

GOMOS Level 2 Daily Report

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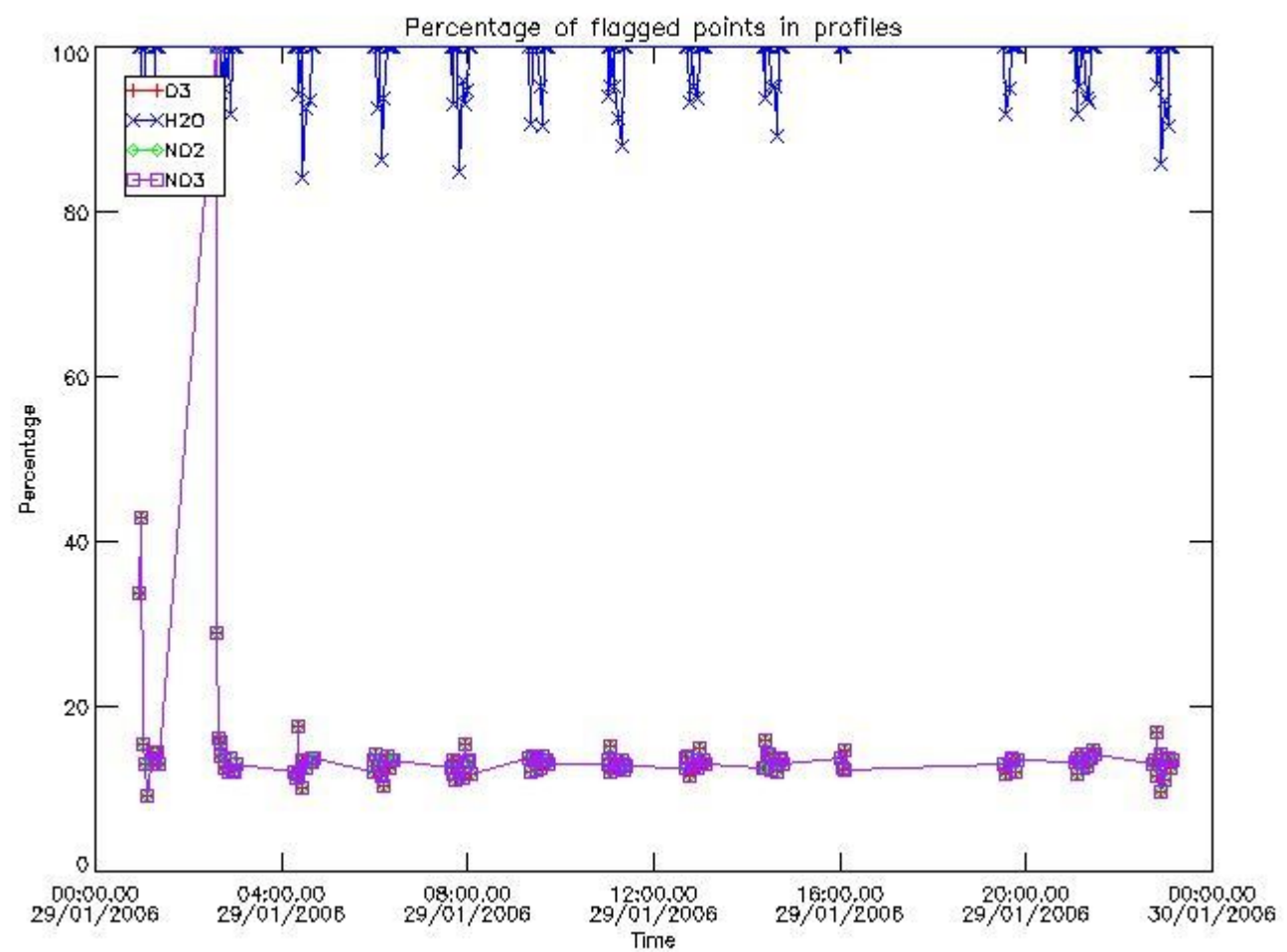
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This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also given.

Item	Value
Time of report generation	22APR2013 15:02:31
Data source version	GOMOS/6.01
Start time of products	29-01-2006 (29JAN2006 00:00:00)
Stop time of products	30-01-2006 (30JAN2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	327
Nb of prods with errors	0

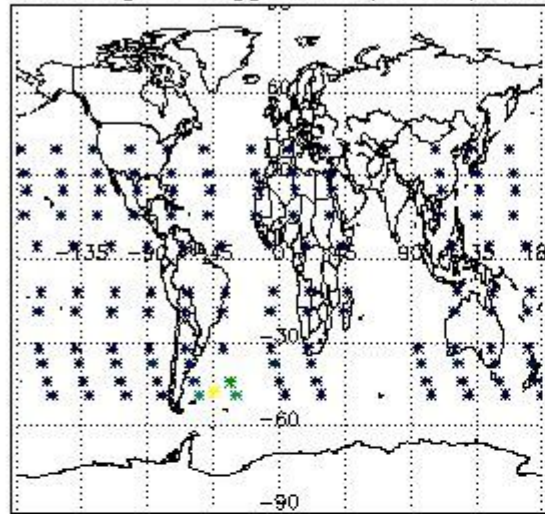
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20060129_000113_000000382044_00374_20468_7977.N1	29-JAN-2006 00:01:13	Bright	38.000	151	13Mu Gem	2.8900	3000.0	76	20468	No
2	GOM_NL__2PRFIN20060129_000529_000000352044_00374_20468_7978.N1	29-JAN-2006 00:05:29	Bright	35.000	107	37The Aur	2.6490	11000.	70	20468	No
3	GOM_NL__2PRFIN20060129_000736_000000362044_00374_20468_7979.N1	29-JAN-2006 00:07:36	Bright	35.500	42	34Bet Aur	1.9000	10200.	71	20468	No
4	GOM_NL__2PRFIN20060129_001958_000000342044_00374_20468_7980.N1	29-JAN-2006 00:19:58	Bright	34.000	49	1Alp UMi	1.9900	6300.0	68	20468	No
5	GOM_NL__2PRFIN20060129_003109_000000382044_00374_20468_7981.N1	29-JAN-2006 00:31:09	Bright	38.000	69	33Gam Dra	2.2310	3800.0	76	20468	No
6	GOM_NL__2PRFIN20060129_003430_000000352044_00374_20468_7982.N1	29-JAN-2006 00:34:30	Bright	35.000	5	3Alp Lyr	0.033000	11000.	70	20468	No
7	GOM_NL__2PRFIN20060129_004236_000000362044_00374_20468_7983.N1	29-JAN-2006 00:42:36	Bright	35.500	59	55Alp Oph	2.0800	8900.0	71	20468	No
8	GOM_NL__2PRFIN20060129_004444_000000352044_00374_20468_7984.N1	29-JAN-2006 00:44:44	Bright	34.500	126	60Bet Oph	2.7700	4250.0	69	20468	No
9	GOM_NL__2PRFIN20060129_005105_000000422044_00374_20468_7985.N1	29-JAN-2006 00:51:05	Twilight	42.000	86	35Eta Oph	2.4300	10200.	84	20468	No
10	GOM_NL__2PRFIN20060129_005615_000000422044_00374_20468_7986.N1	29-JAN-2006 00:56:15	Dark	42.000	25	35Lam Sco	1.6200	28000.	84	20468	No
11	GOM_NL__2PRFIN20060129_005745_000000432044_00374_20468_7987.N1	29-JAN-2006 00:57:45	Dark	42.500	40	The Sco	1.8590	7100.0	85	20468	No
12	GOM_NL__2PRFIN20060129_010113_000000432044_00374_20468_7988.N1	29-JAN-2006 01:01:13	Dark	43.000	141	Bet Ara	2.8400	4600.0	86	20468	No
13	GOM_NL__2PRFIN20060129_010443_000000392044_00375_20469_7963.N1	29-JAN-2006 01:04:43	Dark	39.000	134	Bet TrA	2.8100	6600.0	78	20469	No
14	GOM_NL__2PRFIN20060129_010619_000000552044_00375_20469_7964.N1	29-JAN-2006 01:06:19	Dark	55.000	4	Alp1Cen	-0.010000	5800.0	110	20469	No
15	GOM_NL__2PRFIN20060129_011054_000000392044_00375_20469_7965.N1	29-JAN-2006 01:10:54	Dark	39.000	12	Alp1Cru	0.77500	30000.	78	20469	No
16	GOM_NL__2PRFIN20060129_011439_000000362044_00375_20469_7966.N1	29-JAN-2006 01:14:39	Dark	35.500	29	Bet Car	1.6720	10200.	71	20469	No
17	GOM_NL__2PRFIN20060129_011656_000000382044_00375_20469_7967.N1	29-JAN-2006 01:16:56	Dark	37.500	71	lot Car	2.2460	7700.0	75	20469	No
18	GOM_NL__2PRFIN20060129_011843_000000422044_00375_20469_7968.N1	29-JAN-2006 01:18:43	Dark	42.000	46	Del Vel	1.9540	10600.	84	20469	No
19	GOM_NL__2PRFIN20060129_012116_000000402044_00375_20469_7969.N1	29-JAN-2006 01:21:16	Dark	39.500	34	Gam2Vel	1.7930	23000.	79	20469	No
20	GOM_NL__2PRFIN20060129_012322_000000412044_00375_20469_7970.N1	29-JAN-2006 01:23:22	Straylight	40.500	70	Zet Pup	2.2460	39000.	81	20469	No
21	GOM_NL__2PRFIN20060129_012447_000000422044_00375_20469_7971.N1	29-JAN-2006 01:24:47	Straylight	42.000	117	Pi Pup	2.7060	3800.0	84	20469	No
22	GOM_NL__2PRFIN20060129_012714_000000412044_00375_20469_7972.N1	29-JAN-2006 01:27:14	Straylight	41.000	23	21Eps CMa	1.5020	26000.	82	20469	No
23	GOM_NL__2PRFIN20060129_012836_000000372044_00375_20469_7973.N1	29-JAN-2006 01:28:36	Straylight	37.000	179	24Omi2CMa	3.0320	24000.	74	20469	No
24	GOM_NL__2PRFIN20060129_013045_000000482044_00375_20469_7974.N1	29-JAN-2006 01:30:45	Straylight	47.500	1	9Alp CMa	-1.4400	11000.	95	20469	No
25	GOM_NL__2PRFIN20060129_013733_000000402044_00375_20469_7975.N1	29-JAN-2006 01:37:33	Twilight	40.000	153	3Bet CMi	2.8940	13100.	80	20469	No
26	GOM_NL__2PRFIN20060129_014001_000000392044_00375_20469_7976.N1	29-JAN-2006 01:40:01	Bright	38.500	44	24Gam Gem	1.9280	11000.	77	20469	No
27	GOM_NL__2PRFIN20060129_014149_000000392044_00375_20469_7977.N1	29-JAN-2006 01:41:49	Bright	39.000	151	13Mu Gem	2.8900	3000.0	78	20469	No
28	GOM_NL__2PRFIN20060129_014606_000000352044_00375_20469_7978.N1	29-JAN-2006 01:46:06	Bright	35.000	107	37The Aur	2.6490	11000.	70	20469	No
29	GOM_NL__2PRFIN20060129_014812_000000352044_00375_20469_7979.N1	29-JAN-2006 01:48:12	Bright	34.500	42	34Bet Aur	1.9000	10200.	69	20469	No
30	GOM_NL__2PRFIN20060129_020034_000000342044_00375_20469_7980.N1	29-JAN-2006 02:00:34	Bright	34.000	49	1Alp UMi	1.9900	6300.0	68	20469	No
31	GOM_NL__2PRFIN20060129_021145_000000382044_00375_20469_7981.N1	29-JAN-2006 02:11:45	Bright	38.000	69	33Gam Dra	2.2310	3800.0	76	20469	No
32	GOM_NL__2PRFIN20060129_021506_000000332044_00375_20469_7982.N1	29-JAN-2006 02:15:06	Bright	33.000	5	3Alp Lyr	0.033000	11000.	66	20469	No
33	GOM_NL__2PRFIN20060129_022313_000000362044_00375_20469_7983.N1	29-JAN-2006 02:23:13	Bright	35.500	59	55Alp Oph	2.0800	8900.0	71	20469	No
34	GOM_NL__2PRFIN20060129_022520_000000352044_00375_20469_7984.N1	29-JAN-2006 02:25:20	Bright	34.500	126	60Bet Oph	2.7700	4250.0	69	20469	No
35	GOM_NL__2PRFIN20060129_023141_000000442044_00375_20469_7985.N1	29-JAN-2006 02:31:41	Twilight	43.500	86	35Eta Oph	2.4300	10200.	87	20469	No
36	GOM_NL__2PRFIN20060129_023605_00000042044_00375_20469_7986.N1	29-JAN-2006 02:36:05	Dark	4.0000	136	23Tau Sco	2.8220	30000.	8	20469	No
37	GOM_NL__2PRFIN20060129_023651_000000392044_00375_20469_7987.N1	29-JAN-2006 02:36:51	Dark	38.500	25	35Lam Sco	1.6200	28000.	77	20469	No
38	GOM_NL__2PRFIN20060129_023821_000000382044_00375_20469_7988.N1	29-JAN-2006 02:38:21	Dark	38.000	40	The Sco	1.8590	7100.0	76	20469	No
39	GOM_NL__2PRFIN20060129_024015_000000362044_00375_20469_7989.N1	29-JAN-2006 02:40:15	Dark	36.000	147	Alp Ara	2.8770	26000.	72	20469	No
40	GOM_NL__2PRFIN20060129_024149_000000372044_00375_20469_7990.N1	29-JAN-2006 02:41:49	Dark	36.500	141	Bet Ara	2.8400	4600.0	73	20469	No
41	GOM_NL__2PRFIN20060129_024519_000000382044_00376_20470_7963.N1	29-JAN-2006 02:45:19	Dark	37.500	134	Bet TrA	2.8100	6600.0	75	20470	No
42	GOM_NL__2PRFIN20060129_024655_000000412044_00376_20470_7964.N1	29-JAN-2006 02:46:55	Dark	40.500	4	Alp1Cen	-0.010000	5800.0	81	20470	No

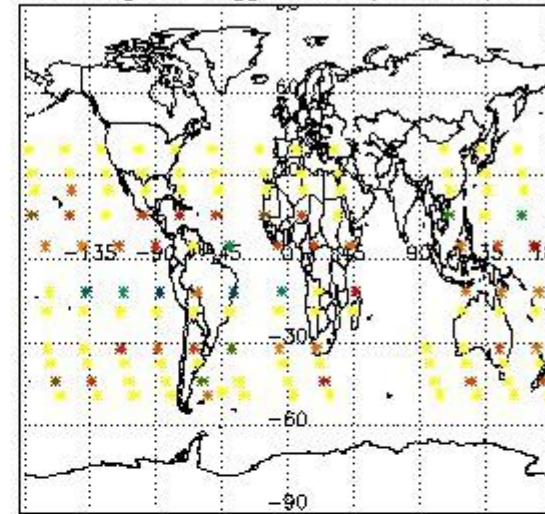


3.2 Plot quality information per product (world map)

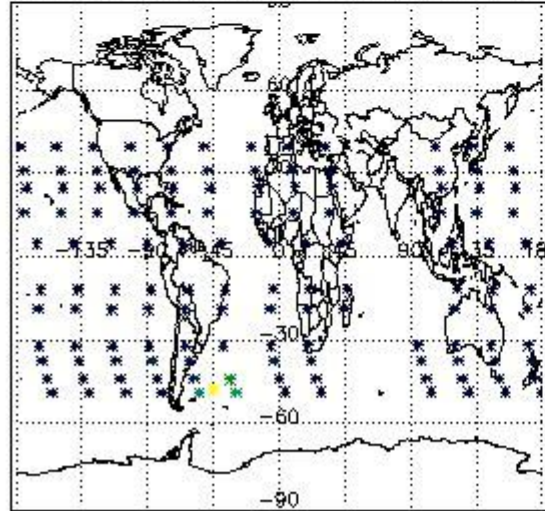
Percentage of flagged data per O3 profile



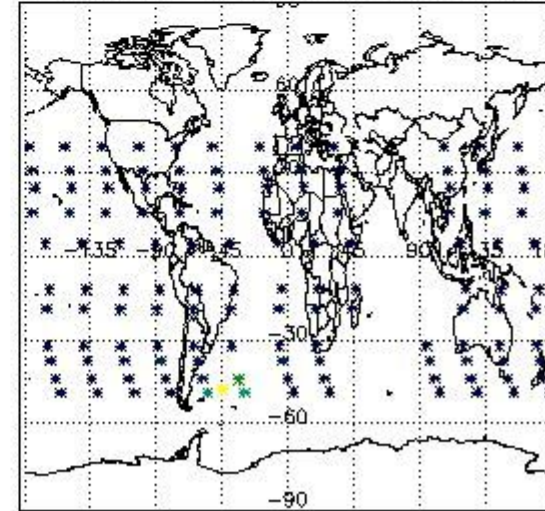
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

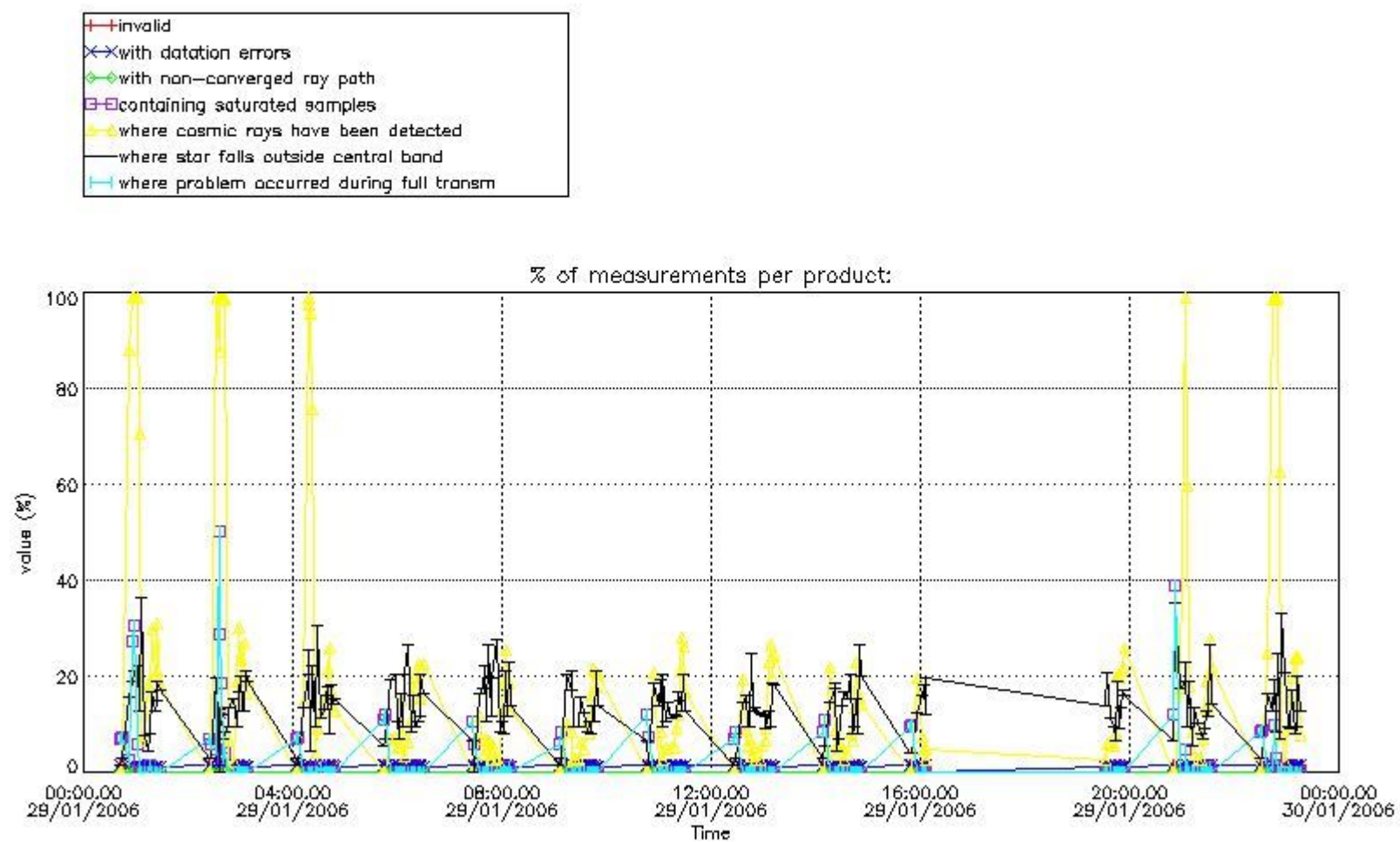


4. Level 1 quality information per product

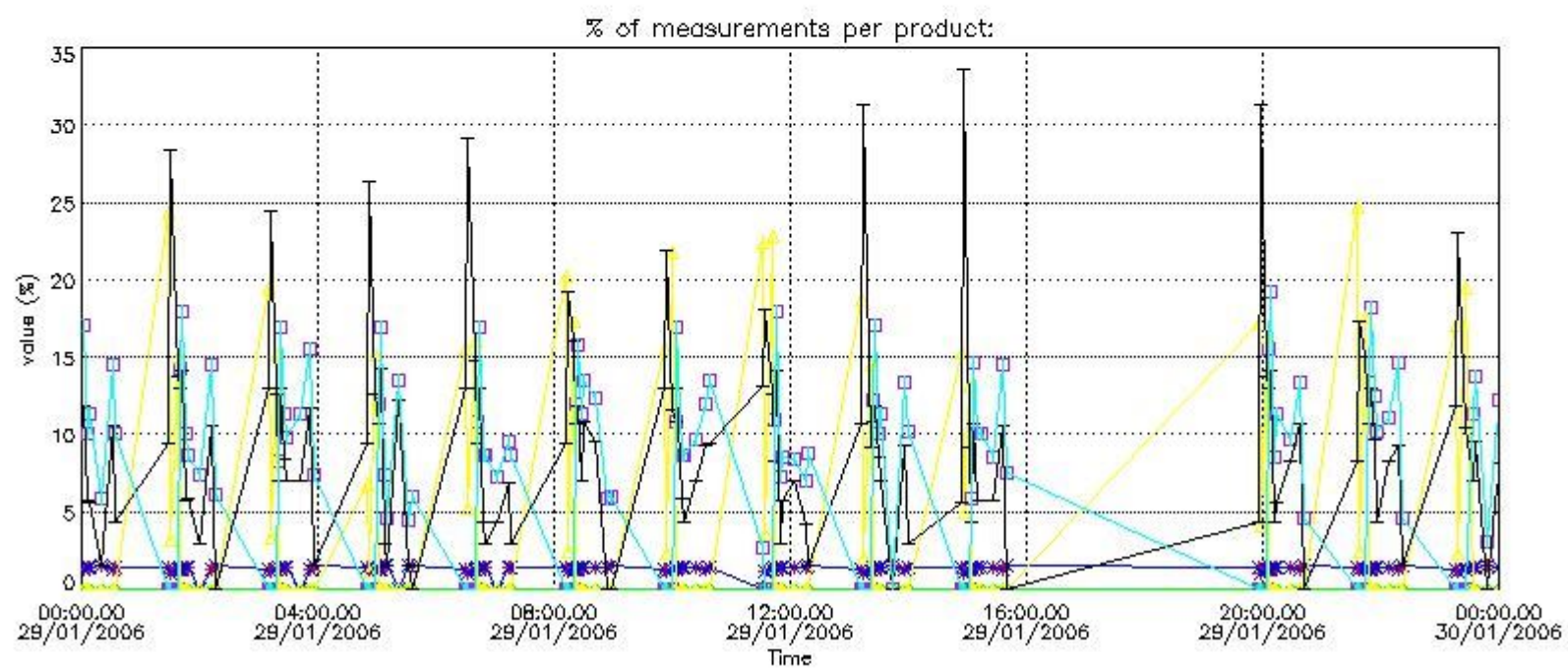
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



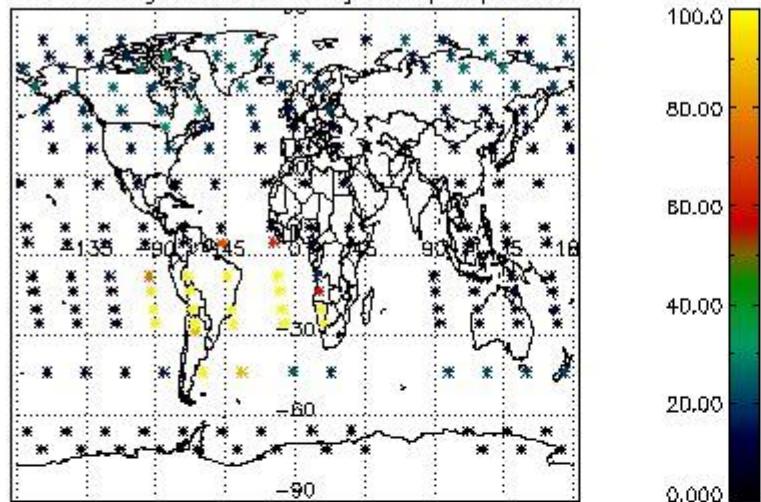
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



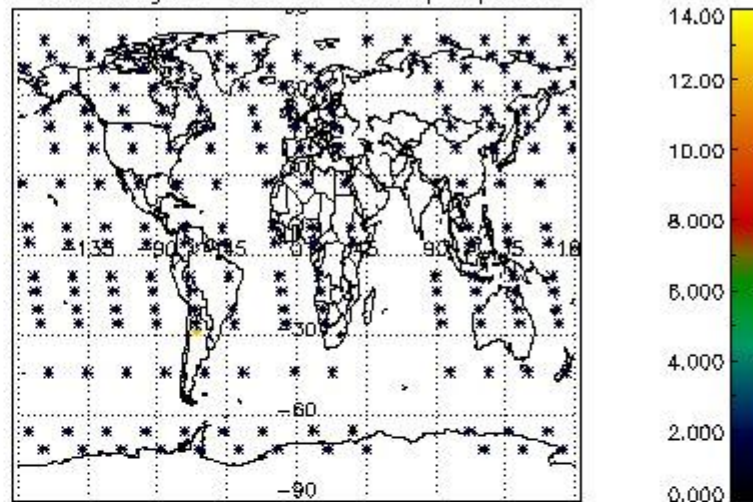
4.2 Plot quality information per product coming from level 1b processing (world map)

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

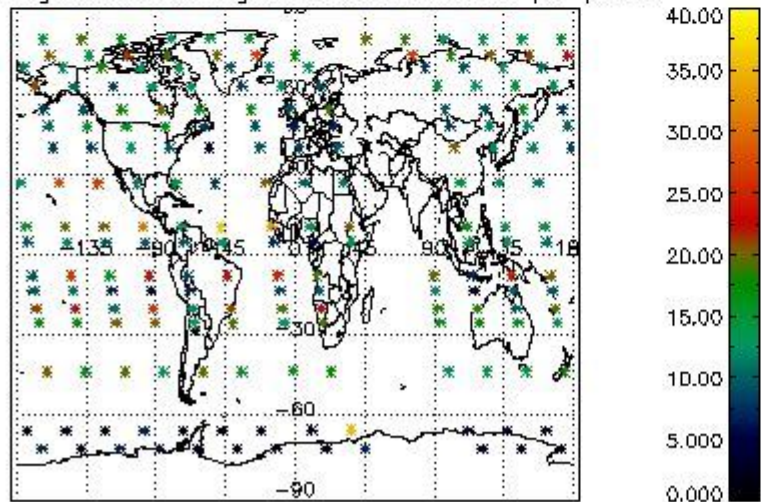
Percentage of cosmic ray hits per profile



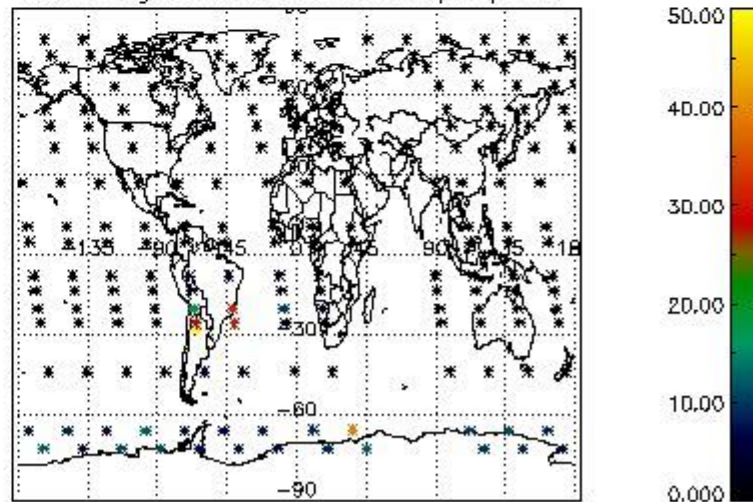
Percentage of datation errors per profile



