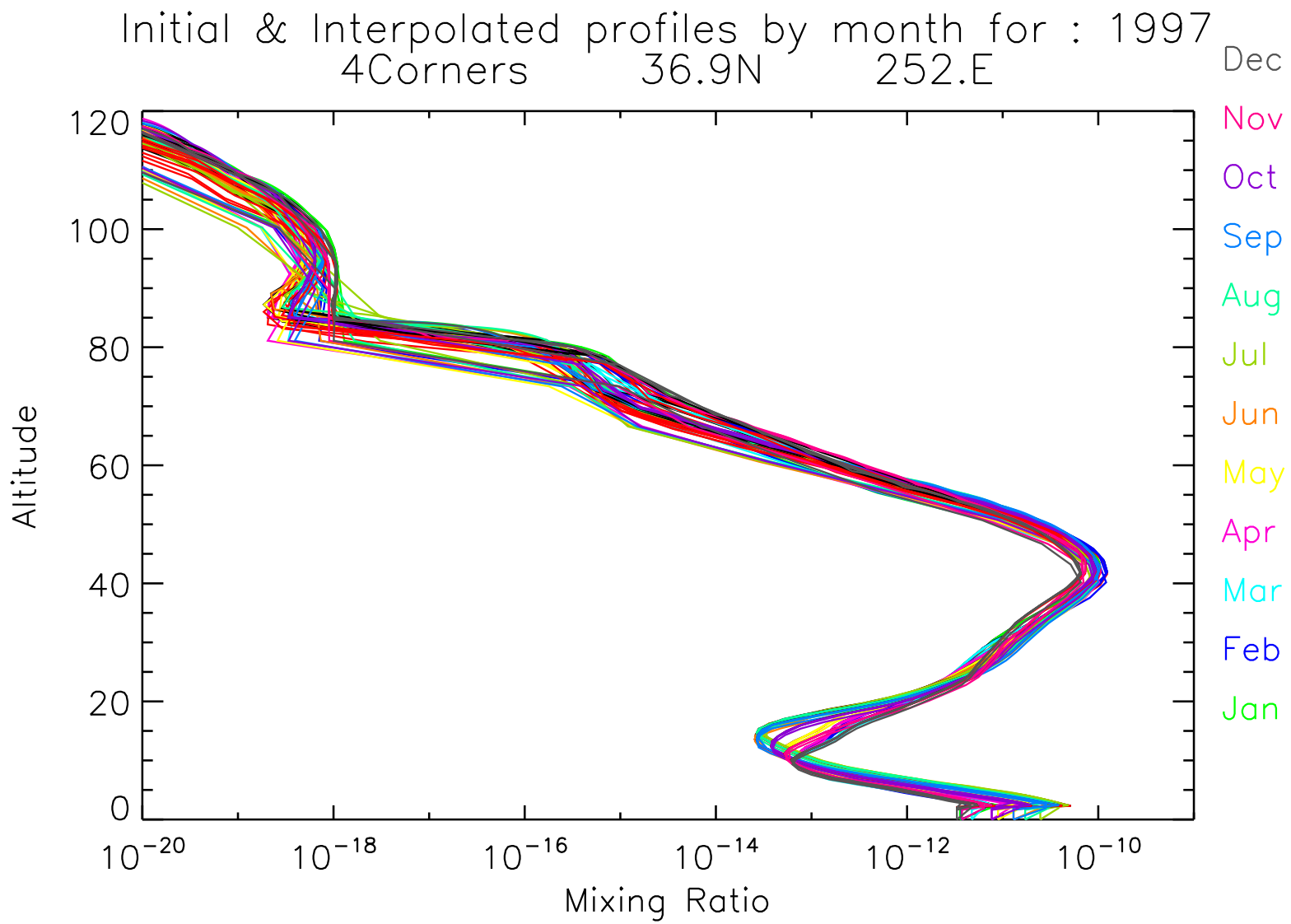
Initial & Interpolated profiles by month for : 1997
4Corners 36.9N 252.E
Altitude
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10^{-20}
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Mixing Ratio
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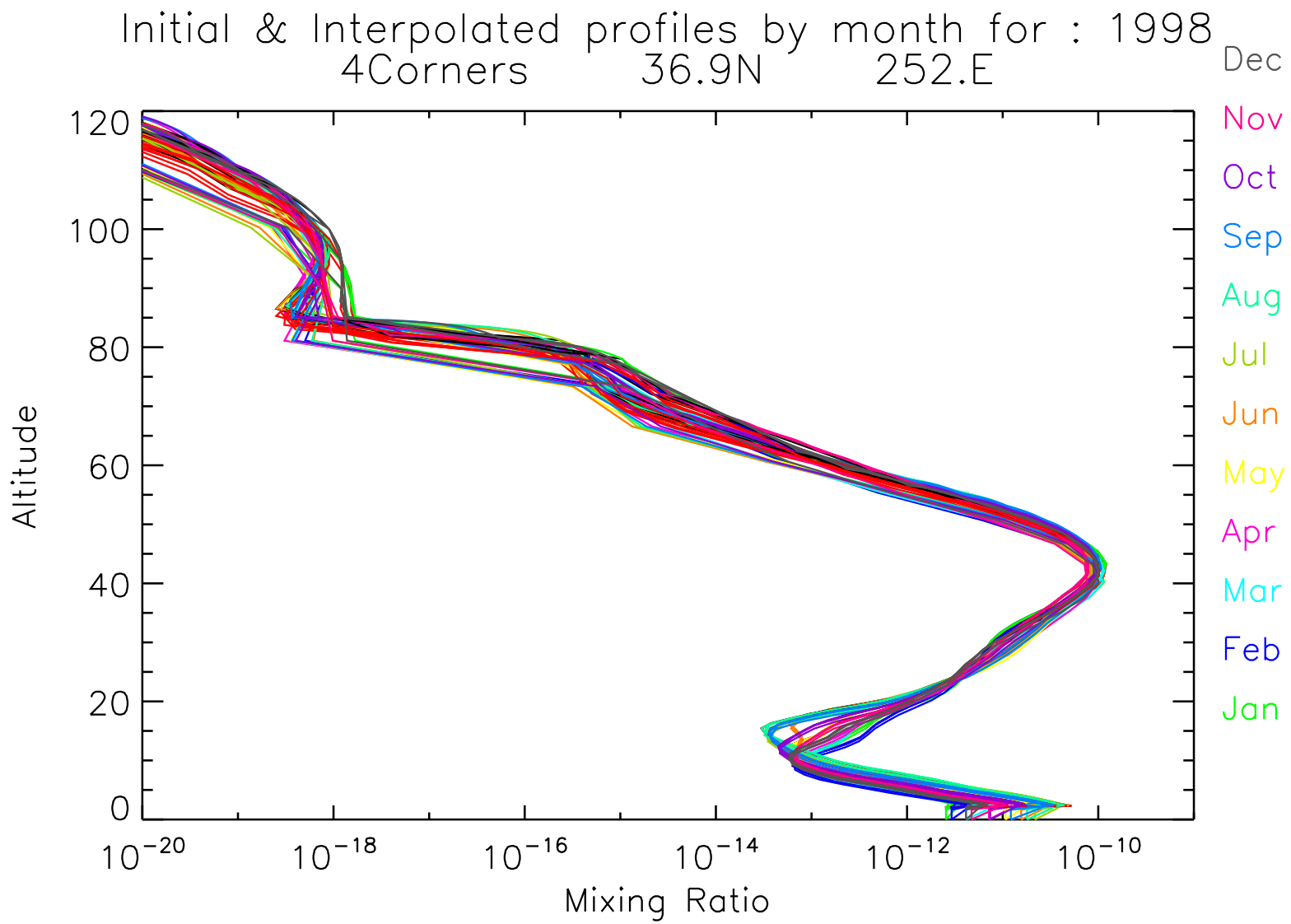
Initial & Interpolated profiles by month for : 1998
4Corners 36.9N 252.E
Altitude
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Mixing Ratio
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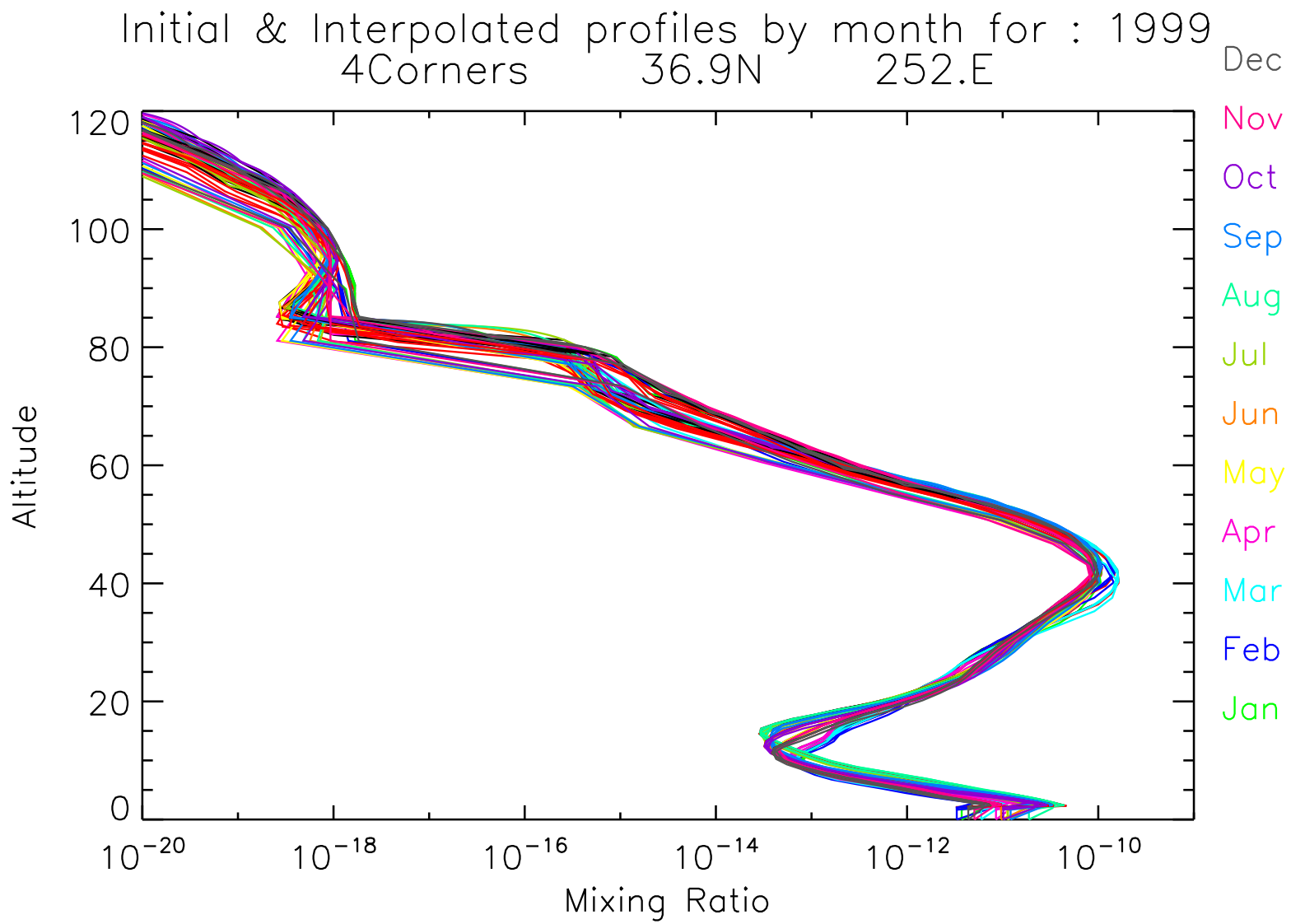
Initial & Interpolated profiles by month for : 1999
4Corners 36.9N 252.E
Dec
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Jan
120
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Altitude
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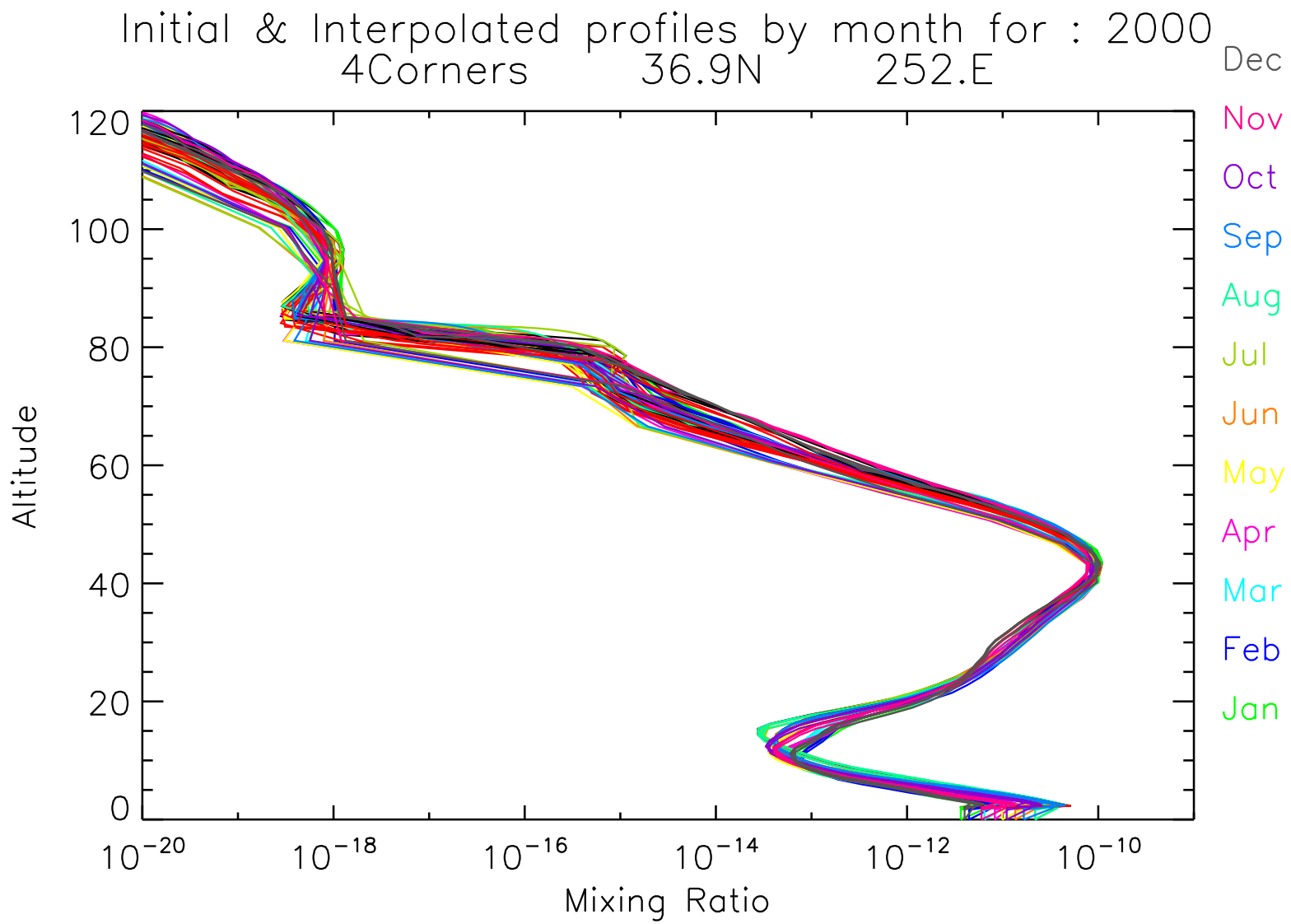
