

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	18APR2013 10:26:39
Data source version	GOMOS/6.01
Start time of products	12-08-2005 (12AUG2005 00:00:00)
Stop time of products	13-08-2005 (13AUG2005 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	62
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

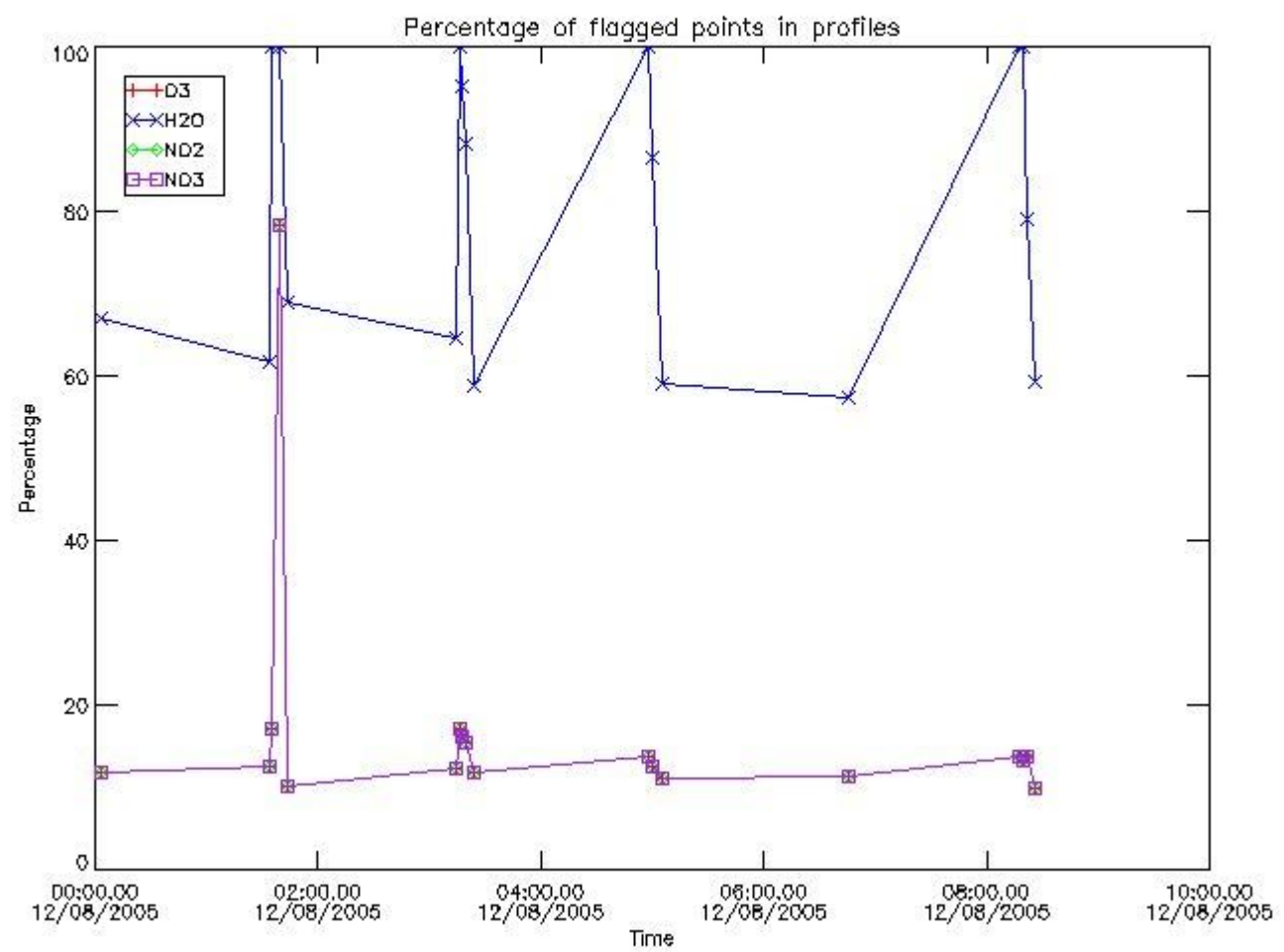
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20050812_000303_000000522039_00445_18034_5797.N1	12-AUG-2005 00:03:03	Dark	52.000	2	Alp Car	-0.73600	7000.0	104	18034	No
2	GOM_NL__2PRFIN20050812_002155_000000422039_00446_18035_6062.N1	12-AUG-2005 00:21:55	Straylight	42.000	45	Alp Pav	1.9400	26000.	84	18035	No
3	GOM_NL__2PRFIN20050812_003008_000000432039_00446_18035_6063.N1	12-AUG-2005 00:30:08	Bright	43.000	103	38Zet Sgr	2.6000	9700.0	86	18035	No
4	GOM_NL__2PRFIN20050812_003232_000000362039_00446_18035_6064.N1	12-AUG-2005 00:32:32	Bright	36.000	155	41Pi Sgr	2.9000	6600.0	72	18035	No
5	GOM_NL__2PRFIN20050812_004029_000000362039_00446_18035_6065.N1	12-AUG-2005 00:40:29	Bright	35.500	11	53Alp Aql	0.76500	8000.0	71	18035	No
6	GOM_NL__2PRFIN20050812_004213_000000352039_00446_18035_6066.N1	12-AUG-2005 00:42:13	Bright	34.500	168	17Zet Aql	2.9860	11000.	69	18035	No
7	GOM_NL__2PRFIN20050812_004922_000000382039_00446_18035_6067.N1	12-AUG-2005 00:49:22	Bright	38.000	5	3Alp Lyr	0.033000	11000.	76	18035	No
8	GOM_NL__2PRFIN20050812_005044_000000352039_00446_18035_6068.N1	12-AUG-2005 00:50:44	Bright	35.000	144	18Del Cyg	2.8600	11000.	70	18035	No
9	GOM_NL__2PRFIN20050812_005323_000000392039_00446_18035_6069.N1	12-AUG-2005 00:53:23	Bright	39.000	69	33Gam Dra	2.2310	3800.0	78	18035	No
10	GOM_NL__2PRFIN20050812_005746_000000342039_00446_18035_6070.N1	12-AUG-2005 00:57:46	Bright	33.500	119	14Eta Dra	2.7270	4700.0	67	18035	No
11	GOM_NL__2PRFIN20050812_010140_000000352039_00446_18035_6071.N1	12-AUG-2005 01:01:40	Bright	35.000	60	7Bet UMi	2.0810	3950.0	70	18035	No
12	GOM_NL__2PRFIN20050812_010328_000000362039_00446_18035_6072.N1	12-AUG-2005 01:03:28	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	18035	No
13	GOM_NL__2PRFIN20050812_013341_000000412039_00446_18035_6073.N1	12-AUG-2005 01:33:41	Dark	41.000	1	9Alp CMa	-1.4400	11000.	82	18035	No
14	GOM_NL__2PRFIN20050812_013523_000000392039_00446_18035_6074.N1	12-AUG-2005 01:35:23	Dark	38.500	179	24Omi2CMa	3.0320	24000.	77	18035	No
15	GOM_NL__2PRFIN20050812_013855_000000422039_00446_18035_6075.N1	12-AUG-2005 01:38:55	Dark	42.000	117	Pi Pup	2.7060	3800.0	84	18035	No
16	GOM_NL__2PRFIN20050812_014339_000000512039_00446_18035_6076.N1	12-AUG-2005 01:43:39	Dark	50.500	2	Alp Car	-0.73600	7000.0	101	18035	No
17	GOM_NL__2PRFIN20050812_020231_000000392039_00447_18036_6063.N1	12-AUG-2005 02:02:31	Straylight	39.000	45	Alp Pav	1.9400	26000.	78	18036	No
18	GOM_NL__2PRFIN20050812_021044_00000052039_00447_18036_6064.N1	12-AUG-2005 02:10:44	Straylight	5.0000	103	38Zet Sgr	2.6000	9700.0	10	18036	No
19	GOM_NL__2PRFIN20050812_021308_000000372039_00447_18036_6065.N1	12-AUG-2005 02:13:08	Bright	37.000	155	41Pi Sgr	2.9000	6600.0	74	18036	No
20	GOM_NL__2PRFIN20050812_022104_000000352039_00447_18036_6066.N1	12-AUG-2005 02:21:04	Bright	35.000	11	53Alp Aql	0.76500	8000.0	70	18036	No
21	GOM_NL__2PRFIN20050812_022249_000000362039_00447_18036_6067.N1	12-AUG-2005 02:22:49	Bright	35.500	168	17Zet Aql	2.9860	11000.	71	18036	No
22	GOM_NL__2PRFIN20050812_022959_000000342039_00447_18036_6068.N1	12-AUG-2005 02:29:59	Bright	34.000	5	3Alp Lyr	0.033000	11000.	68	18036	No
23	GOM_NL__2PRFIN20050812_023120_000000352039_00447_18036_6069.N1	12-AUG-2005 02:31:20	Bright	34.500	144	18Del Cyg	2.8600	11000.	69	18036	No
24	GOM_NL__2PRFIN20050812_023359_000000392039_00447_18036_6070.N1	12-AUG-2005 02:33:59	Bright	38.500	69	33Gam Dra	2.2310	3800.0	77	18036	No
25	GOM_NL__2PRFIN20050812_023822_000000332039_00447_18036_6071.N1	12-AUG-2005 02:38:22	Bright	32.500	119	14Eta Dra	2.7270	4700.0	65	18036	No
26	GOM_NL__2PRFIN20050812_024216_000000362039_00447_18036_6072.N1	12-AUG-2005 02:42:16	Bright	36.000	60	7Bet UMi	2.0810	3950.0	72	18036	No
27	GOM_NL__2PRFIN20050812_024403_000000322039_00447_18036_6073.N1	12-AUG-2005 02:44:03	Bright	32.000	49	1Alp UMi	1.9900	6300.0	64	18036	No
28	GOM_NL__2PRFIN20050812_031417_000000422039_00447_18036_6074.N1	12-AUG-2005 03:14:17	Dark	41.500	1	9Alp CMa	-1.4400	11000.	83	18036	No
29	GOM_NL__2PRFIN20050812_031559_000000392039_00447_18036_6075.N1	12-AUG-2005 03:15:59	Dark	38.500	179	24Omi2CMa	3.0320	24000.	77	18036	No
30	GOM_NL__2PRFIN20050812_031727_000000412039_00447_18036_6076.N1	12-AUG-2005 03:17:27	Dark	41.000	23	21Eps CMa	1.5020	26000.	82	18036	No
31	GOM_NL__2PRFIN20050812_031931_000000432039_00447_18036_6077.N1	12-AUG-2005 03:19:31	Dark	43.000	117	Pi Pup	2.7060	3800.0	86	18036	No
32	GOM_NL__2PRFIN20050812_032416_000000432039_00447_18036_6078.N1	12-AUG-2005 03:24:16	Dark	43.000	2	Alp Car	-0.73600	7000.0	86	18036	No
33	GOM_NL__2PRFIN20050812_041435_000000362039_00448_18037_6064.N1	12-AUG-2005 04:14:35	Bright	36.000	69	33Gam Dra	2.2310	3800.0	72	18037	No
34	GOM_NL__2PRFIN20050812_041859_000000372039_00448_18037_6065.N1	12-AUG-2005 04:18:59	Bright	36.500	119	14Eta Dra	2.7270	4700.0	73	18037	No
35	GOM_NL__2PRFIN20050812_042253_000000352039_00448_18037_6066.N1	12-AUG-2005 04:22:53	Bright	34.500	60	7Bet UMi	2.0810	3950.0	69	18037	No
36	GOM_NL__2PRFIN20050812_042439_000000352039_00448_18037_6067.N1	12-AUG-2005 04:24:39	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	18037	No
37	GOM_NL__2PRFIN20050812_045803_000000412039_00448_18037_6068.N1	12-AUG-2005 04:58:03	Dark	41.000	23	21Eps CMa	1.5020	26000.	82	18037	No
38	GOM_NL__2PRFIN20050812_050008_000000412039_00448_18037_6069.N1	12-AUG-2005 05:00:08	Dark	41.000	117	Pi Pup	2.7060	3800.0	82	18037	No
39	GOM_NL__2PRFIN20050812_050452_000000462039_00448_18037_6070.N1	12-AUG-2005 05:04:52	Dark	45.500	2	Alp Car	-0.73600	7000.0	91	18037	No
40	GOM_NL__2PRFIN20050812_054402_000000362039_00449_18038_6065.N1	12-AUG-2005 05:44:02	Bright	35.500	168	17Zet Aql	2.9860	11000.	71	18038	No
41	GOM_NL__2PRFIN20050812_055111_000000402039_00449_18038_6066.N1	12-AUG-2005 05:51:11	Bright	39.500	5	3Alp Lyr	0.033000	11000.	79	18038	No
42	GOM_NL__2PRFIN20050812_055232_000000352039_00449_18038_6067.N1	12-AUG-2005 05:52:32	Bright	35.000	144	18Del Cyg	2.8600	11000.	70	18038	No

43	GOM_NL__2PRFIN20050812_055512_000000372039_00449_18038_6068.N1	12-AUG-2005 05:55:12	Bright	37.000	69	33Gam Dra	2.2310	3800.0	74	18038	No
44	GOM_NL__2PRFIN20050812_055935_000000372039_00449_18038_6069.N1	12-AUG-2005 05:59:35	Bright	36.500	119	14Eta Dra	2.7270	4700.0	73	18038	No
45	GOM_NL__2PRFIN20050812_060329_000000362039_00449_18038_6070.N1	12-AUG-2005 06:03:29	Bright	35.500	60	7Bet UMi	2.0810	3950.0	71	18038	No
46	GOM_NL__2PRFIN20050812_060516_000000362039_00449_18038_6071.N1	12-AUG-2005 06:05:16	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	18038	No
47	GOM_NL__2PRFIN20050812_064528_000000452039_00449_18038_6072.N1	12-AUG-2005 06:45:28	Dark	45.000	2	Alp Car	-0.73600	7000.0	90	18038	No
48	GOM_NL__2PRFIN20050812_070135_000000462039_00450_18039_5788.N1	12-AUG-2005 07:01:35	Straylight	46.000	148	Alp Tuc	2.8780	4100.0	92	18039	No
49	GOM_NL__2PRFIN20050812_070420_000000412039_00450_18039_5789.N1	12-AUG-2005 07:04:20	Straylight	40.500	45	Alp Pav	1.9400	26000.	81	18039	No
50	GOM_NL__2PRFIN20050812_071457_000000362039_00450_18039_5790.N1	12-AUG-2005 07:14:57	Bright	35.500	155	41Pi Sgr	2.9000	6600.0	71	18039	No
51	GOM_NL__2PRFIN20050812_072253_000000362039_00450_18039_5791.N1	12-AUG-2005 07:22:53	Bright	35.500	11	53Alp Aql	0.76500	8000.0	71	18039	No
52	GOM_NL__2PRFIN20050812_072438_000000362039_00450_18039_5792.N1	12-AUG-2005 07:24:38	Bright	35.500	168	17Zet Aql	2.9860	11000.	71	18039	No
53	GOM_NL__2PRFIN20050812_073147_000000352039_00450_18039_5793.N1	12-AUG-2005 07:31:47	Bright	34.500	5	3Alp Lyr	0.033000	11000.	69	18039	No
54	GOM_NL__2PRFIN20050812_073308_000000362039_00450_18039_5794.N1	12-AUG-2005 07:33:08	Bright	35.500	144	18Del Cyg	2.8600	11000.	71	18039	No
55	GOM_NL__2PRFIN20050812_073548_000000372039_00450_18039_5795.N1	12-AUG-2005 07:35:48	Bright	37.000	69	33Gam Dra	2.2310	3800.0	74	18039	No
56	GOM_NL__2PRFIN20050812_074012_000000372039_00450_18039_5796.N1	12-AUG-2005 07:40:12	Bright	37.000	119	14Eta Dra	2.7270	4700.0	74	18039	No
57	GOM_NL__2PRFIN20050812_074405_000000362039_00450_18039_5797.N1	12-AUG-2005 07:44:05	Bright	36.000	60	7Bet UMi	2.0810	3950.0	72	18039	No
58	GOM_NL__2PRFIN20050812_074551_000000332039_00450_18039_5798.N1	12-AUG-2005 07:45:51	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	18039	No
59	GOM_NL__2PRFIN20050812_081748_000000372039_00450_18039_5799.N1	12-AUG-2005 08:17:48	Dark	37.000	179	24Omi2CMa	3.0320	24000.	74	18039	No
60	GOM_NL__2PRFIN20050812_081915_000000392039_00450_18039_5800.N1	12-AUG-2005 08:19:15	Dark	38.500	23	21Eps CMa	1.5020	26000.	77	18039	No
61	GOM_NL__2PRFIN20050812_082120_000000412039_00450_18039_5801.N1	12-AUG-2005 08:21:20	Dark	41.000	117	Pi Pup	2.7060	3800.0	82	18039	No
62	GOM_NL__2PRFIN20050812_082604_000000522039_00450_18039_5802.N1	12-AUG-2005 08:26:04	Dark	51.500	2	Alp Car	-0.73600	7000.0	103	18039	No

3. Quality information per product

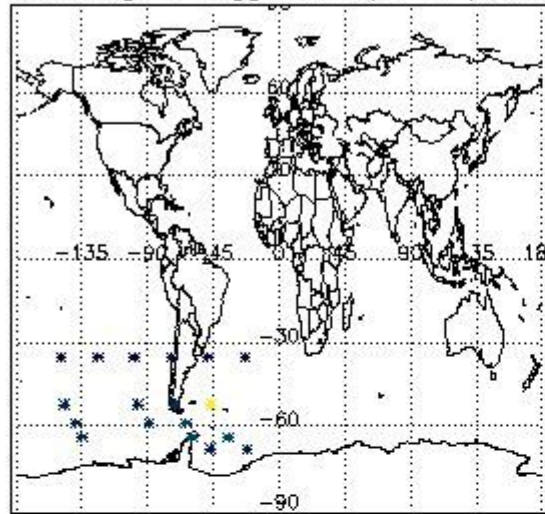
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

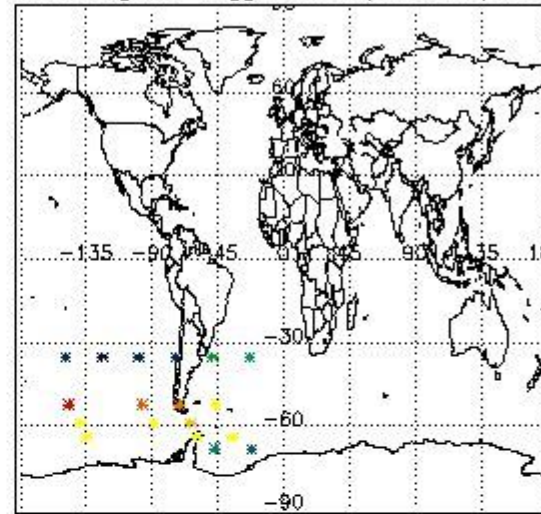


3.2 Plot quality information per product (world map)

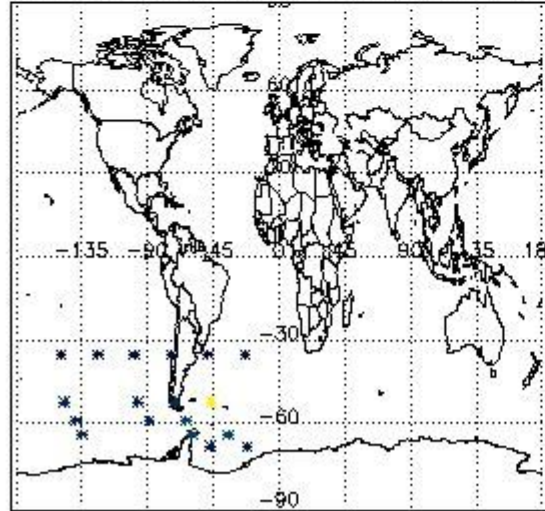
Percentage of flagged data per O3 profile



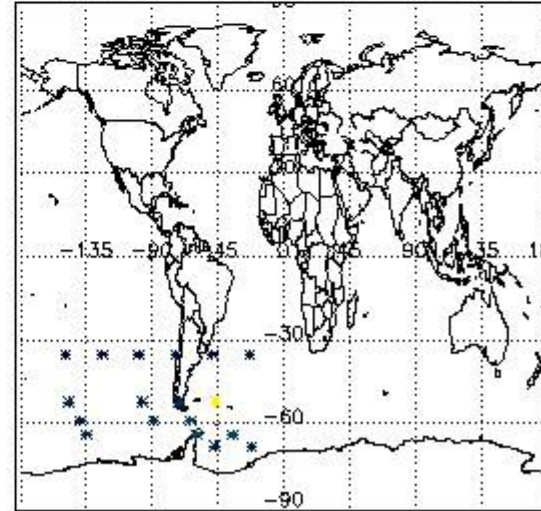
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

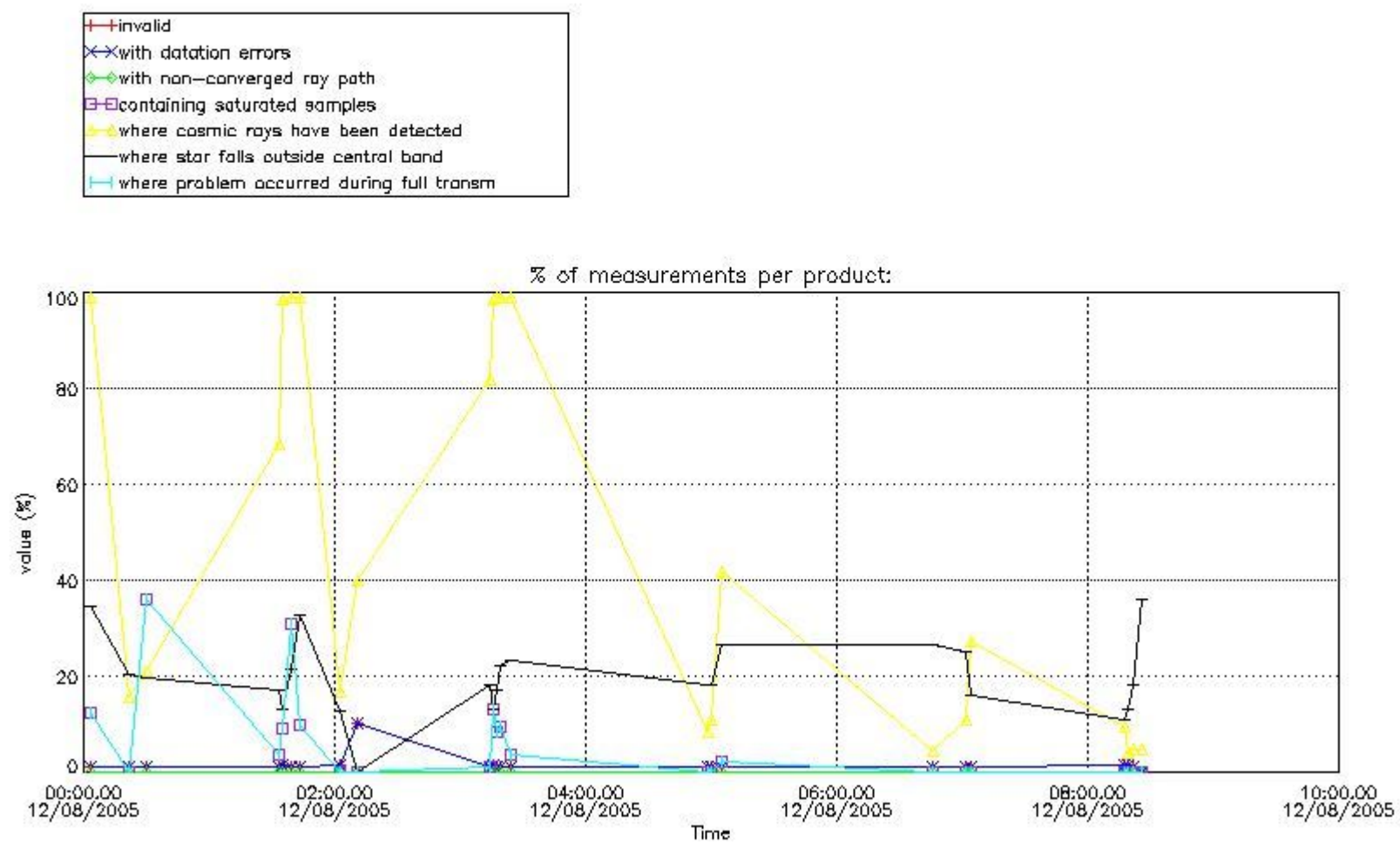


4. Level 1 quality information per product

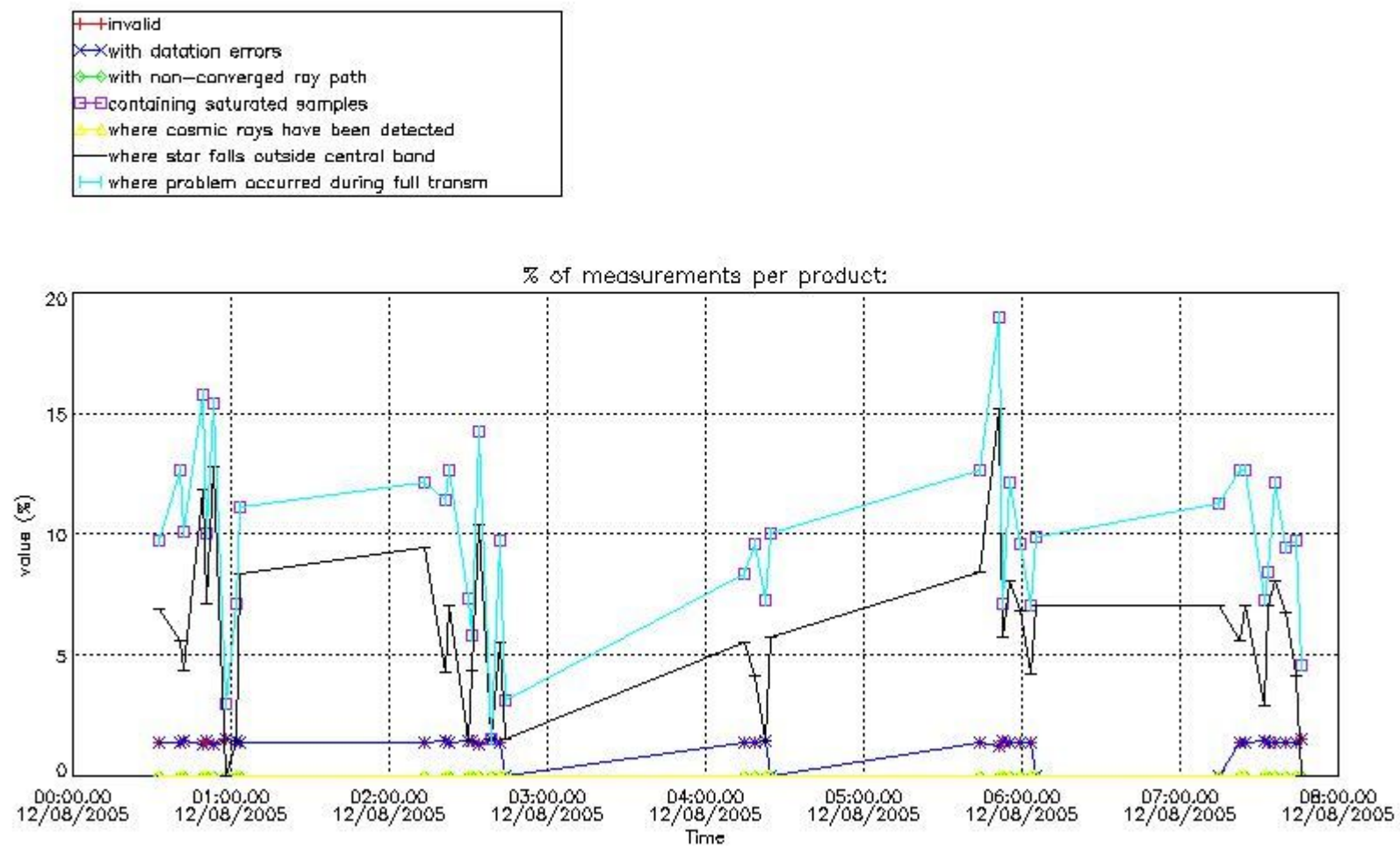
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes



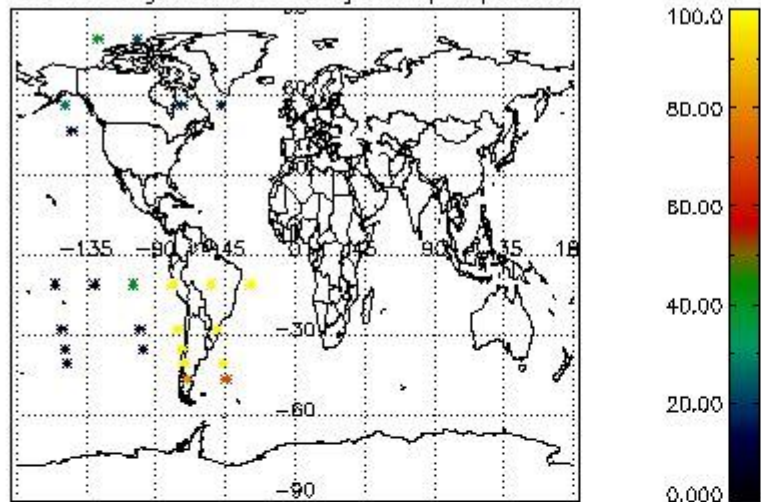
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



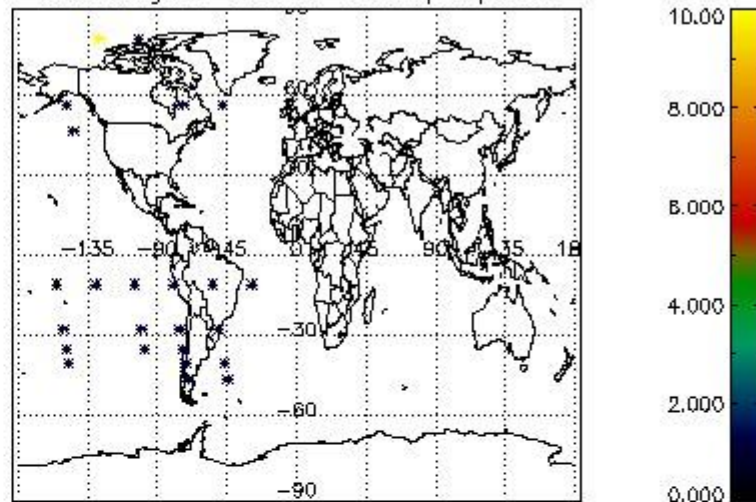
4.2 Plot quality information per product coming from level 1b processing (world map)

