

## MIPAS maps of mean distribution: 20-DEC-2011

Measurement Mode: Upper Atmosphere (42 - 172 km)

Processor version: MIPAS/5.06-N

### Note to users

The following filtering criteria were applied: non convergent profiles or retrievals with chi-2 exceeding a predefined limit are removed from the maps.

The filtering criteria are explained in the Readme file for V5, available [here](#).

Statistics on filtered profiles for each target parameter are provided in the table below.

The retrieved geo-physical products are interpolated at different Teta levels.

The data is then interpolated to a fixed Lat/Lon grid using a weighted distance average.

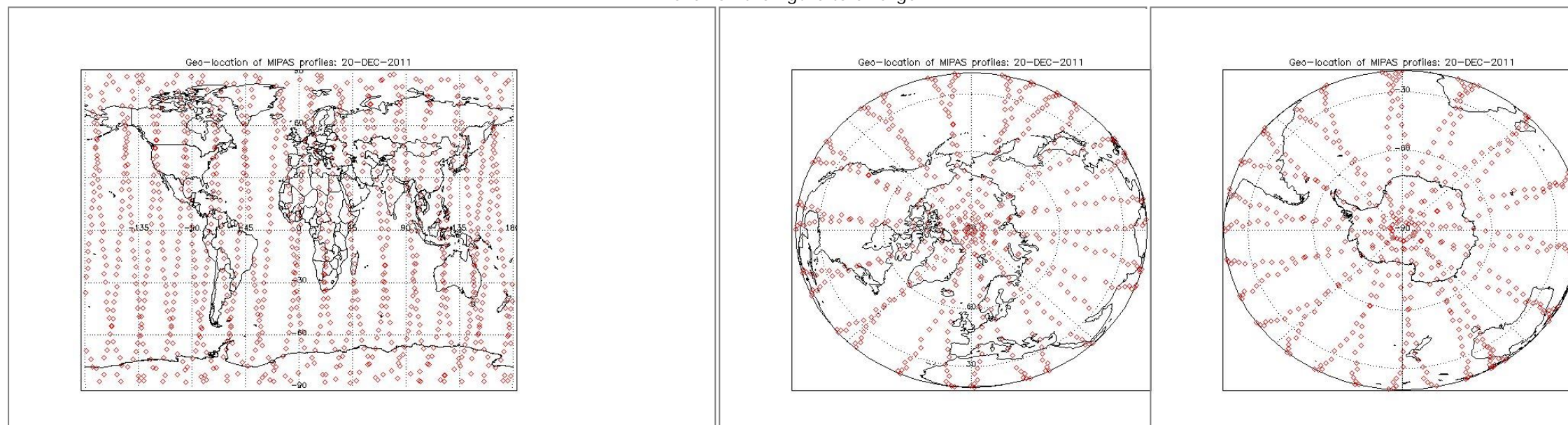
Note that Upper and Middle Atmosphere measurements are only retrieved up to 70km.

Total Number of profiles: 1059

Retrieved Parameter	Profiles not reaching convergence (%)	Profiles exceeding chi2 threshold (%)
p-T	0.38	9.07
H2O	0.38	0.38
O3	0.47	0.09
HNO3	94.90	0.09
CH4	0.38	1.13
N2O	1.04	1.23
NO2	0.47	2.74

### Geo-location of MIPAS profiles

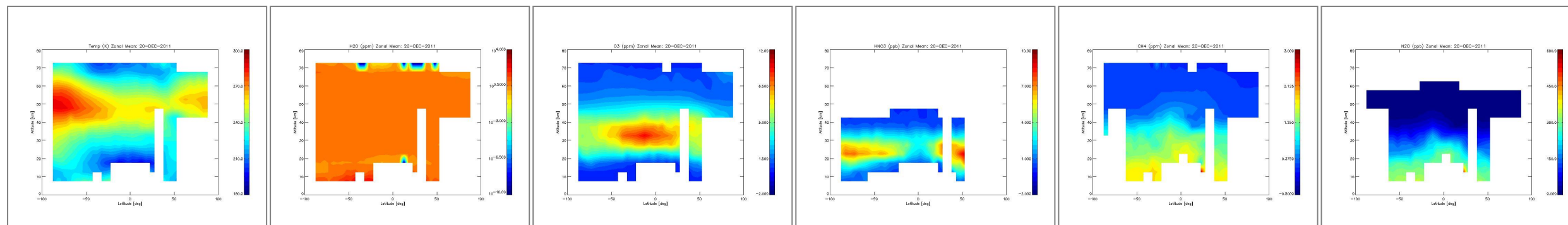
Click on the figure to enlarge



### Zonal Mean Maps

Click on the figure to enlarge

Temp (K)	H2O (ppm)	O3 (ppm)	HNO3 (ppb)	CH4 (ppm)	N2O (ppb)
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### Daily mean interpolated at different isentropic levels

Click on the figure to enlarge

	Temp (K)	H2O (ppm)	O3 (ppm)	HNO3 (ppb)	CH4 (ppm)	N2O (ppb)
2700 K (60km, 0.2hPa)						
1700 K (50km, 1.5hPa)						
850 K (32km, 10hPa)						
490 K (19km, 55hPa)						
410 K (16km, 100hPa)						

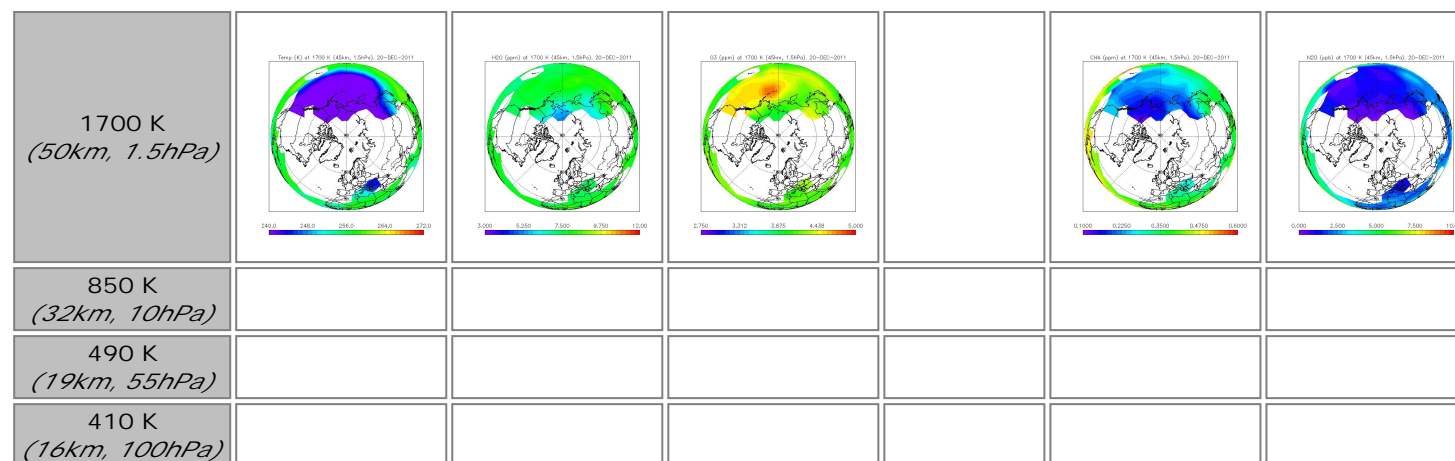
[Home](#)

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### Arctic distribution interpolated at different isentropic levels

Click on the figure to enlarge

	Temp (K)	H2O (ppm)	O3 (ppm)	HNO3 (ppb)	CH4 (ppm)	N2O (ppb)
2700 K (60km, 0.2hPa)						

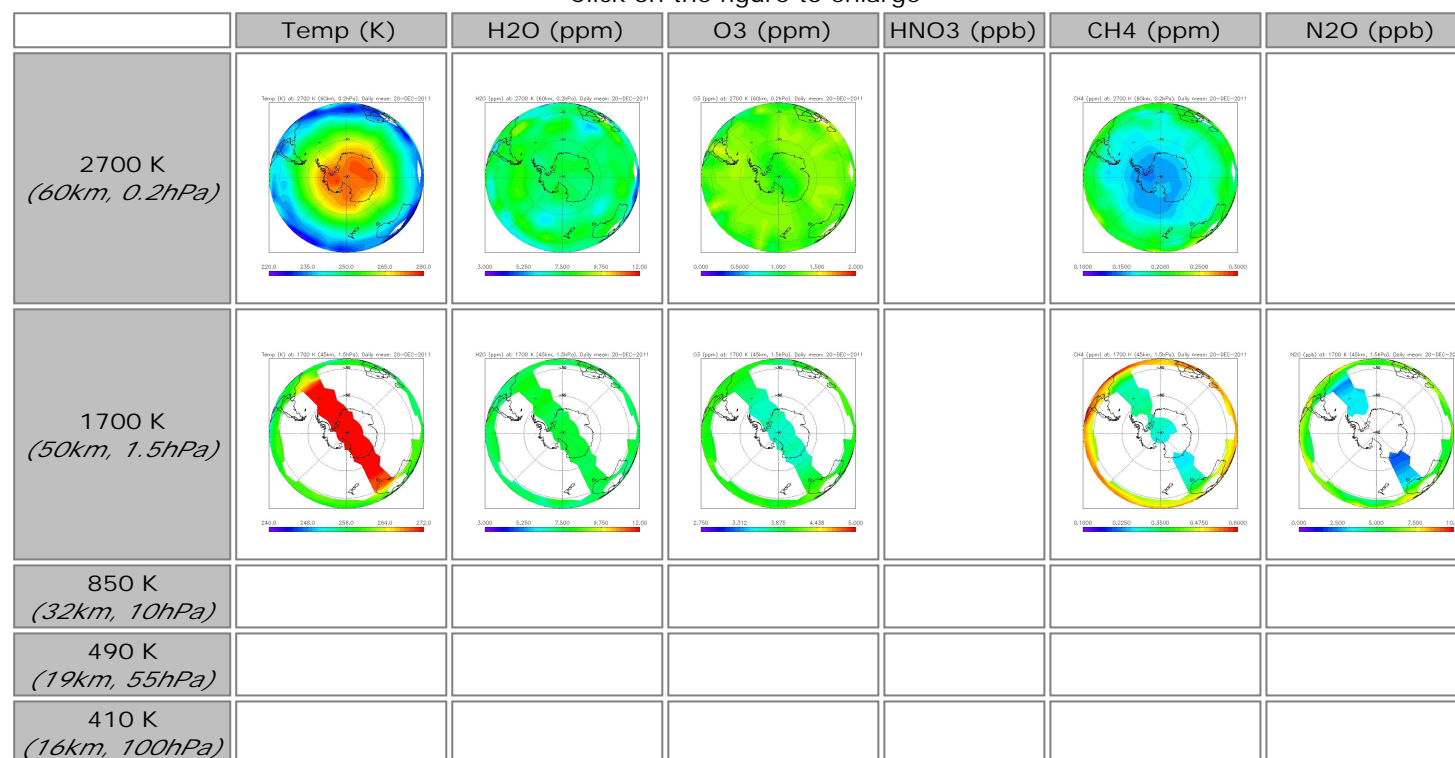


[Home](#)

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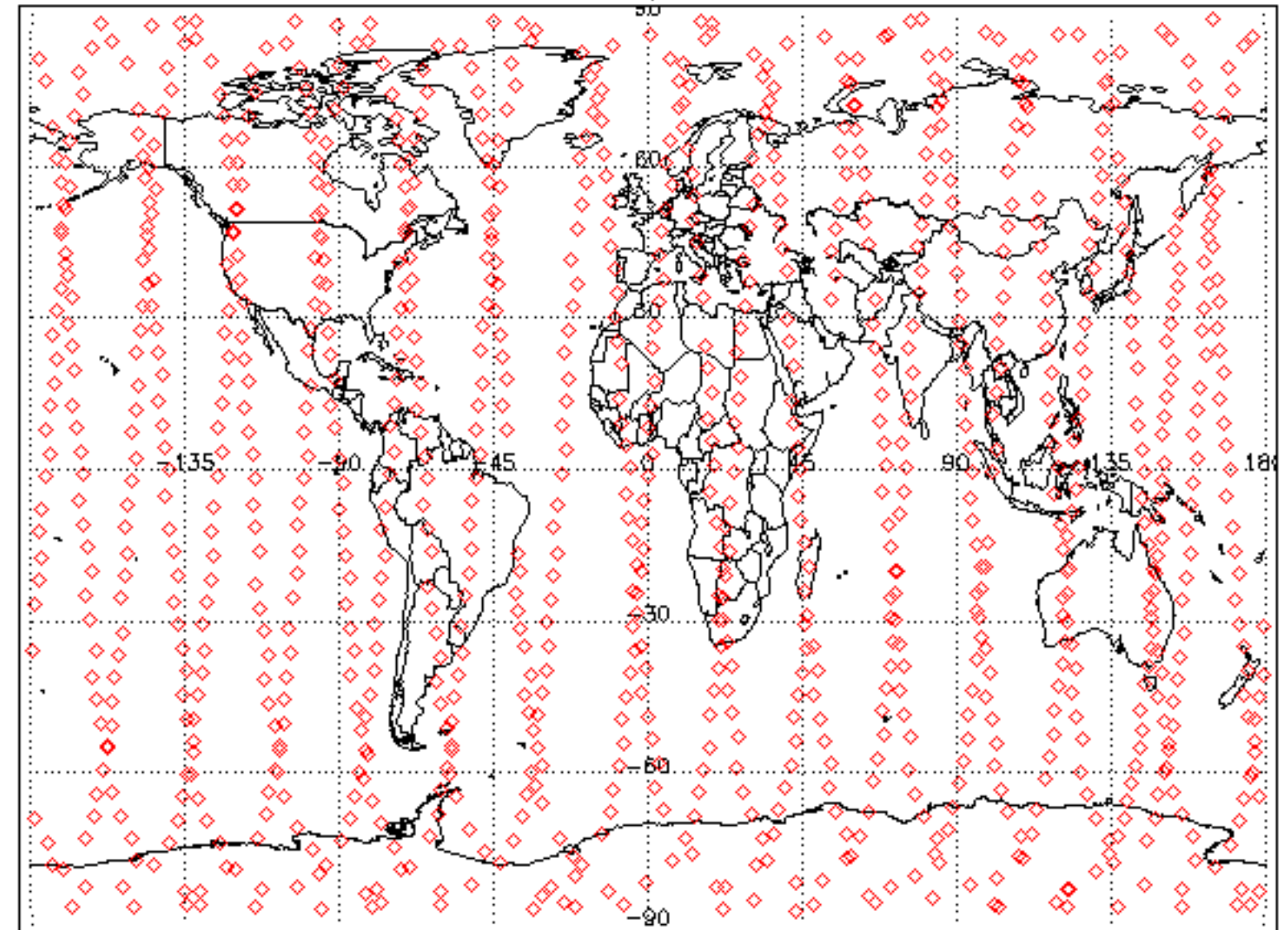
### Antarctic distribution interpolated at different isentropic levels

Click on the figure to enlarge

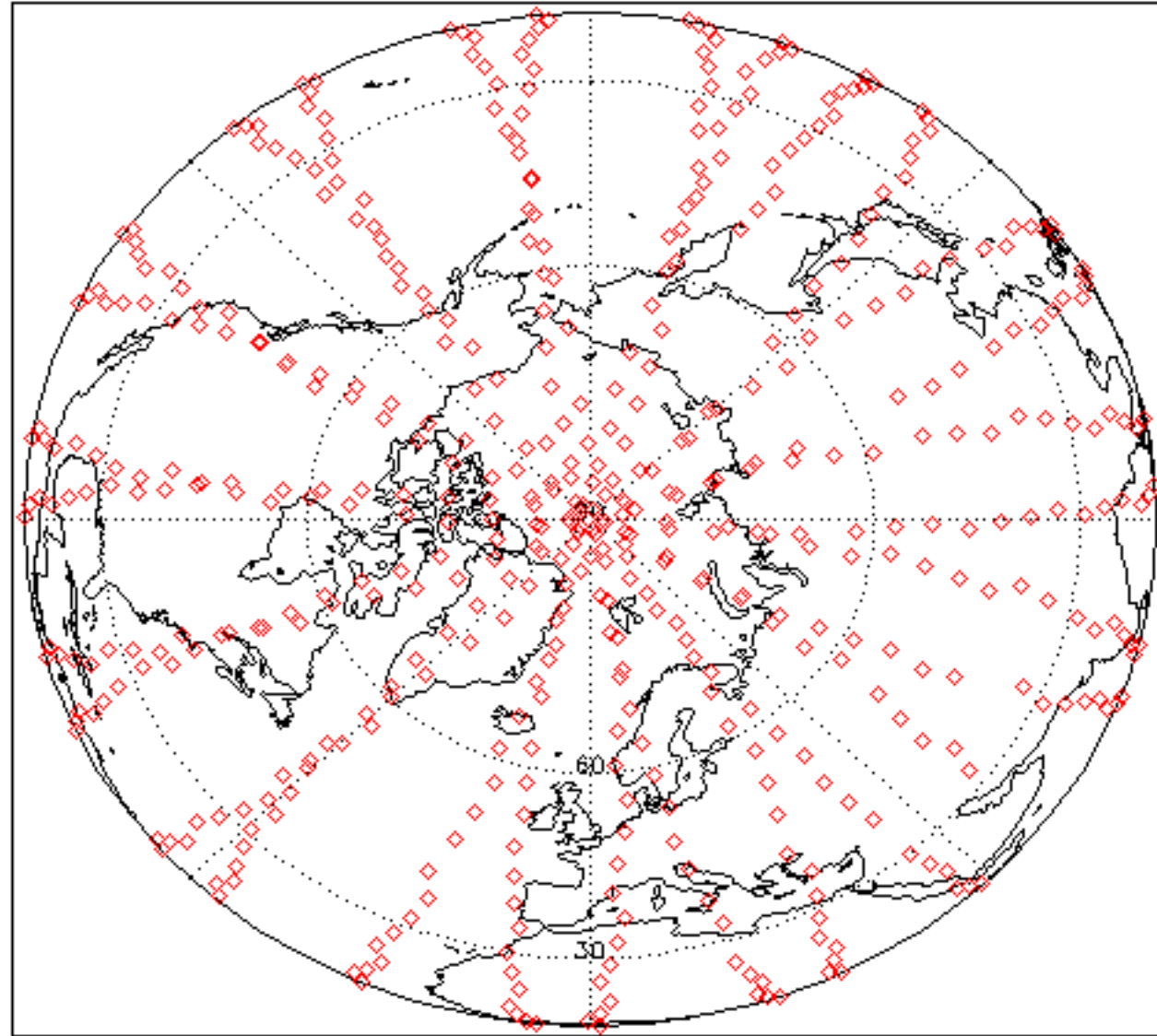




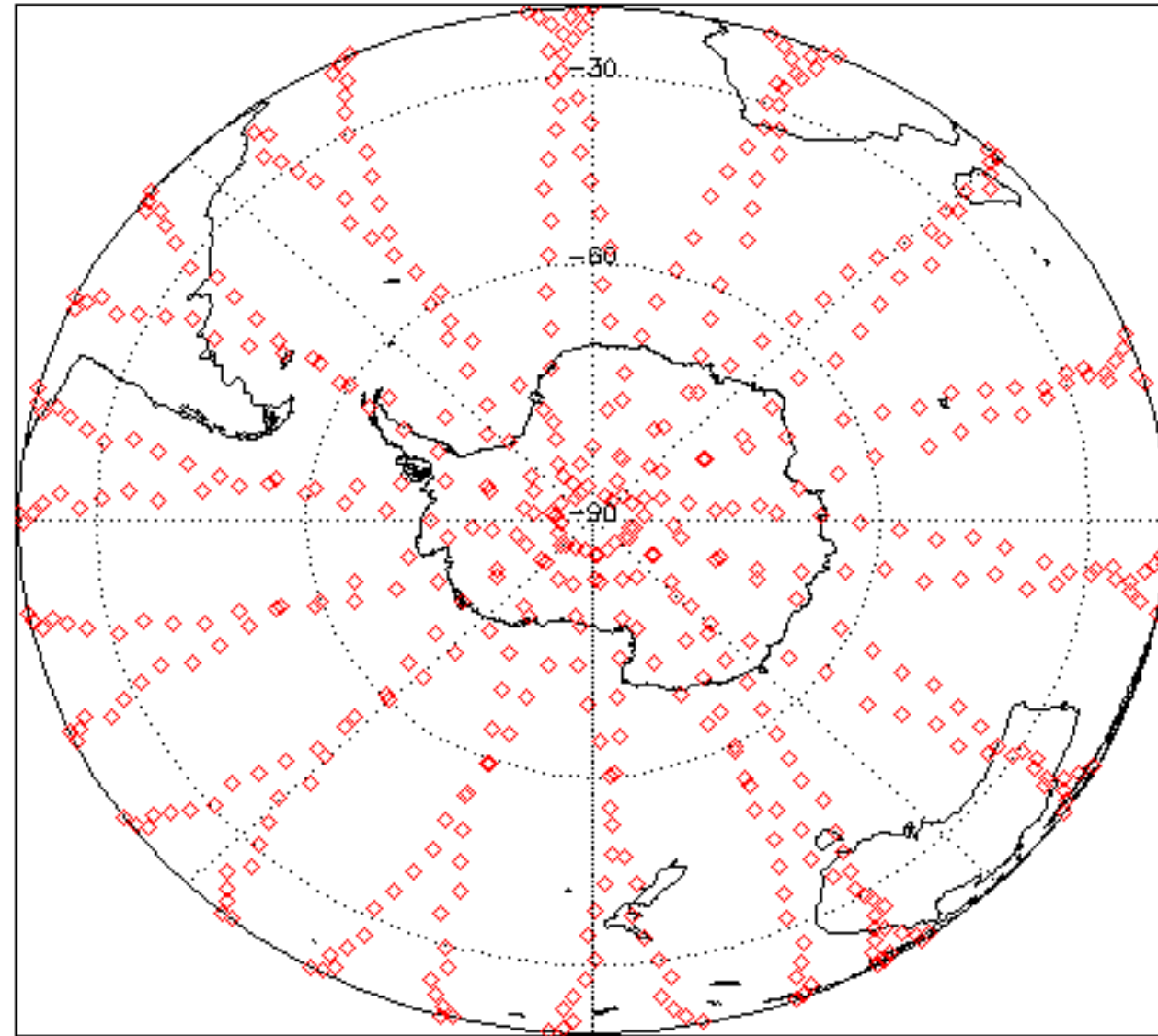
Geo-location of MIPAS profiles: 20-DEC-2011

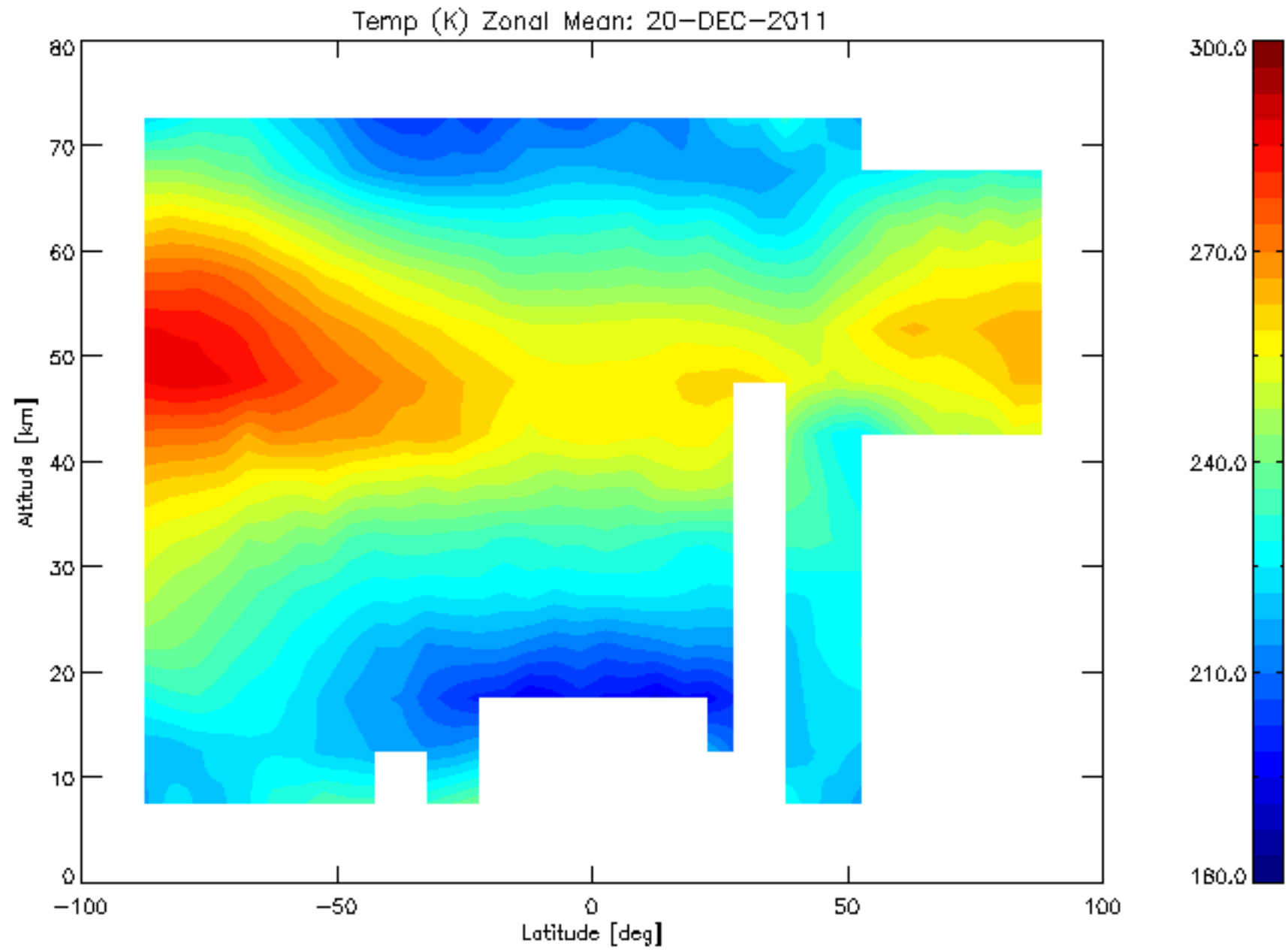


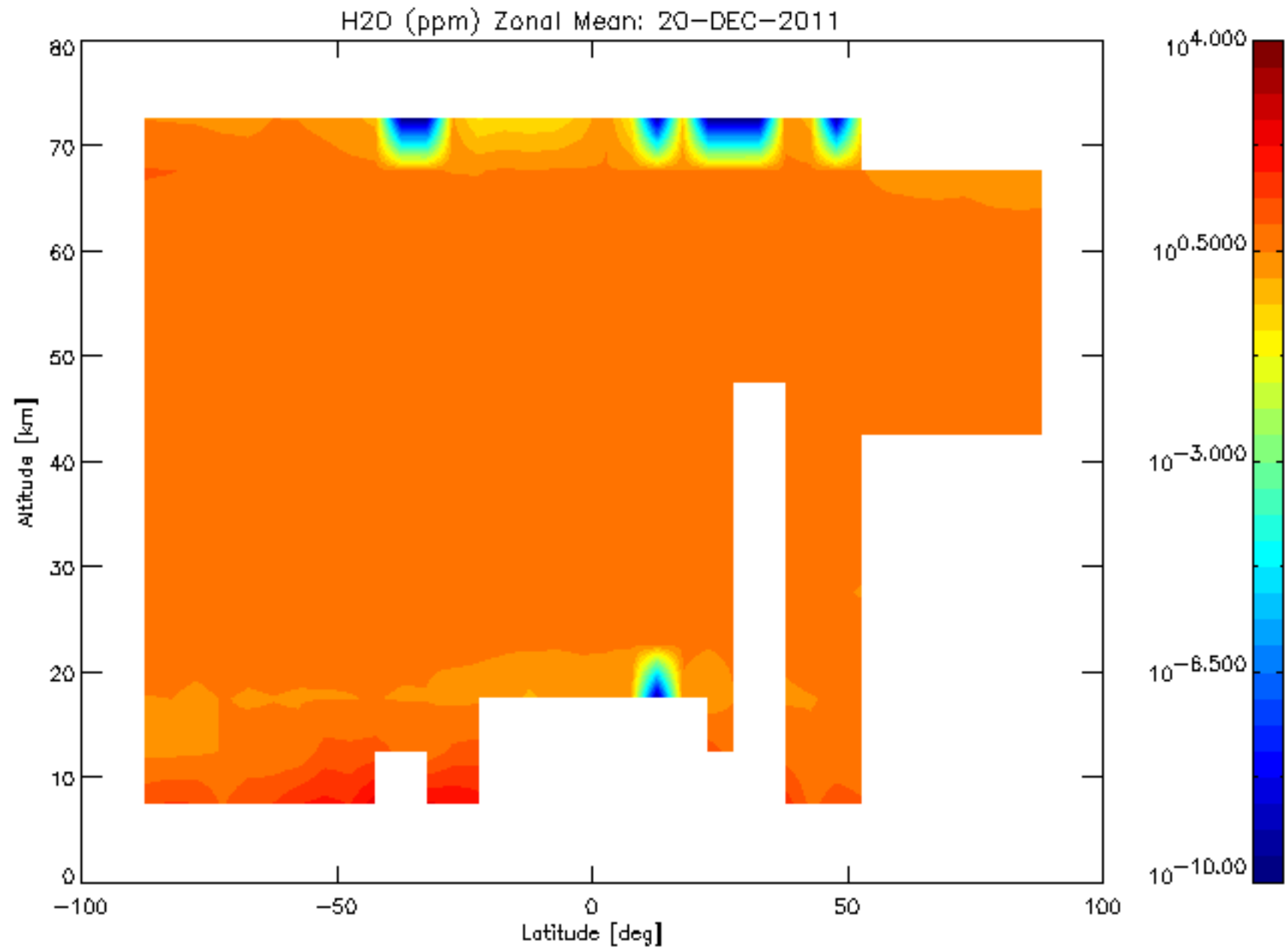
Geo-location of MIPAS profiles: 20-DEC-2011



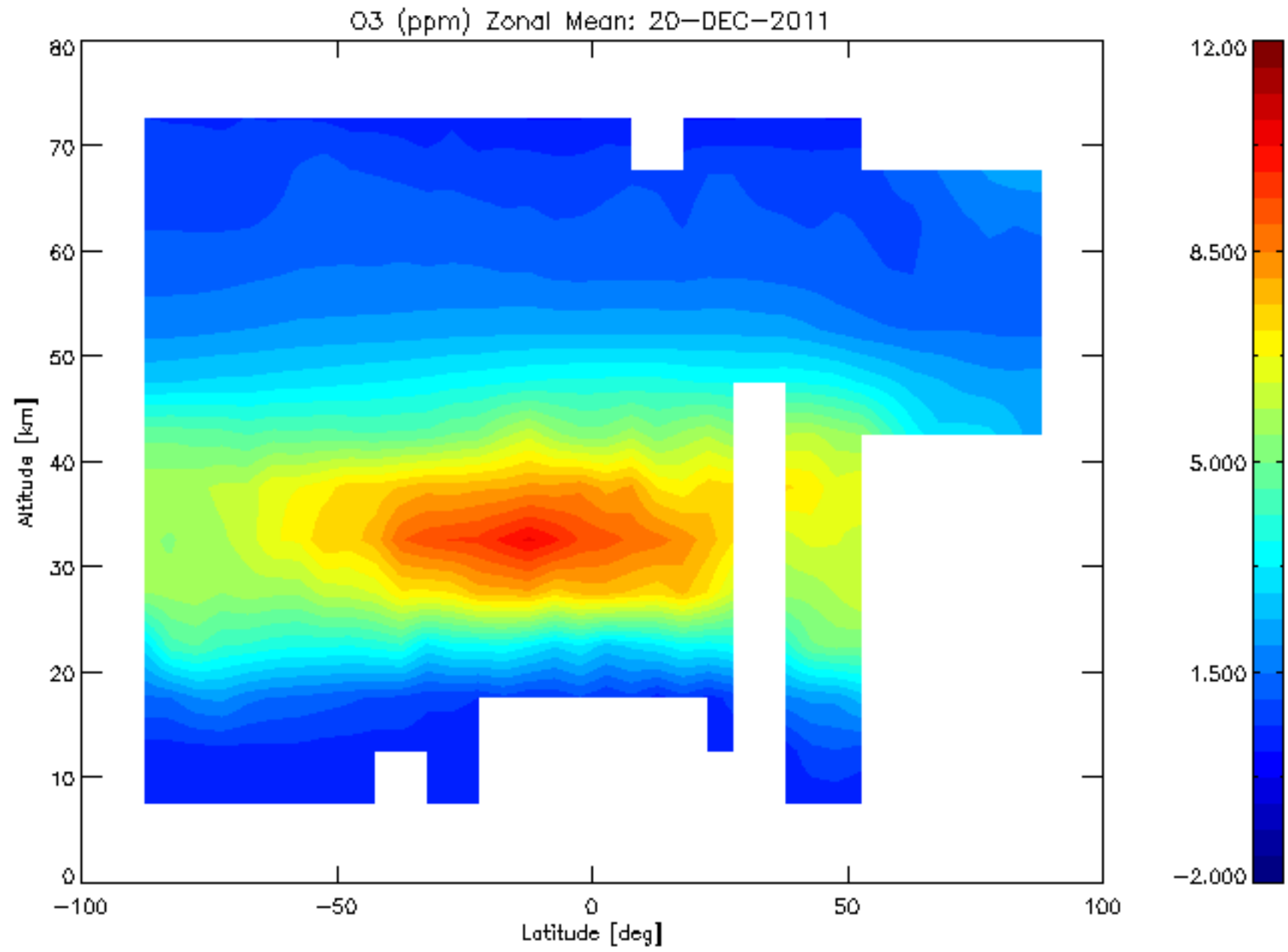
Geo-location of MIPAS profiles: 20-DEC-2011

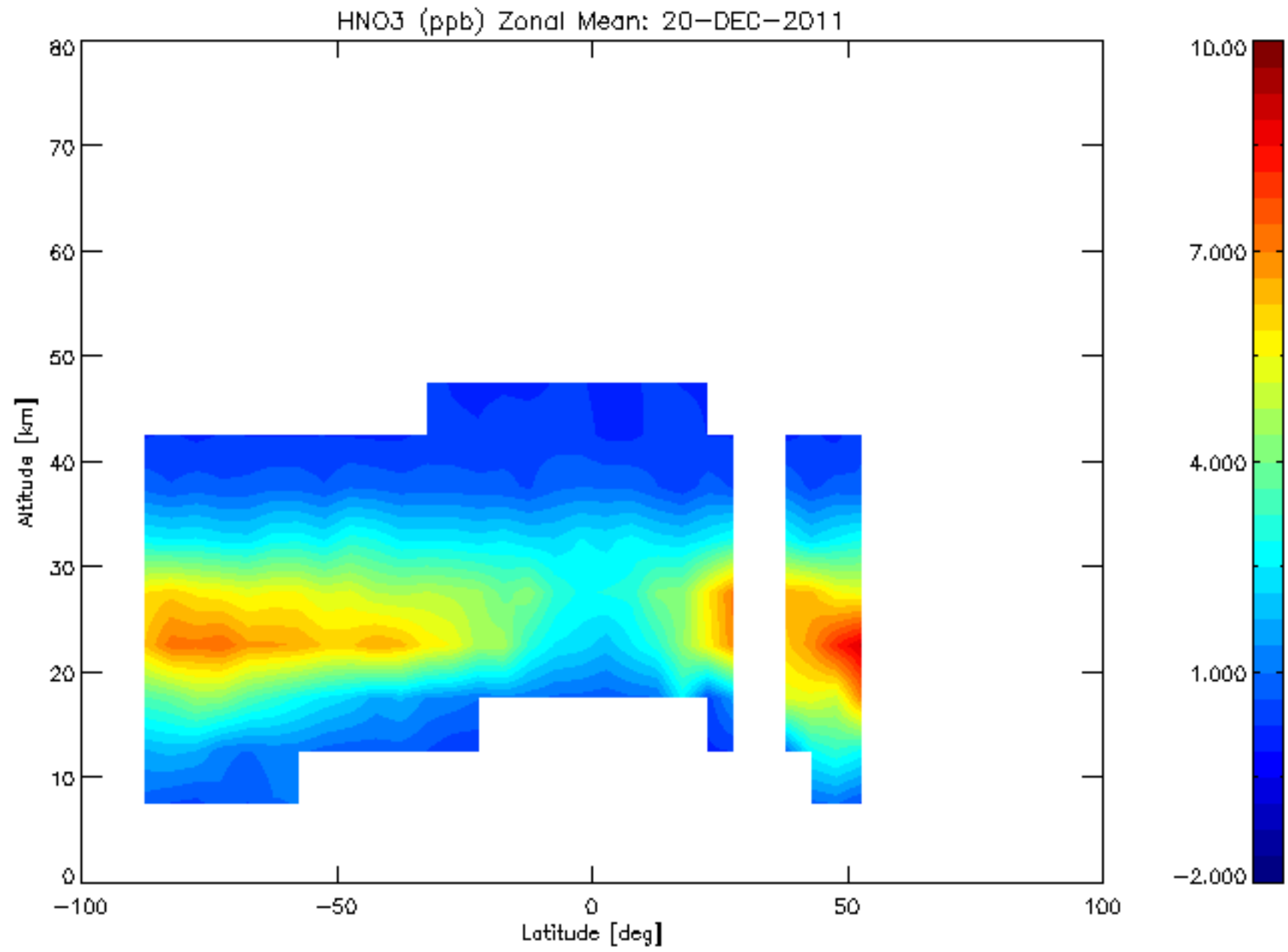


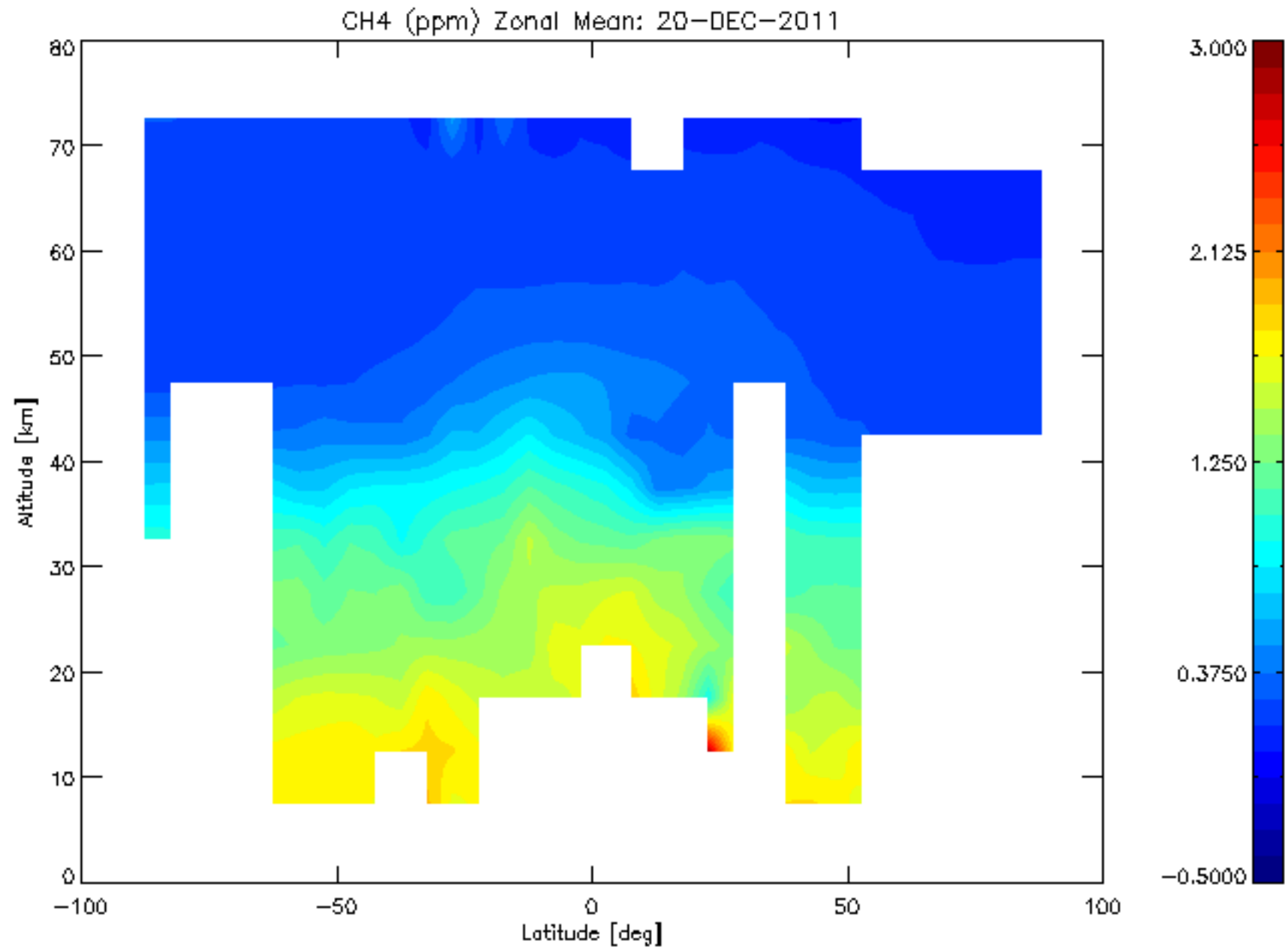


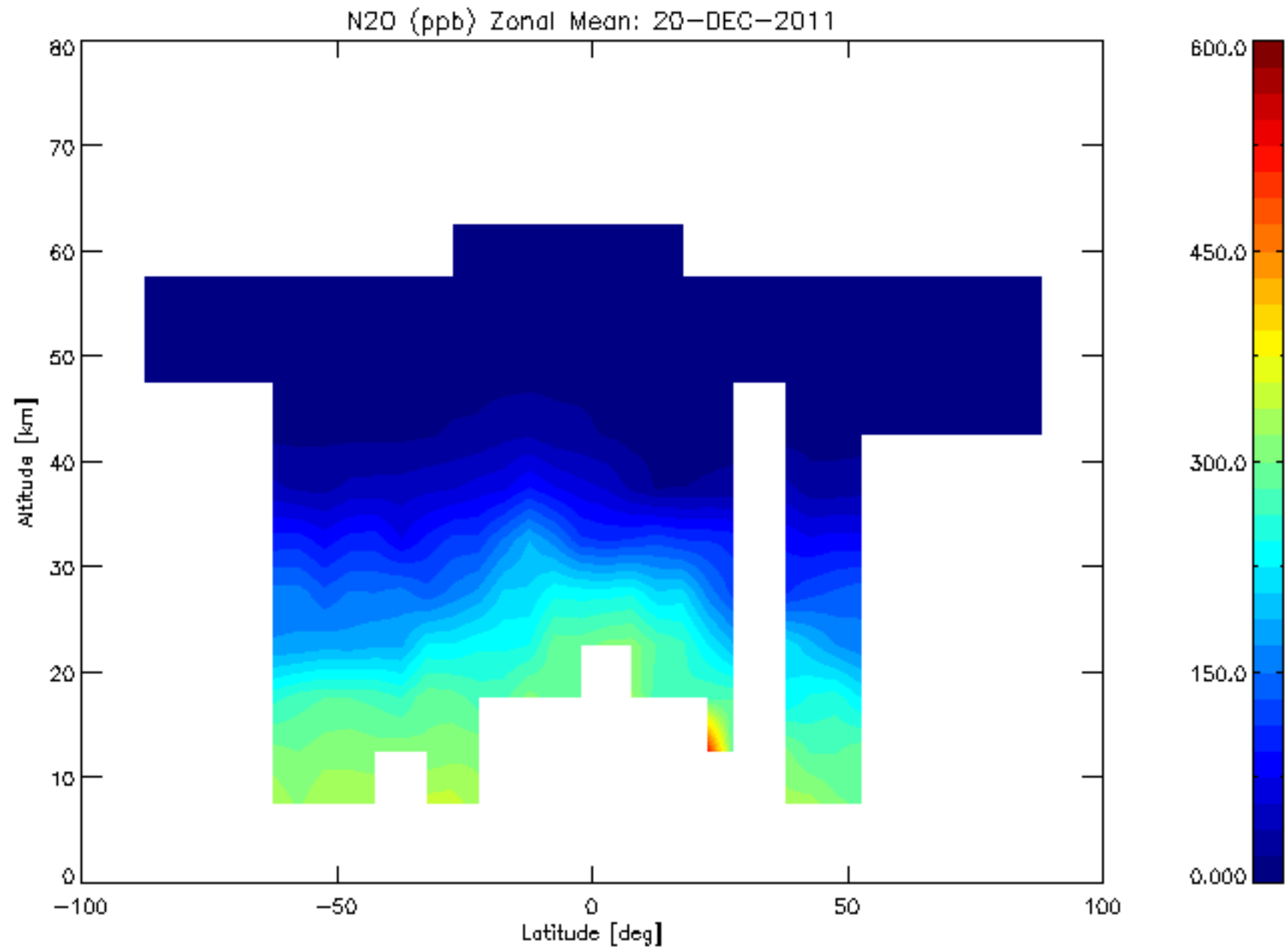




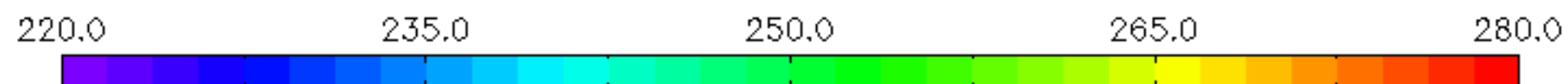
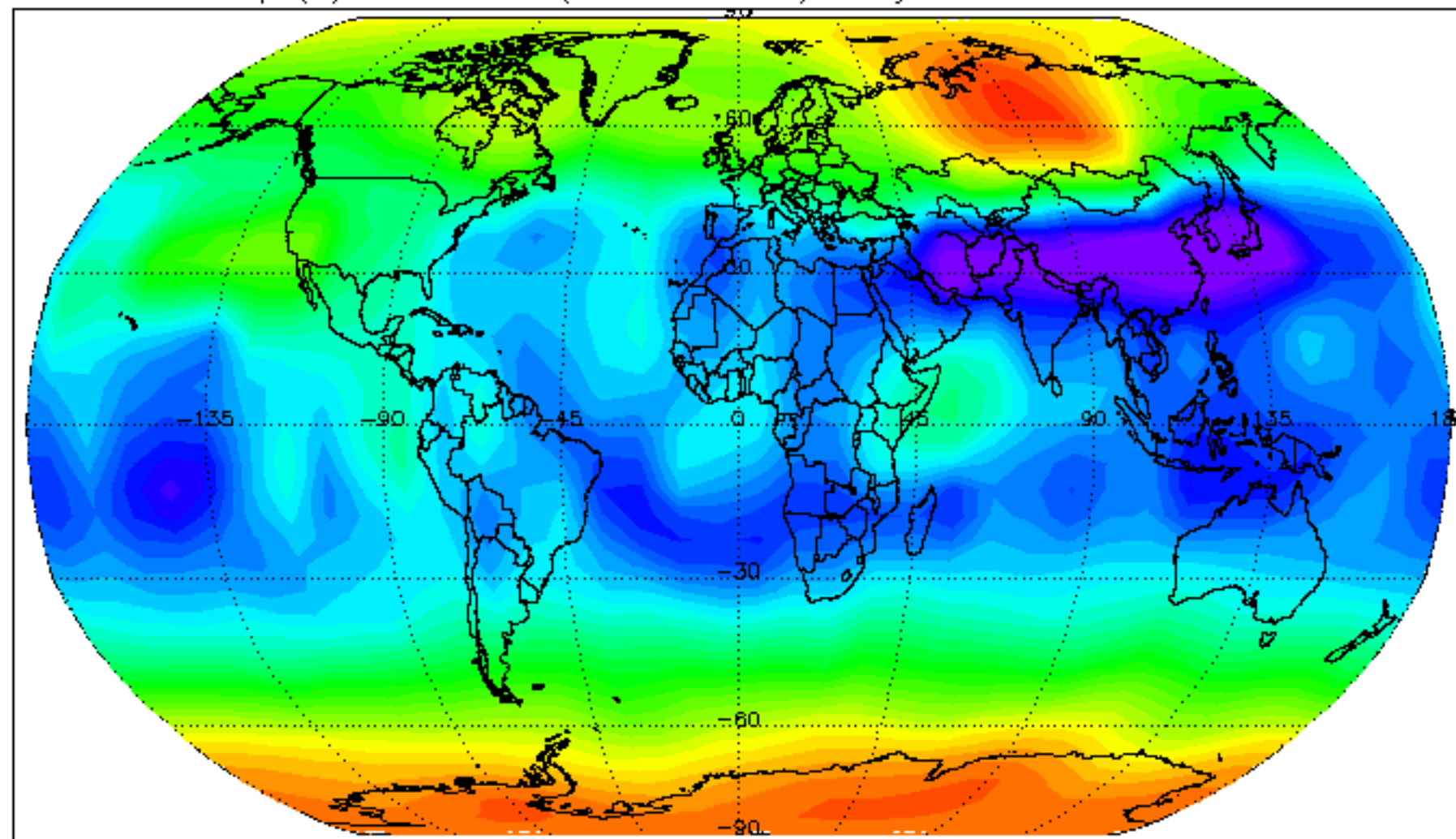






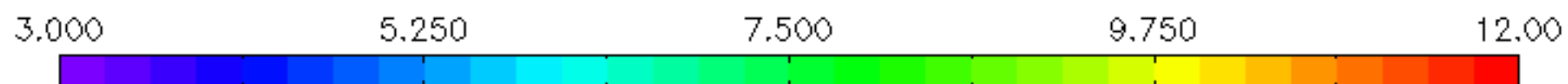
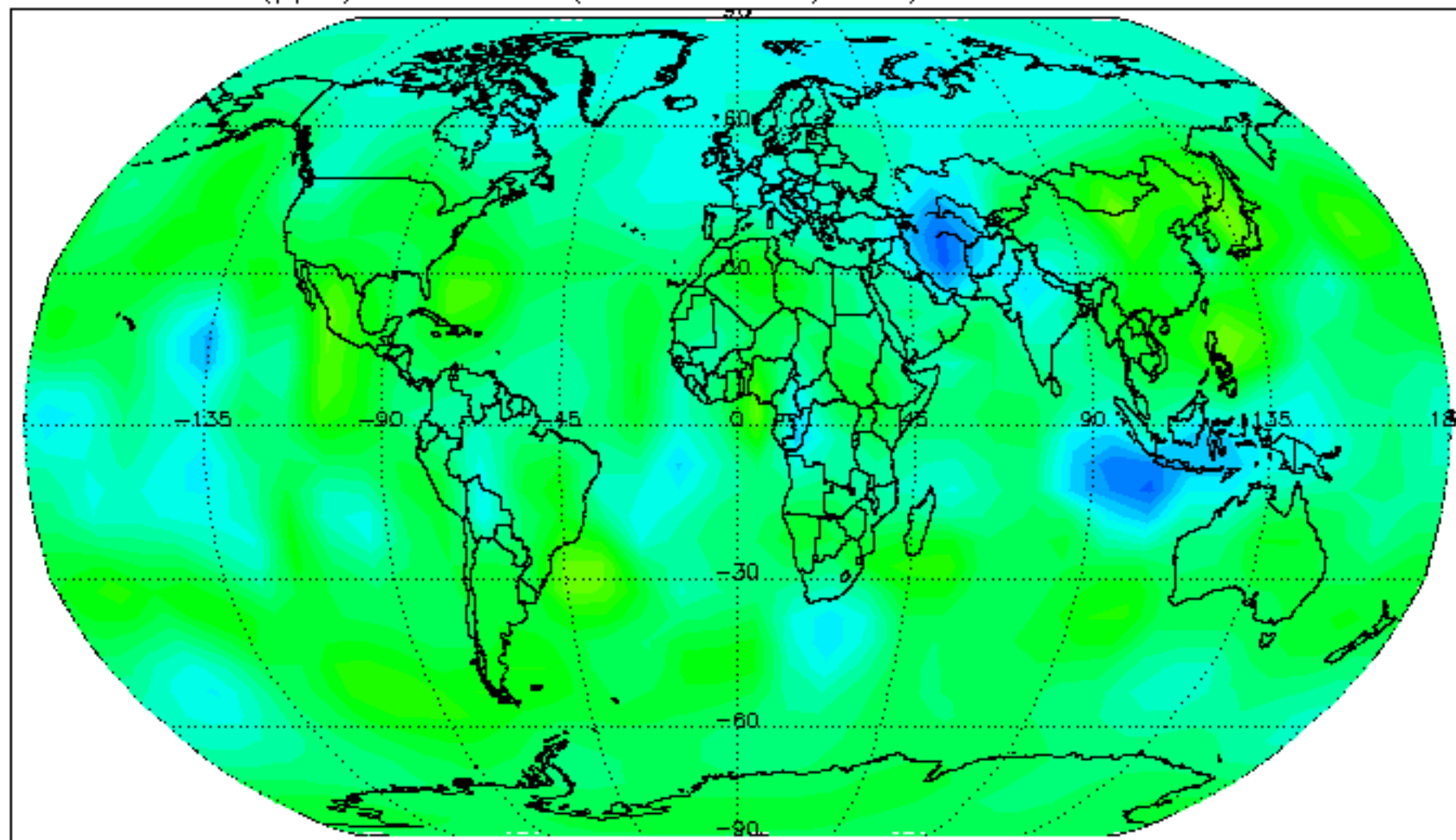


