

GOMOS Level 2 Daily Report

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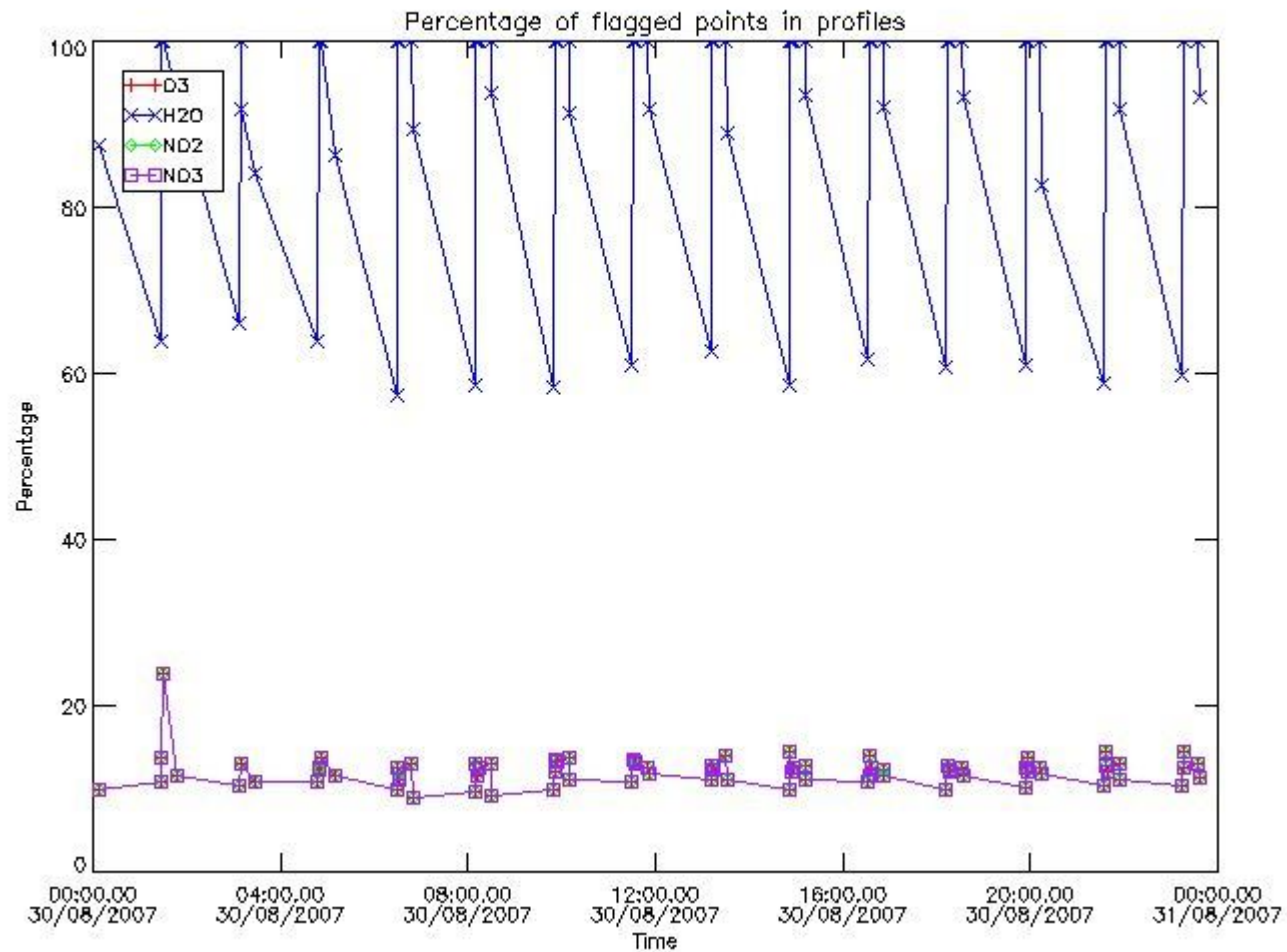
[6. Auxiliary Data Files used for the production reported in section 2](#)

279	GOM_NL__2PRFIN20070830_223452_000000372061_00144_28755_1995.N1	30-AUG-2007 22:34:52	Bright	37.000	89	5Alp Cep	2.4510	8000.0	74	28755	No
280	GOM_NL__2PRFIN20070830_224229_000000362061_00144_28755_1996.N1	30-AUG-2007 22:42:29	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	28755	No
281	GOM_NL__2PRFIN20070830_225923_000000362061_00144_28755_1997.N1	30-AUG-2007 22:59:23	Bright	36.000	24	66Alp Gem	1.5800	10200.	72	28755	No
282	GOM_NL__2PRFIN20070830_230200_000000502061_00144_28755_1998.N1	30-AUG-2007 23:02:00	Bright	49.500	170	27Eps Gem	3.0000	9700.0	99	28755	No
283	GOM_NL__2PRFIN20070830_230458_000000492061_00144_28755_1999.N1	30-AUG-2007 23:04:58	Twilight	48.500	44	24Gam Gem	1.9280	11000.	97	28755	No
284	GOM_NL__2PRFIN20070830_230702_000000502061_00144_28755_2000.N1	30-AUG-2007 23:07:02	Twilight	49.500	8	10Alp CMi	0.40000	6500.0	99	28755	No
285	GOM_NL__2PRFIN20070830_231435_000000492061_00144_28755_2001.N1	30-AUG-2007 23:14:35	Dark	49.000	1	9Alp CMa	-1.4400	11000.	98	28755	No
286	GOM_NL__2PRFIN20070830_231554_000000392061_00144_28755_2002.N1	30-AUG-2007 23:15:54	Dark	38.500	179	24Omi2CMa	3.0320	24000.	77	28755	No
287	GOM_NL__2PRFIN20070830_231722_000000412061_00144_28755_2003.N1	30-AUG-2007 23:17:22	Dark	41.000	23	21Eps CMa	1.5020	26000.	82	28755	No
288	GOM_NL__2PRFIN20070830_233425_000000402061_00145_28756_2001.N1	30-AUG-2007 23:34:25	Dark	39.500	143	Alp Hyi	2.8570	7200.0	79	28756	No
289	GOM_NL__2PRFIN20070830_233541_000000452061_00145_28756_2002.N1	30-AUG-2007 23:35:41	Dark	45.000	9	Alp Eri	0.45300	24000.	90	28756	No
290	GOM_NL__2PRFIN20070830_234139_000000532061_00145_28756_2003.N1	30-AUG-2007 23:41:39	Straylight	53.000	84	Alp Phe	2.3970	4500.0	106	28756	No
291	GOM_NL__2PRFIN20070830_234314_000000532061_00145_28756_2004.N1	30-AUG-2007 23:43:14	Straylight	53.000	63	Bet Gru	2.1500	2800.0	106	28756	No
292	GOM_NL__2PRFIN20070830_234753_000000462061_00145_28756_2005.N1	30-AUG-2007 23:47:53	Straylight	45.500	18	24Alp PsA	1.1660	9700.0	91	28756	No
293	GOM_NL__2PRFIN20070830_235246_000000482061_00145_28756_2006.N1	30-AUG-2007 23:52:46	Bright	47.500	142	49Del Cap	2.8500	8900.0	95	28756	No
294	GOM_NL__2PRFIN20070830_235555_000000382061_00145_28756_2007.N1	30-AUG-2007 23:55:55	Bright	37.500	154	22Bet Aqr	2.8990	5700.0	75	28756	No
295	GOM_NL__2PRFIN20070830_235726_000000412061_00145_28756_2008.N1	30-AUG-2007 23:57:26	Bright	40.500	162	34Alp Aqr	2.9440	5350.0	81	28756	No

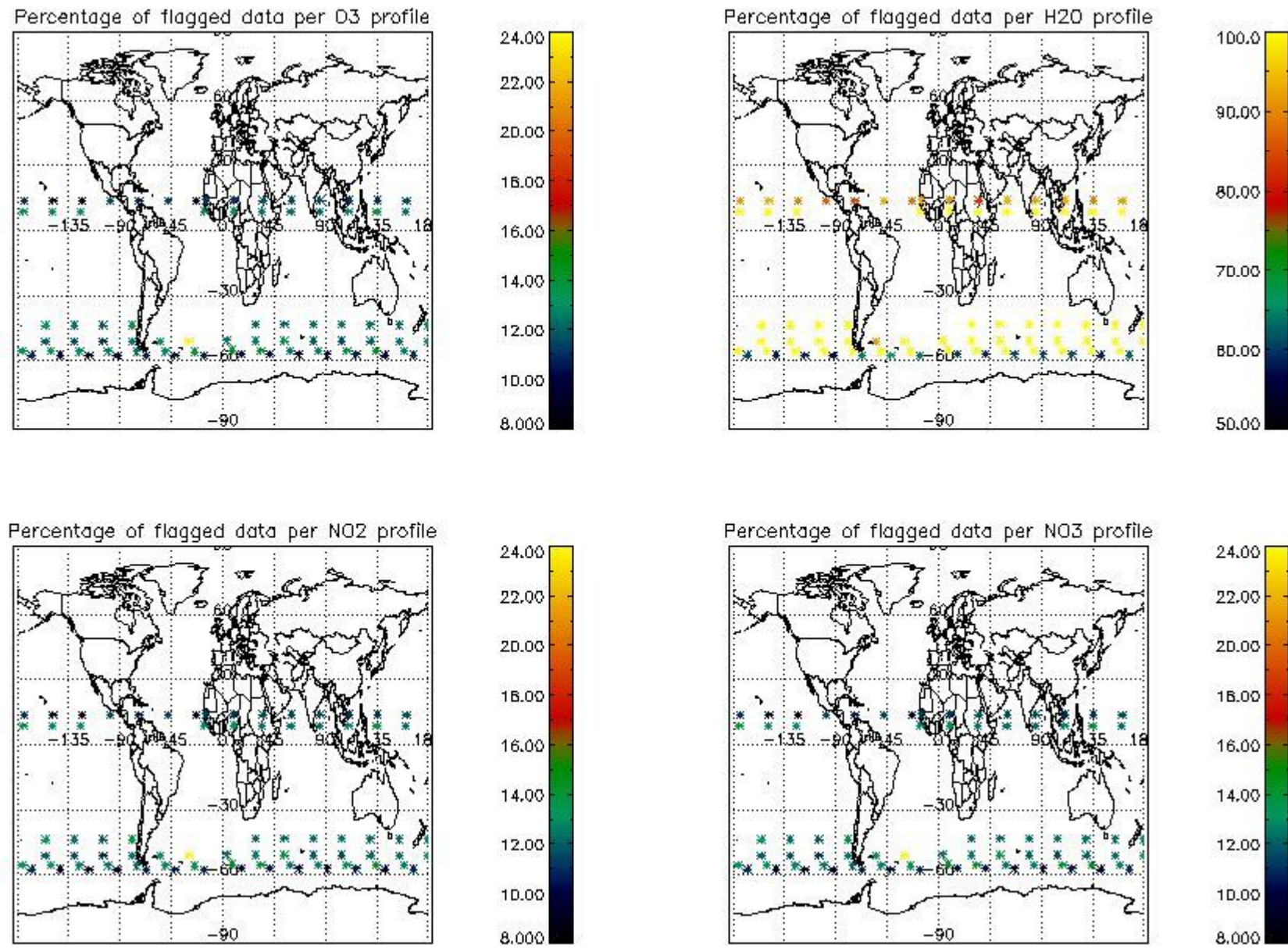
3. Quality information per product

In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)



3.2 Plot quality information per product (world map)

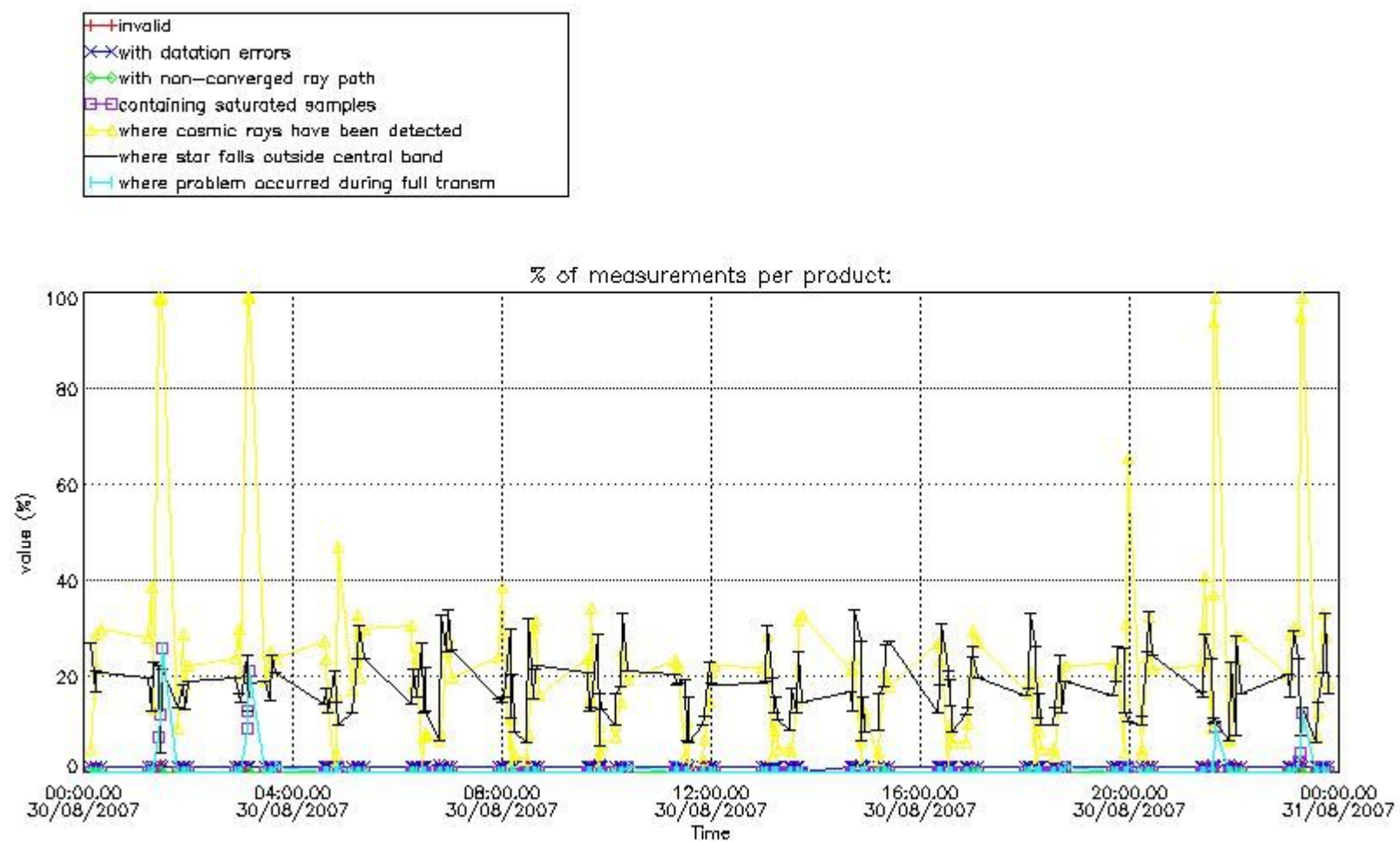


4. Level 1 quality information per product

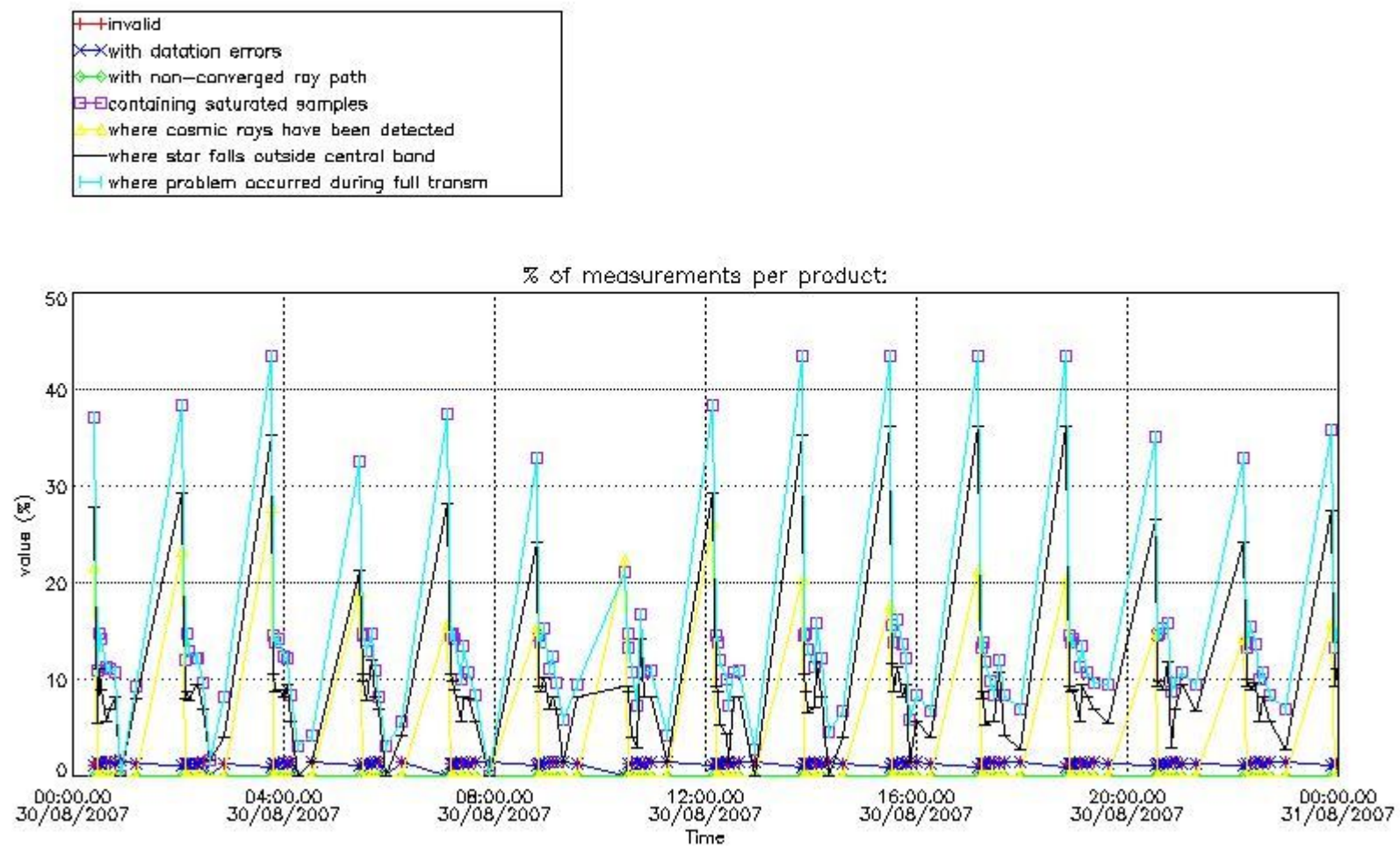
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes



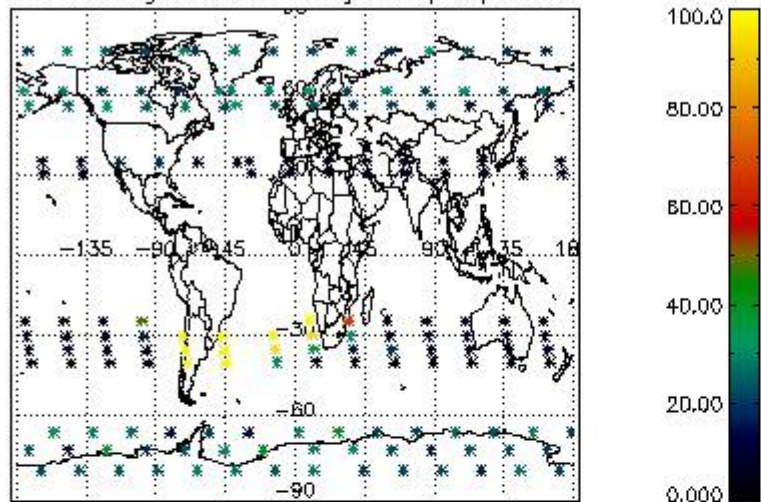
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



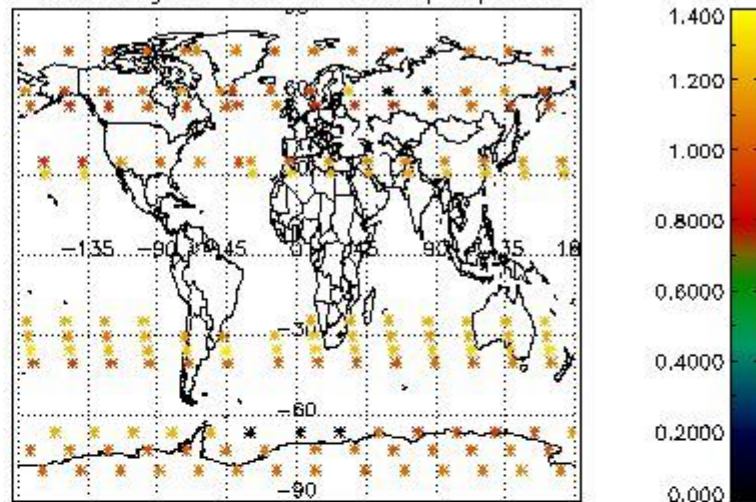
4.2 Plot quality information per product coming from level 1b processing (world map)

4.2.1 Plot level 1 quality information per product (world map): ENVISAT ASCENDING passes

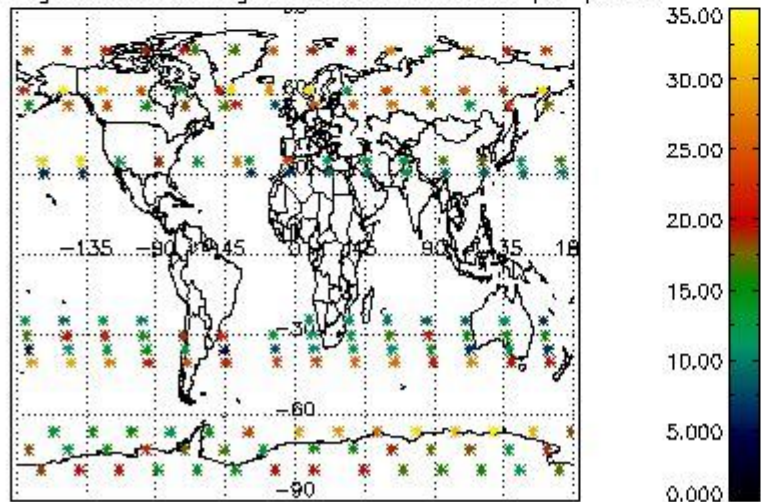
Percentage of cosmic ray hits per profile



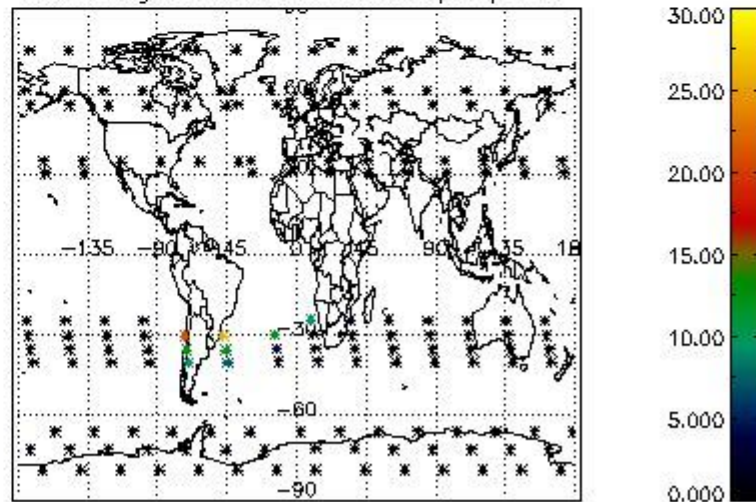
Percentage of datation errors per profile



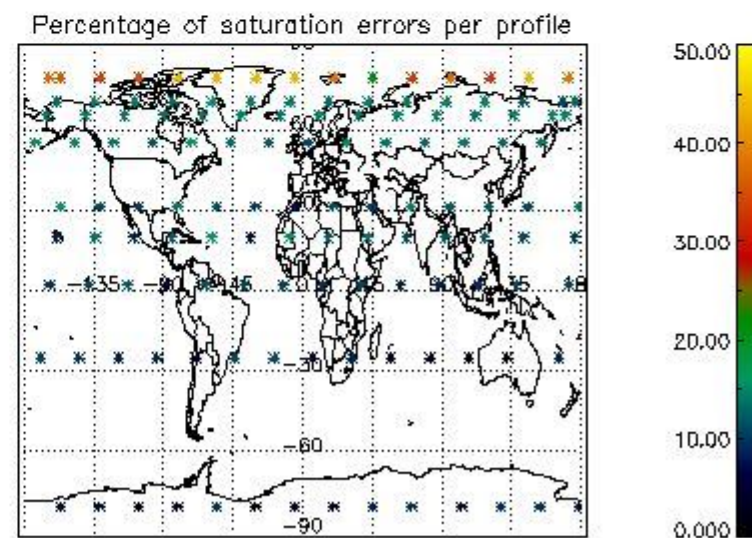
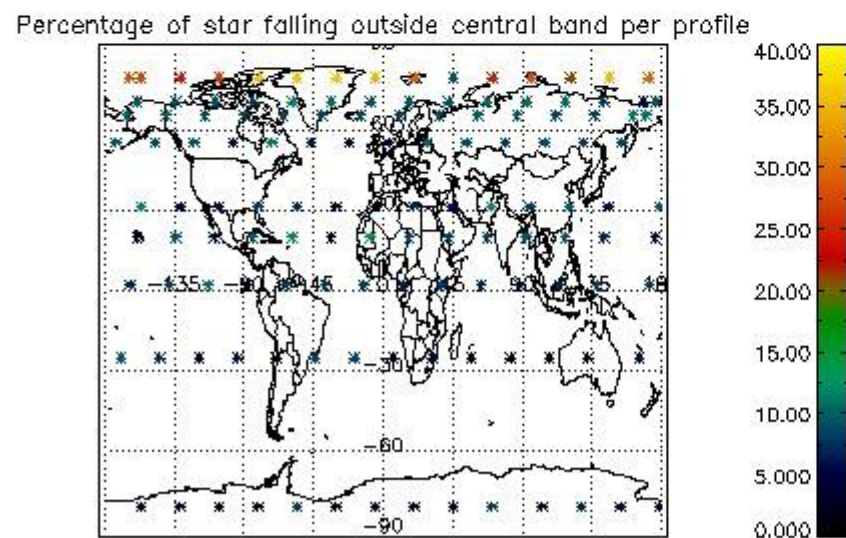
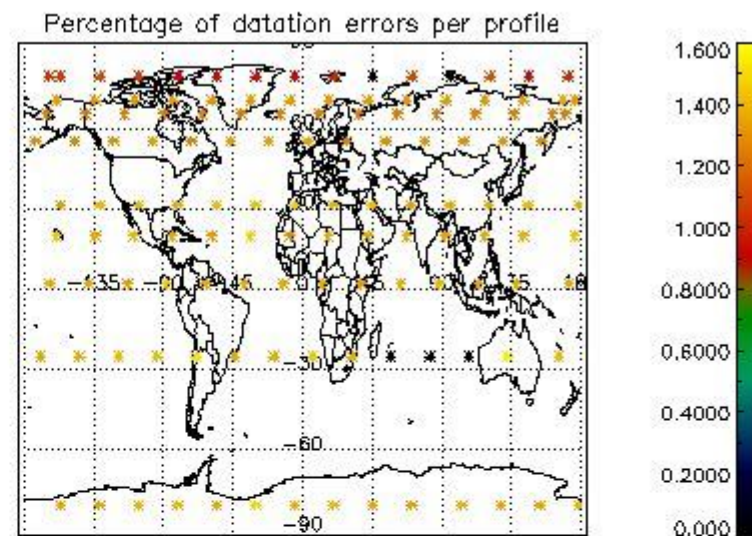
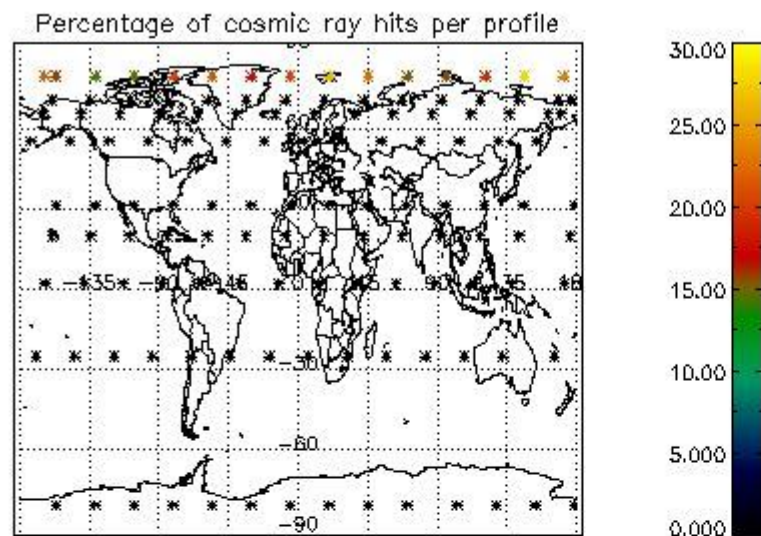
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

