

GOMOS Level 2 Daily Report

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

Item	Value
Time of report generation	24APR2013 04:38:31
Data source version	GOMOS/6.01
Start time of products	03-10-2006 (03OCT2006 00:00:00)
Stop time of products	04-10-2006 (04OCT2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	173
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

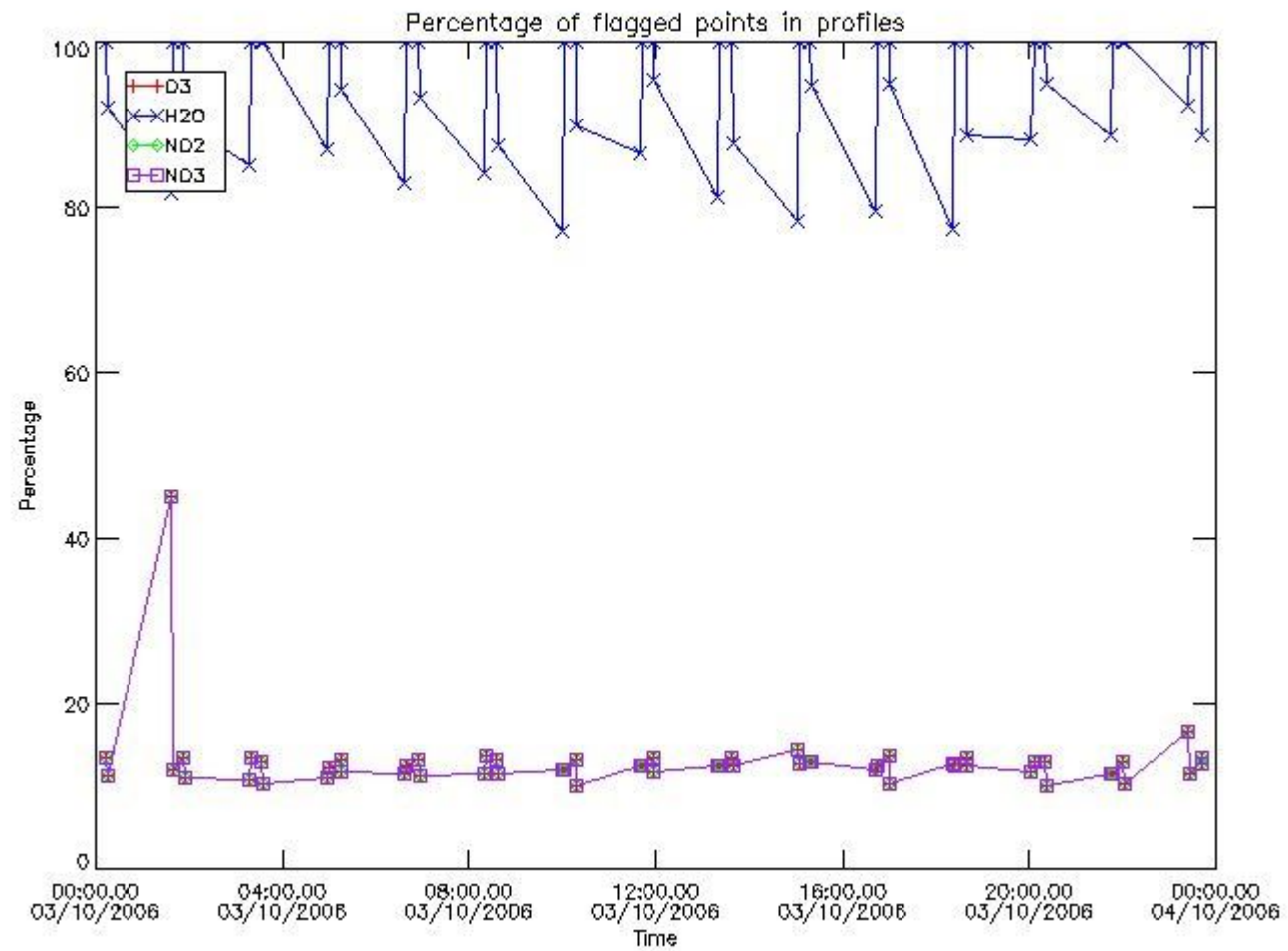
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20061003_001243_000000382051_00403_24004_2604.N1	03-OCT-2006 00:12:43	Dark	37.500	143	Alp Hyi	2.8570	7200.0	75	24004	No
2	GOM_NL__2PRFIN20061003_001411_000000452051_00403_24004_2605.N1	03-OCT-2006 00:14:11	Dark	45.000	9	Alp Eri	0.45300	24000.	90	24004	No
3	GOM_NL__2PRFIN20061003_001930_000000392051_00403_24004_2606.N1	03-OCT-2006 00:19:30	Straylight	39.000	84	Alp Phe	2.3970	4500.0	78	24004	No
4	GOM_NL__2PRFIN20061003_003631_000000362051_00403_24004_2607.N1	03-OCT-2006 00:36:31	Bright	36.000	90	54Alp Peg	2.4870	11000.	72	24004	No
5	GOM_NL__2PRFIN20061003_004008_000000372051_00403_24004_2608.N1	03-OCT-2006 00:40:08	Bright	37.000	93	53Bet Peg	2.5200	3100.0	74	24004	No
6	GOM_NL__2PRFIN20061003_005730_000000362051_00403_24004_2609.N1	03-OCT-2006 00:57:30	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	24004	No
7	GOM_NL__2PRFIN20061003_010530_000000372051_00403_24004_2610.N1	03-OCT-2006 01:05:30	Bright	36.500	36	50Alp UMa	1.8000	6300.0	73	24004	No
8	GOM_NL__2PRFIN20061003_010700_000000362051_00403_24004_2611.N1	03-OCT-2006 01:07:00	Bright	35.500	82	48Bet UMa	2.3650	10600.	71	24004	No
9	GOM_NL__2PRFIN20061003_011654_000000352051_00403_24004_2612.N1	03-OCT-2006 01:16:54	Bright	35.000	166	17Eps Leo	2.9800	6000.0	70	24004	No
10	GOM_NL__2PRFIN20061003_012633_000000492051_00403_24004_2613.N1	03-OCT-2006 01:26:33	Twilight	48.500	48	30Alp Hya	1.9770	4100.0	97	24004	No
11	GOM_NL__2PRFIN20061003_013614_000000422051_00403_24004_2614.N1	03-OCT-2006 01:36:14	Dark	41.500	65	Lam Vel	2.2040	4400.0	83	24004	No
12	GOM_NL__2PRFIN20061003_013854_000000432051_00403_24004_2615.N1	03-OCT-2006 01:38:54	Dark	42.500	34	Gam2Vel	1.7930	23000.	85	24004	No
13	GOM_NL__2PRFIN20061003_015319_000000382051_00404_24005_2606.N1	03-OCT-2006 01:53:19	Dark	38.000	143	Alp Hyi	2.8570	7200.0	76	24005	No
14	GOM_NL__2PRFIN20061003_015447_000000462051_00404_24005_2607.N1	03-OCT-2006 01:54:47	Dark	45.500	9	Alp Eri	0.45300	24000.	91	24005	No
15	GOM_NL__2PRFIN20061003_020006_000000382051_00404_24005_2608.N1	03-OCT-2006 02:00:06	Straylight	38.000	84	Alp Phe	2.3970	4500.0	76	24005	No
16	GOM_NL__2PRFIN20061003_021707_000000372051_00404_24005_2609.N1	03-OCT-2006 02:17:07	Bright	36.500	90	54Alp Peg	2.4870	11000.	73	24005	No
17	GOM_NL__2PRFIN20061003_022044_000000372051_00404_24005_2610.N1	03-OCT-2006 02:20:44	Bright	37.000	93	53Bet Peg	2.5200	3100.0	74	24005	No
18	GOM_NL__2PRFIN20061003_023805_000000362051_00404_24005_2611.N1	03-OCT-2006 02:38:05	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	24005	No
19	GOM_NL__2PRFIN20061003_024606_000000372051_00404_24005_2612.N1	03-OCT-2006 02:46:06	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	24005	No
20	GOM_NL__2PRFIN20061003_024736_000000432051_00404_24005_2613.N1	03-OCT-2006 02:47:36	Bright	43.000	82	48Bet UMa	2.3650	10600.	86	24005	No
21	GOM_NL__2PRFIN20061003_025730_000000352051_00404_24005_2614.N1	03-OCT-2006 02:57:30	Bright	34.500	166	17Eps Leo	2.9800	6000.0	69	24005	No
22	GOM_NL__2PRFIN20061003_030710_000000472051_00404_24005_2615.N1	03-OCT-2006 03:07:10	Twilight	46.500	48	30Alp Hya	1.9770	4100.0	93	24005	No
23	GOM_NL__2PRFIN20061003_031650_000000472051_00404_24005_2616.N1	03-OCT-2006 03:16:50	Dark	47.000	65	Lam Vel	2.2040	4400.0	94	24005	No
24	GOM_NL__2PRFIN20061003_031930_000000422051_00404_24005_2617.N1	03-OCT-2006 03:19:30	Dark	41.500	34	Gam2Vel	1.7930	23000.	83	24005	No
25	GOM_NL__2PRFIN20061003_033356_000000392051_00405_24006_2608.N1	03-OCT-2006 03:33:56	Dark	39.000	143	Alp Hyi	2.8570	7200.0	78	24006	No
26	GOM_NL__2PRFIN20061003_033523_000000502051_00405_24006_2609.N1	03-OCT-2006 03:35:23	Dark	49.500	9	Alp Eri	0.45300	24000.	99	24006	No
27	GOM_NL__2PRFIN20061003_034042_000000422051_00405_24006_2610.N1	03-OCT-2006 03:40:42	Straylight	42.000	84	Alp Phe	2.3970	4500.0	84	24006	No
28	GOM_NL__2PRFIN20061003_035743_000000362051_00405_24006_2611.N1	03-OCT-2006 03:57:43	Bright	36.000	90	54Alp Peg	2.4870	11000.	72	24006	No
29	GOM_NL__2PRFIN20061003_040120_000000372051_00405_24006_2612.N1	03-OCT-2006 04:01:20	Bright	36.500	93	53Bet Peg	2.5200	3100.0	73	24006	No
30	GOM_NL__2PRFIN20061003_041841_000000362051_00405_24006_2613.N1	03-OCT-2006 04:18:41	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	24006	No
31	GOM_NL__2PRFIN20061003_042642_000000372051_00405_24006_2614.N1	03-OCT-2006 04:26:42	Bright	36.500	36	50Alp UMa	1.8000	6300.0	73	24006	No
32	GOM_NL__2PRFIN20061003_042812_000000522051_00405_24006_2615.N1	03-OCT-2006 04:28:12	Bright	52.000	82	48Bet UMa	2.3650	10600.	104	24006	No
33	GOM_NL__2PRFIN20061003_043807_000000362051_00405_24006_2616.N1	03-OCT-2006 04:38:07	Bright	35.500	166	17Eps Leo	2.9800	6000.0	71	24006	No
34	GOM_NL__2PRFIN20061003_044746_000000462051_00405_24006_2617.N1	03-OCT-2006 04:47:46	Twilight	45.500	48	30Alp Hya	1.9770	4100.0	91	24006	No
35	GOM_NL__2PRFIN20061003_045726_000000512051_00405_24006_2618.N1	03-OCT-2006 04:57:26	Dark	50.500	65	Lam Vel	2.2040	4400.0	101	24006	No
36	GOM_NL__2PRFIN20061003_050007_000000422051_00405_24006_2619.N1	03-OCT-2006 05:00:07	Dark	41.500	34	Gam2Vel	1.7930	23000.	83	24006	No
37	GOM_NL__2PRFIN20061003_051432_000000392051_00406_24007_2610.N1	03-OCT-2006 05:14:32	Dark	38.500	143	Alp Hyi	2.8570	7200.0	77	24007	No
38	GOM_NL__2PRFIN20061003_051600_000000442051_00406_24007_2611.N1	03-OCT-2006 05:16:00	Dark	43.500	9	Alp Eri	0.45300	24000.	87	24007	No
39	GOM_NL__2PRFIN20061003_052119_000000422051_00406_24007_2612.N1	03-OCT-2006 05:21:19	Straylight	42.000	84	Alp Phe	2.3970	4500.0	84	24007	No
40	GOM_NL__2PRFIN20061003_053819_000000362051_00406_24007_2613.N1	03-OCT-2006 05:38:19	Bright	36.000	90	54Alp Peg	2.4870	11000.	72	24007	No
41	GOM_NL__2PRFIN20061003_054156_000000372051_00406_24007_2614.N1	03-OCT-2006 05:41:56	Bright	36.500	93	53Bet Peg	2.5200	3100.0	73	24007	No
42	GOM_NL__2PRFIN20061003_055917_000000372051_00406_24007_2615.N1	03-OCT-2006 05:59:17	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	24007	No

161	GOM_NL__2PRFIN20061003_220721_000000422051_00416_24017_2643.N1	03-OCT-2006 22:07:21	Straylight	42.000	84	Alp Phe	2.3970	4500.0	84	24017	No
162	GOM_NL__2PRFIN20061003_222419_000000372051_00416_24017_2644.N1	03-OCT-2006 22:24:19	Bright	36.500	90	54Alp Peg	2.4870	11000.	73	24017	No
163	GOM_NL__2PRFIN20061003_222756_000000372051_00416_24017_2645.N1	03-OCT-2006 22:27:56	Bright	36.500	93	53Bet Peg	2.5200	3100.0	73	24017	No
164	GOM_NL__2PRFIN20061003_224517_000000322051_00416_24017_2646.N1	03-OCT-2006 22:45:17	Bright	31.500	49	1Alp UMi	1.9900	6300.0	63	24017	No
165	GOM_NL__2PRFIN20061003_225318_000000372051_00416_24017_2647.N1	03-OCT-2006 22:53:18	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	24017	No
166	GOM_NL__2PRFIN20061003_225449_000000352051_00416_24017_2648.N1	03-OCT-2006 22:54:49	Bright	35.000	82	48Bet UMa	2.3650	10600.	70	24017	No
167	GOM_NL__2PRFIN20061003_230749_000000342051_00416_24017_2649.N1	03-OCT-2006 23:07:49	Bright	33.500	22	32Alp Leo	1.3600	15200.	67	24017	No
168	GOM_NL__2PRFIN20061003_231426_000000522051_00416_24017_2650.N1	03-OCT-2006 23:14:26	Twilight	52.000	48	30Alp Hya	1.9770	4100.0	104	24017	No
169	GOM_NL__2PRFIN20061003_232406_000000462051_00416_24017_2651.N1	03-OCT-2006 23:24:06	Dark	46.000	65	Lam Vel	2.2040	4400.0	92	24017	No
170	GOM_NL__2PRFIN20061003_232648_000000452051_00416_24017_2652.N1	03-OCT-2006 23:26:48	Dark	44.500	34	Gam2Vel	1.7930	23000.	89	24017	No
171	GOM_NL__2PRFIN20061003_234111_000000382051_00417_24018_2642.N1	03-OCT-2006 23:41:11	Dark	37.500	143	Alp Hyi	2.8570	7200.0	75	24018	No
172	GOM_NL__2PRFIN20061003_234239_000000402051_00417_24018_2643.N1	03-OCT-2006 23:42:39	Dark	40.000	9	Alp Eri	0.45300	24000.	80	24018	No
173	GOM_NL__2PRFIN20061003_234757_000000402051_00417_24018_2644.N1	03-OCT-2006 23:47:57	Straylight	40.000	84	Alp Phe	2.3970	4500.0	80	24018	No

3. Quality information per product

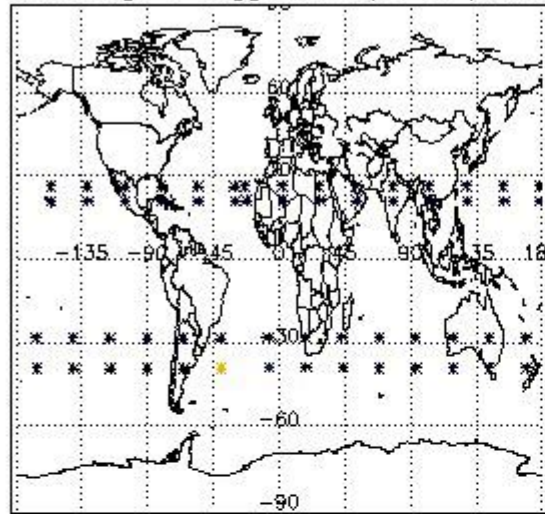
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

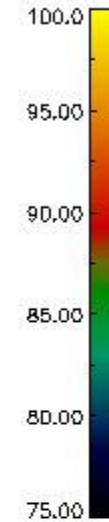
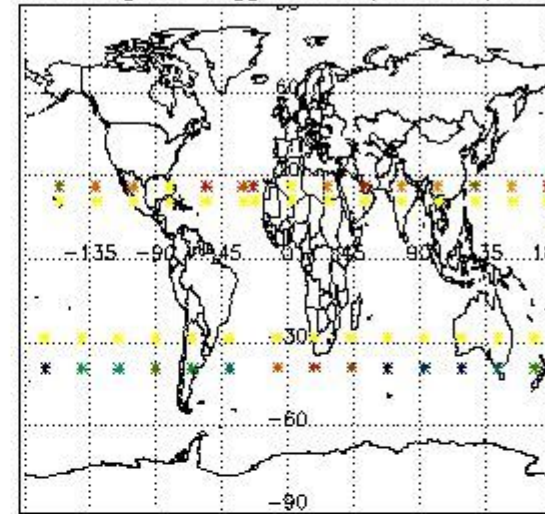


3.2 Plot quality information per product (world map)

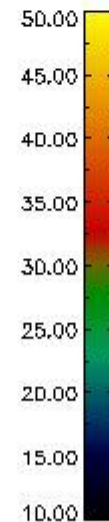
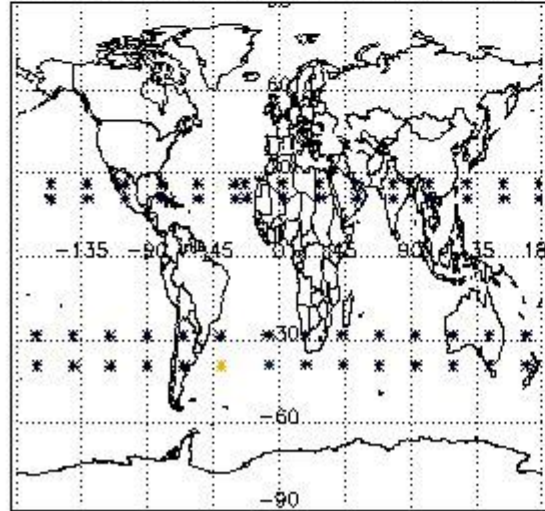
Percentage of flagged data per O3 profile



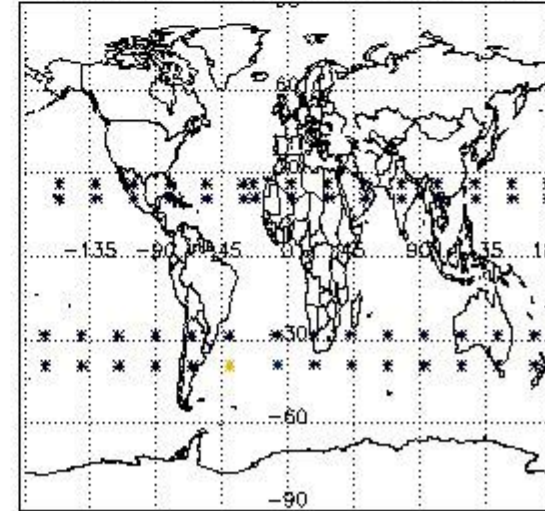
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

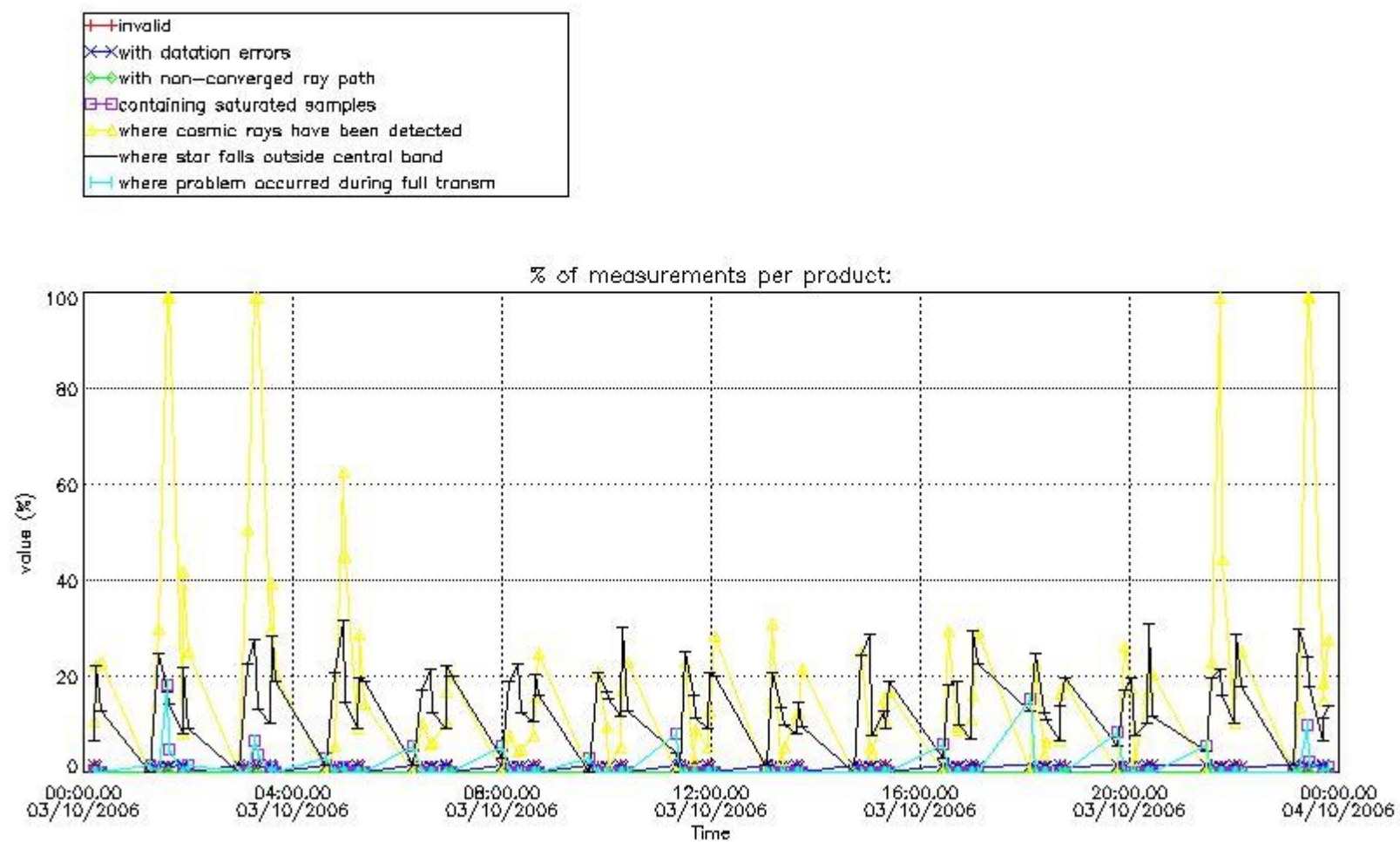


4. Level 1 quality information per product

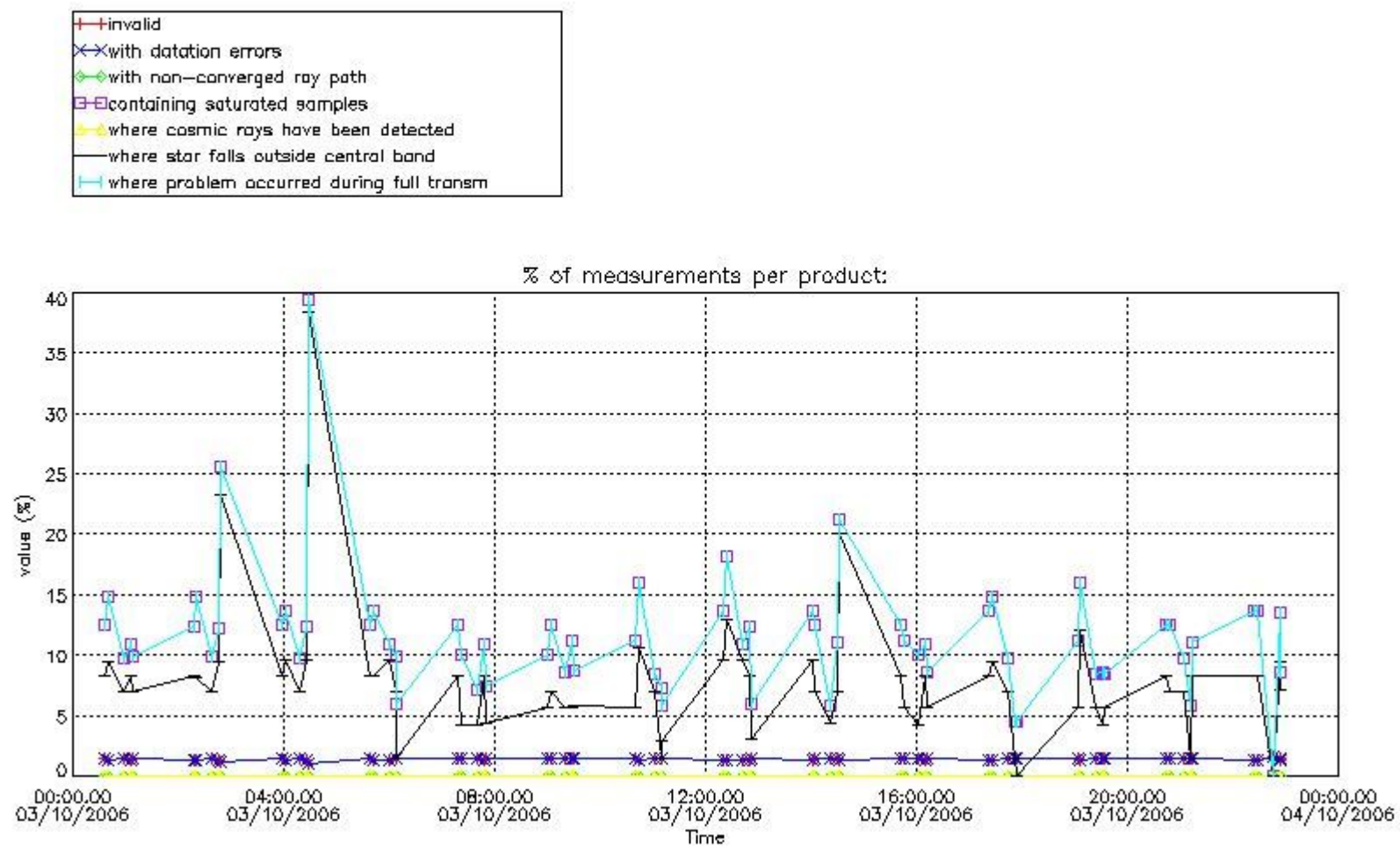
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



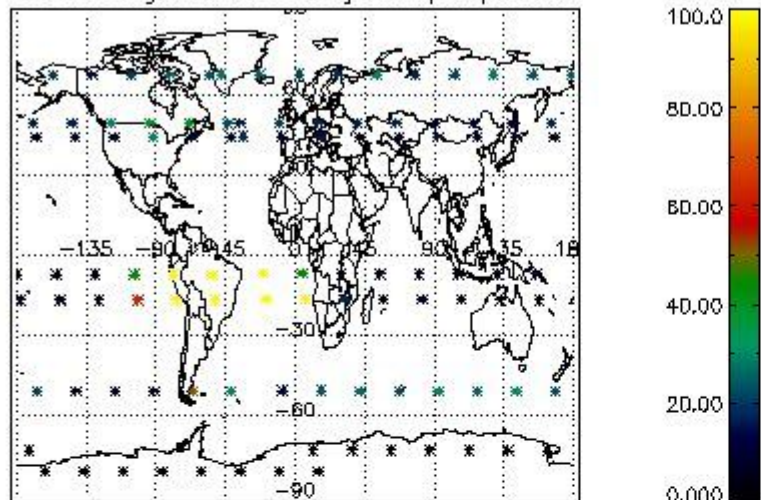
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



