

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	25APR2013 16:05:15
Data source version	GOMOS/6.01
Start time of products	12-06-2008 (12JUN2008 00:00:00)
Stop time of products	13-06-2008 (13JUN2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	281
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

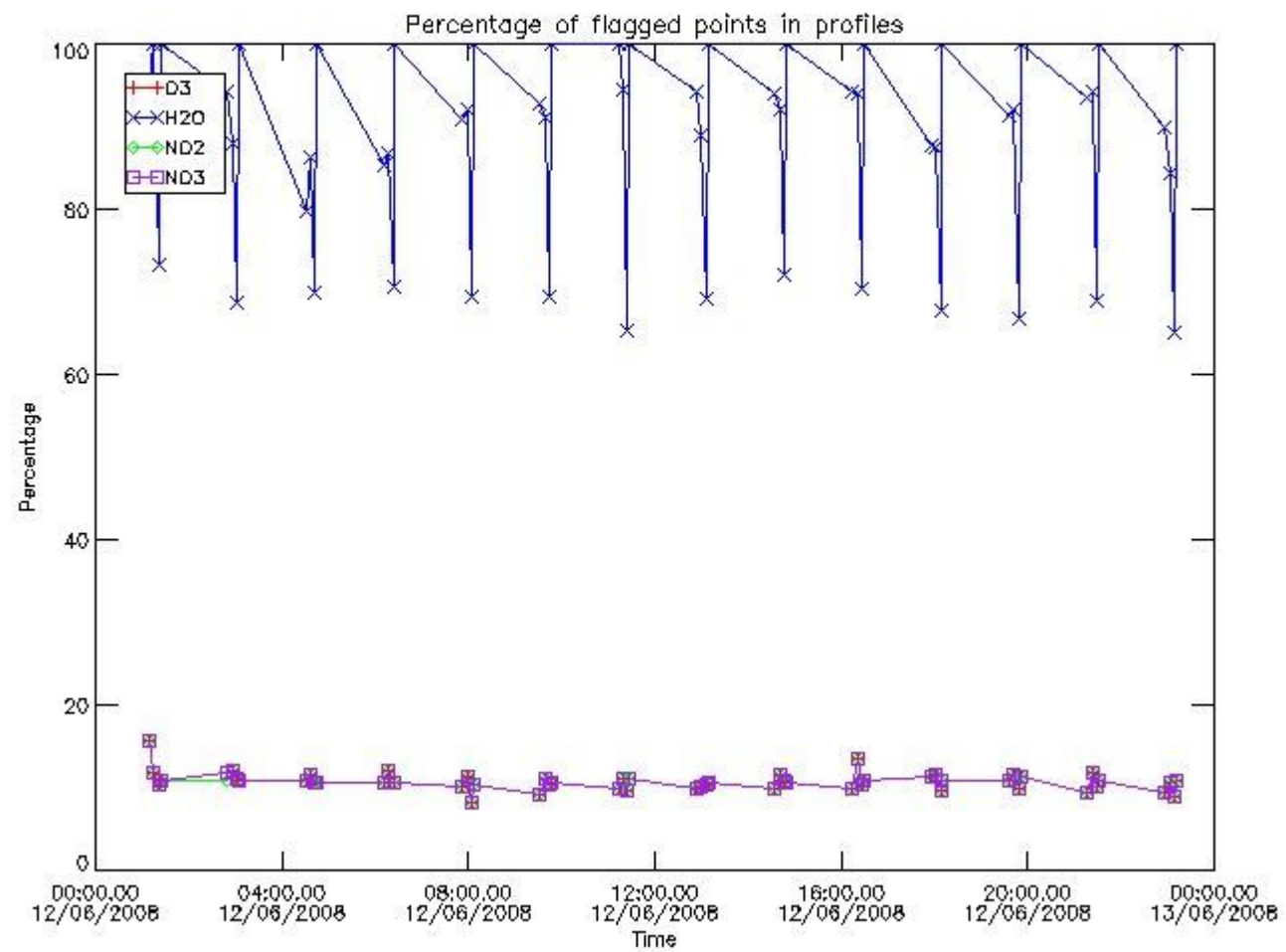
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080612_000402_000000402069_00231_32850_7392.N1	12-JUN-2008 00:04:02	Bright	40.000	86	35Eta Oph	2.4300	10200.	80	32850	No
2	GOM_NL__2PRFIN20080612_000547_000000382069_00231_32850_7393.N1	12-JUN-2008 00:05:47	Bright	37.500	98	13Zet Oph	2.5710	30000.	75	32850	No
3	GOM_NL__2PRFIN20080612_001056_000000462069_00231_32850_7394.N1	12-JUN-2008 00:10:56	Bright	45.500	126	60Bet Oph	2.7700	4250.0	91	32850	No
4	GOM_NL__2PRFIN20080612_001331_000000482069_00231_32850_7395.N1	12-JUN-2008 00:13:31	Bright	47.500	59	55Alp Oph	2.0800	8900.0	95	32850	No
5	GOM_NL__2PRFIN20080612_001517_000000372069_00231_32850_7396.N1	12-JUN-2008 00:15:17	Bright	36.500	127	27Bet Her	2.7810	4700.0	73	32850	No
6	GOM_NL__2PRFIN20080612_001824_000000392069_00231_32850_7397.N1	12-JUN-2008 00:18:24	Bright	39.000	133	40Zet Her	2.8070	6000.0	78	32850	No
7	GOM_NL__2PRFIN20080612_002523_000000412069_00231_32850_7398.N1	12-JUN-2008 00:25:23	Bright	40.500	130	23Bet Dra	2.7990	5800.0	81	32850	No
8	GOM_NL__2PRFIN20080612_003601_000000472069_00231_32850_7399.N1	12-JUN-2008 00:36:01	Bright	46.500	89	5Alp Cep	2.4510	8000.0	93	32850	No
9	GOM_NL__2PRFIN20080612_004221_000000582069_00231_32850_7400.N1	12-JUN-2008 00:42:21	Bright	58.000	76	27Gam Cas	2.3000	30000.	116	32850	No
10	GOM_NL__2PRFIN20080612_004822_000000382069_00231_32850_7401.N1	12-JUN-2008 00:48:22	Bright	37.500	73	57Gam1And	2.2600	13100.	75	32850	No
11	GOM_NL__2PRFIN20080612_005042_000000572069_00231_32850_7402.N1	12-JUN-2008 00:50:42	Twilight	56.500	53	43Bet And	2.0480	3300.0	113	32850	No
12	GOM_NL__2PRFIN20080612_005404_000000472069_00231_32850_7403.N1	12-JUN-2008 00:54:04	Twilight	47.000	50	13Alp Ari	2.0070	4250.0	94	32850	No
13	GOM_NL__2PRFIN20080612_010908_000000552069_00231_32850_7404.N1	12-JUN-2008 01:09:08	Dark	55.000	52	16Bet Cet	2.0370	4500.0	110	32850	No
14	GOM_NL__2PRFIN20080612_011532_000000432069_00231_32850_7405.N1	12-JUN-2008 01:15:32	Dark	43.000	84	Alp Phe	2.3970	4500.0	86	32850	No
15	GOM_NL__2PRFIN20080612_012135_000000492069_00232_32851_7461.N1	12-JUN-2008 01:21:35	Dark	49.000	63	Bet Gru	2.1500	2800.0	98	32851	No
16	GOM_NL__2PRFIN20080612_012337_000000482069_00232_32851_7462.N1	12-JUN-2008 01:23:37	Dark	47.500	31	Alp Gru	1.7340	15200.	95	32851	No
17	GOM_NL__2PRFIN20080612_012514_000000562069_00232_32851_7463.N1	12-JUN-2008 01:25:14	Straylight	56.000	172	Gam Gru	3.0030	13100.	112	32851	No
18	GOM_NL__2PRFIN20080612_012745_000000432069_00232_32851_7464.N1	12-JUN-2008 01:27:45	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	32851	No
19	GOM_NL__2PRFIN20080612_013753_000000422069_00232_32851_7465.N1	12-JUN-2008 01:37:53	Twilight	42.000	25	35Lam Sco	1.6200	28000.	84	32851	No
20	GOM_NL__2PRFIN20080612_013935_000000572069_00232_32851_7466.N1	12-JUN-2008 01:39:35	Bright	57.000	57	34Sig Sgr	2.0660	26000.	114	32851	No
21	GOM_NL__2PRFIN20080612_014438_000000402069_00232_32851_7467.N1	12-JUN-2008 01:44:38	Bright	39.500	86	35Eta Oph	2.4300	10200.	79	32851	No
22	GOM_NL__2PRFIN20080612_014623_000000382069_00232_32851_7468.N1	12-JUN-2008 01:46:23	Bright	37.500	98	13Zet Oph	2.5710	30000.	75	32851	No
23	GOM_NL__2PRFIN20080612_015131_000000462069_00232_32851_7469.N1	12-JUN-2008 01:51:31	Bright	45.500	126	60Bet Oph	2.7700	4250.0	91	32851	No
24	GOM_NL__2PRFIN20080612_015406_000000442069_00232_32851_7470.N1	12-JUN-2008 01:54:06	Bright	43.500	59	55Alp Oph	2.0800	8900.0	87	32851	No
25	GOM_NL__2PRFIN20080612_015553_000000362069_00232_32851_7471.N1	12-JUN-2008 01:55:53	Bright	36.000	127	27Bet Her	2.7810	4700.0	72	32851	No
26	GOM_NL__2PRFIN20080612_015900_000000382069_00232_32851_7472.N1	12-JUN-2008 01:59:00	Bright	37.500	133	40Zet Her	2.8070	6000.0	75	32851	No
27	GOM_NL__2PRFIN20080612_020559_000000412069_00232_32851_7473.N1	12-JUN-2008 02:05:59	Bright	41.000	130	23Bet Dra	2.7990	5800.0	82	32851	No
28	GOM_NL__2PRFIN20080612_021637_000000472069_00232_32851_7474.N1	12-JUN-2008 02:16:37	Bright	47.000	89	5Alp Cep	2.4510	8000.0	94	32851	No
29	GOM_NL__2PRFIN20080612_022257_000000582069_00232_32851_7475.N1	12-JUN-2008 02:22:57	Bright	58.000	76	27Gam Cas	2.3000	30000.	116	32851	No
30	GOM_NL__2PRFIN20080612_022858_000000392069_00232_32851_7476.N1	12-JUN-2008 02:28:58	Bright	39.000	73	57Gam1And	2.2600	13100.	78	32851	No
31	GOM_NL__2PRFIN20080612_023118_000000532069_00232_32851_7477.N1	12-JUN-2008 02:31:18	Twilight	53.000	53	43Bet And	2.0480	3300.0	106	32851	No
32	GOM_NL__2PRFIN20080612_023440_000000472069_00232_32851_7478.N1	12-JUN-2008 02:34:40	Twilight	46.500	50	13Alp Ari	2.0070	4250.0	93	32851	No
33	GOM_NL__2PRFIN20080612_024945_000000522069_00232_32851_7479.N1	12-JUN-2008 02:49:45	Dark	52.000	52	16Bet Cet	2.0370	4500.0	104	32851	No
34	GOM_NL__2PRFIN20080612_025609_000000422069_00232_32851_7480.N1	12-JUN-2008 02:56:09	Dark	42.000	84	Alp Phe	2.3970	4500.0	84	32851	No
35	GOM_NL__2PRFIN20080612_030212_000000502069_00233_32852_7483.N1	12-JUN-2008 03:02:12	Dark	50.000	63	Bet Gru	2.1500	2800.0	100	32852	No
36	GOM_NL__2PRFIN20080612_030414_000000472069_00233_32852_7484.N1	12-JUN-2008 03:04:14	Dark	47.000	31	Alp Gru	1.7340	15200.	94	32852	No
37	GOM_NL__2PRFIN20080612_030551_000000582069_00233_32852_7485.N1	12-JUN-2008 03:05:51	Straylight	57.500	172	Gam Gru	3.0030	13100.	115	32852	No
38	GOM_NL__2PRFIN20080612_030822_000000422069_00233_32852_7486.N1	12-JUN-2008 03:08:22	Straylight	41.500	45	Alp Pav	1.9400	26000.	83	32852	No
39	GOM_NL__2PRFIN20080612_031830_000000462069_00233_32852_7487.N1	12-JUN-2008 03:18:30	Twilight	46.000	25	35Lam Sco	1.6200	28000.	92	32852	No
40	GOM_NL__2PRFIN20080612_032011_000000742069_00233_32852_7488.N1	12-JUN-2008 03:20:11	Bright	74.000	57	34Sig Sgr	2.0660	26000.	148	32852	No
41	GOM_NL__2PRFIN20080612_032514_000000382069_00233_32852_7489.N1	12-JUN-2008 03:25:14	Bright	38.000	86	35Eta Oph	2.4300	10200.	76	32852	No
42	GOM_NL__2PRFIN20080612_032700_000000362069_00233_32852_7490.N1	12-JUN-2008 03:27:00	Bright	36.000	98	13Zet Oph	2.5710	30000.	72	32852	No

279	GOM_NL__2PRFIN20080612_234338_000000392069_00245_32864_7774.N1	12-JUN-2008 23:43:38	Bright	38.500	127	27Bet Her	2.7810	4700.0	77	32864	No
280	GOM_NL__2PRFIN20080612_234644_000000372069_00245_32864_7775.N1	12-JUN-2008 23:46:44	Bright	37.000	133	40Zet Her	2.8070	6000.0	74	32864	No
281	GOM_NL__2PRFIN20080612_235340_000000482069_00245_32864_7776.N1	12-JUN-2008 23:53:40	Bright	48.000	130	23Bet Dra	2.7990	5800.0	96	32864	No

3. Quality information per product

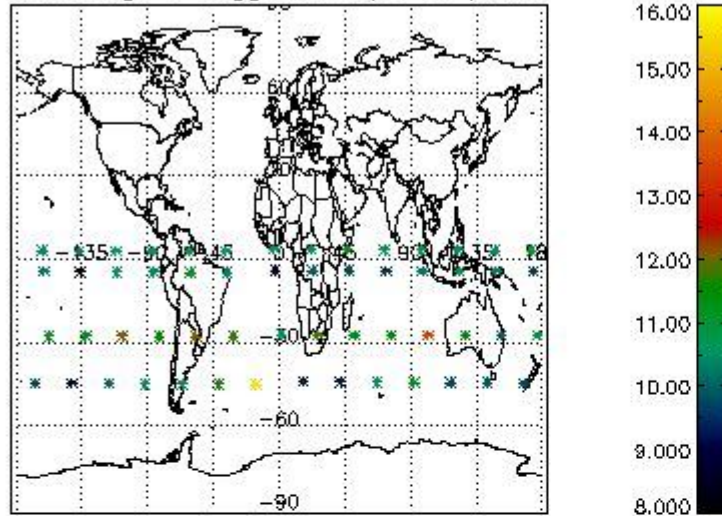
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

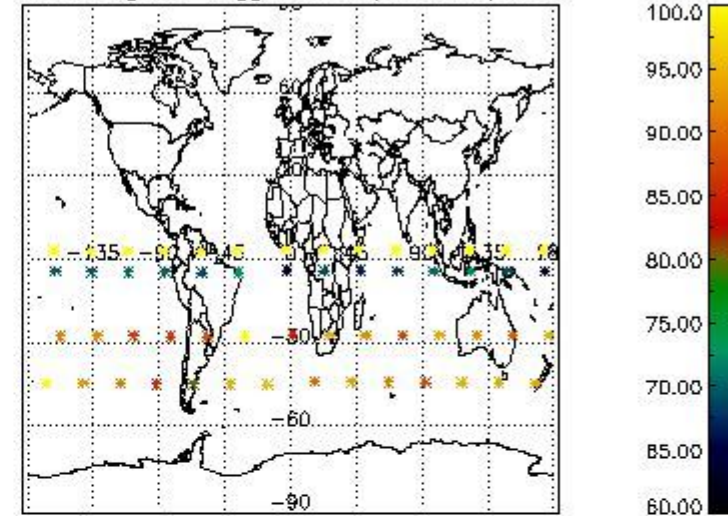


3.2 Plot quality information per product (world map)

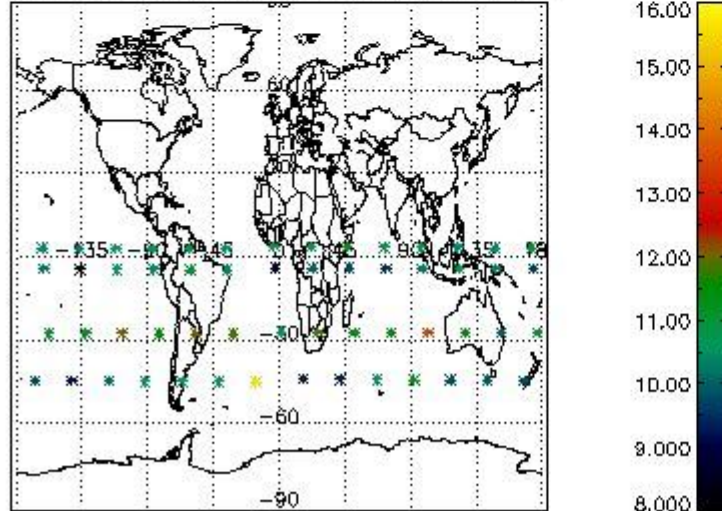
Percentage of flagged data per O3 profile



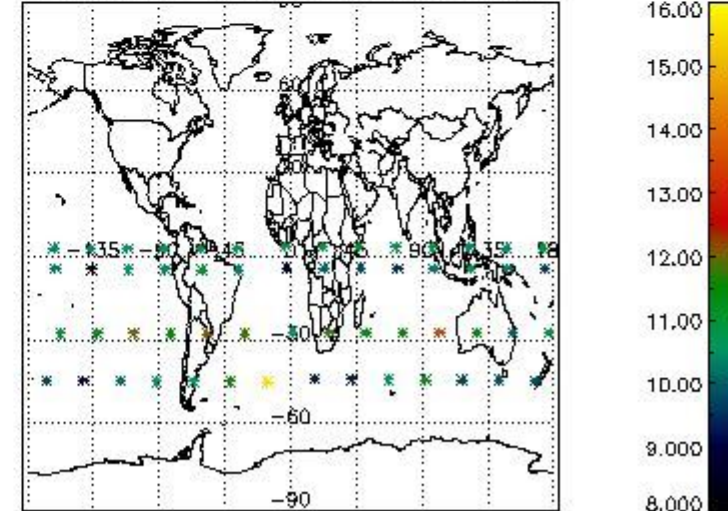
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

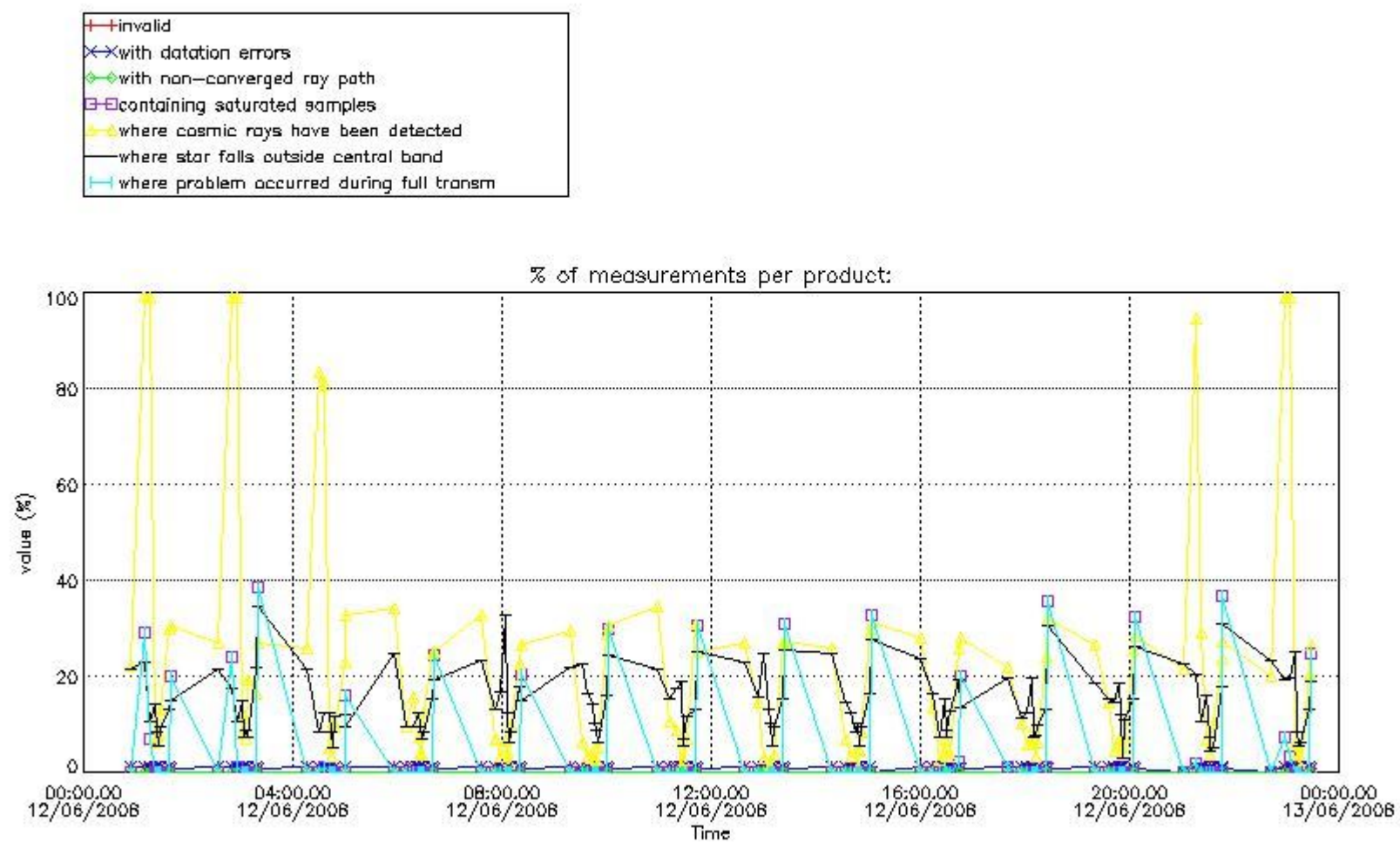


4. Level 1 quality information per product

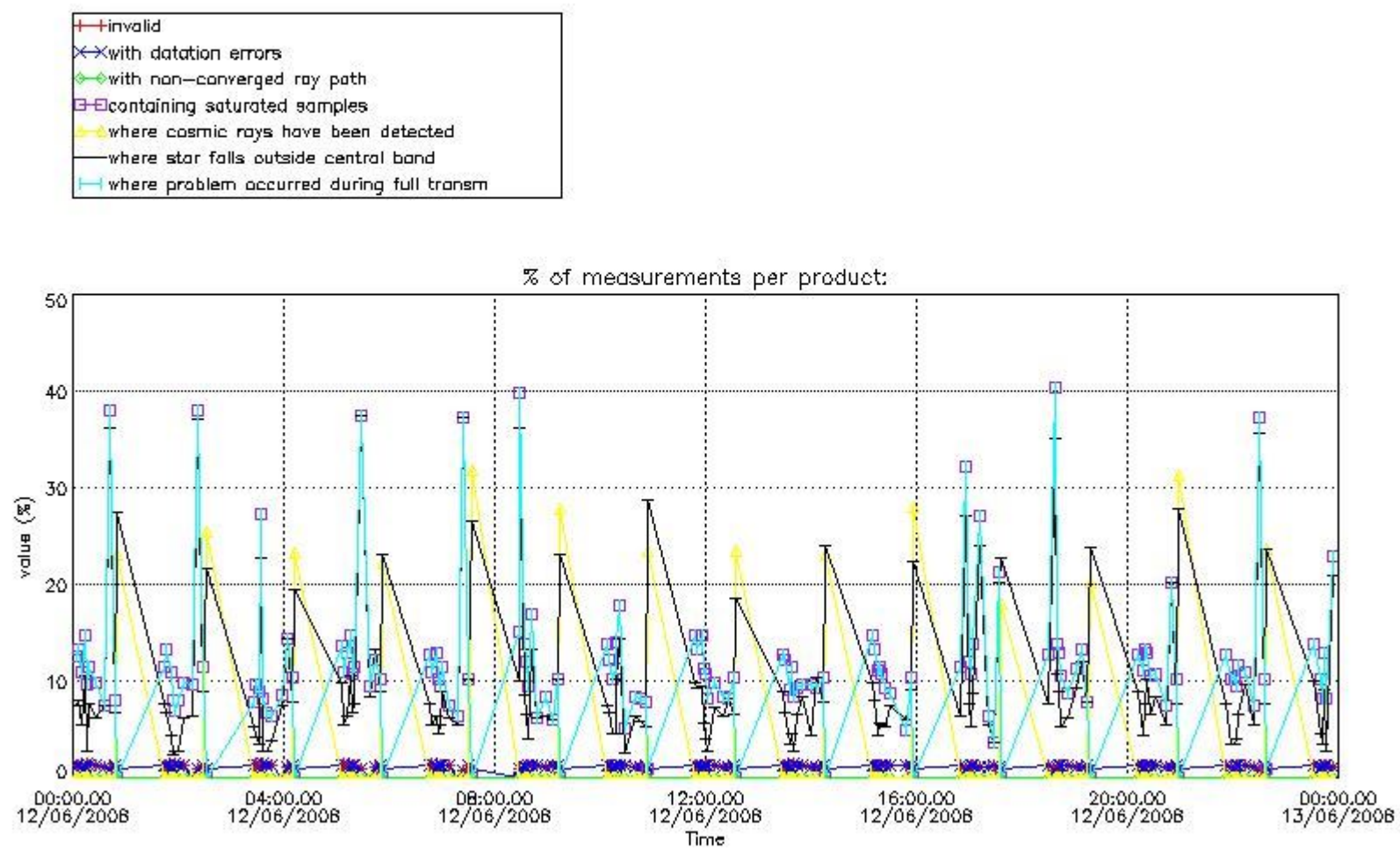
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

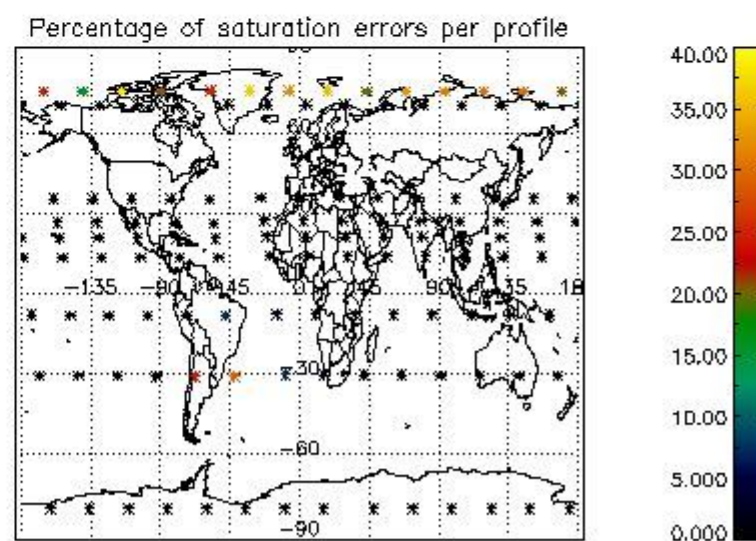
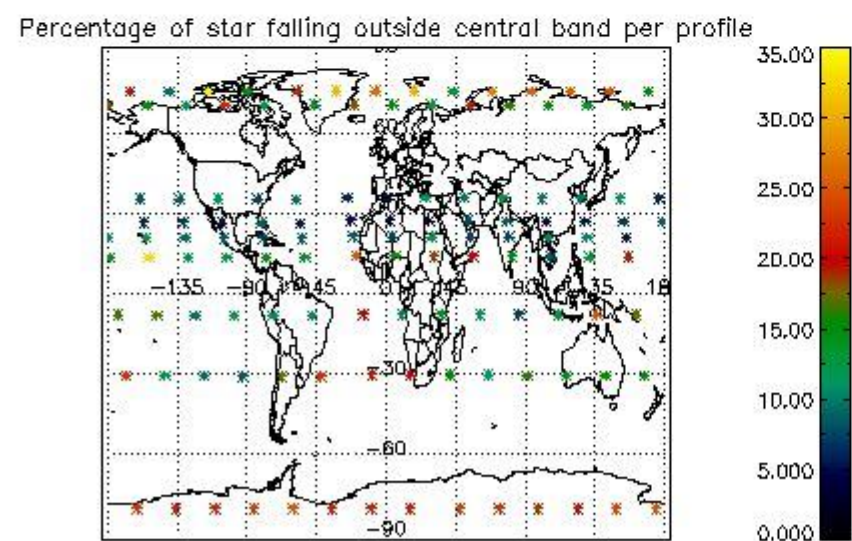
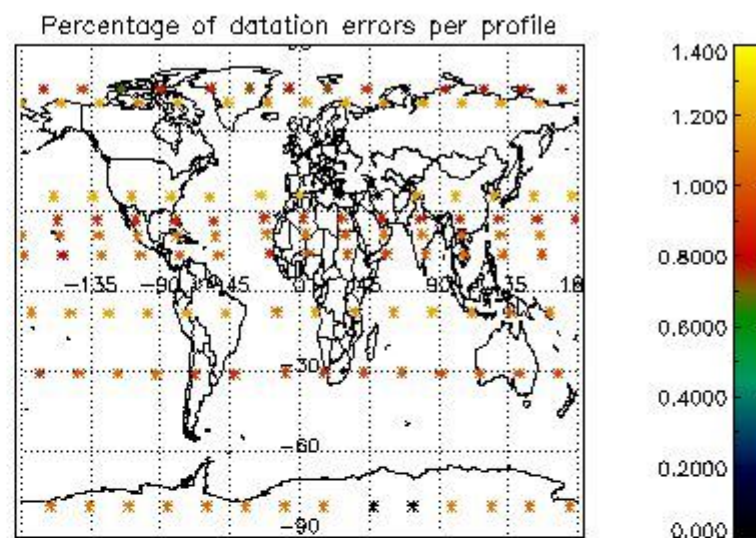
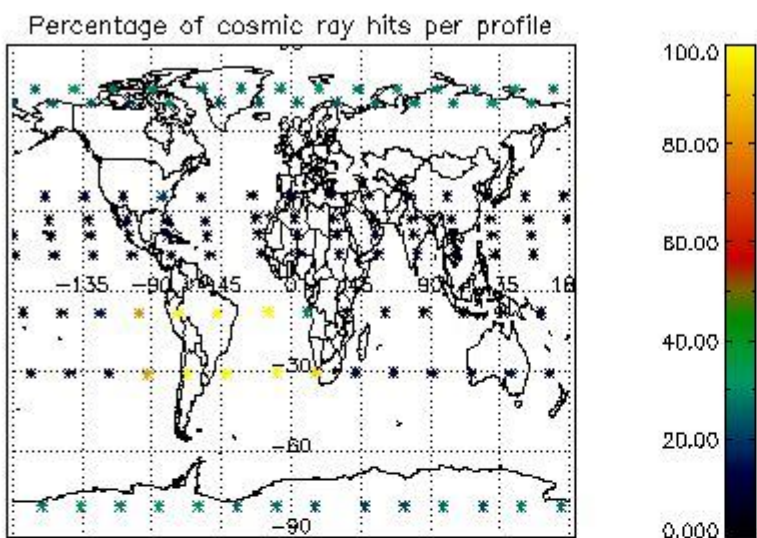


