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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 14:35:57
Data source version	GOMOS/6.01
Start time of products	10-06-2011 (10JUN2011 00:00:00)
Stop time of products	11-06-2011 (11JUN2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	292
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

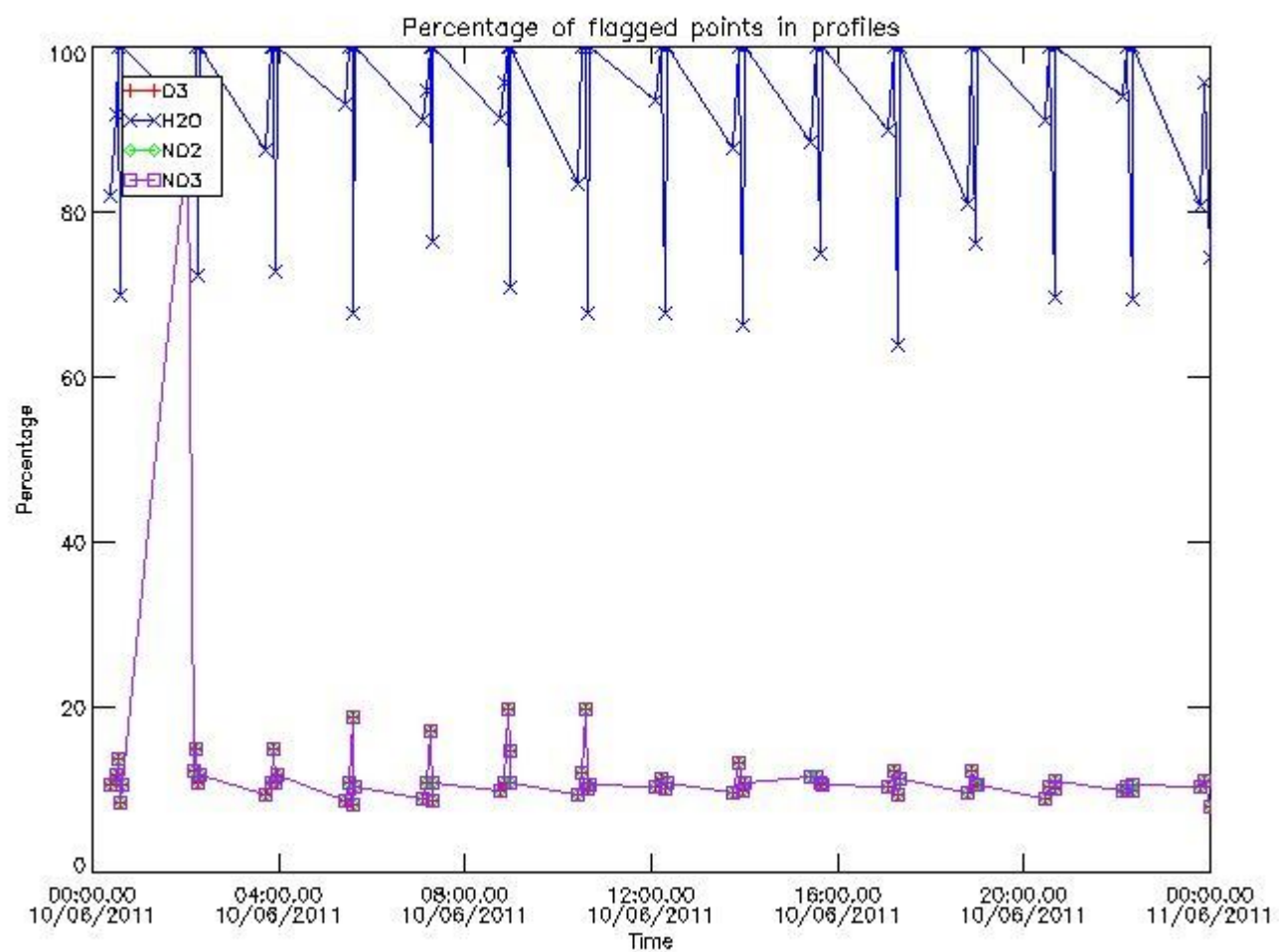
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110610_000313_000000373103_00217_48507_2761.N1	10-JUN-2011 00:03:13	Bright	36.500	73	57Gam1And	2.2600	13100.	73	48507	No
2	GOM_NL__2PRFIN20110610_000531_000000533103_00217_48507_2762.N1	10-JUN-2011 00:05:31	Bright	52.500	53	43Bet And	2.0480	3300.0	105	48507	No
3	GOM_NL__2PRFIN20110610_000850_000000503103_00217_48507_2763.N1	10-JUN-2011 00:08:50	Twilight	49.500	50	13Alp Ari	2.0070	4250.0	99	48507	No
4	GOM_NL__2PRFIN20110610_002335_000000533103_00217_48507_2764.N1	10-JUN-2011 00:23:35	Dark	53.000	52	16Bet Cet	2.0370	4500.0	106	48507	No
5	GOM_NL__2PRFIN20110610_003002_000000433103_00217_48507_2765.N1	10-JUN-2011 00:30:02	Dark	43.000	84	Alp Phe	2.3970	4500.0	86	48507	No
6	GOM_NL__2PRFIN20110610_003347_000000373103_00218_48508_2772.N1	10-JUN-2011 00:33:47	Dark	37.000	18	24Alp PsA	1.1660	9700.0	74	48508	No
7	GOM_NL__2PRFIN20110610_003558_000000603103_00218_48508_2773.N1	10-JUN-2011 00:35:58	Dark	60.000	63	Bet Gru	2.1500	2800.0	120	48508	No
8	GOM_NL__2PRFIN20110610_003758_000000483103_00218_48508_2774.N1	10-JUN-2011 00:37:58	Dark	48.000	31	Alp Gru	1.7340	15200.	96	48508	No
9	GOM_NL__2PRFIN20110610_004215_000000423103_00218_48508_2775.N1	10-JUN-2011 00:42:15	Straylight	41.500	45	Alp Pav	1.9400	26000.	83	48508	No
10	GOM_NL__2PRFIN20110610_005044_000000443103_00218_48508_2776.N1	10-JUN-2011 00:50:44	Straylight	43.500	40	The Sco	1.8590	7100.0	87	48508	No
11	GOM_NL__2PRFIN20110610_005228_000000473103_00218_48508_2777.N1	10-JUN-2011 00:52:28	Tw_and_stray	46.500	25	35Lam Sco	1.6200	28000.	93	48508	No
12	GOM_NL__2PRFIN20110610_005405_000000603103_00218_48508_2778.N1	10-JUN-2011 00:54:05	Bright	60.000	57	34Sig Sgr	2.0660	26000.	120	48508	No
13	GOM_NL__2PRFIN20110610_005916_000000413103_00218_48508_2779.N1	10-JUN-2011 00:59:16	Bright	41.000	86	35Eta Oph	2.4300	10200.	82	48508	No
14	GOM_NL__2PRFIN20110610_010101_000000393103_00218_48508_2780.N1	10-JUN-2011 01:01:01	Bright	39.000	98	13Zet Oph	2.5710	30000.	78	48508	No
15	GOM_NL__2PRFIN20110610_010617_000000493103_00218_48508_2781.N1	10-JUN-2011 01:06:17	Bright	49.000	126	60Bet Oph	2.7700	4250.0	98	48508	No
16	GOM_NL__2PRFIN20110610_010853_000000483103_00218_48508_2782.N1	10-JUN-2011 01:08:53	Bright	47.500	59	55Alp Oph	2.0800	8900.0	95	48508	No
17	GOM_NL__2PRFIN20110610_011034_000000393103_00218_48508_2783.N1	10-JUN-2011 01:10:34	Bright	38.500	127	27Bet Her	2.7810	4700.0	77	48508	No
18	GOM_NL__2PRFIN20110610_011343_000000413103_00218_48508_2784.N1	10-JUN-2011 01:13:43	Bright	40.500	133	40Zet Her	2.8070	6000.0	81	48508	No
19	GOM_NL__2PRFIN20110610_012044_000000403103_00218_48508_2785.N1	10-JUN-2011 01:20:44	Bright	39.500	130	23Bet Dra	2.7990	5800.0	79	48508	No
20	GOM_NL__2PRFIN20110610_013123_000000503103_00218_48508_2786.N1	10-JUN-2011 01:31:23	Bright	49.500	89	5Alp Cep	2.4510	8000.0	99	48508	No
21	GOM_NL__2PRFIN20110610_013732_000000583103_00218_48508_2787.N1	10-JUN-2011 01:37:32	Bright	58.000	76	27Gam Cas	2.3000	30000.	116	48508	No
22	GOM_NL__2PRFIN20110610_014327_000000363103_00218_48508_2788.N1	10-JUN-2011 01:43:27	Bright	35.500	73	57Gam1And	2.2600	13100.	71	48508	No
23	GOM_NL__2PRFIN20110610_014545_000000523103_00218_48508_2789.N1	10-JUN-2011 01:45:45	Bright	51.500	53	43Bet And	2.0480	3300.0	103	48508	No
24	GOM_NL__2PRFIN20110610_014904_000000463103_00218_48508_2790.N1	10-JUN-2011 01:49:04	Twilight	45.500	50	13Alp Ari	2.0070	4250.0	91	48508	No
25	GOM_NL__2PRFIN20110610_020350_000000473103_00218_48508_2791.N1	10-JUN-2011 02:03:50	Dark	46.500	52	16Bet Cet	2.0370	4500.0	93	48508	No
26	GOM_NL__2PRFIN20110610_021016_000000463103_00218_48508_2792.N1	10-JUN-2011 02:10:16	Dark	45.500	84	Alp Phe	2.3970	4500.0	91	48508	No
27	GOM_NL__2PRFIN20110610_021402_000000343103_00219_48509_2786.N1	10-JUN-2011 02:14:02	Dark	34.000	18	24Alp PsA	1.1660	9700.0	68	48509	No
28	GOM_NL__2PRFIN20110610_021613_000000483103_00219_48509_2787.N1	10-JUN-2011 02:16:13	Dark	47.500	63	Bet Gru	2.1500	2800.0	95	48509	No
29	GOM_NL__2PRFIN20110610_021813_000000473103_00219_48509_2788.N1	10-JUN-2011 02:18:13	Dark	47.000	31	Alp Gru	1.7340	15200.	94	48509	No
30	GOM_NL__2PRFIN20110610_022229_000000443103_00219_48509_2789.N1	10-JUN-2011 02:22:29	Straylight	43.500	45	Alp Pav	1.9400	26000.	87	48509	No
31	GOM_NL__2PRFIN20110610_023058_000000443103_00219_48509_2790.N1	10-JUN-2011 02:30:58	Straylight	43.500	40	The Sco	1.8590	7100.0	87	48509	No
32	GOM_NL__2PRFIN20110610_023242_000000433103_00219_48509_2791.N1	10-JUN-2011 02:32:42	Tw_and_stray	43.000	25	35Lam Sco	1.6200	28000.	86	48509	No
33	GOM_NL__2PRFIN20110610_023420_000000613103_00219_48509_2792.N1	10-JUN-2011 02:34:20	Bright	60.500	57	34Sig Sgr	2.0660	26000.	121	48509	No
34	GOM_NL__2PRFIN20110610_023930_000000423103_00219_48509_2793.N1	10-JUN-2011 02:39:30	Bright	42.000	86	35Eta Oph	2.4300	10200.	84	48509	No
35	GOM_NL__2PRFIN20110610_024115_000000393103_00219_48509_2794.N1	10-JUN-2011 02:41:15	Bright	39.000	98	13Zet Oph	2.5710	30000.	78	48509	No
36	GOM_NL__2PRFIN20110610_024630_000000493103_00219_48509_2795.N1	10-JUN-2011 02:46:30	Bright	48.500	126	60Bet Oph	2.7700	4250.0	97	48509	No
37	GOM_NL__2PRFIN20110610_024907_000000483103_00219_48509_2796.N1	10-JUN-2011 02:49:07	Bright	48.000	59	55Alp Oph	2.0800	8900.0	96	48509	No
38	GOM_NL__2PRFIN20110610_025048_000000393103_00219_48509_2797.N1	10-JUN-2011 02:50:48	Bright	38.500	127	27Bet Her	2.7810	4700.0	77	48509	No
39	GOM_NL__2PRFIN20110610_025356_000000413103_00219_48509_2798.N1	10-JUN-2011 02:53:56	Bright	41.000	133	40Zet Her	2.8070	6000.0	82	48509	No
40	GOM_NL__2PRFIN20110610_030058_000000393103_00219_48509_2799.N1	10-JUN-2011 03:00:58	Bright	39.000	130	23Bet Dra	2.7990	5800.0	78	48509	No
41	GOM_NL__2PRFIN20110610_031136_000000483103_00219_48509_2800.N1	10-JUN-2011 03:11:36	Bright	47.500	89	5Alp Cep	2.4510	8000.0	95	48509	No
42	GOM_NL__2PRFIN20110610_031746_000000403103_00219_48509_2801.N1	10-JUN-2011 03:17:46	Bright	39.500	76	27Gam Cas	2.3000	30000.	79	48509	No

279	GOM_NL__2PRFIN20110610_224404_000000383103_00231_48521_3127.N1	10-JUN-2011 22:44:04	Bright	38.000	98	13Zet Oph	2.5710	30000.	76	48521	No
280	GOM_NL__2PRFIN20110610_224914_000000473103_00231_48521_3128.N1	10-JUN-2011 22:49:14	Bright	46.500	126	60Bet Oph	2.7700	4250.0	93	48521	No
281	GOM_NL__2PRFIN20110610_225149_000000493103_00231_48521_3129.N1	10-JUN-2011 22:51:49	Bright	49.000	59	55Alp Oph	2.0800	8900.0	98	48521	No
282	GOM_NL__2PRFIN20110610_225334_000000413103_00231_48521_3130.N1	10-JUN-2011 22:53:34	Bright	40.500	127	27Bet Her	2.7810	4700.0	81	48521	No
283	GOM_NL__2PRFIN20110610_225641_000000393103_00231_48521_3131.N1	10-JUN-2011 22:56:41	Bright	39.000	133	40Zet Her	2.8070	6000.0	78	48521	No
284	GOM_NL__2PRFIN20110610_230340_000000423103_00231_48521_3132.N1	10-JUN-2011 23:03:40	Bright	41.500	130	23Bet Dra	2.7990	5800.0	83	48521	No
285	GOM_NL__2PRFIN20110610_231416_000000473103_00231_48521_3133.N1	10-JUN-2011 23:14:16	Bright	46.500	89	5Alp Cep	2.4510	8000.0	93	48521	No
286	GOM_NL__2PRFIN20110610_232032_000000503103_00231_48521_3134.N1	10-JUN-2011 23:20:32	Bright	50.000	76	27Gam Cas	2.3000	30000.	100	48521	No
287	GOM_NL__2PRFIN20110610_232630_000000363103_00231_48521_3135.N1	10-JUN-2011 23:26:30	Bright	35.500	73	57Gam1And	2.2600	13100.	71	48521	No
288	GOM_NL__2PRFIN20110610_232848_000000493103_00231_48521_3136.N1	10-JUN-2011 23:28:48	Twilight	49.000	53	43Bet And	2.0480	3300.0	98	48521	No
289	GOM_NL__2PRFIN20110610_233208_000000483103_00231_48521_3137.N1	10-JUN-2011 23:32:08	Twilight	47.500	50	13Alp Ari	2.0070	4250.0	95	48521	No
290	GOM_NL__2PRFIN20110610_234703_000000503103_00231_48521_3138.N1	10-JUN-2011 23:47:03	Dark	49.500	52	16Bet Cet	2.0370	4500.0	99	48521	No
291	GOM_NL__2PRFIN20110610_235327_000000463103_00231_48521_3139.N1	10-JUN-2011 23:53:27	Dark	46.000	84	Alp Phe	2.3970	4500.0	92	48521	No
292	GOM_NL__2PRFIN20110610_235927_000000653103_00232_48522_3133.N1	10-JUN-2011 23:59:27	Dark	65.000	63	Bet Gru	2.1500	2800.0	130	48522	No

3. Quality information per product

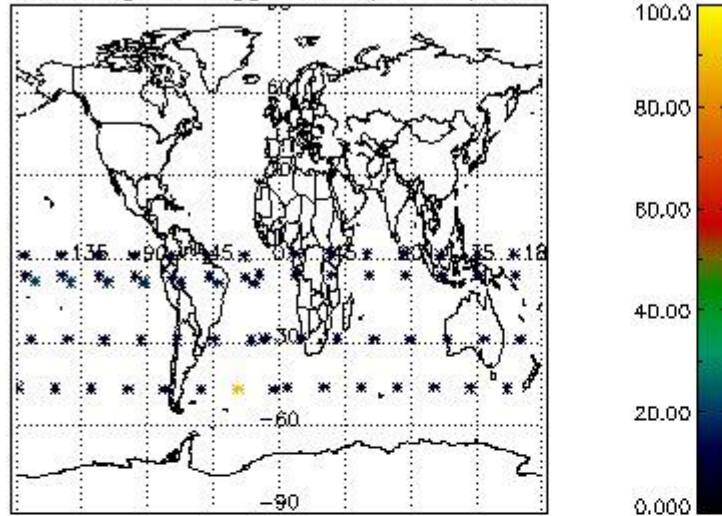
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

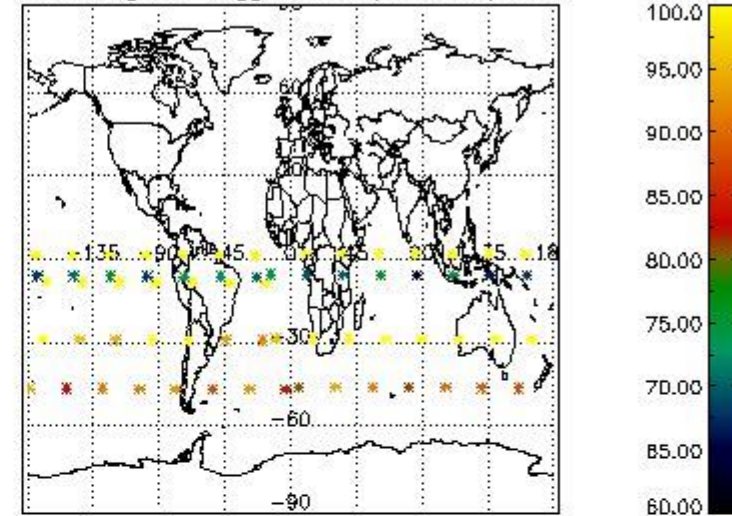


3.2 Plot quality information per product (world map)

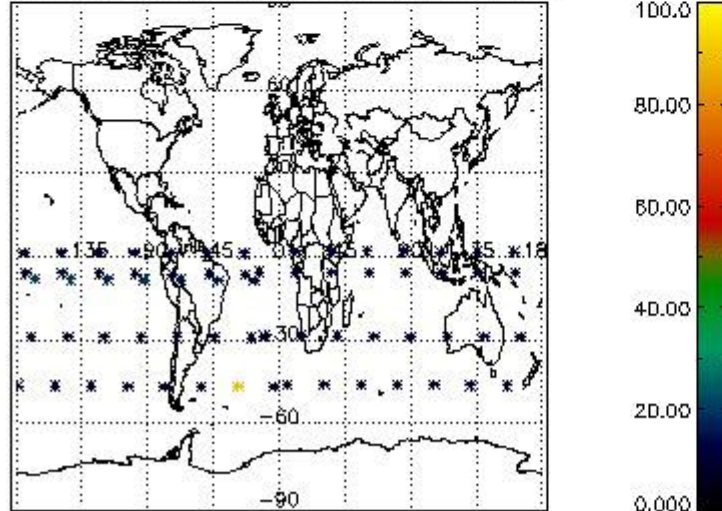
Percentage of flagged data per O3 profile



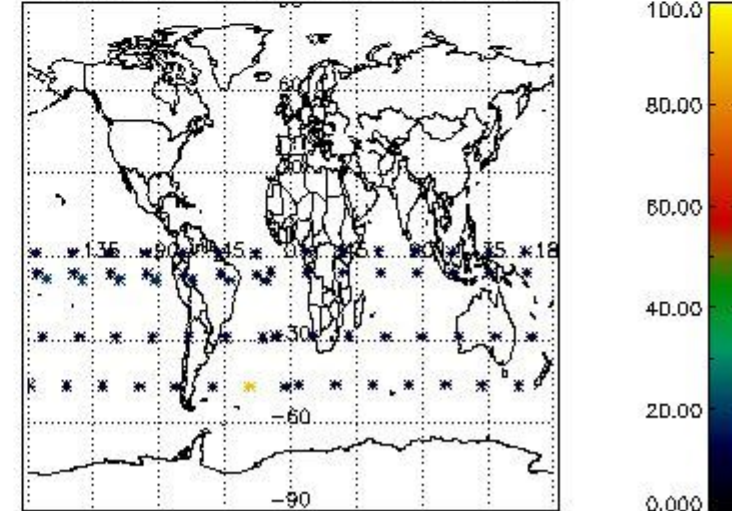
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

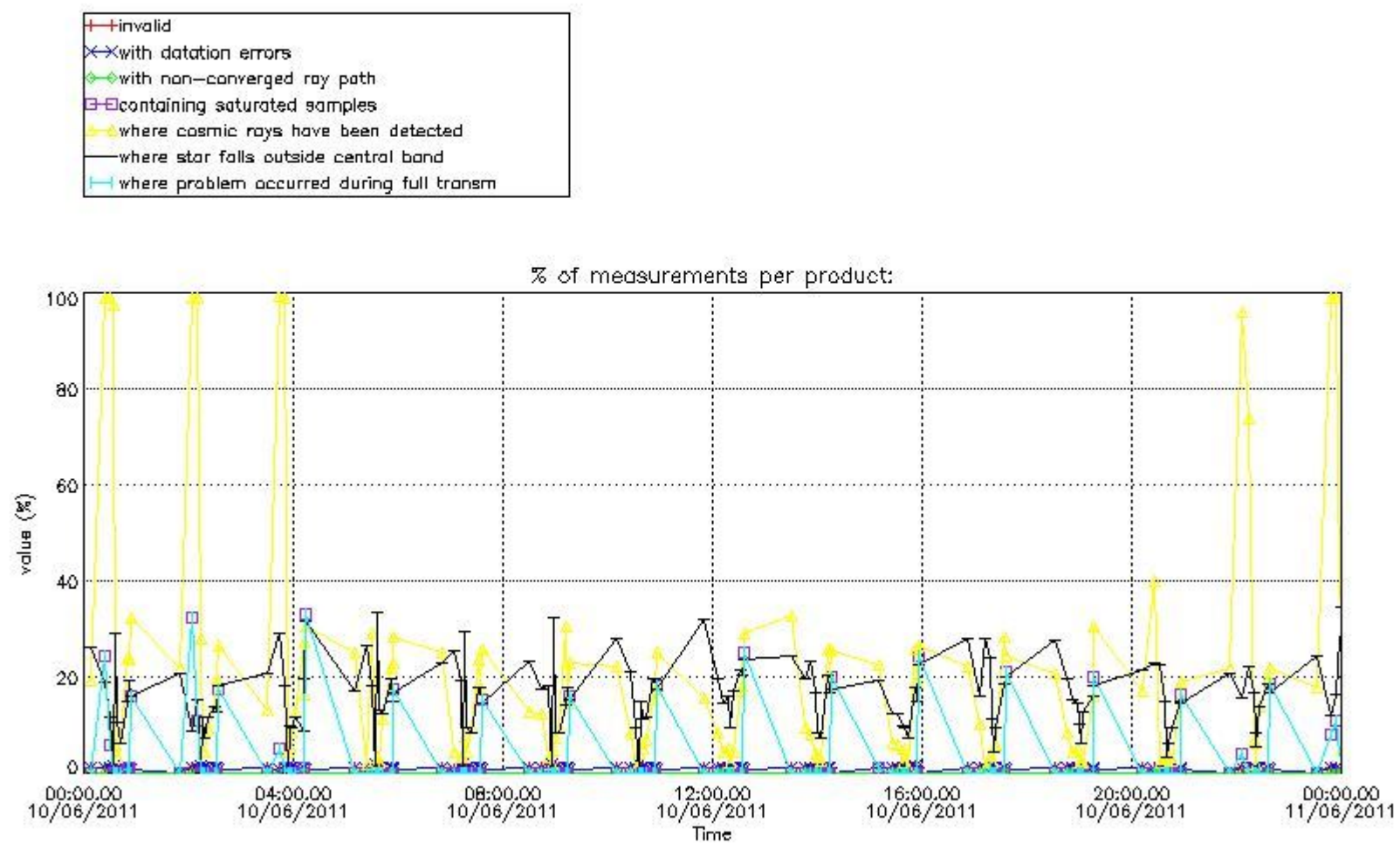


4. Level 1 quality information per product

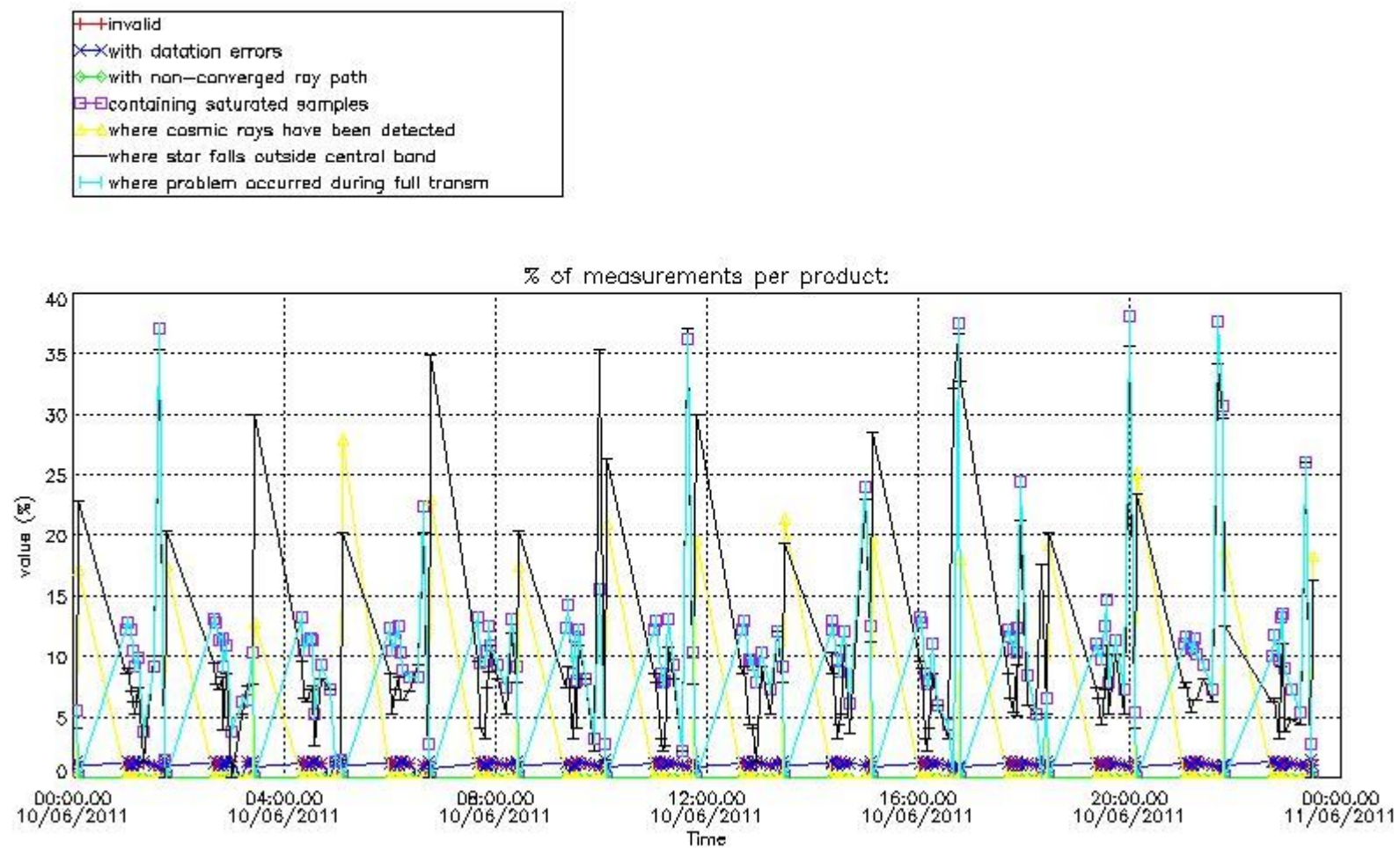
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