Temp (K) at: 2700 K (60km, 0.2hPa). Daily mean: 20-DEC-2011

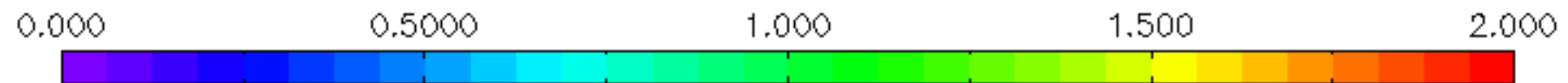
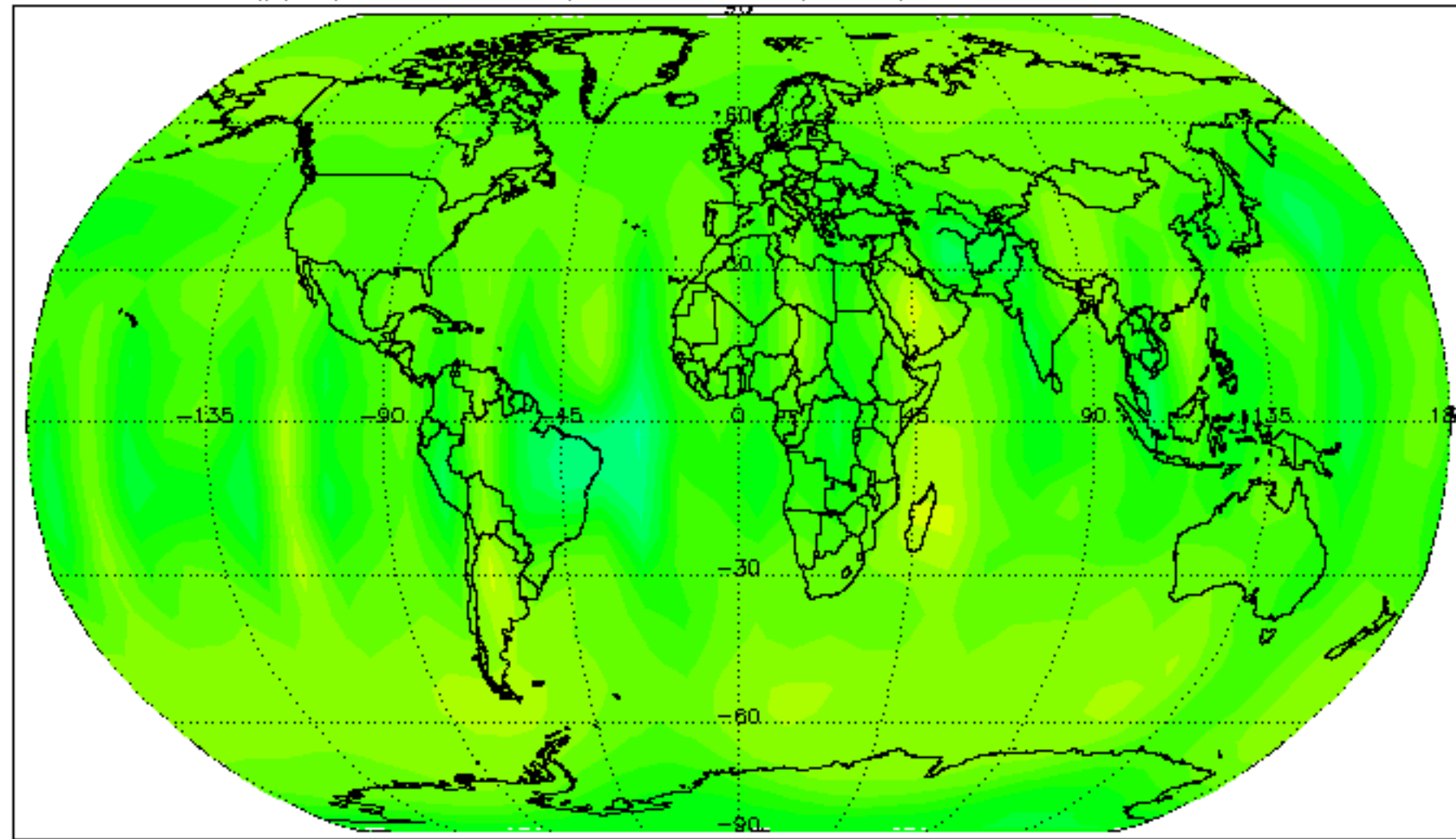




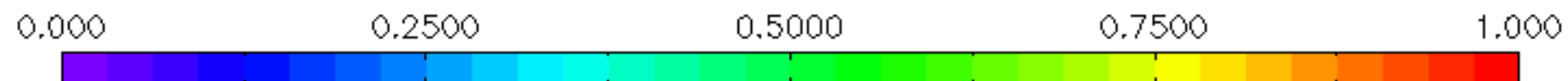
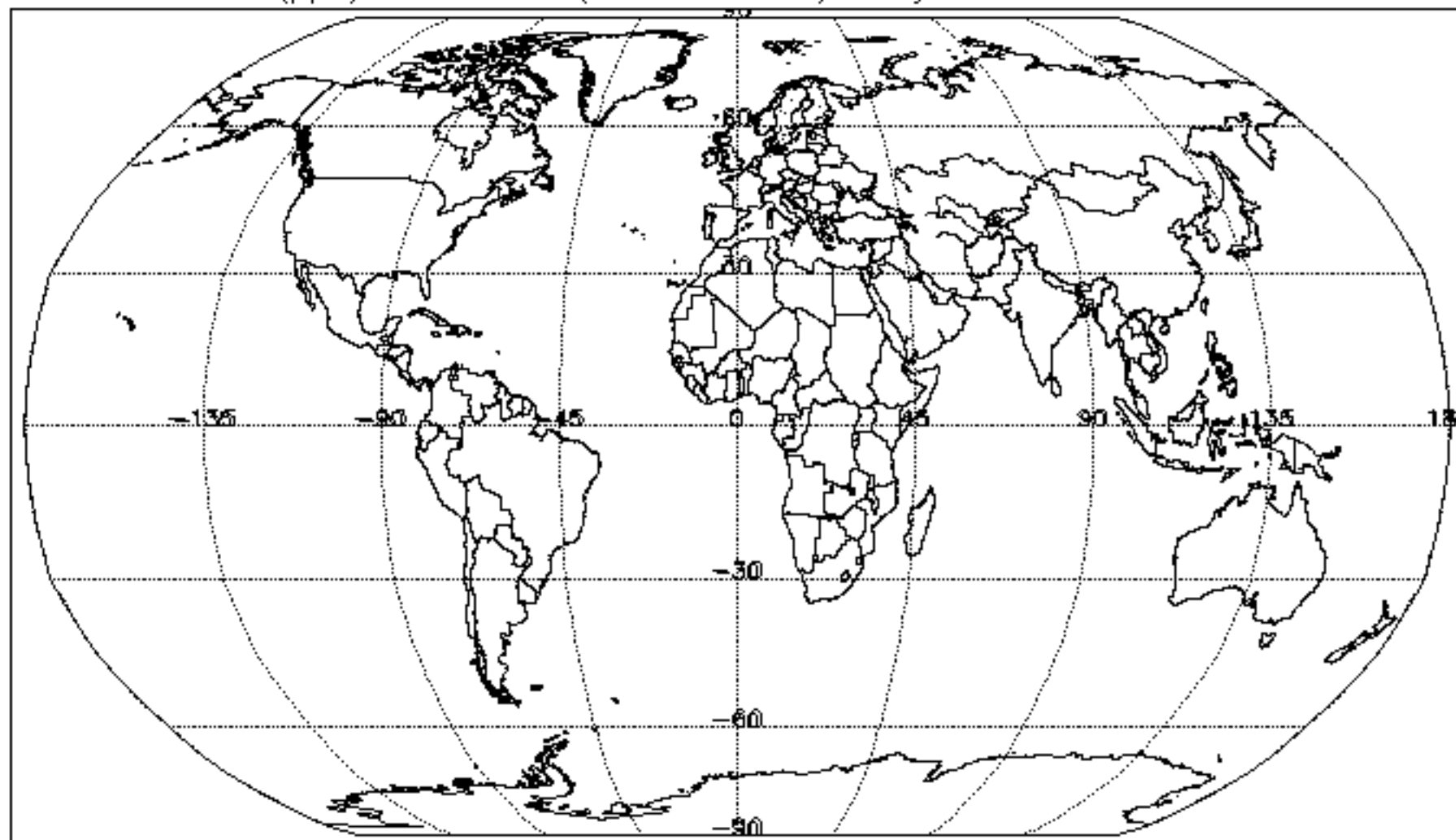
H<sub>2</sub>O (ppm) at: 2700 K (60km, 0.2hPa). Daily mean: 20-DEC-2011



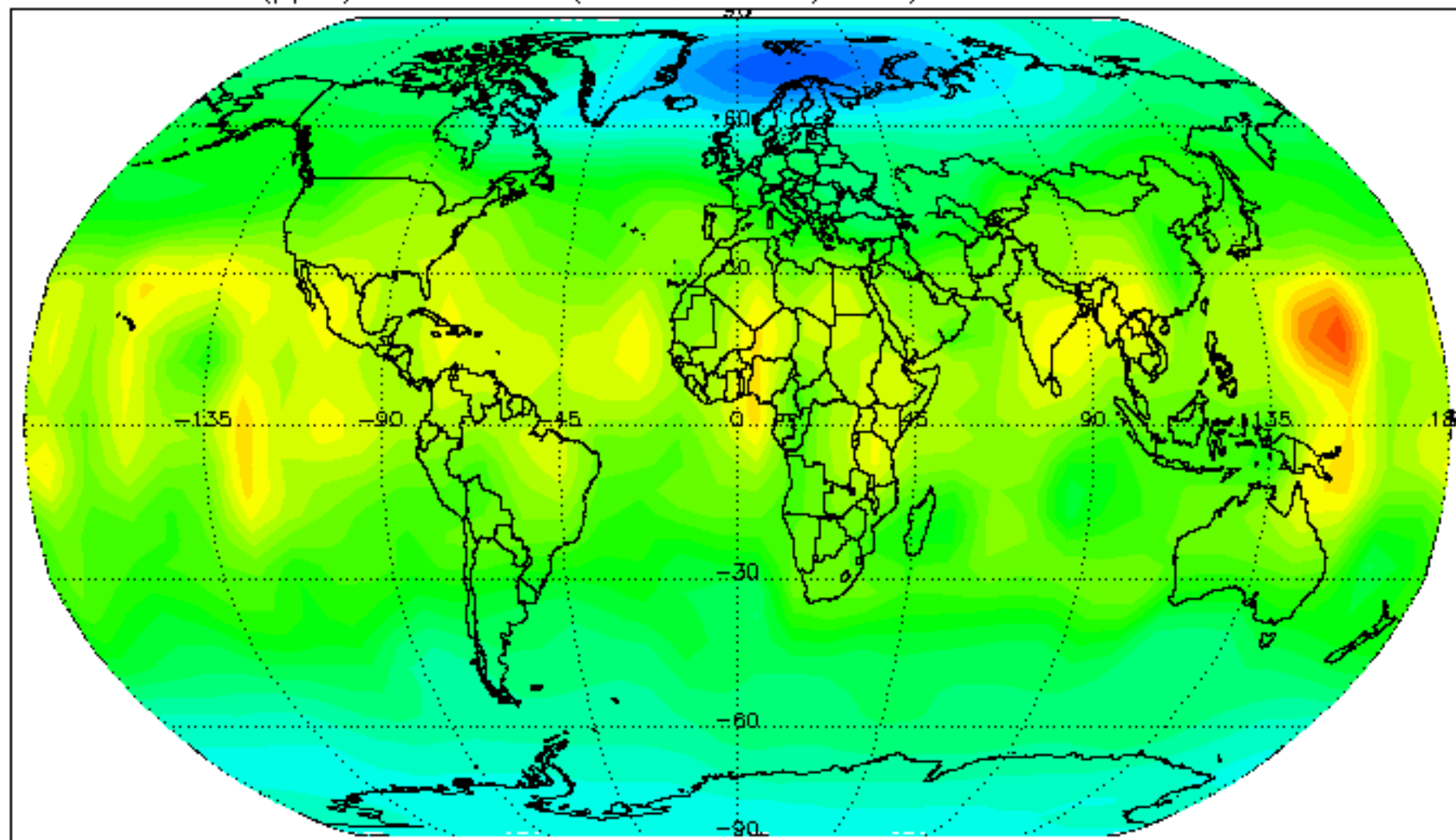
03 (ppm) at: 2700 K (60km, 0.2hPa). Daily mean: 20-DEC-2011



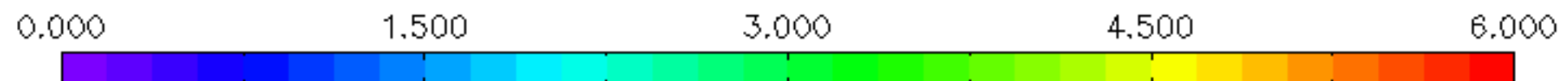
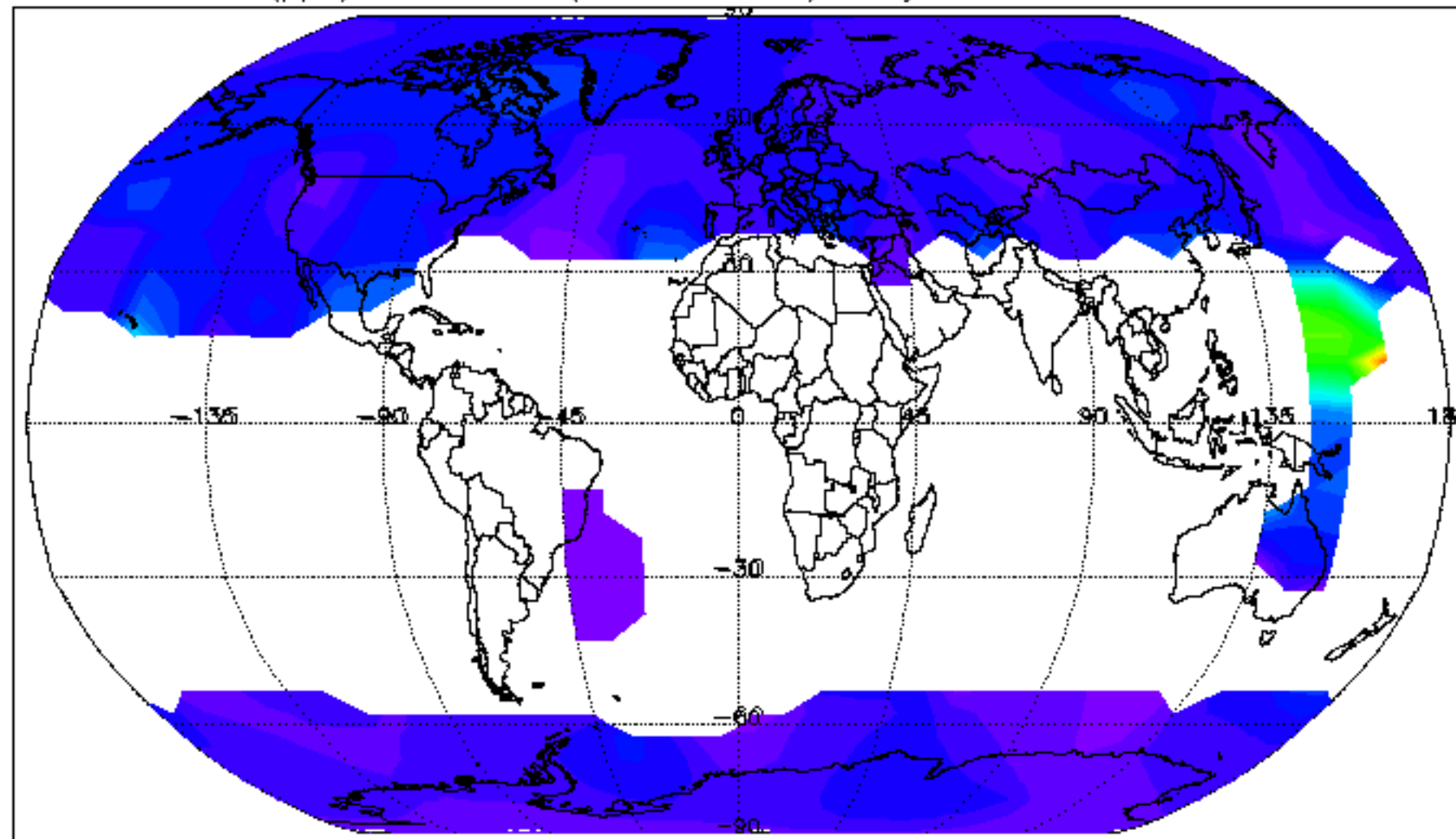
HN03 (ppb) at: 2700 K (60km, 0.2hPa). Daily mean: 20-DEC-2011



CH<sub>4</sub> (ppm) at: 2700 K (60km, 0.2hPa). Daily mean: 20-DEC-2011

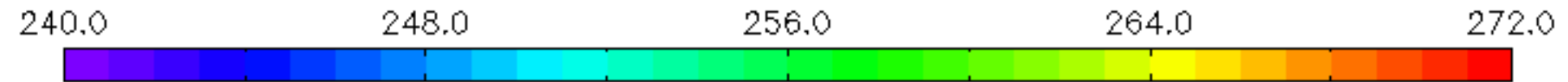
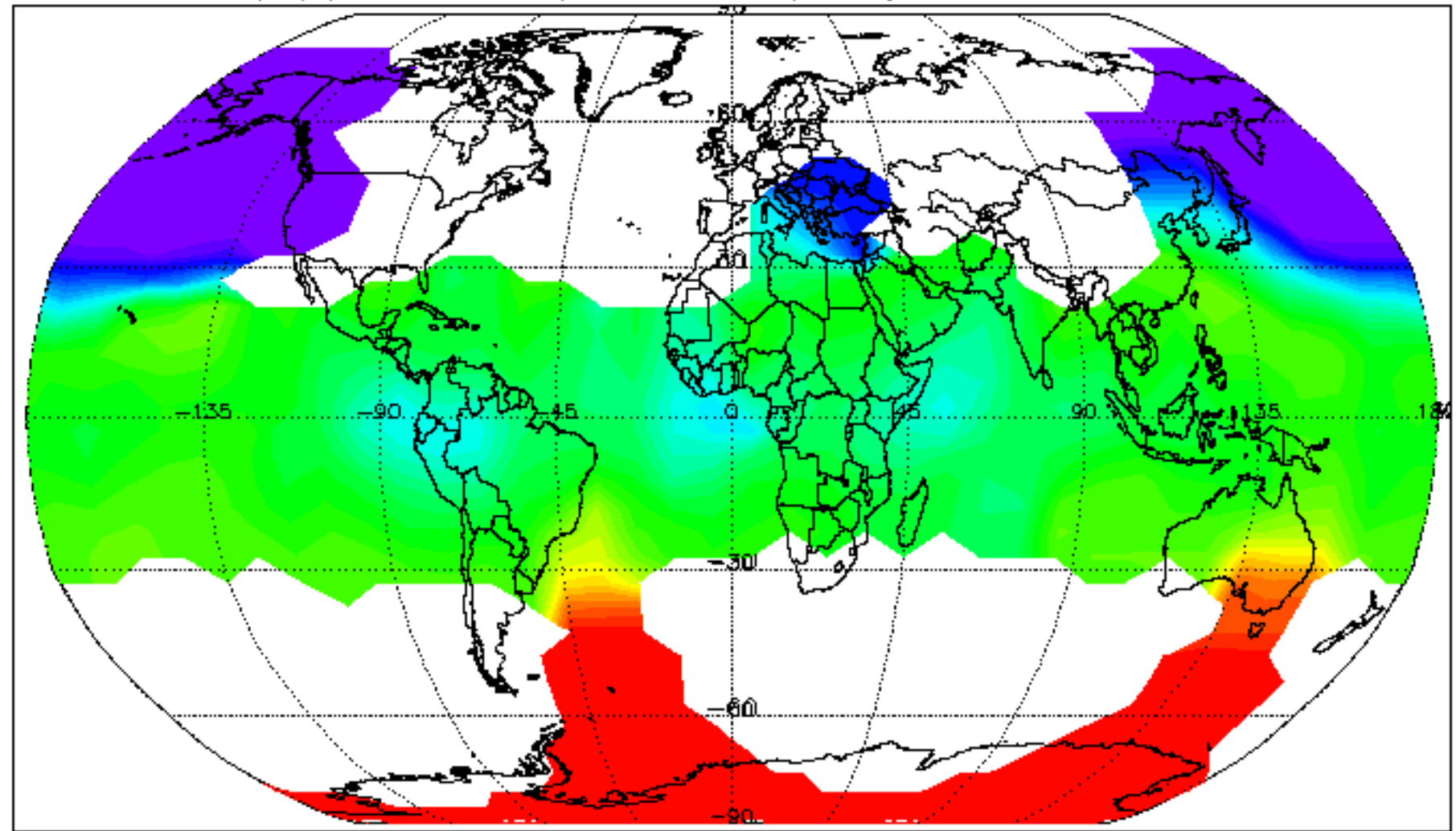


N<sub>2</sub>O (ppb) at: 2700 K (60km, 0.2hPa). Daily mean: 20-DEC-2011

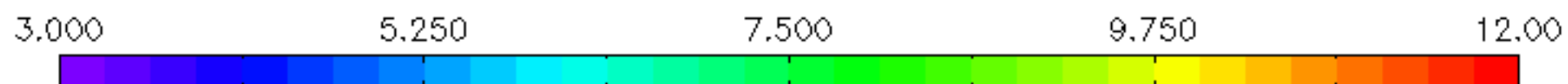
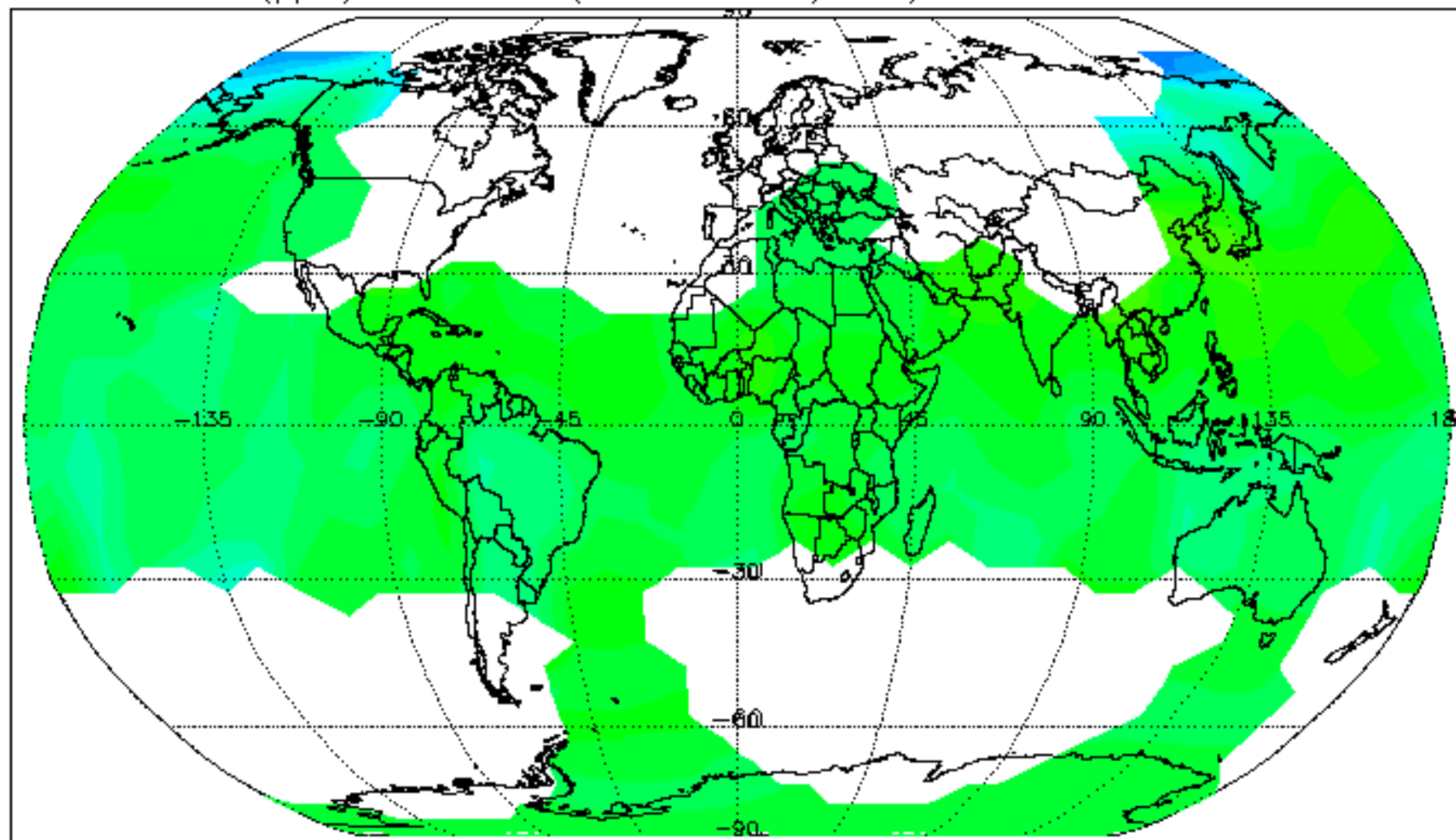




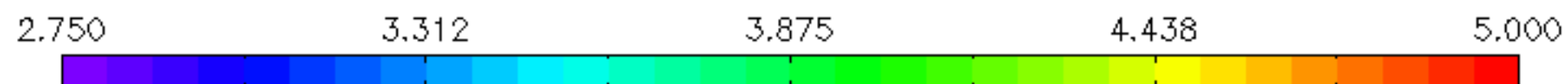
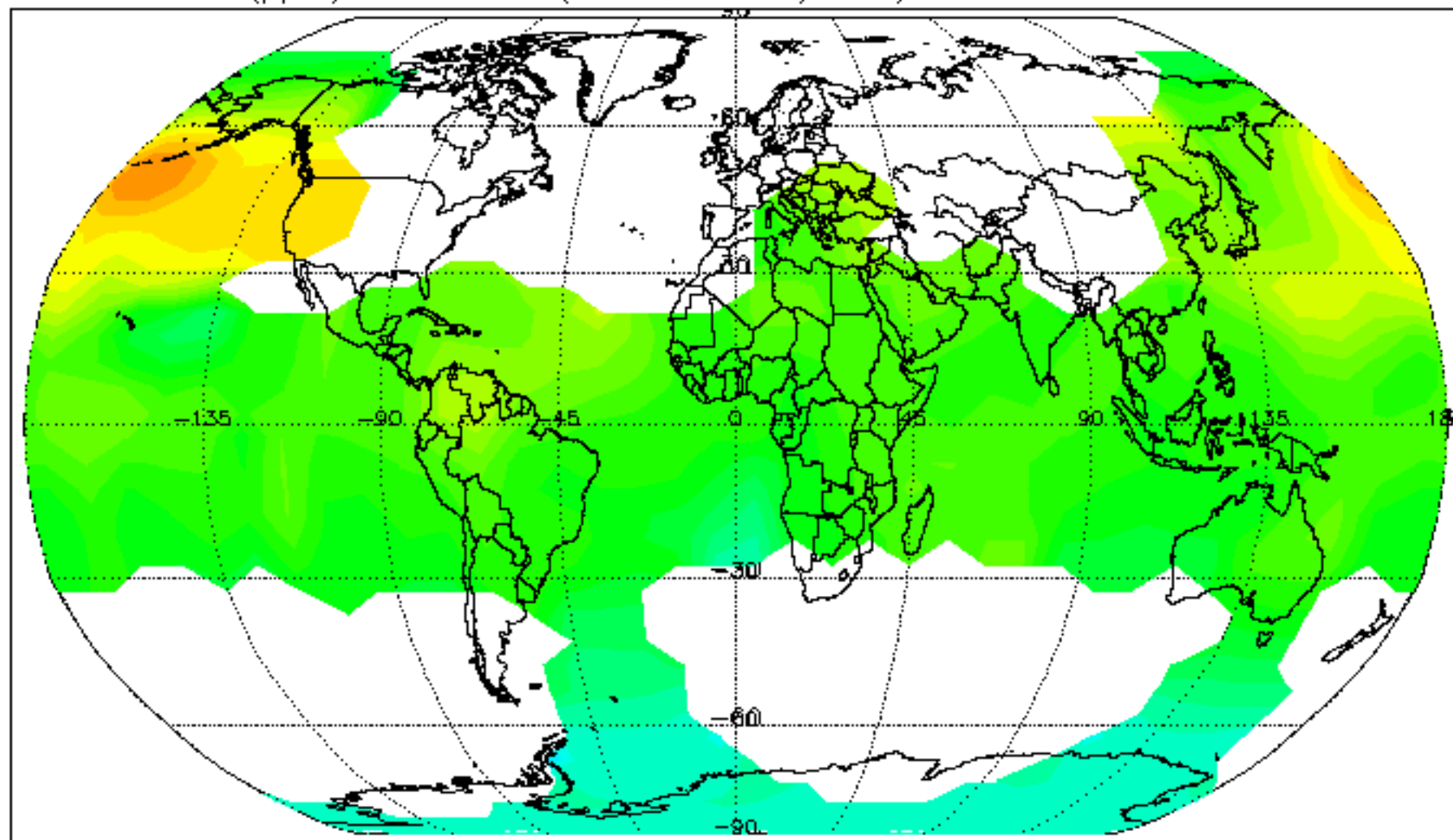
Temp (K) at: 1700 K (45km, 1.5hPa). Daily mean: 20-DEC-2011



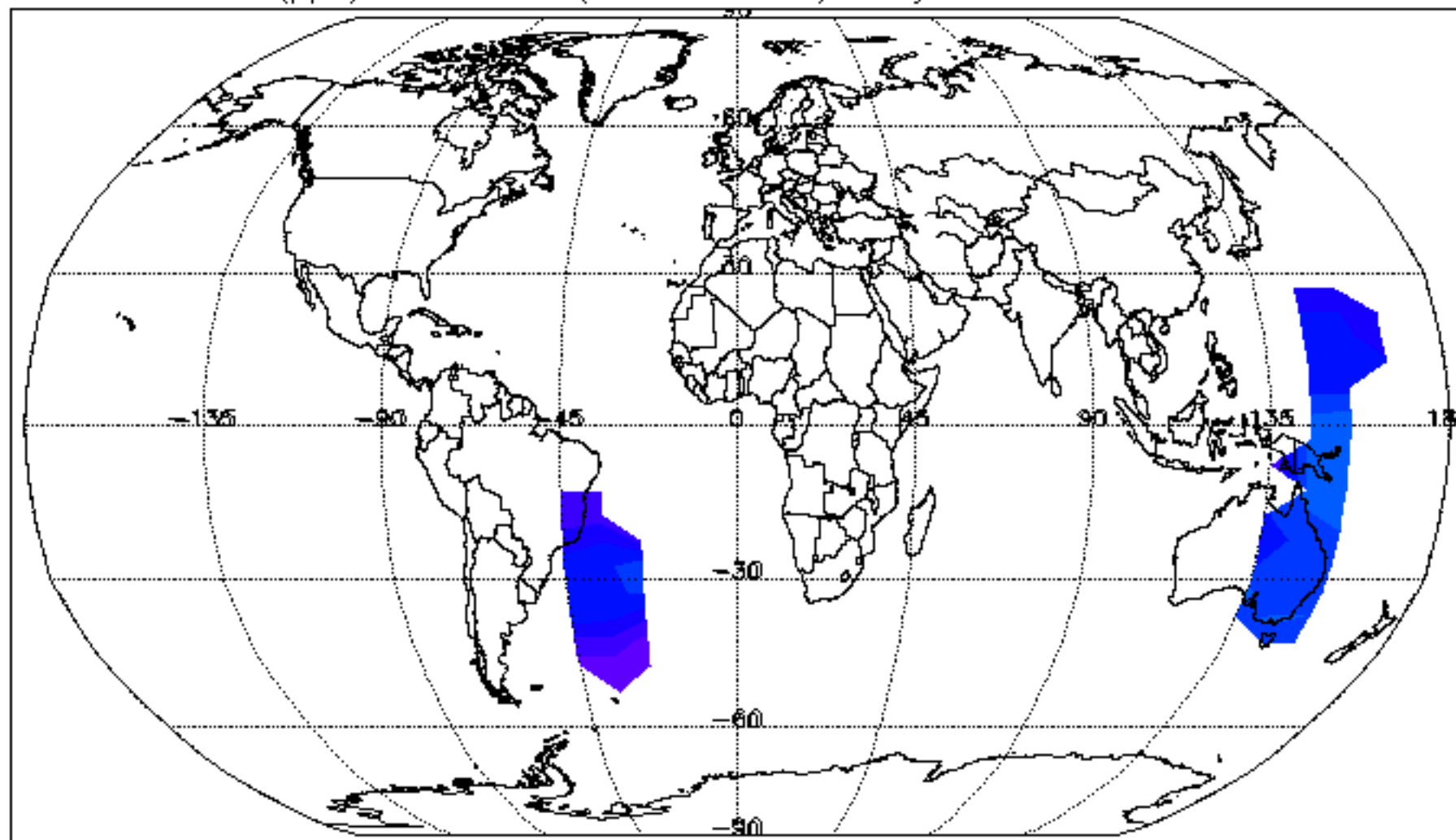
H<sub>2</sub>O (ppm) at: 1700 K (45km, 1.5hPa). Daily mean: 20-DEC-2011



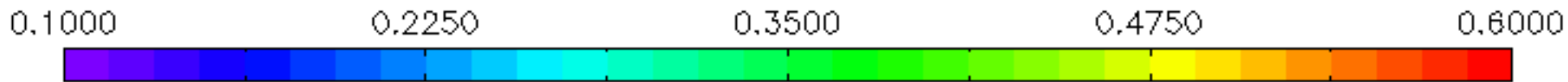
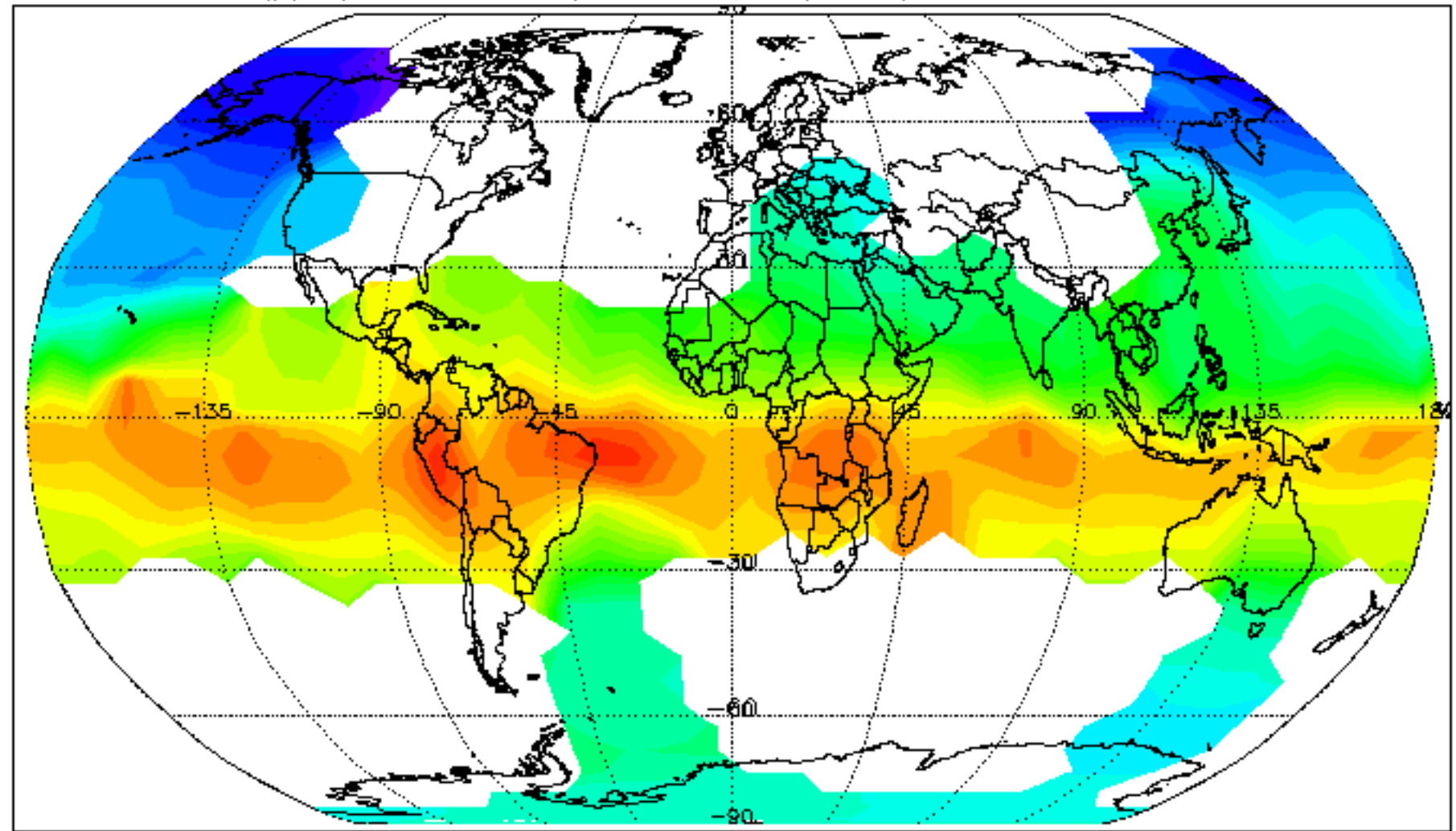
O3 (ppm) at: 1700 K (45km, 1.5hPa). Daily mean: 20-DEC-2011



HN03 (ppb) at: 1700 K (45km, 1.5hPa). Daily mean: 20-DEC-2011

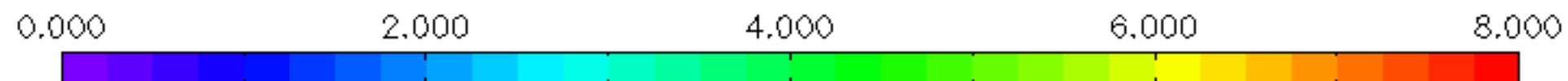
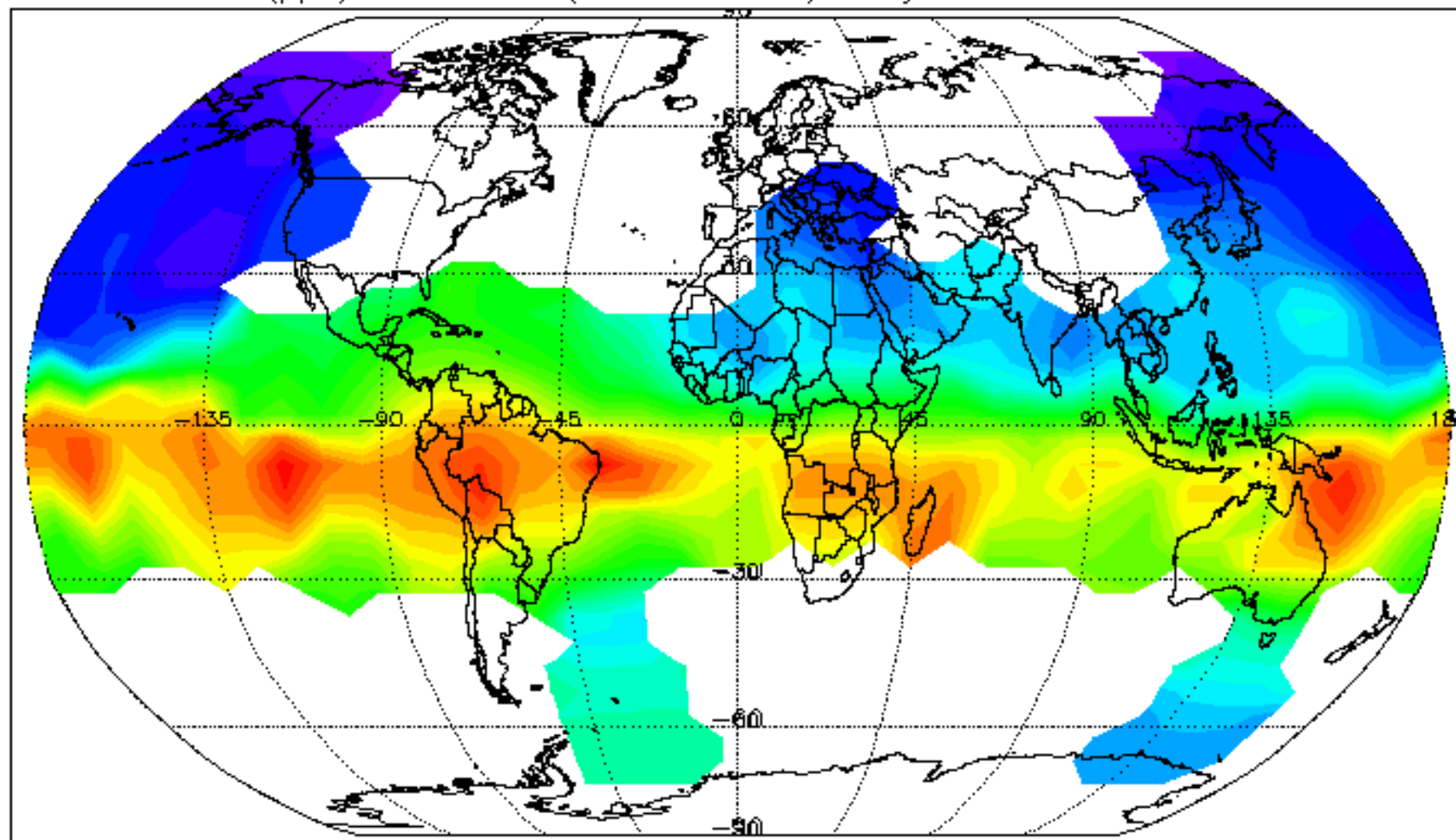


CH<sub>4</sub> (ppm) at: 1700 K (45km, 1.5hPa). Daily mean: 20-DEC-2011

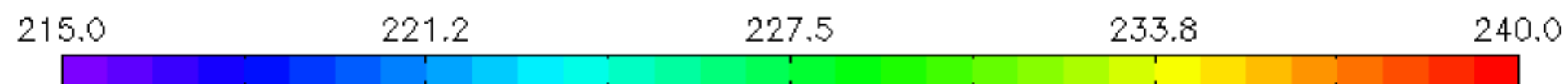
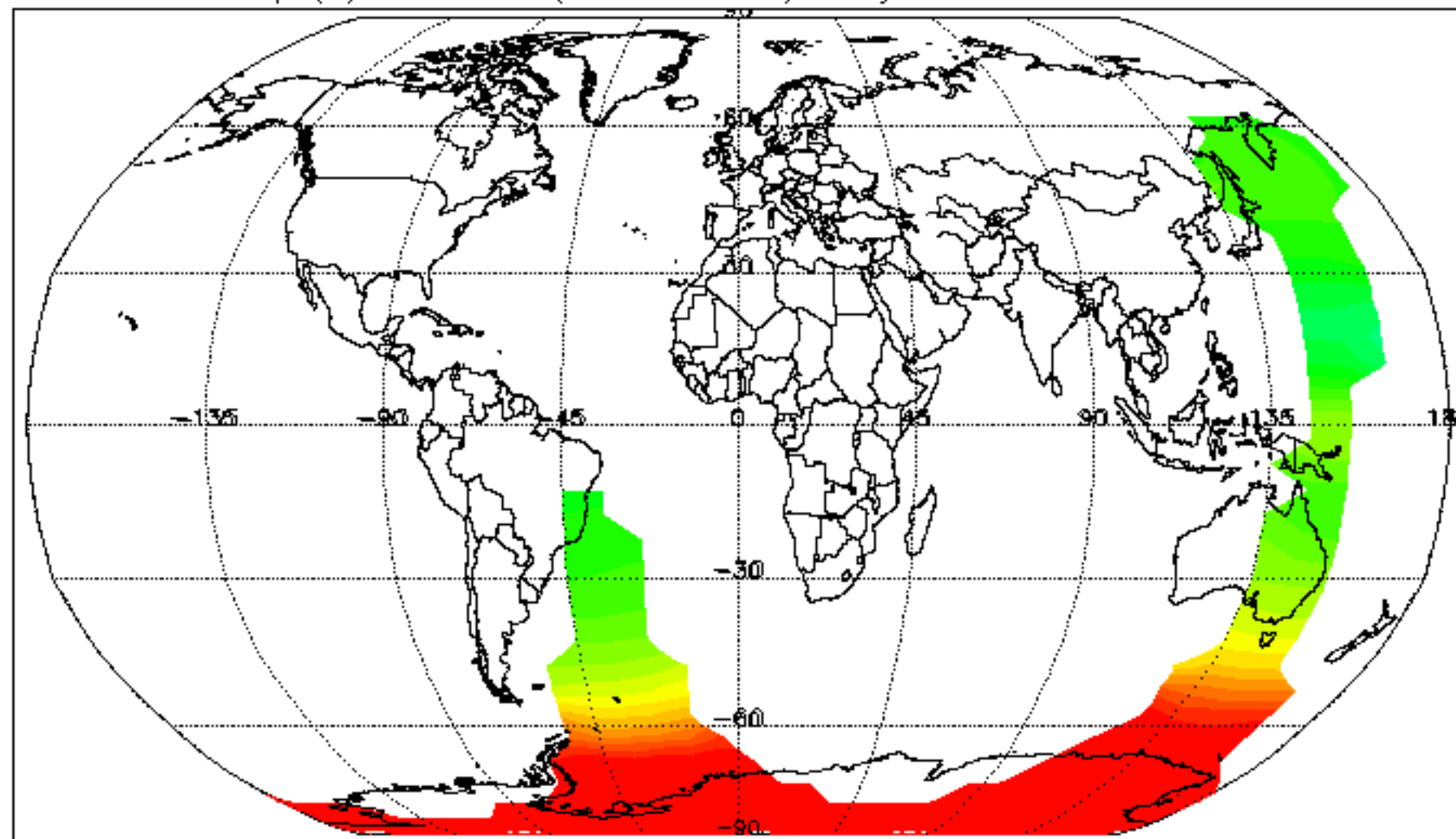




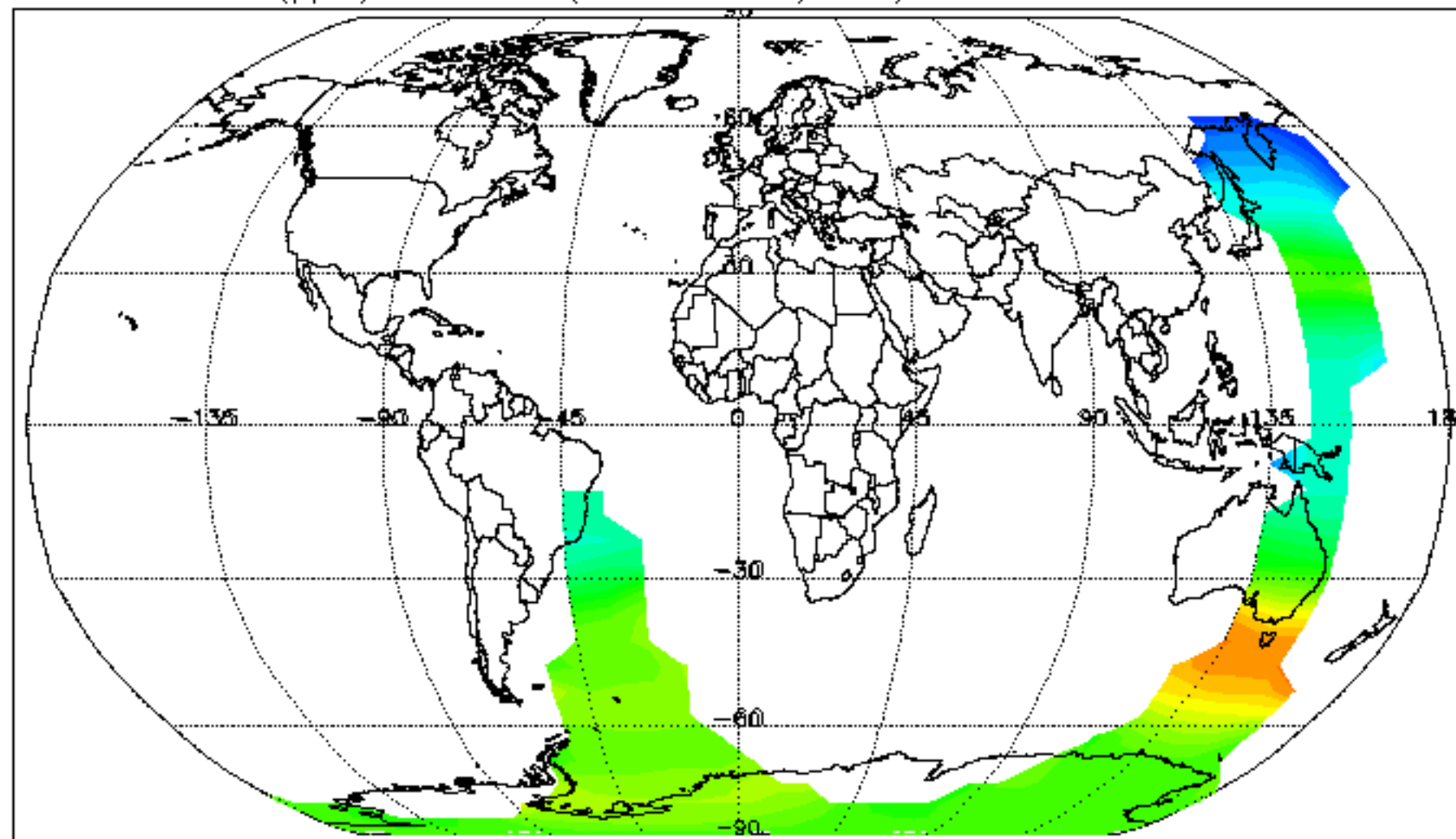
N<sub>2</sub>O (ppb) at: 1700 K (45km, 1.5hPa). Daily mean: 20-DEC-2011



