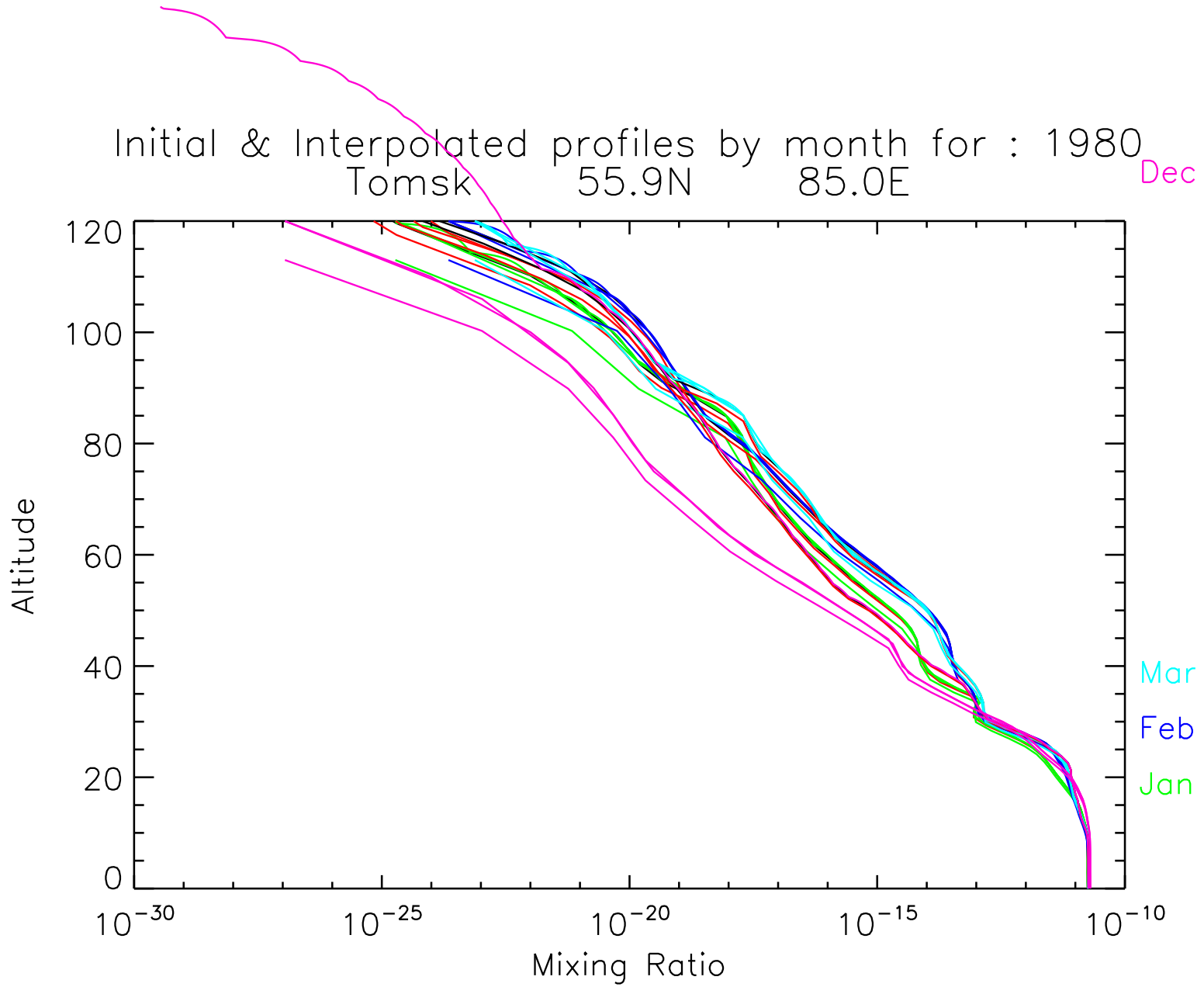
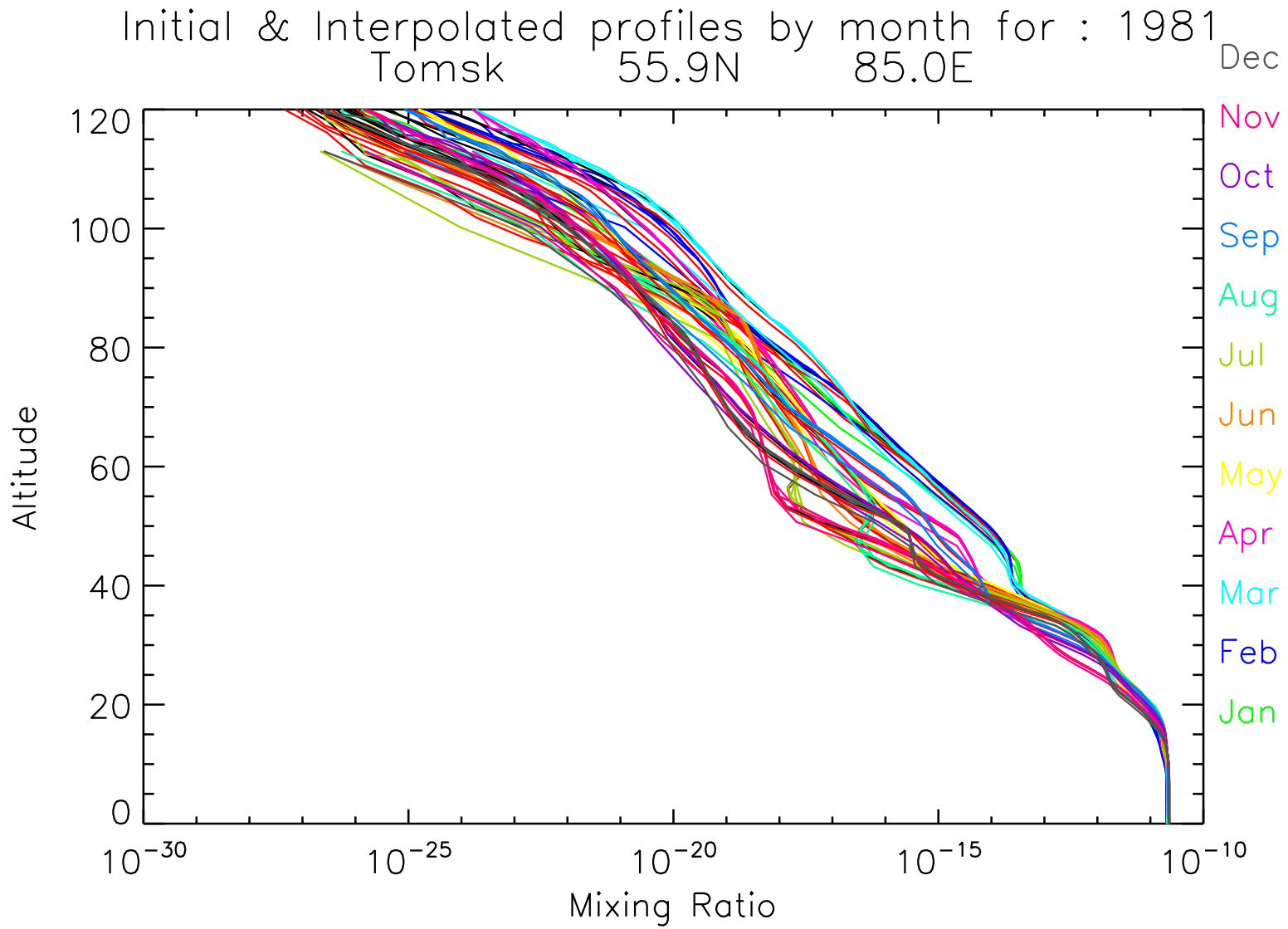
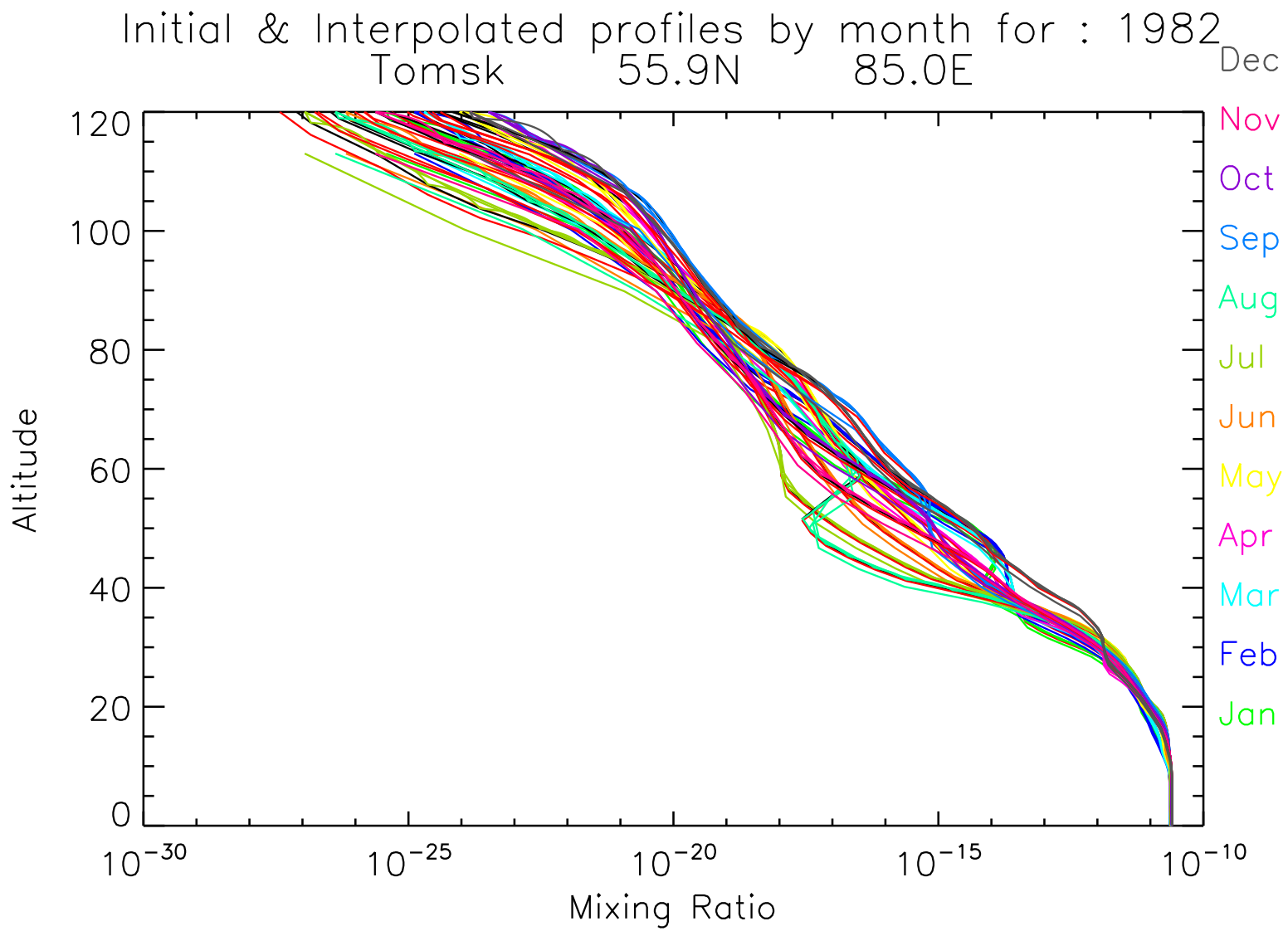
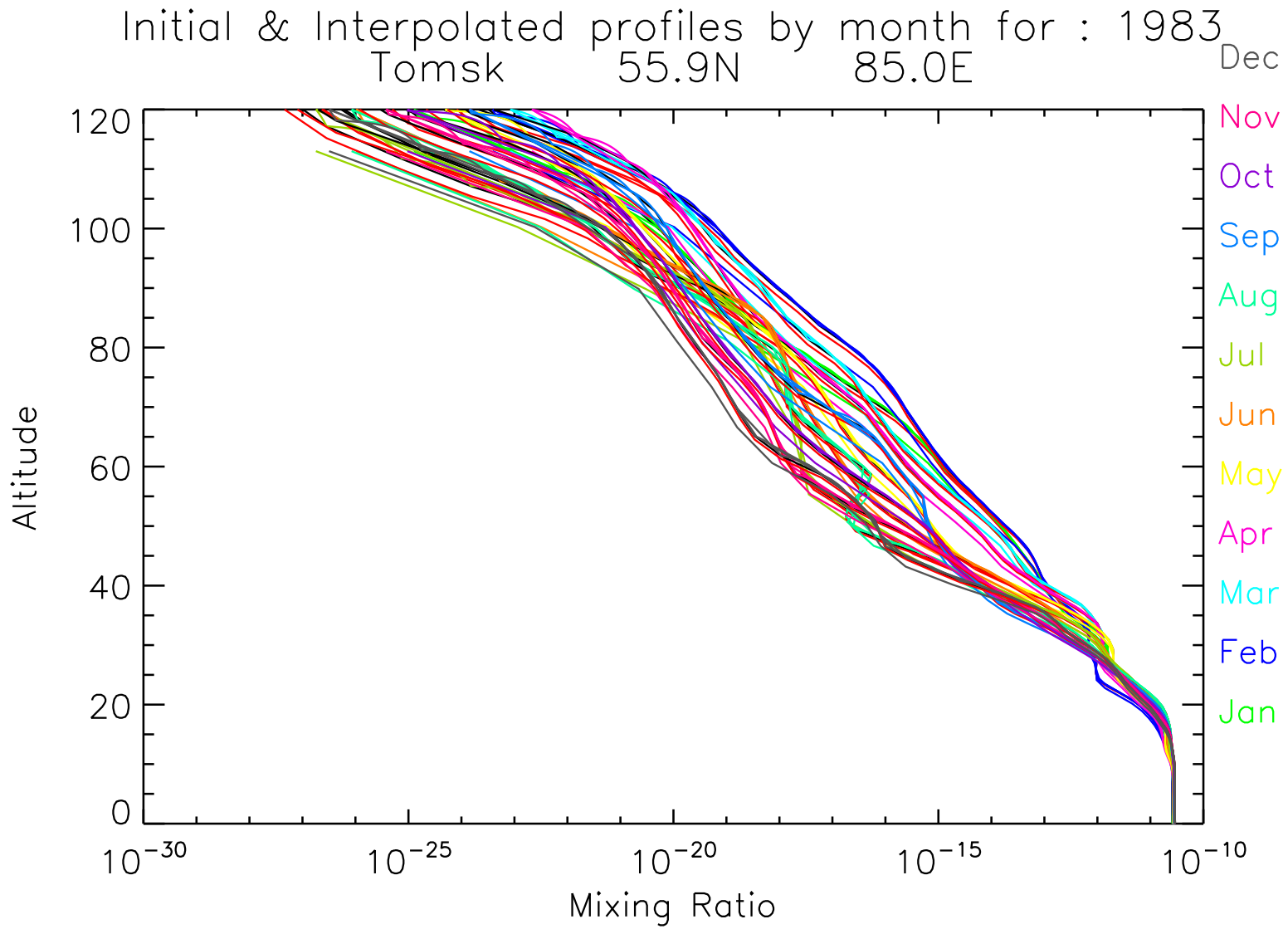
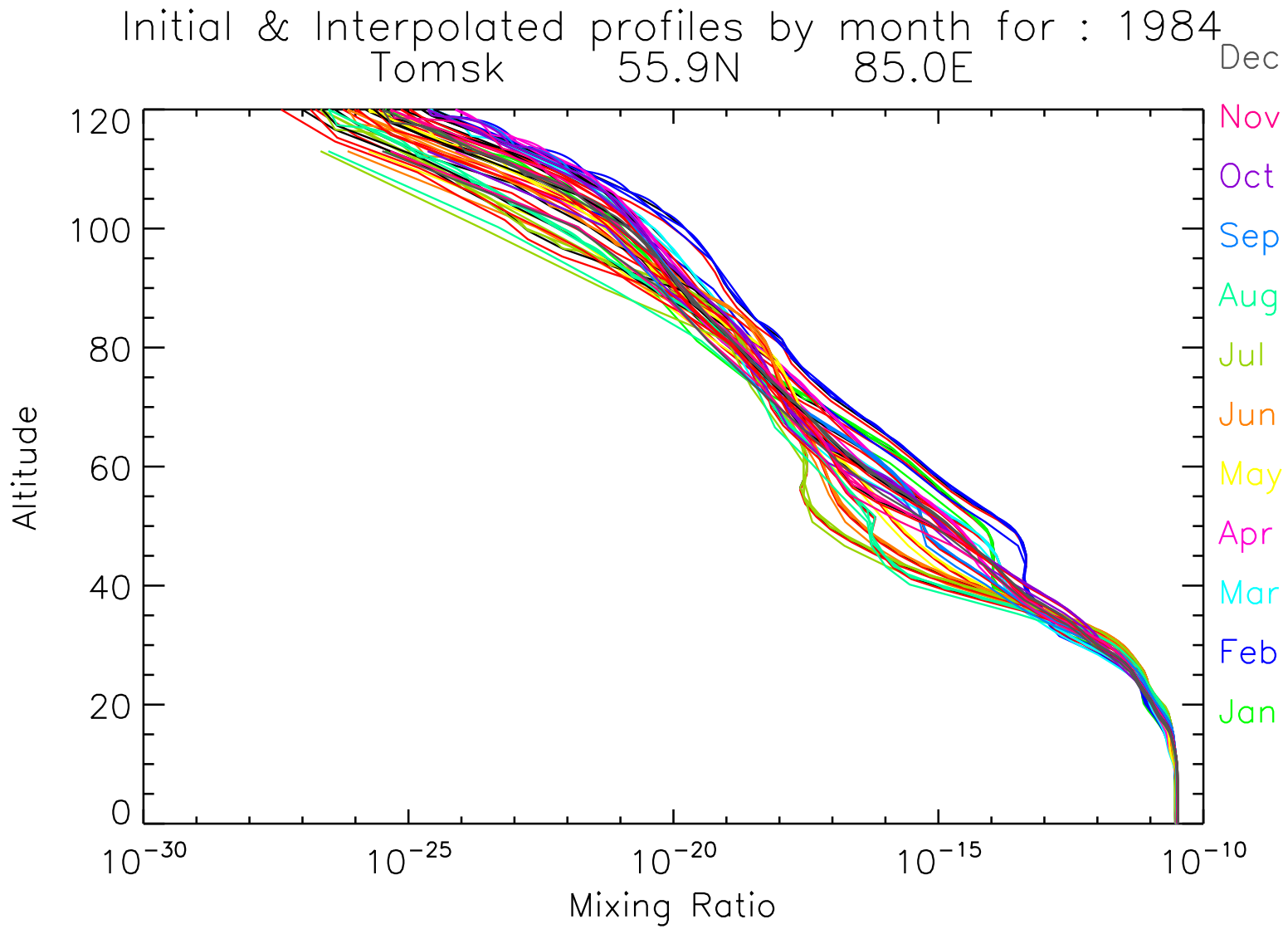
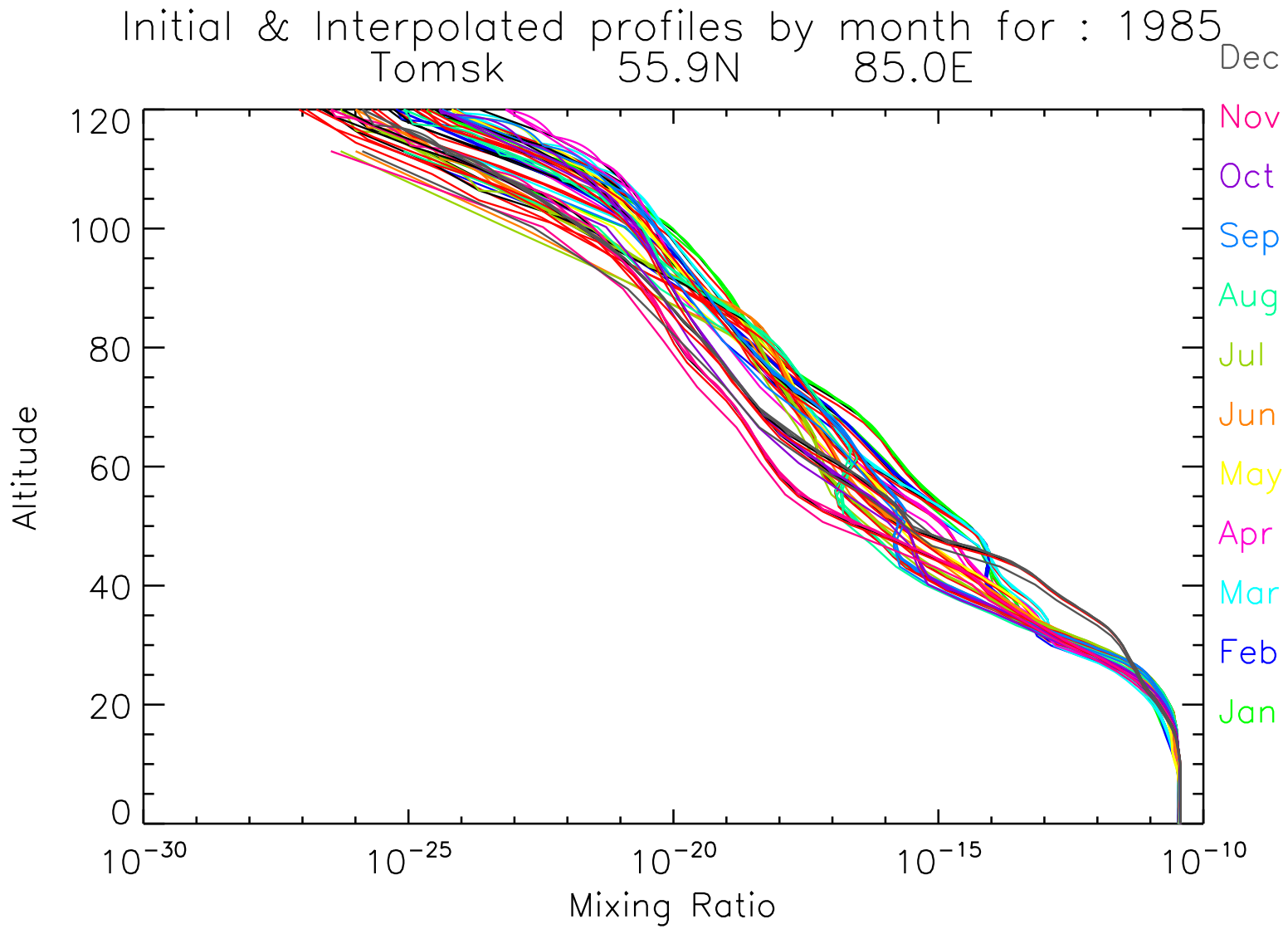

