

GOMOS Level 2 Daily Report

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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.

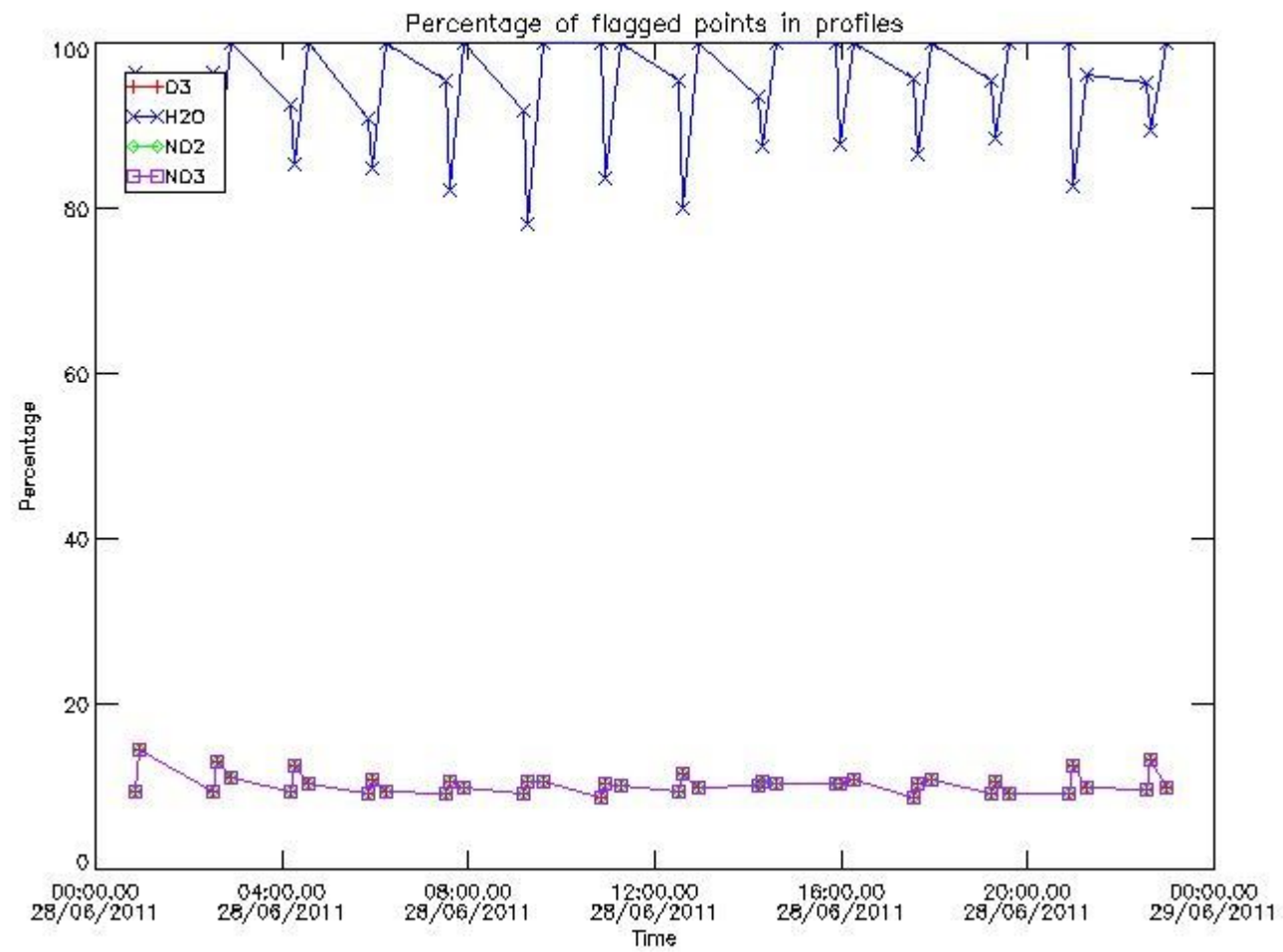
Item	Value
Time of report generation	24APR2013 15:13:37
Data source version	GOMOS/6.01
Start time of products	28-06-2011 (28JUN2011 00:00:00)
Stop time of products	29-06-2011 (29JUN2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	274
Nb of prods with errors	0

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__2PRFIN20110628_000541_000000383104_00045_48766_9141.N1	28-JUN-2011 00:05:41	Bright	37.500	126	60Bet Oph	2.7700	4250.0	75	48766	No
2	GOM_NL__2PRFIN20110628_000801_000000393104_00045_48766_9142.N1	28-JUN-2011 00:08:01	Bright	38.500	59	55Alp Oph	2.0800	8900.0	77	48766	No
3	GOM_NL__2PRFIN20110628_001702_000000463104_00045_48766_9143.N1	28-JUN-2011 00:17:02	Bright	45.500	5	3Alp Lyr	0.033000	11000.	91	48766	No
4	GOM_NL__2PRFIN20110628_001929_000000533104_00045_48766_9144.N1	28-JUN-2011 00:19:29	Bright	53.000	130	23Bet Dra	2.7990	5800.0	106	48766	No
5	GOM_NL__2PRFIN20110628_002837_000000463104_00045_48766_9145.N1	28-JUN-2011 00:28:37	Bright	45.500	89	5Alp Cep	2.4510	8000.0	91	48766	No
6	GOM_NL__2PRFIN20110628_003550_000000693104_00045_48766_9146.N1	28-JUN-2011 00:35:50	Bright	69.000	74	11Bet Cas	2.2680	6600.0	138	48766	No
7	GOM_NL__2PRFIN20110628_003729_000000483104_00045_48766_9147.N1	28-JUN-2011 00:37:29	Bright	48.000	68	18Alp Cas	2.2250	4500.0	96	48766	No
8	GOM_NL__2PRFIN20110628_004014_000000363104_00045_48766_9148.N1	28-JUN-2011 00:40:14	Bright	36.000	160	23Gam Per	2.9300	4700.0	72	48766	No
9	GOM_NL__2PRFIN20110628_004336_000000483104_00045_48766_9149.N1	28-JUN-2011 00:43:36	Bright	48.000	73	57Gam1And	2.2600	13100.	96	48766	No
10	GOM_NL__2PRFIN20110628_004610_000000483104_00045_48766_9150.N1	28-JUN-2011 00:46:10	Twilight	47.500	173	4Bet Tri	3.0040	8900.0	95	48766	No
11	GOM_NL__2PRFIN20110628_005015_000000553104_00045_48766_9151.N1	28-JUN-2011 00:50:15	Dark	54.500	50	13Alp Ari	2.0070	4250.0	109	48766	No
12	GOM_NL__2PRFIN20110628_005511_000000383104_00045_48766_9152.N1	28-JUN-2011 00:55:11	Dark	38.000	94	92Alp Cet	2.5260	3100.0	76	48766	No
13	GOM_NL__2PRFIN20110628_012032_000000623104_00046_48767_9142.N1	28-JUN-2011 01:20:32	Straylight	62.000	63	Bet Gru	2.1500	2800.0	124	48767	No
14	GOM_NL__2PRFIN20110628_012231_000000583104_00046_48767_9143.N1	28-JUN-2011 01:22:31	Straylight	58.000	31	Alp Gru	1.7340	15200.	116	48767	No
15	GOM_NL__2PRFIN20110628_012506_000000473104_00046_48767_9144.N1	28-JUN-2011 01:25:06	Straylight	47.000	45	Alp Pav	1.9400	26000.	94	48767	No
16	GOM_NL__2PRFIN20110628_013400_000000453104_00046_48767_9145.N1	28-JUN-2011 01:34:00	Twilight	45.000	38	20Eps Sgr	1.8360	11000.	90	48767	No
17	GOM_NL__2PRFIN20110628_013522_000000563104_00046_48767_9146.N1	28-JUN-2011 01:35:22	Bright	56.000	116	19Del Sgr	2.7000	4100.0	112	48767	No
18	GOM_NL__2PRFIN20110628_013728_000000473104_00046_48767_9147.N1	28-JUN-2011 01:37:28	Bright	46.500	155	41Pi Sgr	2.9000	6600.0	93	48767	No
19	GOM_NL__2PRFIN20110628_014555_000000383104_00046_48767_9148.N1	28-JUN-2011 01:45:55	Bright	37.500	126	60Bet Oph	2.7700	4250.0	75	48767	No
20	GOM_NL__2PRFIN20110628_014815_000000393104_00046_48767_9149.N1	28-JUN-2011 01:48:15	Bright	39.000	59	55Alp Oph	2.0800	8900.0	78	48767	No
21	GOM_NL__2PRFIN20110628_015716_000000463104_00046_48767_9150.N1	28-JUN-2011 01:57:16	Bright	46.000	5	3Alp Lyr	0.033000	11000.	92	48767	No
22	GOM_NL__2PRFIN20110628_015943_000000363104_00046_48767_9151.N1	28-JUN-2011 01:59:43	Bright	36.000	130	23Bet Dra	2.7990	5800.0	72	48767	No
23	GOM_NL__2PRFIN20110628_020850_000000453104_00046_48767_9152.N1	28-JUN-2011 02:08:50	Bright	45.000	89	5Alp Cep	2.4510	8000.0	90	48767	No
24	GOM_NL__2PRFIN20110628_021604_000000693104_00046_48767_9153.N1	28-JUN-2011 02:16:04	Bright	69.000	74	11Bet Cas	2.2680	6600.0	138	48767	No
25	GOM_NL__2PRFIN20110628_021743_000000483104_00046_48767_9154.N1	28-JUN-2011 02:17:43	Bright	48.000	68	18Alp Cas	2.2250	4500.0	96	48767	No
26	GOM_NL__2PRFIN20110628_022027_000000523104_00046_48767_9155.N1	28-JUN-2011 02:20:27	Bright	52.000	160	23Gam Per	2.9300	4700.0	104	48767	No
27	GOM_NL__2PRFIN20110628_022350_000000493104_00046_48767_9156.N1	28-JUN-2011 02:23:50	Bright	49.000	73	57Gam1And	2.2600	13100.	98	48767	No
28	GOM_NL__2PRFIN20110628_022624_000000453104_00046_48767_9157.N1	28-JUN-2011 02:26:24	Twilight	45.000	173	4Bet Tri	3.0040	8900.0	90	48767	No
29	GOM_NL__2PRFIN20110628_023030_000000553104_00046_48767_9158.N1	28-JUN-2011 02:30:30	Dark	54.500	50	13Alp Ari	2.0070	4250.0	109	48767	No
30	GOM_NL__2PRFIN20110628_023525_000000393104_00046_48767_9159.N1	28-JUN-2011 02:35:25	Dark	39.000	94	92Alp Cet	2.5260	3100.0	78	48767	No
31	GOM_NL__2PRFIN20110628_025419_000000463104_00047_48768_9170.N1	28-JUN-2011 02:54:19	Dark	46.000	84	Alp Phe	2.3970	4500.0	92	48768	No
32	GOM_NL__2PRFIN20110628_030048_000000553104_00047_48768_9171.N1	28-JUN-2011 03:00:48	Straylight	55.000	63	Bet Gru	2.1500	2800.0	110	48768	No
33	GOM_NL__2PRFIN20110628_030246_000000483104_00047_48768_9172.N1	28-JUN-2011 03:02:46	Straylight	48.000	31	Alp Gru	1.7340	15200.	96	48768	No
34	GOM_NL__2PRFIN20110628_030521_000000433104_00047_48768_9173.N1	28-JUN-2011 03:05:21	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	48768	No
35	GOM_NL__2PRFIN20110628_031414_000000453104_00047_48768_9174.N1	28-JUN-2011 03:14:14	Twilight	44.500	38	20Eps Sgr	1.8360	11000.	89	48768	No
36	GOM_NL__2PRFIN20110628_031537_000000543104_00047_48768_9175.N1	28-JUN-2011 03:15:37	Bright	53.500	116	19Del Sgr	2.7000	4100.0	107	48768	No
37	GOM_NL__2PRFIN20110628_031742_000000473104_00047_48768_9176.N1	28-JUN-2011 03:17:42	Bright	47.000	155	41Pi Sgr	2.9000	6600.0	94	48768	No
38	GOM_NL__2PRFIN20110628_032609_000000383104_00047_48768_9177.N1	28-JUN-2011 03:26:09	Bright	38.000	126	60Bet Oph	2.7700	4250.0	76	48768	No
39	GOM_NL__2PRFIN20110628_032829_000000393104_00047_48768_9178.N1	28-JUN-2011 03:28:29	Bright	38.500	59	55Alp Oph	2.0800	8900.0	77	48768	No
40	GOM_NL__2PRFIN20110628_033729_000000463104_00047_48768_9179.N1	28-JUN-2011 03:37:29	Bright	46.000	5	3Alp Lyr	0.033000	11000.	92	48768	No
41	GOM_NL__2PRFIN20110628_033957_000000383104_00047_48768_9180.N1	28-JUN-2011 03:39:57	Bright	37.500	130	23Bet Dra	2.7990	5800.0	75	48768	No
42	GOM_NL__2PRFIN20110628_034903_000000433104_00047_48768_9181.N1	28-JUN-2011 03:49:03	Bright	43.000	89	5Alp Cep	2.4510	8000.0	86	48768	No

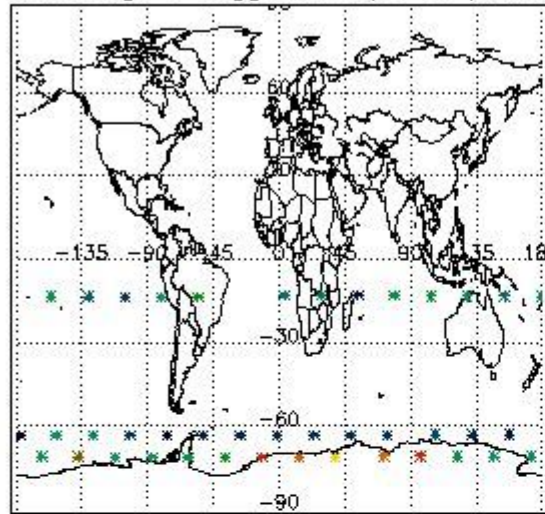
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

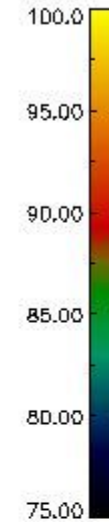
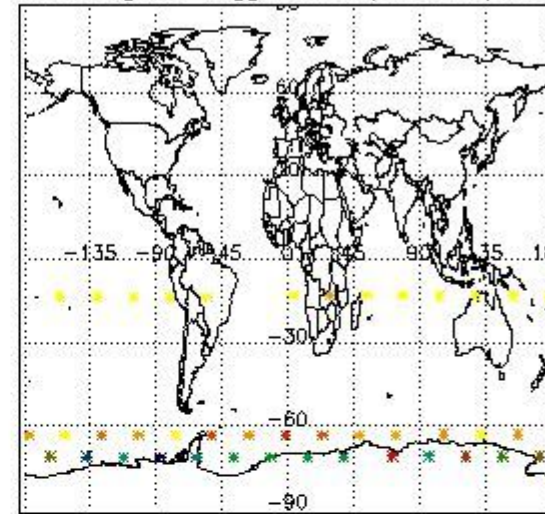


3.2 Plot quality information per product (world map)

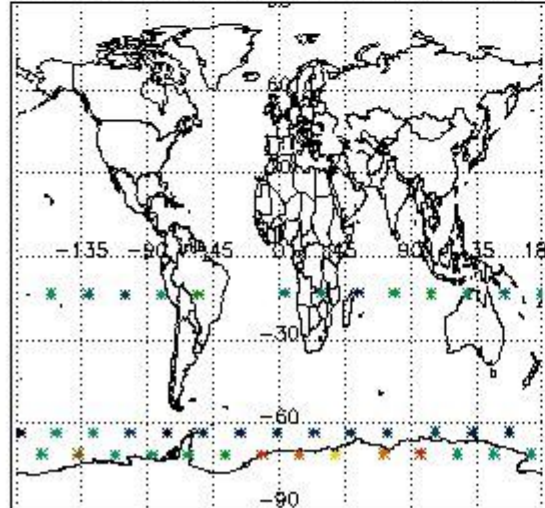
Percentage of flagged data per O3 profile



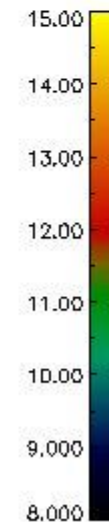
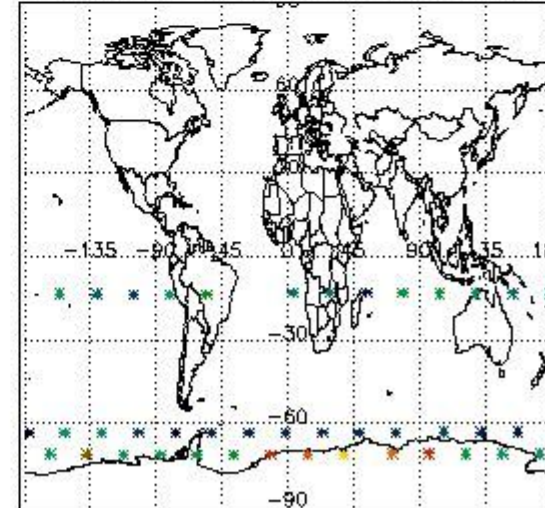
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

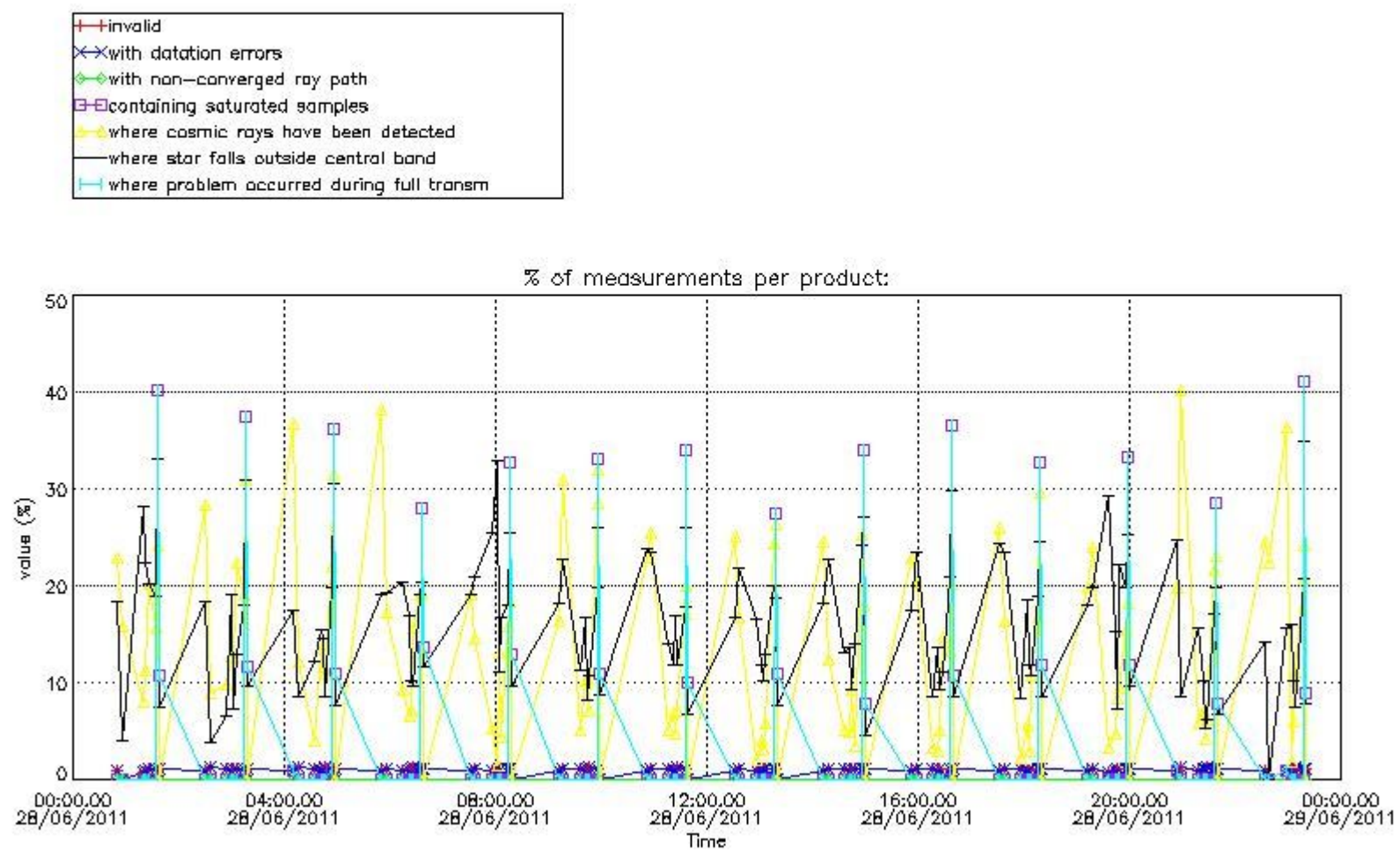


4. Level 1 quality information per product

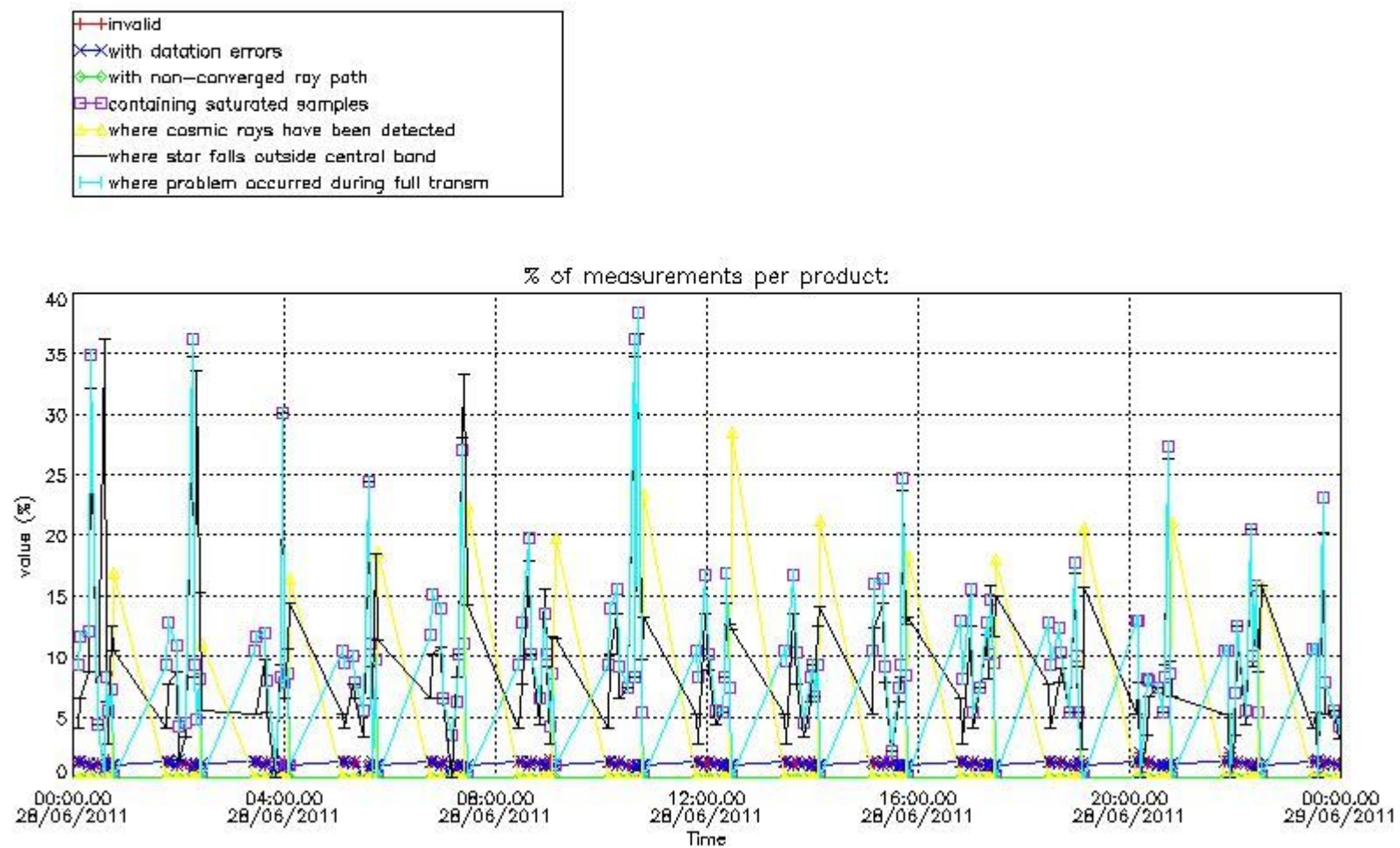
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

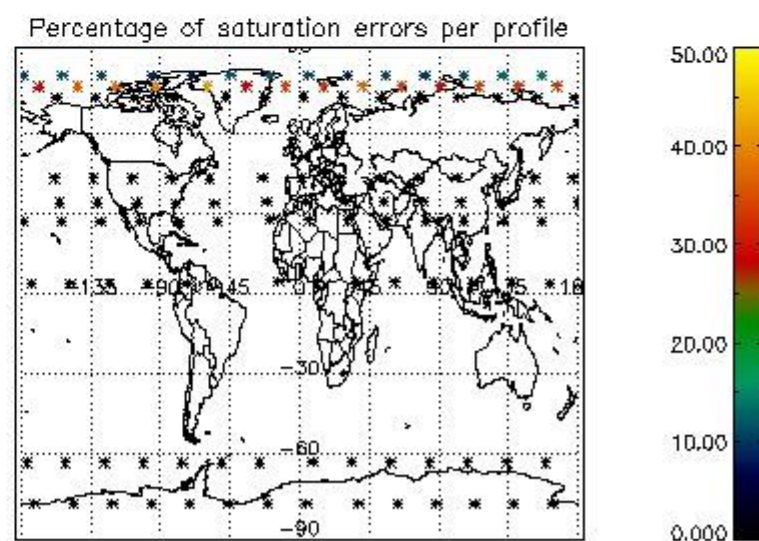
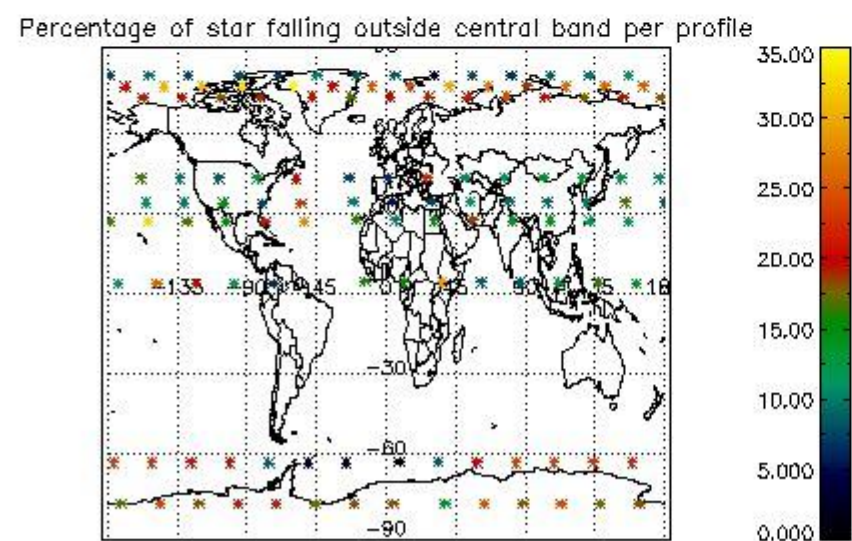
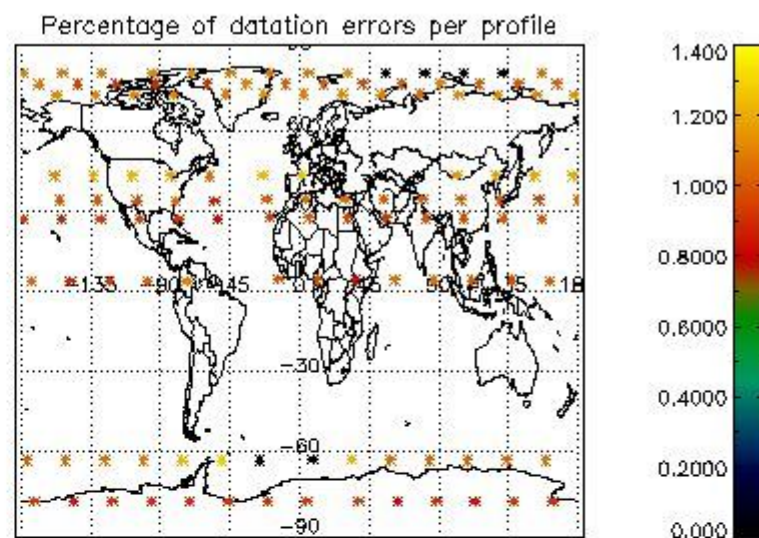
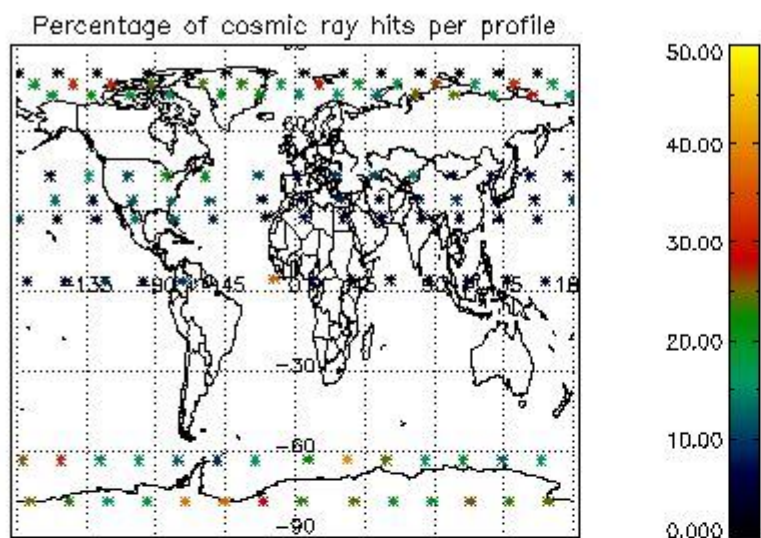


