

-----

## MIPAS maps of mean distribution: 30-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.

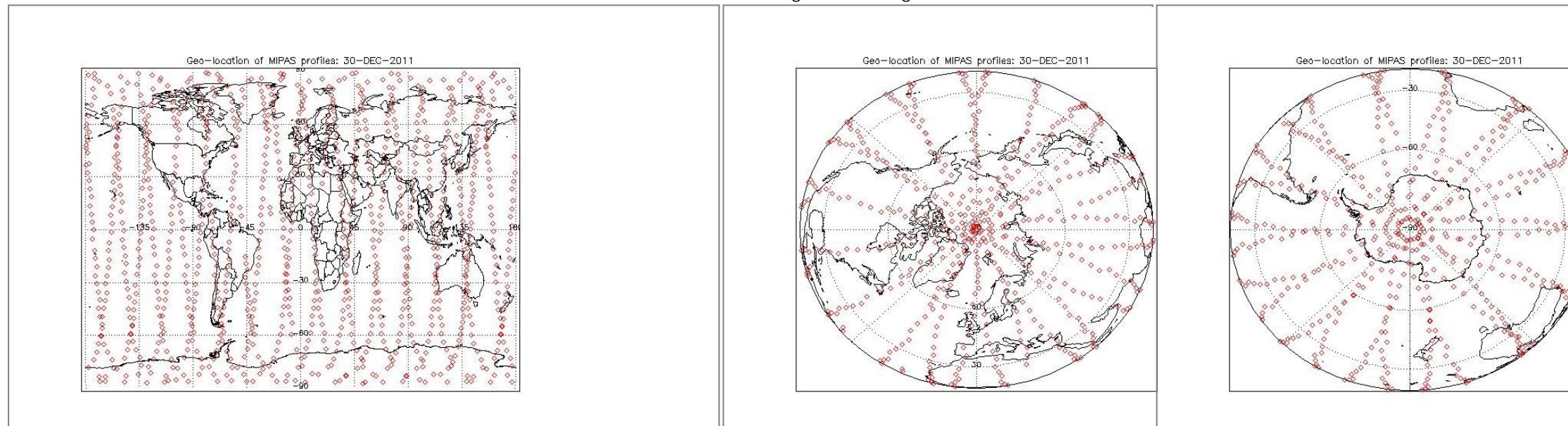
Note that Upper and Middle Atmosphere measurements are only retrieved up to 70km.

Total Number of profiles: 1110

Retrieved Parameter	Profiles not reaching convergence (%)	Profiles exceeding chi2 threshold (%)
p-T	7.84	9.01
H2O	7.84	1.17
O3	7.84	0.27
HNO3	93.60	0.27
CH4	7.84	1.08
N2O	8.02	1.26
NO2	8.20	7.30

### Geo-location of MIPAS profiles

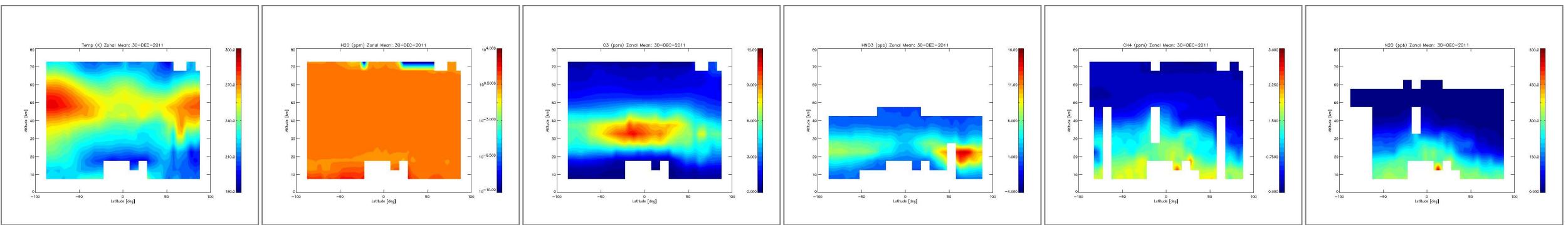
Click on the figure to enlarge



### Zonal Mean Maps

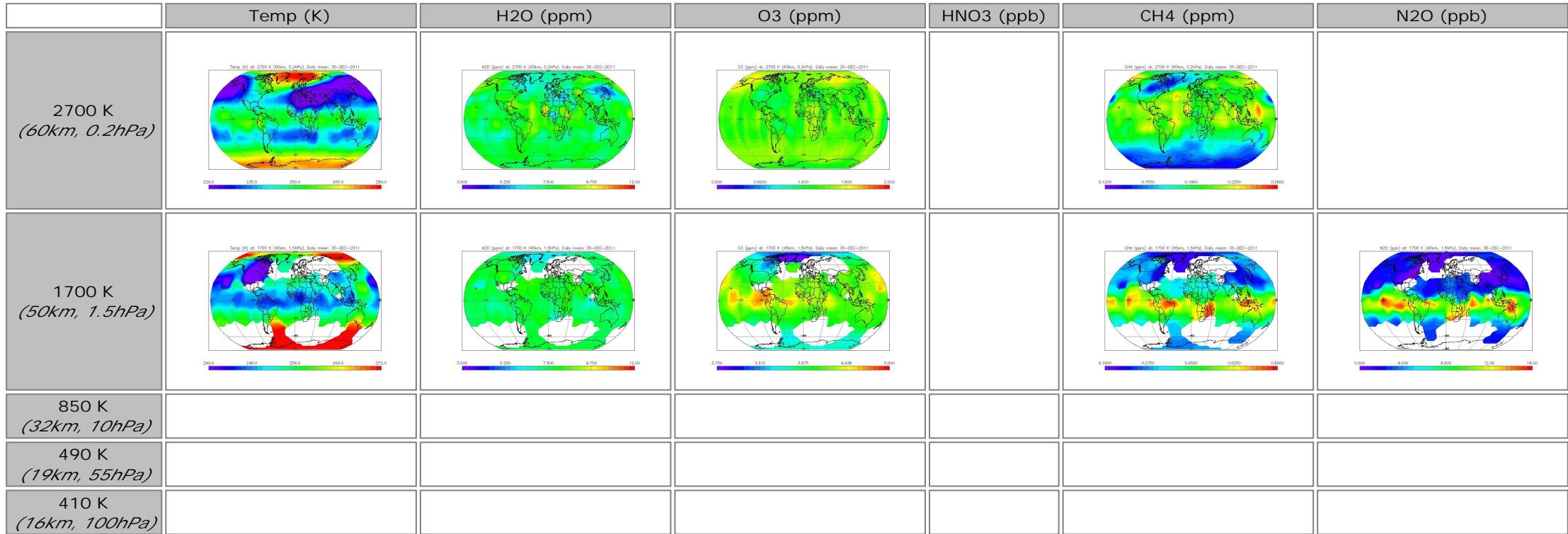
Click on the figure to enlarge





Daily mean interpolated at different isentropic levels

Click on the figure to enlarge

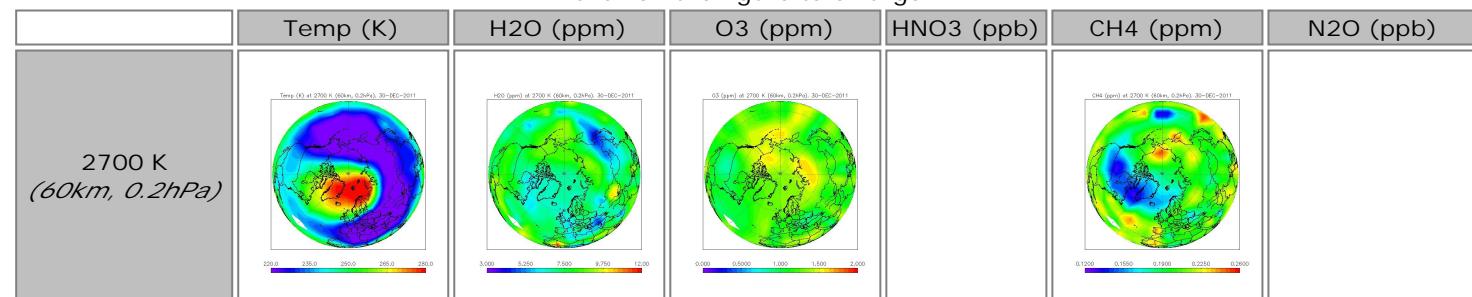


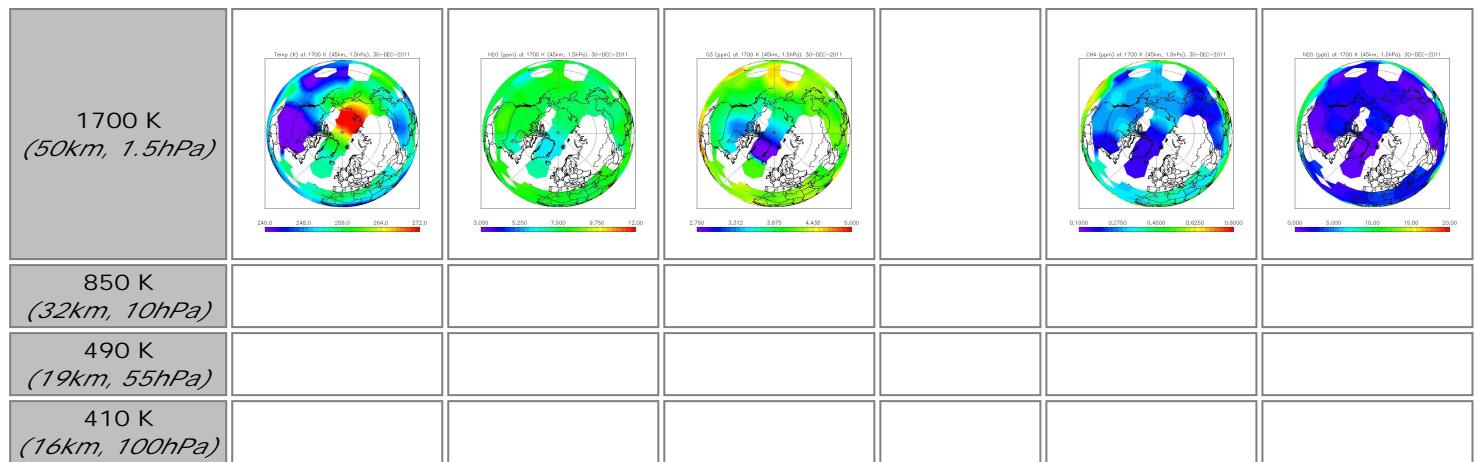
[Home](#)

-----

Arctic distribution interpolated at different isentropic levels

Click on the figure to enlarge

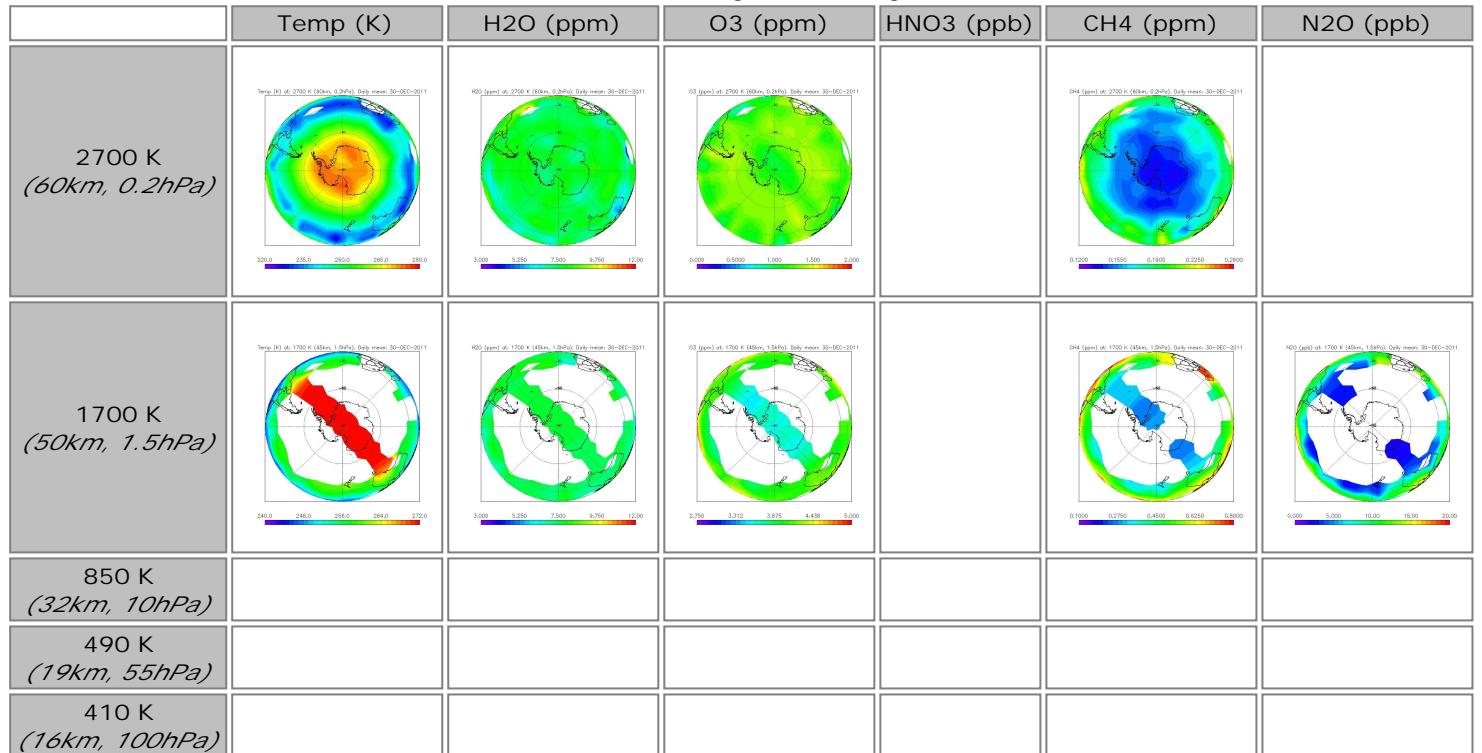


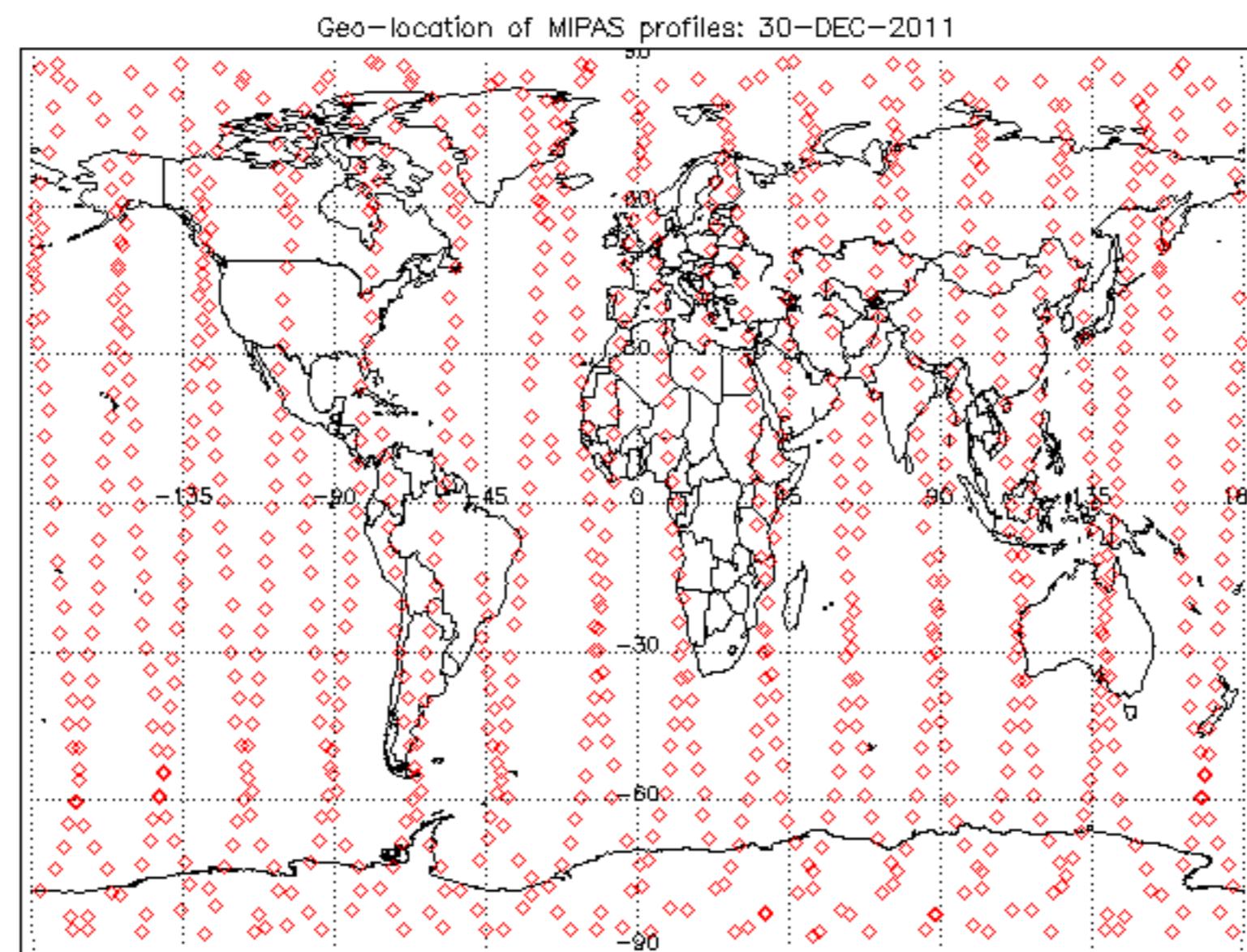


Home

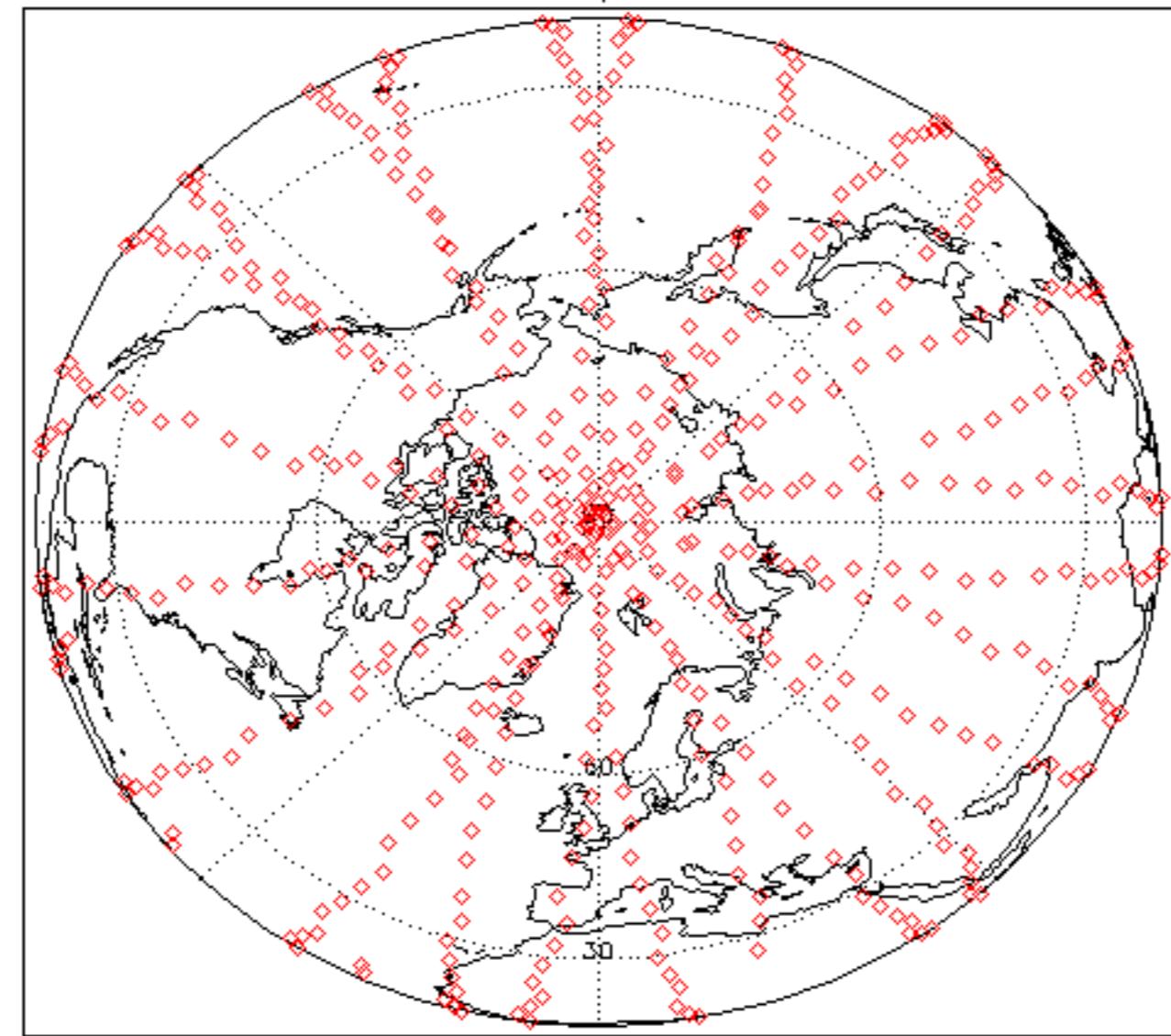
Antarctic distribution interpolated at different isentropic levels

Click on the figure to enlarge

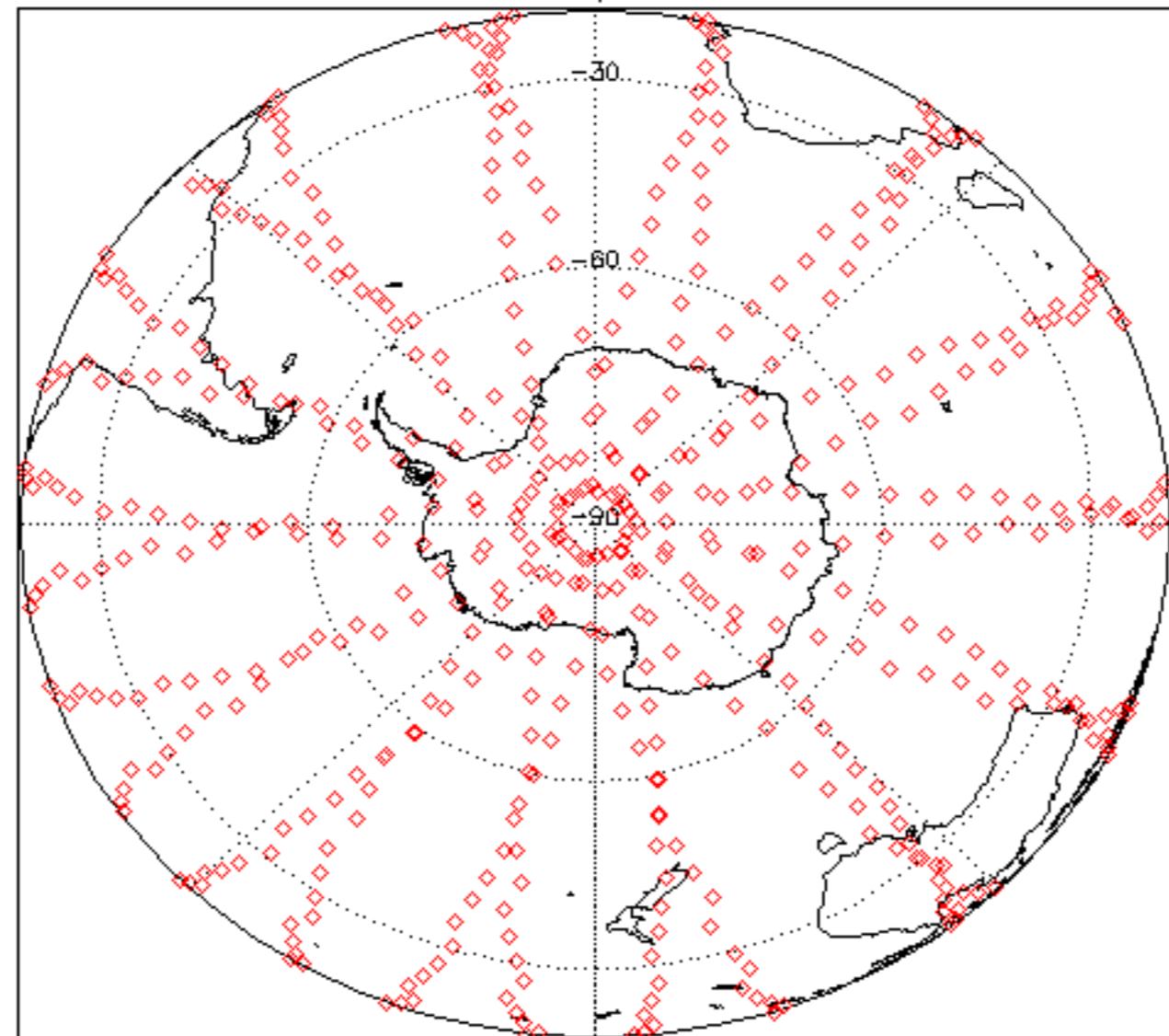


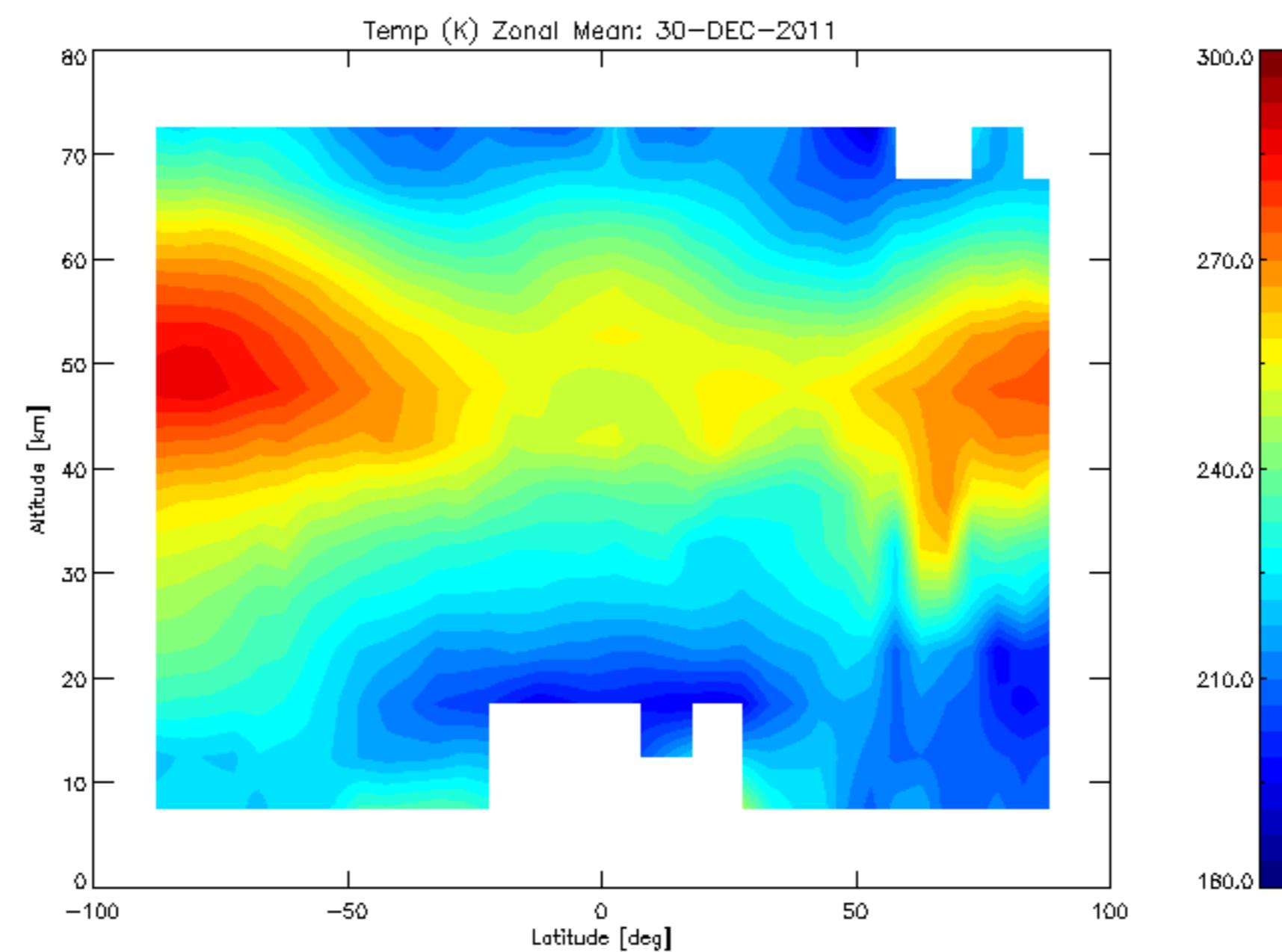


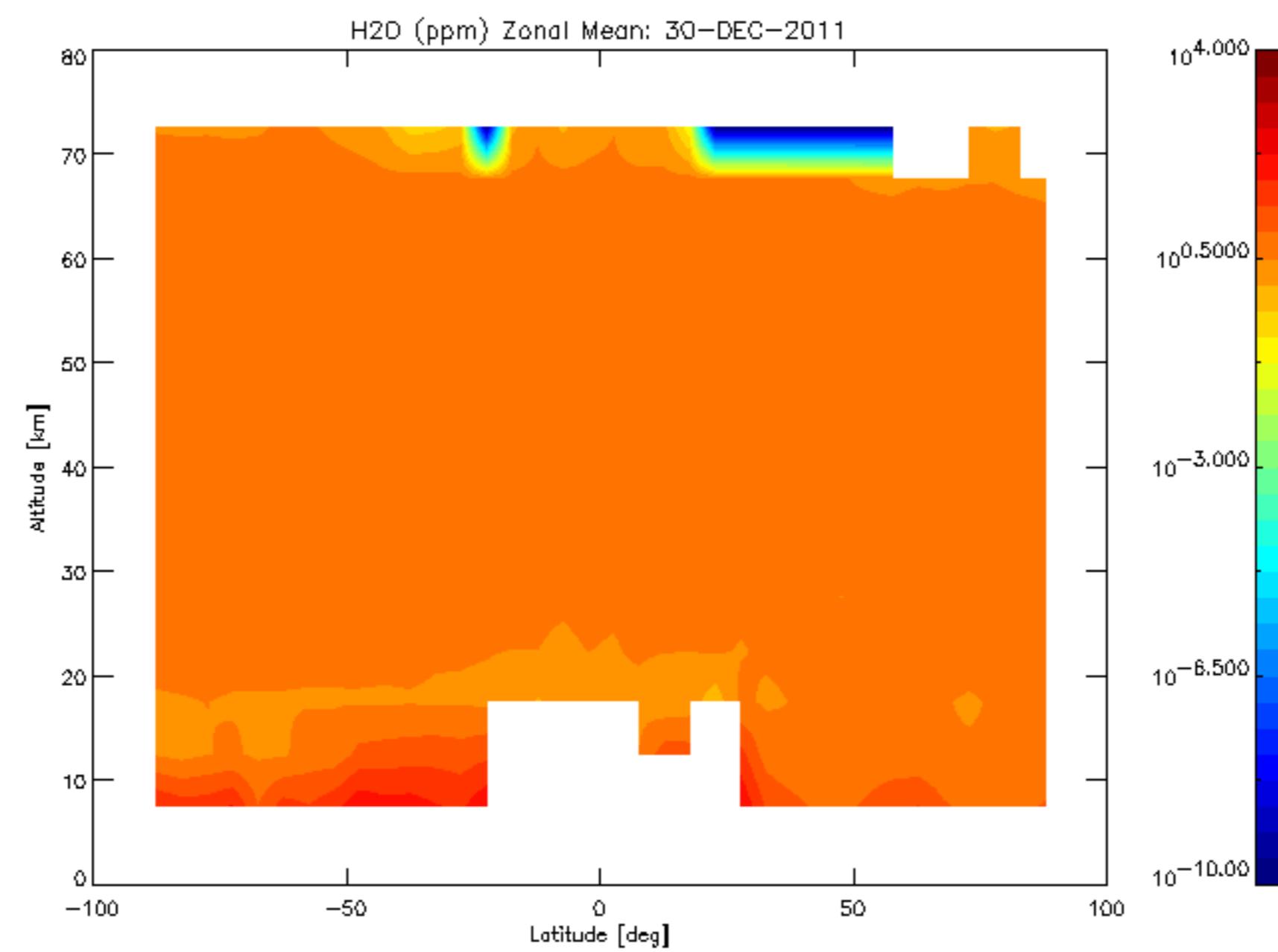
Geo-location of MIPAS profiles: 30-DEC-2011

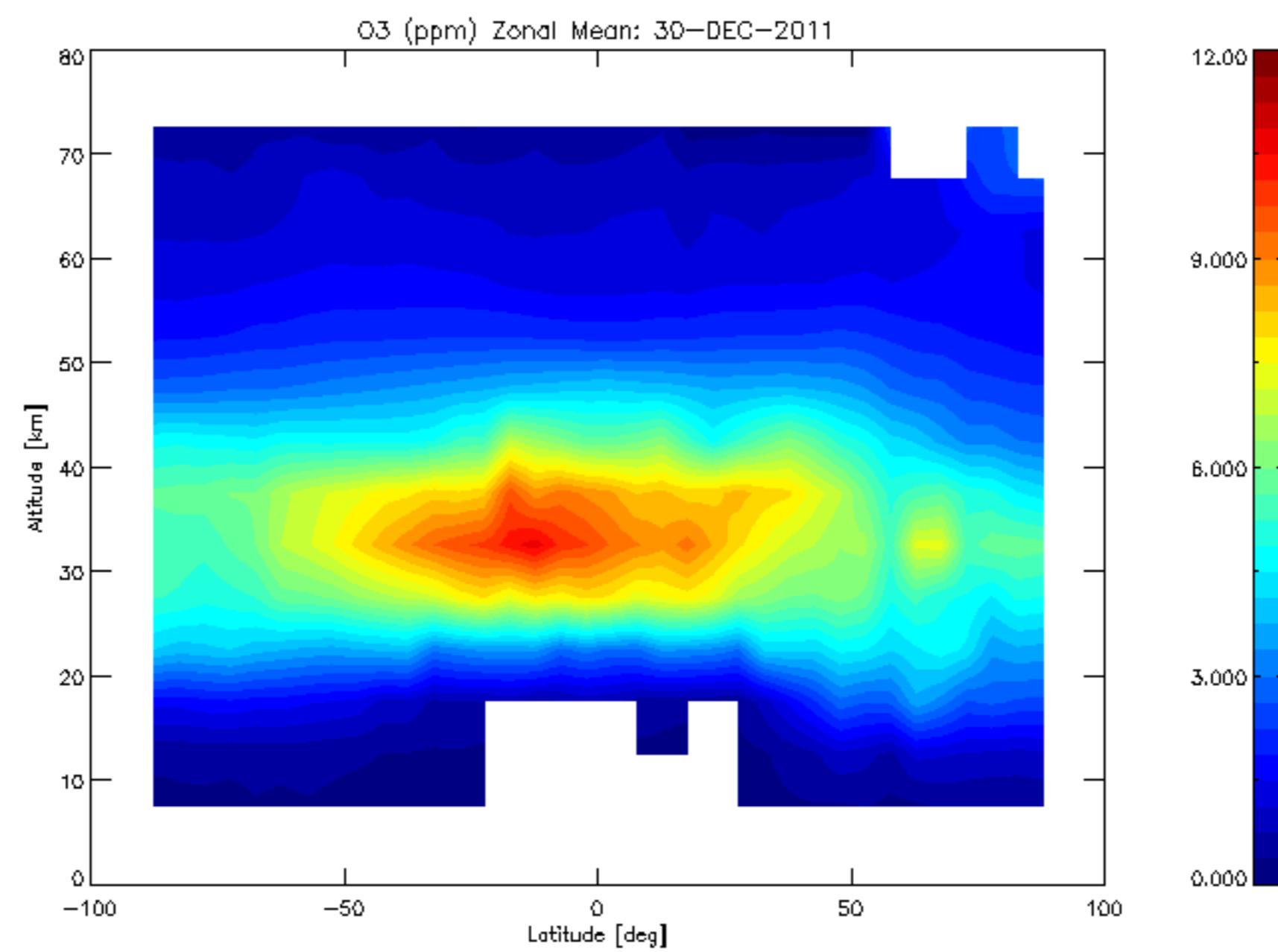


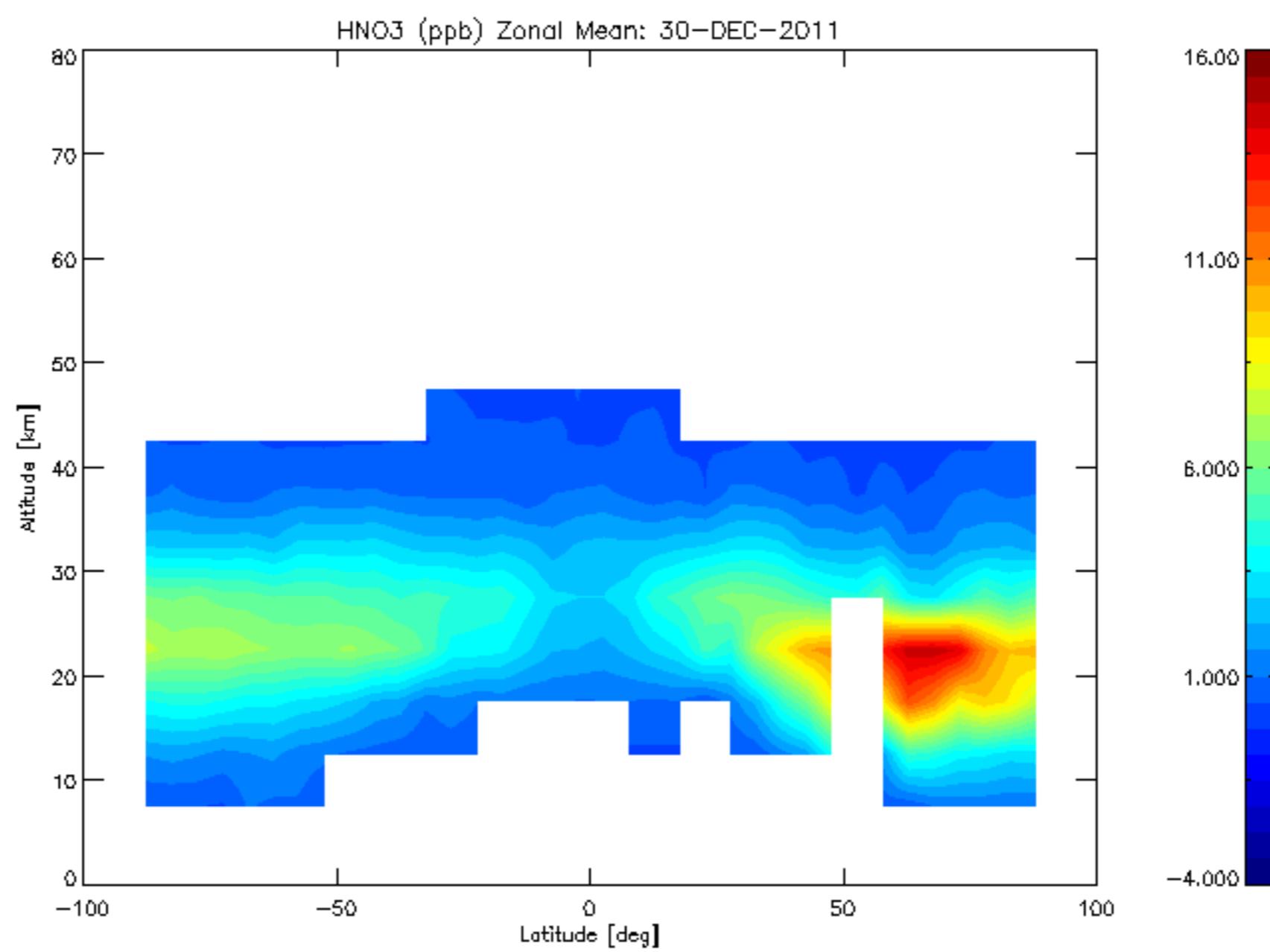
Geo-location of MIPAS profiles: 30-DEC-2011

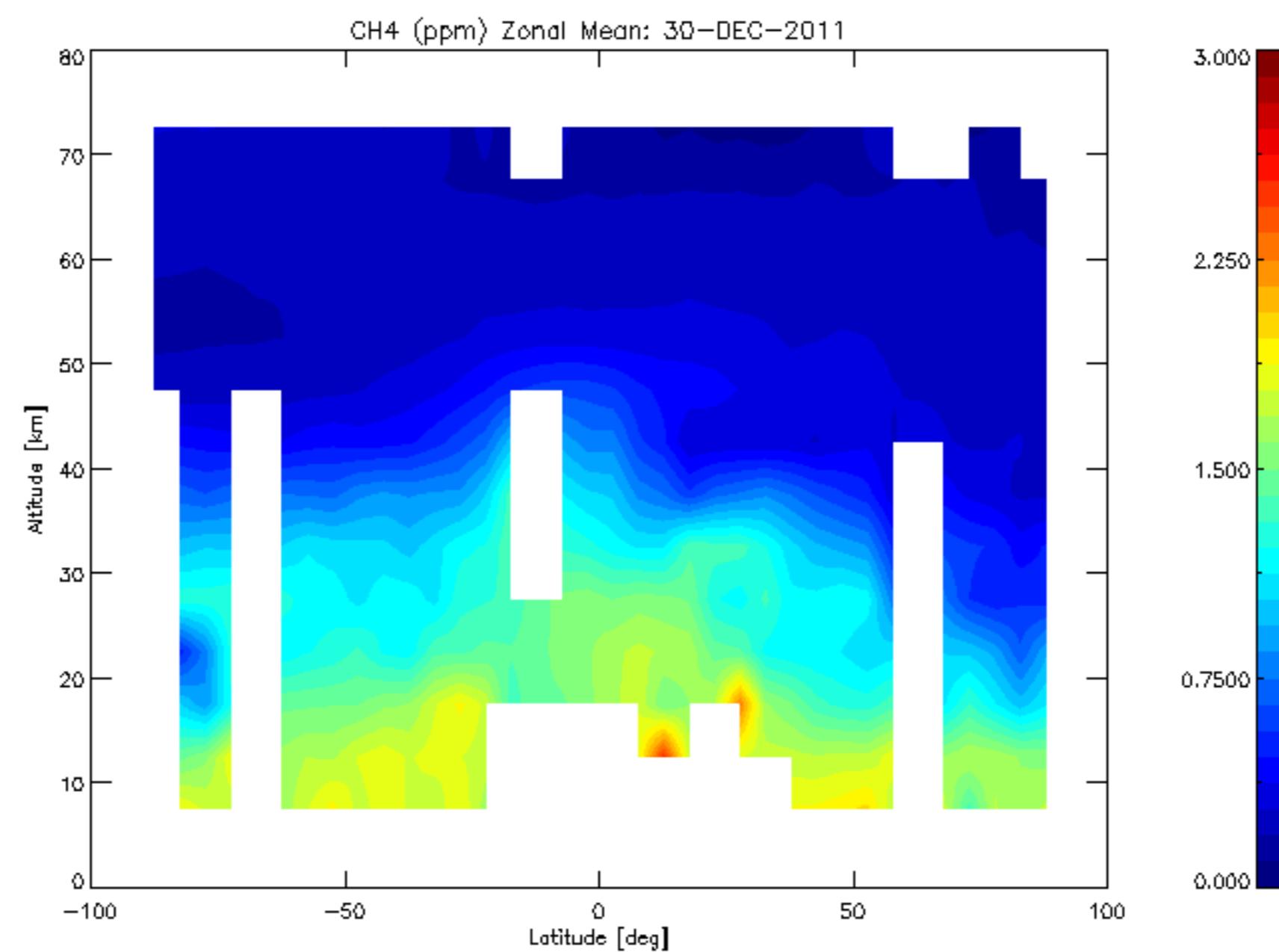


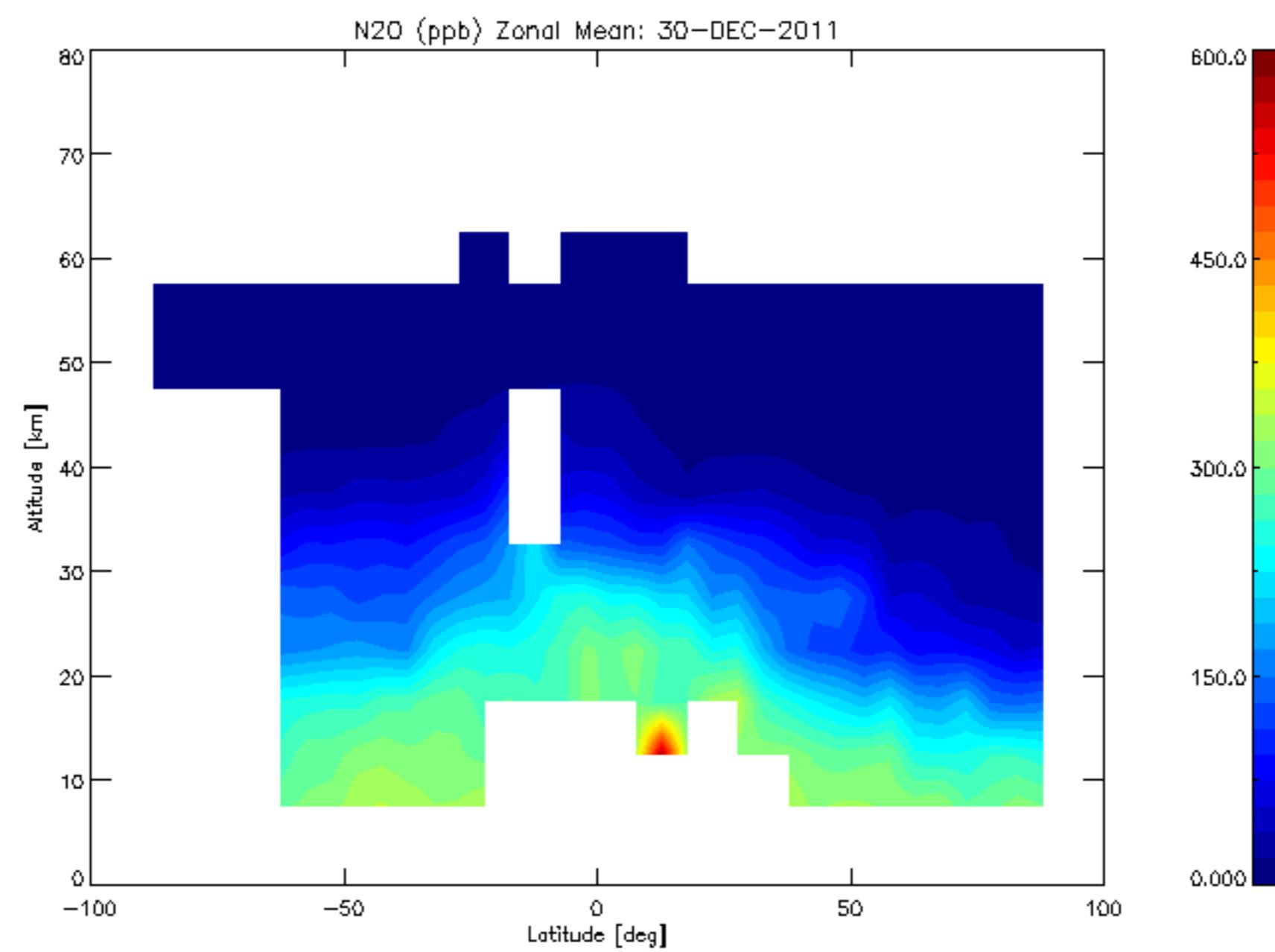




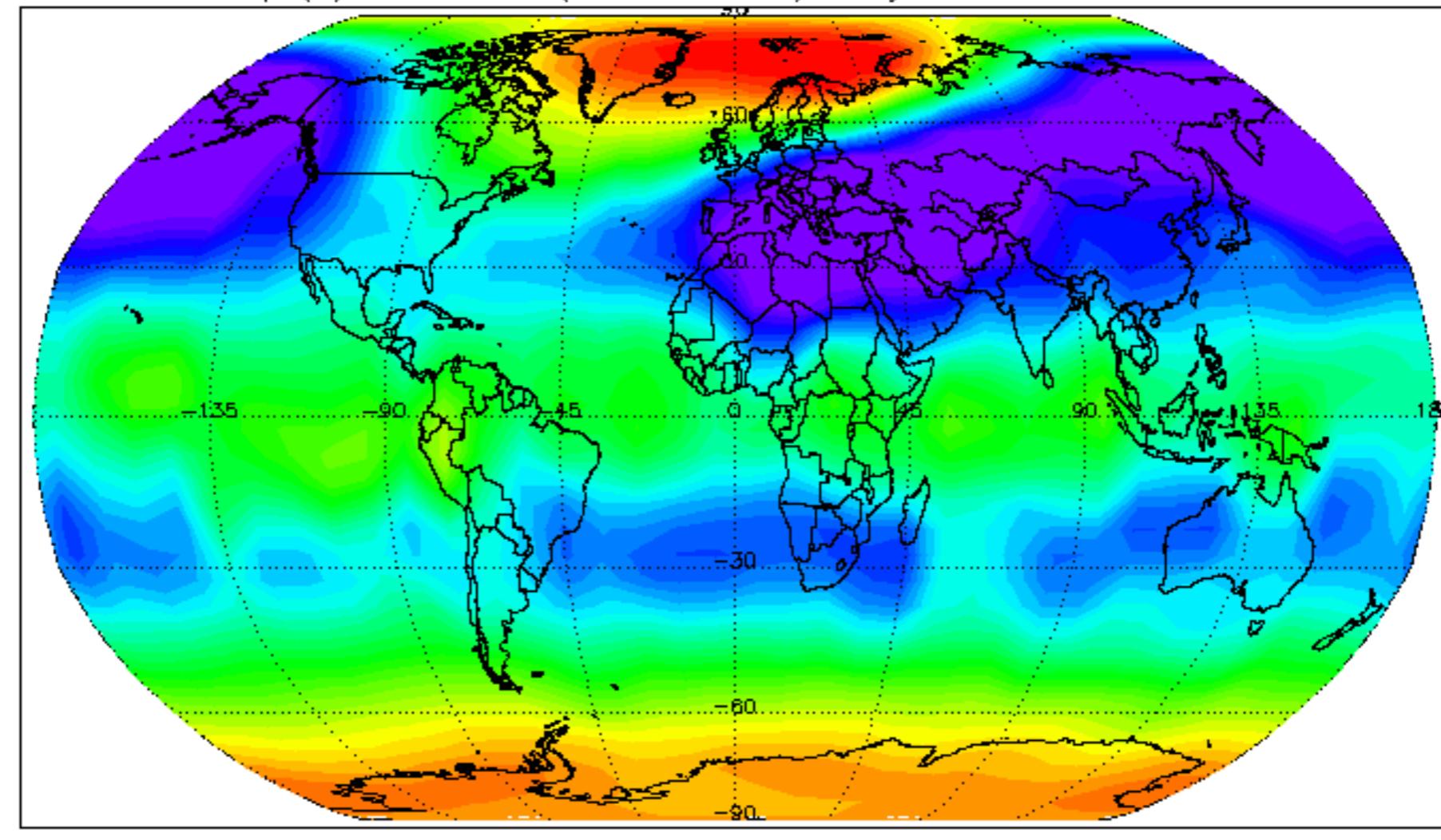








Temp (K) at: 2700 K (60km, 0.2hPa). Daily mean: 30-DEC-2011



220.0

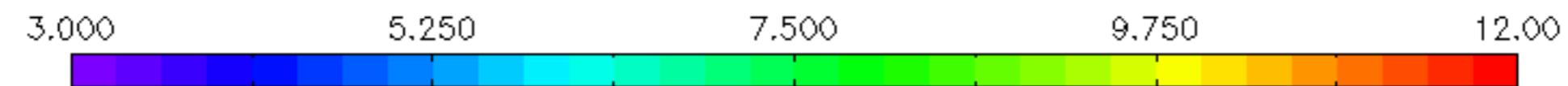
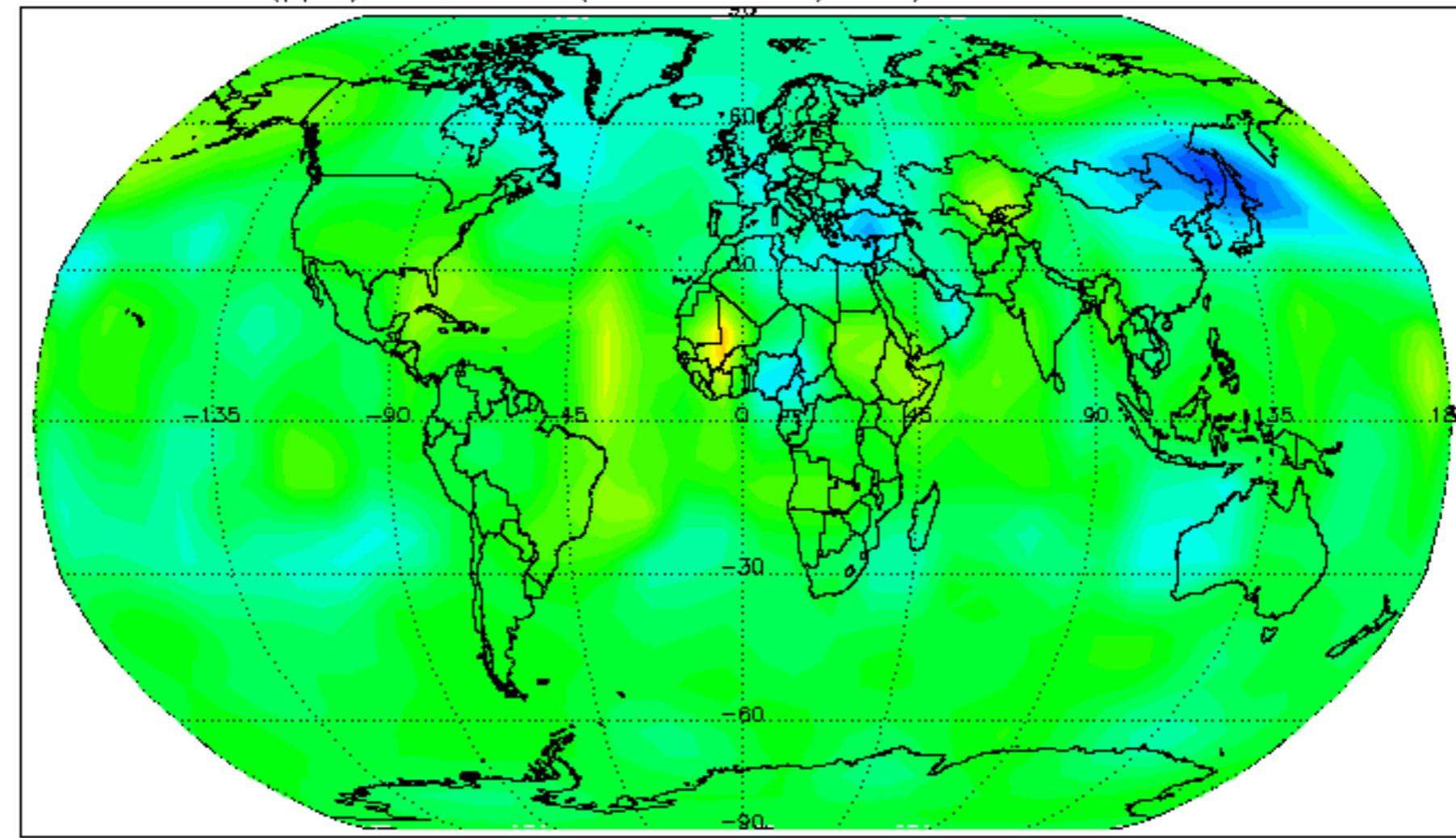
235.0

