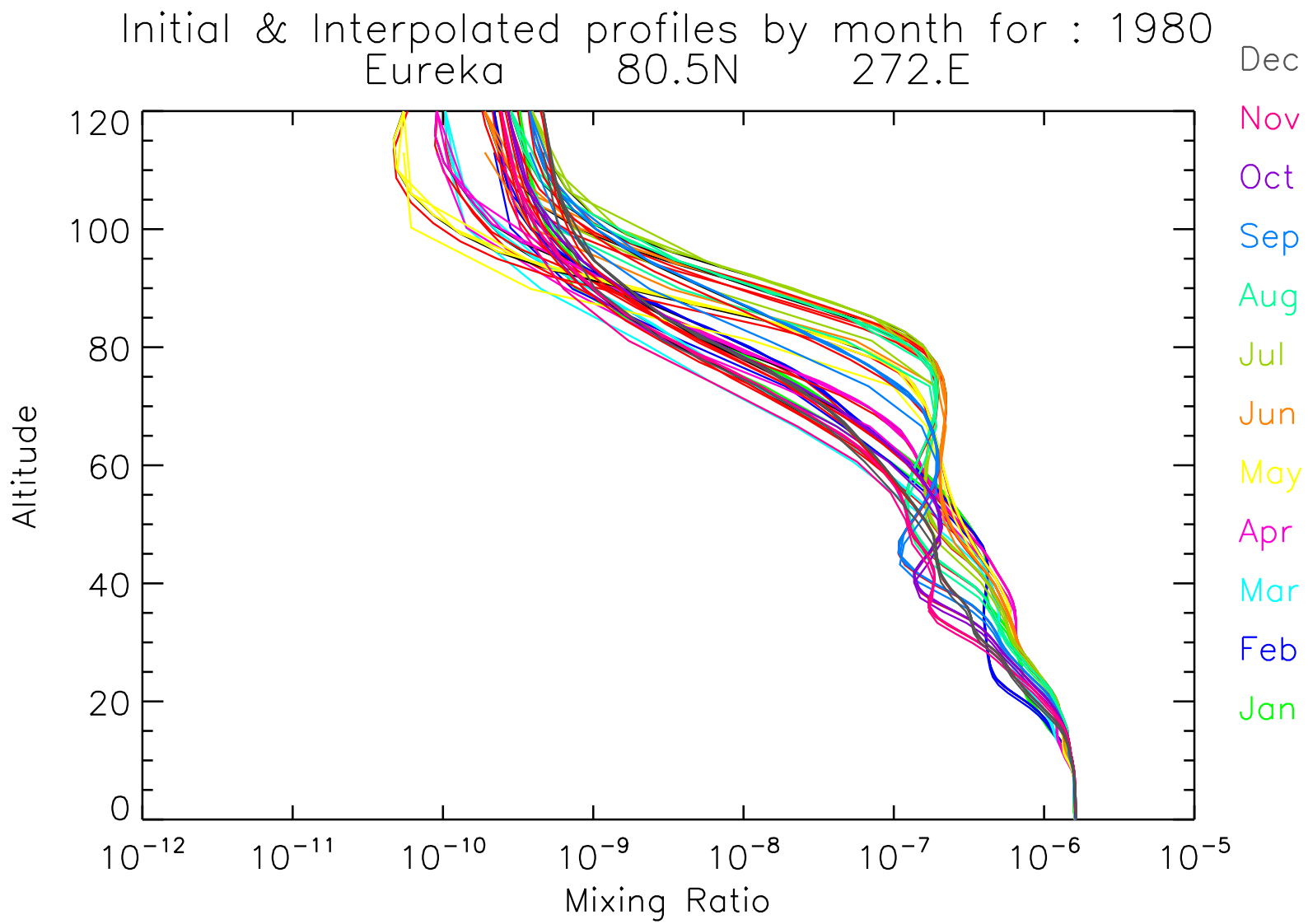
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Mixing Ratio
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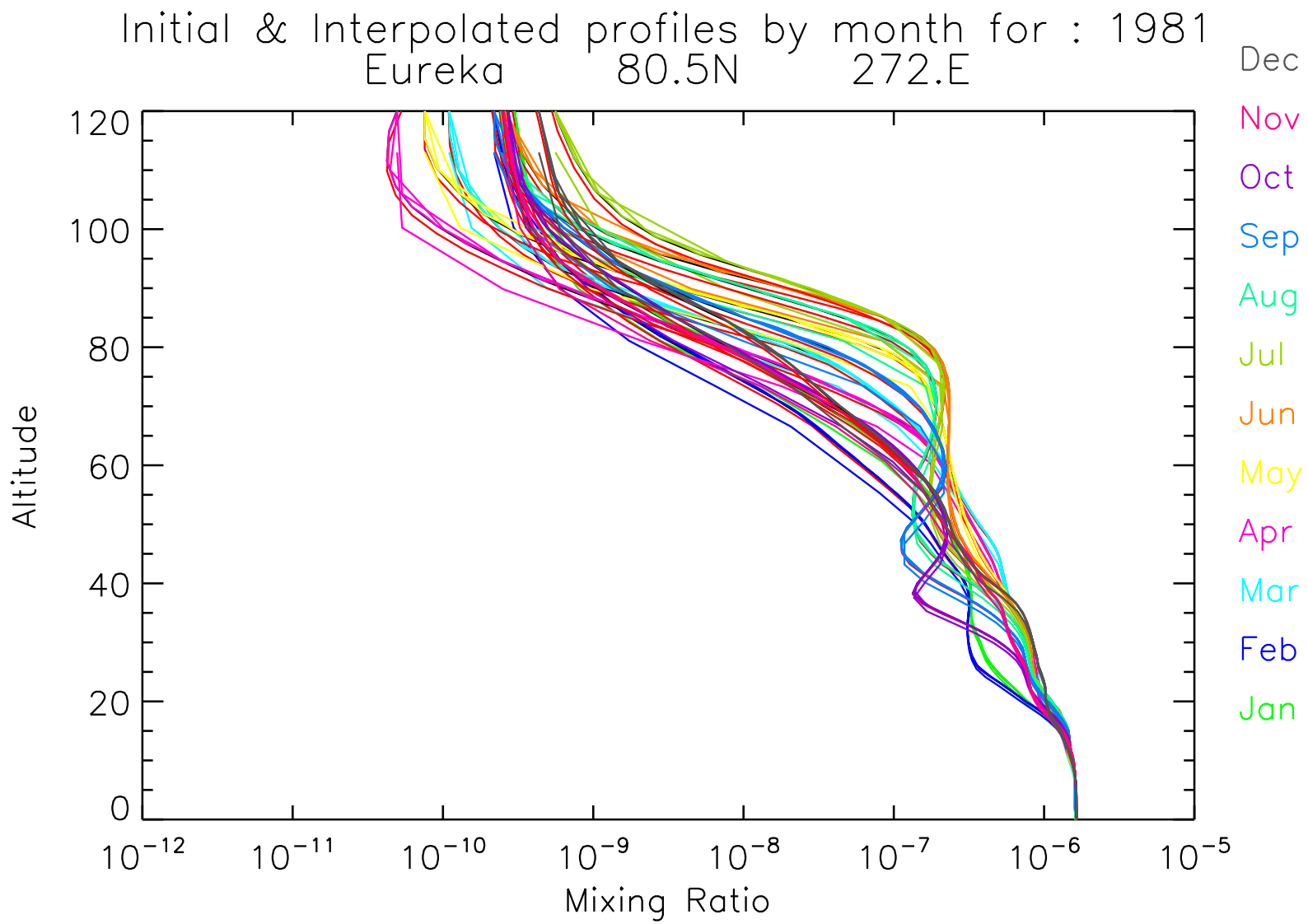
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Mixing Ratio
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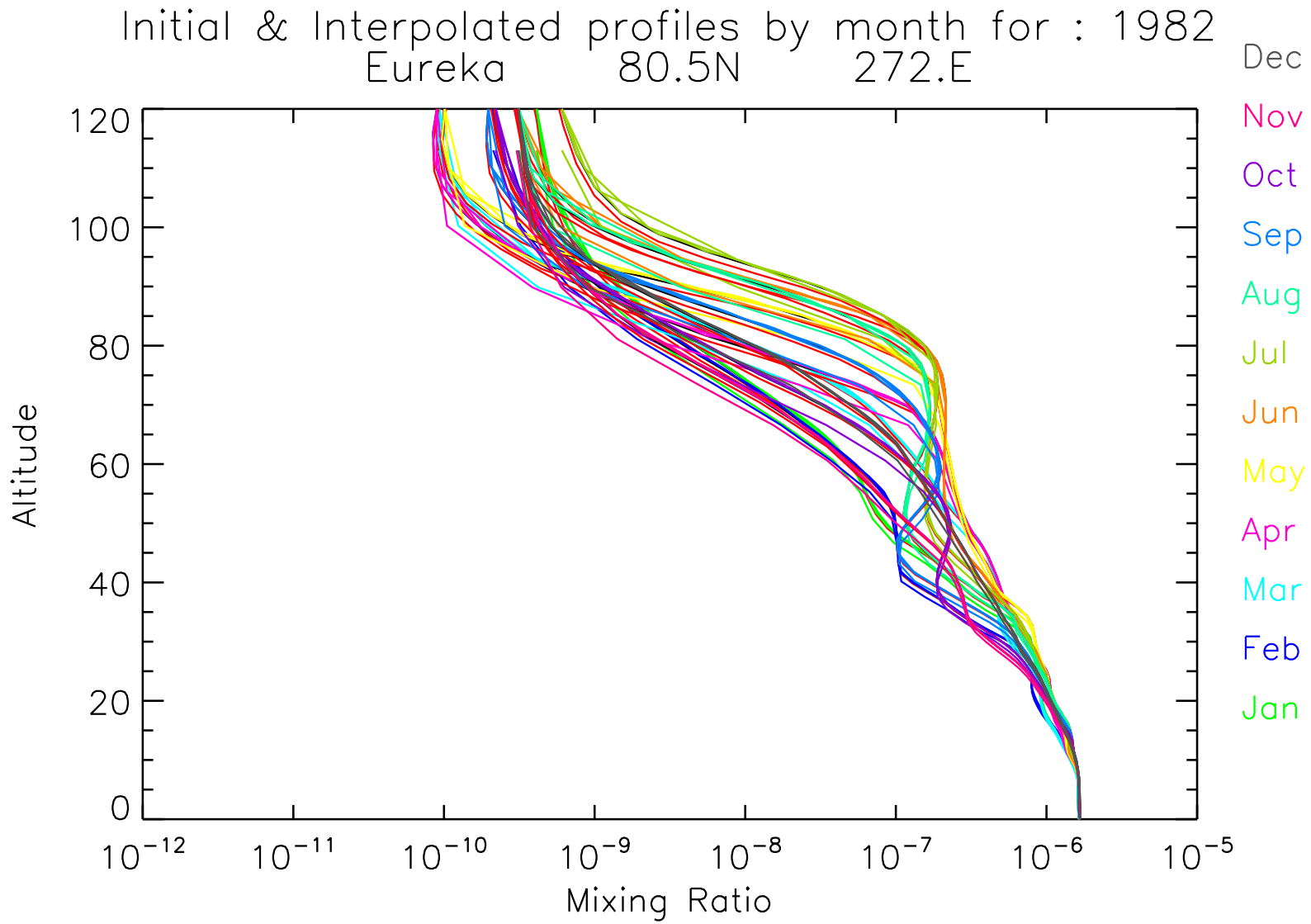
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Mixing Ratio
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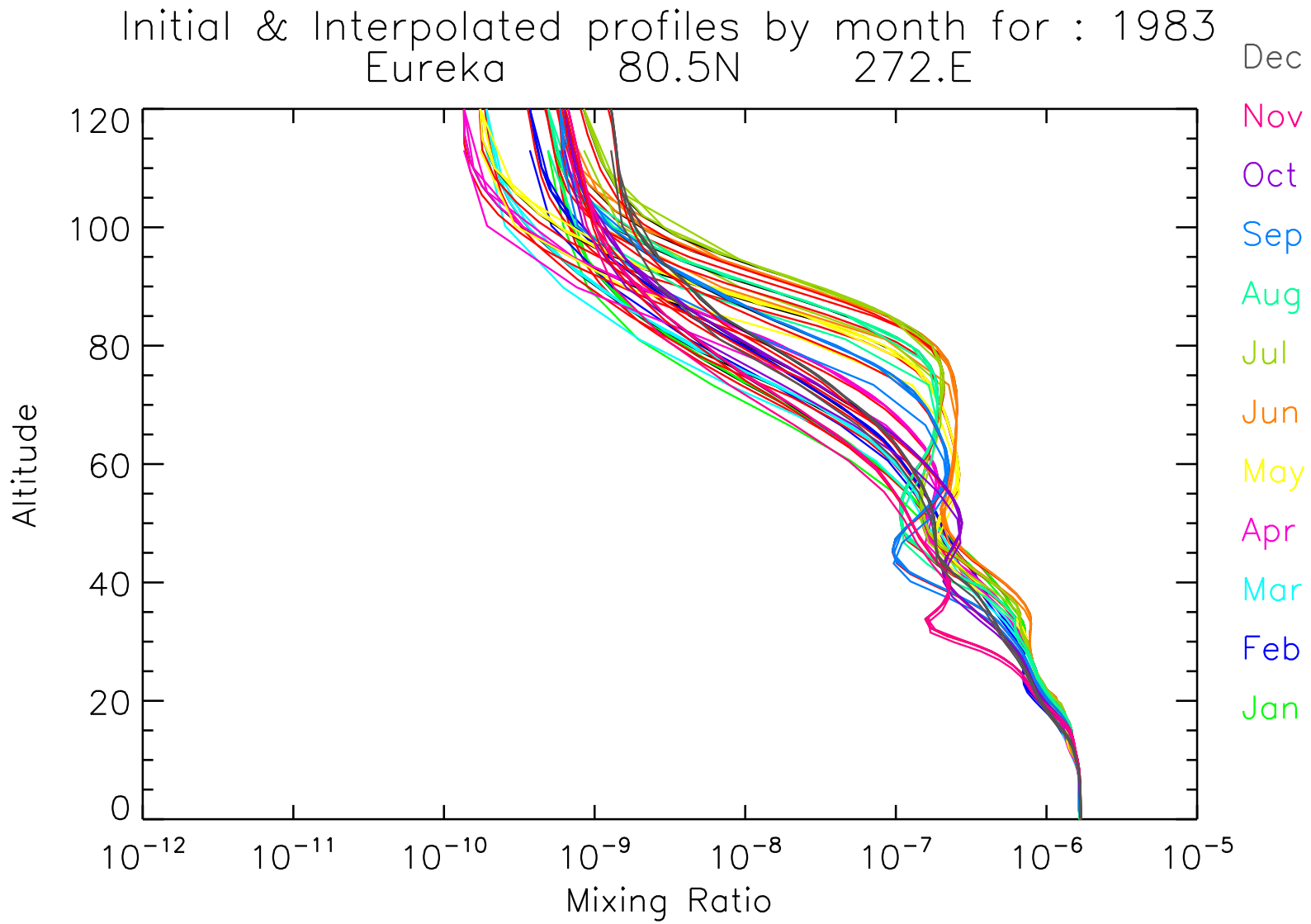
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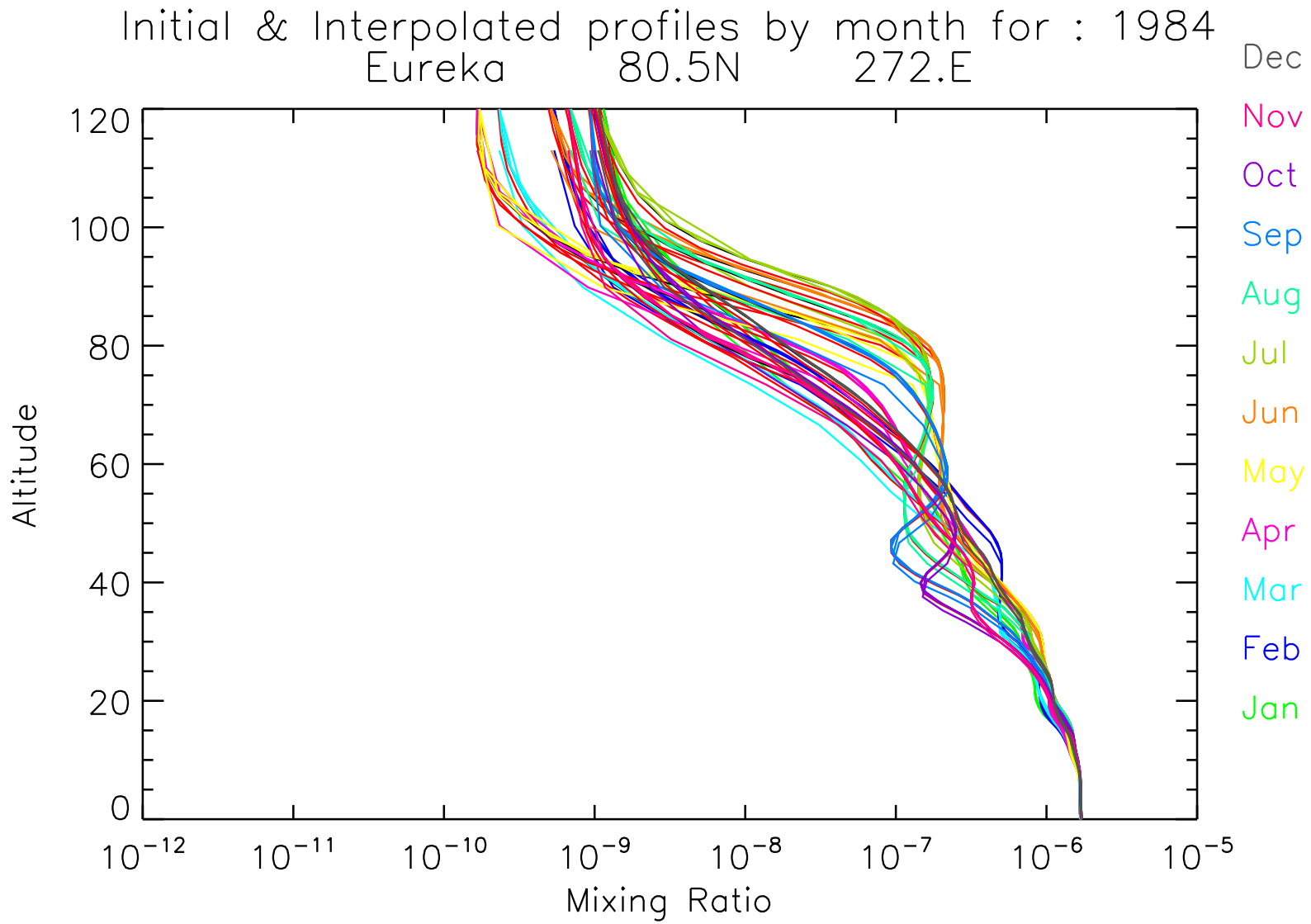
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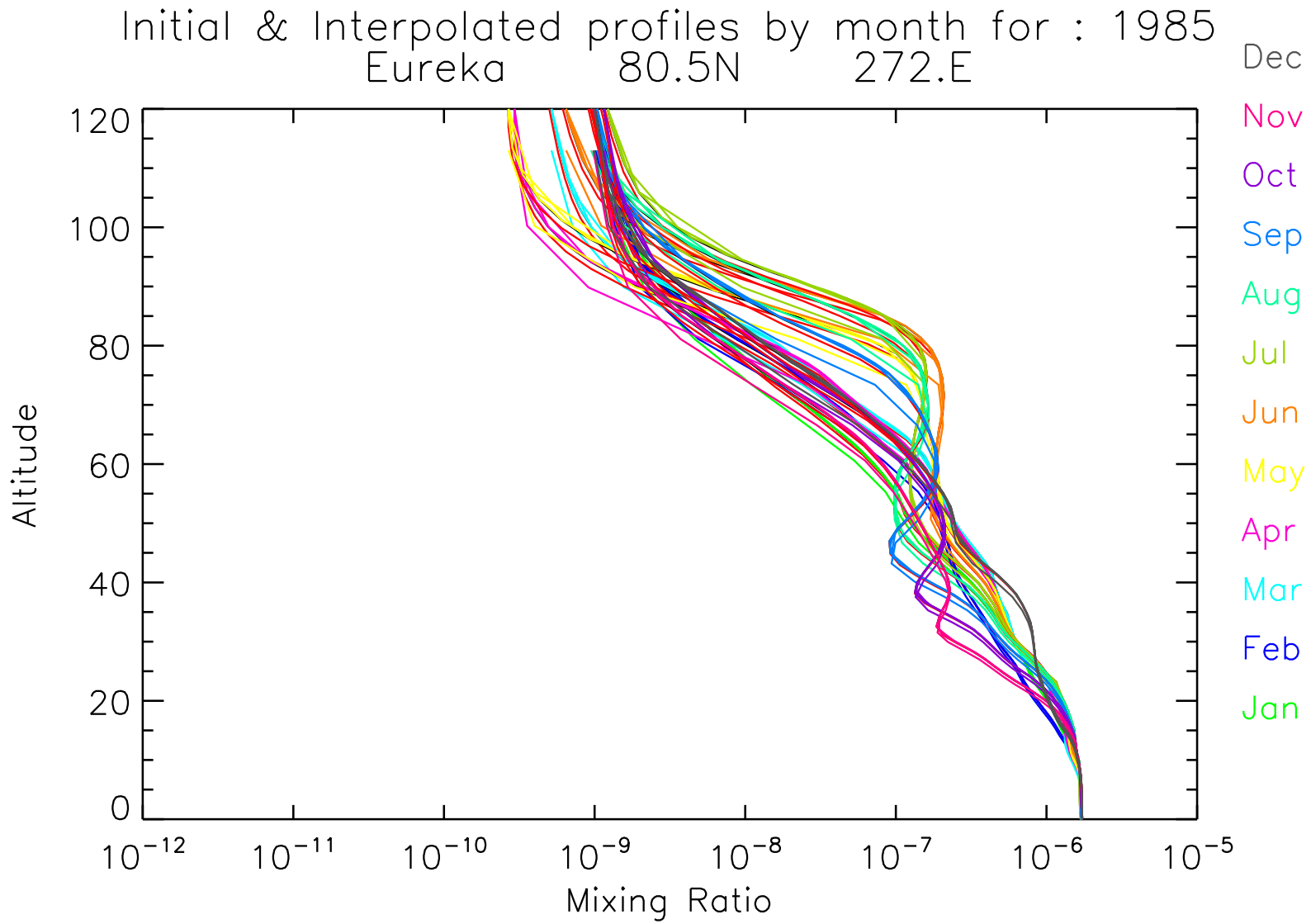
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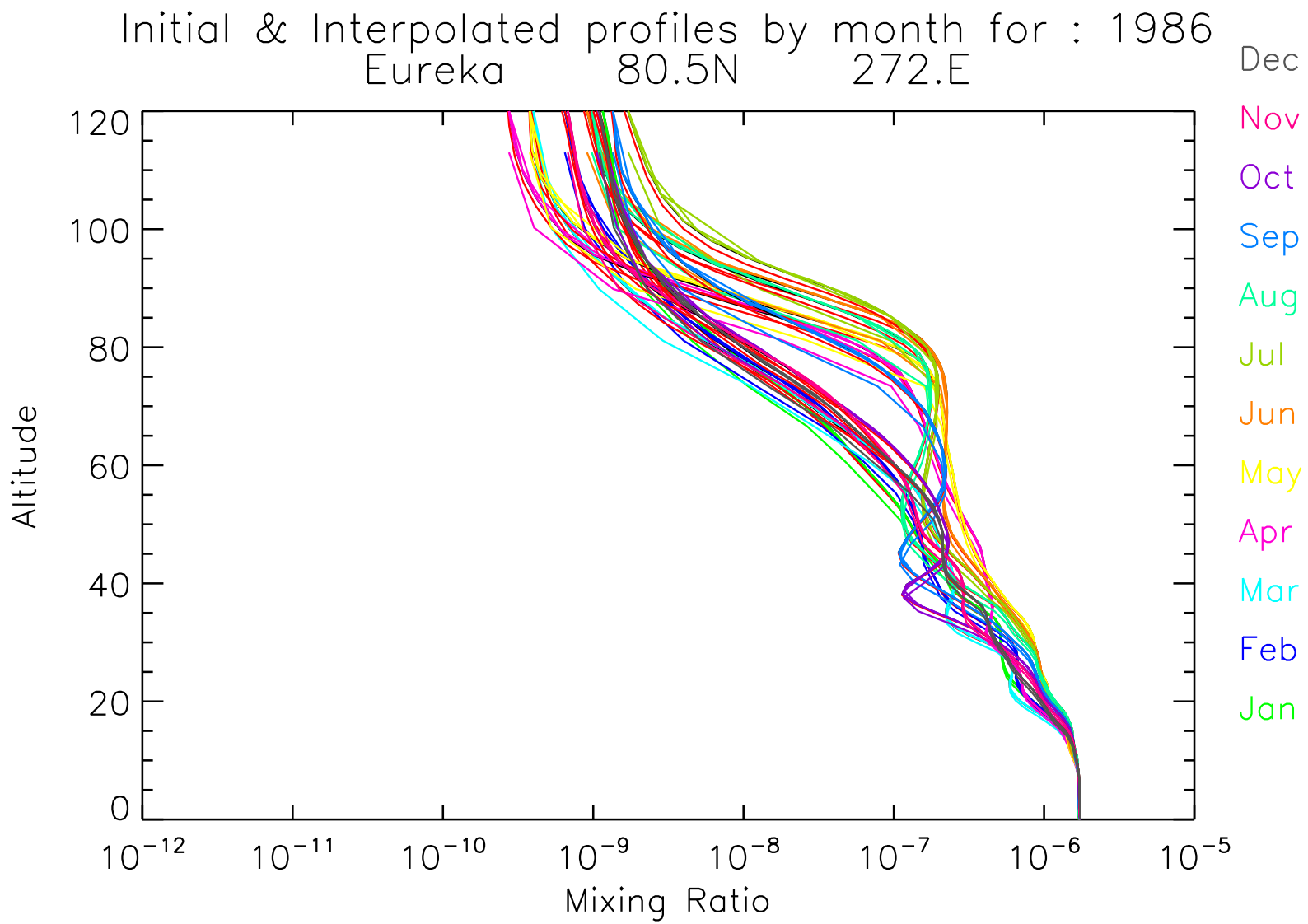
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Altitude