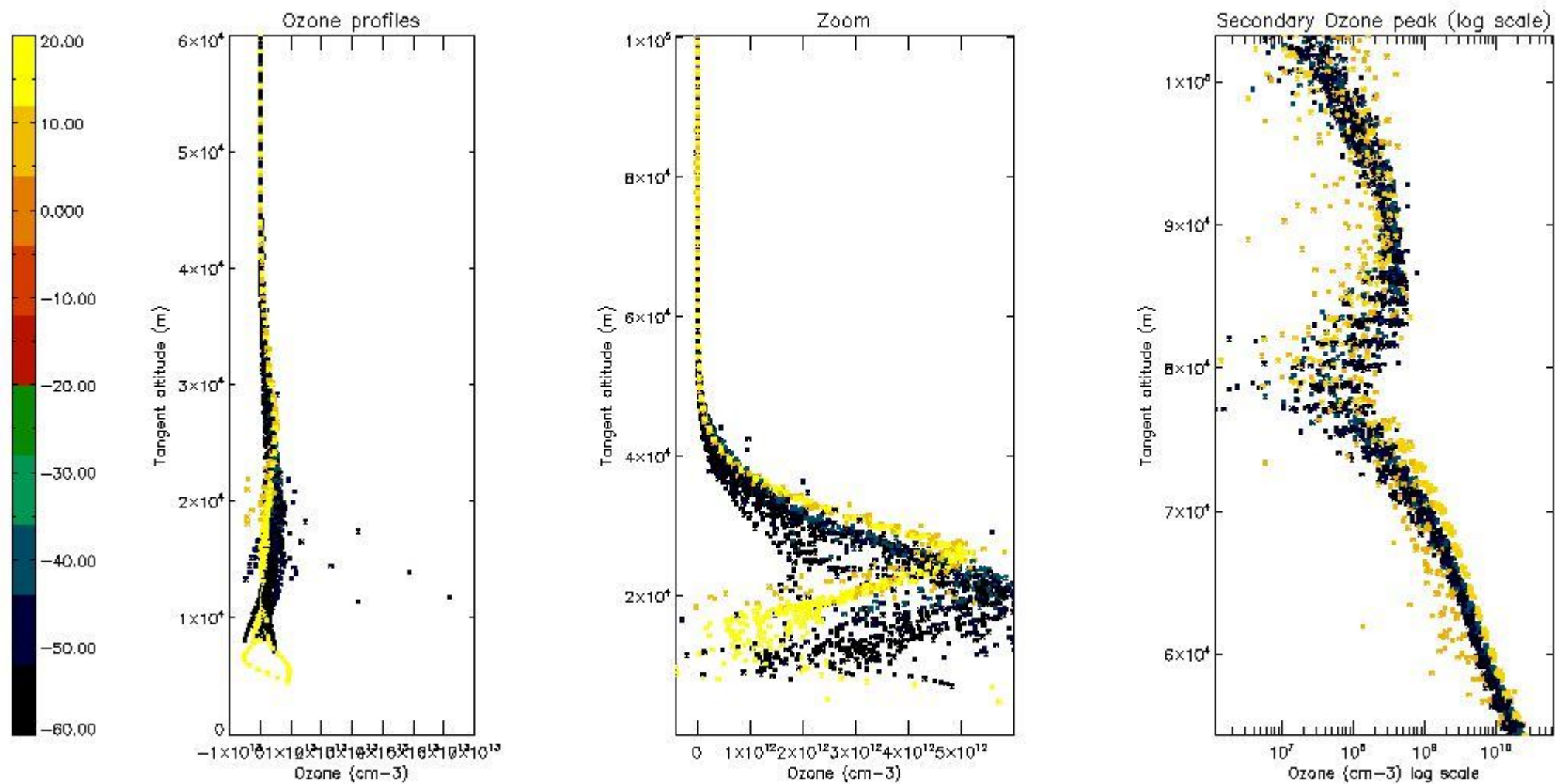
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	28
STD < 20	19

STD < 10	16
STD < 5	12

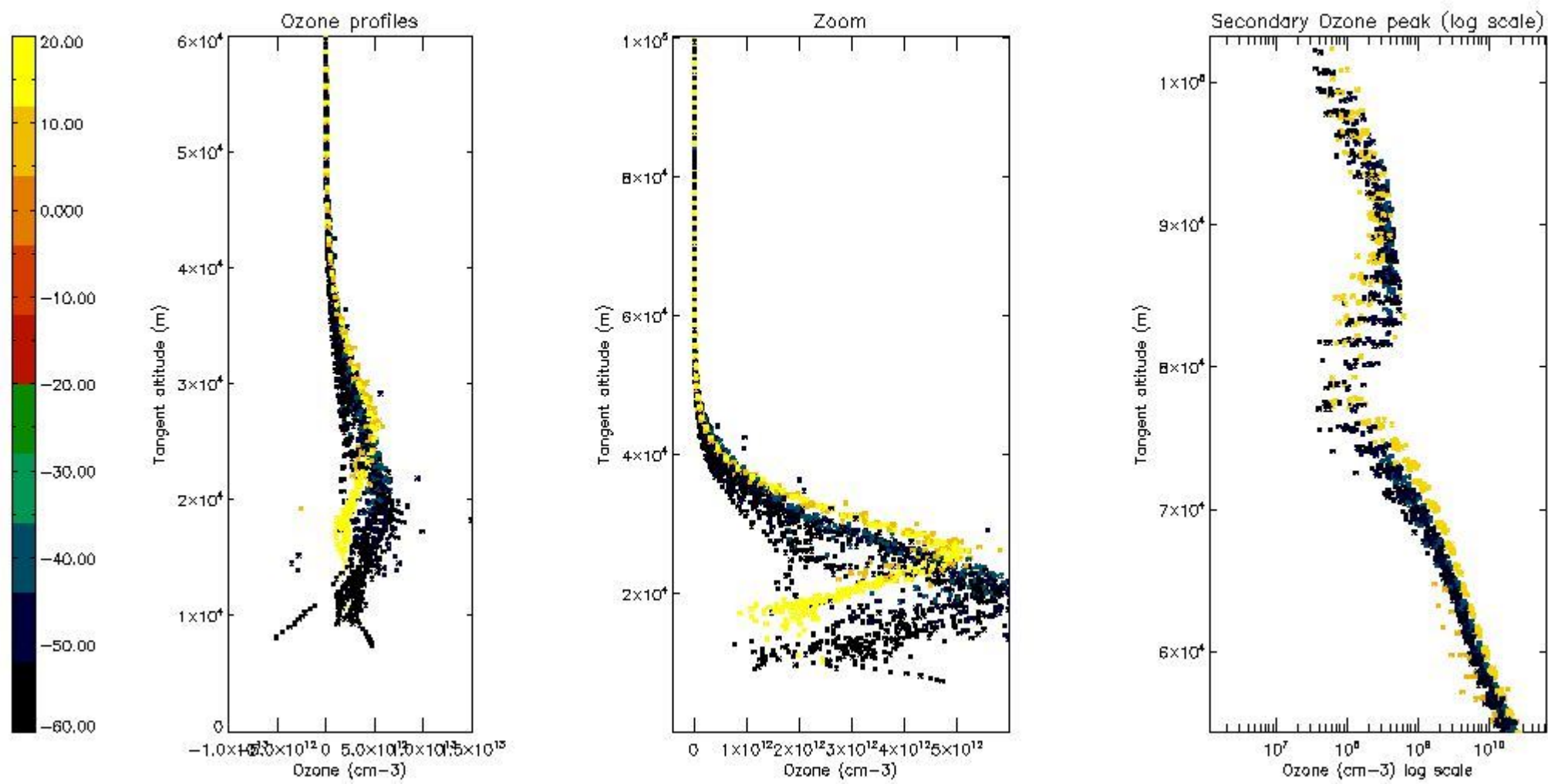
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



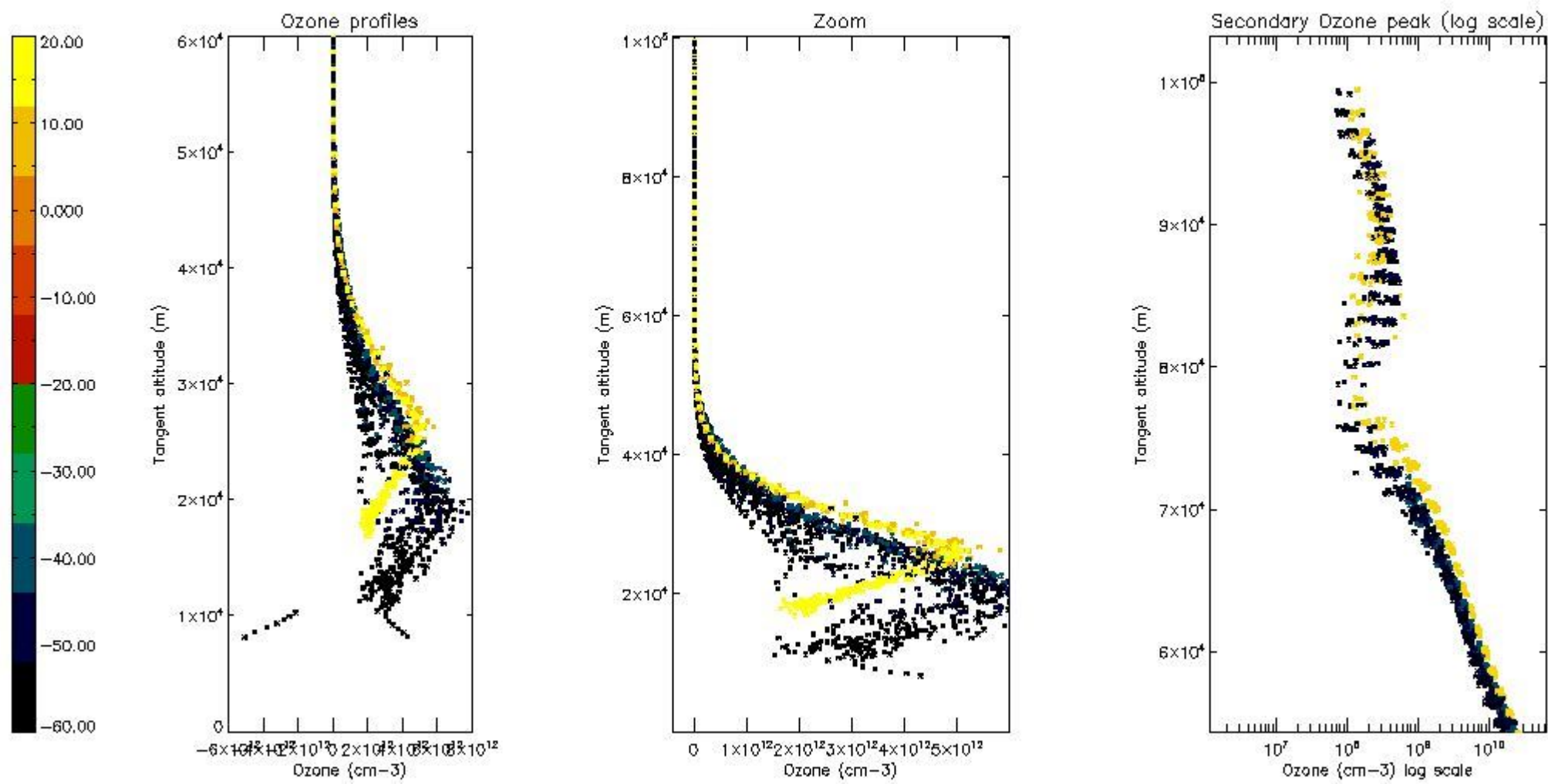
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



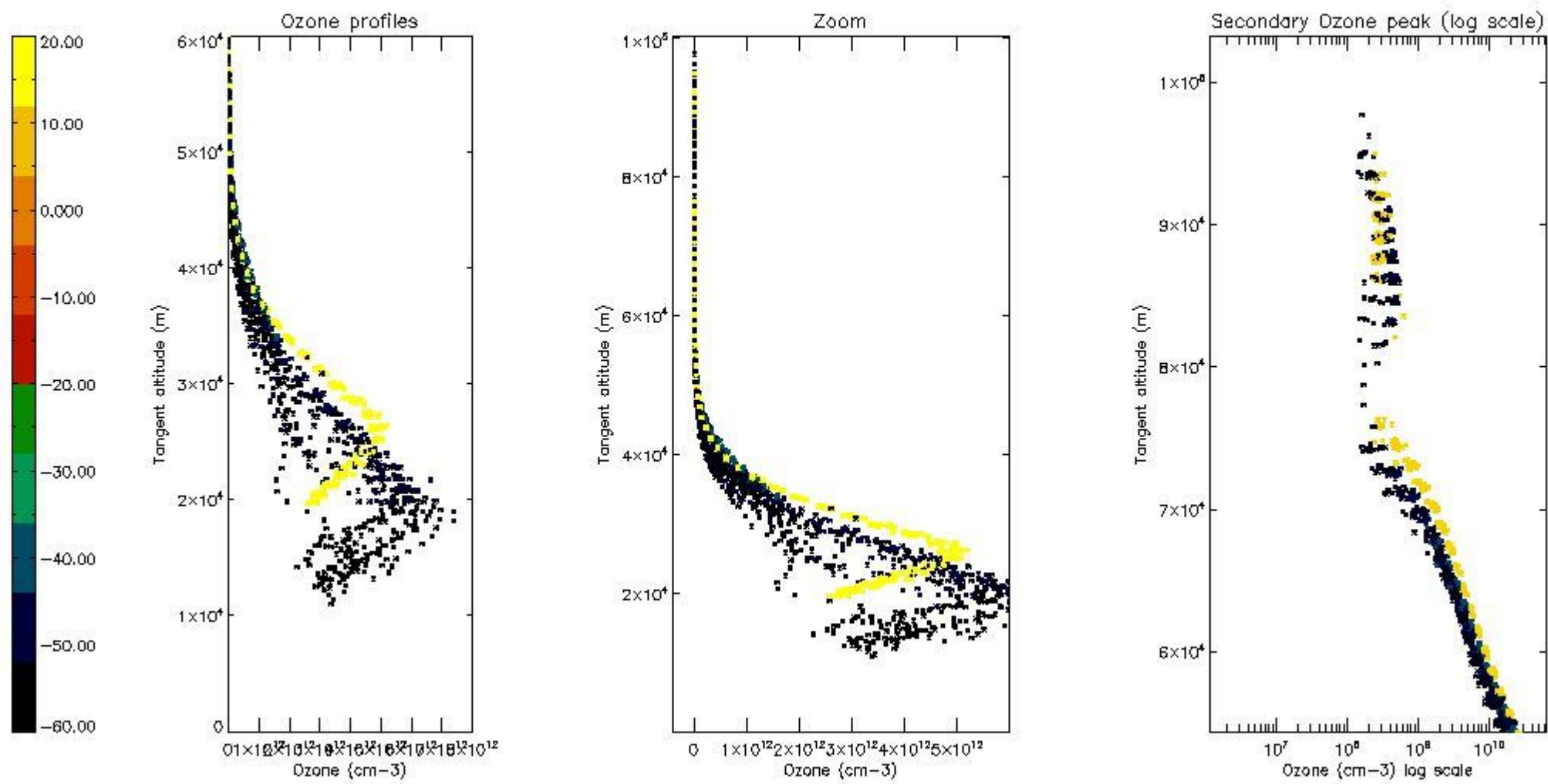
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



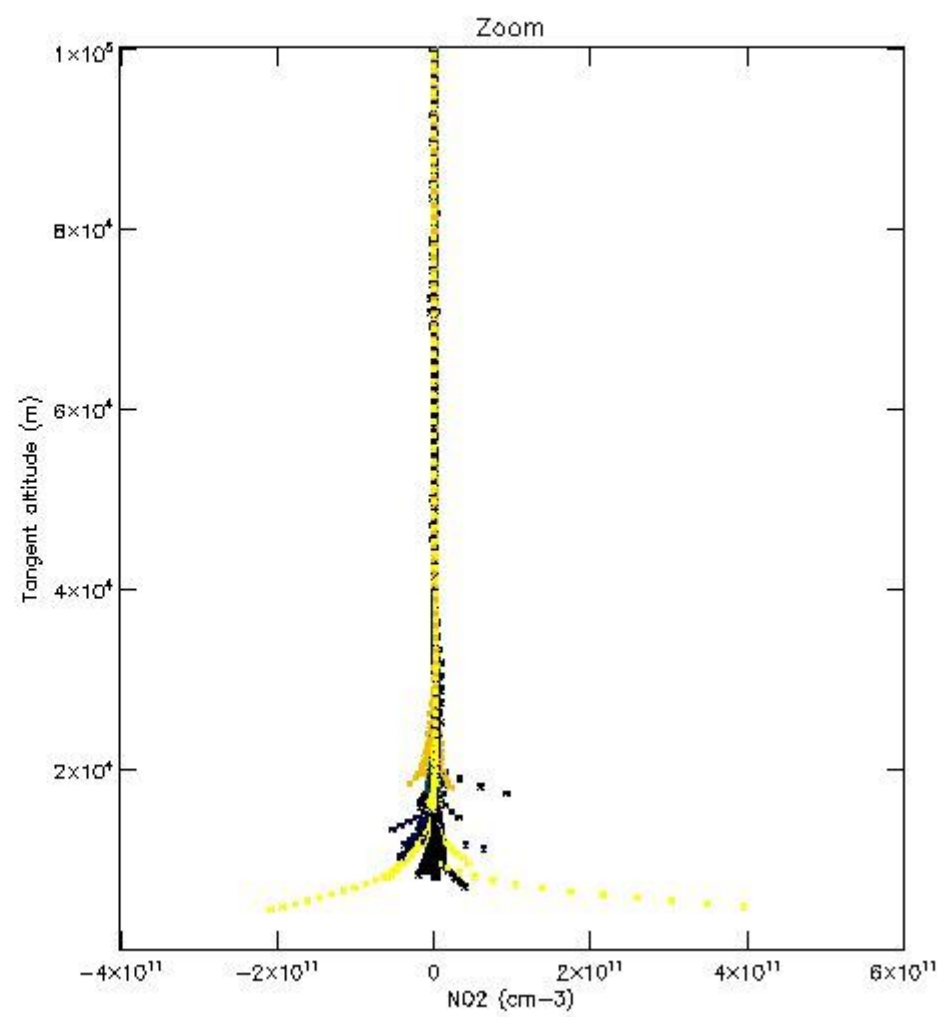
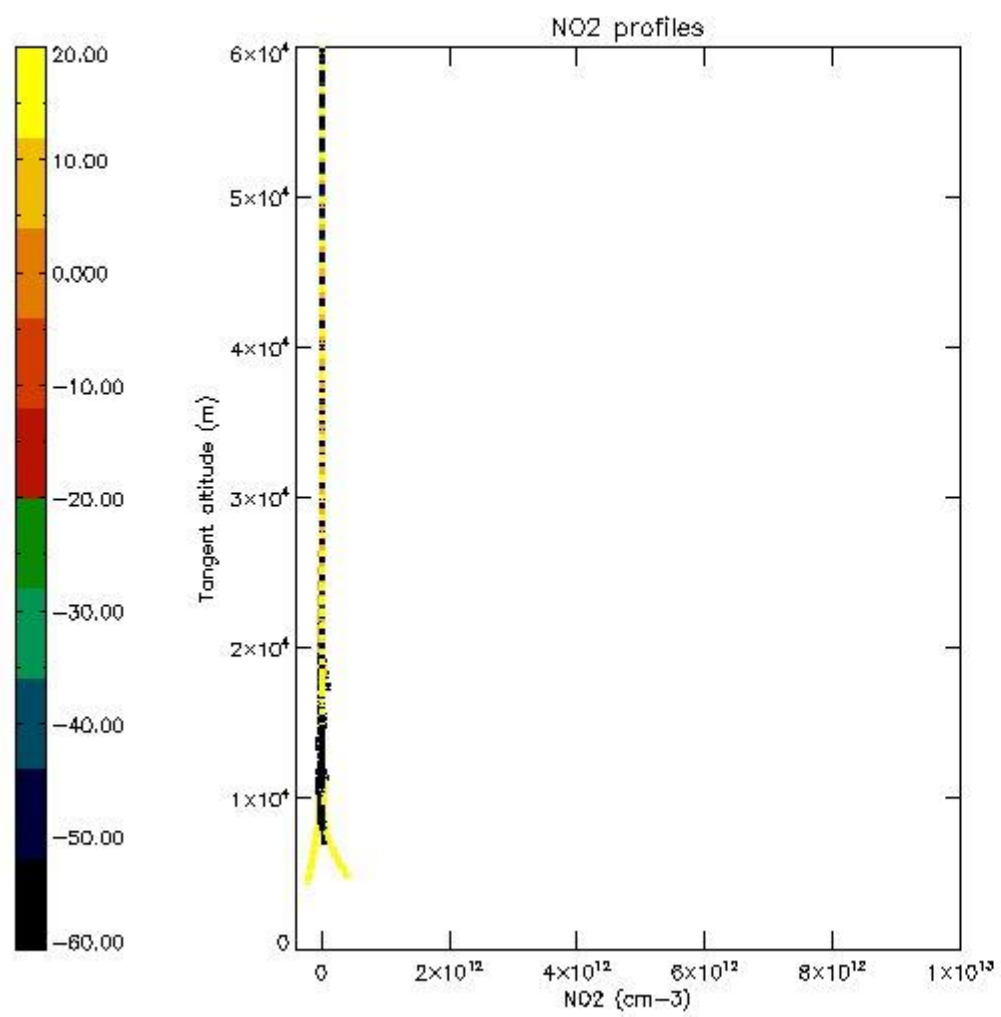
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



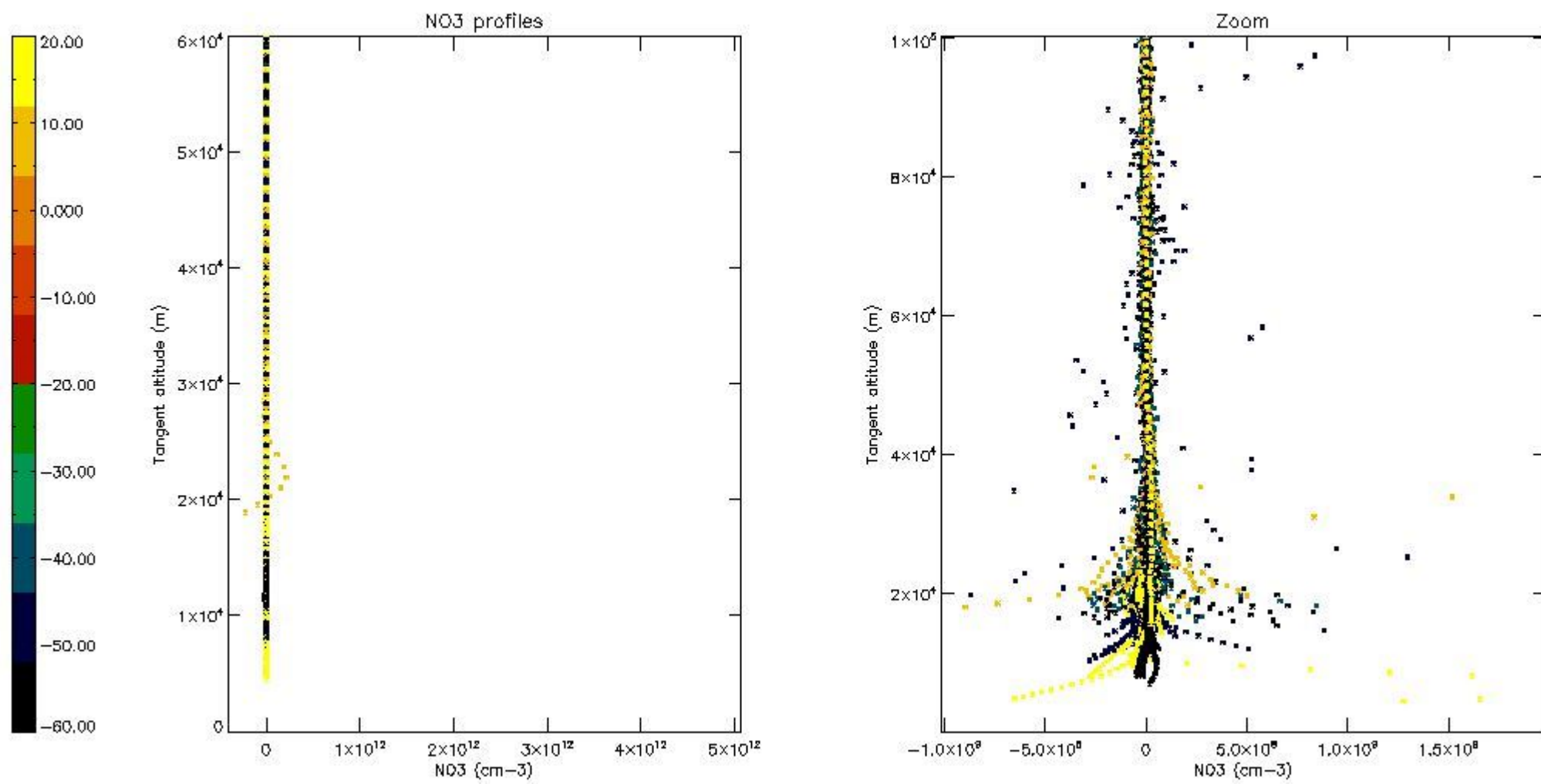
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



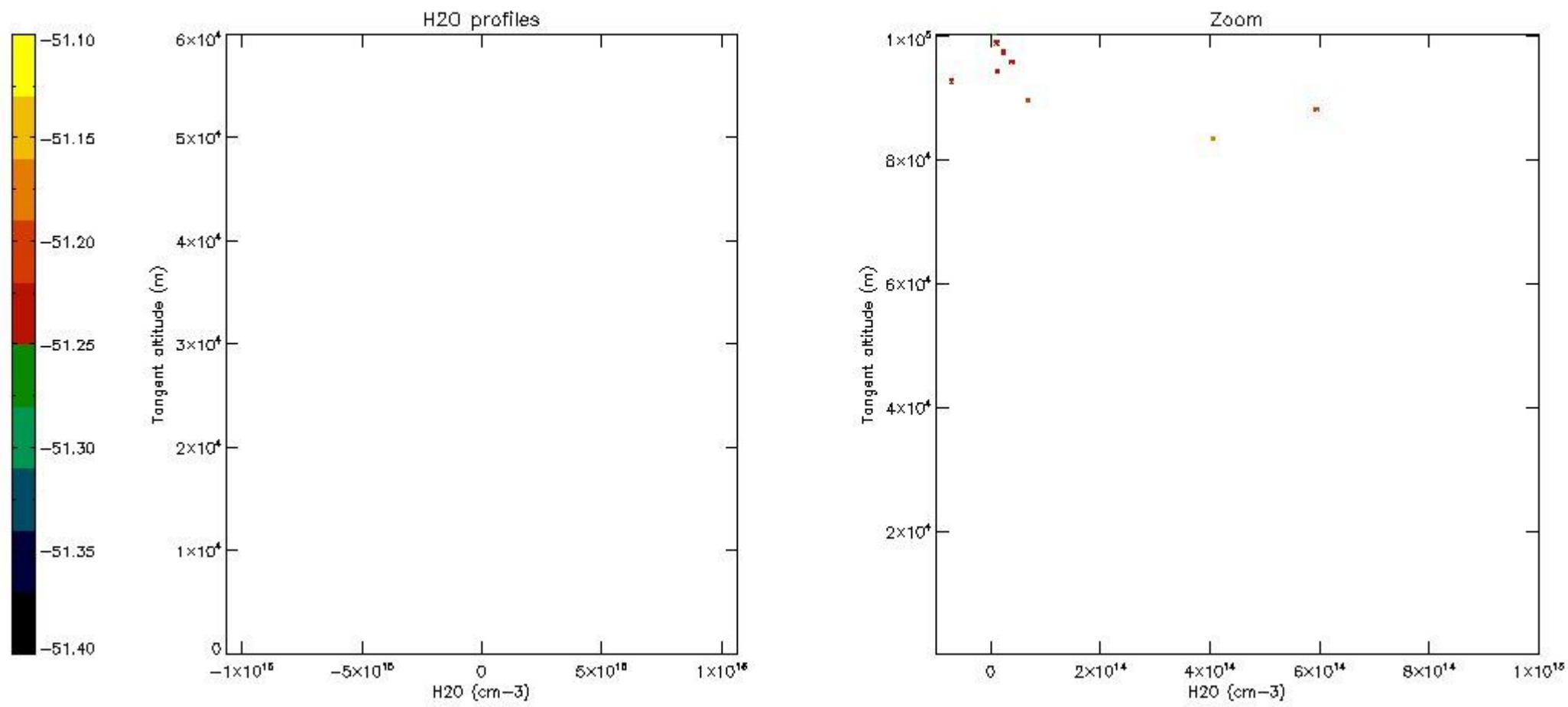
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



5.8 Plot H2O profiles for all STD (only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors)

The colorbar represents the latitude.