250.0

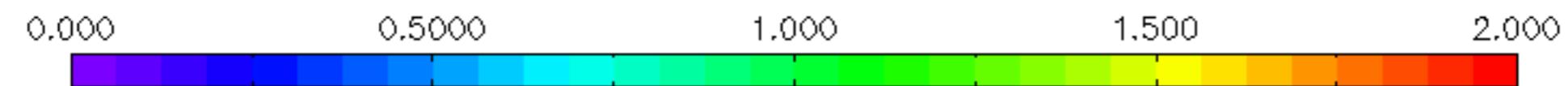
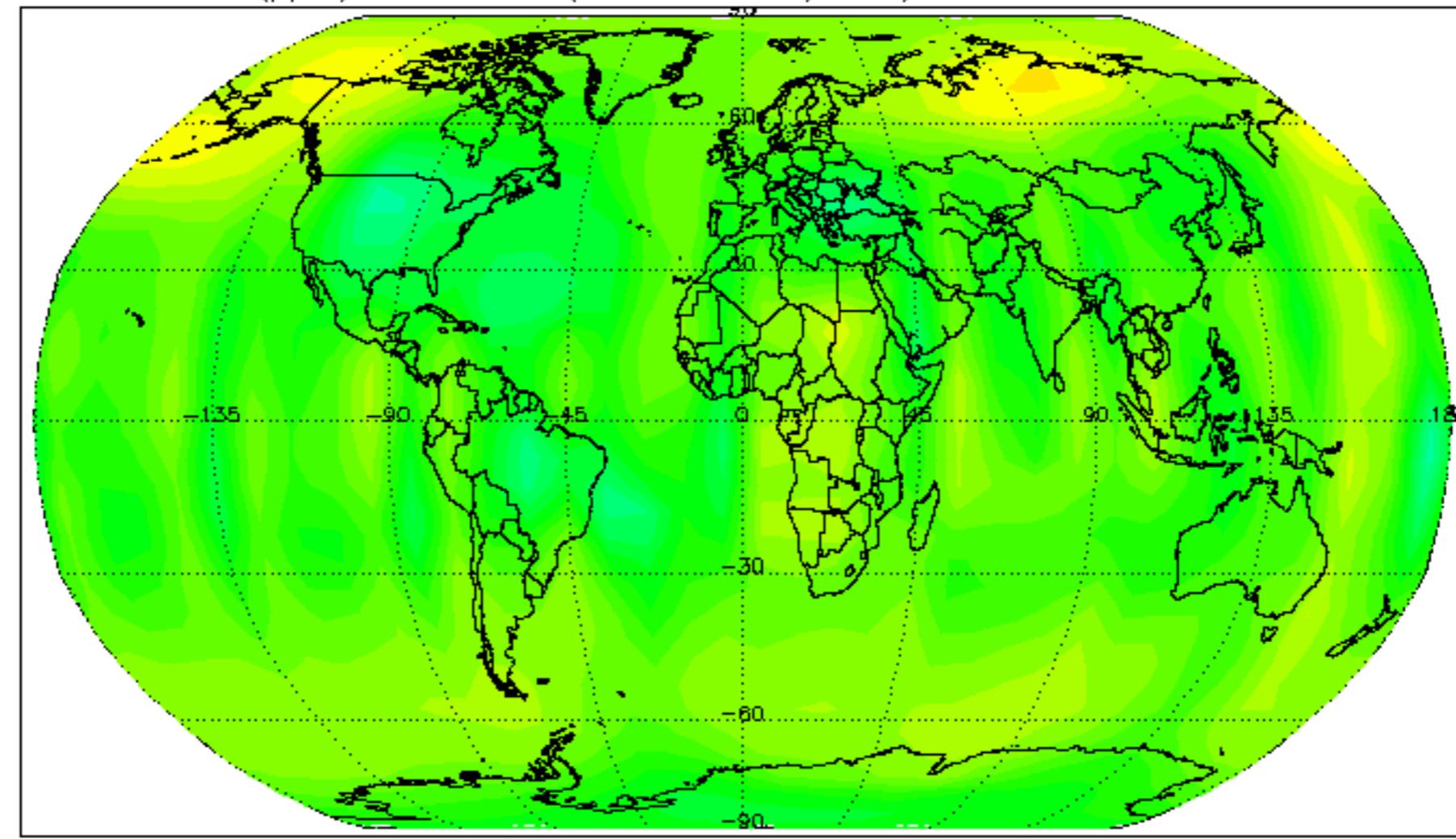
265.0

280.0

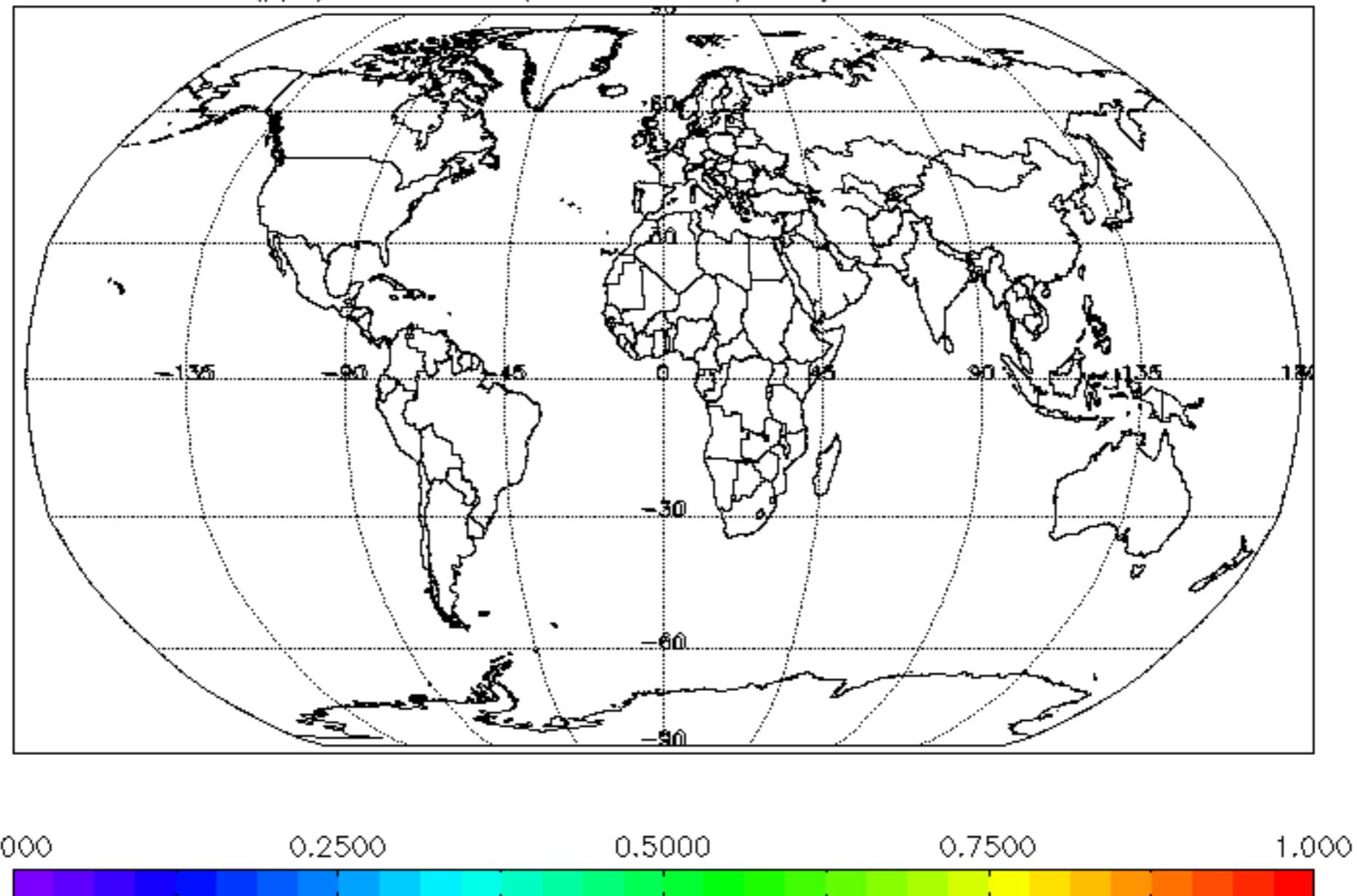
H<sub>2</sub>O (ppm) at: 2700 K (60km, 0.2hPa). Daily mean: 30-DEC-2011



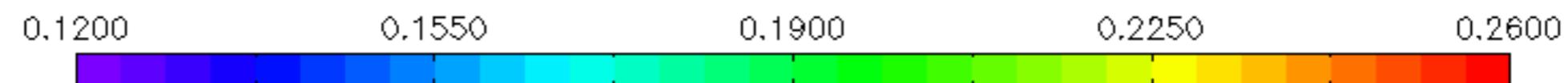
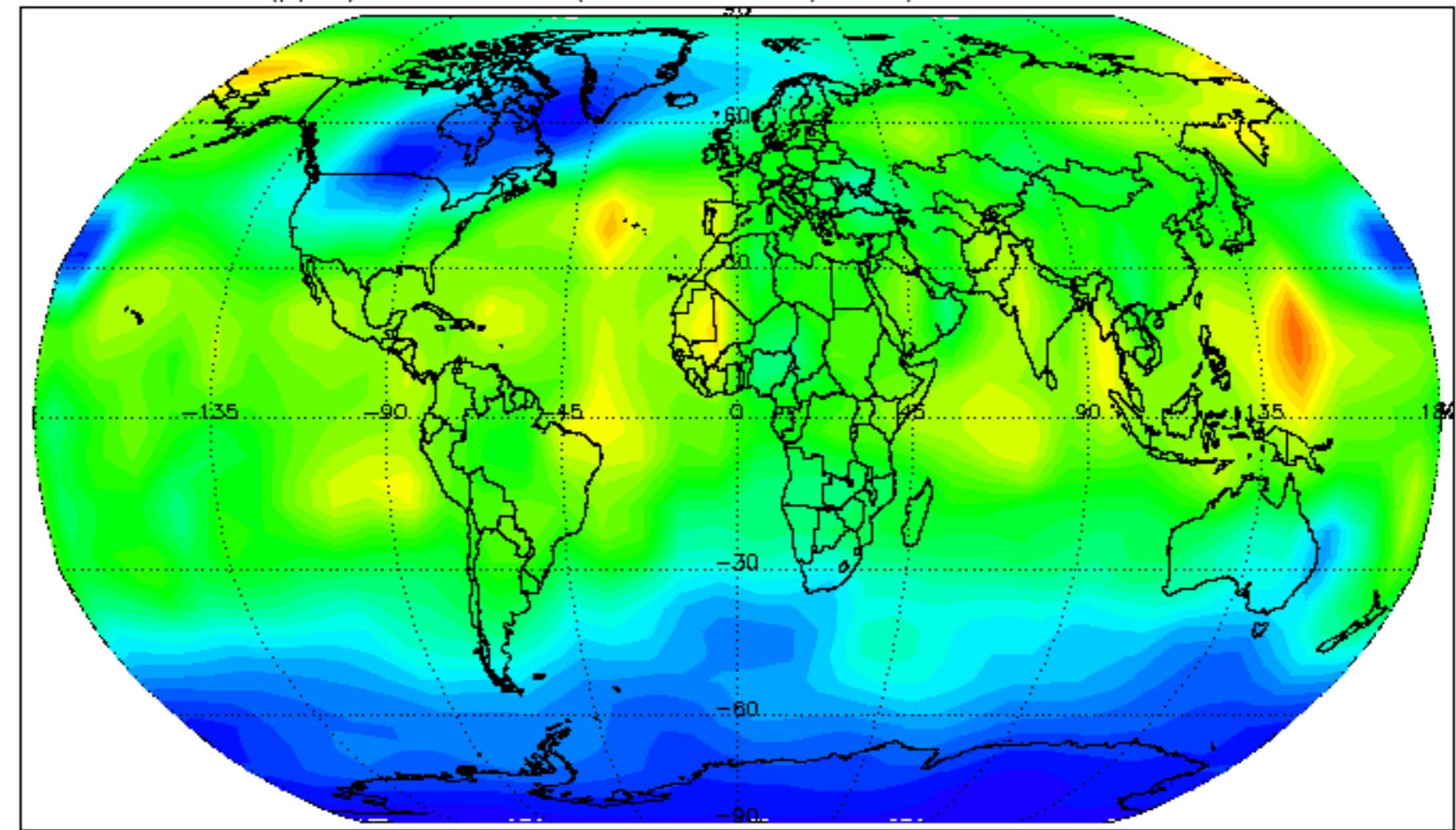
O<sub>3</sub> (ppm) at: 2700 K (60km, 0.2hPa). Daily mean: 30-DEC-2011



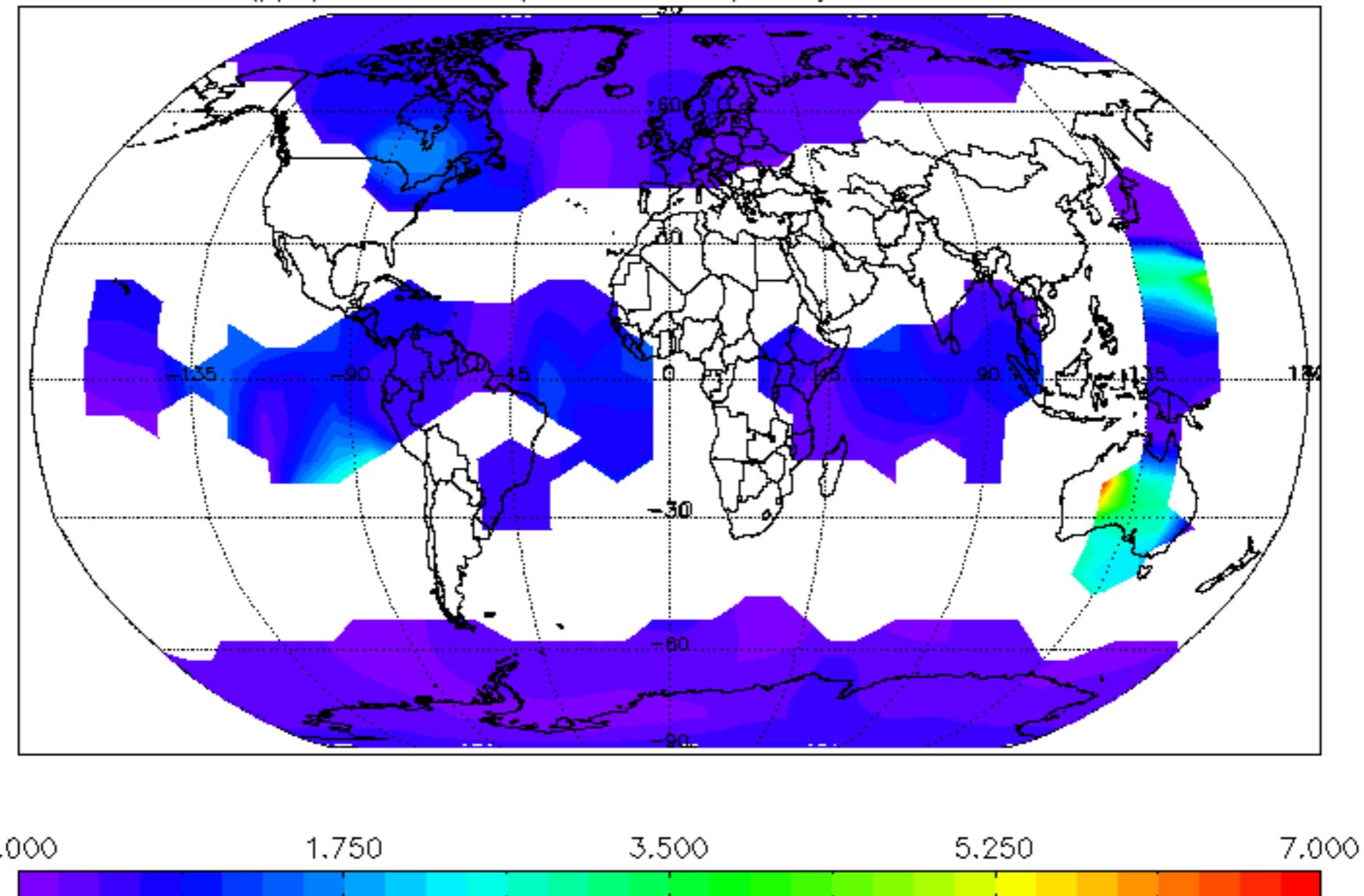
HN<sub>3</sub> (ppb) at: 2700 K (60km, 0.2hPa). Daily mean: 30-DEC-2011



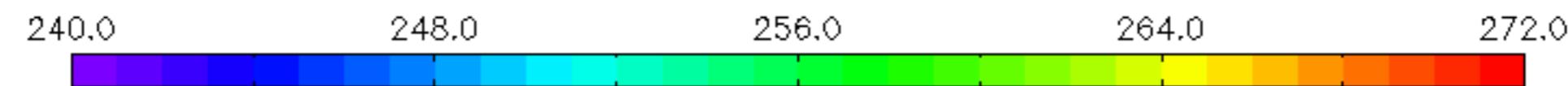
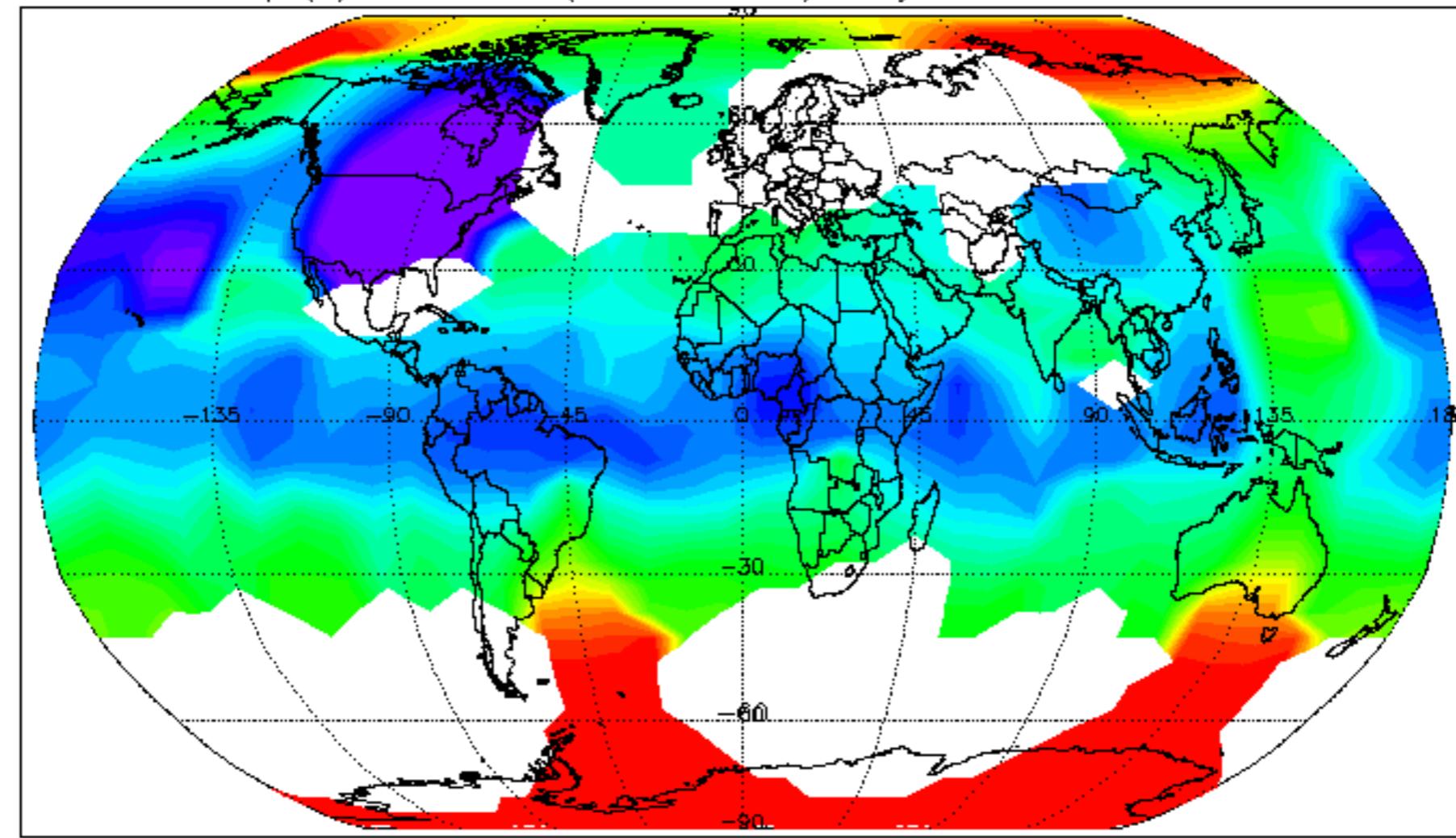
CH<sub>4</sub> (ppm) at: 2700 K (60km, 0.2hPa). Daily mean: 30-DEC-2011



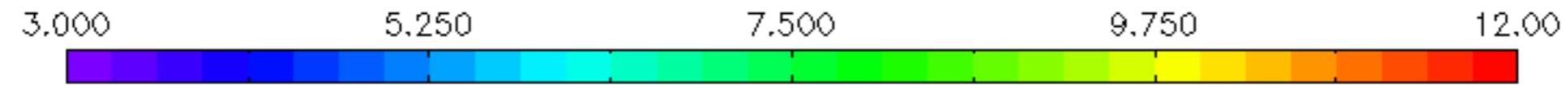
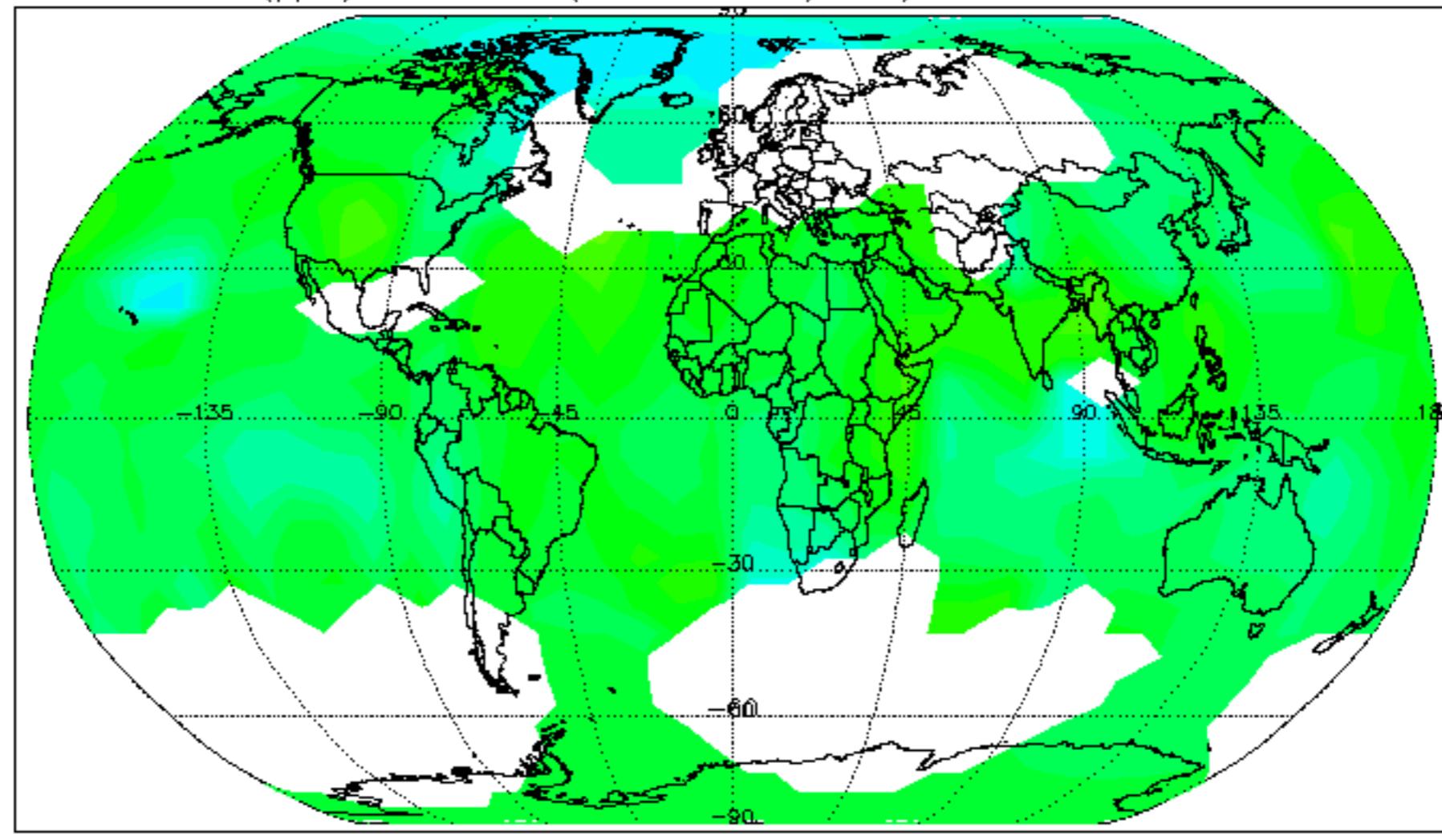
N<sub>2</sub>O (ppb) at: 2700 K (60km, 0.2hPa). Daily mean: 30-DEC-2011



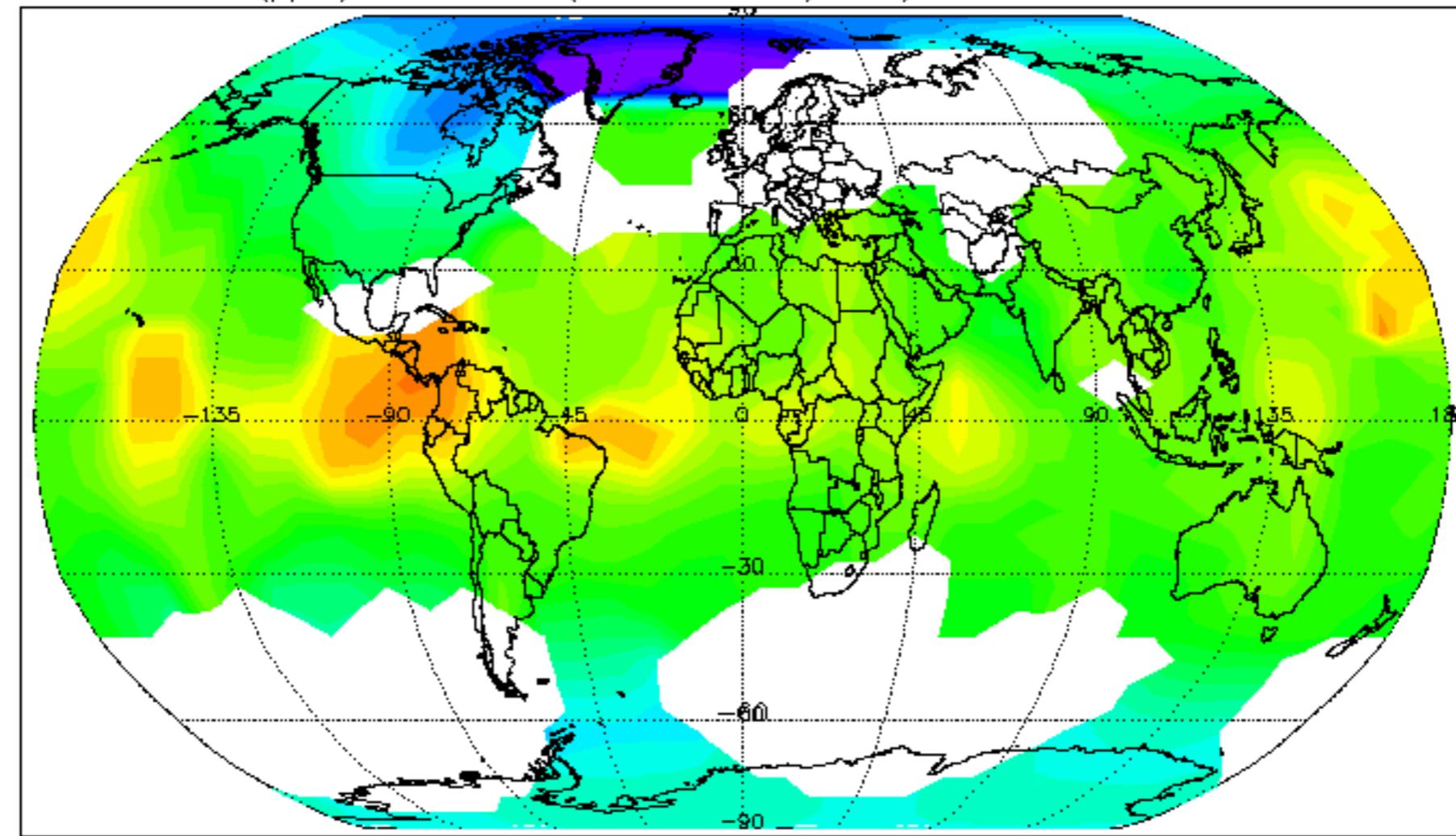
Temp (K) at: 1700 K (45km, 1.5hPa). Daily mean: 30-DEC-2011



H<sub>2</sub>O (ppm) at: 1700 K (45km, 1.5hPa). Daily mean: 30-DEC-2011



O<sub>3</sub> (ppm) at: 1700 K (45km, 1.5hPa). Daily mean: 30-DEC-2011



2.750

3.312

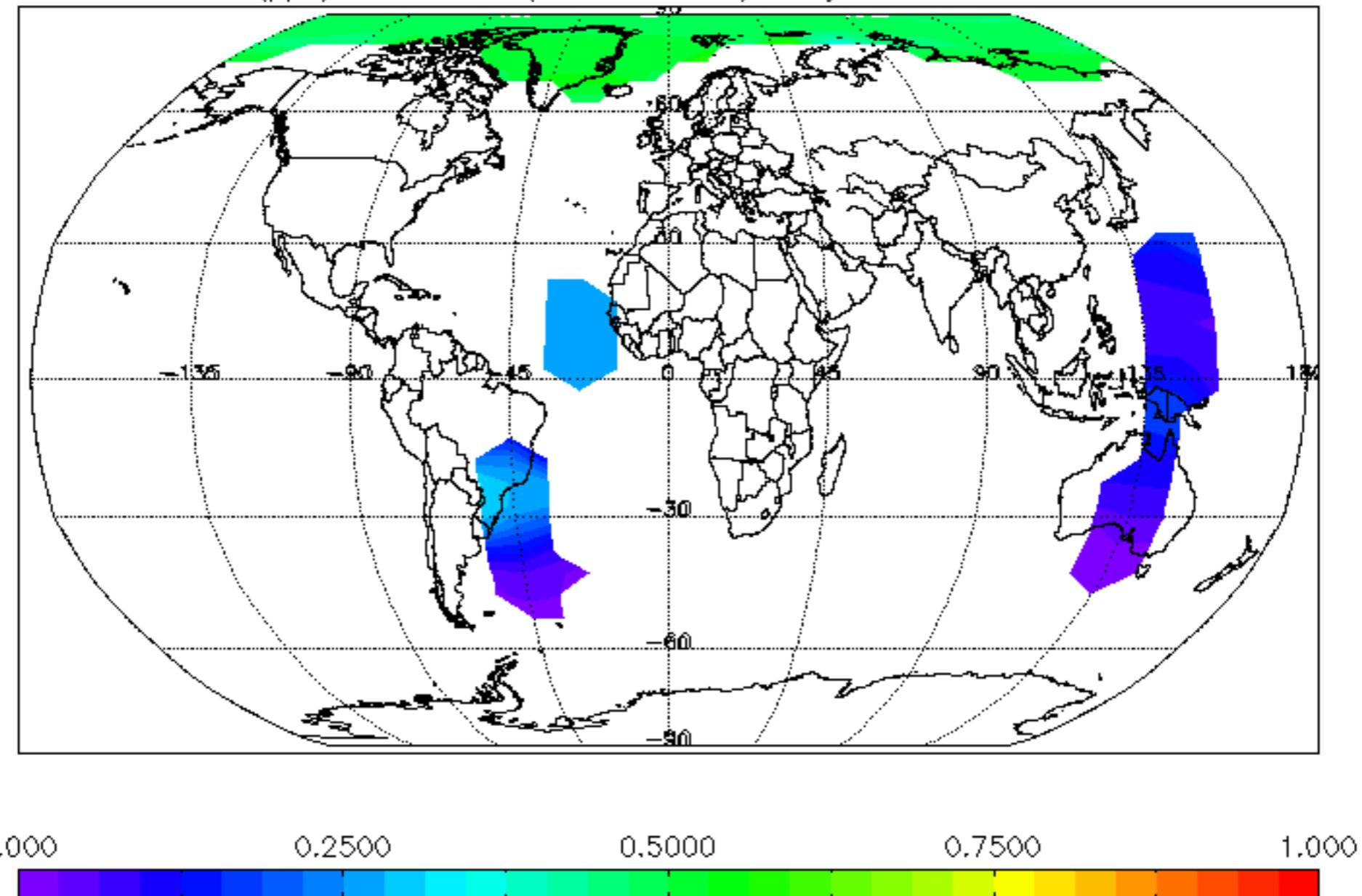
3.875

4.438

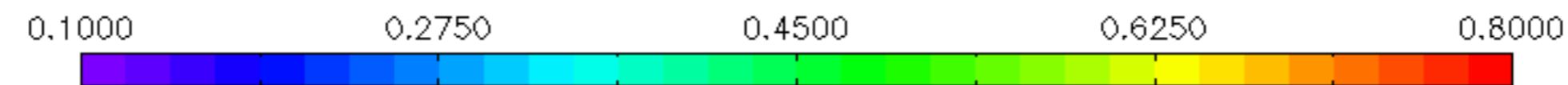
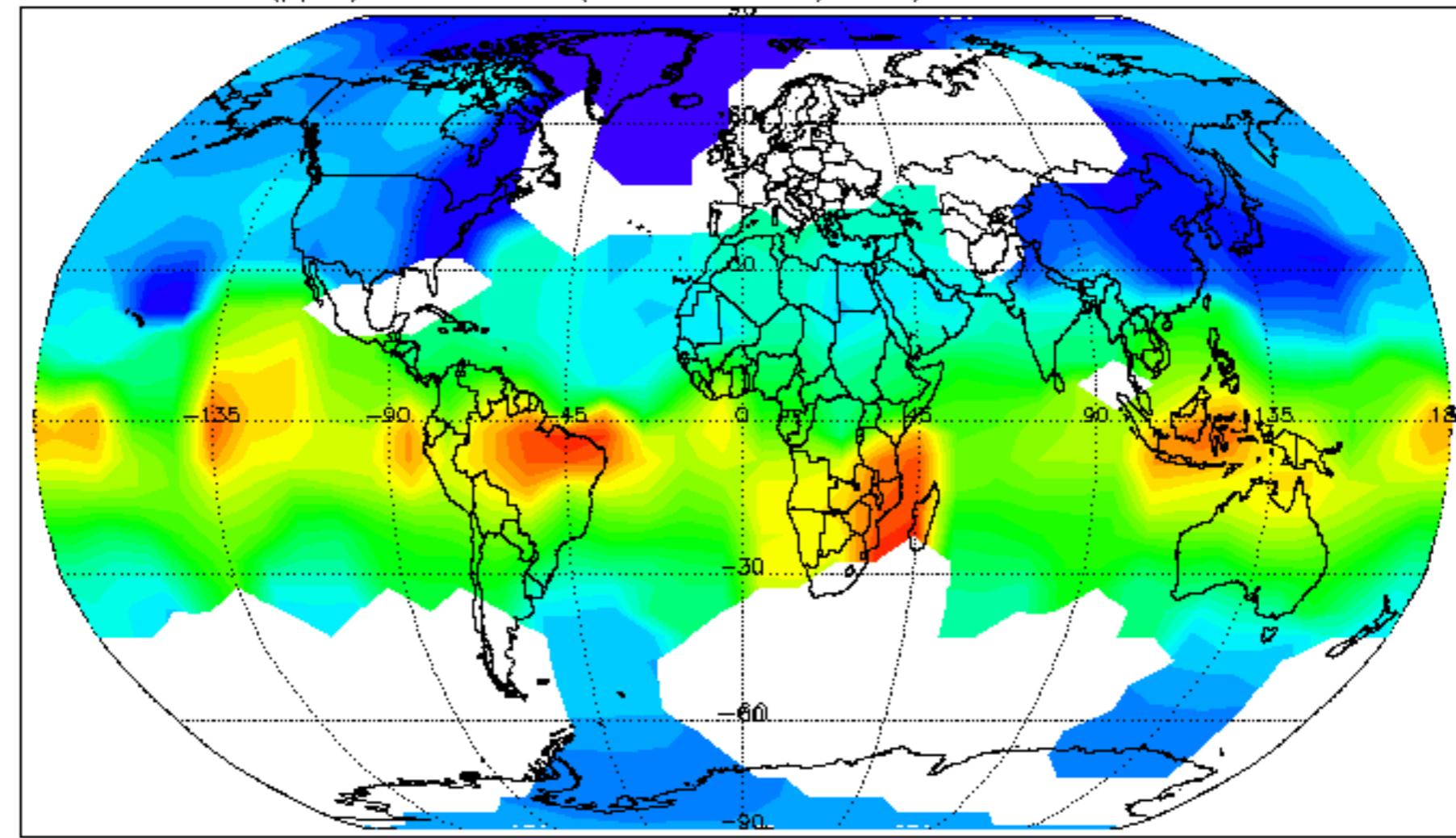
5.000



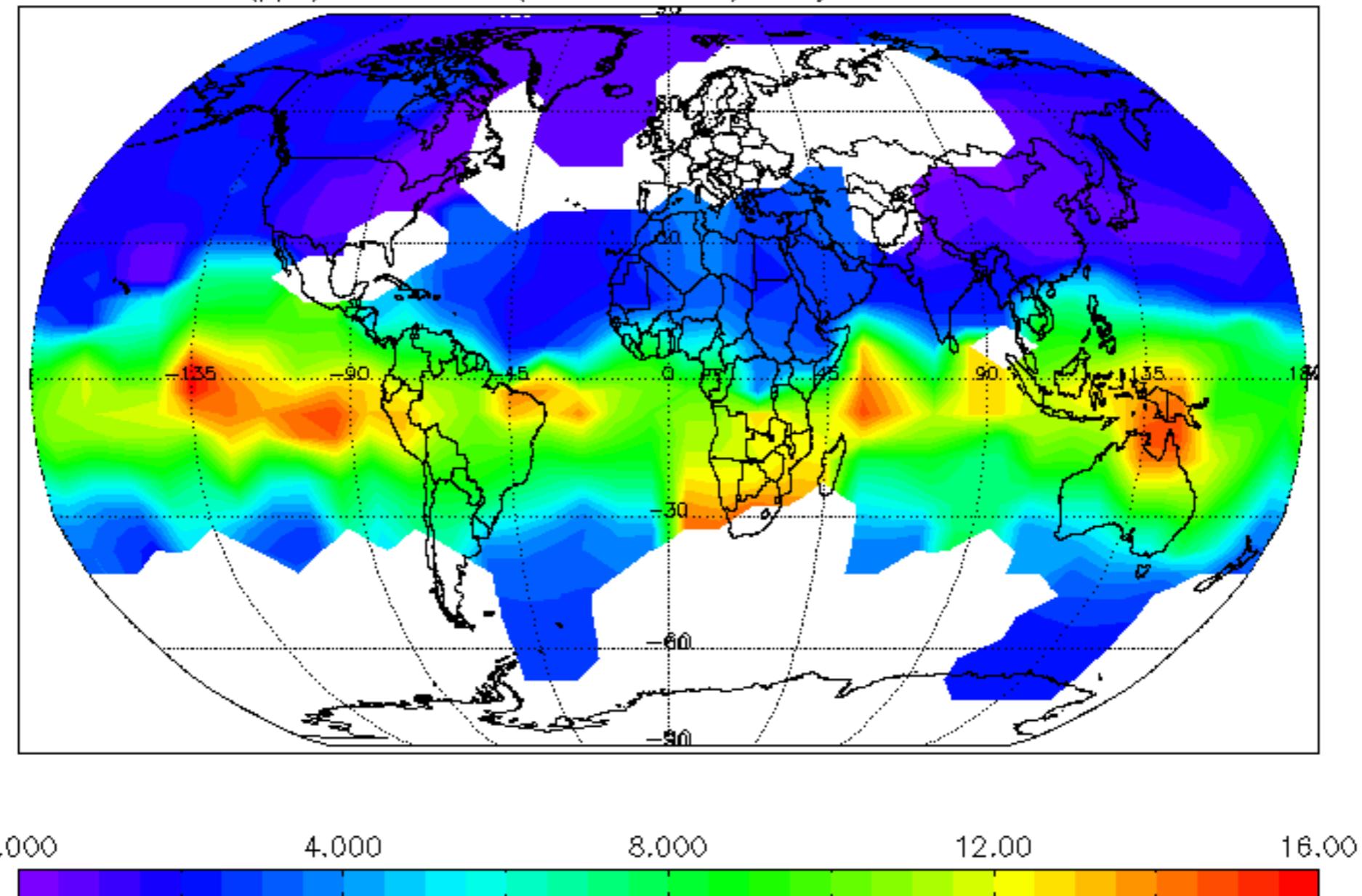
HN<sub>3</sub> (ppb) at: 1700 K (45km, 1.5hPa). Daily mean: 30-DEC-2011



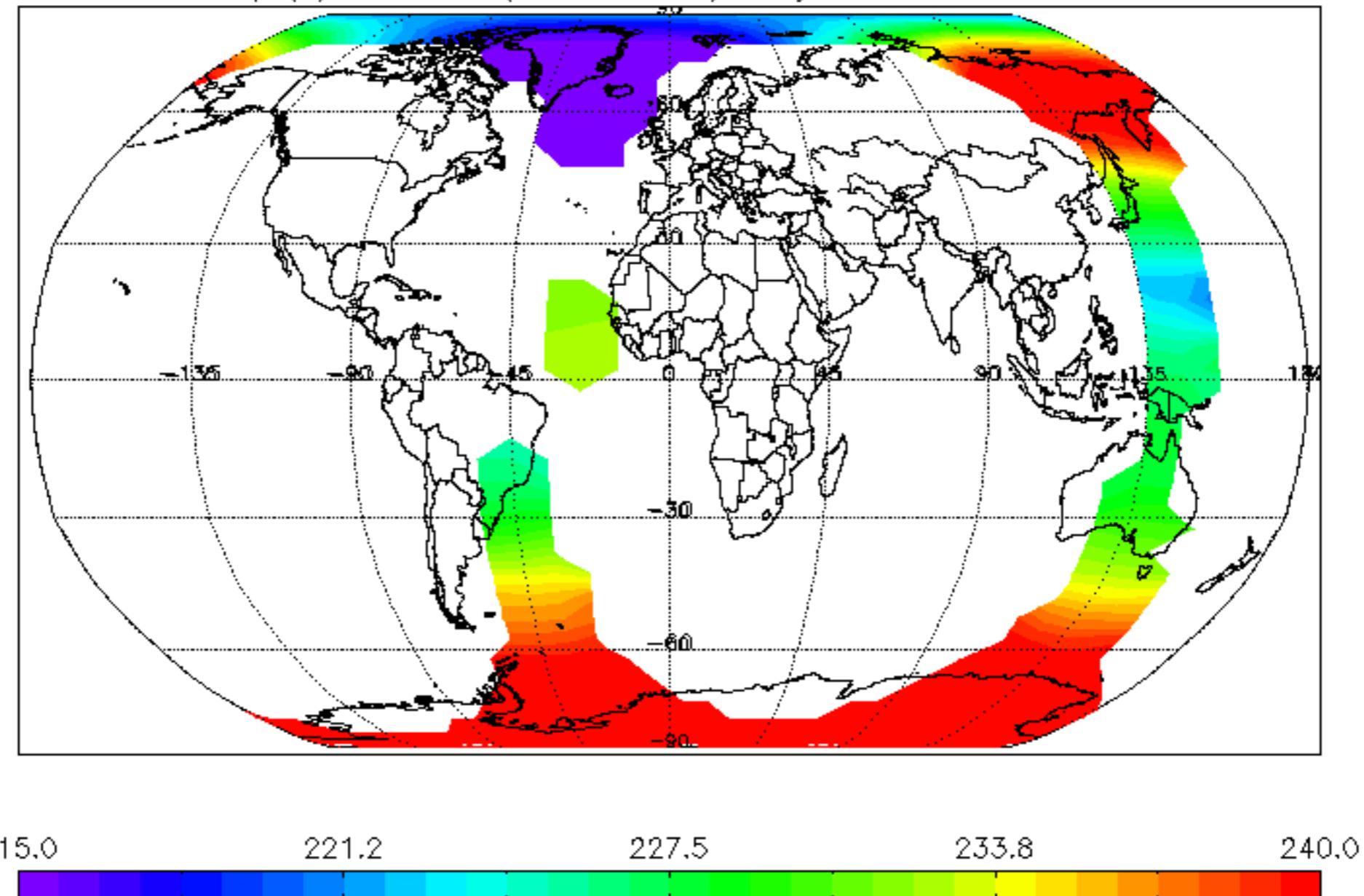
CH<sub>4</sub> (ppm) at: 1700 K (45km, 1.5hPa). Daily mean: 30–DEC–2011



