

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	22APR2013 11:31:22
Data source version	GOMOS/6.01
Start time of products	01-01-2006 (01JAN2006 00:00:00)
Stop time of products	02-01-2006 (02JAN2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	360
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

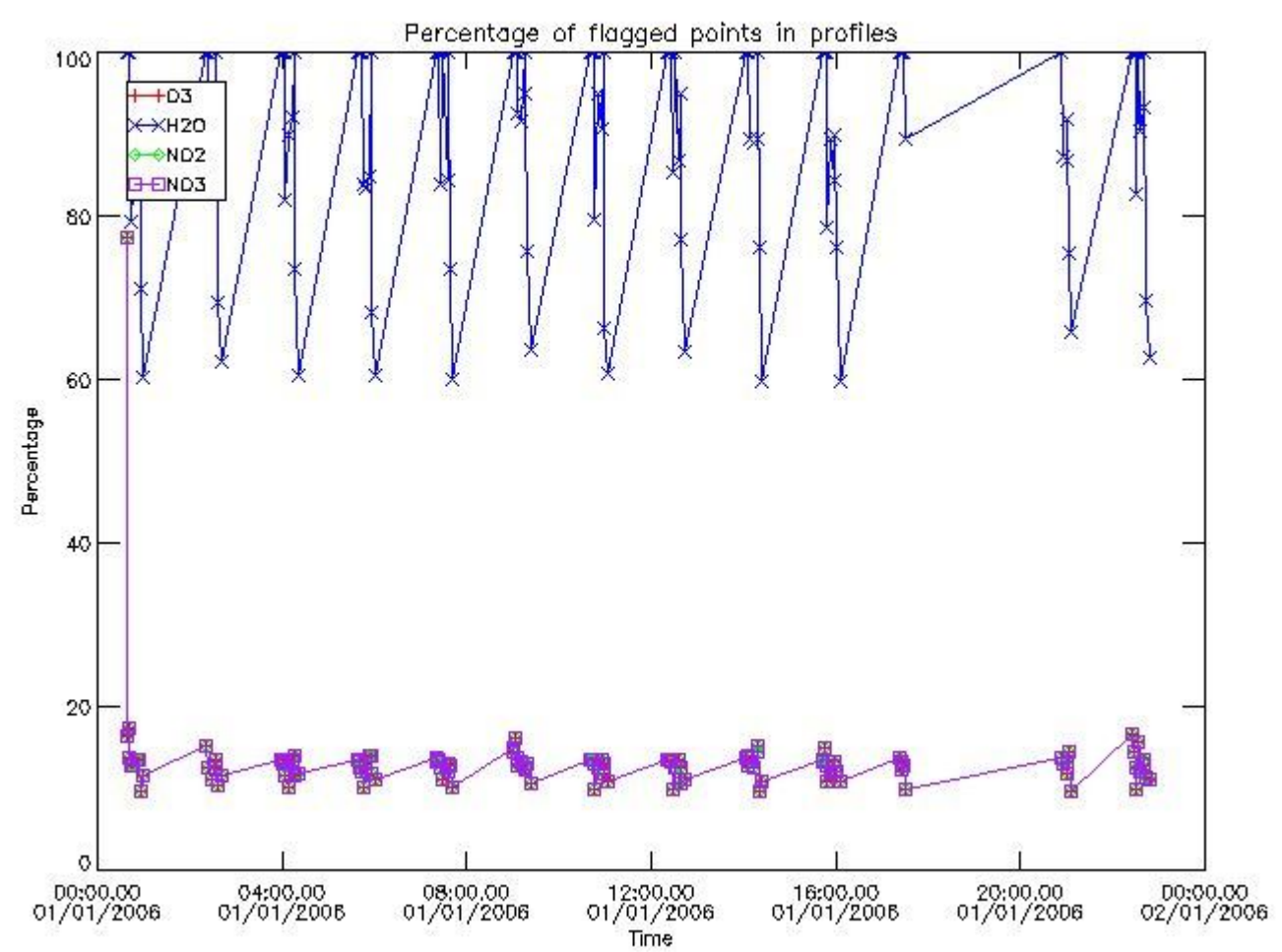
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20060101_000807_000000372043_00474_20067_7164.N1	01-JAN-2006 00:08:07	Bright	36.500	119	14Eta Dra	2.7270	4700.0	73	20067	No
2	GOM_NL__2PRFIN20060101_001014_000000332043_00474_20067_7165.N1	01-JAN-2006 00:10:14	Bright	32.500	130	23Bet Dra	2.7990	5800.0	65	20067	No
3	GOM_NL__2PRFIN20060101_001627_000000522043_00474_20067_7166.N1	01-JAN-2006 00:16:27	Bright	52.000	133	40Zet Her	2.8070	6000.0	104	20067	No
4	GOM_NL__2PRFIN20060101_001923_000000342043_00474_20067_7167.N1	01-JAN-2006 00:19:23	Bright	34.000	127	27Bet Her	2.7810	4700.0	68	20067	No
5	GOM_NL__2PRFIN20060101_002416_000000362043_00474_20067_7168.N1	01-JAN-2006 00:24:16	Bright	36.000	102	24Alp Ser	2.6000	4250.0	72	20067	No
6	GOM_NL__2PRFIN20060101_002635_000000352043_00474_20067_7169.N1	01-JAN-2006 00:26:35	Bright	34.500	120	1Del Oph	2.7340	3200.0	69	20067	No
7	GOM_NL__2PRFIN20060101_002919_000000402043_00474_20067_7170.N1	01-JAN-2006 00:29:19	Bright	40.000	104	27Bet Lib	2.6140	13100.	80	20067	No
8	GOM_NL__2PRFIN20060101_003722_000000382043_00474_20067_7171.N1	01-JAN-2006 00:37:22	Dark	38.000	131	Gam Lup	2.8000	26000.	76	20067	No
9	GOM_NL__2PRFIN20060101_003841_000000412043_00474_20067_7172.N1	01-JAN-2006 00:38:41	Dark	40.500	109	Bet Lup	2.6770	26000.	81	20067	No
10	GOM_NL__2PRFIN20060101_004009_000000382043_00474_20067_7173.N1	01-JAN-2006 00:40:09	Dark	38.000	78	Alp Lup	2.3040	28000.	76	20067	No
11	GOM_NL__2PRFIN20060101_004138_000000412043_00474_20067_7174.N1	01-JAN-2006 00:41:38	Dark	40.500	95	Zet Cen	2.5450	26000.	81	20067	No
12	GOM_NL__2PRFIN20060101_004319_000000442043_00475_20068_6837.N1	01-JAN-2006 00:43:19	Dark	44.000	4	Alp1Cen	-0.010000	5800.0	88	20068	No
13	GOM_NL__2PRFIN20060101_004710_000000402043_00475_20068_6838.N1	01-JAN-2006 00:47:10	Dark	40.000	12	Alp1Cru	0.77500	30000.	80	20068	No
14	GOM_NL__2PRFIN20060101_005228_000000382043_00475_20068_6839.N1	01-JAN-2006 00:52:28	Dark	38.000	29	Bet Car	1.6720	10200.	76	20068	No
15	GOM_NL__2PRFIN20060101_005351_000000382043_00475_20068_6840.N1	01-JAN-2006 00:53:51	Dark	38.000	71	lot Car	2.2460	7700.0	76	20068	No
16	GOM_NL__2PRFIN20060101_005526_000000532043_00475_20068_6841.N1	01-JAN-2006 00:55:26	Dark	52.500	41	Eps Car	1.8600	4100.0	105	20068	No
17	GOM_NL__2PRFIN20060101_005939_000000452043_00475_20068_6842.N1	01-JAN-2006 00:59:39	Dark	44.500	2	Alp Car	-0.73600	7000.0	89	20068	No
18	GOM_NL__2PRFIN20060101_010521_000000412043_00475_20068_6843.N1	01-JAN-2006 01:05:21	Straylight	40.500	108	Alp Col	2.6520	15200.	81	20068	No
19	GOM_NL__2PRFIN20060101_010958_000000422043_00475_20068_6844.N1	01-JAN-2006 01:09:58	Straylight	42.000	101	11Alp Lep	2.5820	7000.0	84	20068	No
20	GOM_NL__2PRFIN20060101_011250_000000512043_00475_20068_6845.N1	01-JAN-2006 01:12:50	Straylight	50.500	7	19Bet Ori	0.10000	14000.	101	20068	No
21	GOM_NL__2PRFIN20060101_011442_000000442043_00475_20068_6846.N1	01-JAN-2006 01:14:42	Straylight	44.000	30	46Eps Ori	1.6940	30000.	88	20068	No
22	GOM_NL__2PRFIN20060101_011654_000000422043_00475_20068_6847.N1	01-JAN-2006 01:16:54	Twilight_stray	42.000	27	24Gam Ori	1.6360	26000.	84	20068	No
23	GOM_NL__2PRFIN20060101_012001_000000492043_00475_20068_6848.N1	01-JAN-2006 01:20:01	Bright	49.000	13	87Alp Tau	0.86700	3800.0	98	20068	No
24	GOM_NL__2PRFIN20060101_012318_000000382043_00475_20068_6849.N1	01-JAN-2006 01:23:18	Bright	37.500	28	12Bet Tau	1.6500	15200.	75	20068	No
25	GOM_NL__2PRFIN20060101_012433_000000382043_00475_20068_6850.N1	01-JAN-2006 01:24:33	Bright	38.000	114	3lot Aur	2.6930	4600.0	76	20068	No
26	GOM_NL__2PRFIN20060101_012653_000000352043_00475_20068_6851.N1	01-JAN-2006 01:26:53	Bright	34.500	149	45Eps Per	2.8880	30000.	69	20068	No
27	GOM_NL__2PRFIN20060101_012813_000000402043_00475_20068_6852.N1	01-JAN-2006 01:28:13	Bright	40.000	6	13Alp Aur	0.080000	3400.0	80	20068	No
28	GOM_NL__2PRFIN20060101_013001_000000382043_00475_20068_6853.N1	01-JAN-2006 01:30:01	Bright	37.500	35	33Alp Per	1.7950	6250.0	75	20068	No
29	GOM_NL__2PRFIN20060101_013118_000000352043_00475_20068_6854.N1	01-JAN-2006 01:31:18	Bright	34.500	160	23Gam Per	2.9300	4700.0	69	20068	No
30	GOM_NL__2PRFIN20060101_014023_000000352043_00475_20068_6855.N1	01-JAN-2006 01:40:23	Bright	34.500	49	1Alp UMi	1.9900	6300.0	69	20068	No
31	GOM_NL__2PRFIN20060101_014842_000000352043_00475_20068_6856.N1	01-JAN-2006 01:48:42	Bright	34.500	119	14Eta Dra	2.7270	4700.0	69	20068	No
32	GOM_NL__2PRFIN20060101_015049_000000372043_00475_20068_6857.N1	01-JAN-2006 01:50:49	Bright	36.500	130	23Bet Dra	2.7990	5800.0	73	20068	No
33	GOM_NL__2PRFIN20060101_015702_000000342043_00475_20068_6858.N1	01-JAN-2006 01:57:02	Bright	34.000	133	40Zet Her	2.8070	6000.0	68	20068	No
34	GOM_NL__2PRFIN20060101_015959_000000342043_00475_20068_6859.N1	01-JAN-2006 01:59:59	Bright	33.500	127	27Bet Her	2.7810	4700.0	67	20068	No
35	GOM_NL__2PRFIN20060101_020451_000000372043_00475_20068_6860.N1	01-JAN-2006 02:04:51	Bright	36.500	102	24Alp Ser	2.6000	4250.0	73	20068	No
36	GOM_NL__2PRFIN20060101_020710_000000342043_00475_20068_6861.N1	01-JAN-2006 02:07:10	Bright	34.000	120	1Del Oph	2.7340	3200.0	68	20068	No
37	GOM_NL__2PRFIN20060101_020955_000000562043_00475_20068_6862.N1	01-JAN-2006 02:09:55	Bright	56.000	104	27Bet Lib	2.6140	13100.	112	20068	No
38	GOM_NL__2PRFIN20060101_022045_000000372043_00475_20068_6863.N1	01-JAN-2006 02:20:45	Dark	37.000	78	Alp Lup	2.3040	28000.	74	20068	No
39	GOM_NL__2PRFIN20060101_022214_000000412043_00475_20068_6864.N1	01-JAN-2006 02:22:14	Dark	40.500	95	Zet Cen	2.5450	26000.	81	20068	No
40	GOM_NL__2PRFIN20060101_022356_000000412043_00476_20069_6865.N1	01-JAN-2006 02:23:56	Dark	41.000	4	Alp1Cen	-0.010000	5800.0	82	20069	No
41	GOM_NL__2PRFIN20060101_022746_000000462043_00476_20069_6838.N1	01-JAN-2006 02:27:46	Dark	45.500	12	Alp1Cru	0.77500	30000.	91	20069	No
42	GOM_NL__2PRFIN20060101_023304_000000412043_00476_20069_6839.N1	01-JAN-2006 02:33:04	Dark	41.000	29	Bet Car	1.6720	10200.	82	20069	No

338	GOM_NL__2PRFIN20060101_223504_000000422043_00488_20081_6868.N1	01-JAN-2006 22:35:04	Dark	42.000	12	Alp1Cru	0.77500	30000.	84	20081	No
339	GOM_NL__2PRFIN20060101_224019_000000382043_00488_20081_6869.N1	01-JAN-2006 22:40:19	Dark	37.500	29	Bet Car	1.6720	10200.	75	20081	No
340	GOM_NL__2PRFIN20060101_224145_000000402043_00488_20081_6870.N1	01-JAN-2006 22:41:45	Dark	39.500	71	lot Car	2.2460	7700.0	79	20081	No
341	GOM_NL__2PRFIN20060101_224319_000000452043_00488_20081_6871.N1	01-JAN-2006 22:43:19	Dark	45.000	41	Eps Car	1.8600	4100.0	90	20081	No
342	GOM_NL__2PRFIN20060101_224730_000000462043_00488_20081_6872.N1	01-JAN-2006 22:47:30	Dark	46.000	2	Alp Car	-0.73600	7000.0	92	20081	No
343	GOM_NL__2PRFIN20060101_225311_000000412043_00488_20081_6873.N1	01-JAN-2006 22:53:11	Straylight	40.500	108	Alp Col	2.6520	15200.	81	20081	No
344	GOM_NL__2PRFIN20060101_225747_000000412043_00488_20081_6874.N1	01-JAN-2006 22:57:47	Straylight	41.000	101	11Alp Lep	2.5820	7000.0	82	20081	No
345	GOM_NL__2PRFIN20060101_230039_000000462043_00488_20081_6875.N1	01-JAN-2006 23:00:39	Straylight	46.000	7	19Bet Ori	0.10000	14000.	92	20081	No
346	GOM_NL__2PRFIN20060101_230230_000000442043_00488_20081_6876.N1	01-JAN-2006 23:02:30	Straylight	43.500	30	46Eps Ori	1.6940	30000.	87	20081	No
347	GOM_NL__2PRFIN20060101_230441_000000432043_00488_20081_6877.N1	01-JAN-2006 23:04:41	Tw_i_and_stray	42.500	27	24Gam Ori	1.6360	26000.	85	20081	No
348	GOM_NL__2PRFIN20060101_230750_000000442043_00488_20081_6878.N1	01-JAN-2006 23:07:50	Bright	43.500	13	87Alp Tau	0.86700	3800.0	87	20081	No
349	GOM_NL__2PRFIN20060101_231104_000000382043_00488_20081_6879.N1	01-JAN-2006 23:11:04	Bright	38.000	28	12Bet Tau	1.6500	15200.	76	20081	No
350	GOM_NL__2PRFIN20060101_231220_000000392043_00488_20081_6880.N1	01-JAN-2006 23:12:20	Bright	38.500	114	3lot Aur	2.6930	4600.0	77	20081	No
351	GOM_NL__2PRFIN20060101_231443_000000332043_00488_20081_6881.N1	01-JAN-2006 23:14:43	Bright	33.000	149	45Eps Per	2.8880	30000.	66	20081	No
352	GOM_NL__2PRFIN20060101_231700_000000342043_00488_20081_6882.N1	01-JAN-2006 23:17:00	Bright	34.000	175	39Del Per	3.0100	19400.	68	20081	No
353	GOM_NL__2PRFIN20060101_231909_000000362043_00488_20081_6883.N1	01-JAN-2006 23:19:09	Bright	35.500	160	23Gam Per	2.9300	4700.0	71	20081	No
354	GOM_NL__2PRFIN20060101_232810_000000352043_00488_20081_6884.N1	01-JAN-2006 23:28:10	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	20081	No
355	GOM_NL__2PRFIN20060101_233630_000000342043_00488_20081_6885.N1	01-JAN-2006 23:36:30	Bright	33.500	119	14Eta Dra	2.7270	4700.0	67	20081	No
356	GOM_NL__2PRFIN20060101_233838_000000412043_00488_20081_6886.N1	01-JAN-2006 23:38:38	Bright	40.500	130	23Bet Dra	2.7990	5800.0	81	20081	No
357	GOM_NL__2PRFIN20060101_234451_000000342043_00488_20081_6887.N1	01-JAN-2006 23:44:51	Bright	34.000	133	40Zet Her	2.8070	6000.0	68	20081	No
358	GOM_NL__2PRFIN20060101_234748_000000342043_00488_20081_6888.N1	01-JAN-2006 23:47:48	Bright	34.000	127	27Bet Her	2.7810	4700.0	68	20081	No
359	GOM_NL__2PRFIN20060101_235242_000000362043_00488_20081_6889.N1	01-JAN-2006 23:52:42	Bright	36.000	102	24Alp Ser	2.6000	4250.0	72	20081	No
360	GOM_NL__2PRFIN20060101_235500_000000342043_00488_20081_6890.N1	01-JAN-2006 23:55:00	Bright	33.500	120	1Del Oph	2.7340	3200.0	67	20081	No

3. Quality information per product

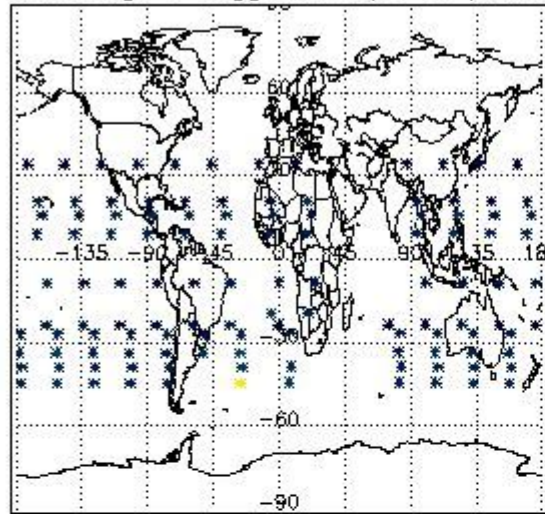
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