6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	30-AUG-2007 00:07:09
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	30-AUG-2007 00:07:09
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	30-AUG-2007 00:07:09

GOMOS Level 2 Daily Report

SUMMARY

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[2. Summary of processed GOM_NL_2P products](#)

[3. Level 2 Quality information per product](#)

[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

[3.2 Plot of level 2 quality information per product \(world map\)](#)

[4. Level 1 Quality information per product \(stored on level 2 products\)](#)

[4.1 Plot of level 1 quality information per product \(time dependant\)](#)

[4.1.1 Plot of level 1 quality information per product \(time dependant\): ASCENDING](#)

[4.1.2 Plot of level 1 quality information per product \(time dependant\): DESCENDING](#)

[4.2 Plot of level 1 quality information per product \(world map\)](#)

[4.2.1 Plot of level 1 quality information per product \(world map\): ASCENDING](#)

[4.2.2 Plot of level 1 quality information per product \(world map\): DESCENDING](#)

[5. Ozone profiles based on quality statistics and other trace gas profiles](#)

[5.1 Ozone statistics based on quality of products](#)

[5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

[5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

[5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

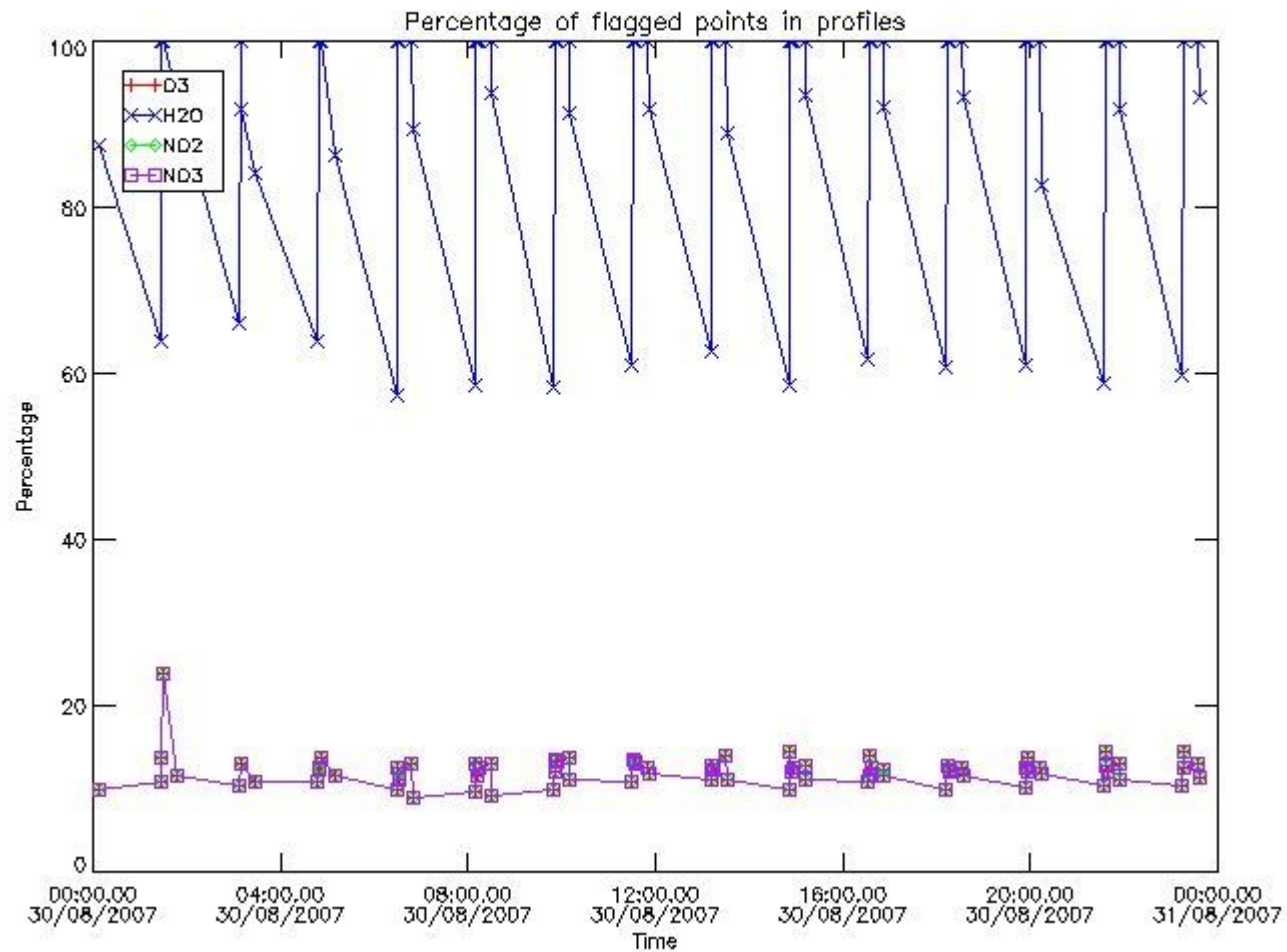
[6. Auxiliary Data Files used for the production reported in section 2](#)

279	GOM_NL__2PRFIN20070830_223452_000000372061_00144_28755_1995.N1	30-AUG-2007 22:34:52	Bright	37.000	89	5Alp Cep	2.4510	8000.0	74	28755	No
280	GOM_NL__2PRFIN20070830_224229_000000362061_00144_28755_1996.N1	30-AUG-2007 22:42:29	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	28755	No
281	GOM_NL__2PRFIN20070830_225923_000000362061_00144_28755_1997.N1	30-AUG-2007 22:59:23	Bright	36.000	24	66Alp Gem	1.5800	10200.	72	28755	No
282	GOM_NL__2PRFIN20070830_230200_000000502061_00144_28755_1998.N1	30-AUG-2007 23:02:00	Bright	49.500	170	27Eps Gem	3.0000	9700.0	99	28755	No
283	GOM_NL__2PRFIN20070830_230458_000000492061_00144_28755_1999.N1	30-AUG-2007 23:04:58	Twilight	48.500	44	24Gam Gem	1.9280	11000.	97	28755	No
284	GOM_NL__2PRFIN20070830_230702_000000502061_00144_28755_2000.N1	30-AUG-2007 23:07:02	Twilight	49.500	8	10Alp CMi	0.40000	6500.0	99	28755	No
285	GOM_NL__2PRFIN20070830_231435_000000492061_00144_28755_2001.N1	30-AUG-2007 23:14:35	Dark	49.000	1	9Alp CMa	-1.4400	11000.	98	28755	No
286	GOM_NL__2PRFIN20070830_231554_000000392061_00144_28755_2002.N1	30-AUG-2007 23:15:54	Dark	38.500	179	24Omi2CMa	3.0320	24000.	77	28755	No
287	GOM_NL__2PRFIN20070830_231722_000000412061_00144_28755_2003.N1	30-AUG-2007 23:17:22	Dark	41.000	23	21Eps CMa	1.5020	26000.	82	28755	No
288	GOM_NL__2PRFIN20070830_233425_000000402061_00145_28756_2001.N1	30-AUG-2007 23:34:25	Dark	39.500	143	Alp Hyi	2.8570	7200.0	79	28756	No
289	GOM_NL__2PRFIN20070830_233541_000000452061_00145_28756_2002.N1	30-AUG-2007 23:35:41	Dark	45.000	9	Alp Eri	0.45300	24000.	90	28756	No
290	GOM_NL__2PRFIN20070830_234139_000000532061_00145_28756_2003.N1	30-AUG-2007 23:41:39	Straylight	53.000	84	Alp Phe	2.3970	4500.0	106	28756	No
291	GOM_NL__2PRFIN20070830_234314_000000532061_00145_28756_2004.N1	30-AUG-2007 23:43:14	Straylight	53.000	63	Bet Gru	2.1500	2800.0	106	28756	No
292	GOM_NL__2PRFIN20070830_234753_000000462061_00145_28756_2005.N1	30-AUG-2007 23:47:53	Straylight	45.500	18	24Alp PsA	1.1660	9700.0	91	28756	No
293	GOM_NL__2PRFIN20070830_235246_000000482061_00145_28756_2006.N1	30-AUG-2007 23:52:46	Bright	47.500	142	49Del Cap	2.8500	8900.0	95	28756	No
294	GOM_NL__2PRFIN20070830_235555_000000382061_00145_28756_2007.N1	30-AUG-2007 23:55:55	Bright	37.500	154	22Bet Aqr	2.8990	5700.0	75	28756	No
295	GOM_NL__2PRFIN20070830_235726_000000412061_00145_28756_2008.N1	30-AUG-2007 23:57:26	Bright	40.500	162	34Alp Aqr	2.9440	5350.0	81	28756	No

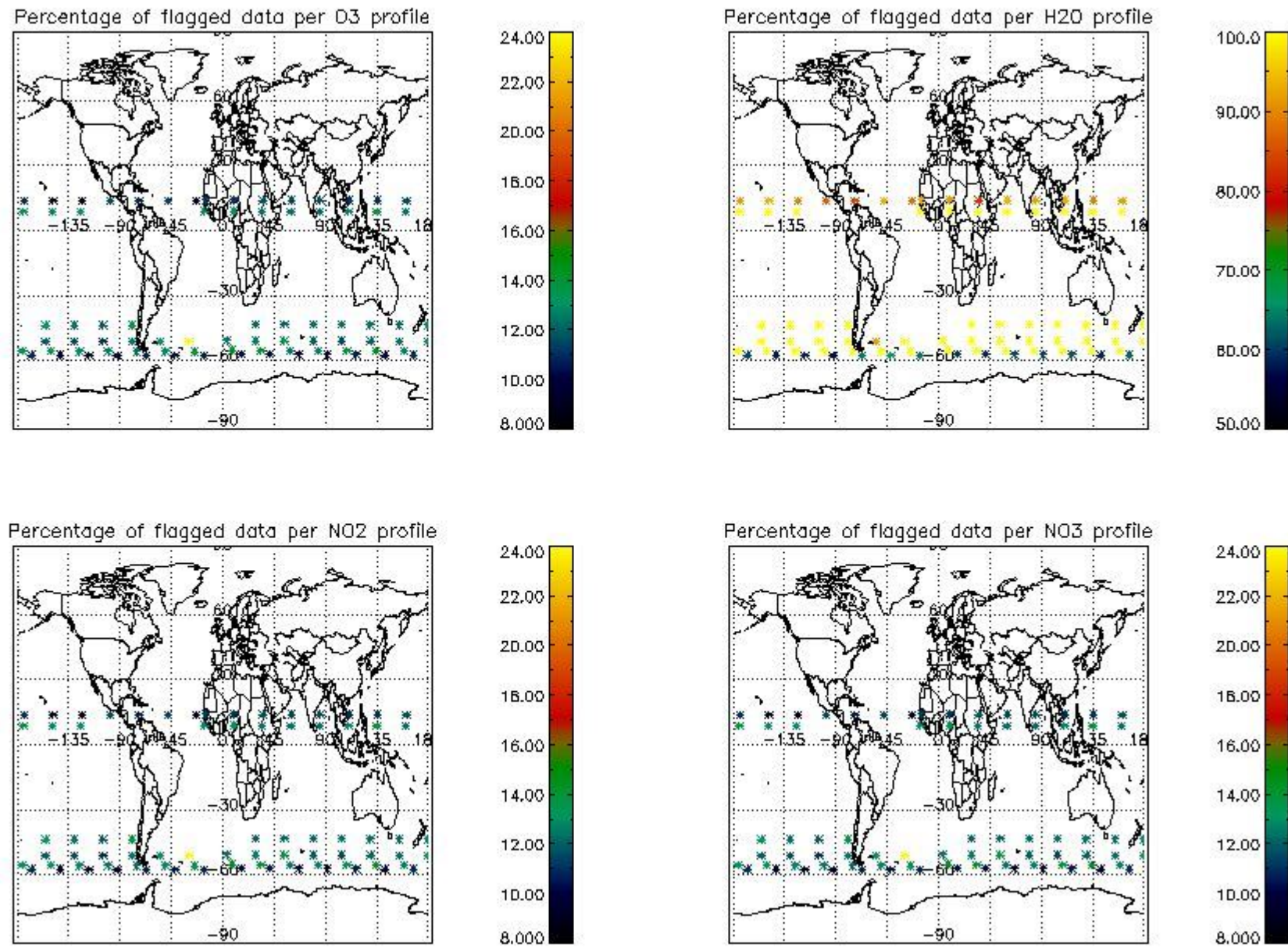
3. Quality information per product

In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)



3.2 Plot quality information per product (world map)

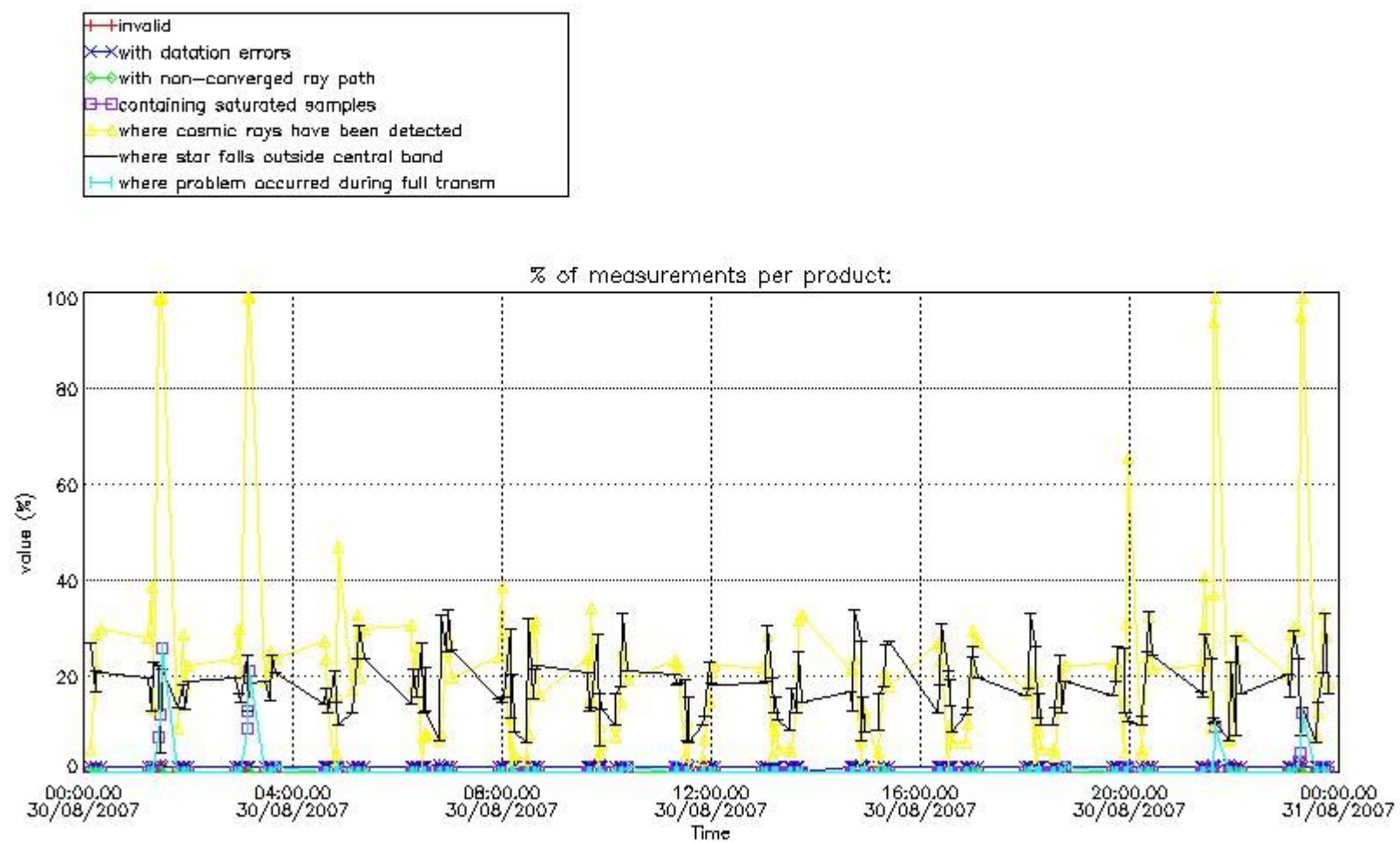


4. Level 1 quality information per product

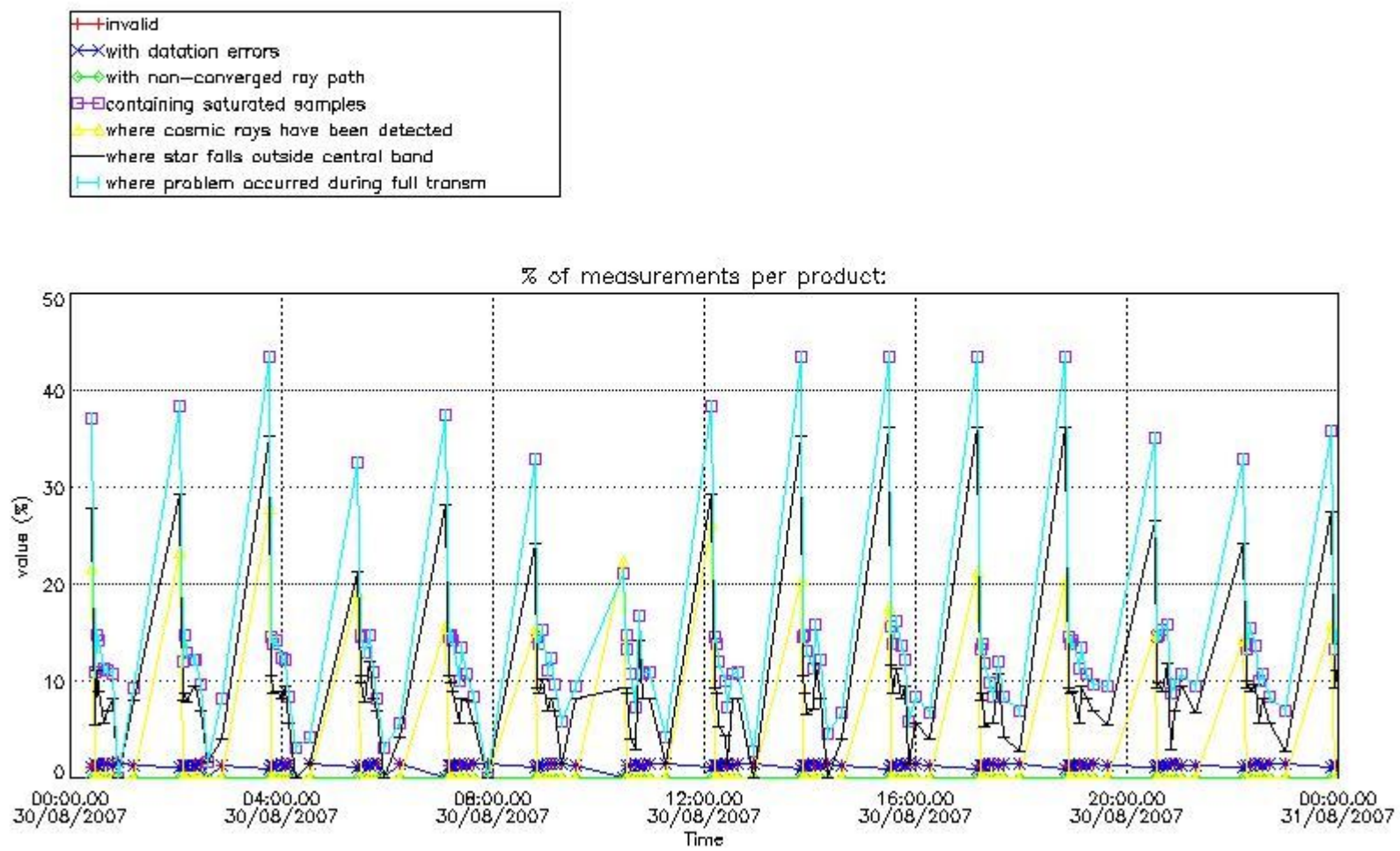
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes



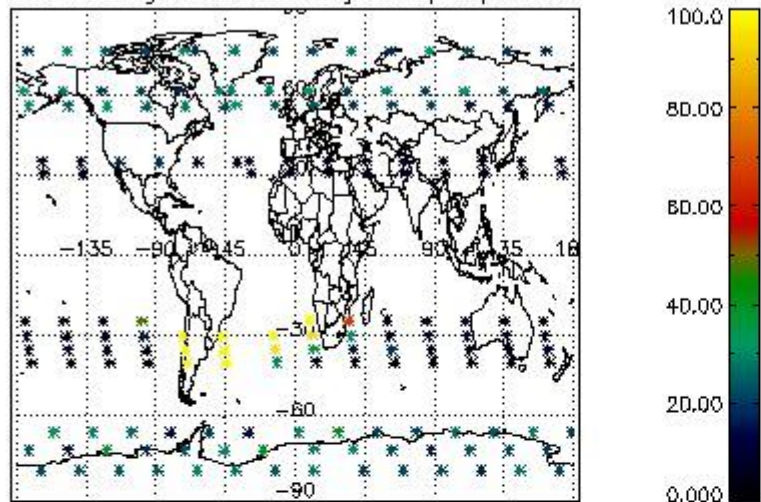
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



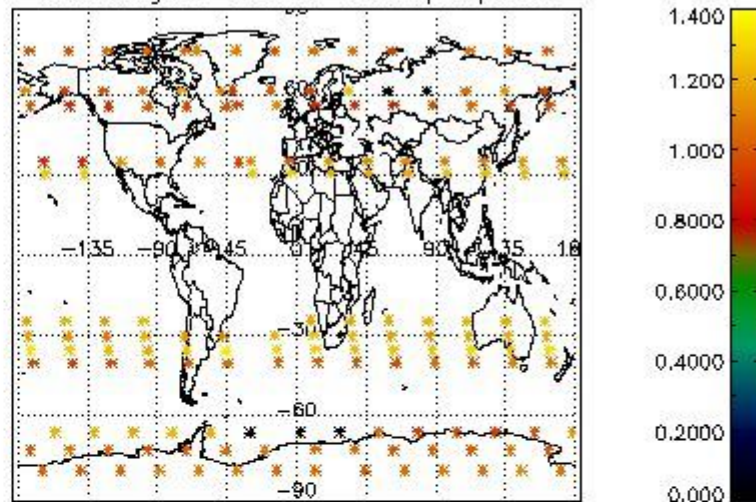
4.2 Plot quality information per product coming from level 1b processing (world map)

4.2.1 Plot level 1 quality information per product (world map): ENVISAT ASCENDING passes

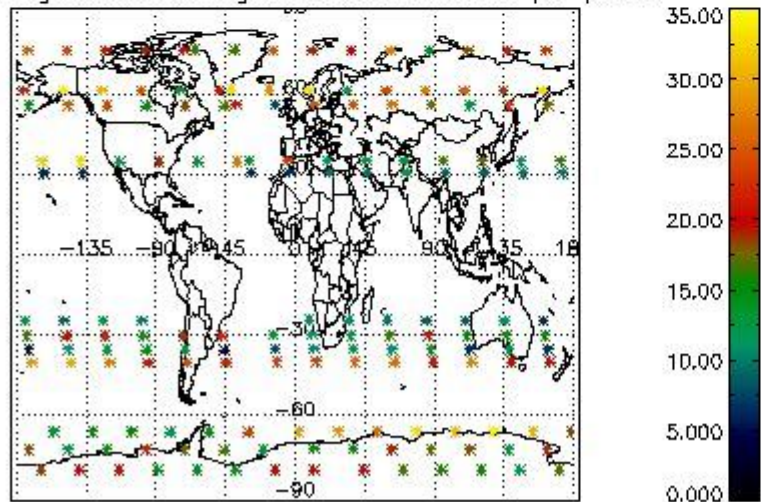
Percentage of cosmic ray hits per profile



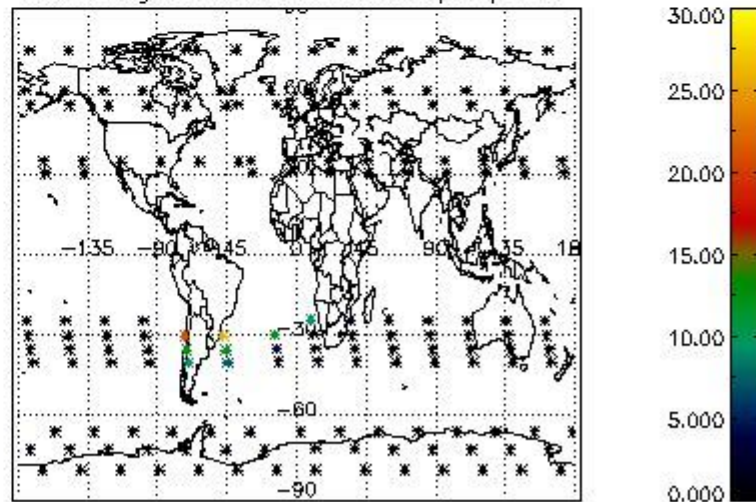
Percentage of datation errors per profile



