

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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 01:10:34
Data source version	GOMOS/6.01
Start time of products	05-07-2006 (05JUL2006 00:00:00)
Stop time of products	06-07-2006 (06JUL2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	290
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

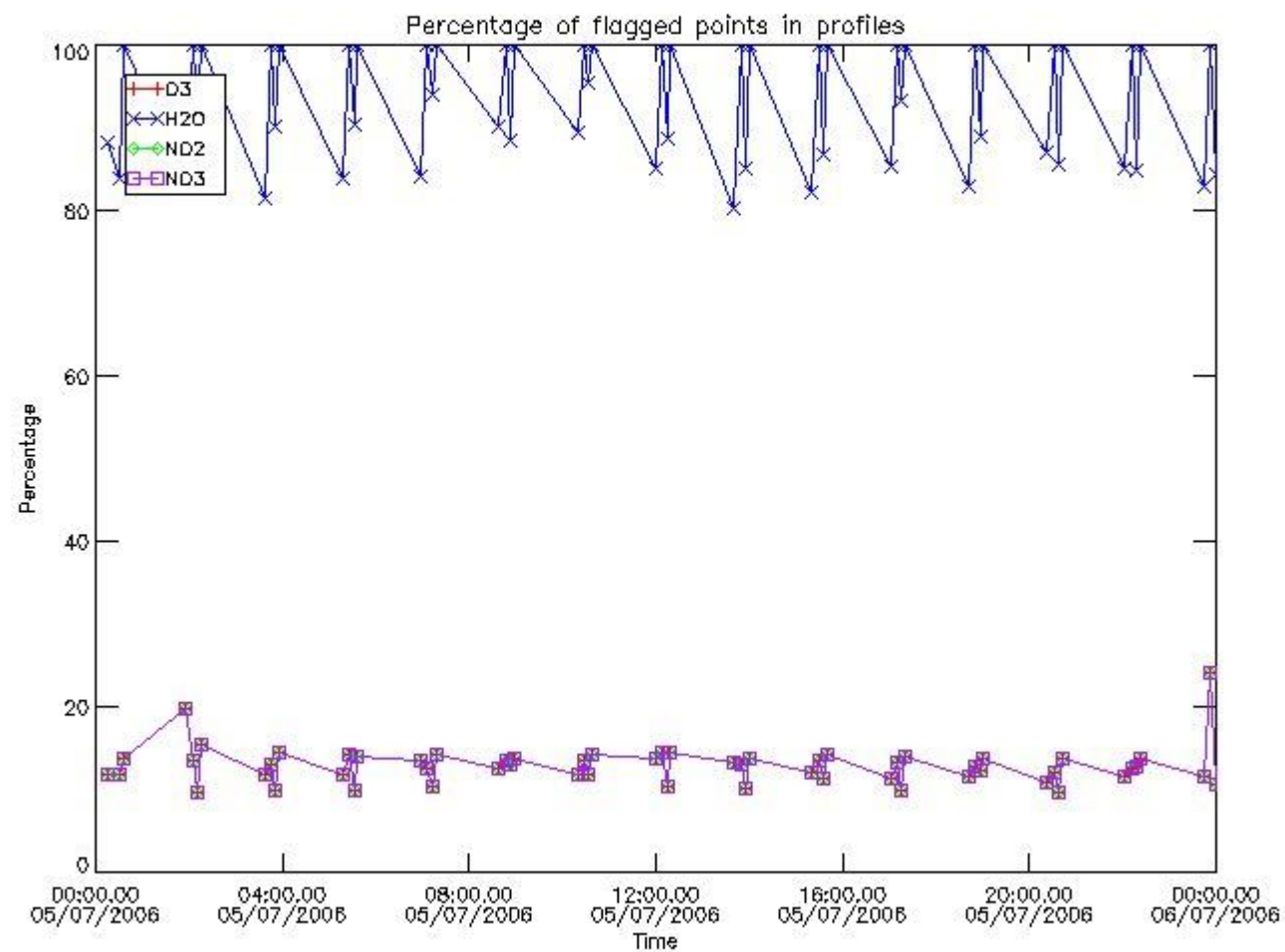
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20060705_000016_000000342049_00116_22715_9706.N1	05-JUL-2006 00:00:16	Bright	34.000	149	45Eps Per	2.8880	30000.	68	22715	No
2	GOM_NL__2PRFIN20060705_000241_000000382049_00116_22715_9707.N1	05-JUL-2006 00:02:41	Bright	38.000	150	44Zet Per	2.8900	28000.	76	22715	No
3	GOM_NL__2PRFIN20060705_001529_000000432049_00116_22715_9708.N1	05-JUL-2006 00:15:29	Dark	42.500	165	34Gam Eri	2.9500	3200.0	85	22715	No
4	GOM_NL__2PRFIN20060705_003012_000000442049_00117_22716_9688.N1	05-JUL-2006 00:30:12	Dark	43.500	9	Alp Eri	0.45300	24000.	87	22716	No
5	GOM_NL__2PRFIN20060705_003437_000000372049_00117_22716_9689.N1	05-JUL-2006 00:34:37	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	22716	No
6	GOM_NL__2PRFIN20060705_004200_000000432049_00117_22716_9690.N1	05-JUL-2006 00:42:00	Straylight	43.000	45	Alp Pav	1.9400	26000.	86	22716	No
7	GOM_NL__2PRFIN20060705_004532_000000412049_00117_22716_9691.N1	05-JUL-2006 00:45:32	Straylight	40.500	141	Bet Ara	2.8400	4600.0	81	22716	No
8	GOM_NL__2PRFIN20060705_004701_000000382049_00117_22716_9692.N1	05-JUL-2006 00:47:01	Tw_i_and_stray	38.000	147	Alp Ara	2.8770	26000.	76	22716	No
9	GOM_NL__2PRFIN20060705_004850_000000392049_00117_22716_9693.N1	05-JUL-2006 00:48:50	Tw_i_and_stray	39.000	40	The Sco	1.8590	7100.0	78	22716	No
10	GOM_NL__2PRFIN20060705_005030_000000412049_00117_22716_9694.N1	05-JUL-2006 00:50:30	Tw_i_and_stray	41.000	25	35Lam Sco	1.6200	28000.	82	22716	No
11	GOM_NL__2PRFIN20060705_005156_000000452049_00117_22716_9695.N1	05-JUL-2006 00:51:56	Bright	44.500	116	19Del Sgr	2.7000	4100.0	89	22716	No
12	GOM_NL__2PRFIN20060705_005640_000000372049_00117_22716_9696.N1	05-JUL-2006 00:56:40	Bright	36.500	86	35Eta Oph	2.4300	10200.	73	22716	No
13	GOM_NL__2PRFIN20060705_005827_000000362049_00117_22716_9697.N1	05-JUL-2006 00:58:27	Bright	36.000	98	13Zet Oph	2.5710	30000.	72	22716	No
14	GOM_NL__2PRFIN20060705_010210_000000372049_00117_22716_9698.N1	05-JUL-2006 01:02:10	Bright	36.500	126	60Bet Oph	2.7700	4250.0	73	22716	No
15	GOM_NL__2PRFIN20060705_010429_000000362049_00117_22716_9699.N1	05-JUL-2006 01:04:29	Bright	36.000	59	55Alp Oph	2.0800	8900.0	72	22716	No
16	GOM_NL__2PRFIN20060705_010721_000000352049_00117_22716_9700.N1	05-JUL-2006 01:07:21	Bright	35.000	127	27Bet Her	2.7810	4700.0	70	22716	No
17	GOM_NL__2PRFIN20060705_011002_000000372049_00117_22716_9701.N1	05-JUL-2006 01:10:02	Bright	36.500	133	40Zet Her	2.8070	6000.0	73	22716	No
18	GOM_NL__2PRFIN20060705_011550_000000342049_00117_22716_9702.N1	05-JUL-2006 01:15:50	Bright	34.000	130	23Bet Dra	2.7990	5800.0	68	22716	No
19	GOM_NL__2PRFIN20060705_011824_000000372049_00117_22716_9703.N1	05-JUL-2006 01:18:24	Bright	36.500	119	14Eta Dra	2.7270	4700.0	73	22716	No
20	GOM_NL__2PRFIN20060705_012228_000000332049_00117_22716_9704.N1	05-JUL-2006 01:22:28	Bright	32.500	60	7Bet UMI	2.0810	3950.0	65	22716	No
21	GOM_NL__2PRFIN20060705_012633_000000362049_00117_22716_9705.N1	05-JUL-2006 01:26:33	Bright	36.000	49	1Alp UMI	1.9900	6300.0	72	22716	No
22	GOM_NL__2PRFIN20060705_014052_000000402049_00117_22716_9706.N1	05-JUL-2006 01:40:52	Bright	40.000	149	45Eps Per	2.8880	30000.	80	22716	No
23	GOM_NL__2PRFIN20060705_014317_000000392049_00117_22716_9707.N1	05-JUL-2006 01:43:17	Bright	38.500	150	44Zet Per	2.8900	28000.	77	22716	No
24	GOM_NL__2PRFIN20060705_015605_000000442049_00117_22716_9708.N1	05-JUL-2006 01:56:05	Dark	43.500	165	34Gam Eri	2.9500	3200.0	87	22716	No
25	GOM_NL__2PRFIN20060705_020439_000000382049_00117_22716_9709.N1	05-JUL-2006 02:04:39	Dark	38.000	157	The1Eri	2.9060	9300.0	76	22716	No
26	GOM_NL__2PRFIN20060705_021049_000000532049_00118_22717_9690.N1	05-JUL-2006 02:10:49	Dark	53.000	9	Alp Eri	0.45300	24000.	106	22717	No
27	GOM_NL__2PRFIN20060705_021513_000000372049_00118_22717_9691.N1	05-JUL-2006 02:15:13	Dark	36.500	135	Bet Hyi	2.8200	5800.0	73	22717	No
28	GOM_NL__2PRFIN20060705_022236_000000412049_00118_22717_9692.N1	05-JUL-2006 02:22:36	Straylight	40.500	45	Alp Pav	1.9400	26000.	81	22717	No
29	GOM_NL__2PRFIN20060705_022608_000000432049_00118_22717_9693.N1	05-JUL-2006 02:26:08	Straylight	42.500	141	Bet Ara	2.8400	4600.0	85	22717	No
30	GOM_NL__2PRFIN20060705_022737_000000382049_00118_22717_9694.N1	05-JUL-2006 02:27:37	Tw_i_and_stray	37.500	147	Alp Ara	2.8770	26000.	75	22717	No
31	GOM_NL__2PRFIN20060705_022926_000000412049_00118_22717_9695.N1	05-JUL-2006 02:29:26	Tw_i_and_stray	41.000	40	The Sco	1.8590	7100.0	82	22717	No
32	GOM_NL__2PRFIN20060705_023106_000000422049_00118_22717_9696.N1	05-JUL-2006 02:31:06	Tw_i_and_stray	41.500	25	35Lam Sco	1.6200	28000.	83	22717	No
33	GOM_NL__2PRFIN20060705_023232_000000462049_00118_22717_9697.N1	05-JUL-2006 02:32:32	Bright	46.000	116	19Del Sgr	2.7000	4100.0	92	22717	No
34	GOM_NL__2PRFIN20060705_023716_000000372049_00118_22717_9698.N1	05-JUL-2006 02:37:16	Bright	37.000	86	35Eta Oph	2.4300	10200.	74	22717	No
35	GOM_NL__2PRFIN20060705_023903_000000372049_00118_22717_9699.N1	05-JUL-2006 02:39:03	Bright	36.500	98	13Zet Oph	2.5710	30000.	73	22717	No
36	GOM_NL__2PRFIN20060705_024246_000000372049_00118_22717_9700.N1	05-JUL-2006 02:42:46	Bright	37.000	126	60Bet Oph	2.7700	4250.0	74	22717	No
37	GOM_NL__2PRFIN20060705_024505_000000372049_00118_22717_9701.N1	05-JUL-2006 02:45:05	Bright	37.000	59	55Alp Oph	2.0800	8900.0	74	22717	No
38	GOM_NL__2PRFIN20060705_024757_000000372049_00118_22717_9702.N1	05-JUL-2006 02:47:57	Bright	36.500	127	27Bet Her	2.7810	4700.0	73	22717	No
39	GOM_NL__2PRFIN20060705_025038_000000372049_00118_22717_9703.N1	05-JUL-2006 02:50:38	Bright	37.000	133	40Zet Her	2.8070	6000.0	74	22717	No
40	GOM_NL__2PRFIN20060705_025626_000000382049_00118_22717_9704.N1	05-JUL-2006 02:56:26	Bright	37.500	130	23Bet Dra	2.7990	5800.0	75	22717	No
41	GOM_NL__2PRFIN20060705_025900_000000342049_00118_22717_9705.N1	05-JUL-2006 02:59:00	Bright	34.000	119	14Eta Dra	2.7270	4700.0	68	22717	No
42	GOM_NL__2PRFIN20060705_030304_000000332049_00118_22717_9706.N1	05-JUL-2006 03:03:04	Bright	32.500	60	7Bet UMI	2.0810	3950.0	65	22717	No

279	GOM_NL__2PRFIN20060705_224958_000000352049_00130_22729_9722.N1	05-JUL-2006 22:49:58	Bright	35.000	126	60Bet Oph	2.7700	4250.0	70	22729	No
280	GOM_NL__2PRFIN20060705_225216_000000372049_00130_22729_9723.N1	05-JUL-2006 22:52:16	Bright	36.500	59	55Alp Oph	2.0800	8900.0	73	22729	No
281	GOM_NL__2PRFIN20060705_225511_000000372049_00130_22729_9724.N1	05-JUL-2006 22:55:11	Bright	37.000	127	27Bet Her	2.7810	4700.0	74	22729	No
282	GOM_NL__2PRFIN20060705_225751_000000342049_00130_22729_9725.N1	05-JUL-2006 22:57:51	Bright	34.000	133	40Zet Her	2.8070	6000.0	68	22729	No
283	GOM_NL__2PRFIN20060705_230336_000000352049_00130_22729_9726.N1	05-JUL-2006 23:03:36	Bright	34.500	130	23Bet Dra	2.7990	5800.0	69	22729	No
284	GOM_NL__2PRFIN20060705_230612_000000372049_00130_22729_9727.N1	05-JUL-2006 23:06:12	Bright	36.500	119	14Eta Dra	2.7270	4700.0	73	22729	No
285	GOM_NL__2PRFIN20060705_231017_000000362049_00130_22729_9728.N1	05-JUL-2006 23:10:17	Bright	35.500	60	7Bet UMi	2.0810	3950.0	71	22729	No
286	GOM_NL__2PRFIN20060705_231420_000000342049_00130_22729_9729.N1	05-JUL-2006 23:14:20	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	22729	No
287	GOM_NL__2PRFIN20060705_232840_000000342049_00130_22729_9730.N1	05-JUL-2006 23:28:40	Bright	34.000	149	45Eps Per	2.8880	30000.0	68	22729	No
288	GOM_NL__2PRFIN20060705_234357_000000442049_00130_22729_9731.N1	05-JUL-2006 23:43:57	Dark	44.000	165	34Gam Eri	2.9500	3200.0	88	22729	No
289	GOM_NL__2PRFIN20060705_235232_000000402049_00130_22729_9732.N1	05-JUL-2006 23:52:32	Dark	40.000	157	The1Eri	2.9060	9300.0	80	22729	No
290	GOM_NL__2PRFIN20060705_235843_000000492049_00131_22730_9714.N1	05-JUL-2006 23:58:43	Dark	48.500	9	Alp Eri	0.45300	24000.0	97	22730	No

3. Quality information per product

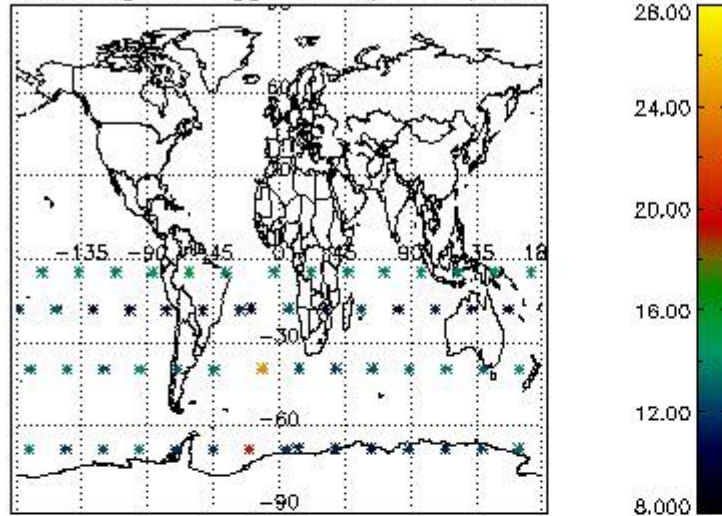
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

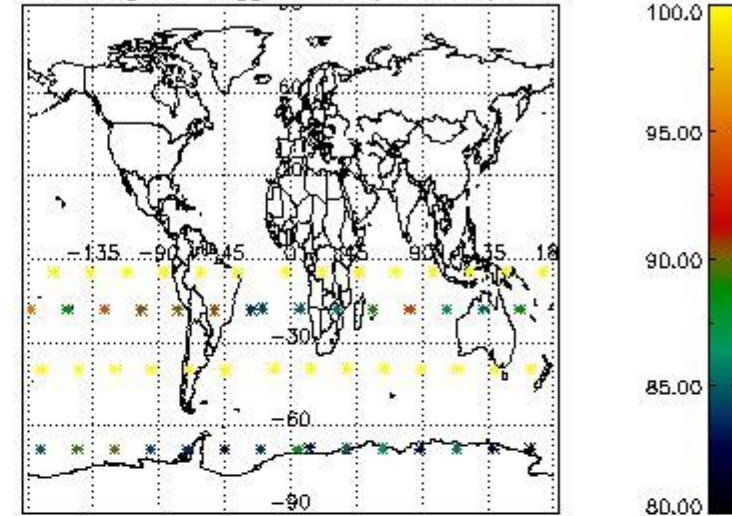


3.2 Plot quality information per product (world map)

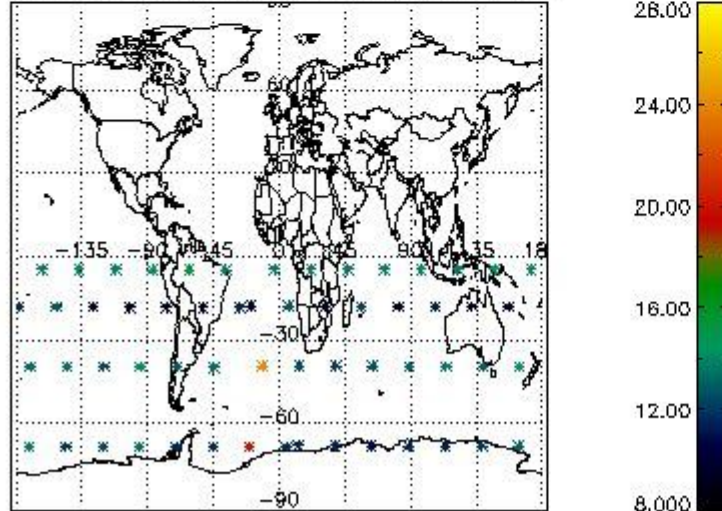
Percentage of flagged data per O3 profile



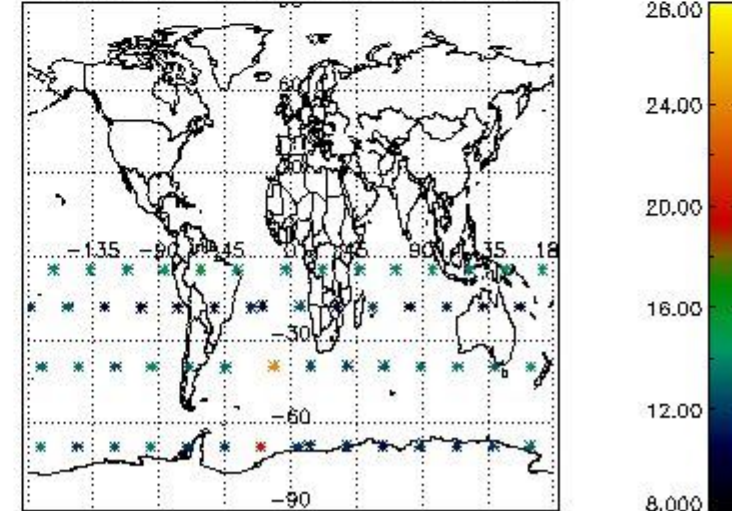
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

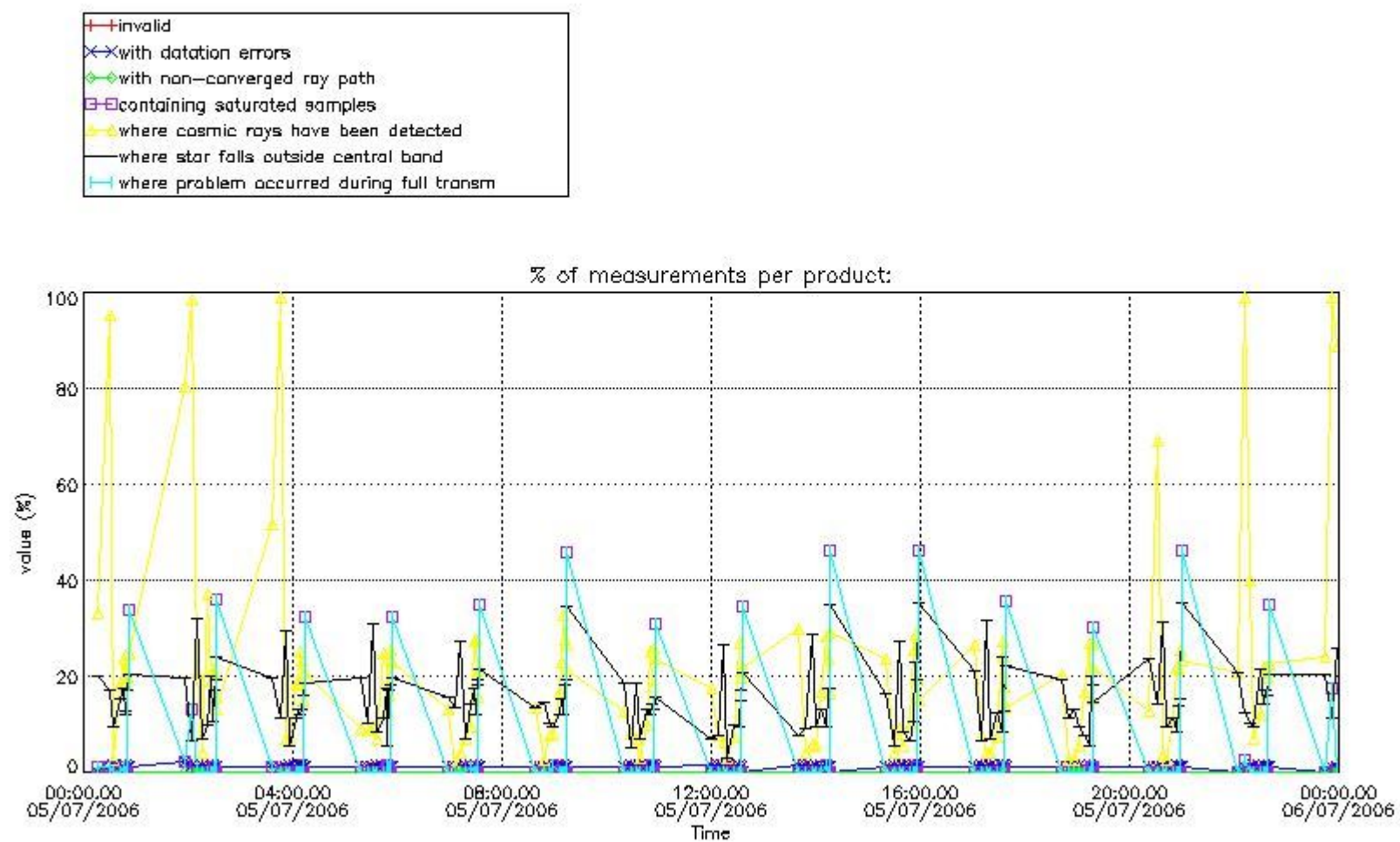


4. Level 1 quality information per product

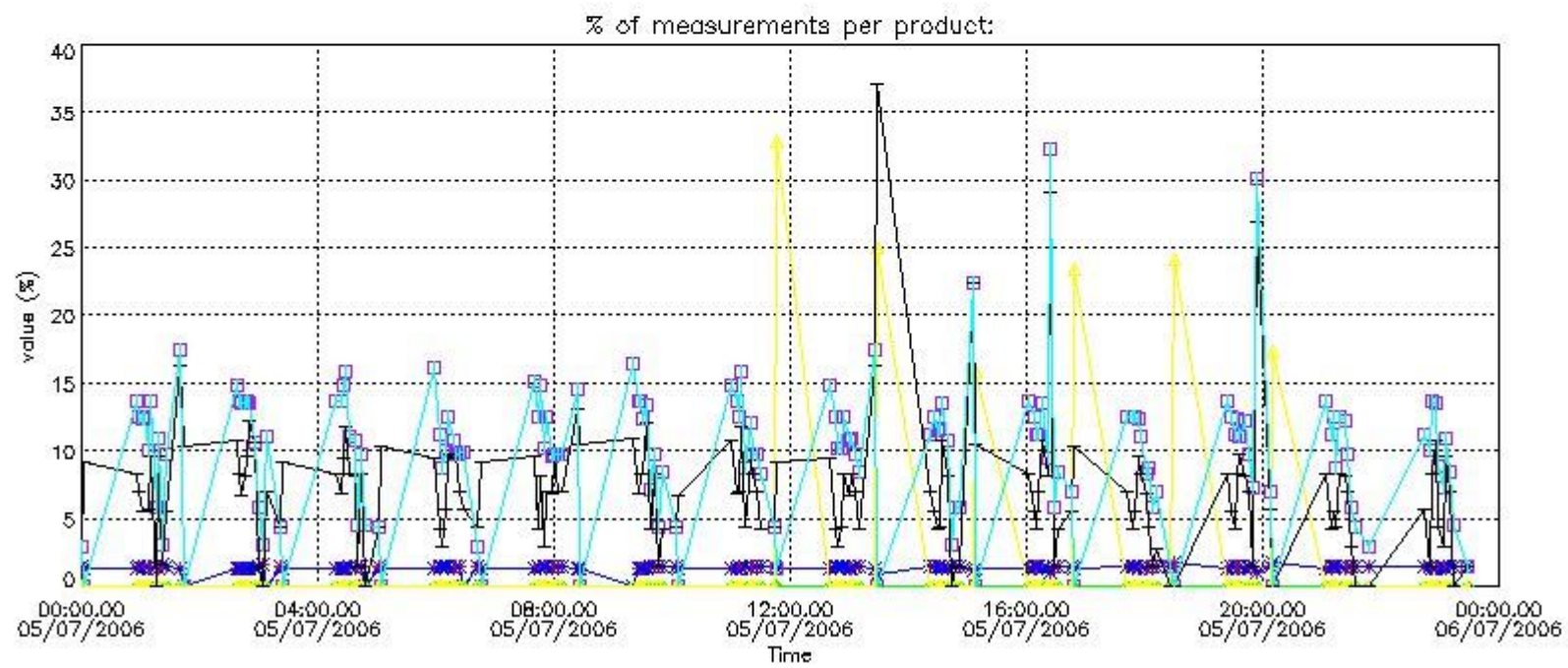
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