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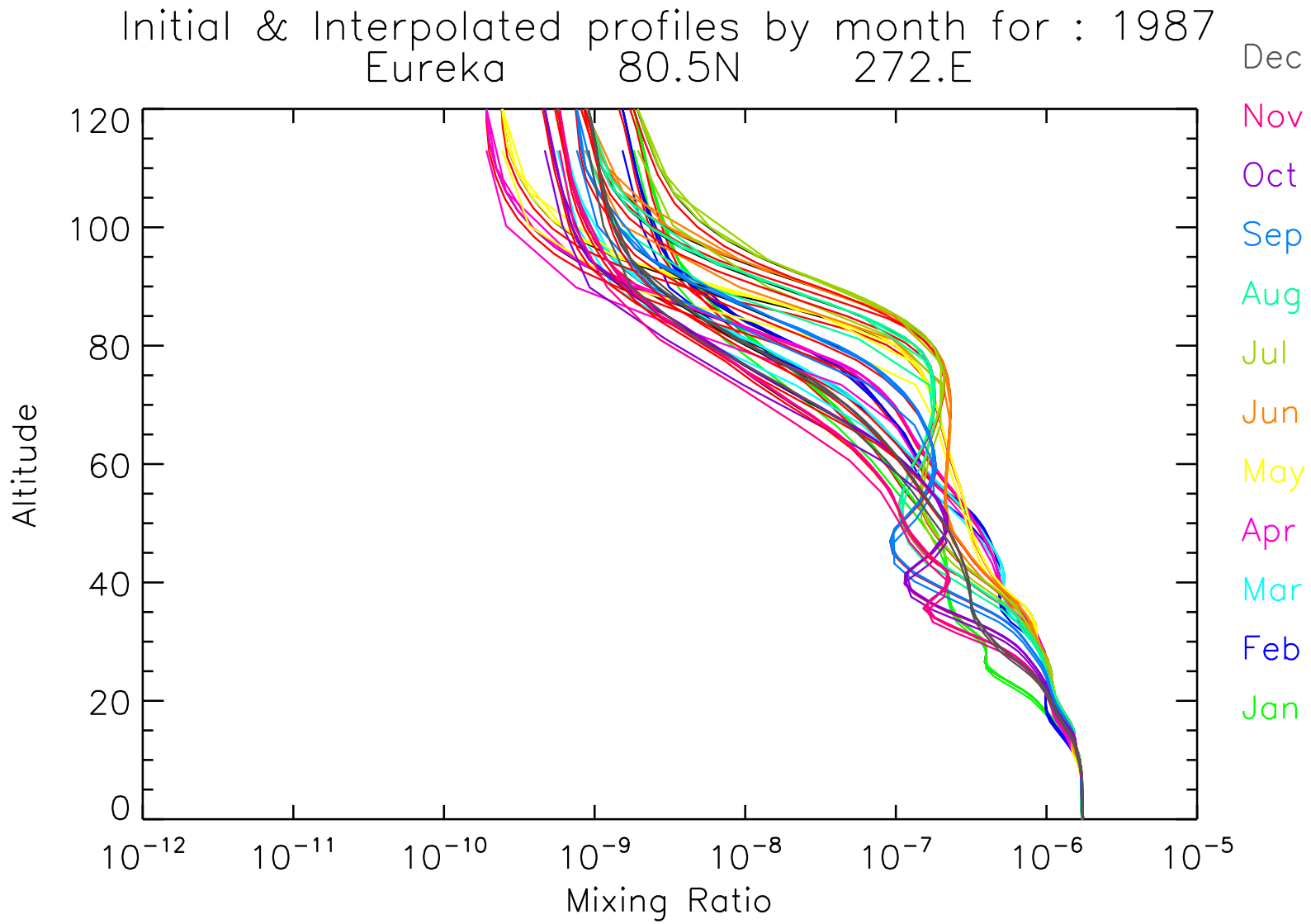
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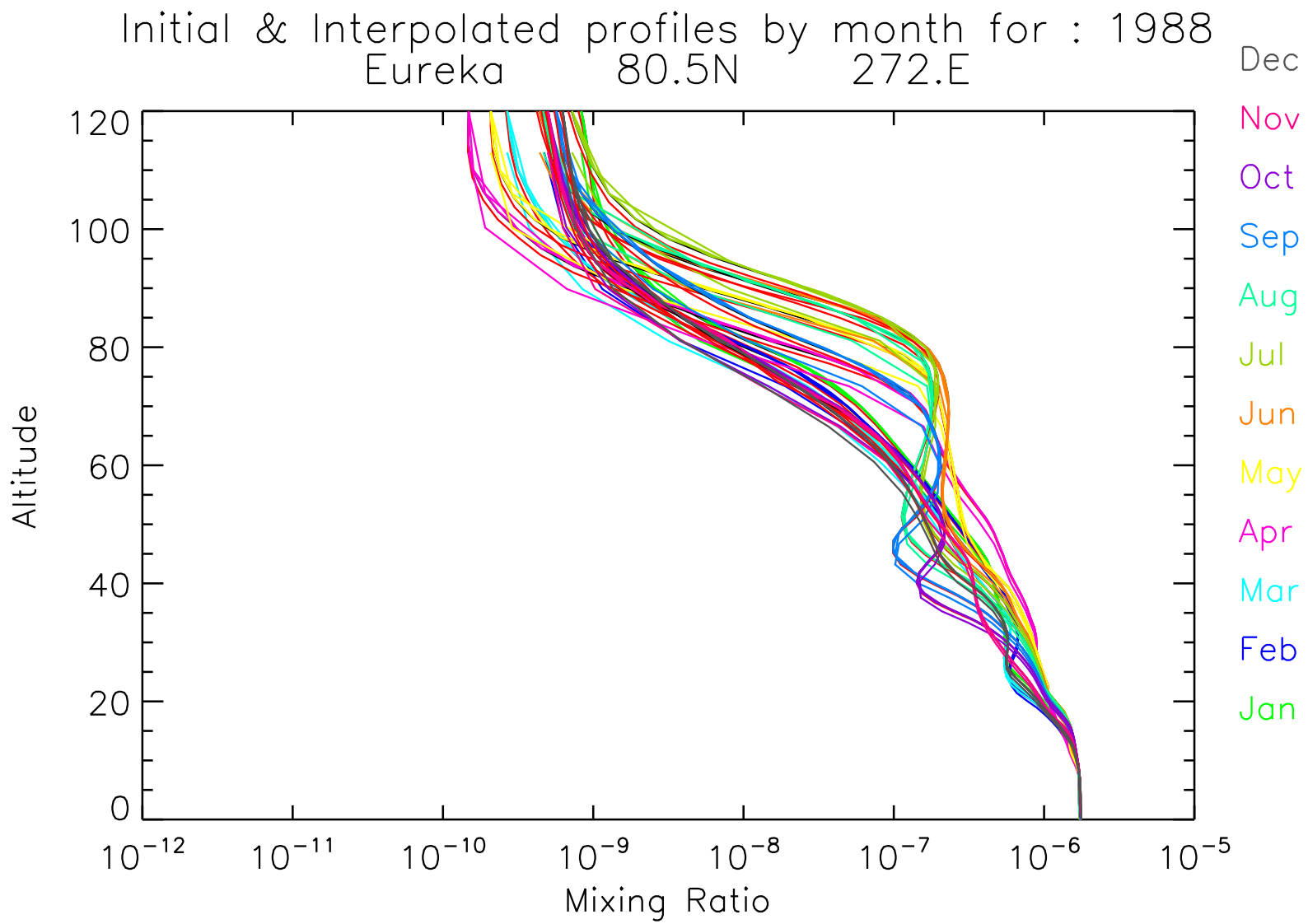
Initial & Interpolated profiles by month for : 1988
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Altitude
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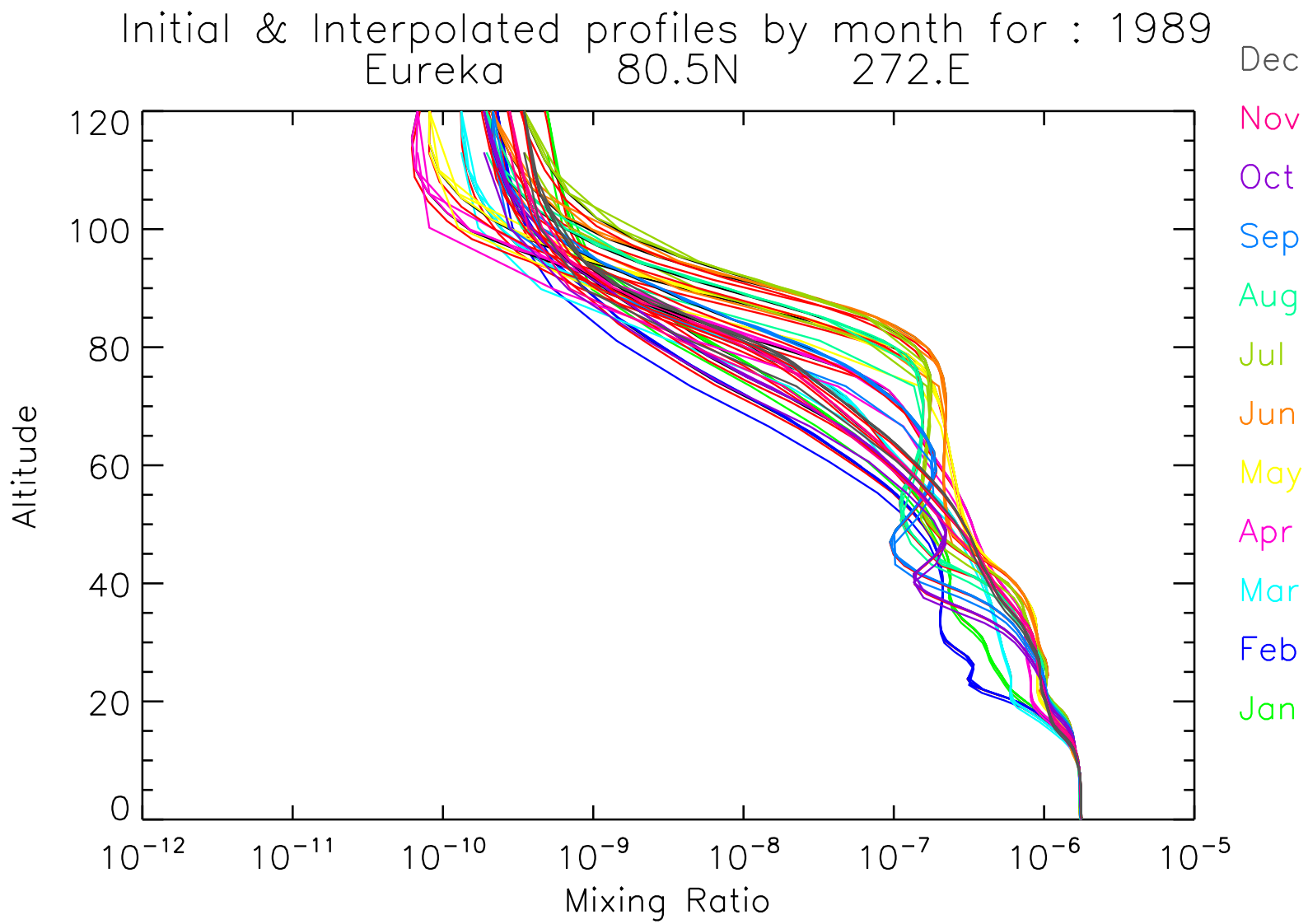
Initial & Interpolated profiles by month for : 1989
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Altitude
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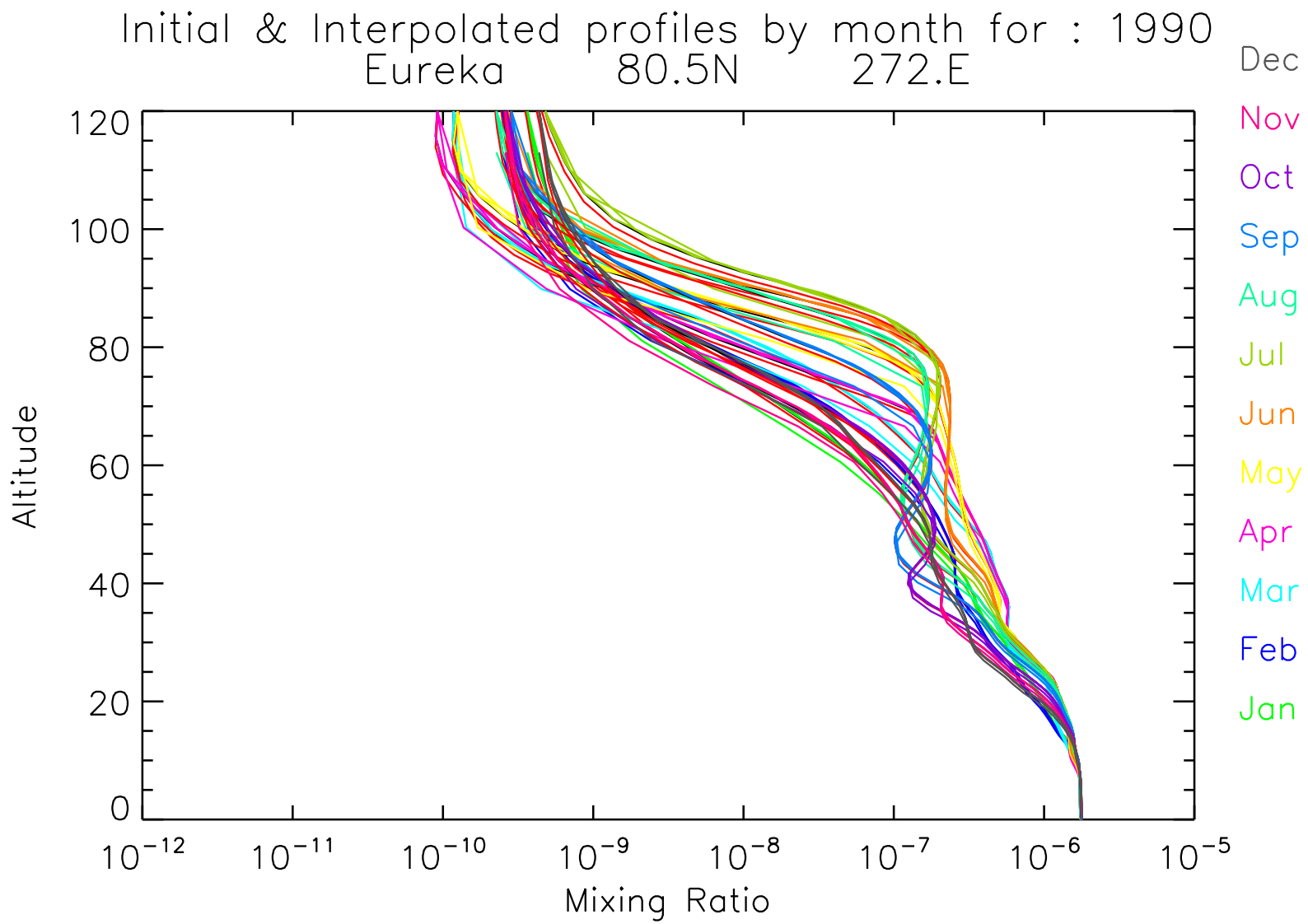
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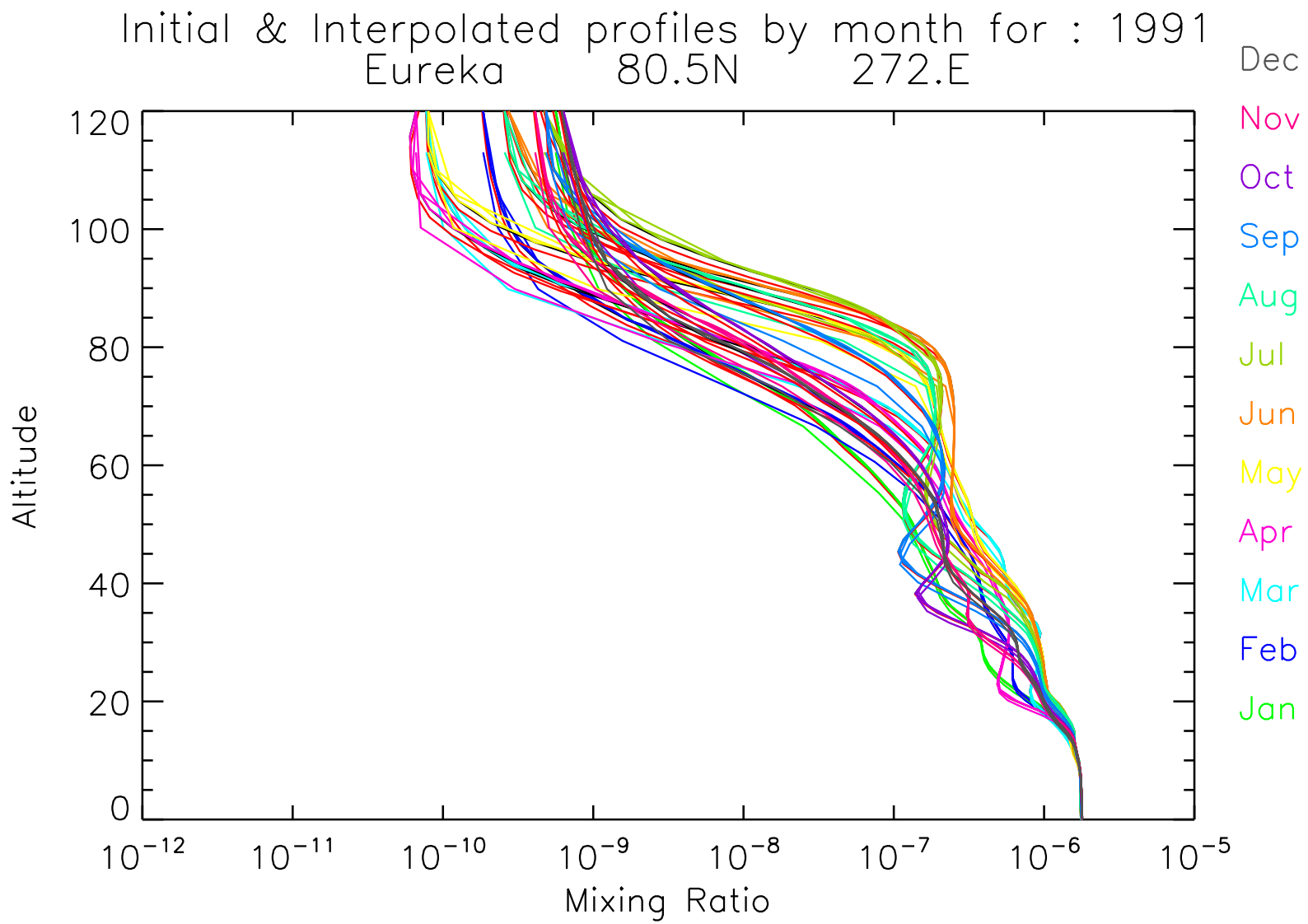
Initial & Interpolated profiles by month for : 1991
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Altitude