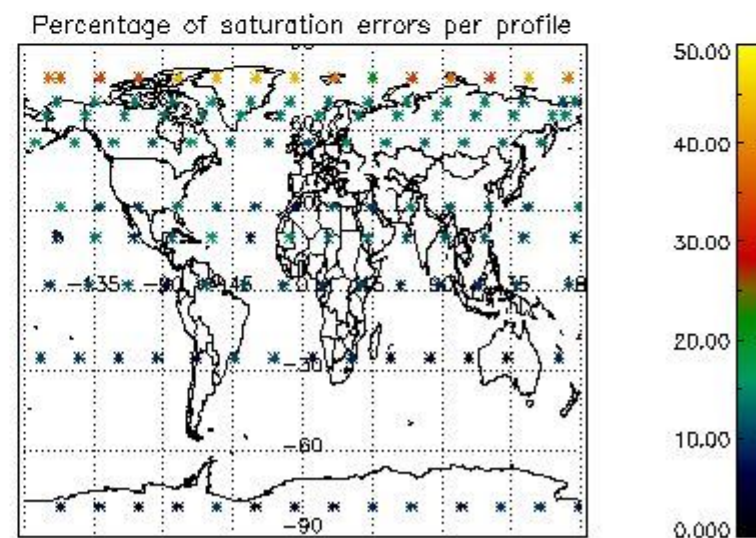
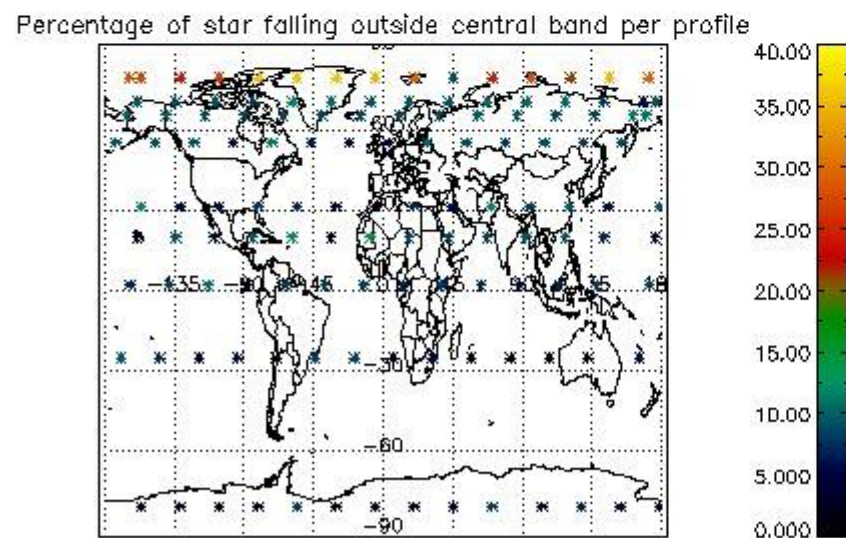
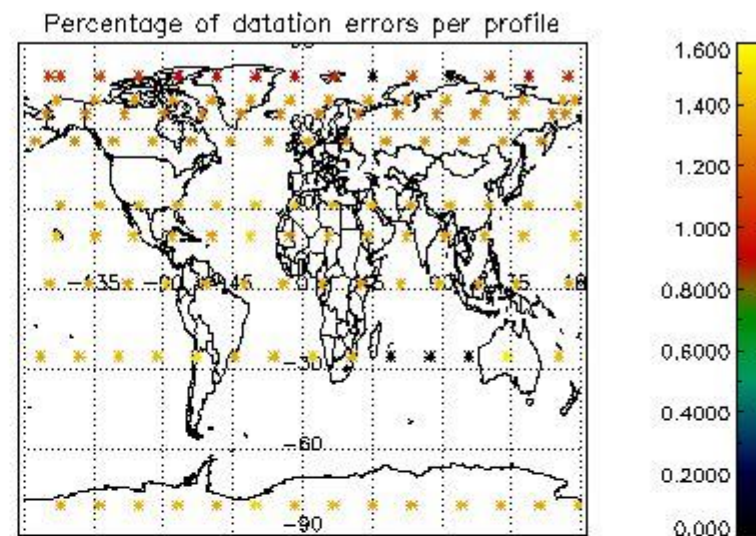
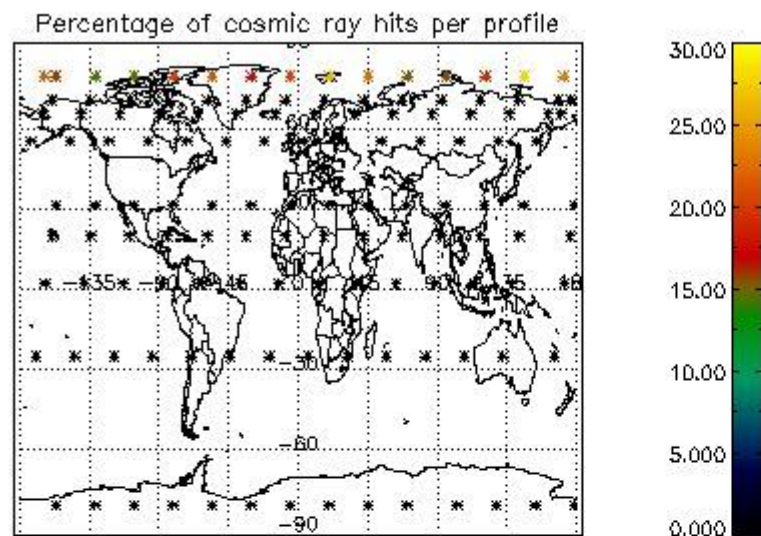
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

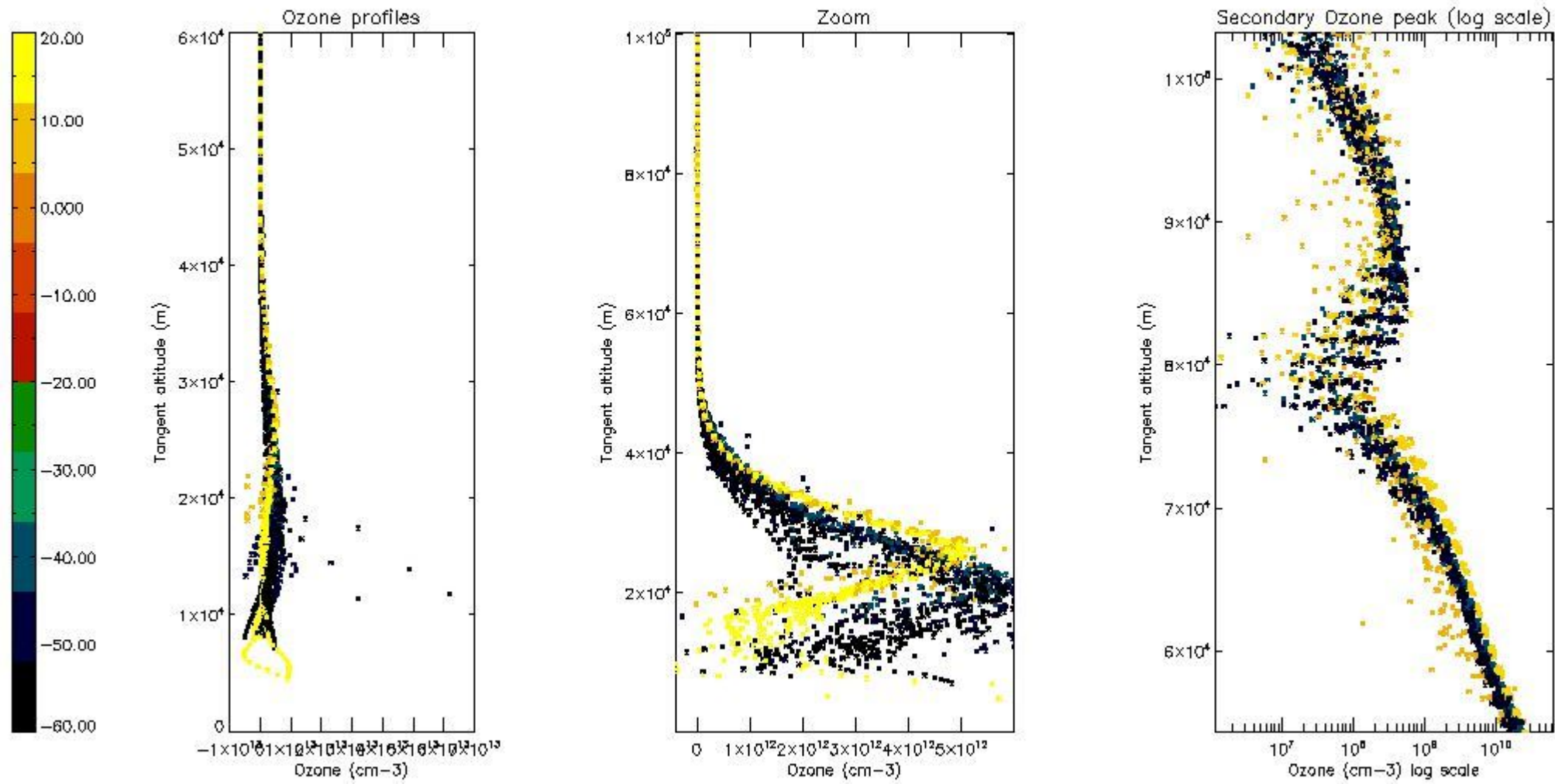
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	28
STD < 20	19

STD < 10	16
STD < 5	12

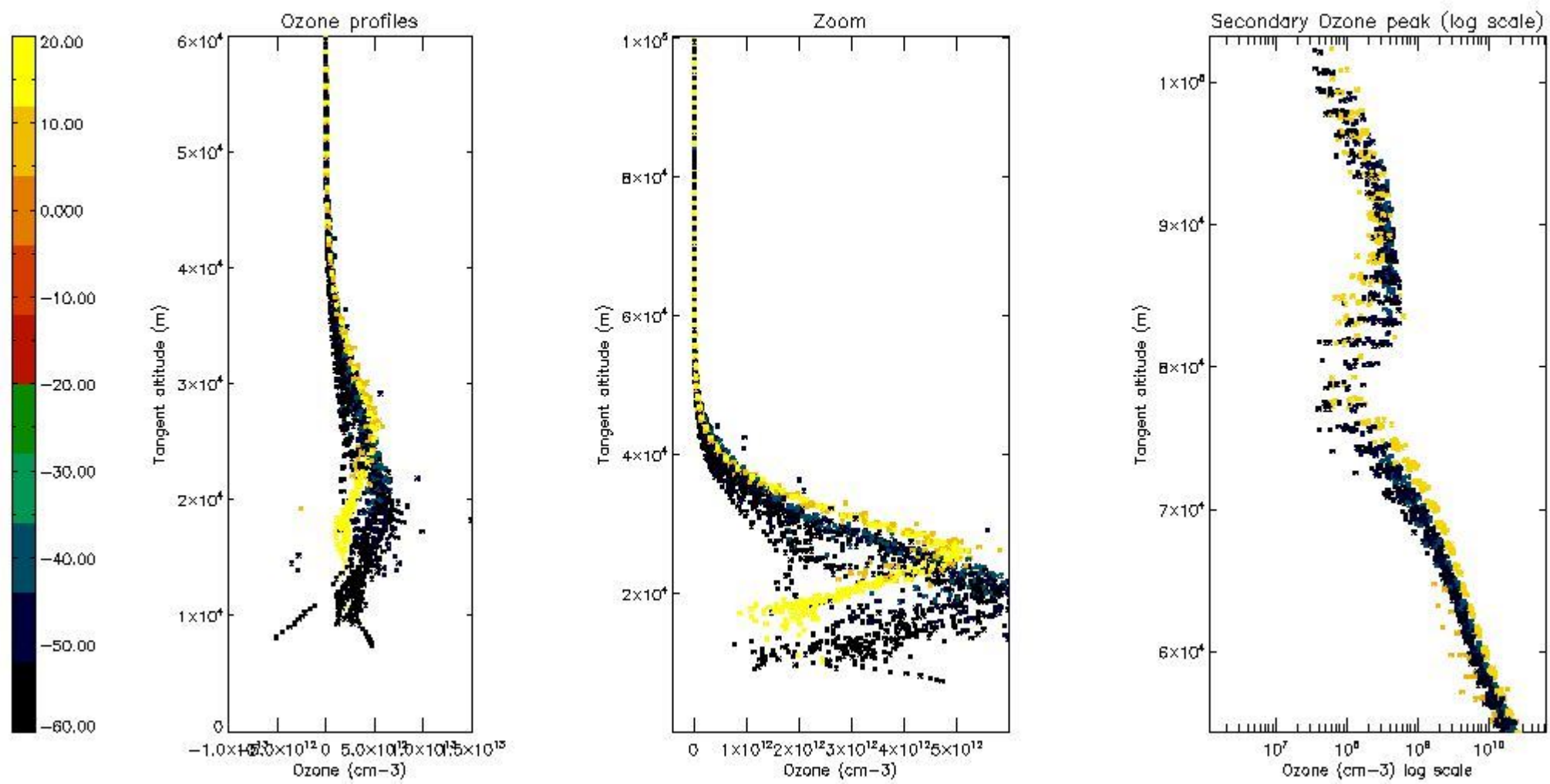
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



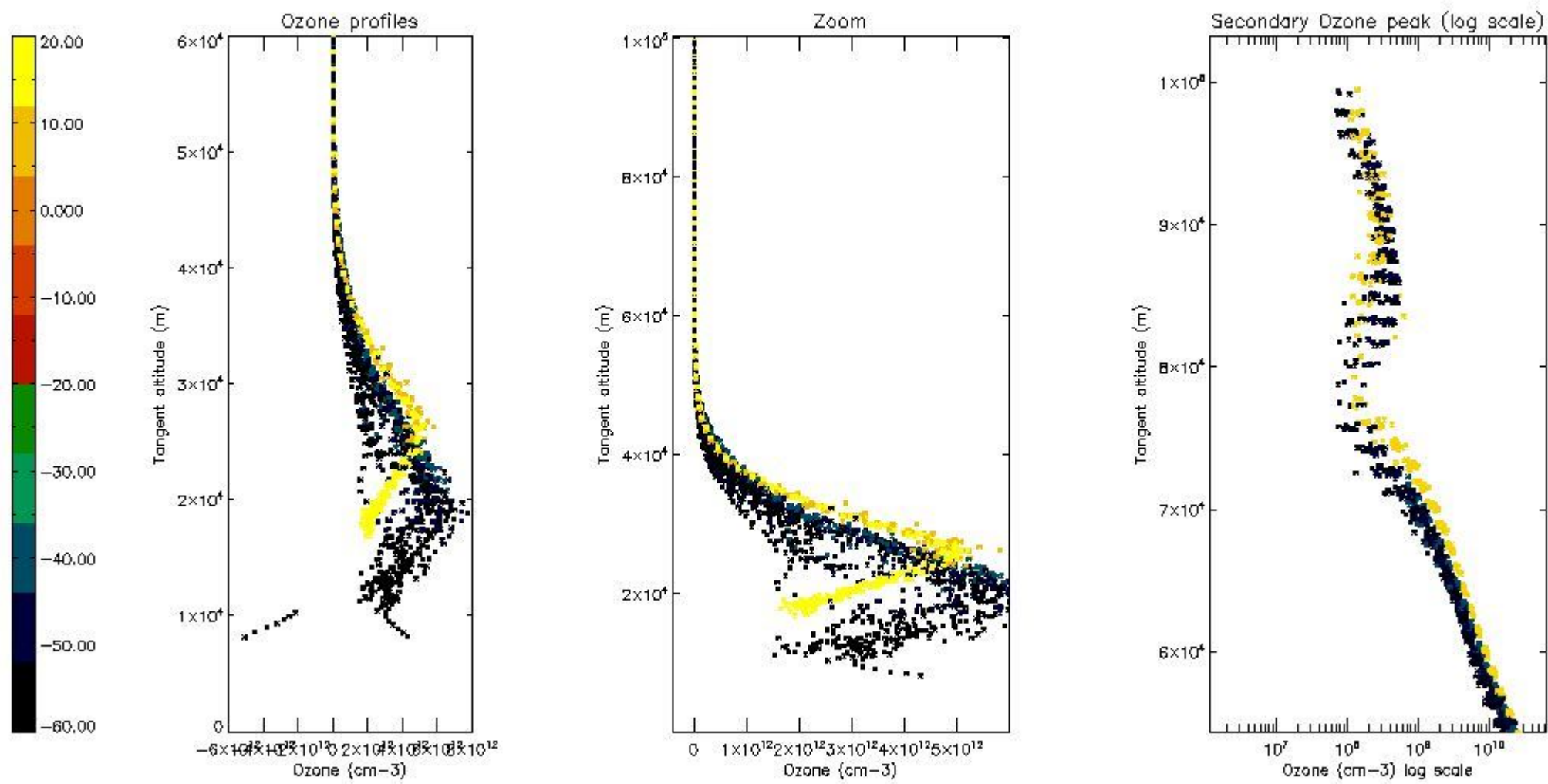
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



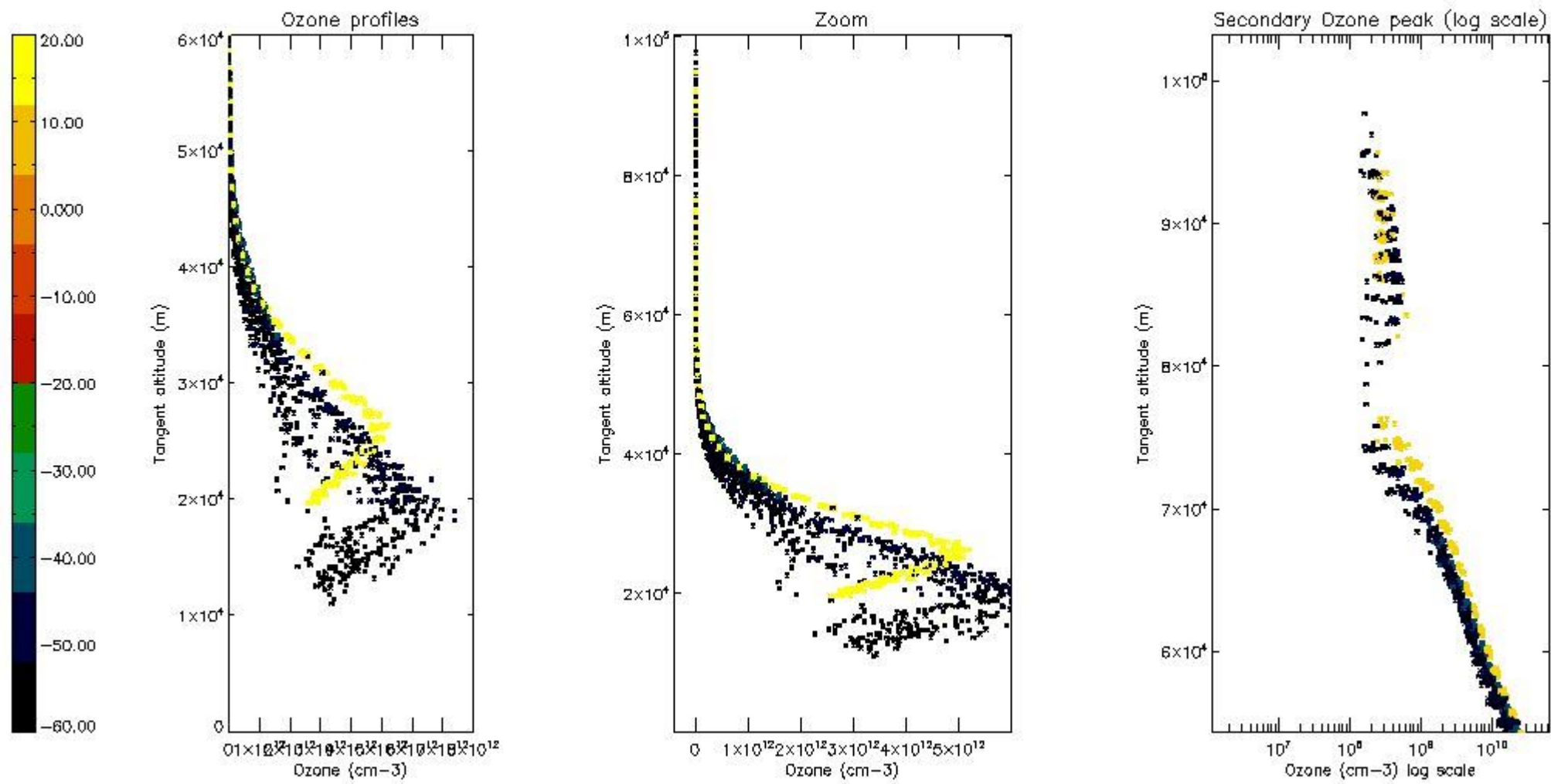
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



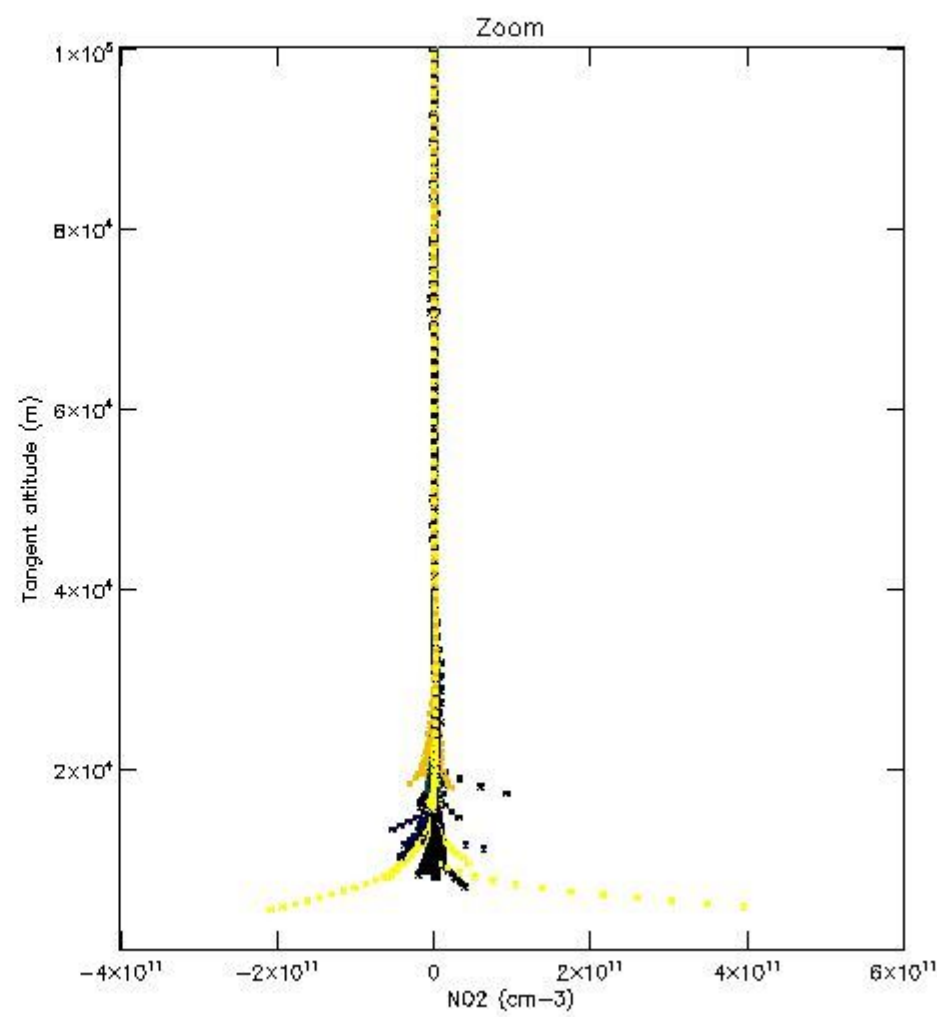
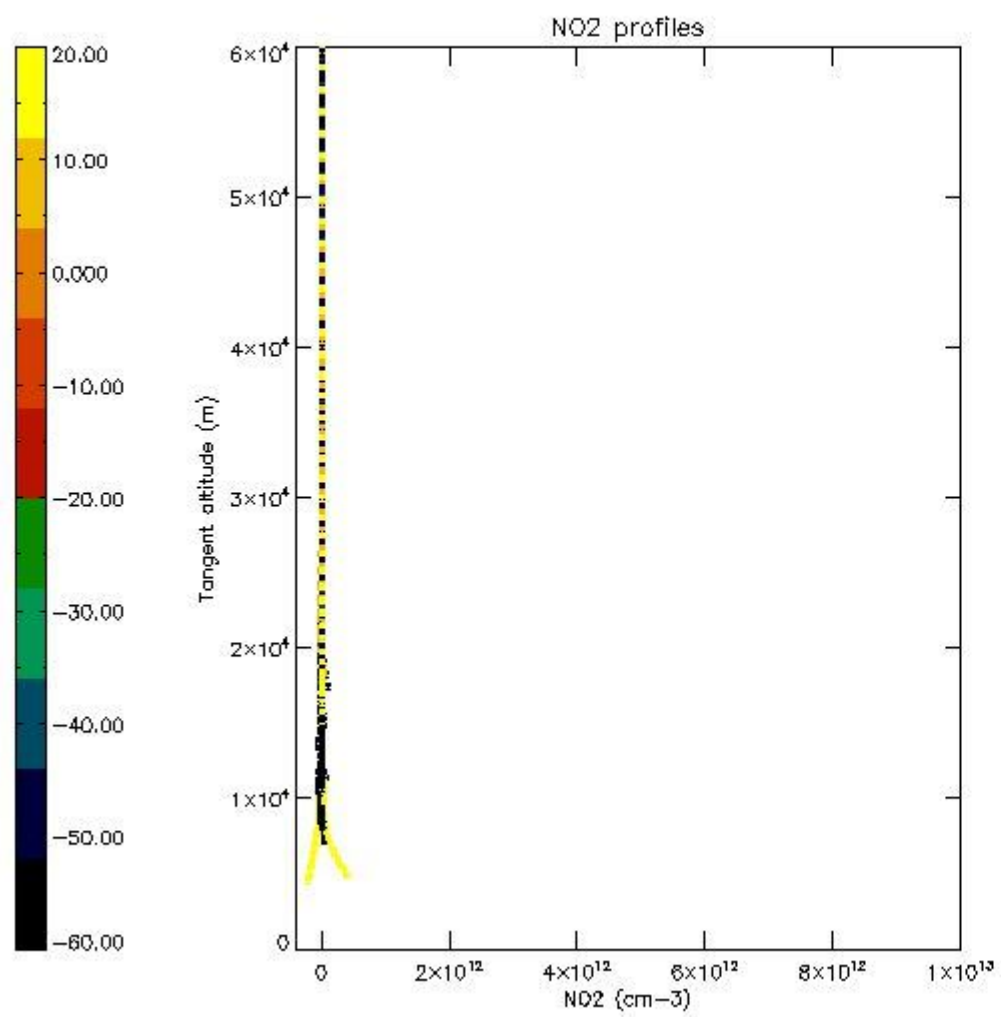
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



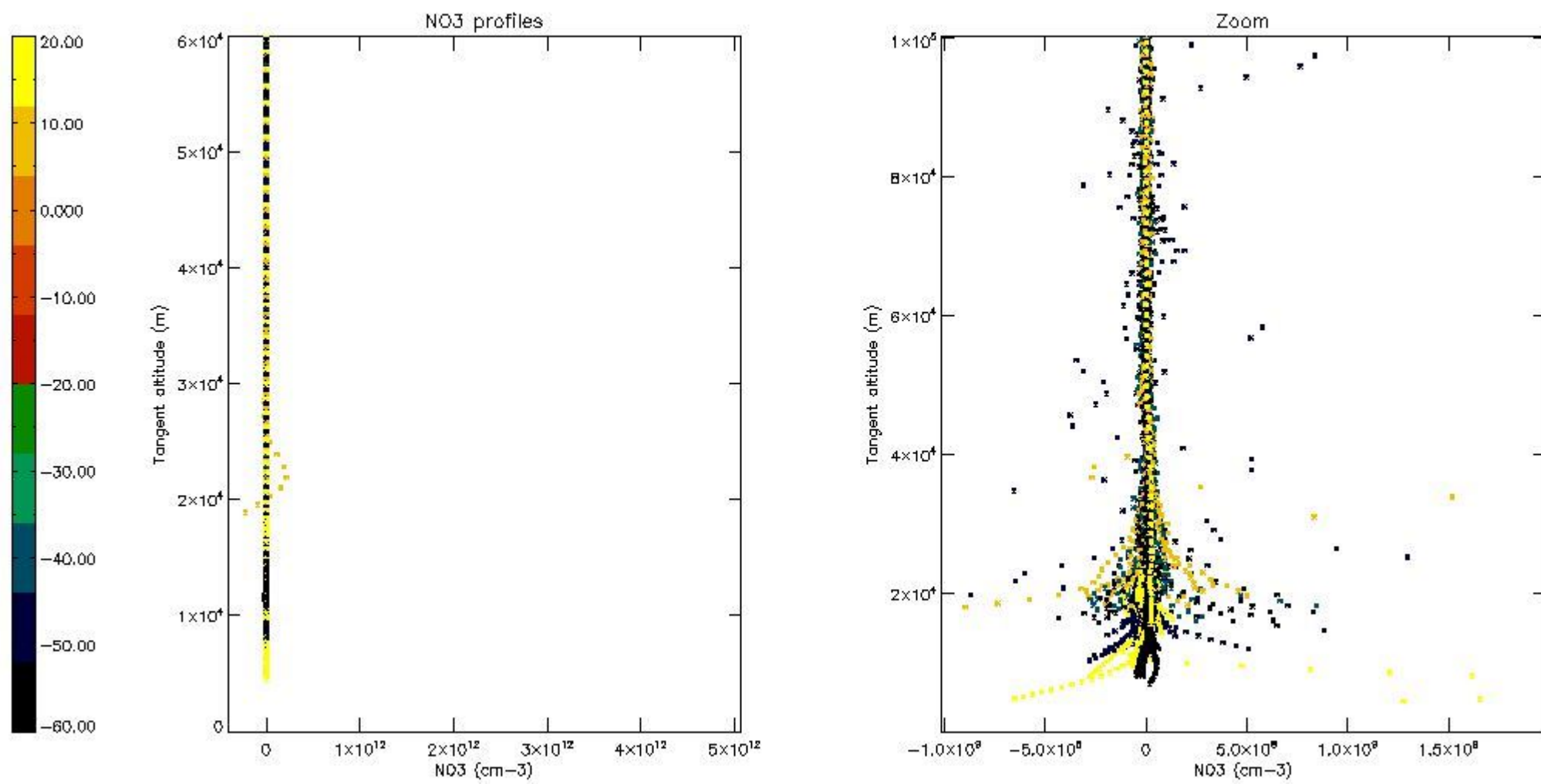
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



