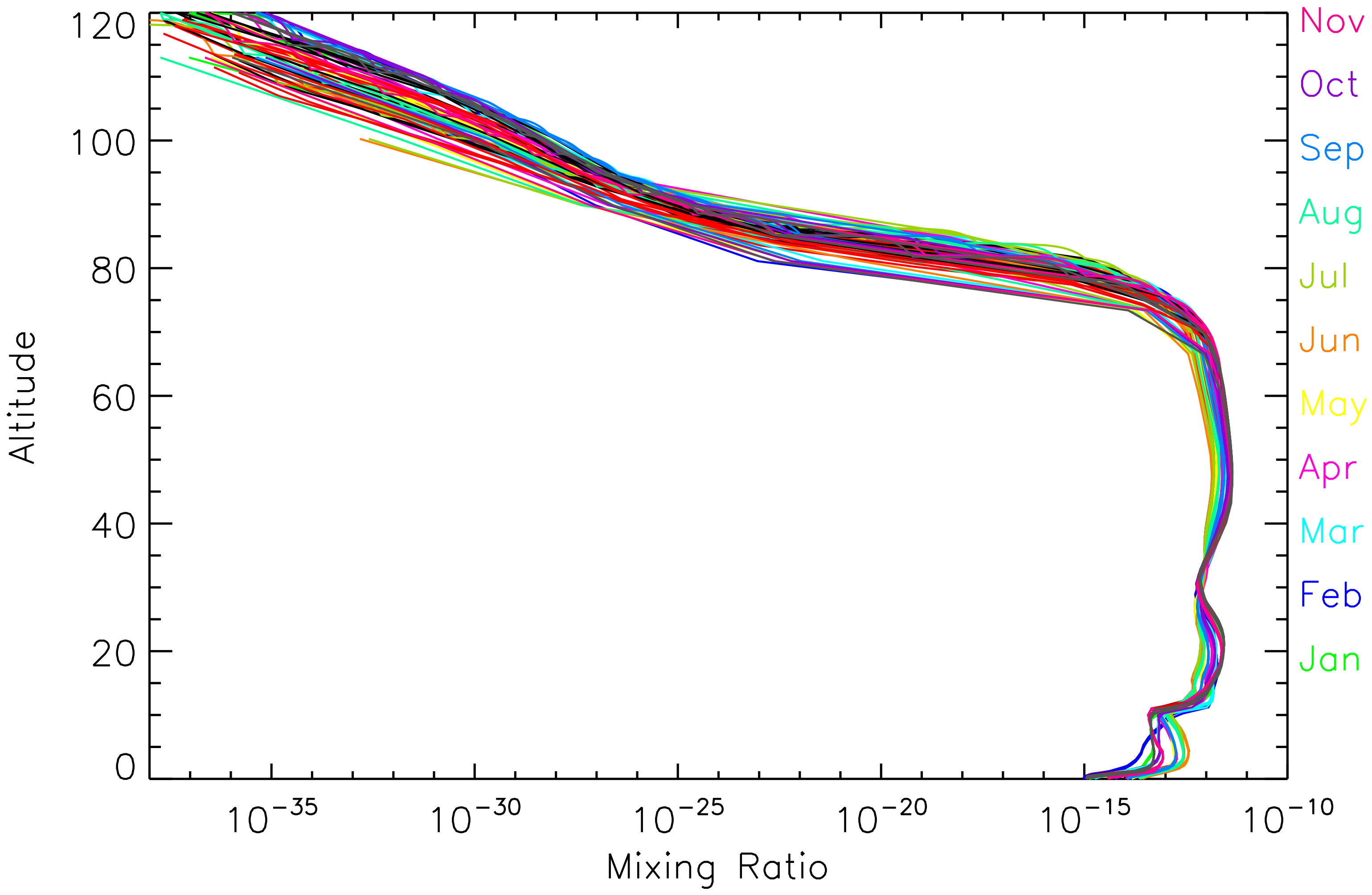
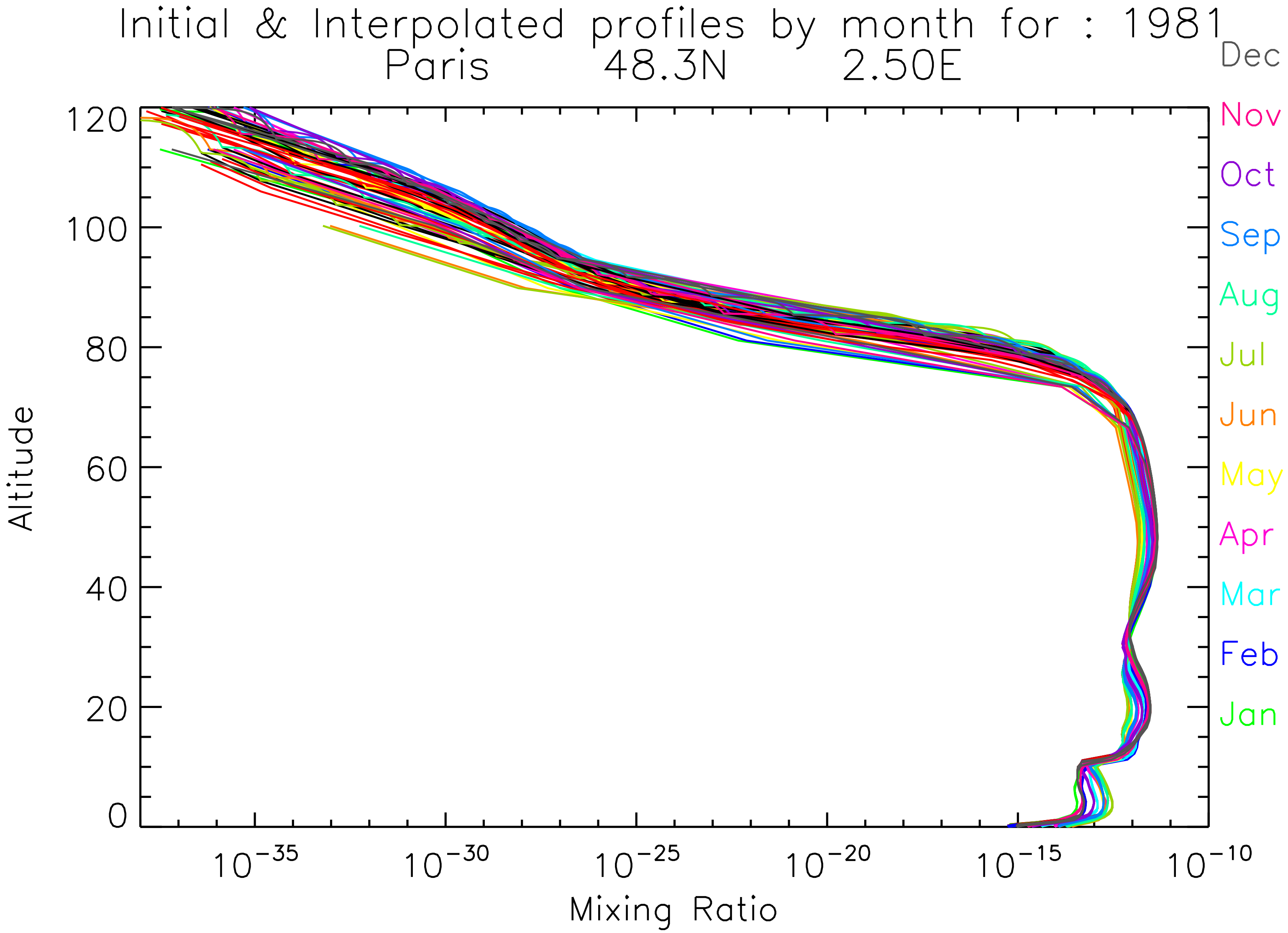
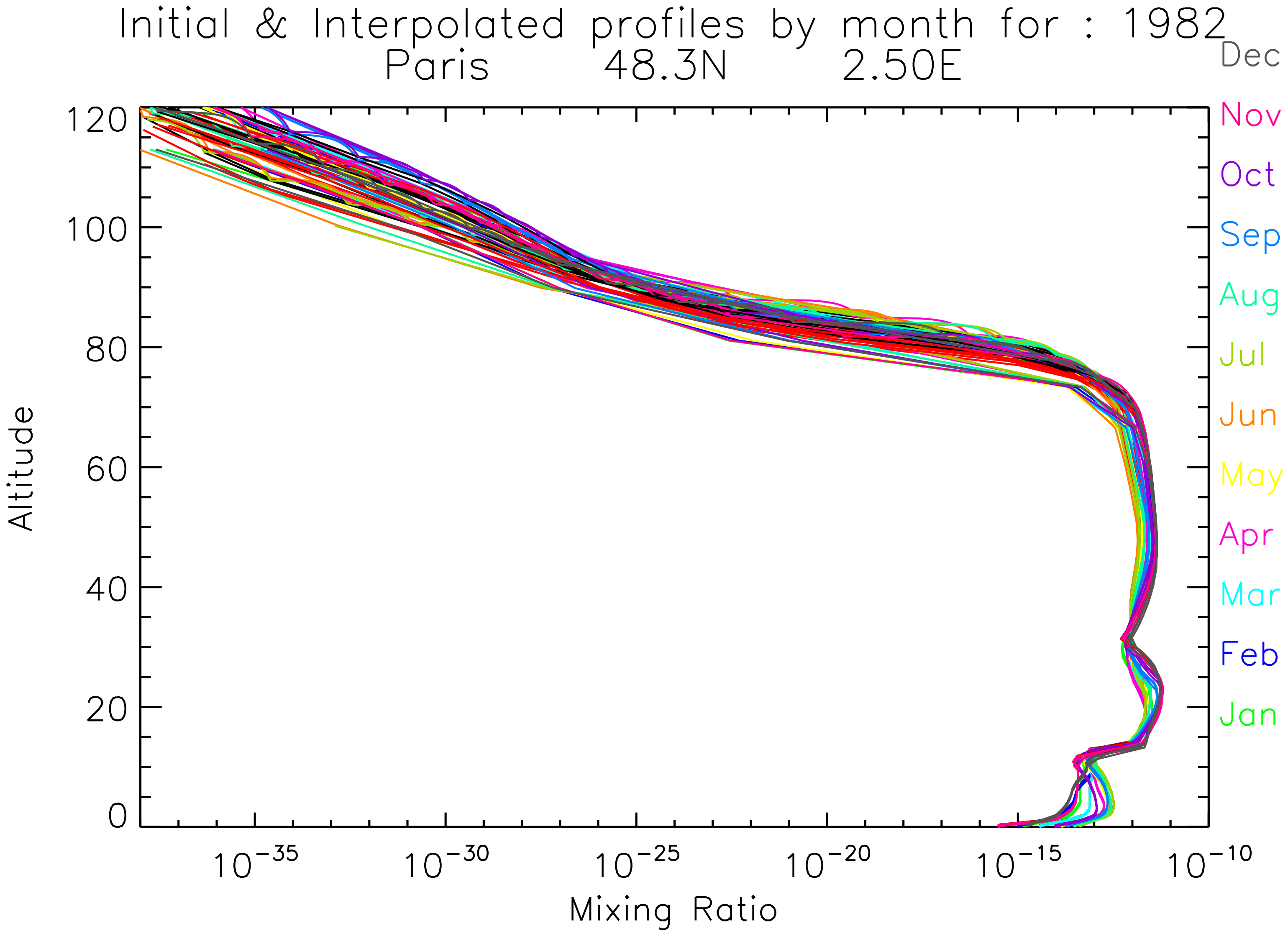
Initial & Interpolated profiles by month for : 1980
Paris 48.3N 2.50E

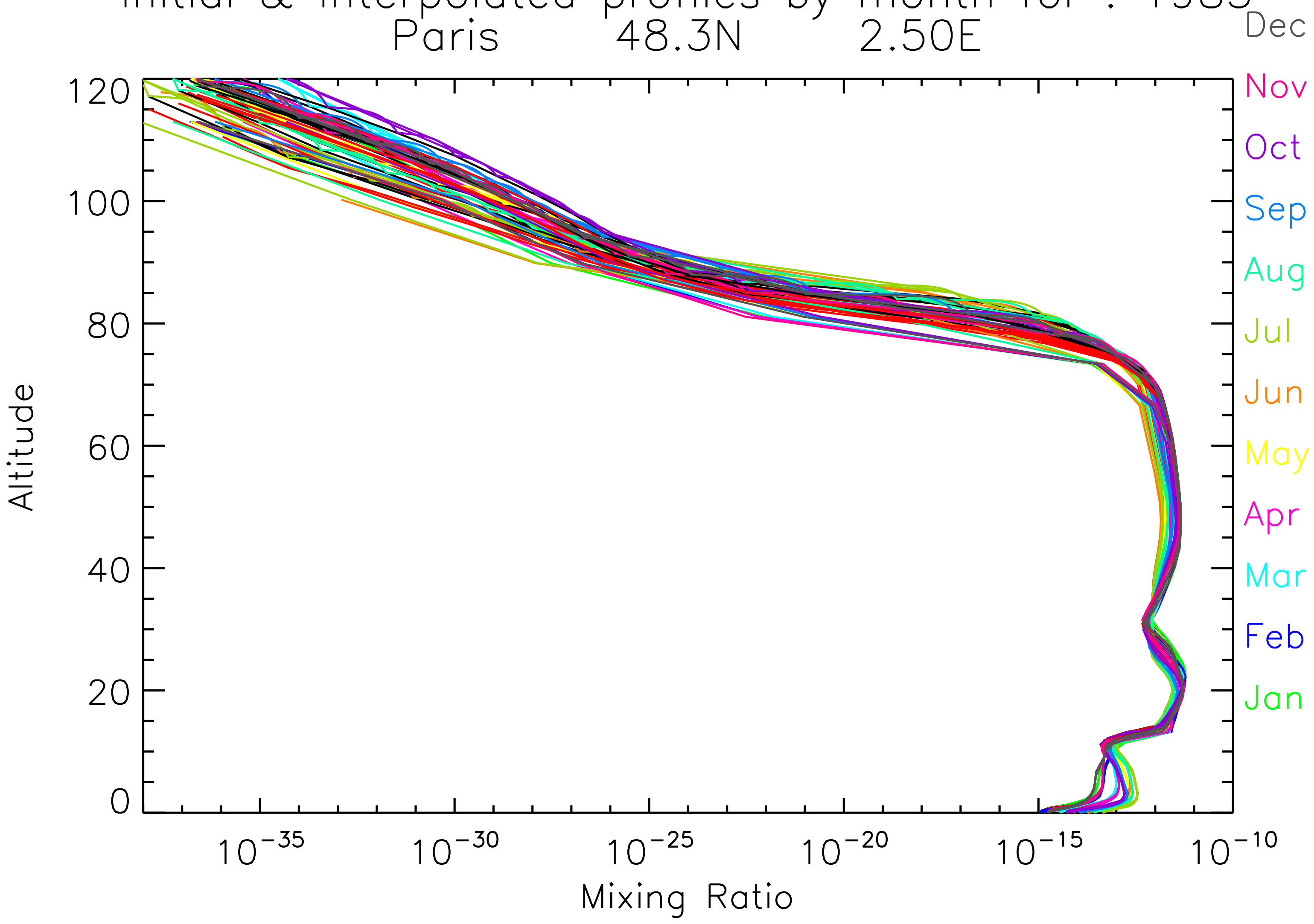


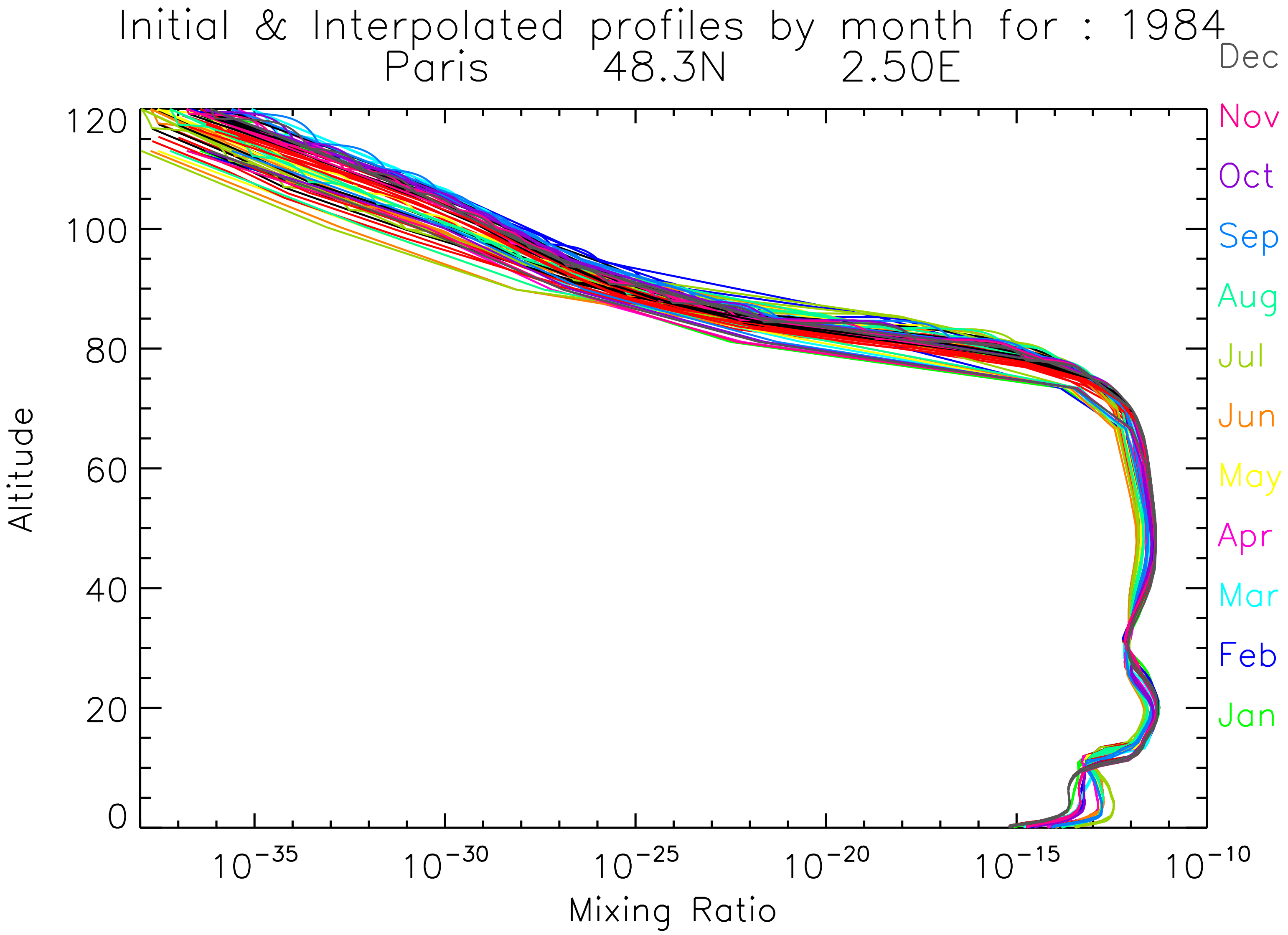


Initial & Interpolated profiles by month for : 1981
Paris 48.3N 2.50E


Initial & Interpolated profiles by month for : 1982
Paris 48.3N 2.50E
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

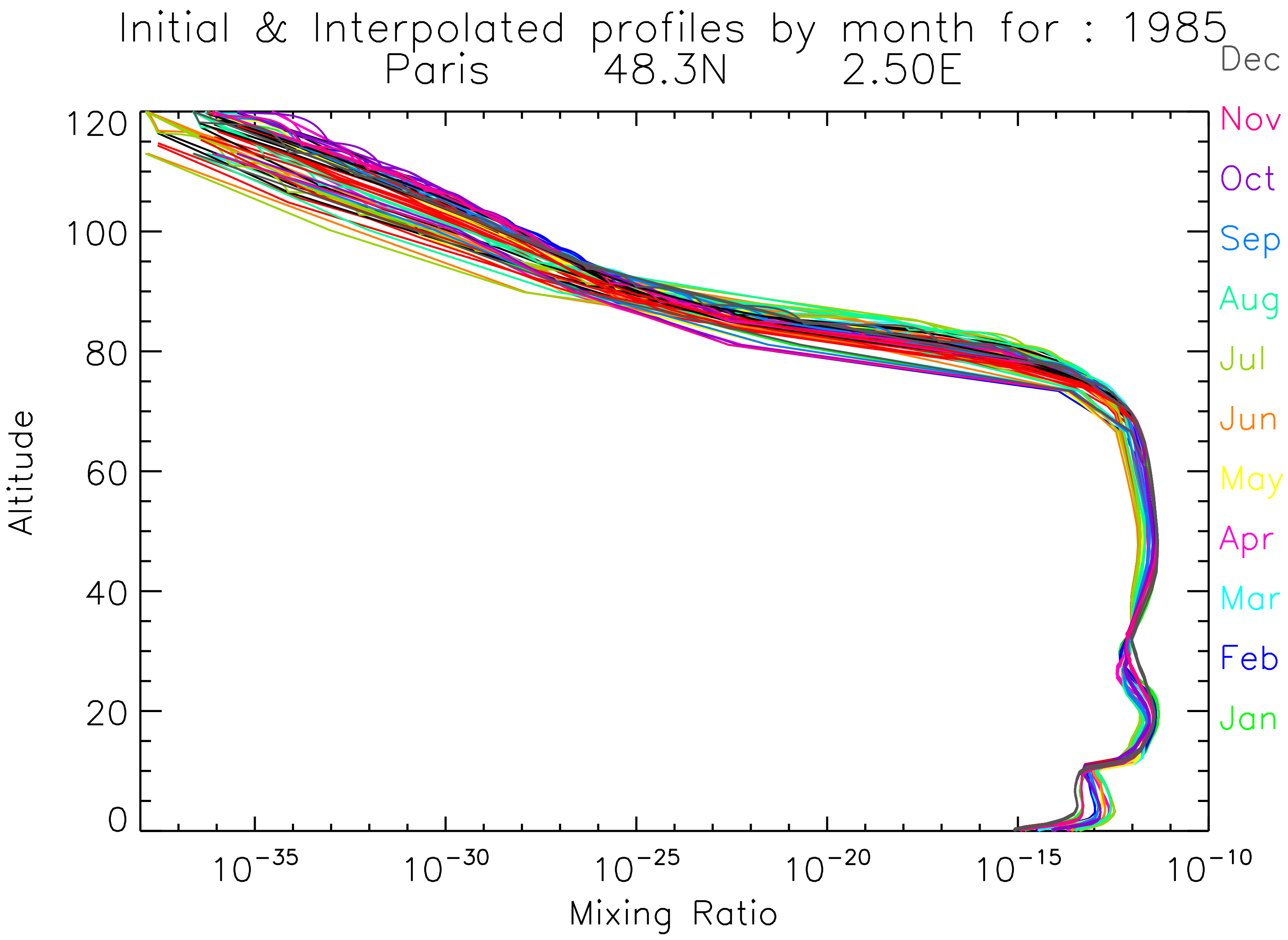
Initial & Interpolated profiles by month for : 1983
Paris 48.3N 2.50E