10^{-12}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2000
4Corners 36.9N 252.E
Altitude
120
100
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10^{-20}
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10^{-10}
Mixing Ratio
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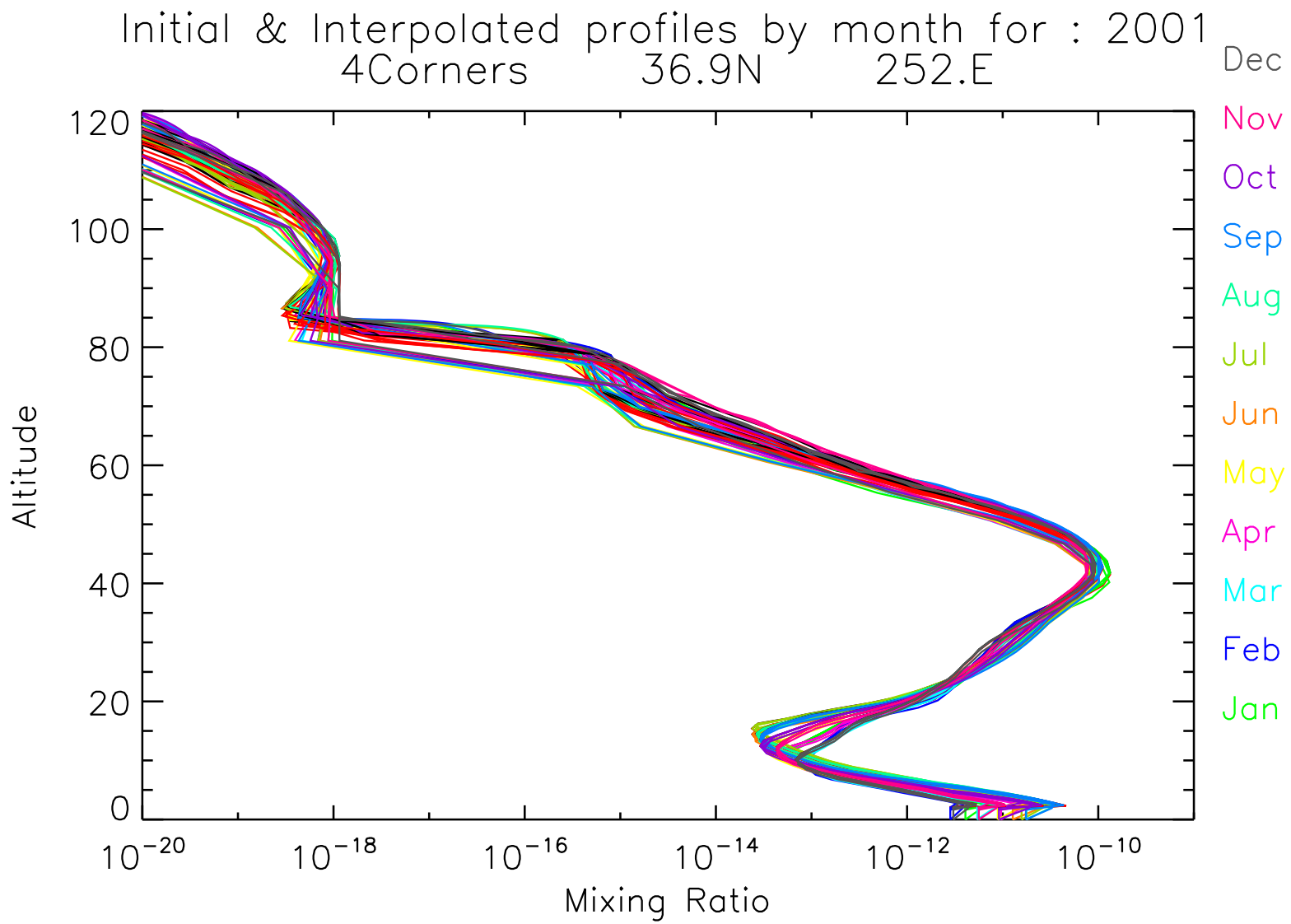
Initial & Interpolated profiles by month for : 2001
4Corners 36.9N 252.E
Altitude
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100
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10^{-20}
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10^{-16}
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10^{-10}
Mixing Ratio
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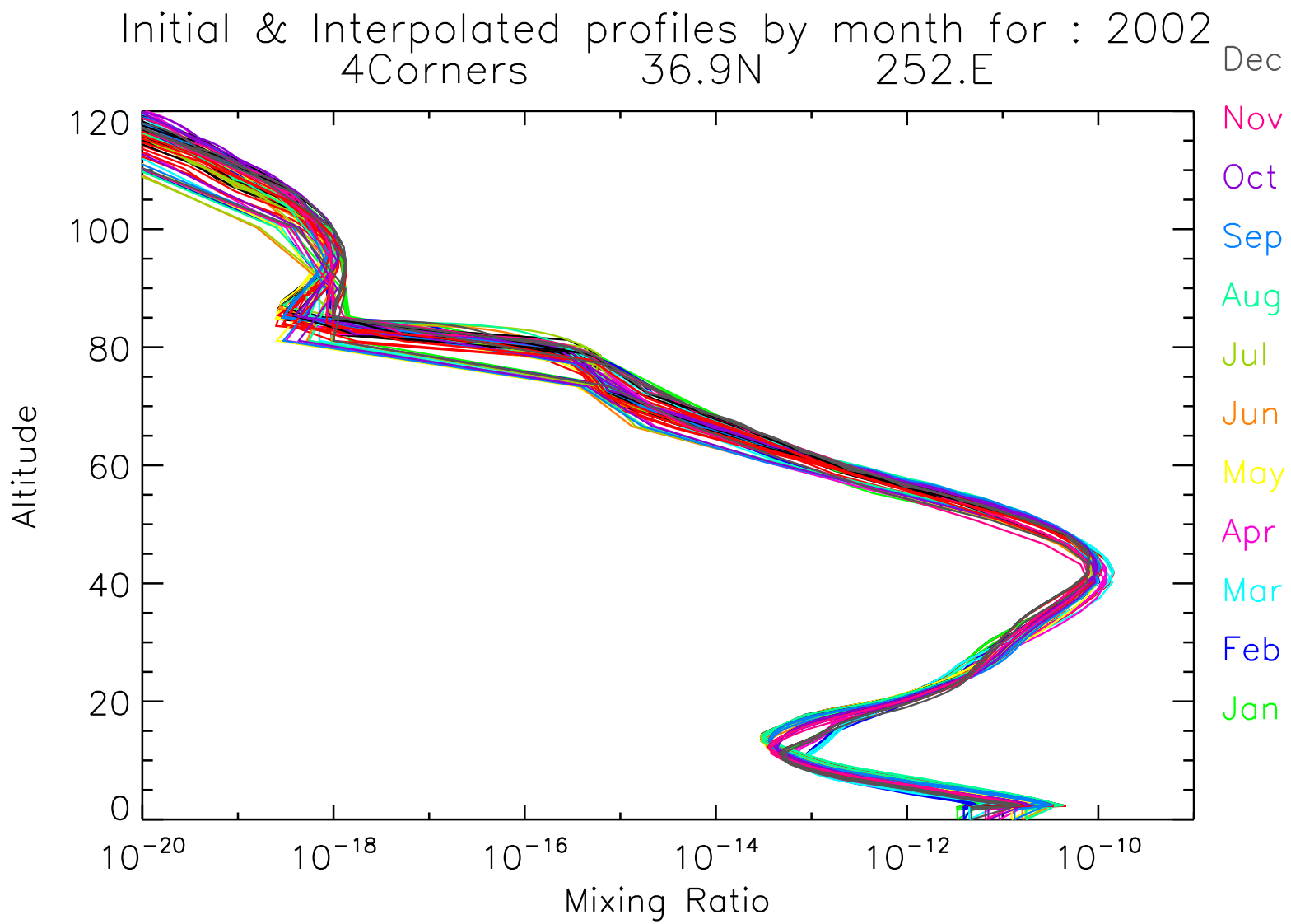
Initial & Interpolated profiles by month for : 2002
4Corners 36.9N 252.E
Altitude
120
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10^{-20}