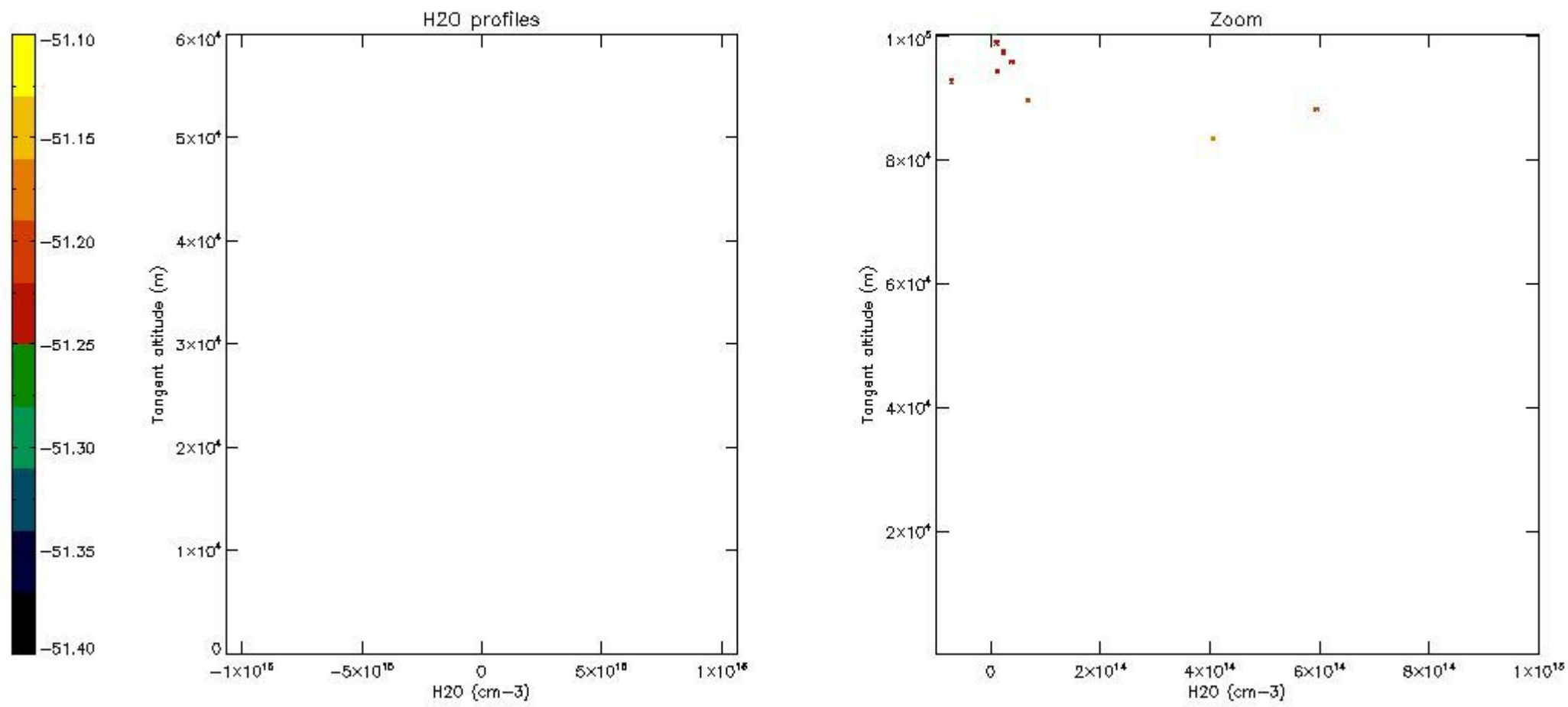
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



5.8 Plot H2O profiles for all STD (only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors)

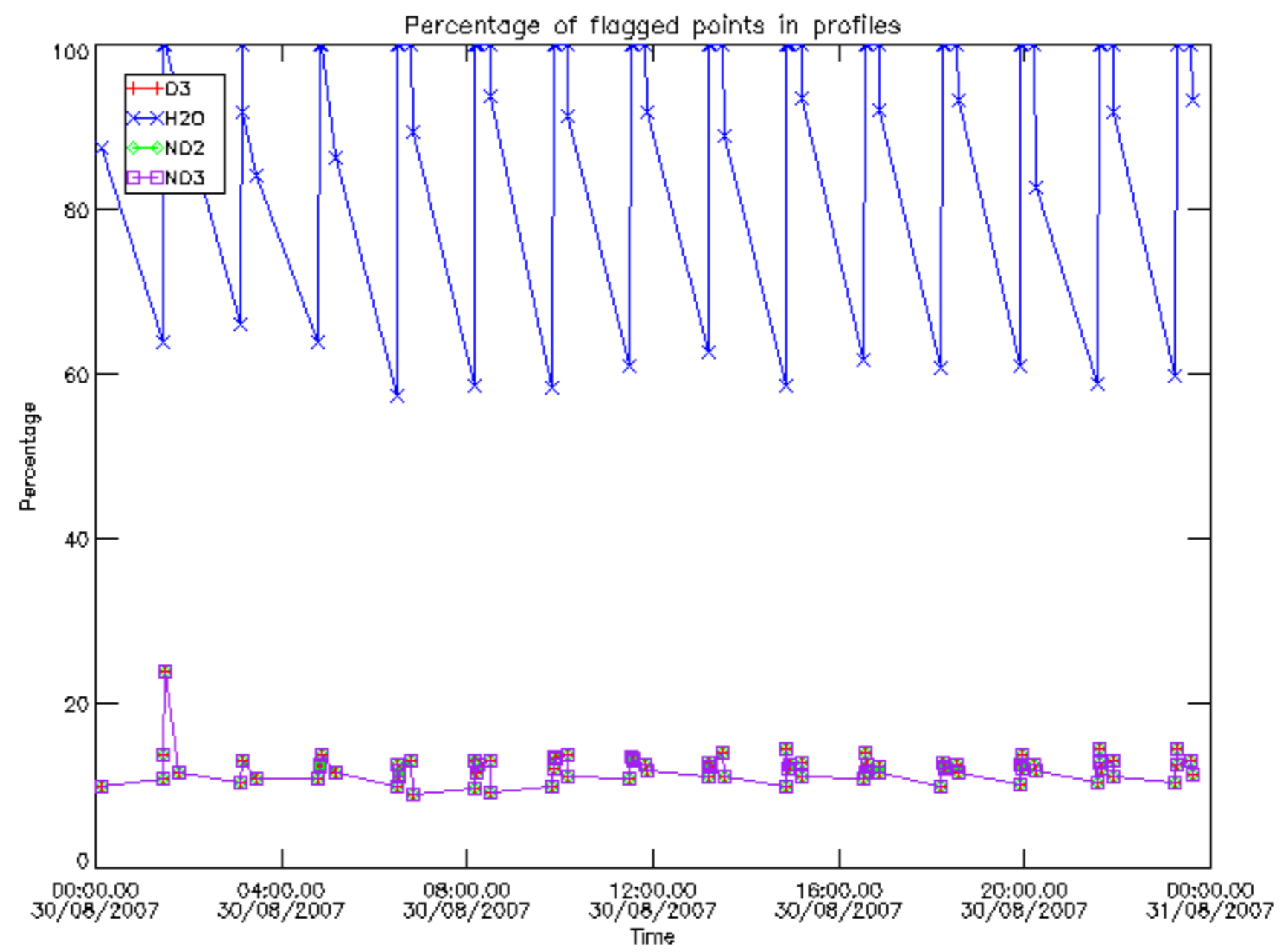
The colorbar represents the latitude.



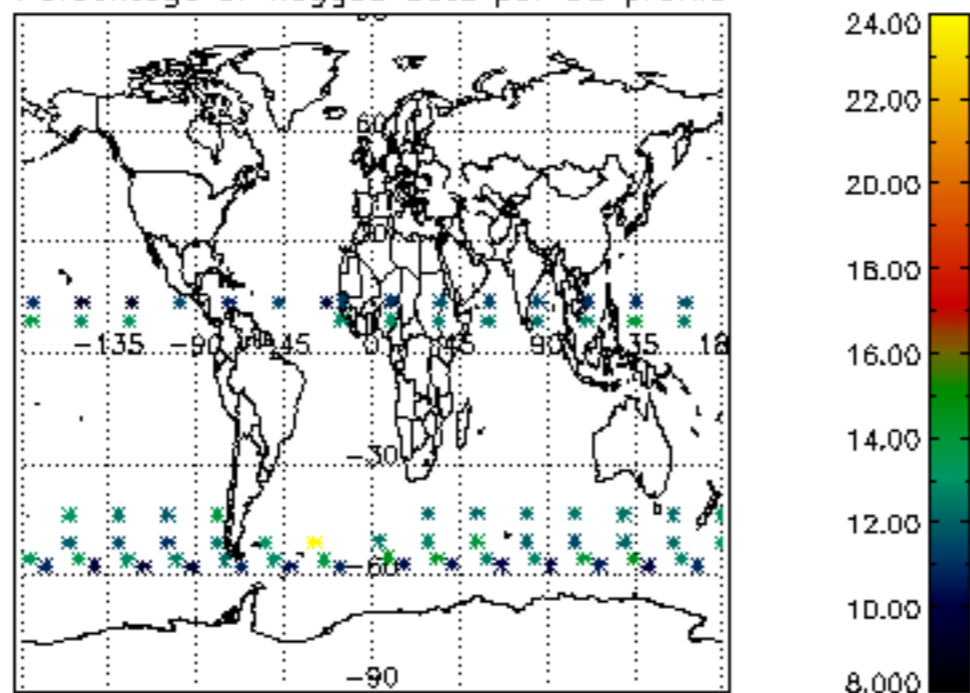
6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

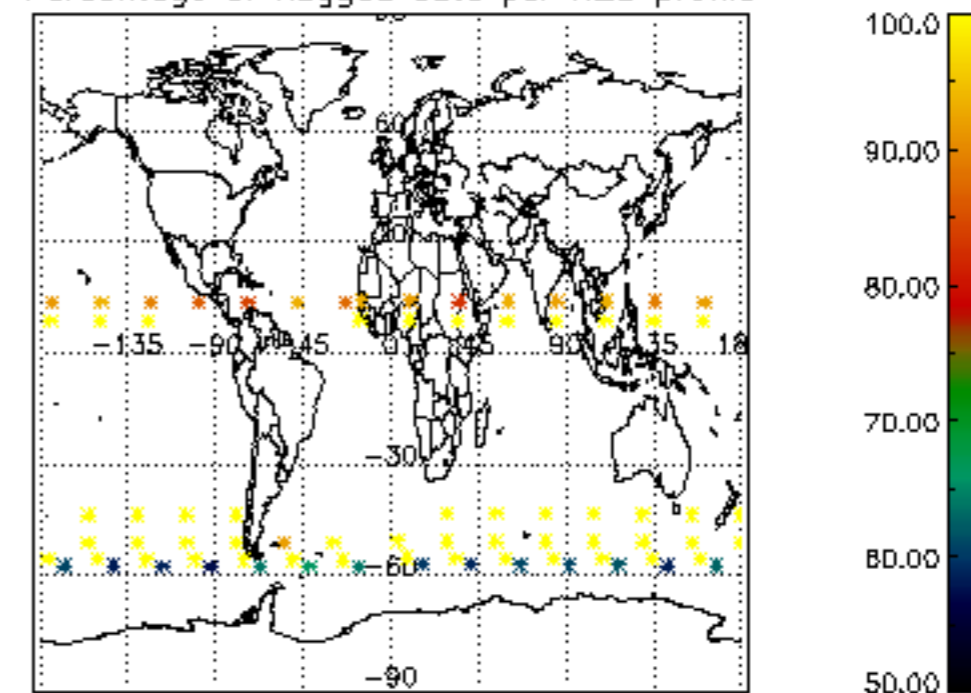
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	30-AUG-2007 00:07:09
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	30-AUG-2007 00:07:09
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	30-AUG-2007 00:07:09



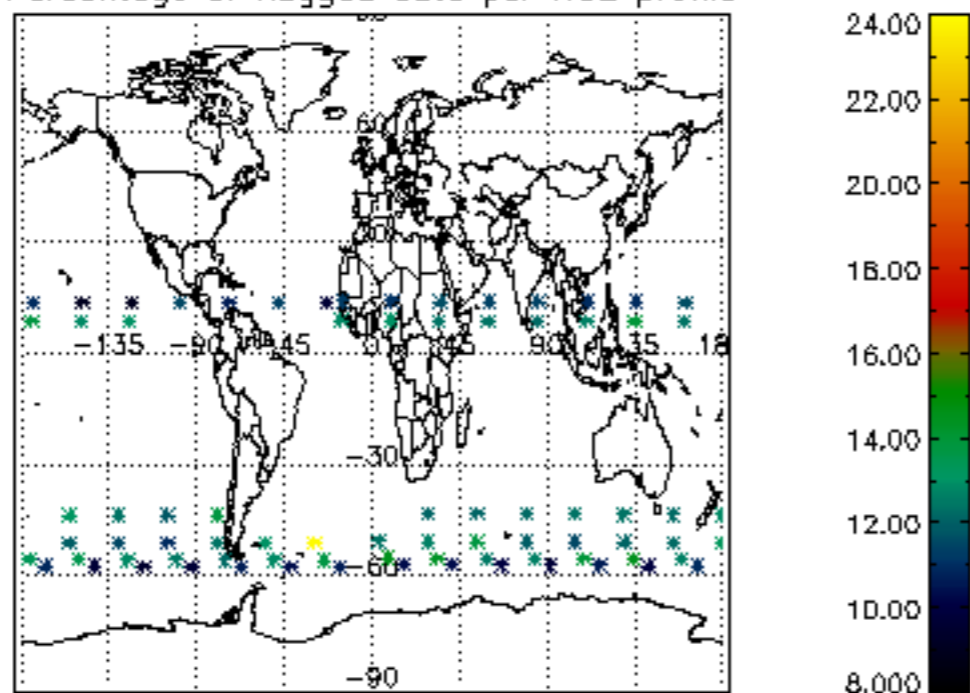
Percentage of flagged data per D3 profile



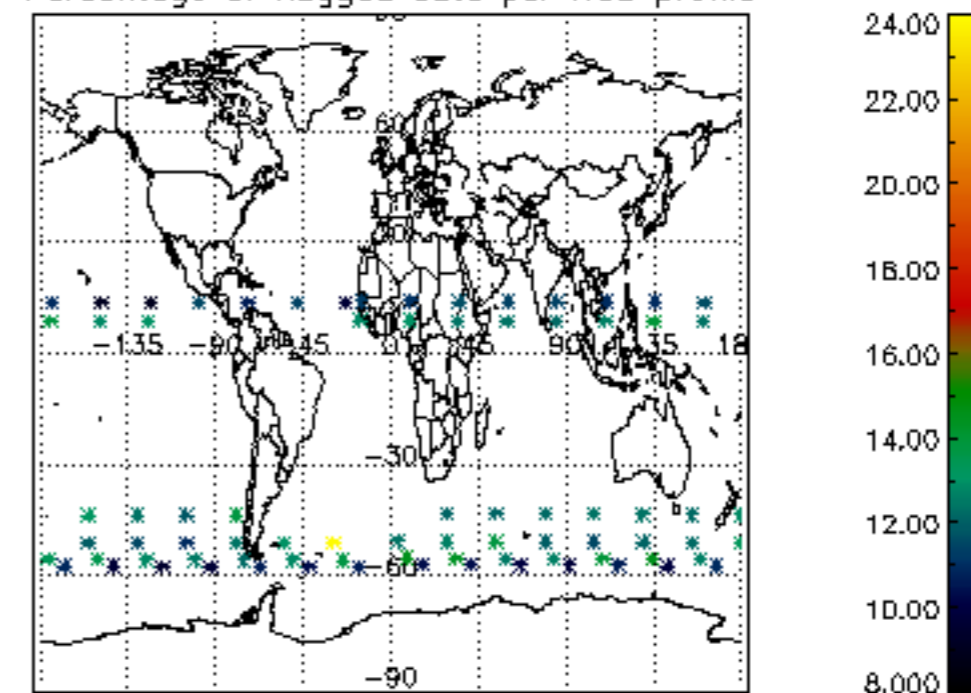
Percentage of flagged data per H2O profile

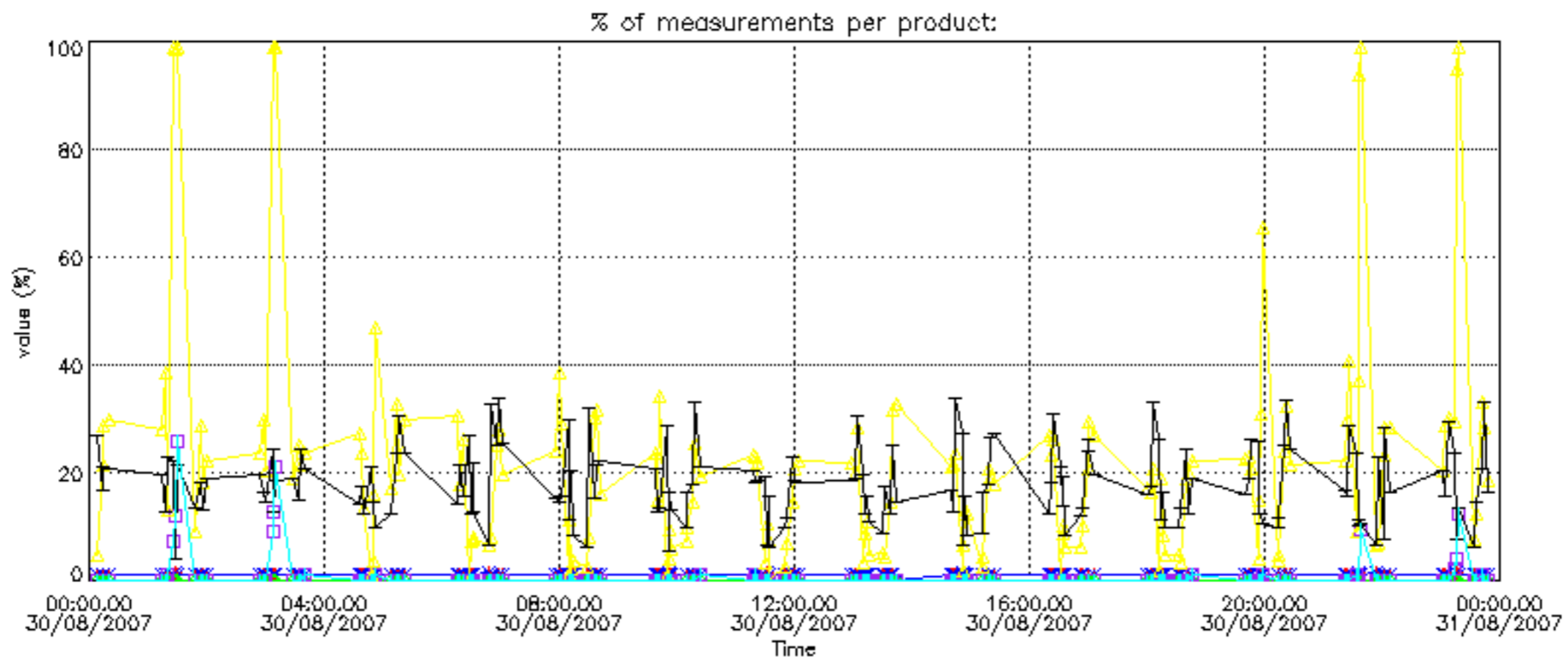


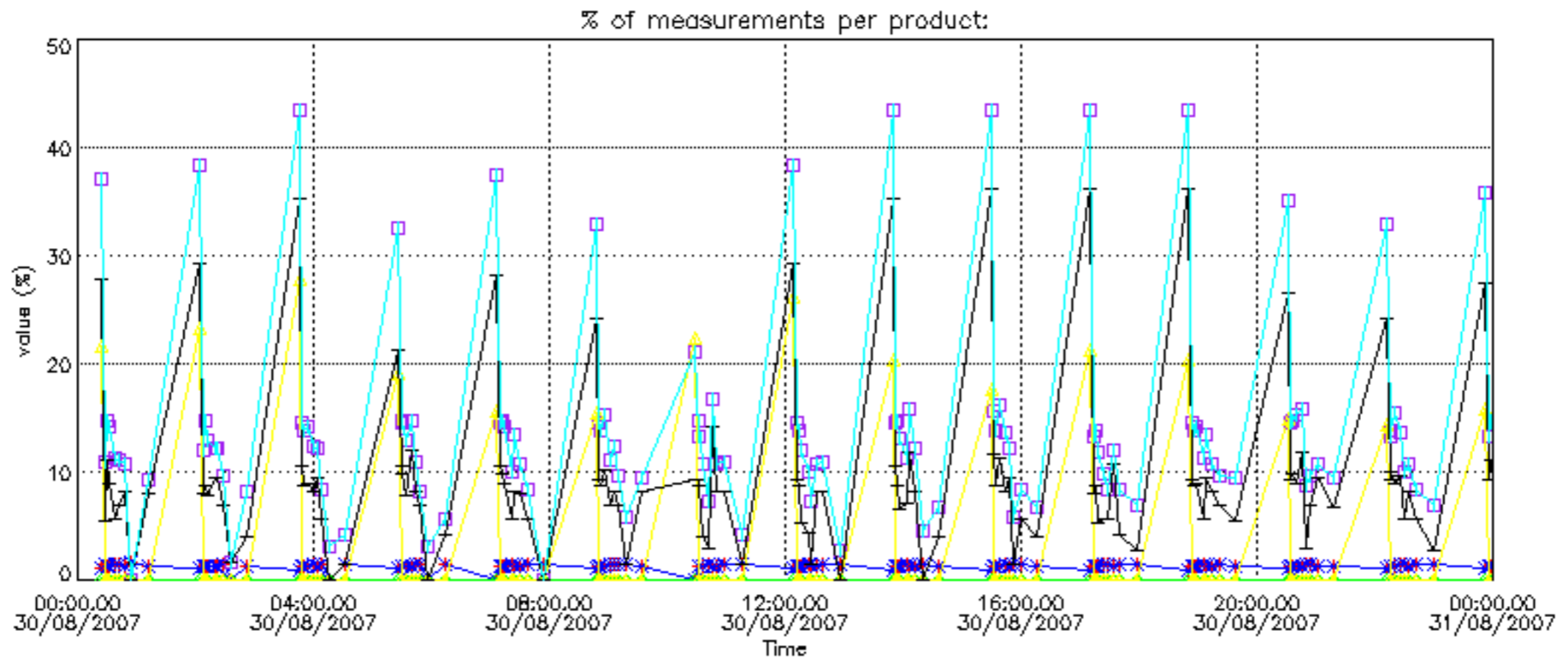
Percentage of flagged data per NO2 profile



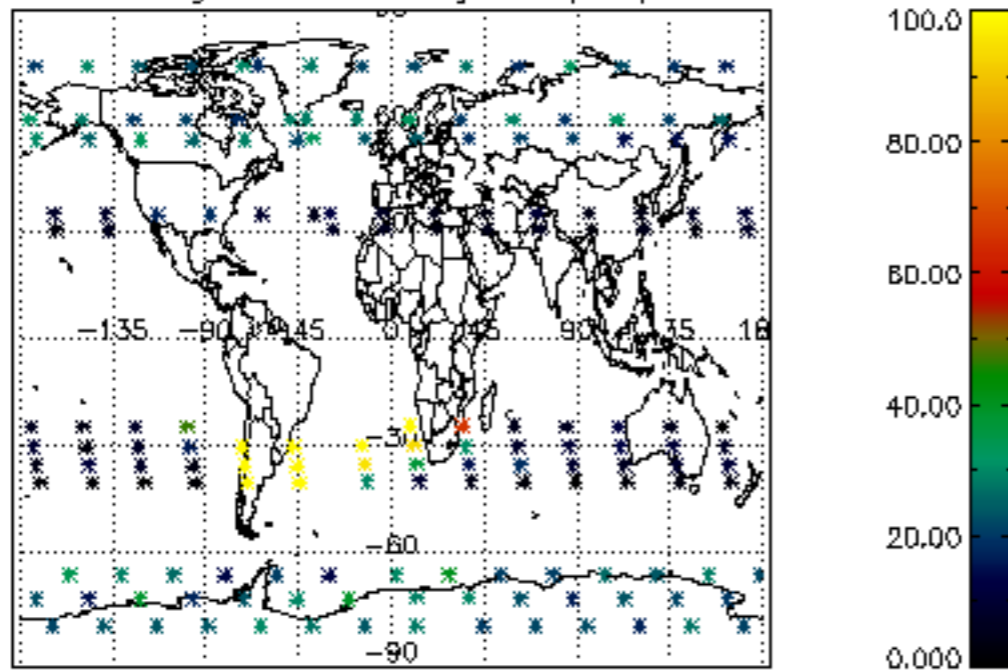
Percentage of flagged data per NO3 profile



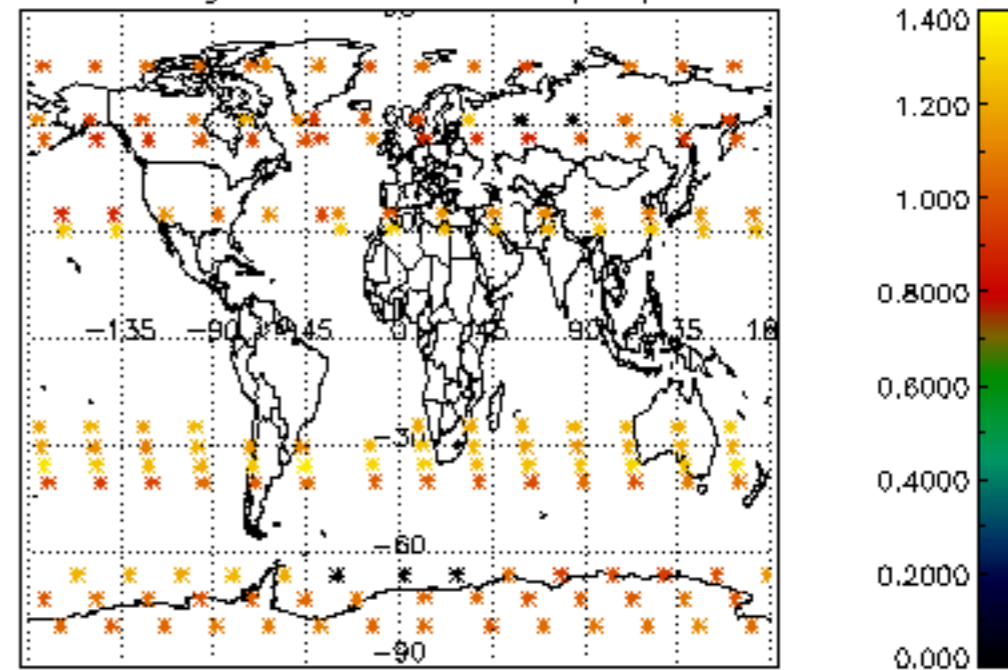




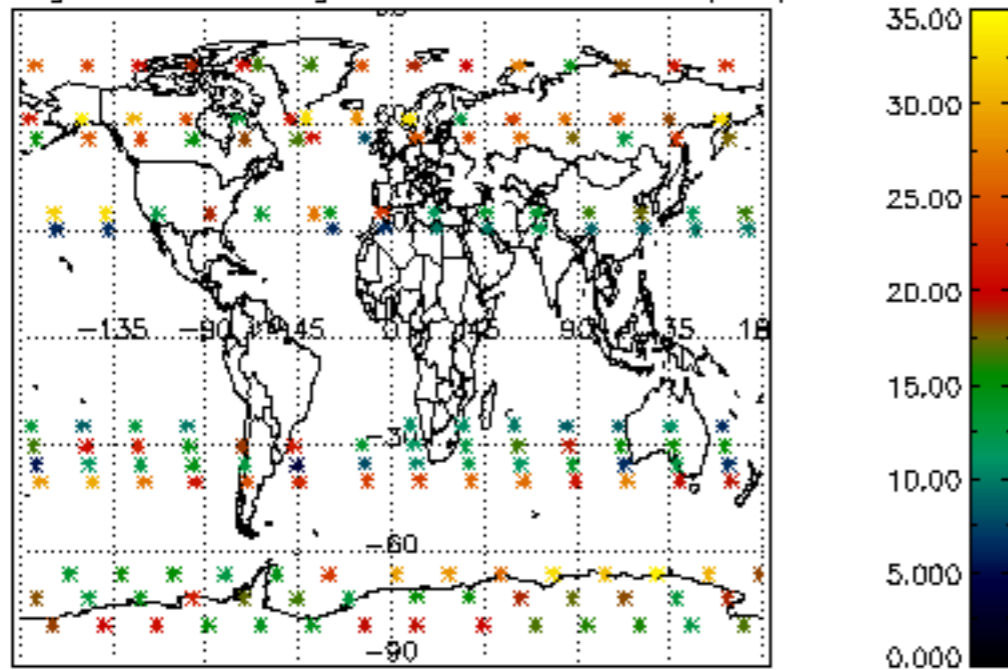
Percentage of cosmic ray hits per profile