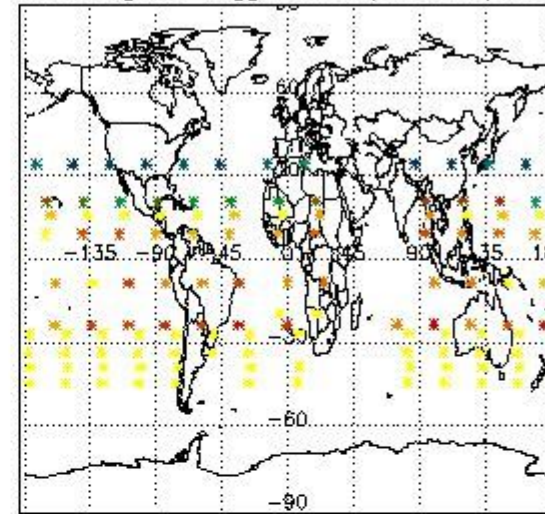


3.2 Plot quality information per product (world map)

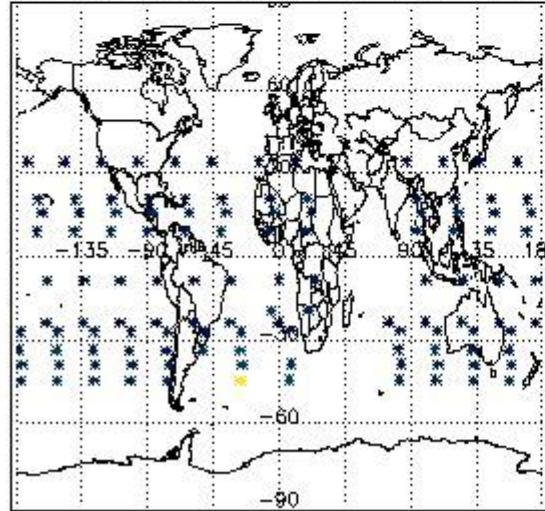
Percentage of flagged data per O3 profile



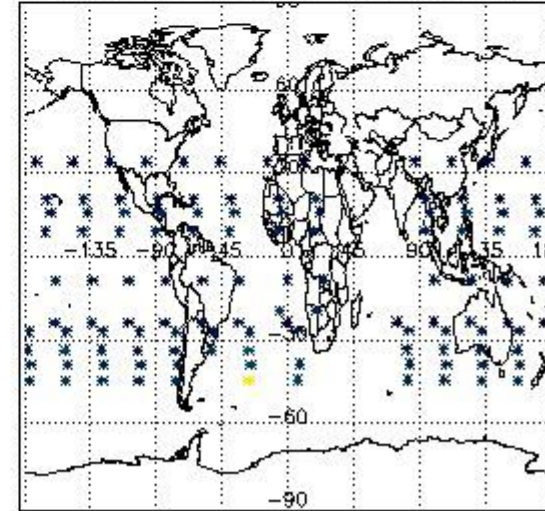
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

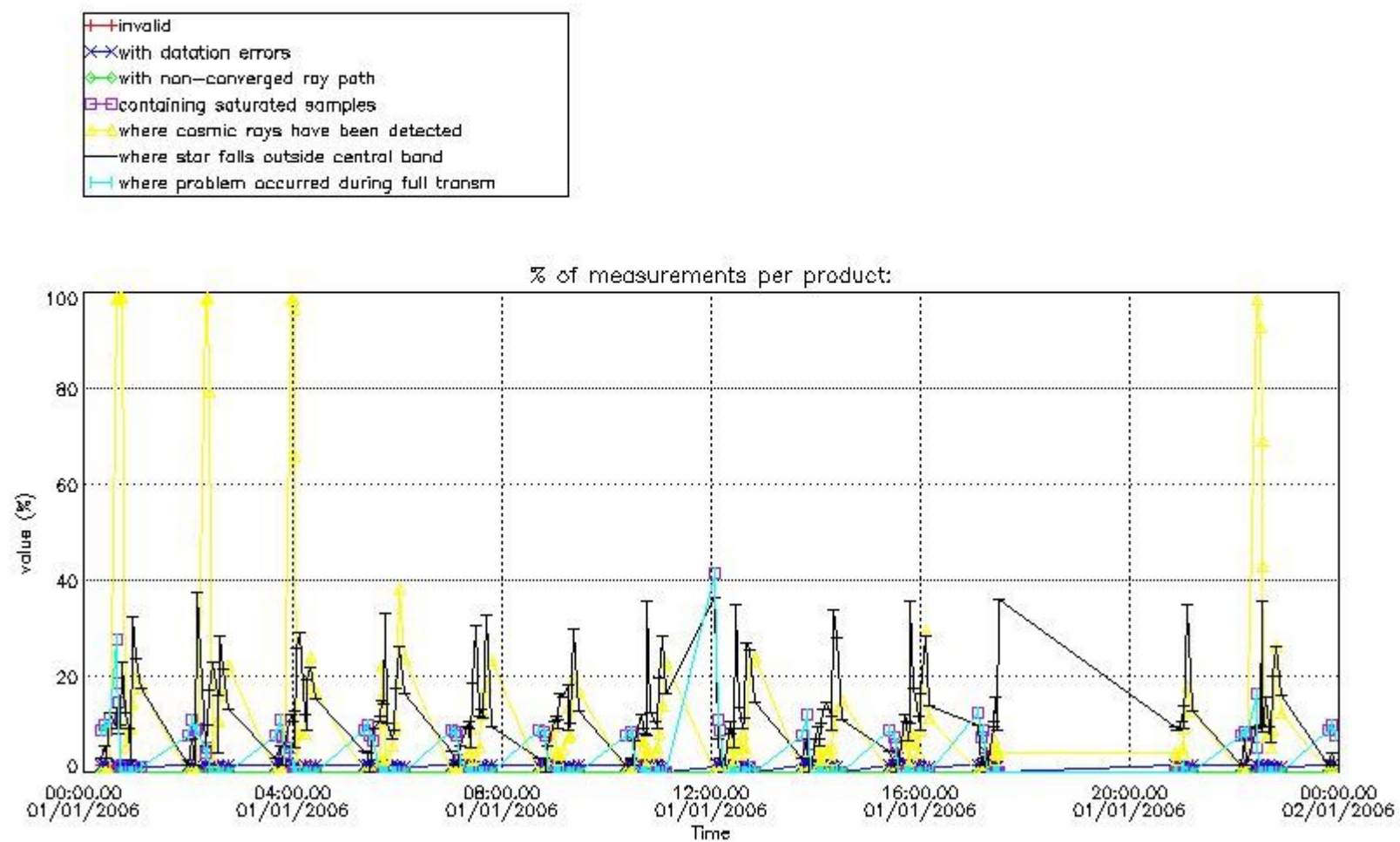


4. Level 1 quality information per product

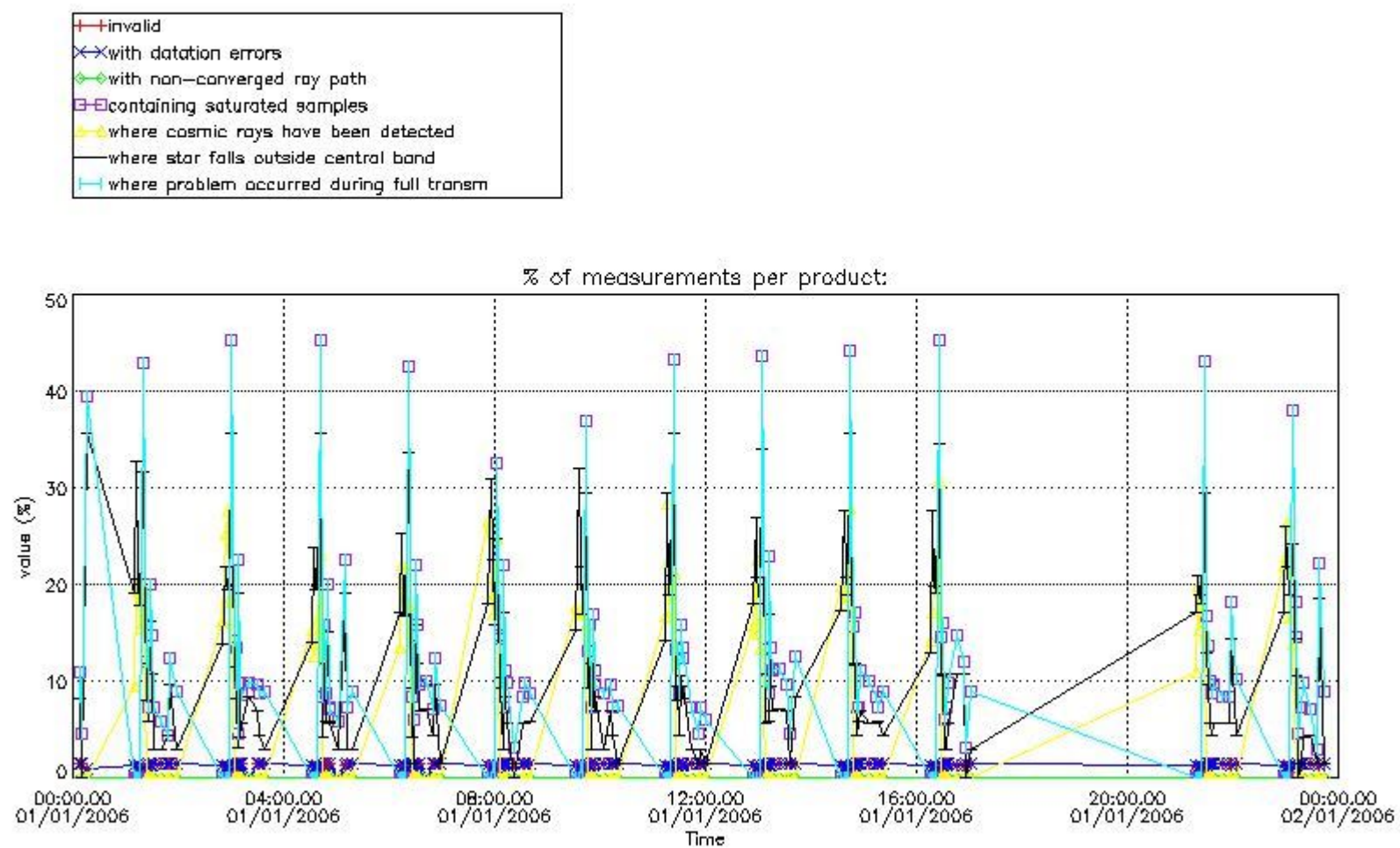
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



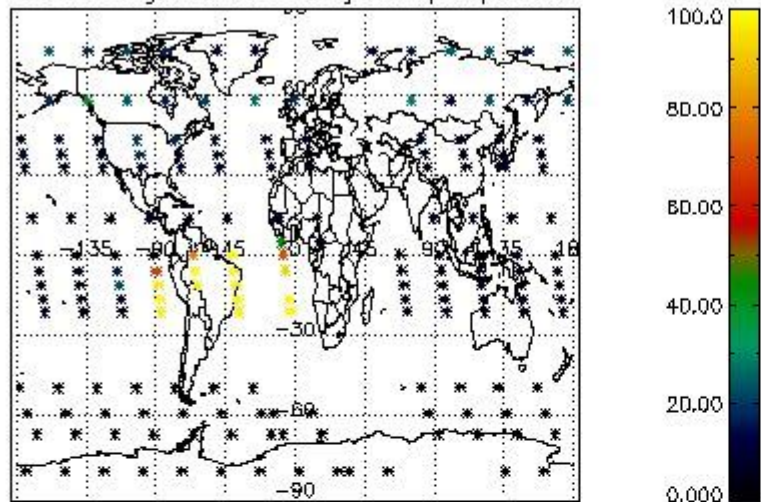
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



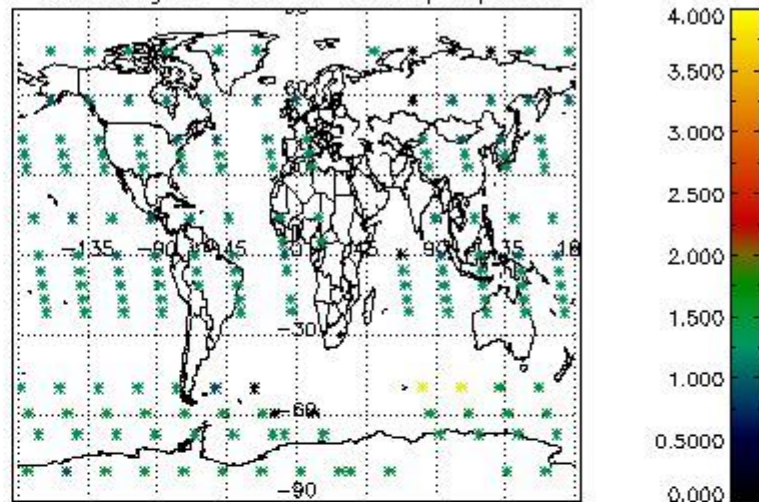
4.2 Plot quality information per product coming from level 1b processing (world map)

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

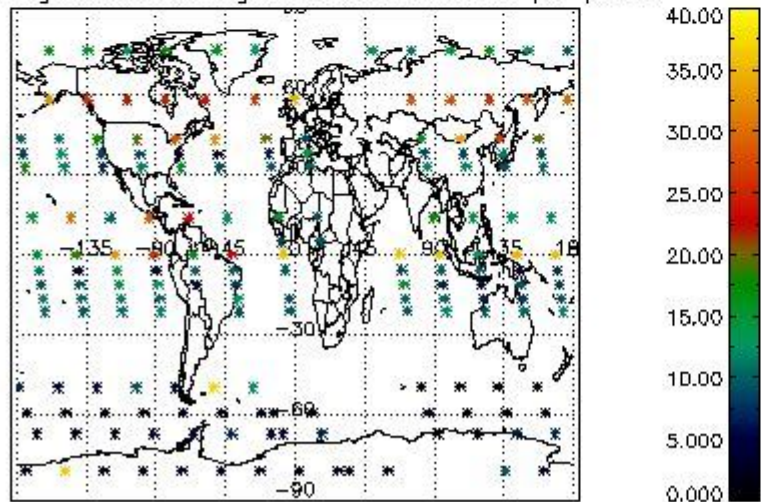
Percentage of cosmic ray hits per profile



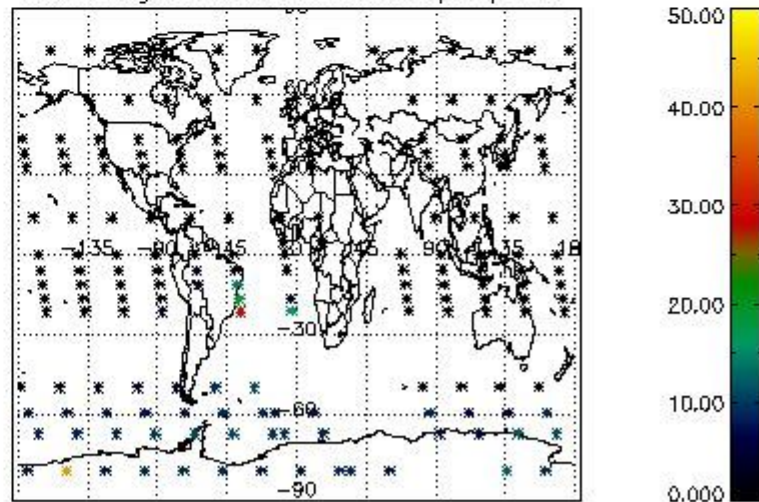
Percentage of datation errors per profile



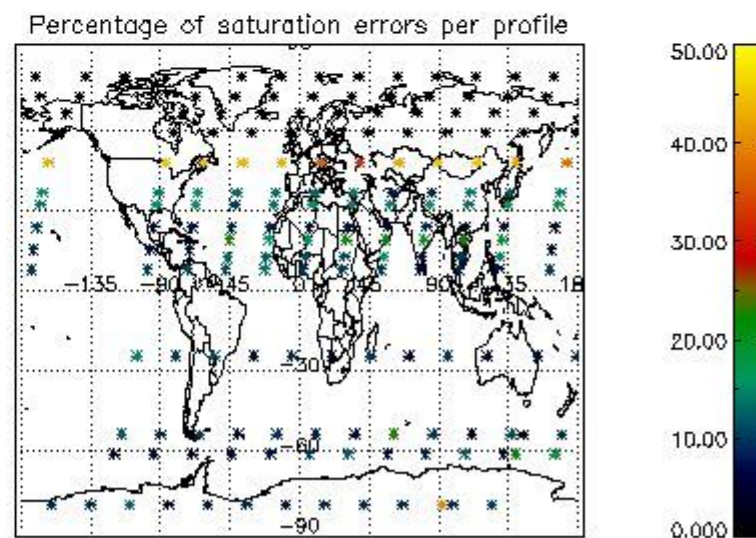
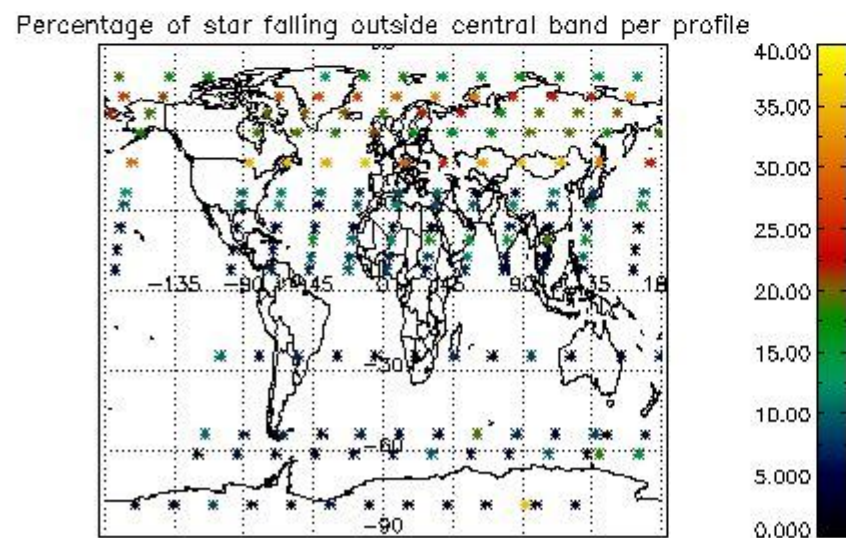
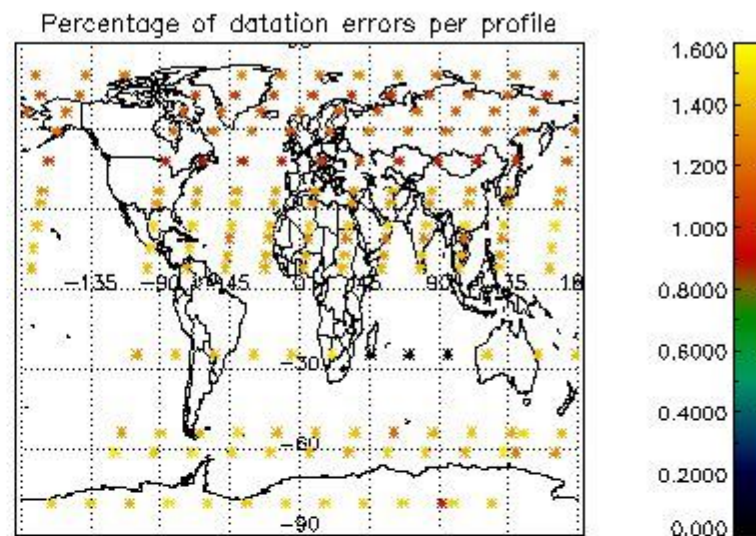
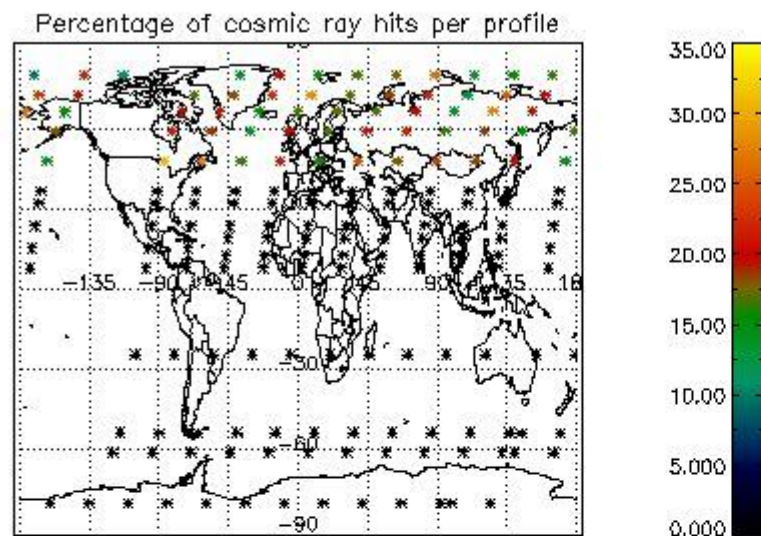
Percentage of star falling outside central band per profile