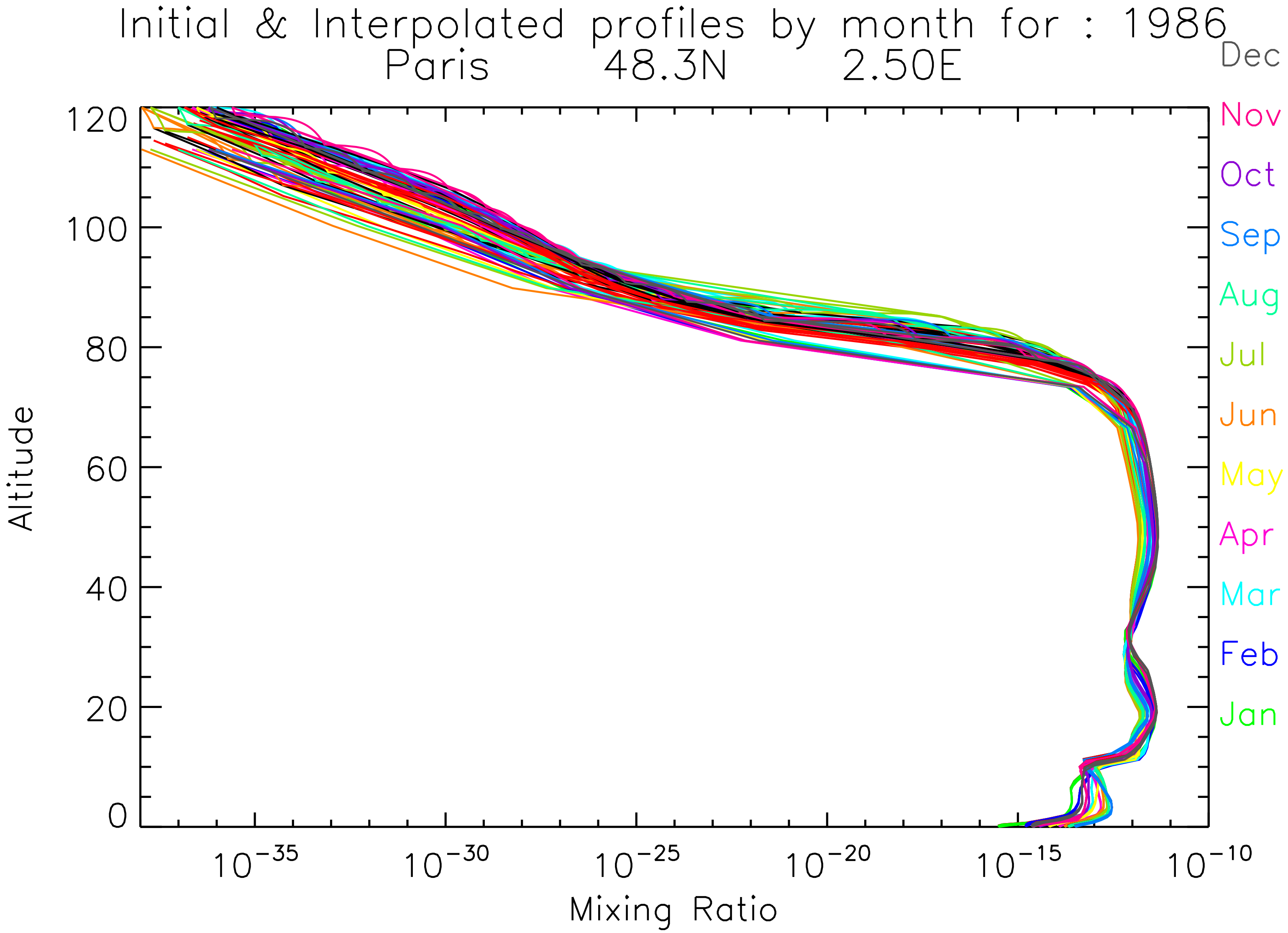




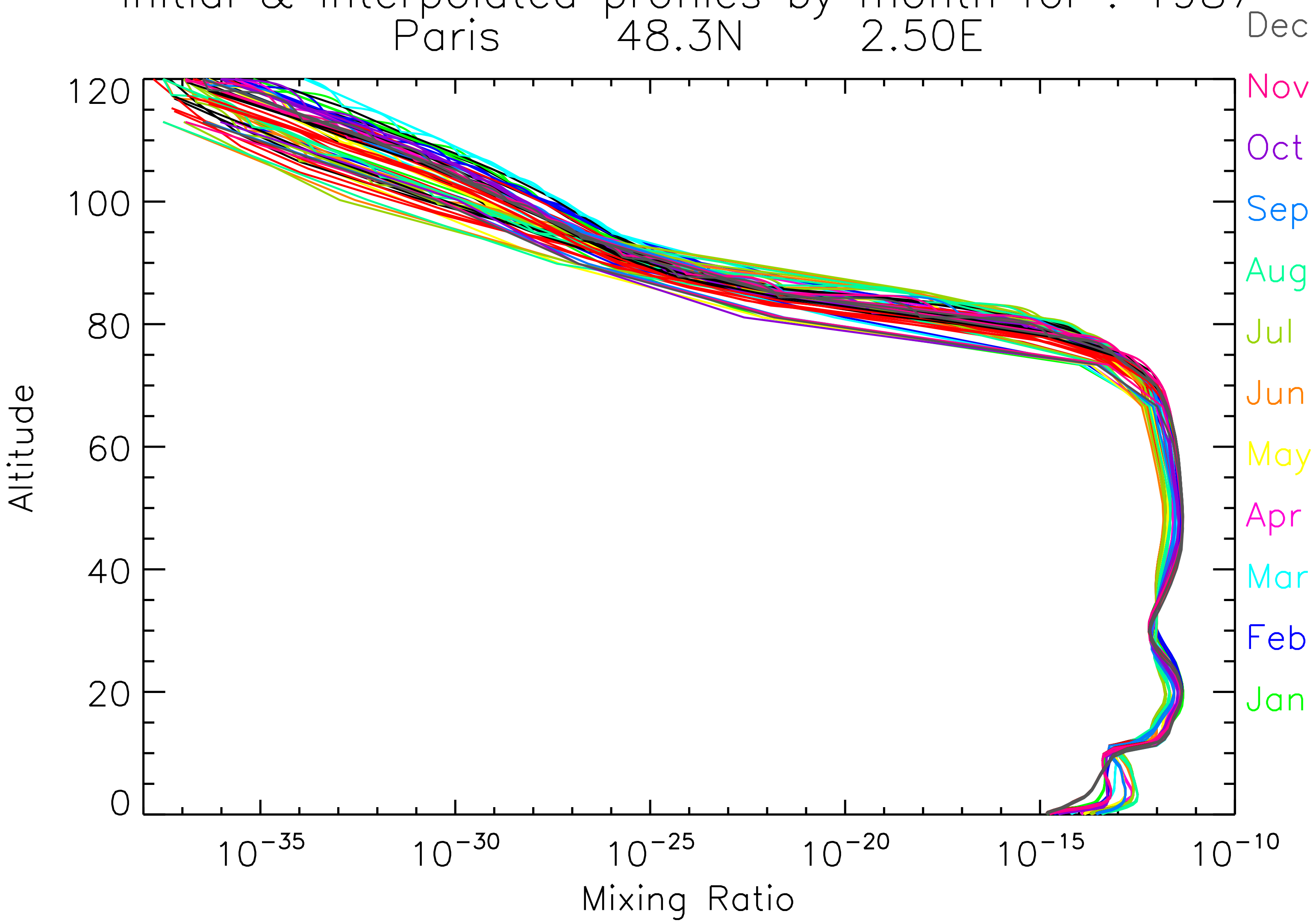
Initial & Interpolated profiles by month for : 1984

Paris 48.3N 2.50E


Initial & Interpolated profiles by month for : 1985
Paris 48.3N 2.50E
Altitude
0
20
40
60
80
100
120
Mixing Ratio
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

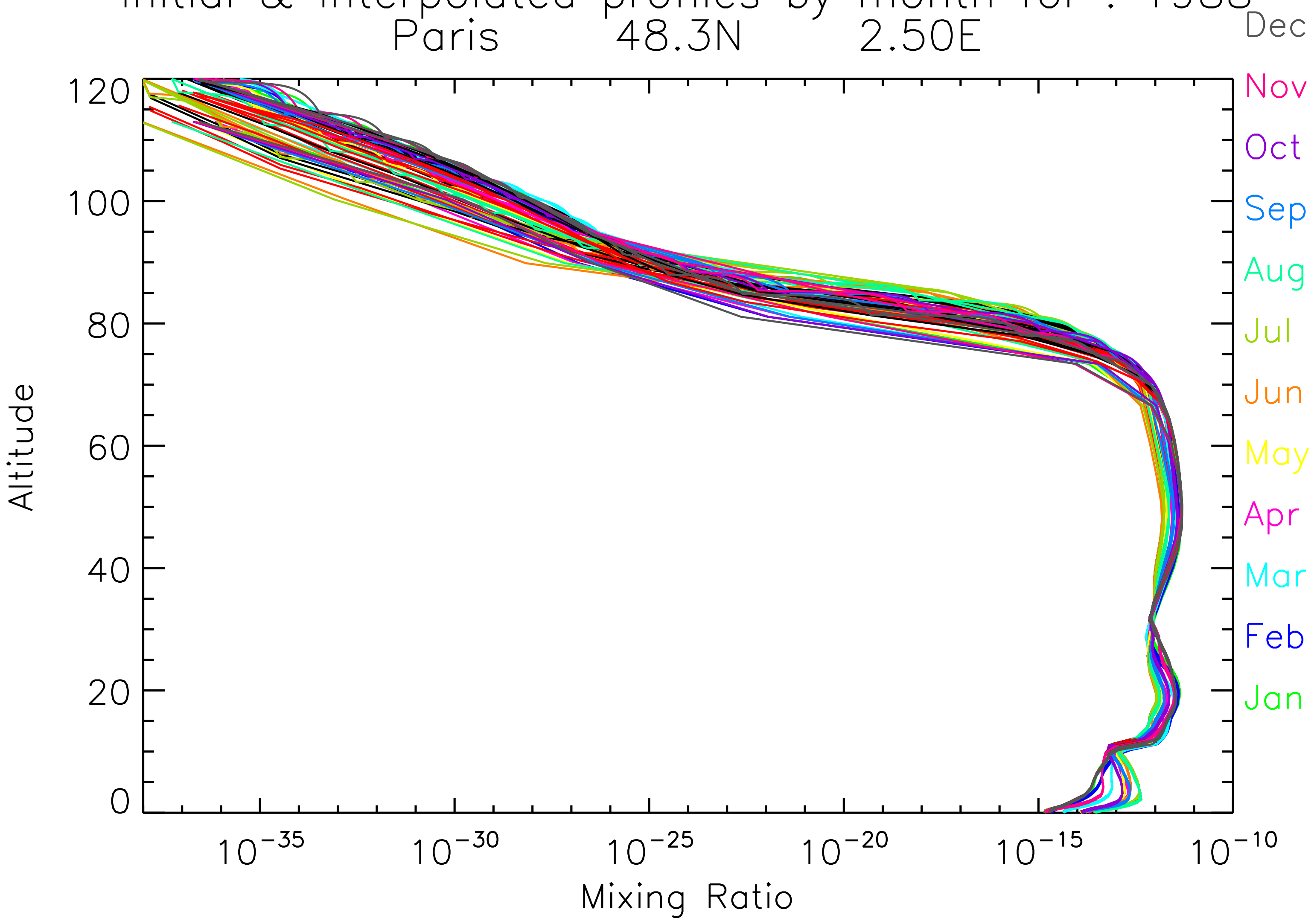

Initial & Interpolated profiles by month for : 1986
Paris 48.3N 2.50E

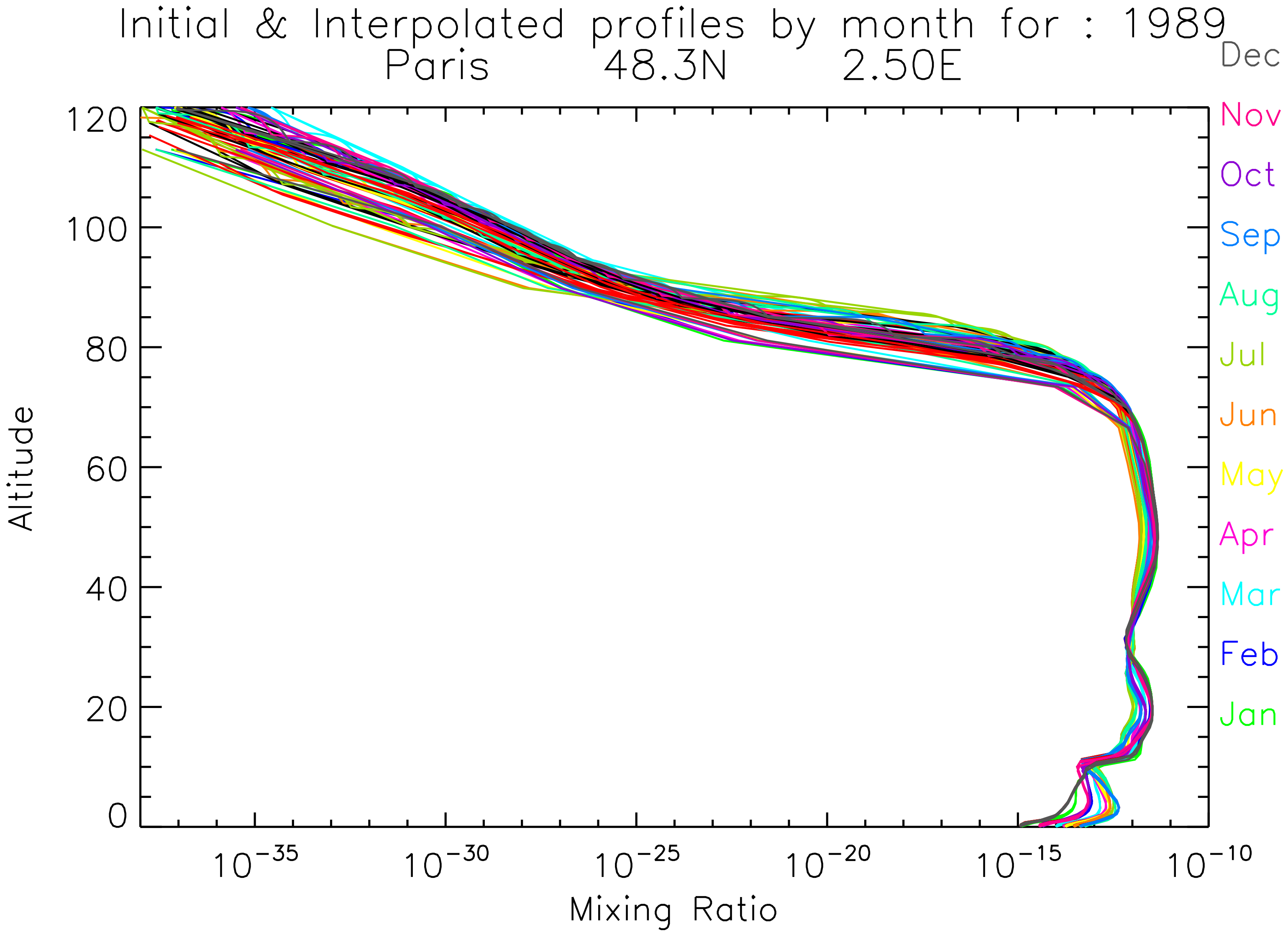
Initial & Interpolated profiles by month for : 1987
Paris 48.3N 2.50E



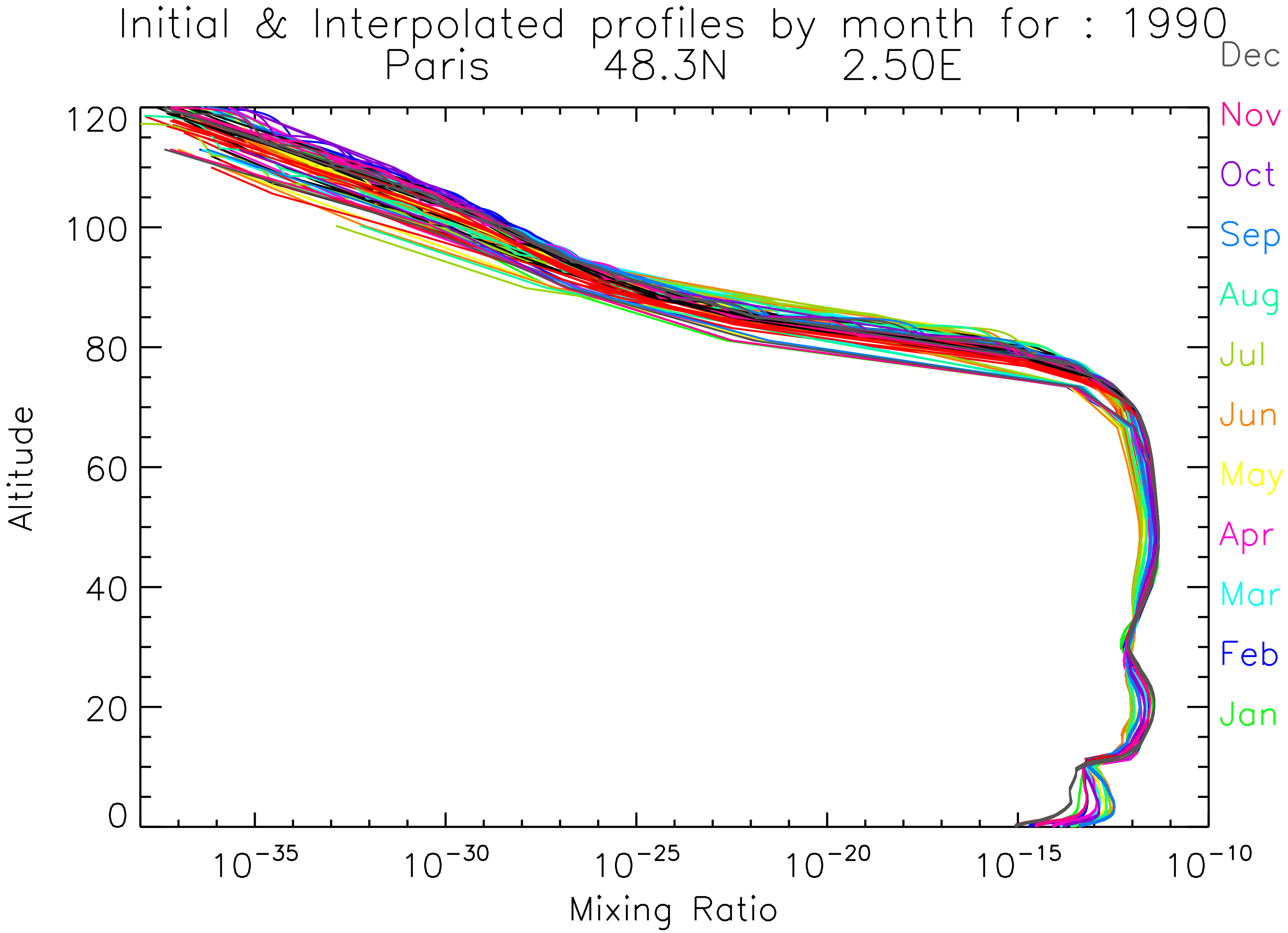
Initial & Interpolated profiles by month for : 1988