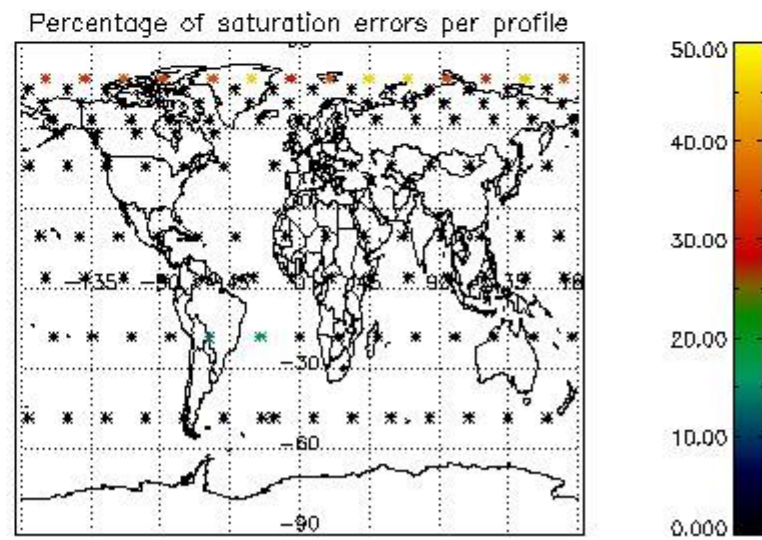
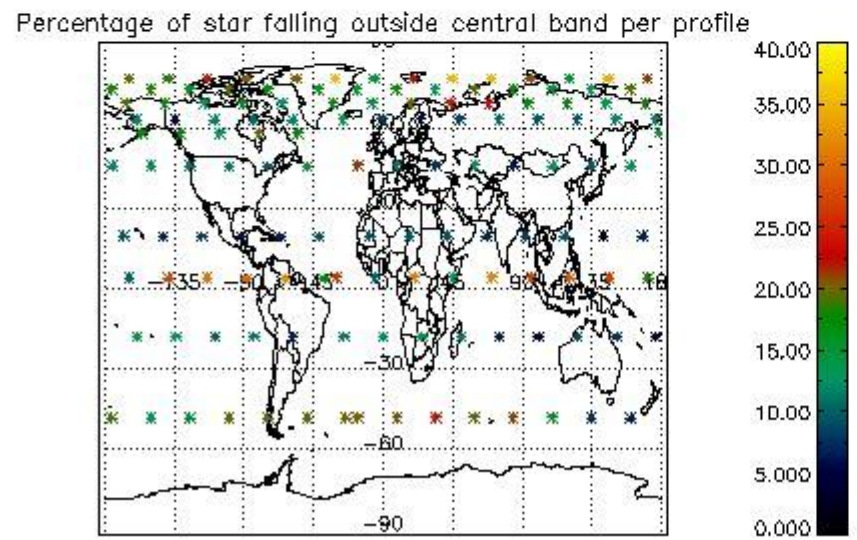
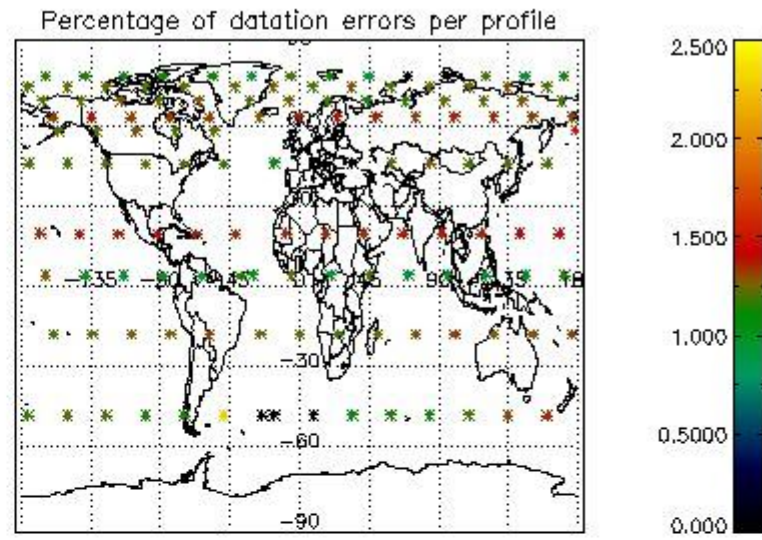
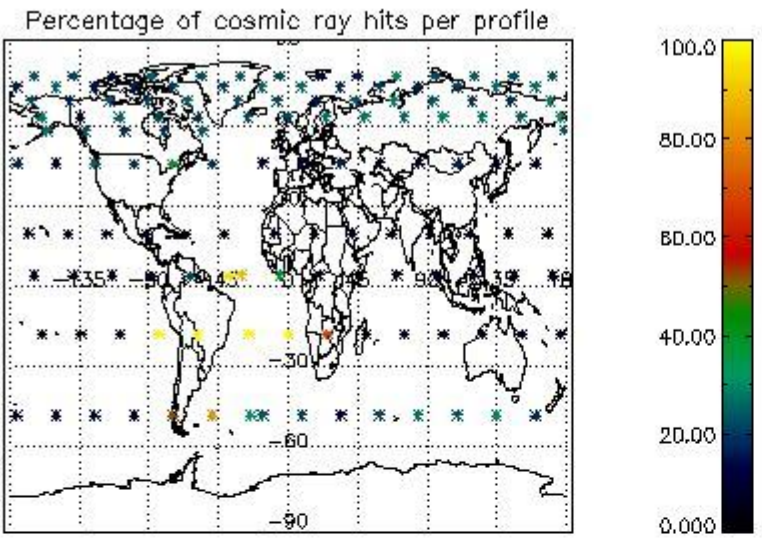


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

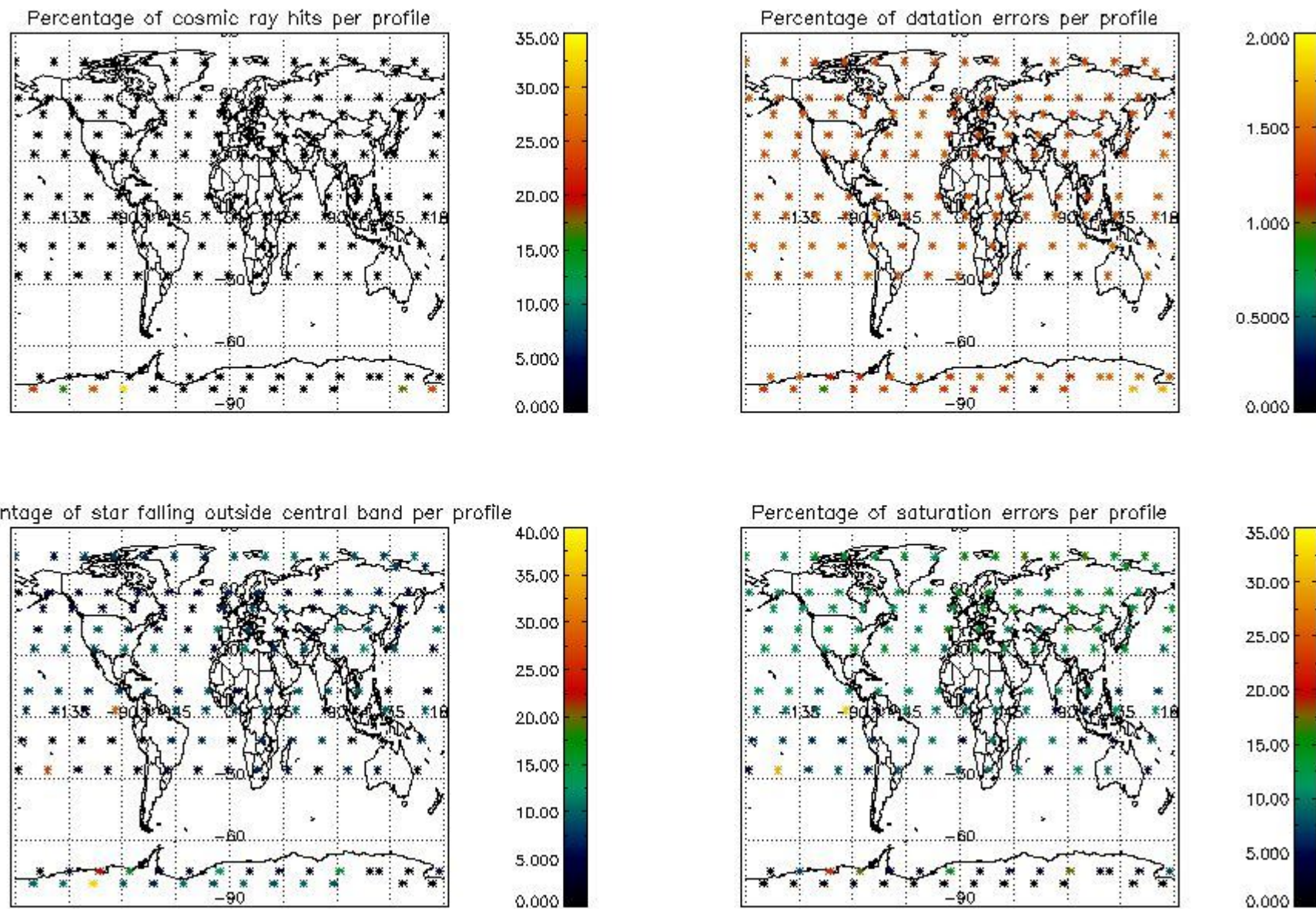


4.2 Plot quality information per product coming from level 1b processing (world map)

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

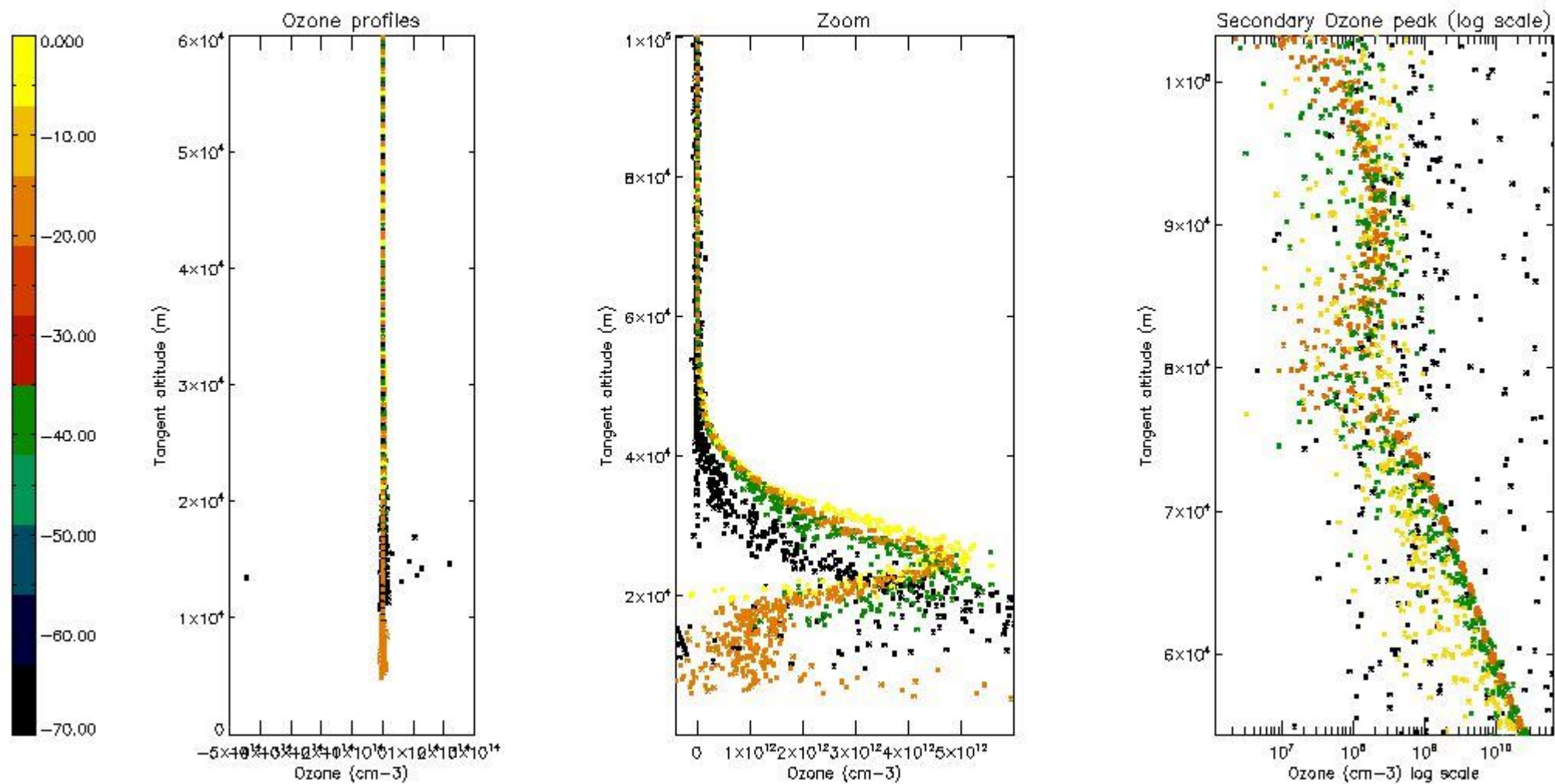
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	23
STD < 20	10

STD < 10	7
STD < 5	4

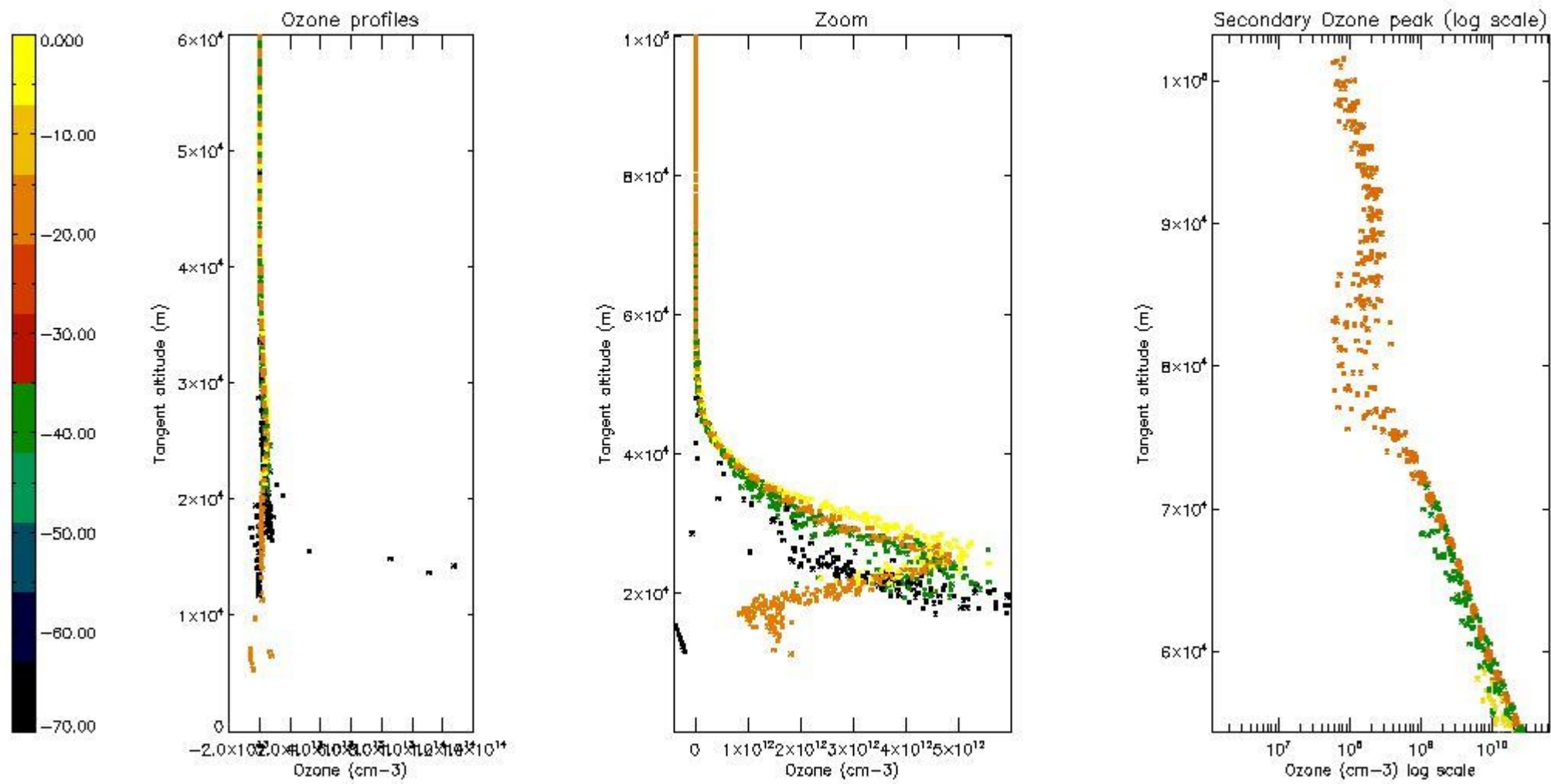
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



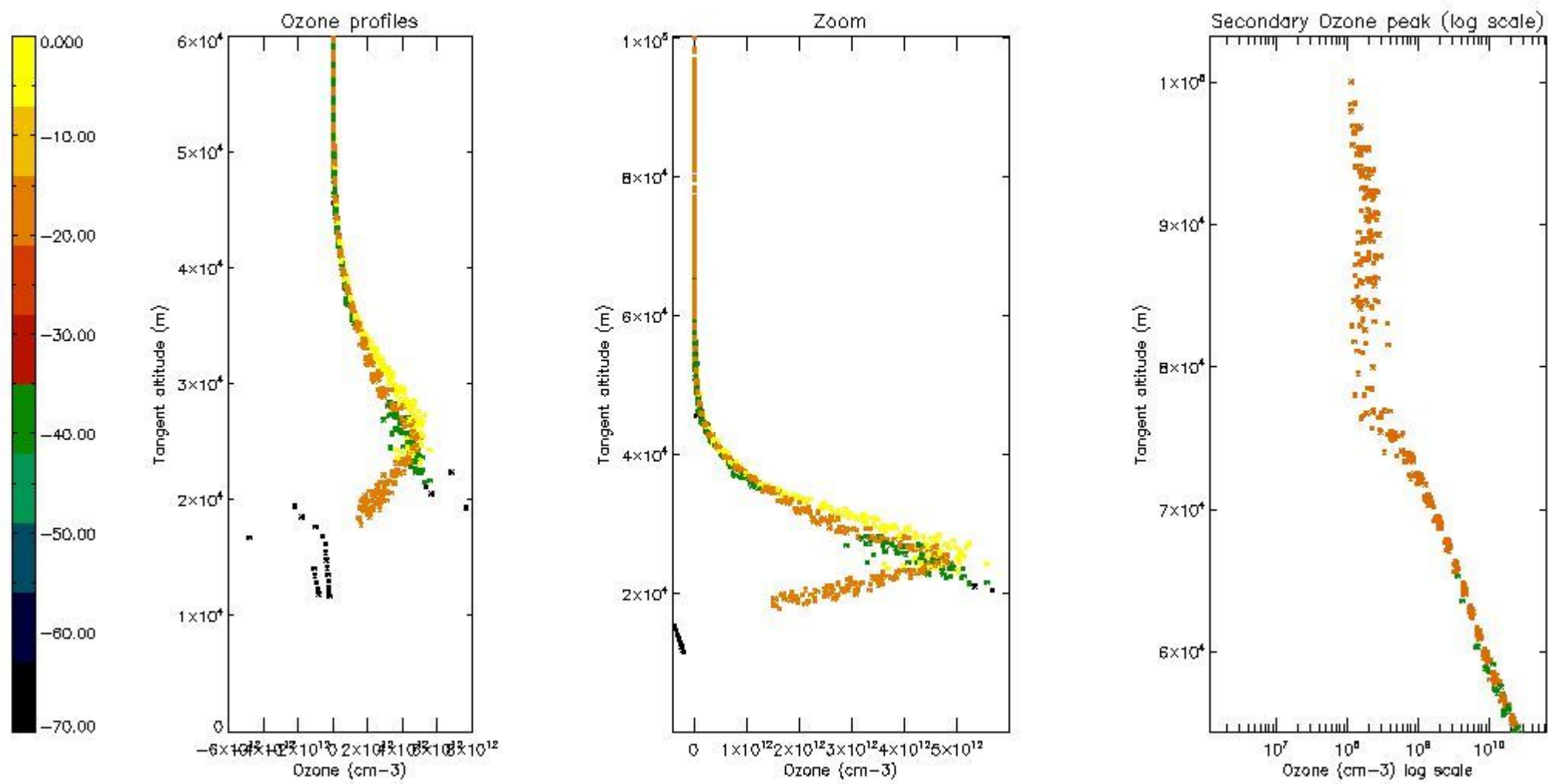
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



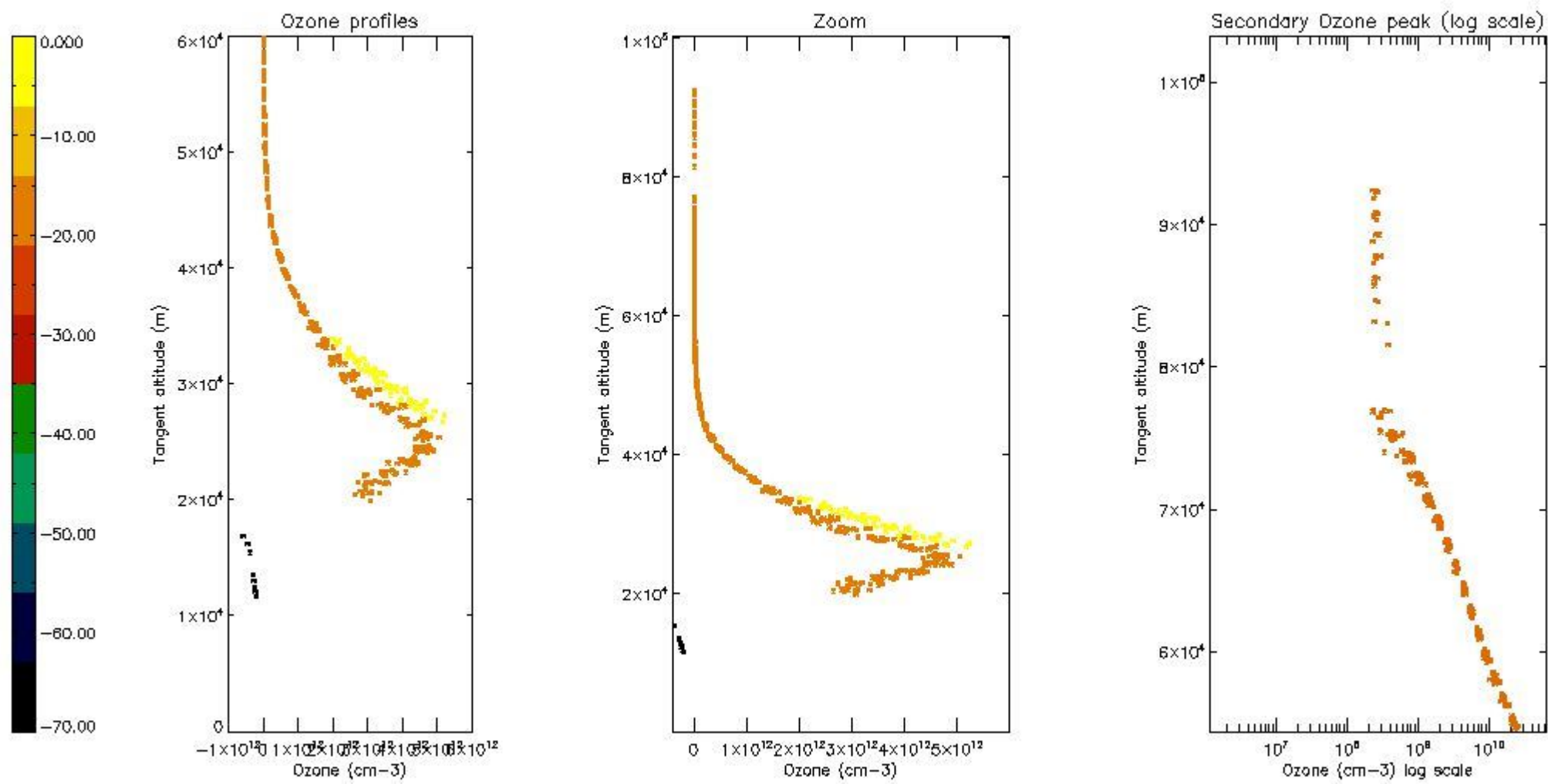
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



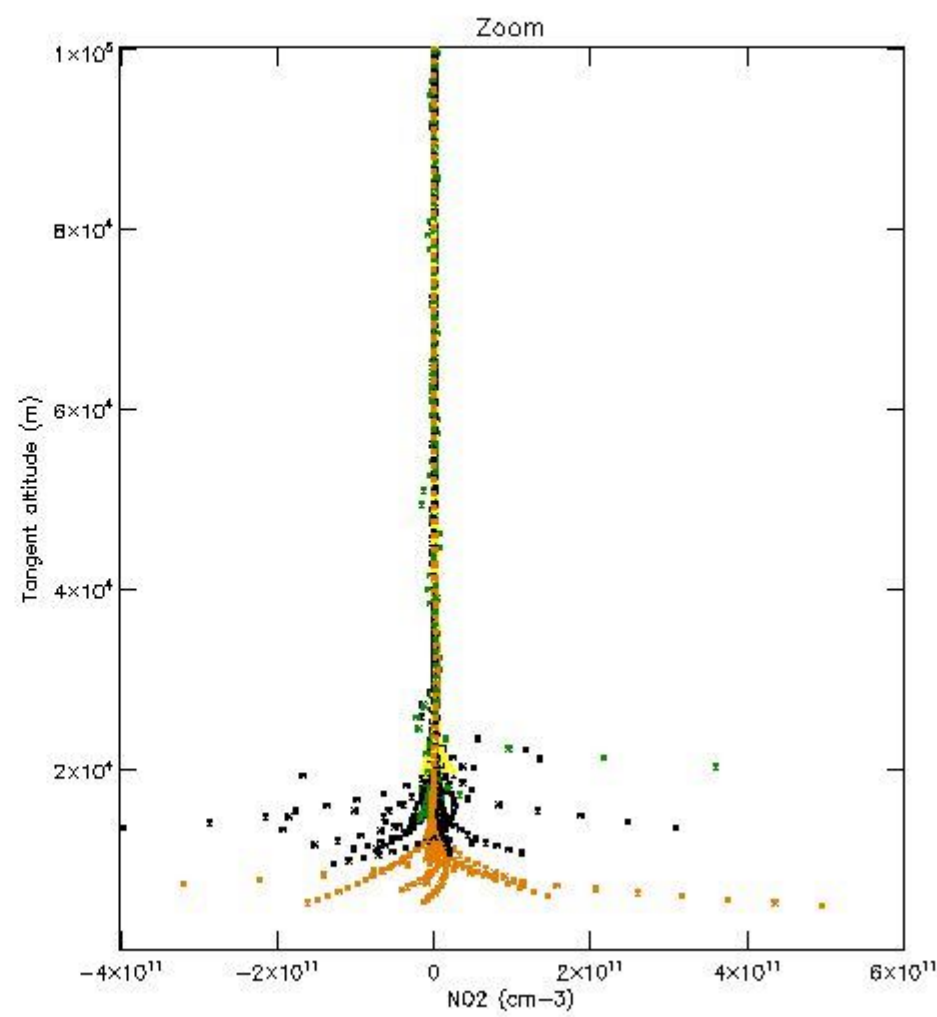
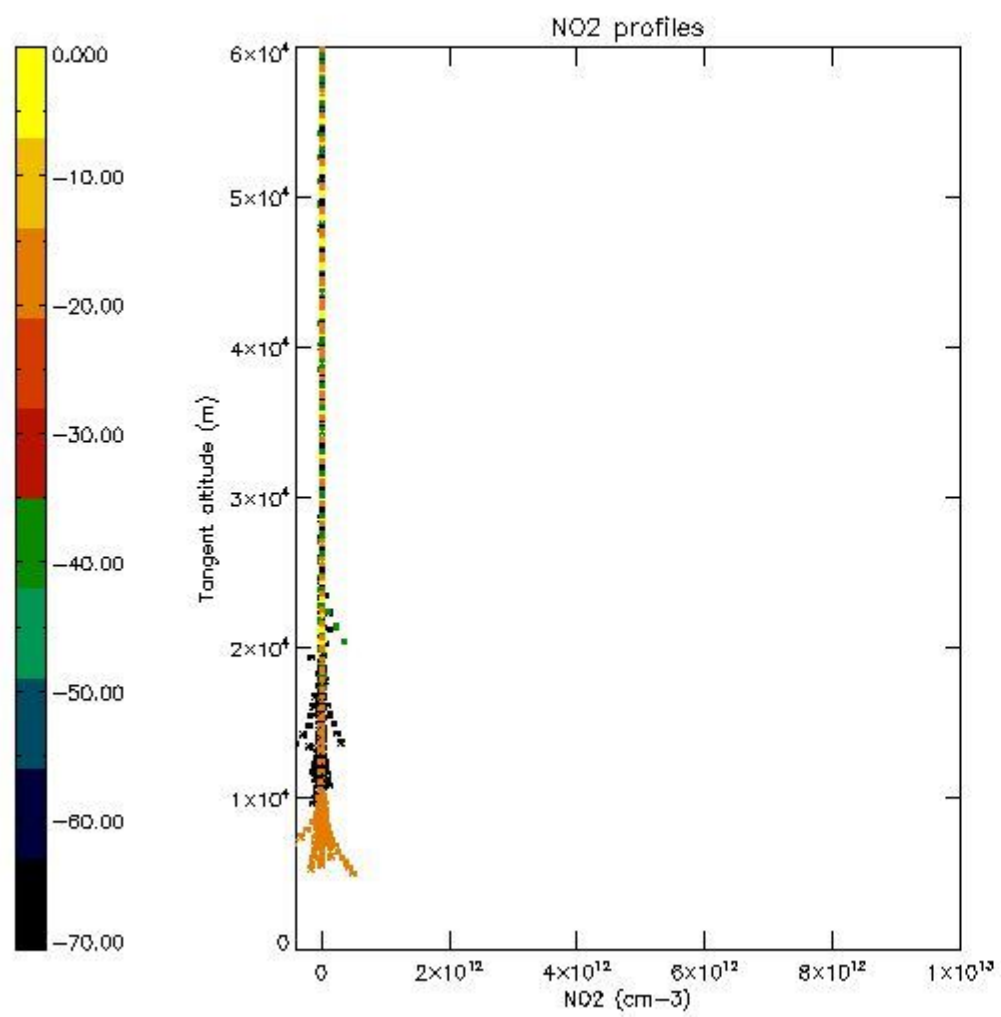
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