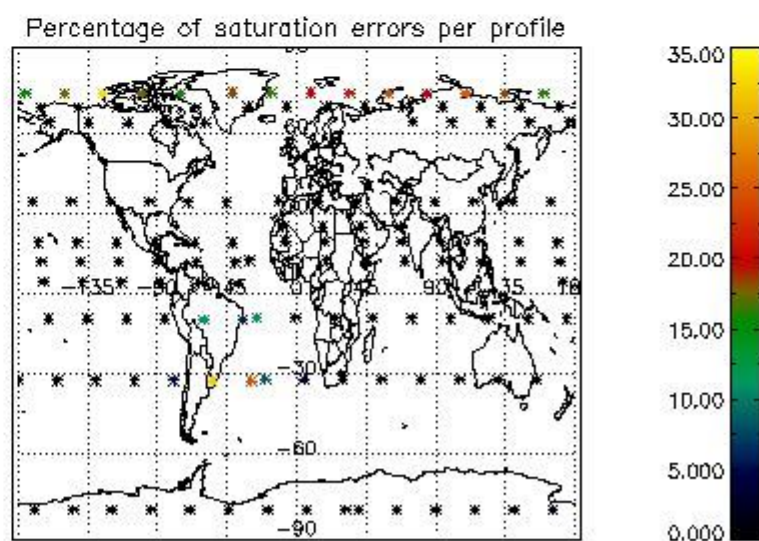
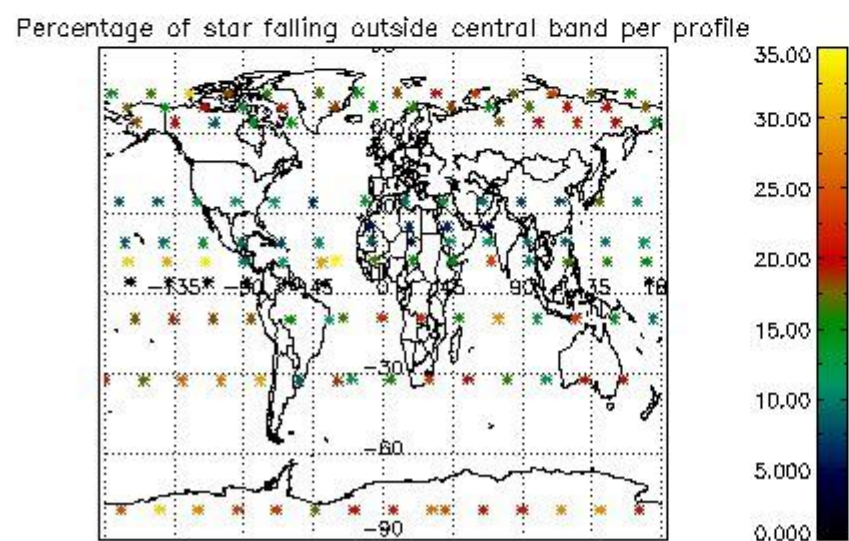
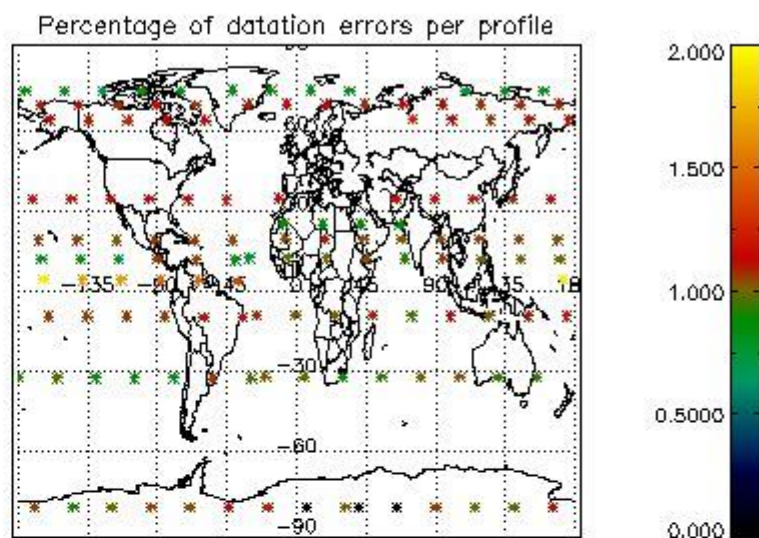
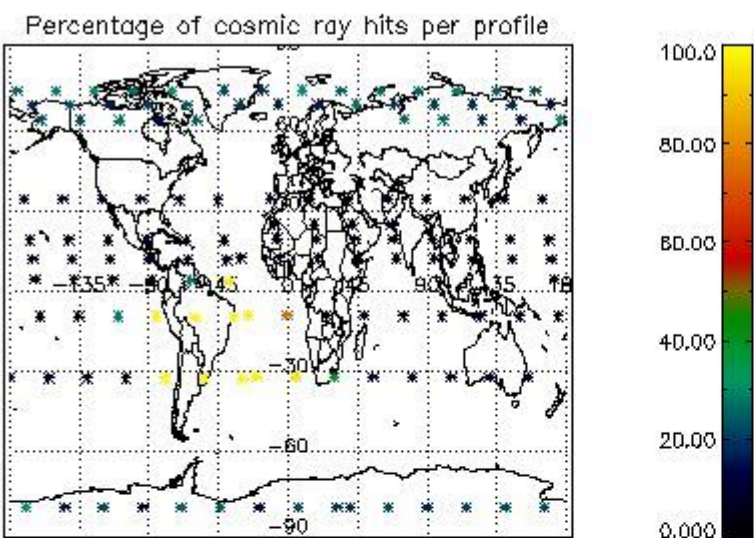


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

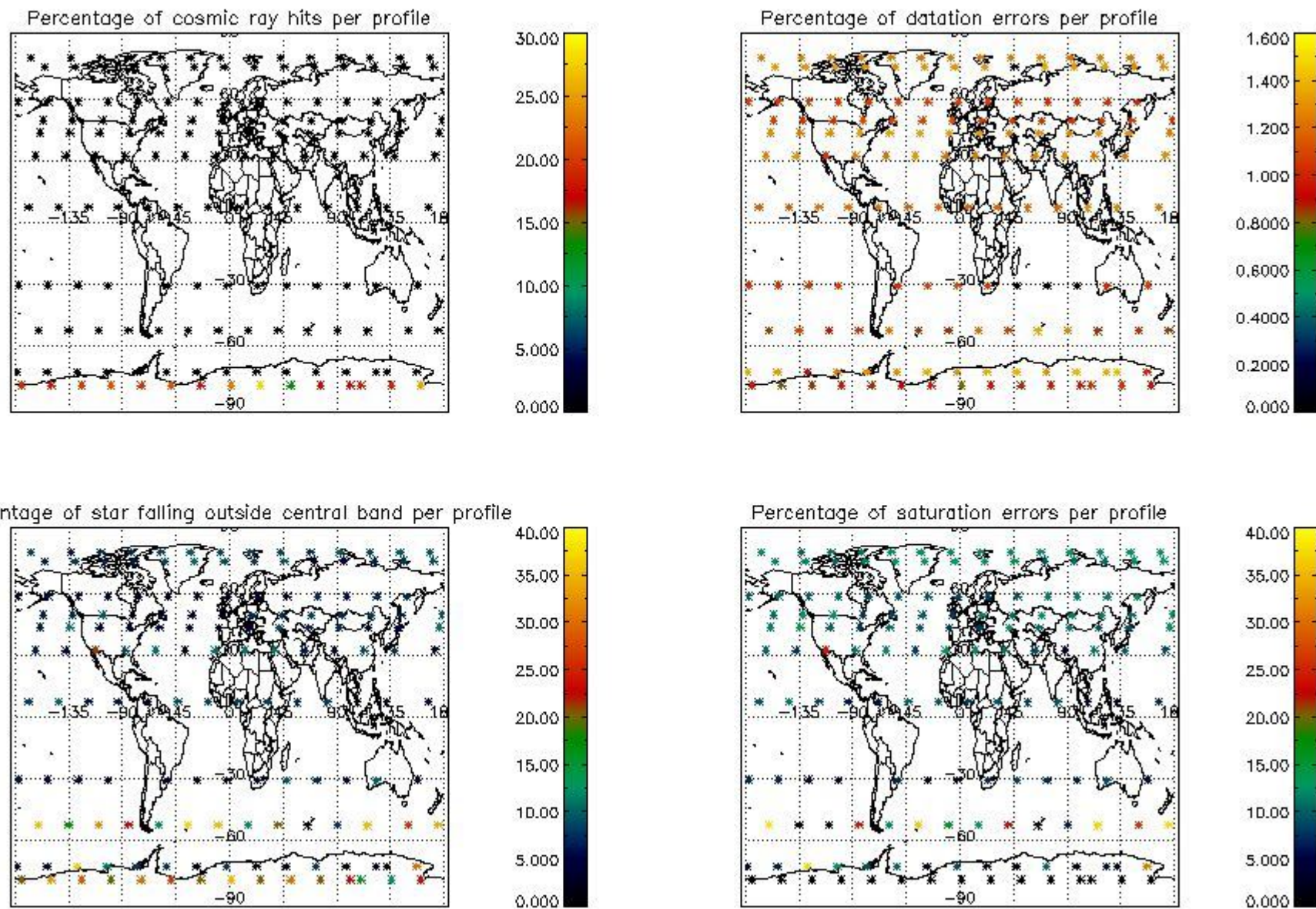


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

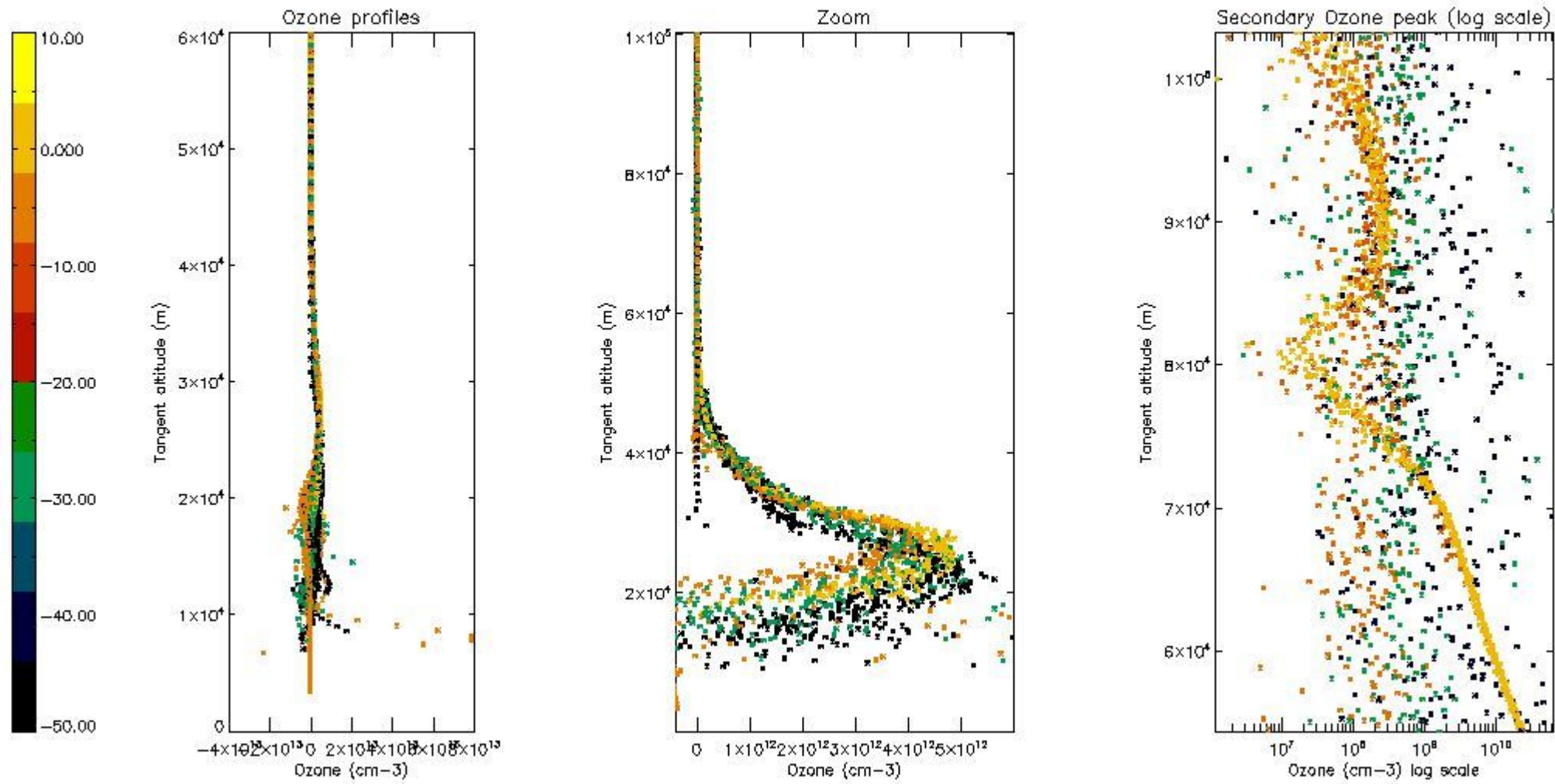
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	24
STD < 20	8

STD < 10	5
STD < 5	3

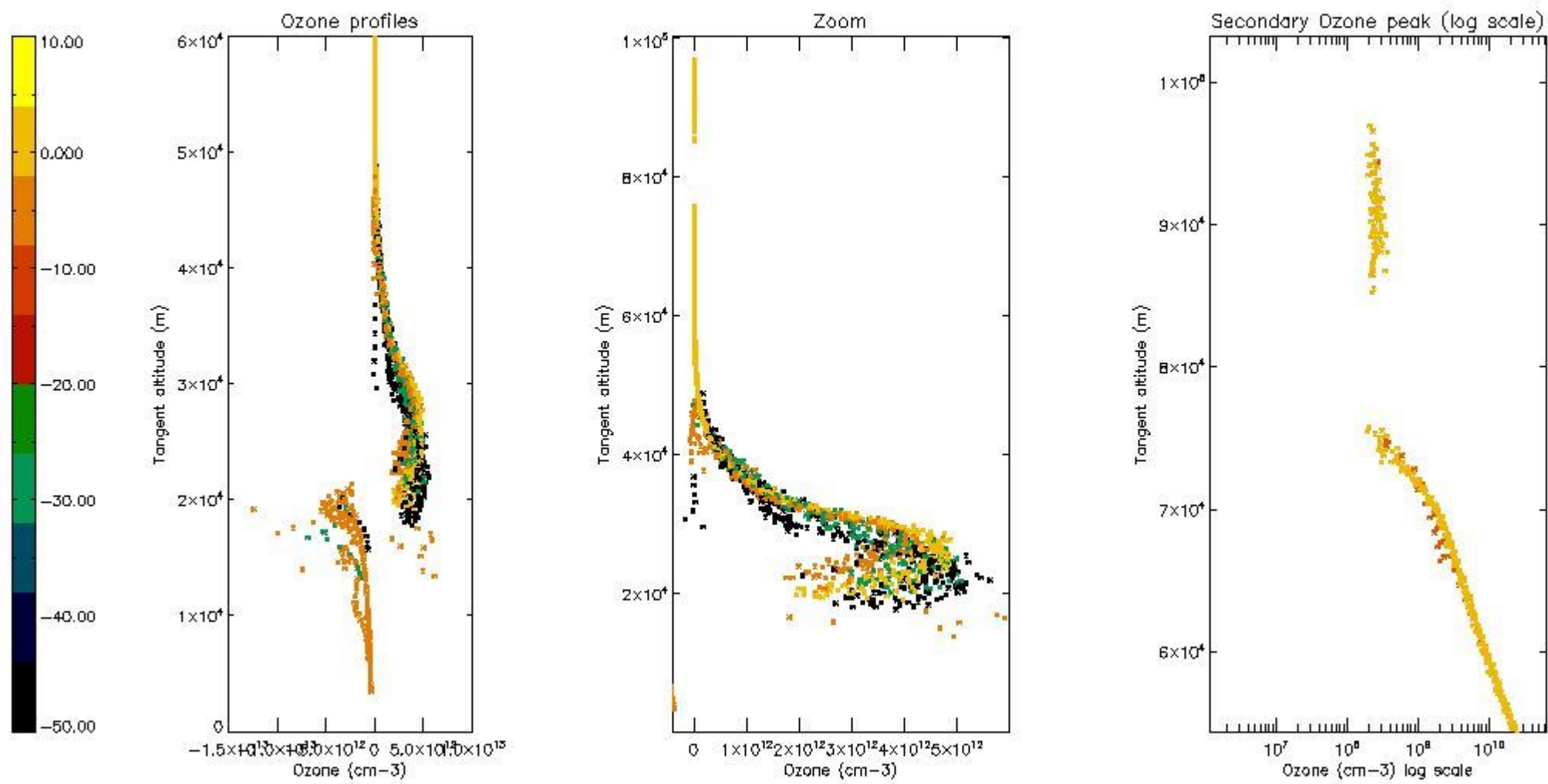
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



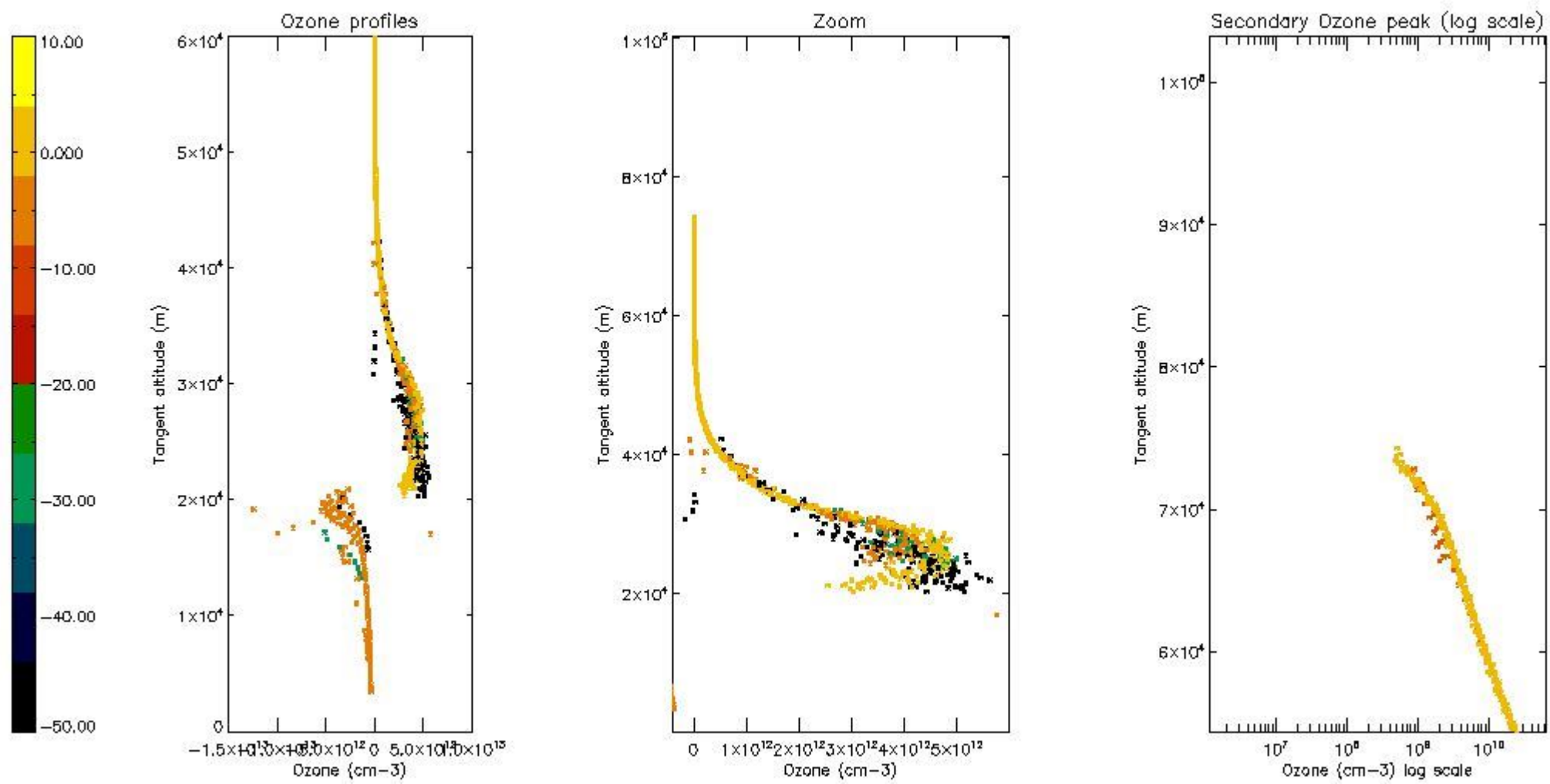
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



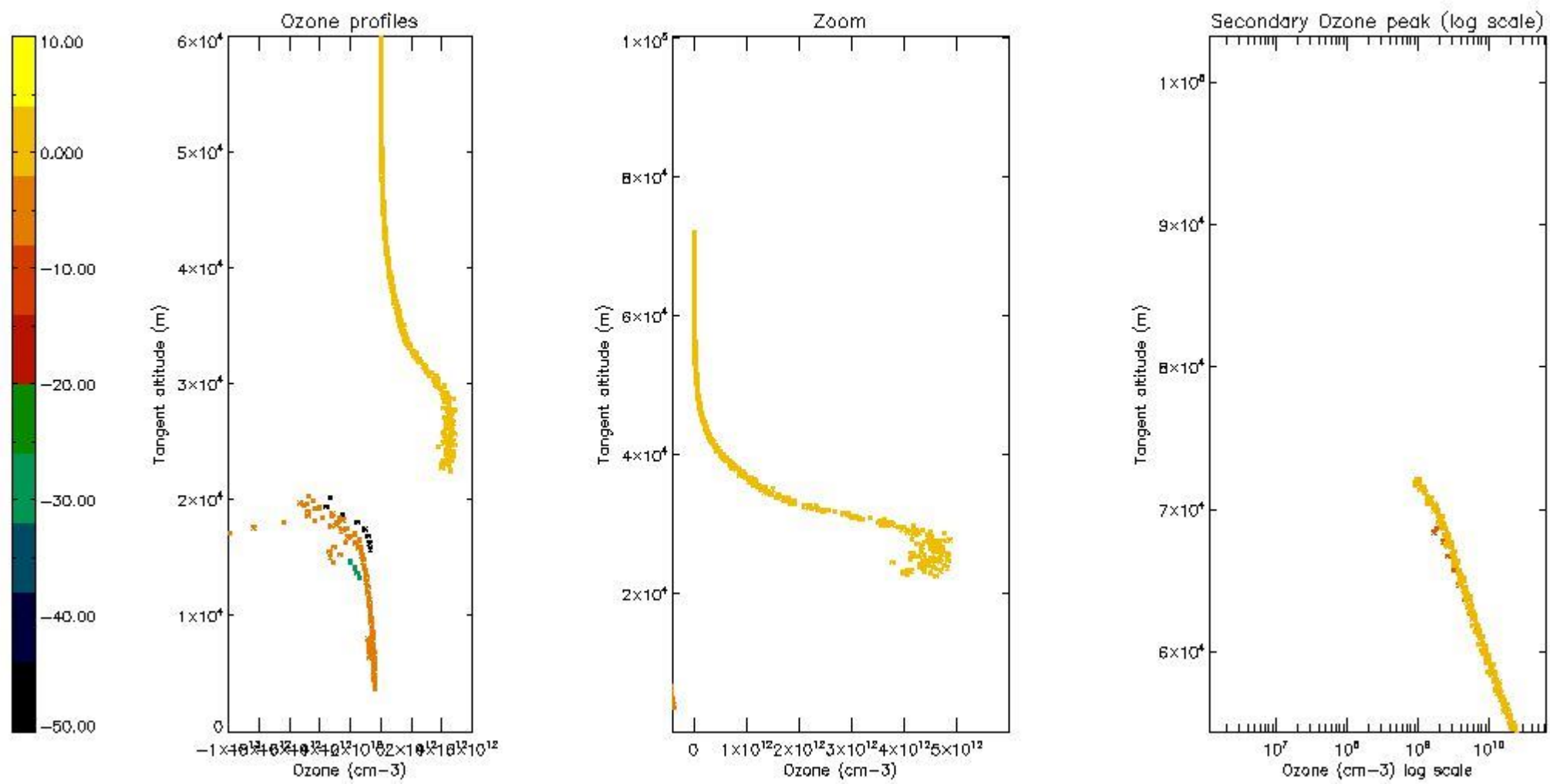
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



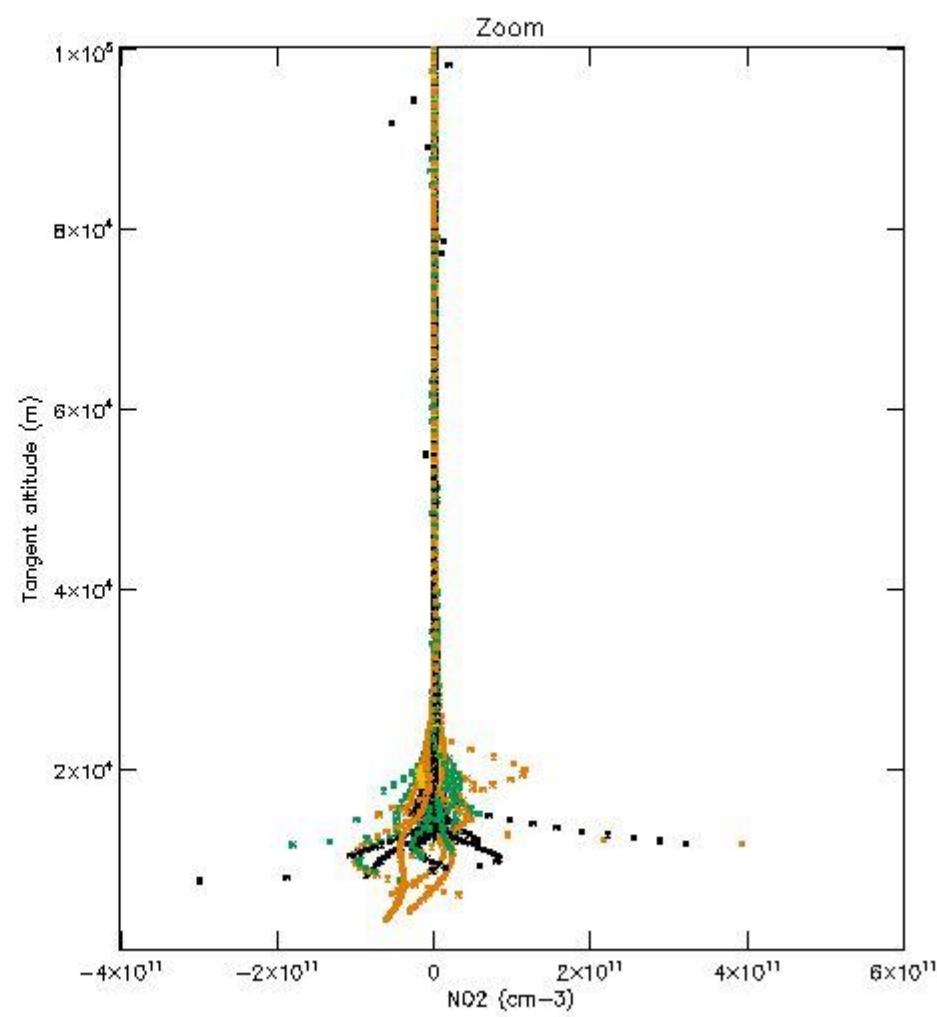
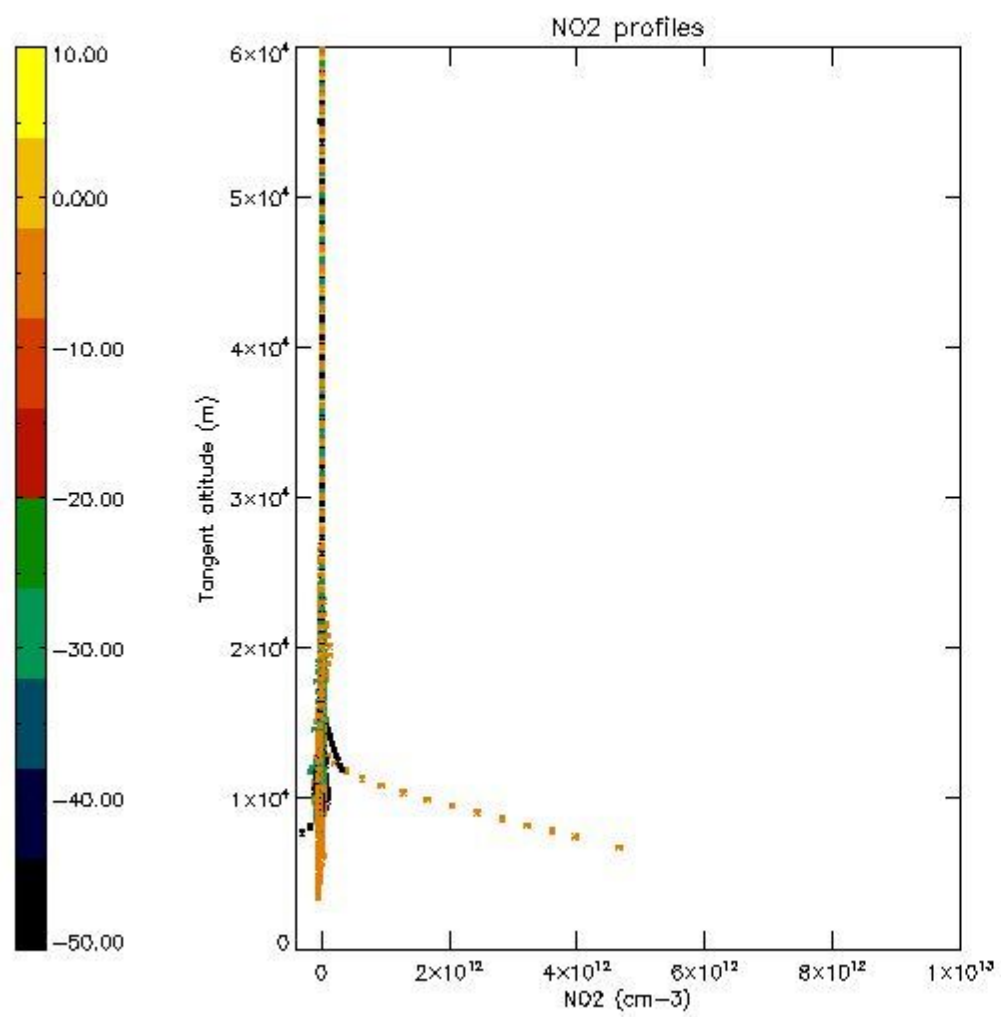
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