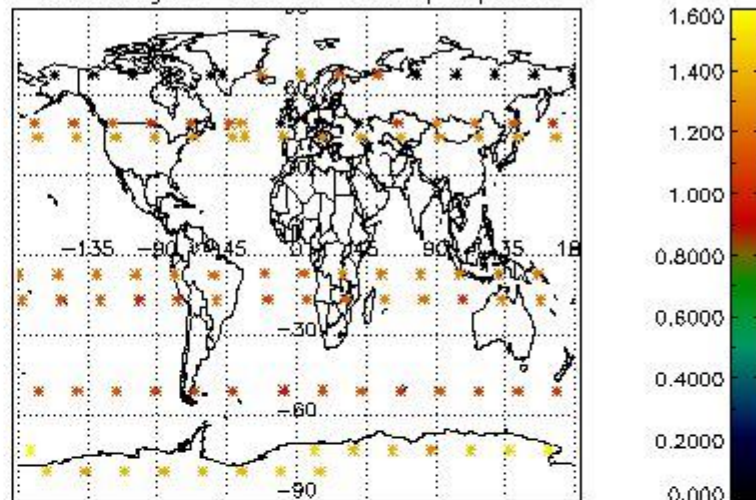
4.2 Plot quality information per product coming from level 1b processing (world map)

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

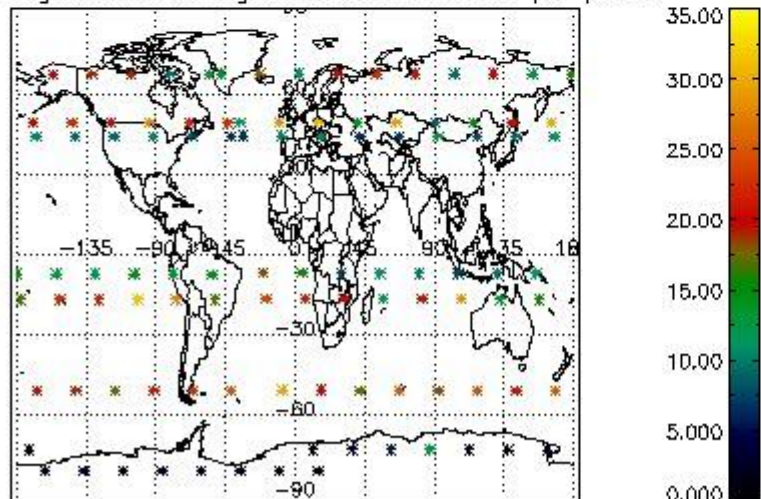
Percentage of cosmic ray hits per profile



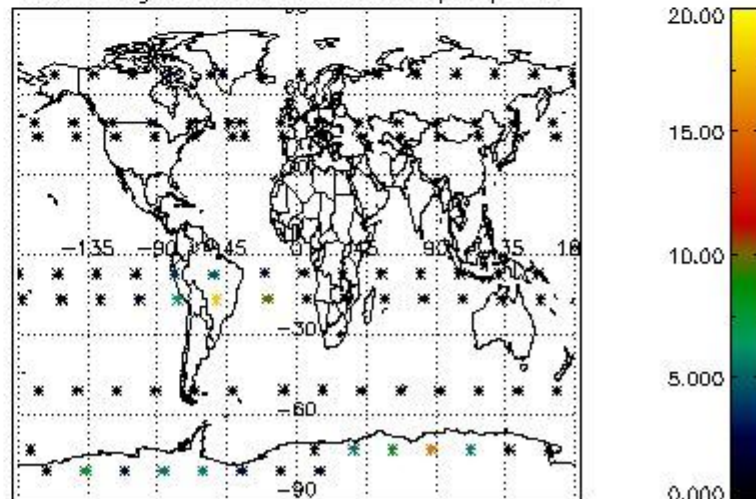
Percentage of datation errors per profile



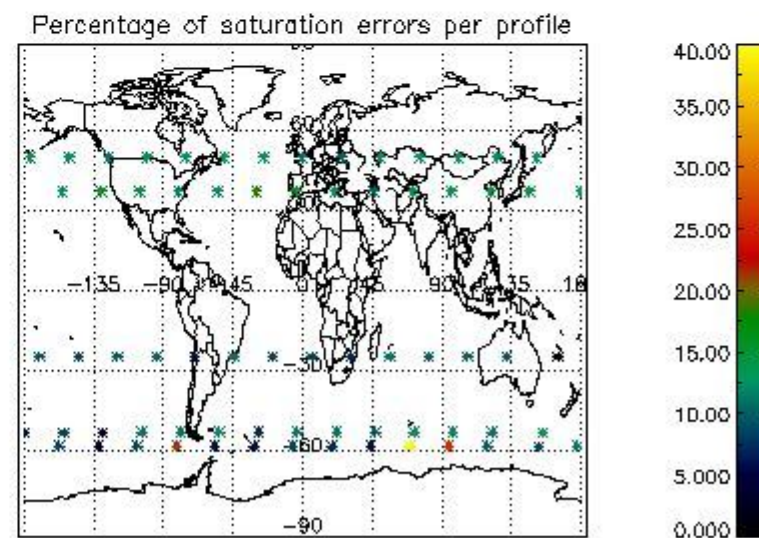
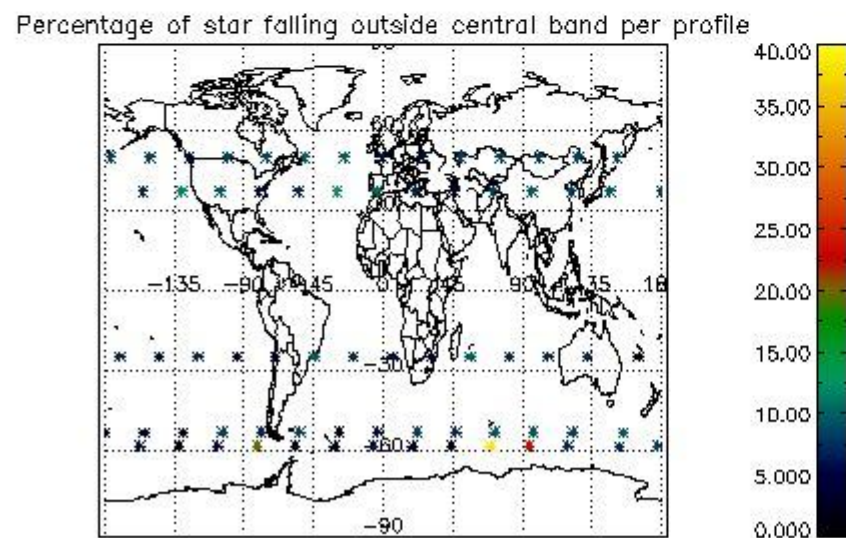
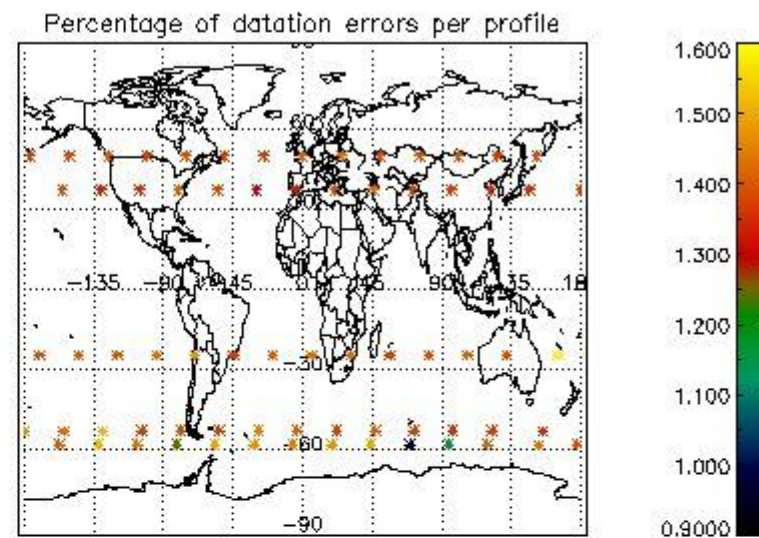
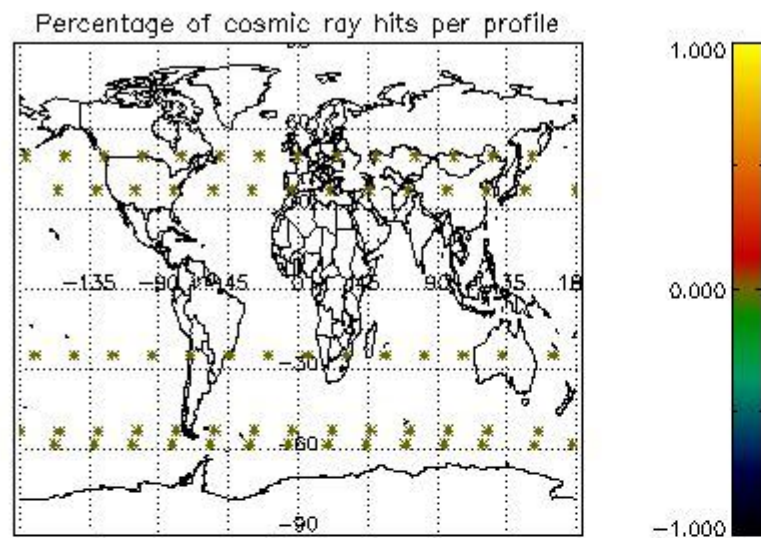
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

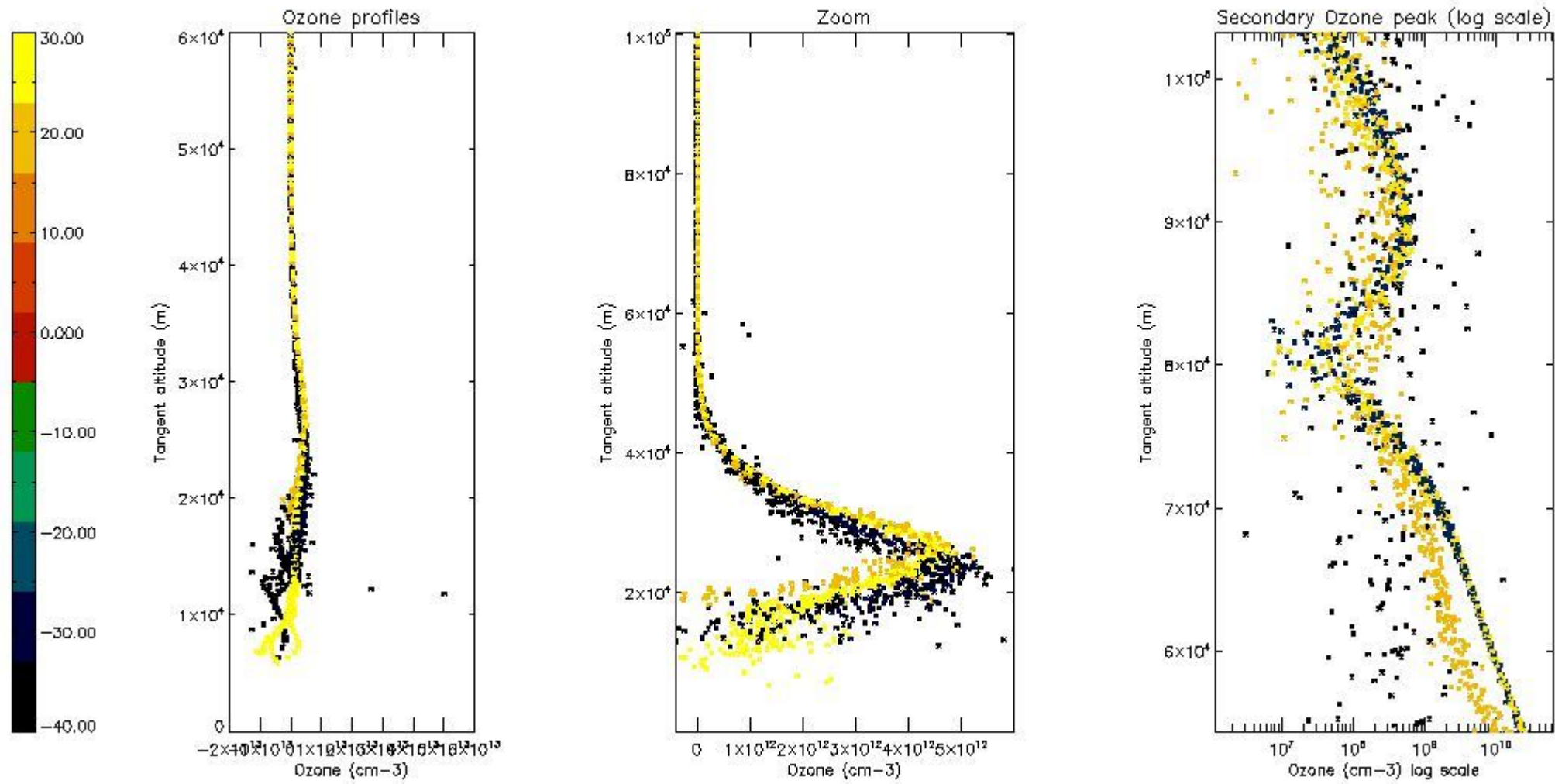
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	21

STD < 10	16
STD < 5	11

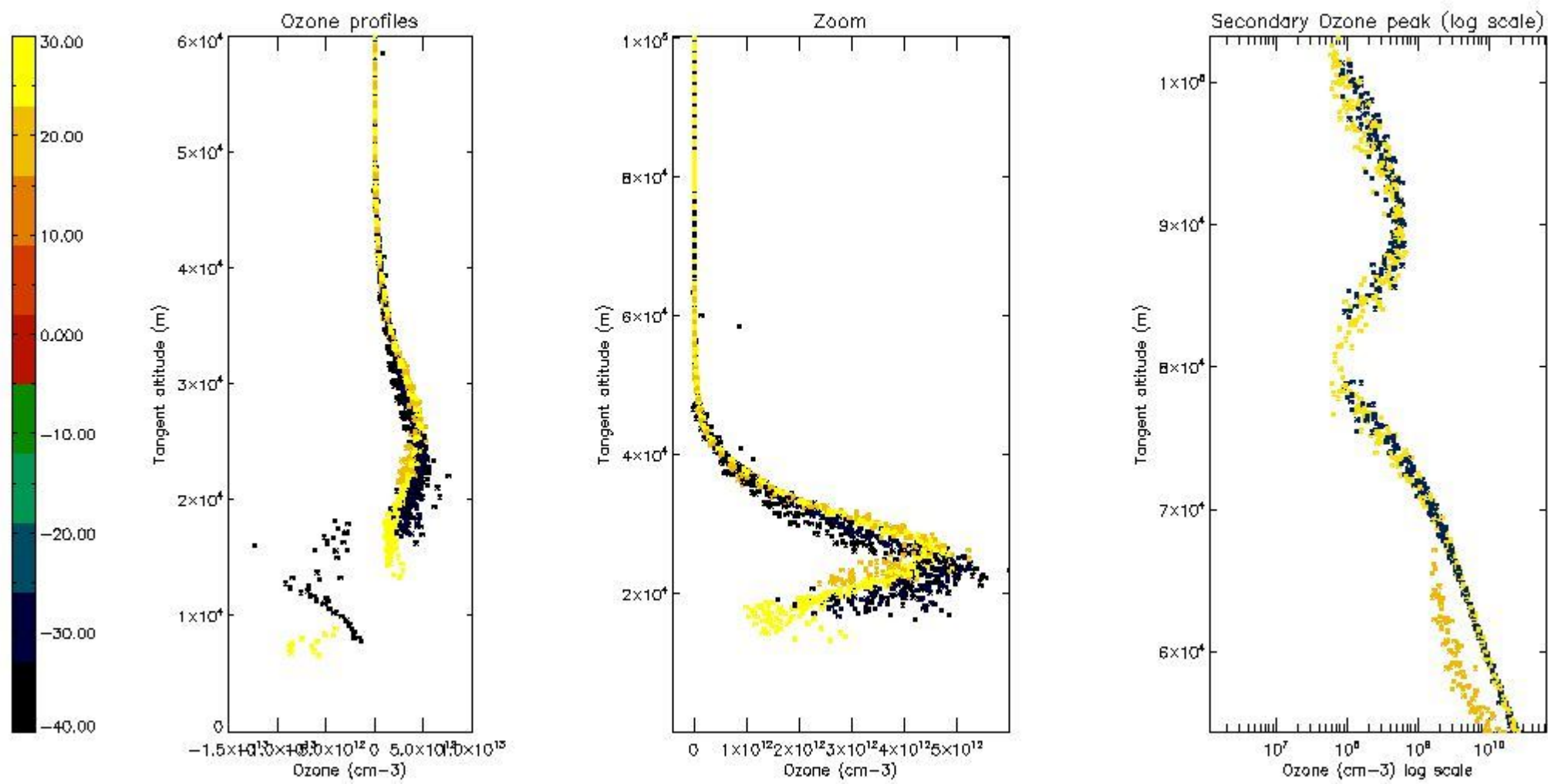
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



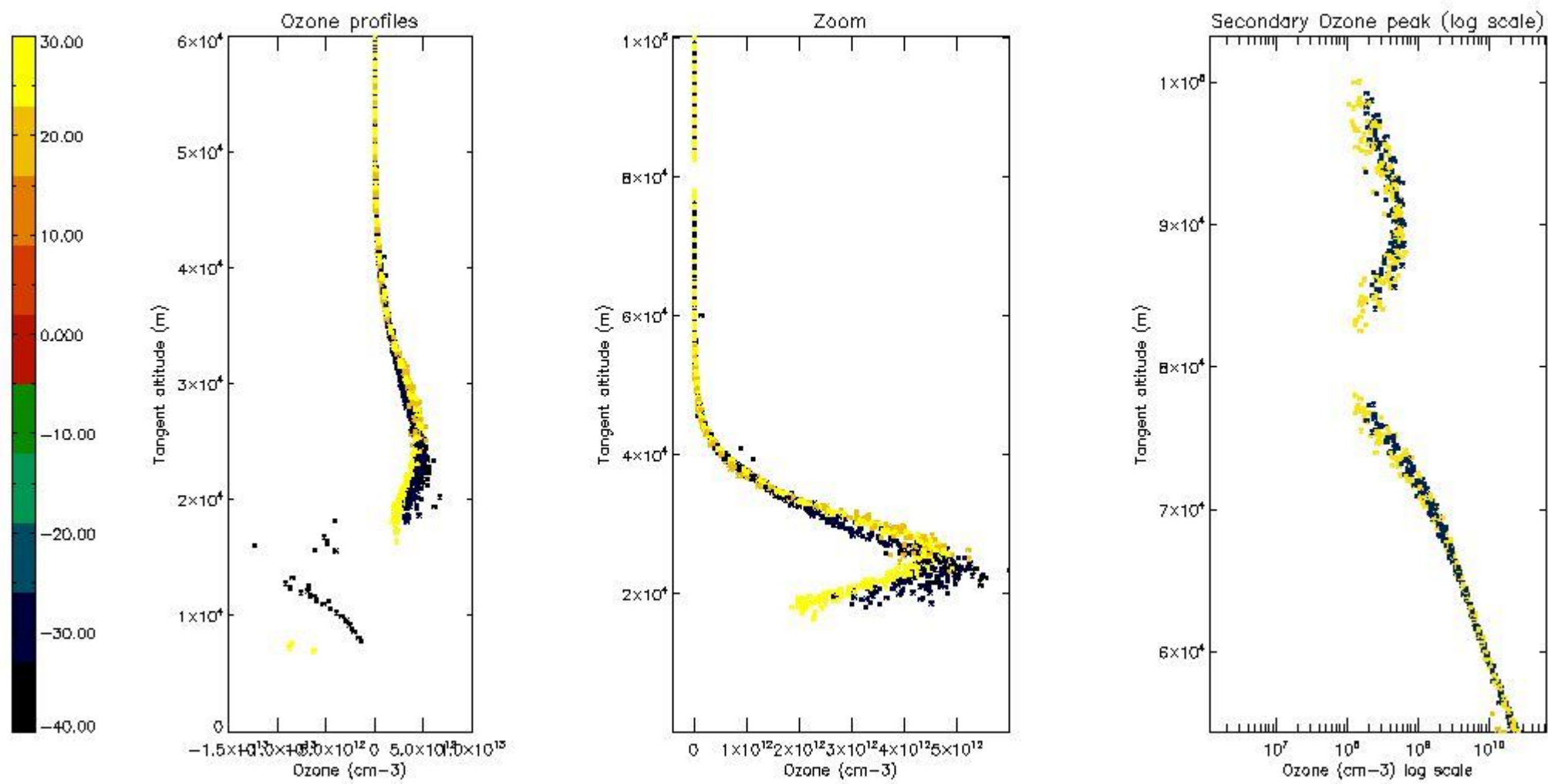
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



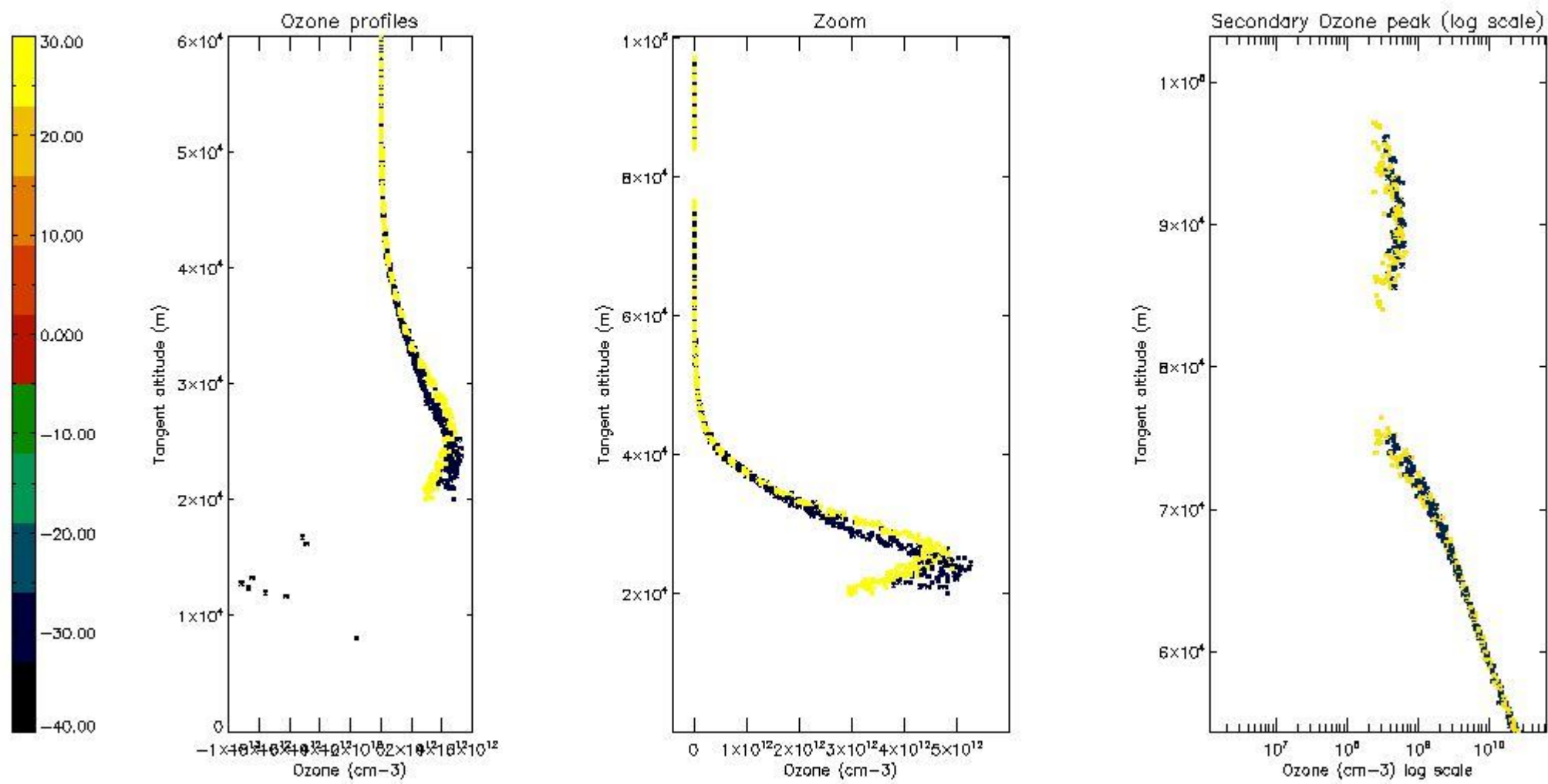
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



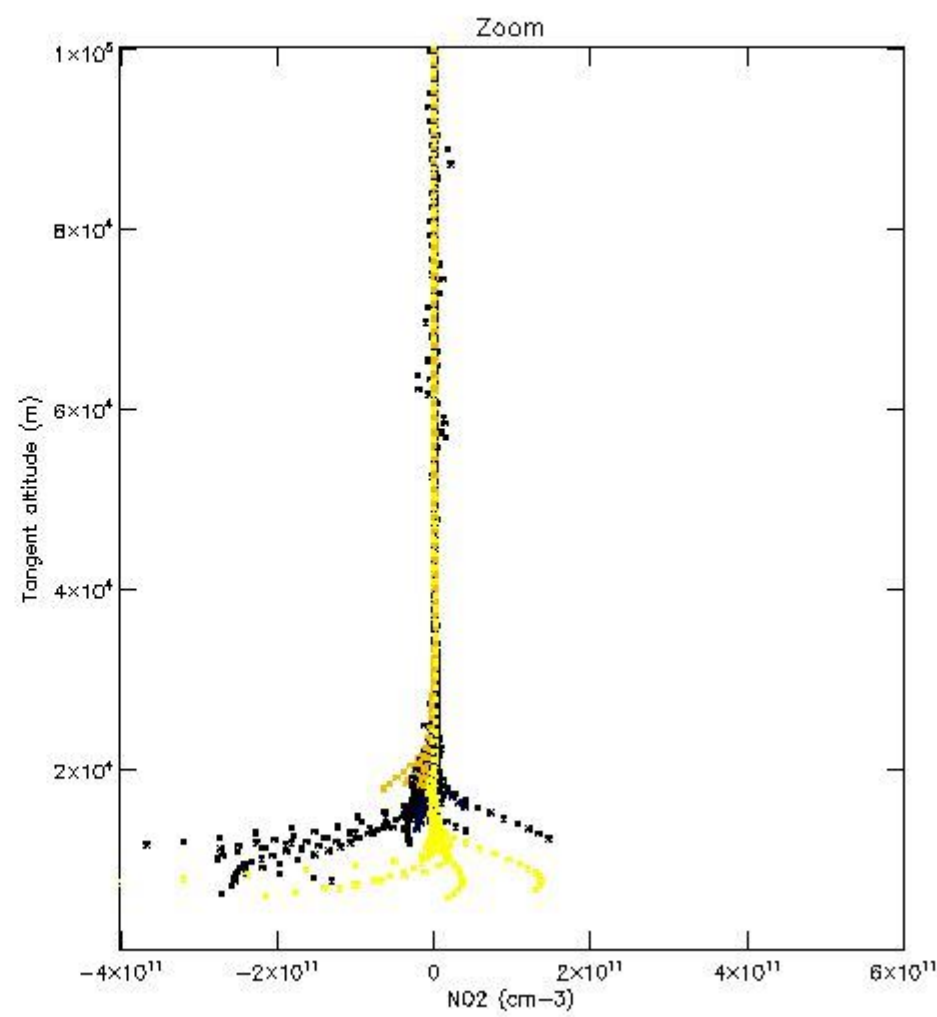
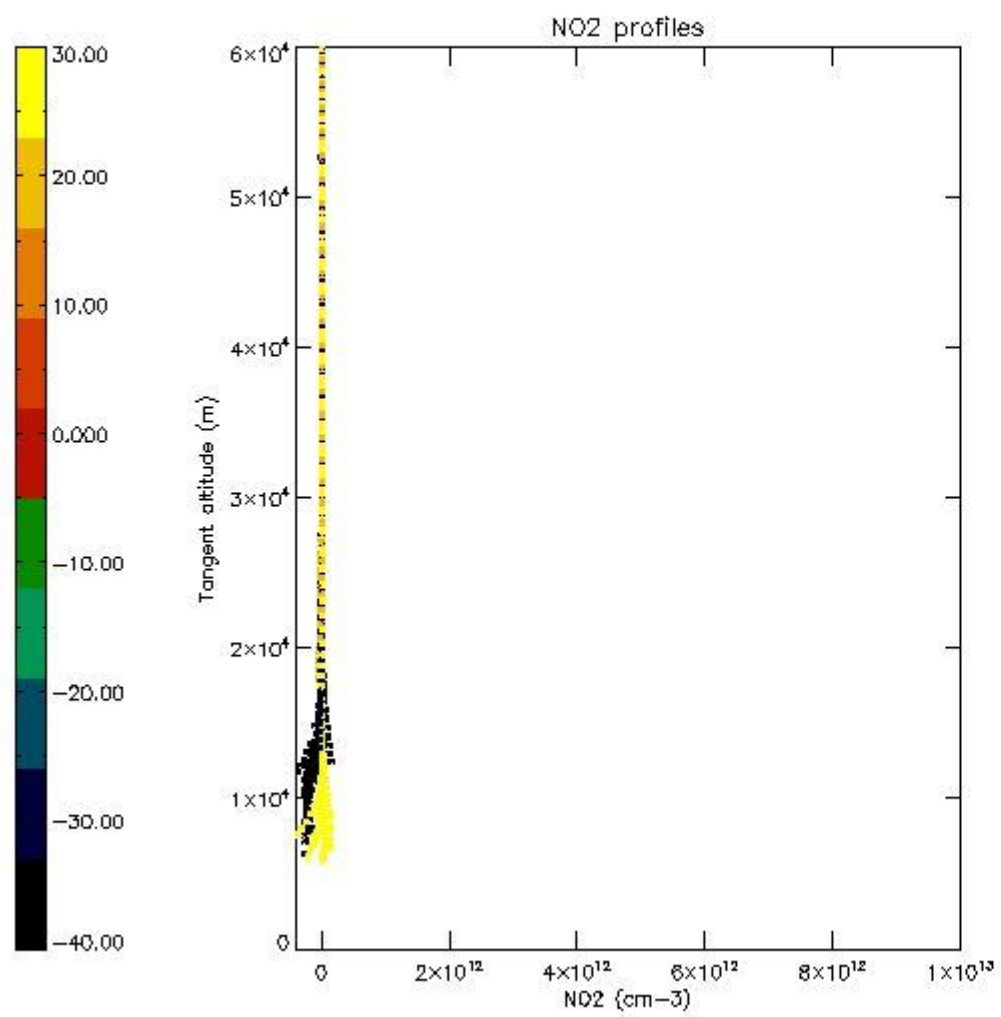
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