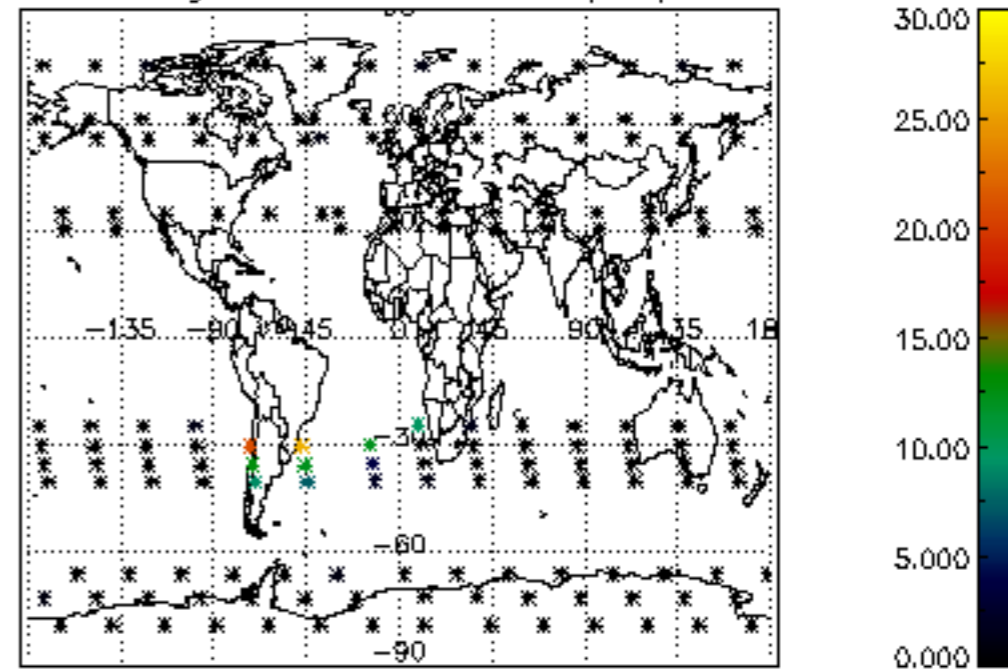
Percentage of datation errors per profile



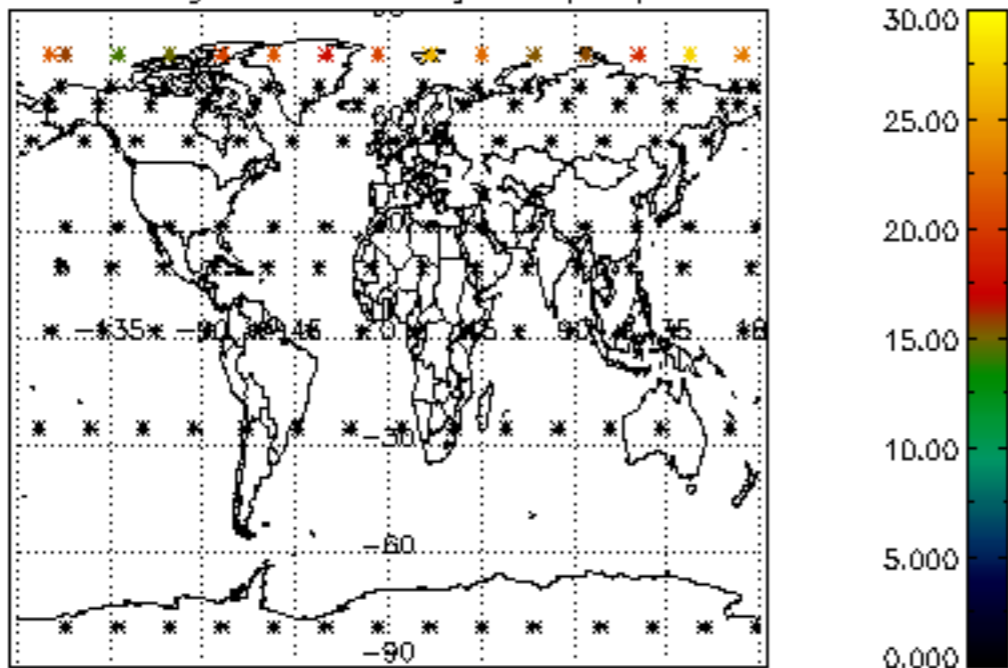
Percentage of star falling outside central band per profile



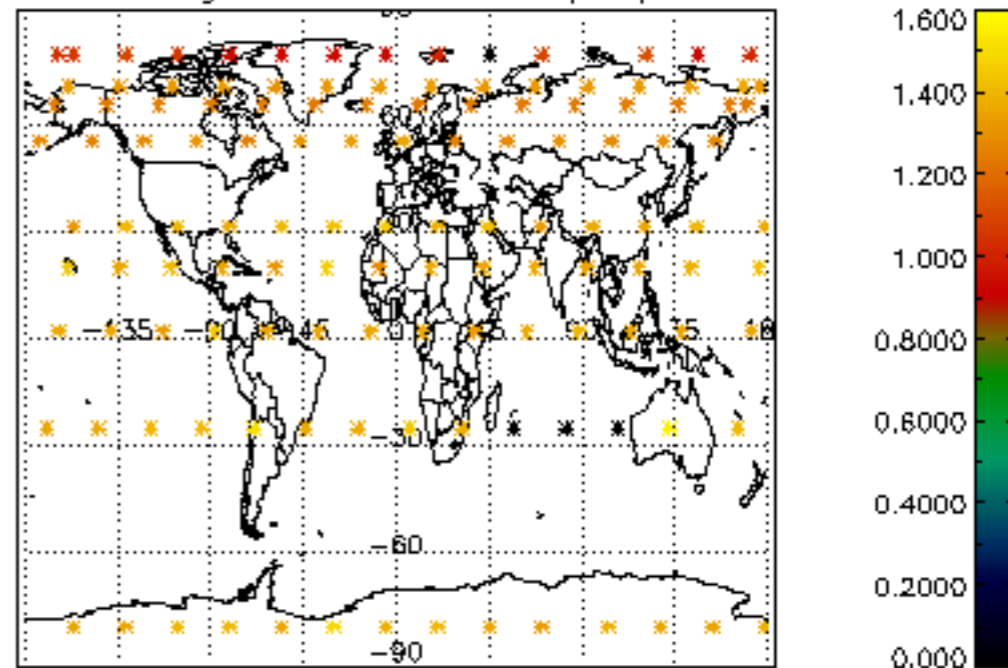
Percentage of saturation errors per profile



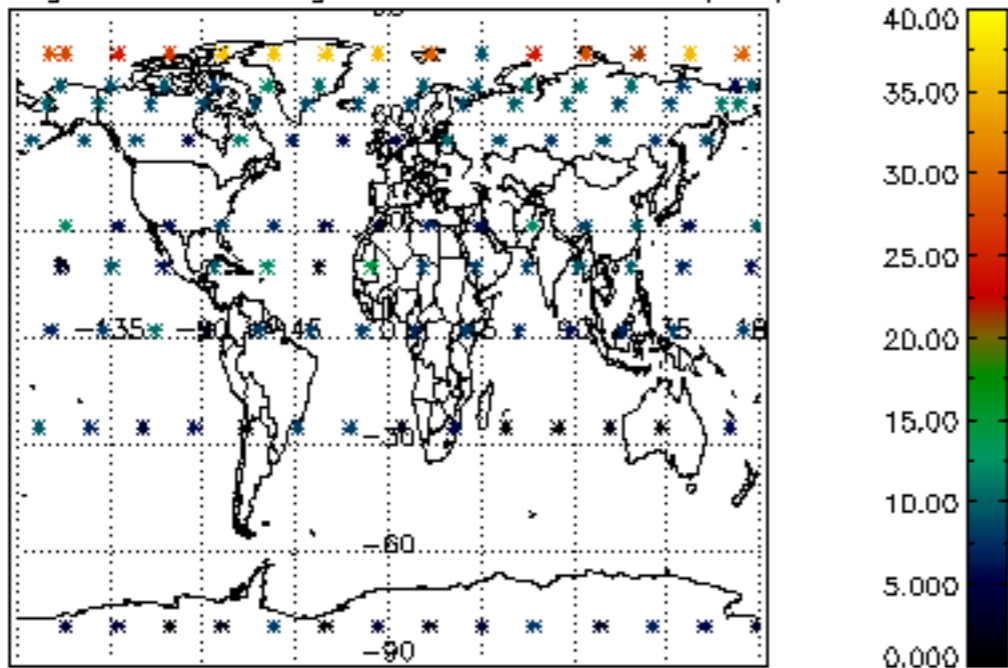
Percentage of cosmic ray hits per profile



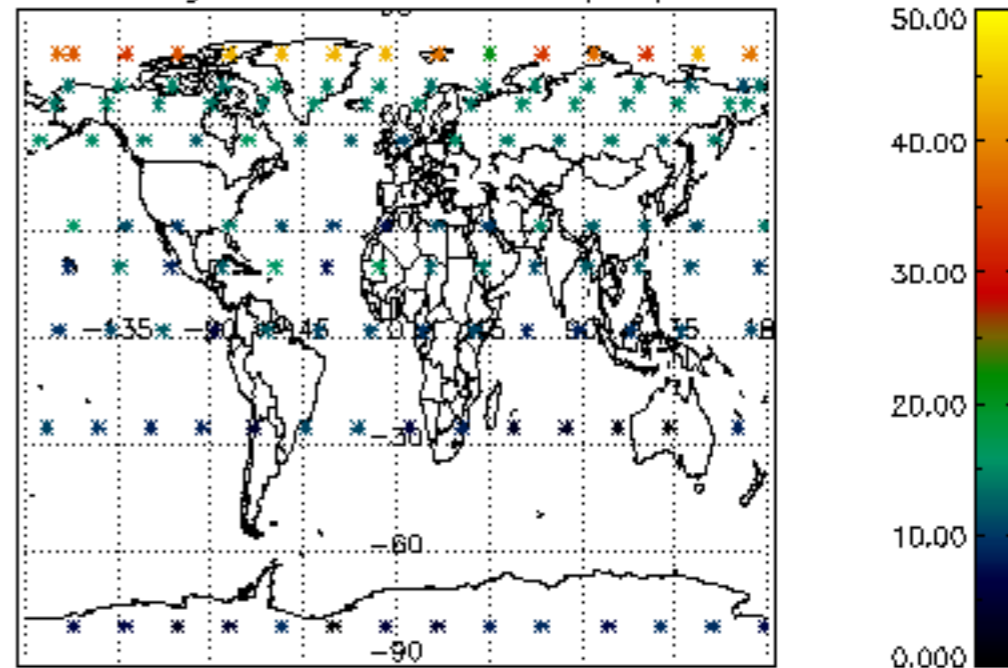
Percentage of datation errors per profile

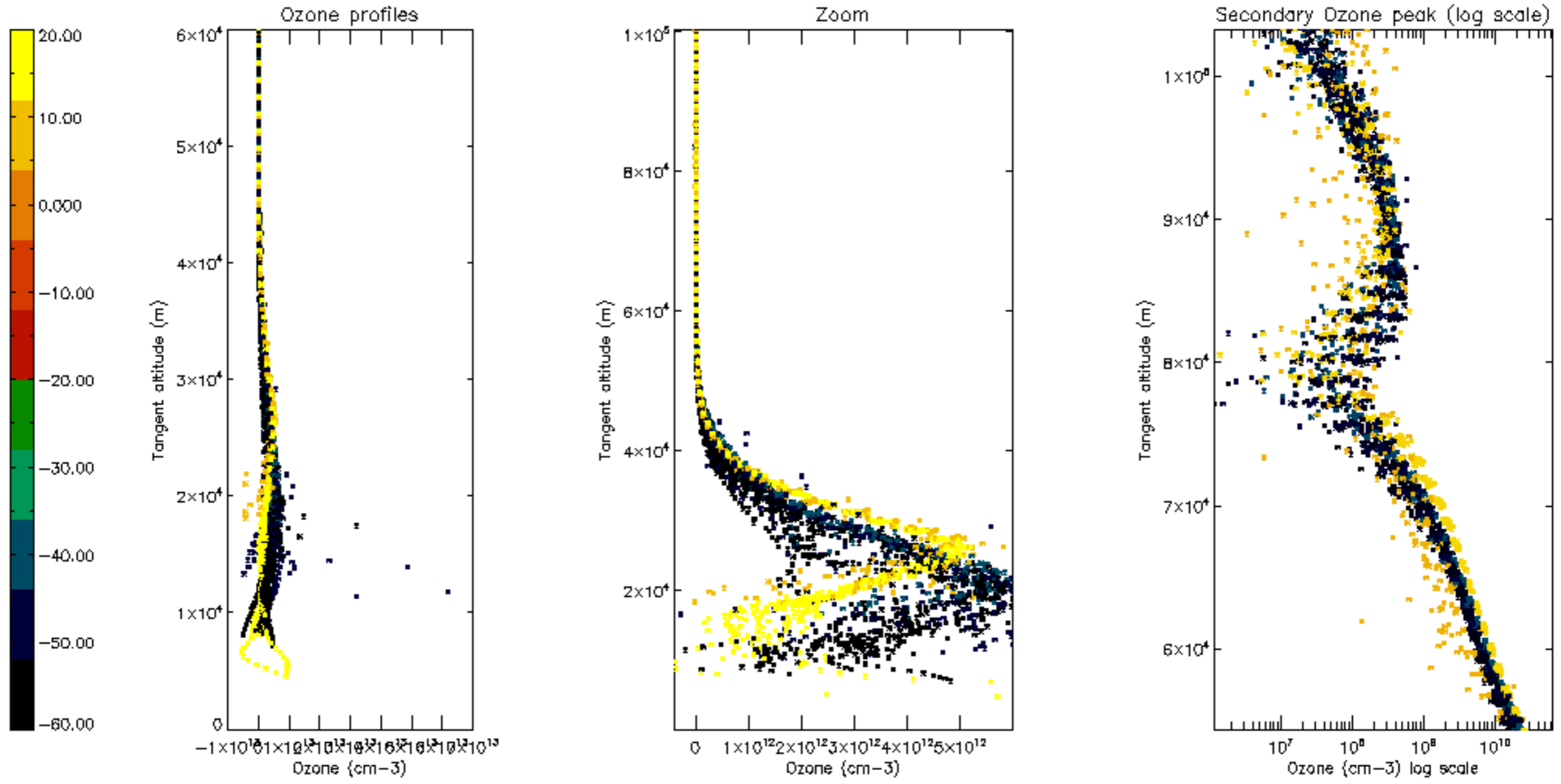


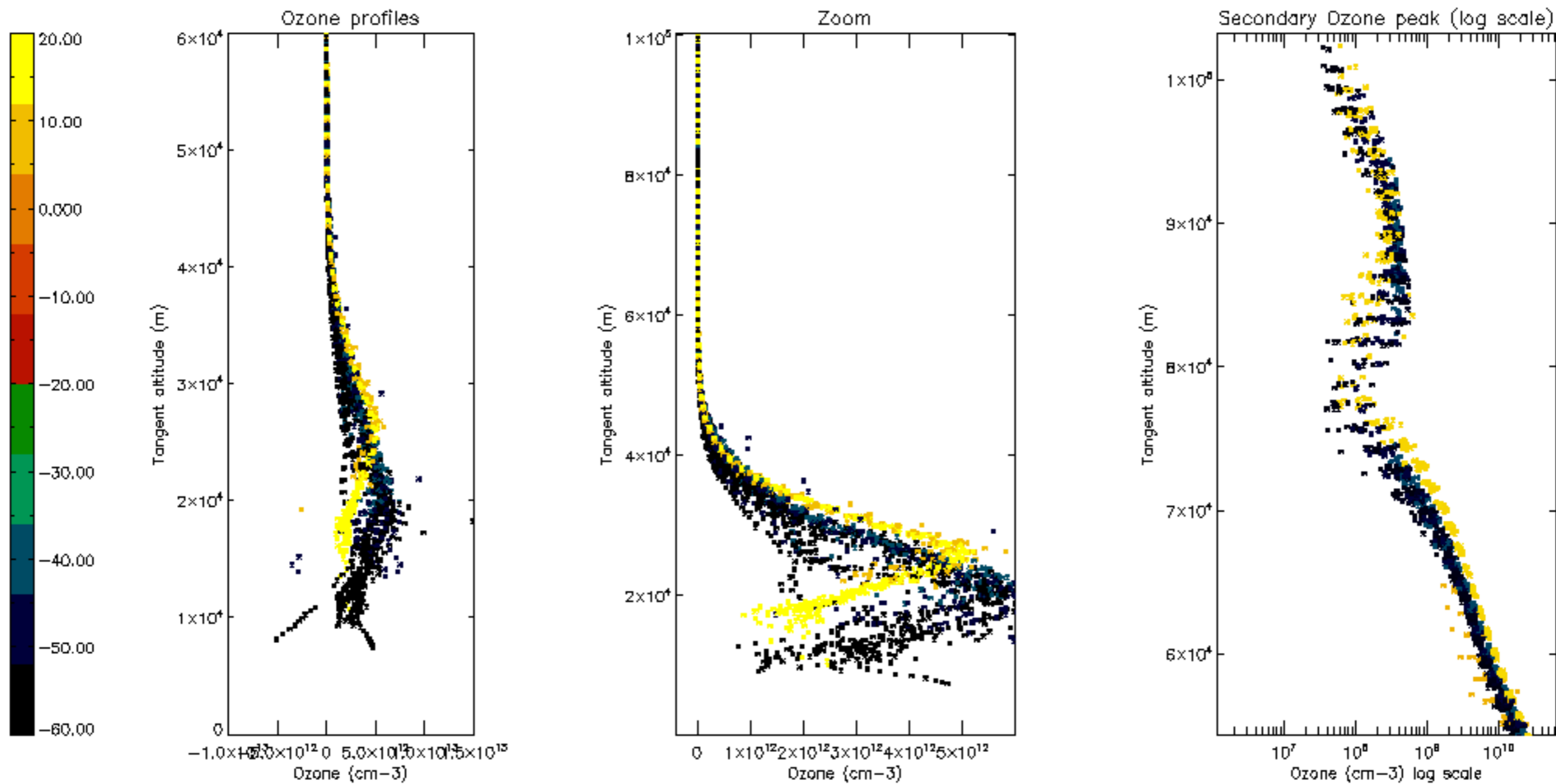
Percentage of star falling outside central band per profile

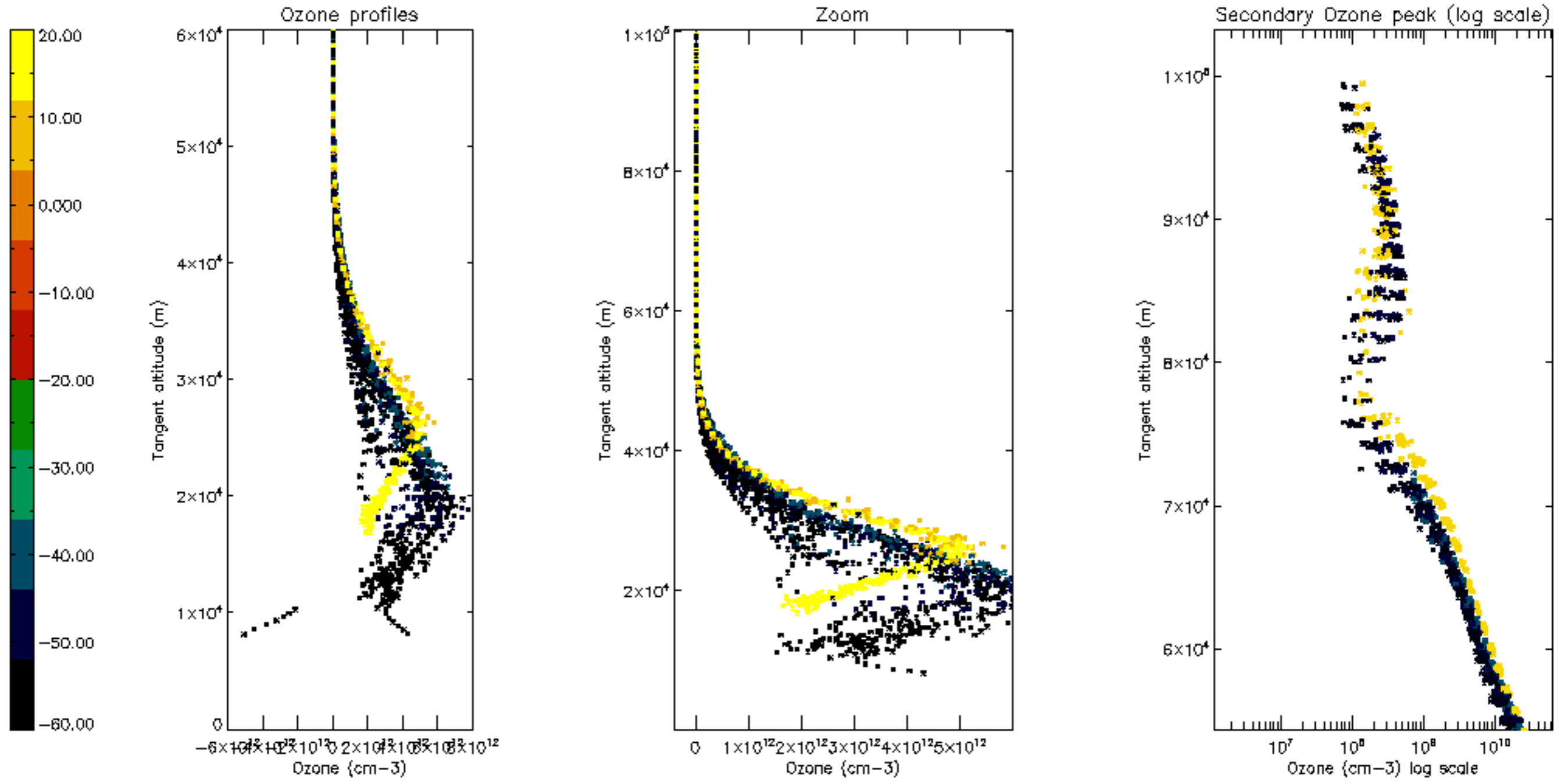


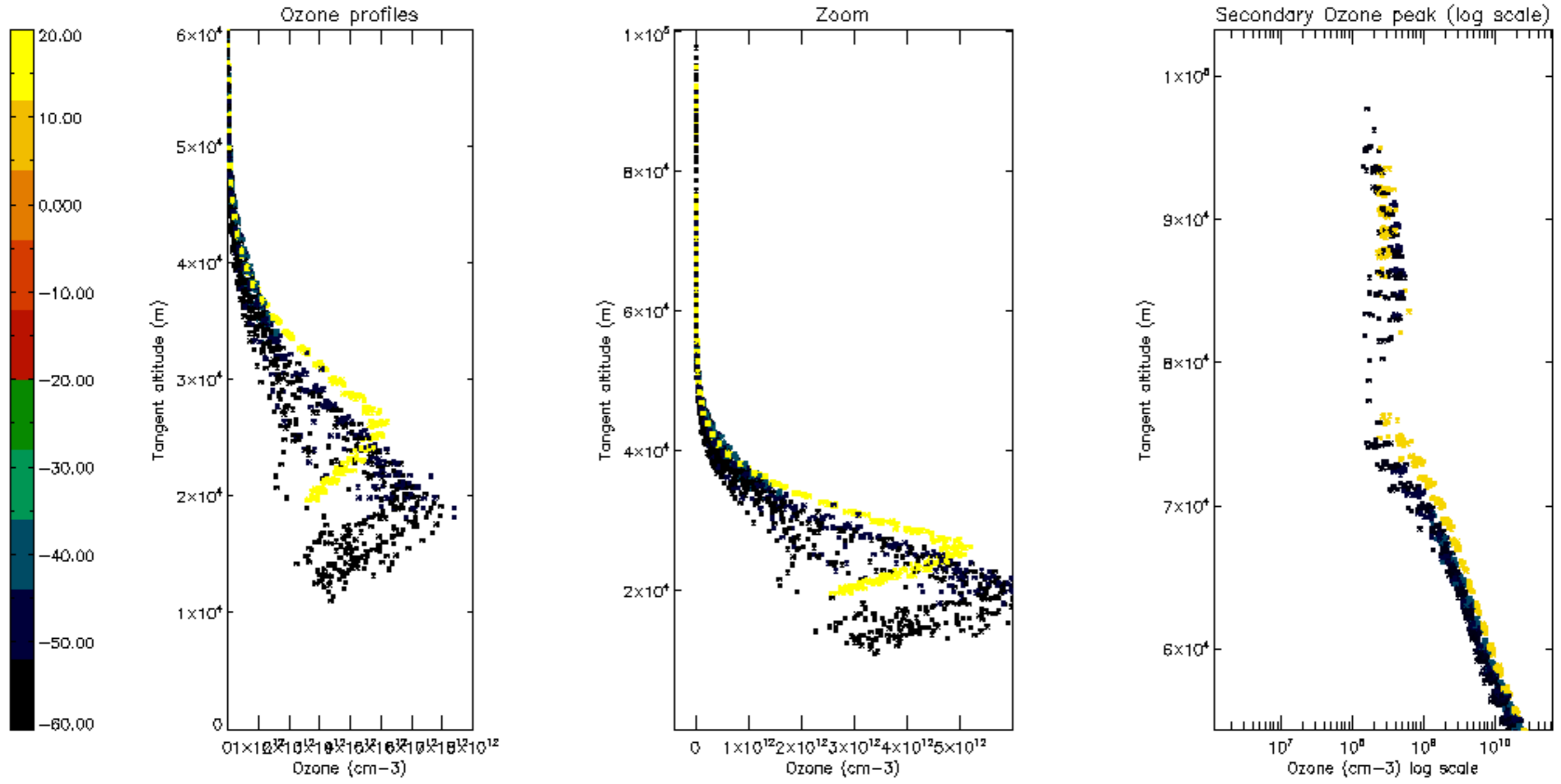
Percentage of saturation errors per profile