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

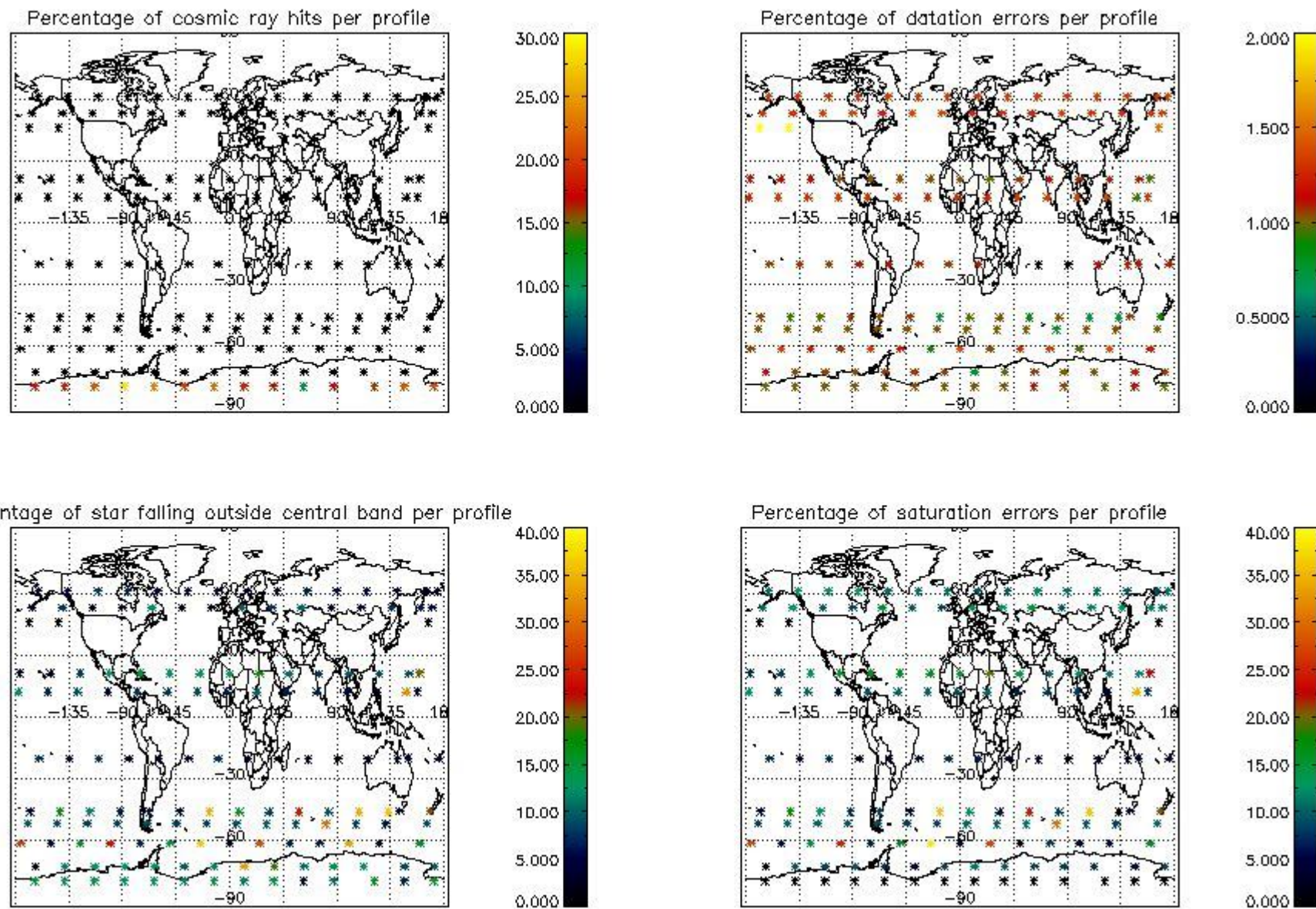


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

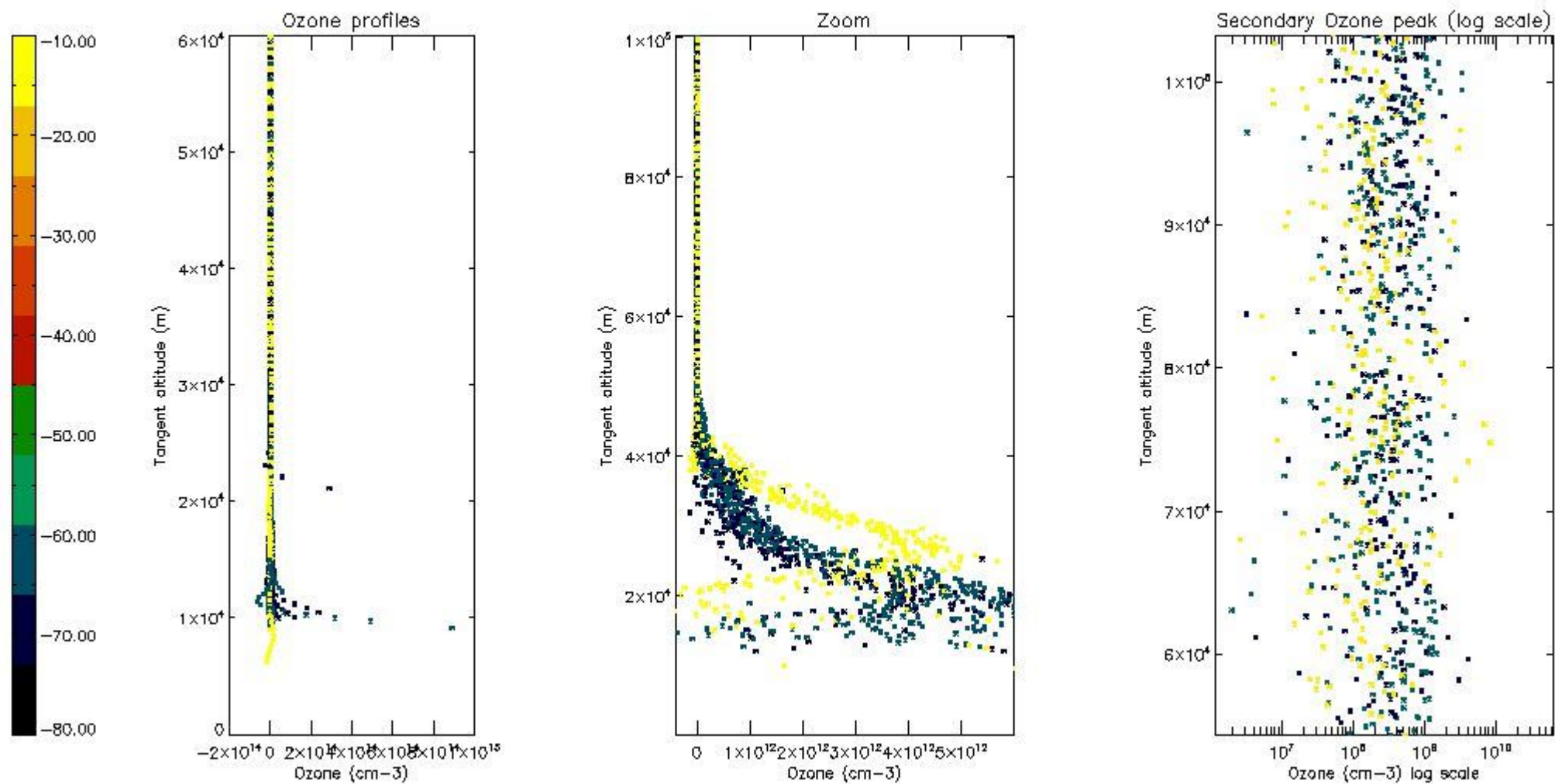
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	17
STD < 20	4

STD < 10	2
STD < 5	0

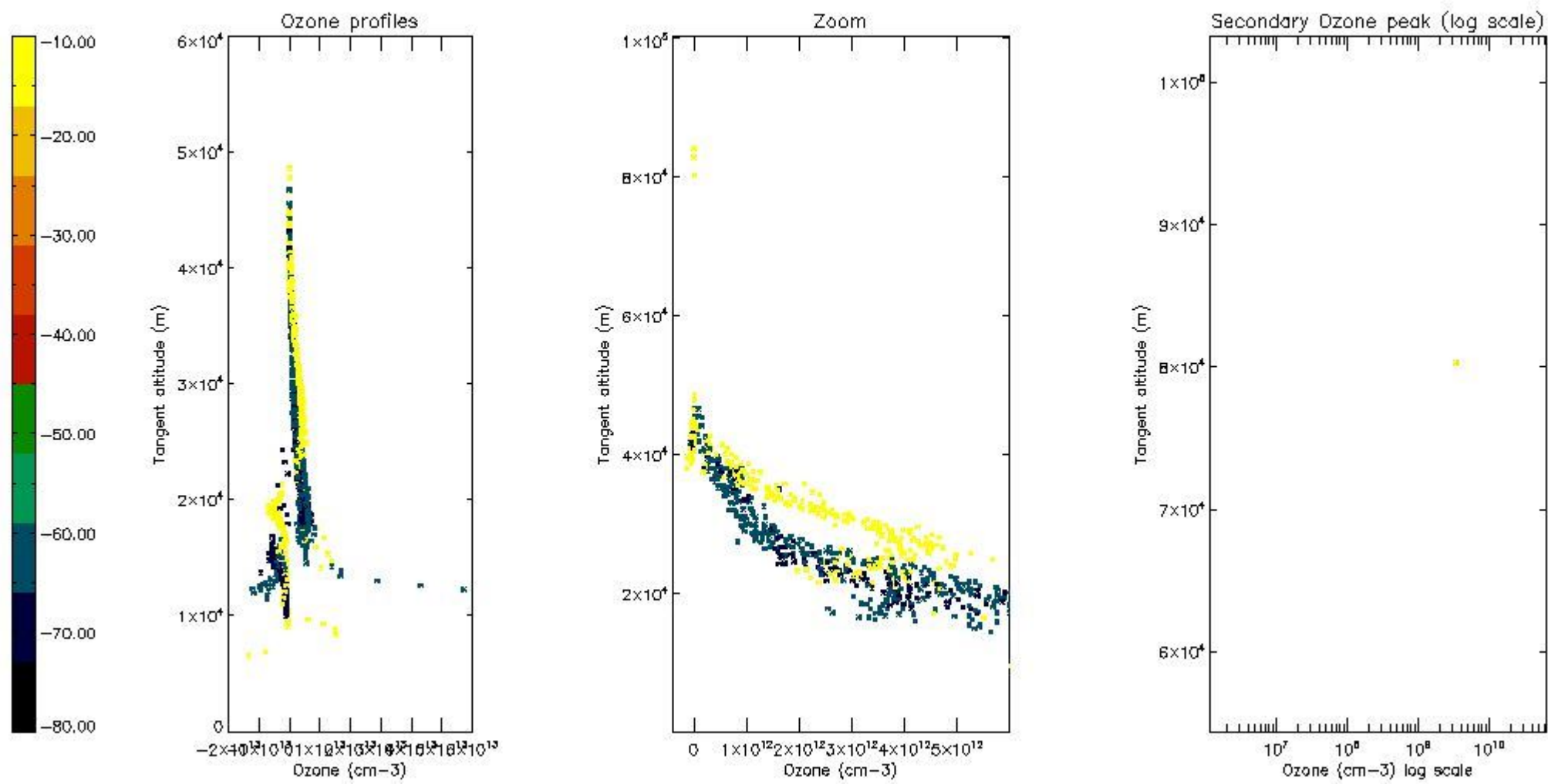
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



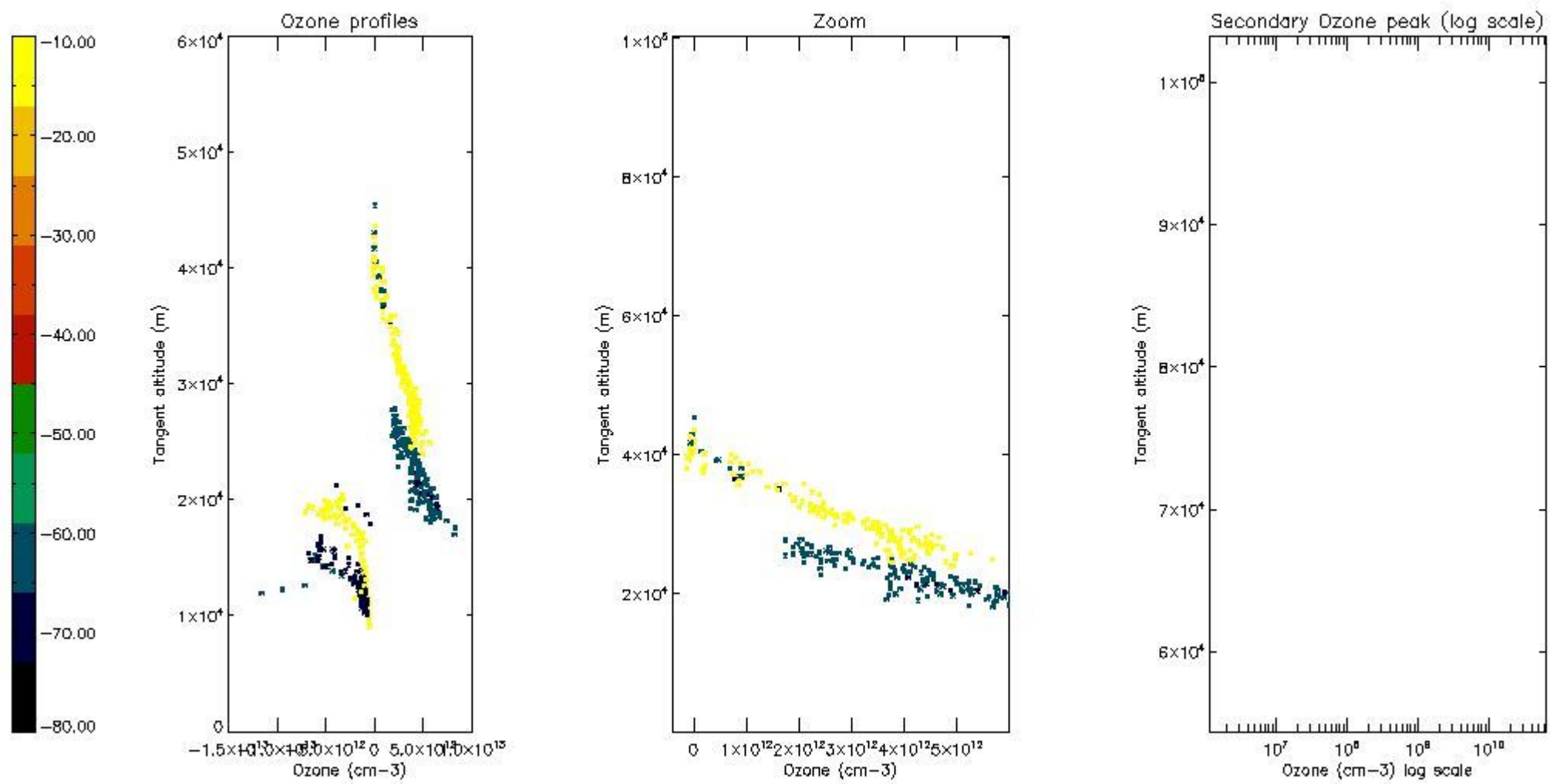
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



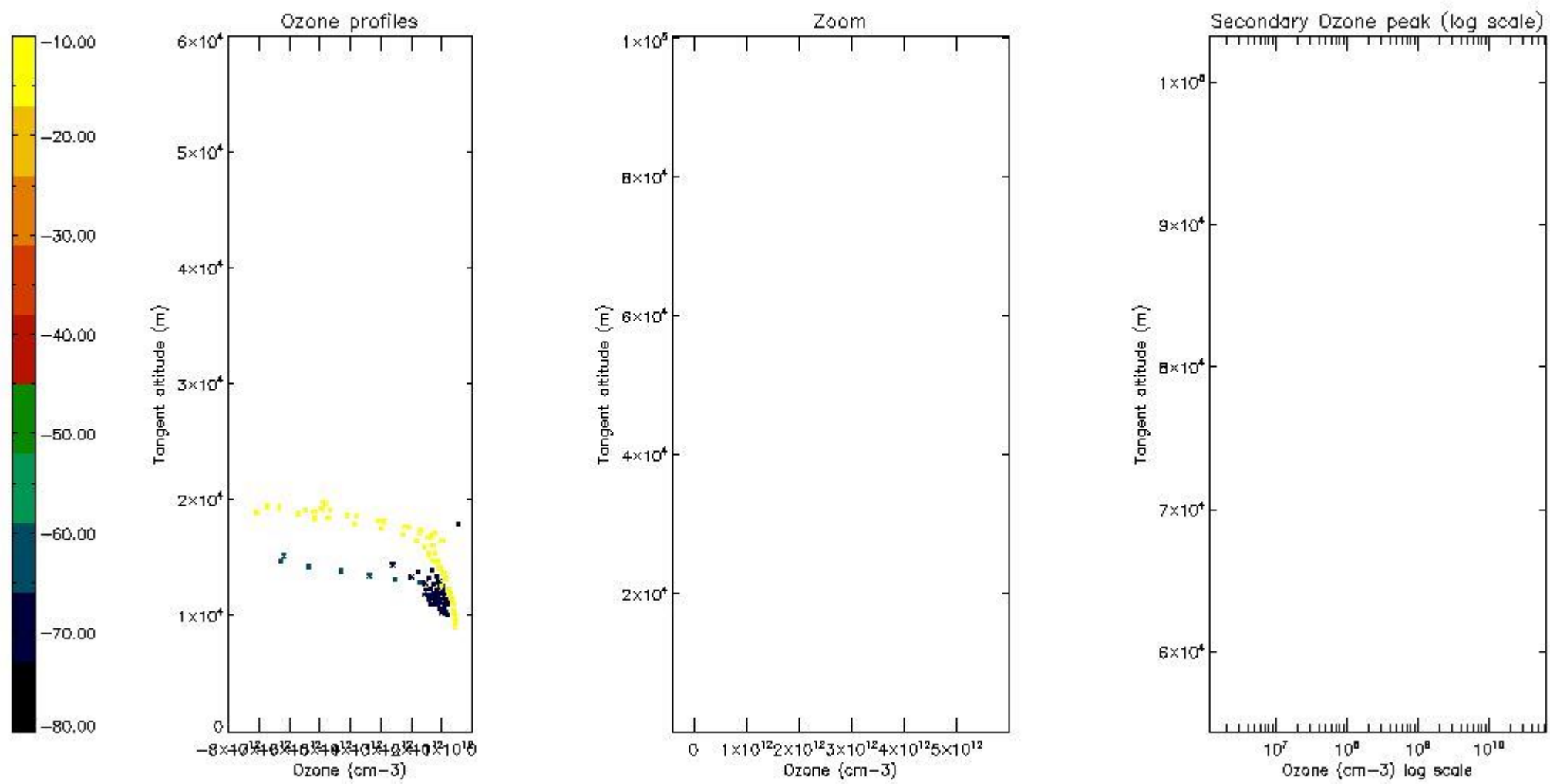
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



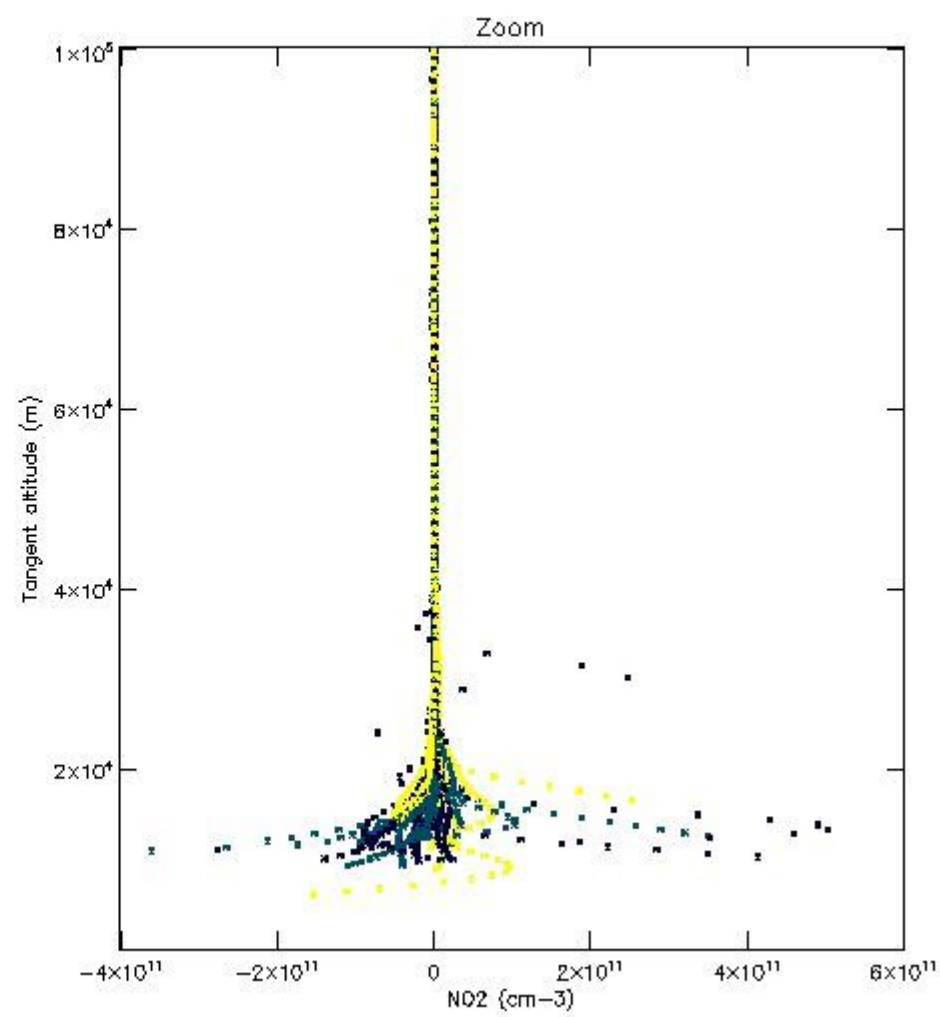
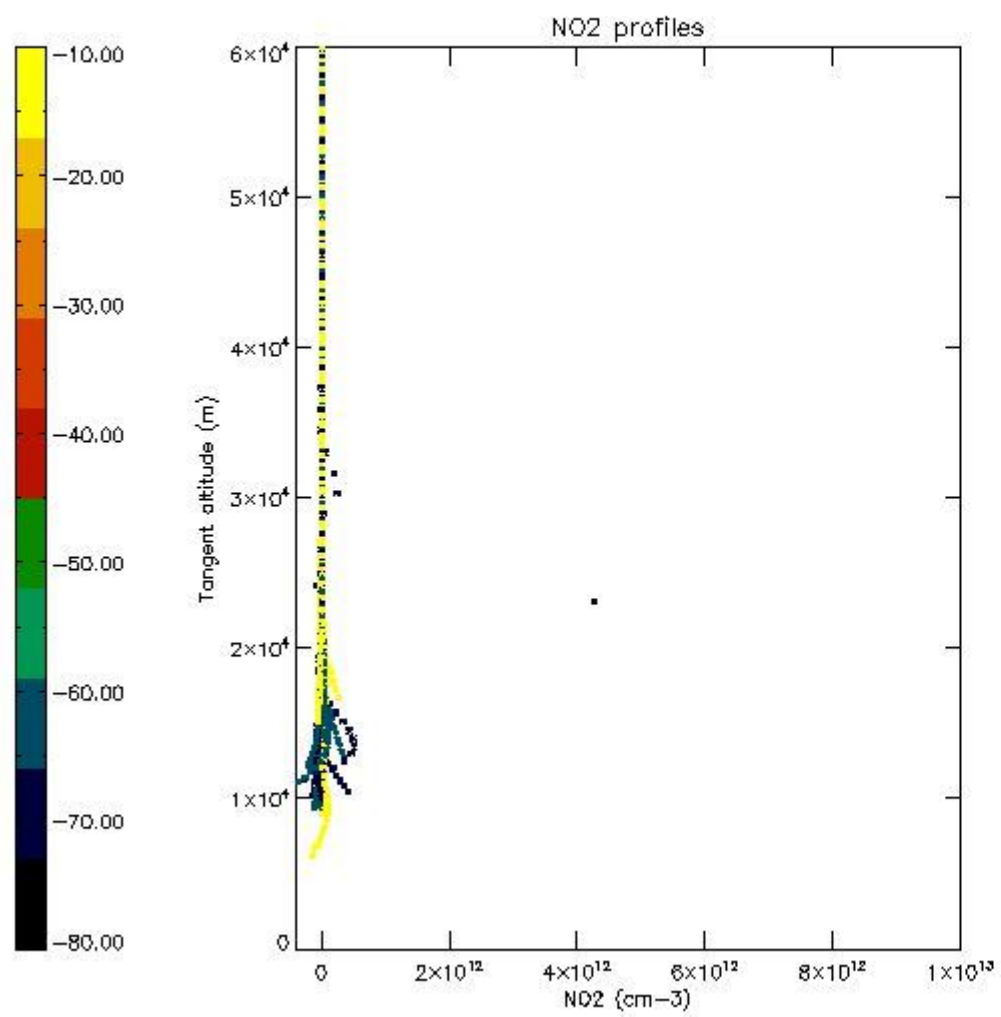
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



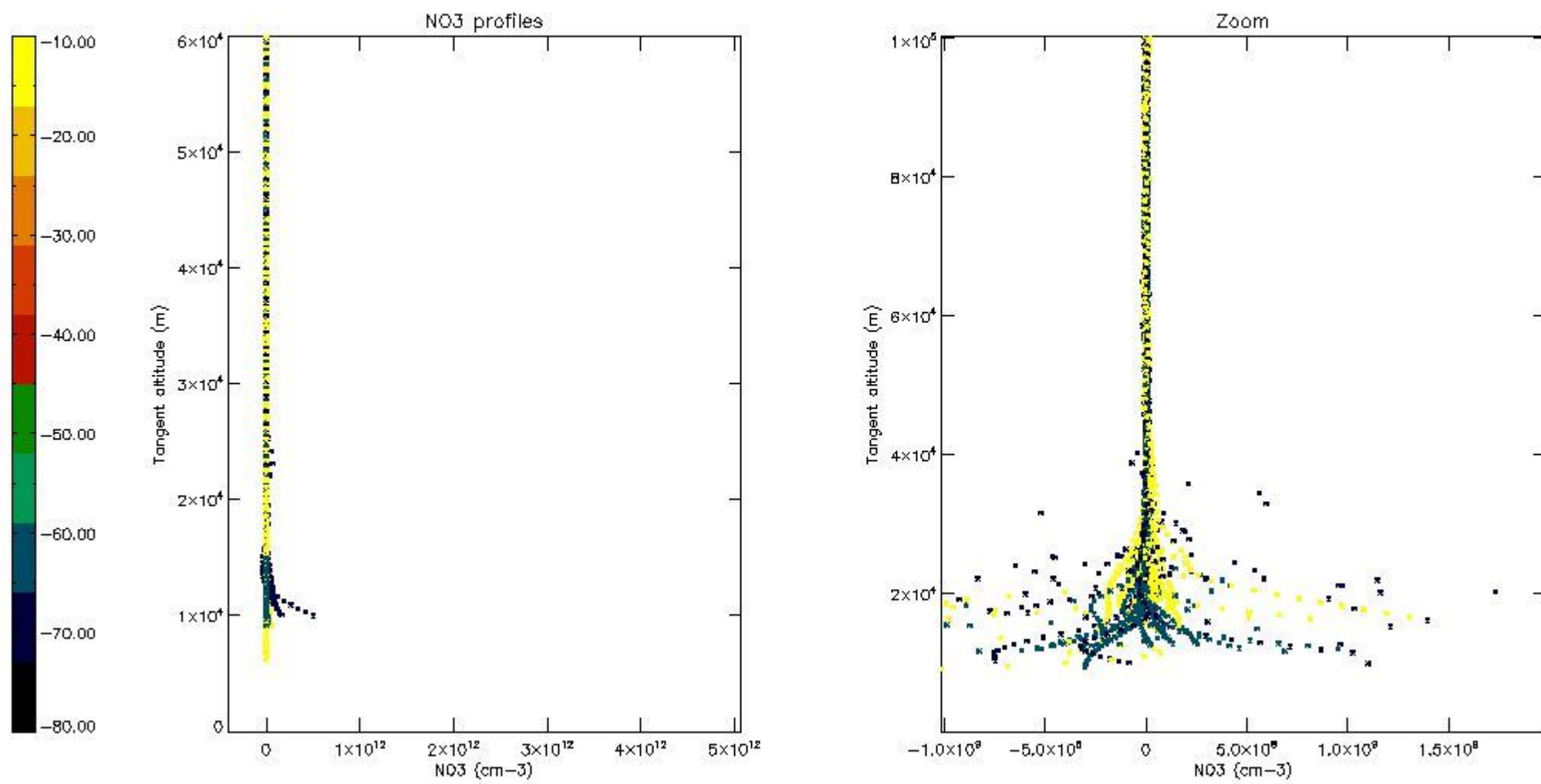
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



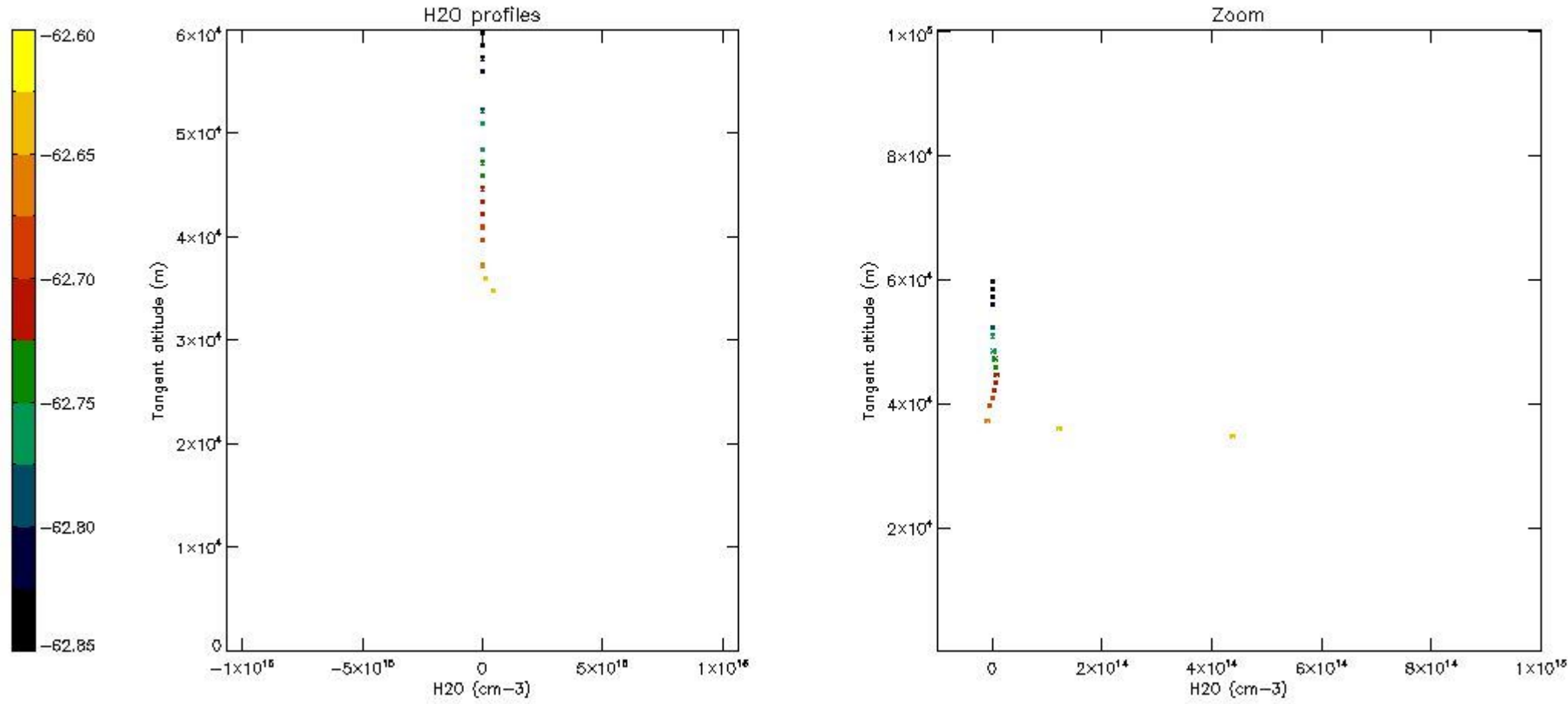
5.7 Plot NO3 profiles for all STD (dark without errors)

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	28-JUN-2011 00:05:41
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	28-JUN-2011 00:05:41
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	28-JUN-2011 00:05:41

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[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](#)

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.