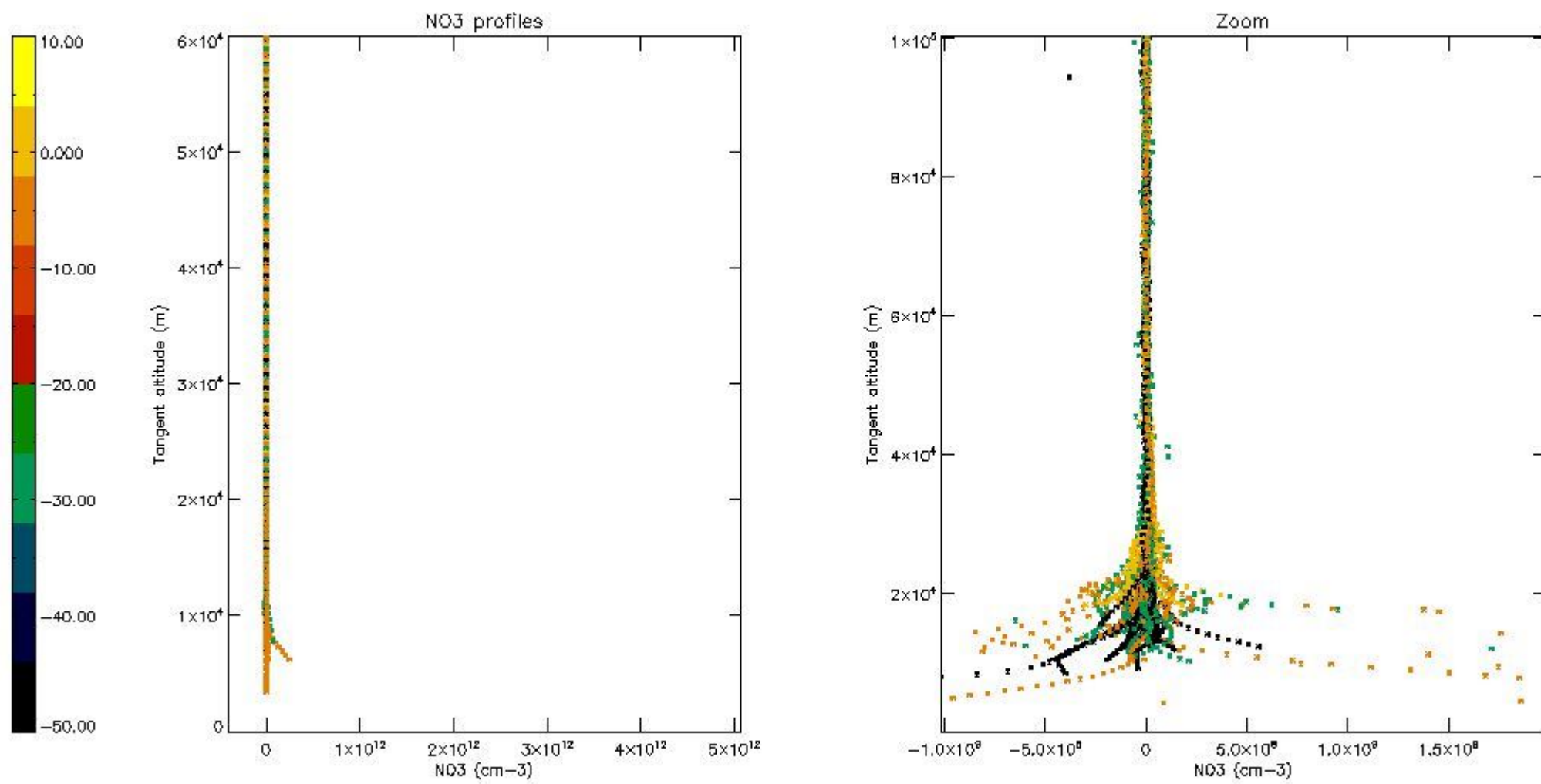
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



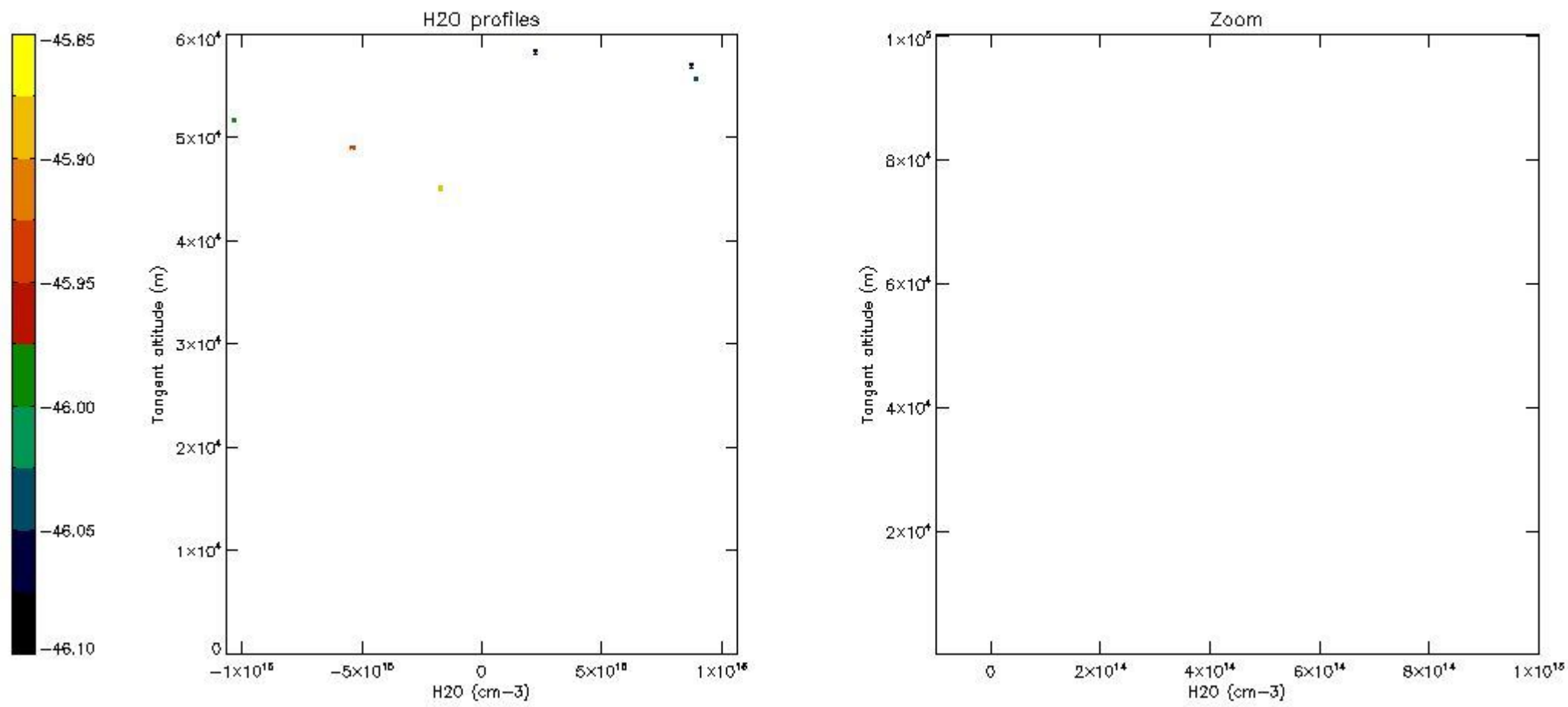
5.7 Plot NO3 profiles for all STD (dark without errors)

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	10-JUN-2011 00:03:13
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	10-JUN-2011 00:03:13
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	10-JUN-2011 00:03:13

GOMOS Level 2 Daily Report

SUMMARY

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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 14:35:57
Data source version	GOMOS/6.01
Start time of products	10-06-2011 (10JUN2011 00:00:00)
Stop time of products	11-06-2011 (11JUN2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	292
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

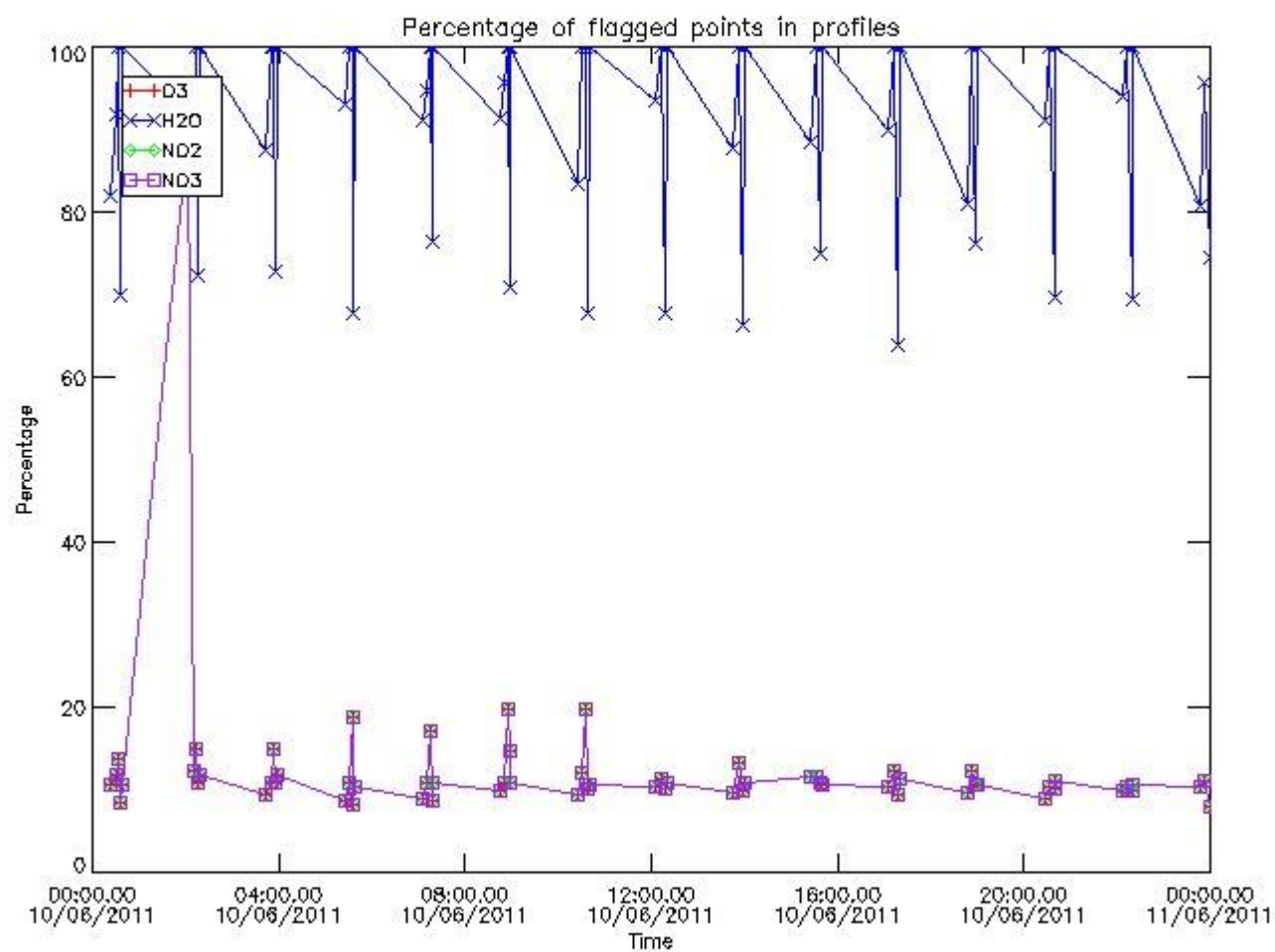
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110610_000313_000000373103_00217_48507_2761.N1	10-JUN-2011 00:03:13	Bright	36.500	73	57Gam1And	2.2600	13100.	73	48507	No
2	GOM_NL__2PRFIN20110610_000531_000000533103_00217_48507_2762.N1	10-JUN-2011 00:05:31	Bright	52.500	53	43Bet And	2.0480	3300.0	105	48507	No
3	GOM_NL__2PRFIN20110610_000850_000000503103_00217_48507_2763.N1	10-JUN-2011 00:08:50	Twilight	49.500	50	13Alp Ari	2.0070	4250.0	99	48507	No
4	GOM_NL__2PRFIN20110610_002335_000000533103_00217_48507_2764.N1	10-JUN-2011 00:23:35	Dark	53.000	52	16Bet Cet	2.0370	4500.0	106	48507	No
5	GOM_NL__2PRFIN20110610_003002_000000433103_00217_48507_2765.N1	10-JUN-2011 00:30:02	Dark	43.000	84	Alp Phe	2.3970	4500.0	86	48507	No
6	GOM_NL__2PRFIN20110610_003347_000000373103_00218_48508_2772.N1	10-JUN-2011 00:33:47	Dark	37.000	18	24Alp PsA	1.1660	9700.0	74	48508	No
7	GOM_NL__2PRFIN20110610_003558_000000603103_00218_48508_2773.N1	10-JUN-2011 00:35:58	Dark	60.000	63	Bet Gru	2.1500	2800.0	120	48508	No
8	GOM_NL__2PRFIN20110610_003758_000000483103_00218_48508_2774.N1	10-JUN-2011 00:37:58	Dark	48.000	31	Alp Gru	1.7340	15200.	96	48508	No
9	GOM_NL__2PRFIN20110610_004215_000000423103_00218_48508_2775.N1	10-JUN-2011 00:42:15	Straylight	41.500	45	Alp Pav	1.9400	26000.	83	48508	No
10	GOM_NL__2PRFIN20110610_005044_000000443103_00218_48508_2776.N1	10-JUN-2011 00:50:44	Straylight	43.500	40	The Sco	1.8590	7100.0	87	48508	No
11	GOM_NL__2PRFIN20110610_005228_000000473103_00218_48508_2777.N1	10-JUN-2011 00:52:28	Tw_and_stray	46.500	25	35Lam Sco	1.6200	28000.	93	48508	No
12	GOM_NL__2PRFIN20110610_005405_000000603103_00218_48508_2778.N1	10-JUN-2011 00:54:05	Bright	60.000	57	34Sig Sgr	2.0660	26000.	120	48508	No
13	GOM_NL__2PRFIN20110610_005916_000000413103_00218_48508_2779.N1	10-JUN-2011 00:59:16	Bright	41.000	86	35Eta Oph	2.4300	10200.	82	48508	No
14	GOM_NL__2PRFIN20110610_010101_000000393103_00218_48508_2780.N1	10-JUN-2011 01:01:01	Bright	39.000	98	13Zet Oph	2.5710	30000.	78	48508	No
15	GOM_NL__2PRFIN20110610_010617_000000493103_00218_48508_2781.N1	10-JUN-2011 01:06:17	Bright	49.000	126	60Bet Oph	2.7700	4250.0	98	48508	No
16	GOM_NL__2PRFIN20110610_010853_000000483103_00218_48508_2782.N1	10-JUN-2011 01:08:53	Bright	47.500	59	55Alp Oph	2.0800	8900.0	95	48508	No
17	GOM_NL__2PRFIN20110610_011034_000000393103_00218_48508_2783.N1	10-JUN-2011 01:10:34	Bright	38.500	127	27Bet Her	2.7810	4700.0	77	48508	No
18	GOM_NL__2PRFIN20110610_011343_000000413103_00218_48508_2784.N1	10-JUN-2011 01:13:43	Bright	40.500	133	40Zet Her	2.8070	6000.0	81	48508	No
19	GOM_NL__2PRFIN20110610_012044_000000403103_00218_48508_2785.N1	10-JUN-2011 01:20:44	Bright	39.500	130	23Bet Dra	2.7990	5800.0	79	48508	No
20	GOM_NL__2PRFIN20110610_013123_000000503103_00218_48508_2786.N1	10-JUN-2011 01:31:23	Bright	49.500	89	5Alp Cep	2.4510	8000.0	99	48508	No
21	GOM_NL__2PRFIN20110610_013732_000000583103_00218_48508_2787.N1	10-JUN-2011 01:37:32	Bright	58.000	76	27Gam Cas	2.3000	30000.	116	48508	No
22	GOM_NL__2PRFIN20110610_014327_000000363103_00218_48508_2788.N1	10-JUN-2011 01:43:27	Bright	35.500	73	57Gam1And	2.2600	13100.	71	48508	No
23	GOM_NL__2PRFIN20110610_014545_000000523103_00218_48508_2789.N1	10-JUN-2011 01:45:45	Bright	51.500	53	43Bet And	2.0480	3300.0	103	48508	No
24	GOM_NL__2PRFIN20110610_014904_000000463103_00218_48508_2790.N1	10-JUN-2011 01:49:04	Twilight	45.500	50	13Alp Ari	2.0070	4250.0	91	48508	No
25	GOM_NL__2PRFIN20110610_020350_000000473103_00218_48508_2791.N1	10-JUN-2011 02:03:50	Dark	46.500	52	16Bet Cet	2.0370	4500.0	93	48508	No
26	GOM_NL__2PRFIN20110610_021016_000000463103_00218_48508_2792.N1	10-JUN-2011 02:10:16	Dark	45.500	84	Alp Phe	2.3970	4500.0	91	48508	No
27	GOM_NL__2PRFIN20110610_021402_000000343103_00219_48509_2786.N1	10-JUN-2011 02:14:02	Dark	34.000	18	24Alp PsA	1.1660	9700.0	68	48509	No
28	GOM_NL__2PRFIN20110610_021613_000000483103_00219_48509_2787.N1	10-JUN-2011 02:16:13	Dark	47.500	63	Bet Gru	2.1500	2800.0	95	48509	No
29	GOM_NL__2PRFIN20110610_021813_000000473103_00219_48509_2788.N1	10-JUN-2011 02:18:13	Dark	47.000	31	Alp Gru	1.7340	15200.	94	48509	No
30	GOM_NL__2PRFIN20110610_022229_000000443103_00219_48509_2789.N1	10-JUN-2011 02:22:29	Straylight	43.500	45	Alp Pav	1.9400	26000.	87	48509	No
31	GOM_NL__2PRFIN20110610_023058_000000443103_00219_48509_2790.N1	10-JUN-2011 02:30:58	Straylight	43.500	40	The Sco	1.8590	7100.0	87	48509	No
32	GOM_NL__2PRFIN20110610_023242_000000433103_00219_48509_2791.N1	10-JUN-2011 02:32:42	Tw_and_stray	43.000	25	35Lam Sco	1.6200	28000.	86	48509	No
33	GOM_NL__2PRFIN20110610_023420_000000613103_00219_48509_2792.N1	10-JUN-2011 02:34:20	Bright	60.500	57	34Sig Sgr	2.0660	26000.	121	48509	No
34	GOM_NL__2PRFIN20110610_023930_000000423103_00219_48509_2793.N1	10-JUN-2011 02:39:30	Bright	42.000	86	35Eta Oph	2.4300	10200.	84	48509	No
35	GOM_NL__2PRFIN20110610_024115_000000393103_00219_48509_2794.N1	10-JUN-2011 02:41:15	Bright	39.000	98	13Zet Oph	2.5710	30000.	78	48509	No
36	GOM_NL__2PRFIN20110610_024630_000000493103_00219_48509_2795.N1	10-JUN-2011 02:46:30	Bright	48.500	126	60Bet Oph	2.7700	4250.0	97	48509	No
37	GOM_NL__2PRFIN20110610_024907_000000483103_00219_48509_2796.N1	10-JUN-2011 02:49:07	Bright	48.000	59	55Alp Oph	2.0800	8900.0	96	48509	No
38	GOM_NL__2PRFIN20110610_025048_000000393103_00219_48509_2797.N1	10-JUN-2011 02:50:48	Bright	38.500	127	27Bet Her	2.7810	4700.0	77	48509	No
39	GOM_NL__2PRFIN20110610_025356_000000413103_00219_48509_2798.N1	10-JUN-2011 02:53:56	Bright	41.000	133	40Zet Her	2.8070	6000.0	82	48509	No
40	GOM_NL__2PRFIN20110610_030058_000000393103_00219_48509_2799.N1	10-JUN-2011 03:00:58	Bright	39.000	130	23Bet Dra	2.7990	5800.0	78	48509	No
41	GOM_NL__2PRFIN20110610_031136_000000483103_00219_48509_2800.N1	10-JUN-2011 03:11:36	Bright	47.500	89	5Alp Cep	2.4510	8000.0	95	48509	No
42	GOM_NL__2PRFIN20110610_031746_000000403103_00219_48509_2801.N1	10-JUN-2011 03:17:46	Bright	39.500	76	27Gam Cas	2.3000	30000.	79	48509	No

279	GOM_NL__2PRFIN20110610_224404_000000383103_00231_48521_3127.N1	10-JUN-2011 22:44:04	Bright	38.000	98	13Zet Oph	2.5710	30000.	76	48521	No
280	GOM_NL__2PRFIN20110610_224914_000000473103_00231_48521_3128.N1	10-JUN-2011 22:49:14	Bright	46.500	126	60Bet Oph	2.7700	4250.0	93	48521	No
281	GOM_NL__2PRFIN20110610_225149_000000493103_00231_48521_3129.N1	10-JUN-2011 22:51:49	Bright	49.000	59	55Alp Oph	2.0800	8900.0	98	48521	No
282	GOM_NL__2PRFIN20110610_225334_000000413103_00231_48521_3130.N1	10-JUN-2011 22:53:34	Bright	40.500	127	27Bet Her	2.7810	4700.0	81	48521	No
283	GOM_NL__2PRFIN20110610_225641_000000393103_00231_48521_3131.N1	10-JUN-2011 22:56:41	Bright	39.000	133	40Zet Her	2.8070	6000.0	78	48521	No
284	GOM_NL__2PRFIN20110610_230340_000000423103_00231_48521_3132.N1	10-JUN-2011 23:03:40	Bright	41.500	130	23Bet Dra	2.7990	5800.0	83	48521	No
285	GOM_NL__2PRFIN20110610_231416_000000473103_00231_48521_3133.N1	10-JUN-2011 23:14:16	Bright	46.500	89	5Alp Cep	2.4510	8000.0	93	48521	No
286	GOM_NL__2PRFIN20110610_232032_000000503103_00231_48521_3134.N1	10-JUN-2011 23:20:32	Bright	50.000	76	27Gam Cas	2.3000	30000.	100	48521	No
287	GOM_NL__2PRFIN20110610_232630_000000363103_00231_48521_3135.N1	10-JUN-2011 23:26:30	Bright	35.500	73	57Gam1And	2.2600	13100.	71	48521	No
288	GOM_NL__2PRFIN20110610_232848_000000493103_00231_48521_3136.N1	10-JUN-2011 23:28:48	Twilight	49.000	53	43Bet And	2.0480	3300.0	98	48521	No
289	GOM_NL__2PRFIN20110610_233208_000000483103_00231_48521_3137.N1	10-JUN-2011 23:32:08	Twilight	47.500	50	13Alp Ari	2.0070	4250.0	95	48521	No
290	GOM_NL__2PRFIN20110610_234703_000000503103_00231_48521_3138.N1	10-JUN-2011 23:47:03	Dark	49.500	52	16Bet Cet	2.0370	4500.0	99	48521	No
291	GOM_NL__2PRFIN20110610_235327_000000463103_00231_48521_3139.N1	10-JUN-2011 23:53:27	Dark	46.000	84	Alp Phe	2.3970	4500.0	92	48521	No
292	GOM_NL__2PRFIN20110610_235927_000000653103_00232_48522_3133.N1	10-JUN-2011 23:59:27	Dark	65.000	63	Bet Gru	2.1500	2800.0	130	48522	No

3. Quality information per product

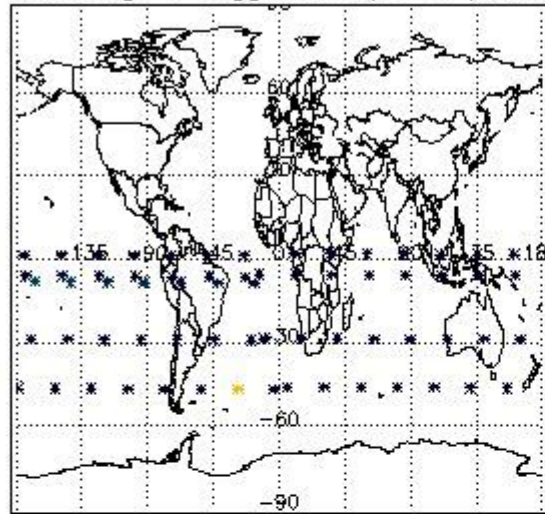
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

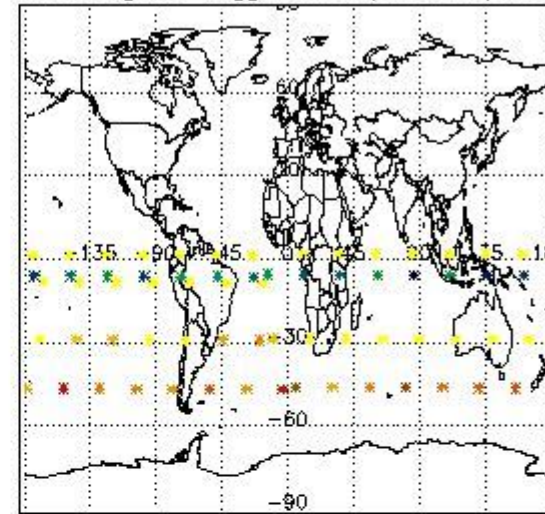


3.2 Plot quality information per product (world map)

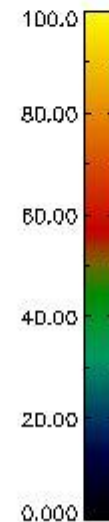
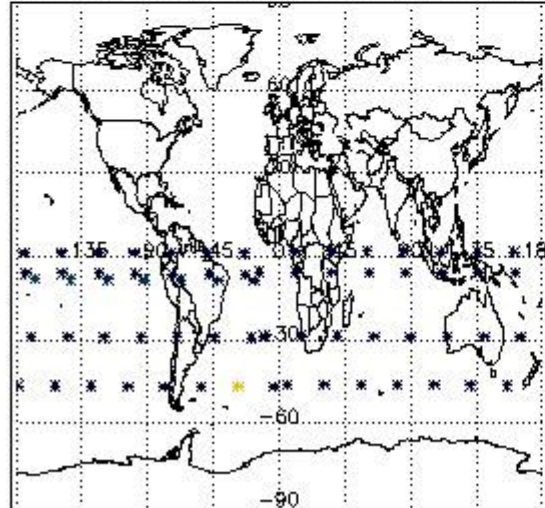
Percentage of flagged data per O3 profile



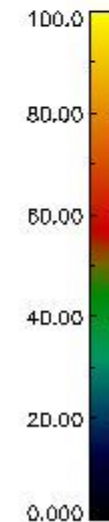
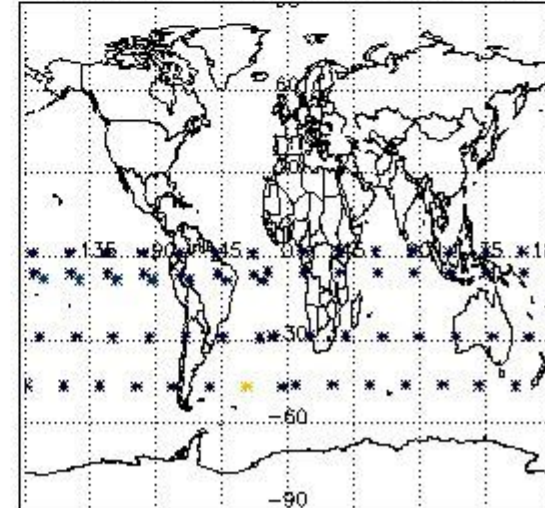
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