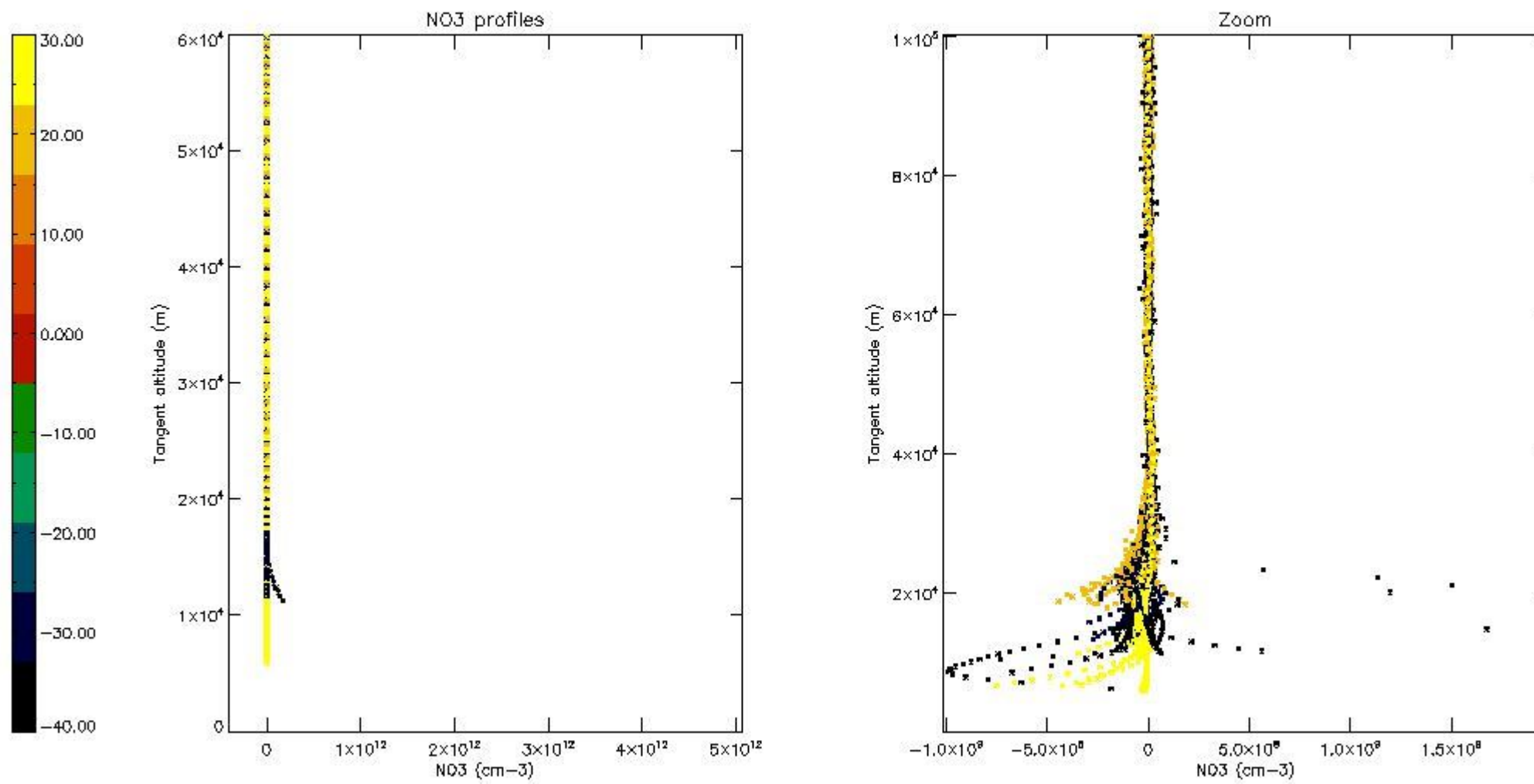
5.6 Plot NO₂ profiles for all STD (dark without errors)

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	03-OCT-2006 00:12:43
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	03-OCT-2006 00:12:43
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	03-OCT-2006 00:12:43

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 04:38:31
Data source version	GOMOS/6.01
Start time of products	03-10-2006 (03OCT2006 00:00:00)
Stop time of products	04-10-2006 (04OCT2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	173
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

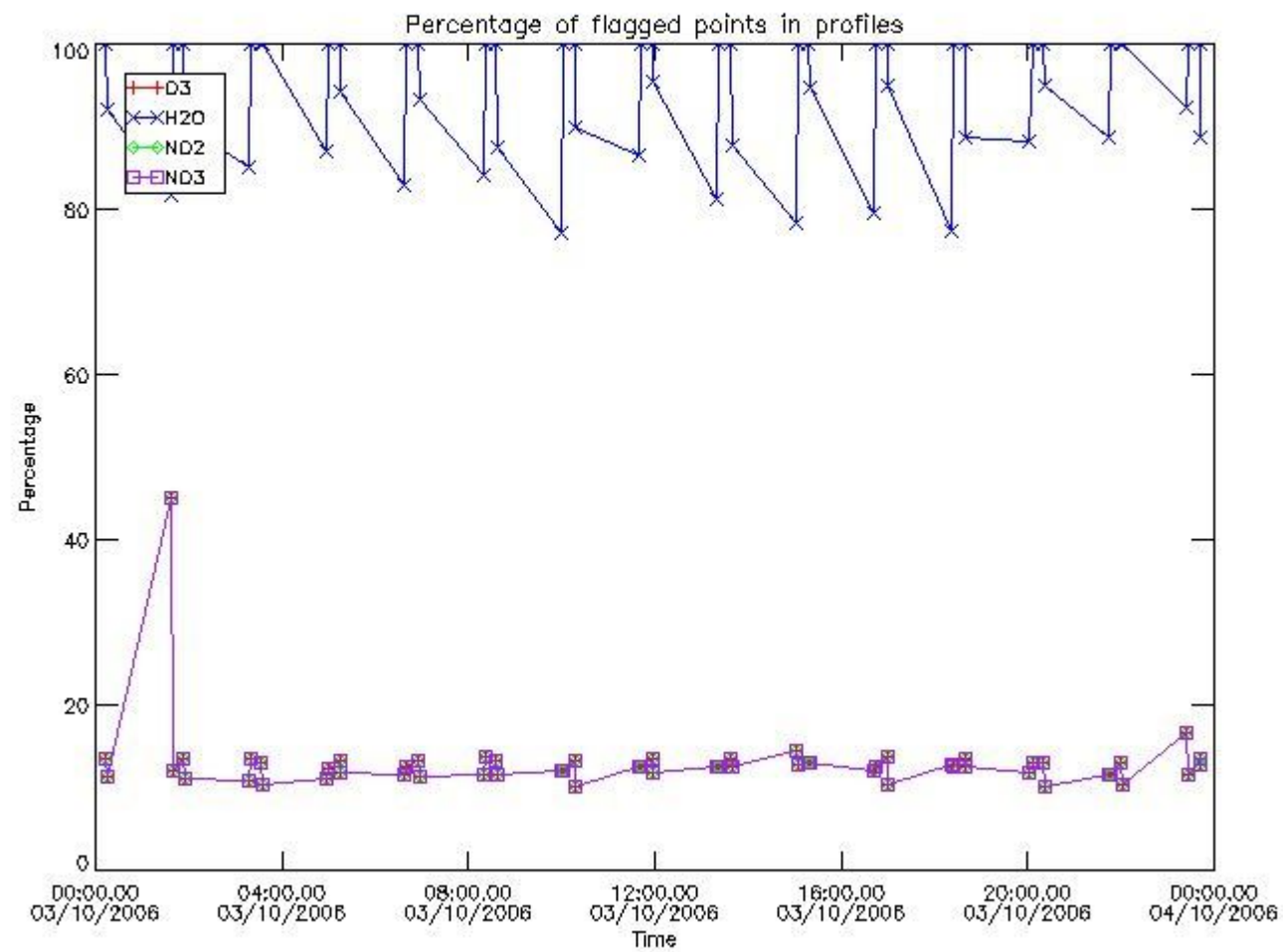
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20061003_001243_000000382051_00403_24004_2604.N1	03-OCT-2006 00:12:43	Dark	37.500	143	Alp Hyi	2.8570	7200.0	75	24004	No
2	GOM_NL__2PRFIN20061003_001411_000000452051_00403_24004_2605.N1	03-OCT-2006 00:14:11	Dark	45.000	9	Alp Eri	0.45300	24000.	90	24004	No
3	GOM_NL__2PRFIN20061003_001930_000000392051_00403_24004_2606.N1	03-OCT-2006 00:19:30	Straylight	39.000	84	Alp Phe	2.3970	4500.0	78	24004	No
4	GOM_NL__2PRFIN20061003_003631_000000362051_00403_24004_2607.N1	03-OCT-2006 00:36:31	Bright	36.000	90	54Alp Peg	2.4870	11000.	72	24004	No
5	GOM_NL__2PRFIN20061003_004008_000000372051_00403_24004_2608.N1	03-OCT-2006 00:40:08	Bright	37.000	93	53Bet Peg	2.5200	3100.0	74	24004	No
6	GOM_NL__2PRFIN20061003_005730_000000362051_00403_24004_2609.N1	03-OCT-2006 00:57:30	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	24004	No
7	GOM_NL__2PRFIN20061003_010530_000000372051_00403_24004_2610.N1	03-OCT-2006 01:05:30	Bright	36.500	36	50Alp UMa	1.8000	6300.0	73	24004	No
8	GOM_NL__2PRFIN20061003_010700_000000362051_00403_24004_2611.N1	03-OCT-2006 01:07:00	Bright	35.500	82	48Bet UMa	2.3650	10600.	71	24004	No
9	GOM_NL__2PRFIN20061003_011654_000000352051_00403_24004_2612.N1	03-OCT-2006 01:16:54	Bright	35.000	166	17Eps Leo	2.9800	6000.0	70	24004	No
10	GOM_NL__2PRFIN20061003_012633_000000492051_00403_24004_2613.N1	03-OCT-2006 01:26:33	Twilight	48.500	48	30Alp Hya	1.9770	4100.0	97	24004	No
11	GOM_NL__2PRFIN20061003_013614_000000422051_00403_24004_2614.N1	03-OCT-2006 01:36:14	Dark	41.500	65	Lam Vel	2.2040	4400.0	83	24004	No
12	GOM_NL__2PRFIN20061003_013854_000000432051_00403_24004_2615.N1	03-OCT-2006 01:38:54	Dark	42.500	34	Gam2Vel	1.7930	23000.	85	24004	No
13	GOM_NL__2PRFIN20061003_015319_000000382051_00404_24005_2606.N1	03-OCT-2006 01:53:19	Dark	38.000	143	Alp Hyi	2.8570	7200.0	76	24005	No
14	GOM_NL__2PRFIN20061003_015447_000000462051_00404_24005_2607.N1	03-OCT-2006 01:54:47	Dark	45.500	9	Alp Eri	0.45300	24000.	91	24005	No
15	GOM_NL__2PRFIN20061003_020006_000000382051_00404_24005_2608.N1	03-OCT-2006 02:00:06	Straylight	38.000	84	Alp Phe	2.3970	4500.0	76	24005	No
16	GOM_NL__2PRFIN20061003_021707_000000372051_00404_24005_2609.N1	03-OCT-2006 02:17:07	Bright	36.500	90	54Alp Peg	2.4870	11000.	73	24005	No
17	GOM_NL__2PRFIN20061003_022044_000000372051_00404_24005_2610.N1	03-OCT-2006 02:20:44	Bright	37.000	93	53Bet Peg	2.5200	3100.0	74	24005	No
18	GOM_NL__2PRFIN20061003_023805_000000362051_00404_24005_2611.N1	03-OCT-2006 02:38:05	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	24005	No
19	GOM_NL__2PRFIN20061003_024606_000000372051_00404_24005_2612.N1	03-OCT-2006 02:46:06	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	24005	No
20	GOM_NL__2PRFIN20061003_024736_000000432051_00404_24005_2613.N1	03-OCT-2006 02:47:36	Bright	43.000	82	48Bet UMa	2.3650	10600.	86	24005	No
21	GOM_NL__2PRFIN20061003_025730_000000352051_00404_24005_2614.N1	03-OCT-2006 02:57:30	Bright	34.500	166	17Eps Leo	2.9800	6000.0	69	24005	No
22	GOM_NL__2PRFIN20061003_030710_000000472051_00404_24005_2615.N1	03-OCT-2006 03:07:10	Twilight	46.500	48	30Alp Hya	1.9770	4100.0	93	24005	No
23	GOM_NL__2PRFIN20061003_031650_000000472051_00404_24005_2616.N1	03-OCT-2006 03:16:50	Dark	47.000	65	Lam Vel	2.2040	4400.0	94	24005	No
24	GOM_NL__2PRFIN20061003_031930_000000422051_00404_24005_2617.N1	03-OCT-2006 03:19:30	Dark	41.500	34	Gam2Vel	1.7930	23000.	83	24005	No
25	GOM_NL__2PRFIN20061003_033356_000000392051_00405_24006_2608.N1	03-OCT-2006 03:33:56	Dark	39.000	143	Alp Hyi	2.8570	7200.0	78	24006	No
26	GOM_NL__2PRFIN20061003_033523_000000502051_00405_24006_2609.N1	03-OCT-2006 03:35:23	Dark	49.500	9	Alp Eri	0.45300	24000.	99	24006	No
27	GOM_NL__2PRFIN20061003_034042_000000422051_00405_24006_2610.N1	03-OCT-2006 03:40:42	Straylight	42.000	84	Alp Phe	2.3970	4500.0	84	24006	No
28	GOM_NL__2PRFIN20061003_035743_000000362051_00405_24006_2611.N1	03-OCT-2006 03:57:43	Bright	36.000	90	54Alp Peg	2.4870	11000.	72	24006	No
29	GOM_NL__2PRFIN20061003_040120_000000372051_00405_24006_2612.N1	03-OCT-2006 04:01:20	Bright	36.500	93	53Bet Peg	2.5200	3100.0	73	24006	No
30	GOM_NL__2PRFIN20061003_041841_000000362051_00405_24006_2613.N1	03-OCT-2006 04:18:41	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	24006	No
31	GOM_NL__2PRFIN20061003_042642_000000372051_00405_24006_2614.N1	03-OCT-2006 04:26:42	Bright	36.500	36	50Alp UMa	1.8000	6300.0	73	24006	No
32	GOM_NL__2PRFIN20061003_042812_000000522051_00405_24006_2615.N1	03-OCT-2006 04:28:12	Bright	52.000	82	48Bet UMa	2.3650	10600.	104	24006	No
33	GOM_NL__2PRFIN20061003_043807_000000362051_00405_24006_2616.N1	03-OCT-2006 04:38:07	Bright	35.500	166	17Eps Leo	2.9800	6000.0	71	24006	No
34	GOM_NL__2PRFIN20061003_044746_000000462051_00405_24006_2617.N1	03-OCT-2006 04:47:46	Twilight	45.500	48	30Alp Hya	1.9770	4100.0	91	24006	No
35	GOM_NL__2PRFIN20061003_045726_000000512051_00405_24006_2618.N1	03-OCT-2006 04:57:26	Dark	50.500	65	Lam Vel	2.2040	4400.0	101	24006	No
36	GOM_NL__2PRFIN20061003_050007_000000422051_00405_24006_2619.N1	03-OCT-2006 05:00:07	Dark	41.500	34	Gam2Vel	1.7930	23000.	83	24006	No
37	GOM_NL__2PRFIN20061003_051432_000000392051_00406_24007_2610.N1	03-OCT-2006 05:14:32	Dark	38.500	143	Alp Hyi	2.8570	7200.0	77	24007	No
38	GOM_NL__2PRFIN20061003_051600_000000442051_00406_24007_2611.N1	03-OCT-2006 05:16:00	Dark	43.500	9	Alp Eri	0.45300	24000.	87	24007	No
39	GOM_NL__2PRFIN20061003_052119_000000422051_00406_24007_2612.N1	03-OCT-2006 05:21:19	Straylight	42.000	84	Alp Phe	2.3970	4500.0	84	24007	No
40	GOM_NL__2PRFIN20061003_053819_000000362051_00406_24007_2613.N1	03-OCT-2006 05:38:19	Bright	36.000	90	54Alp Peg	2.4870	11000.	72	24007	No
41	GOM_NL__2PRFIN20061003_054156_000000372051_00406_24007_2614.N1	03-OCT-2006 05:41:56	Bright	36.500	93	53Bet Peg	2.5200	3100.0	73	24007	No
42	GOM_NL__2PRFIN20061003_055917_000000372051_00406_24007_2615.N1	03-OCT-2006 05:59:17	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	24007	No

161	GOM_NL__2PRFIN20061003_220721_000000422051_00416_24017_2643.N1	03-OCT-2006 22:07:21	Straylight	42.000	84	Alp Phe	2.3970	4500.0	84	24017	No
162	GOM_NL__2PRFIN20061003_222419_000000372051_00416_24017_2644.N1	03-OCT-2006 22:24:19	Bright	36.500	90	54Alp Peg	2.4870	11000.	73	24017	No
163	GOM_NL__2PRFIN20061003_222756_000000372051_00416_24017_2645.N1	03-OCT-2006 22:27:56	Bright	36.500	93	53Bet Peg	2.5200	3100.0	73	24017	No
164	GOM_NL__2PRFIN20061003_224517_000000322051_00416_24017_2646.N1	03-OCT-2006 22:45:17	Bright	31.500	49	1Alp UMi	1.9900	6300.0	63	24017	No
165	GOM_NL__2PRFIN20061003_225318_000000372051_00416_24017_2647.N1	03-OCT-2006 22:53:18	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	24017	No
166	GOM_NL__2PRFIN20061003_225449_000000352051_00416_24017_2648.N1	03-OCT-2006 22:54:49	Bright	35.000	82	48Bet UMa	2.3650	10600.	70	24017	No
167	GOM_NL__2PRFIN20061003_230749_000000342051_00416_24017_2649.N1	03-OCT-2006 23:07:49	Bright	33.500	22	32Alp Leo	1.3600	15200.	67	24017	No
168	GOM_NL__2PRFIN20061003_231426_000000522051_00416_24017_2650.N1	03-OCT-2006 23:14:26	Twilight	52.000	48	30Alp Hya	1.9770	4100.0	104	24017	No
169	GOM_NL__2PRFIN20061003_232406_000000462051_00416_24017_2651.N1	03-OCT-2006 23:24:06	Dark	46.000	65	Lam Vel	2.2040	4400.0	92	24017	No
170	GOM_NL__2PRFIN20061003_232648_000000452051_00416_24017_2652.N1	03-OCT-2006 23:26:48	Dark	44.500	34	Gam2Vel	1.7930	23000.	89	24017	No
171	GOM_NL__2PRFIN20061003_234111_000000382051_00417_24018_2642.N1	03-OCT-2006 23:41:11	Dark	37.500	143	Alp Hyi	2.8570	7200.0	75	24018	No
172	GOM_NL__2PRFIN20061003_234239_000000402051_00417_24018_2643.N1	03-OCT-2006 23:42:39	Dark	40.000	9	Alp Eri	0.45300	24000.	80	24018	No
173	GOM_NL__2PRFIN20061003_234757_000000402051_00417_24018_2644.N1	03-OCT-2006 23:47:57	Straylight	40.000	84	Alp Phe	2.3970	4500.0	80	24018	No

3. Quality information per product

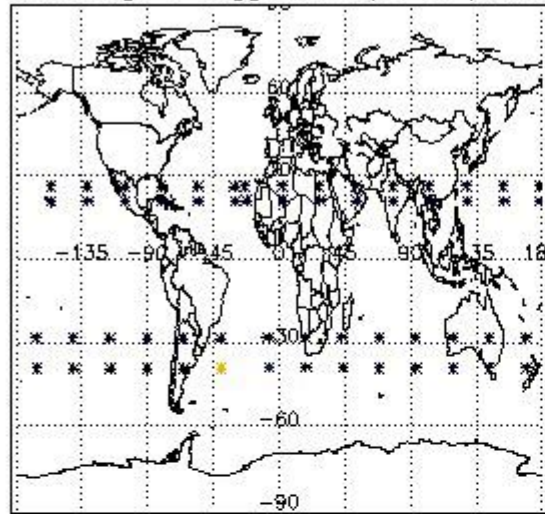
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

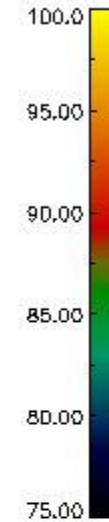
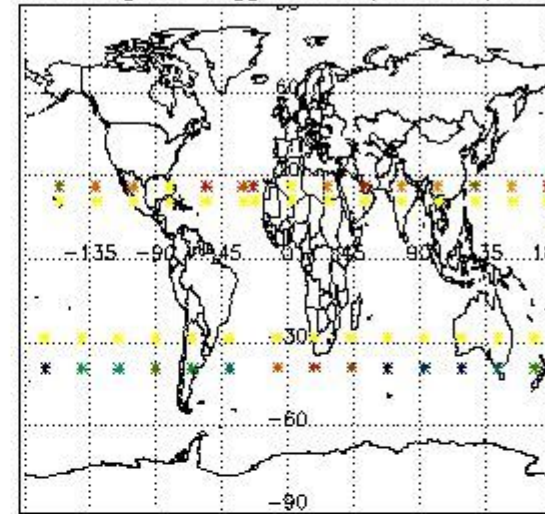


3.2 Plot quality information per product (world map)

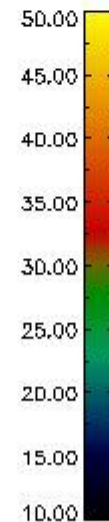
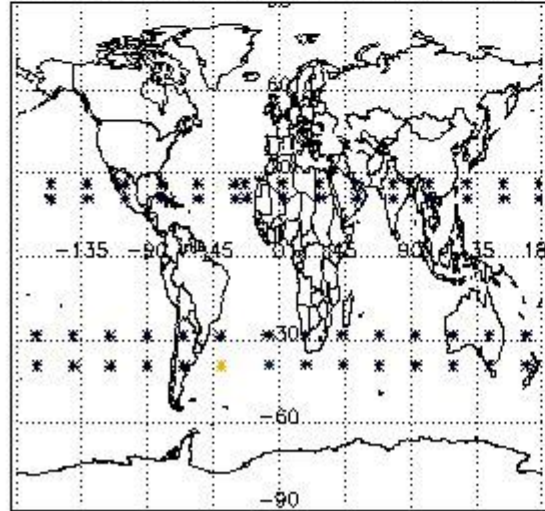
Percentage of flagged data per O3 profile



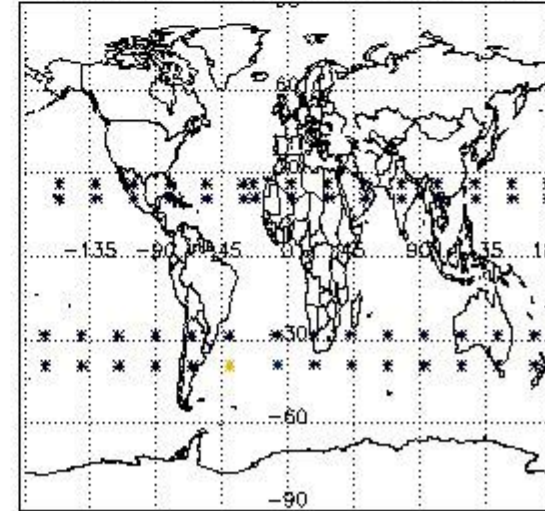
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