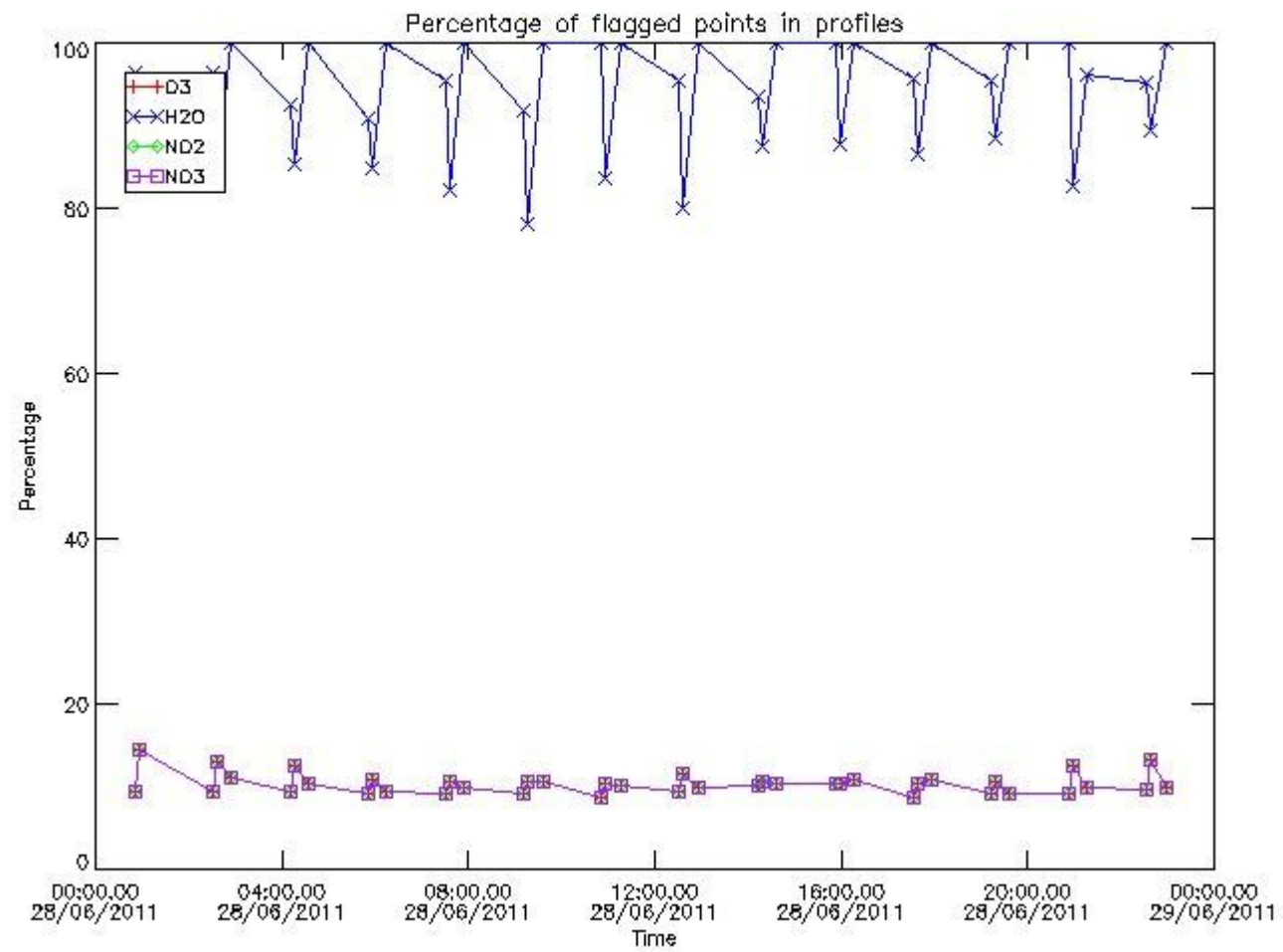
Item	Value
Time of report generation	24APR2013 15:13:37
Data source version	GOMOS/6.01
Start time of products	28-06-2011 (28JUN2011 00:00:00)
Stop time of products	29-06-2011 (29JUN2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	274
Nb of prods with errors	0

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__2PRFIN20110628_000541_000000383104_00045_48766_9141.N1	28-JUN-2011 00:05:41	Bright	37.500	126	60Bet Oph	2.7700	4250.0	75	48766	No
2	GOM_NL__2PRFIN20110628_000801_000000393104_00045_48766_9142.N1	28-JUN-2011 00:08:01	Bright	38.500	59	55Alp Oph	2.0800	8900.0	77	48766	No
3	GOM_NL__2PRFIN20110628_001702_000000463104_00045_48766_9143.N1	28-JUN-2011 00:17:02	Bright	45.500	5	3Alp Lyr	0.033000	11000.	91	48766	No
4	GOM_NL__2PRFIN20110628_001929_000000533104_00045_48766_9144.N1	28-JUN-2011 00:19:29	Bright	53.000	130	23Bet Dra	2.7990	5800.0	106	48766	No
5	GOM_NL__2PRFIN20110628_002837_000000463104_00045_48766_9145.N1	28-JUN-2011 00:28:37	Bright	45.500	89	5Alp Cep	2.4510	8000.0	91	48766	No
6	GOM_NL__2PRFIN20110628_003550_000000693104_00045_48766_9146.N1	28-JUN-2011 00:35:50	Bright	69.000	74	11Bet Cas	2.2680	6600.0	138	48766	No
7	GOM_NL__2PRFIN20110628_003729_000000483104_00045_48766_9147.N1	28-JUN-2011 00:37:29	Bright	48.000	68	18Alp Cas	2.2250	4500.0	96	48766	No
8	GOM_NL__2PRFIN20110628_004014_000000363104_00045_48766_9148.N1	28-JUN-2011 00:40:14	Bright	36.000	160	23Gam Per	2.9300	4700.0	72	48766	No
9	GOM_NL__2PRFIN20110628_004336_000000483104_00045_48766_9149.N1	28-JUN-2011 00:43:36	Bright	48.000	73	57Gam1And	2.2600	13100.	96	48766	No
10	GOM_NL__2PRFIN20110628_004610_000000483104_00045_48766_9150.N1	28-JUN-2011 00:46:10	Twilight	47.500	173	4Bet Tri	3.0040	8900.0	95	48766	No
11	GOM_NL__2PRFIN20110628_005015_000000553104_00045_48766_9151.N1	28-JUN-2011 00:50:15	Dark	54.500	50	13Alp Ari	2.0070	4250.0	109	48766	No
12	GOM_NL__2PRFIN20110628_005511_000000383104_00045_48766_9152.N1	28-JUN-2011 00:55:11	Dark	38.000	94	92Alp Cet	2.5260	3100.0	76	48766	No
13	GOM_NL__2PRFIN20110628_012032_000000623104_00046_48767_9142.N1	28-JUN-2011 01:20:32	Straylight	62.000	63	Bet Gru	2.1500	2800.0	124	48767	No
14	GOM_NL__2PRFIN20110628_012231_000000583104_00046_48767_9143.N1	28-JUN-2011 01:22:31	Straylight	58.000	31	Alp Gru	1.7340	15200.	116	48767	No
15	GOM_NL__2PRFIN20110628_012506_000000473104_00046_48767_9144.N1	28-JUN-2011 01:25:06	Straylight	47.000	45	Alp Pav	1.9400	26000.	94	48767	No
16	GOM_NL__2PRFIN20110628_013400_000000453104_00046_48767_9145.N1	28-JUN-2011 01:34:00	Twilight	45.000	38	20Eps Sgr	1.8360	11000.	90	48767	No
17	GOM_NL__2PRFIN20110628_013522_000000563104_00046_48767_9146.N1	28-JUN-2011 01:35:22	Bright	56.000	116	19Del Sgr	2.7000	4100.0	112	48767	No
18	GOM_NL__2PRFIN20110628_013728_000000473104_00046_48767_9147.N1	28-JUN-2011 01:37:28	Bright	46.500	155	41Pi Sgr	2.9000	6600.0	93	48767	No
19	GOM_NL__2PRFIN20110628_014555_000000383104_00046_48767_9148.N1	28-JUN-2011 01:45:55	Bright	37.500	126	60Bet Oph	2.7700	4250.0	75	48767	No
20	GOM_NL__2PRFIN20110628_014815_000000393104_00046_48767_9149.N1	28-JUN-2011 01:48:15	Bright	39.000	59	55Alp Oph	2.0800	8900.0	78	48767	No
21	GOM_NL__2PRFIN20110628_015716_000000463104_00046_48767_9150.N1	28-JUN-2011 01:57:16	Bright	46.000	5	3Alp Lyr	0.033000	11000.	92	48767	No
22	GOM_NL__2PRFIN20110628_015943_000000363104_00046_48767_9151.N1	28-JUN-2011 01:59:43	Bright	36.000	130	23Bet Dra	2.7990	5800.0	72	48767	No
23	GOM_NL__2PRFIN20110628_020850_000000453104_00046_48767_9152.N1	28-JUN-2011 02:08:50	Bright	45.000	89	5Alp Cep	2.4510	8000.0	90	48767	No
24	GOM_NL__2PRFIN20110628_021604_000000693104_00046_48767_9153.N1	28-JUN-2011 02:16:04	Bright	69.000	74	11Bet Cas	2.2680	6600.0	138	48767	No
25	GOM_NL__2PRFIN20110628_021743_000000483104_00046_48767_9154.N1	28-JUN-2011 02:17:43	Bright	48.000	68	18Alp Cas	2.2250	4500.0	96	48767	No
26	GOM_NL__2PRFIN20110628_022027_000000523104_00046_48767_9155.N1	28-JUN-2011 02:20:27	Bright	52.000	160	23Gam Per	2.9300	4700.0	104	48767	No
27	GOM_NL__2PRFIN20110628_022350_000000493104_00046_48767_9156.N1	28-JUN-2011 02:23:50	Bright	49.000	73	57Gam1And	2.2600	13100.	98	48767	No
28	GOM_NL__2PRFIN20110628_022624_000000453104_00046_48767_9157.N1	28-JUN-2011 02:26:24	Twilight	45.000	173	4Bet Tri	3.0040	8900.0	90	48767	No
29	GOM_NL__2PRFIN20110628_023030_000000553104_00046_48767_9158.N1	28-JUN-2011 02:30:30	Dark	54.500	50	13Alp Ari	2.0070	4250.0	109	48767	No
30	GOM_NL__2PRFIN20110628_023525_000000393104_00046_48767_9159.N1	28-JUN-2011 02:35:25	Dark	39.000	94	92Alp Cet	2.5260	3100.0	78	48767	No
31	GOM_NL__2PRFIN20110628_025419_000000463104_00047_48768_9170.N1	28-JUN-2011 02:54:19	Dark	46.000	84	Alp Phe	2.3970	4500.0	92	48768	No
32	GOM_NL__2PRFIN20110628_030048_000000553104_00047_48768_9171.N1	28-JUN-2011 03:00:48	Straylight	55.000	63	Bet Gru	2.1500	2800.0	110	48768	No
33	GOM_NL__2PRFIN20110628_030246_000000483104_00047_48768_9172.N1	28-JUN-2011 03:02:46	Straylight	48.000	31	Alp Gru	1.7340	15200.	96	48768	No
34	GOM_NL__2PRFIN20110628_030521_000000433104_00047_48768_9173.N1	28-JUN-2011 03:05:21	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	48768	No
35	GOM_NL__2PRFIN20110628_031414_000000453104_00047_48768_9174.N1	28-JUN-2011 03:14:14	Twilight	44.500	38	20Eps Sgr	1.8360	11000.	89	48768	No
36	GOM_NL__2PRFIN20110628_031537_000000543104_00047_48768_9175.N1	28-JUN-2011 03:15:37	Bright	53.500	116	19Del Sgr	2.7000	4100.0	107	48768	No
37	GOM_NL__2PRFIN20110628_031742_000000473104_00047_48768_9176.N1	28-JUN-2011 03:17:42	Bright	47.000	155	41Pi Sgr	2.9000	6600.0	94	48768	No
38	GOM_NL__2PRFIN20110628_032609_000000383104_00047_48768_9177.N1	28-JUN-2011 03:26:09	Bright	38.000	126	60Bet Oph	2.7700	4250.0	76	48768	No
39	GOM_NL__2PRFIN20110628_032829_000000393104_00047_48768_9178.N1	28-JUN-2011 03:28:29	Bright	38.500	59	55Alp Oph	2.0800	8900.0	77	48768	No
40	GOM_NL__2PRFIN20110628_033729_000000463104_00047_48768_9179.N1	28-JUN-2011 03:37:29	Bright	46.000	5	3Alp Lyr	0.033000	11000.	92	48768	No
41	GOM_NL__2PRFIN20110628_033957_000000383104_00047_48768_9180.N1	28-JUN-2011 03:39:57	Bright	37.500	130	23Bet Dra	2.7990	5800.0	75	48768	No
42	GOM_NL__2PRFIN20110628_034903_000000433104_00047_48768_9181.N1	28-JUN-2011 03:49:03	Bright	43.000	89	5Alp Cep	2.4510	8000.0	86	48768	No

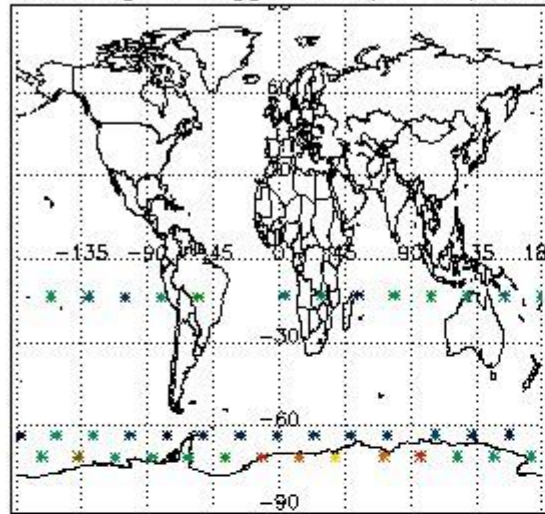
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

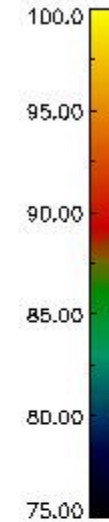
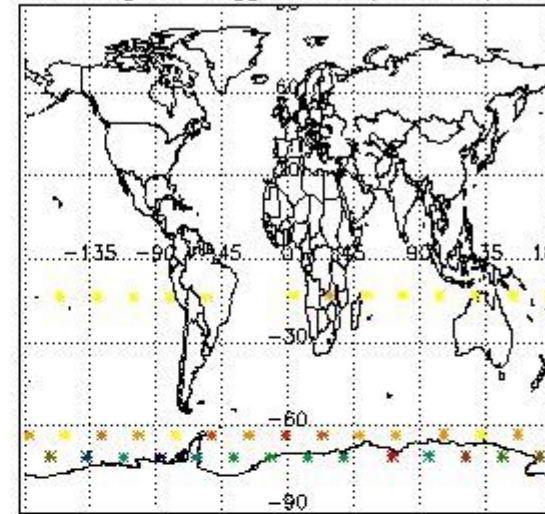


3.2 Plot quality information per product (world map)

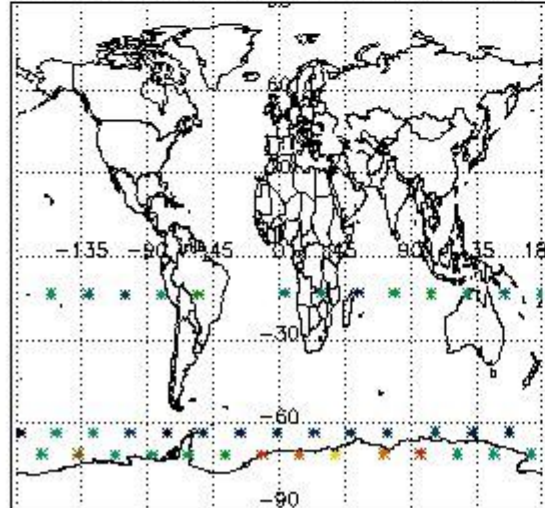
Percentage of flagged data per O3 profile



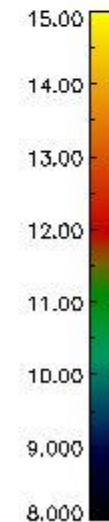
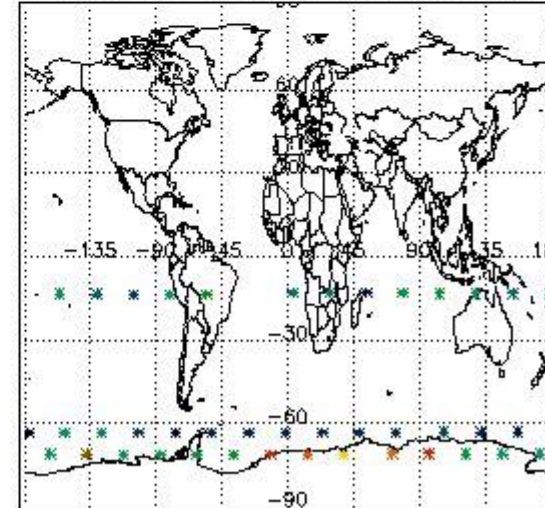
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

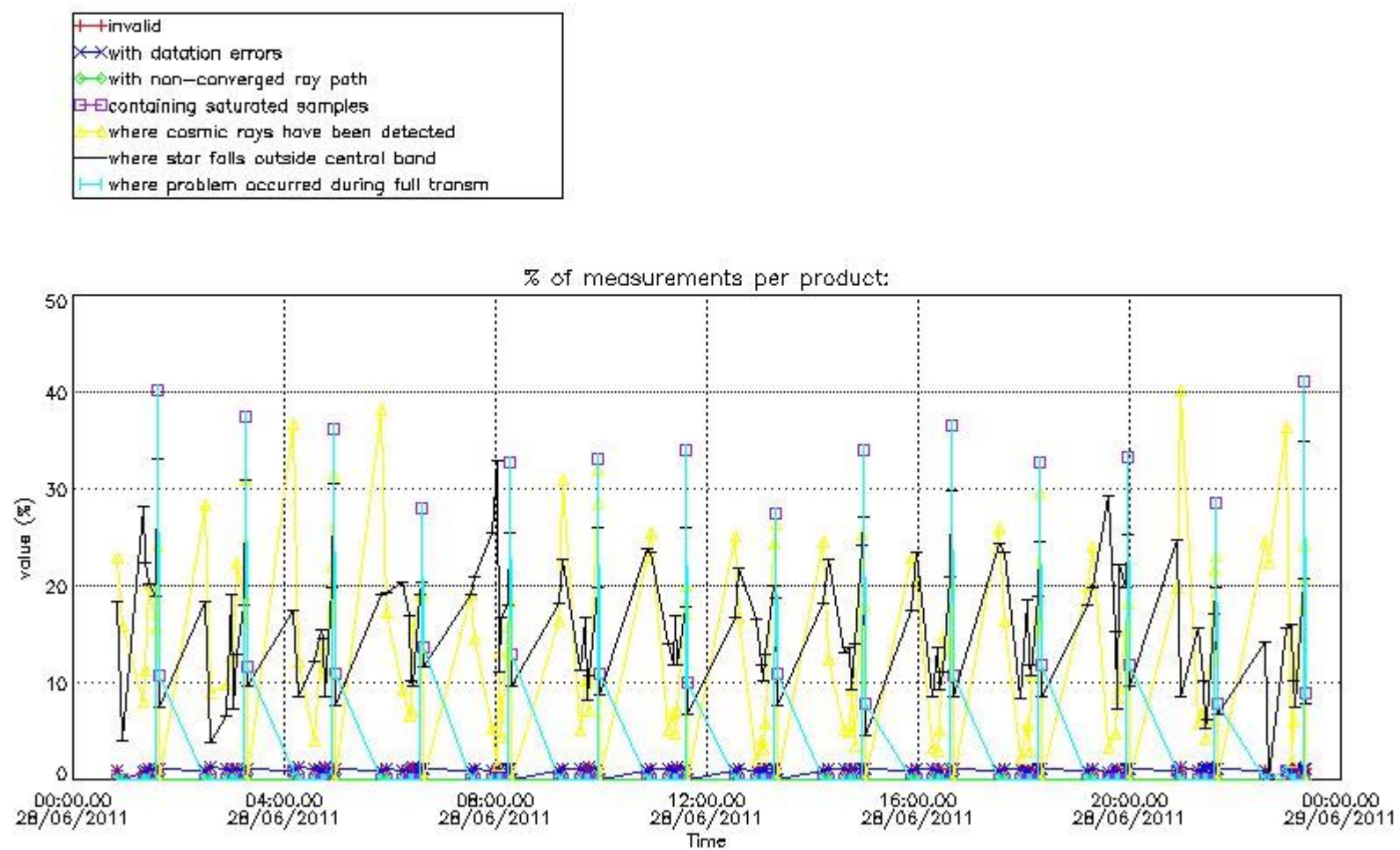


4. Level 1 quality information per product

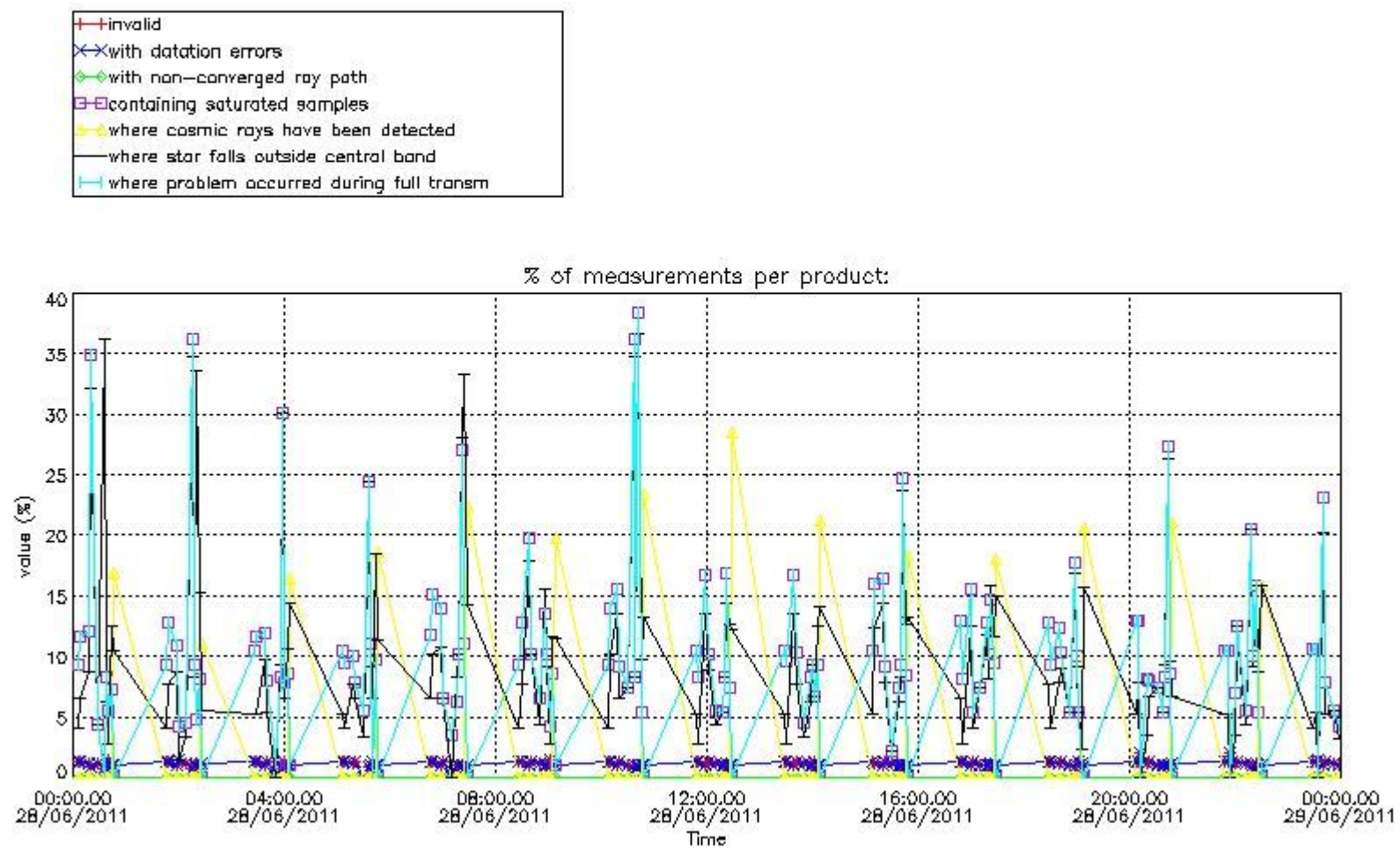
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