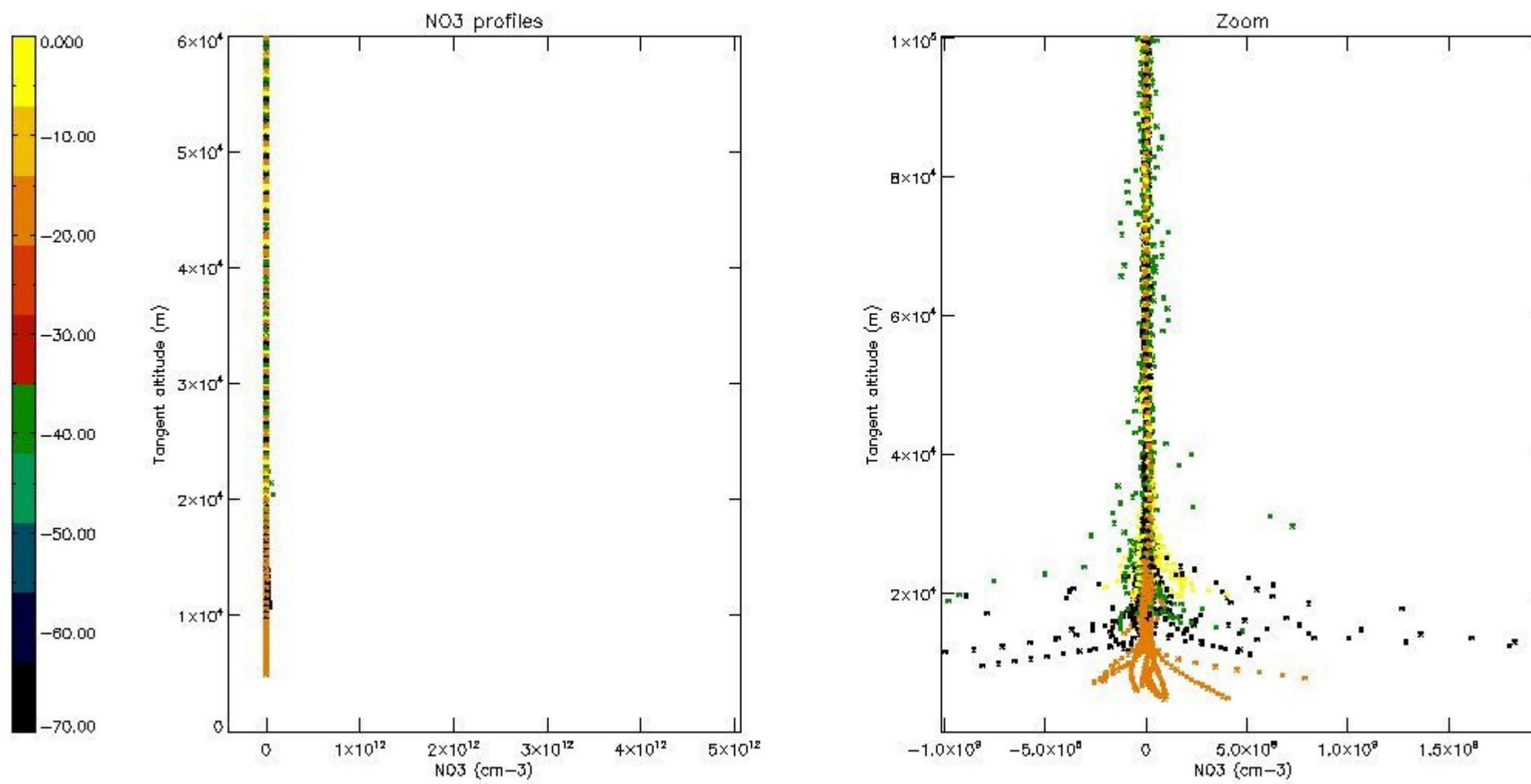
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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	05-JUL-2006 00:00:16
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	05-JUL-2006 00:00:16
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	05-JUL-2006 00:00:16

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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 01:10:34
Data source version	GOMOS/6.01
Start time of products	05-07-2006 (05JUL2006 00:00:00)
Stop time of products	06-07-2006 (06JUL2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	290
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

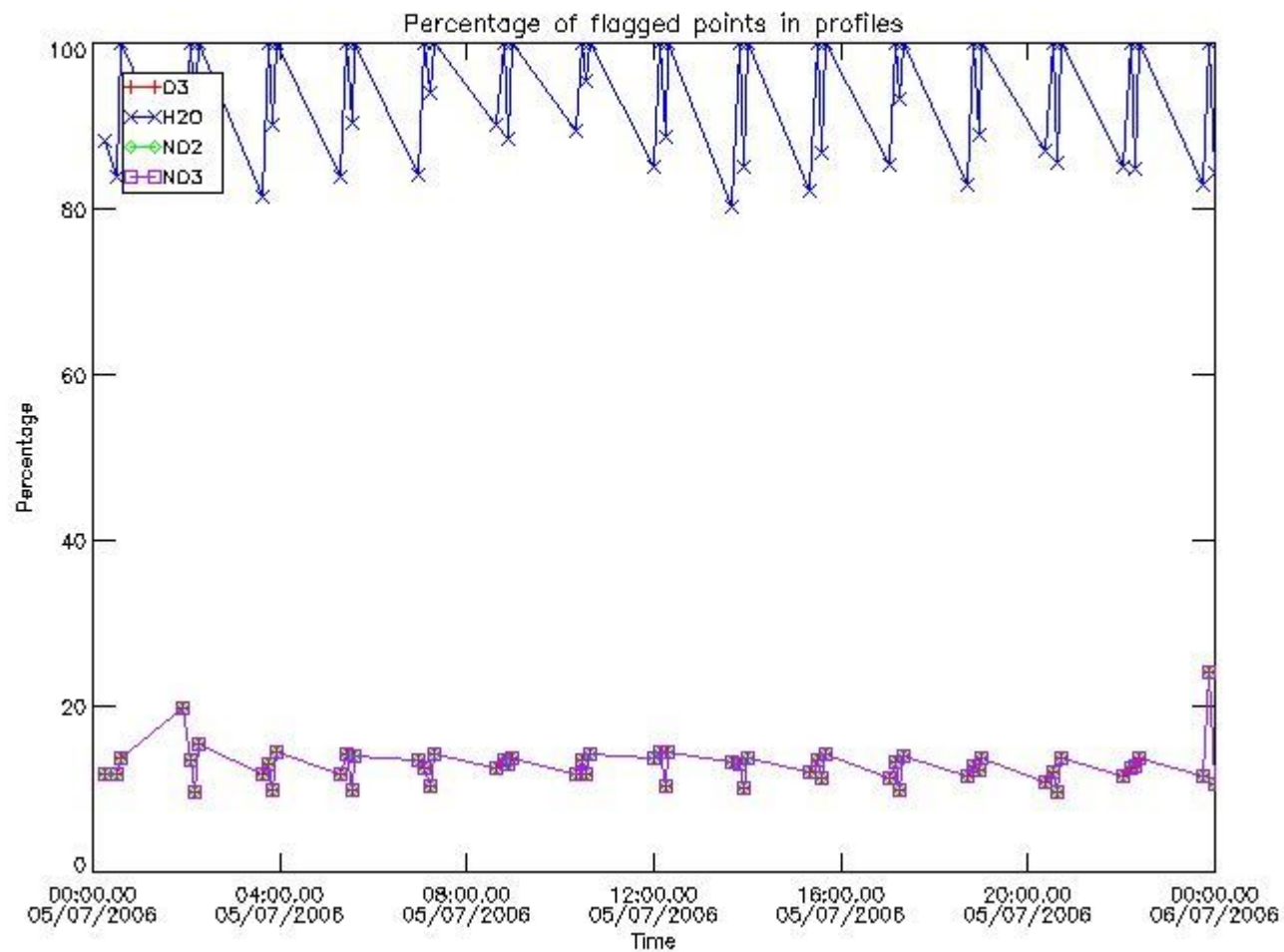
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20060705_000016_000000342049_00116_22715_9706.N1	05-JUL-2006 00:00:16	Bright	34.000	149	45Eps Per	2.8880	30000.	68	22715	No
2	GOM_NL__2PRFIN20060705_000241_000000382049_00116_22715_9707.N1	05-JUL-2006 00:02:41	Bright	38.000	150	44Zet Per	2.8900	28000.	76	22715	No
3	GOM_NL__2PRFIN20060705_001529_000000432049_00116_22715_9708.N1	05-JUL-2006 00:15:29	Dark	42.500	165	34Gam Eri	2.9500	3200.0	85	22715	No
4	GOM_NL__2PRFIN20060705_003012_000000442049_00117_22716_9688.N1	05-JUL-2006 00:30:12	Dark	43.500	9	Alp Eri	0.45300	24000.	87	22716	No
5	GOM_NL__2PRFIN20060705_003437_000000372049_00117_22716_9689.N1	05-JUL-2006 00:34:37	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	22716	No
6	GOM_NL__2PRFIN20060705_004200_000000432049_00117_22716_9690.N1	05-JUL-2006 00:42:00	Straylight	43.000	45	Alp Pav	1.9400	26000.	86	22716	No
7	GOM_NL__2PRFIN20060705_004532_000000412049_00117_22716_9691.N1	05-JUL-2006 00:45:32	Straylight	40.500	141	Bet Ara	2.8400	4600.0	81	22716	No
8	GOM_NL__2PRFIN20060705_004701_000000382049_00117_22716_9692.N1	05-JUL-2006 00:47:01	Tw_i_and_stray	38.000	147	Alp Ara	2.8770	26000.	76	22716	No
9	GOM_NL__2PRFIN20060705_004850_000000392049_00117_22716_9693.N1	05-JUL-2006 00:48:50	Tw_i_and_stray	39.000	40	The Sco	1.8590	7100.0	78	22716	No
10	GOM_NL__2PRFIN20060705_005030_000000412049_00117_22716_9694.N1	05-JUL-2006 00:50:30	Tw_i_and_stray	41.000	25	35Lam Sco	1.6200	28000.	82	22716	No
11	GOM_NL__2PRFIN20060705_005156_000000452049_00117_22716_9695.N1	05-JUL-2006 00:51:56	Bright	44.500	116	19Del Sgr	2.7000	4100.0	89	22716	No
12	GOM_NL__2PRFIN20060705_005640_000000372049_00117_22716_9696.N1	05-JUL-2006 00:56:40	Bright	36.500	86	35Eta Oph	2.4300	10200.	73	22716	No
13	GOM_NL__2PRFIN20060705_005827_000000362049_00117_22716_9697.N1	05-JUL-2006 00:58:27	Bright	36.000	98	13Zet Oph	2.5710	30000.	72	22716	No
14	GOM_NL__2PRFIN20060705_010210_000000372049_00117_22716_9698.N1	05-JUL-2006 01:02:10	Bright	36.500	126	60Bet Oph	2.7700	4250.0	73	22716	No
15	GOM_NL__2PRFIN20060705_010429_000000362049_00117_22716_9699.N1	05-JUL-2006 01:04:29	Bright	36.000	59	55Alp Oph	2.0800	8900.0	72	22716	No
16	GOM_NL__2PRFIN20060705_010721_000000352049_00117_22716_9700.N1	05-JUL-2006 01:07:21	Bright	35.000	127	27Bet Her	2.7810	4700.0	70	22716	No
17	GOM_NL__2PRFIN20060705_011002_000000372049_00117_22716_9701.N1	05-JUL-2006 01:10:02	Bright	36.500	133	40Zet Her	2.8070	6000.0	73	22716	No
18	GOM_NL__2PRFIN20060705_011550_000000342049_00117_22716_9702.N1	05-JUL-2006 01:15:50	Bright	34.000	130	23Bet Dra	2.7990	5800.0	68	22716	No
19	GOM_NL__2PRFIN20060705_011824_000000372049_00117_22716_9703.N1	05-JUL-2006 01:18:24	Bright	36.500	119	14Eta Dra	2.7270	4700.0	73	22716	No
20	GOM_NL__2PRFIN20060705_012228_000000332049_00117_22716_9704.N1	05-JUL-2006 01:22:28	Bright	32.500	60	7Bet UMI	2.0810	3950.0	65	22716	No
21	GOM_NL__2PRFIN20060705_012633_000000362049_00117_22716_9705.N1	05-JUL-2006 01:26:33	Bright	36.000	49	1Alp UMI	1.9900	6300.0	72	22716	No
22	GOM_NL__2PRFIN20060705_014052_000000402049_00117_22716_9706.N1	05-JUL-2006 01:40:52	Bright	40.000	149	45Eps Per	2.8880	30000.	80	22716	No
23	GOM_NL__2PRFIN20060705_014317_000000392049_00117_22716_9707.N1	05-JUL-2006 01:43:17	Bright	38.500	150	44Zet Per	2.8900	28000.	77	22716	No
24	GOM_NL__2PRFIN20060705_015605_000000442049_00117_22716_9708.N1	05-JUL-2006 01:56:05	Dark	43.500	165	34Gam Eri	2.9500	3200.0	87	22716	No
25	GOM_NL__2PRFIN20060705_020439_000000382049_00117_22716_9709.N1	05-JUL-2006 02:04:39	Dark	38.000	157	The1Eri	2.9060	9300.0	76	22716	No
26	GOM_NL__2PRFIN20060705_021049_000000532049_00118_22717_9690.N1	05-JUL-2006 02:10:49	Dark	53.000	9	Alp Eri	0.45300	24000.	106	22717	No
27	GOM_NL__2PRFIN20060705_021513_000000372049_00118_22717_9691.N1	05-JUL-2006 02:15:13	Dark	36.500	135	Bet Hyi	2.8200	5800.0	73	22717	No
28	GOM_NL__2PRFIN20060705_022236_000000412049_00118_22717_9692.N1	05-JUL-2006 02:22:36	Straylight	40.500	45	Alp Pav	1.9400	26000.	81	22717	No
29	GOM_NL__2PRFIN20060705_022608_000000432049_00118_22717_9693.N1	05-JUL-2006 02:26:08	Straylight	42.500	141	Bet Ara	2.8400	4600.0	85	22717	No
30	GOM_NL__2PRFIN20060705_022737_000000382049_00118_22717_9694.N1	05-JUL-2006 02:27:37	Tw_i_and_stray	37.500	147	Alp Ara	2.8770	26000.	75	22717	No
31	GOM_NL__2PRFIN20060705_022926_000000412049_00118_22717_9695.N1	05-JUL-2006 02:29:26	Tw_i_and_stray	41.000	40	The Sco	1.8590	7100.0	82	22717	No
32	GOM_NL__2PRFIN20060705_023106_000000422049_00118_22717_9696.N1	05-JUL-2006 02:31:06	Tw_i_and_stray	41.500	25	35Lam Sco	1.6200	28000.	83	22717	No
33	GOM_NL__2PRFIN20060705_023232_000000462049_00118_22717_9697.N1	05-JUL-2006 02:32:32	Bright	46.000	116	19Del Sgr	2.7000	4100.0	92	22717	No
34	GOM_NL__2PRFIN20060705_023716_000000372049_00118_22717_9698.N1	05-JUL-2006 02:37:16	Bright	37.000	86	35Eta Oph	2.4300	10200.	74	22717	No
35	GOM_NL__2PRFIN20060705_023903_000000372049_00118_22717_9699.N1	05-JUL-2006 02:39:03	Bright	36.500	98	13Zet Oph	2.5710	30000.	73	22717	No
36	GOM_NL__2PRFIN20060705_024246_000000372049_00118_22717_9700.N1	05-JUL-2006 02:42:46	Bright	37.000	126	60Bet Oph	2.7700	4250.0	74	22717	No
37	GOM_NL__2PRFIN20060705_024505_000000372049_00118_22717_9701.N1	05-JUL-2006 02:45:05	Bright	37.000	59	55Alp Oph	2.0800	8900.0	74	22717	No
38	GOM_NL__2PRFIN20060705_024757_000000372049_00118_22717_9702.N1	05-JUL-2006 02:47:57	Bright	36.500	127	27Bet Her	2.7810	4700.0	73	22717	No
39	GOM_NL__2PRFIN20060705_025038_000000372049_00118_22717_9703.N1	05-JUL-2006 02:50:38	Bright	37.000	133	40Zet Her	2.8070	6000.0	74	22717	No
40	GOM_NL__2PRFIN20060705_025626_000000382049_00118_22717_9704.N1	05-JUL-2006 02:56:26	Bright	37.500	130	23Bet Dra	2.7990	5800.0	75	22717	No
41	GOM_NL__2PRFIN20060705_025900_000000342049_00118_22717_9705.N1	05-JUL-2006 02:59:00	Bright	34.000	119	14Eta Dra	2.7270	4700.0	68	22717	No
42	GOM_NL__2PRFIN20060705_030304_000000332049_00118_22717_9706.N1	05-JUL-2006 03:03:04	Bright	32.500	60	7Bet UMI	2.0810	3950.0	65	22717	No

279	GOM_NL__2PRFIN20060705_224958_000000352049_00130_22729_9722.N1	05-JUL-2006 22:49:58	Bright	35.000	126	60Bet Oph	2.7700	4250.0	70	22729	No
280	GOM_NL__2PRFIN20060705_225216_000000372049_00130_22729_9723.N1	05-JUL-2006 22:52:16	Bright	36.500	59	55Alp Oph	2.0800	8900.0	73	22729	No
281	GOM_NL__2PRFIN20060705_225511_000000372049_00130_22729_9724.N1	05-JUL-2006 22:55:11	Bright	37.000	127	27Bet Her	2.7810	4700.0	74	22729	No
282	GOM_NL__2PRFIN20060705_225751_000000342049_00130_22729_9725.N1	05-JUL-2006 22:57:51	Bright	34.000	133	40Zet Her	2.8070	6000.0	68	22729	No
283	GOM_NL__2PRFIN20060705_230336_000000352049_00130_22729_9726.N1	05-JUL-2006 23:03:36	Bright	34.500	130	23Bet Dra	2.7990	5800.0	69	22729	No
284	GOM_NL__2PRFIN20060705_230612_000000372049_00130_22729_9727.N1	05-JUL-2006 23:06:12	Bright	36.500	119	14Eta Dra	2.7270	4700.0	73	22729	No
285	GOM_NL__2PRFIN20060705_231017_000000362049_00130_22729_9728.N1	05-JUL-2006 23:10:17	Bright	35.500	60	7Bet UMi	2.0810	3950.0	71	22729	No
286	GOM_NL__2PRFIN20060705_231420_000000342049_00130_22729_9729.N1	05-JUL-2006 23:14:20	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	22729	No
287	GOM_NL__2PRFIN20060705_232840_000000342049_00130_22729_9730.N1	05-JUL-2006 23:28:40	Bright	34.000	149	45Eps Per	2.8880	30000.0	68	22729	No
288	GOM_NL__2PRFIN20060705_234357_000000442049_00130_22729_9731.N1	05-JUL-2006 23:43:57	Dark	44.000	165	34Gam Eri	2.9500	3200.0	88	22729	No
289	GOM_NL__2PRFIN20060705_235232_000000402049_00130_22729_9732.N1	05-JUL-2006 23:52:32	Dark	40.000	157	The1Eri	2.9060	9300.0	80	22729	No
290	GOM_NL__2PRFIN20060705_235843_000000492049_00131_22730_9714.N1	05-JUL-2006 23:58:43	Dark	48.500	9	Alp Eri	0.45300	24000.0	97	22730	No

3. Quality information per product

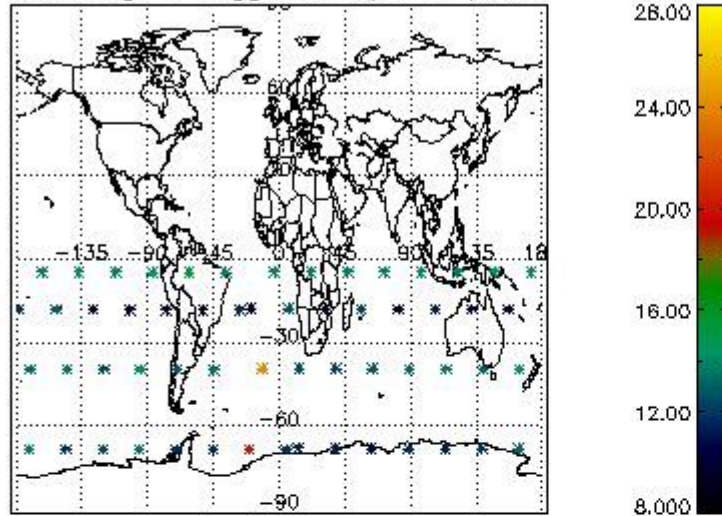
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

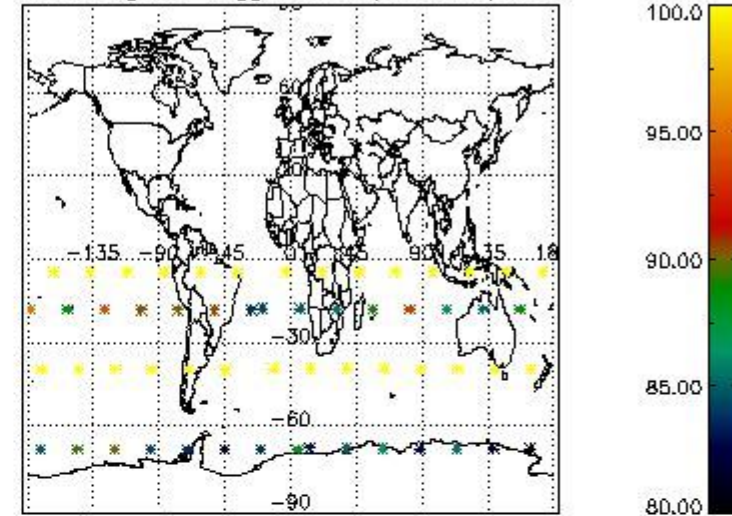


3.2 Plot quality information per product (world map)

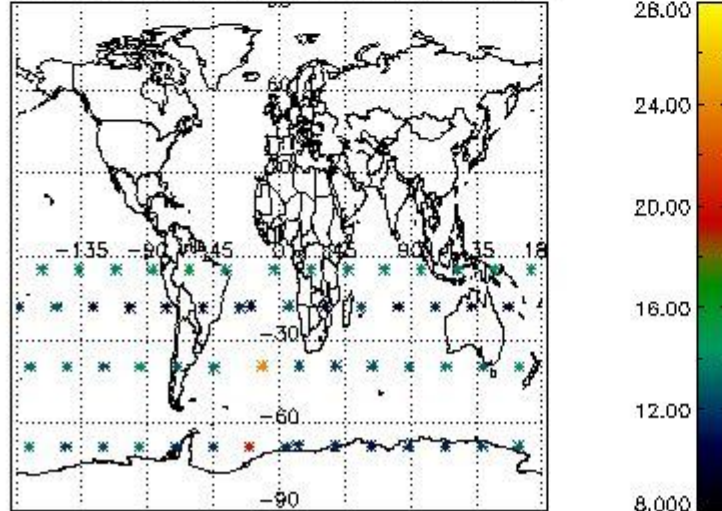
Percentage of flagged data per O3 profile



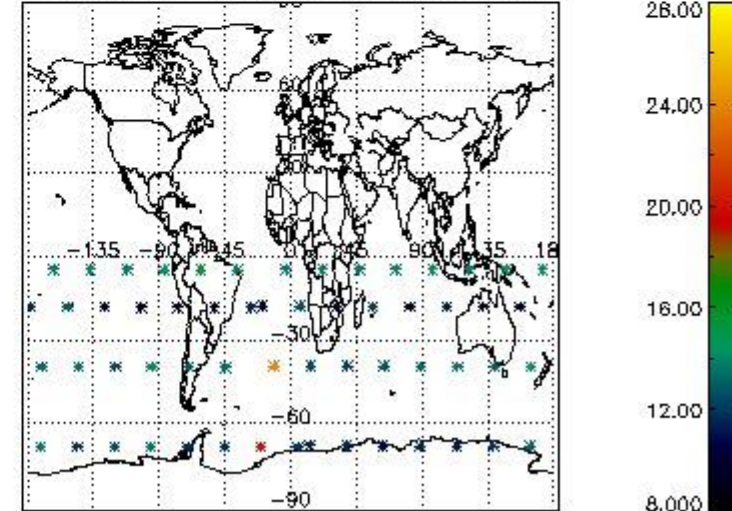
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