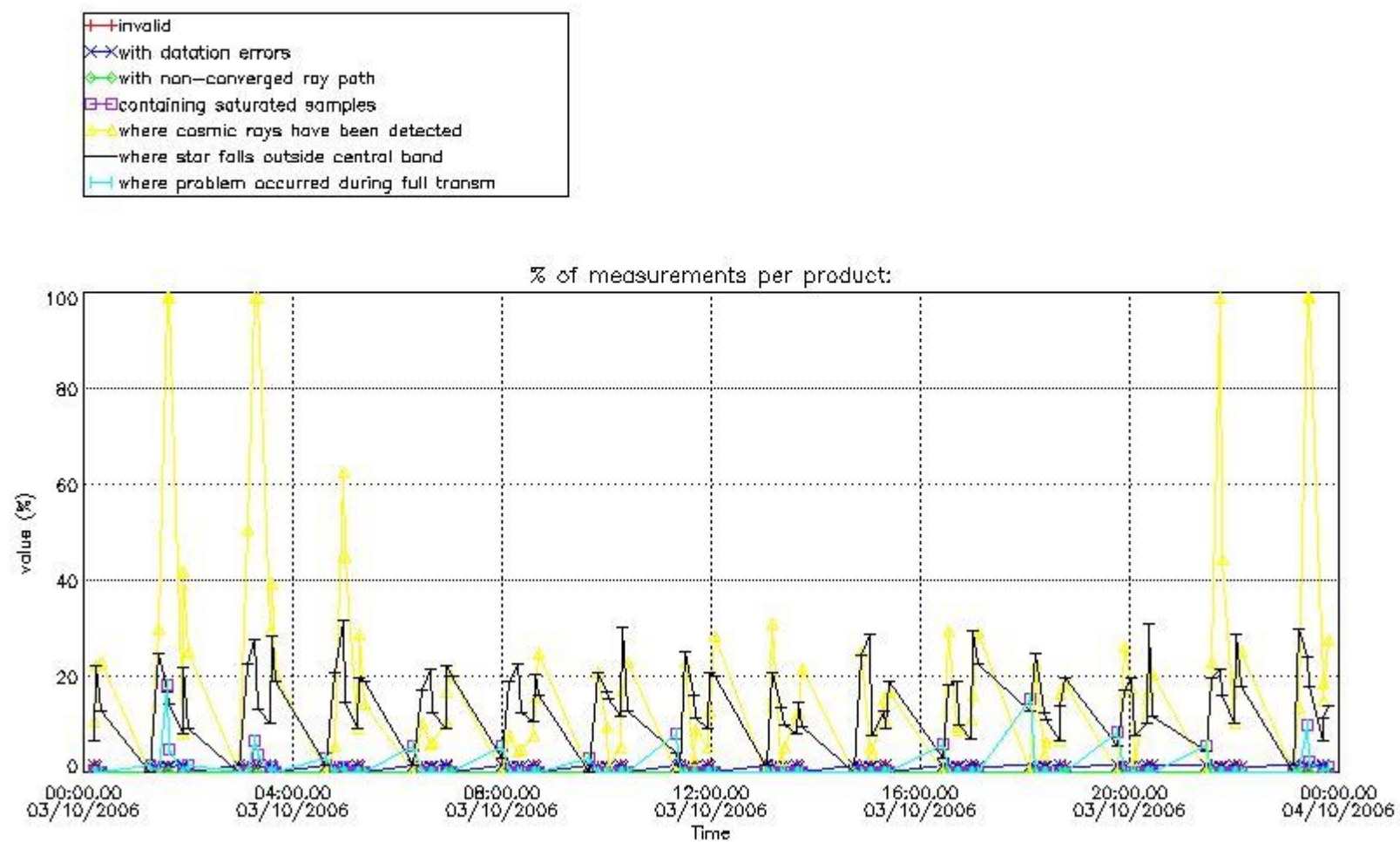


4. Level 1 quality information per product

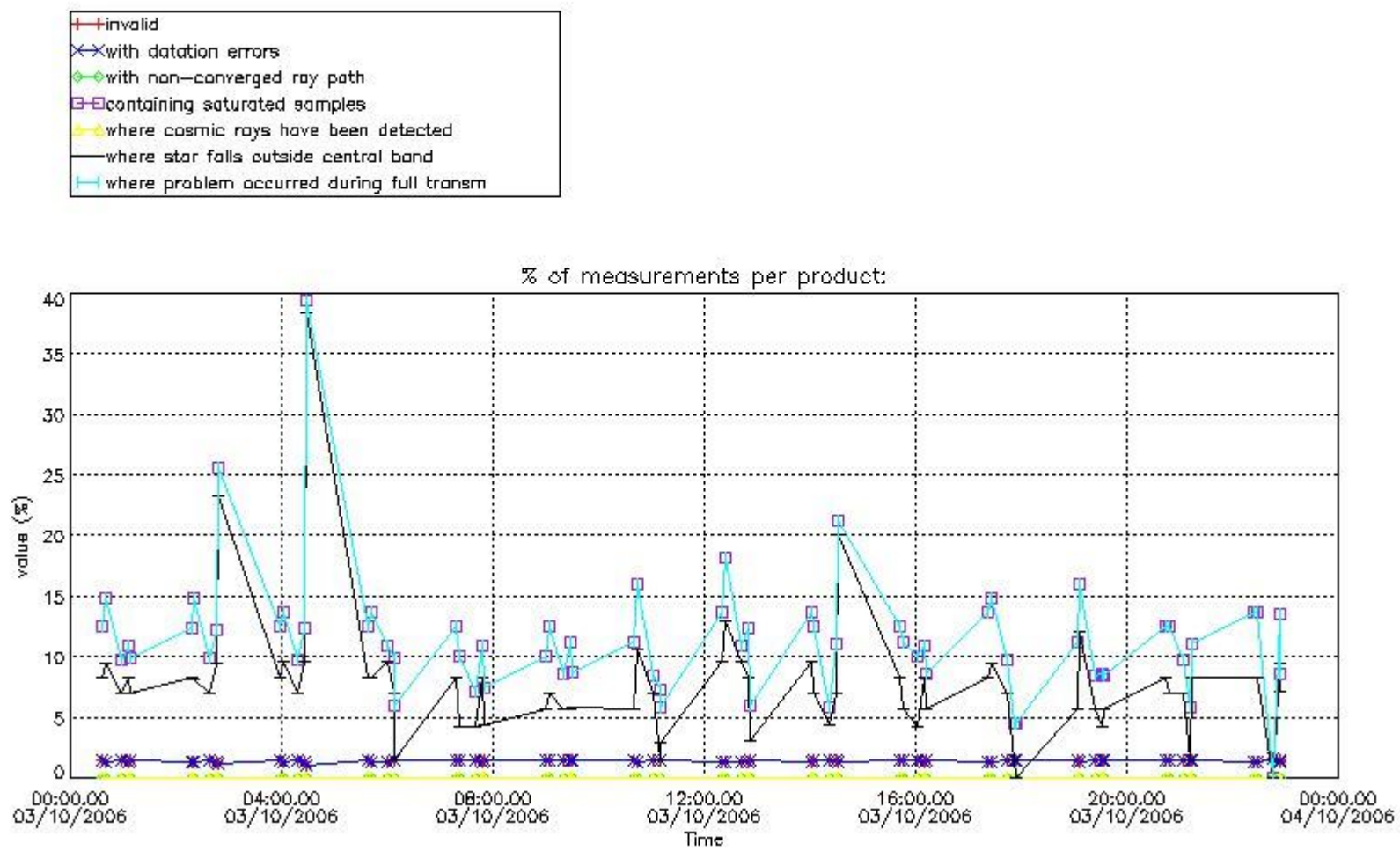
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



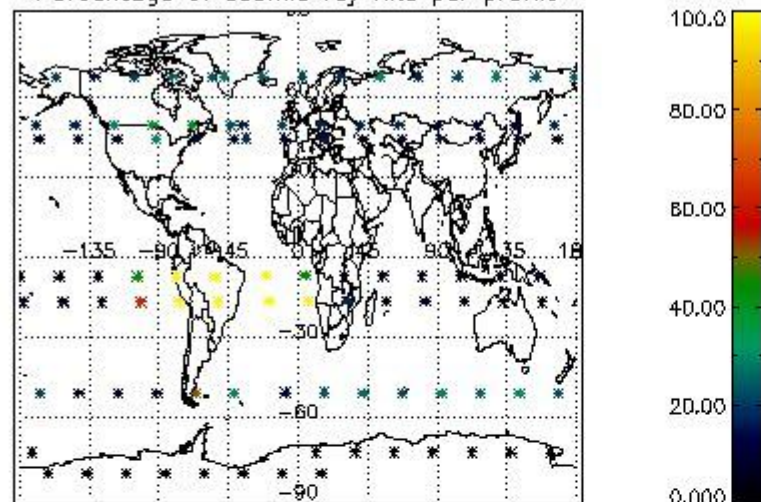
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



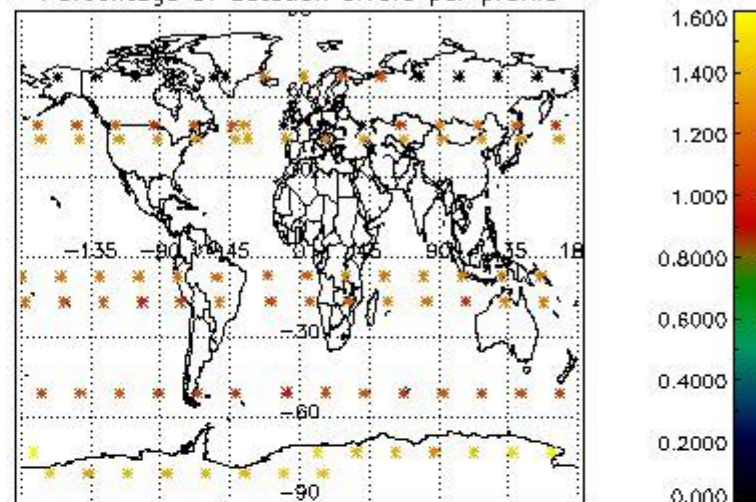
4.2 Plot quality information per product coming from level 1b processing (world map)

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

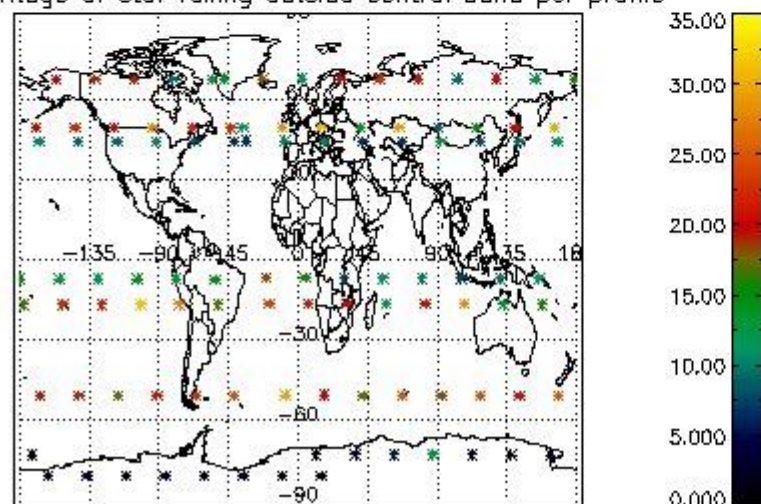
Percentage of cosmic ray hits per profile



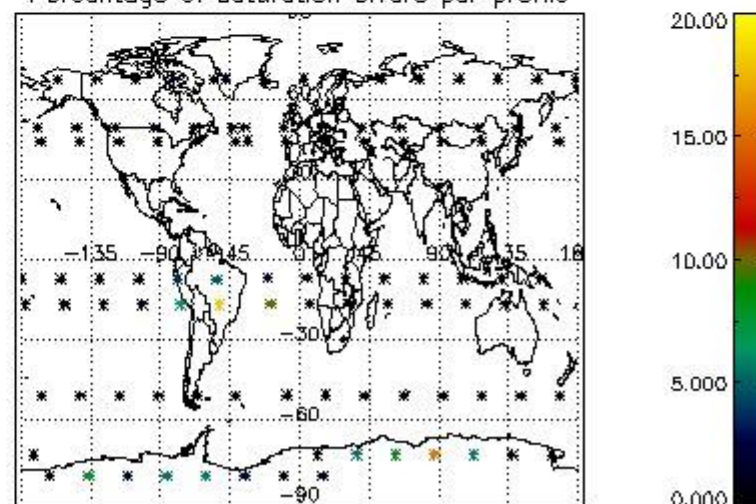
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

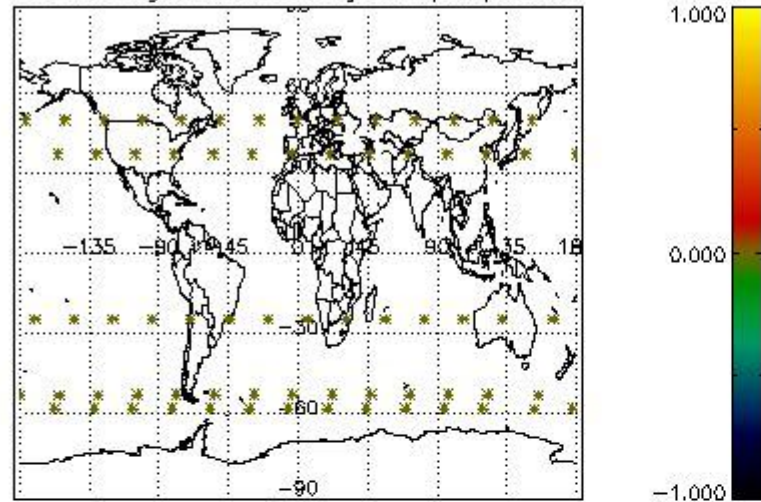


Percentage of saturation errors per profile

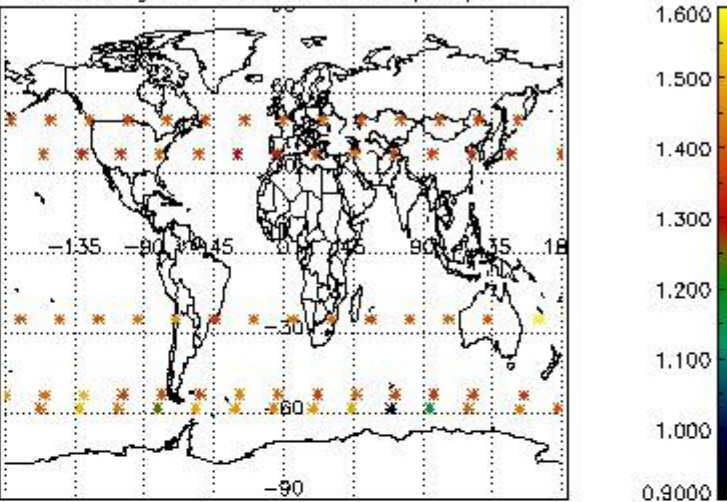


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

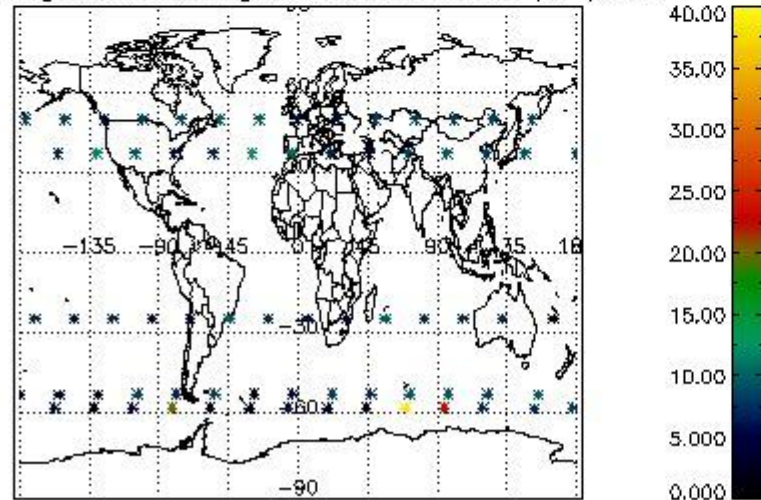
Percentage of cosmic ray hits per profile



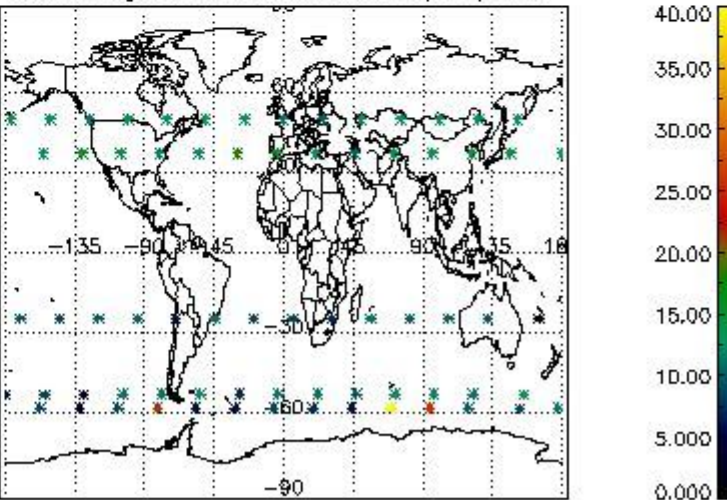
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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

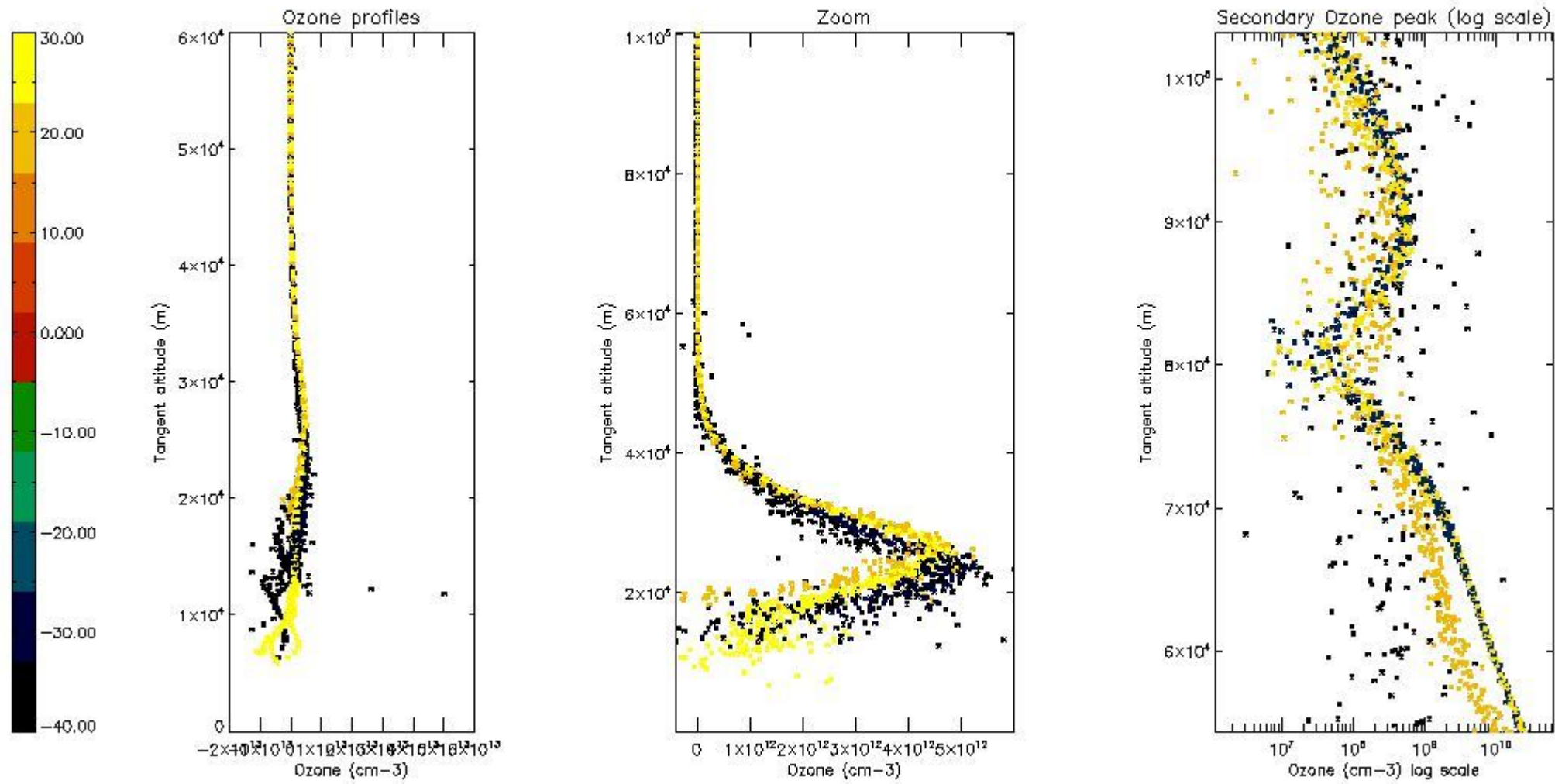
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	21

STD < 10	16
STD < 5	11

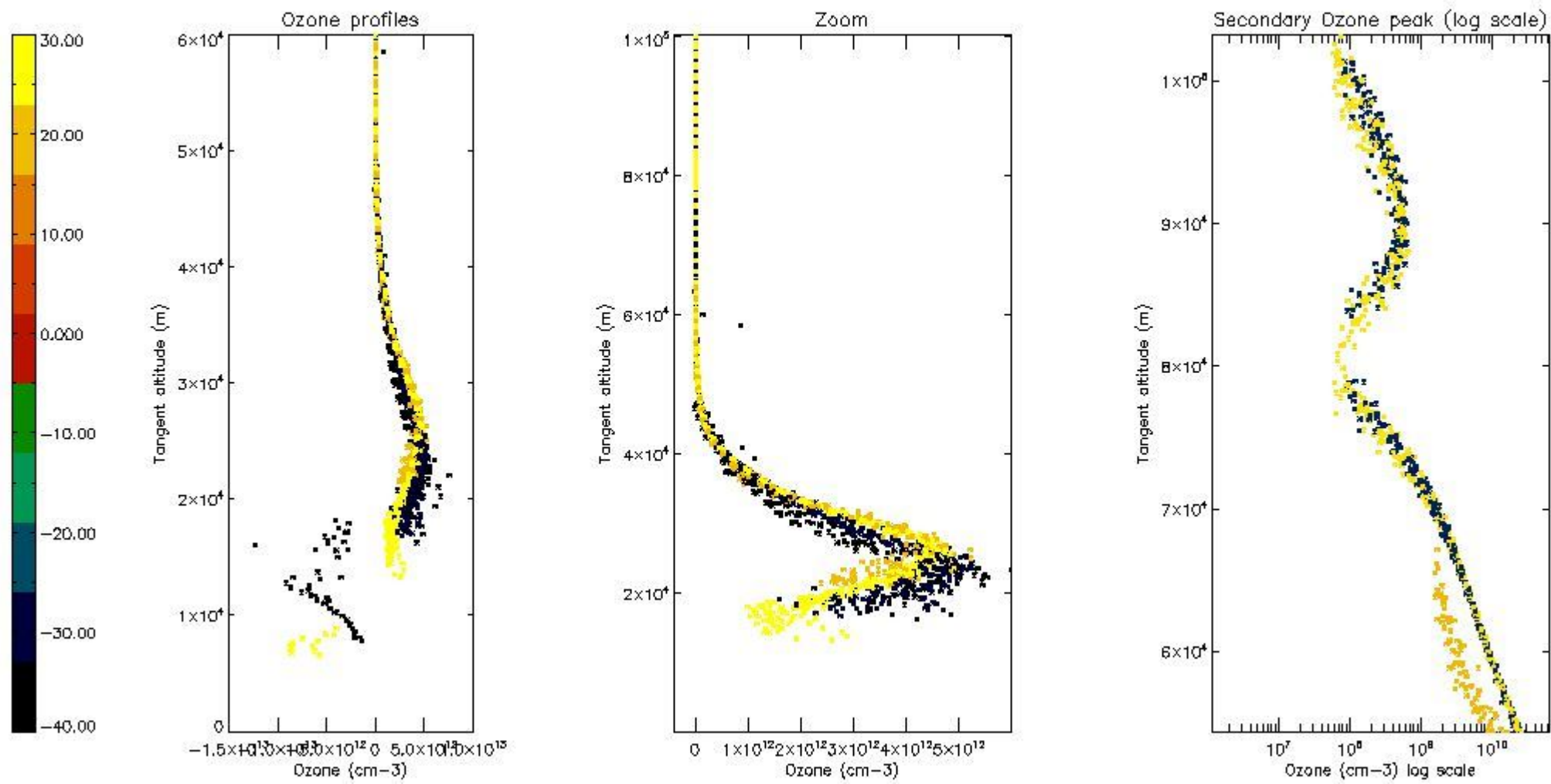
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



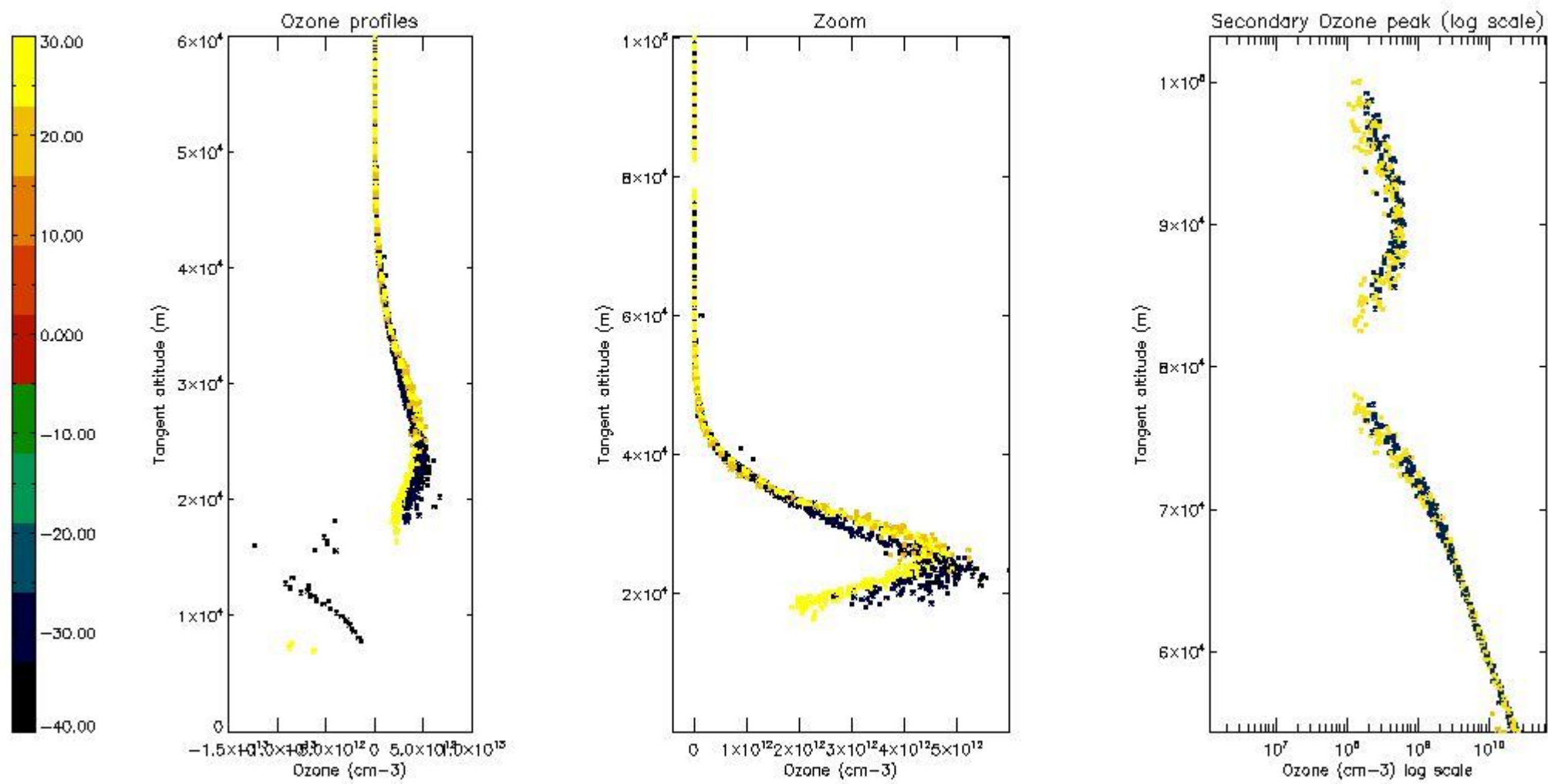
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