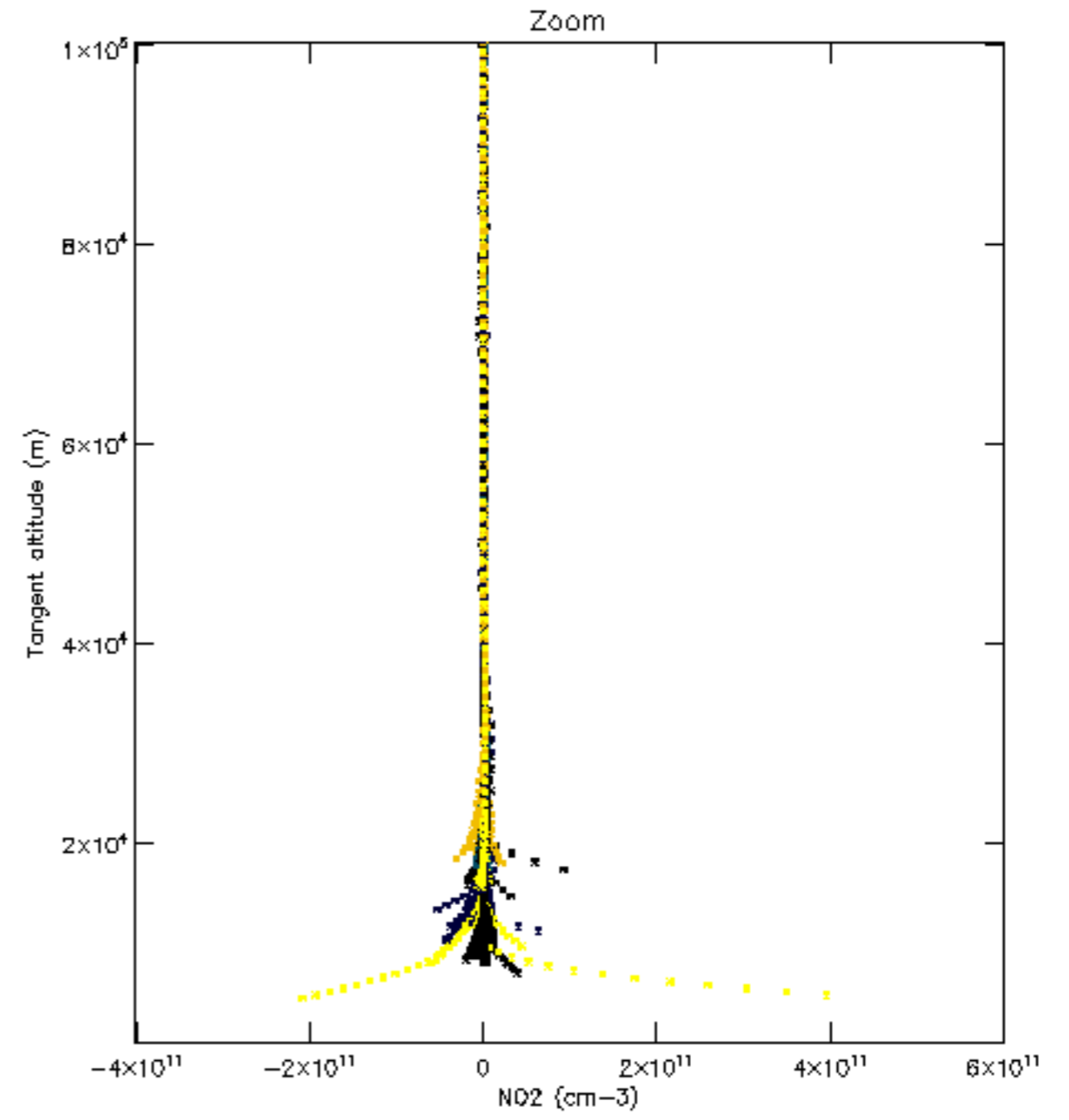
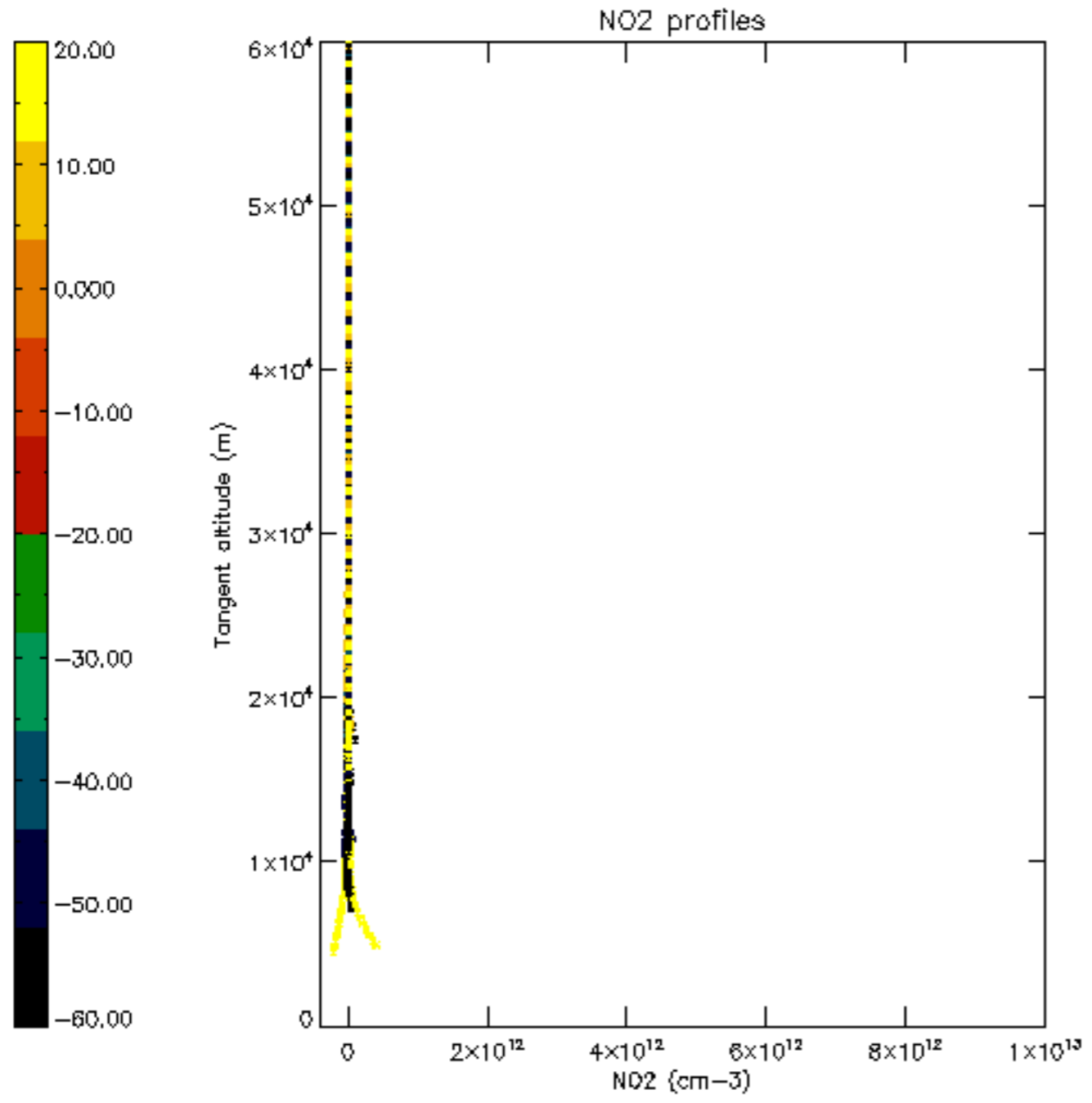


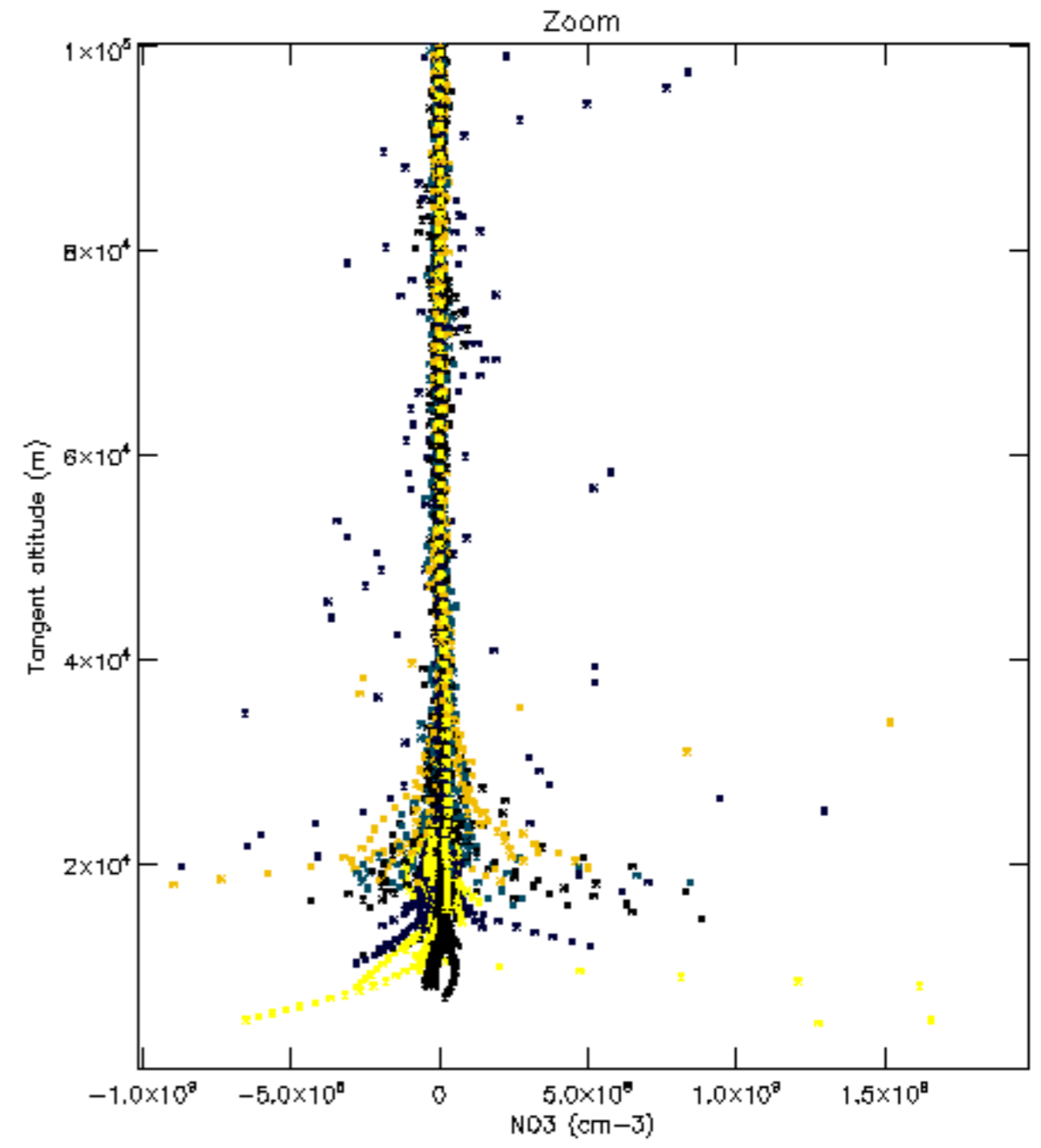
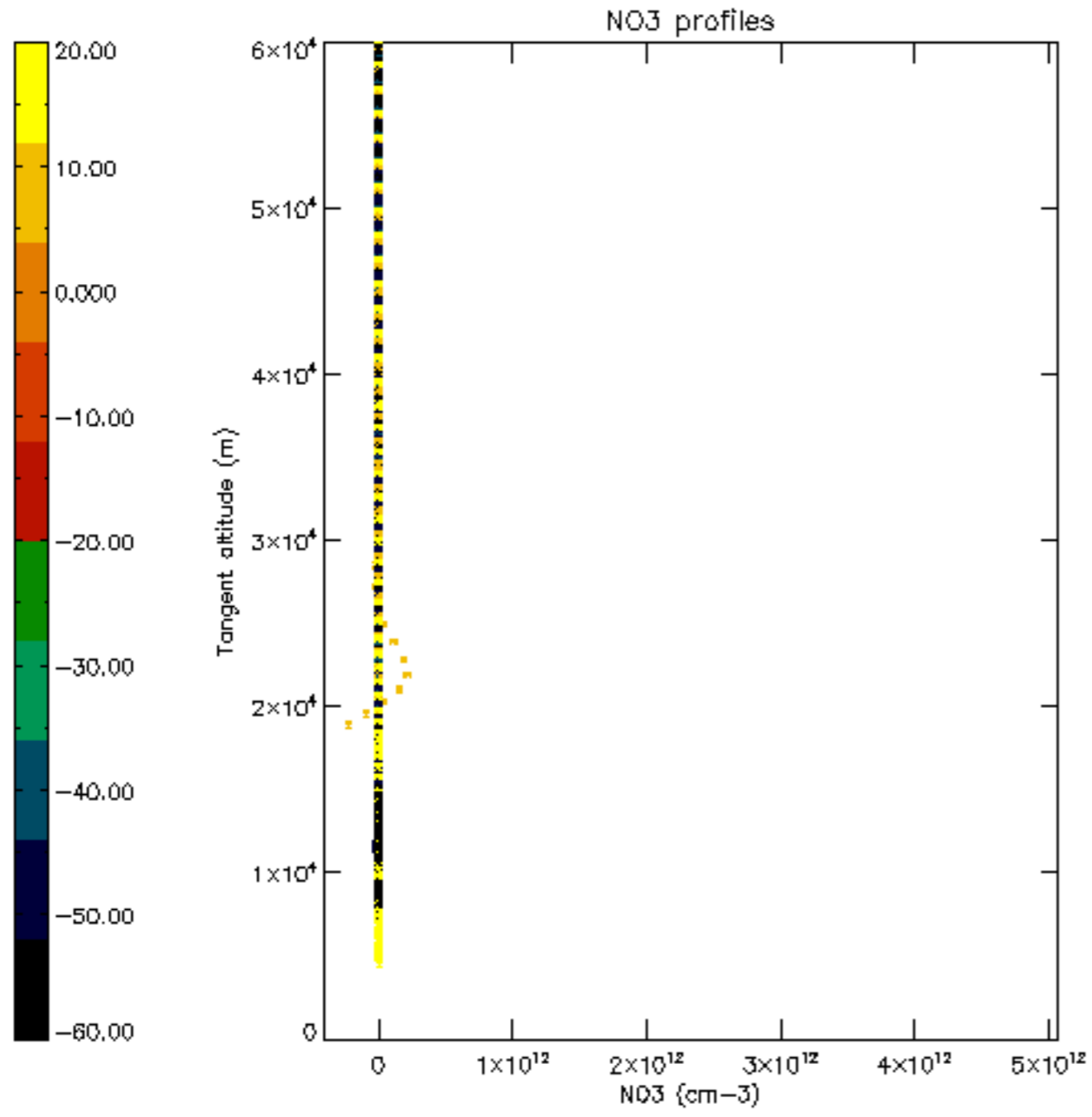


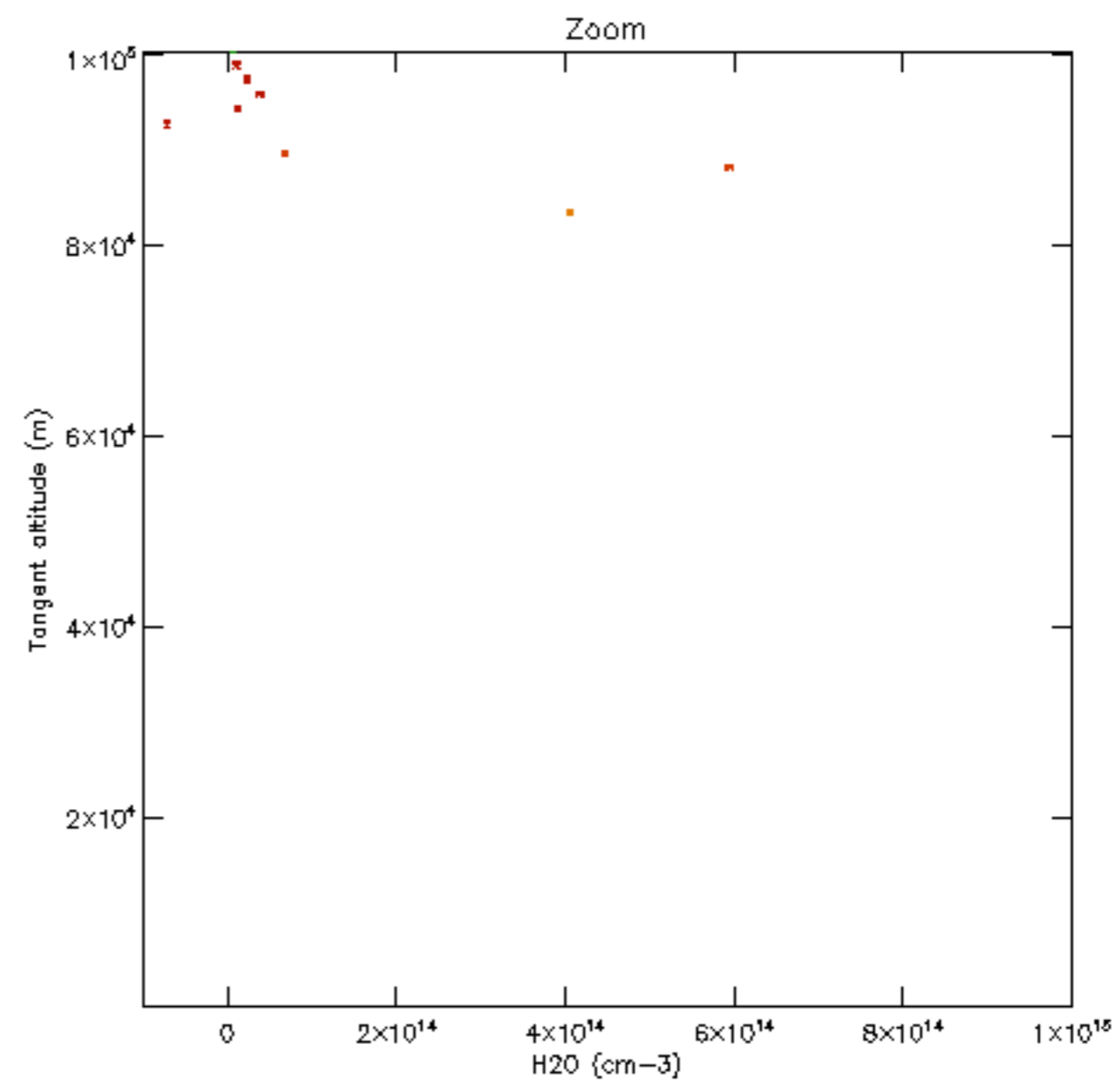
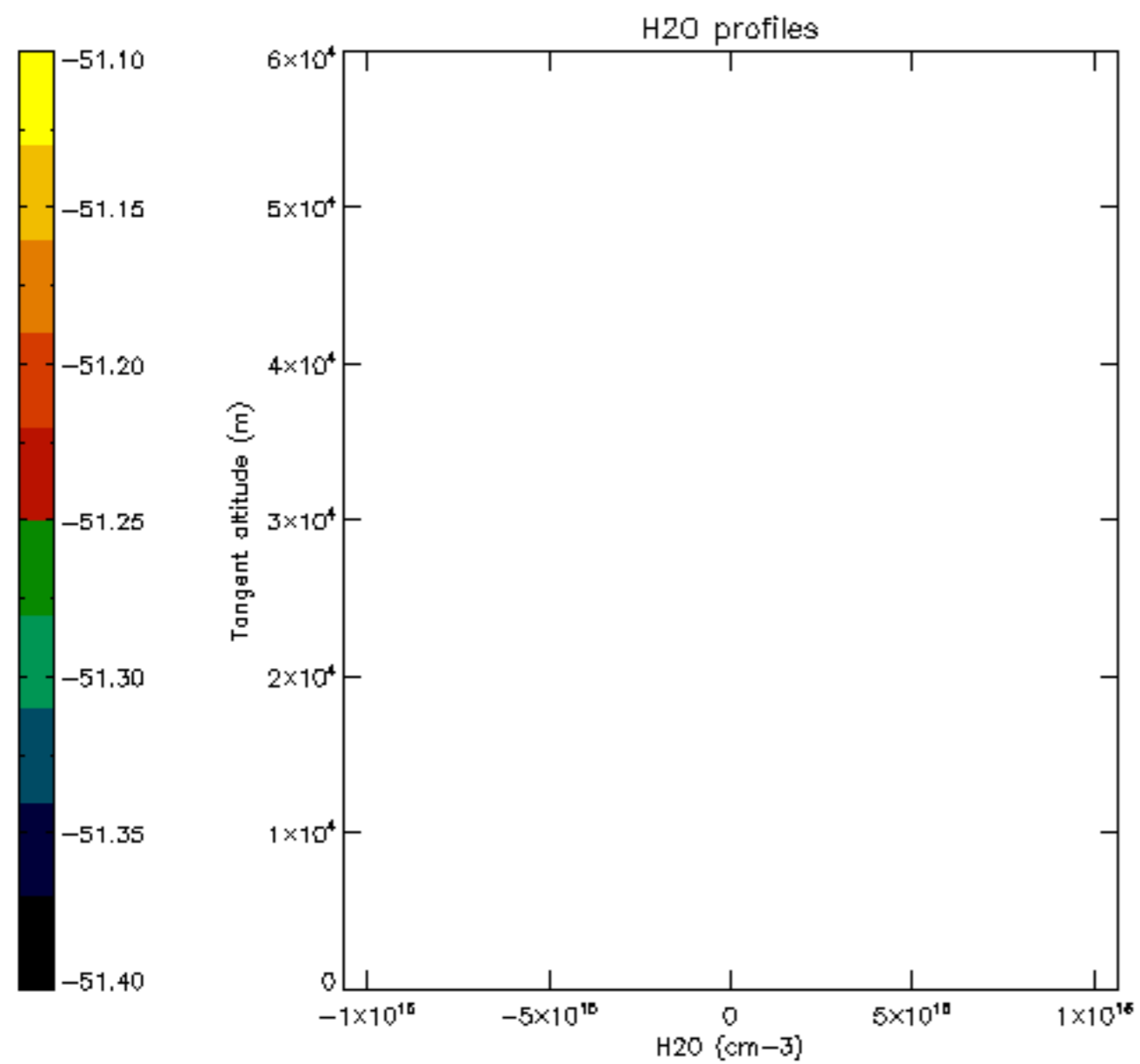


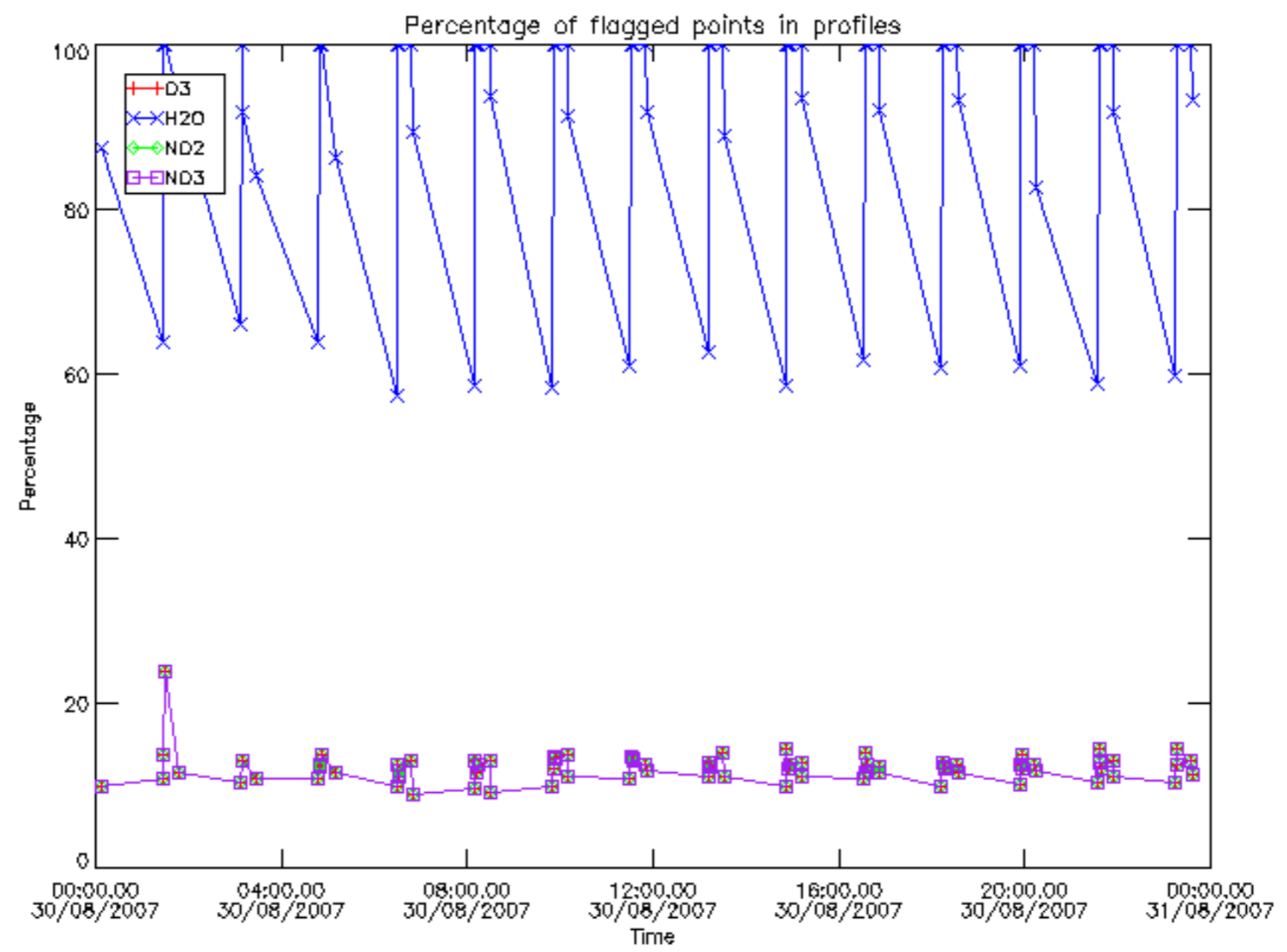




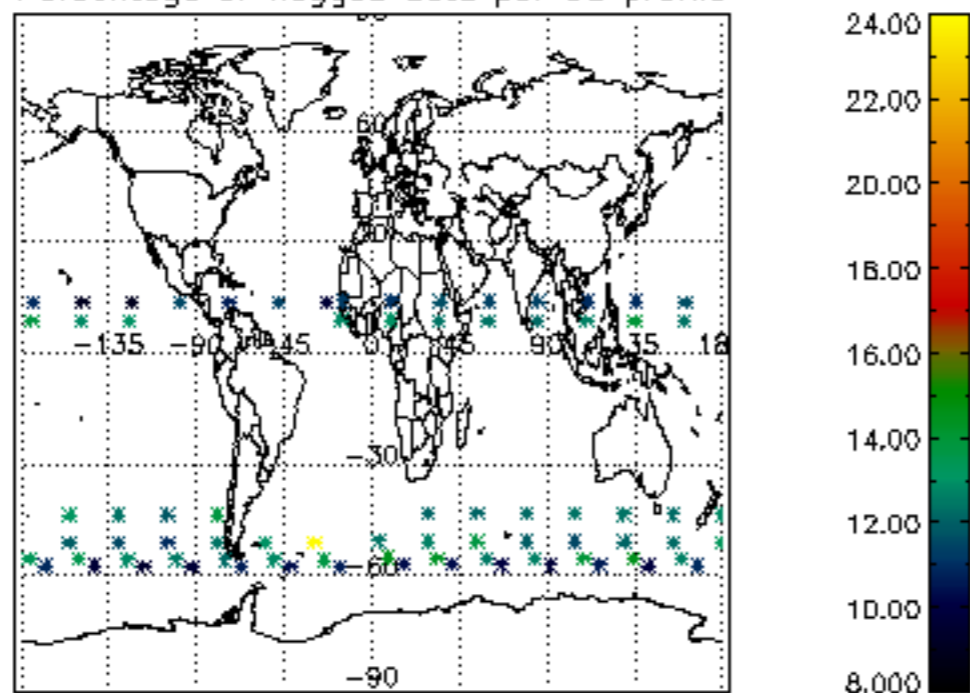




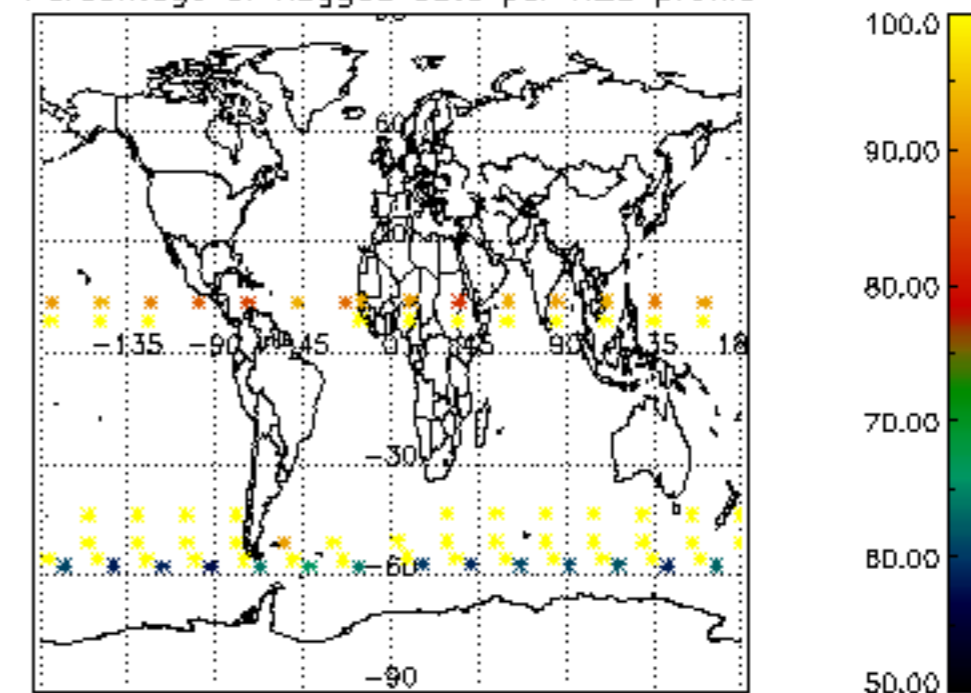




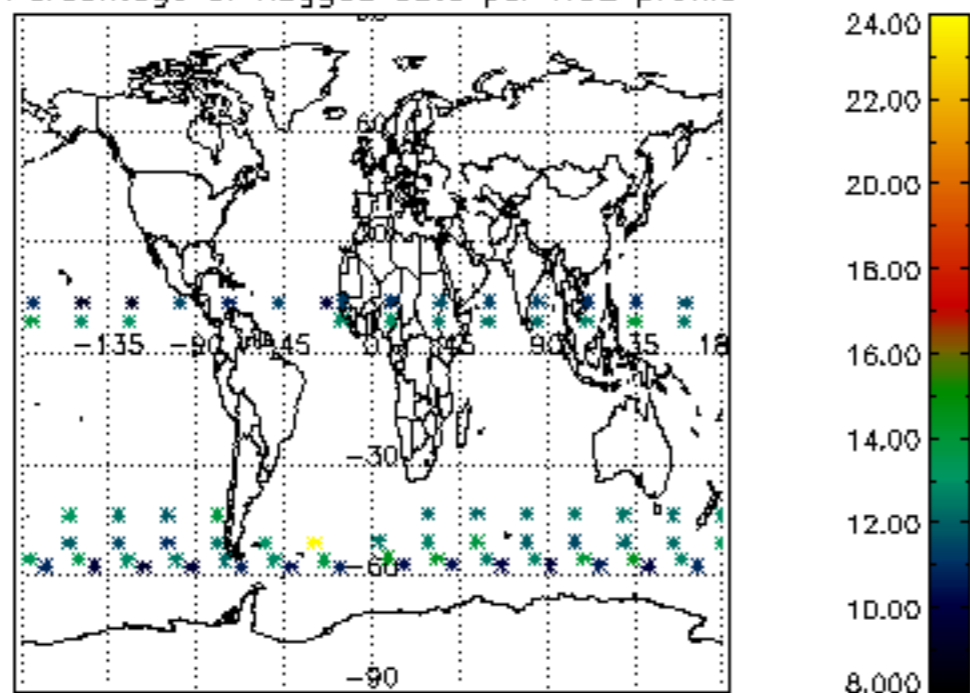
Percentage of flagged data per D3 profile