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

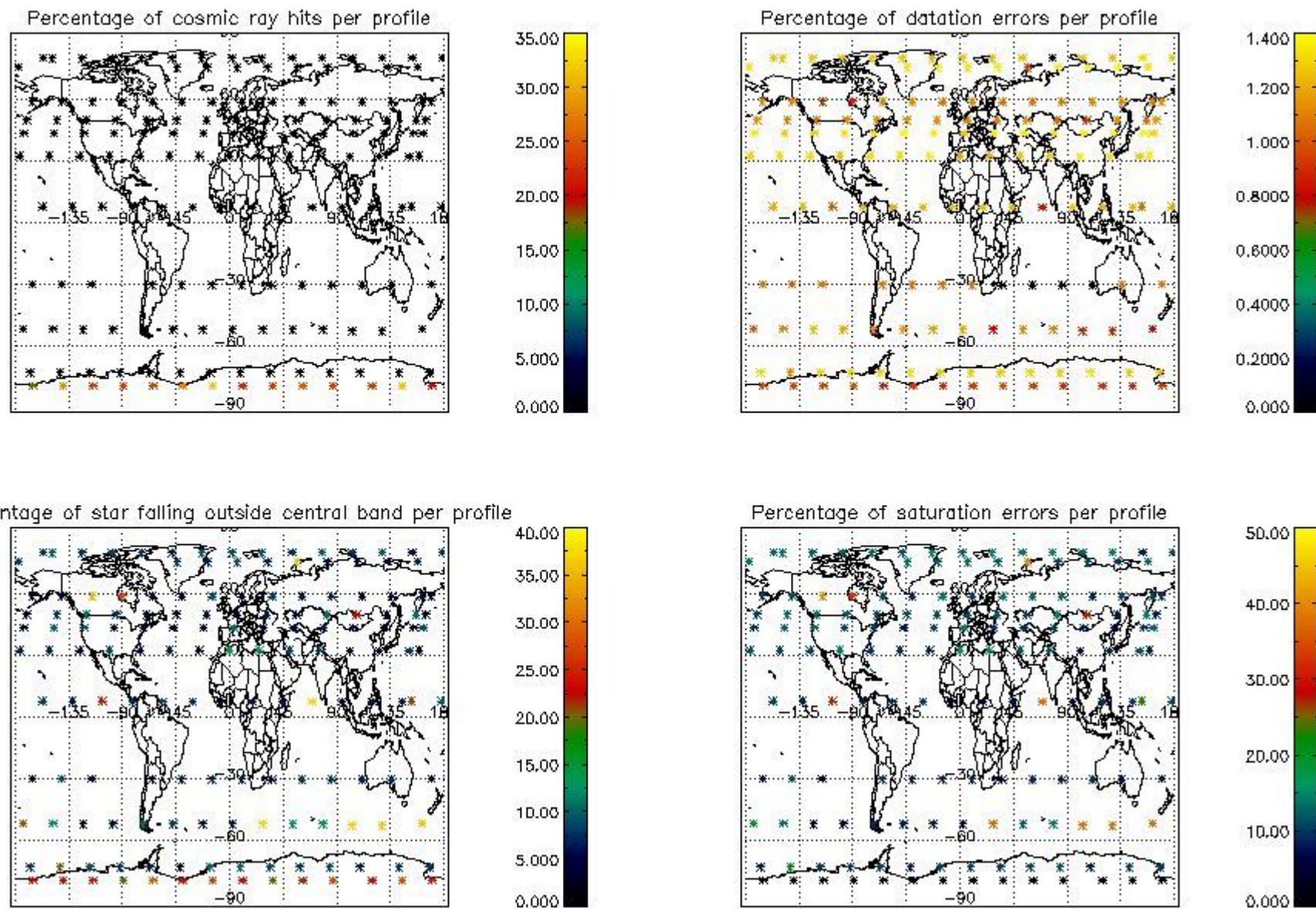


4.2 Plot quality information per product coming from level 1b processing (world map)

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

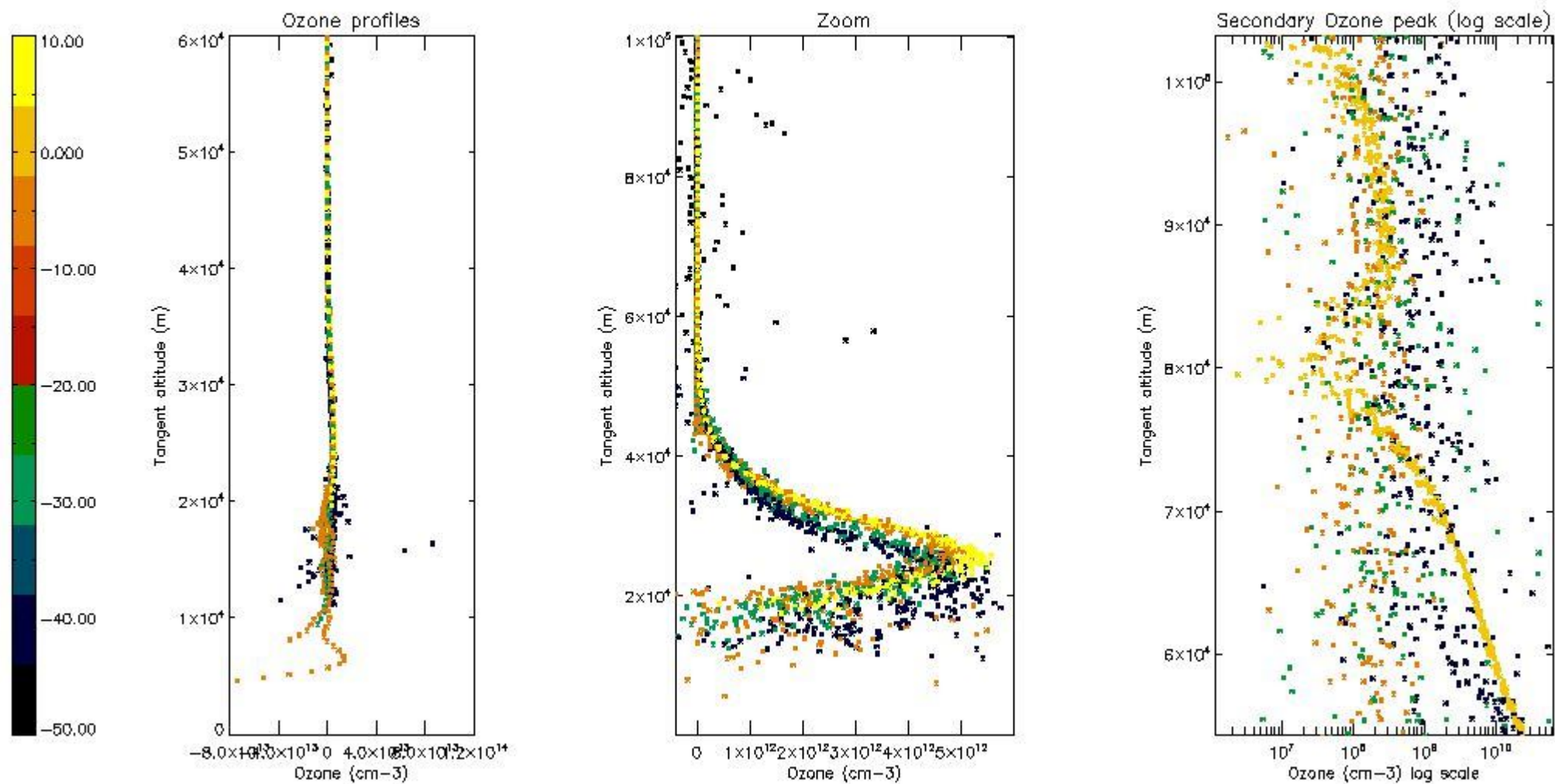
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	22
STD < 20	8

STD < 10	5
STD < 5	3

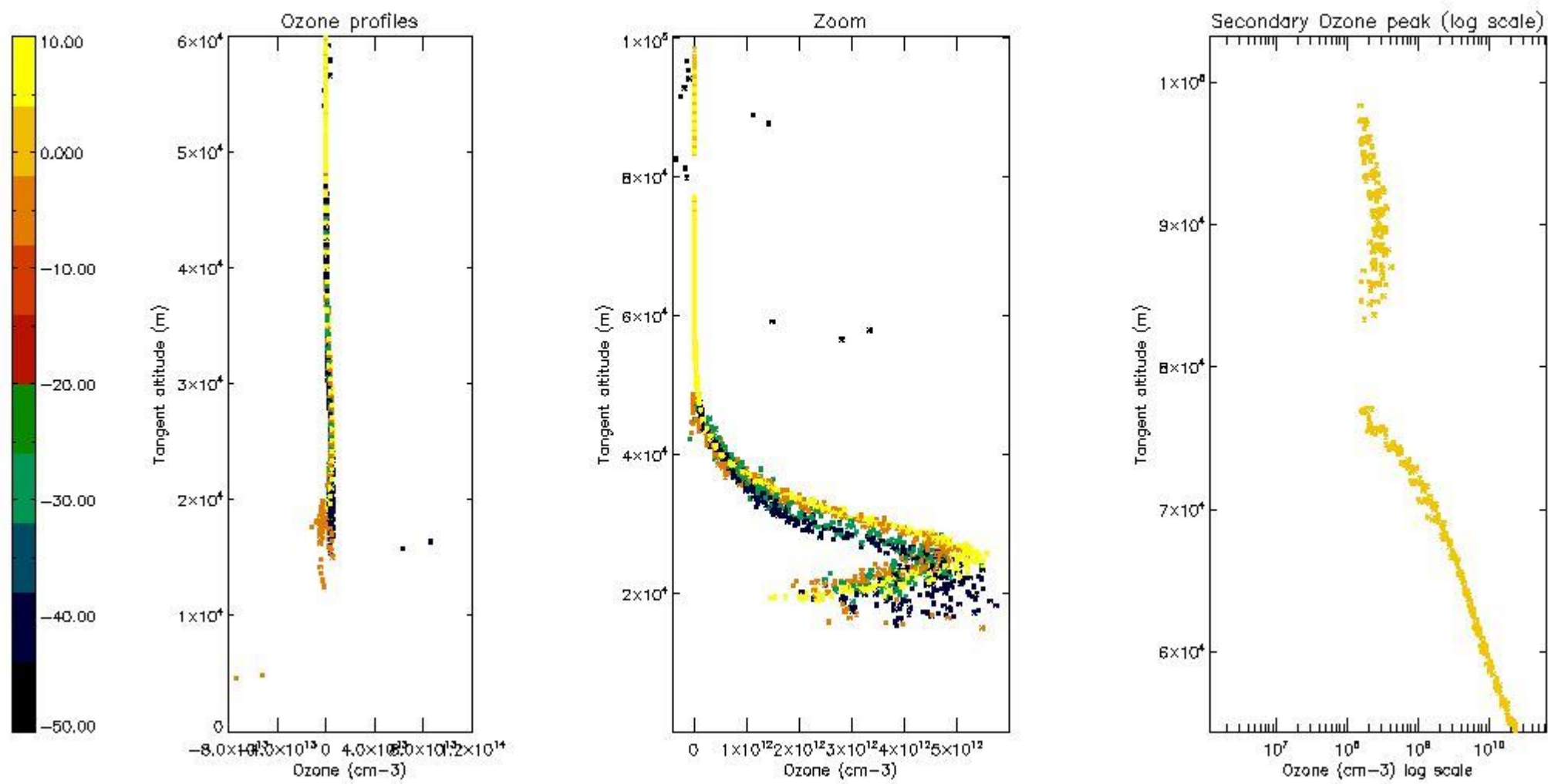
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



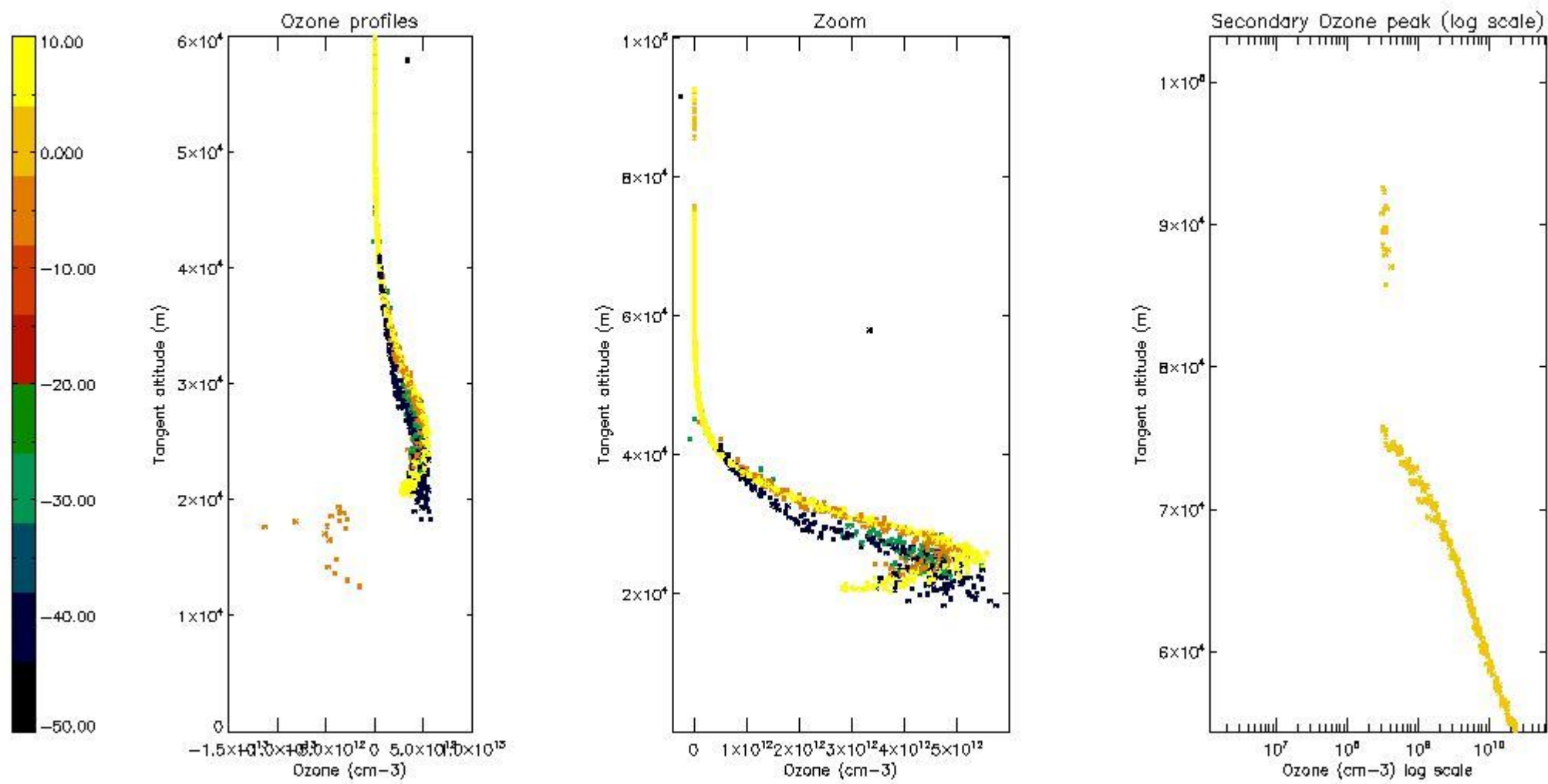
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



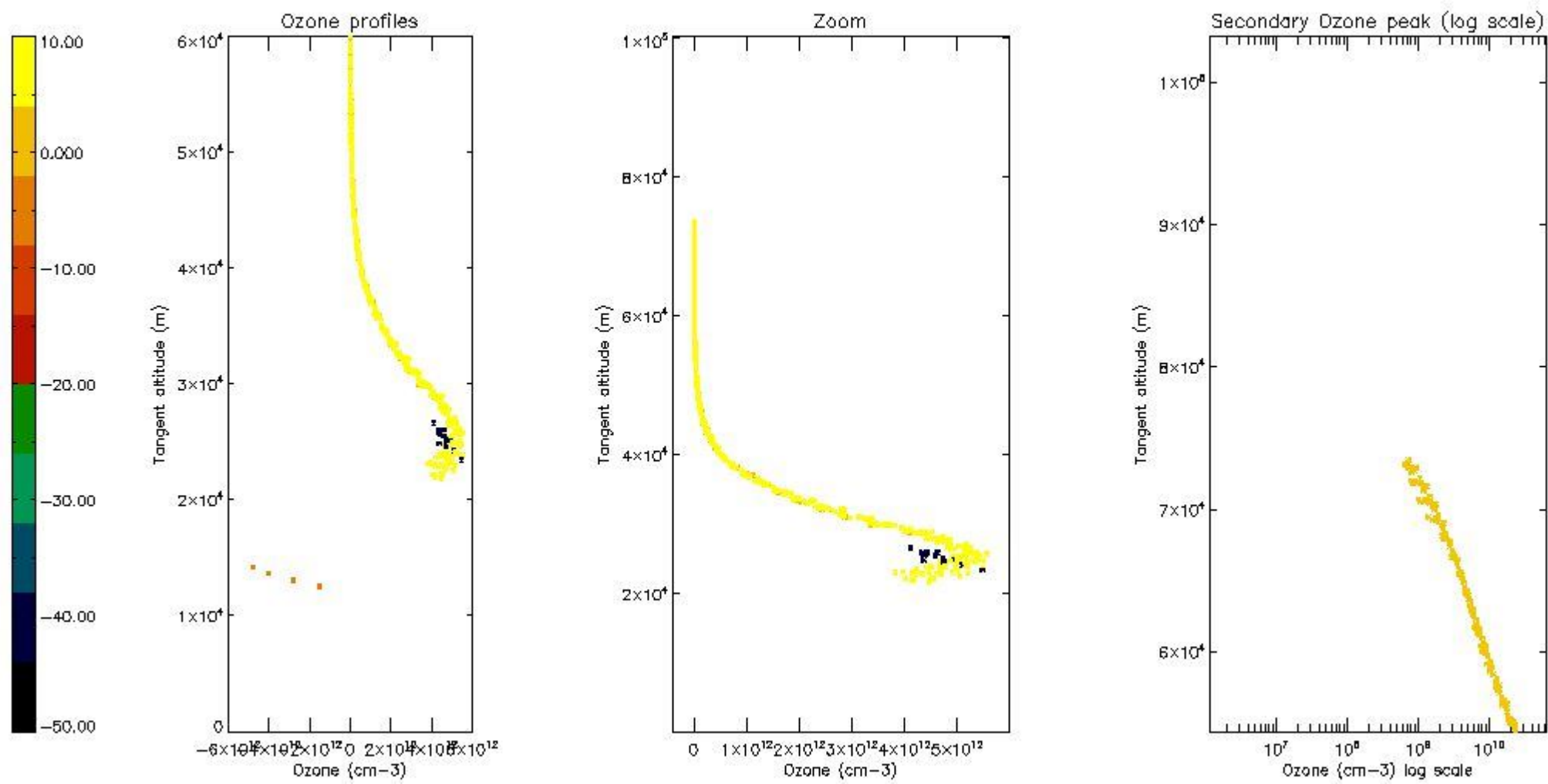
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



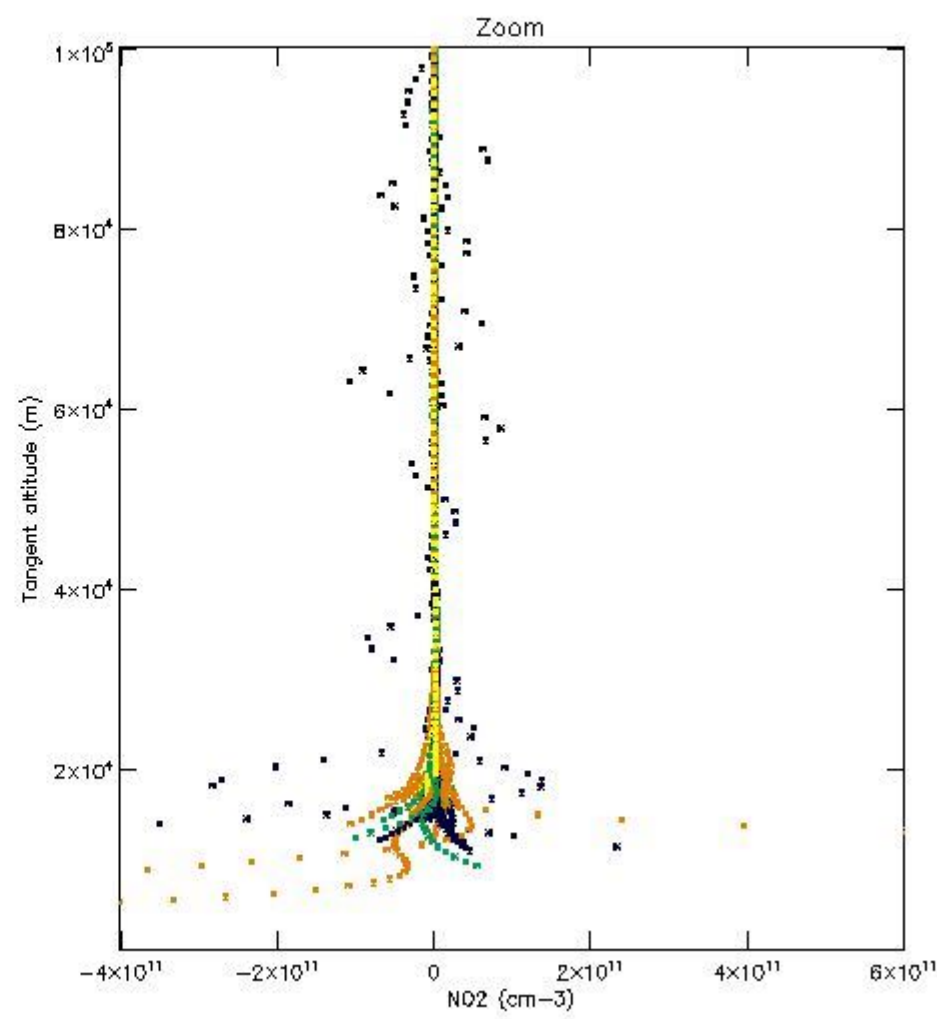
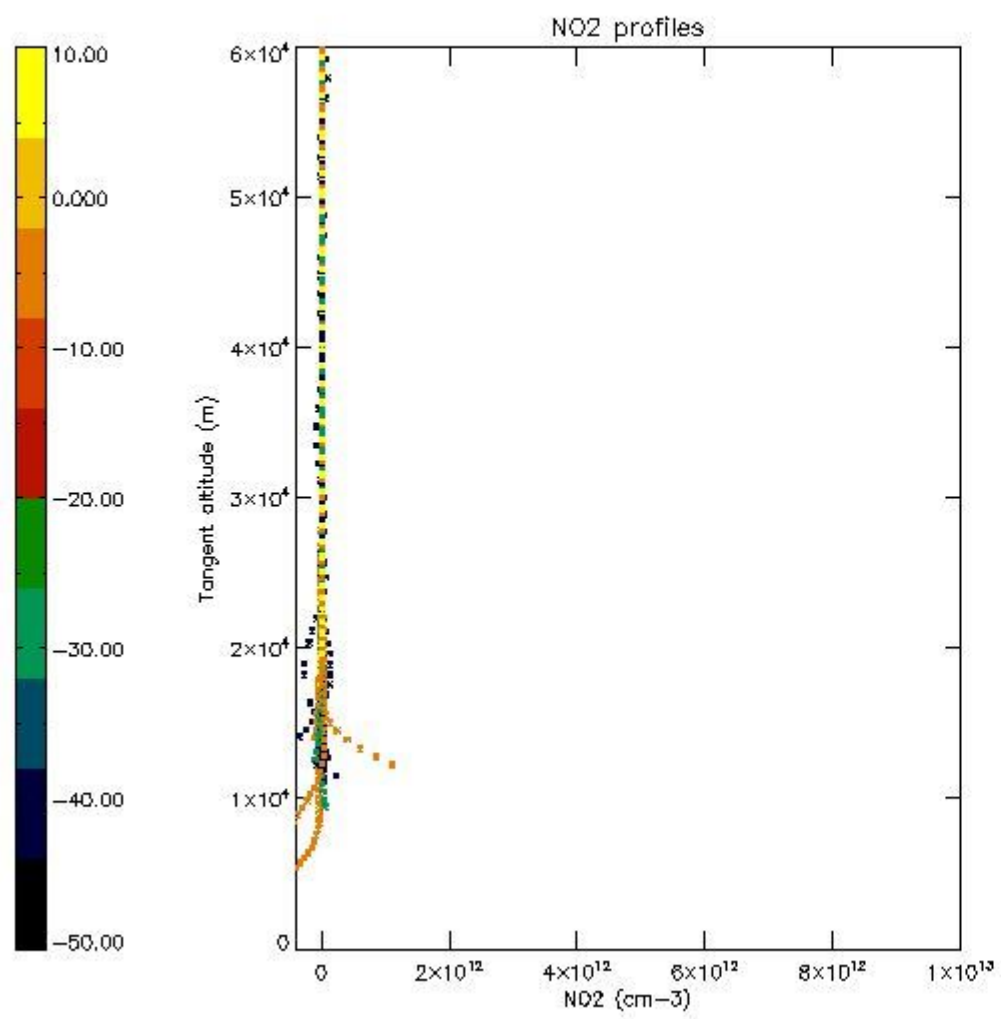
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



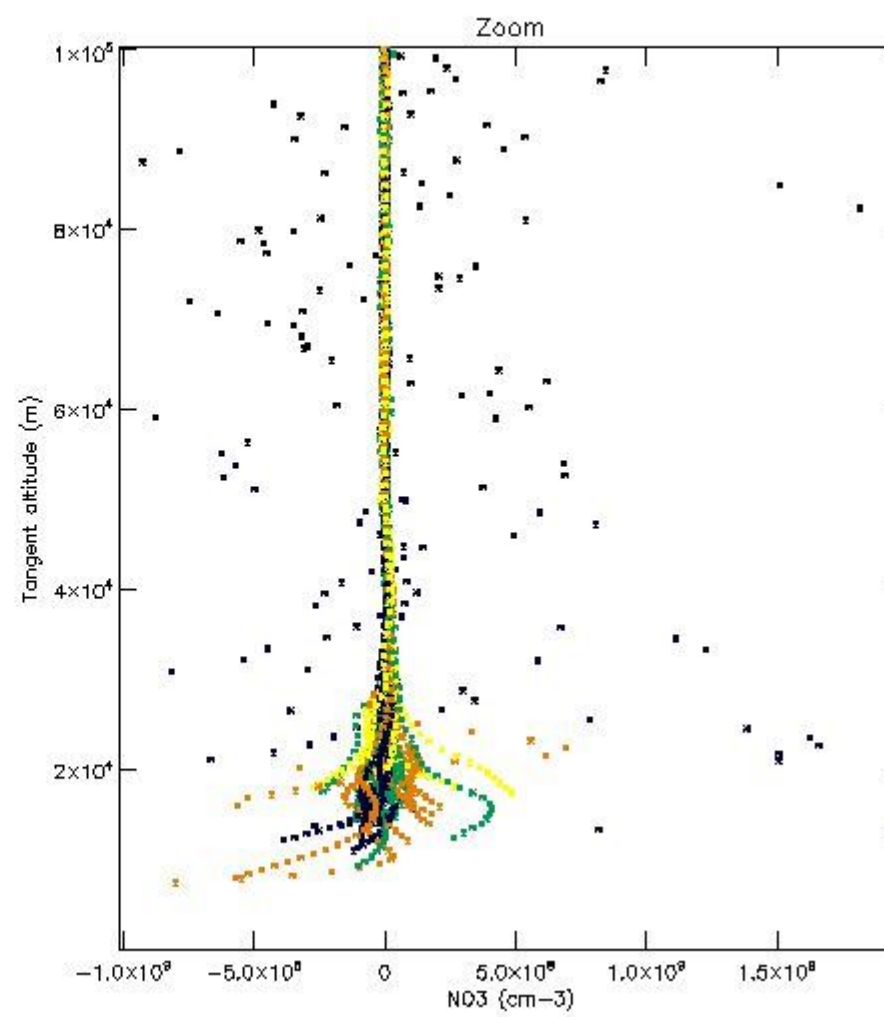
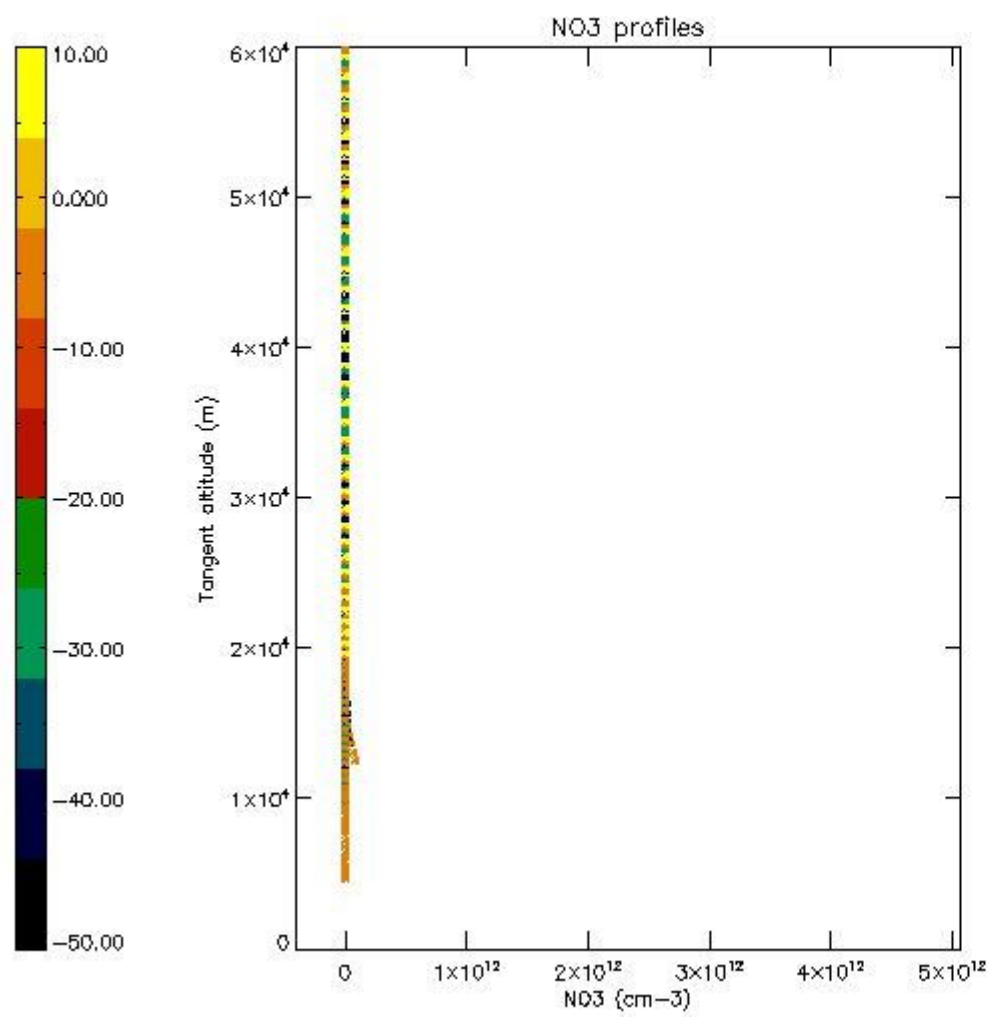
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