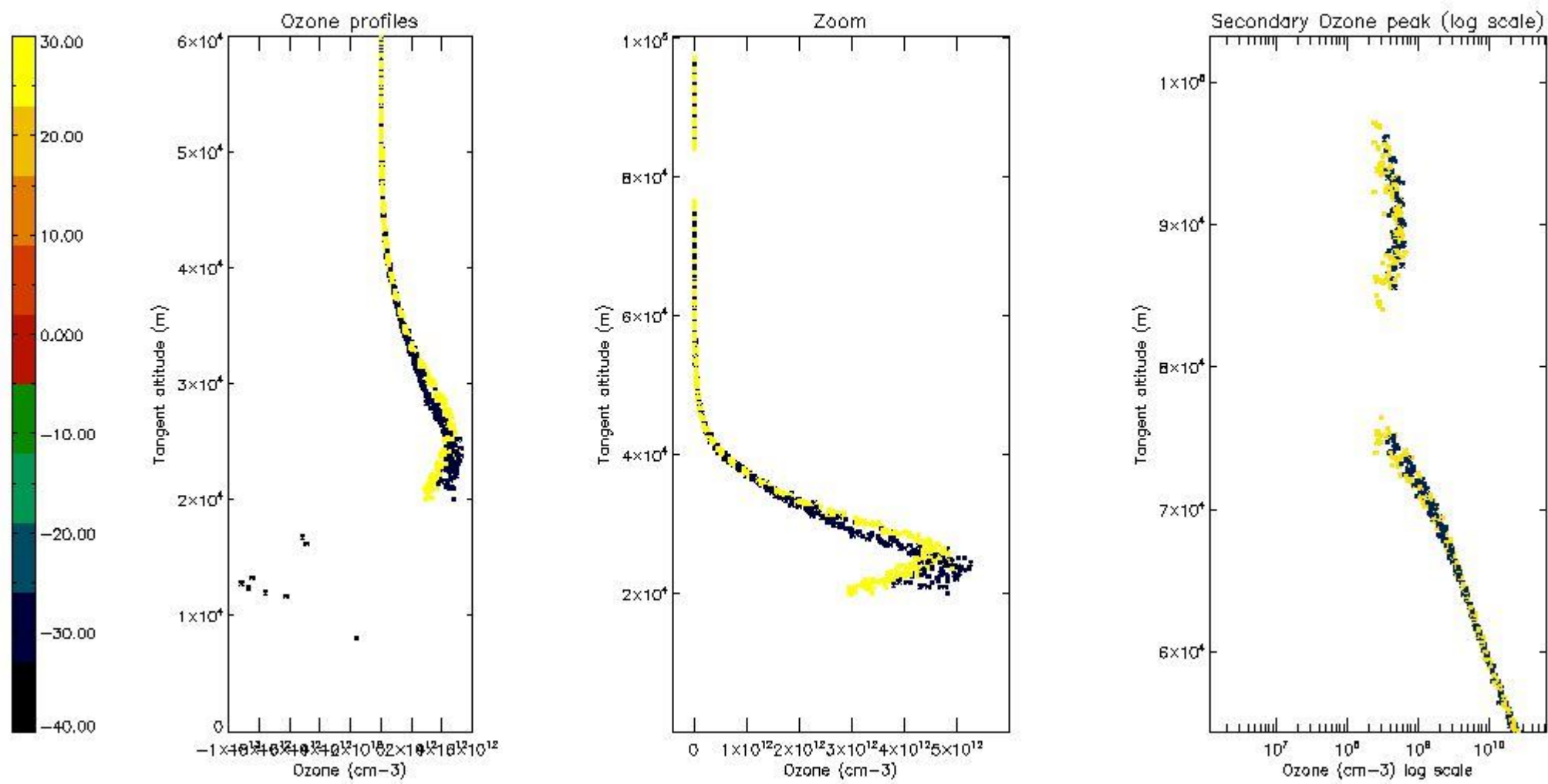
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



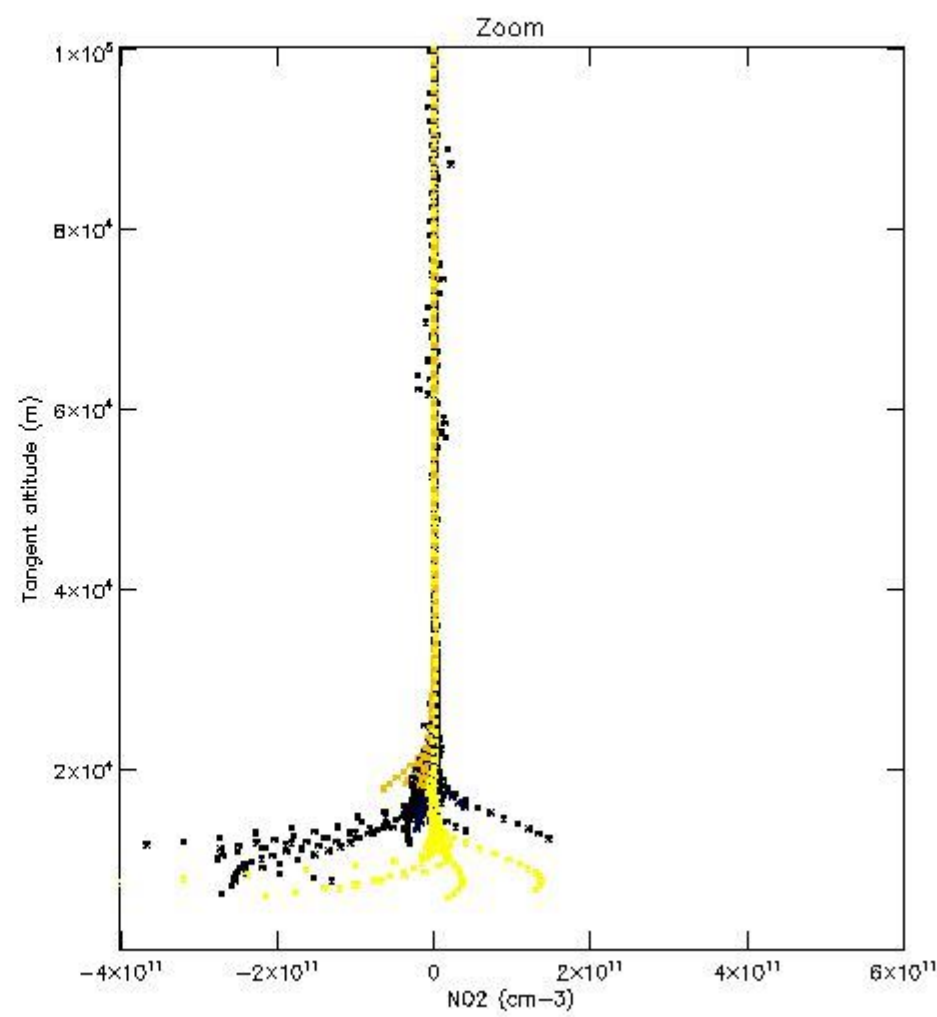
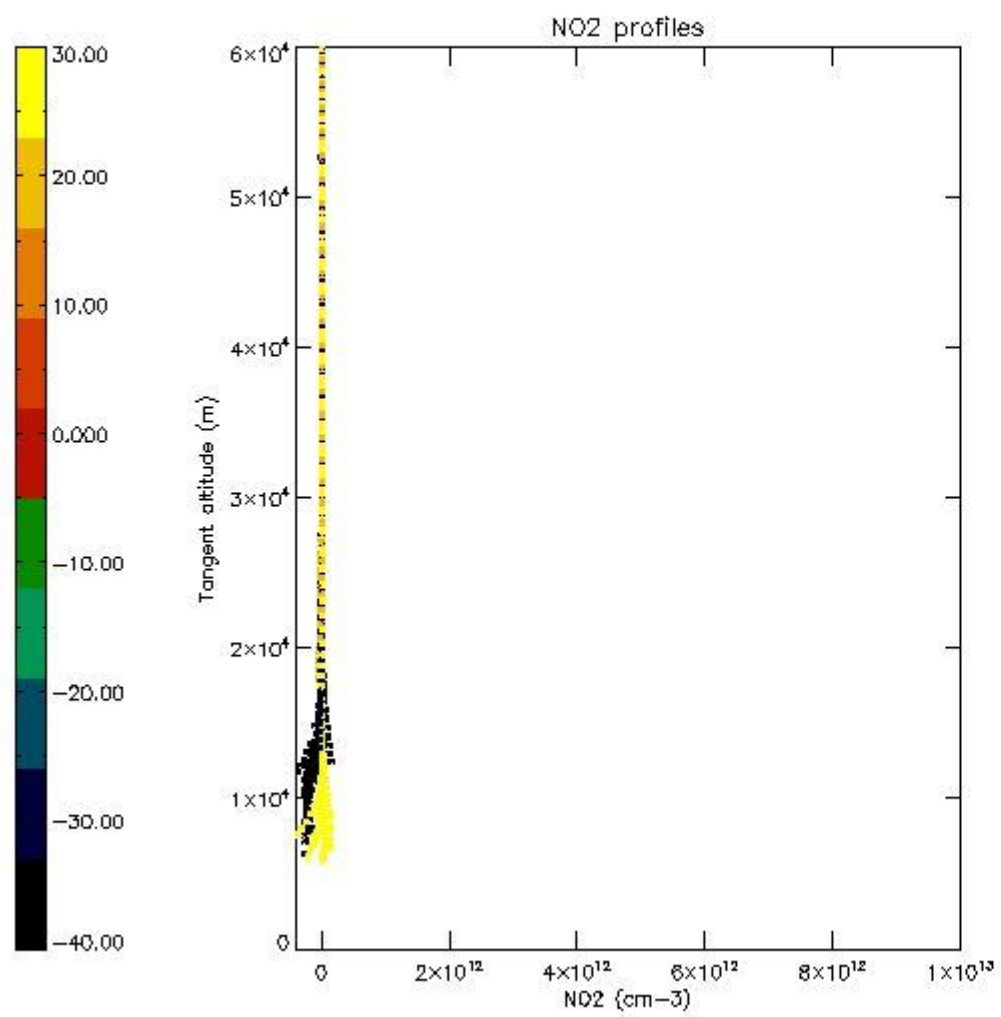
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



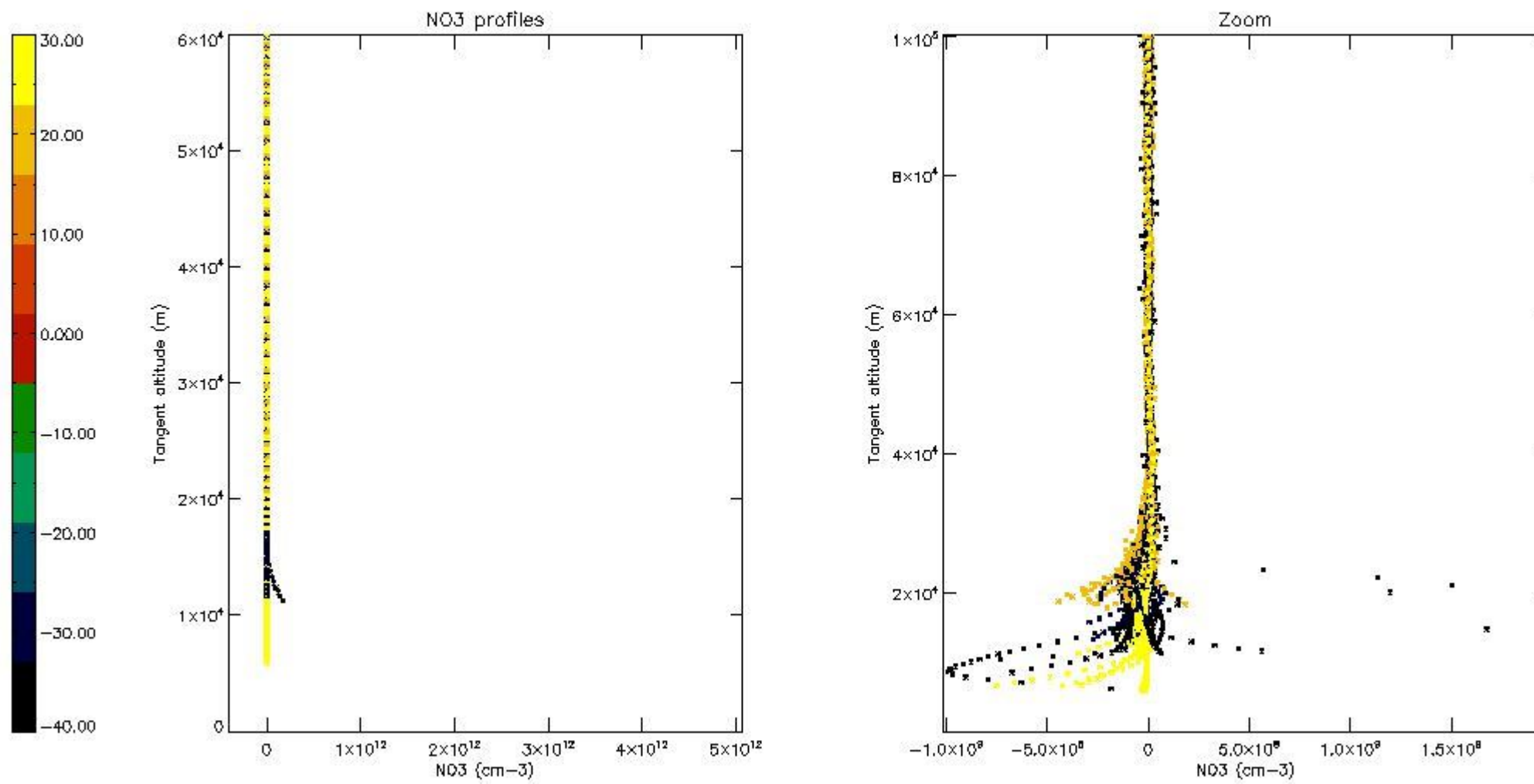
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

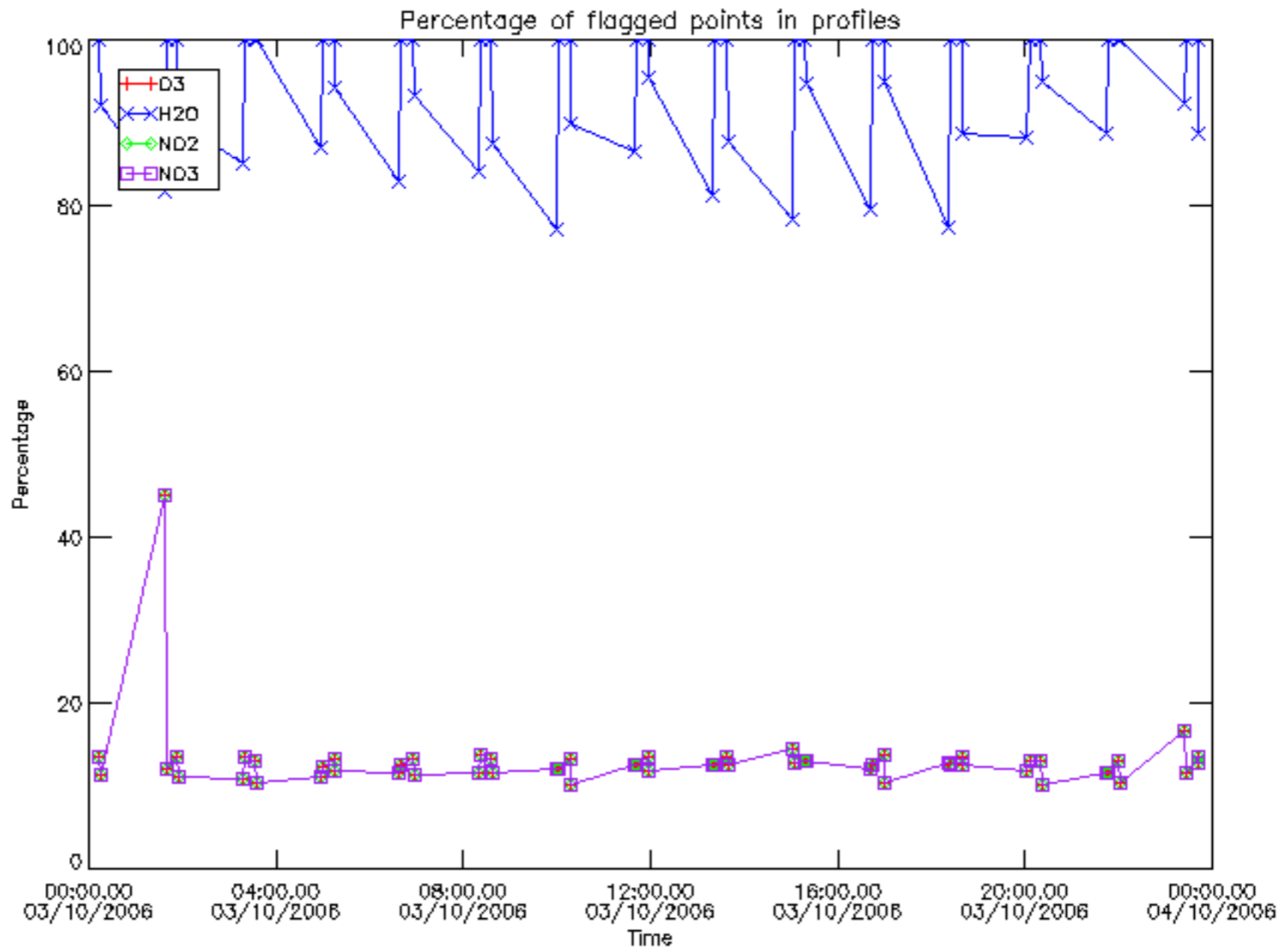
The colorbar represents the latitude.



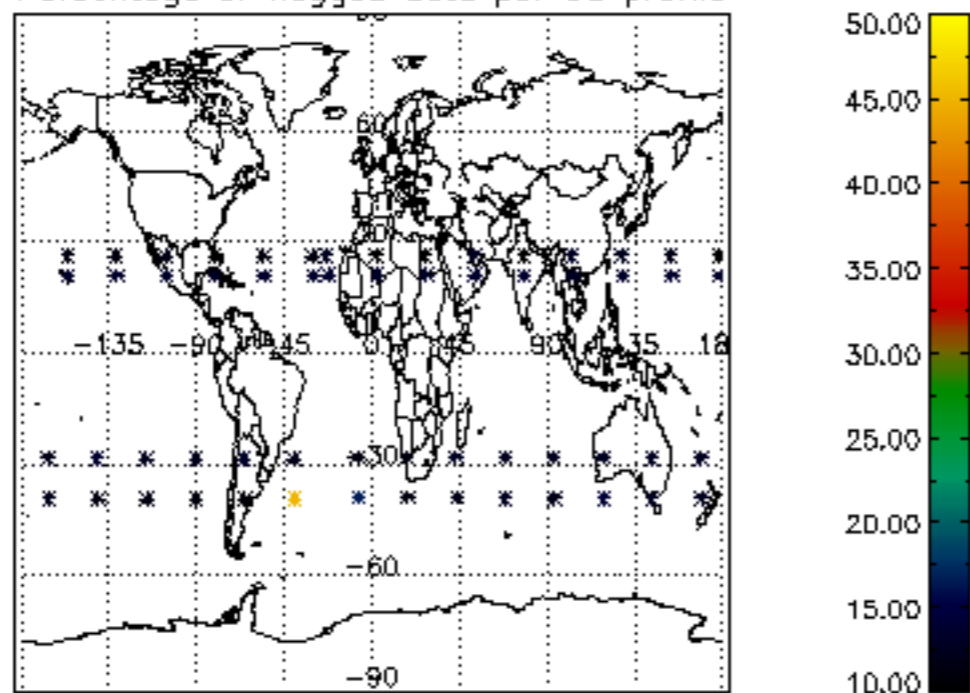
6. Auxiliary Data Files used for the production reported in section 2

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.

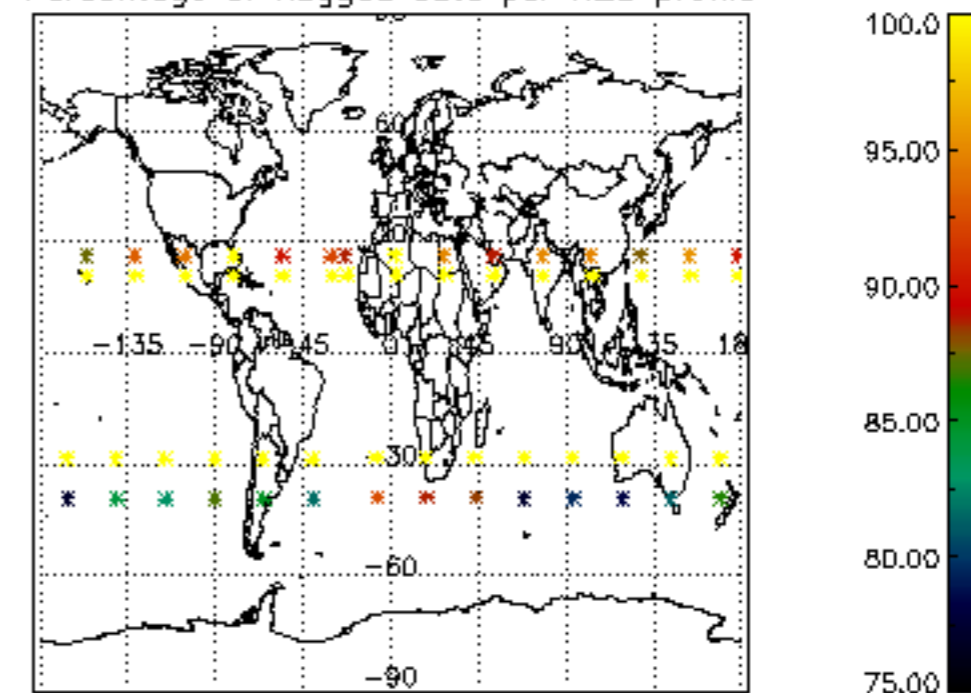
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	03-OCT-2006 00:12:43
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	03-OCT-2006 00:12:43
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	03-OCT-2006 00:12:43



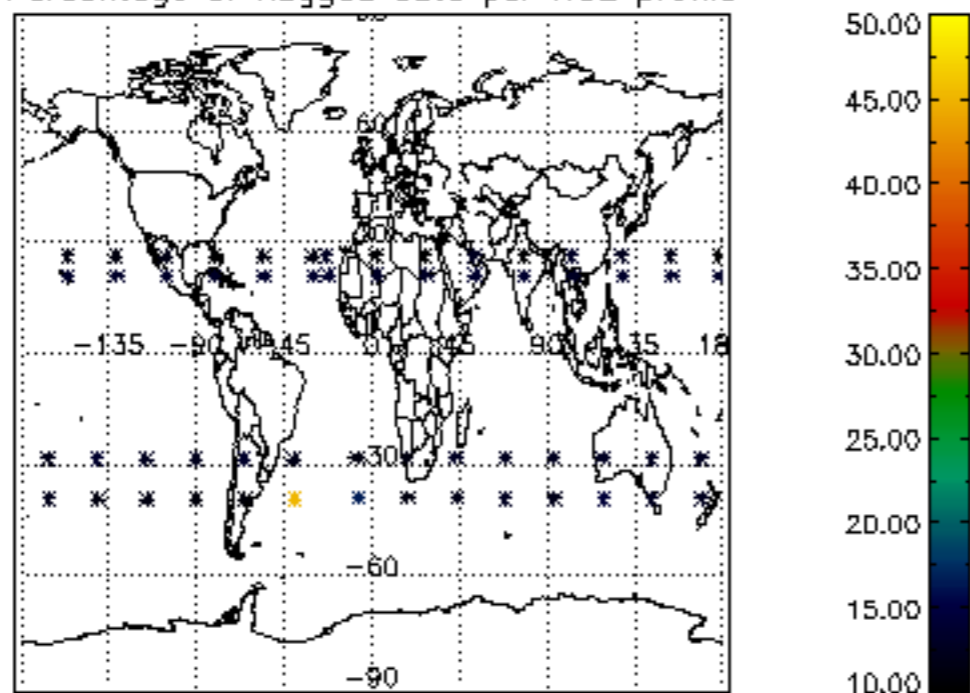
Percentage of flagged data per D3 profile



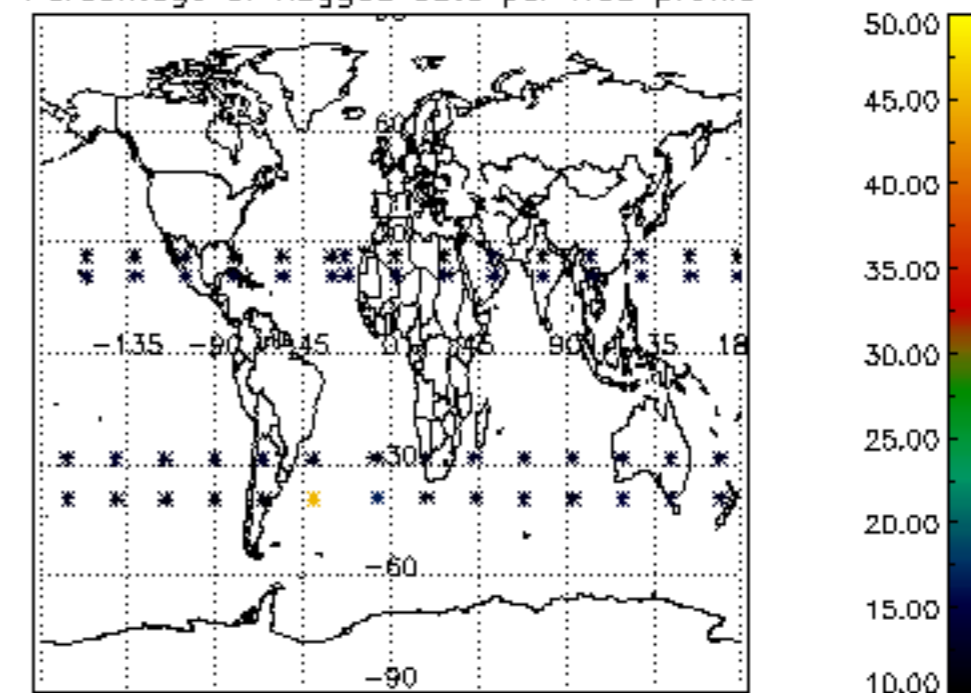
Percentage of flagged data per H2O profile

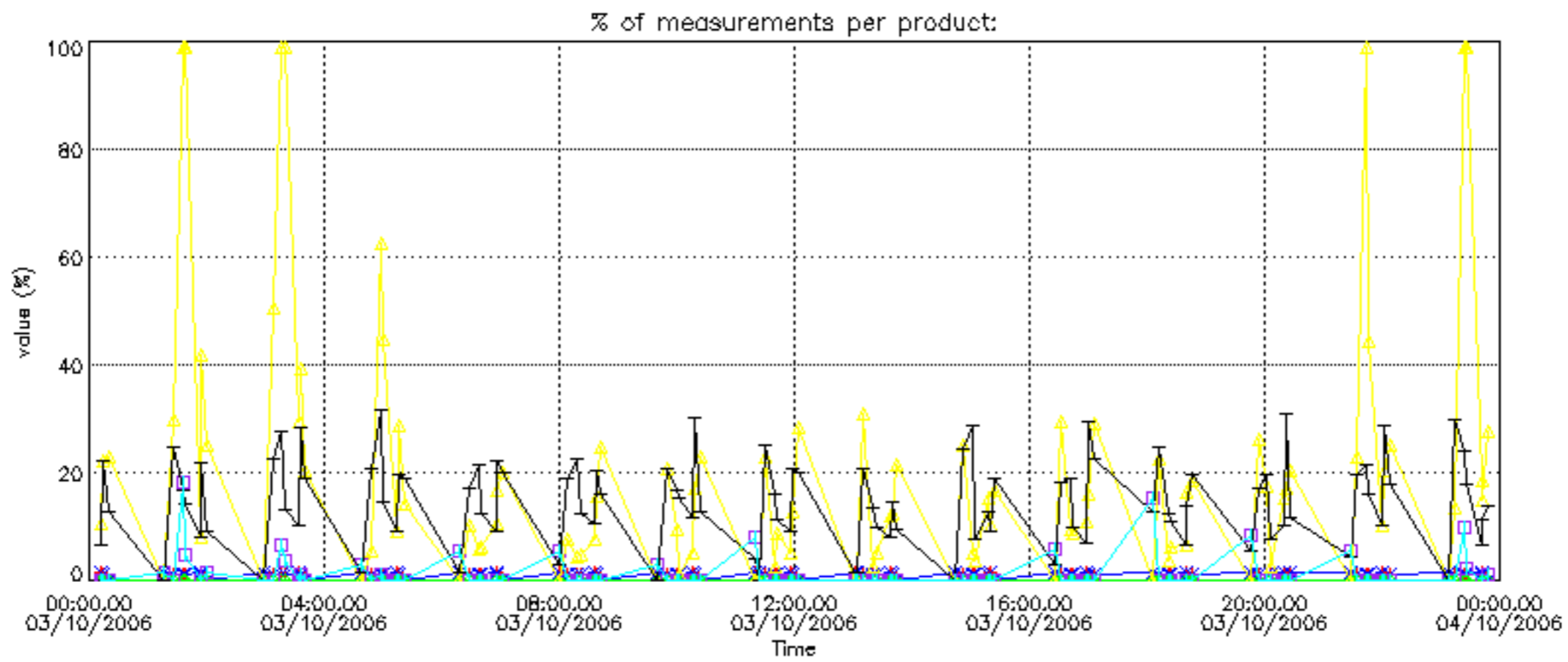


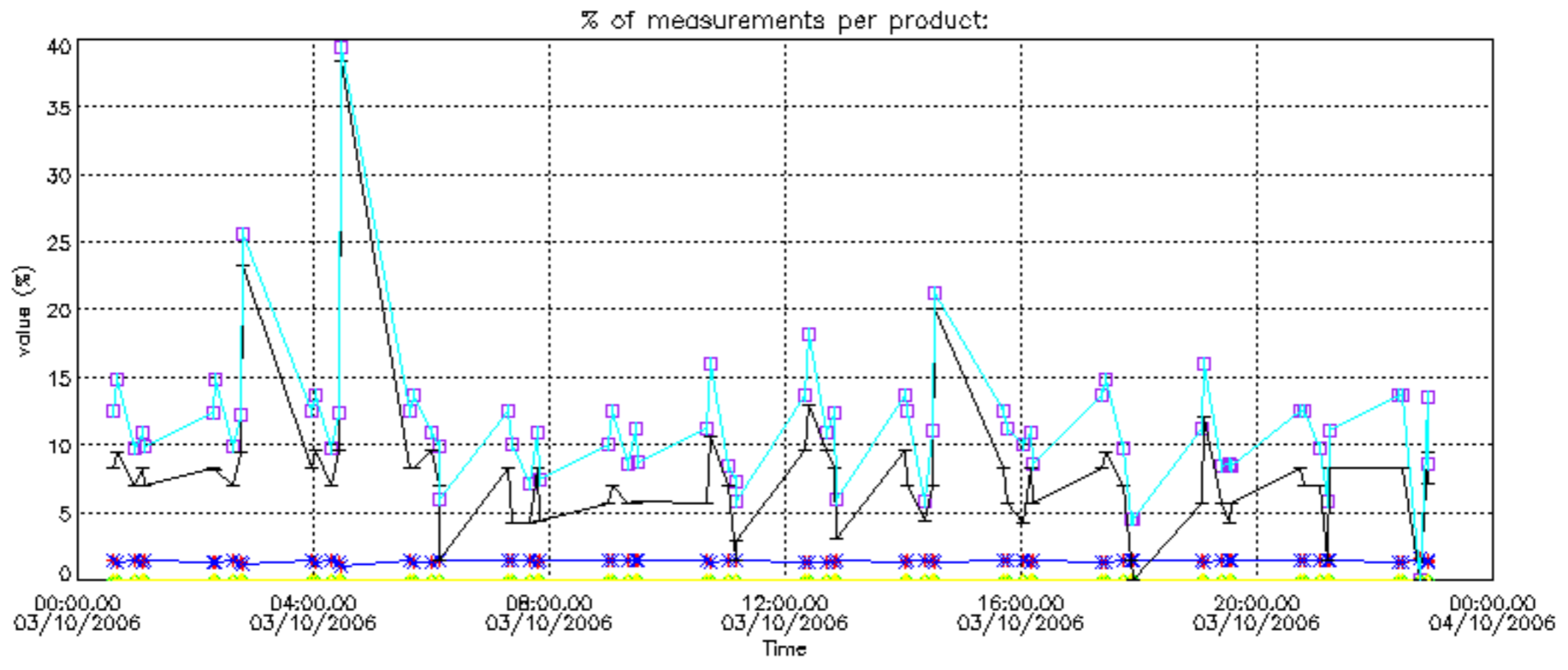
Percentage of flagged data per NO2 profile