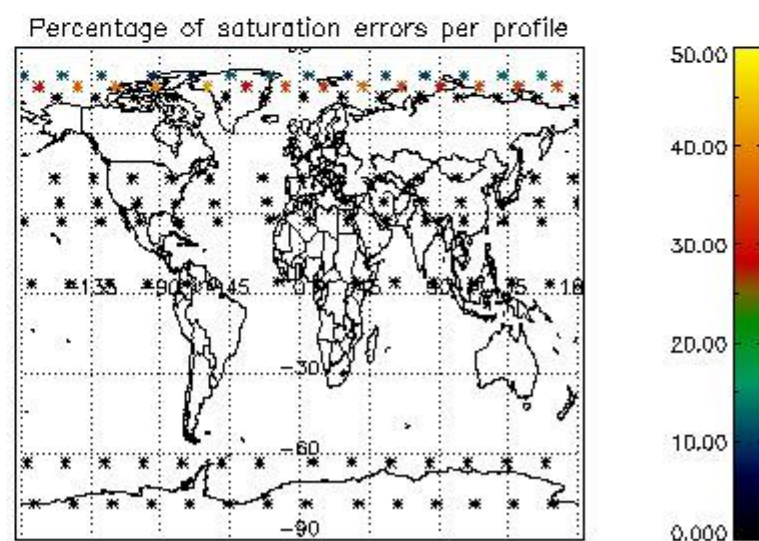
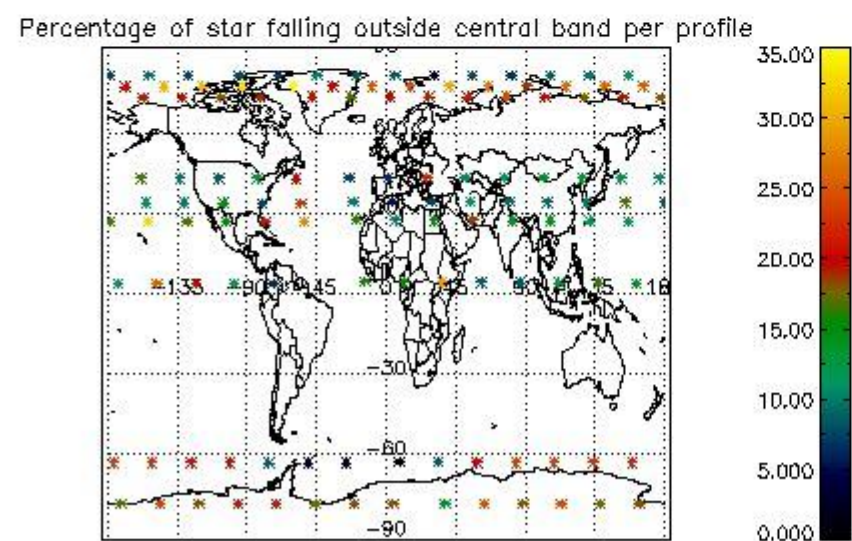
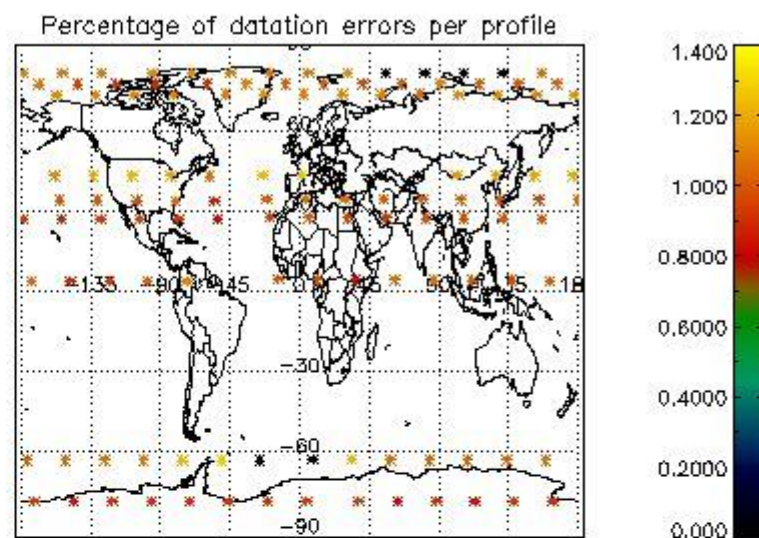
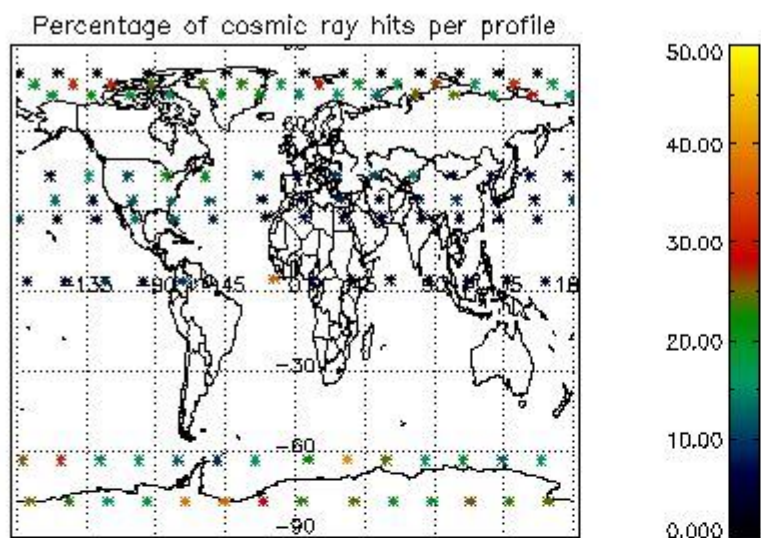


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

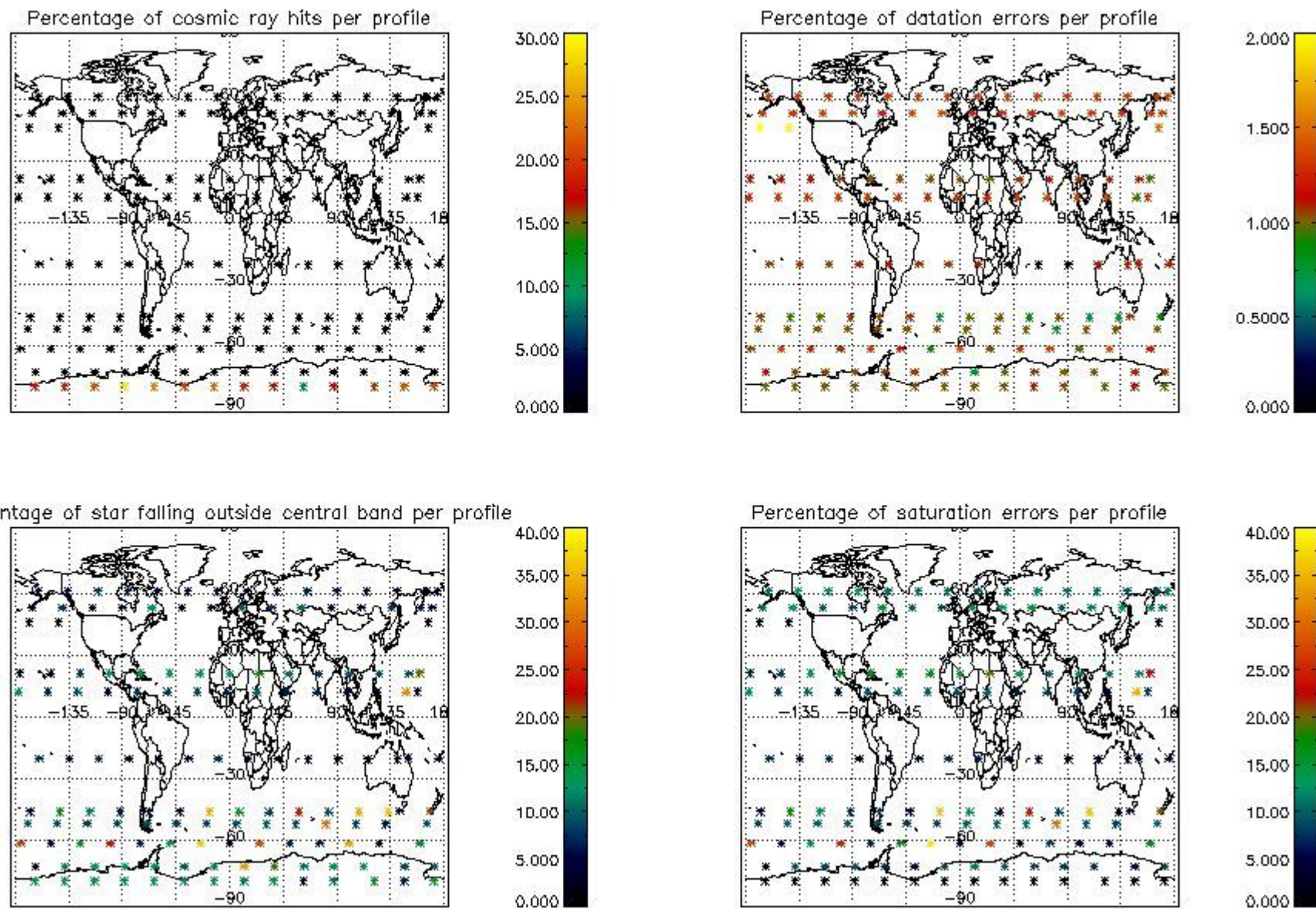


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

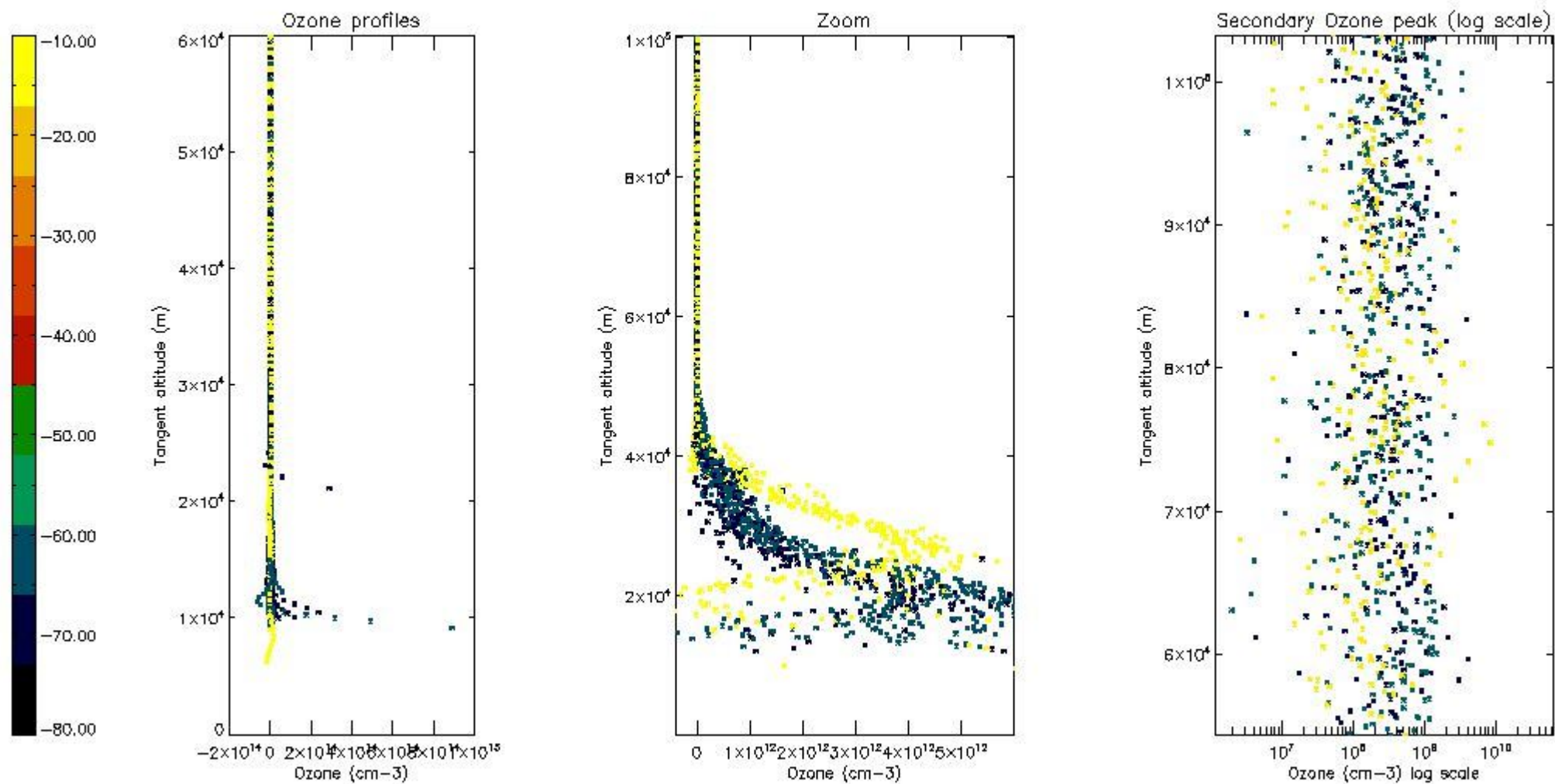
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	17
STD < 20	4

STD < 10	2
STD < 5	0

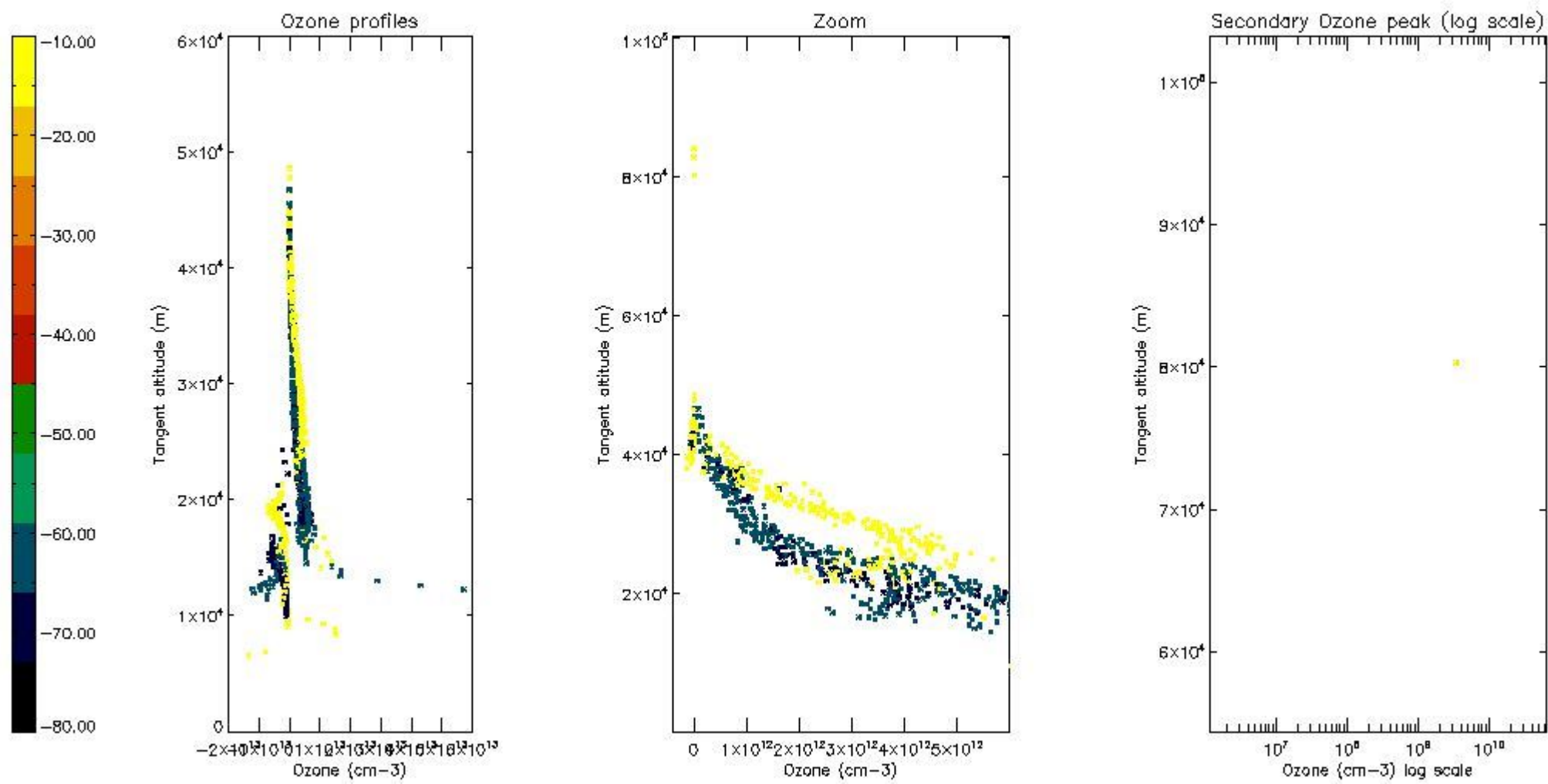
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



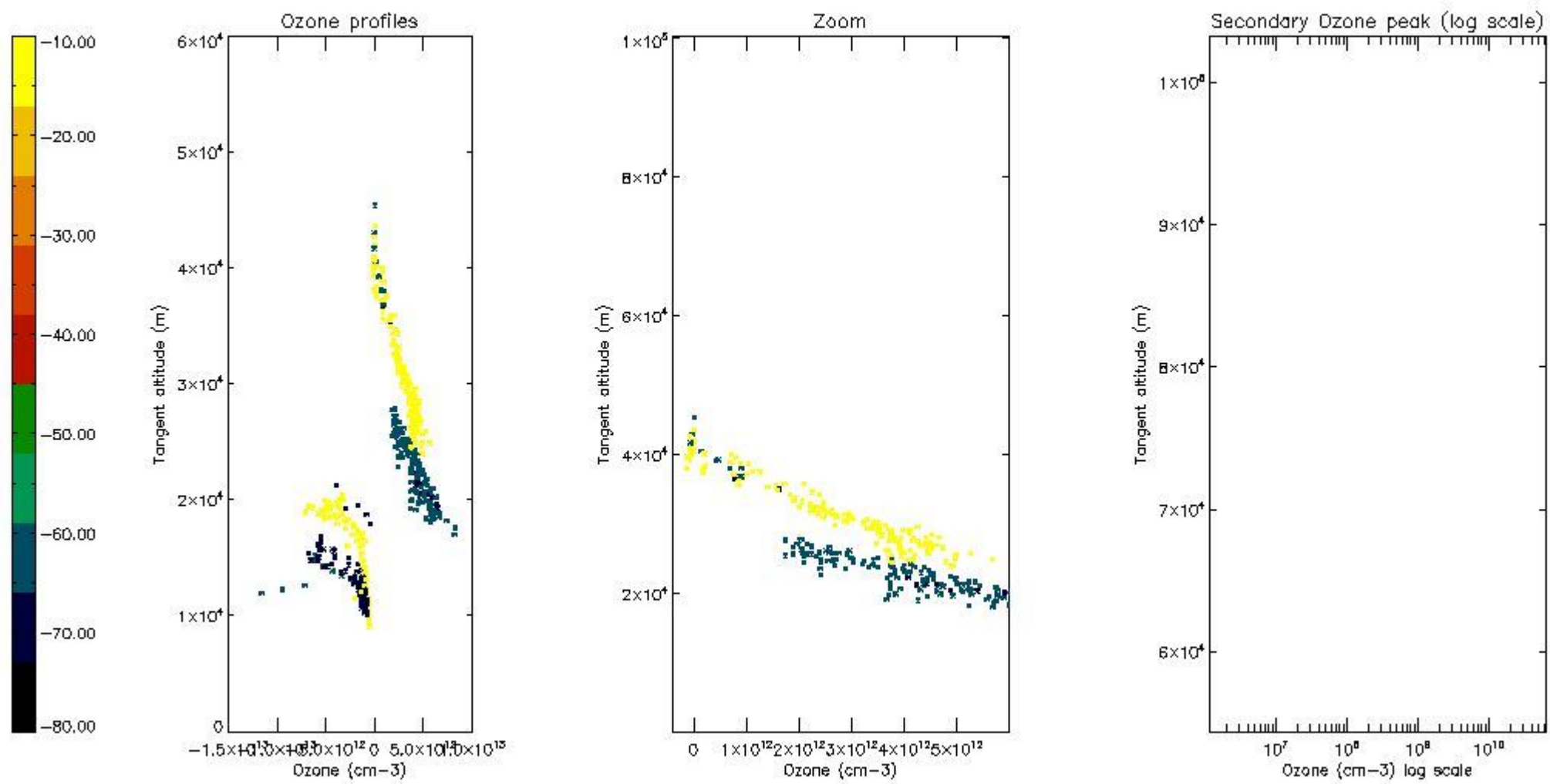
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



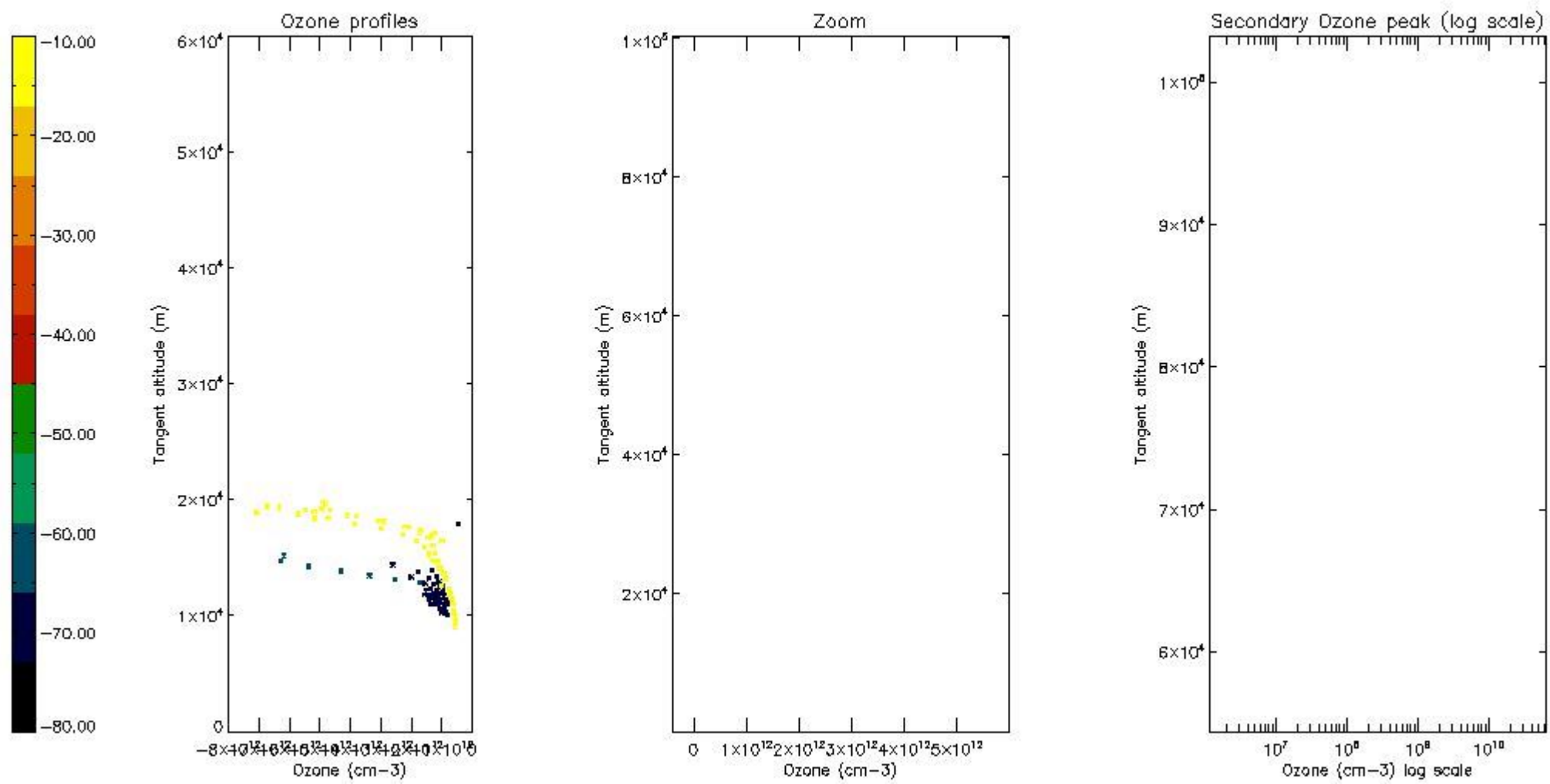
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



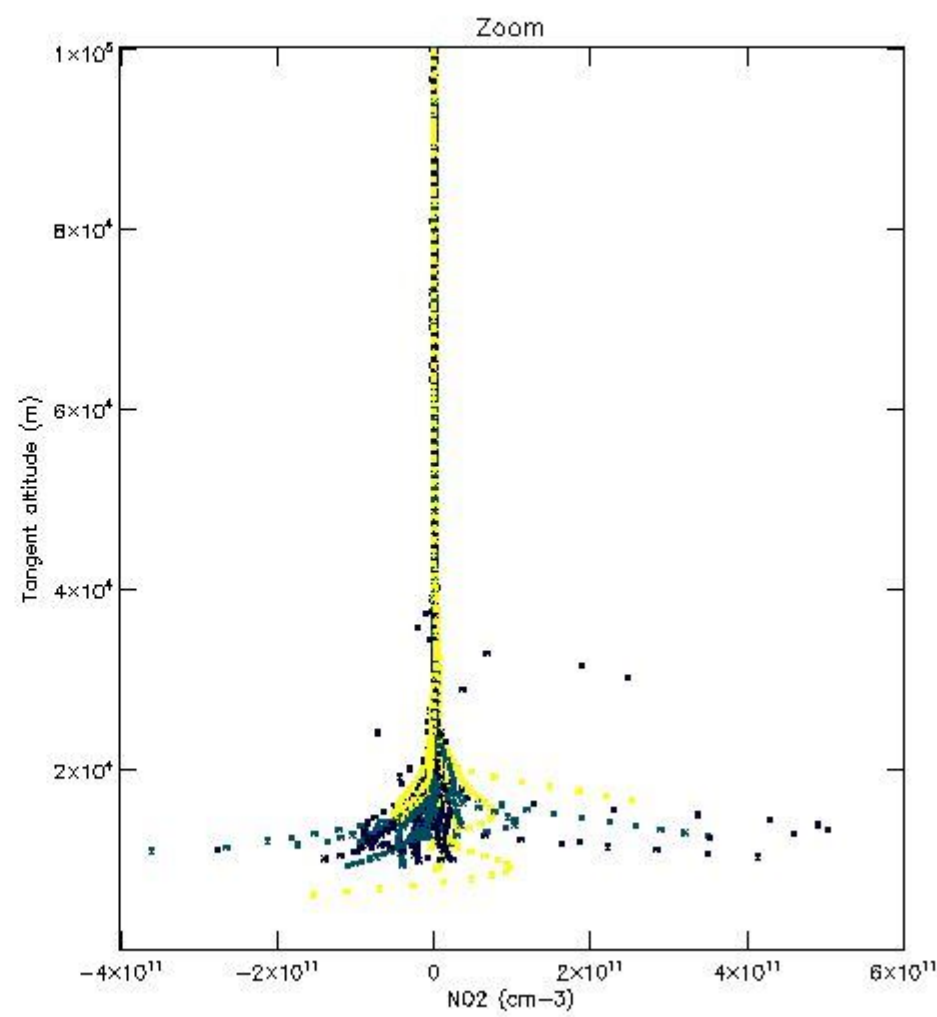
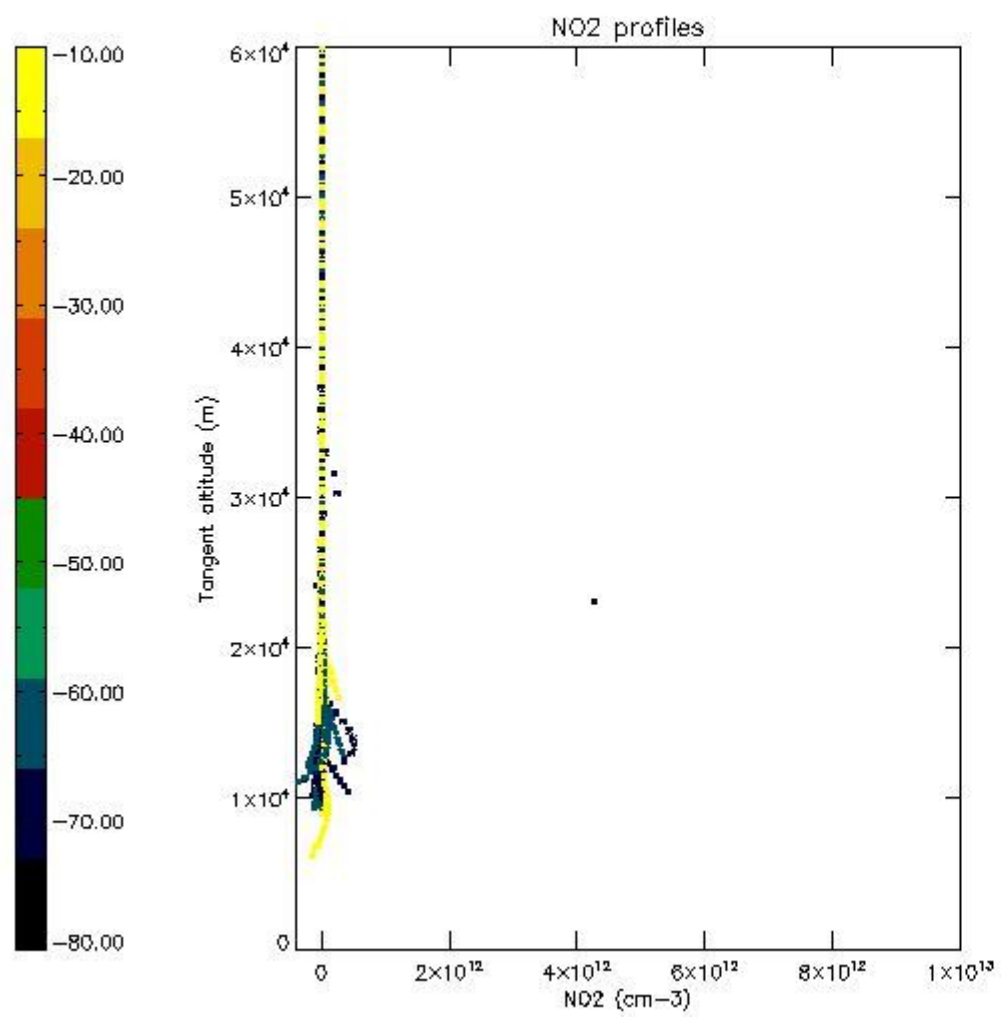
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