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

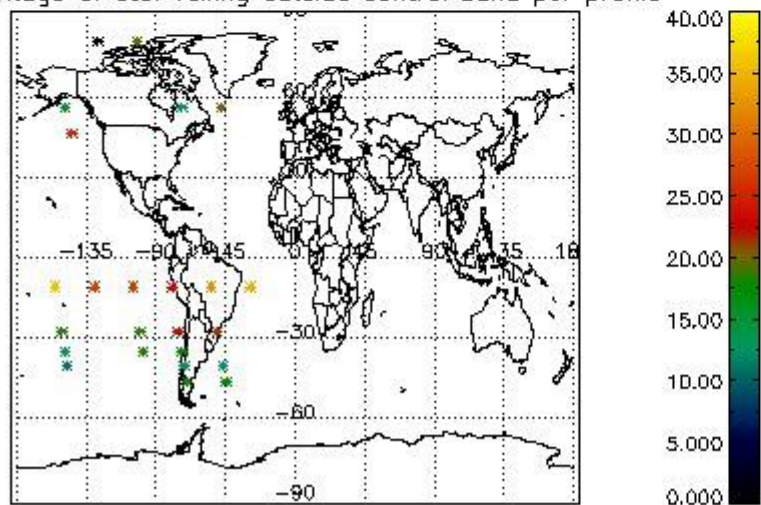
Percentage of cosmic ray hits per profile



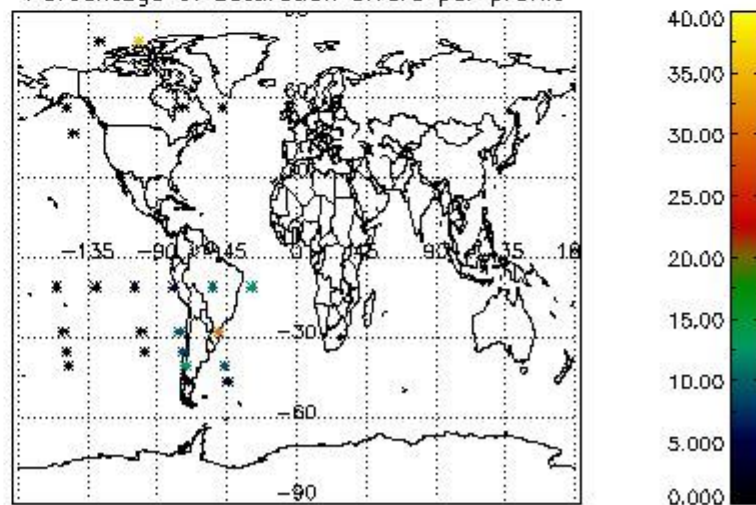
Percentage of datation errors per profile



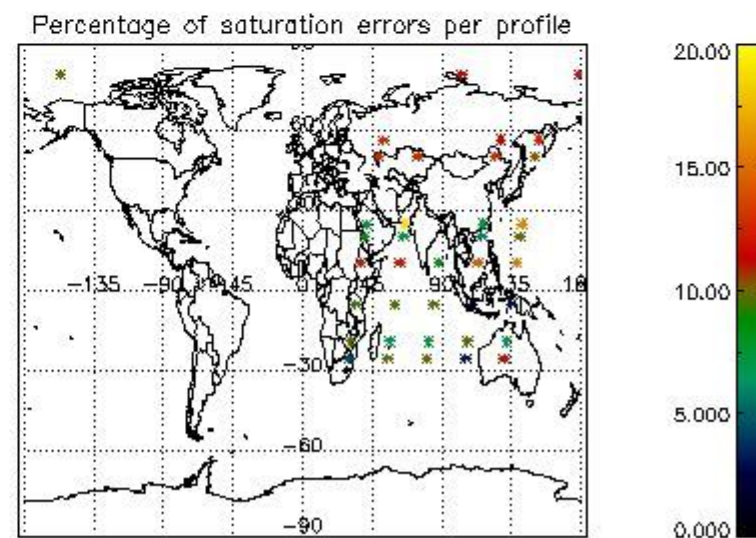
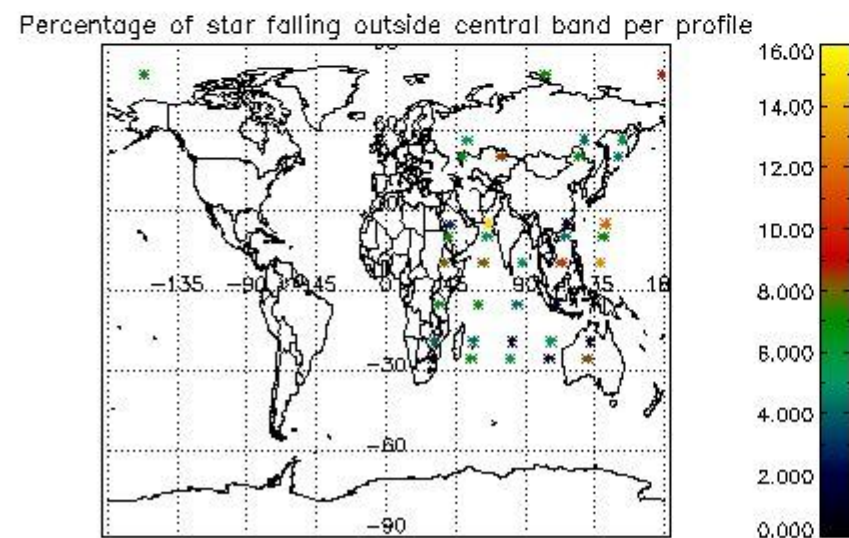
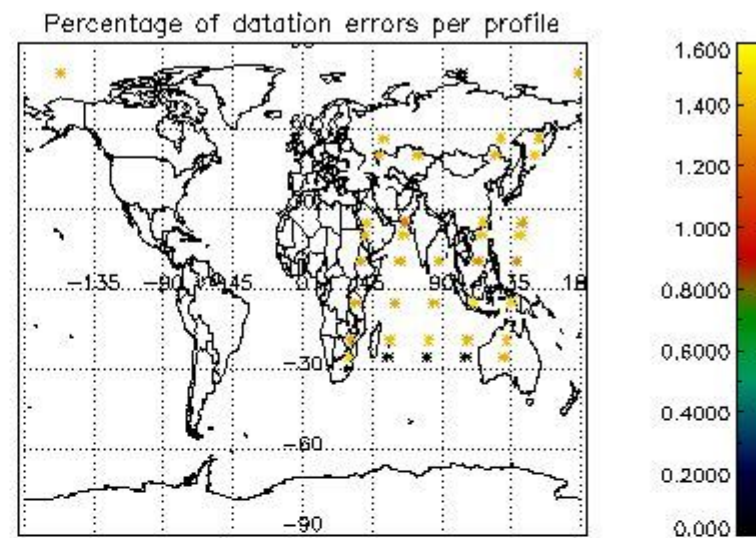
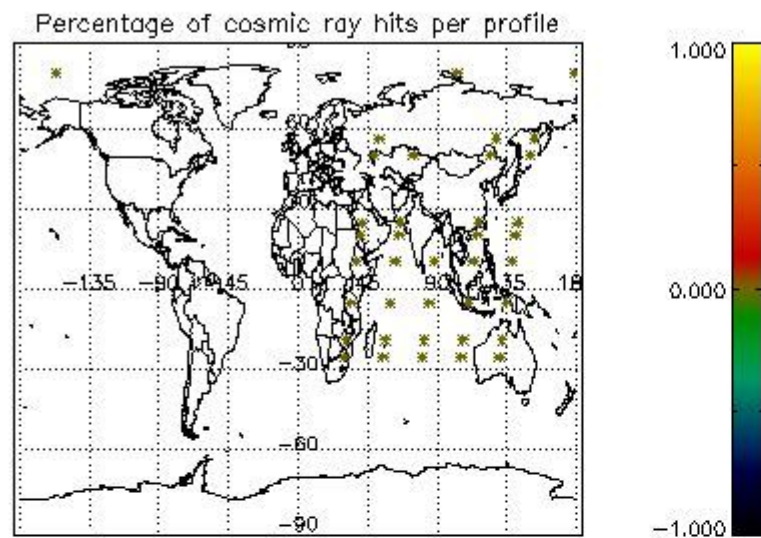
Percentage of star falling outside central band per profile



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

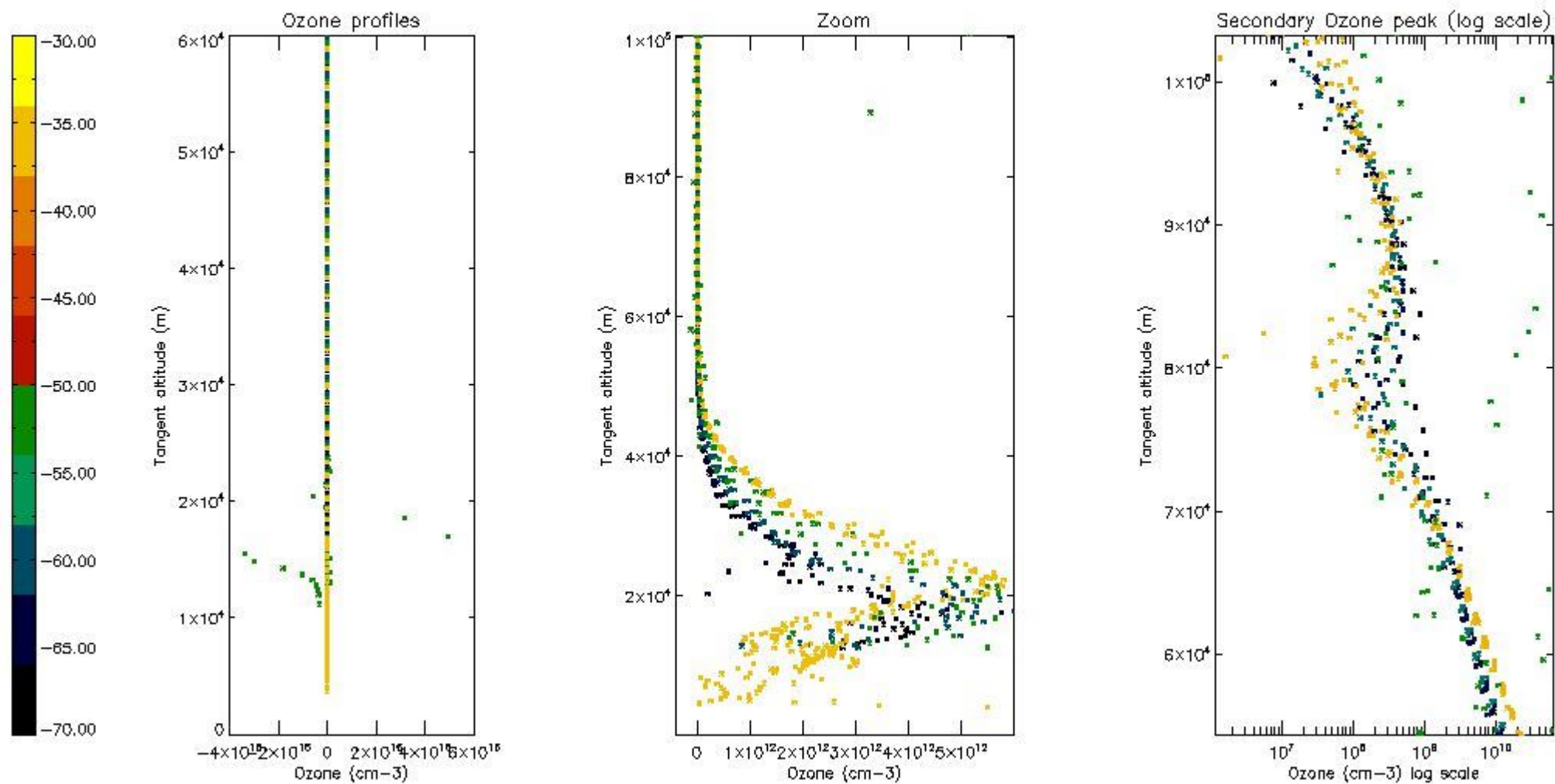
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	33
STD < 20	20

STD < 10	17
STD < 5	13

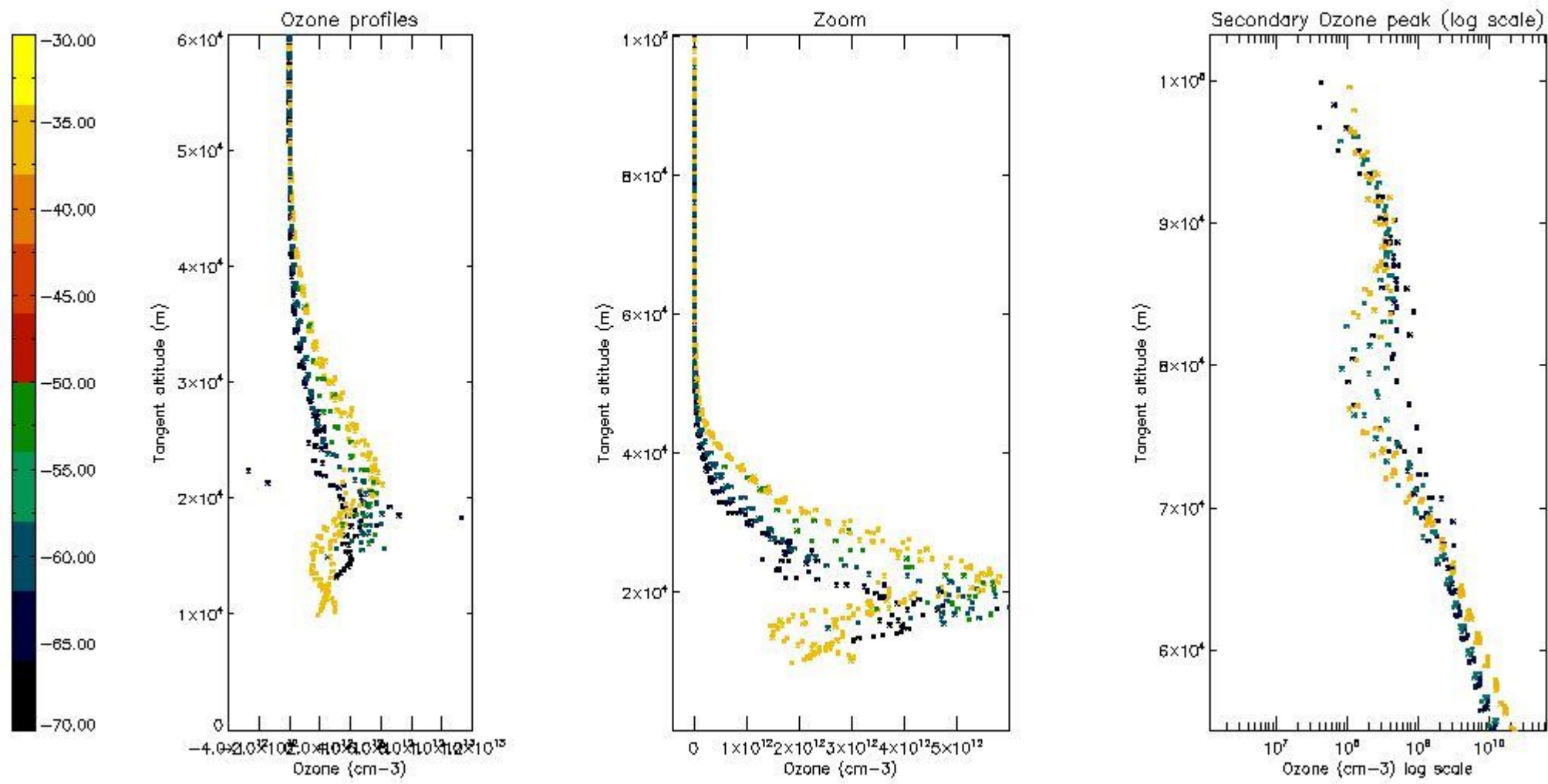
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



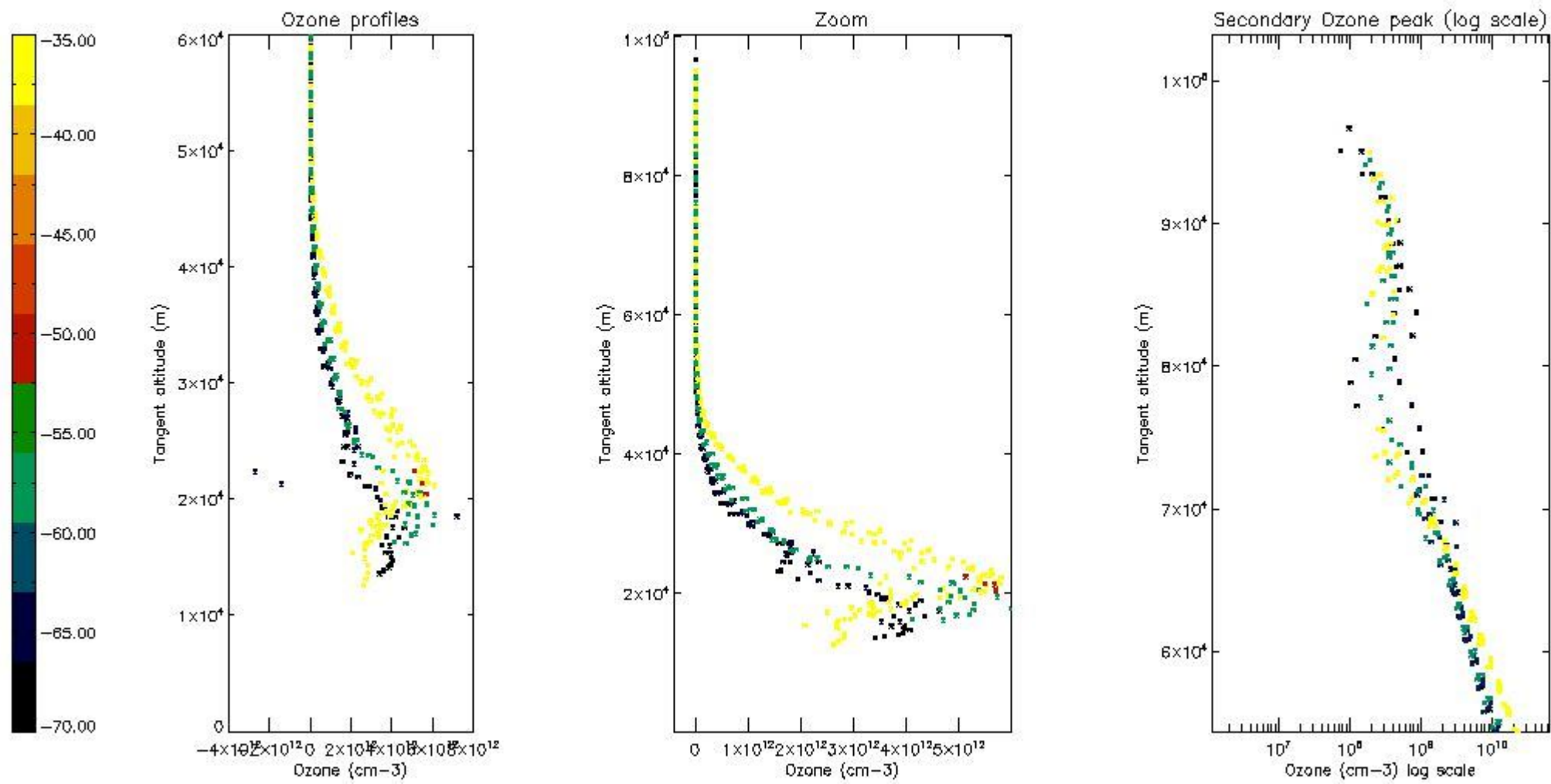
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



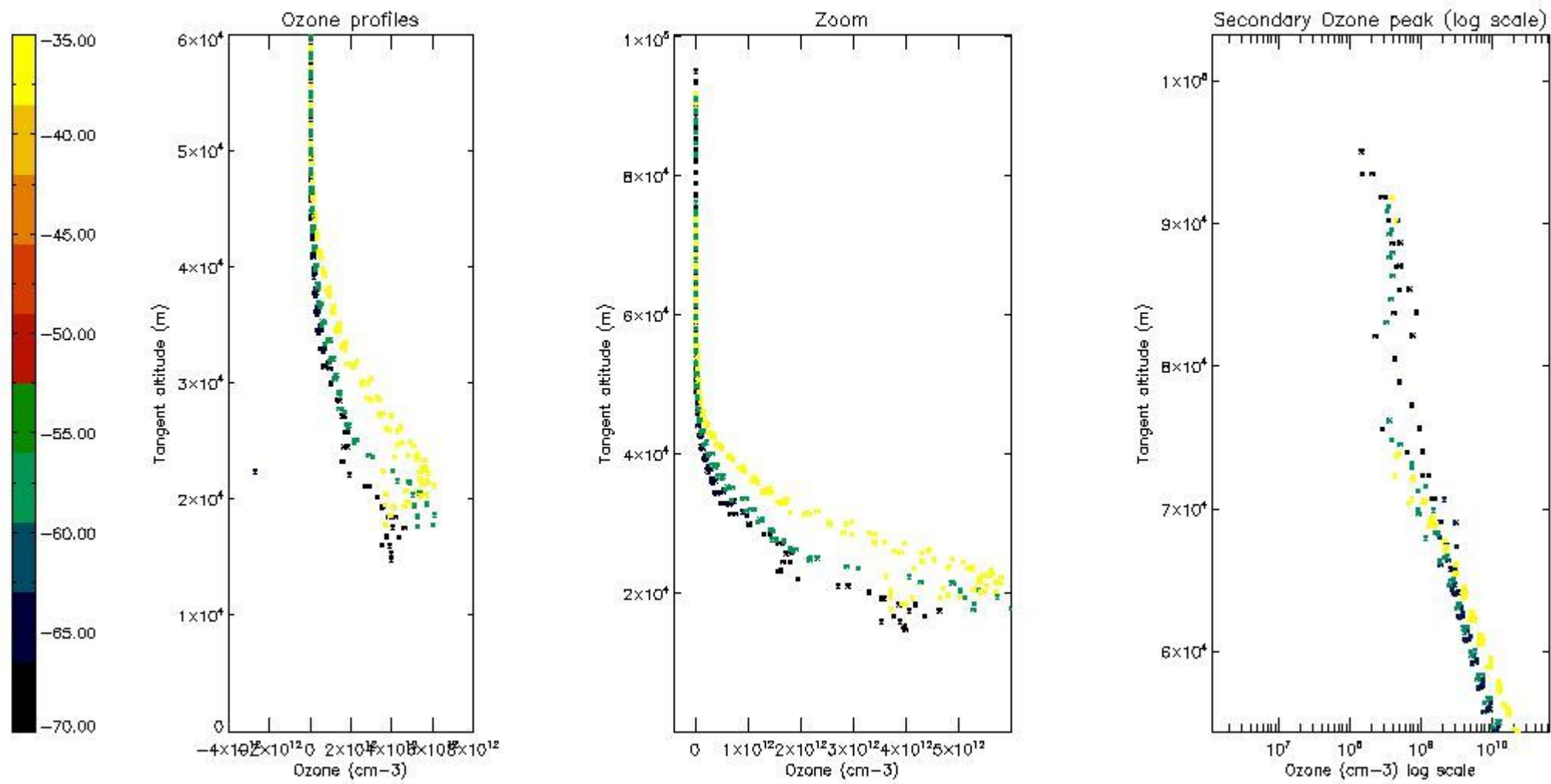
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



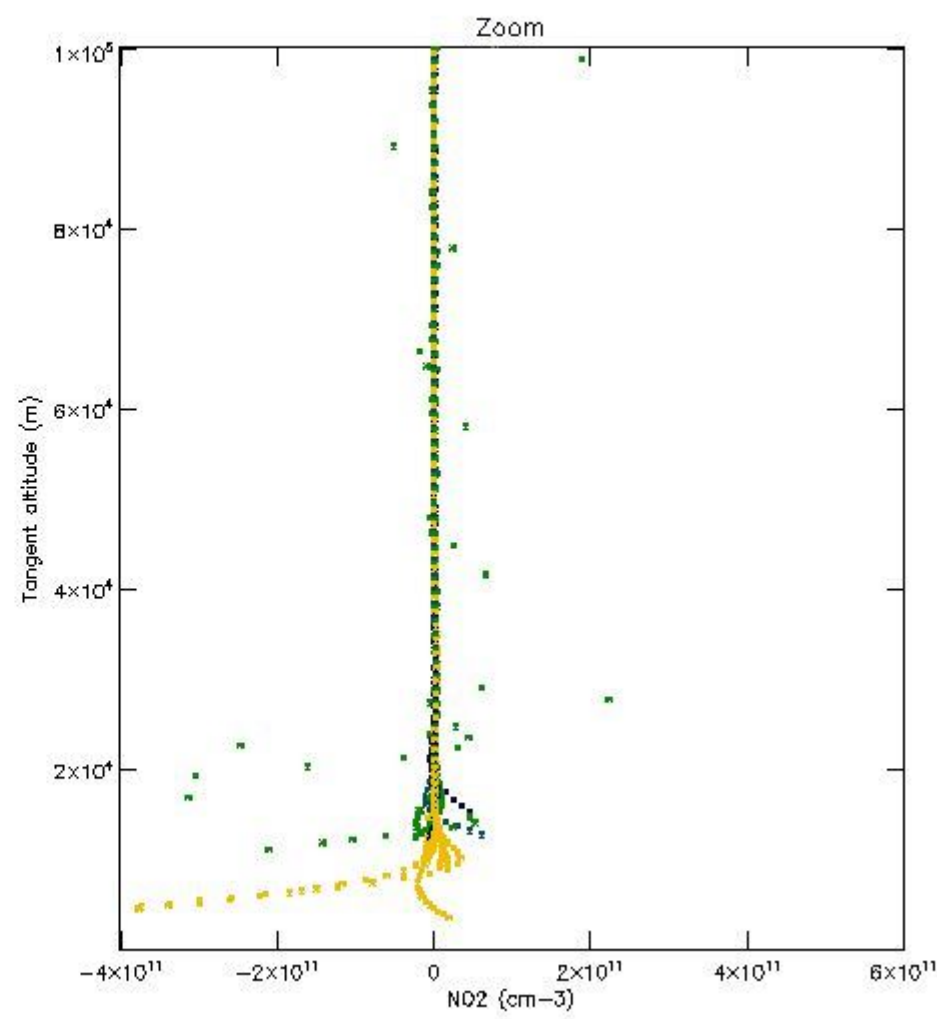
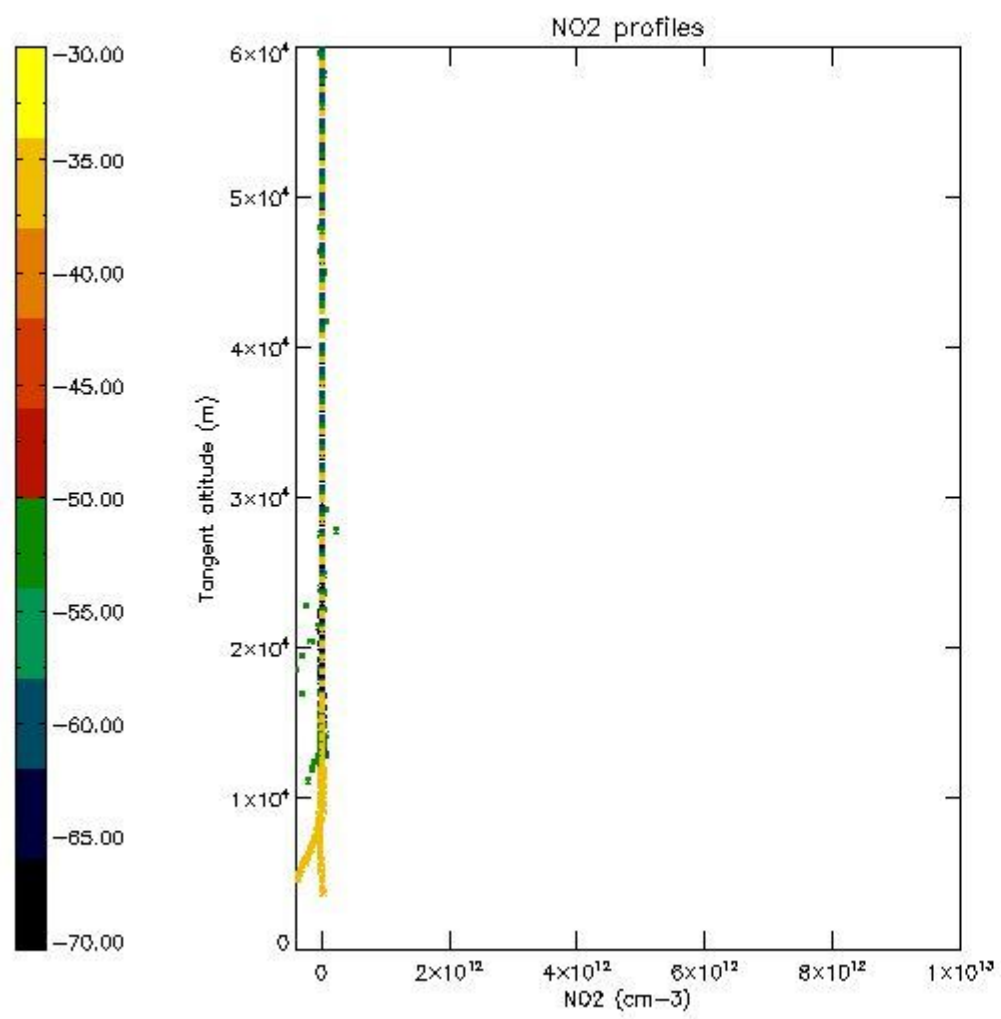
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



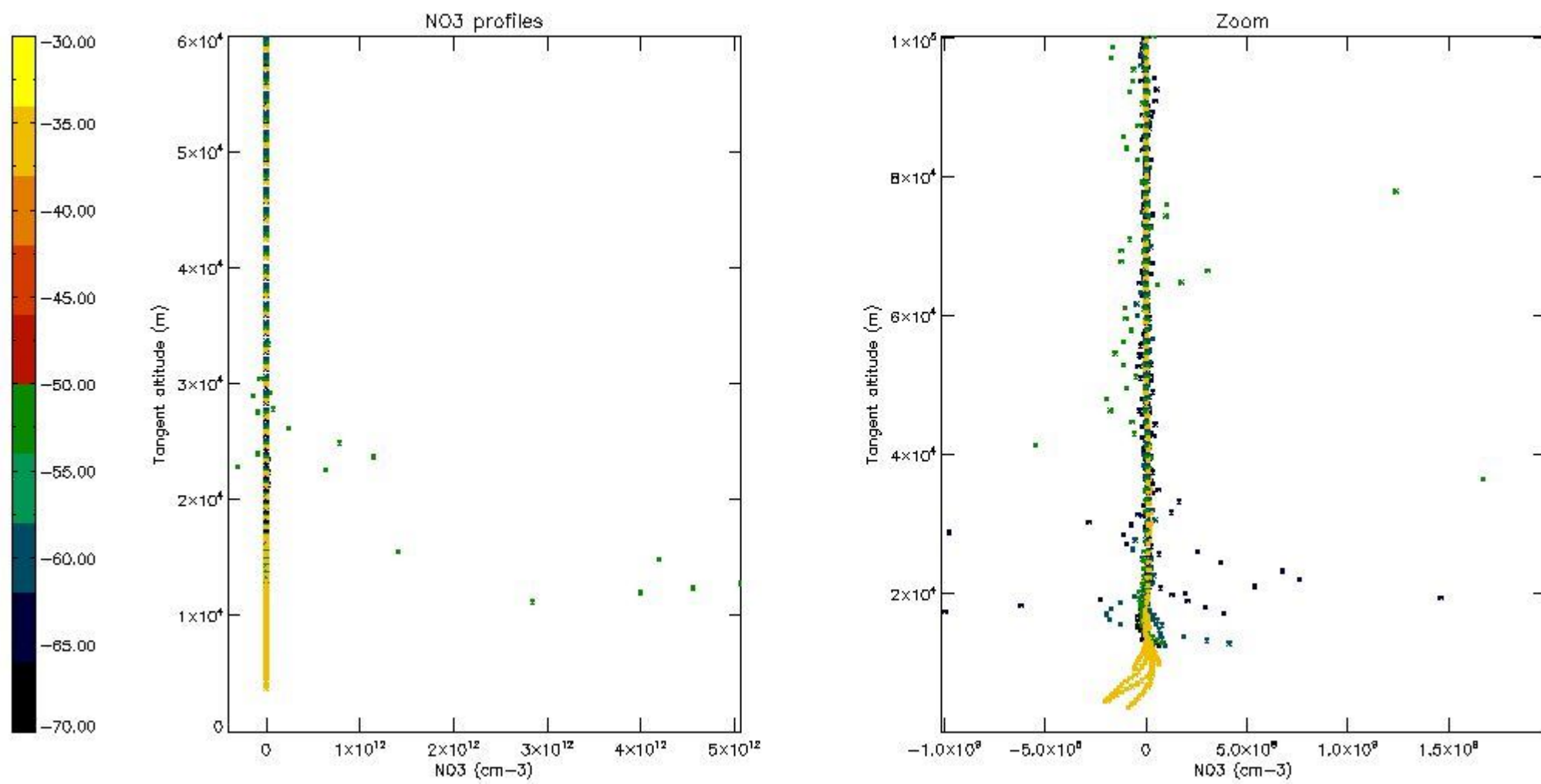
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