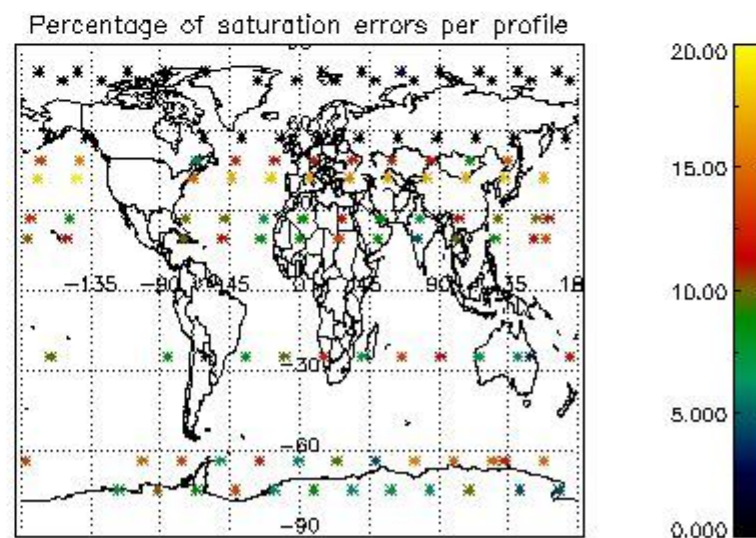
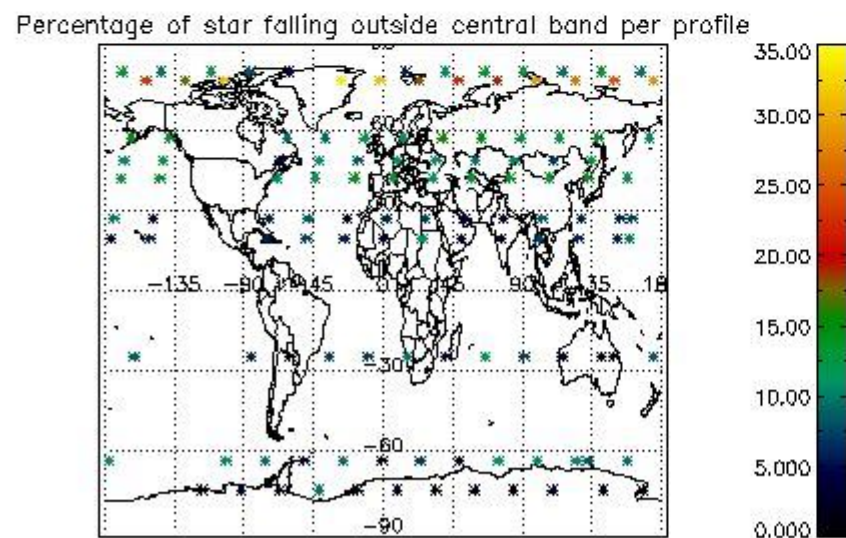
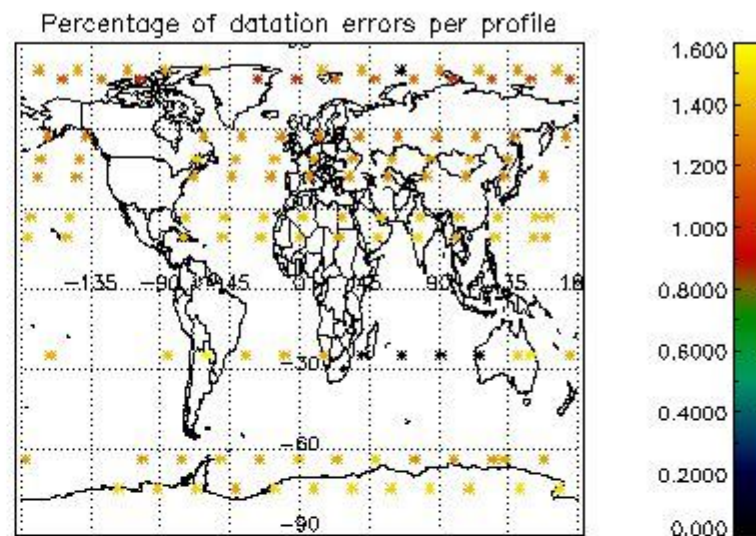
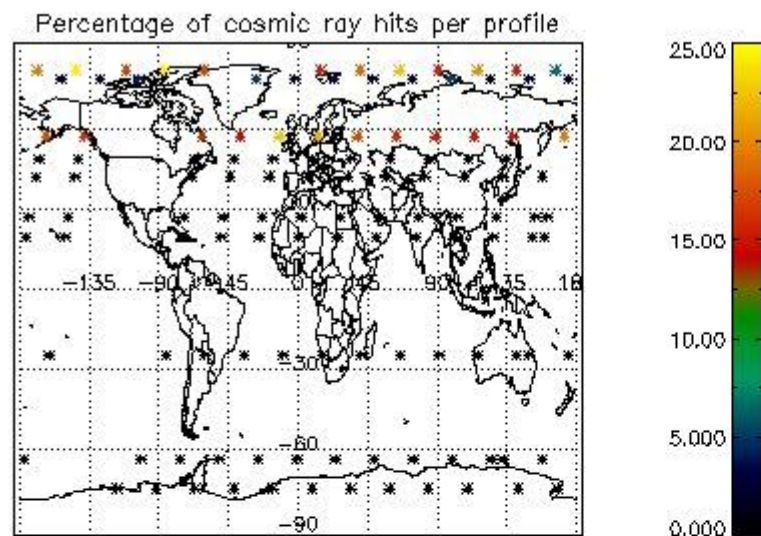
Percentage of star falling outside central band per profile



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

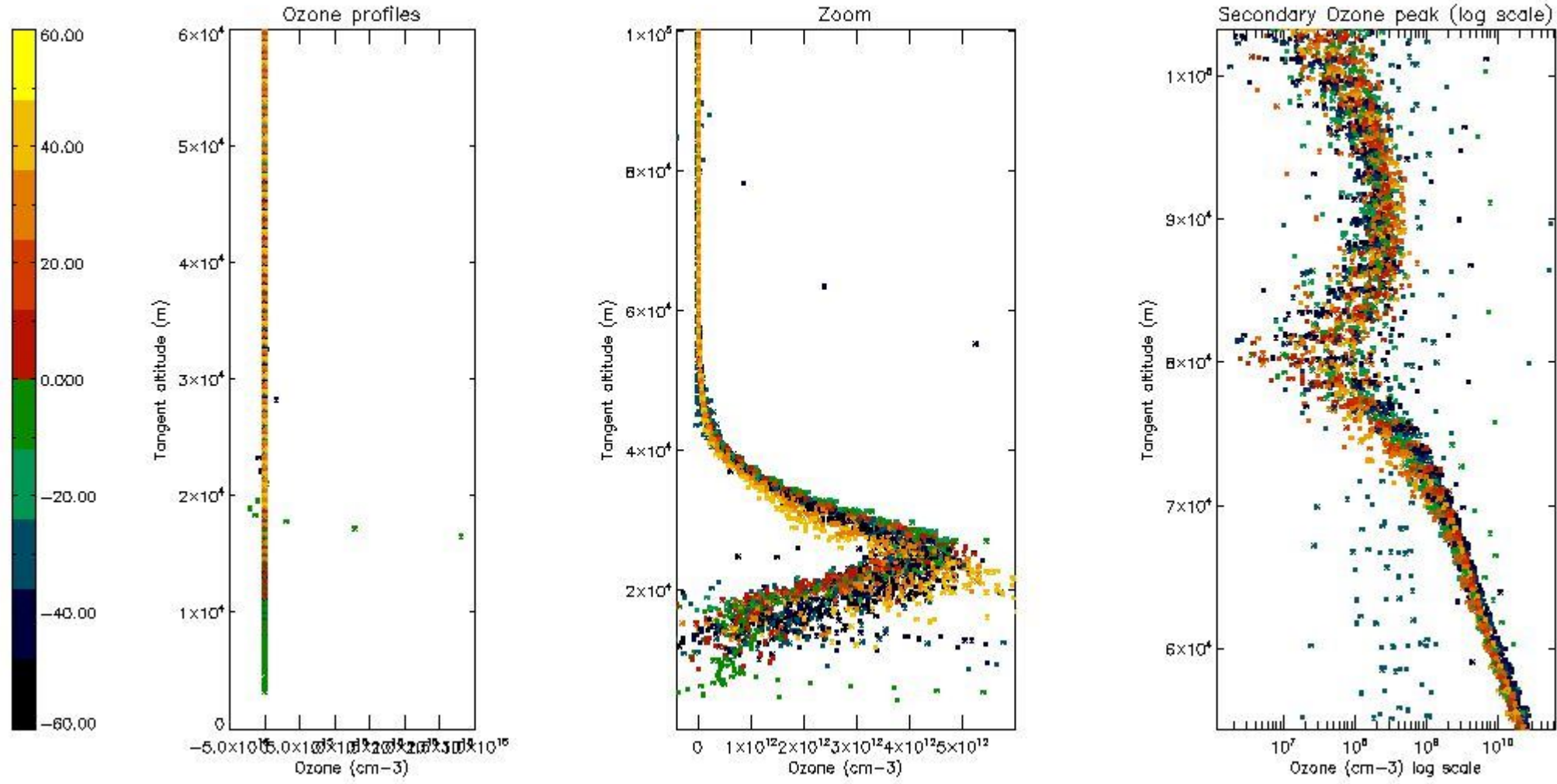
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	42
STD < 20	24

STD < 10	20
STD < 5	13

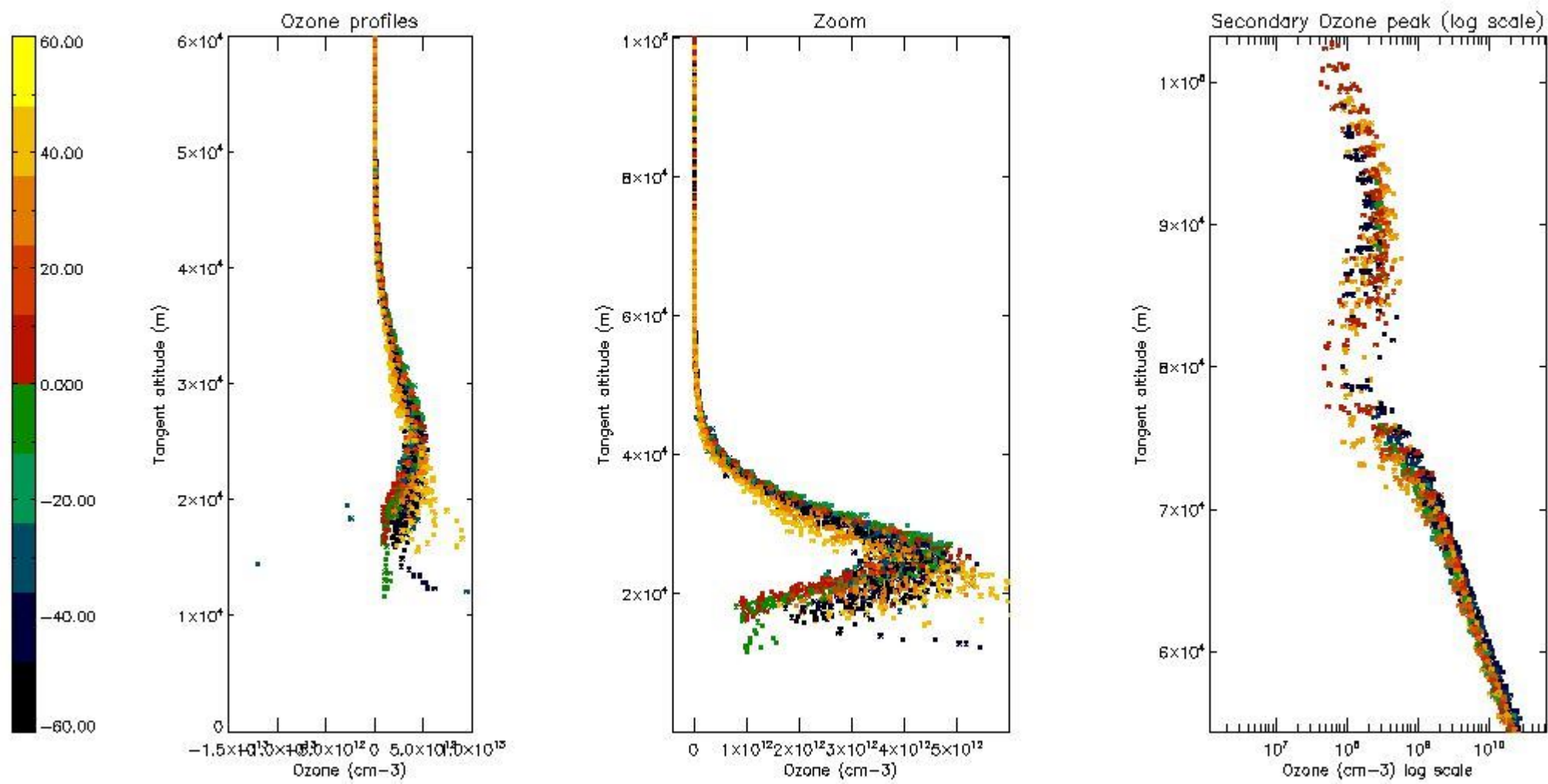
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



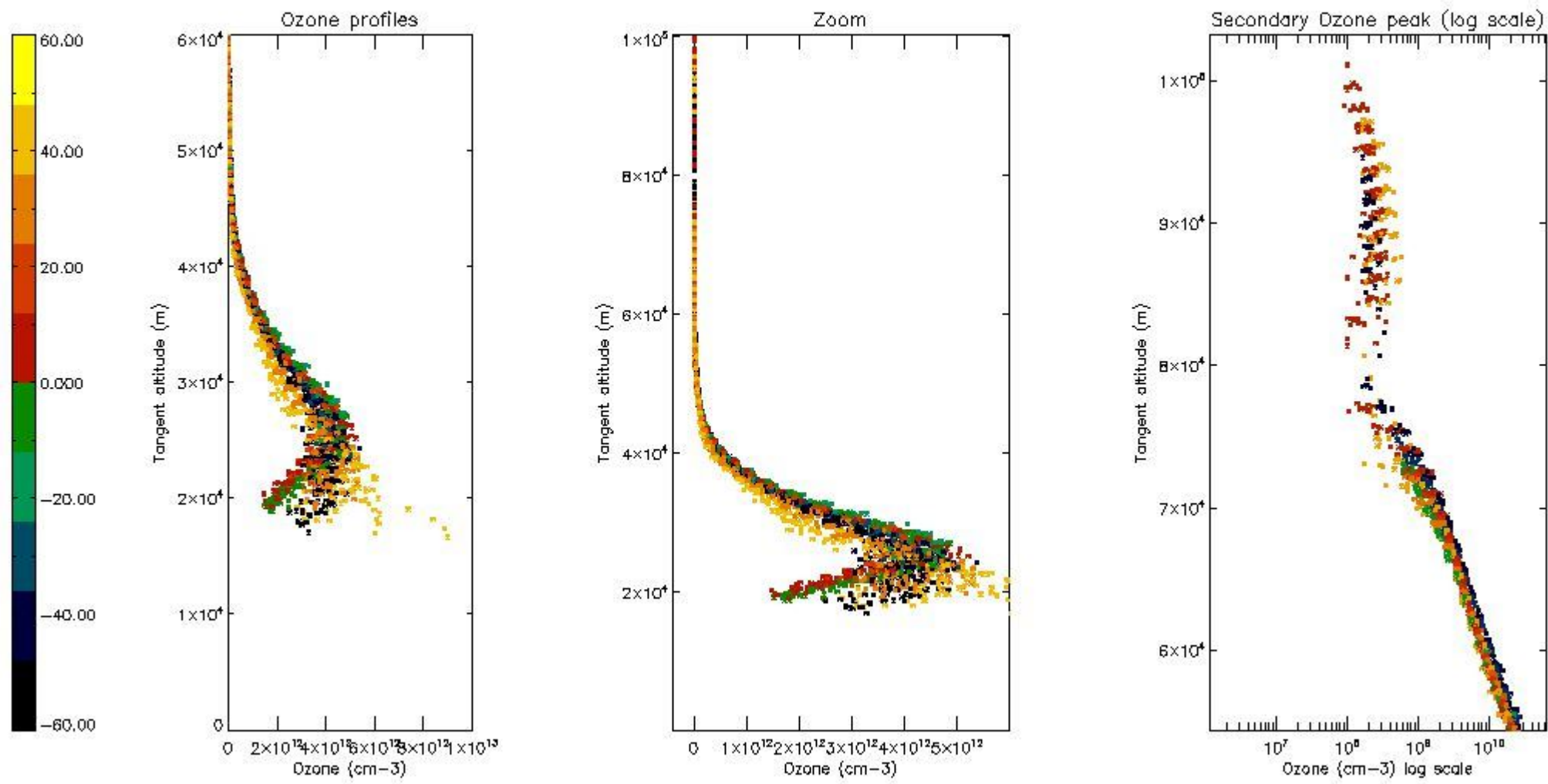
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



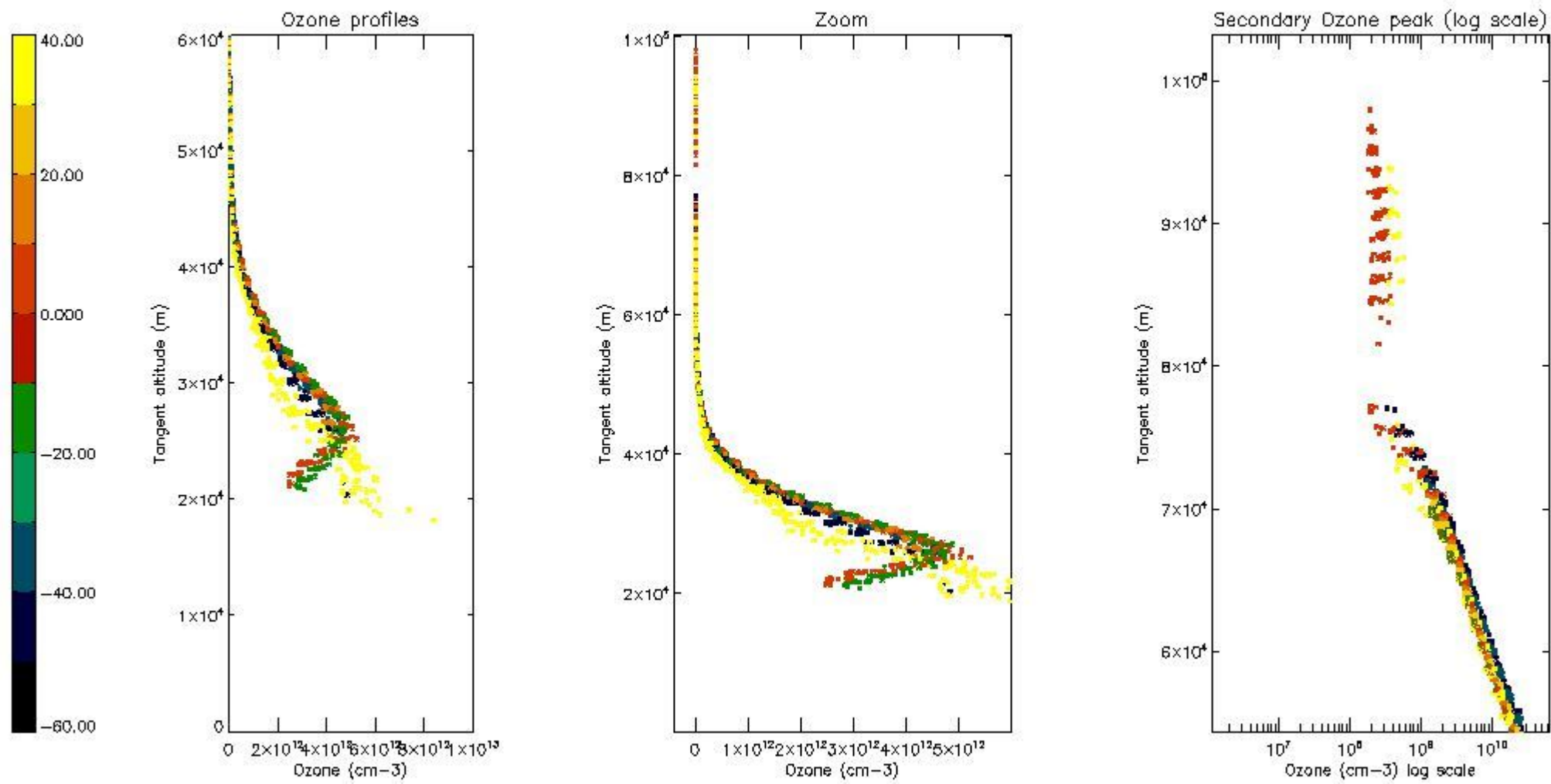
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



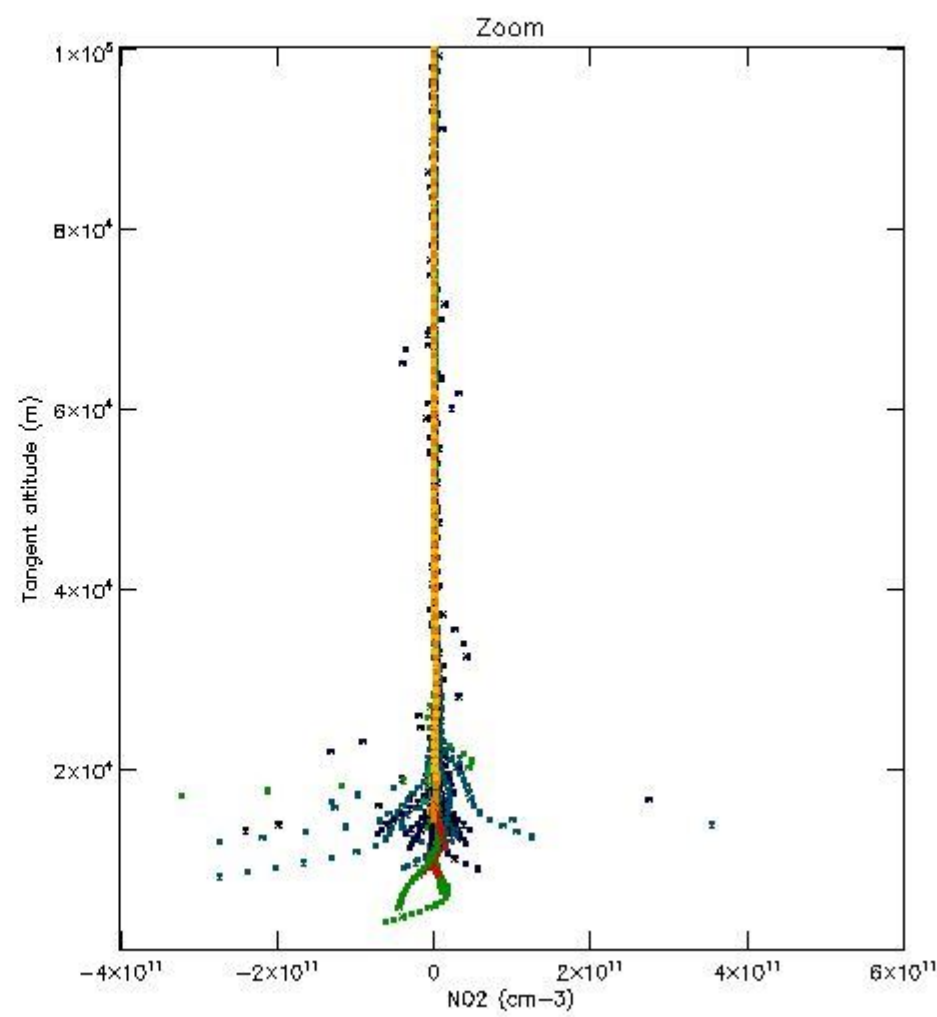
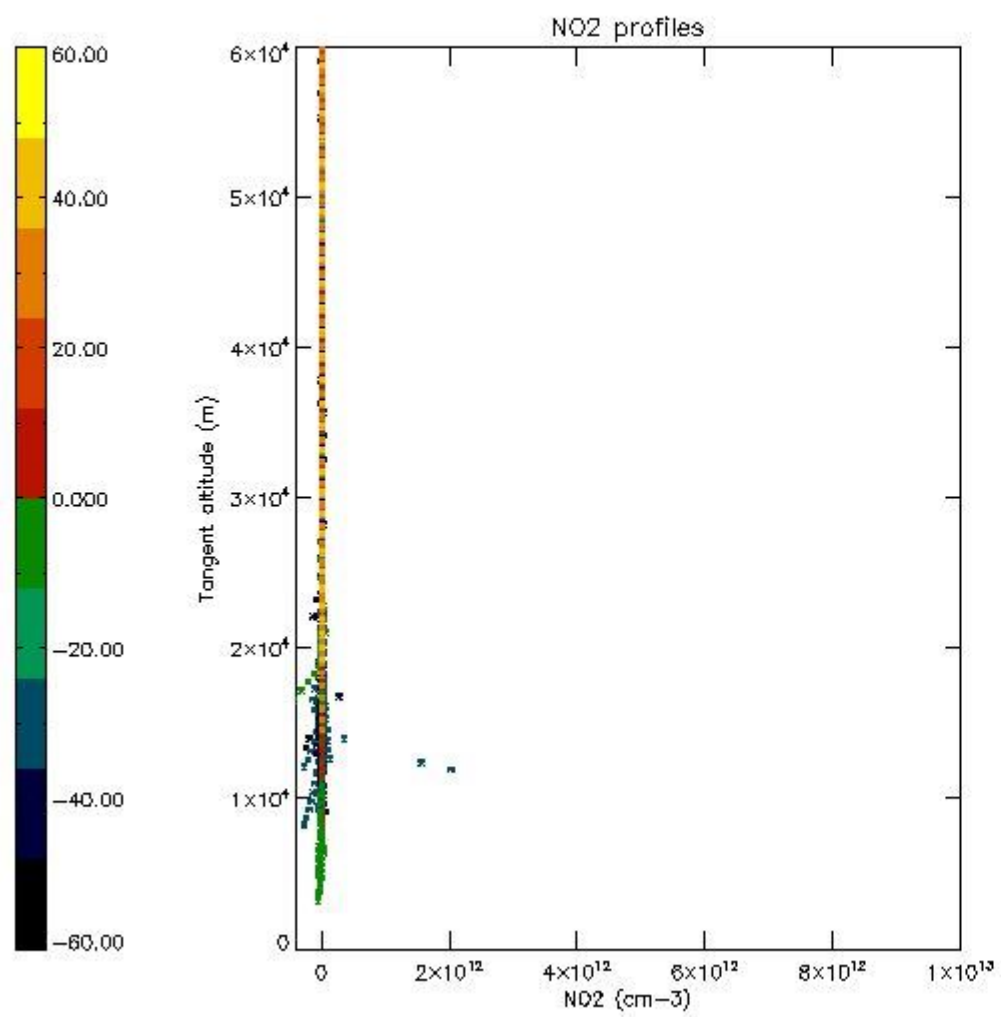
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