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10^{-16}
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Mixing Ratio
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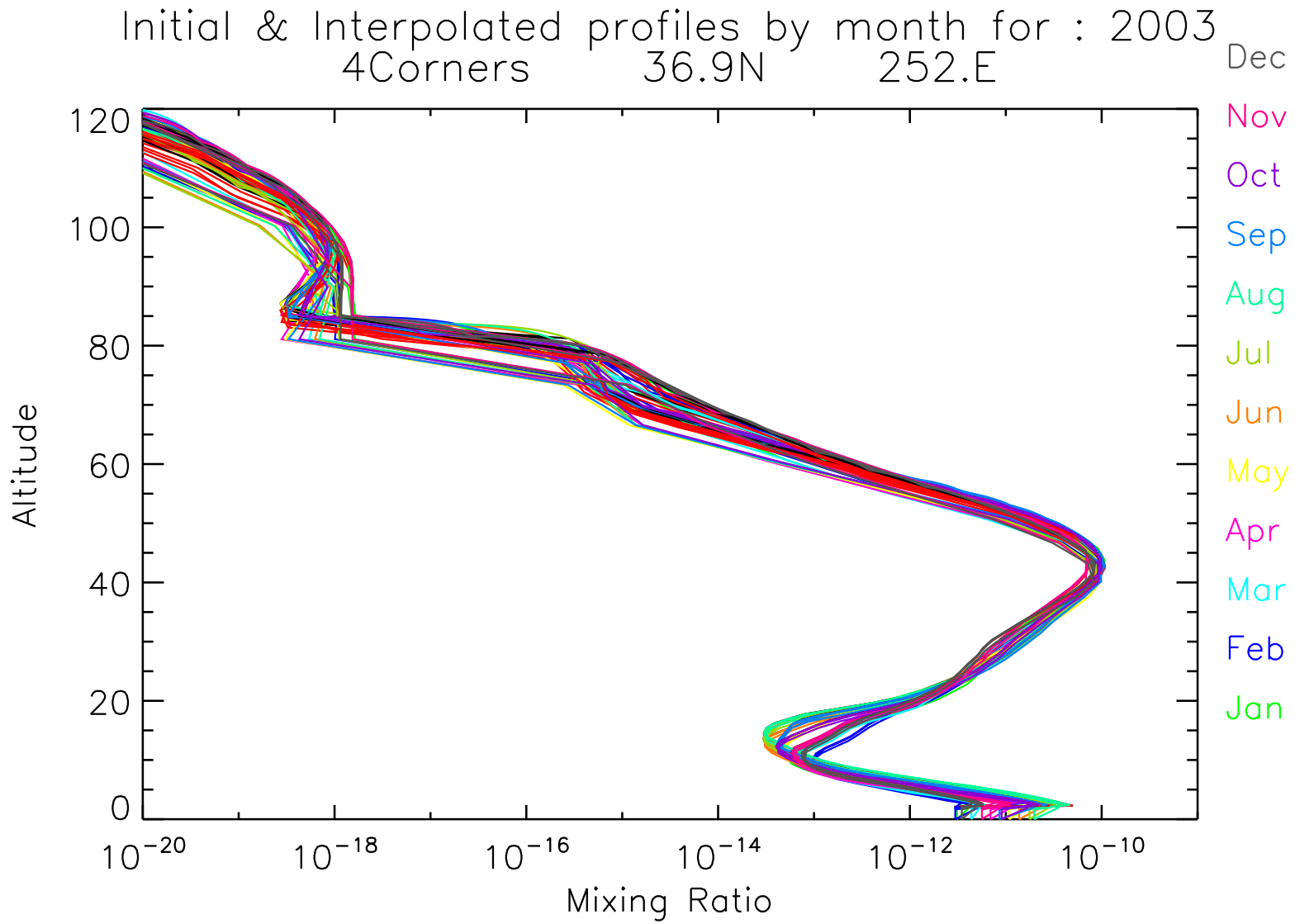
Initial & Interpolated profiles by month for : 2003
4Corners 36.9N 252.E
Altitude
120
100
80
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20
0
10^{-20}
10^{-18}
10^{-16}
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10^{-10}
Mixing Ratio
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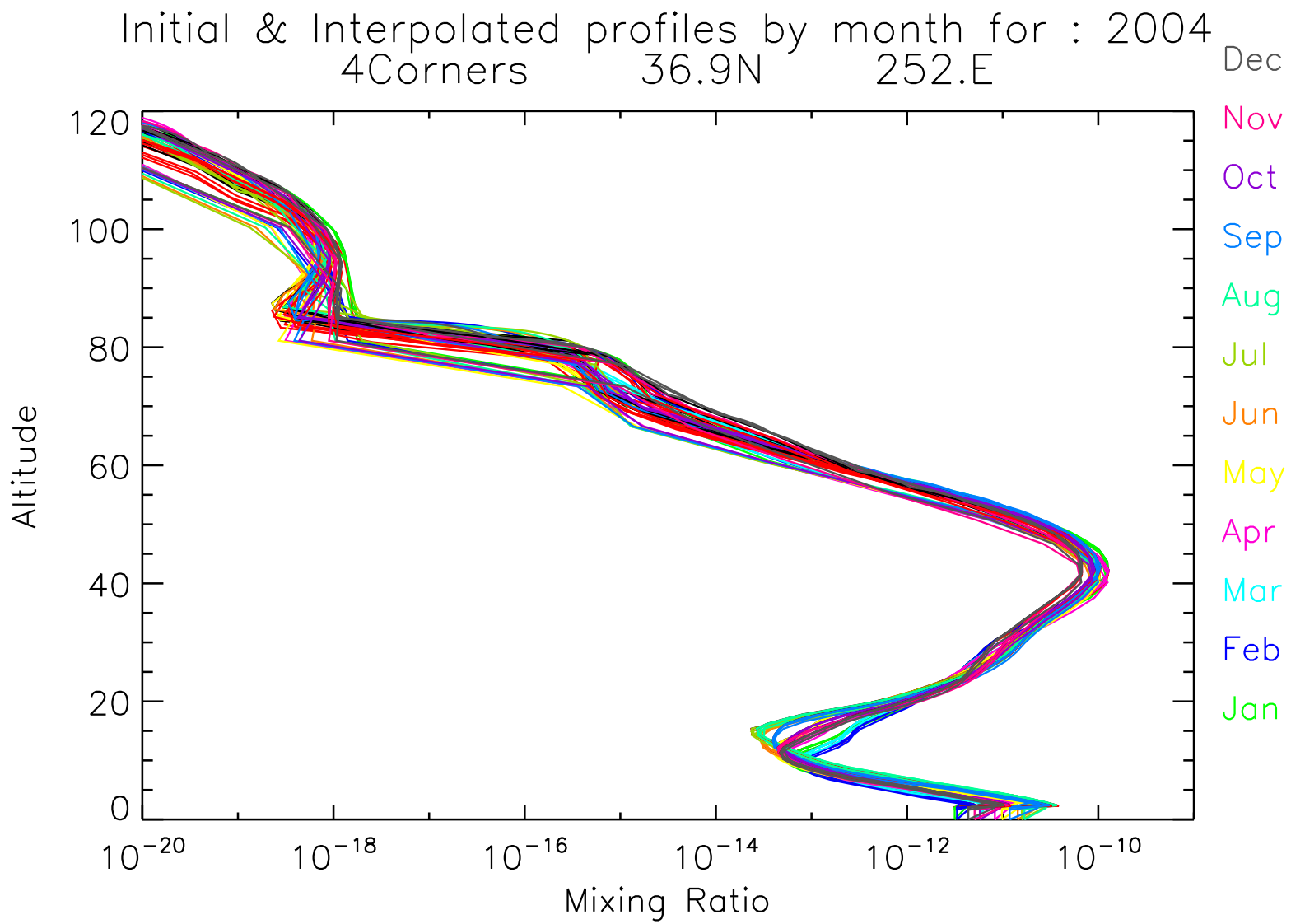
Initial & Interpolated profiles by month for : 2004
4Corners 36.9N 252.E
Dec
Nov
Oct
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May
Apr
Mar
Feb
Jan
120
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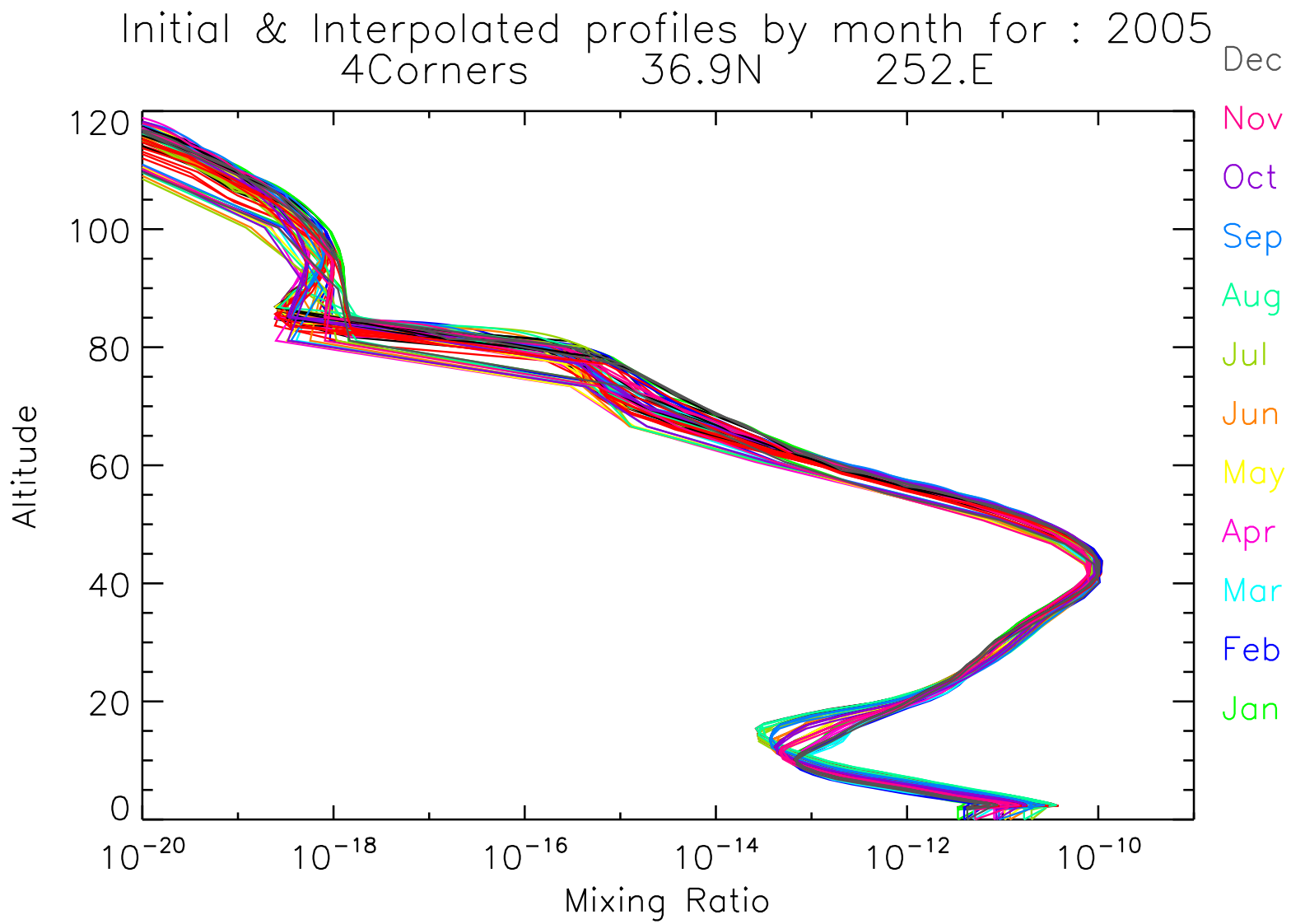
0
Altitude
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2005
4Corners 36.9N 252.E
Dec
Nov