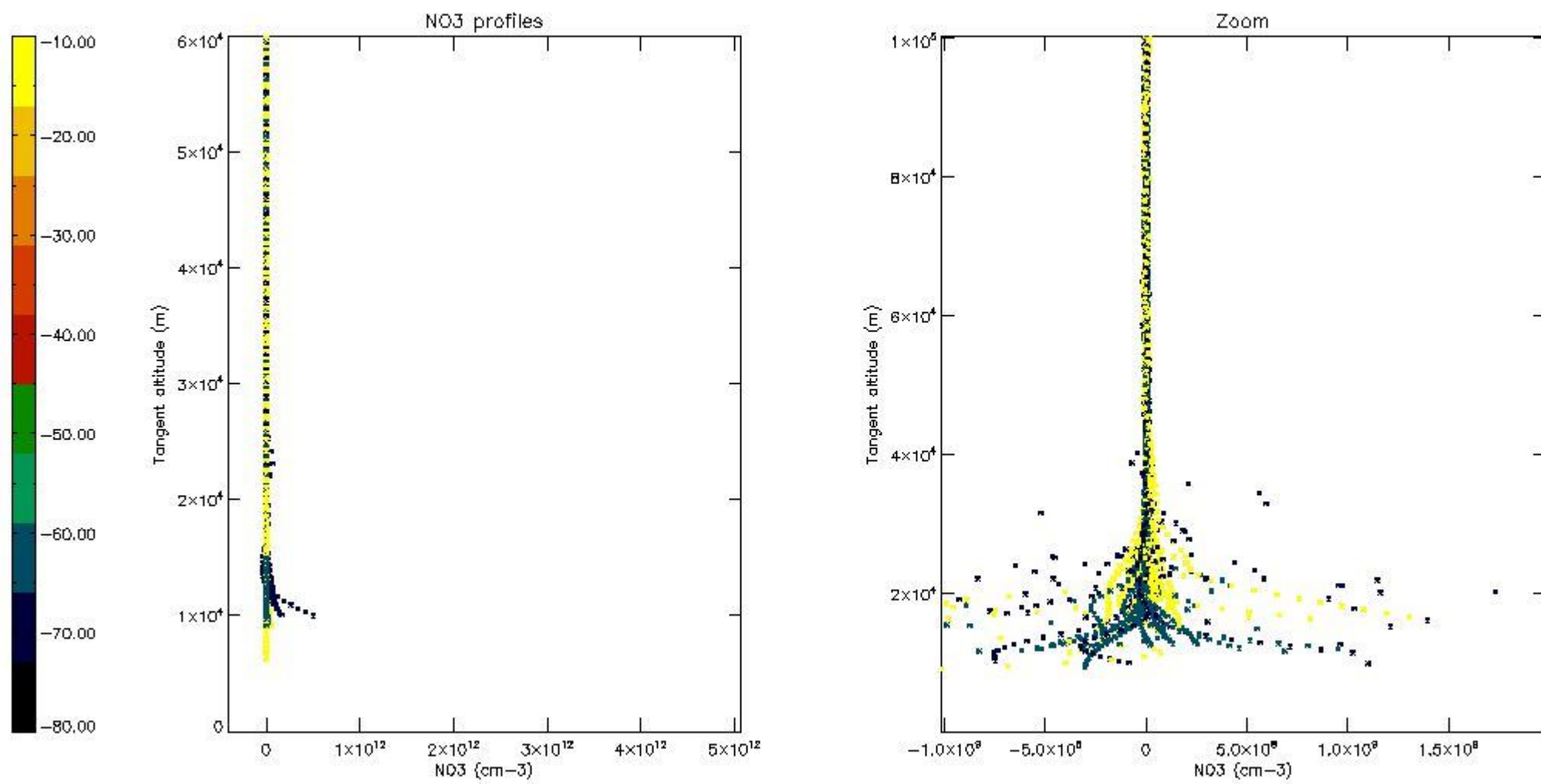
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



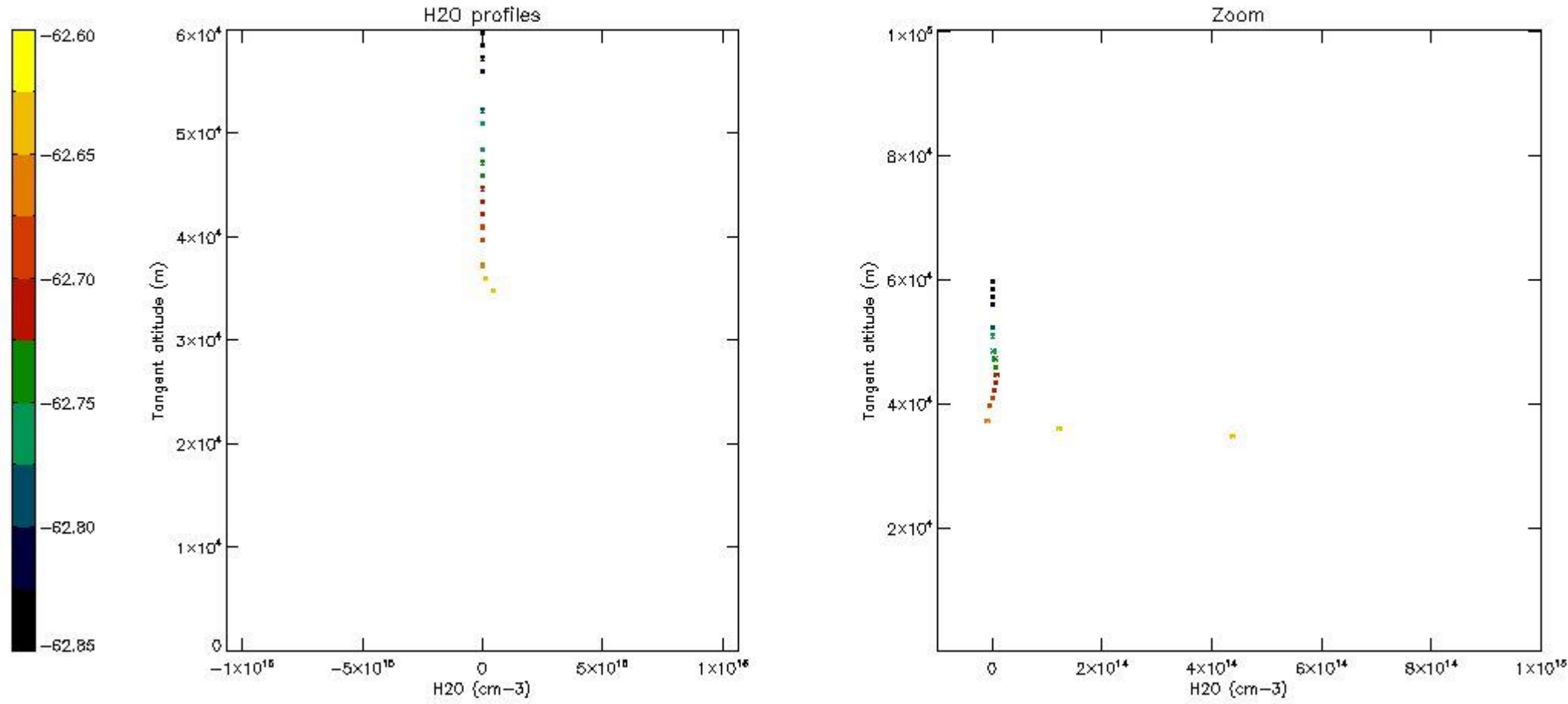
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

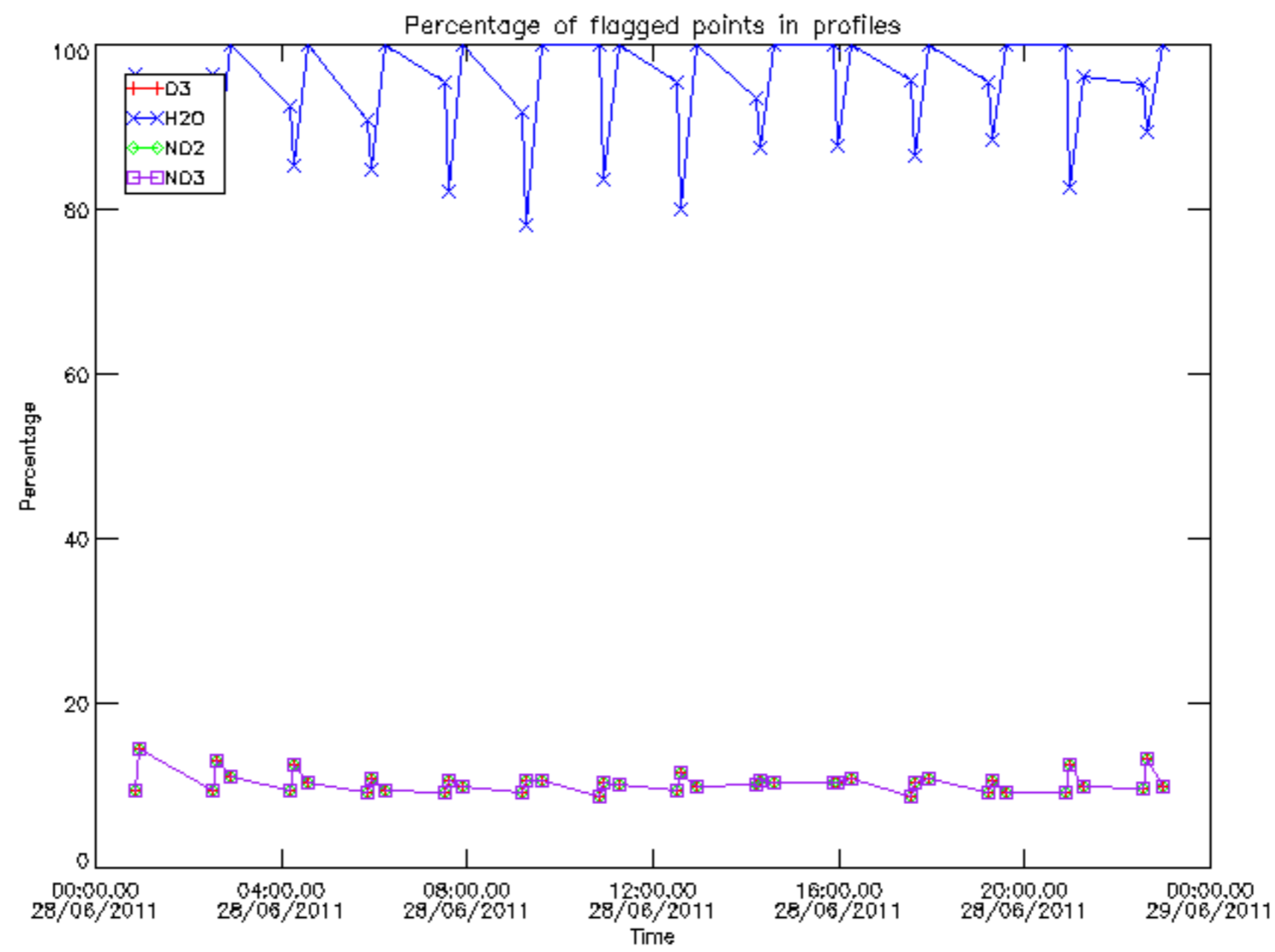
The colorbar represents the latitude.



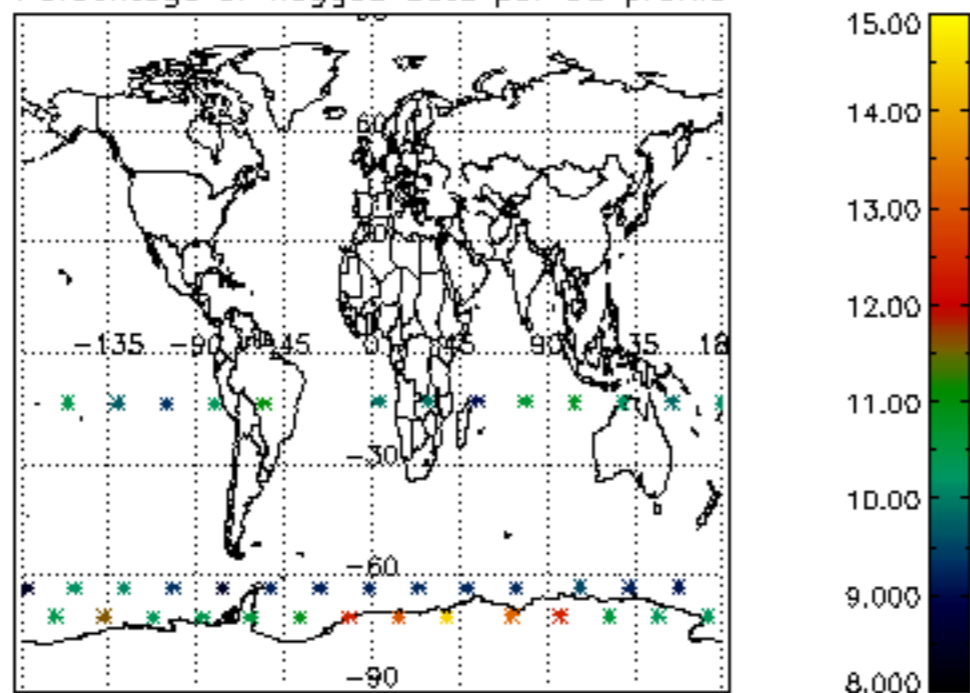
6. Auxiliary Data Files used for the production reported in section 2

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.

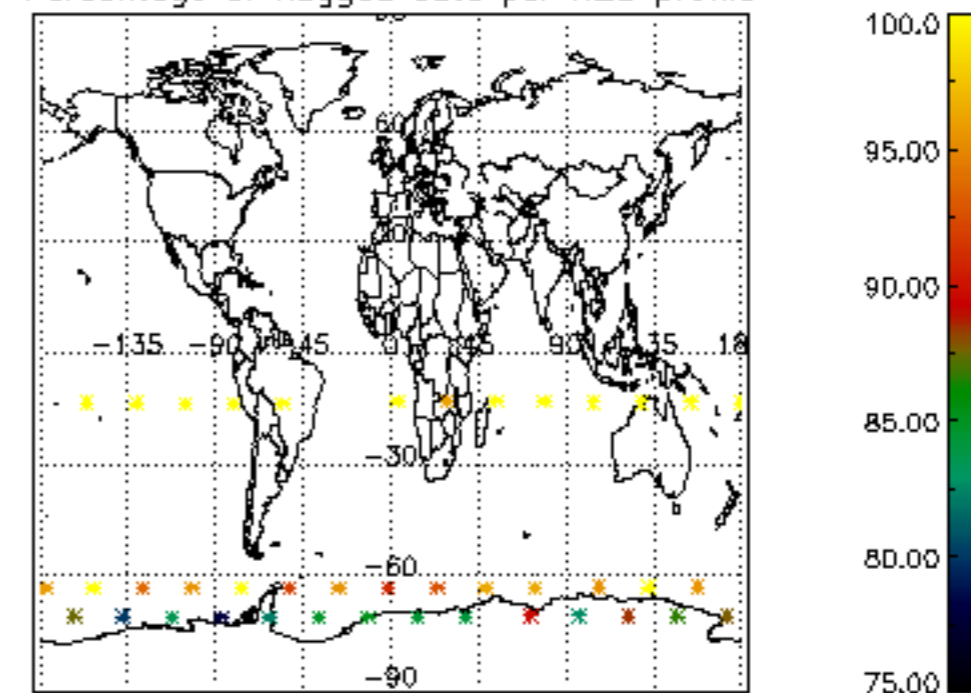
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	28-JUN-2011 00:05:41
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	28-JUN-2011 00:05:41
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	28-JUN-2011 00:05:41



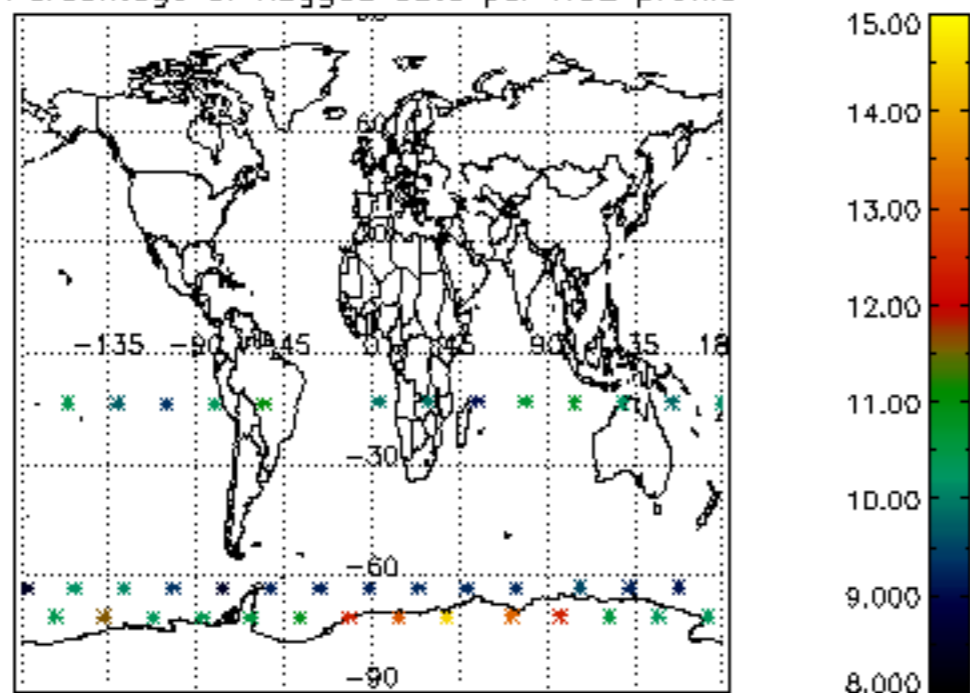
Percentage of flagged data per D3 profile



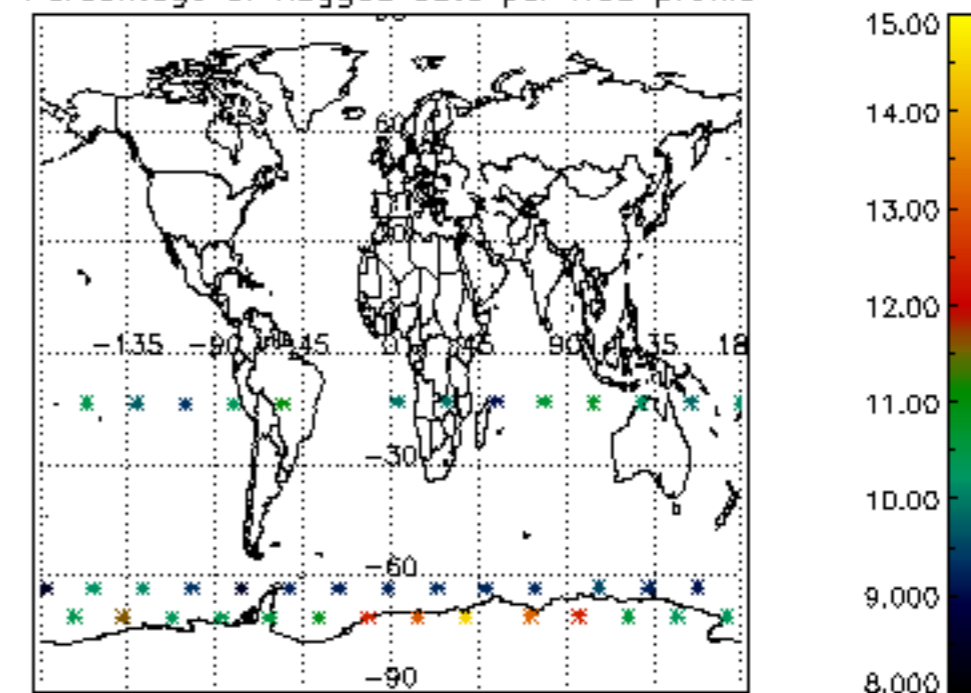
Percentage of flagged data per H2O profile

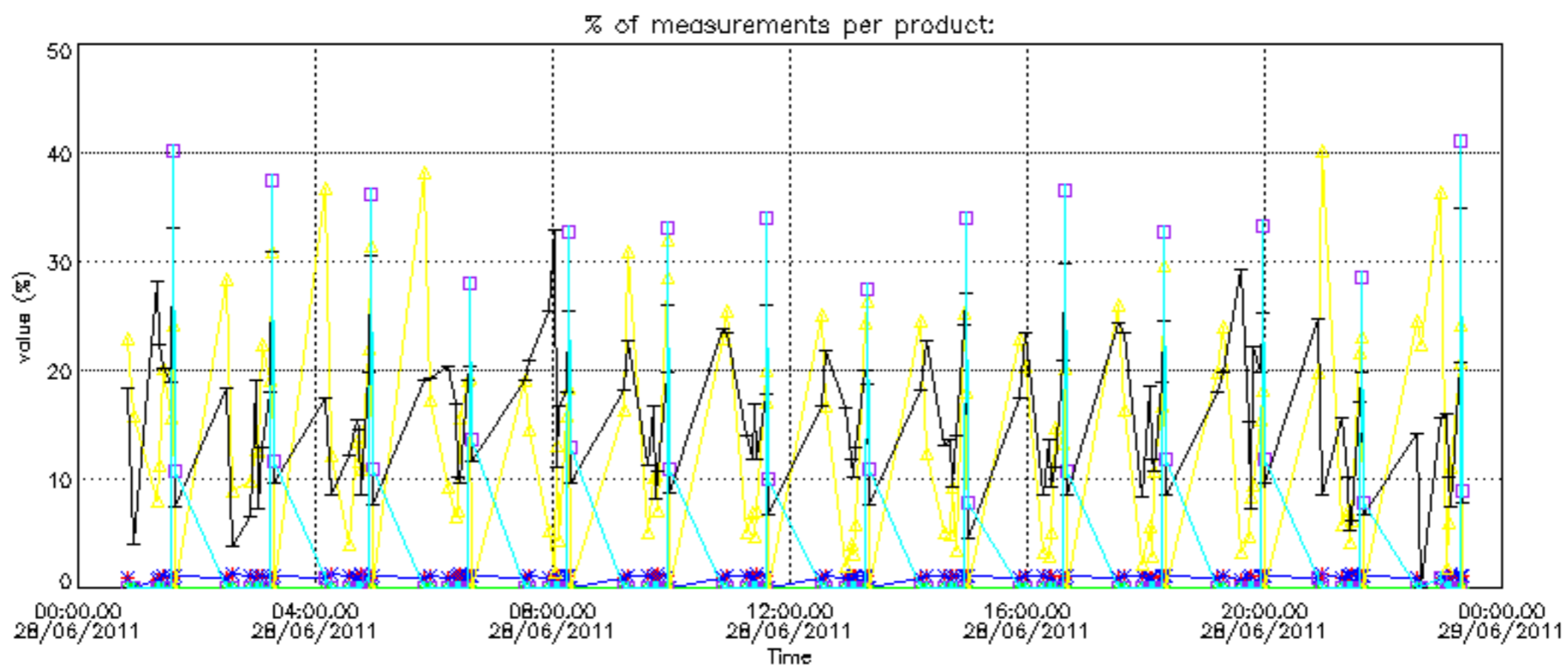


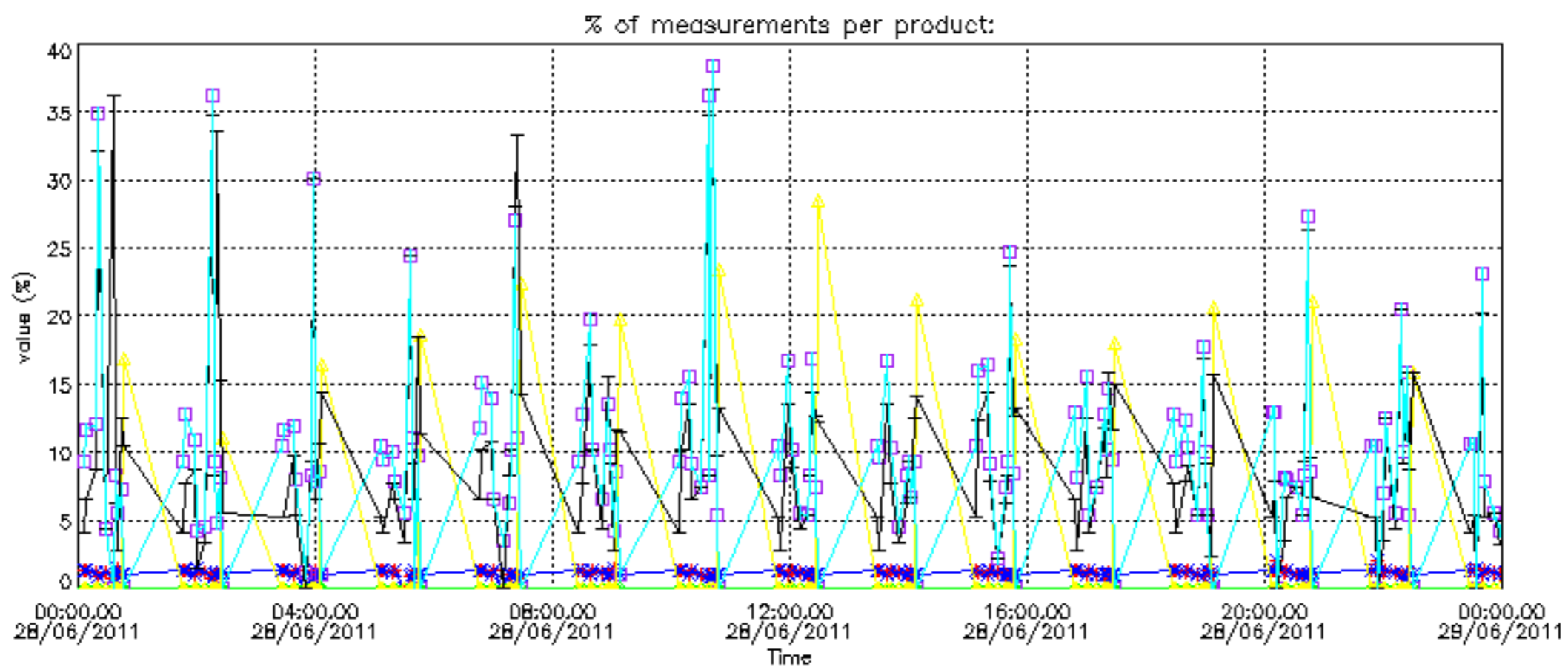
Percentage of flagged data per NO2 profile



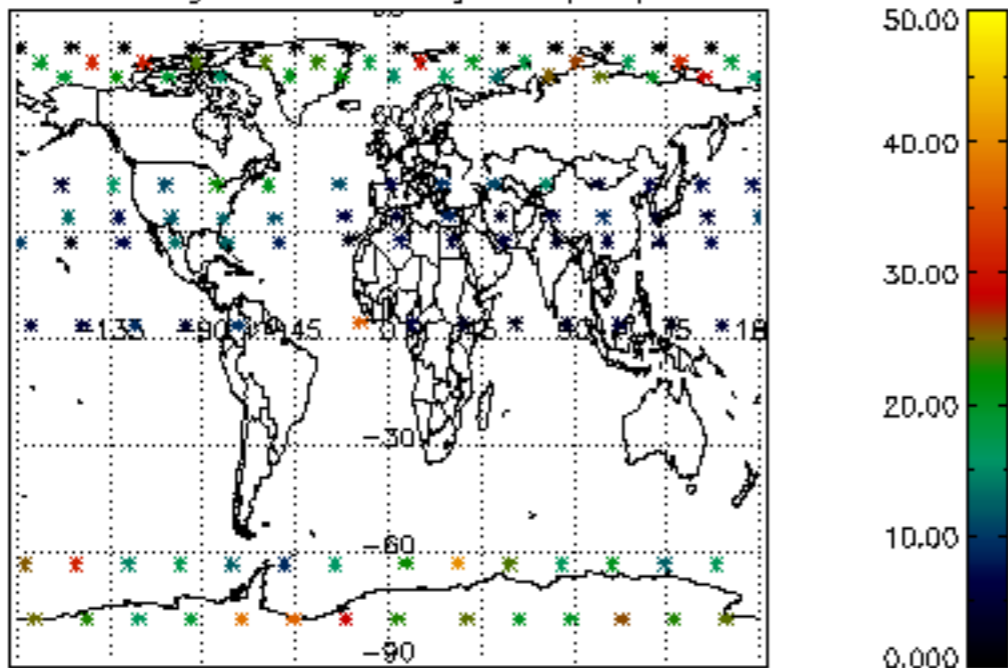
Percentage of flagged data per NO3 profile



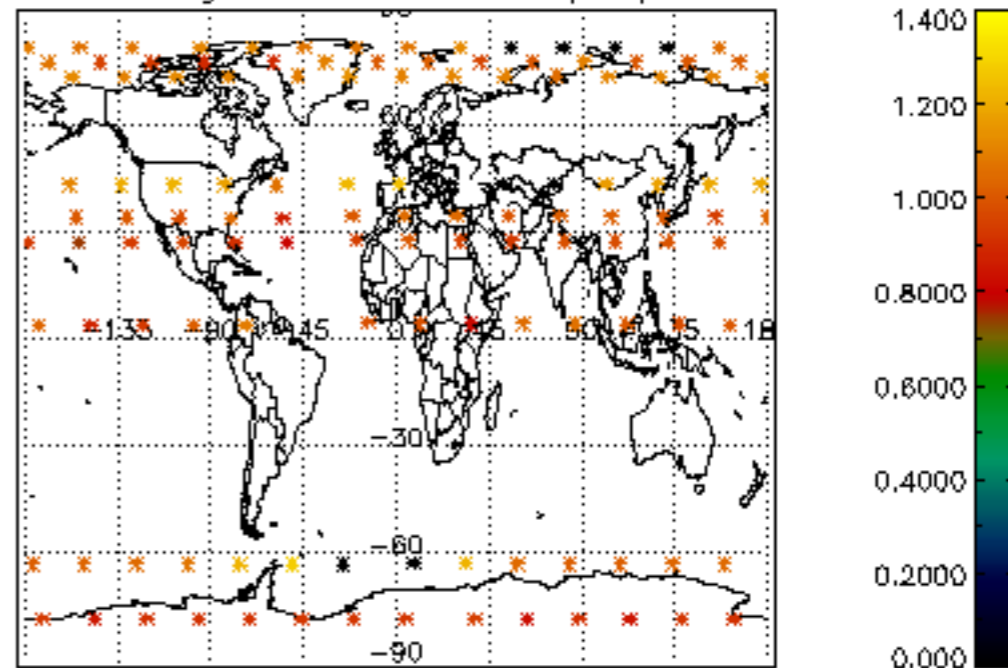




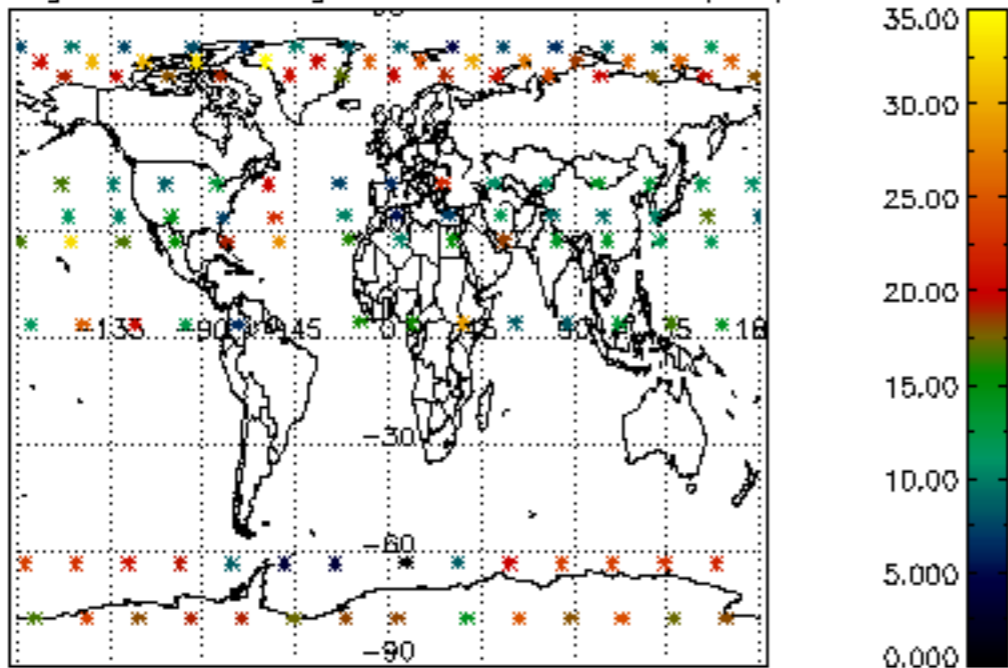
Percentage of cosmic ray hits per profile