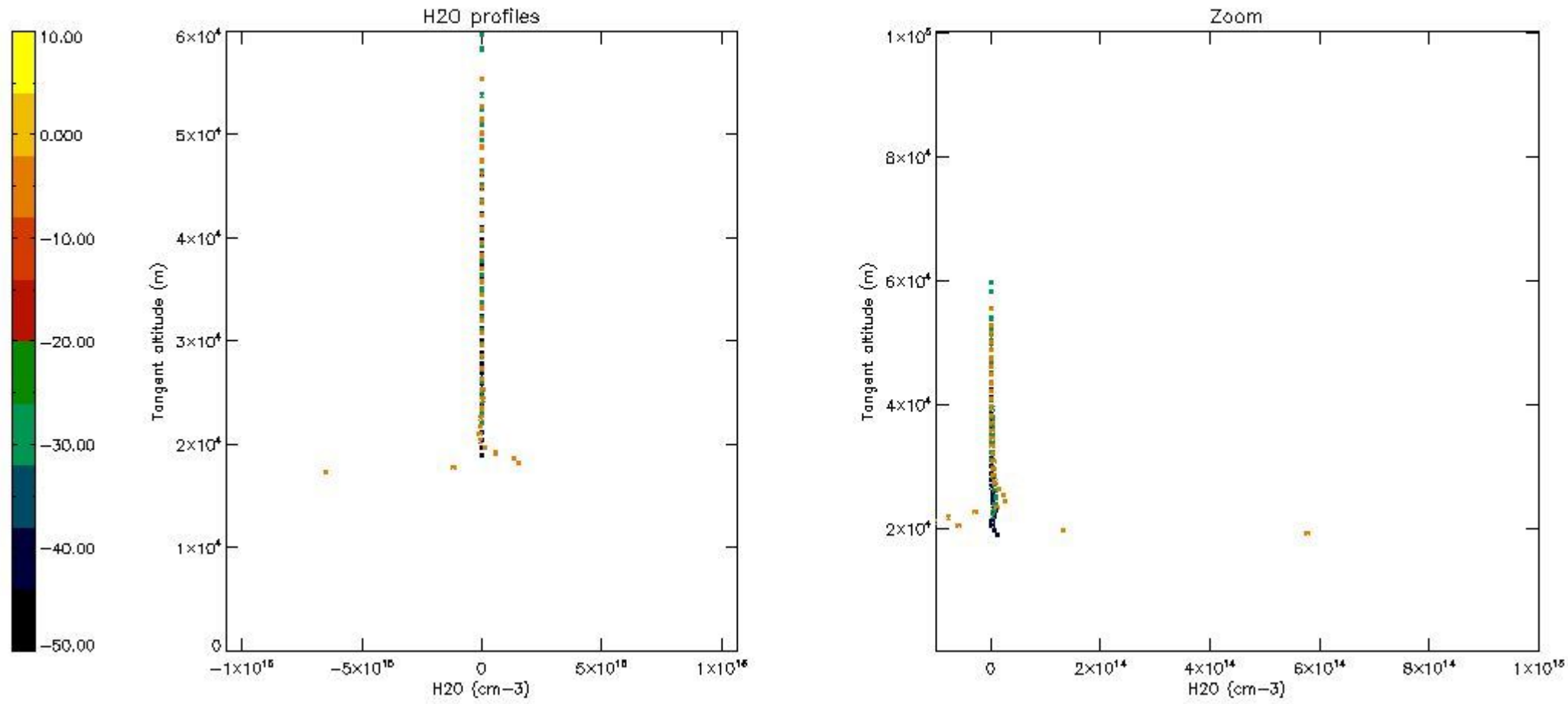
5.7 Plot NO3 profiles for all STD (dark without errors)

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	12-JUN-2008 00:04:02
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	12-JUN-2008 00:04:02
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	12-JUN-2008 00:04:02

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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](#)

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

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[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.

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Time of report generation	25APR2013 16:05:15
Data source version	GOMOS/6.01
Start time of products	12-06-2008 (12JUN2008 00:00:00)
Stop time of products	13-06-2008 (13JUN2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	281
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

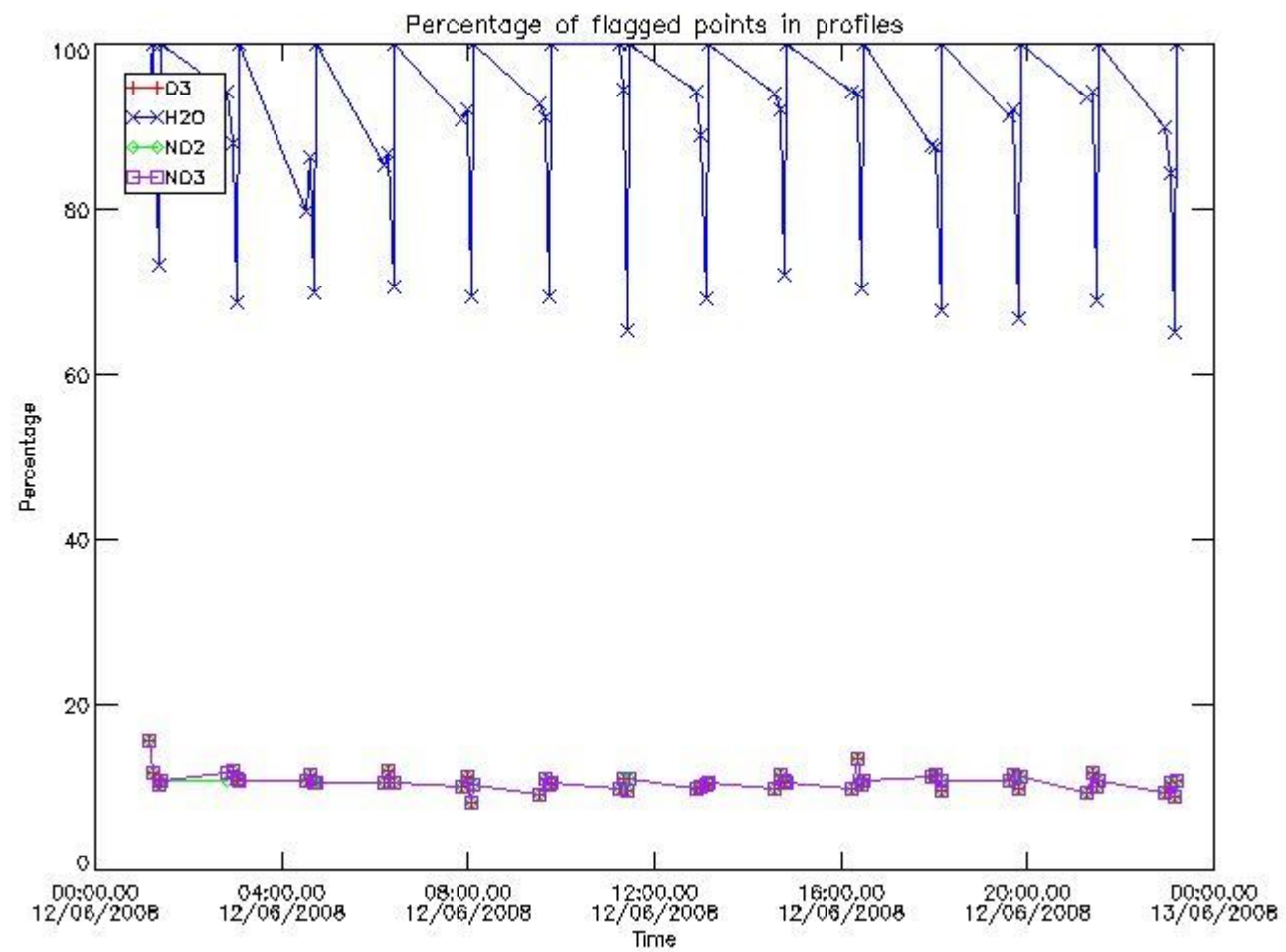
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080612_000402_000000402069_00231_32850_7392.N1	12-JUN-2008 00:04:02	Bright	40.000	86	35Eta Oph	2.4300	10200.	80	32850	No
2	GOM_NL__2PRFIN20080612_000547_000000382069_00231_32850_7393.N1	12-JUN-2008 00:05:47	Bright	37.500	98	13Zet Oph	2.5710	30000.	75	32850	No
3	GOM_NL__2PRFIN20080612_001056_000000462069_00231_32850_7394.N1	12-JUN-2008 00:10:56	Bright	45.500	126	60Bet Oph	2.7700	4250.0	91	32850	No
4	GOM_NL__2PRFIN20080612_001331_000000482069_00231_32850_7395.N1	12-JUN-2008 00:13:31	Bright	47.500	59	55Alp Oph	2.0800	8900.0	95	32850	No
5	GOM_NL__2PRFIN20080612_001517_000000372069_00231_32850_7396.N1	12-JUN-2008 00:15:17	Bright	36.500	127	27Bet Her	2.7810	4700.0	73	32850	No
6	GOM_NL__2PRFIN20080612_001824_000000392069_00231_32850_7397.N1	12-JUN-2008 00:18:24	Bright	39.000	133	40Zet Her	2.8070	6000.0	78	32850	No
7	GOM_NL__2PRFIN20080612_002523_000000412069_00231_32850_7398.N1	12-JUN-2008 00:25:23	Bright	40.500	130	23Bet Dra	2.7990	5800.0	81	32850	No
8	GOM_NL__2PRFIN20080612_003601_000000472069_00231_32850_7399.N1	12-JUN-2008 00:36:01	Bright	46.500	89	5Alp Cep	2.4510	8000.0	93	32850	No
9	GOM_NL__2PRFIN20080612_004221_000000582069_00231_32850_7400.N1	12-JUN-2008 00:42:21	Bright	58.000	76	27Gam Cas	2.3000	30000.	116	32850	No
10	GOM_NL__2PRFIN20080612_004822_000000382069_00231_32850_7401.N1	12-JUN-2008 00:48:22	Bright	37.500	73	57Gam1And	2.2600	13100.	75	32850	No
11	GOM_NL__2PRFIN20080612_005042_000000572069_00231_32850_7402.N1	12-JUN-2008 00:50:42	Twilight	56.500	53	43Bet And	2.0480	3300.0	113	32850	No
12	GOM_NL__2PRFIN20080612_005404_000000472069_00231_32850_7403.N1	12-JUN-2008 00:54:04	Twilight	47.000	50	13Alp Ari	2.0070	4250.0	94	32850	No
13	GOM_NL__2PRFIN20080612_010908_000000552069_00231_32850_7404.N1	12-JUN-2008 01:09:08	Dark	55.000	52	16Bet Cet	2.0370	4500.0	110	32850	No
14	GOM_NL__2PRFIN20080612_011532_000000432069_00231_32850_7405.N1	12-JUN-2008 01:15:32	Dark	43.000	84	Alp Phe	2.3970	4500.0	86	32850	No
15	GOM_NL__2PRFIN20080612_012135_000000492069_00232_32851_7461.N1	12-JUN-2008 01:21:35	Dark	49.000	63	Bet Gru	2.1500	2800.0	98	32851	No
16	GOM_NL__2PRFIN20080612_012337_000000482069_00232_32851_7462.N1	12-JUN-2008 01:23:37	Dark	47.500	31	Alp Gru	1.7340	15200.	95	32851	No
17	GOM_NL__2PRFIN20080612_012514_000000562069_00232_32851_7463.N1	12-JUN-2008 01:25:14	Straylight	56.000	172	Gam Gru	3.0030	13100.	112	32851	No
18	GOM_NL__2PRFIN20080612_012745_000000432069_00232_32851_7464.N1	12-JUN-2008 01:27:45	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	32851	No
19	GOM_NL__2PRFIN20080612_013753_000000422069_00232_32851_7465.N1	12-JUN-2008 01:37:53	Twilight	42.000	25	35Lam Sco	1.6200	28000.	84	32851	No
20	GOM_NL__2PRFIN20080612_013935_000000572069_00232_32851_7466.N1	12-JUN-2008 01:39:35	Bright	57.000	57	34Sig Sgr	2.0660	26000.	114	32851	No
21	GOM_NL__2PRFIN20080612_014438_000000402069_00232_32851_7467.N1	12-JUN-2008 01:44:38	Bright	39.500	86	35Eta Oph	2.4300	10200.	79	32851	No
22	GOM_NL__2PRFIN20080612_014623_000000382069_00232_32851_7468.N1	12-JUN-2008 01:46:23	Bright	37.500	98	13Zet Oph	2.5710	30000.	75	32851	No
23	GOM_NL__2PRFIN20080612_015131_000000462069_00232_32851_7469.N1	12-JUN-2008 01:51:31	Bright	45.500	126	60Bet Oph	2.7700	4250.0	91	32851	No
24	GOM_NL__2PRFIN20080612_015406_000000442069_00232_32851_7470.N1	12-JUN-2008 01:54:06	Bright	43.500	59	55Alp Oph	2.0800	8900.0	87	32851	No
25	GOM_NL__2PRFIN20080612_015553_000000362069_00232_32851_7471.N1	12-JUN-2008 01:55:53	Bright	36.000	127	27Bet Her	2.7810	4700.0	72	32851	No
26	GOM_NL__2PRFIN20080612_015900_000000382069_00232_32851_7472.N1	12-JUN-2008 01:59:00	Bright	37.500	133	40Zet Her	2.8070	6000.0	75	32851	No
27	GOM_NL__2PRFIN20080612_020559_000000412069_00232_32851_7473.N1	12-JUN-2008 02:05:59	Bright	41.000	130	23Bet Dra	2.7990	5800.0	82	32851	No
28	GOM_NL__2PRFIN20080612_021637_000000472069_00232_32851_7474.N1	12-JUN-2008 02:16:37	Bright	47.000	89	5Alp Cep	2.4510	8000.0	94	32851	No
29	GOM_NL__2PRFIN20080612_022257_000000582069_00232_32851_7475.N1	12-JUN-2008 02:22:57	Bright	58.000	76	27Gam Cas	2.3000	30000.	116	32851	No
30	GOM_NL__2PRFIN20080612_022858_000000392069_00232_32851_7476.N1	12-JUN-2008 02:28:58	Bright	39.000	73	57Gam1And	2.2600	13100.	78	32851	No
31	GOM_NL__2PRFIN20080612_023118_000000532069_00232_32851_7477.N1	12-JUN-2008 02:31:18	Twilight	53.000	53	43Bet And	2.0480	3300.0	106	32851	No
32	GOM_NL__2PRFIN20080612_023440_000000472069_00232_32851_7478.N1	12-JUN-2008 02:34:40	Twilight	46.500	50	13Alp Ari	2.0070	4250.0	93	32851	No
33	GOM_NL__2PRFIN20080612_024945_000000522069_00232_32851_7479.N1	12-JUN-2008 02:49:45	Dark	52.000	52	16Bet Cet	2.0370	4500.0	104	32851	No
34	GOM_NL__2PRFIN20080612_025609_000000422069_00232_32851_7480.N1	12-JUN-2008 02:56:09	Dark	42.000	84	Alp Phe	2.3970	4500.0	84	32851	No
35	GOM_NL__2PRFIN20080612_030212_000000502069_00233_32852_7483.N1	12-JUN-2008 03:02:12	Dark	50.000	63	Bet Gru	2.1500	2800.0	100	32852	No
36	GOM_NL__2PRFIN20080612_030414_000000472069_00233_32852_7484.N1	12-JUN-2008 03:04:14	Dark	47.000	31	Alp Gru	1.7340	15200.	94	32852	No
37	GOM_NL__2PRFIN20080612_030551_000000582069_00233_32852_7485.N1	12-JUN-2008 03:05:51	Straylight	57.500	172	Gam Gru	3.0030	13100.	115	32852	No
38	GOM_NL__2PRFIN20080612_030822_000000422069_00233_32852_7486.N1	12-JUN-2008 03:08:22	Straylight	41.500	45	Alp Pav	1.9400	26000.	83	32852	No
39	GOM_NL__2PRFIN20080612_031830_000000462069_00233_32852_7487.N1	12-JUN-2008 03:18:30	Twilight	46.000	25	35Lam Sco	1.6200	28000.	92	32852	No
40	GOM_NL__2PRFIN20080612_032011_000000742069_00233_32852_7488.N1	12-JUN-2008 03:20:11	Bright	74.000	57	34Sig Sgr	2.0660	26000.	148	32852	No
41	GOM_NL__2PRFIN20080612_032514_000000382069_00233_32852_7489.N1	12-JUN-2008 03:25:14	Bright	38.000	86	35Eta Oph	2.4300	10200.	76	32852	No
42	GOM_NL__2PRFIN20080612_032700_000000362069_00233_32852_7490.N1	12-JUN-2008 03:27:00	Bright	36.000	98	13Zet Oph	2.5710	30000.	72	32852	No

279	GOM_NL__2PRFIN20080612_234338_000000392069_00245_32864_7774.N1	12-JUN-2008 23:43:38	Bright	38.500	127	27Bet Her	2.7810	4700.0	77	32864	No
280	GOM_NL__2PRFIN20080612_234644_000000372069_00245_32864_7775.N1	12-JUN-2008 23:46:44	Bright	37.000	133	40Zet Her	2.8070	6000.0	74	32864	No
281	GOM_NL__2PRFIN20080612_235340_000000482069_00245_32864_7776.N1	12-JUN-2008 23:53:40	Bright	48.000	130	23Bet Dra	2.7990	5800.0	96	32864	No

3. Quality information per product

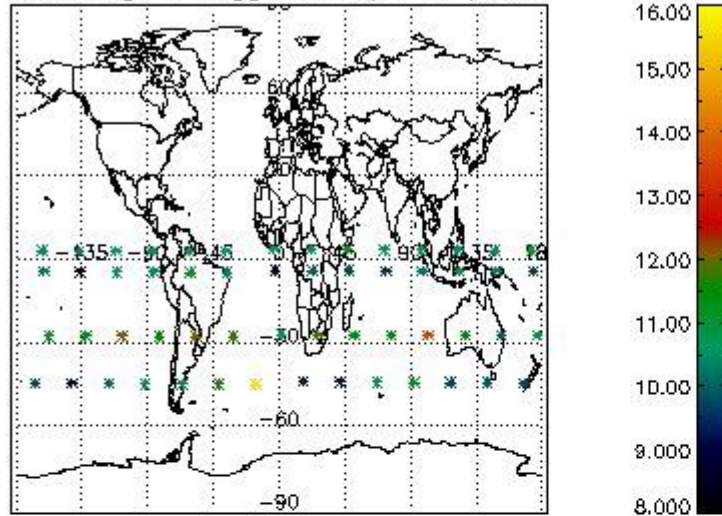
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

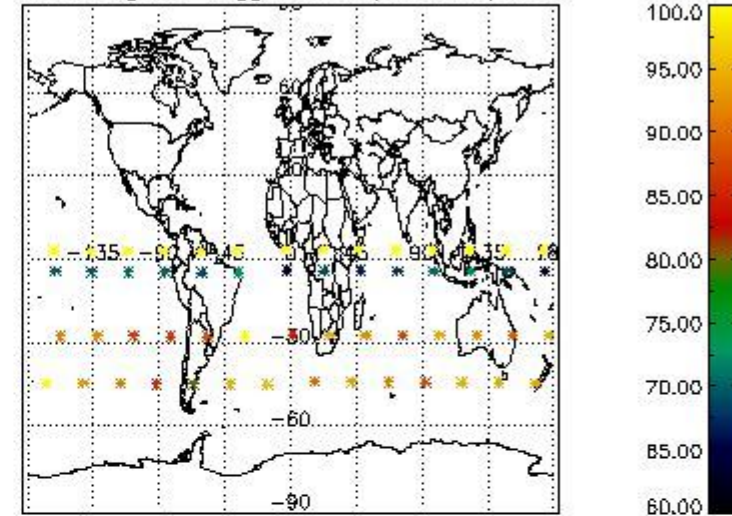


3.2 Plot quality information per product (world map)

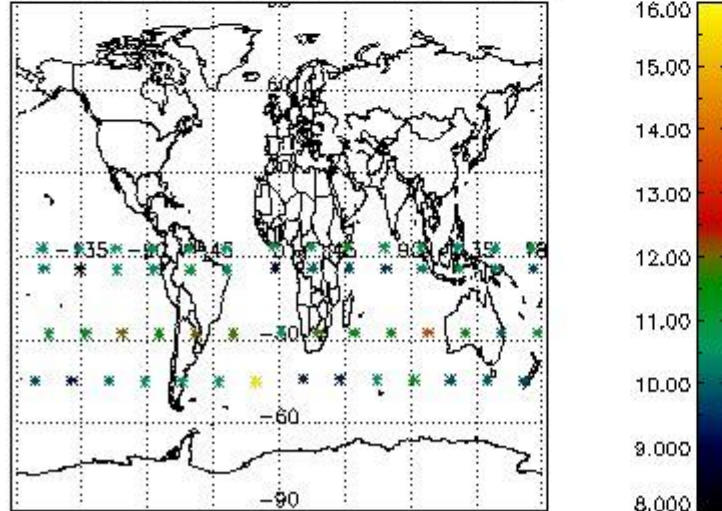
Percentage of flagged data per O3 profile



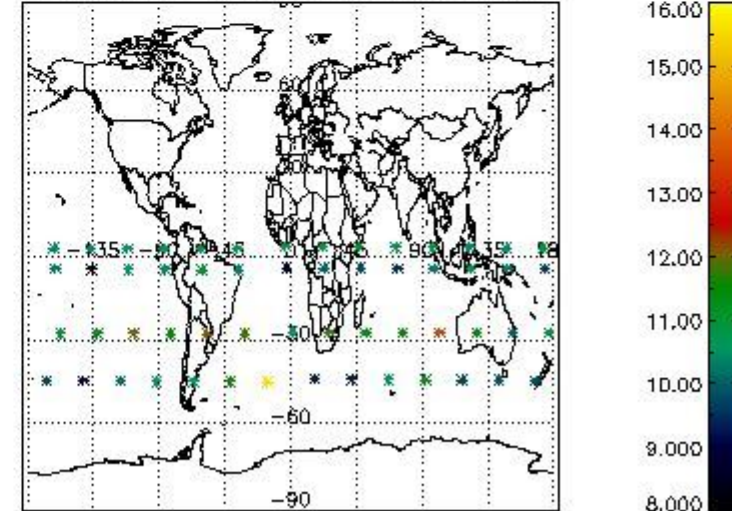
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

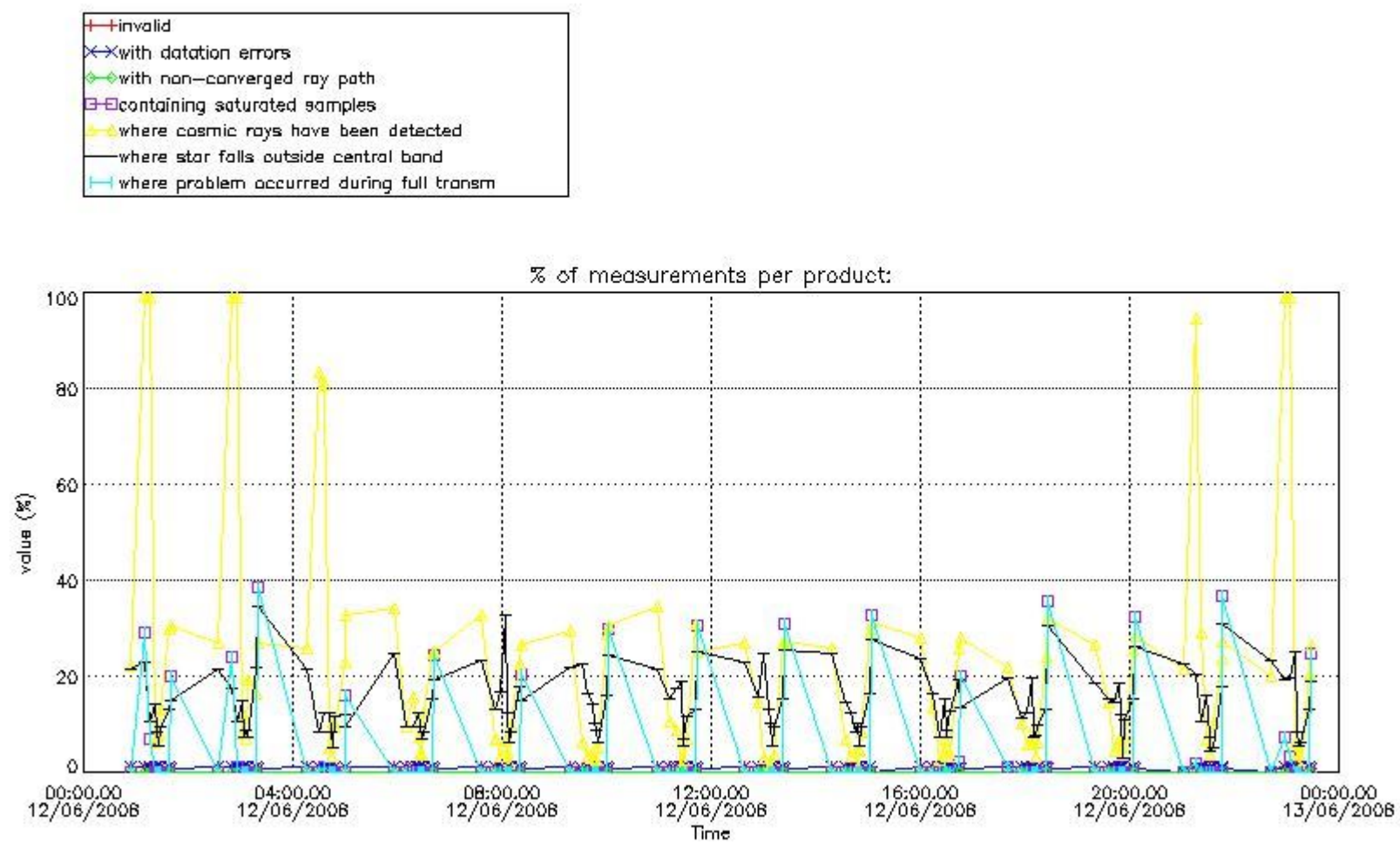


4. Level 1 quality information per product

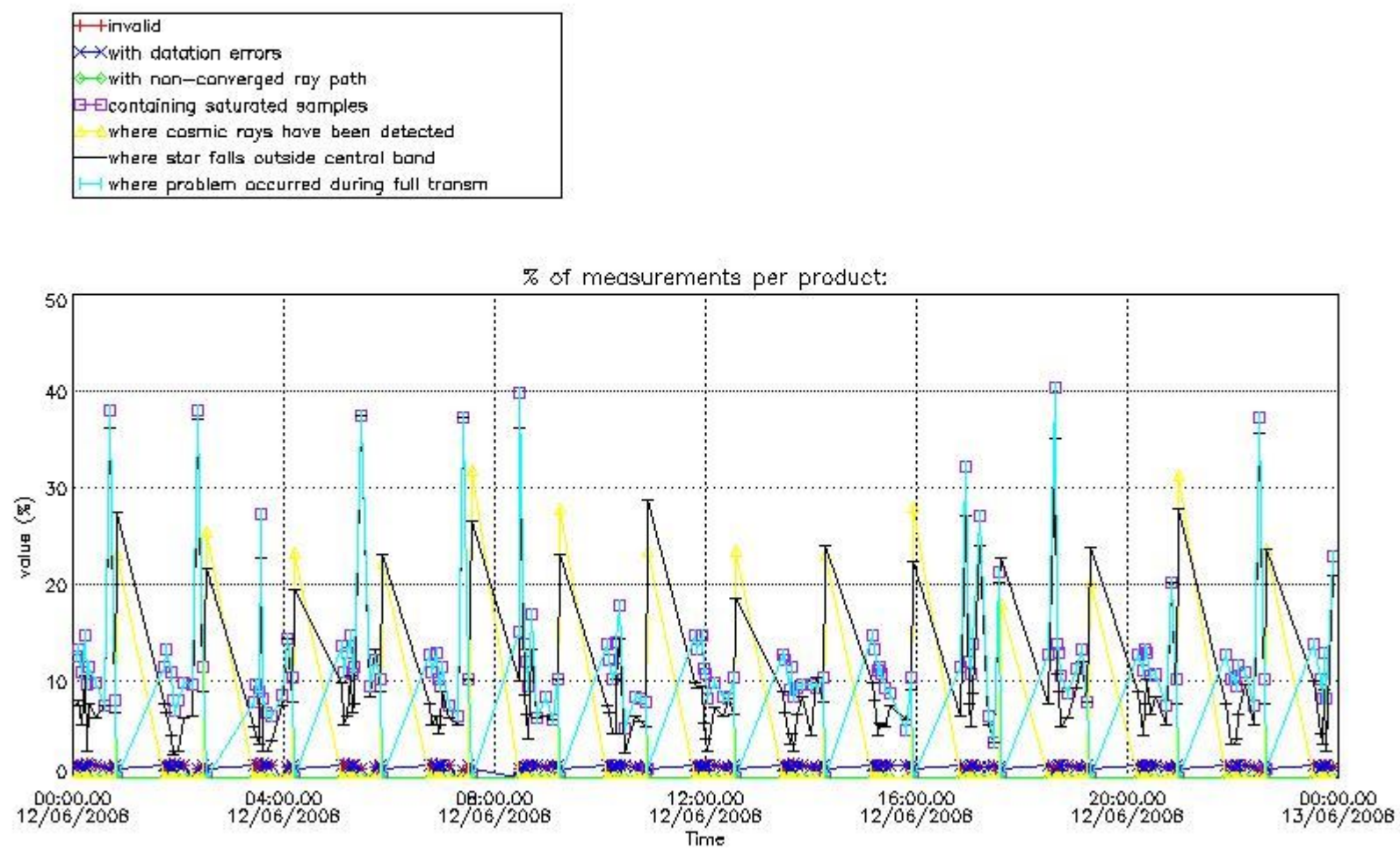
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