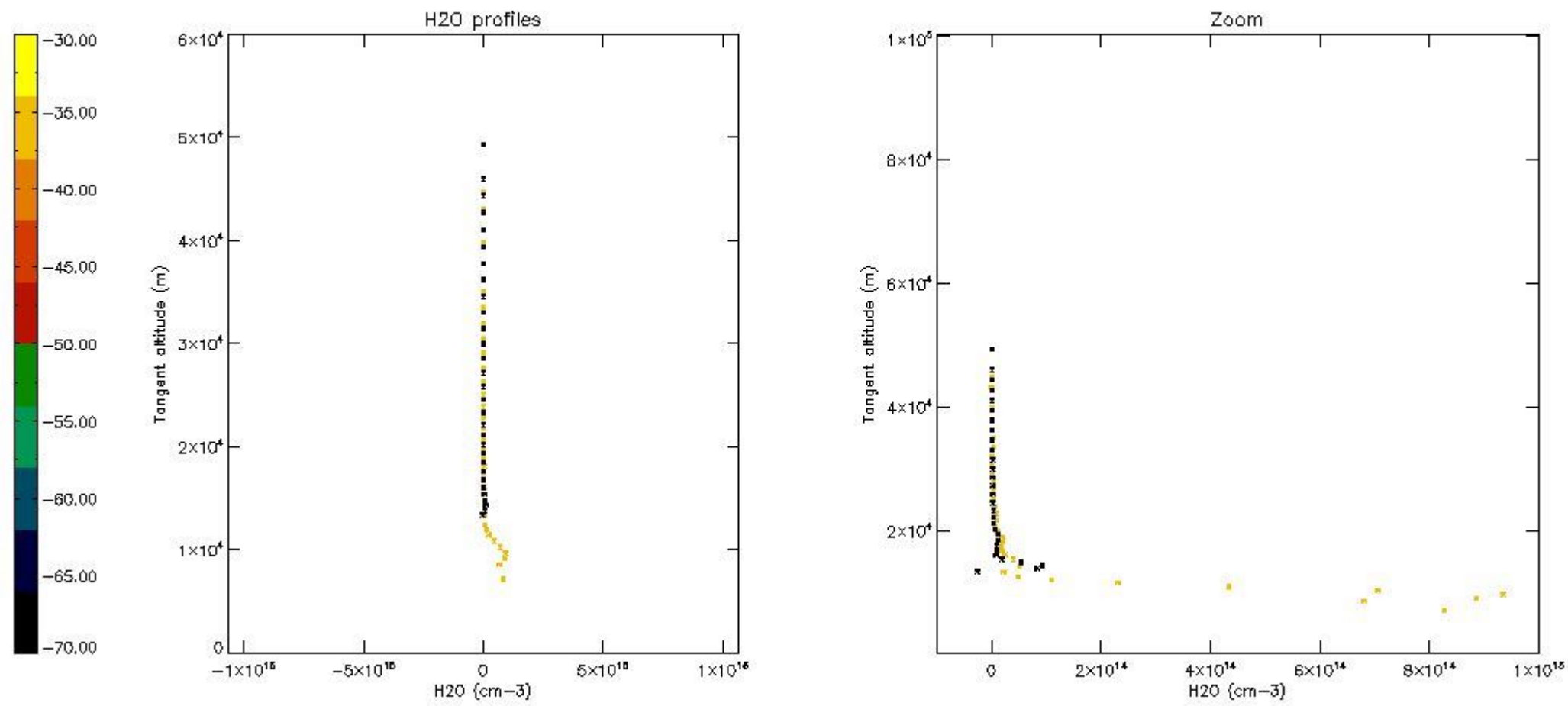
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	12-AUG-2005 00:03:03
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	12-AUG-2005 00:03:03
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	12-AUG-2005 00:03:03

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	18APR2013 10:26:39
Data source version	GOMOS/6.01
Start time of products	12-08-2005 (12AUG2005 00:00:00)
Stop time of products	13-08-2005 (13AUG2005 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	62
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

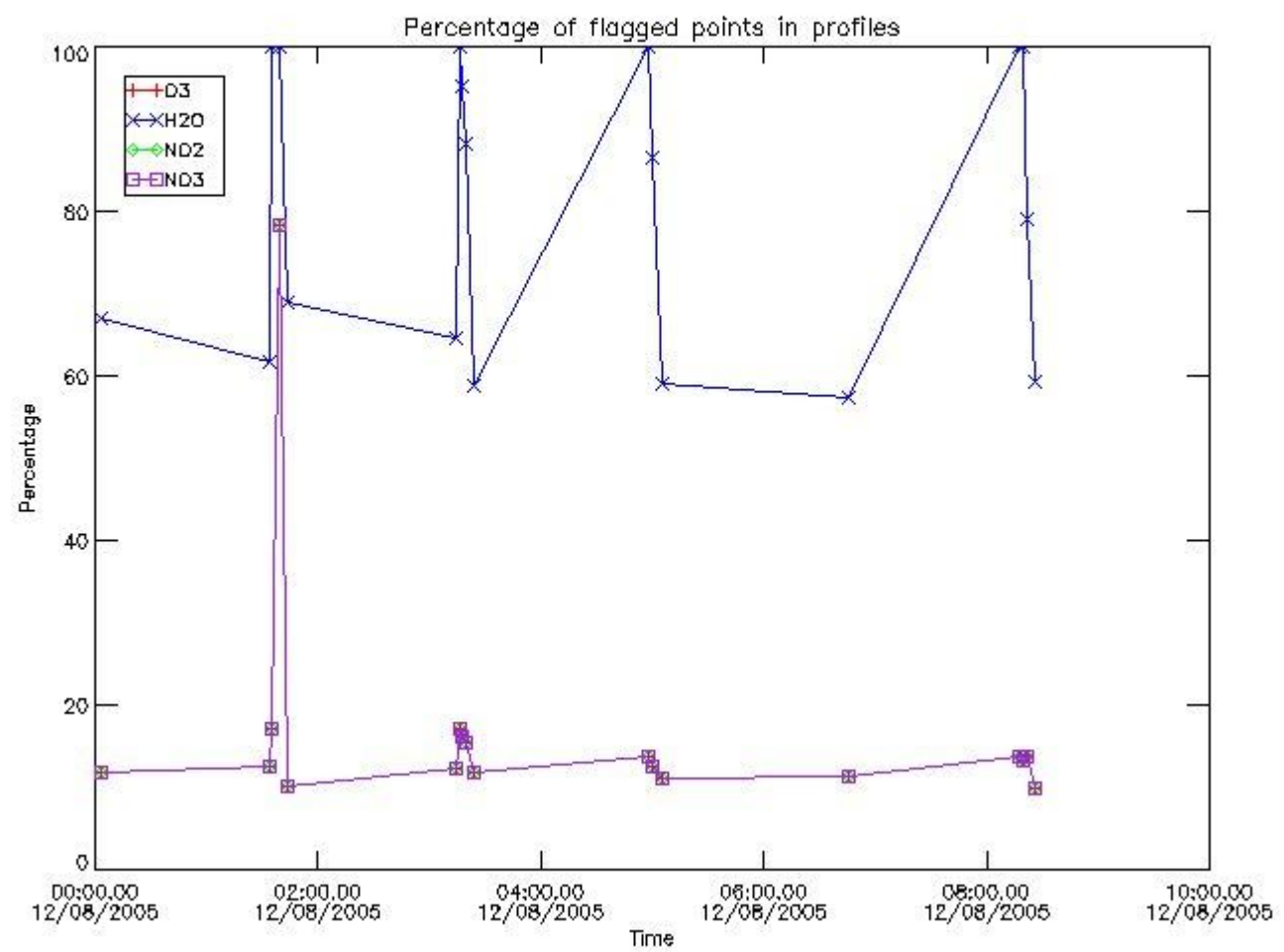
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20050812_000303_000000522039_00445_18034_5797.N1	12-AUG-2005 00:03:03	Dark	52.000	2	Alp Car	-0.73600	7000.0	104	18034	No
2	GOM_NL__2PRFIN20050812_002155_000000422039_00446_18035_6062.N1	12-AUG-2005 00:21:55	Straylight	42.000	45	Alp Pav	1.9400	26000.	84	18035	No
3	GOM_NL__2PRFIN20050812_003008_000000432039_00446_18035_6063.N1	12-AUG-2005 00:30:08	Bright	43.000	103	38Zet Sgr	2.6000	9700.0	86	18035	No
4	GOM_NL__2PRFIN20050812_003232_000000362039_00446_18035_6064.N1	12-AUG-2005 00:32:32	Bright	36.000	155	41Pi Sgr	2.9000	6600.0	72	18035	No
5	GOM_NL__2PRFIN20050812_004029_000000362039_00446_18035_6065.N1	12-AUG-2005 00:40:29	Bright	35.500	11	53Alp Aql	0.76500	8000.0	71	18035	No
6	GOM_NL__2PRFIN20050812_004213_000000352039_00446_18035_6066.N1	12-AUG-2005 00:42:13	Bright	34.500	168	17Zet Aql	2.9860	11000.	69	18035	No
7	GOM_NL__2PRFIN20050812_004922_000000382039_00446_18035_6067.N1	12-AUG-2005 00:49:22	Bright	38.000	5	3Alp Lyr	0.033000	11000.	76	18035	No
8	GOM_NL__2PRFIN20050812_005044_000000352039_00446_18035_6068.N1	12-AUG-2005 00:50:44	Bright	35.000	144	18Del Cyg	2.8600	11000.	70	18035	No
9	GOM_NL__2PRFIN20050812_005323_000000392039_00446_18035_6069.N1	12-AUG-2005 00:53:23	Bright	39.000	69	33Gam Dra	2.2310	3800.0	78	18035	No
10	GOM_NL__2PRFIN20050812_005746_000000342039_00446_18035_6070.N1	12-AUG-2005 00:57:46	Bright	33.500	119	14Eta Dra	2.7270	4700.0	67	18035	No
11	GOM_NL__2PRFIN20050812_010140_000000352039_00446_18035_6071.N1	12-AUG-2005 01:01:40	Bright	35.000	60	7Bet UMi	2.0810	3950.0	70	18035	No
12	GOM_NL__2PRFIN20050812_010328_000000362039_00446_18035_6072.N1	12-AUG-2005 01:03:28	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	18035	No
13	GOM_NL__2PRFIN20050812_013341_000000412039_00446_18035_6073.N1	12-AUG-2005 01:33:41	Dark	41.000	1	9Alp CMa	-1.4400	11000.	82	18035	No
14	GOM_NL__2PRFIN20050812_013523_000000392039_00446_18035_6074.N1	12-AUG-2005 01:35:23	Dark	38.500	179	24Omi2CMa	3.0320	24000.	77	18035	No
15	GOM_NL__2PRFIN20050812_013855_000000422039_00446_18035_6075.N1	12-AUG-2005 01:38:55	Dark	42.000	117	Pi Pup	2.7060	3800.0	84	18035	No
16	GOM_NL__2PRFIN20050812_014339_000000512039_00446_18035_6076.N1	12-AUG-2005 01:43:39	Dark	50.500	2	Alp Car	-0.73600	7000.0	101	18035	No
17	GOM_NL__2PRFIN20050812_020231_000000392039_00447_18036_6063.N1	12-AUG-2005 02:02:31	Straylight	39.000	45	Alp Pav	1.9400	26000.	78	18036	No
18	GOM_NL__2PRFIN20050812_021044_00000052039_00447_18036_6064.N1	12-AUG-2005 02:10:44	Straylight	5.0000	103	38Zet Sgr	2.6000	9700.0	10	18036	No
19	GOM_NL__2PRFIN20050812_021308_000000372039_00447_18036_6065.N1	12-AUG-2005 02:13:08	Bright	37.000	155	41Pi Sgr	2.9000	6600.0	74	18036	No
20	GOM_NL__2PRFIN20050812_022104_000000352039_00447_18036_6066.N1	12-AUG-2005 02:21:04	Bright	35.000	11	53Alp Aql	0.76500	8000.0	70	18036	No
21	GOM_NL__2PRFIN20050812_022249_000000362039_00447_18036_6067.N1	12-AUG-2005 02:22:49	Bright	35.500	168	17Zet Aql	2.9860	11000.	71	18036	No
22	GOM_NL__2PRFIN20050812_022959_000000342039_00447_18036_6068.N1	12-AUG-2005 02:29:59	Bright	34.000	5	3Alp Lyr	0.033000	11000.	68	18036	No
23	GOM_NL__2PRFIN20050812_023120_000000352039_00447_18036_6069.N1	12-AUG-2005 02:31:20	Bright	34.500	144	18Del Cyg	2.8600	11000.	69	18036	No
24	GOM_NL__2PRFIN20050812_023359_000000392039_00447_18036_6070.N1	12-AUG-2005 02:33:59	Bright	38.500	69	33Gam Dra	2.2310	3800.0	77	18036	No
25	GOM_NL__2PRFIN20050812_023822_000000332039_00447_18036_6071.N1	12-AUG-2005 02:38:22	Bright	32.500	119	14Eta Dra	2.7270	4700.0	65	18036	No
26	GOM_NL__2PRFIN20050812_024216_000000362039_00447_18036_6072.N1	12-AUG-2005 02:42:16	Bright	36.000	60	7Bet UMi	2.0810	3950.0	72	18036	No
27	GOM_NL__2PRFIN20050812_024403_000000322039_00447_18036_6073.N1	12-AUG-2005 02:44:03	Bright	32.000	49	1Alp UMi	1.9900	6300.0	64	18036	No
28	GOM_NL__2PRFIN20050812_031417_000000422039_00447_18036_6074.N1	12-AUG-2005 03:14:17	Dark	41.500	1	9Alp CMa	-1.4400	11000.	83	18036	No
29	GOM_NL__2PRFIN20050812_031559_000000392039_00447_18036_6075.N1	12-AUG-2005 03:15:59	Dark	38.500	179	24Omi2CMa	3.0320	24000.	77	18036	No
30	GOM_NL__2PRFIN20050812_031727_000000412039_00447_18036_6076.N1	12-AUG-2005 03:17:27	Dark	41.000	23	21Eps CMa	1.5020	26000.	82	18036	No
31	GOM_NL__2PRFIN20050812_031931_000000432039_00447_18036_6077.N1	12-AUG-2005 03:19:31	Dark	43.000	117	Pi Pup	2.7060	3800.0	86	18036	No
32	GOM_NL__2PRFIN20050812_032416_000000432039_00447_18036_6078.N1	12-AUG-2005 03:24:16	Dark	43.000	2	Alp Car	-0.73600	7000.0	86	18036	No
33	GOM_NL__2PRFIN20050812_041435_000000362039_00448_18037_6064.N1	12-AUG-2005 04:14:35	Bright	36.000	69	33Gam Dra	2.2310	3800.0	72	18037	No
34	GOM_NL__2PRFIN20050812_041859_000000372039_00448_18037_6065.N1	12-AUG-2005 04:18:59	Bright	36.500	119	14Eta Dra	2.7270	4700.0	73	18037	No
35	GOM_NL__2PRFIN20050812_042253_000000352039_00448_18037_6066.N1	12-AUG-2005 04:22:53	Bright	34.500	60	7Bet UMi	2.0810	3950.0	69	18037	No
36	GOM_NL__2PRFIN20050812_042439_000000352039_00448_18037_6067.N1	12-AUG-2005 04:24:39	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	18037	No
37	GOM_NL__2PRFIN20050812_045803_000000412039_00448_18037_6068.N1	12-AUG-2005 04:58:03	Dark	41.000	23	21Eps CMa	1.5020	26000.	82	18037	No
38	GOM_NL__2PRFIN20050812_050008_000000412039_00448_18037_6069.N1	12-AUG-2005 05:00:08	Dark	41.000	117	Pi Pup	2.7060	3800.0	82	18037	No
39	GOM_NL__2PRFIN20050812_050452_000000462039_00448_18037_6070.N1	12-AUG-2005 05:04:52	Dark	45.500	2	Alp Car	-0.73600	7000.0	91	18037	No
40	GOM_NL__2PRFIN20050812_054402_000000362039_00449_18038_6065.N1	12-AUG-2005 05:44:02	Bright	35.500	168	17Zet Aql	2.9860	11000.	71	18038	No
41	GOM_NL__2PRFIN20050812_055111_000000402039_00449_18038_6066.N1	12-AUG-2005 05:51:11	Bright	39.500	5	3Alp Lyr	0.033000	11000.	79	18038	No
42	GOM_NL__2PRFIN20050812_055232_000000352039_00449_18038_6067.N1	12-AUG-2005 05:52:32	Bright	35.000	144	18Del Cyg	2.8600	11000.	70	18038	No

43	GOM_NL__2PRFIN20050812_055512_000000372039_00449_18038_6068.N1	12-AUG-2005 05:55:12	Bright	37.000	69	33Gam Dra	2.2310	3800.0	74	18038	No
44	GOM_NL__2PRFIN20050812_055935_000000372039_00449_18038_6069.N1	12-AUG-2005 05:59:35	Bright	36.500	119	14Eta Dra	2.7270	4700.0	73	18038	No
45	GOM_NL__2PRFIN20050812_060329_000000362039_00449_18038_6070.N1	12-AUG-2005 06:03:29	Bright	35.500	60	7Bet UMi	2.0810	3950.0	71	18038	No
46	GOM_NL__2PRFIN20050812_060516_000000362039_00449_18038_6071.N1	12-AUG-2005 06:05:16	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	18038	No
47	GOM_NL__2PRFIN20050812_064528_000000452039_00449_18038_6072.N1	12-AUG-2005 06:45:28	Dark	45.000	2	Alp Car	-0.73600	7000.0	90	18038	No
48	GOM_NL__2PRFIN20050812_070135_000000462039_00450_18039_5788.N1	12-AUG-2005 07:01:35	Straylight	46.000	148	Alp Tuc	2.8780	4100.0	92	18039	No
49	GOM_NL__2PRFIN20050812_070420_000000412039_00450_18039_5789.N1	12-AUG-2005 07:04:20	Straylight	40.500	45	Alp Pav	1.9400	26000.	81	18039	No
50	GOM_NL__2PRFIN20050812_071457_000000362039_00450_18039_5790.N1	12-AUG-2005 07:14:57	Bright	35.500	155	41Pi Sgr	2.9000	6600.0	71	18039	No
51	GOM_NL__2PRFIN20050812_072253_000000362039_00450_18039_5791.N1	12-AUG-2005 07:22:53	Bright	35.500	11	53Alp Aql	0.76500	8000.0	71	18039	No
52	GOM_NL__2PRFIN20050812_072438_000000362039_00450_18039_5792.N1	12-AUG-2005 07:24:38	Bright	35.500	168	17Zet Aql	2.9860	11000.	71	18039	No
53	GOM_NL__2PRFIN20050812_073147_000000352039_00450_18039_5793.N1	12-AUG-2005 07:31:47	Bright	34.500	5	3Alp Lyr	0.033000	11000.	69	18039	No
54	GOM_NL__2PRFIN20050812_073308_000000362039_00450_18039_5794.N1	12-AUG-2005 07:33:08	Bright	35.500	144	18Del Cyg	2.8600	11000.	71	18039	No
55	GOM_NL__2PRFIN20050812_073548_000000372039_00450_18039_5795.N1	12-AUG-2005 07:35:48	Bright	37.000	69	33Gam Dra	2.2310	3800.0	74	18039	No
56	GOM_NL__2PRFIN20050812_074012_000000372039_00450_18039_5796.N1	12-AUG-2005 07:40:12	Bright	37.000	119	14Eta Dra	2.7270	4700.0	74	18039	No
57	GOM_NL__2PRFIN20050812_074405_000000362039_00450_18039_5797.N1	12-AUG-2005 07:44:05	Bright	36.000	60	7Bet UMi	2.0810	3950.0	72	18039	No
58	GOM_NL__2PRFIN20050812_074551_000000332039_00450_18039_5798.N1	12-AUG-2005 07:45:51	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	18039	No
59	GOM_NL__2PRFIN20050812_081748_000000372039_00450_18039_5799.N1	12-AUG-2005 08:17:48	Dark	37.000	179	24Omi2CMa	3.0320	24000.	74	18039	No
60	GOM_NL__2PRFIN20050812_081915_000000392039_00450_18039_5800.N1	12-AUG-2005 08:19:15	Dark	38.500	23	21Eps CMa	1.5020	26000.	77	18039	No
61	GOM_NL__2PRFIN20050812_082120_000000412039_00450_18039_5801.N1	12-AUG-2005 08:21:20	Dark	41.000	117	Pi Pup	2.7060	3800.0	82	18039	No
62	GOM_NL__2PRFIN20050812_082604_000000522039_00450_18039_5802.N1	12-AUG-2005 08:26:04	Dark	51.500	2	Alp Car	-0.73600	7000.0	103	18039	No

3. Quality information per product

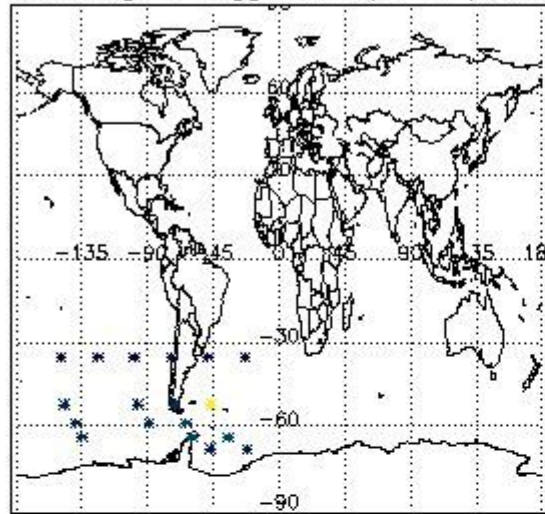
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

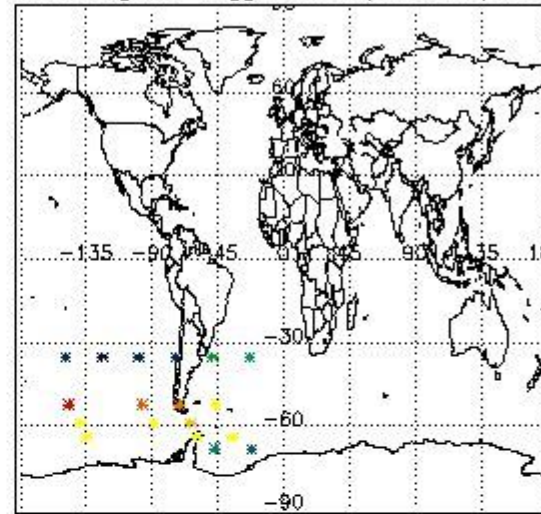


3.2 Plot quality information per product (world map)

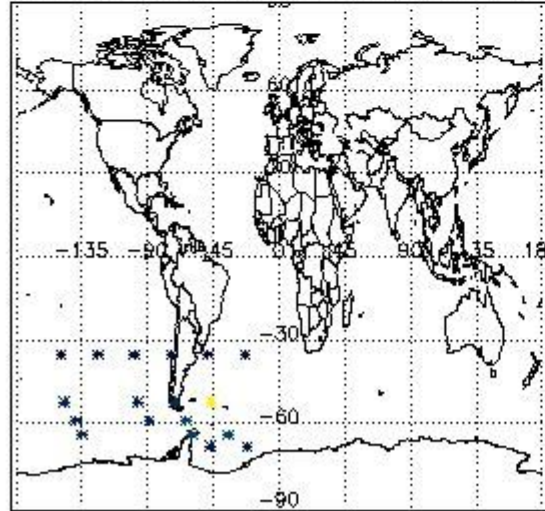
Percentage of flagged data per O3 profile



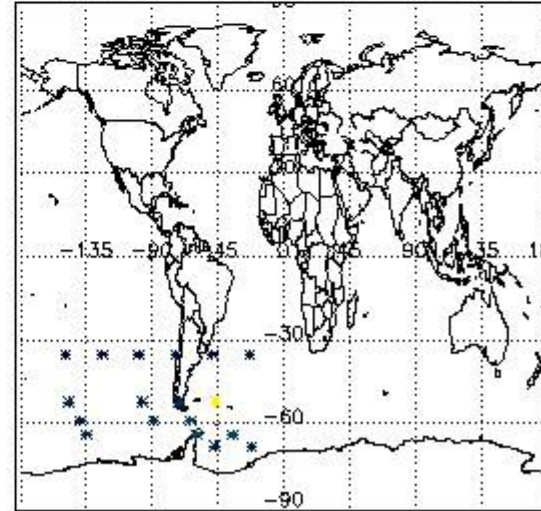
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

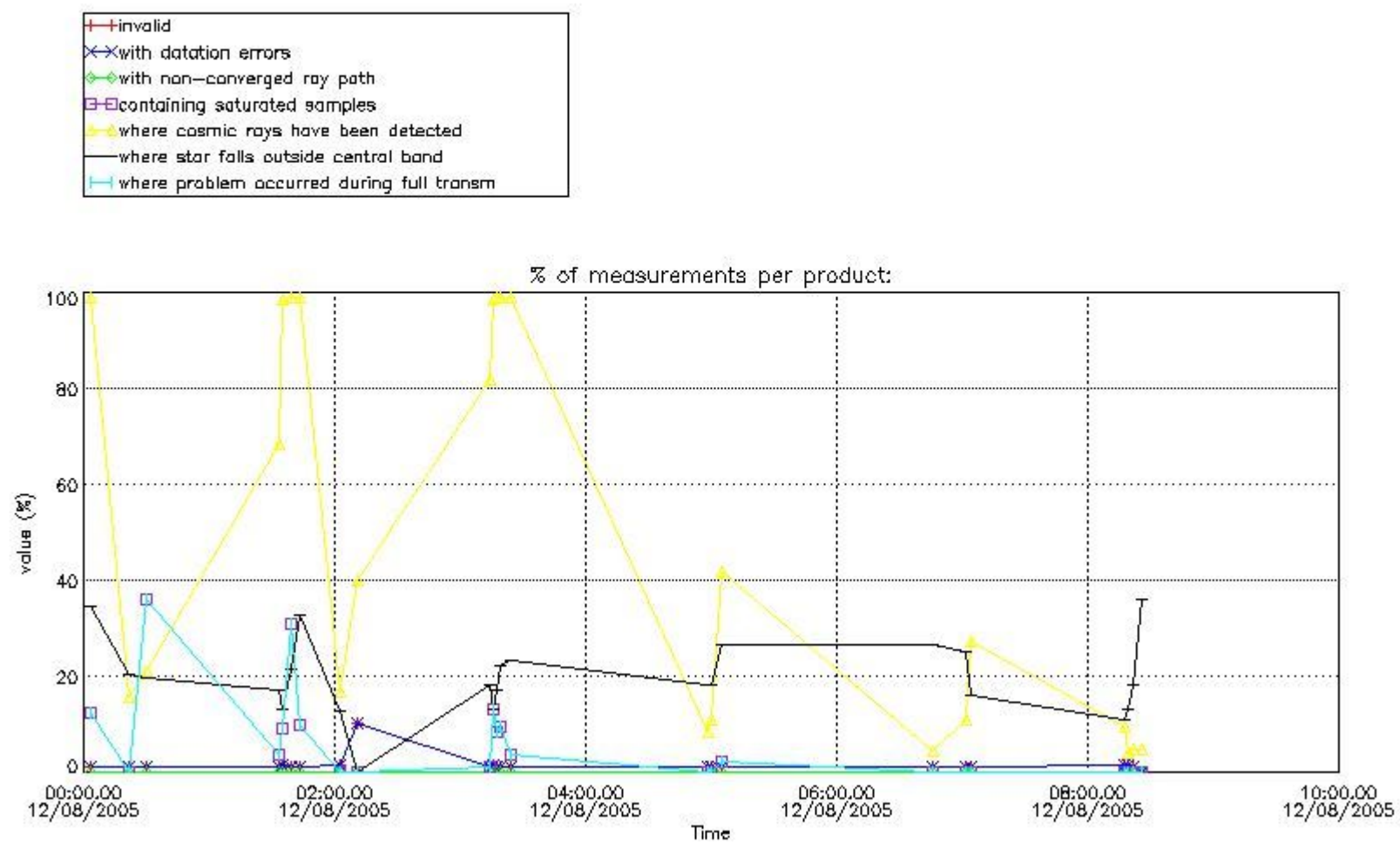


4. Level 1 quality information per product

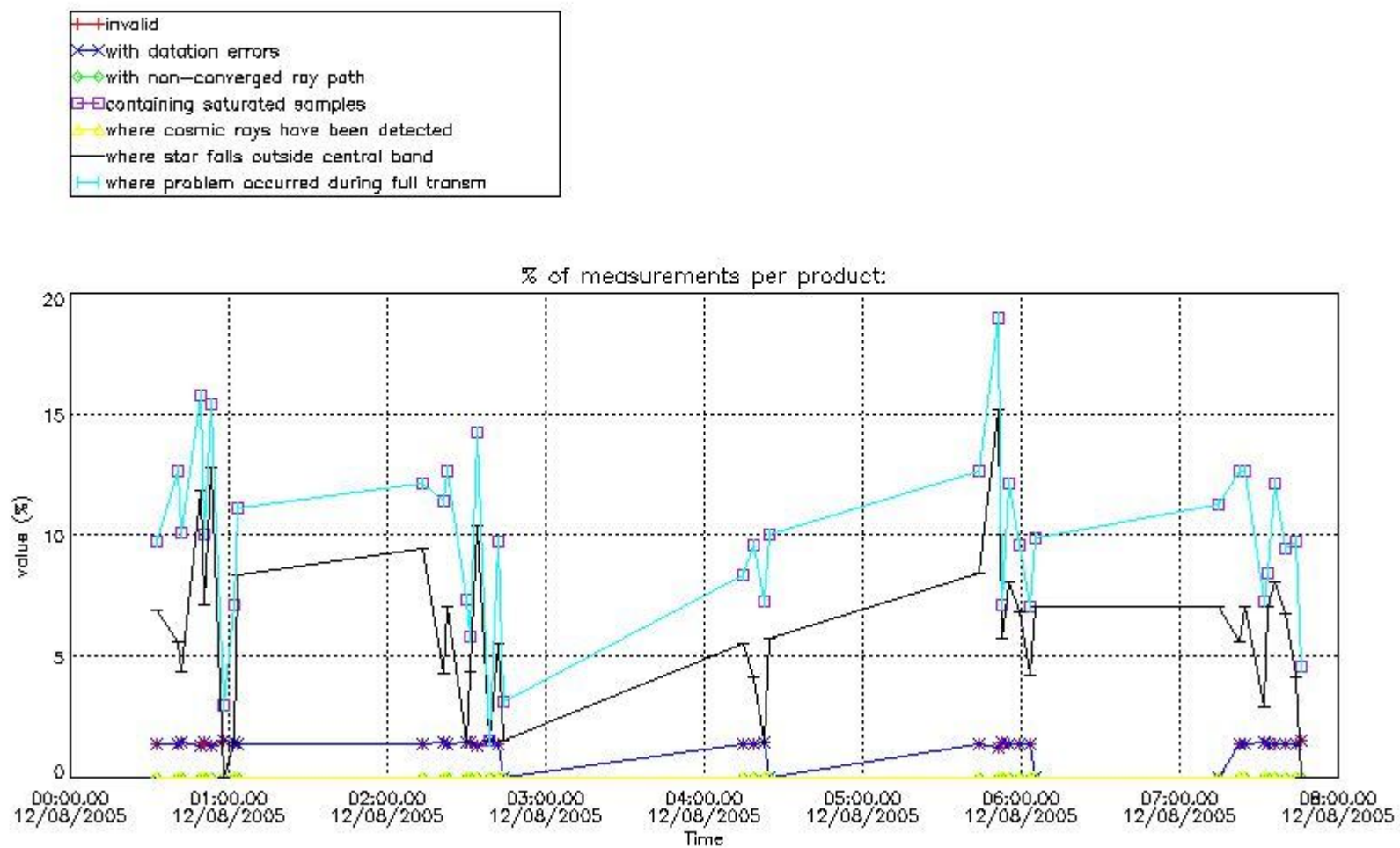
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