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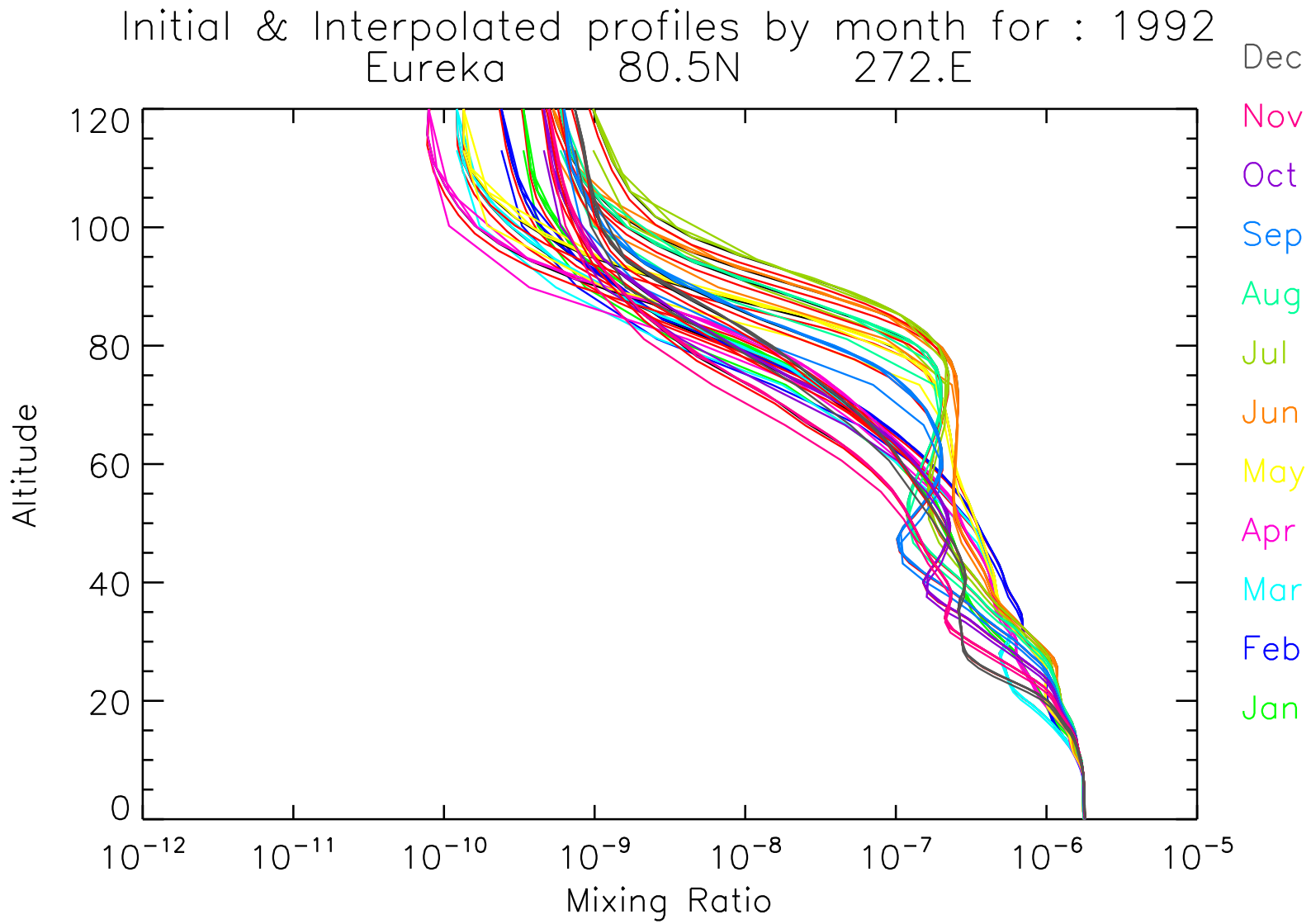
Initial & Interpolated profiles by month for : 1992
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Altitude
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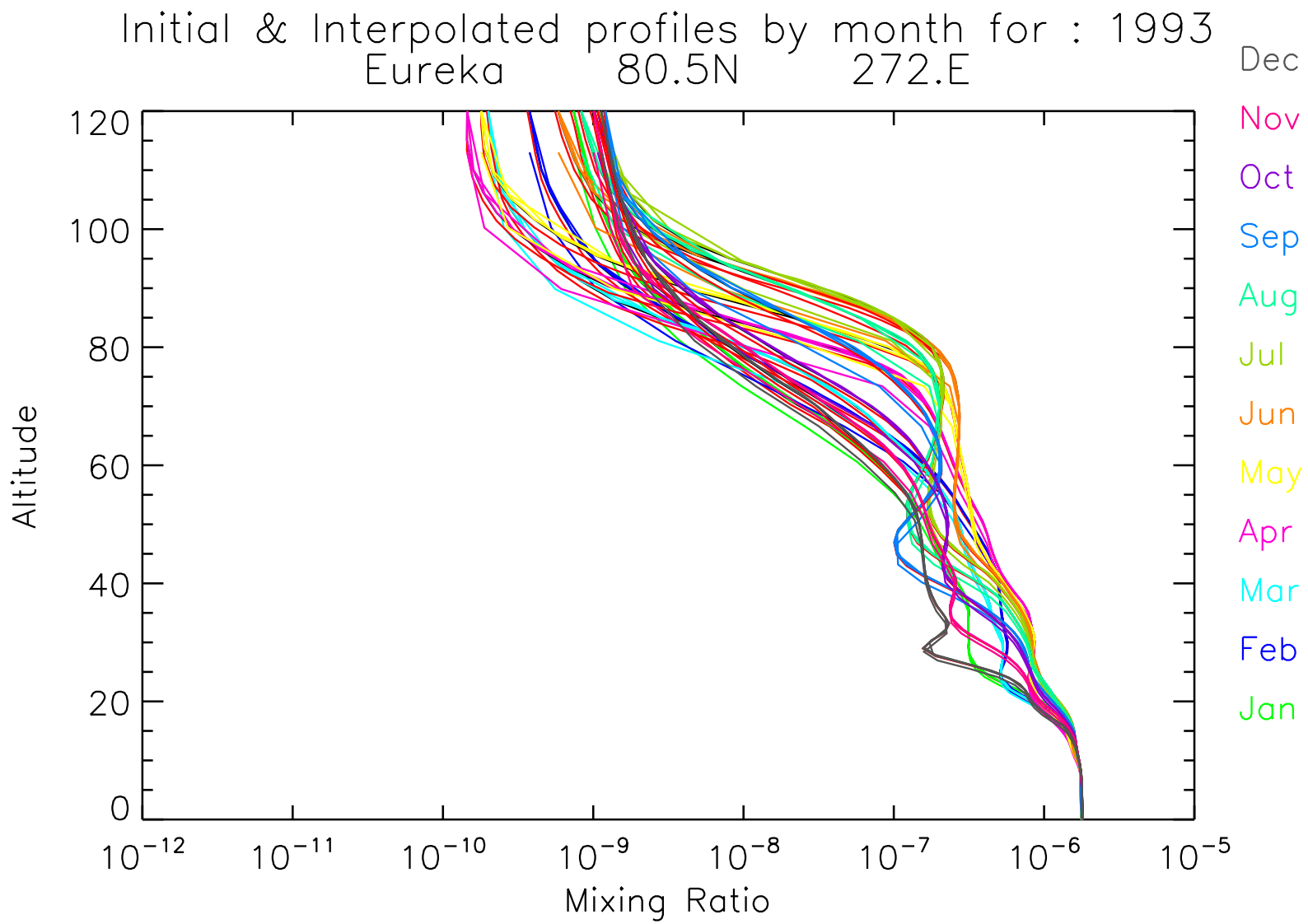
Initial & Interpolated profiles by month for : 1993
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Altitude
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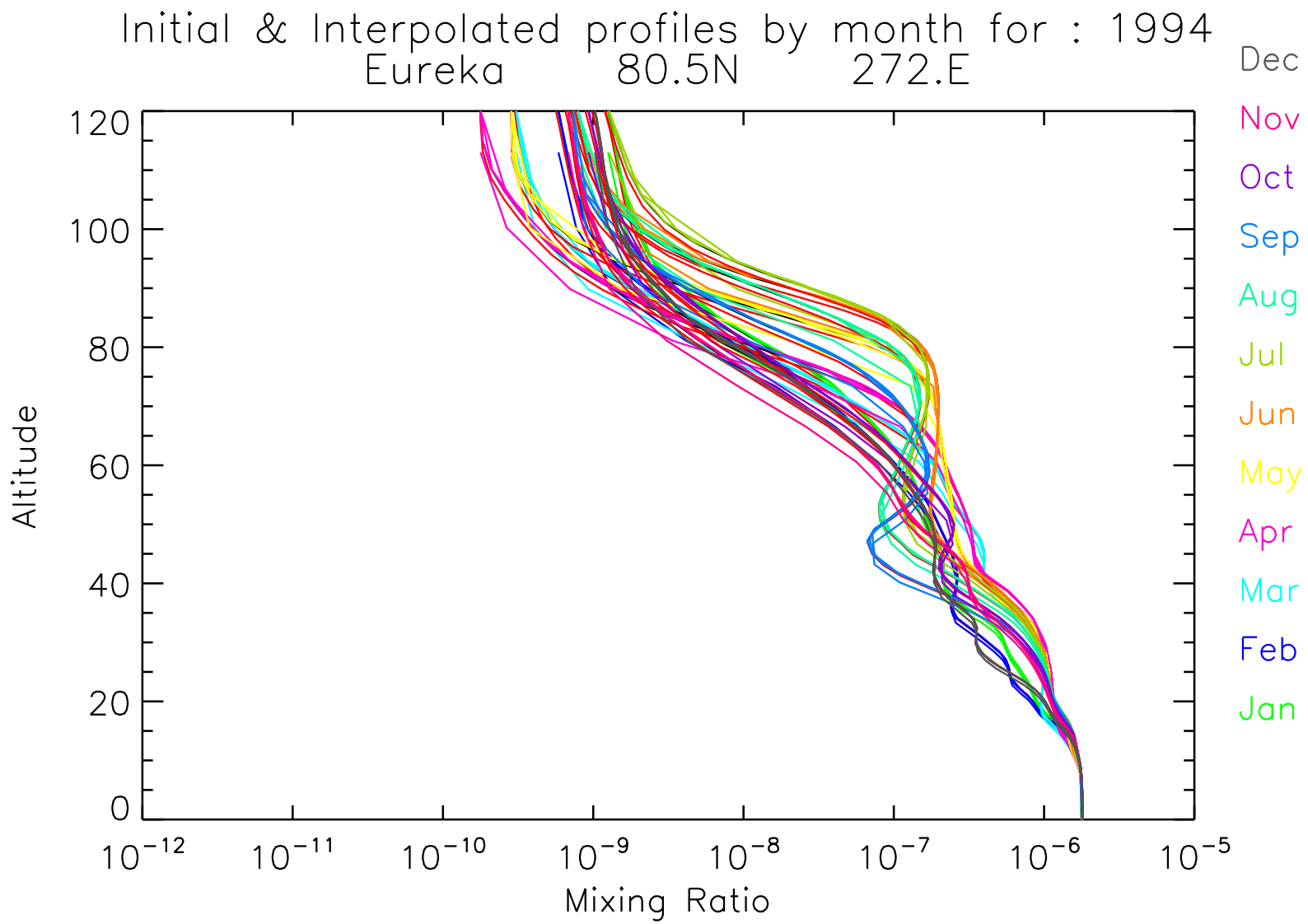
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Altitude
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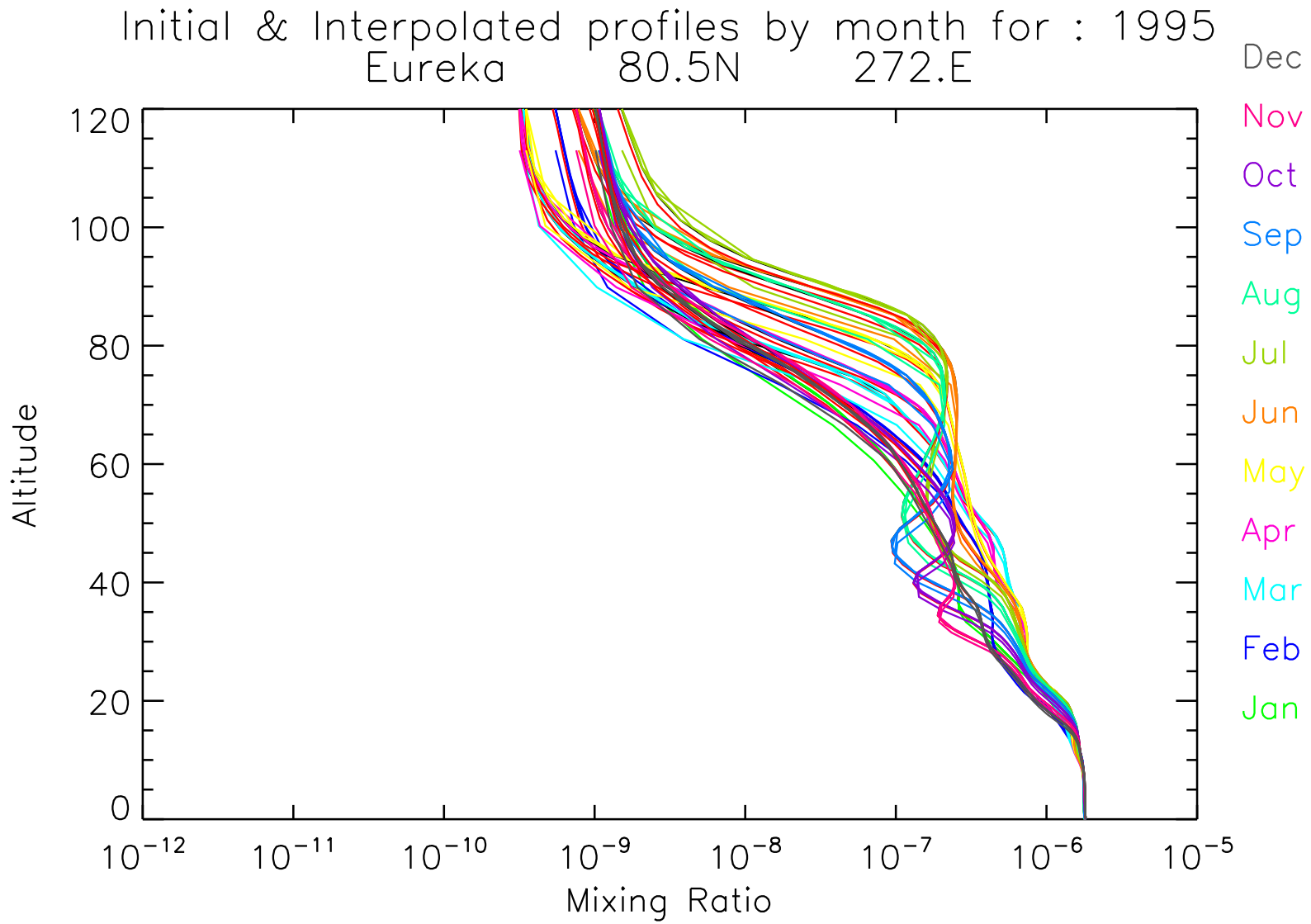
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Altitude
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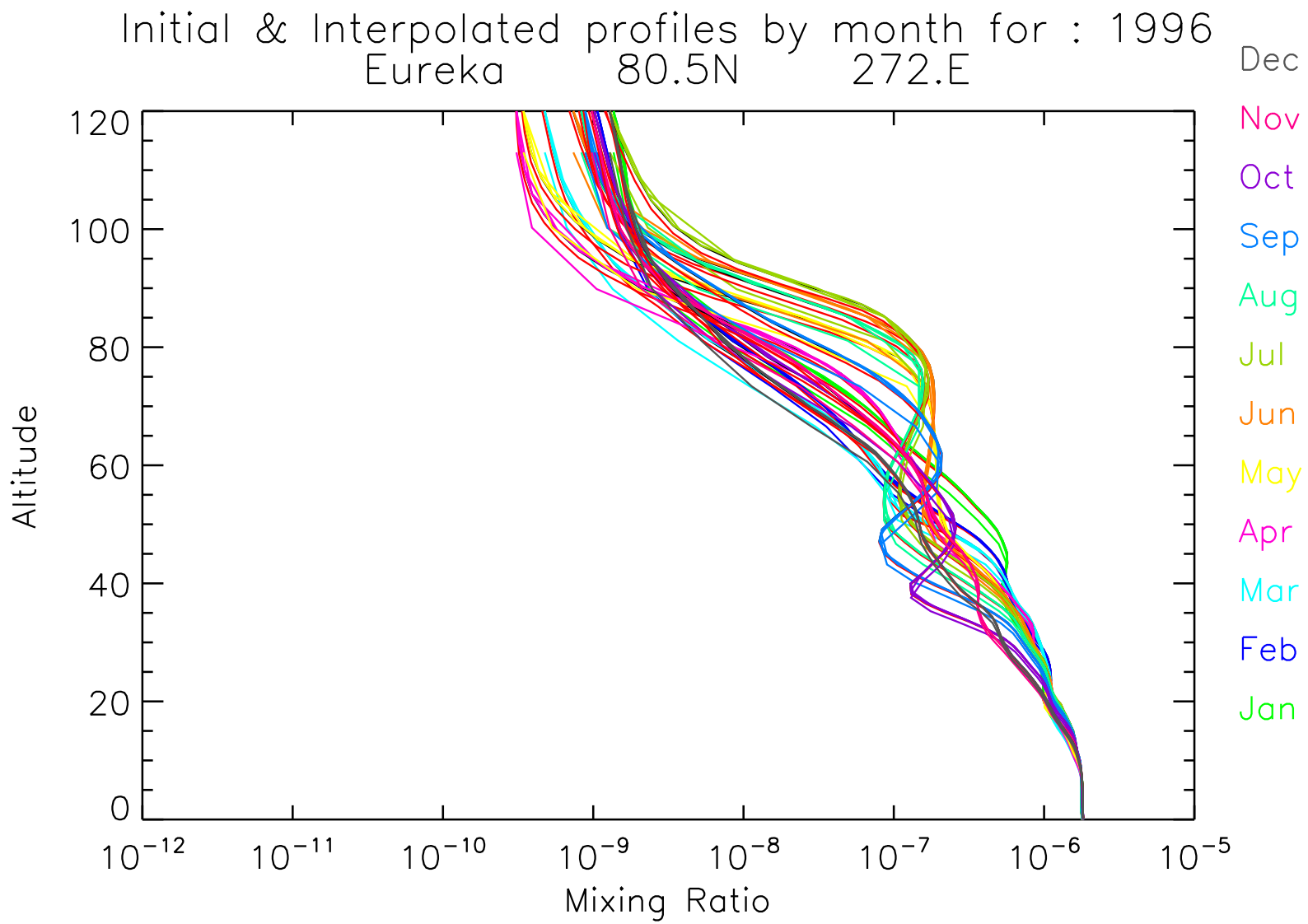