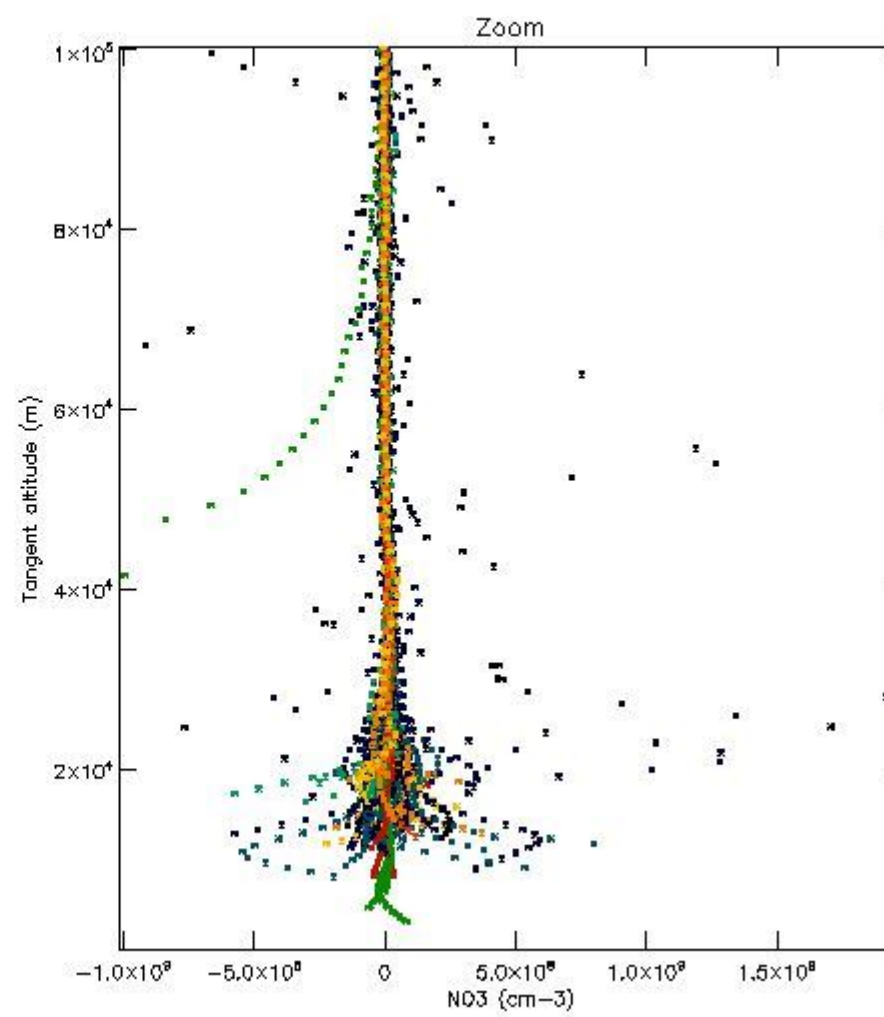
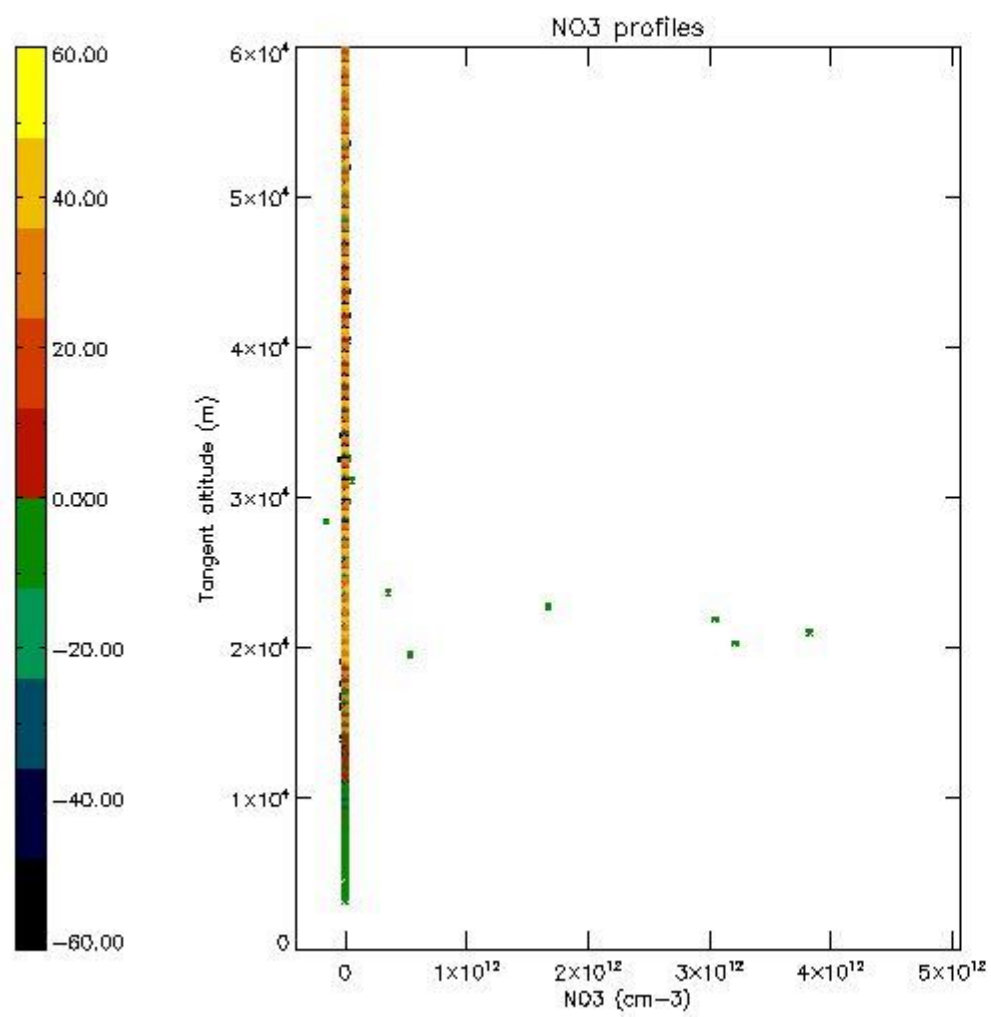
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



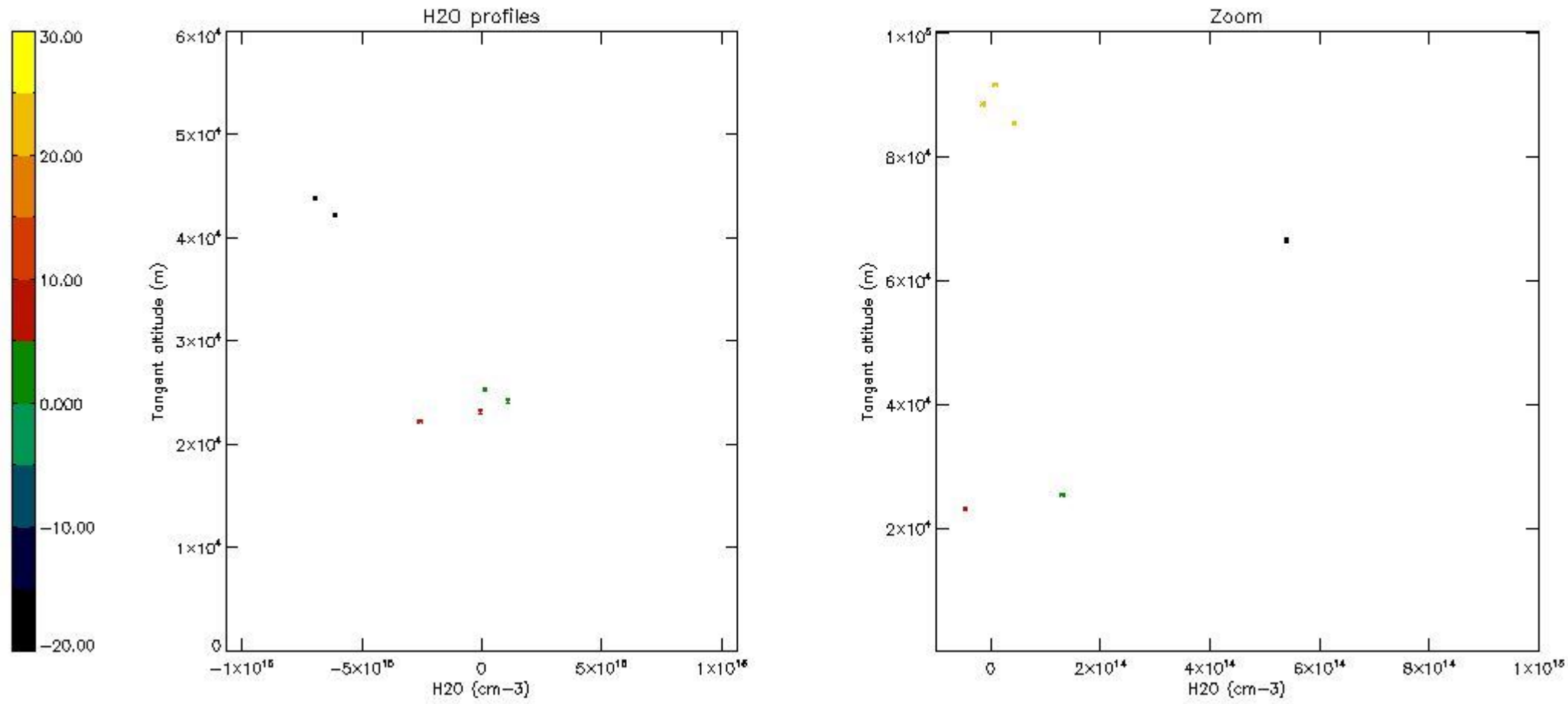
5.7 Plot NO3 profiles for all STD (dark without errors)

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	29-JAN-2006 00:01:13
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	29-JAN-2006 00:01:13
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	29-JAN-2006 00:01:13

GOMOS Level 2 Daily Report

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[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% \(dark without errors\)](#)

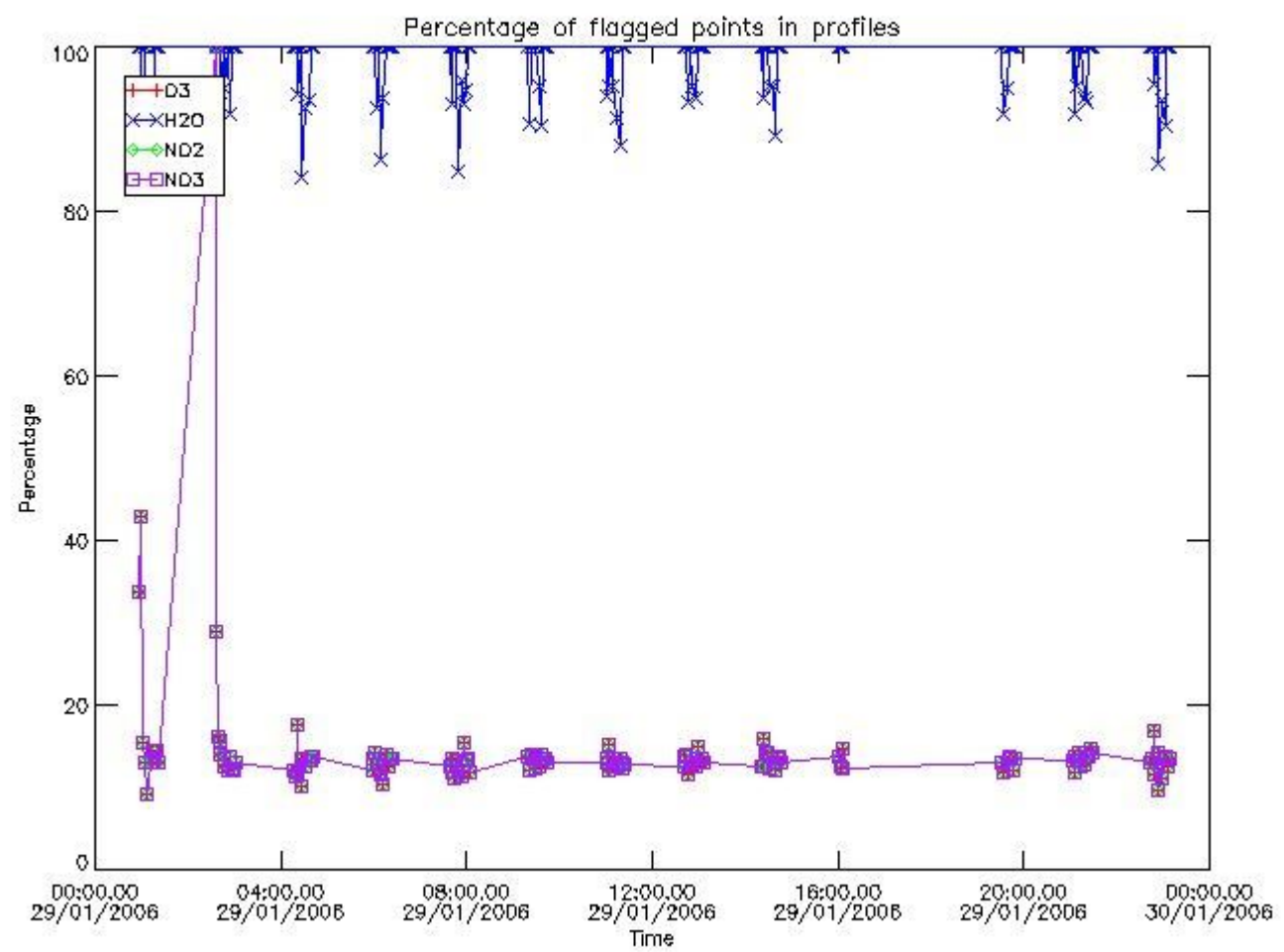
[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

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

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

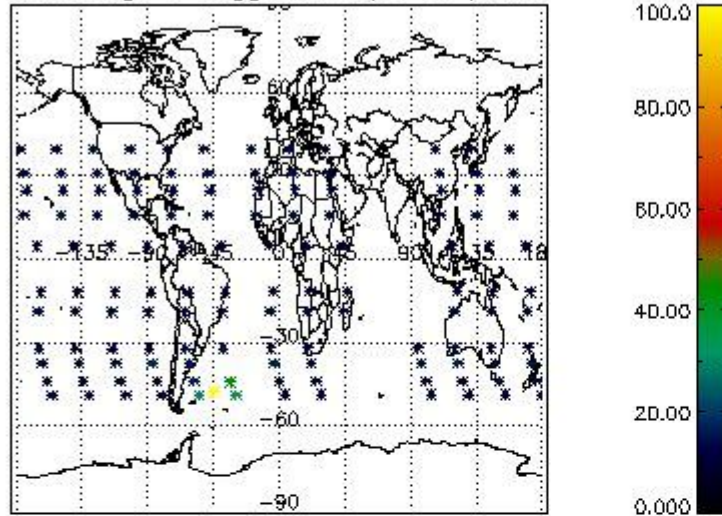
[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

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

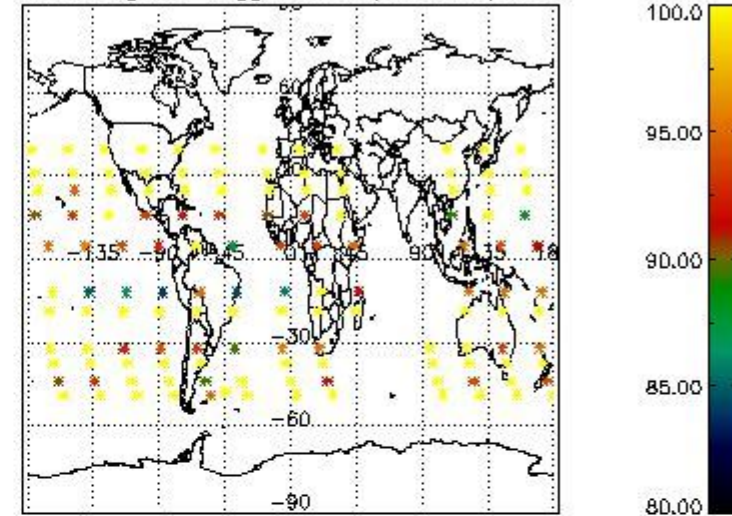


3.2 Plot quality information per product (world map)

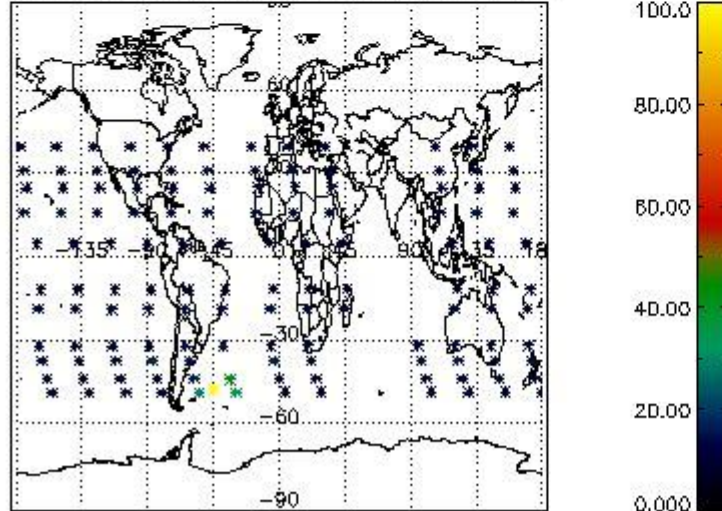
Percentage of flagged data per O3 profile



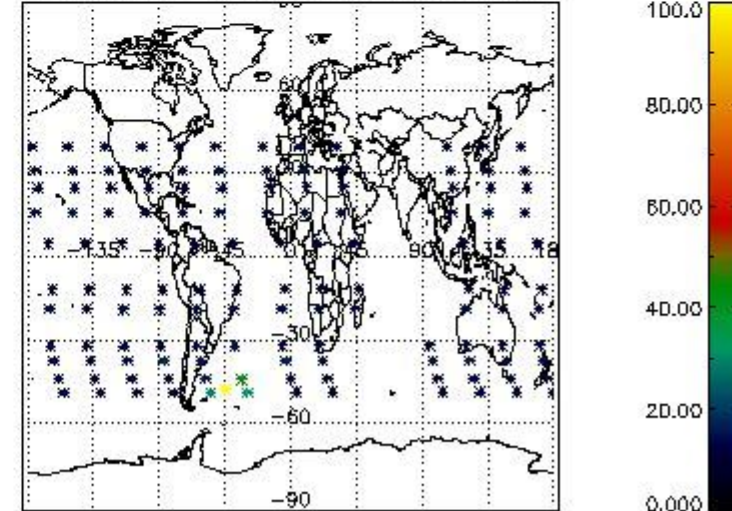
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

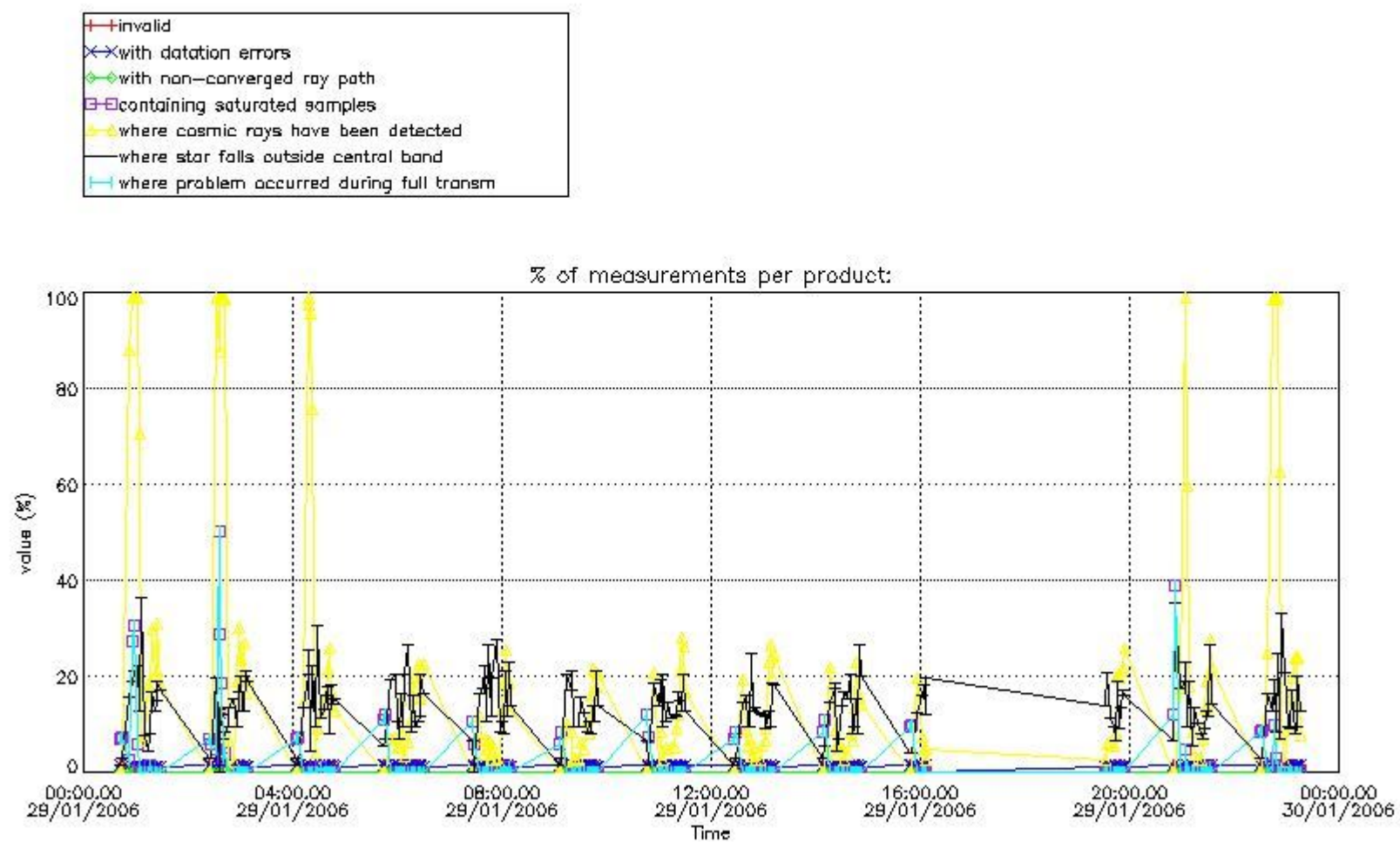


4. Level 1 quality information per product

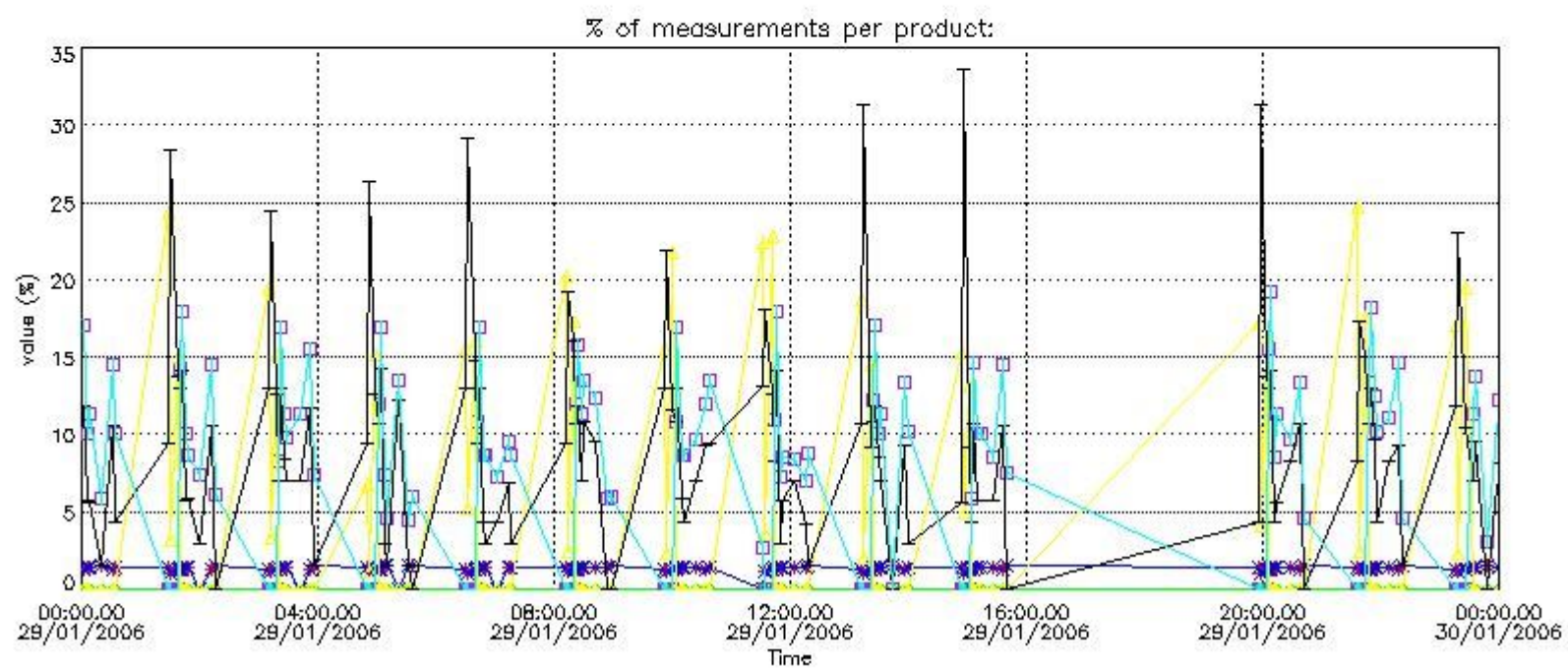
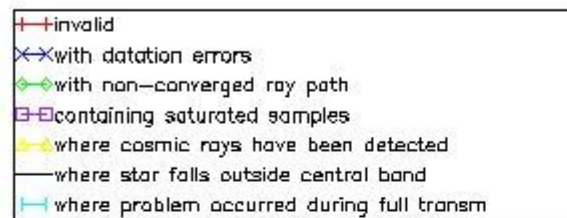
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



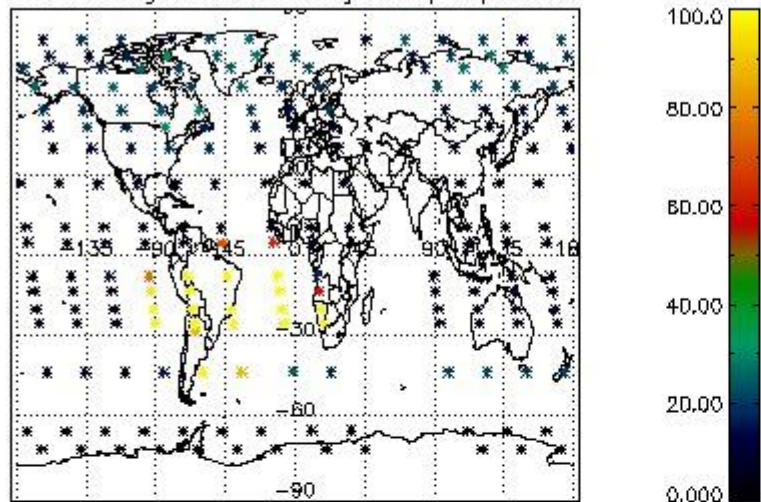
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



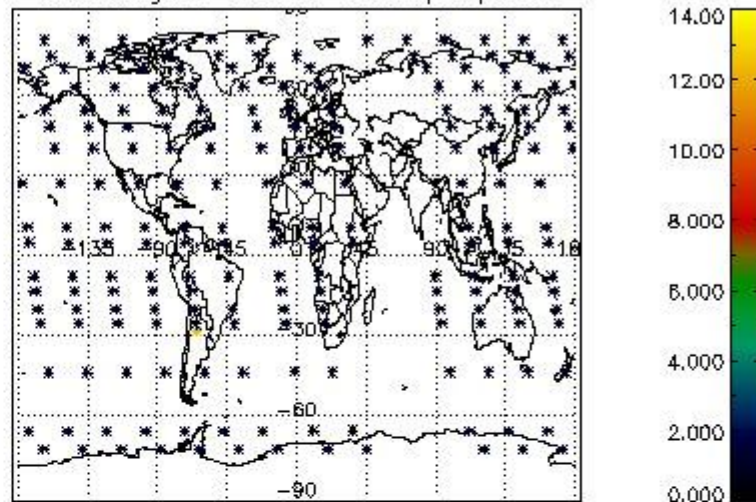
4.2 Plot quality information per product coming from level 1b processing (world map)

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

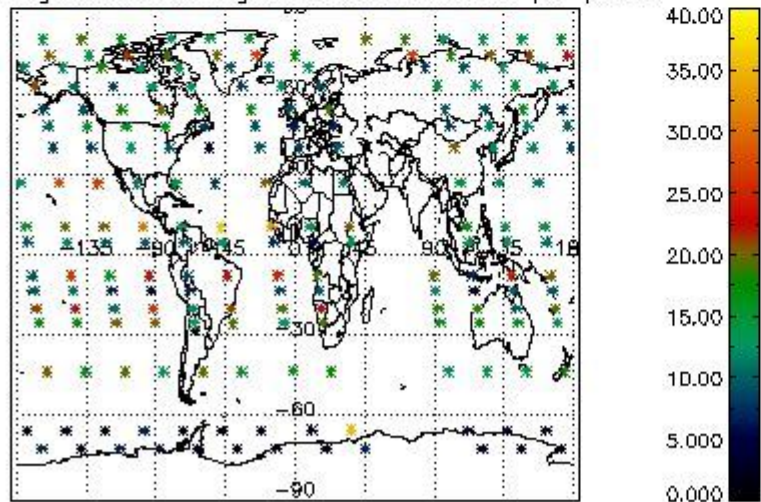
Percentage of cosmic ray hits per profile



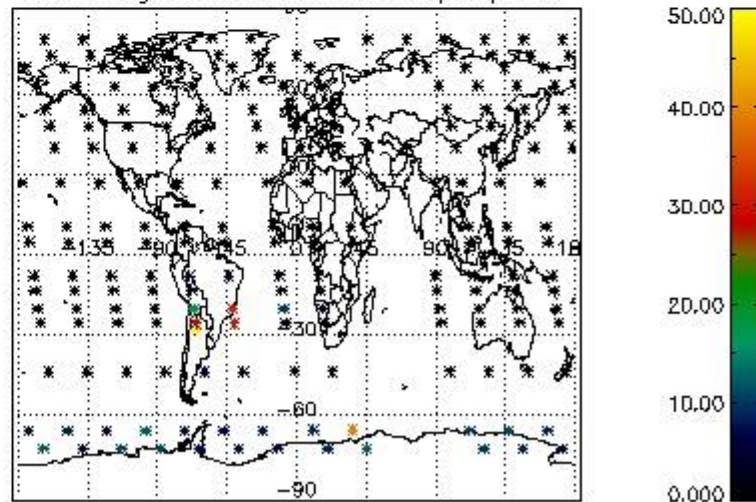
Percentage of datation errors per profile