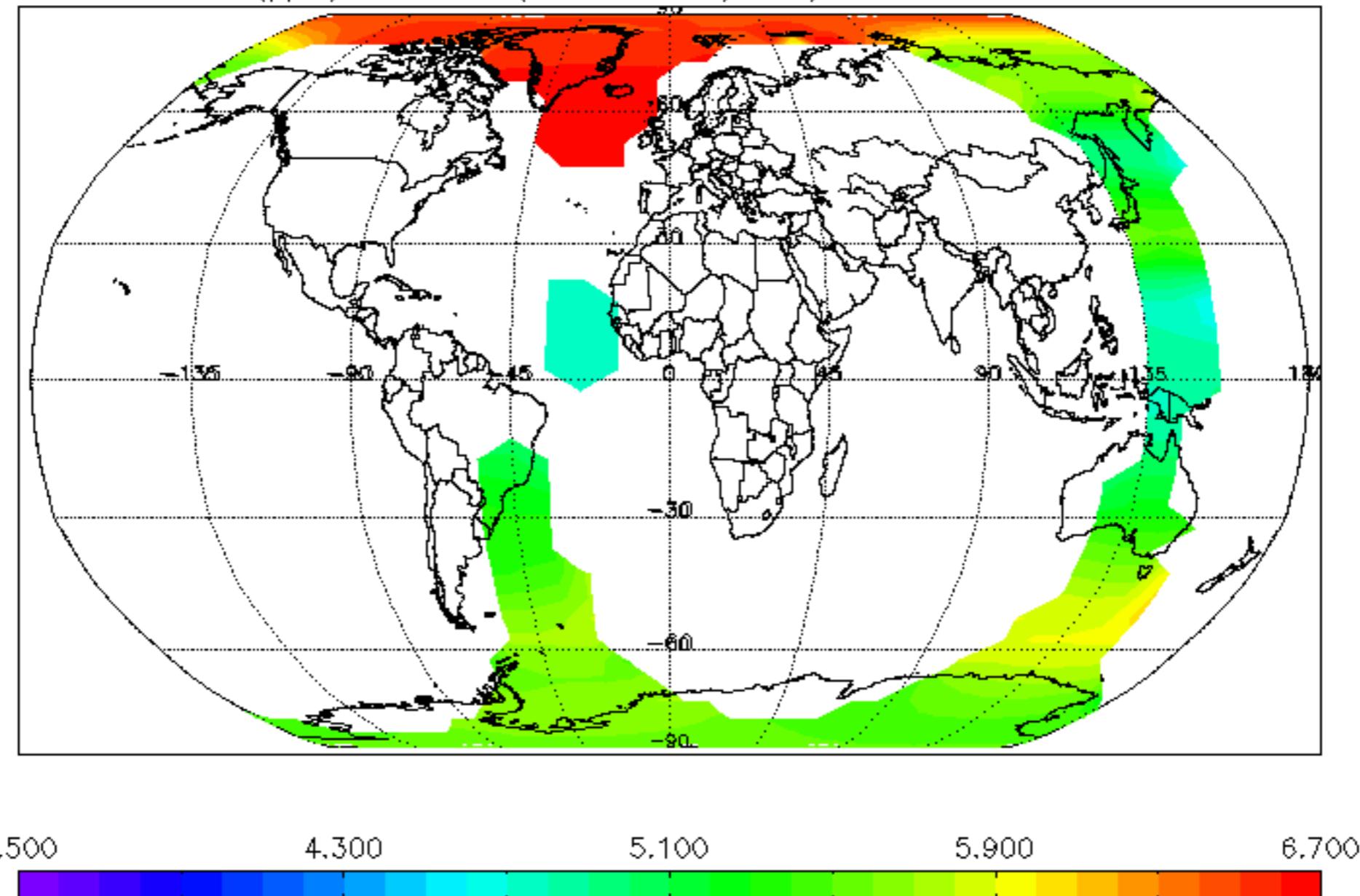
N<sub>2</sub>O (ppb) at: 1700 K (45km, 1.5hPa). Daily mean: 30-DEC-2011



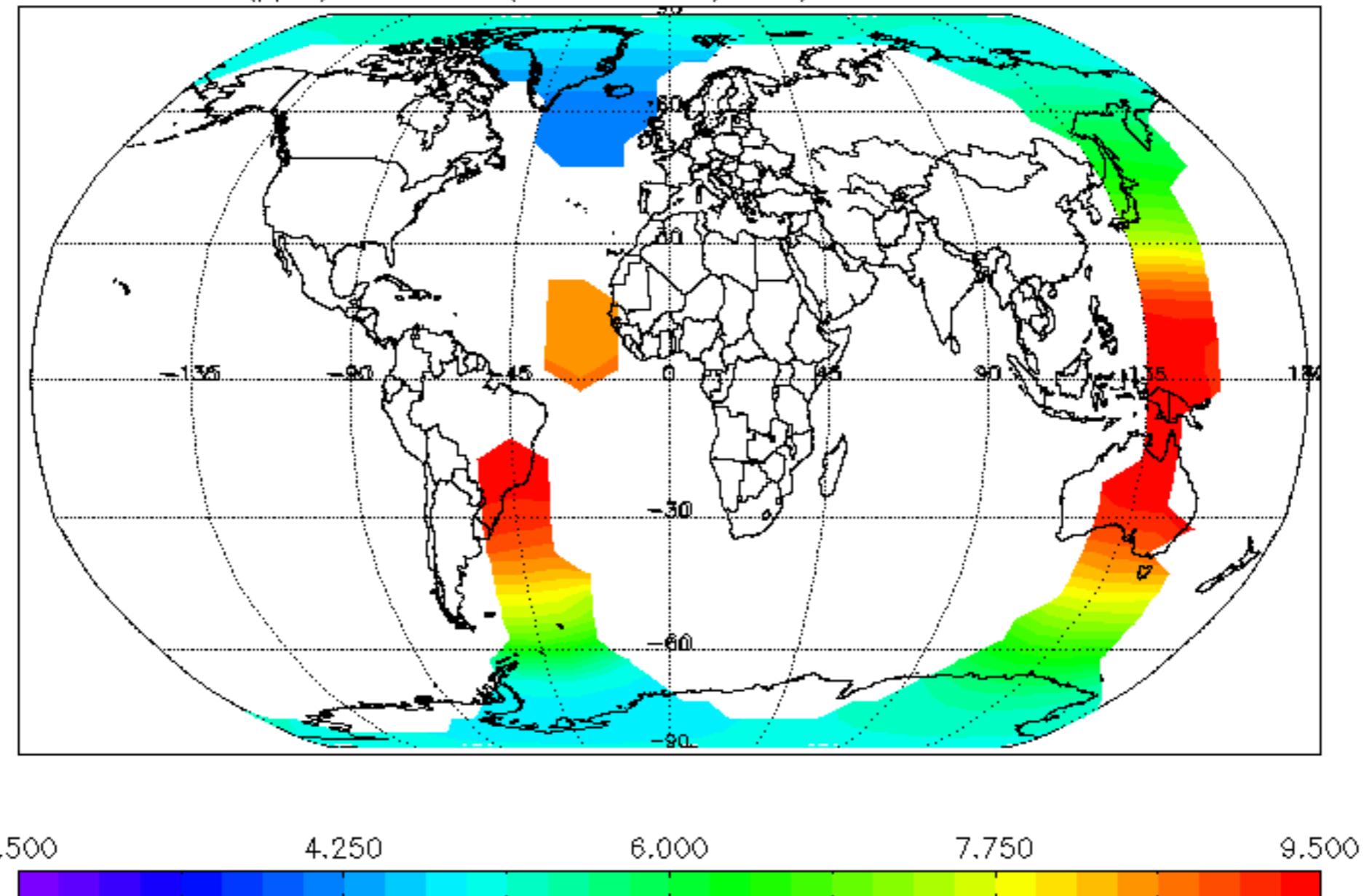
Temp (K) at: 850 K (32km, 10hPa). Daily mean: 30-DEC-2011



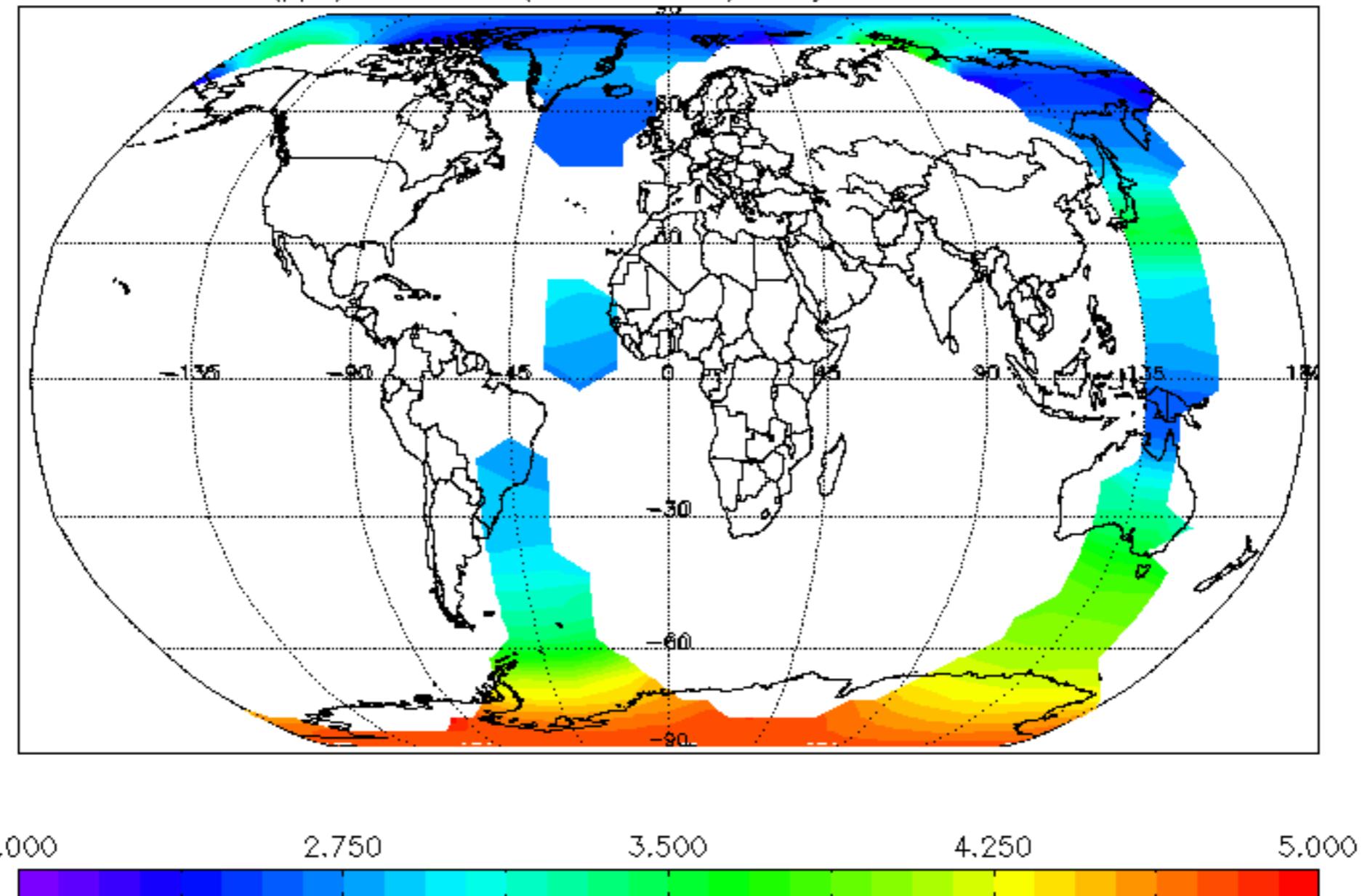
H<sub>2</sub>O (ppm) at: 850 K (32km, 10hPa). Daily mean: 30-DEC-2011



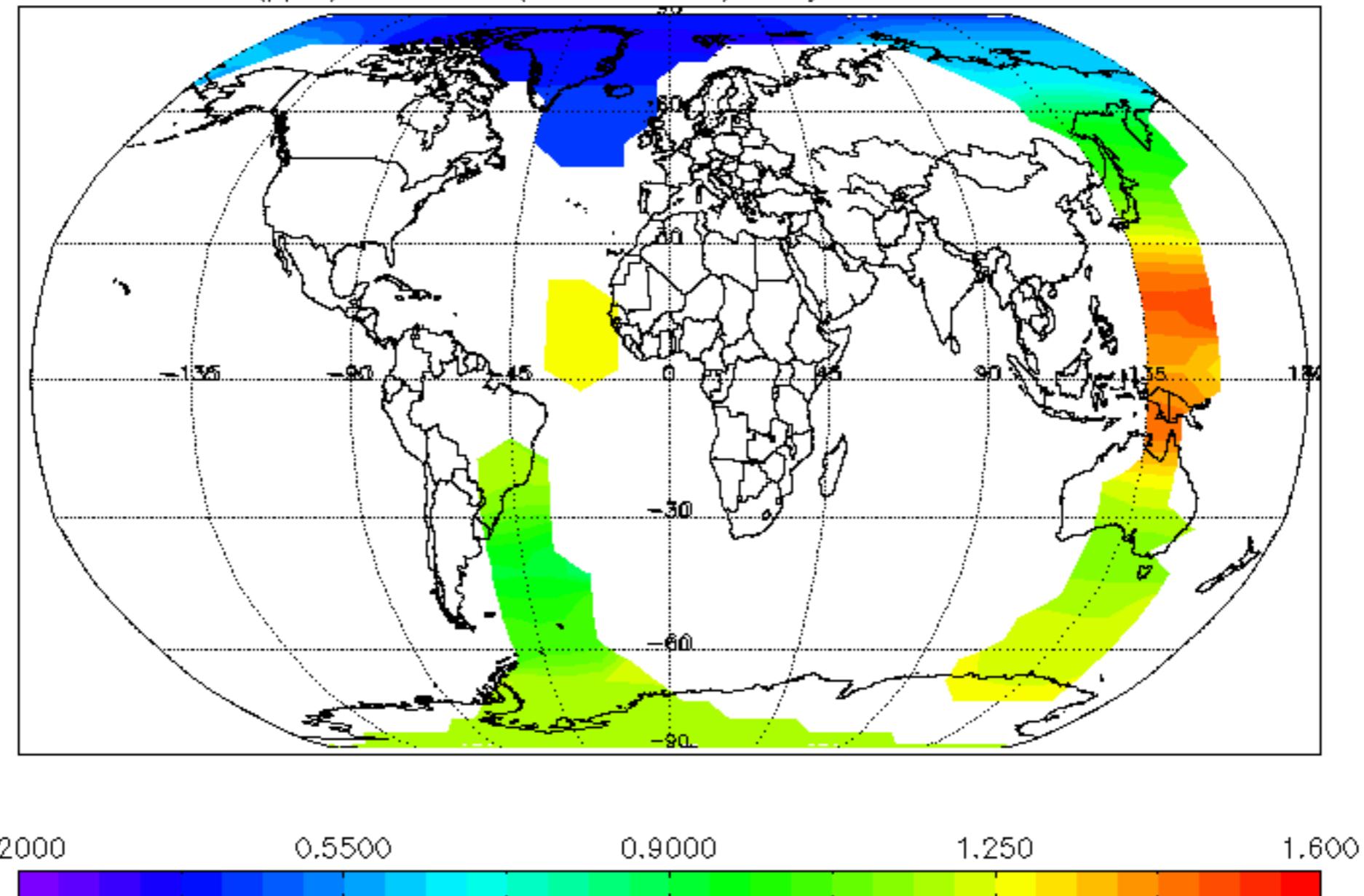
O<sub>3</sub> (ppm) at: 850 K (32km, 10hPa). Daily mean: 30-DEC-2011



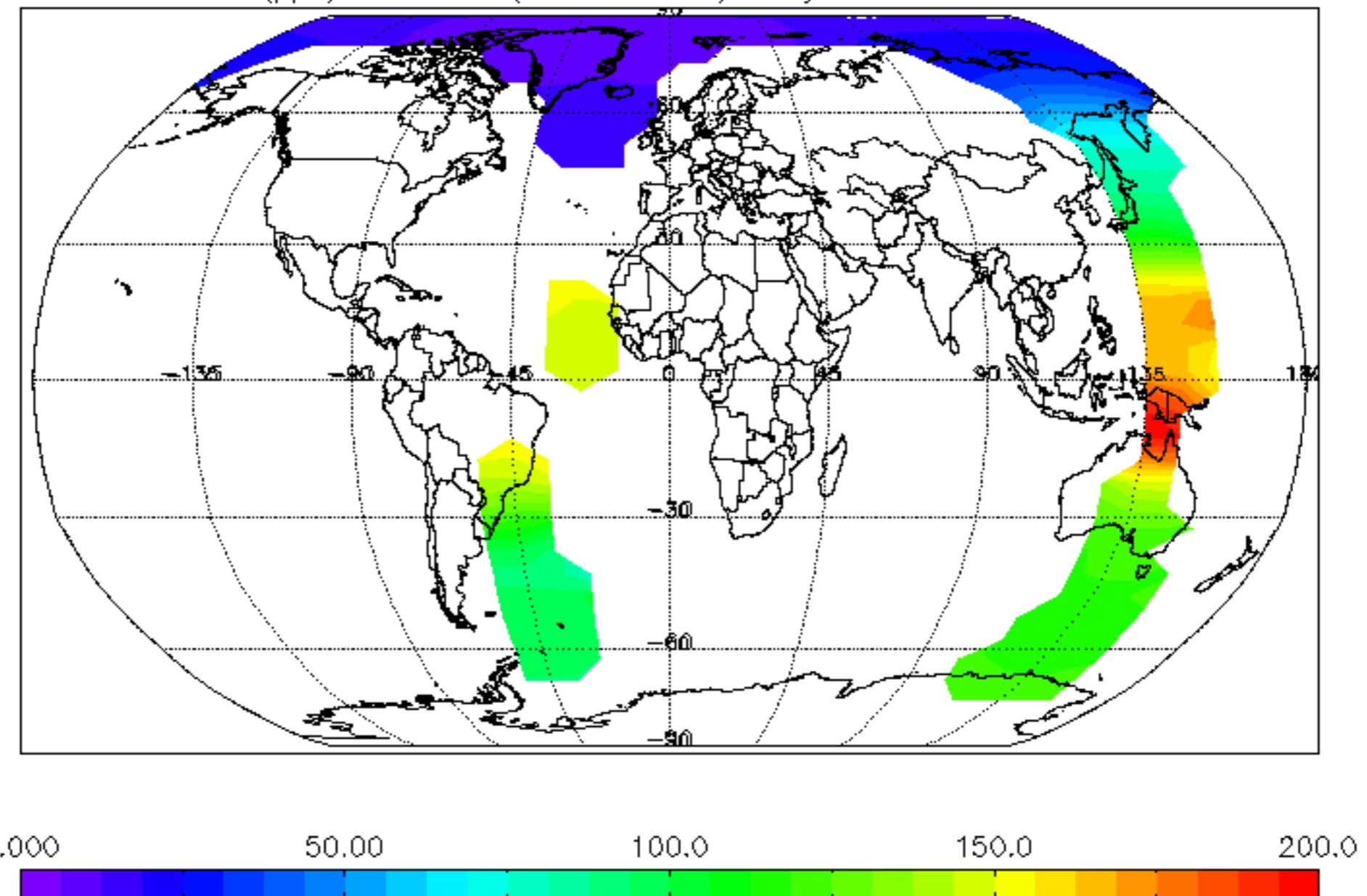
HN<sub>3</sub> (ppb) at: 850 K (32km, 10hPa). Daily mean: 30-DEC-2011



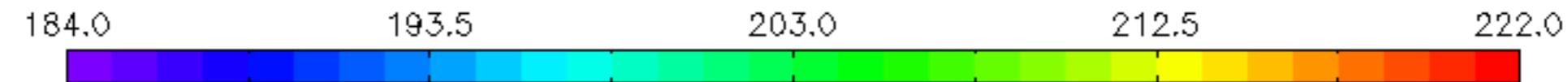
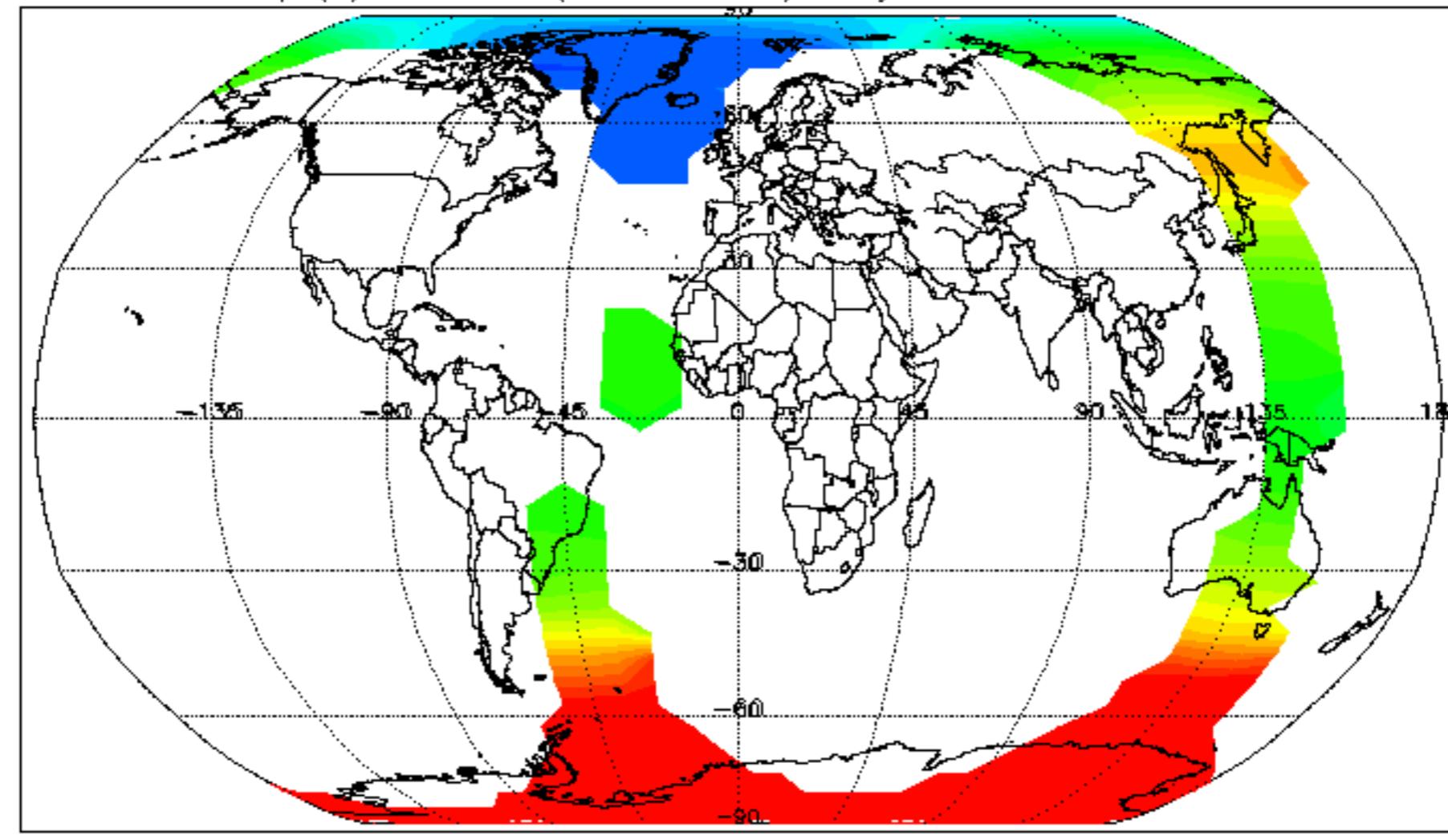
CH<sub>4</sub> (ppm) at: 850 K (32km, 10hPa). Daily mean: 30-DEC-2011



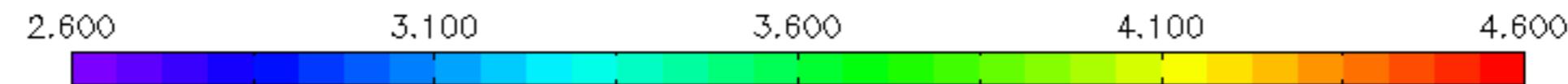
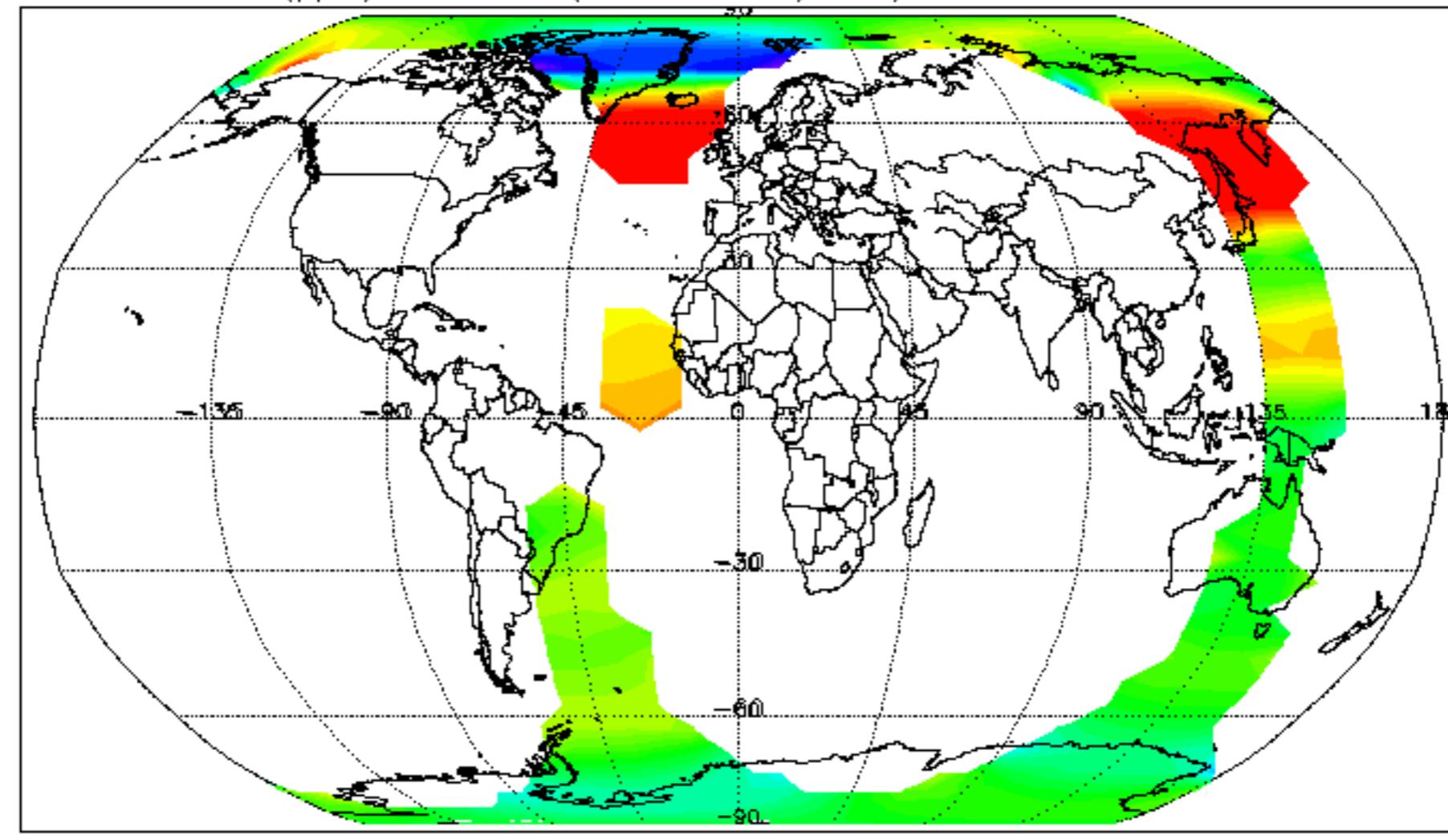
N<sub>2</sub>O (ppb) at: 850 K (32km, 10hPa). Daily mean: 30-DEC-2011



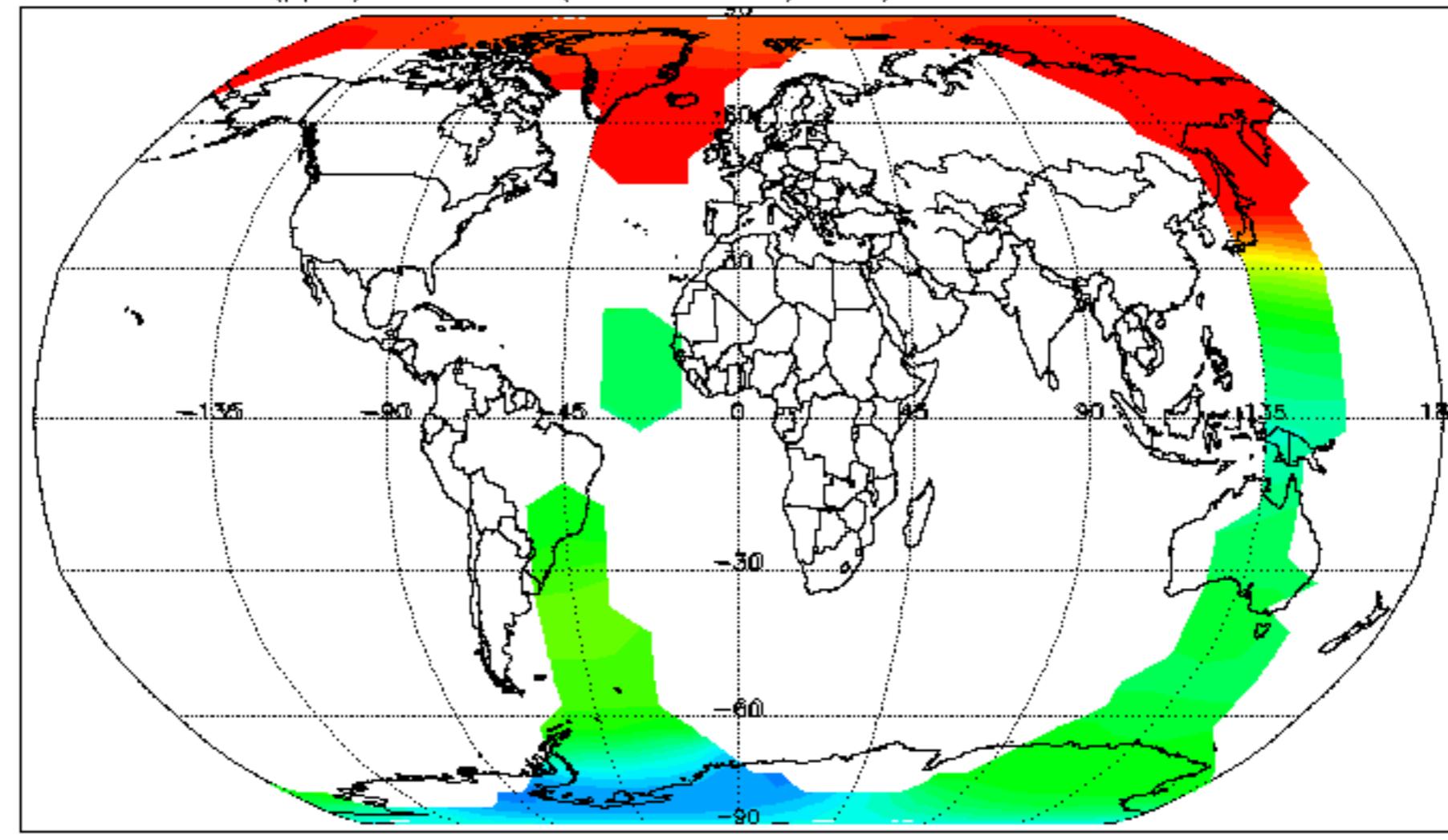
Temp (K) at: 490 K (19km, 55hPa). Daily mean: 30-DEC-2011



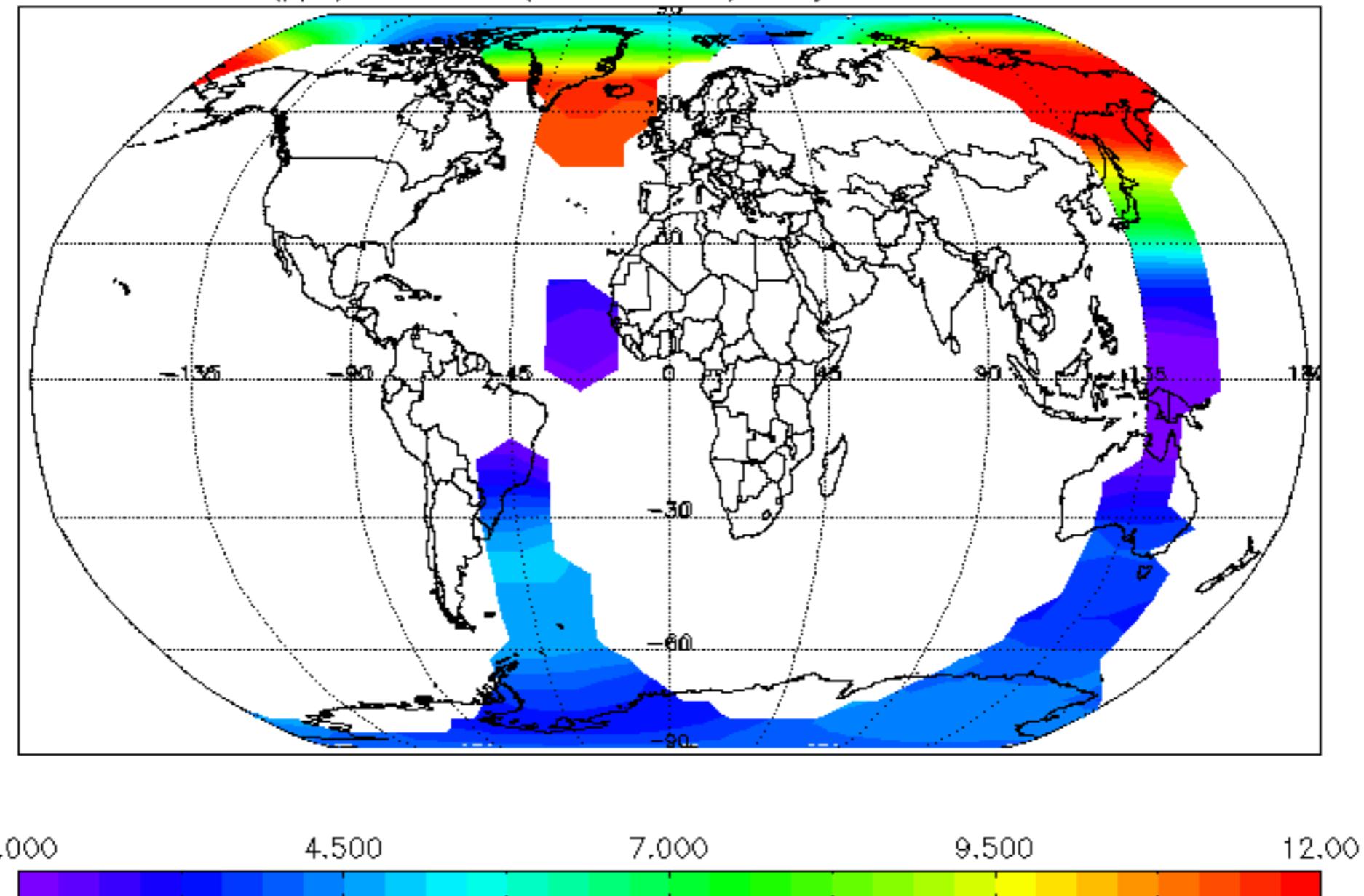
H<sub>2</sub>O (ppm) at: 490 K (19km, 55hPa). Daily mean: 30-DEC-2011



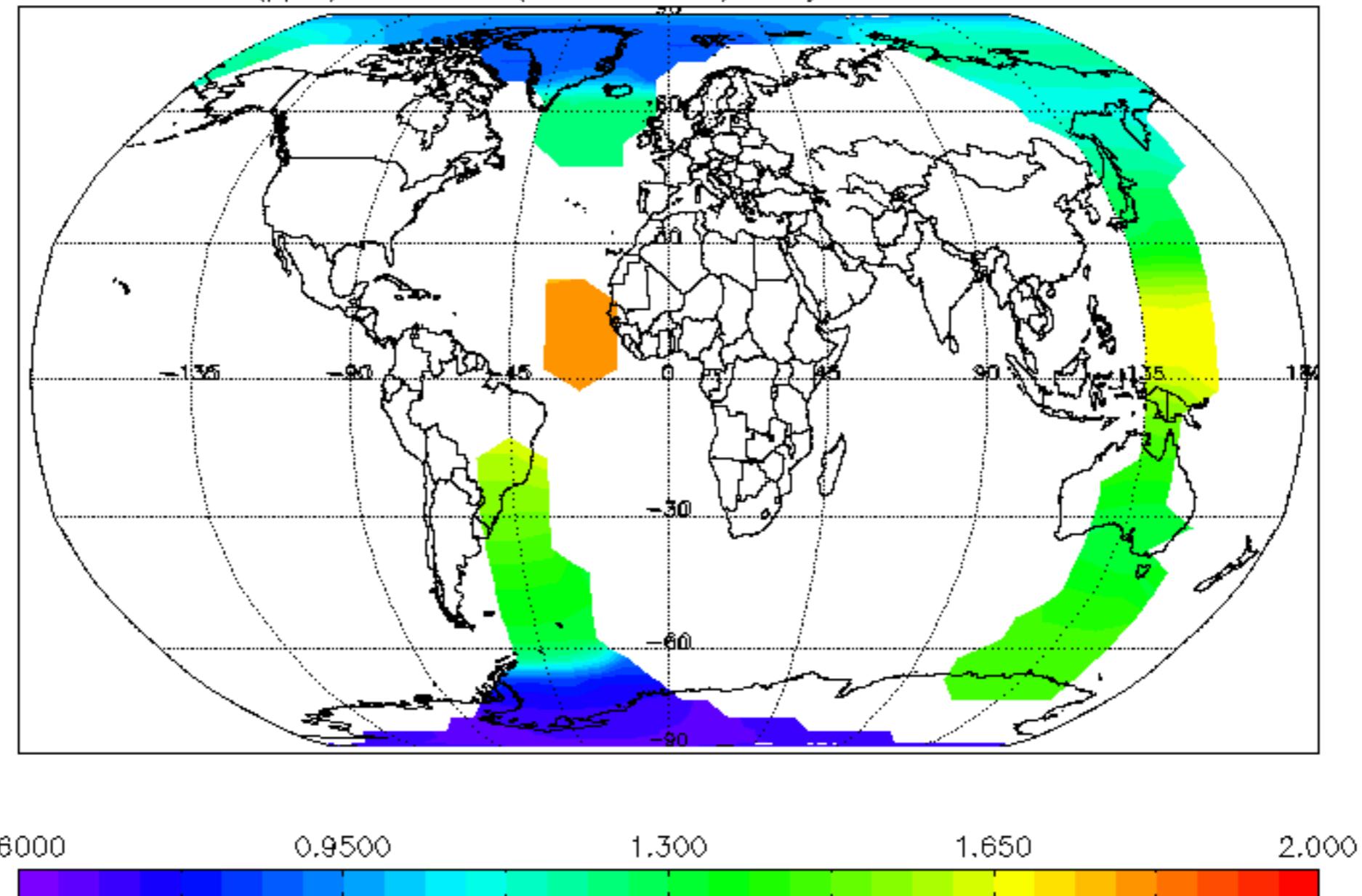
O<sub>3</sub> (ppm) at: 490 K (19km, 55hPa). Daily mean: 30-DEC-2011



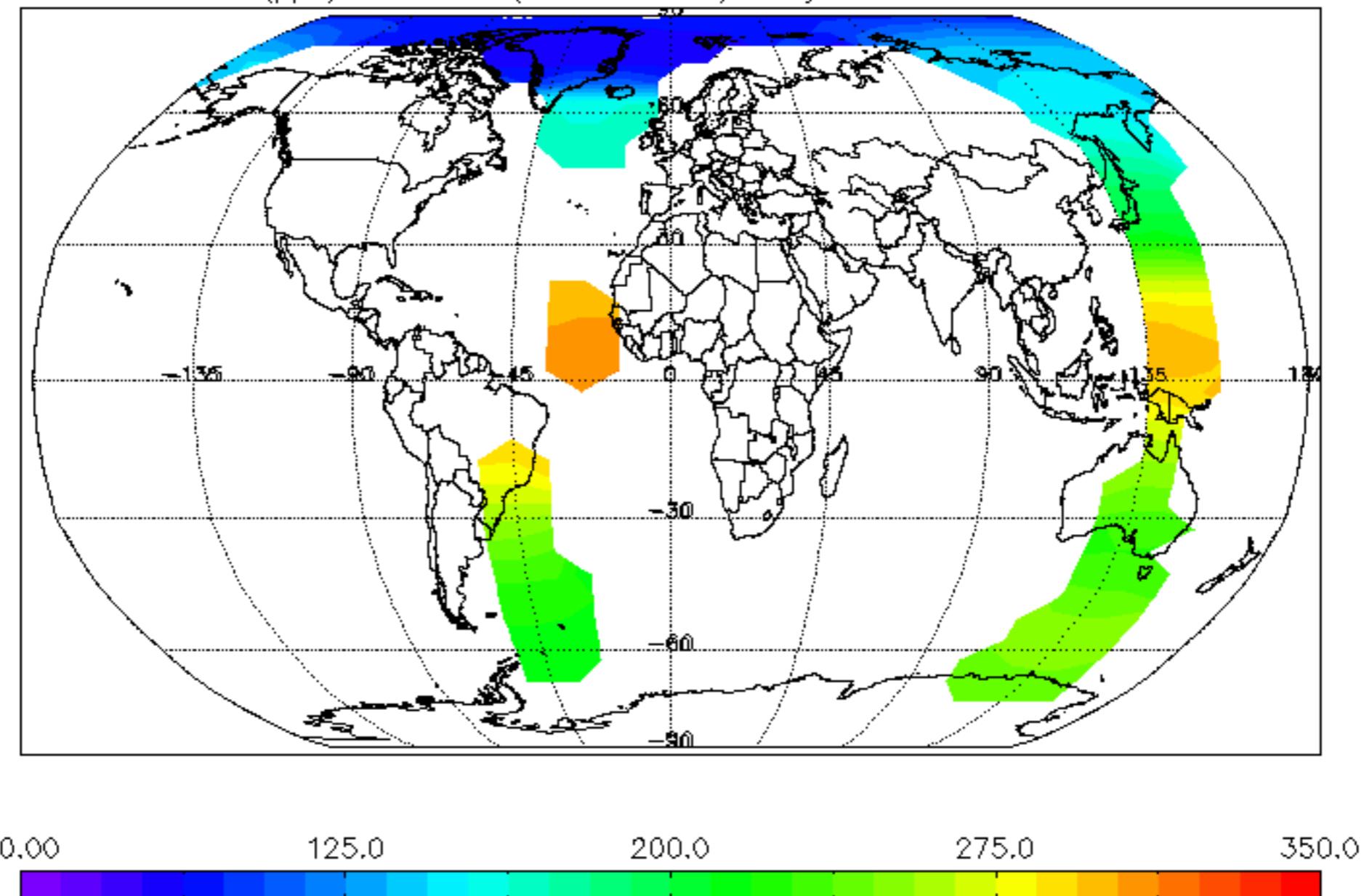
HN<sub>3</sub> (ppb) at: 490 K (19km, 55hPa). Daily mean: 30-DEC-2011



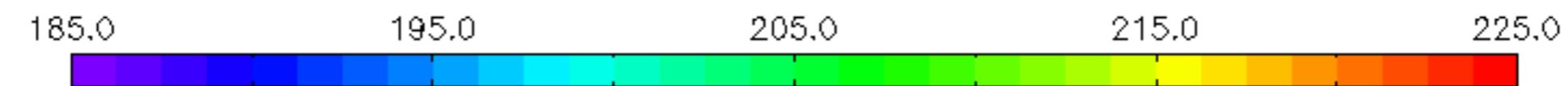
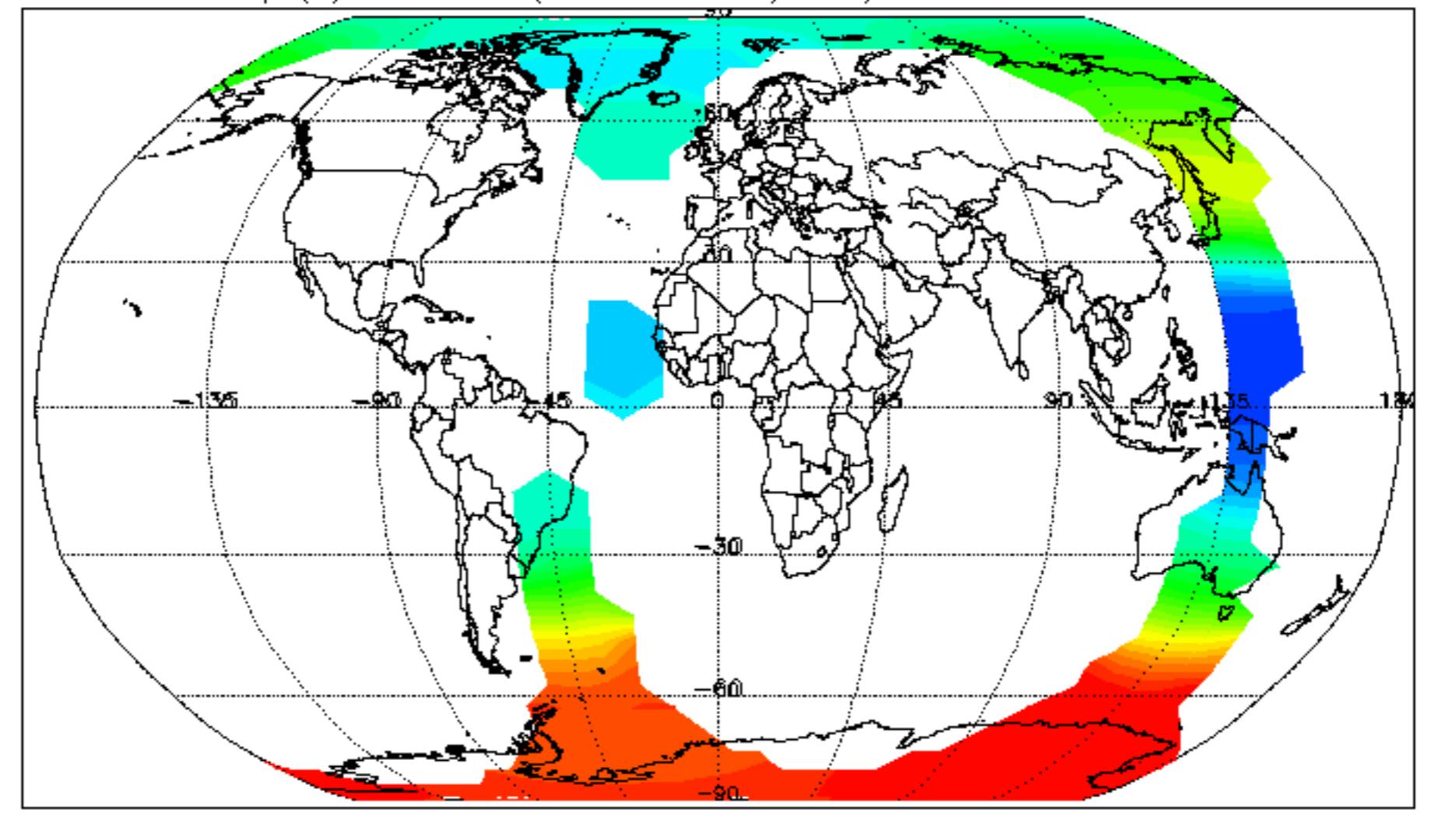
CH<sub>4</sub> (ppm) at: 490 K (19km, 55hPa). Daily mean: 30-DEC-2011



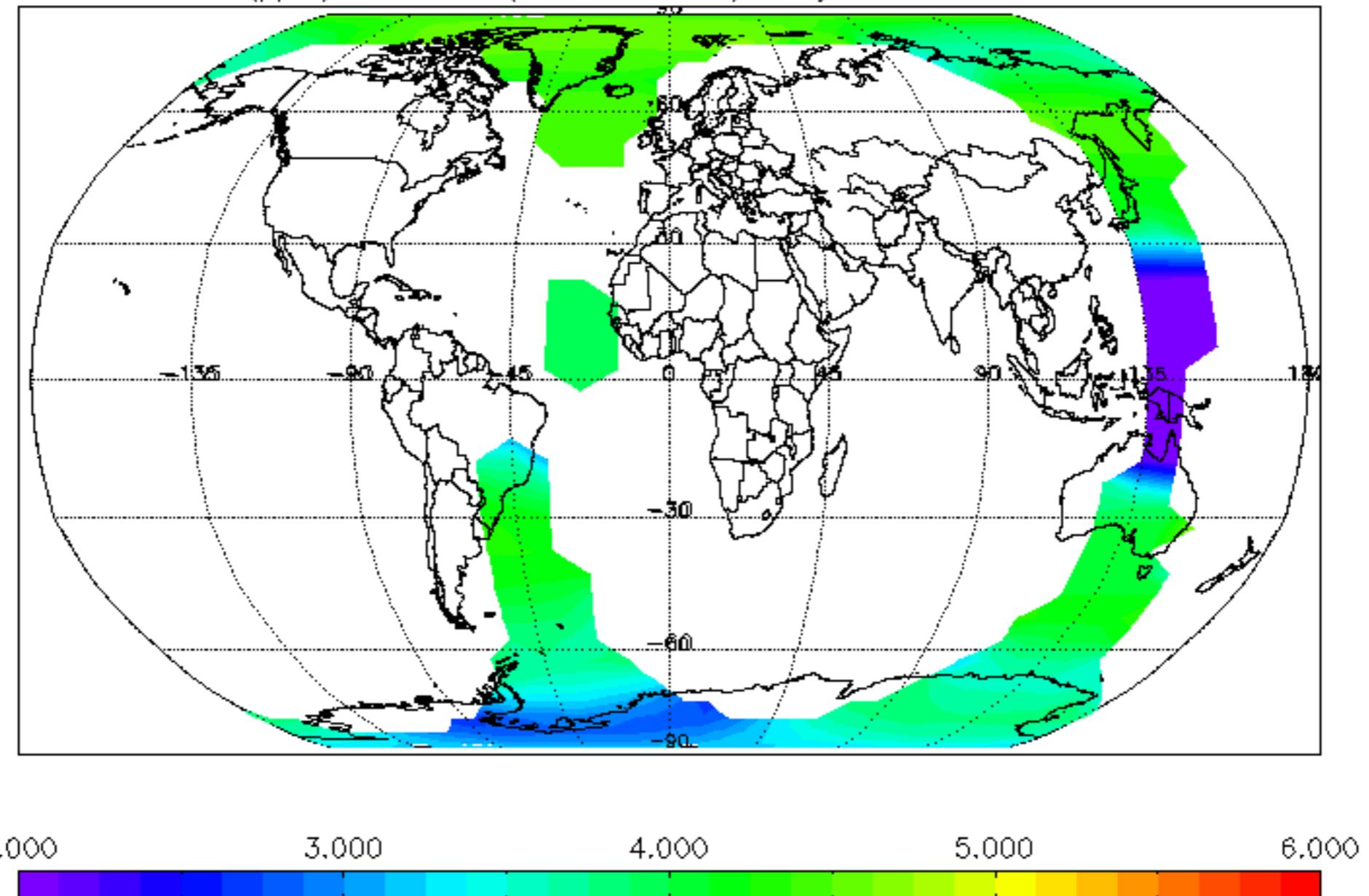
N<sub>2</sub>O (ppb) at: 490 K (19km, 55hPa). Daily mean: 30-DEC-2011