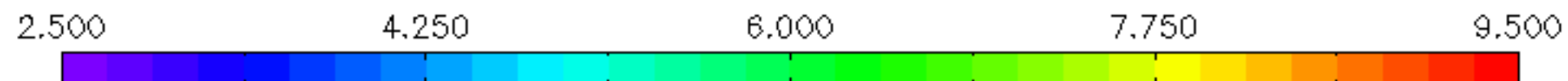
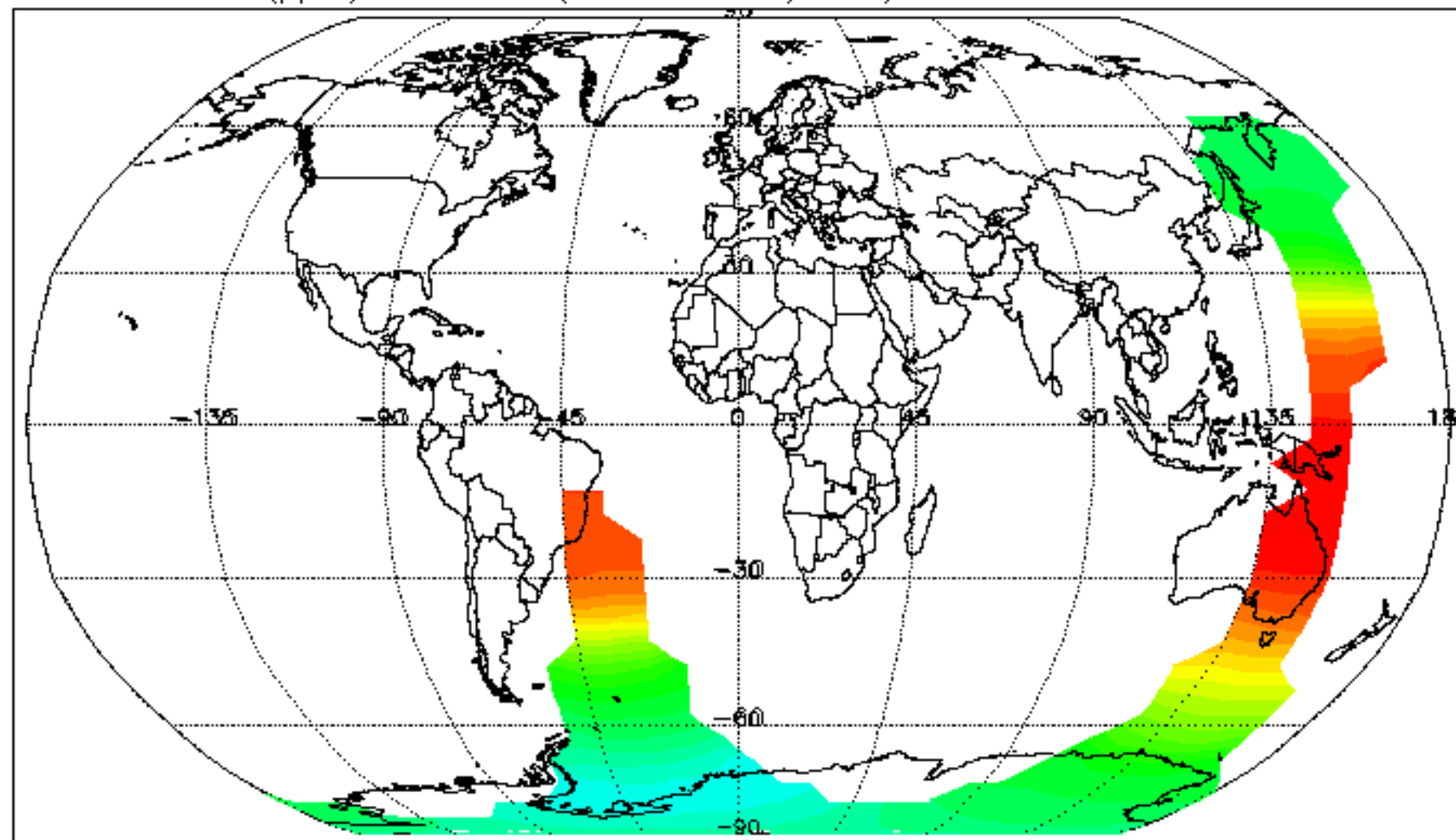
Temp (K) at: 850 K (32km, 10hPa). Daily mean: 20-DEC-2011



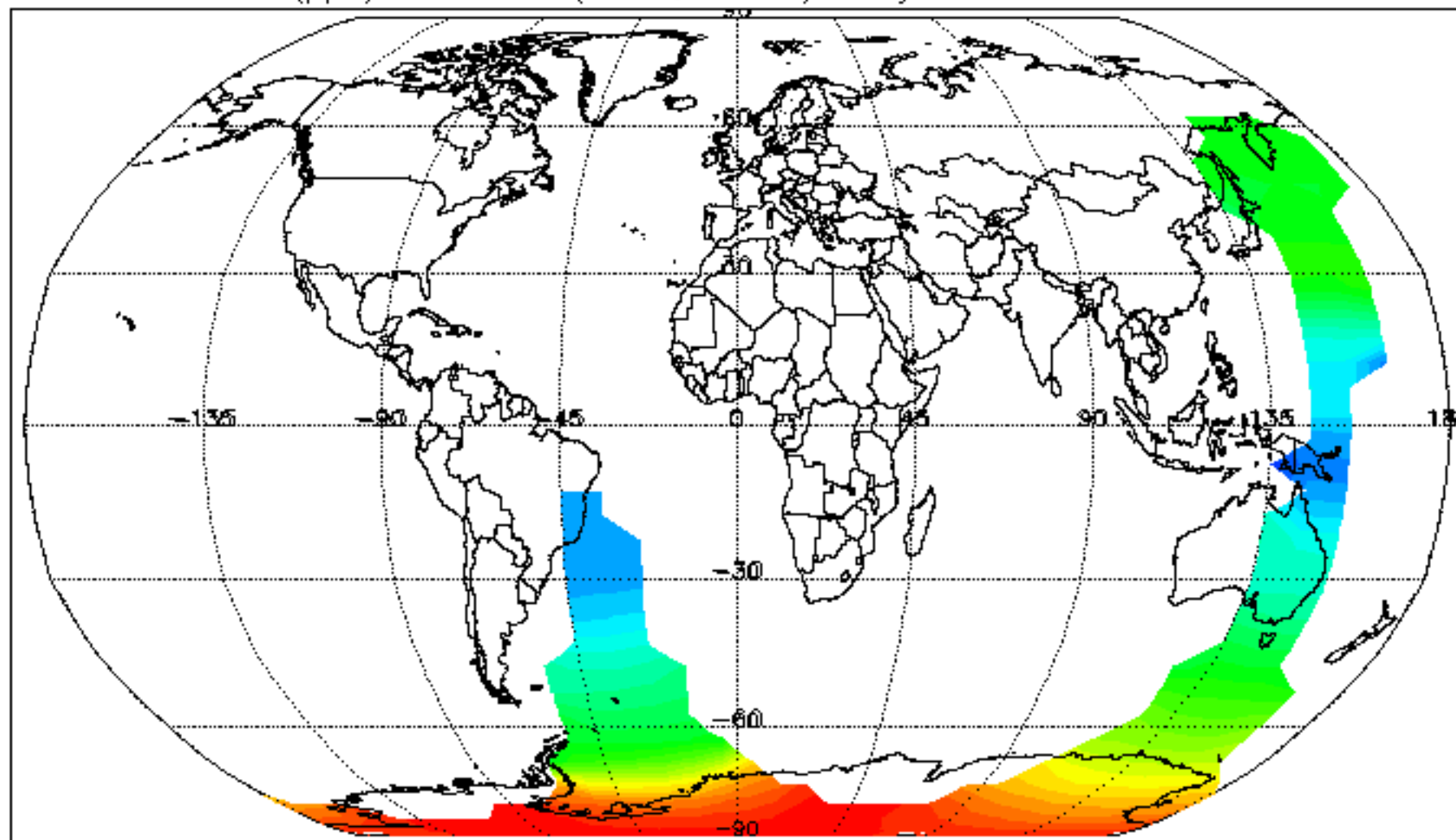
H<sub>2</sub>O (ppm) at: 850 K (32km, 10hPa). Daily mean: 20-DEC-2011



O3 (ppm) at: 850 K (32km, 10hPa). Daily mean: 20-DEC-2011

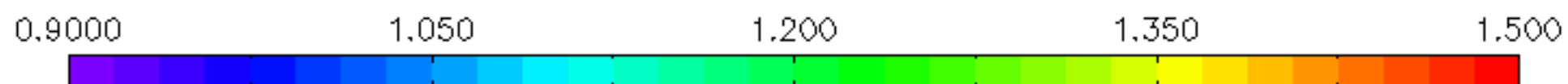
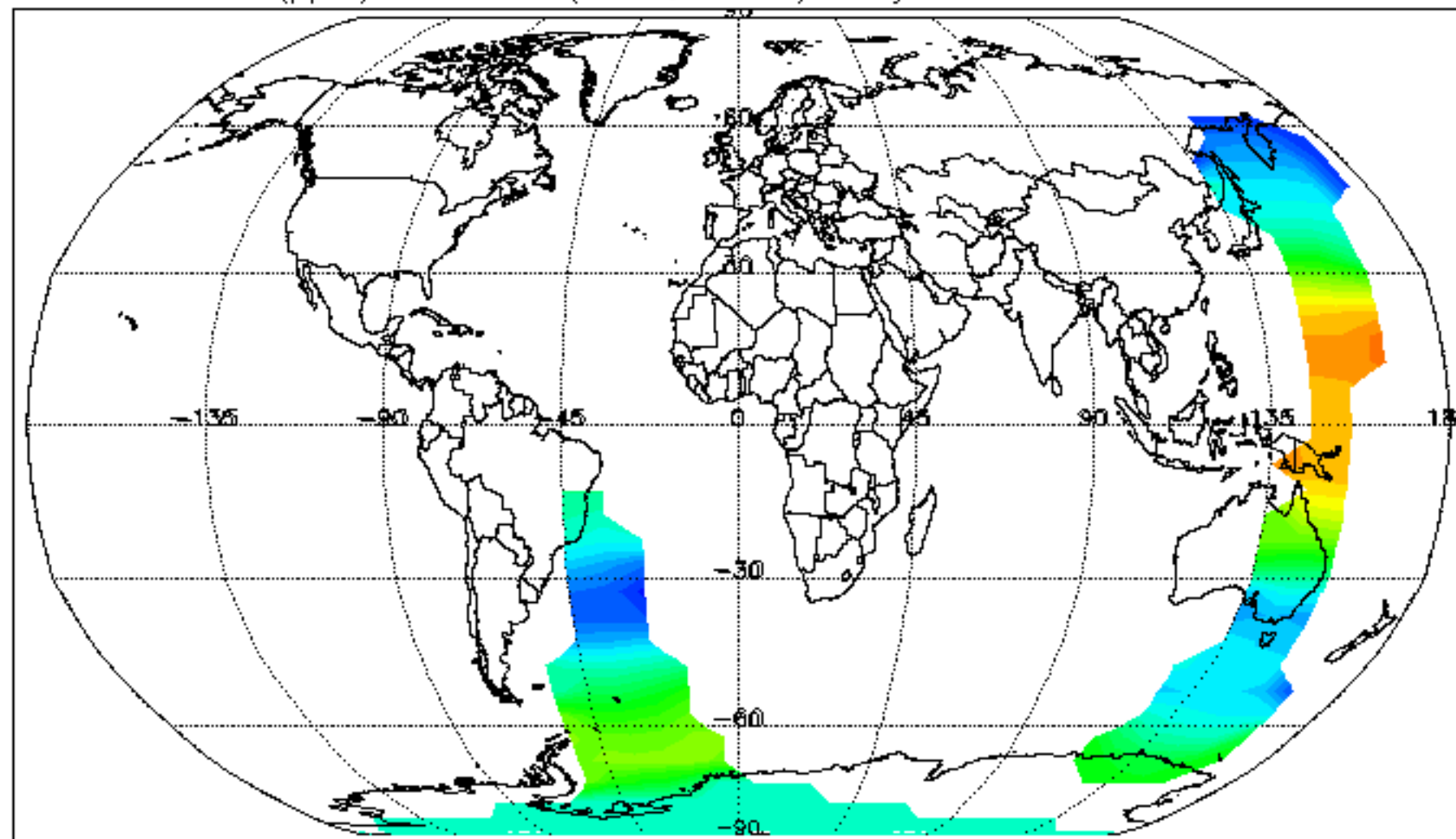


HNO<sub>3</sub> (ppb) at: 850 K (32km, 10hPa). Daily mean: 20-DEC-2011

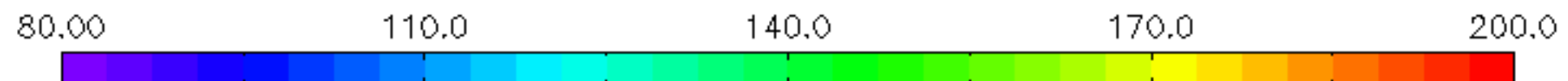
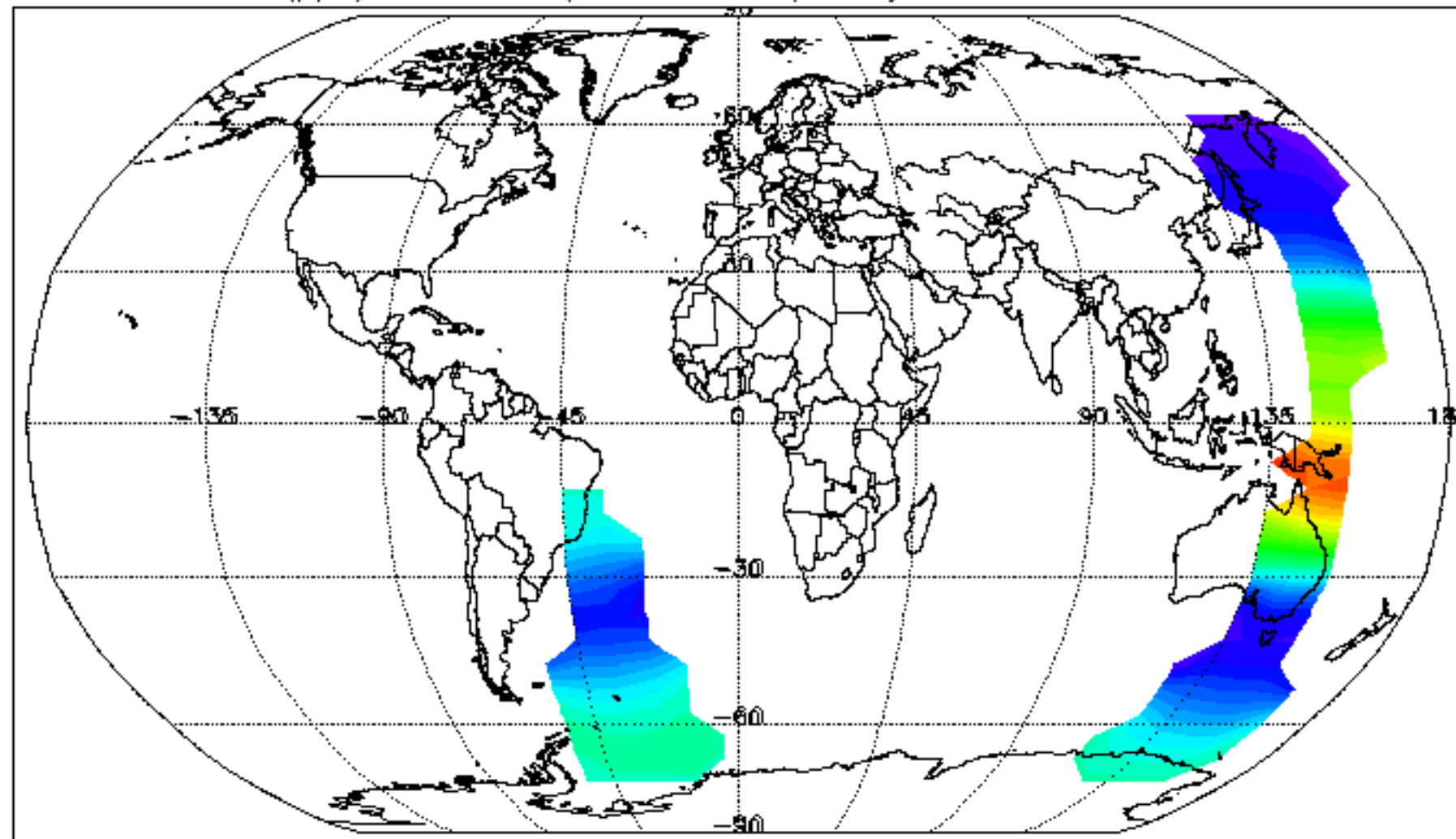




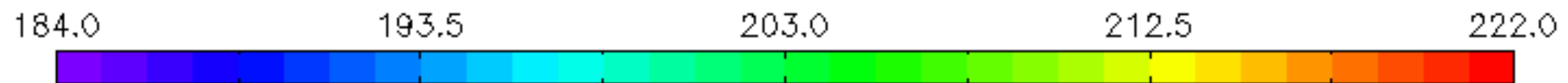
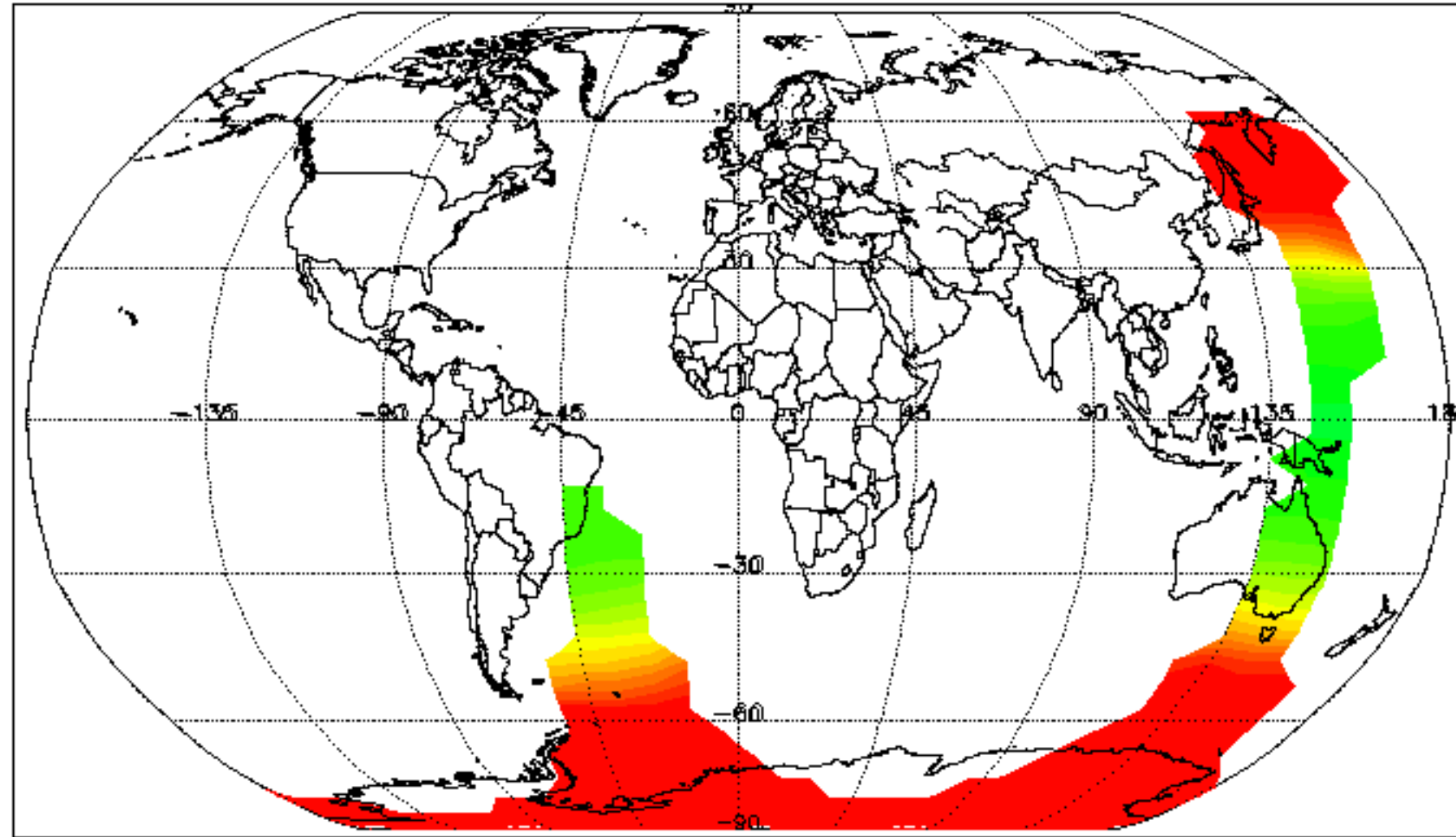
CH<sub>4</sub> (ppm) at: 850 K (32km, 10hPa). Daily mean: 20-DEC-2011



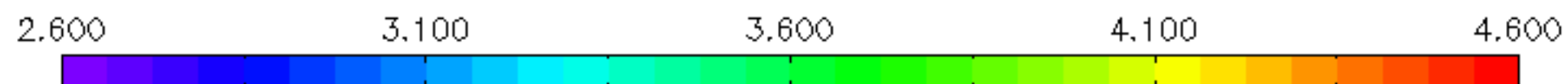
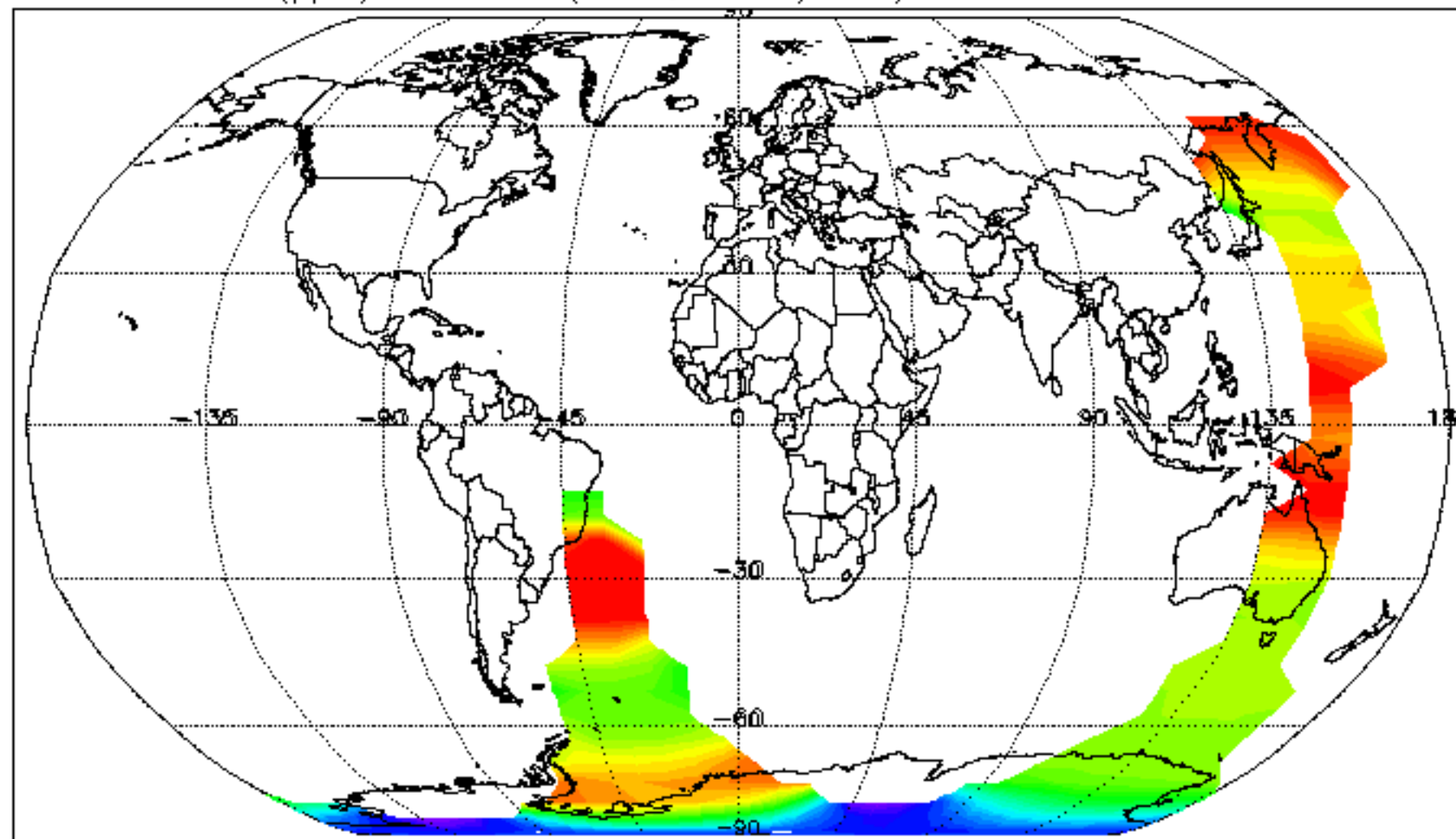
N<sub>2</sub>O (ppb) at: 850 K (32km, 10hPa). Daily mean: 20-DEC-2011



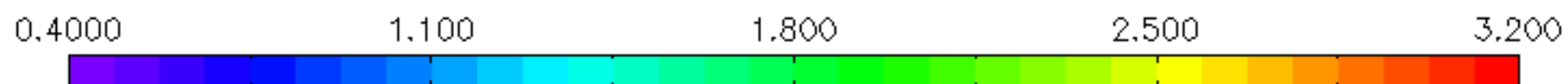
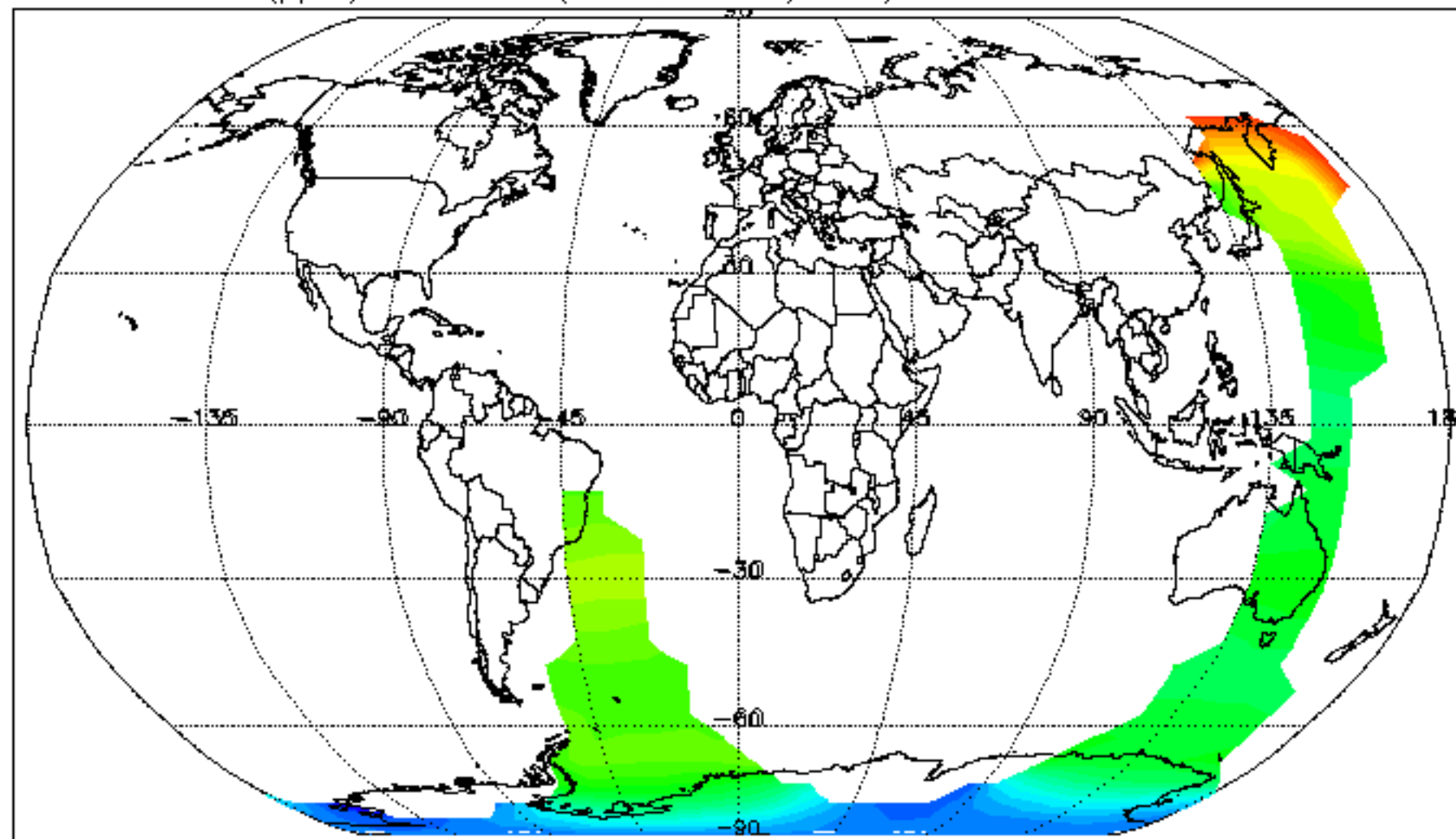
Temp (K) at: 490 K (19km, 55hPa). Daily mean: 20-DEC-2011



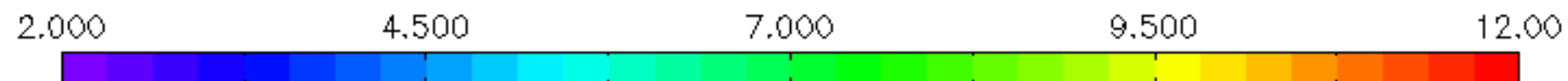
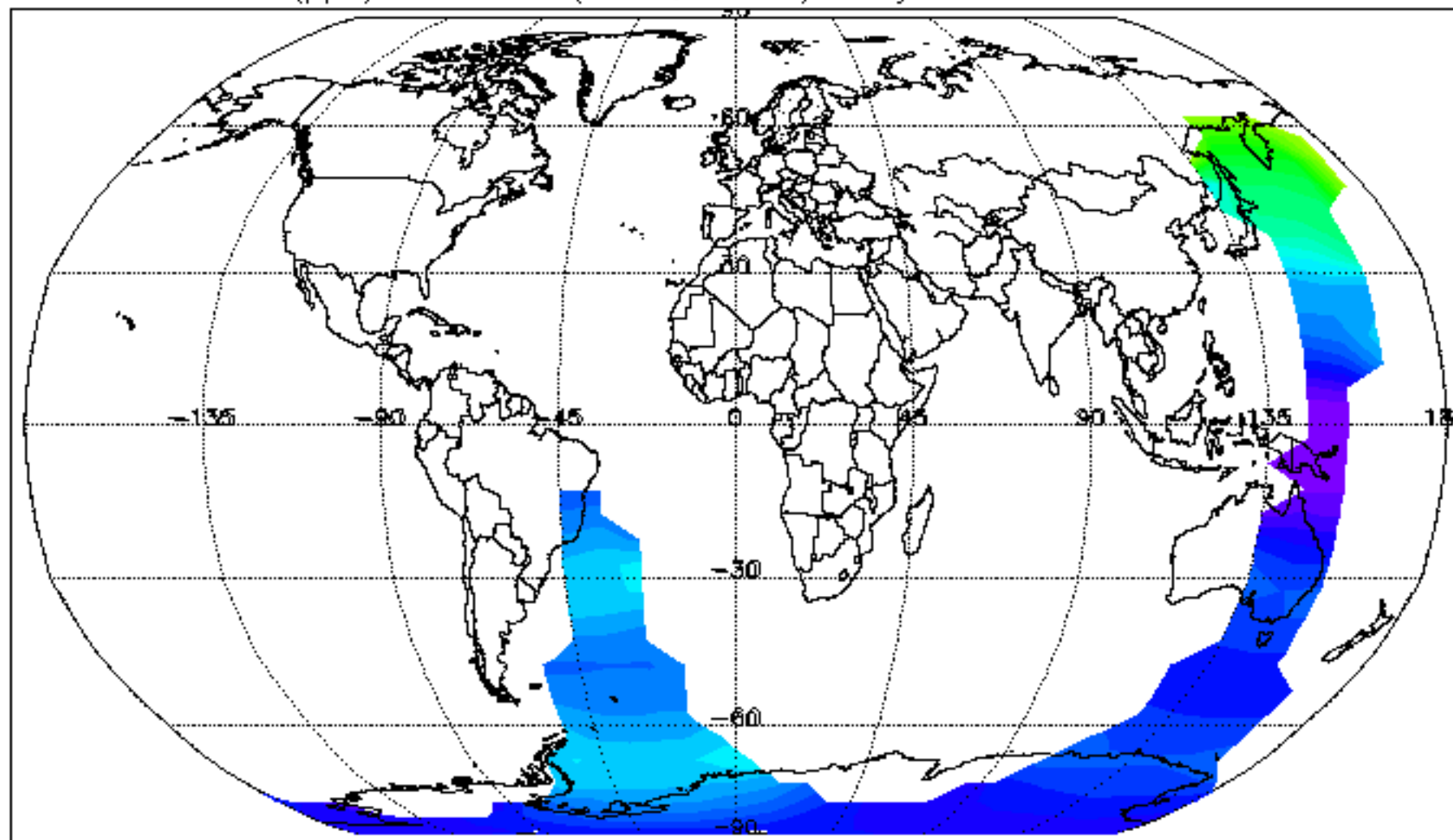
H<sub>2</sub>O (ppm) at: 490 K (19km, 55hPa). Daily mean: 20-DEC-2011



O3 (ppm) at: 490 K (19km, 55hPa). Daily mean: 20-DEC-2011

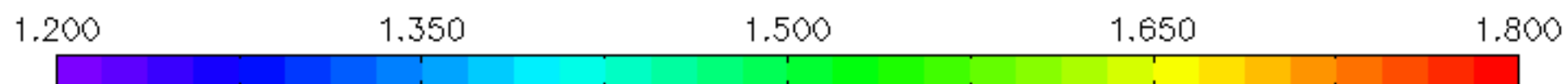
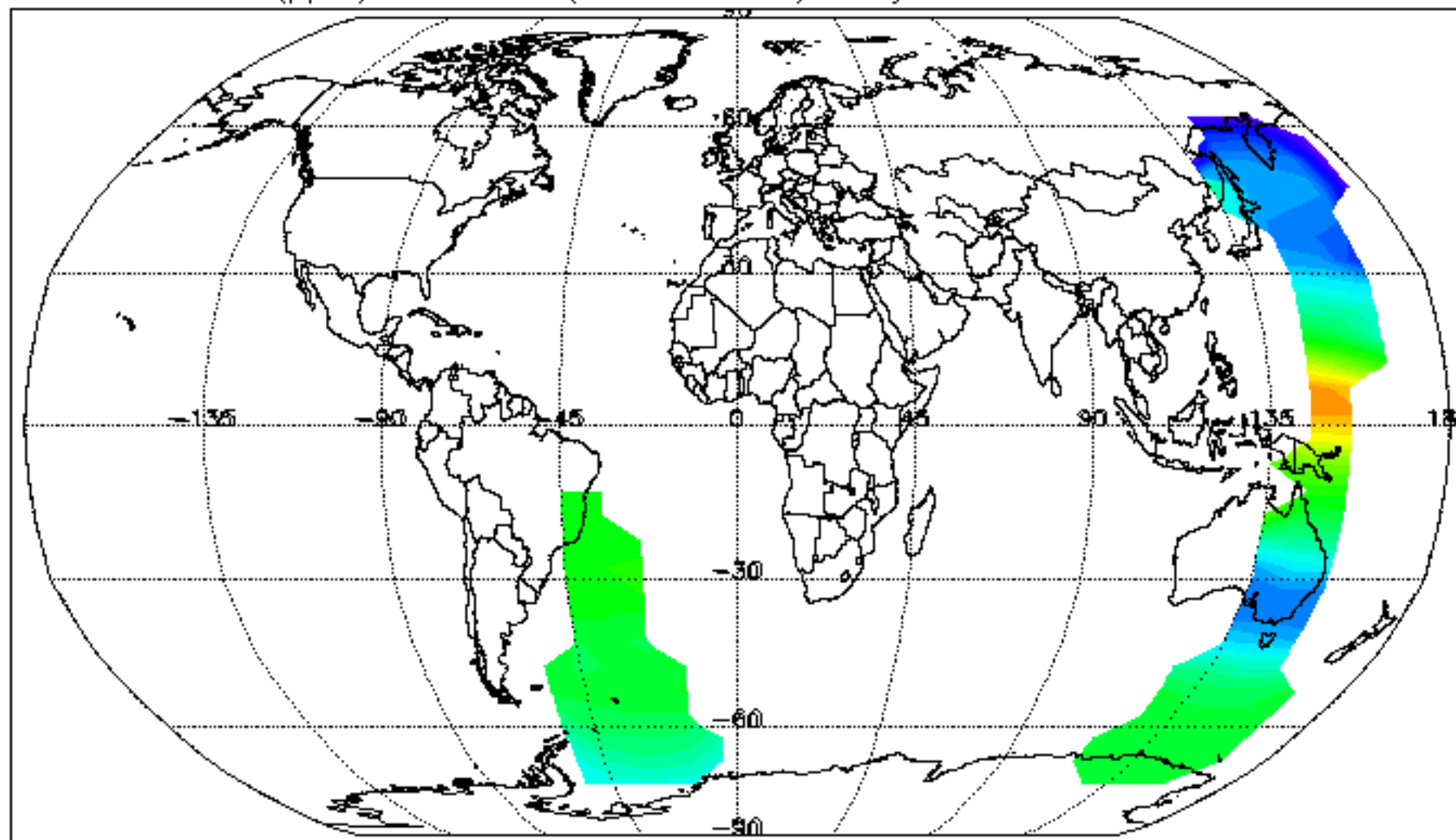


HNO<sub>3</sub> (ppb) at: 490 K (19km, 55hPa). Daily mean: 20-DEC-2011



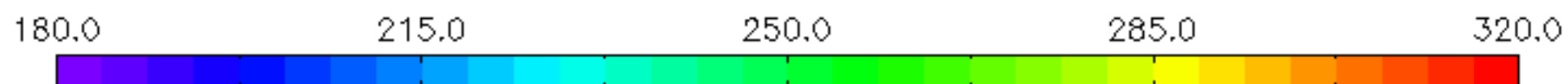
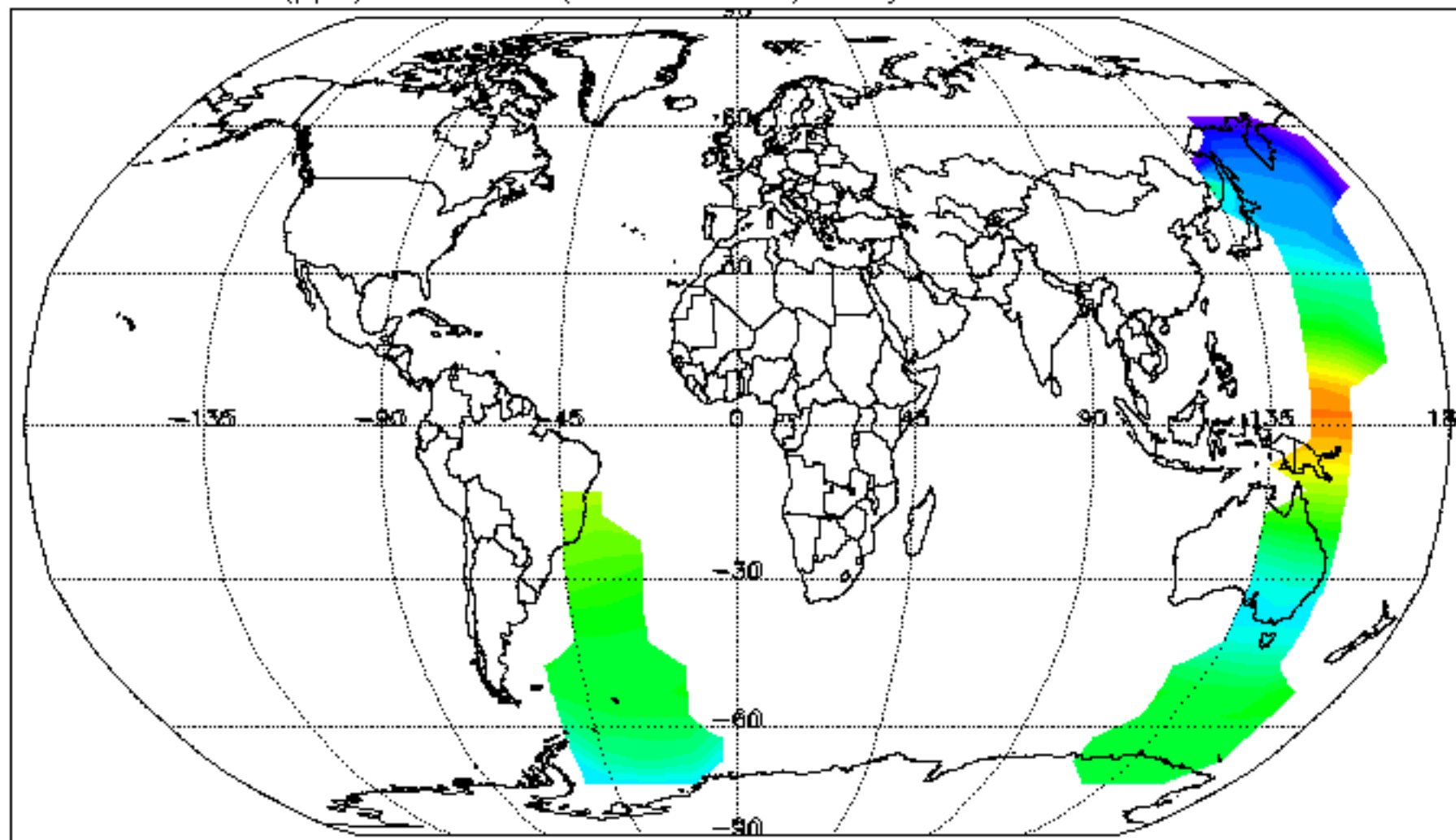


CH<sub>4</sub> (ppm) at: 490 K (19km, 55hPa). Daily mean: 20-DEC-2011

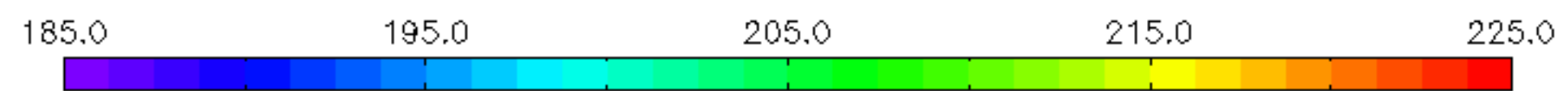
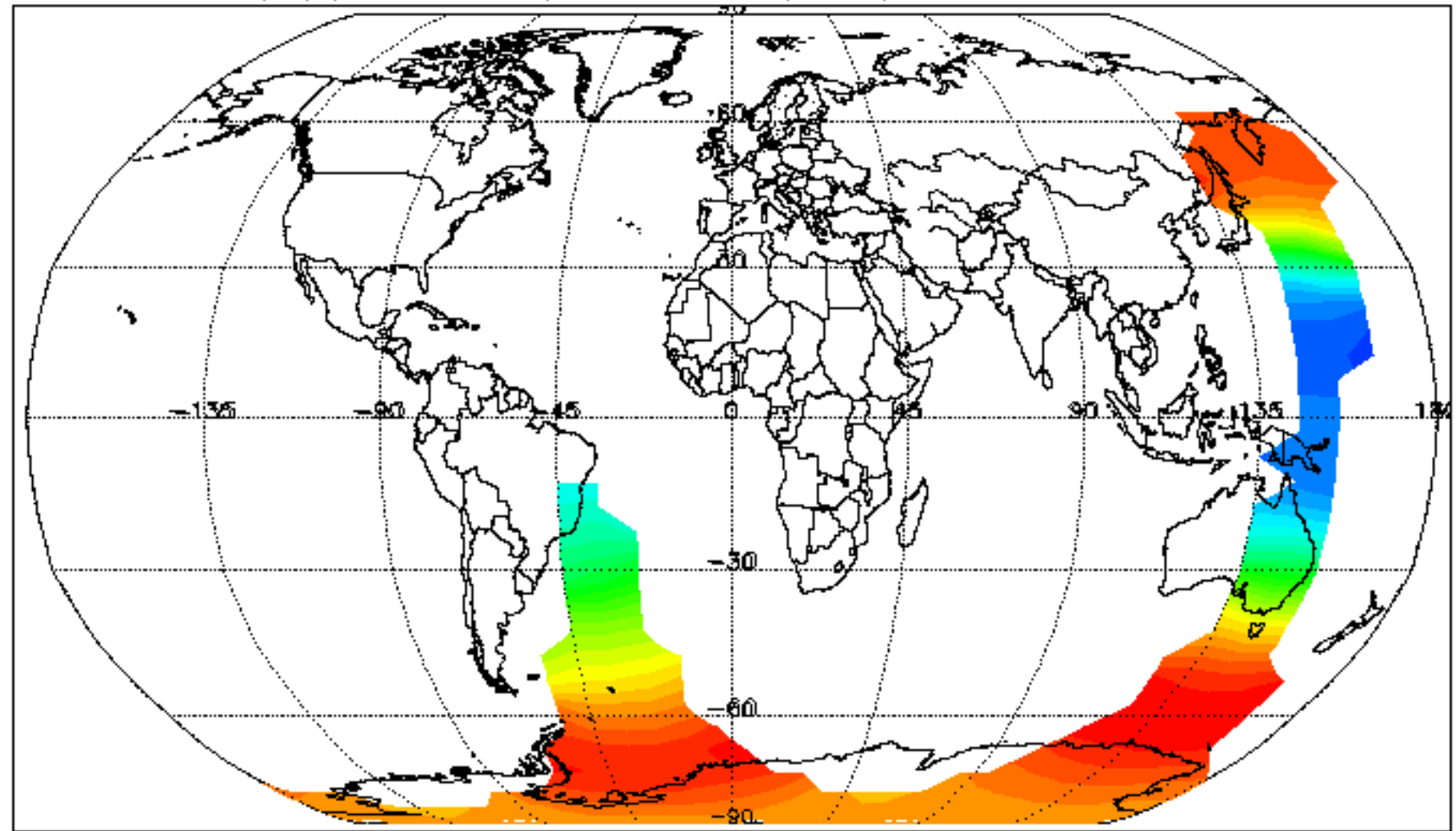




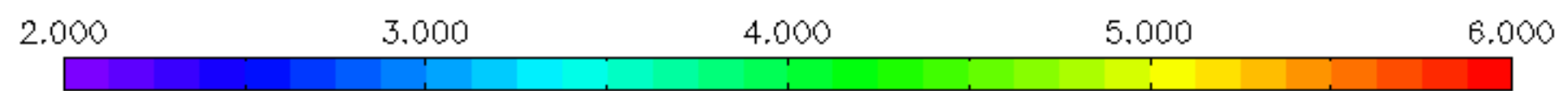
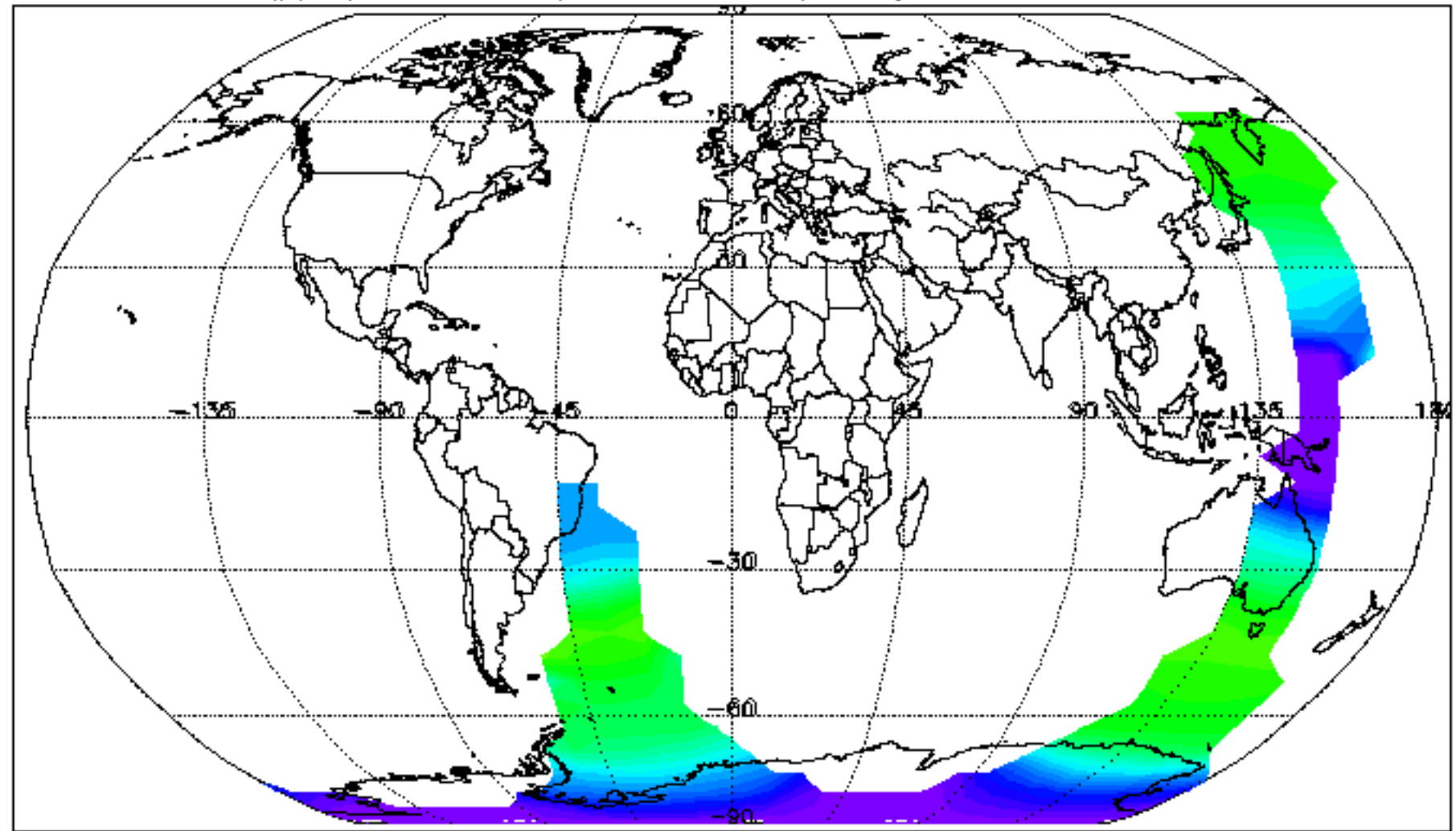
N<sub>2</sub>O (ppb) at: 490 K (19km, 55hPa). Daily mean: 20-DEC-2011



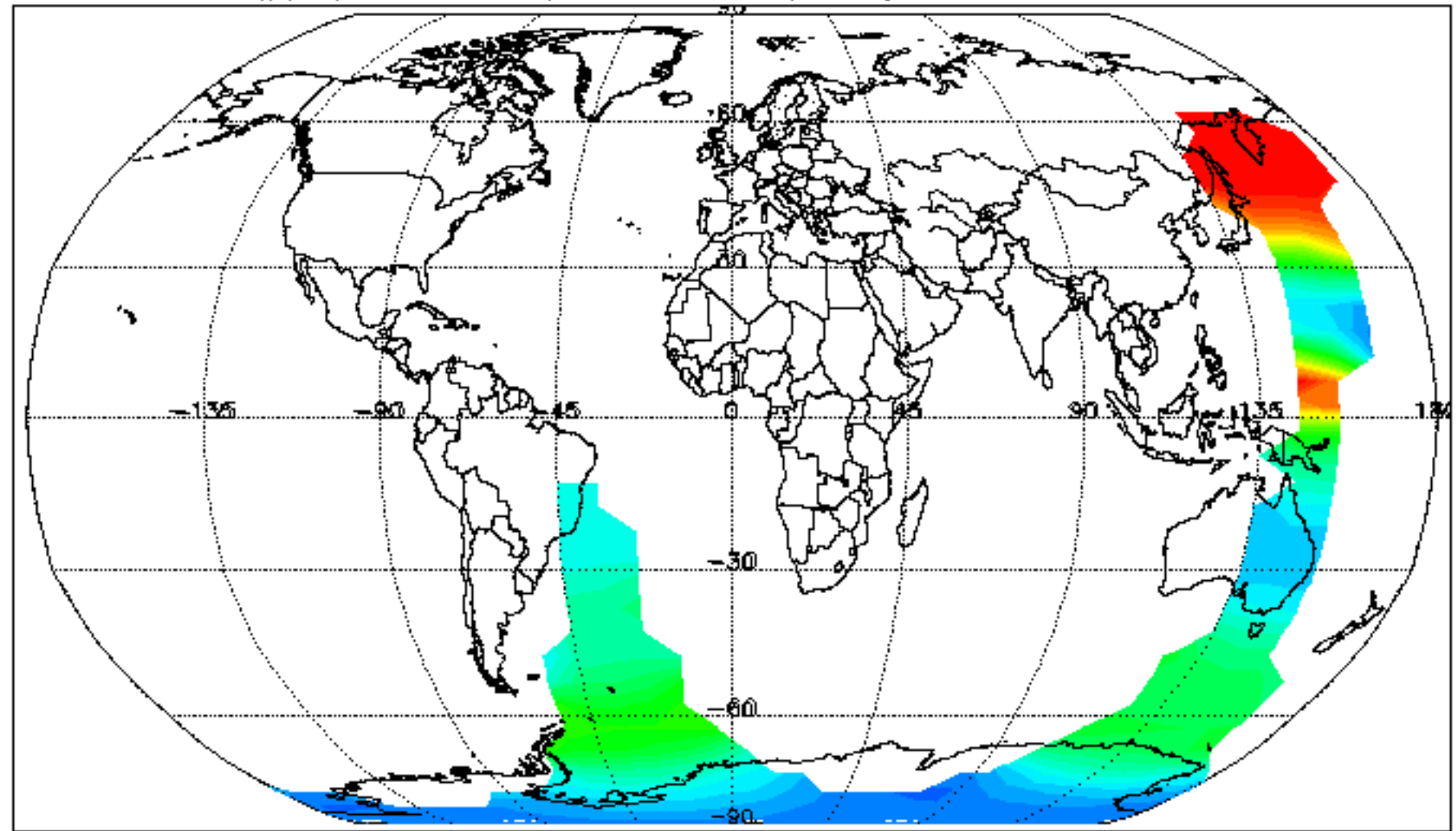
Temp (K) at: 410 K (16km, 100hPa). Daily mean: 20-DEC-2011