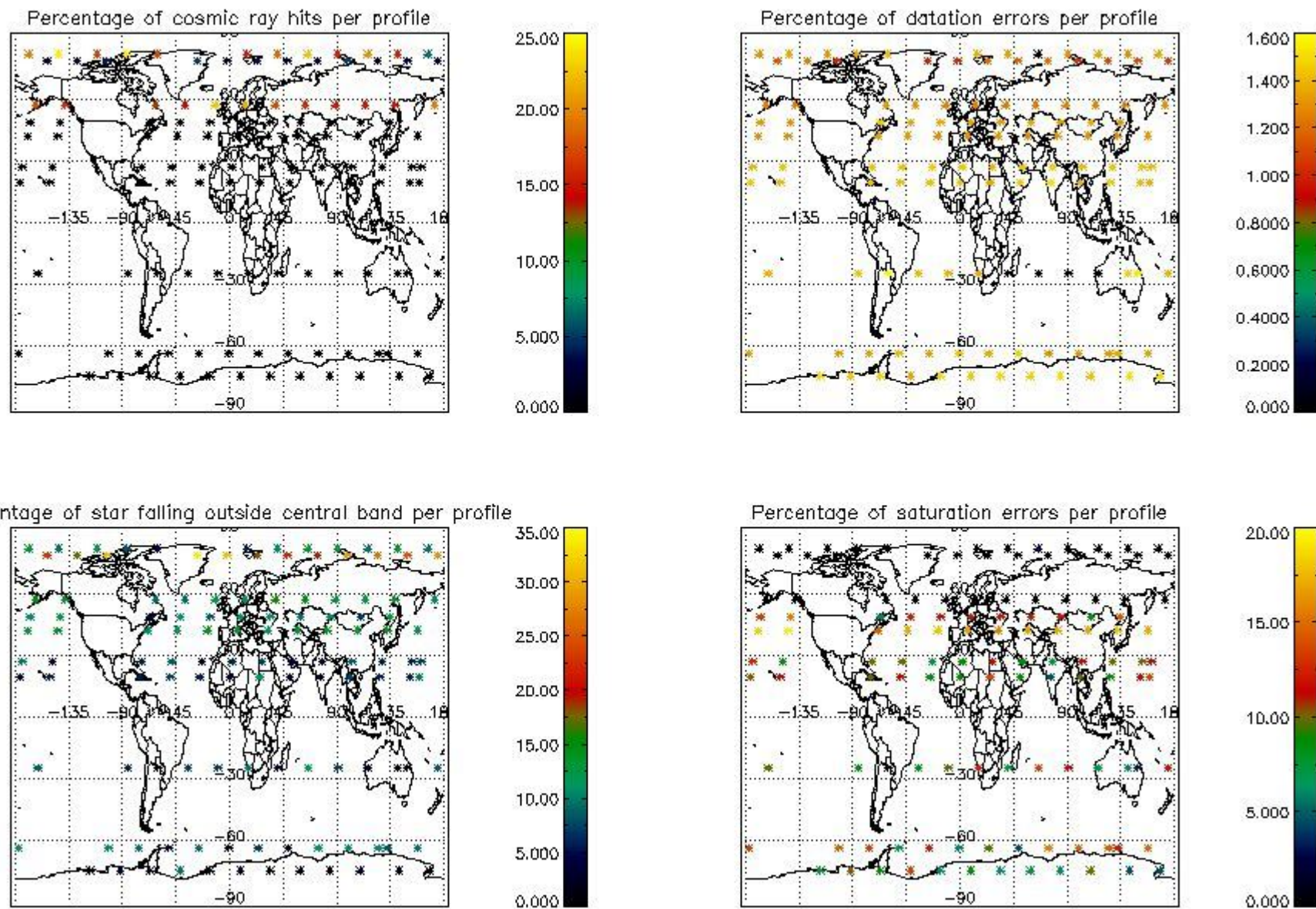
Percentage of star falling outside central band per profile



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

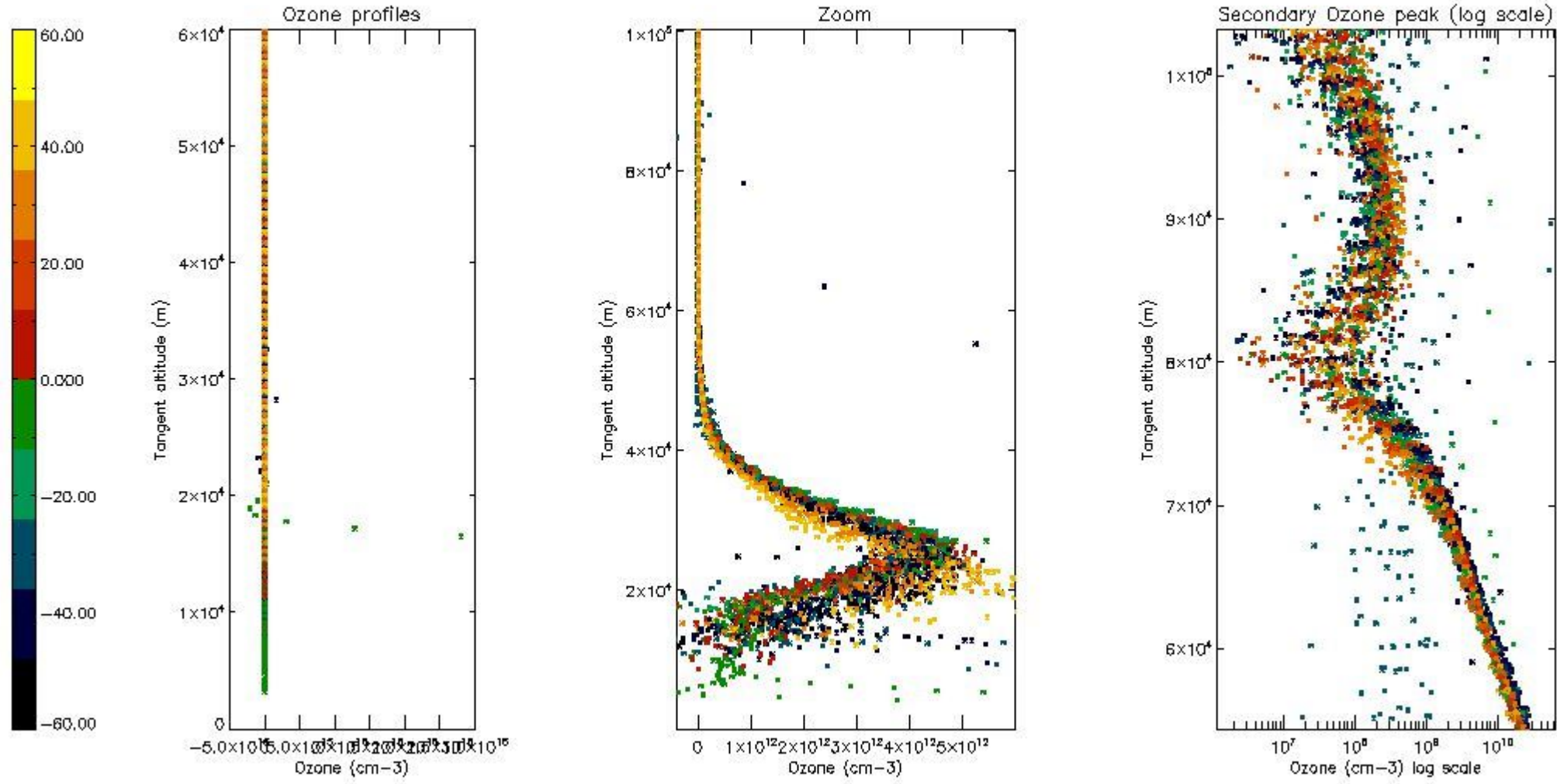
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	42
STD < 20	24

STD < 10	20
STD < 5	13

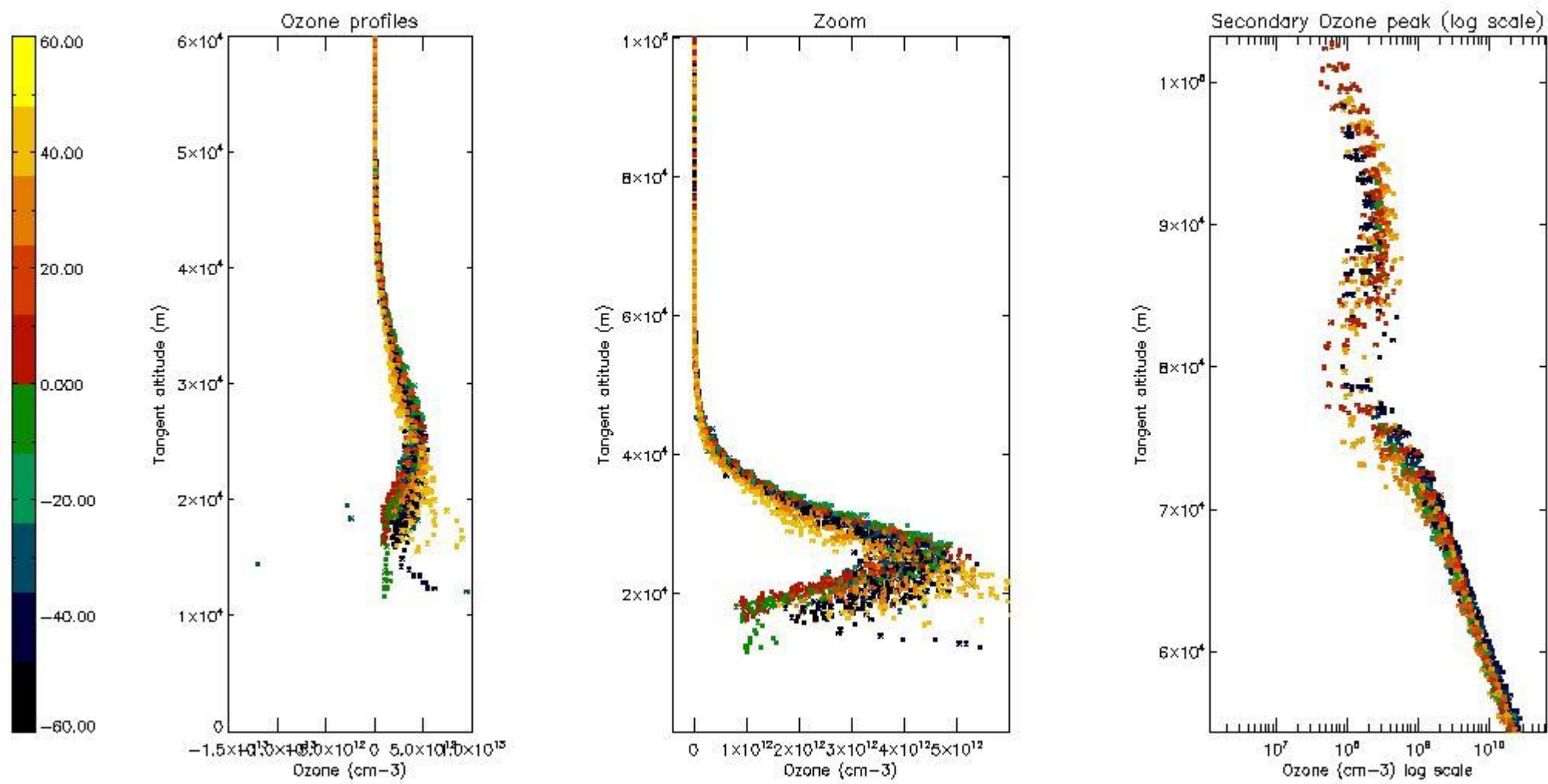
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



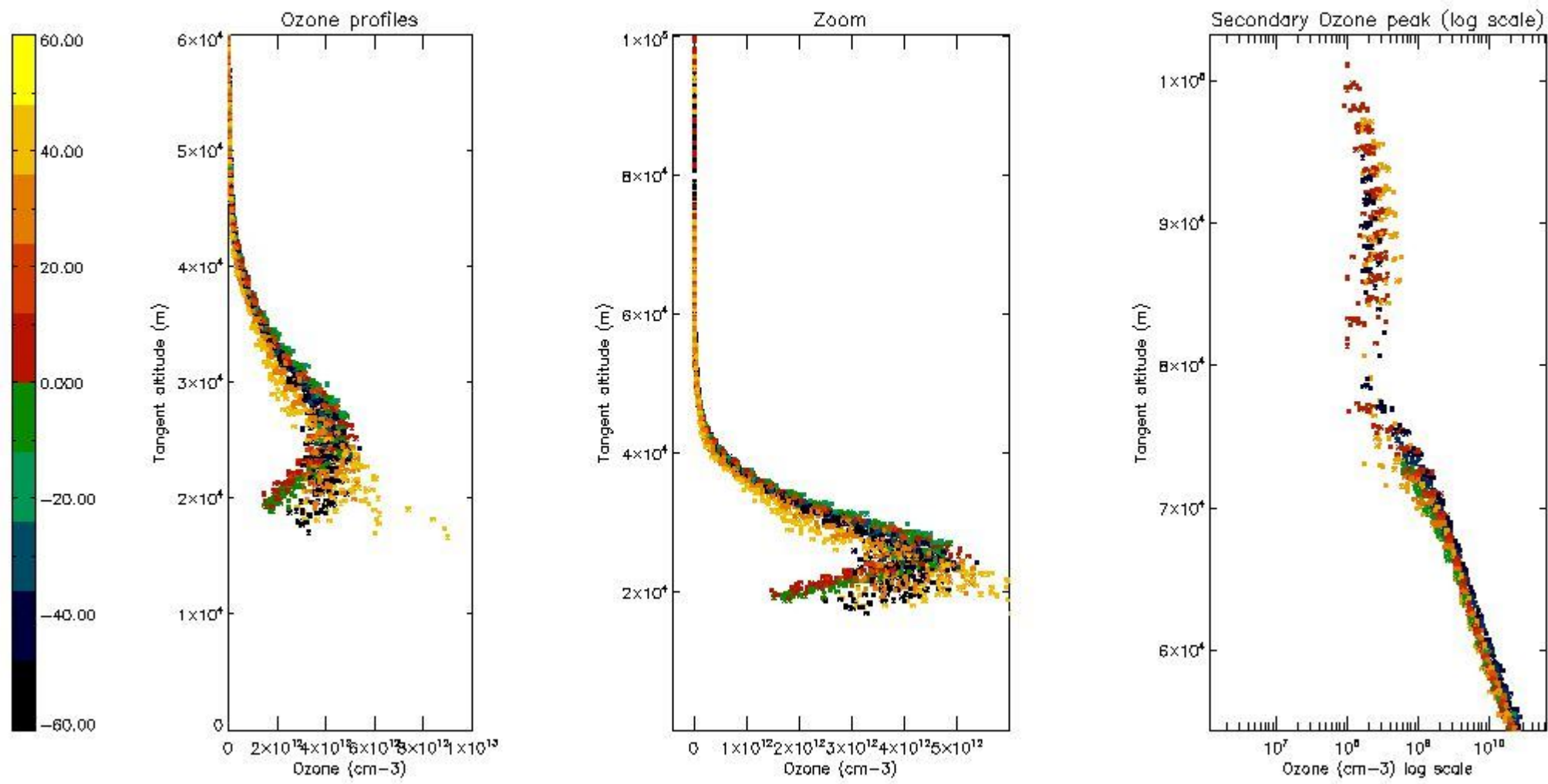
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



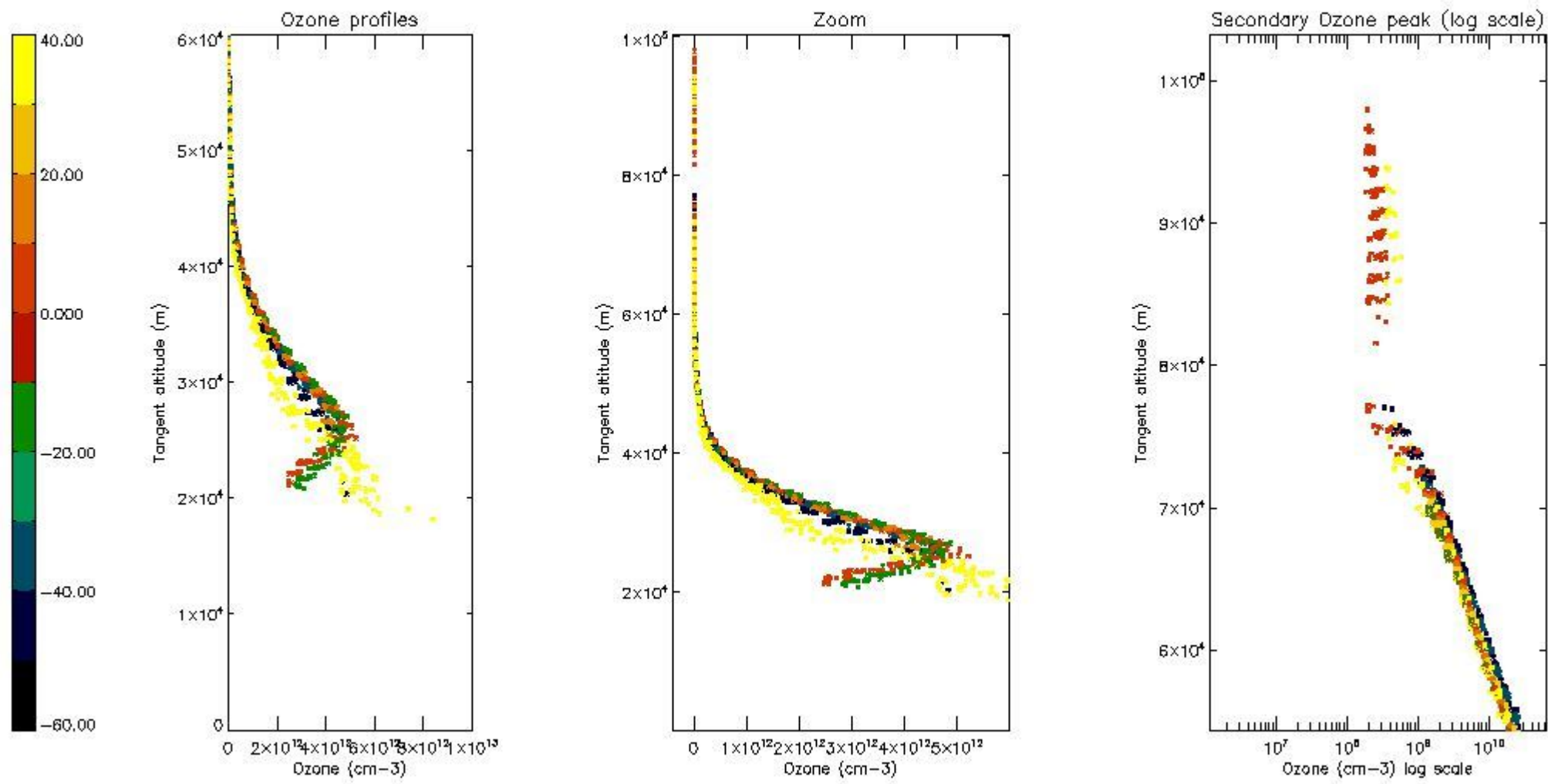
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



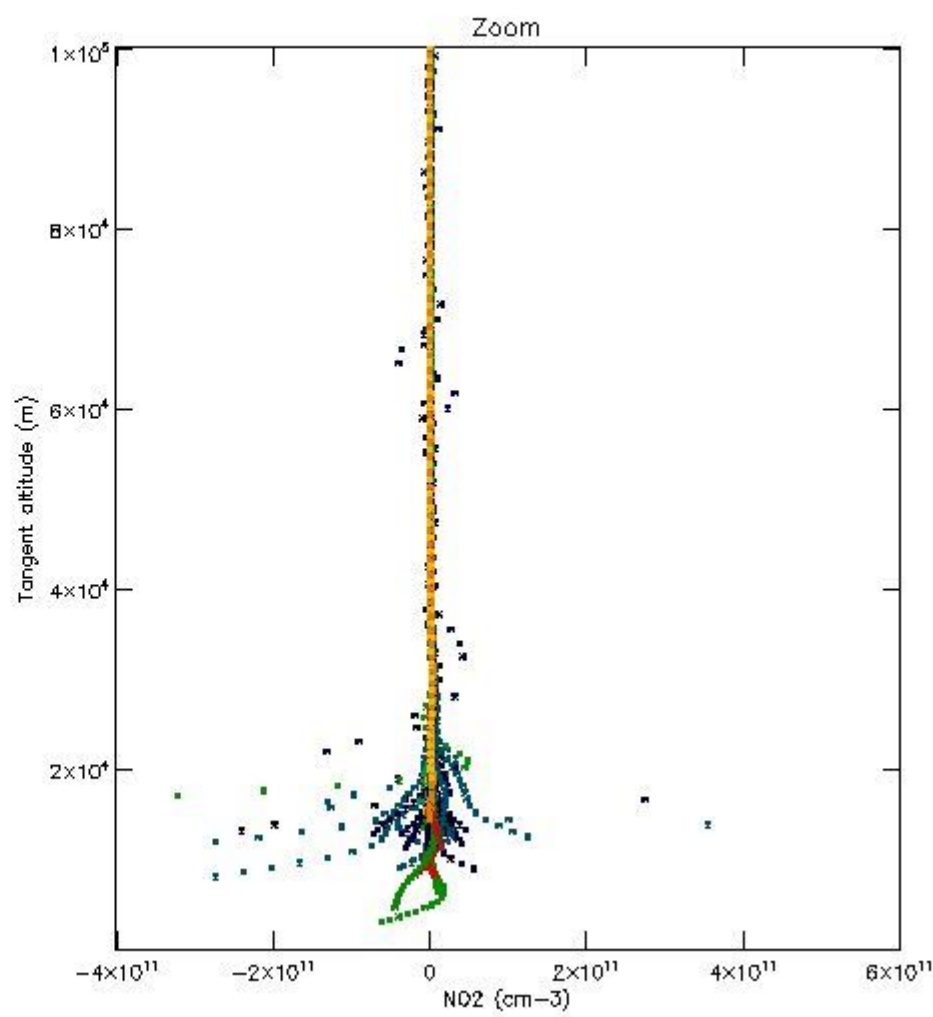
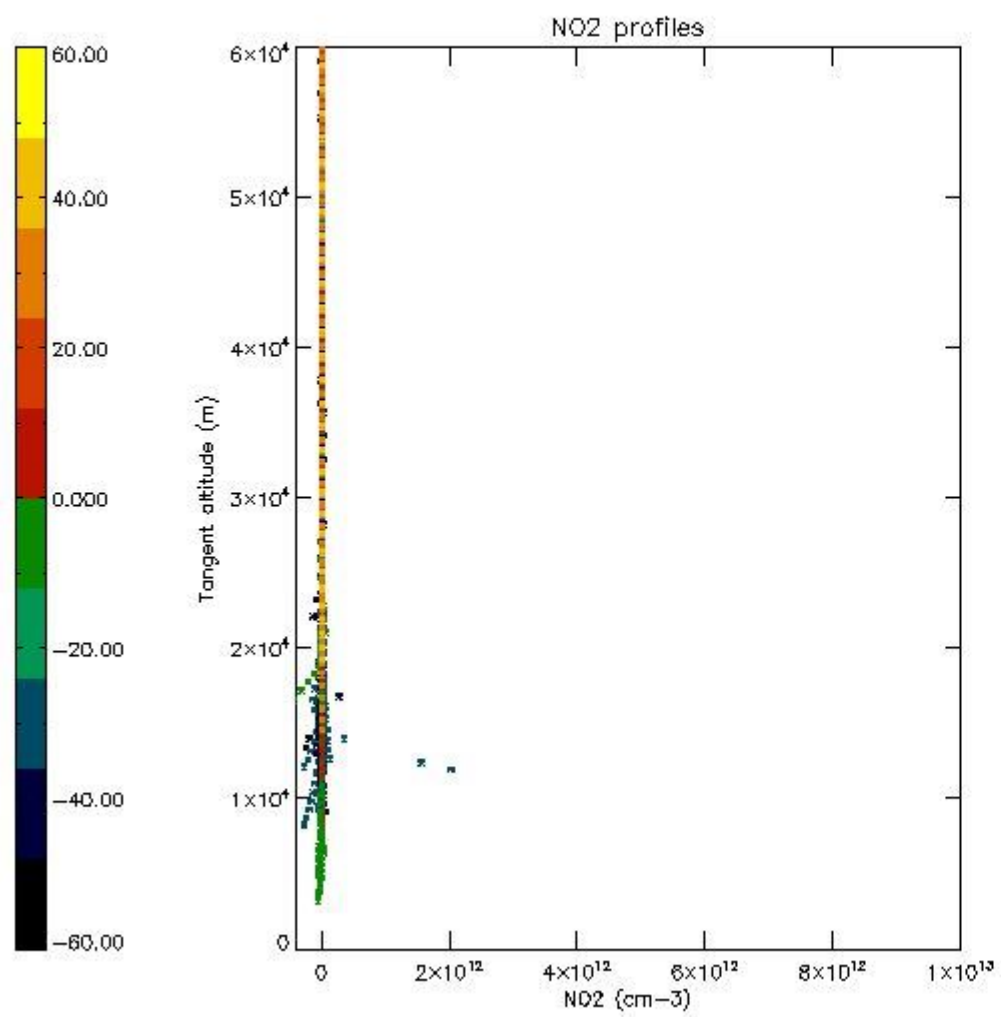
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



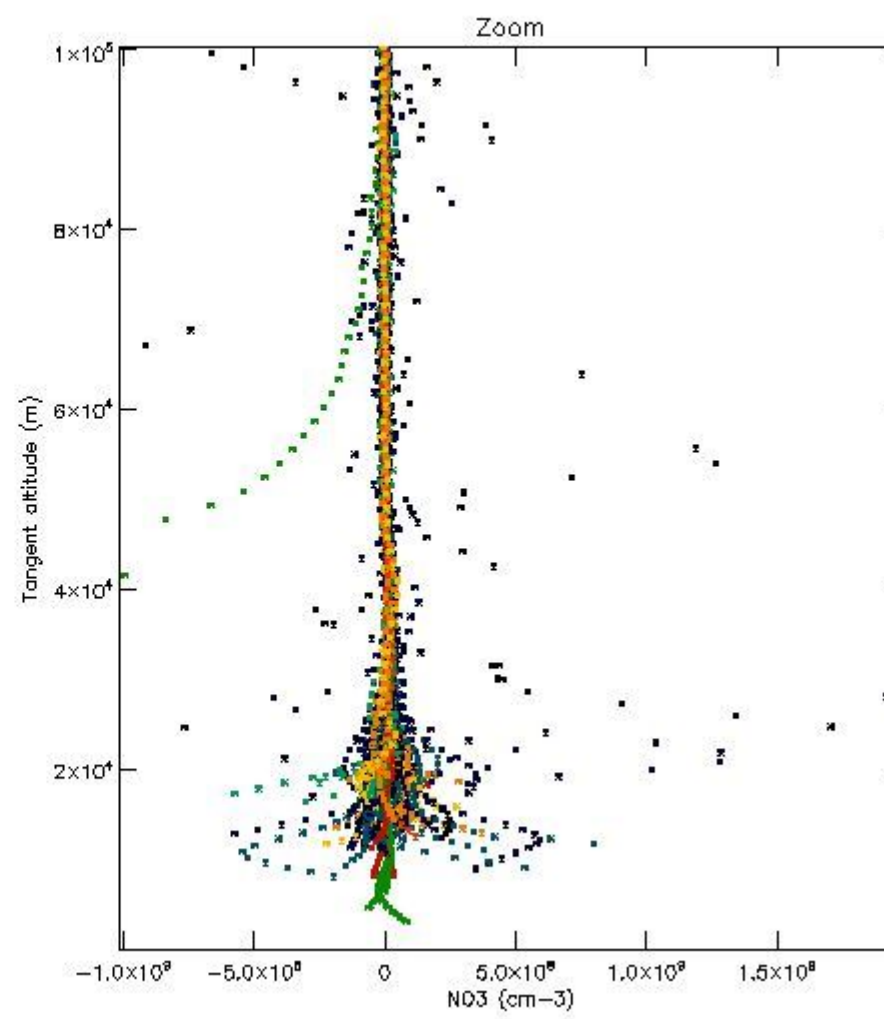
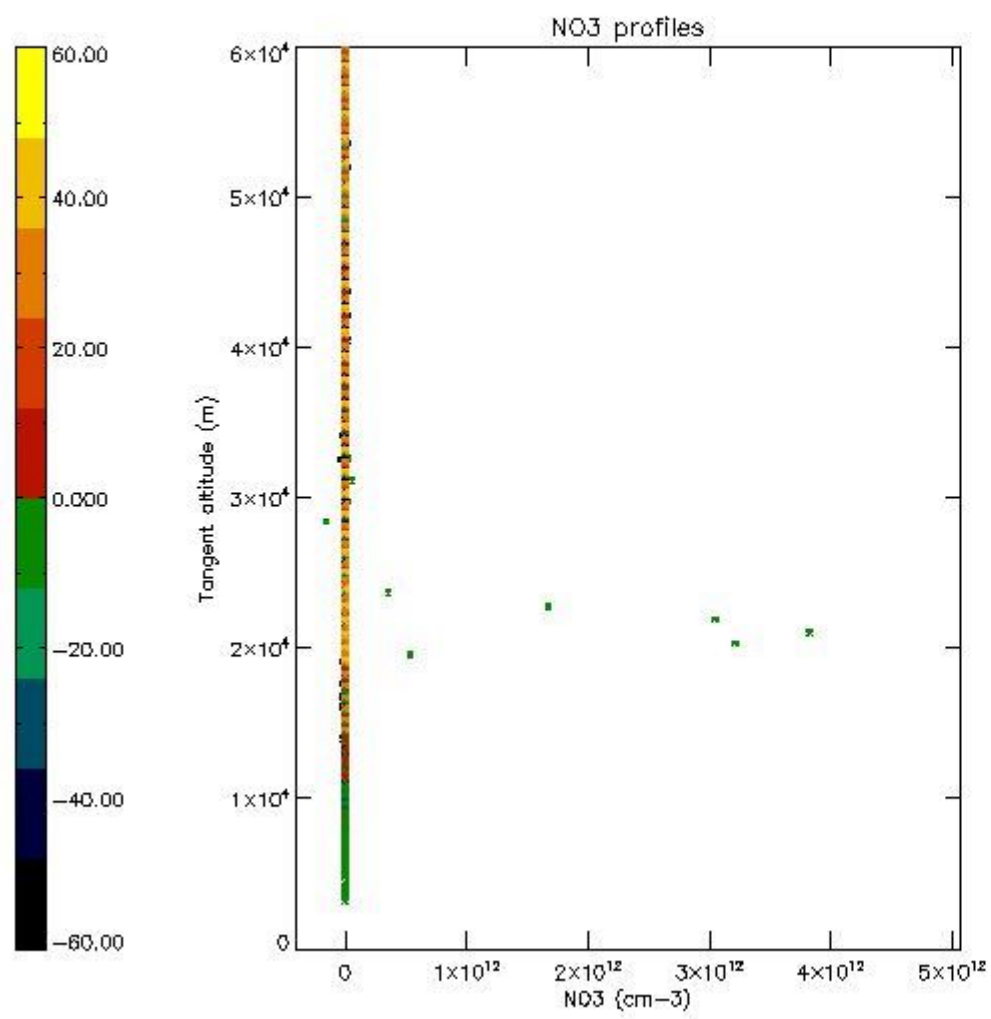
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