Paris 48.3N 2.50E





Initial & Interpolated profiles by month for : 1989
Paris 48.3N 2.50E


Initial & Interpolated profiles by month for : 1990
Paris 48.3N 2.50E
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio
Dec
Nov
Oct
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Aug
Jul
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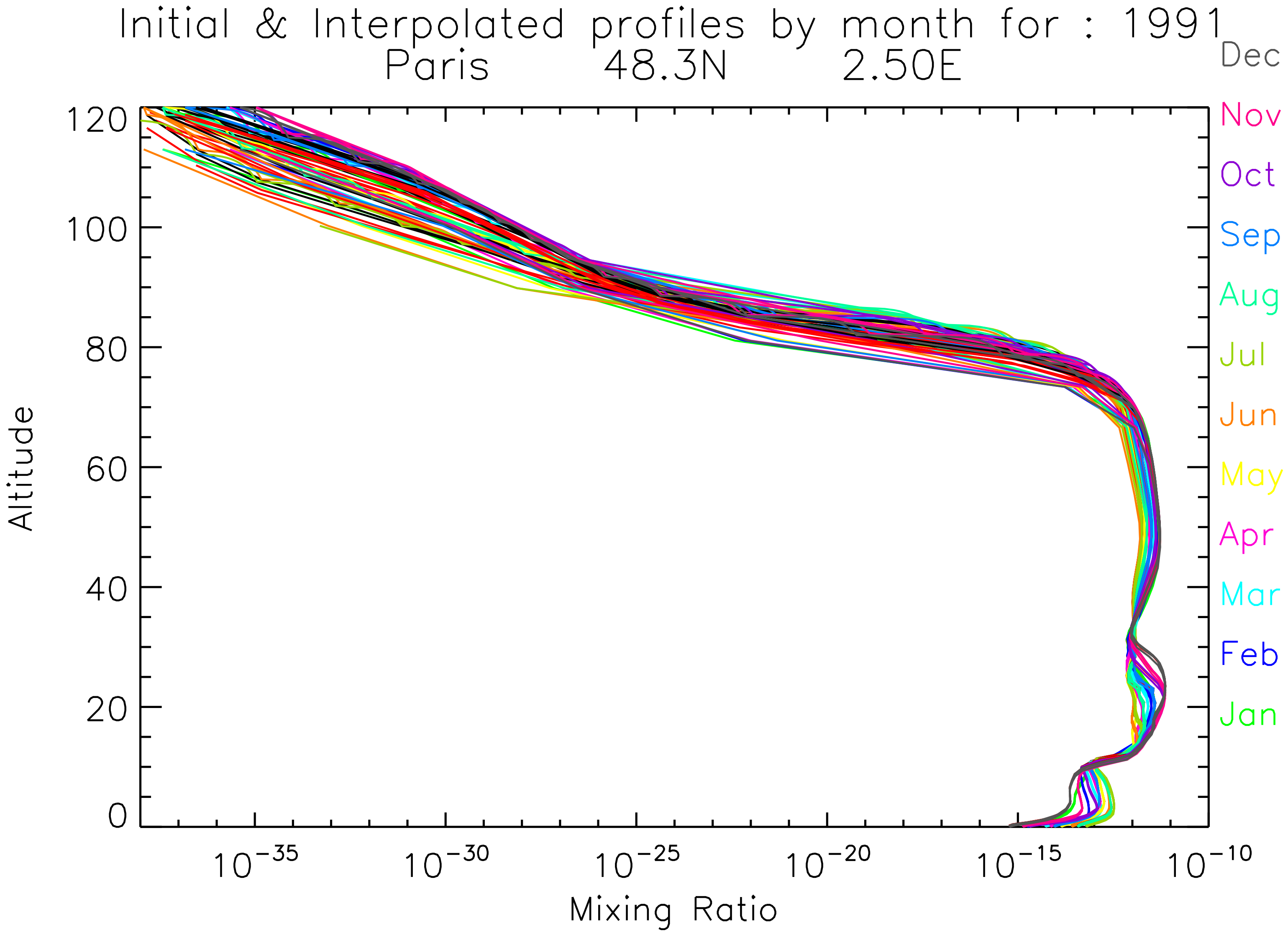
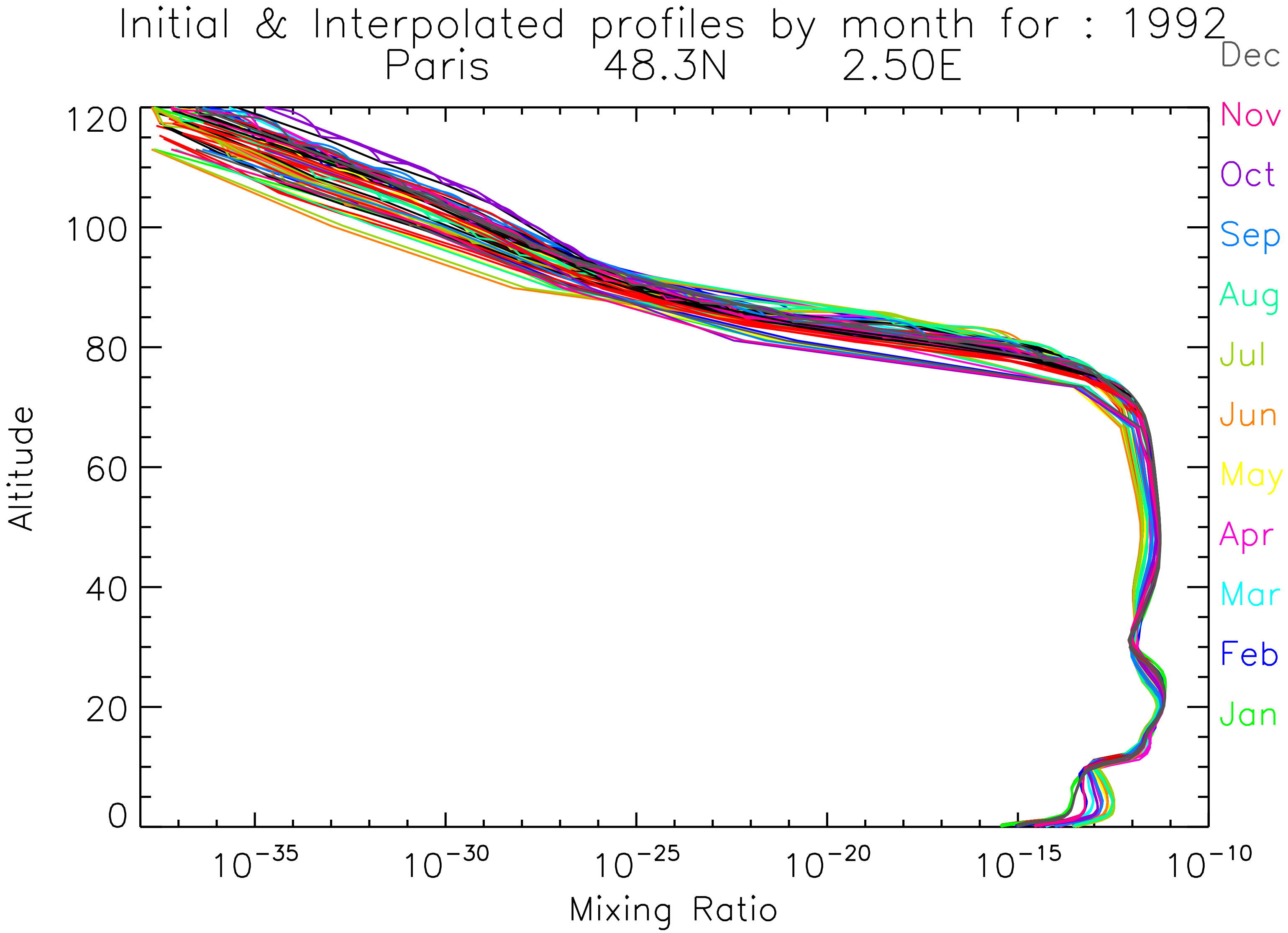
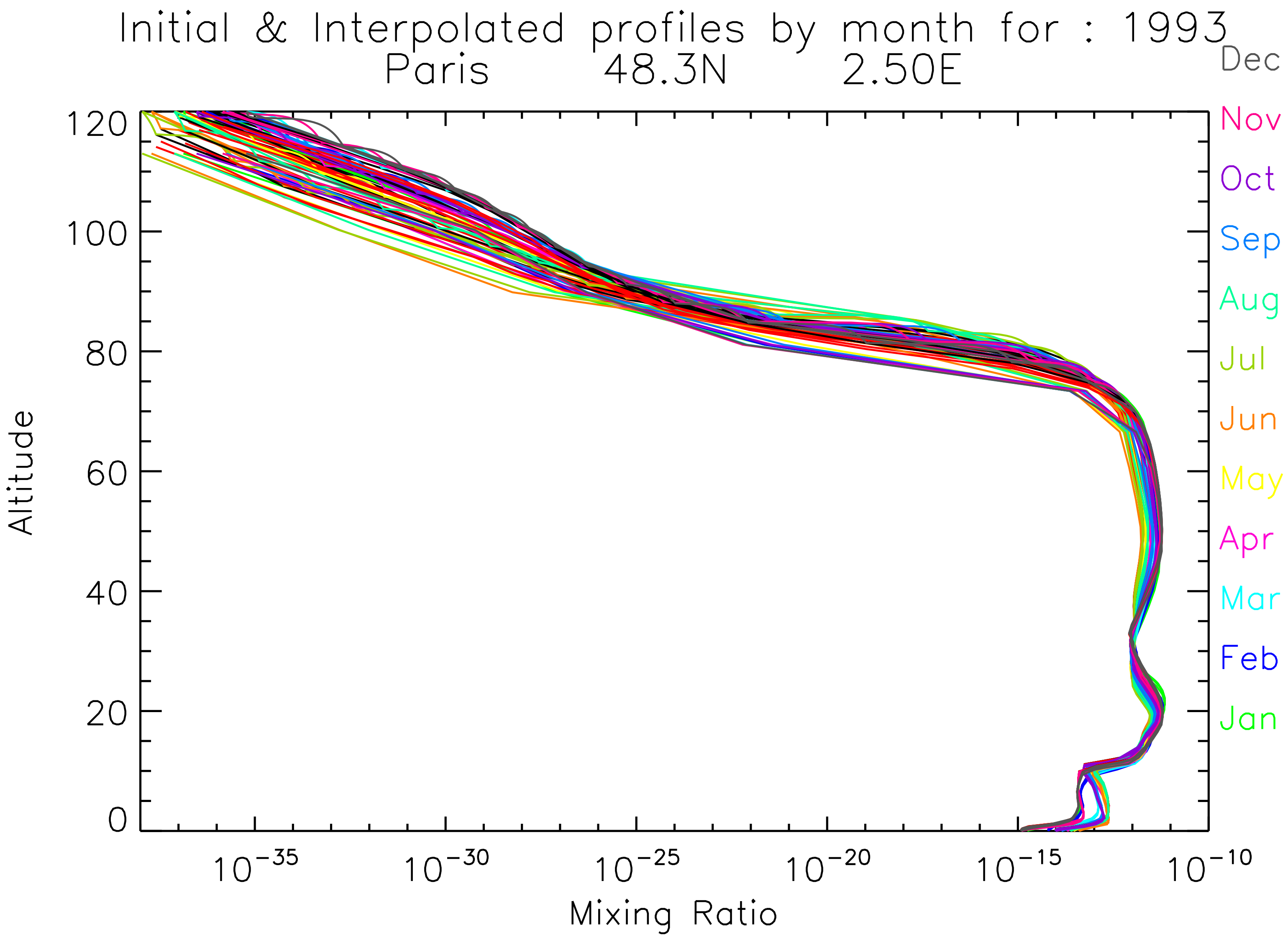
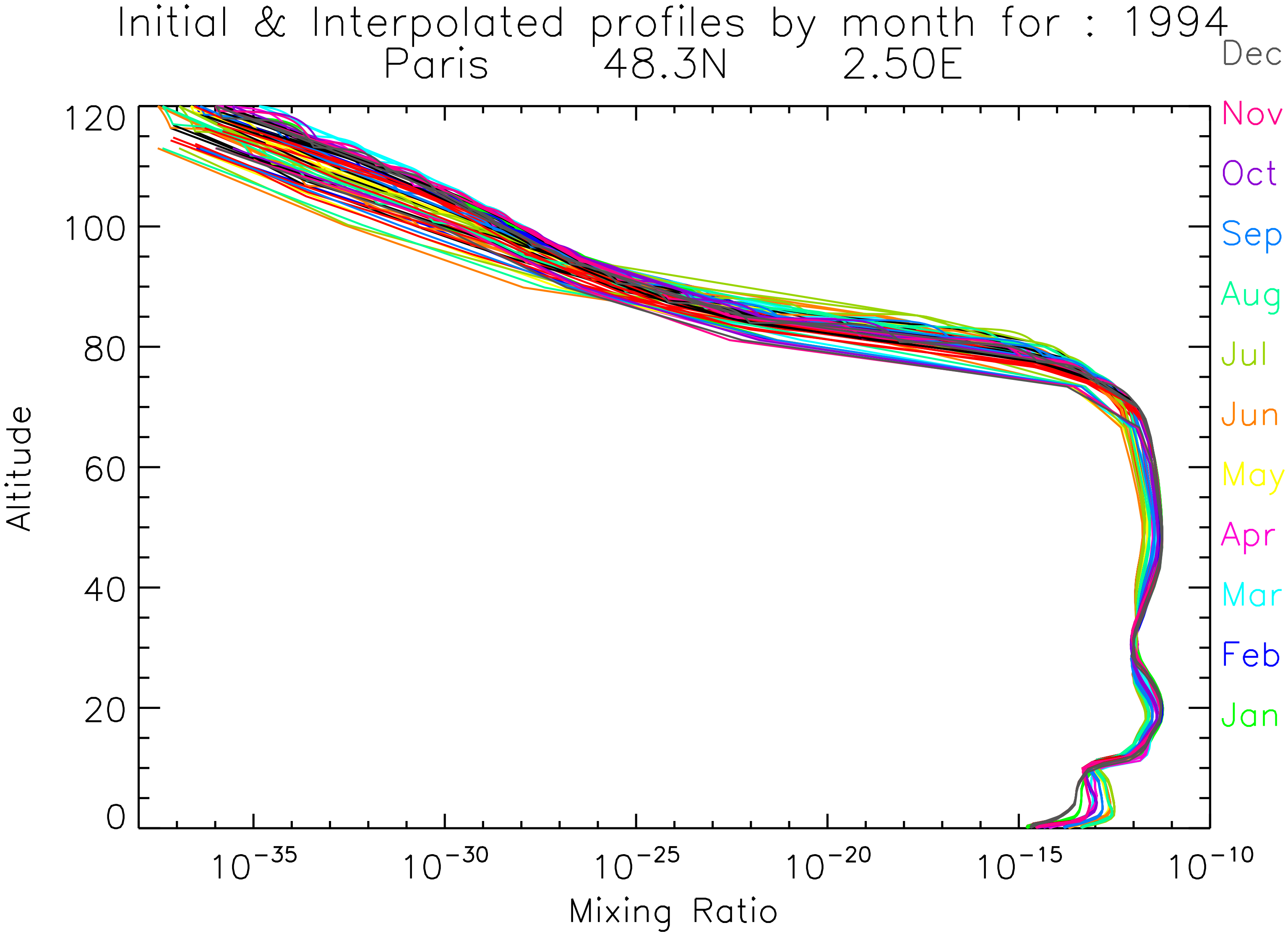
Feb
Jan

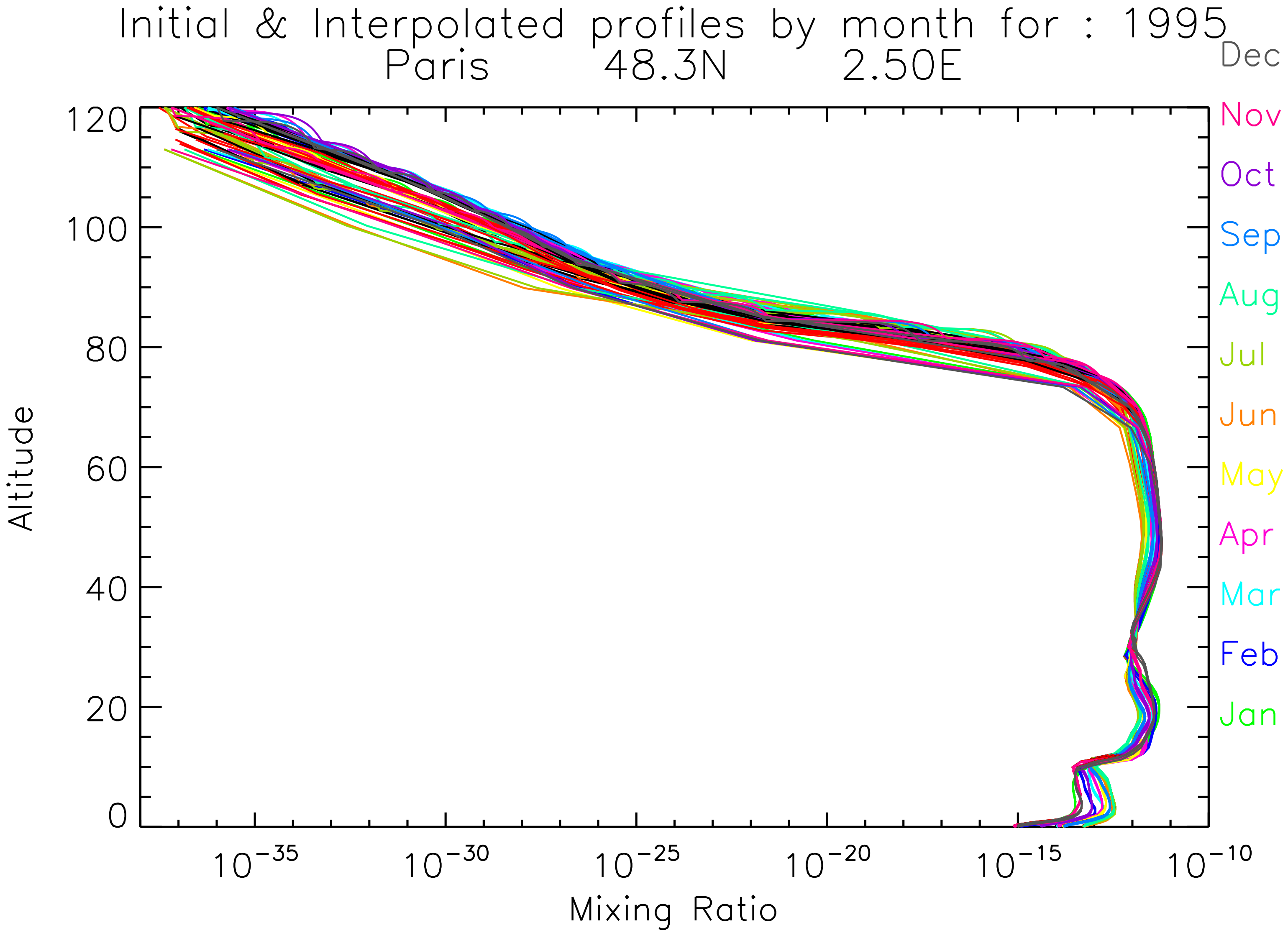


Initial & Interpolated profiles by month for : 1991
Paris 48.3N 2.50E


Initial & Interpolated profiles by month for : 1992
Paris 48.3N 2.50E


Initial & Interpolated profiles by month for : 1993
Paris 48.3N 2.50E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1994
Paris 48.3N 2.50E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 1995
Paris 48.3N 2.50E
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio
Dec
Nov
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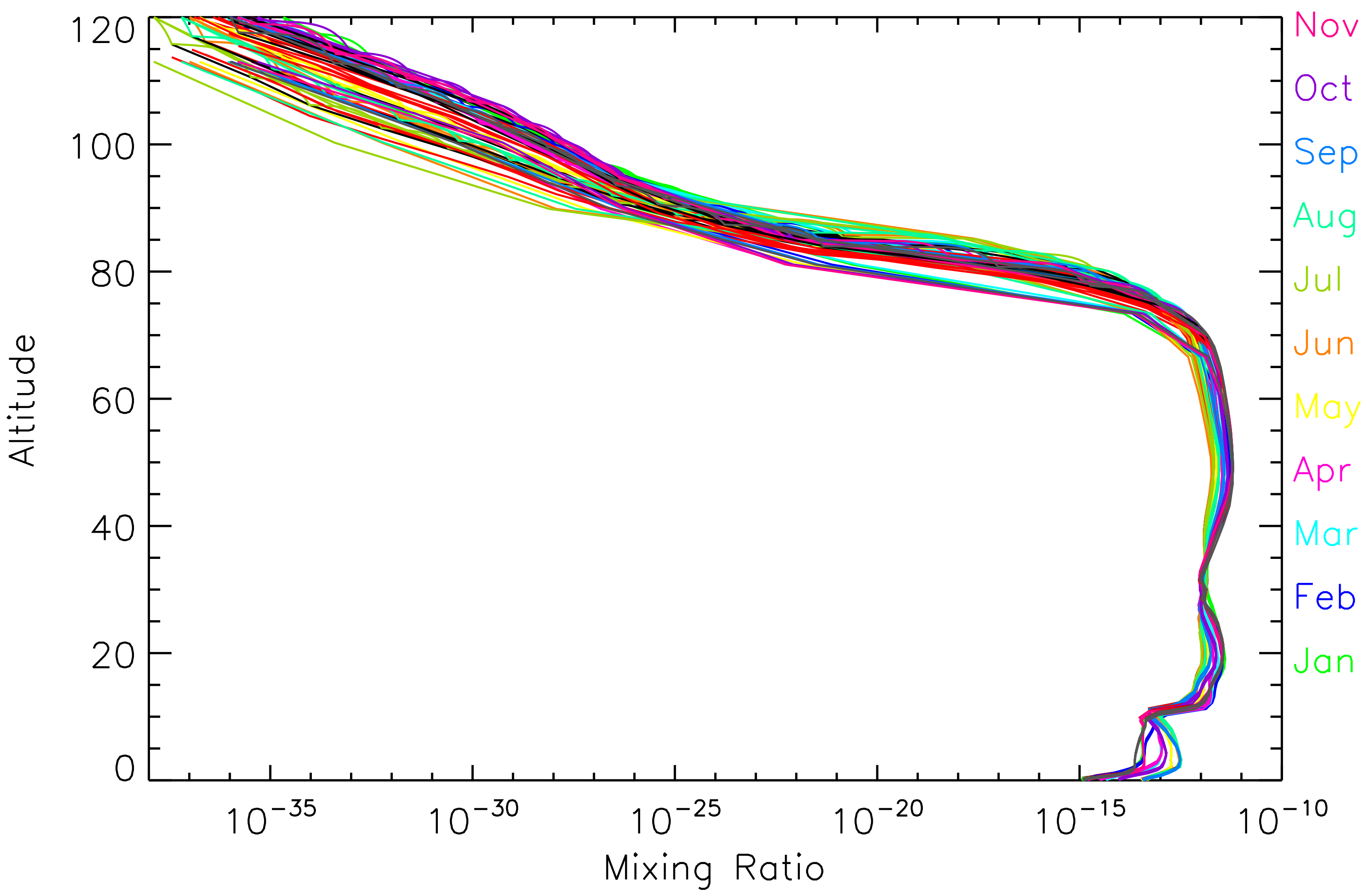
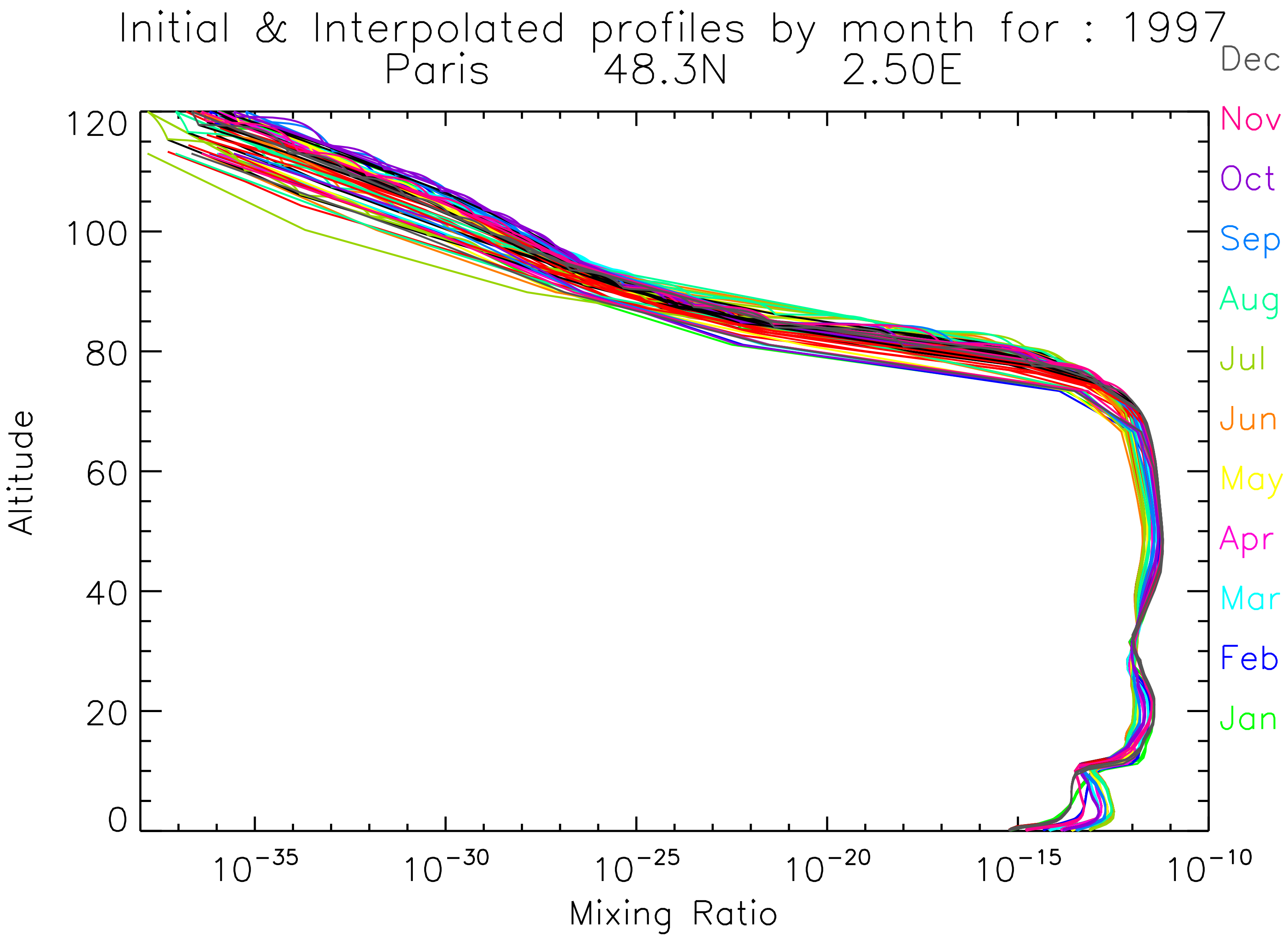
Feb
Jan