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Feb
Jan
120
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Altitude
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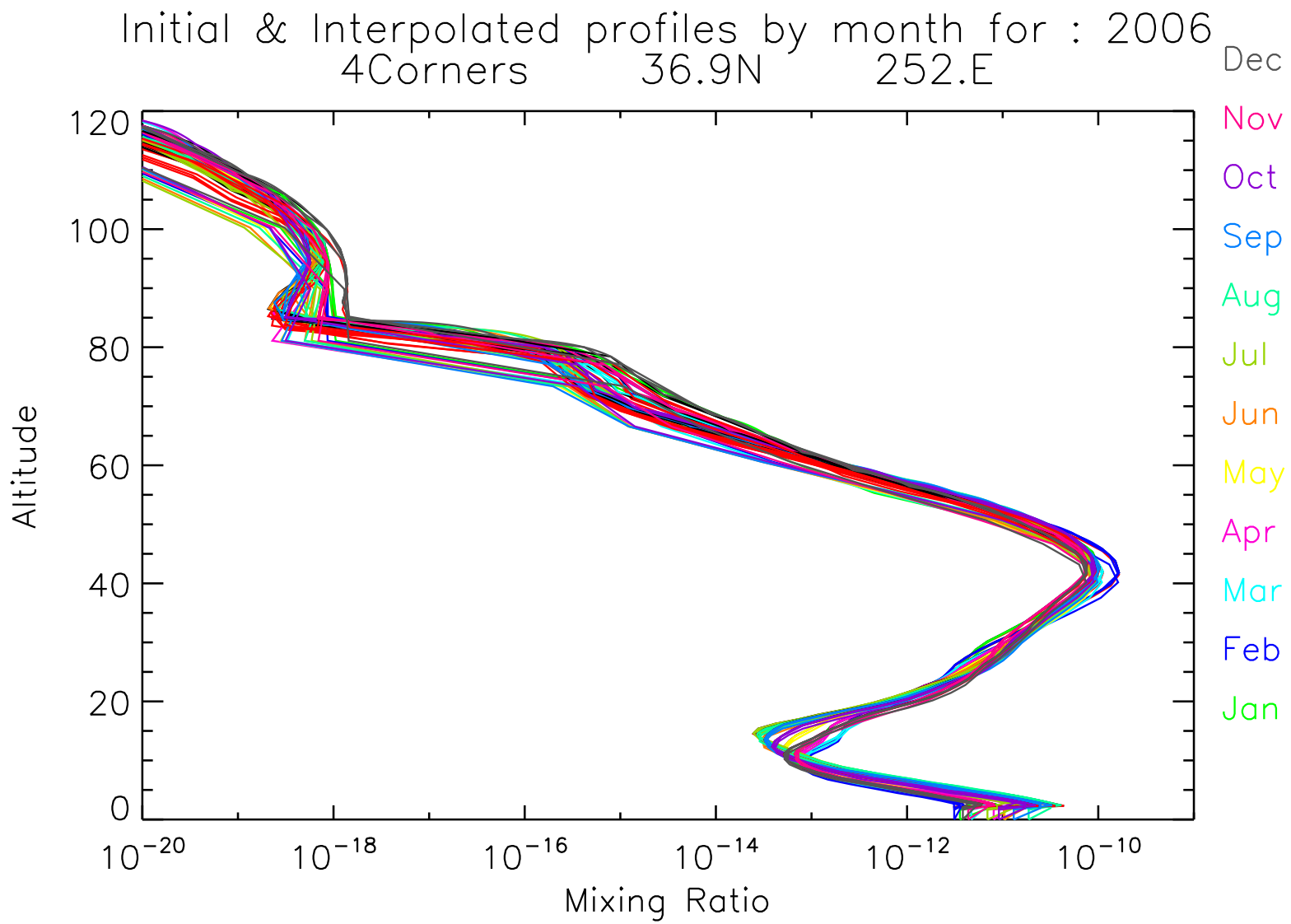
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2006
4Corners 36.9N 252.E
Altitude
120
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10^{-20}
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10^{-10}
Mixing Ratio
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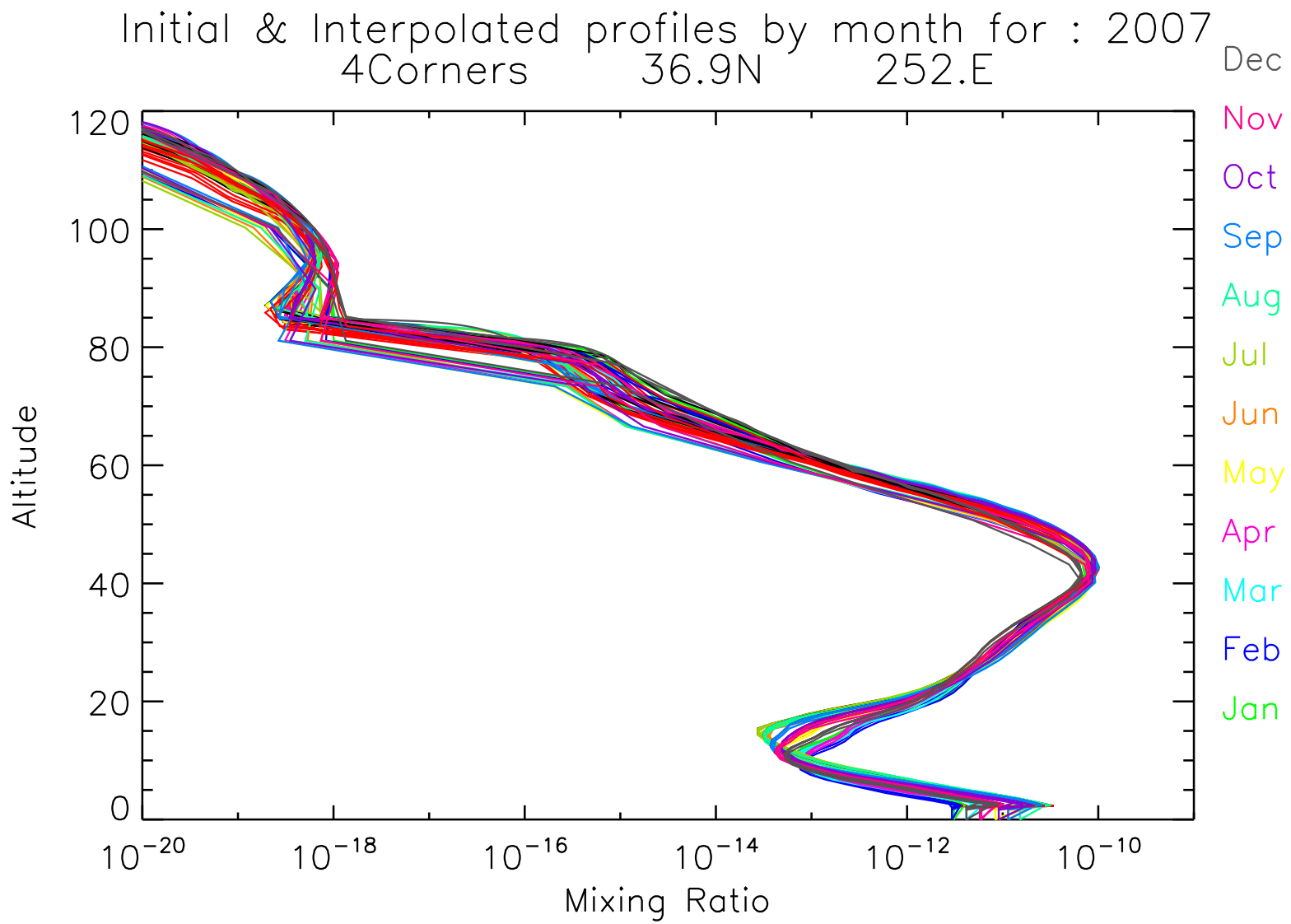
Initial & Interpolated profiles by month for : 2007
4Corners 36.9N 252.E
Altitude
120
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10^{-20}
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Mixing Ratio
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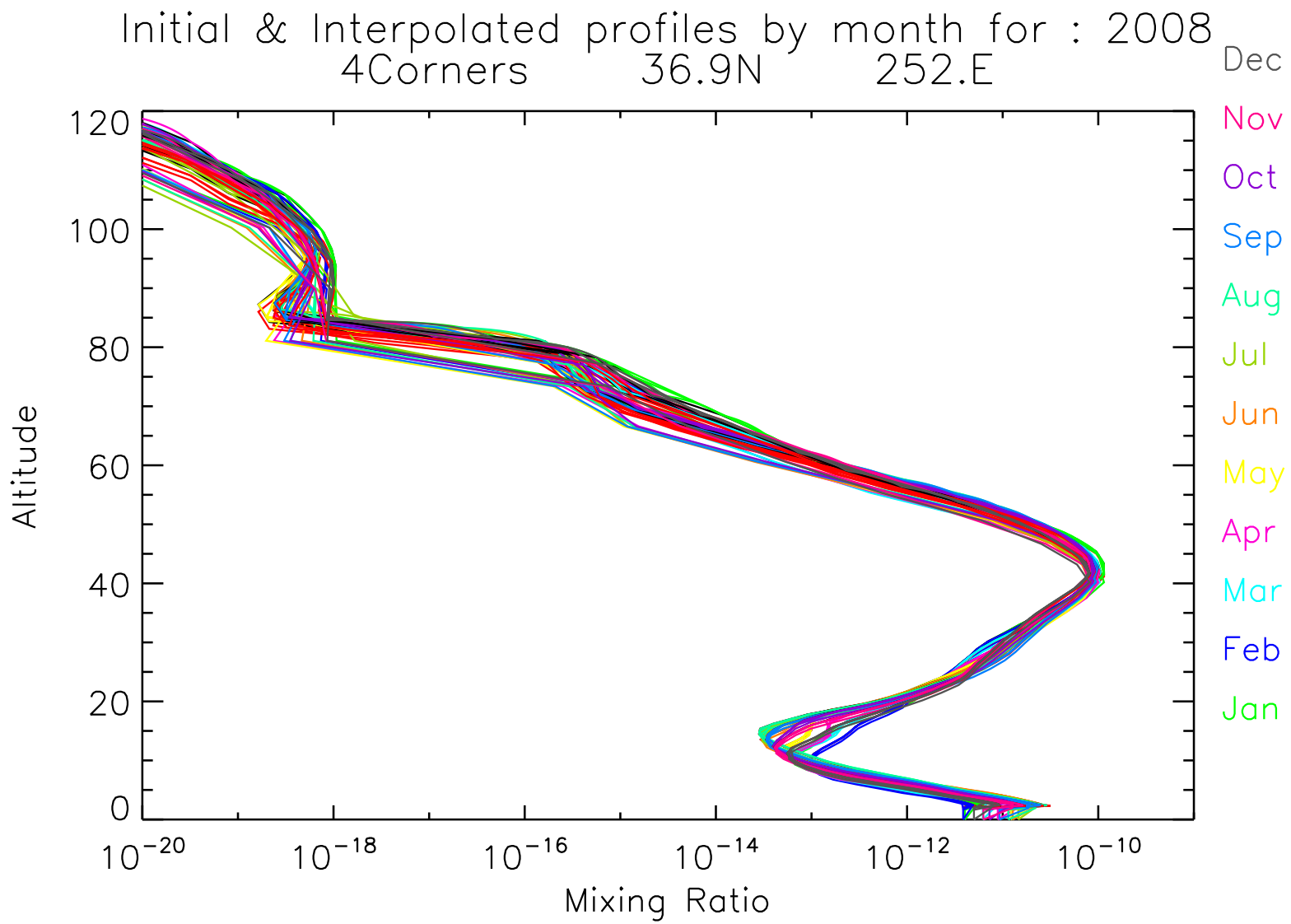
Initial & Interpolated profiles by month for : 2008
4Corners 36.9N 252.E