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

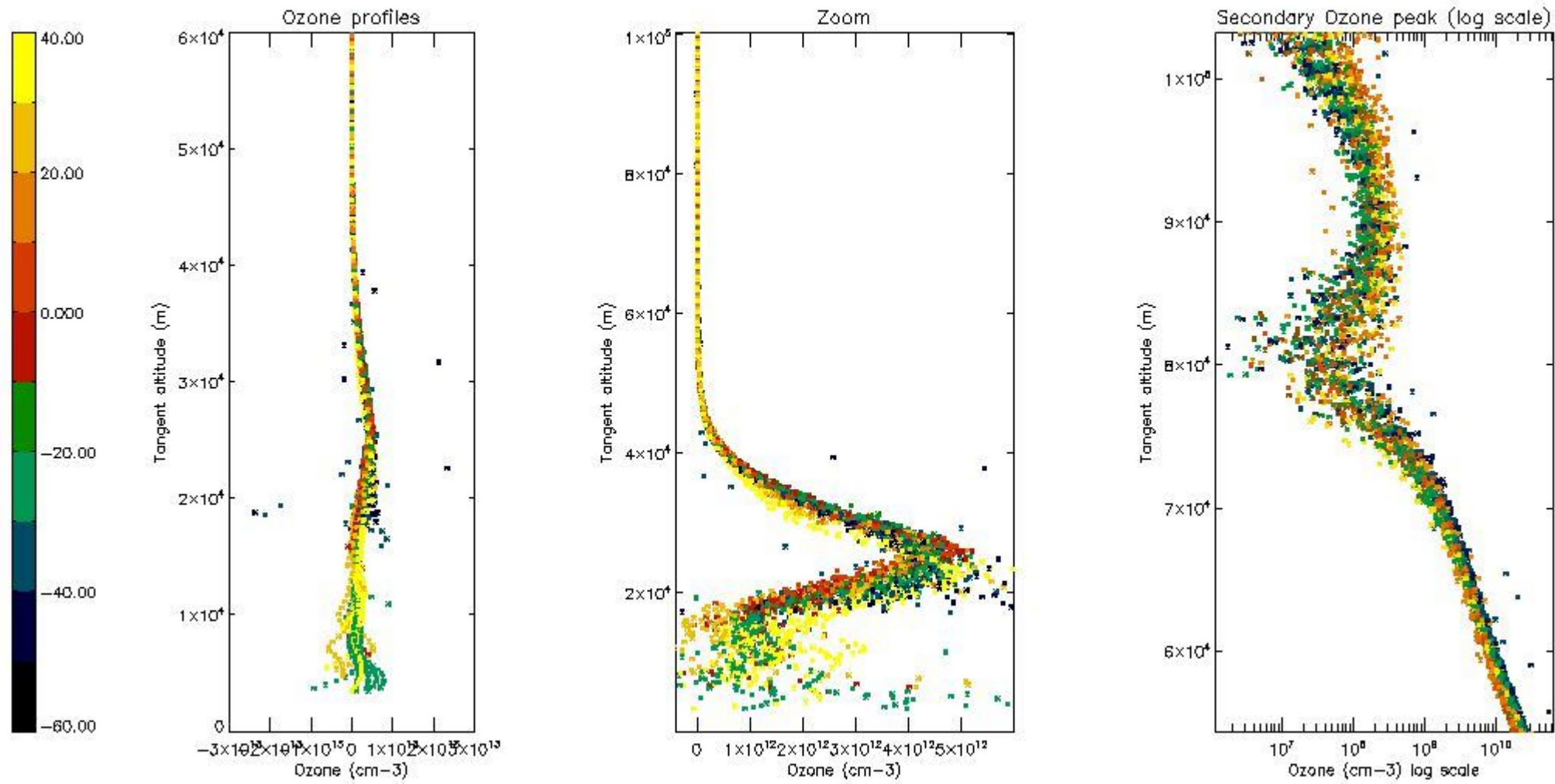
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	36
STD < 20	22

STD < 10	19
STD < 5	12

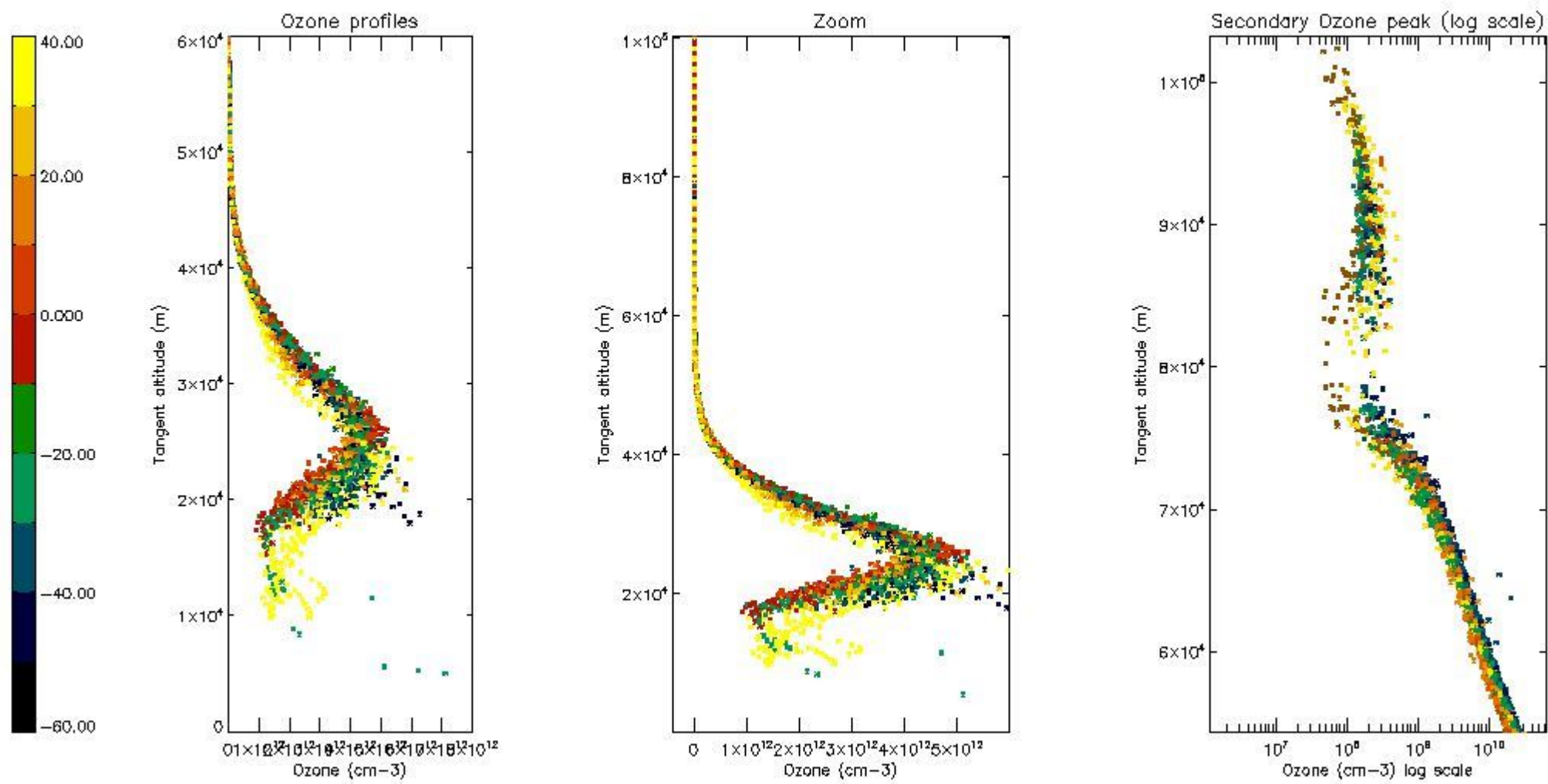
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



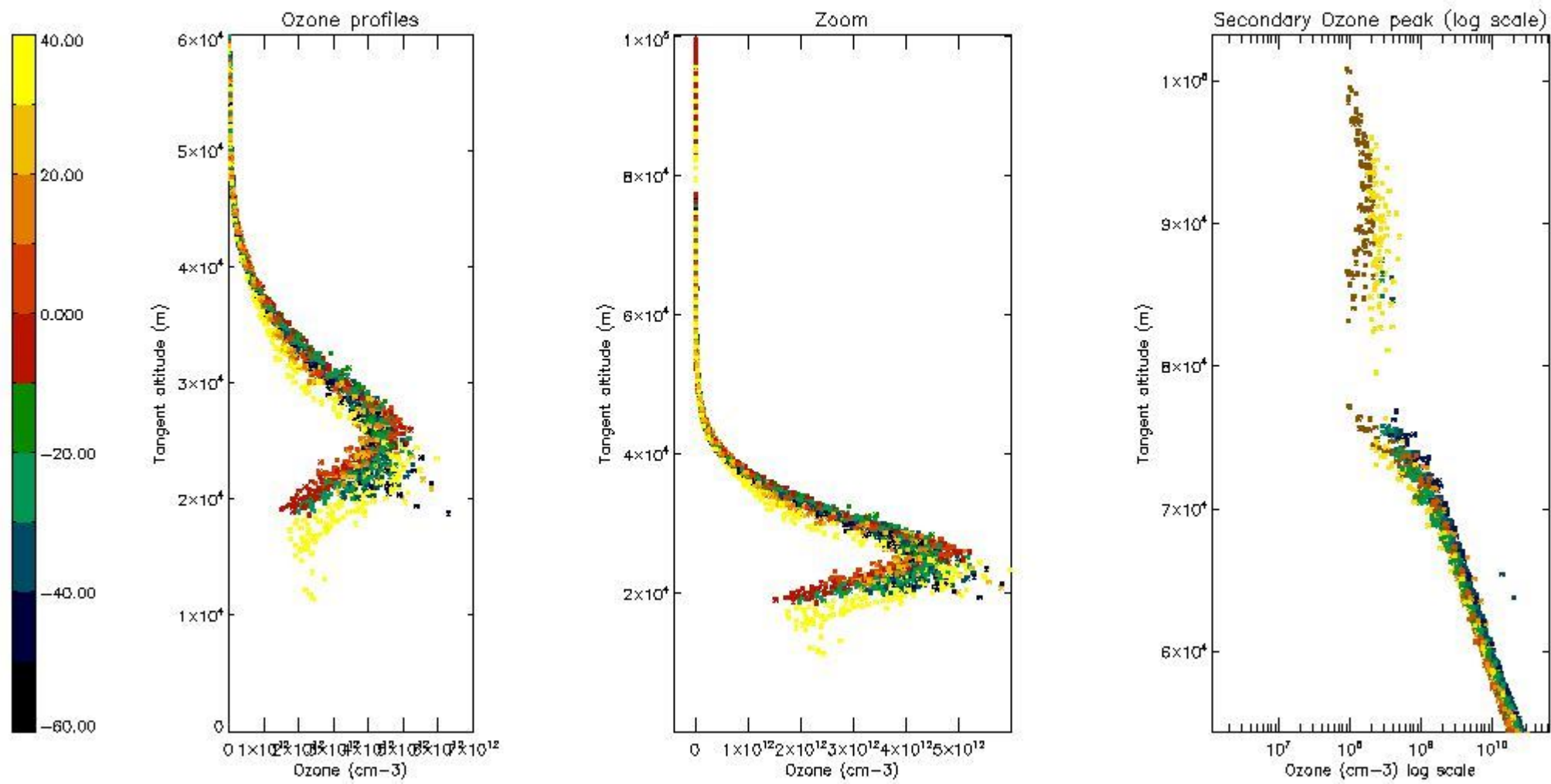
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



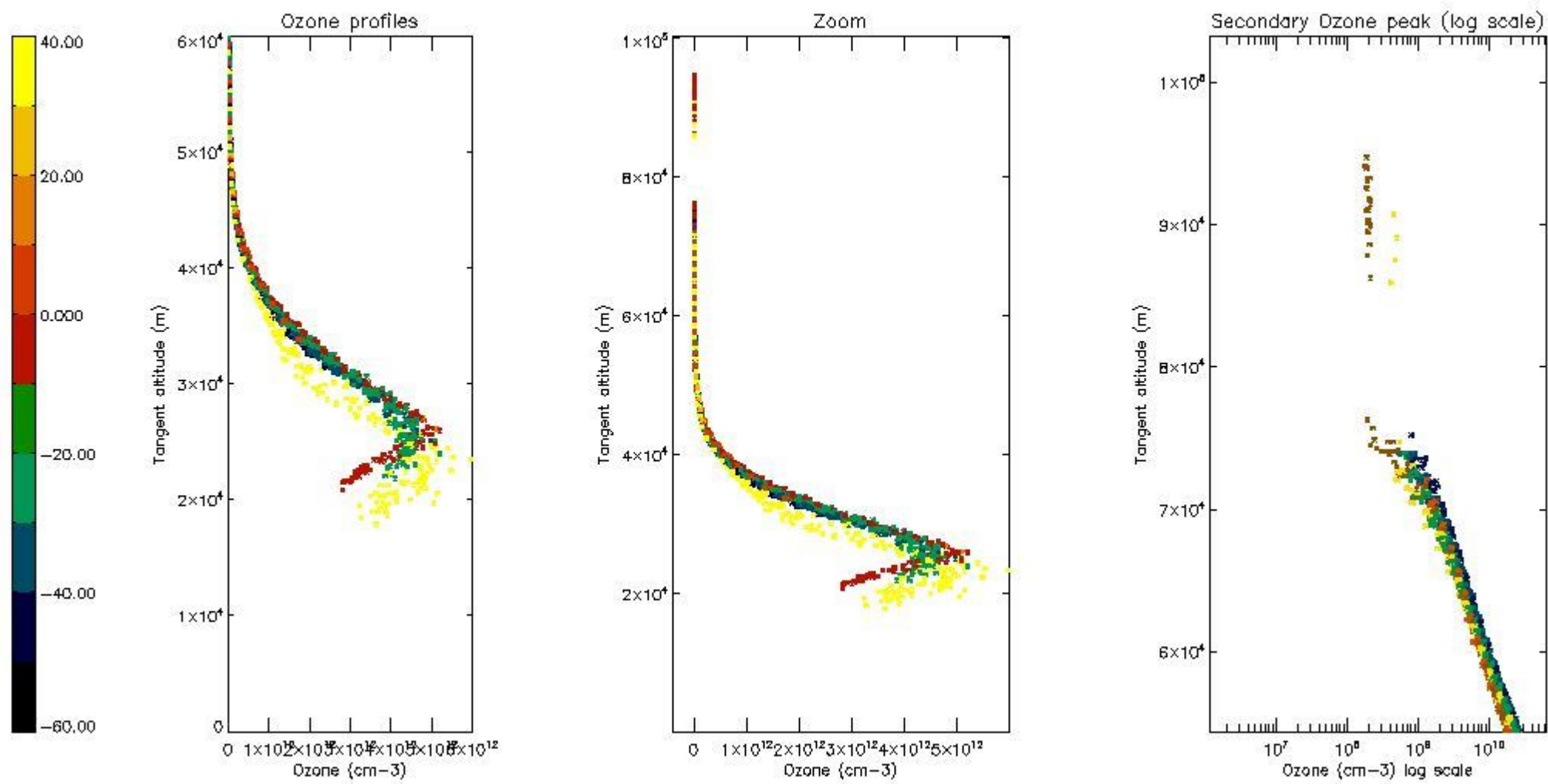
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