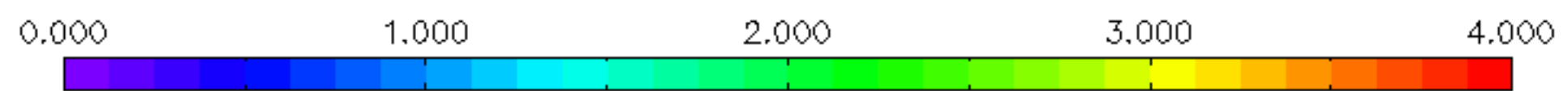
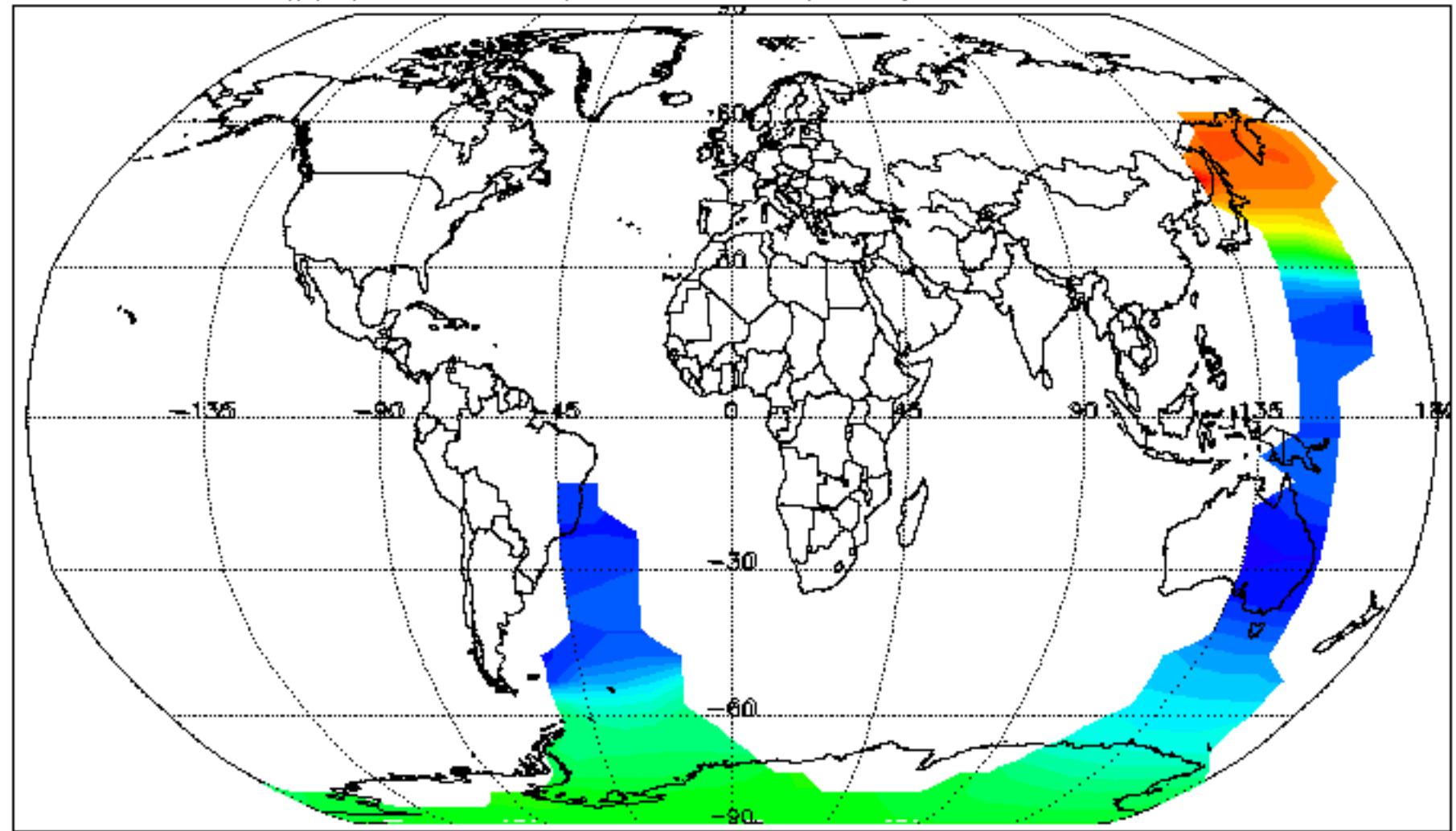
H2O (ppm) at: 410 K (16km, 100hPa). Daily mean: 20-DEC-2011



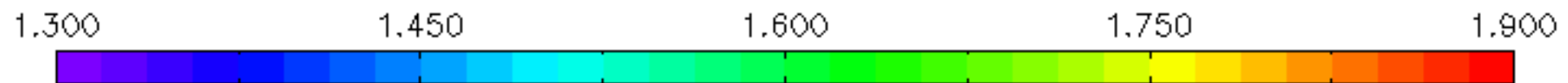
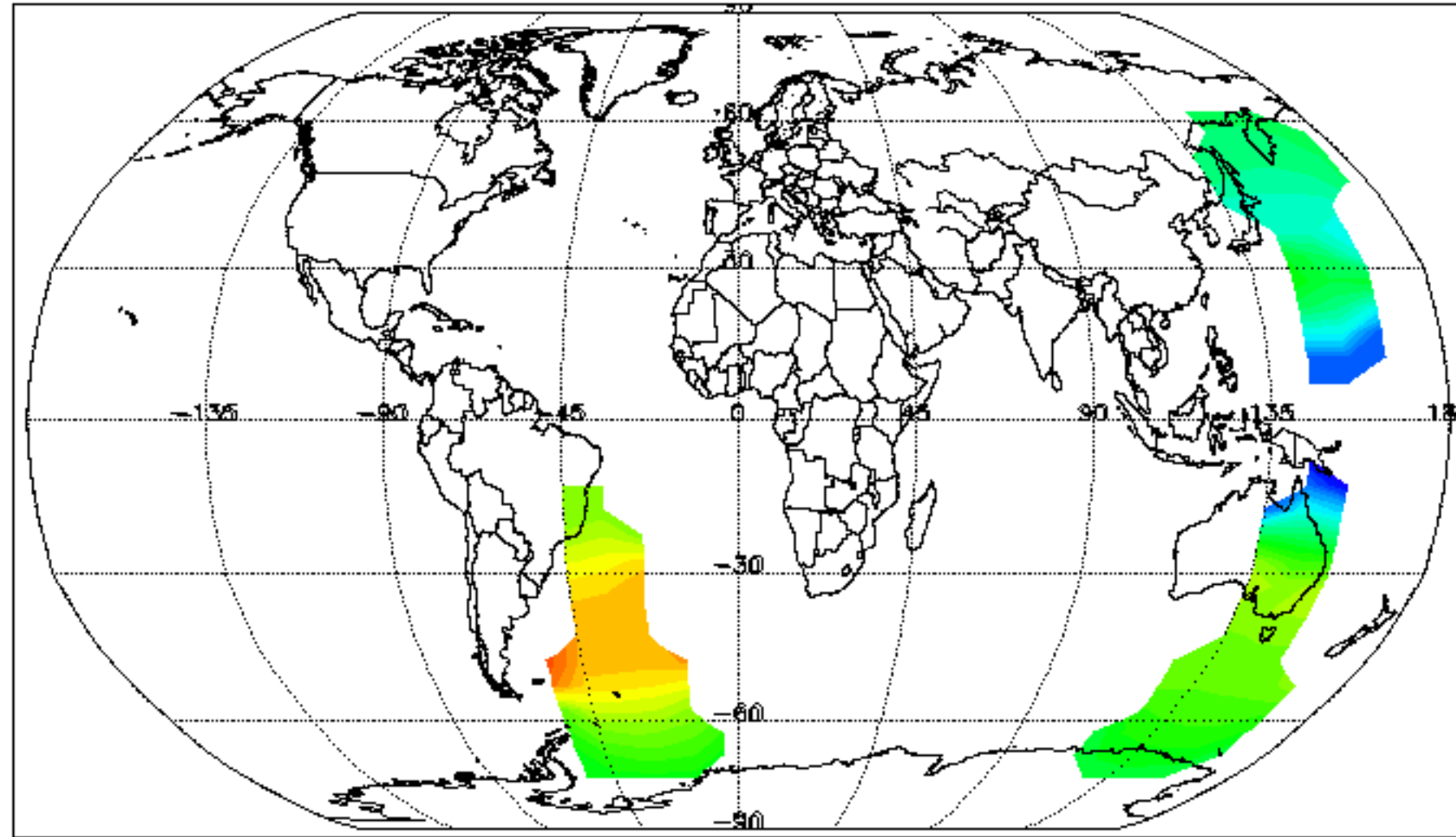
O3 (ppm) at: 410 K (16km, 100hPa). Daily mean: 20-DEC-2011



HNO<sub>3</sub> (ppb) at: 410 K (16km, 100hPa). Daily mean: 20-DEC-2011

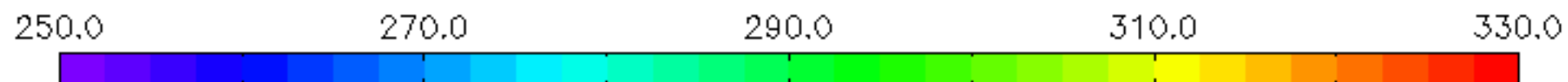
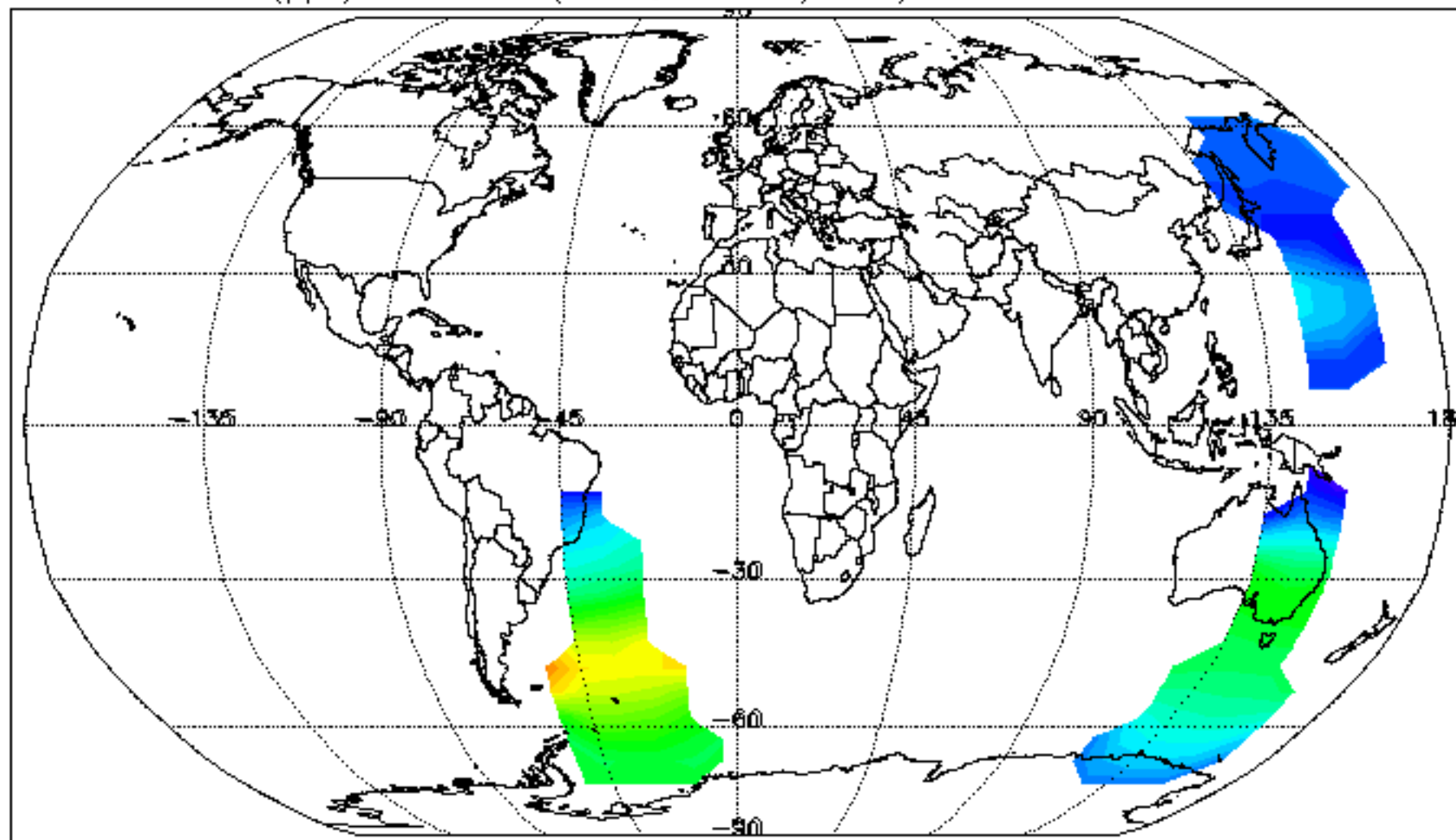


CH<sub>4</sub> (ppm) at: 410 K (16km, 100hPa). Daily mean: 20-DEC-2011

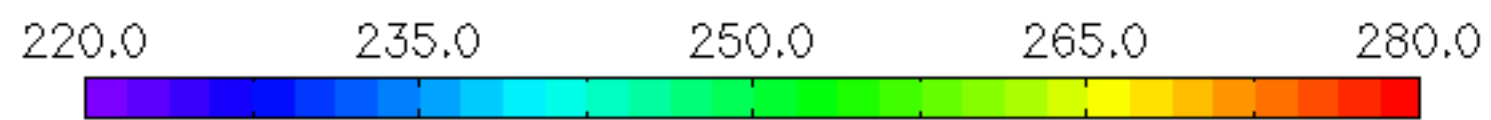
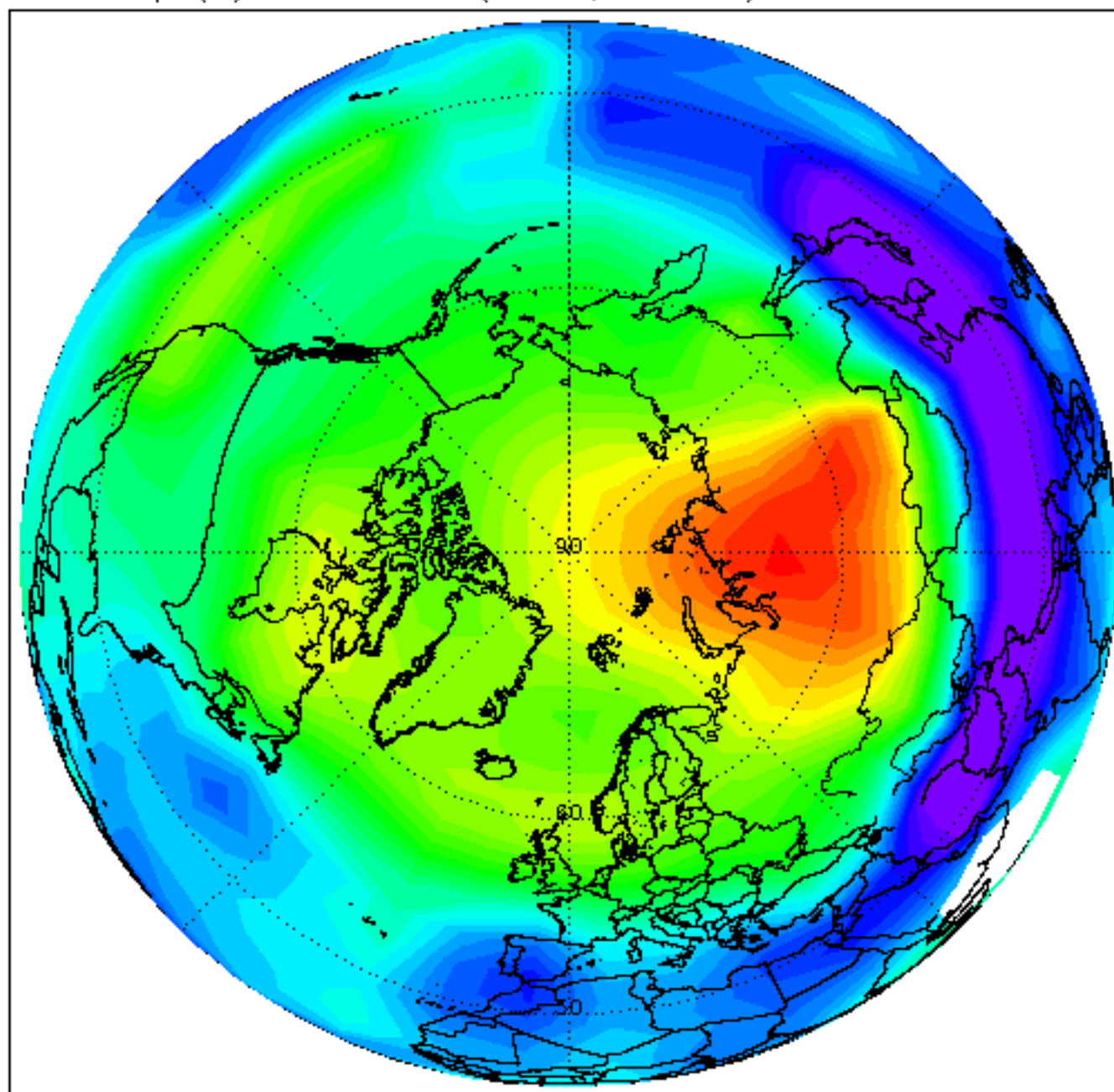




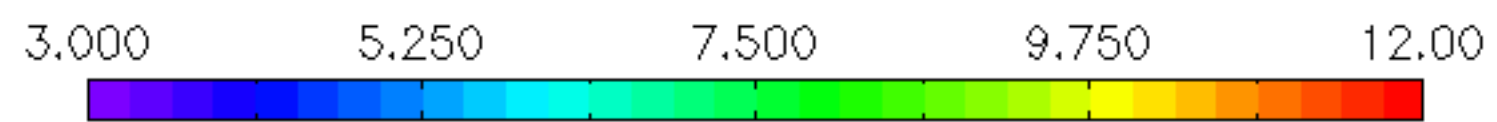
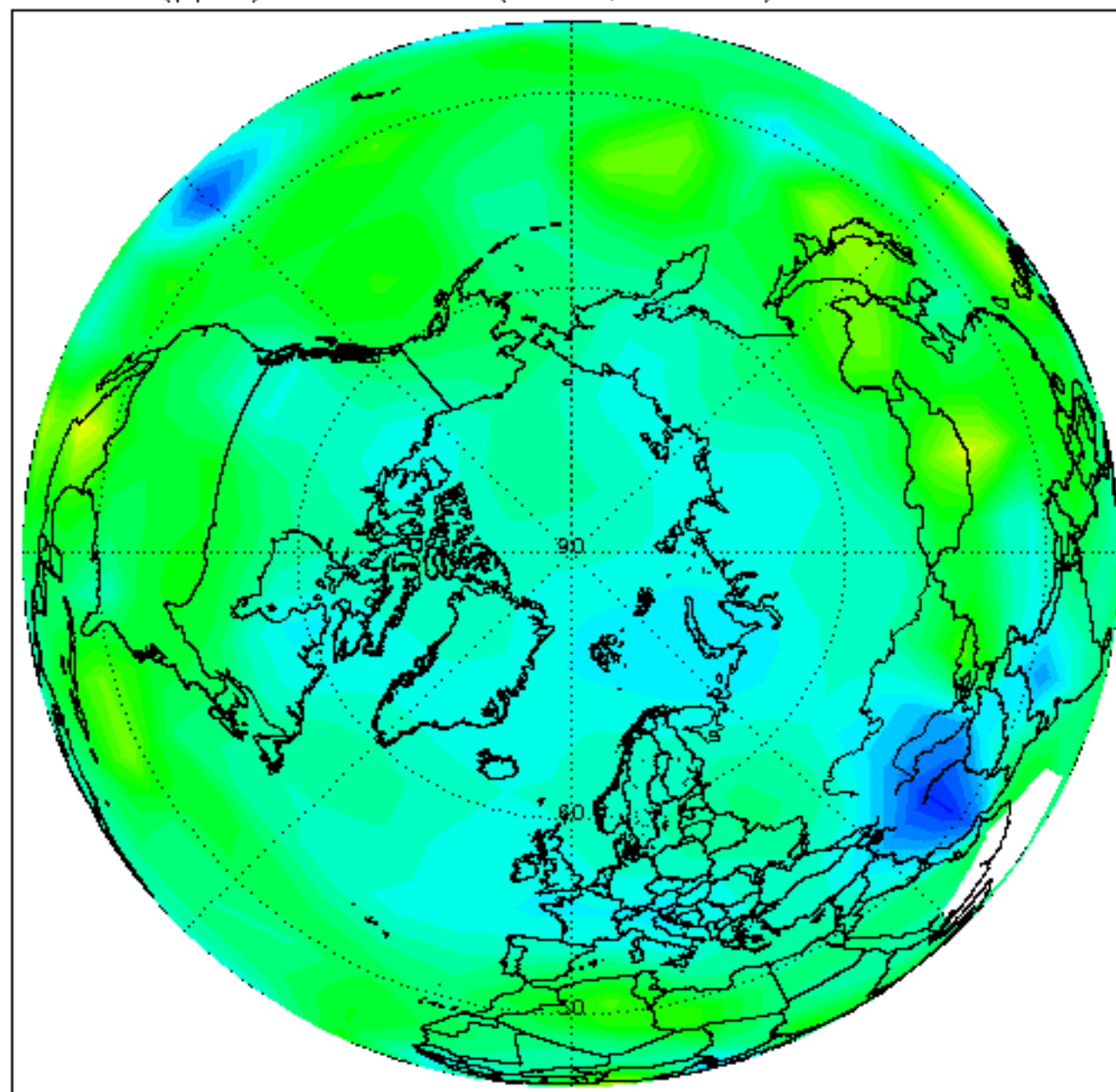
N<sub>2</sub>O (ppb) at: 410 K (16km, 100hPa). Daily mean: 20-DEC-2011



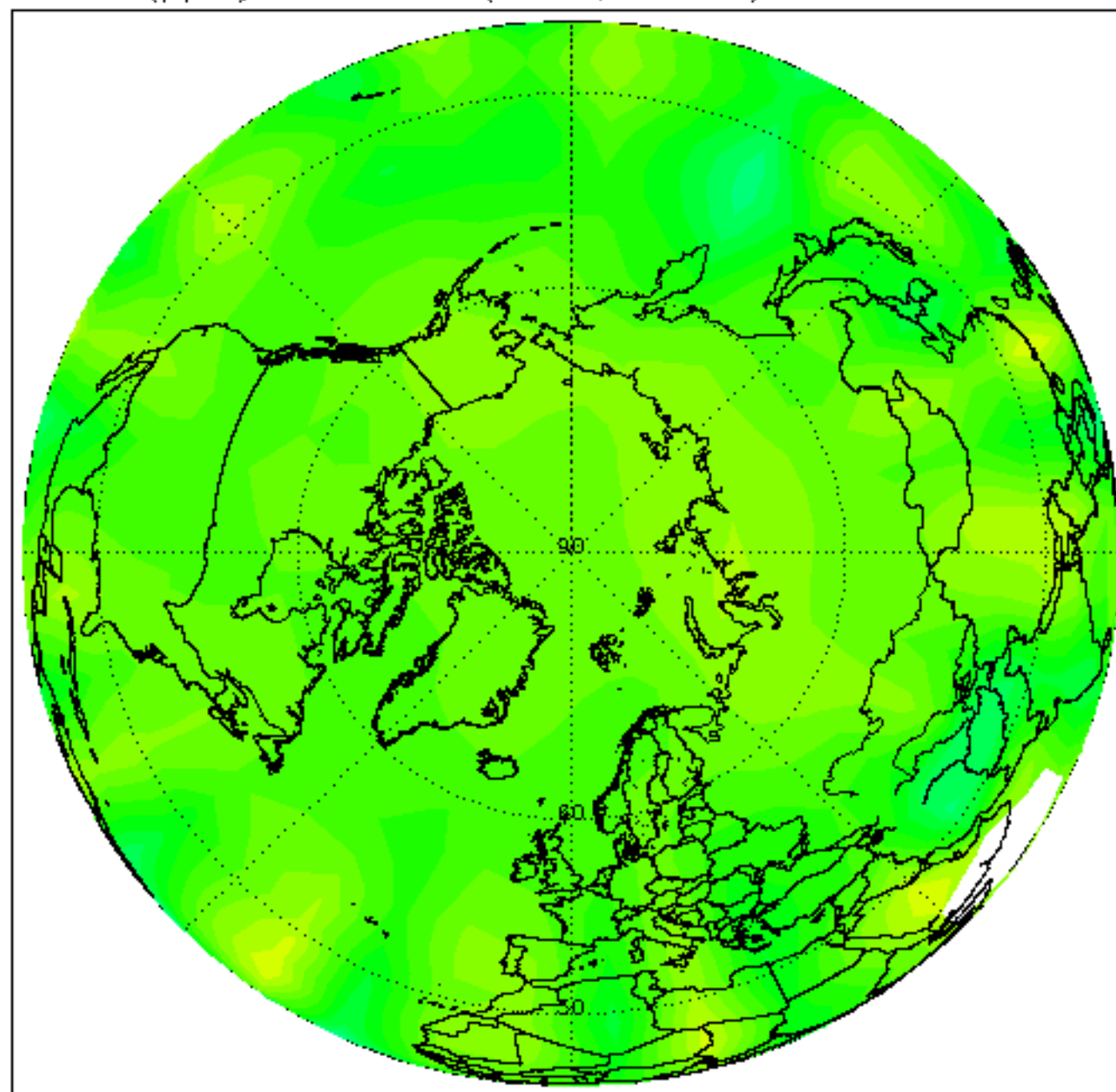
Temp (K) at 2700 K (60km, 0.2hPa). 20-DEC-2011



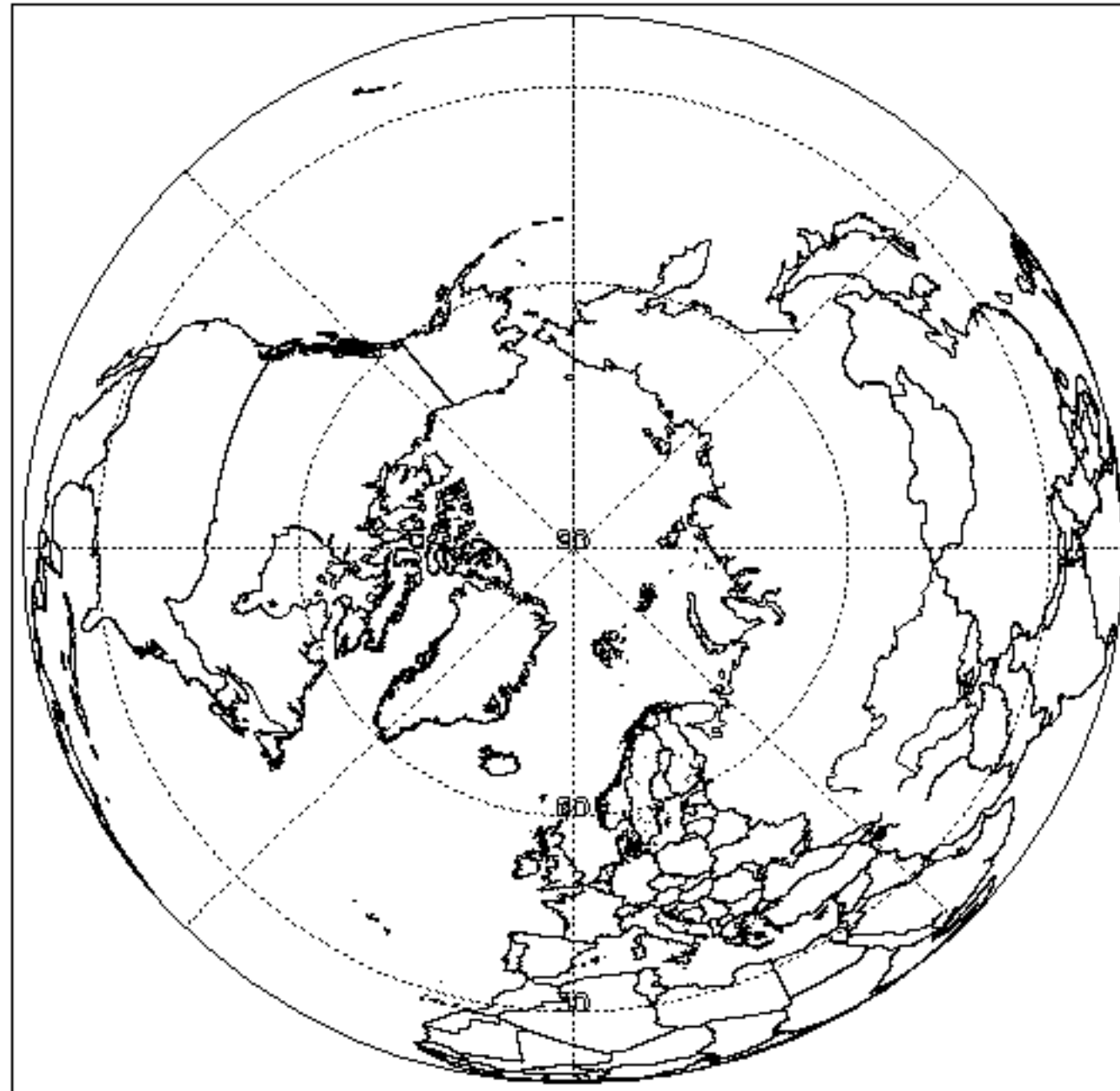
H<sub>2</sub>O (ppm) at 2700 K (60km, 0.2hPa). 20-DEC-2011



O3 (ppm) at 2700 K (60km, 0.2hPa). 20-DEC-2011

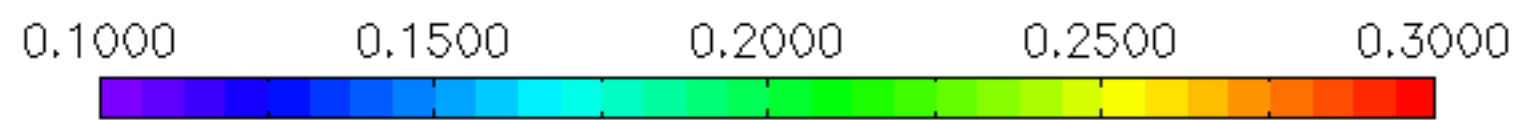
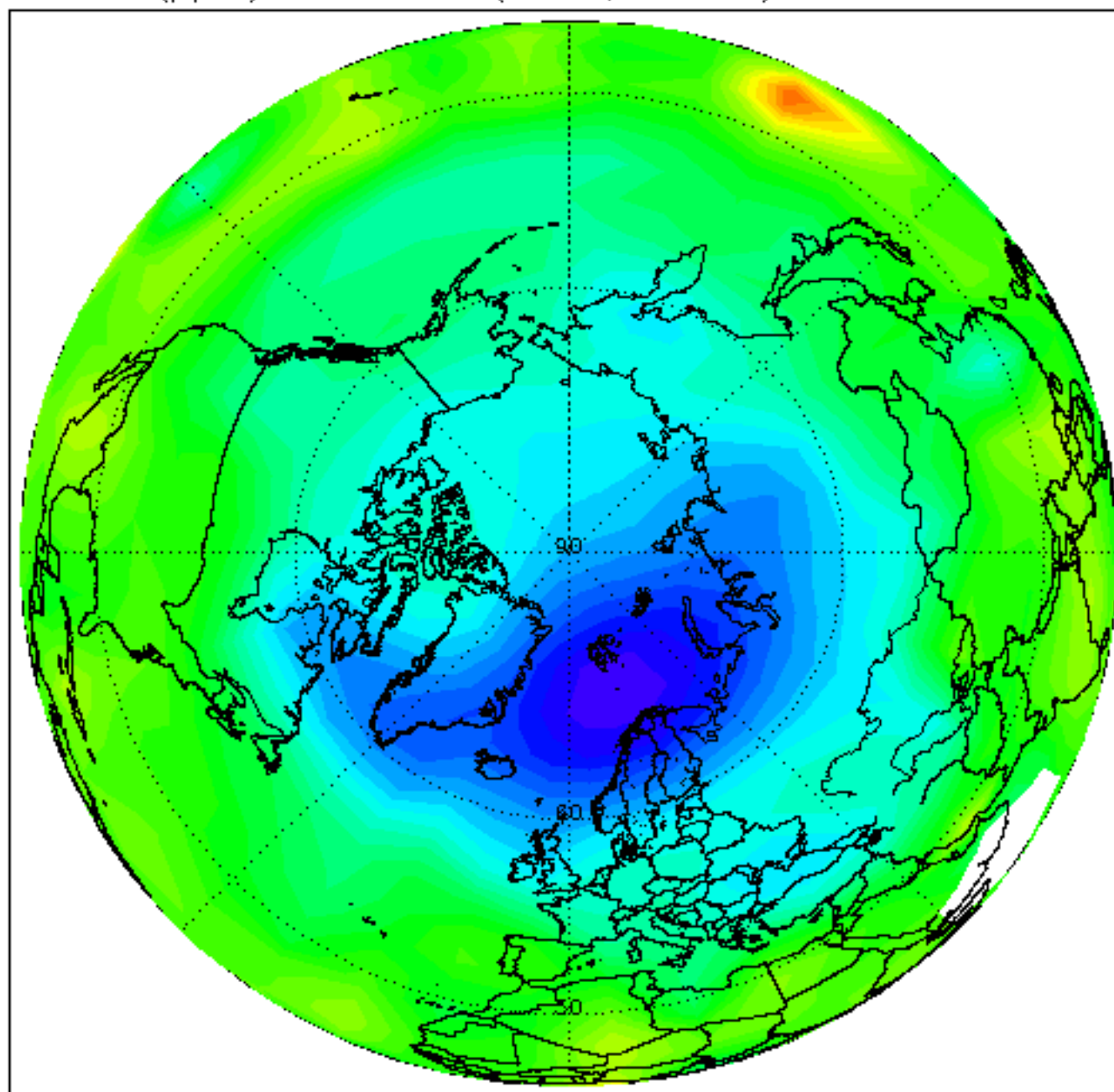


HNO<sub>3</sub> (ppb) at 2700 K (60km, 0.2hPa). 20-DEC-2011



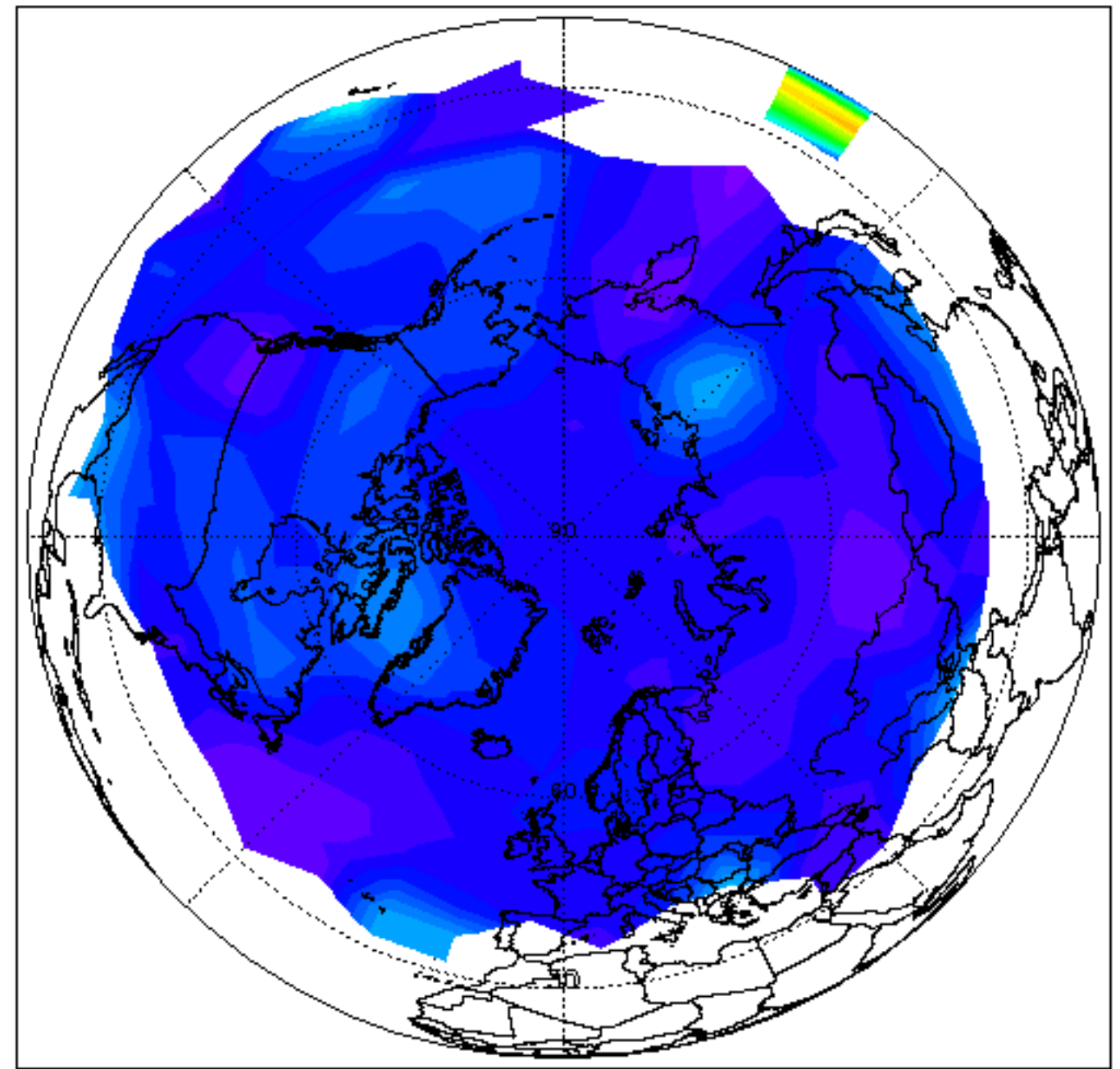


CH<sub>4</sub> (ppm) at 2700 K (60km, 0.2hPa). 20-DEC-2011





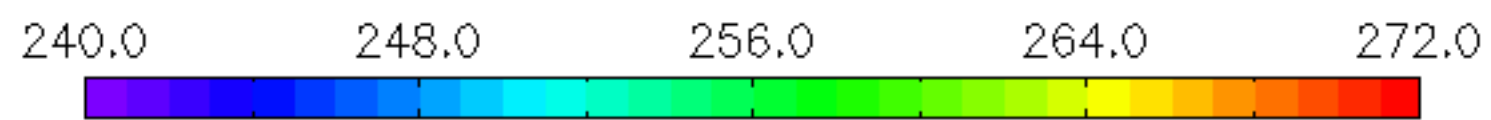
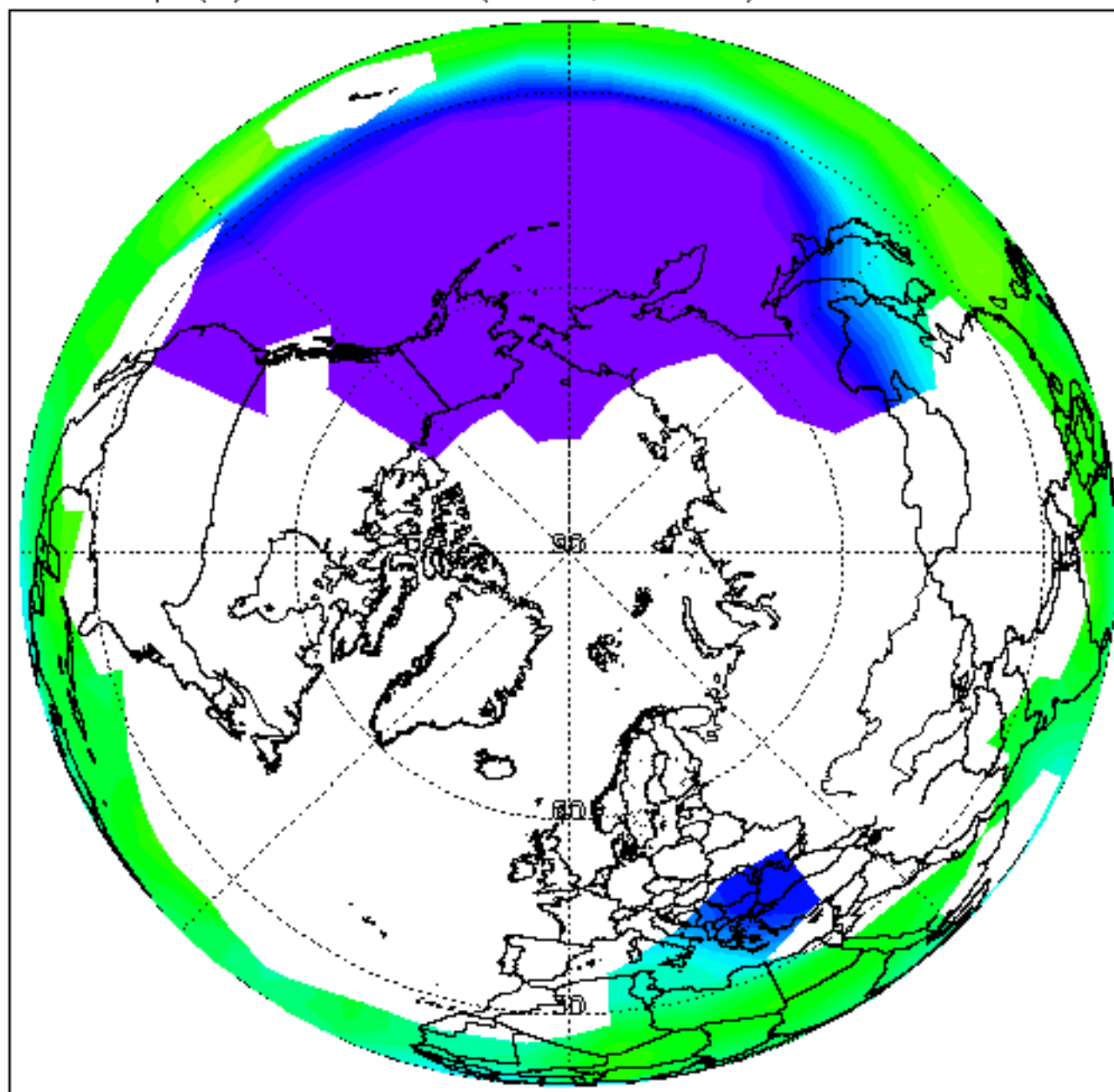
N<sub>2</sub>O (ppb) at 2700 K (60km, 0.2hPa). 20-DEC-2011



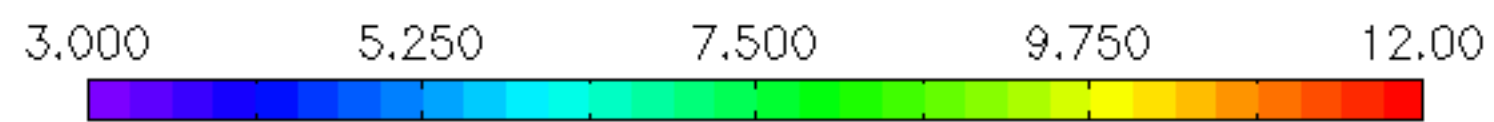
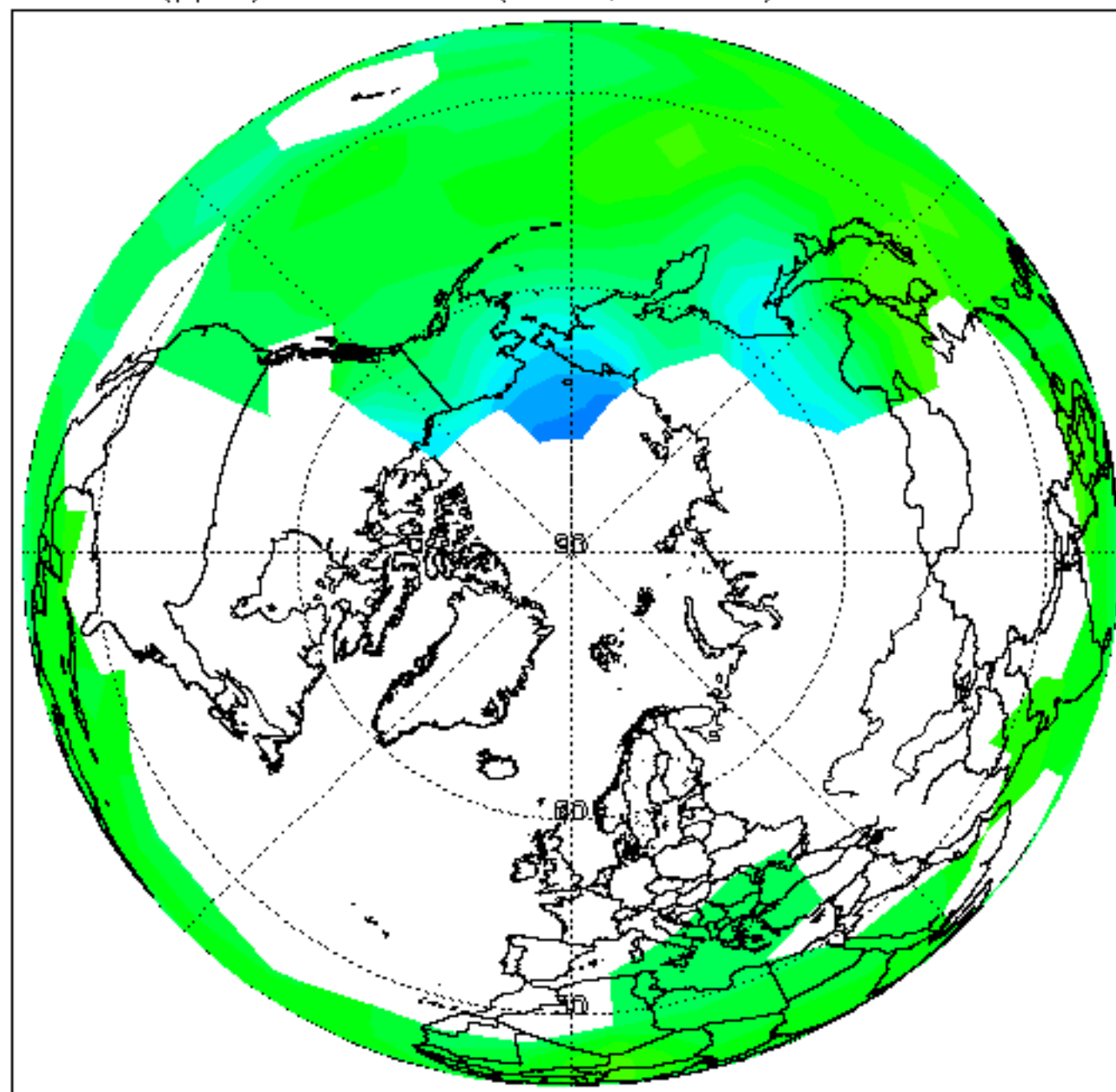
0.000      1.250      2.500      3.750      5.000



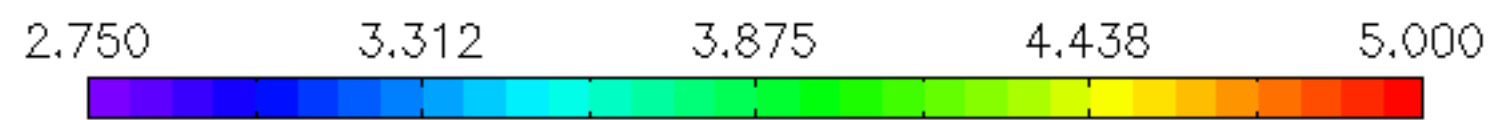
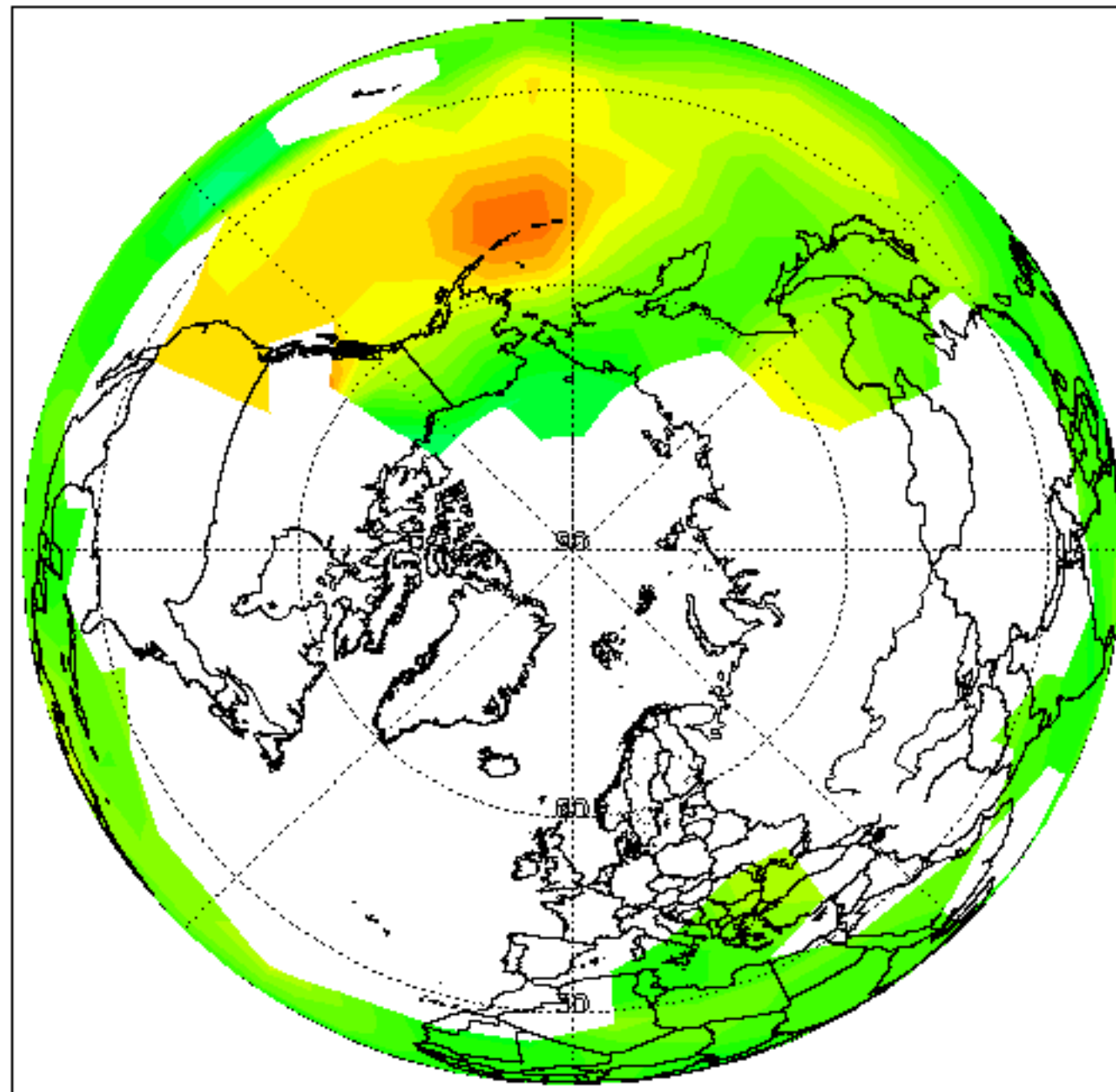
Temp (K) at 1700 K (45km, 1.5hPa). 20-DEC-2011