Altitude
120
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10^{-20}
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Mixing Ratio
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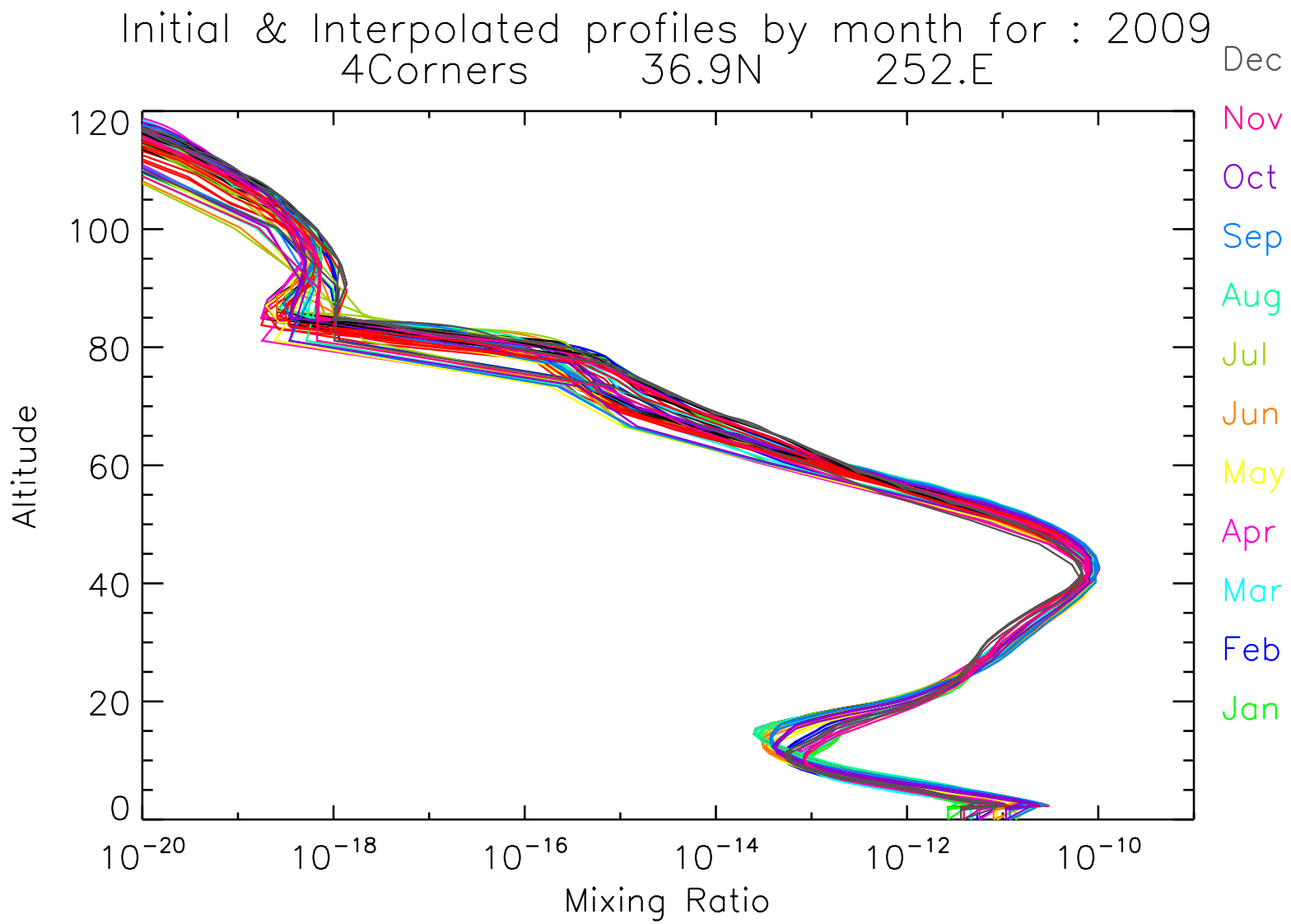
Initial & Interpolated profiles by month for : 2009
4Corners 36.9N 252.E
Dec
Nov
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Jan
Altitude
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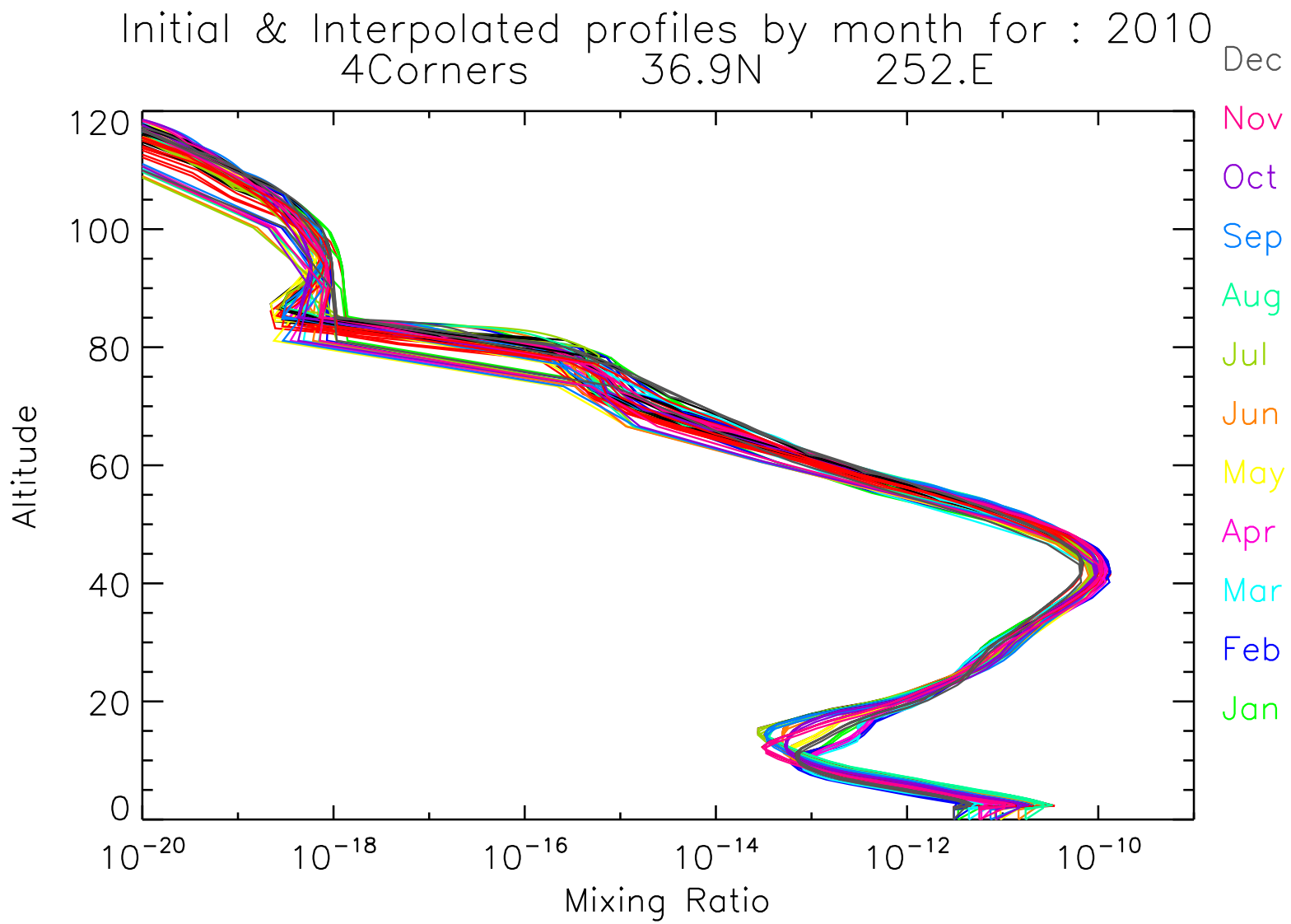
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2010
4Corners 36.9N 252.E
Altitude
120
100
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Mixing Ratio
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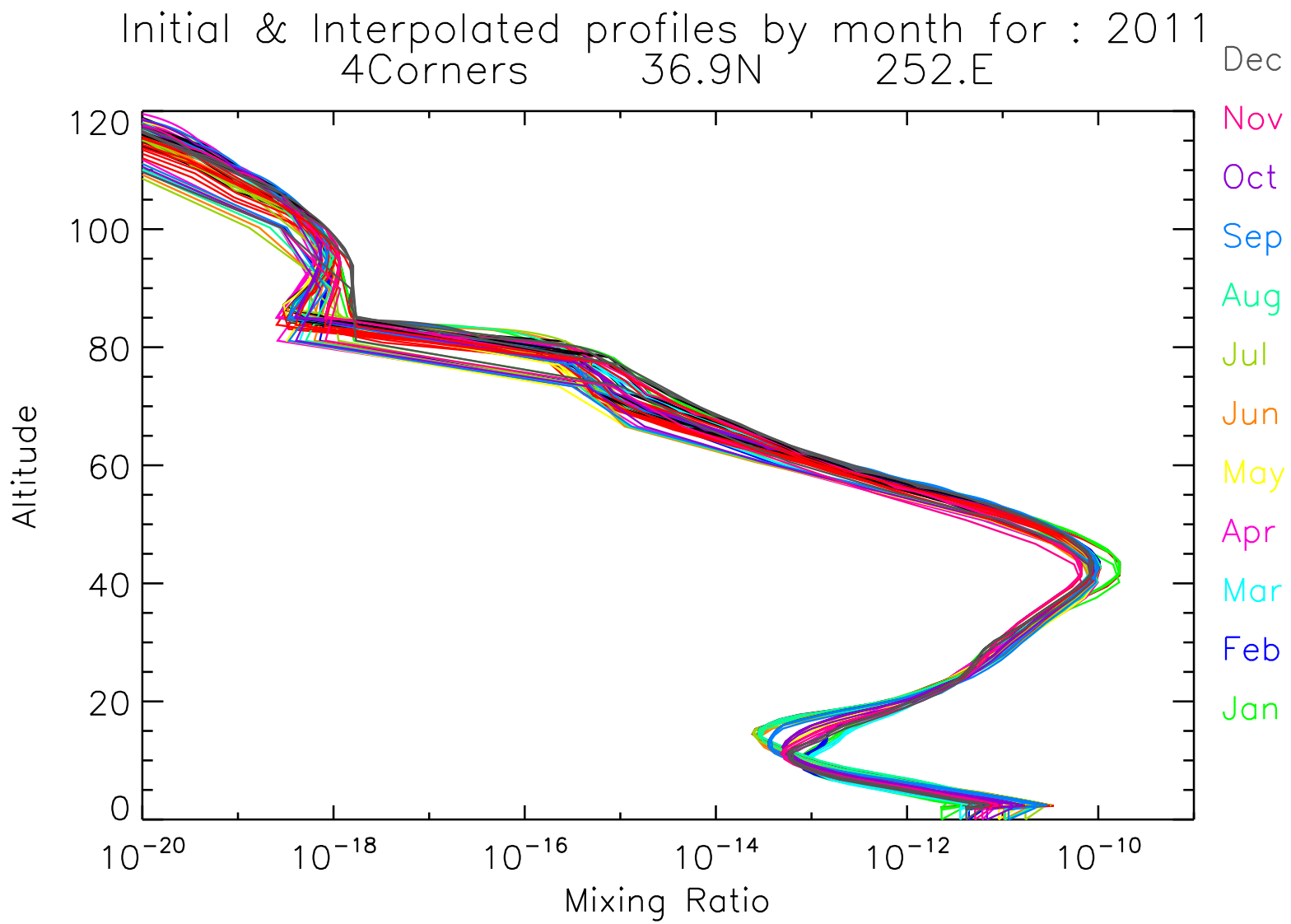
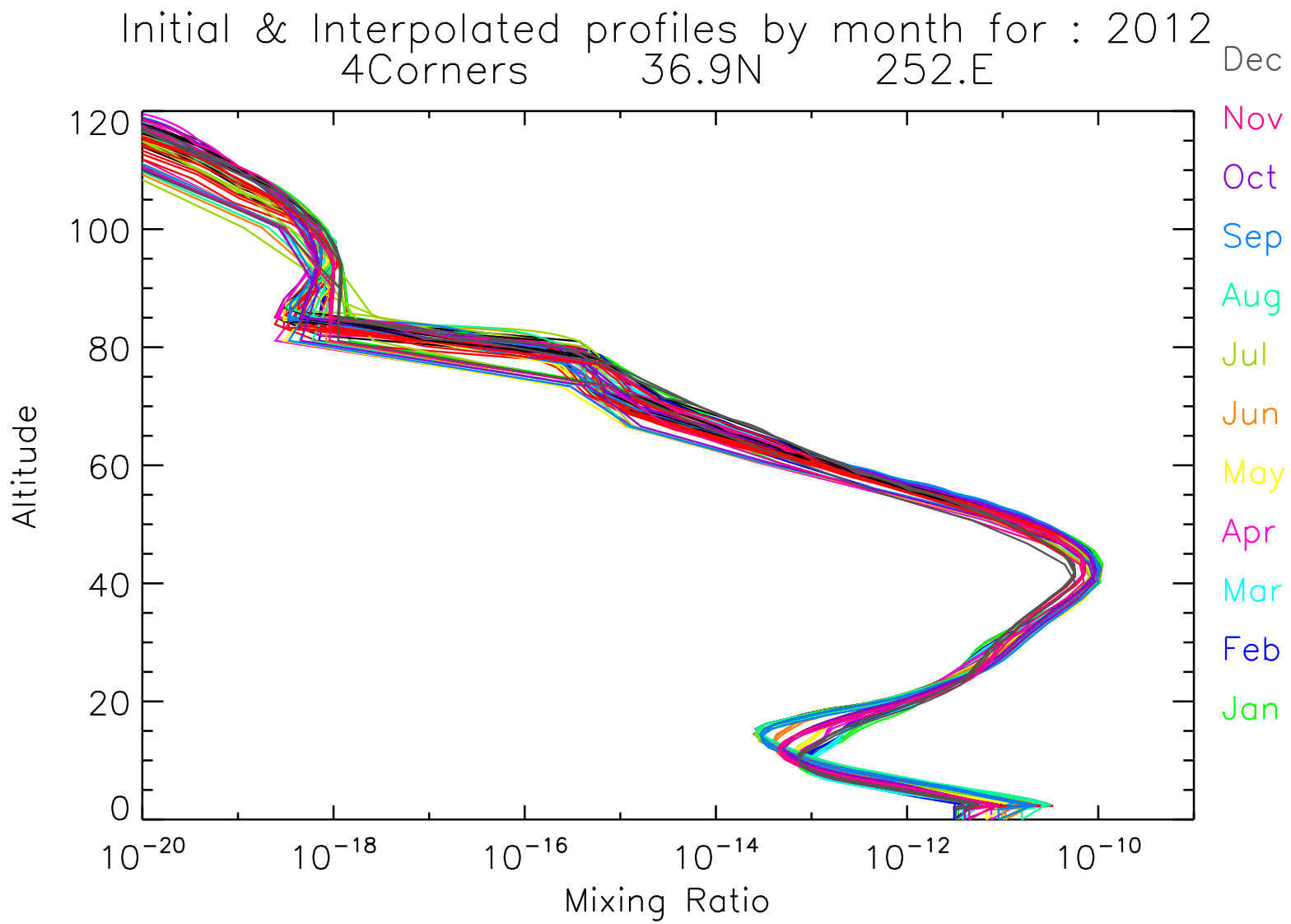
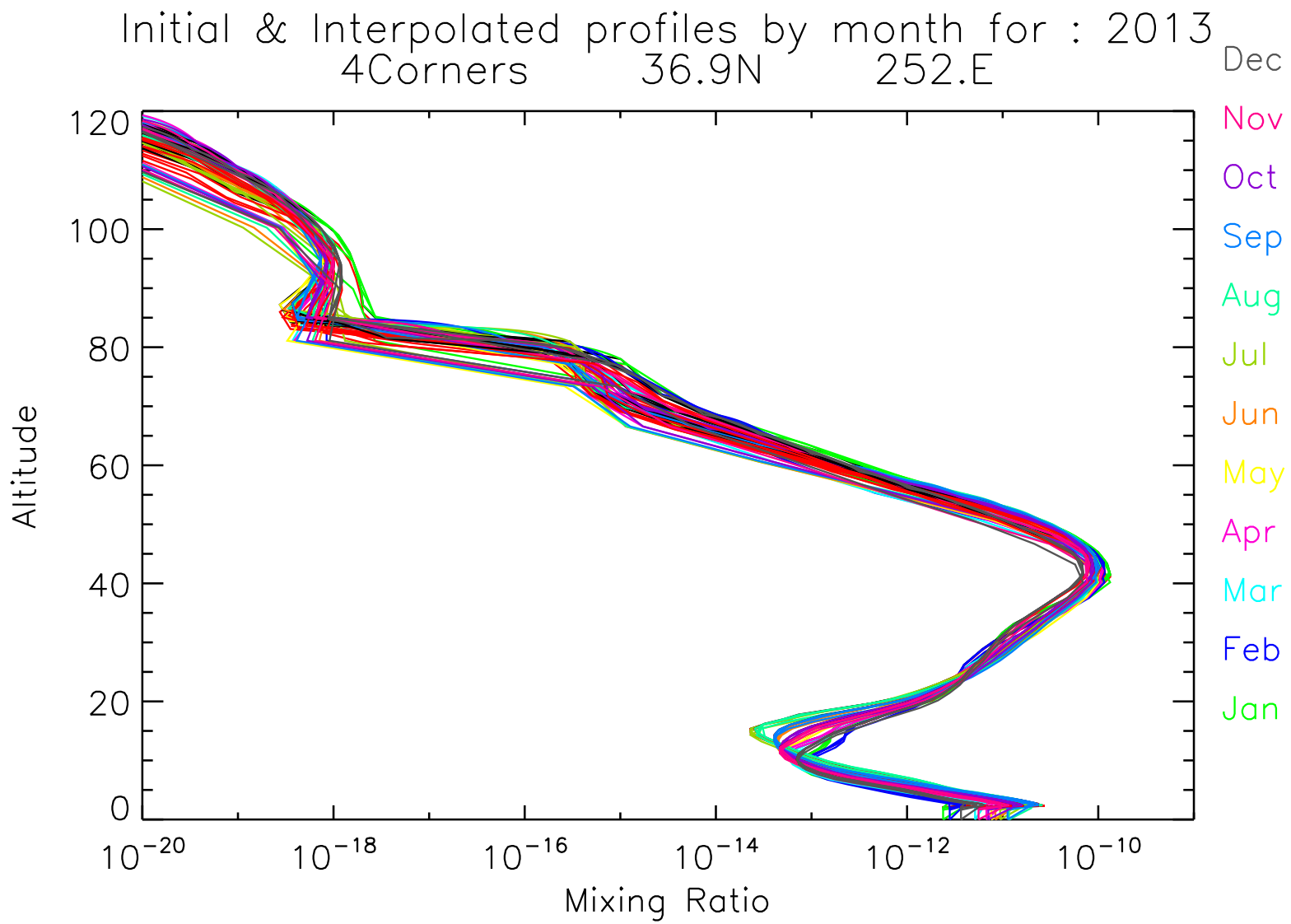
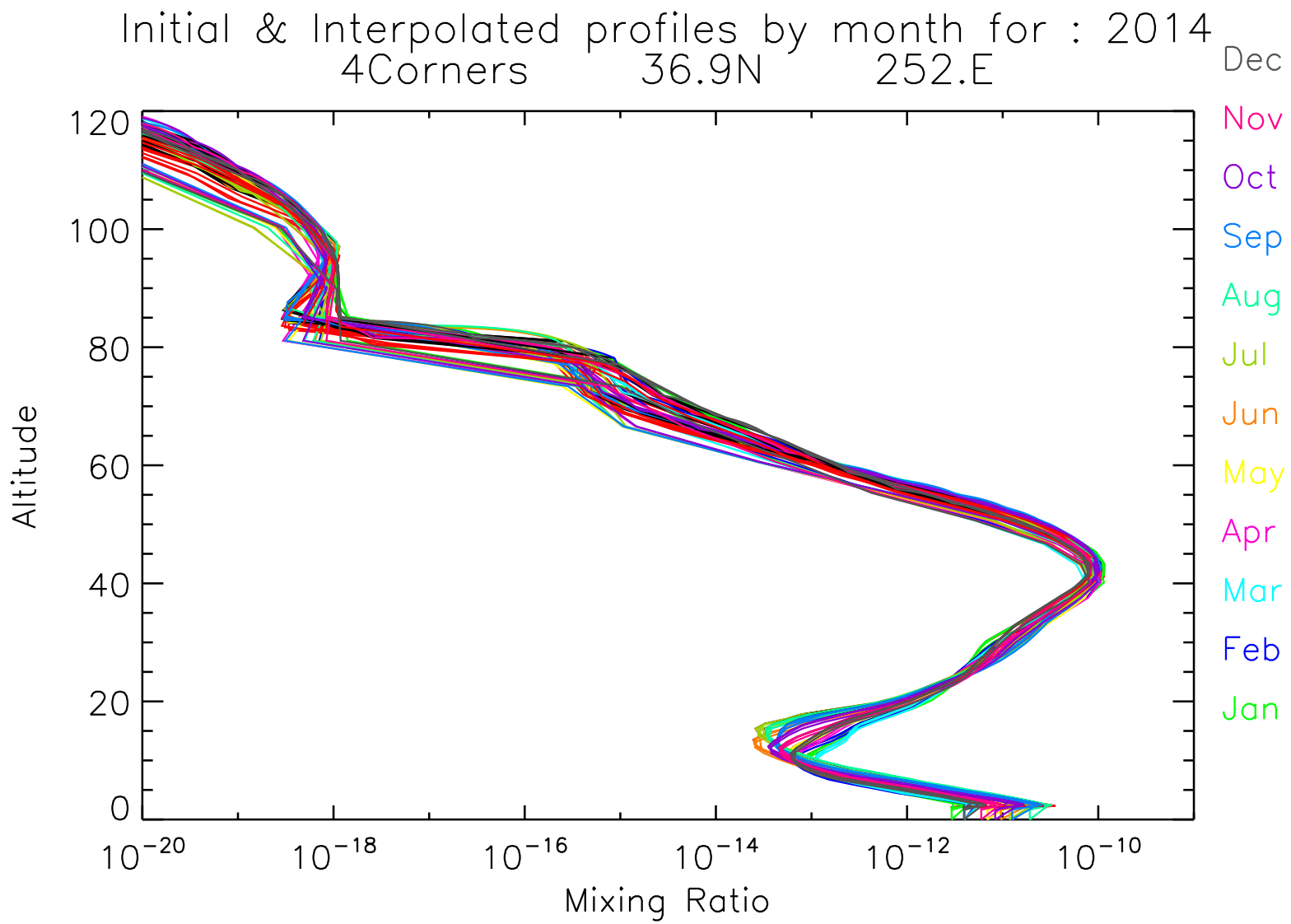
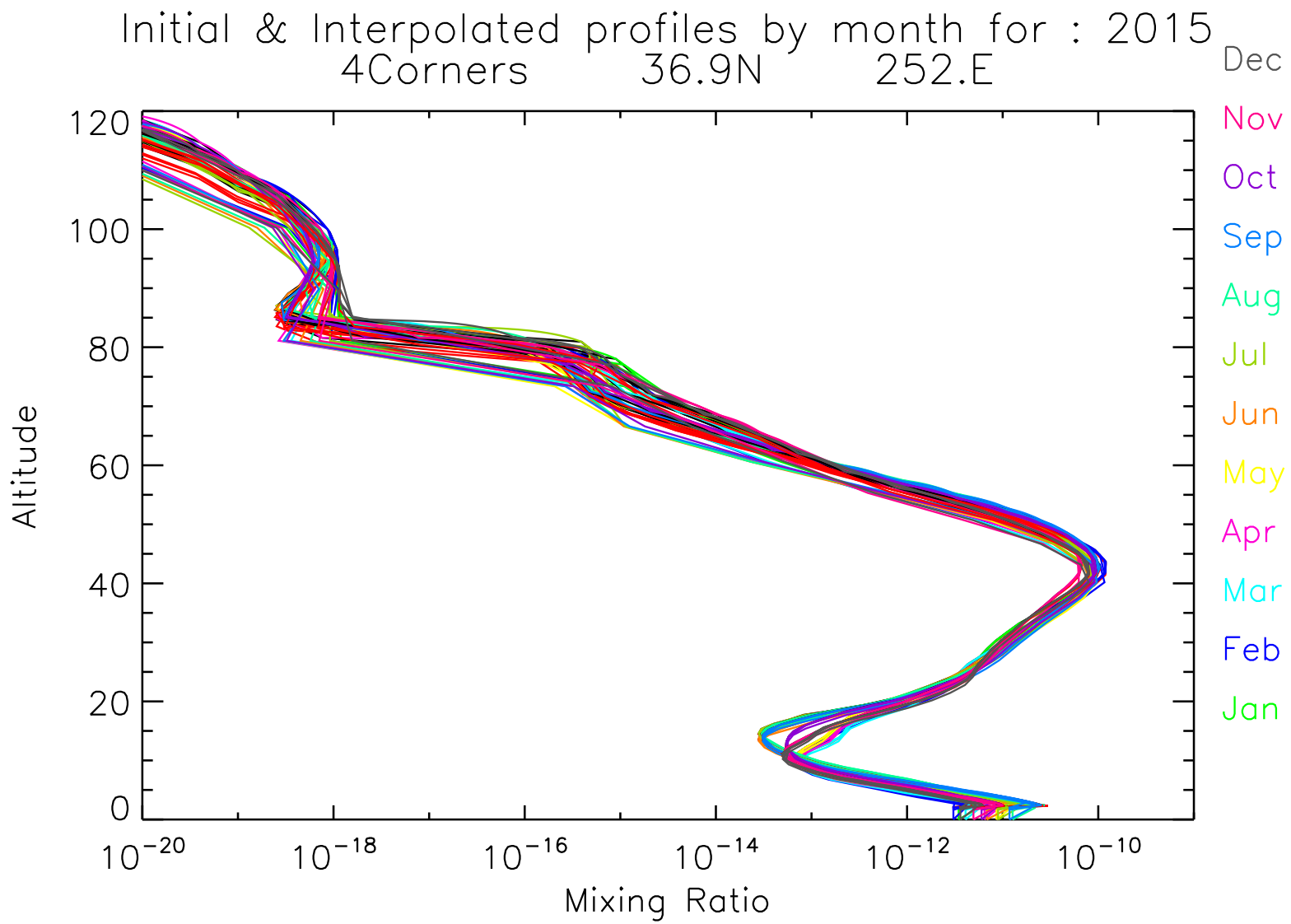
Jan