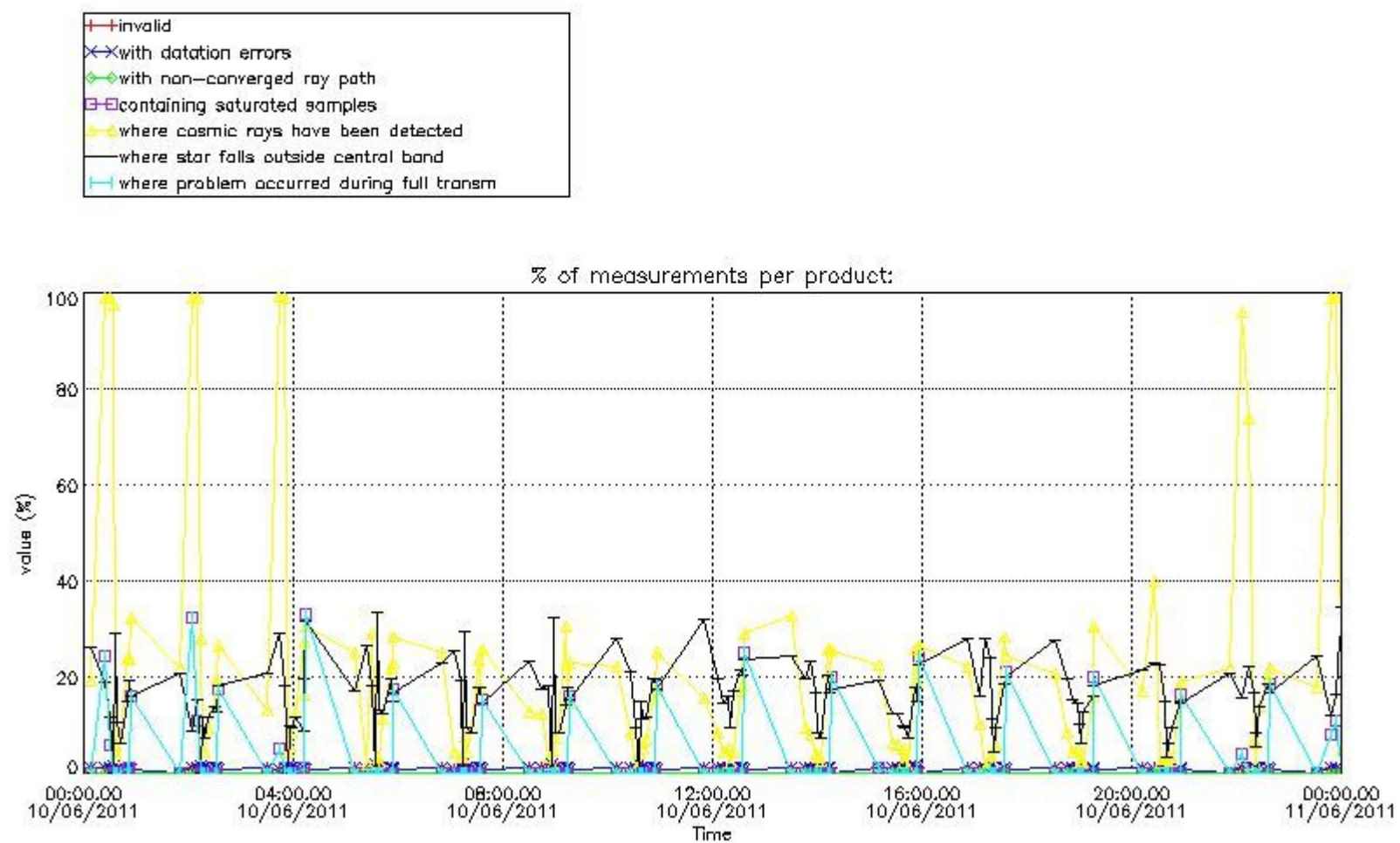


4. Level 1 quality information per product

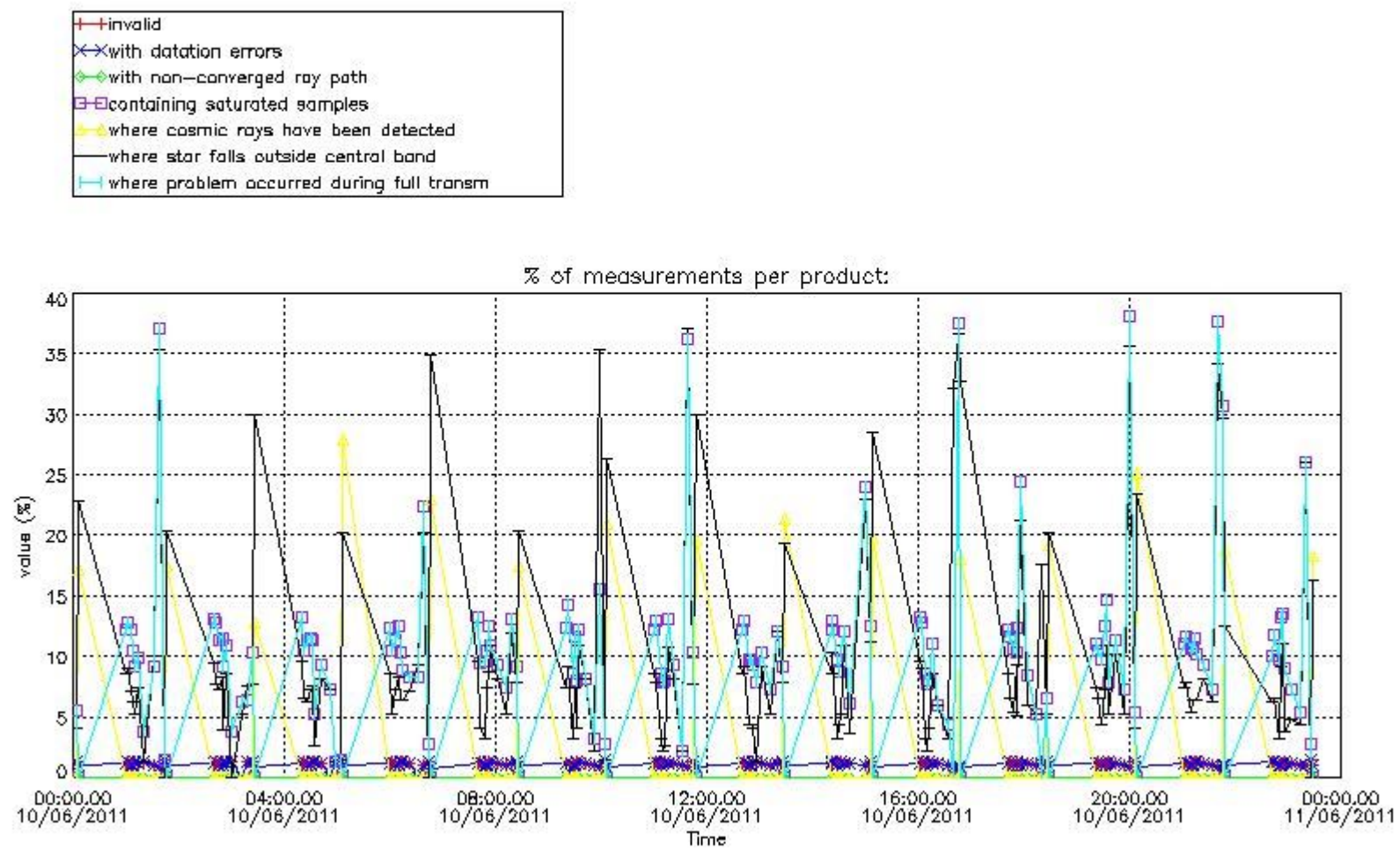
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

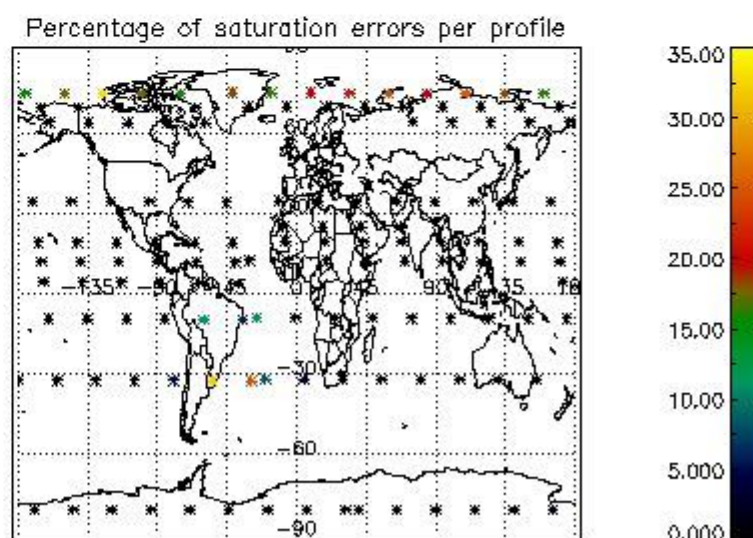
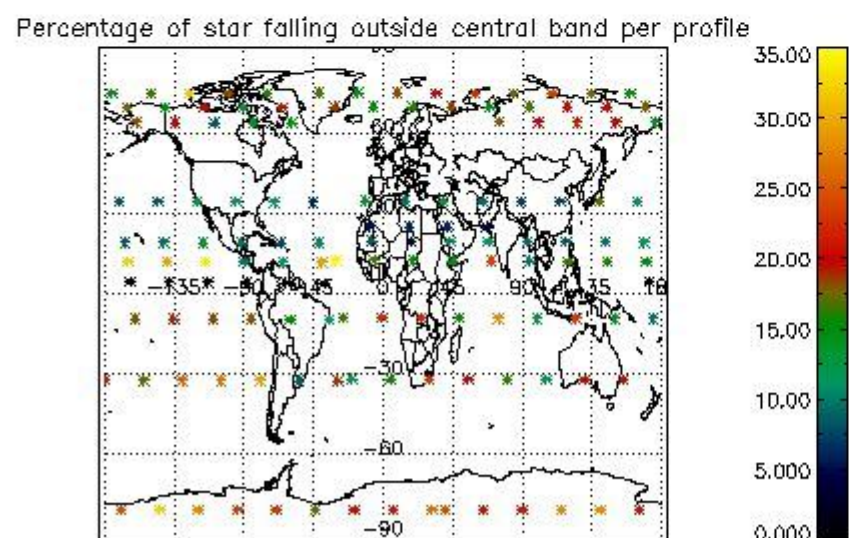
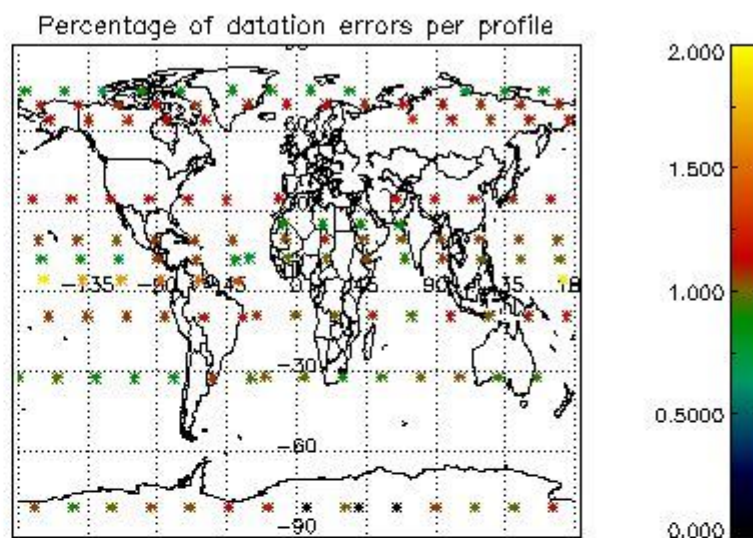
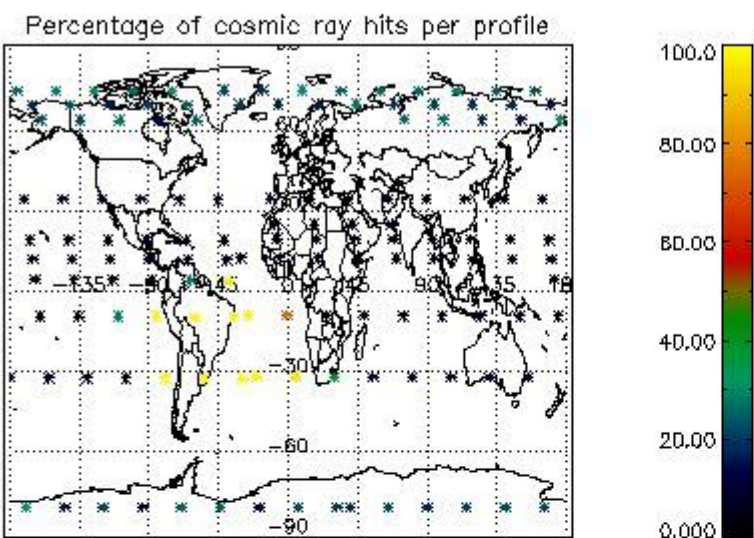


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

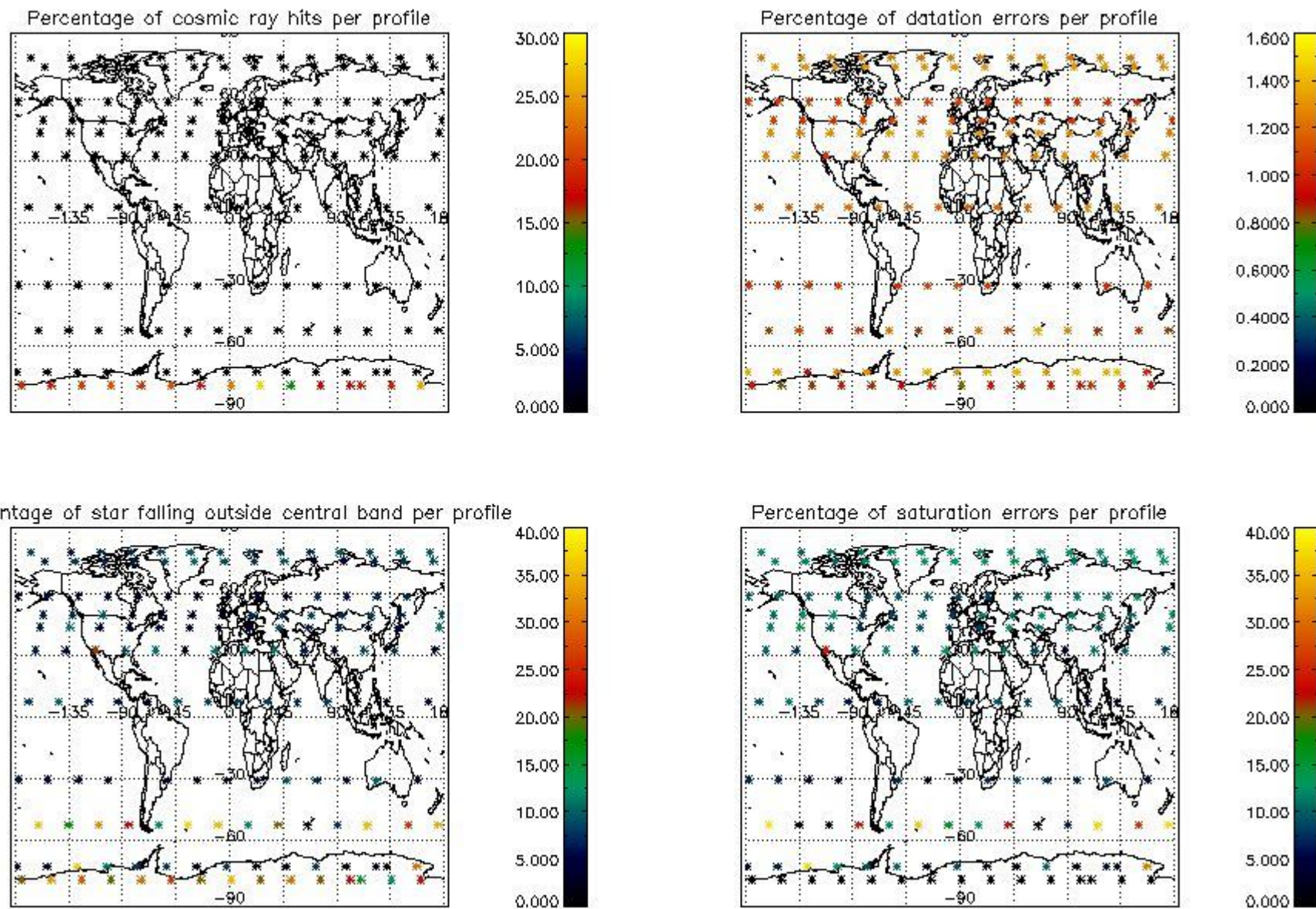


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

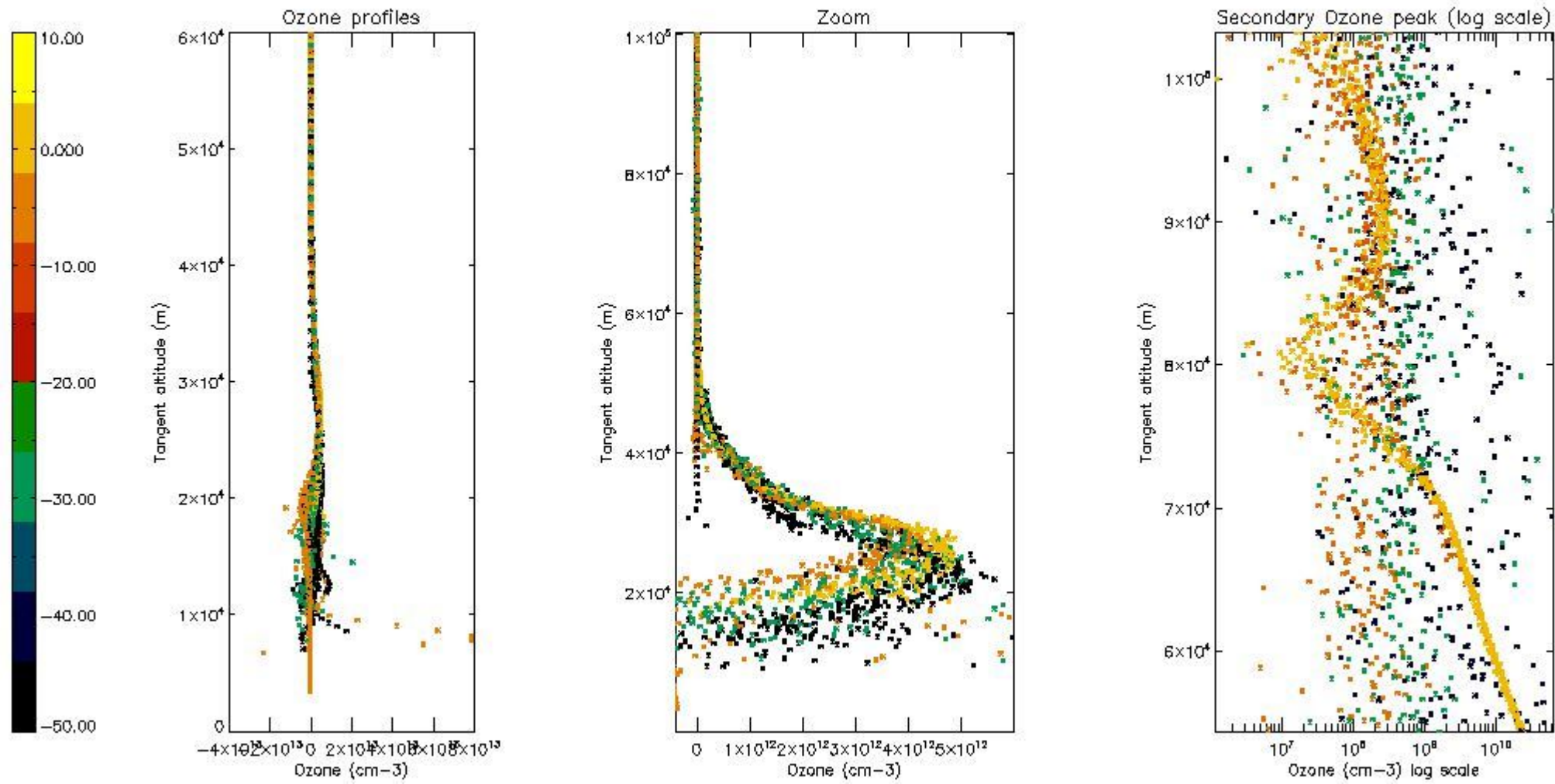
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	24
STD < 20	8

STD < 10	5
STD < 5	3

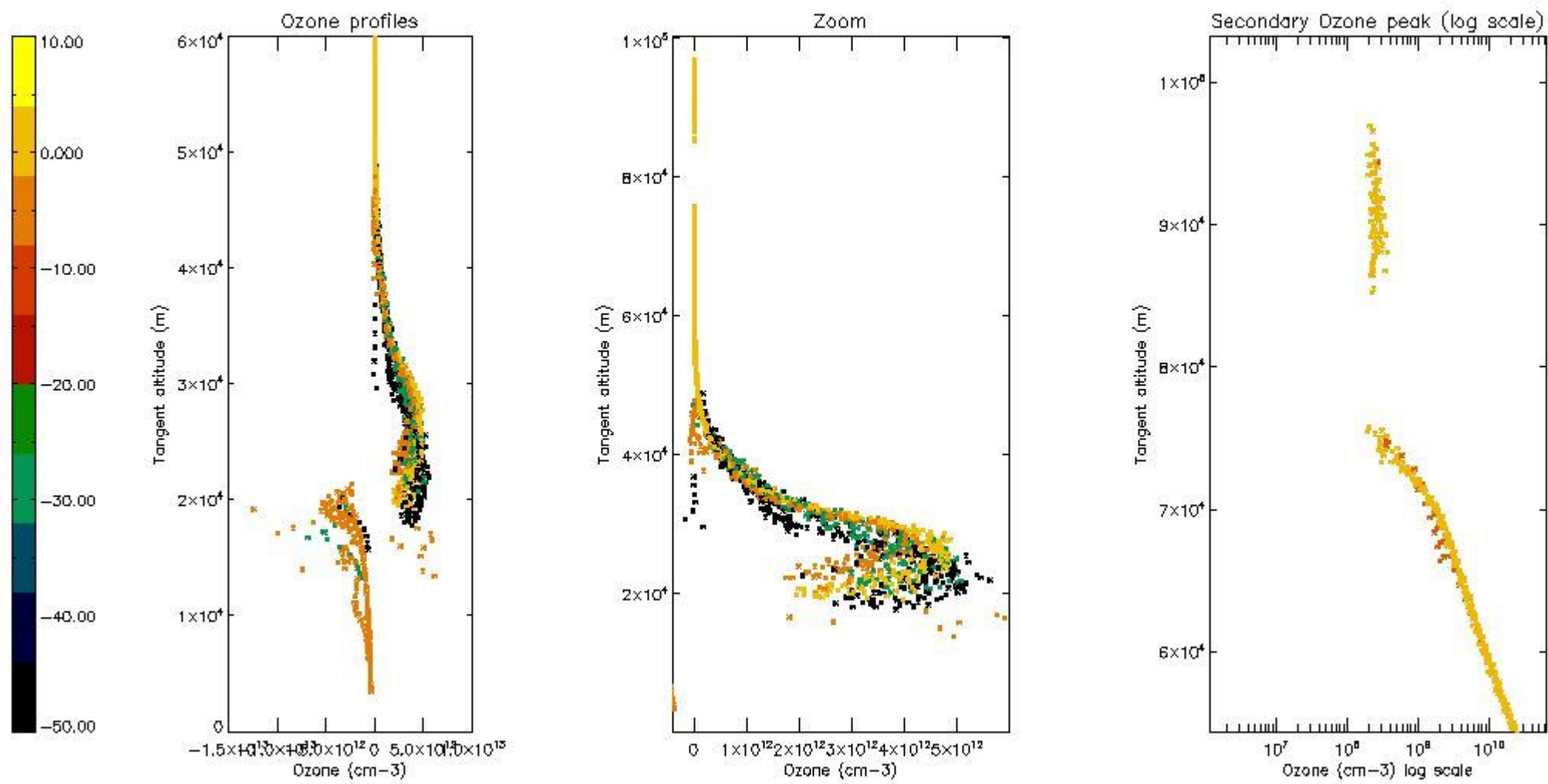
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



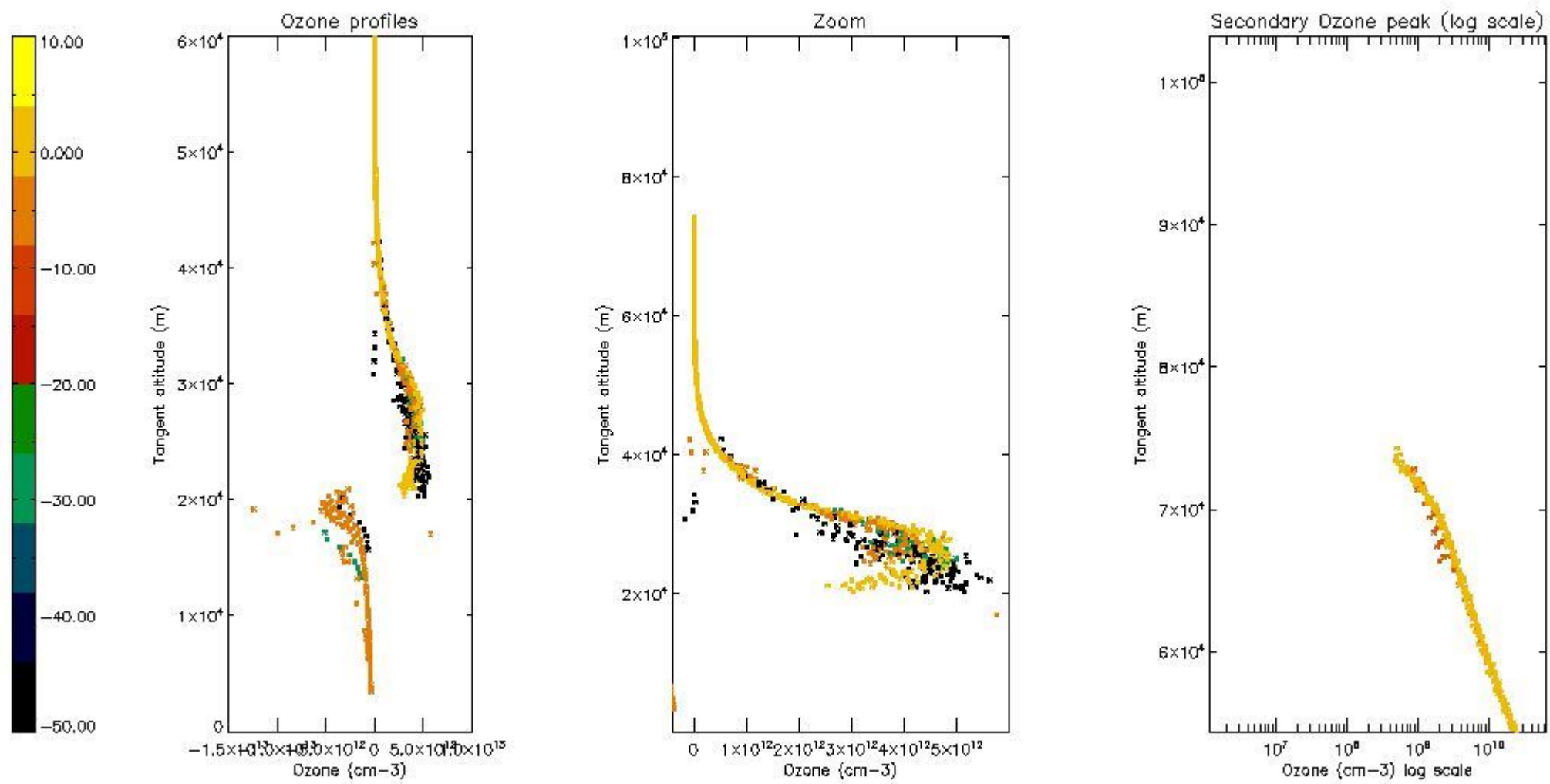
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



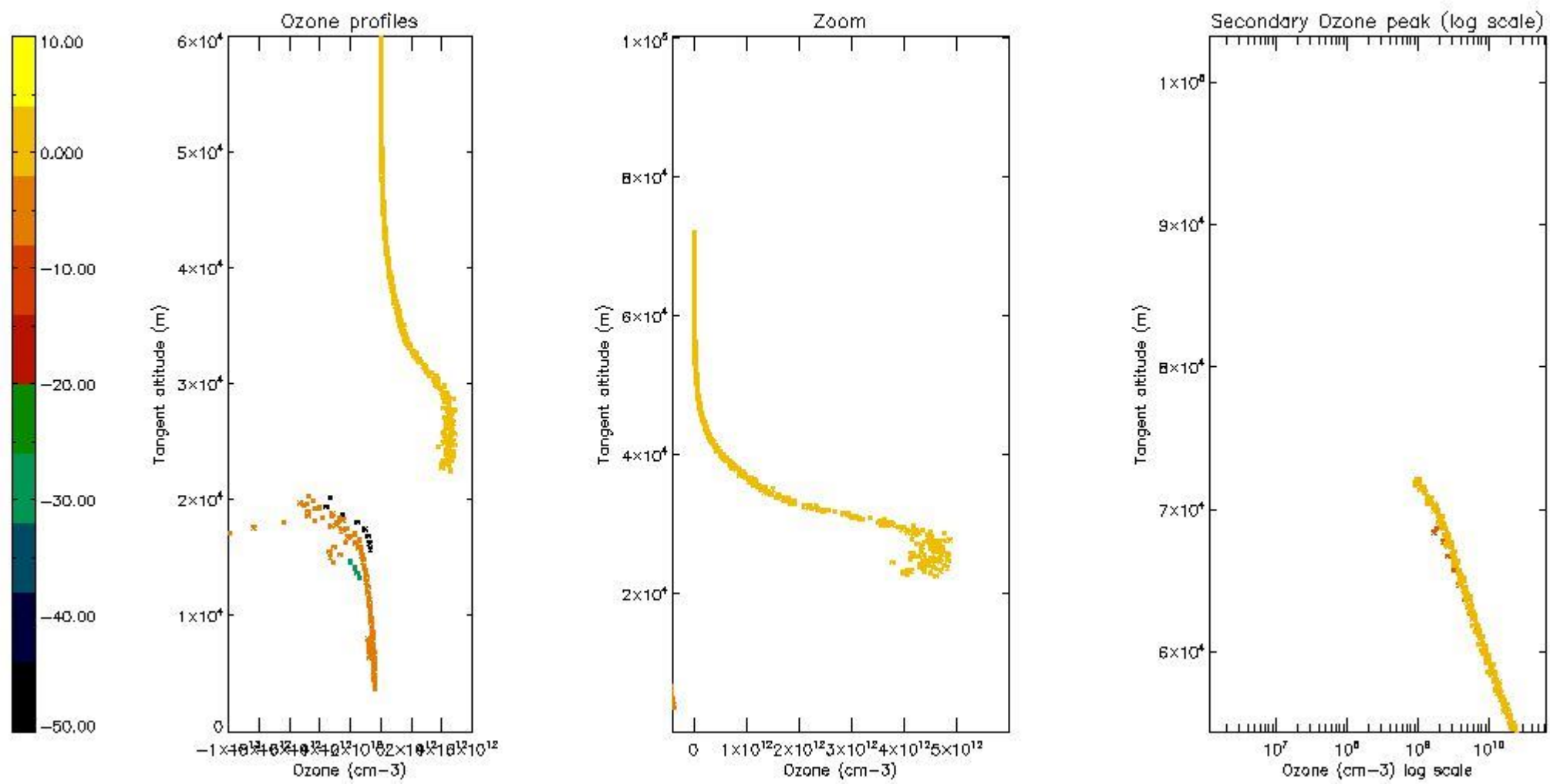
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