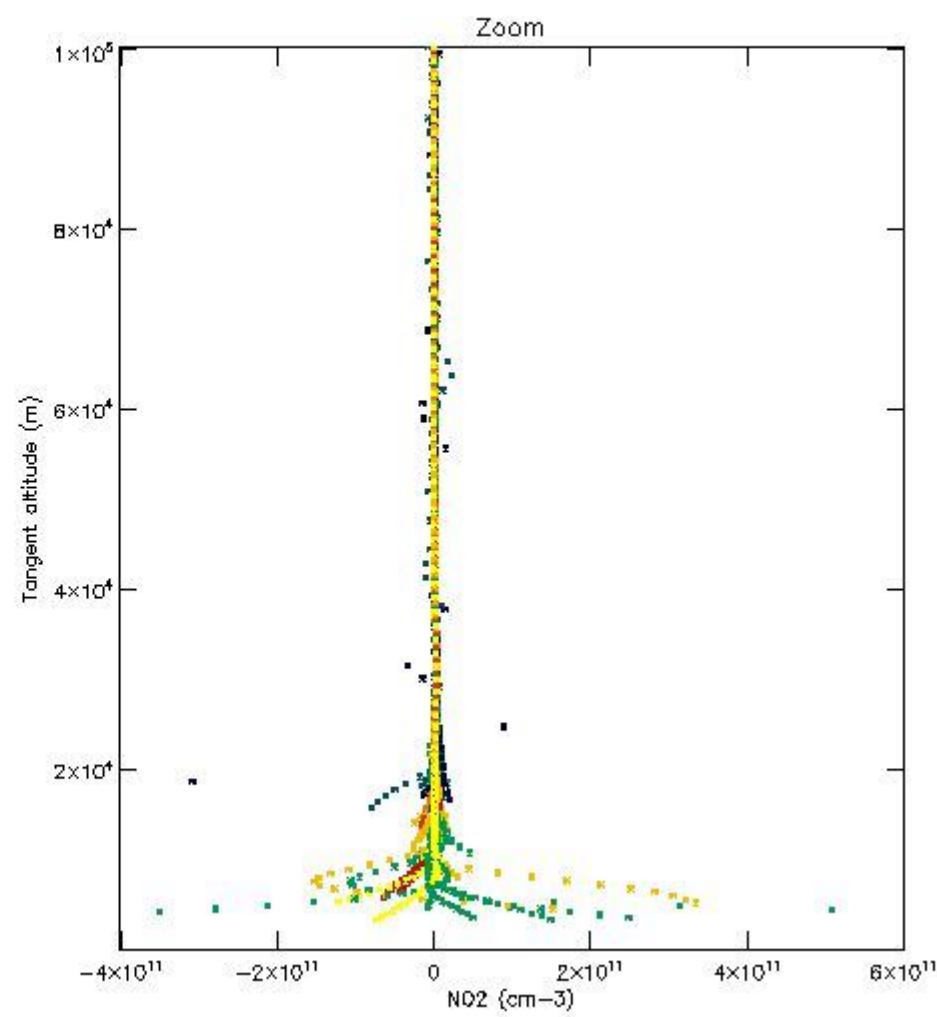
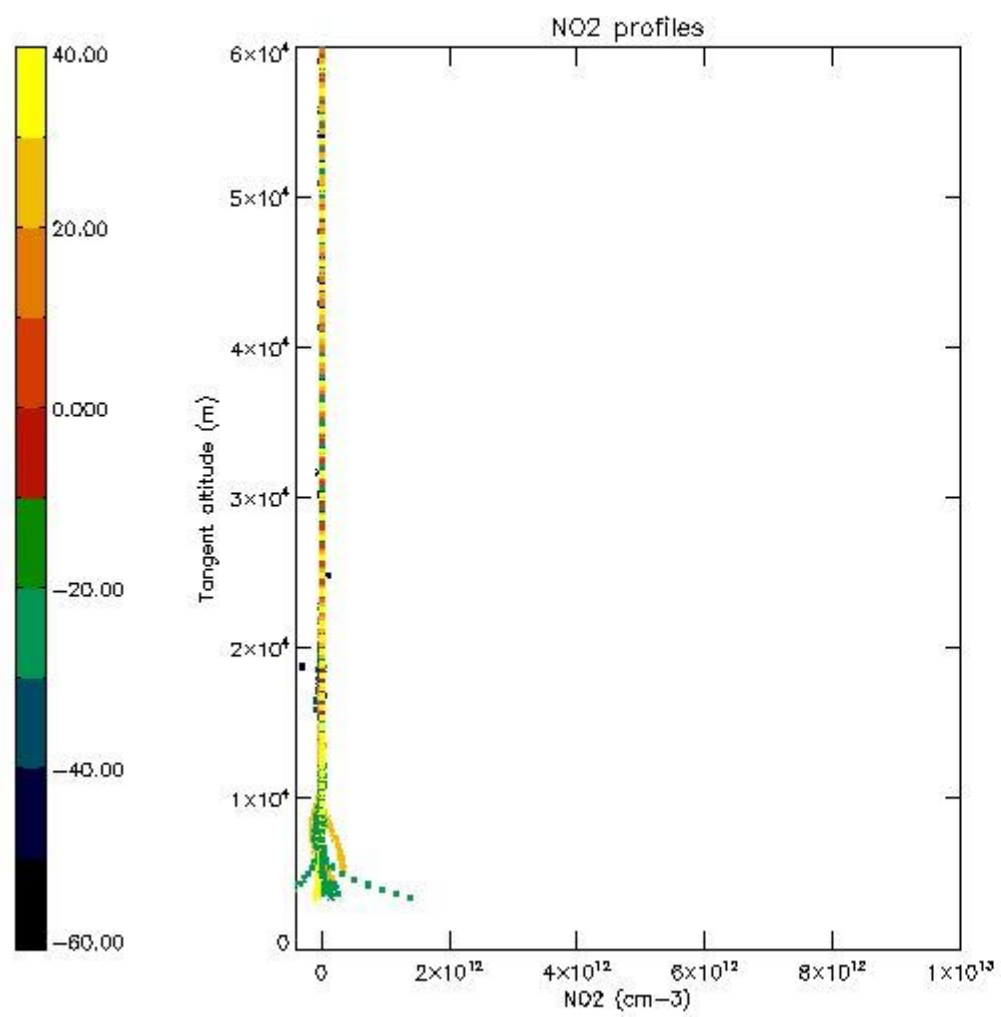
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



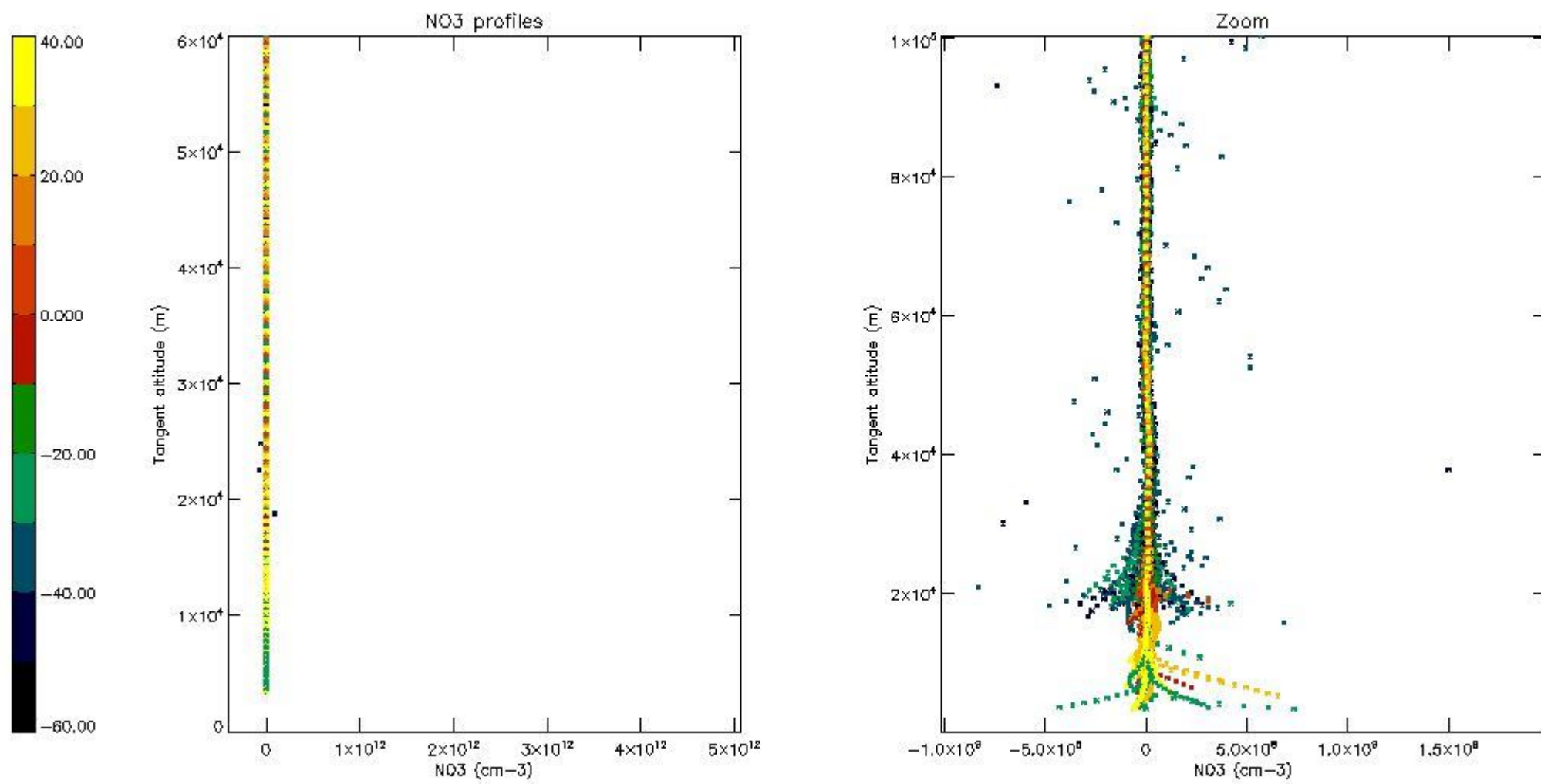
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



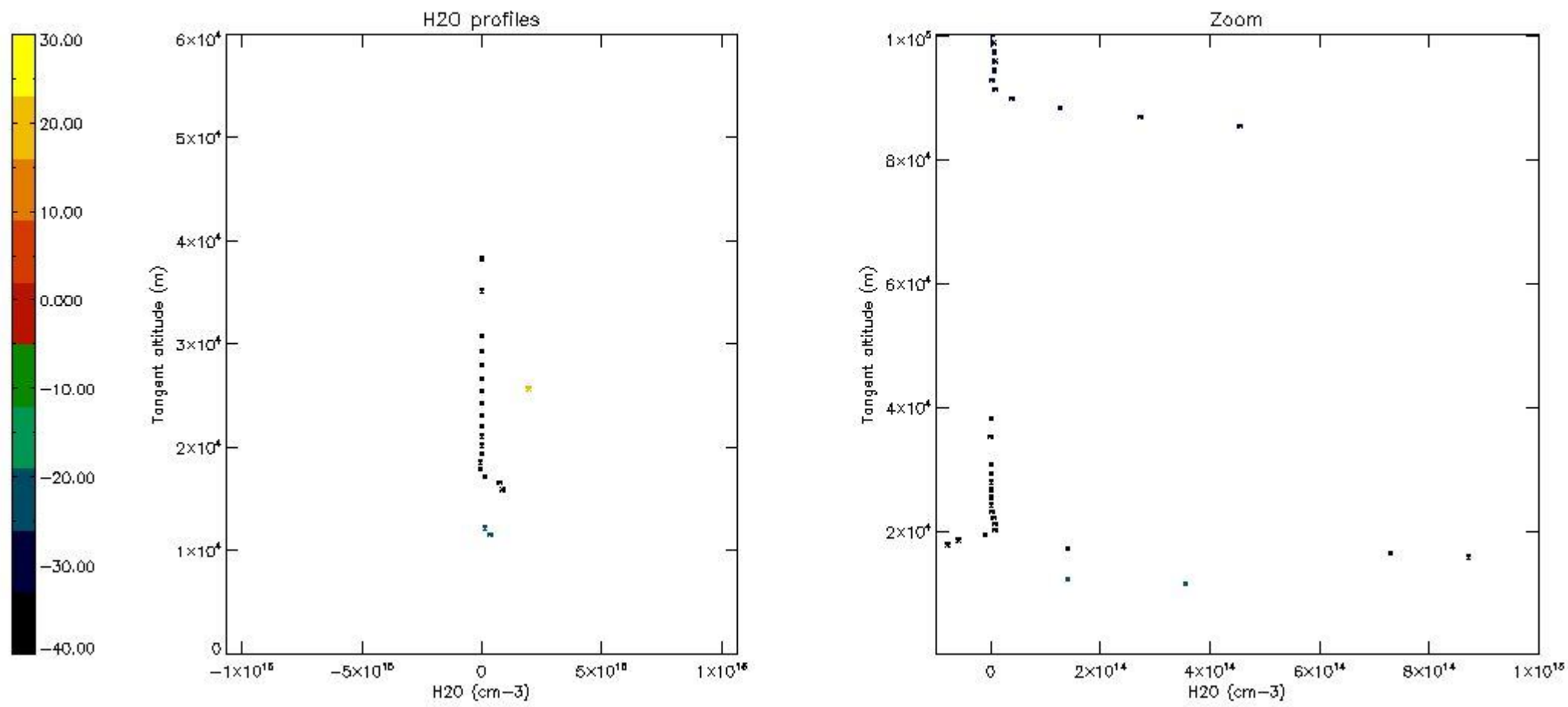
5.7 Plot NO3 profiles for all STD (dark without errors)

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	01-JAN-2006 00:08:07
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-JAN-2006 00:08:07
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-JAN-2006 00:08:07

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](#)

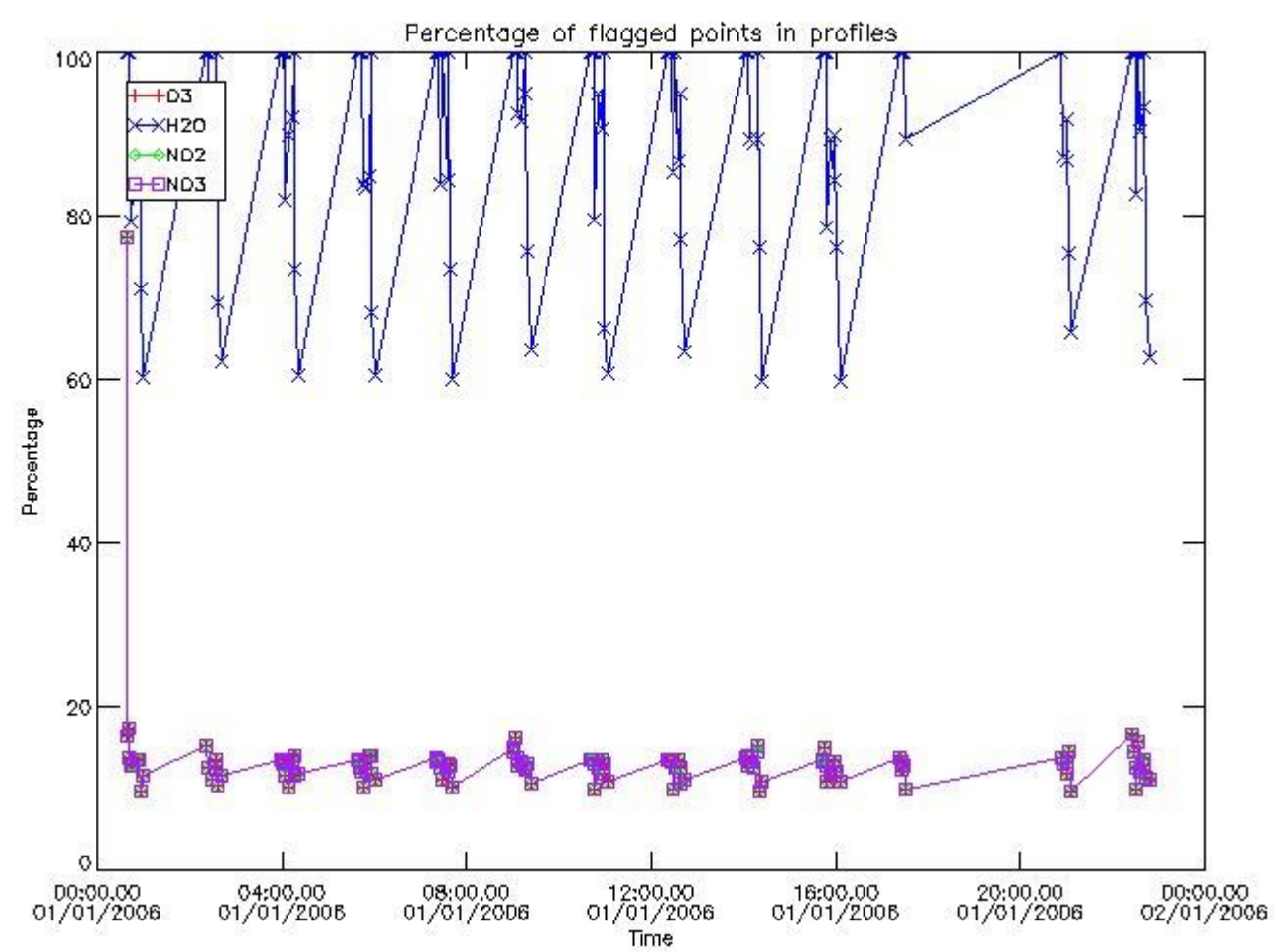
[6. Auxiliary Data Files used for the production reported in section 2](#)

338	GOM_NL__2PRFIN20060101_223504_000000422043_00488_20081_6868.N1	01-JAN-2006 22:35:04	Dark	42.000	12	Alp1Cru	0.77500	30000.	84	20081	No
339	GOM_NL__2PRFIN20060101_224019_000000382043_00488_20081_6869.N1	01-JAN-2006 22:40:19	Dark	37.500	29	Bet Car	1.6720	10200.	75	20081	No
340	GOM_NL__2PRFIN20060101_224145_000000402043_00488_20081_6870.N1	01-JAN-2006 22:41:45	Dark	39.500	71	lot Car	2.2460	7700.0	79	20081	No
341	GOM_NL__2PRFIN20060101_224319_000000452043_00488_20081_6871.N1	01-JAN-2006 22:43:19	Dark	45.000	41	Eps Car	1.8600	4100.0	90	20081	No
342	GOM_NL__2PRFIN20060101_224730_000000462043_00488_20081_6872.N1	01-JAN-2006 22:47:30	Dark	46.000	2	Alp Car	-0.73600	7000.0	92	20081	No
343	GOM_NL__2PRFIN20060101_225311_000000412043_00488_20081_6873.N1	01-JAN-2006 22:53:11	Straylight	40.500	108	Alp Col	2.6520	15200.	81	20081	No
344	GOM_NL__2PRFIN20060101_225747_000000412043_00488_20081_6874.N1	01-JAN-2006 22:57:47	Straylight	41.000	101	11Alp Lep	2.5820	7000.0	82	20081	No
345	GOM_NL__2PRFIN20060101_230039_000000462043_00488_20081_6875.N1	01-JAN-2006 23:00:39	Straylight	46.000	7	19Bet Ori	0.10000	14000.	92	20081	No
346	GOM_NL__2PRFIN20060101_230230_000000442043_00488_20081_6876.N1	01-JAN-2006 23:02:30	Straylight	43.500	30	46Eps Ori	1.6940	30000.	87	20081	No
347	GOM_NL__2PRFIN20060101_230441_000000432043_00488_20081_6877.N1	01-JAN-2006 23:04:41	Tw_i_and_stray	42.500	27	24Gam Ori	1.6360	26000.	85	20081	No
348	GOM_NL__2PRFIN20060101_230750_000000442043_00488_20081_6878.N1	01-JAN-2006 23:07:50	Bright	43.500	13	87Alp Tau	0.86700	3800.0	87	20081	No
349	GOM_NL__2PRFIN20060101_231104_000000382043_00488_20081_6879.N1	01-JAN-2006 23:11:04	Bright	38.000	28	12Bet Tau	1.6500	15200.	76	20081	No
350	GOM_NL__2PRFIN20060101_231220_000000392043_00488_20081_6880.N1	01-JAN-2006 23:12:20	Bright	38.500	114	3lot Aur	2.6930	4600.0	77	20081	No
351	GOM_NL__2PRFIN20060101_231443_000000332043_00488_20081_6881.N1	01-JAN-2006 23:14:43	Bright	33.000	149	45Eps Per	2.8880	30000.	66	20081	No
352	GOM_NL__2PRFIN20060101_231700_000000342043_00488_20081_6882.N1	01-JAN-2006 23:17:00	Bright	34.000	175	39Del Per	3.0100	19400.	68	20081	No
353	GOM_NL__2PRFIN20060101_231909_000000362043_00488_20081_6883.N1	01-JAN-2006 23:19:09	Bright	35.500	160	23Gam Per	2.9300	4700.0	71	20081	No
354	GOM_NL__2PRFIN20060101_232810_000000352043_00488_20081_6884.N1	01-JAN-2006 23:28:10	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	20081	No
355	GOM_NL__2PRFIN20060101_233630_000000342043_00488_20081_6885.N1	01-JAN-2006 23:36:30	Bright	33.500	119	14Eta Dra	2.7270	4700.0	67	20081	No
356	GOM_NL__2PRFIN20060101_233838_000000412043_00488_20081_6886.N1	01-JAN-2006 23:38:38	Bright	40.500	130	23Bet Dra	2.7990	5800.0	81	20081	No
357	GOM_NL__2PRFIN20060101_234451_000000342043_00488_20081_6887.N1	01-JAN-2006 23:44:51	Bright	34.000	133	40Zet Her	2.8070	6000.0	68	20081	No
358	GOM_NL__2PRFIN20060101_234748_000000342043_00488_20081_6888.N1	01-JAN-2006 23:47:48	Bright	34.000	127	27Bet Her	2.7810	4700.0	68	20081	No
359	GOM_NL__2PRFIN20060101_235242_000000362043_00488_20081_6889.N1	01-JAN-2006 23:52:42	Bright	36.000	102	24Alp Ser	2.6000	4250.0	72	20081	No
360	GOM_NL__2PRFIN20060101_235500_000000342043_00488_20081_6890.N1	01-JAN-2006 23:55:00	Bright	33.500	120	1Del Oph	2.7340	3200.0	67	20081	No