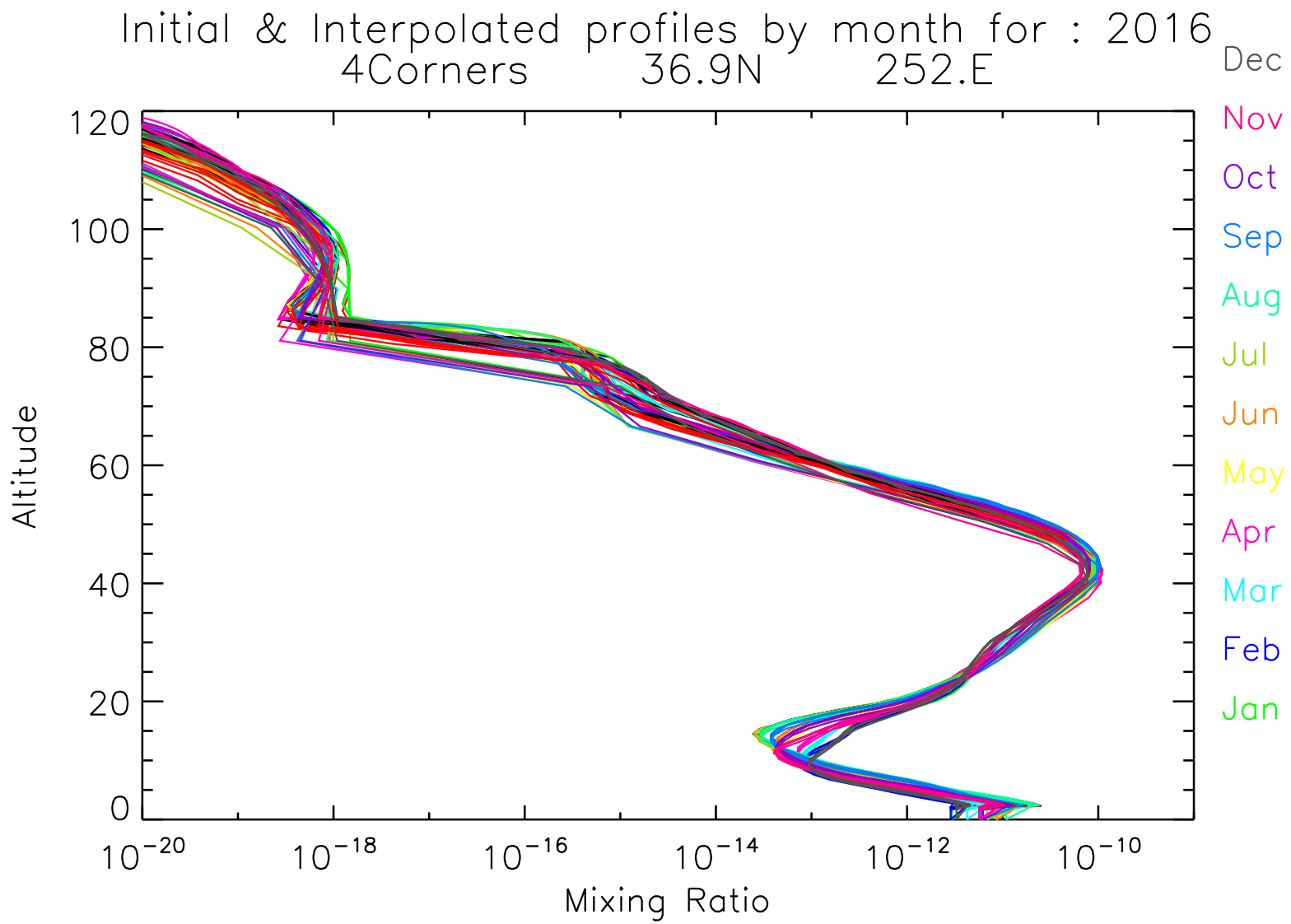

Initial & Interpolated profiles by month for : 2011
4Corners 36.9N 252.E
Altitude
120
100
80
60
40
20
0
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

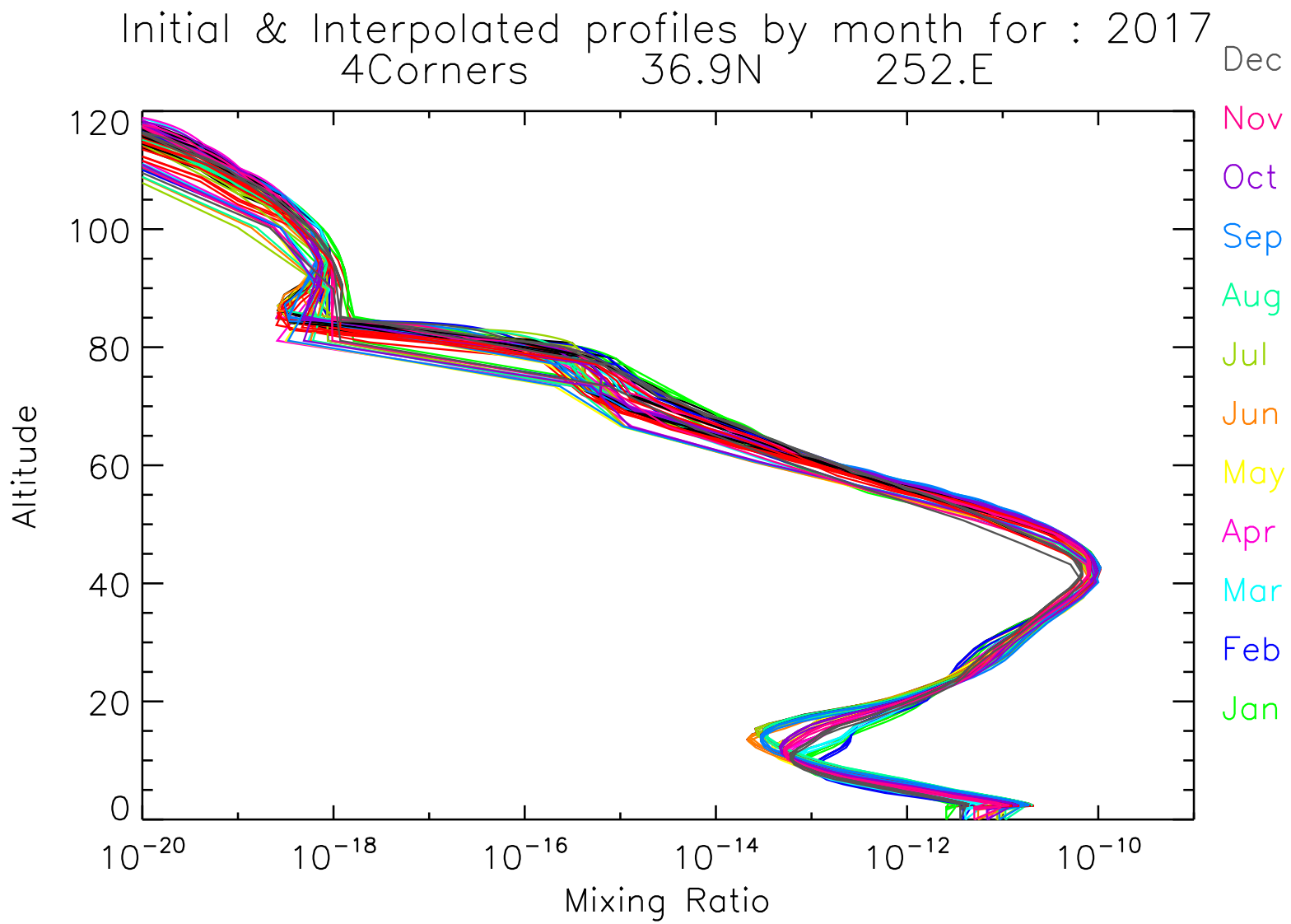

Initial & Interpolated profiles by month for : 2012
4Corners 36.9N 252.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio

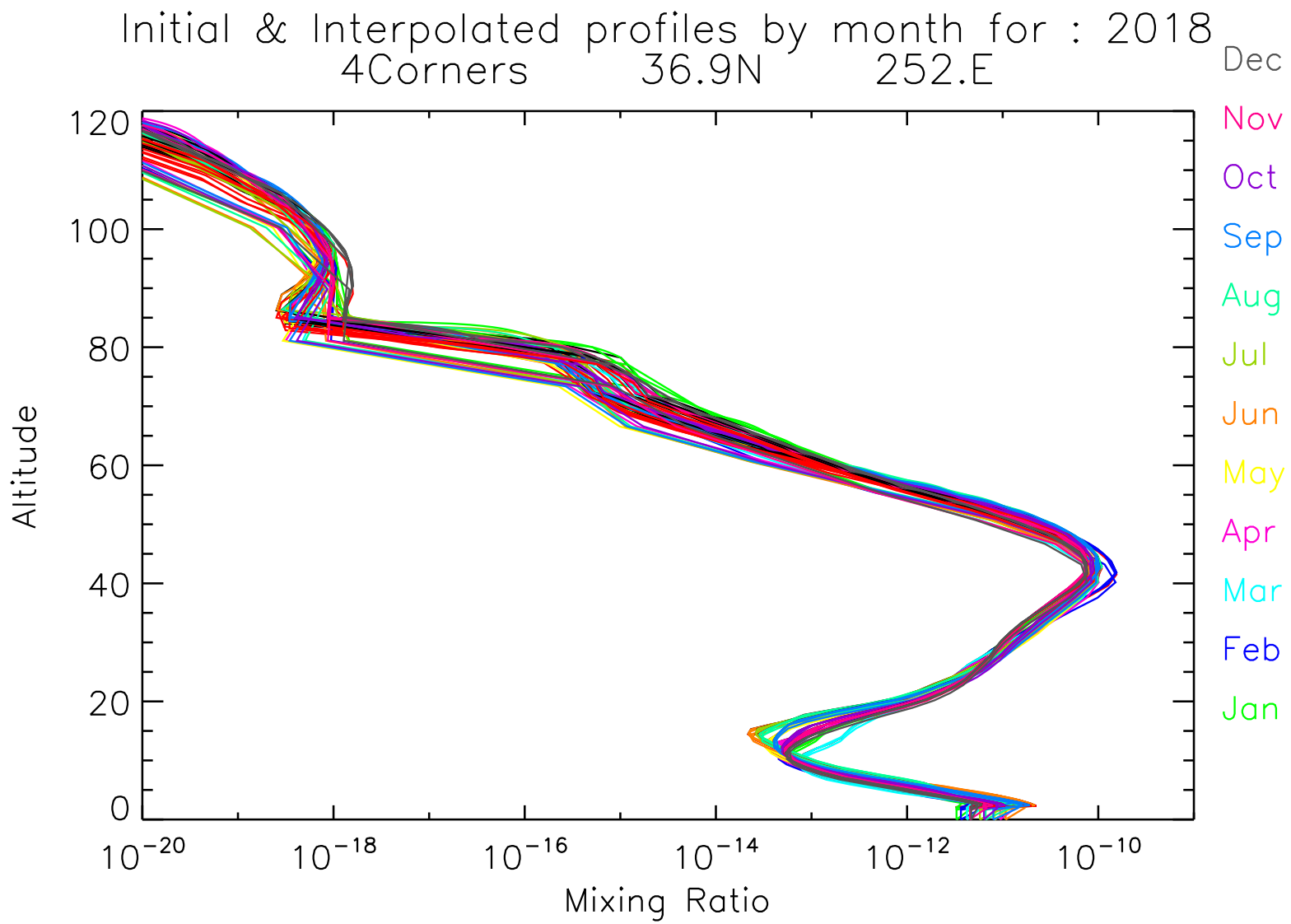

Initial & Interpolated profiles by month for : 2013
4Corners 36.9N 252.E
Altitude
120
100
80
60
40
20
0
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

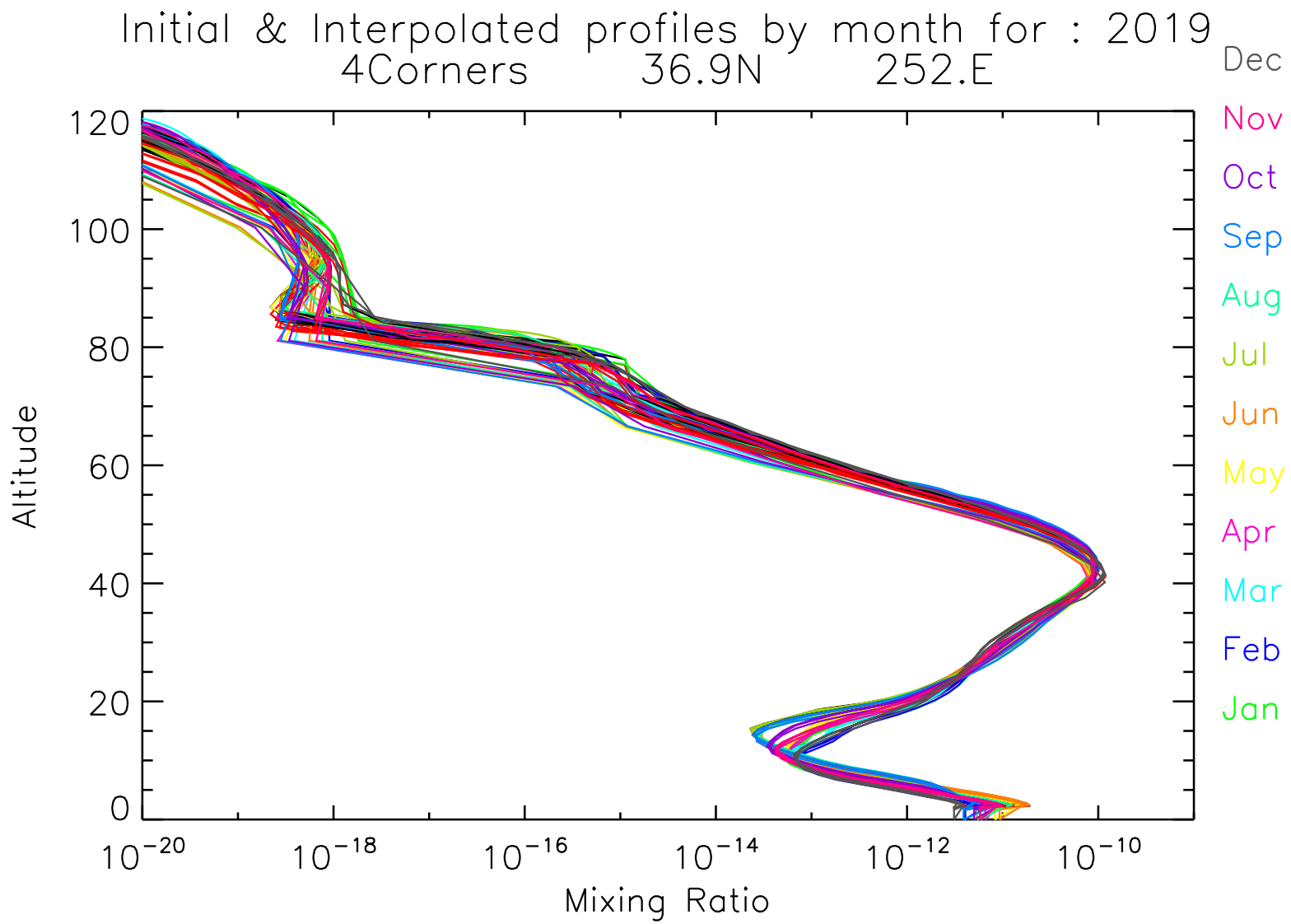

Initial & Interpolated profiles by month for : 2014
4Corners 36.9N 252.E
Altitude
120
100
80
60
40
20
0
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