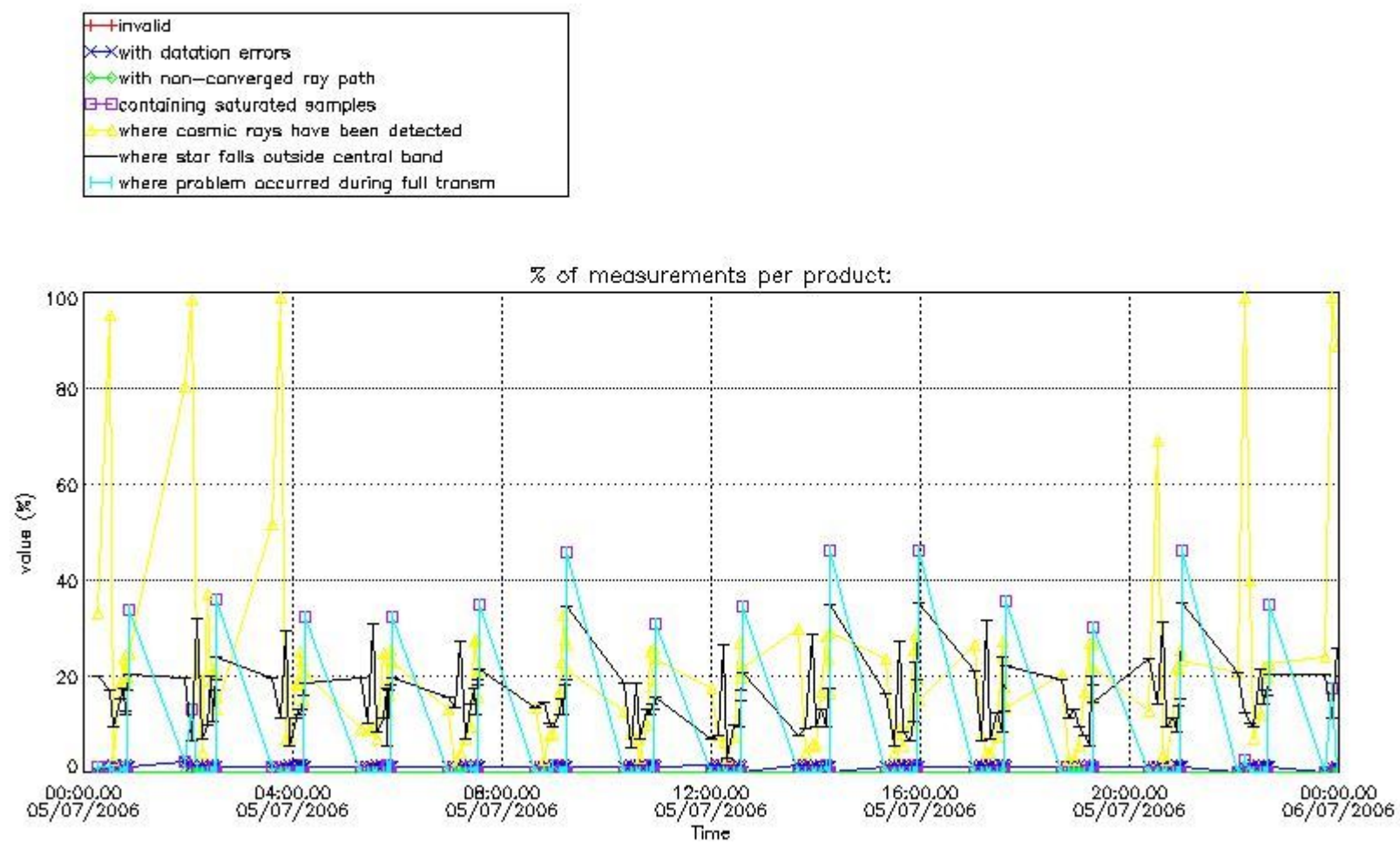


4. Level 1 quality information per product

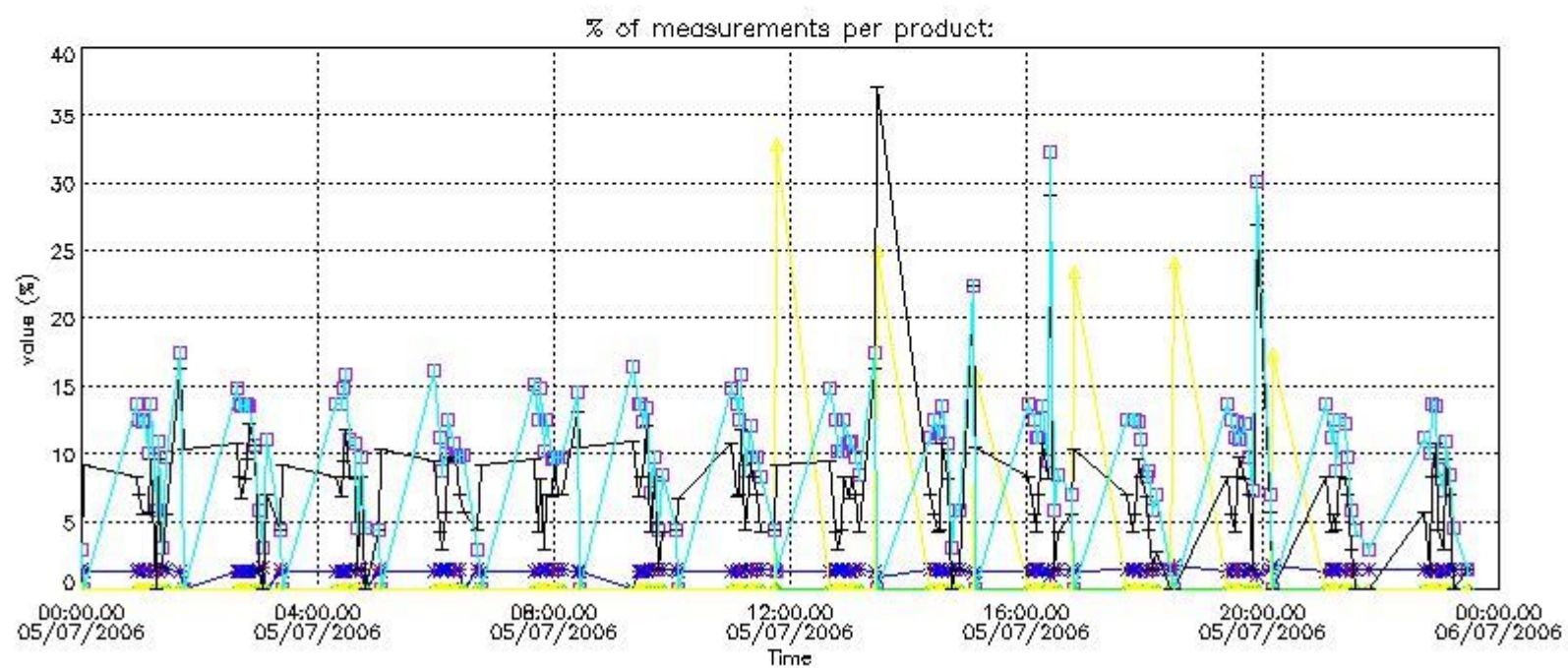
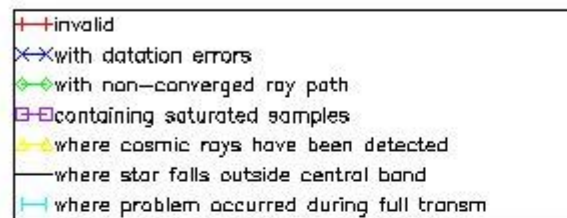
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

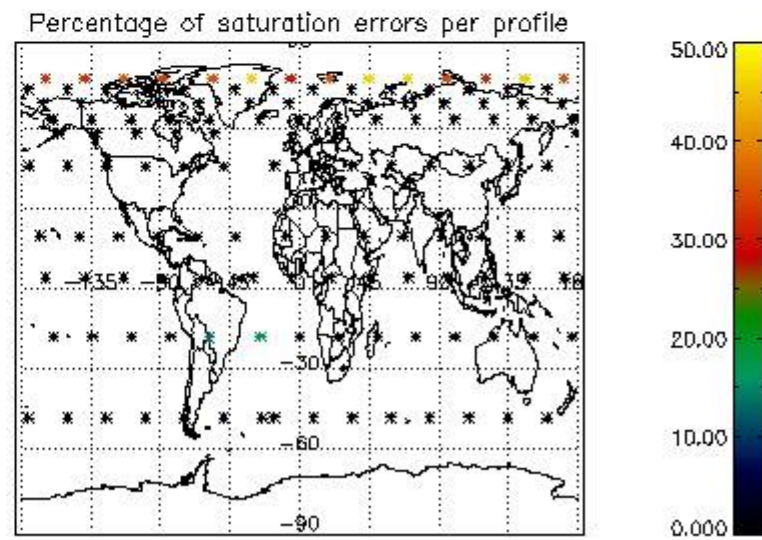
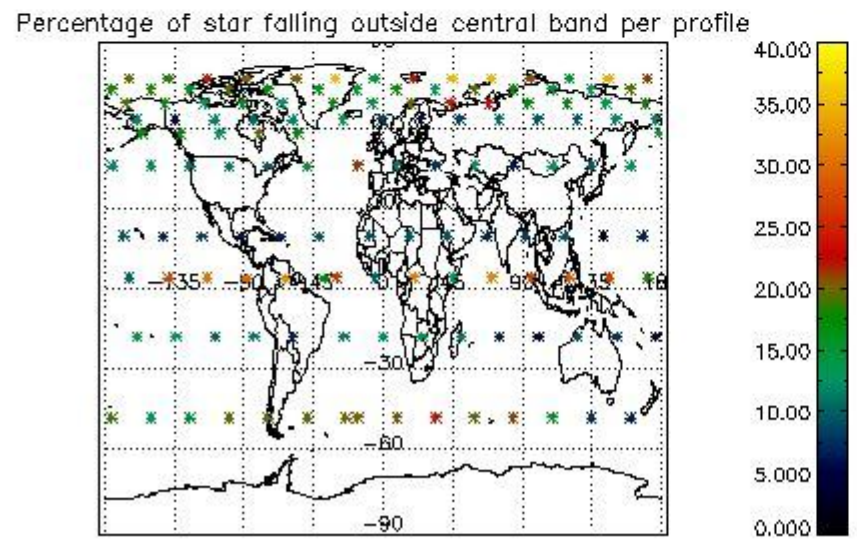
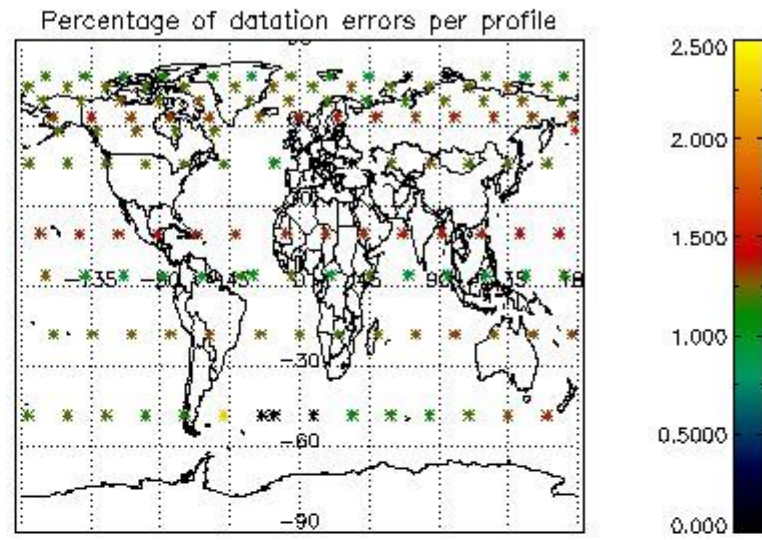
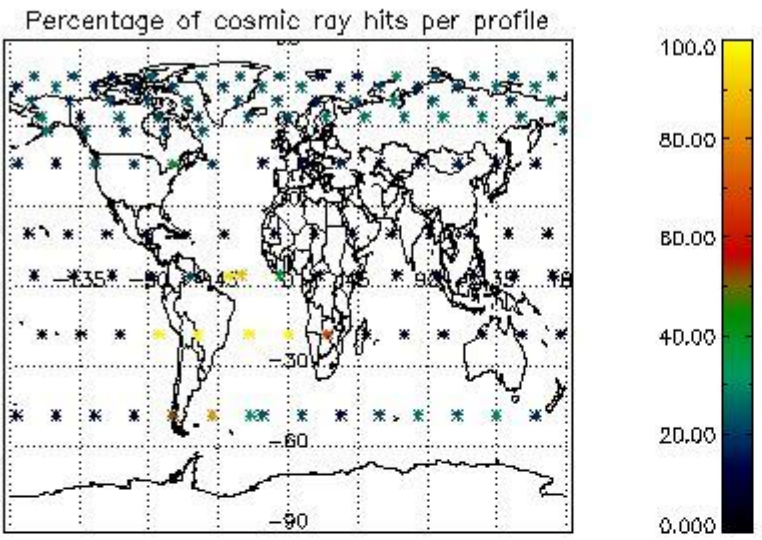


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

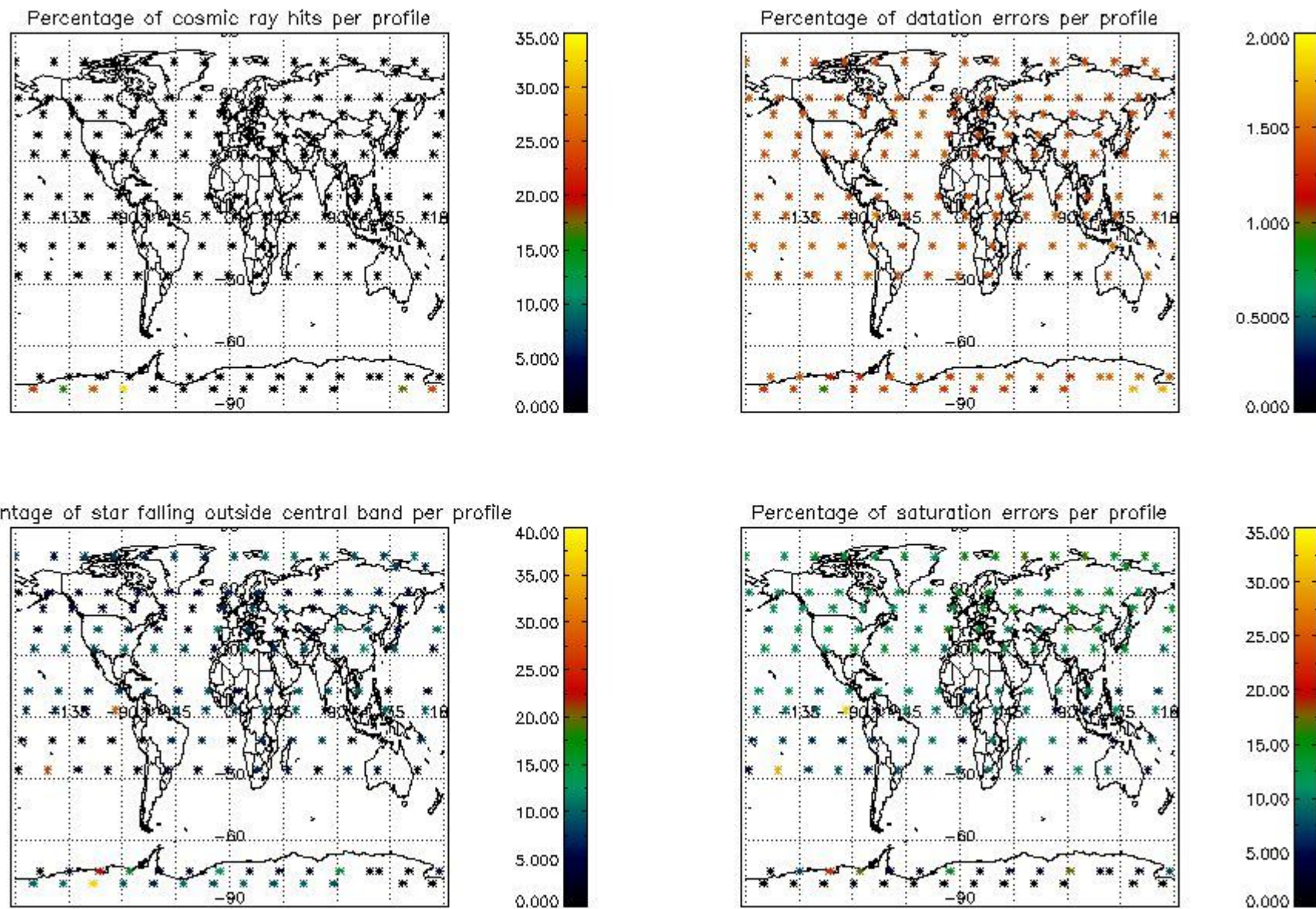


4.2 Plot quality information per product coming from level 1b processing (world map)

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

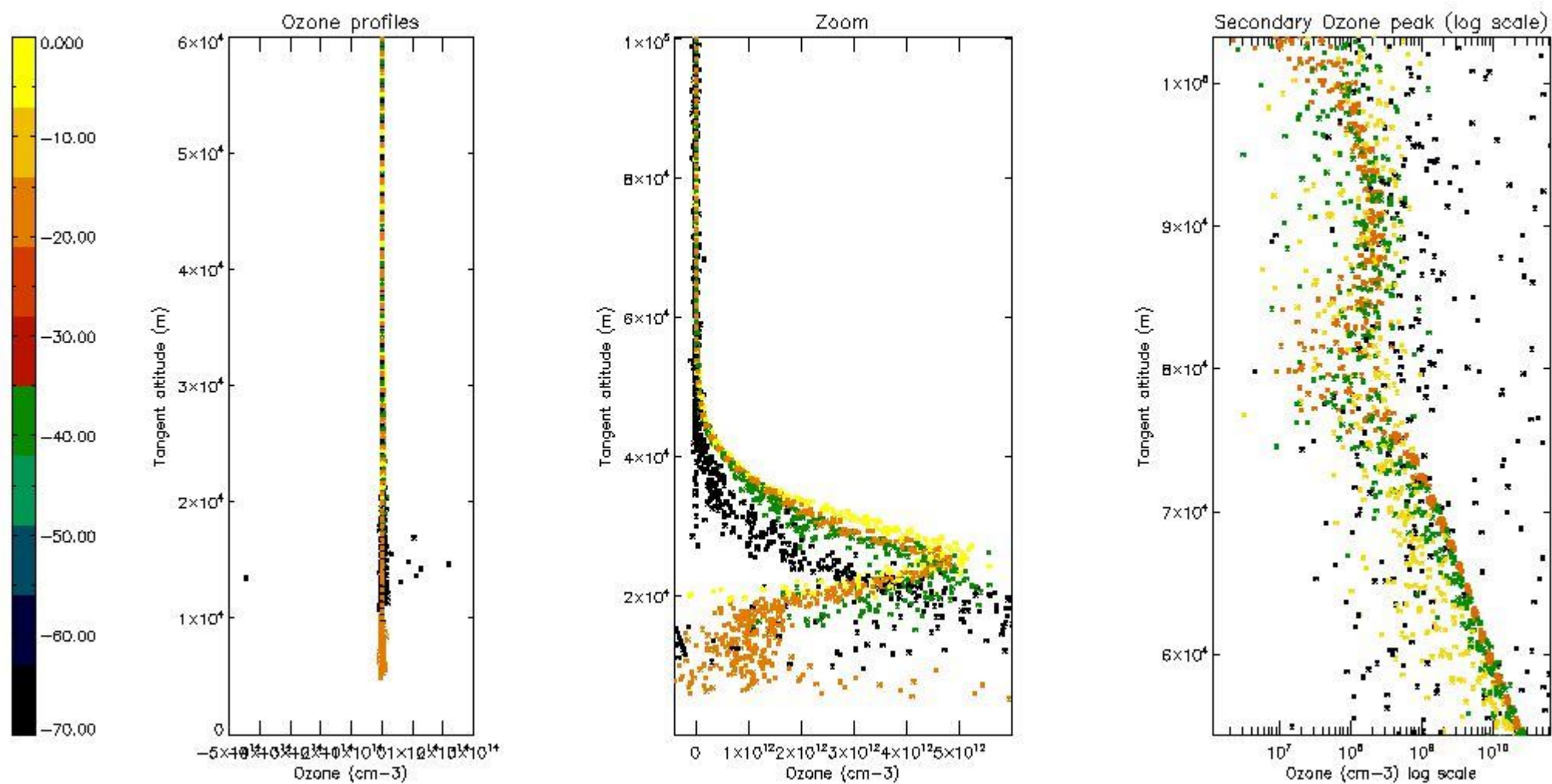
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	23
STD < 20	10

STD < 10	7
STD < 5	4

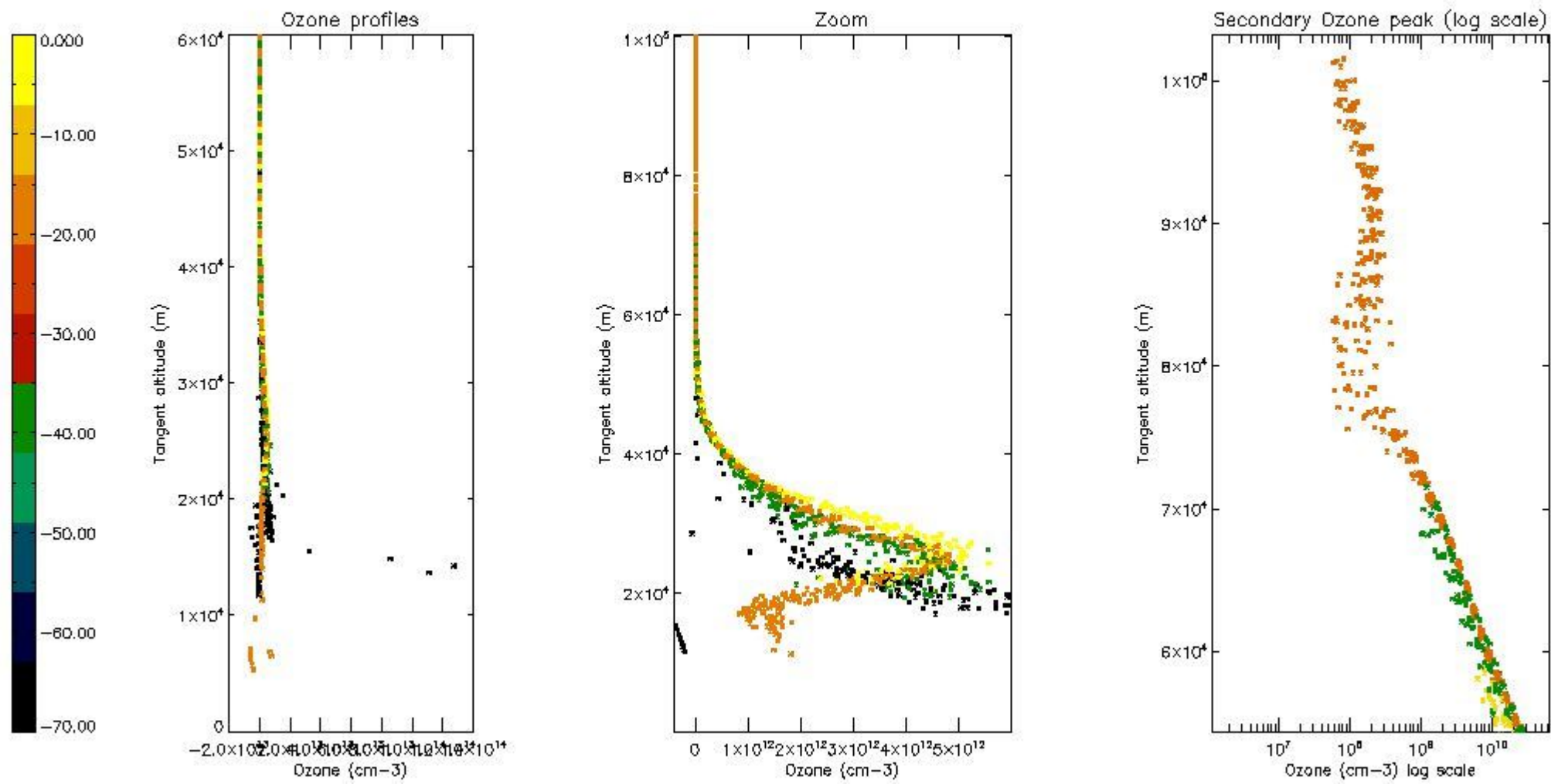
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



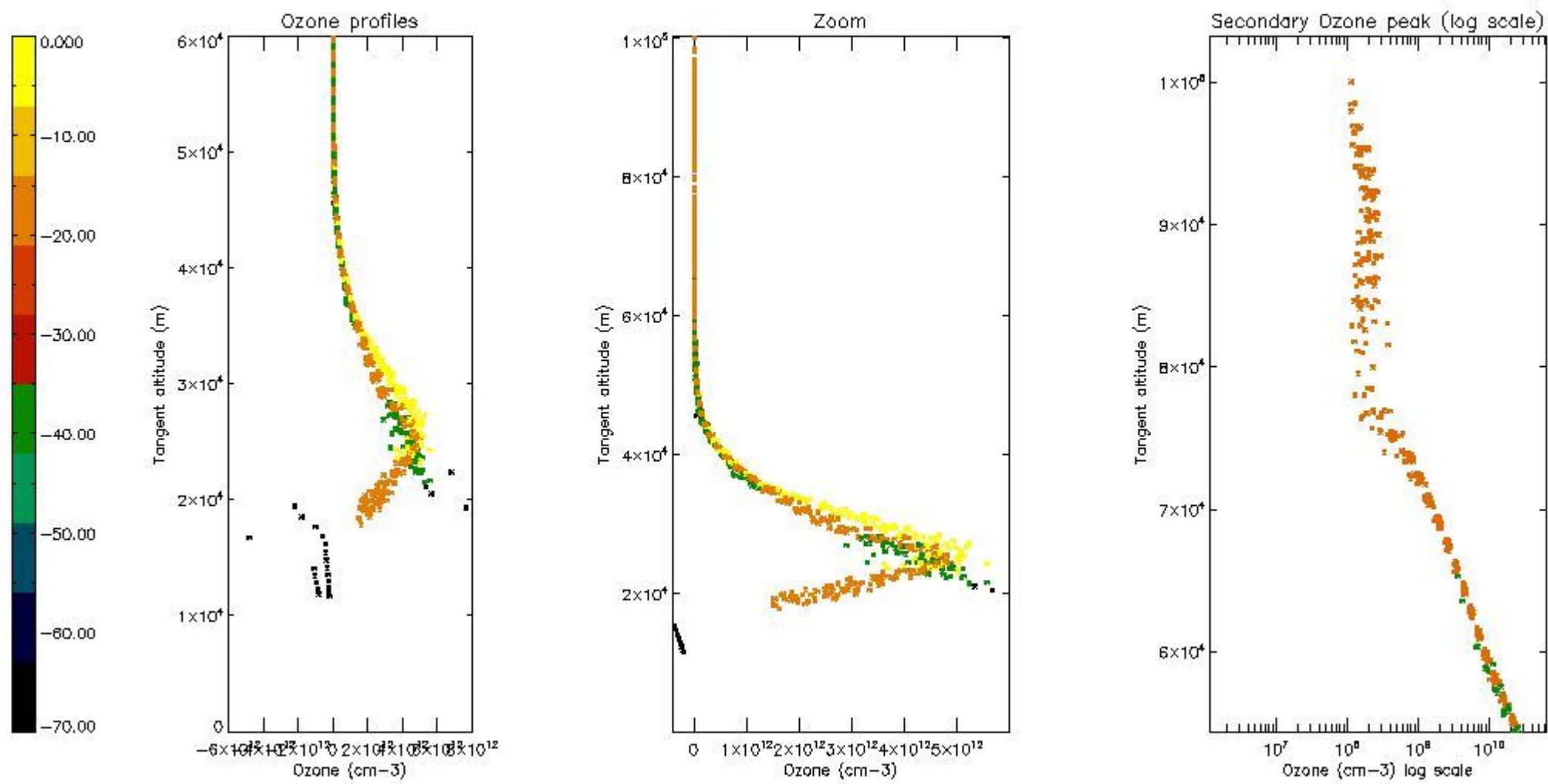
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