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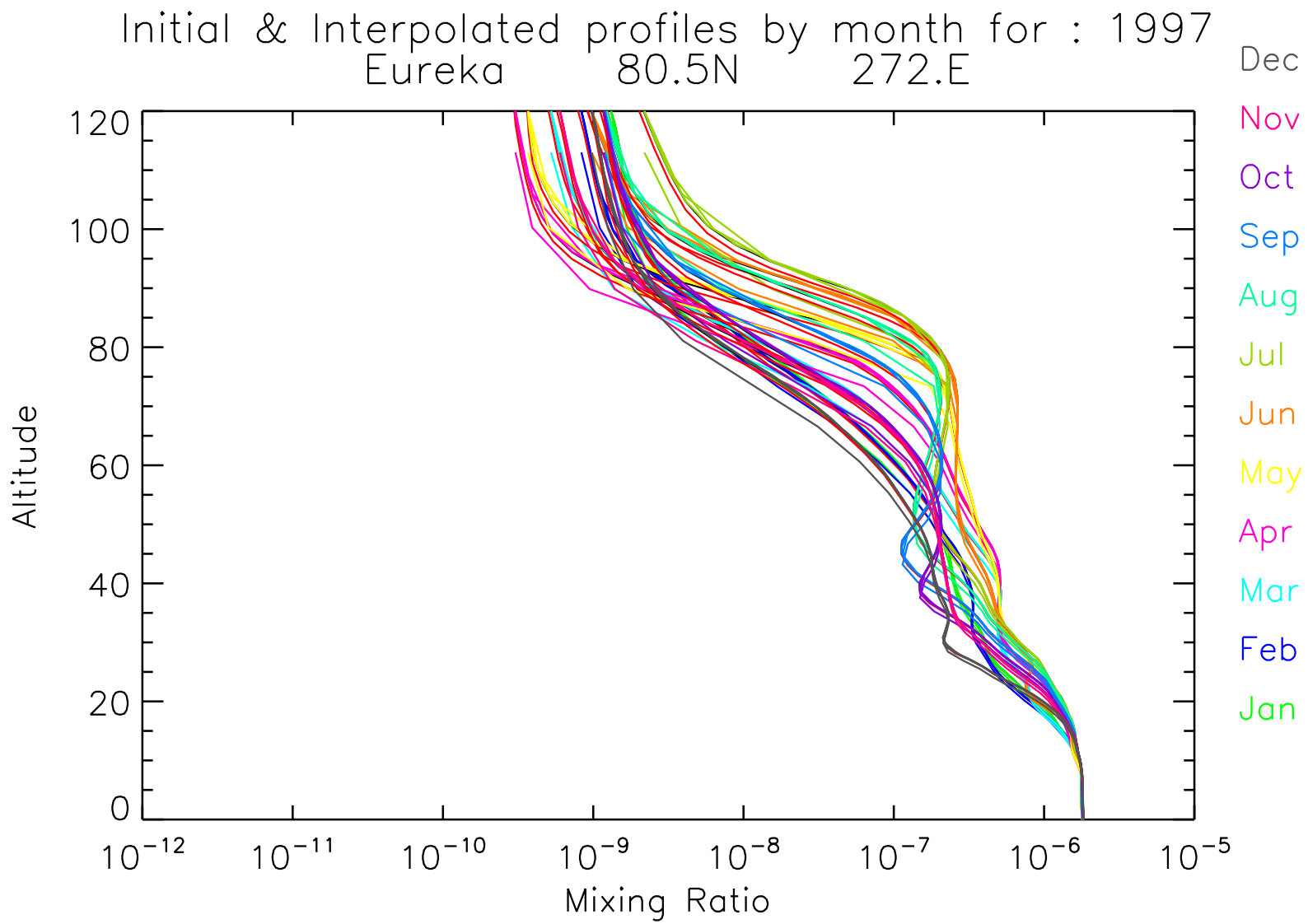
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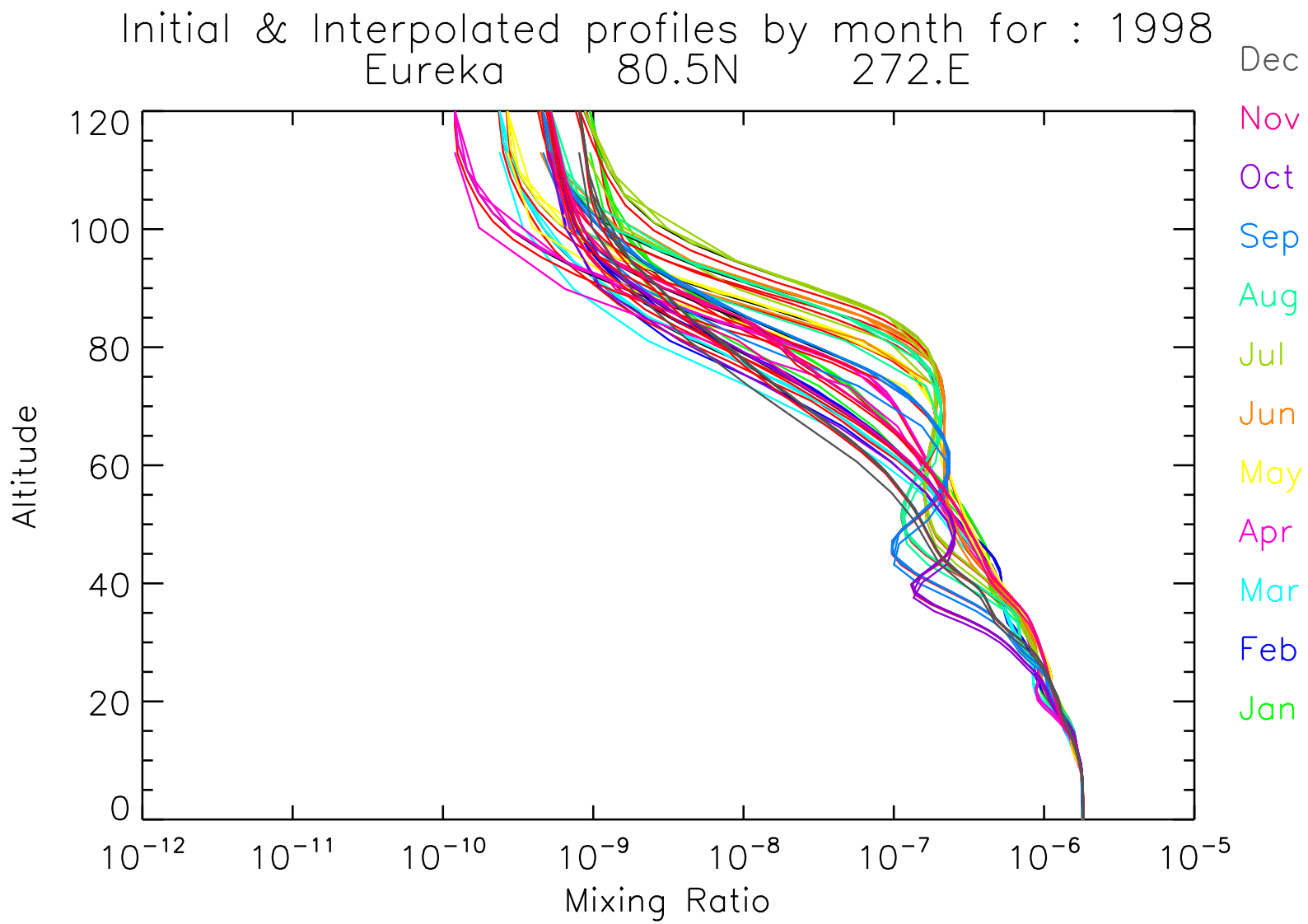
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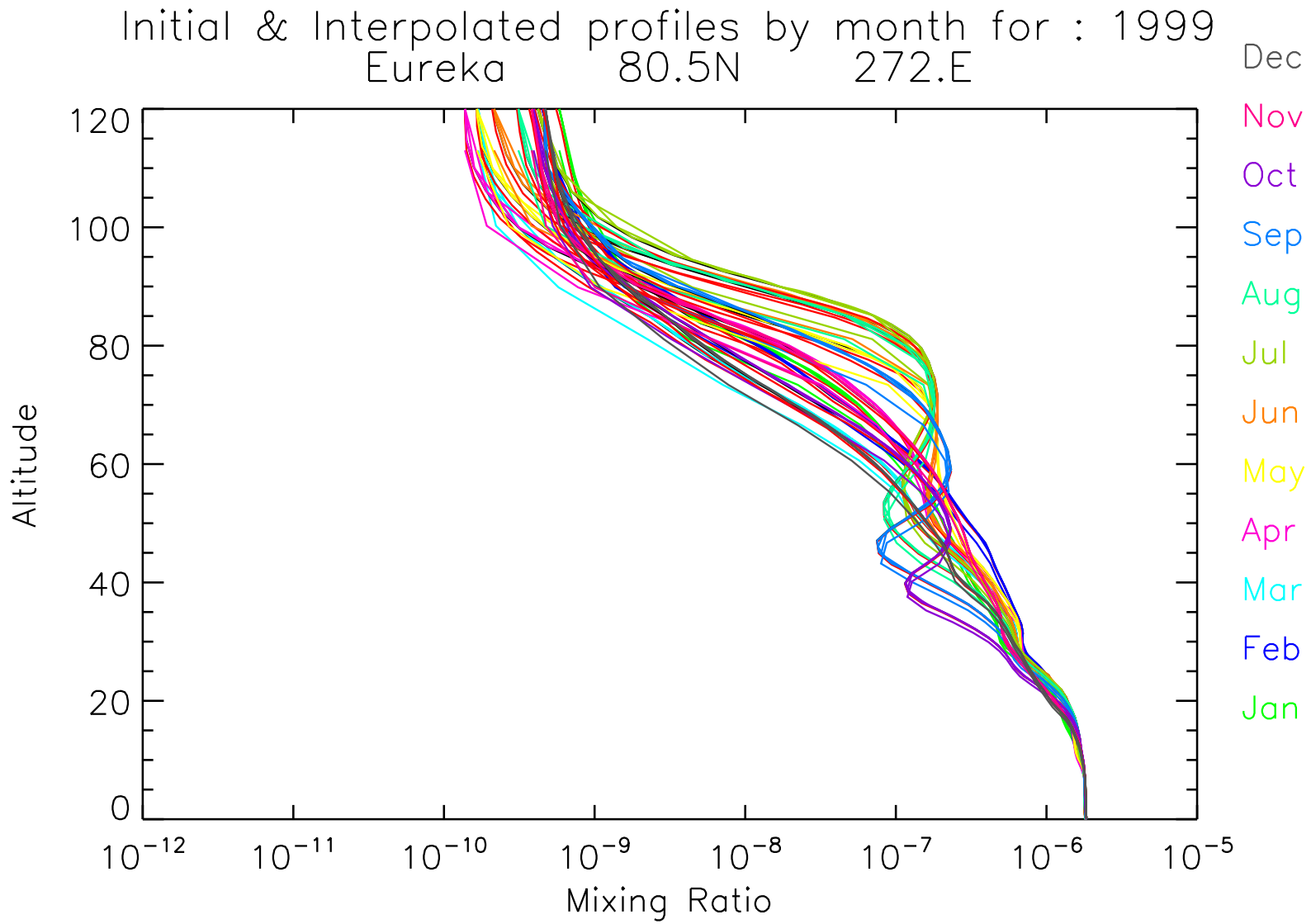
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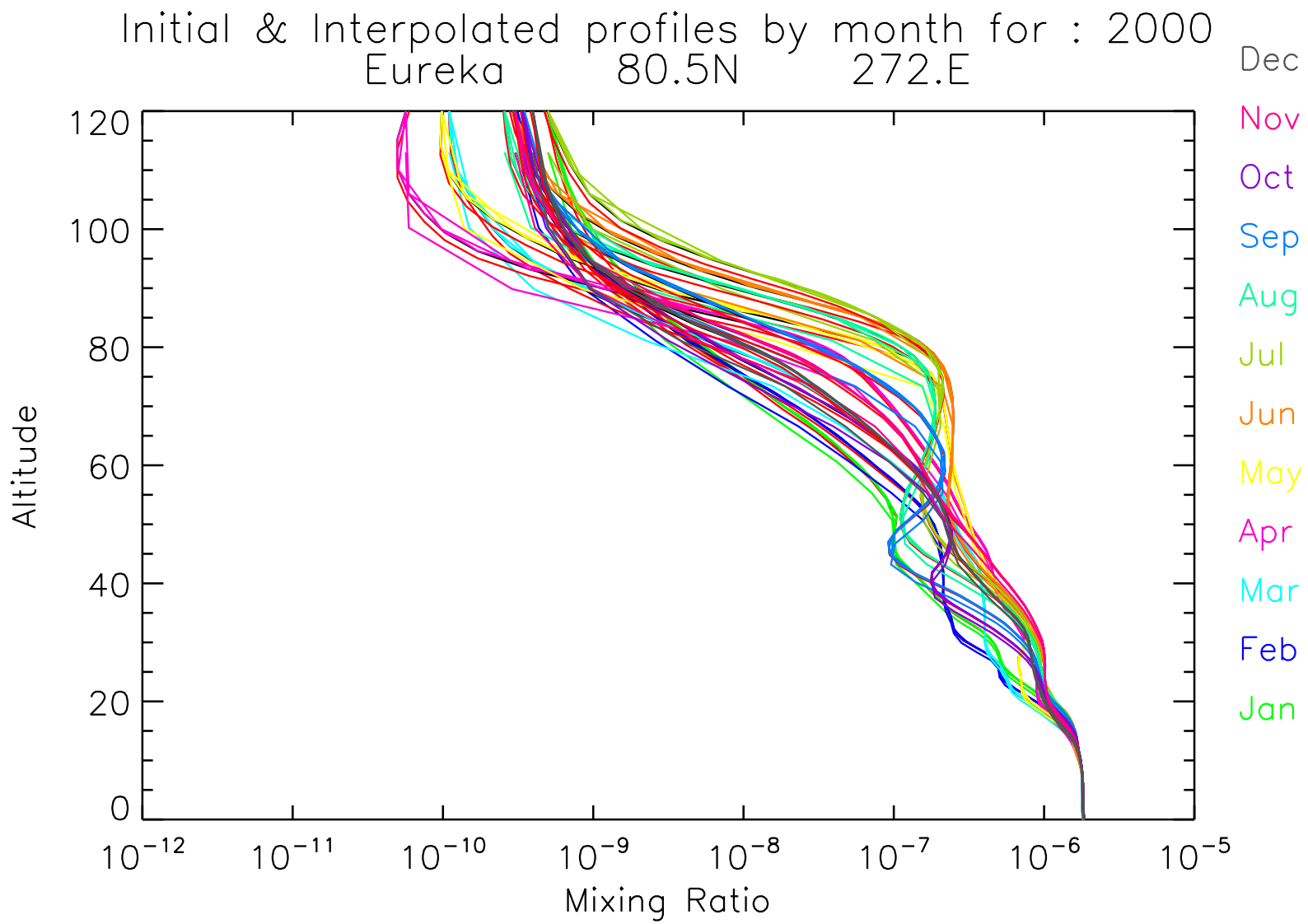
Initial & Interpolated profiles by month for : 2000
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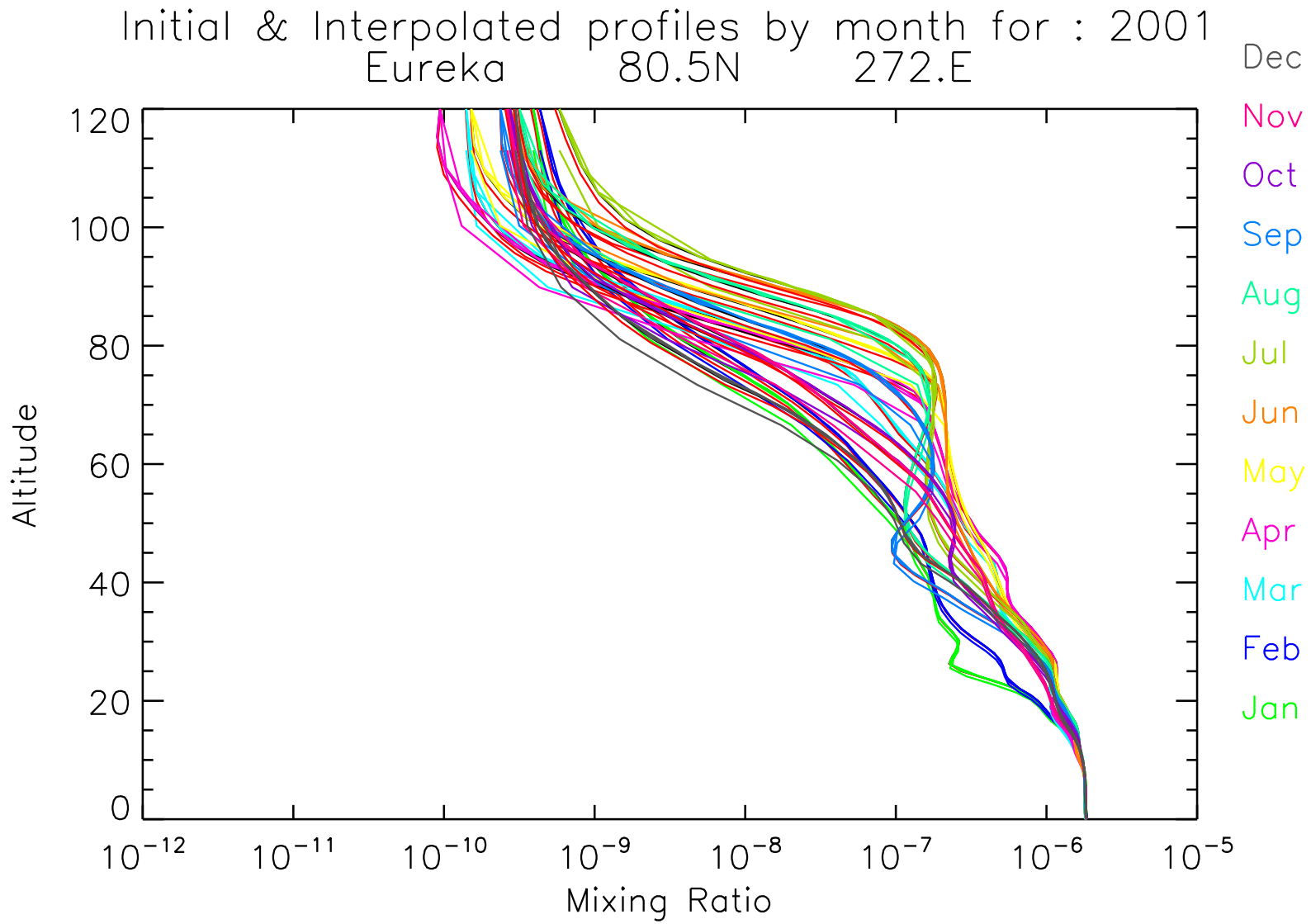
Initial & Interpolated profiles by month for : 2001
Eureka 80.5N 272.E
Altitude
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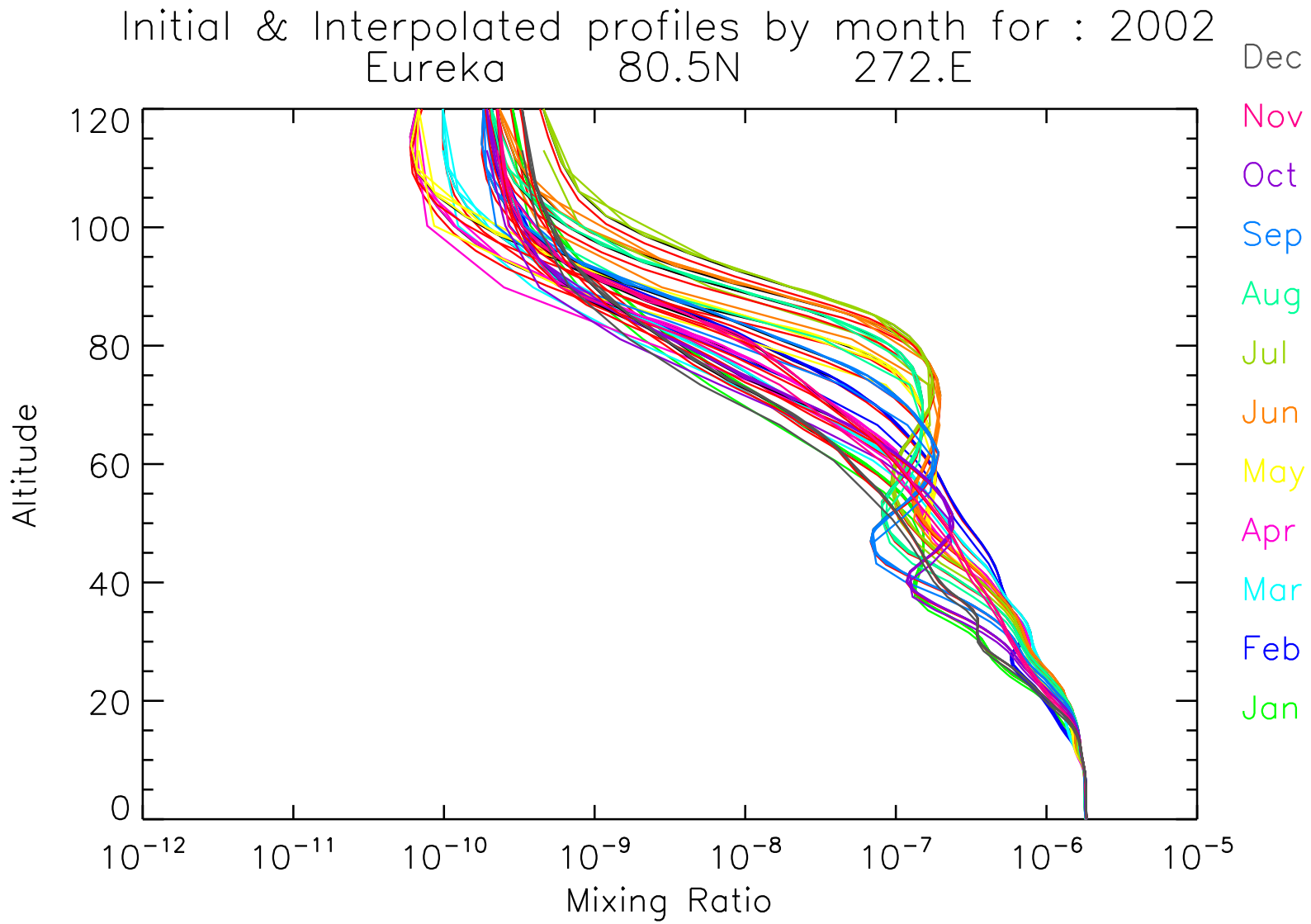
Initial & Interpolated profiles by month for : 2002
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Altitude
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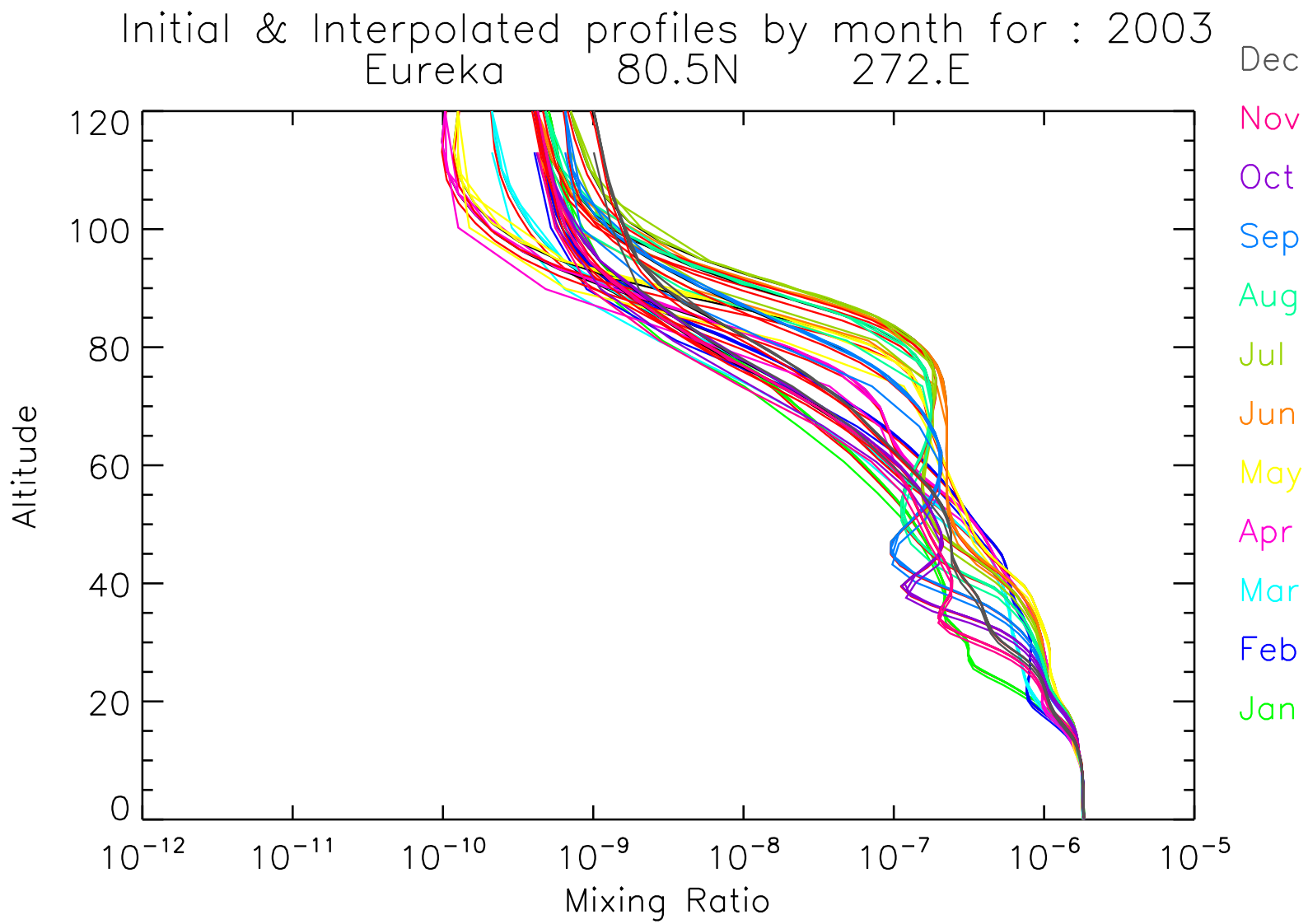