3. Quality information per product

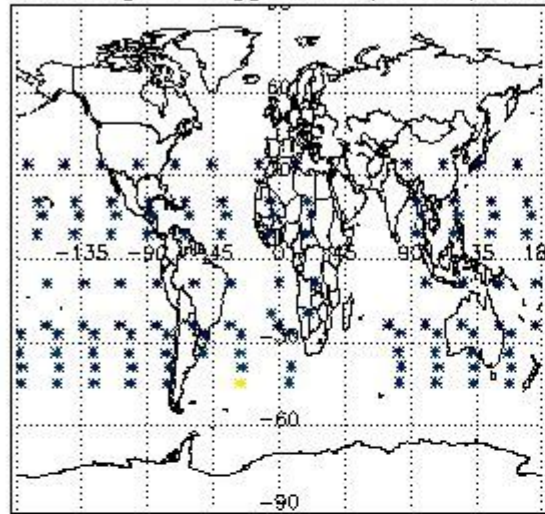
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

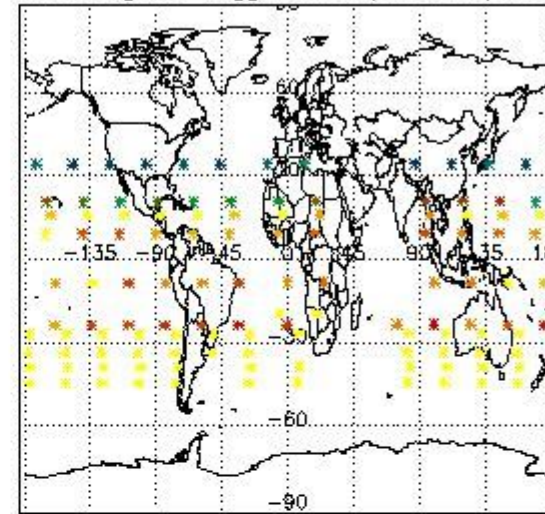


3.2 Plot quality information per product (world map)

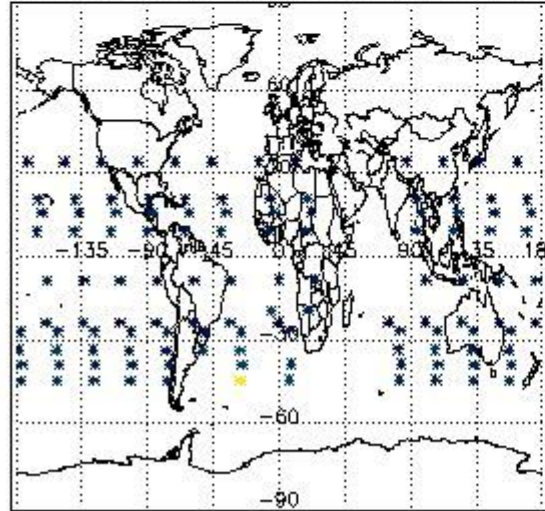
Percentage of flagged data per O3 profile



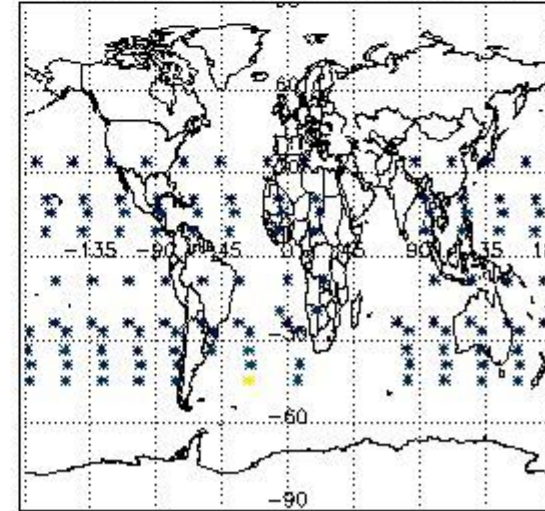
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

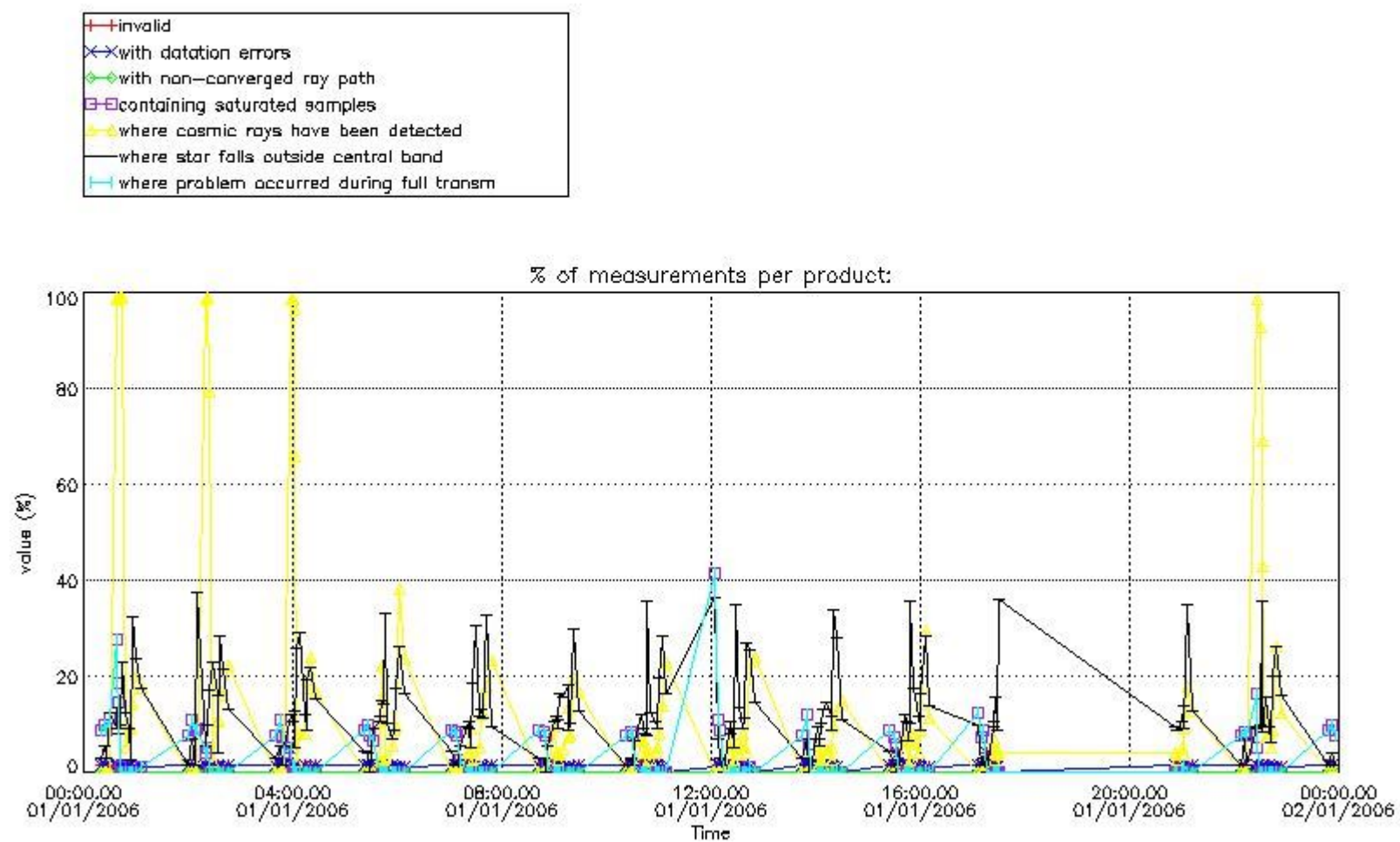


4. Level 1 quality information per product

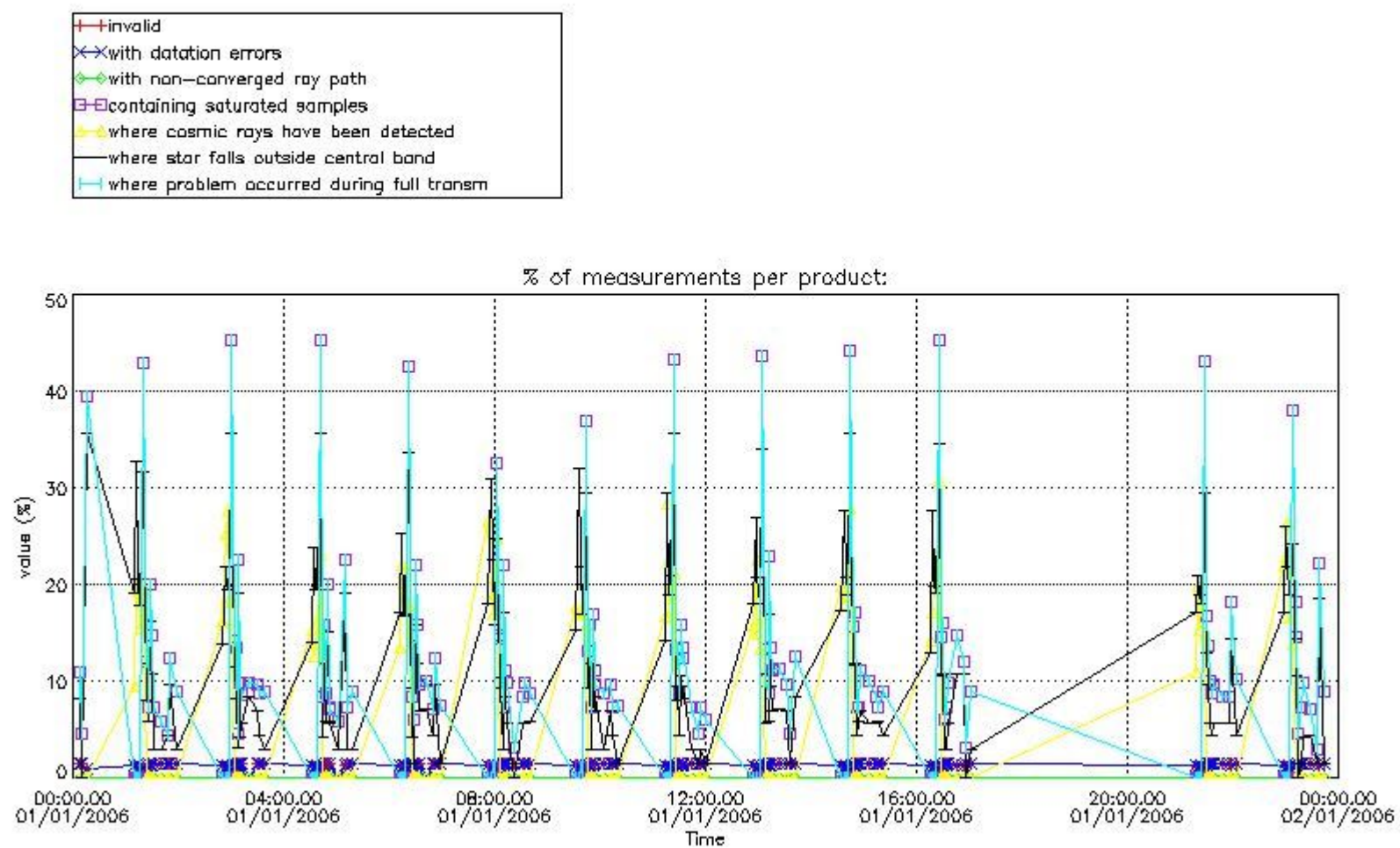
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

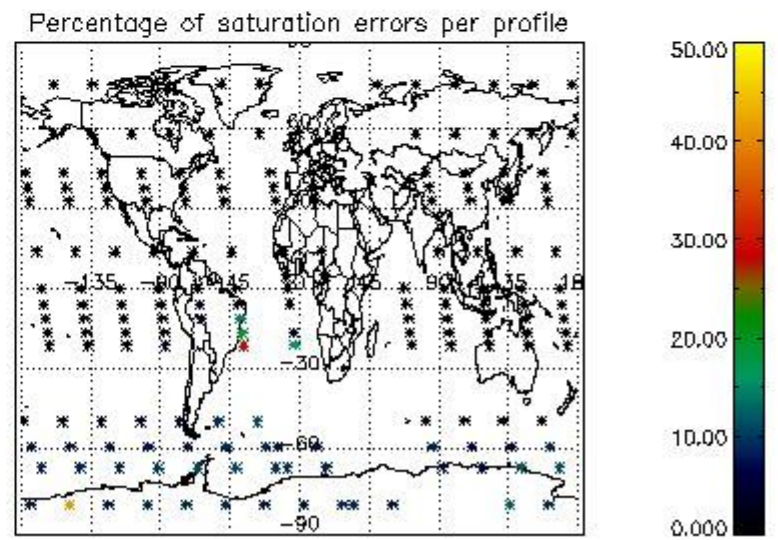
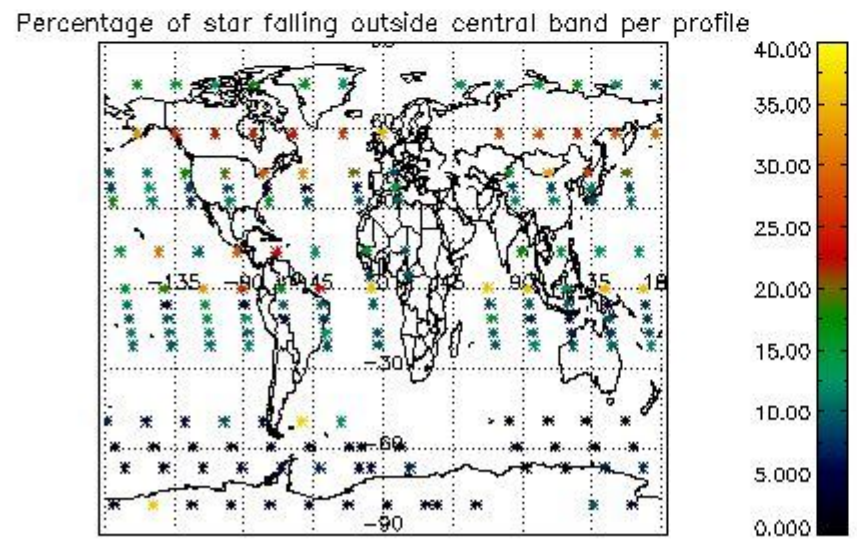
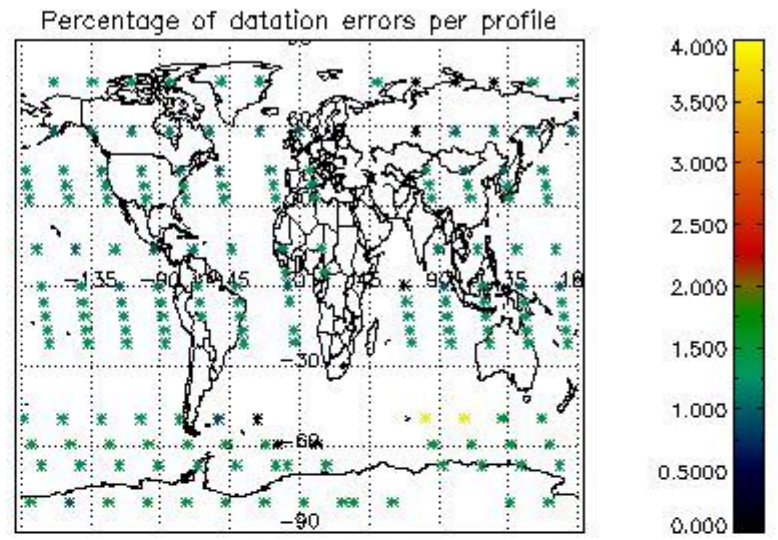
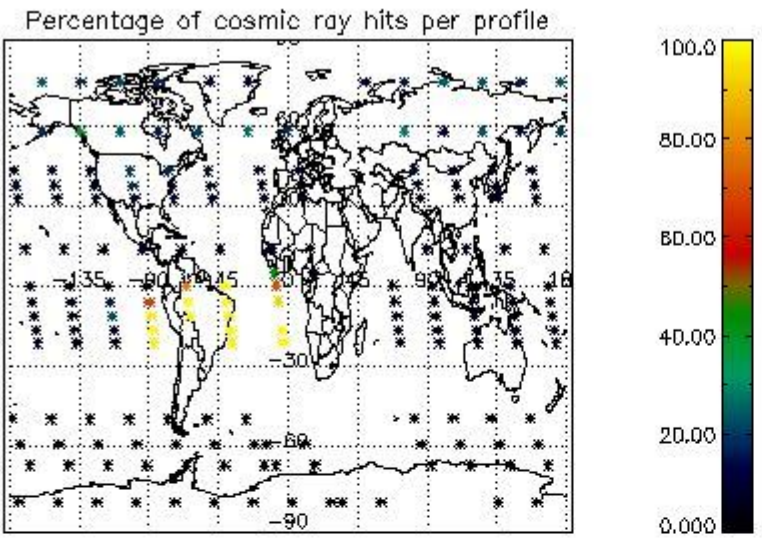