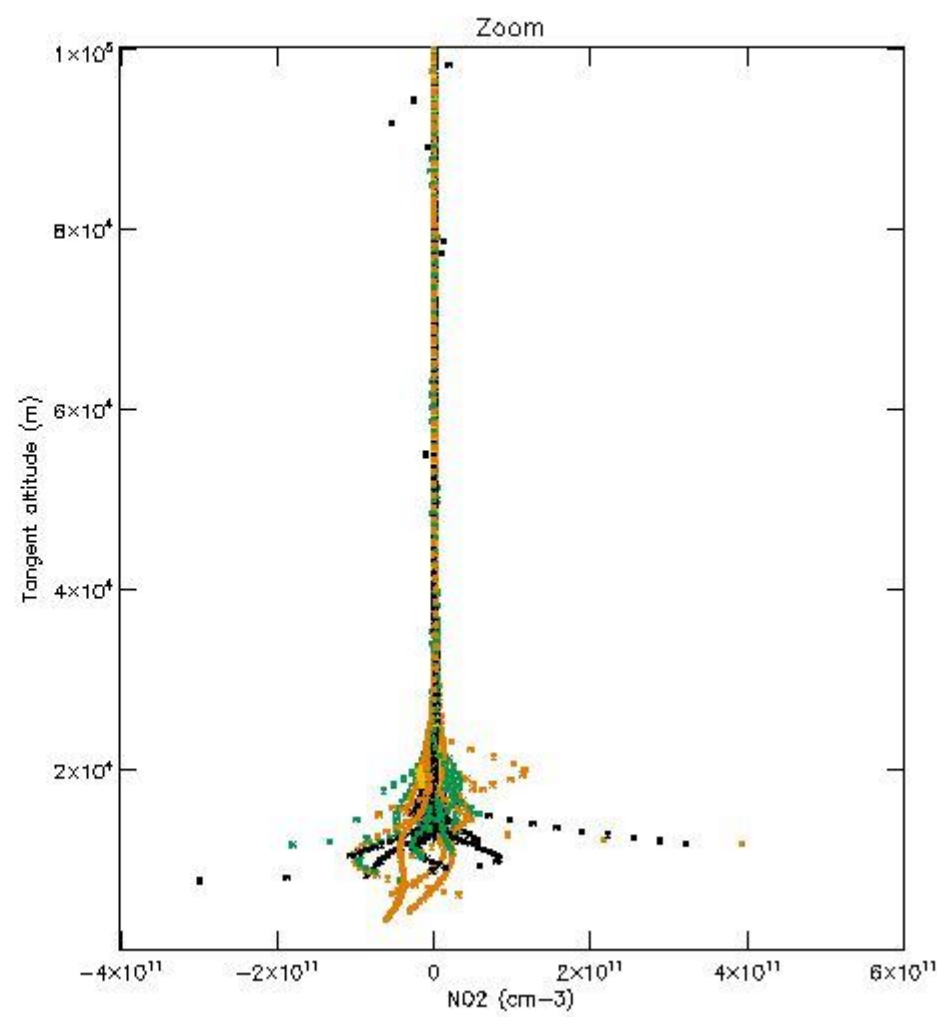
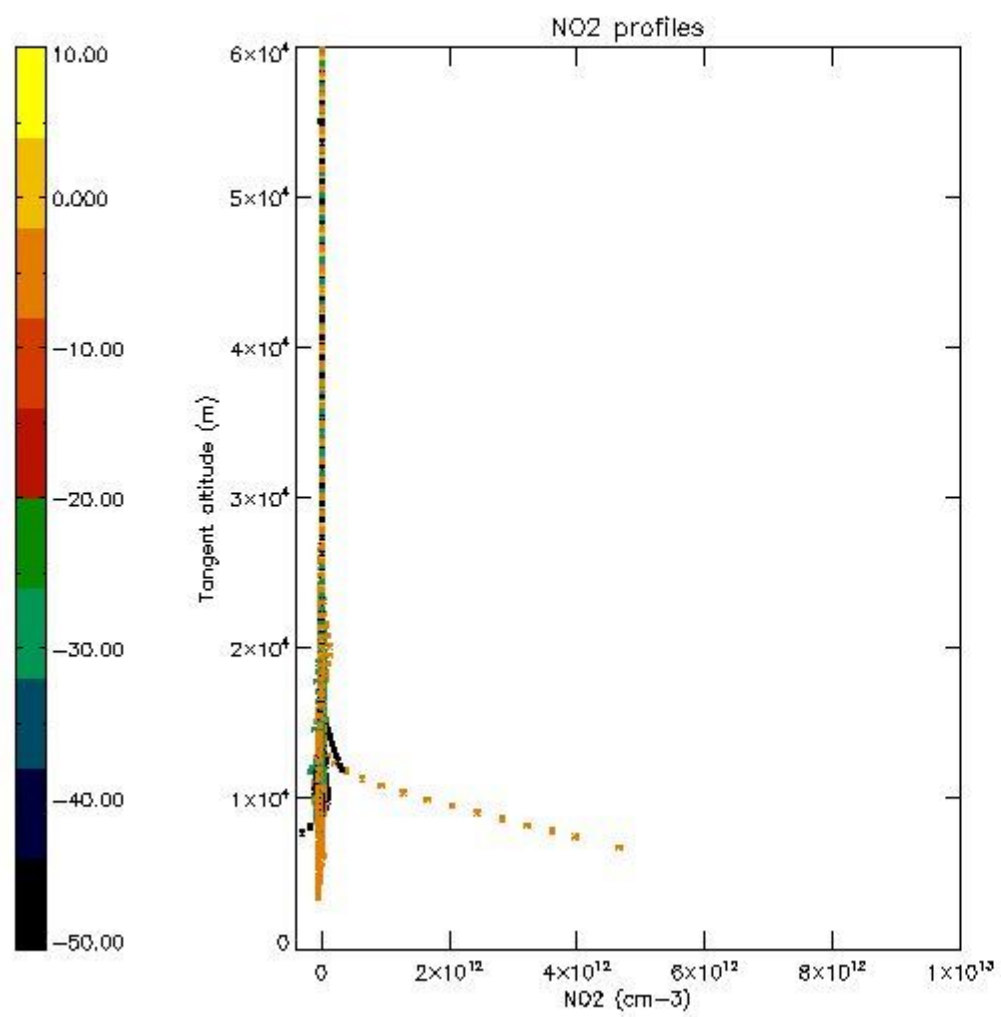
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



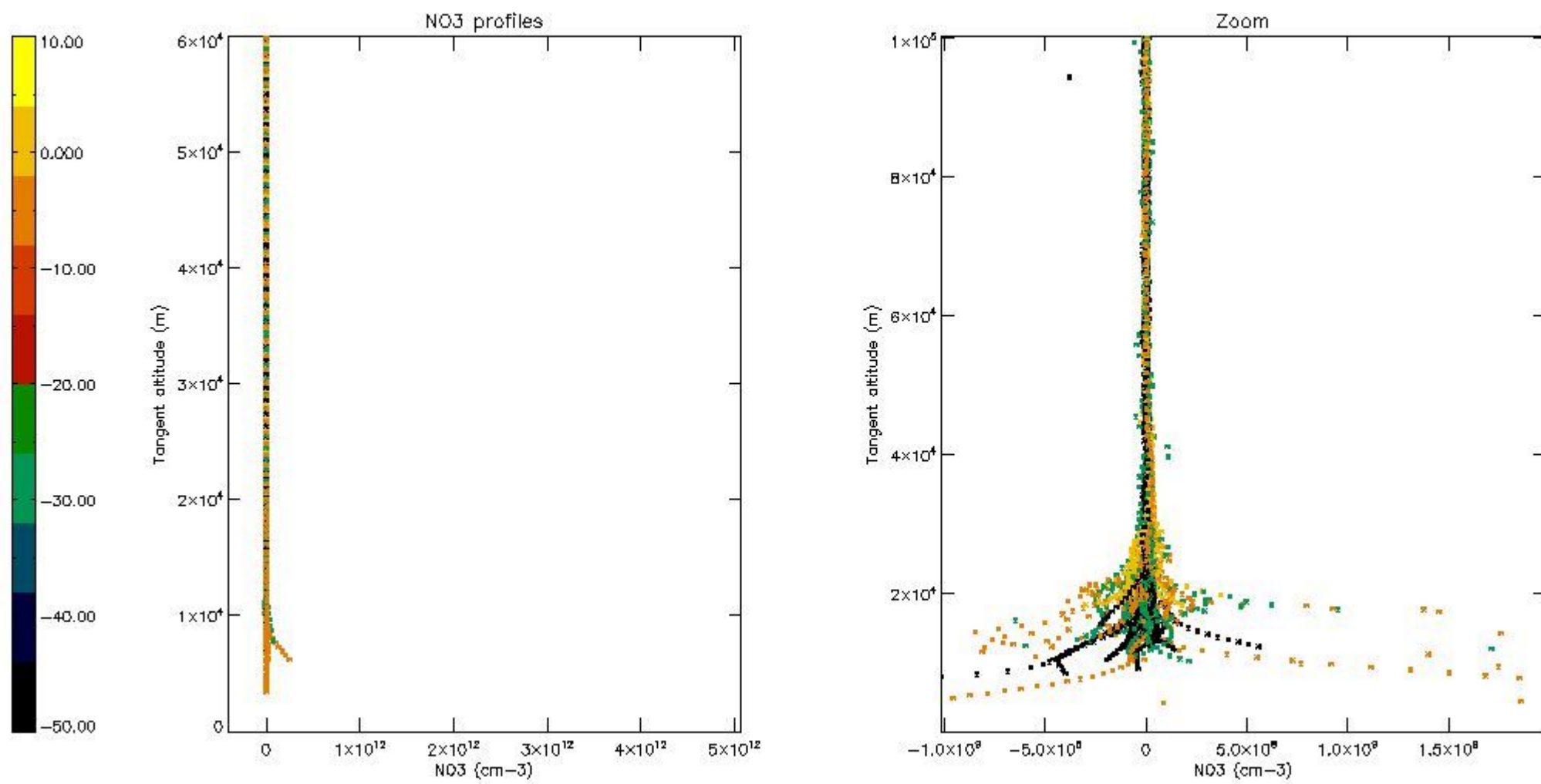
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



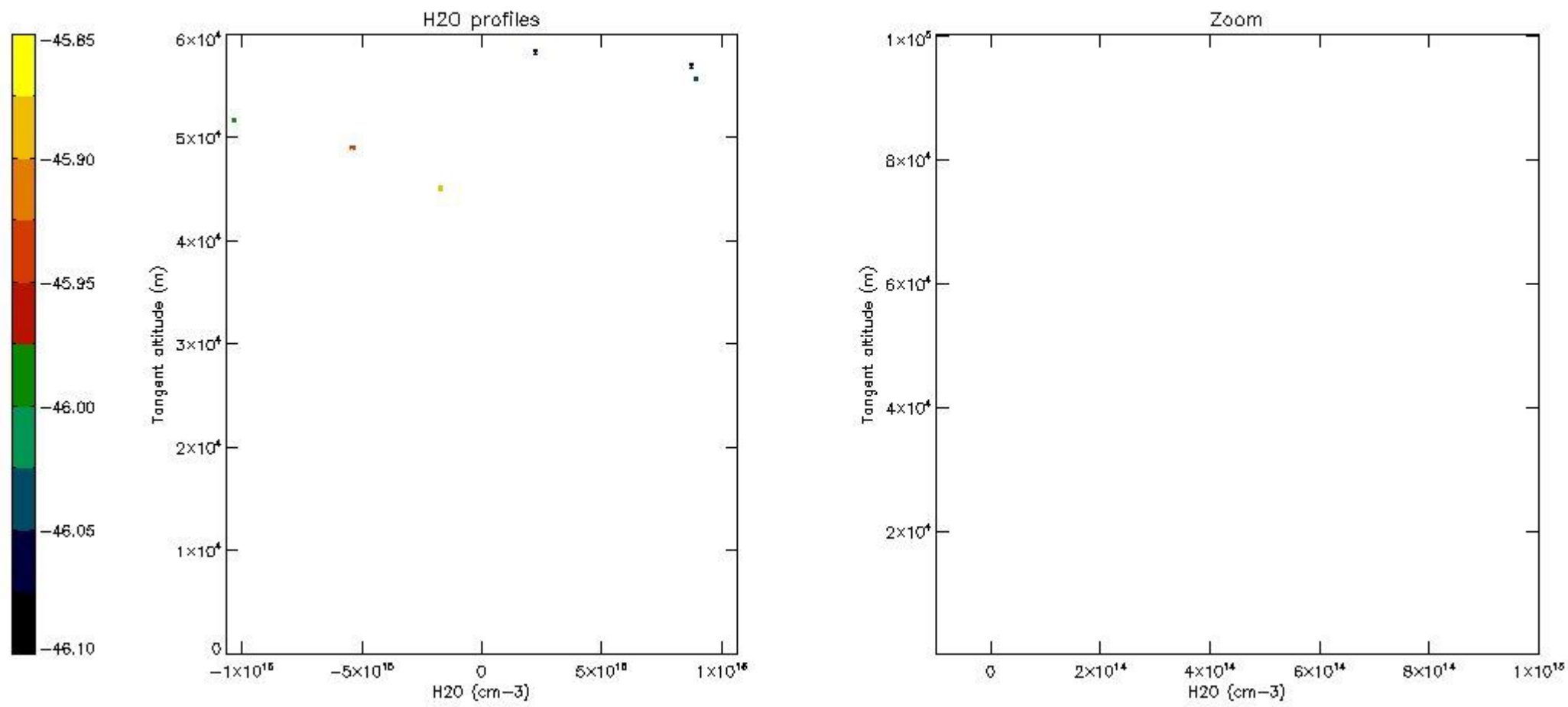
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

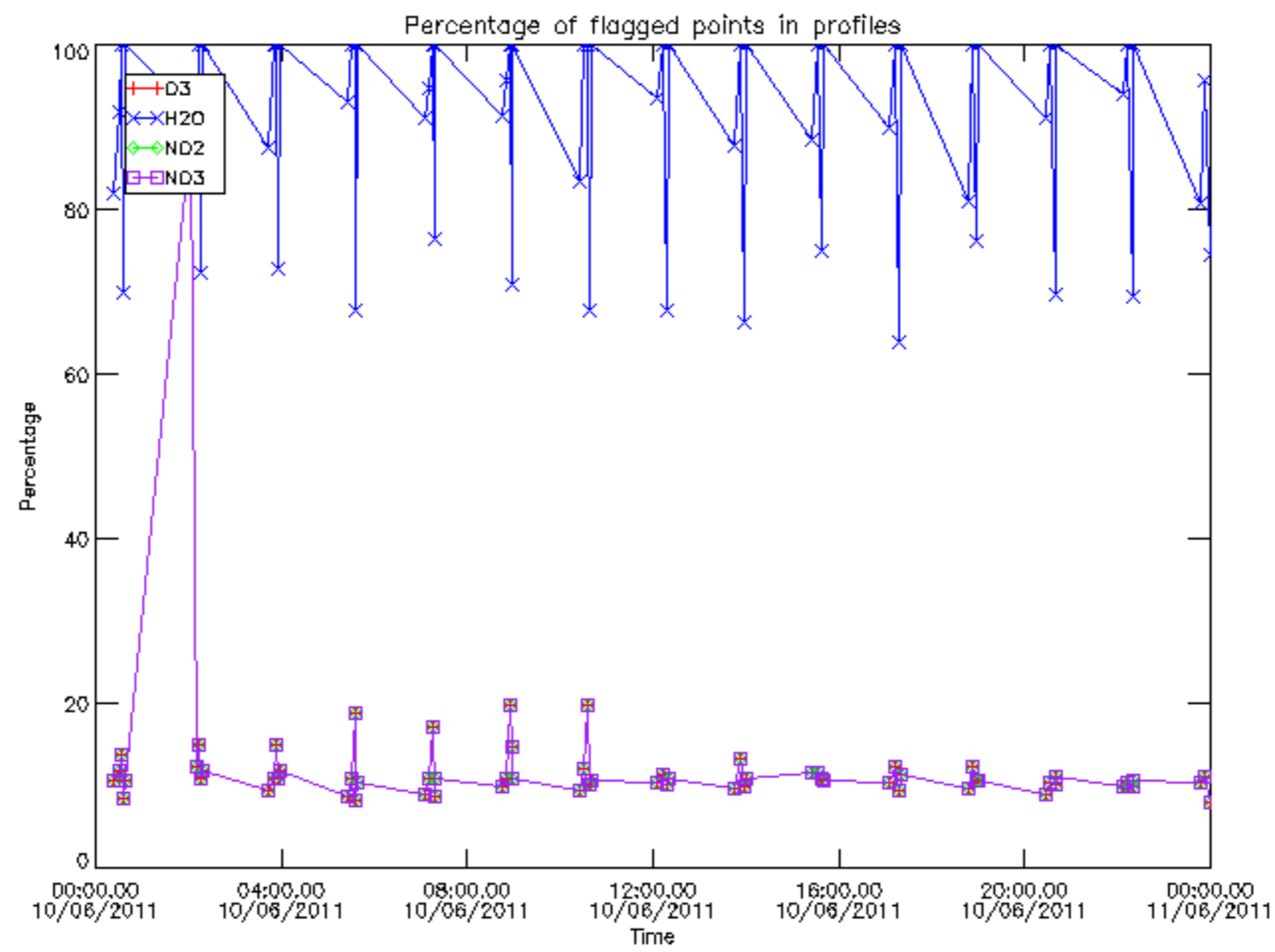
The colorbar represents the latitude.



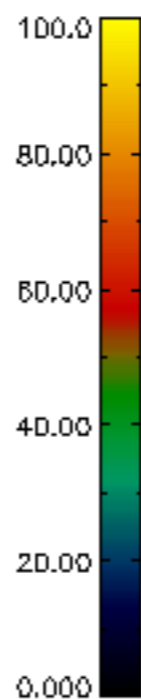
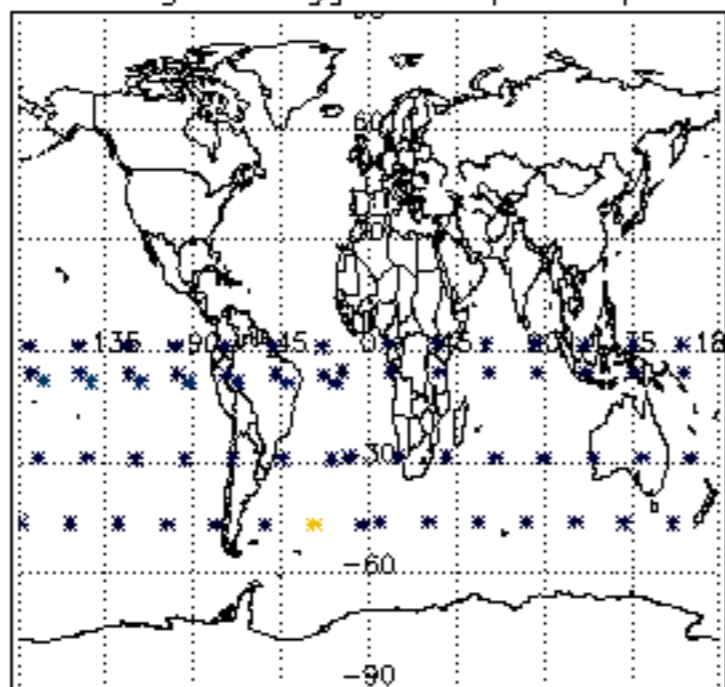
6. Auxiliary Data Files used for the production reported in section 2

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.

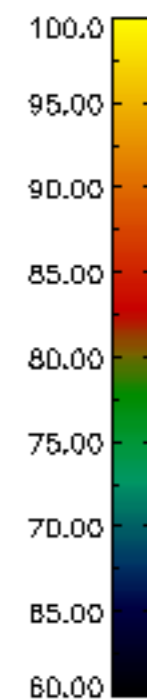
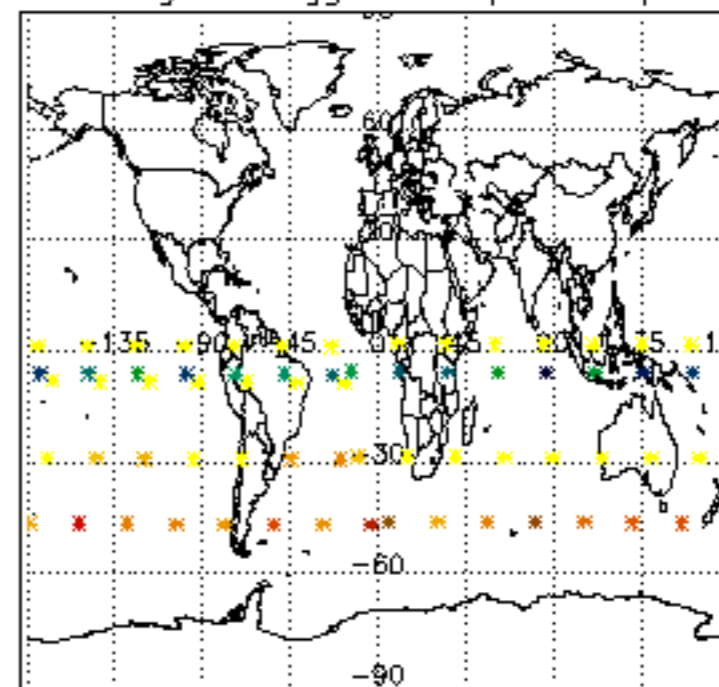
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	10-JUN-2011 00:03:13
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	10-JUN-2011 00:03:13
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	10-JUN-2011 00:03:13



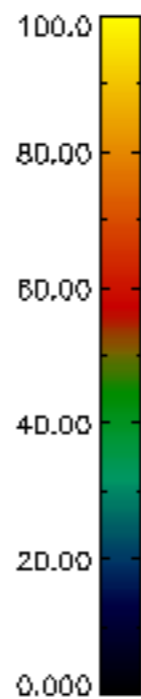
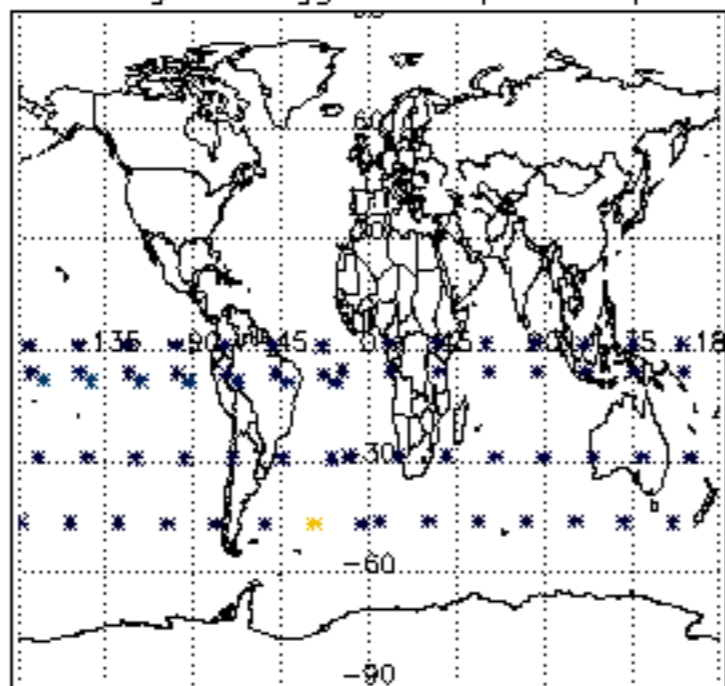
Percentage of flagged data per D3 profile



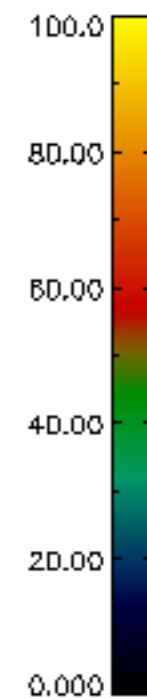
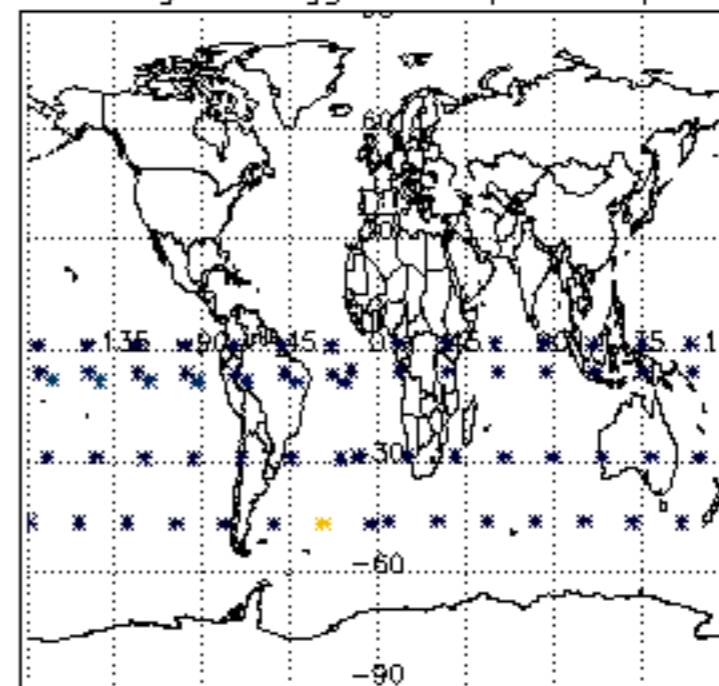
Percentage of flagged data per H2O profile

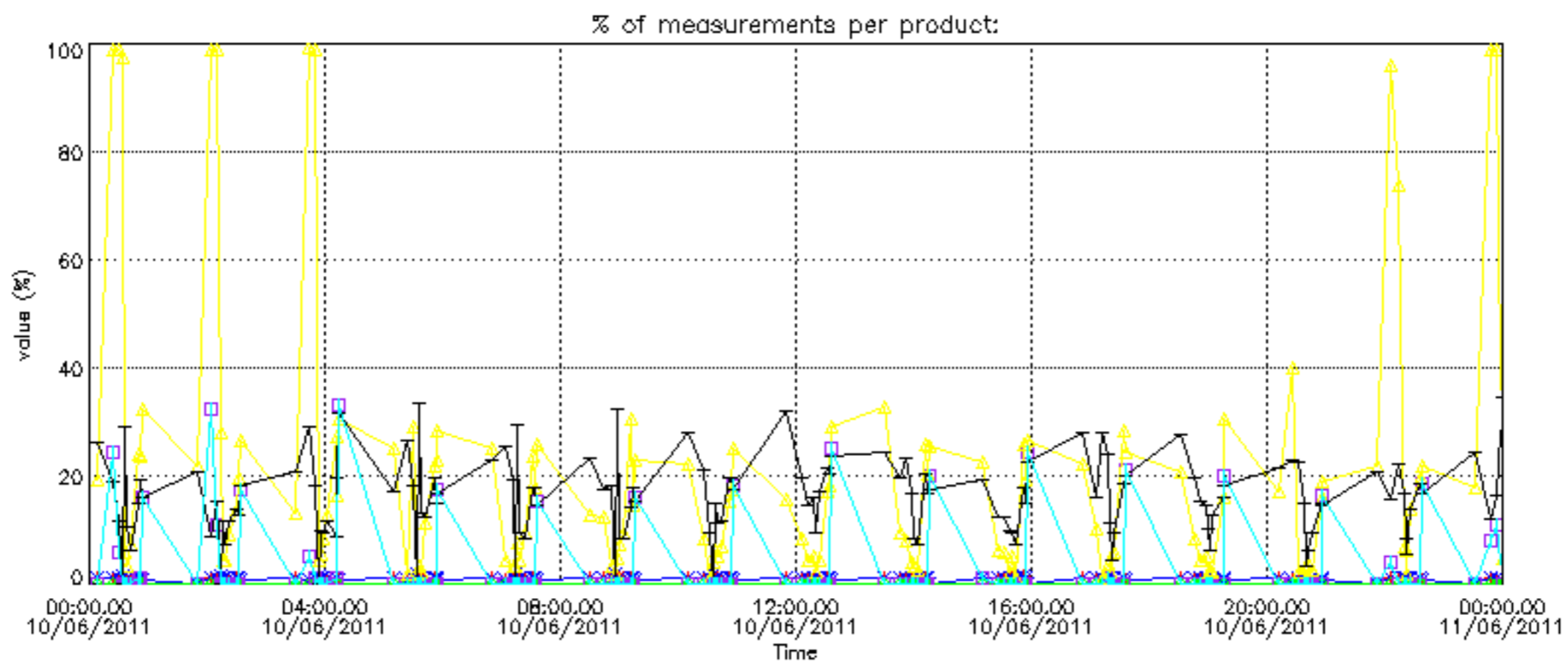


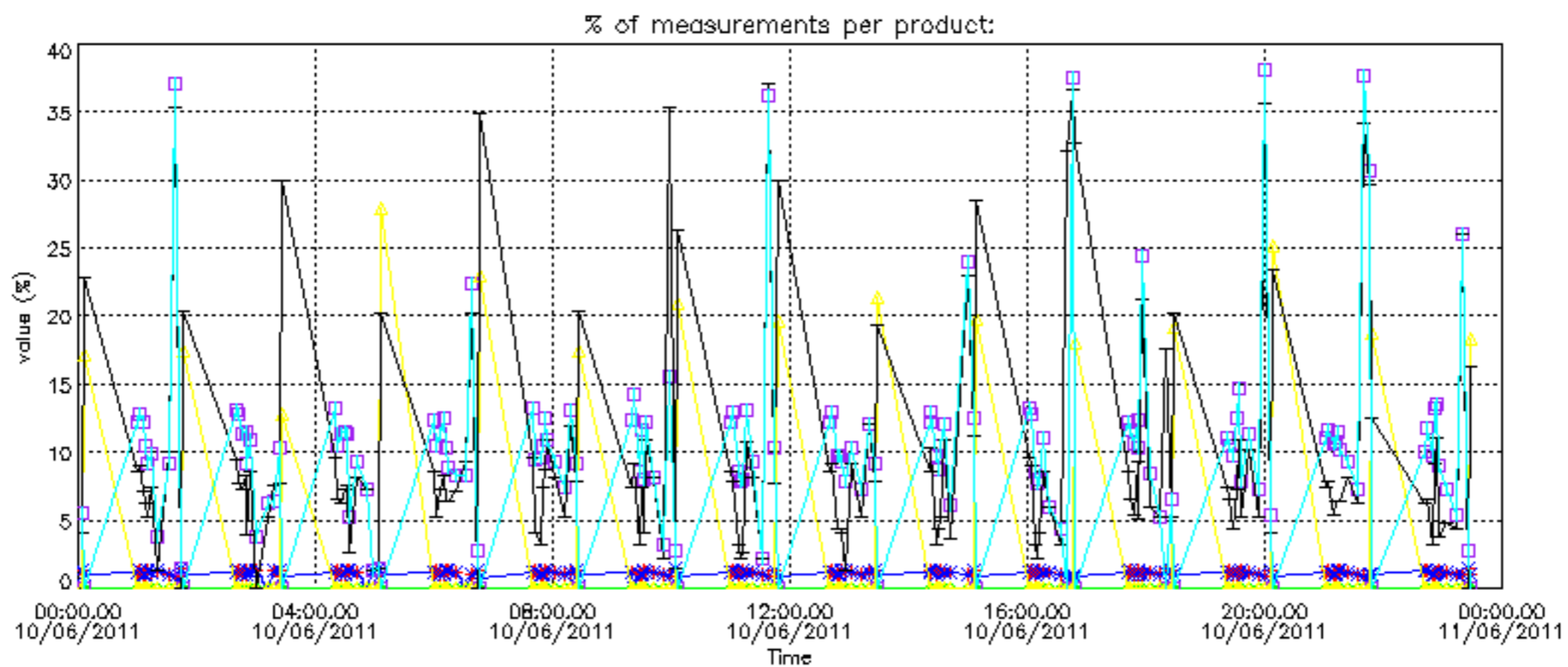
Percentage of flagged data per NO2 profile