Initial & Interpolated profiles by month for : 2003
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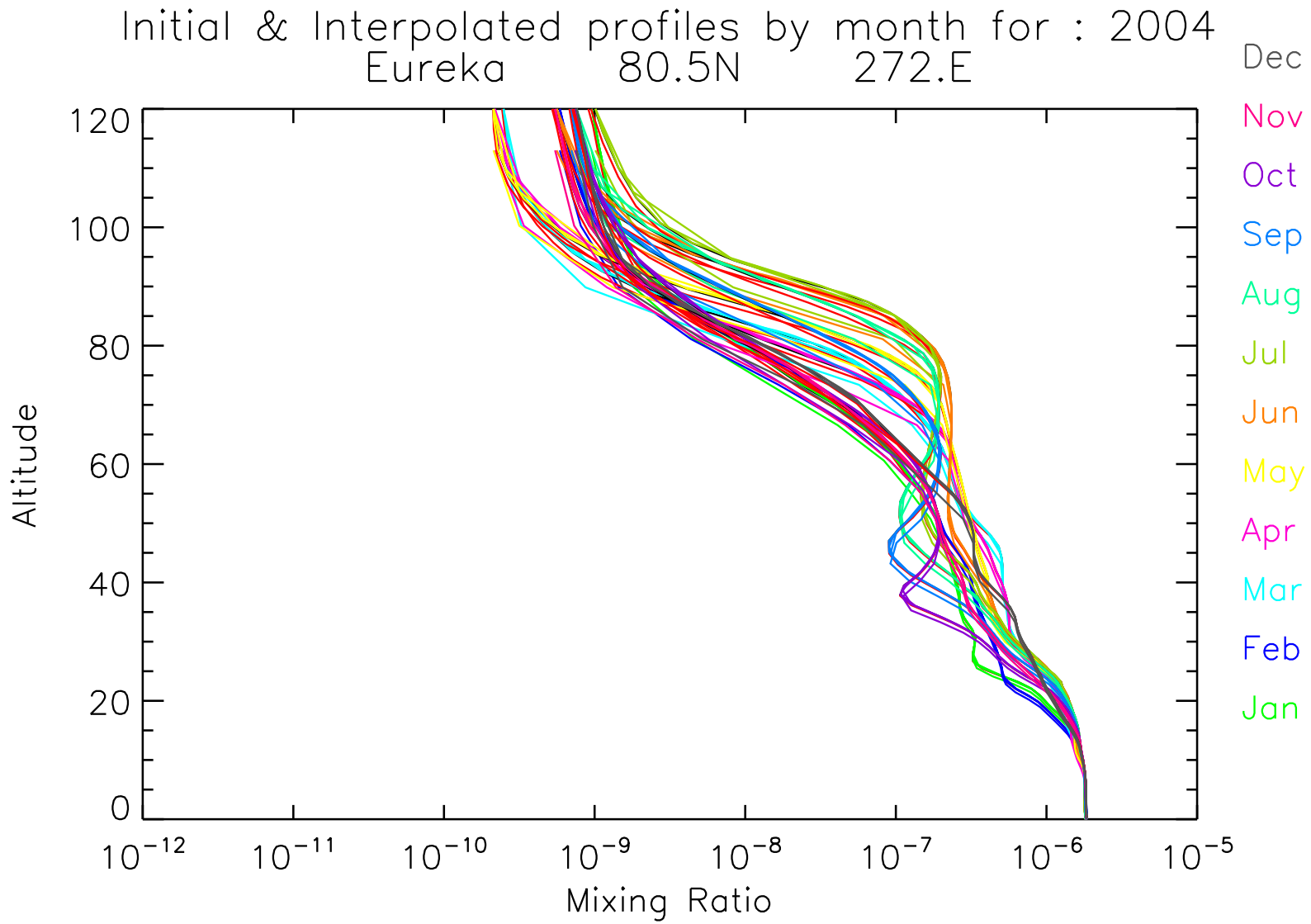
Initial & Interpolated profiles by month for : 2004
Eureka 80.5N 272.E
Altitude
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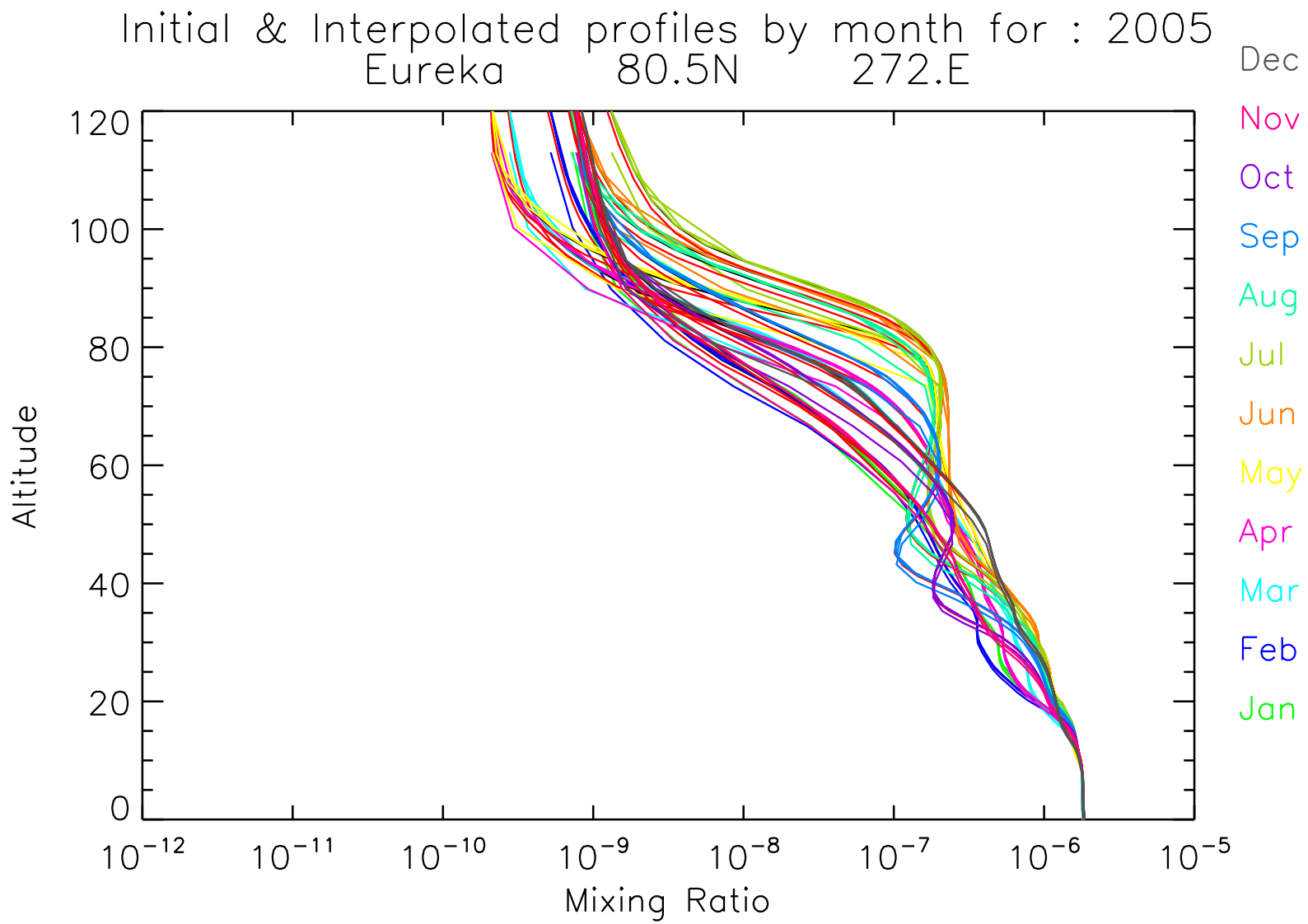
Initial & Interpolated profiles by month for : 2005
Eureka 80.5N 272.E
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Mixing Ratio
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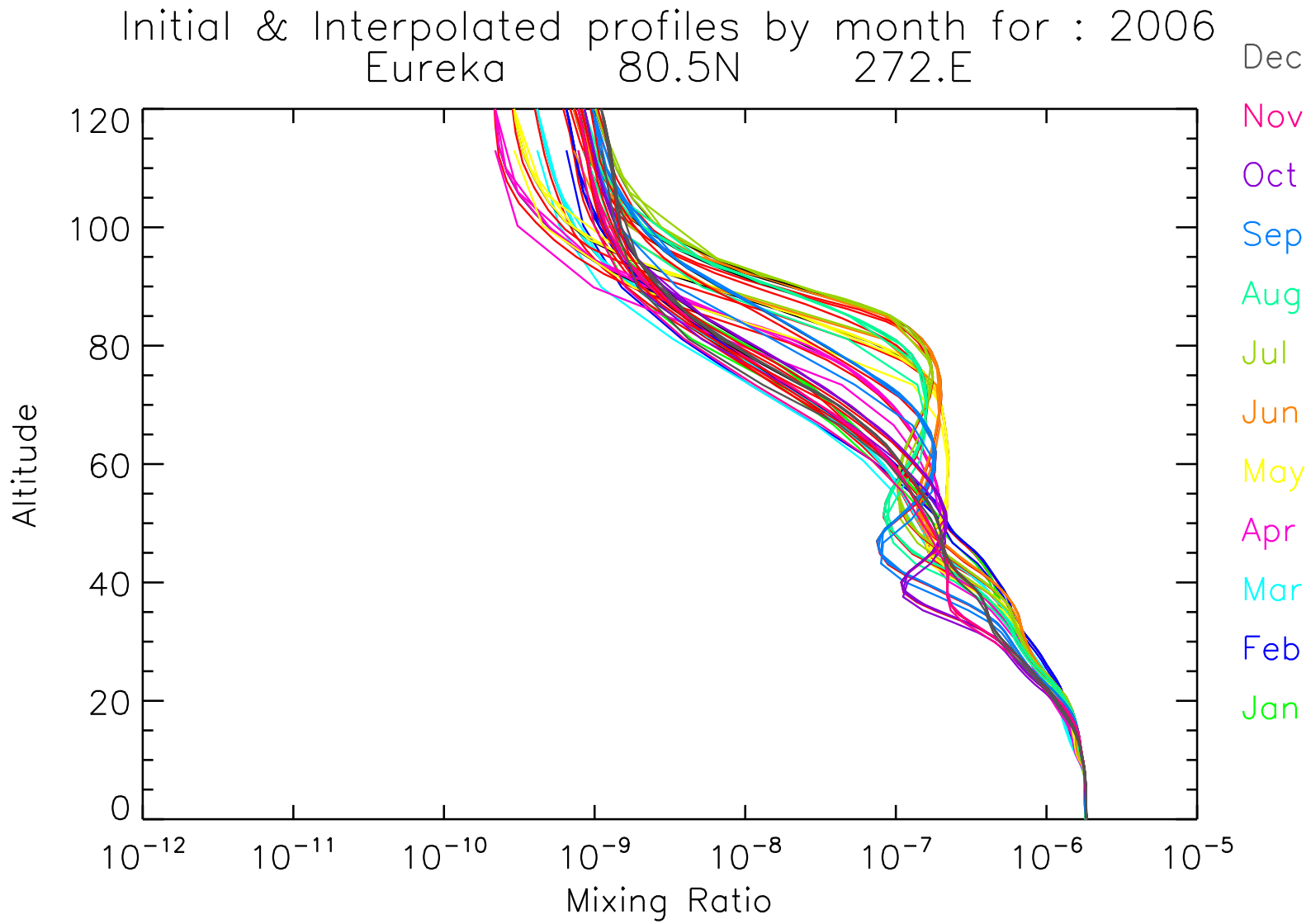
Initial & Interpolated profiles by month for : 2006
Eureka 80.5N 272.E
Altitude
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Mixing Ratio
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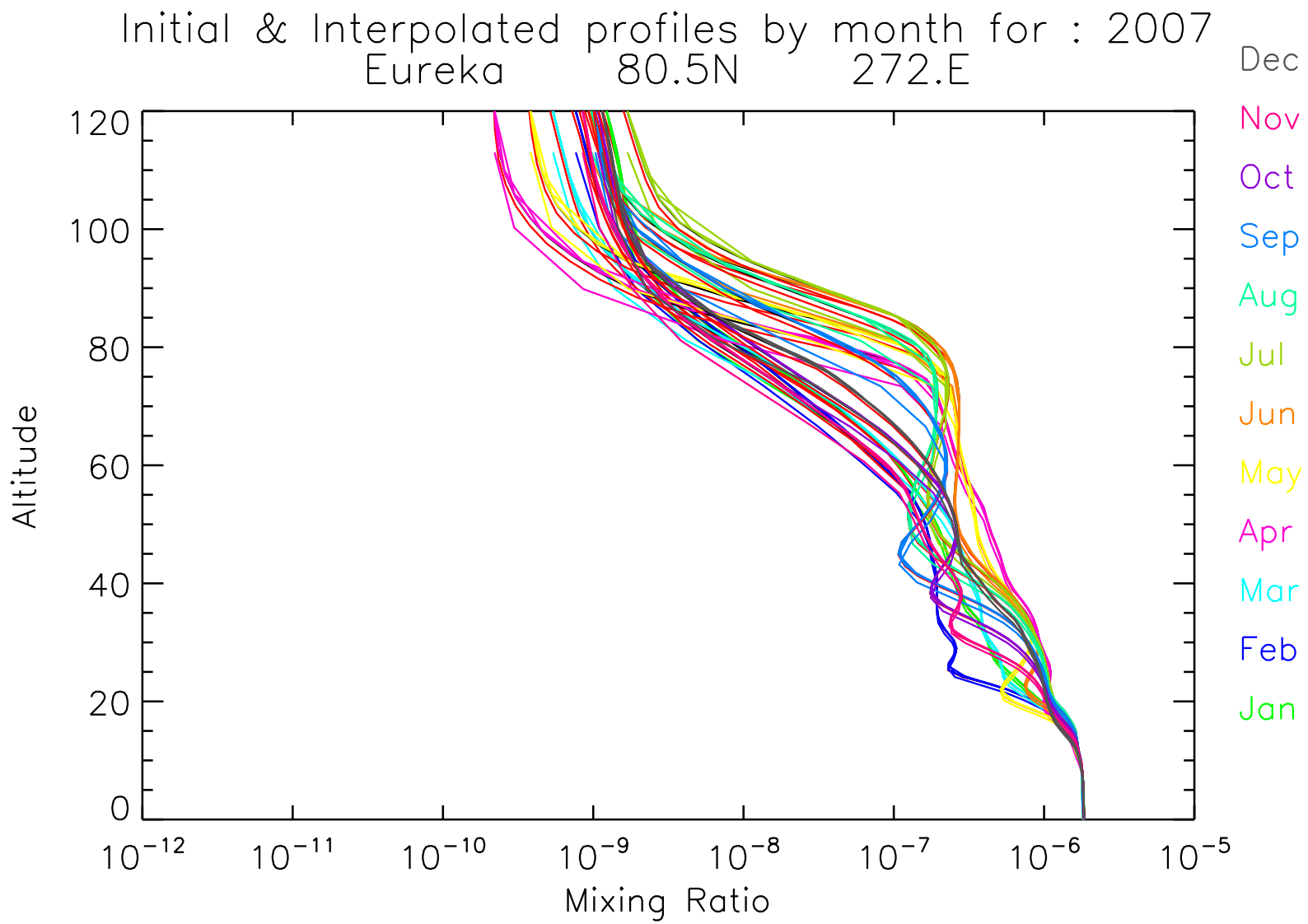