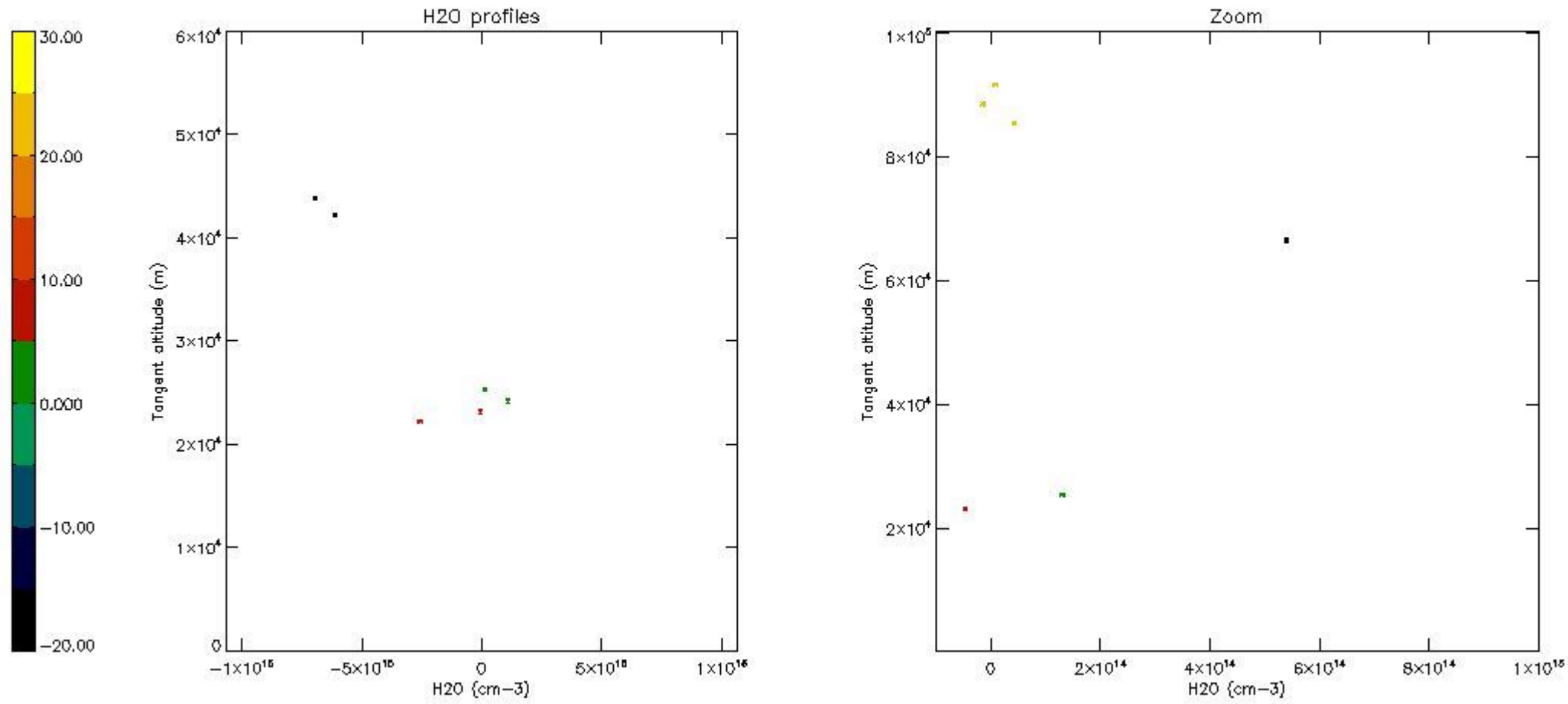
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

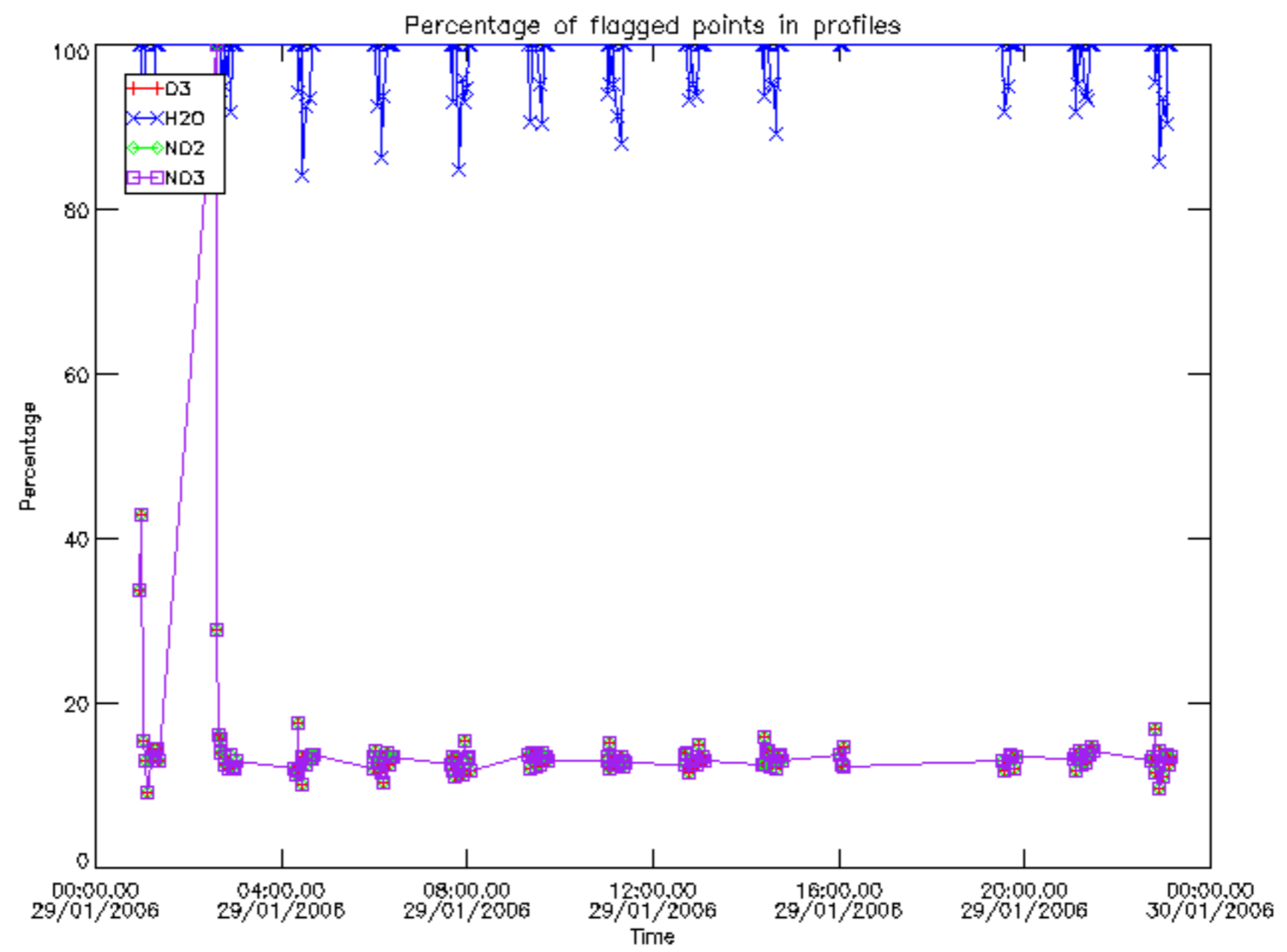
The colorbar represents the latitude.



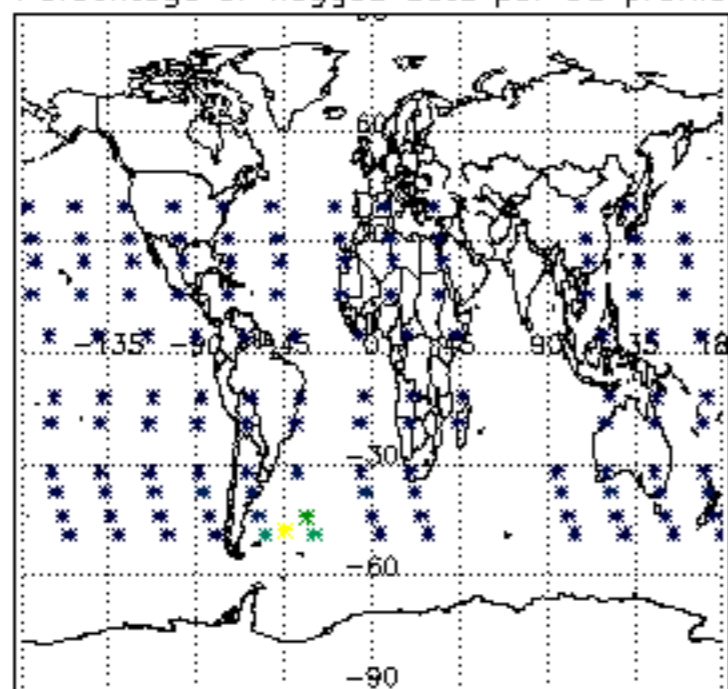
6. Auxiliary Data Files used for the production reported in section 2

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.

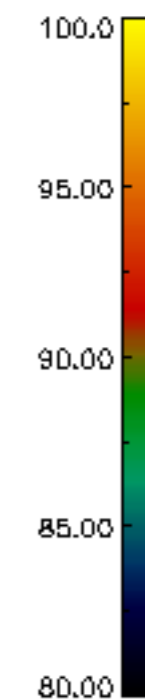
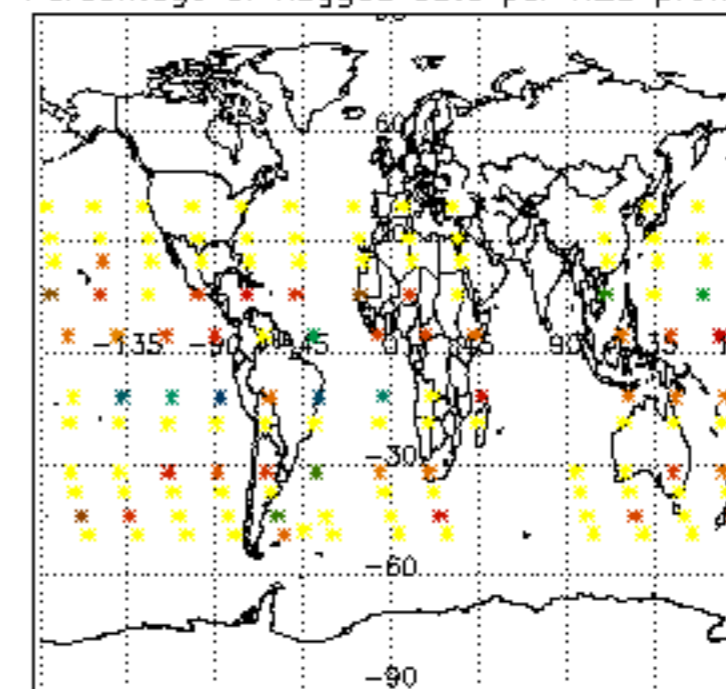
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	29-JAN-2006 00:01:13
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	29-JAN-2006 00:01:13
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	29-JAN-2006 00:01:13



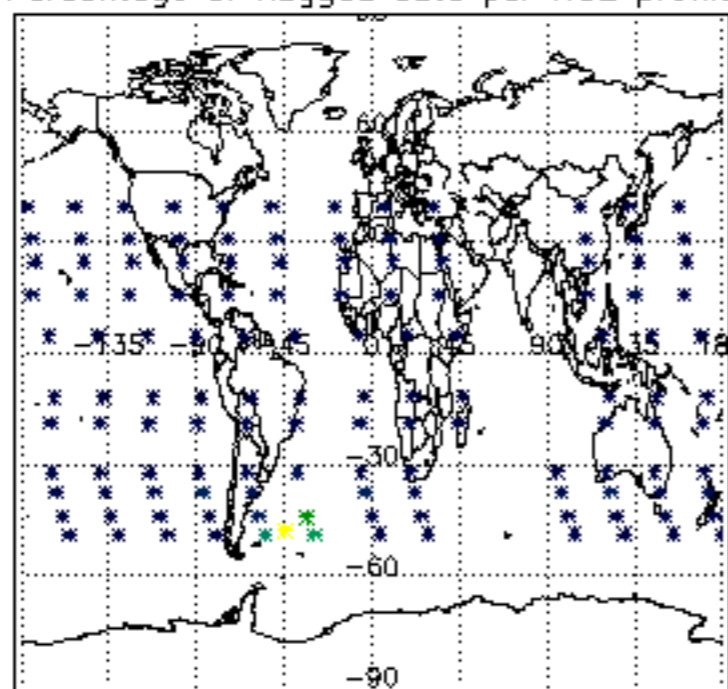
Percentage of flagged data per D3 profile



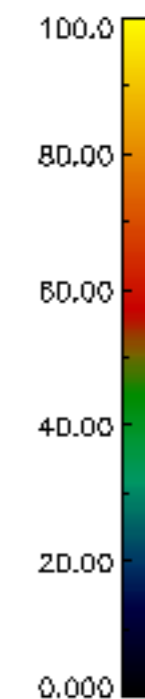
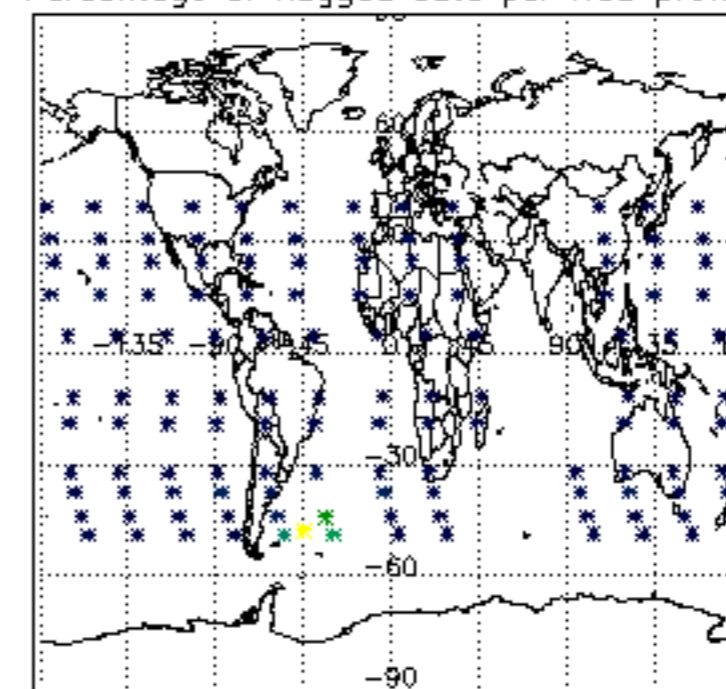
Percentage of flagged data per H2O profile

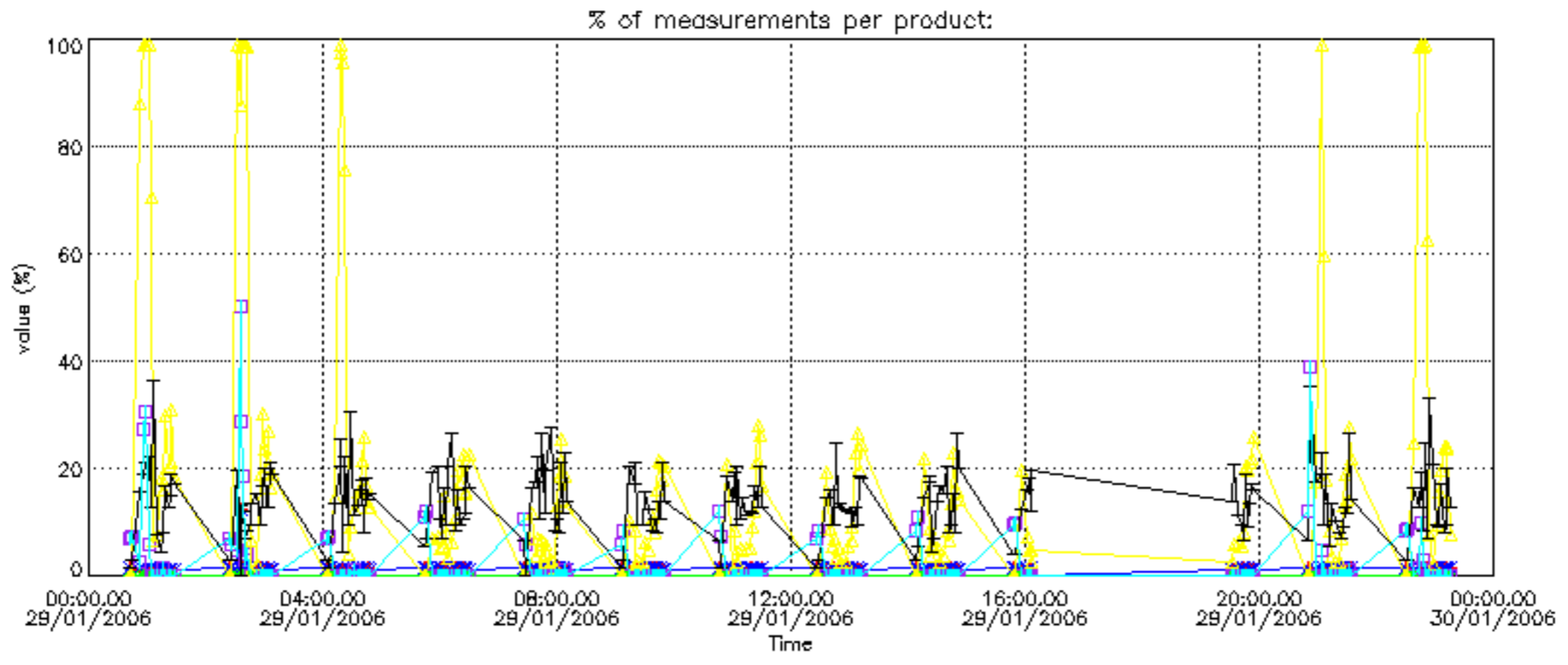


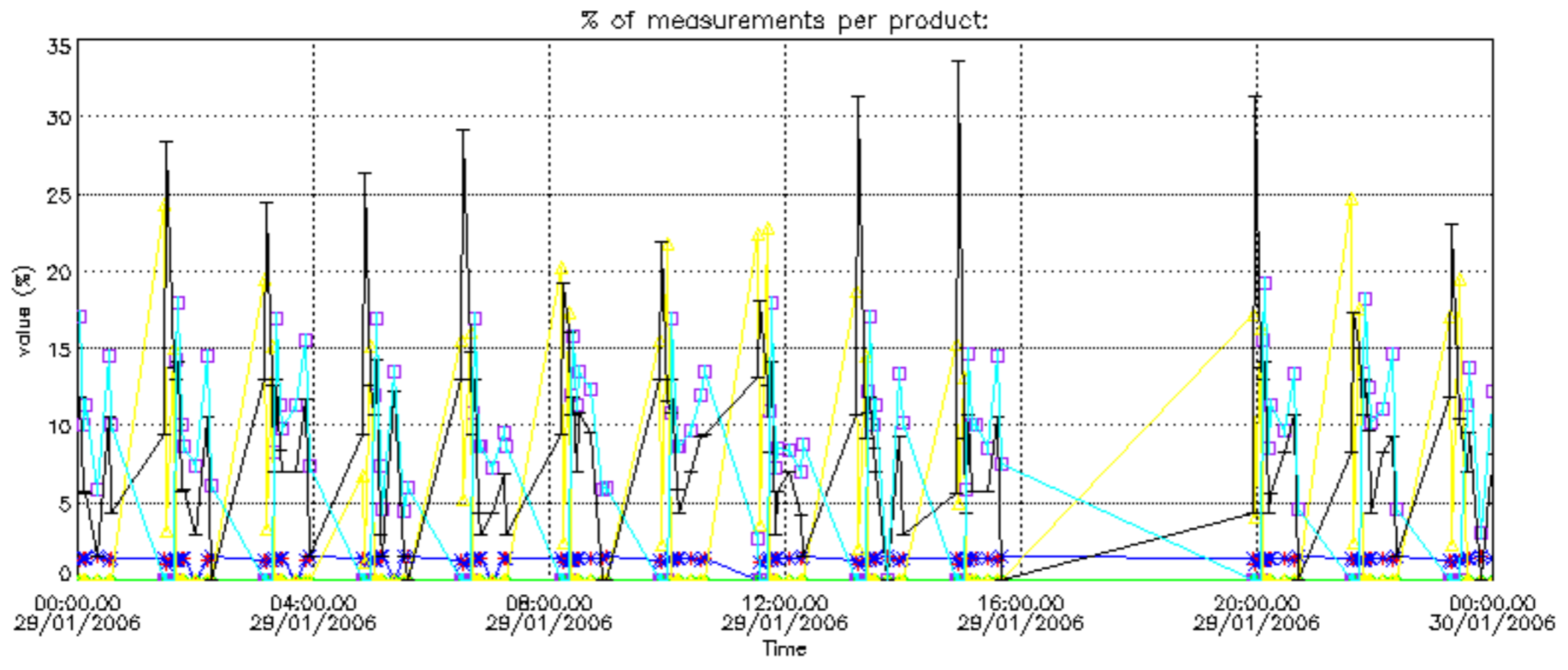
Percentage of flagged data per NO2 profile



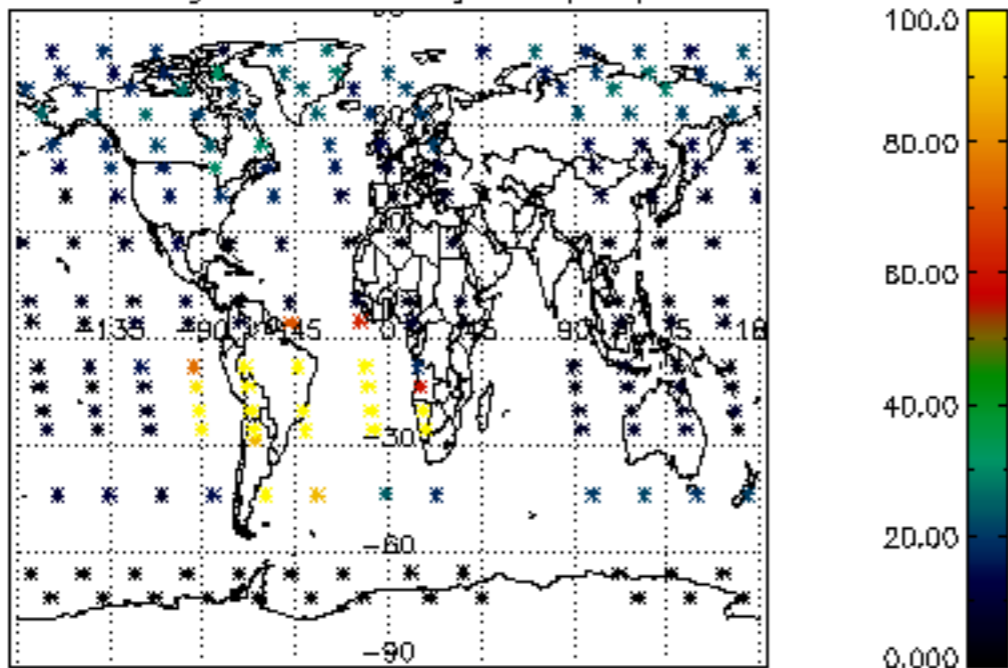
Percentage of flagged data per NO3 profile



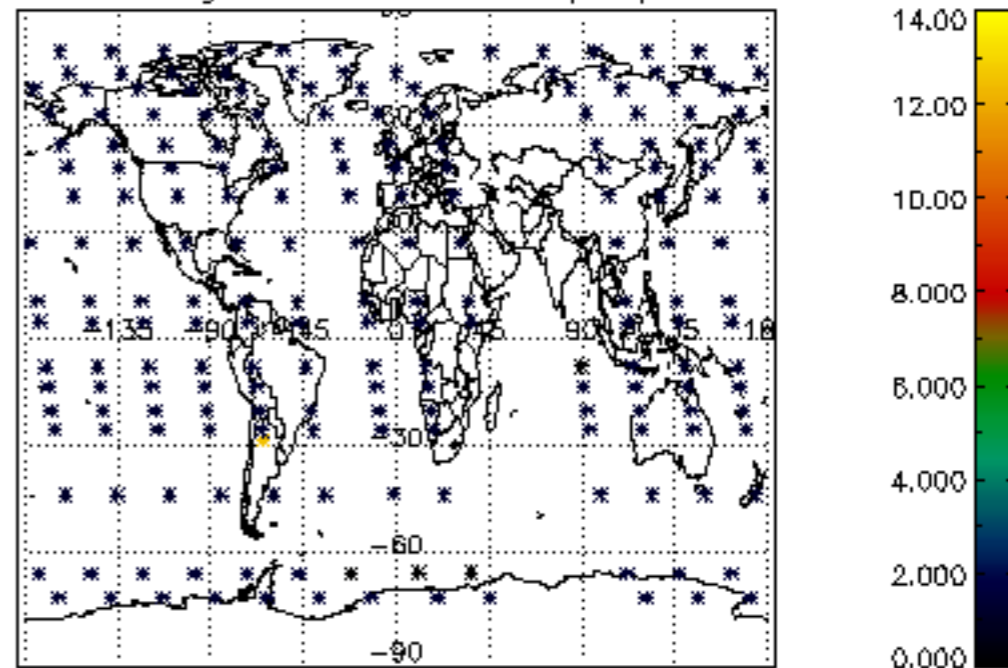




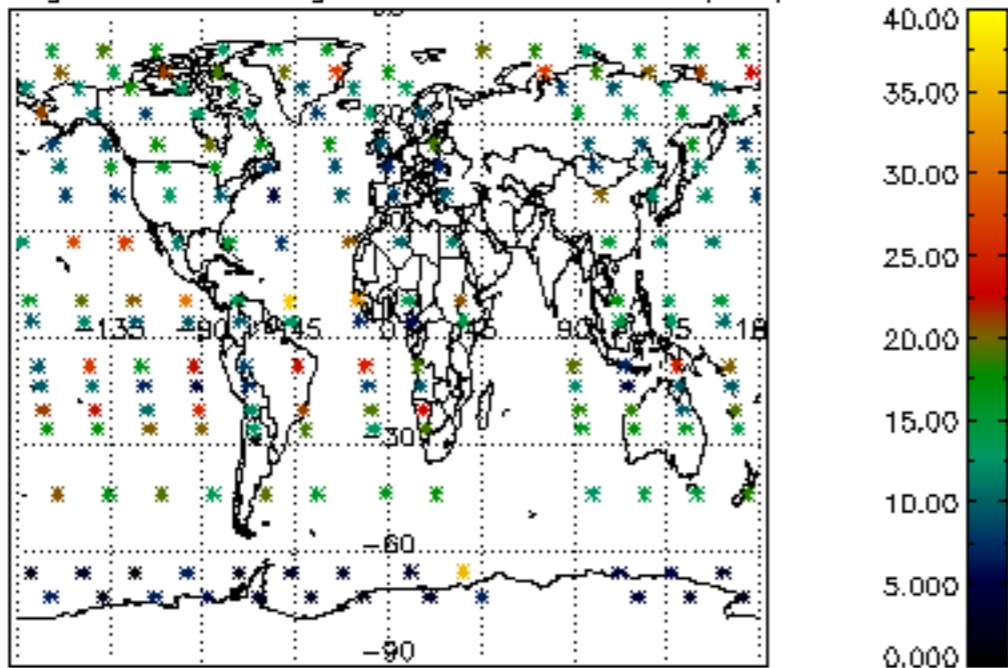
Percentage of cosmic ray hits per profile