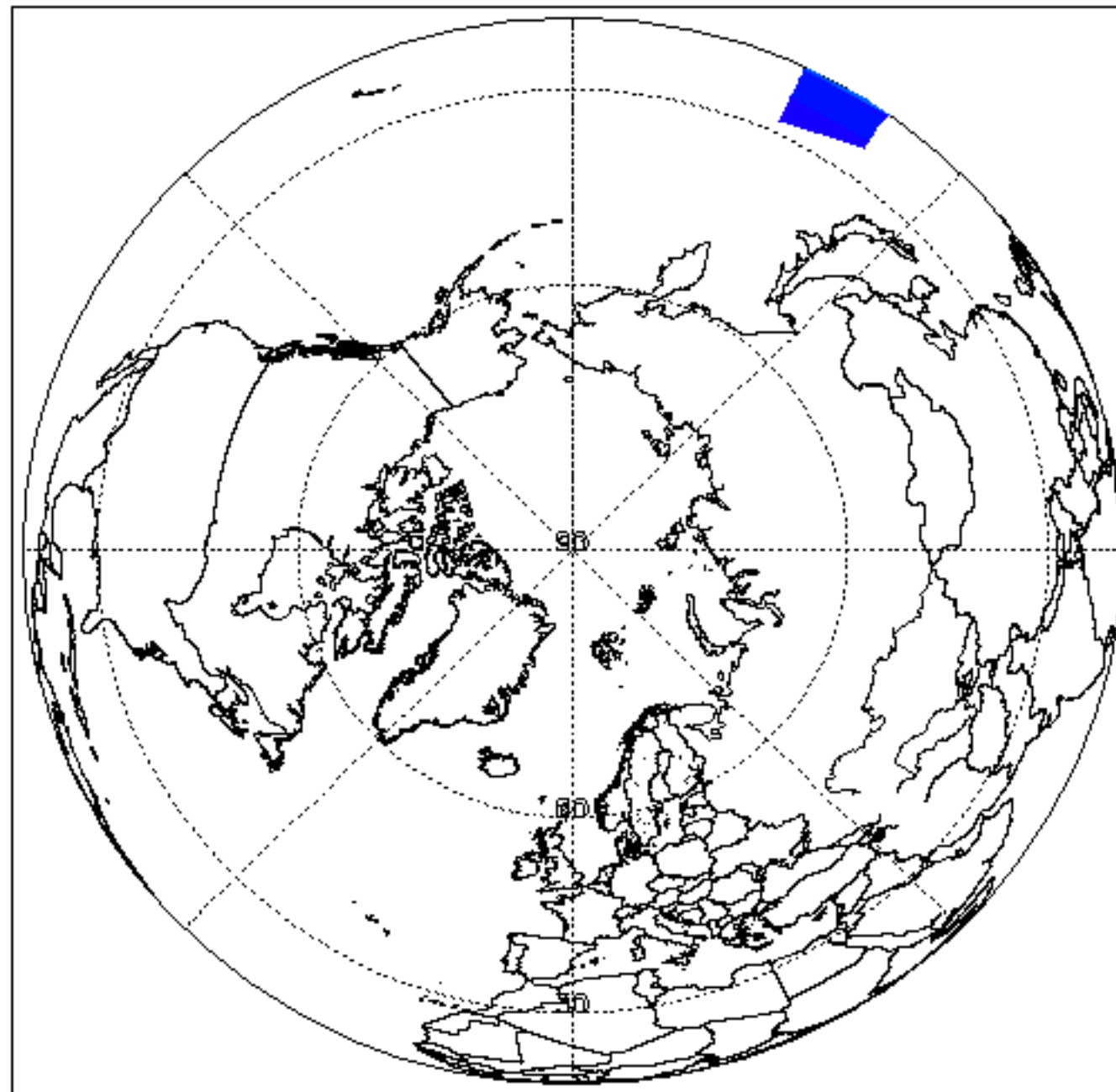
H<sub>2</sub>O (ppm) at 1700 K (45km, 1.5hPa). 20-DEC-2011



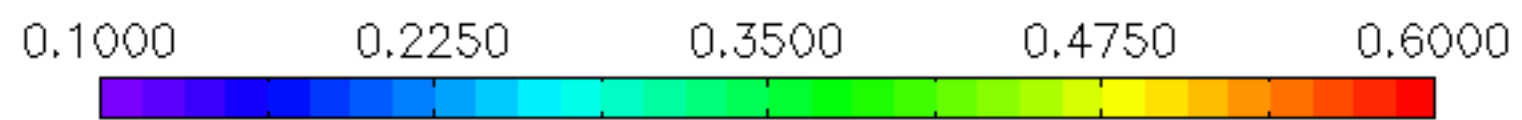
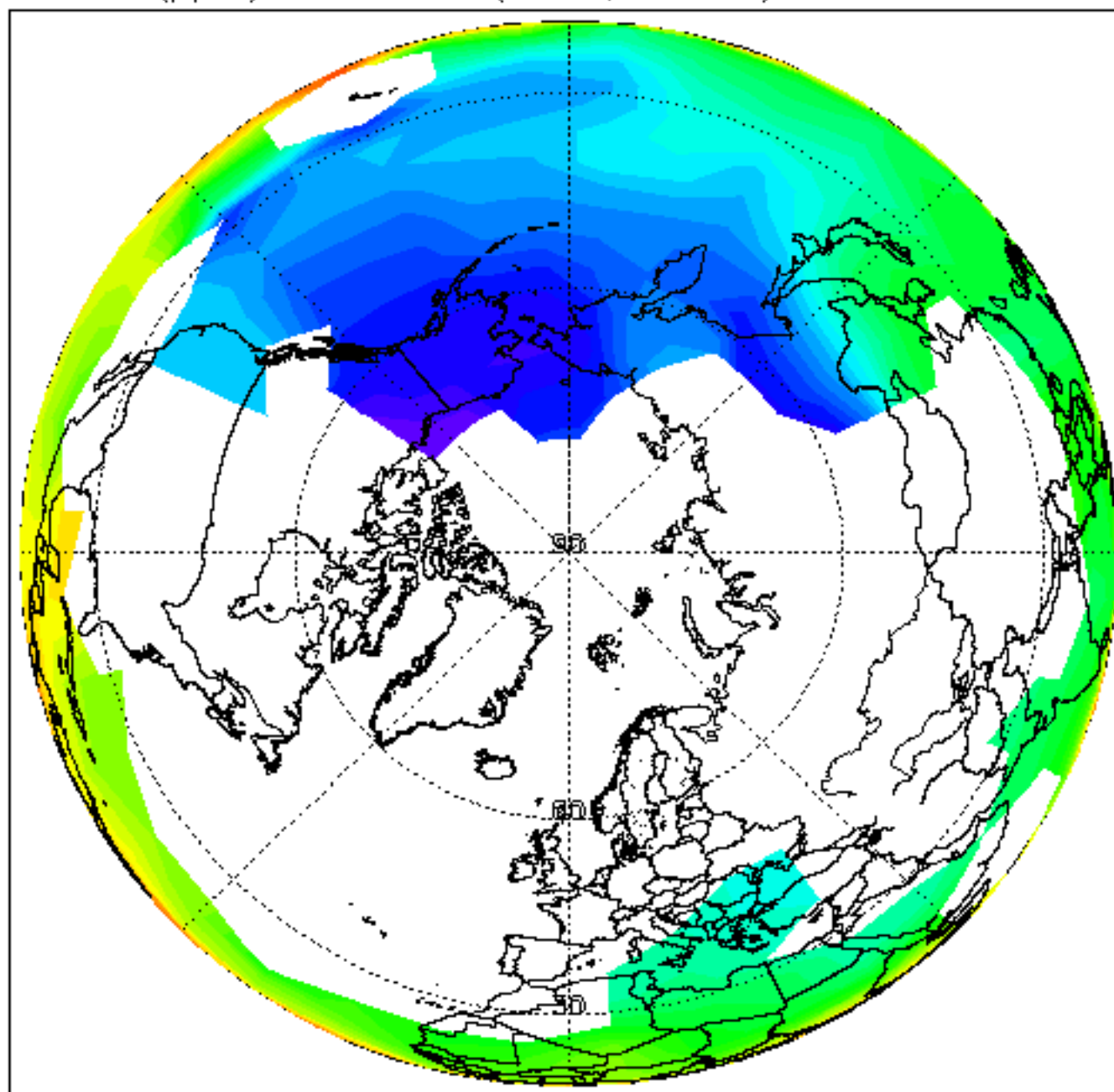
O<sub>3</sub> (ppm) at 1700 K (45km, 1.5hPa). 20-DEC-2011



HNO<sub>3</sub> (ppb) at 1700 K (45km, 1.5hPa). 20-DEC-2011

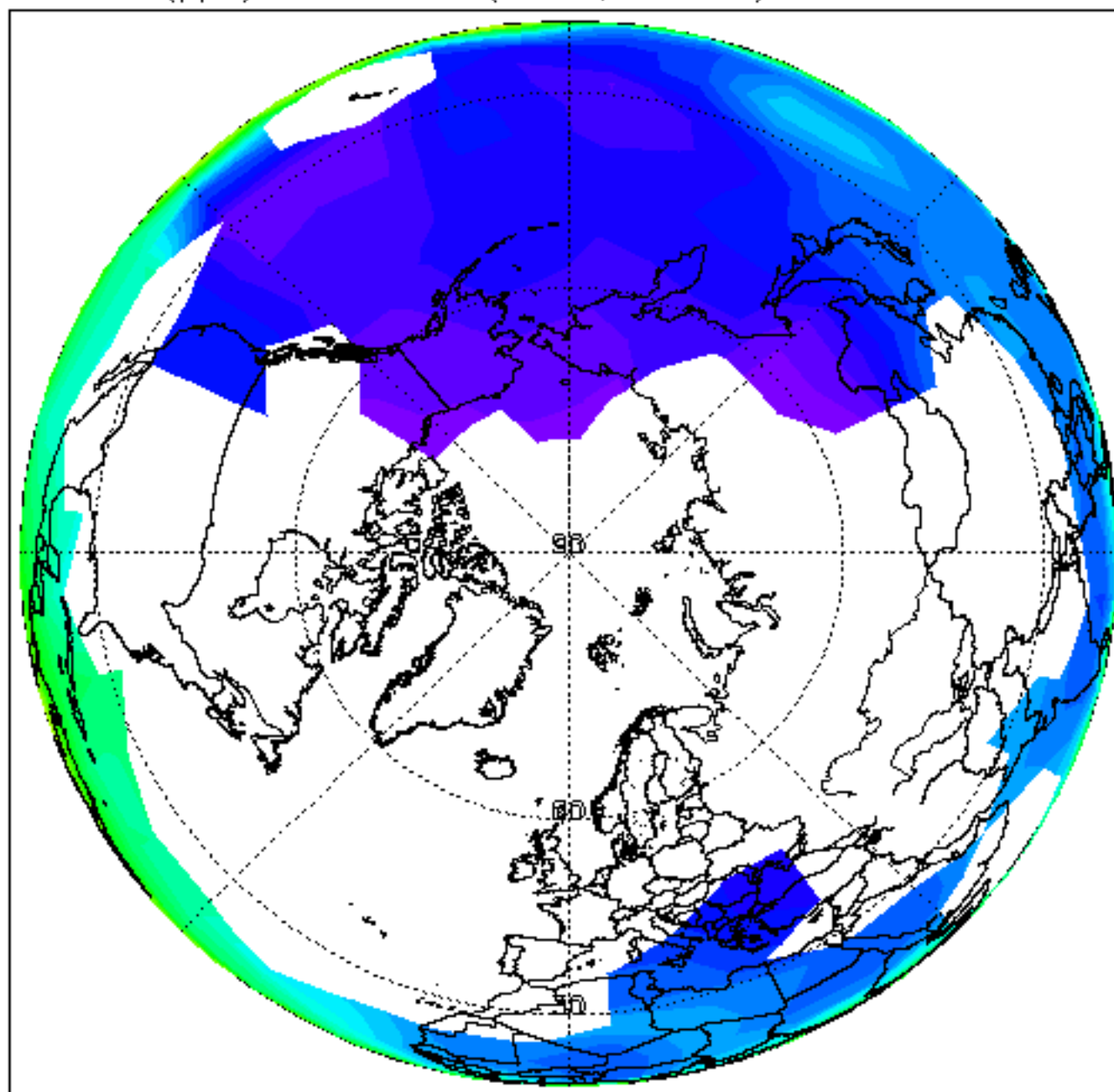


CH<sub>4</sub> (ppm) at 1700 K (45km, 1.5hPa). 20-DEC-2011

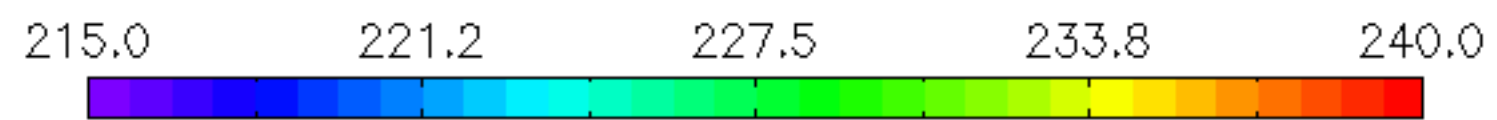
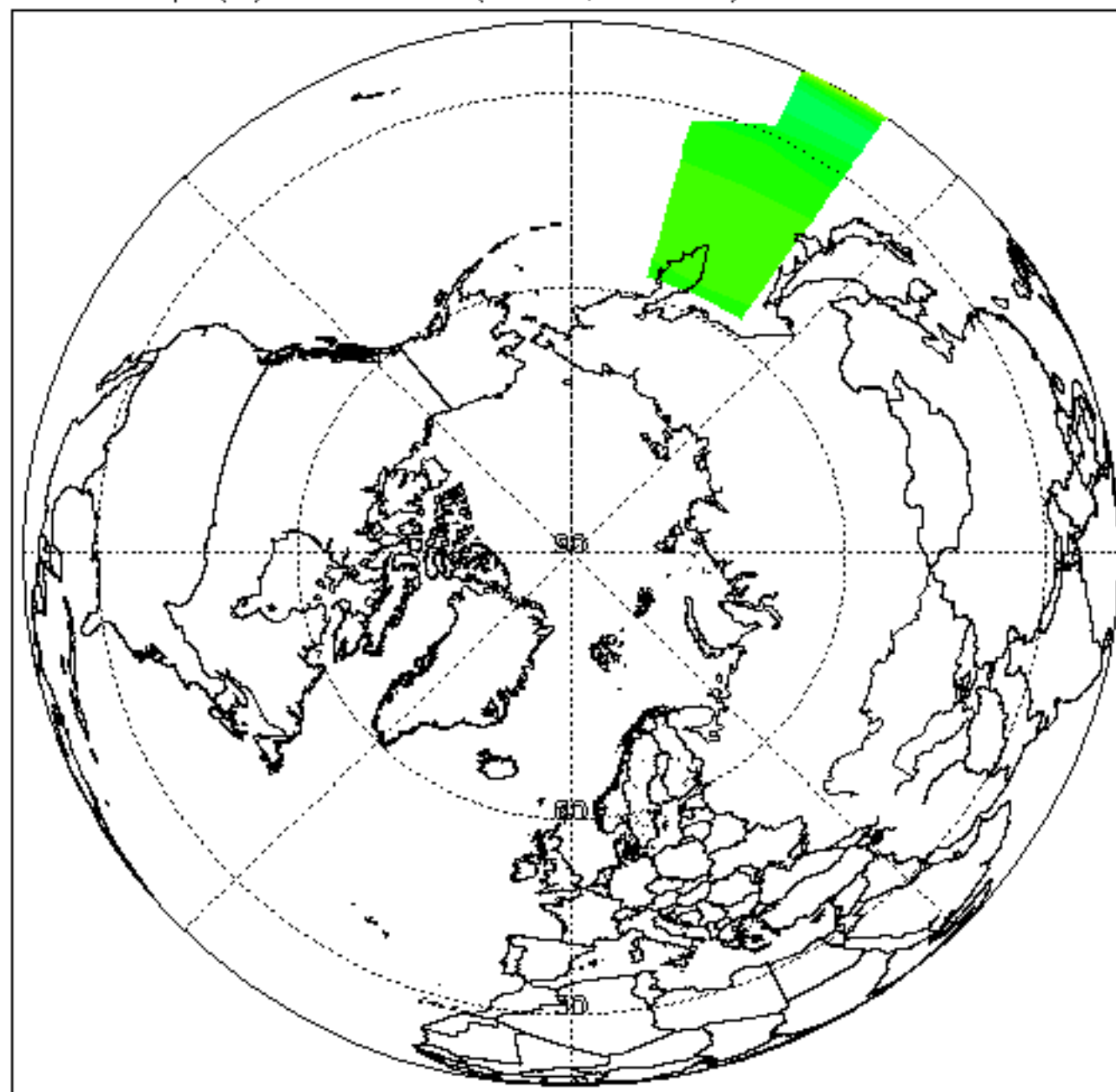




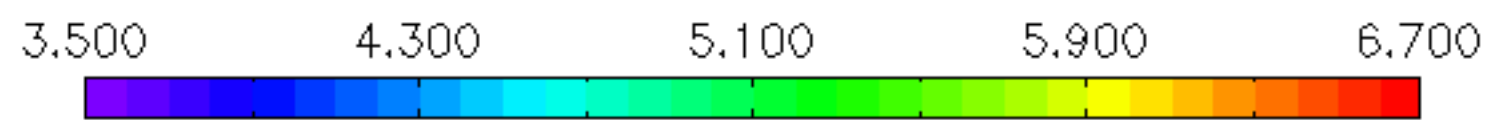
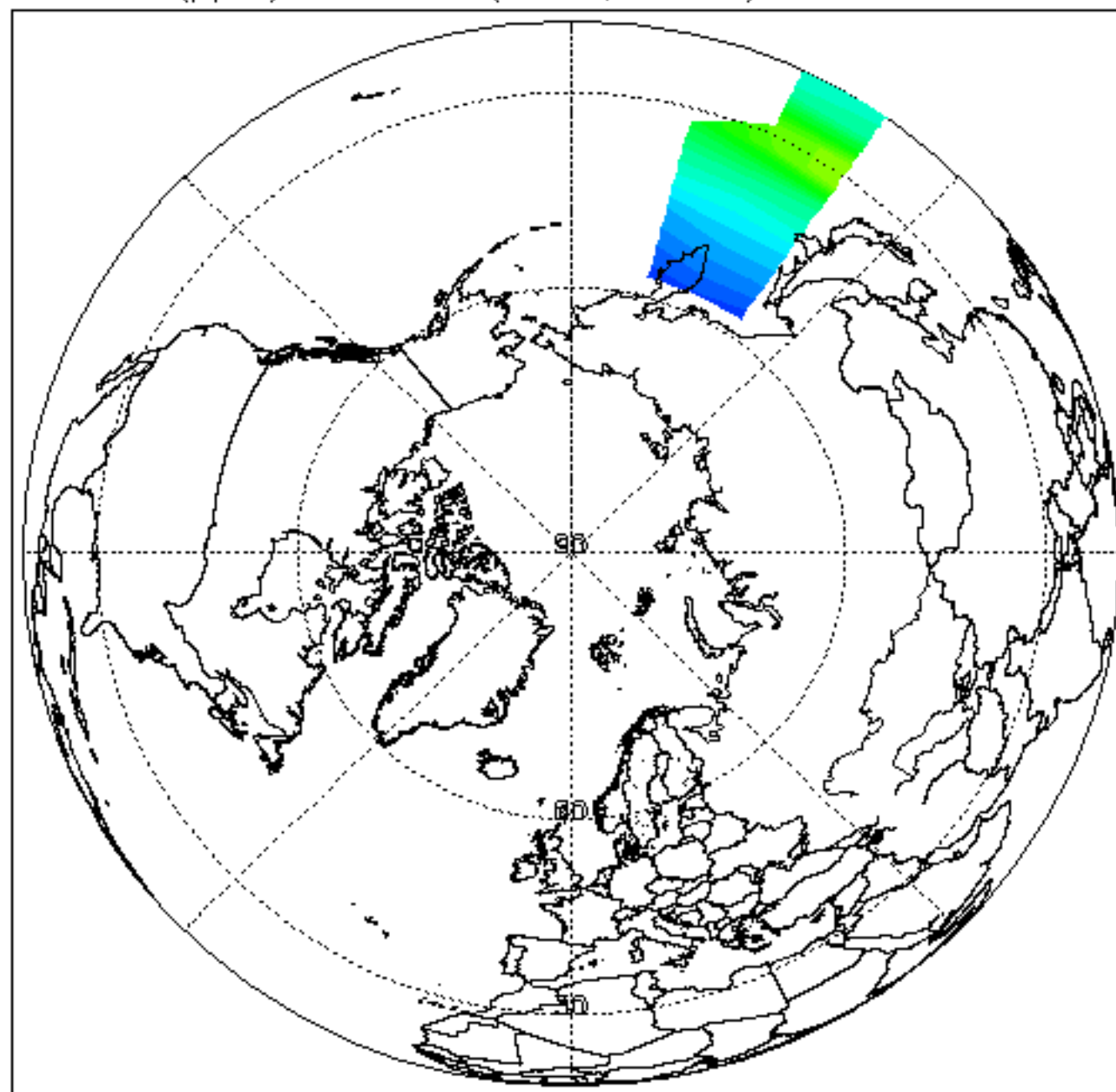
N<sub>2</sub>O (ppb) at 1700 K (45km, 1.5hPa). 20-DEC-2011



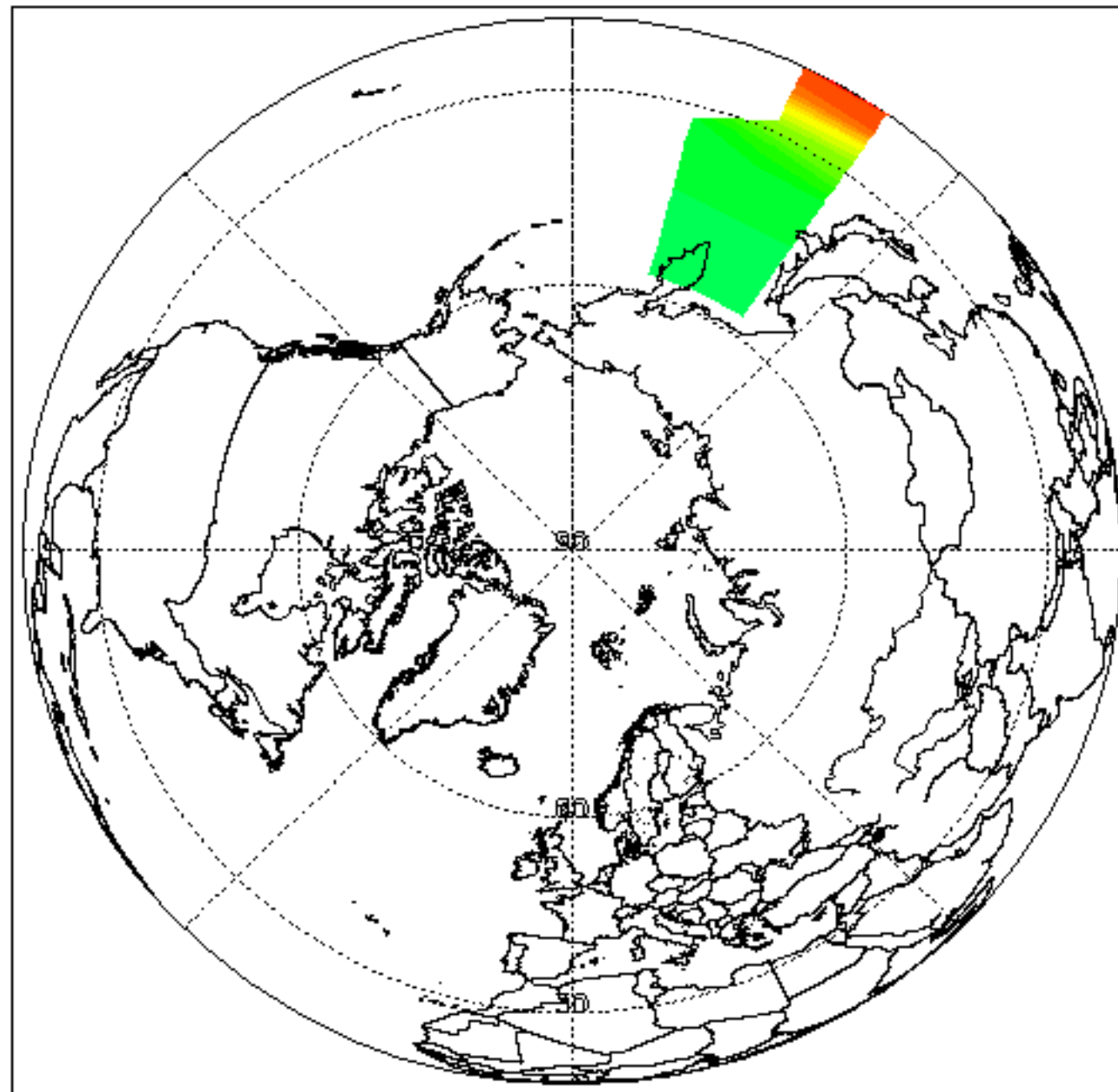
Temp (K) at 850 K (32km, 10hPa). 20-DEC-2011



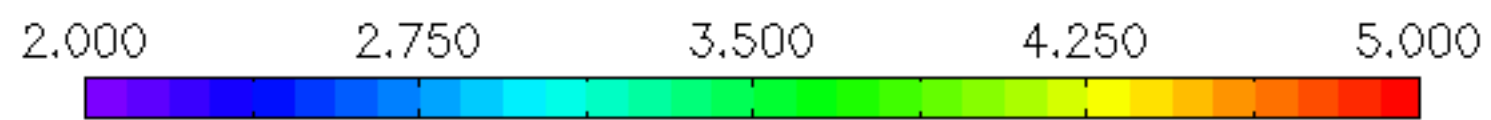
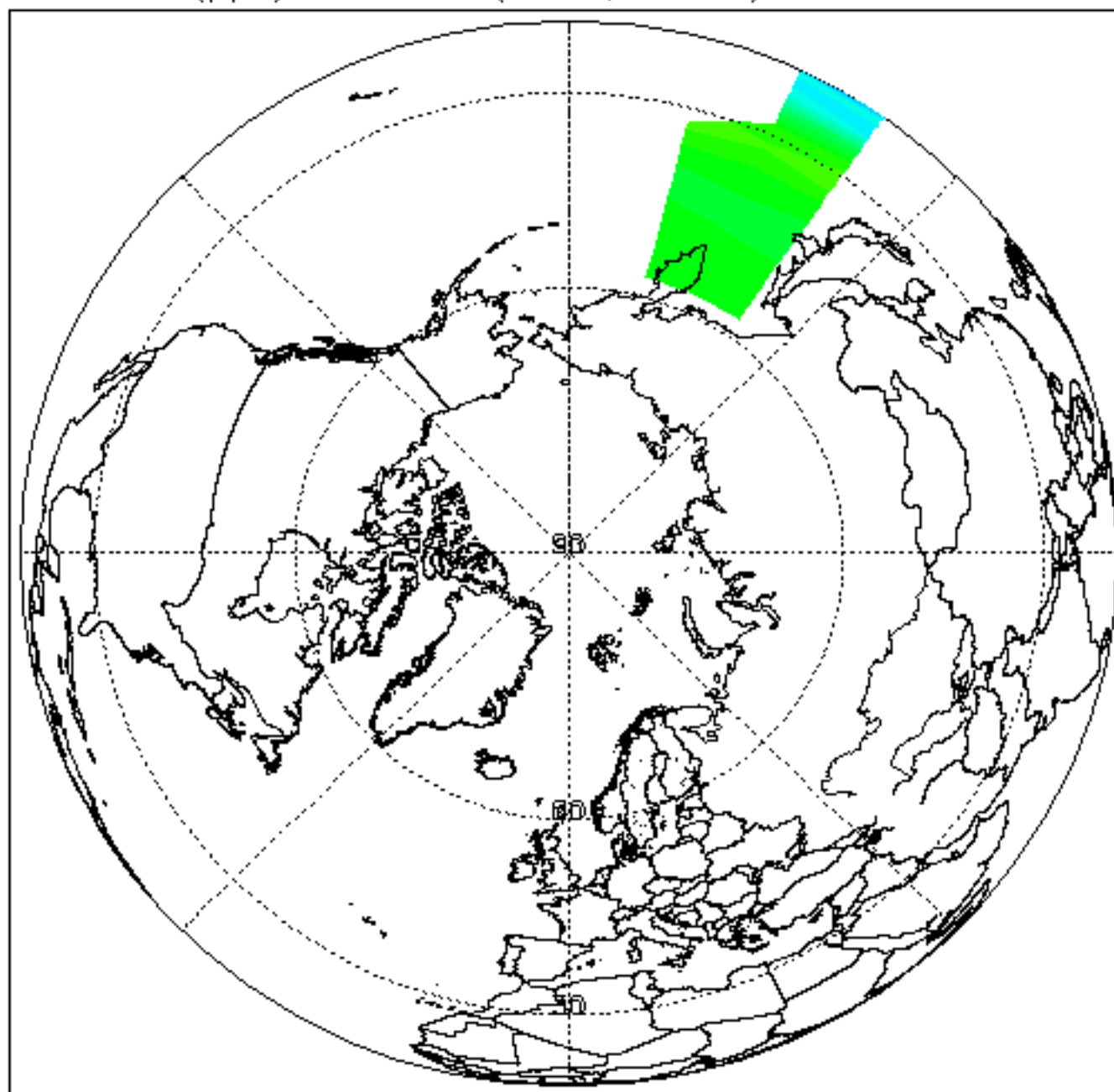
H<sub>2</sub>O (ppm) at 850 K (32km, 10hPa). 20-DEC-2011



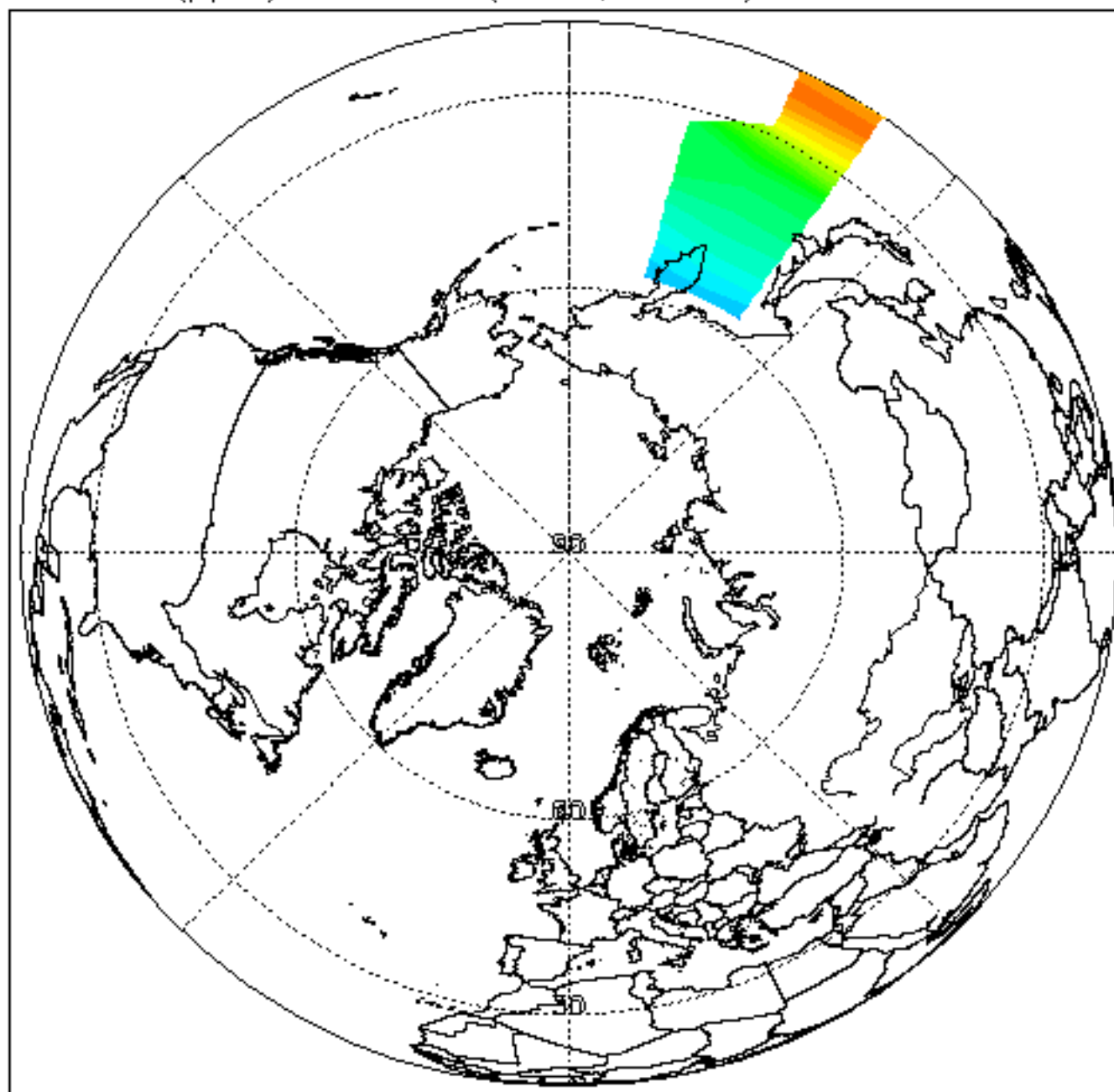
O<sub>3</sub> (ppm) at 850 K (32km, 10hPa). 20-DEC-2011



HNO<sub>3</sub> (ppb) at 850 K (32km, 10hPa). 20-DEC-2011

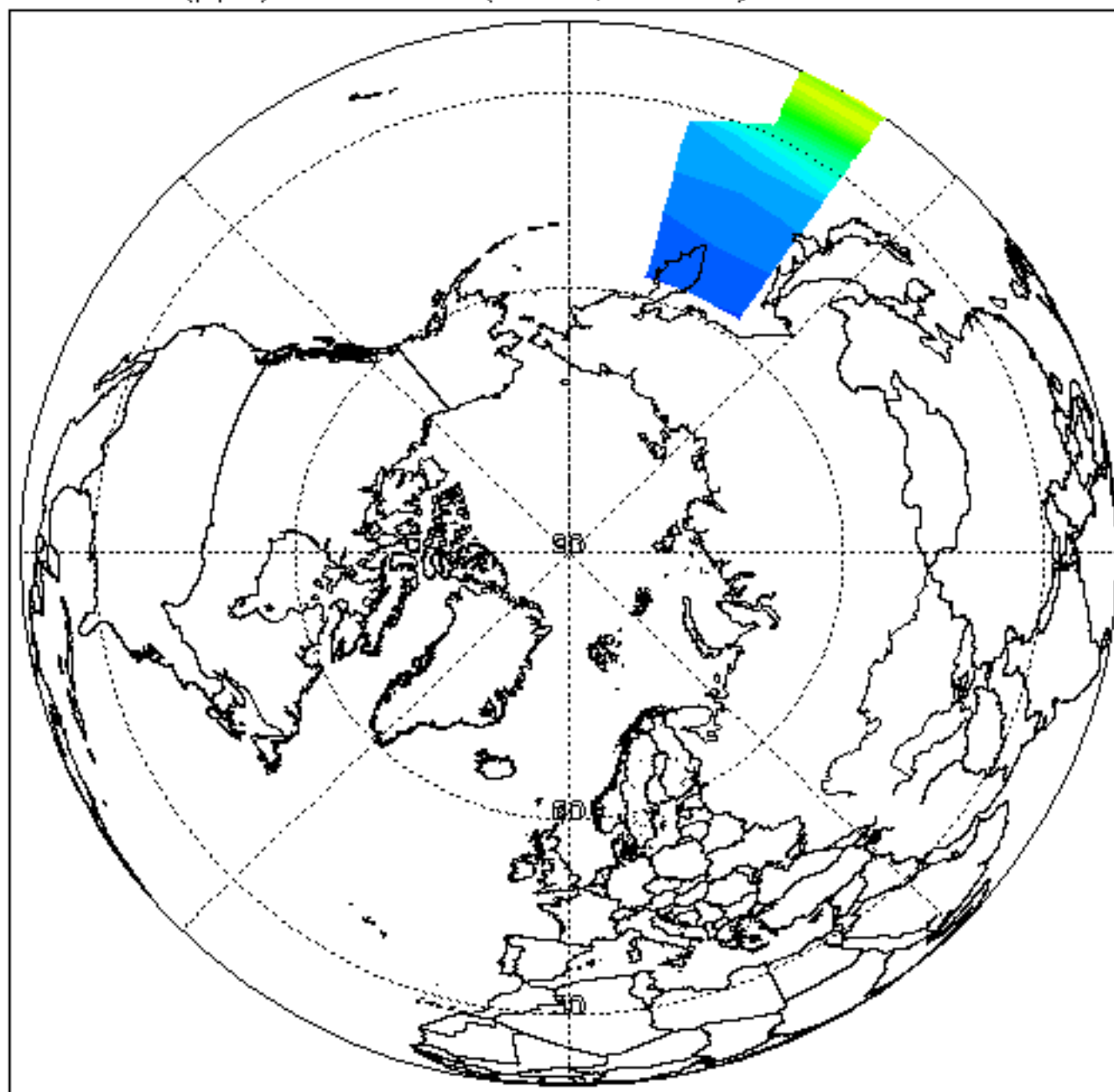


CH<sub>4</sub> (ppm) at 850 K (32km, 10hPa). 20-DEC-2011

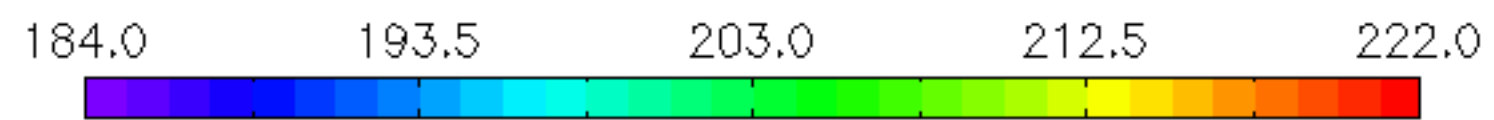
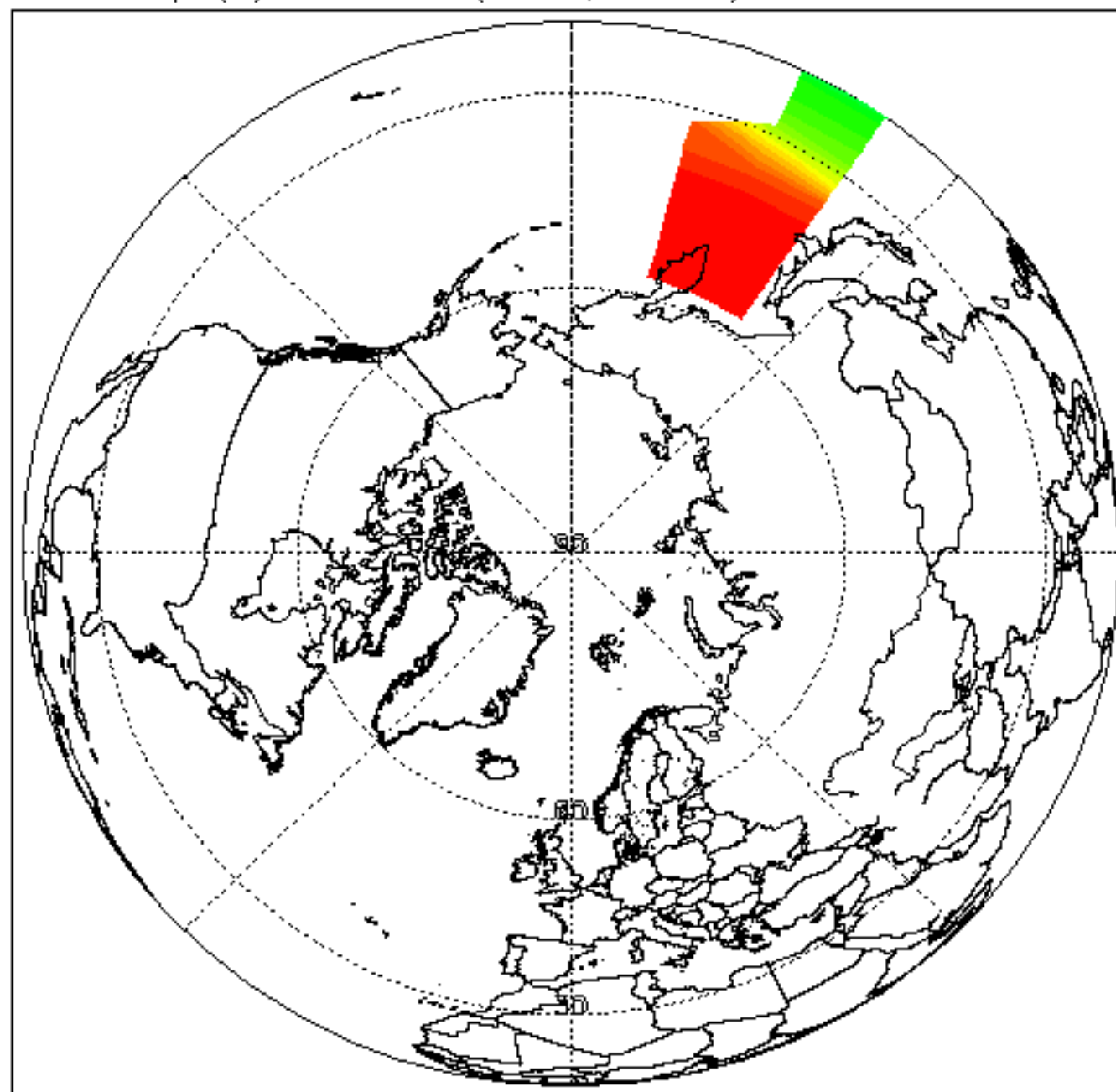




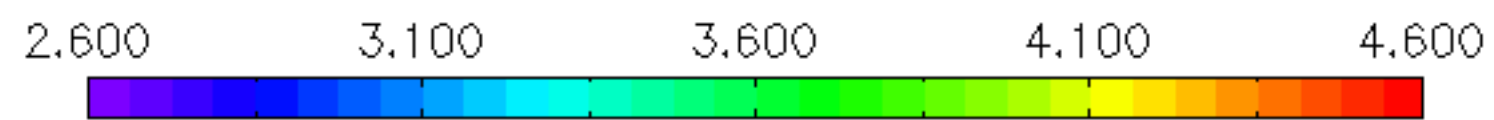
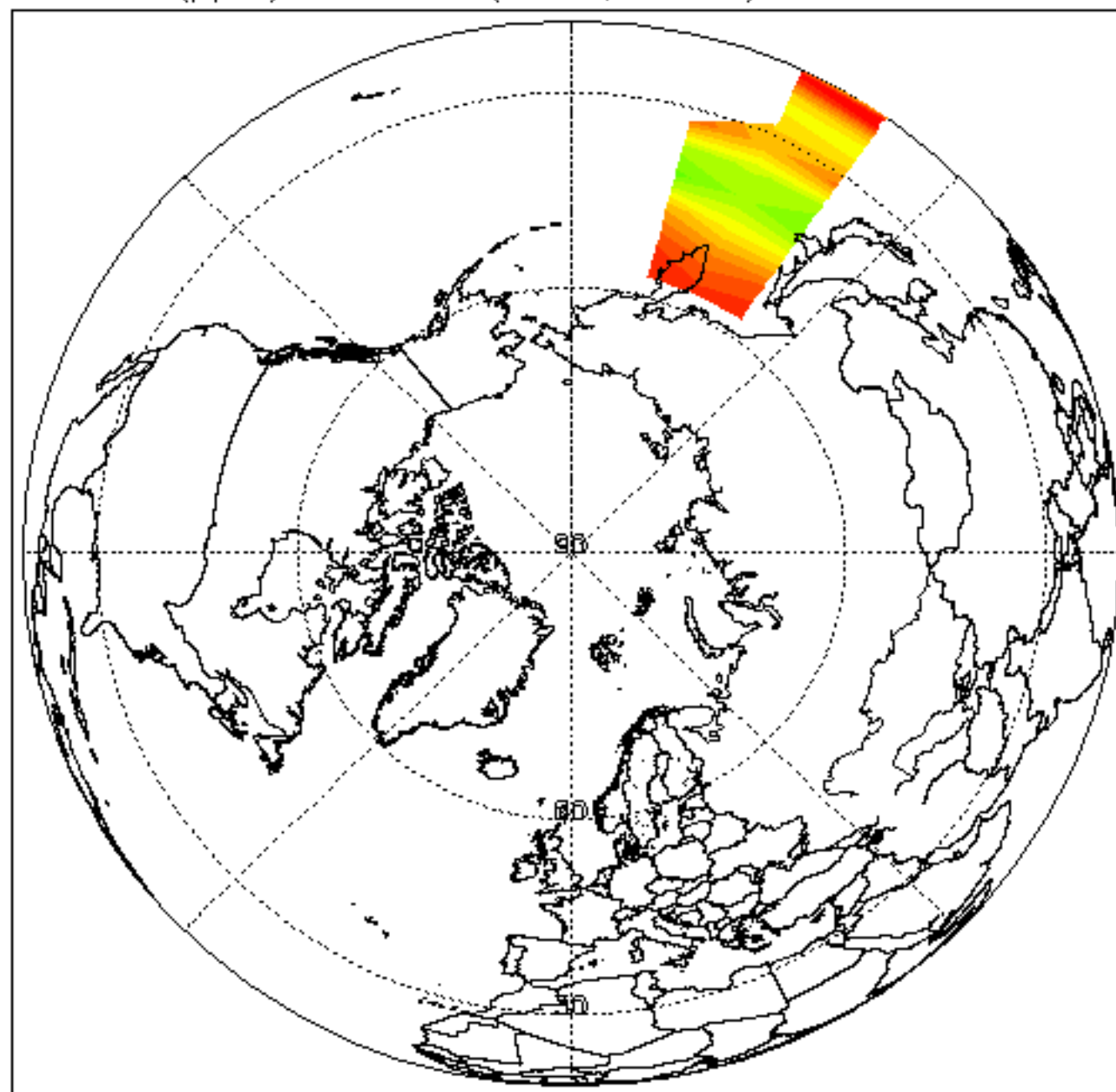
N<sub>2</sub>O (ppb) at 850 K (32km, 10hPa). 20-DEC-2011



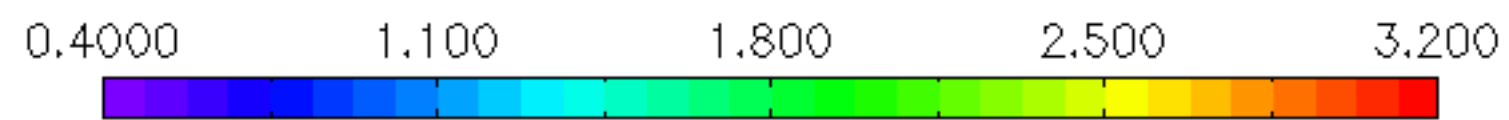
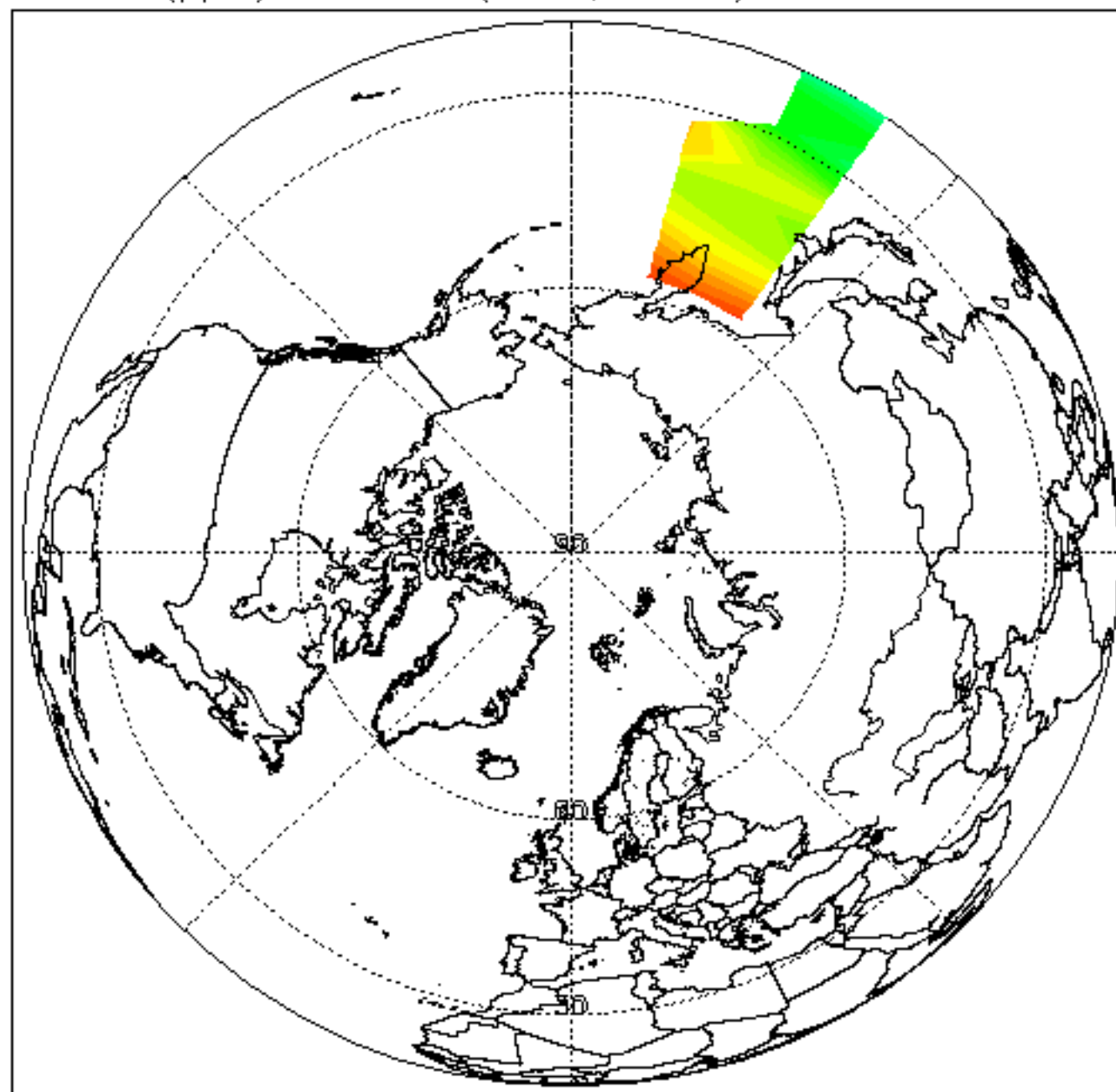
Temp (K) at 490 K (19km, 55hPa). 20-DEC-2011



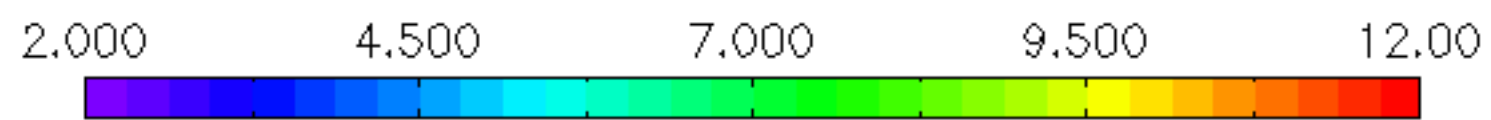
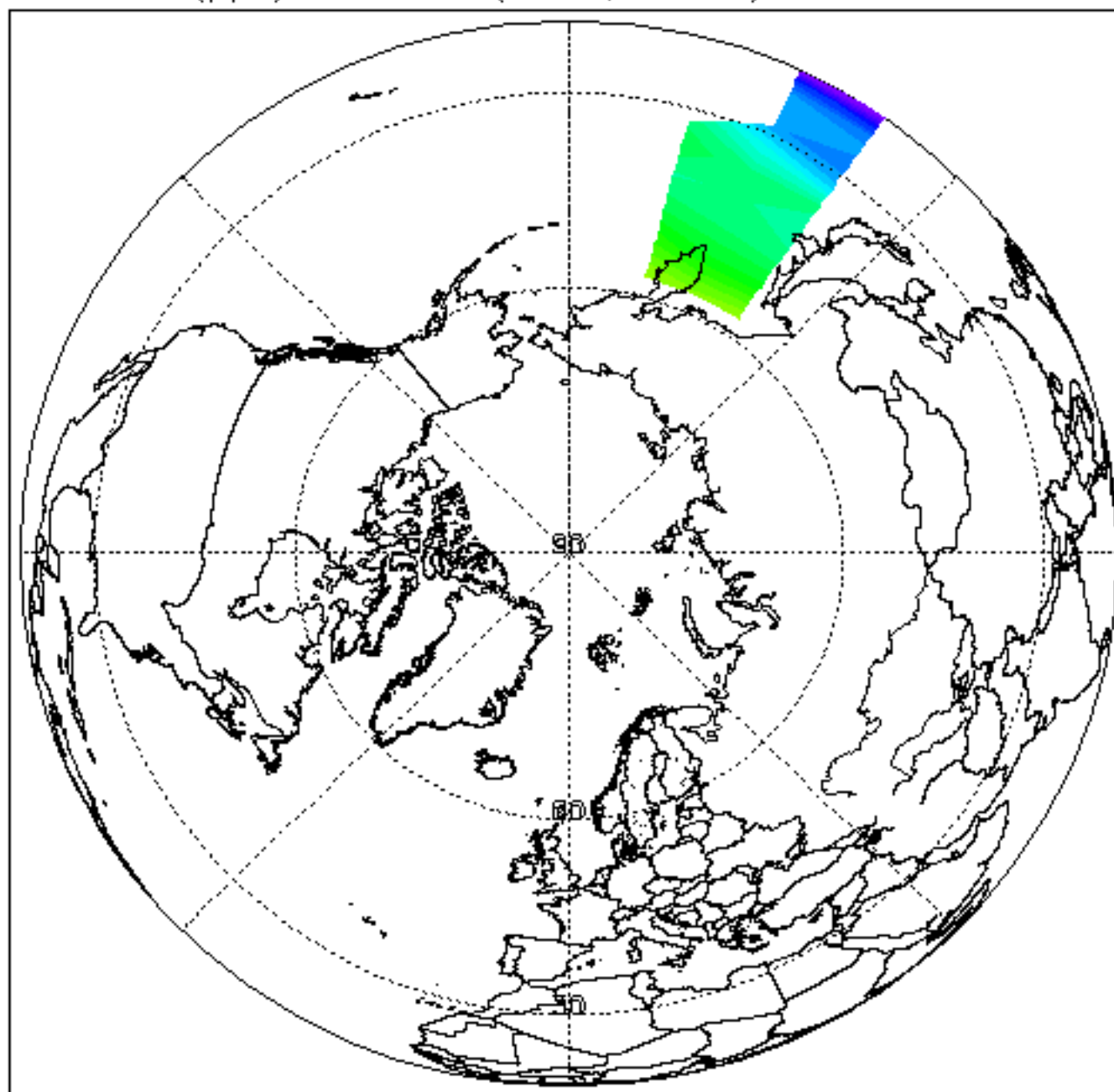
H<sub>2</sub>O (ppm) at 490 K (19km, 55hPa). 20-DEC-2011