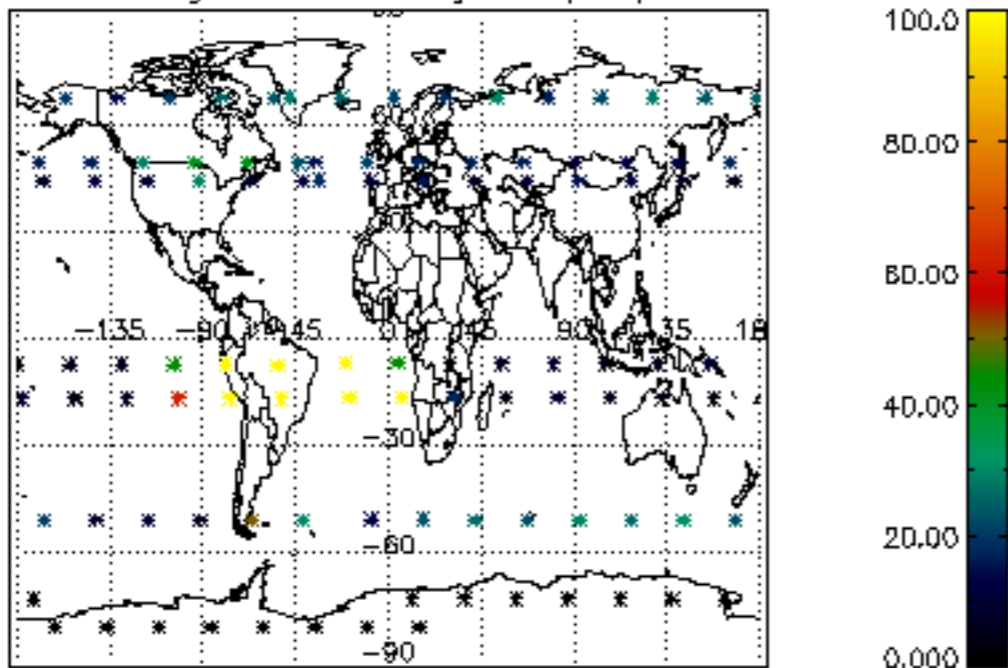
Percentage of flagged data per NO3 profile



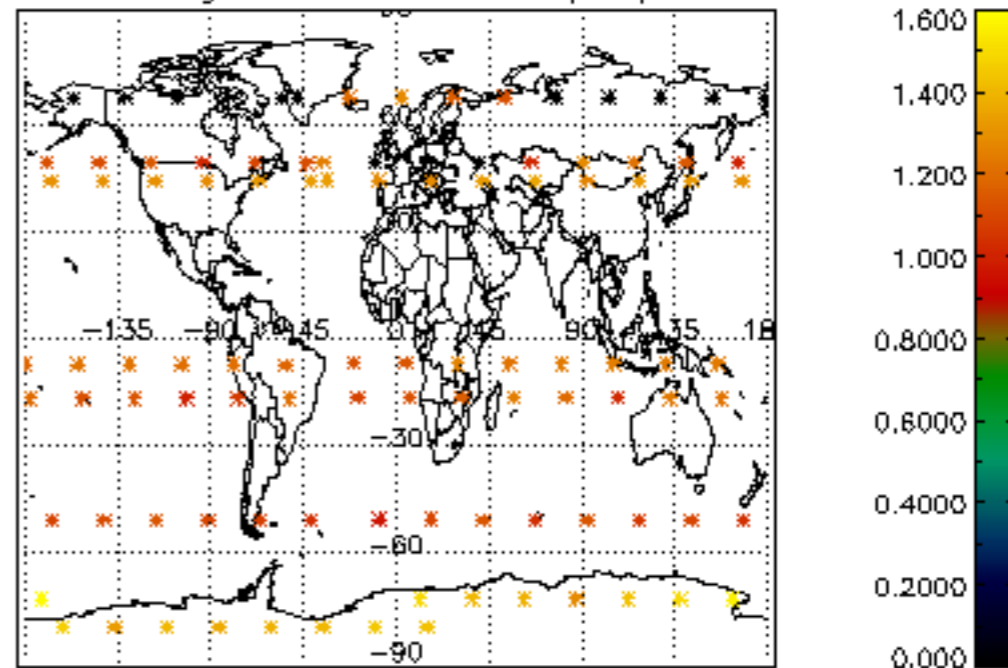




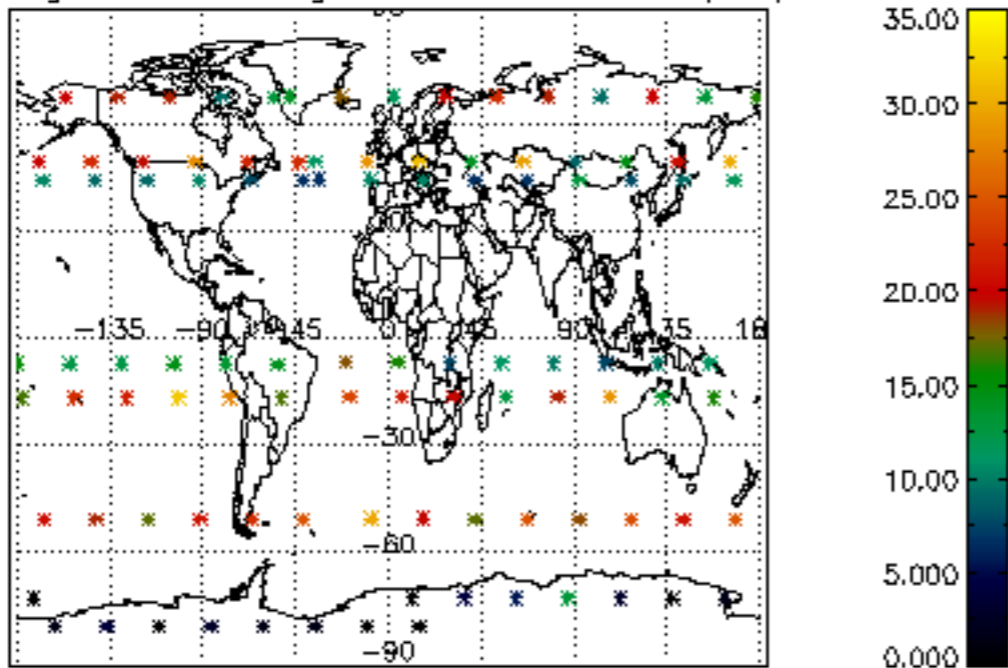
Percentage of cosmic ray hits per profile



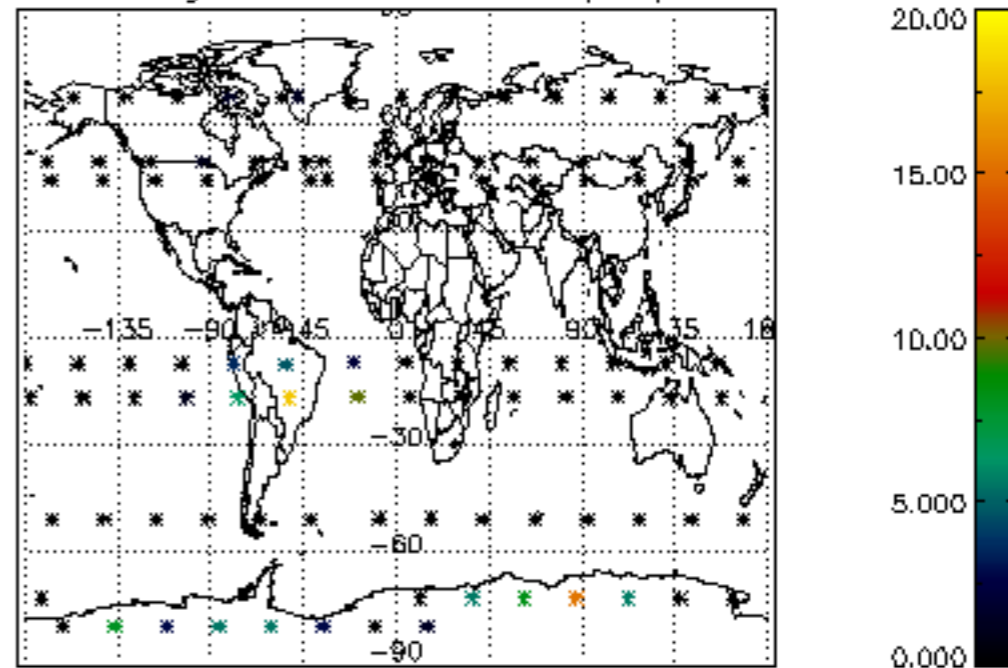
Percentage of datation errors per profile



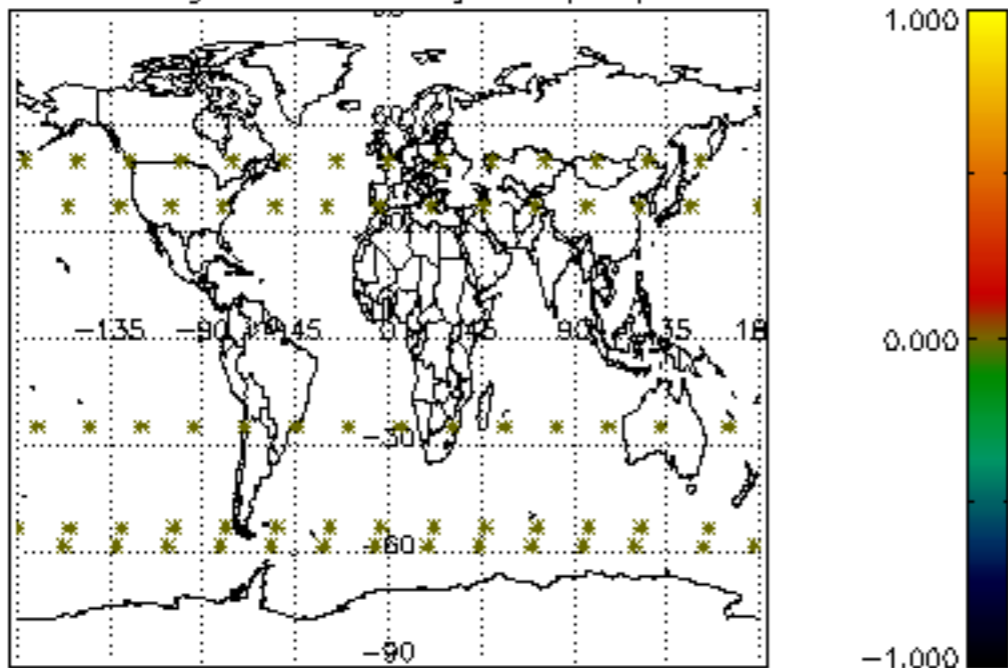
Percentage of star falling outside central band per profile



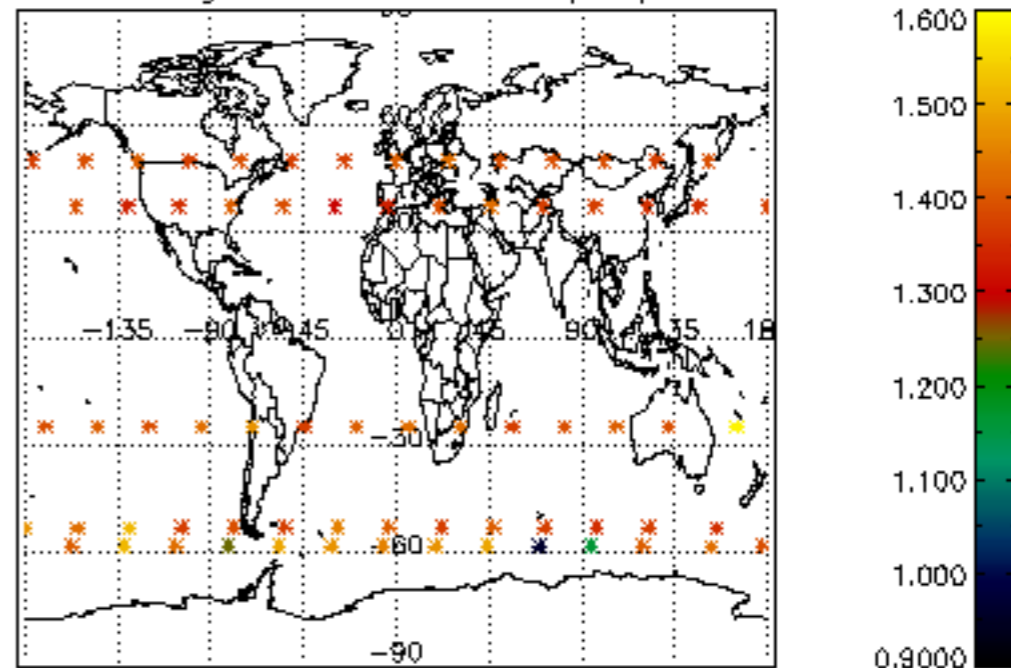
Percentage of saturation errors per profile



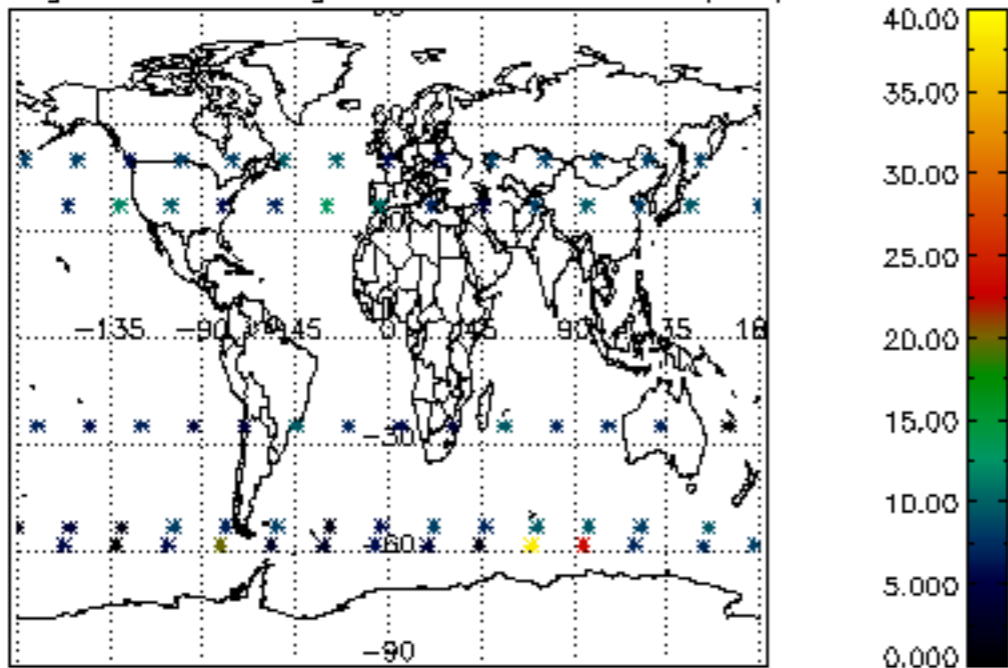
Percentage of cosmic ray hits per profile



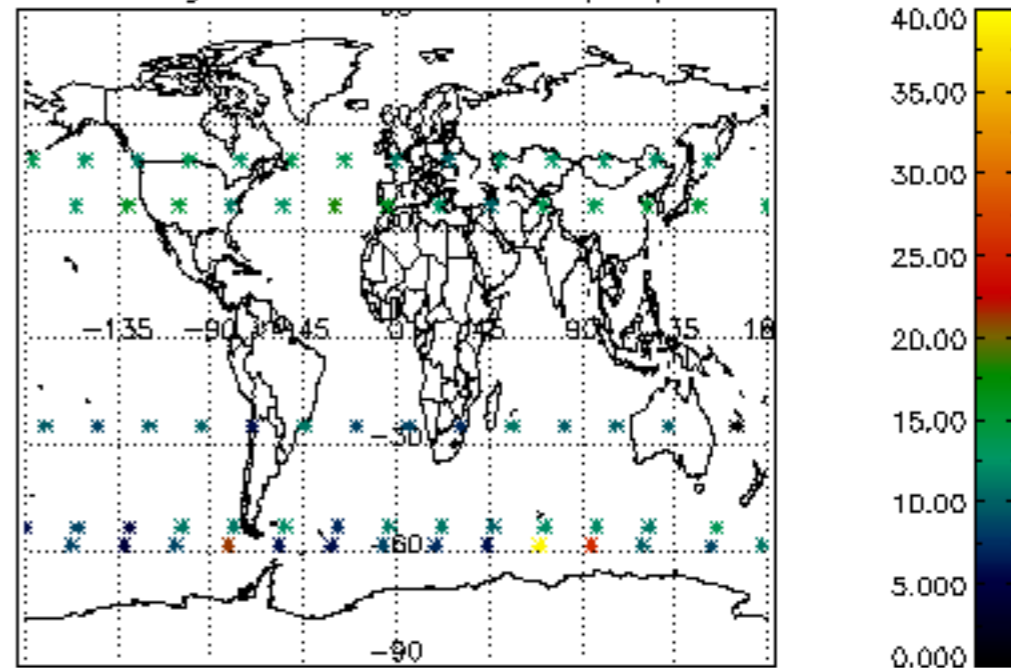
Percentage of datation errors per profile

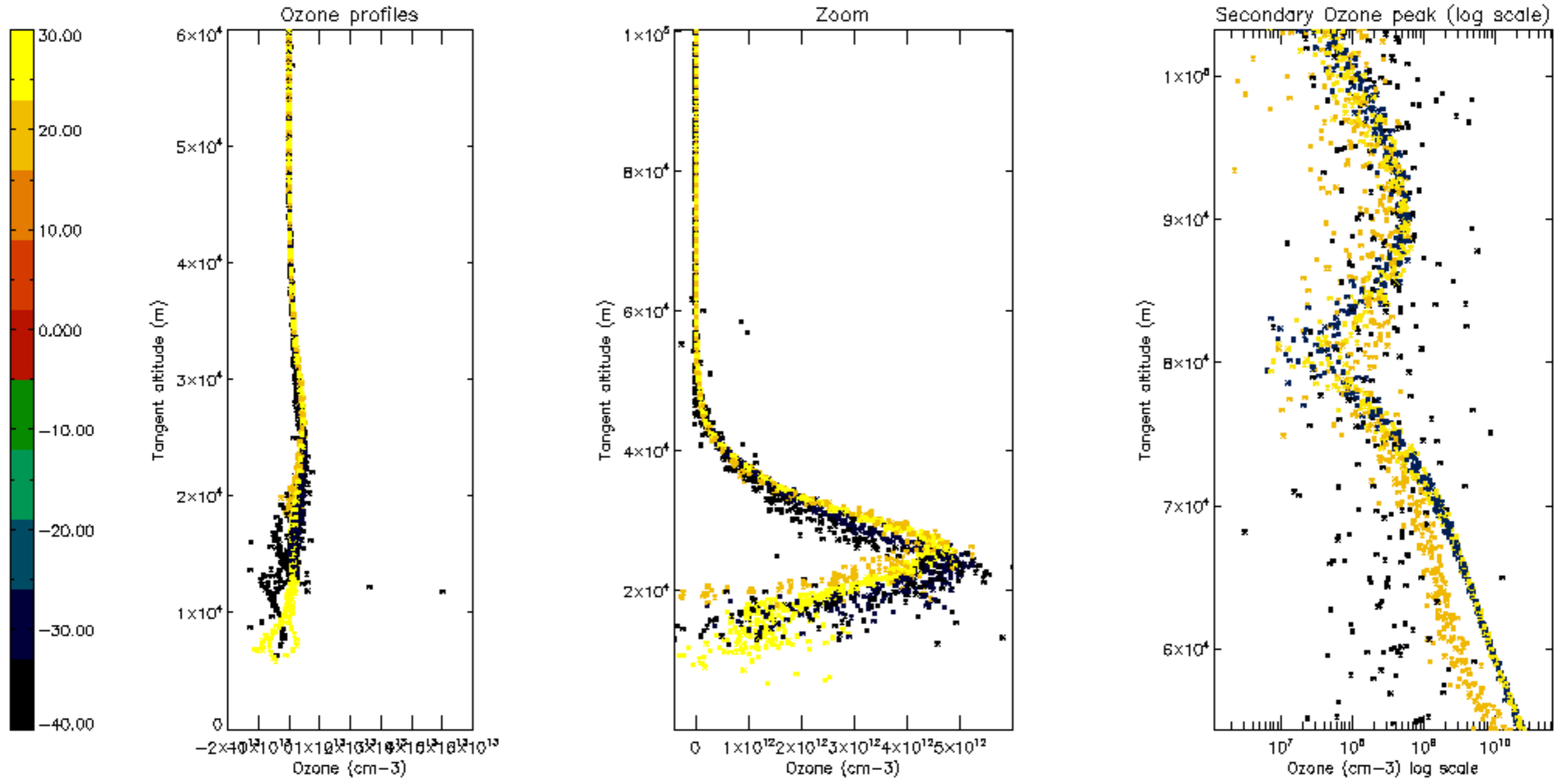


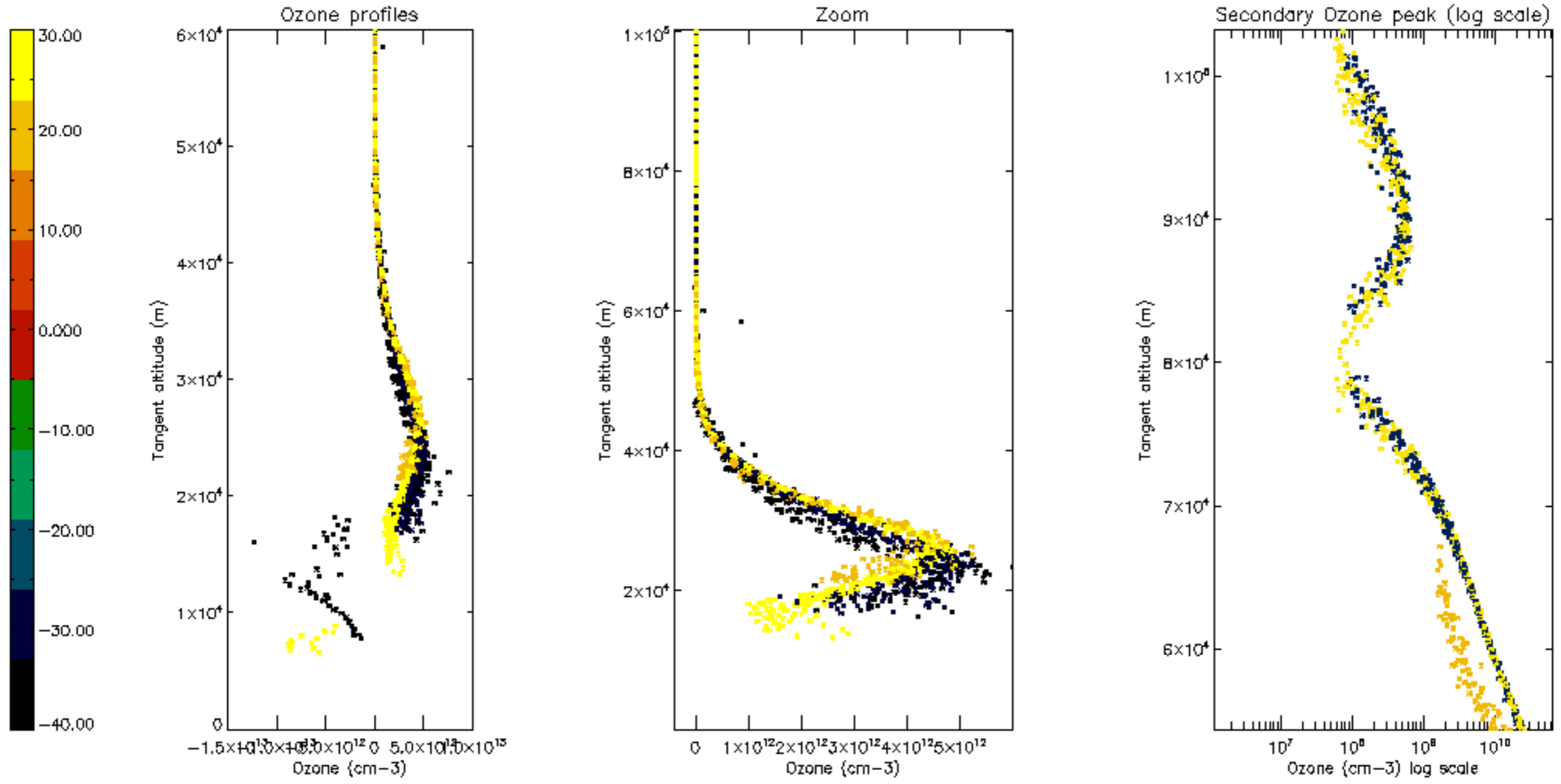
Percentage of star falling outside central band per profile