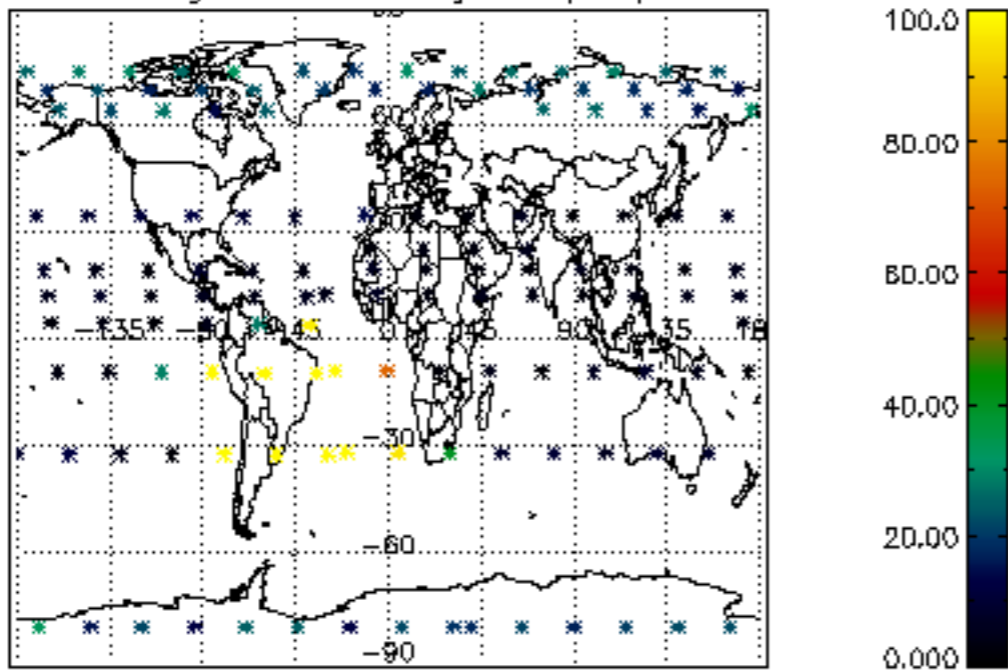
Percentage of flagged data per NO3 profile



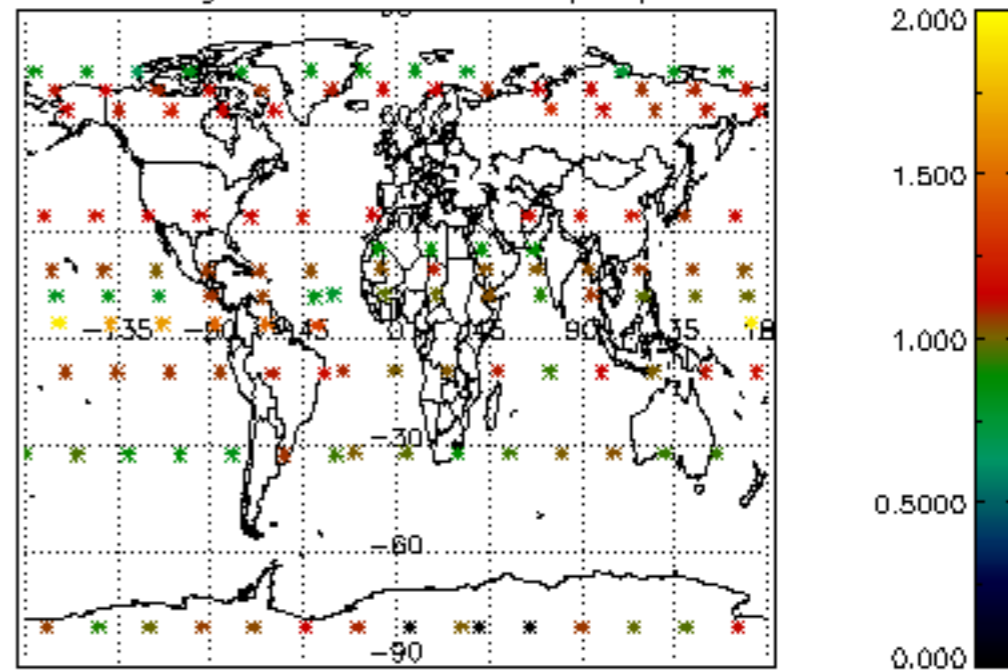




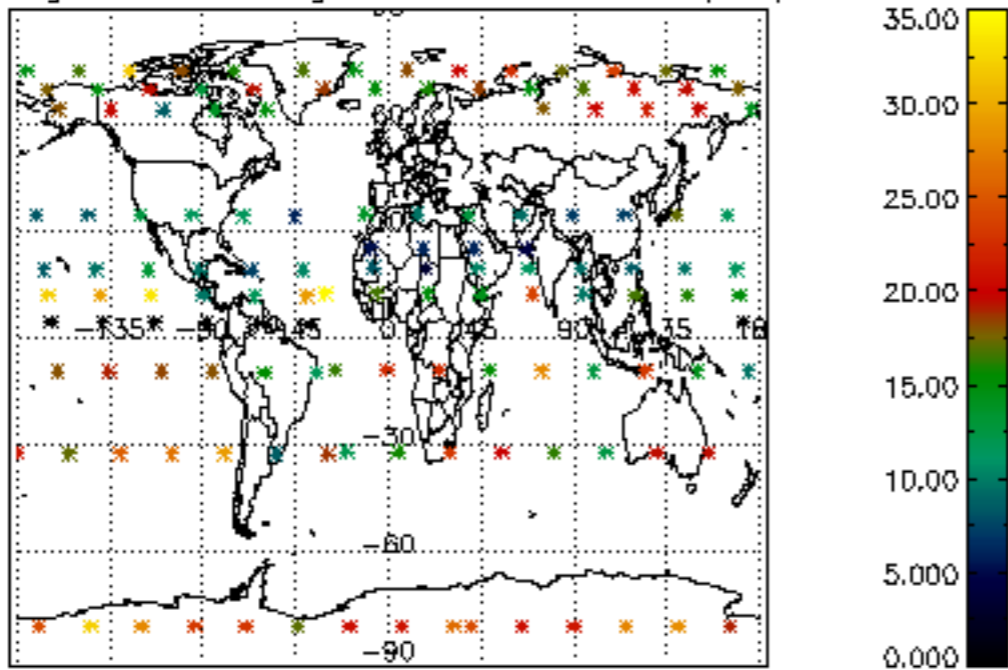
Percentage of cosmic ray hits per profile



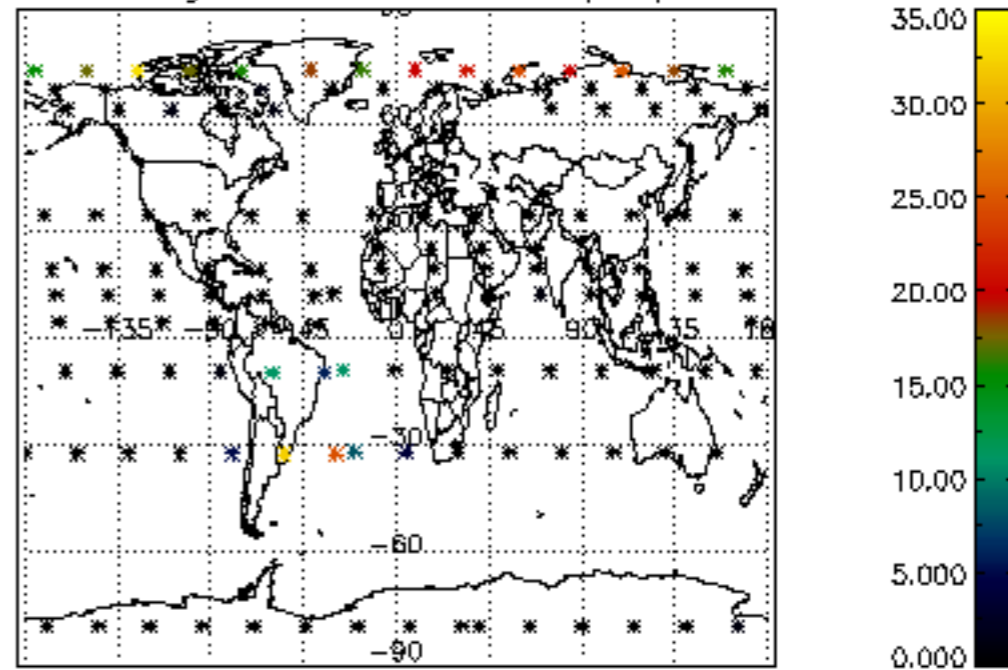
Percentage of datation errors per profile



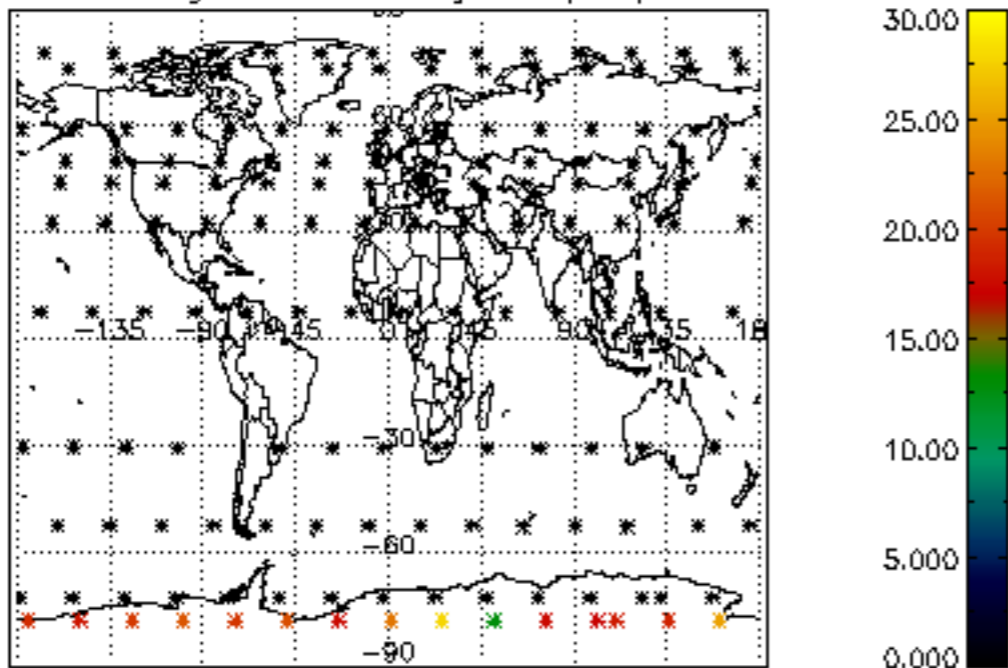
Percentage of star falling outside central band per profile



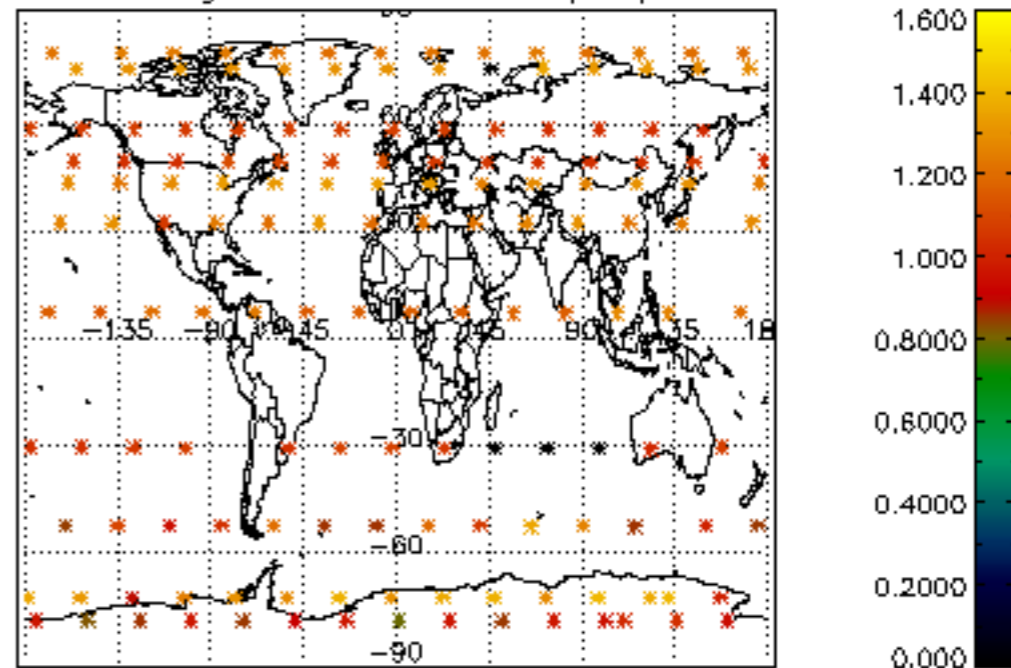
Percentage of saturation errors per profile



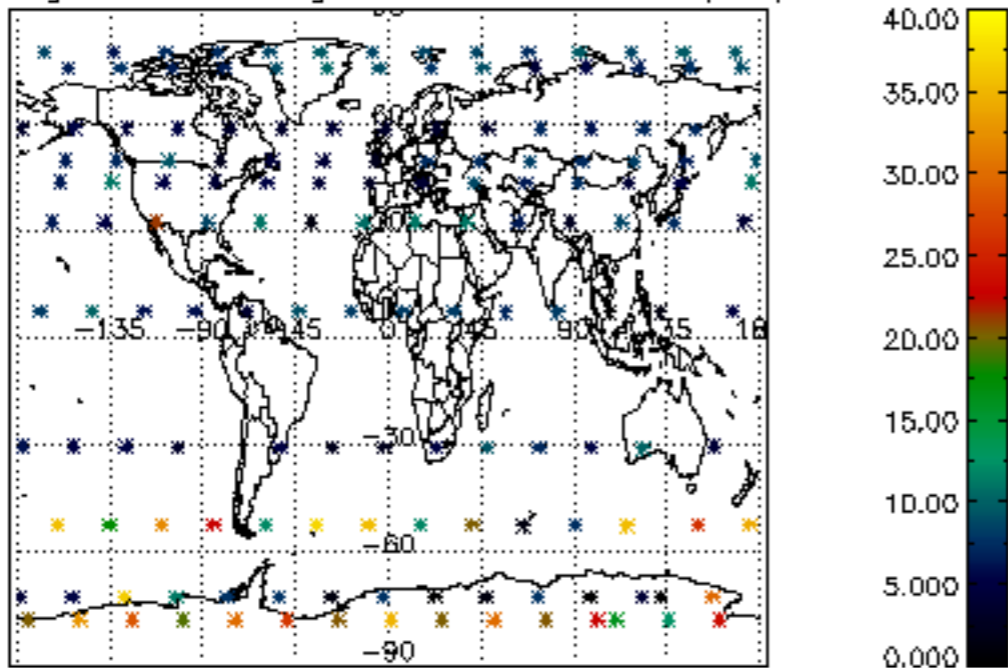
Percentage of cosmic ray hits per profile



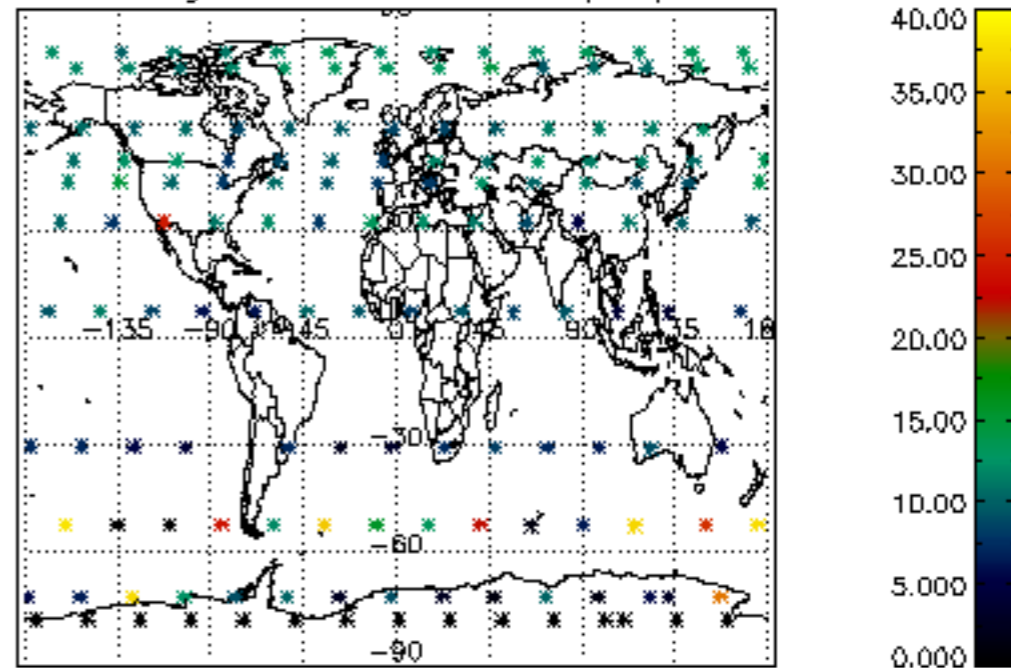
Percentage of datation errors per profile

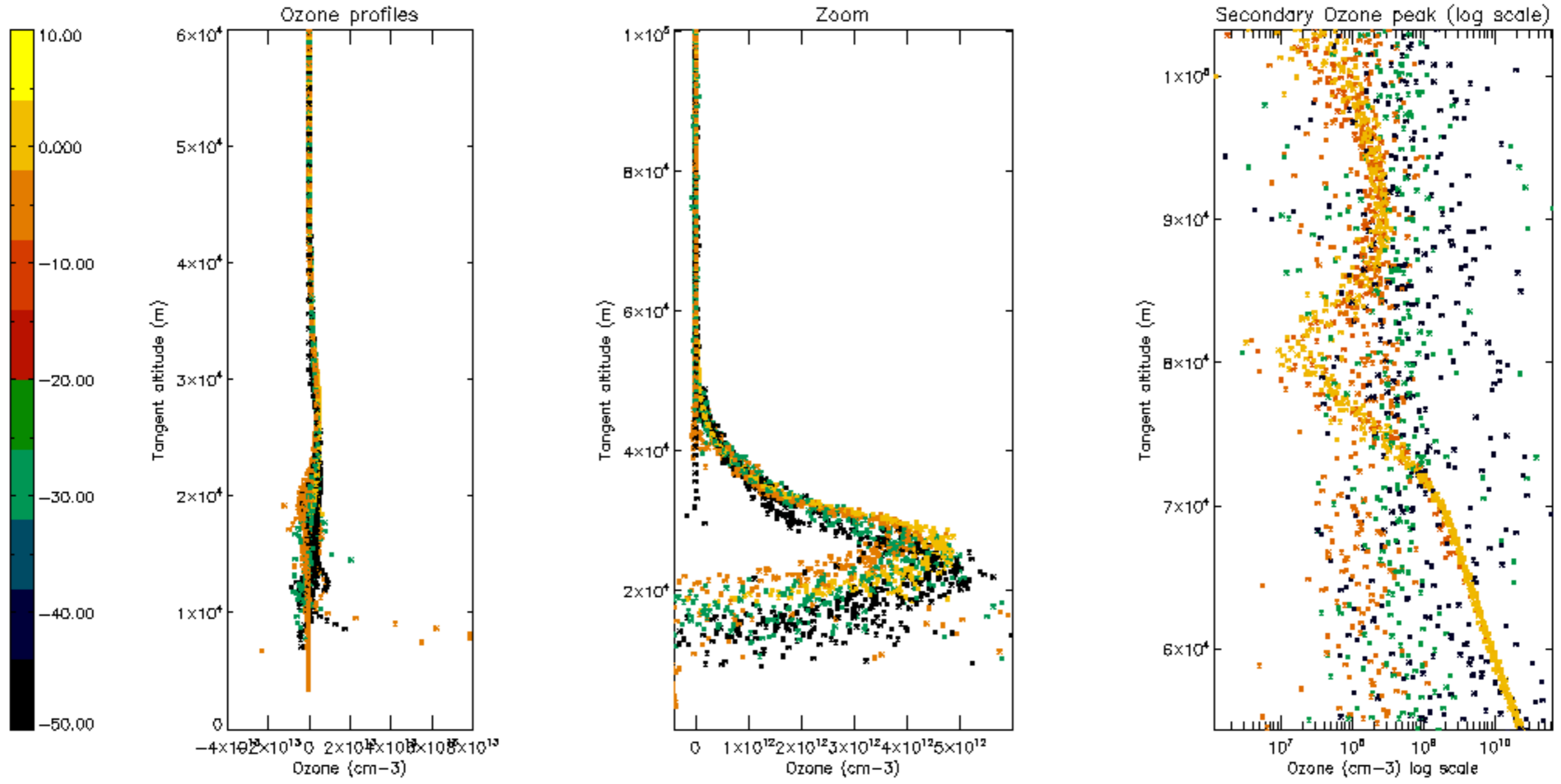


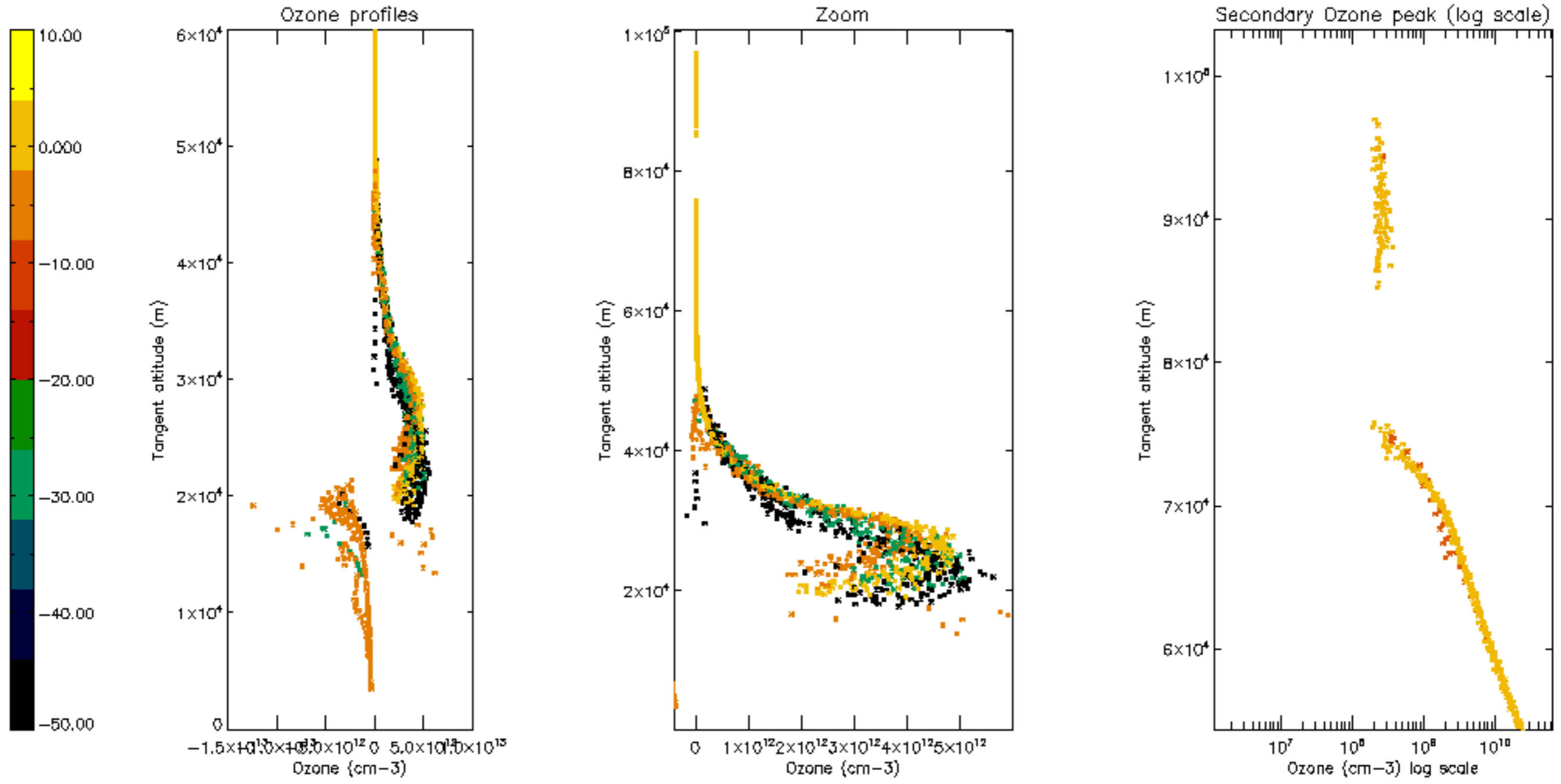
Percentage of star falling outside central band per profile