Initial & Interpolated profiles by month for : 1980
Tomsk 55.9N 85.0E
Dec
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

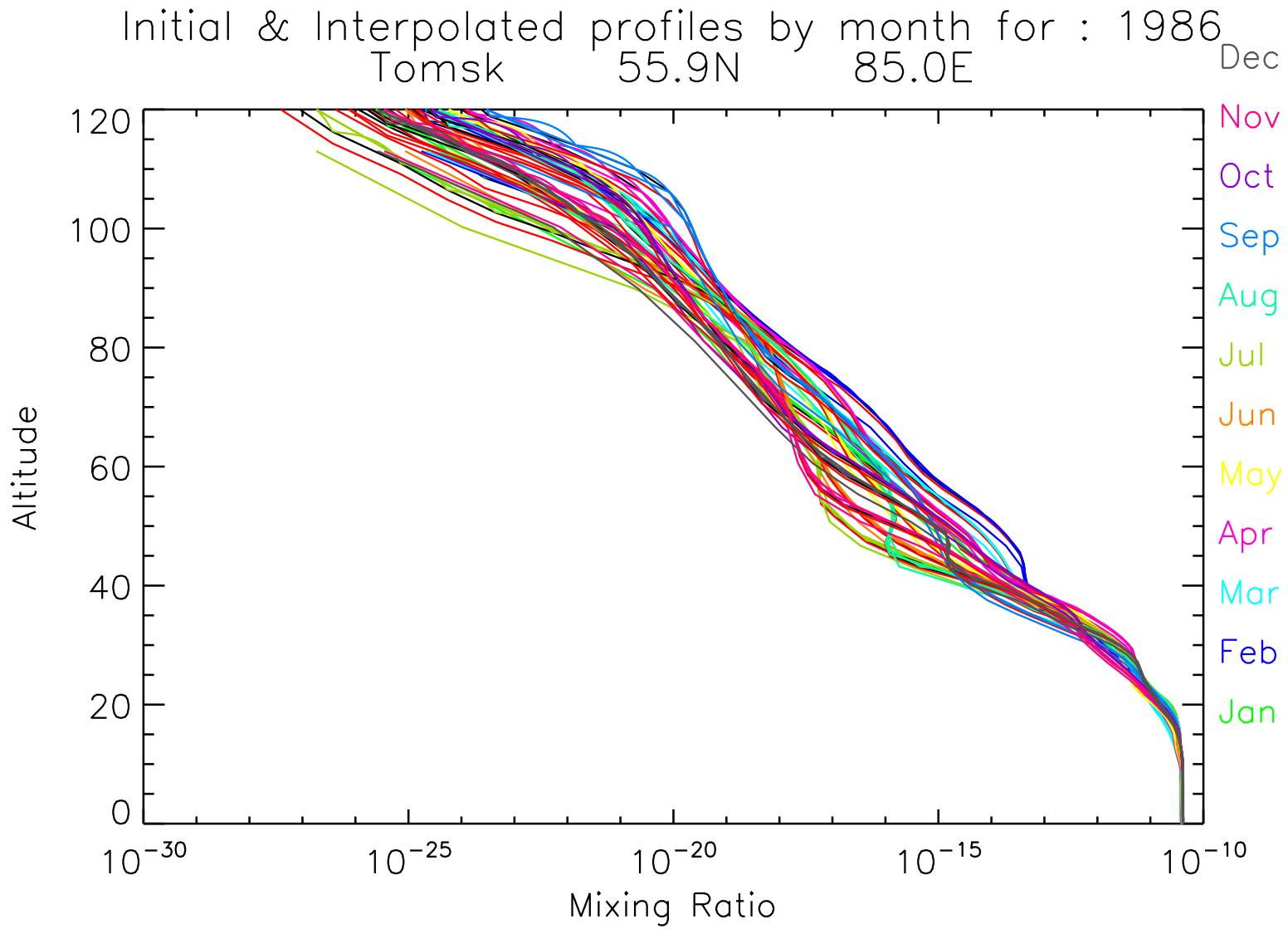

Initial & Interpolated profiles by month for : 1981
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

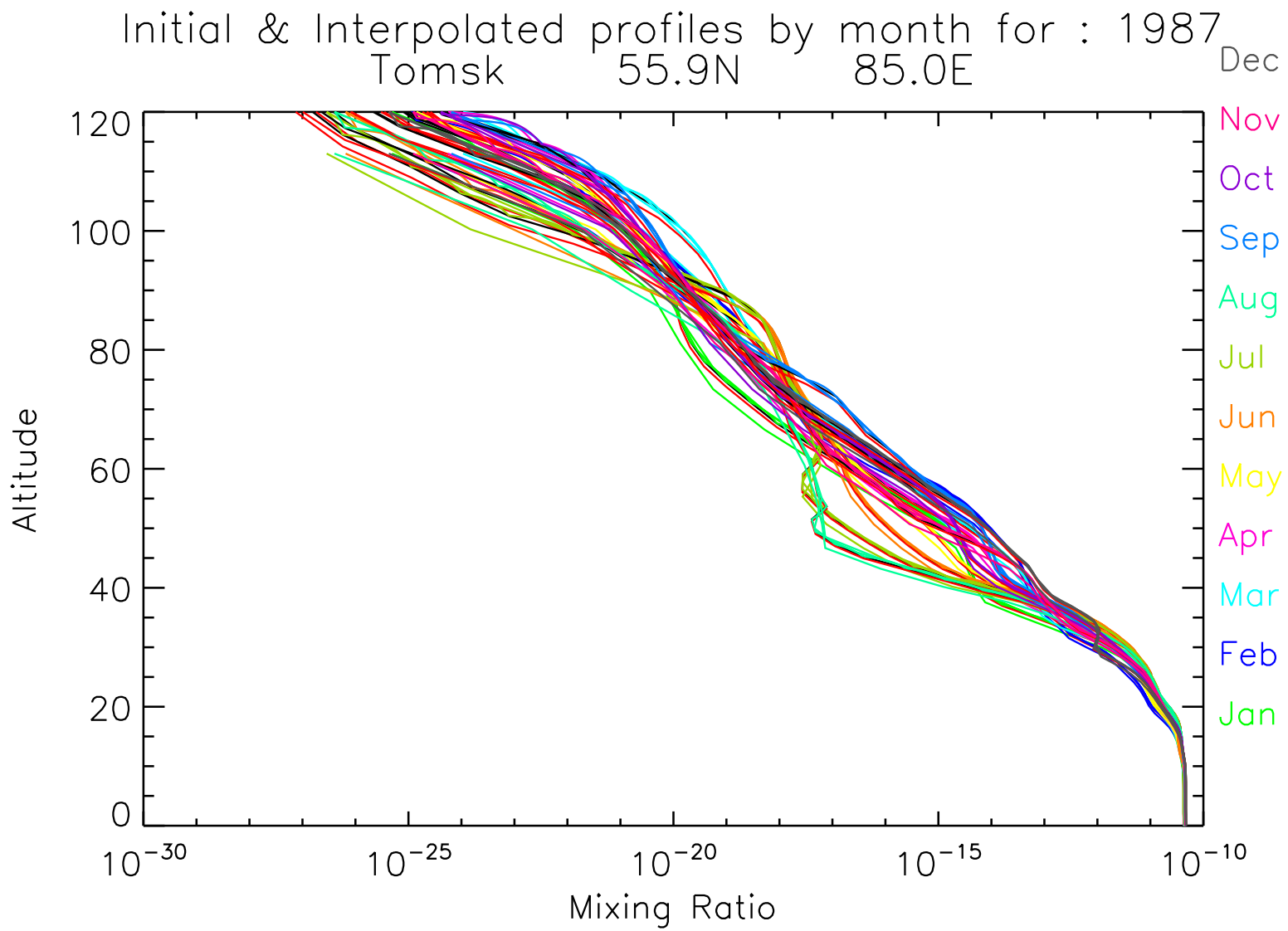

Initial & Interpolated profiles by month for : 1982
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

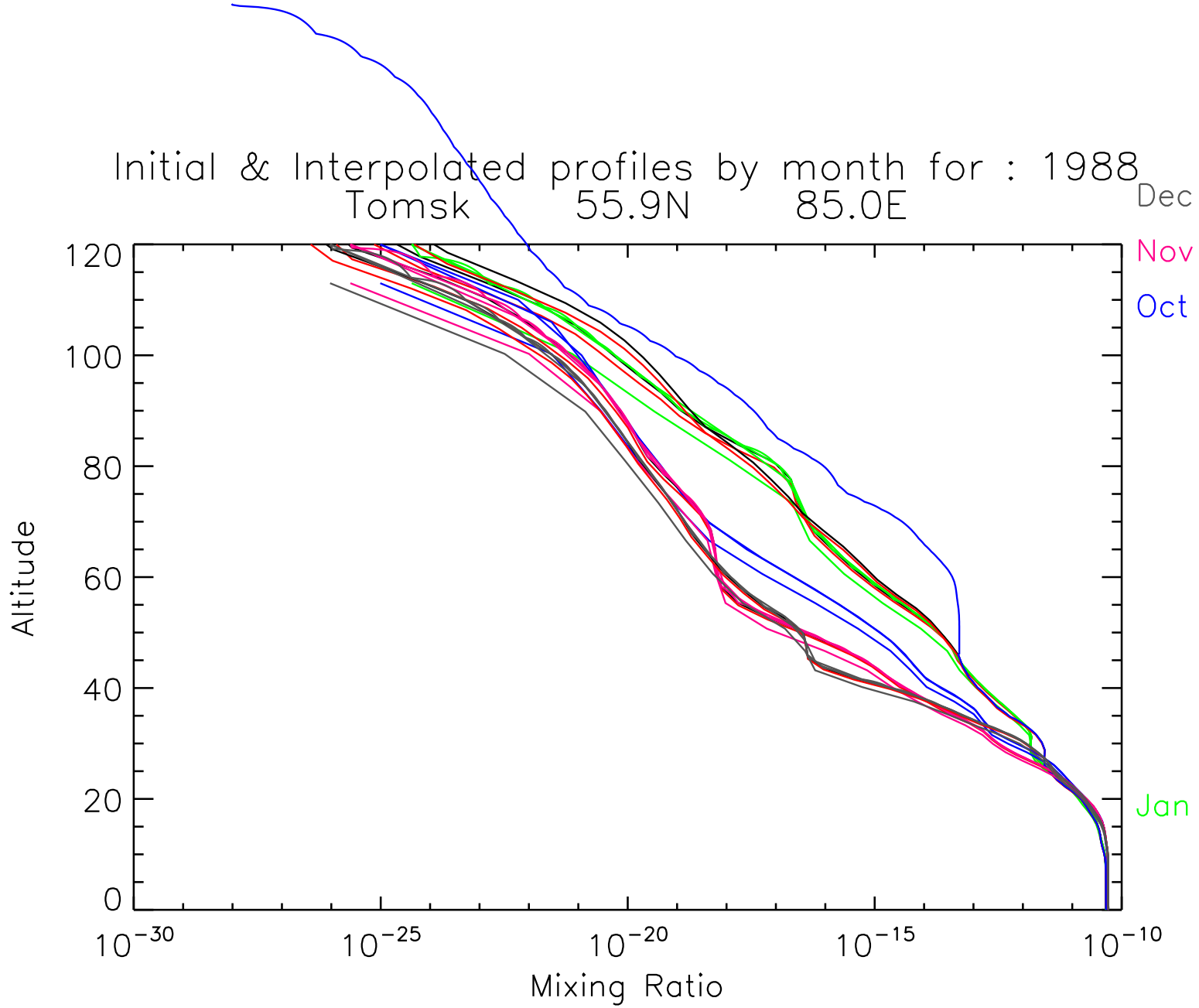

Initial & Interpolated profiles by month for : 1983
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

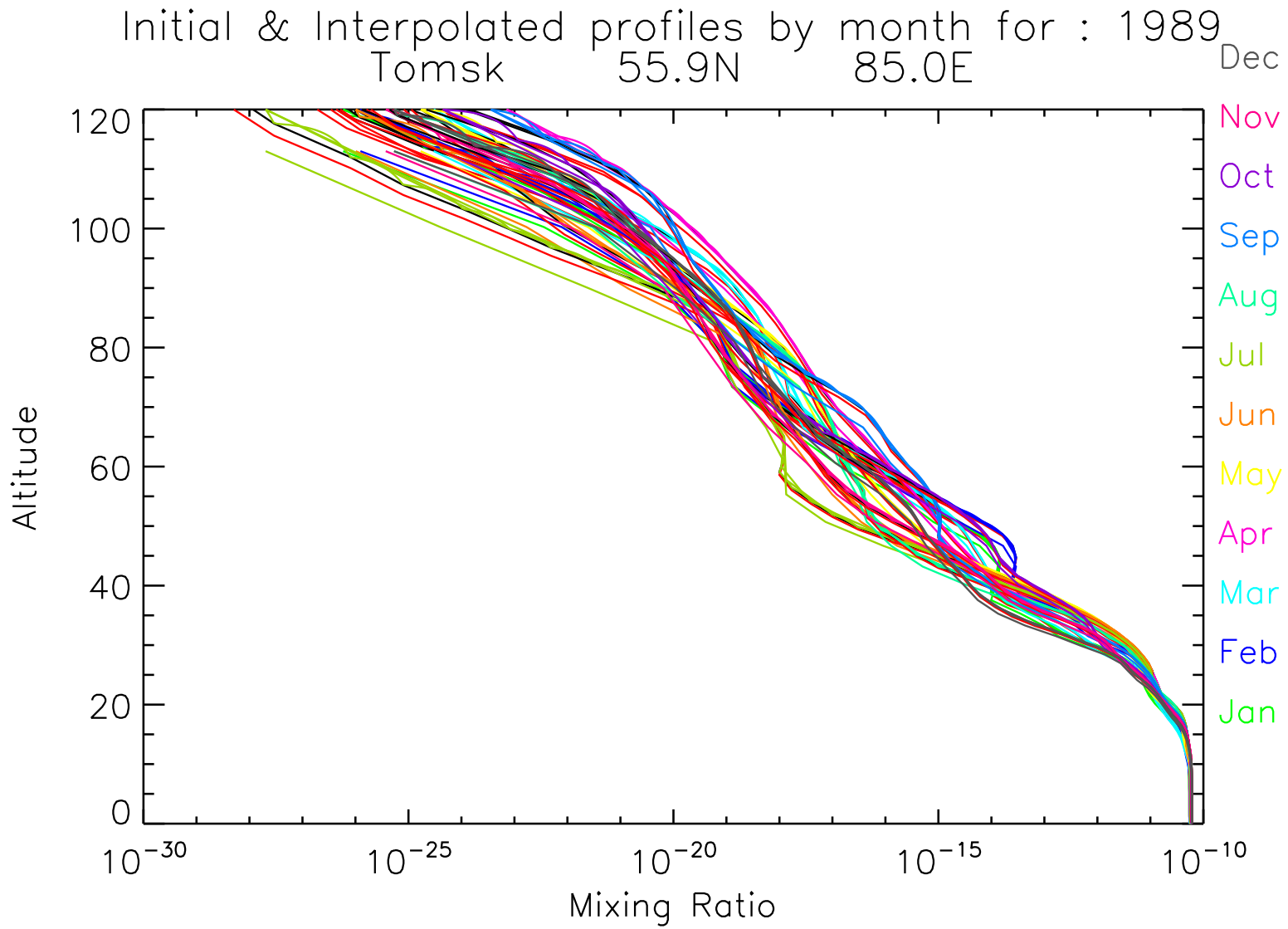

Initial & Interpolated profiles by month for : 1984
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

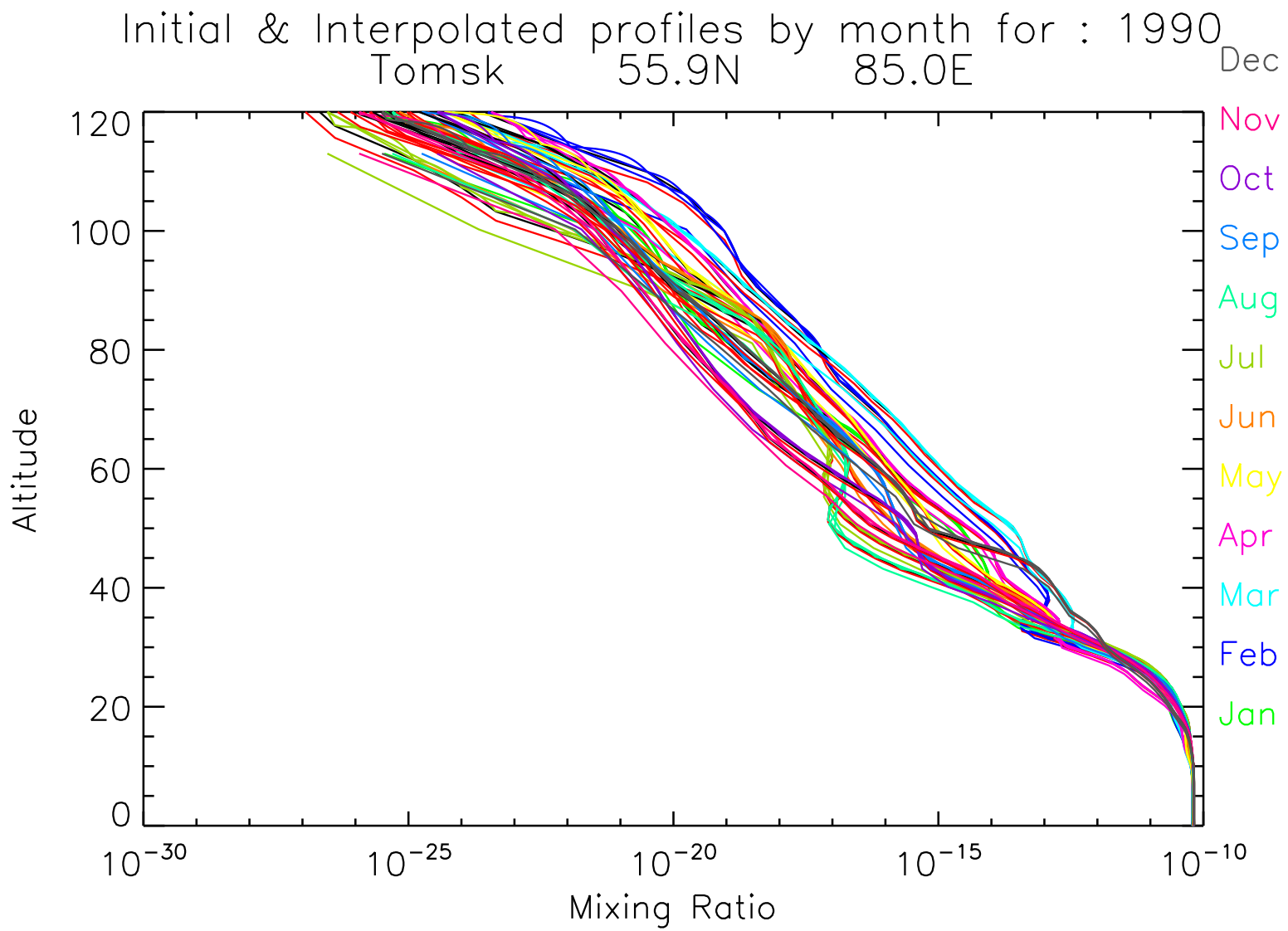

Initial & Interpolated profiles by month for : 1985
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

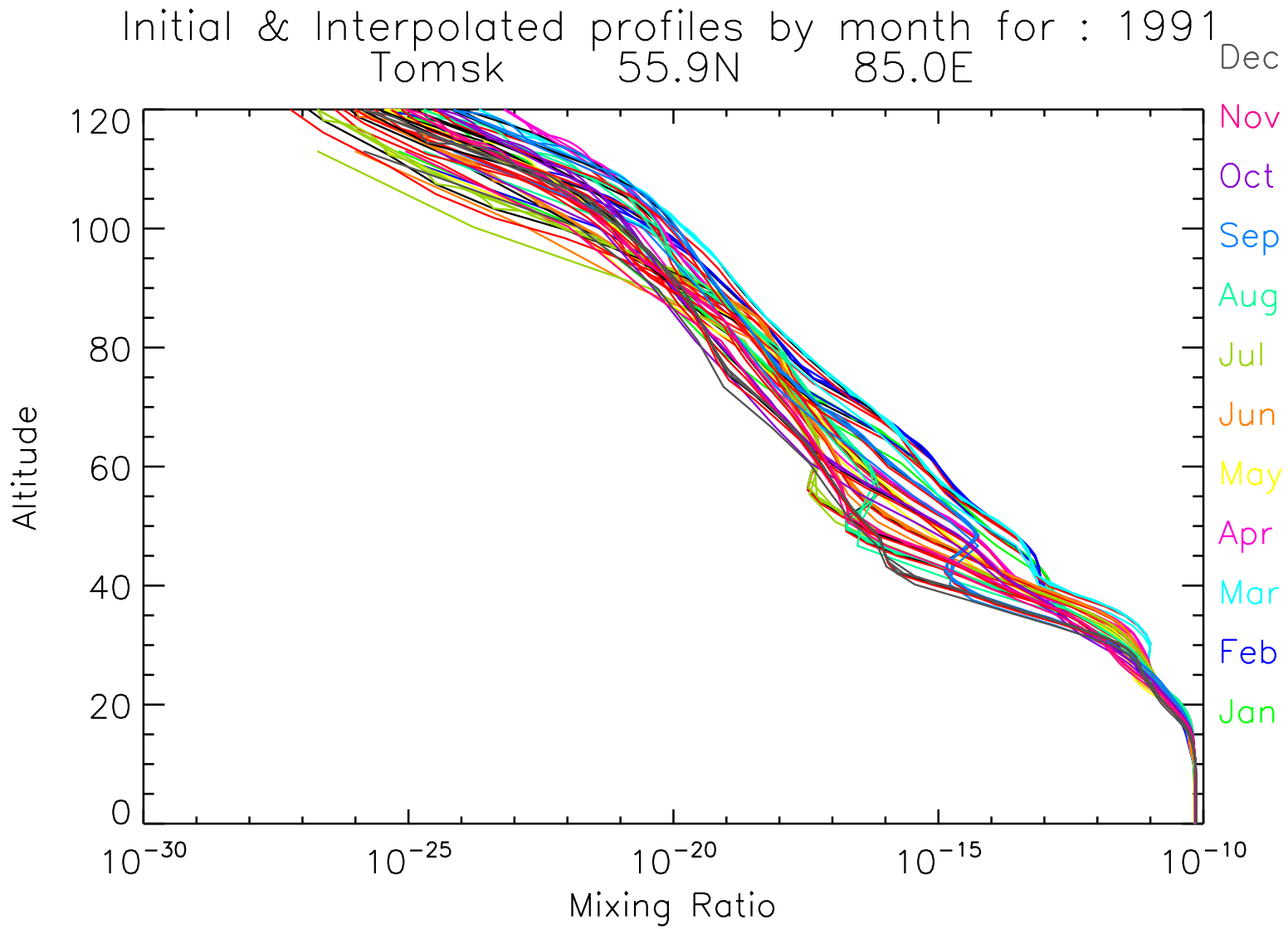

Initial & Interpolated profiles by month for : 1986
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