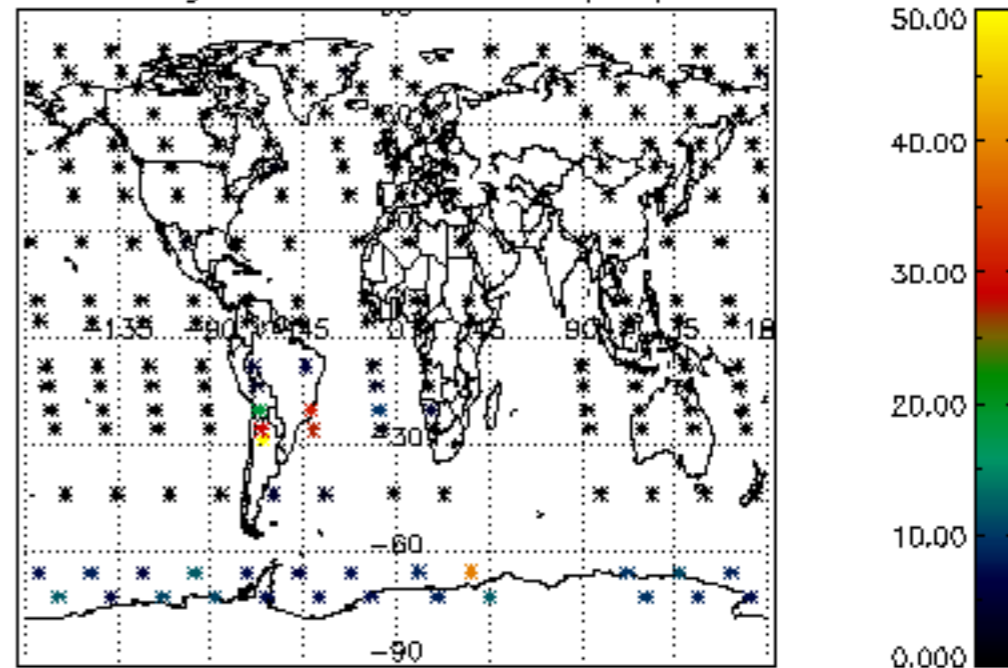
Percentage of datation errors per profile



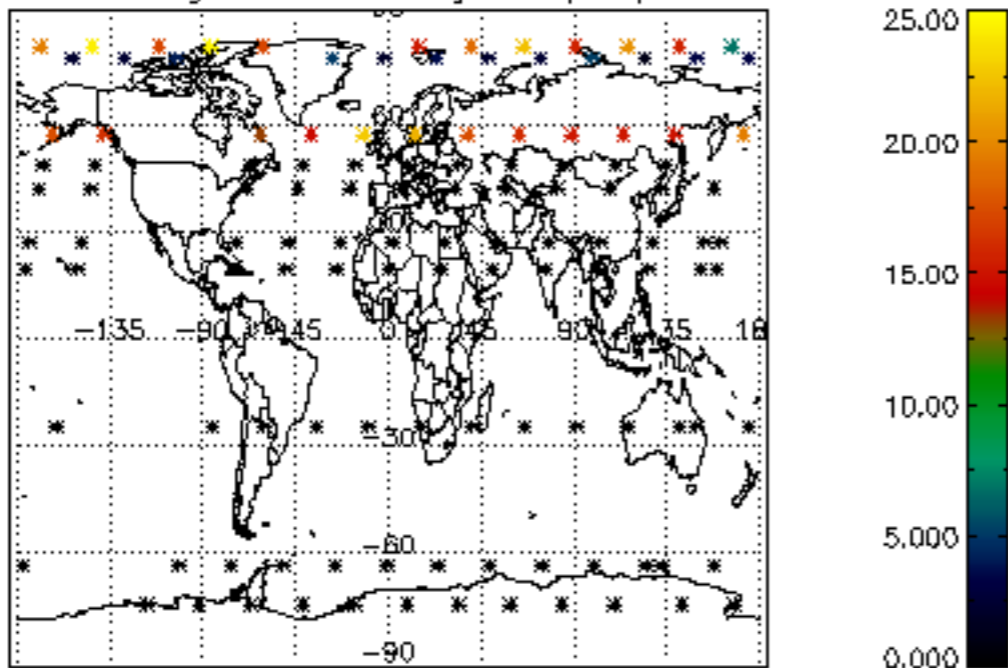
Percentage of star falling outside central band per profile



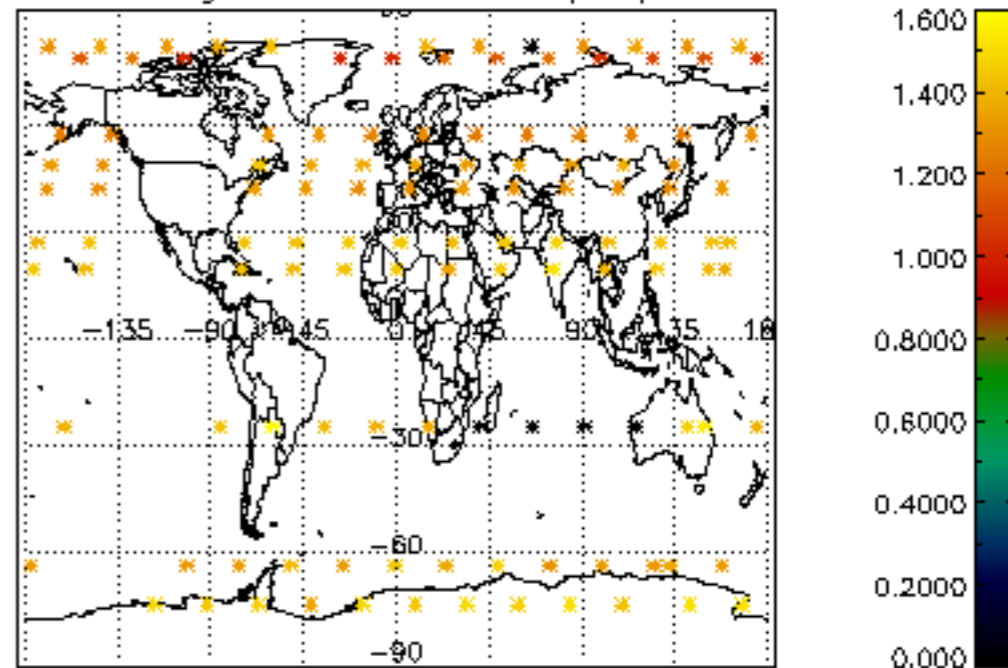
Percentage of saturation errors per profile



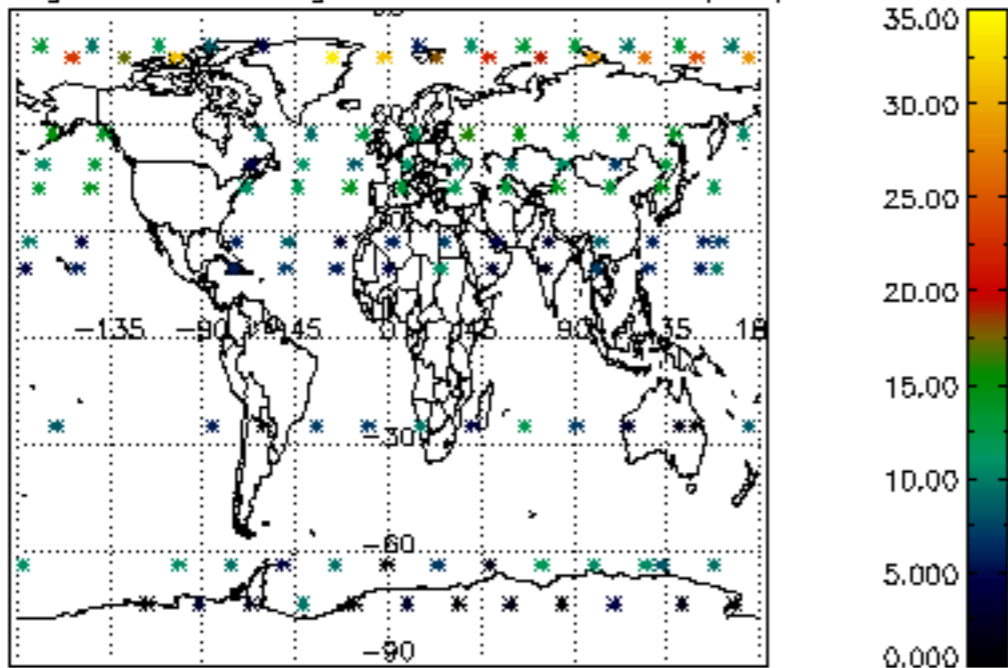
Percentage of cosmic ray hits per profile



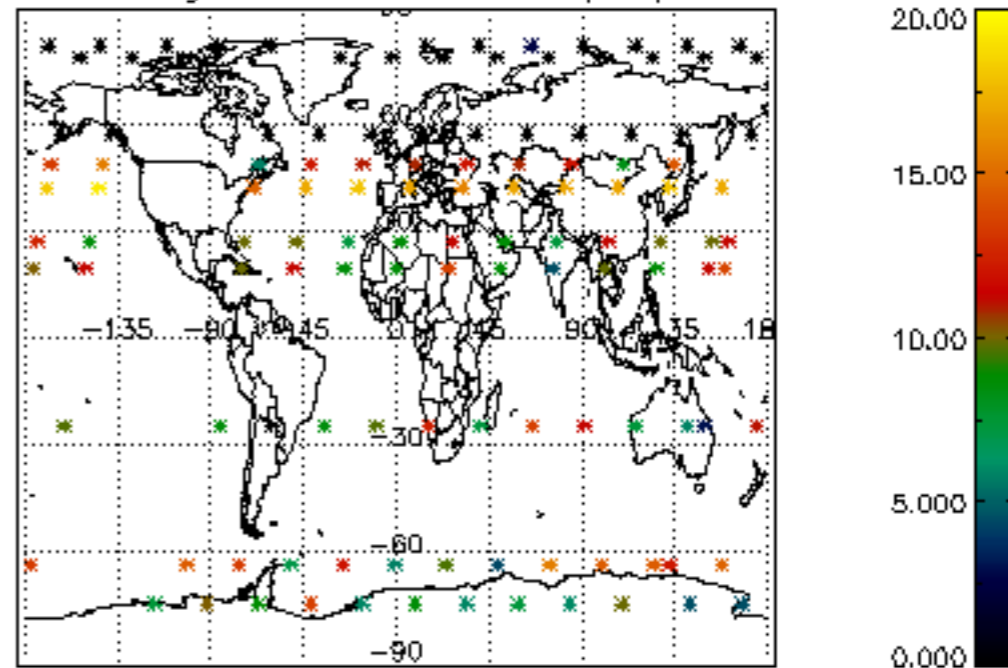
Percentage of datation errors per profile

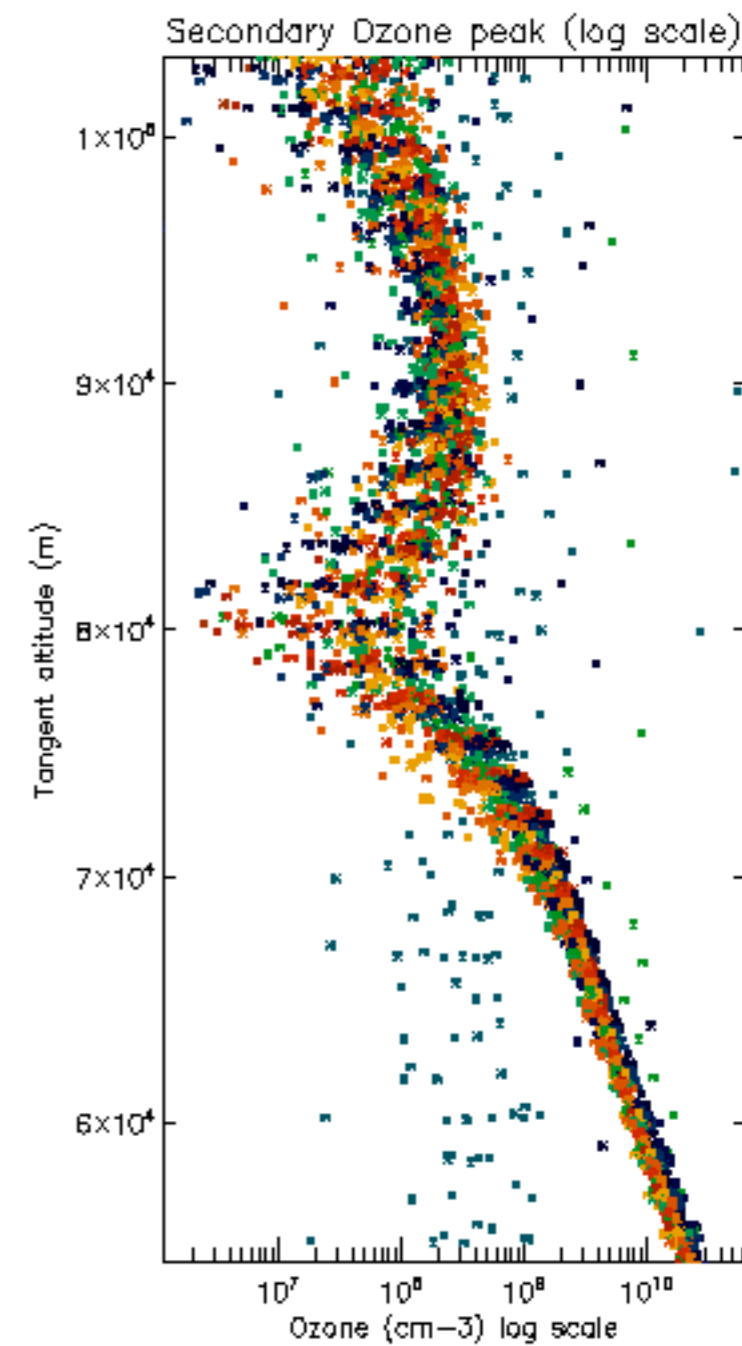
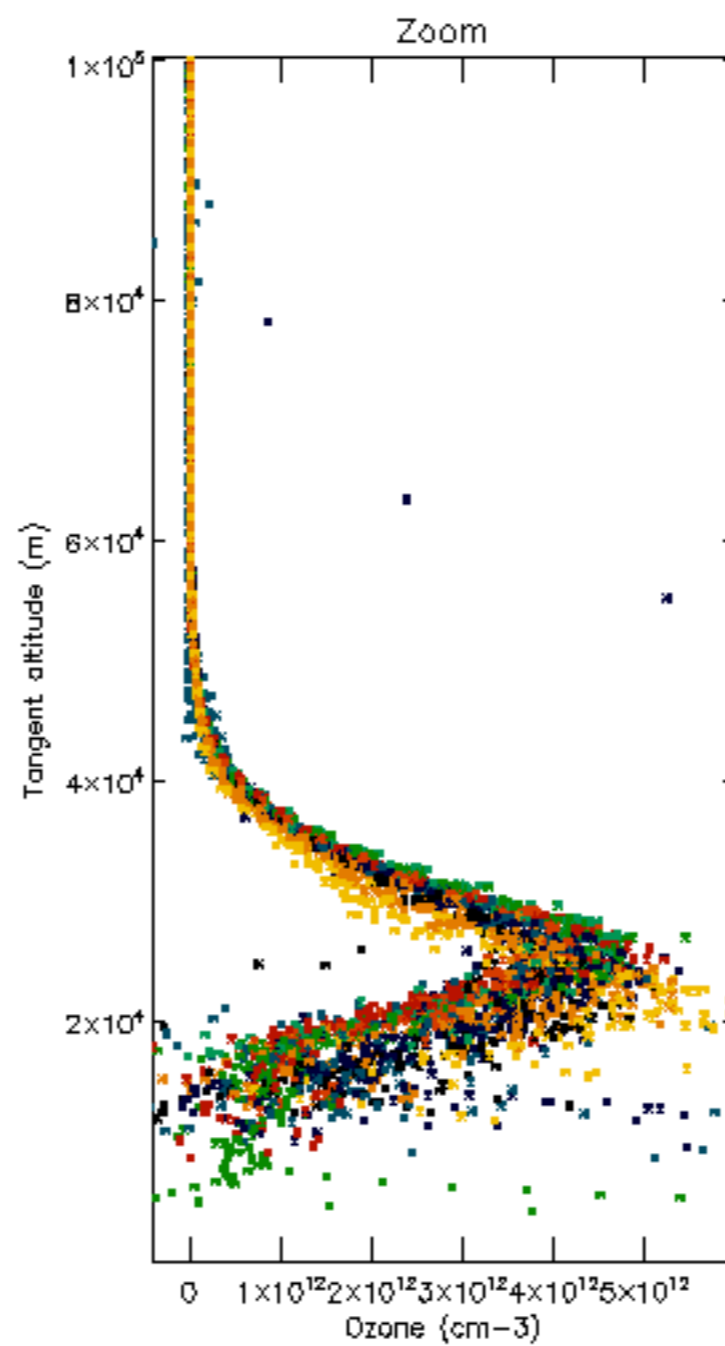
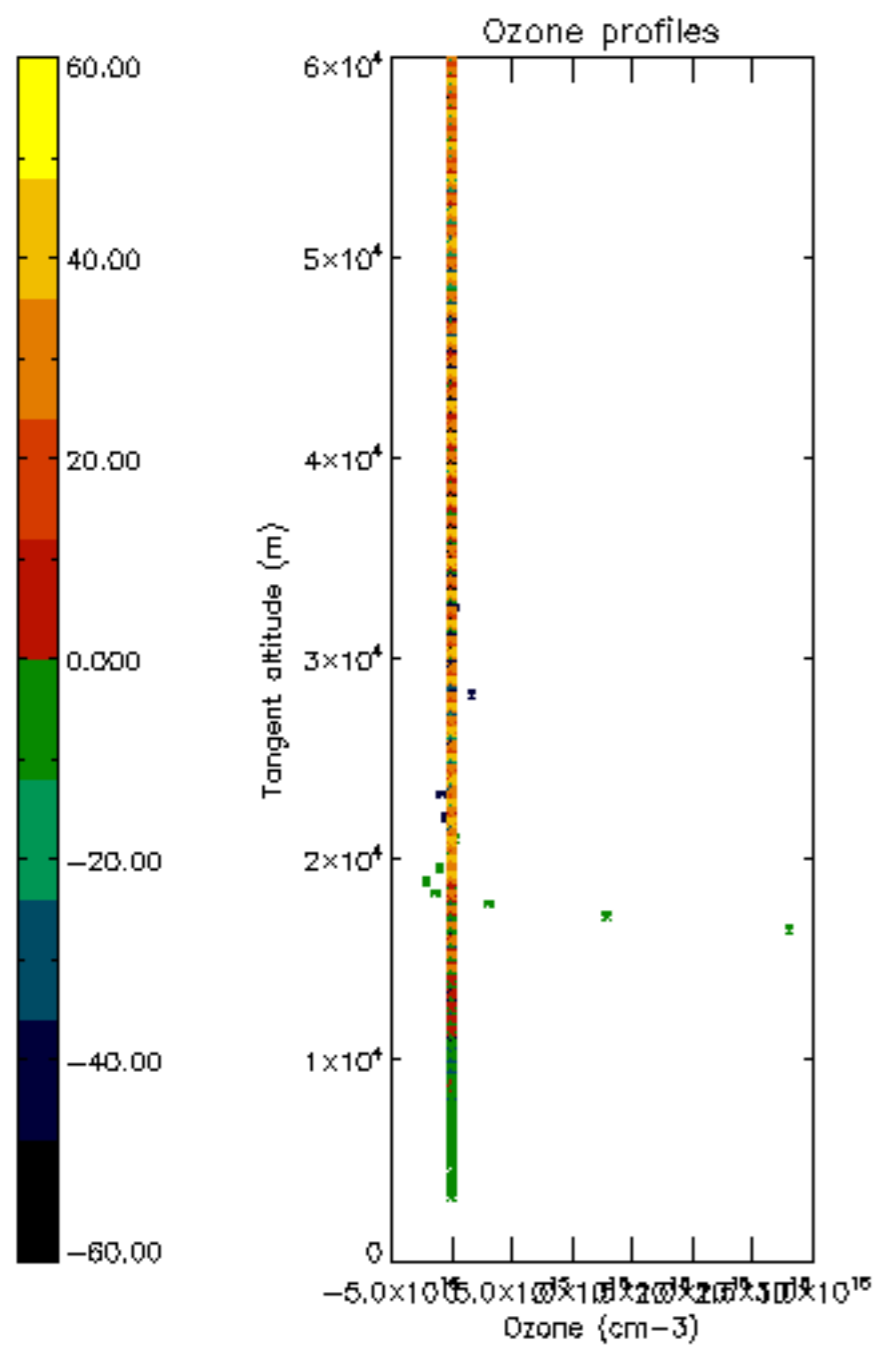


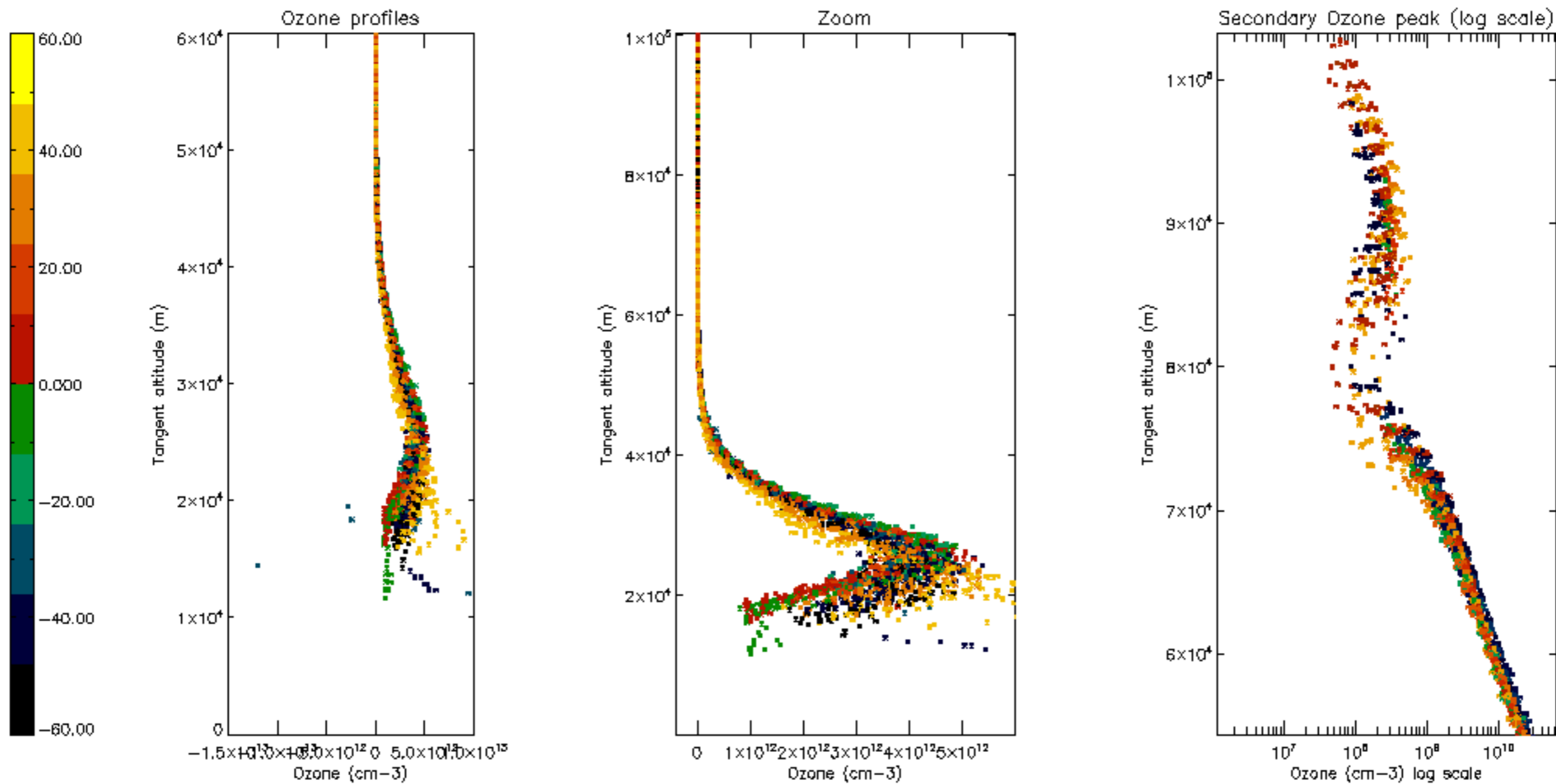
Percentage of star falling outside central band per profile

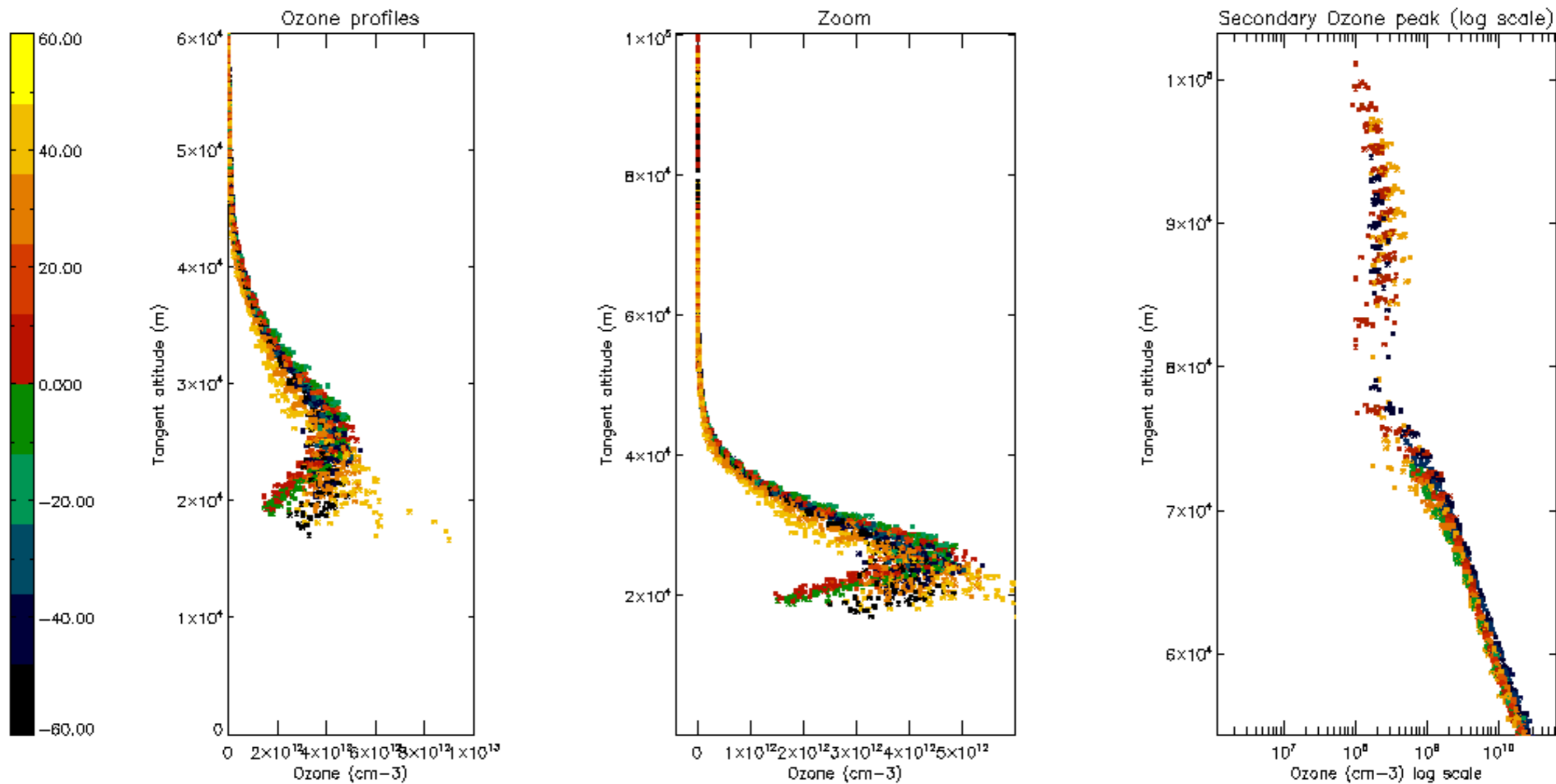


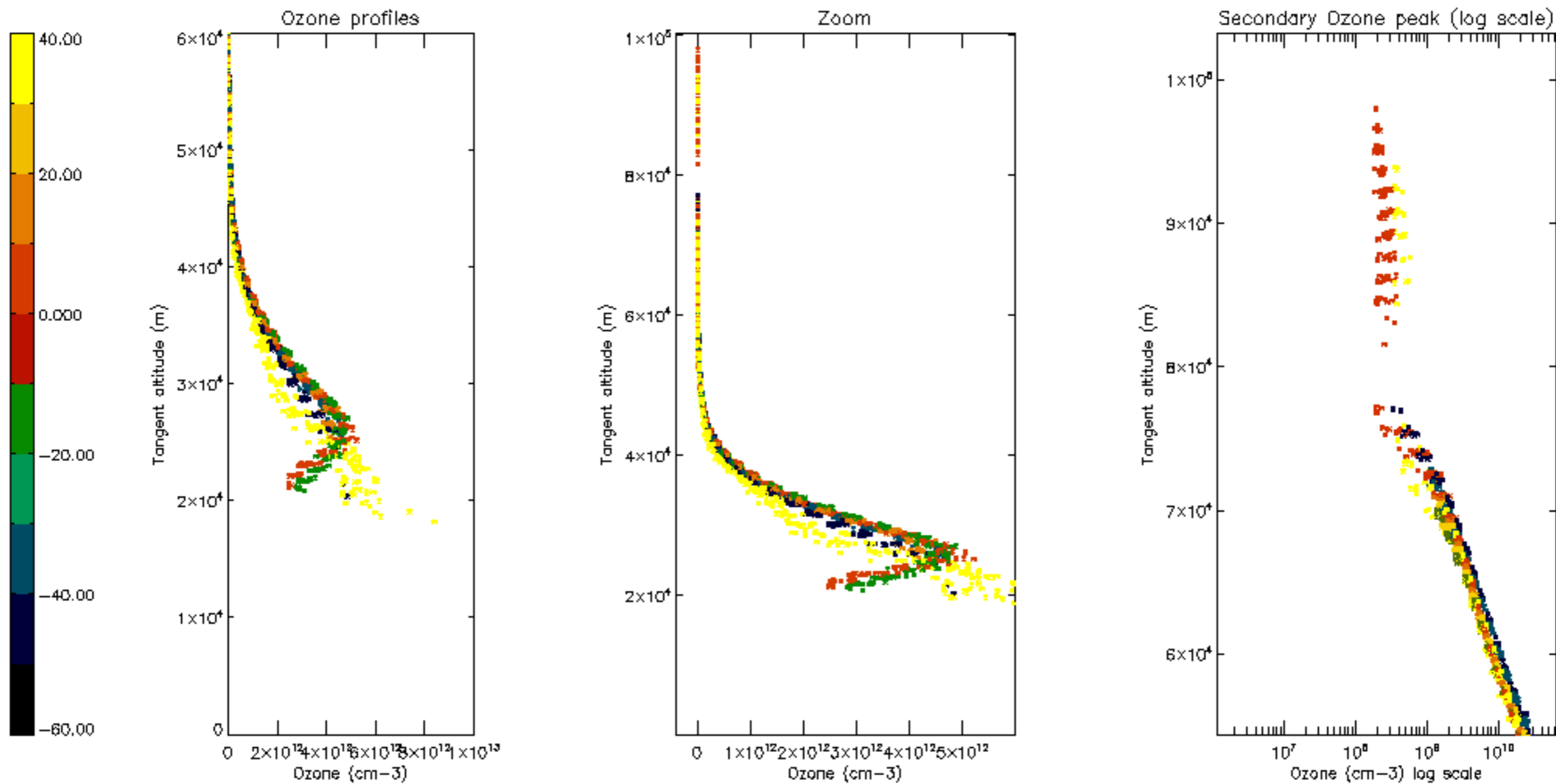
Percentage of saturation errors per profile