Initial & Interpolated profiles by month for : 1996
Paris 48.3N 2.50E


Initial & Interpolated profiles by month for : 1997
Paris 48.3N 2.50E
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio
Dec
Nov
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Aug
Jul
Jun
May
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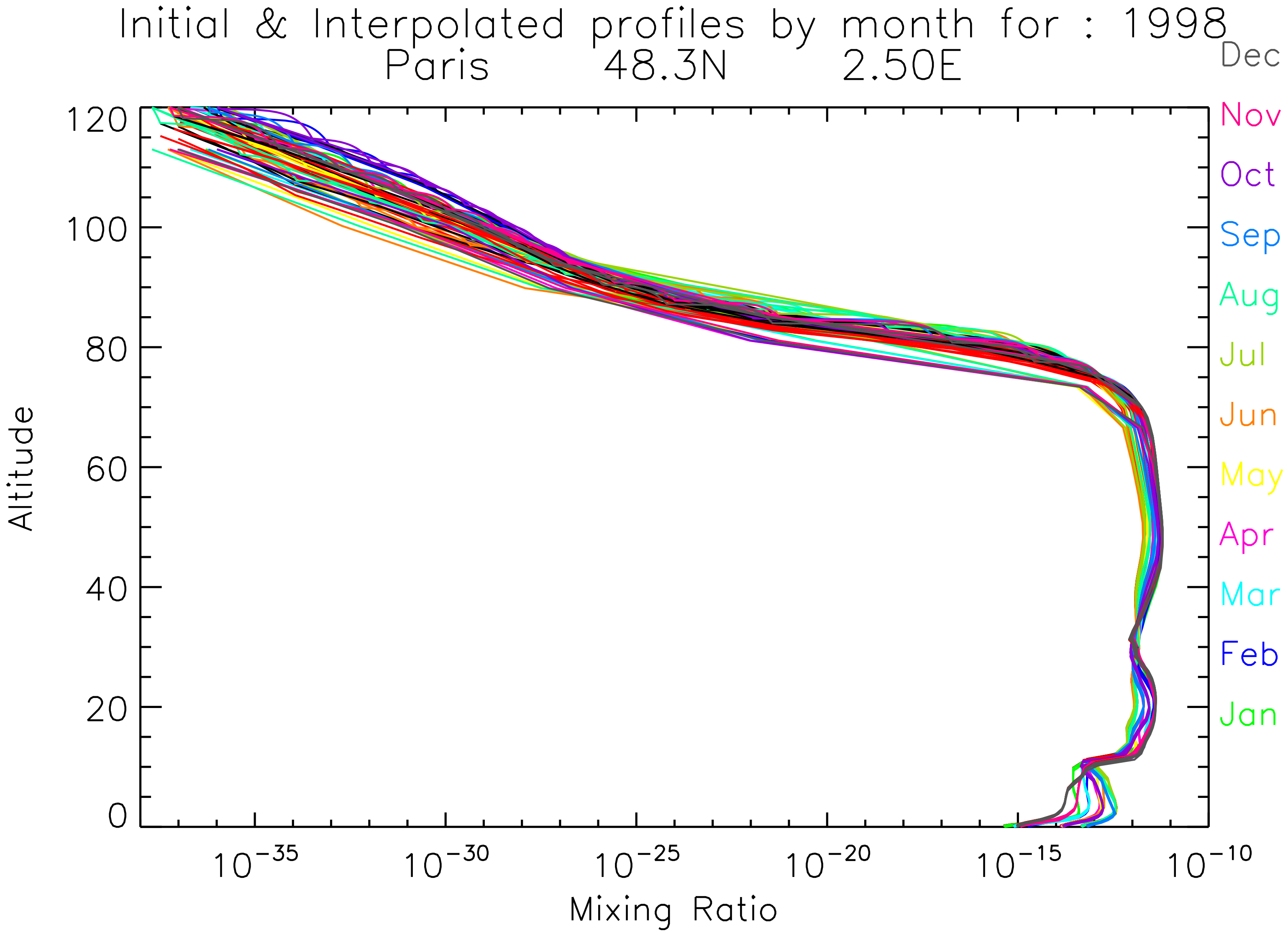
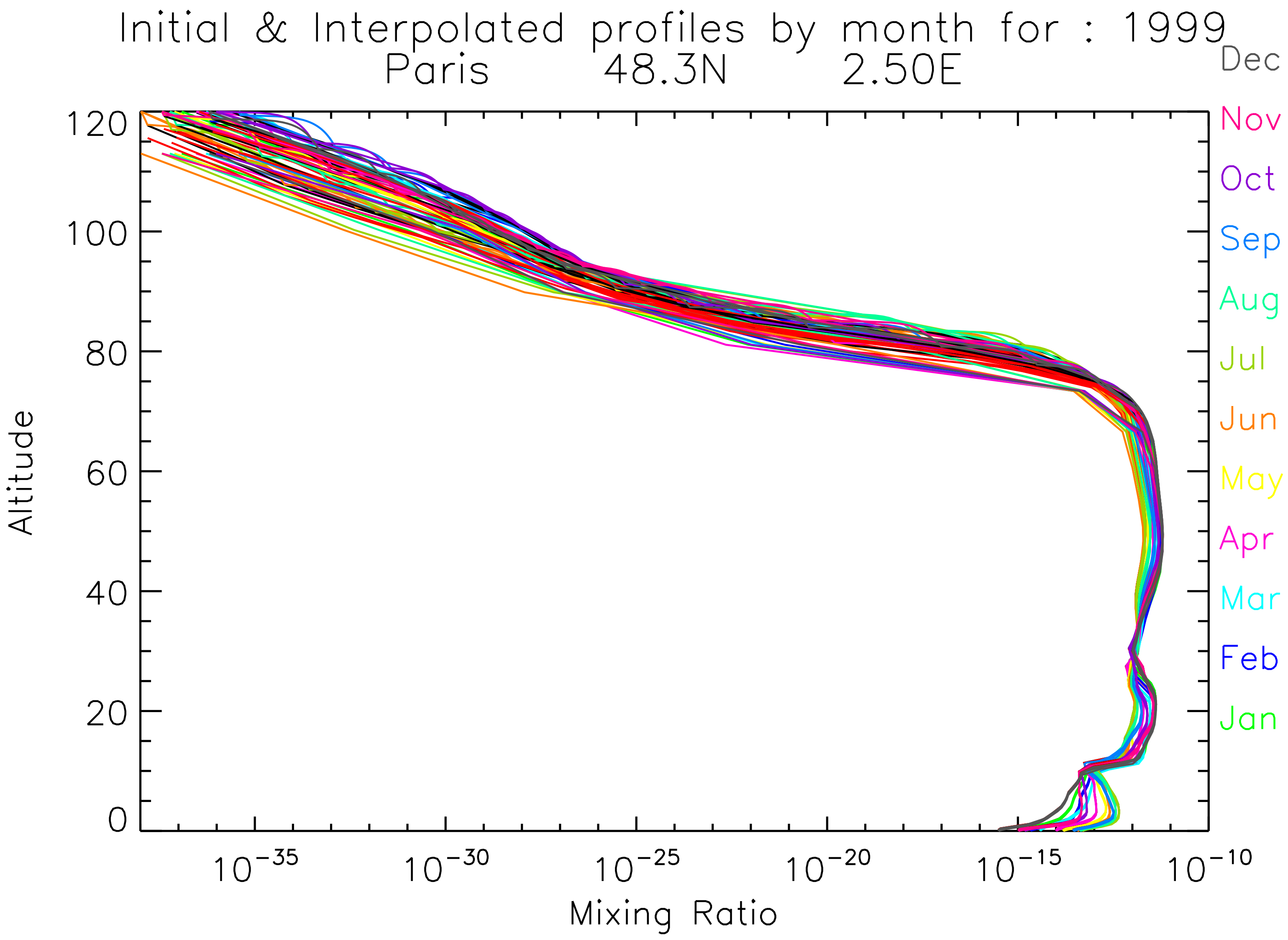
Feb
Jan


Initial & Interpolated profiles by month for : 1998
Paris 48.3N 2.50E


Initial & Interpolated profiles by month for : 1999
Paris 48.3N 2.50E
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio
Dec
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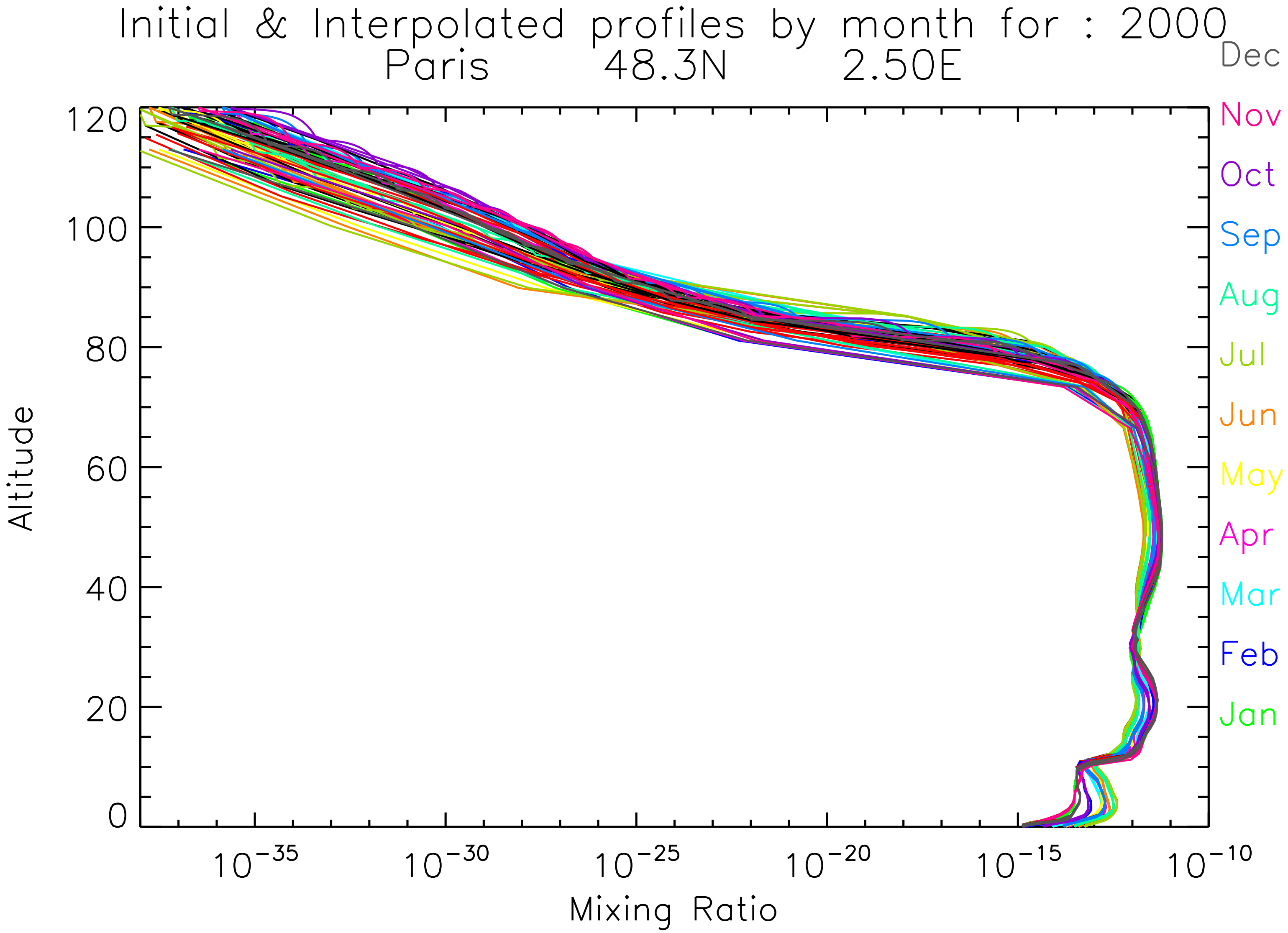
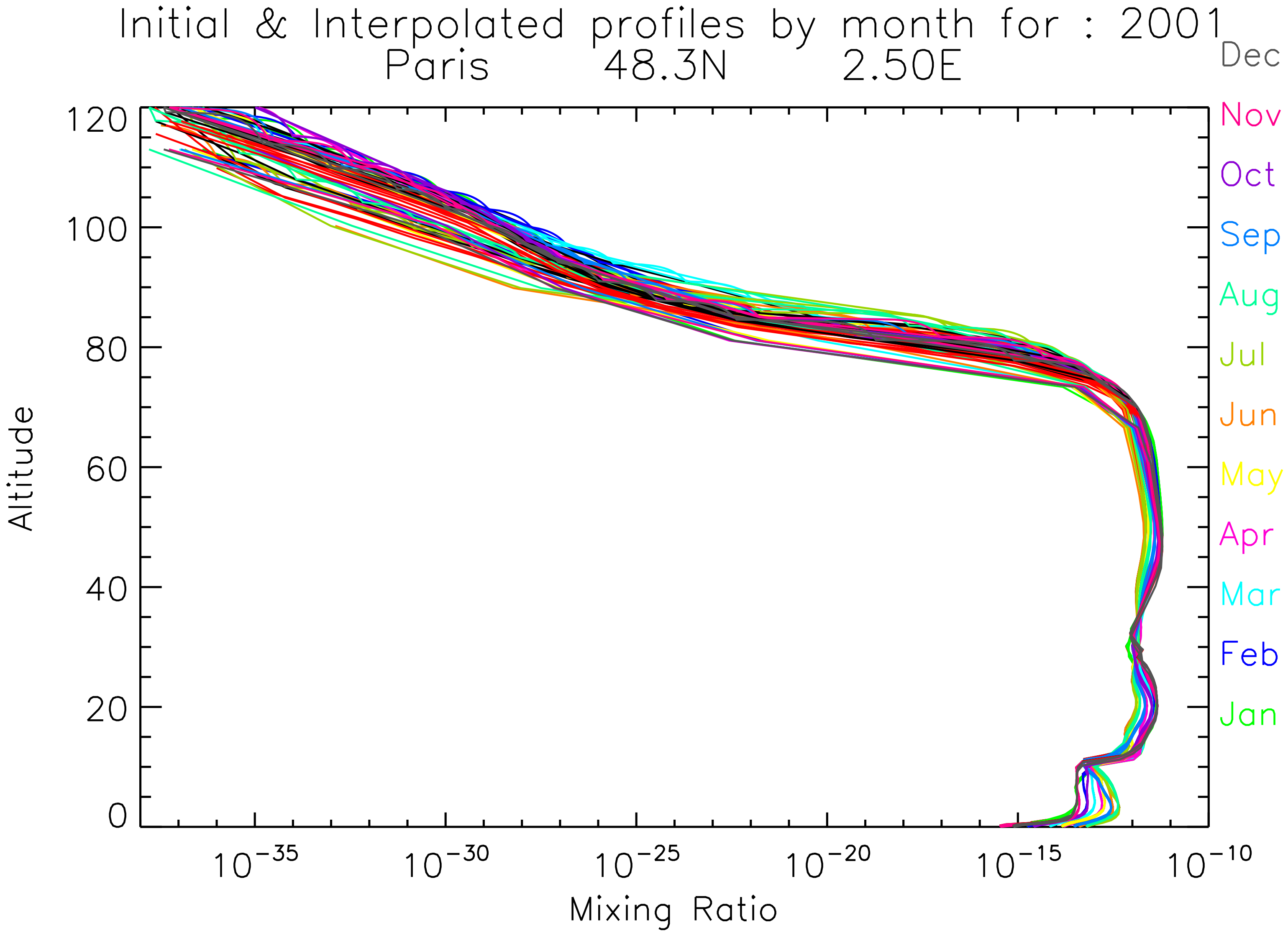
Feb
Jan



Initial & Interpolated profiles by month for : 2000
Paris 48.3N 2.50E


Initial & Interpolated profiles by month for : 2001
Paris 48.3N 2.50E
Altitude
0
20
40
60
80
100
120
Mixing Ratio
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Dec
Nov
Oct
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Aug
Jul
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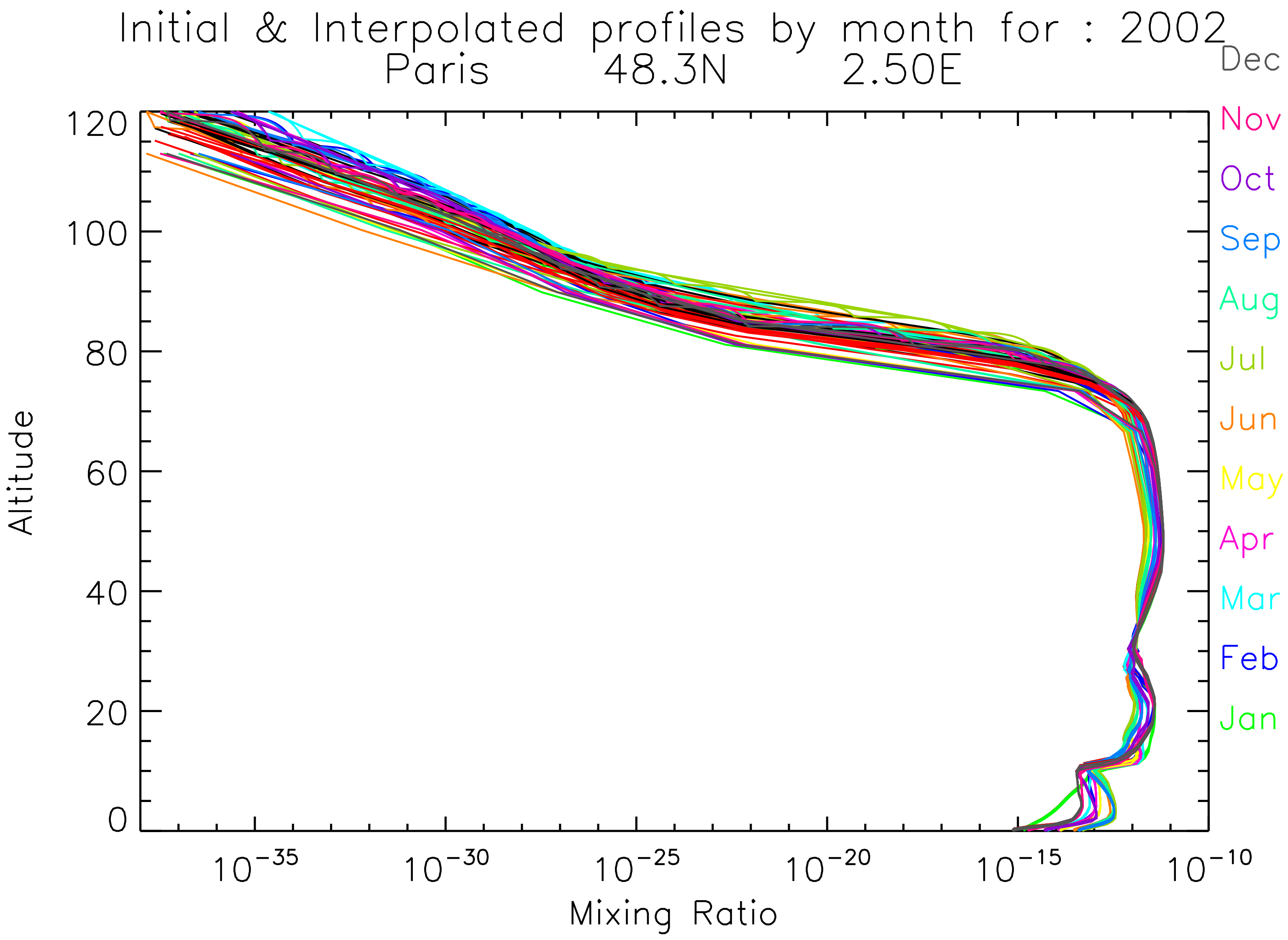
May
Apr
Mar
Feb
Jan