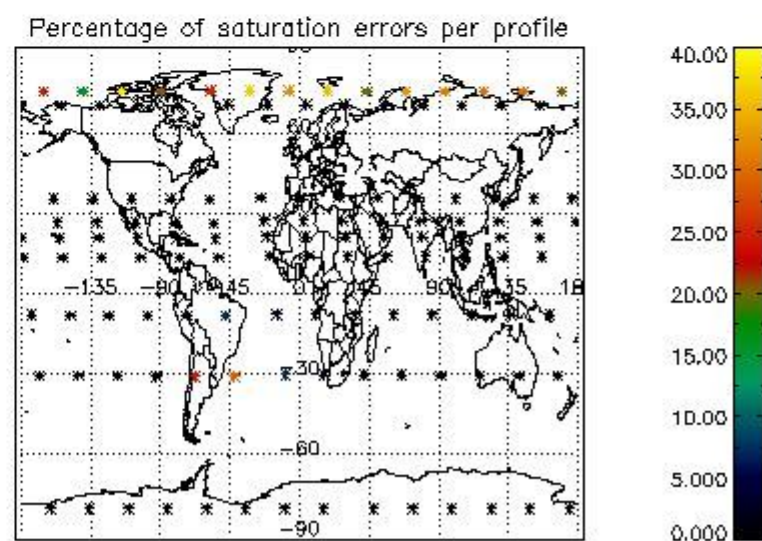
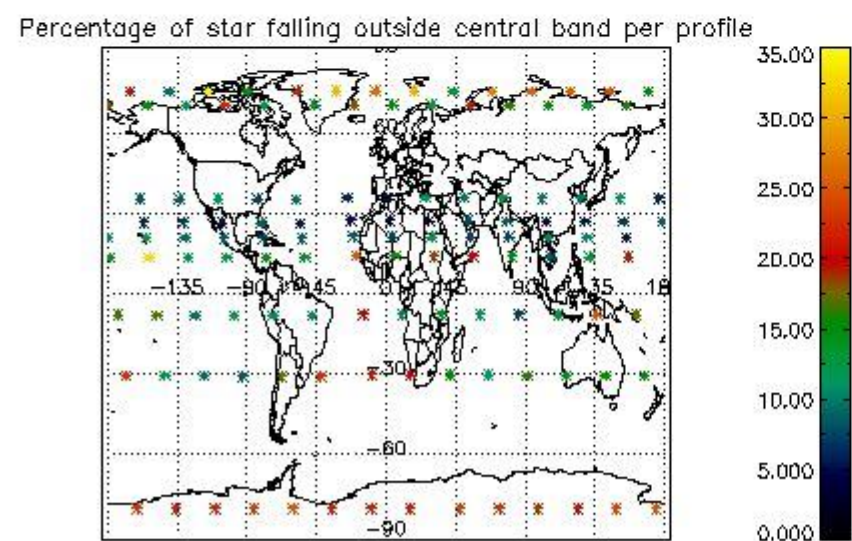
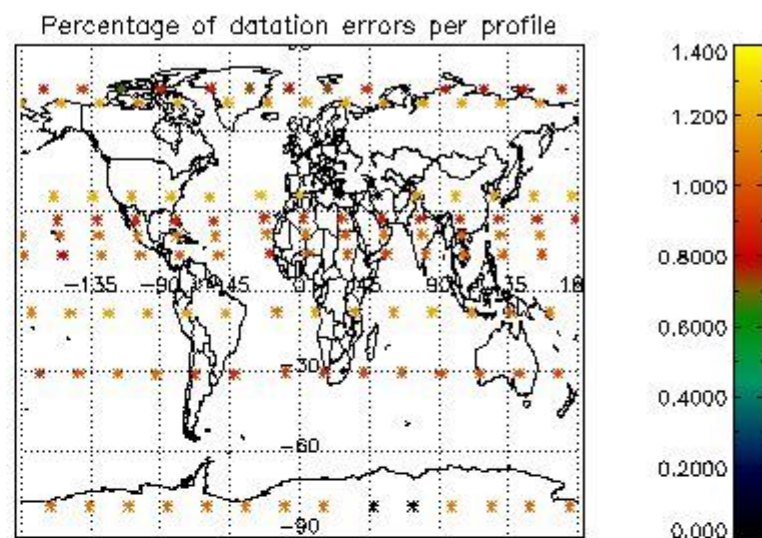
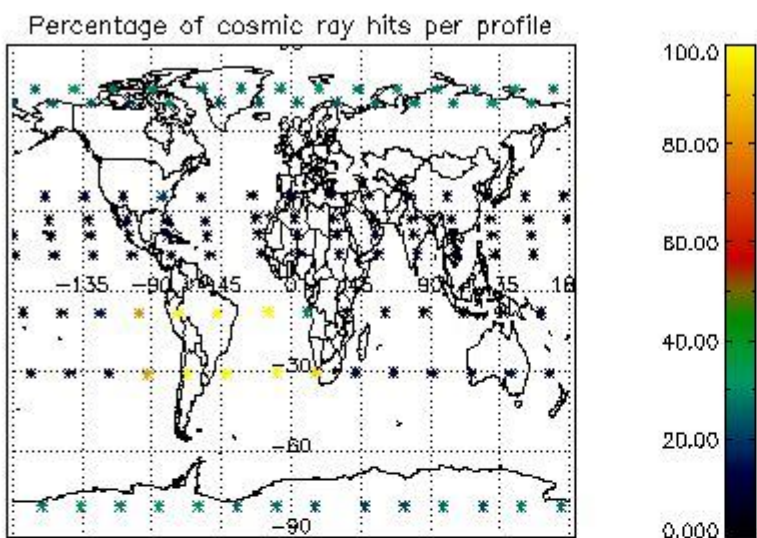


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

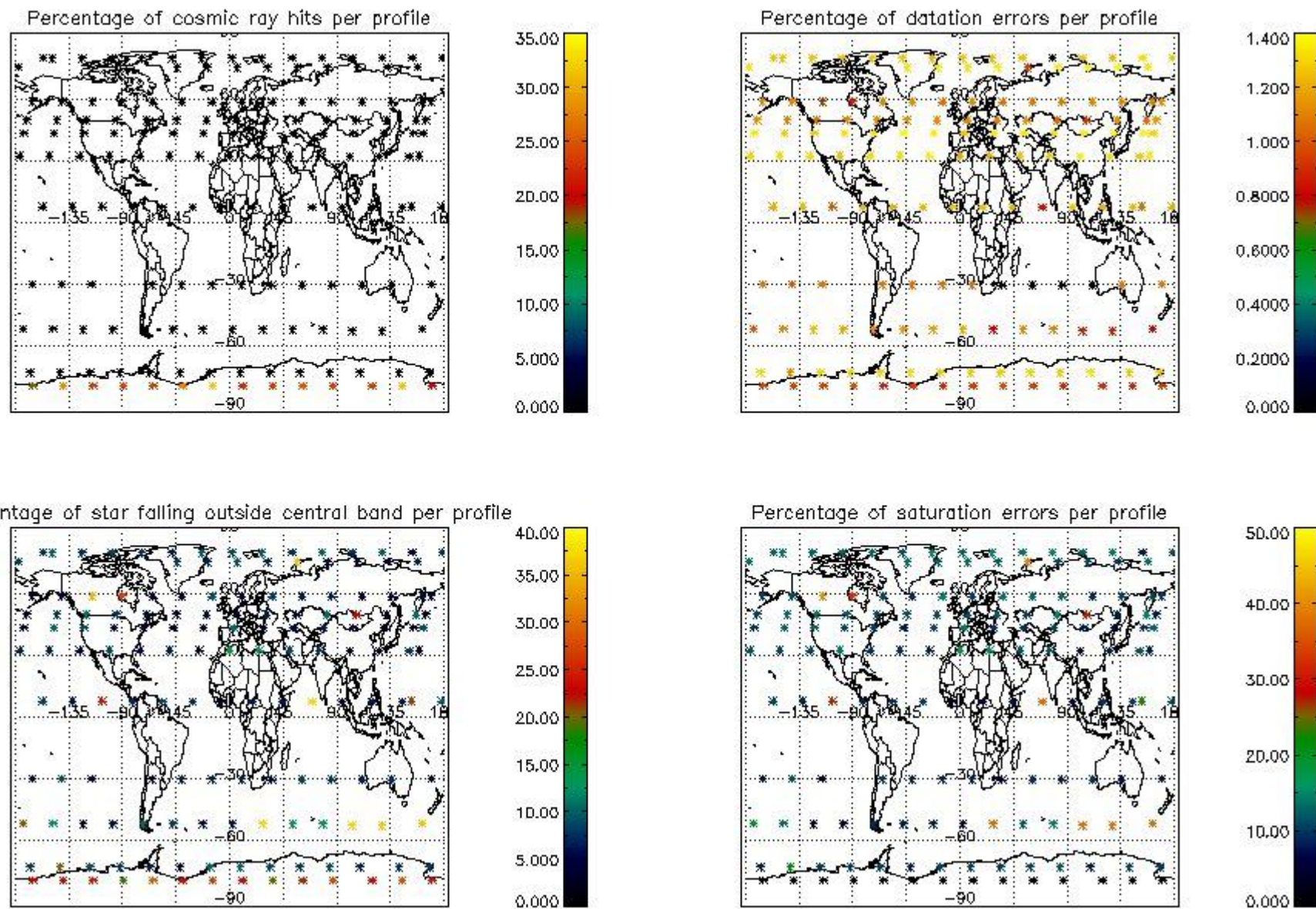


4.2 Plot quality information per product coming from level 1b processing (world map)

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

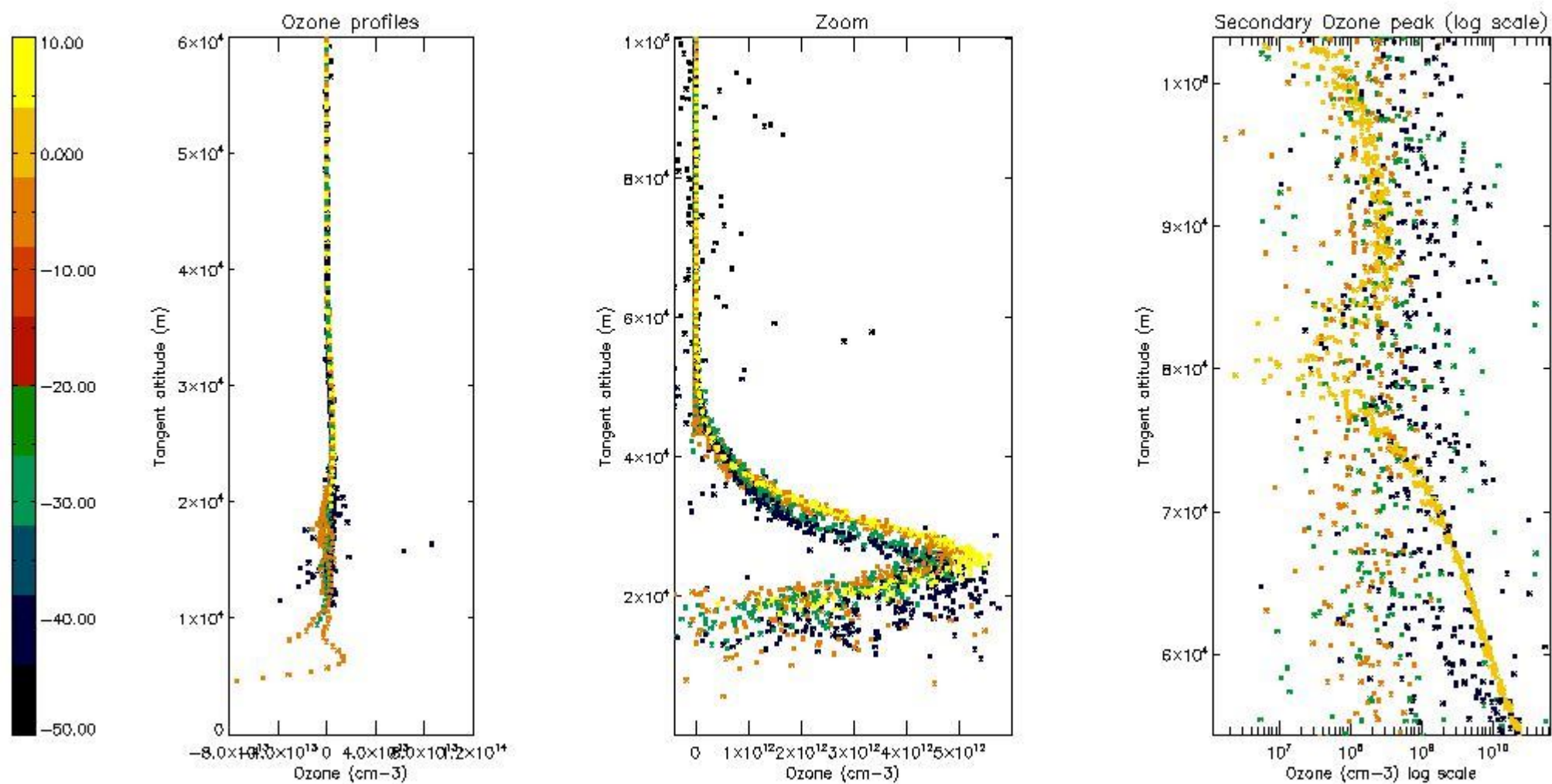
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	22
STD < 20	8

STD < 10	5
STD < 5	3

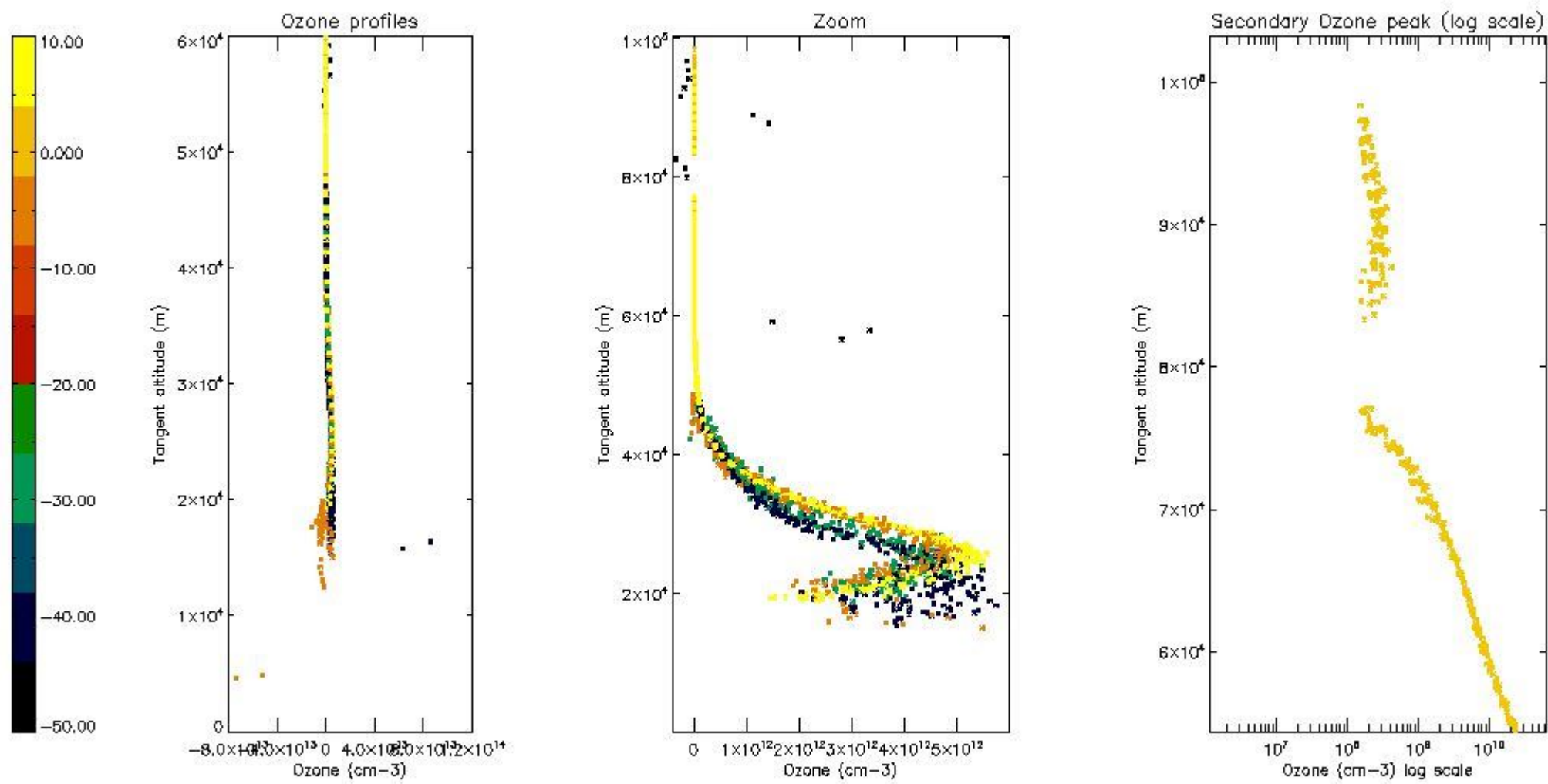
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



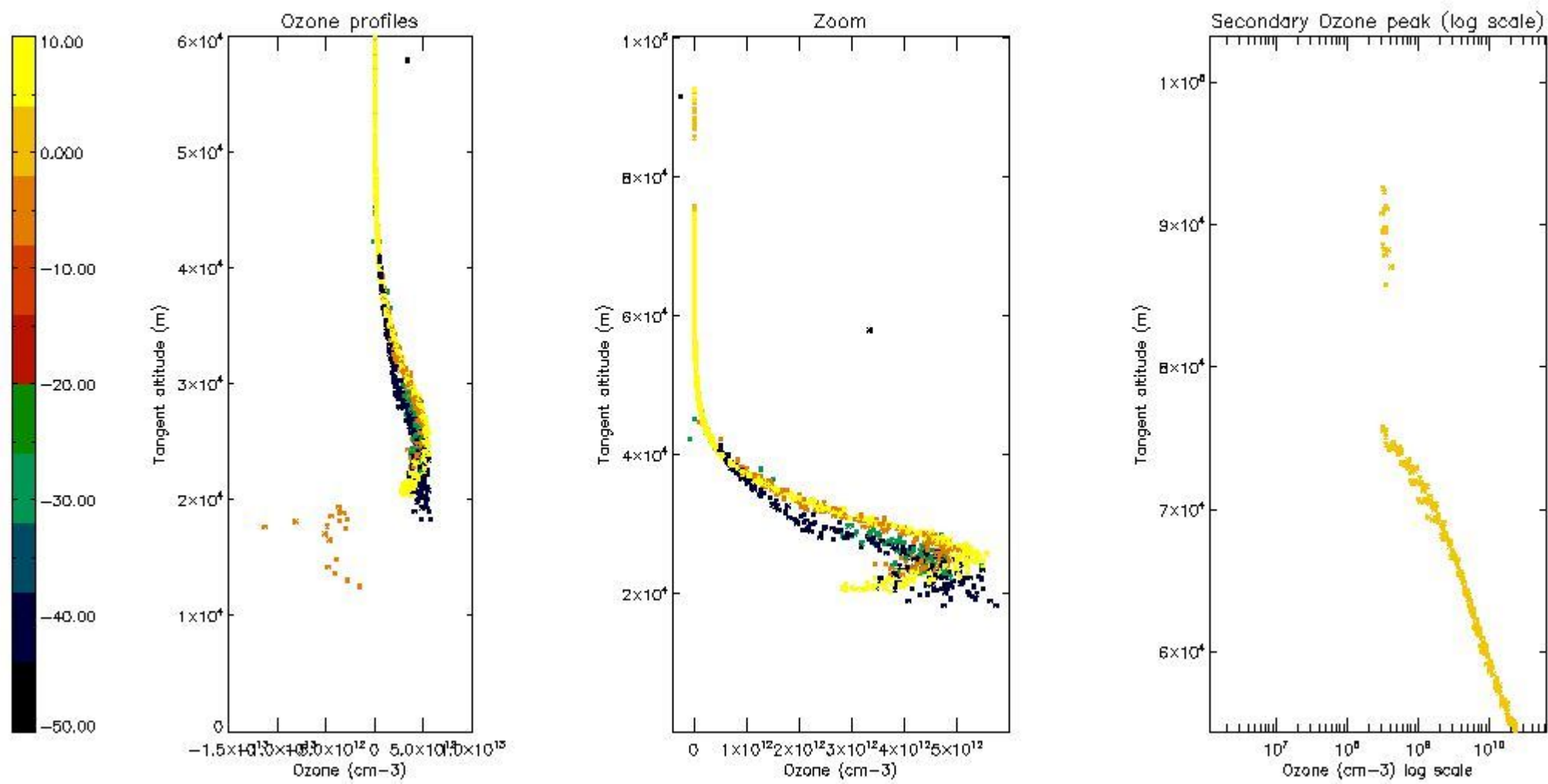
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



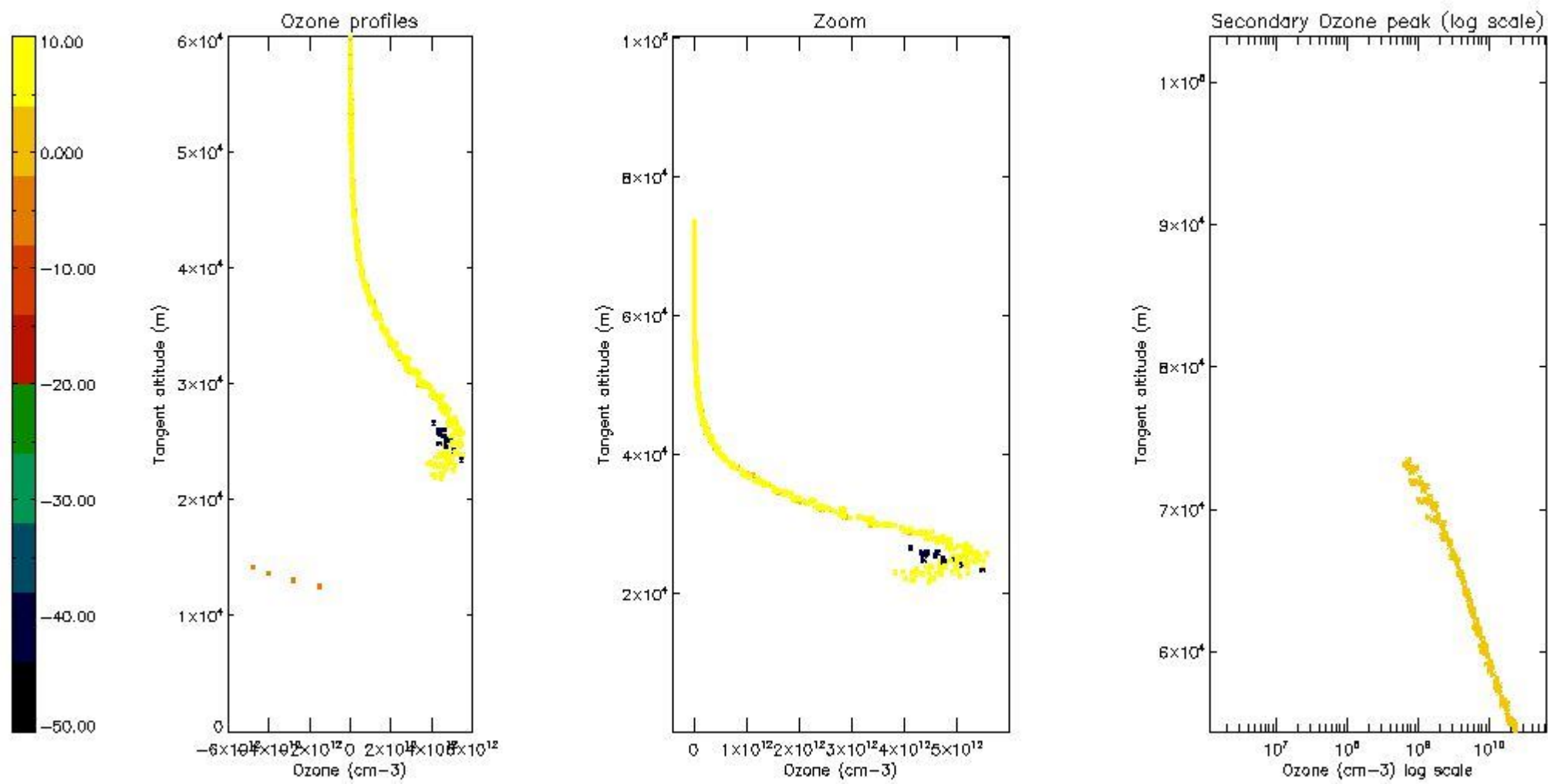
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



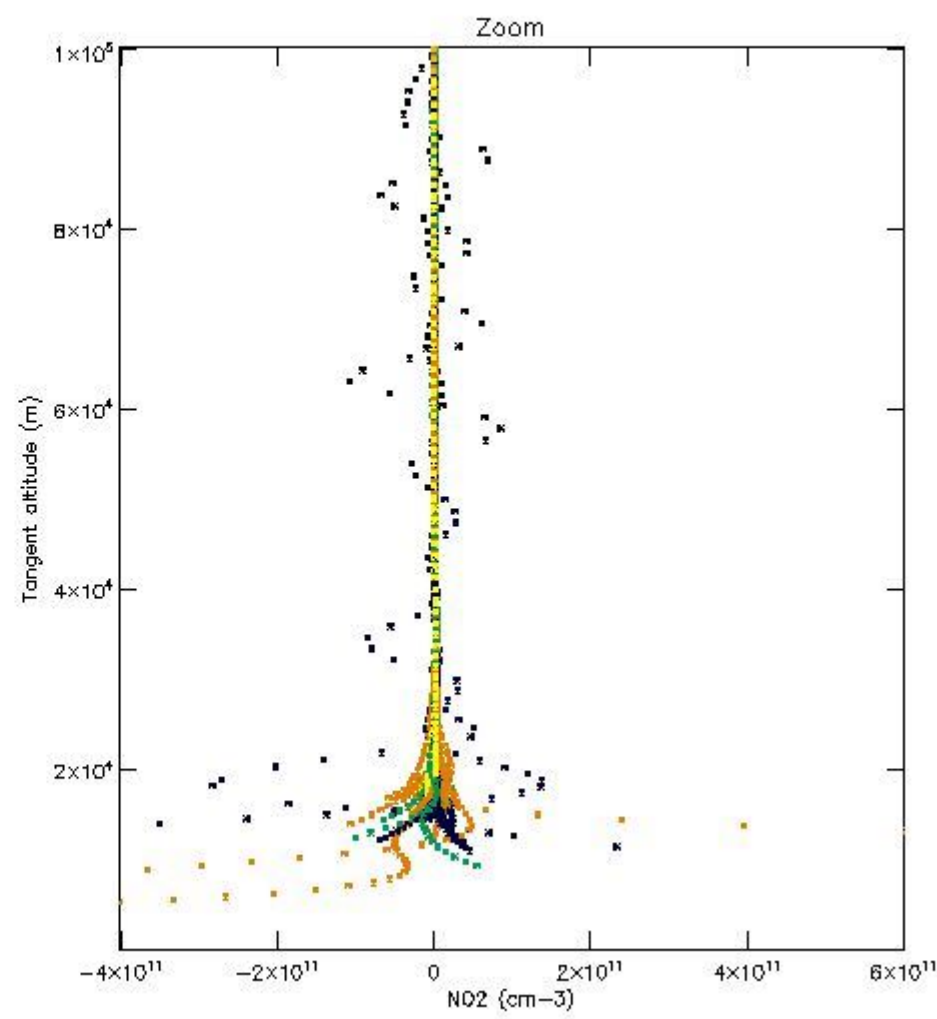
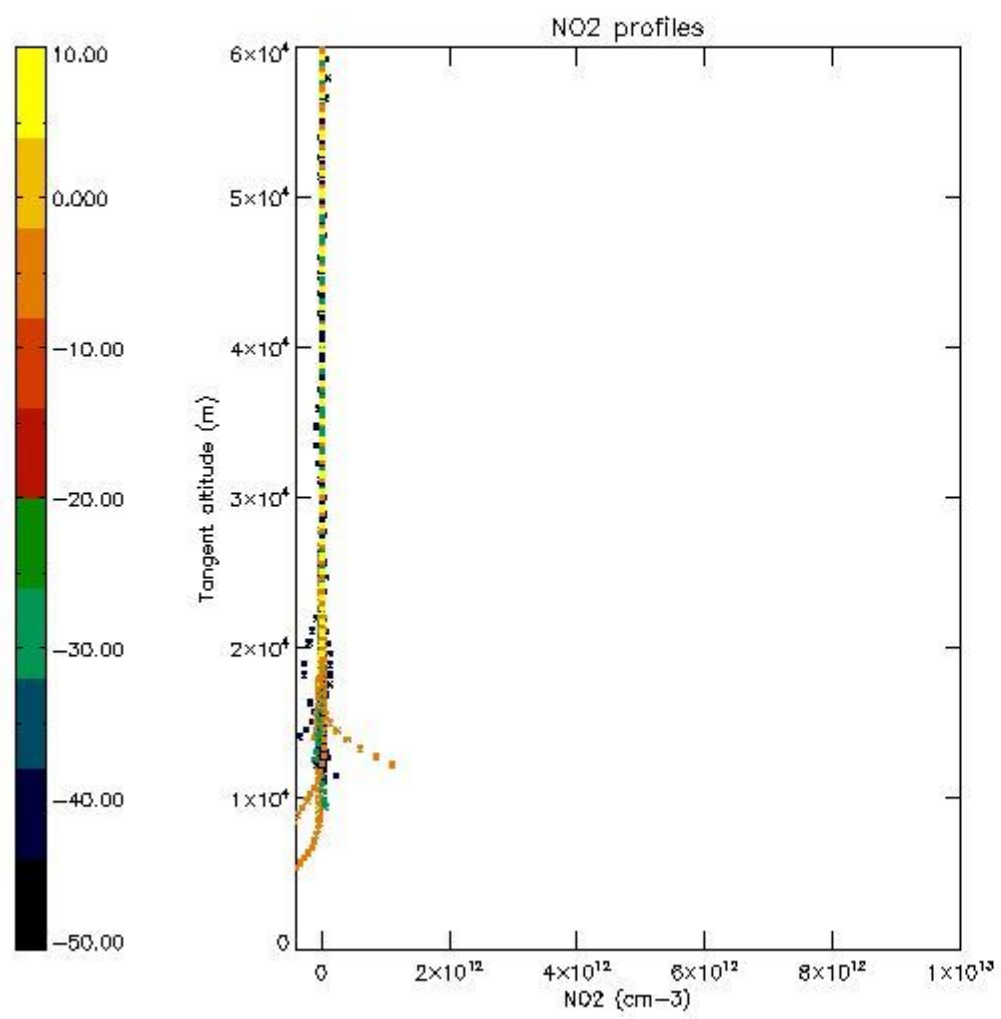
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