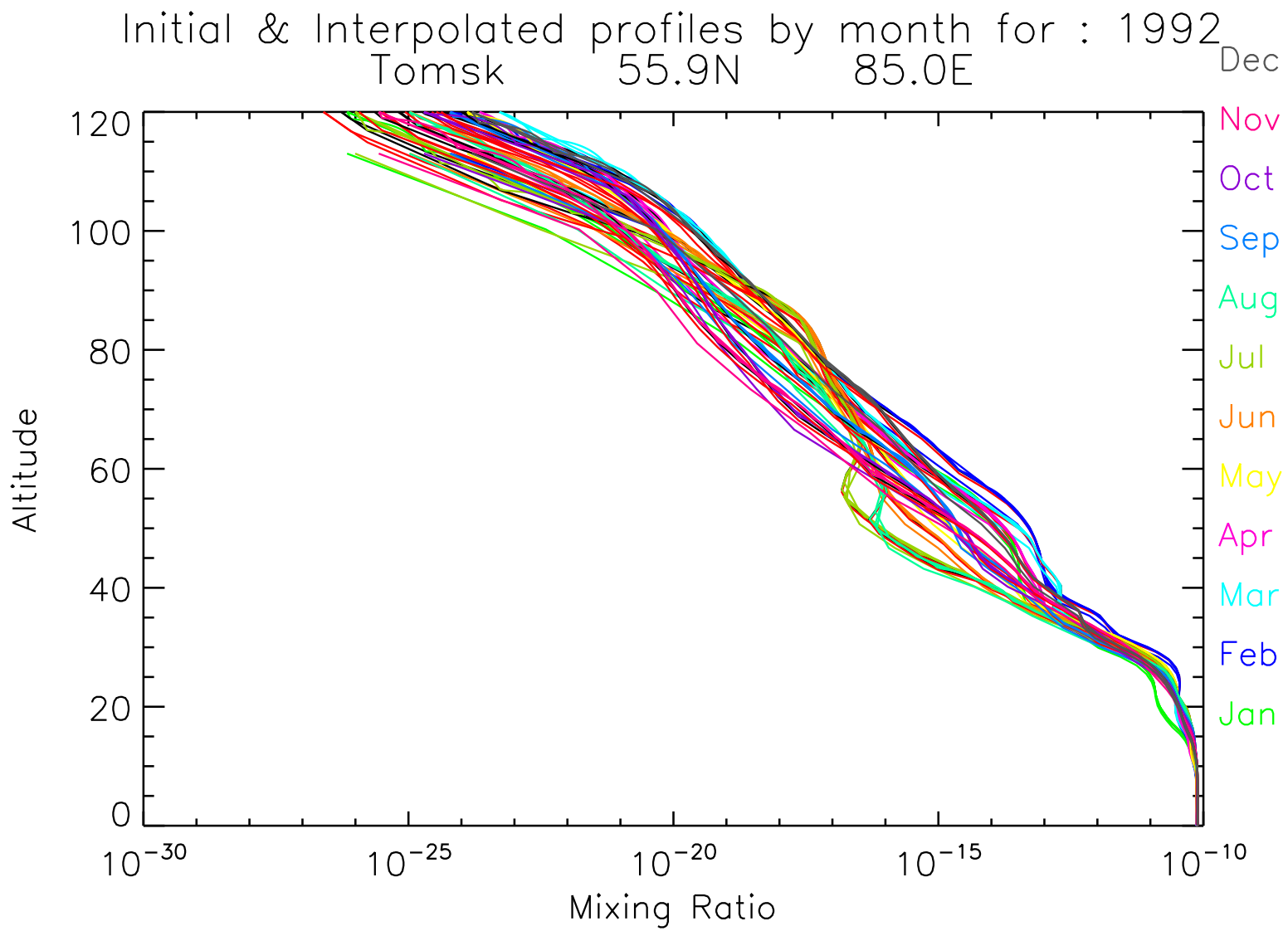

Initial & Interpolated profiles by month for : 1987
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

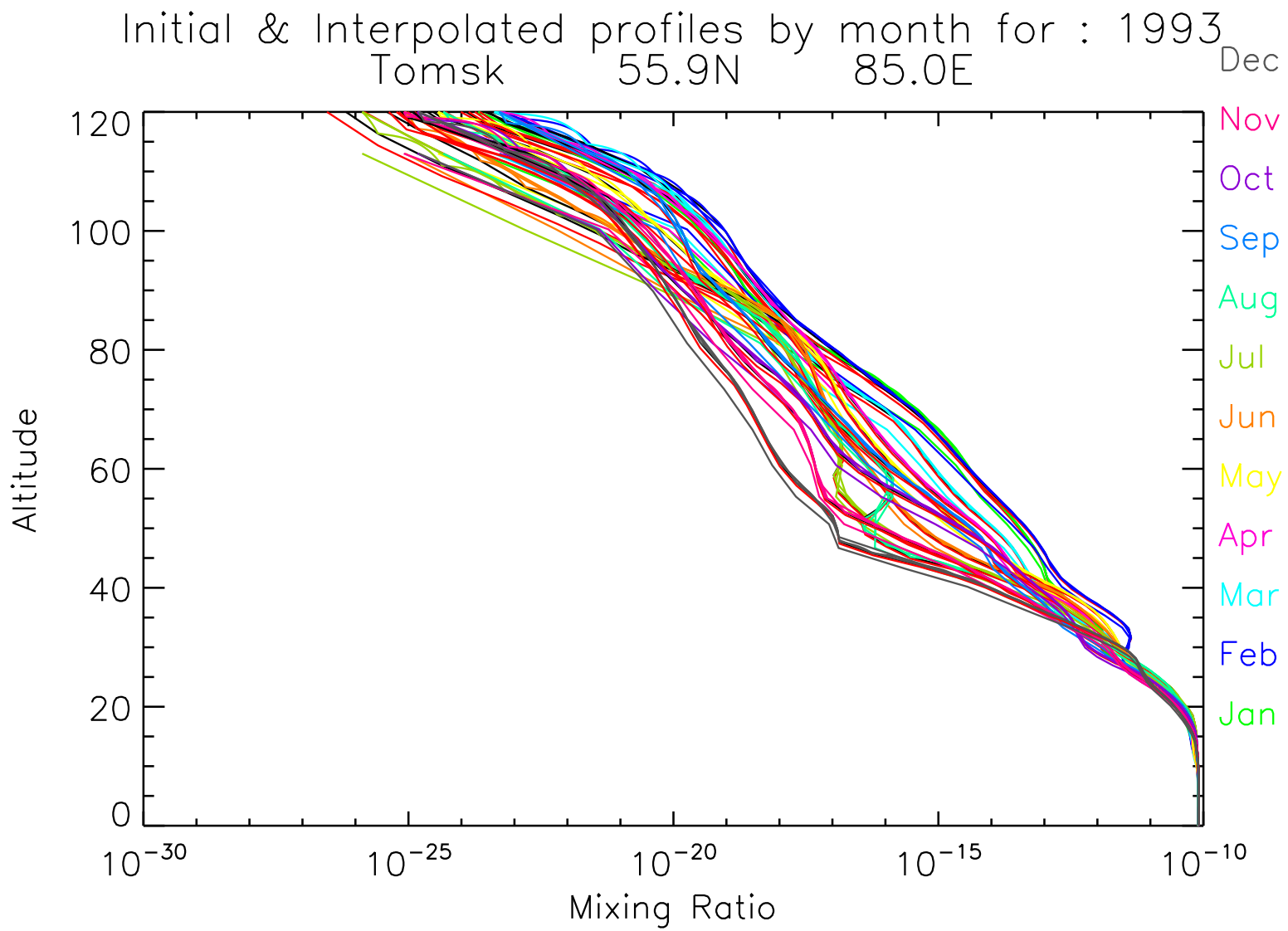

Initial & Interpolated profiles by month for : 1988
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

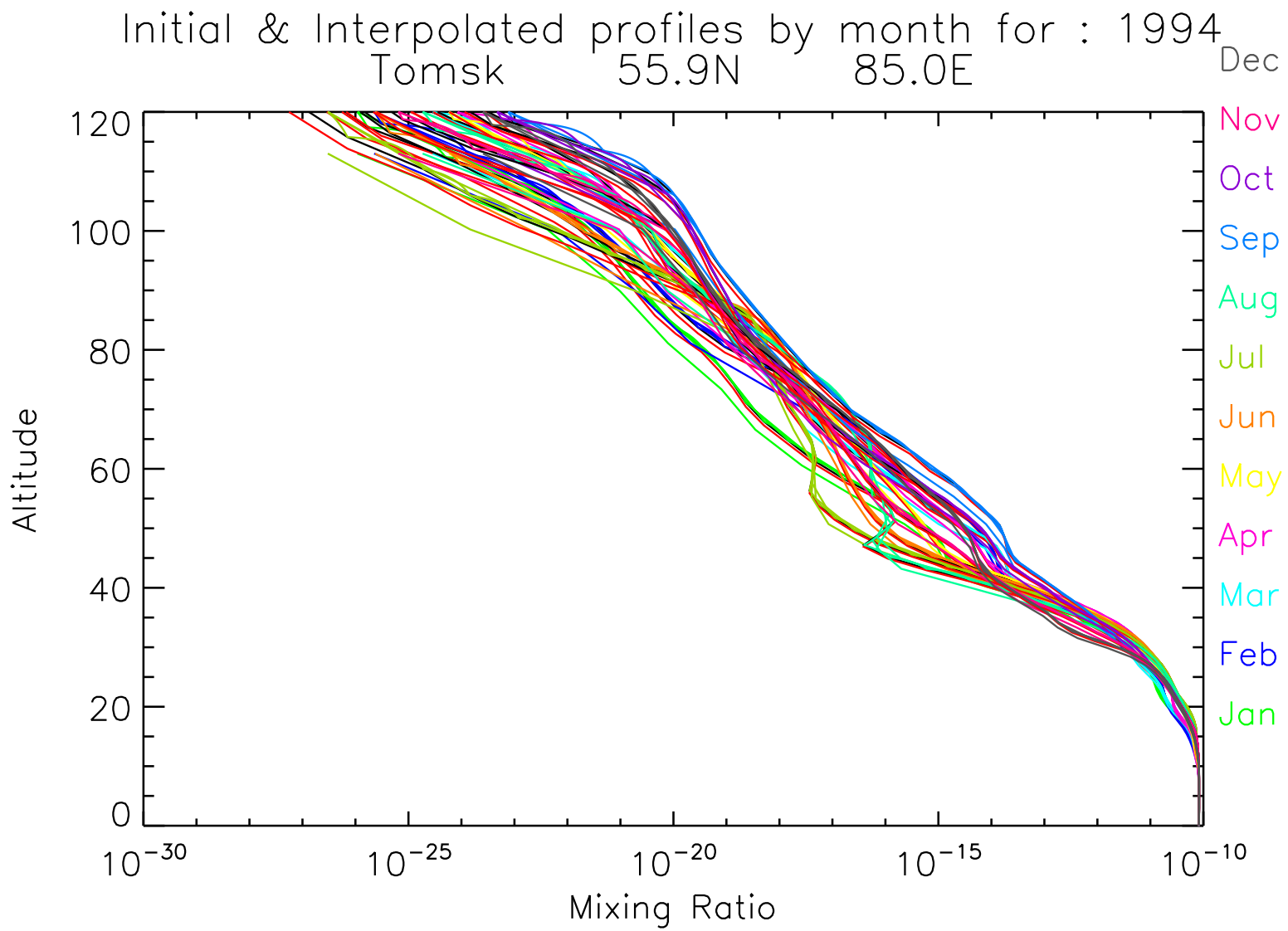

Initial & Interpolated profiles by month for : 1989
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

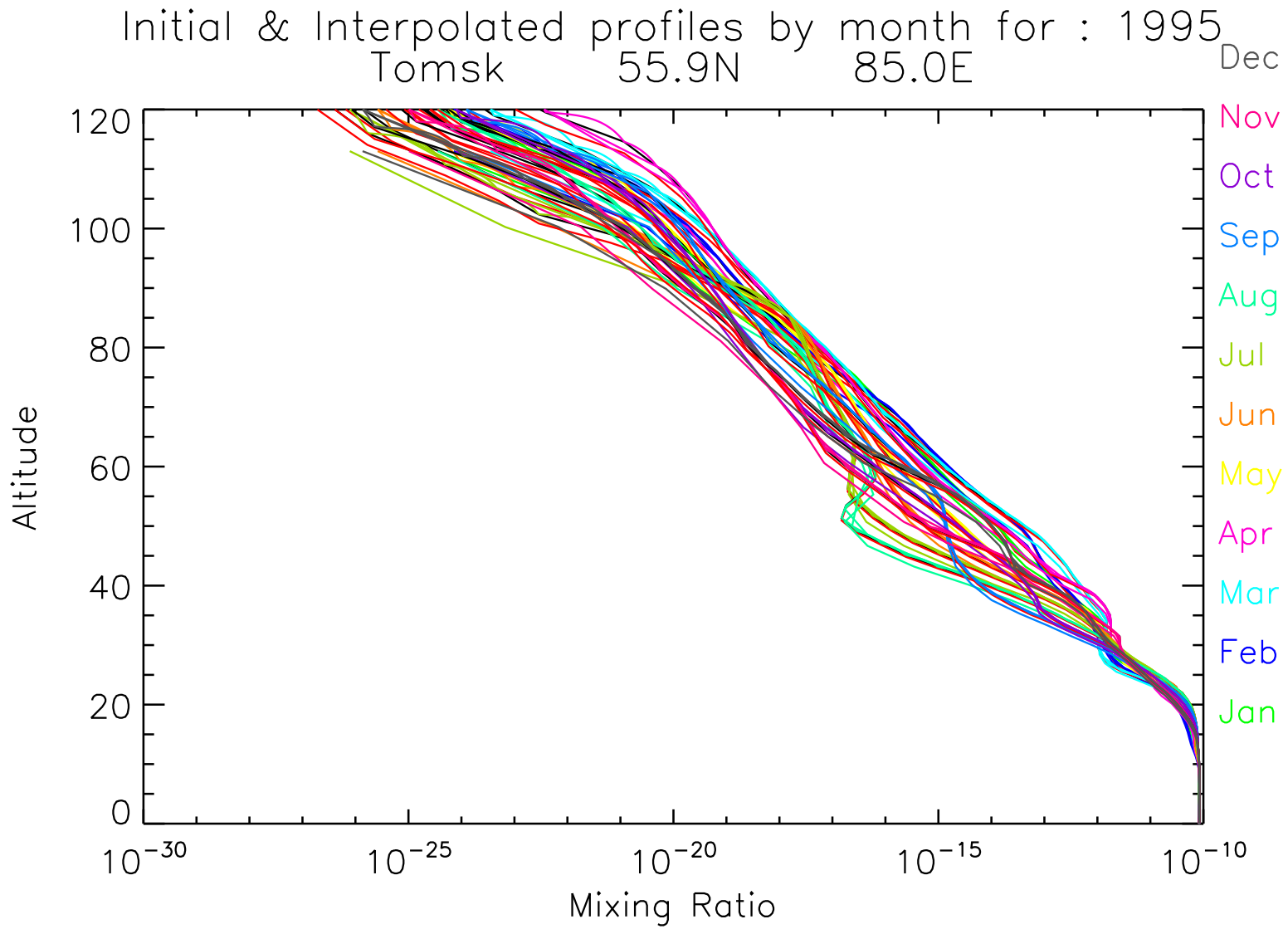

Initial & Interpolated profiles by month for : 1990
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

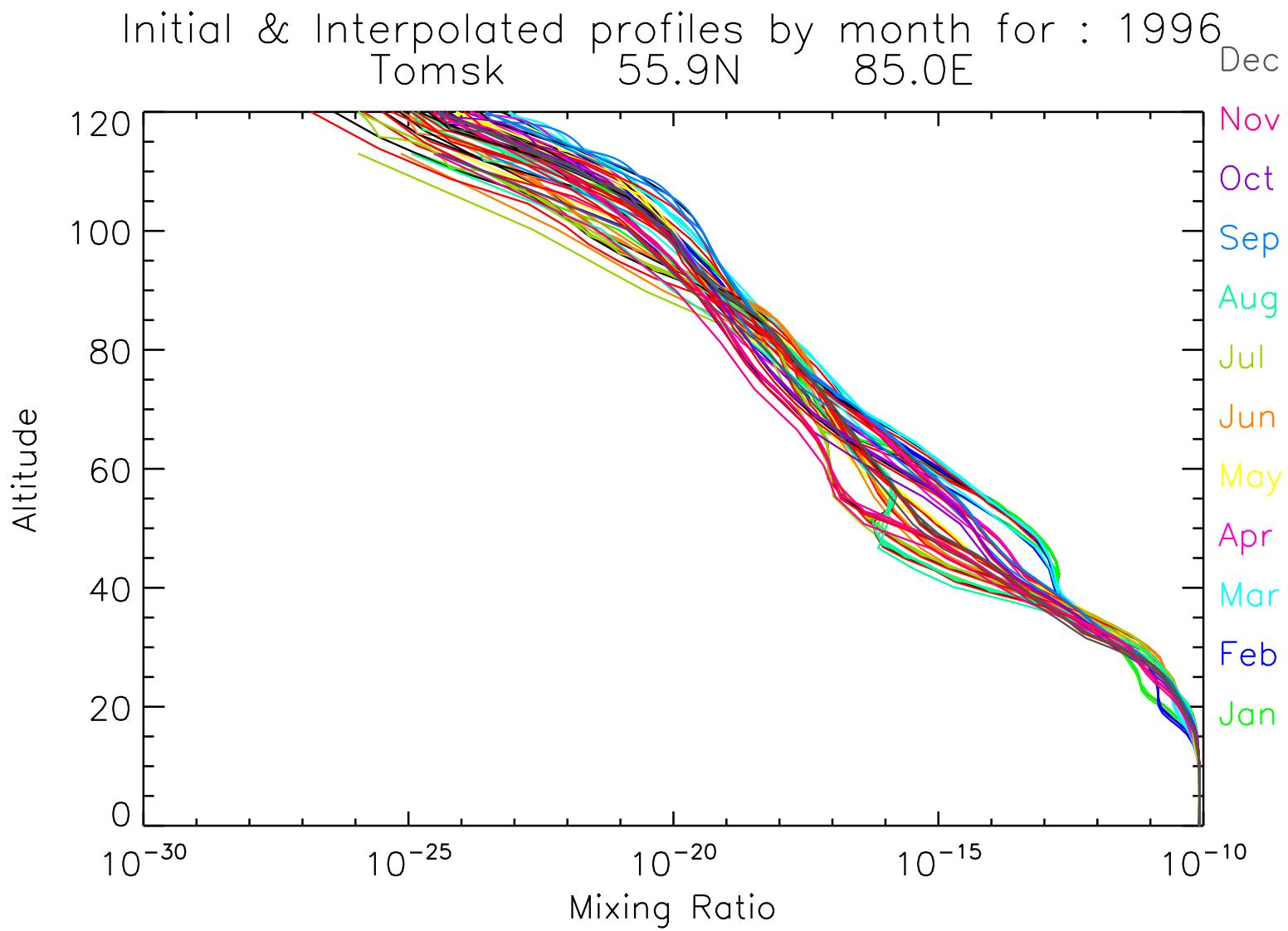

Initial & Interpolated profiles by month for : 1991
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

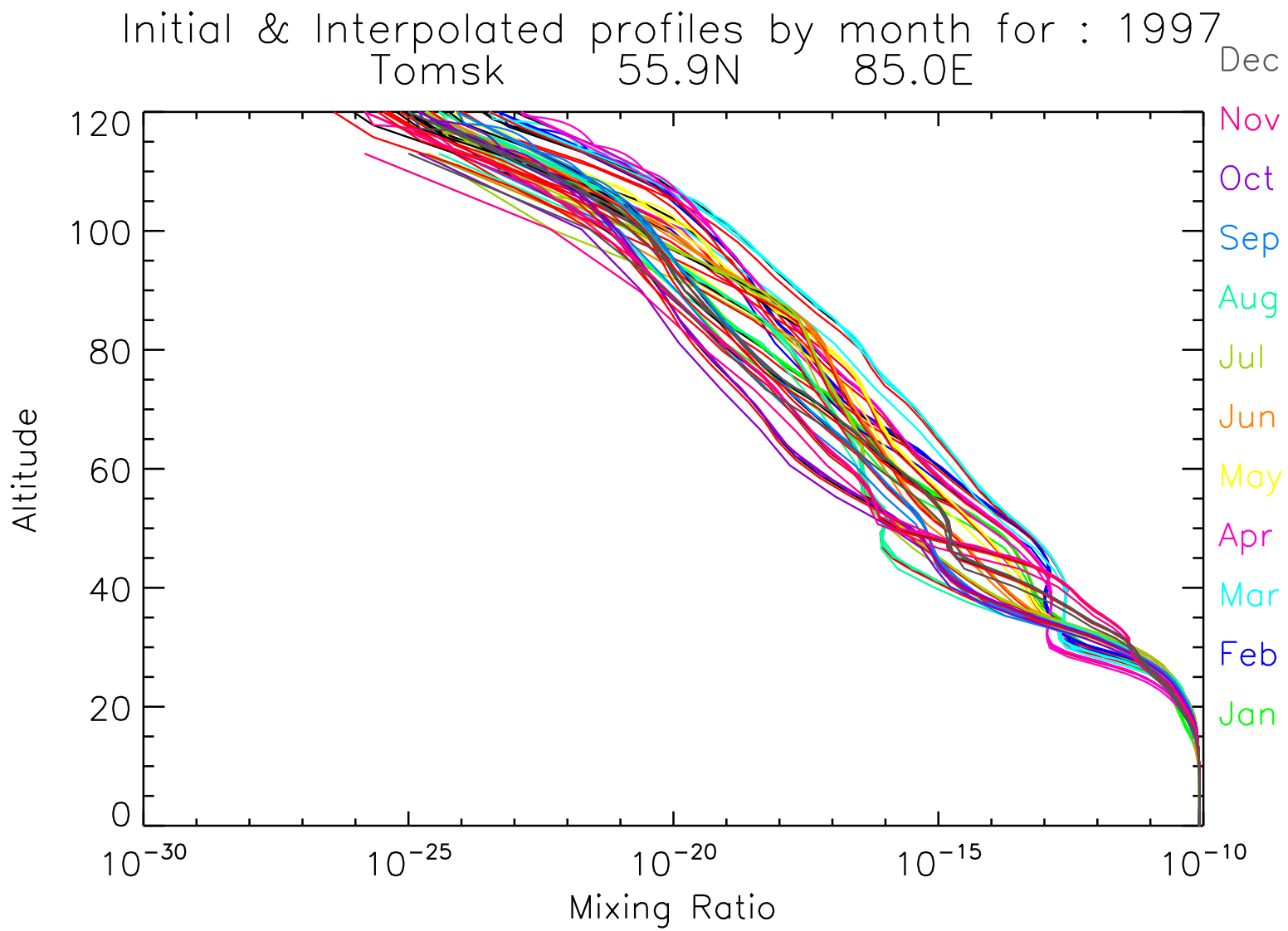

Initial & Interpolated profiles by month for : 1992
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