Initial & Interpolated profiles by month for : 2002
Paris 48.3N 2.50E
Altitude
0
20
40
60
80
100
120
Mixing Ratio
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Dec
Nov
Oct
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Jul
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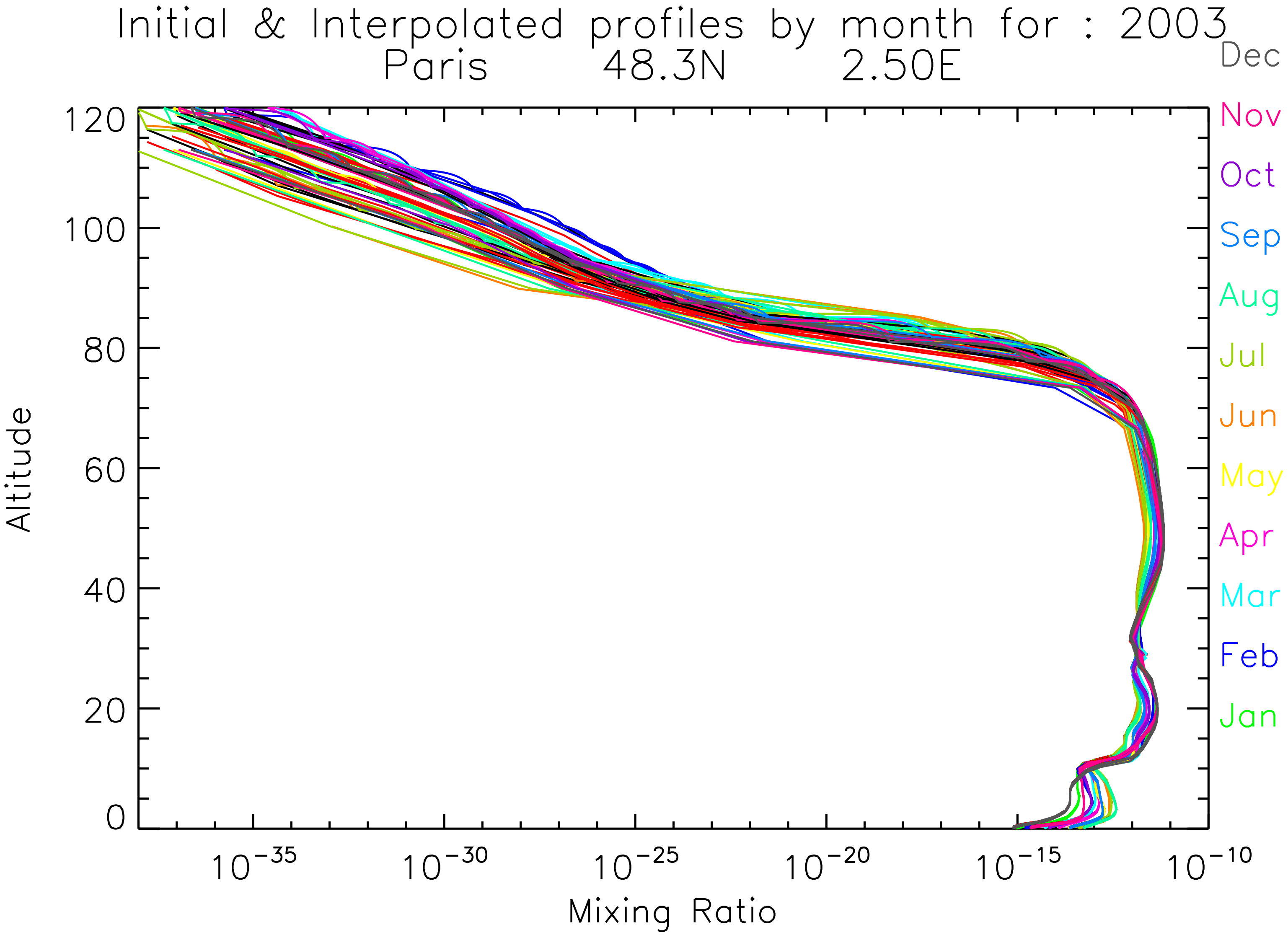
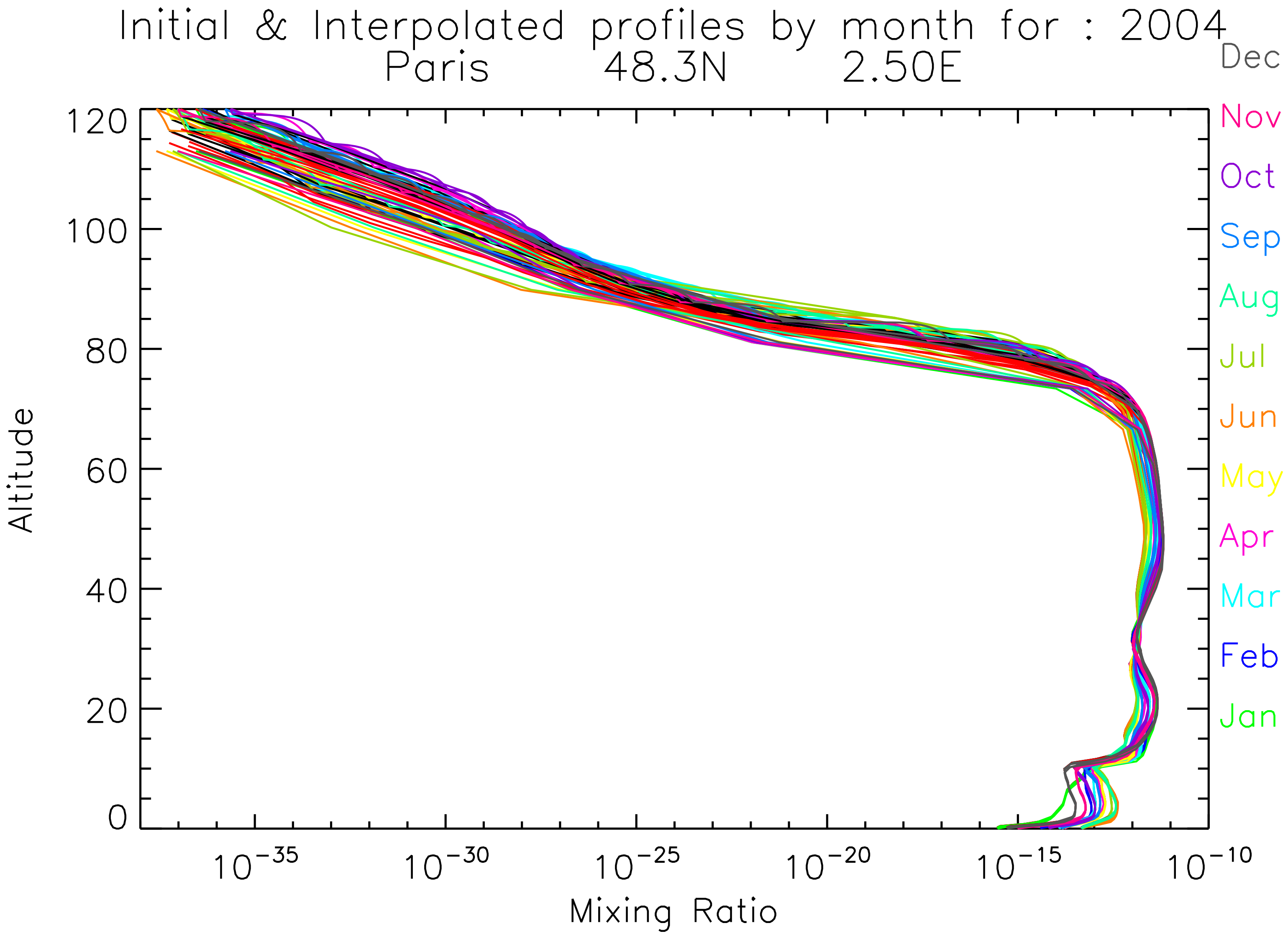
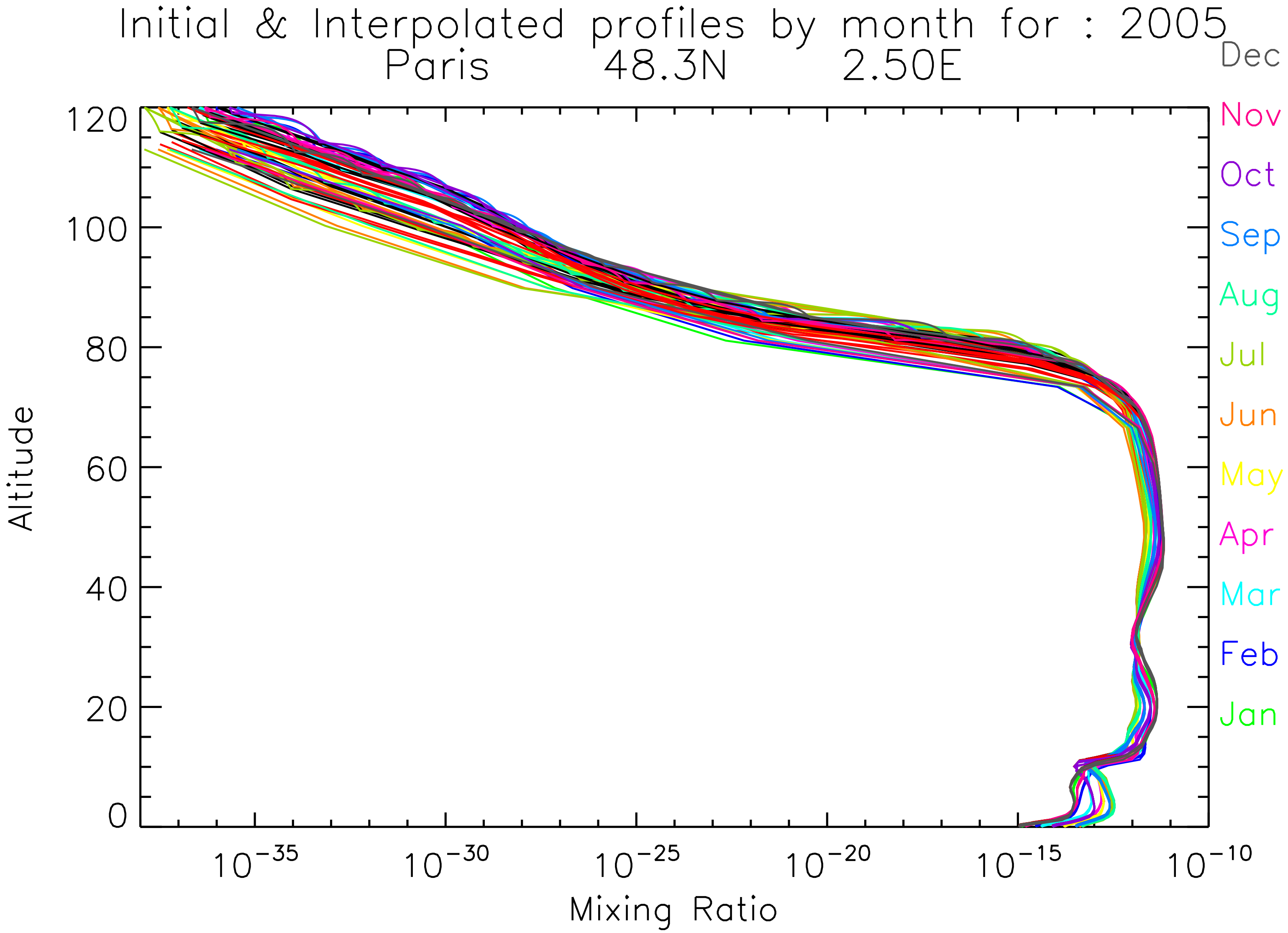
Feb
Jan

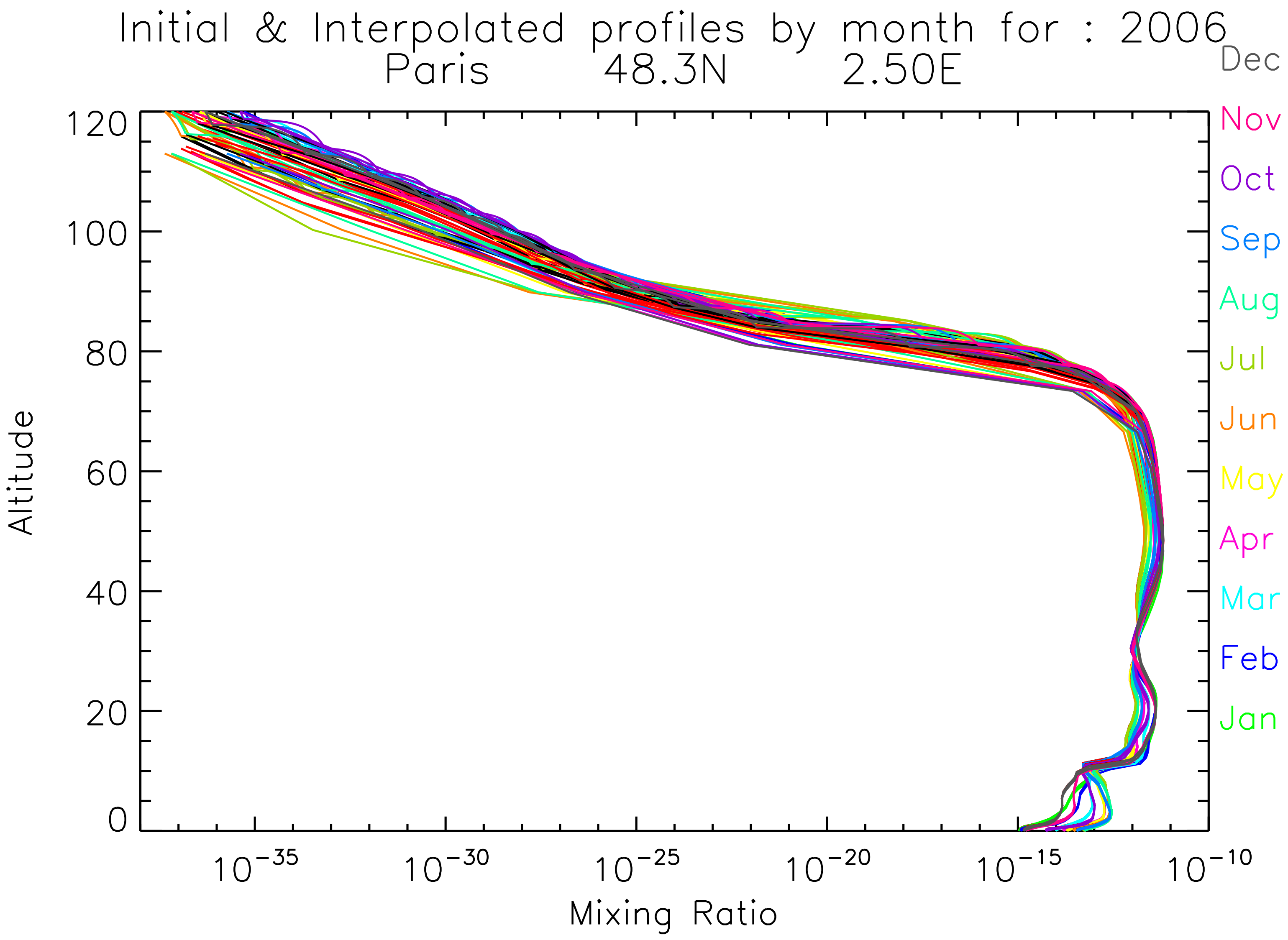


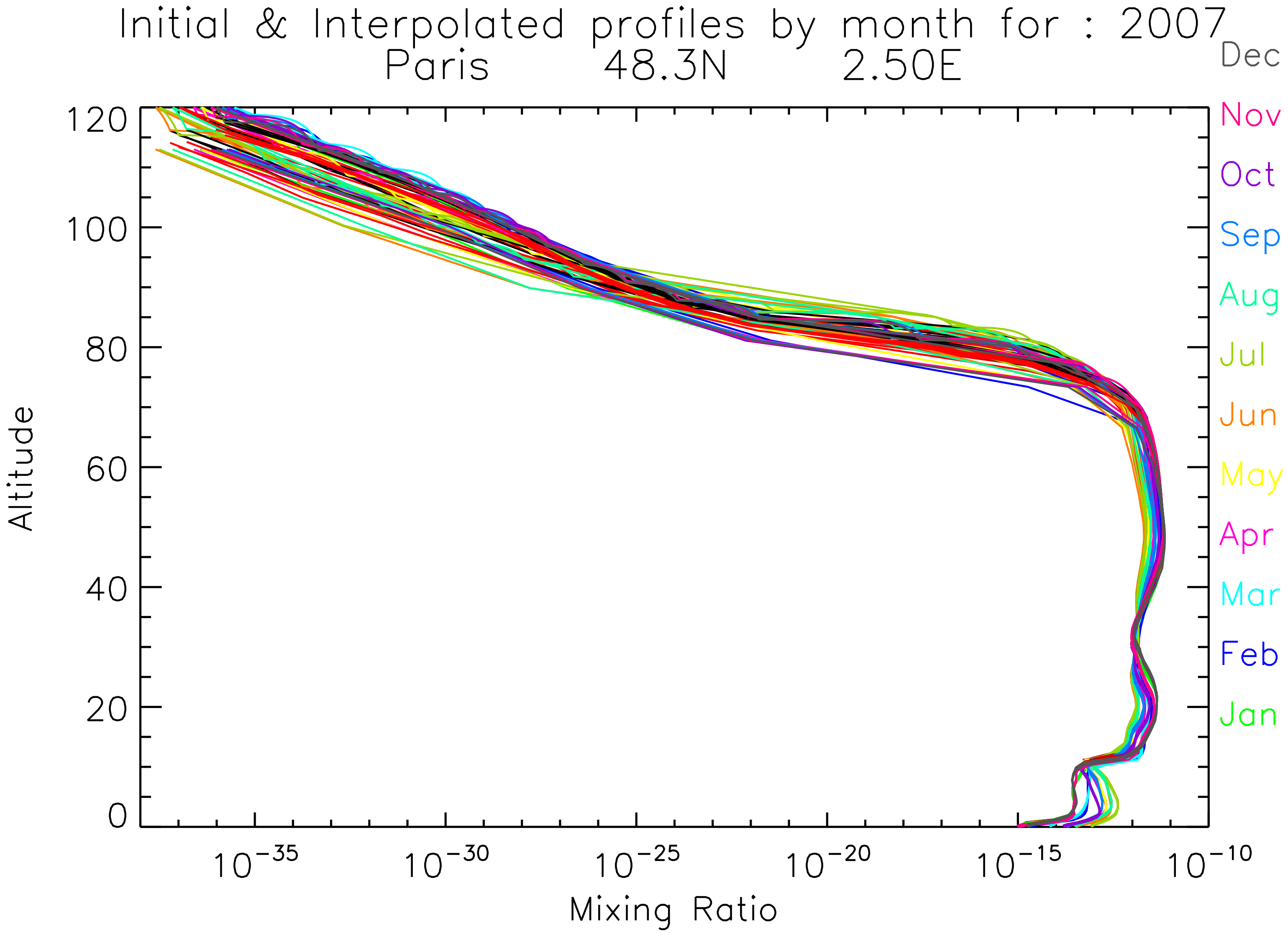
Initial & Interpolated profiles by month for : 2003
Paris 48.3N 2.50E

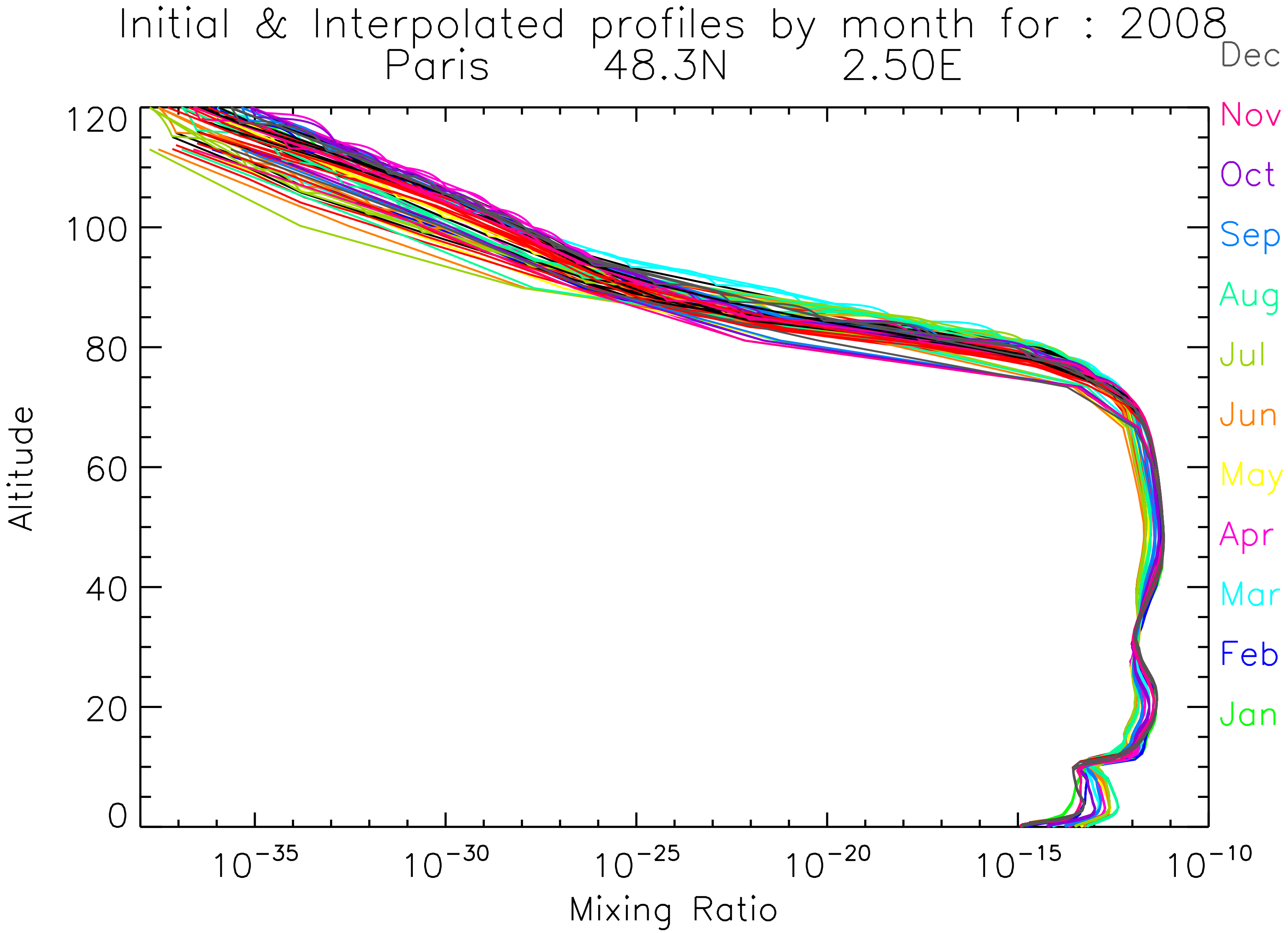

Initial & Interpolated profiles by month for : 2004
Paris 48.3N 2.50E
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan



Initial & Interpolated profiles by month for : 2005
Paris 48.3N 2.50E


Initial & Interpolated profiles by month for : 2006
Paris 48.3N 2.50E
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan