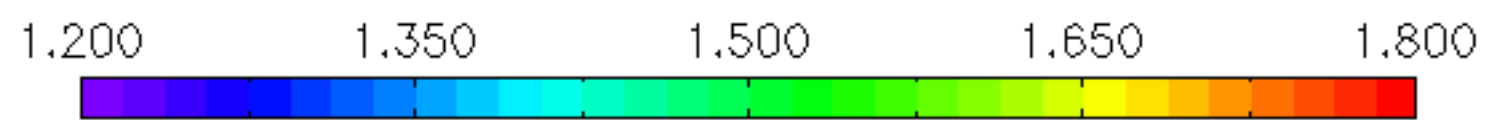
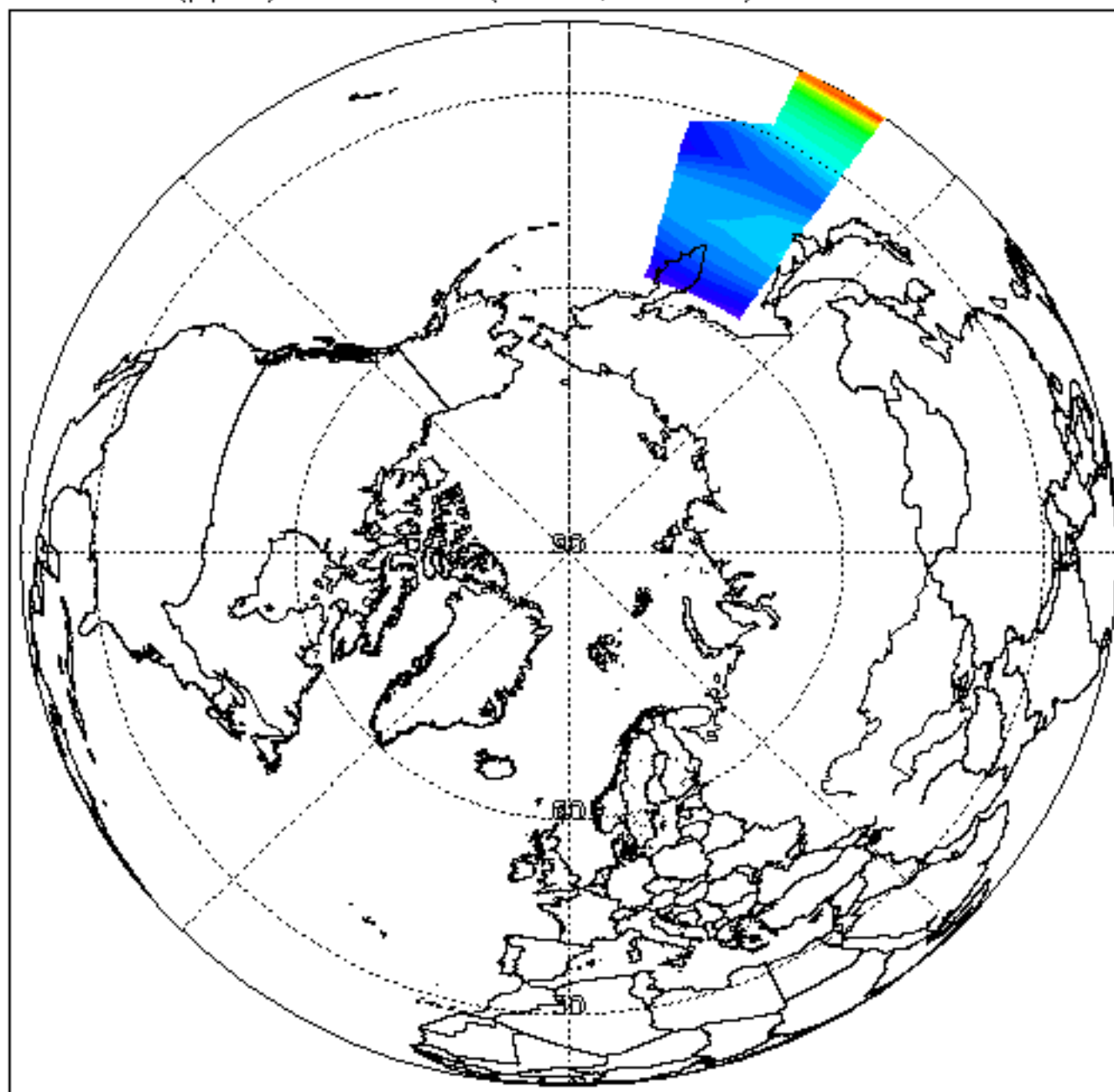
O<sub>3</sub> (ppm) at 490 K (19km, 55hPa). 20-DEC-2011



HNO<sub>3</sub> (ppb) at 490 K (19km, 55hPa). 20-DEC-2011

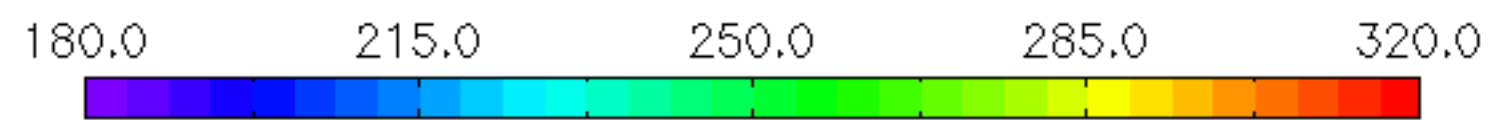
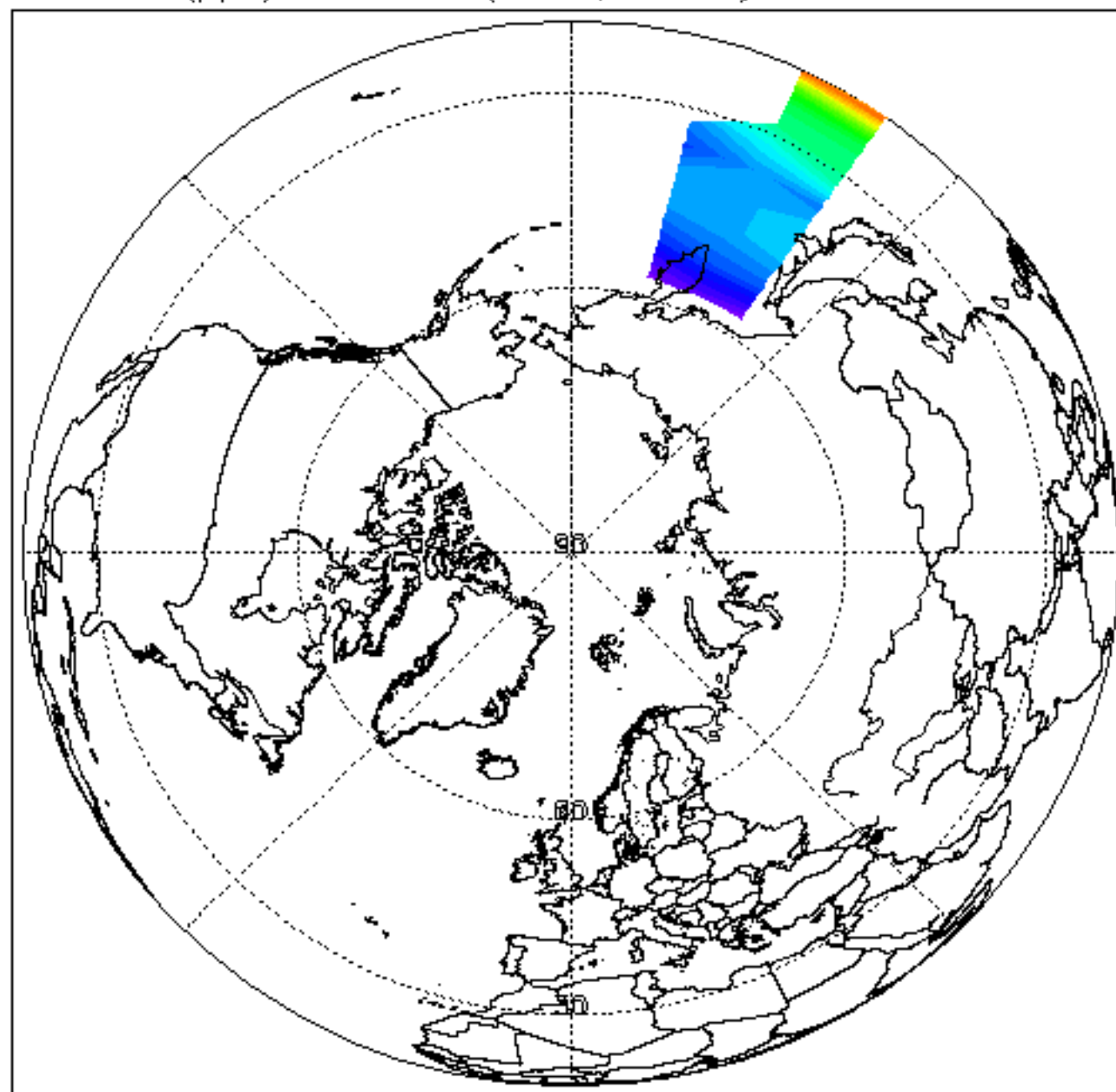


CH<sub>4</sub> (ppm) at 490 K (19km, 55hPa). 20-DEC-2011

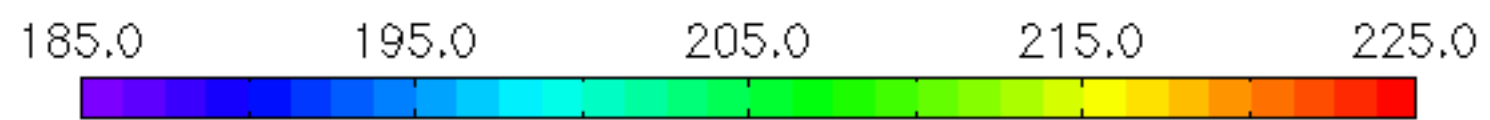
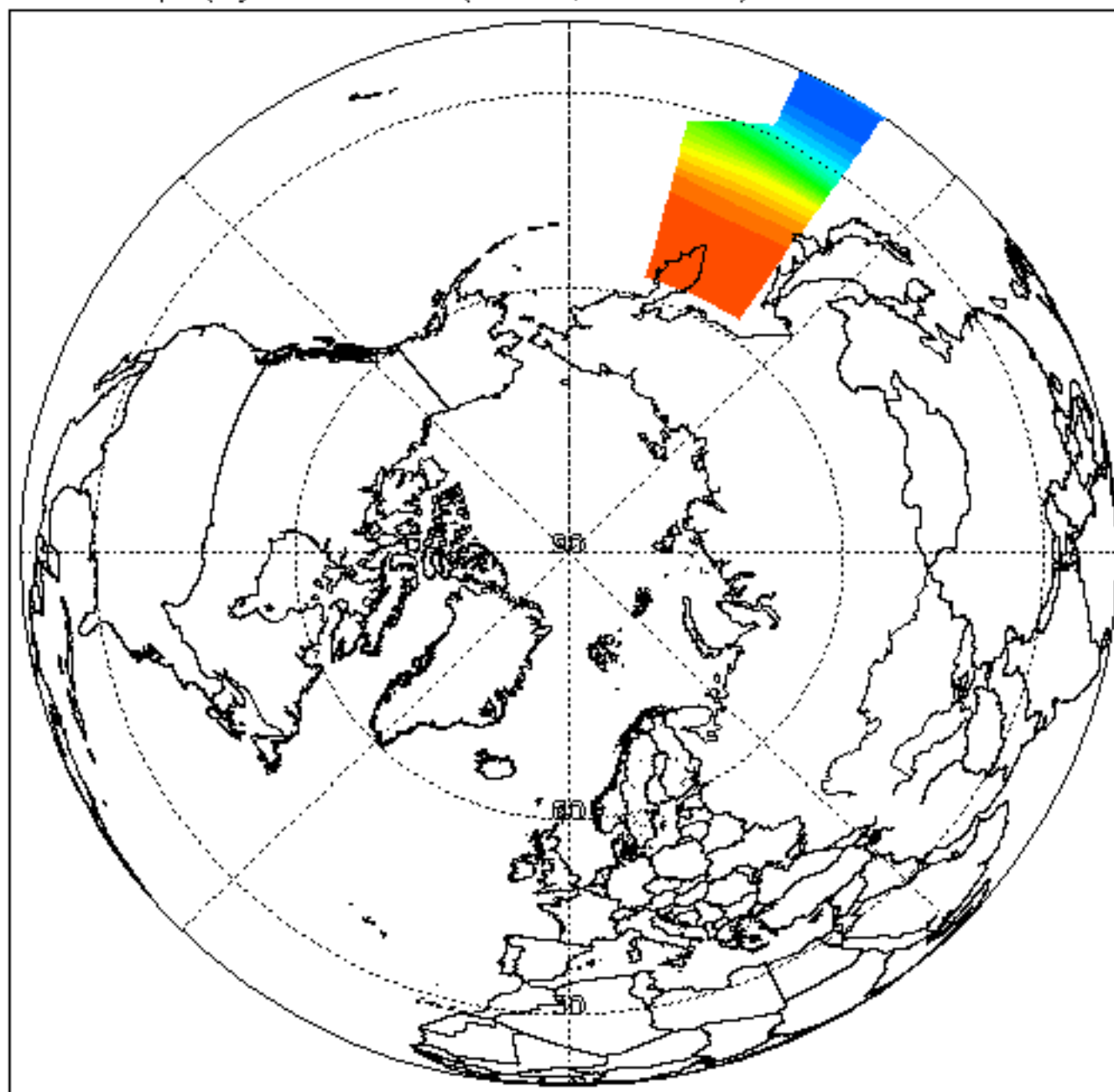




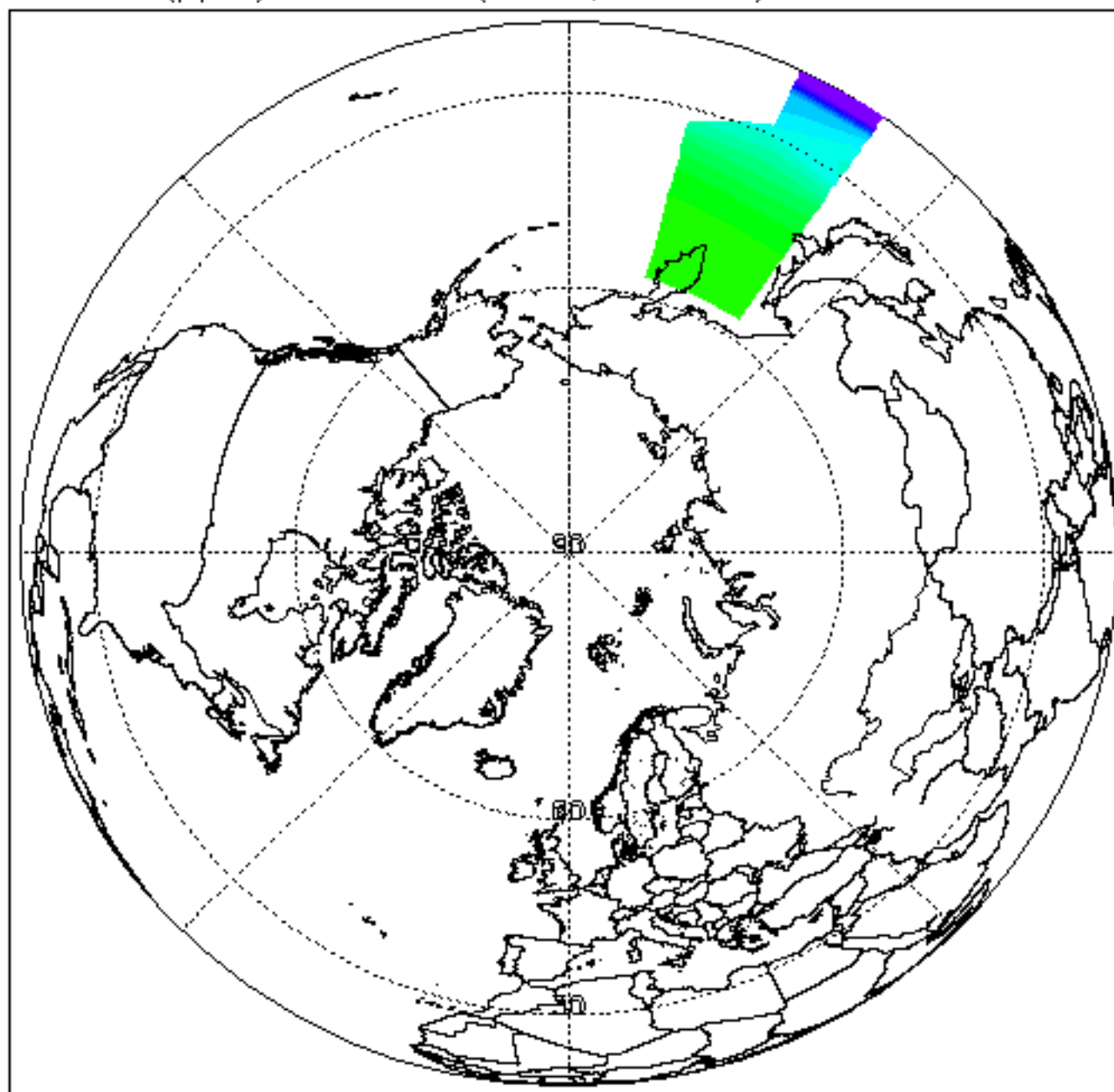
N<sub>2</sub>O (ppb) at 490 K (19km, 55hPa). 20-DEC-2011



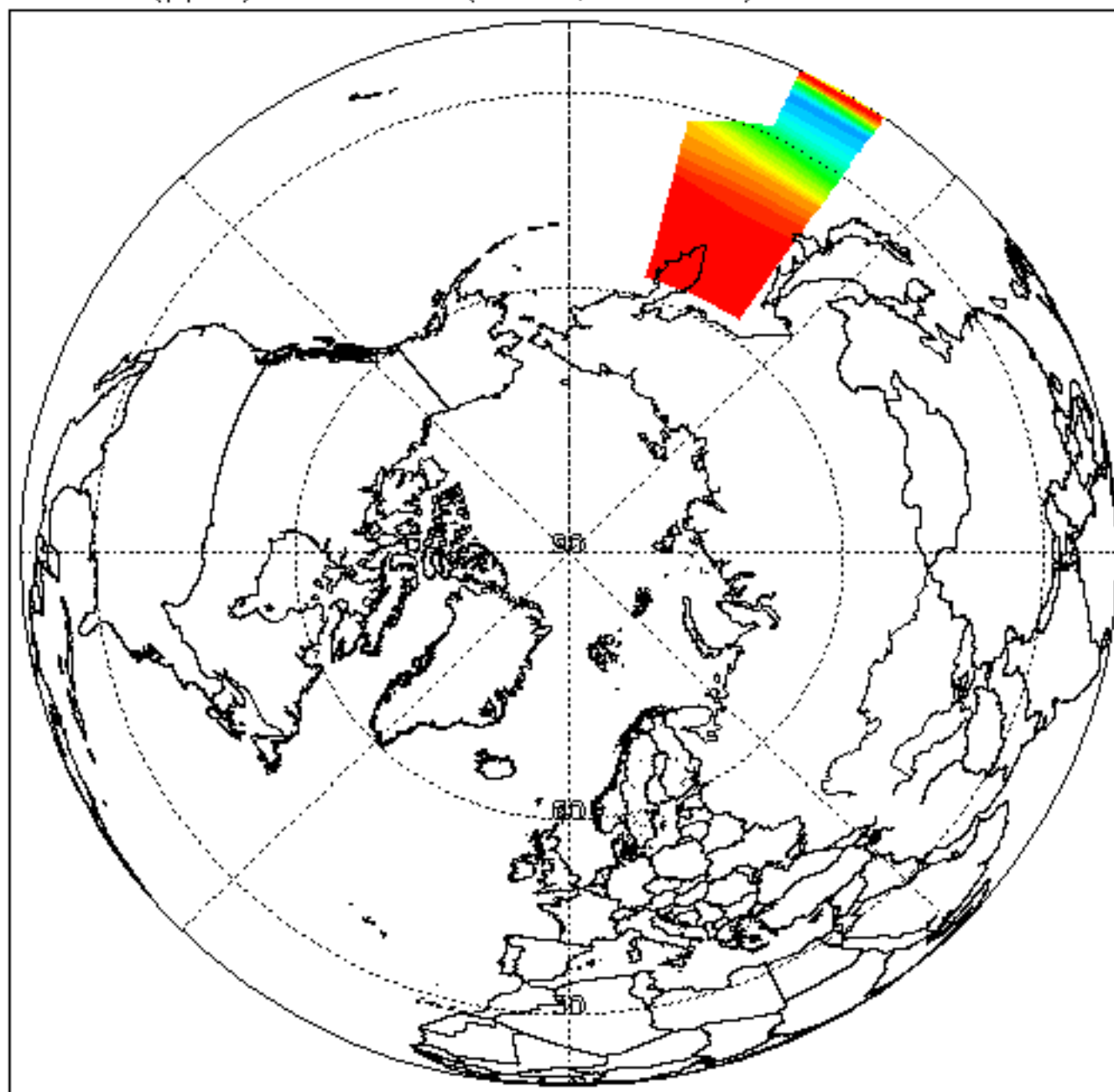
Temp (K) at 410 K (16km, 100hPa). 20-DEC-2011



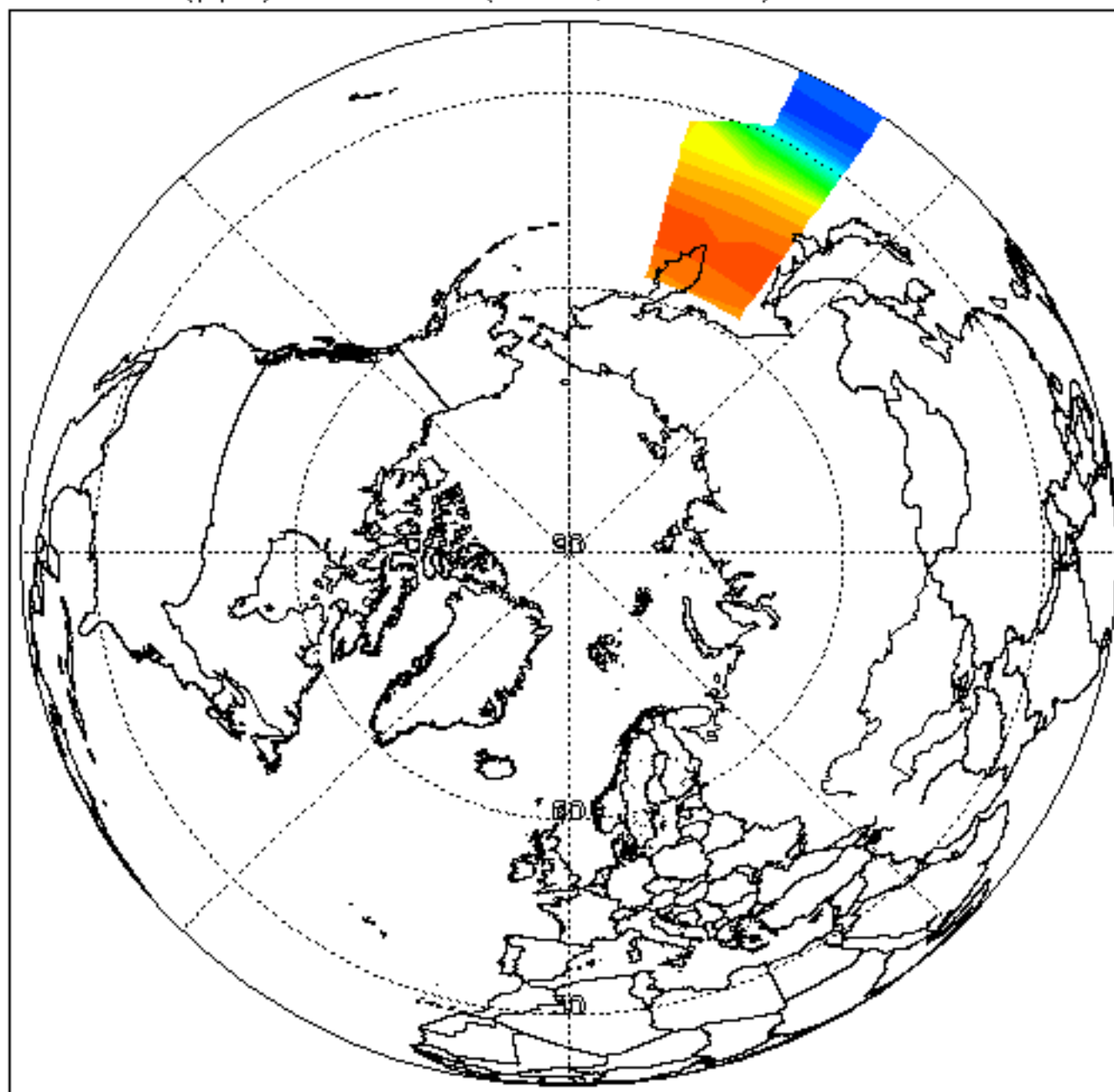
H<sub>2</sub>O (ppm) at 410 K (16km, 100hPa). 20-DEC-2011



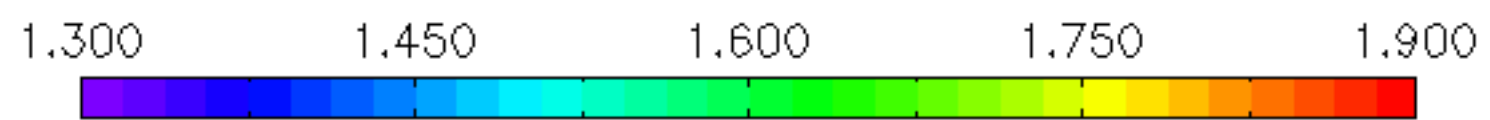
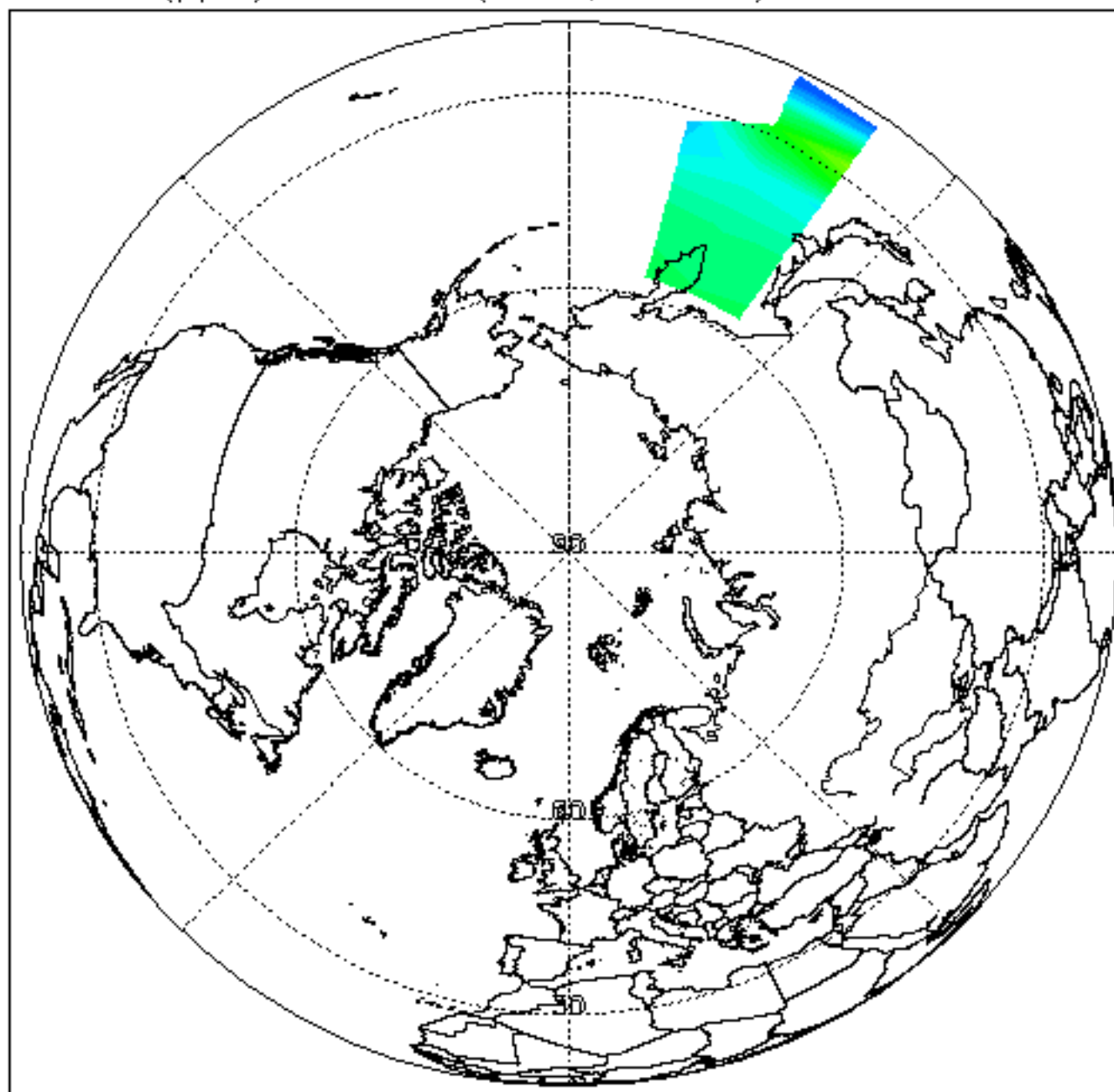
O<sub>3</sub> (ppm) at 410 K (16km, 100hPa). 20-DEC-2011



HNO<sub>3</sub> (ppb) at 410 K (16km, 100hPa). 20-DEC-2011

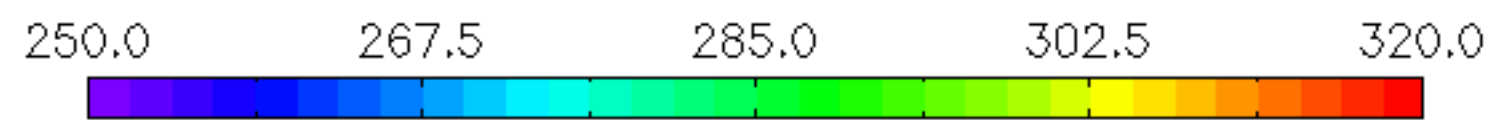
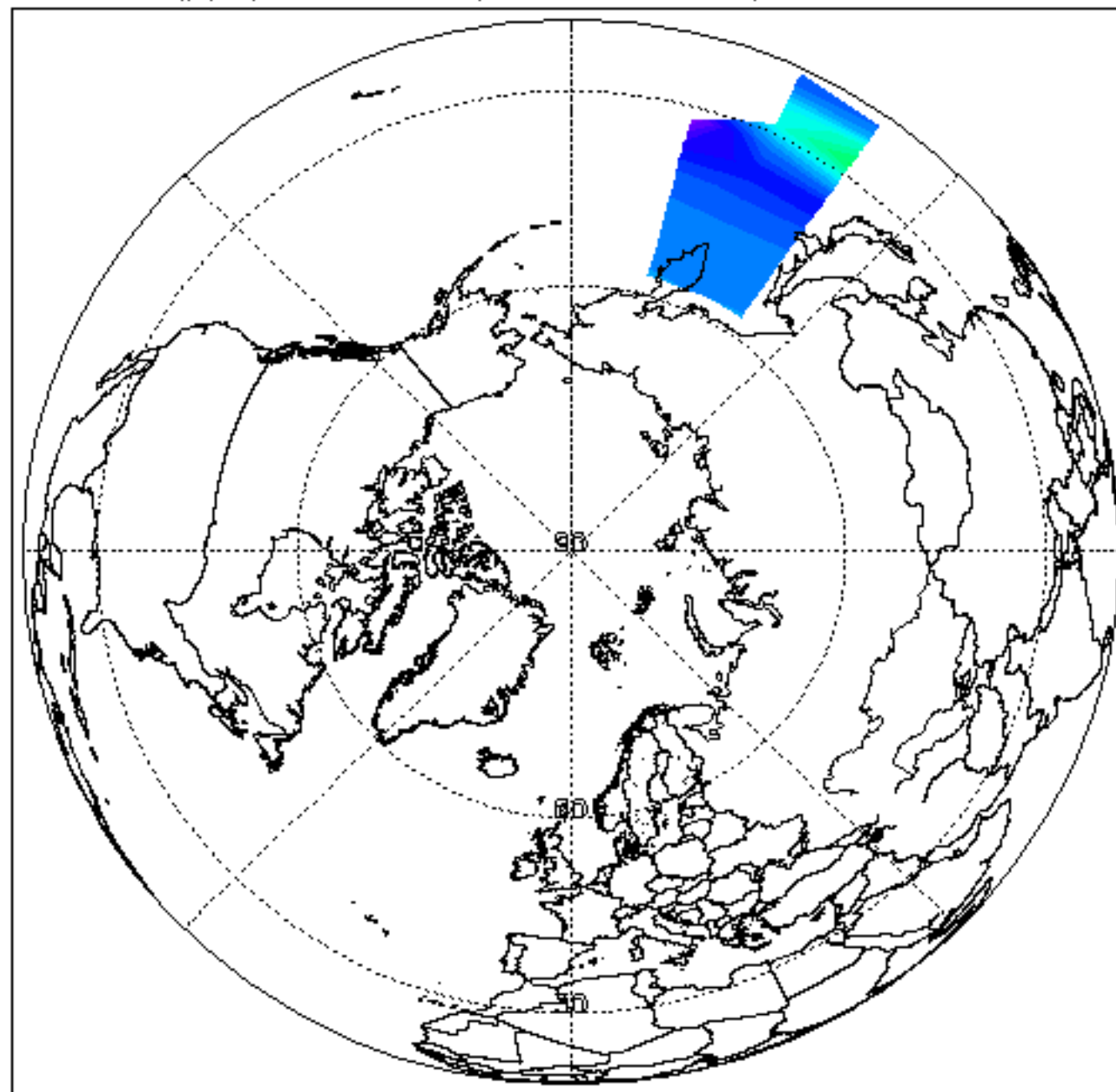


CH<sub>4</sub> (ppm) at 410 K (16km, 100hPa). 20-DEC-2011

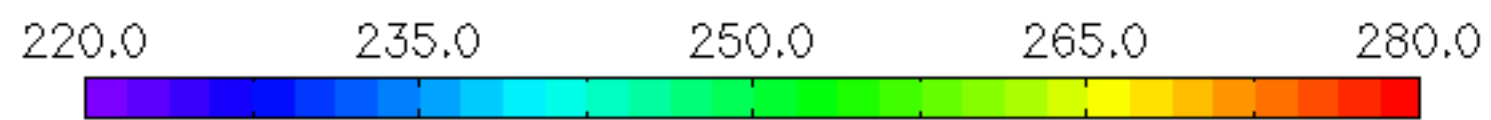
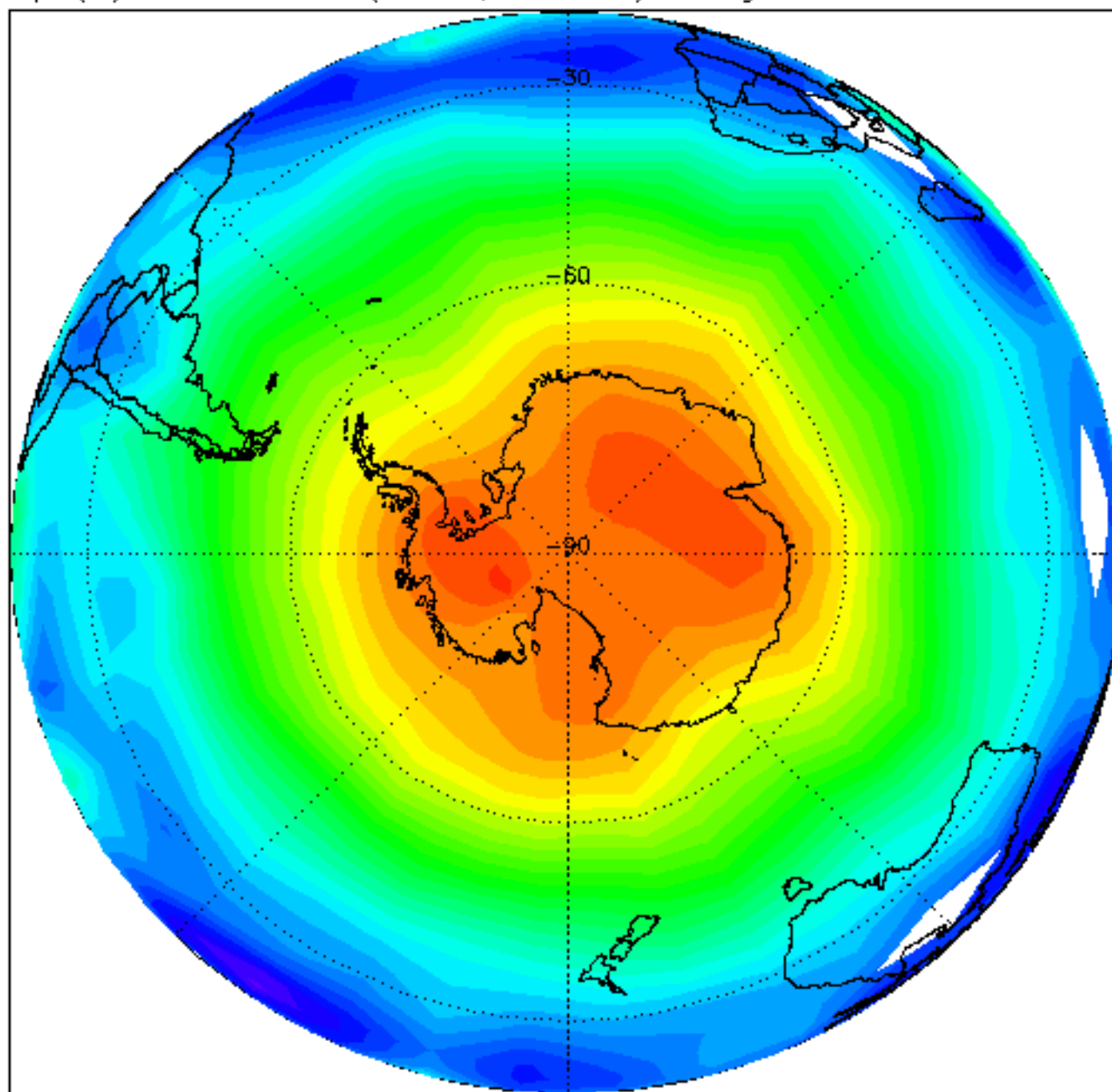




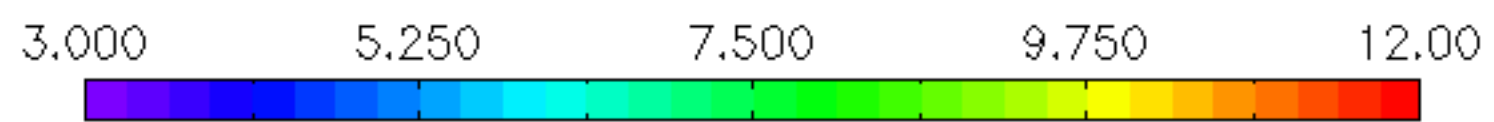
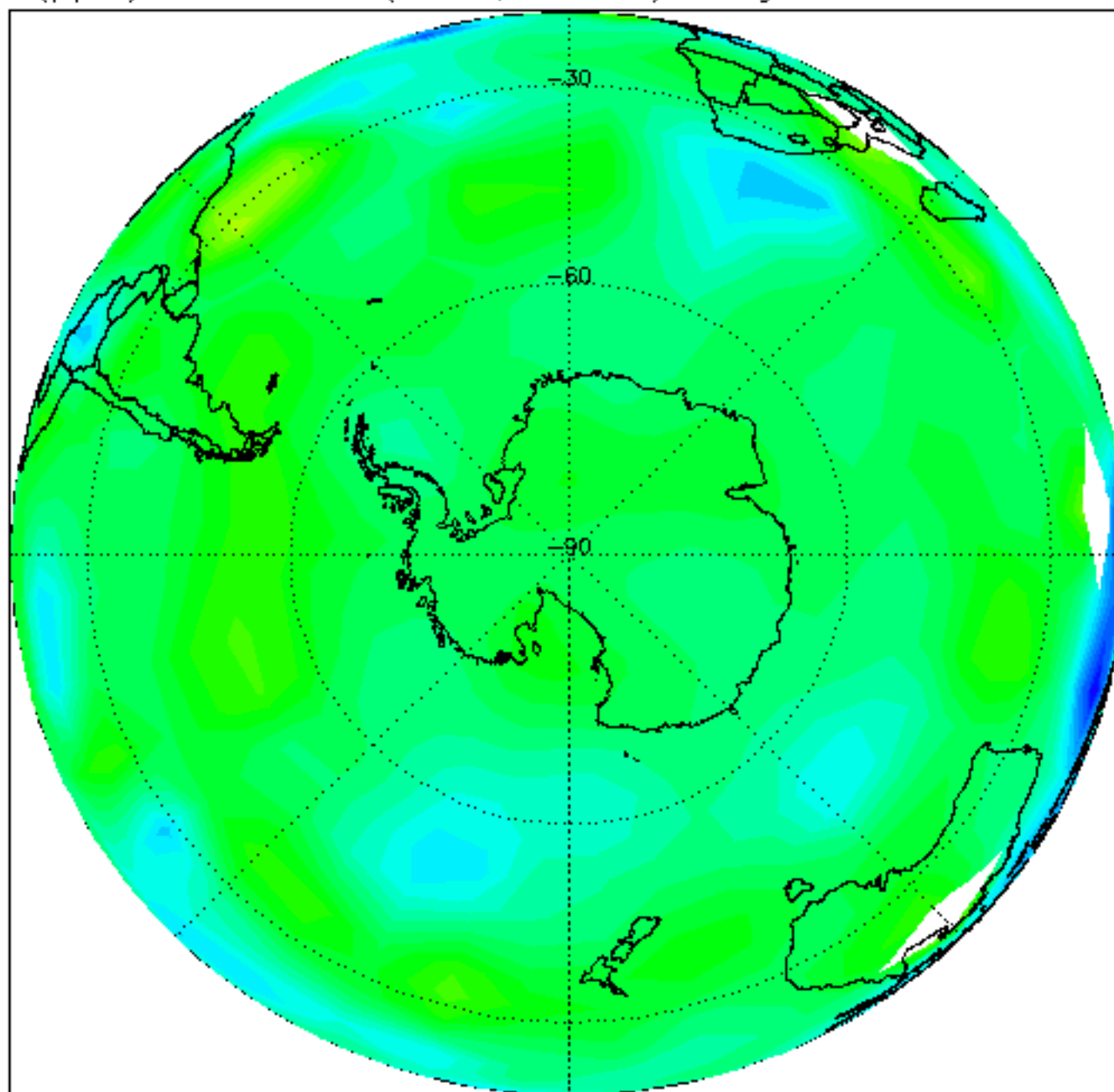
N<sub>2</sub>O (ppb) at 410 K (16km, 100hPa). 20-DEC-2011



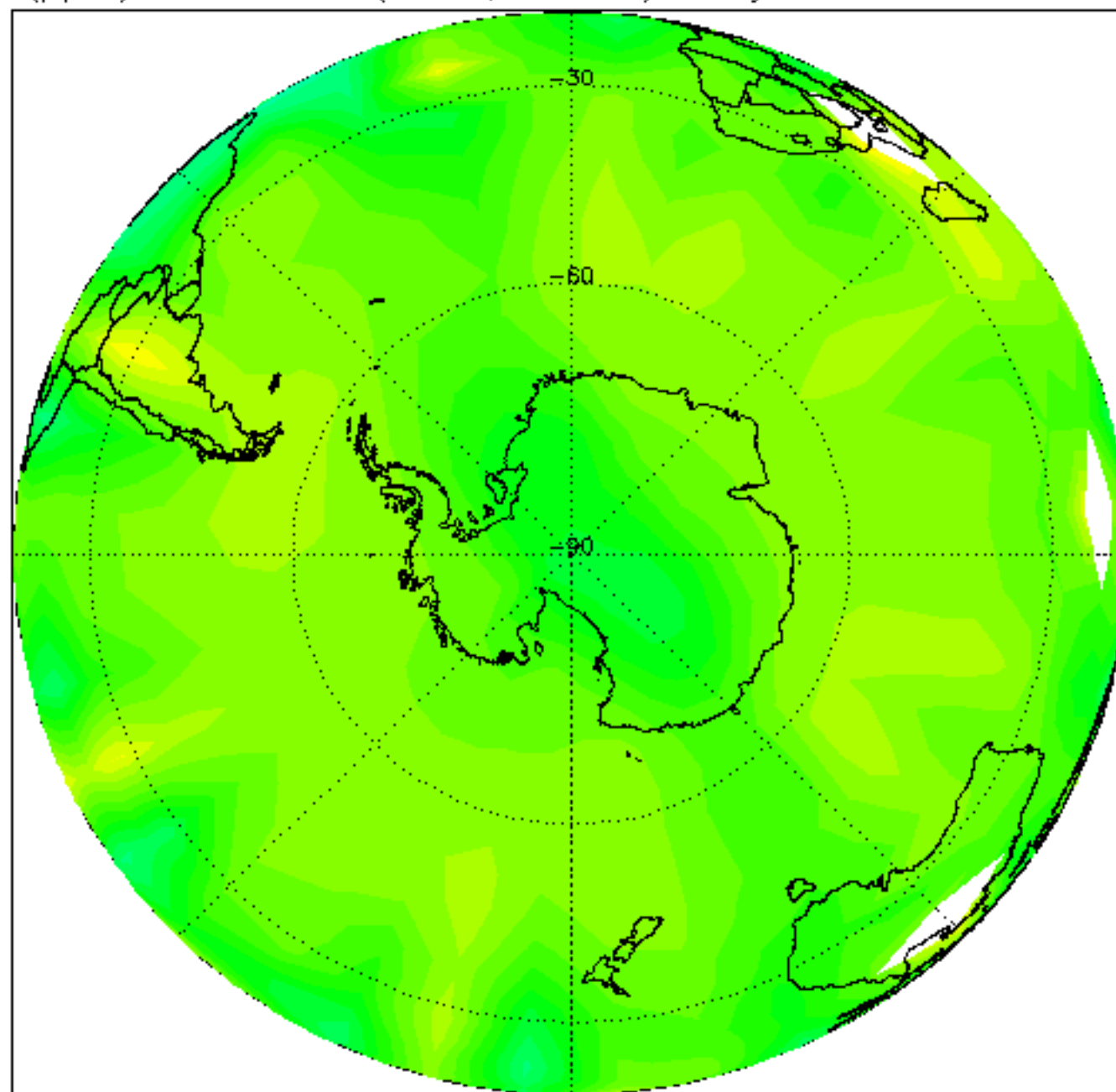
Temp (K) at: 2700 K (60km, 0.2hPa). Daily mean: 20-DEC-2011



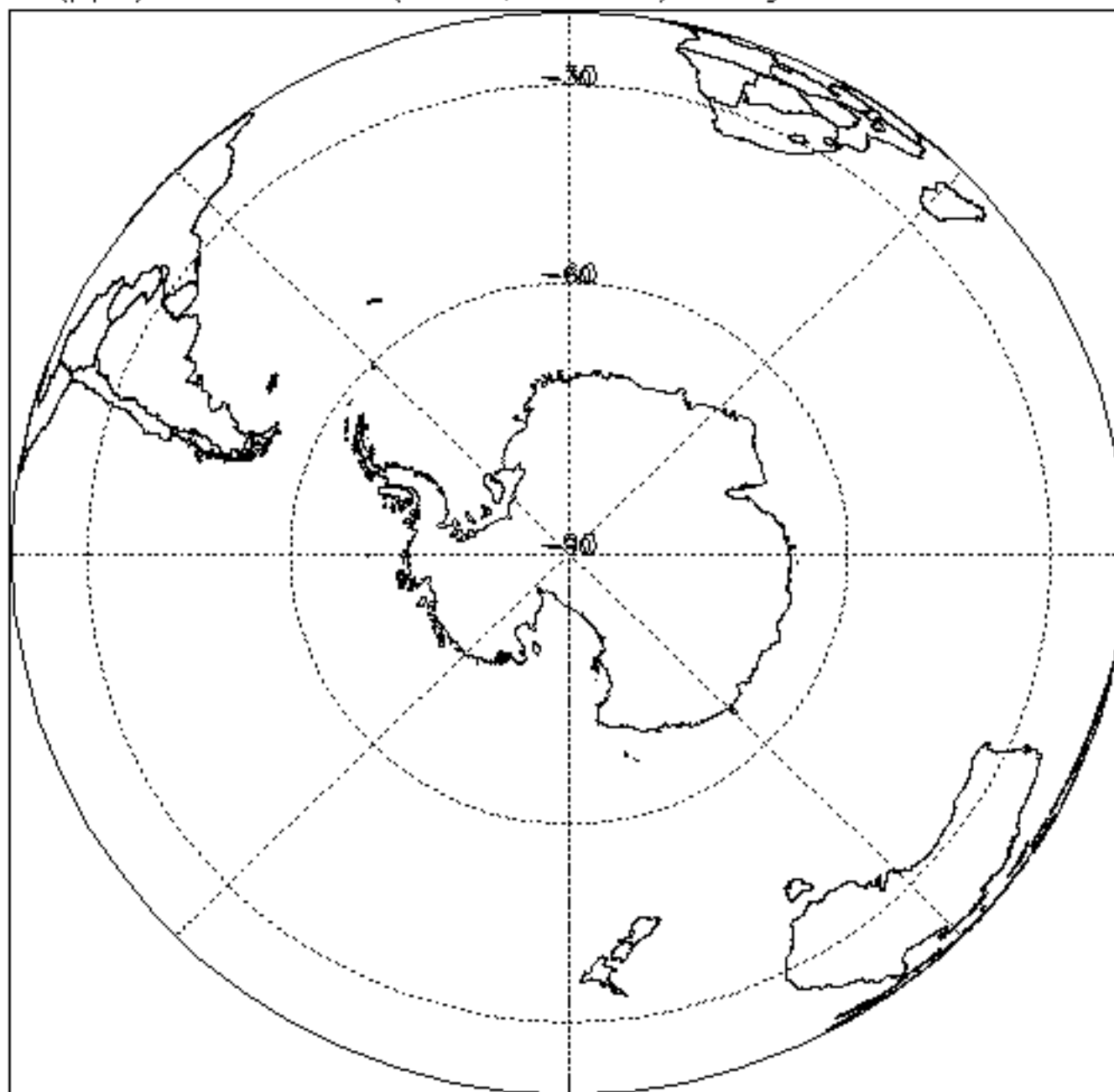
H<sub>2</sub>O (ppm) at: 2700 K (60km, 0.2hPa). Daily mean: 20-DEC-2011