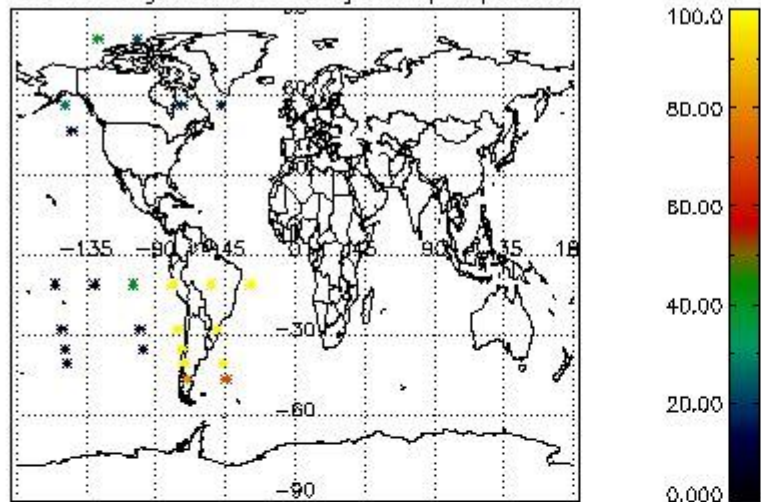
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



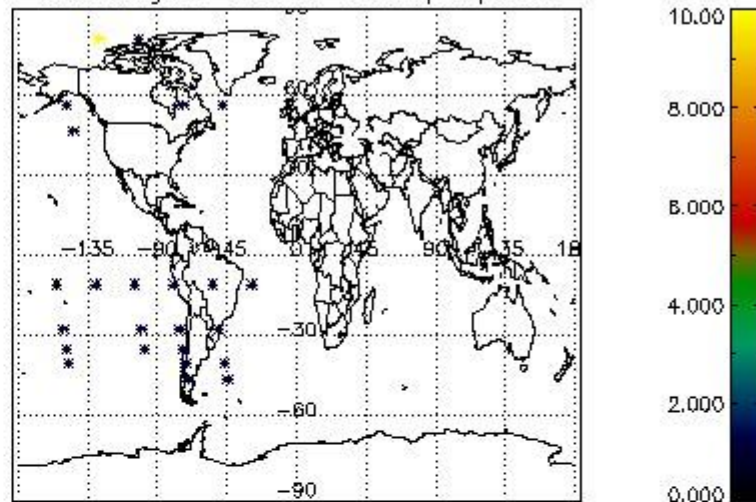
4.2 Plot quality information per product coming from level 1b processing (world map)

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

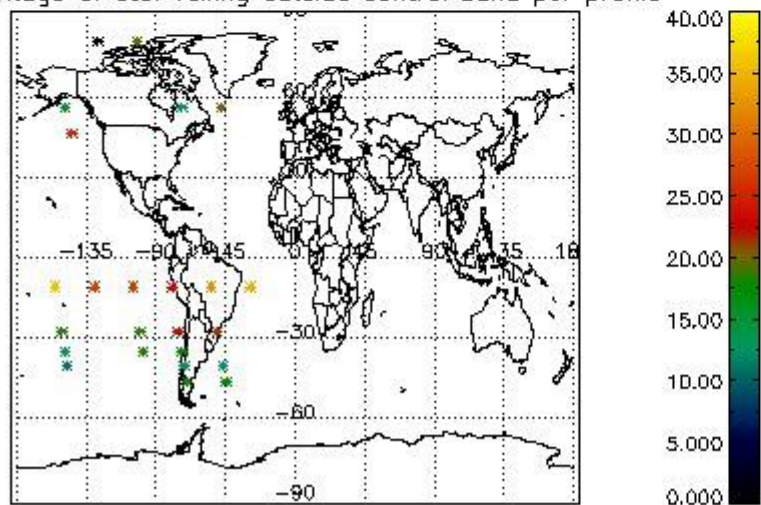
Percentage of cosmic ray hits per profile



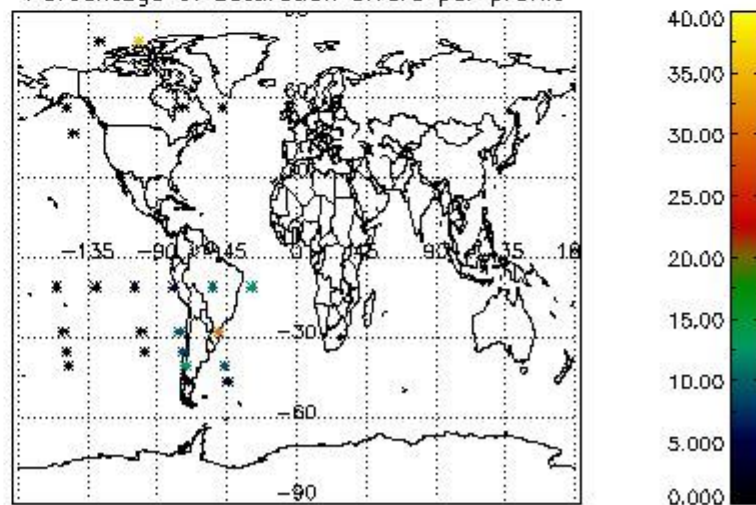
Percentage of datation errors per profile



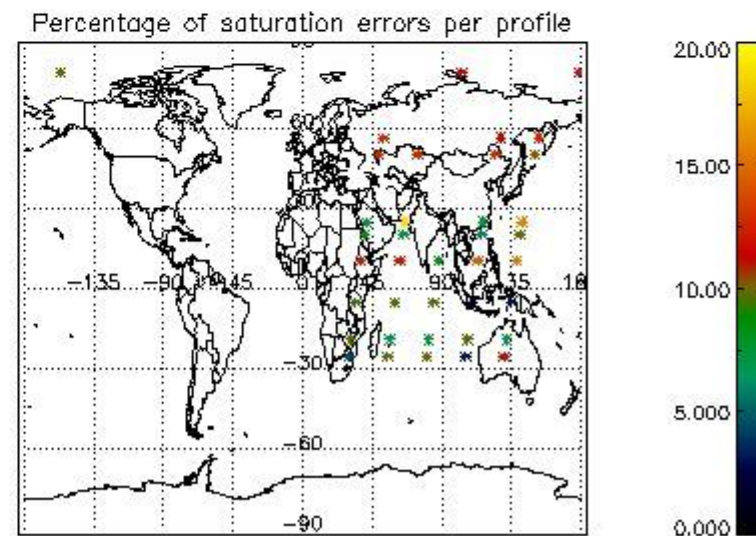
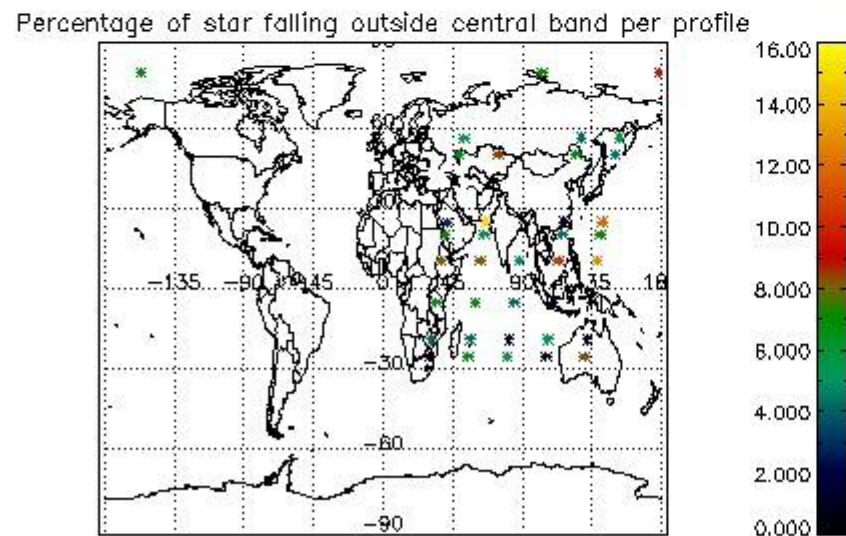
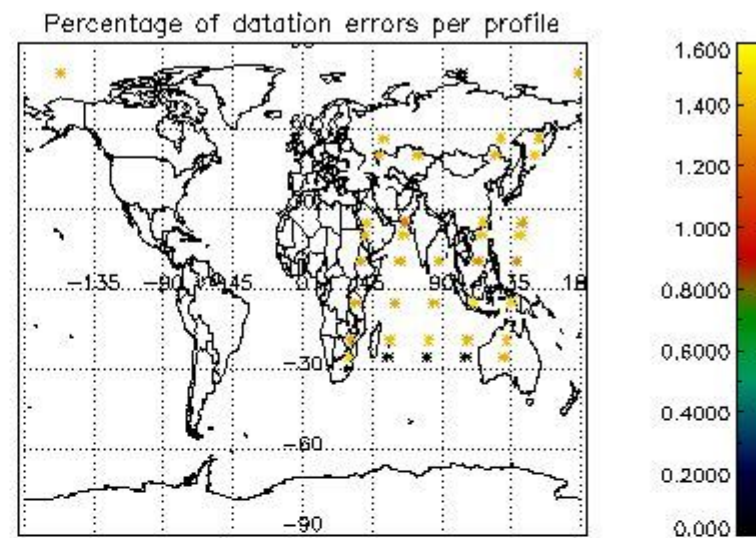
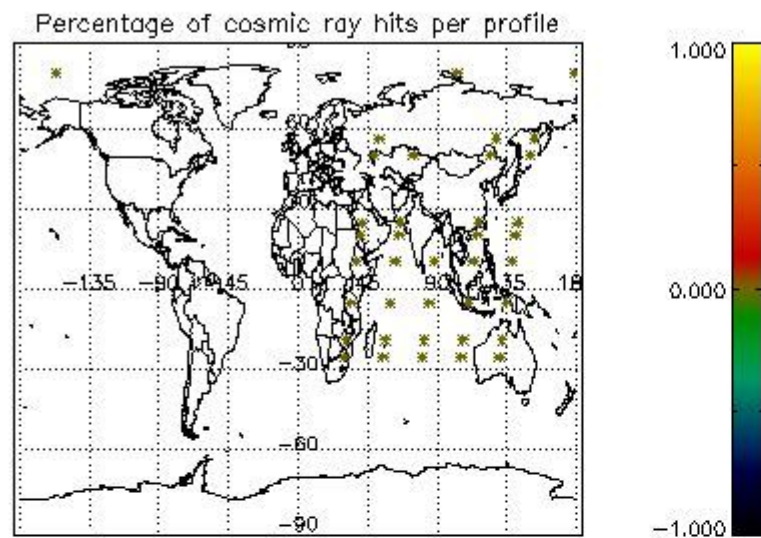
Percentage of star falling outside central band per profile



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

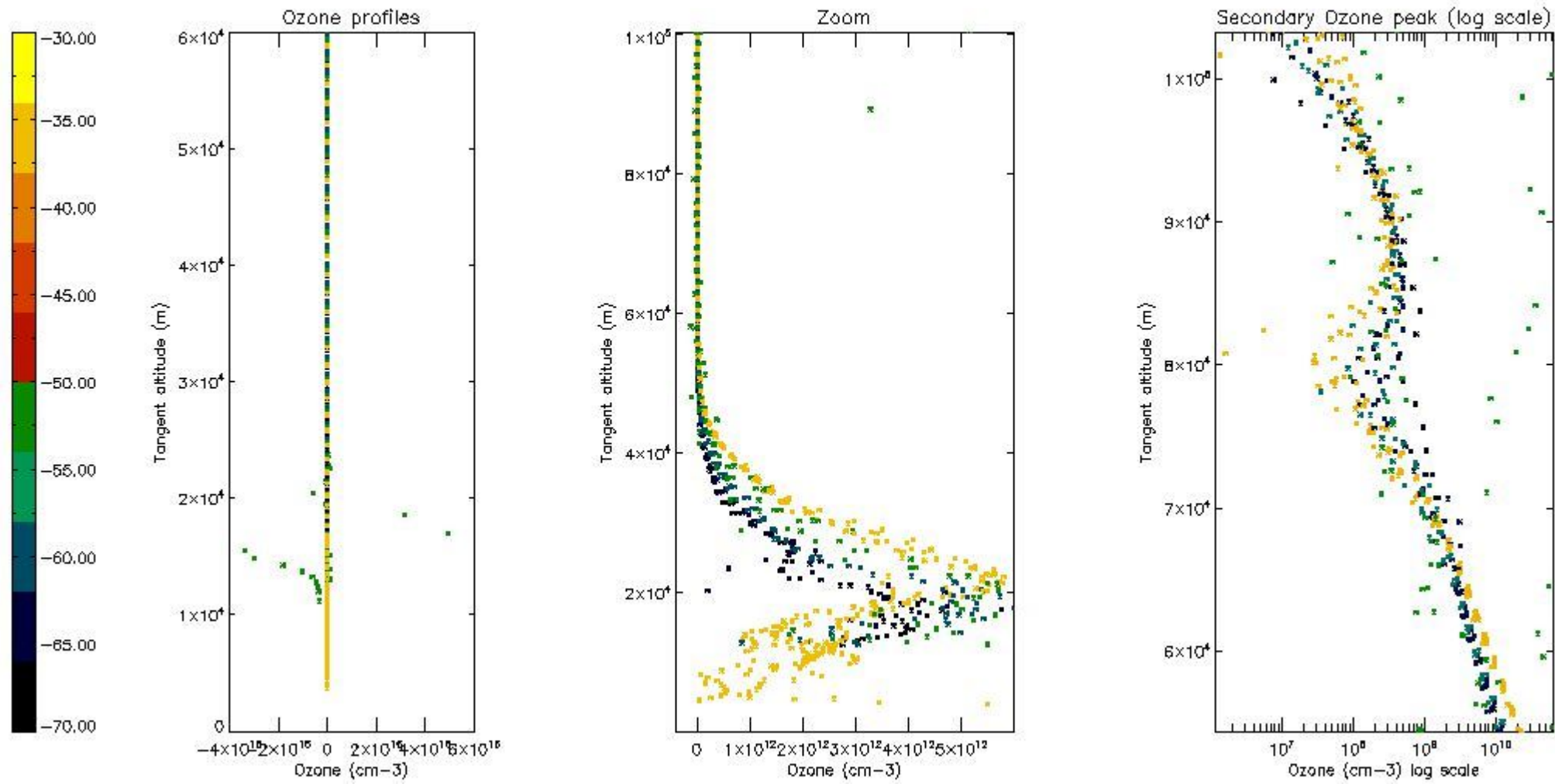
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	33
STD < 20	20

STD < 10	17
STD < 5	13

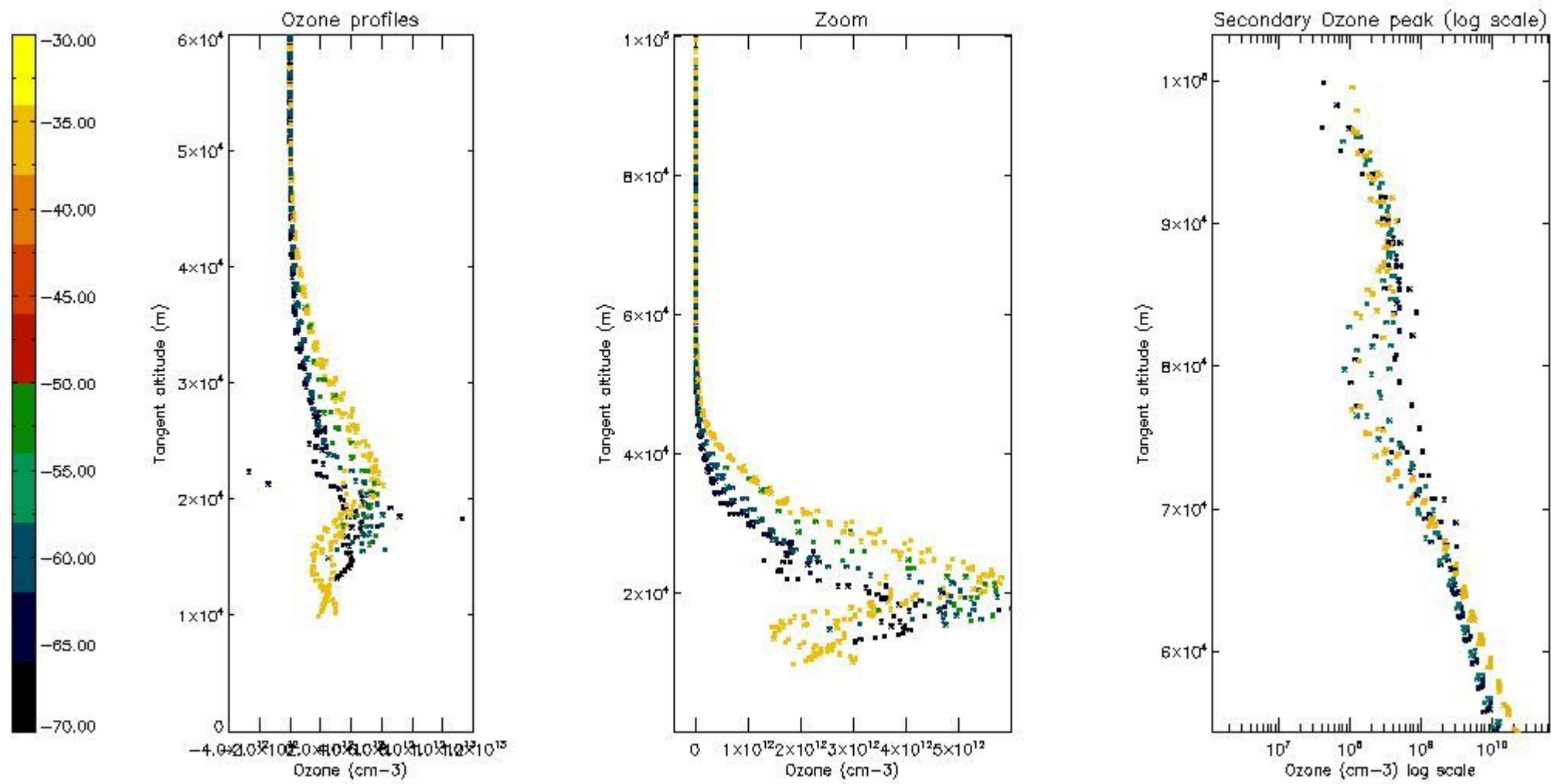
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



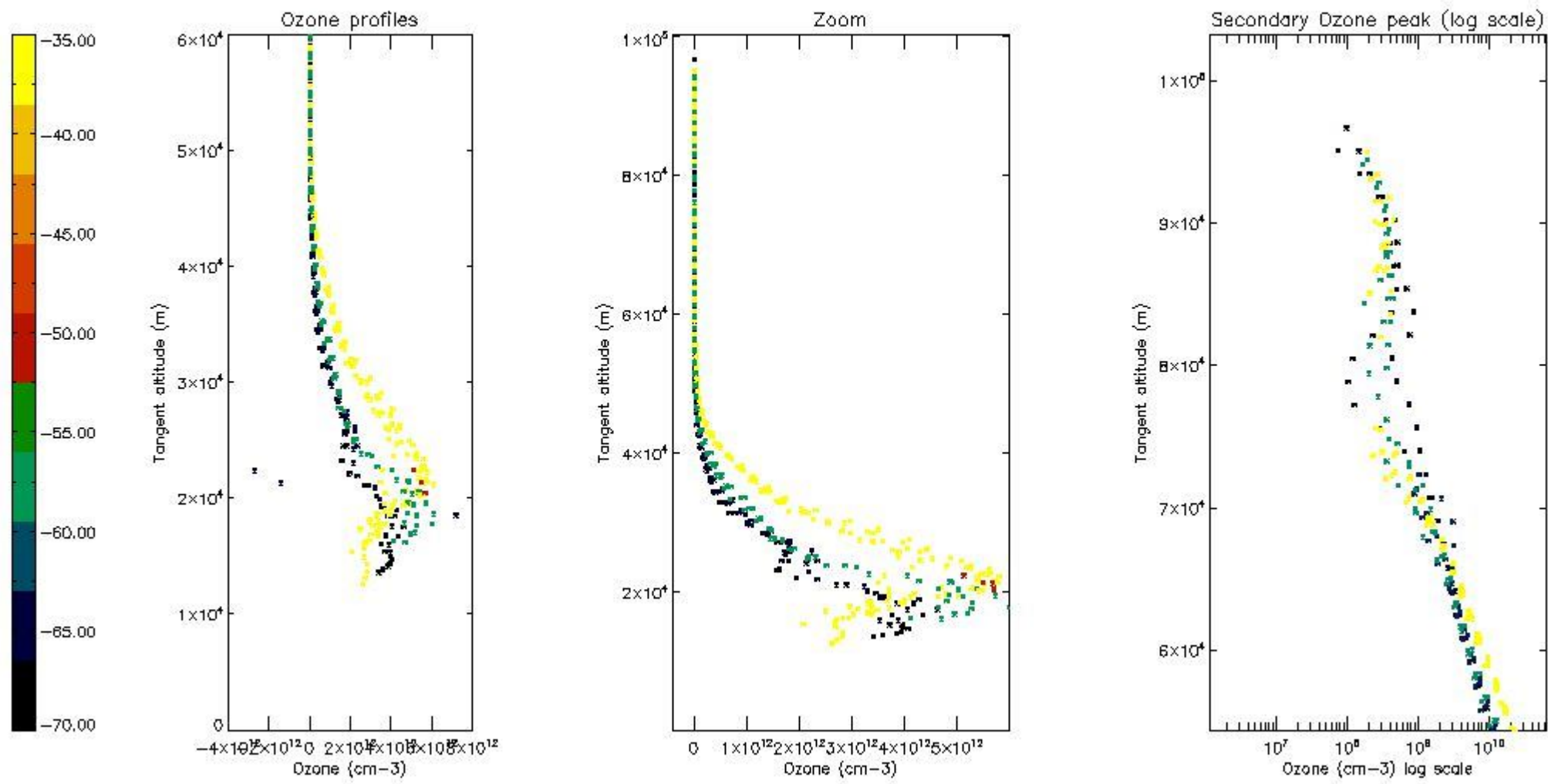
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



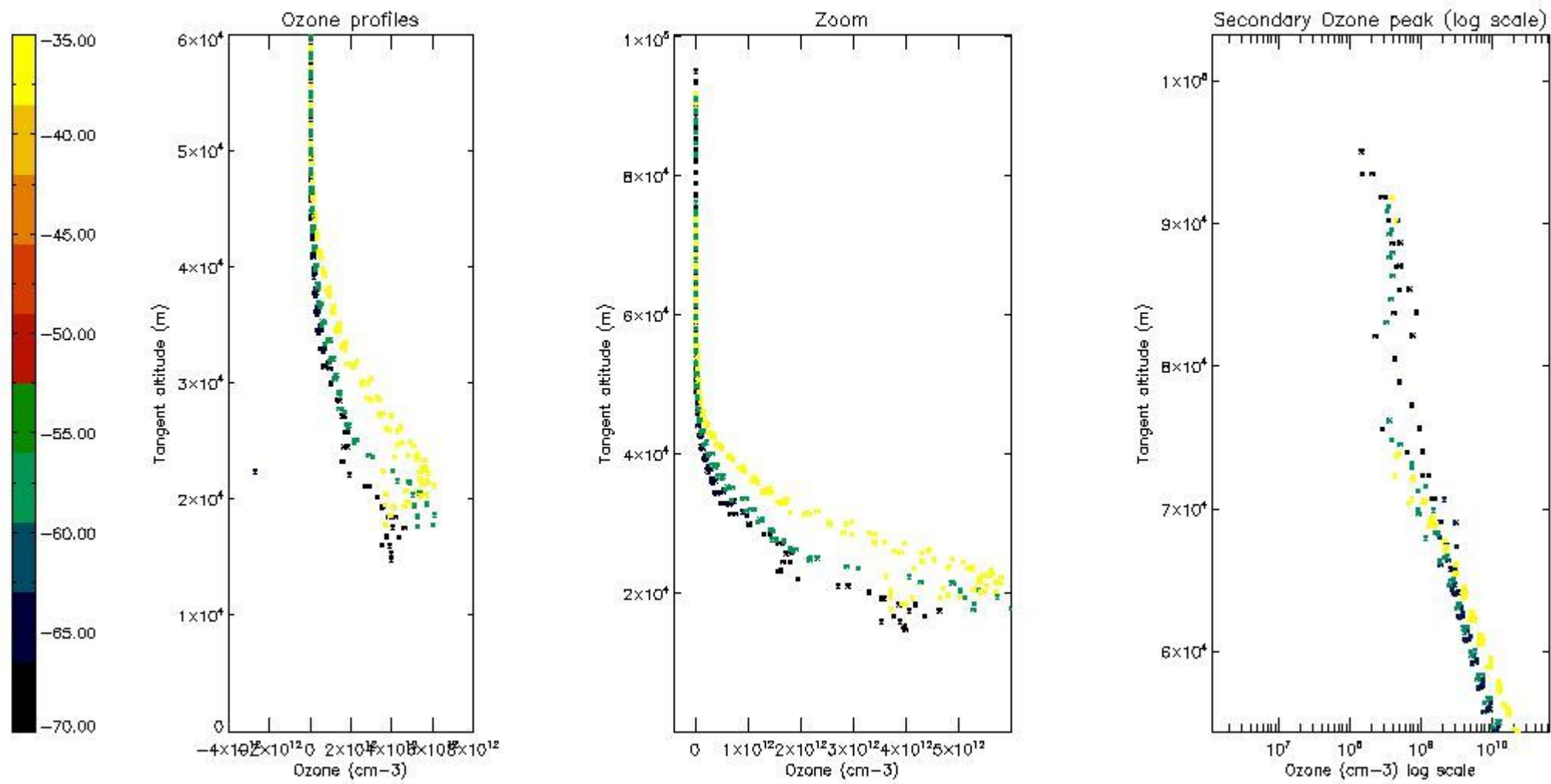
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