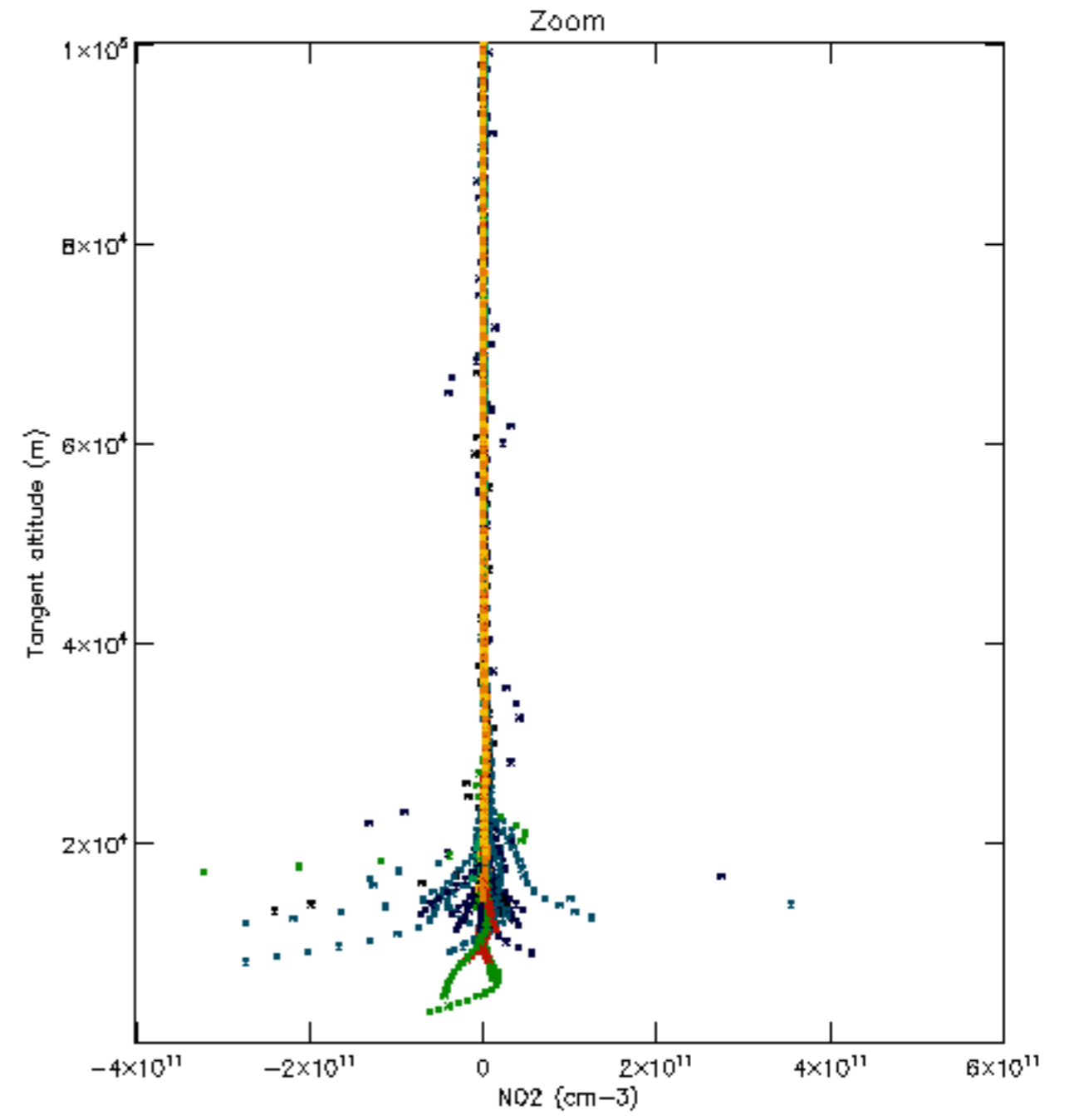
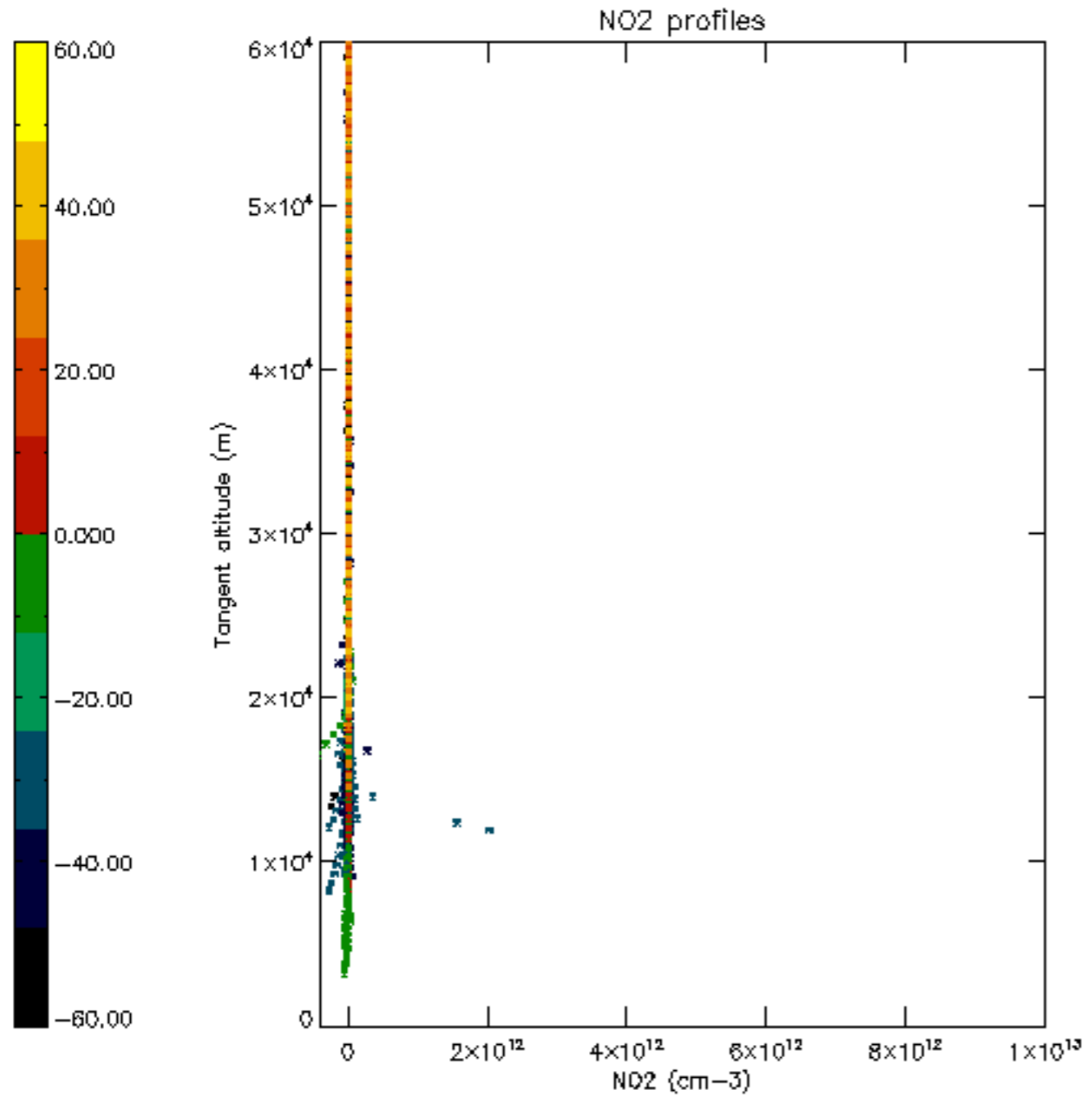


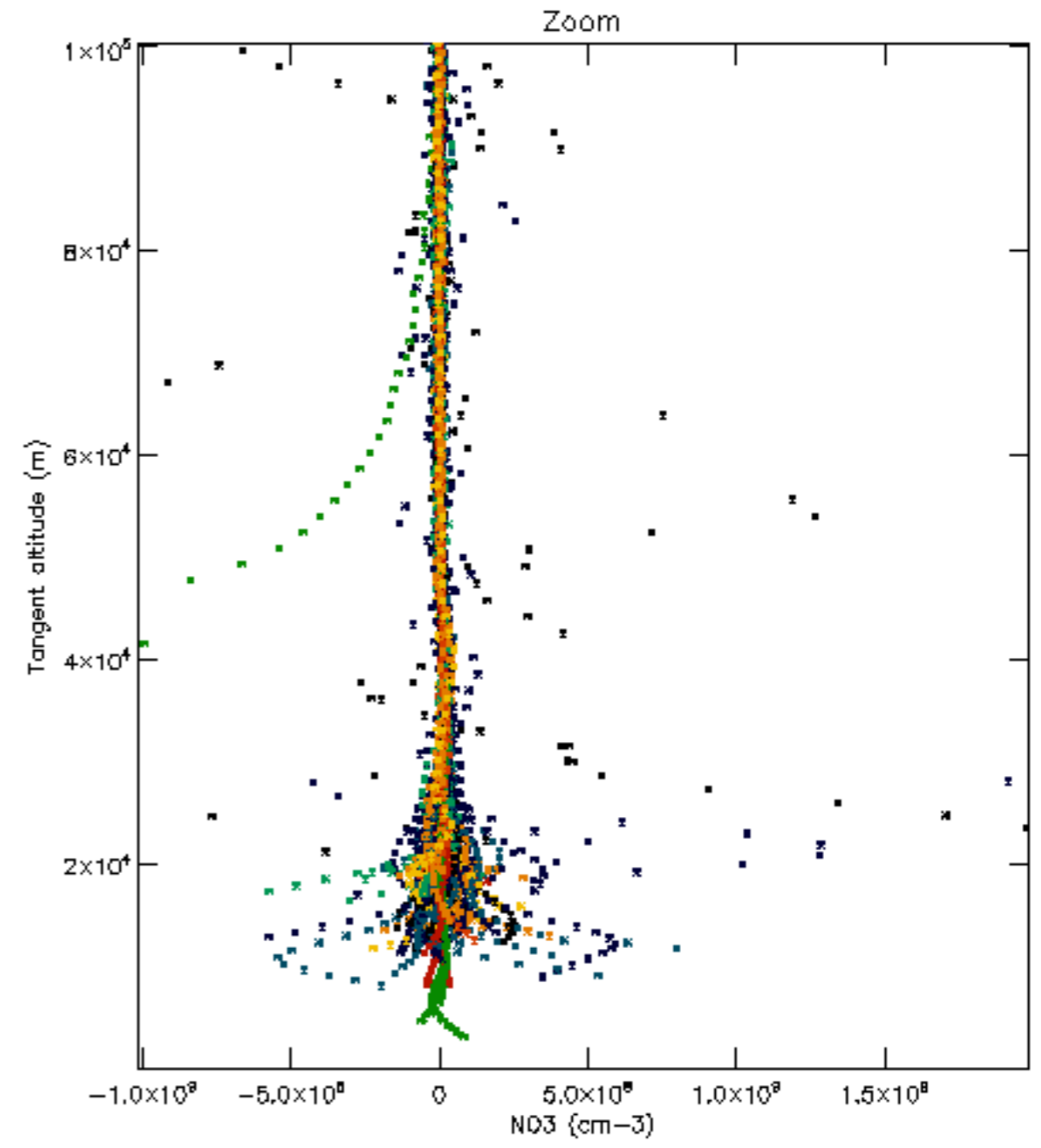
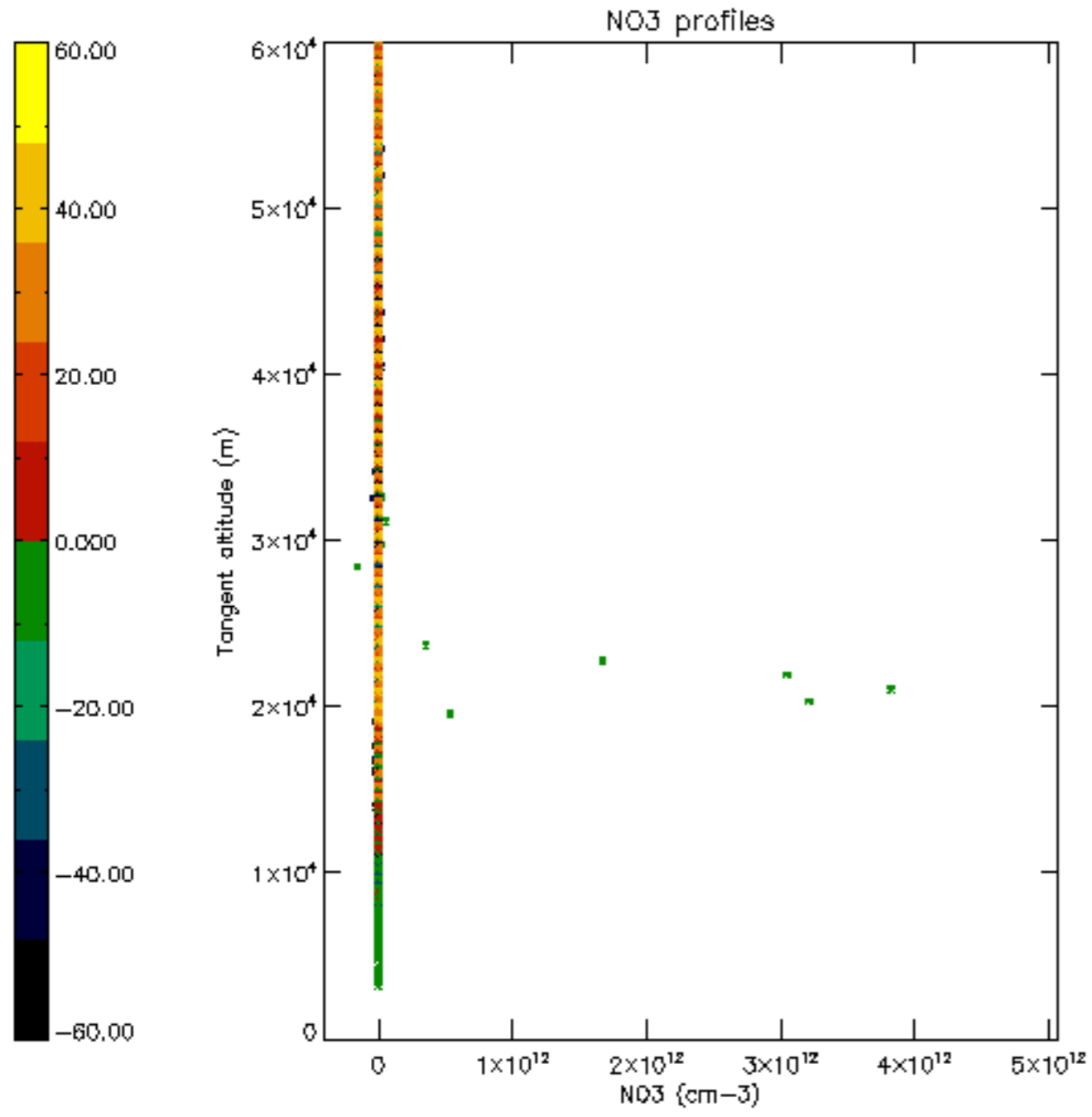


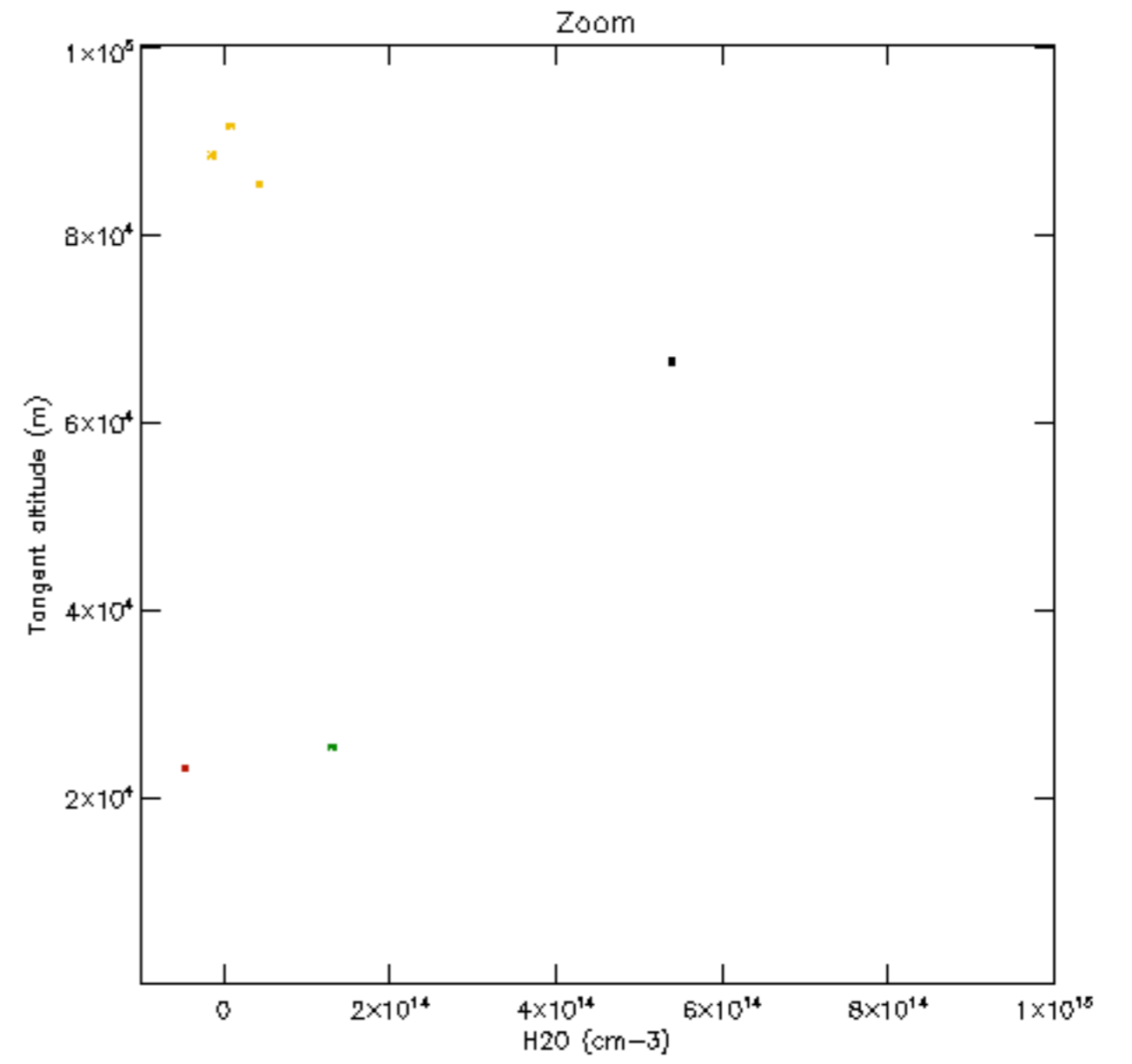
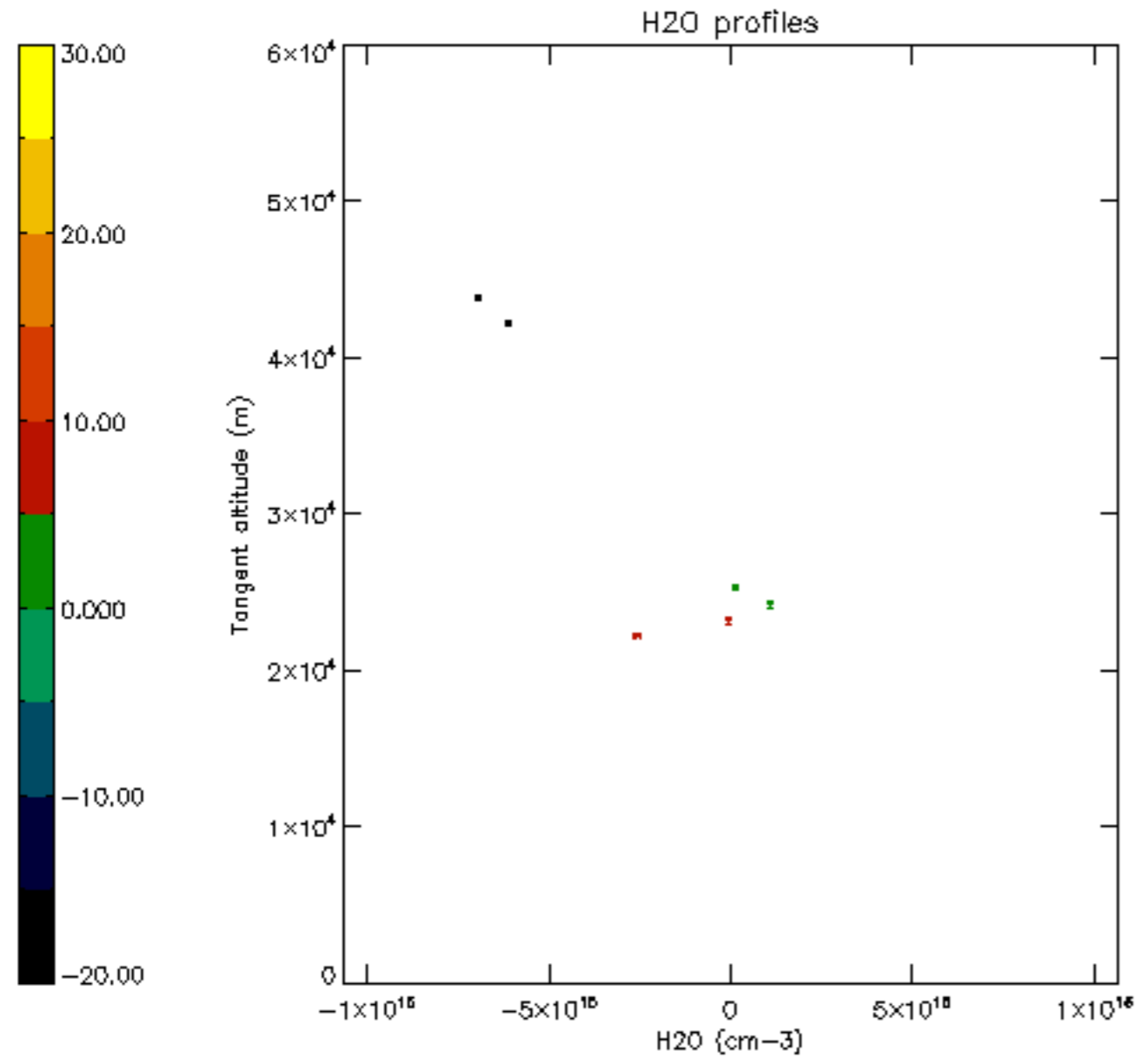


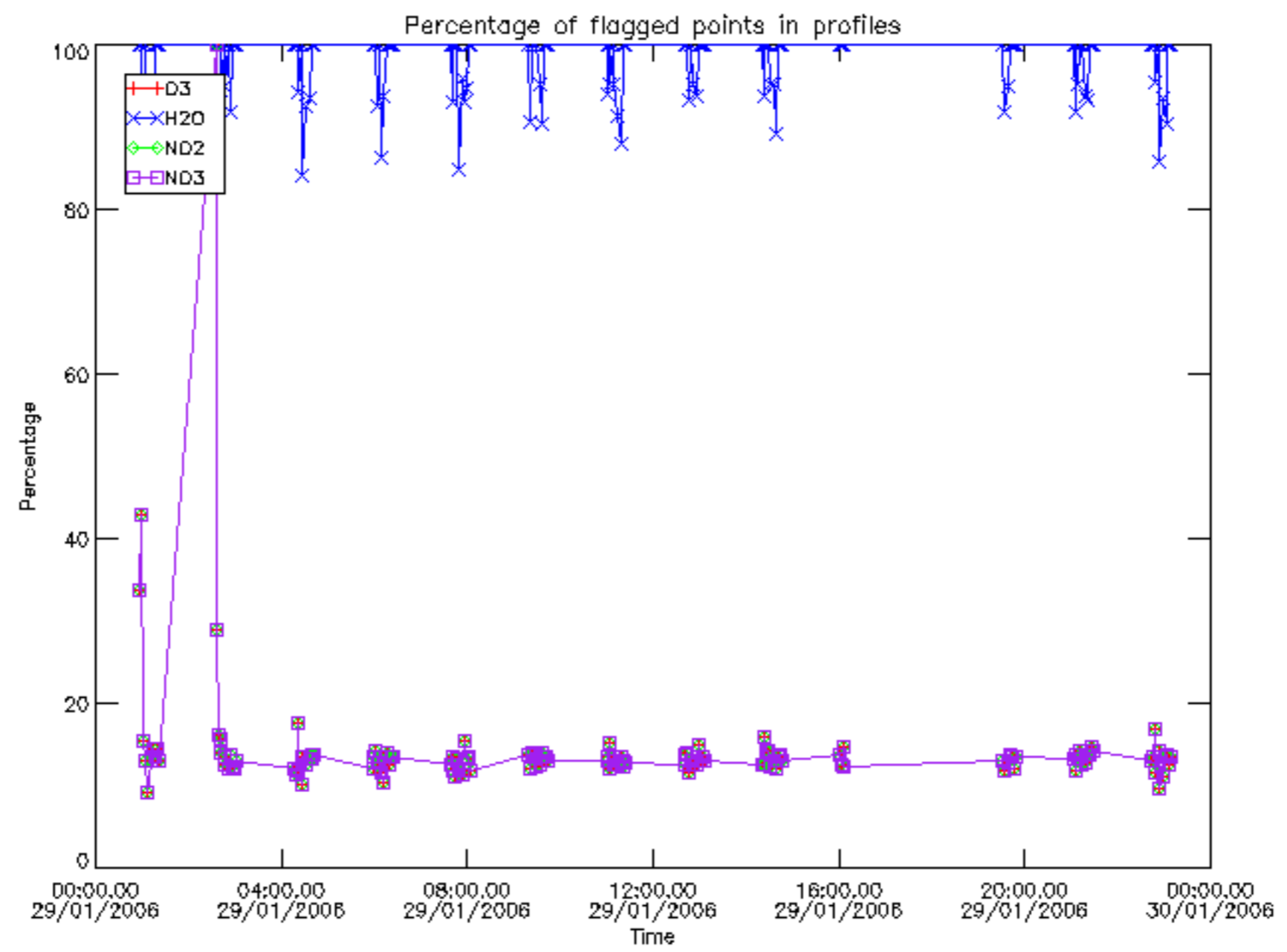




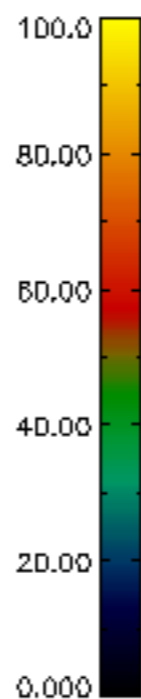
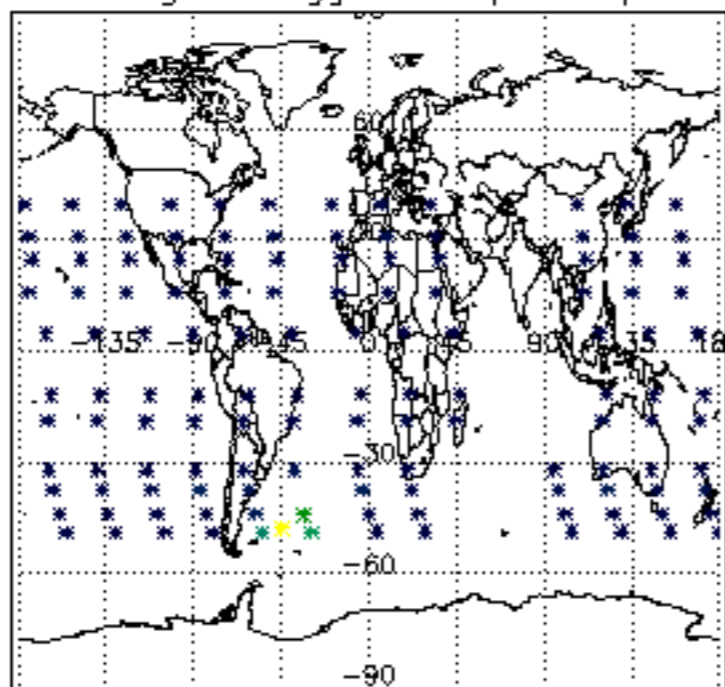