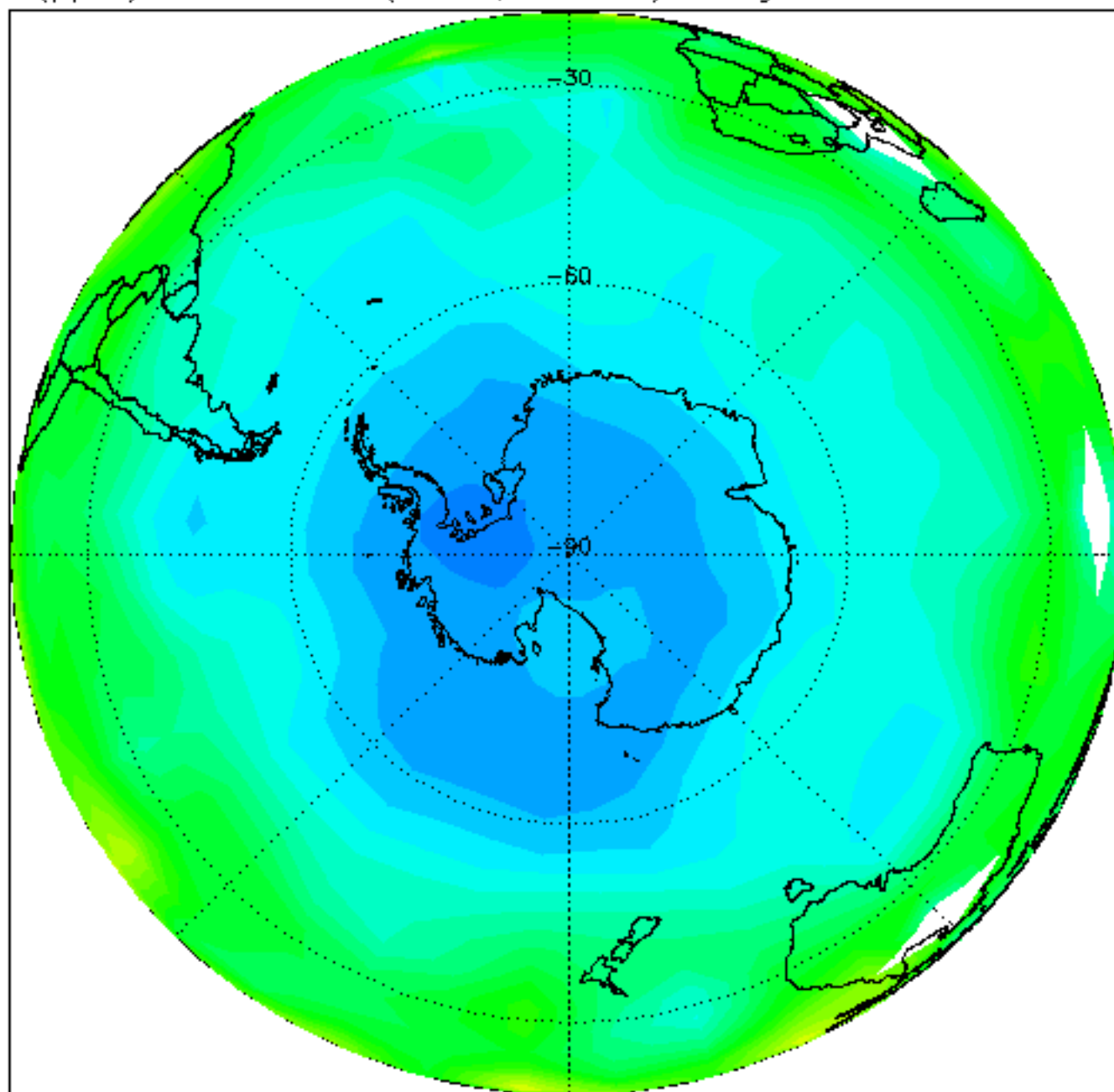
O<sub>3</sub> (ppm) at: 2700 K (60km, 0.2hPa). Daily mean: 20-DEC-2011



HN03 (ppb) at: 2700 K (60km, 0.2hPa). Daily mean: 20-DEC-2011

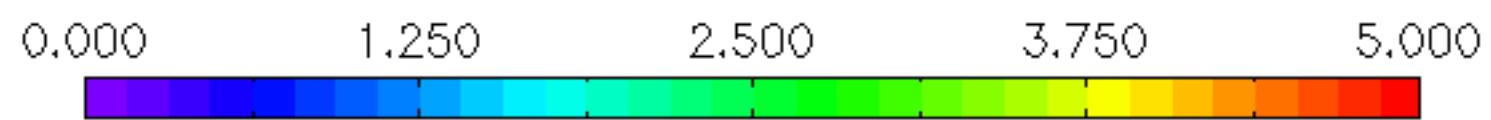
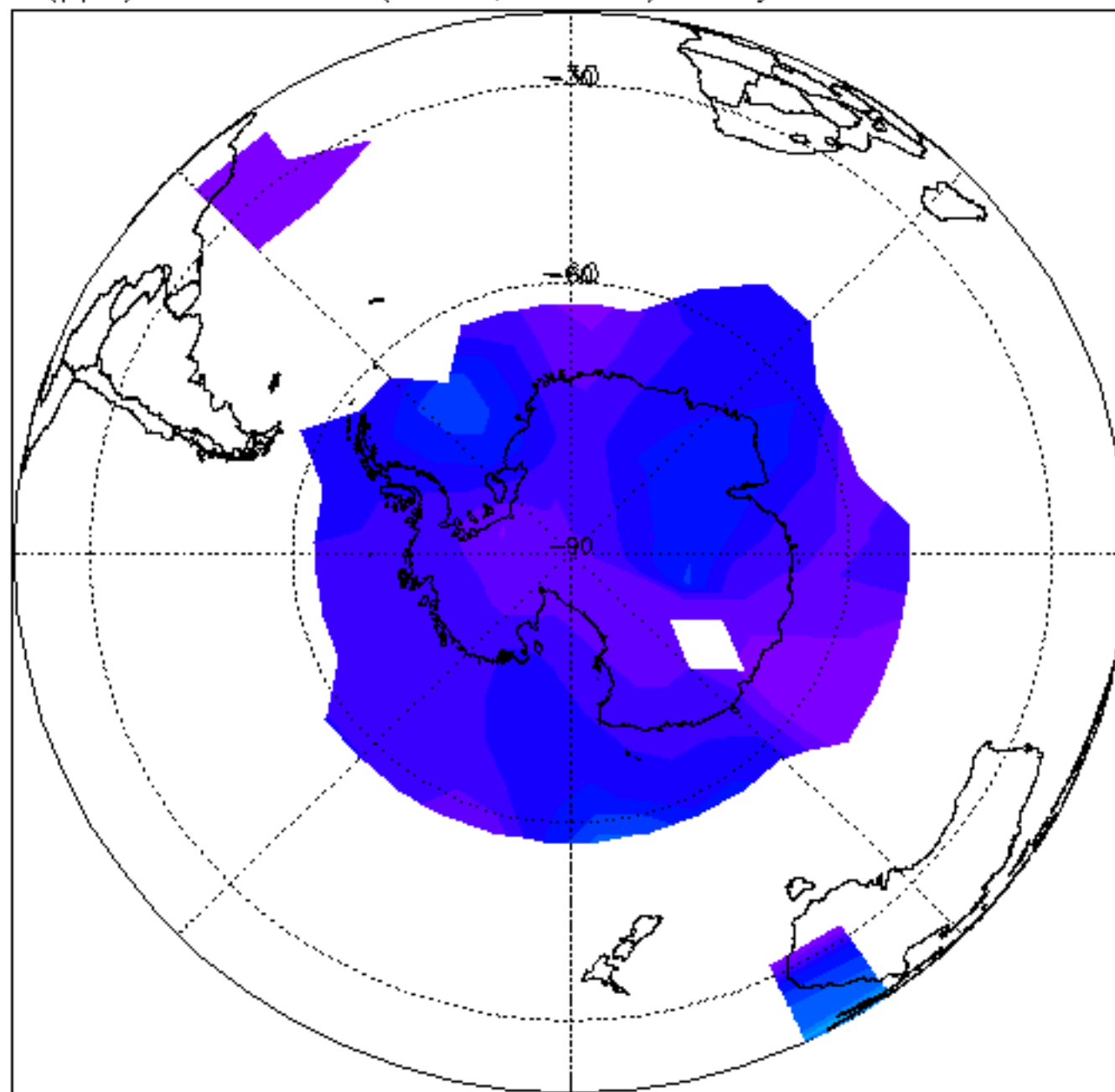


CH<sub>4</sub> (ppm) at: 2700 K (60km, 0.2hPa). Daily mean: 20-DEC-2011

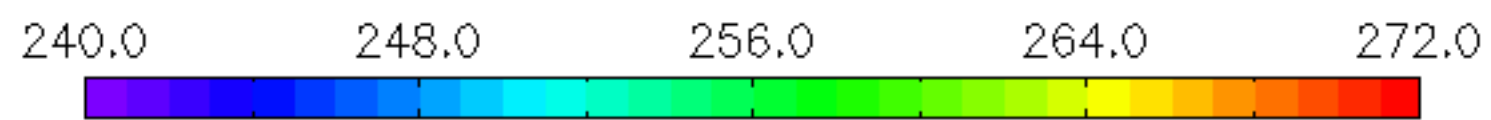
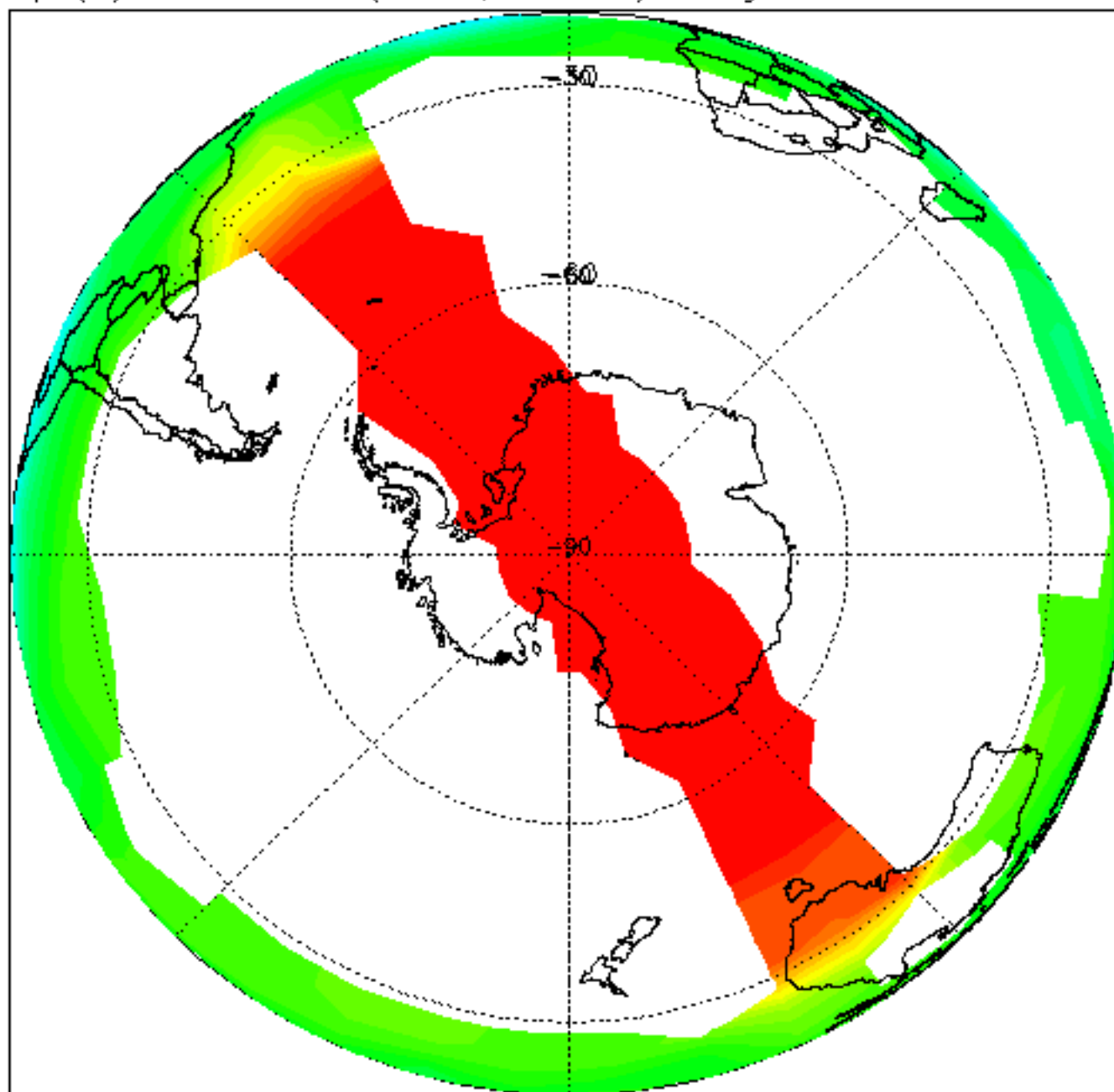




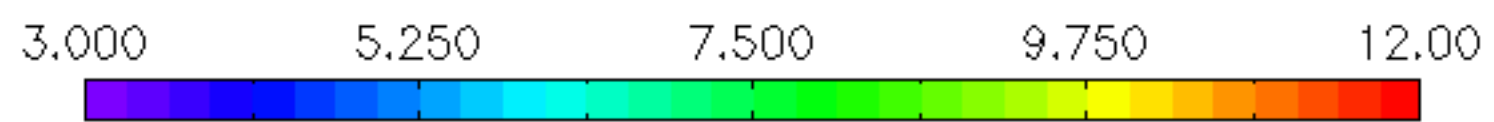
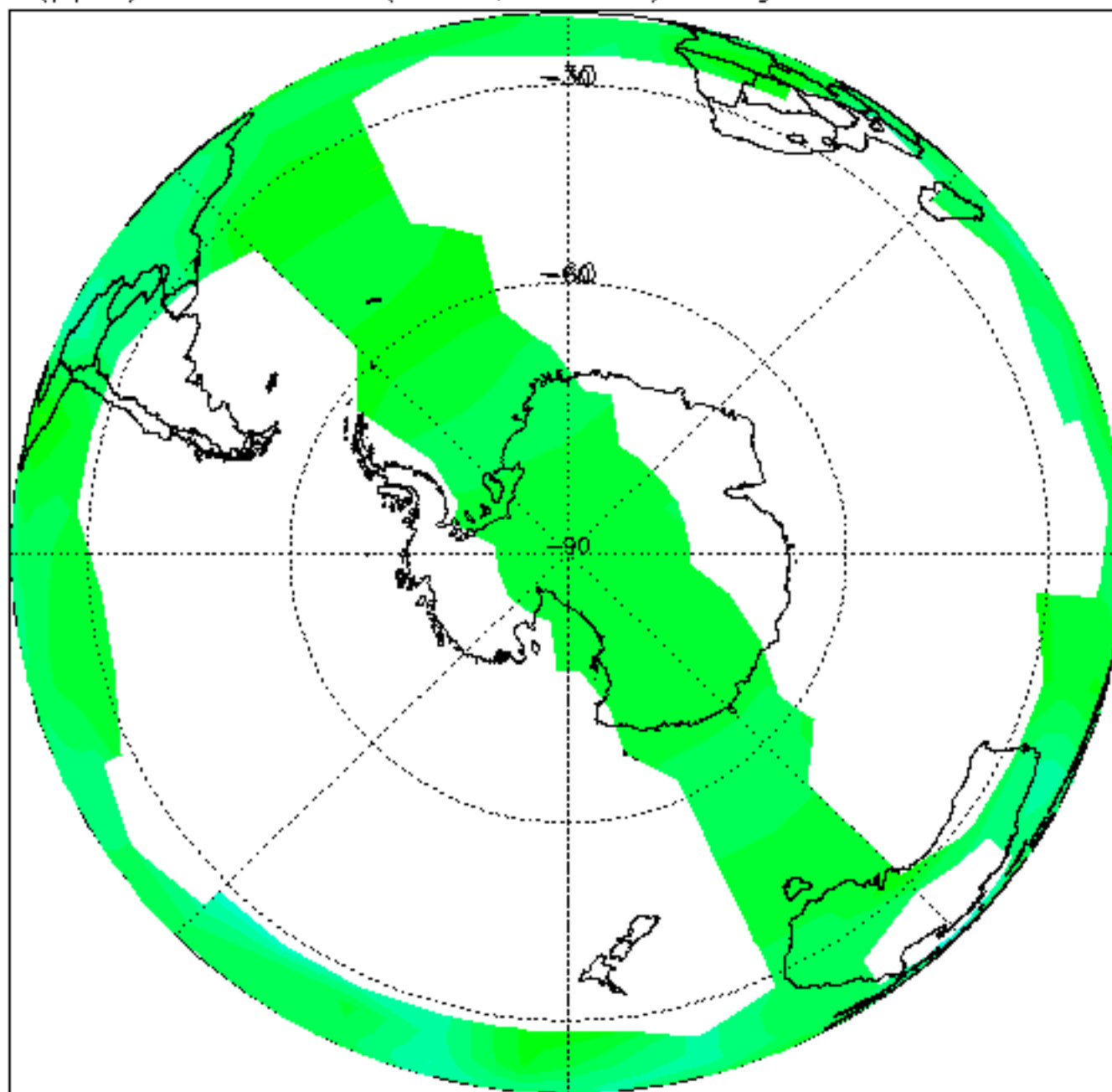
N<sub>2</sub>O (ppb) at: 2700 K (60km, 0.2hPa). Daily mean: 20-DEC-2011



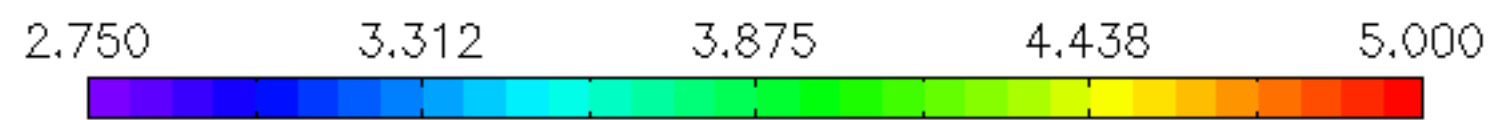
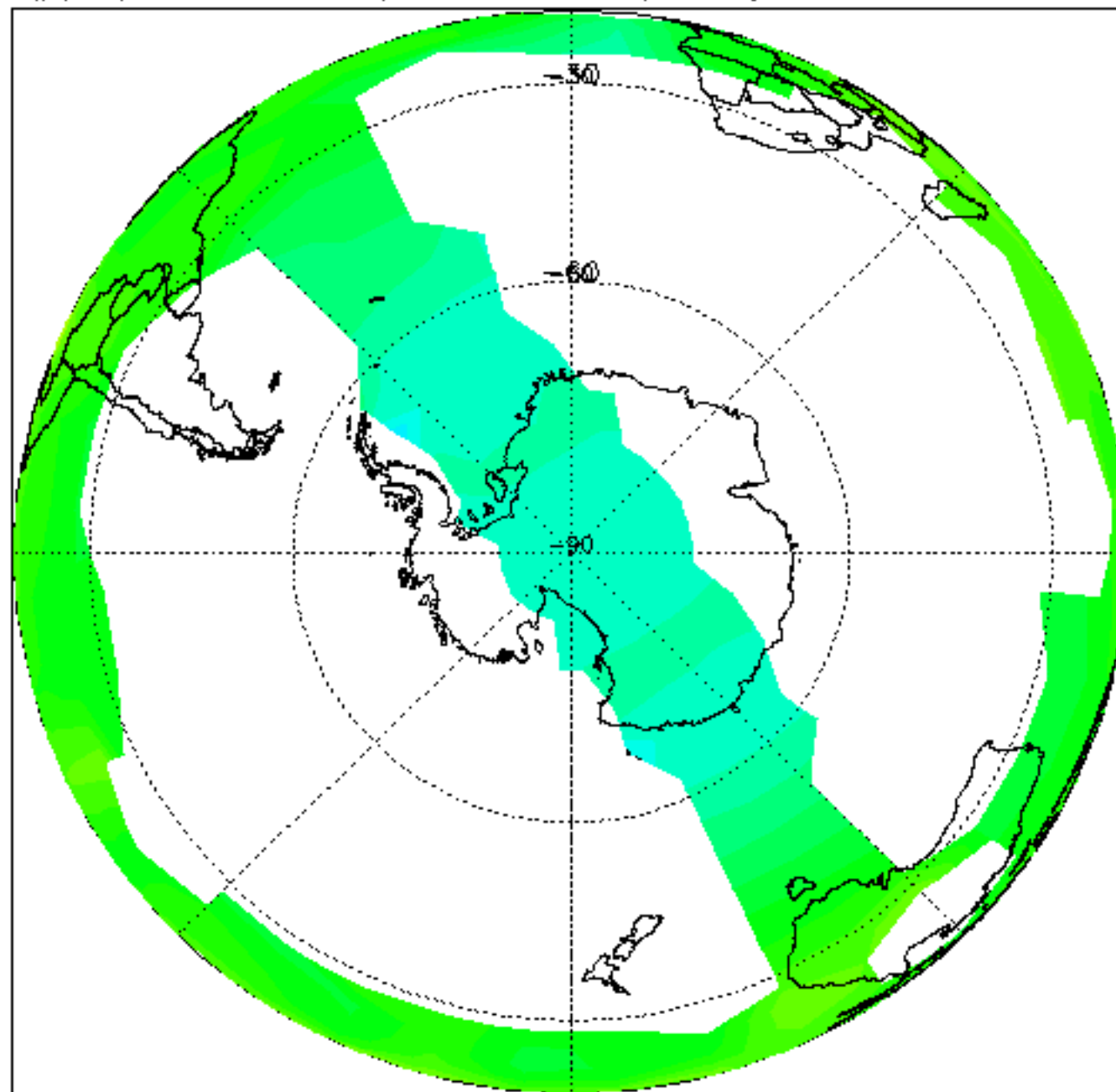
Temp (K) at: 1700 K (45km, 1.5hPa). Daily mean: 20-DEC-2011



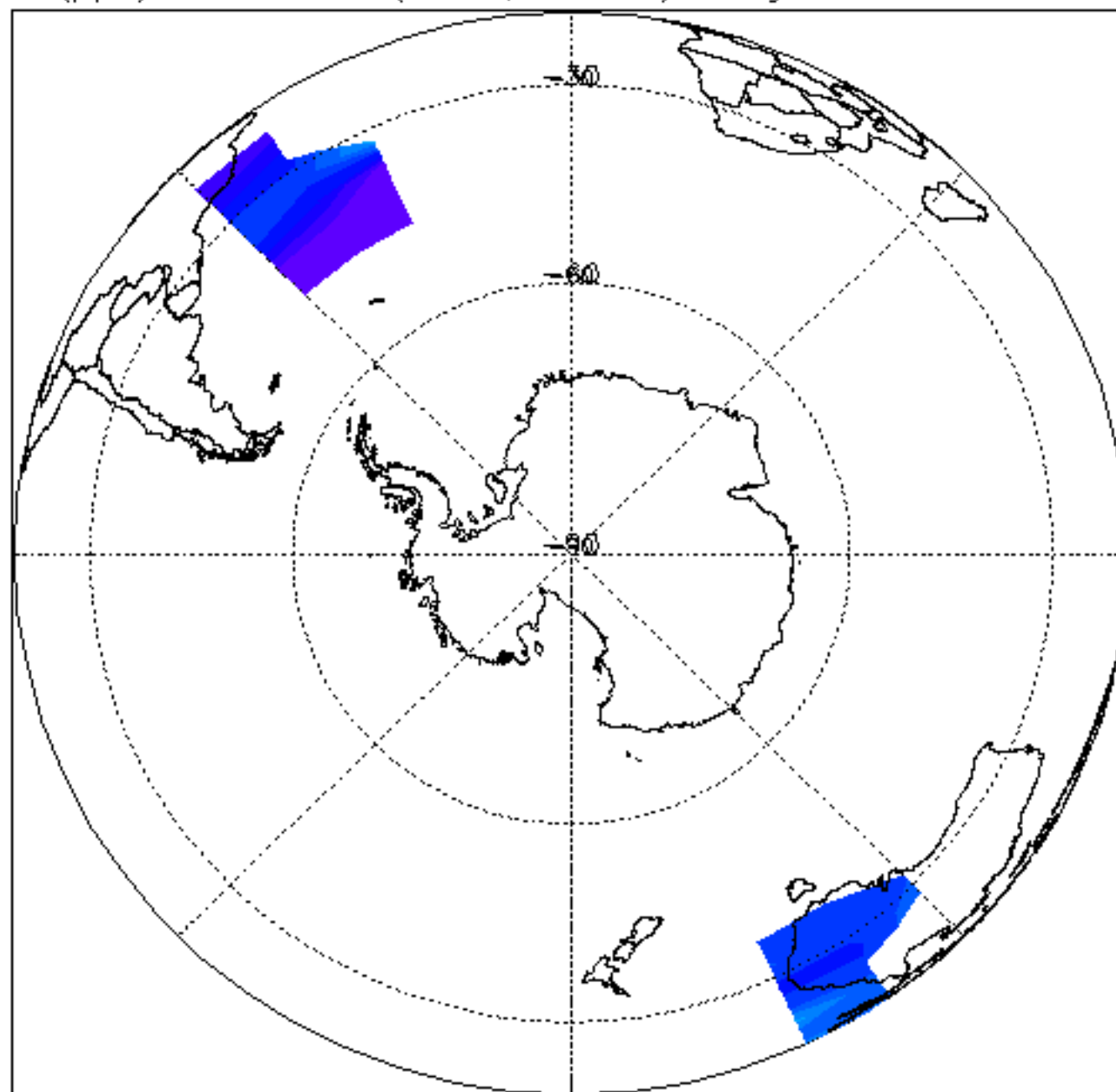
H<sub>2</sub>O (ppm) at: 1700 K (45km, 1.5hPa). Daily mean: 20-DEC-2011



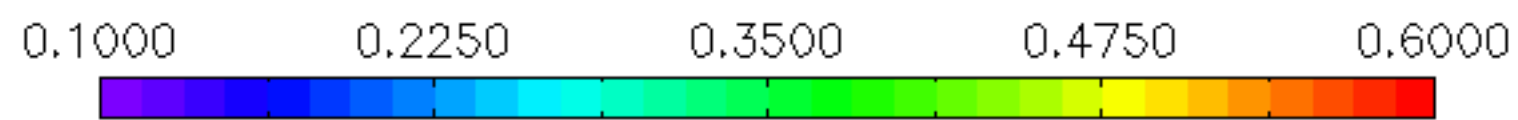
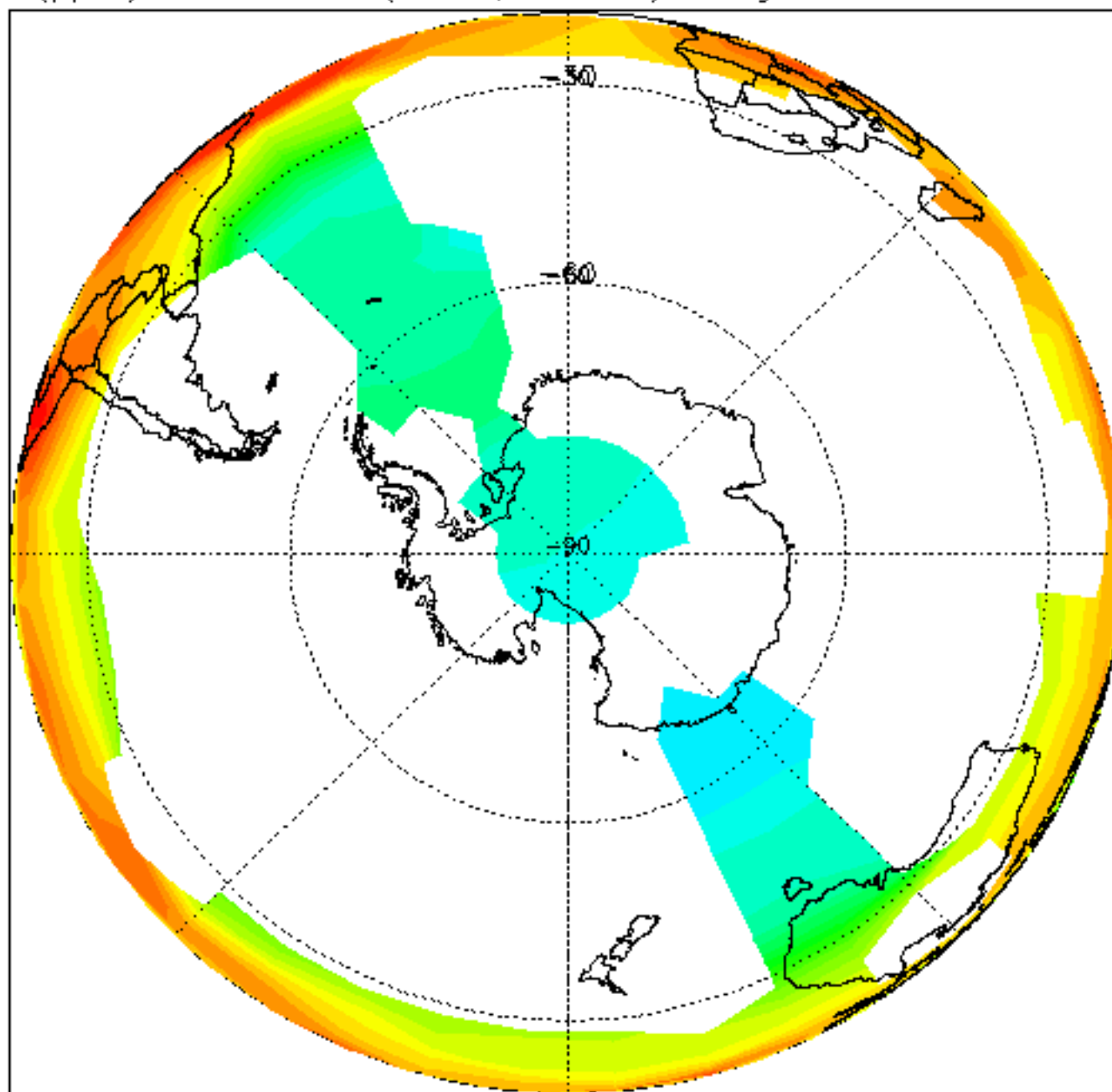
O<sub>3</sub> (ppm) at: 1700 K (45km, 1.5hPa). Daily mean: 20-DEC-2011



HN03 (ppb) at: 1700 K (45km, 1.5hPa). Daily mean: 20-DEC-2011

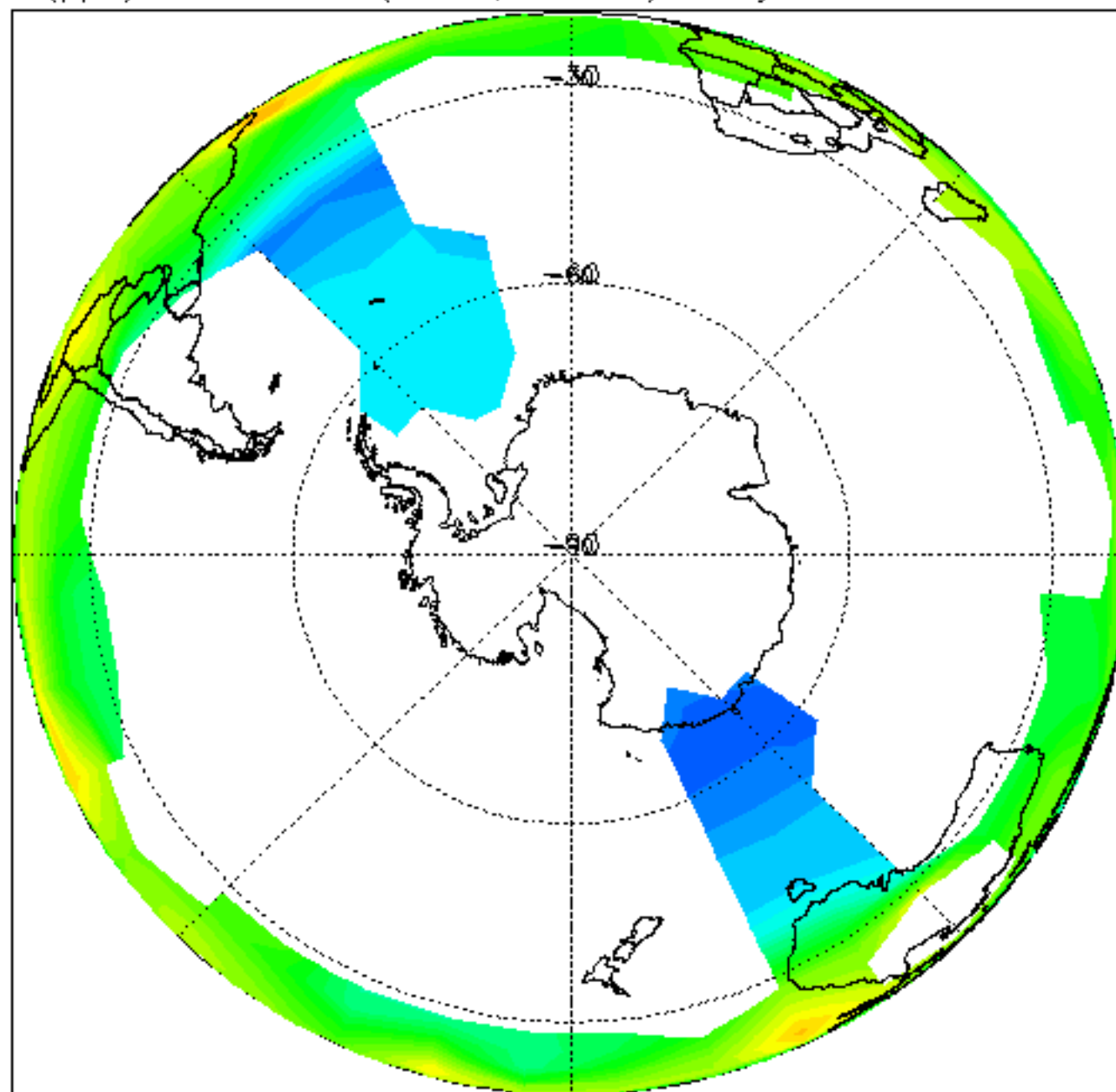


CH<sub>4</sub> (ppm) at: 1700 K (45km, 1.5hPa). Daily mean: 20-DEC-2011

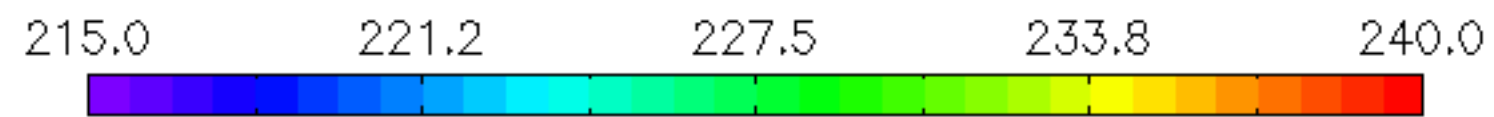
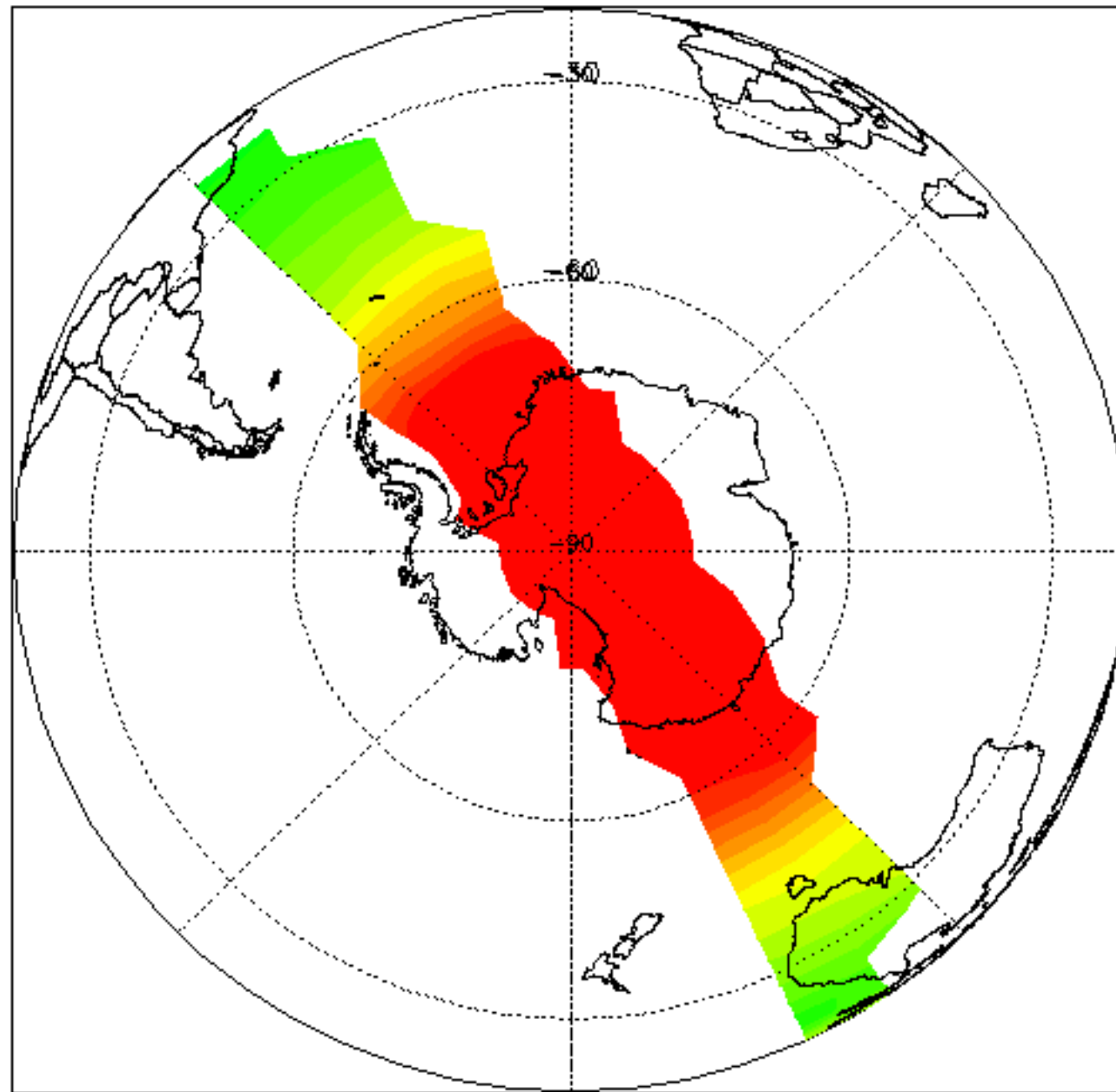




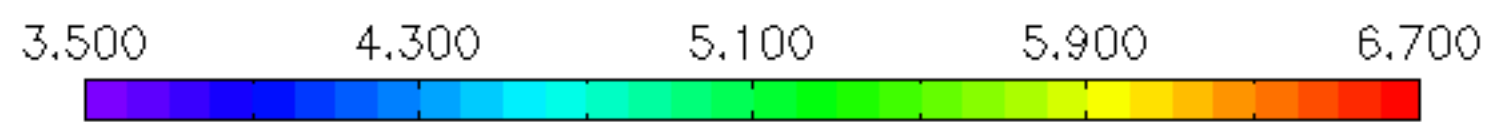
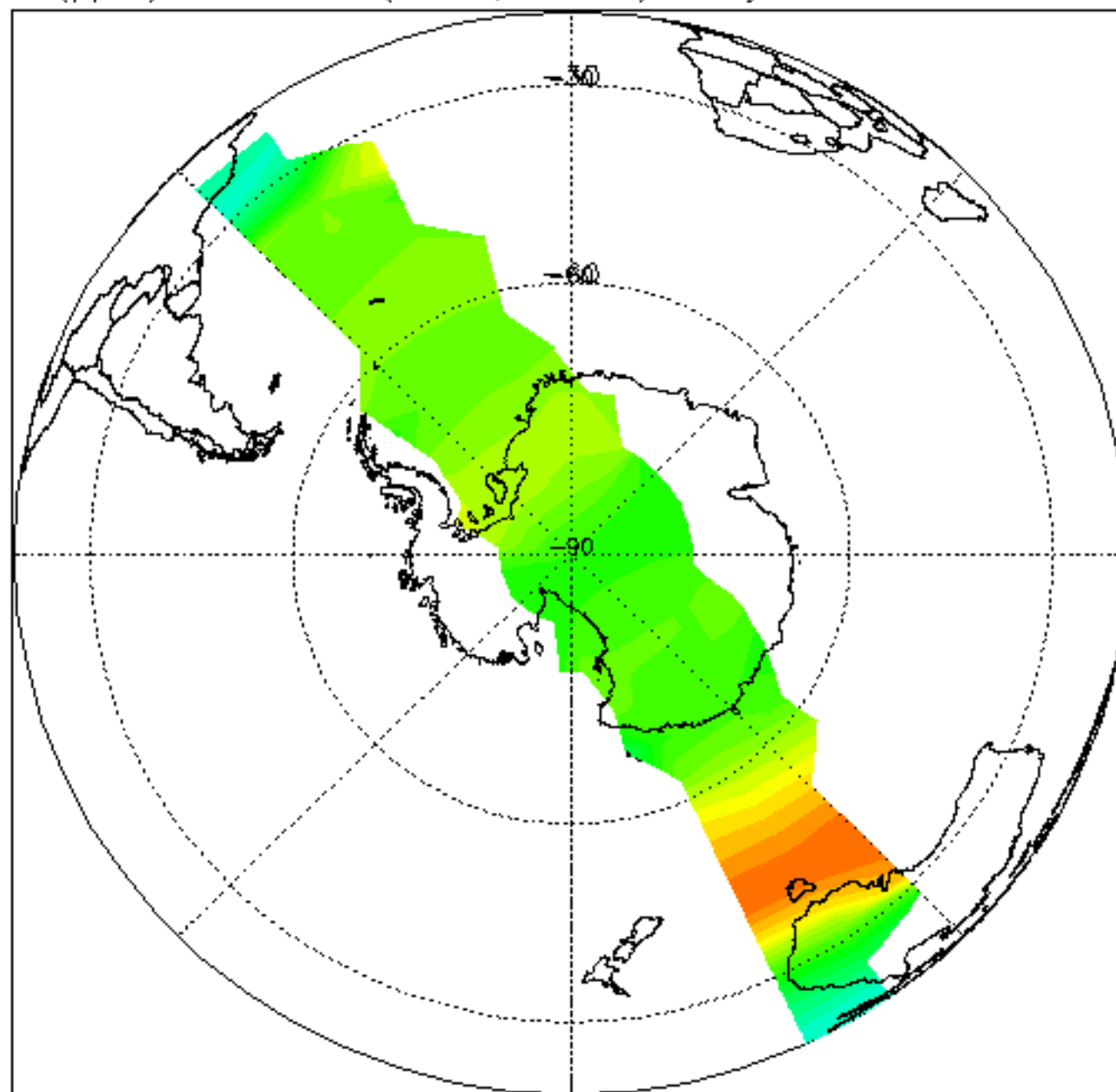
N<sub>2</sub>O (ppb) at: 1700 K (45km, 1.5hPa). Daily mean: 20-DEC-2011



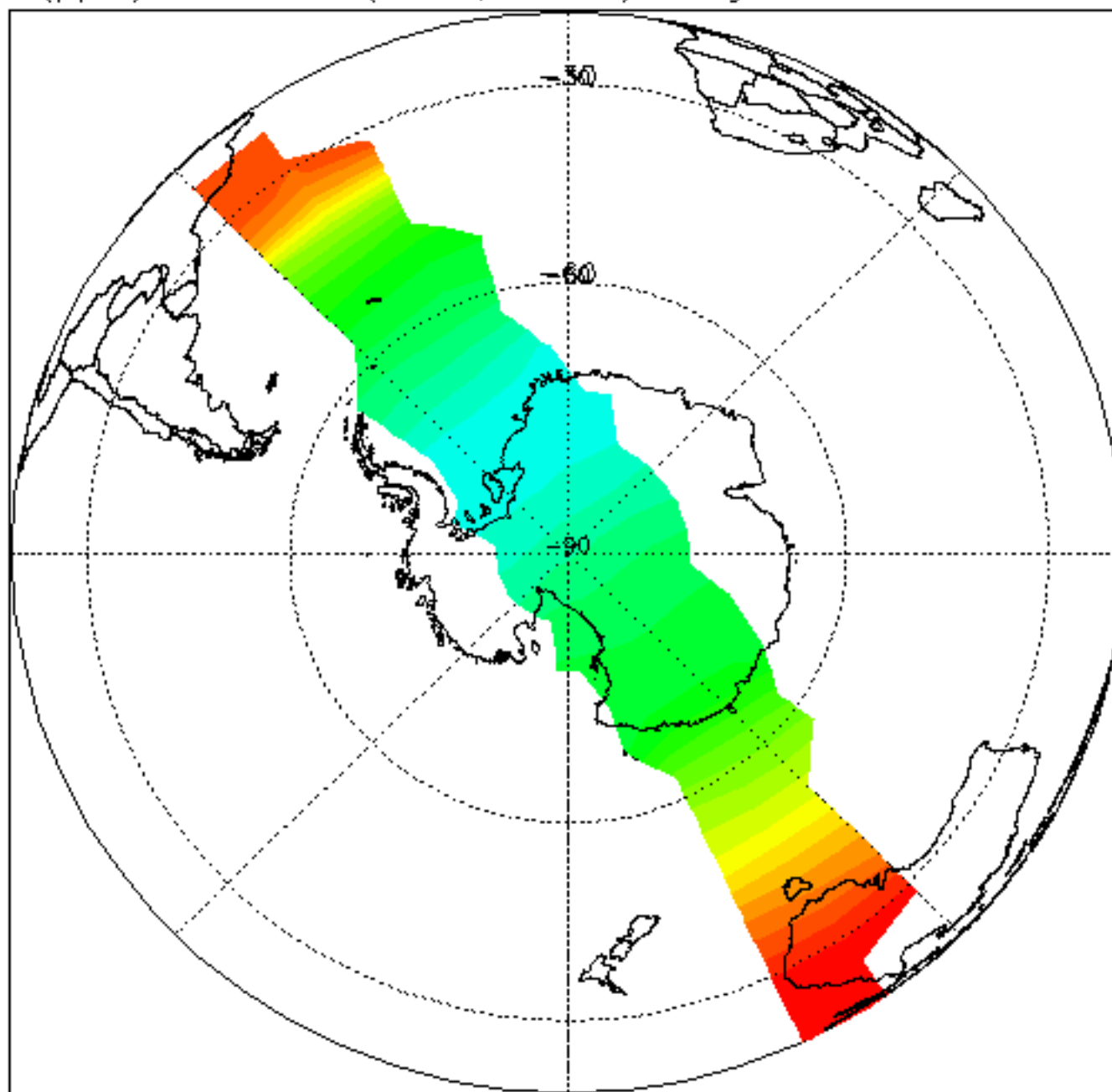
Temp (K) at: 850 K (32km, 10hPa). Daily mean: 20-DEC-2011



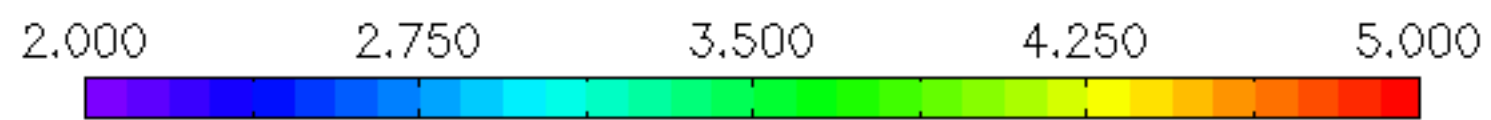
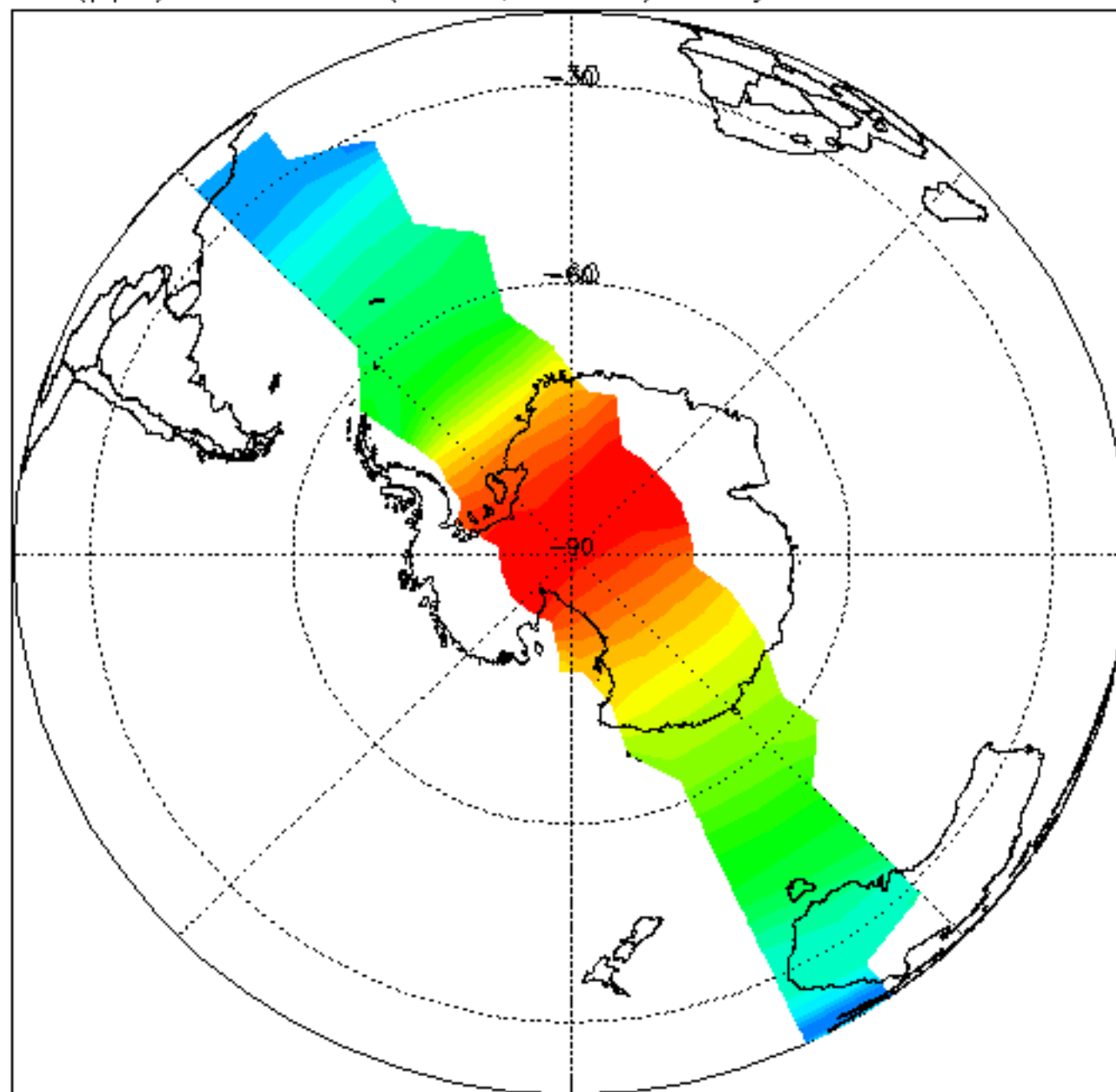
H<sub>2</sub>O (ppm) at: 850 K (32km, 10hPa). Daily mean: 20-DEC-2011