Initial & Interpolated profiles by month for : 2007
Paris 48.3N 2.50E


Initial & Interpolated profiles by month for : 2008
Paris 48.3N 2.50E
Altitude
0
20
40
60
80
100
120
Mixing Ratio
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Dec
Nov
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Aug
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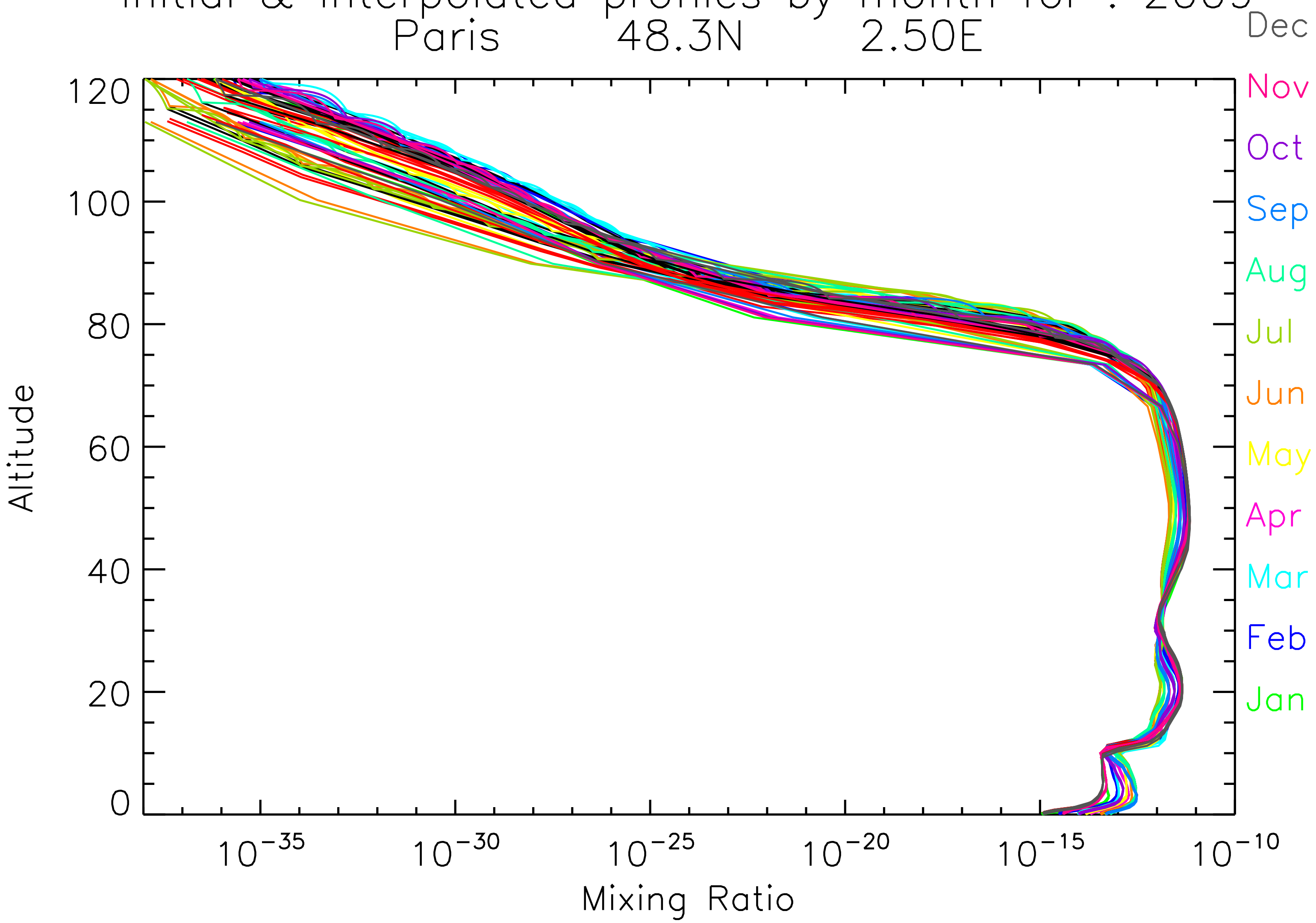
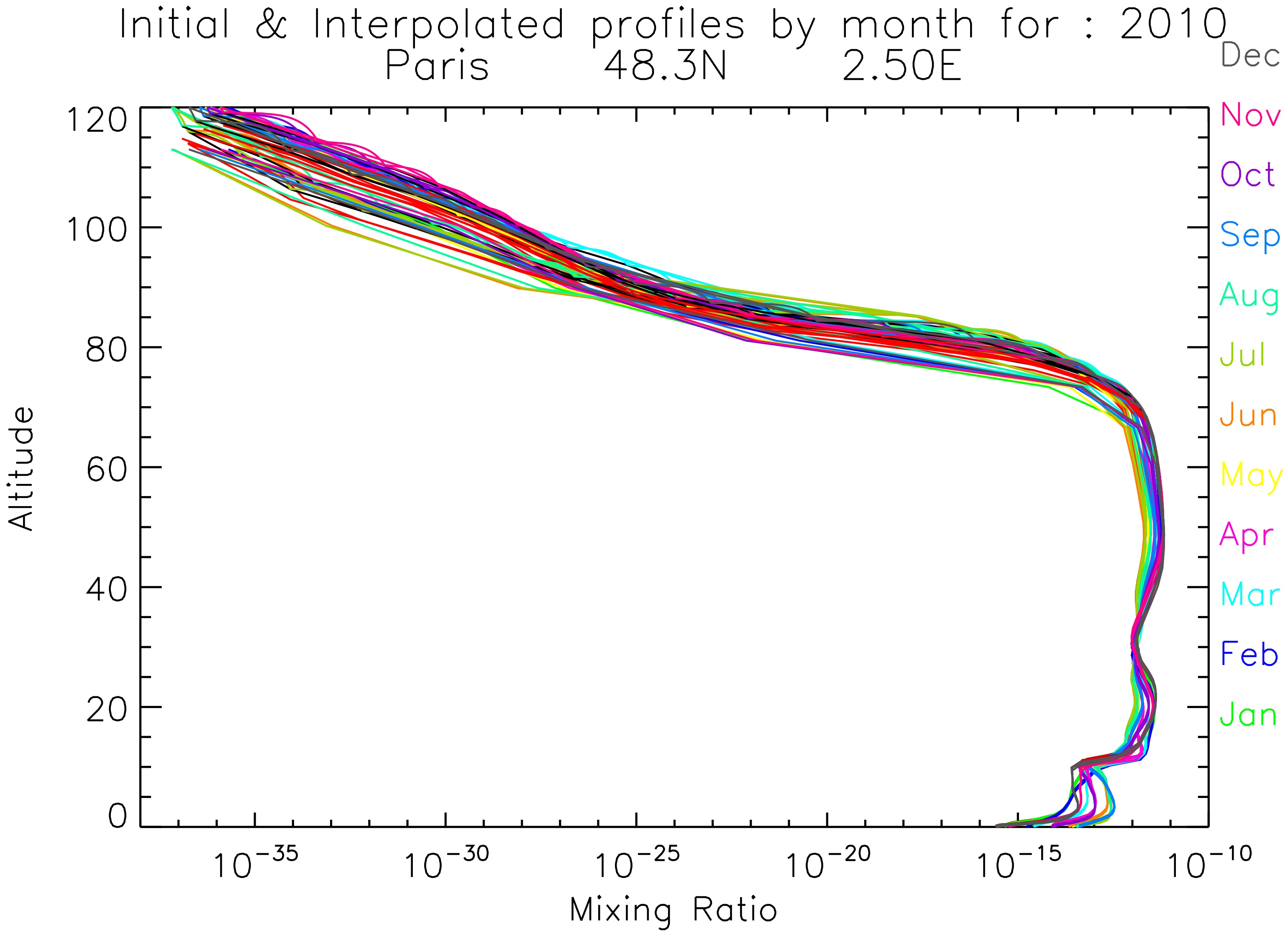
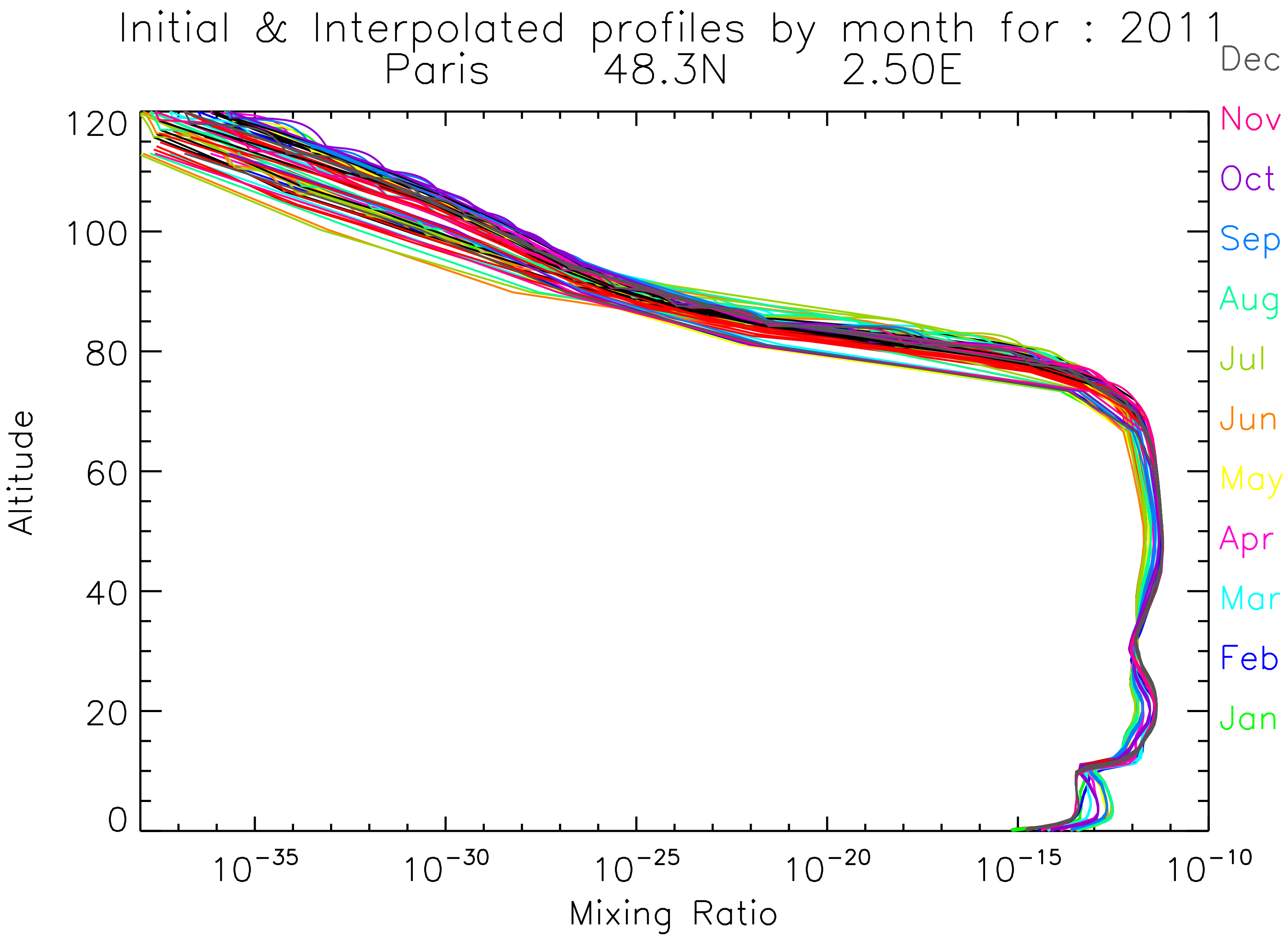
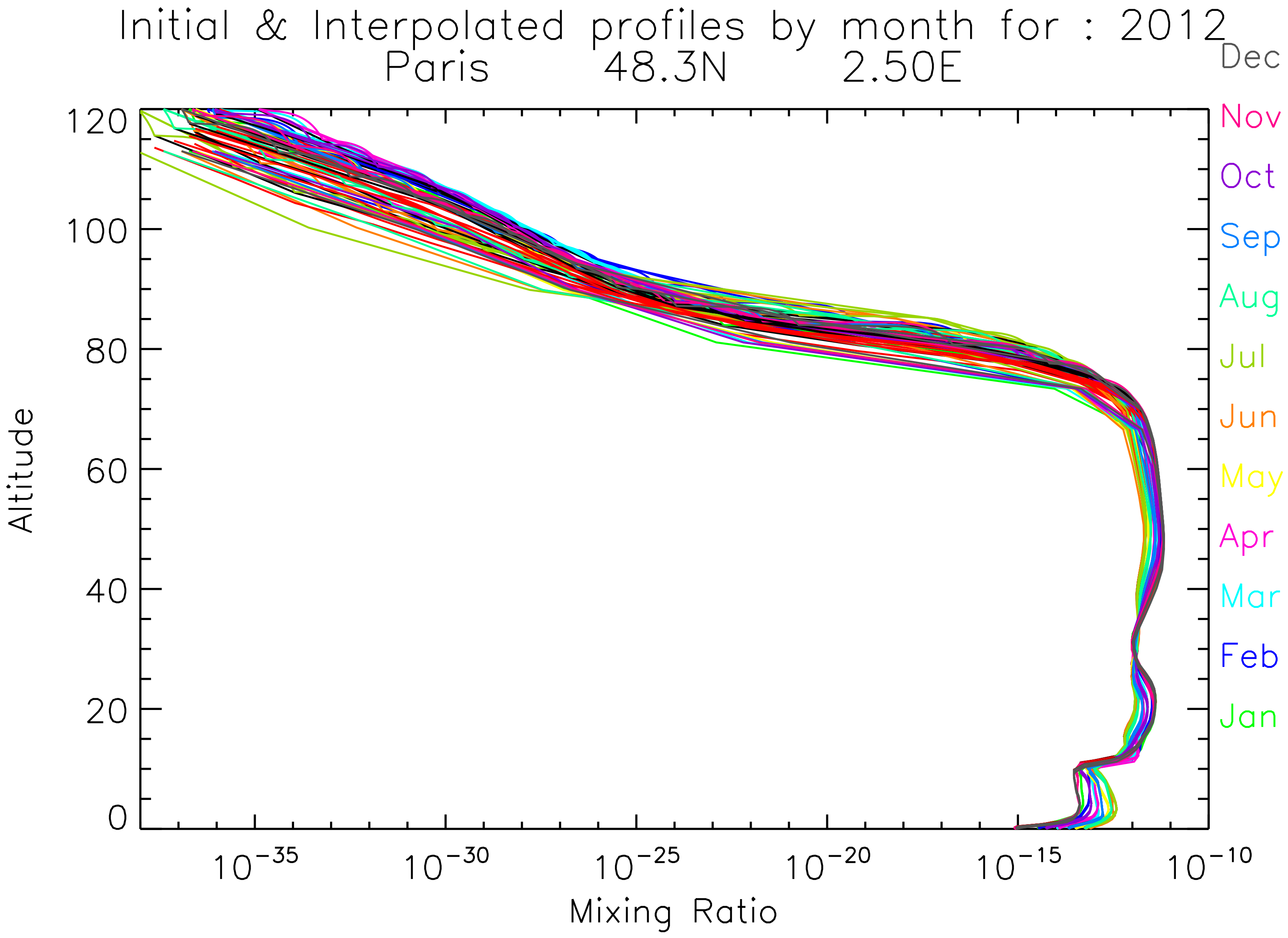
Apr
Mar
Feb
Jan

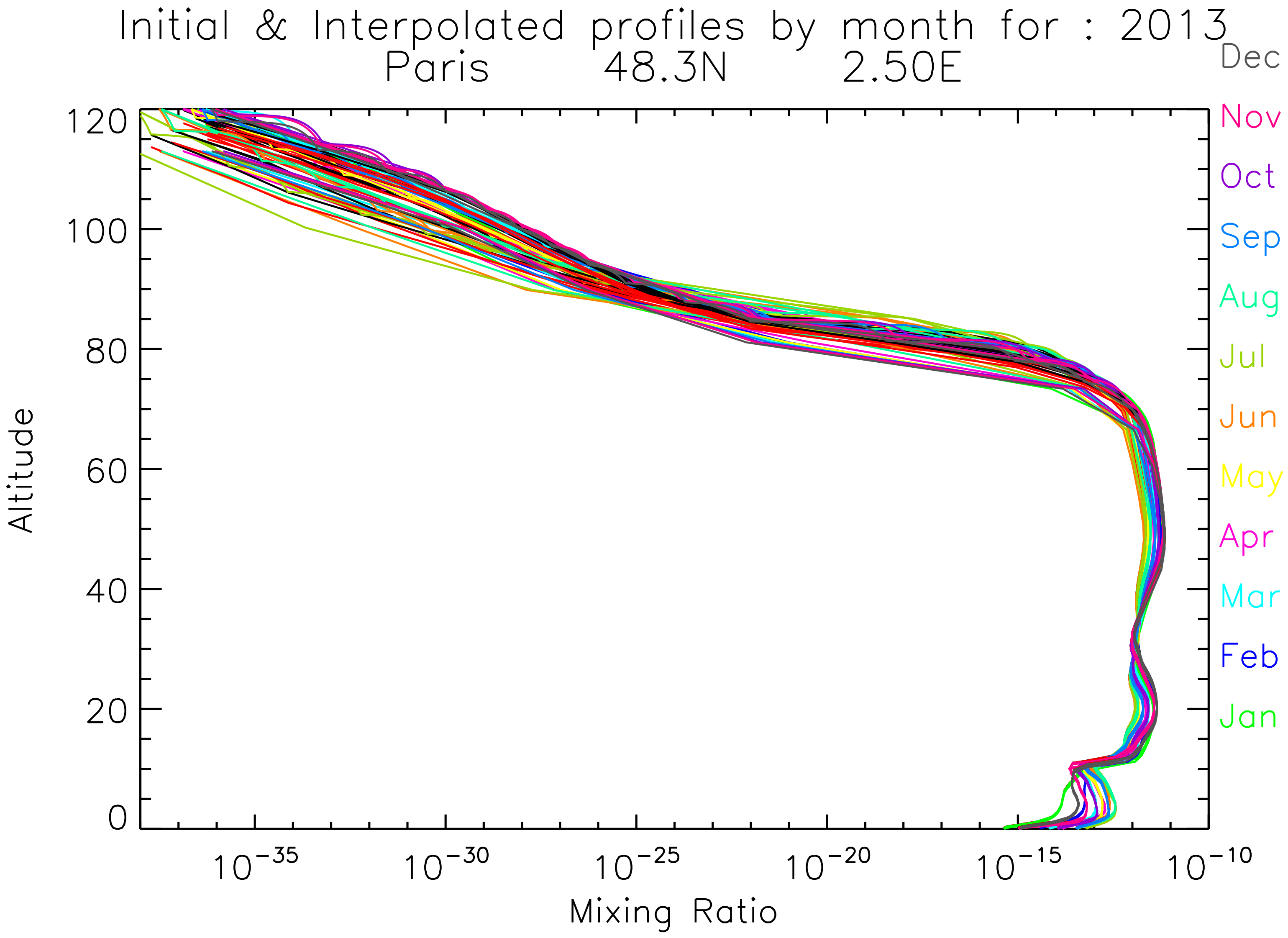


Initial & Interpolated profiles by month for : 2009
Paris 48.3N 2.50E

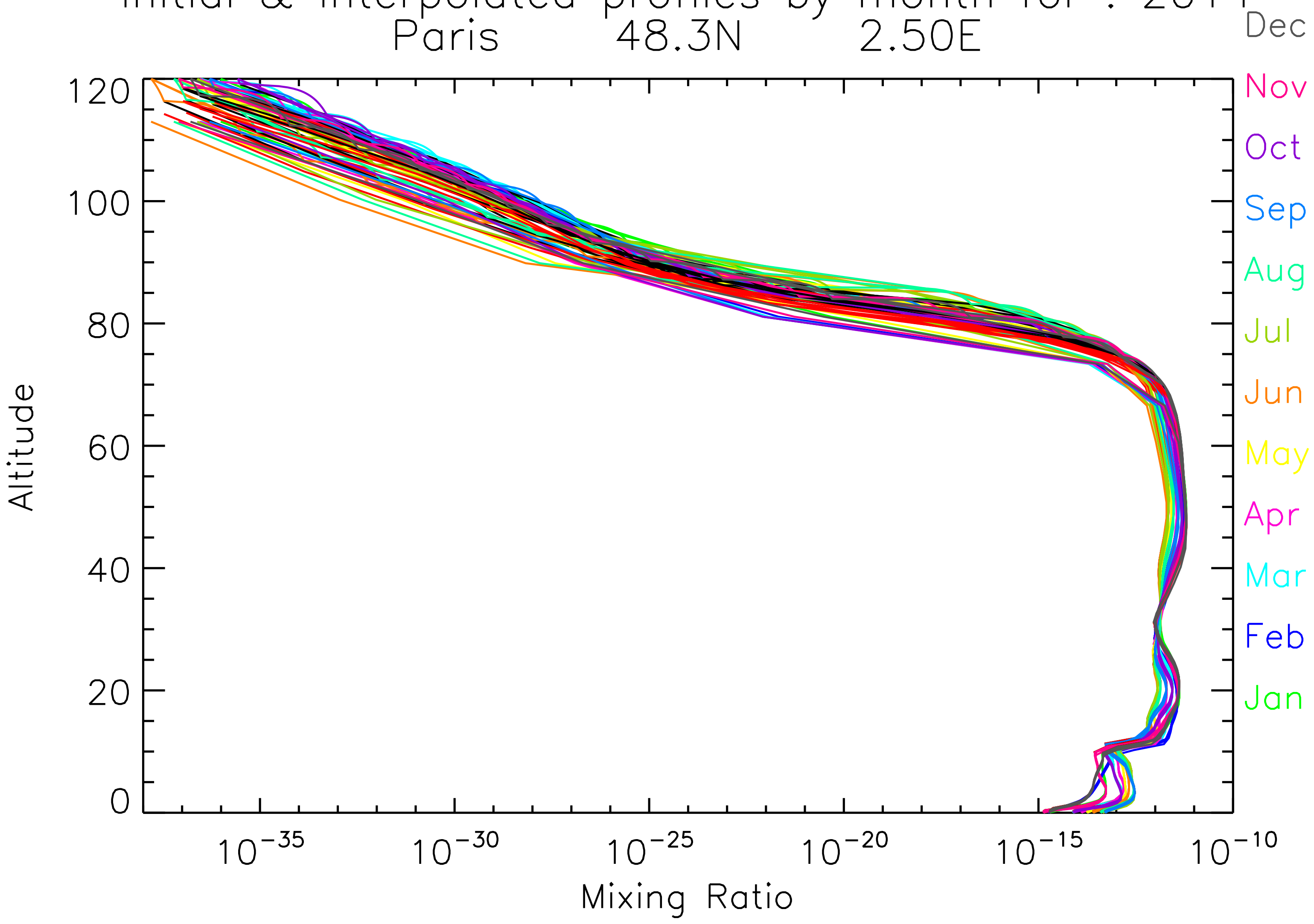

Initial & Interpolated profiles by month for : 2010
Paris 48.3N 2.50E
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