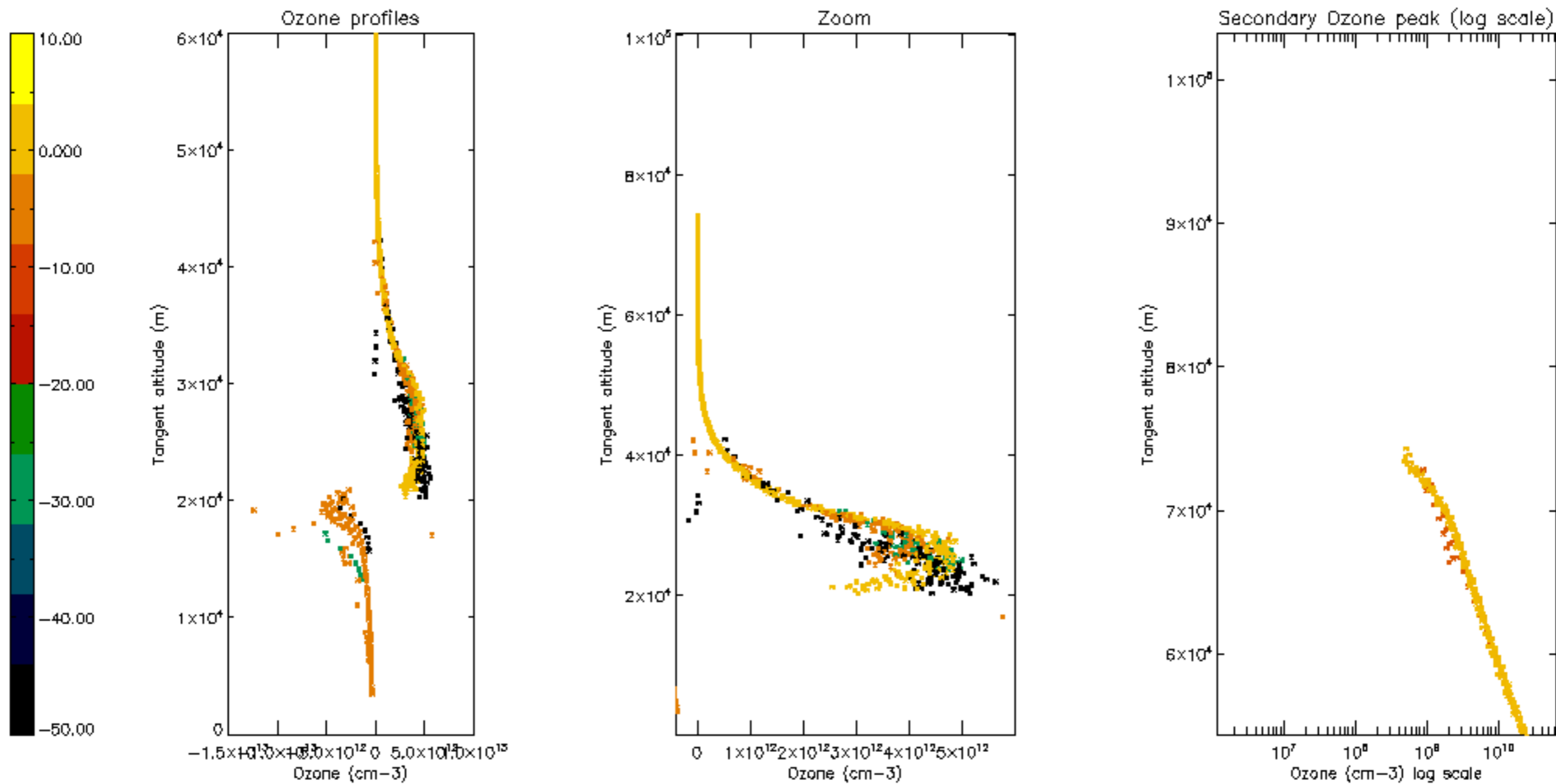


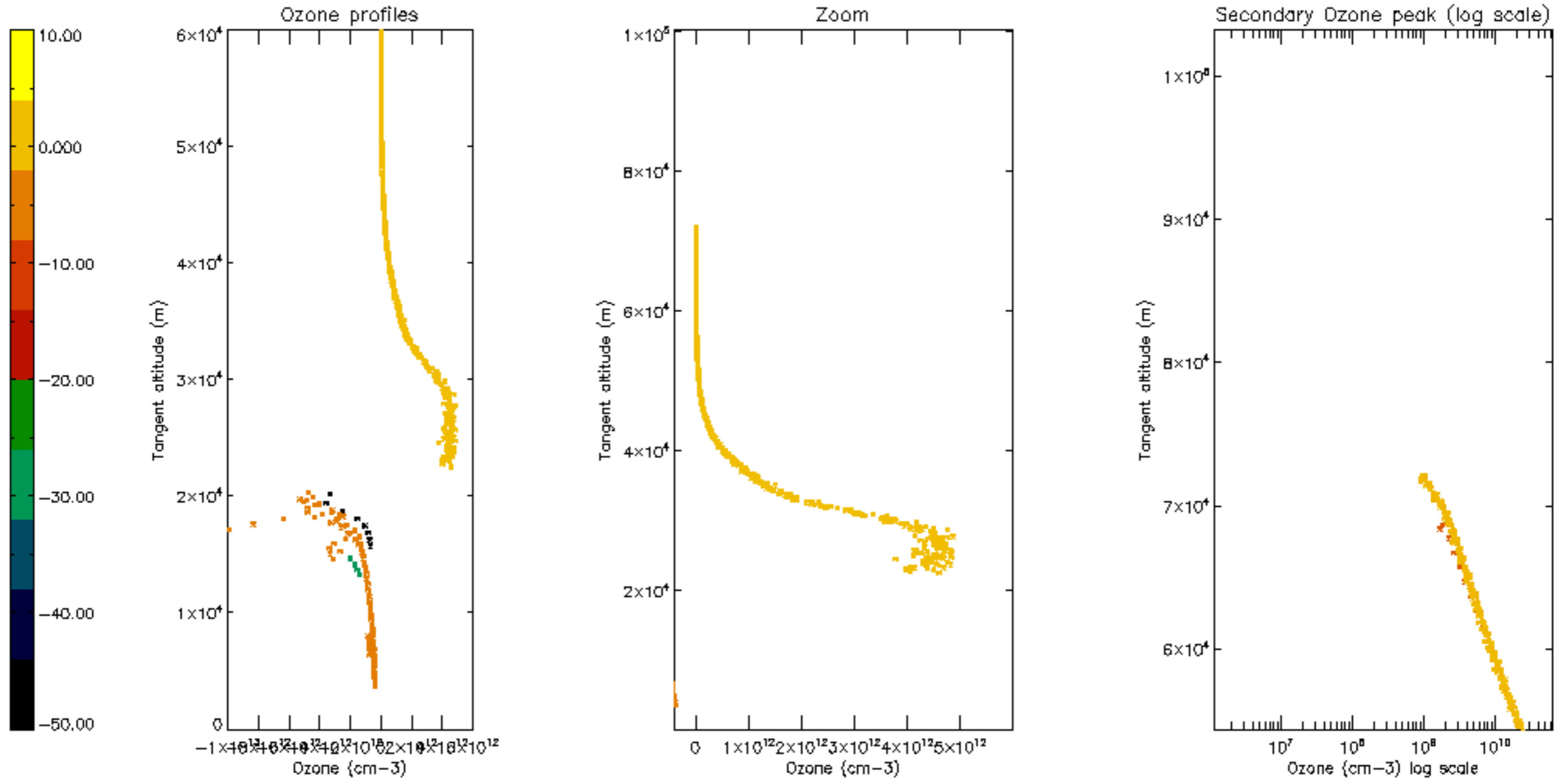
Percentage of saturation errors per profile

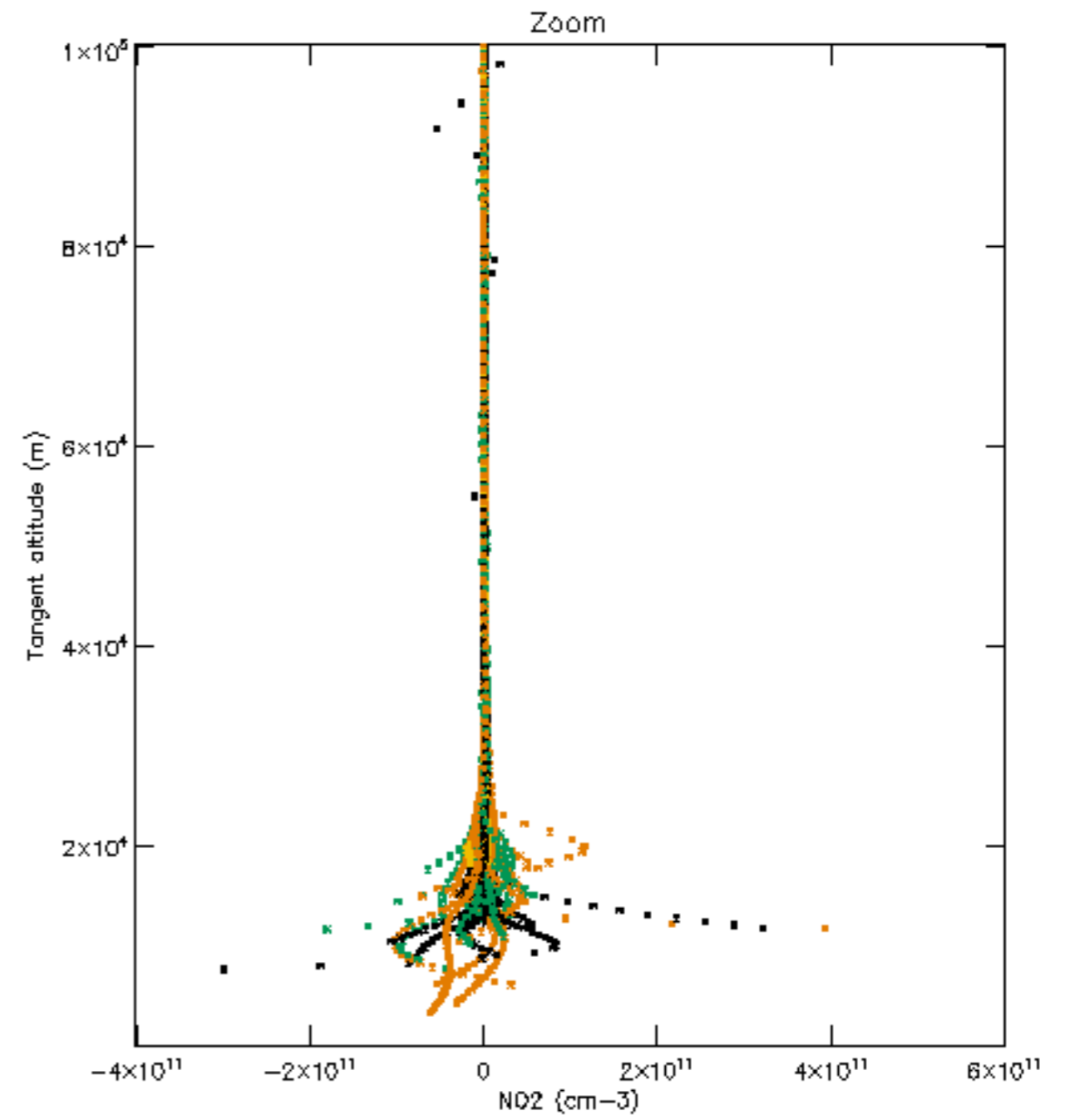
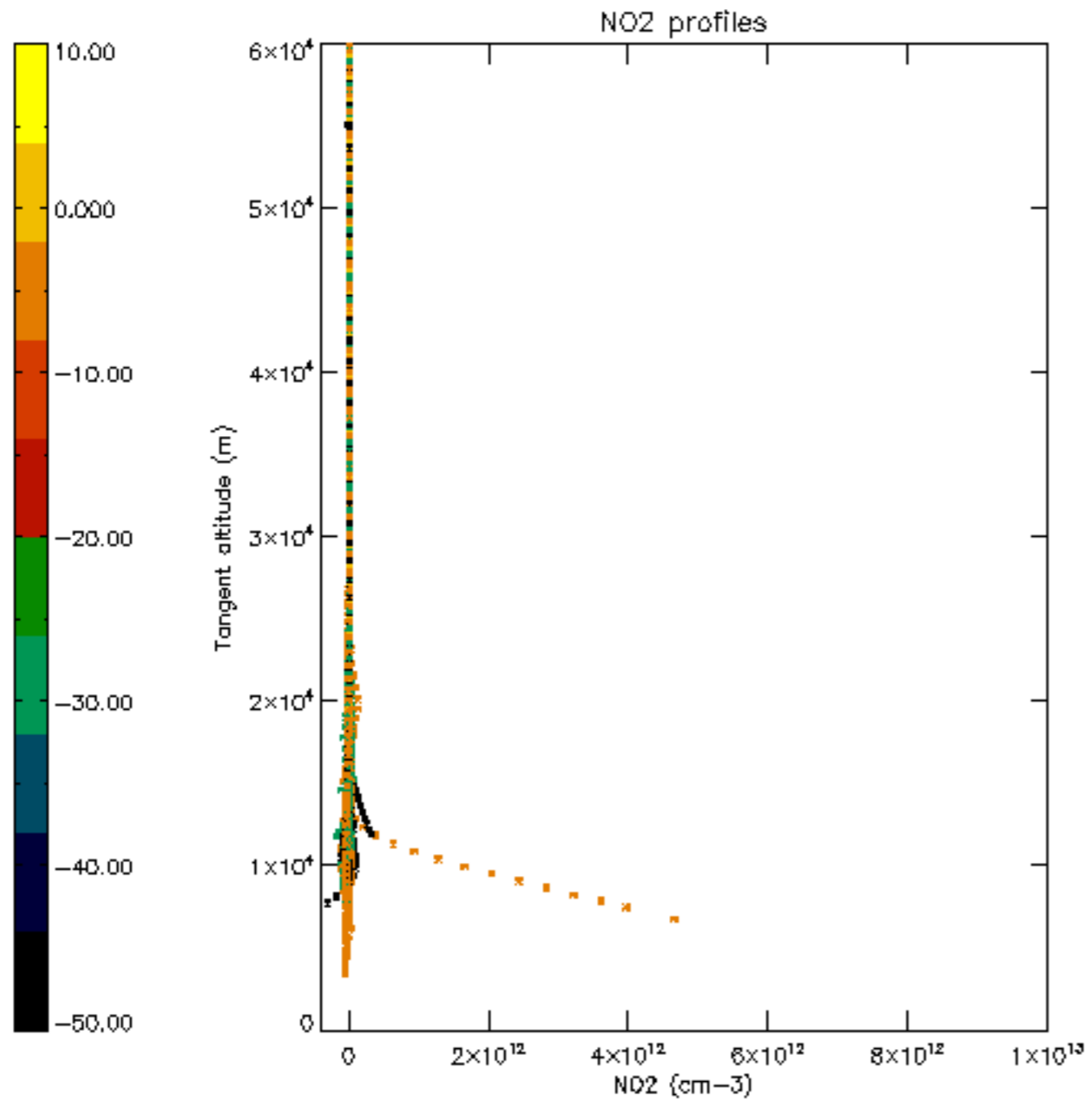


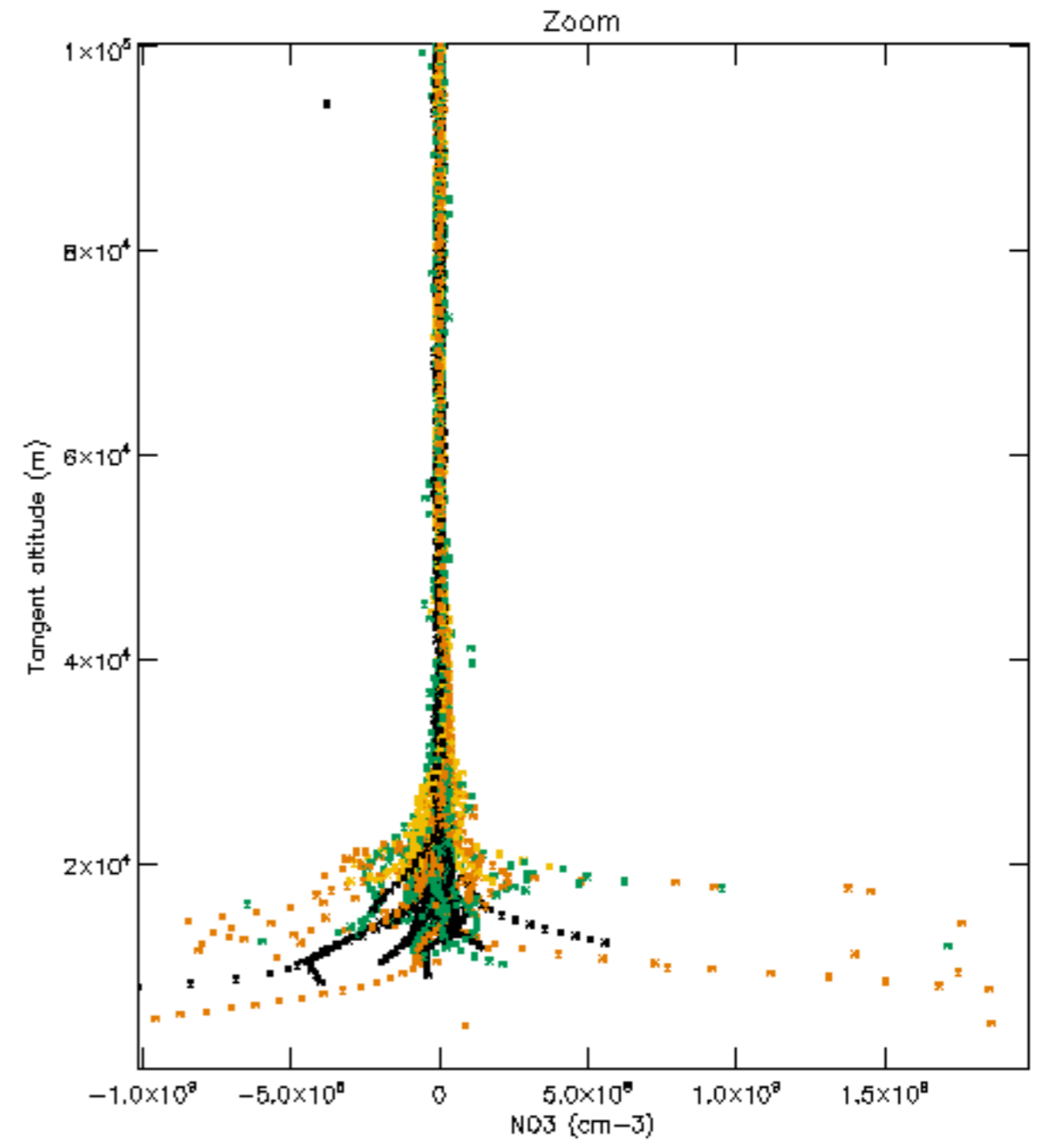
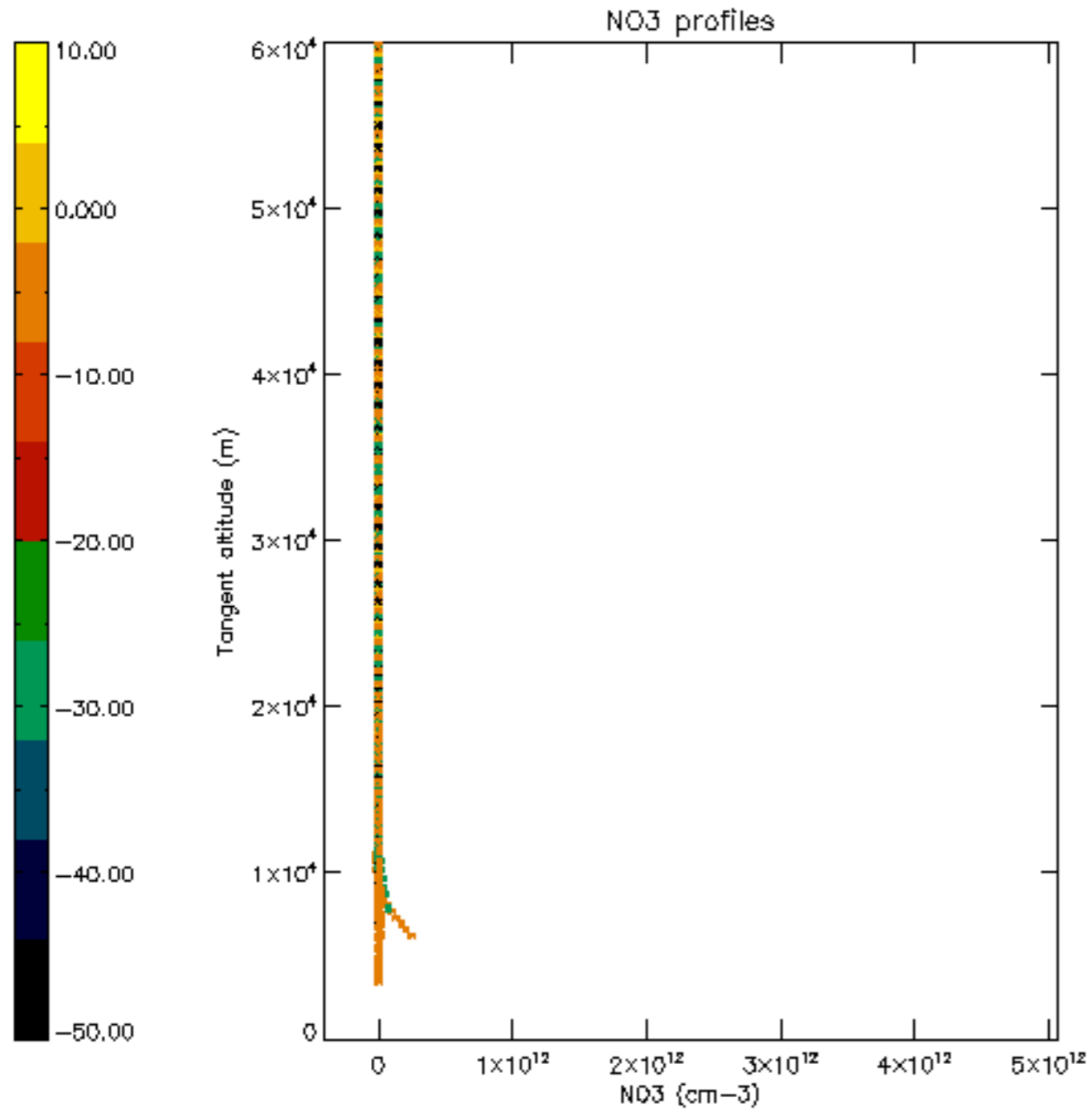


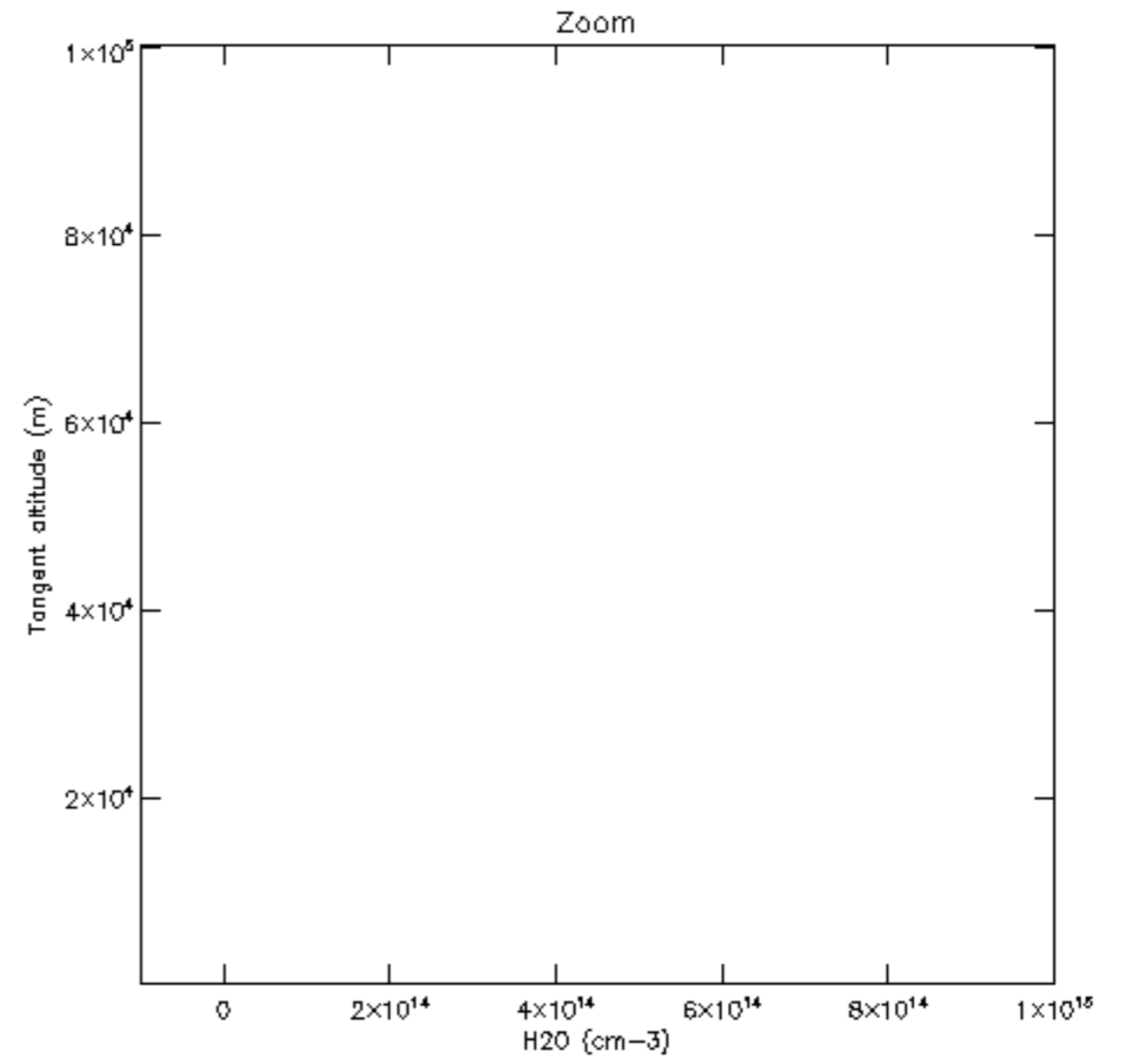
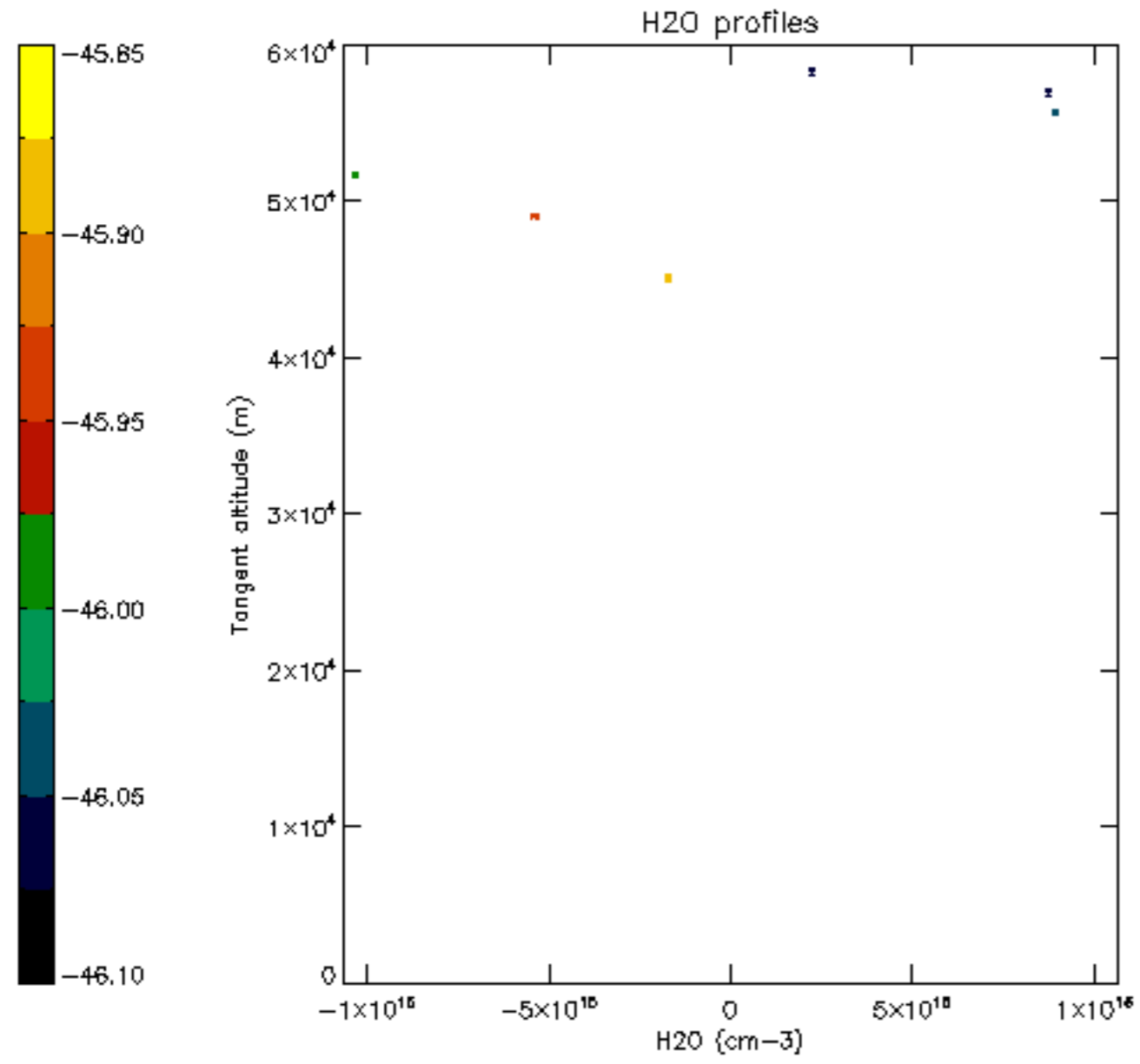


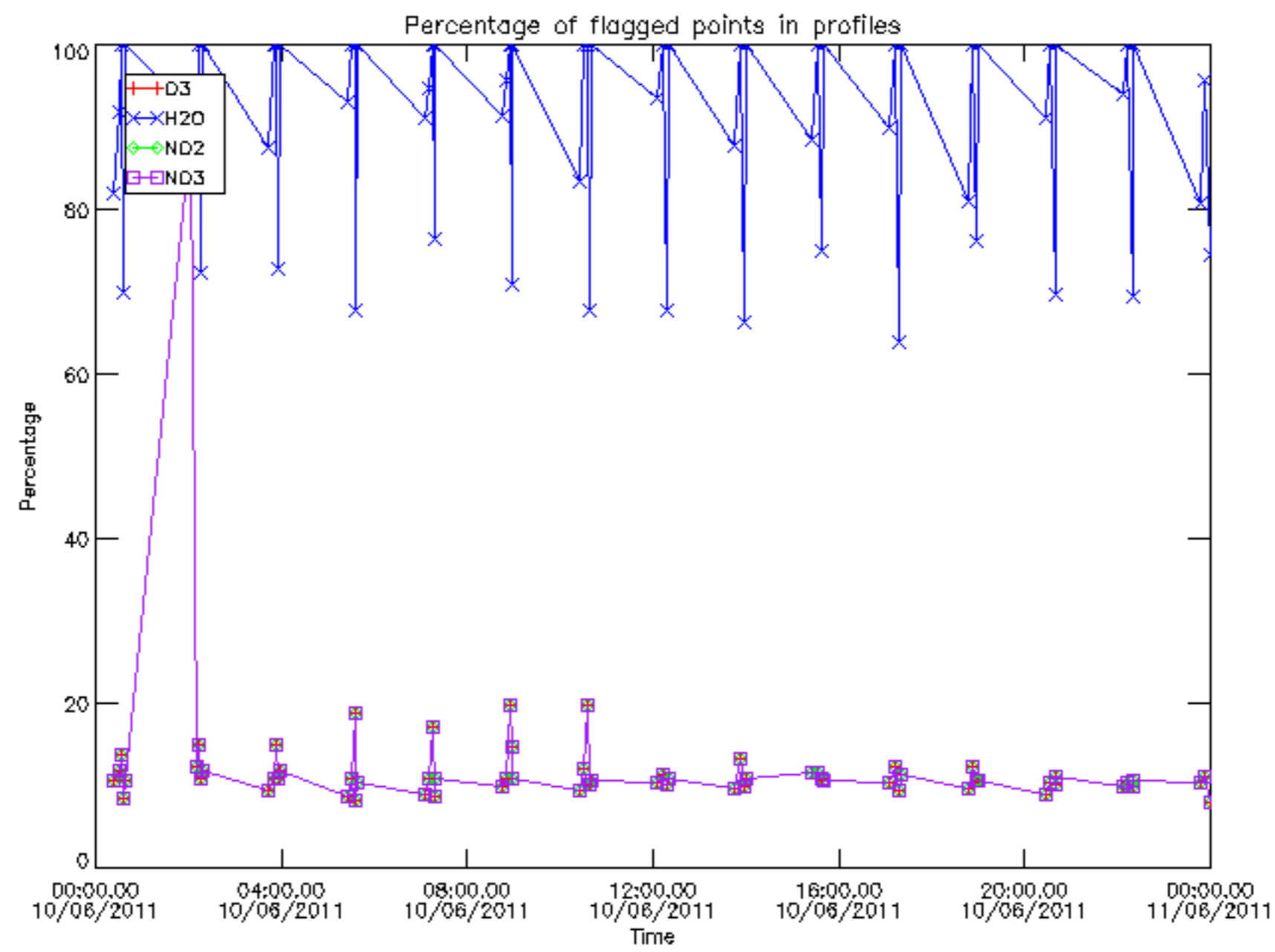




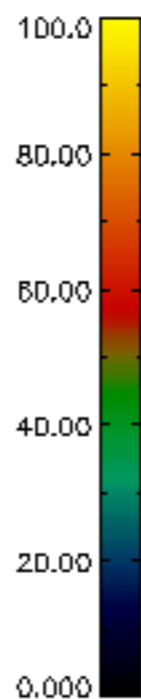
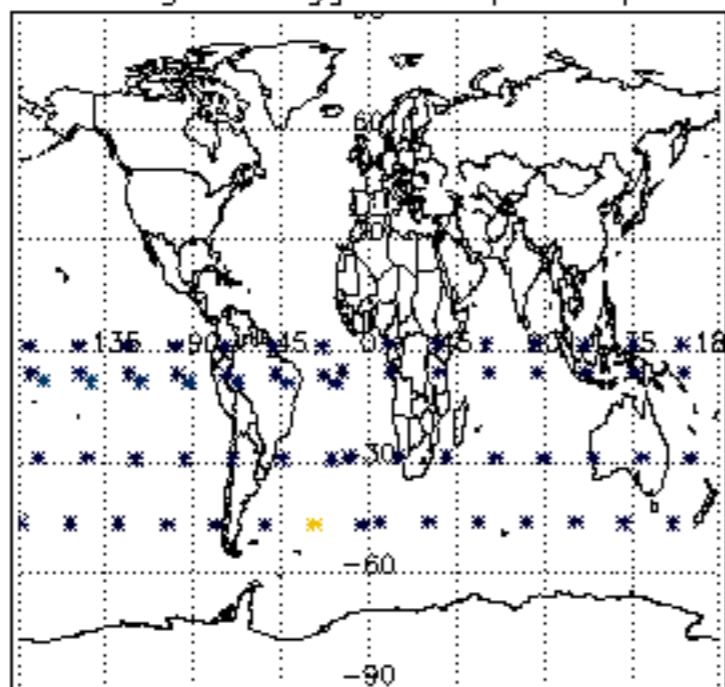