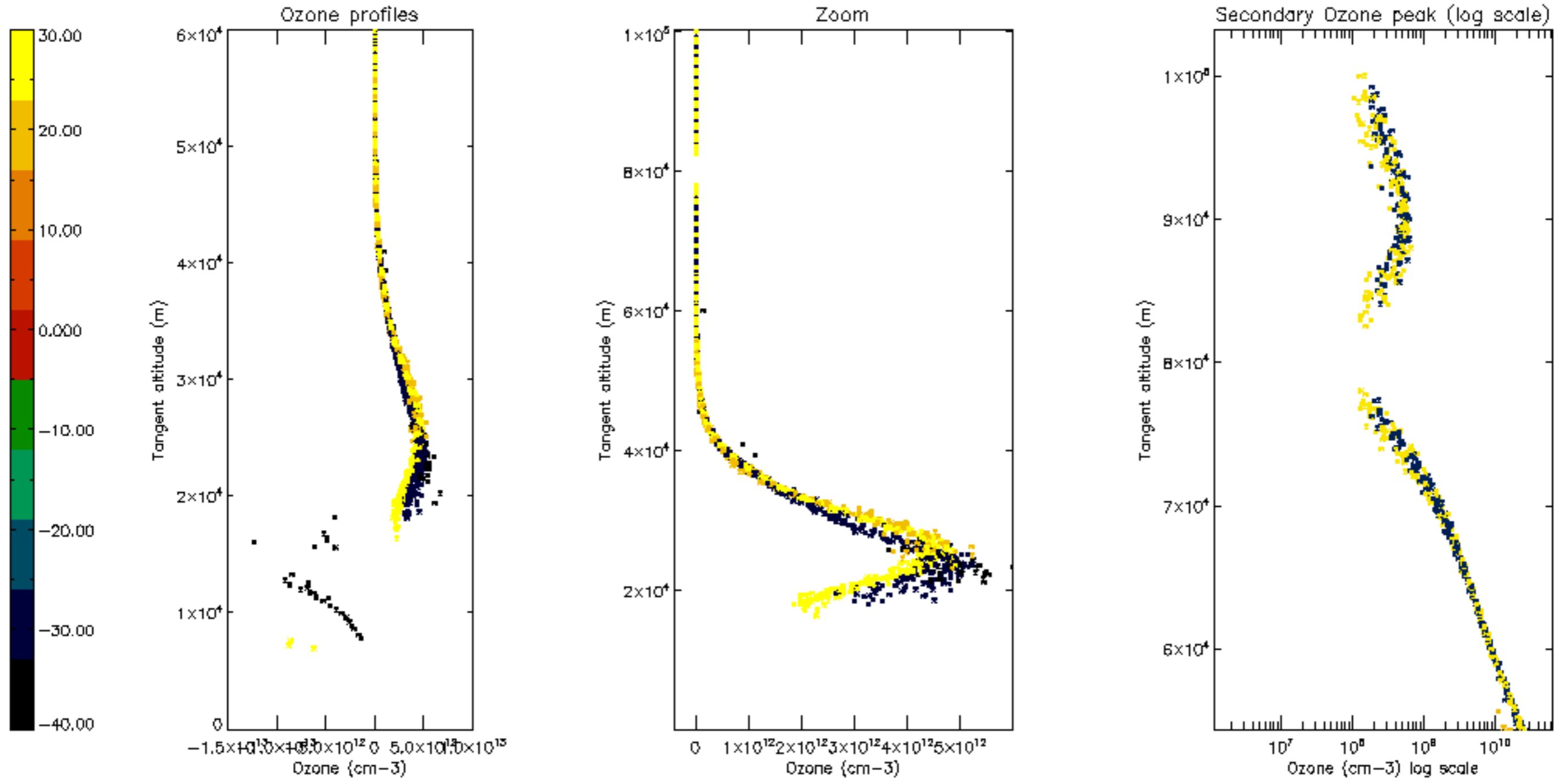


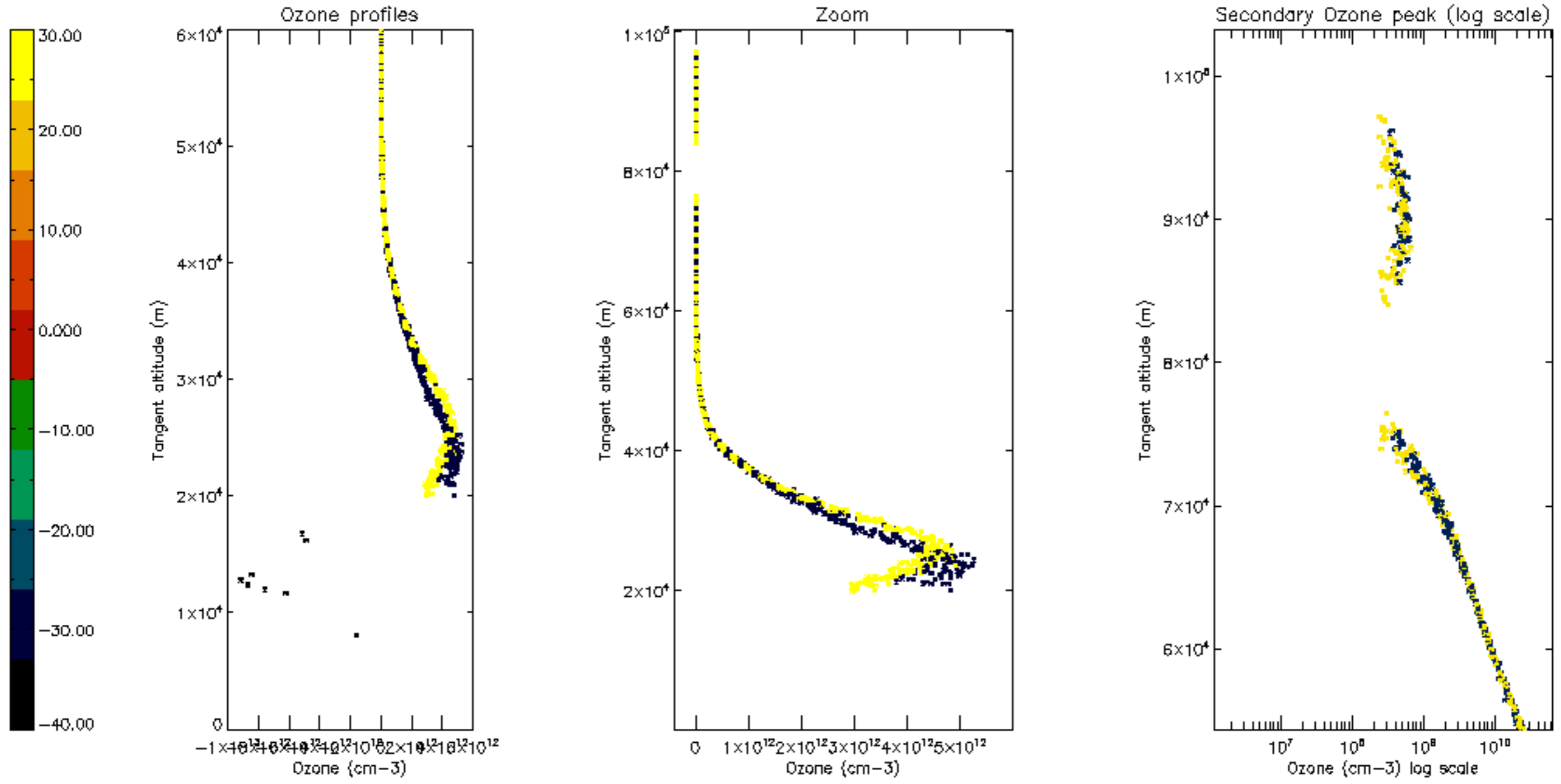
Percentage of saturation errors per profile

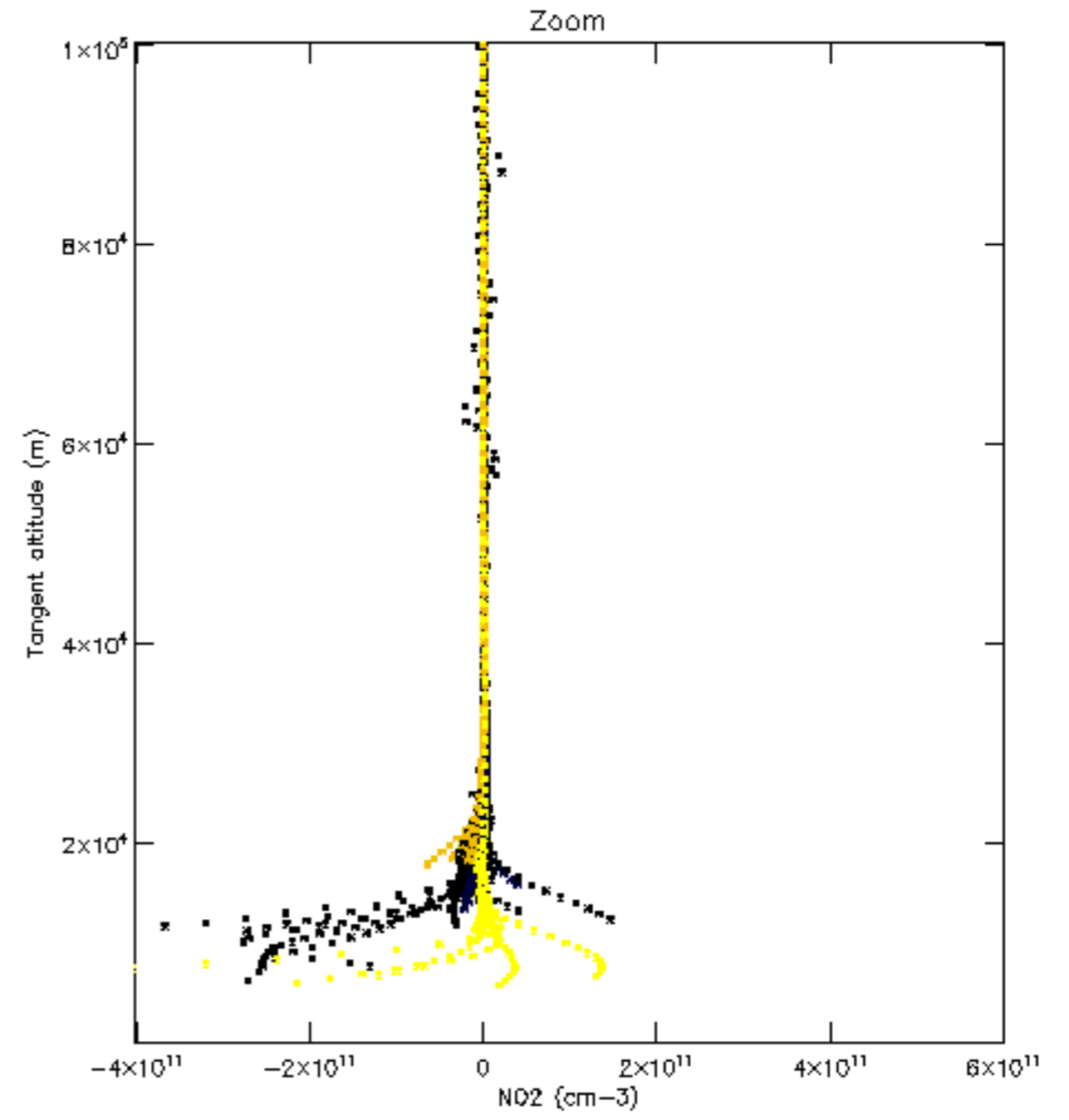
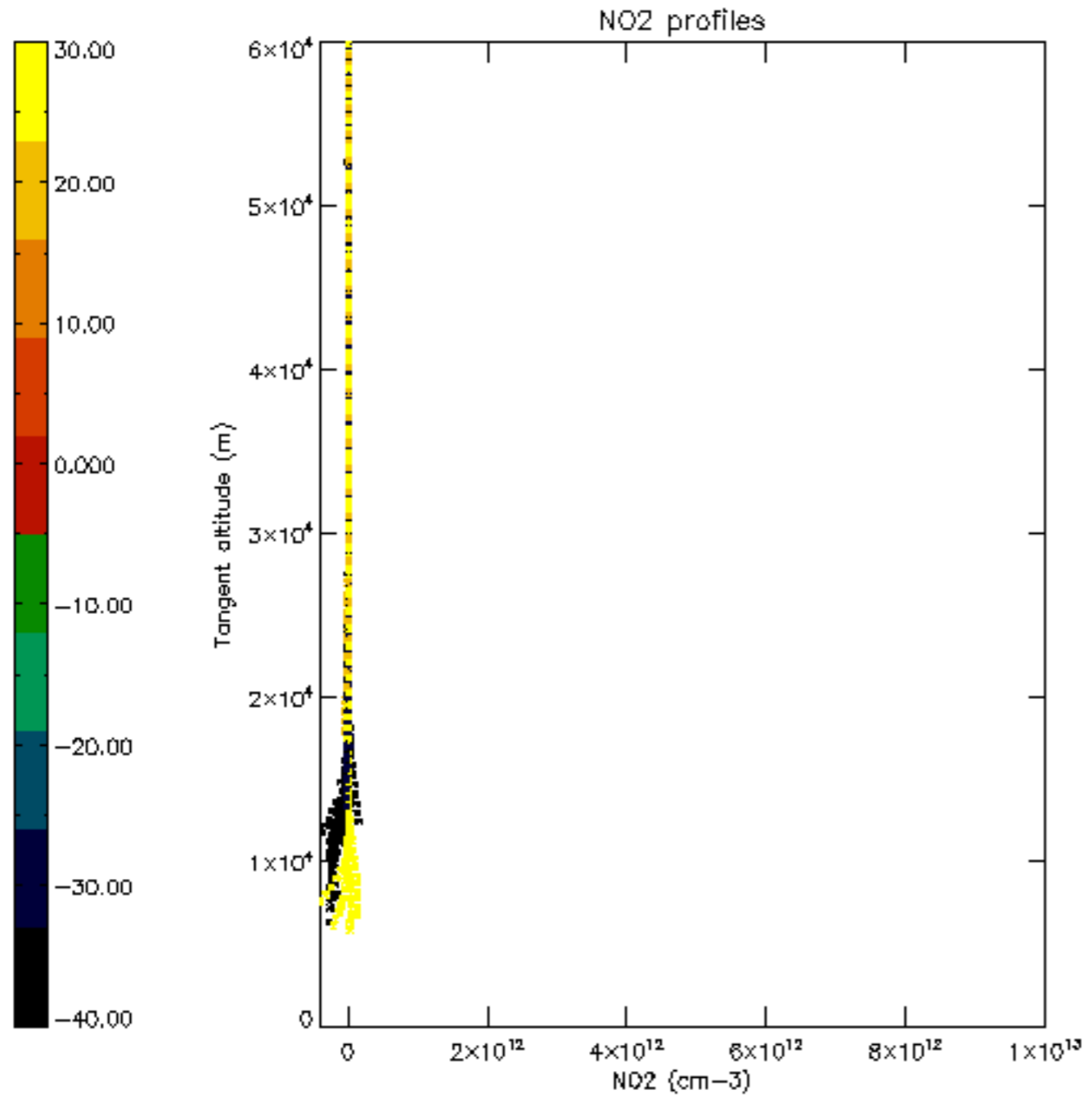


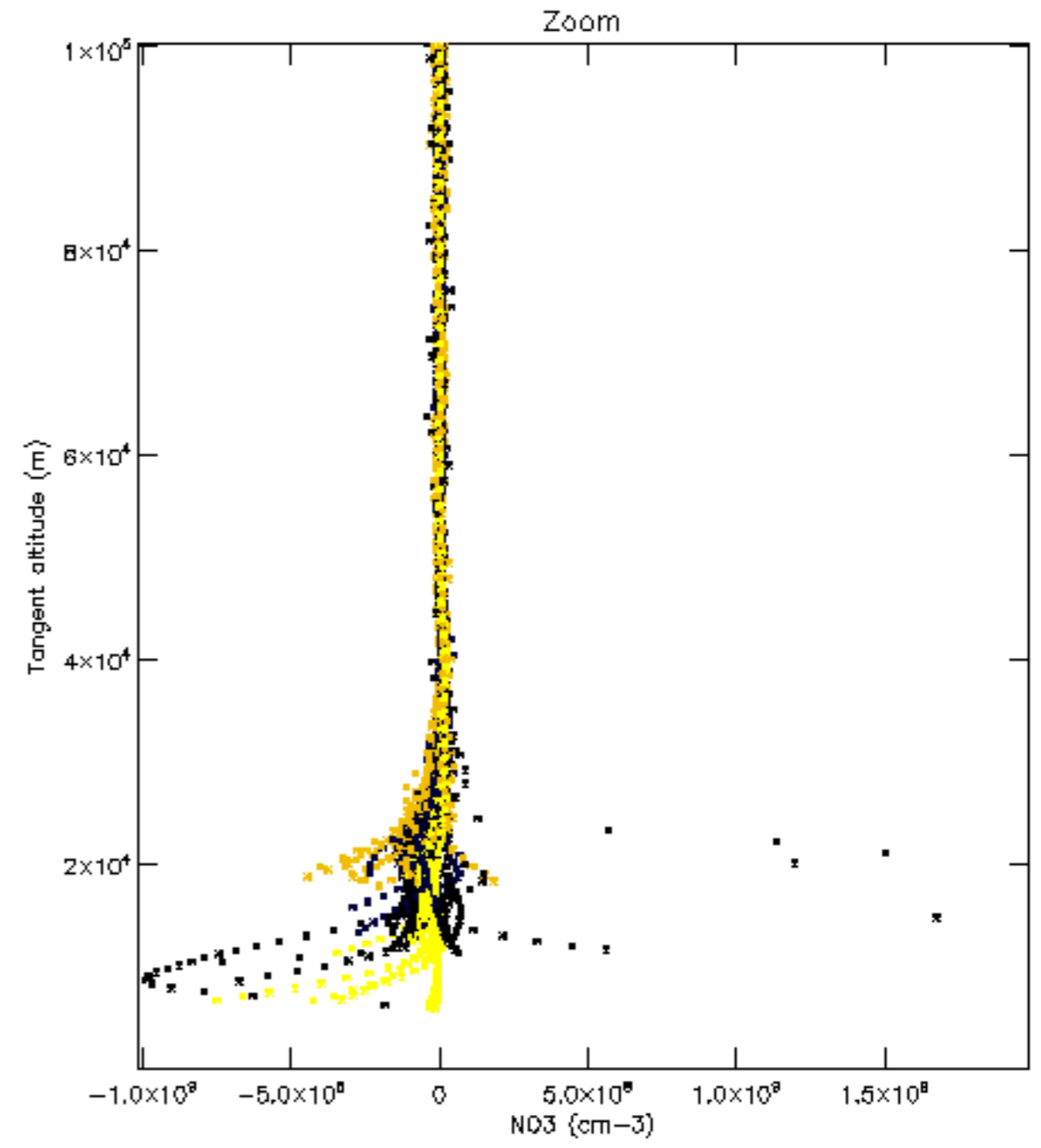
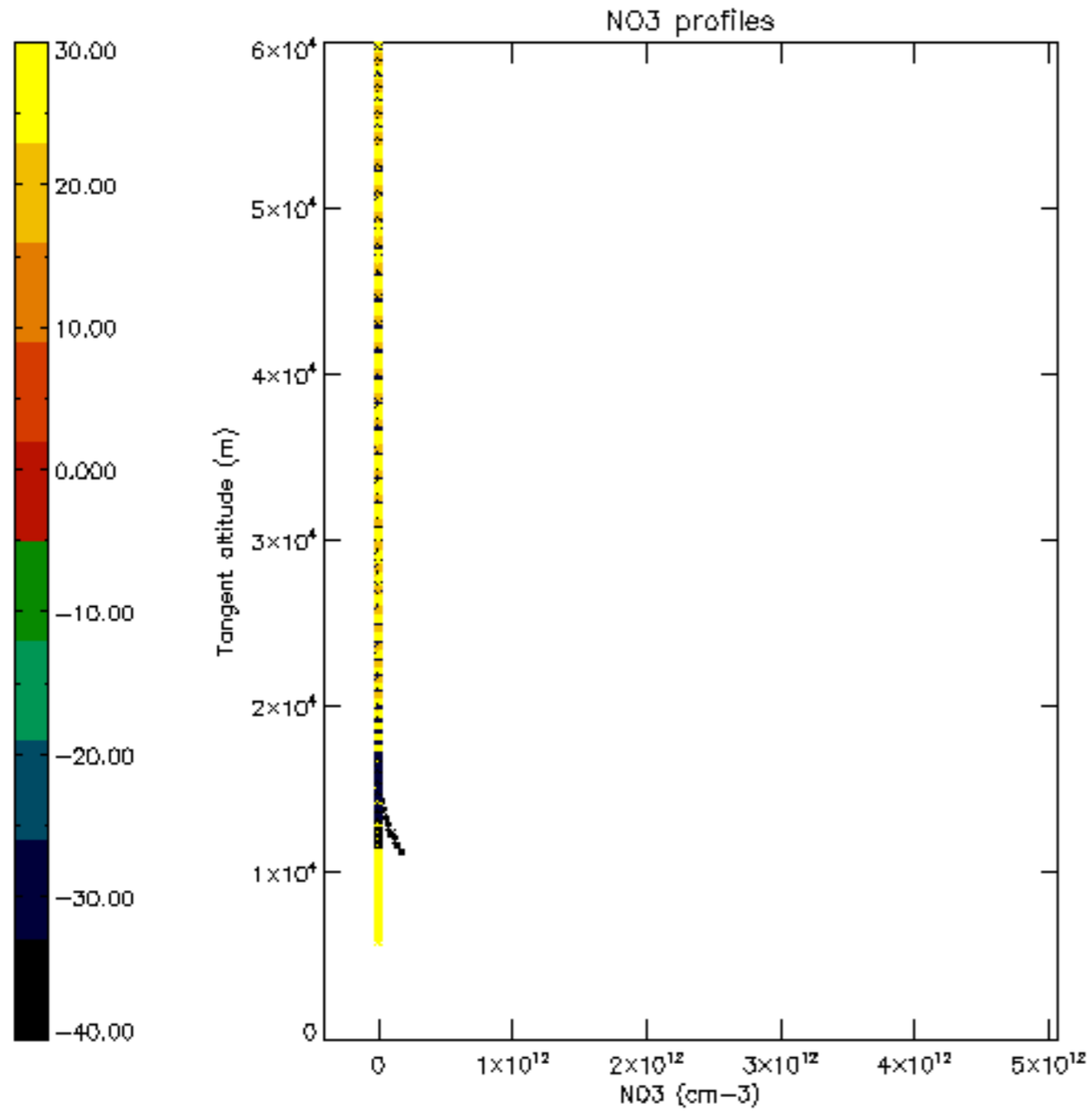


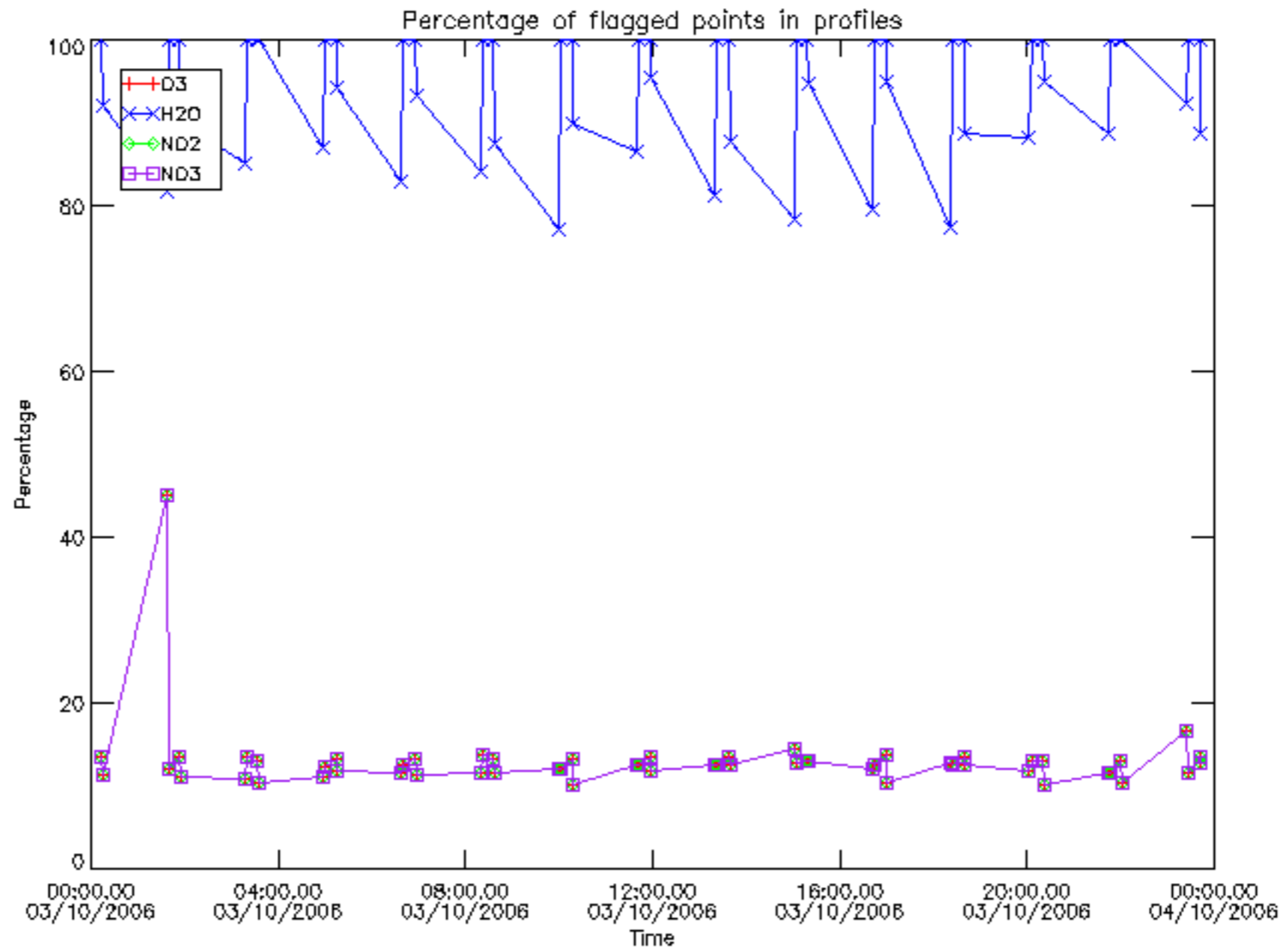




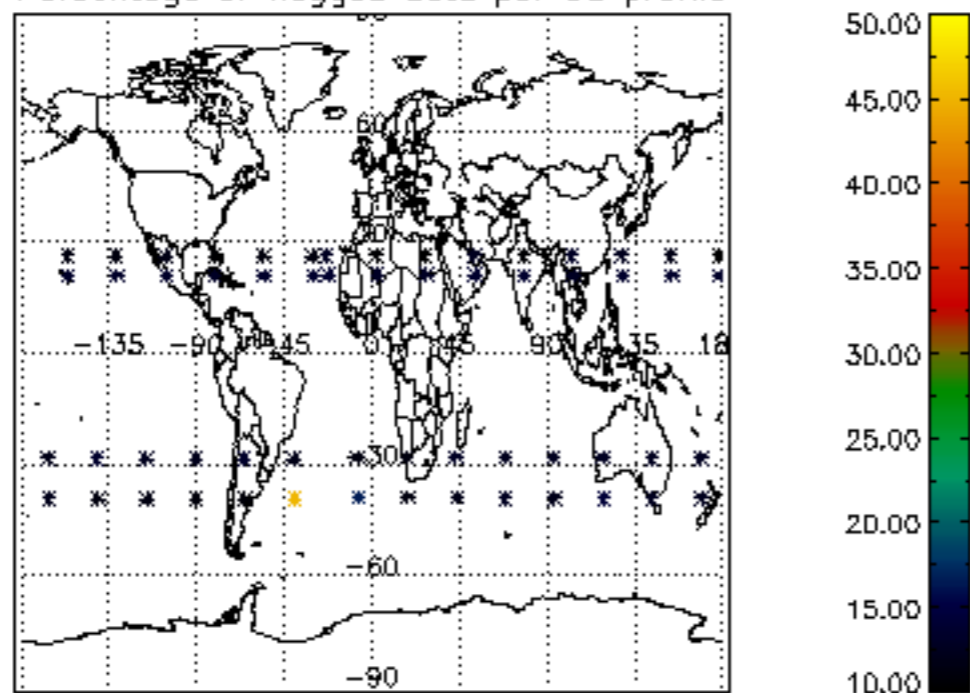




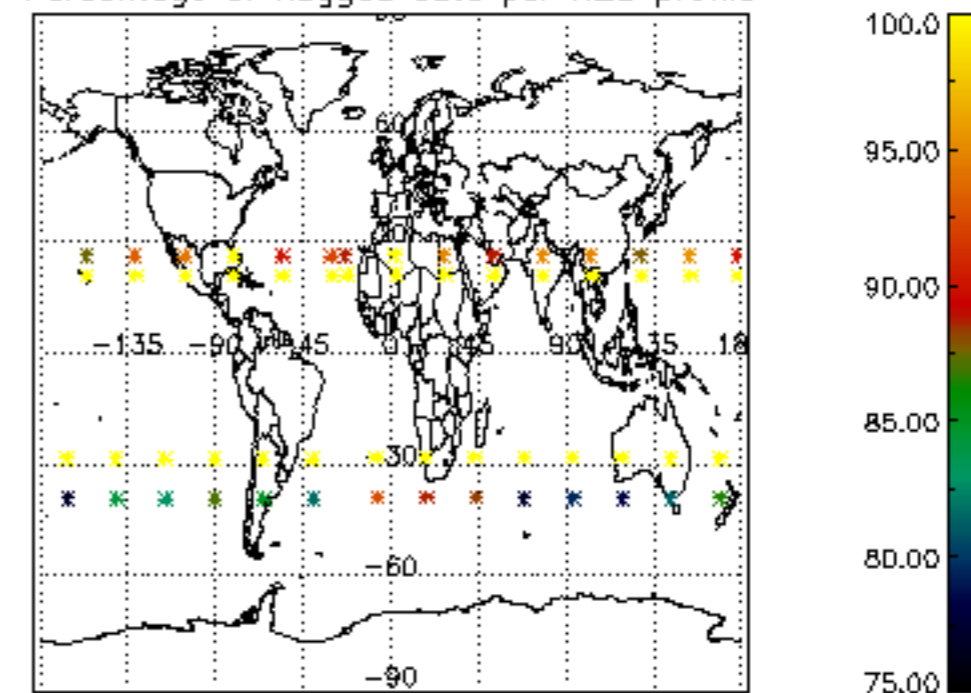




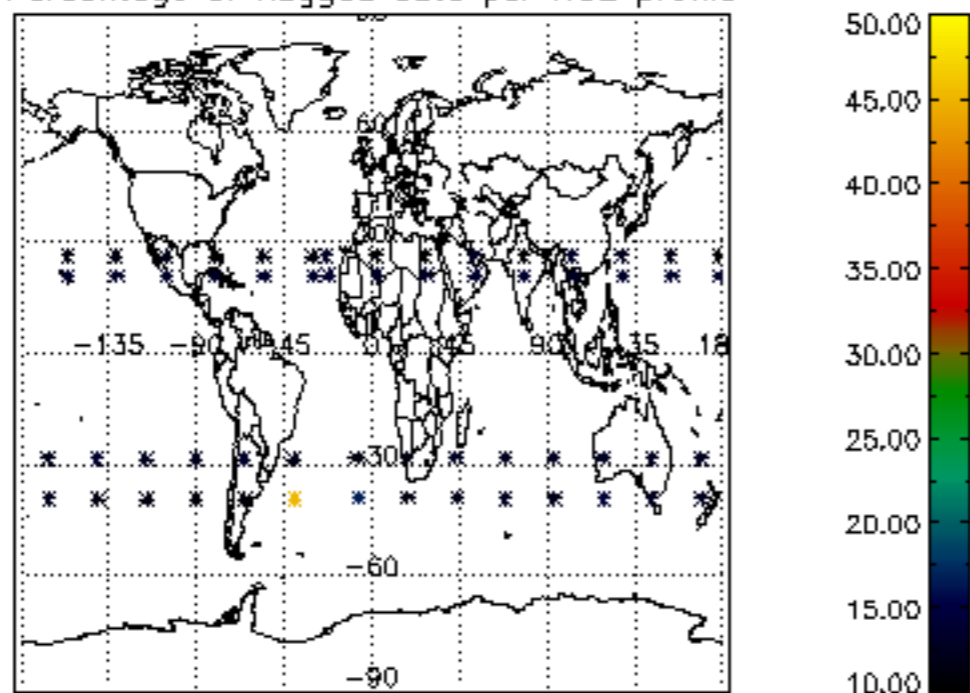
Percentage of flagged data per D3 profile