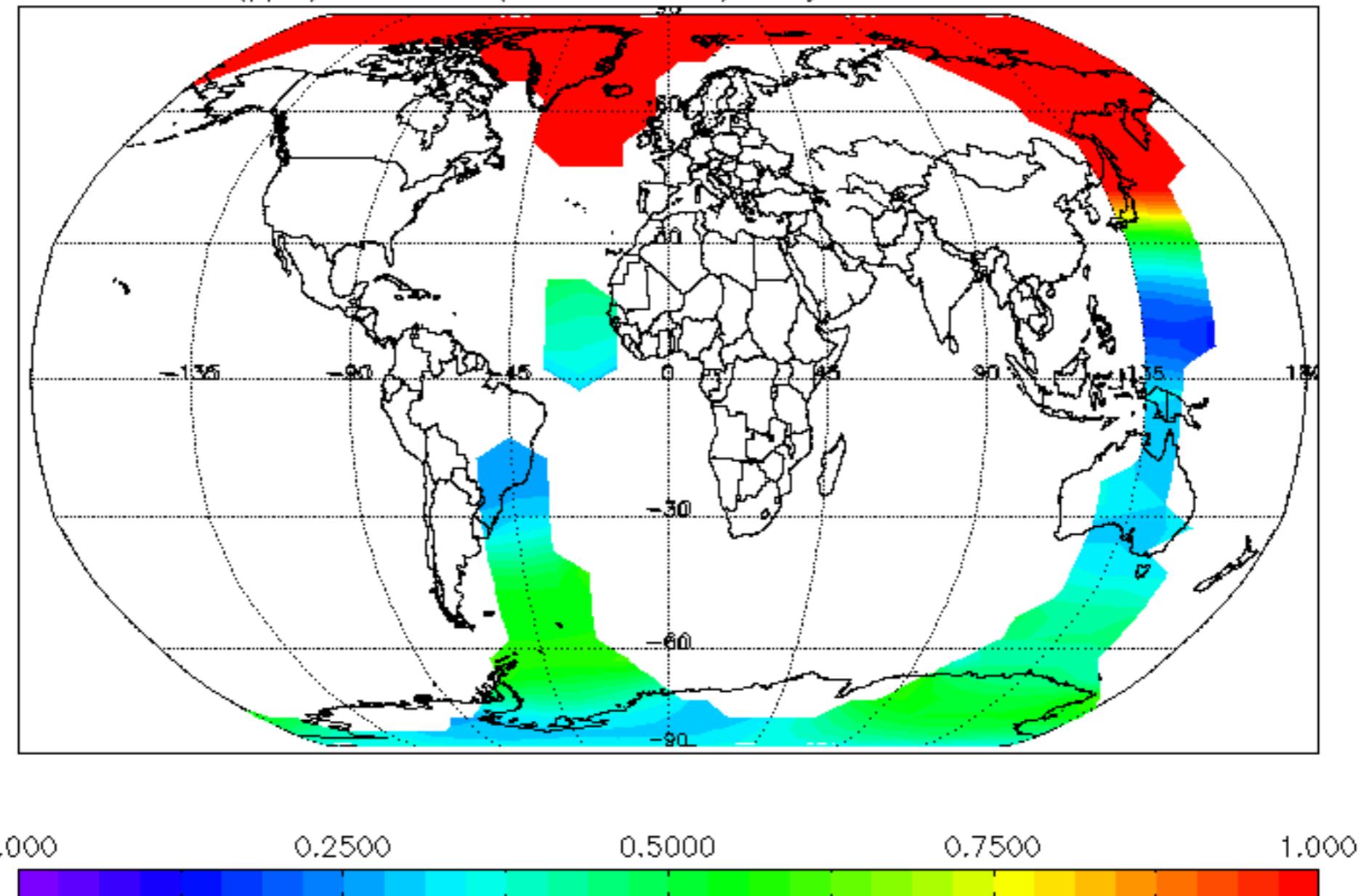
Temp (K) at: 410 K (16km, 100hPa). Daily mean: 30-DEC-2011



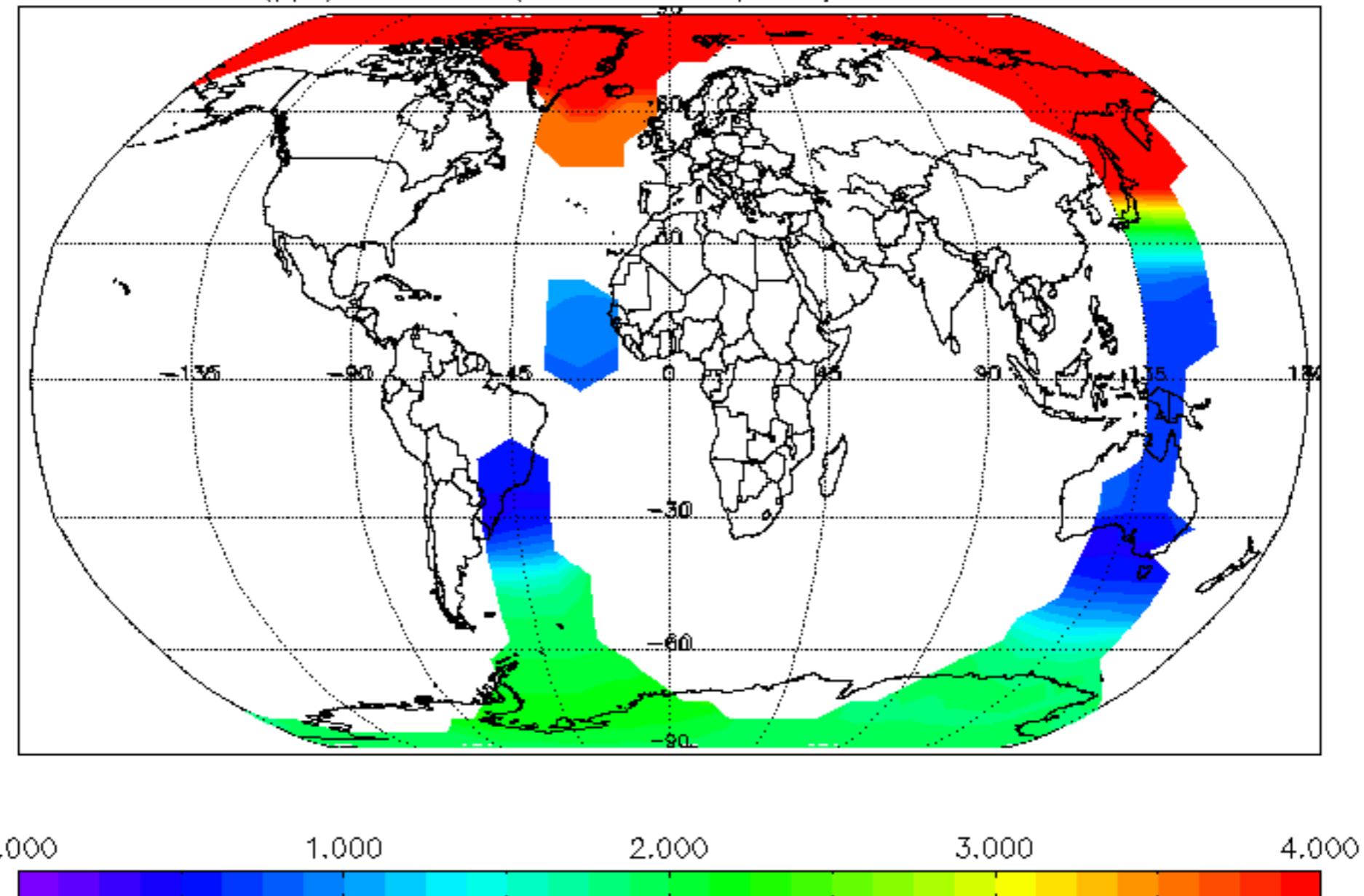
H<sub>2</sub>O (ppm) at: 410 K (16km, 100hPa). Daily mean: 30-DEC-2011



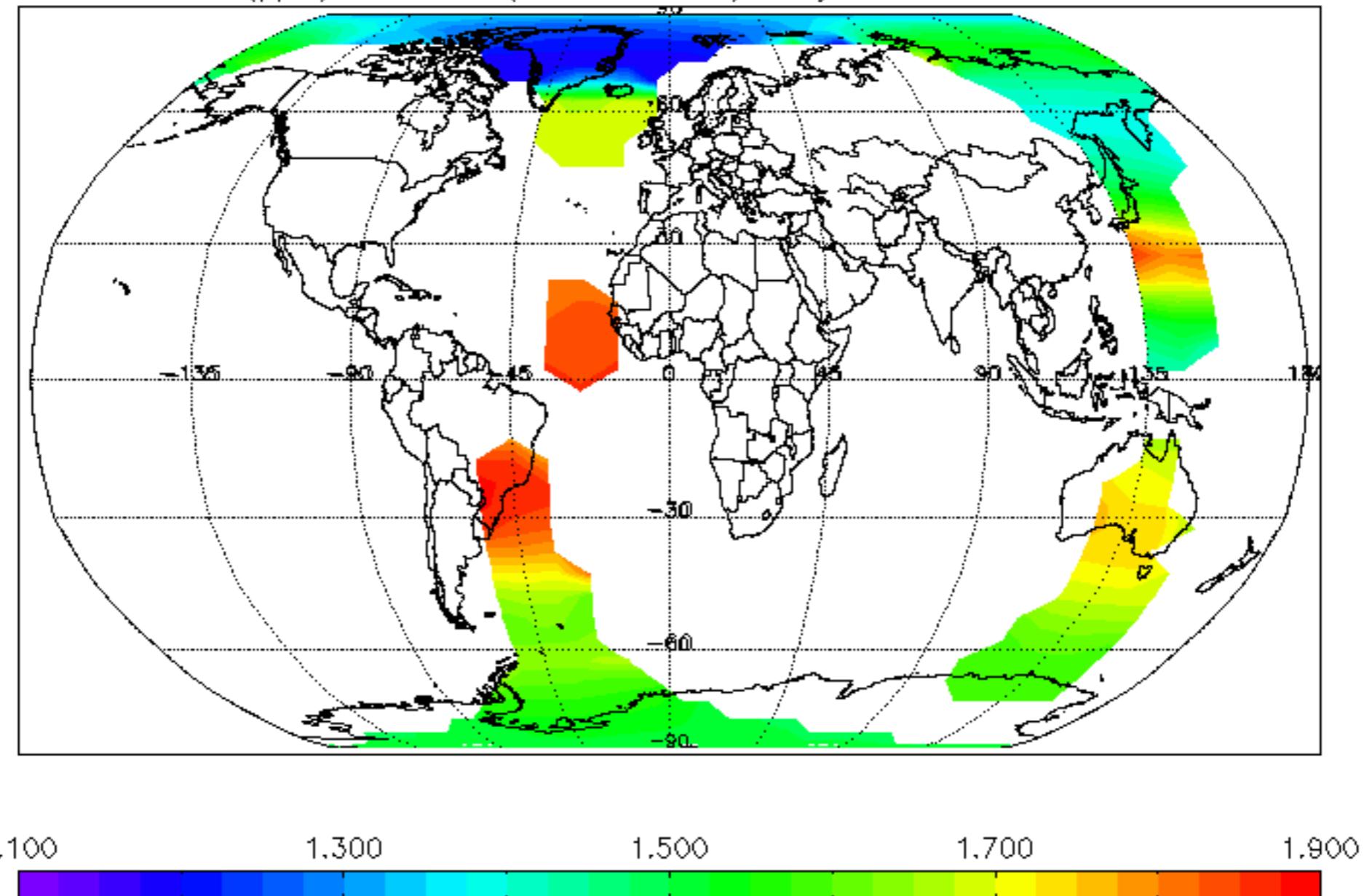
O<sub>3</sub> (ppm) at: 410 K (16km, 100hPa). Daily mean: 30-DEC-2011



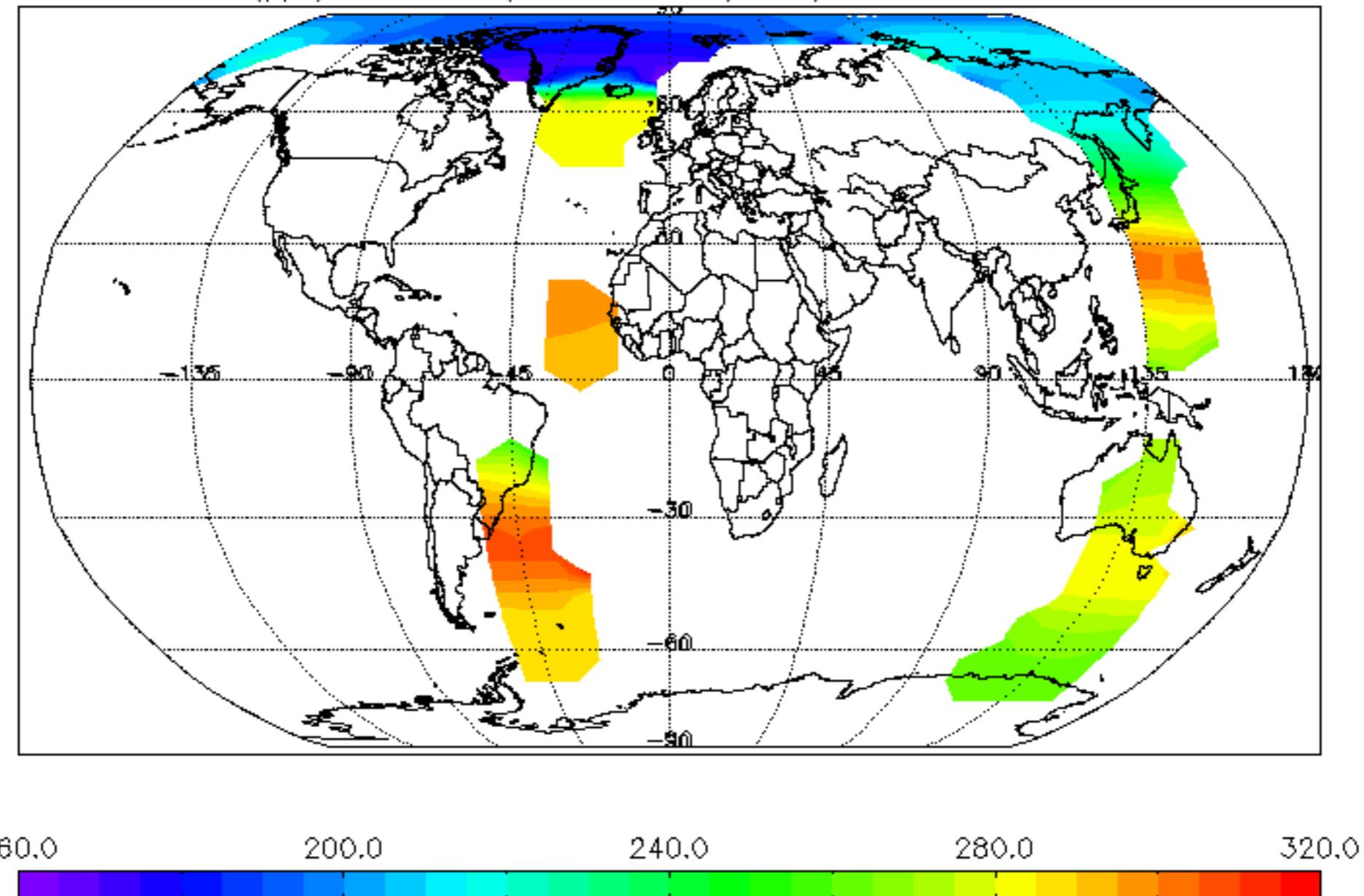
HN<sub>3</sub> (ppb) at: 410 K (16km, 100hPa). Daily mean: 30-DEC-2011



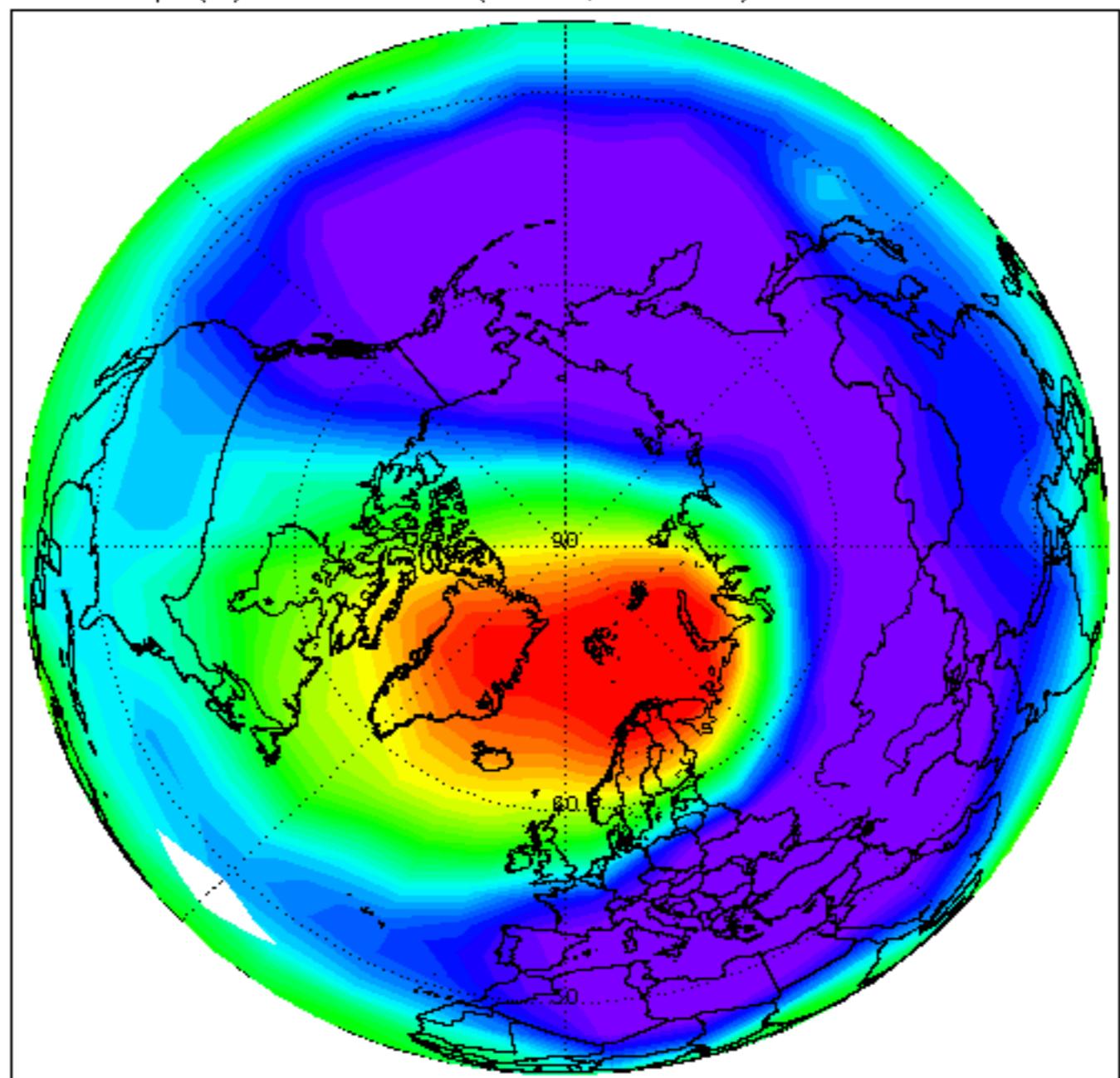
CH<sub>4</sub> (ppm) at: 410 K (16km, 100hPa). Daily mean: 30-DEC-2011



N<sub>2</sub>O (ppb) at: 410 K (16km, 100hPa). Daily mean: 30-DEC-2011



Temp (K) at 2700 K (60km, 0.2hPa). 30-DEC-2011



220.0

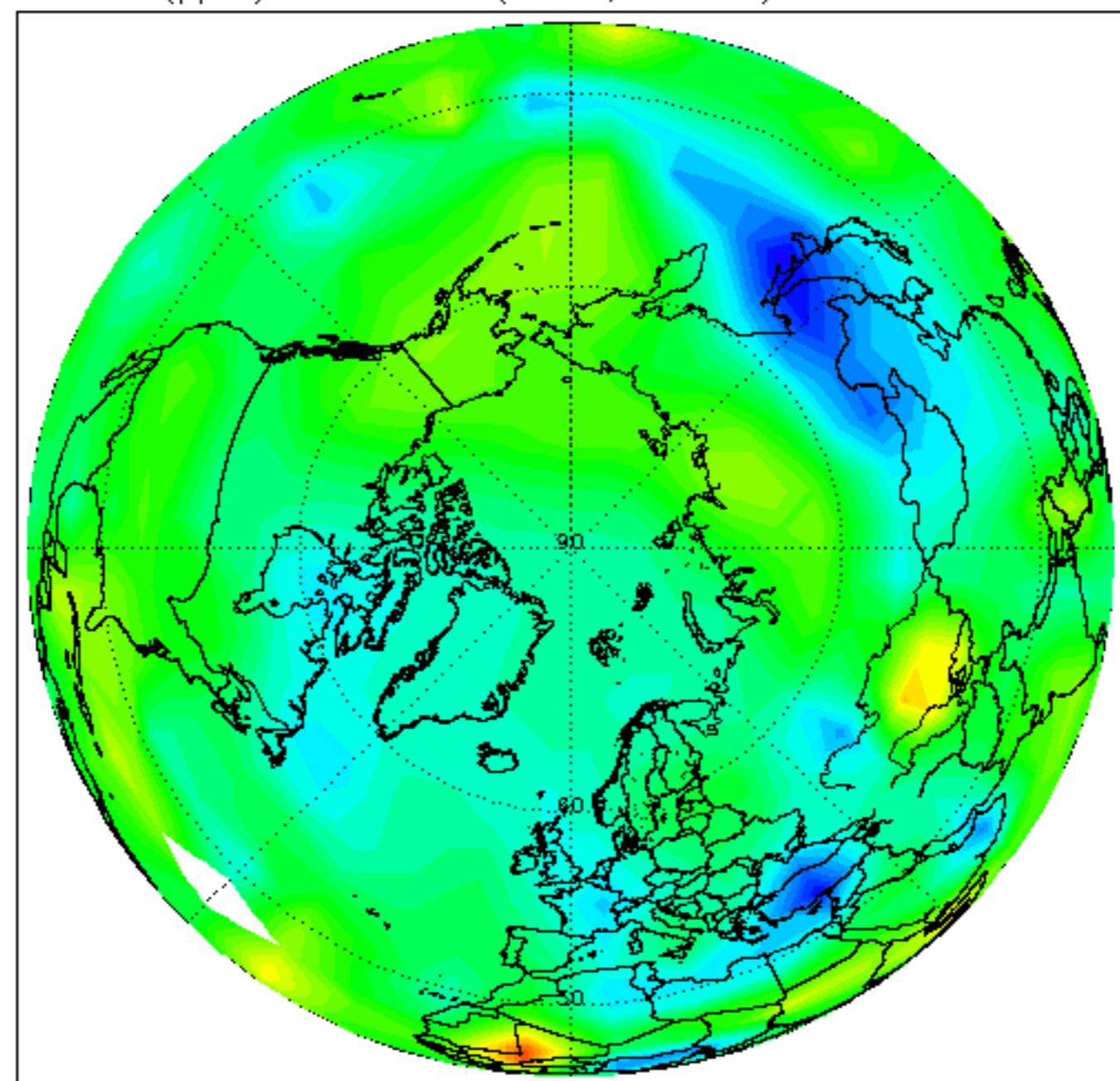
235.0

250.0

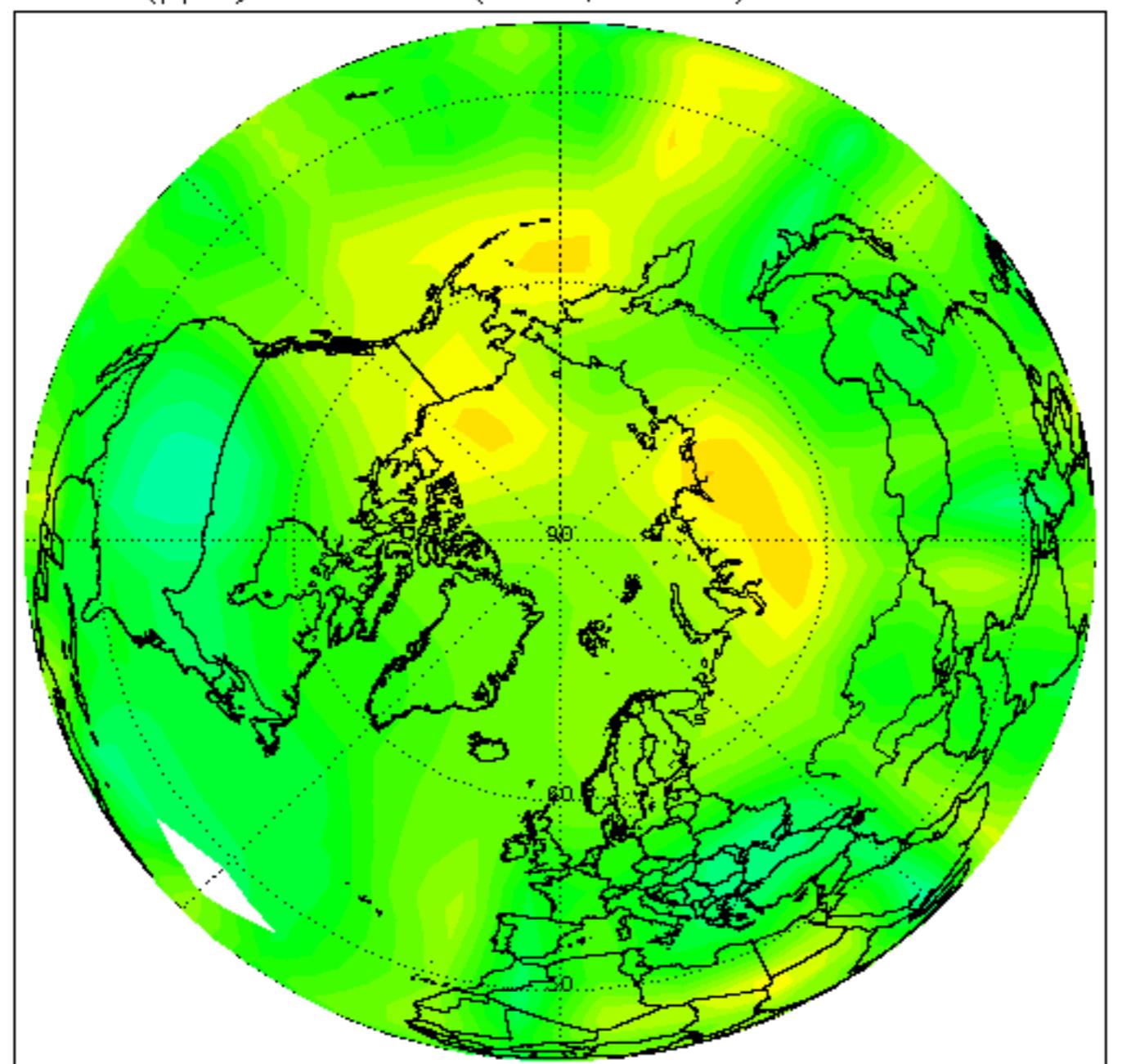
265.0

280.0

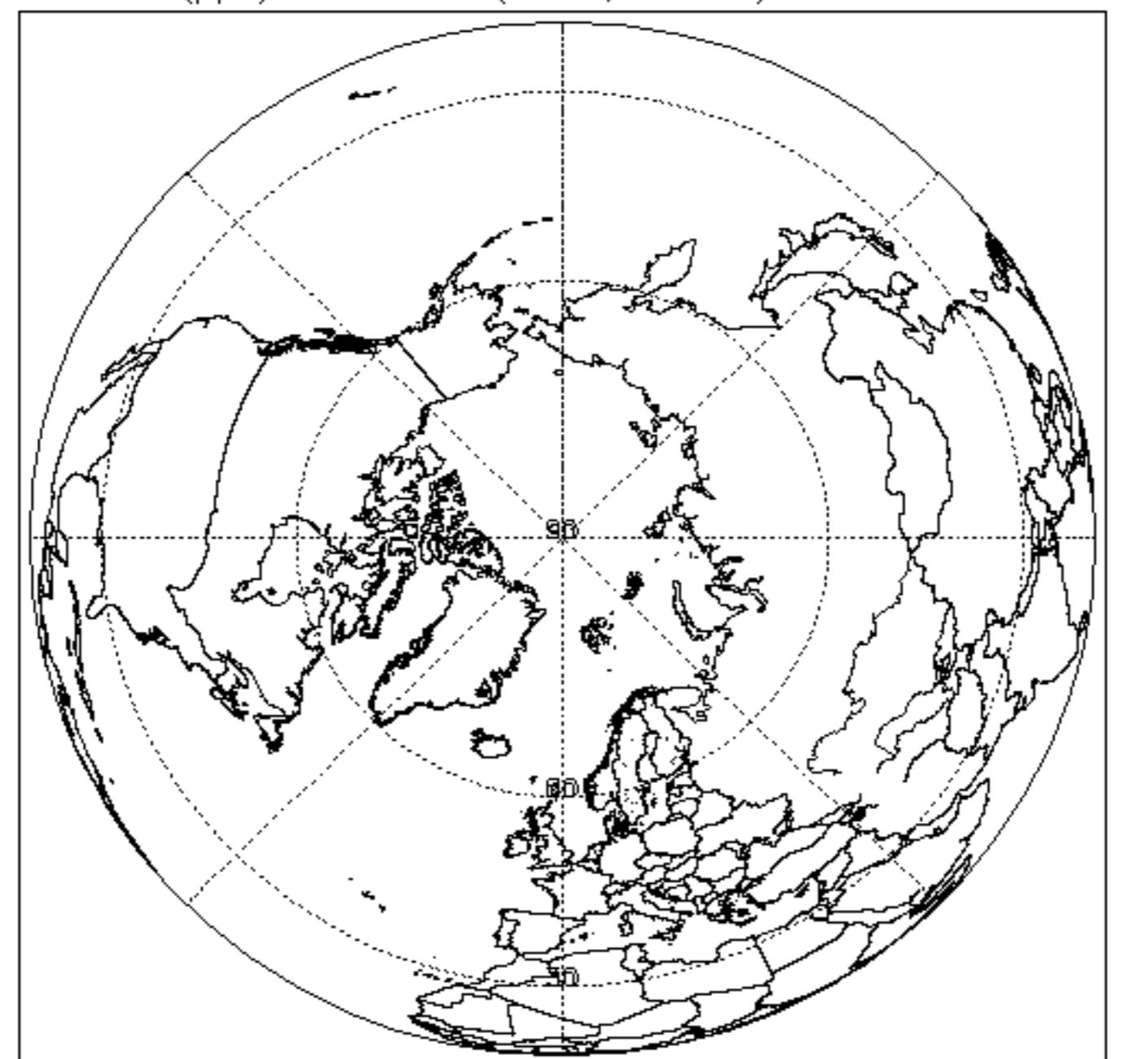
H<sub>2</sub>O (ppm) at 2700 K (60km, 0.2hPa). 30-DEC-2011

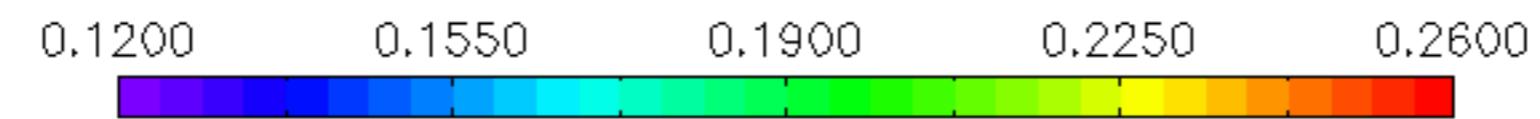
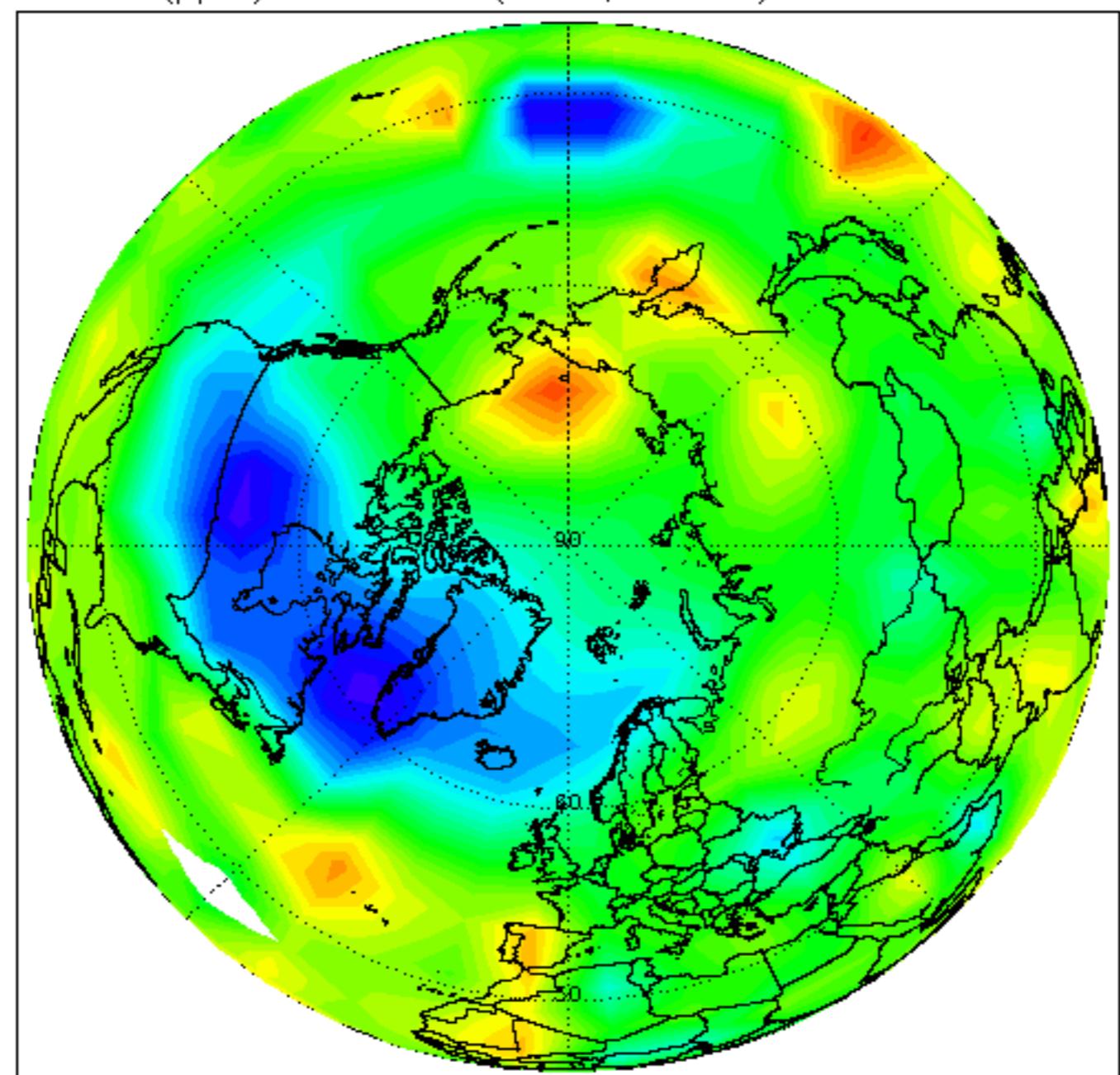


O<sub>3</sub> (ppm) at 2700 K (60km, 0.2hPa). 30-DEC-2011

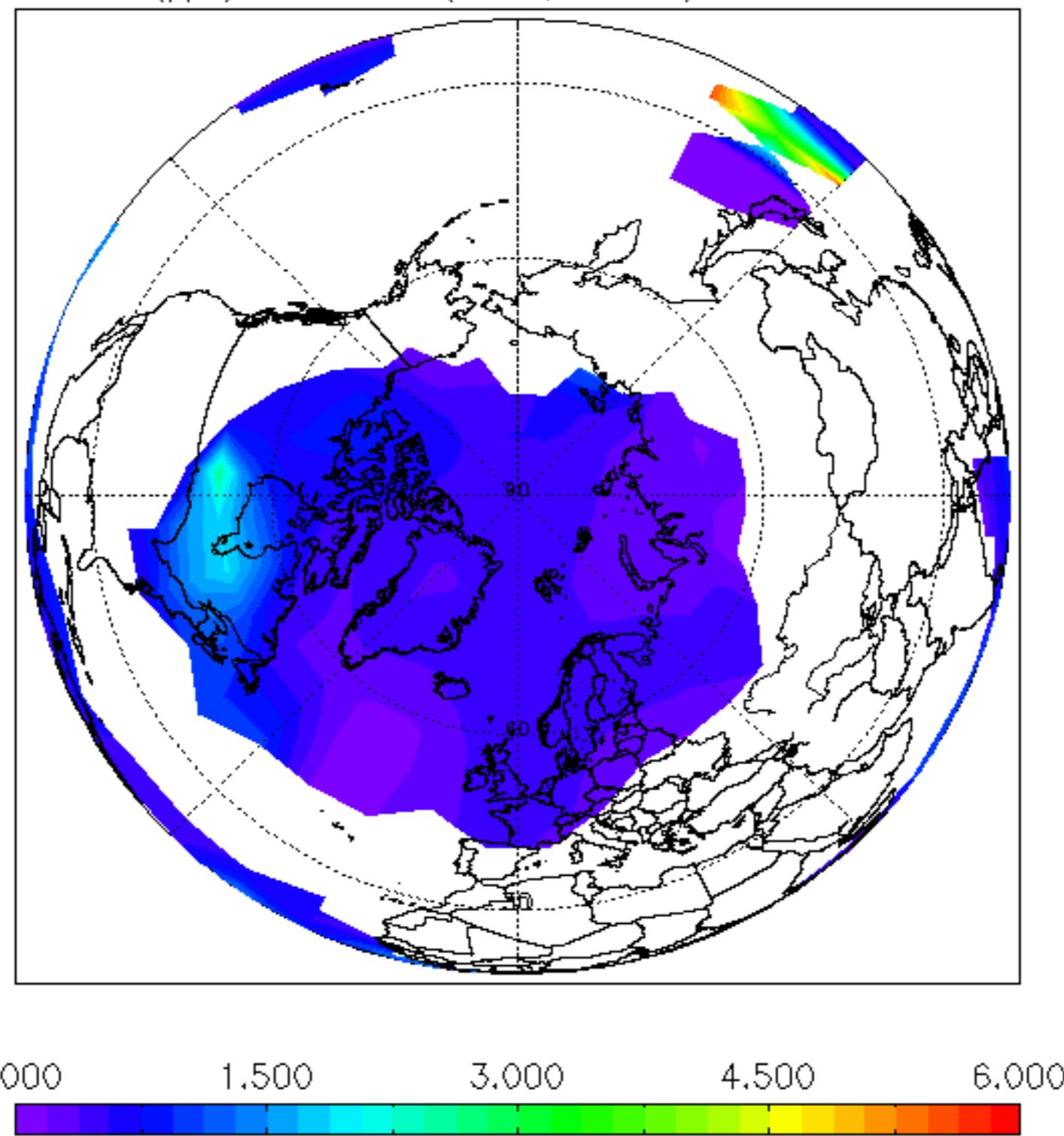


HN03 (ppb) at 2700 K (60km, 0.2hPa). 30-DEC-2011

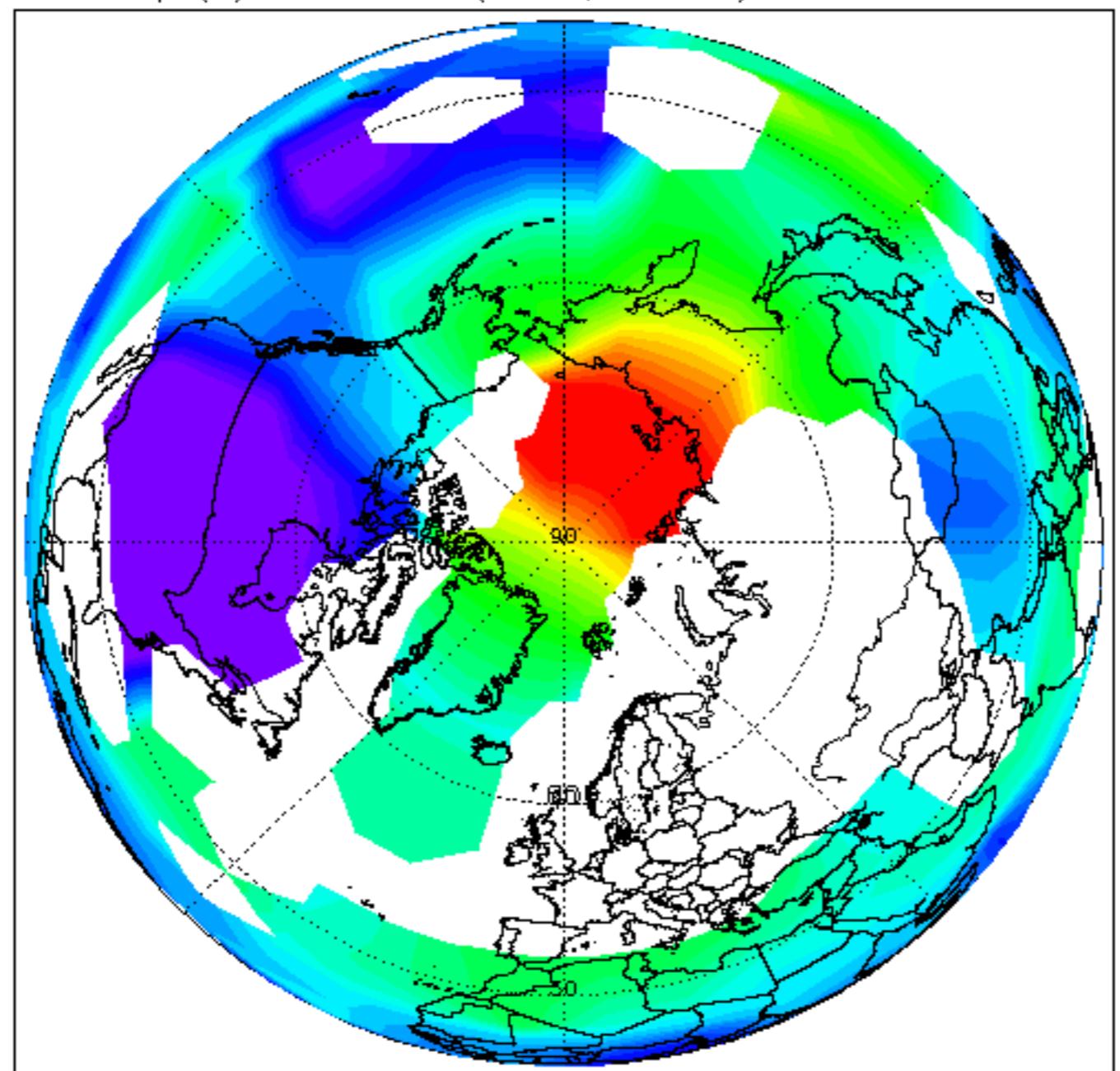


CH<sub>4</sub> (ppm) at 2700 K (60km, 0.2hPa). 30-DEC-2011

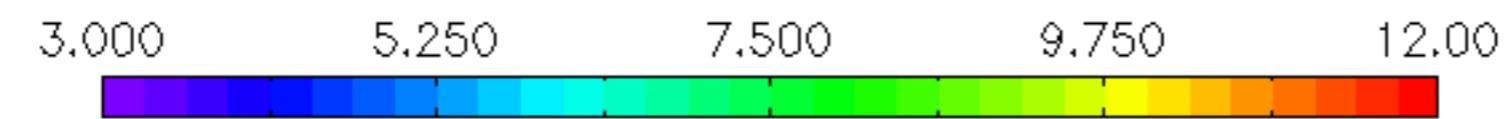
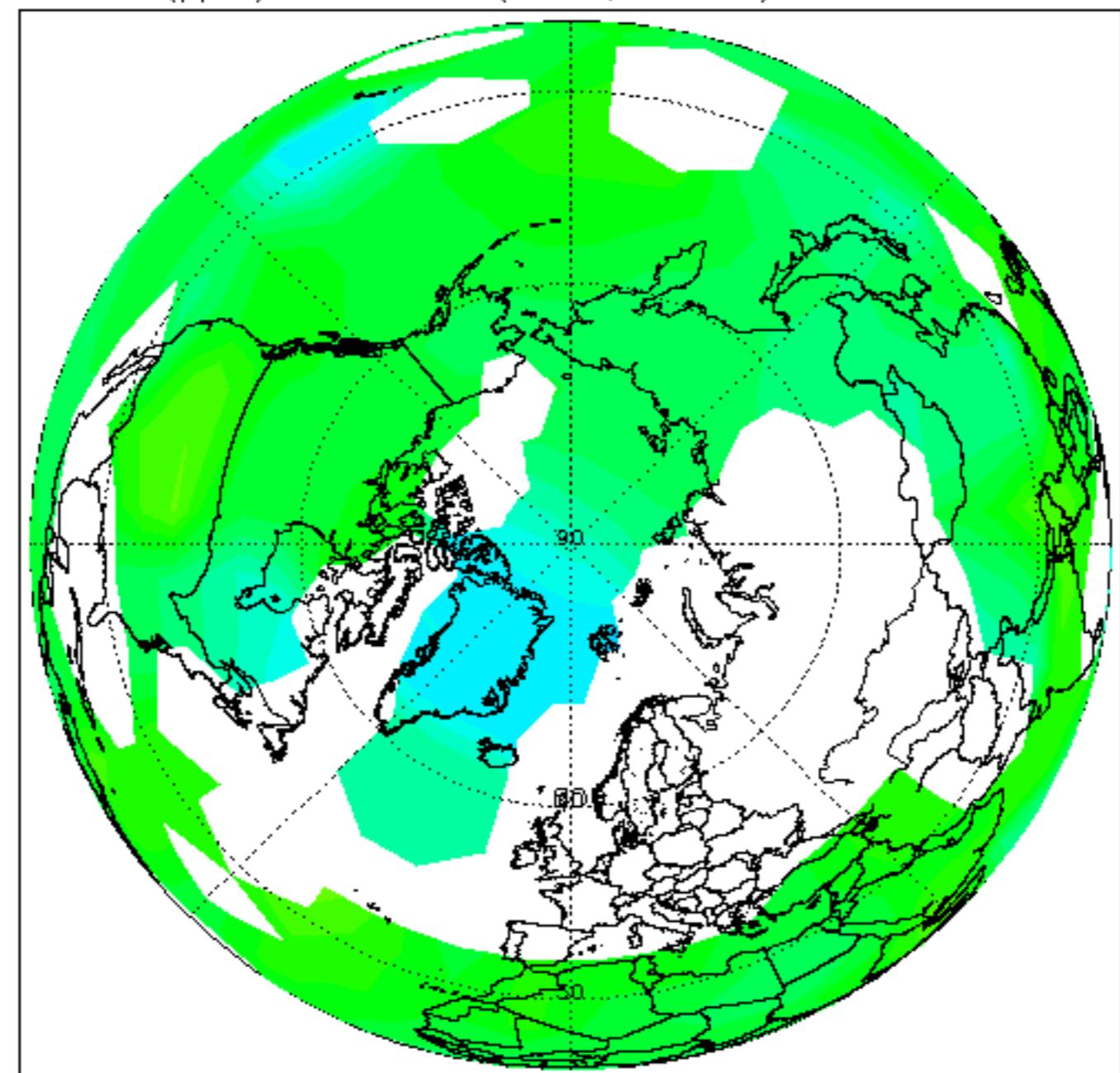
N<sub>2</sub>O (ppb) at 2700 K (60km, 0.2hPa). 30-DEC-2011