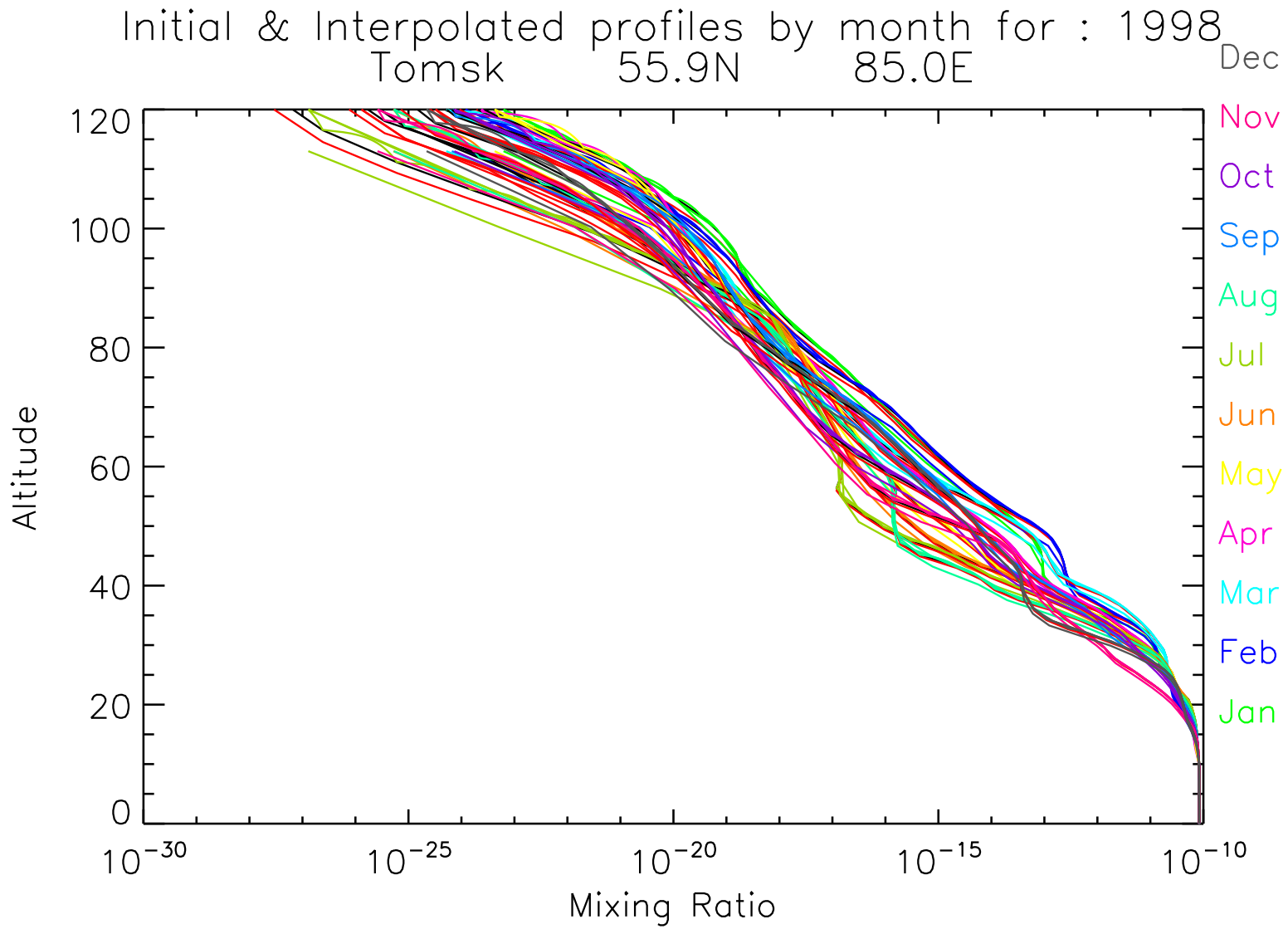

Initial & Interpolated profiles by month for : 1993
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

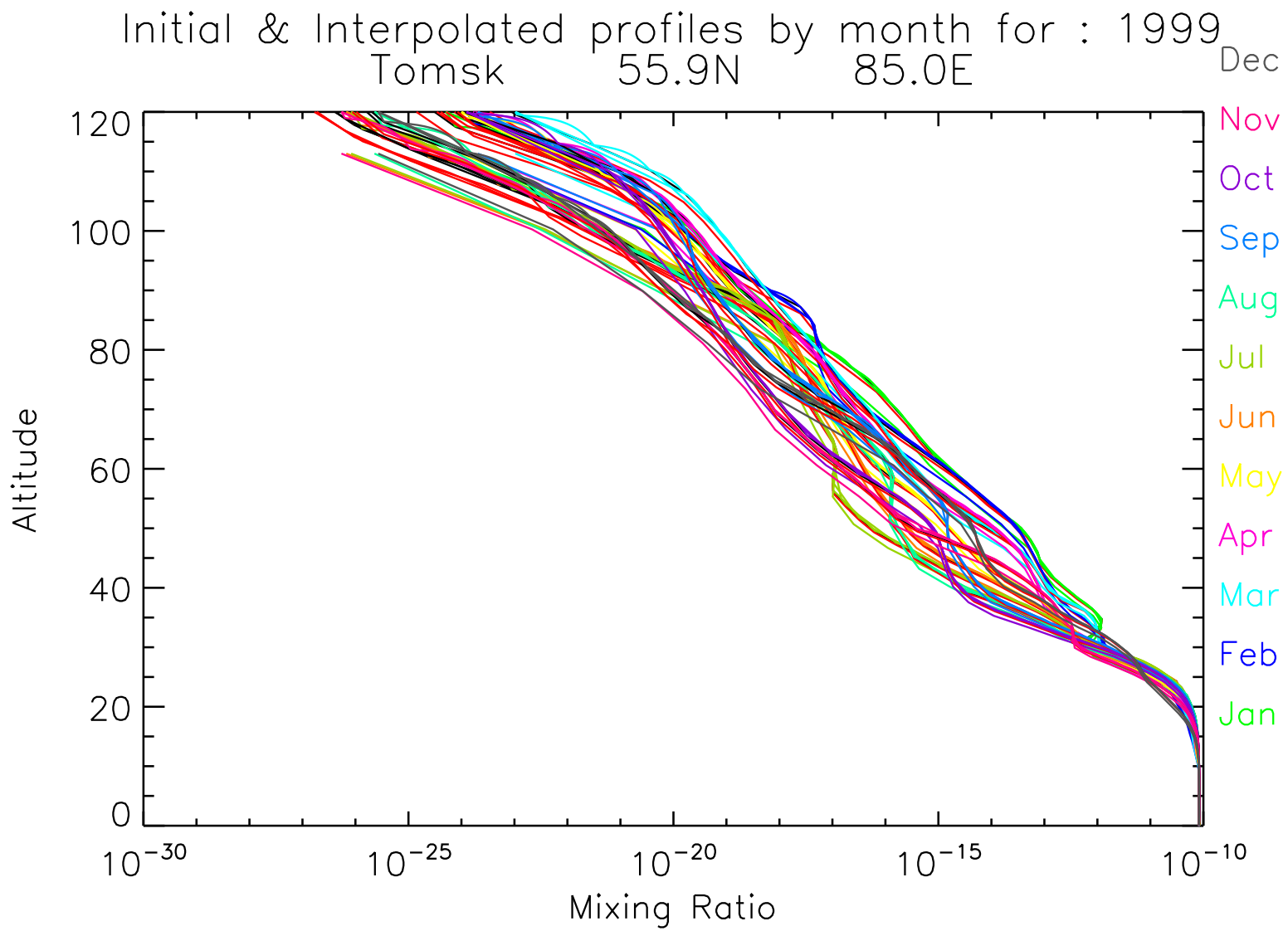

Initial & Interpolated profiles by month for : 1994
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

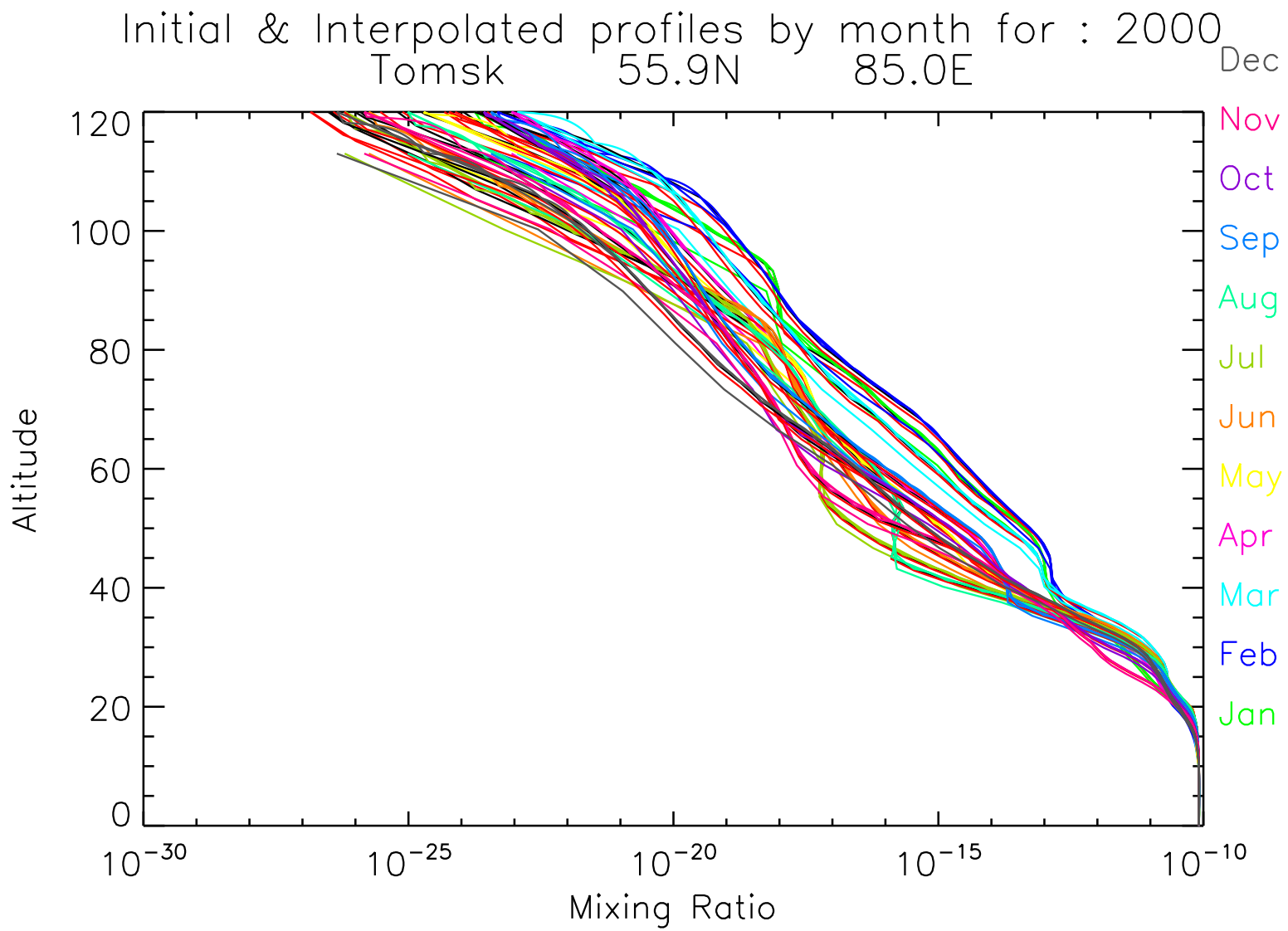

Initial & Interpolated profiles by month for : 1995
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

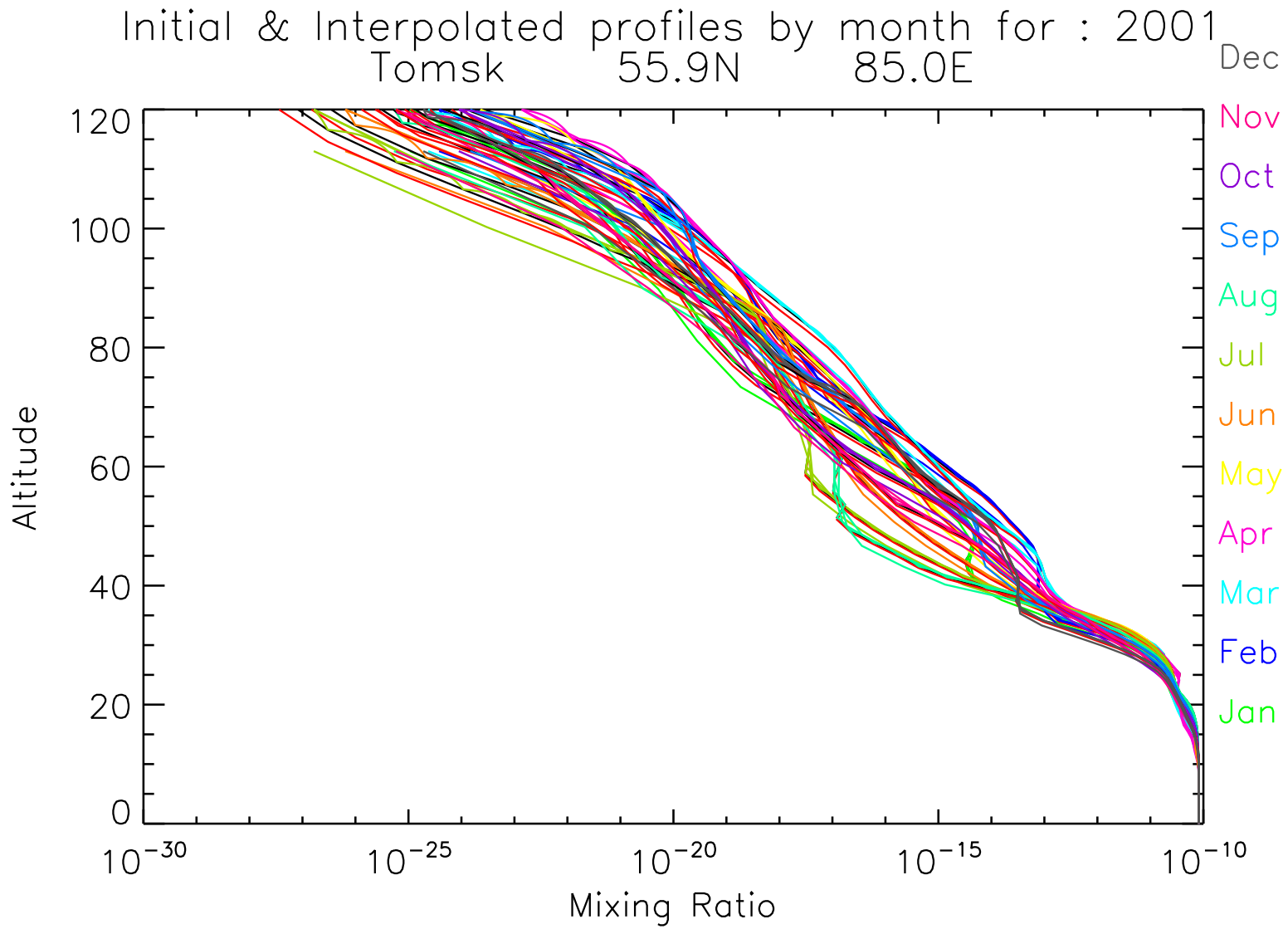

Initial & Interpolated profiles by month for : 1996
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

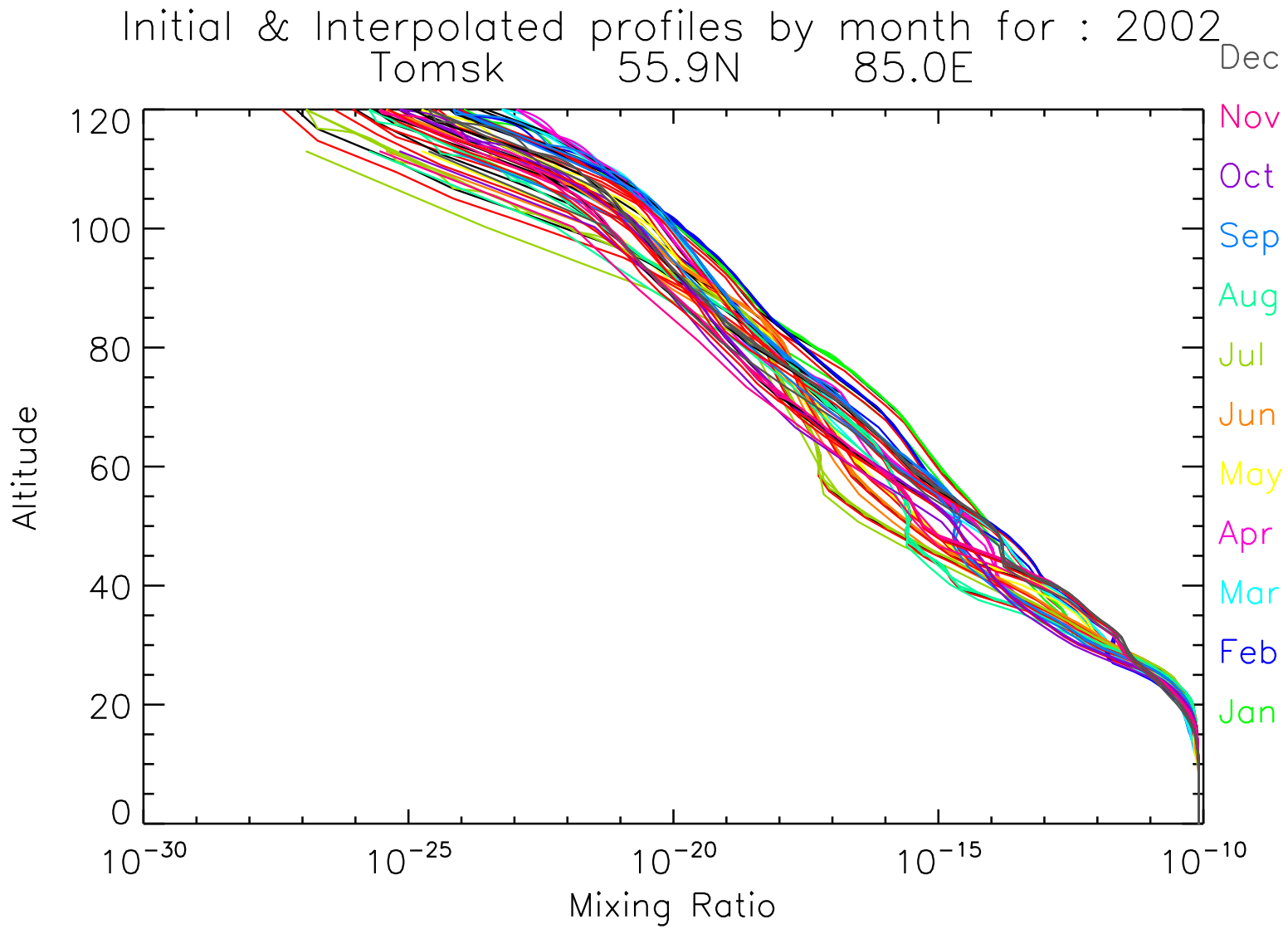

Initial & Interpolated profiles by month for : 1997
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

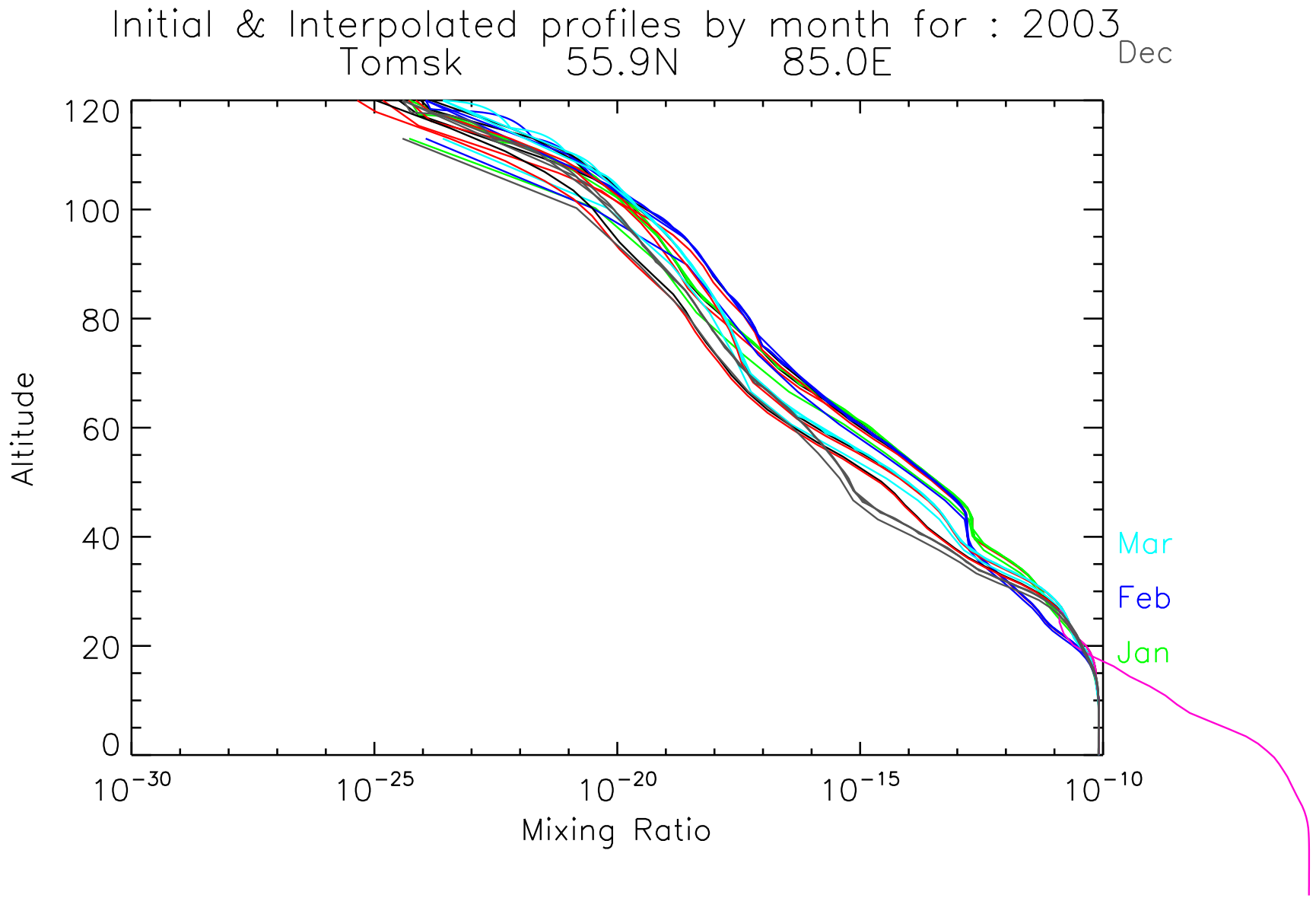

Initial & Interpolated profiles by month for : 1998
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