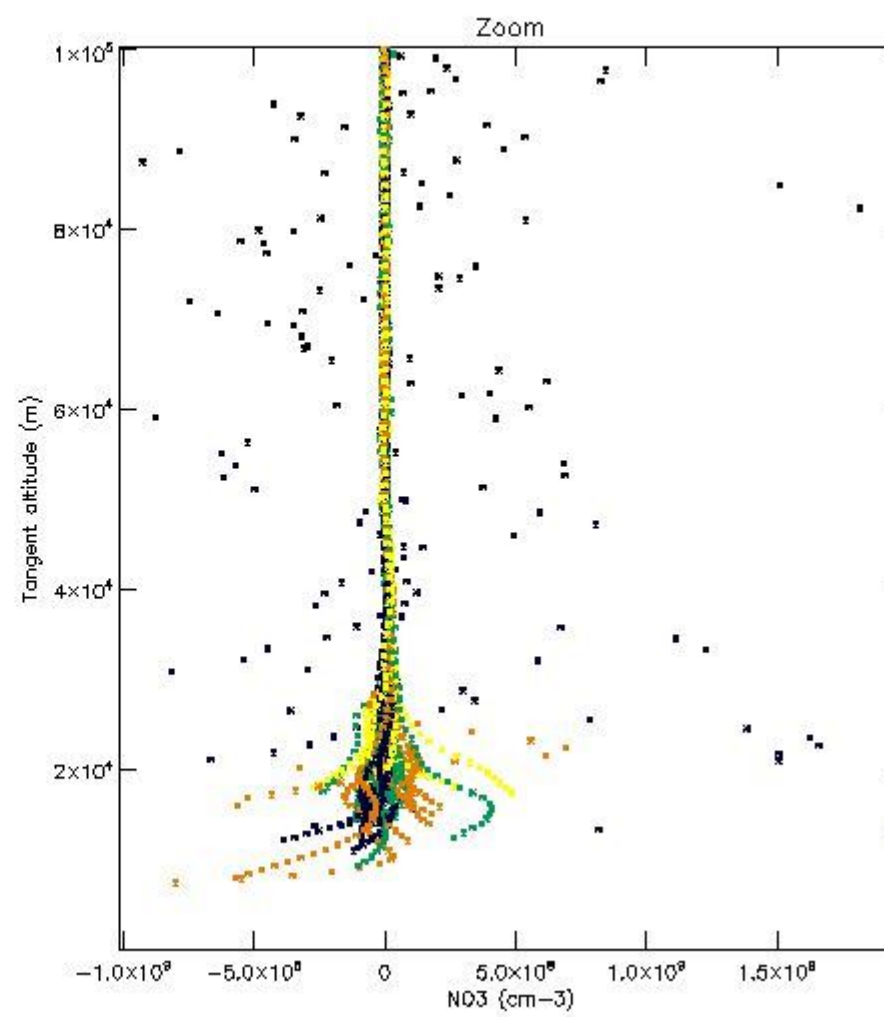
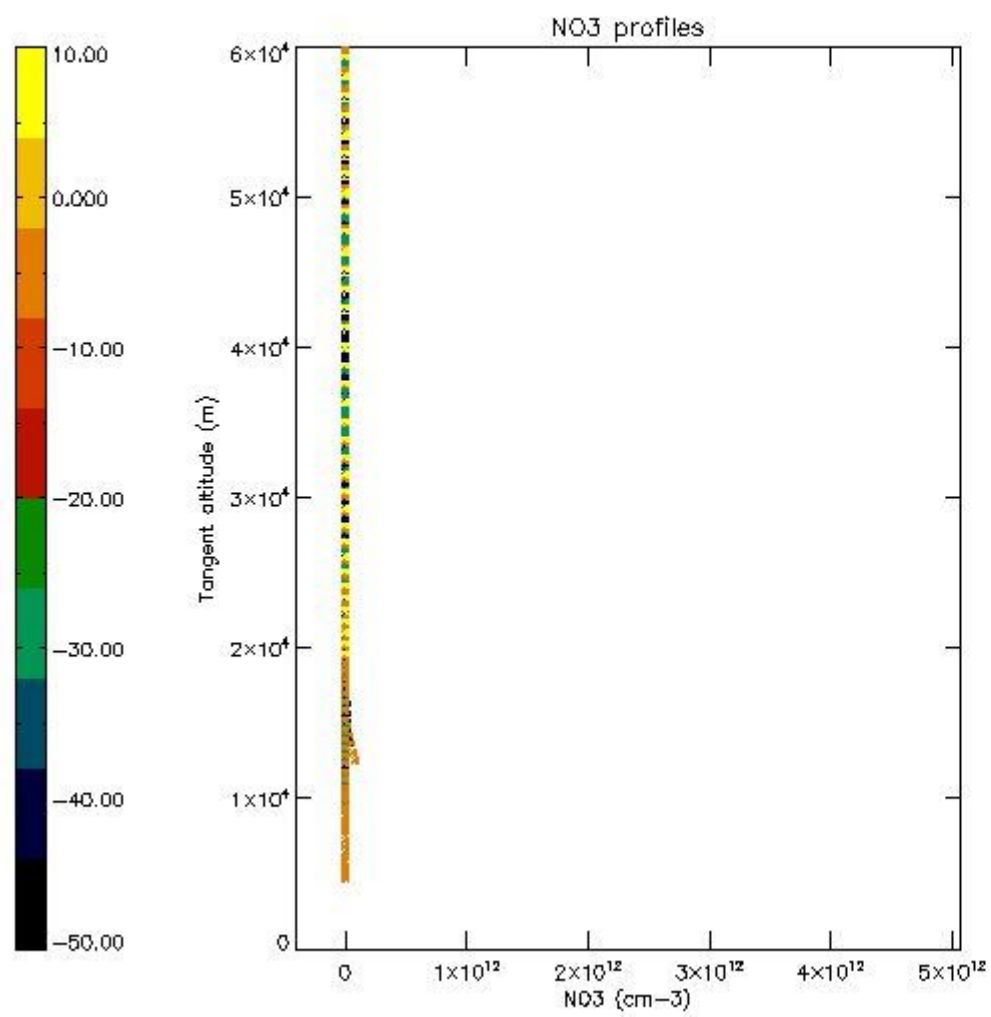
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



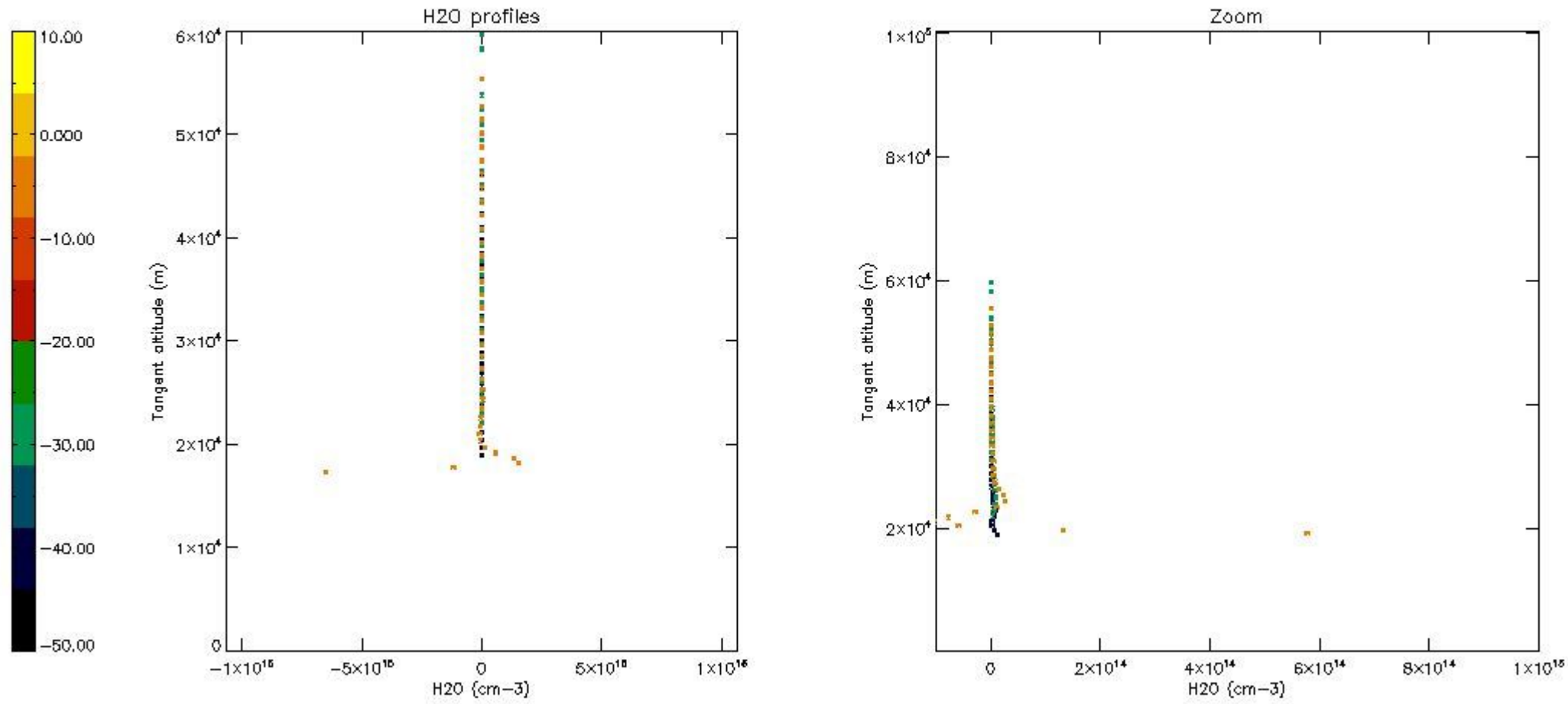
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

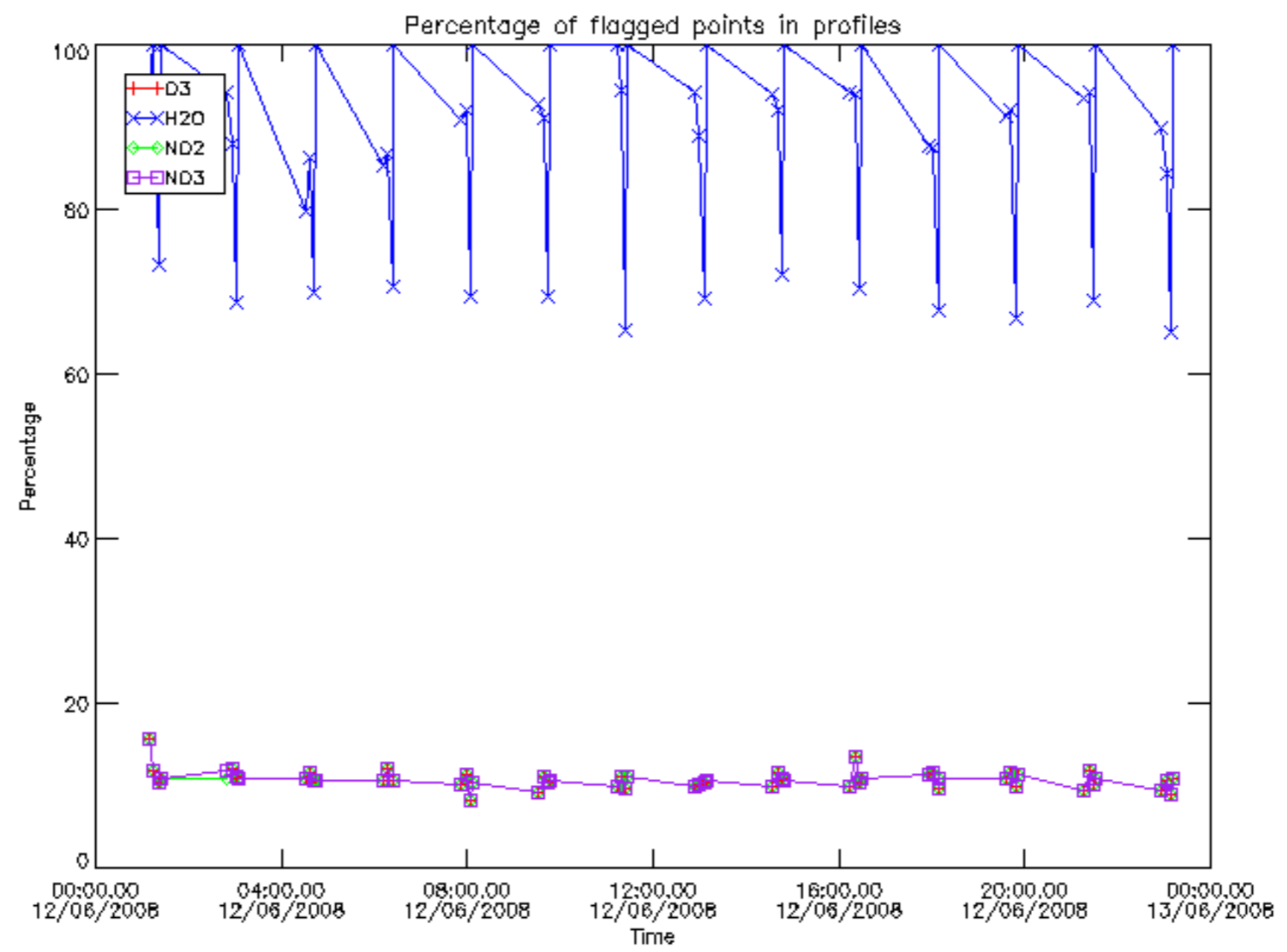
The colorbar represents the latitude.



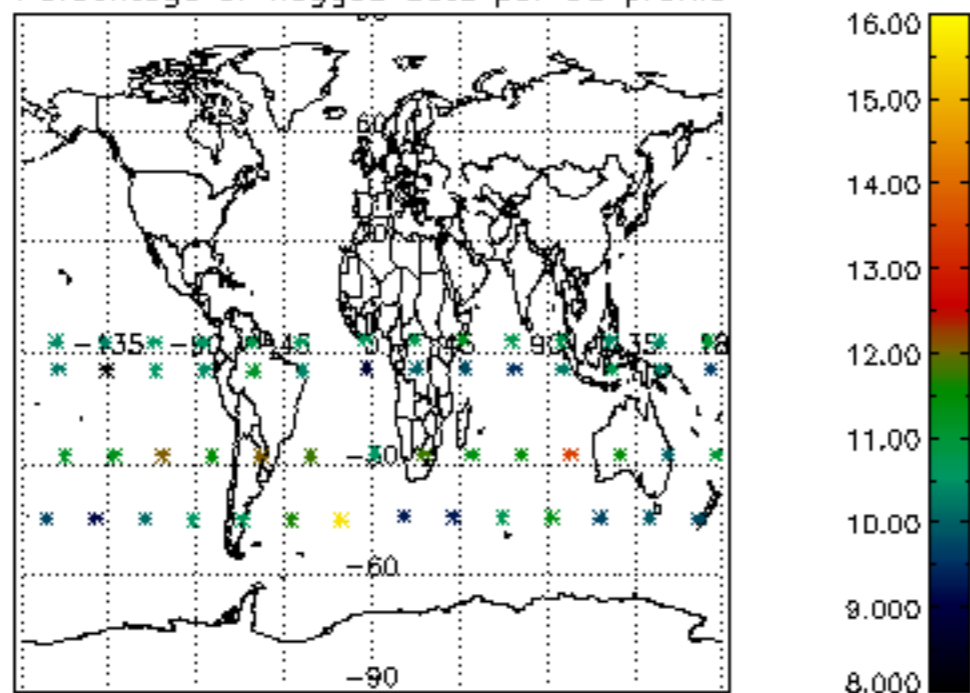
6. Auxiliary Data Files used for the production reported in section 2

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.

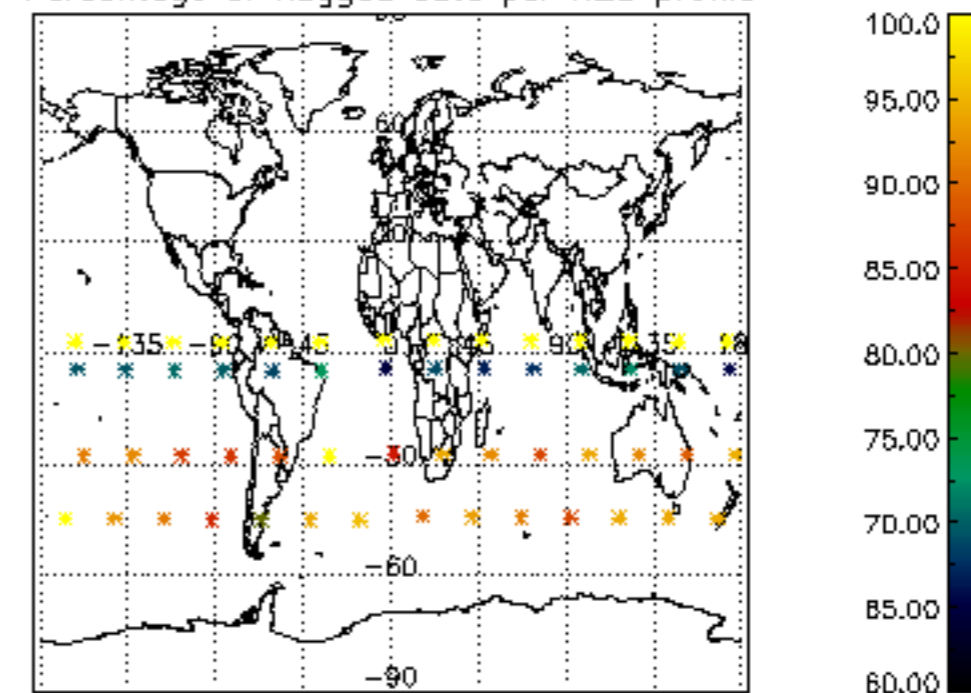
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	12-JUN-2008 00:04:02
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	12-JUN-2008 00:04:02
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	12-JUN-2008 00:04:02



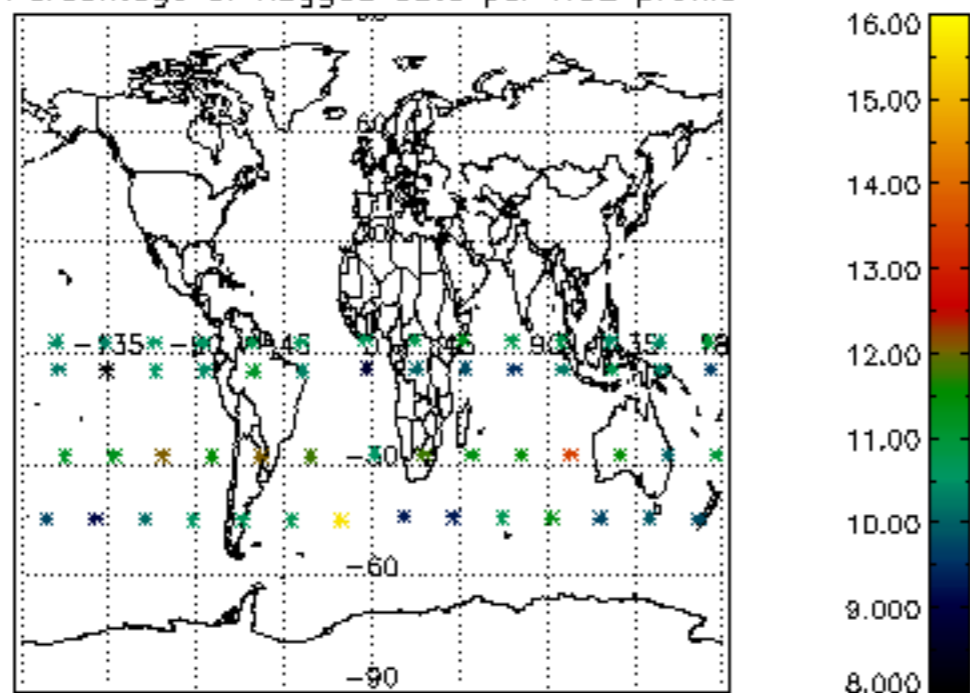
Percentage of flagged data per D3 profile



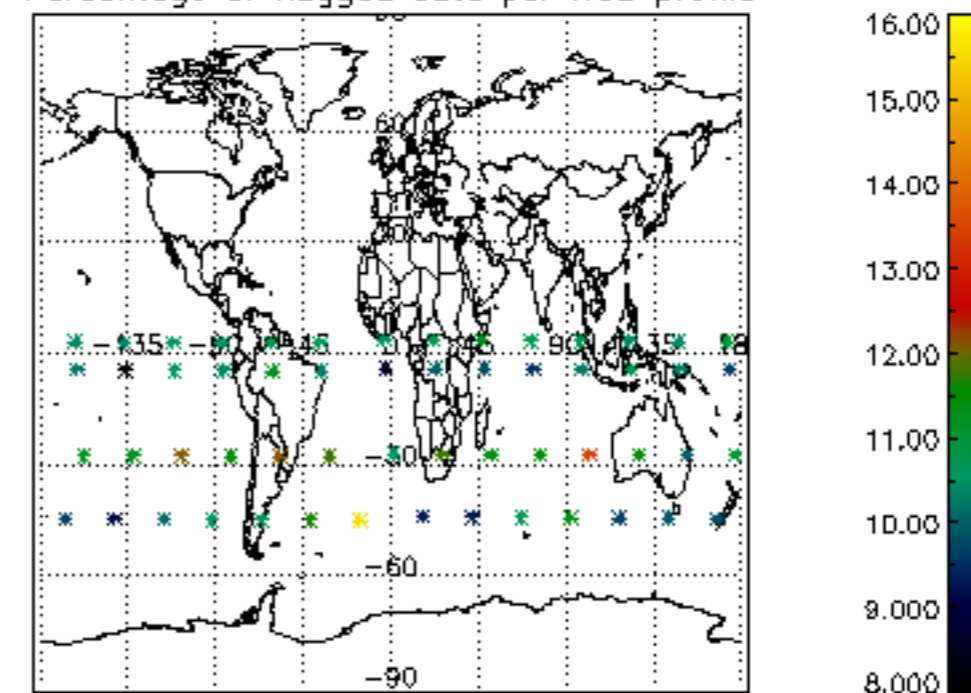
Percentage of flagged data per H2O profile

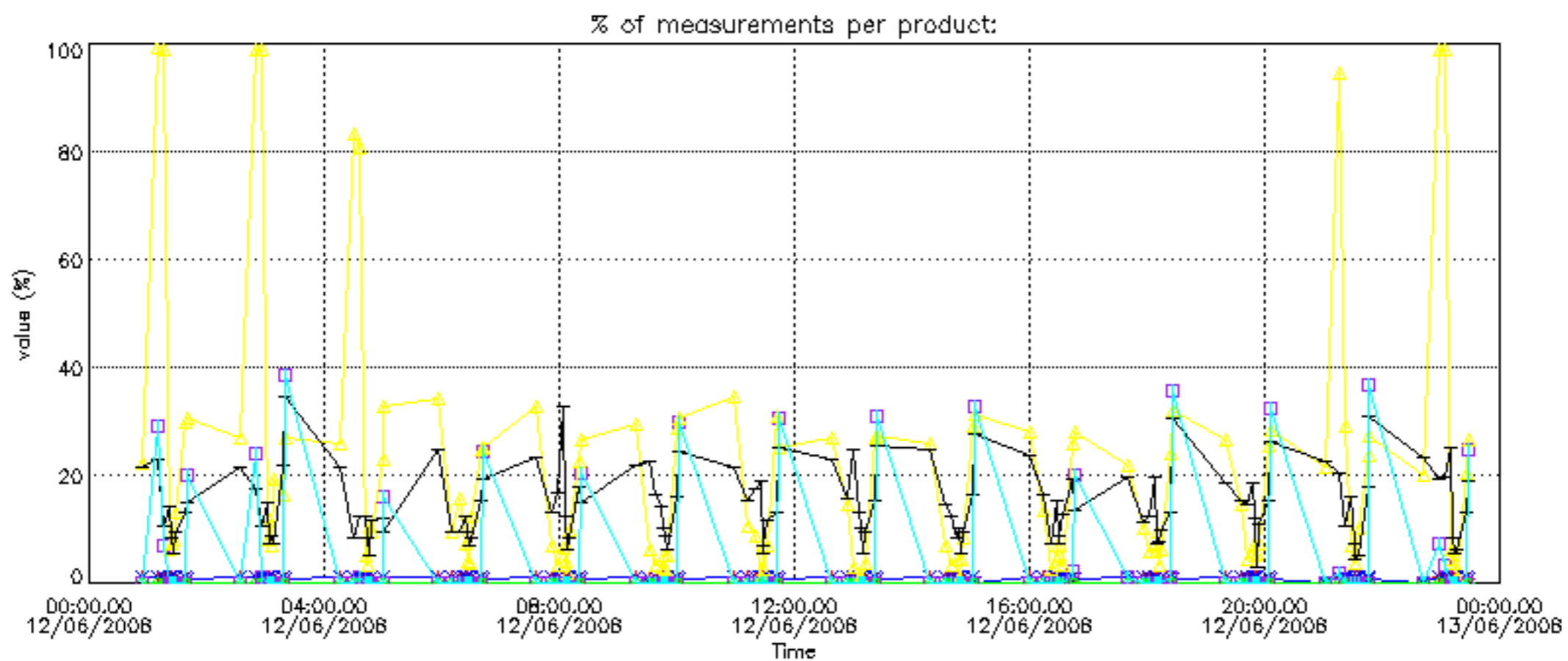


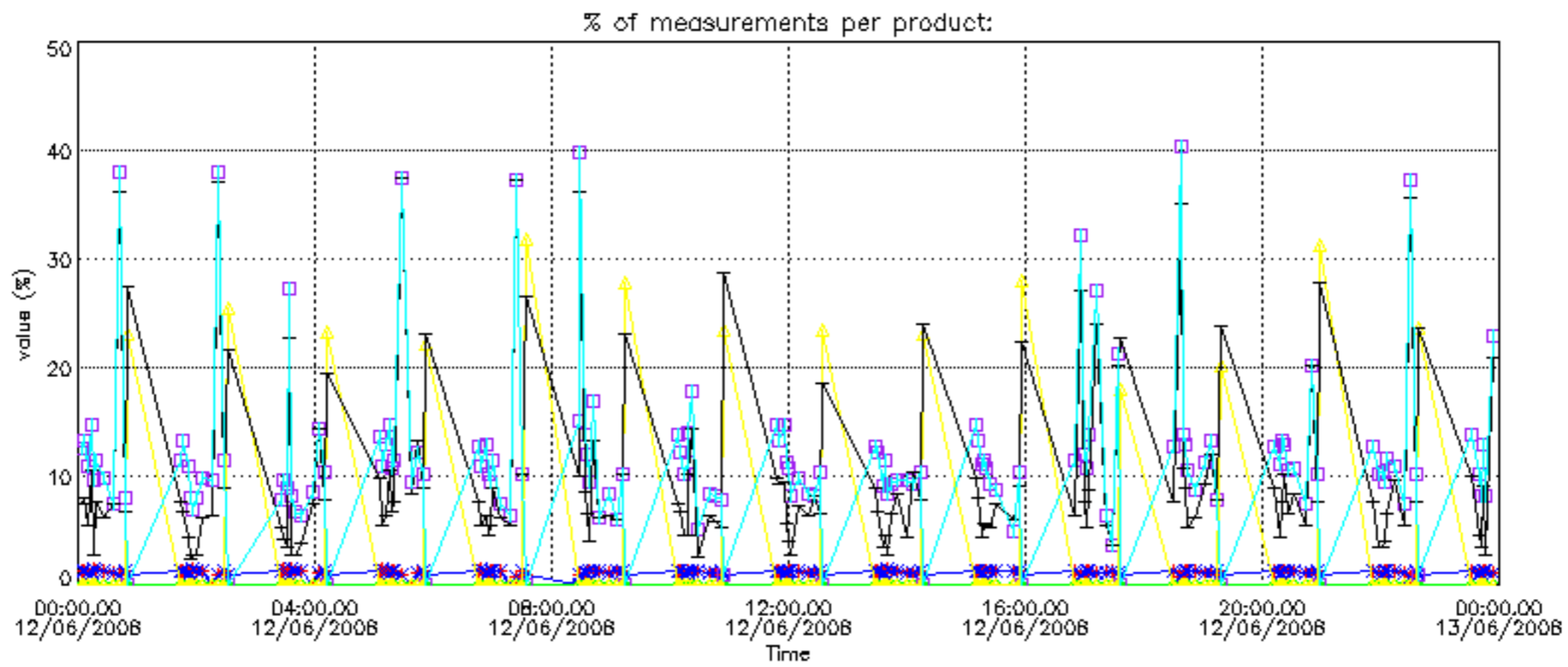
Percentage of flagged data per NO2 profile