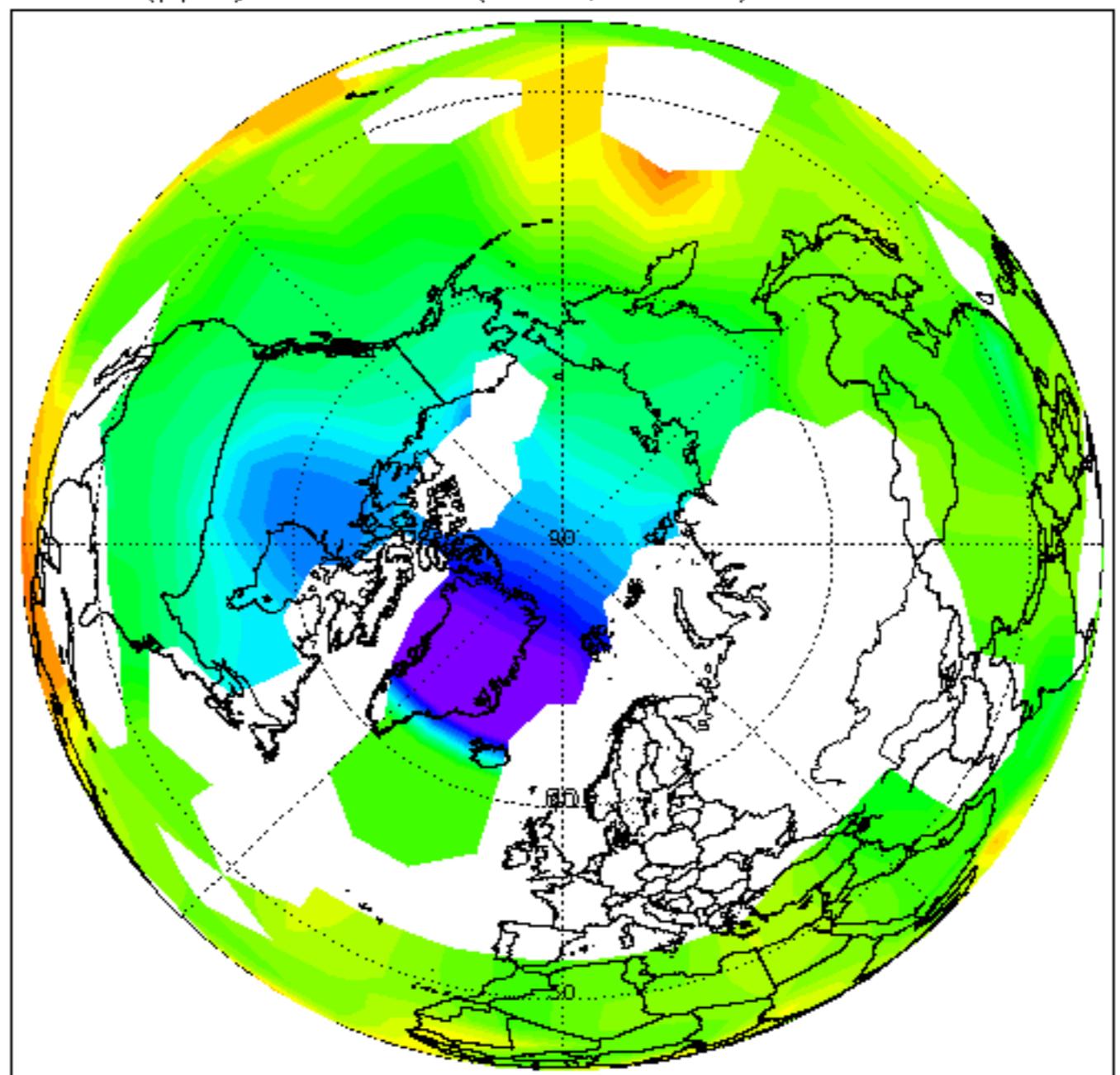


Temp (K) at 1700 K (45km, 1.5hPa). 30-DEC-2011



H<sub>2</sub>O (ppm) at 1700 K (45km, 1.5hPa). 30-DEC-2011



O<sub>3</sub> (ppm) at 1700 K (45km, 1.5hPa). 30-DEC-2011

2.750

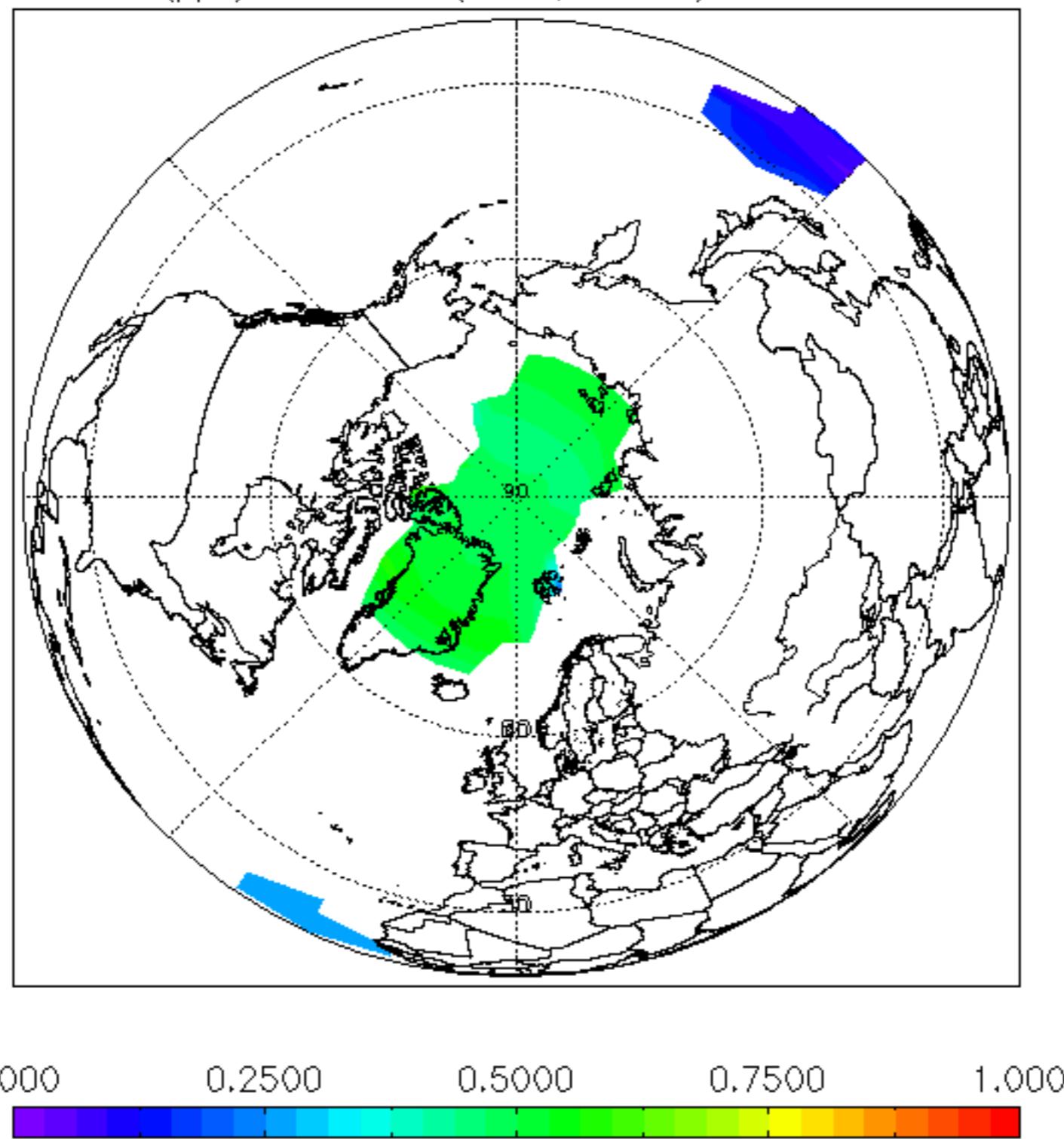
3.312

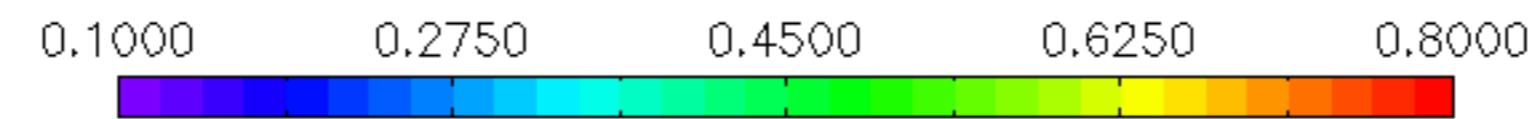
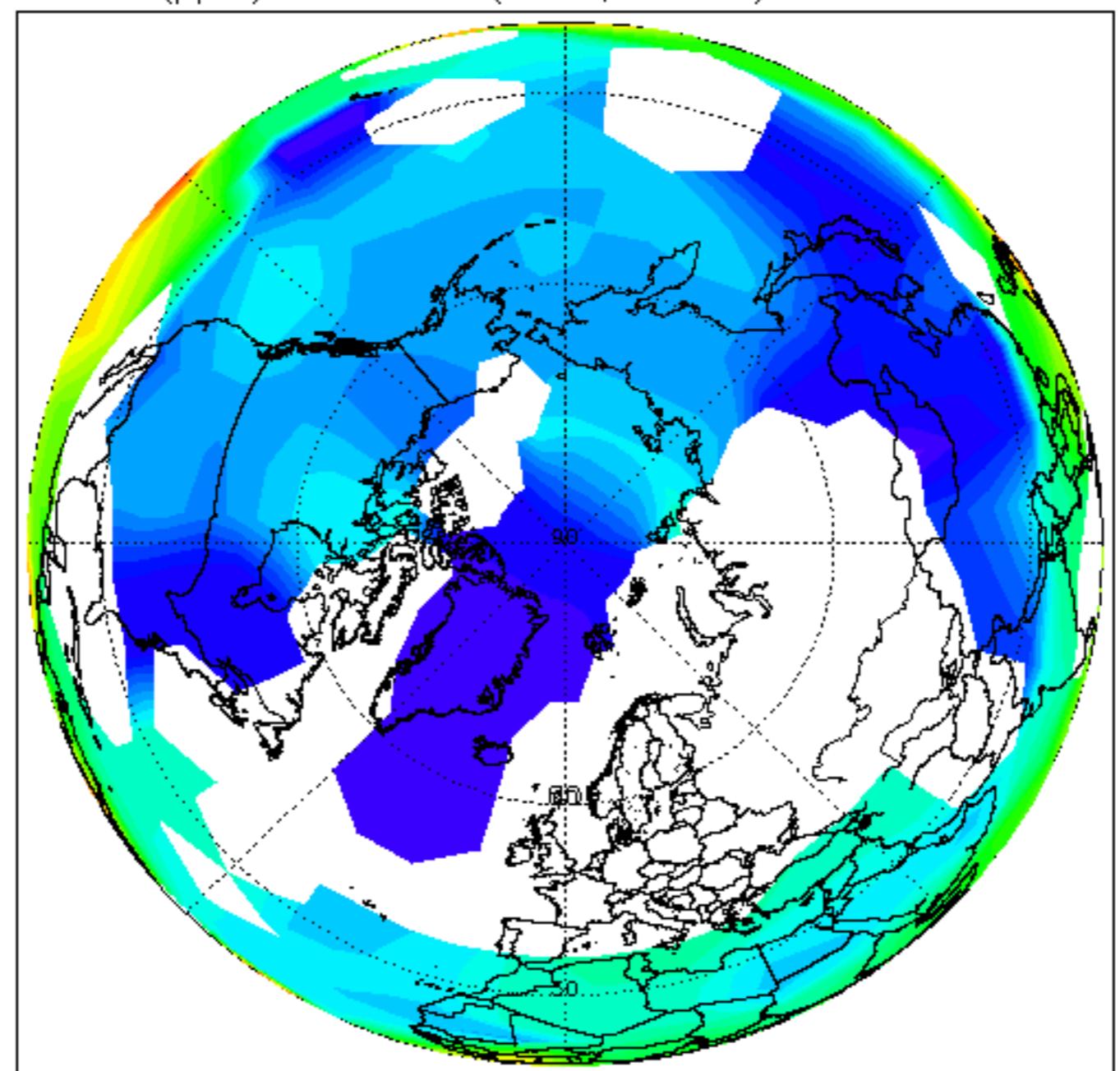
3.875

4.438

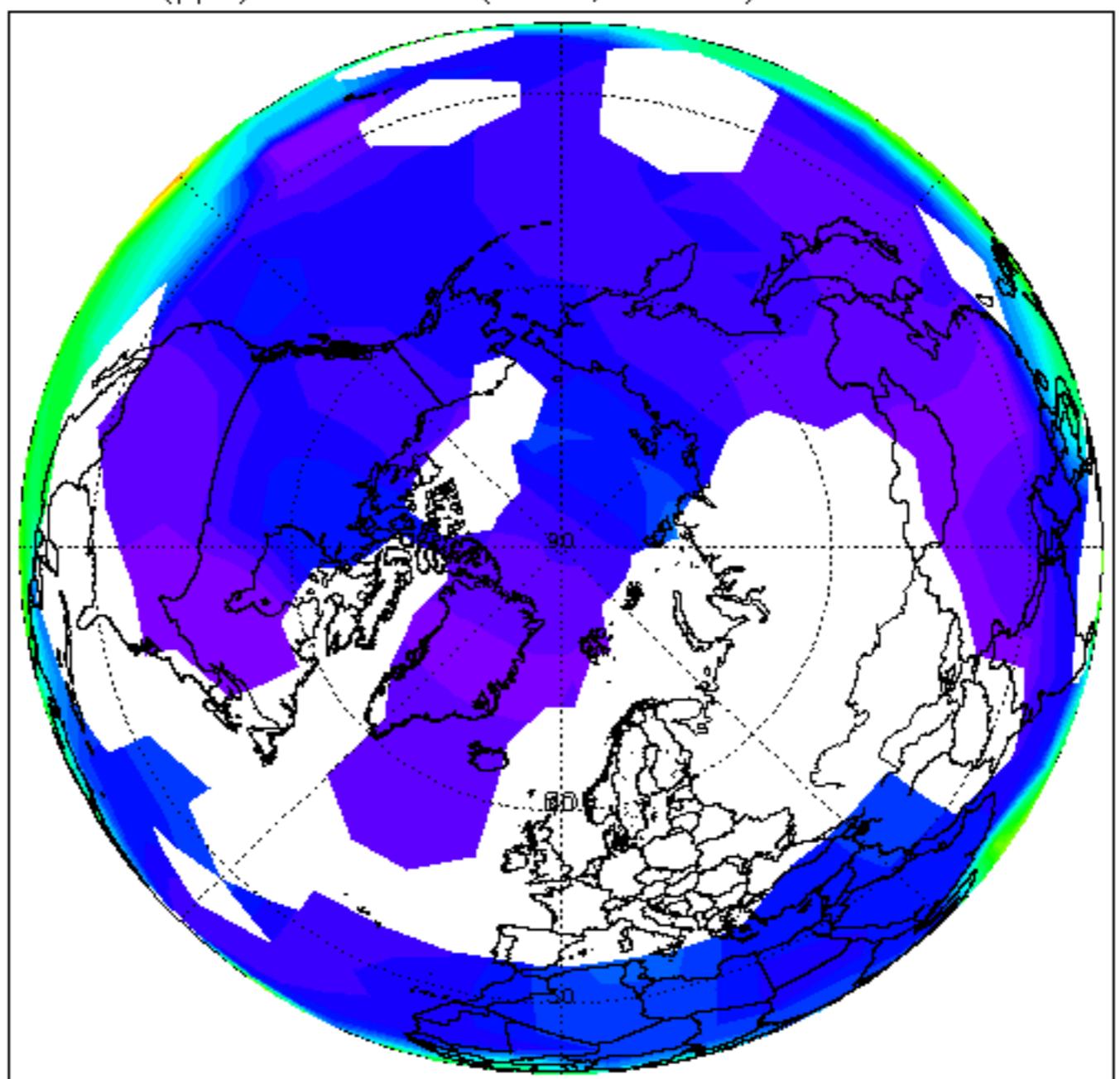
5.000



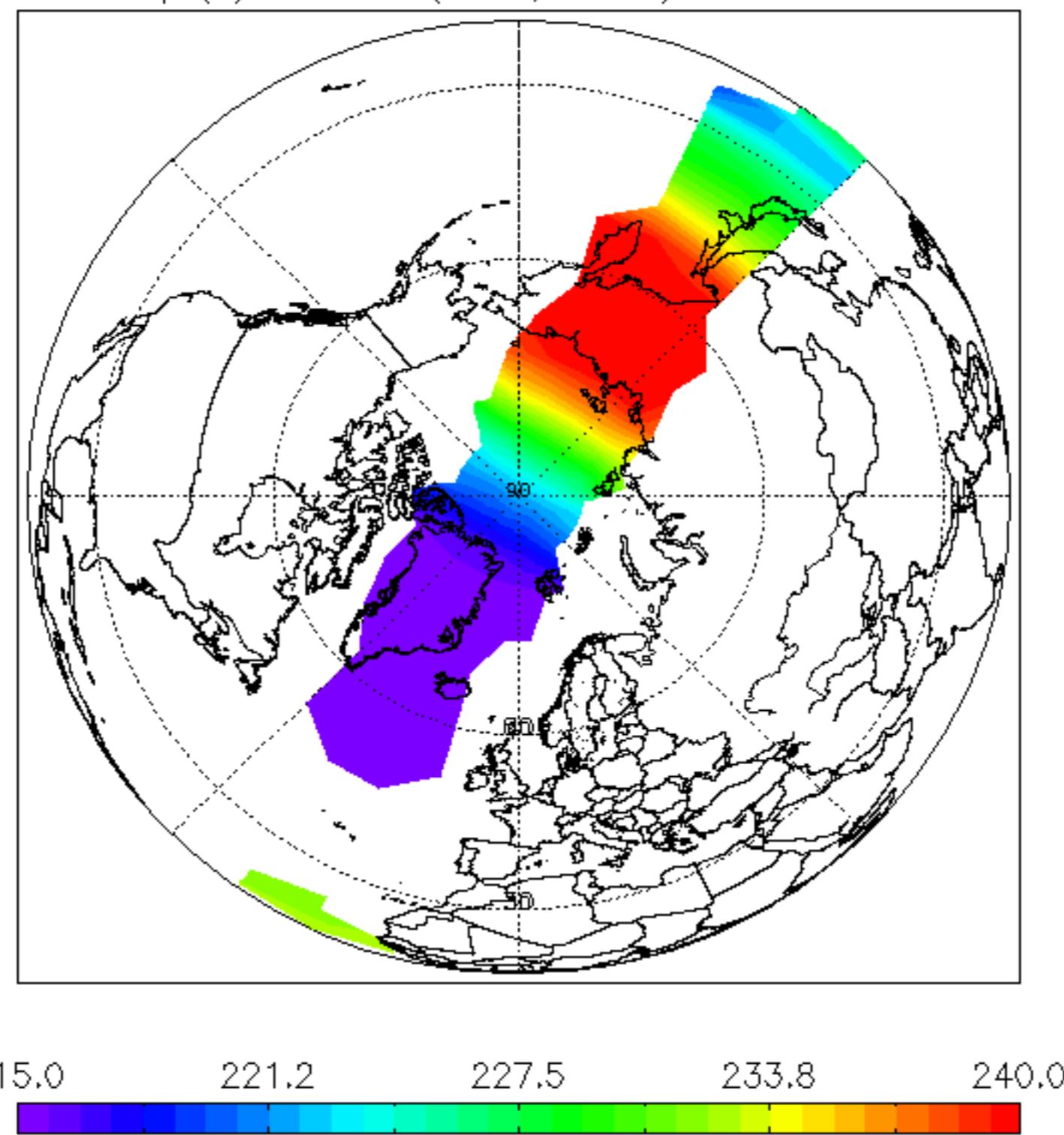
HNO<sub>3</sub> (ppb) at 1700 K (45km, 1.5hPa). 30-DEC-2011

CH<sub>4</sub> (ppm) at 1700 K (45km, 1.5hPa). 30-DEC-2011

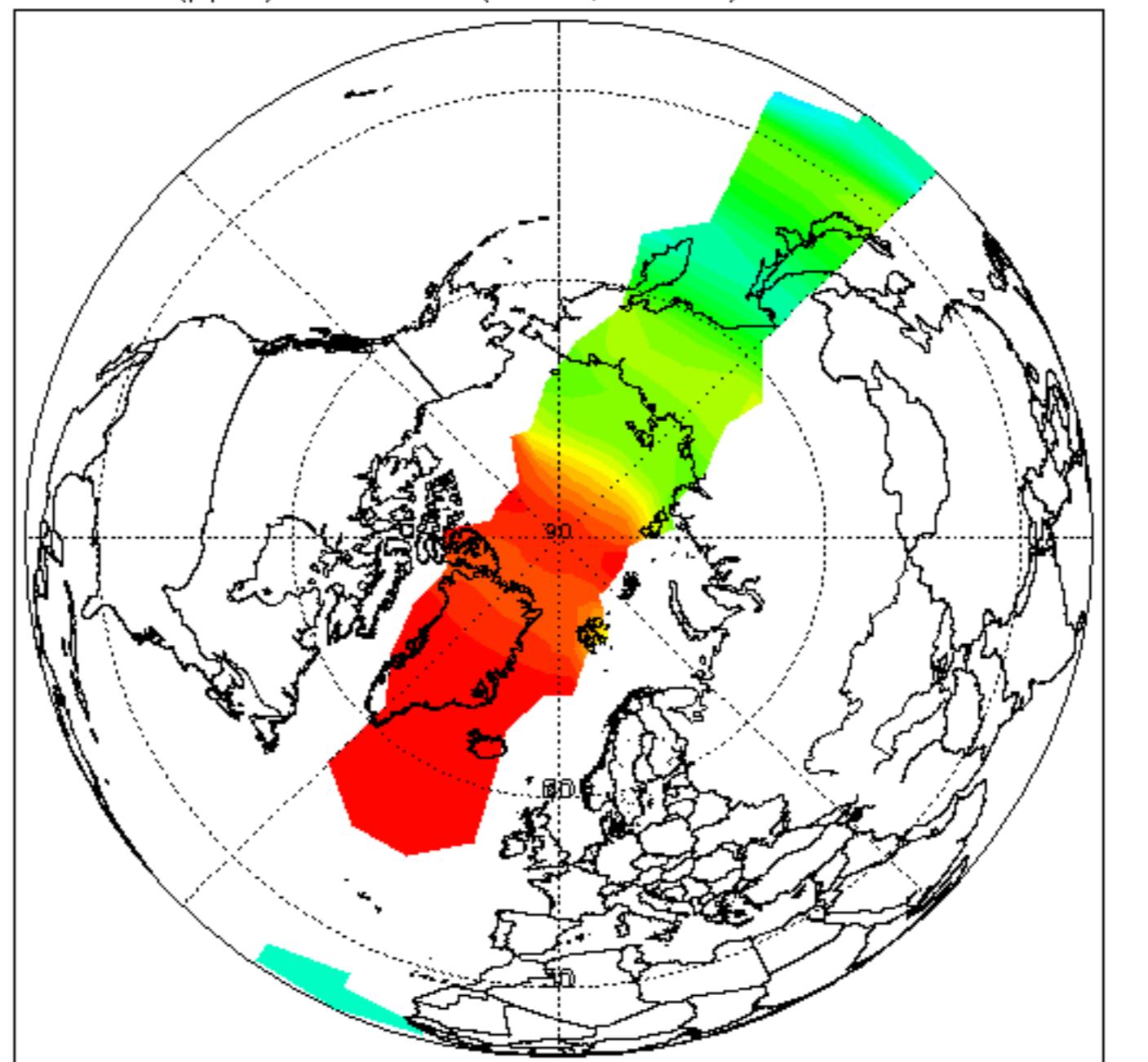
N<sub>2</sub>O (ppb) at 1700 K (45km, 1.5hPa). 30-DEC-2011



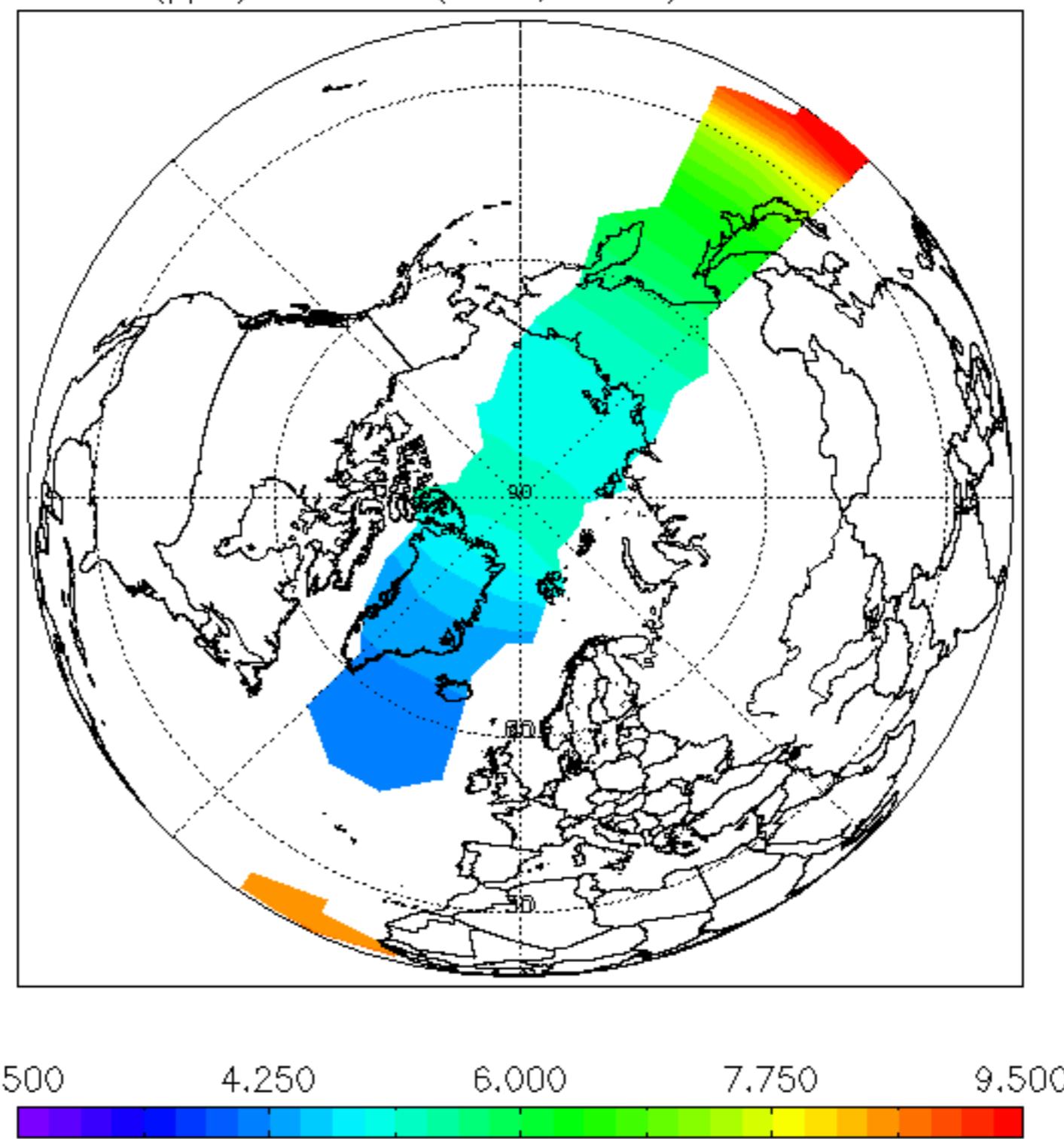
Temp (K) at 850 K (32km, 10hPa). 30-DEC-2011

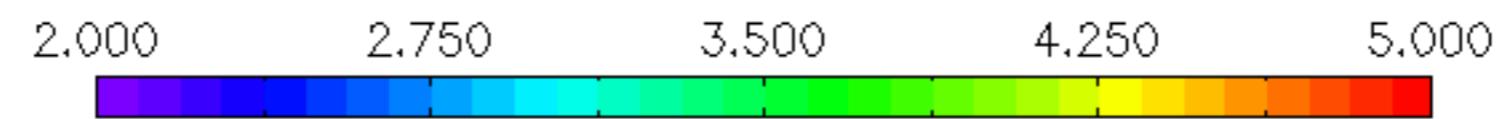
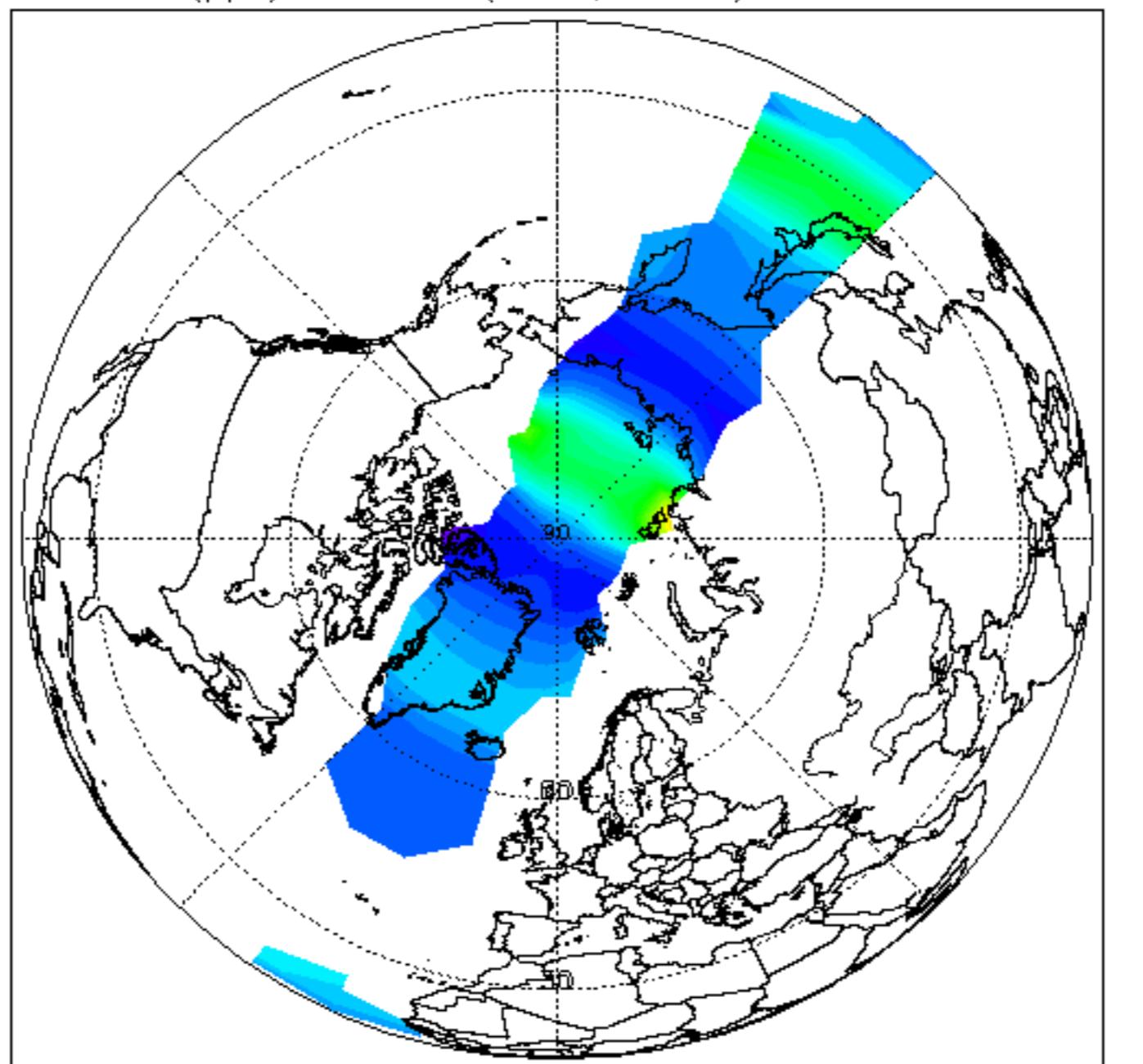


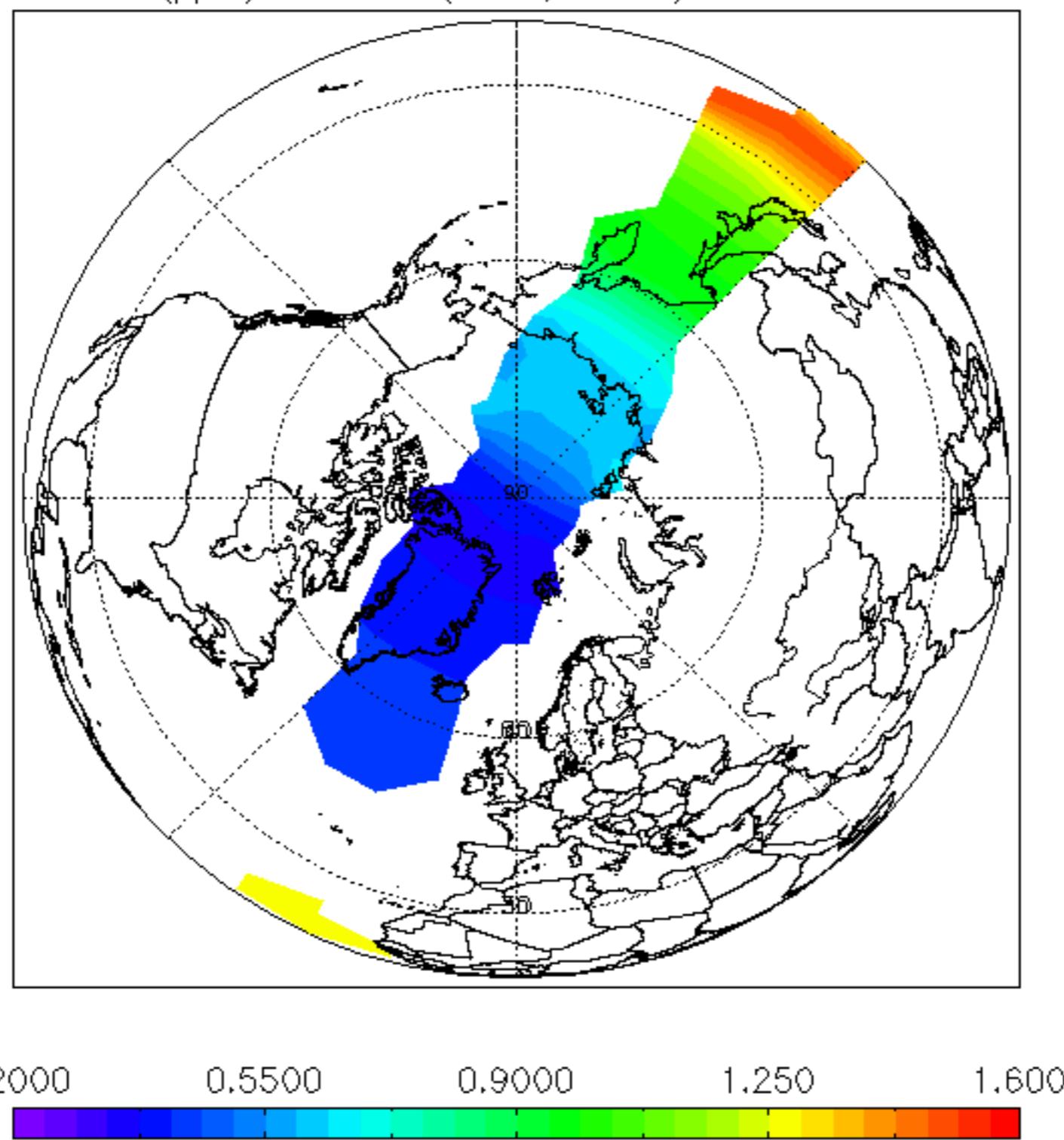
H<sub>2</sub>O (ppm) at 850 K (32km, 10hPa). 30-DEC-2011

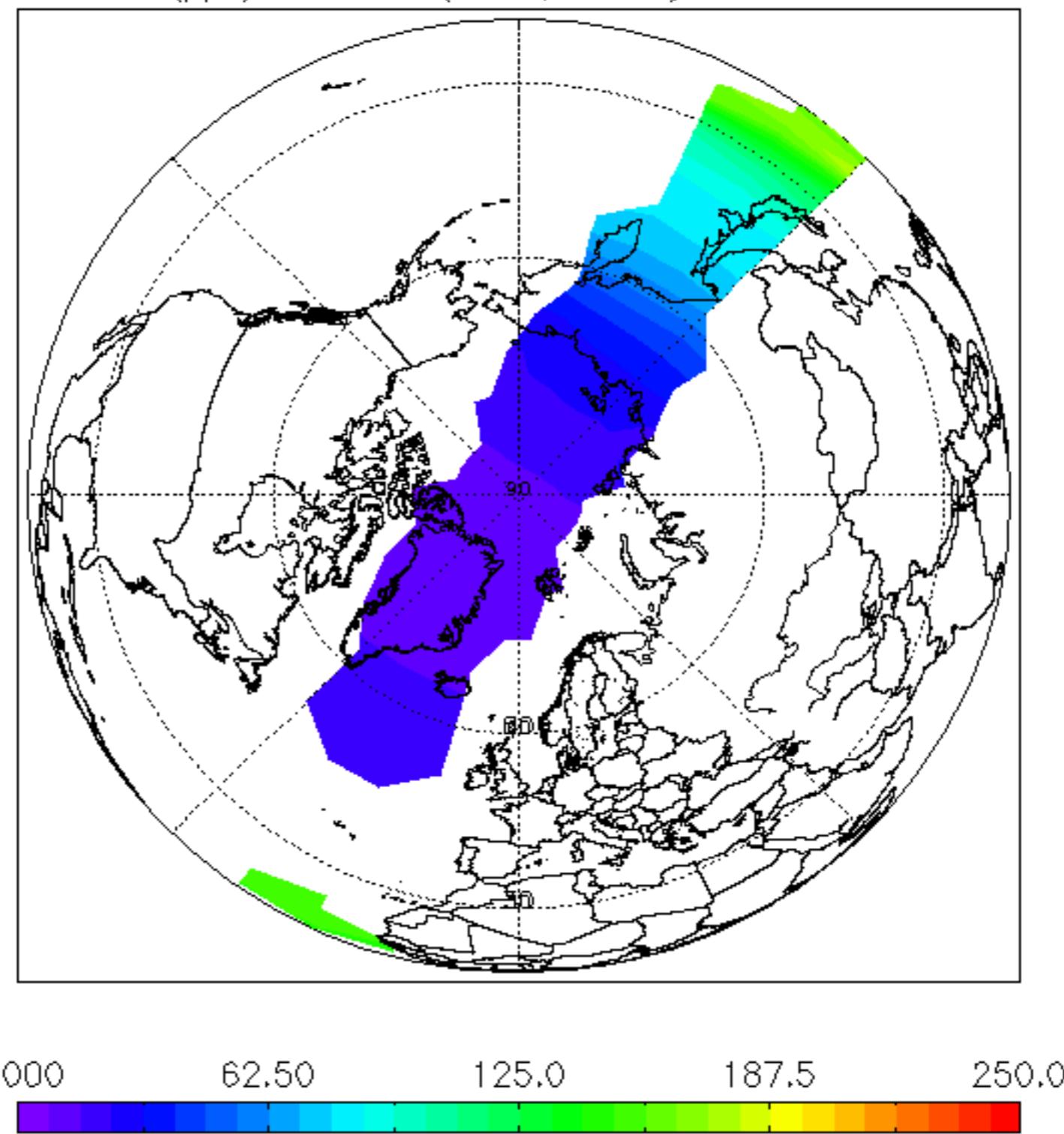


O<sub>3</sub> (ppm) at 850 K (32km, 10hPa). 30-DEC-2011

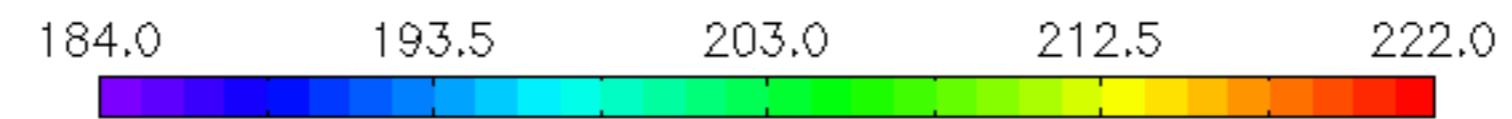
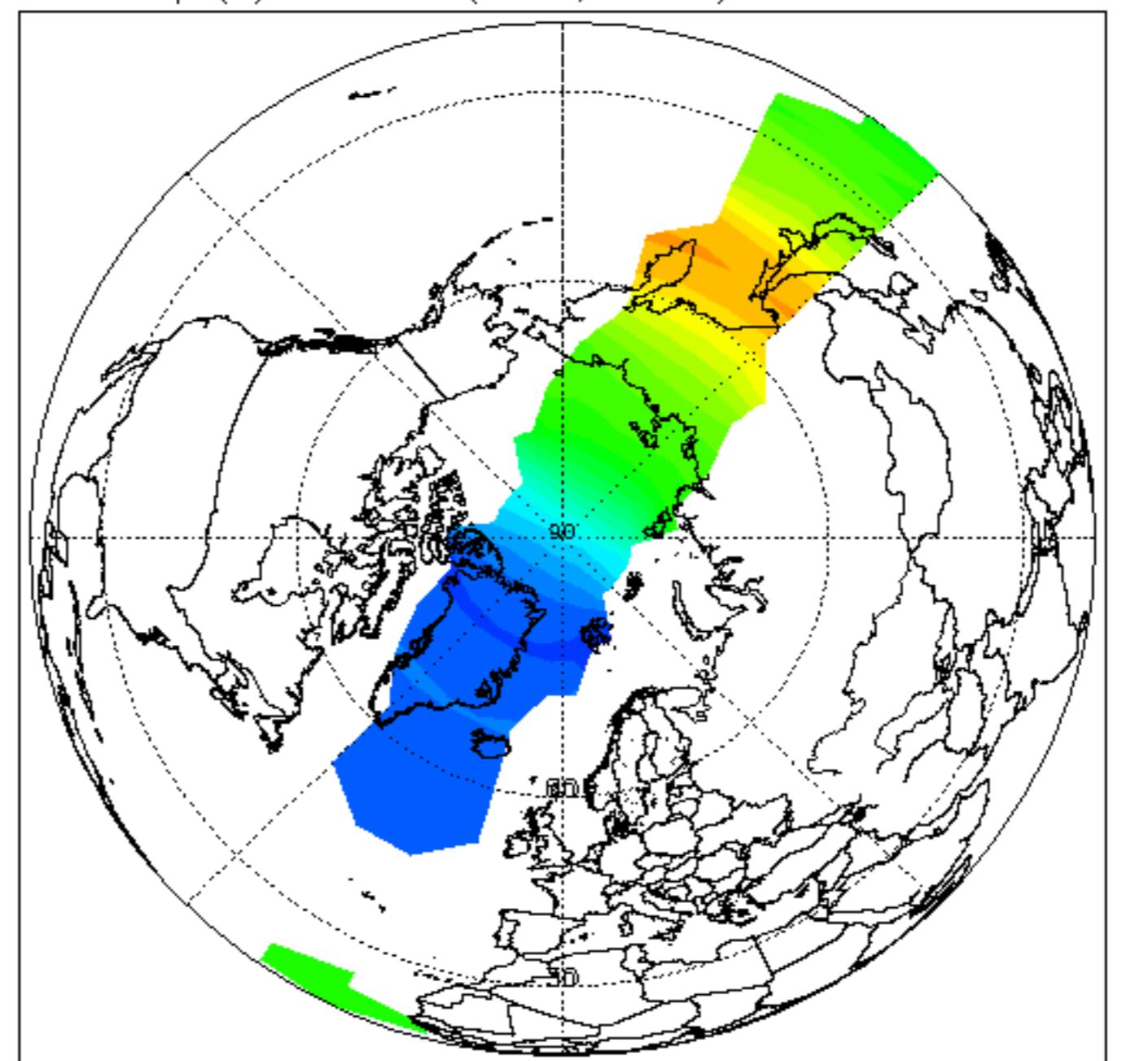


HNO<sub>3</sub> (ppb) at 850 K (32km, 10hPa). 30-DEC-2011

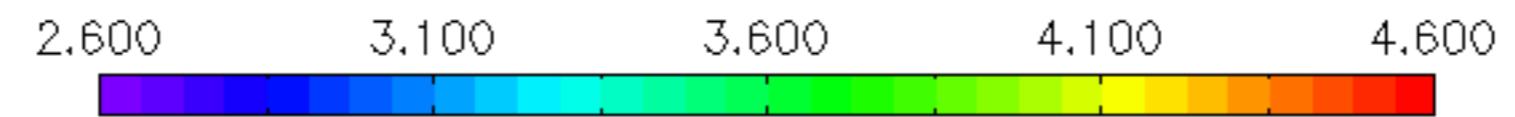
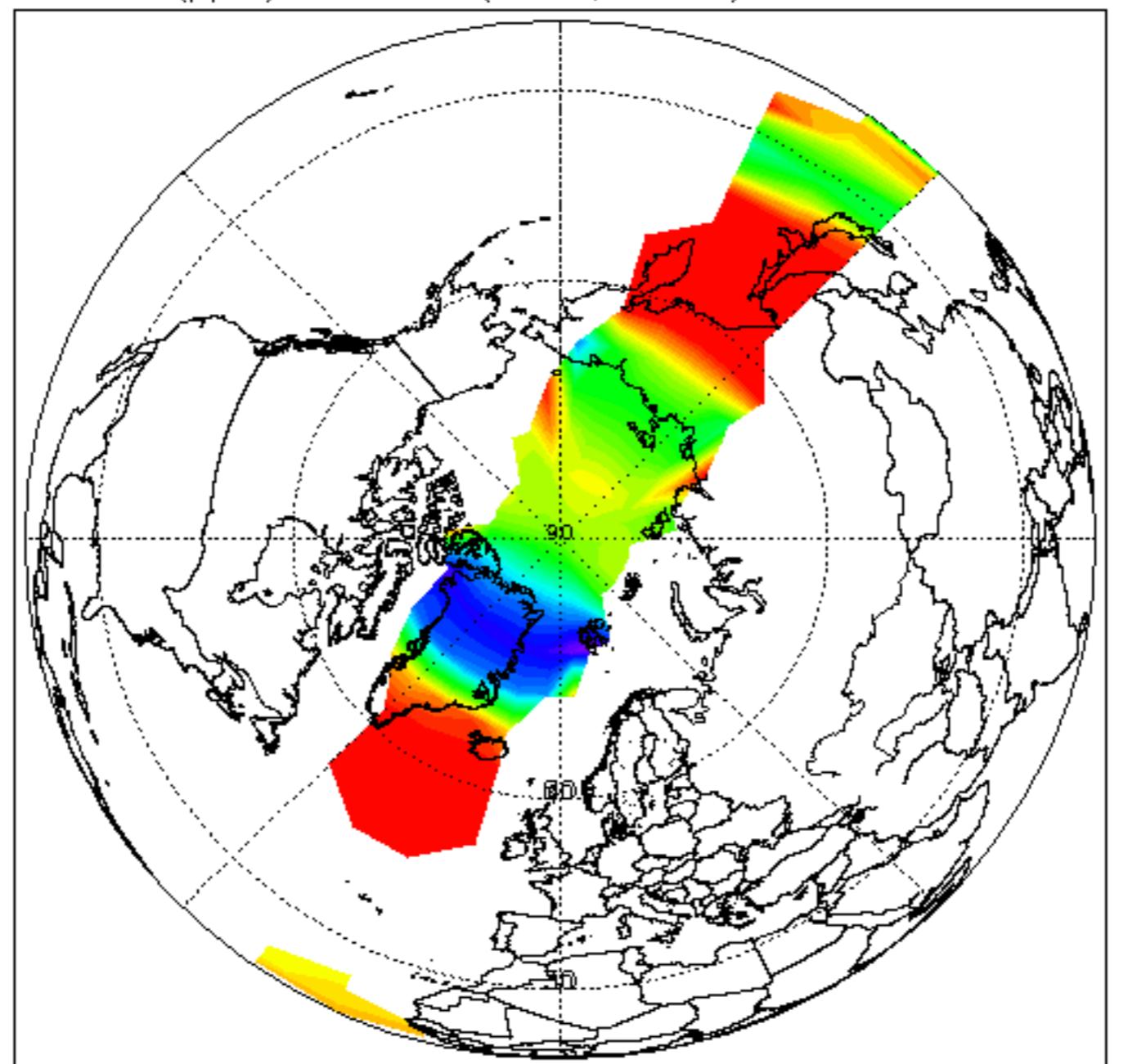
CH<sub>4</sub> (ppm) at 850 K (32km, 10hPa). 30-DEC-2011

N<sub>2</sub>O (ppb) at 850 K (32km, 10hPa). 30-DEC-2011

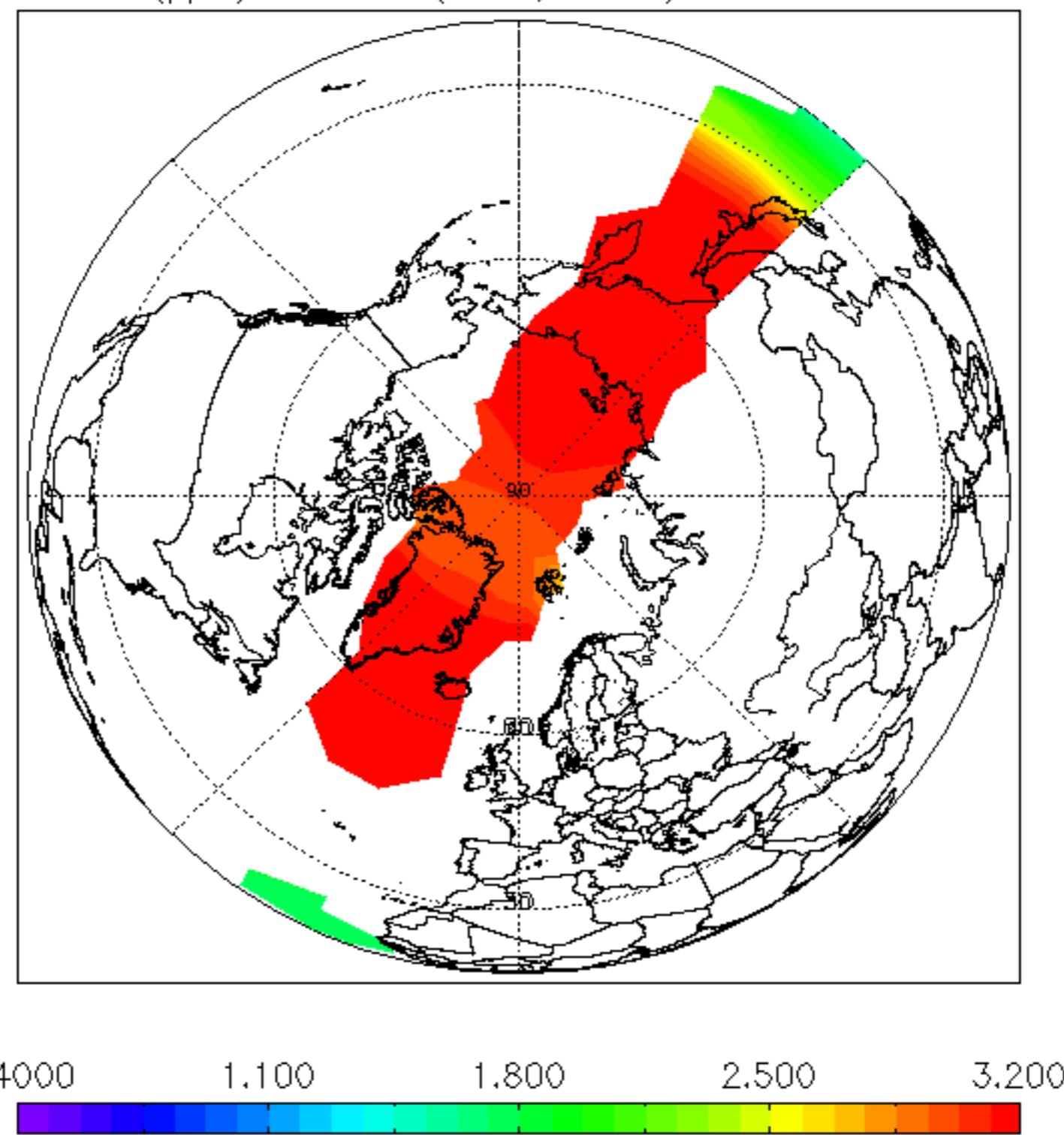
Temp (K) at 490 K (19km, 55hPa). 30-DEC-2011