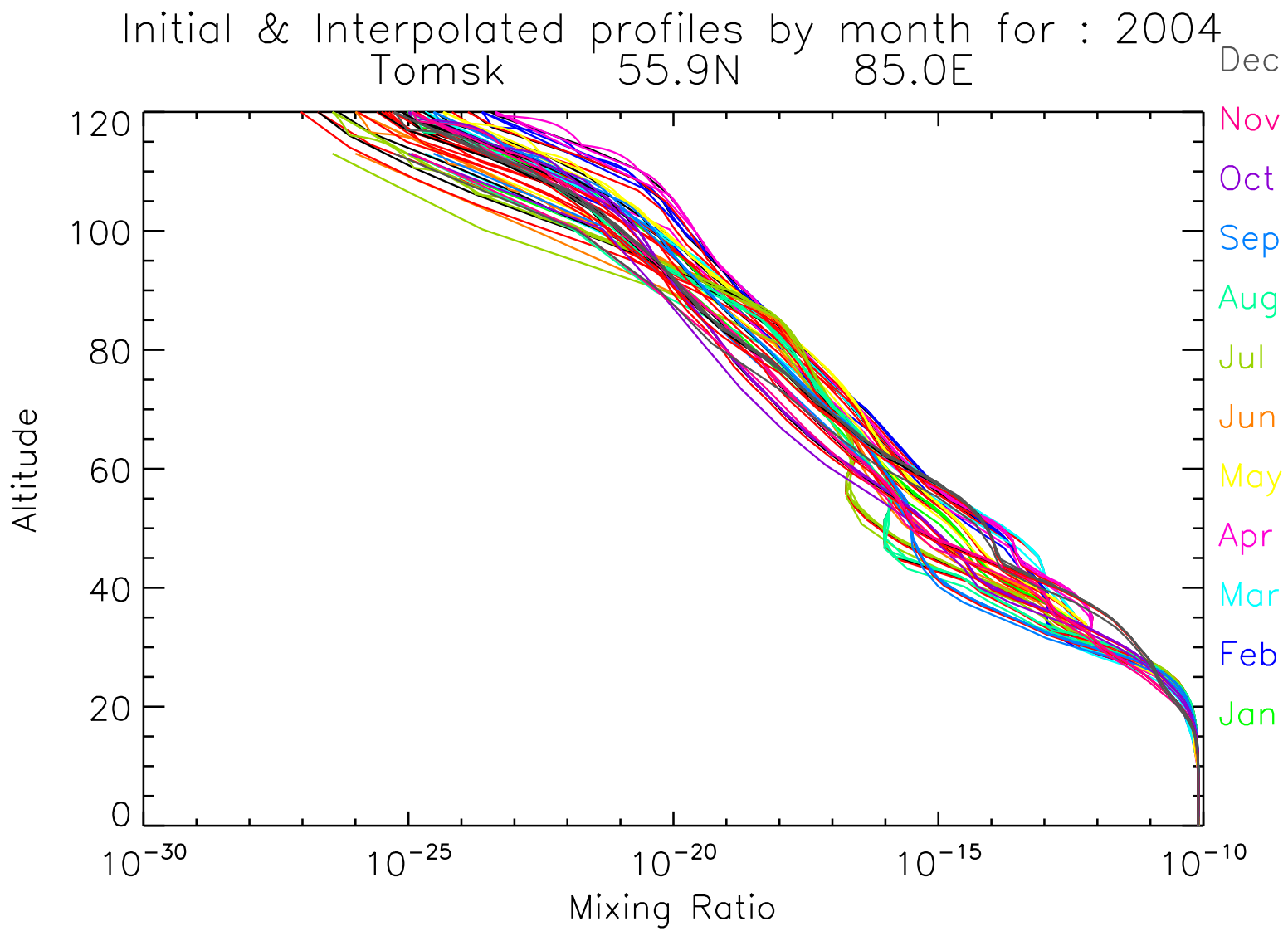

Initial & Interpolated profiles by month for : 1999
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

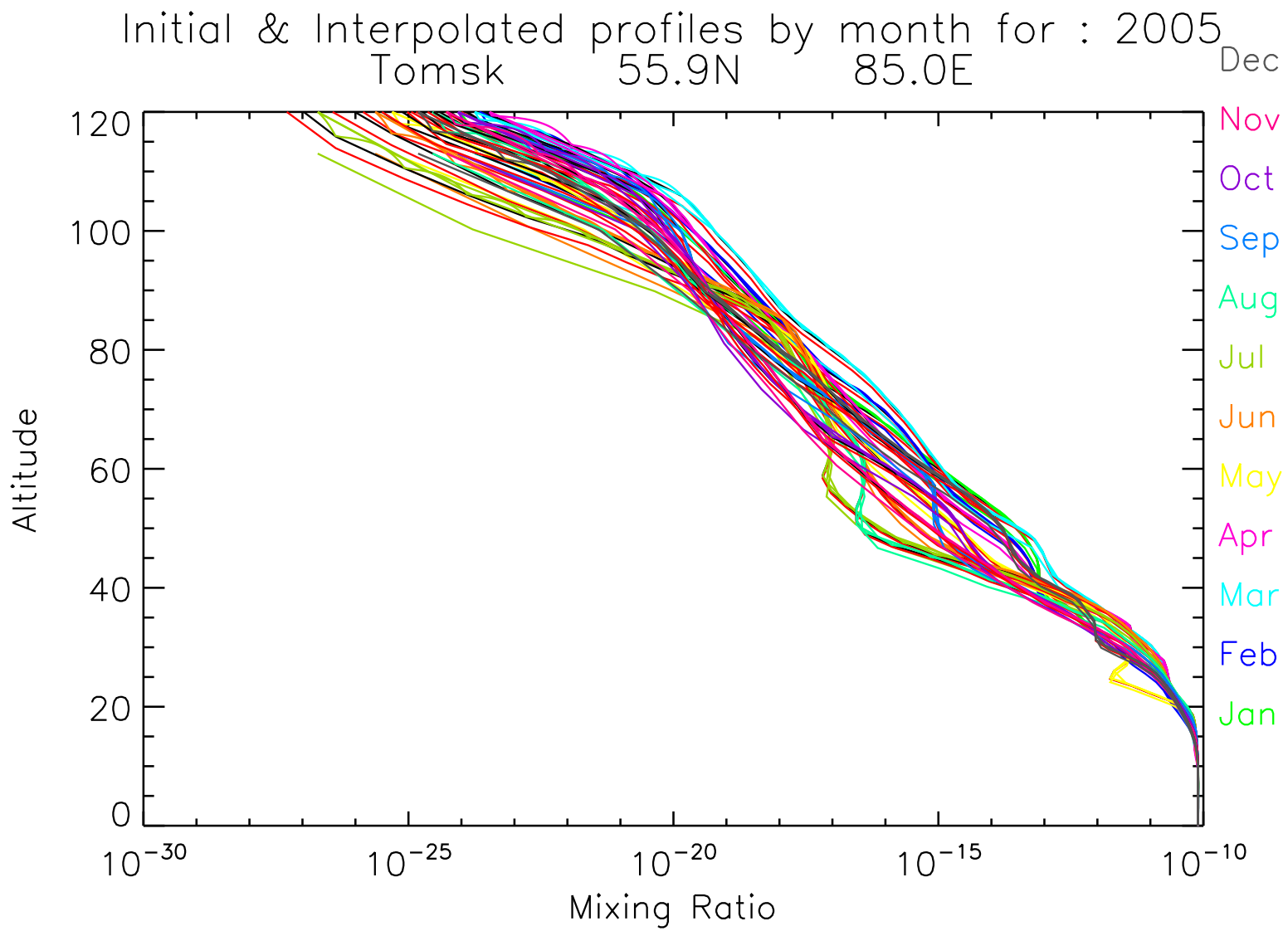

Initial & Interpolated profiles by month for : 2000
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

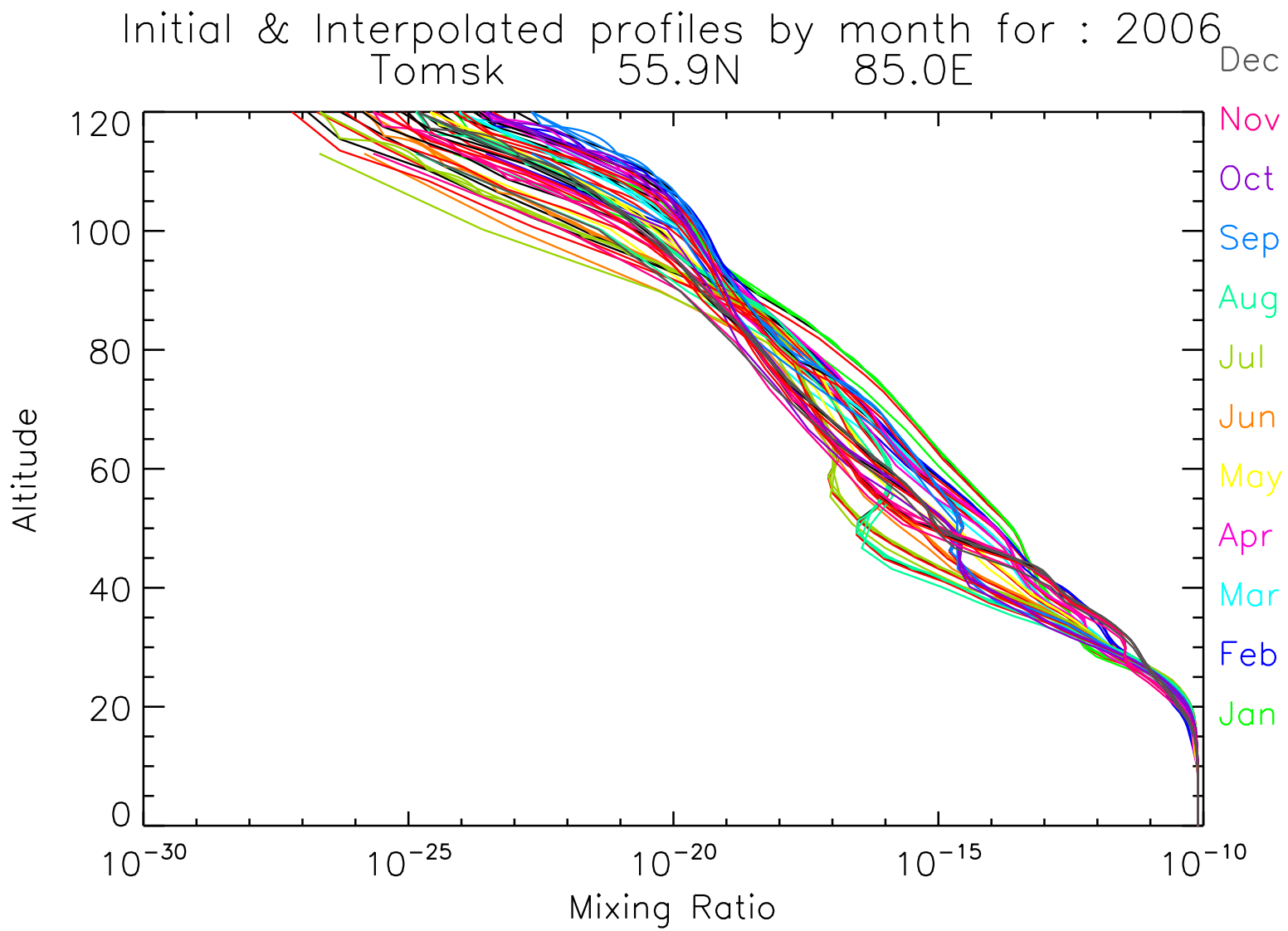

Initial & Interpolated profiles by month for : 2001
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

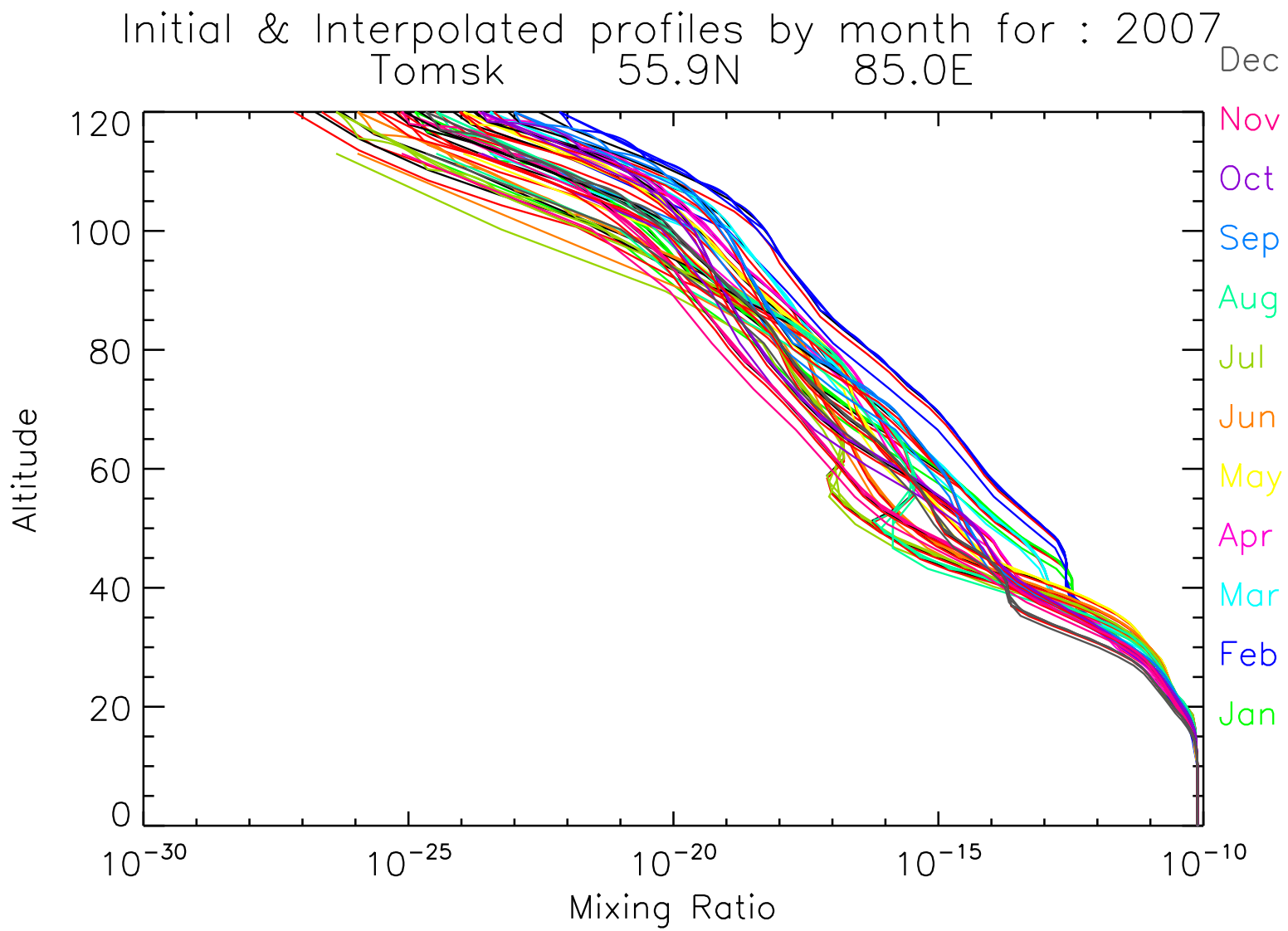

Initial & Interpolated profiles by month for : 2002
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

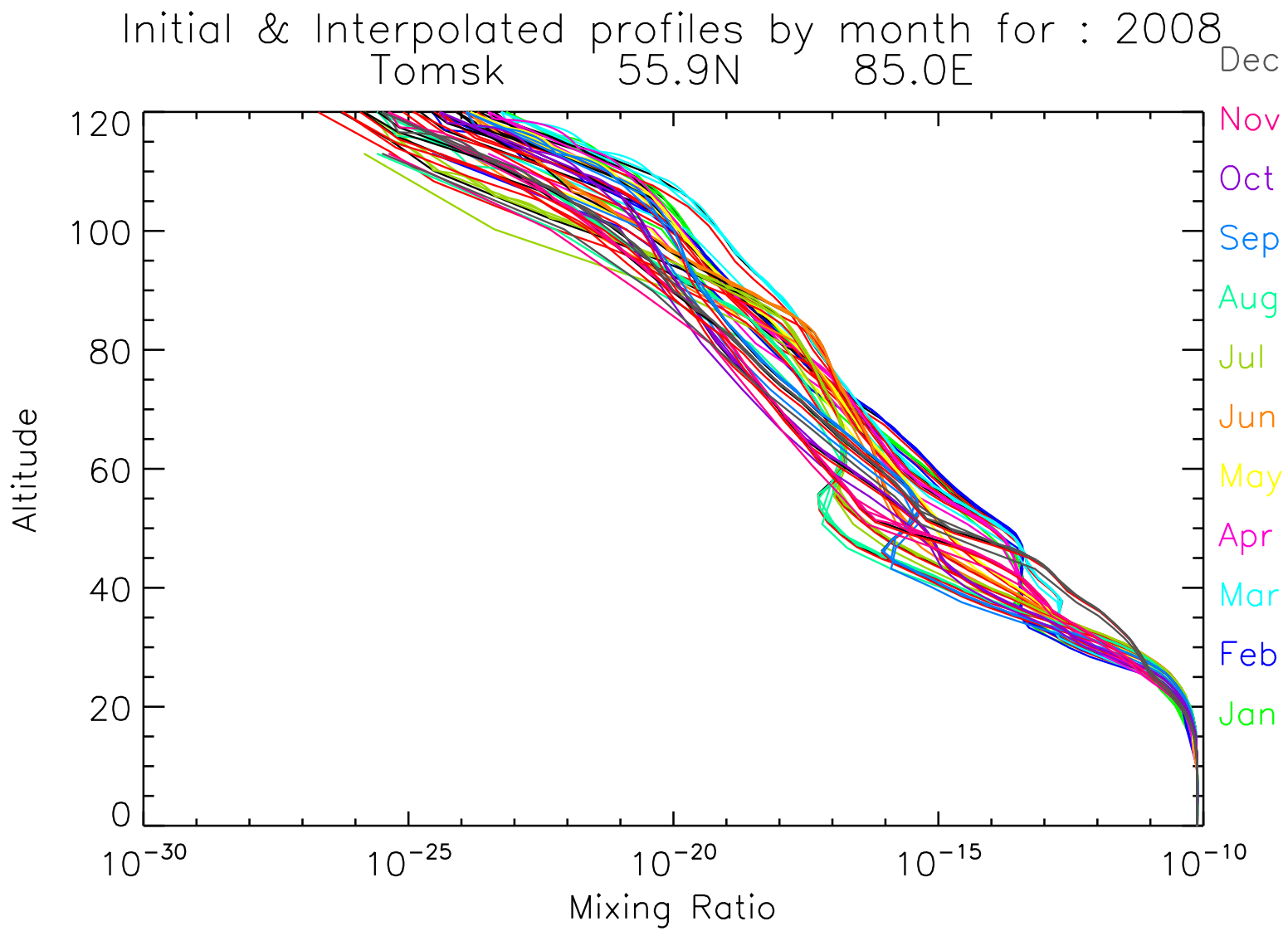

Initial & Interpolated profiles by month for : 2003
Tomsk 55.9N 85.0E
Dec
Mar
Feb
Jan
Altitude
Mixing Ratio
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}

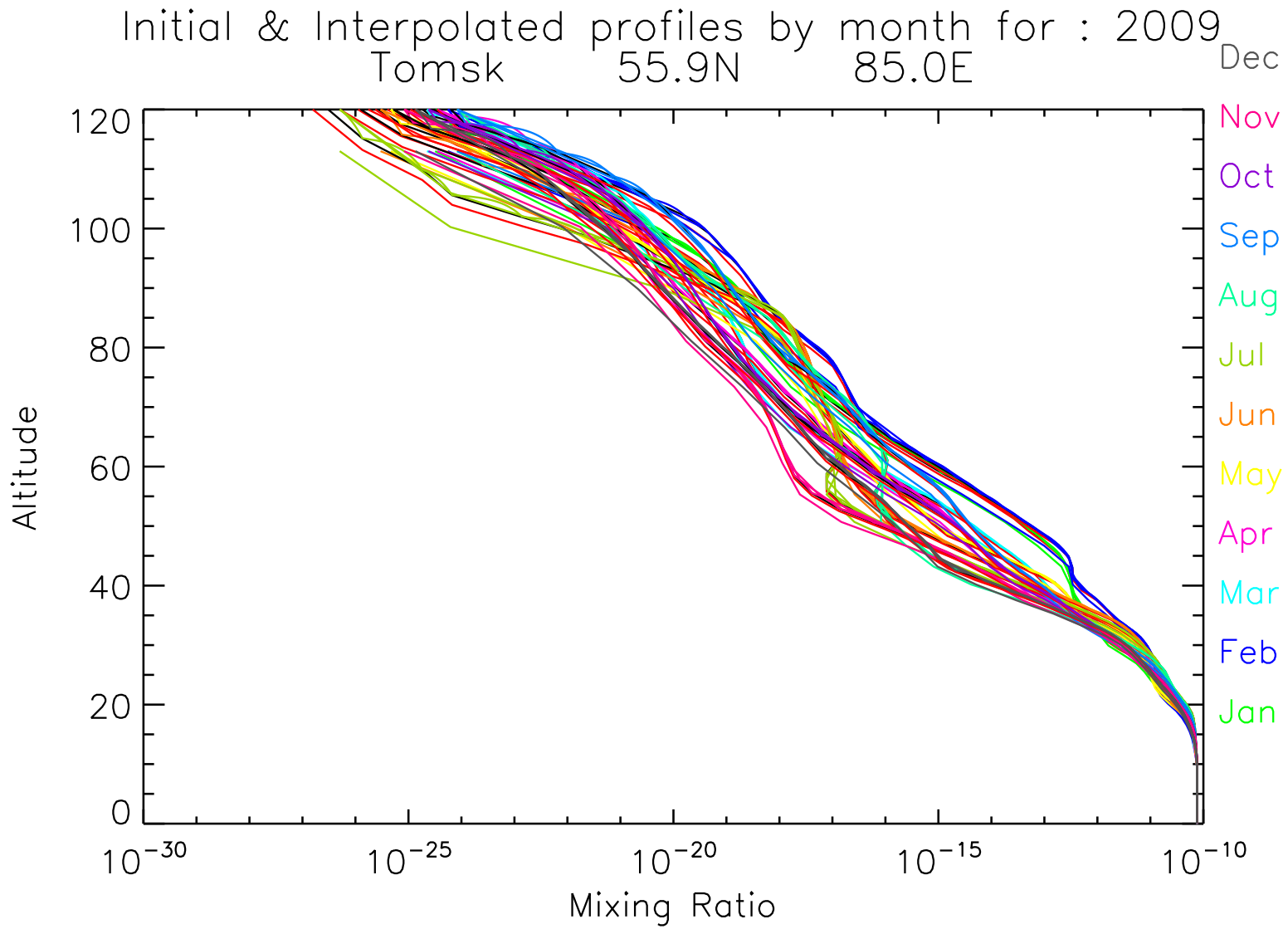

Initial & Interpolated profiles by month for : 2004
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