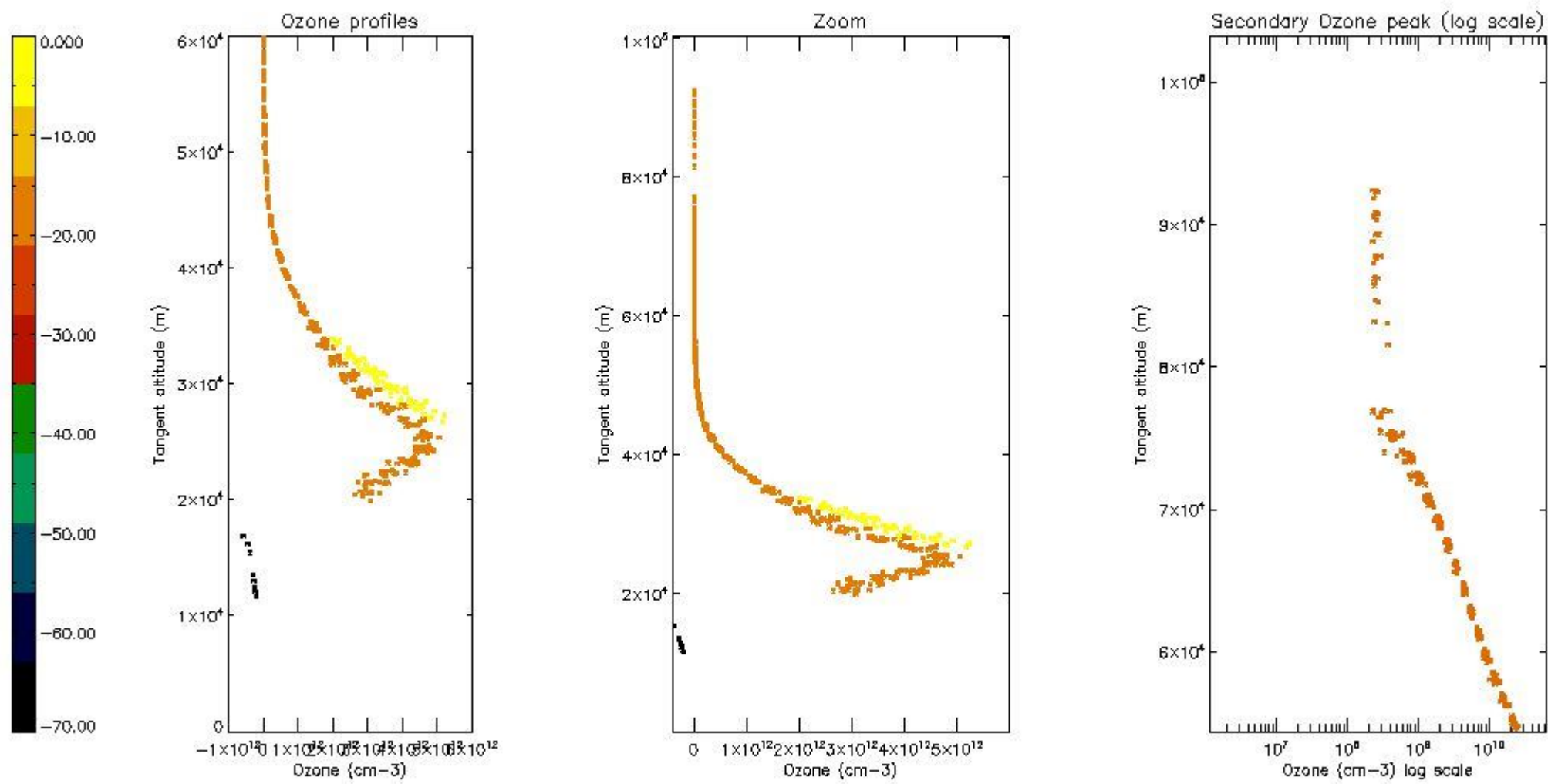
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



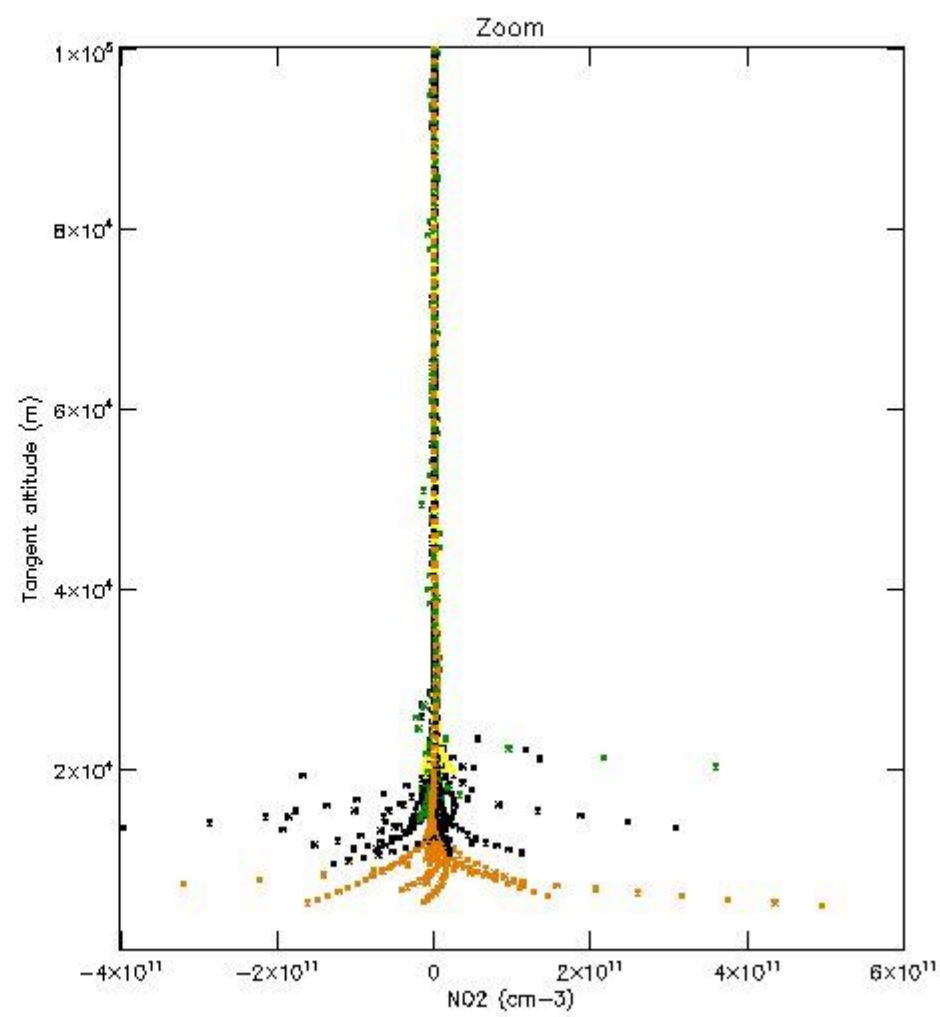
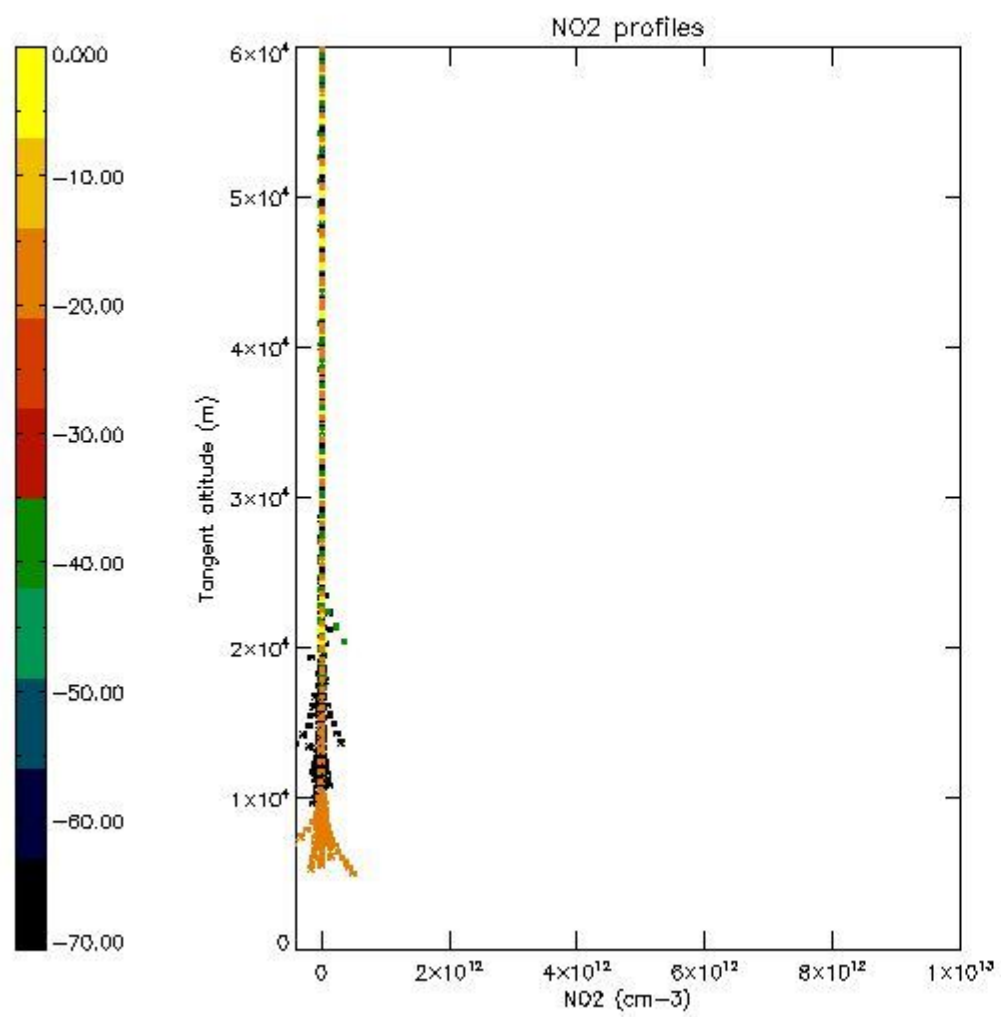
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



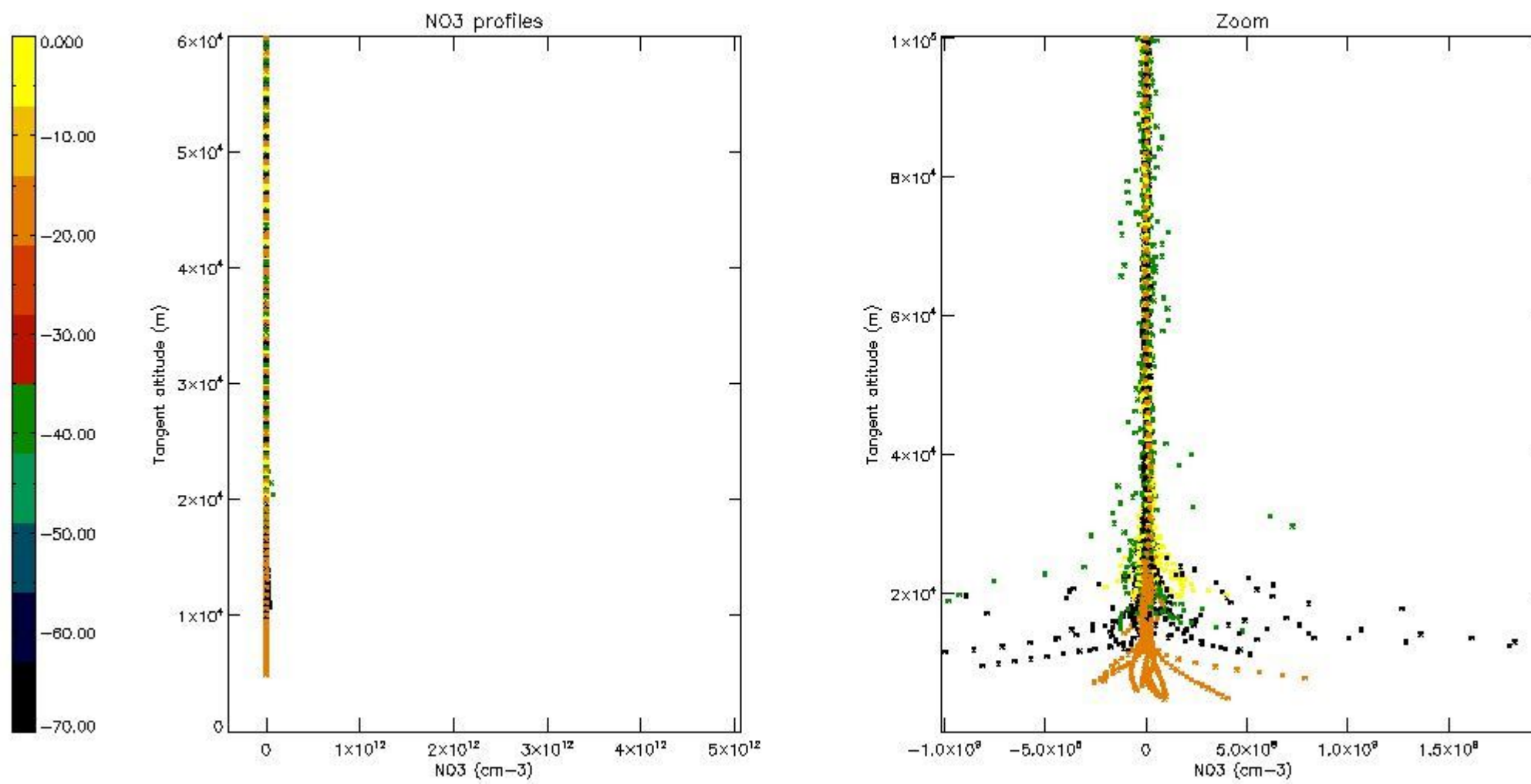
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

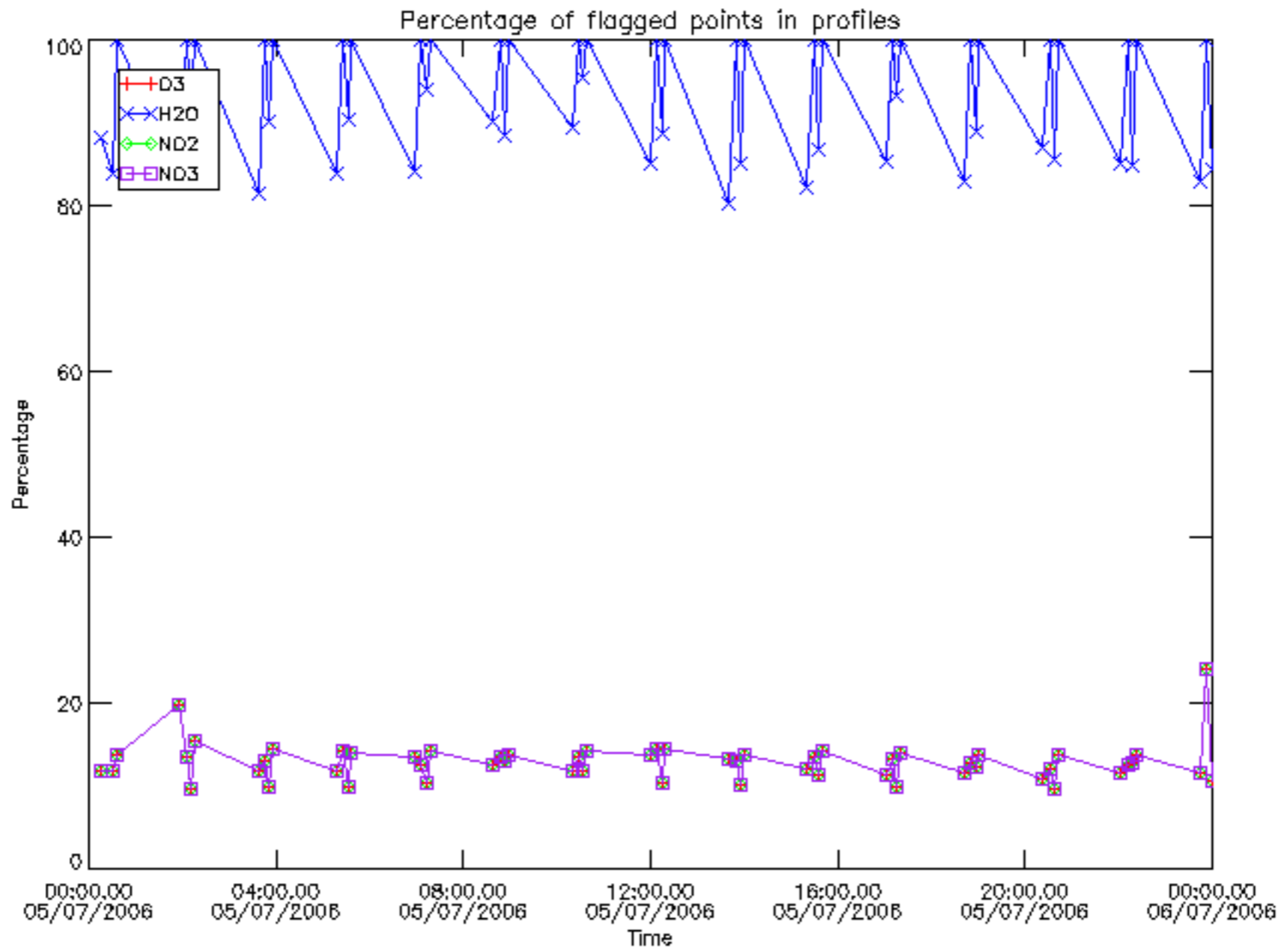
The colorbar represents the latitude.



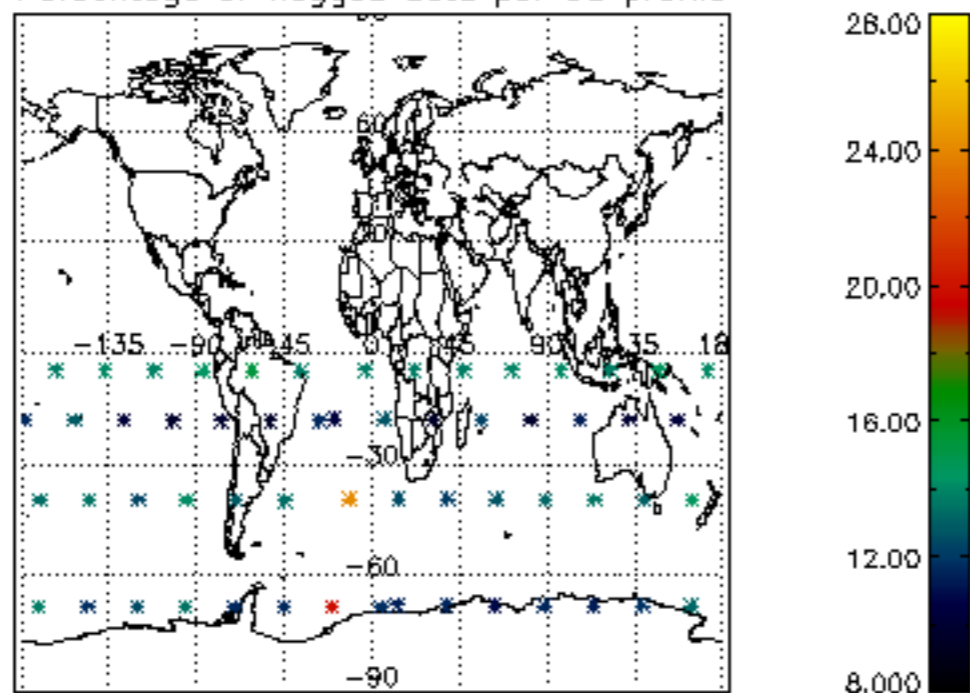
6. Auxiliary Data Files used for the production reported in section 2

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.

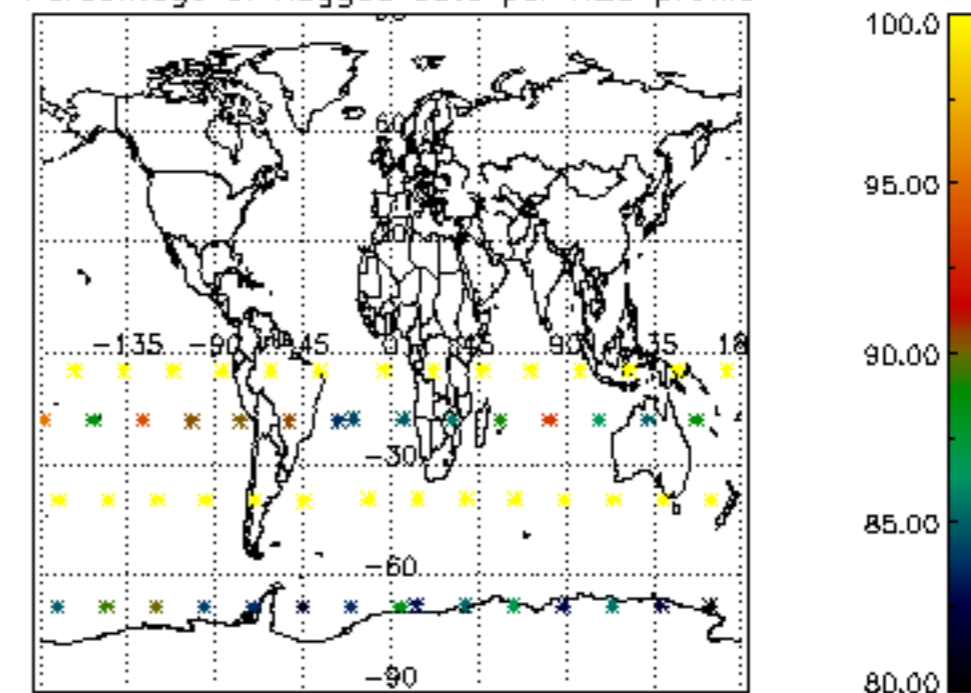
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	05-JUL-2006 00:00:16
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	05-JUL-2006 00:00:16
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	05-JUL-2006 00:00:16



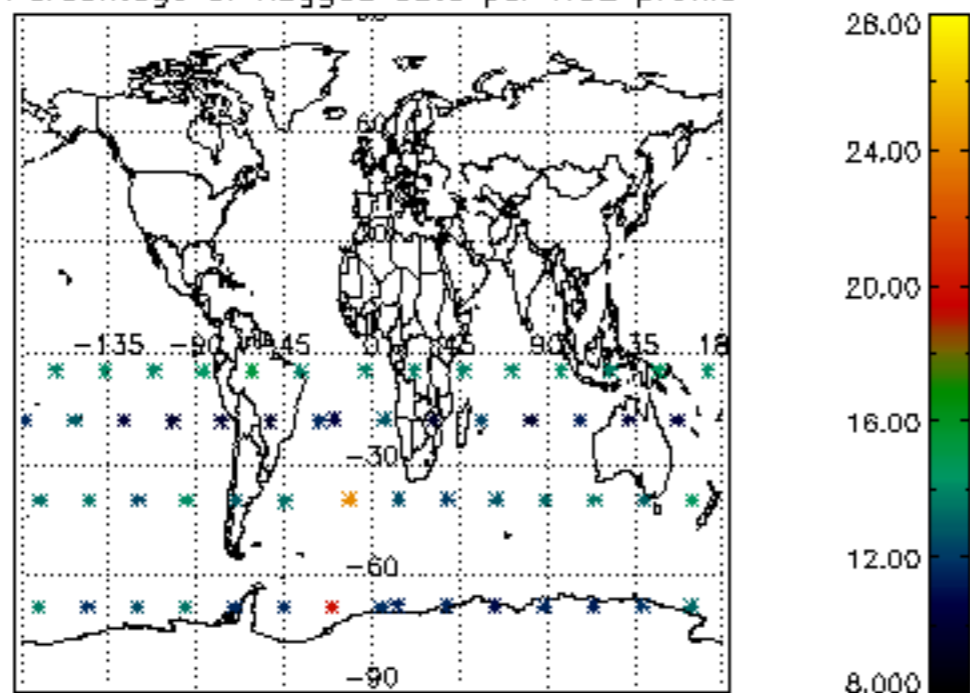
Percentage of flagged data per D3 profile



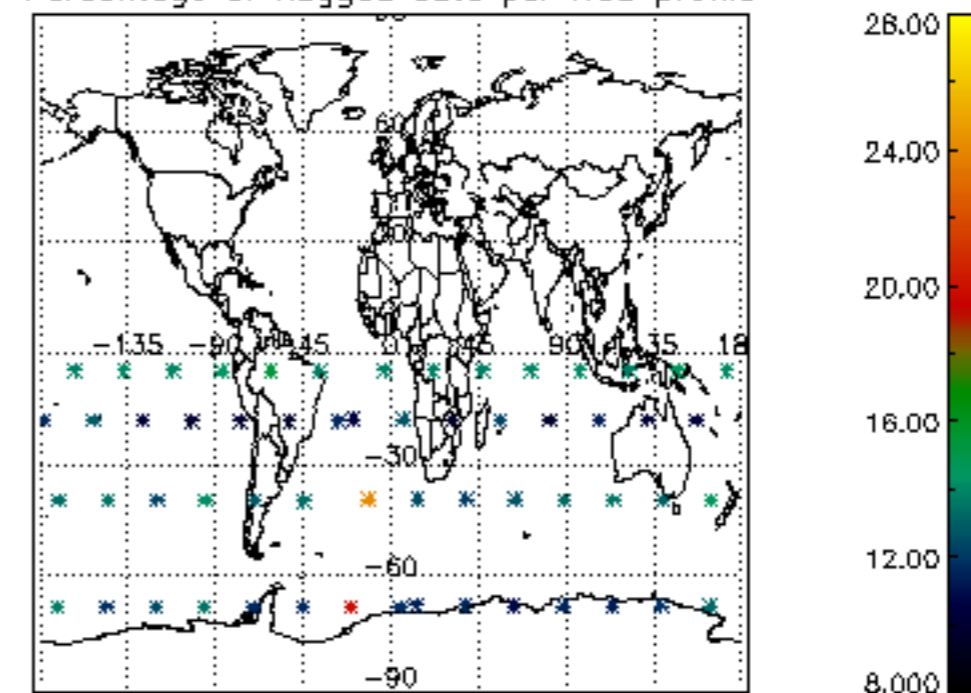
Percentage of flagged data per H2O profile