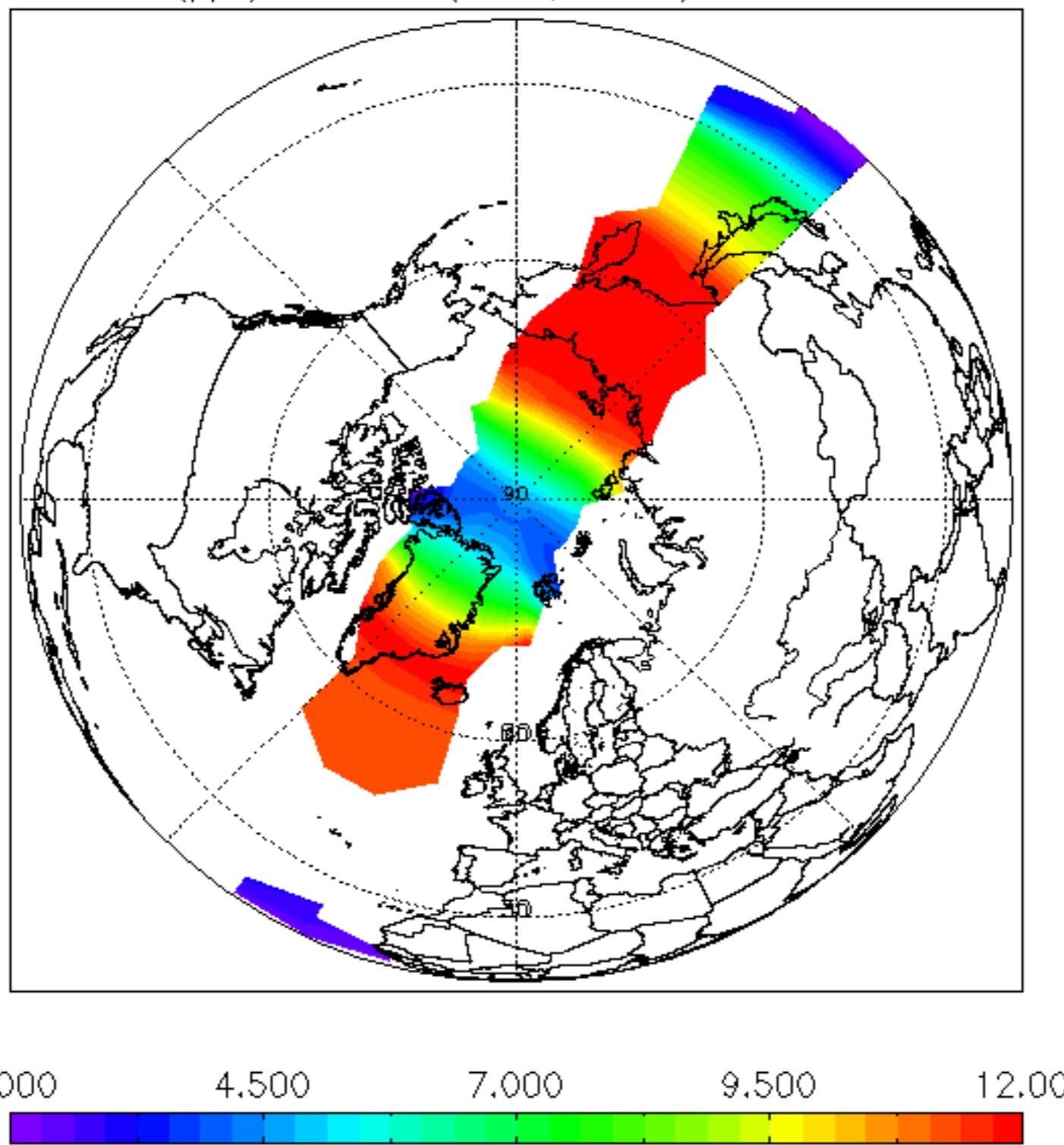
H<sub>2</sub>O (ppm) at 490 K (19km, 55hPa). 30-DEC-2011

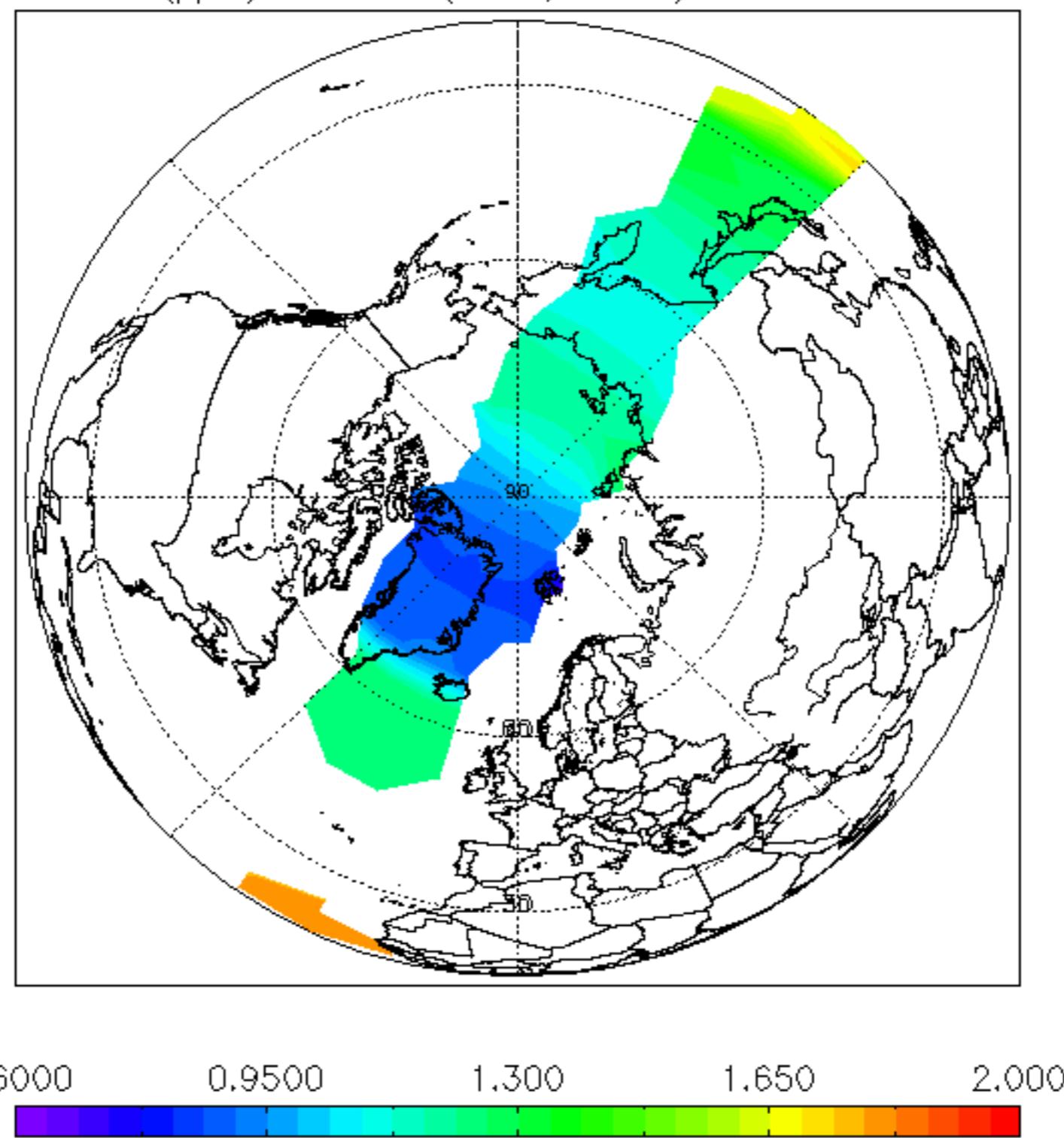


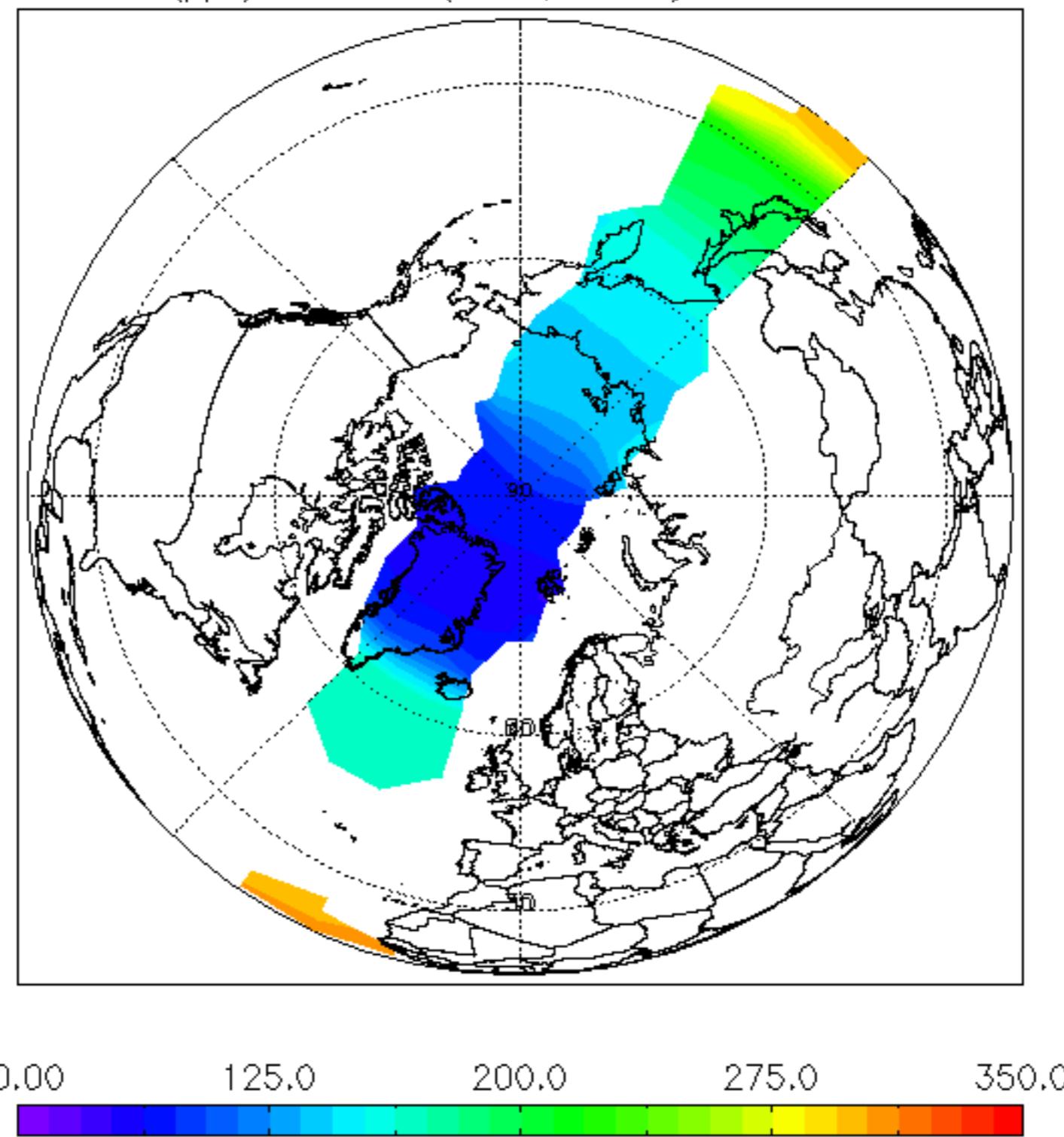
O<sub>3</sub> (ppm) at 490 K (19km, 55hPa). 30-DEC-2011



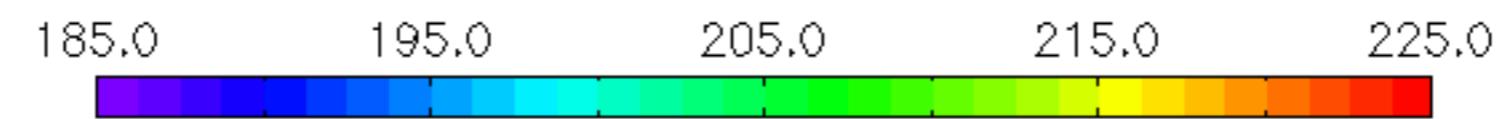
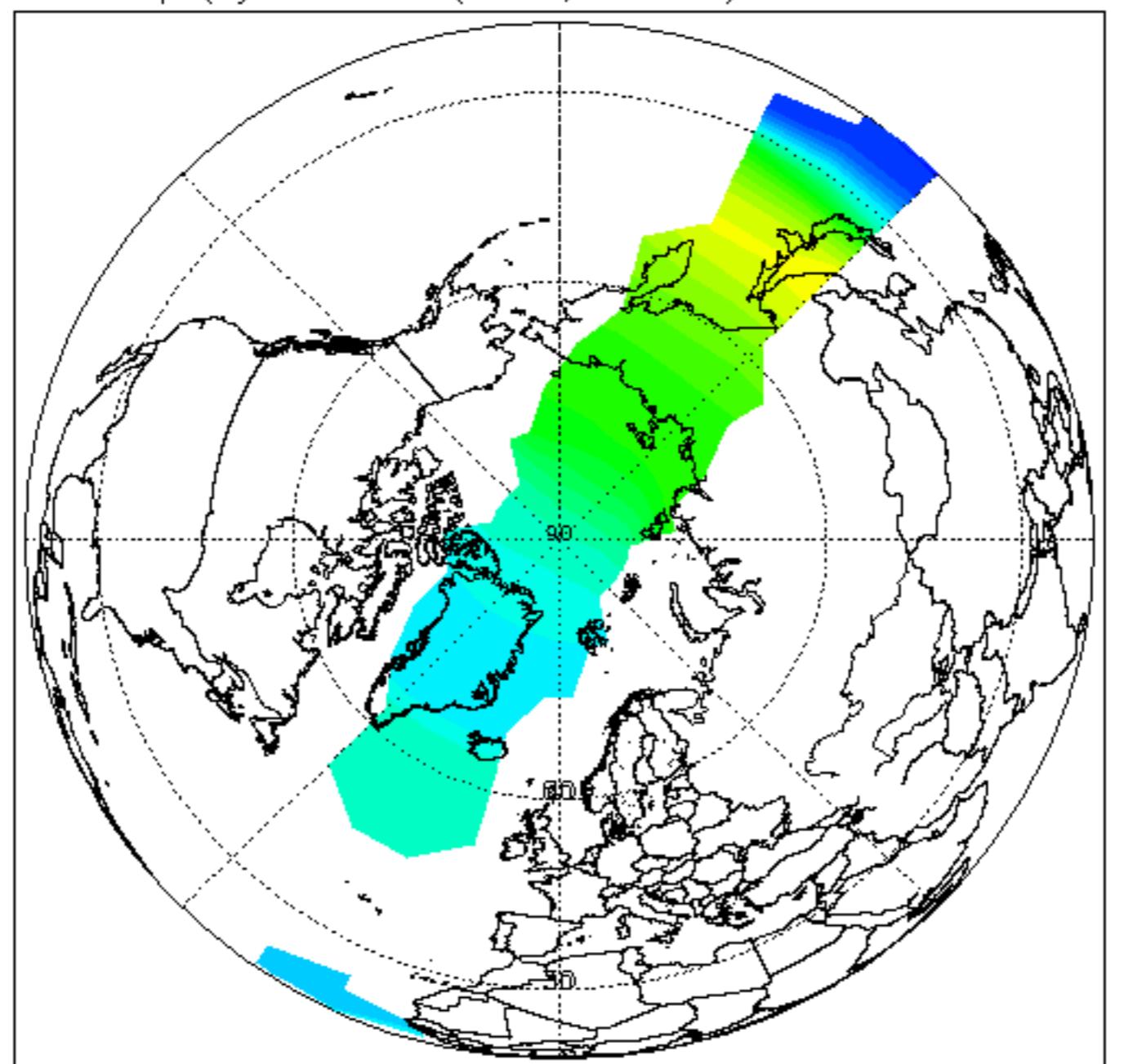
HN03 (ppb) at 490 K (19km, 55hPa). 30-DEC-2011



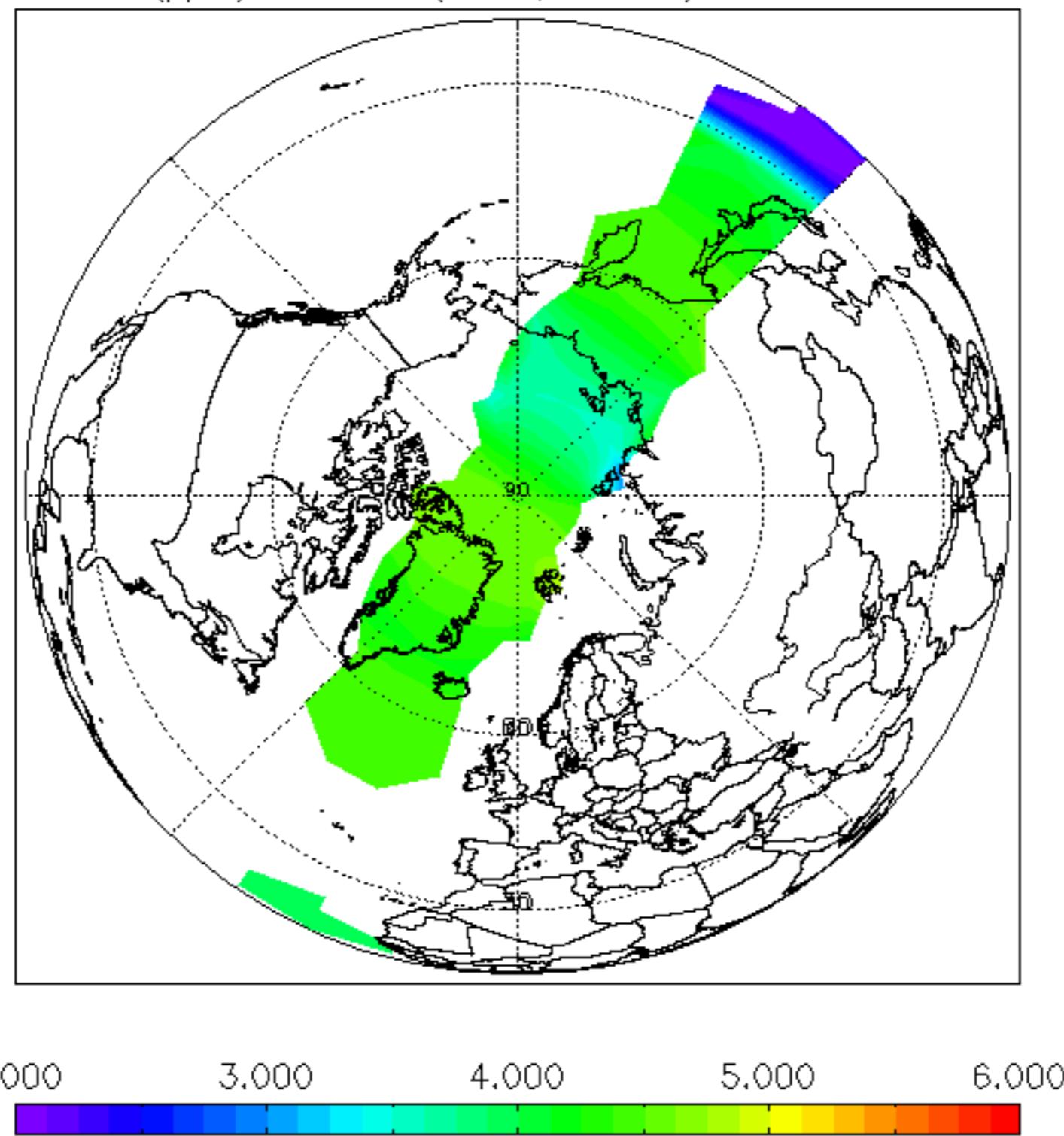
CH<sub>4</sub> (ppm) at 490 K (19km, 55hPa). 30-DEC-2011

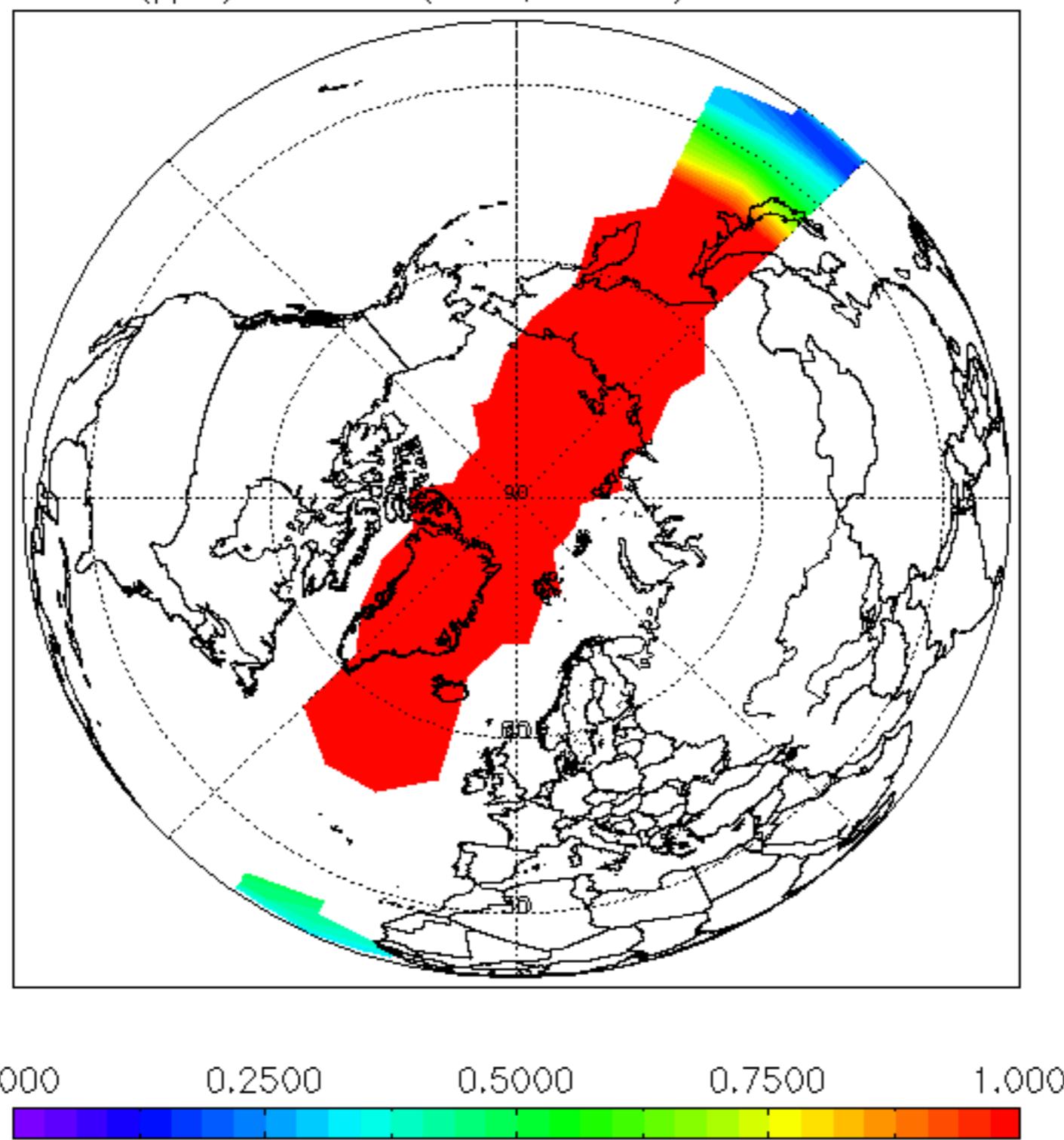
N<sub>2</sub>O (ppb) at 490 K (19km, 55hPa). 30-DEC-2011

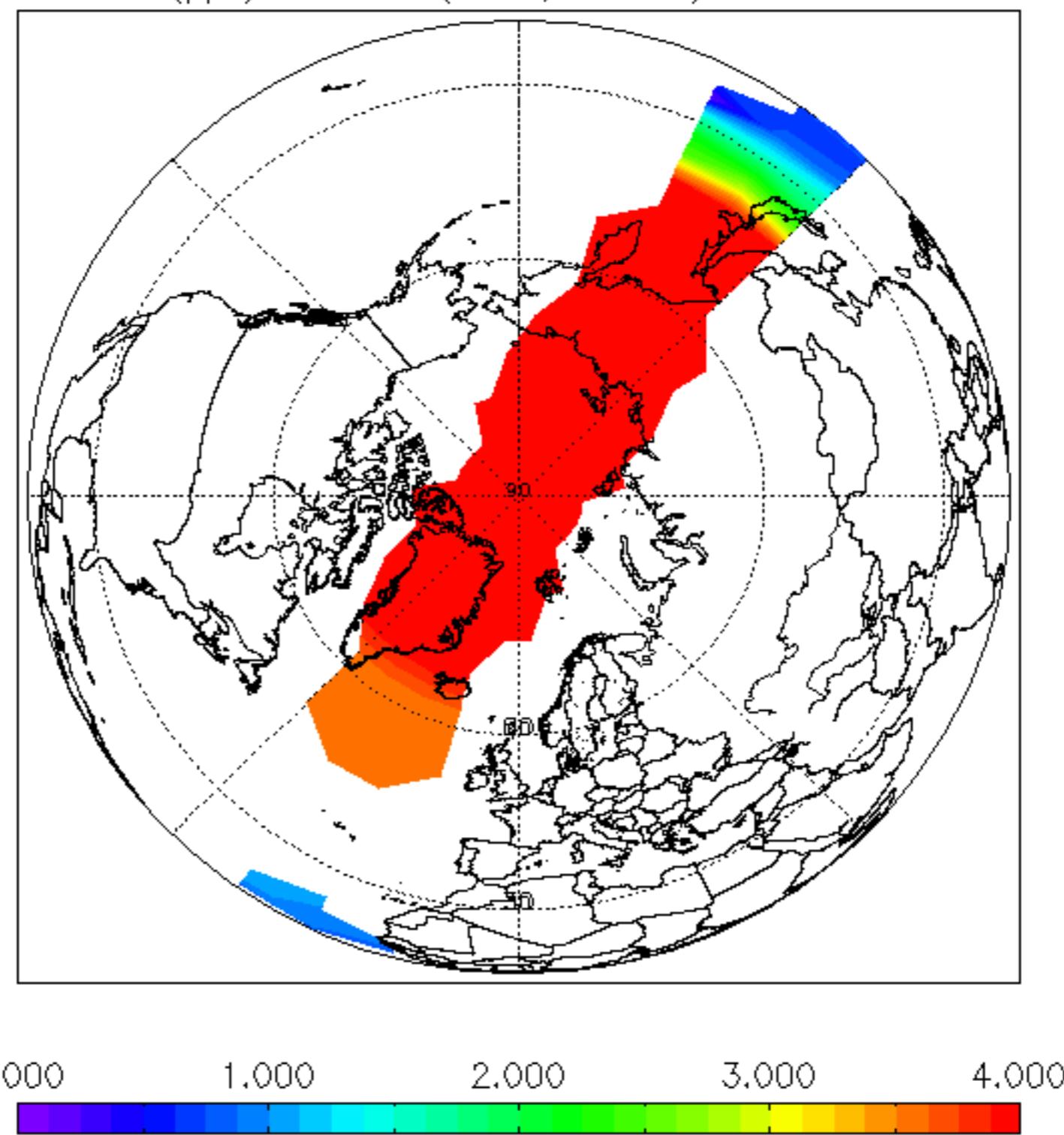
Temp (K) at 410 K (16km, 100hPa). 30-DEC-2011

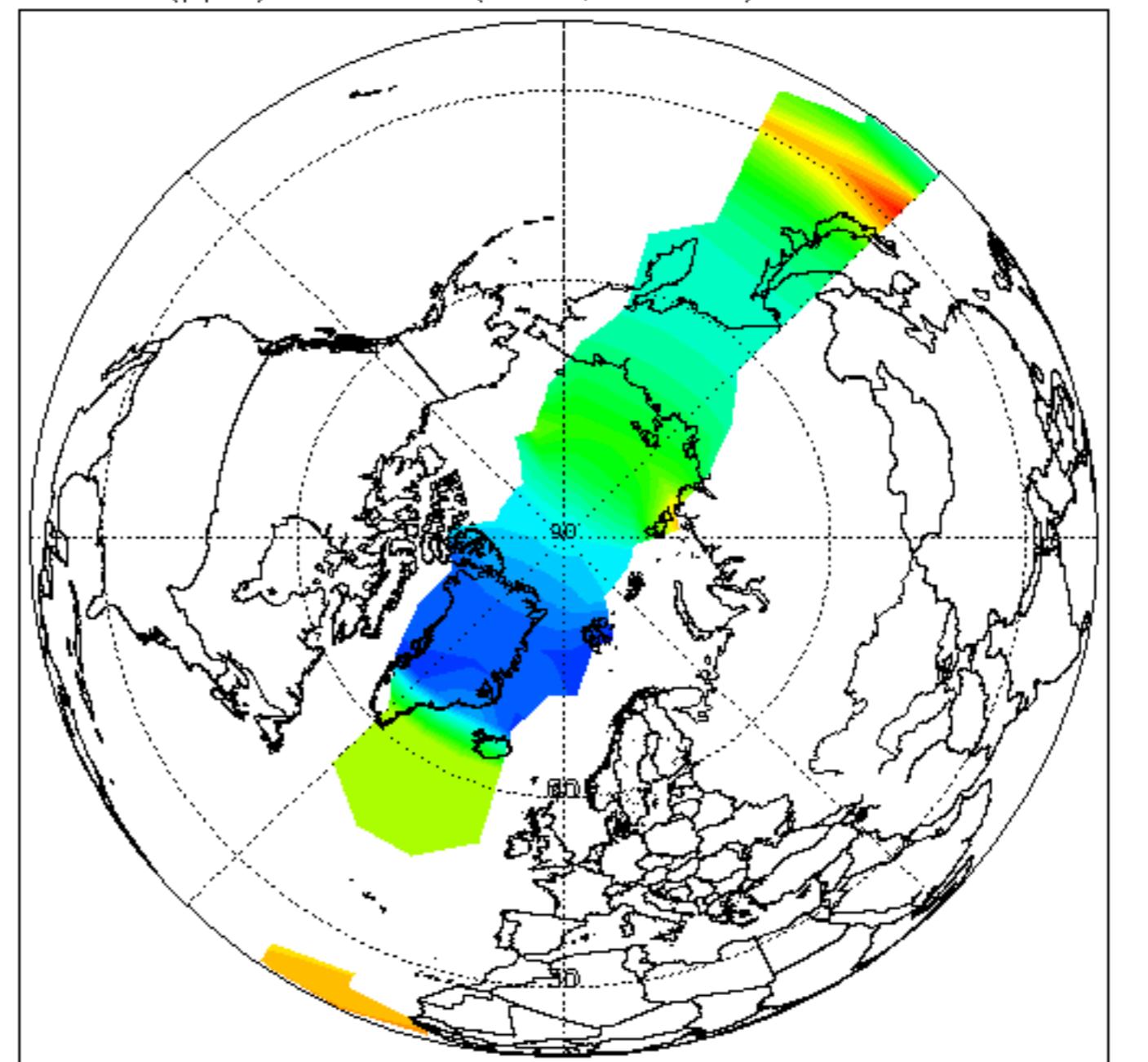


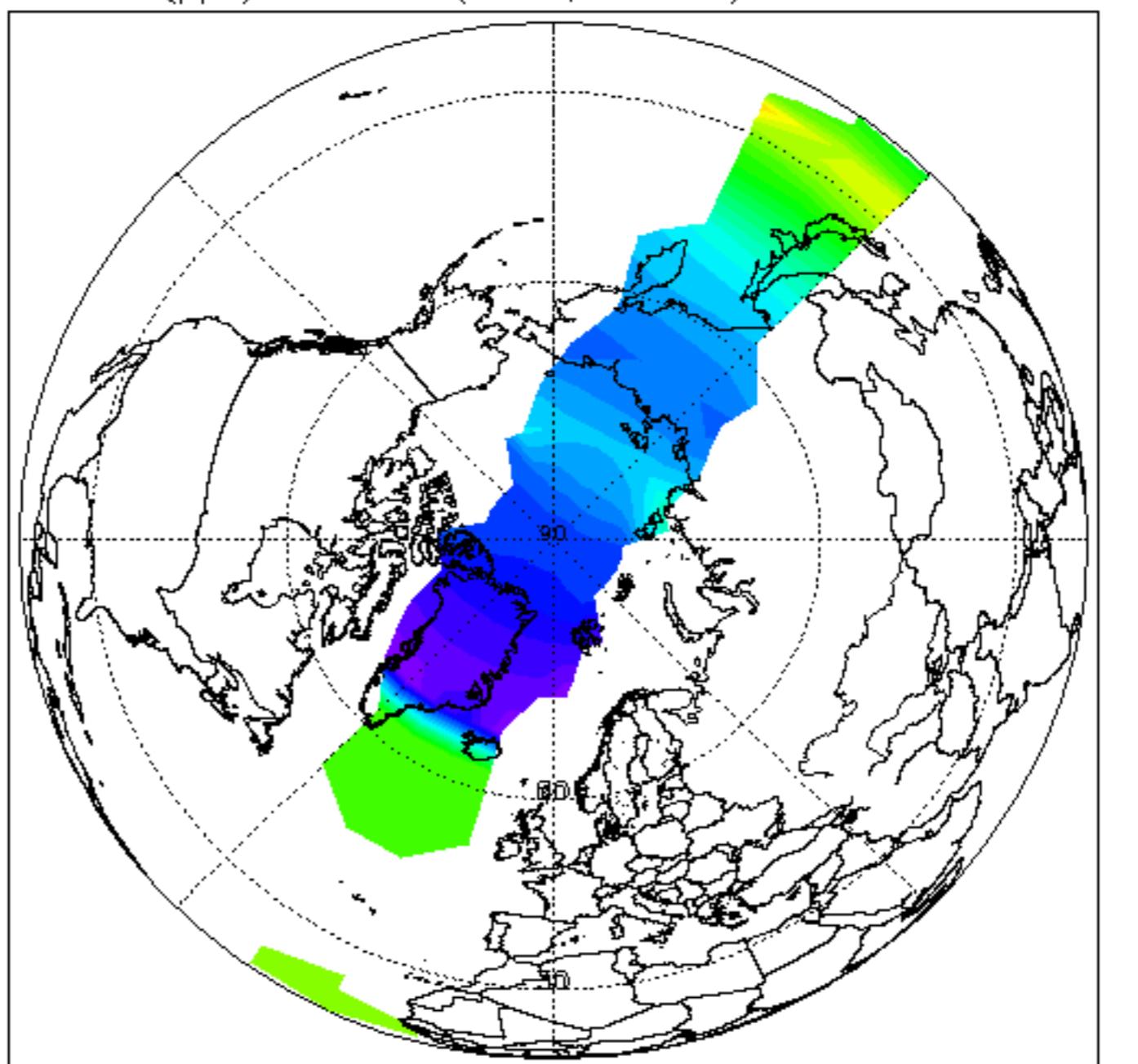
H<sub>2</sub>O (ppm) at 410 K (16km, 100hPa). 30-DEC-2011



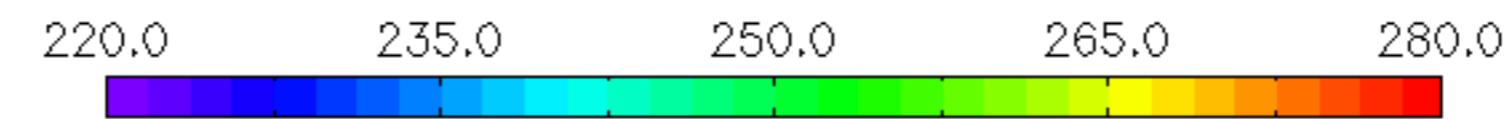
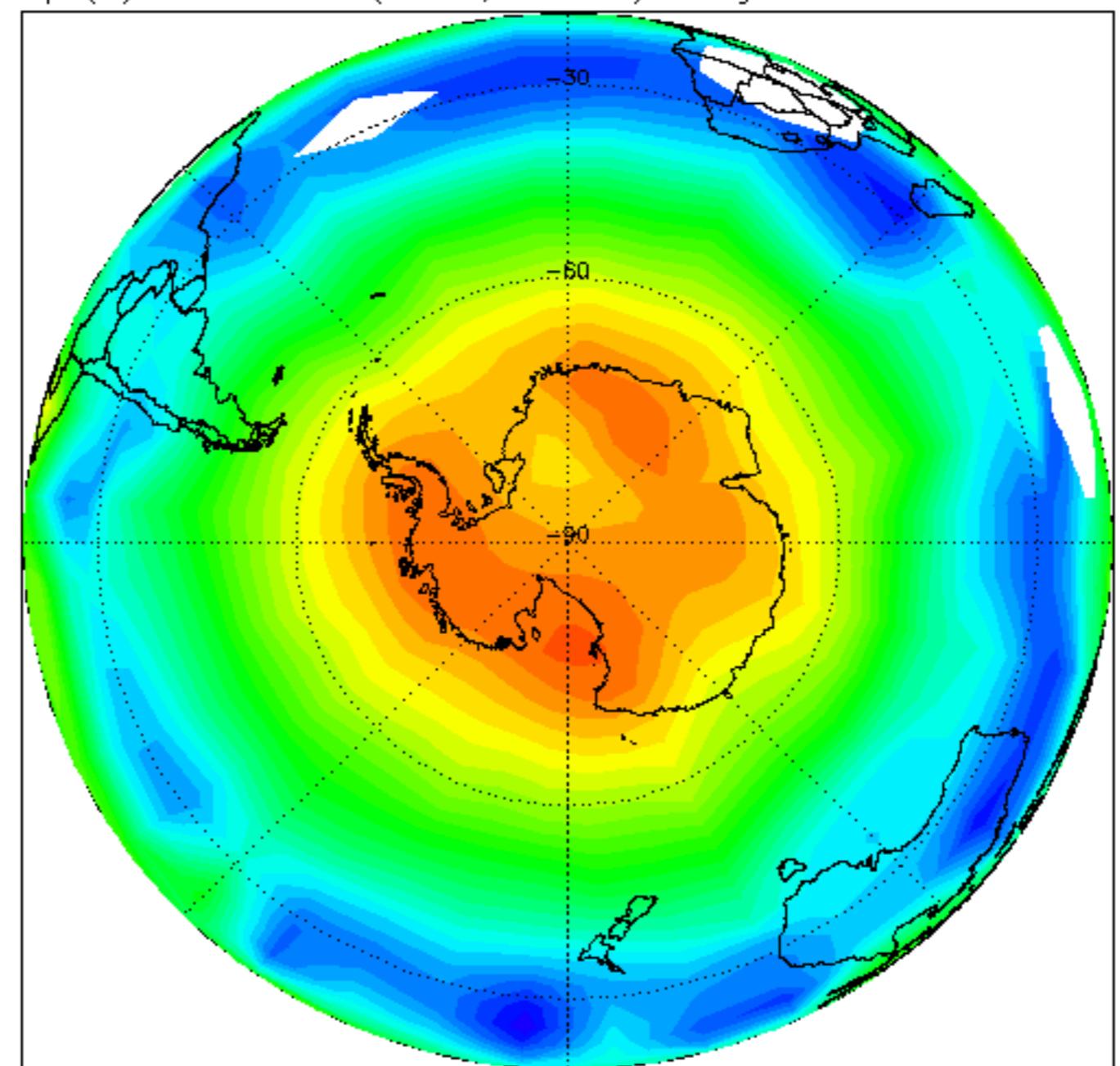
O<sub>3</sub> (ppm) at 410 K (16km, 100hPa). 30-DEC-2011

HNO<sub>3</sub> (ppb) at 410 K (16km, 100hPa). 30-DEC-2011

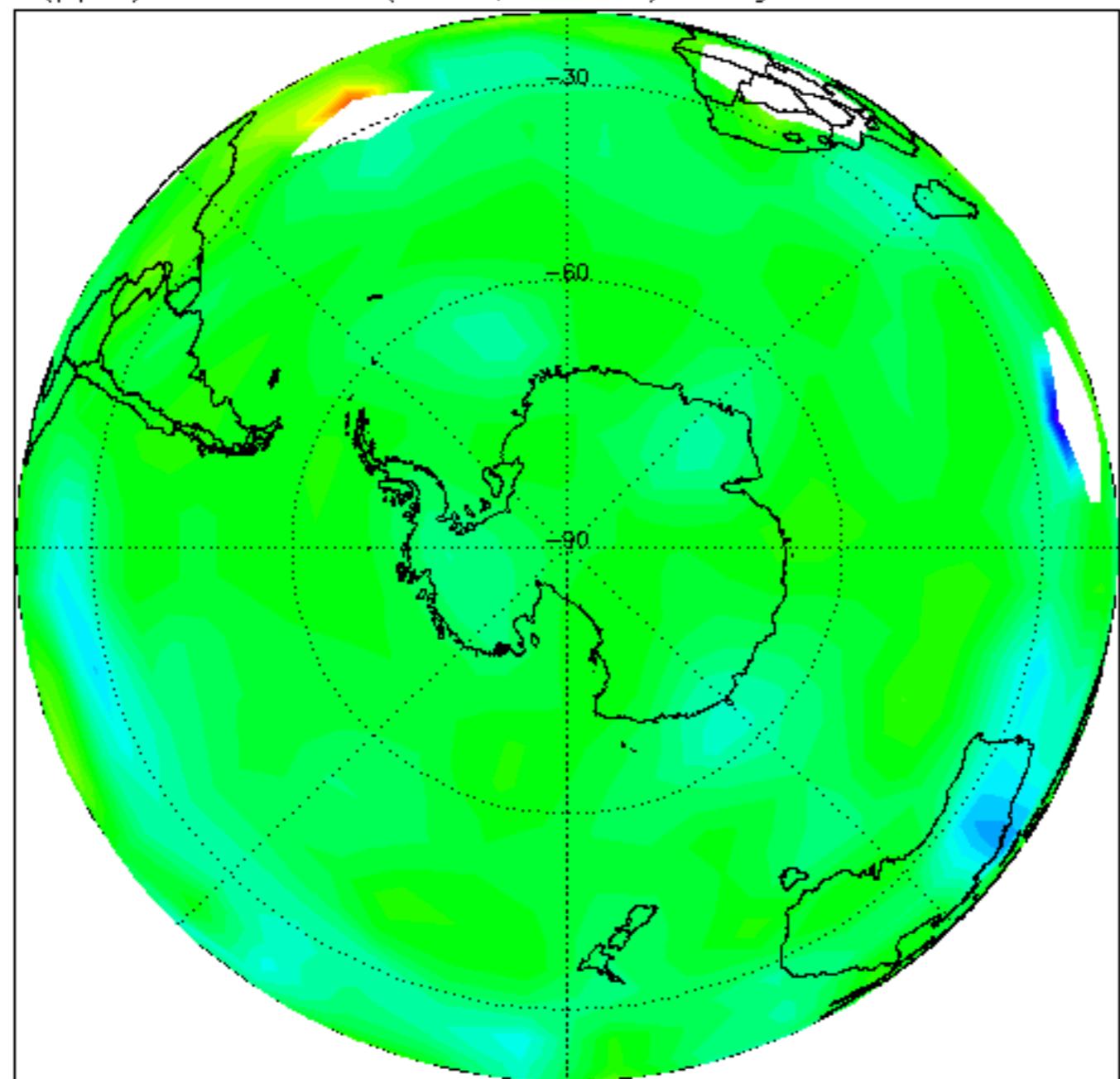
CH<sub>4</sub> (ppm) at 410 K (16km, 100hPa). 30-DEC-2011

N<sub>2</sub>O (ppb) at 410 K (16km, 100hPa). 30-DEC-2011

Temp (K) at: 2700 K (60km, 0.2hPa). Daily mean: 30-DEC-2011



H<sub>2</sub>O (ppm) at: 2700 K (60km, 0.2hPa). Daily mean: 30-DEC-2011



3.000

5.250

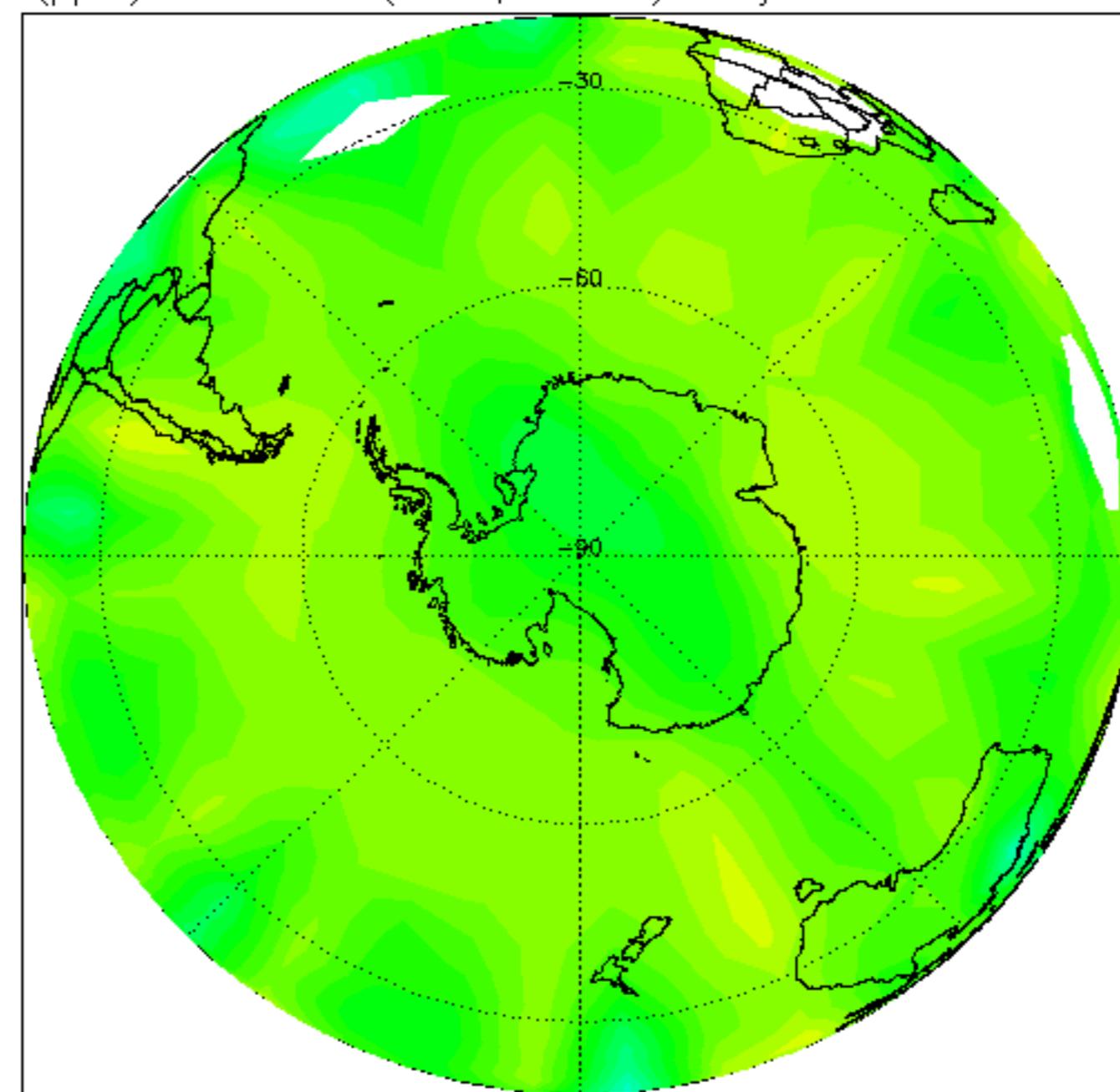
7.500

9.750

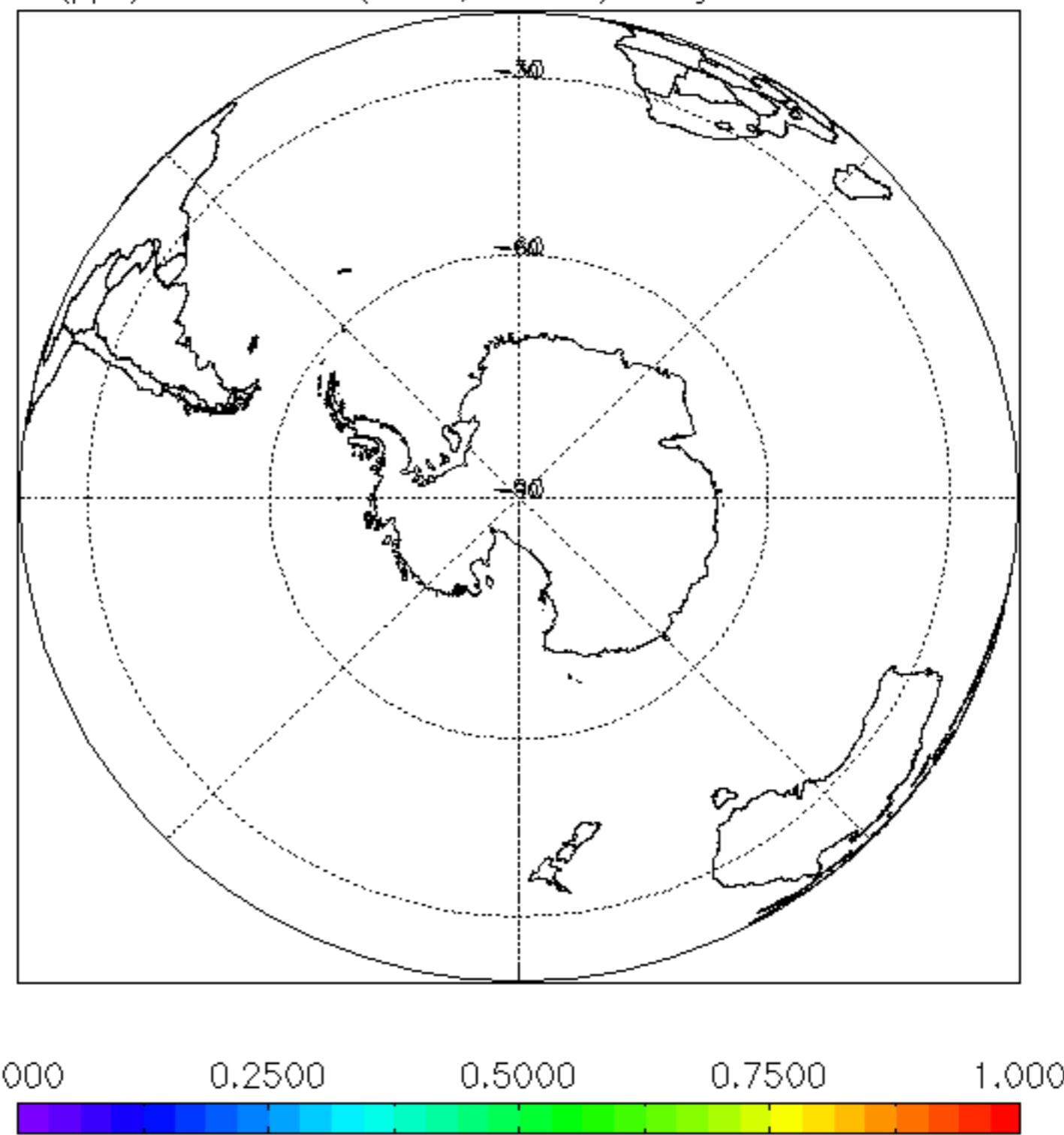
12.00



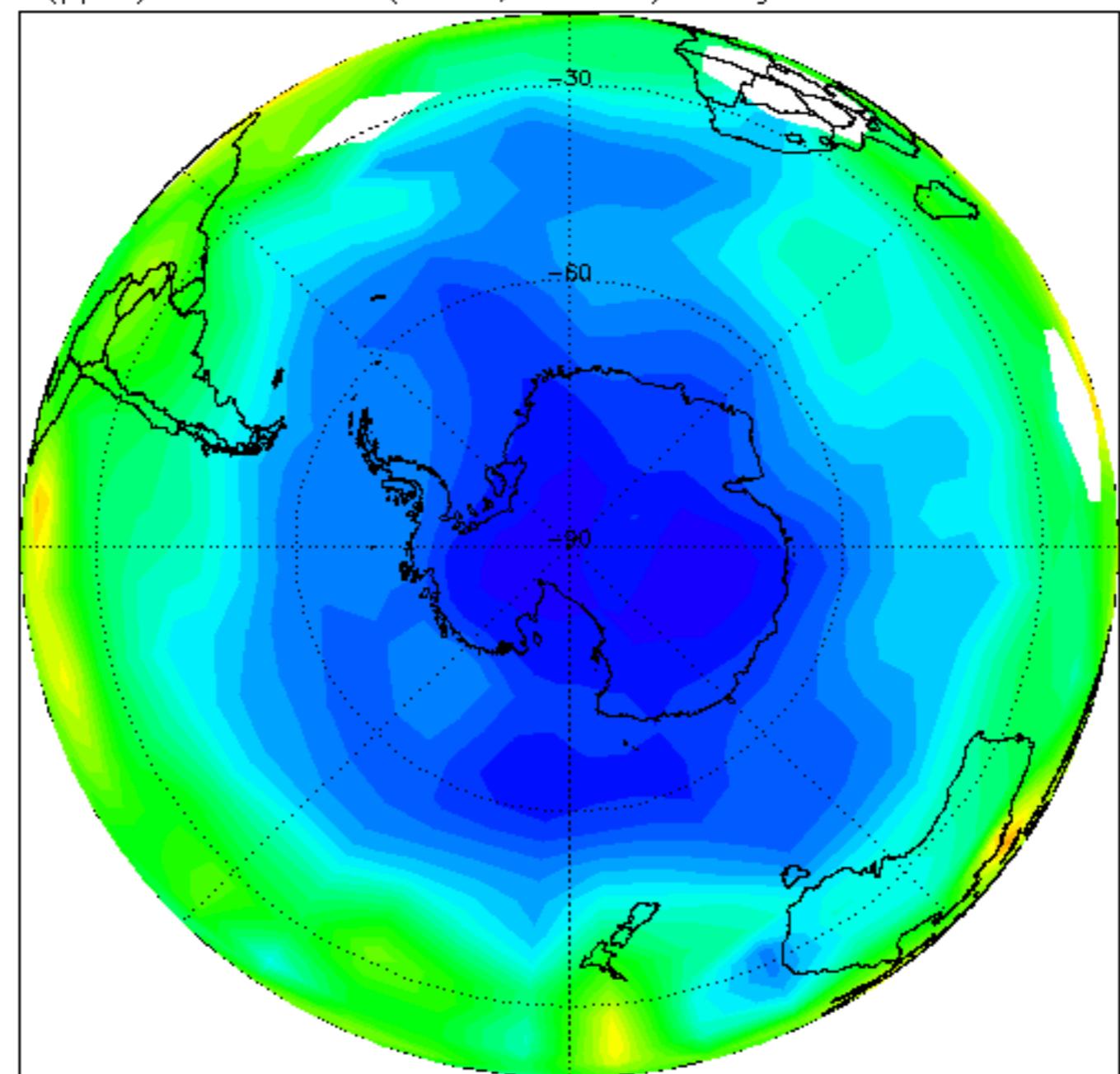
O3 (ppm) at: 2700 K (60km, 0.2hPa). Daily mean: 30-DEC-2011