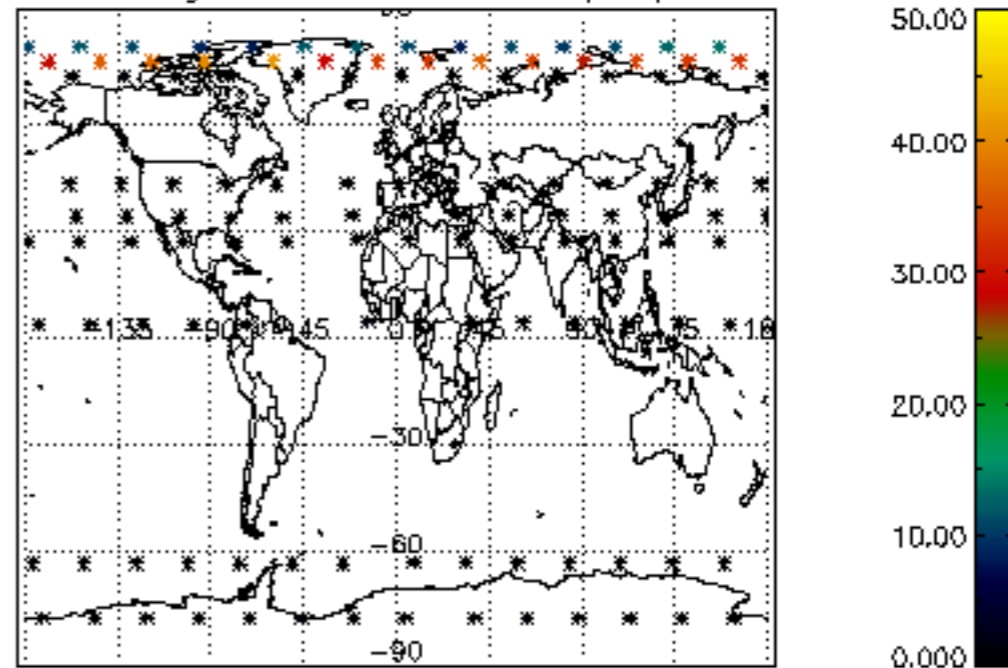
Percentage of datation errors per profile



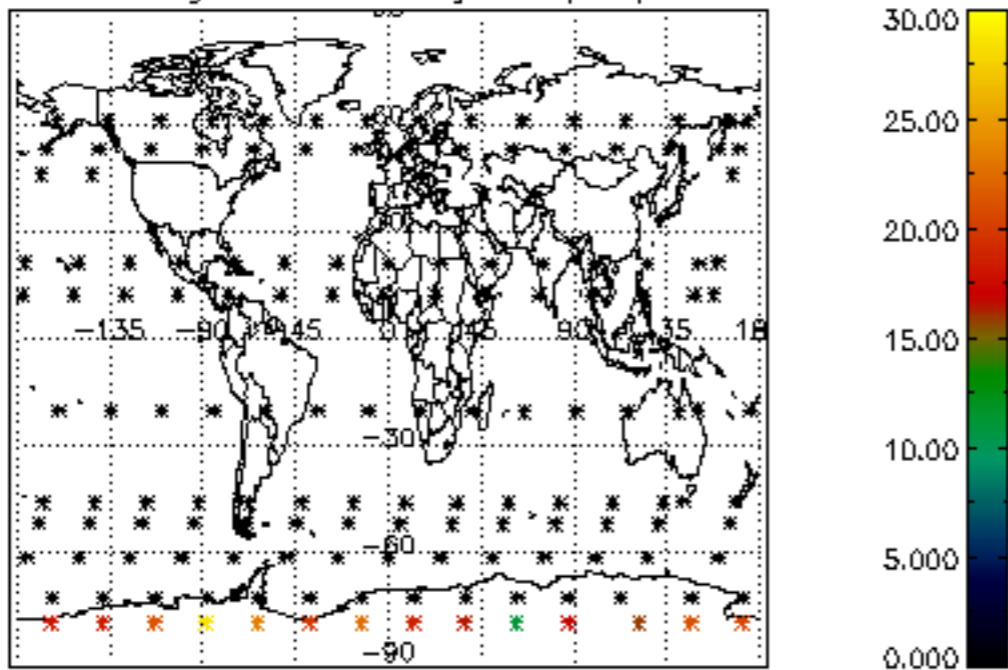
Percentage of star falling outside central band per profile



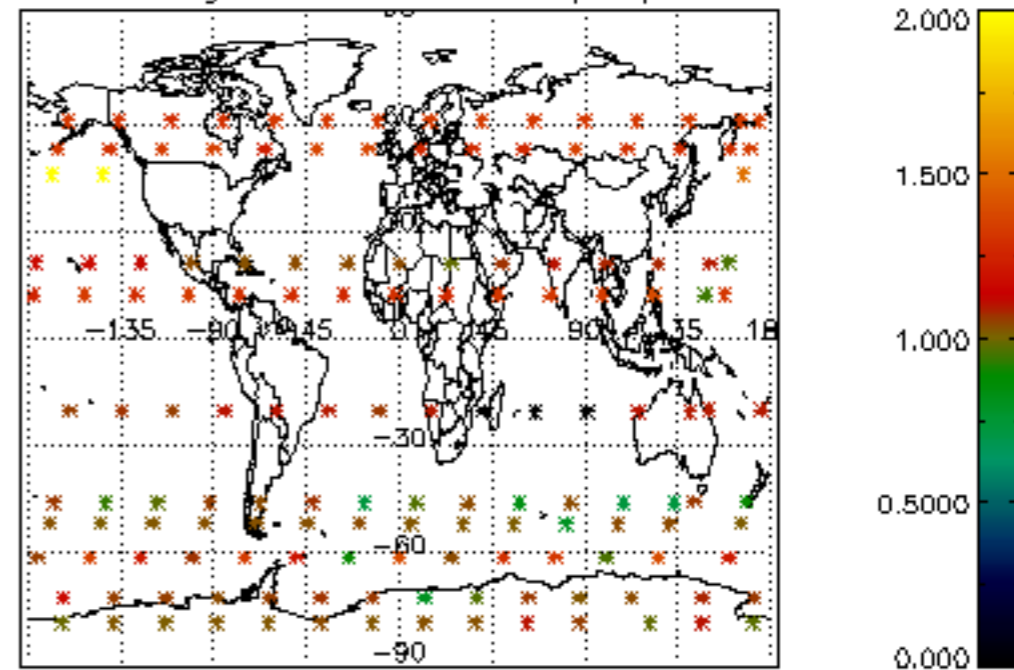
Percentage of saturation errors per profile



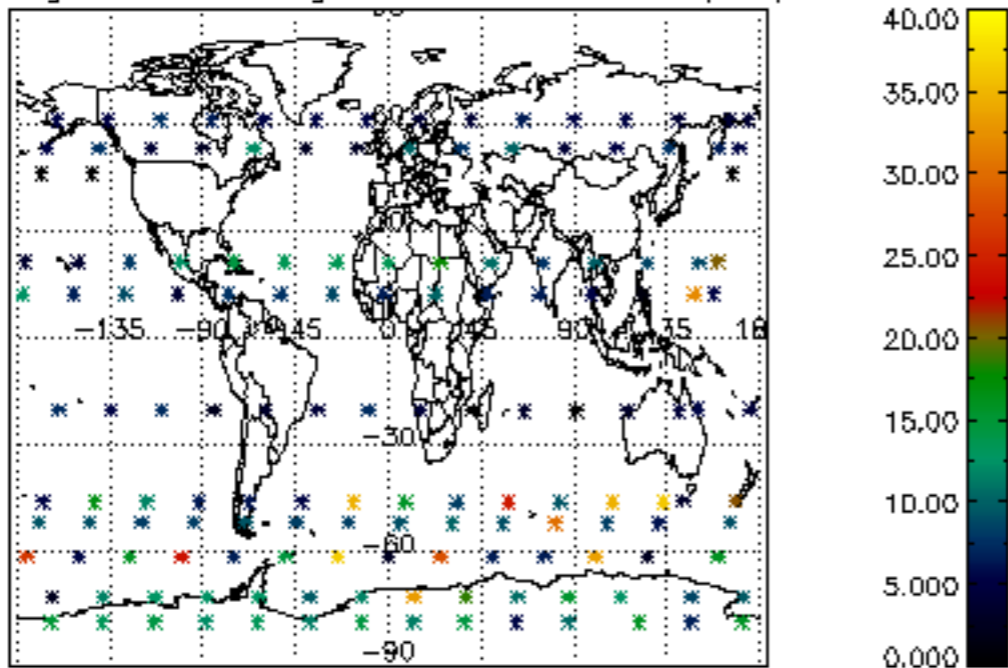
Percentage of cosmic ray hits per profile



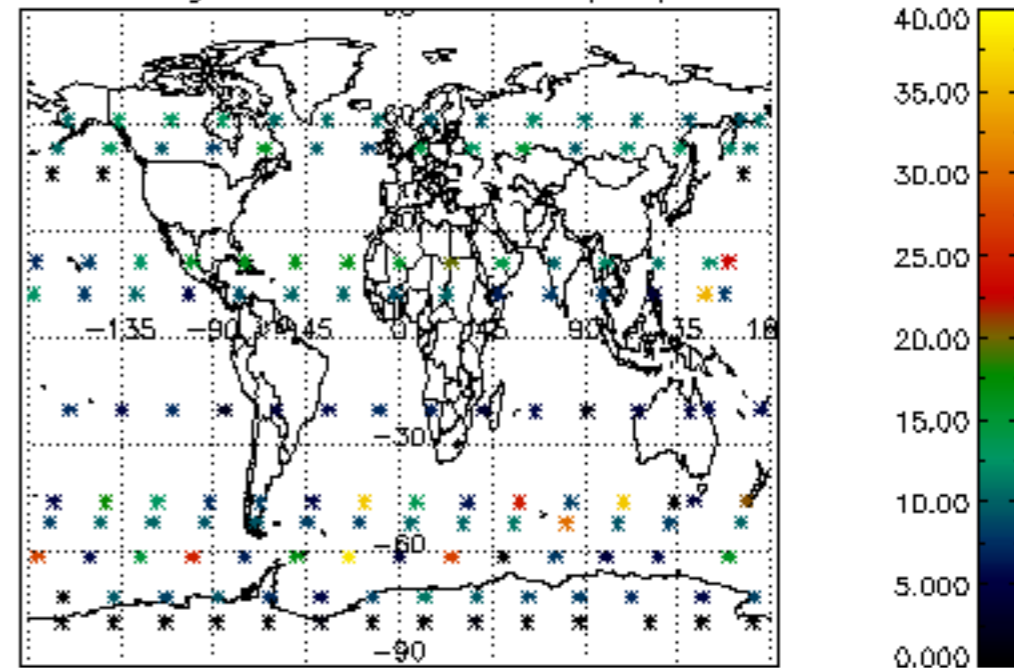
Percentage of datation errors per profile

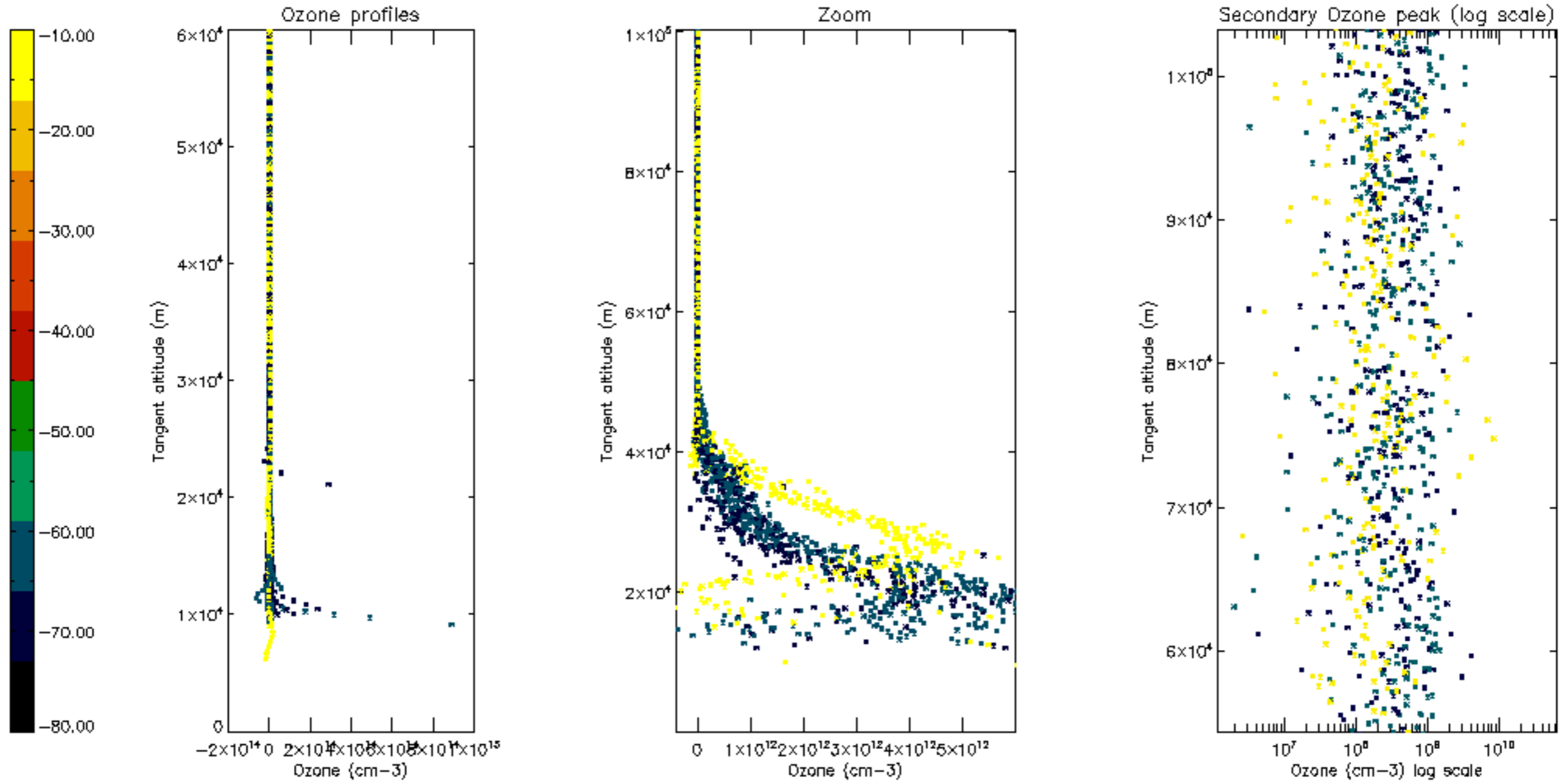


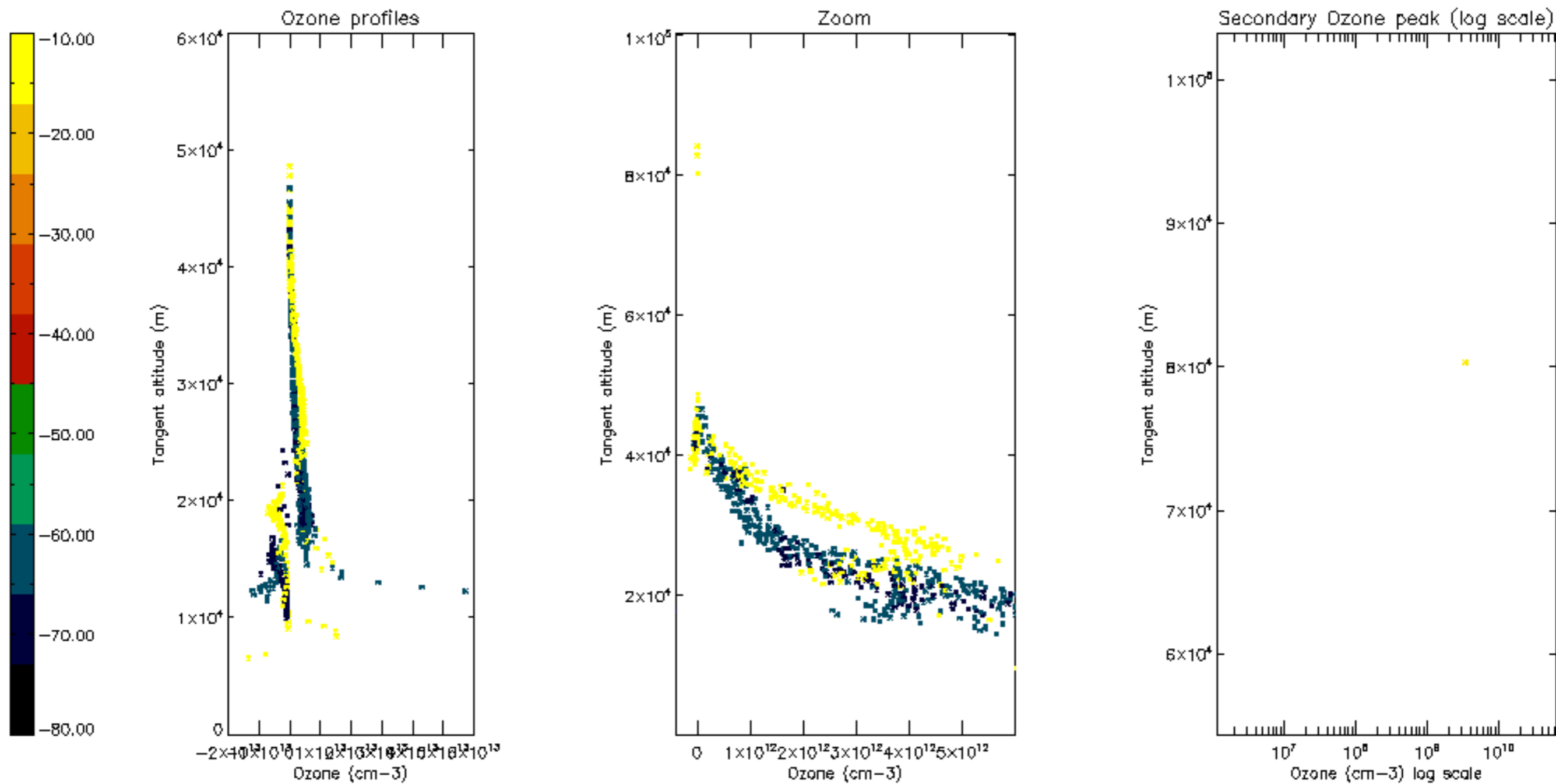
Percentage of star falling outside central band per profile

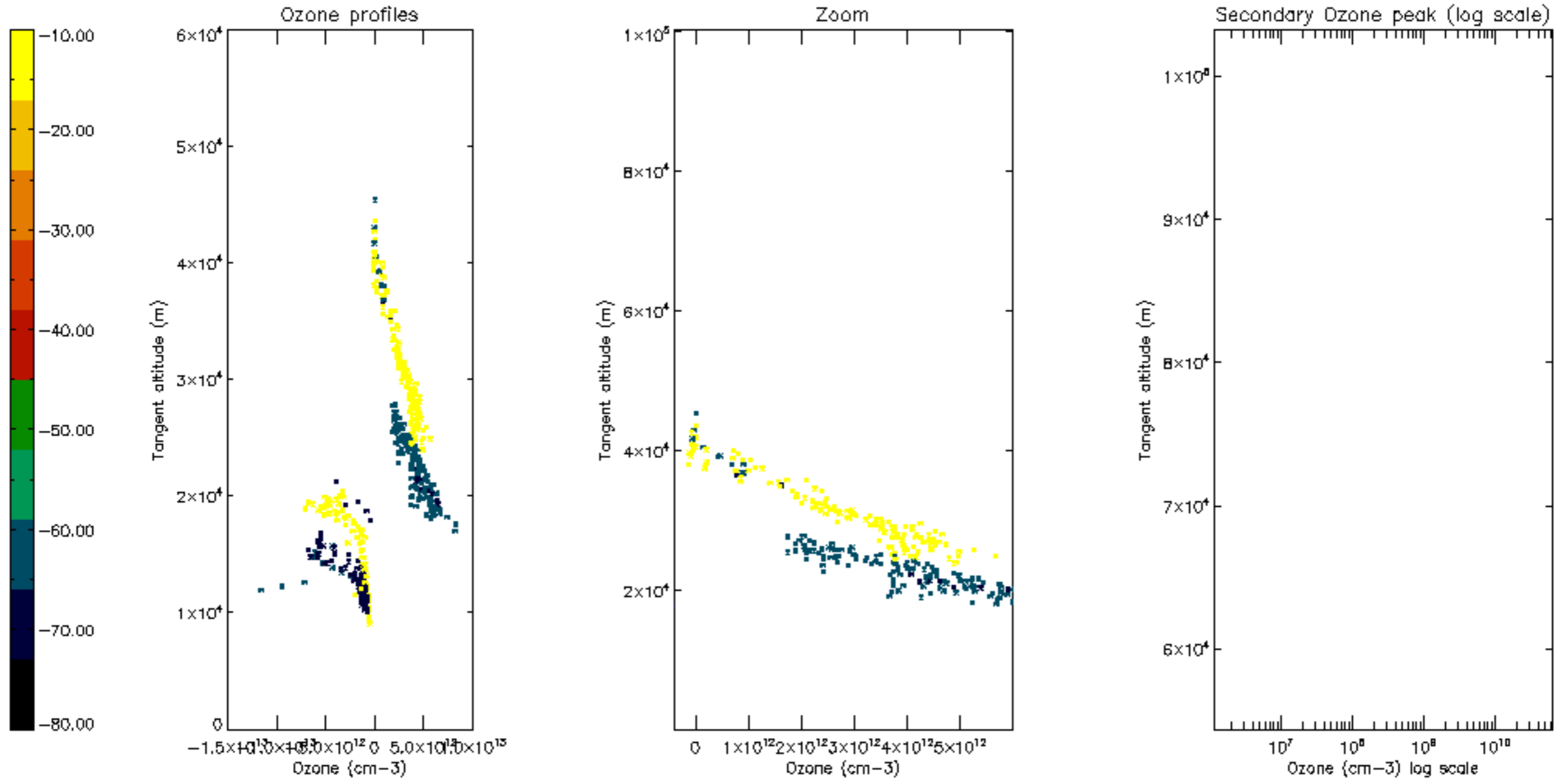


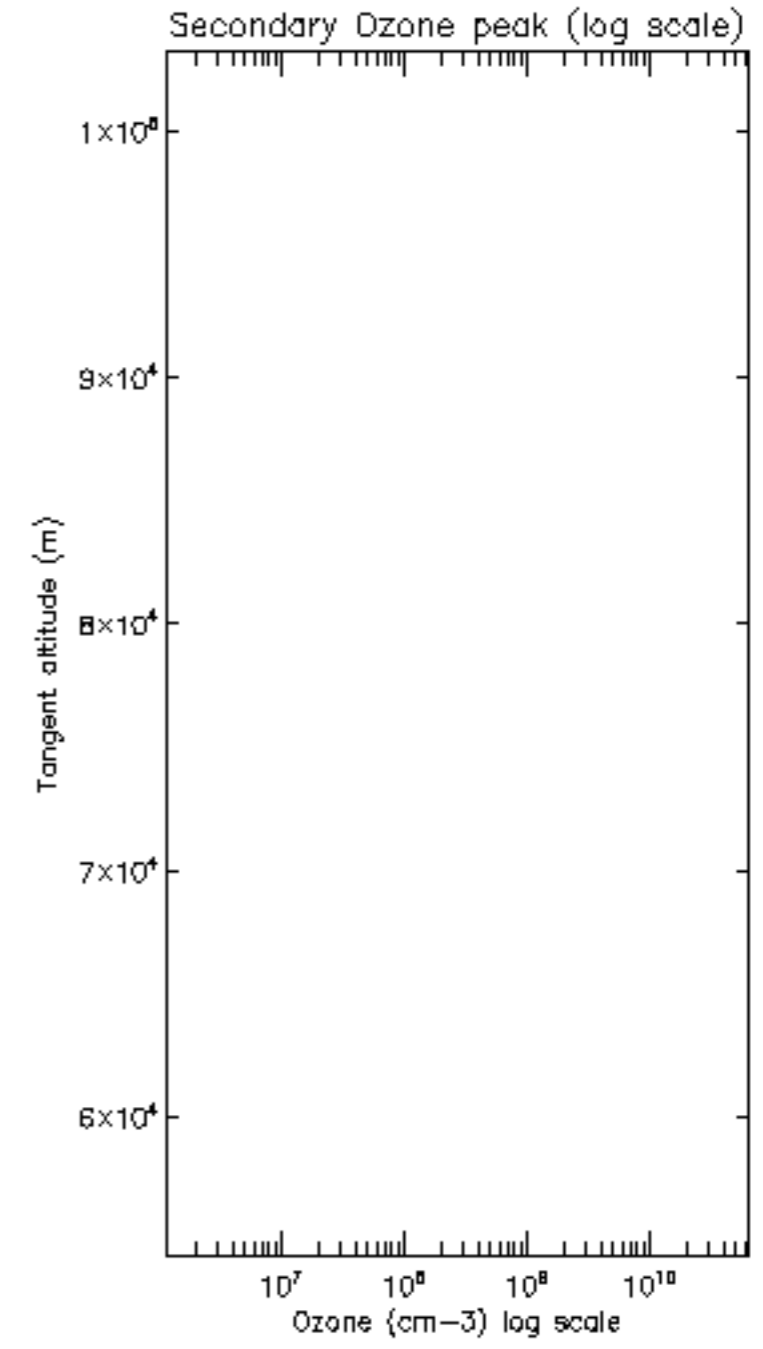
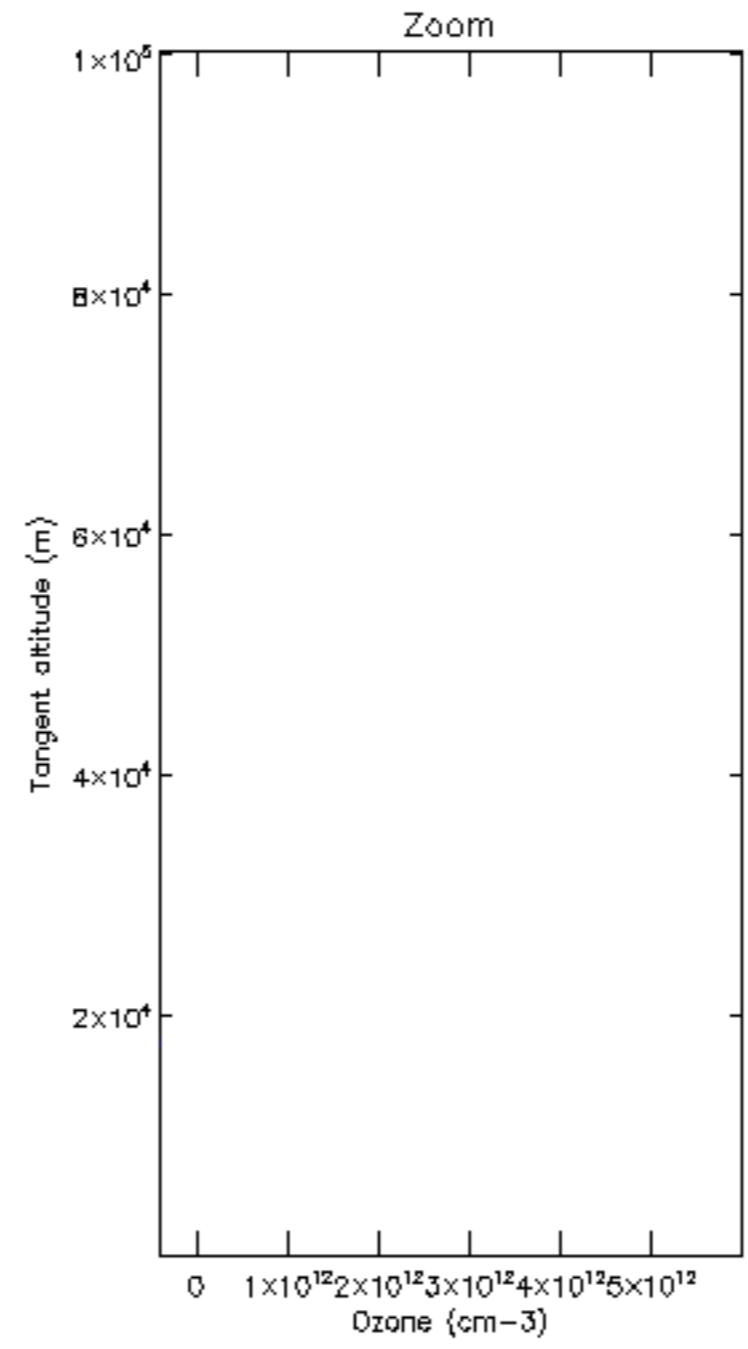
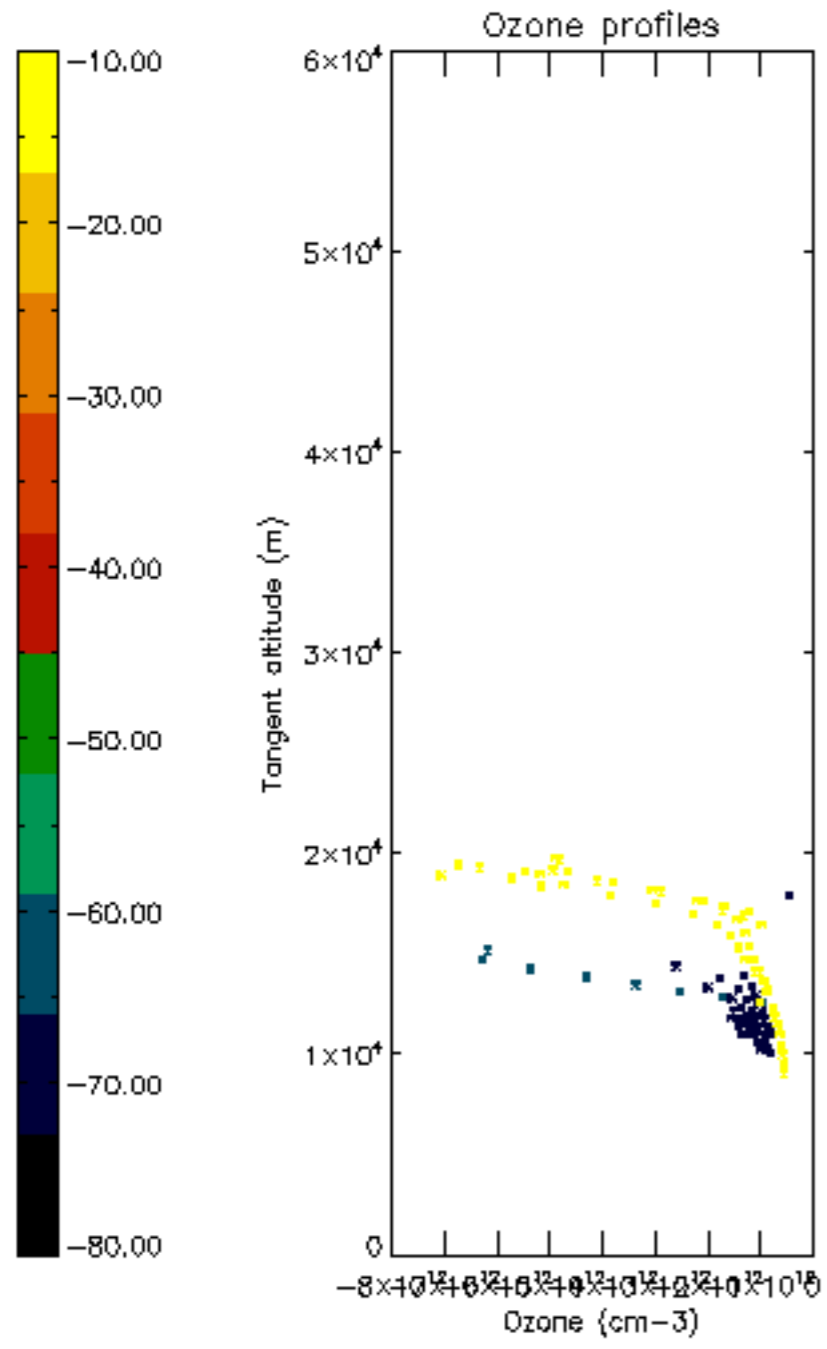
Percentage of saturation errors per profile