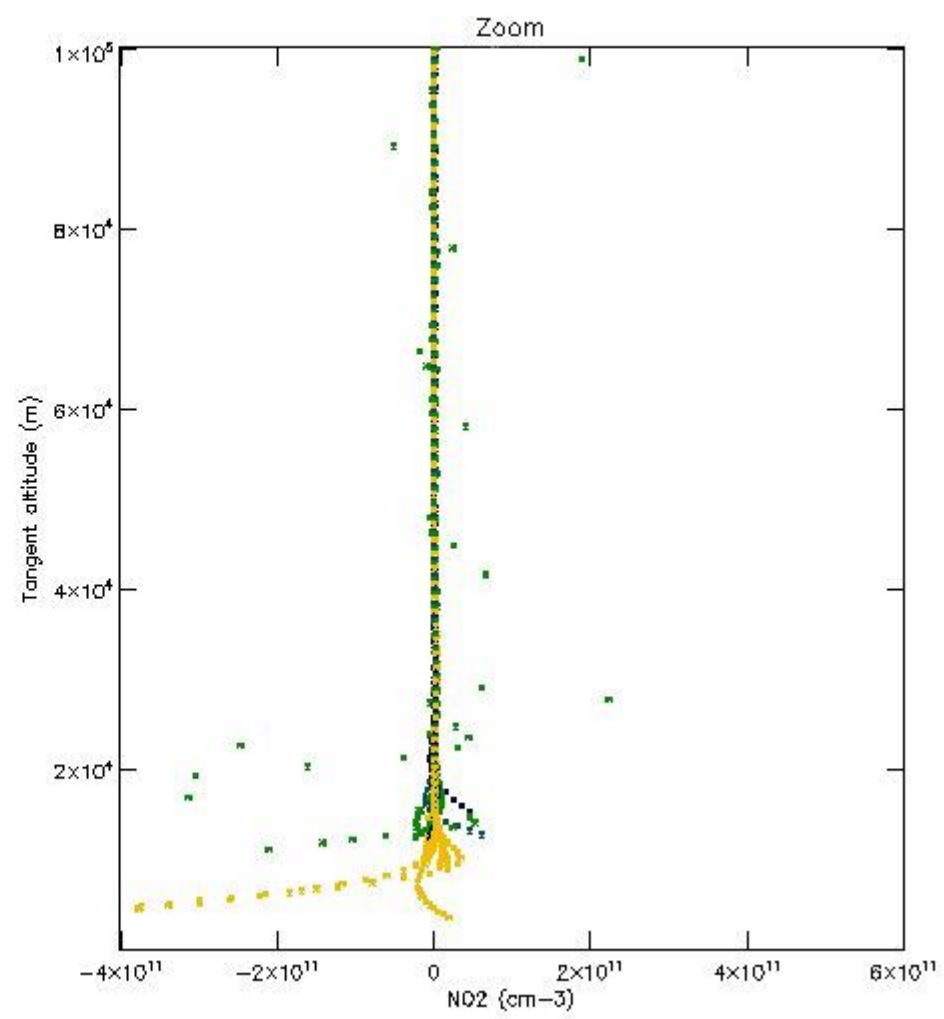
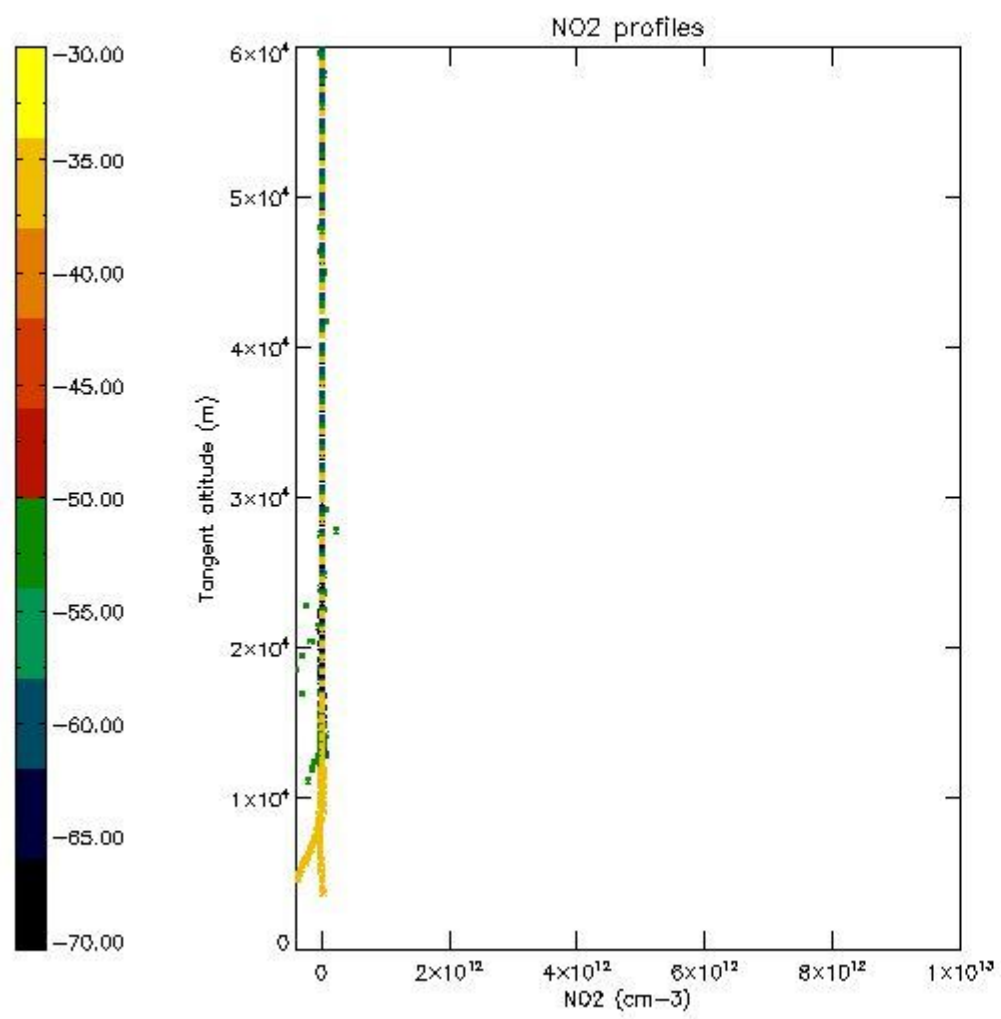
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



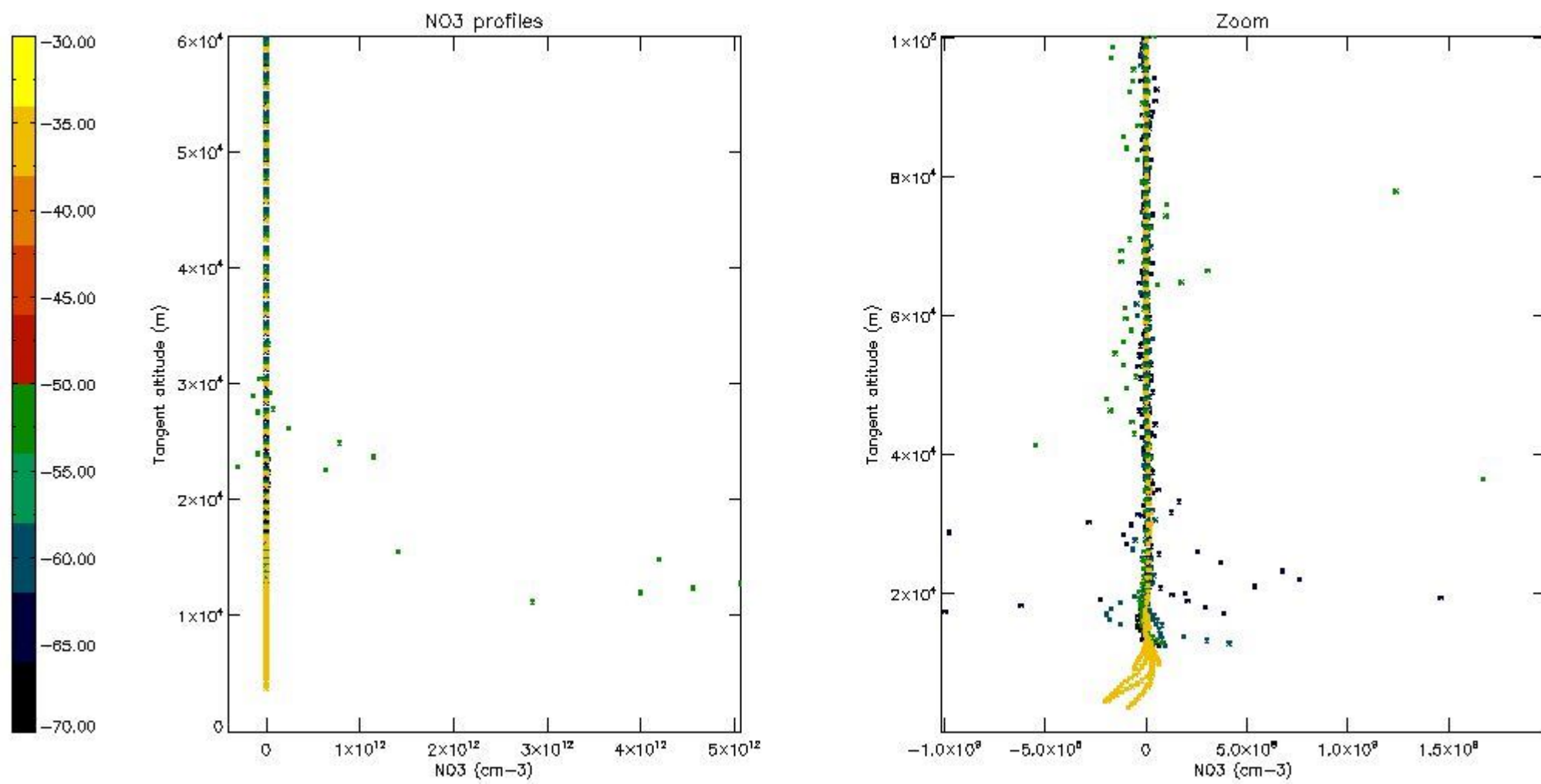
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



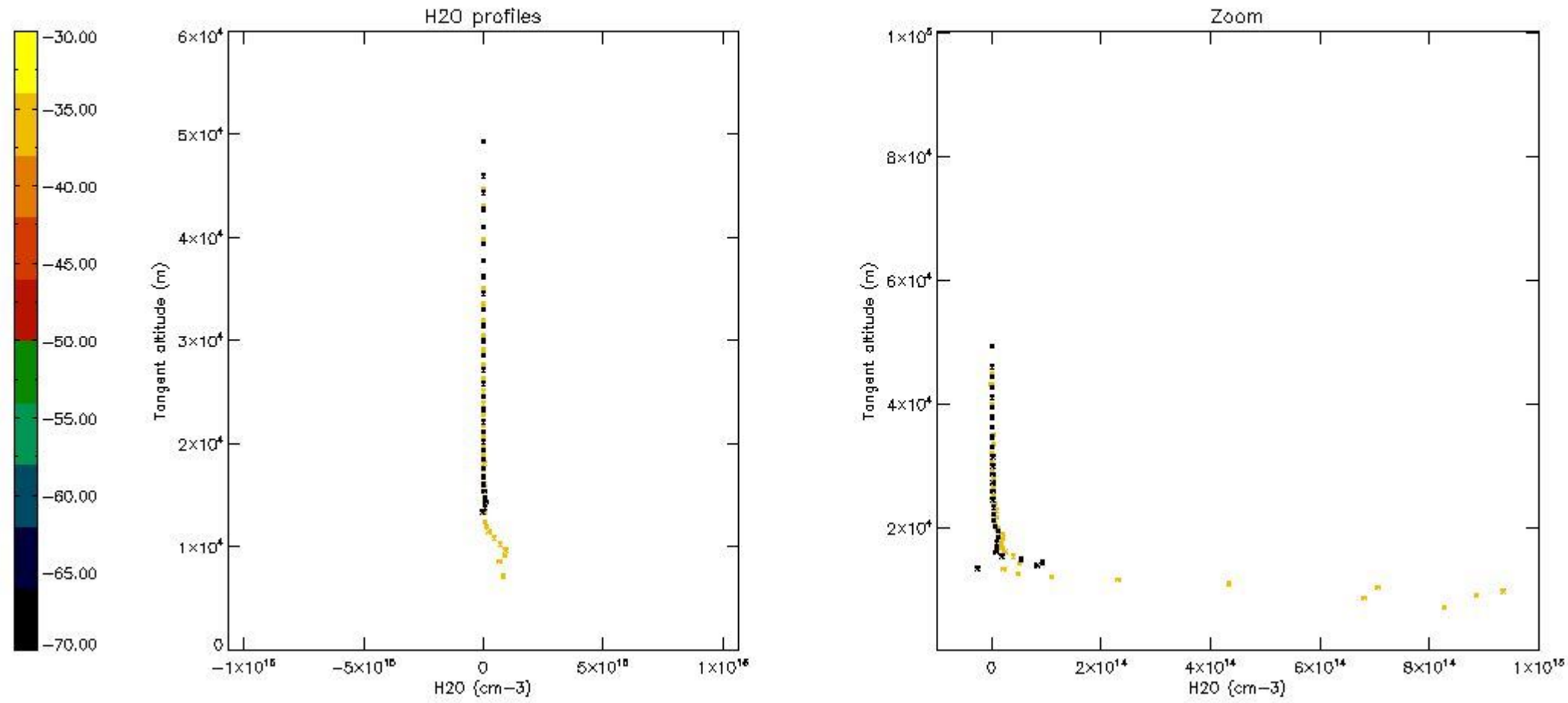
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

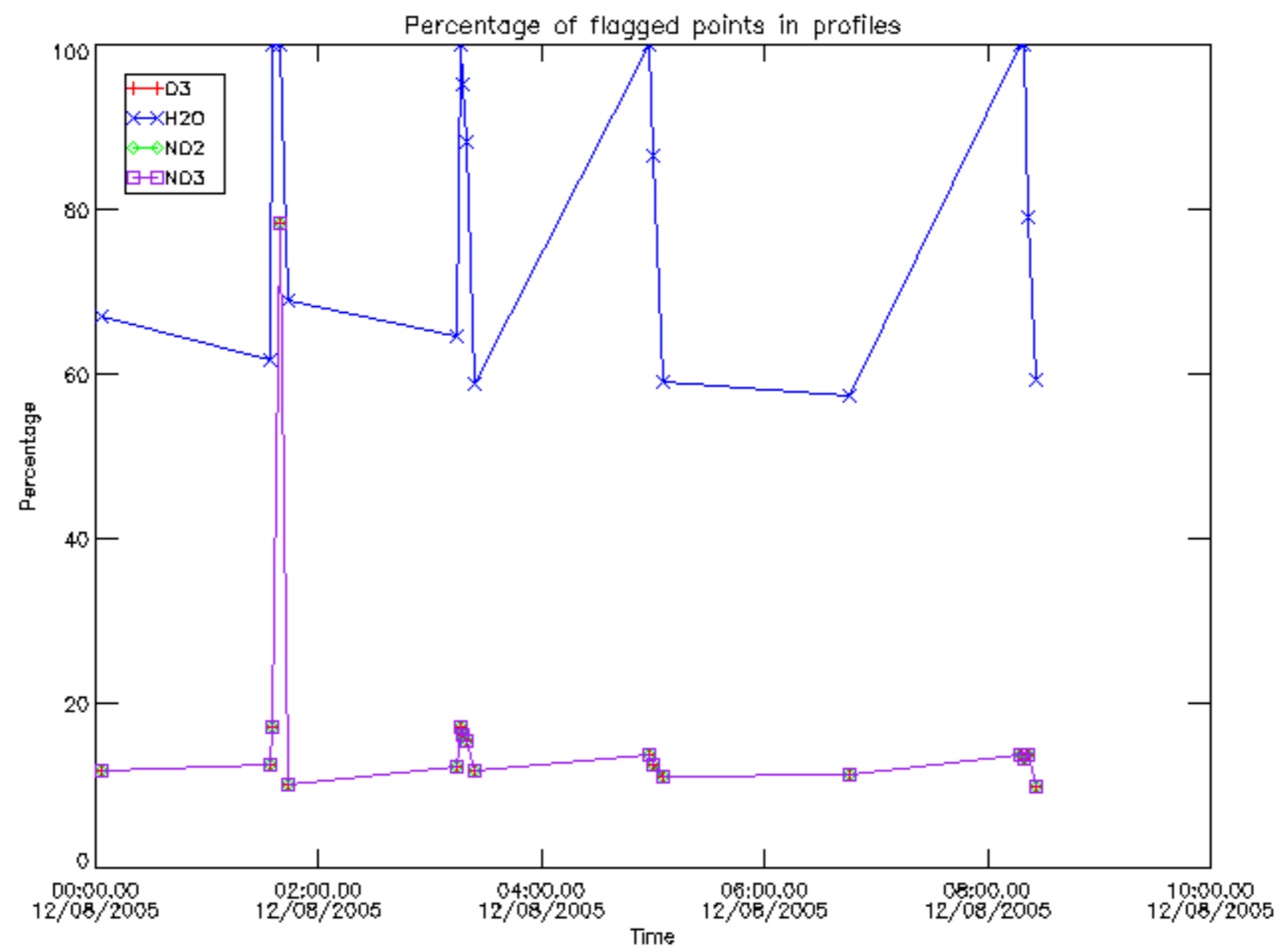
The colorbar represents the latitude.



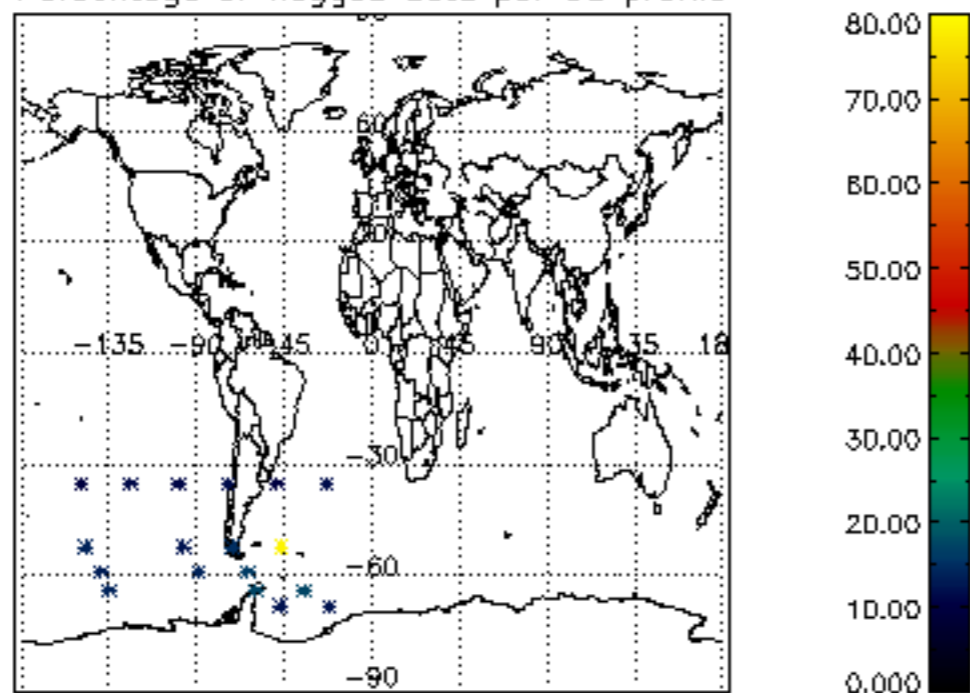
6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

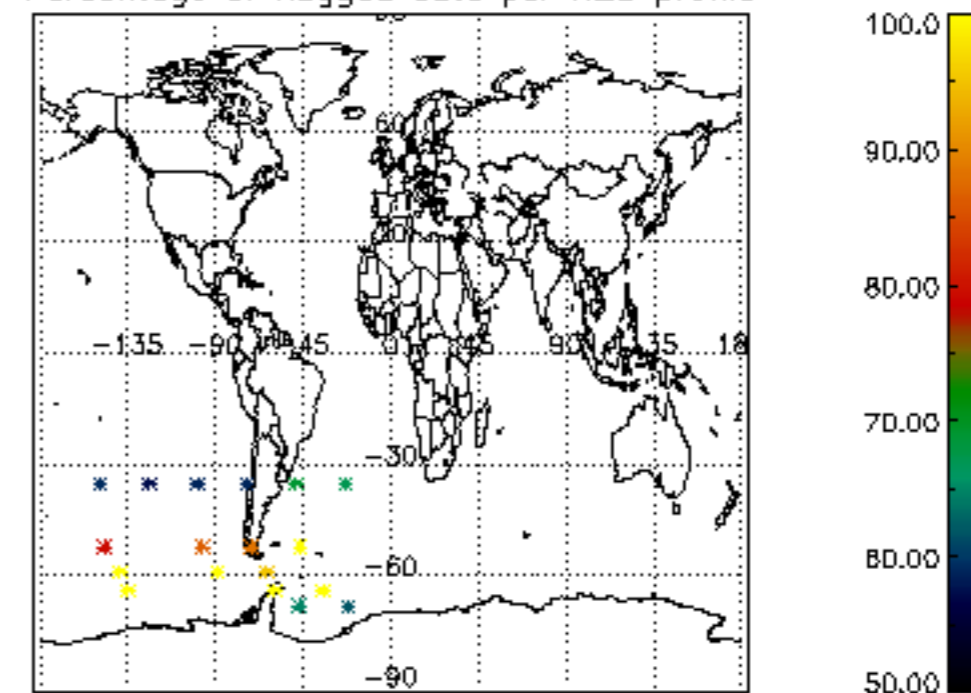
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	12-AUG-2005 00:03:03
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	12-AUG-2005 00:03:03
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	12-AUG-2005 00:03:03



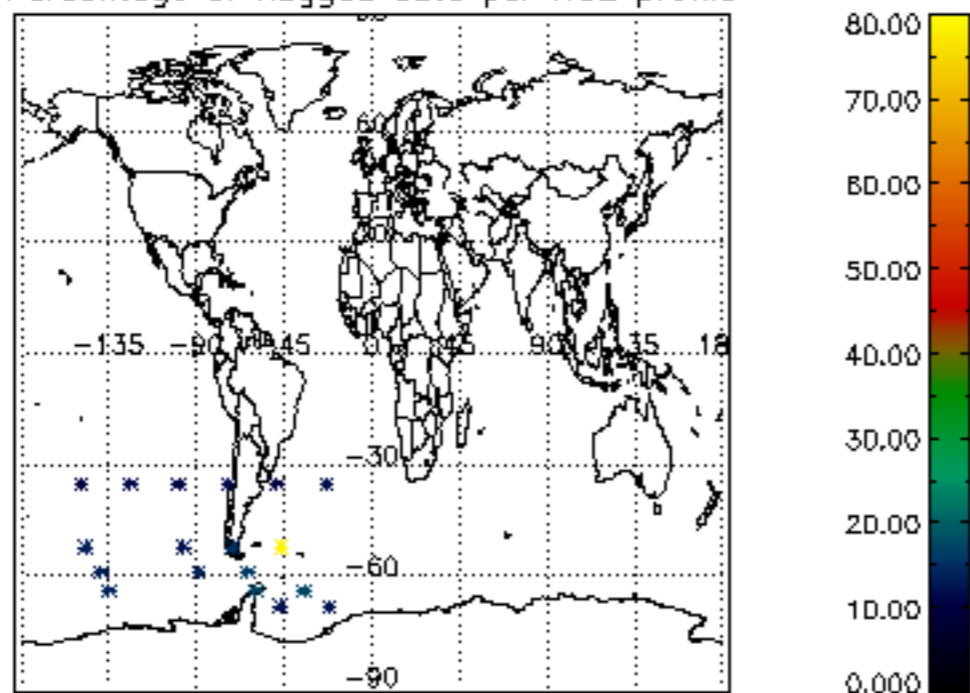
Percentage of flagged data per D3 profile



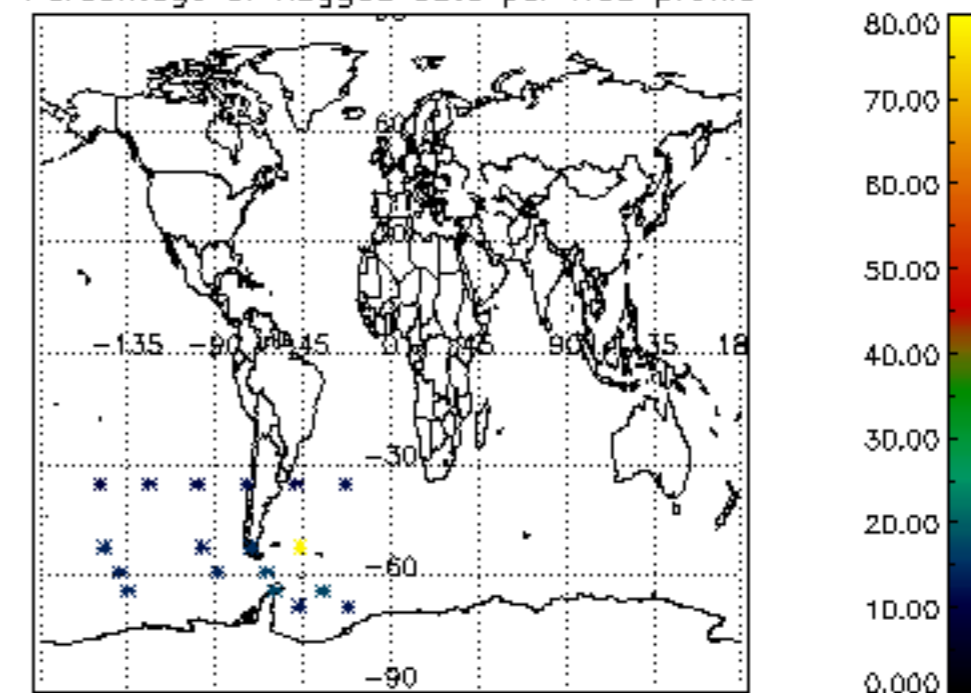
Percentage of flagged data per H2O profile

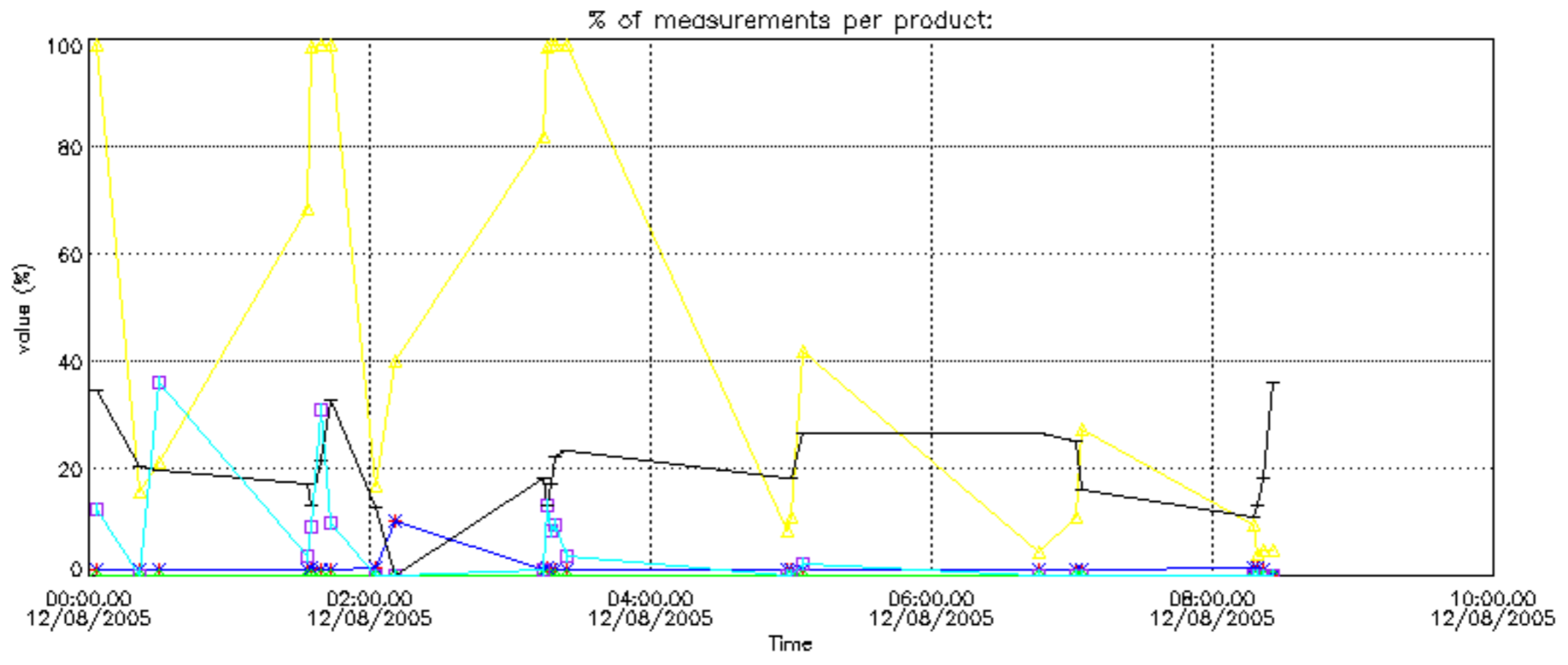


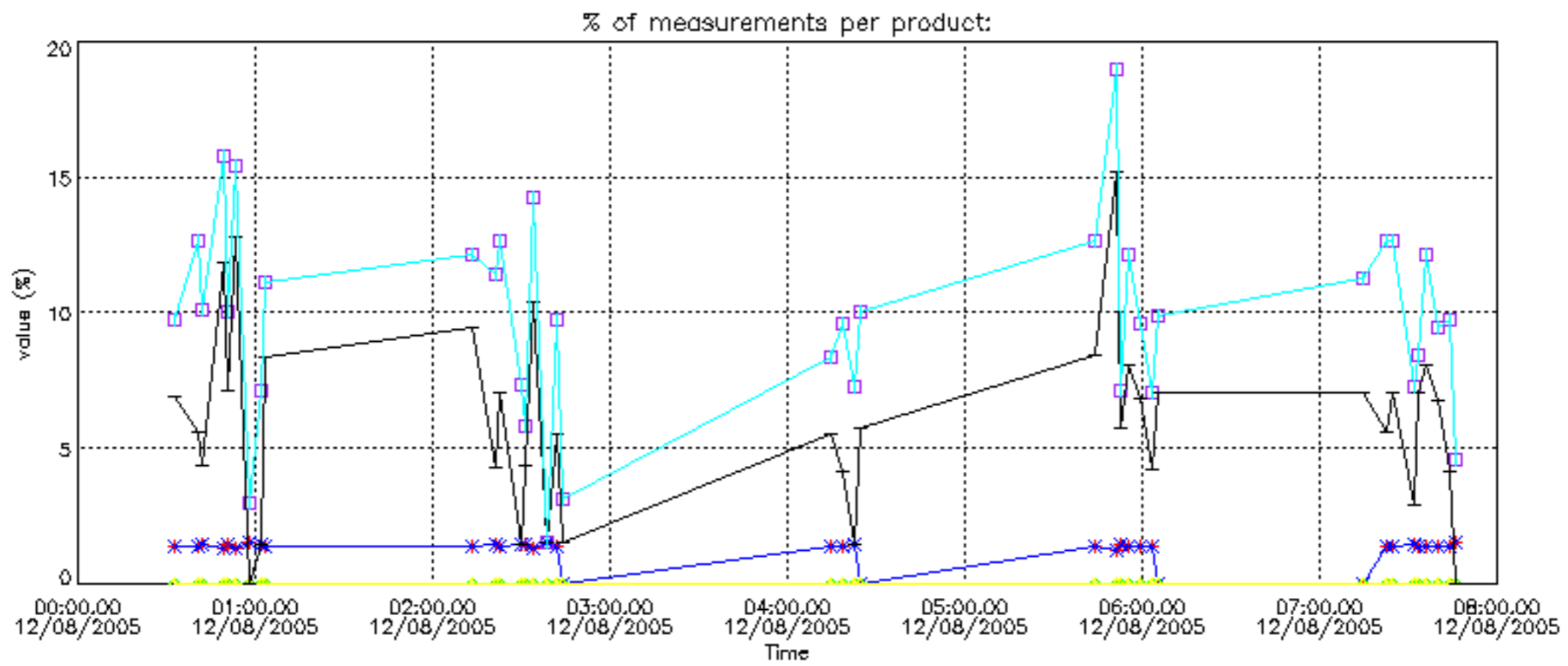
Percentage of flagged data per NO2 profile



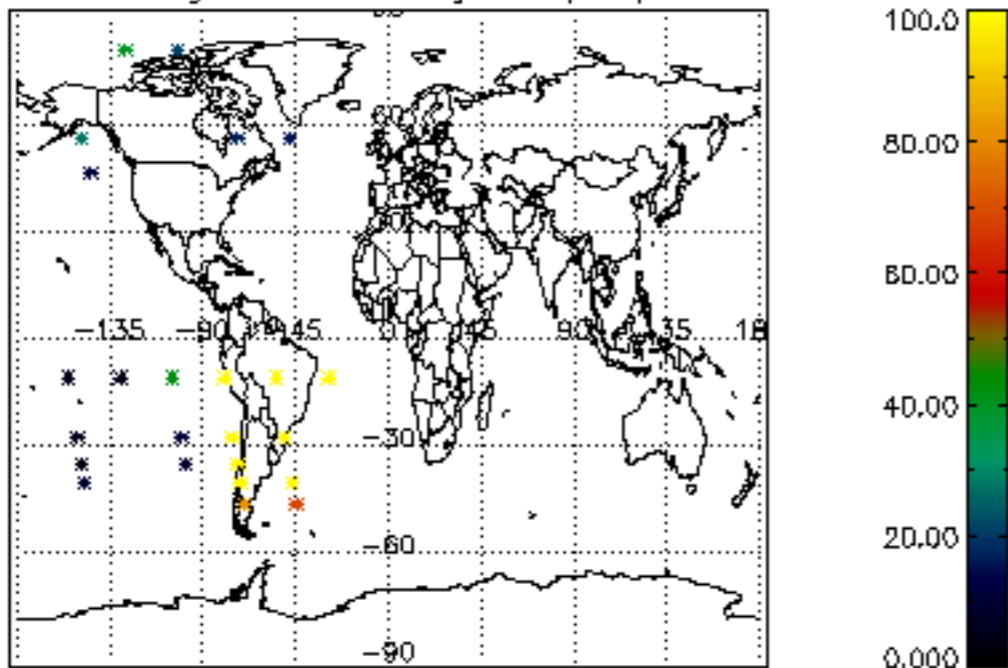
Percentage of flagged data per NO3 profile