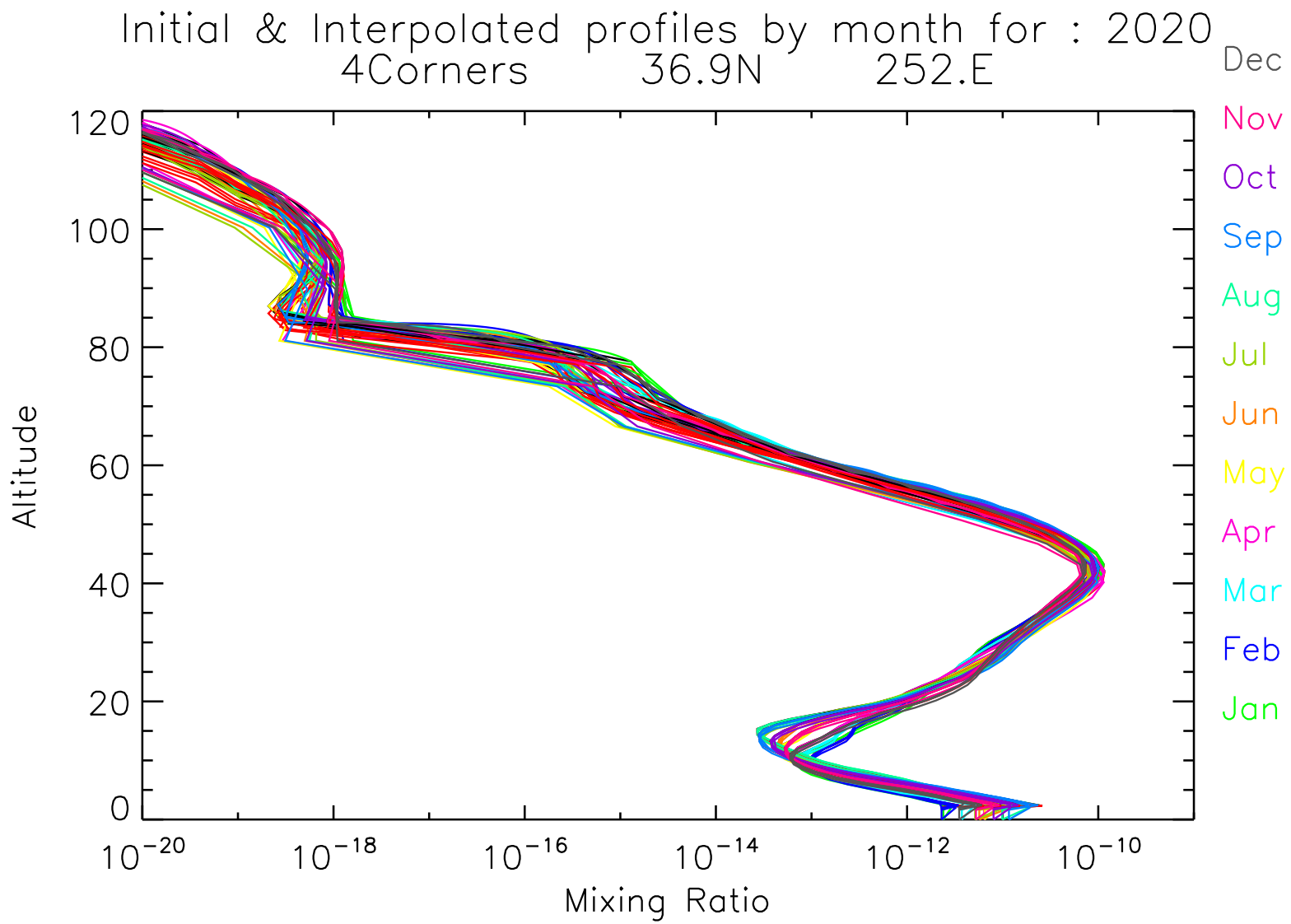

Initial & Interpolated profiles by month for : 2015
4Corners 36.9N 252.E
Altitude
120
100
80
60
40
20
0
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

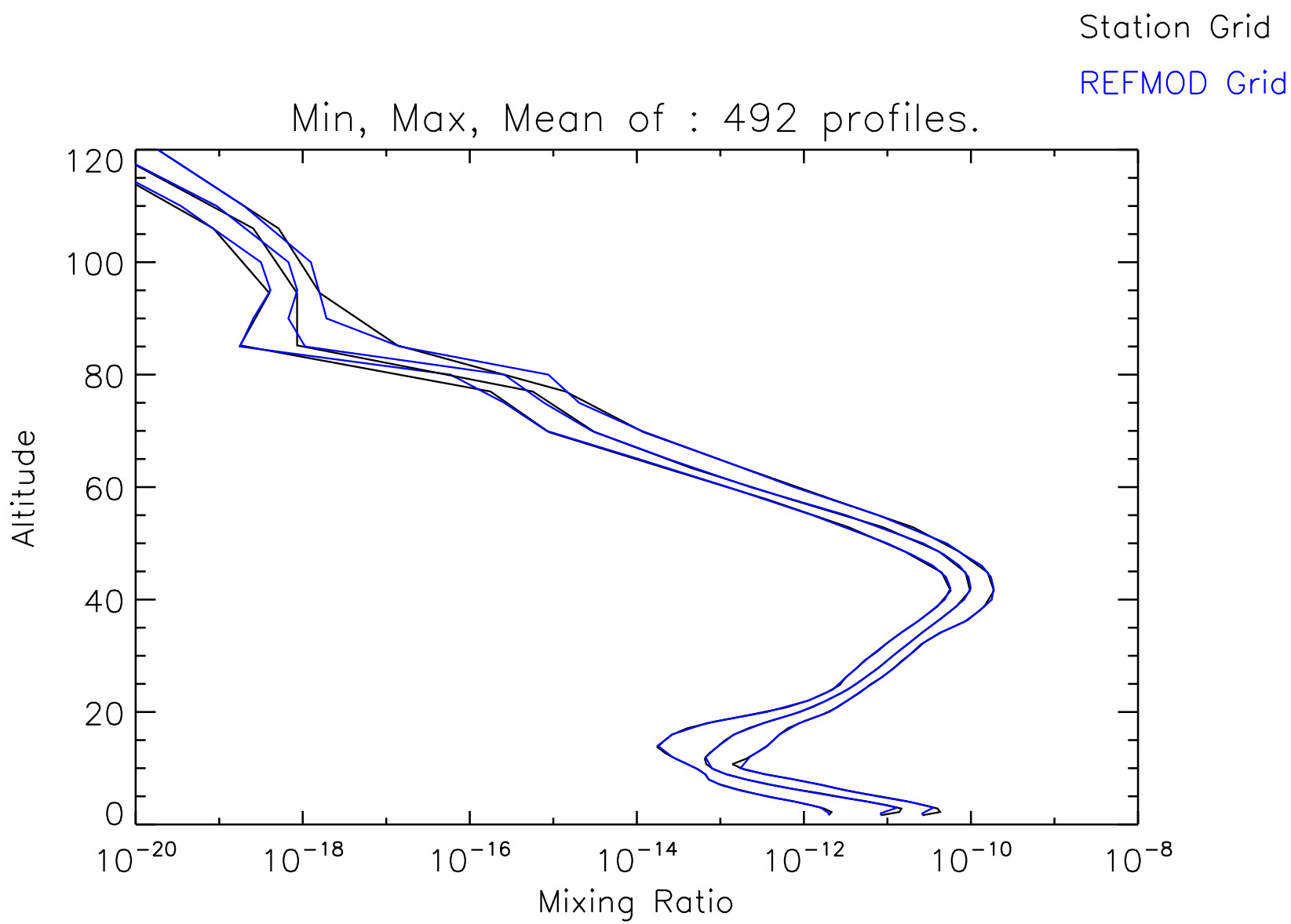

Initial & Interpolated profiles by month for : 2016
4Corners 36.9N 252.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio

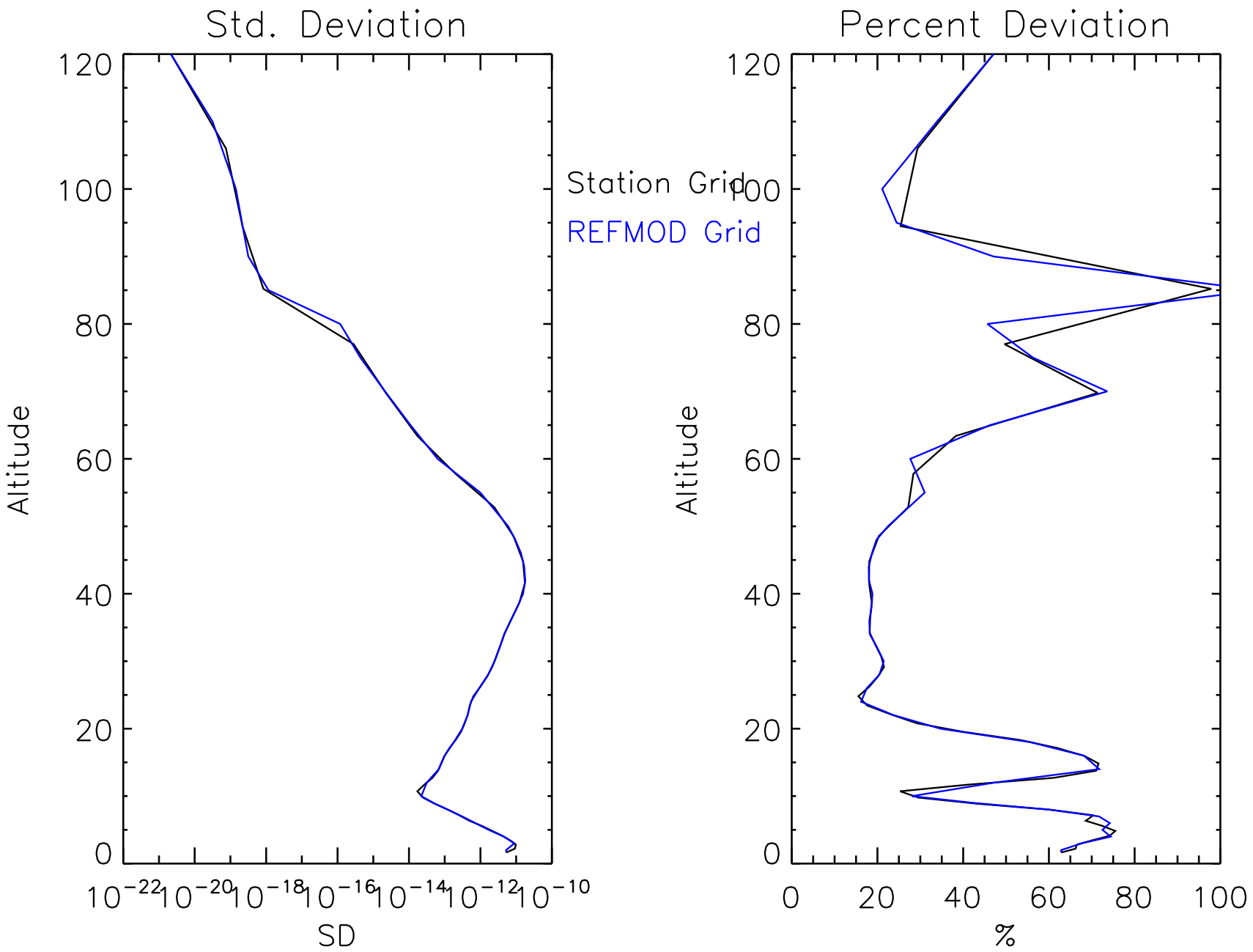

Initial & Interpolated profiles by month for : 2017
4Corners 36.9N 252.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio