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

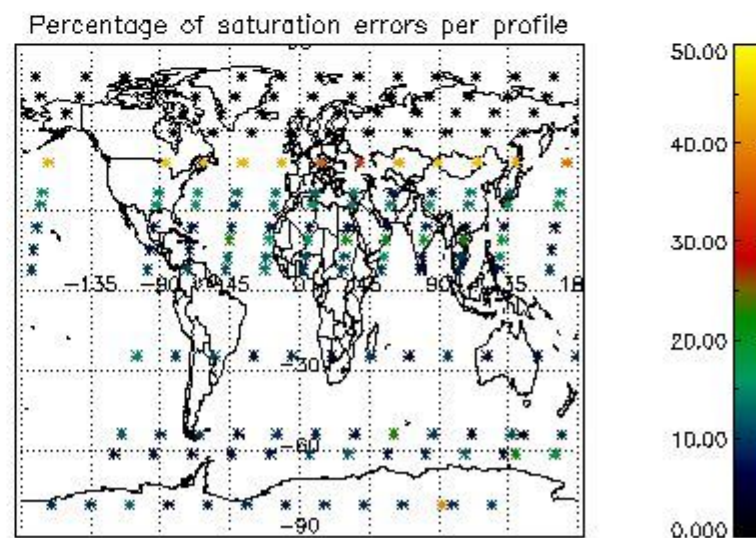
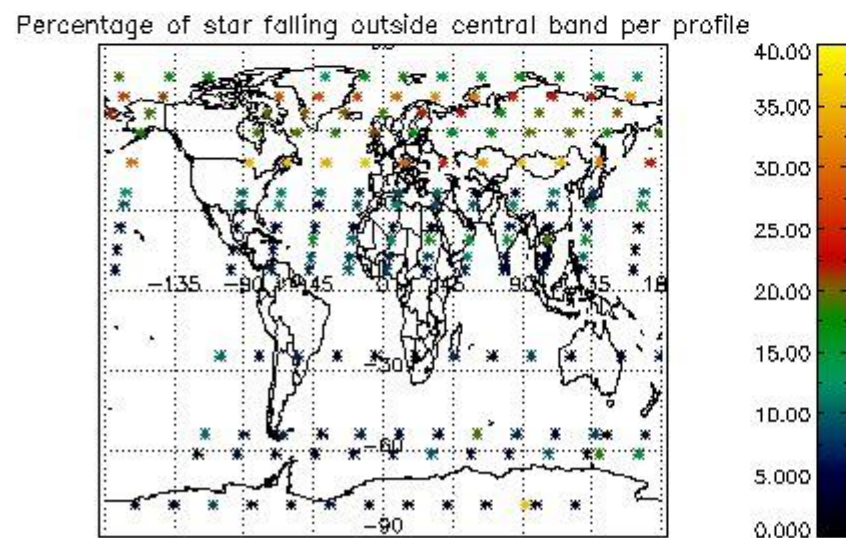
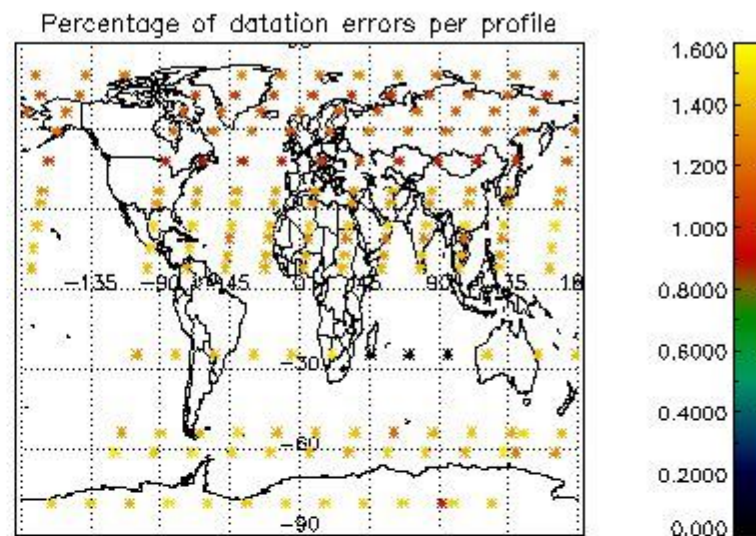
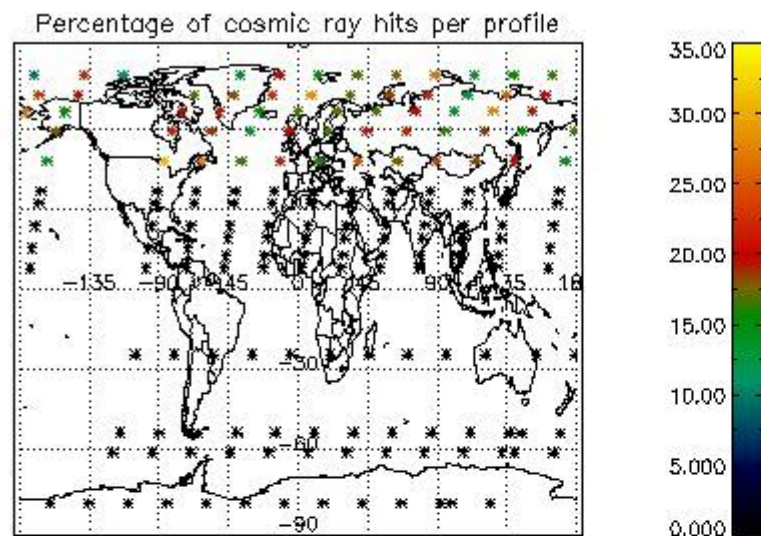


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

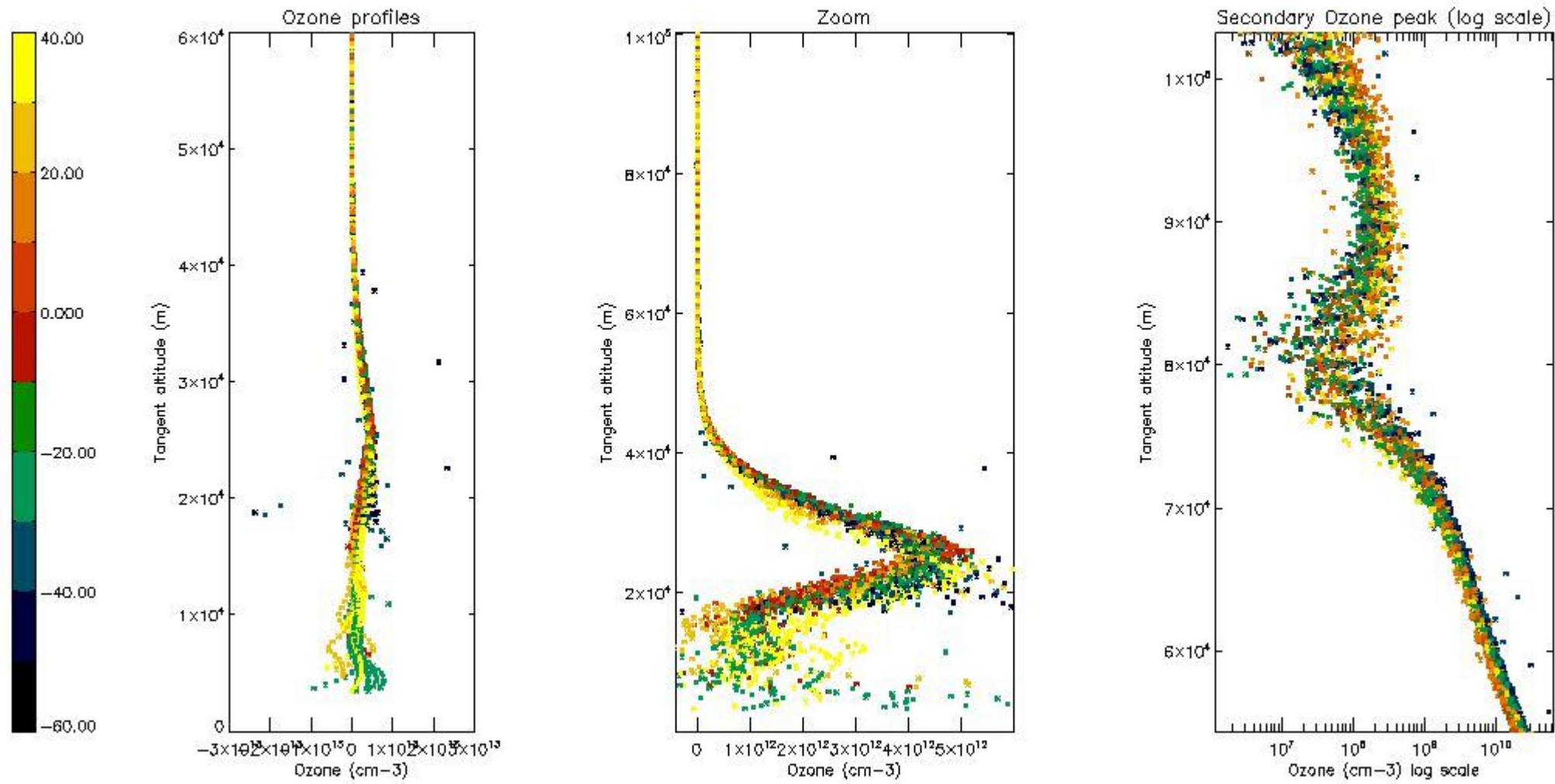
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	36
STD < 20	22

STD < 10	19
STD < 5	12

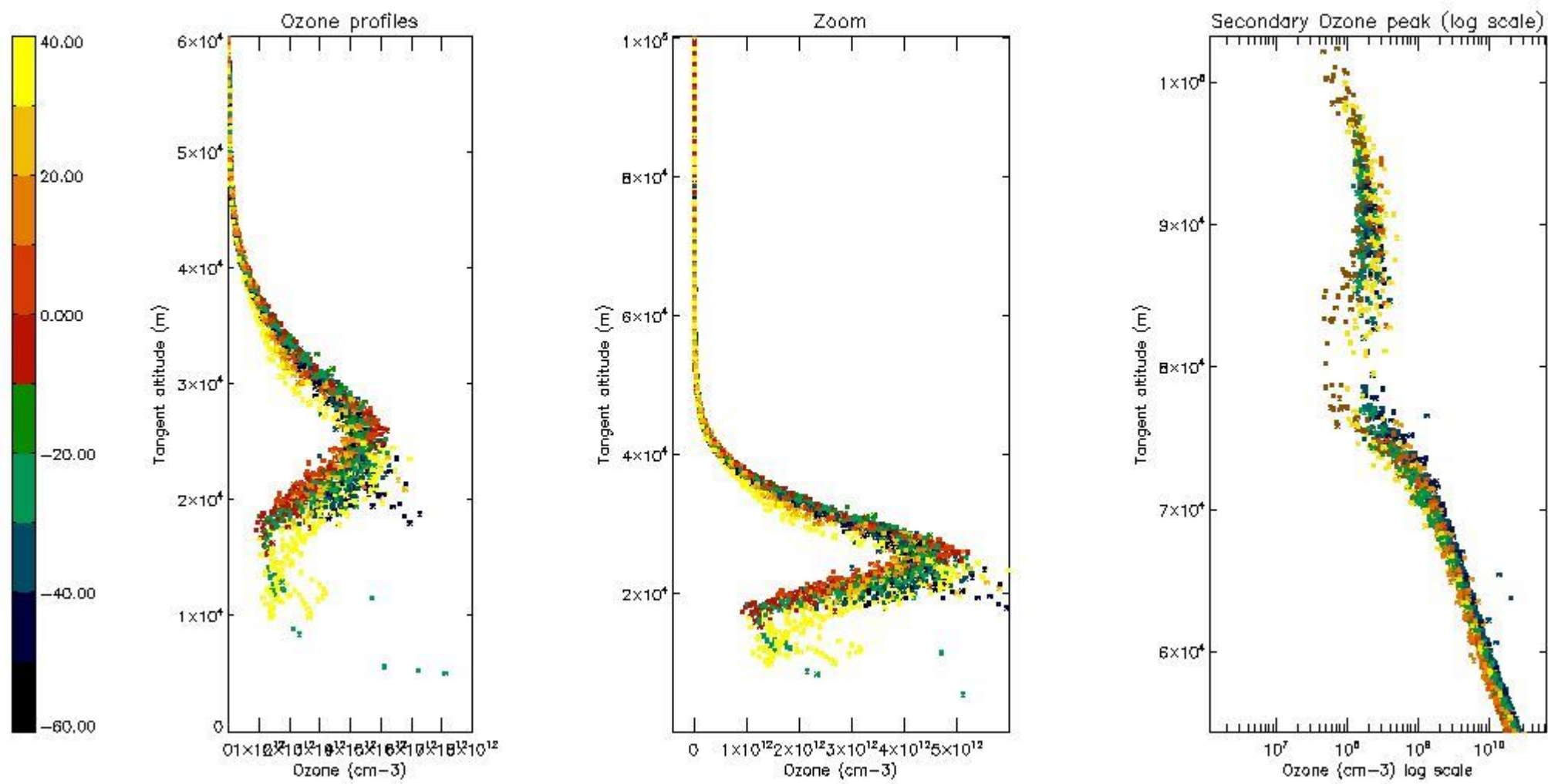
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



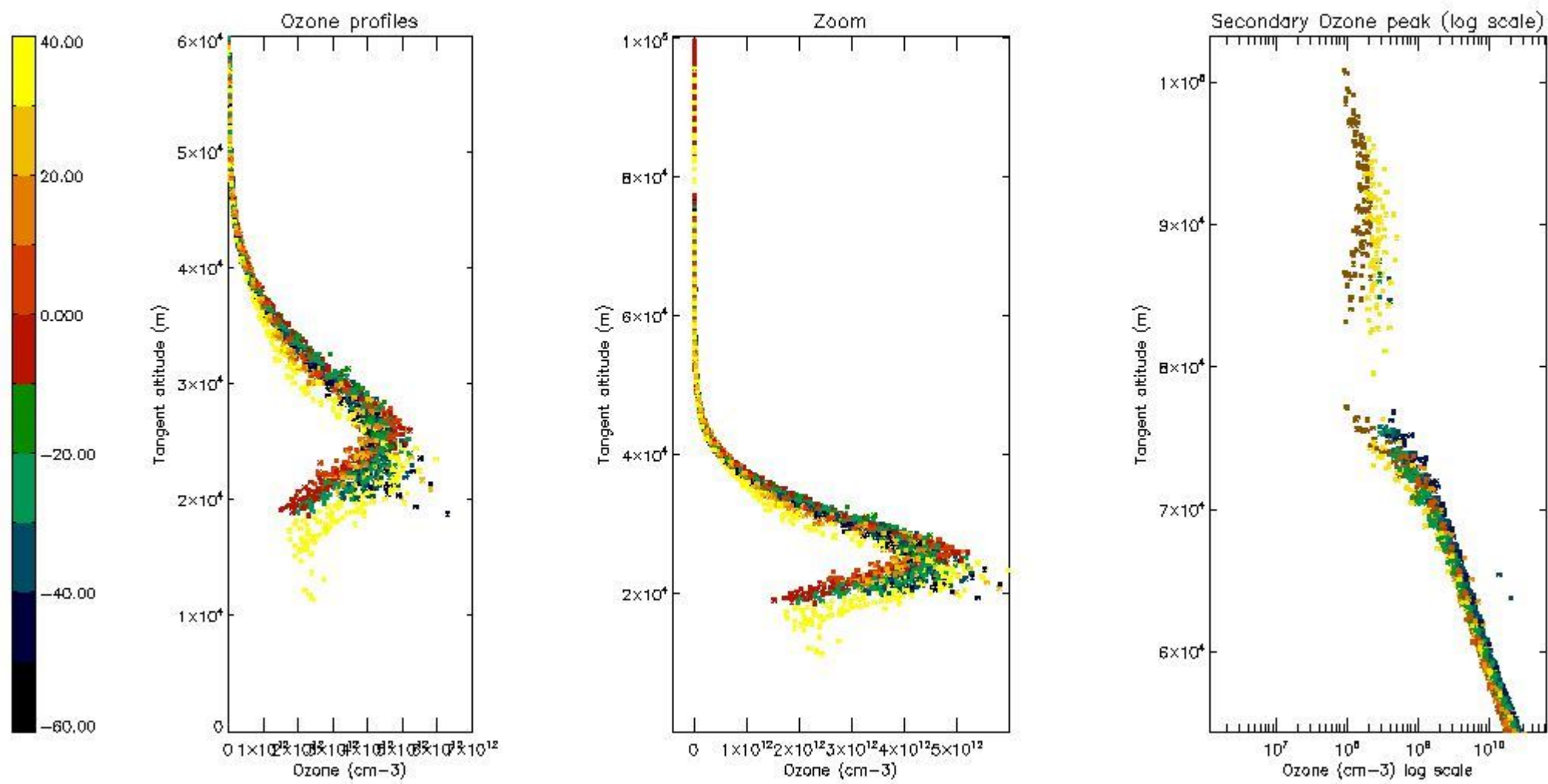
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



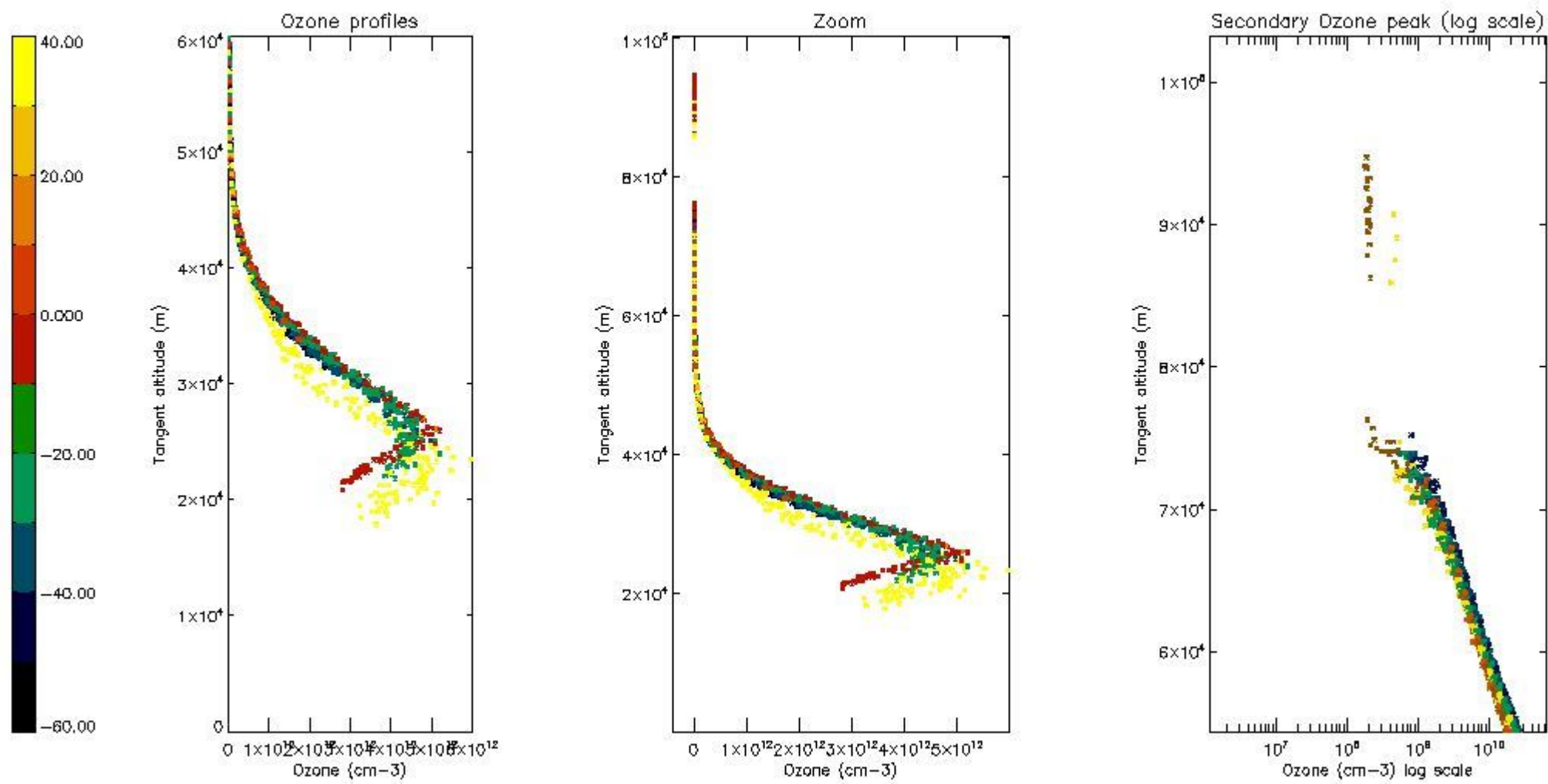
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