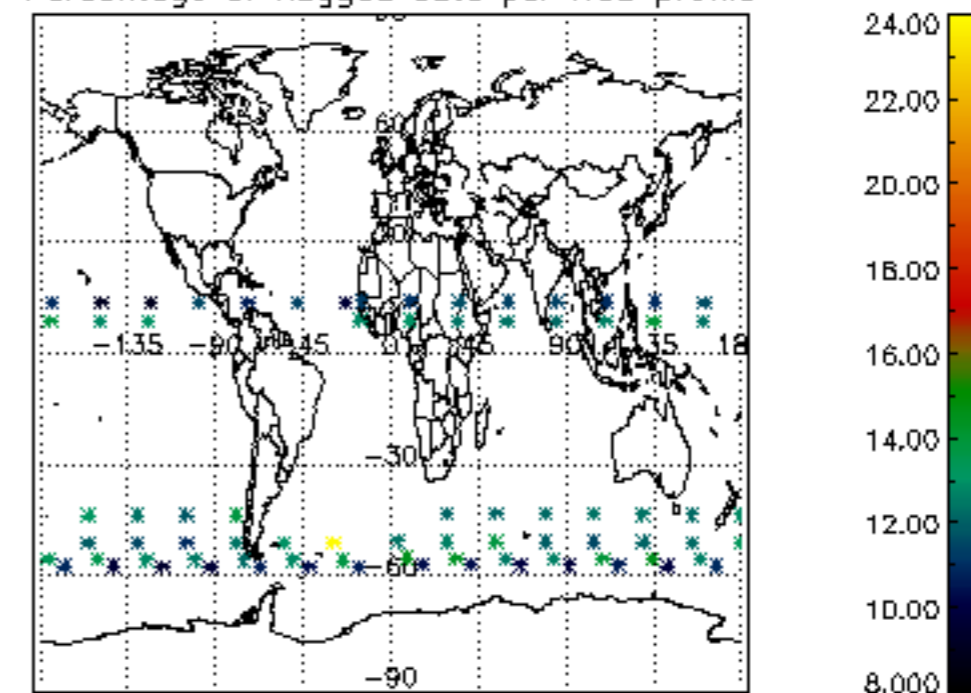
Percentage of flagged data per H2O profile

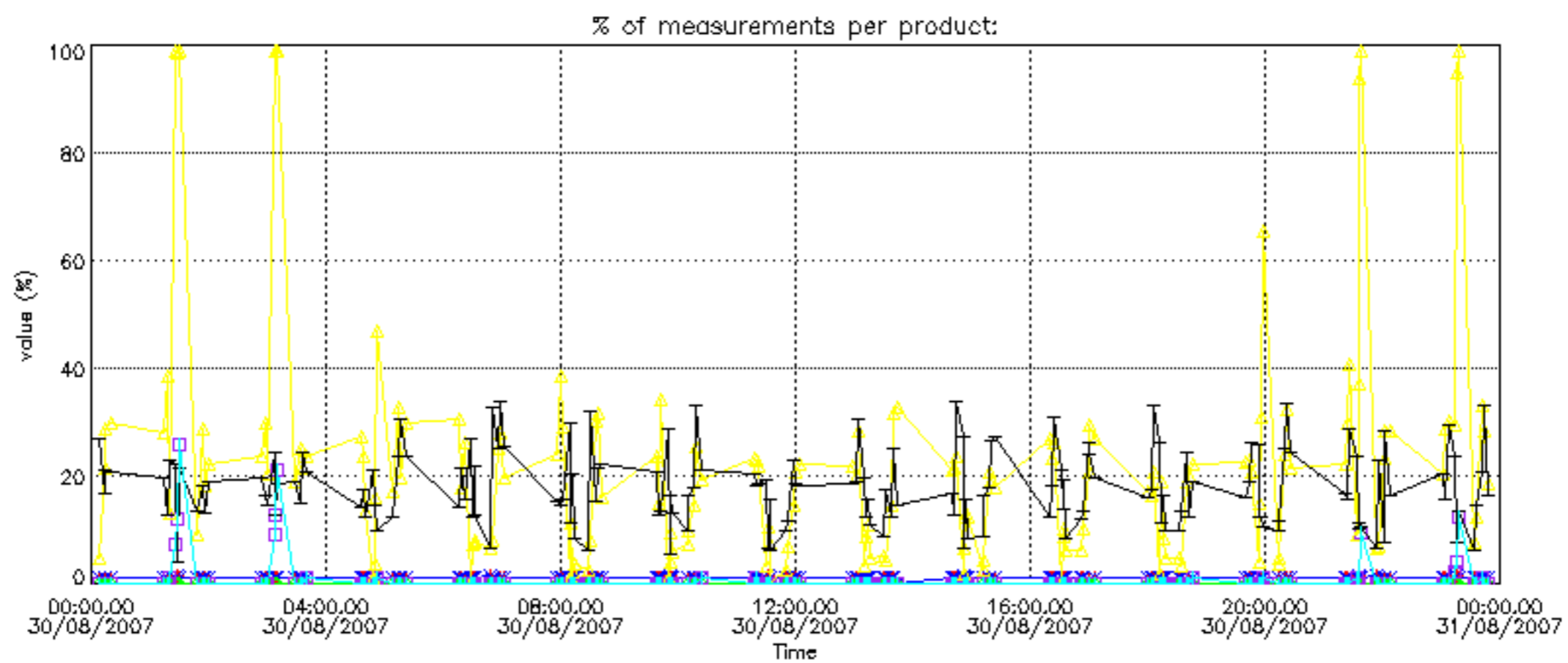
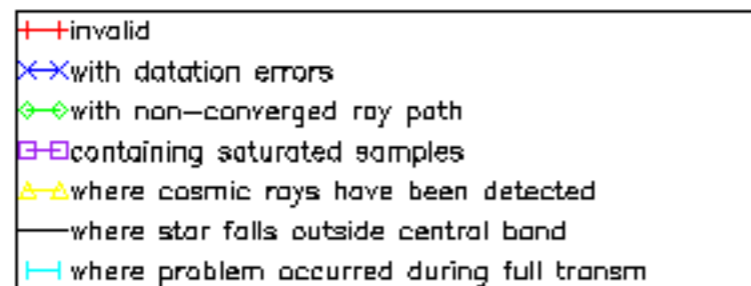


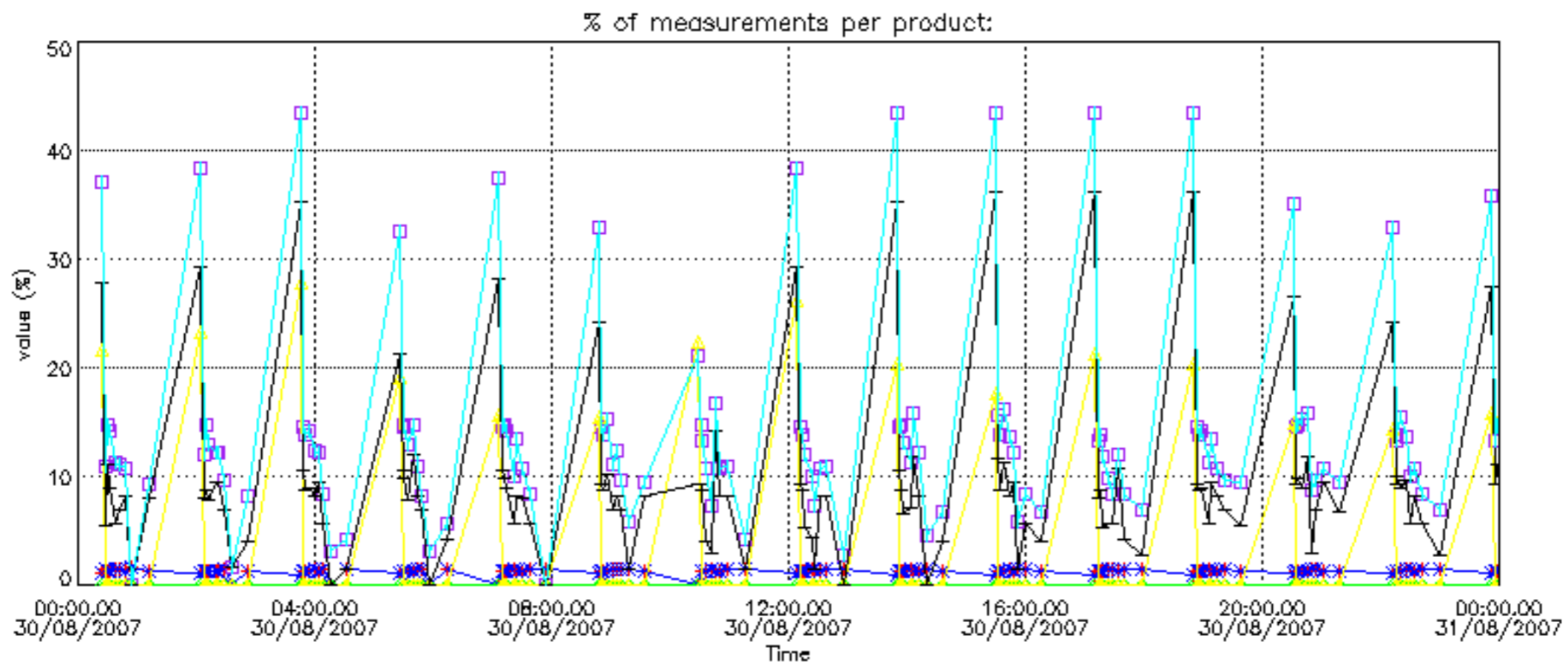
Percentage of flagged data per NO2 profile



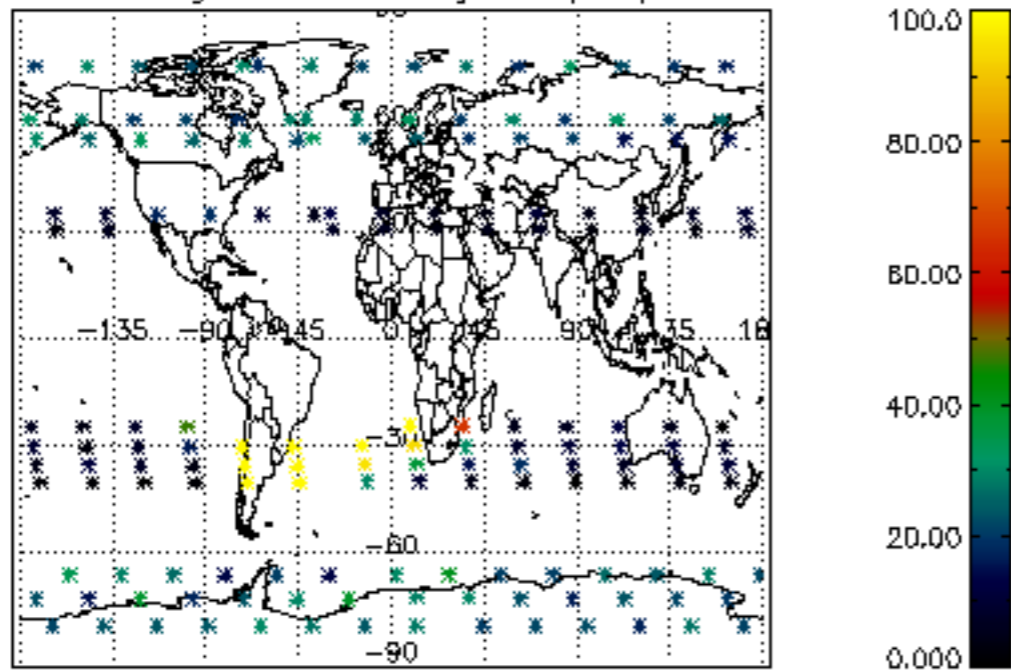
Percentage of flagged data per NO3 profile



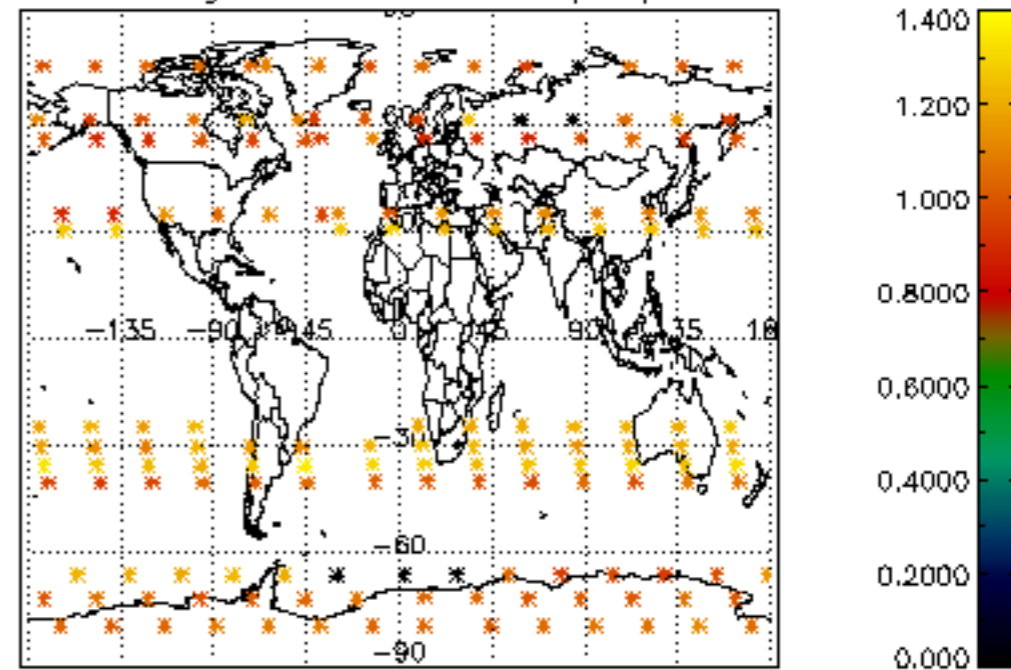




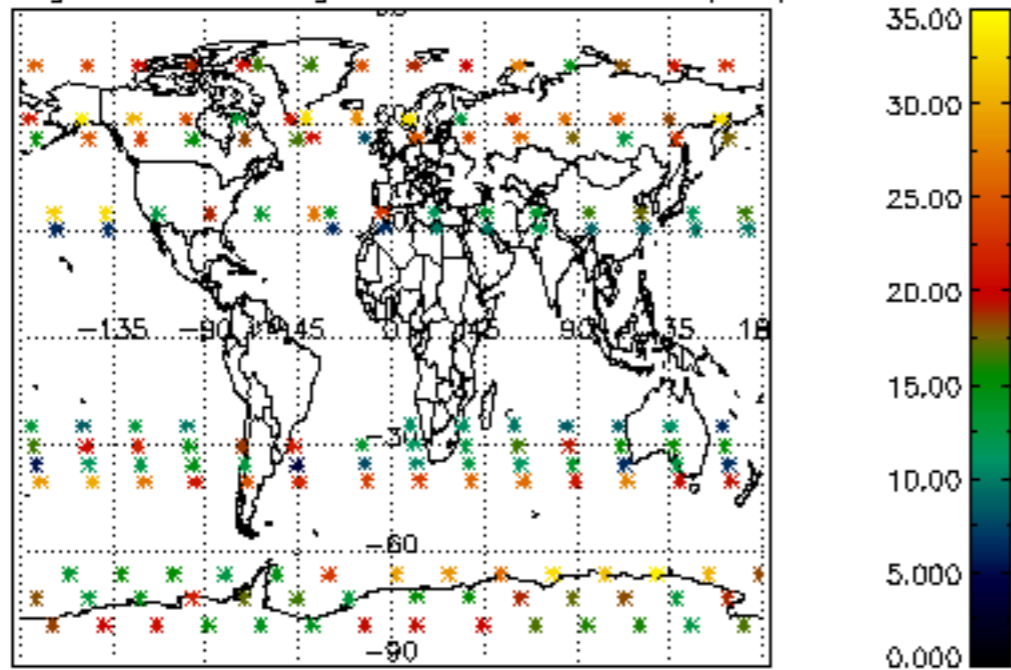
Percentage of cosmic ray hits per profile



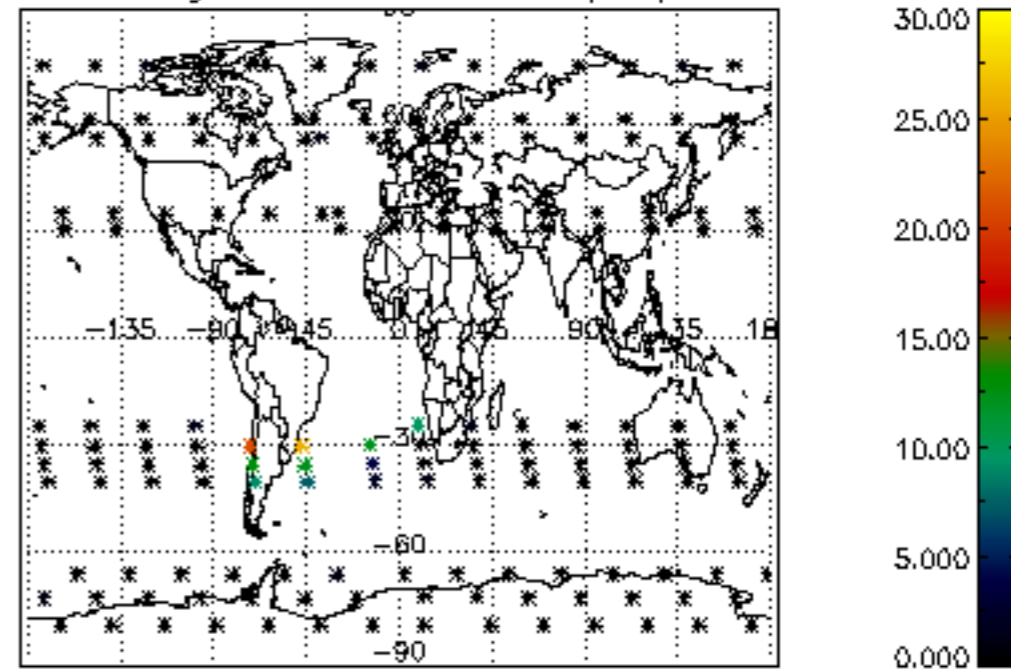
Percentage of datation errors per profile



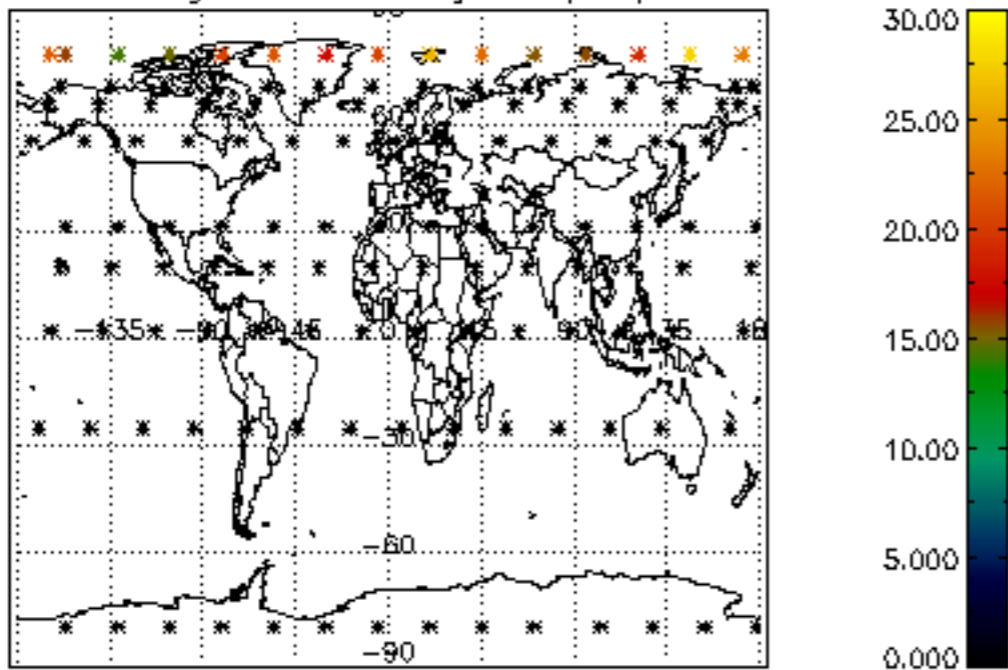
Percentage of star falling outside central band per profile



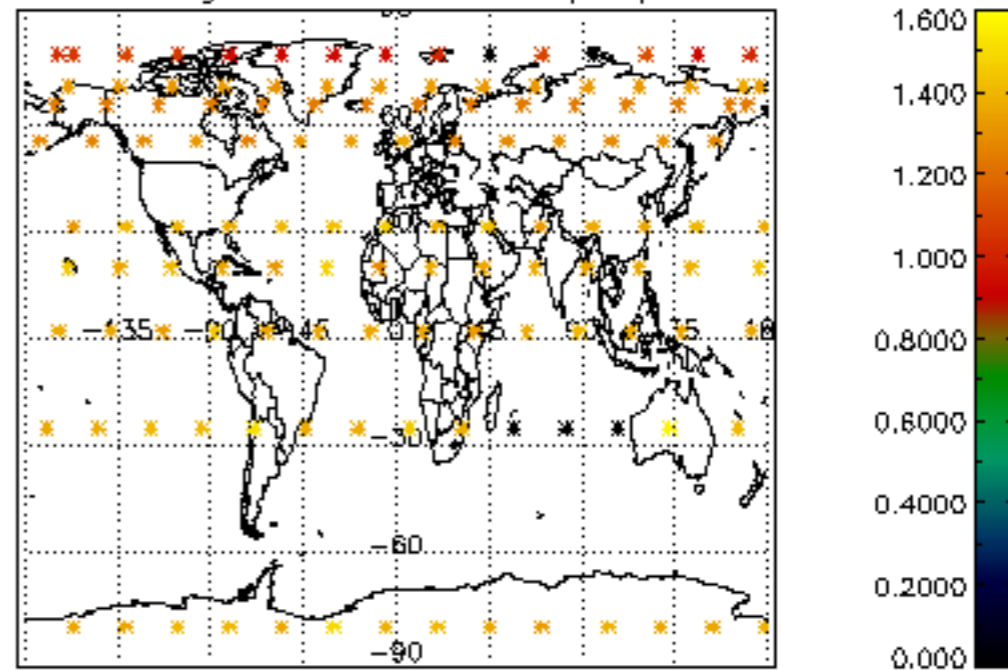
Percentage of saturation errors per profile



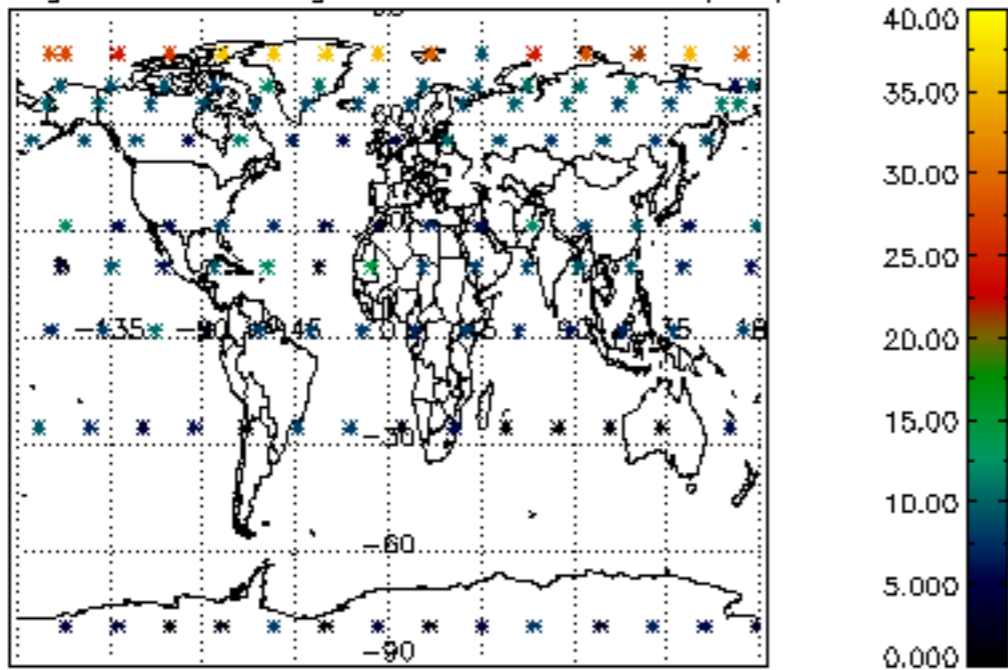
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