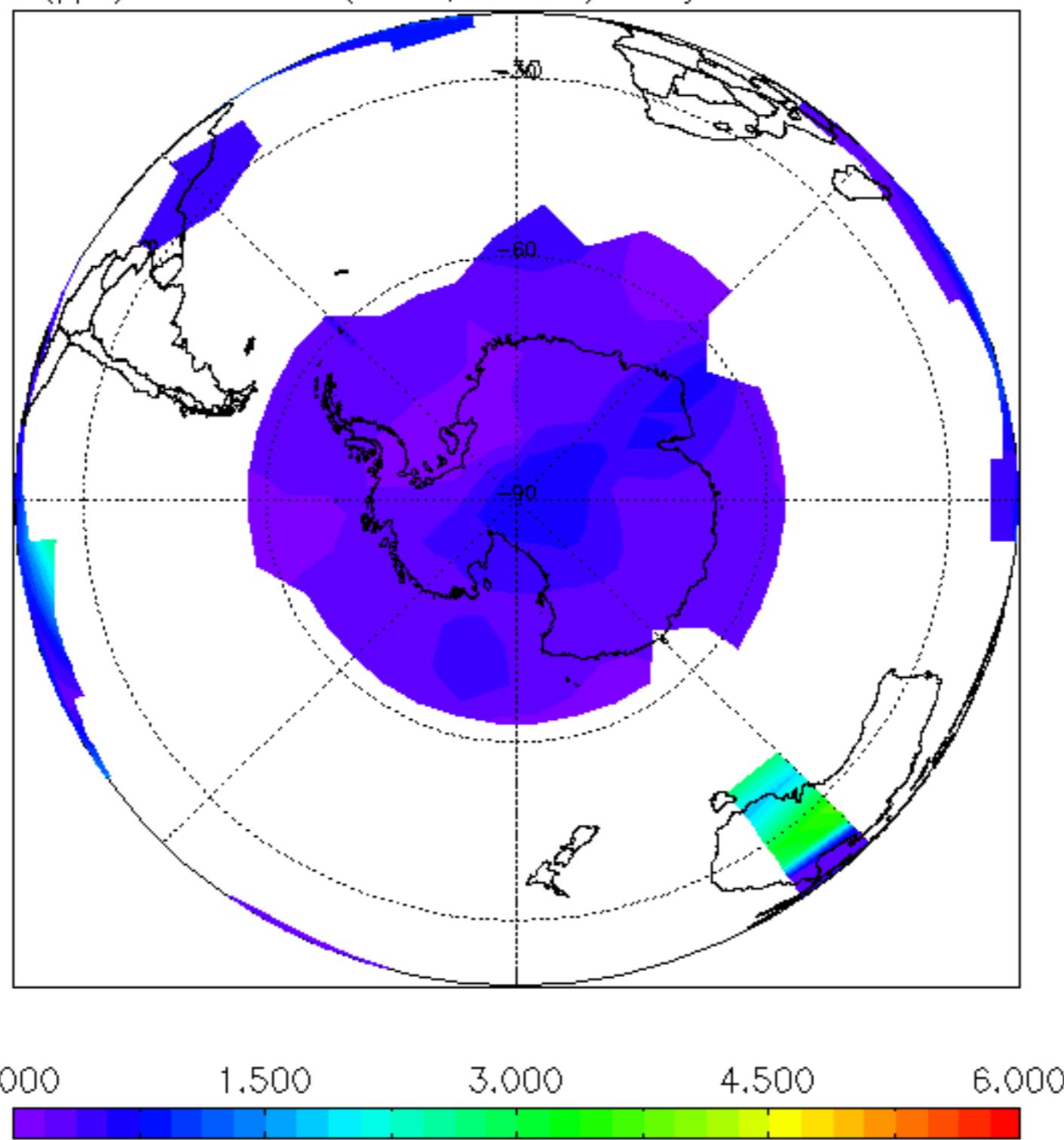
HNO<sub>3</sub> (ppb) at: 2700 K (60km, 0.2hPa). Daily mean: 30-DEC-2011



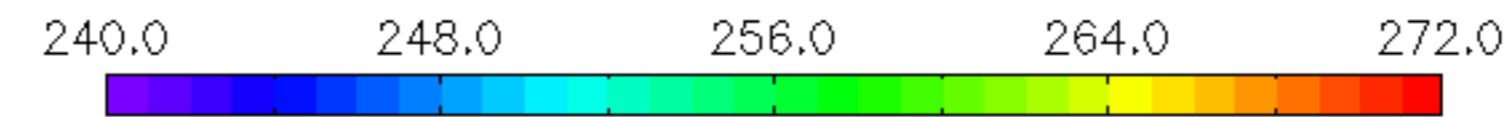
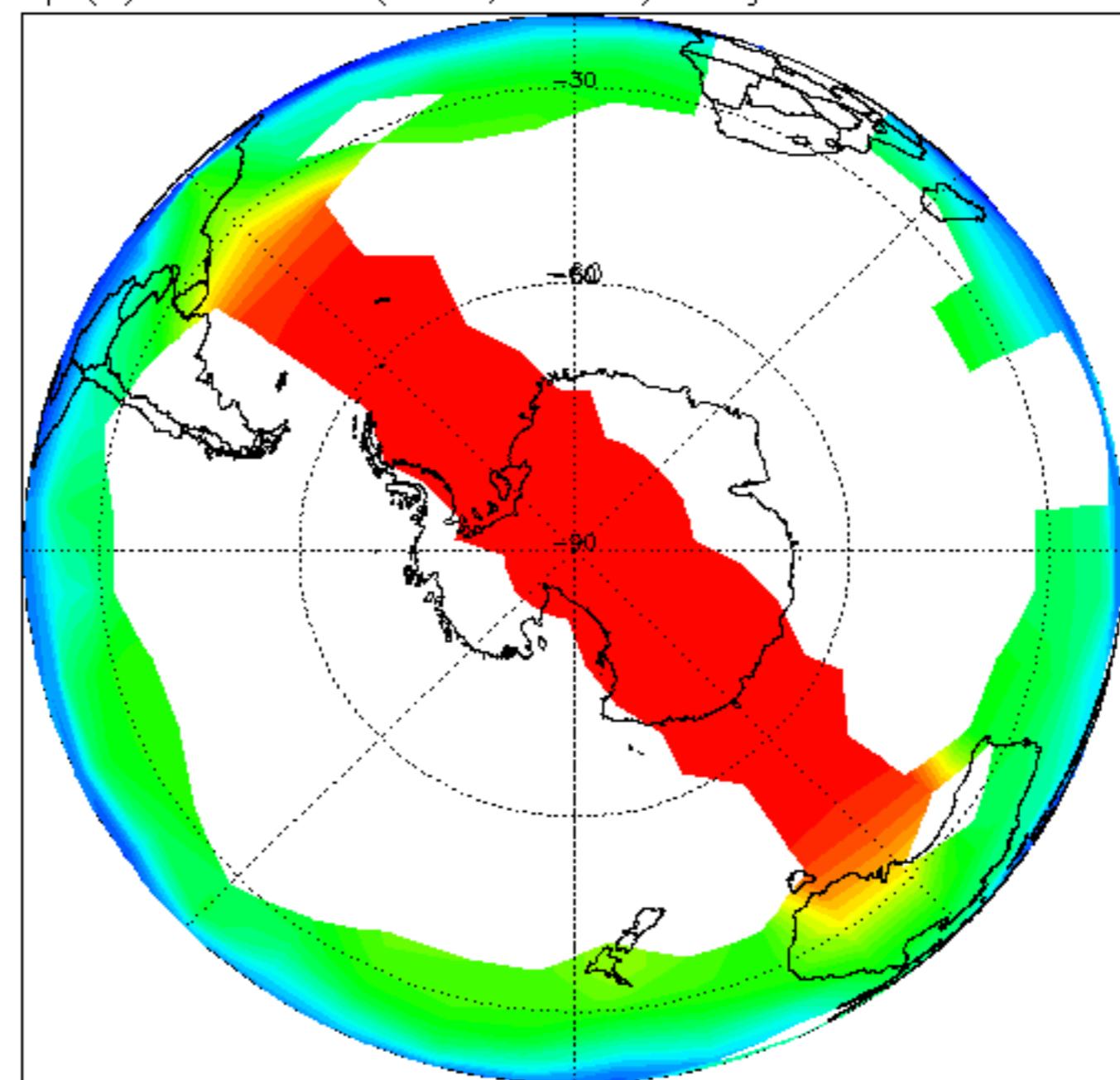
CH<sub>4</sub> (ppm) at: 2700 K (60km, 0.2hPa). Daily mean: 30-DEC-2011



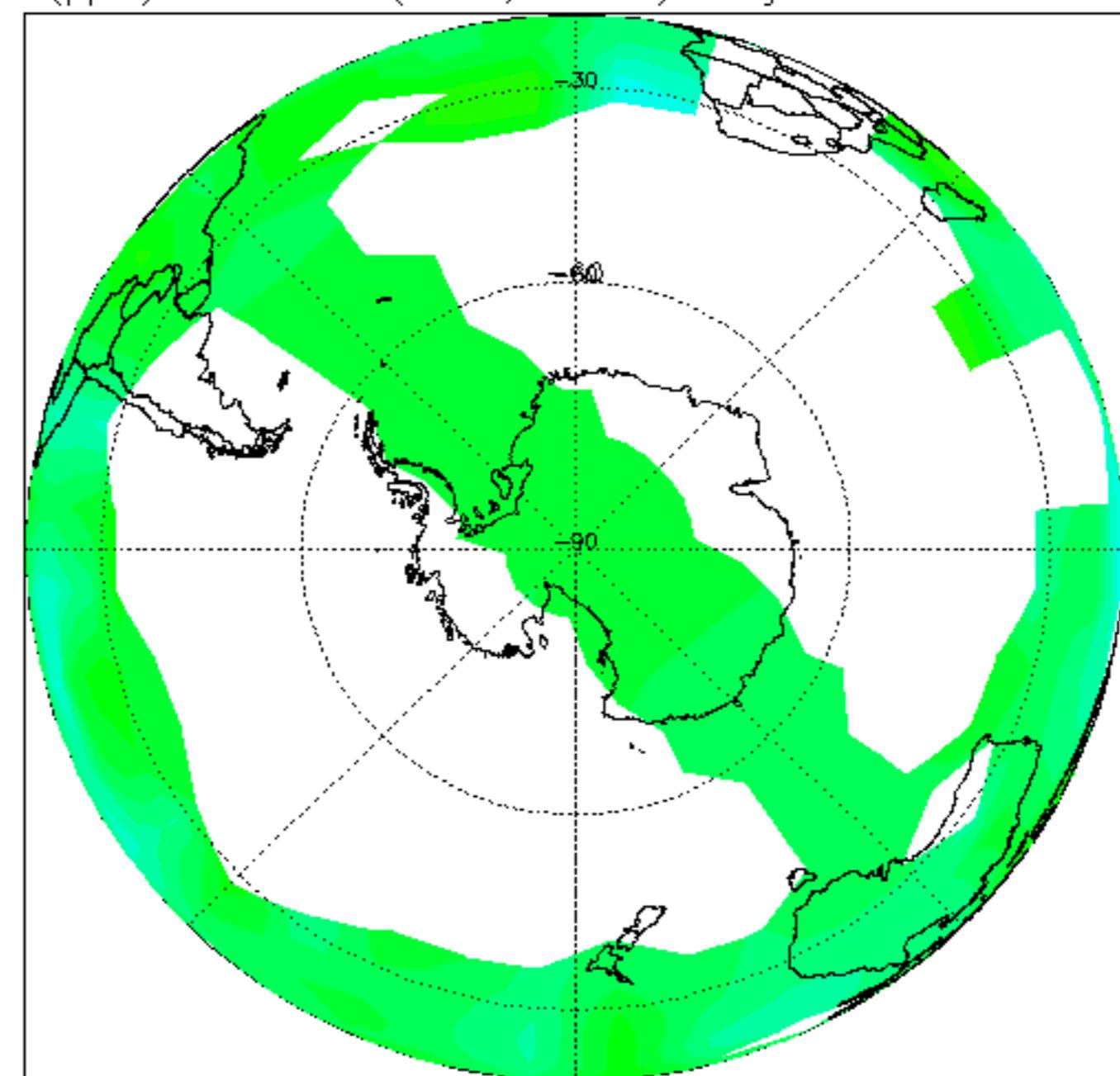
N<sub>2</sub>O (ppb) at: 2700 K (60km, 0.2hPa). Daily mean: 30-DEC-2011



Temp (K) at: 1700 K (45km, 1.5hPa). Daily mean: 30-DEC-2011



H<sub>2</sub>O (ppm) at: 1700 K (45km, 1.5hPa). Daily mean: 30-DEC-2011



3.000

5.250

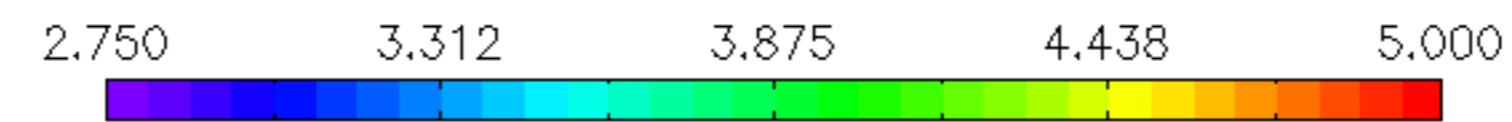
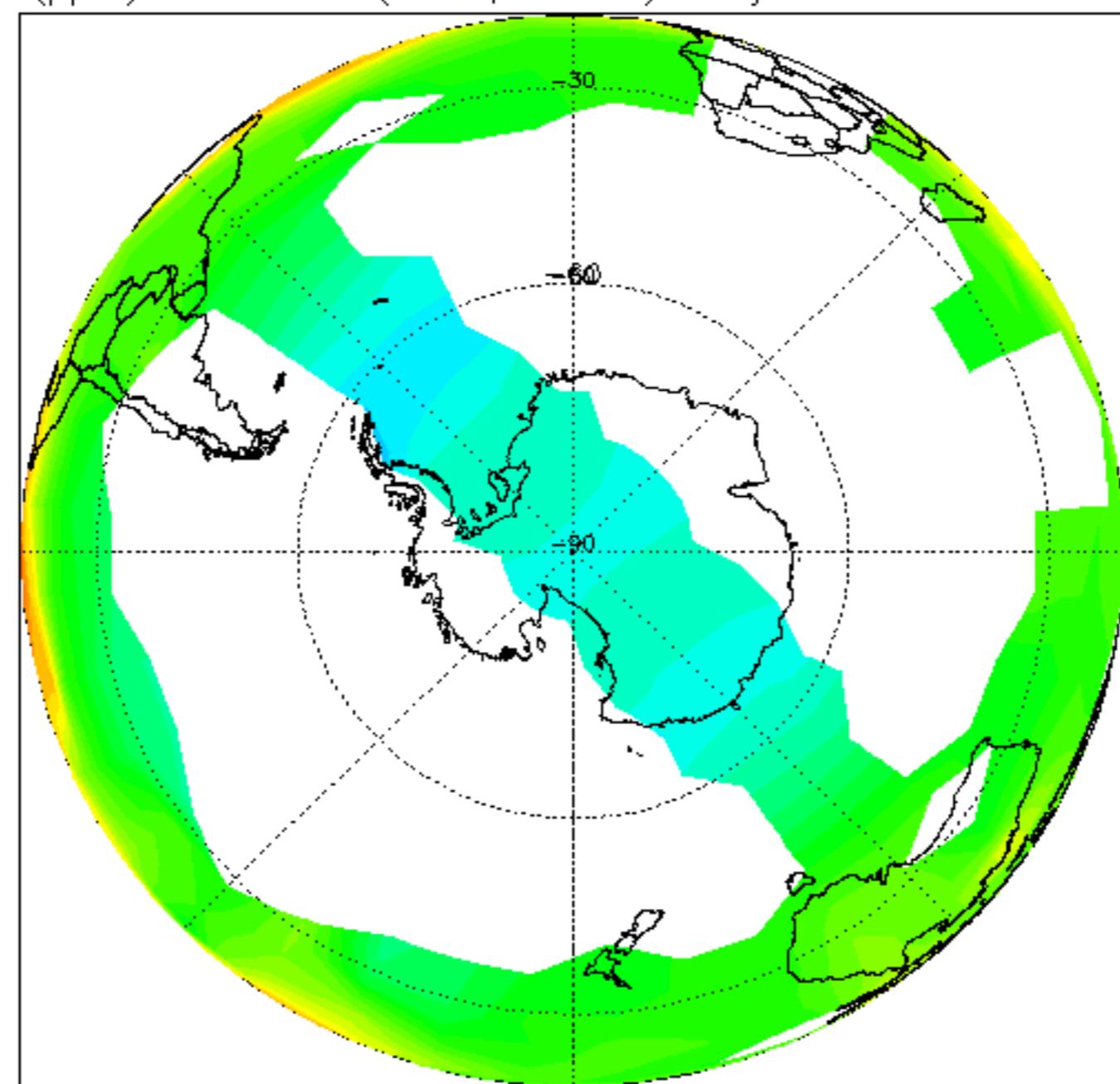
7.500

9.750

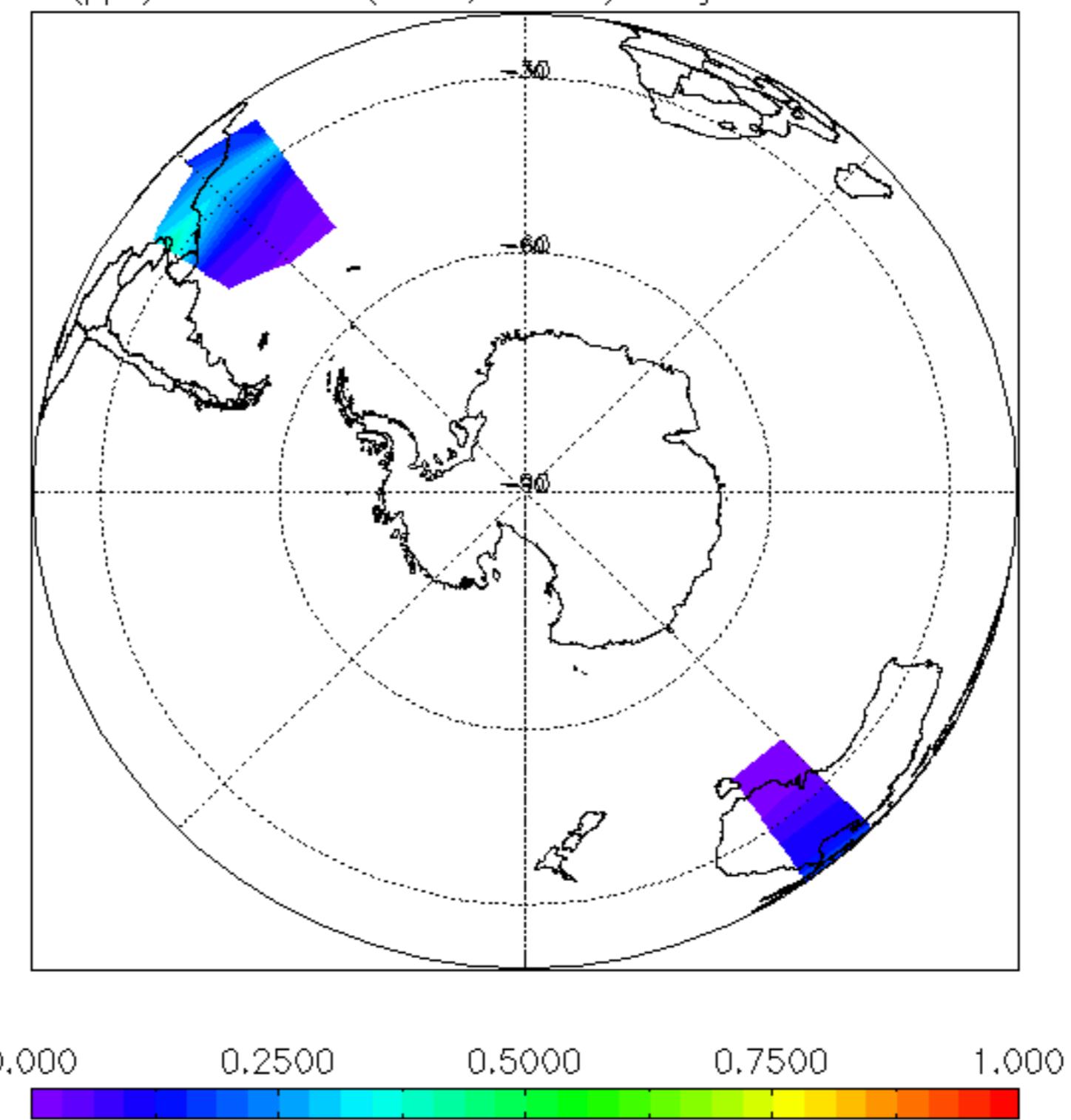
12.00



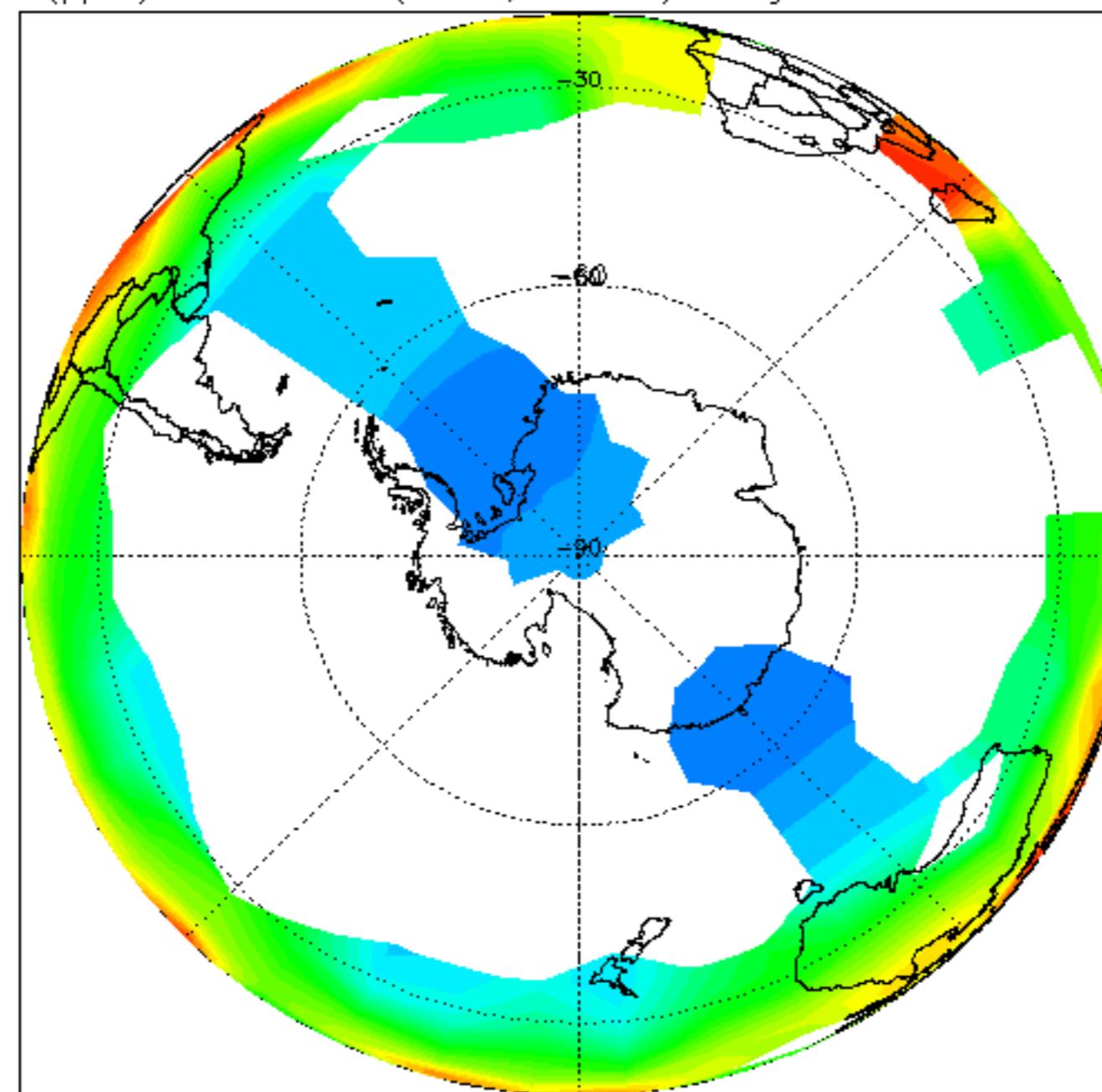
O3 (ppm) at: 1700 K (45km, 1.5hPa). Daily mean: 30-DEC-2011



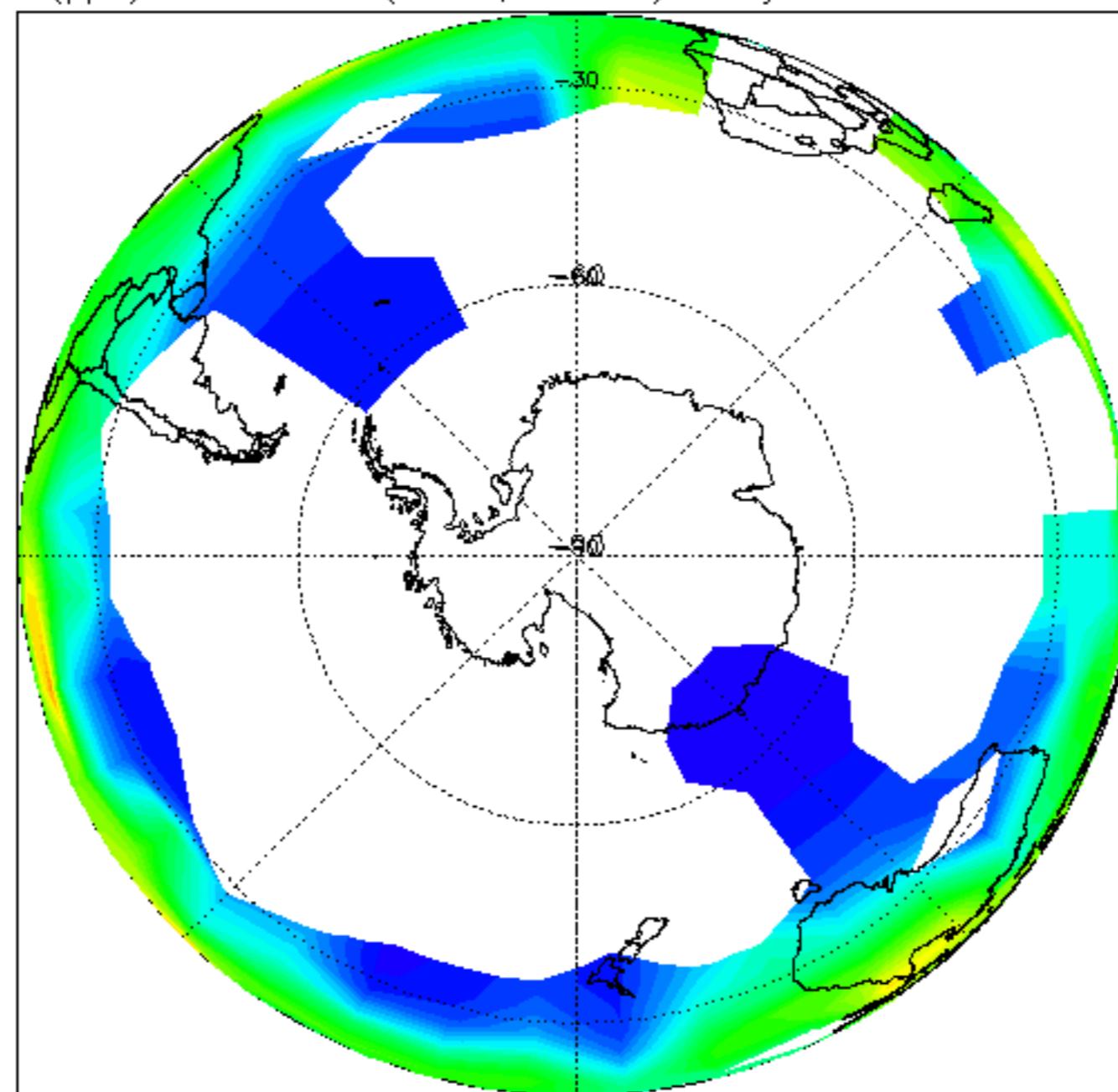
HNO<sub>3</sub> (ppb) at: 1700 K (45km, 1.5hPa). Daily mean: 30-DEC-2011



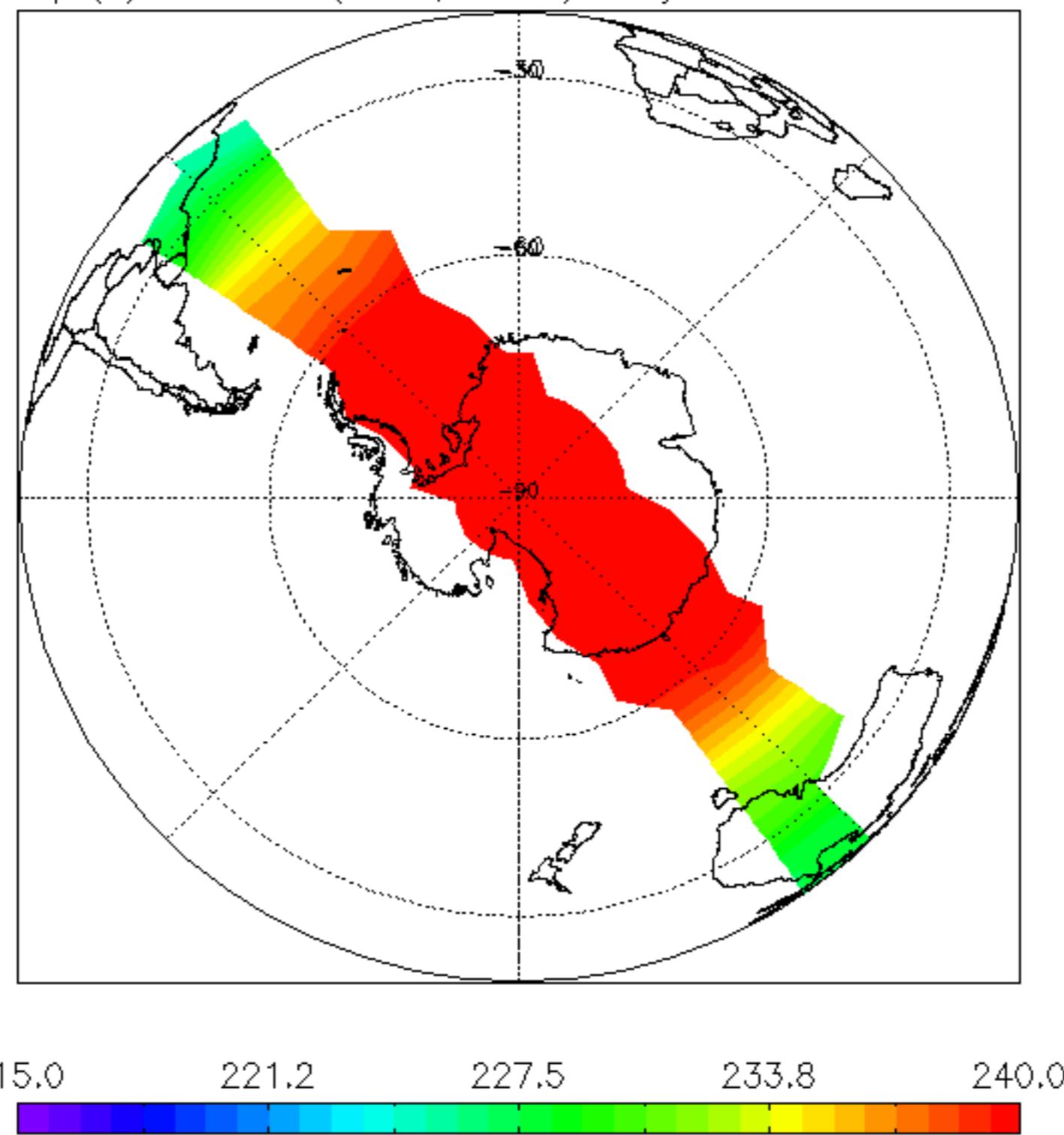
CH<sub>4</sub> (ppm) at: 1700 K (45km, 1.5hPa). Daily mean: 30-DEC-2011



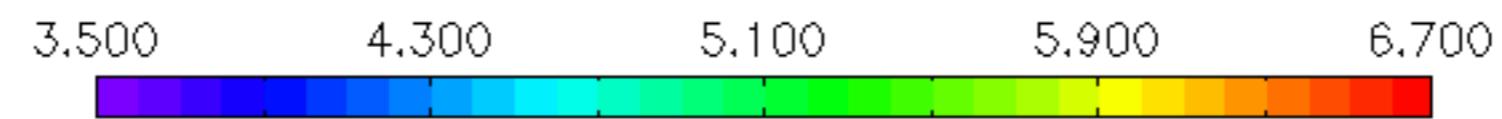
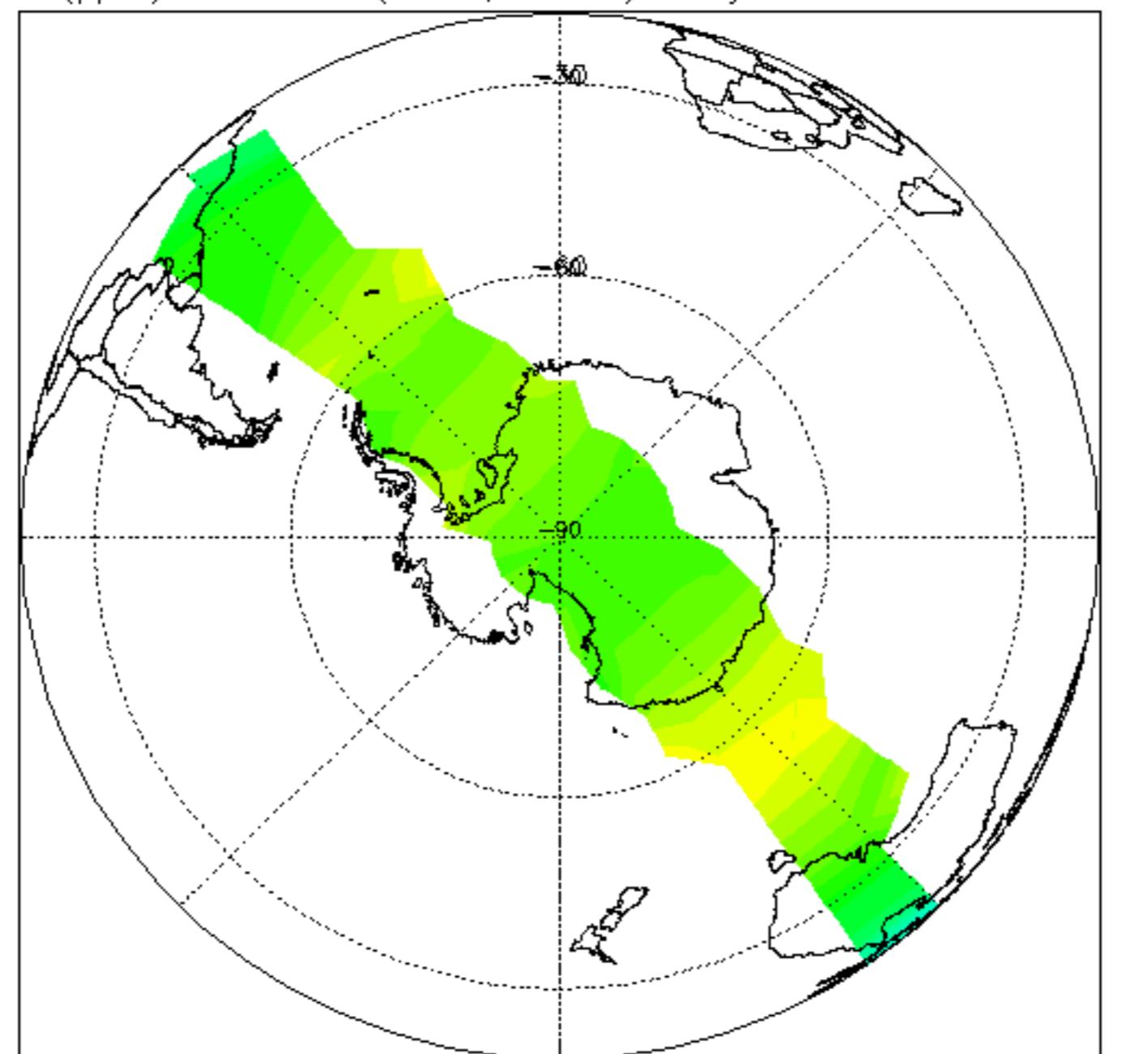
N<sub>2</sub>O (ppb) at: 1700 K (45km, 1.5hPa). Daily mean: 30-DEC-2011



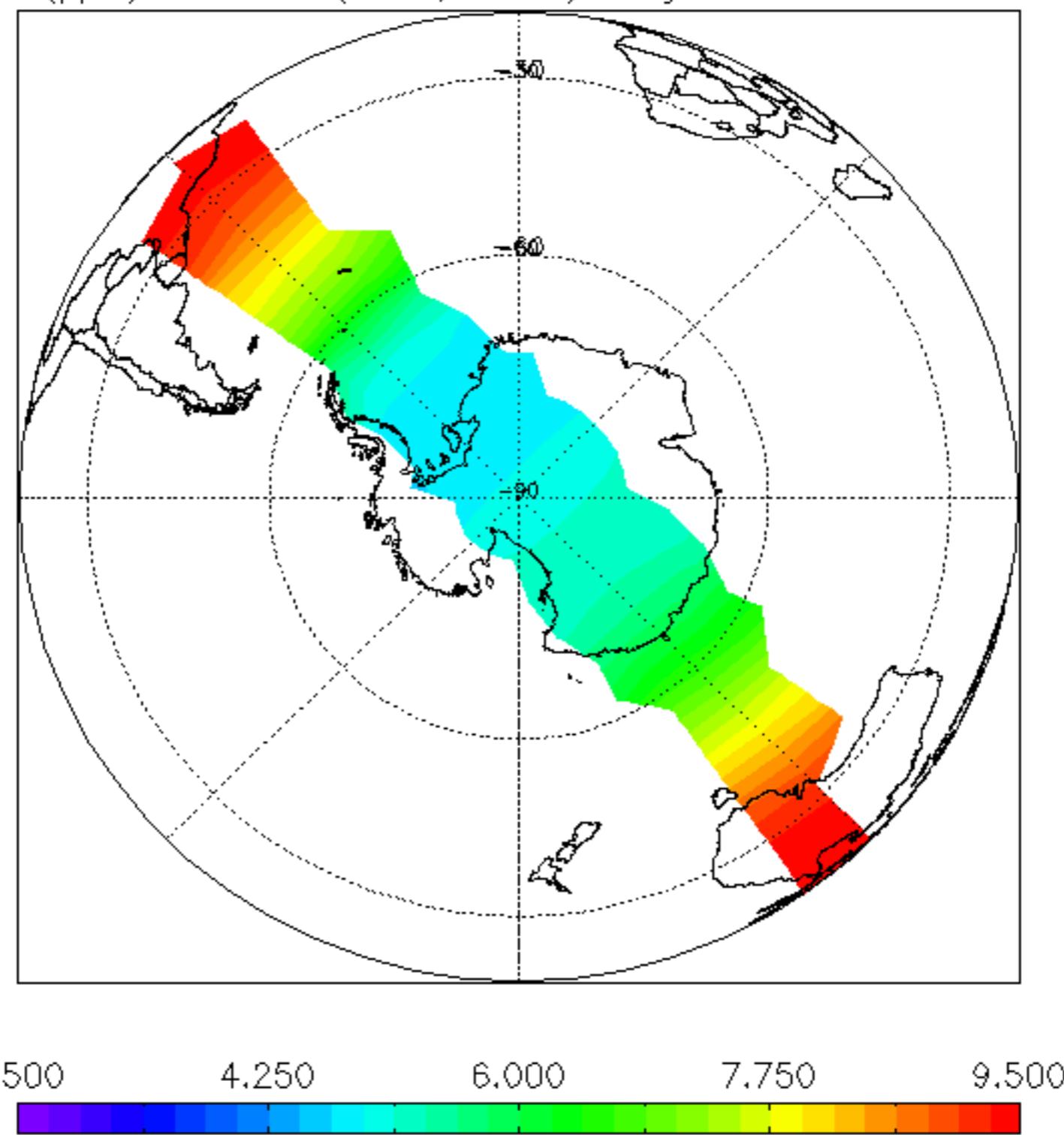
Temp (K) at: 850 K (32km, 10hPa). Daily mean: 30-DEC-2011



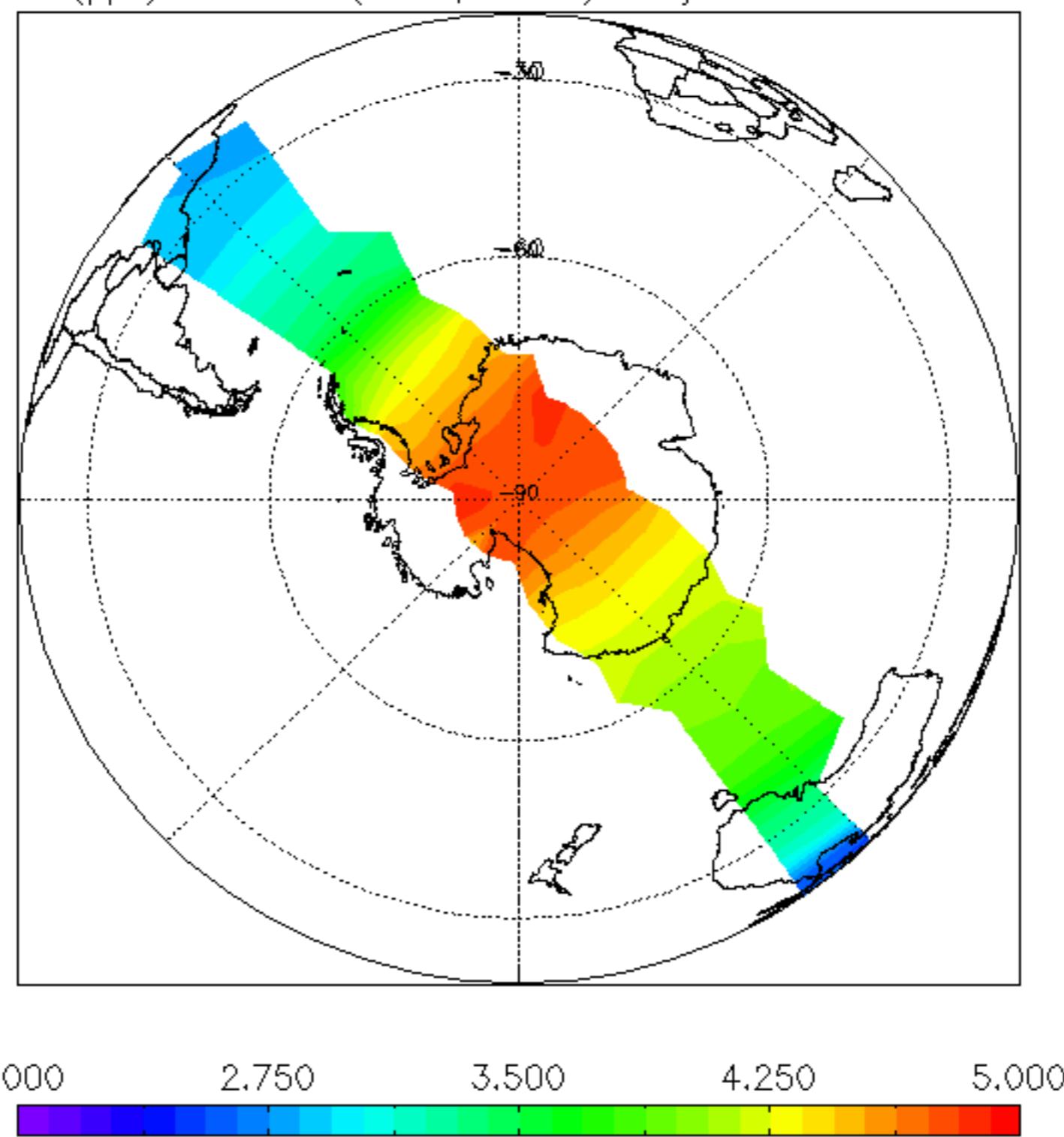
H<sub>2</sub>O (ppm) at: 850 K (32km, 10hPa). Daily mean: 30-DEC-2011