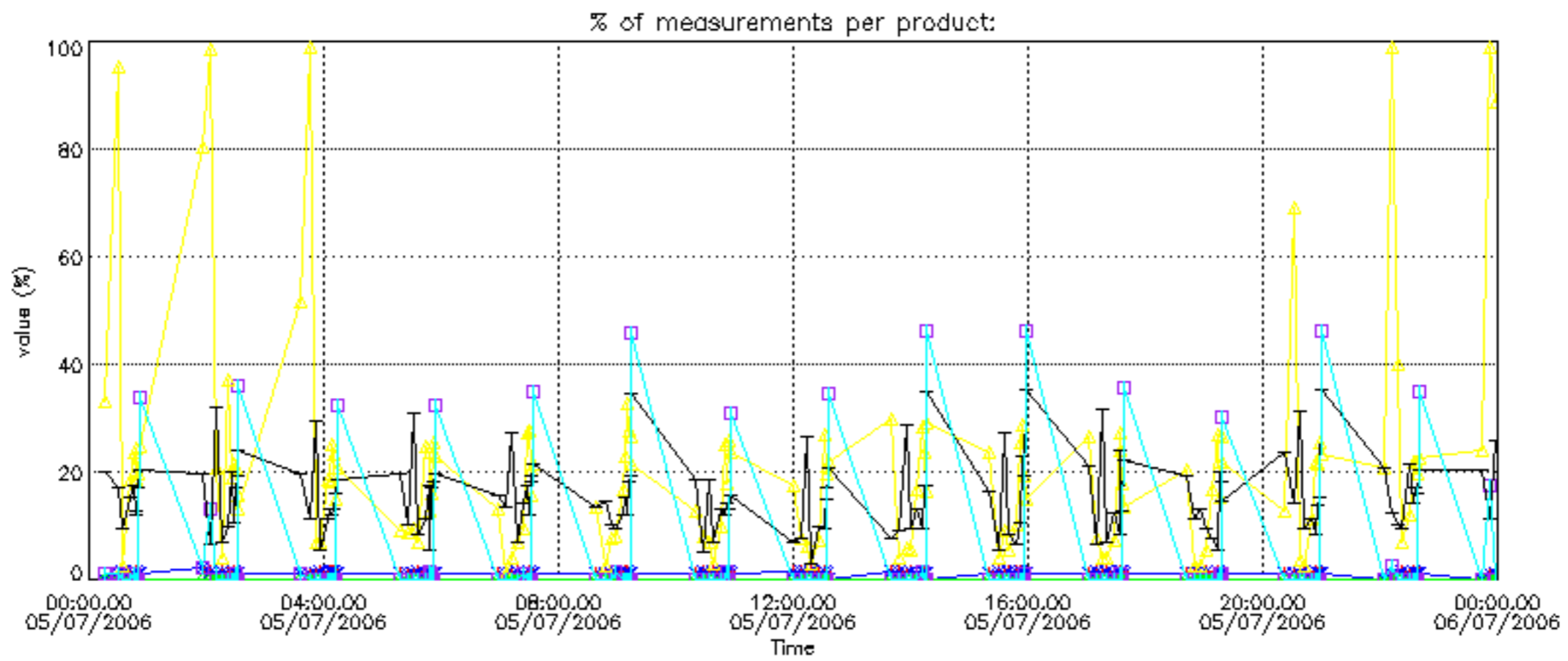


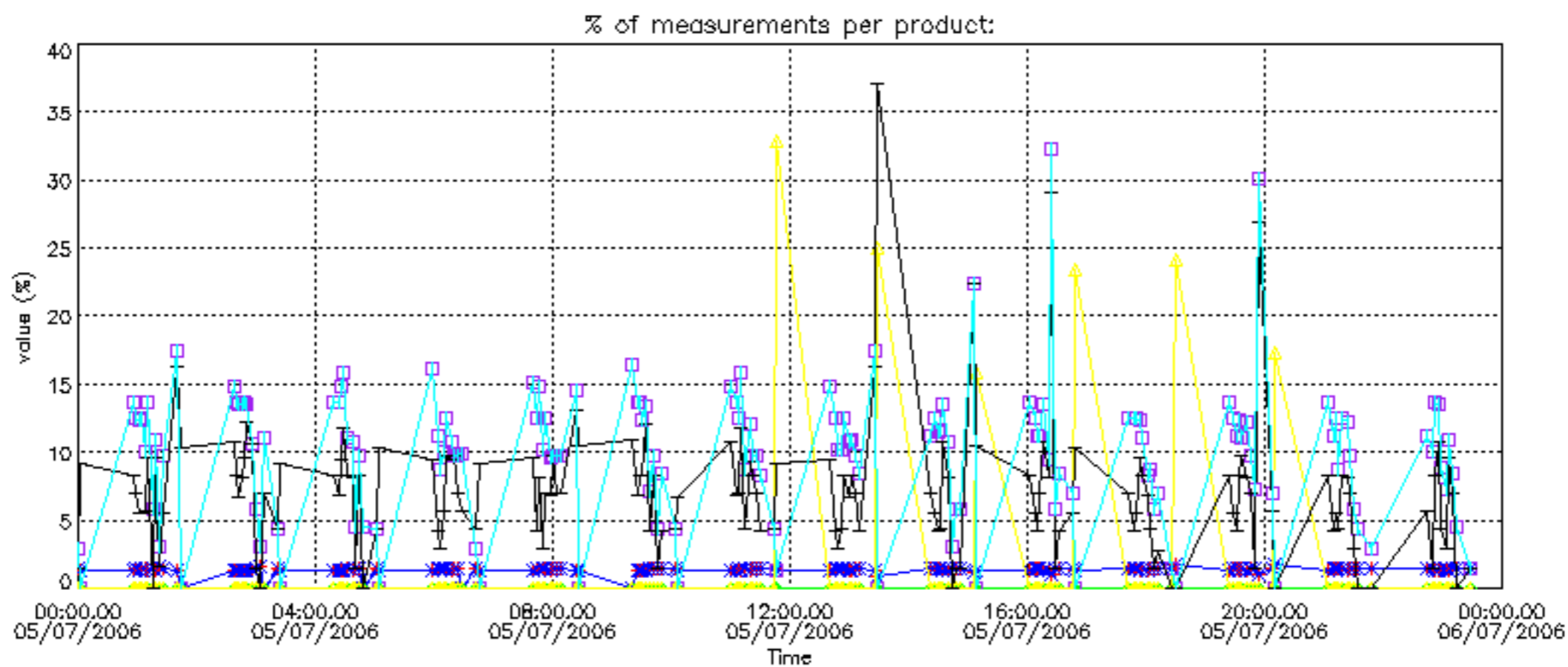
Percentage of flagged data per NO2 profile



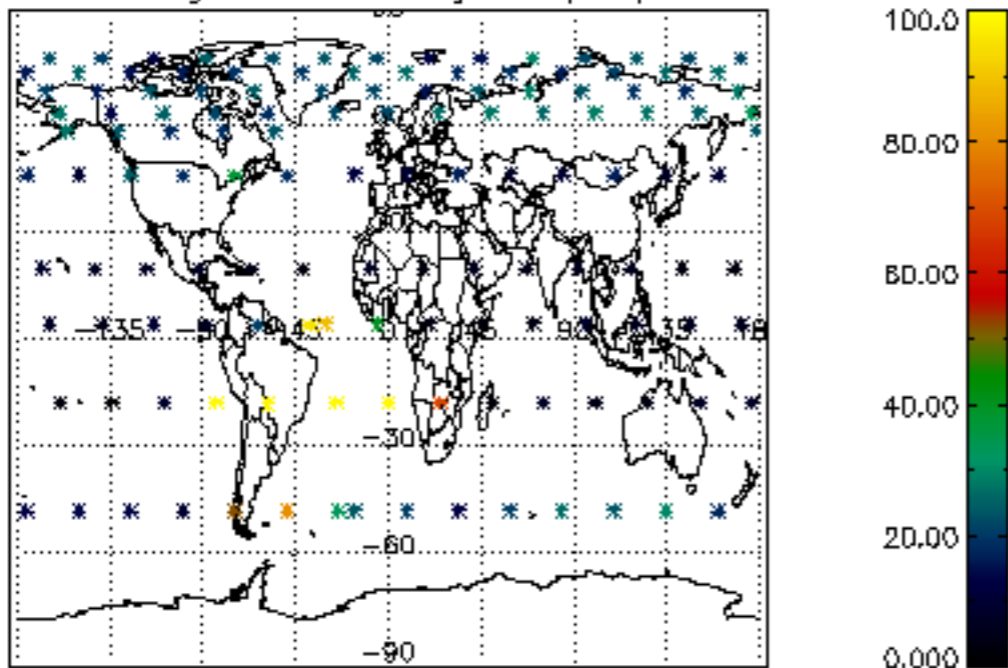
Percentage of flagged data per NO3 profile



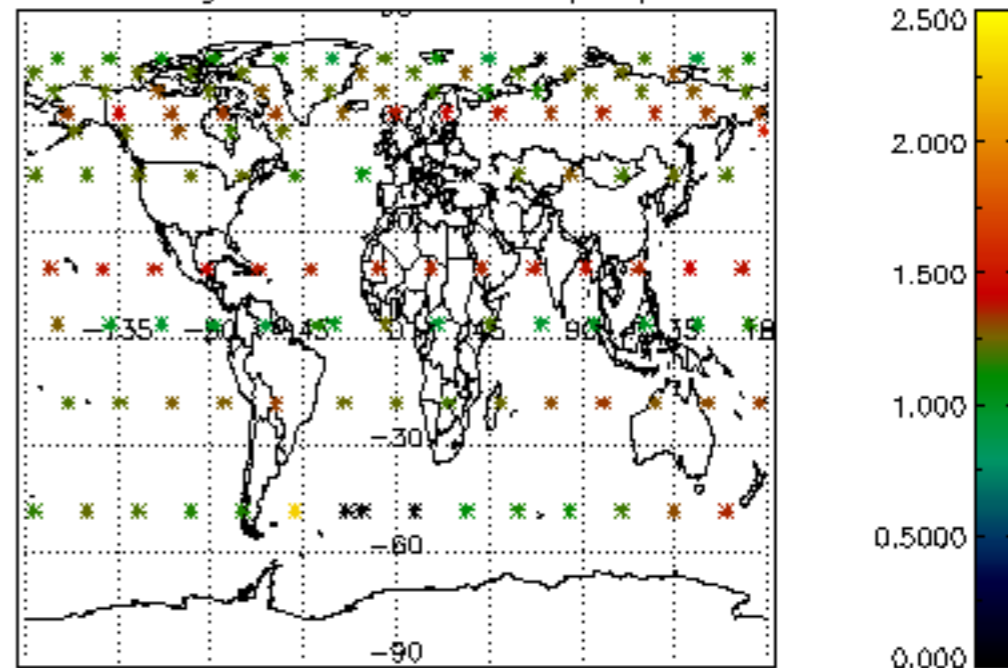




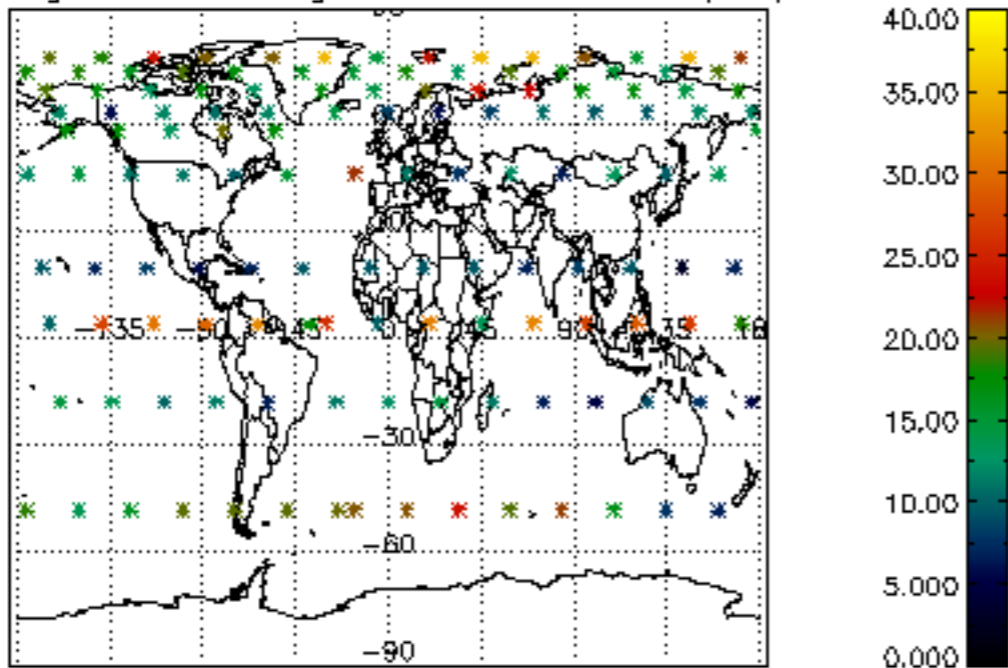
Percentage of cosmic ray hits per profile



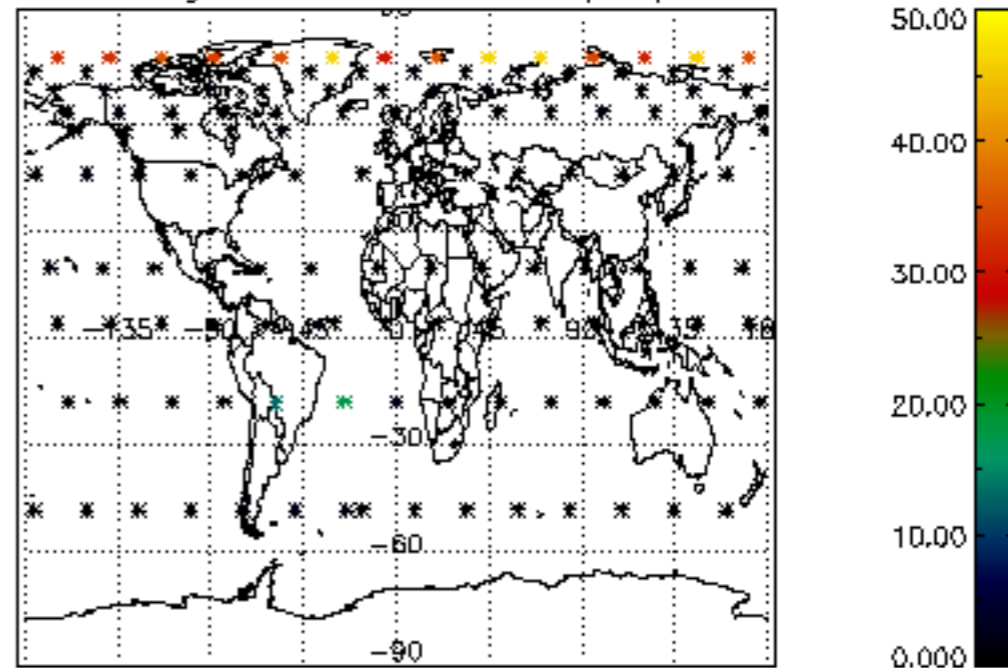
Percentage of datation errors per profile



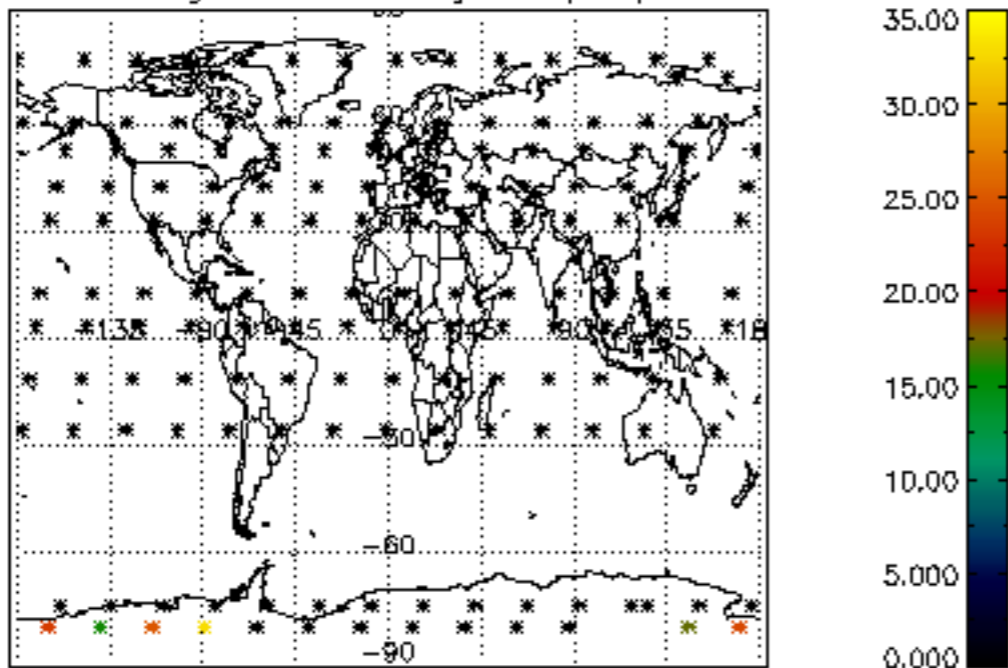
Percentage of star falling outside central band per profile



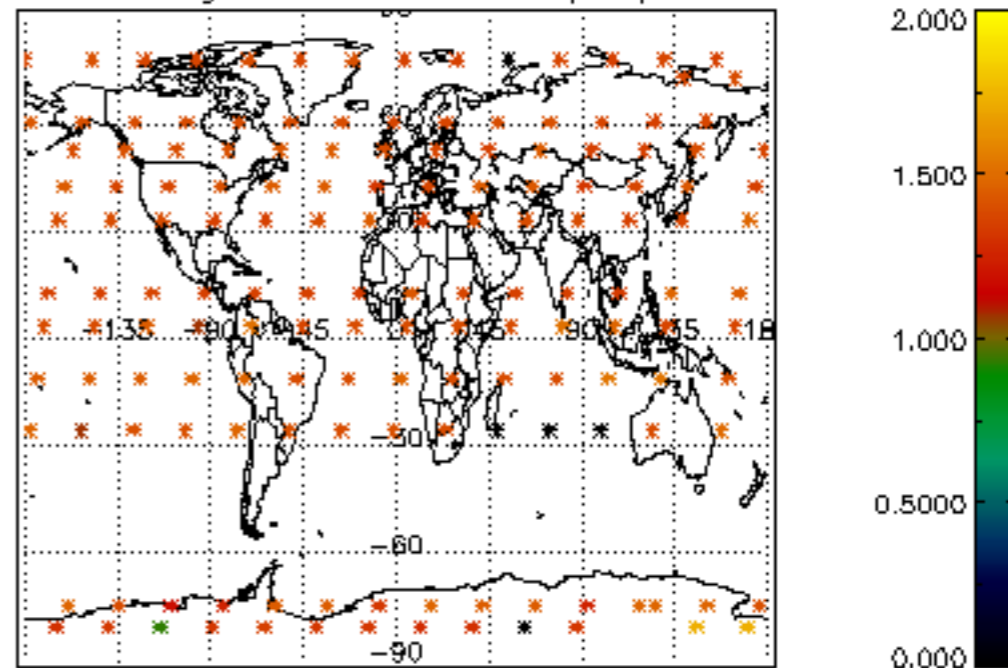
Percentage of saturation errors per profile



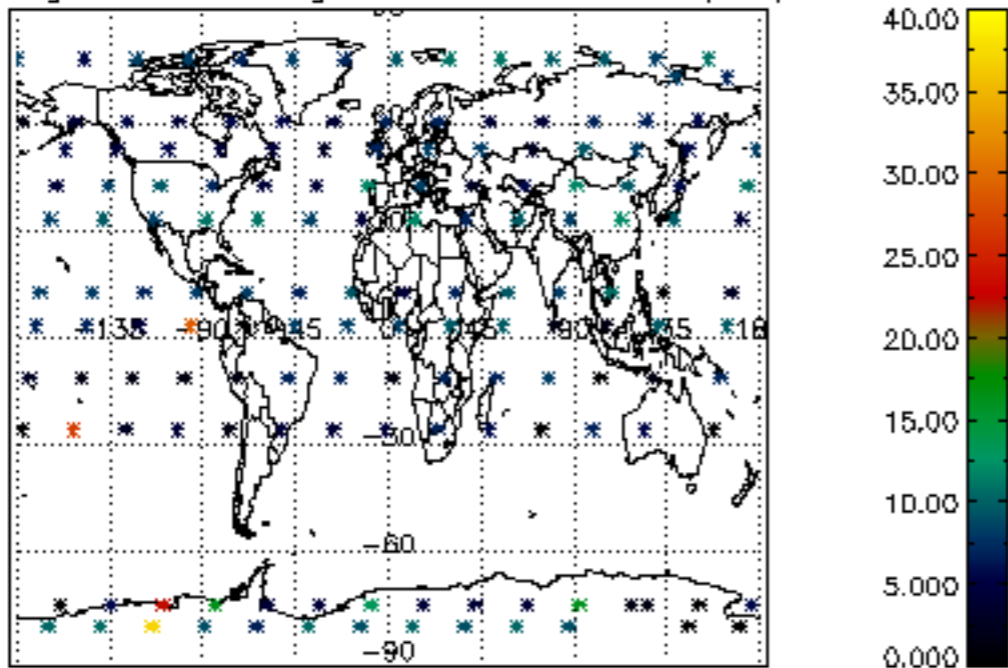
Percentage of cosmic ray hits per profile



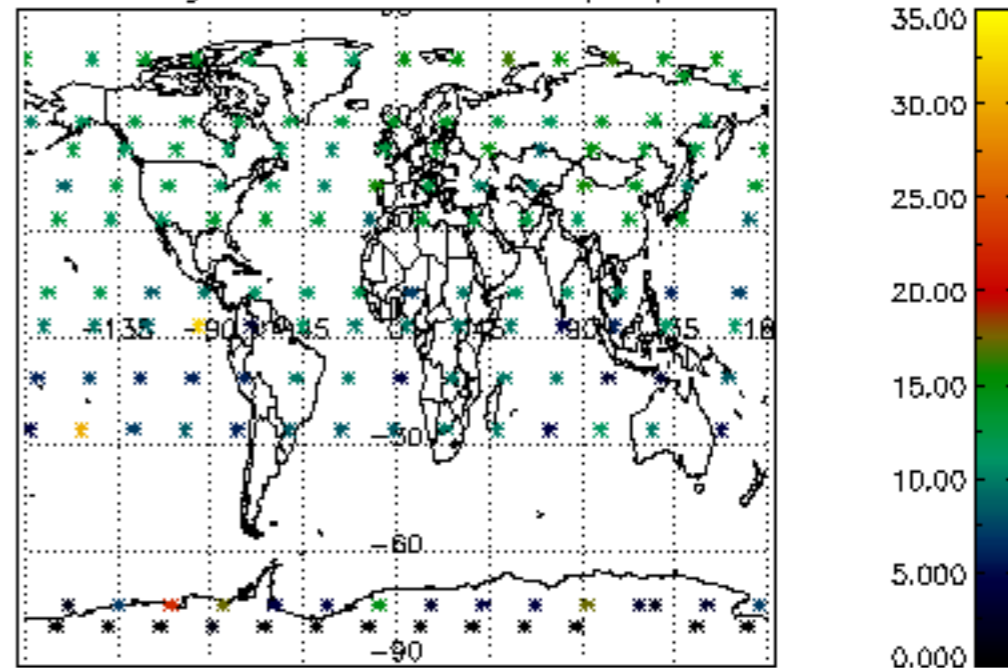
Percentage of datation errors per profile

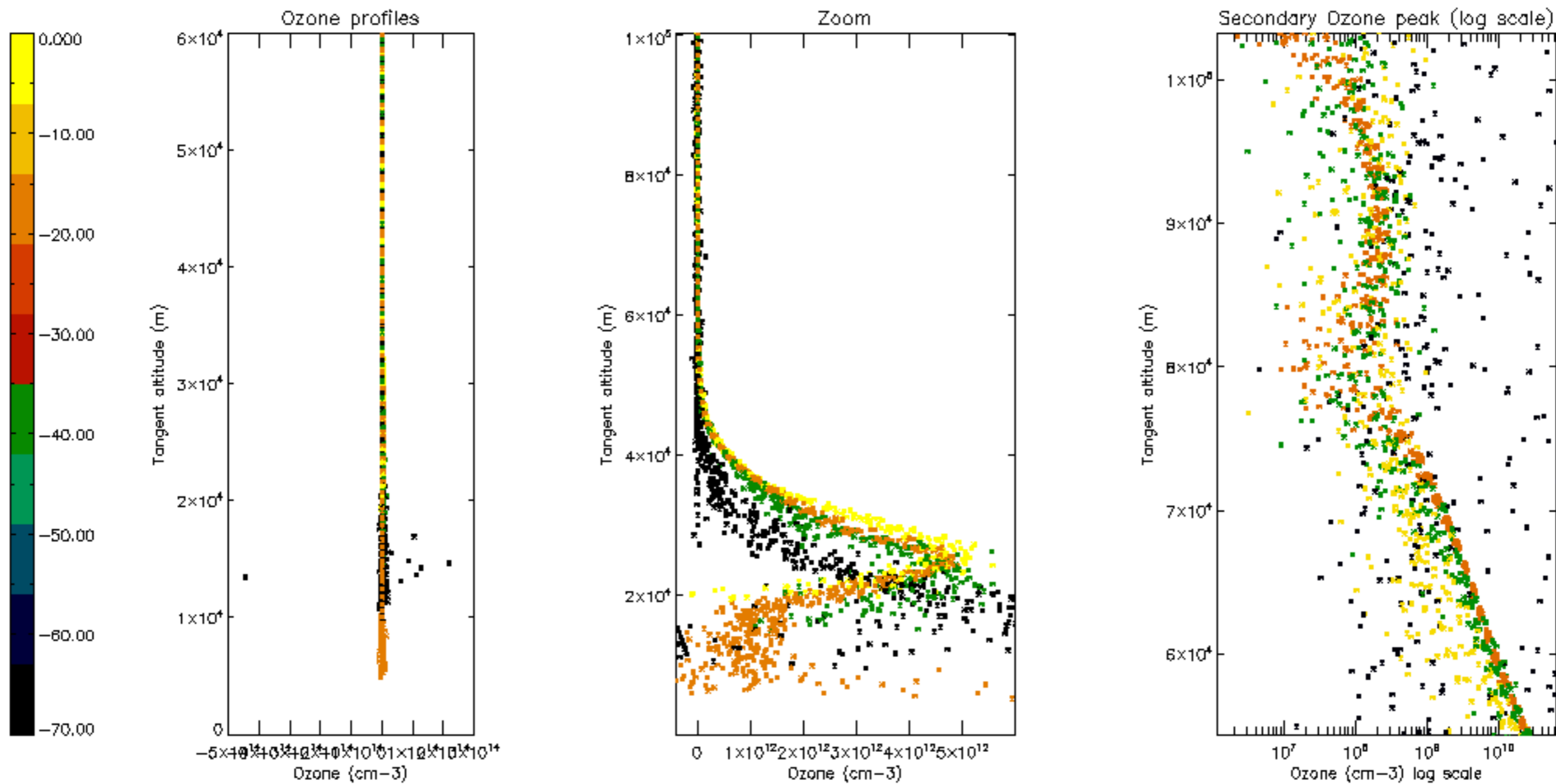


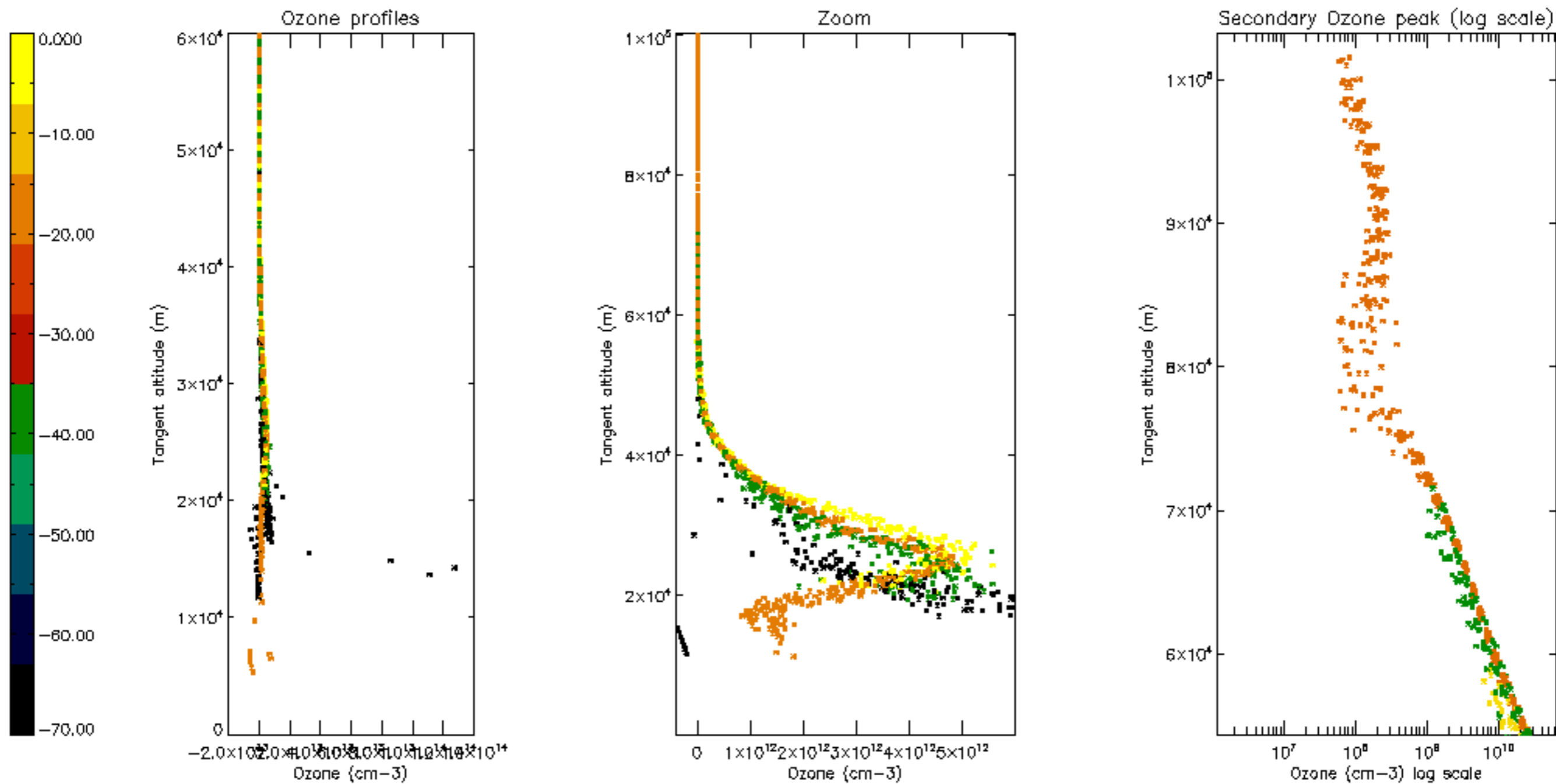
Percentage of star falling outside central band per profile