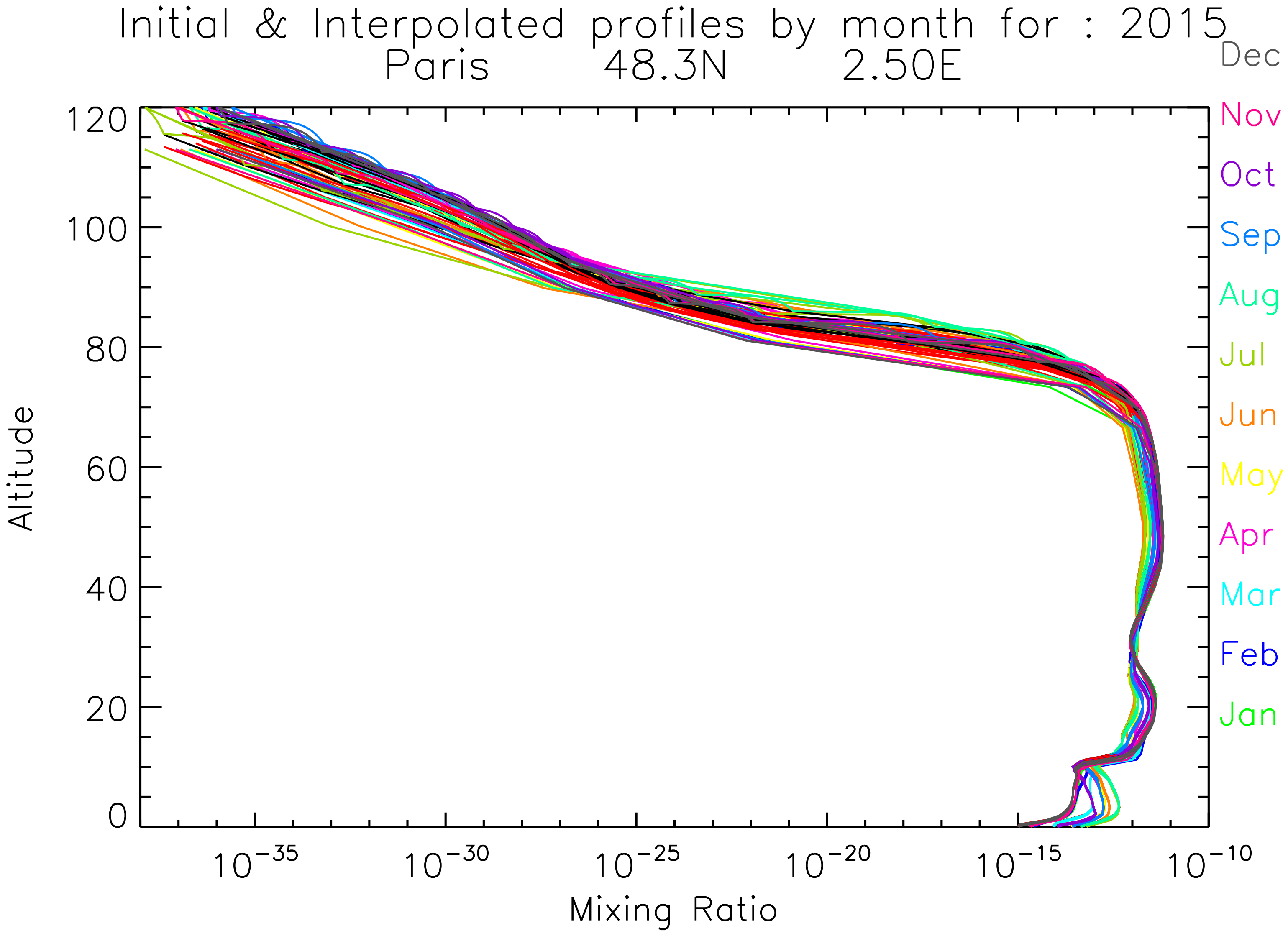

Initial & Interpolated profiles by month for : 2011
Paris 48.3N 2.50E
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

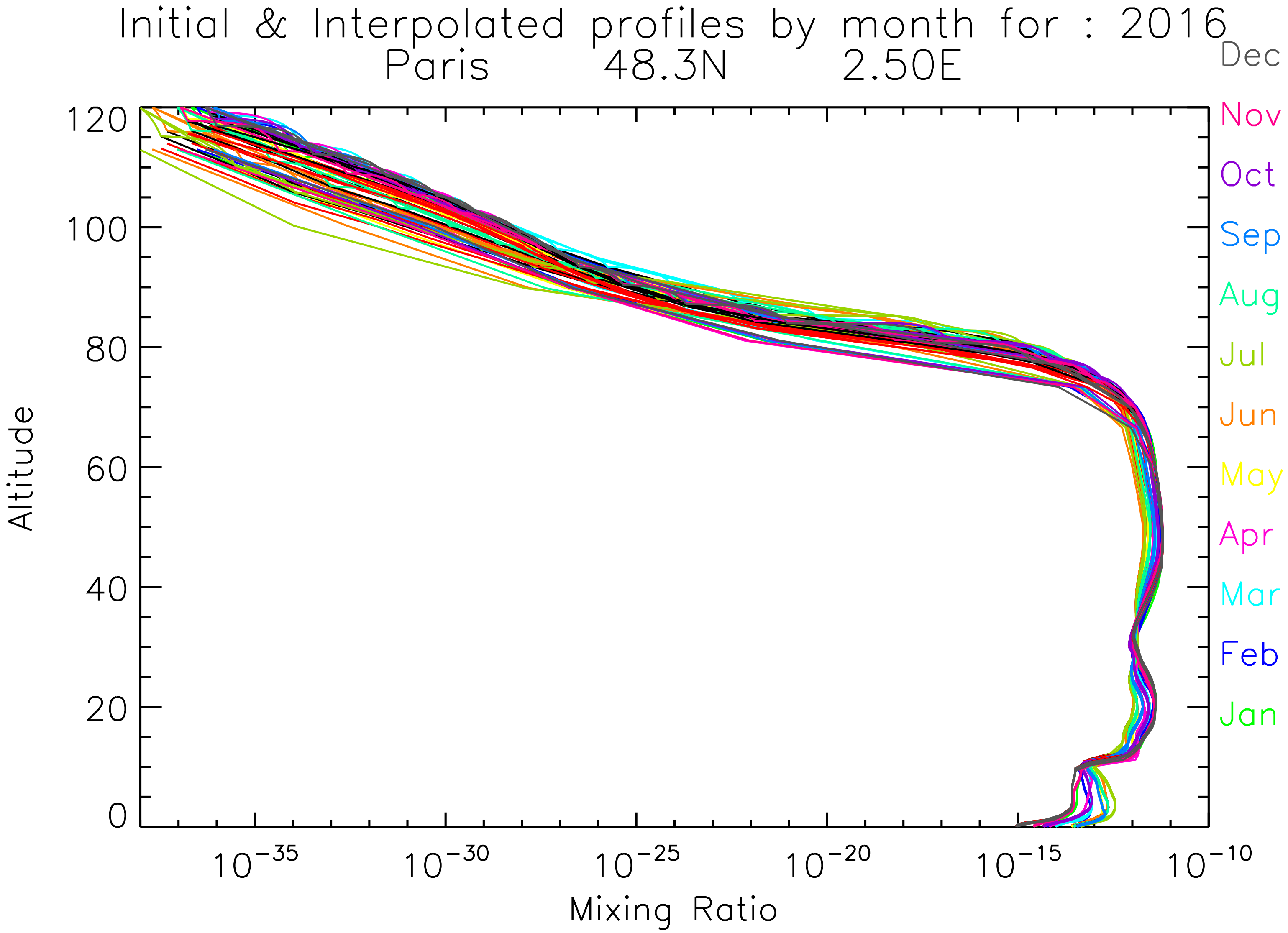

Initial & Interpolated profiles by month for : 2012
Paris 48.3N 2.50E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Initial & Interpolated profiles by month for : 2013
Paris 48.3N 2.50E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
0
20
40
60
80
100
120
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio

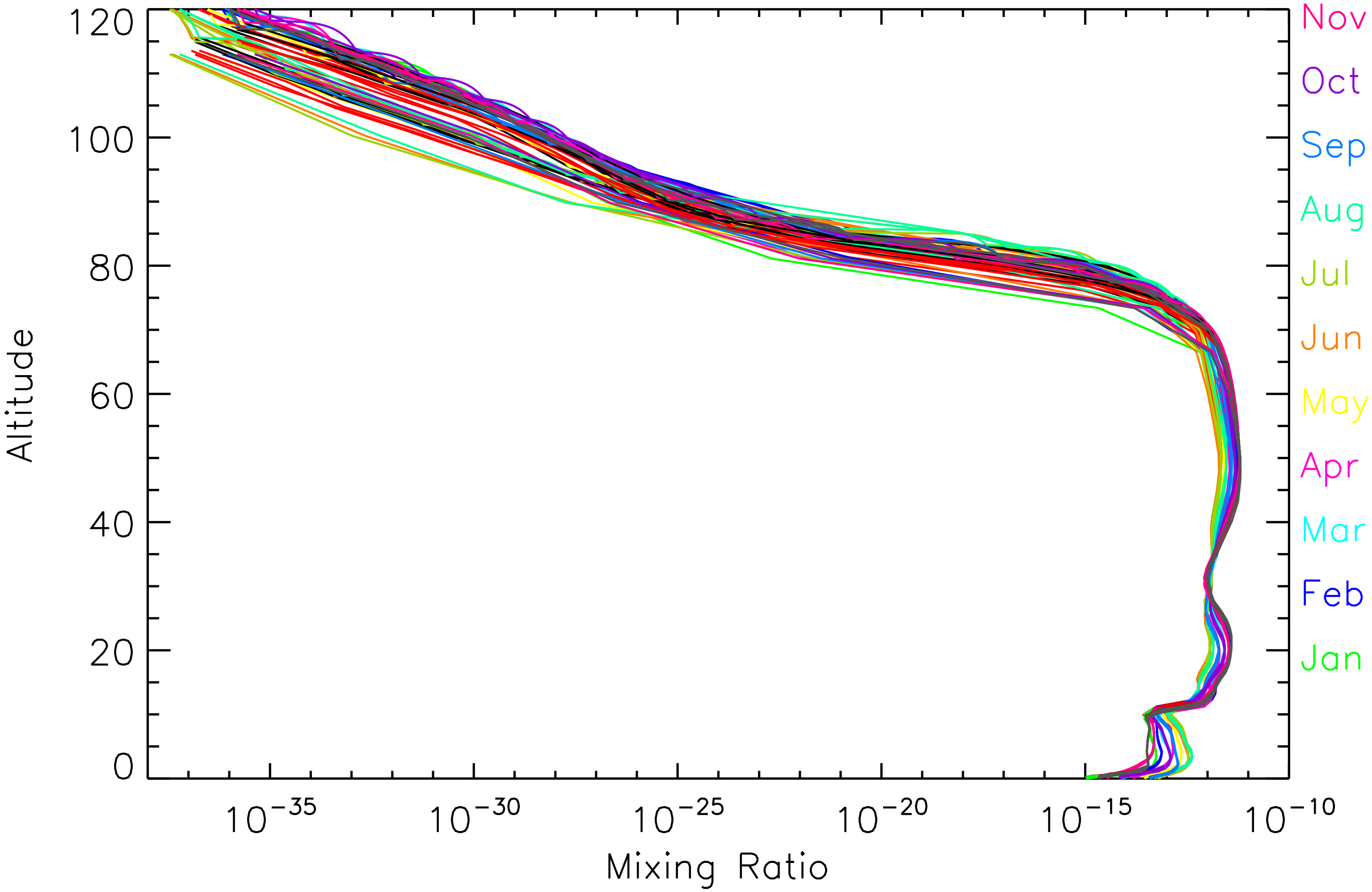
Initial & Interpolated profiles by month for : 2014
Paris 48.3N 2.50E

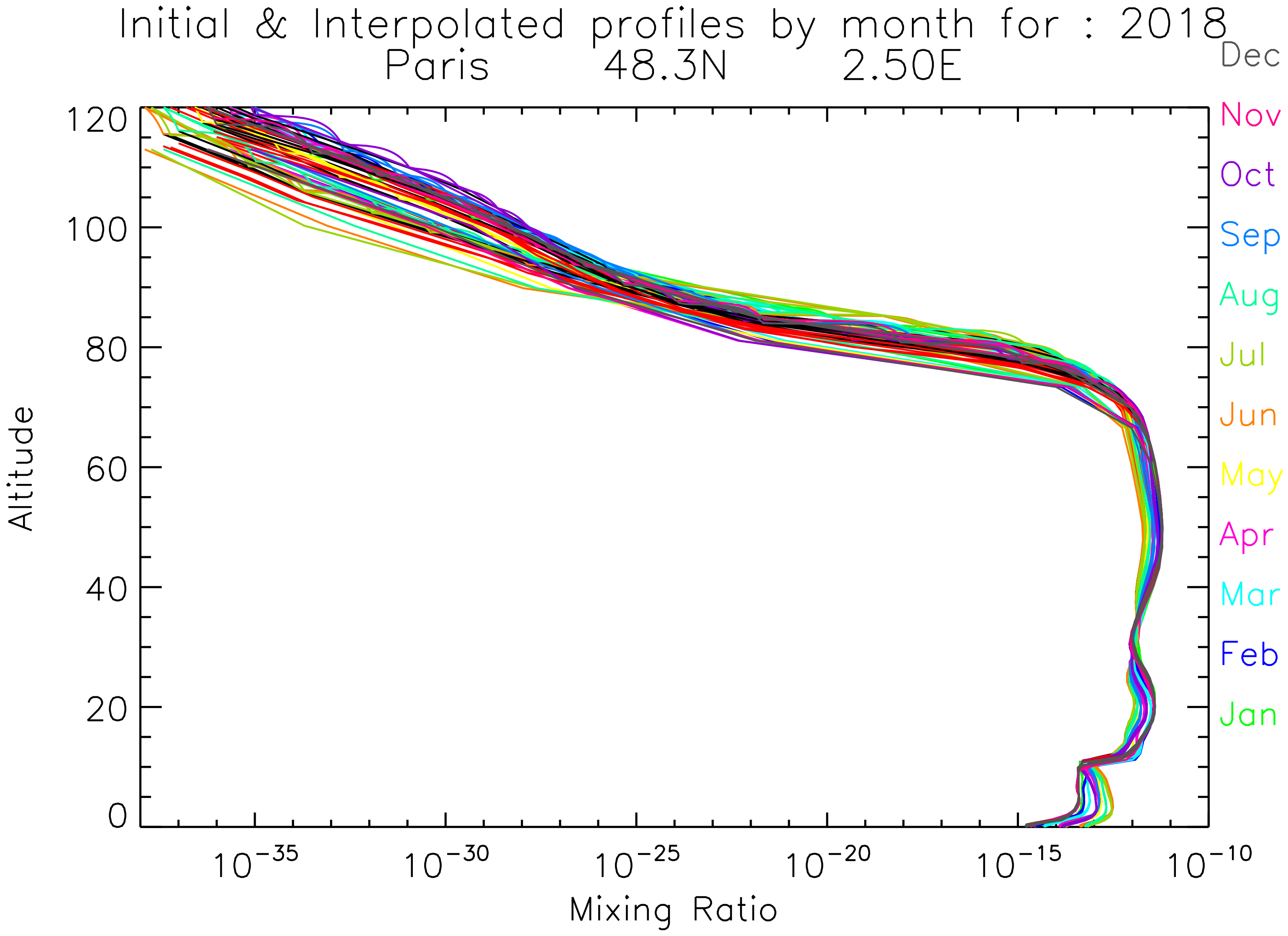



Initial & Interpolated profiles by month for : 2015
Paris 48.3N 2.50E

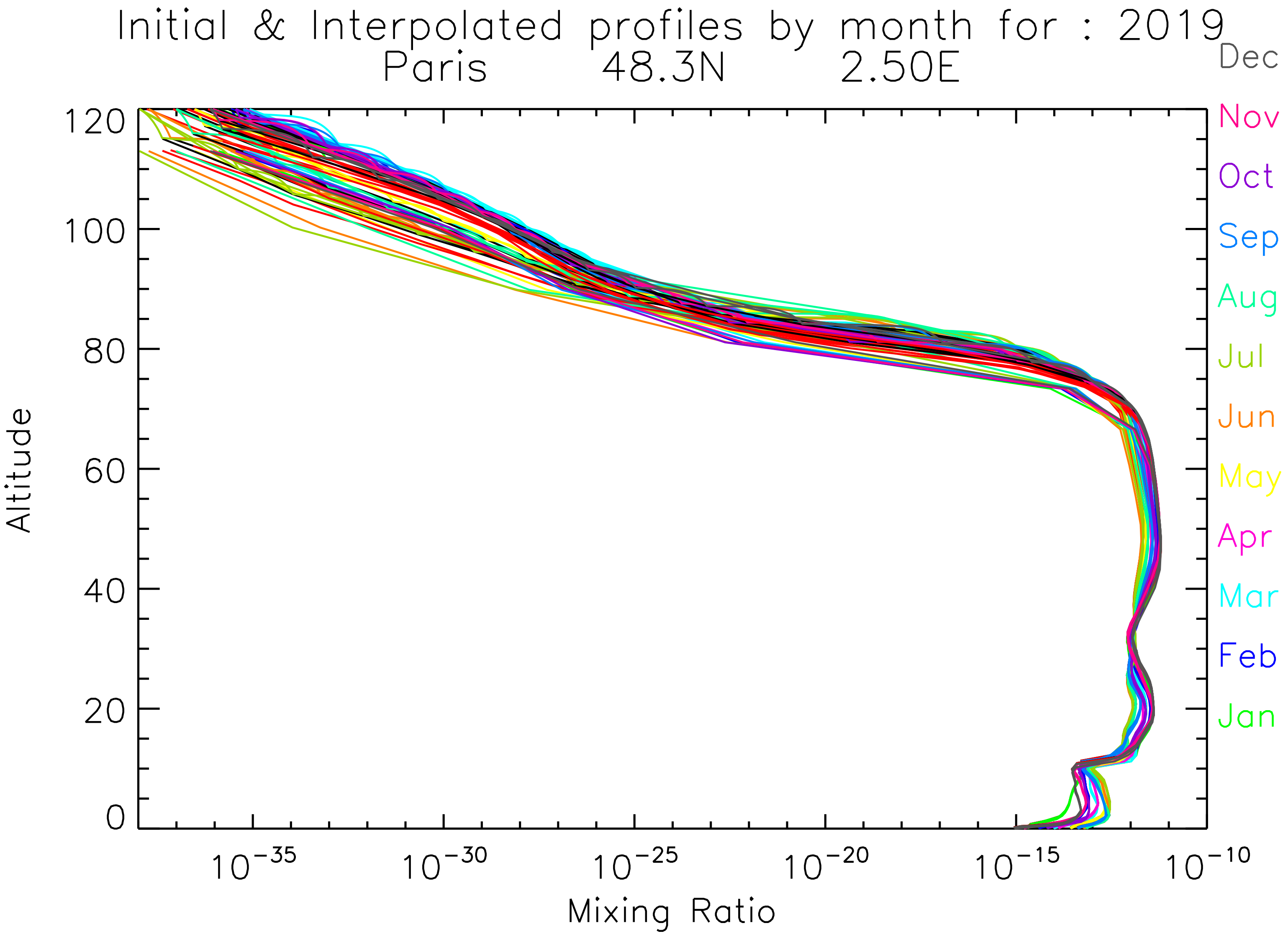

Initial & Interpolated profiles by month for : 2016
Paris 48.3N 2.50E
Altitude
0
20
40
60
80
100
120
Mixing Ratio
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan

Initial & Interpolated profiles by month for : 2017
Paris 48.3N 2.50E



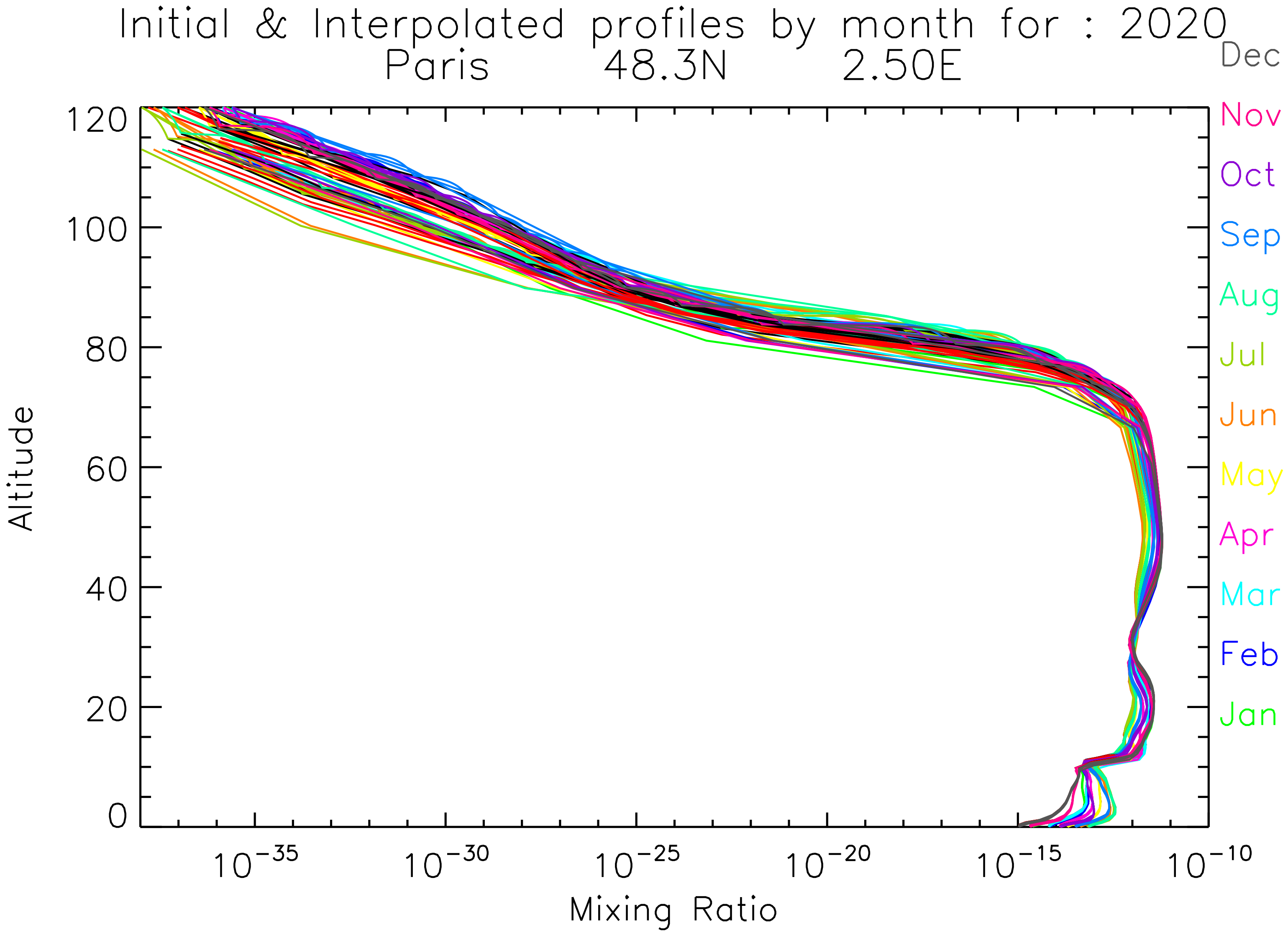


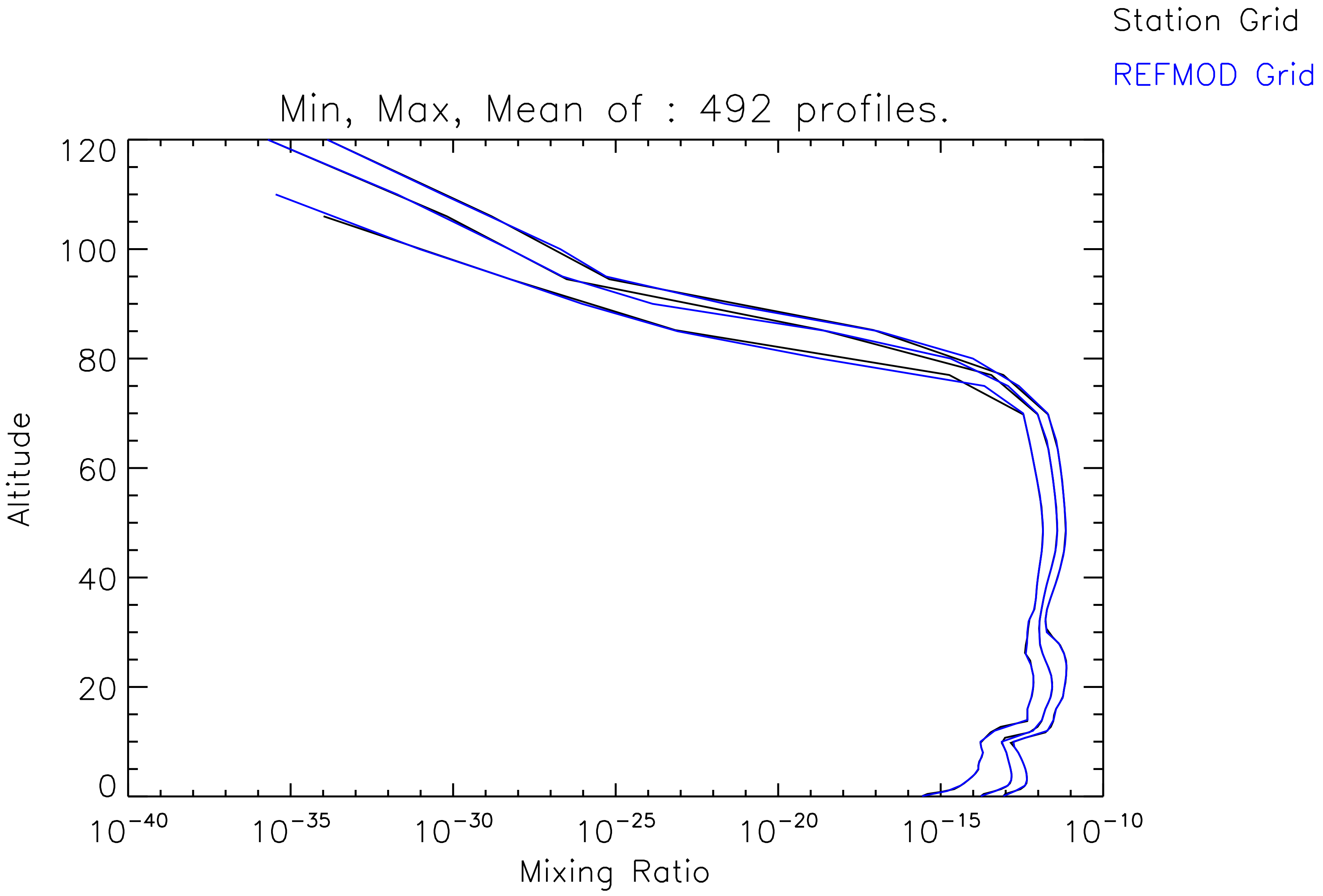
Initial & Interpolated profiles by month for : 2018
Paris 48.3N 2.50E