Initial & Interpolated profiles by month for : 2007
Eureka 80.5N 272.E
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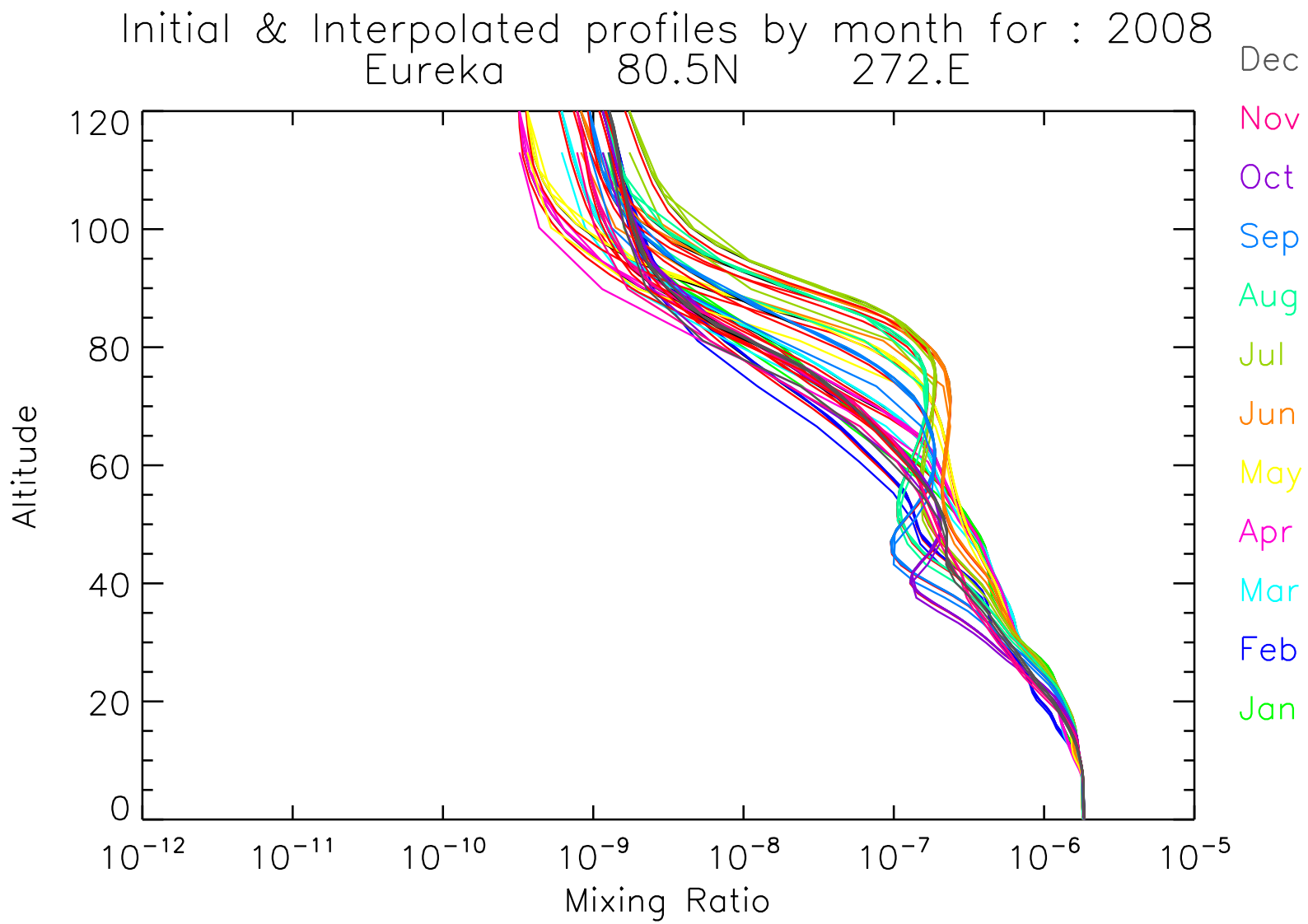
Initial & Interpolated profiles by month for : 2008
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Mixing Ratio
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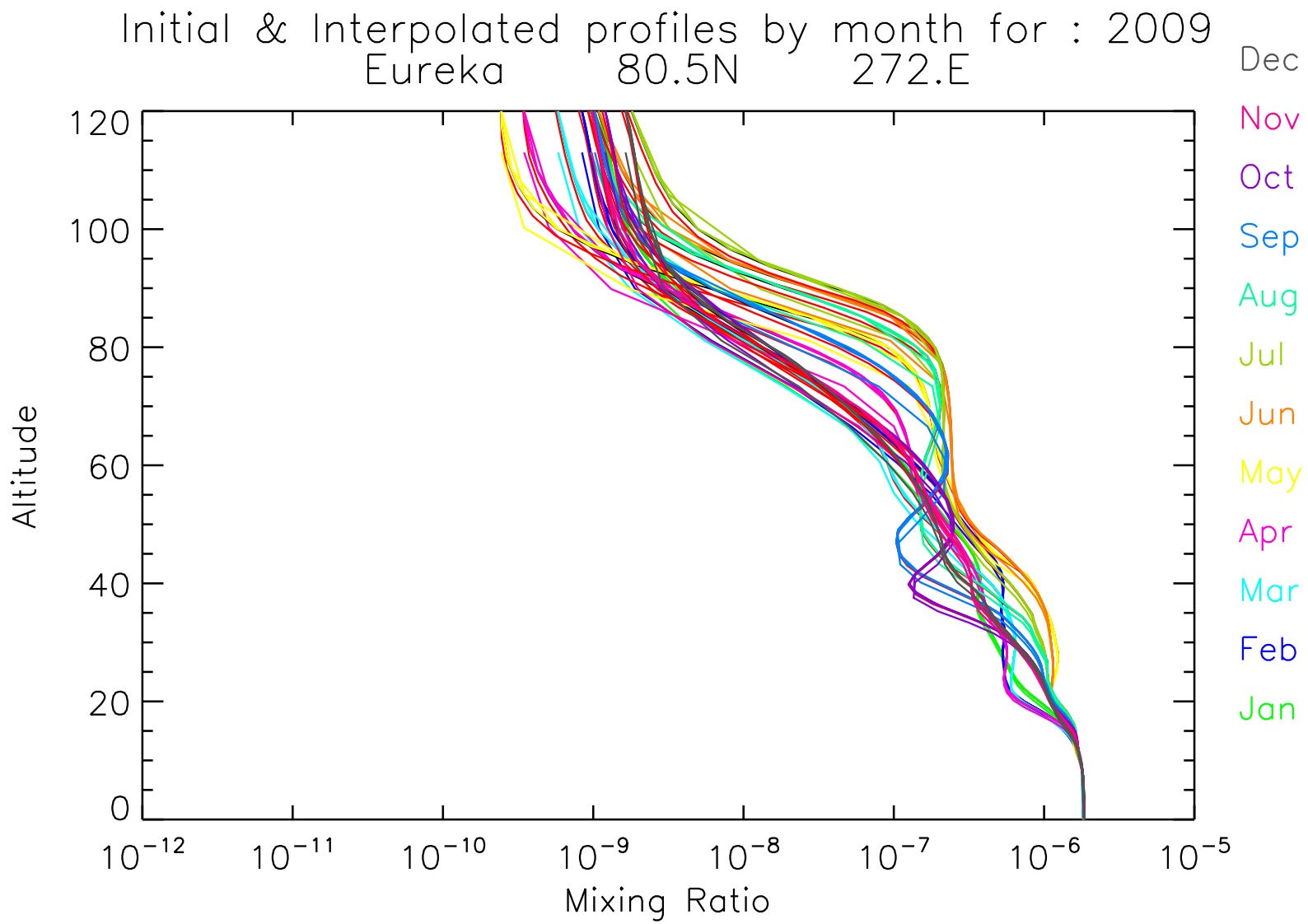
Initial & Interpolated profiles by month for : 2009
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Altitude
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Mixing Ratio
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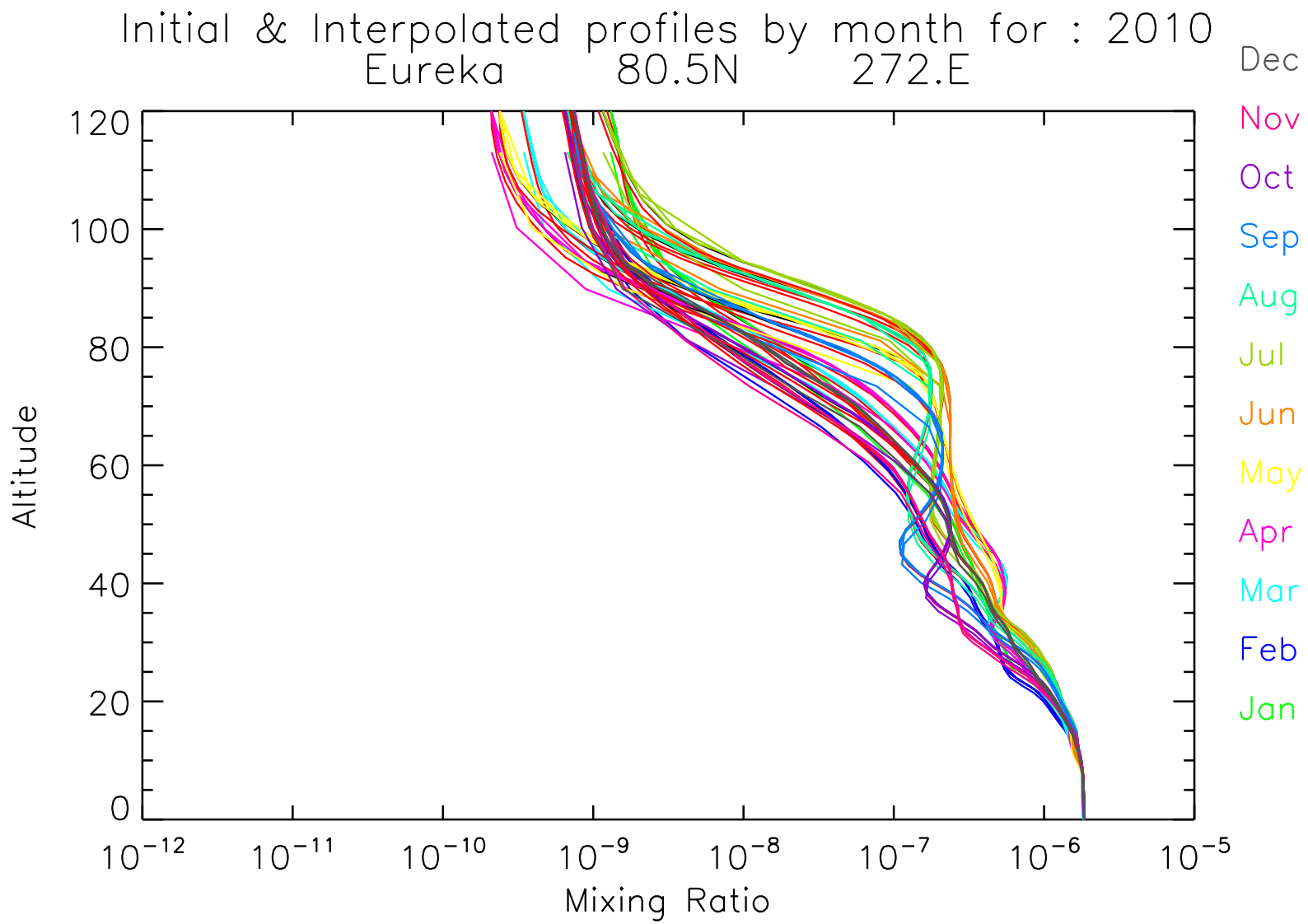
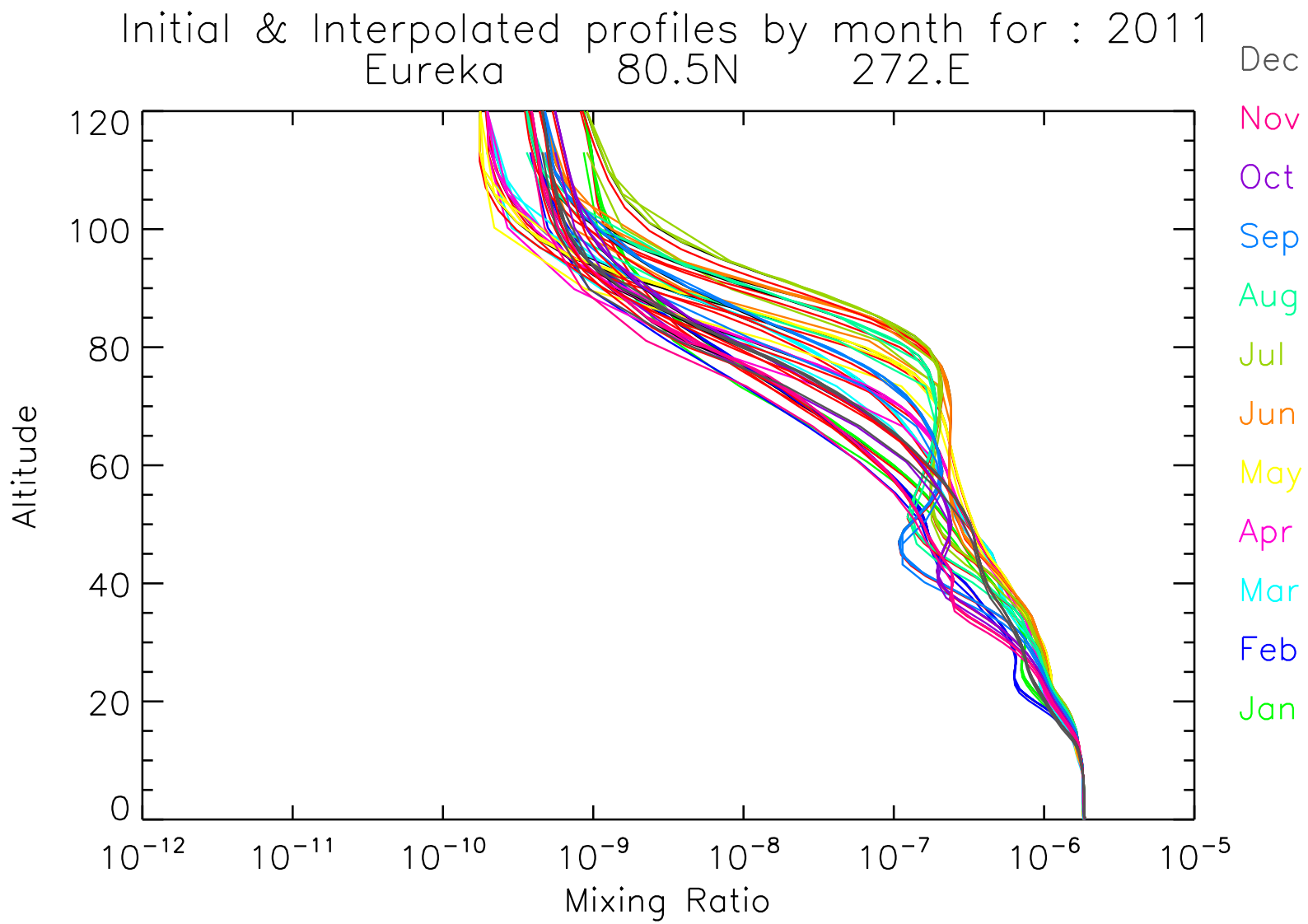
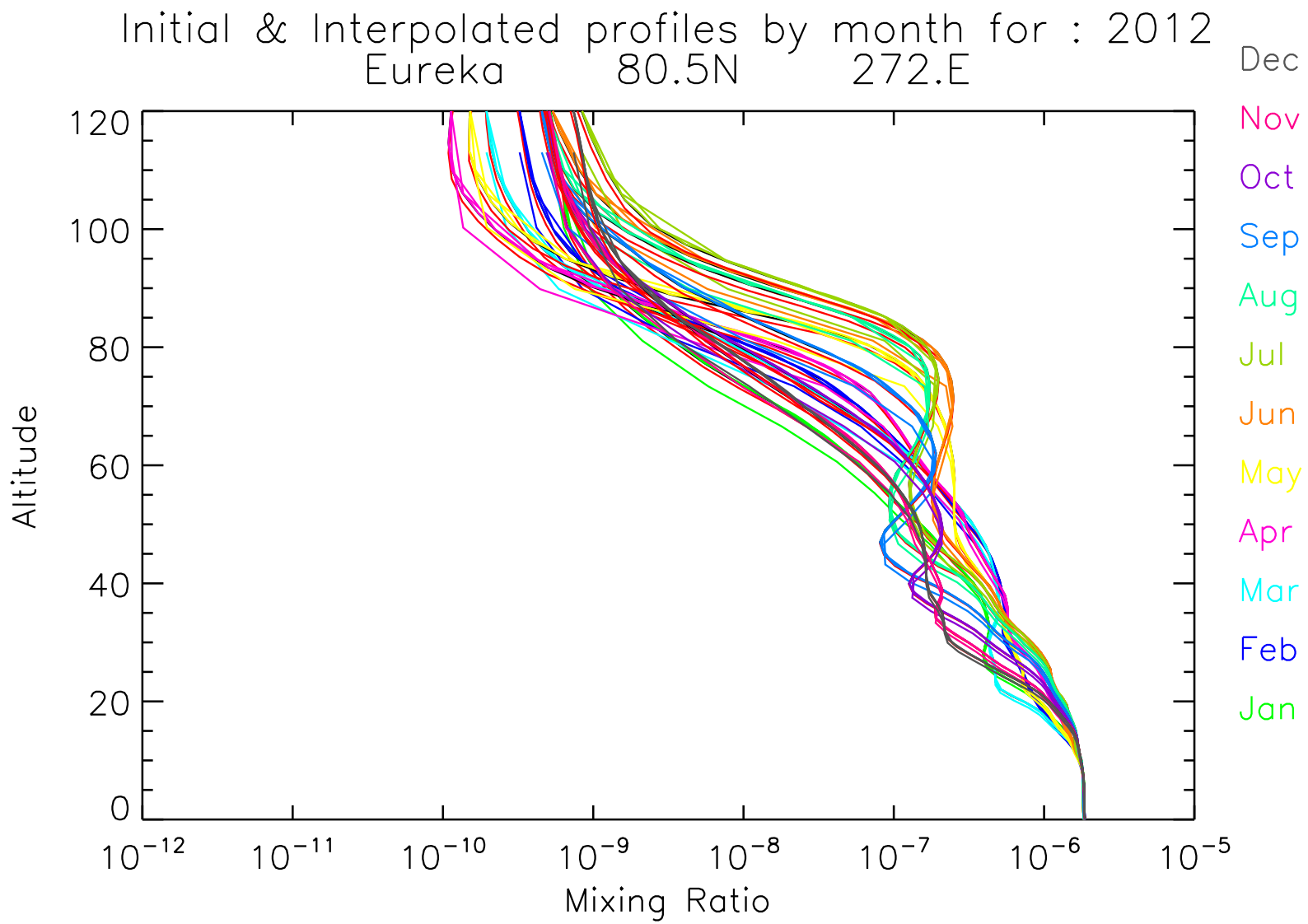
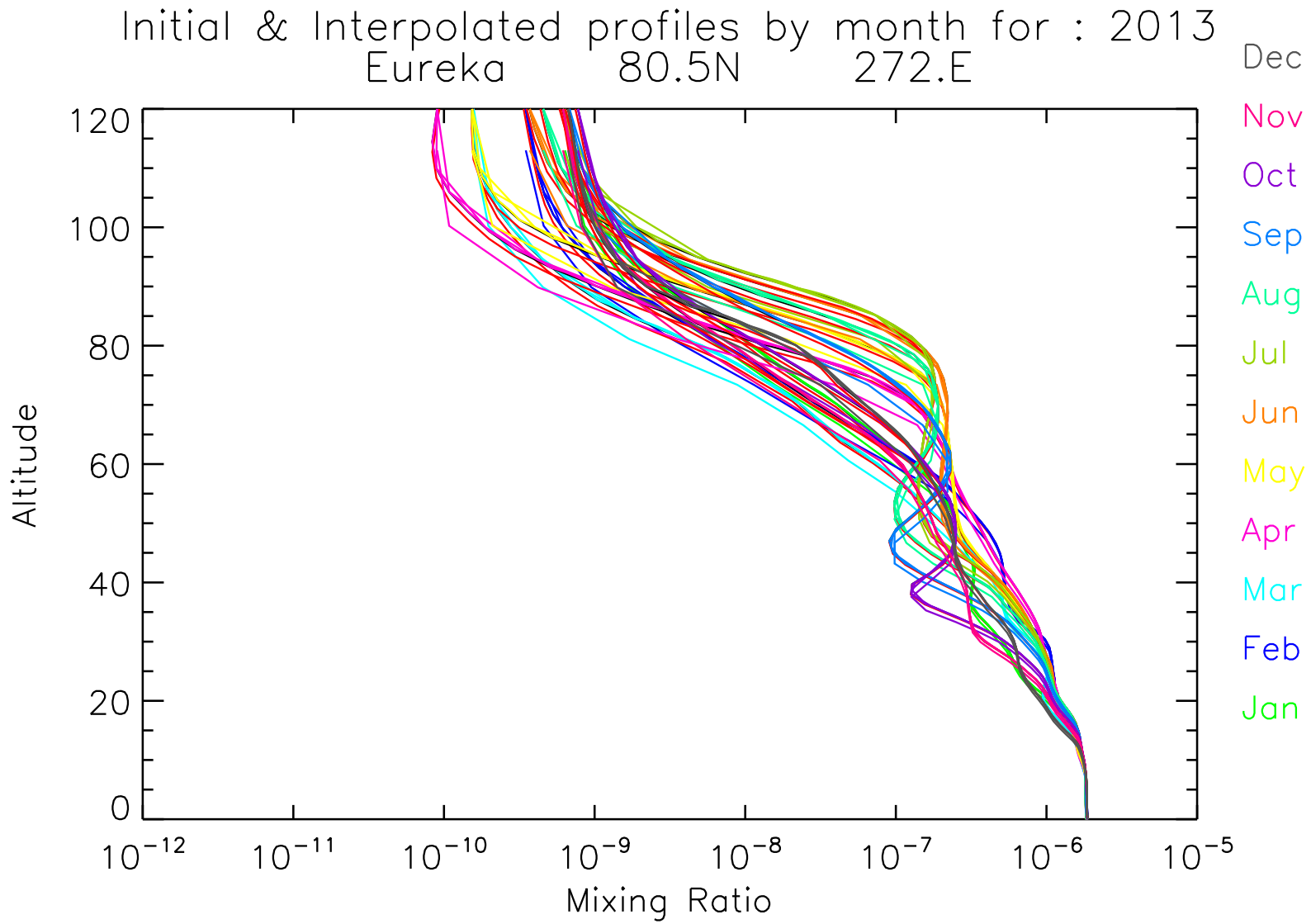
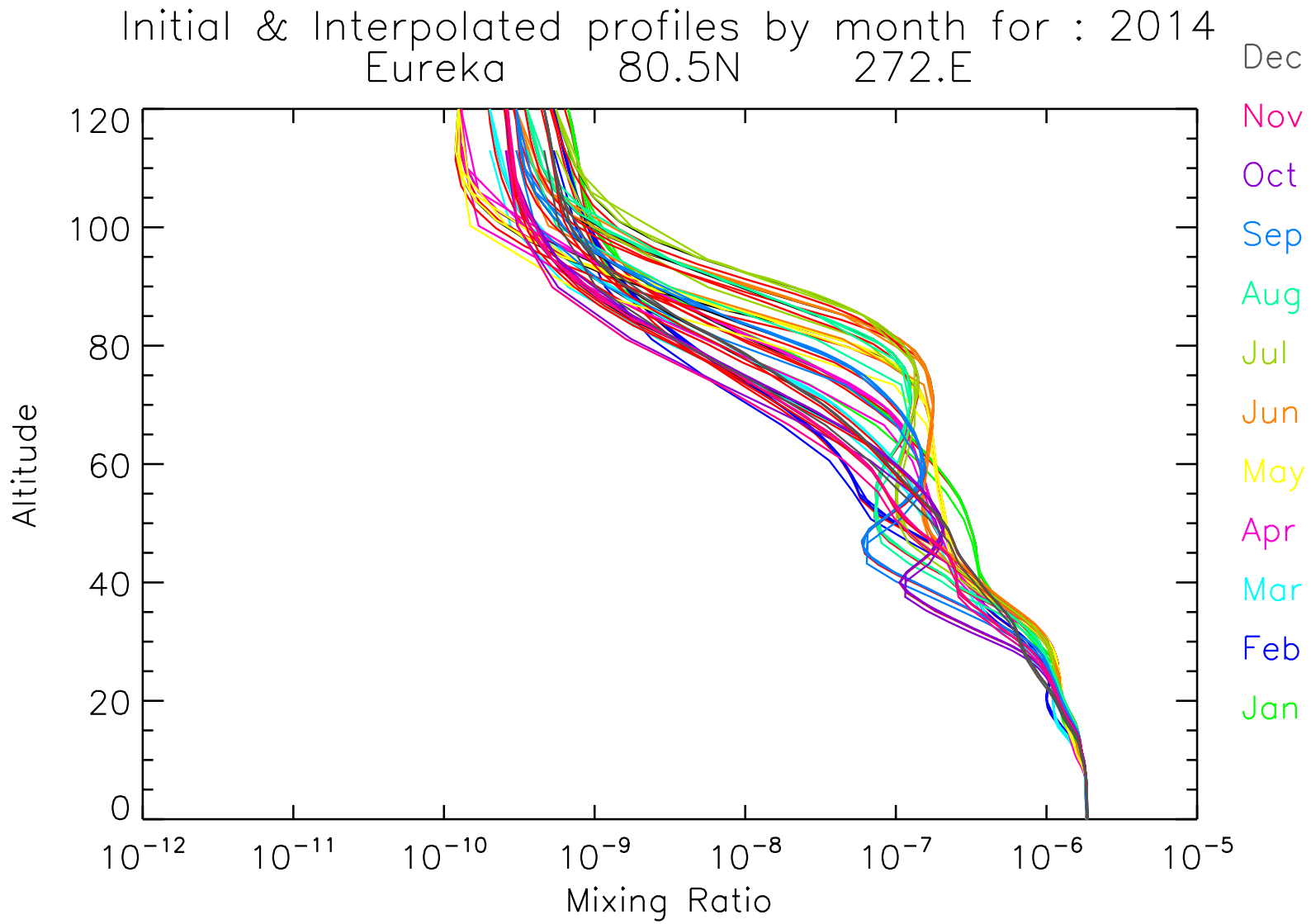
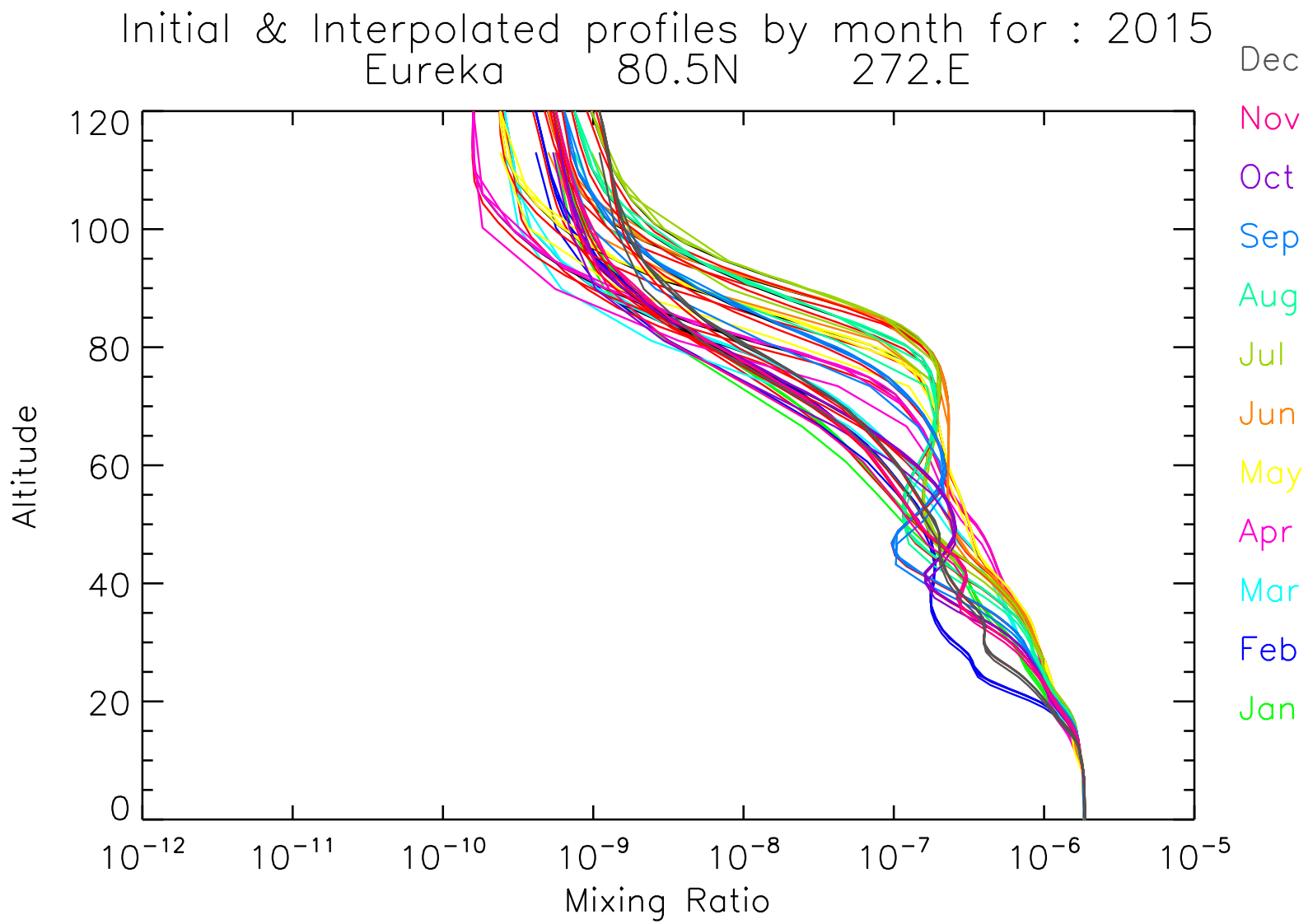