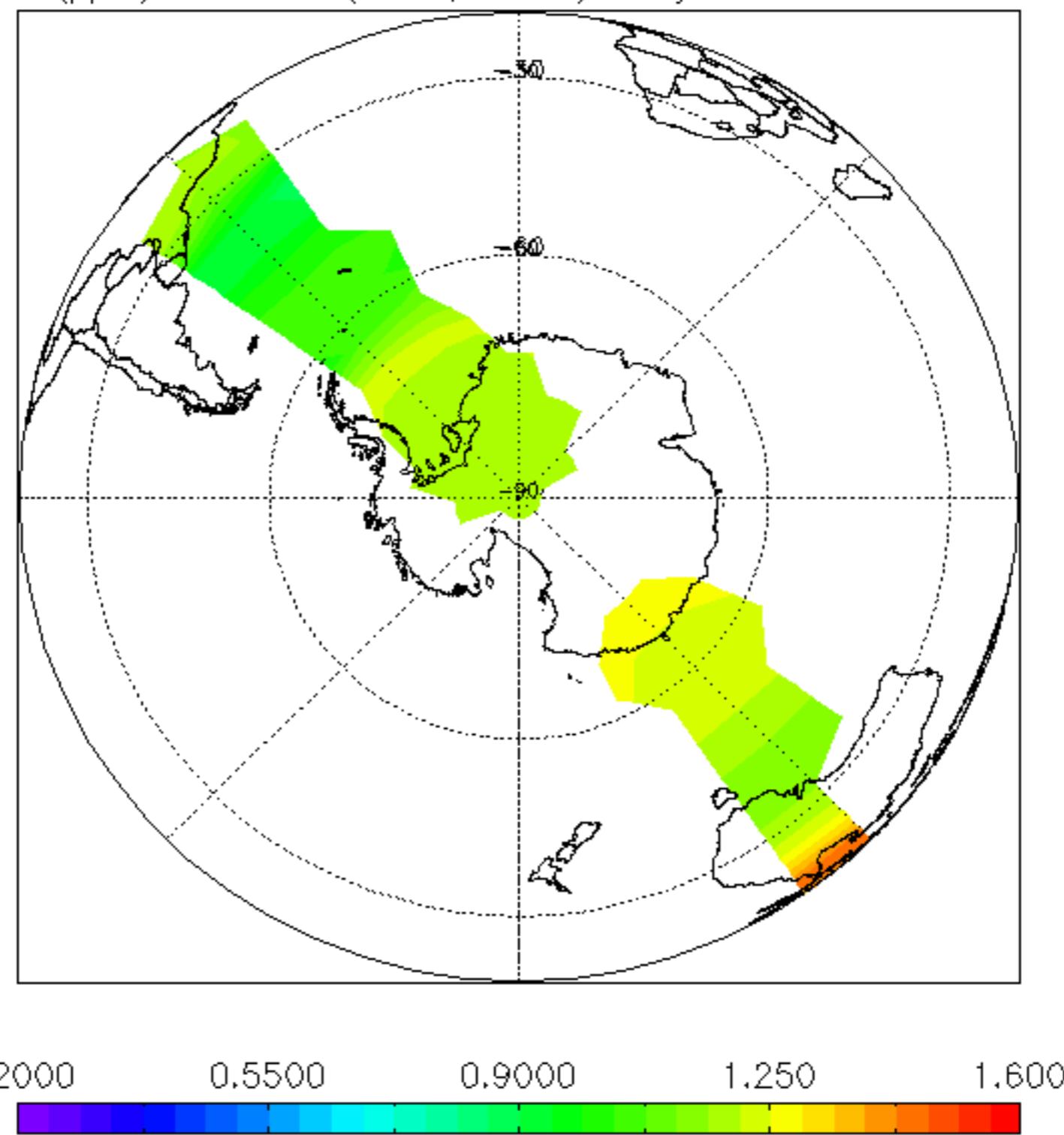
O3 (ppm) at: 850 K (32km, 10hPa). Daily mean: 30-DEC-2011



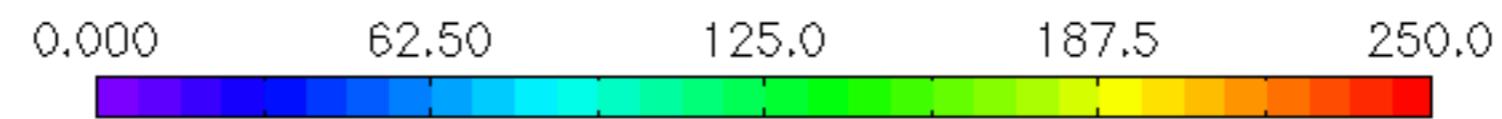
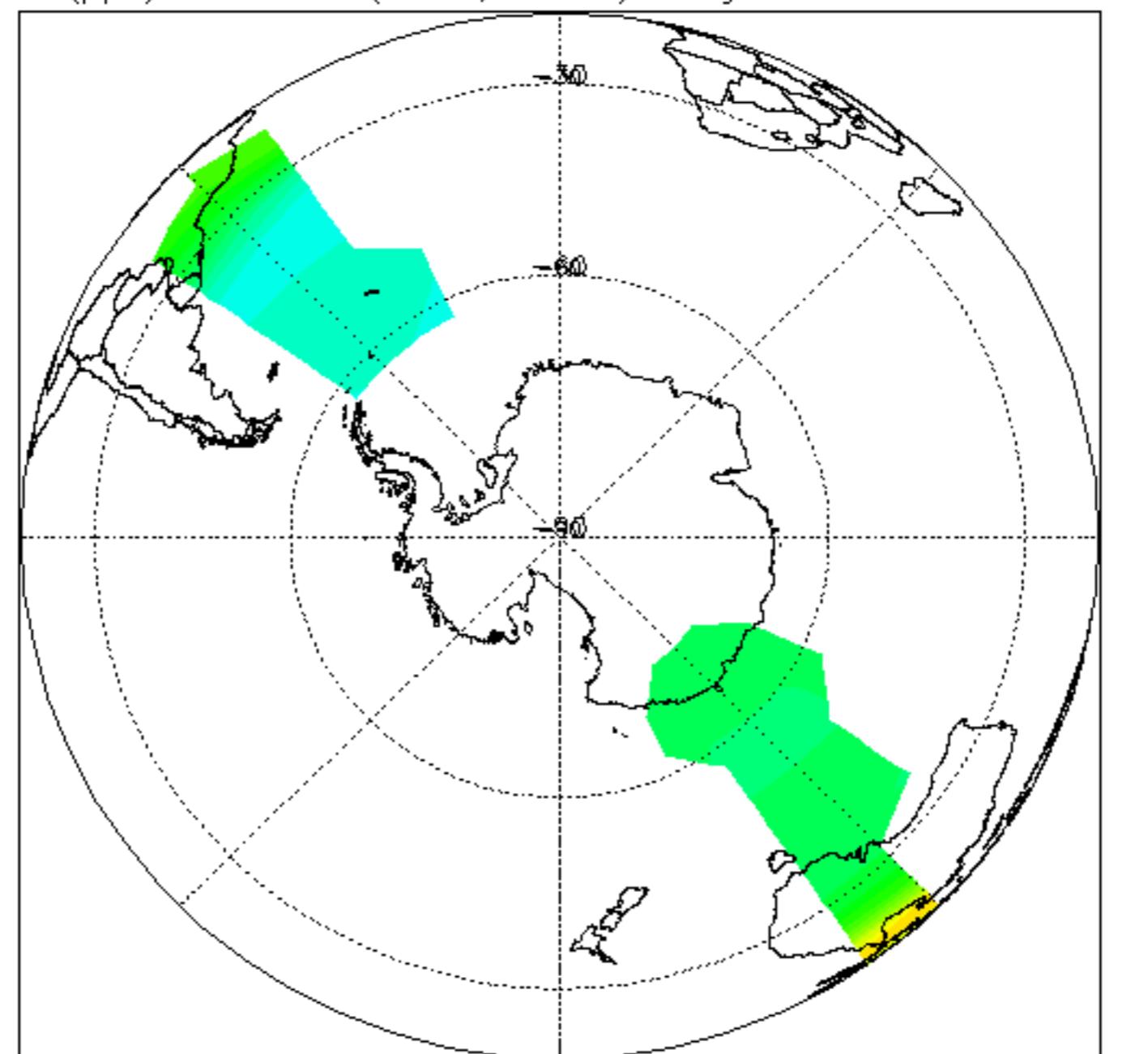
HN03 (ppb) at: 850 K (32km, 10hPa). Daily mean: 30-DEC-2011



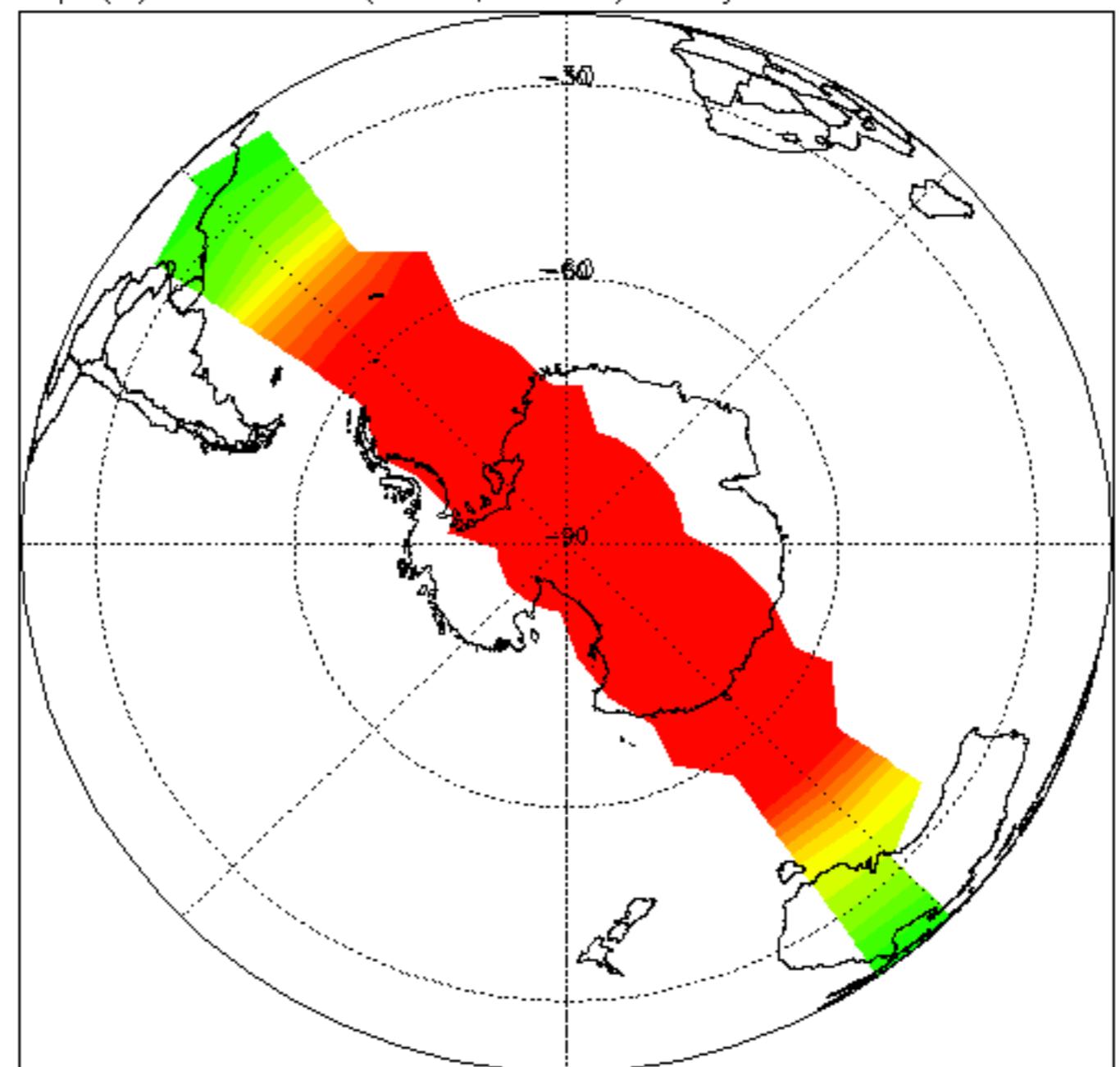
CH<sub>4</sub> (ppm) at: 850 K (32km, 10hPa). Daily mean: 30-DEC-2011



N<sub>2</sub>O (ppb) at: 850 K (32km, 10hPa). Daily mean: 30-DEC-2011



Temp (K) at: 490 K (19km, 55hPa). Daily mean: 30-DEC-2011



184.0

193.5

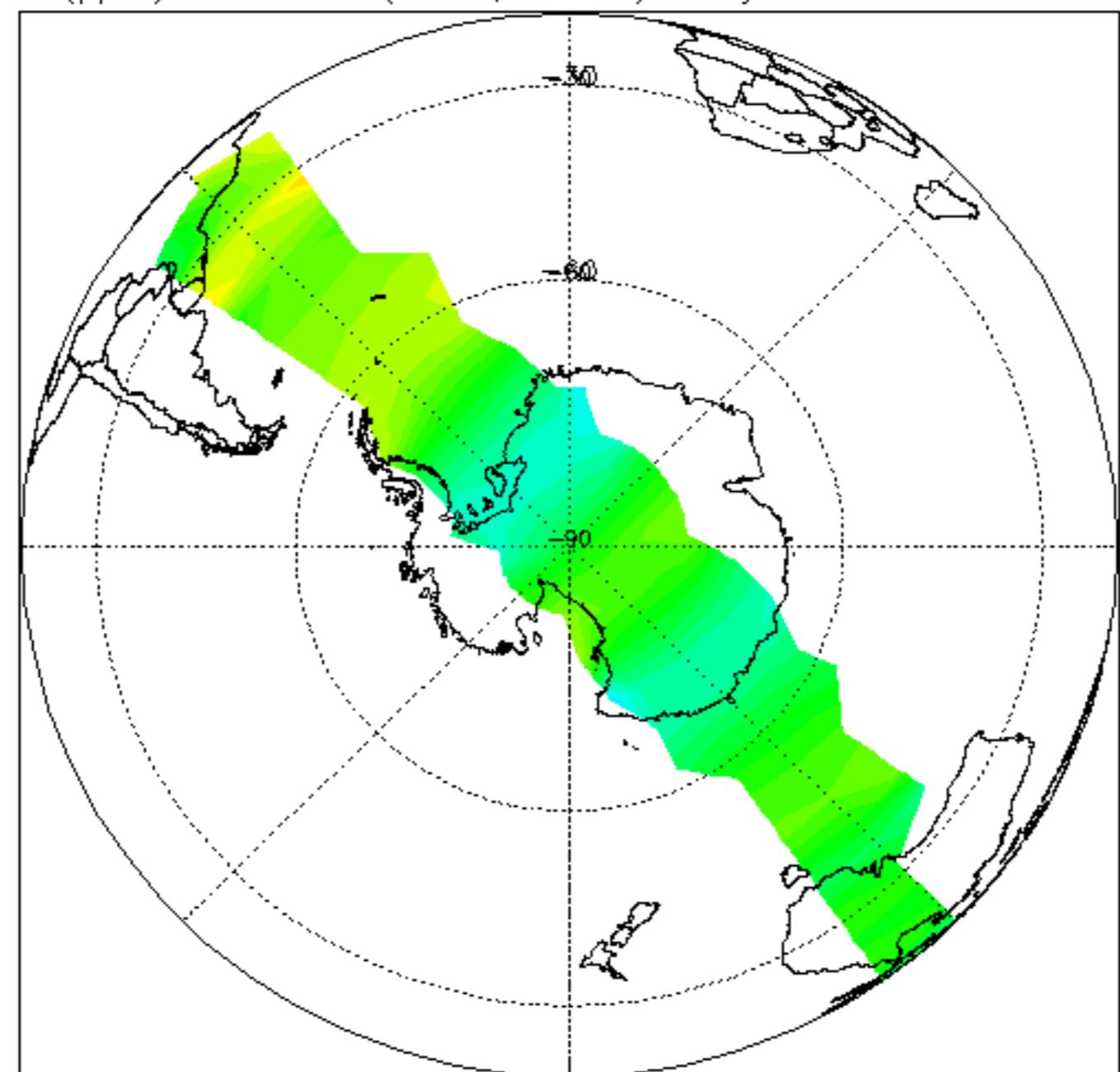
203.0

212.5

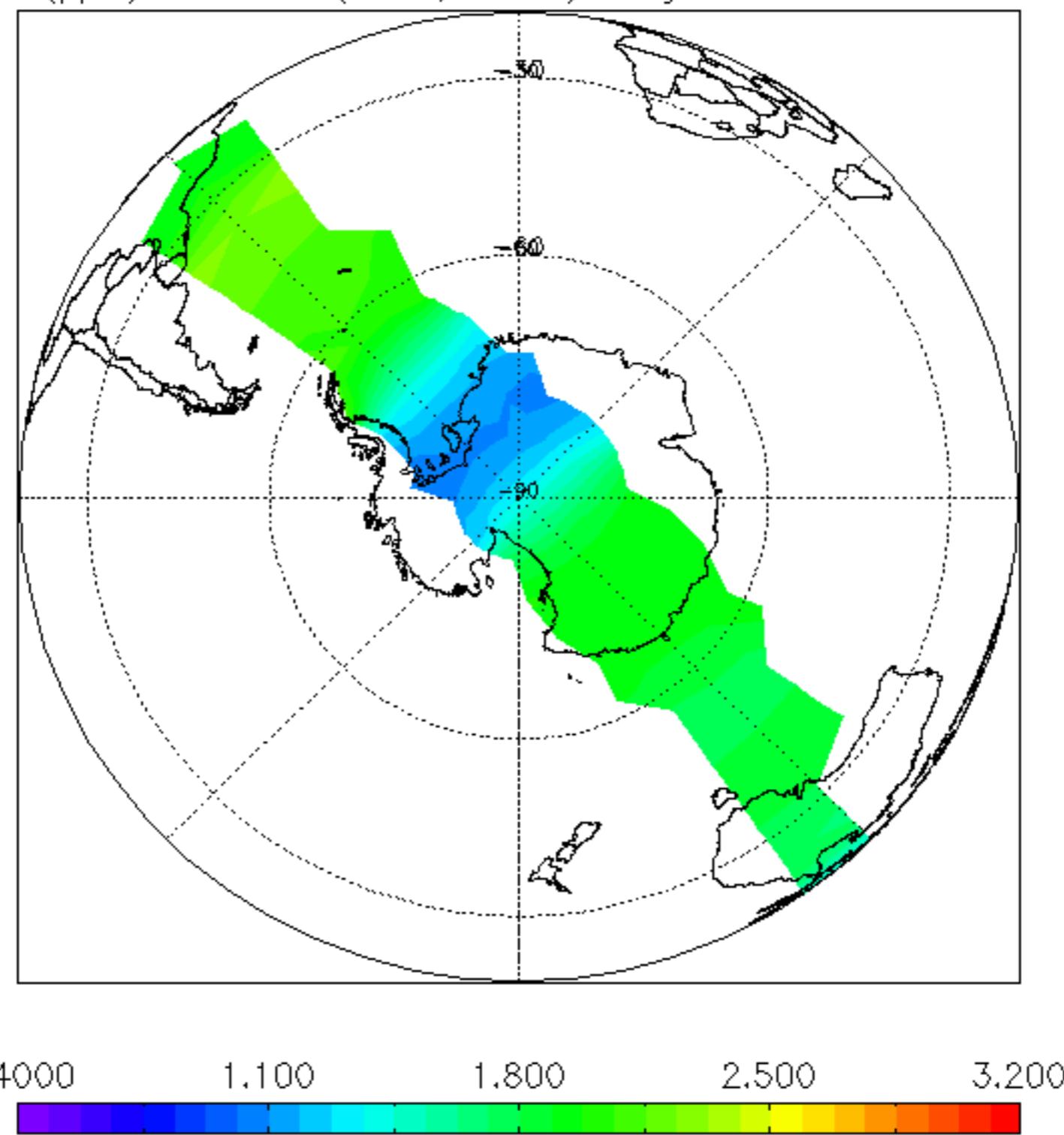
222.0



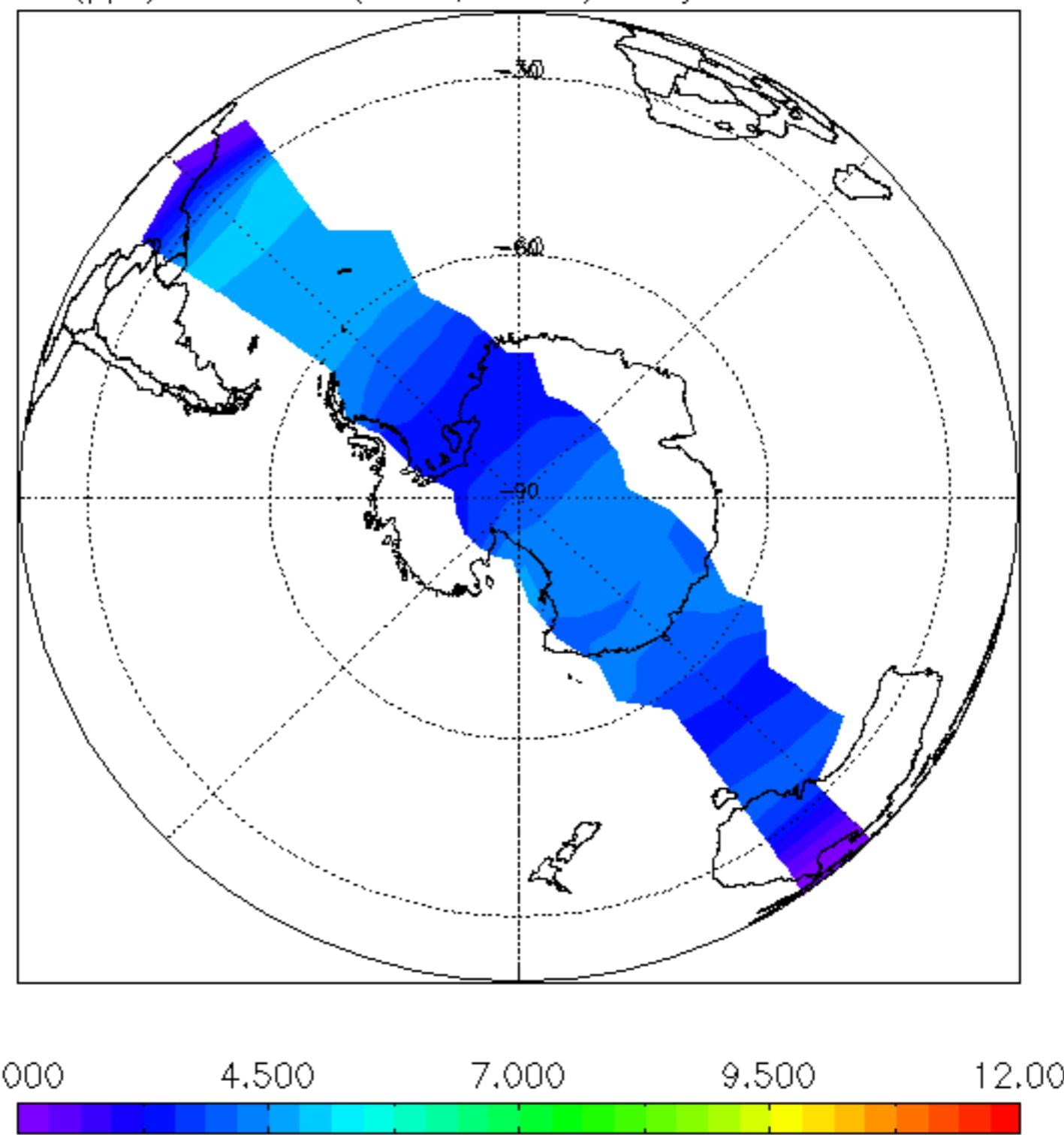
H<sub>2</sub>O (ppm) at: 490 K (19km, 55hPa). Daily mean: 30-DEC-2011



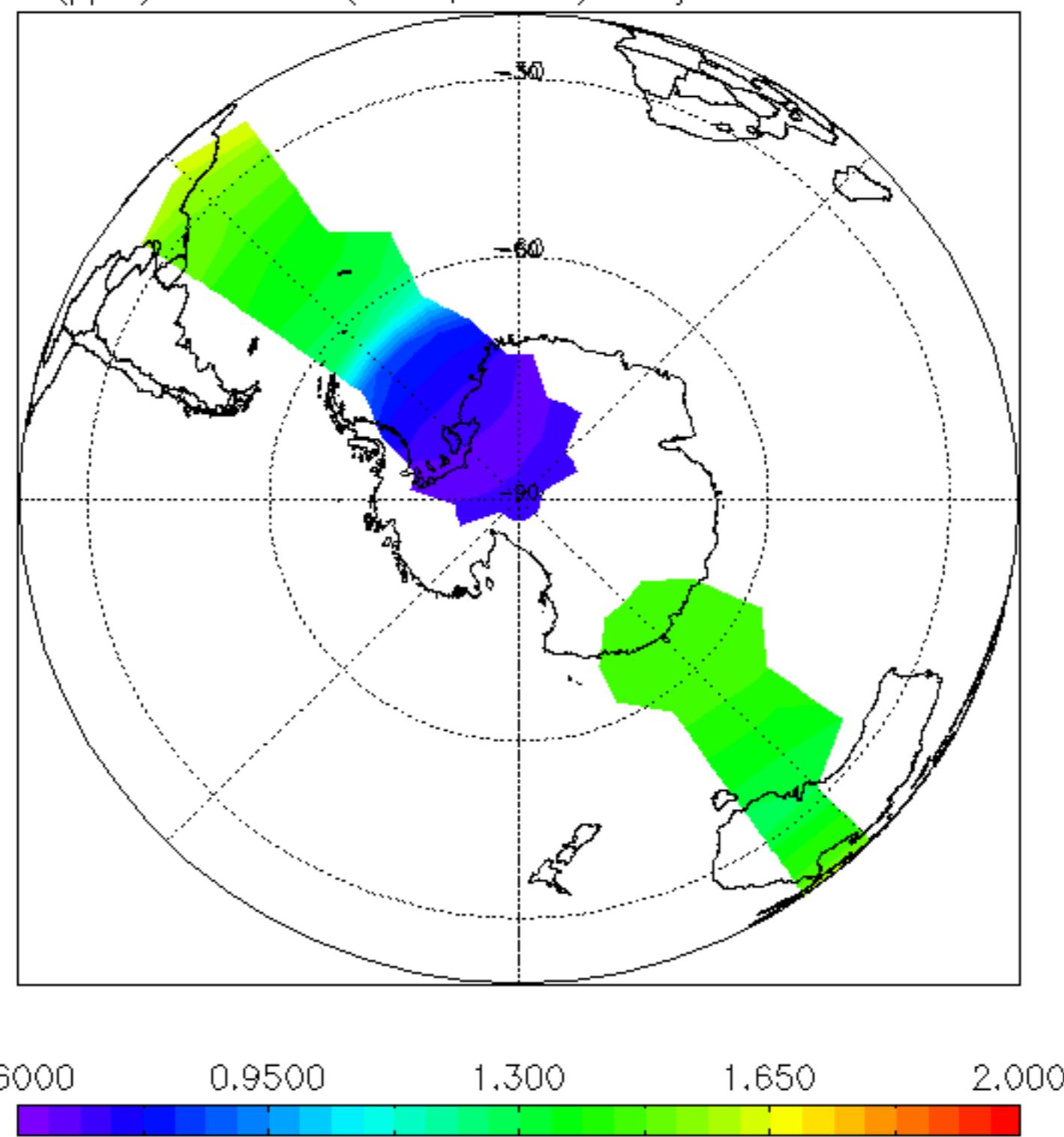
O3 (ppm) at: 490 K (19km, 55hPa). Daily mean: 30-DEC-2011



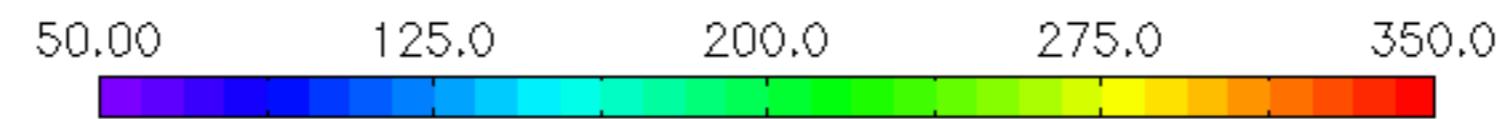
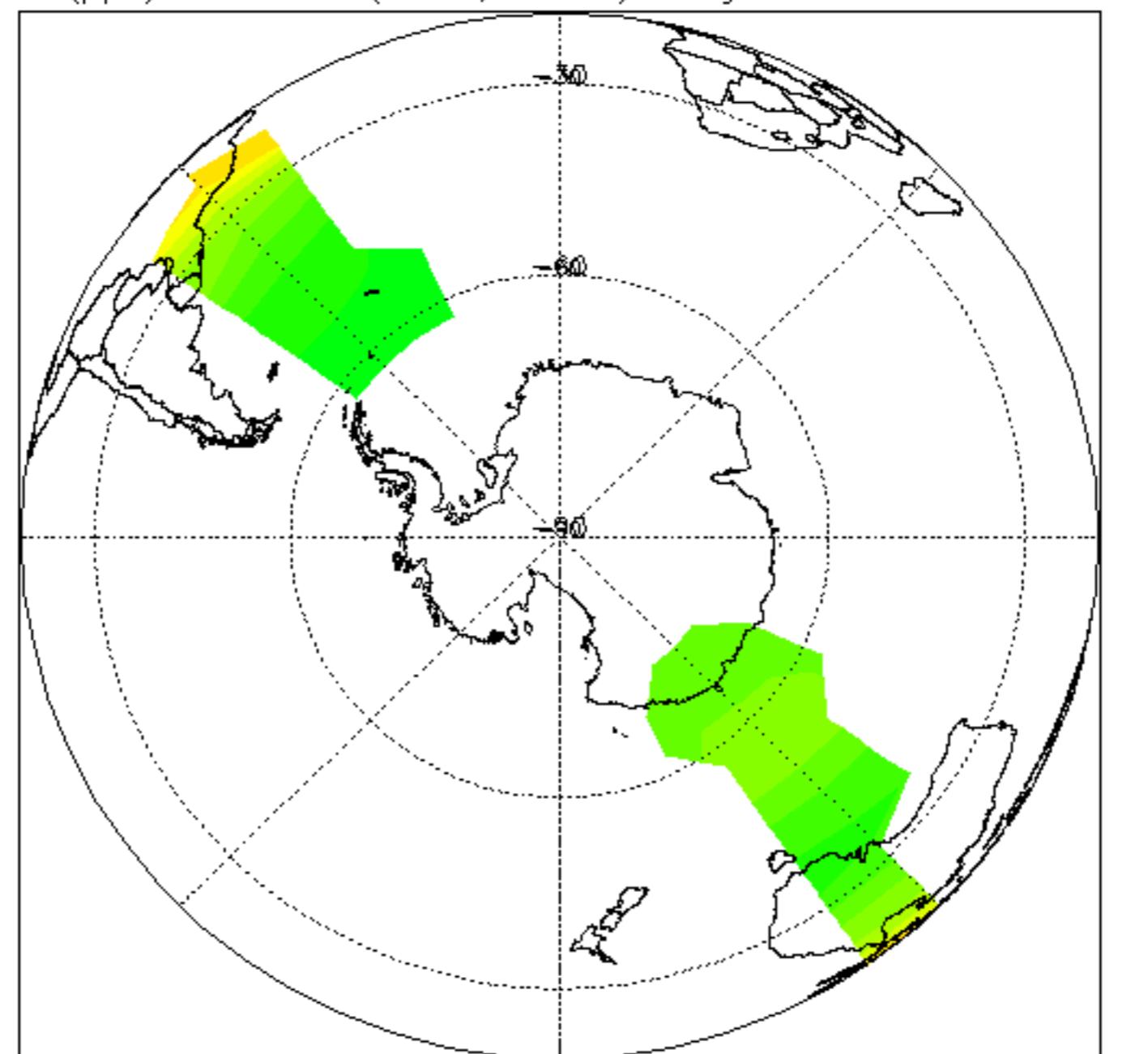
HN03 (ppb) at: 490 K (19km, 55hPa). Daily mean: 30-DEC-2011



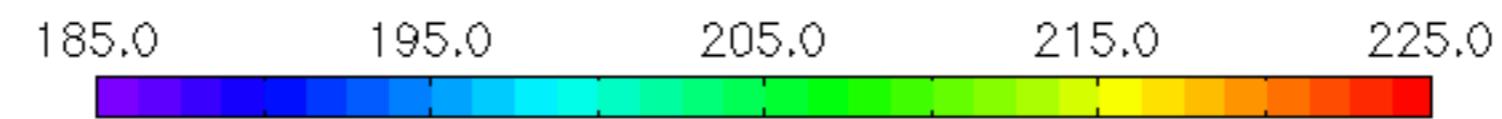
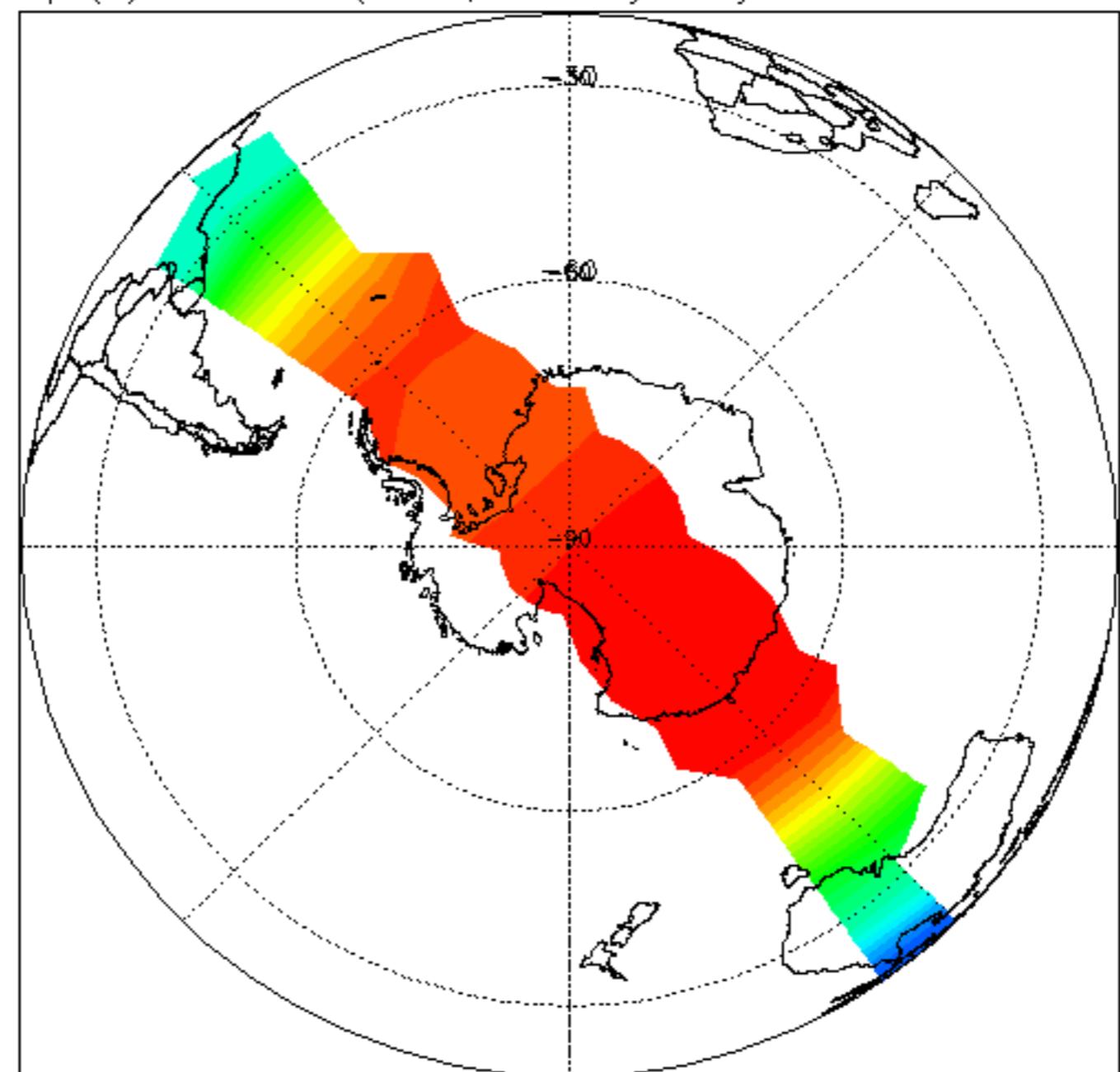
CH<sub>4</sub> (ppm) at: 490 K (19km, 55hPa). Daily mean: 30-DEC-2011



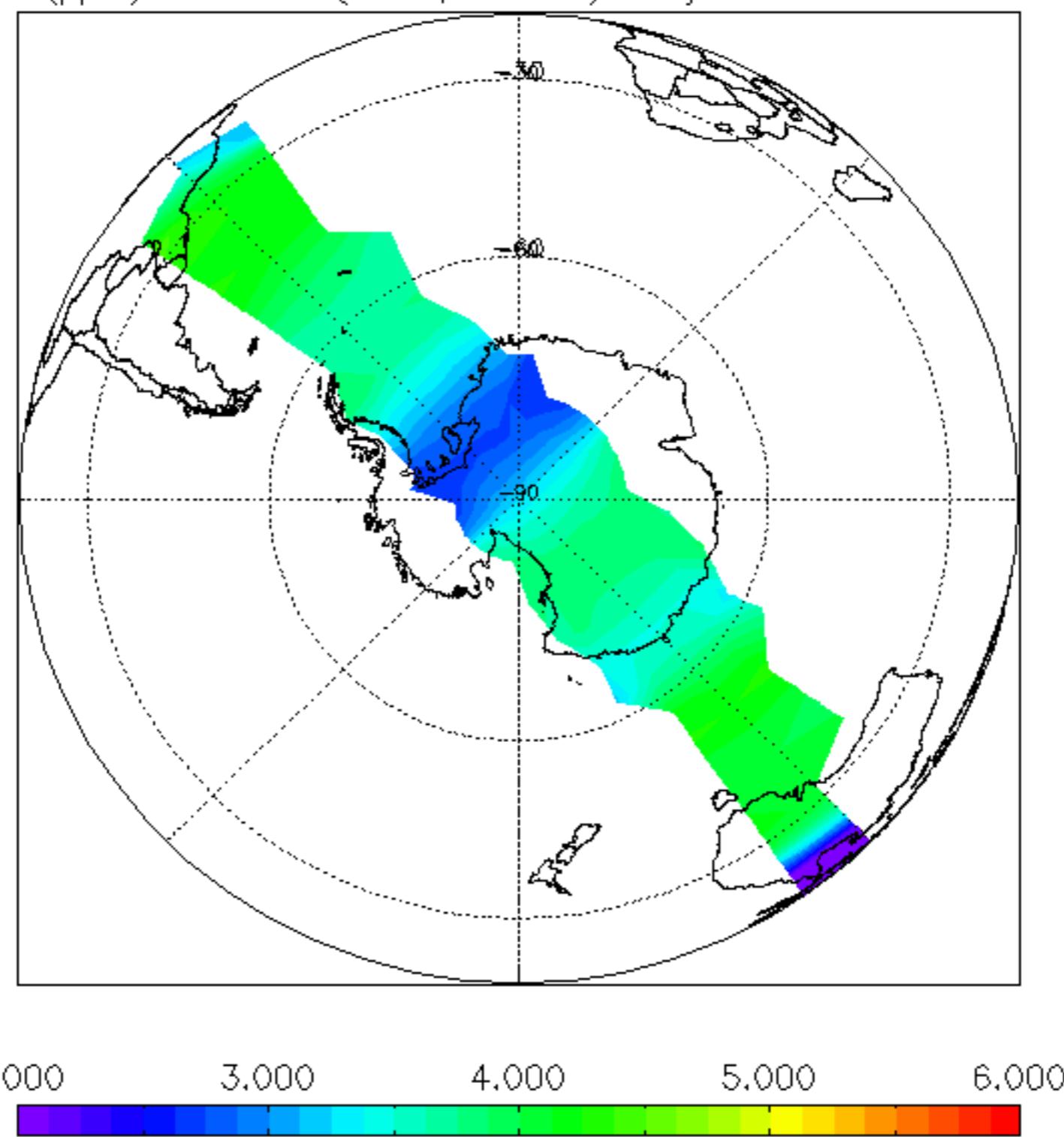
N<sub>2</sub>O (ppb) at: 490 K (19km, 55hPa). Daily mean: 30-DEC-2011



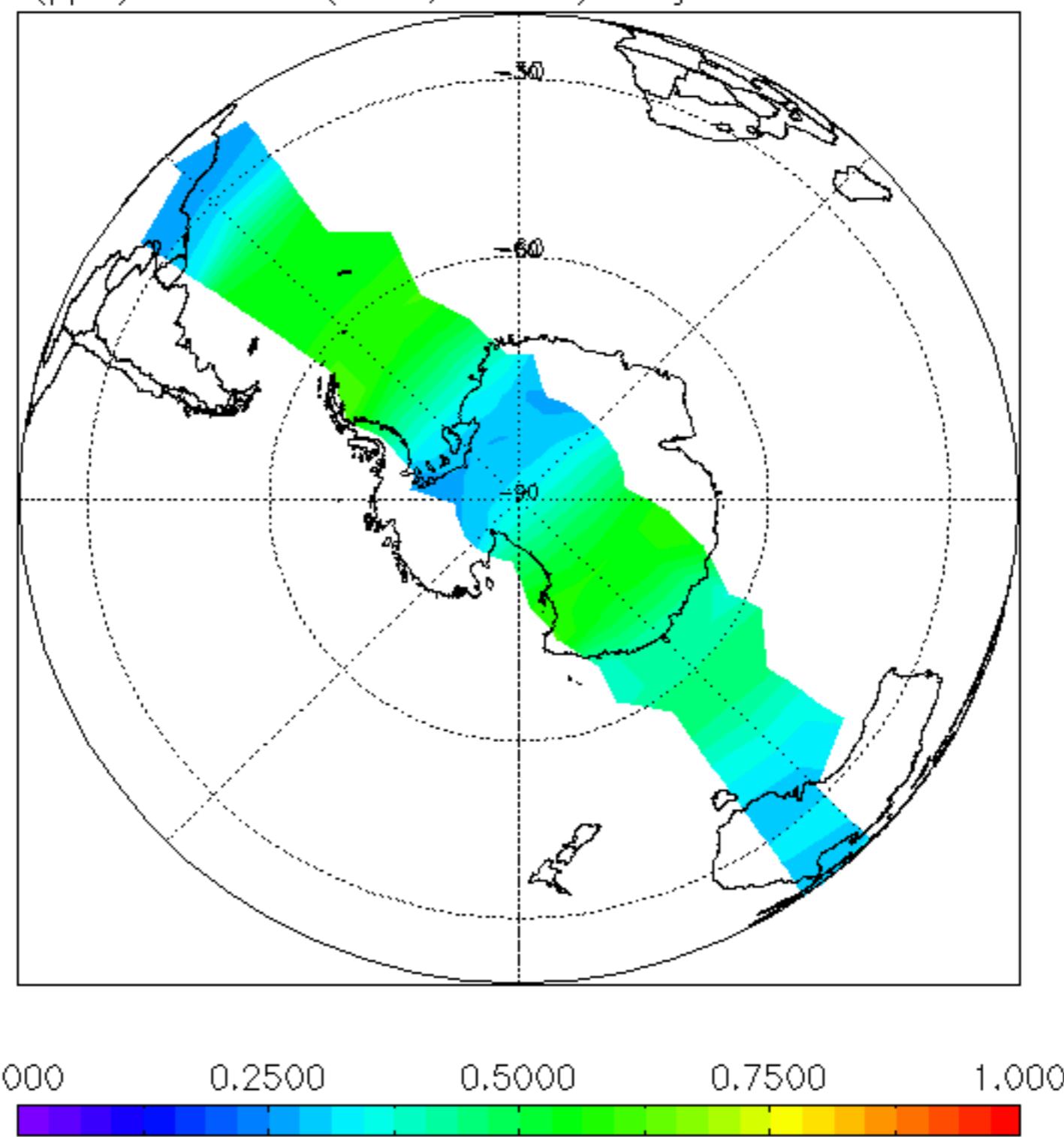
Temp (K) at: 410 K (16km, 100hPa). Daily mean: 30-DEC-2011



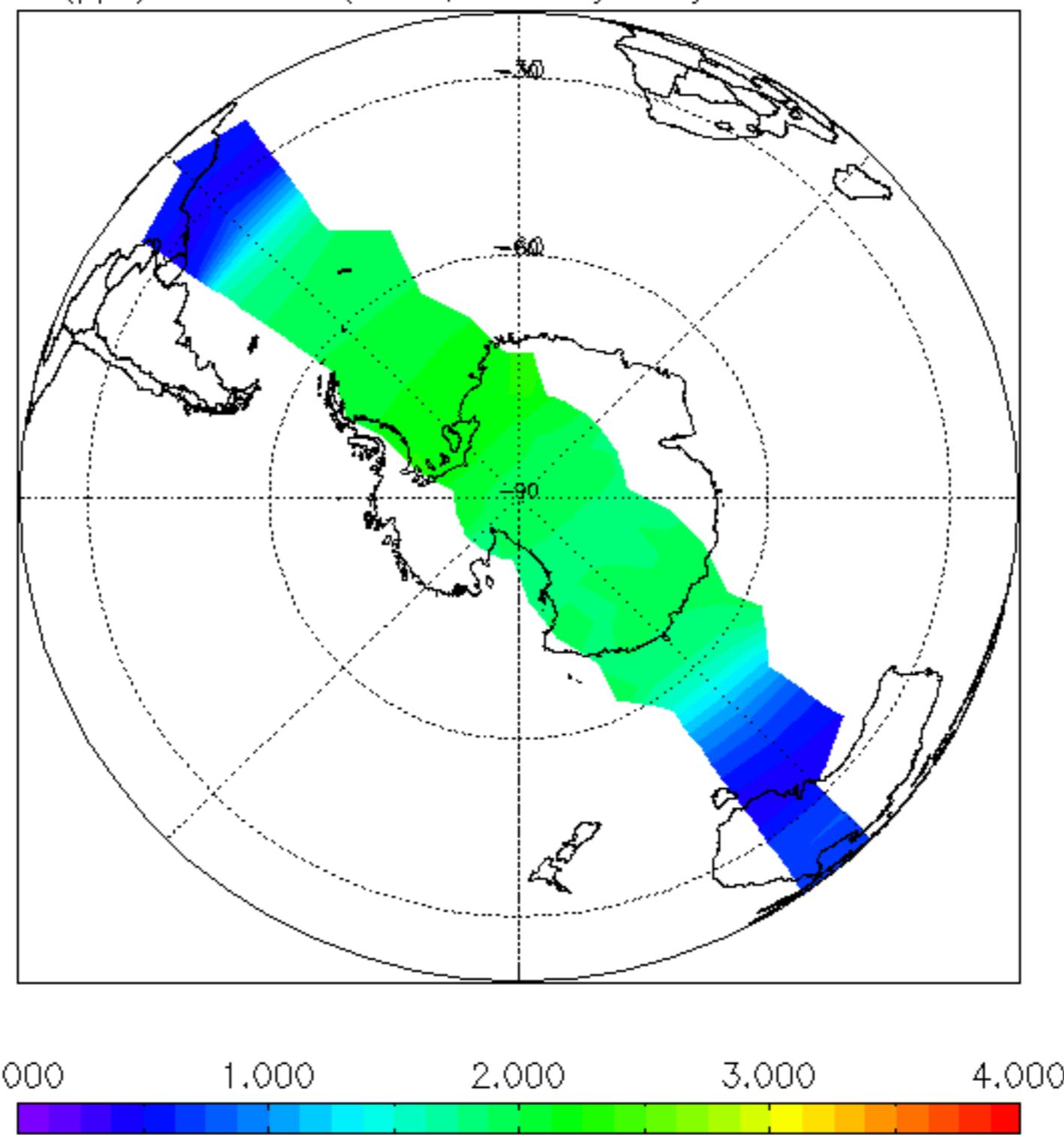
H<sub>2</sub>O (ppm) at: 410 K (16km, 100hPa). Daily mean: 30-DEC-2011



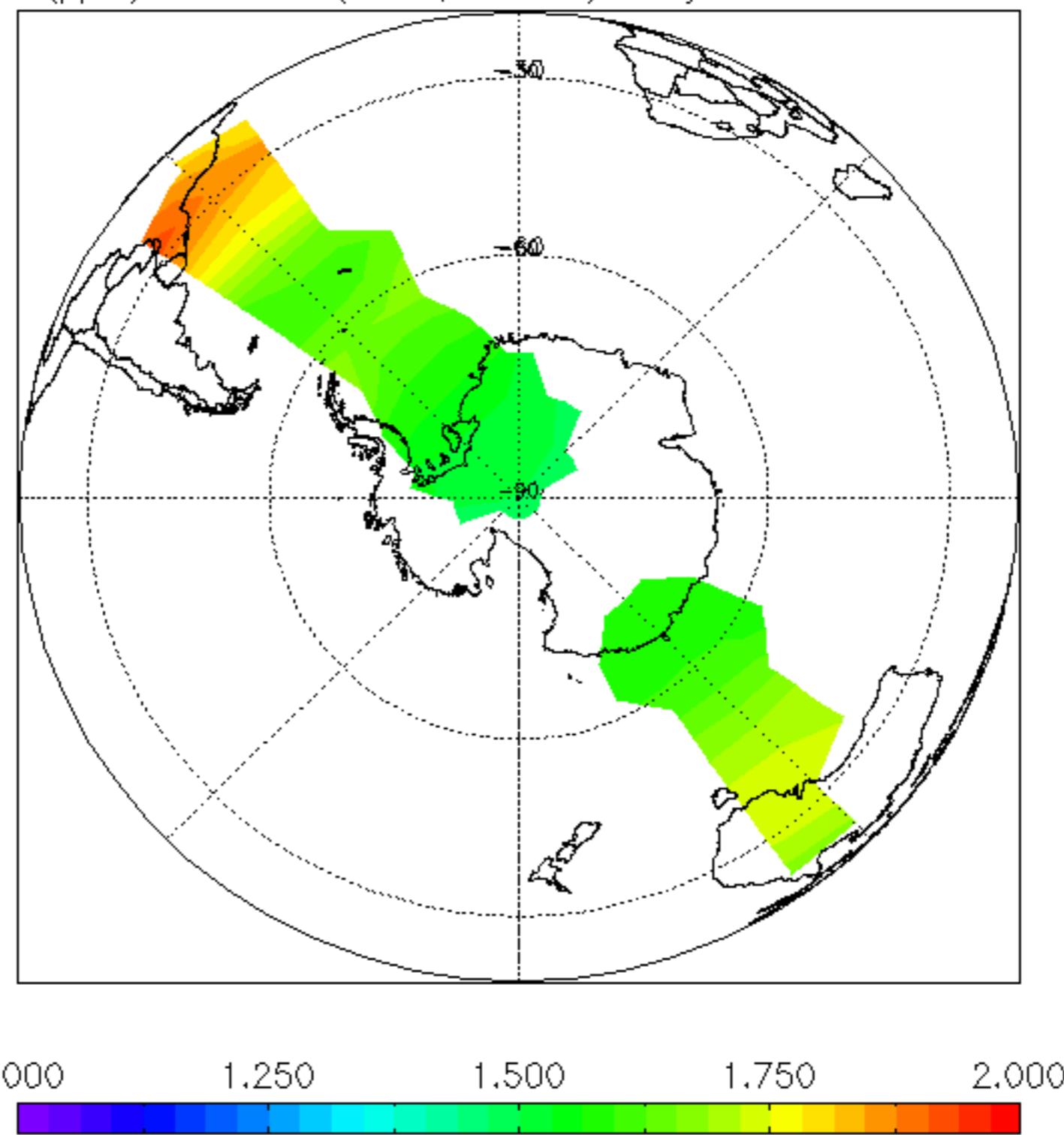
O3 (ppm) at: 410 K (16km, 100hPa). Daily mean: 30-DEC-2011



HNO<sub>3</sub> (ppb) at: 410 K (16km, 100hPa). Daily mean: 30-DEC-2011



CH<sub>4</sub> (ppm) at: 410 K (16km, 100hPa). Daily mean: 30-DEC-2011



N<sub>2</sub>O (ppb) at: 410 K (16km, 100hPa). Daily mean: 30-DEC-2011