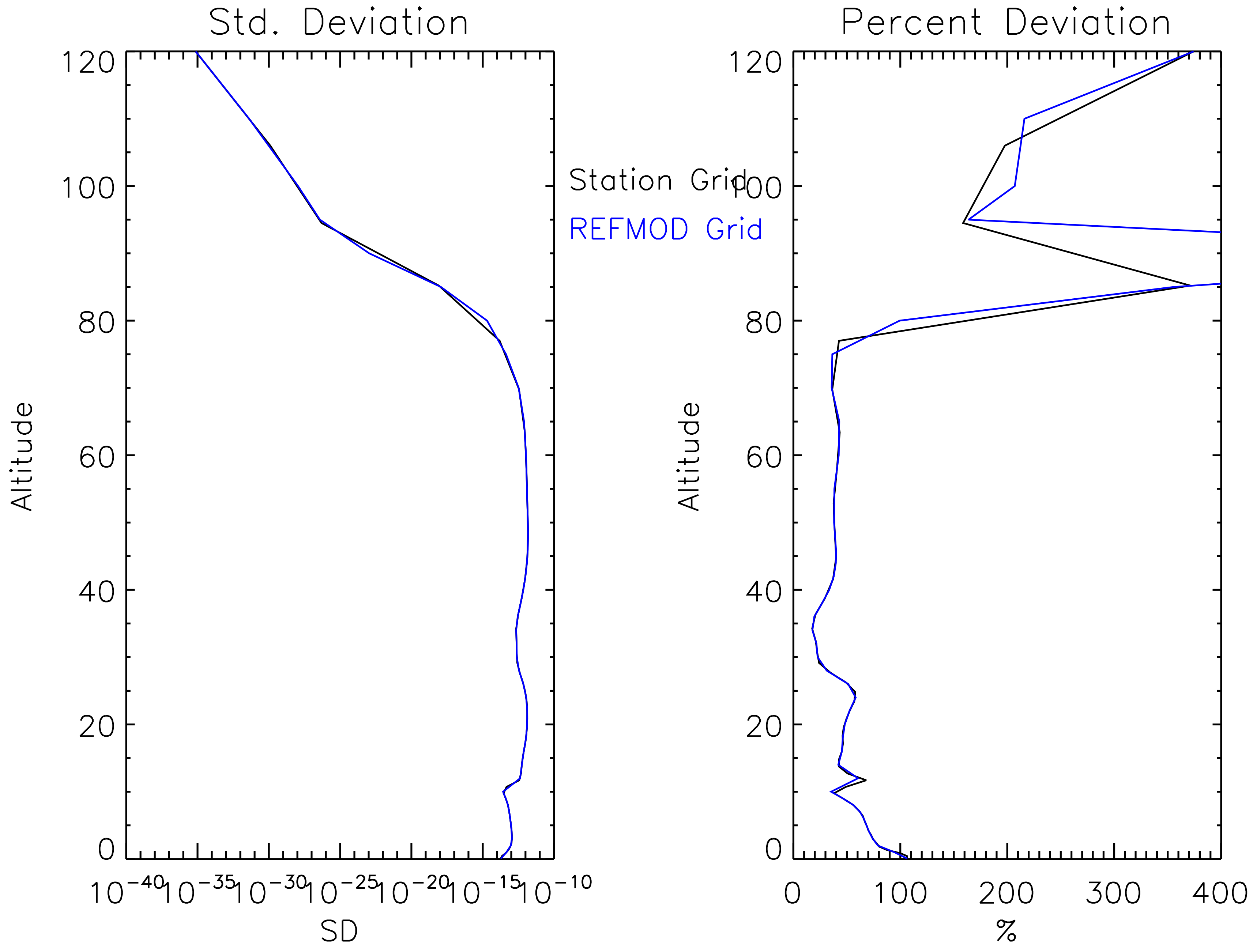


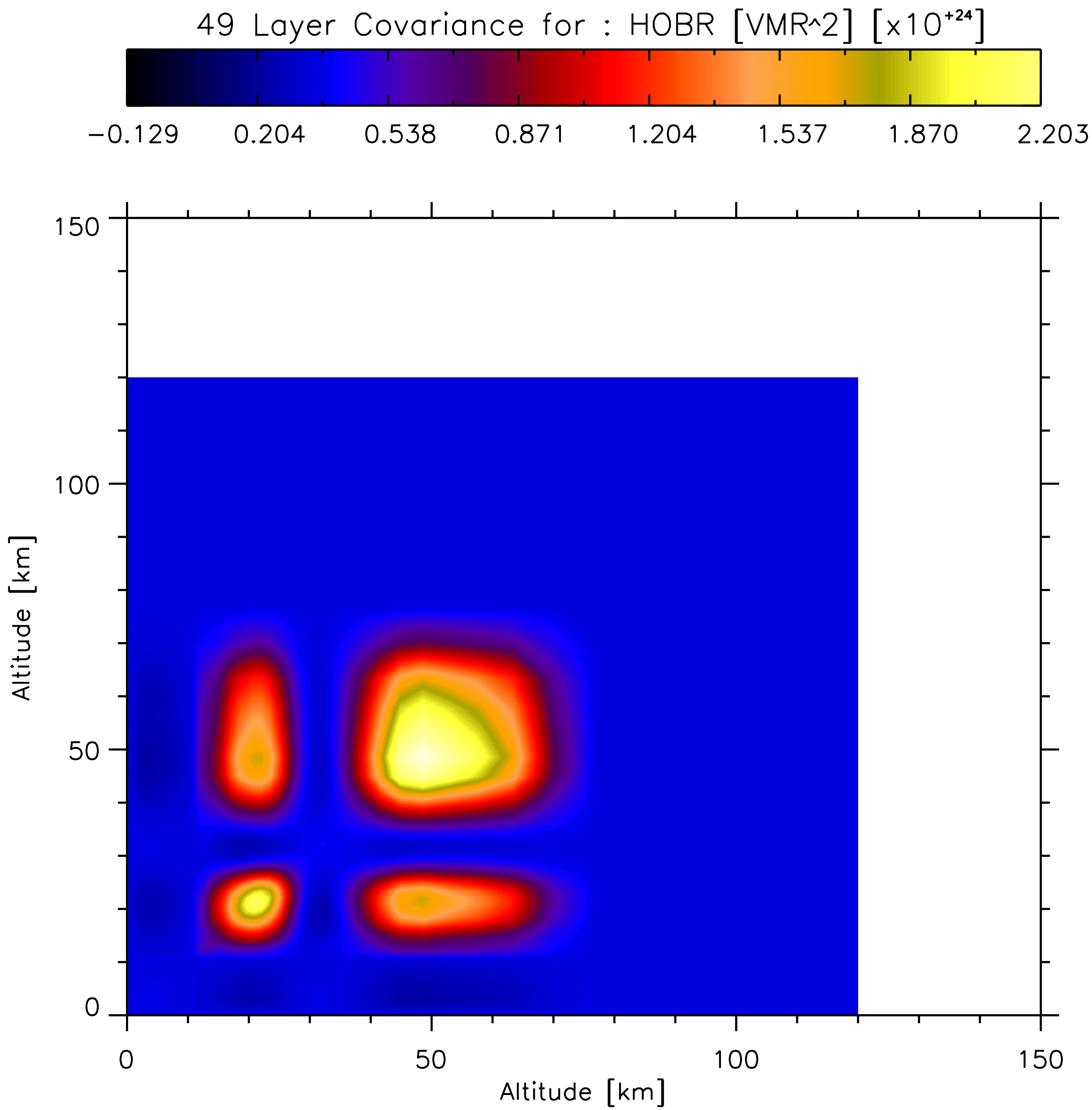
Initial & Interpolated profiles by month for : 2019

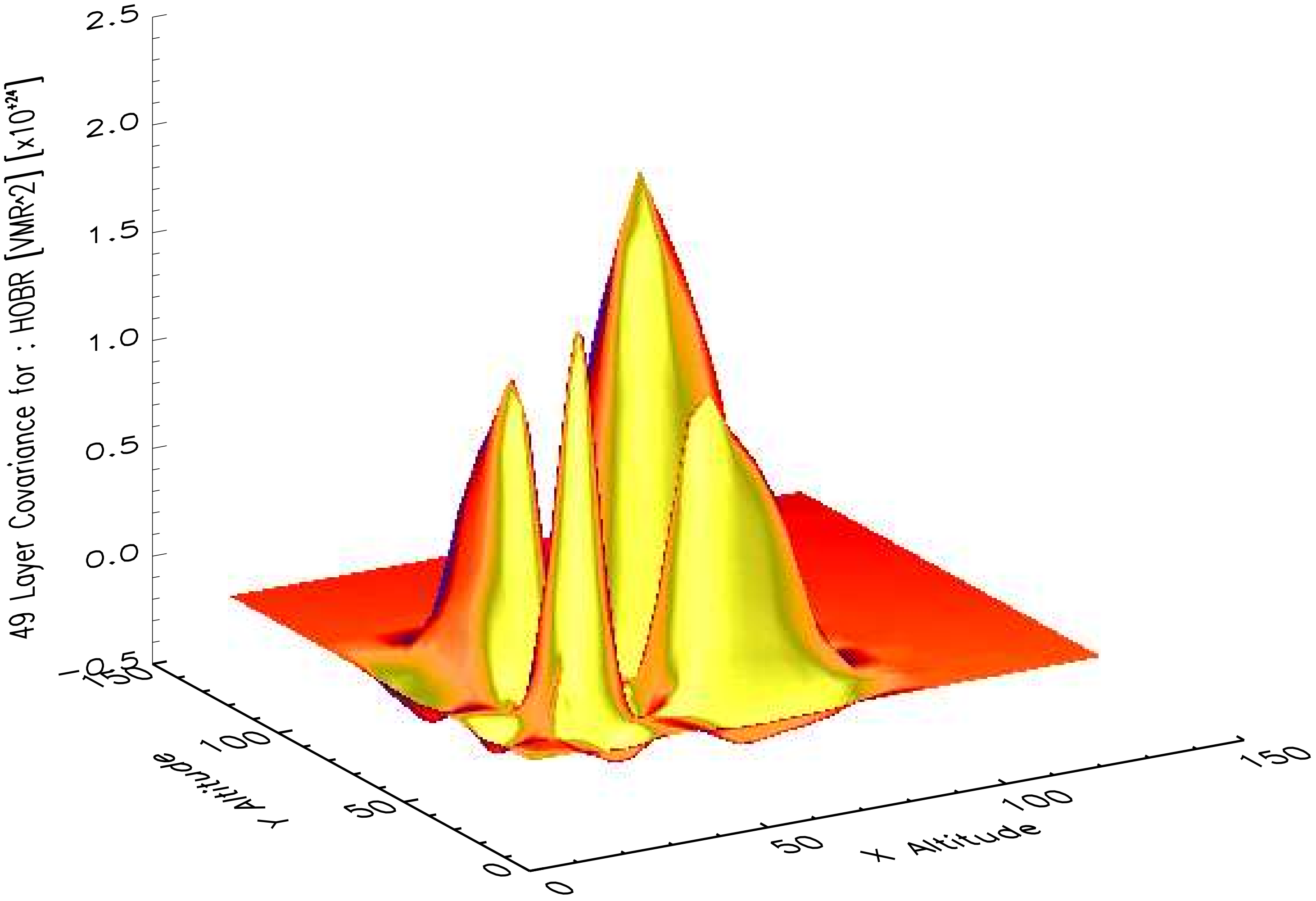
Paris 48.3N 2.50E

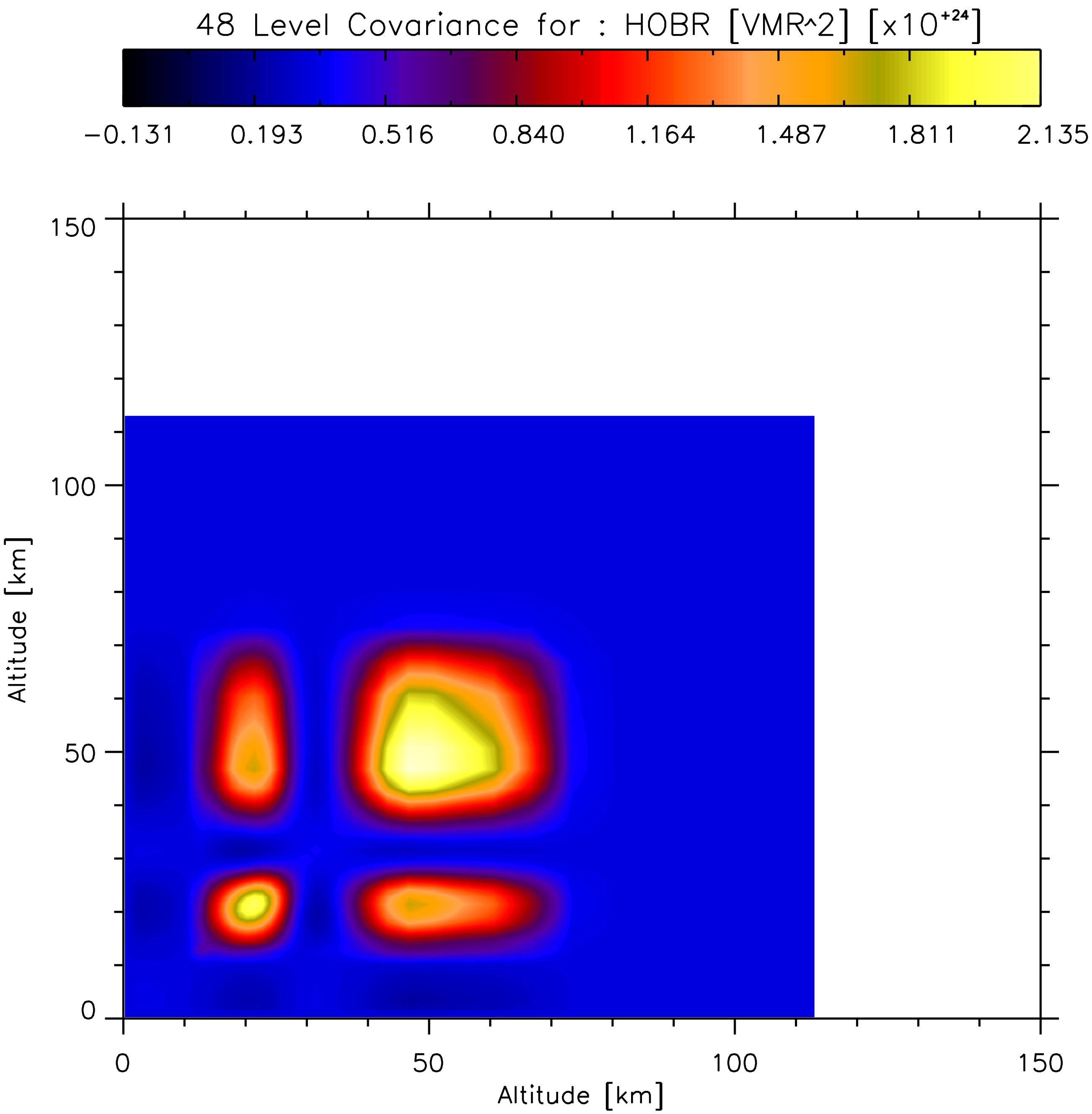

Initial & Interpolated profiles by month for : 2020
Paris 48.3N 2.50E
Dec
Nov
Oct
Sep
Aug
Jul
Jun
May
Apr
Mar
Feb
Jan
Altitude
0
20
40
60
80
100
120
Mixing Ratio
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}

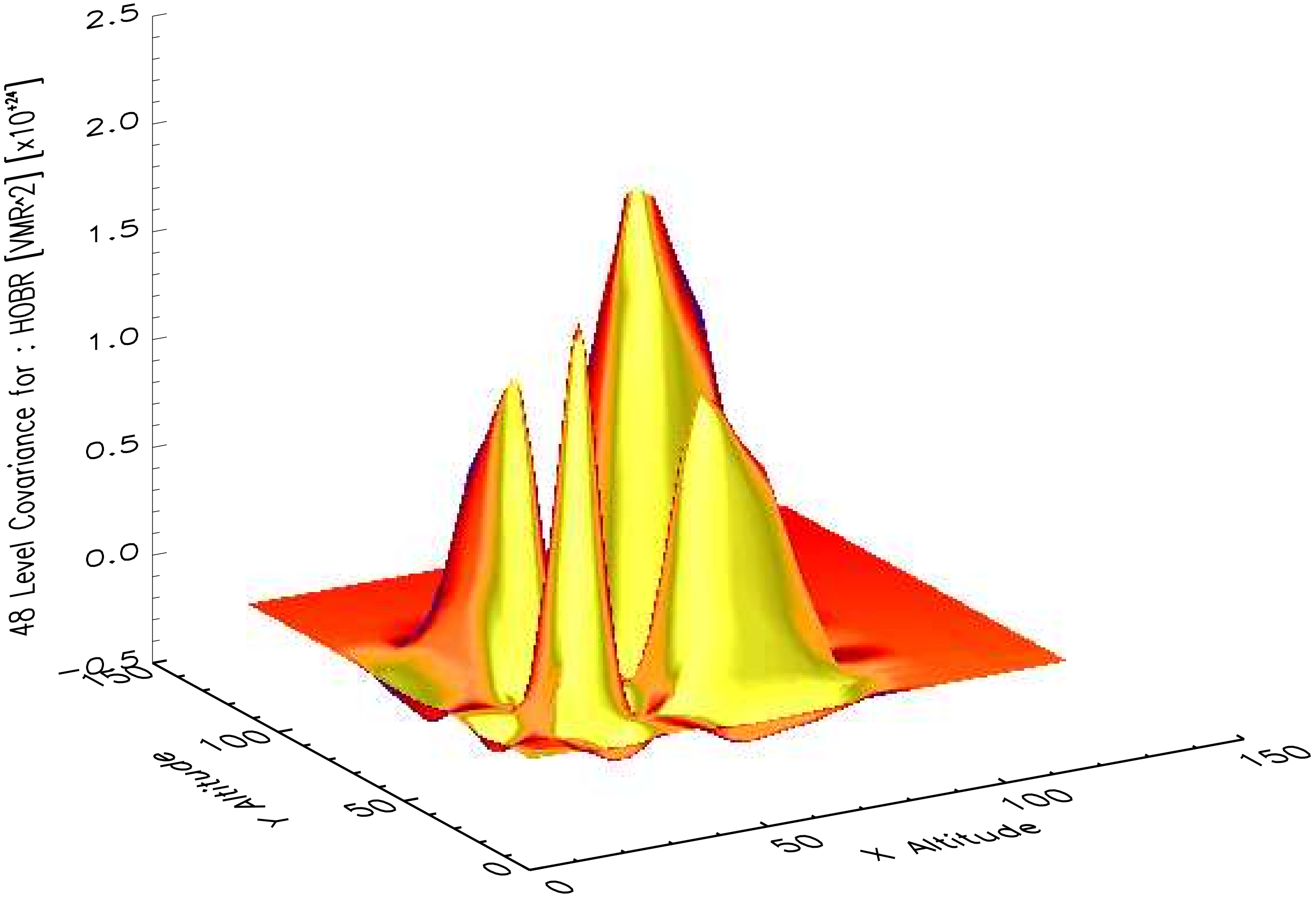

Station Grid
REFMOD Grid
Min, Max, Mean of : 492 profiles.
120
100
80
60
40
20
0
Altitude
10^{-40}
10^{-35}
10^{-30}
10^{-25}
10^{-20}
10^{-15}
10^{-10}
Mixing Ratio


Std. Deviation
Percent Deviation
Altitude
120
100
80
60
40
20
0
10^{-40} 10^{-35} 10^{-30} 10^{-25} 10^{-20} 10^{-15} 10^{-10}
SD
Station Grid
REFMOD Grid
0
100
200
300
400
%


49 Layer Covariance for : HOBR [VMR^2] [x10^{+24}]
−0.129
0.204
0.538
0.871
1.204
1.537
1.870
2.203
150
100
50
0
Altitude [km]
0
50
100
150
Altitude [km]


49 Layer Covariance for : HOBR [VMR^2] [x10^{+24}]
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
150
100
50
0
Y Altitude
0
50
100
150
X Altitude


48 Level Covariance for : HOBR [VMR^2] [x10^{+24}]
−0.131
0.193
0.516
0.840
1.164
1.487
1.811
2.135
150
100
50
0
0
50
100
150
Altitude [km]
Altitude [km]



48 Level Covariance for : HOBR [VMR^2] [x10^+24]
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
150
100
50
0
Y Altitude
0
50
100
150
X Altitude