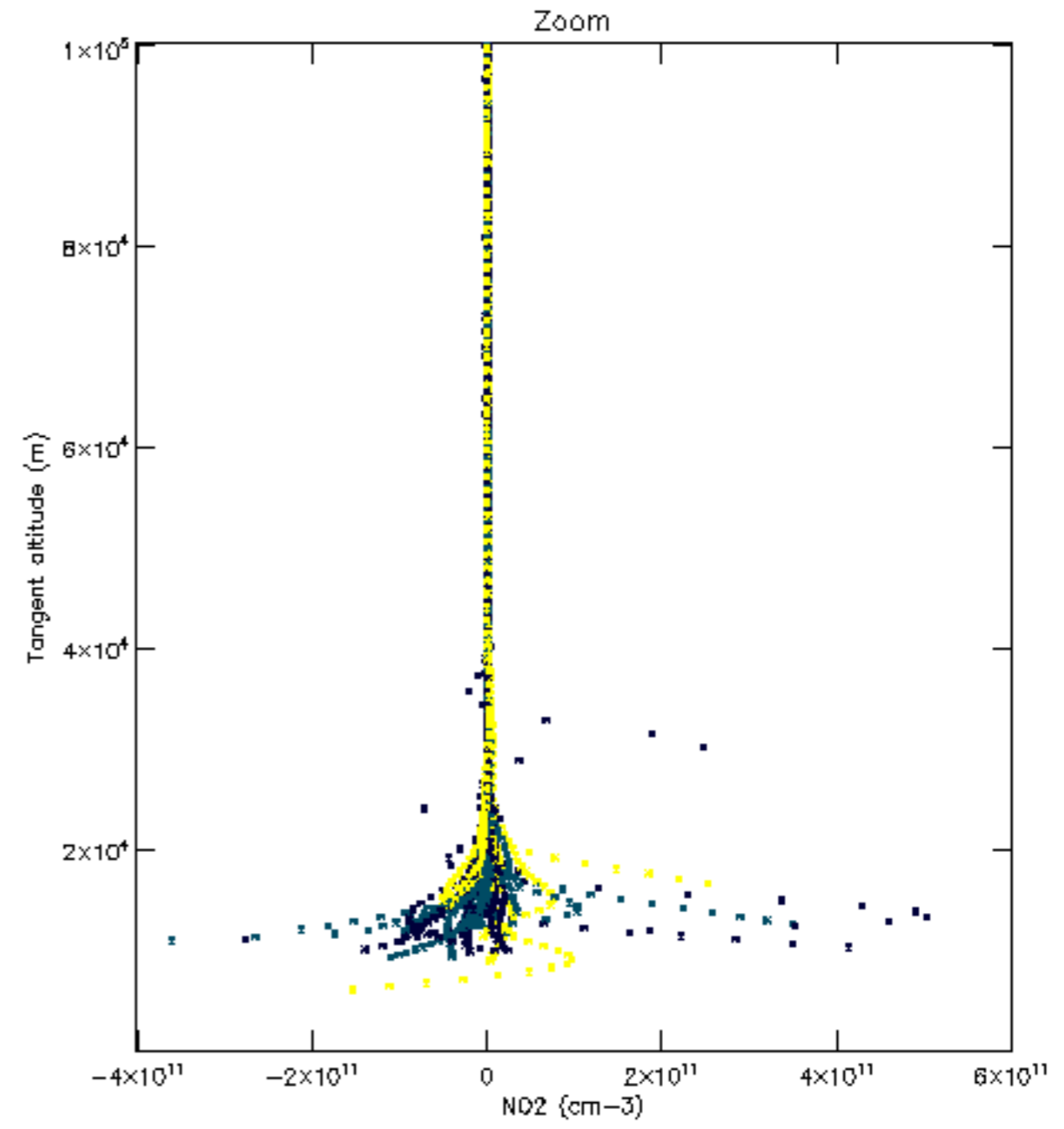
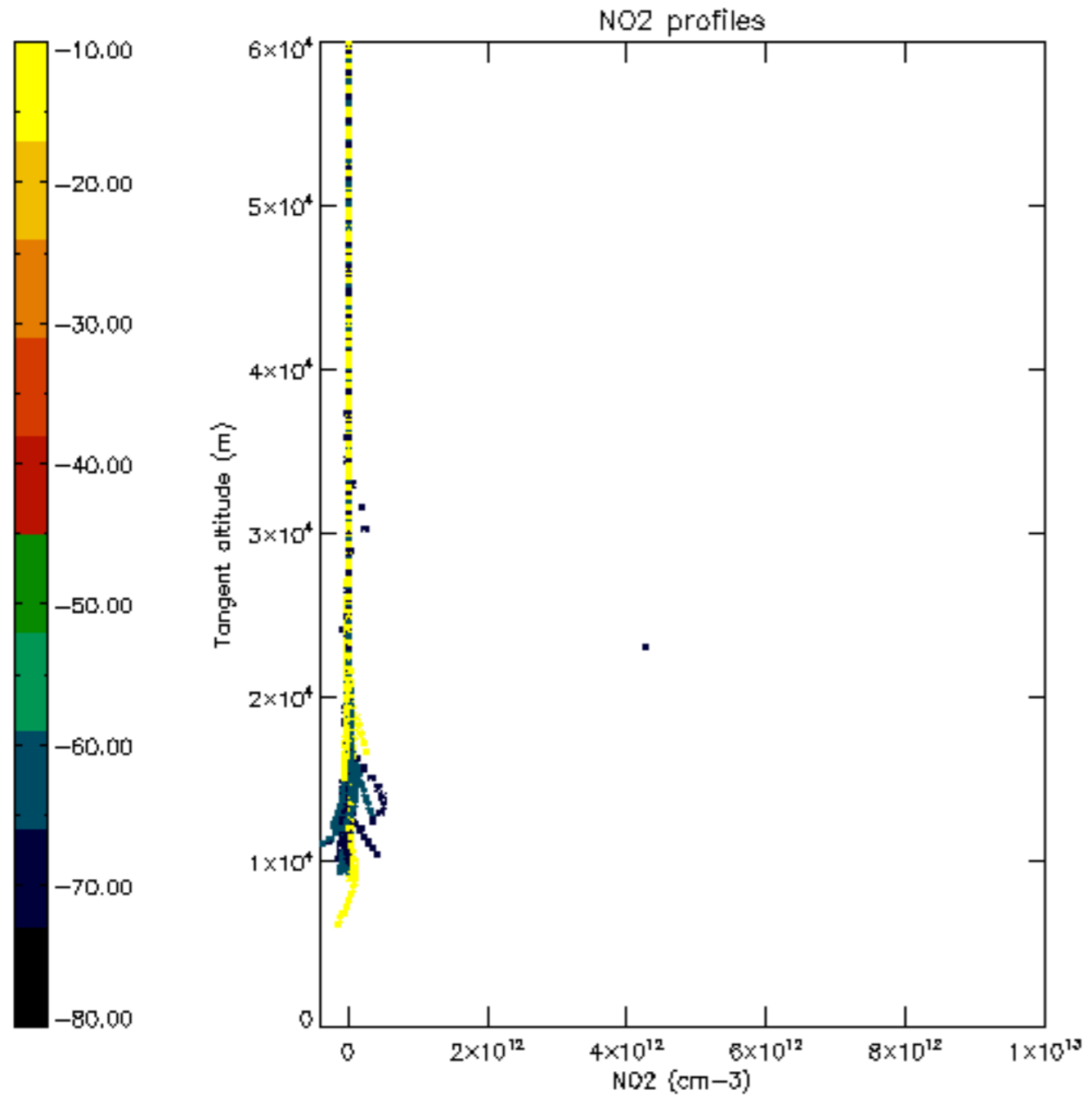


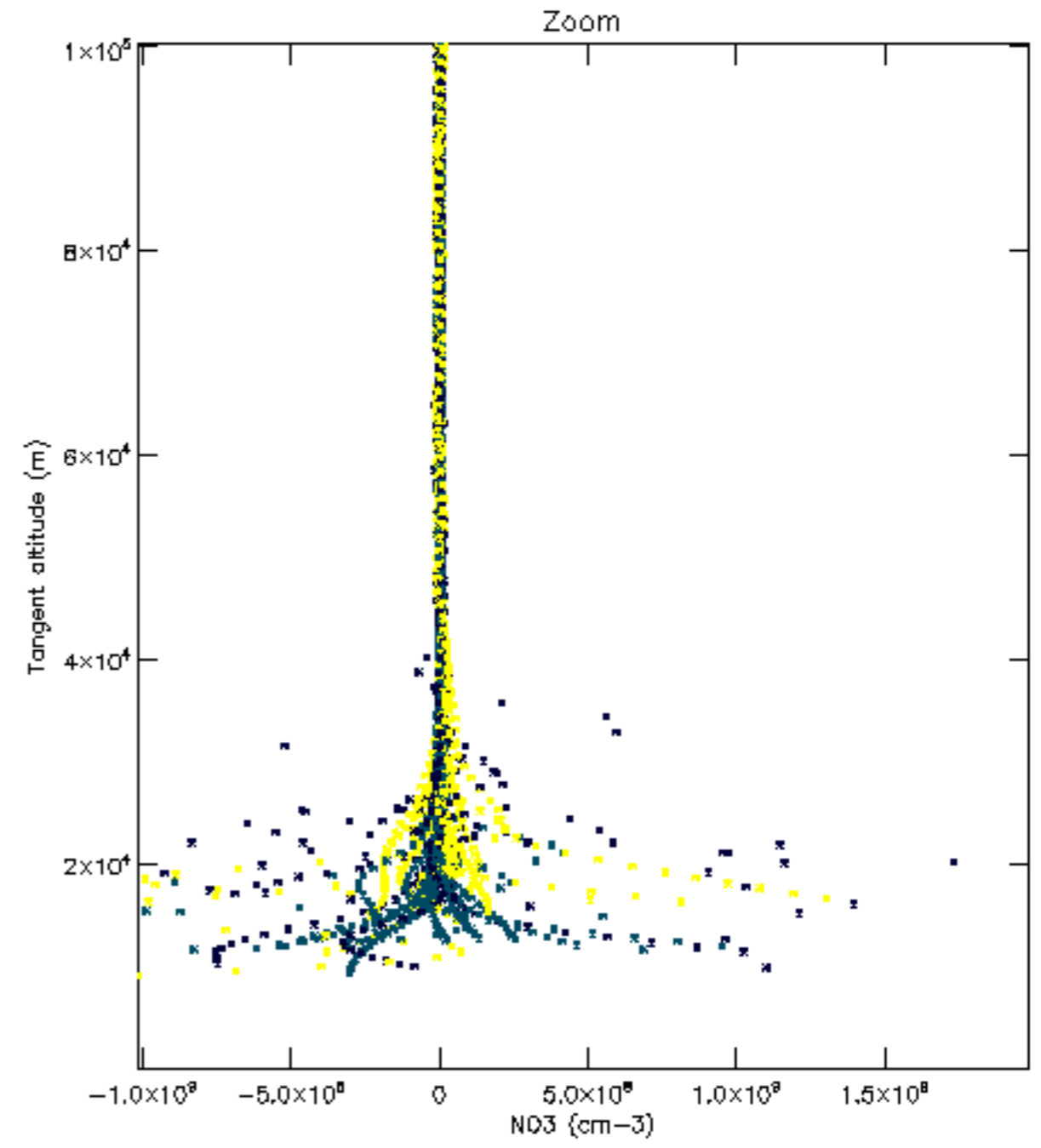
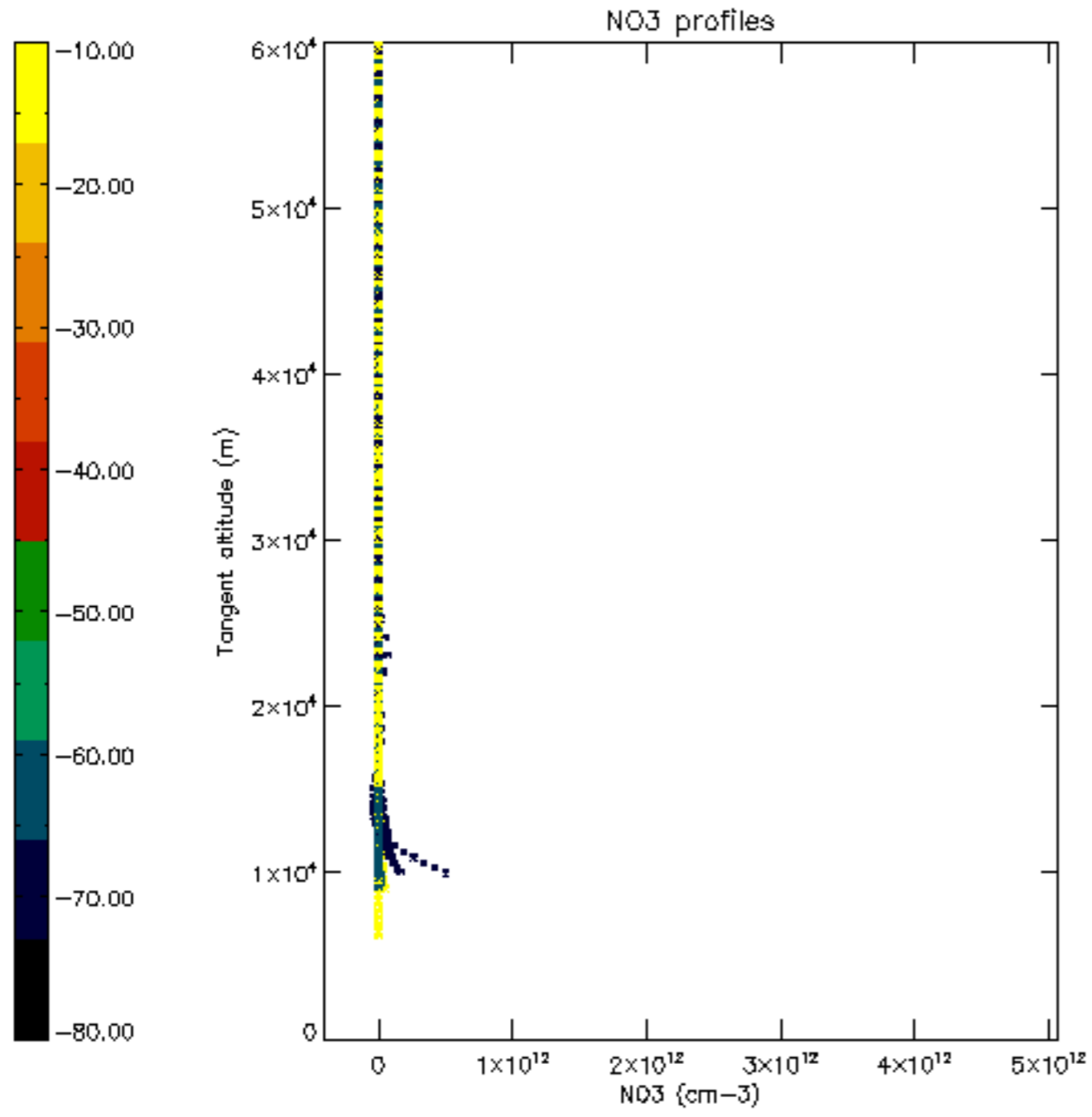


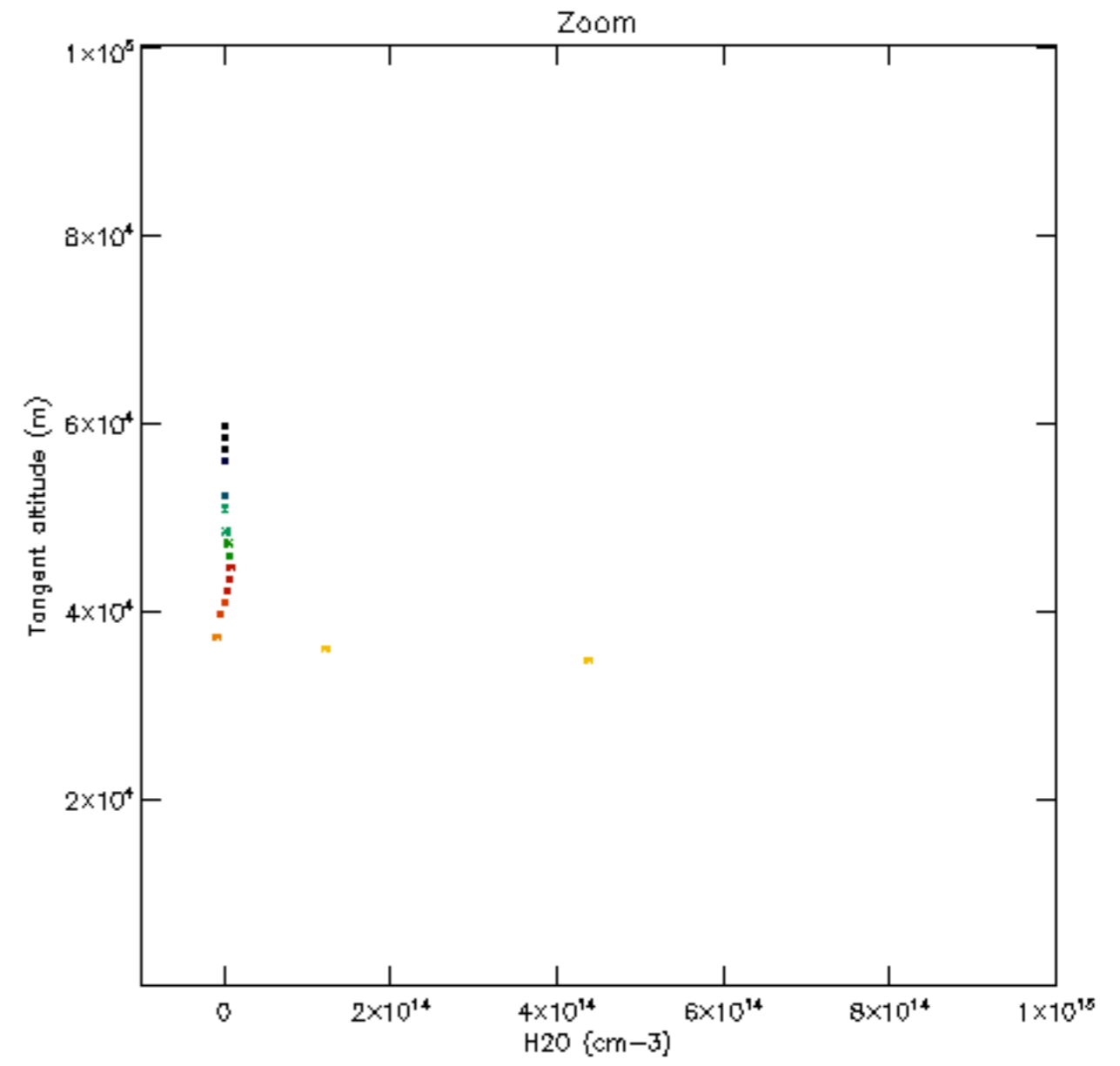
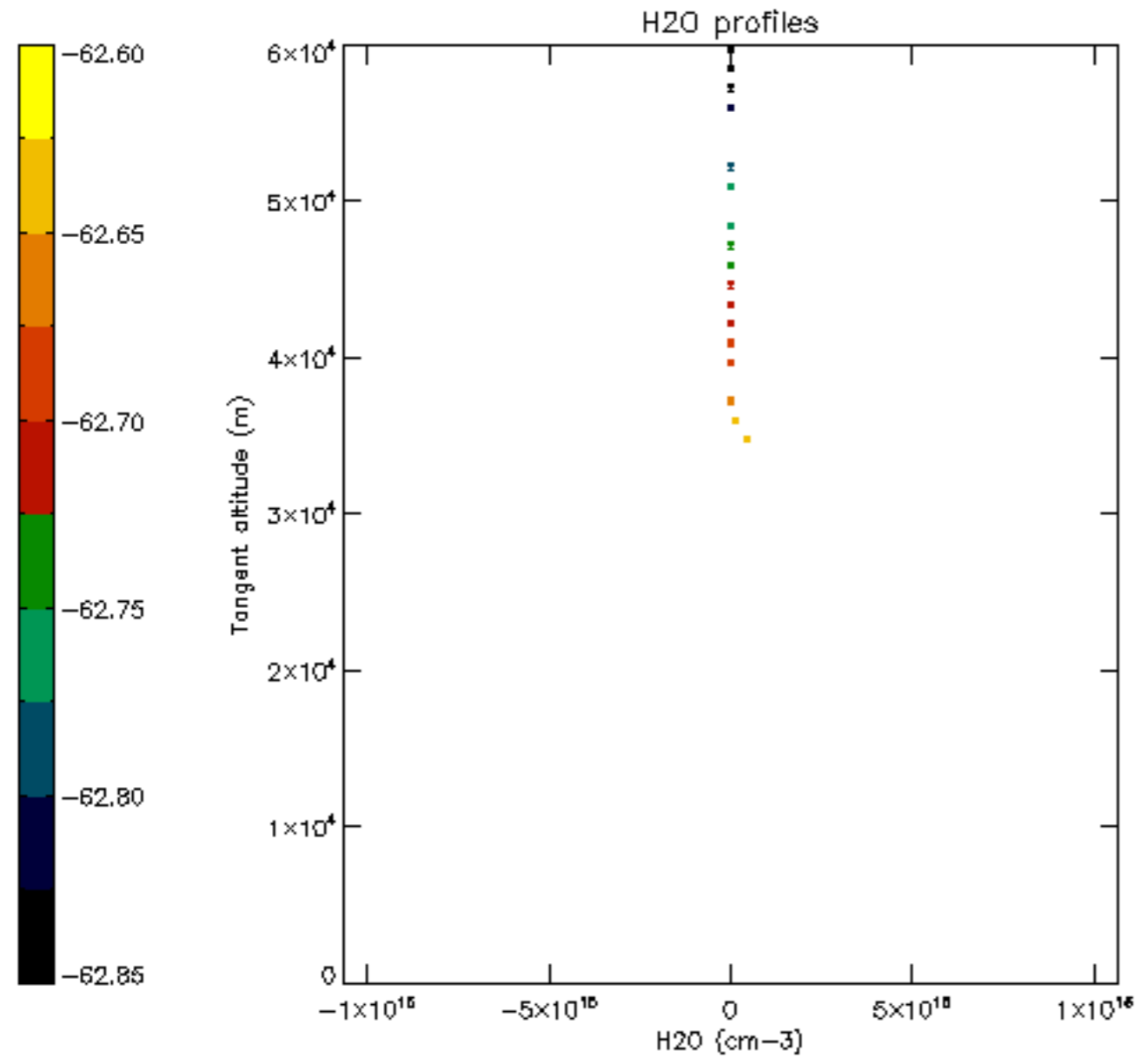