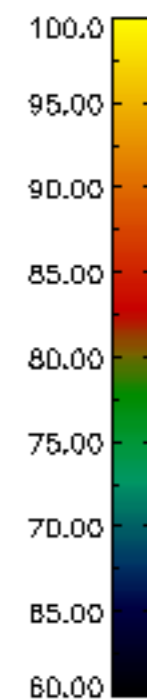
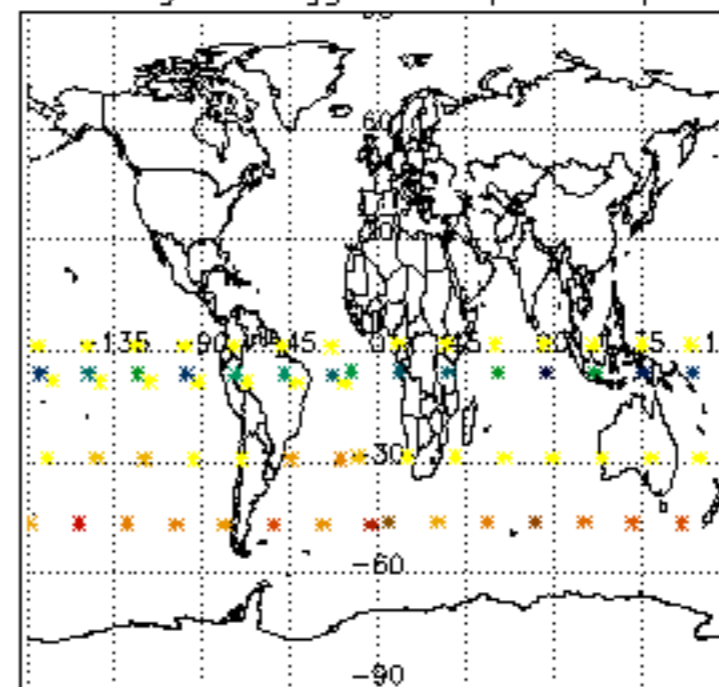




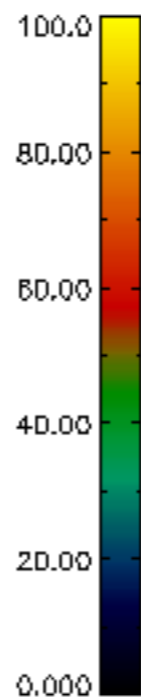
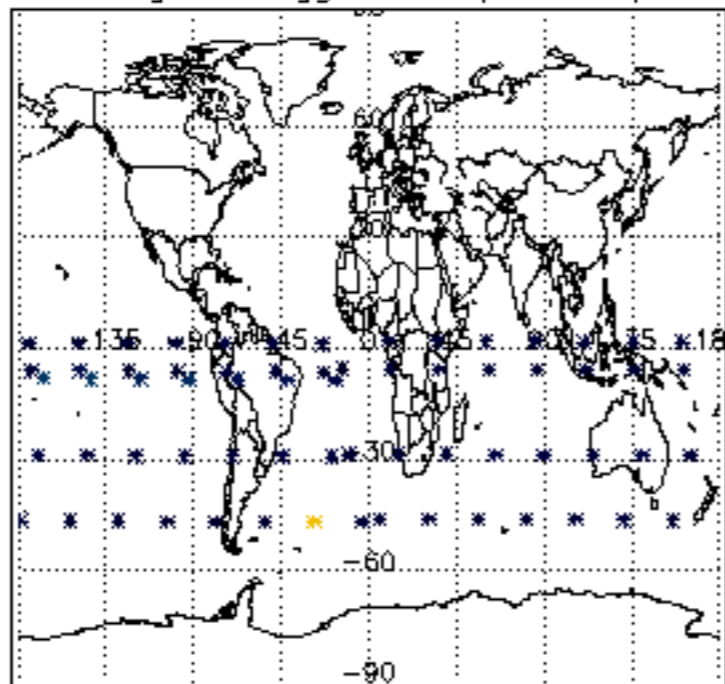
Percentage of flagged data per D3 profile



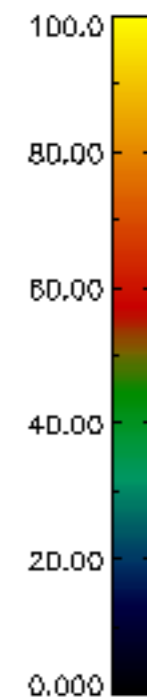
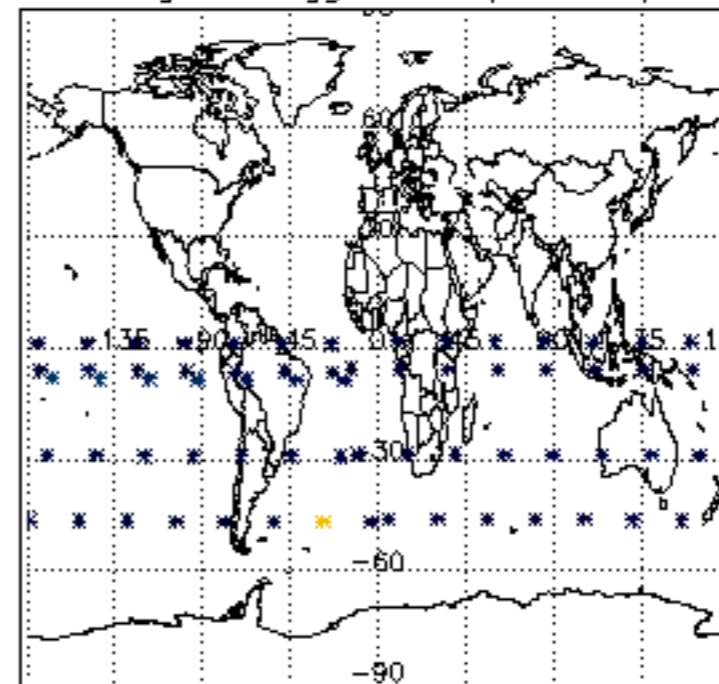
Percentage of flagged data per H2O profile

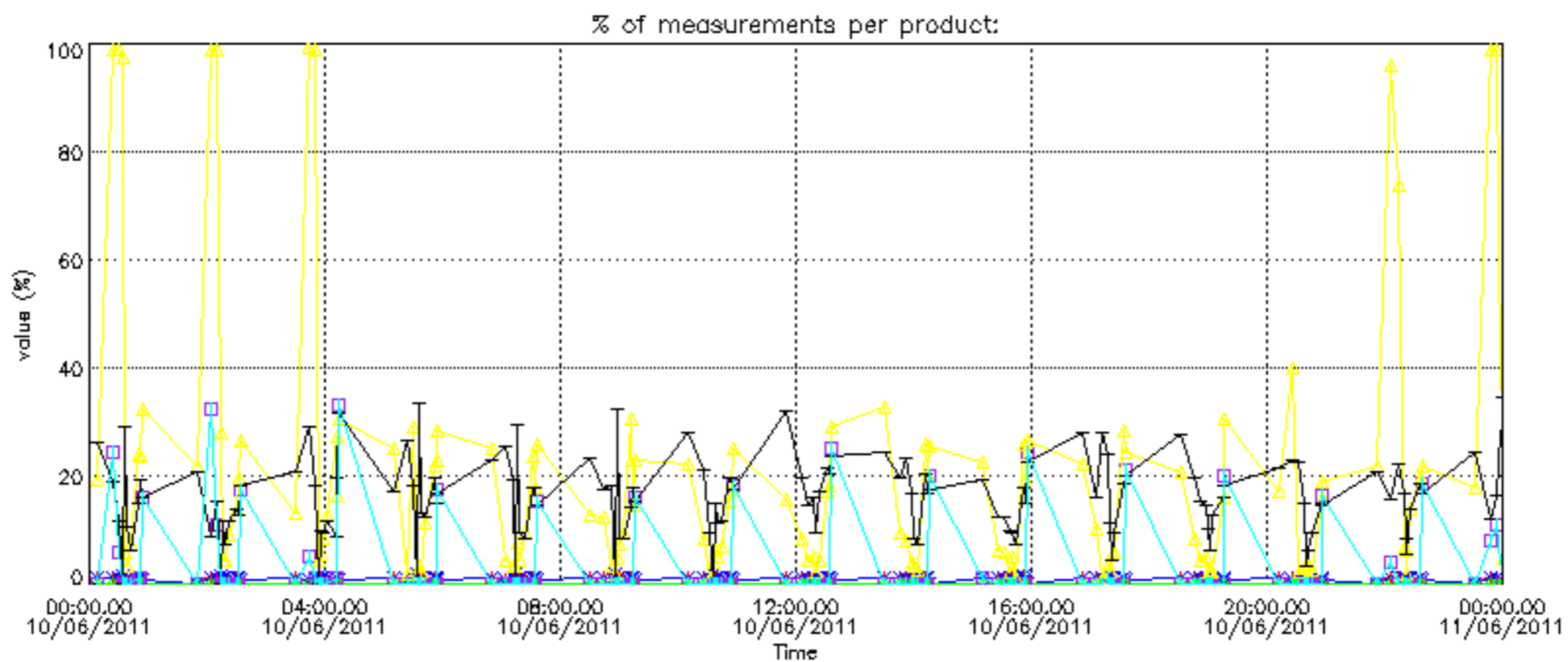


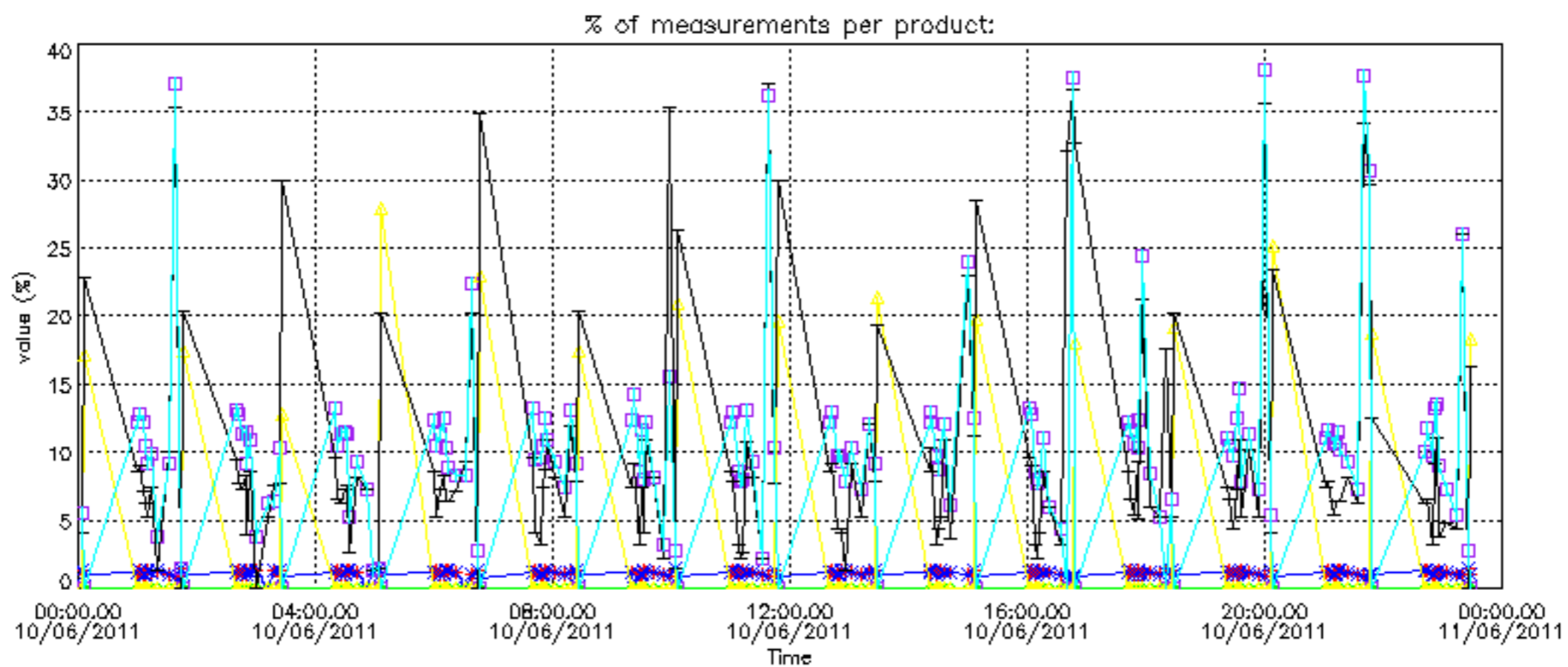
Percentage of flagged data per NO2 profile



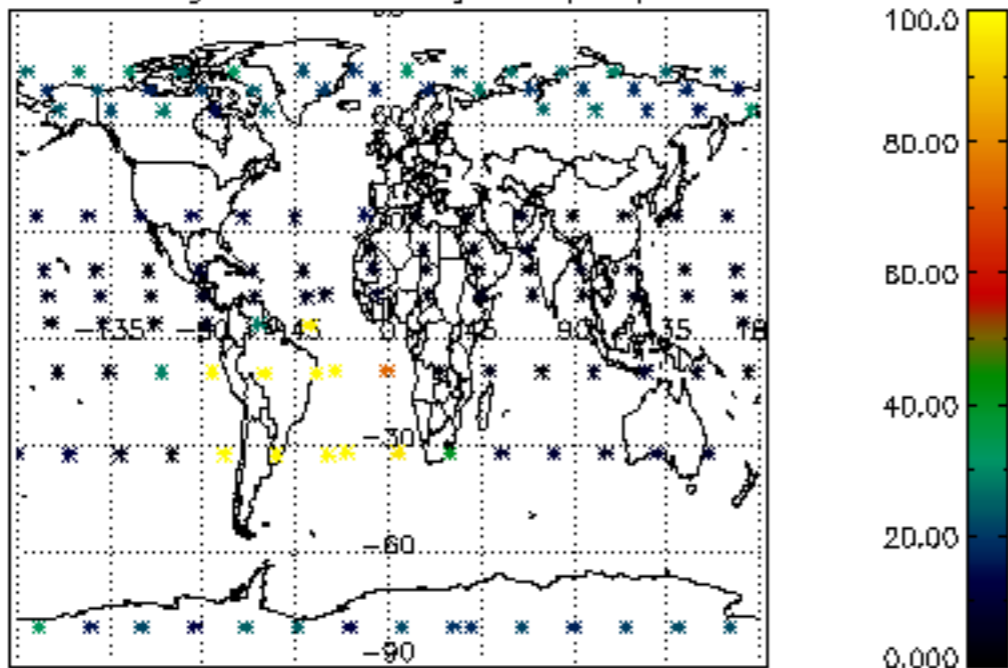
Percentage of flagged data per NO3 profile



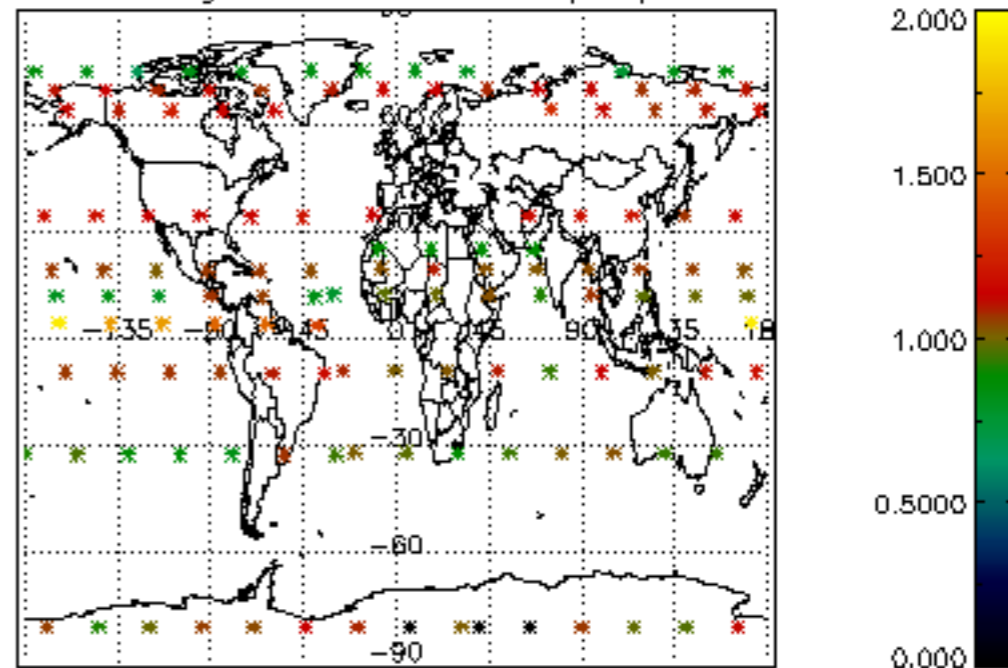




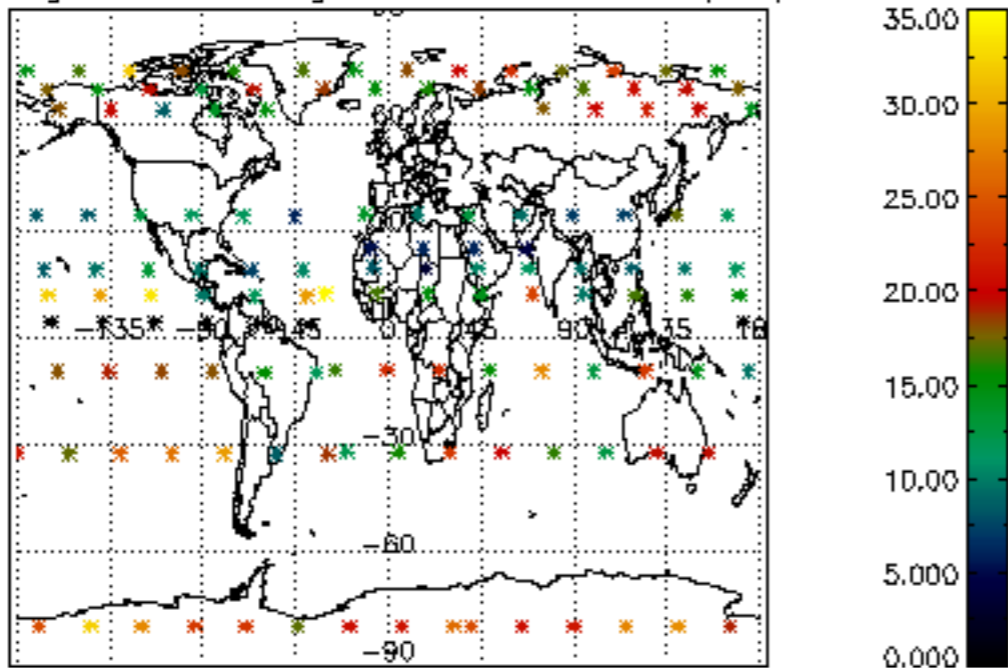
Percentage of cosmic ray hits per profile



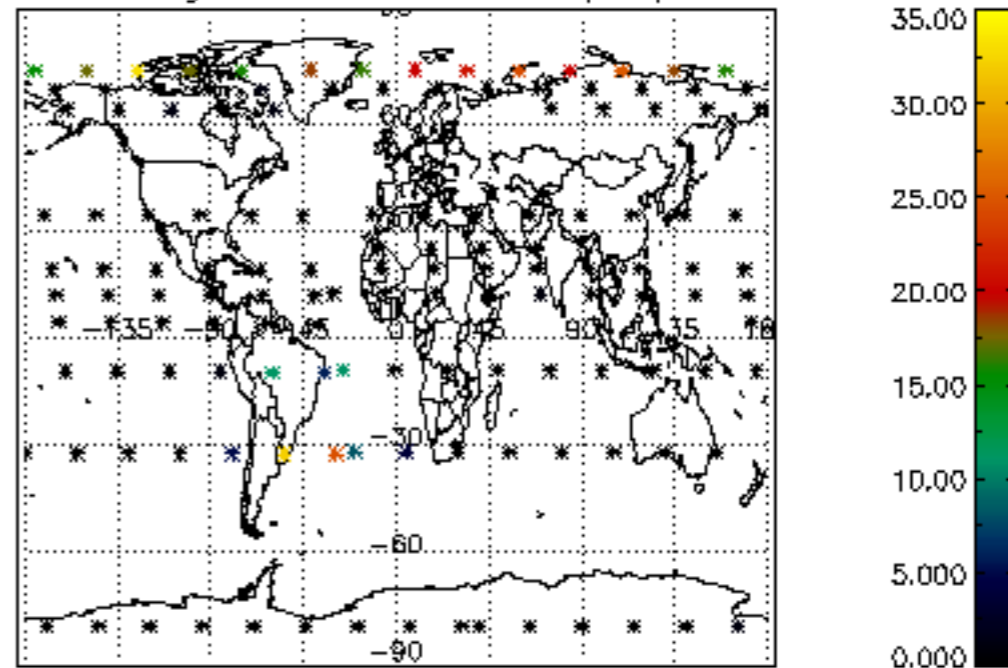
Percentage of datation errors per profile



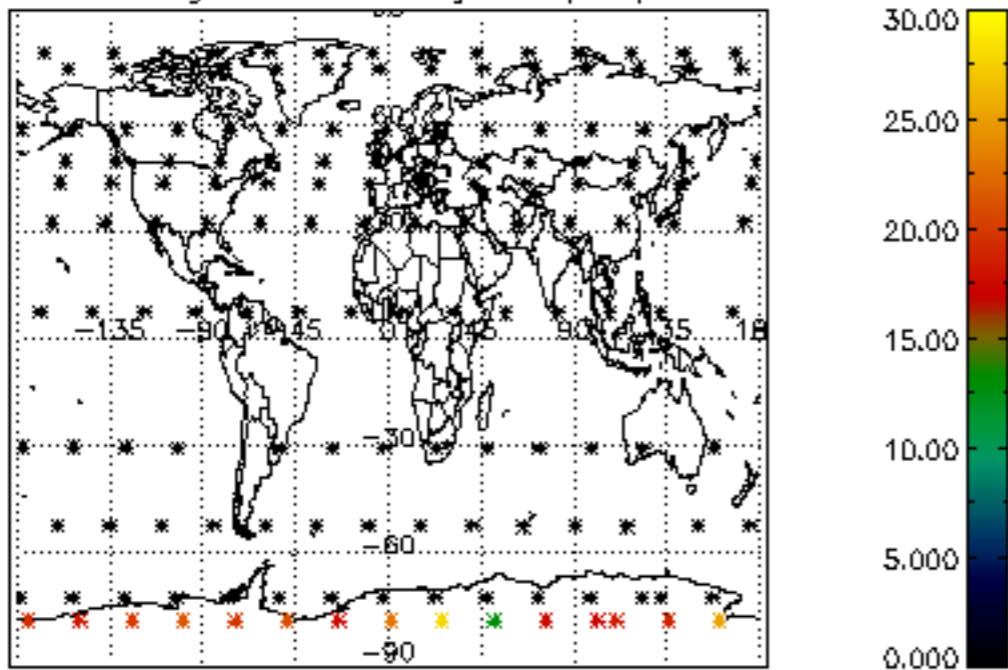
Percentage of star falling outside central band per profile



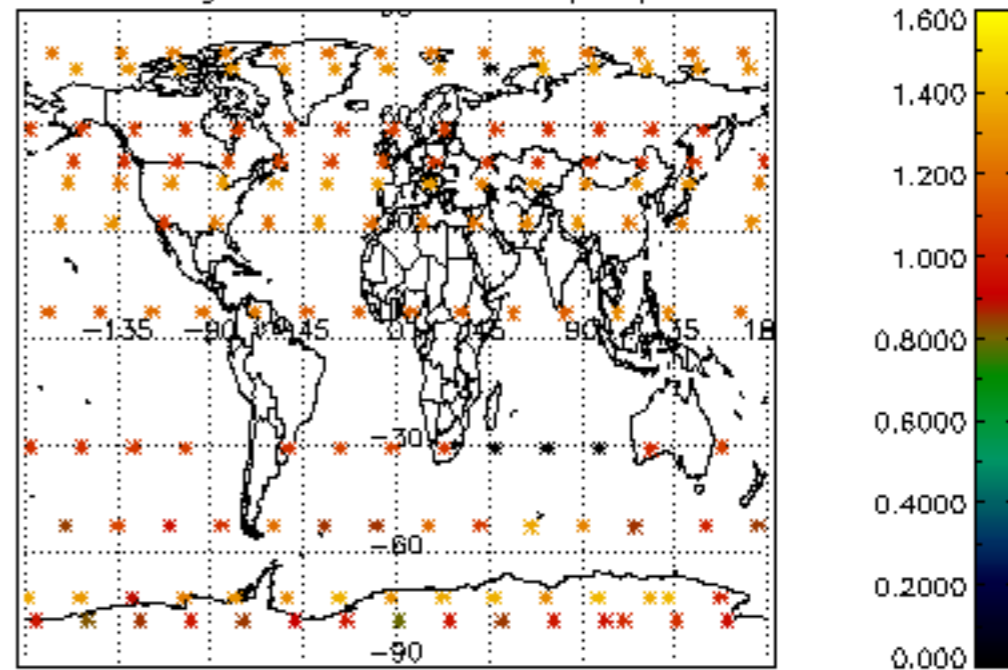
Percentage of saturation errors per profile



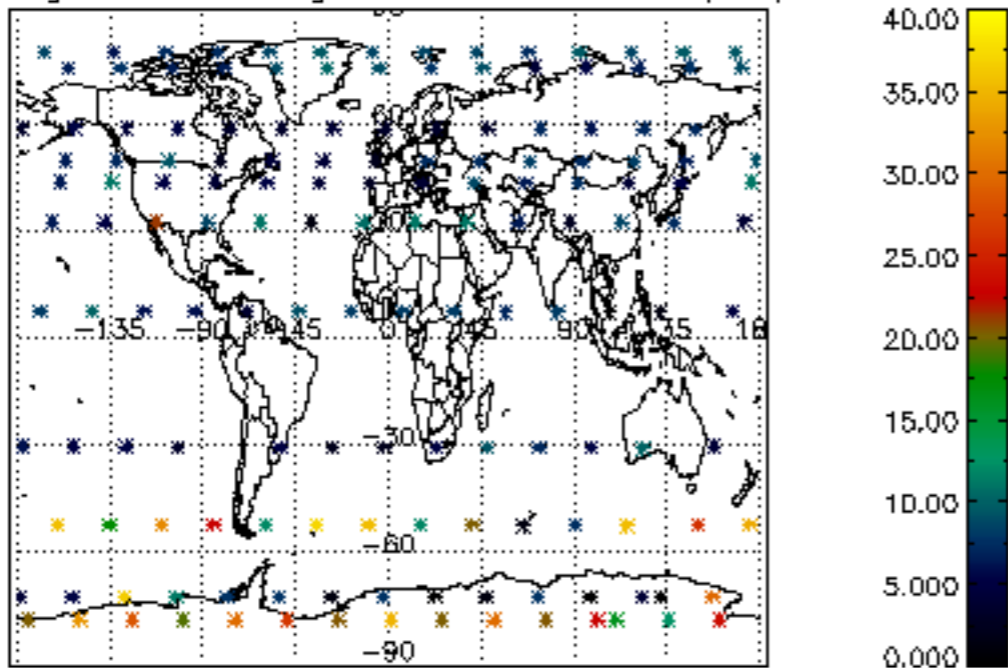
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