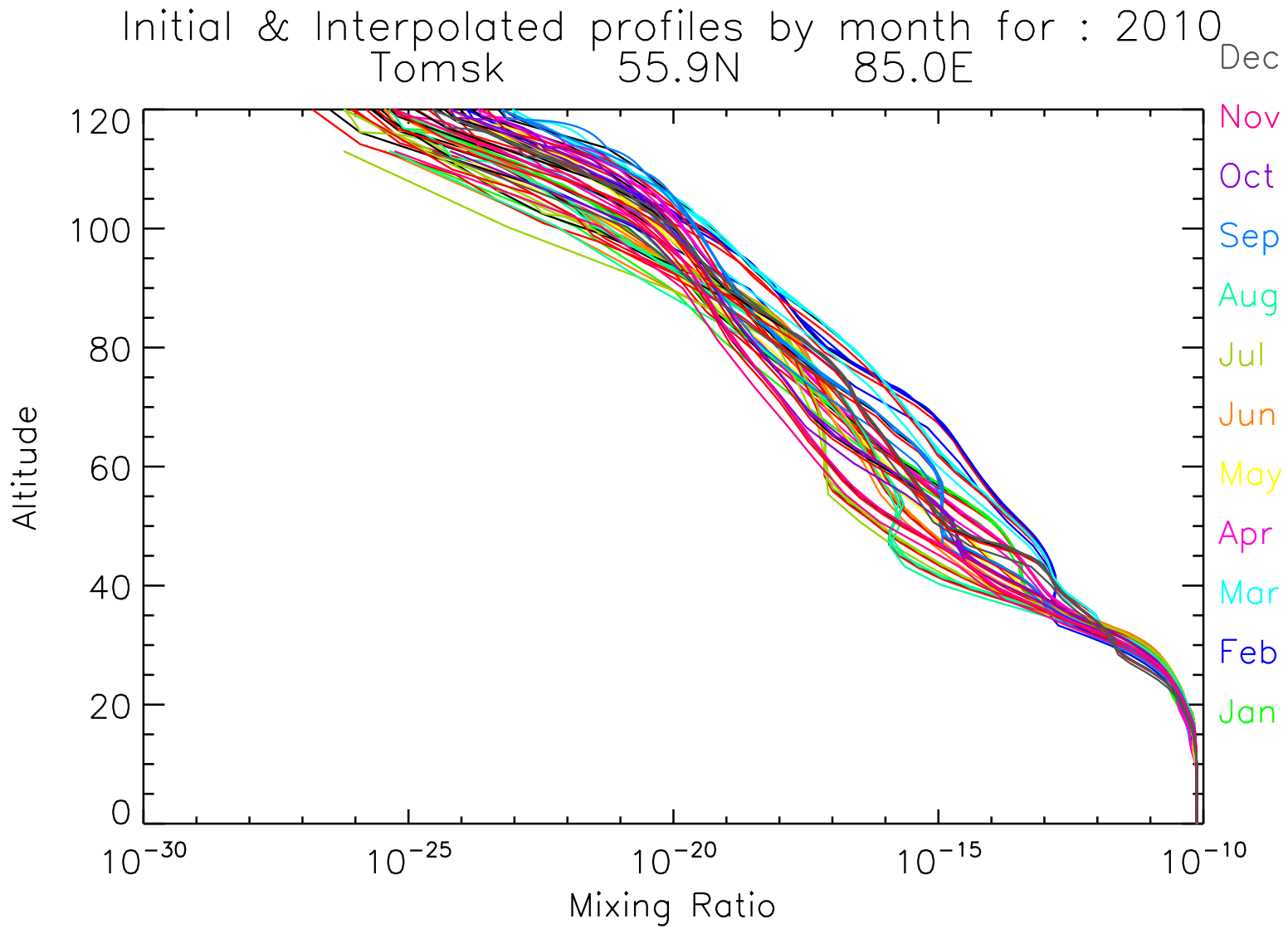

Initial & Interpolated profiles by month for : 2005
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

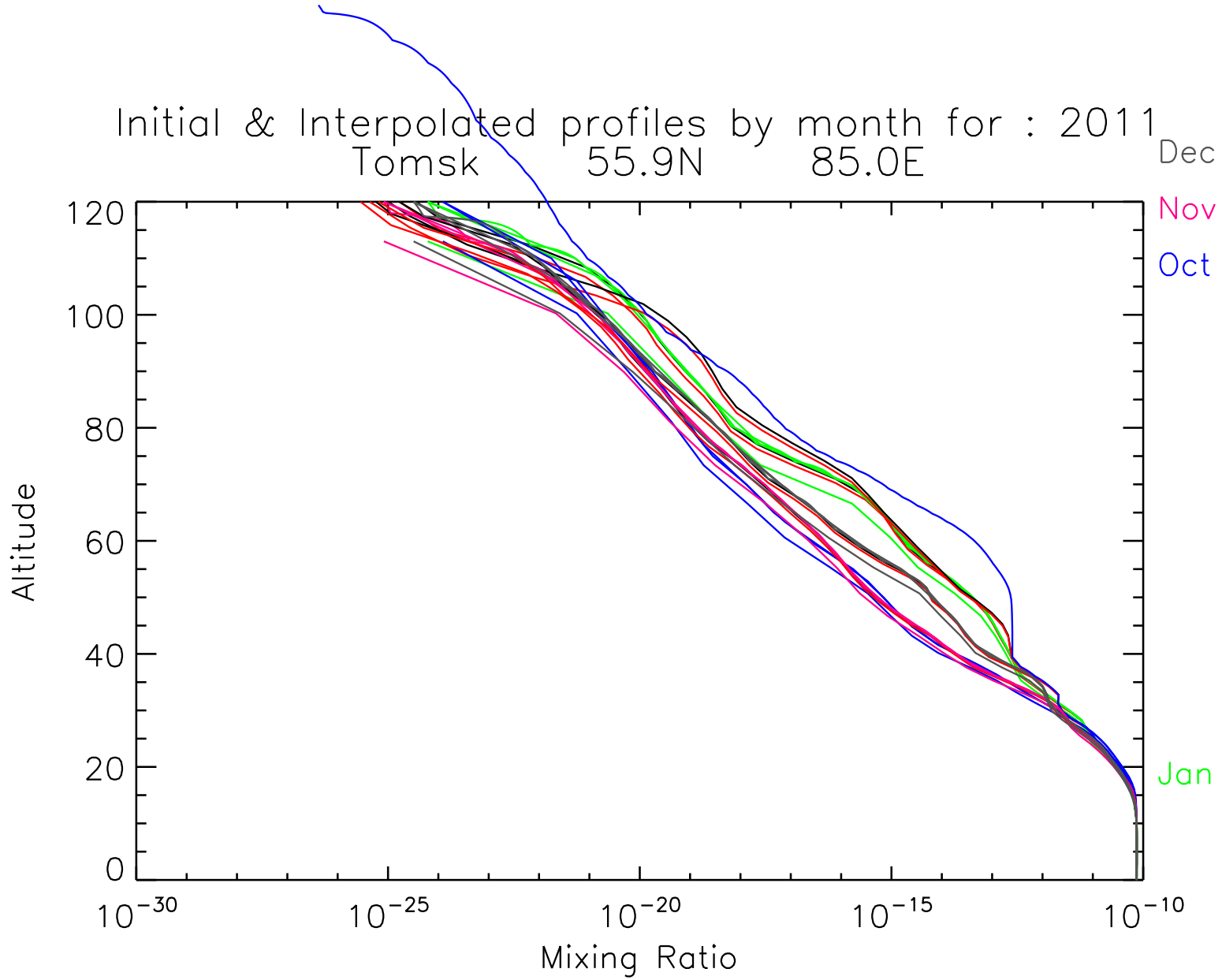

Initial & Interpolated profiles by month for : 2006
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

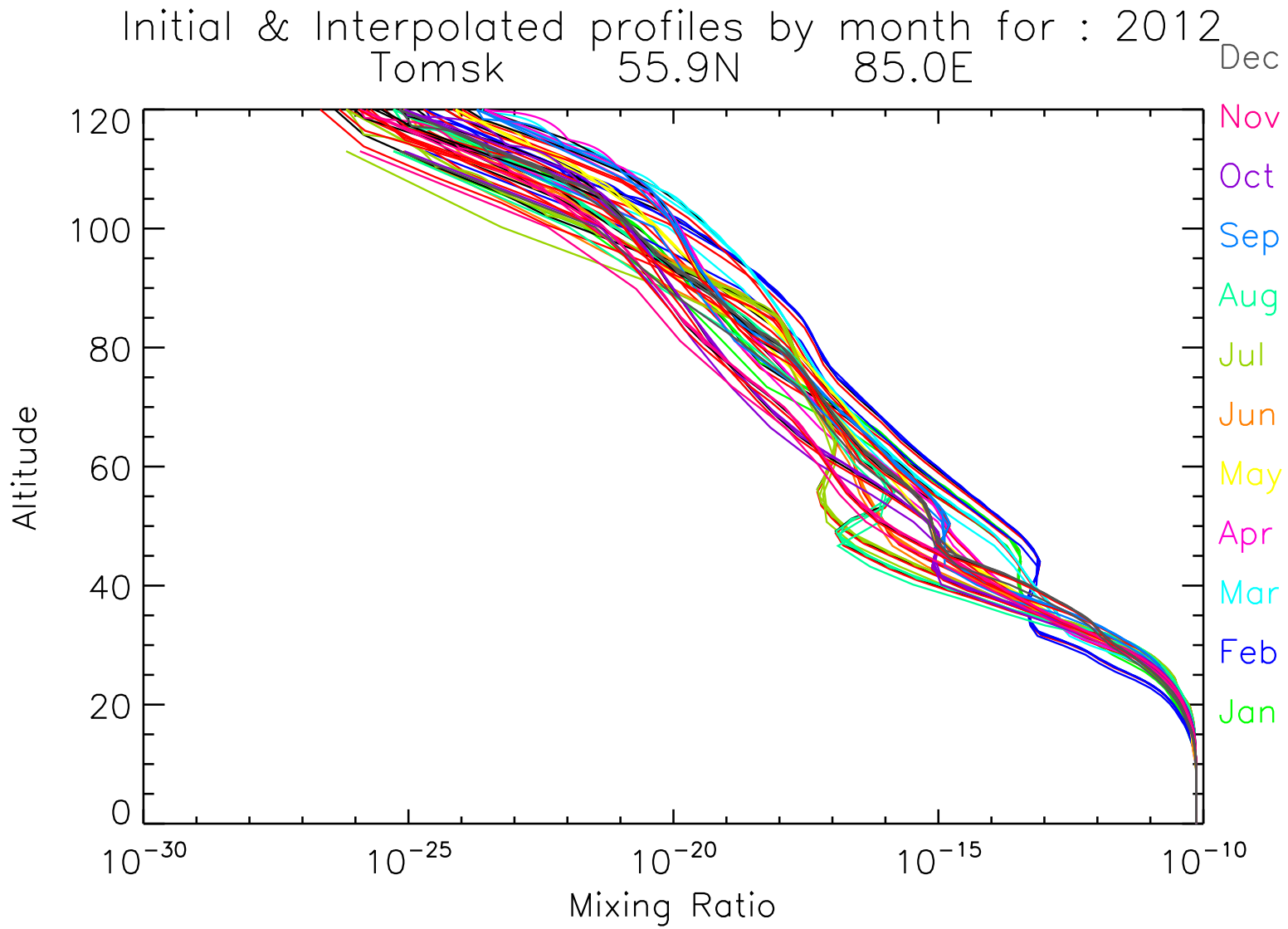

Initial & Interpolated profiles by month for : 2007
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

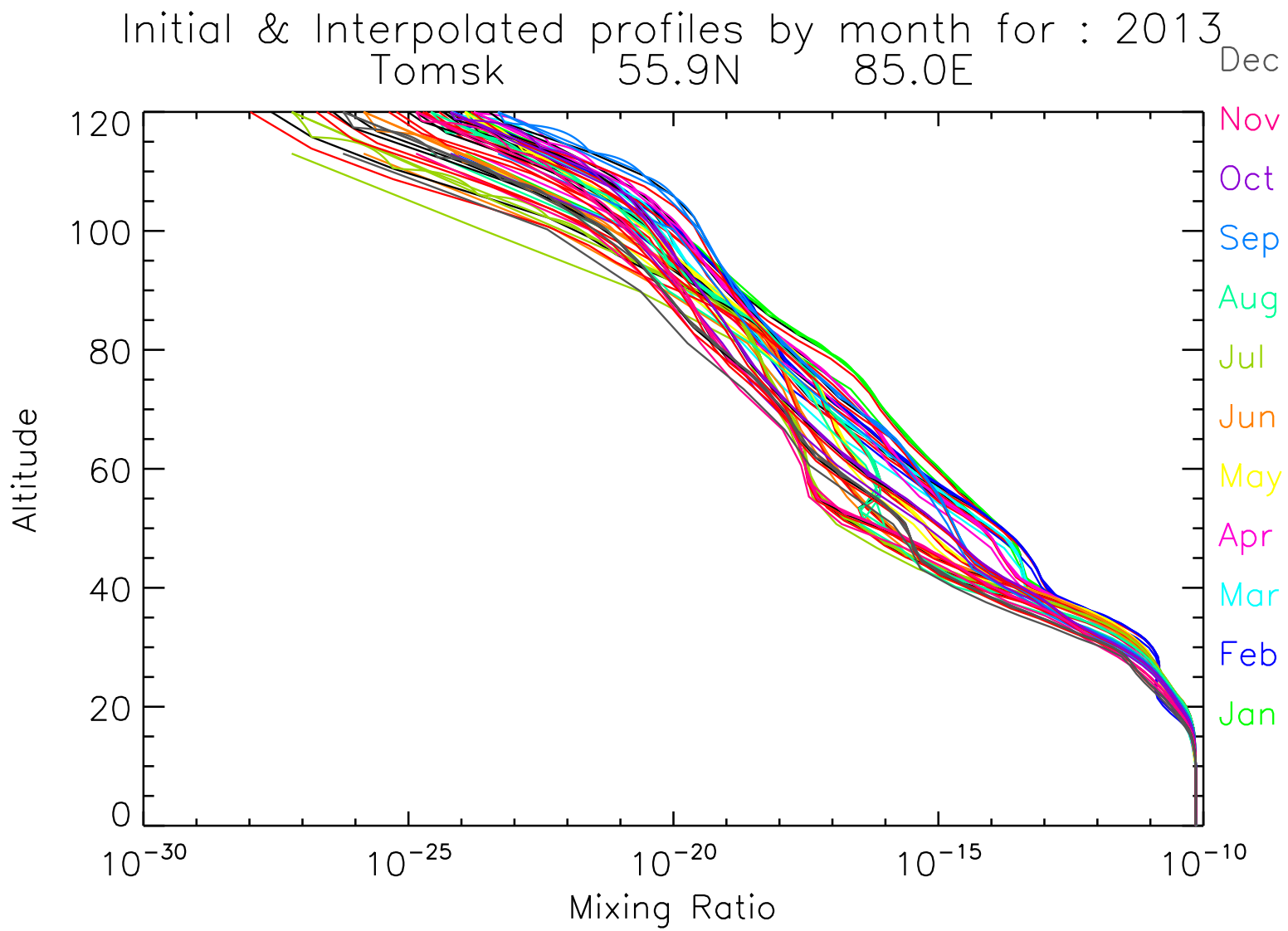

Initial & Interpolated profiles by month for : 2008
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

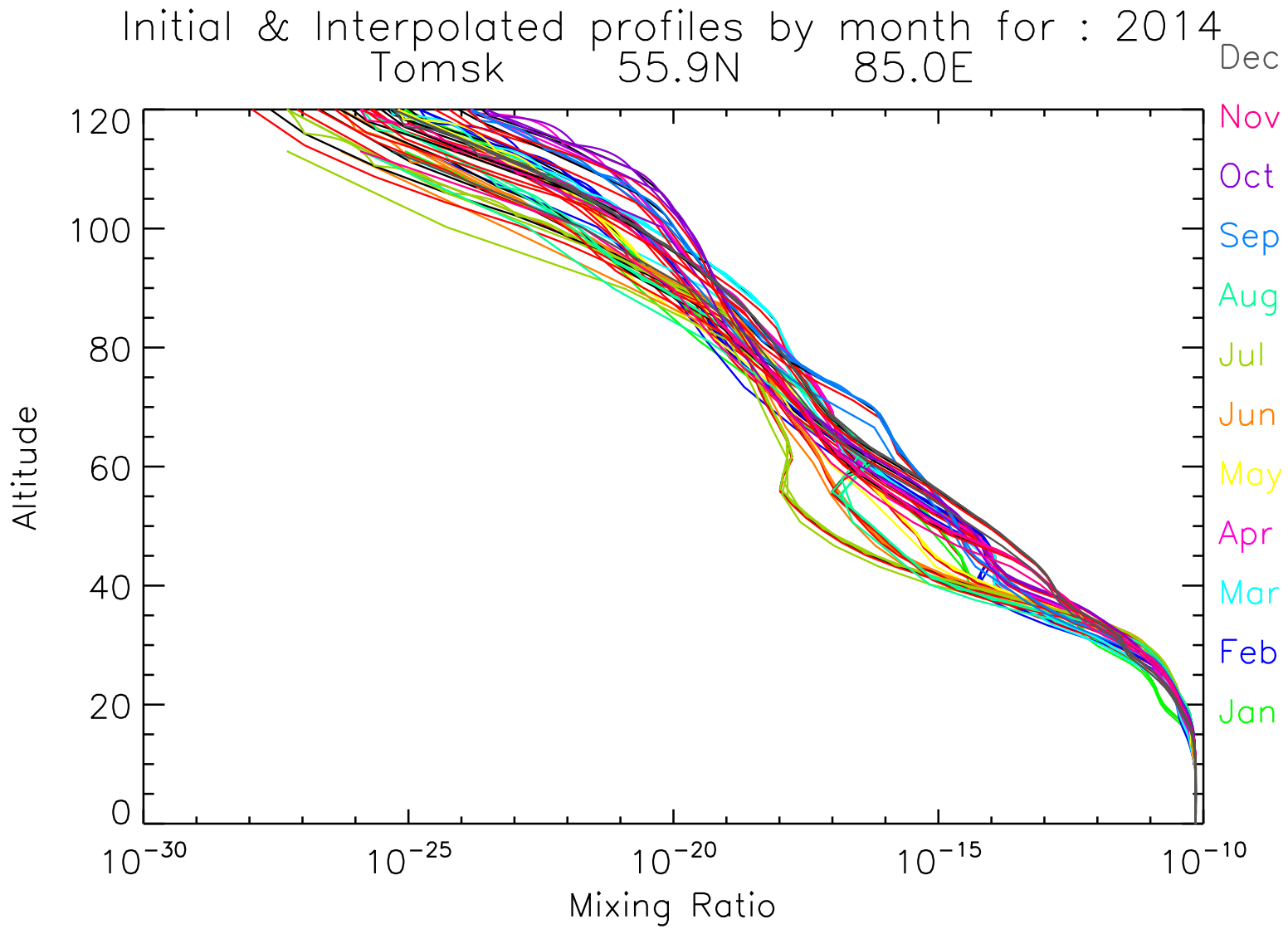

Initial & Interpolated profiles by month for : 2009
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