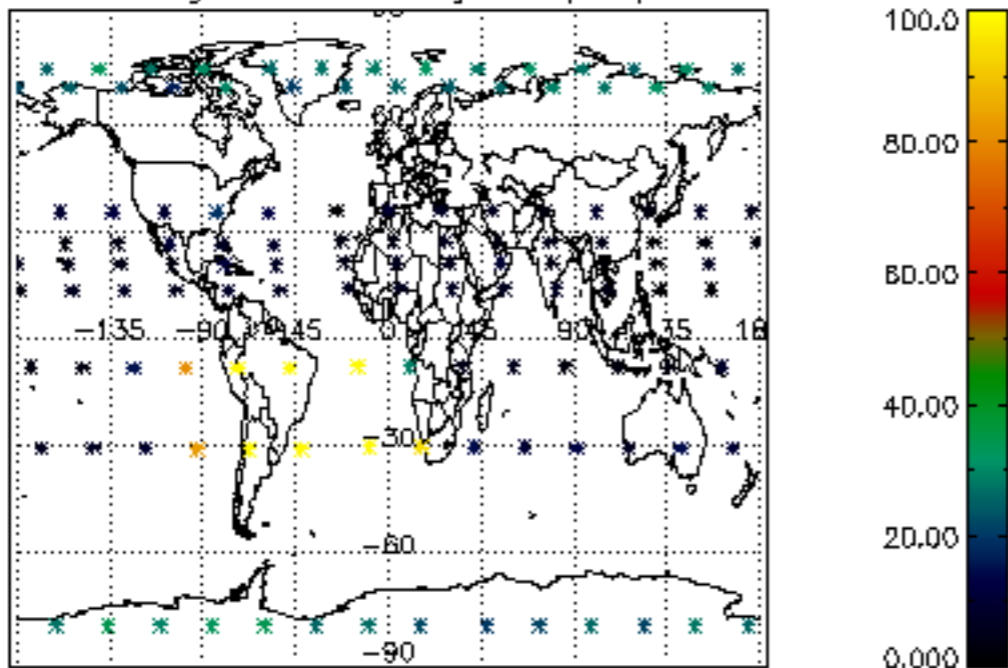
Percentage of flagged data per NO3 profile



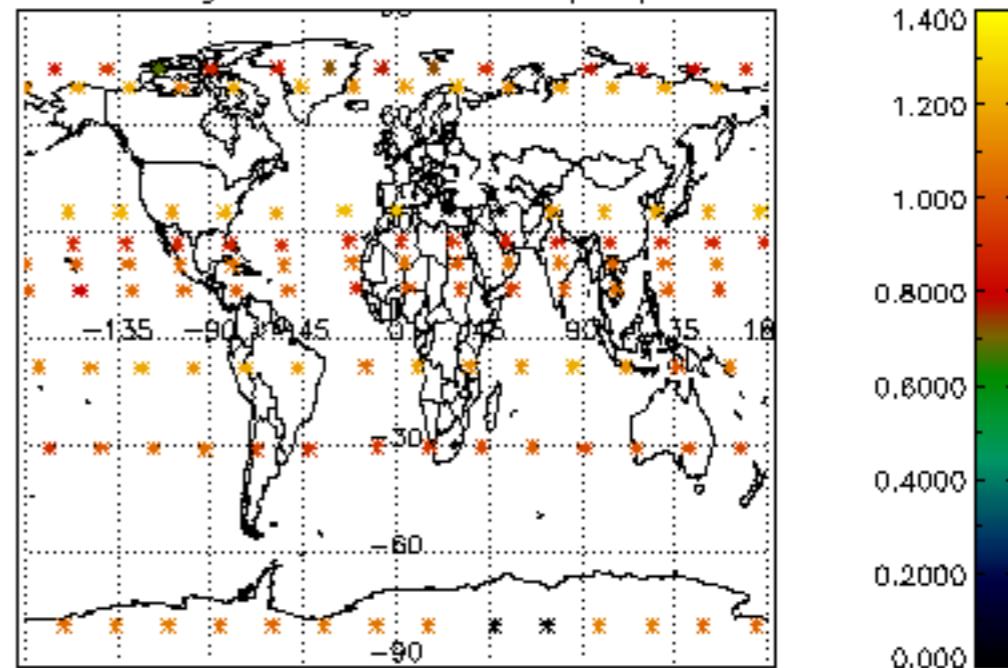




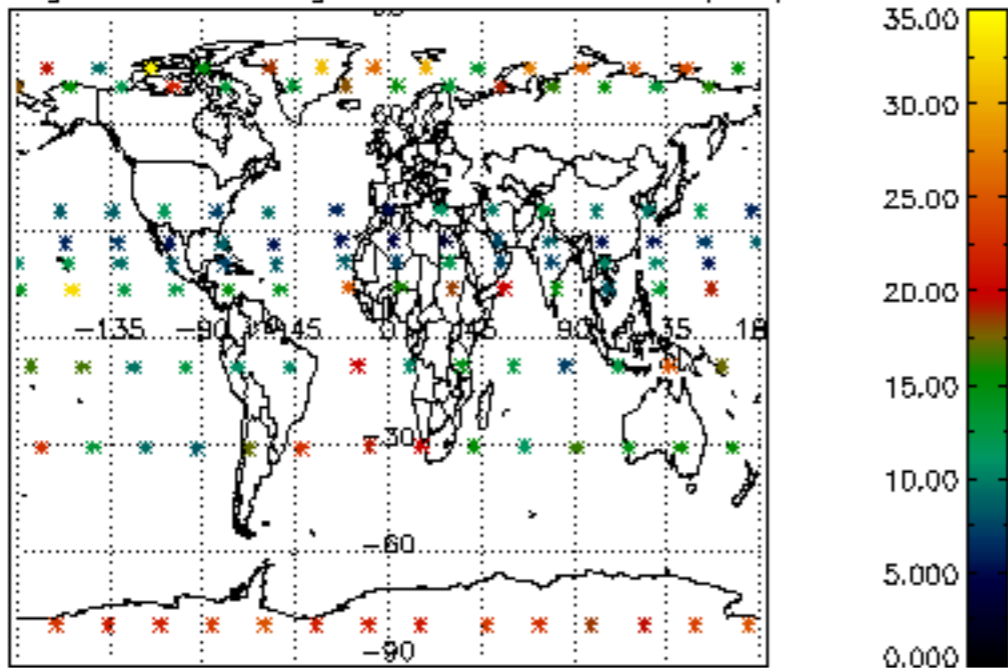
Percentage of cosmic ray hits per profile



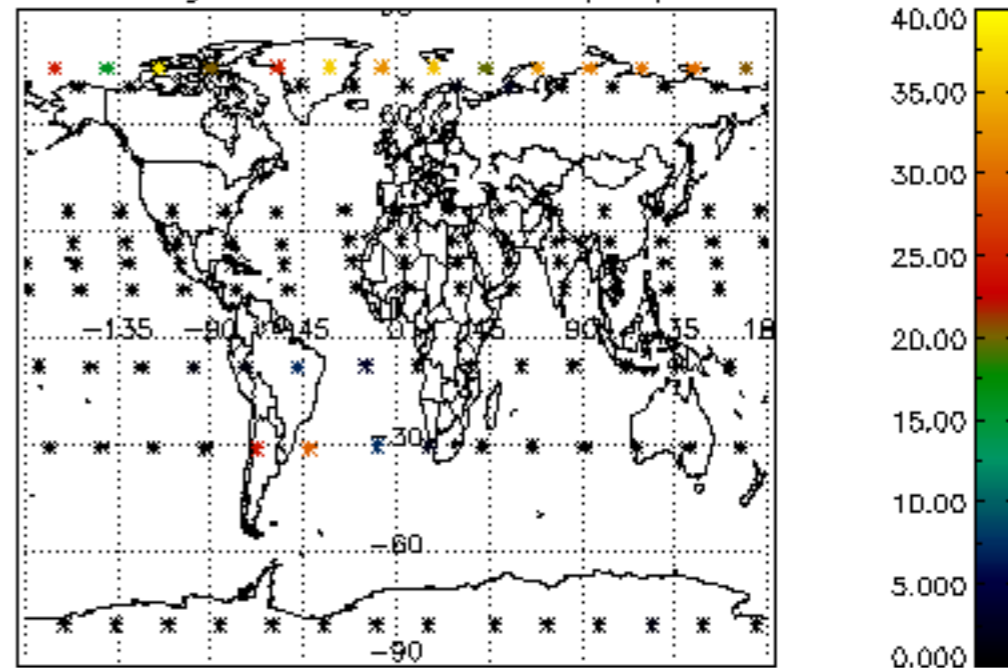
Percentage of datation errors per profile



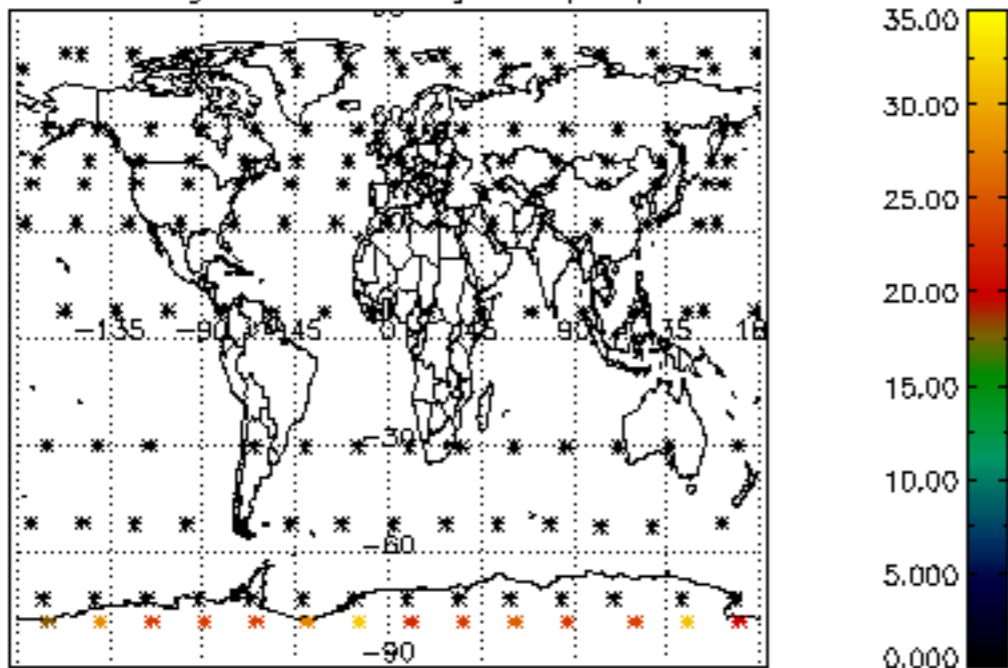
Percentage of star falling outside central band per profile



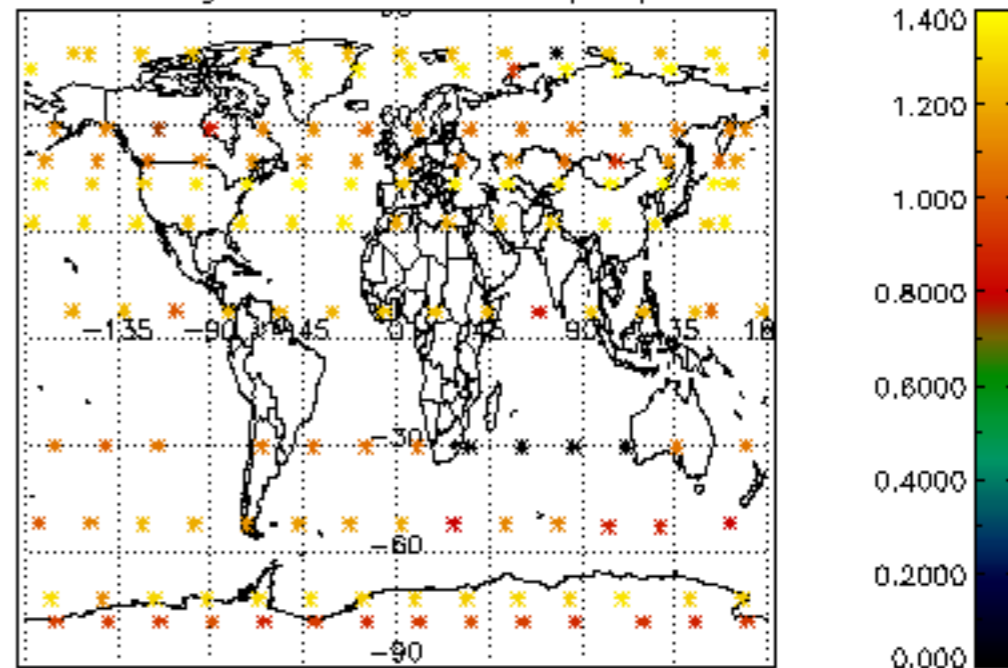
Percentage of saturation errors per profile



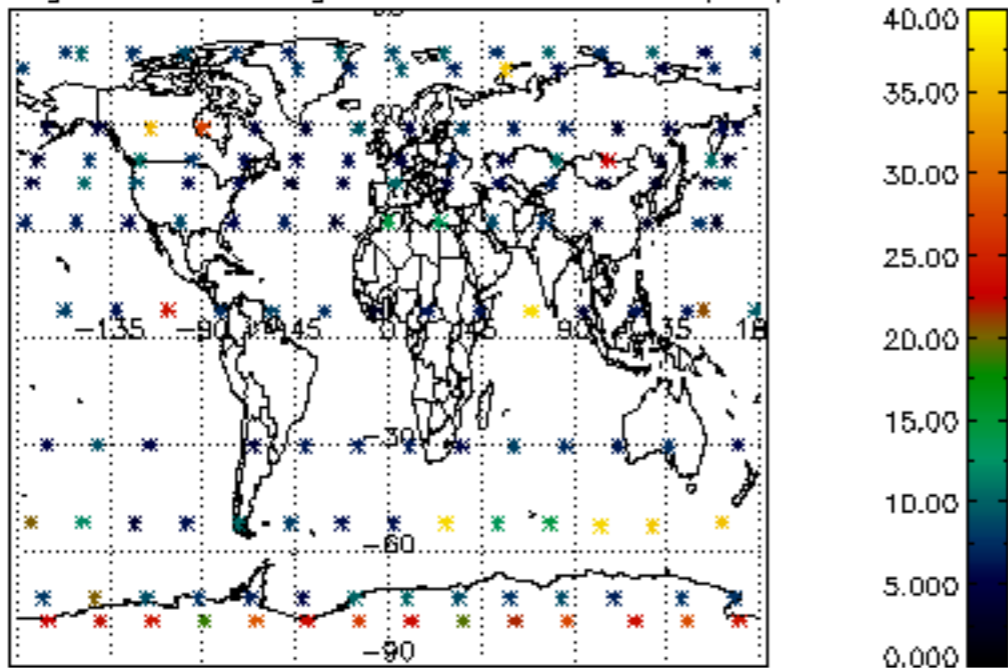
Percentage of cosmic ray hits per profile



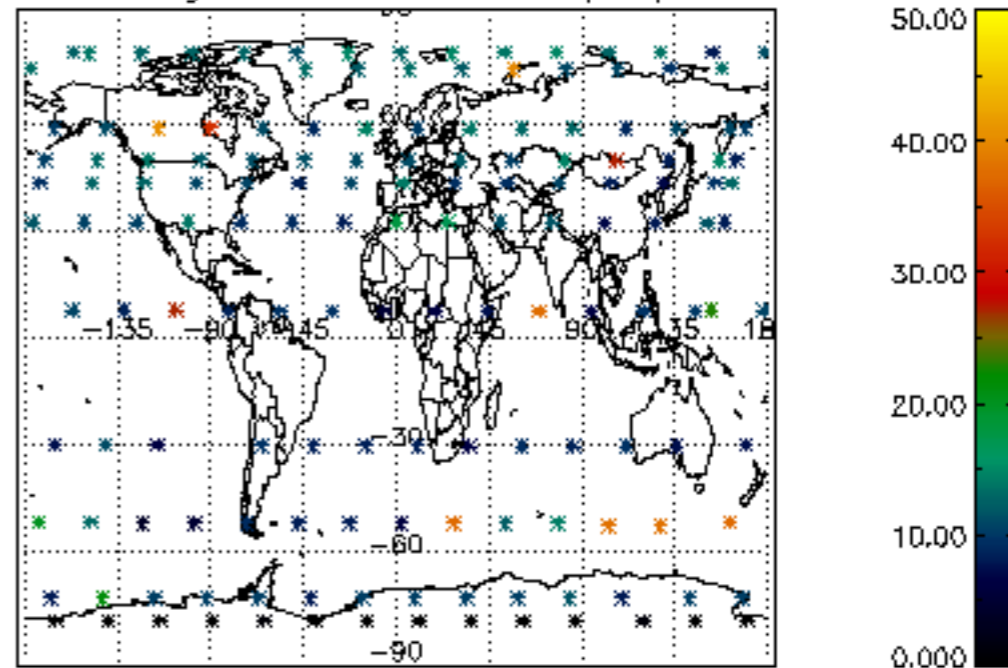
Percentage of datation errors per profile

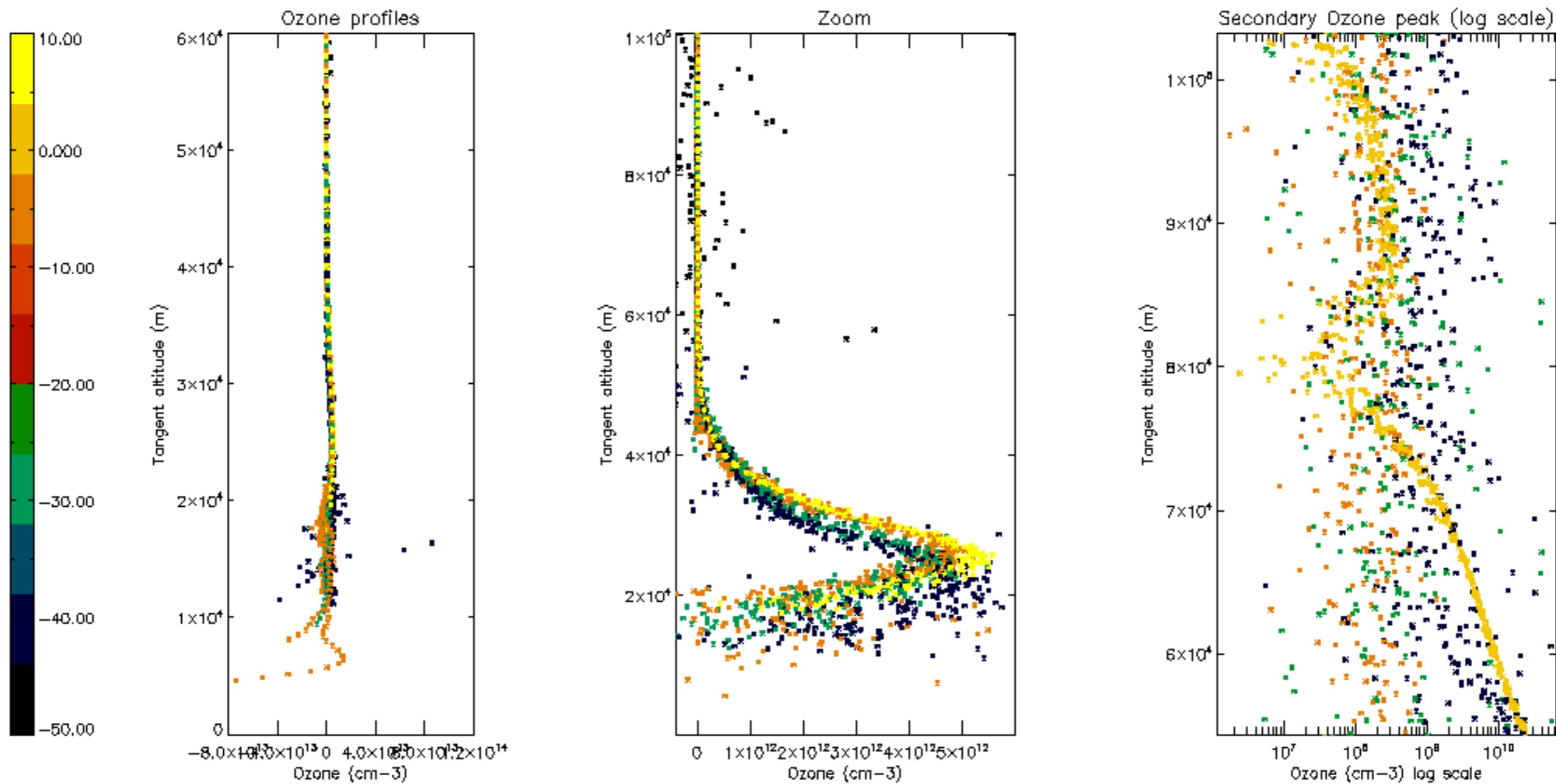


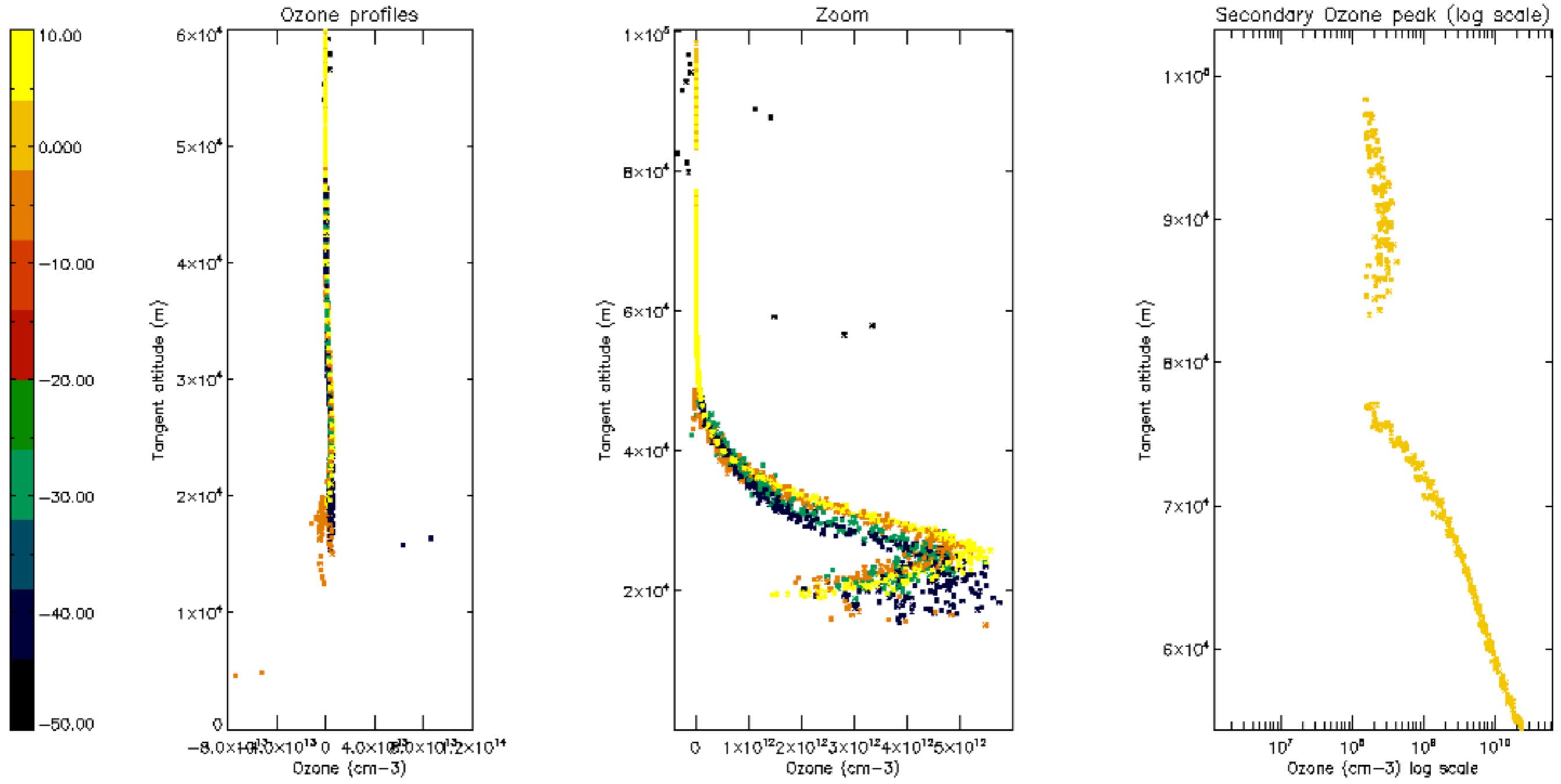
Percentage of star falling outside central band per profile