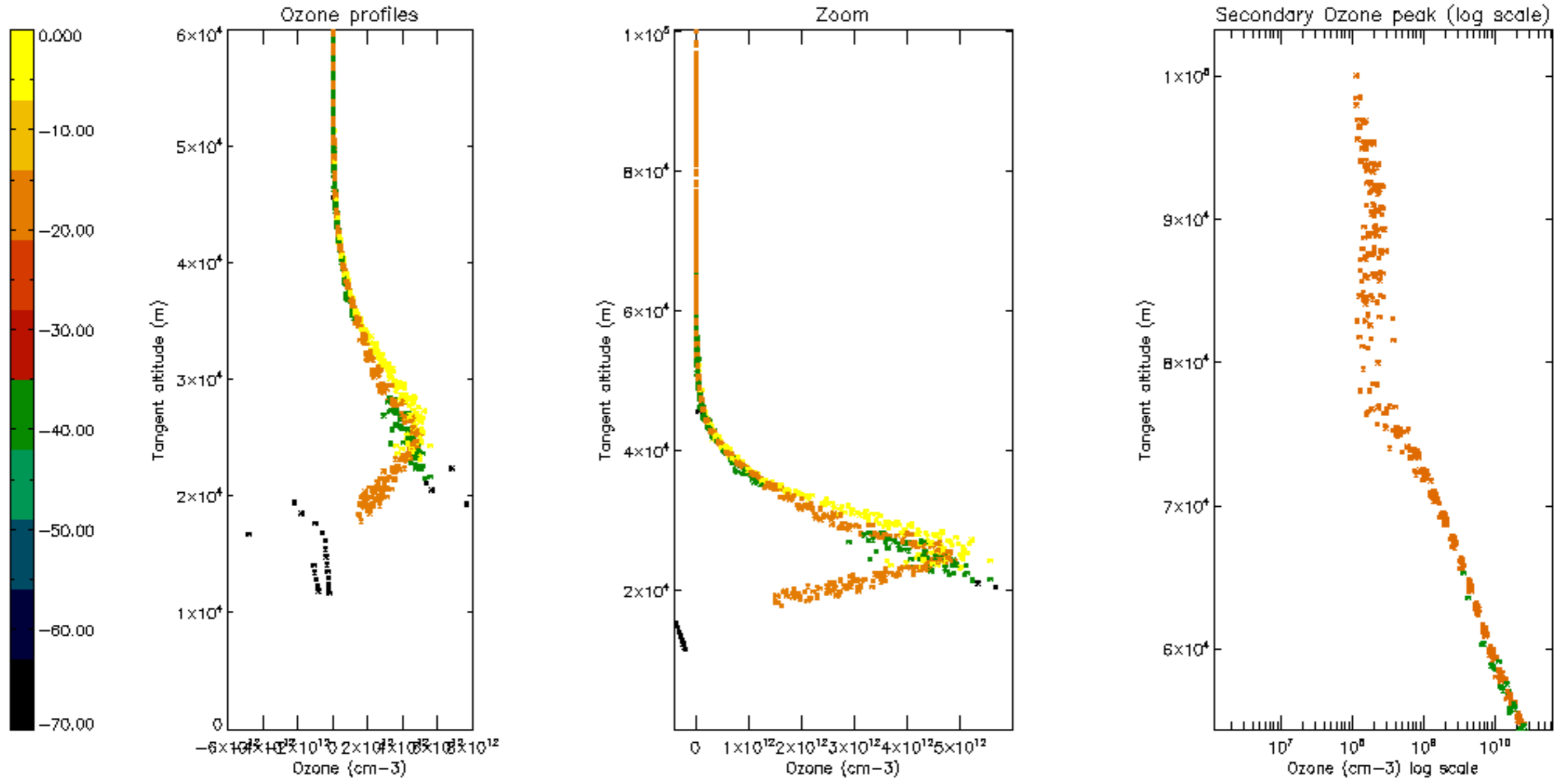


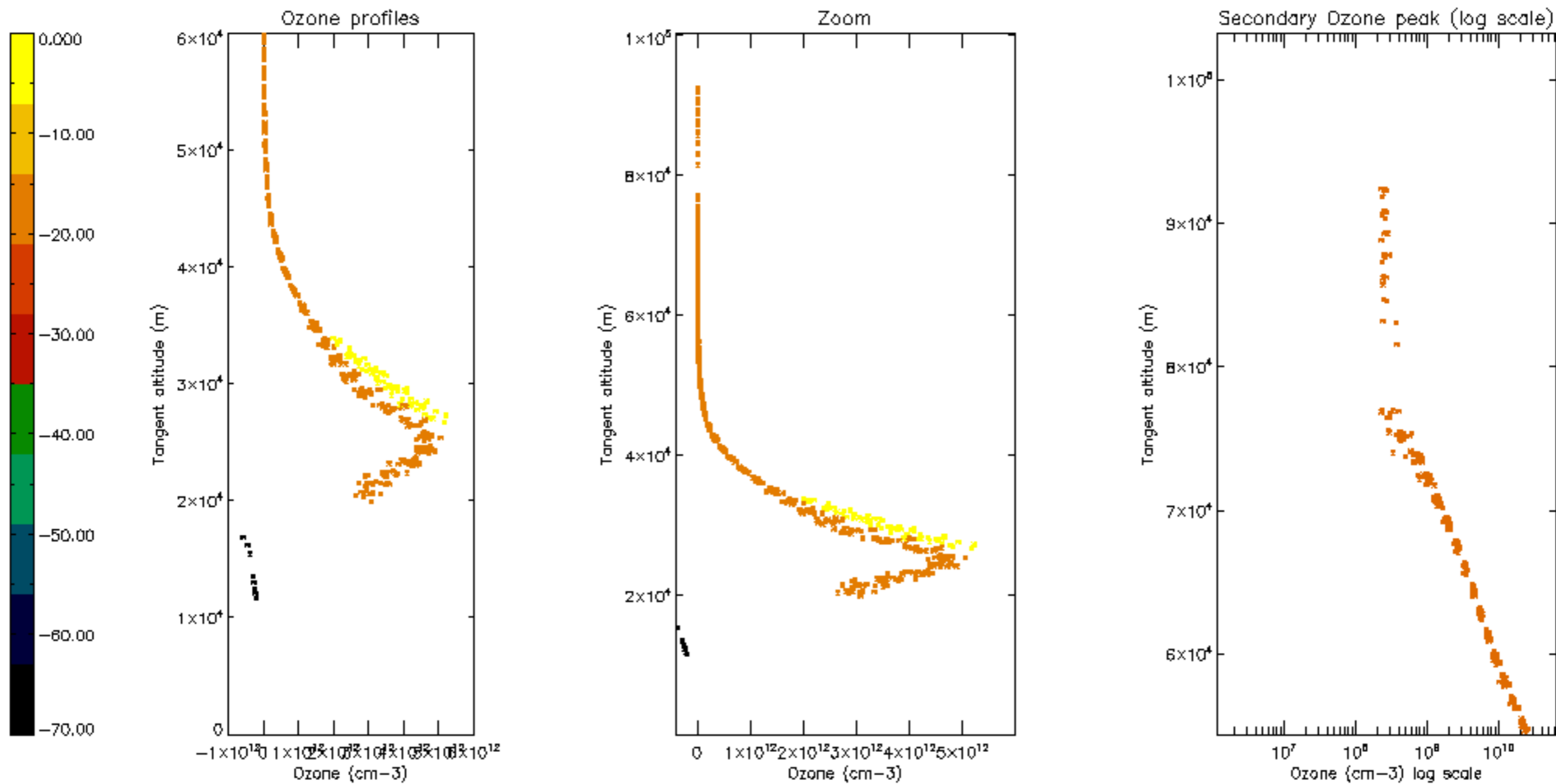
Percentage of saturation errors per profile

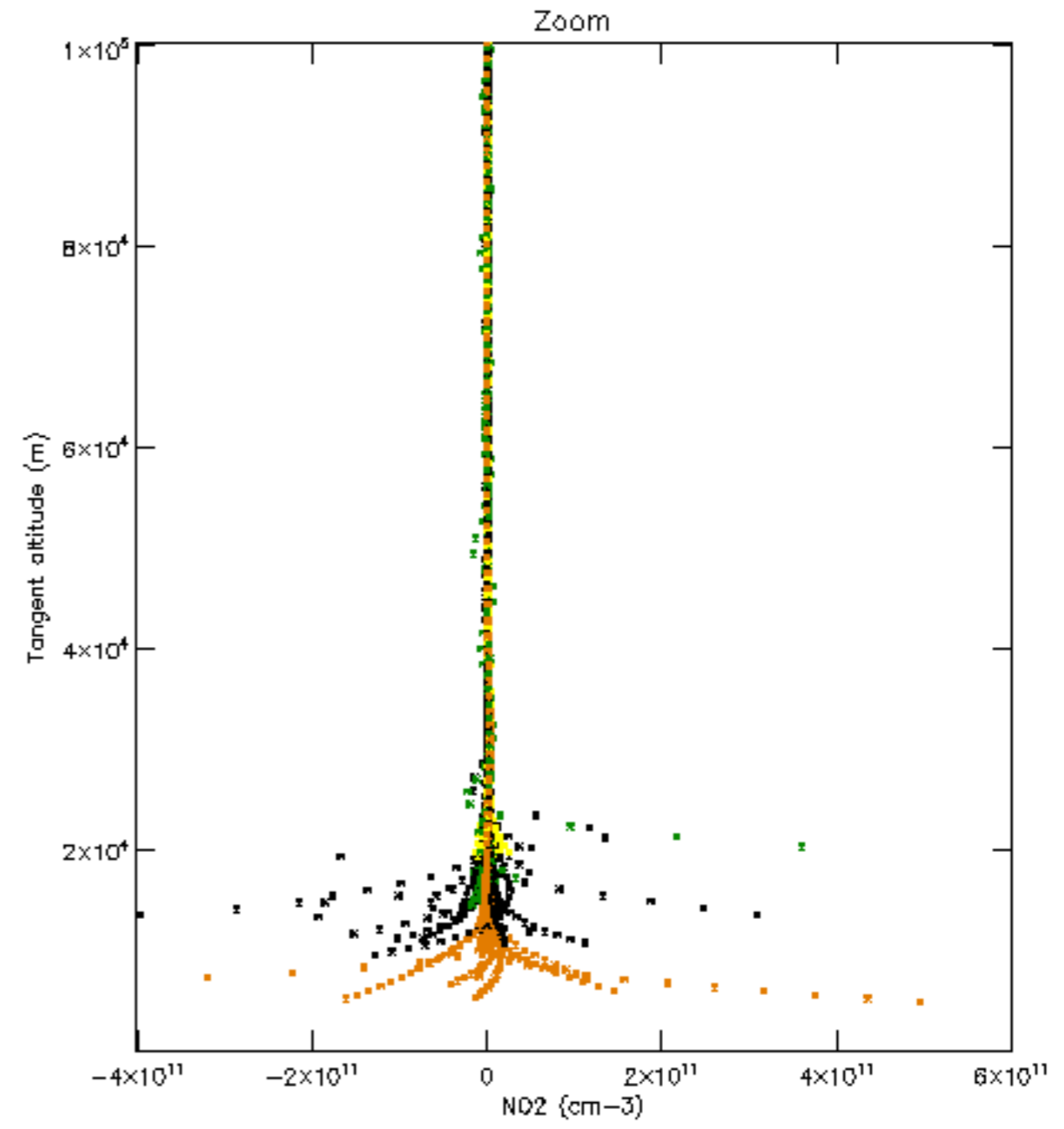
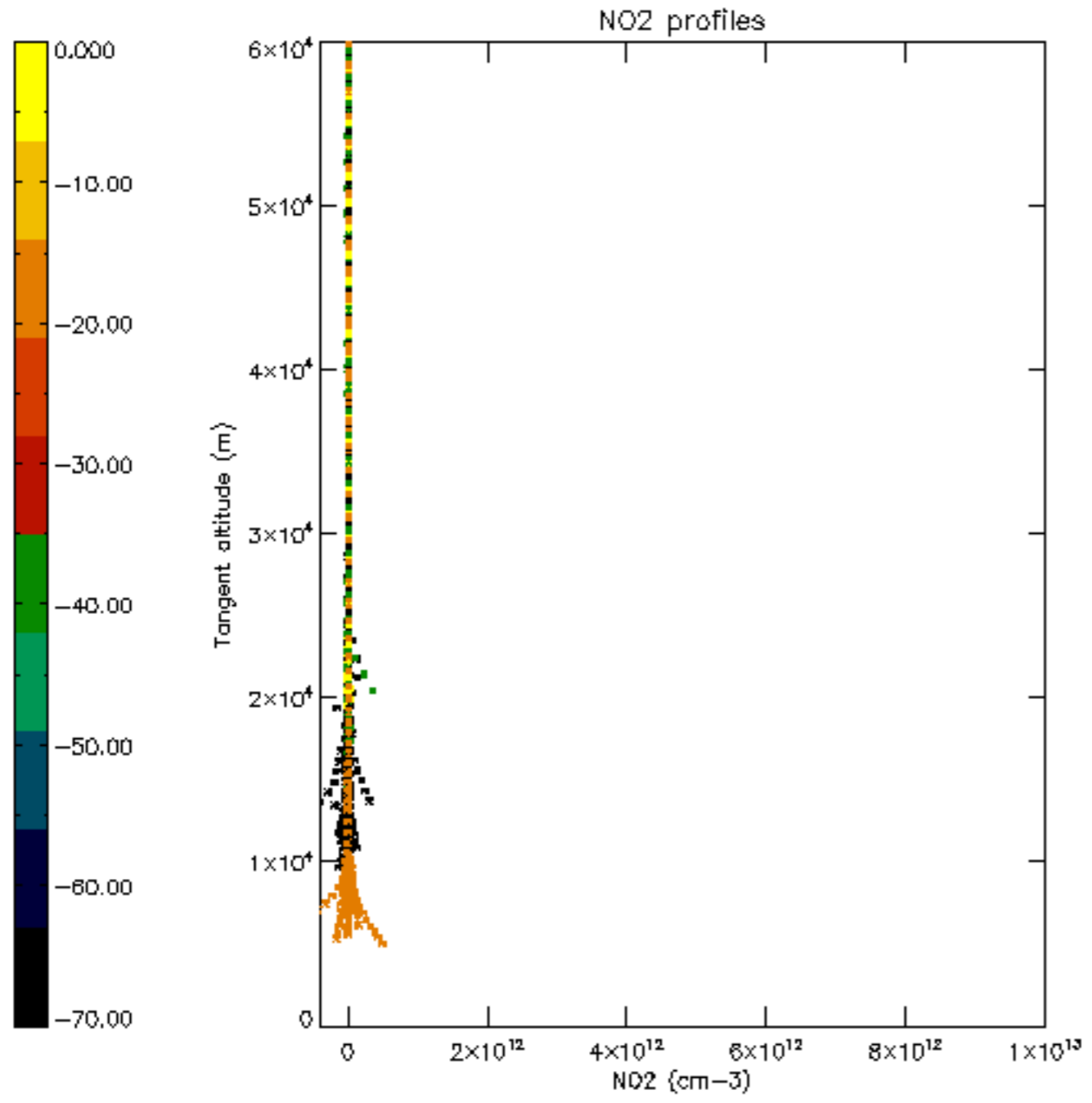


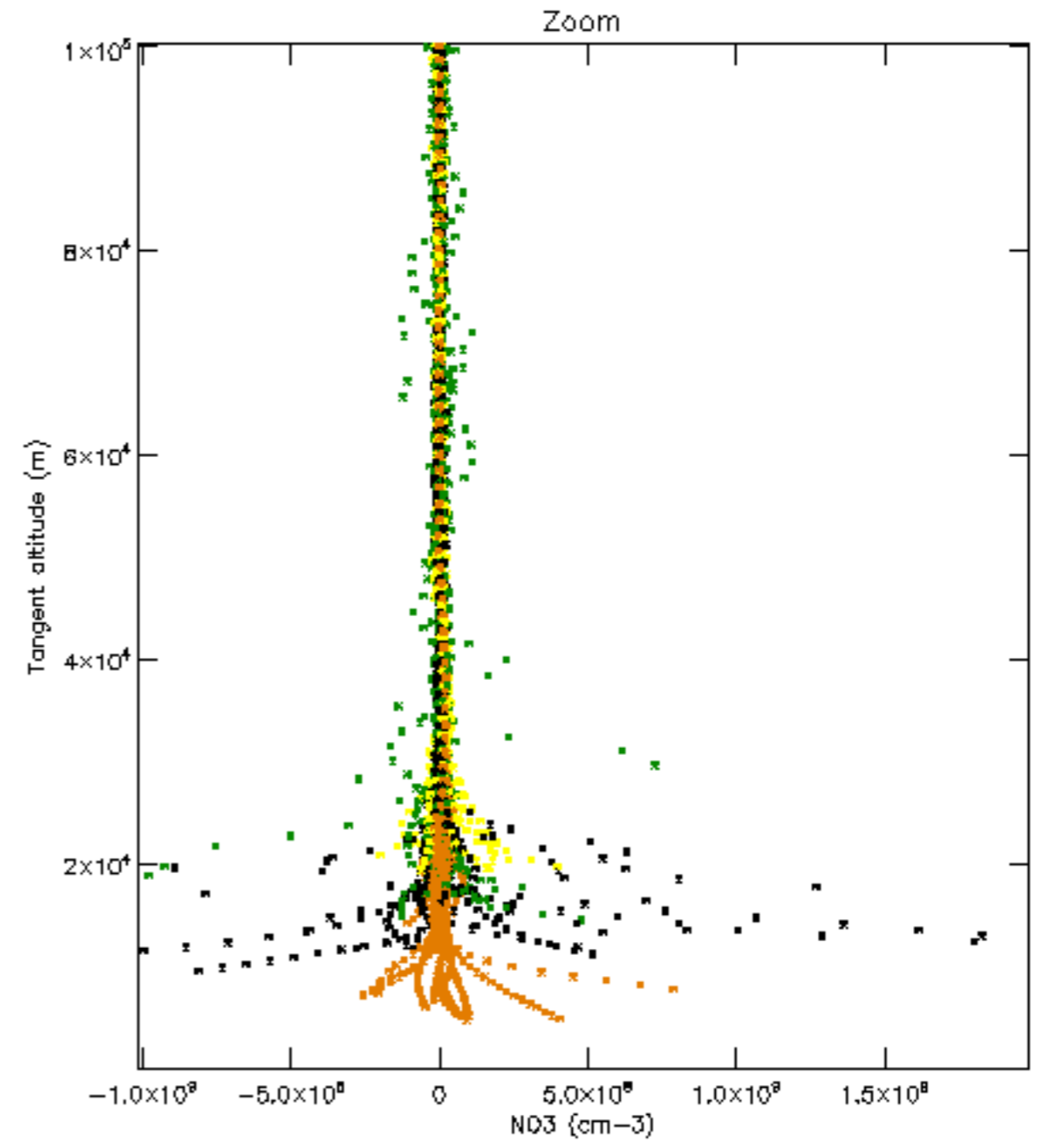
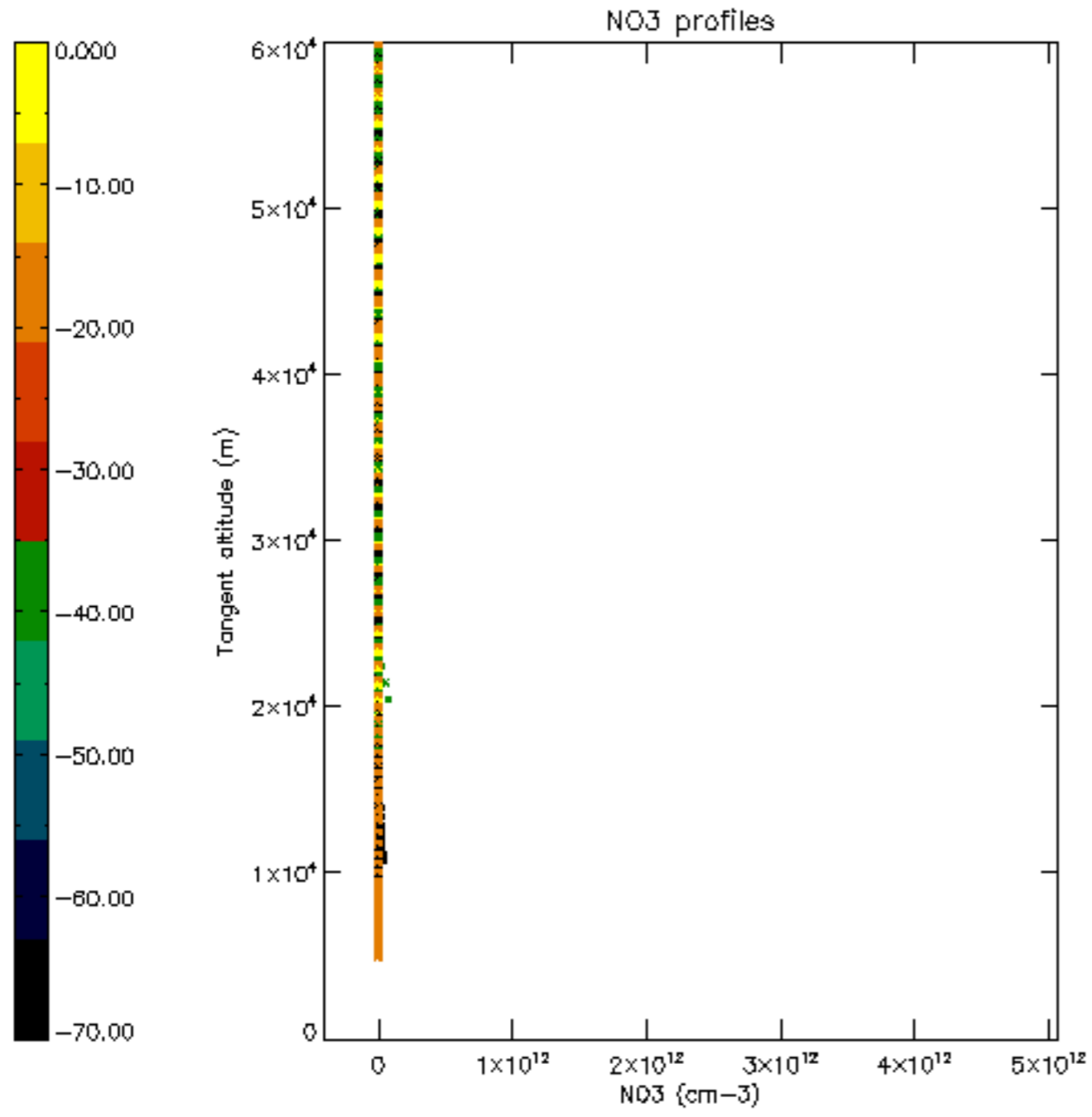


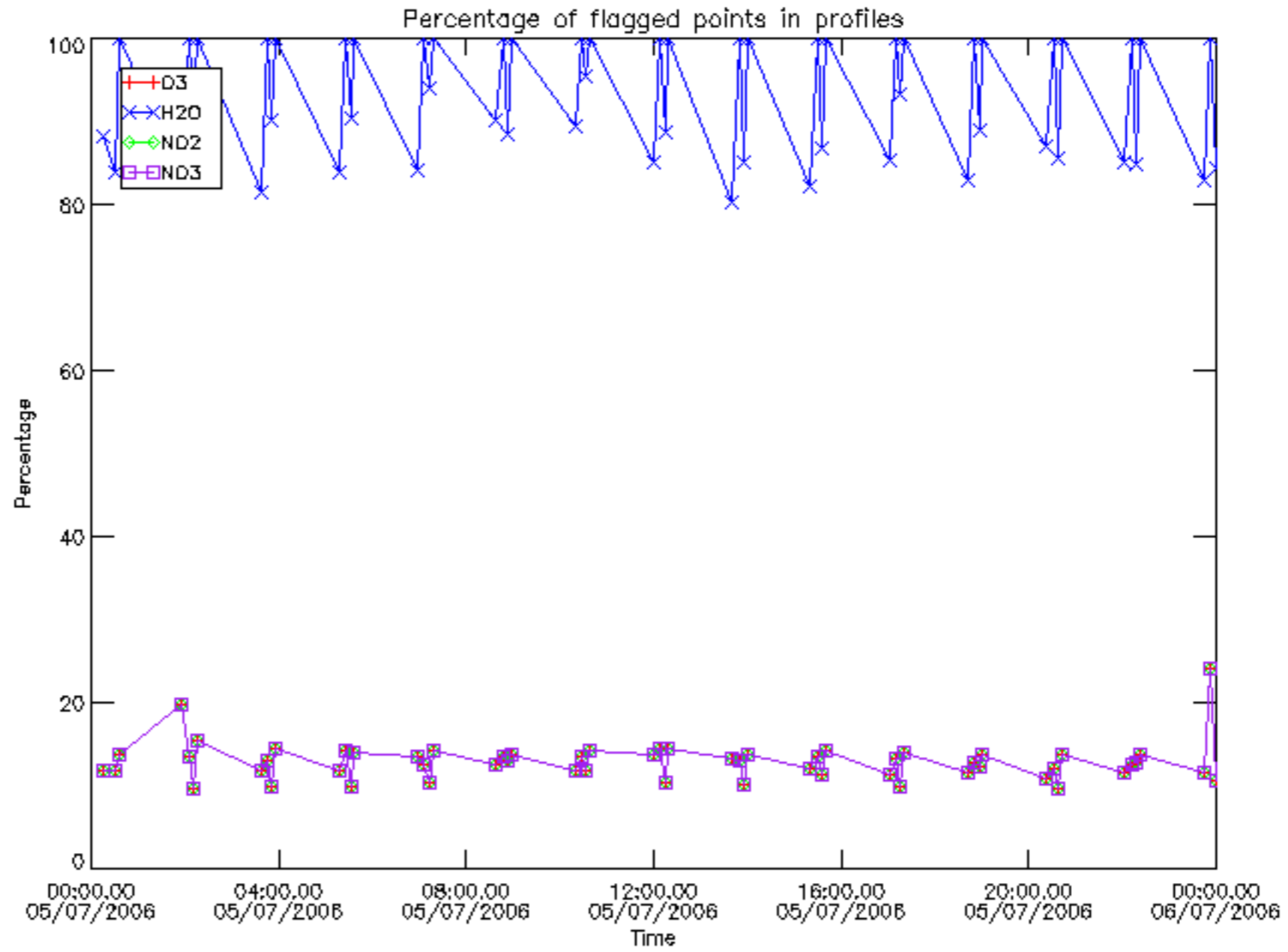




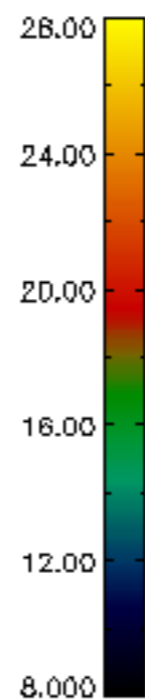
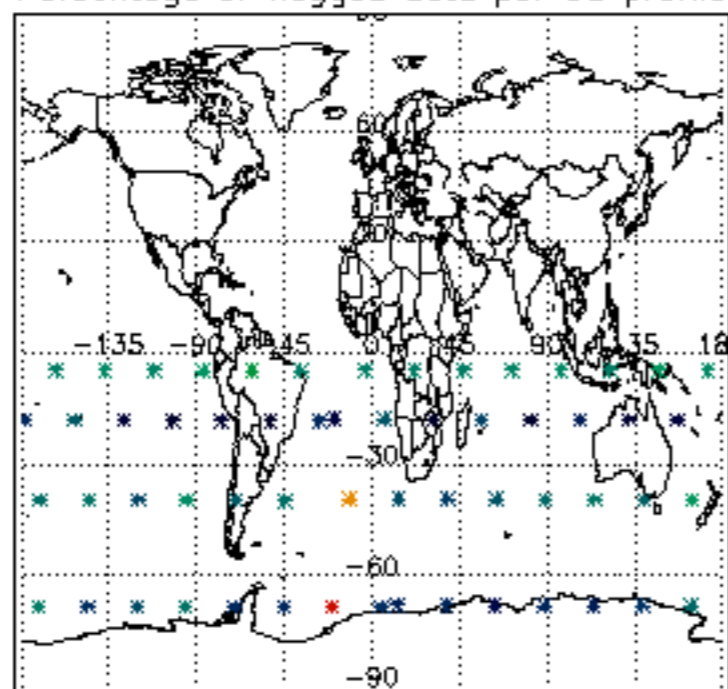