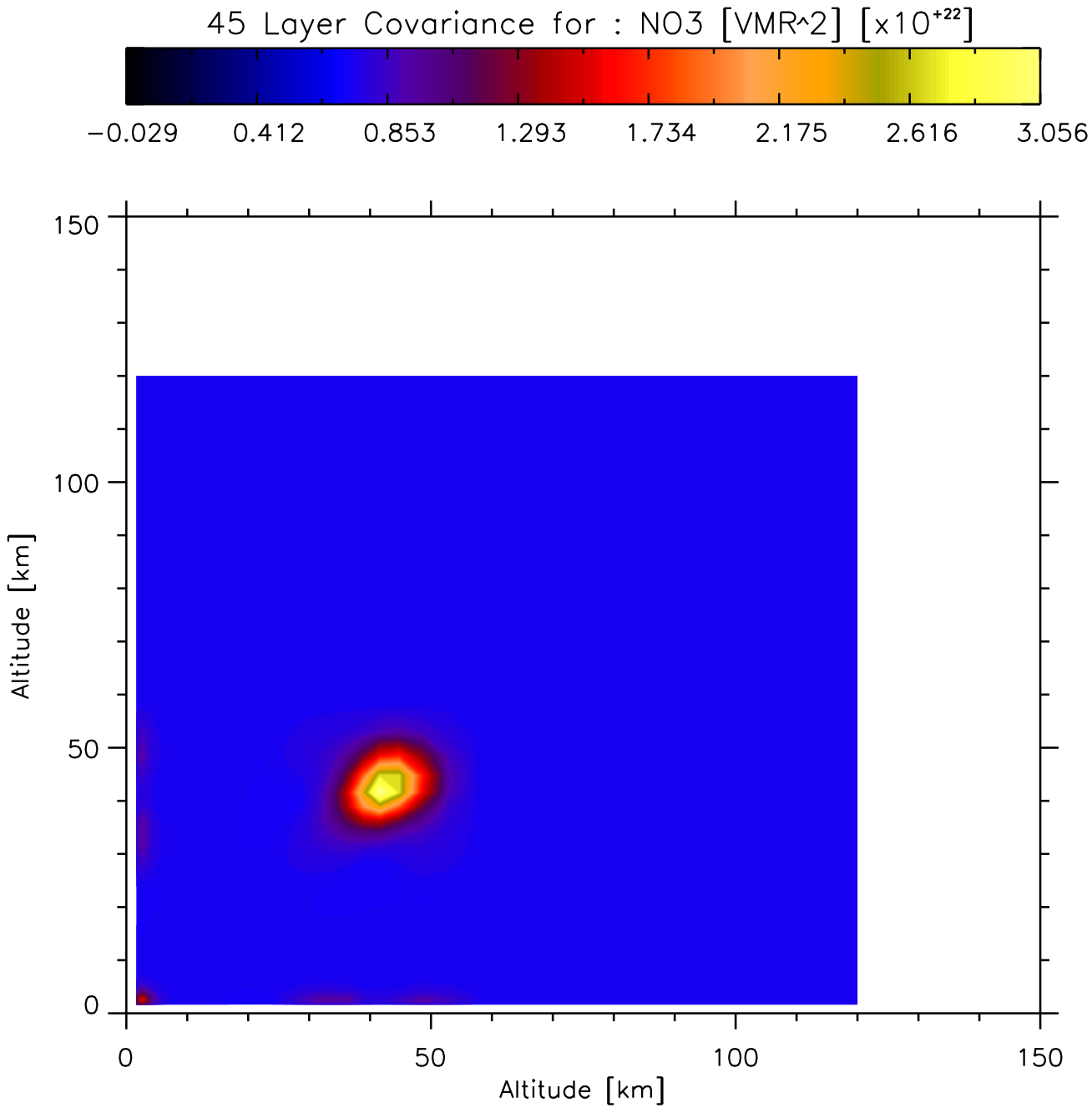

Initial & Interpolated profiles by month for : 2018
4Corners 36.9N 252.E
Altitude
120
100
80
60
40
20
0
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

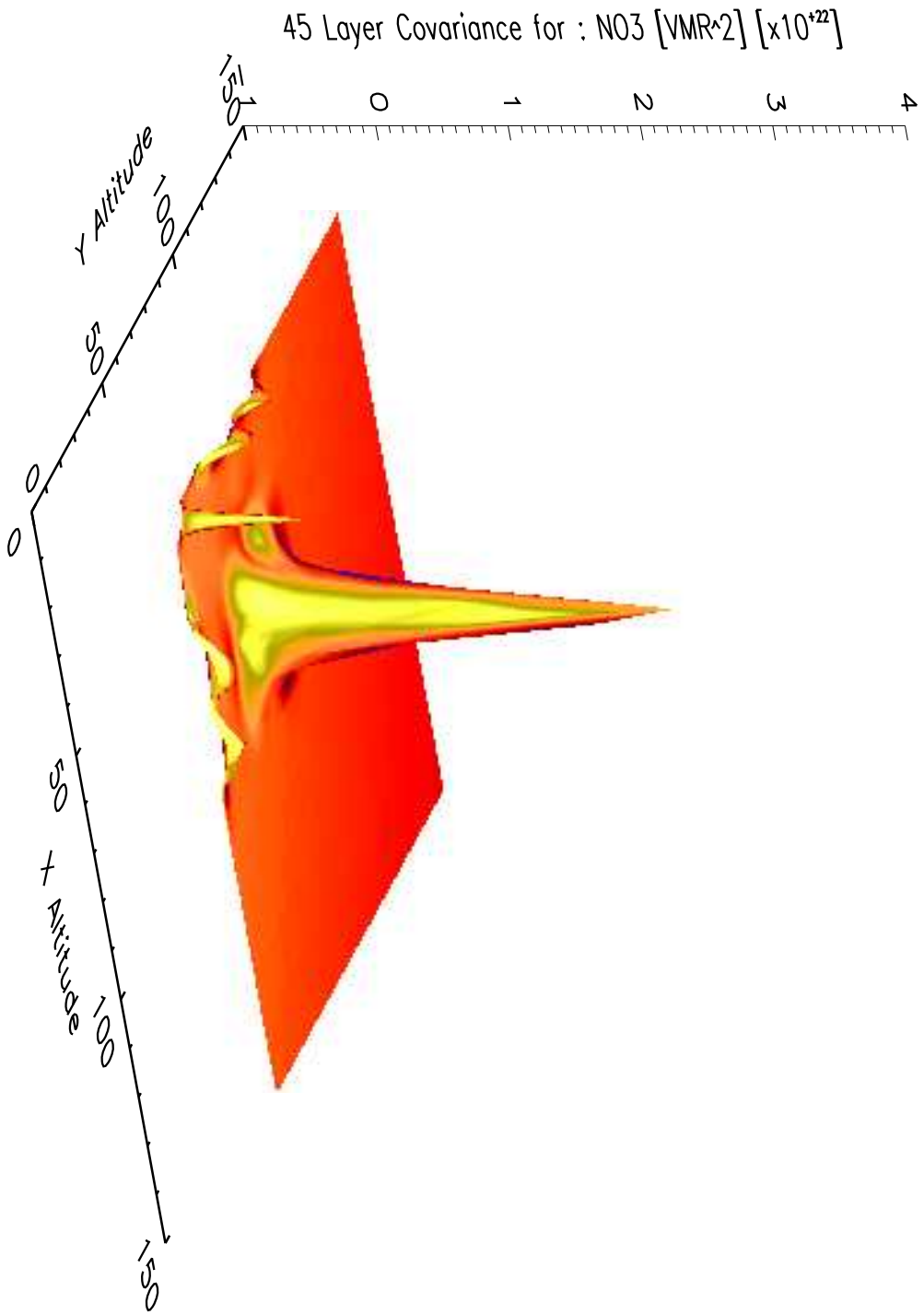

Initial & Interpolated profiles by month for : 2019
4Corners 36.9N 252.E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio

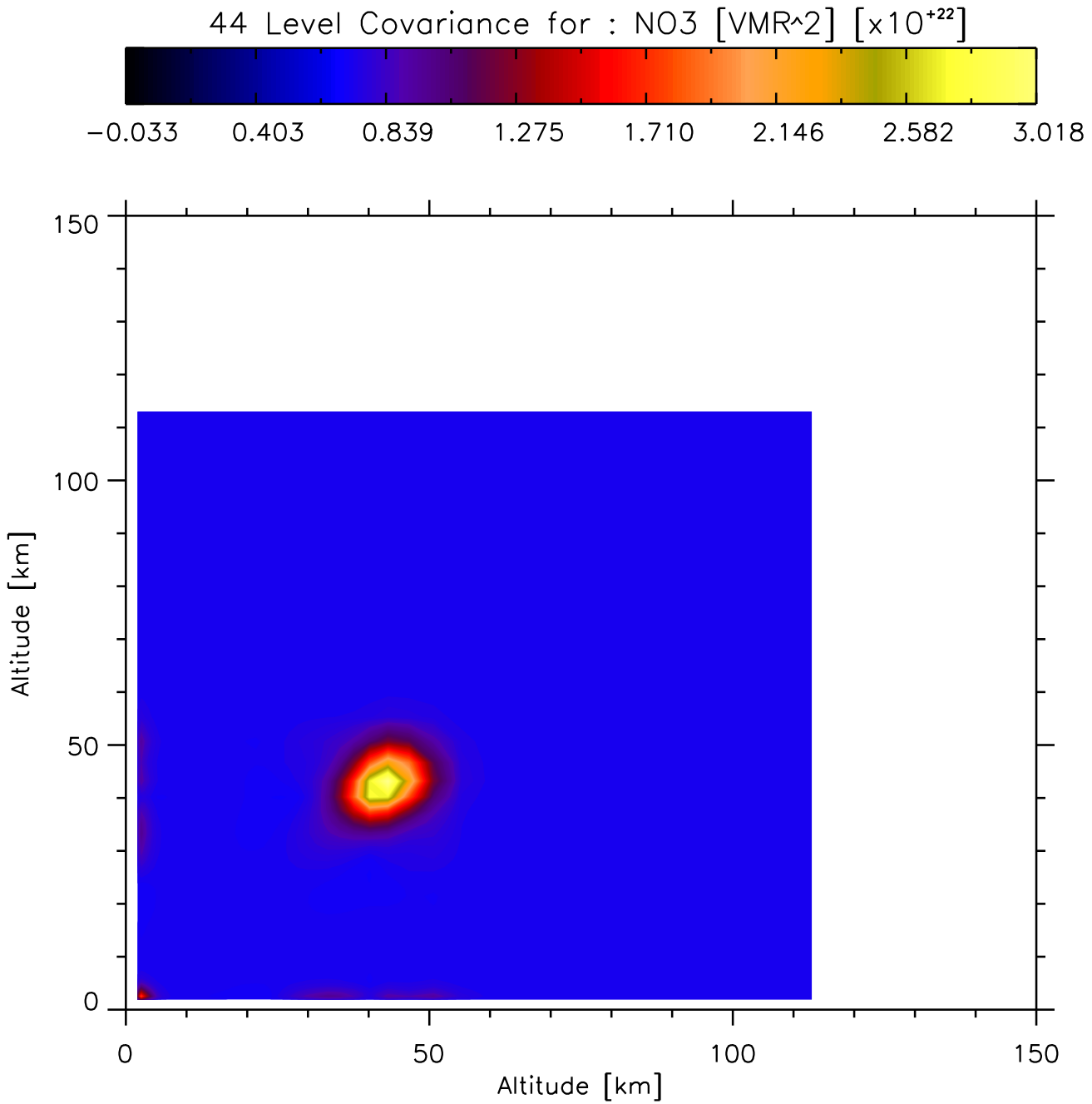

Initial & Interpolated profiles by month for : 2020
4Corners 36.9N 252.E
Altitude
120
100
80
60
40
20
0
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

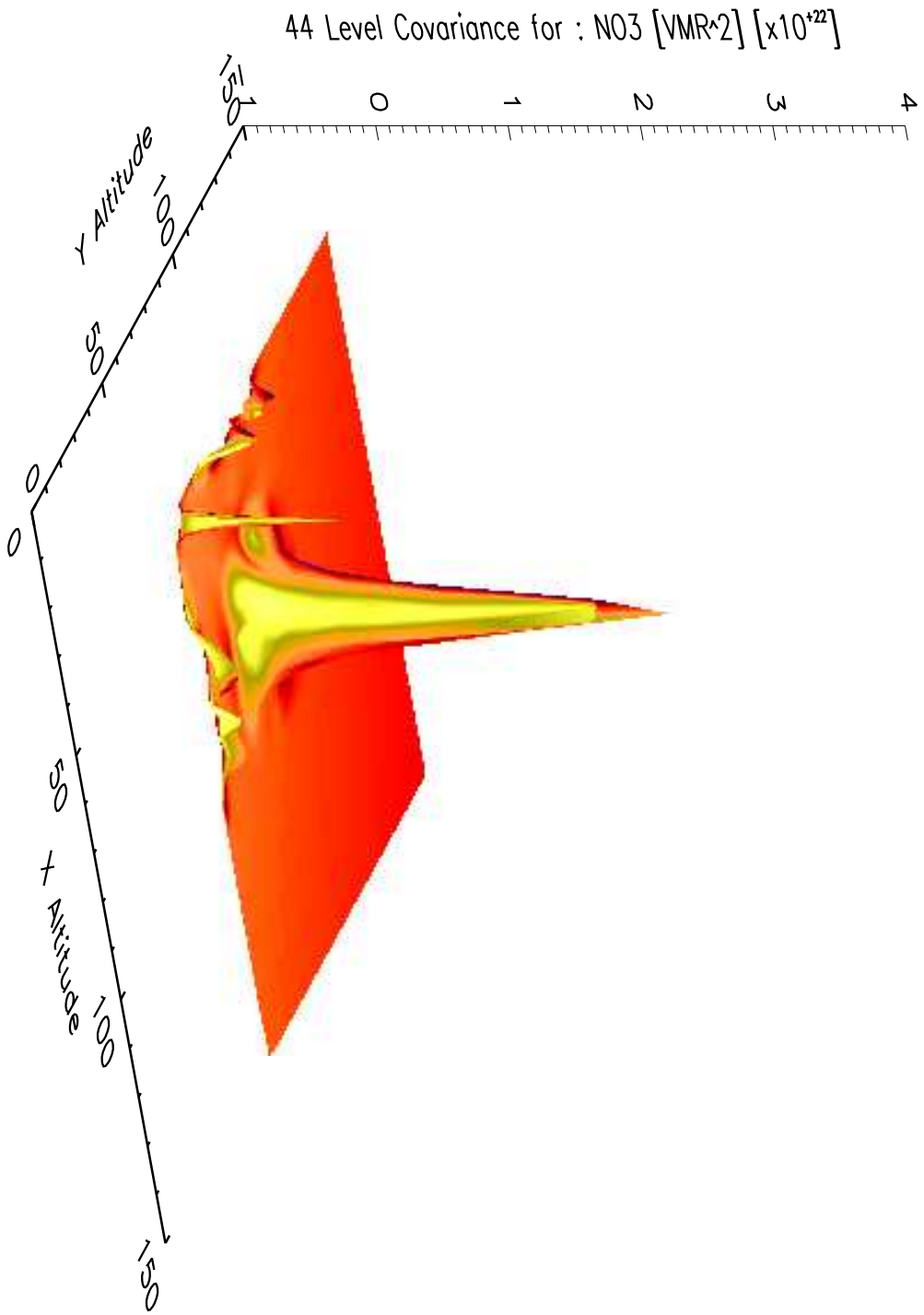

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
Altitude
120
100
80
60
40
20
0
10^{-20}
10^{-18}
10^{-16}
10^{-14}
10^{-12}
10^{-10}
10^{-8}
Mixing Ratio


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 20 40 60 80 100
%


45 Layer Covariance for : NO3 [VMR^2] [x10+22]
−0.029
0.412
0.853
1.293
1.734
2.175
2.616
3.056
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


45 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


44 Level Covariance for : NO3 [VMR^2] [x10^+22]
−0.033
0.403
0.839
1.275
1.710
2.146
2.582
3.018
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


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