Initial & Interpolated profiles by month for : 2010
Eureka 80.5N 272.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

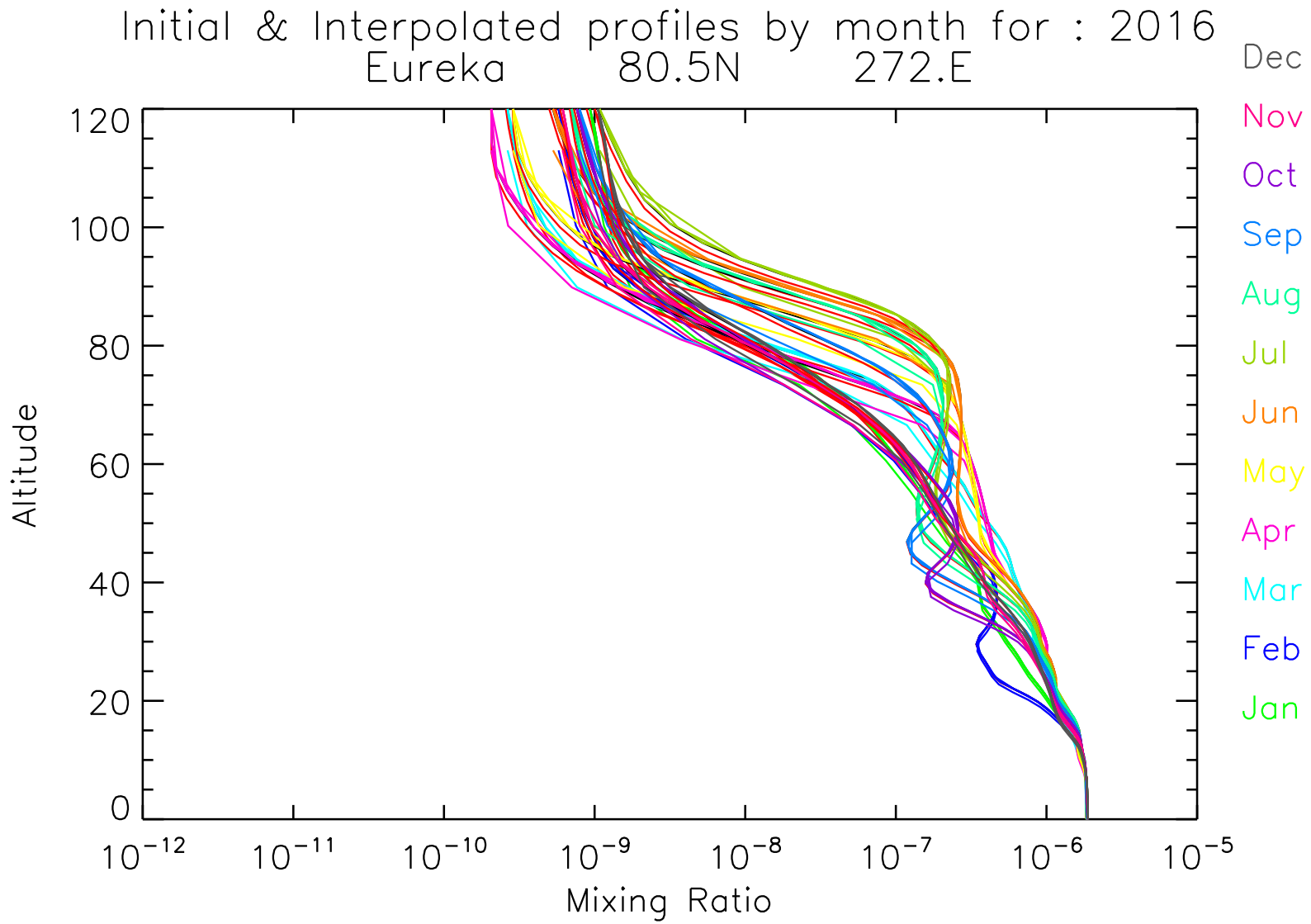

Initial & Interpolated profiles by month for : 2011
Eureka 80.5N 272.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

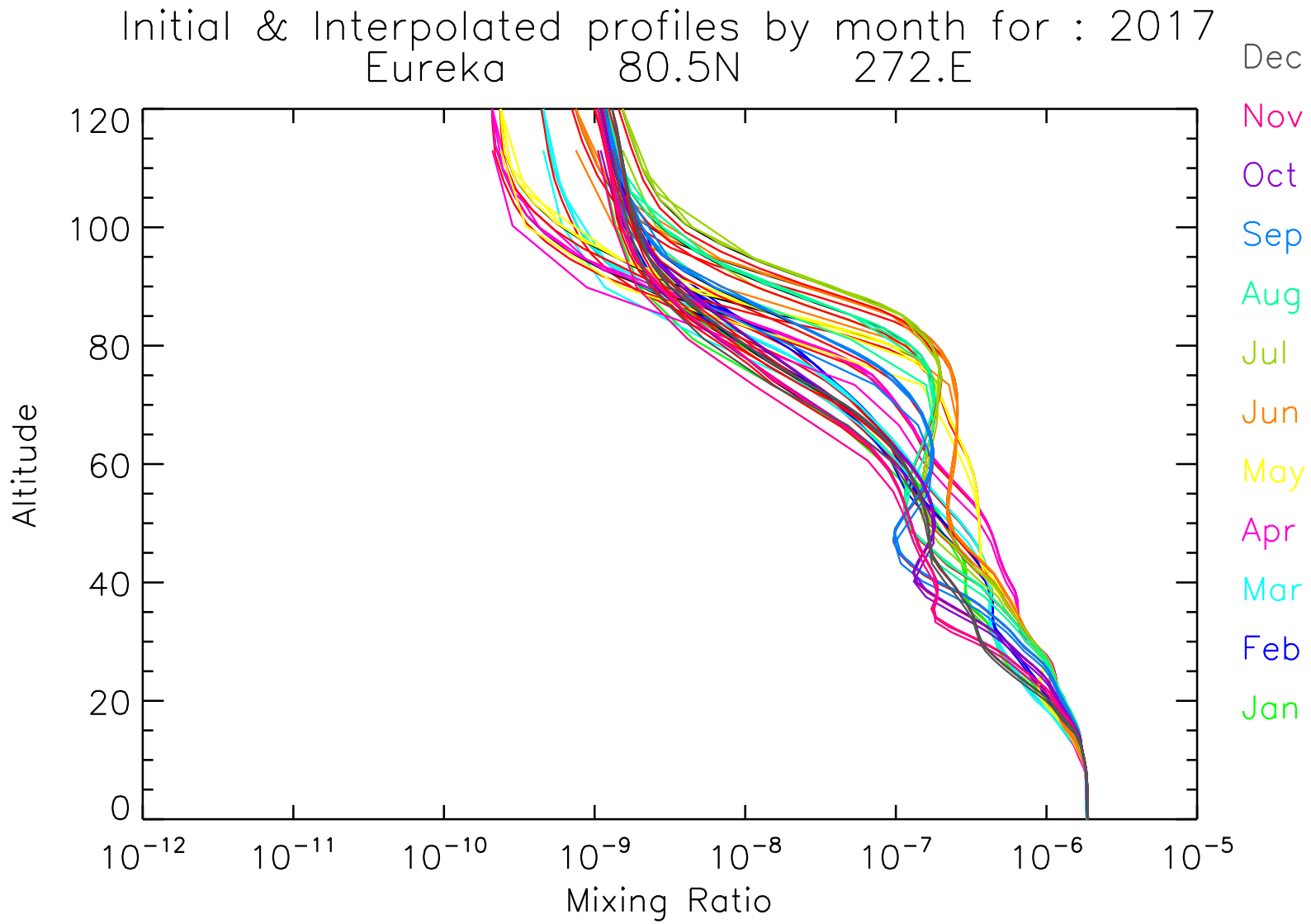

Initial & Interpolated profiles by month for : 2012
Eureka 80.5N 272.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

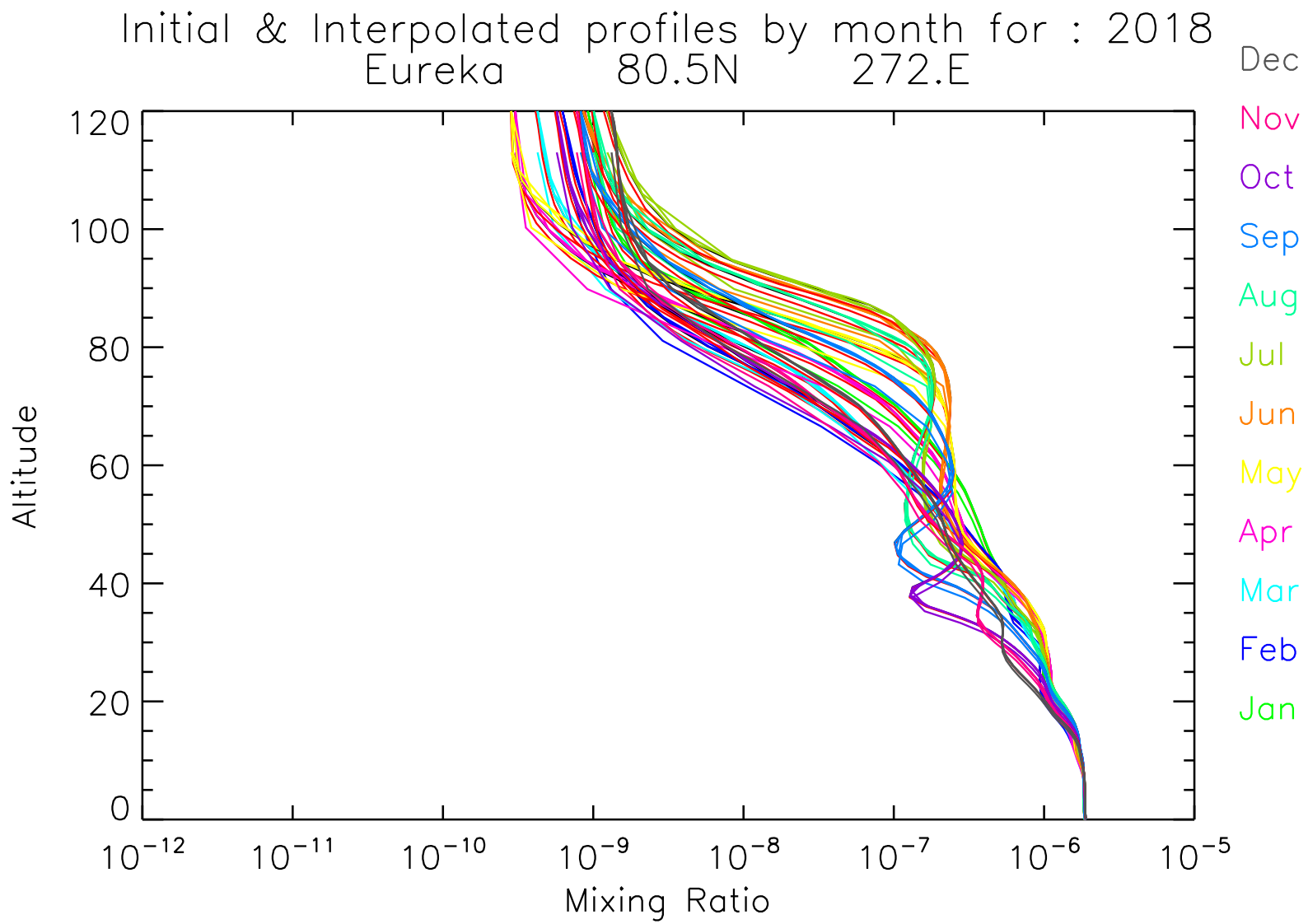

Initial & Interpolated profiles by month for : 2013
Eureka 80.5N 272.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

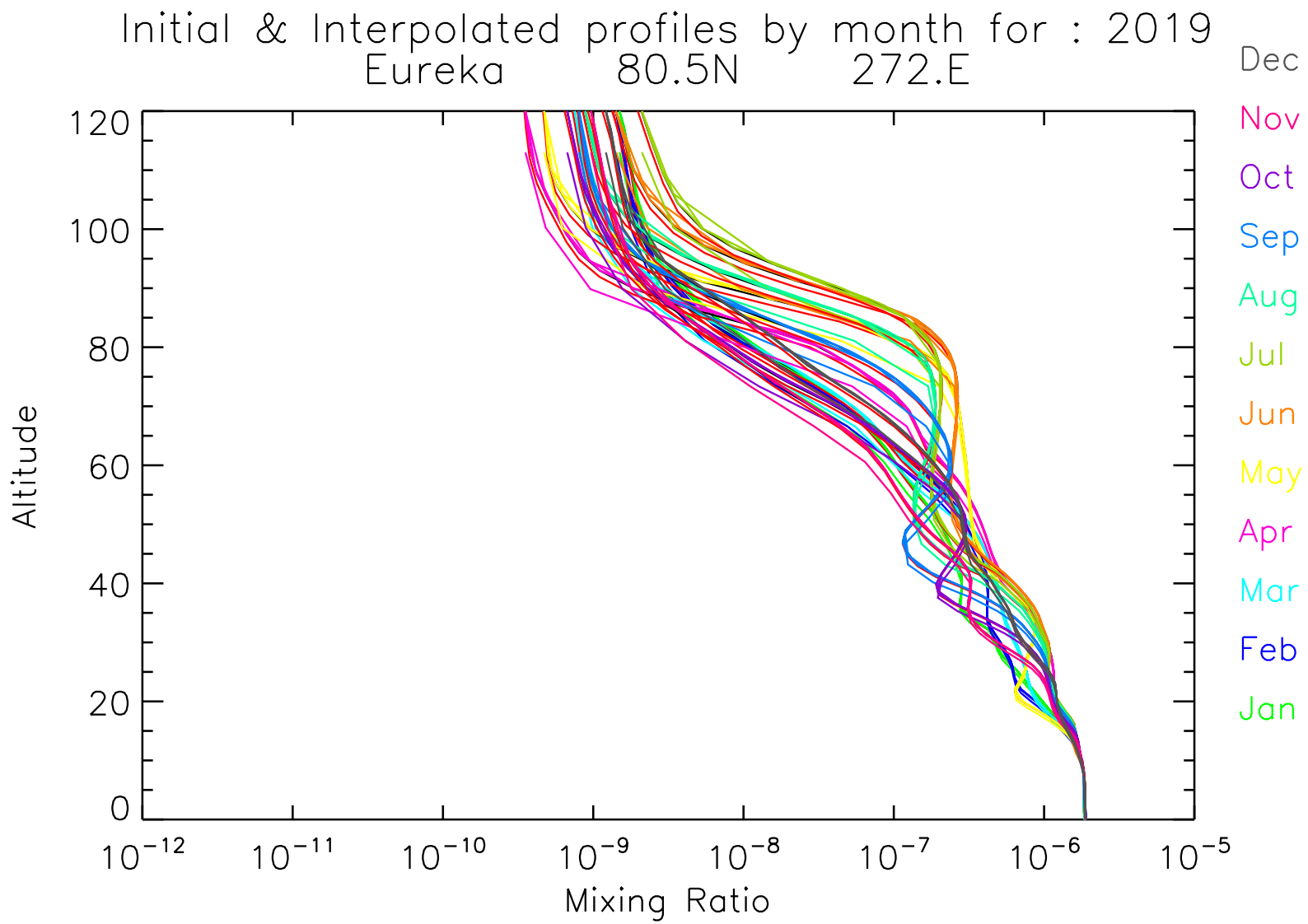

Initial & Interpolated profiles by month for : 2014
Eureka 80.5N 272.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

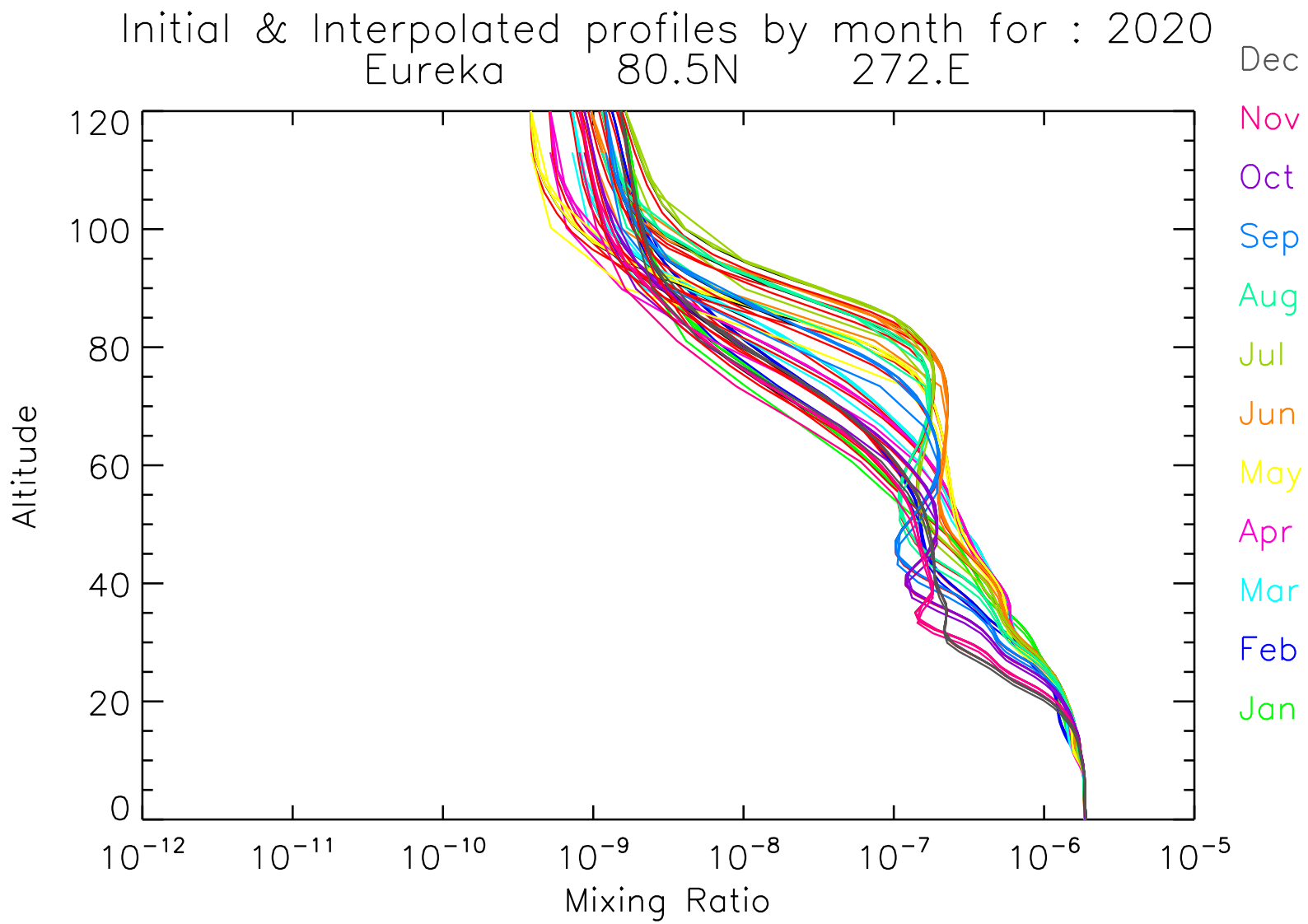

Initial & Interpolated profiles by month for : 2015
Eureka 80.5N 272.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