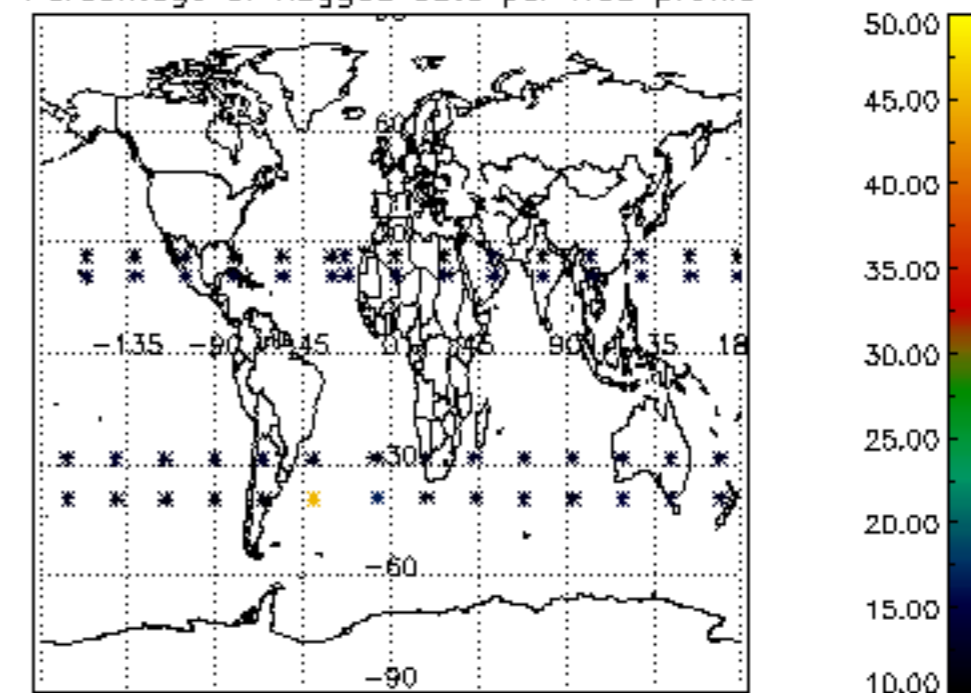
Percentage of flagged data per H2O profile

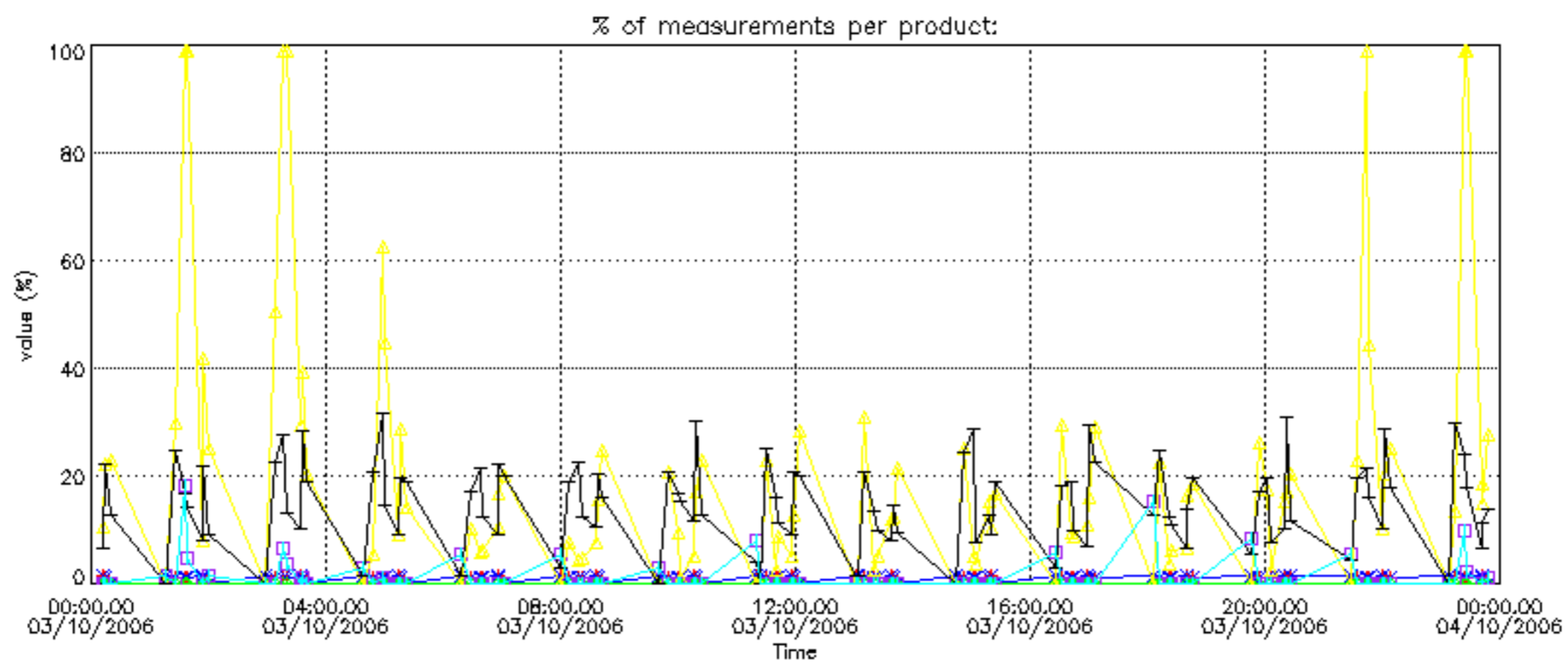
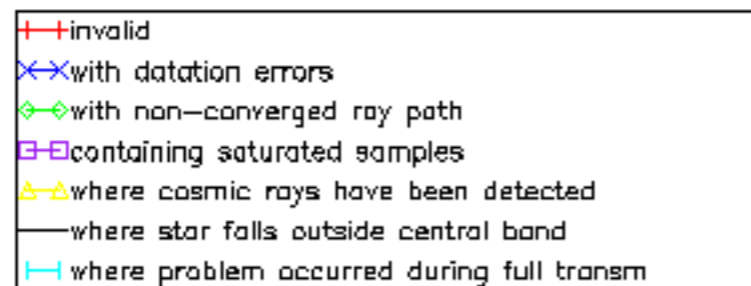


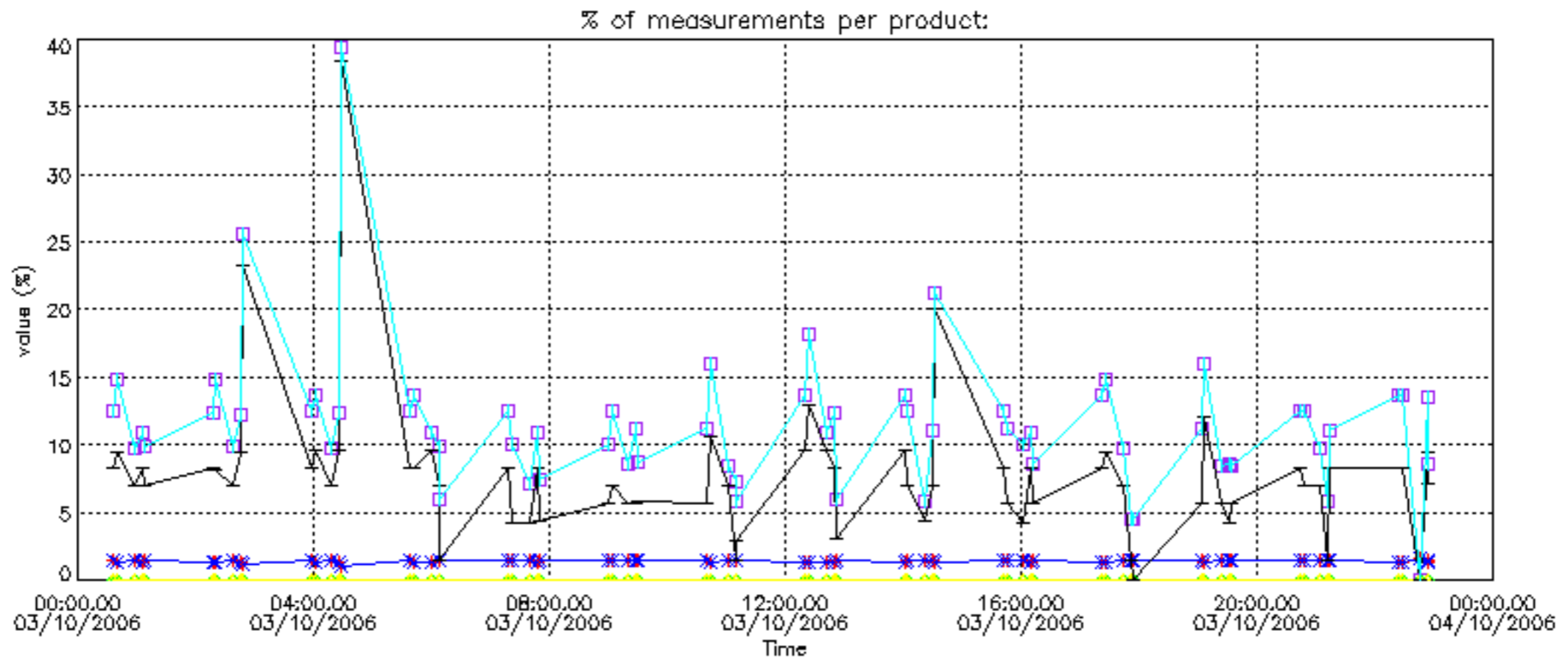
Percentage of flagged data per NO2 profile



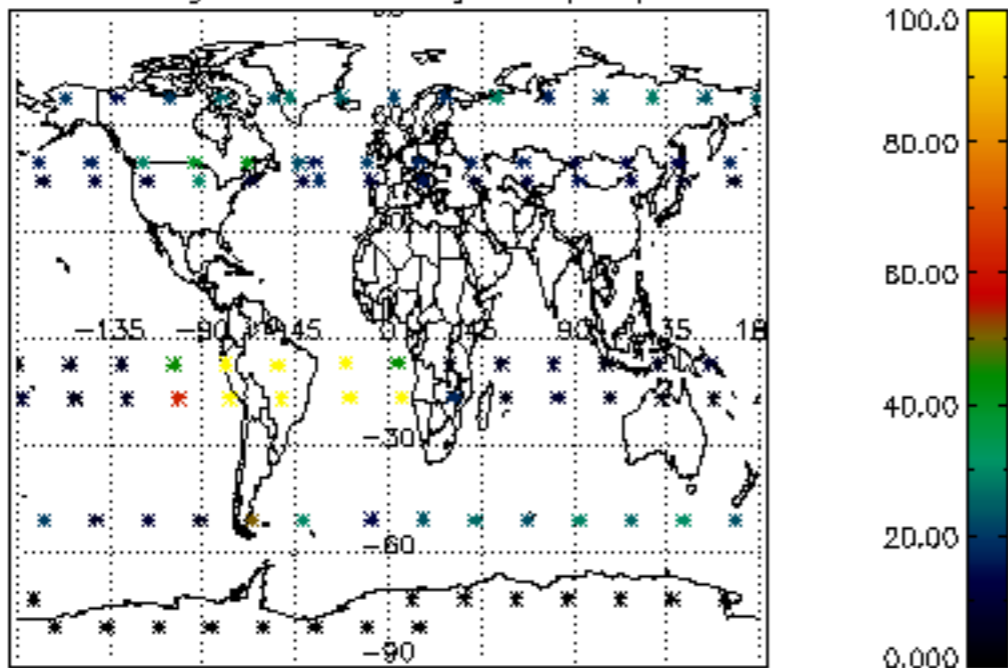
Percentage of flagged data per NO3 profile



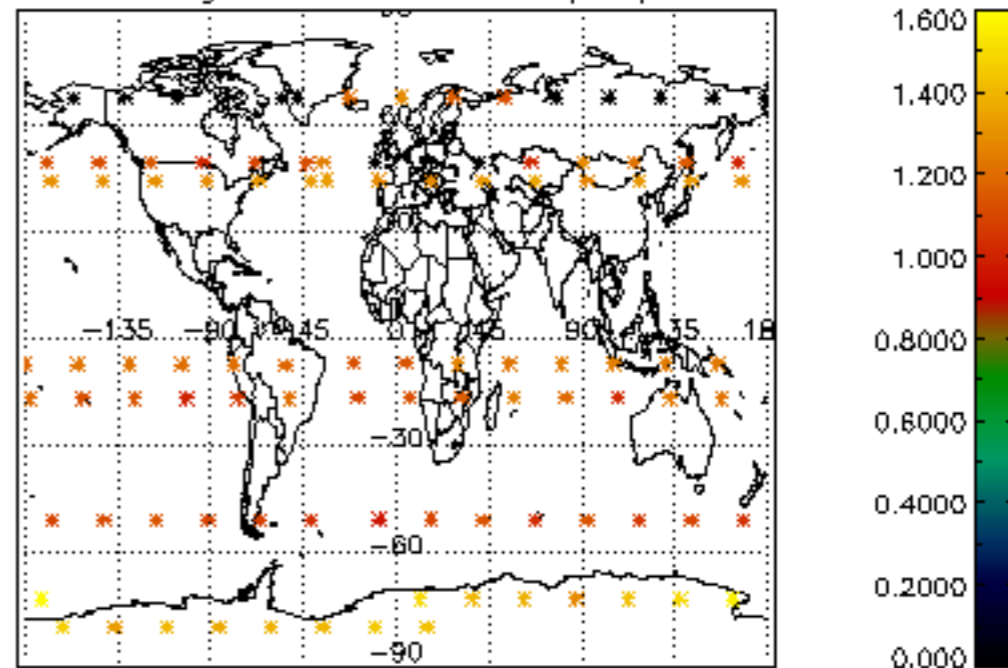




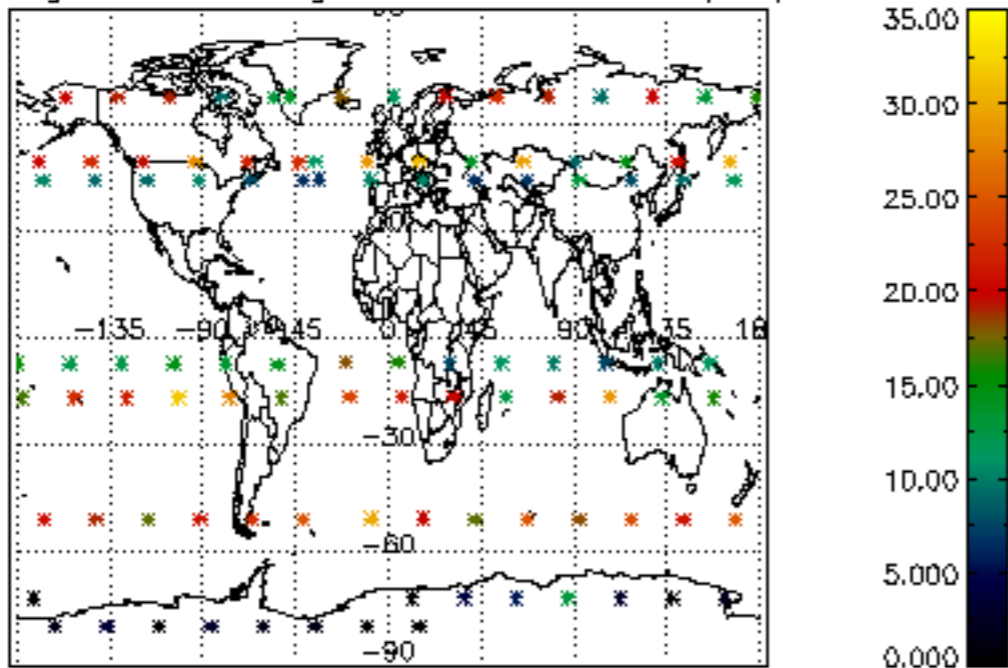
Percentage of cosmic ray hits per profile



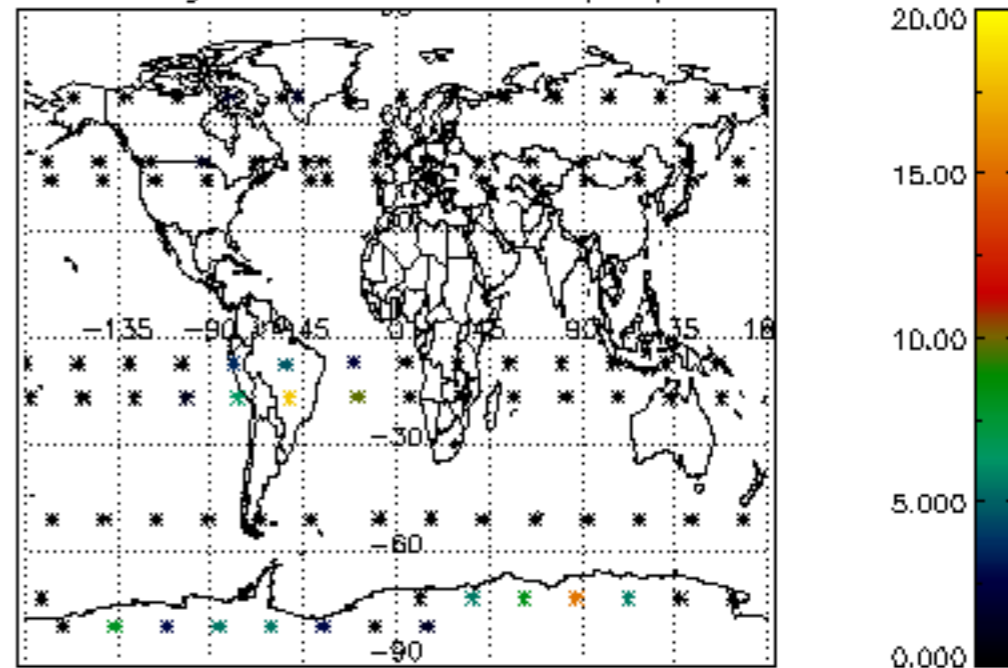
Percentage of datation errors per profile



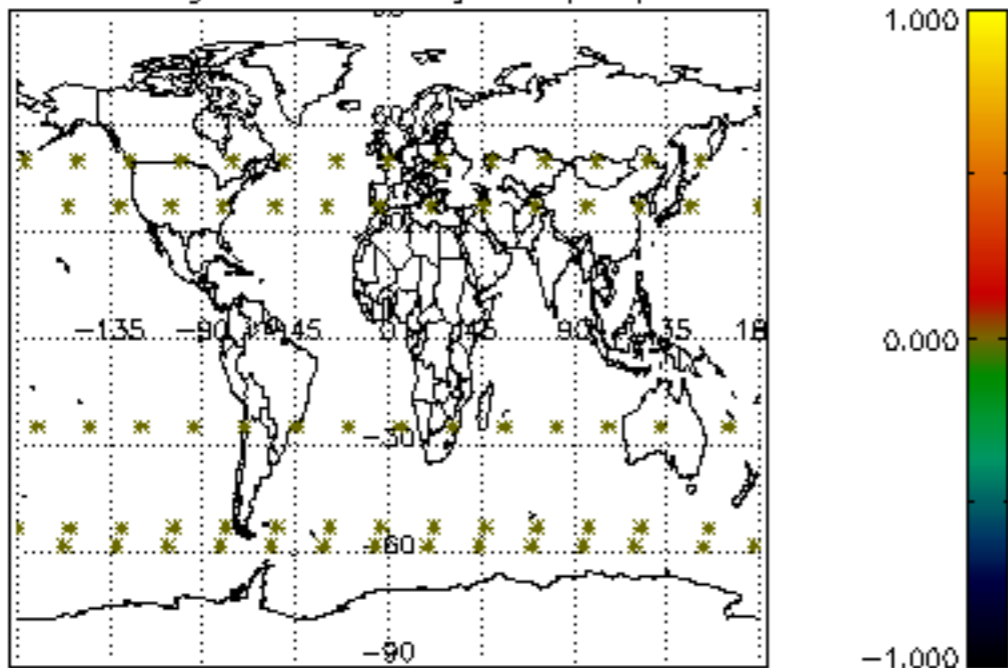
Percentage of star falling outside central band per profile



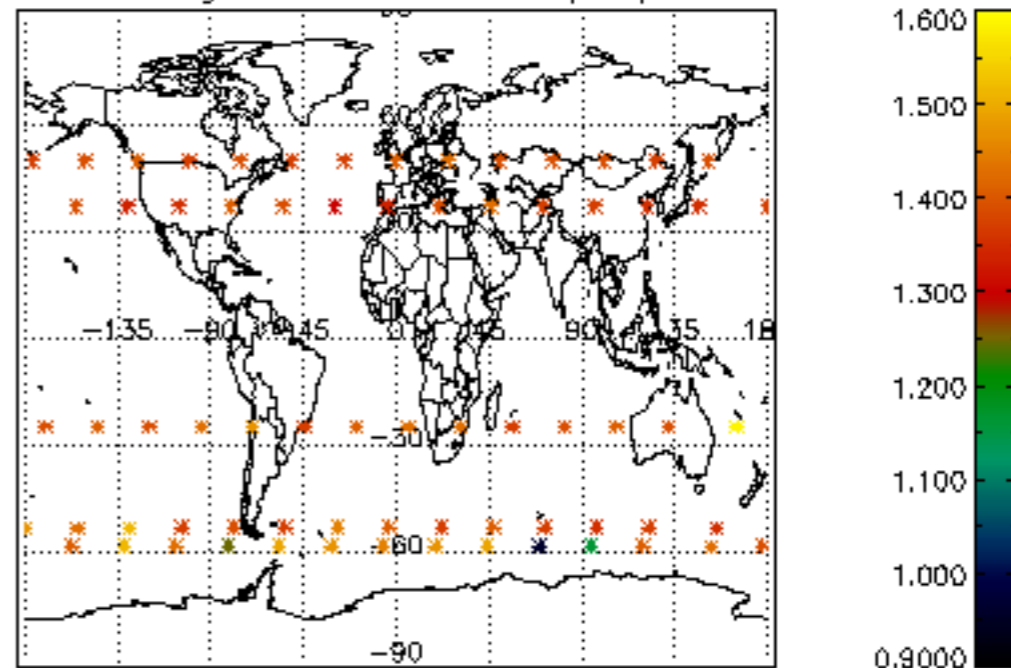
Percentage of saturation errors per profile



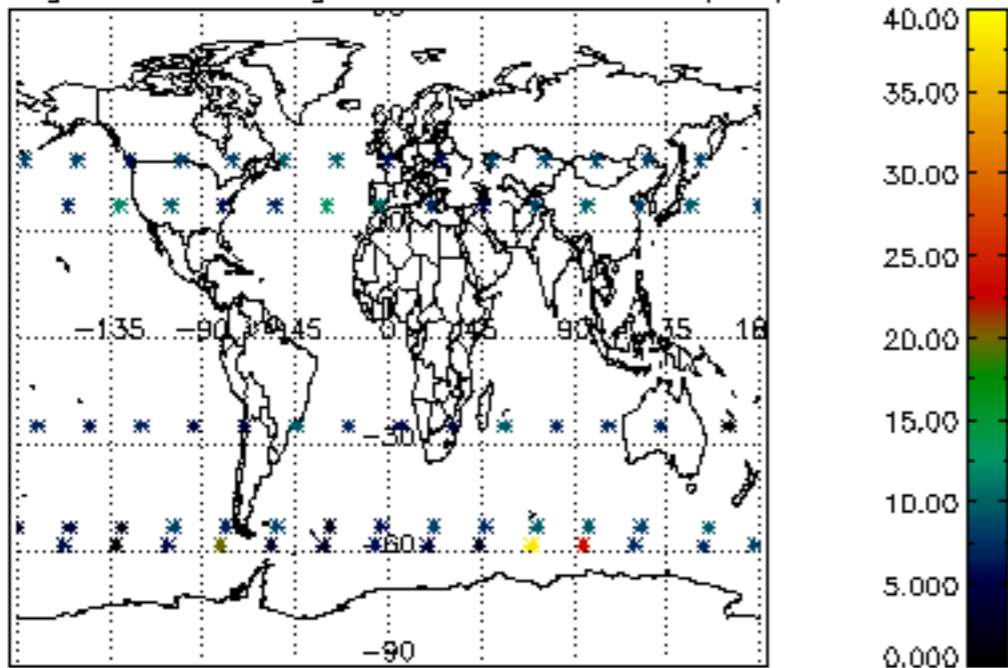
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