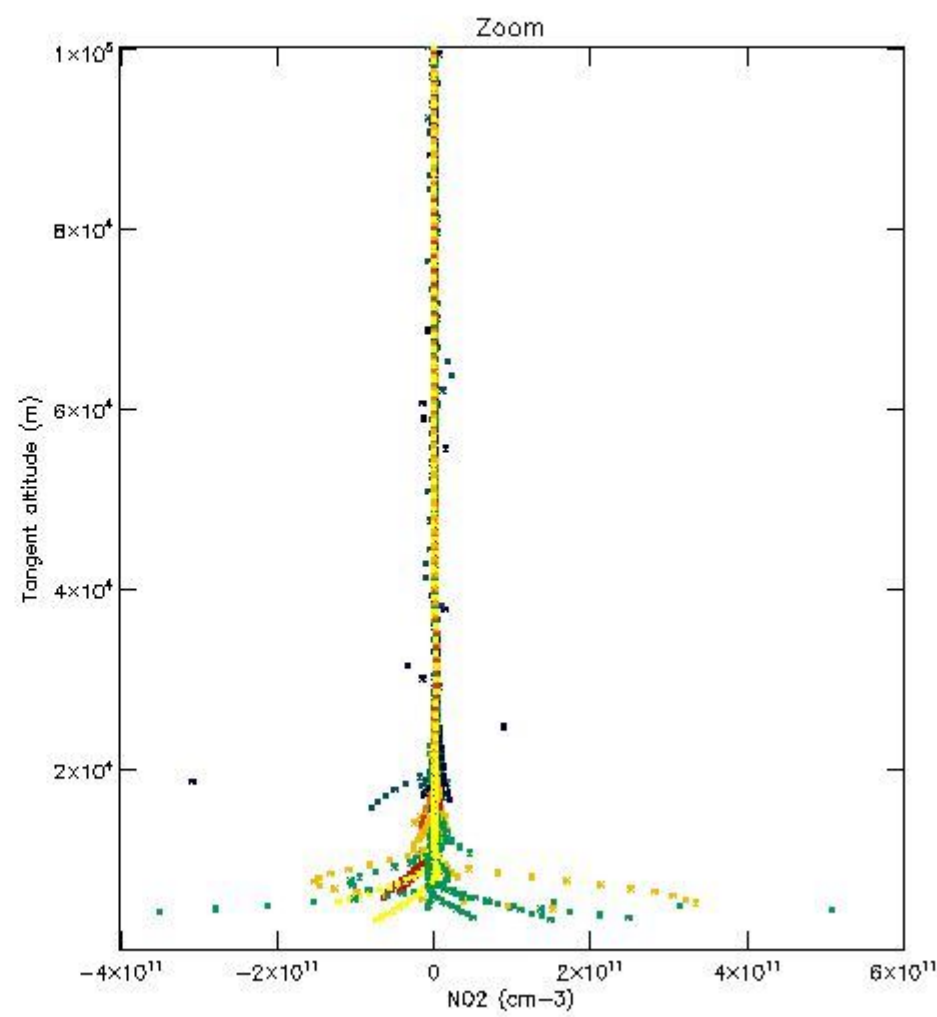
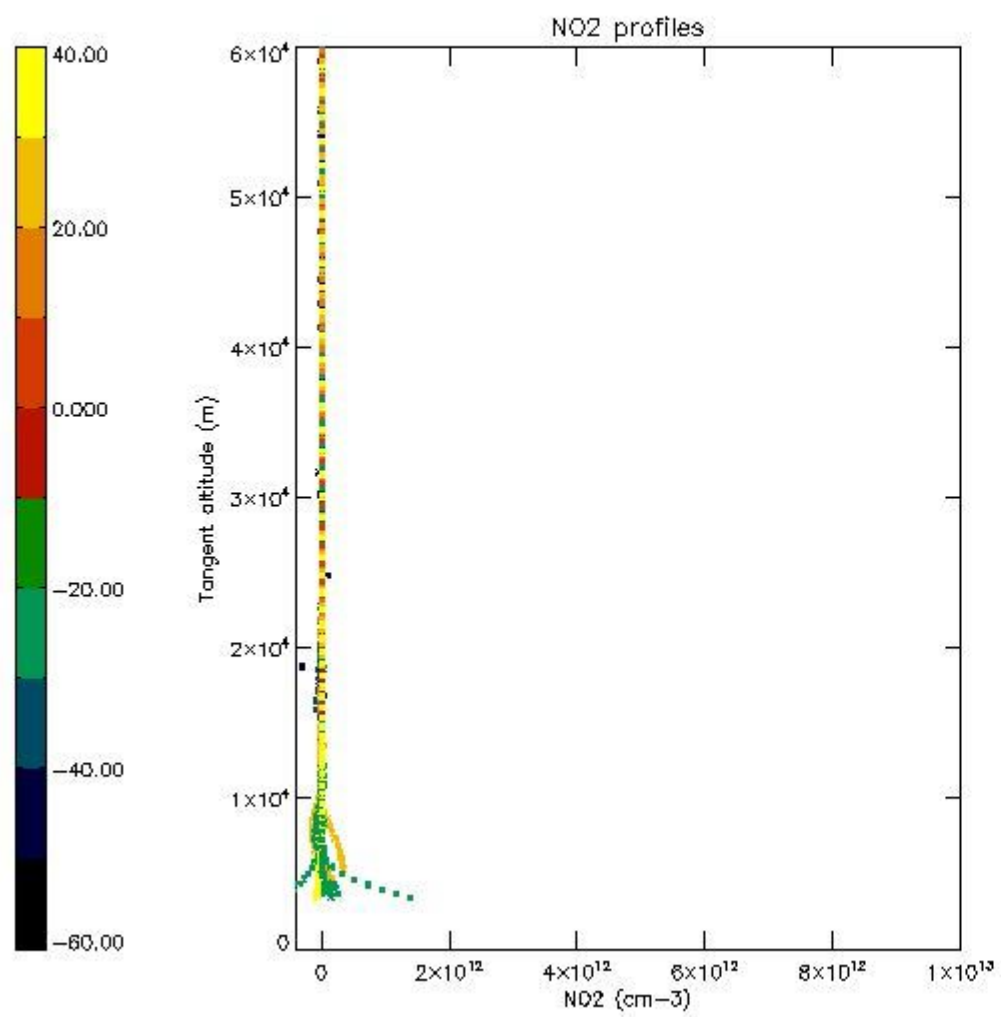
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



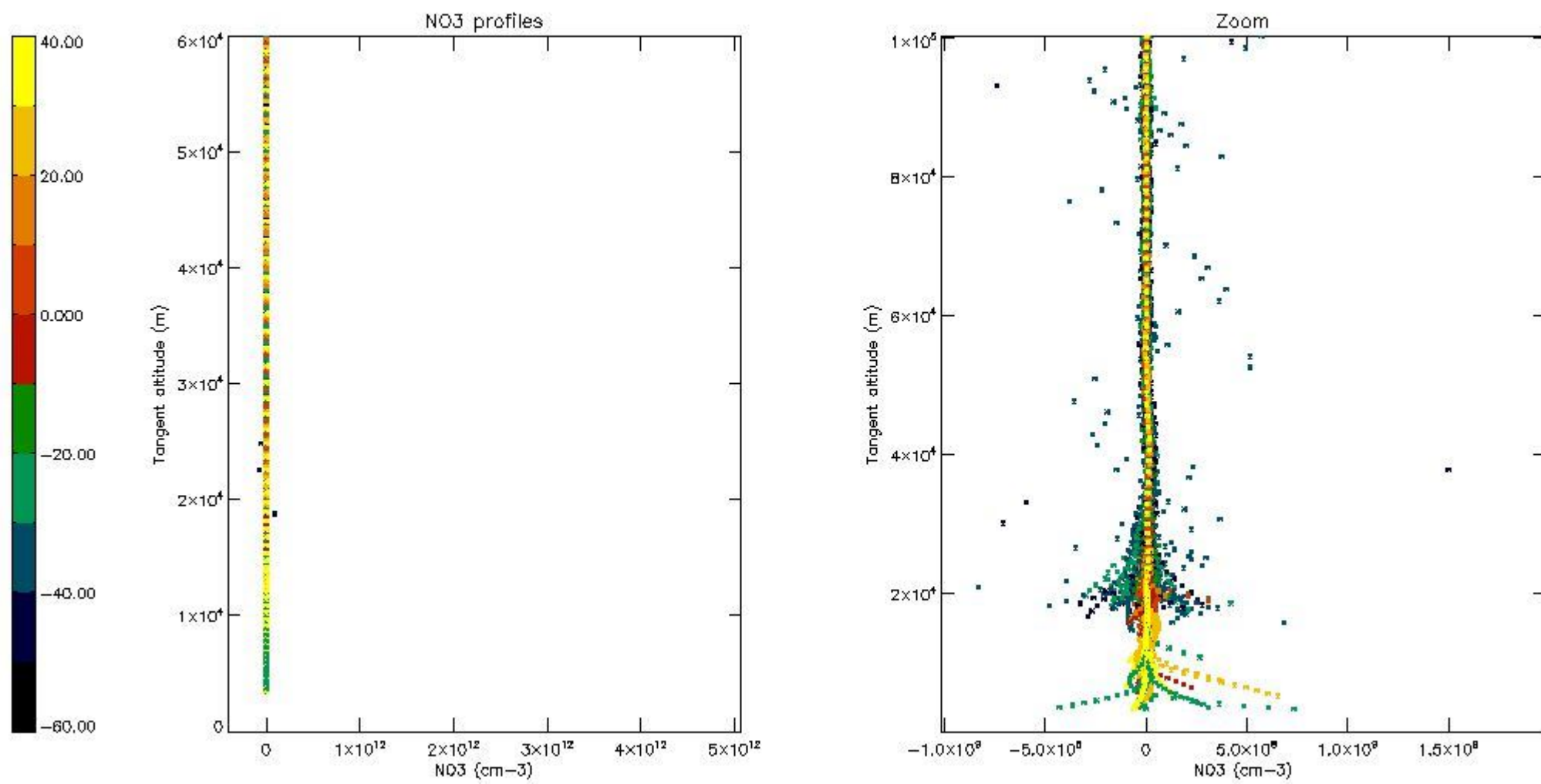
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



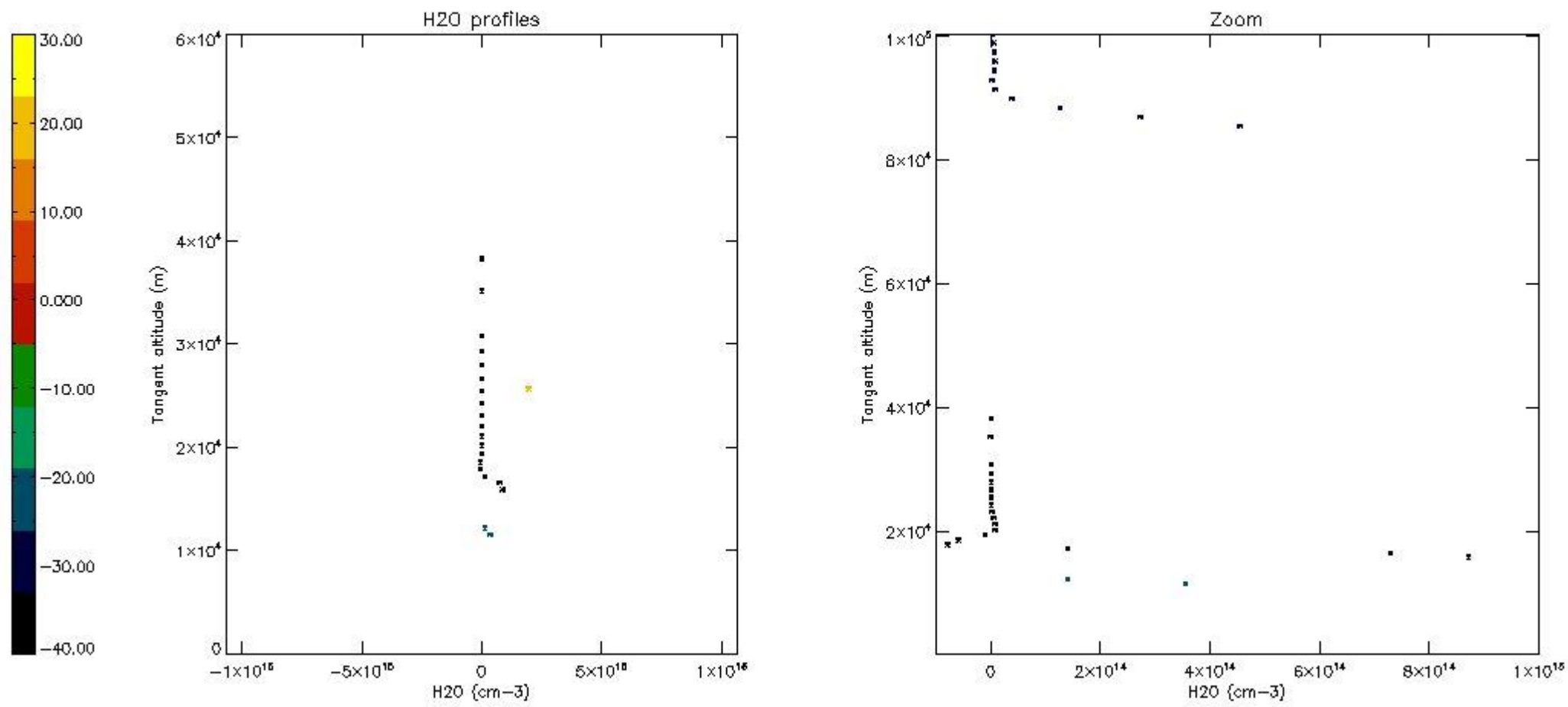
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

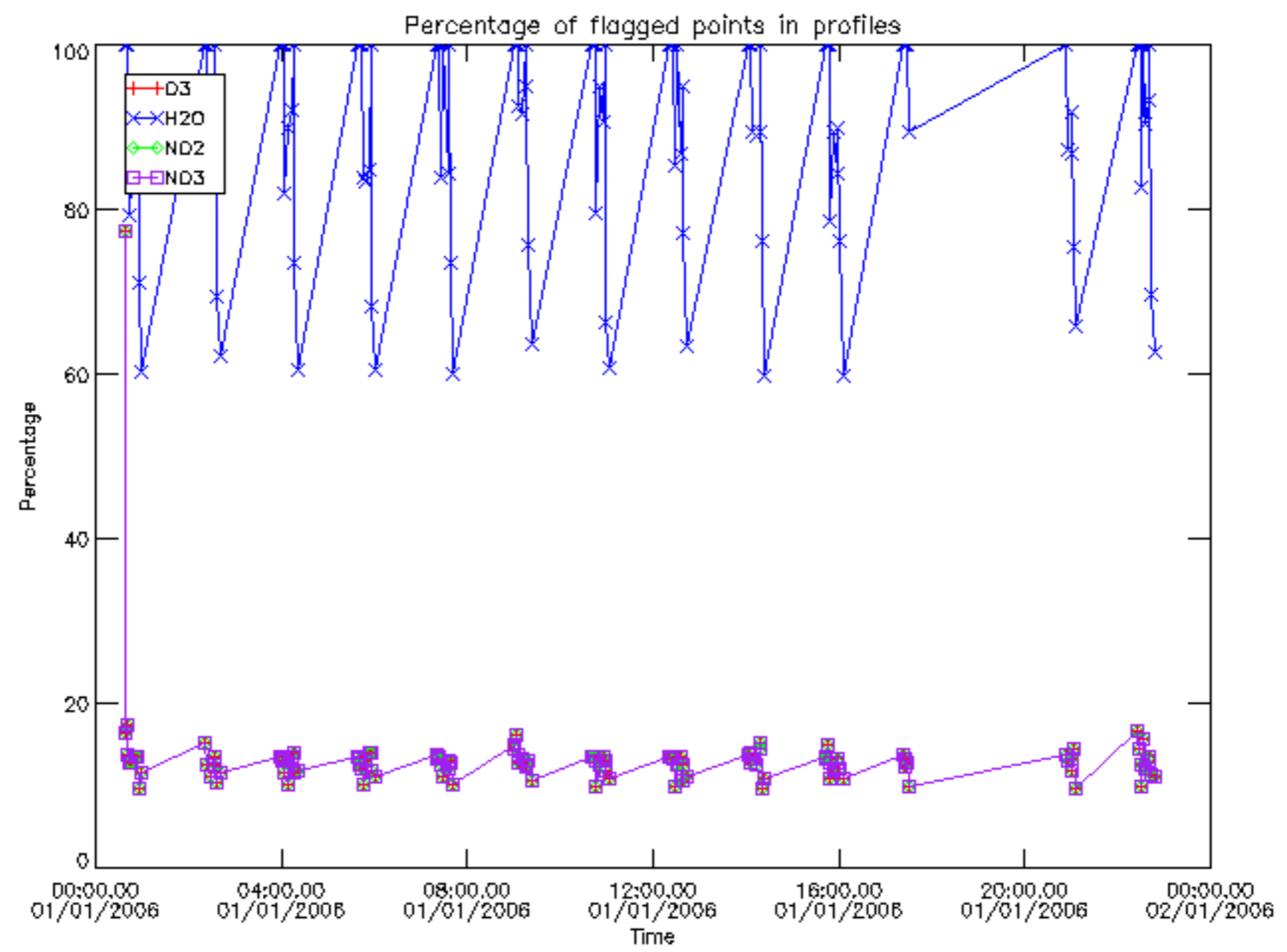
The colorbar represents the latitude.



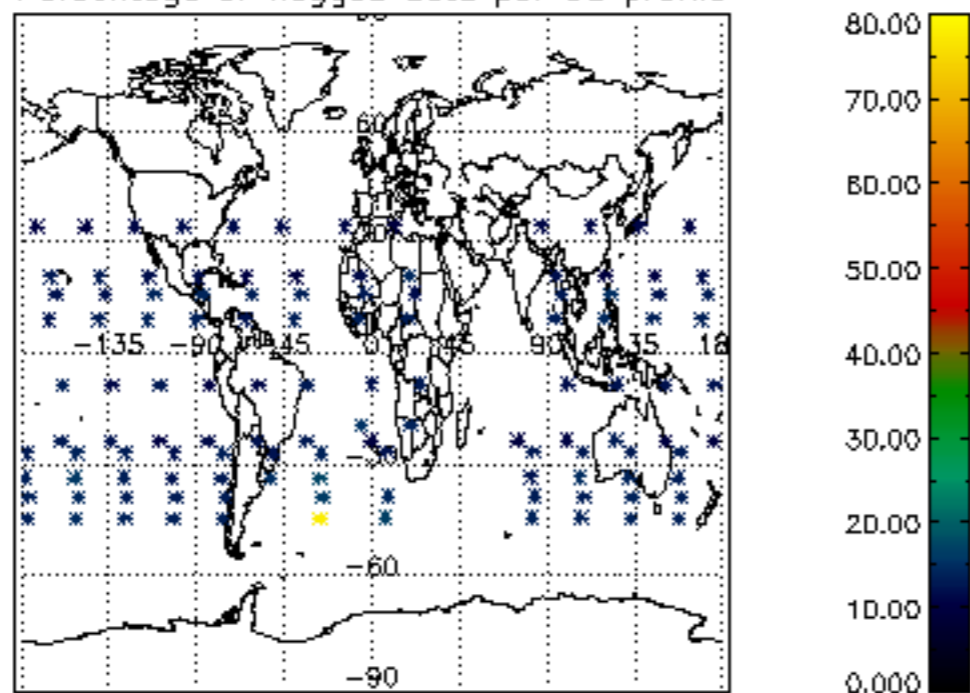
6. Auxiliary Data Files used for the production reported in section 2

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.