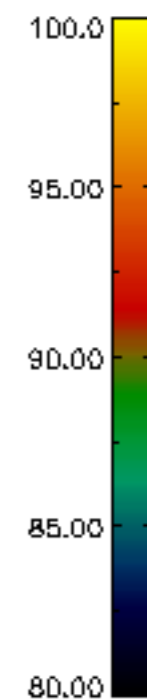
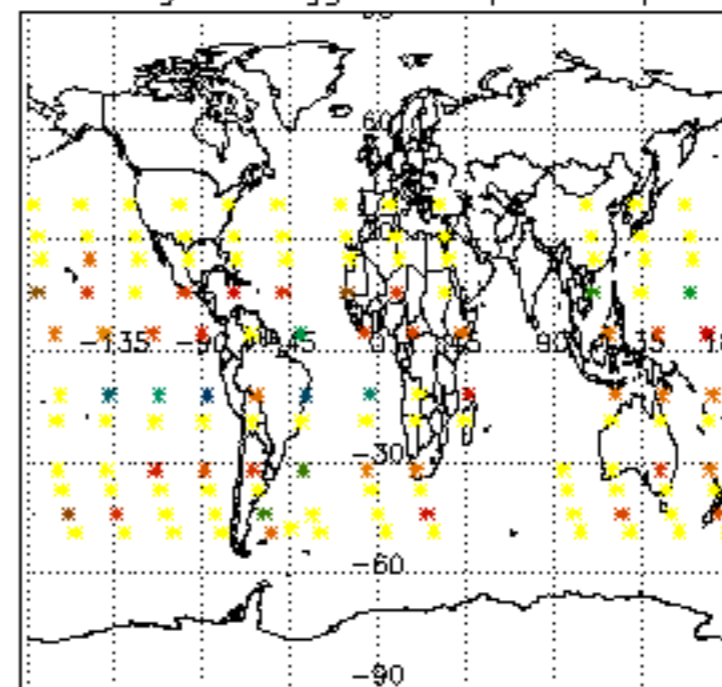




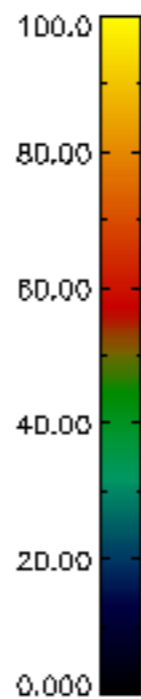
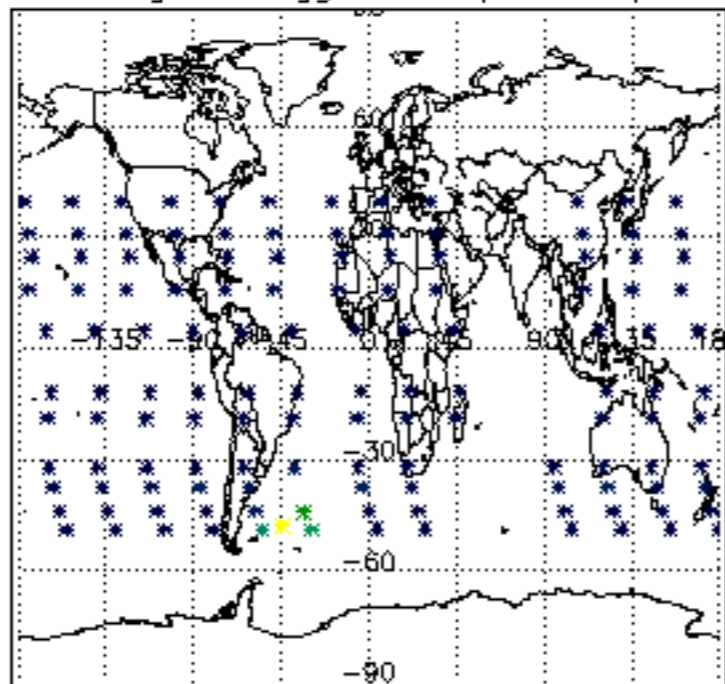
Percentage of flagged data per D3 profile



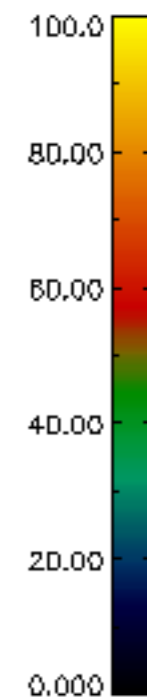
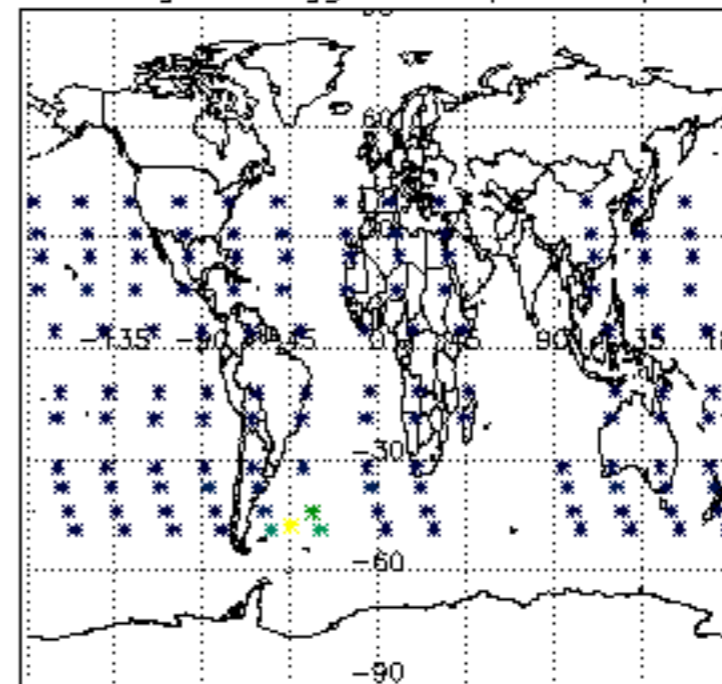
Percentage of flagged data per H2O profile

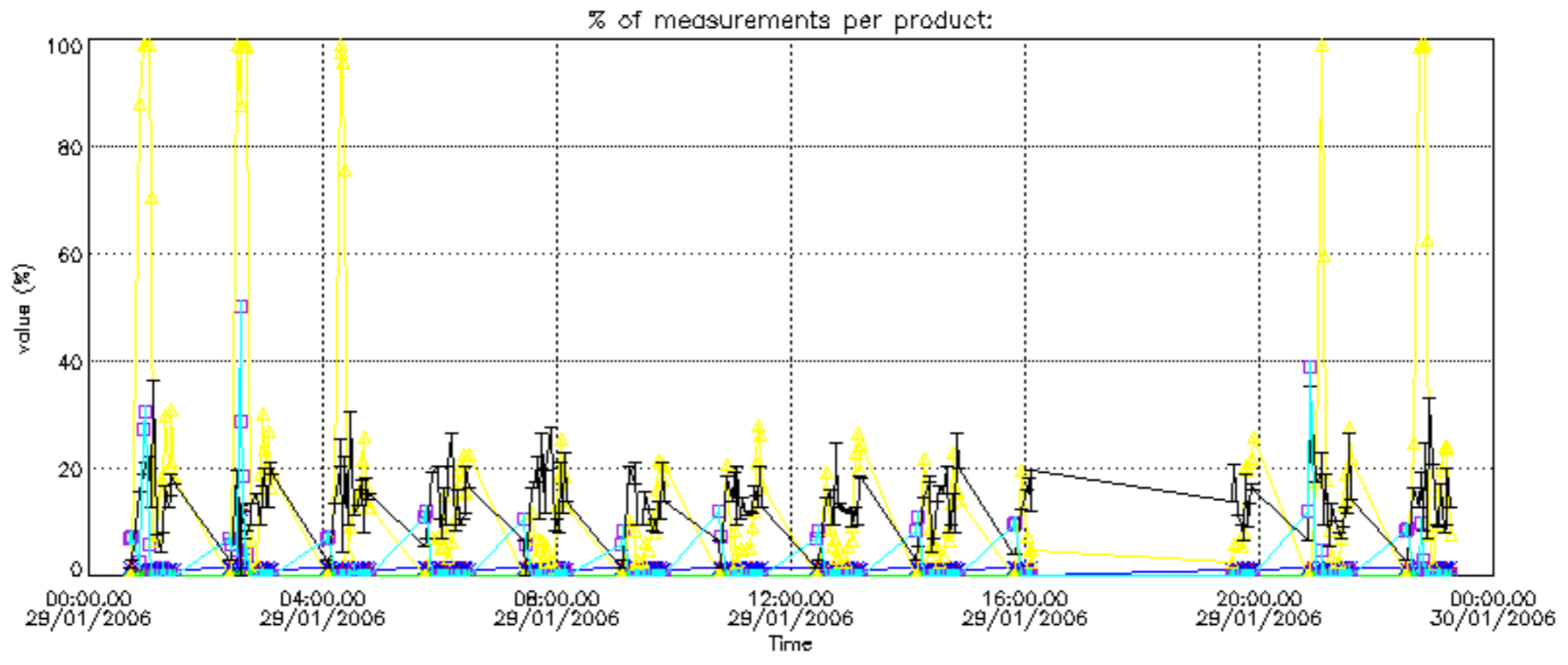


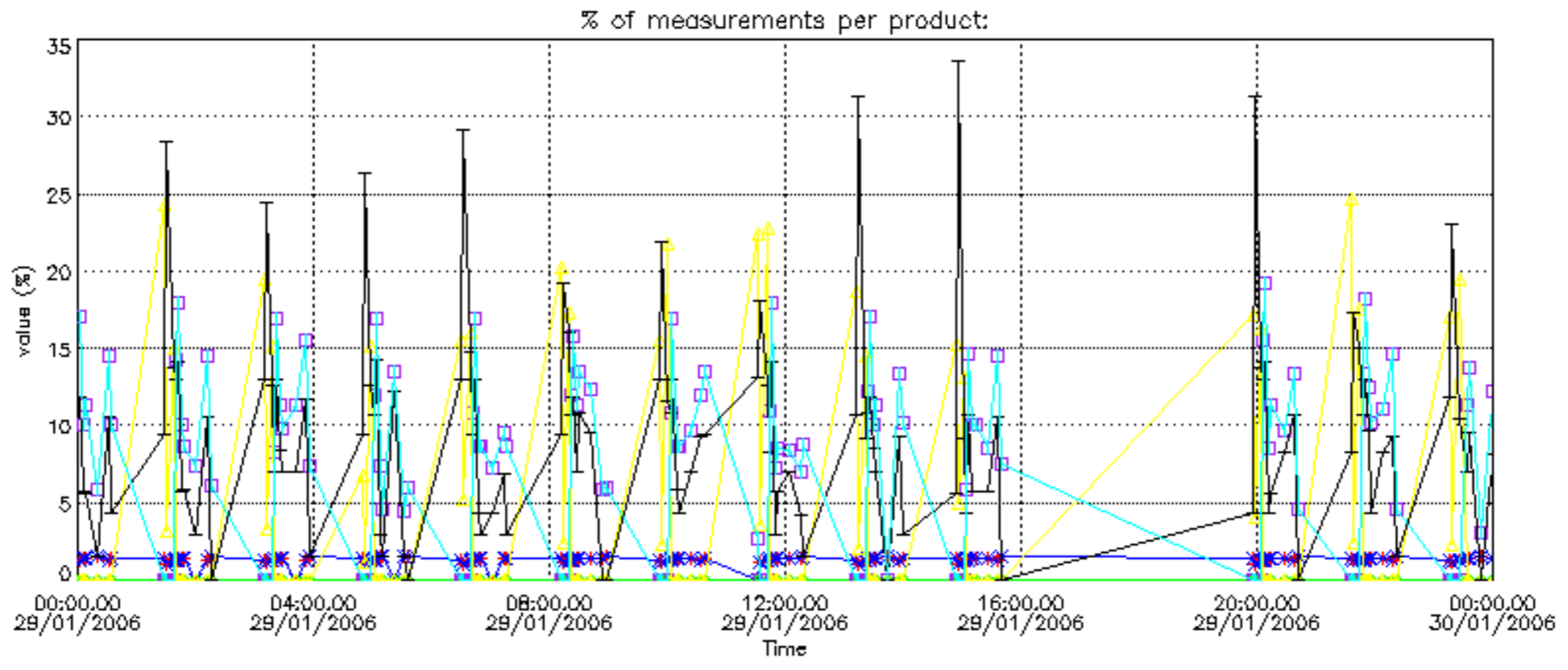
Percentage of flagged data per NO2 profile



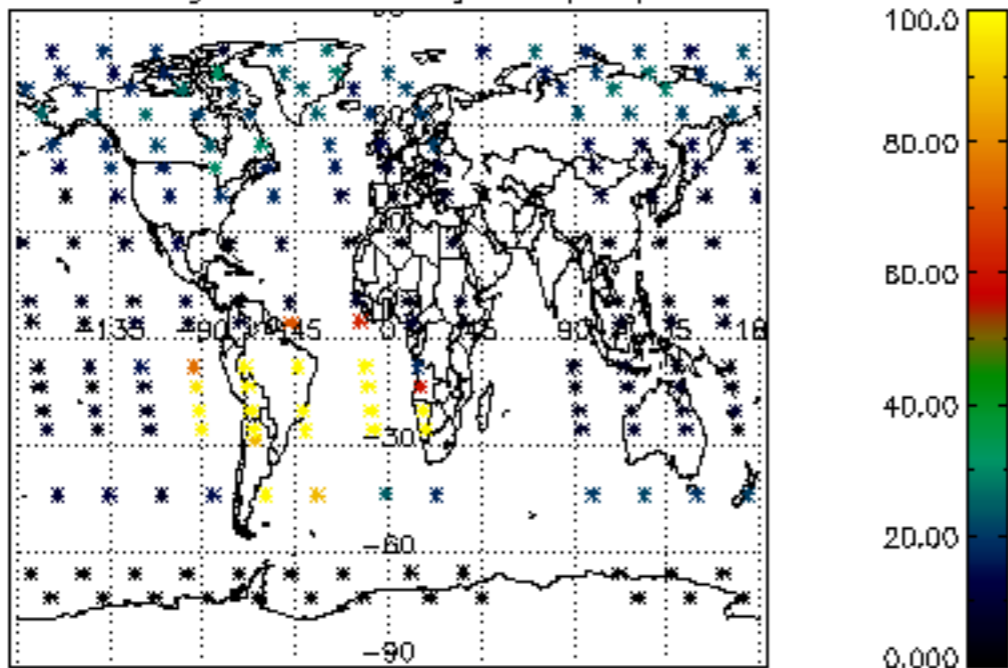
Percentage of flagged data per NO3 profile



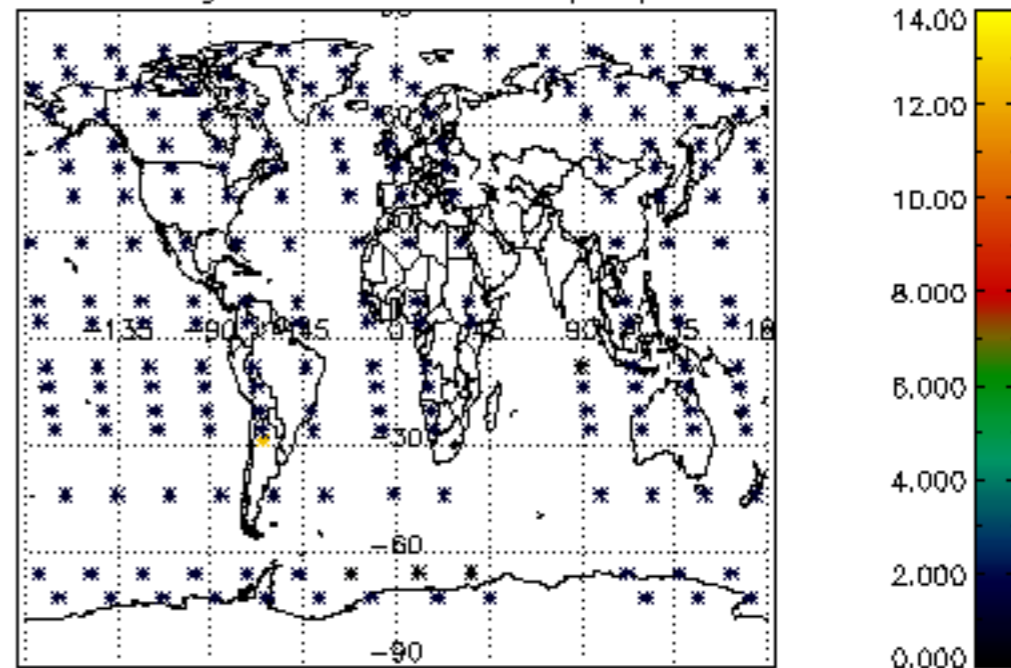




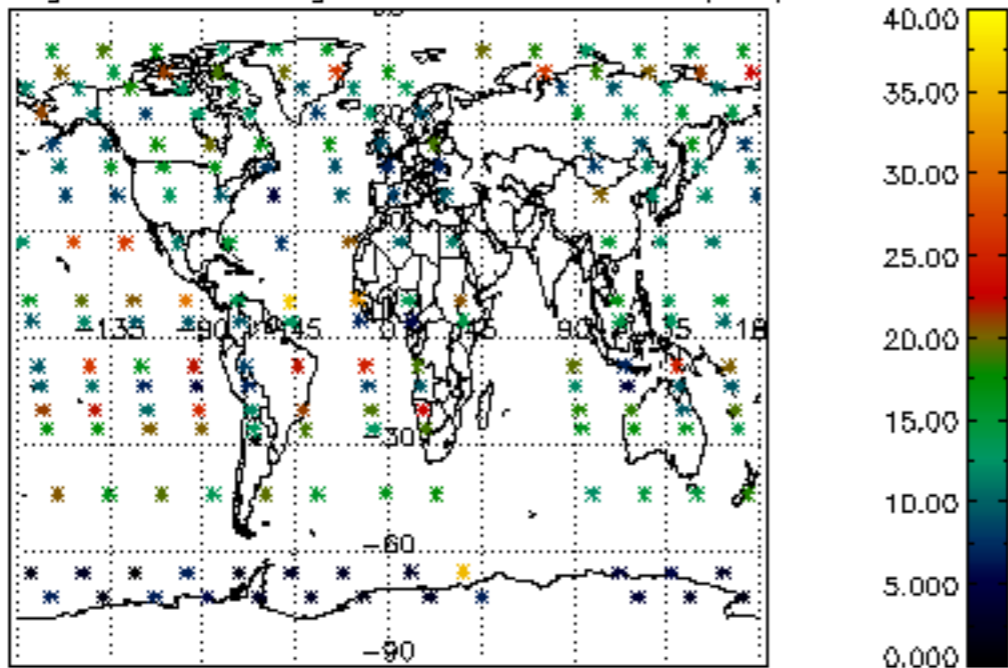
Percentage of cosmic ray hits per profile



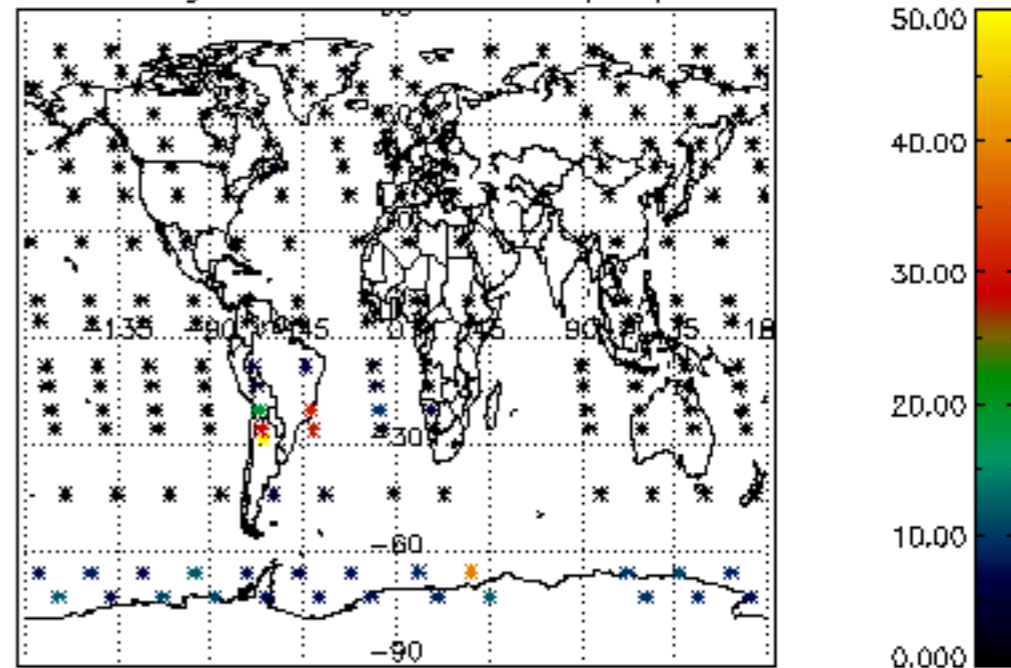
Percentage of datation errors per profile



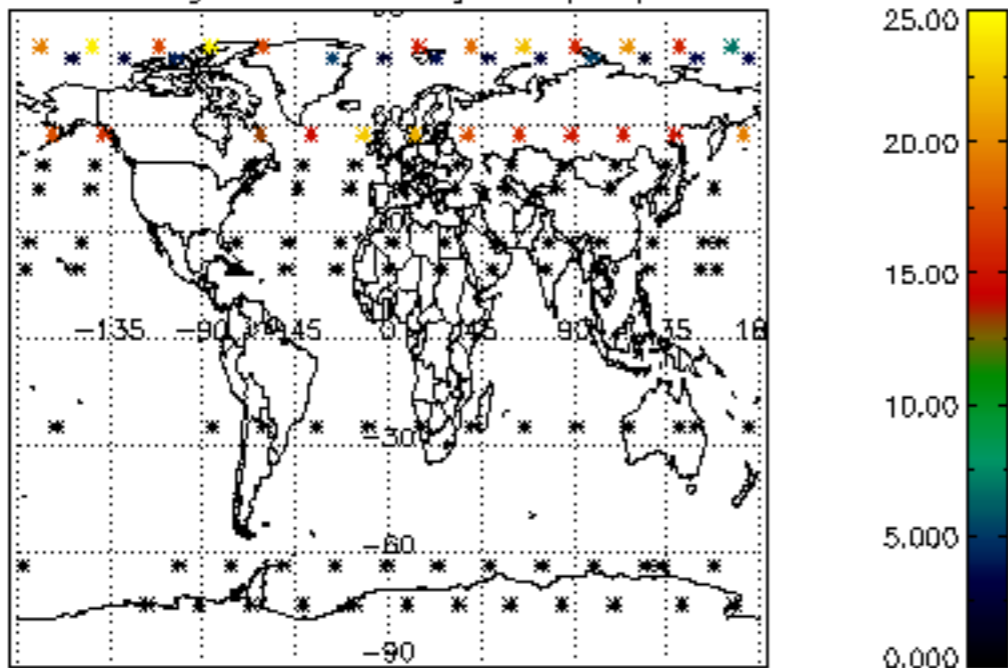
Percentage of star falling outside central band per profile



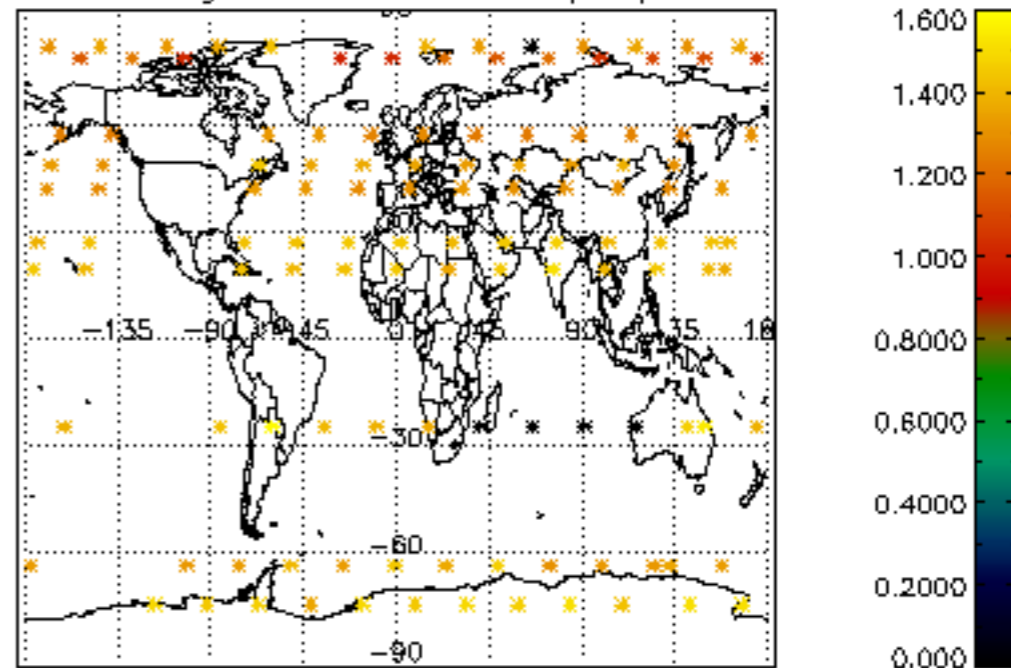
Percentage of saturation errors per profile



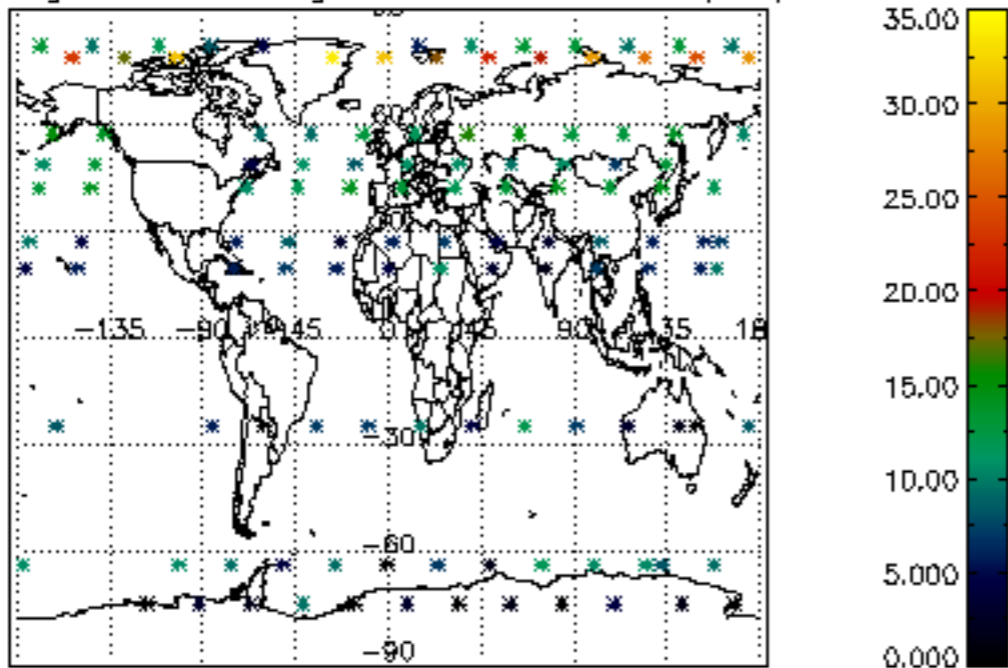
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