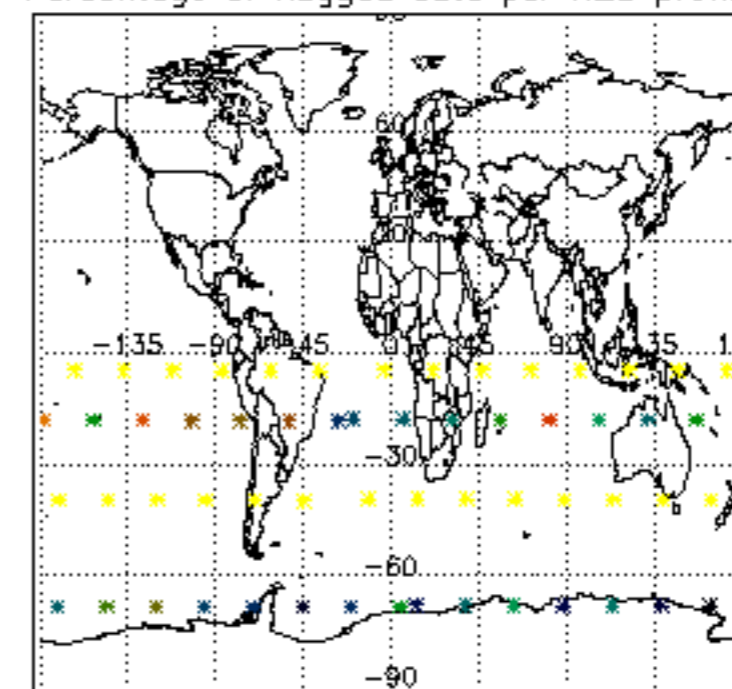




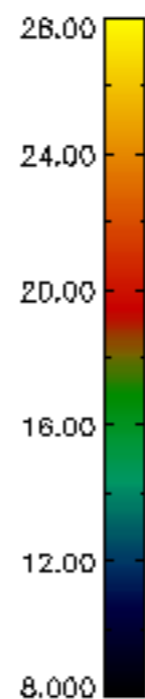
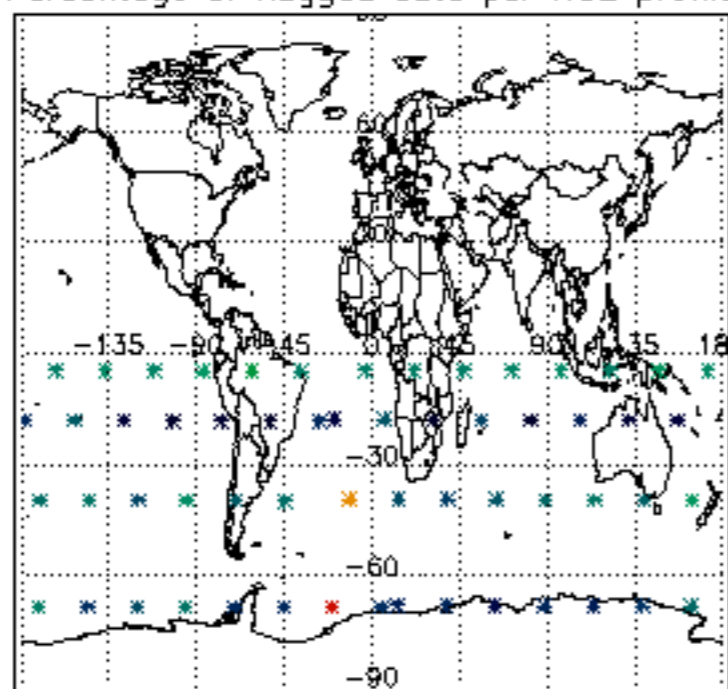
Percentage of flagged data per D3 profile



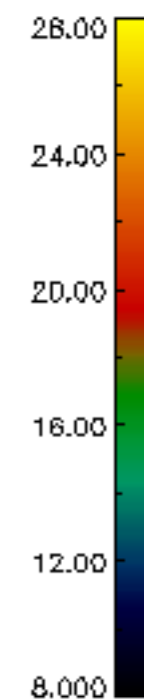
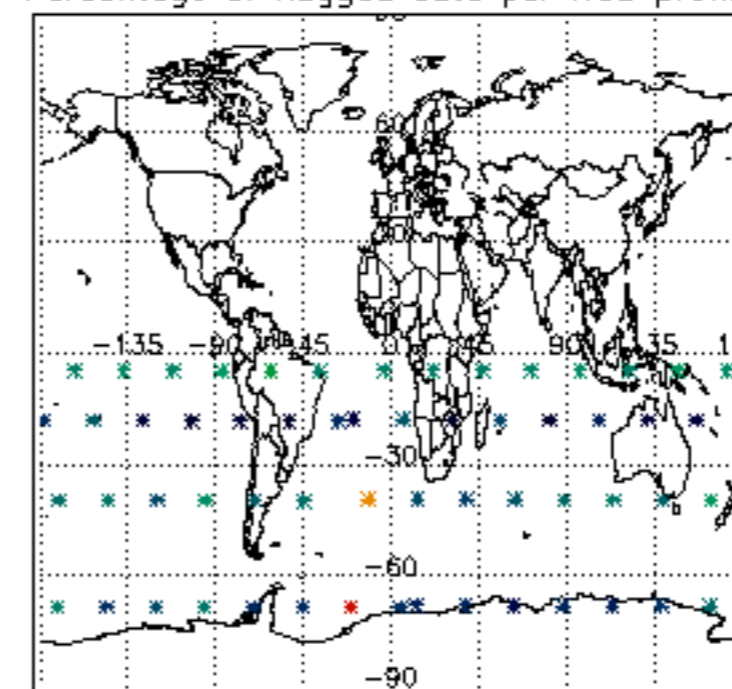
Percentage of flagged data per H2O profile

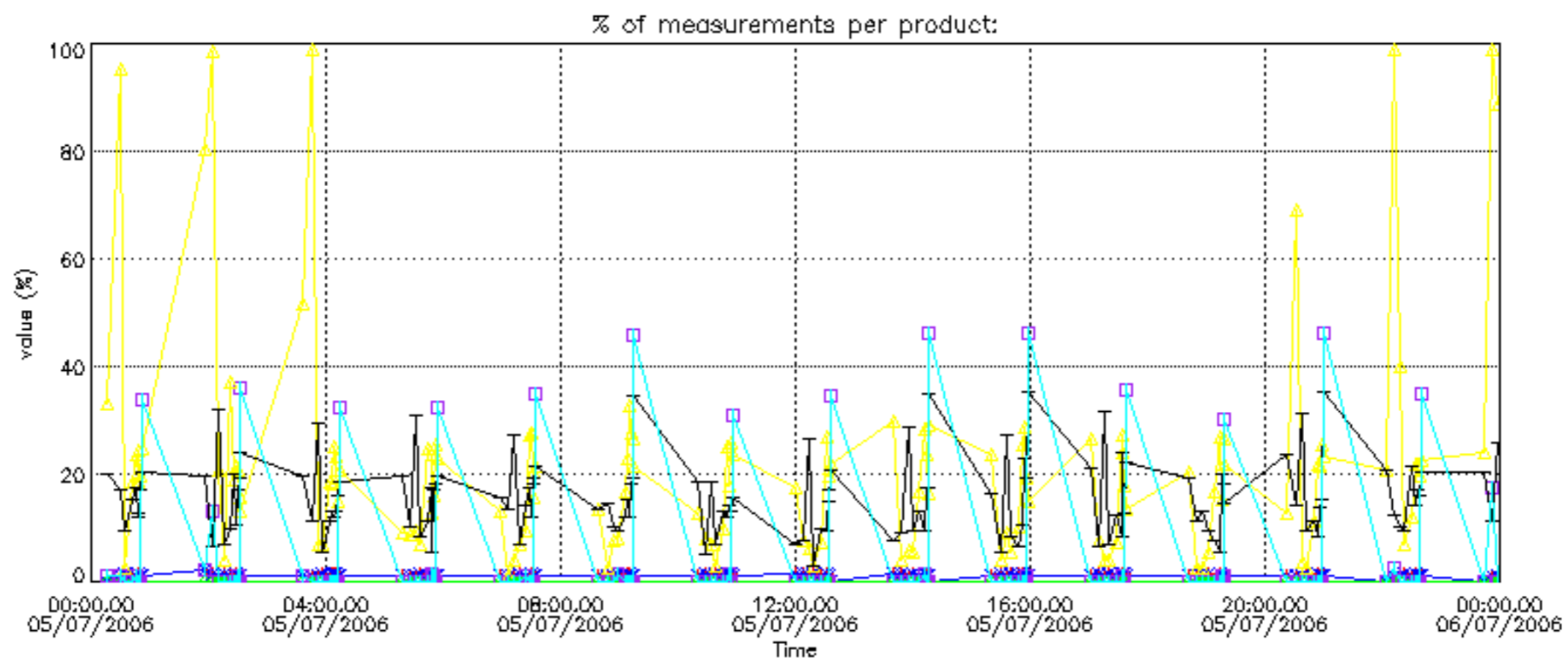
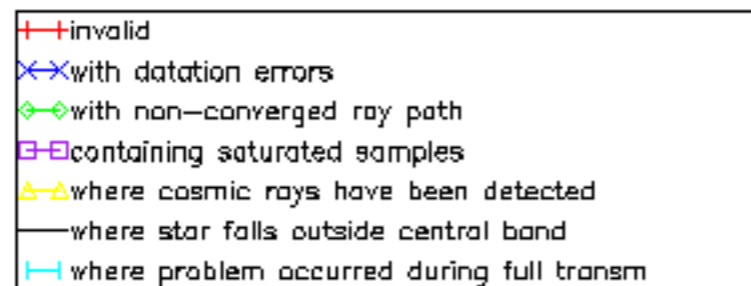


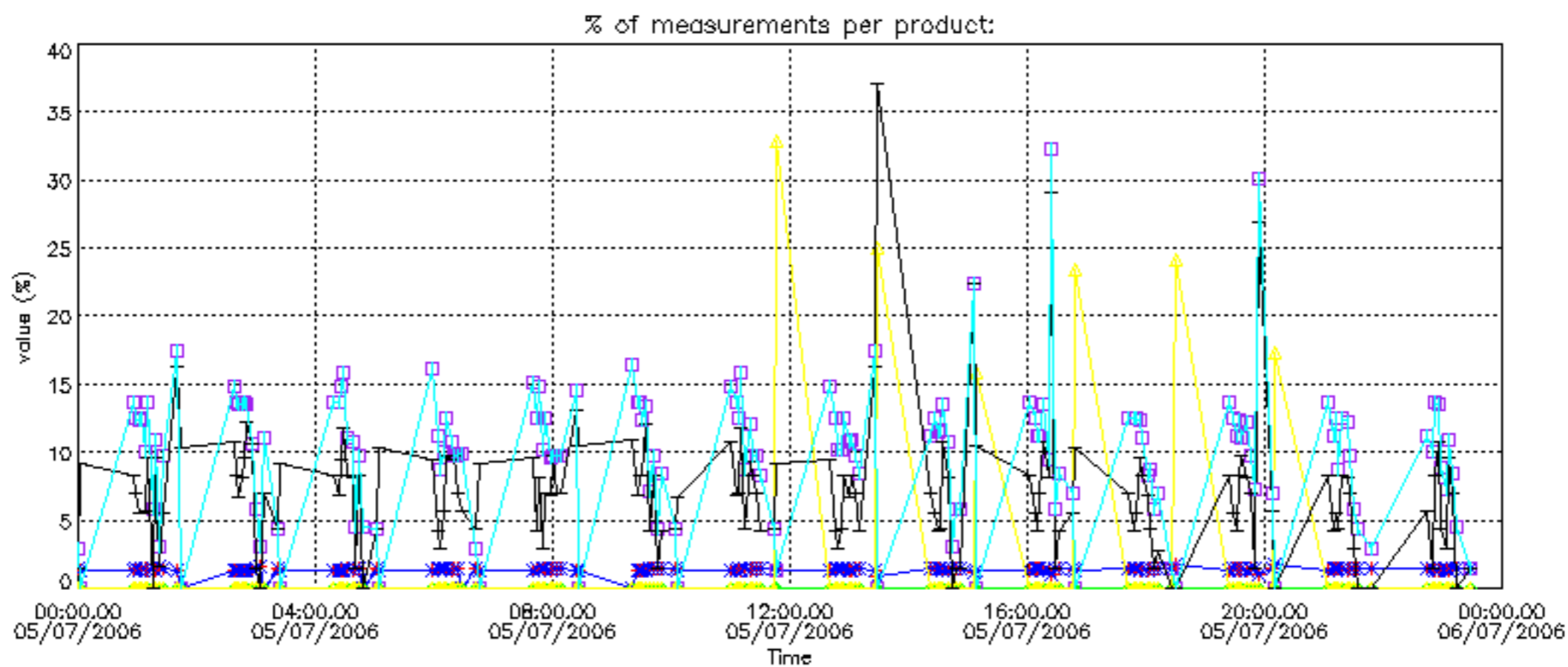
Percentage of flagged data per NO2 profile



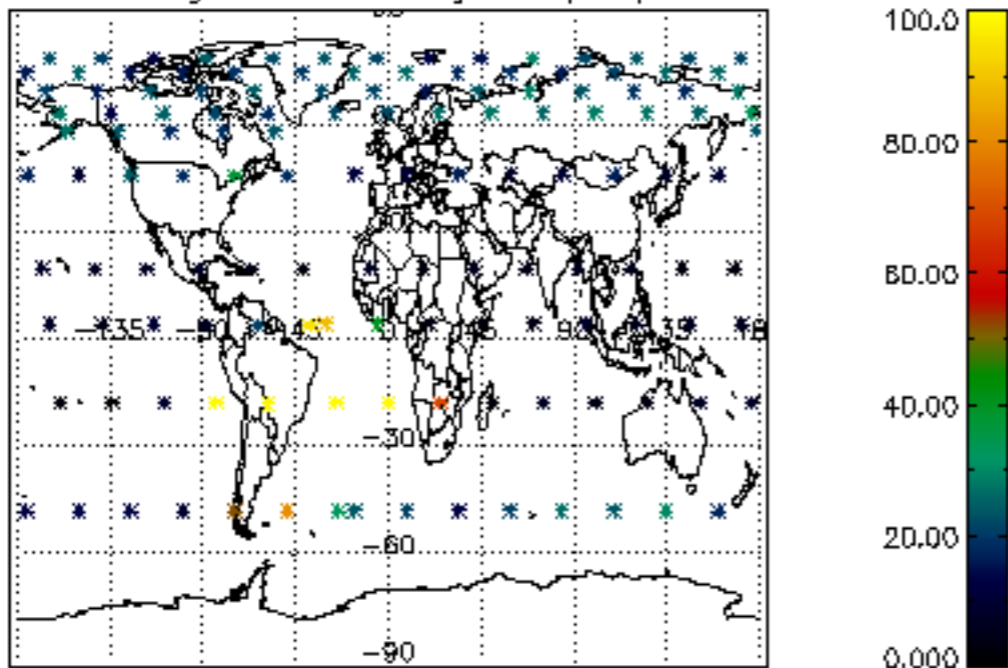
Percentage of flagged data per NO3 profile



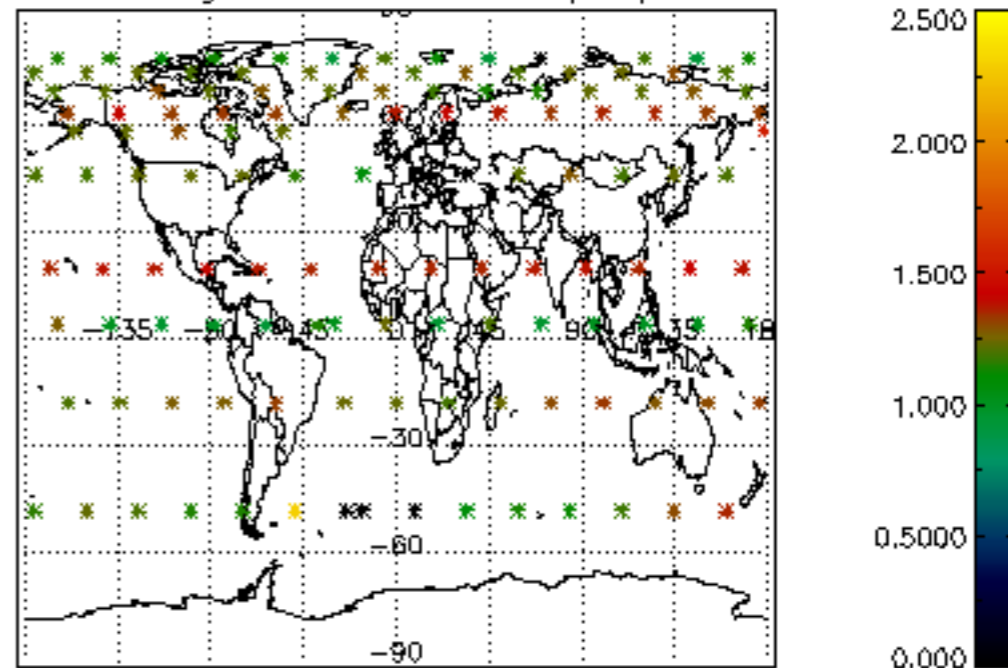




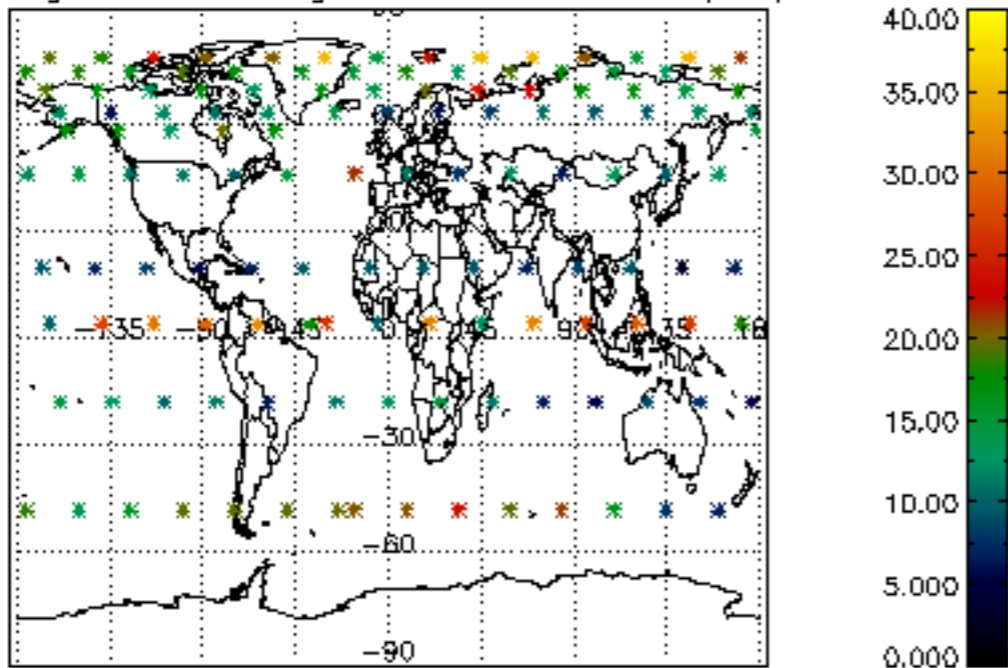
Percentage of cosmic ray hits per profile



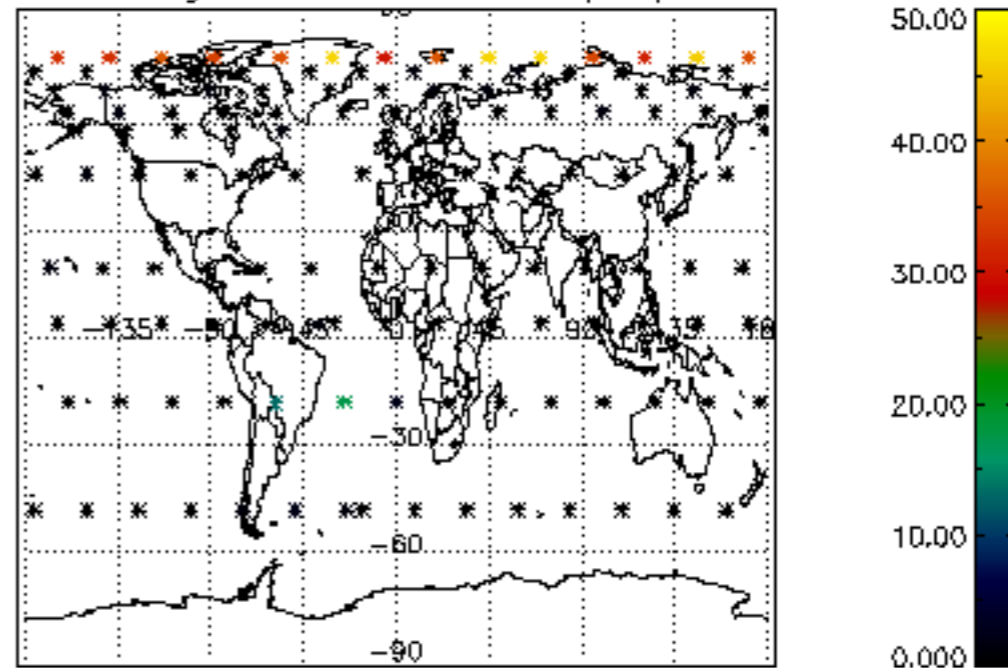
Percentage of datation errors per profile



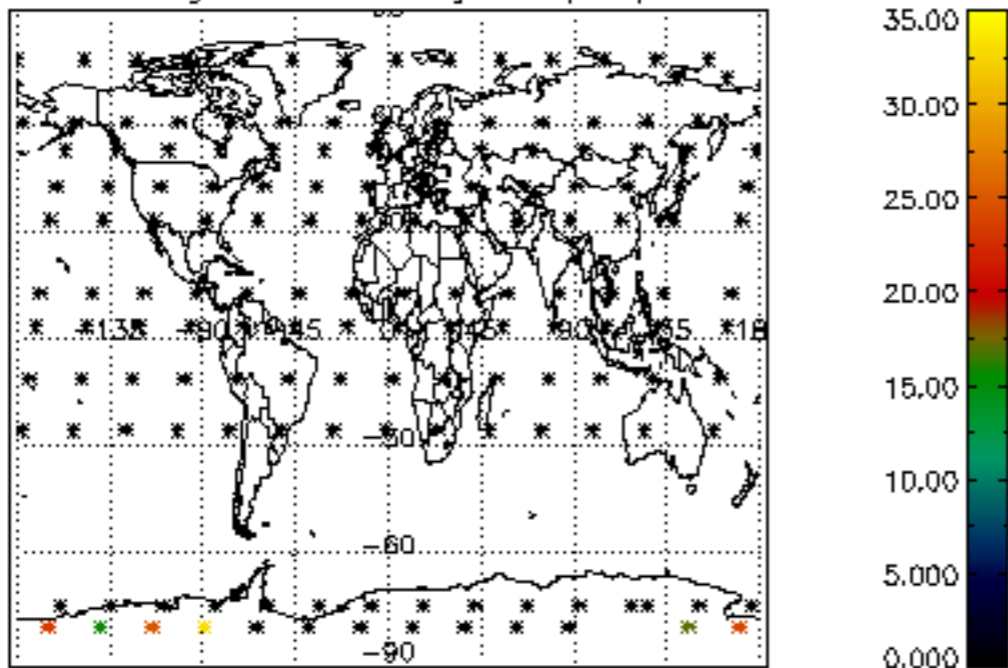
Percentage of star falling outside central band per profile



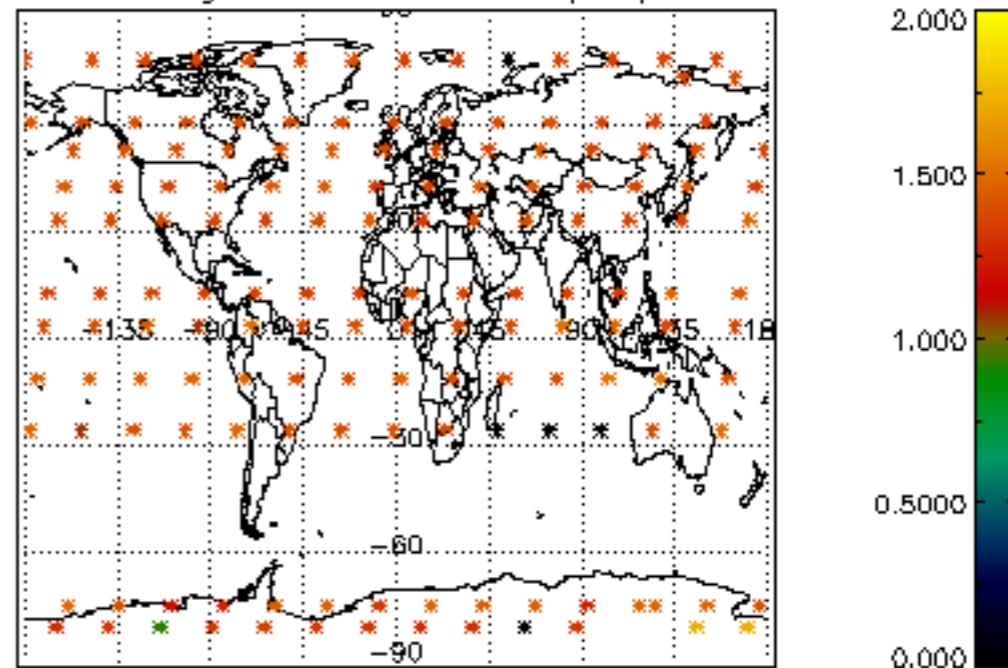
Percentage of saturation errors per profile



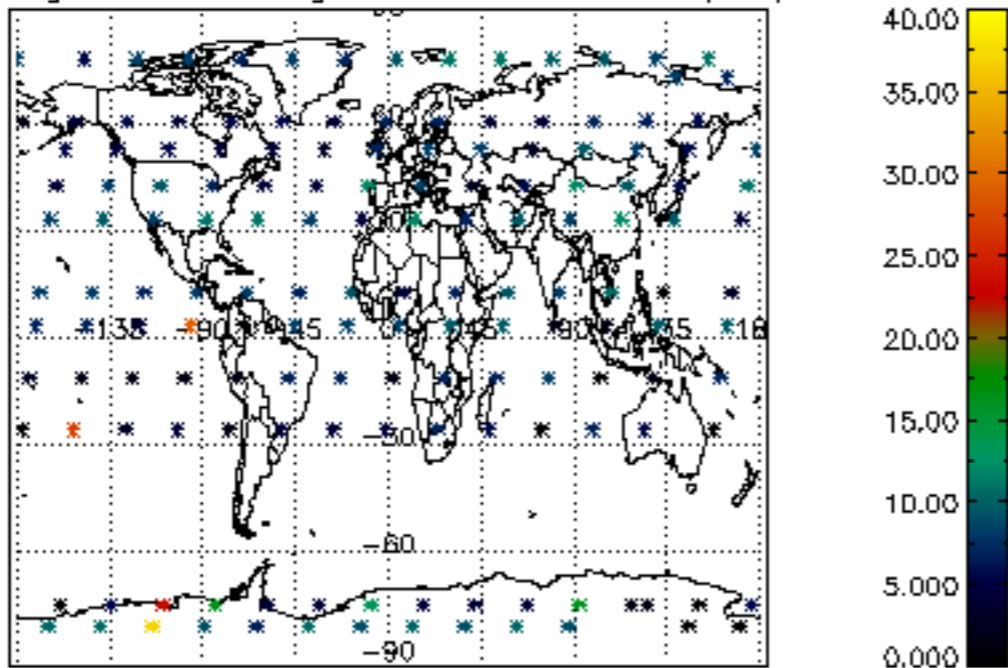
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