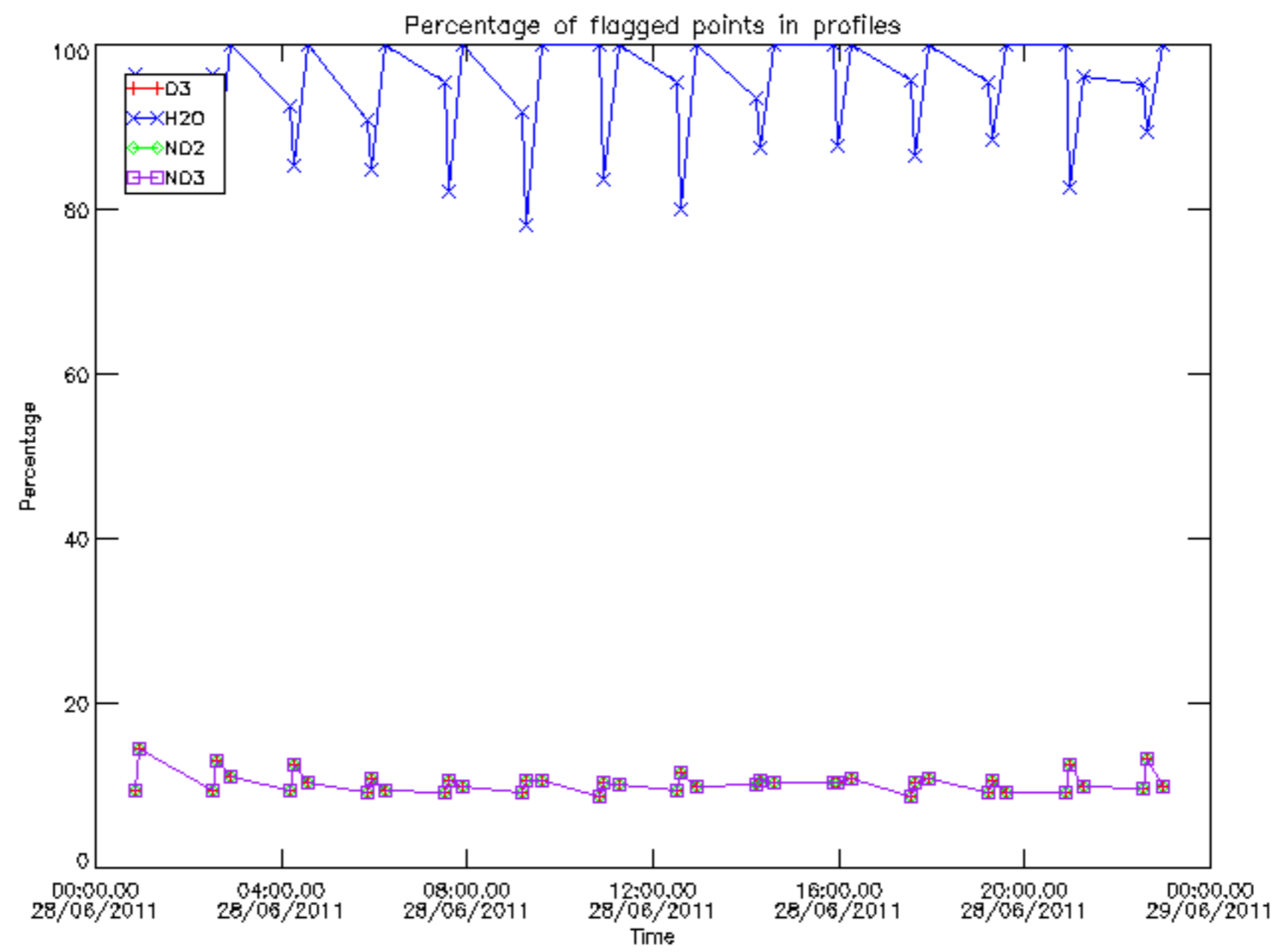




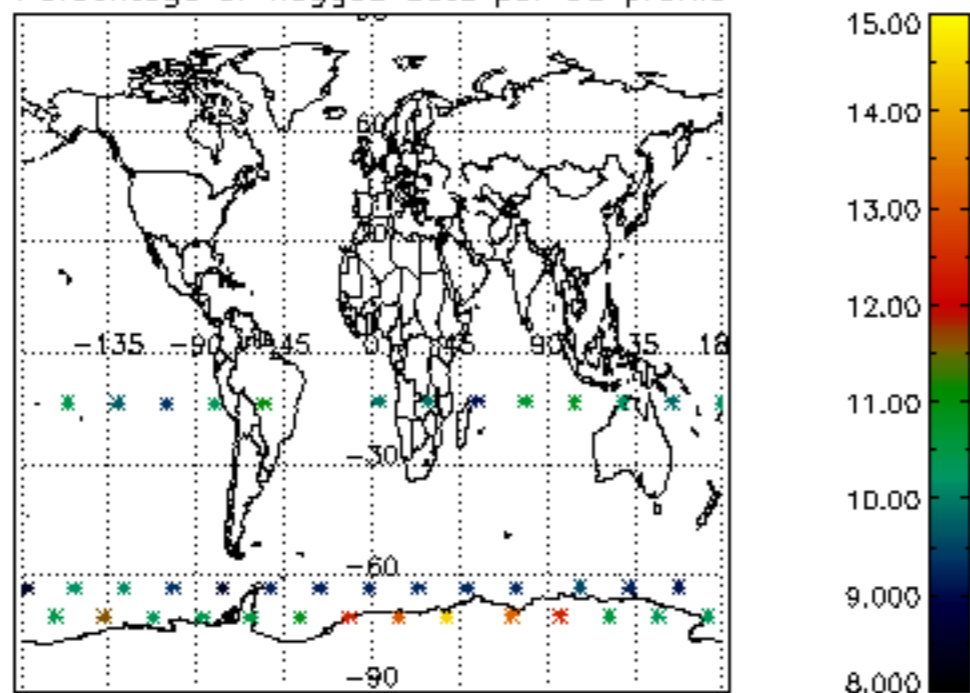




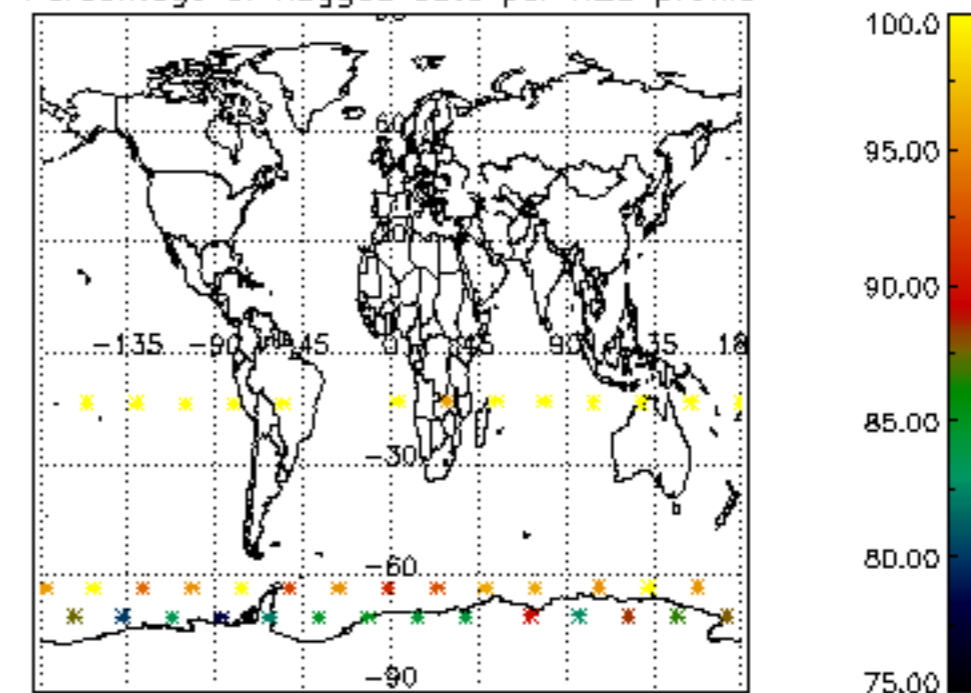




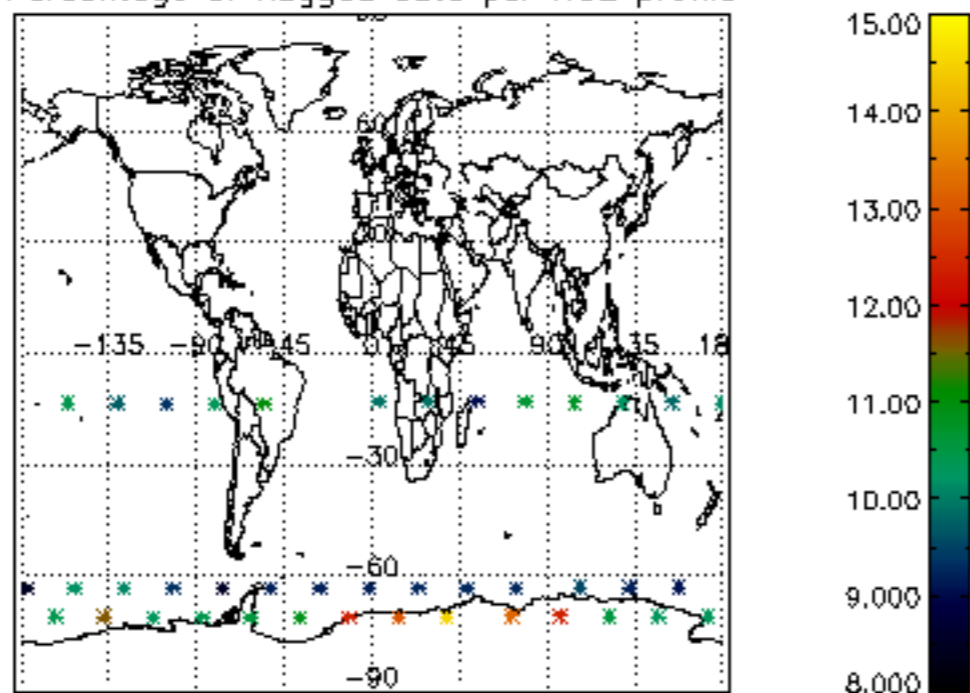
Percentage of flagged data per D3 profile



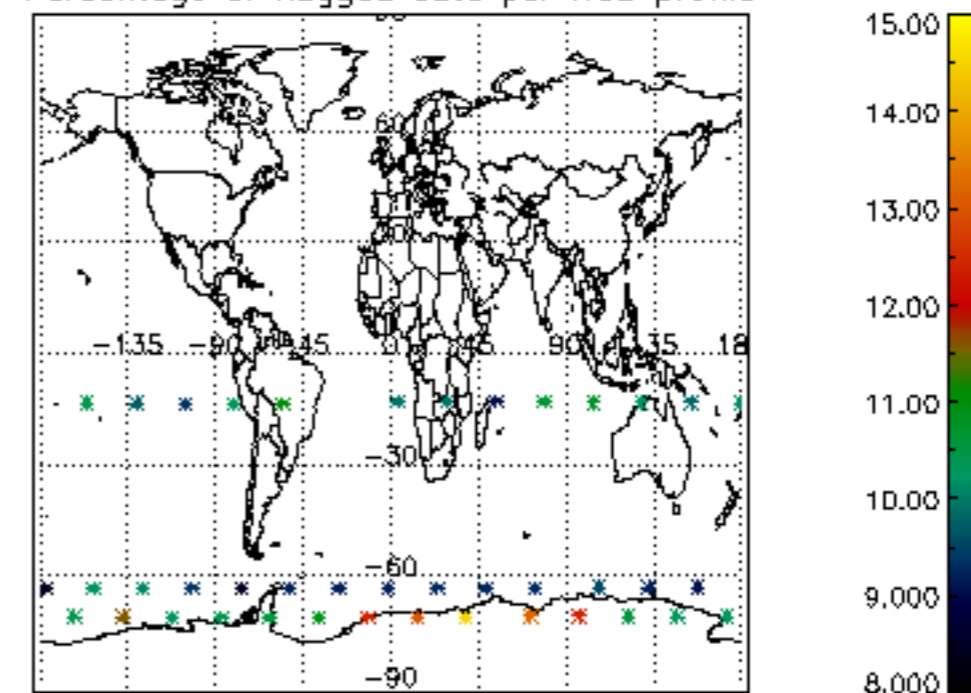
Percentage of flagged data per H2O profile

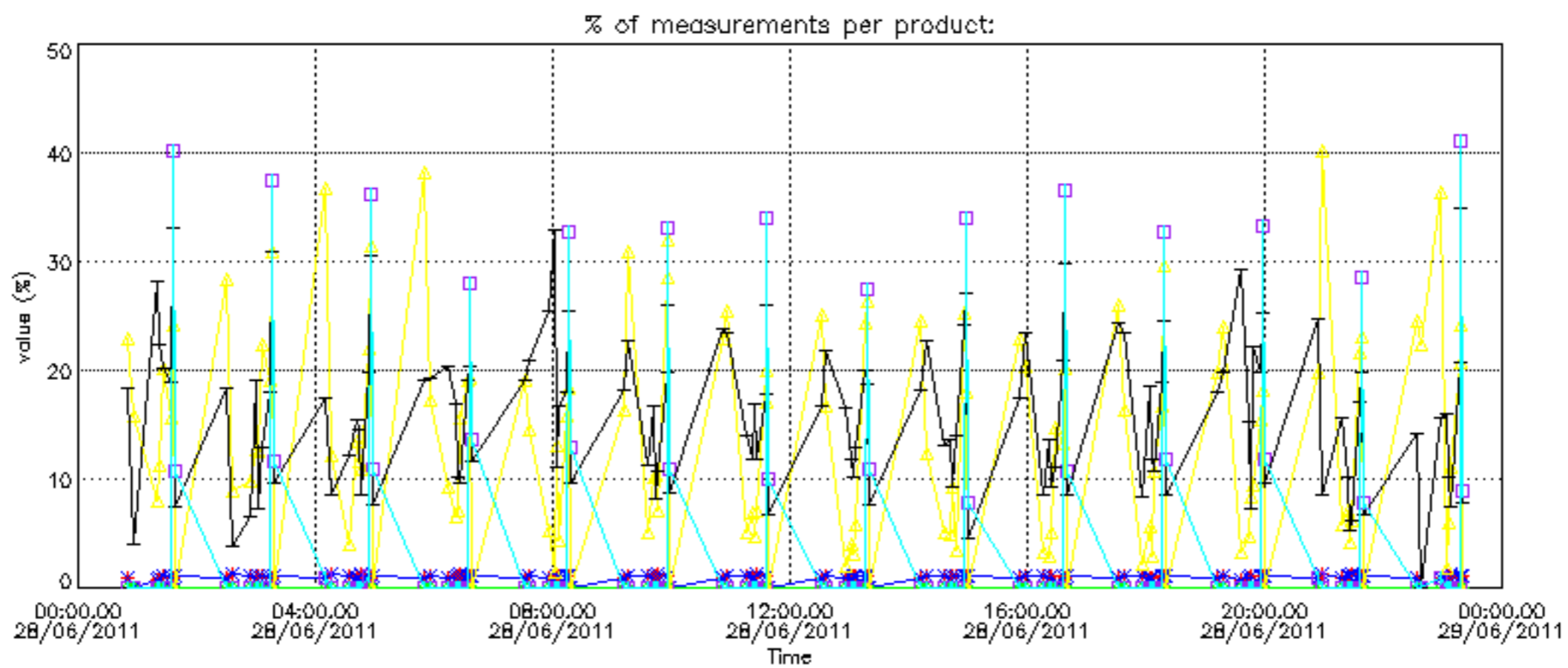


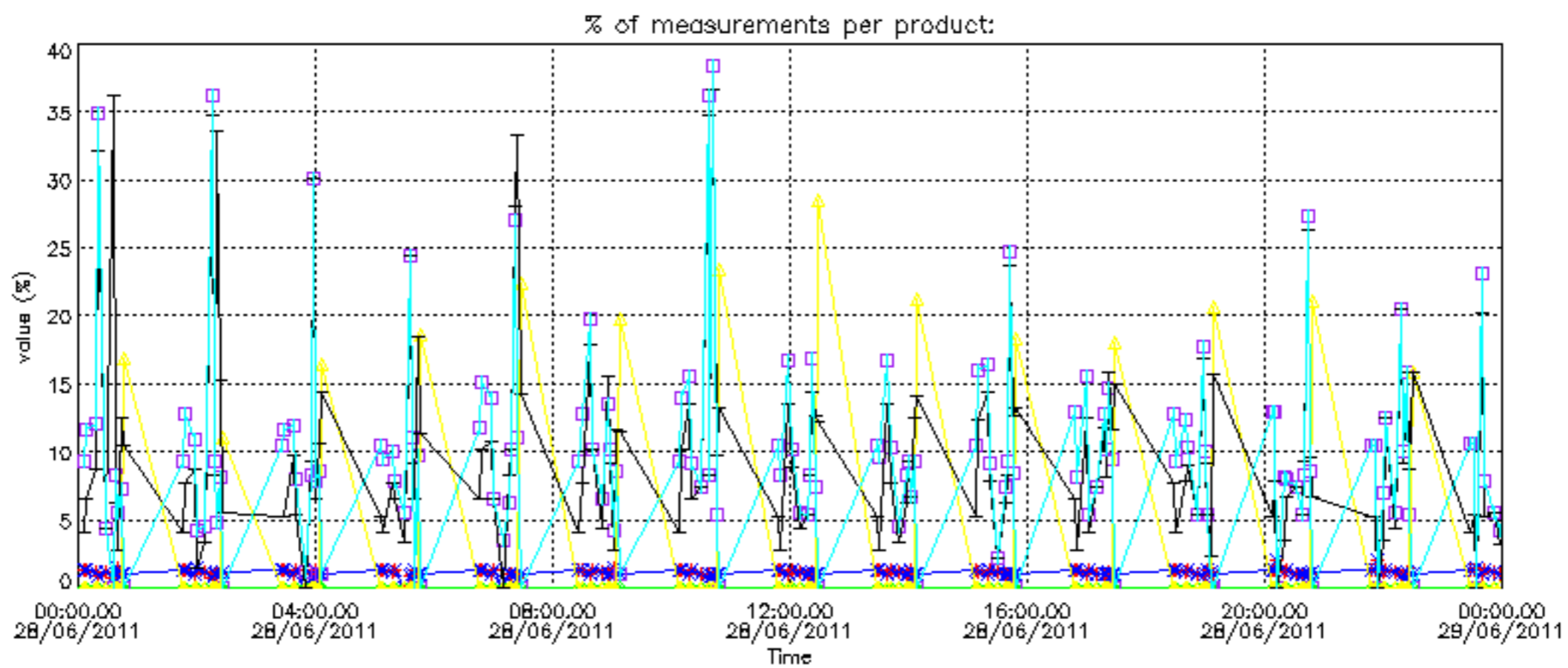
Percentage of flagged data per NO2 profile



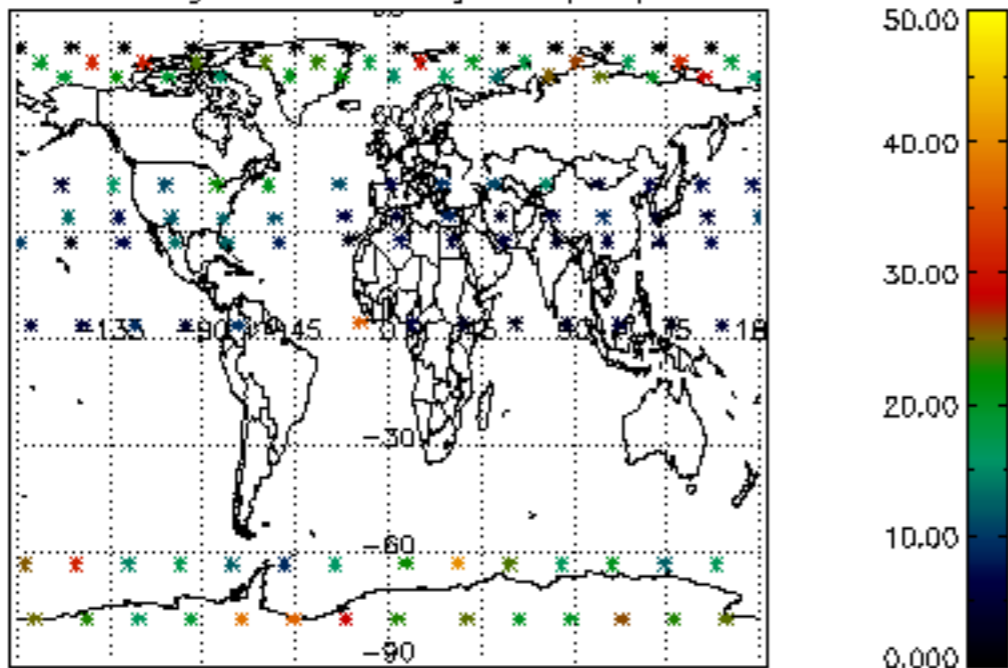
Percentage of flagged data per NO3 profile



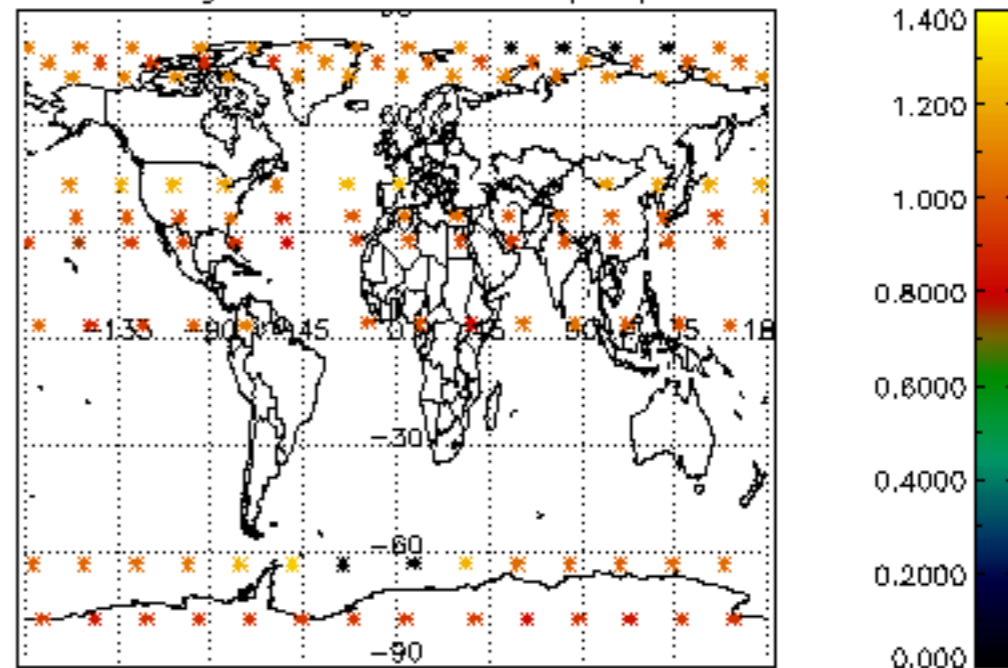




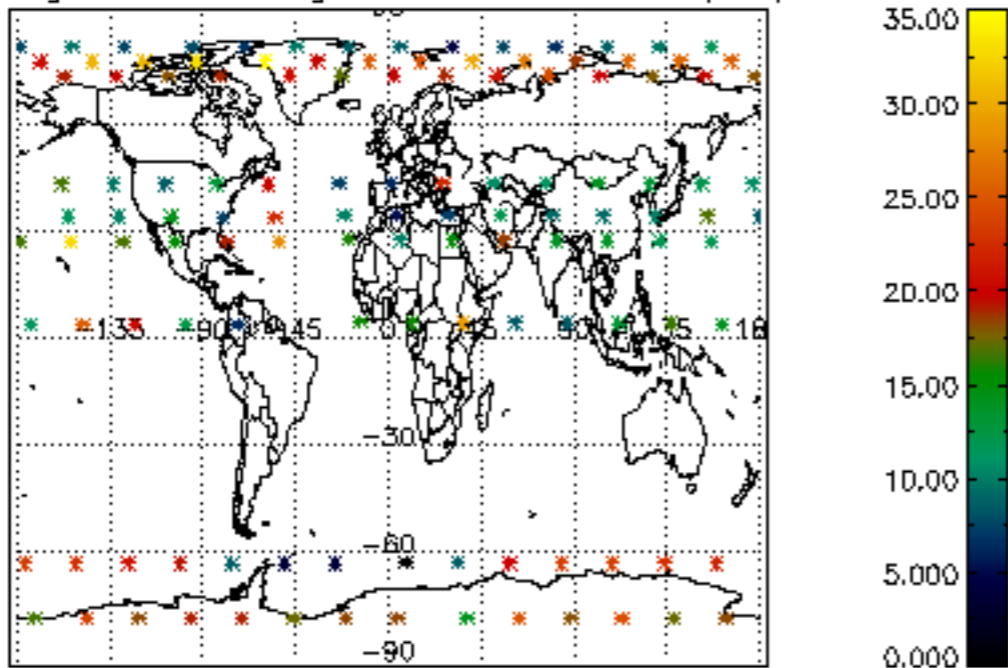
Percentage of cosmic ray hits per profile



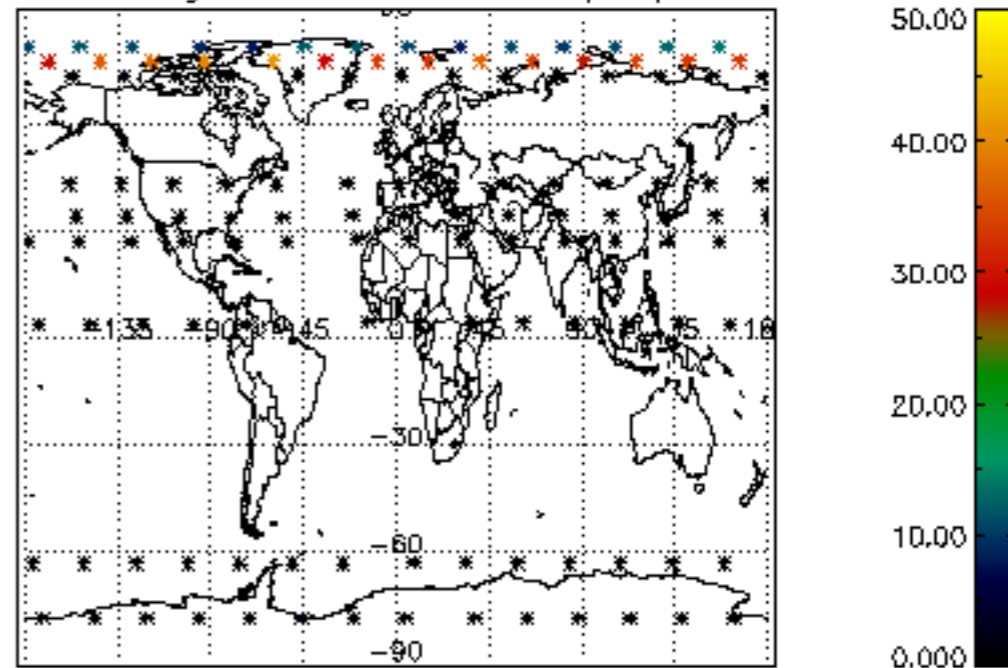
Percentage of datation errors per profile



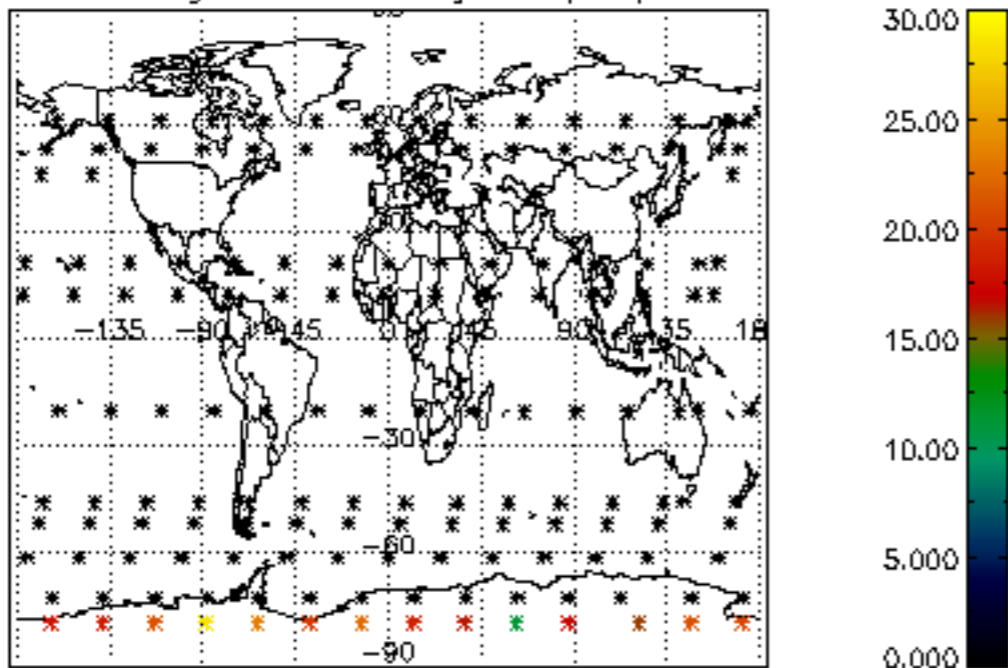
Percentage of star falling outside central band per profile



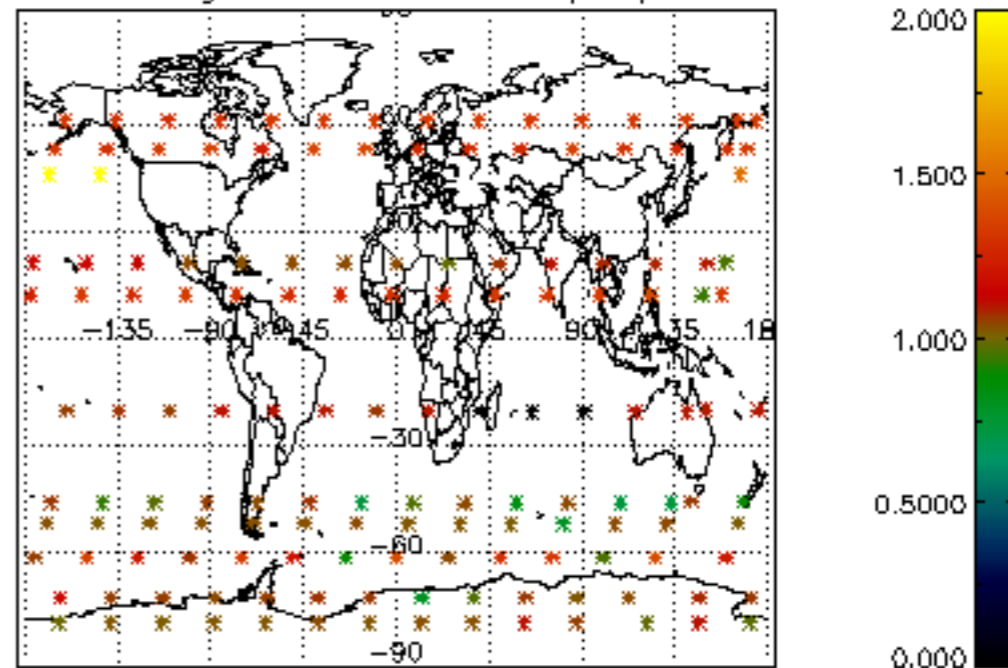
Percentage of saturation errors per profile



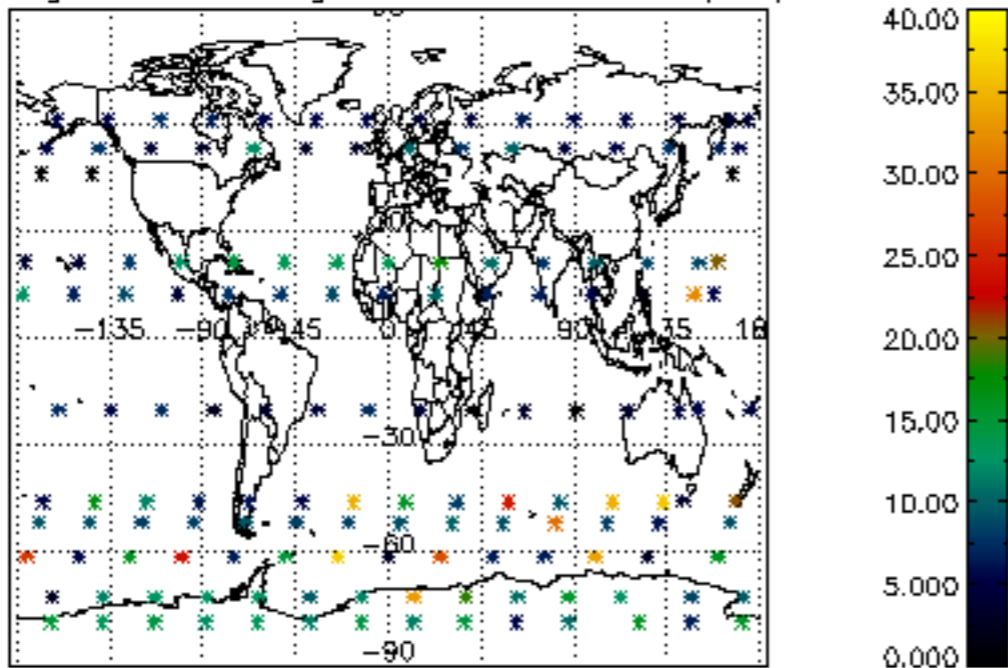
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