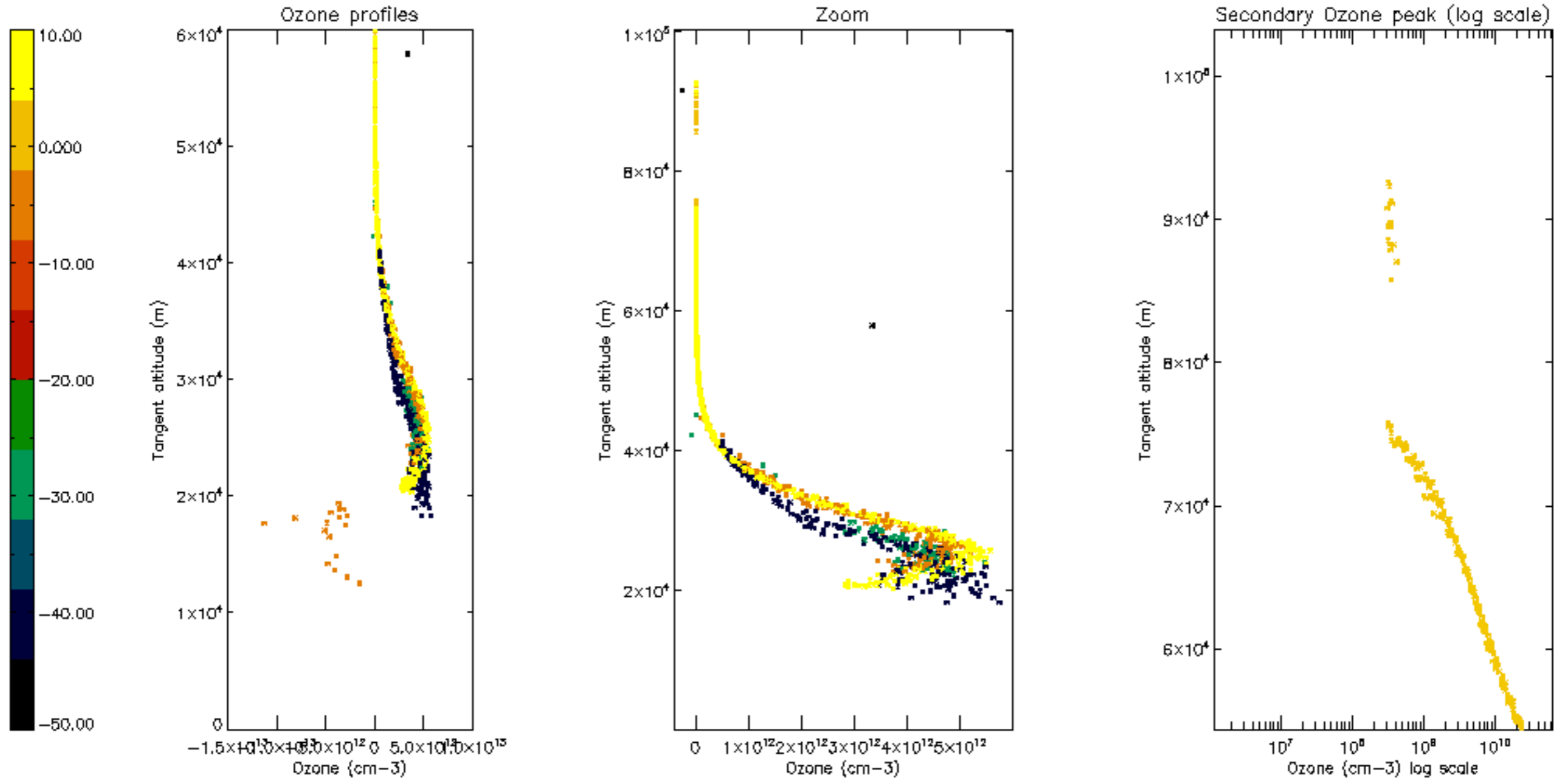


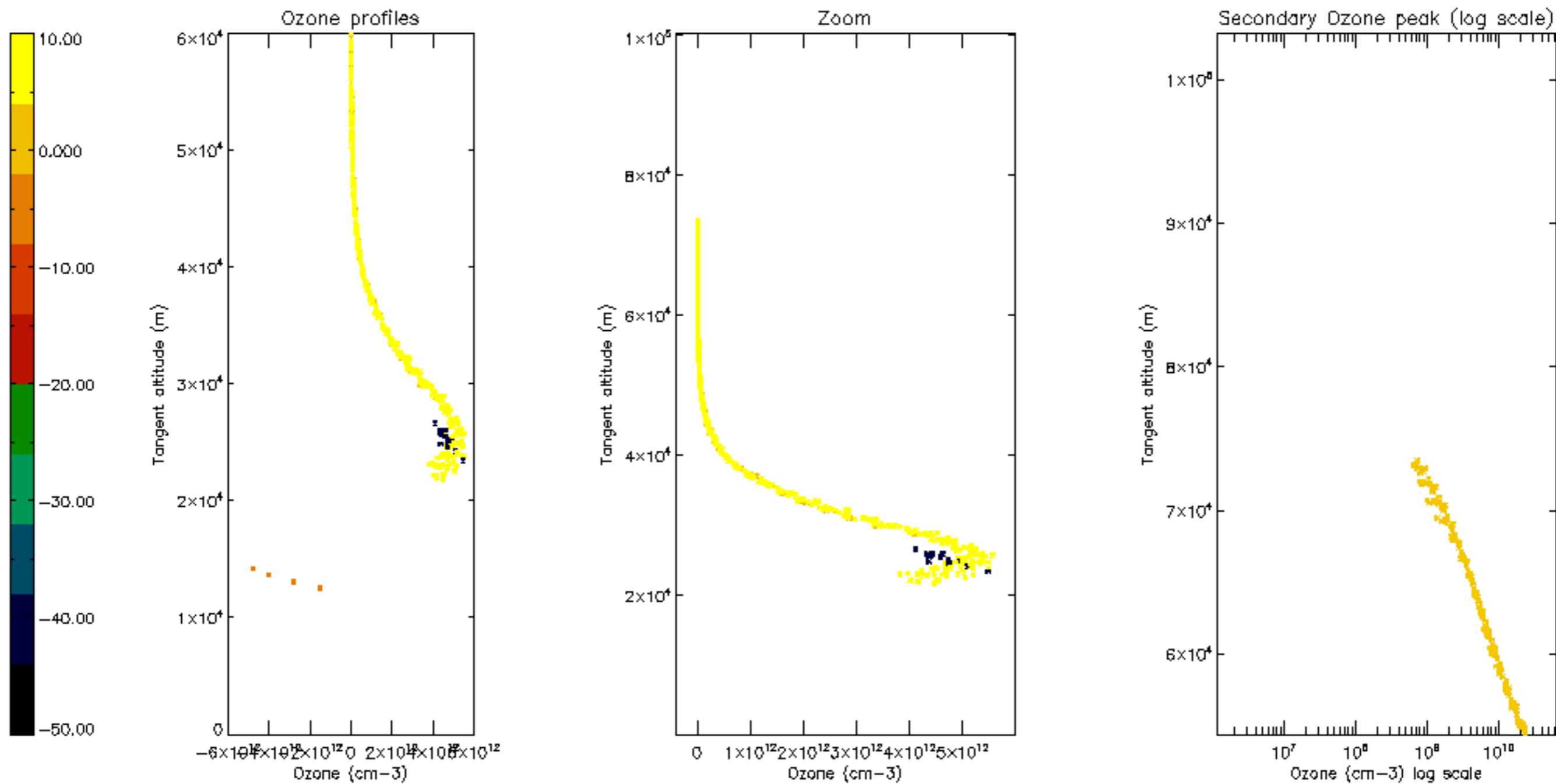
Percentage of saturation errors per profile

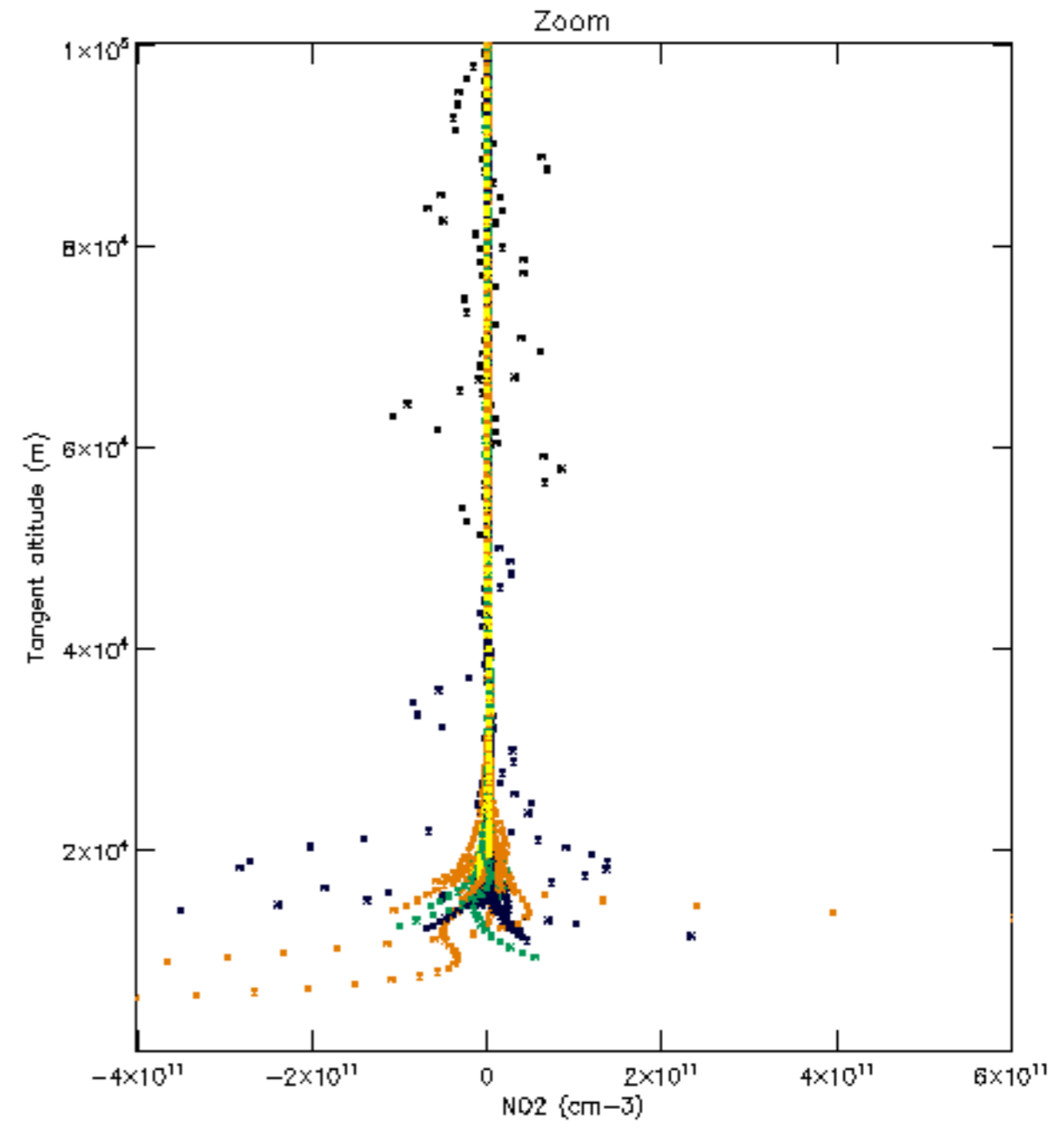
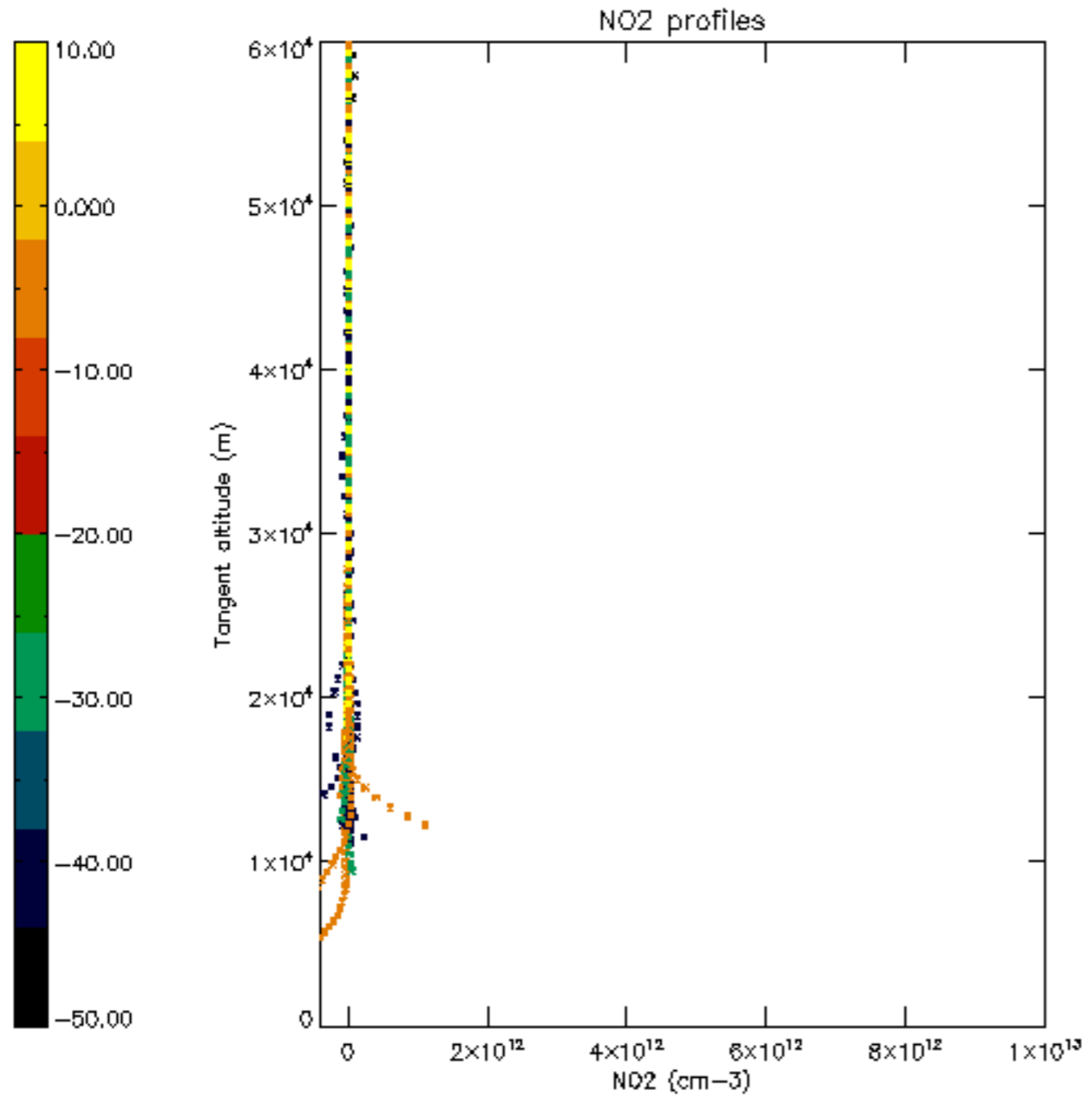


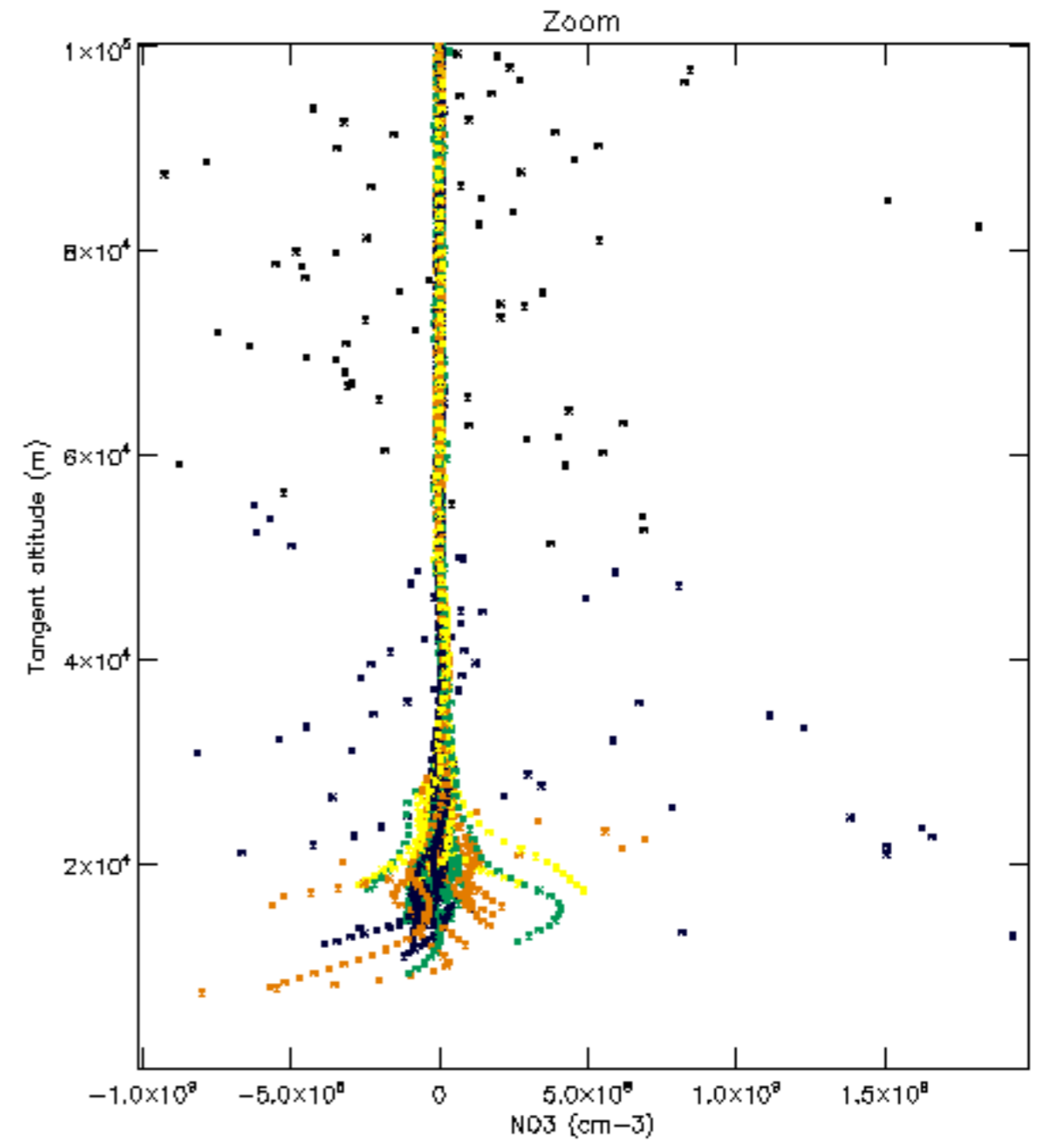
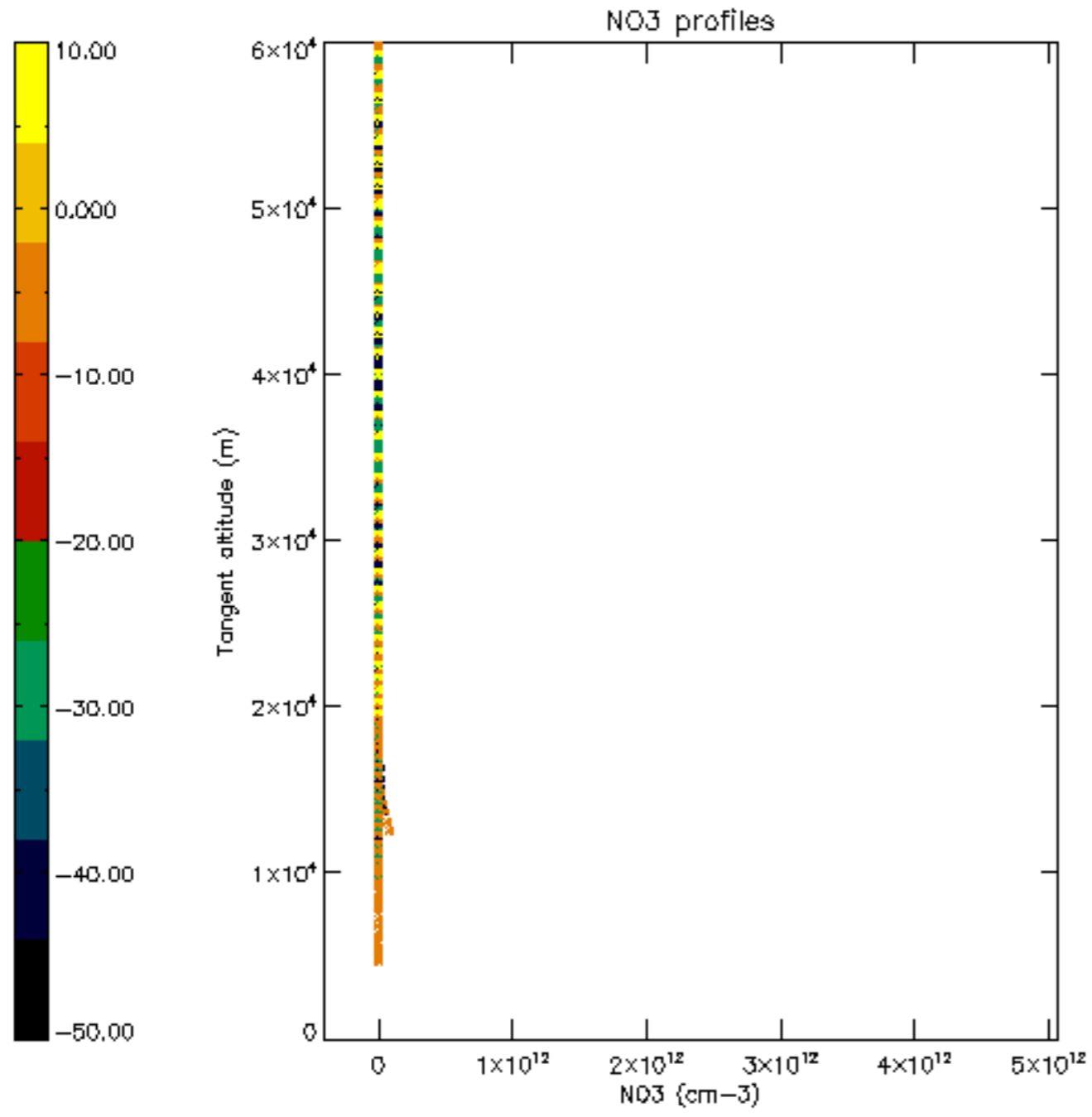


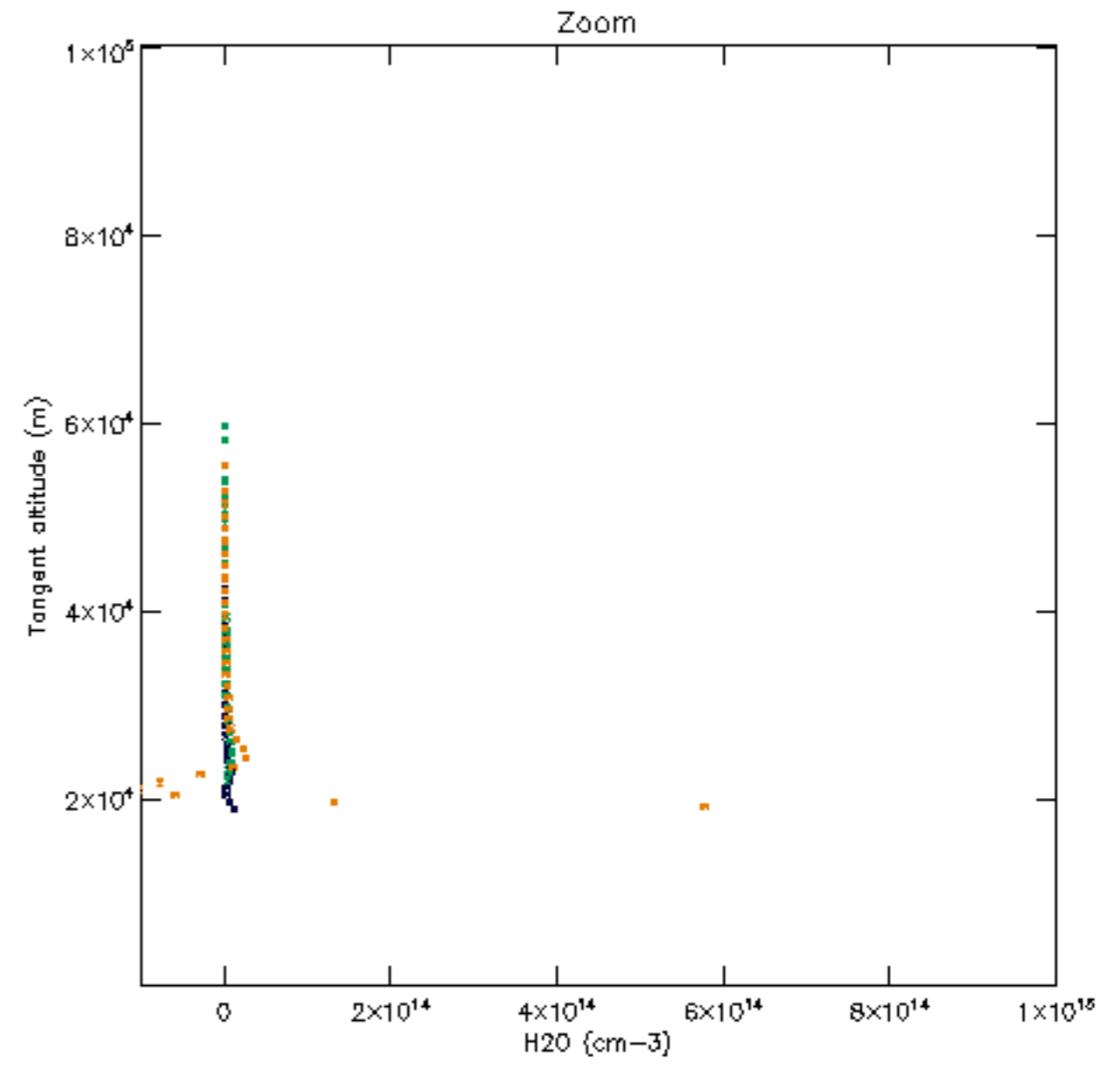
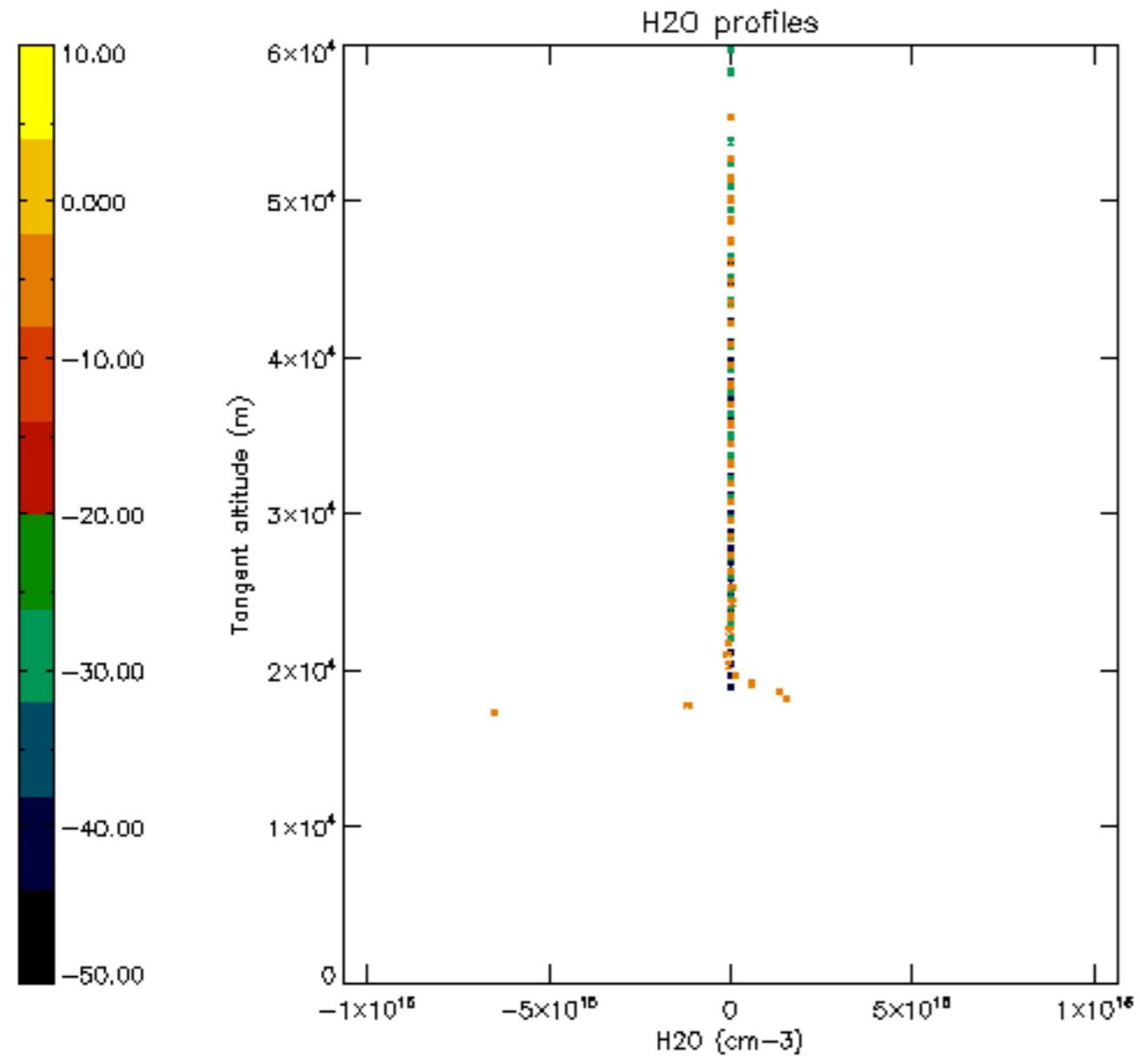