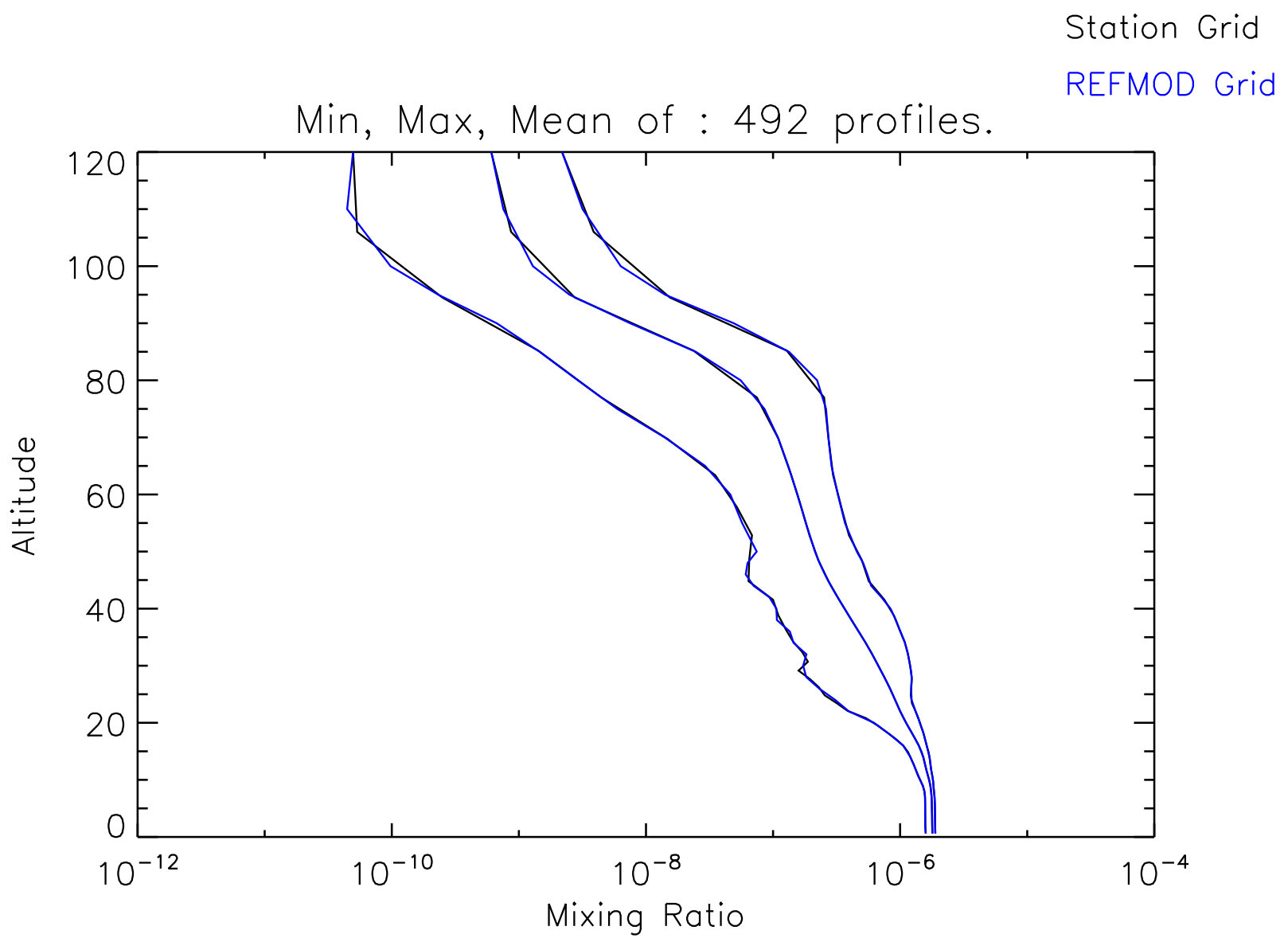

Initial & Interpolated profiles by month for : 2016
Eureka 80.5N 272.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

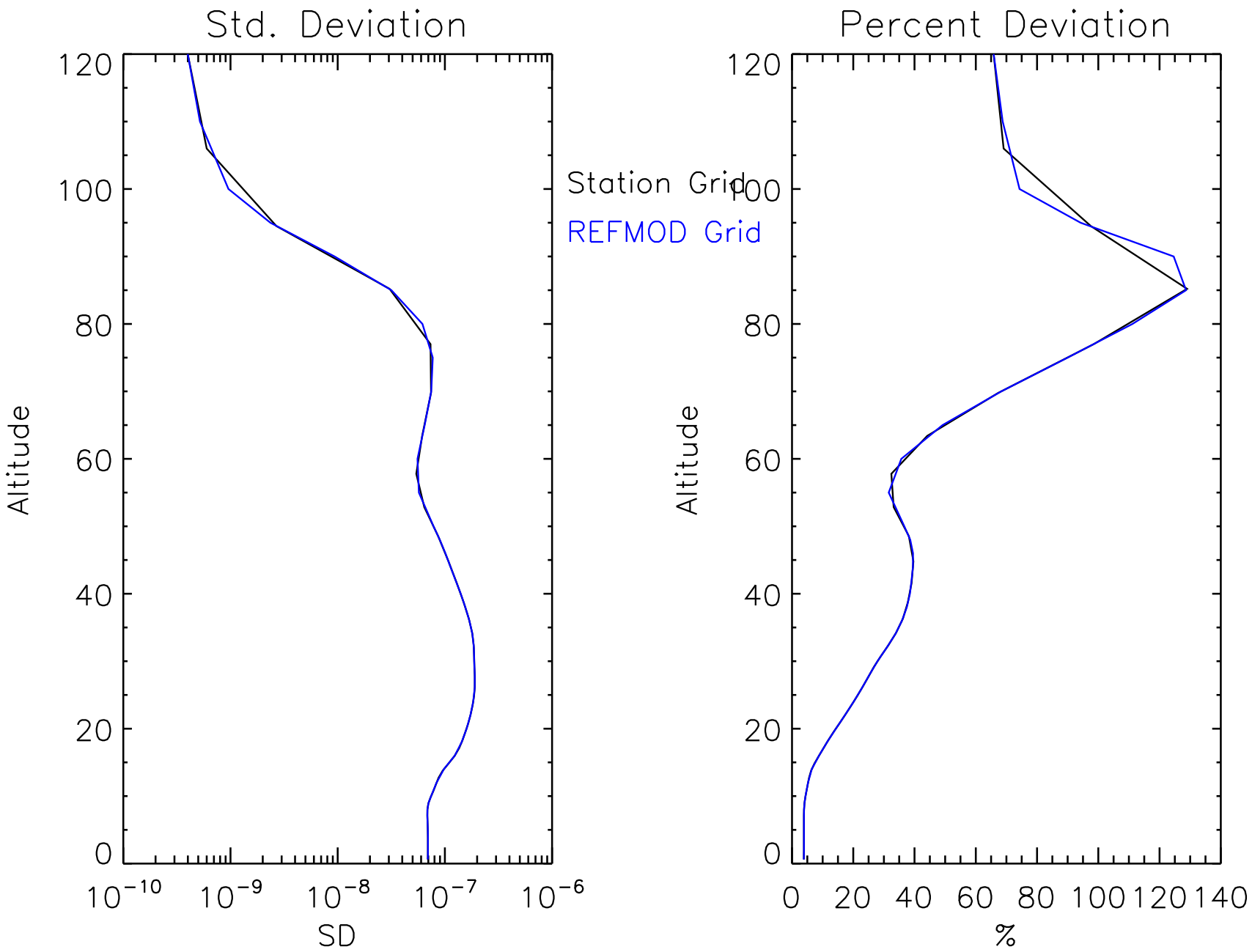

Initial & Interpolated profiles by month for : 2017
Eureka 80.5N 272.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

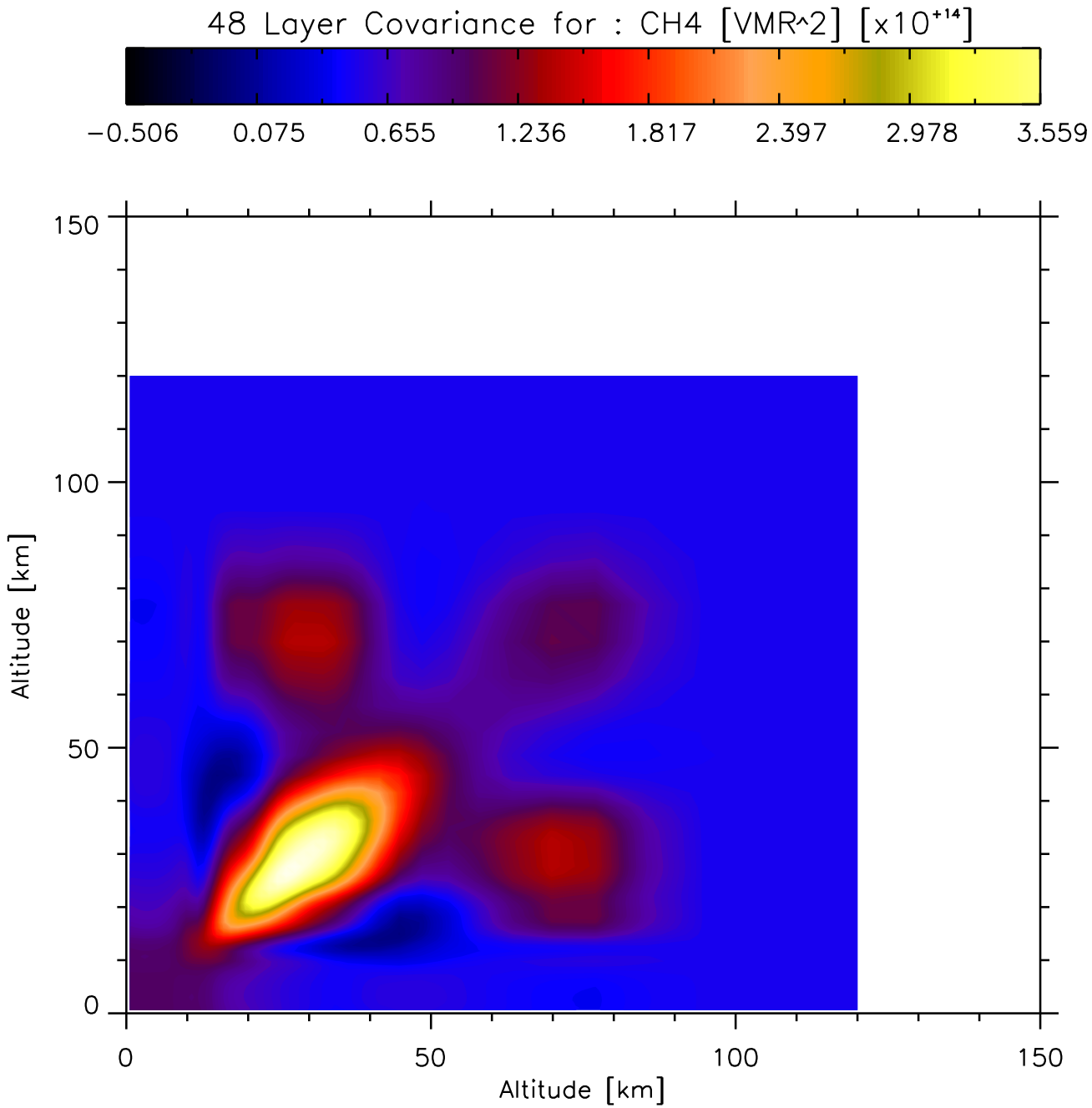

Initial & Interpolated profiles by month for : 2018
Eureka 80.5N 272.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

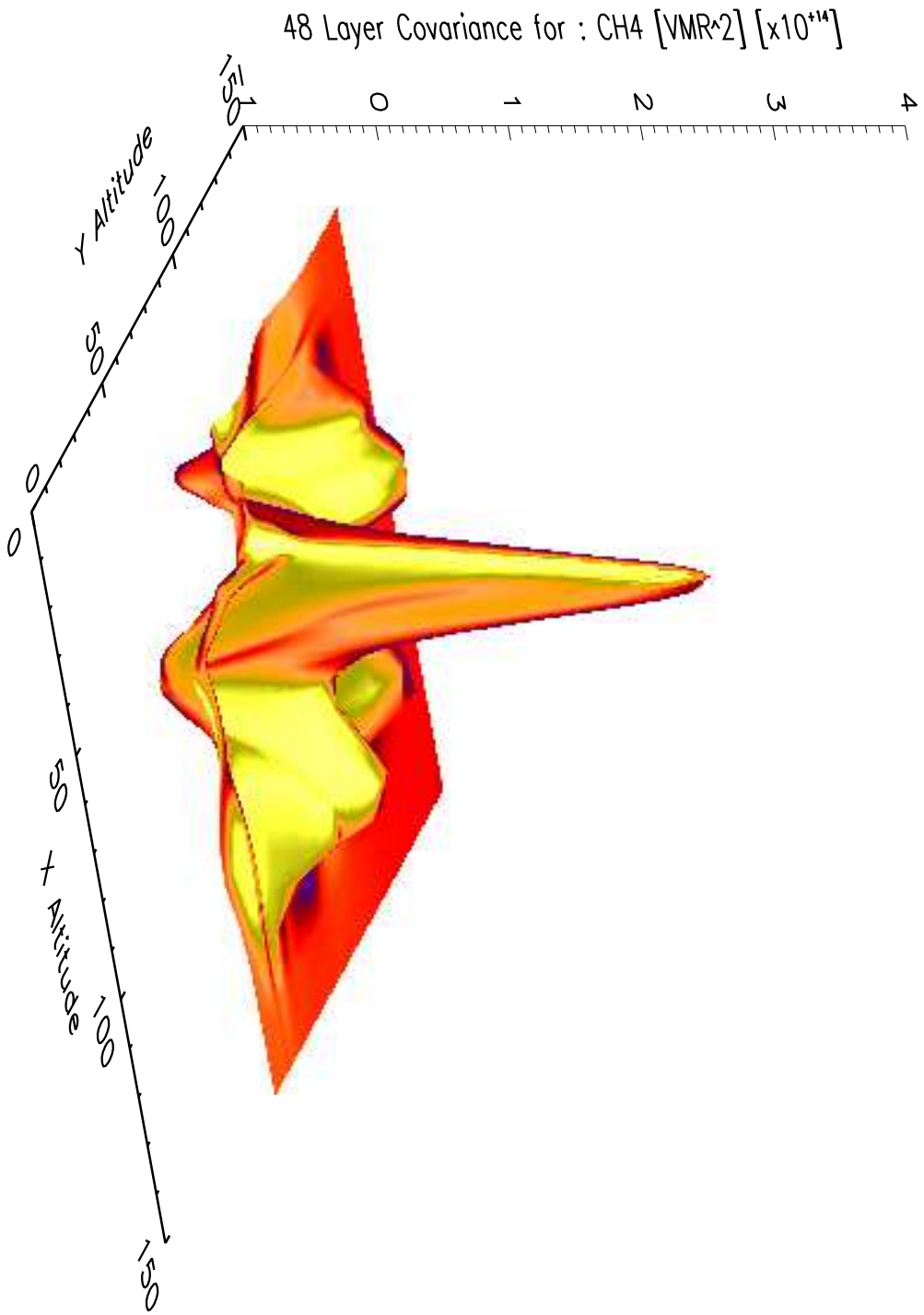

Initial & Interpolated profiles by month for : 2019
Eureka 80.5N 272.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

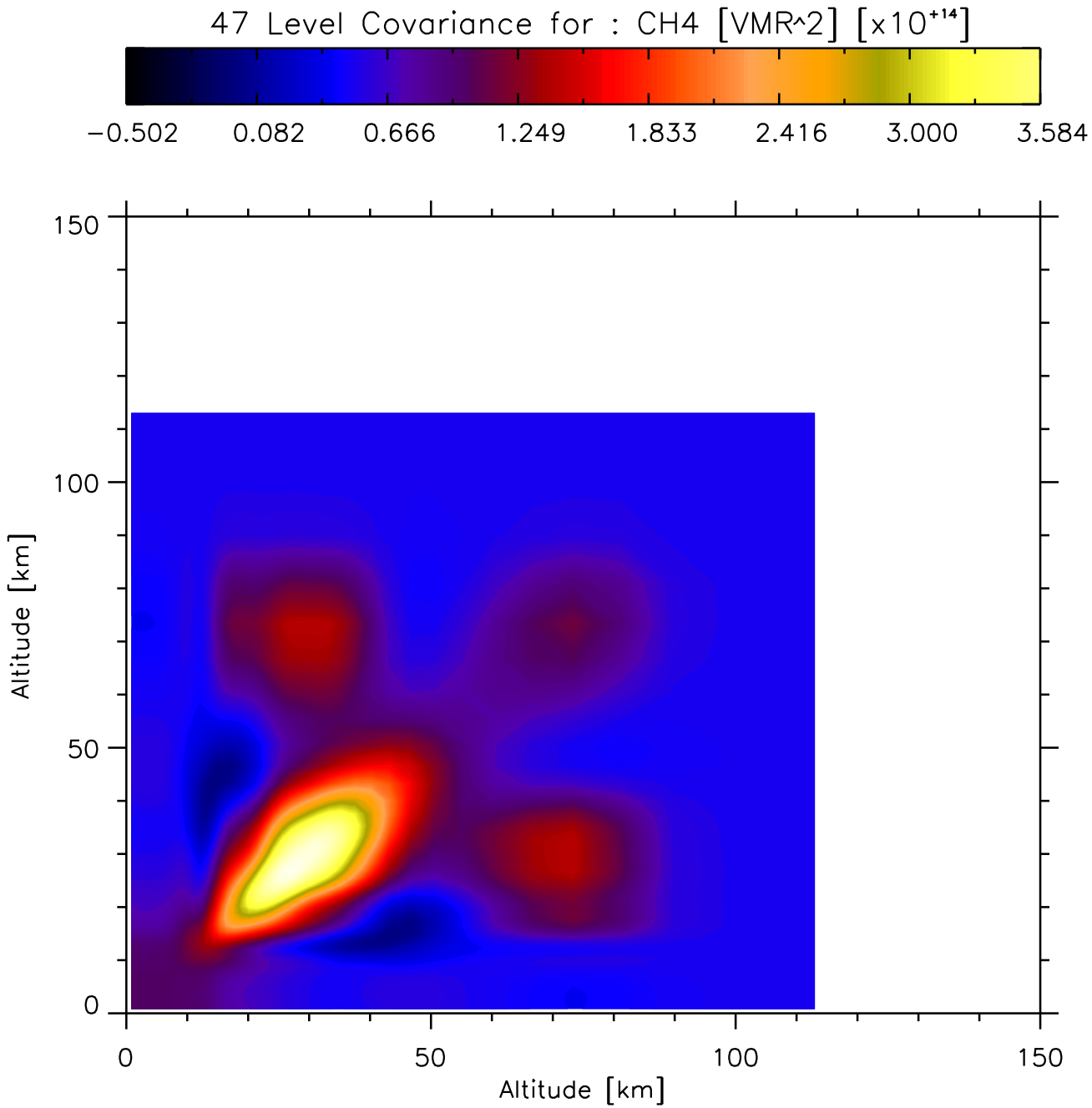

Initial & Interpolated profiles by month for : 2020
Eureka 80.5N 272.E
Altitude
120
100
80
60
40
20
0
10^{-12}
10^{-11}
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
10^{-5}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

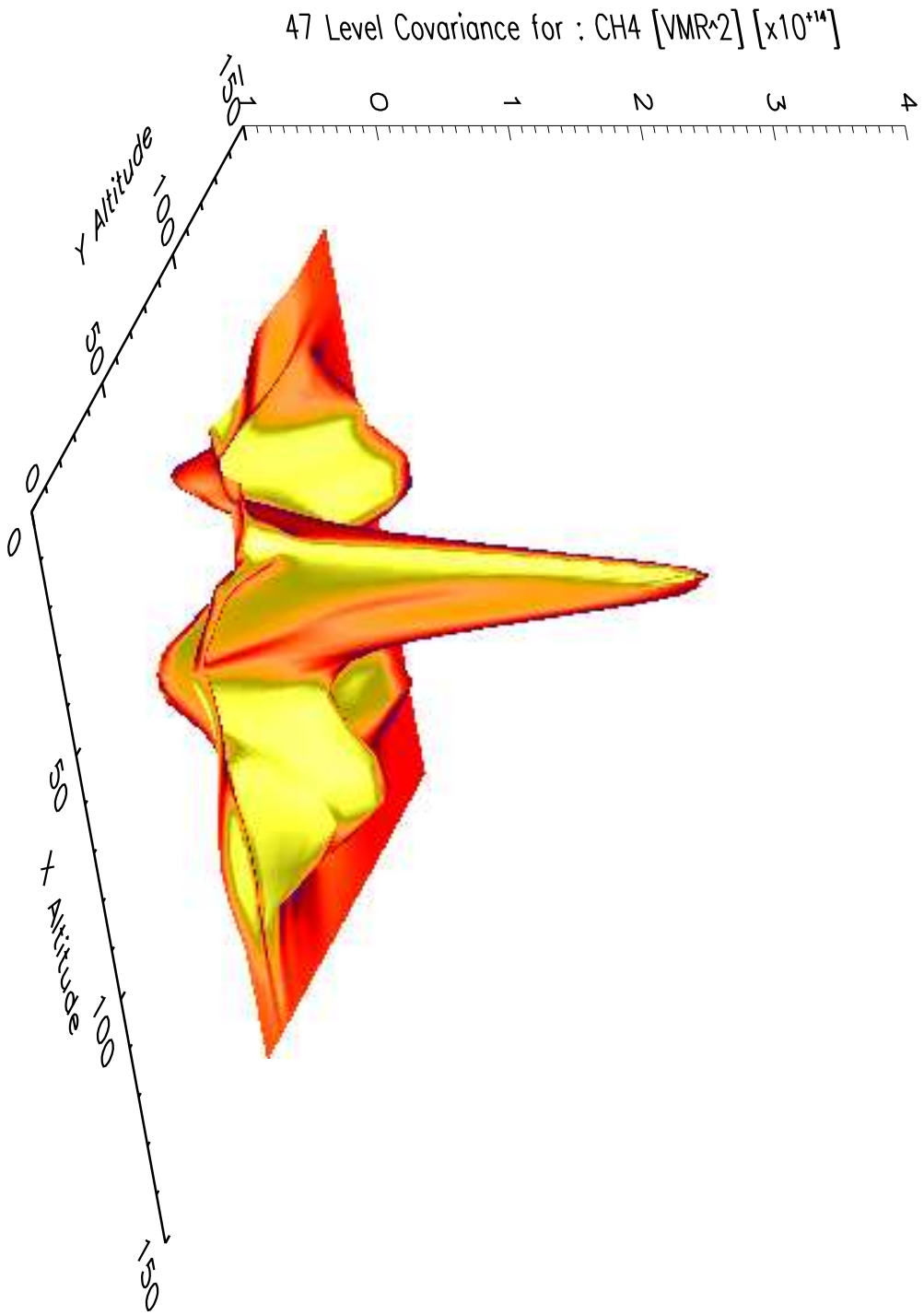

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
120
100
80
60
40
20
0
Altitude
10^{-12}
10^{-10}
10^{-8}
10^{-6}
10^{-4}
Mixing Ratio


Std. Deviation
Percent Deviation
Station Grid
REFMOD Grid
Altitude
Altitude
120
100
80
60
40
20
0
10^{-10}
10^{-9}
10^{-8}
10^{-7}
10^{-6}
SD
0
20
40
60
80
100
120
140
%


48 Layer Covariance for : CH4 [VMR^2] [x10^+14]
−0.506
0.075
0.655
1.236
1.817
2.397
2.978
3.559
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


48 Layer Covariance for : CH4 [VMR^2] [x10^+14]
0
1
2
3
4
Y Altitude
0
50
100
150
0
50
100
150
X Altitude


47 Level Covariance for : CH4 [VMR^2] [x10^+14]
−0.502
0.082
0.666
1.249
1.833
2.416
3.000
3.584
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


47 Level Covariance for : CH4 [VMR^2] [x10^+14]
0
1
2
3
4
Y Altitude
0
50
100
150
0
50
100
150
X Altitude