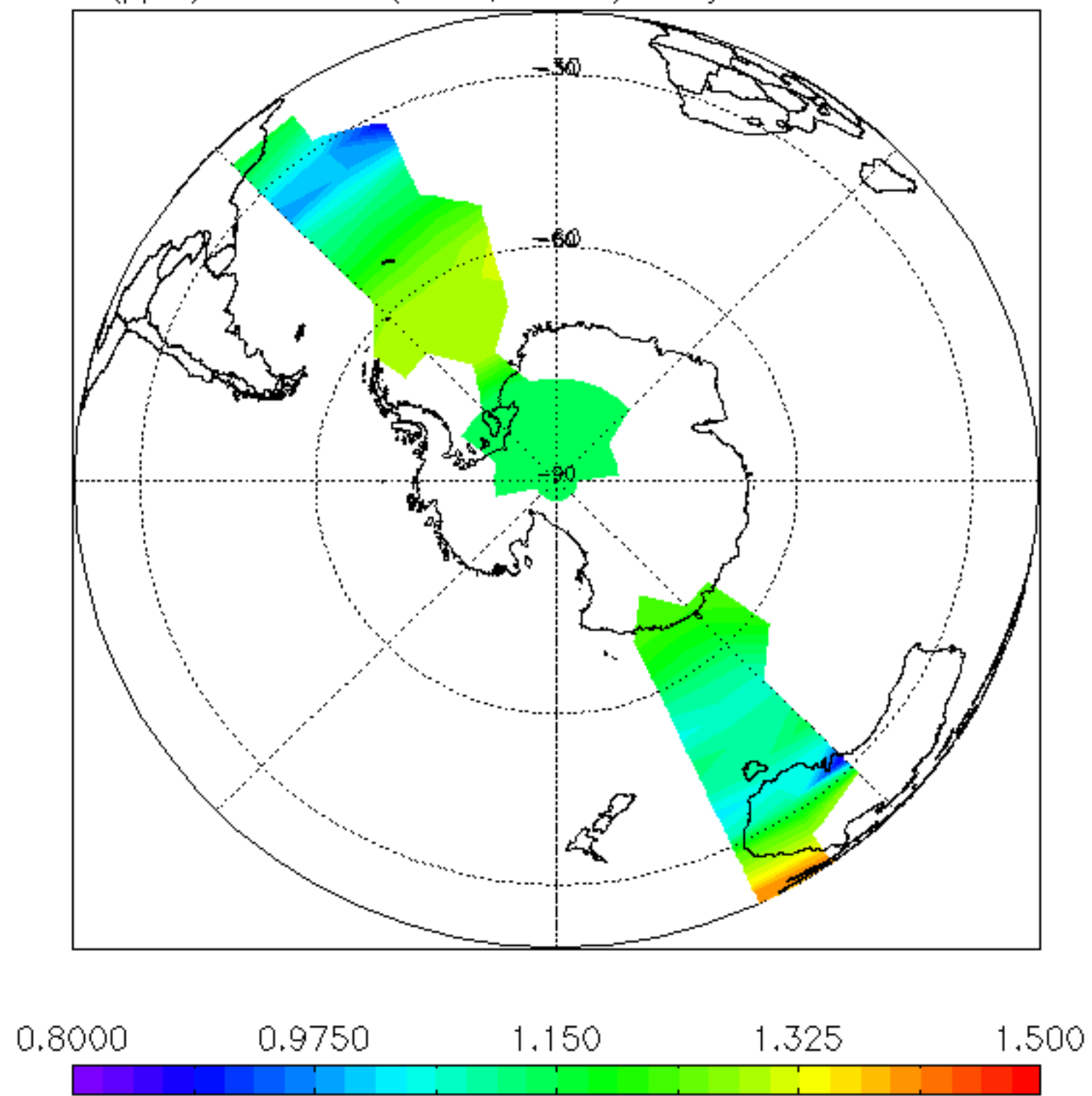
O<sub>3</sub> (ppm) at: 850 K (32km, 10hPa). Daily mean: 20-DEC-2011



HN03 (ppb) at: 850 K (32km, 10hPa). Daily mean: 20-DEC-2011

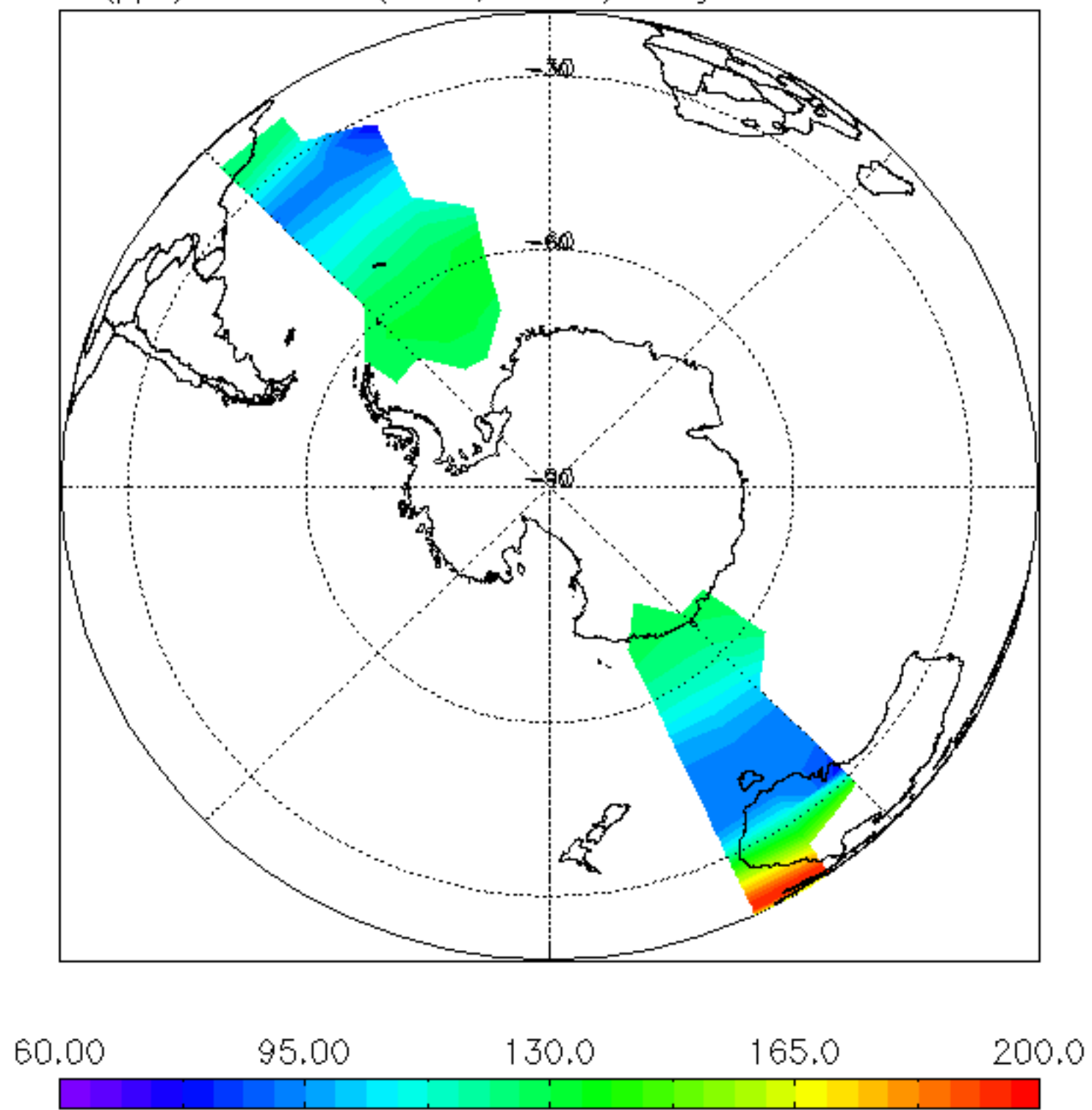


CH<sub>4</sub> (ppm) at: 850 K (32km, 10hPa). Daily mean: 20-DEC-2011

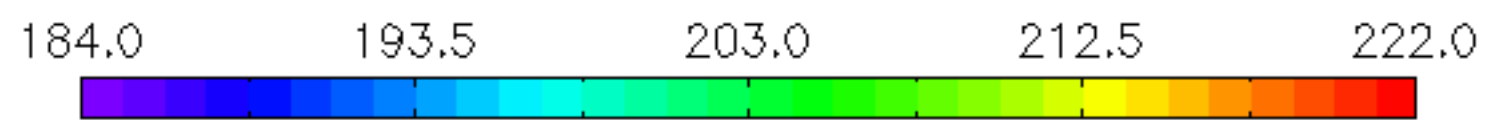
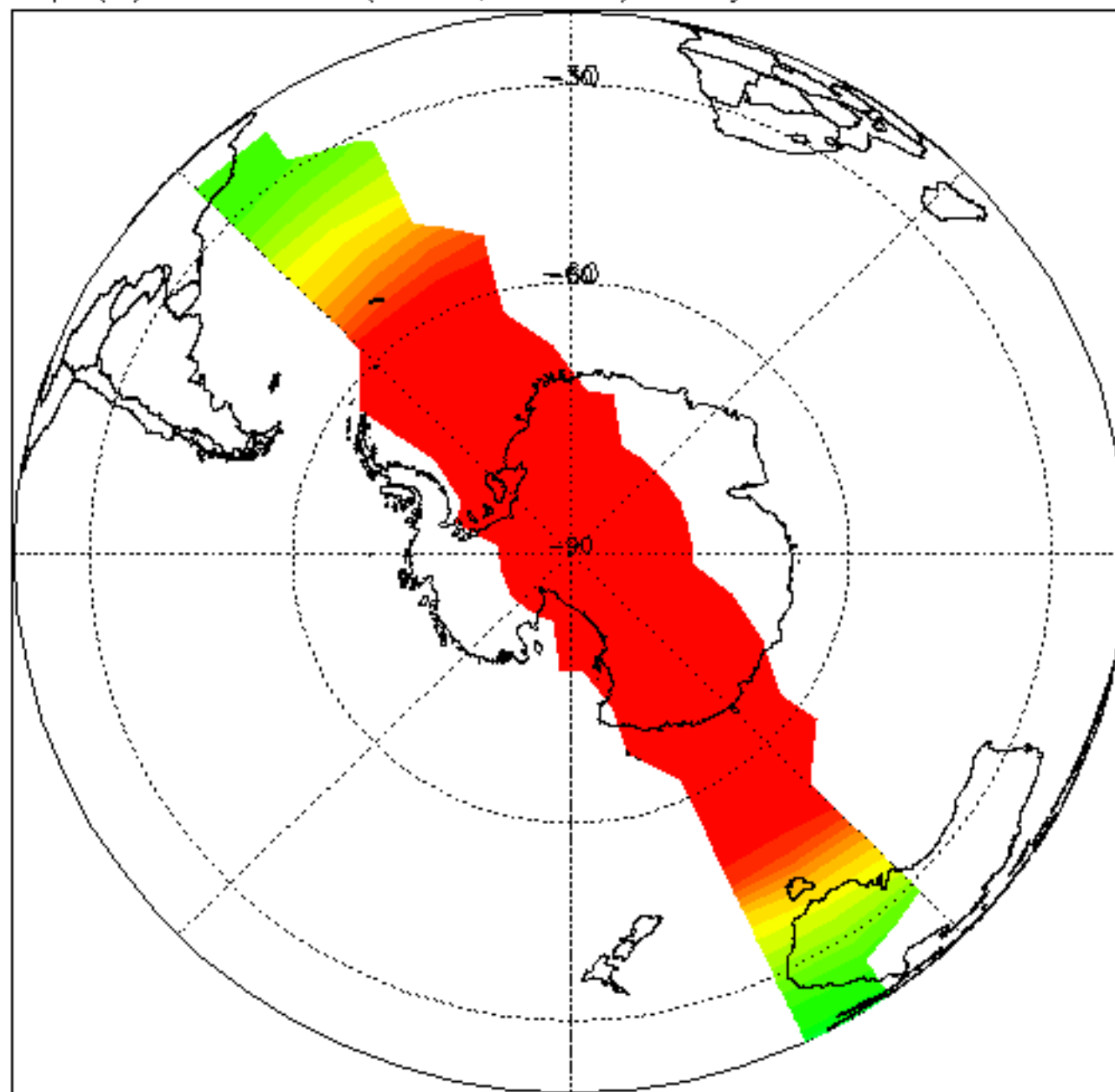




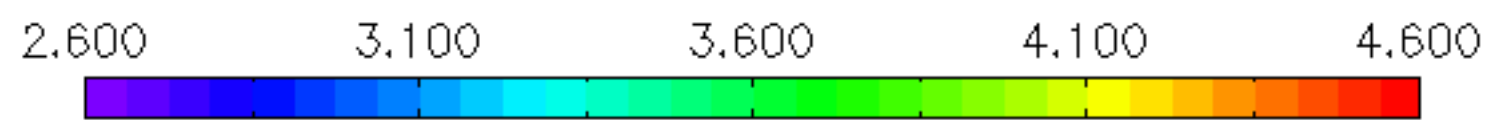
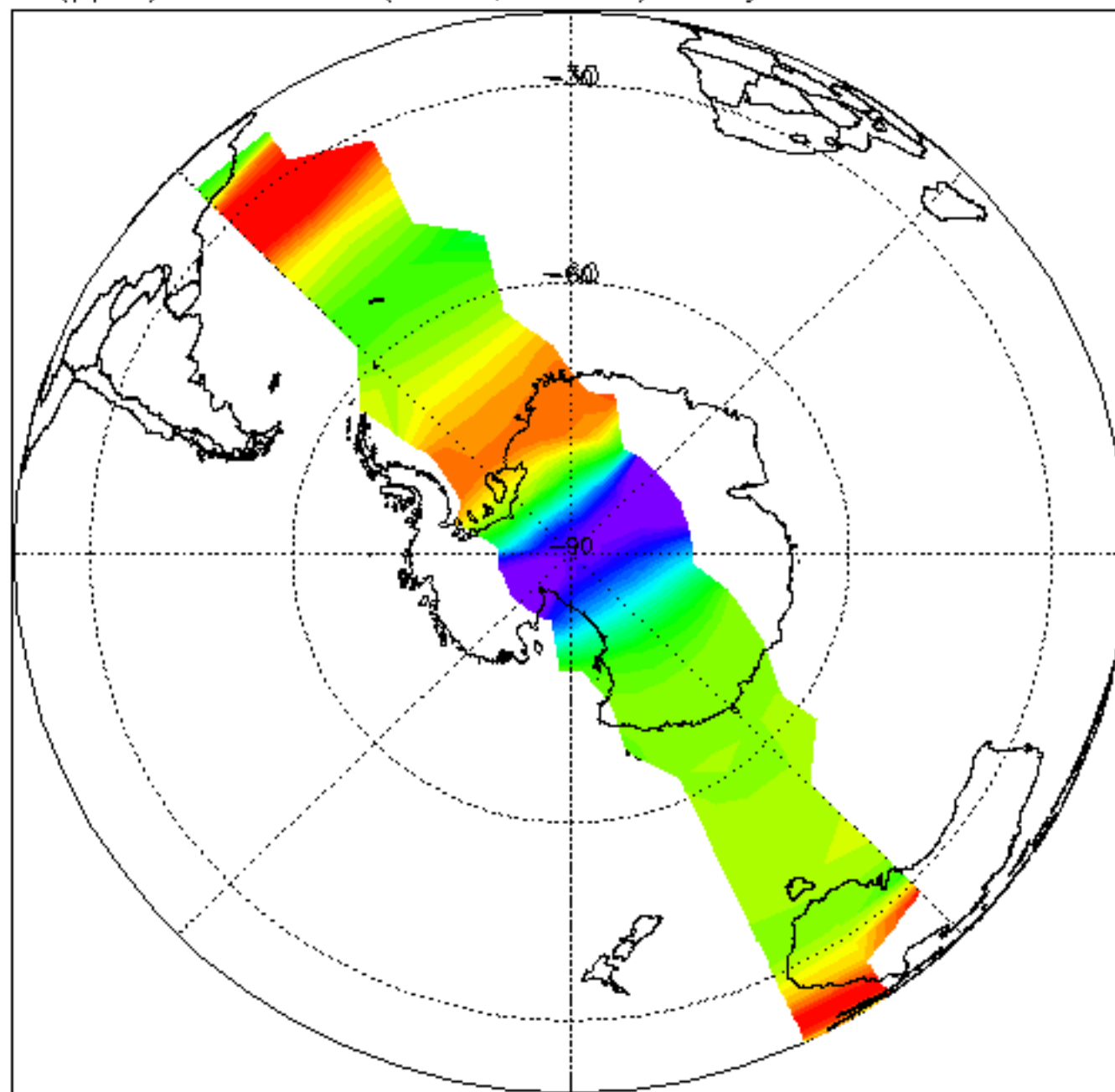
N20 (ppb) at: 850 K (32km, 10hPa). Daily mean: 20-DEC-2011



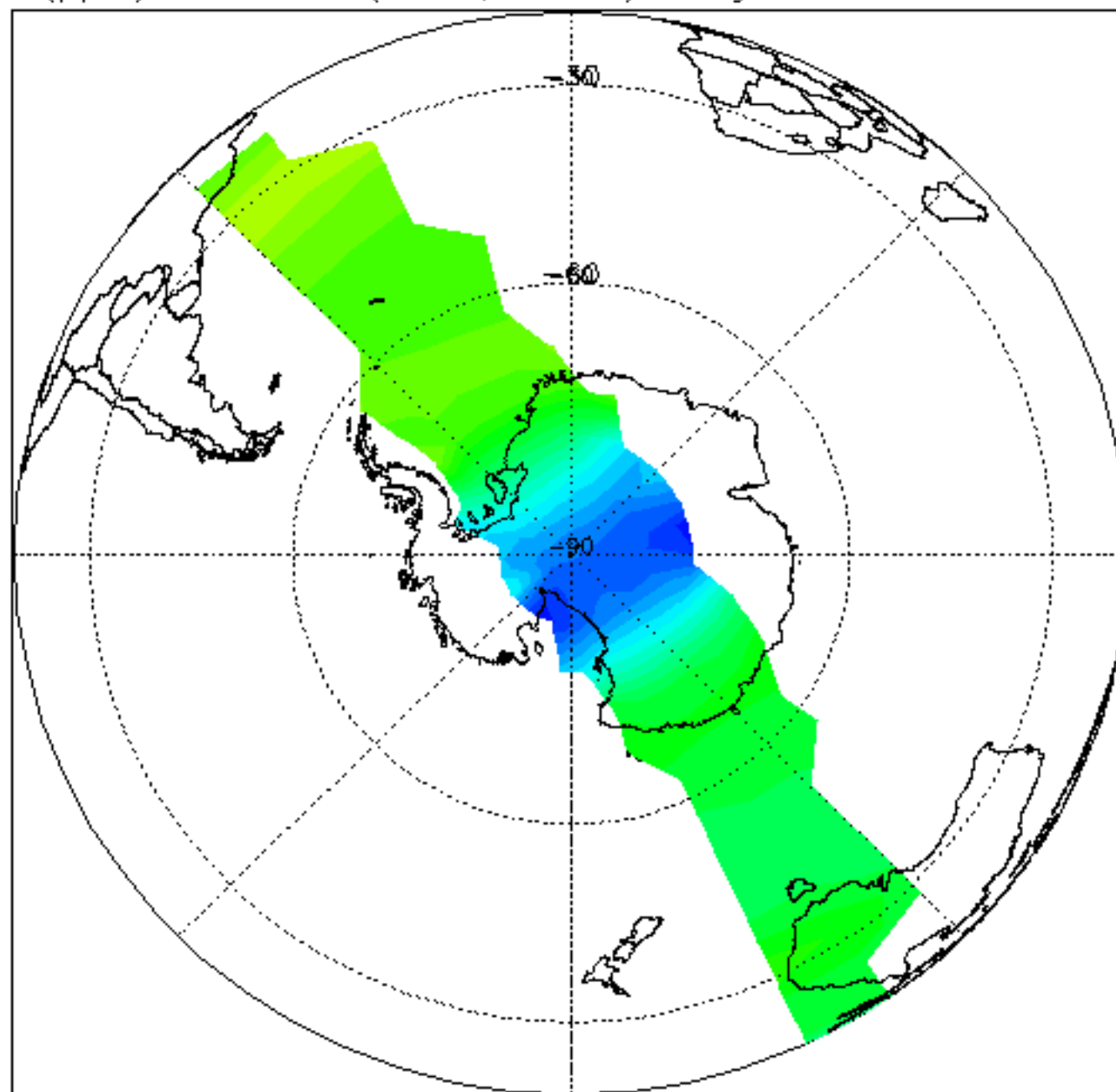
Temp (K) at: 490 K (19km, 55hPa). Daily mean: 20-DEC-2011



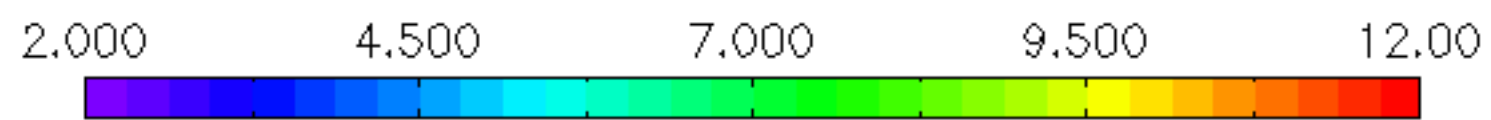
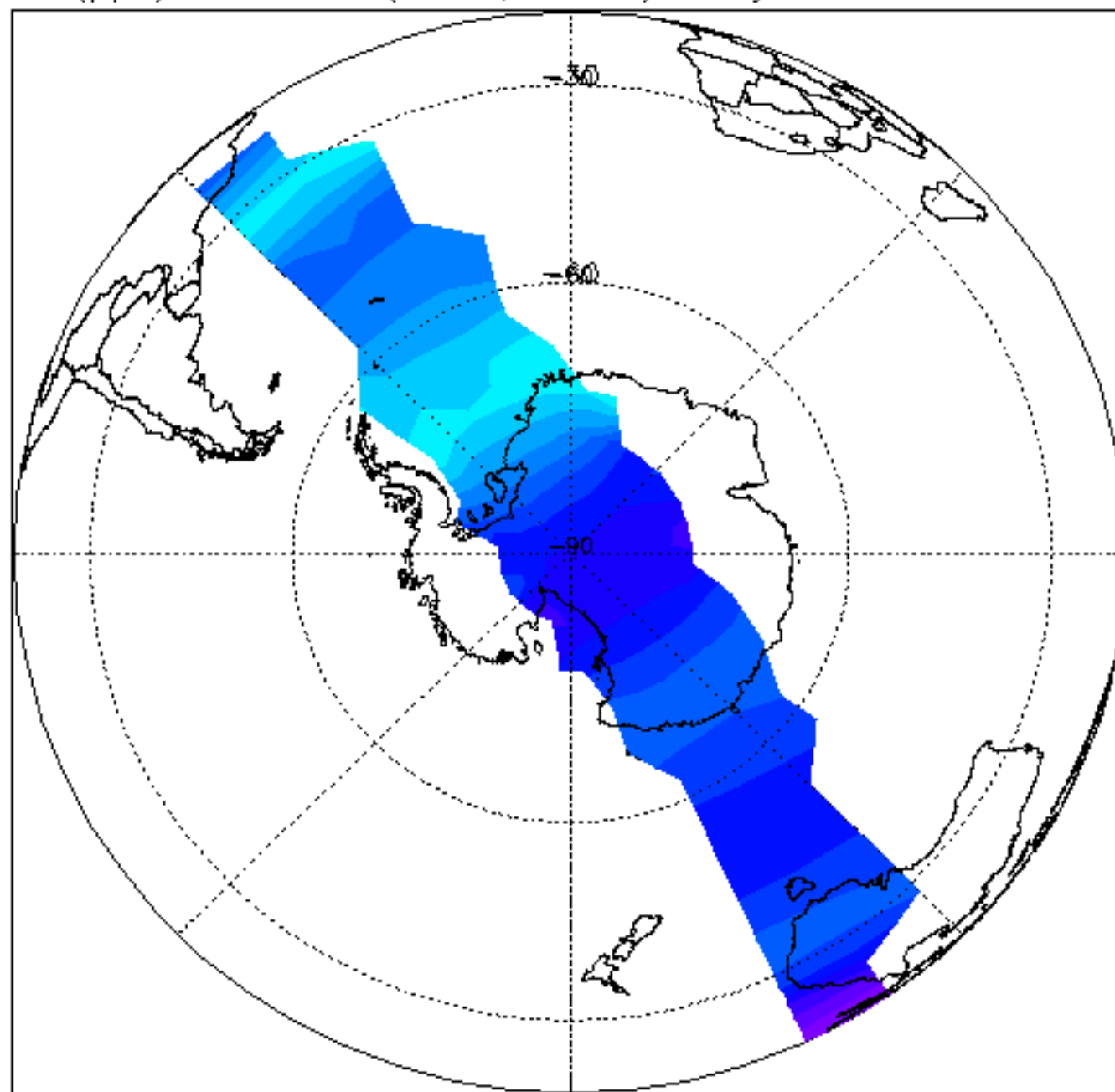
H<sub>2</sub>O (ppm) at: 490 K (19km, 55hPa). Daily mean: 20-DEC-2011



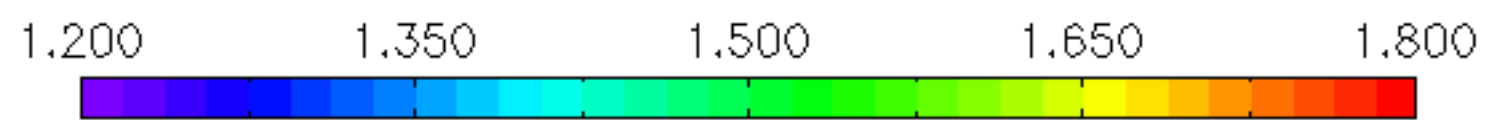
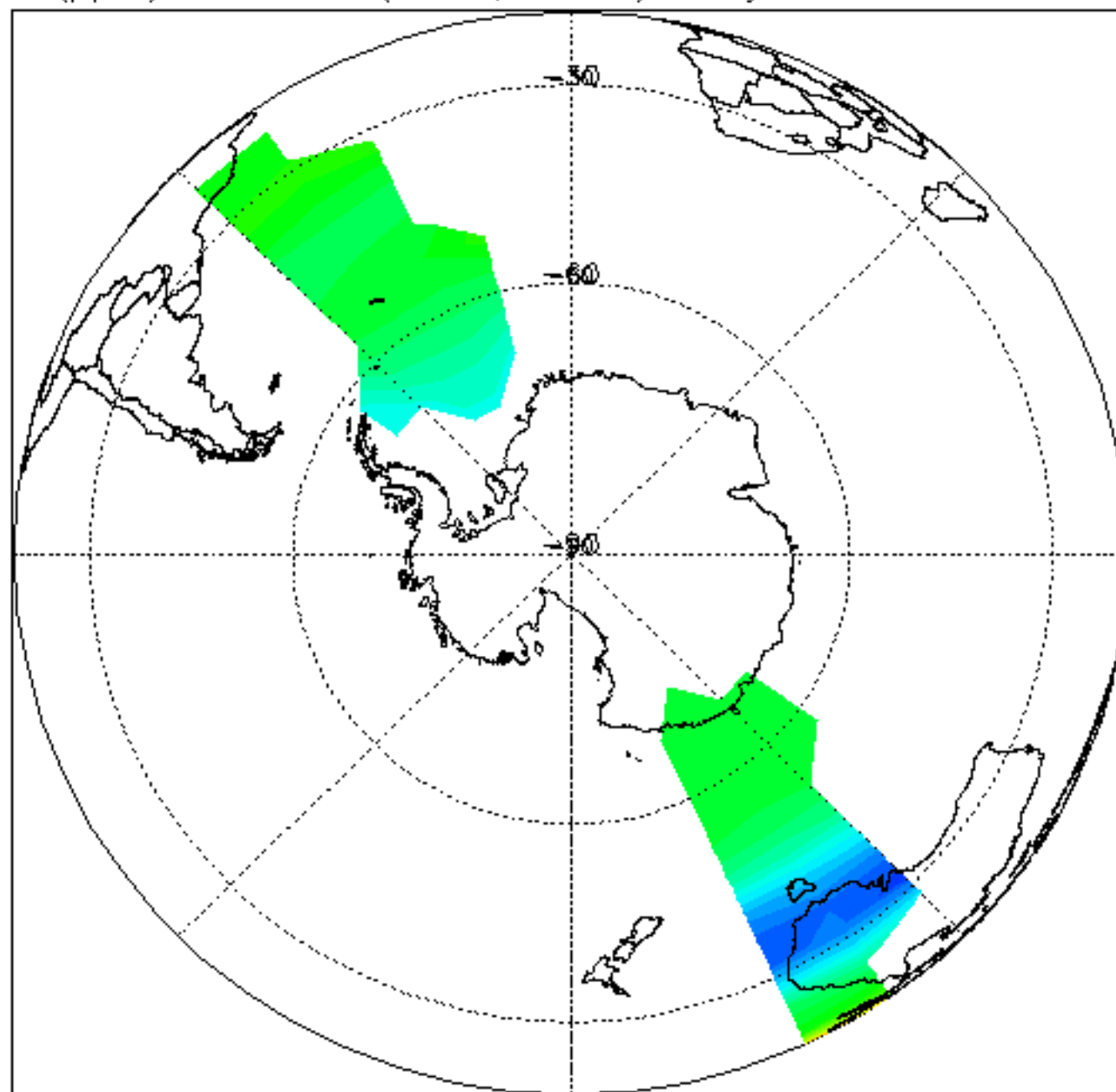
O<sub>3</sub> (ppm) at: 490 K (19km, 55hPa). Daily mean: 20-DEC-2011



HN03 (ppb) at: 490 K (19km, 55hPa). Daily mean: 20-DEC-2011

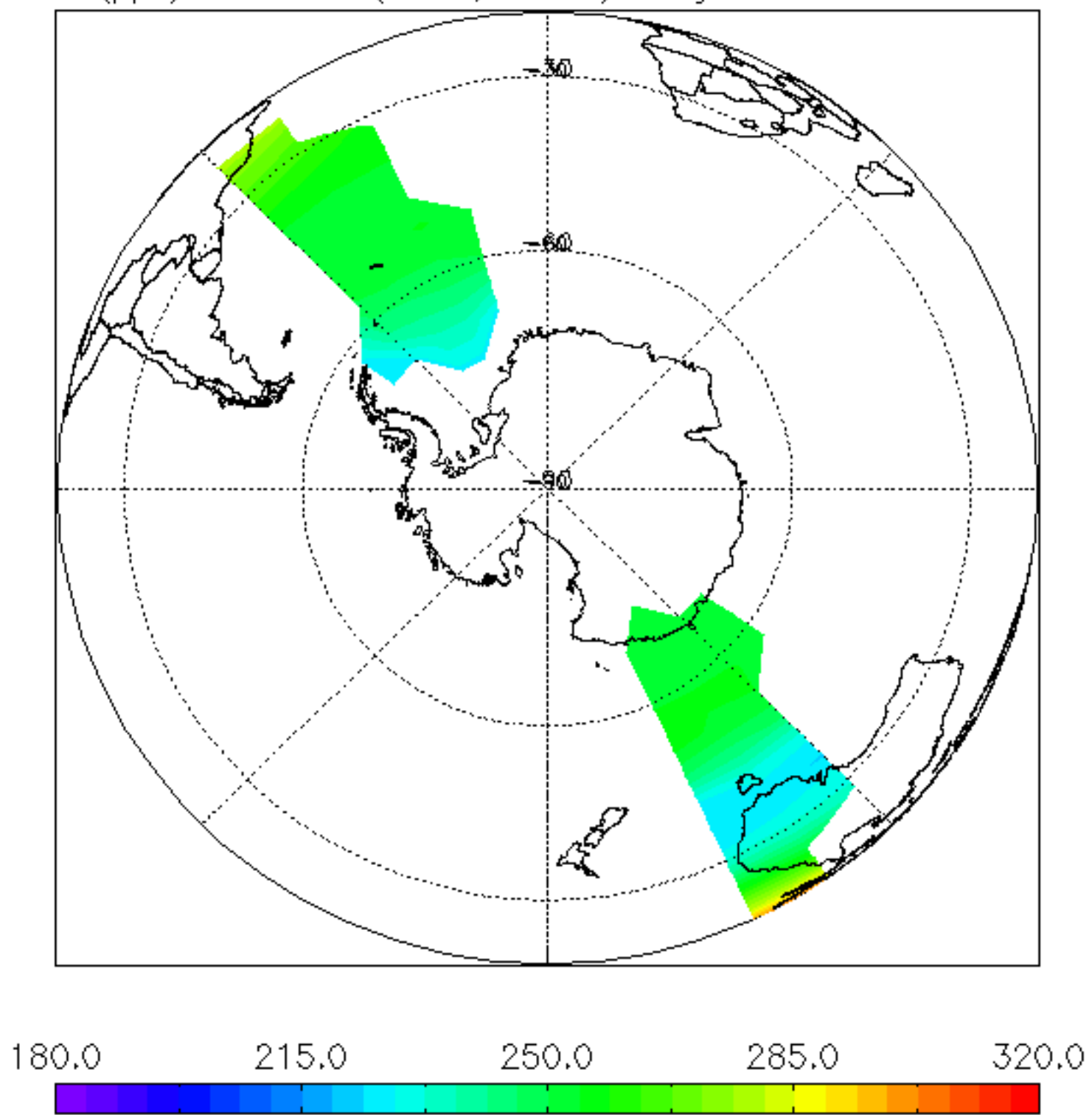


CH<sub>4</sub> (ppm) at: 490 K (19km, 55hPa). Daily mean: 20-DEC-2011

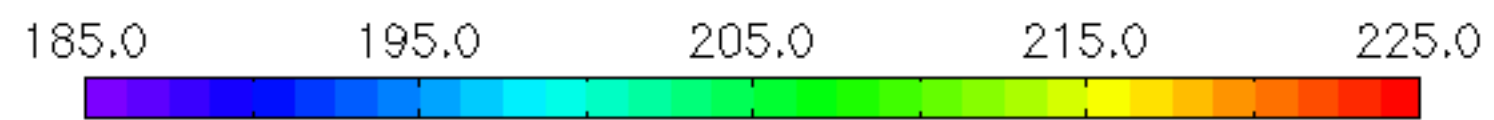
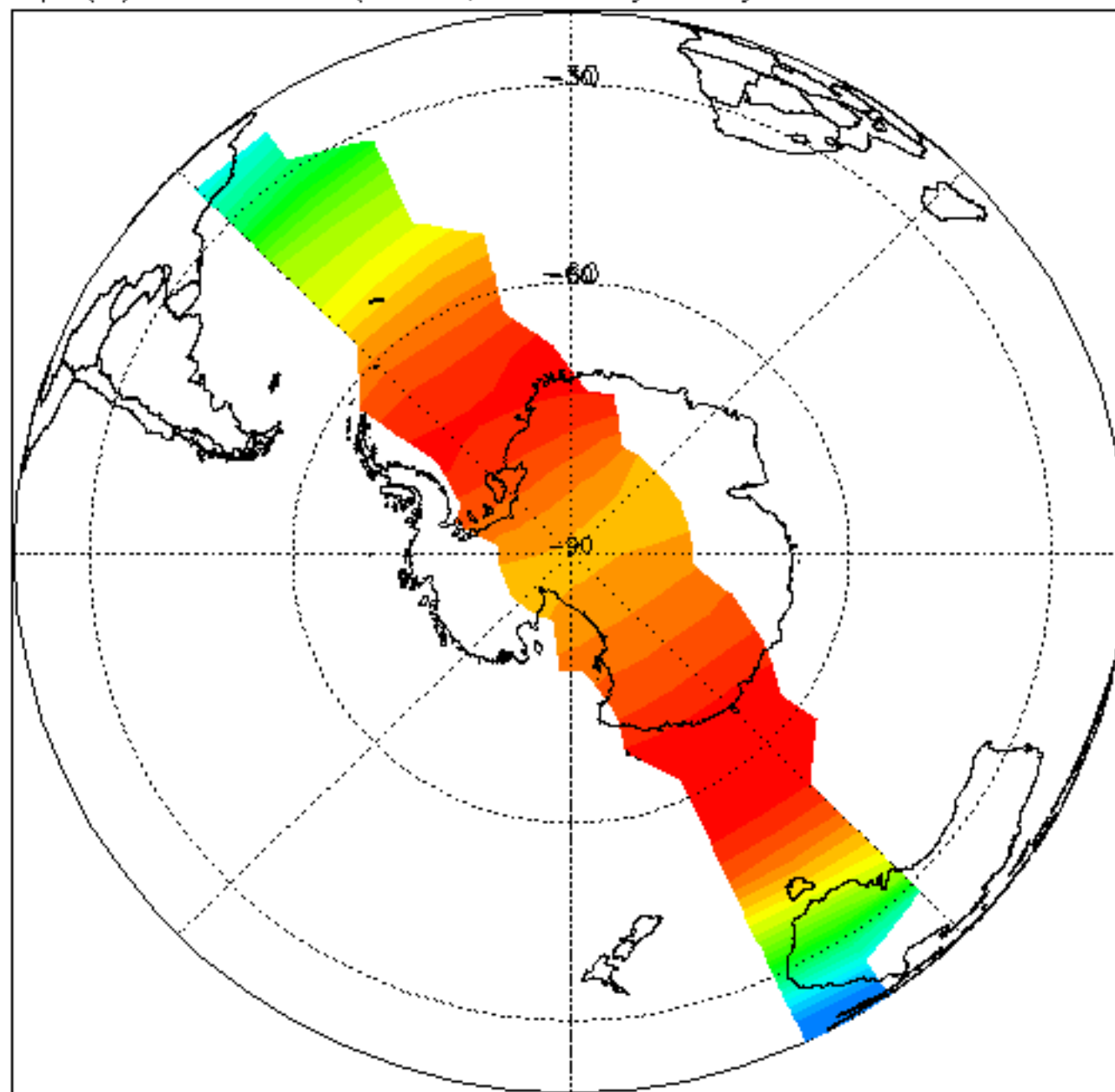




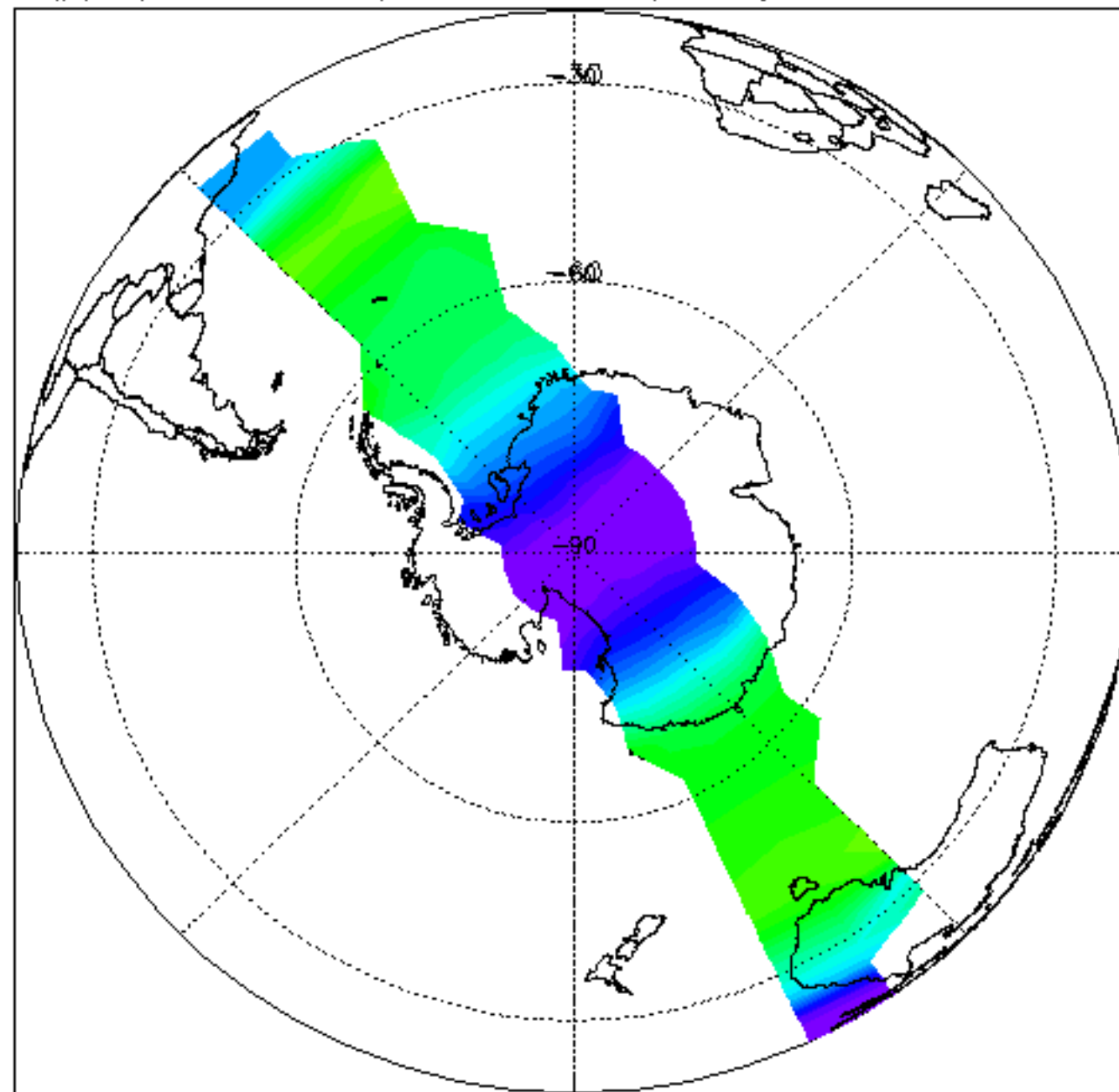
N<sub>2</sub>O (ppb) at: 490 K (19km, 55hPa). Daily mean: 20-DEC-2011



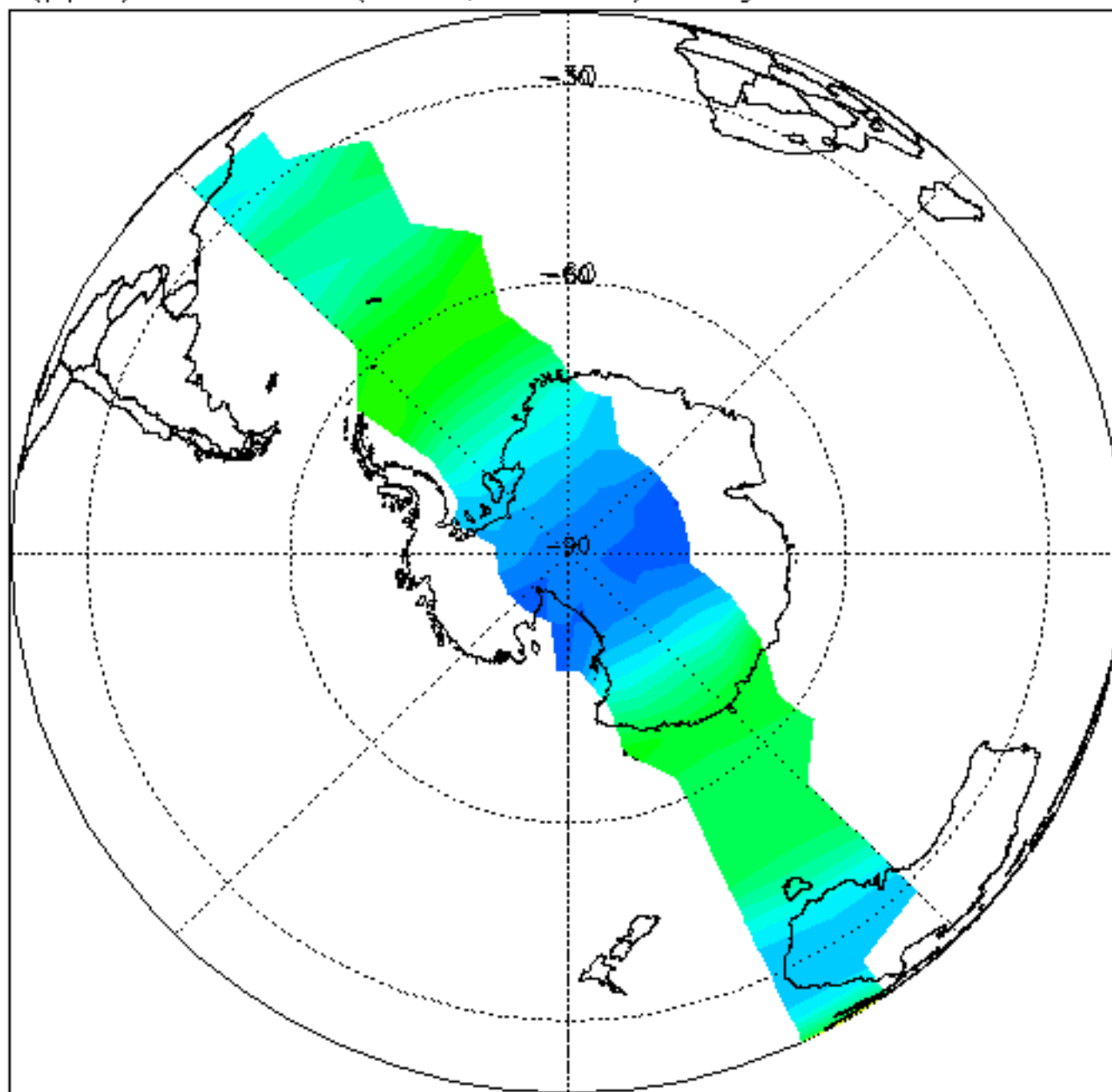
Temp (K) at: 410 K (16km, 100hPa). Daily mean: 20-DEC-2011



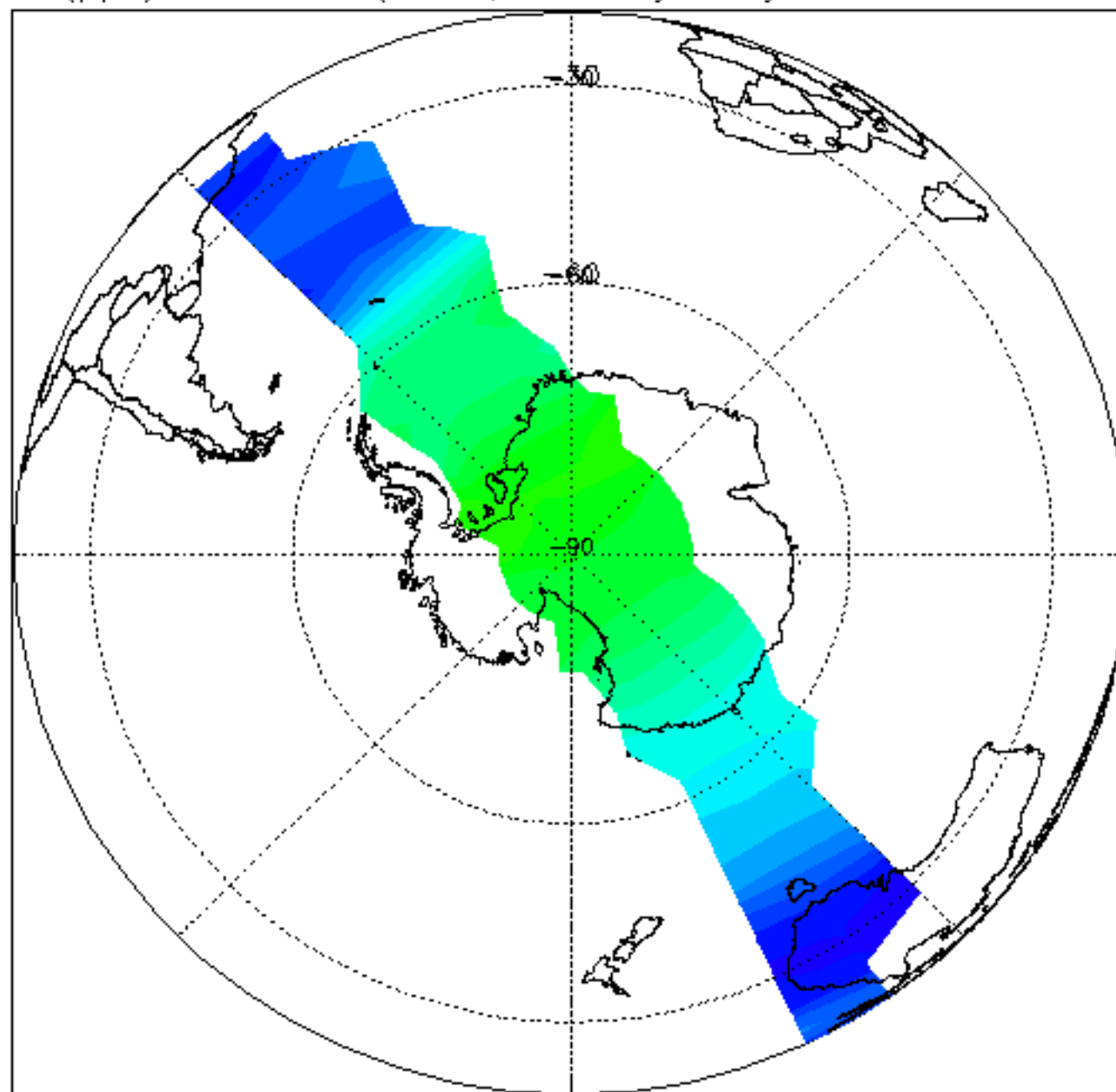
H<sub>2</sub>O (ppm) at: 410 K (16km, 100hPa). Daily mean: 20-DEC-2011



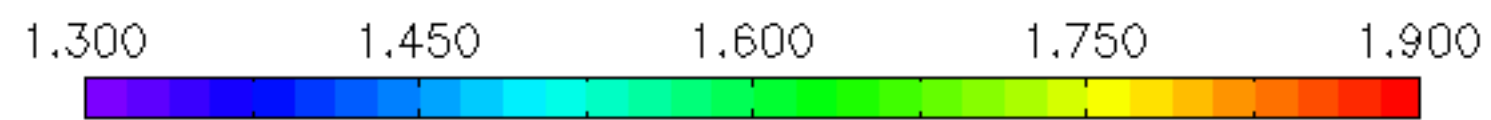
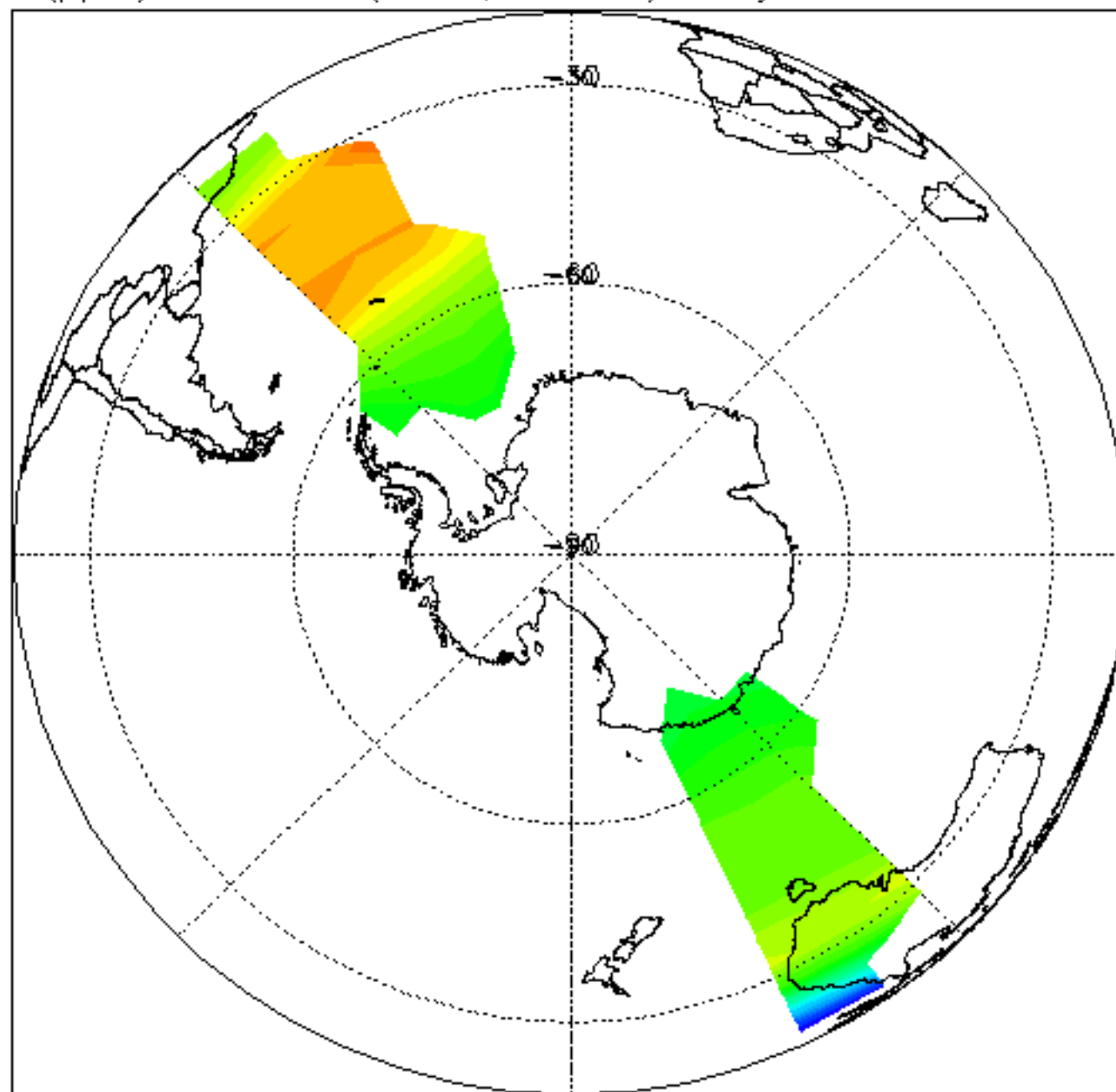
O<sub>3</sub> (ppm) at: 410 K (16km, 100hPa). Daily mean: 20-DEC-2011



HNO<sub>3</sub> (ppb) at: 410 K (16km, 100hPa). Daily mean: 20-DEC-2011



CH<sub>4</sub> (ppm) at: 410 K (16km, 100hPa). Daily mean: 20-DEC-2011





N<sub>2</sub>O (ppb) at: 410 K (16km, 100hPa). Daily mean: 20-DEC-2011