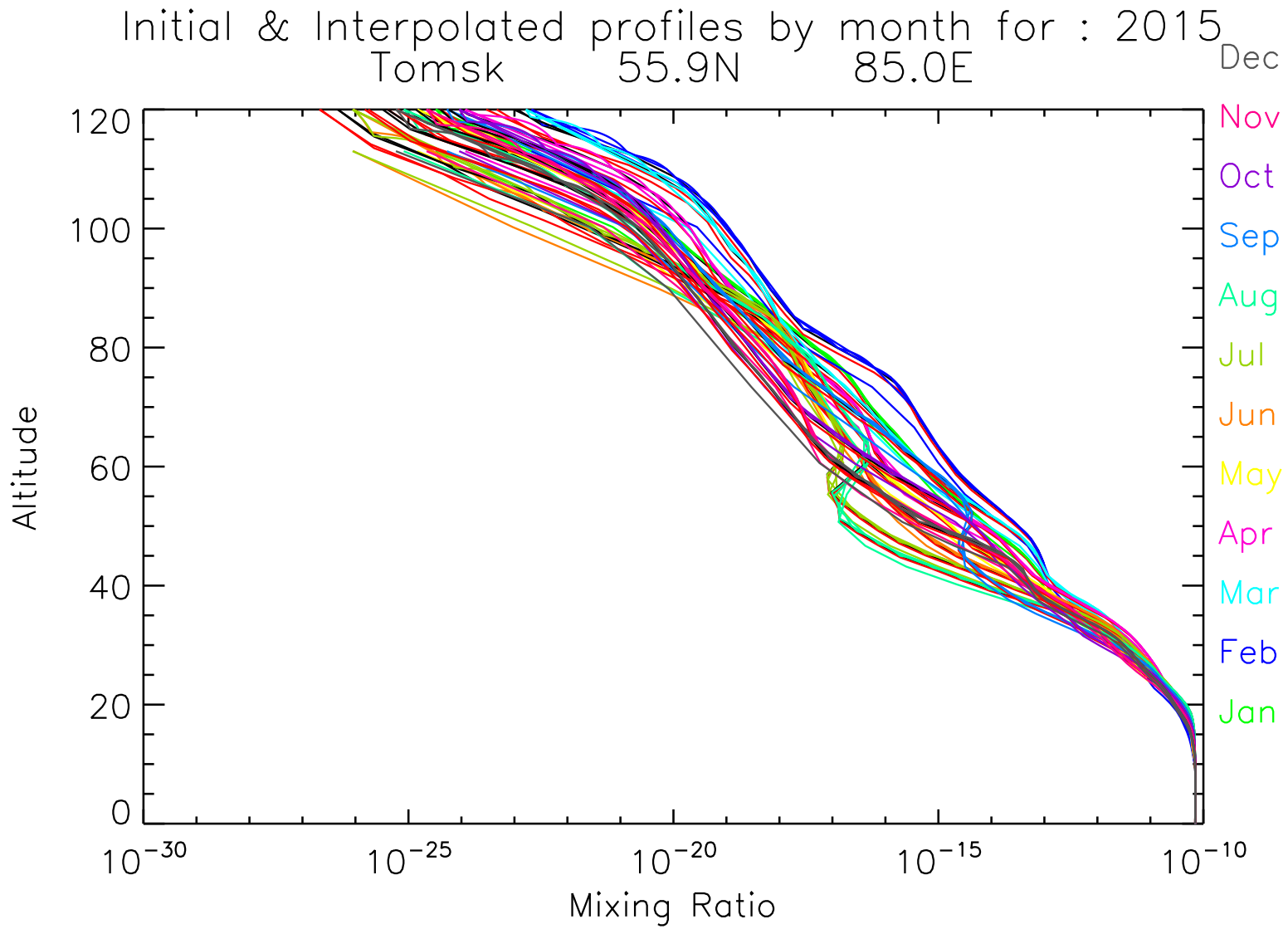

Initial & Interpolated profiles by month for : 2010
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

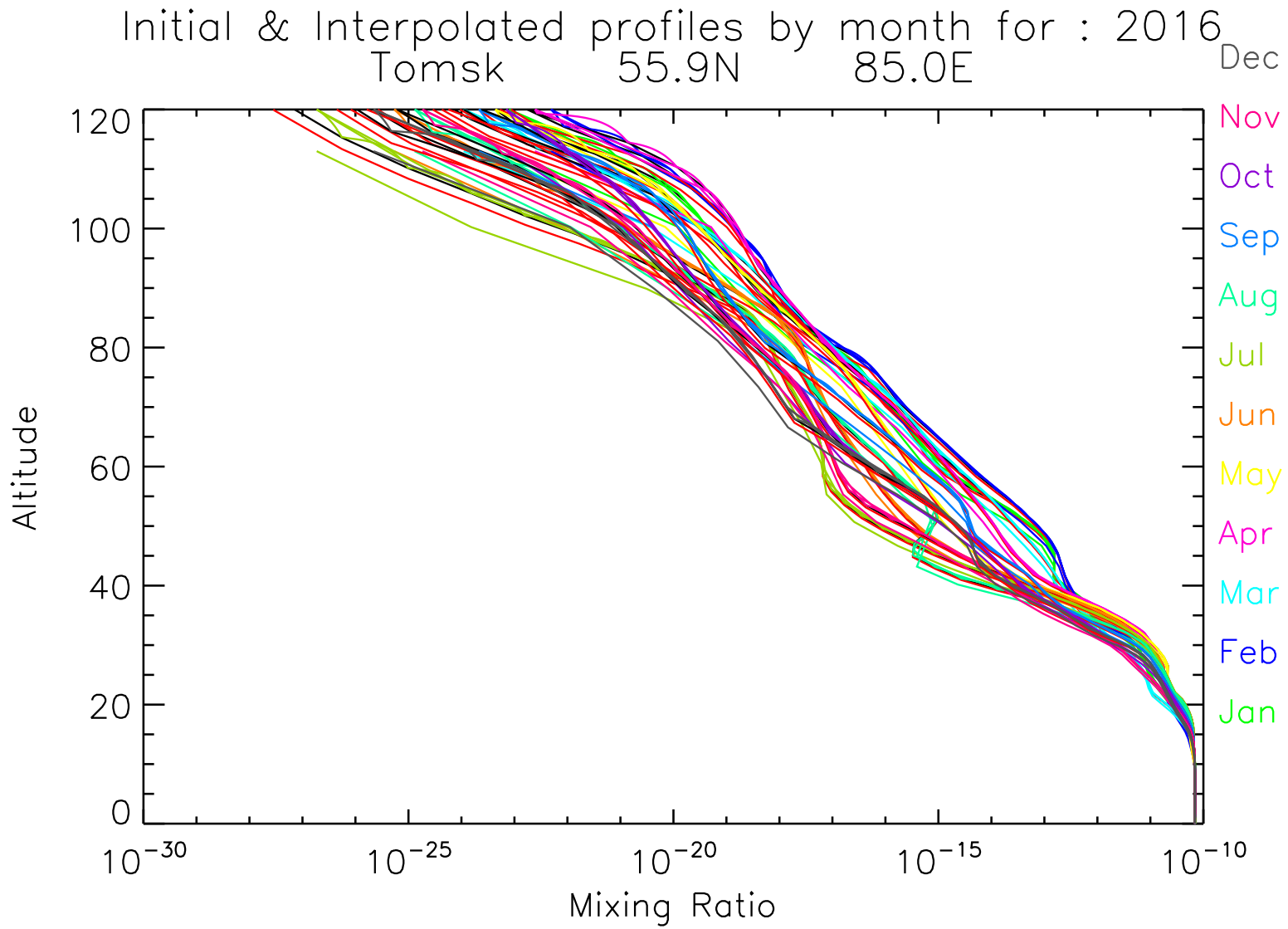

Initial & Interpolated profiles by month for : 2011
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

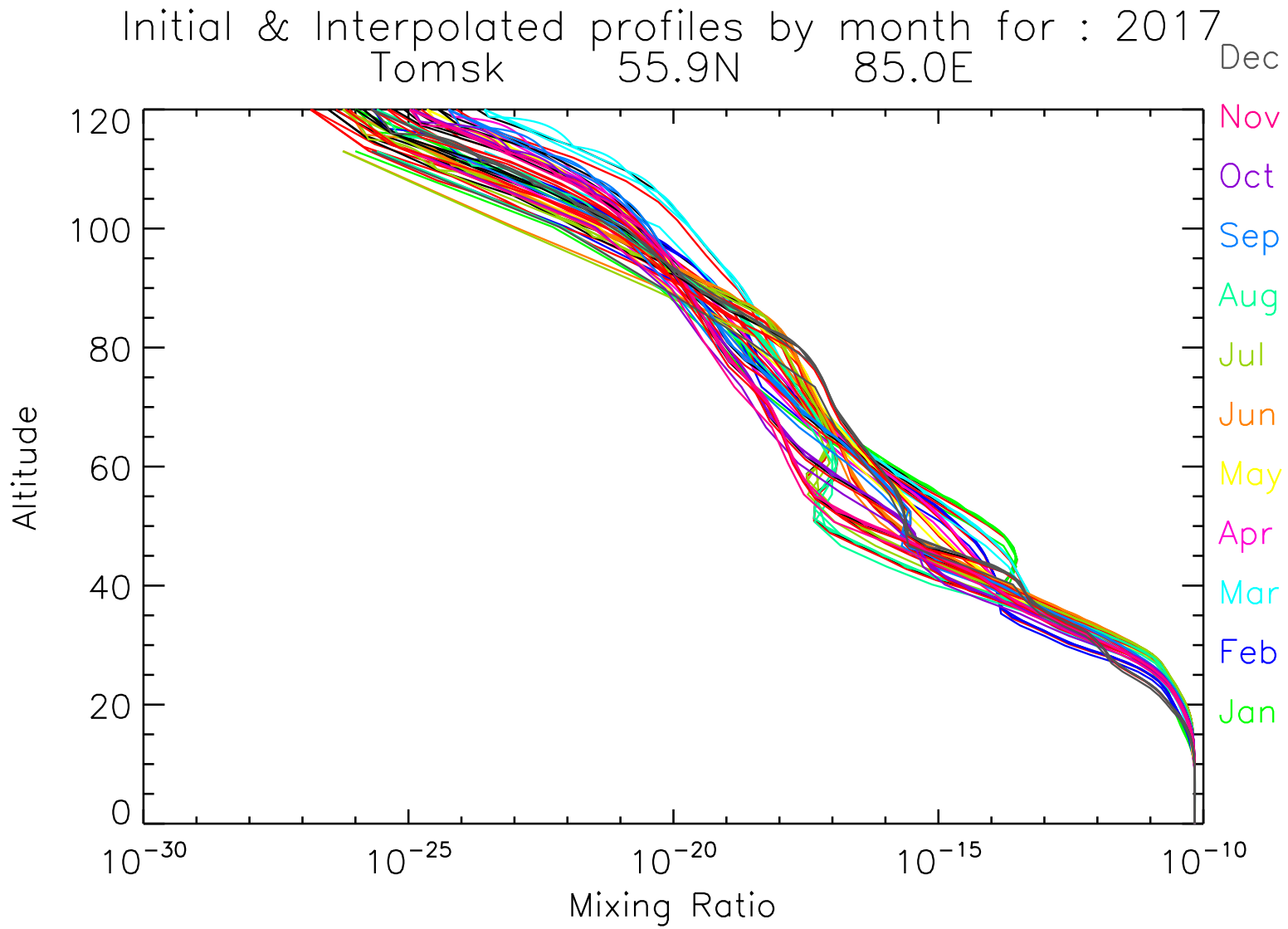

Initial & Interpolated profiles by month for : 2012
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

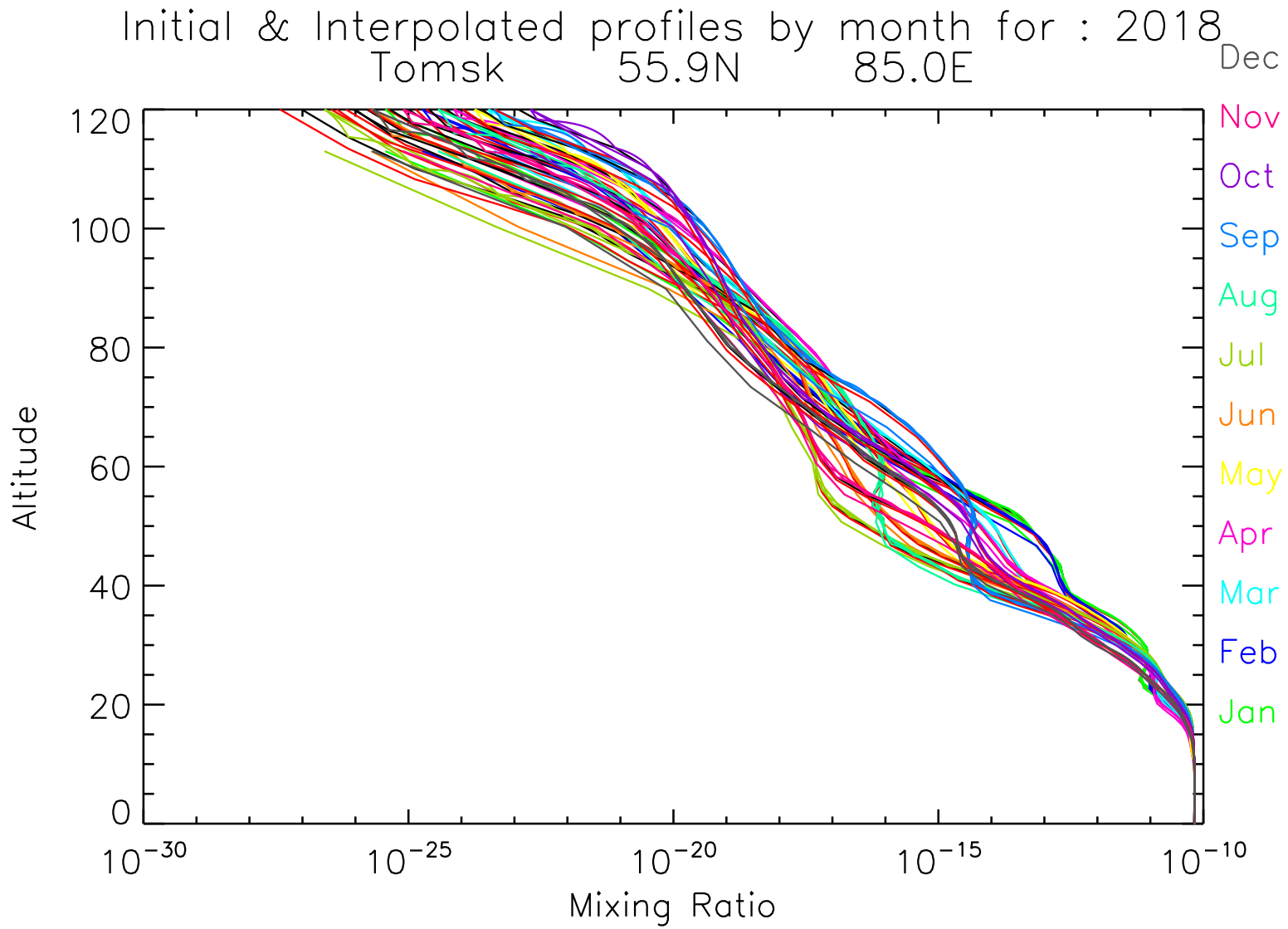

Initial & Interpolated profiles by month for : 2013
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

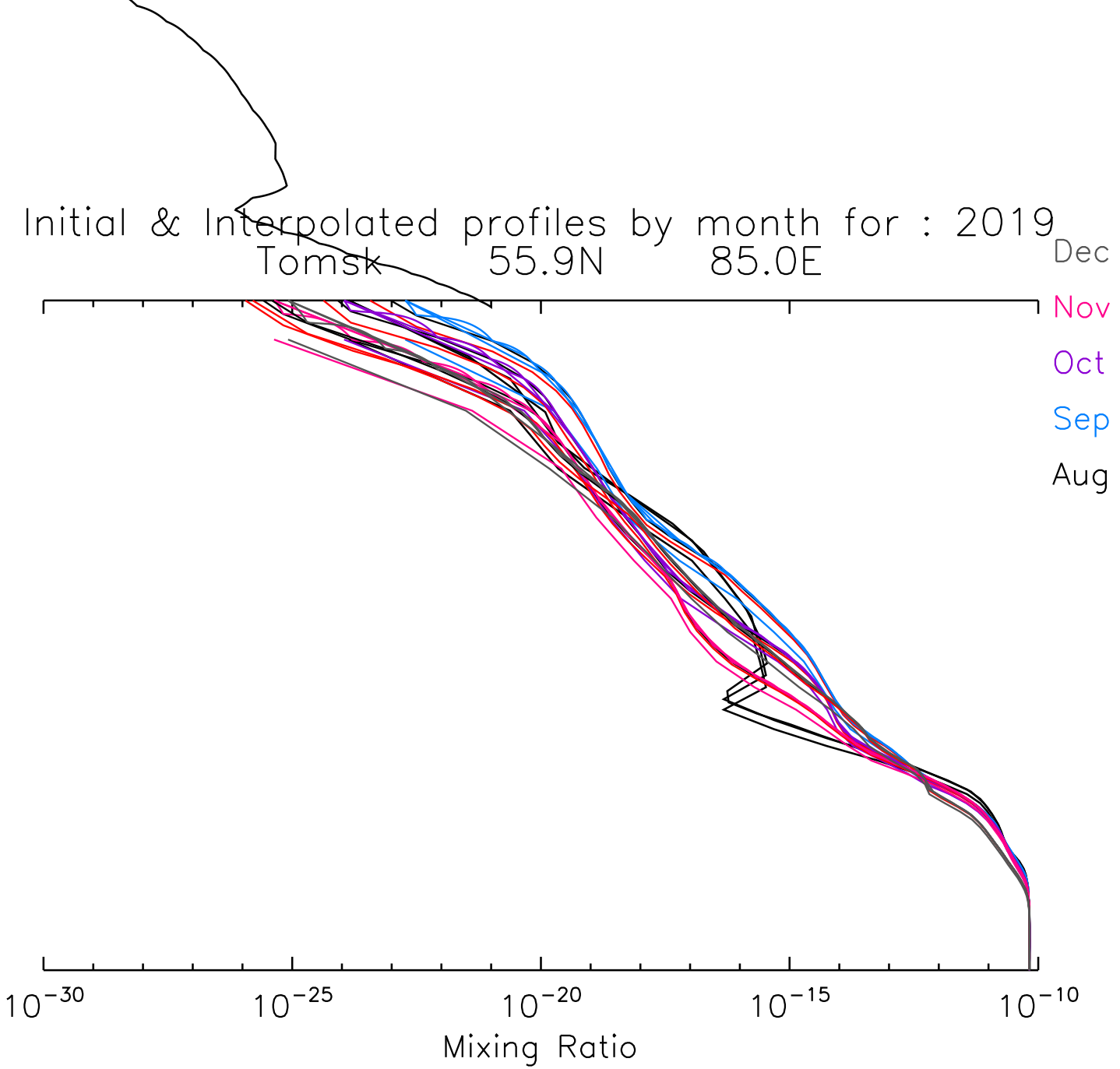

Initial & Interpolated profiles by month for : 2014
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

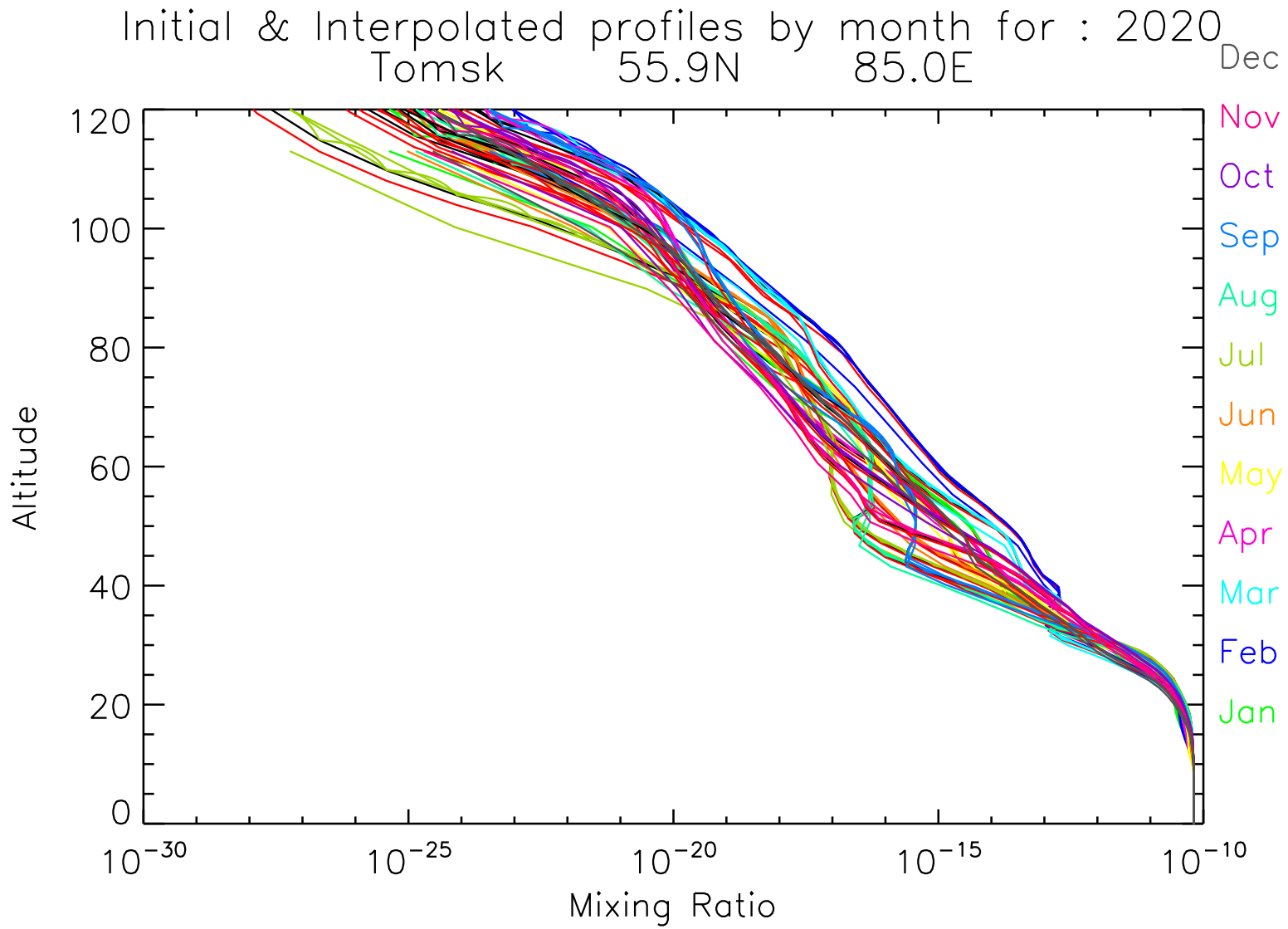

Initial & Interpolated profiles by month for : 2015
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