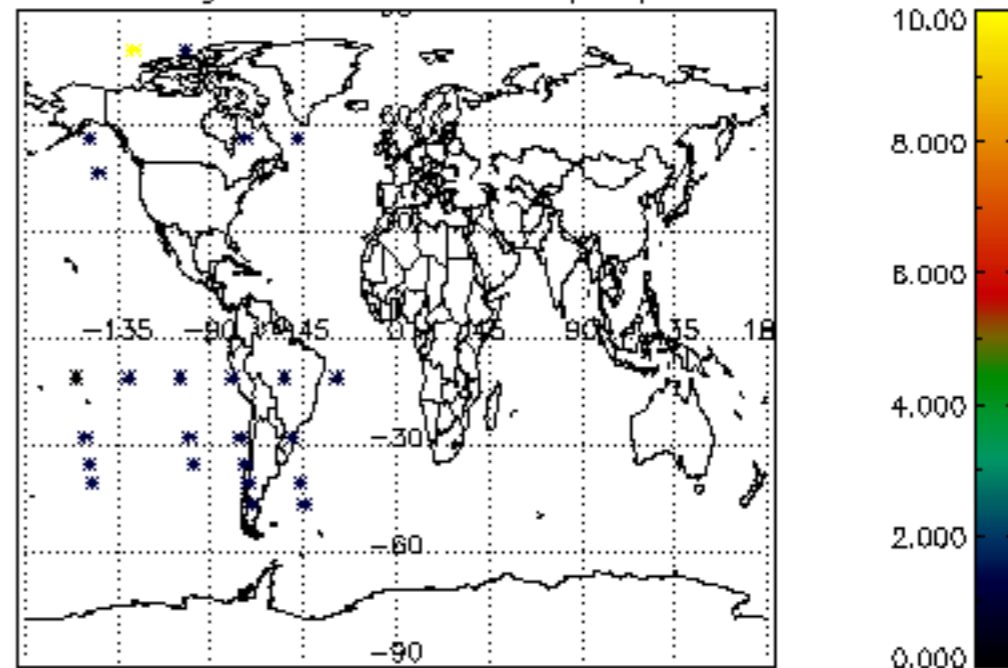




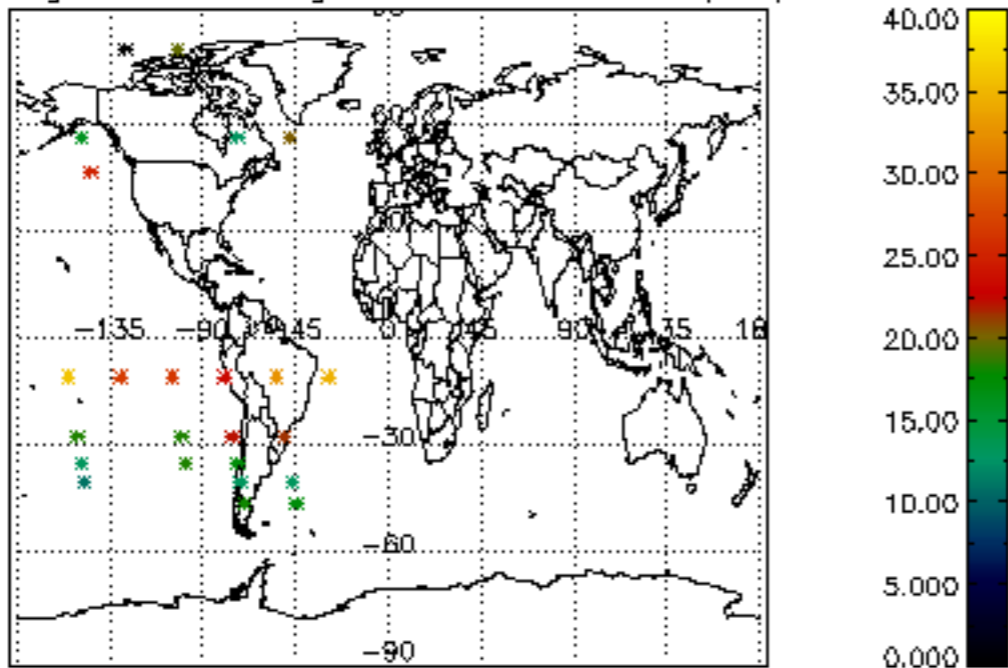
Percentage of cosmic ray hits per profile



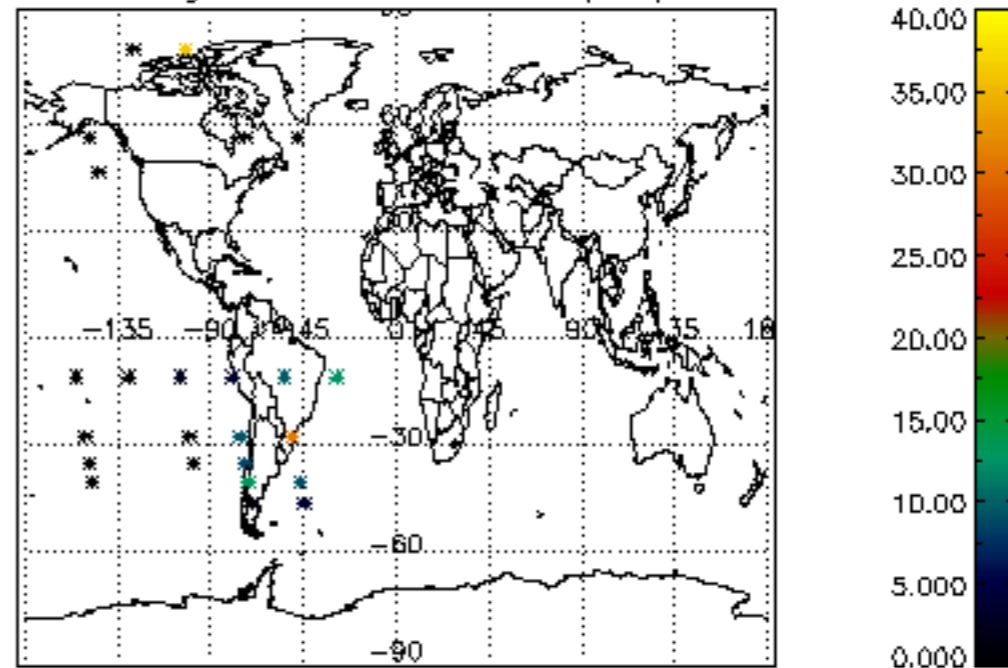
Percentage of datation errors per profile



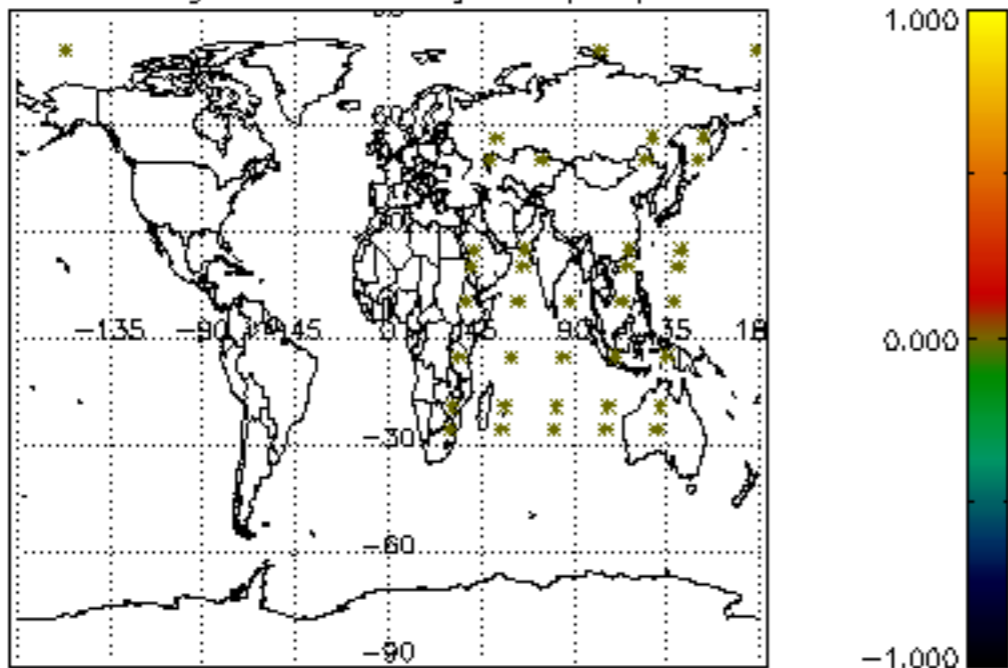
Percentage of star falling outside central band per profile



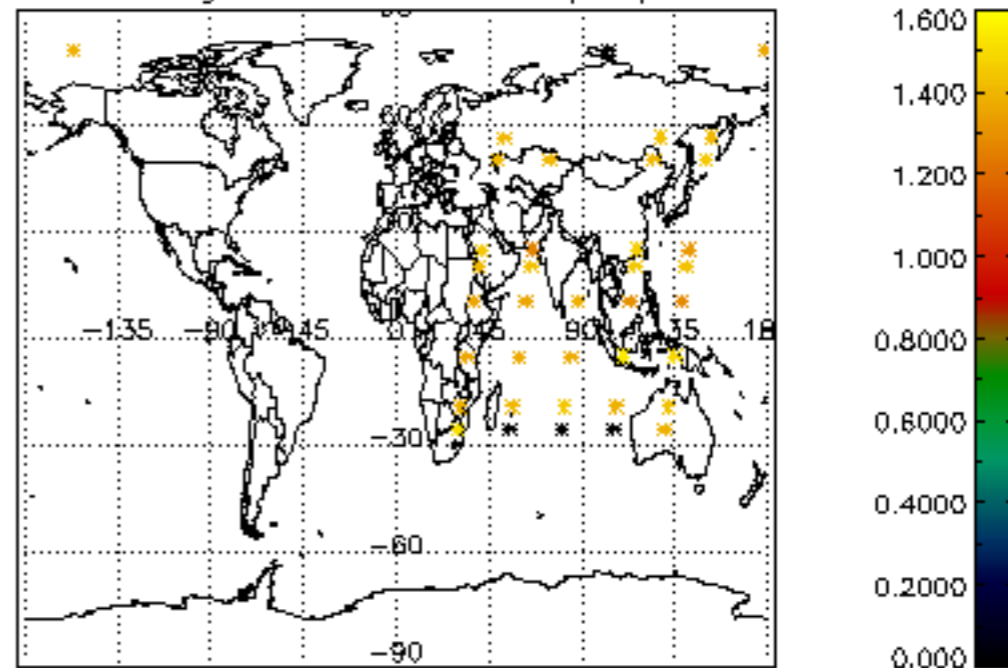
Percentage of saturation errors per profile



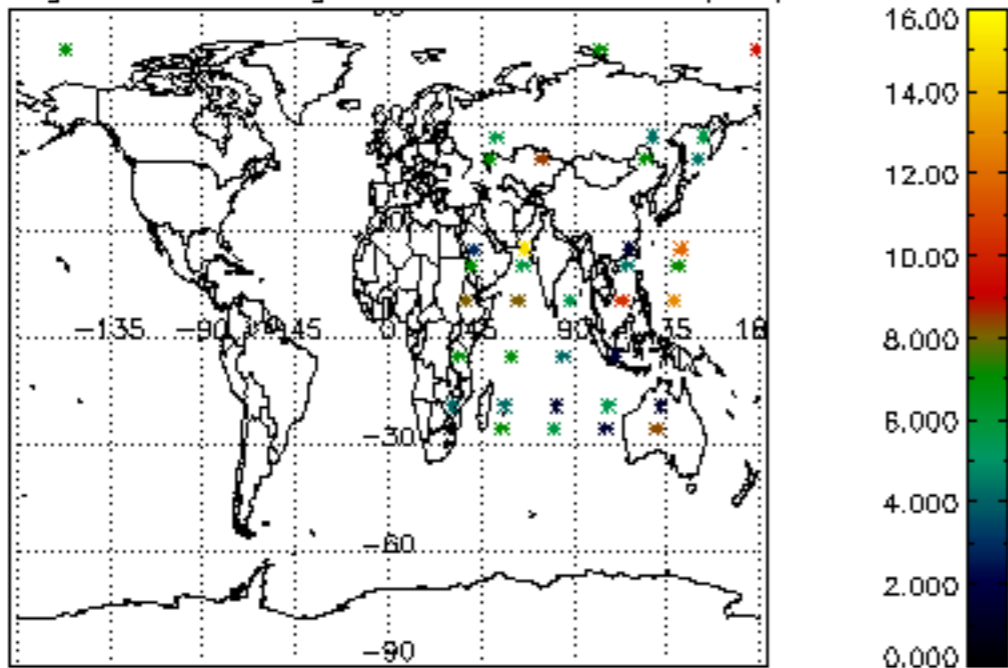
Percentage of cosmic ray hits per profile



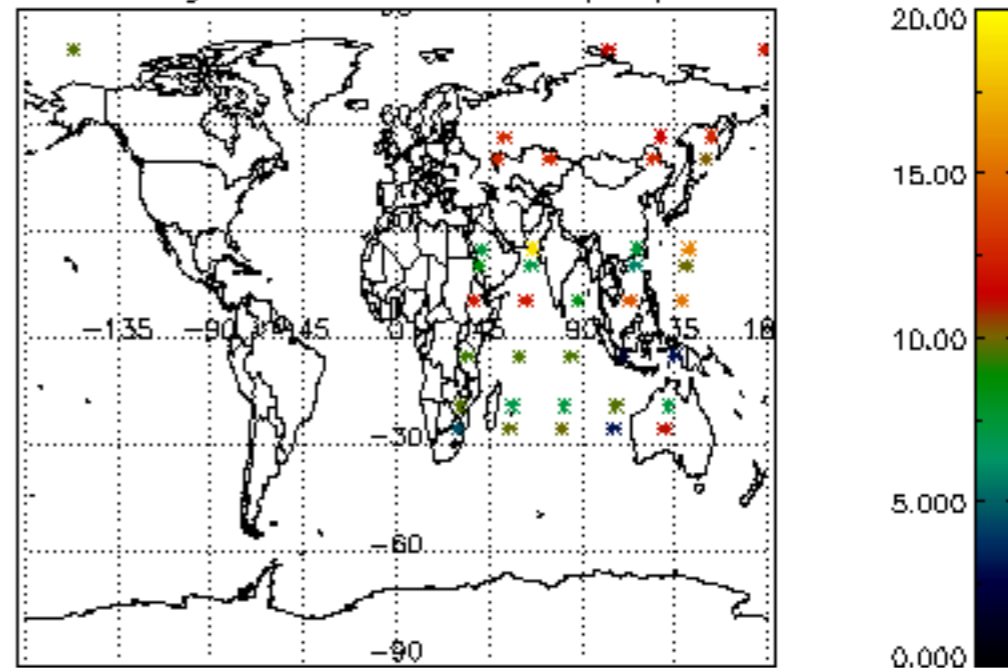
Percentage of datation errors per profile

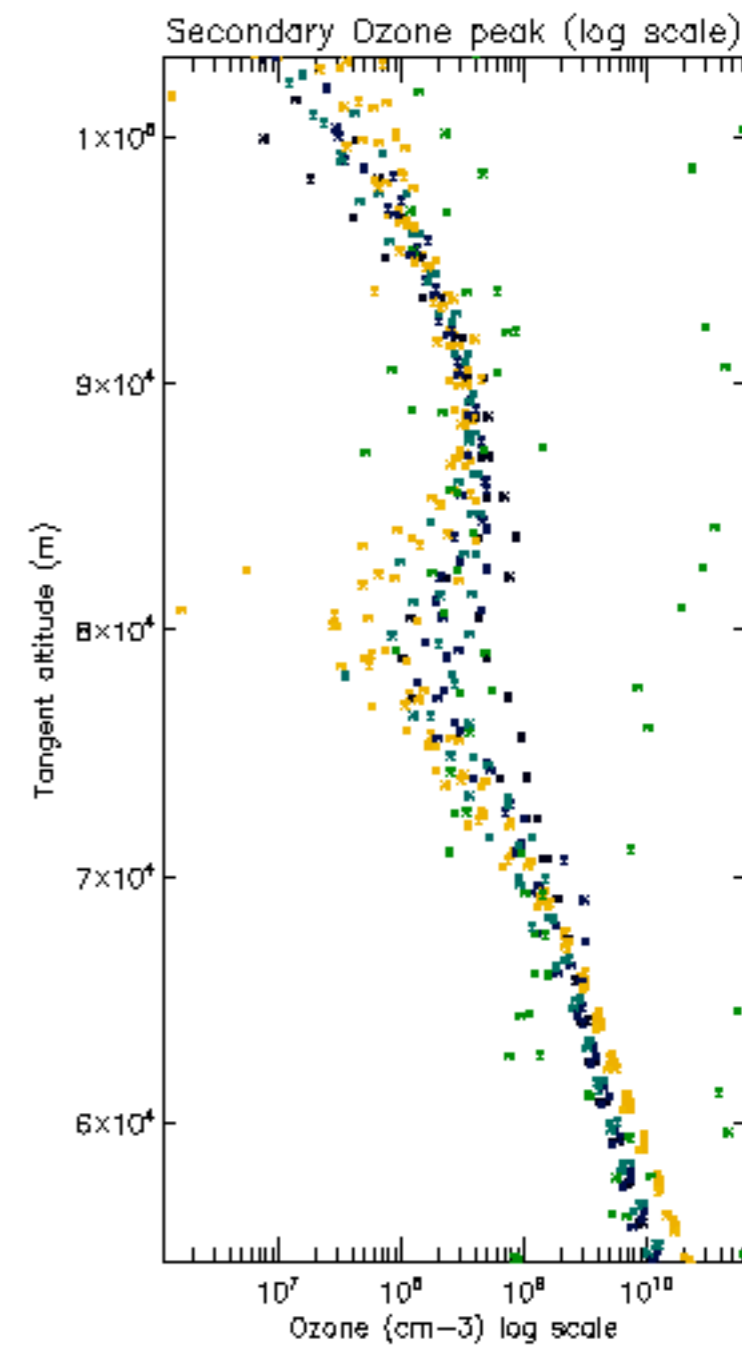
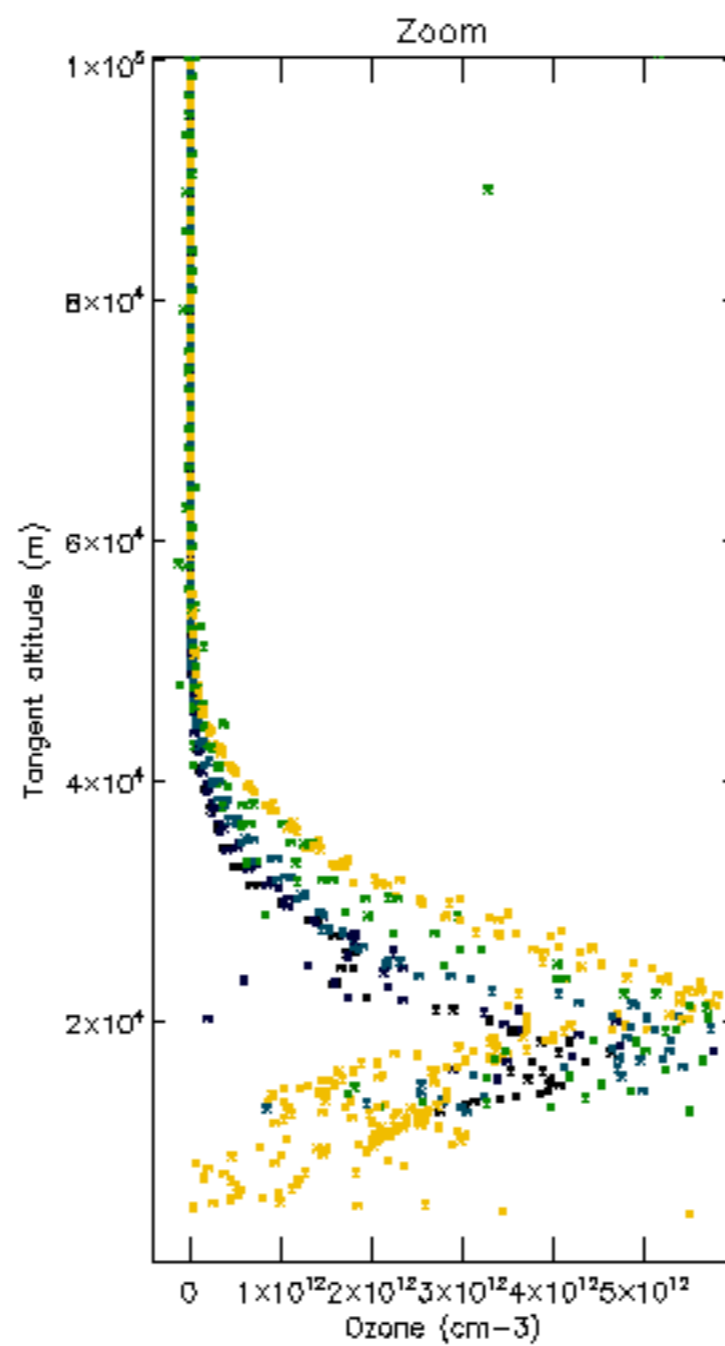
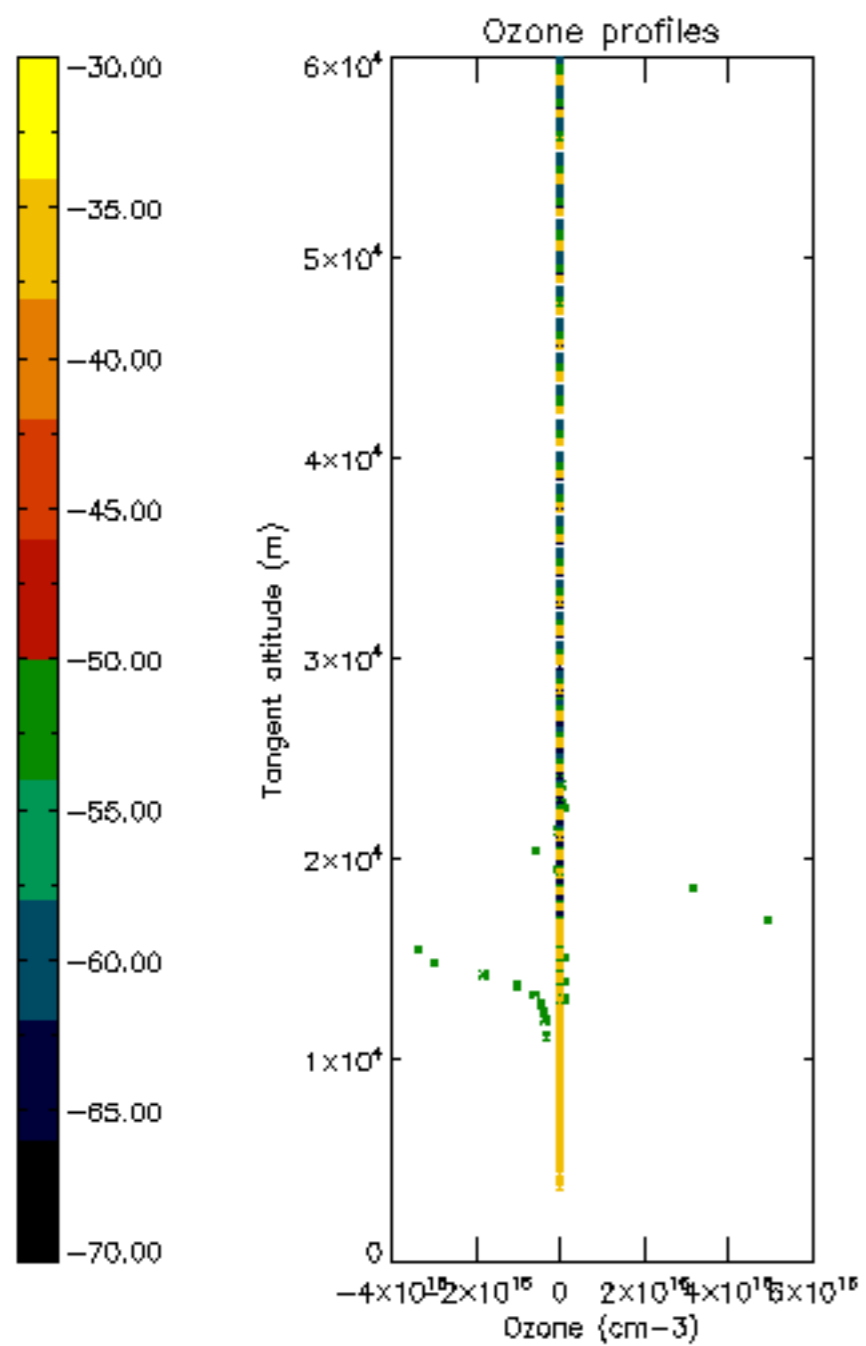


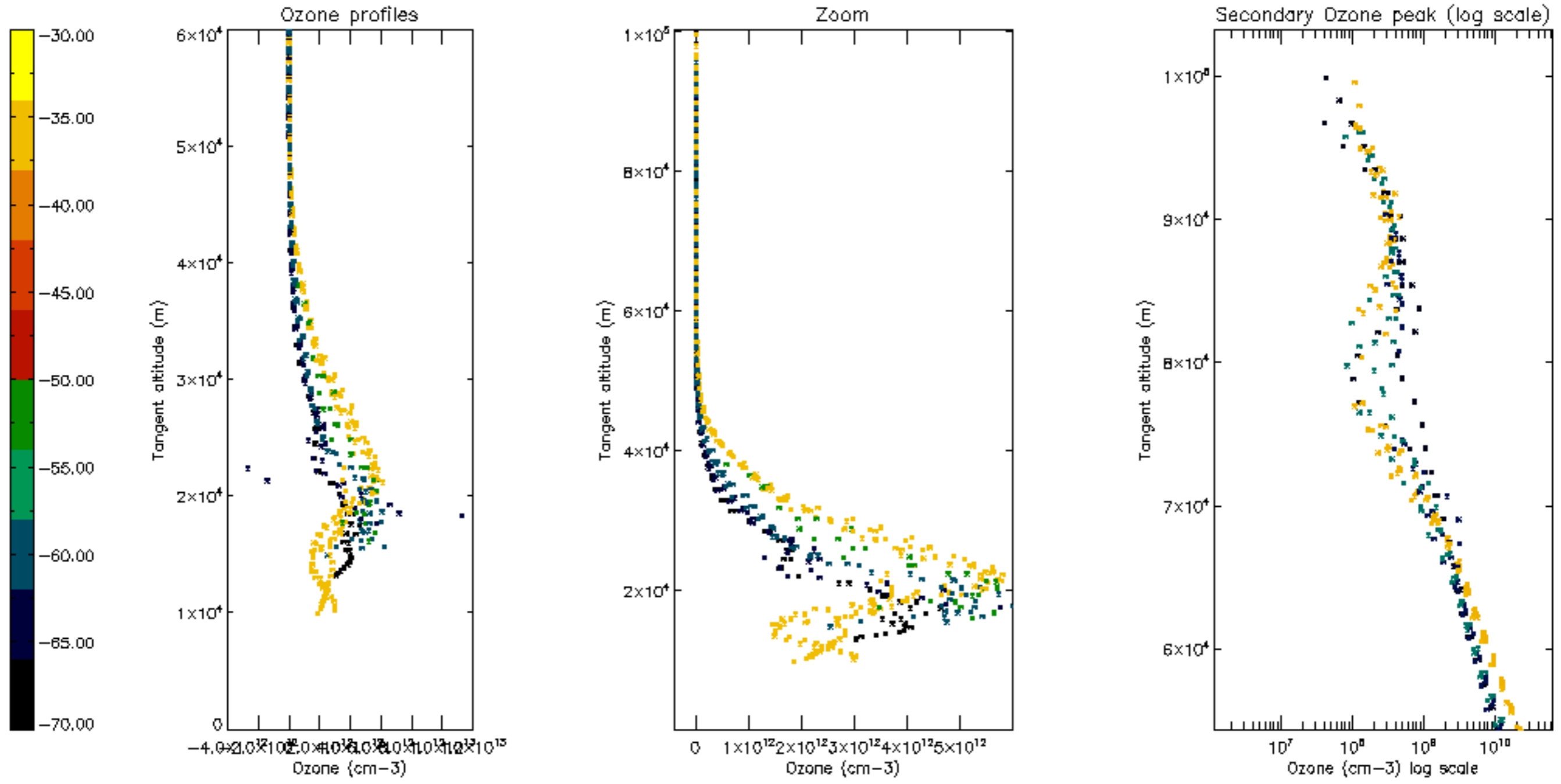
Percentage of star falling outside central band per profile