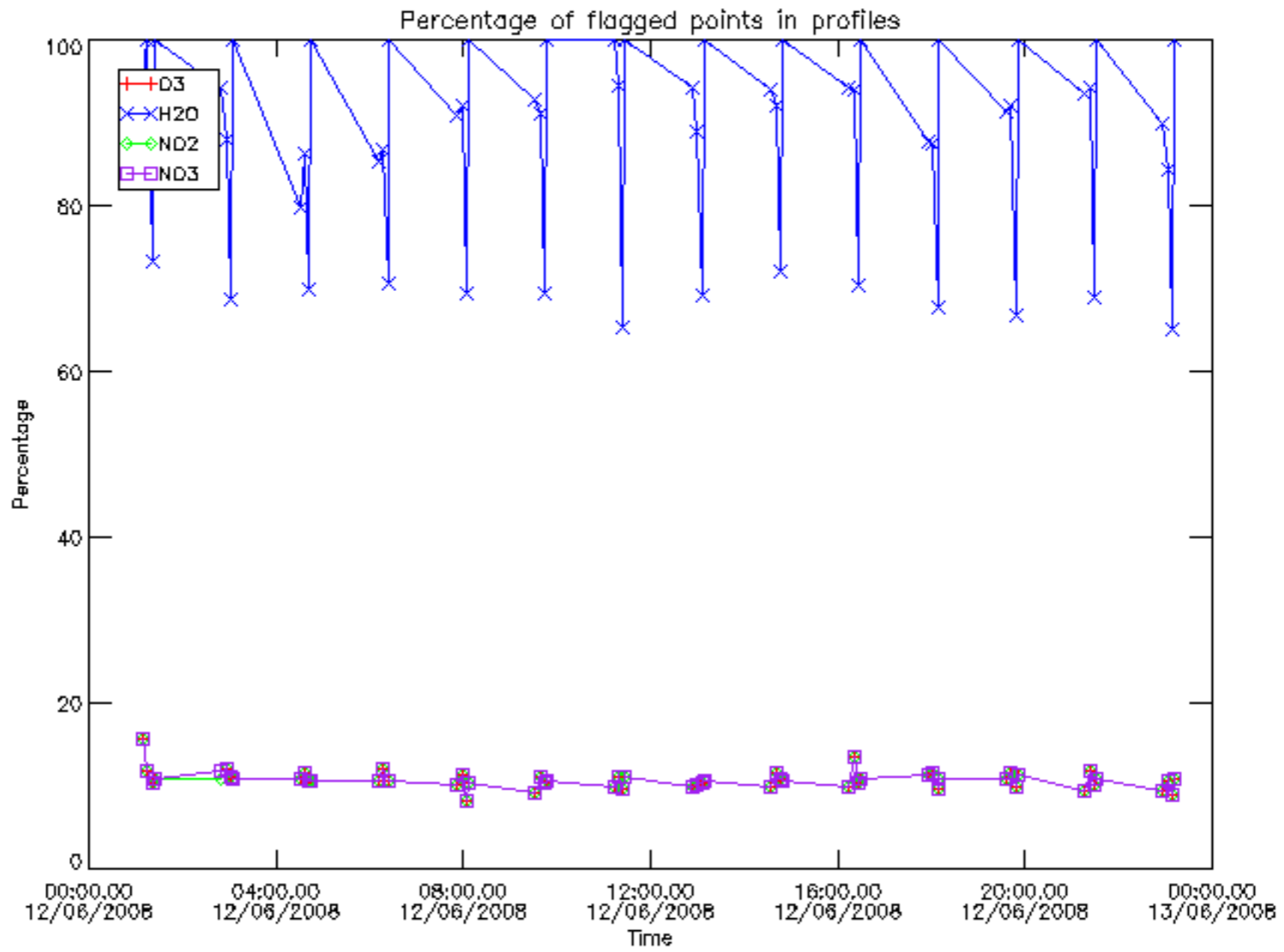




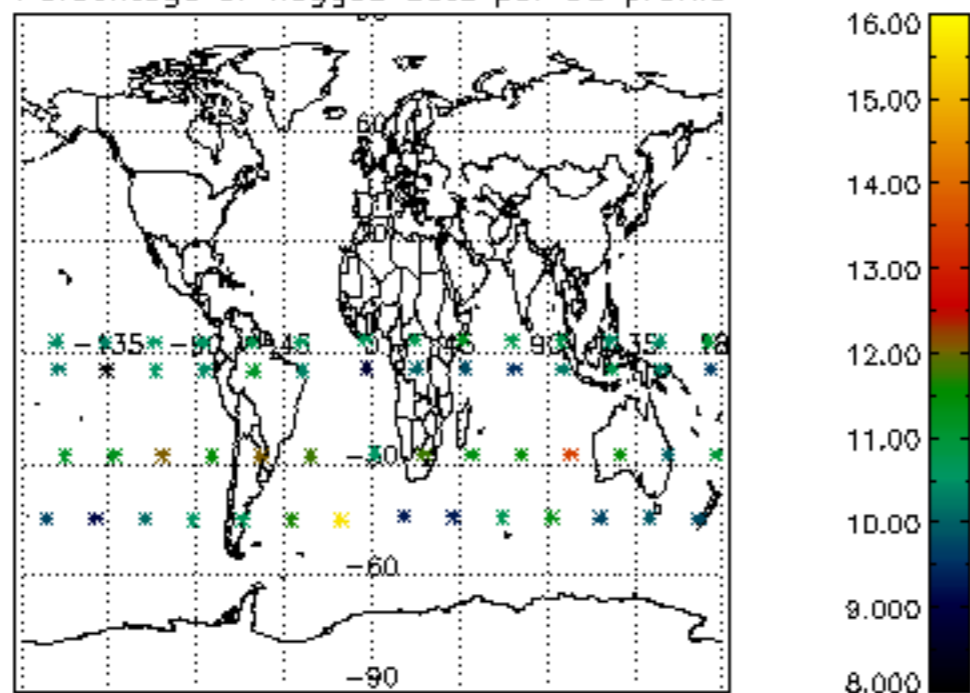




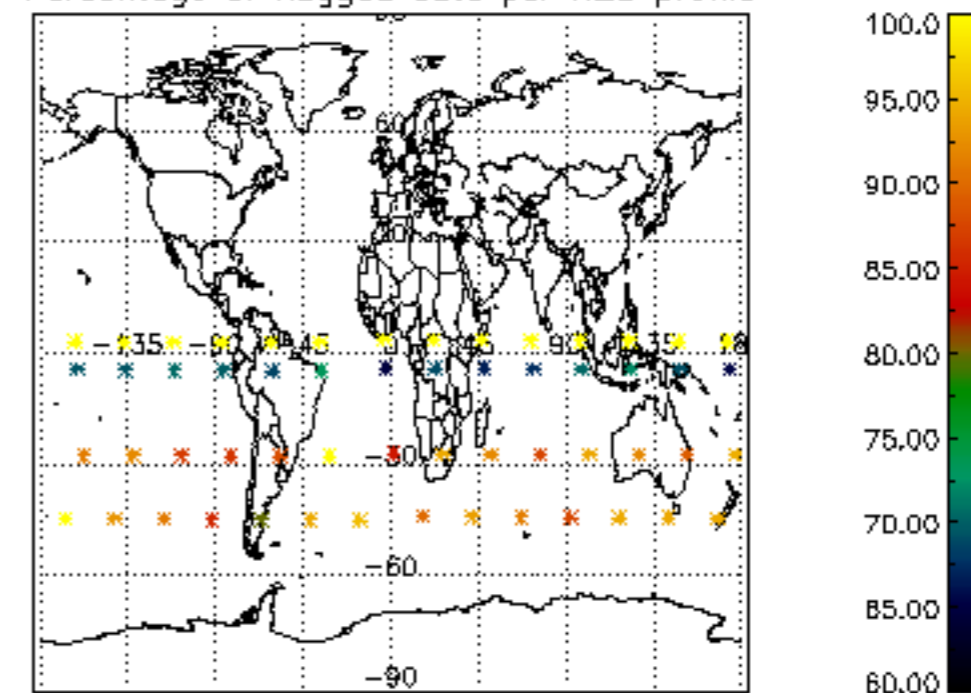




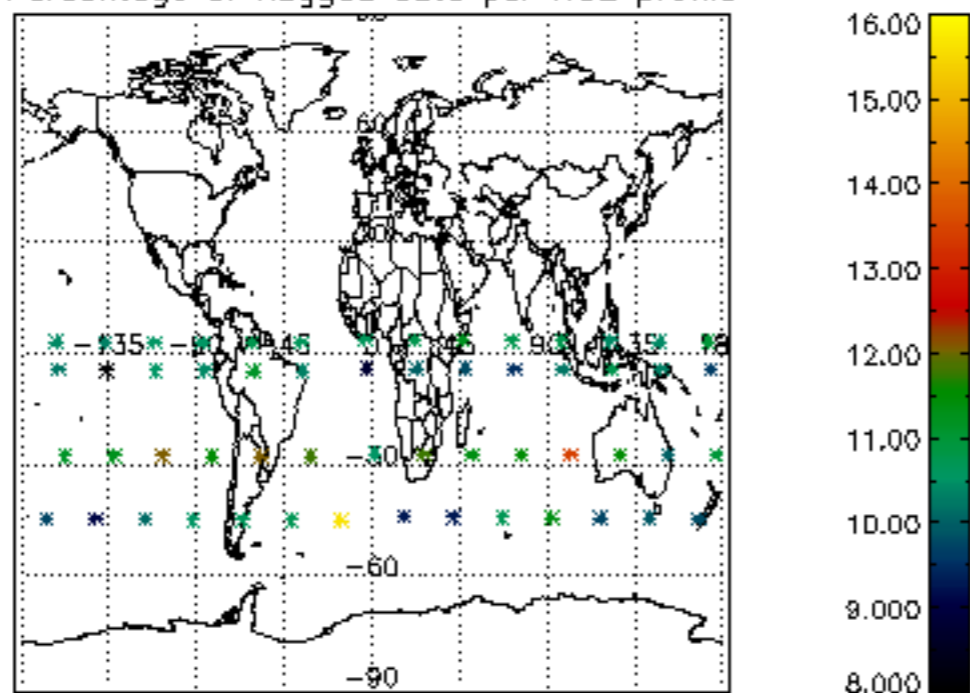
Percentage of flagged data per D3 profile



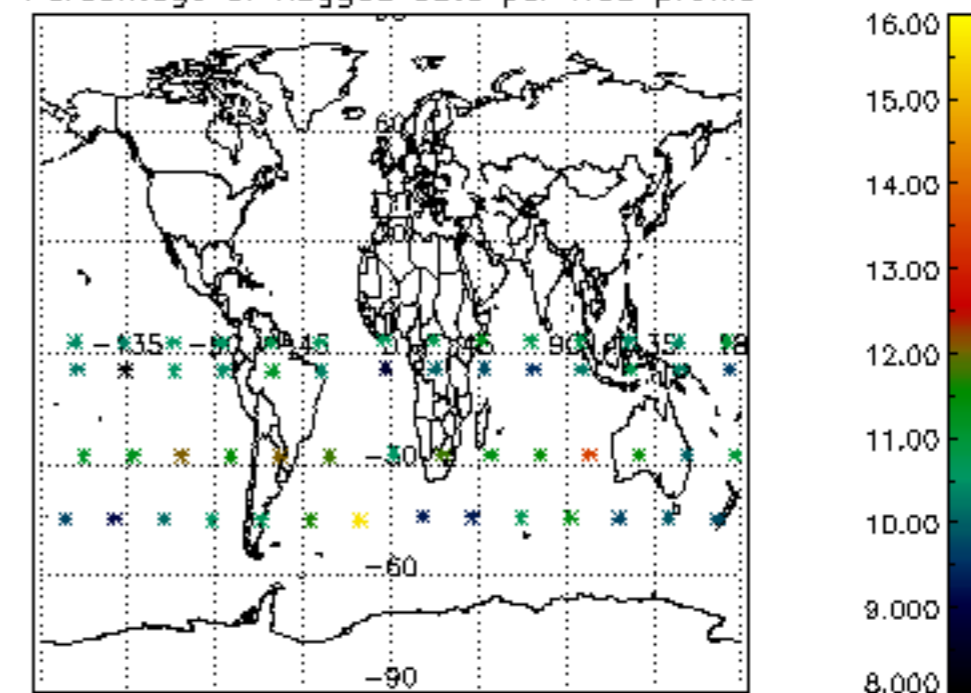
Percentage of flagged data per H2O profile

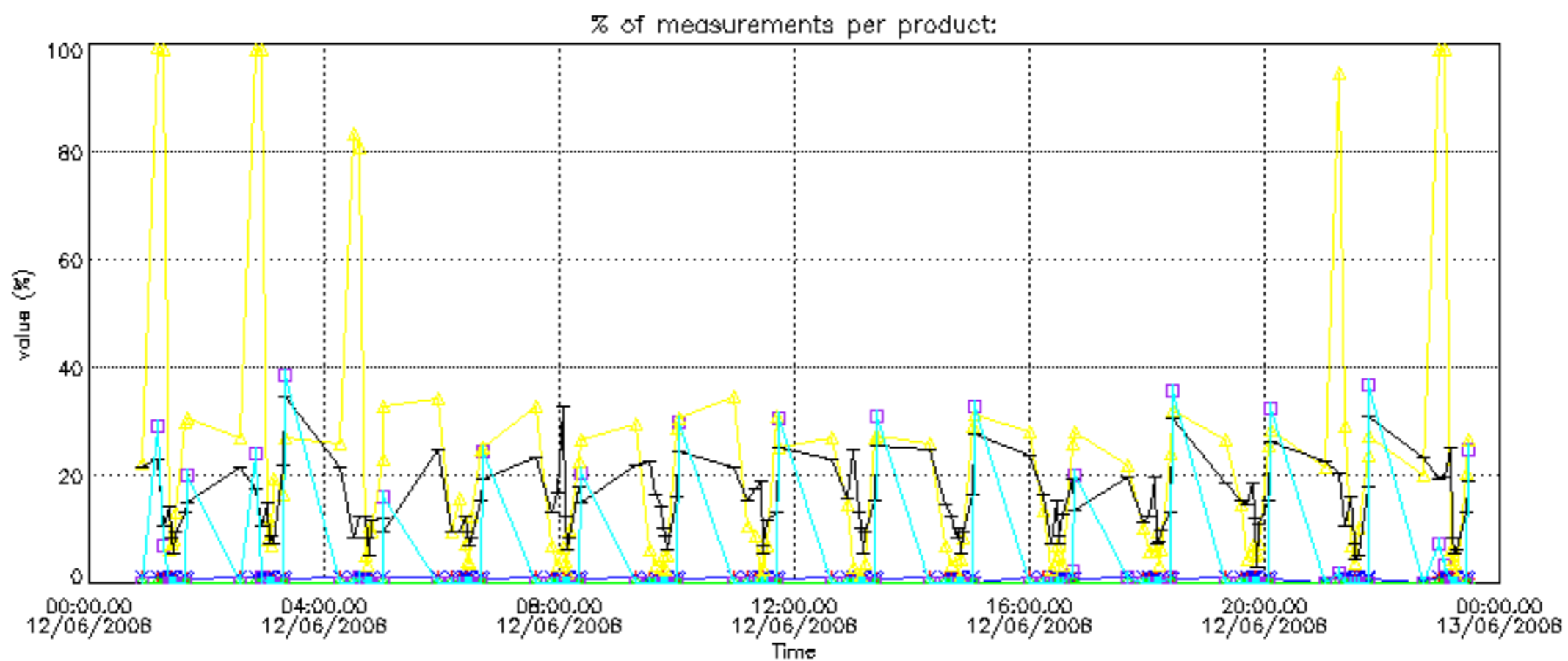


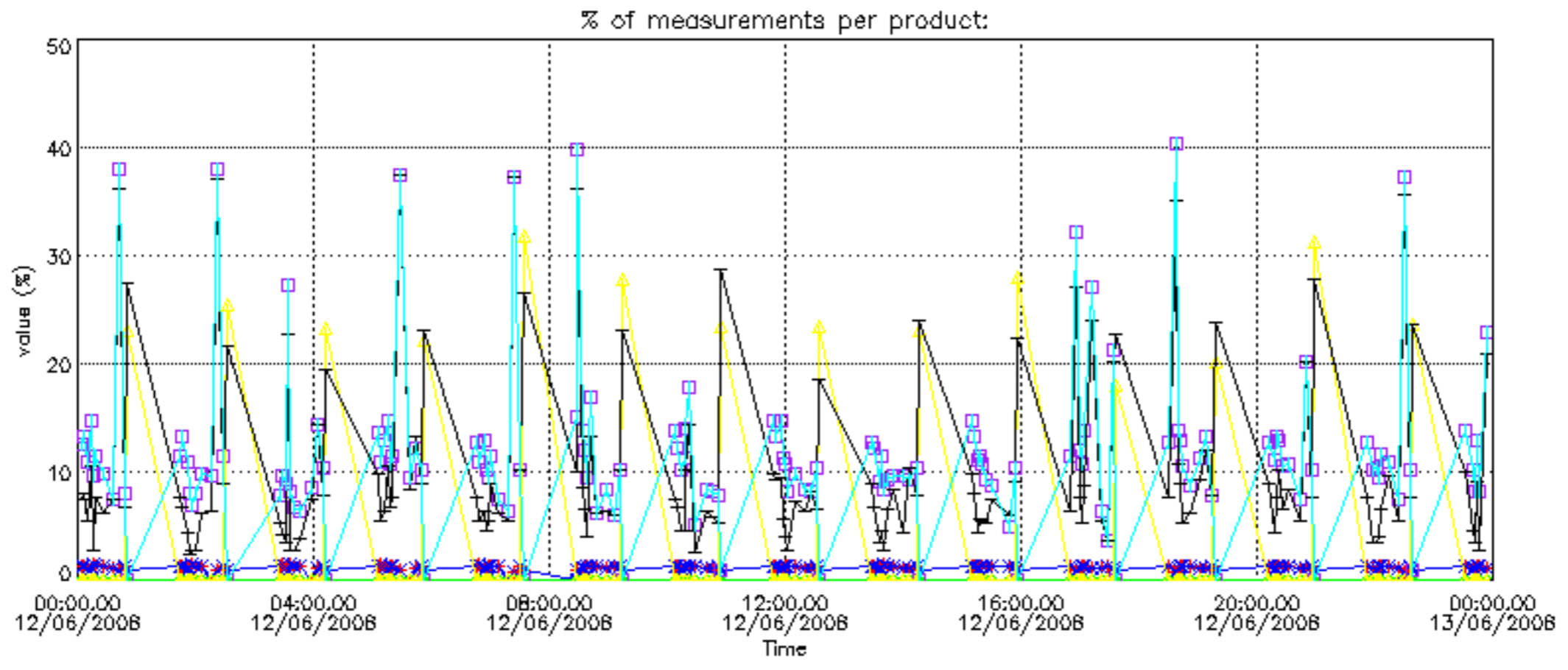
Percentage of flagged data per NO2 profile



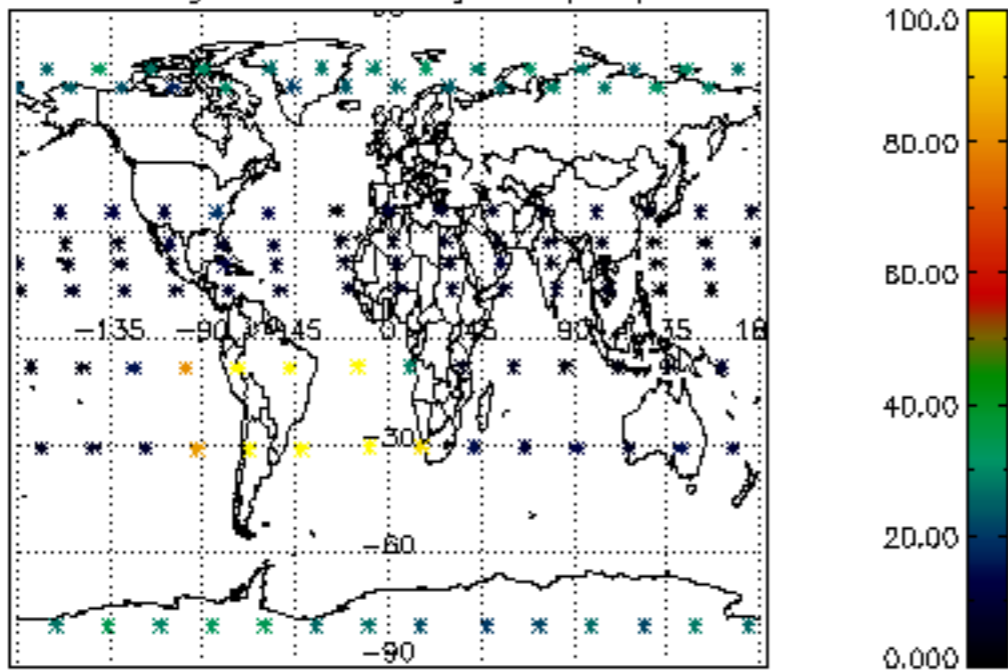
Percentage of flagged data per NO3 profile



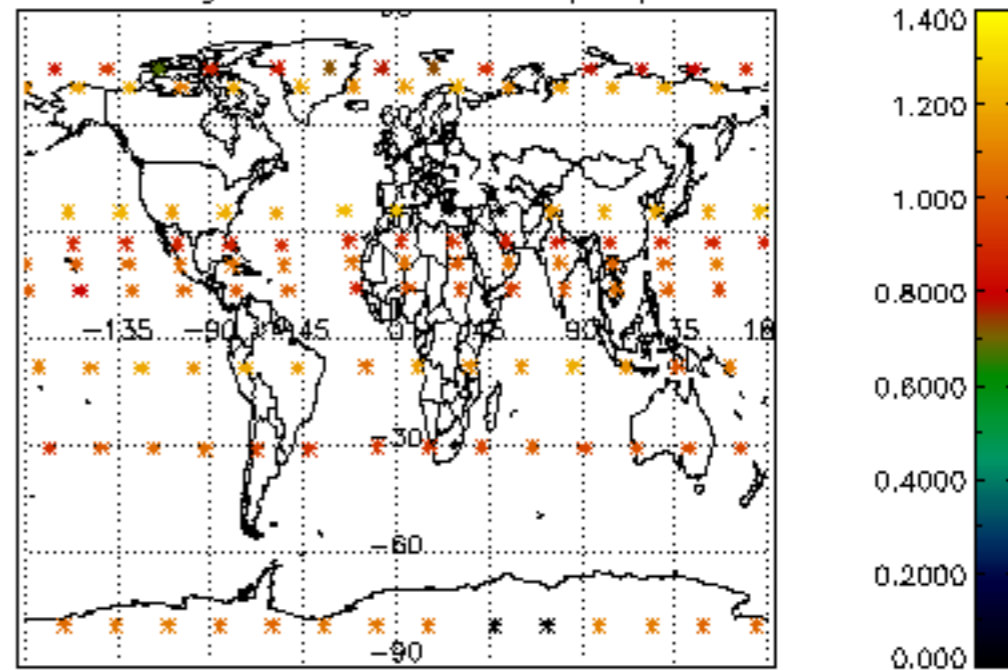




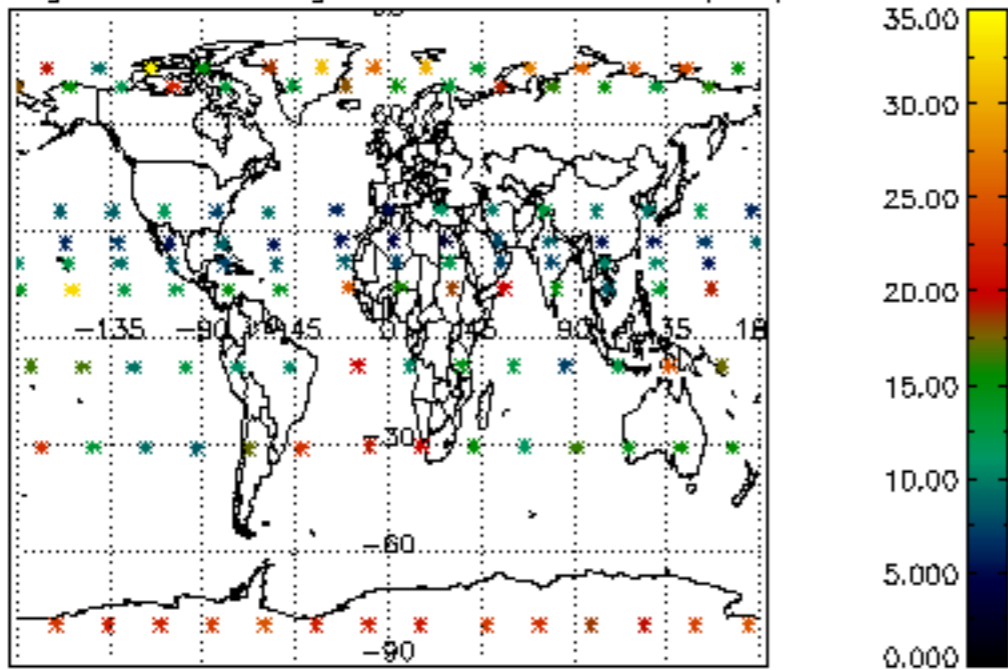
Percentage of cosmic ray hits per profile



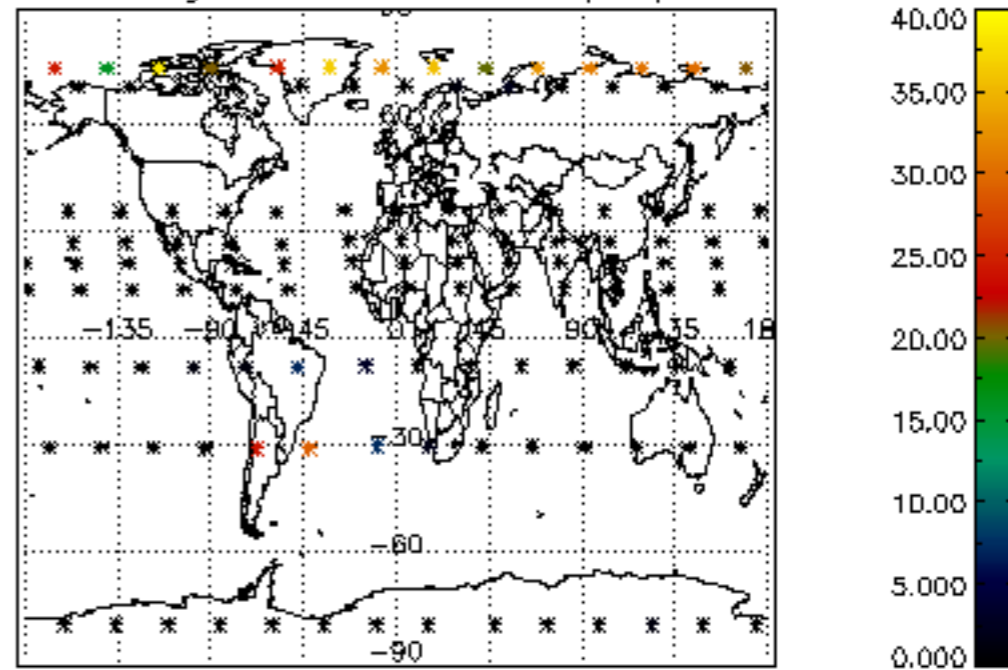
Percentage of datation errors per profile



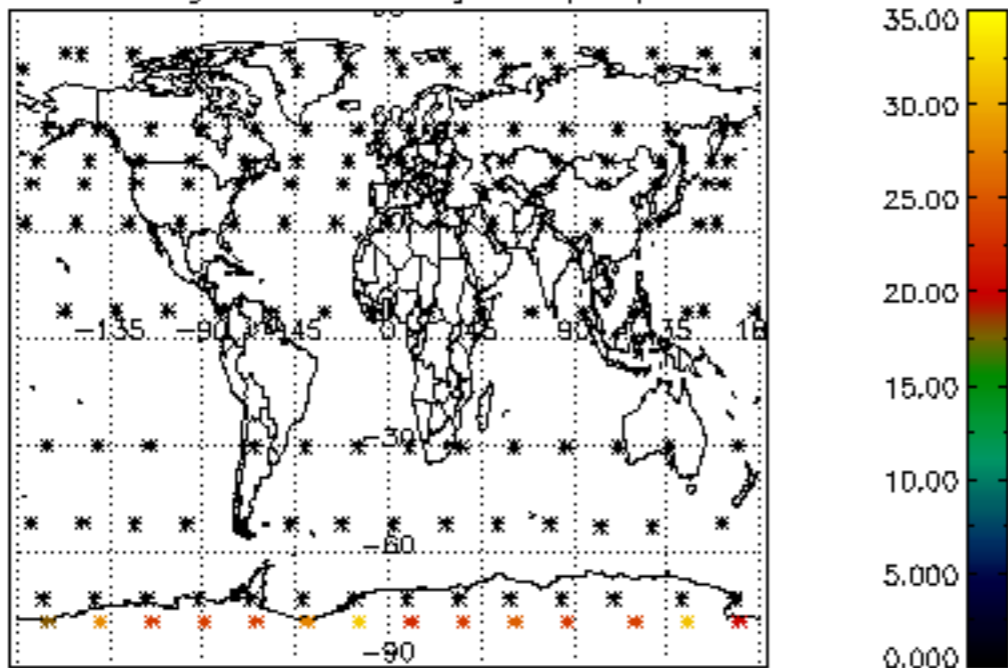
Percentage of star falling outside central band per profile



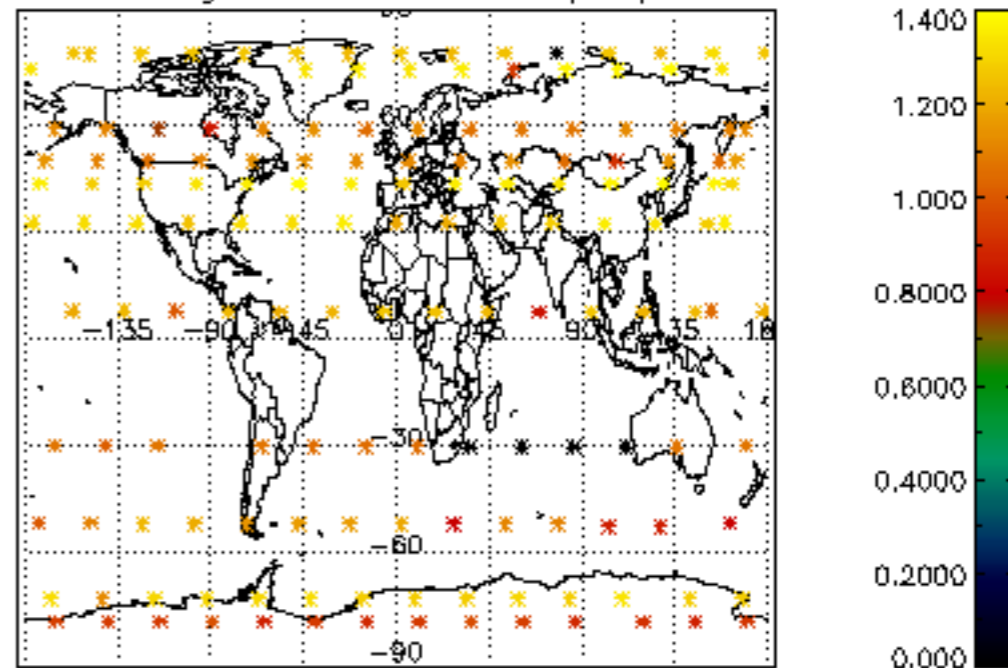
Percentage of saturation errors per profile



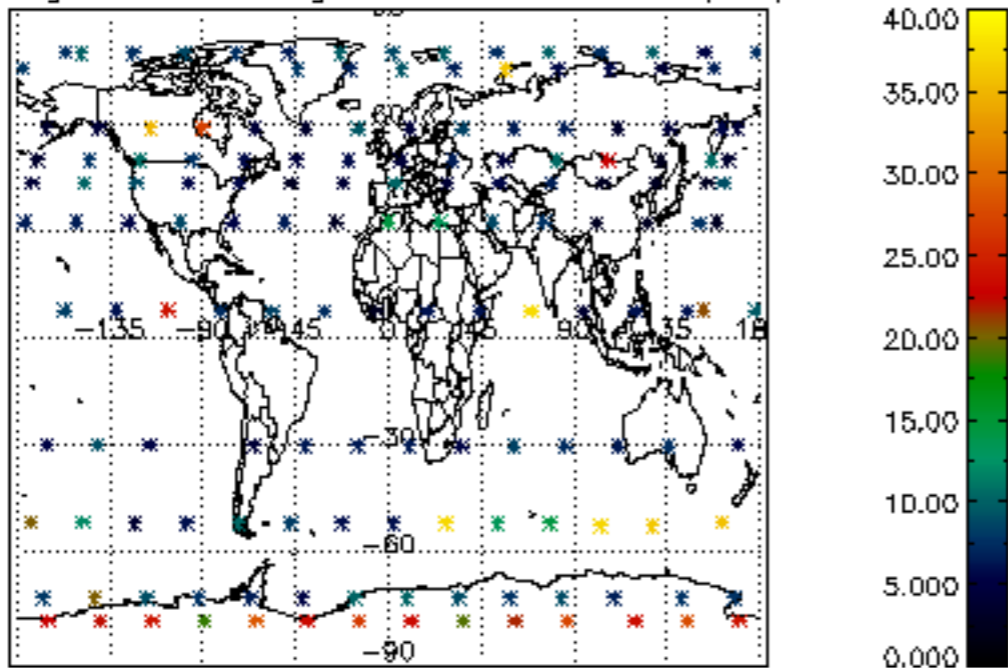
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