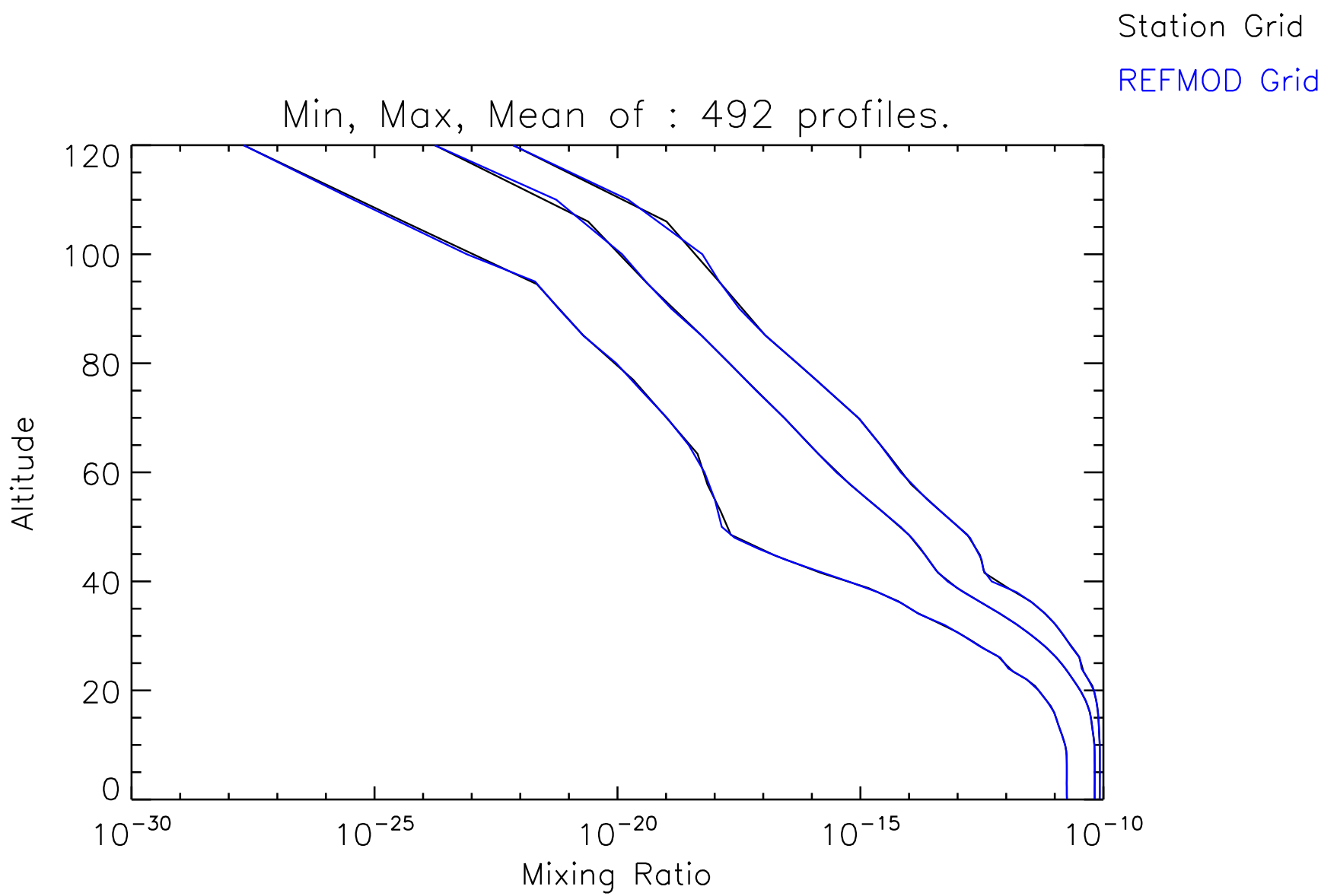

Initial & Interpolated profiles by month for : 2016
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

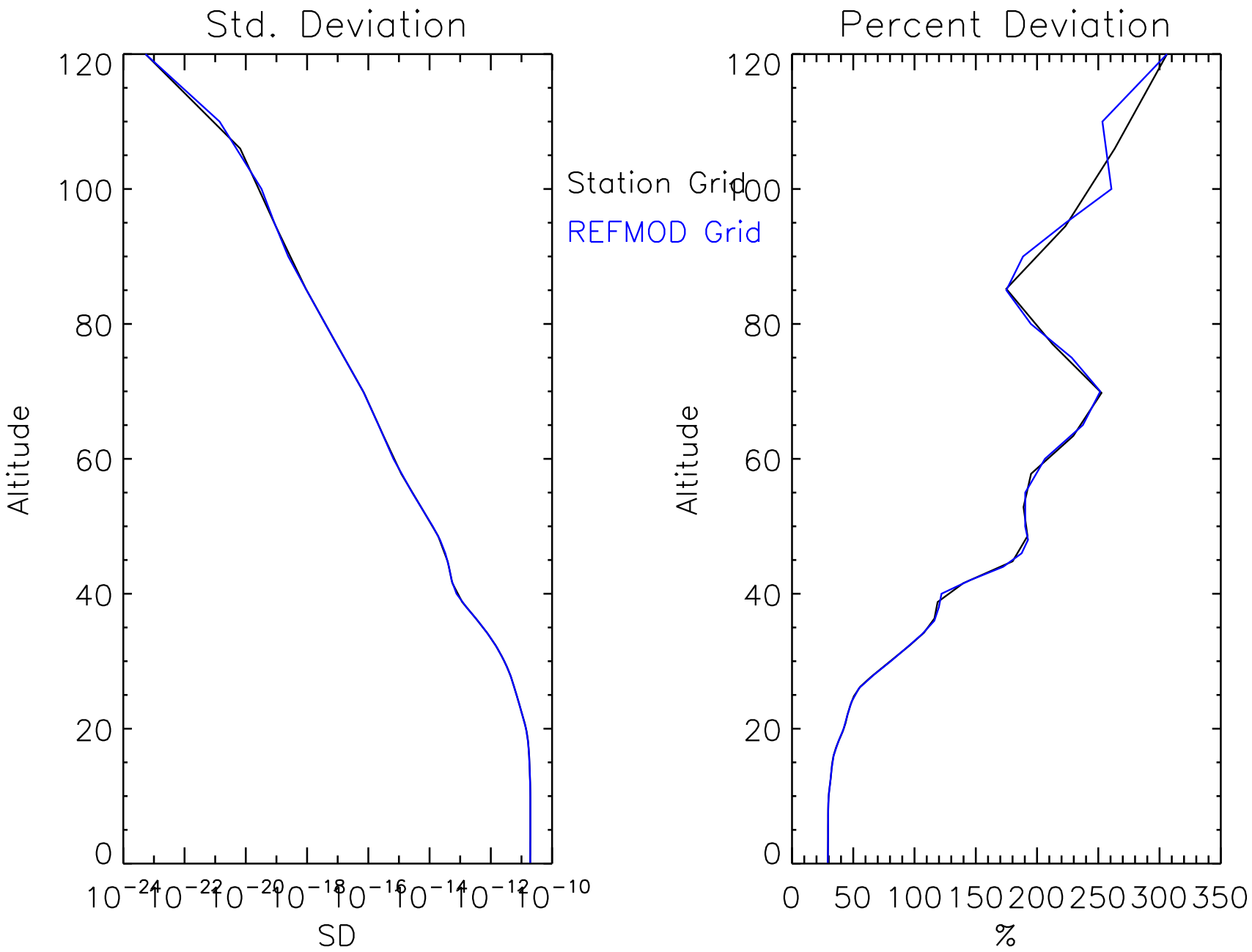

Initial & Interpolated profiles by month for : 2017
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

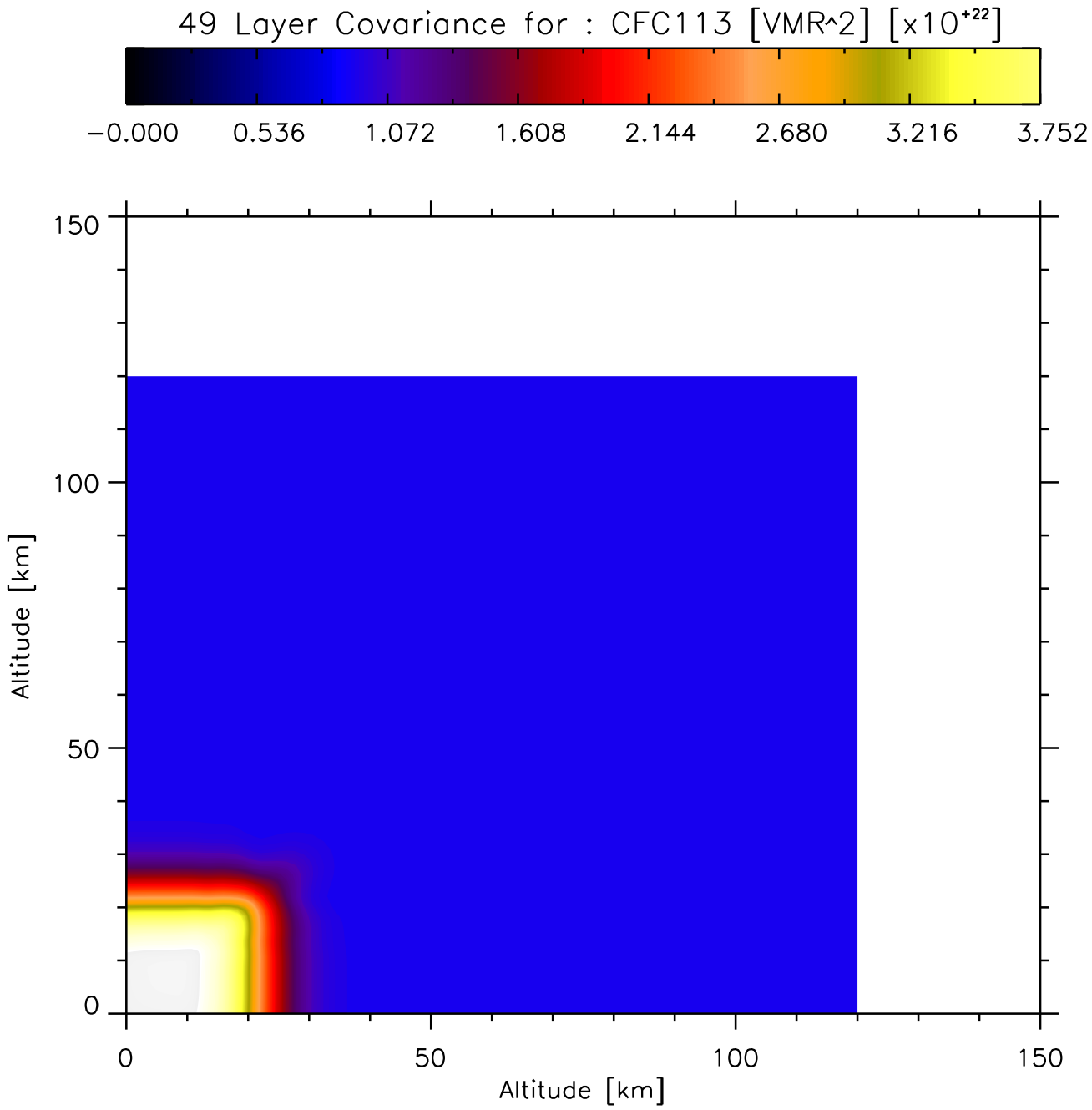

Initial & Interpolated profiles by month for : 2018
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

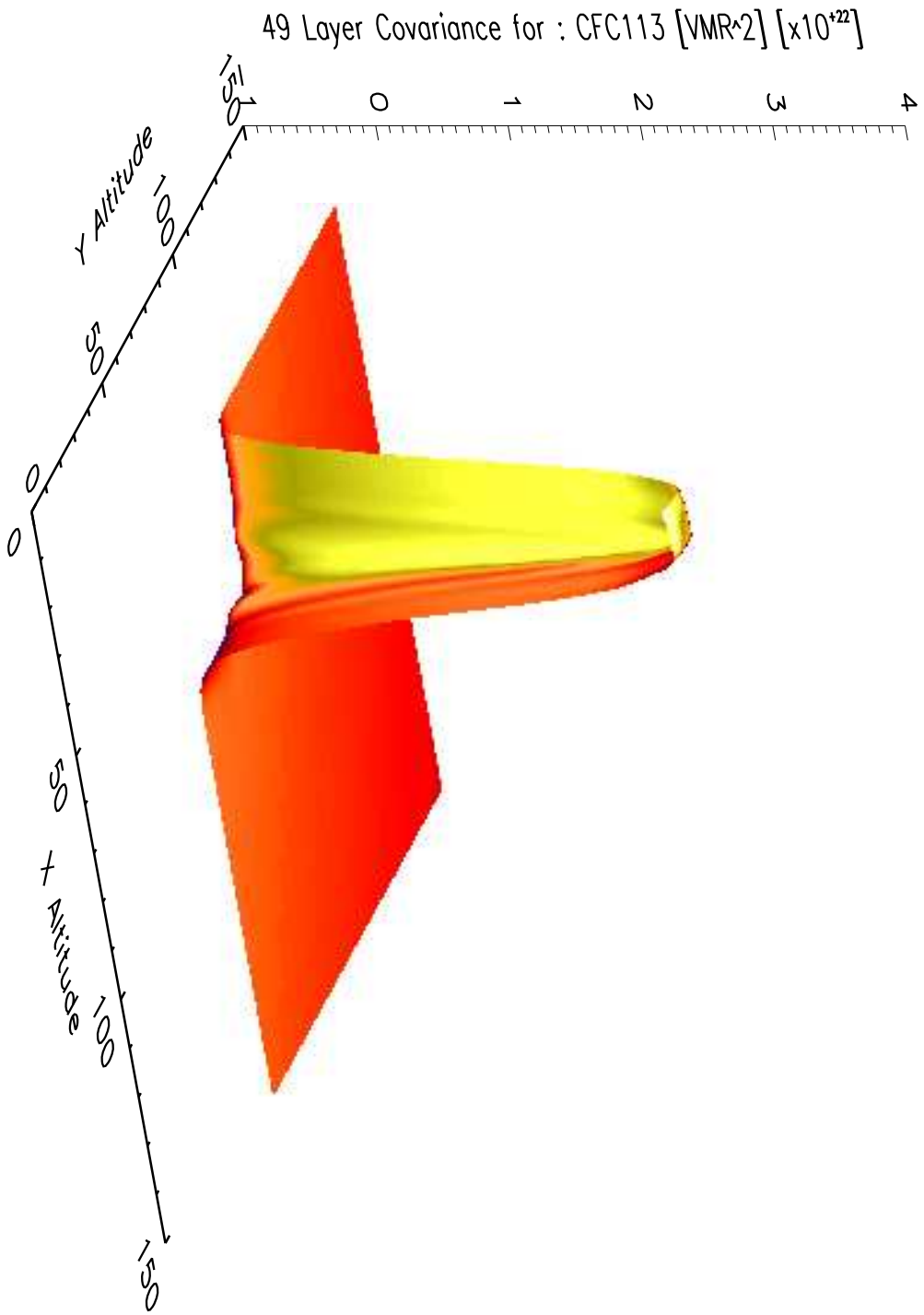

Initial & Interpolated profiles by month for : 2019
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
10^-30
10^-25
10^-20
10^-15
10^-10
Mixing Ratio

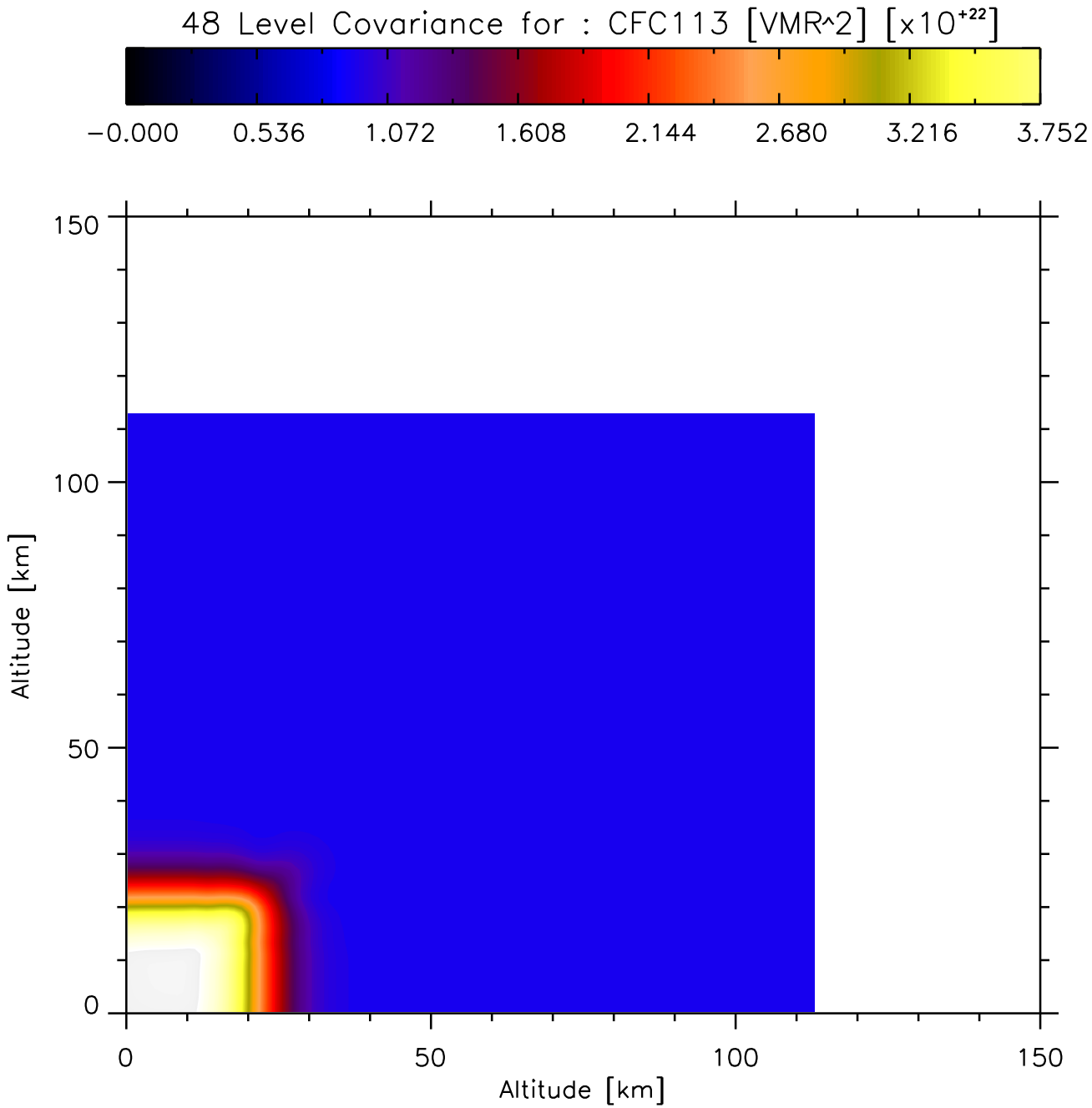

Initial & Interpolated profiles by month for : 2020
Tomsk 55.9N 85.0E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
120
100
80
60
40
20
0
Altitude
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

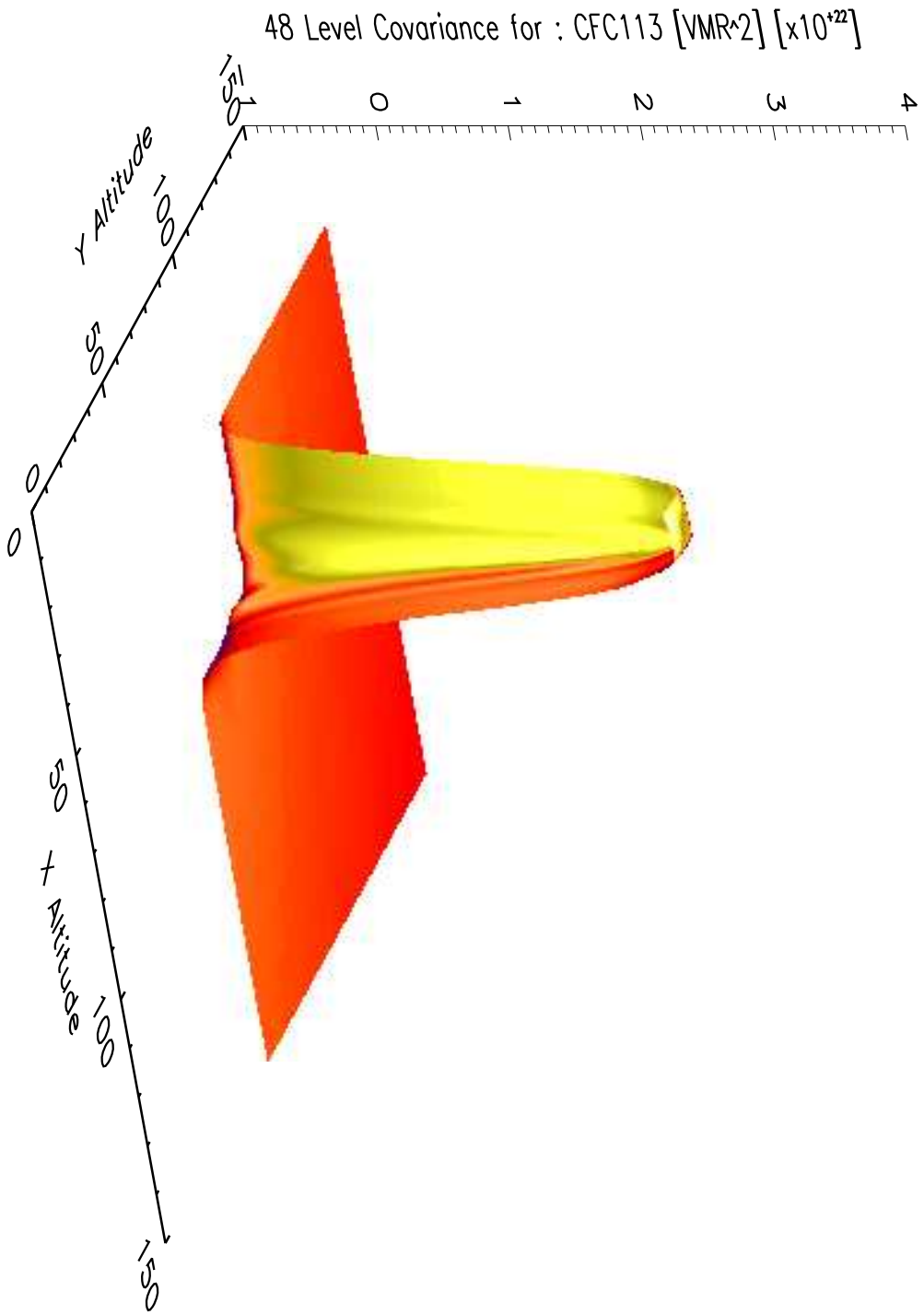

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
Altitude
120
100
80
60
40
20
0
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
10^{-24} 10^{-22} 10^{-20} 10^{-18} 10^{-16} 10^{-14} 10^{-12} 10^{-10}
SD
0 50 100 150 200 250 300 350
%


49 Layer Covariance for : CFC113 [VMR^2] [x10^+22]
−0.000
0.536
1.072
1.608
2.144
2.680
3.216
3.752
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


49 Layer Covariance for : CFC113 [VMR^2] [x10^+22]
0
1
2
3
4
Y Altitude
150
100
50
0
X Altitude
0
50
100
150


48 Level Covariance for : CFC113 [VMR^2] [x10^+22]
−0.000
0.536
1.072
1.608
2.144
2.680
3.216
3.752
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


48 Level Covariance for : CFC113 [VMR^2] [x10^+22]
0
1
2
3
4
150
100
50
0
Y Altitude
0
50
100
150
X Altitude