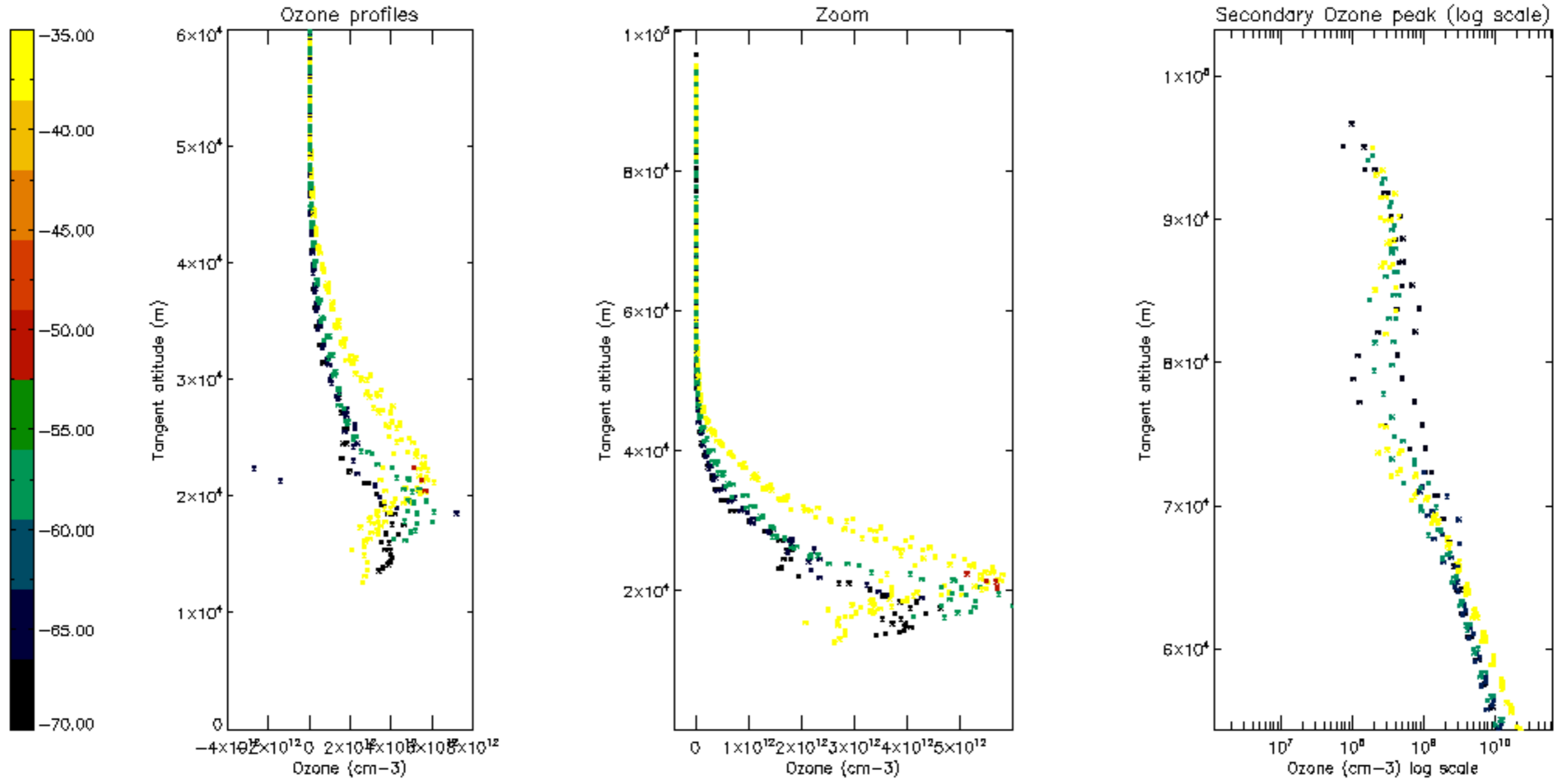


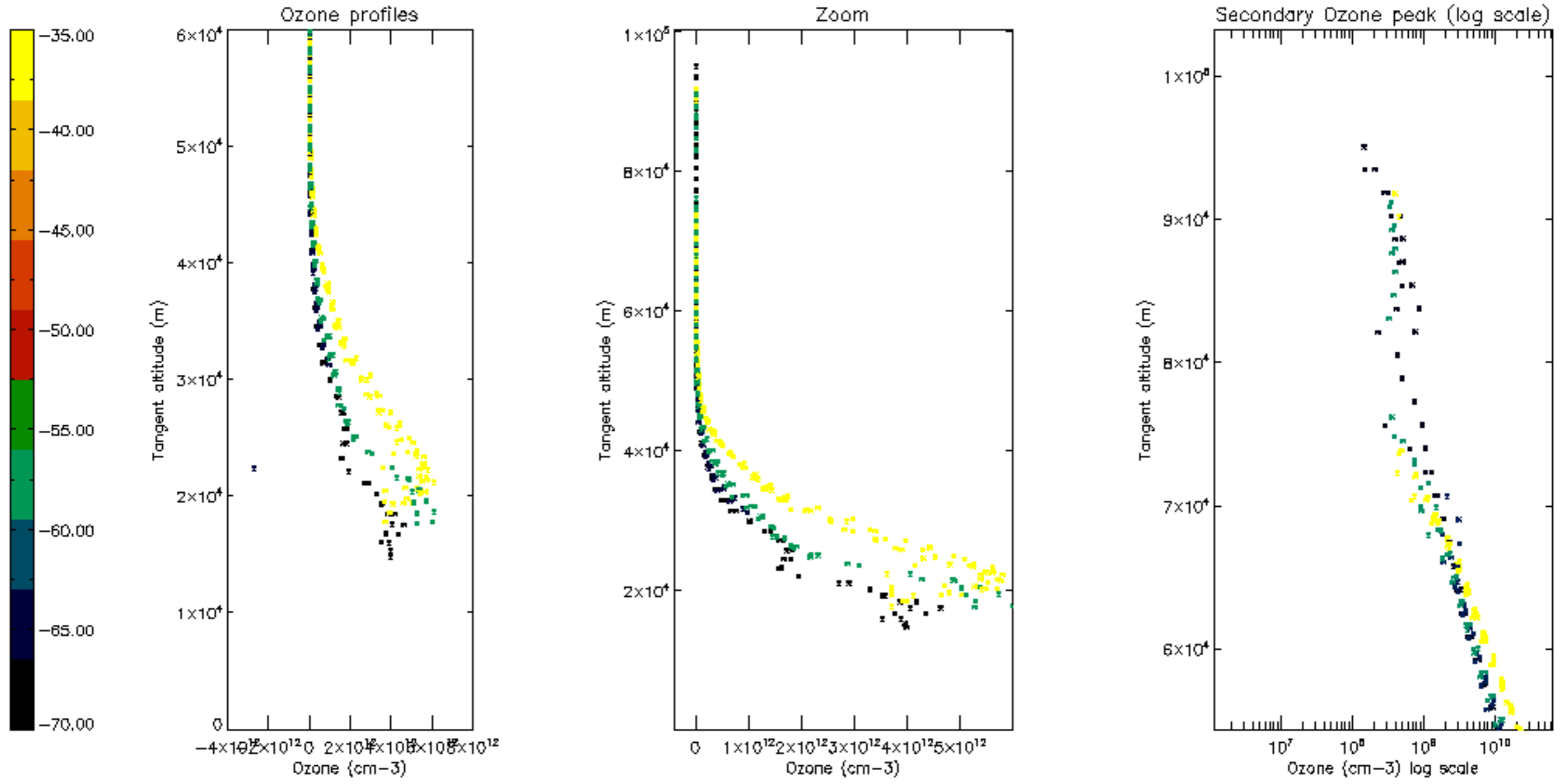
Percentage of saturation errors per profile

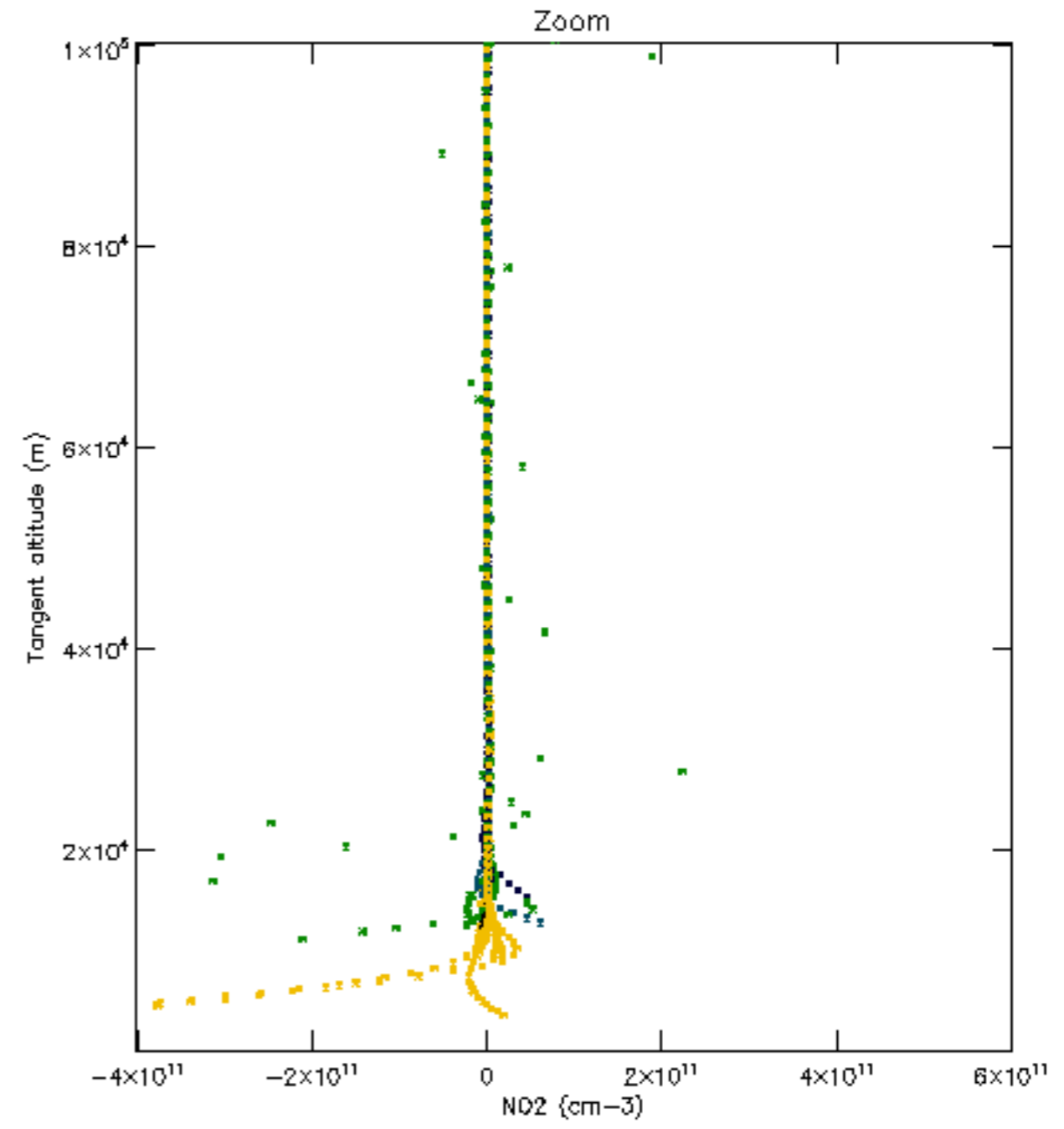
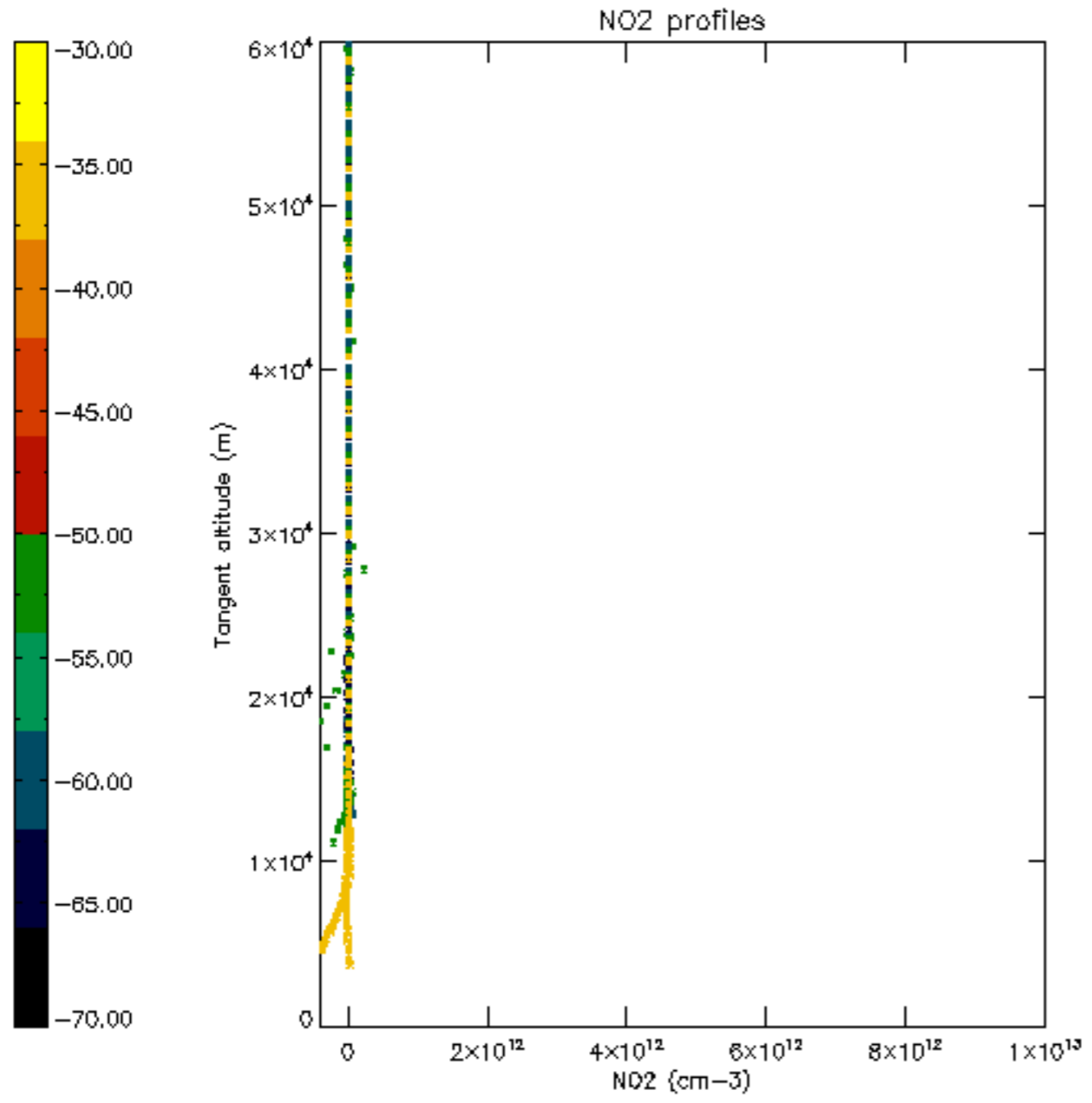


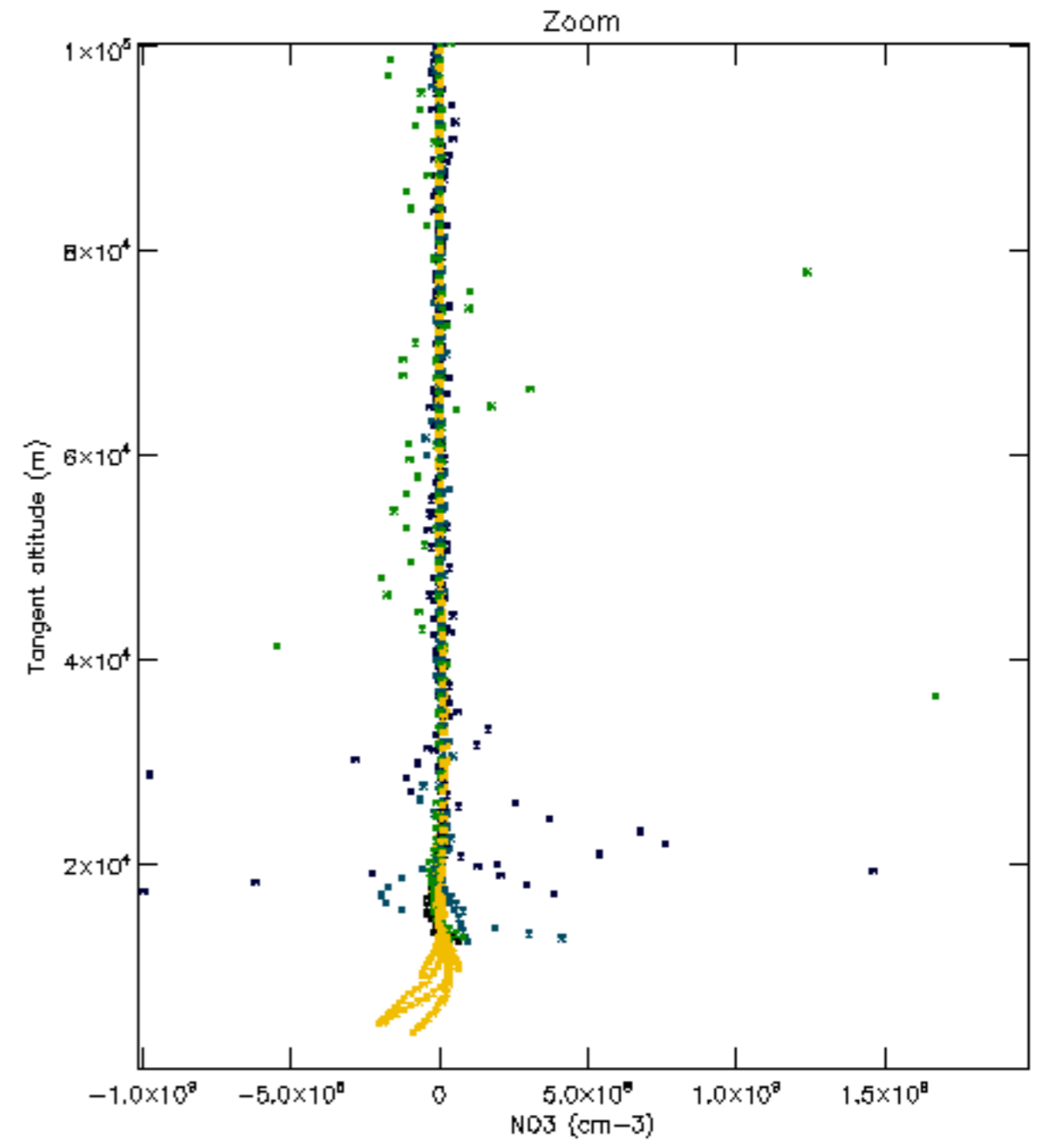
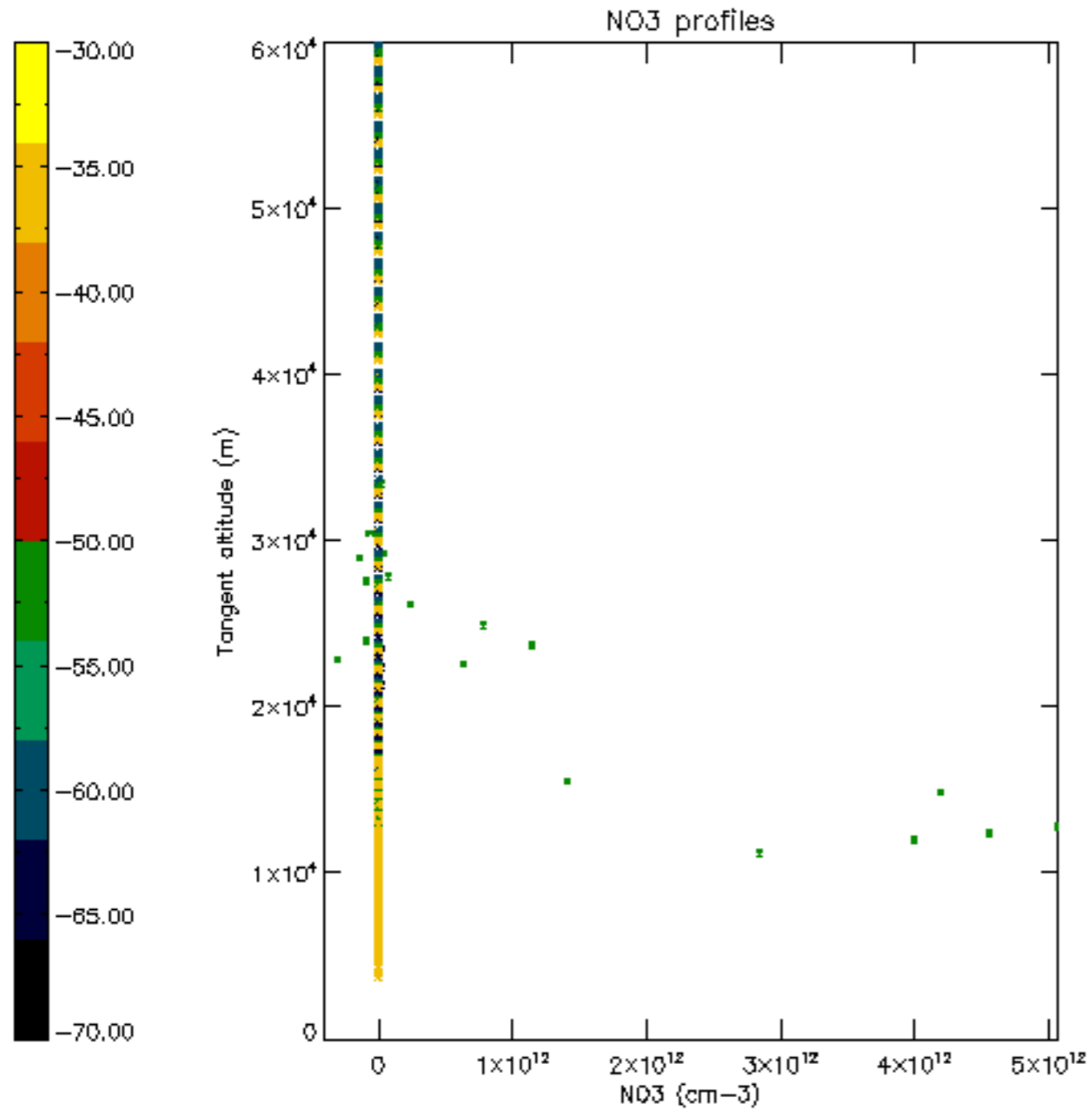


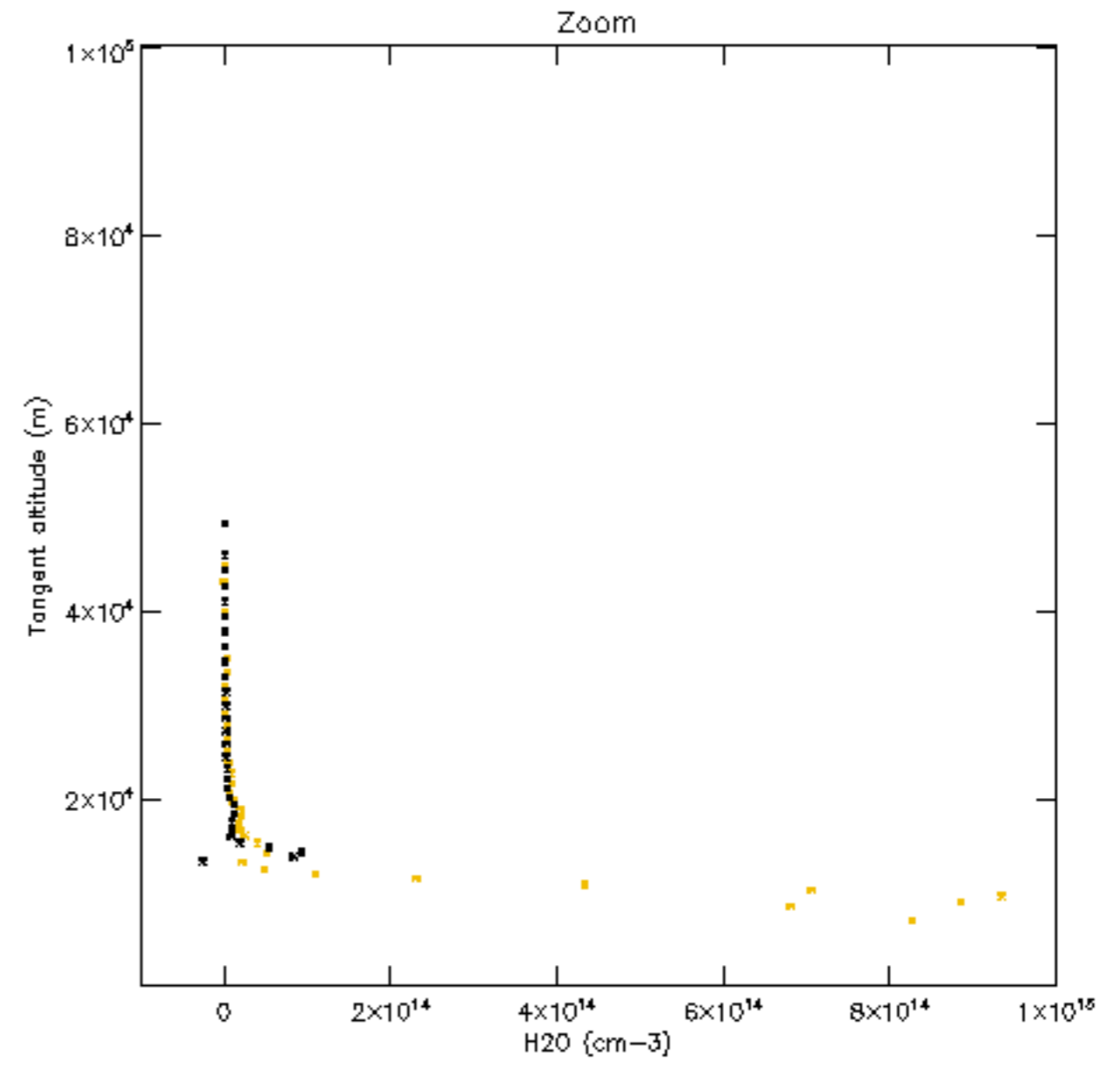
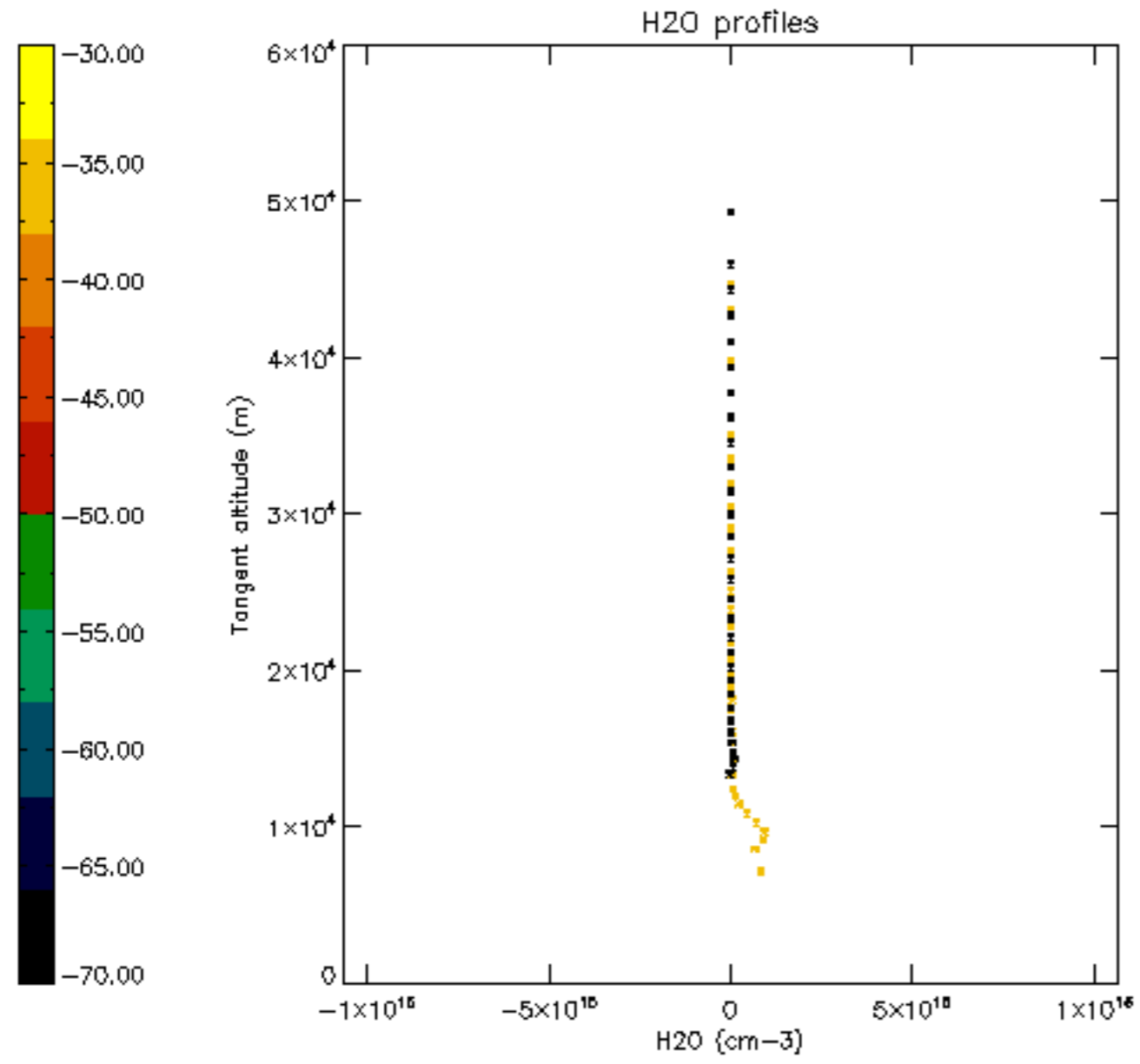


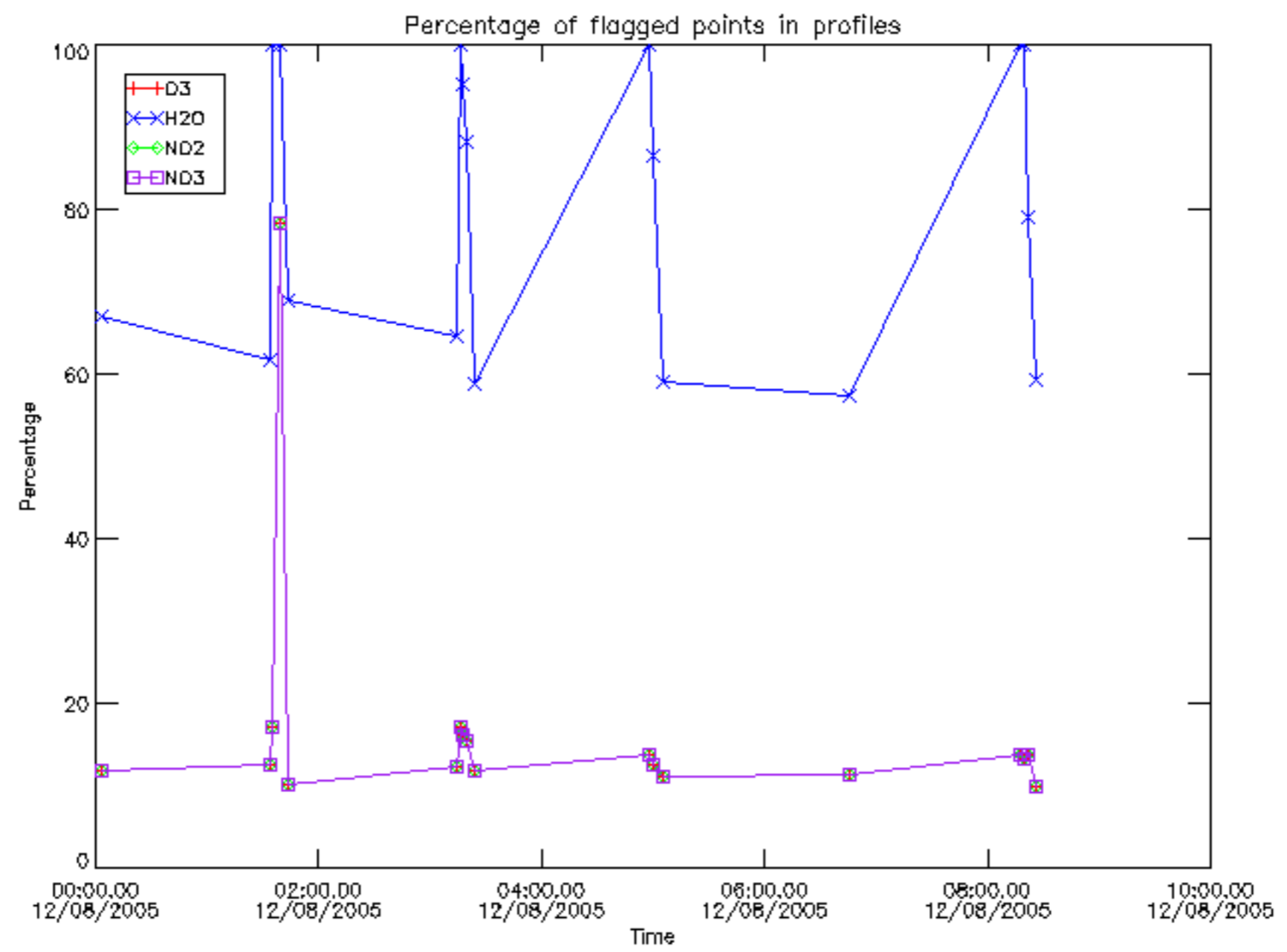




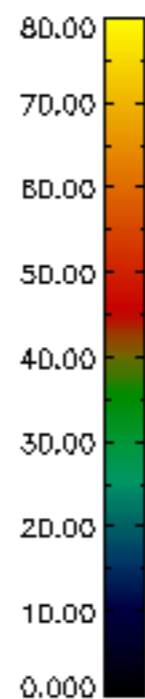
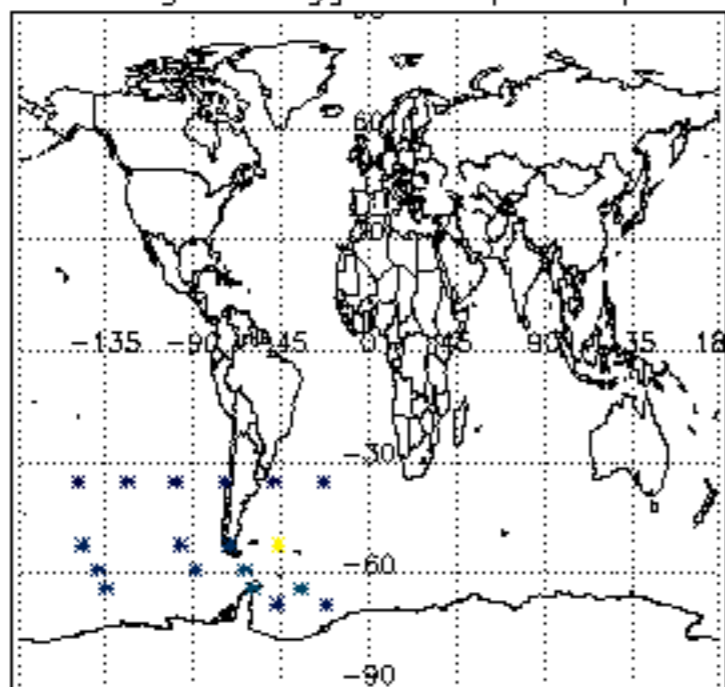




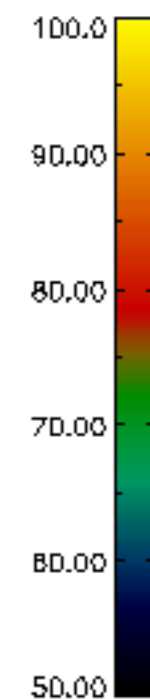
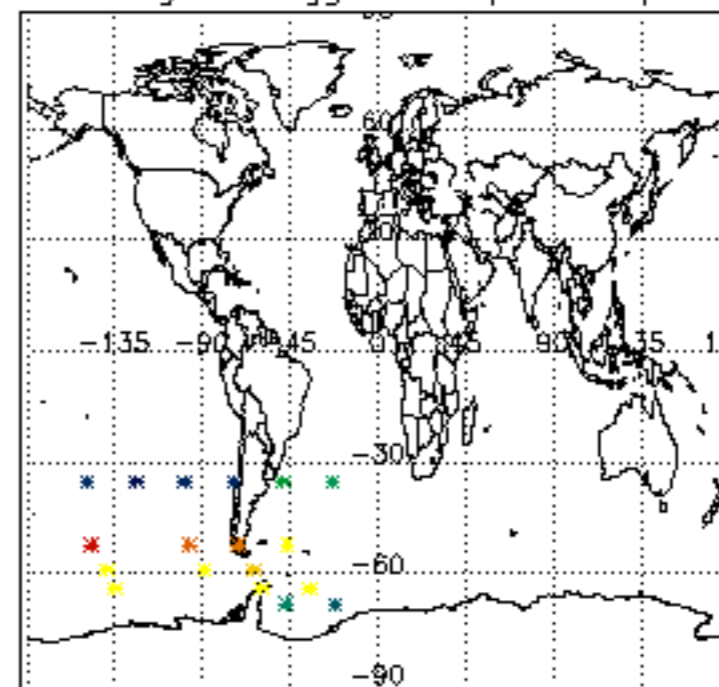




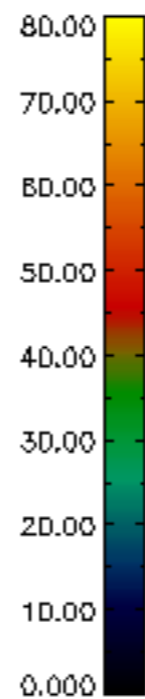
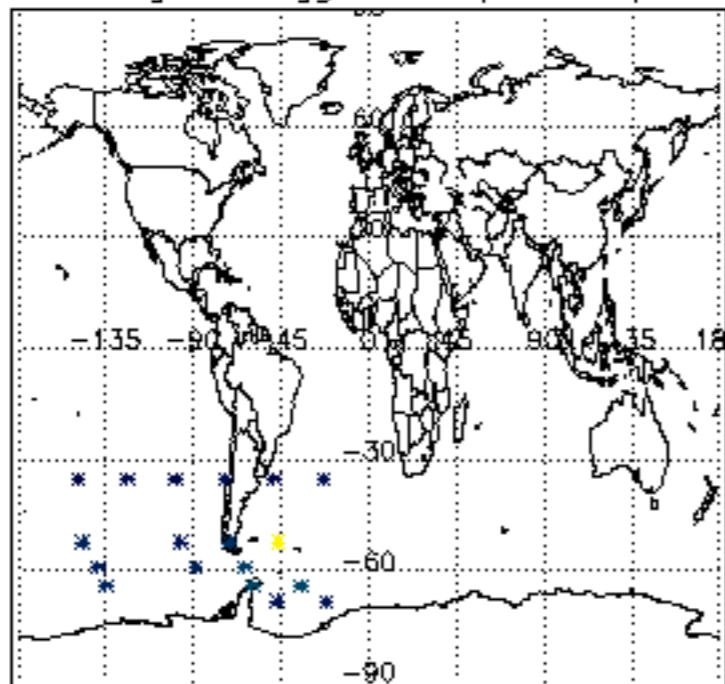
Percentage of flagged data per D3 profile



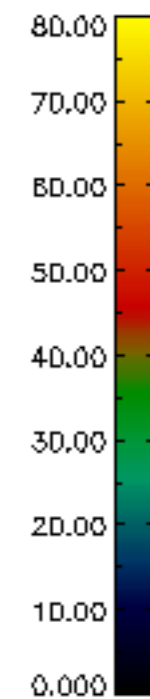
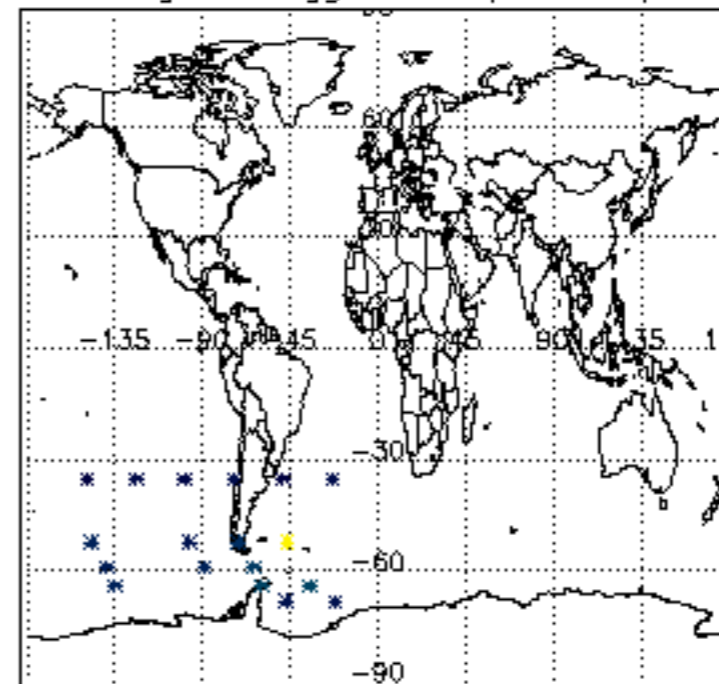
Percentage of flagged data per H2O profile

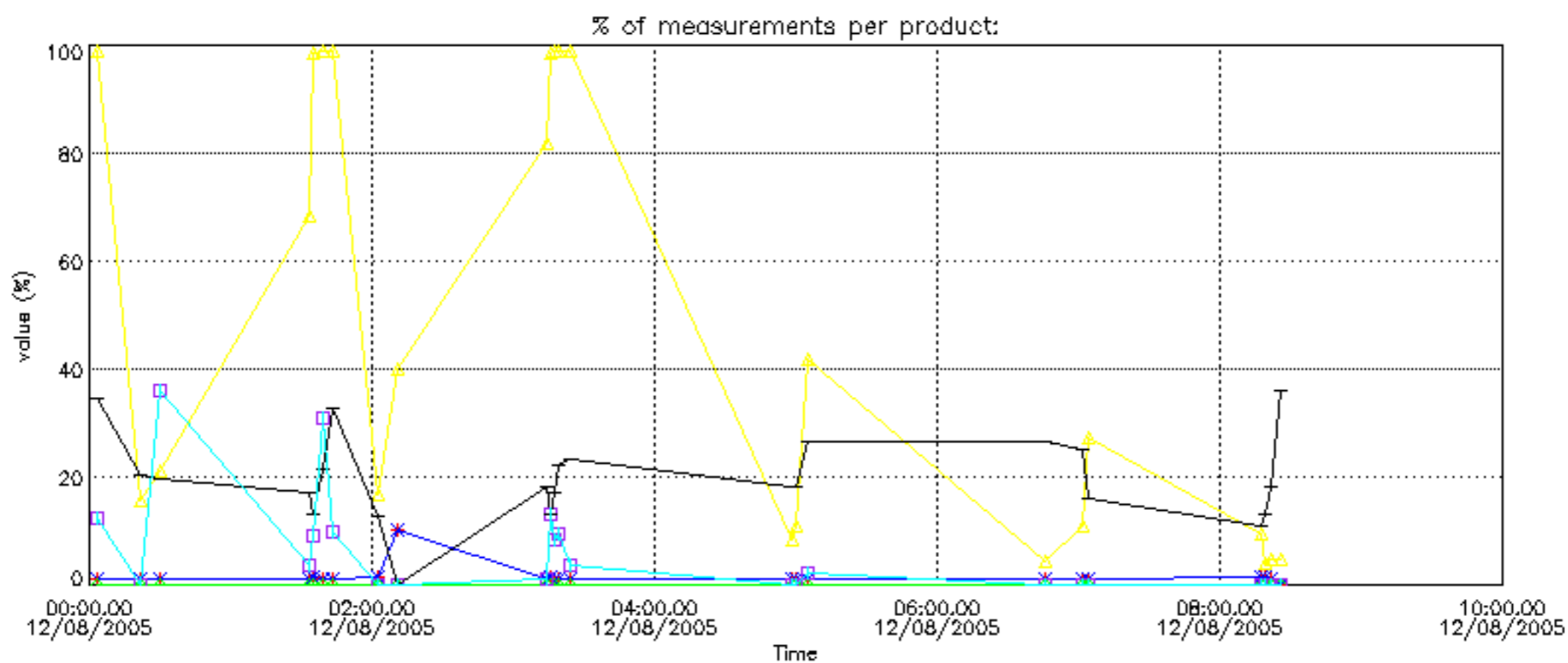
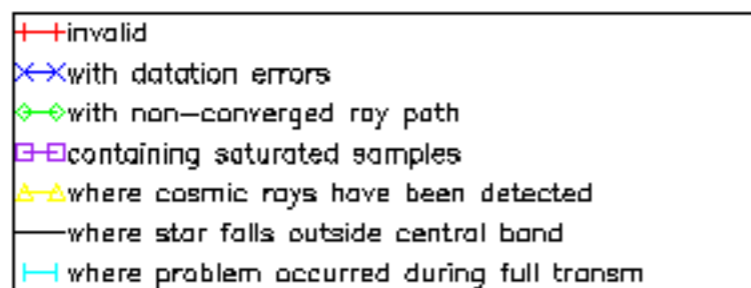


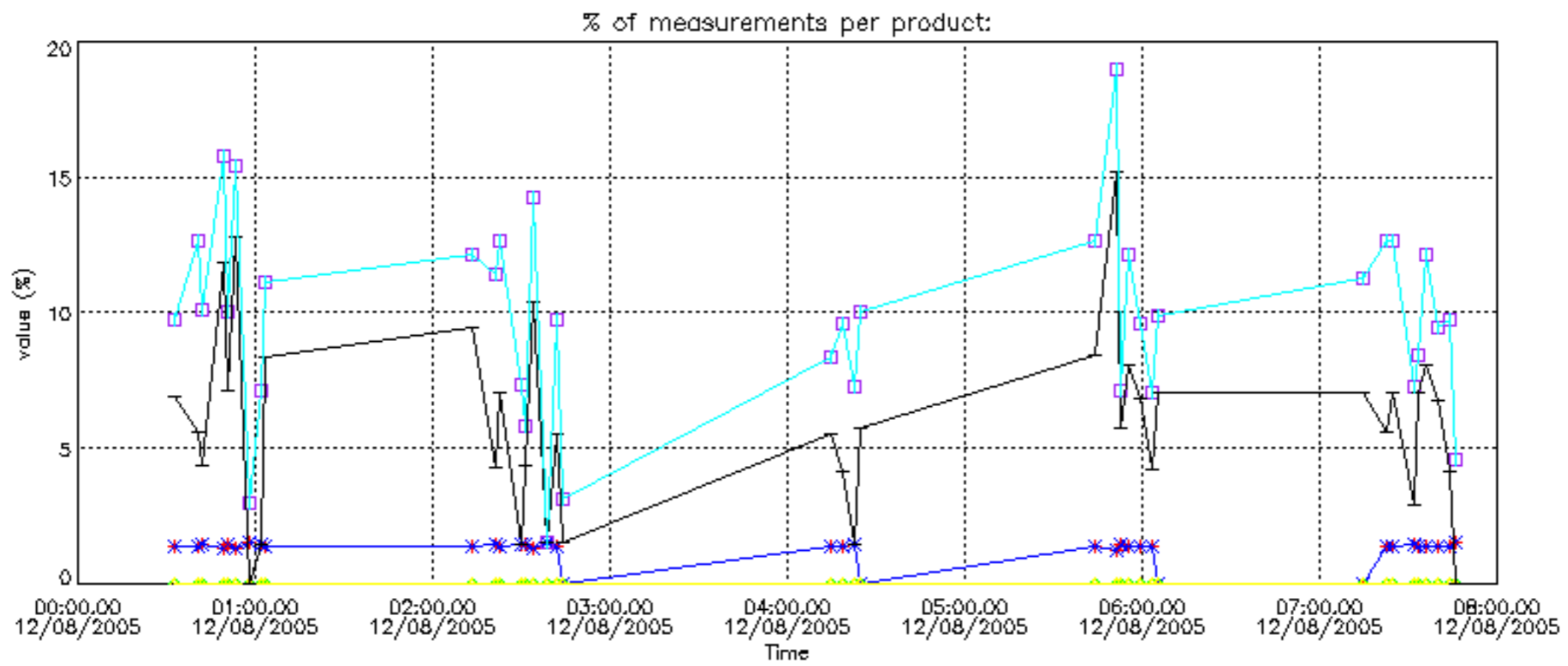
Percentage of flagged data per NO2 profile



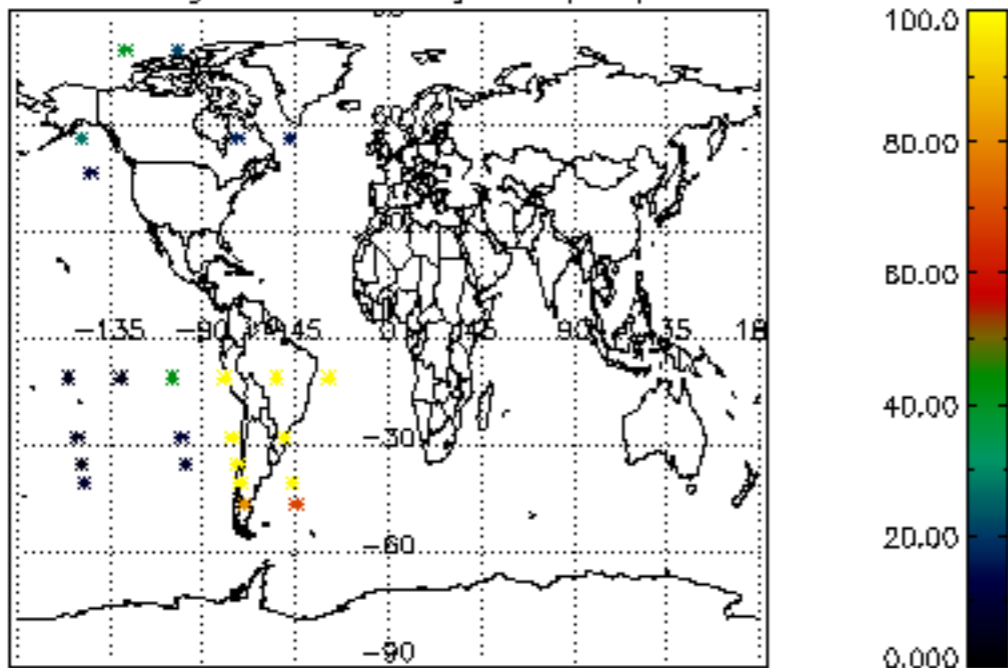
Percentage of flagged data per NO3 profile



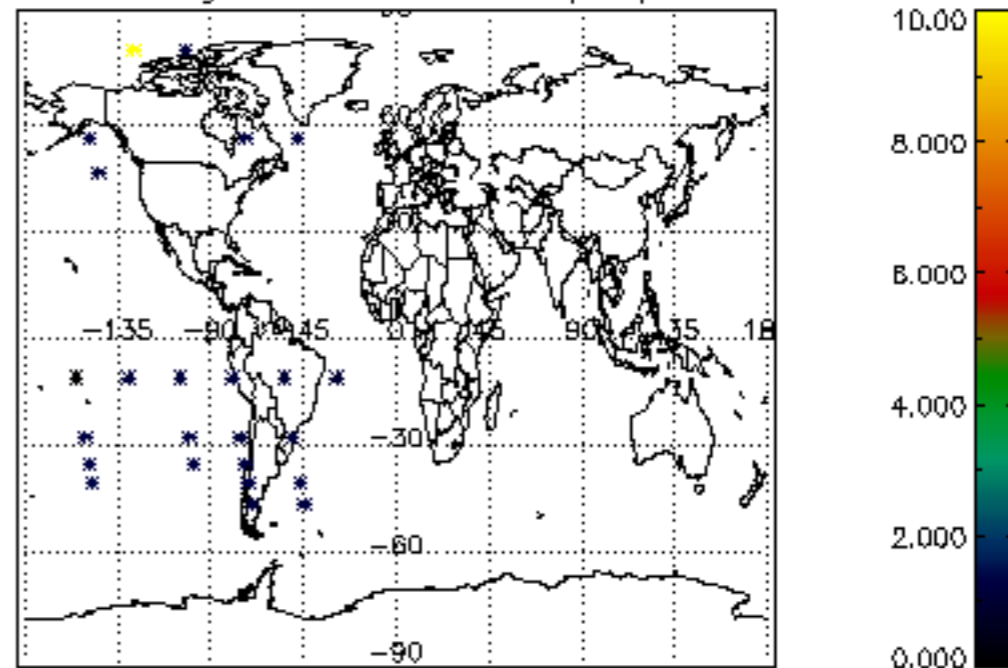




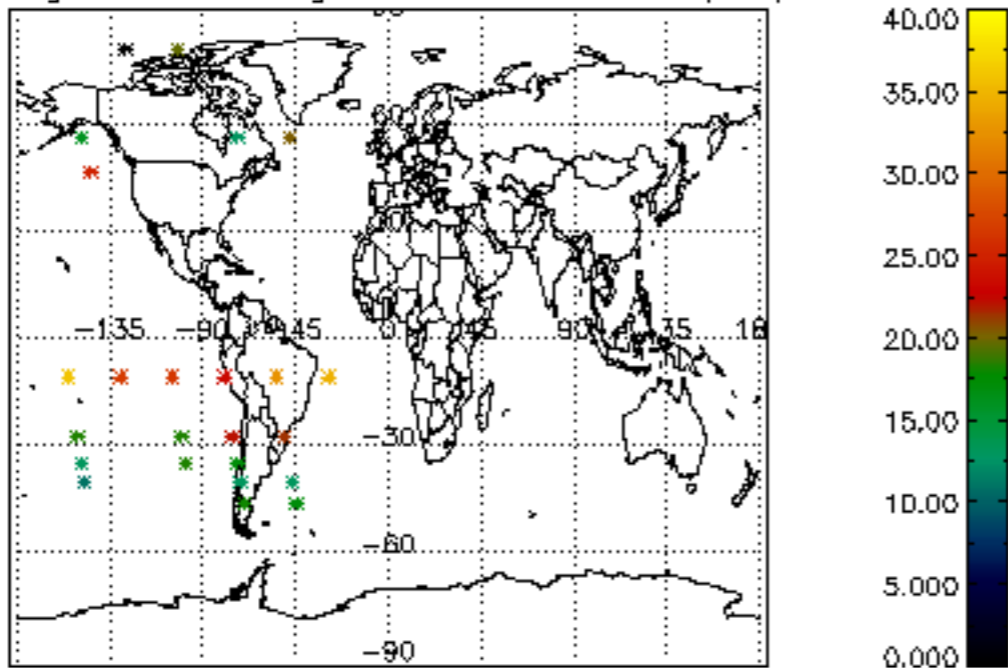
Percentage of cosmic ray hits per profile



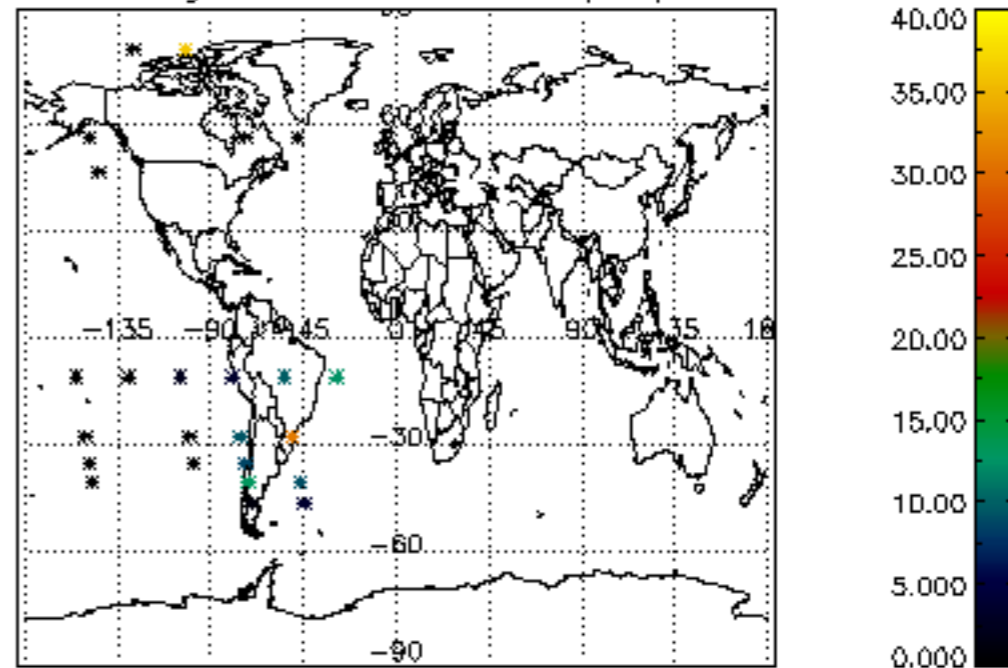
Percentage of datation errors per profile



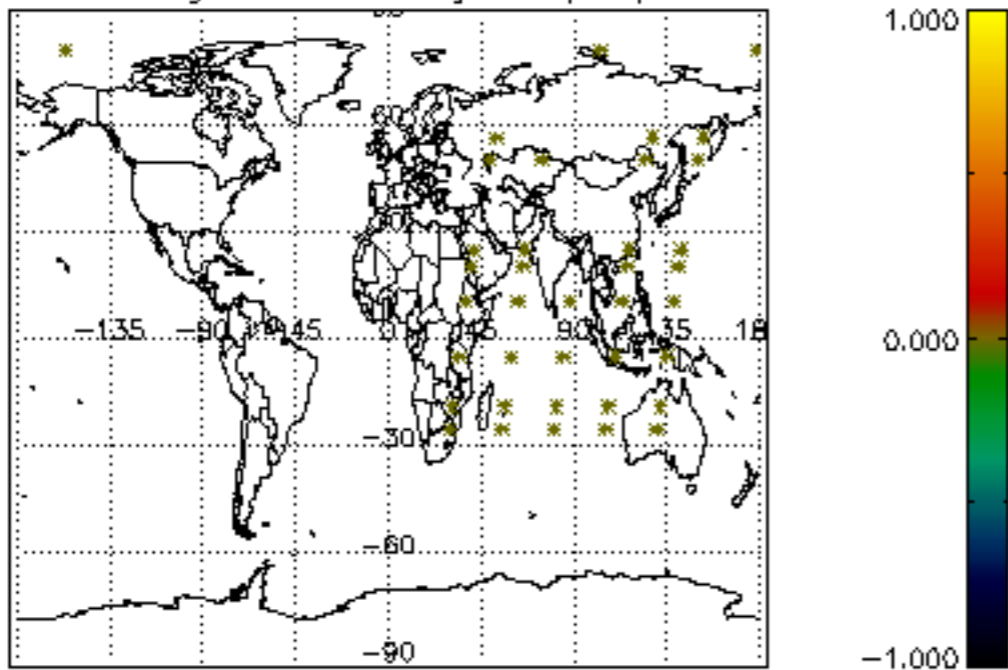
Percentage of star falling outside central band per profile



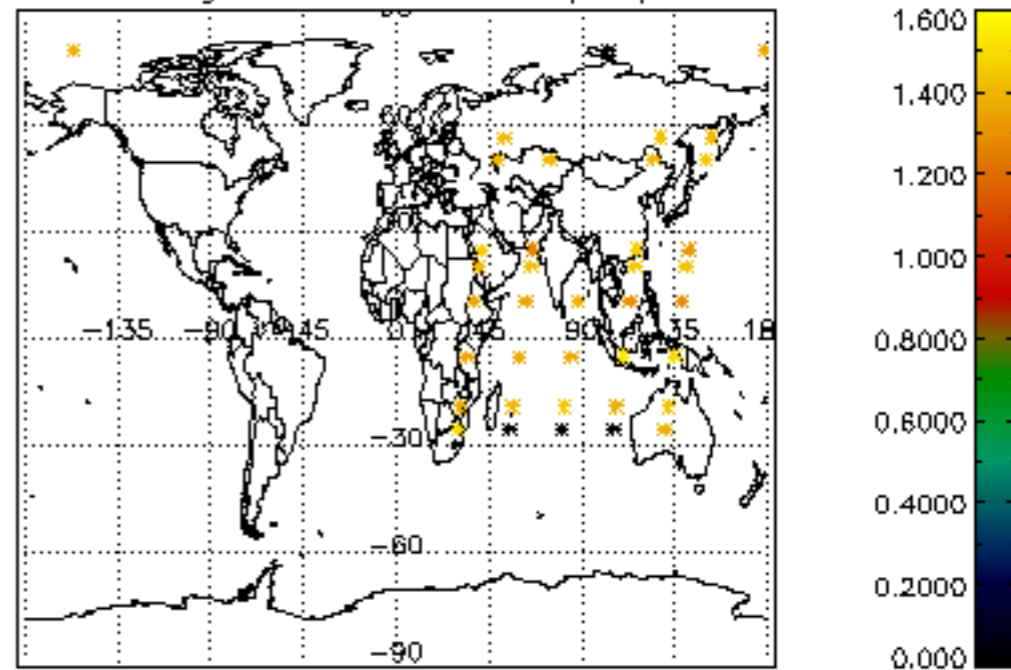
Percentage of saturation errors per profile



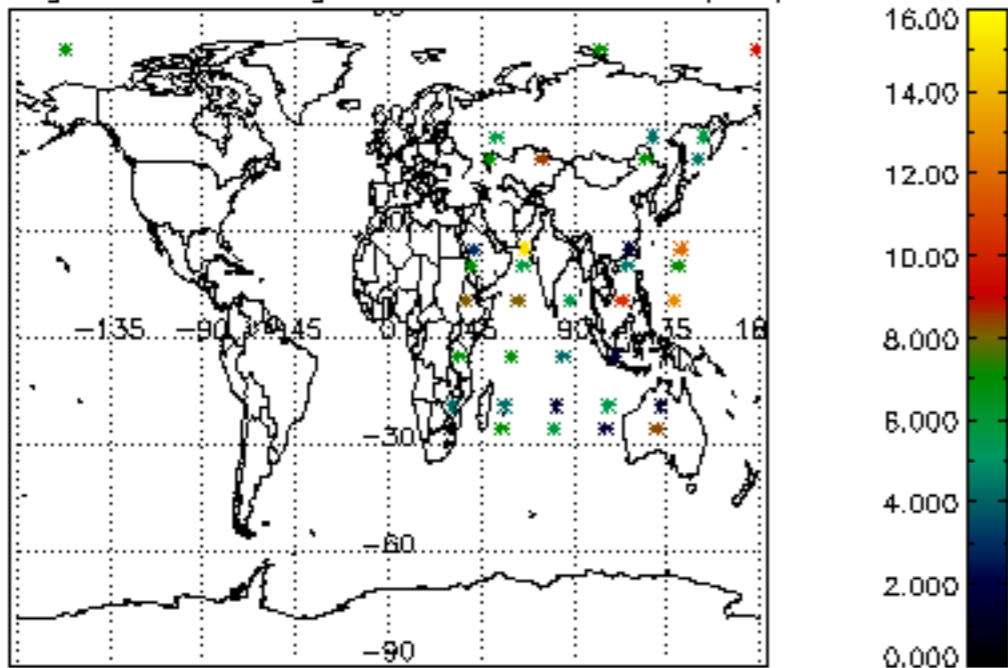
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