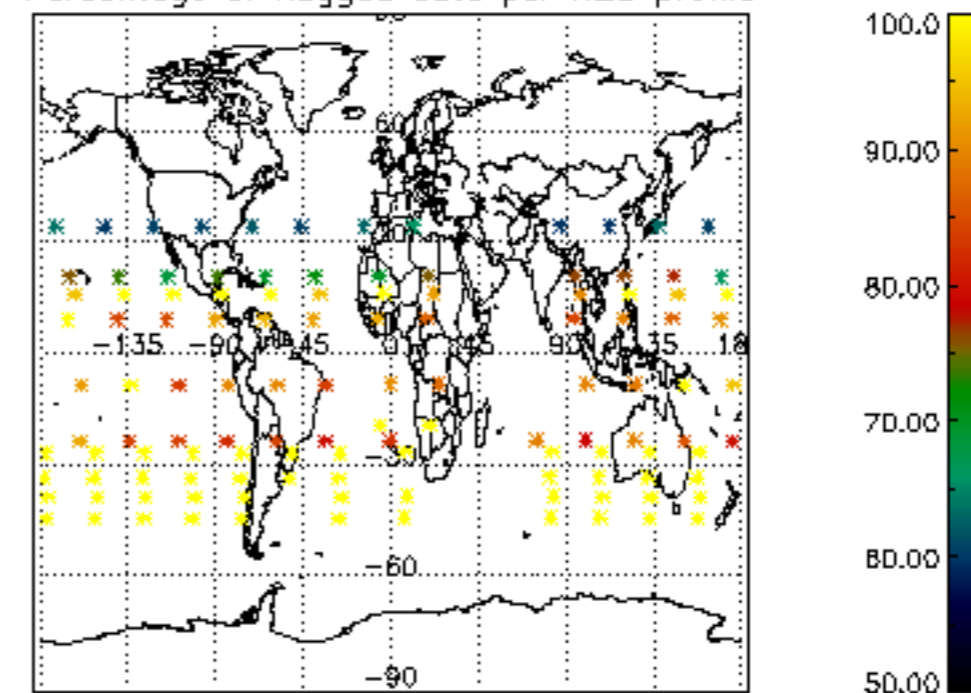
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	01-JAN-2006 00:08:07
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-JAN-2006 00:08:07
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-JAN-2006 00:08:07



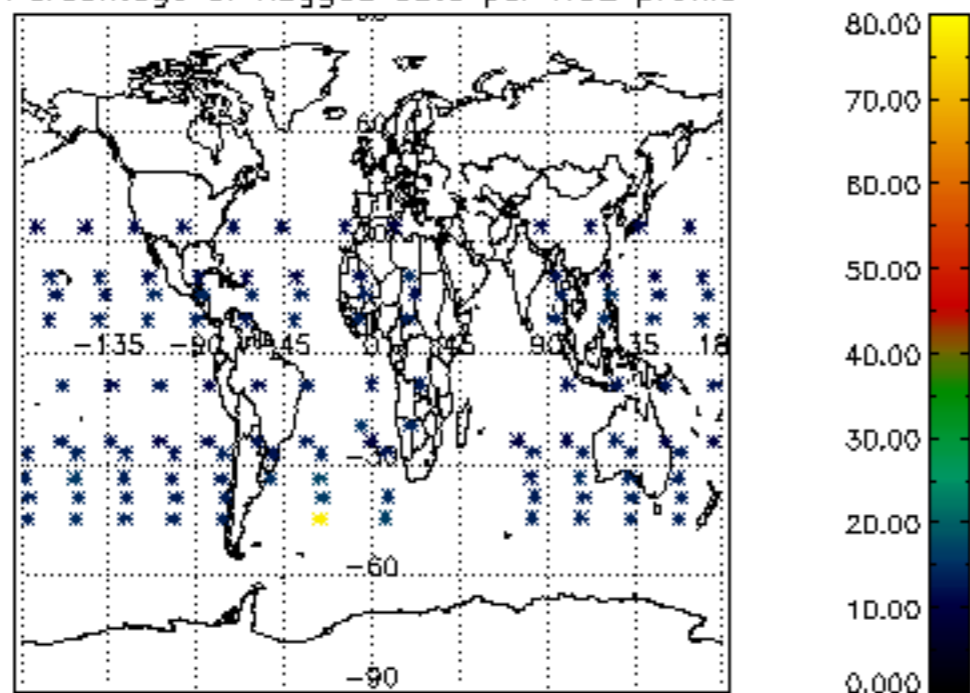
Percentage of flagged data per D3 profile



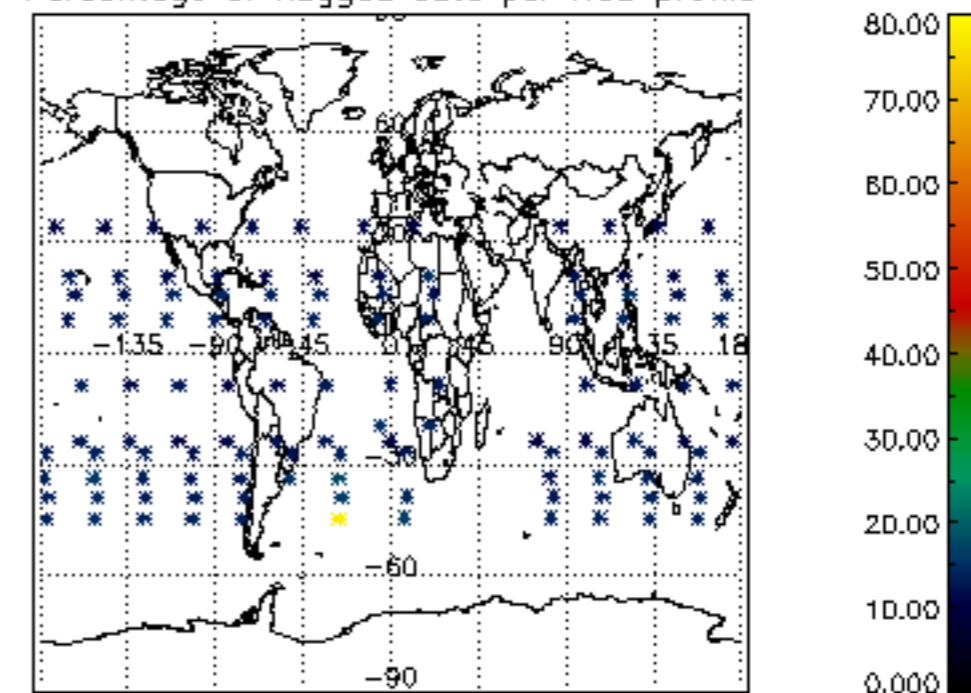
Percentage of flagged data per H2O profile

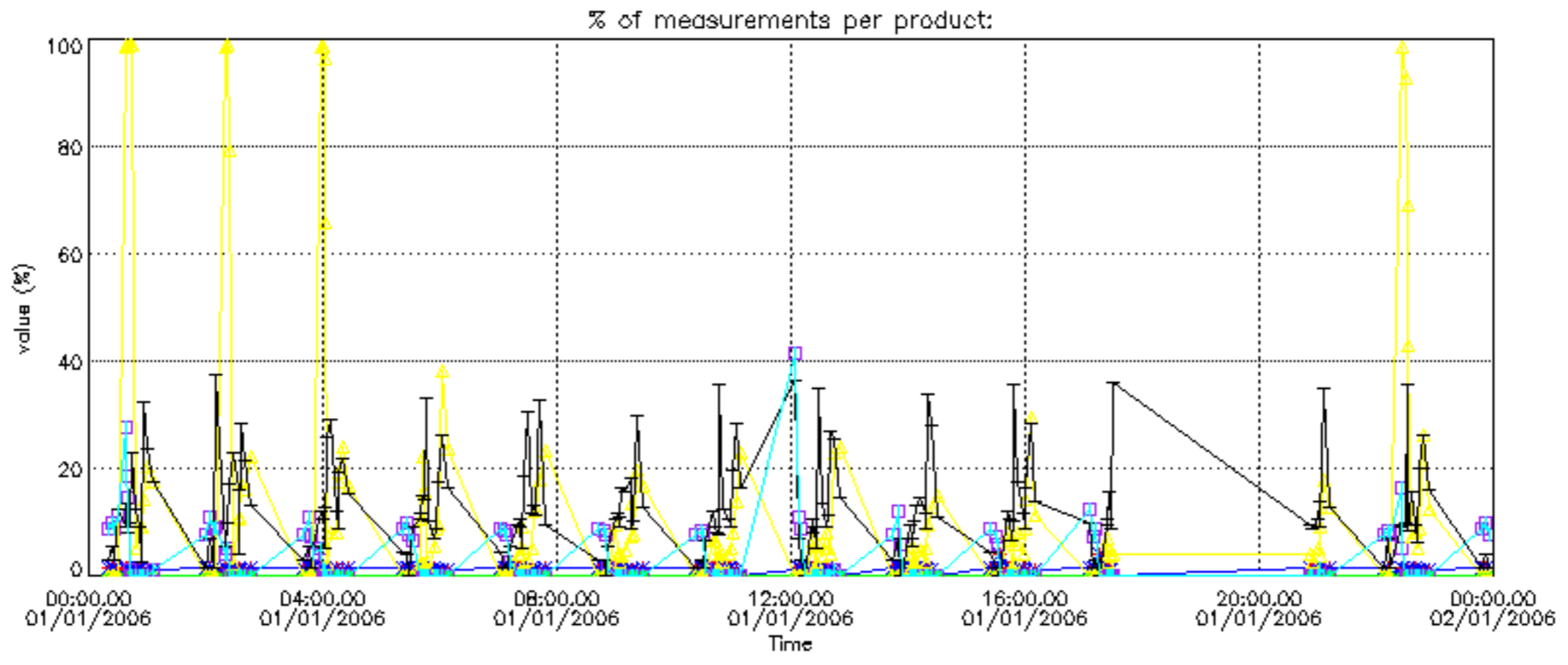


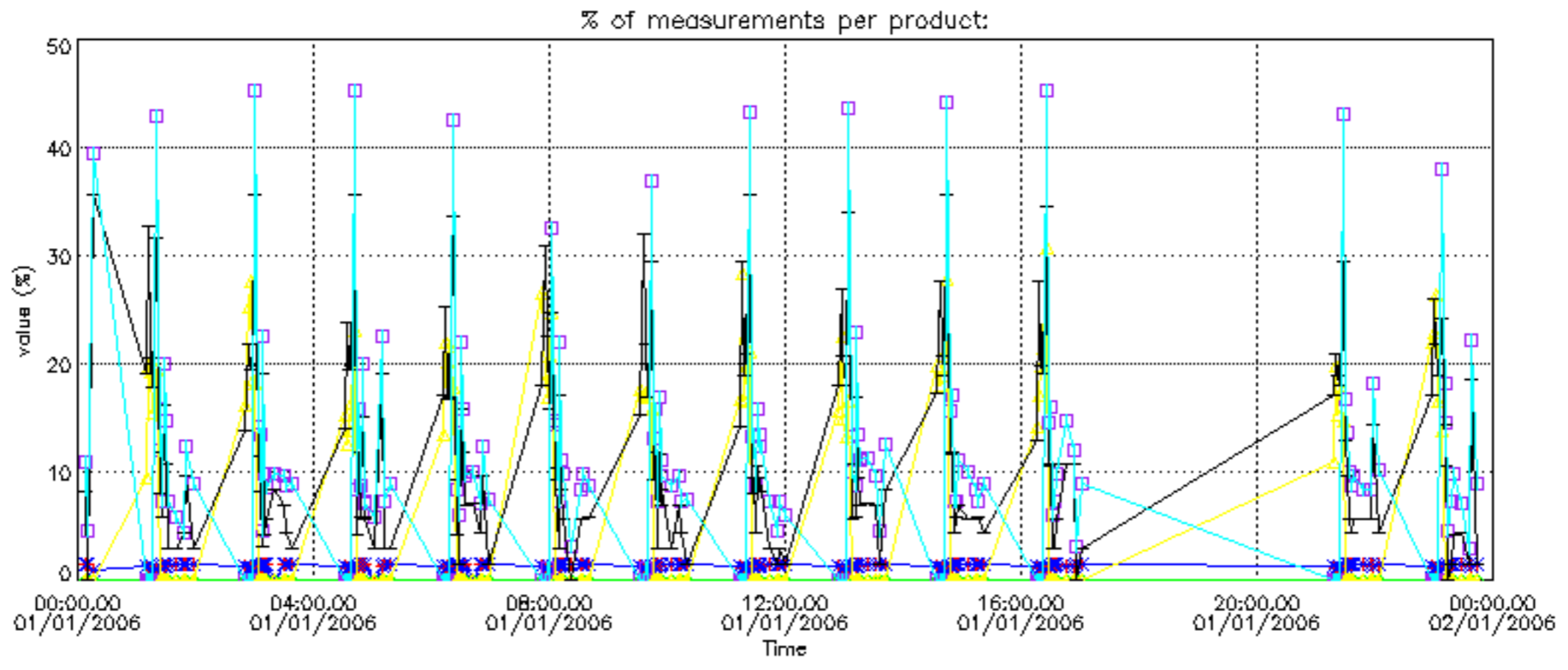
Percentage of flagged data per NO2 profile



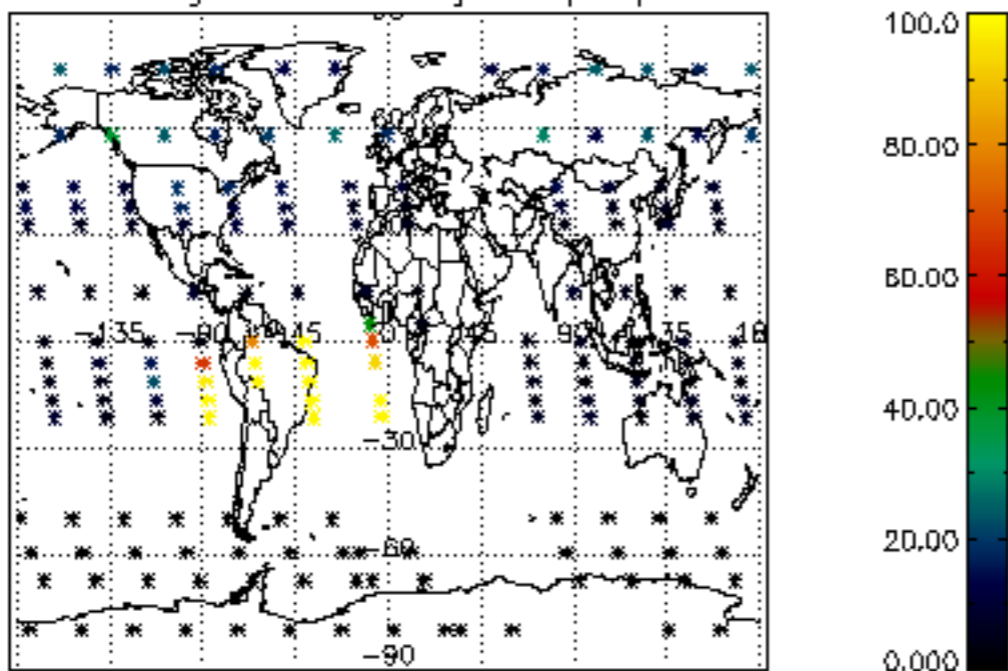
Percentage of flagged data per NO3 profile



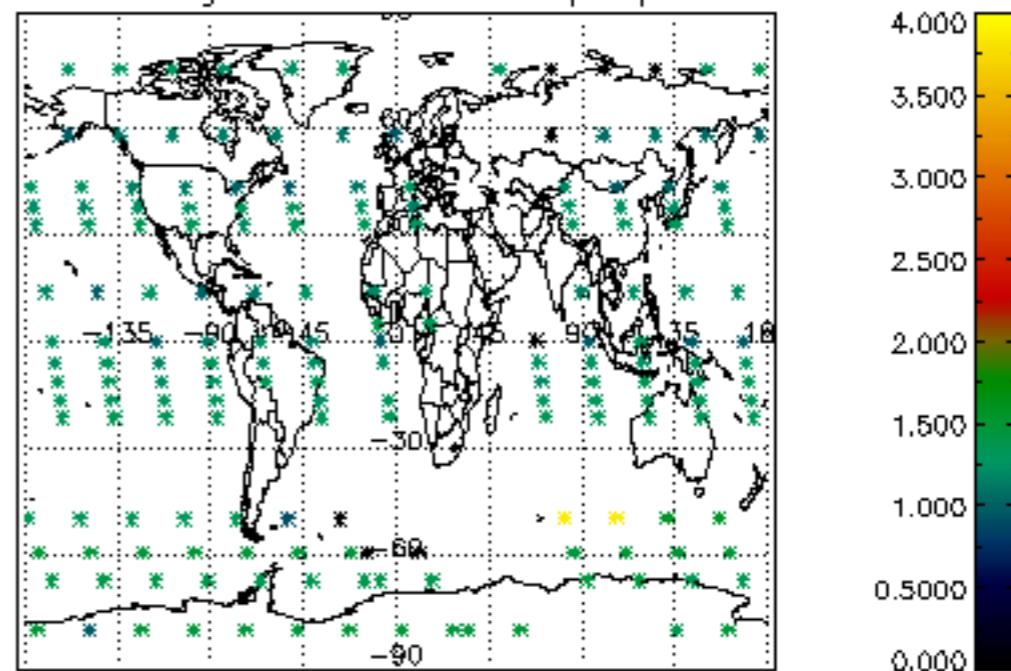




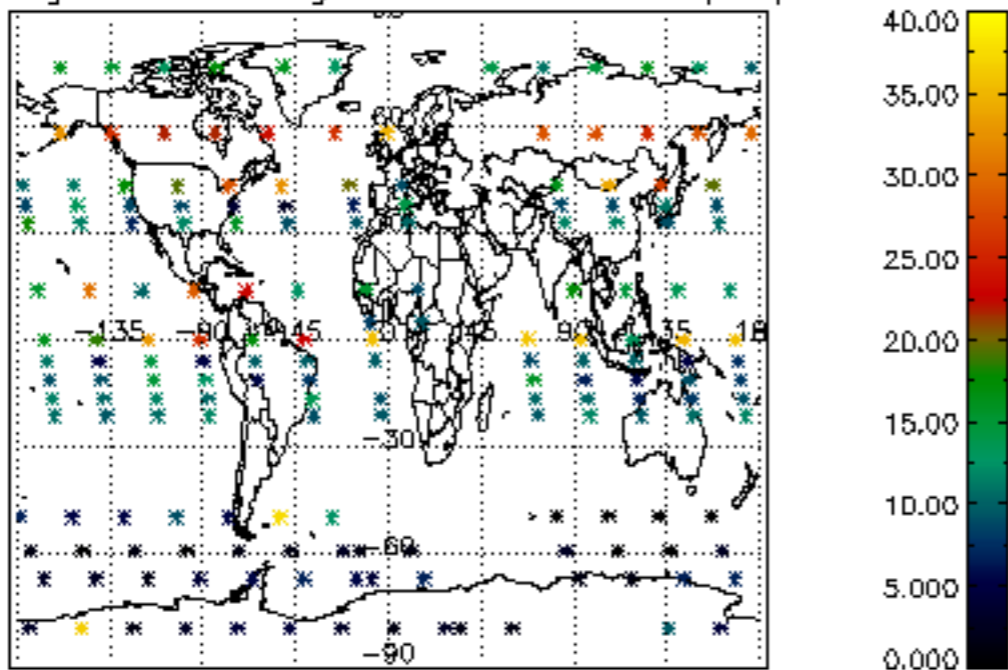
Percentage of cosmic ray hits per profile



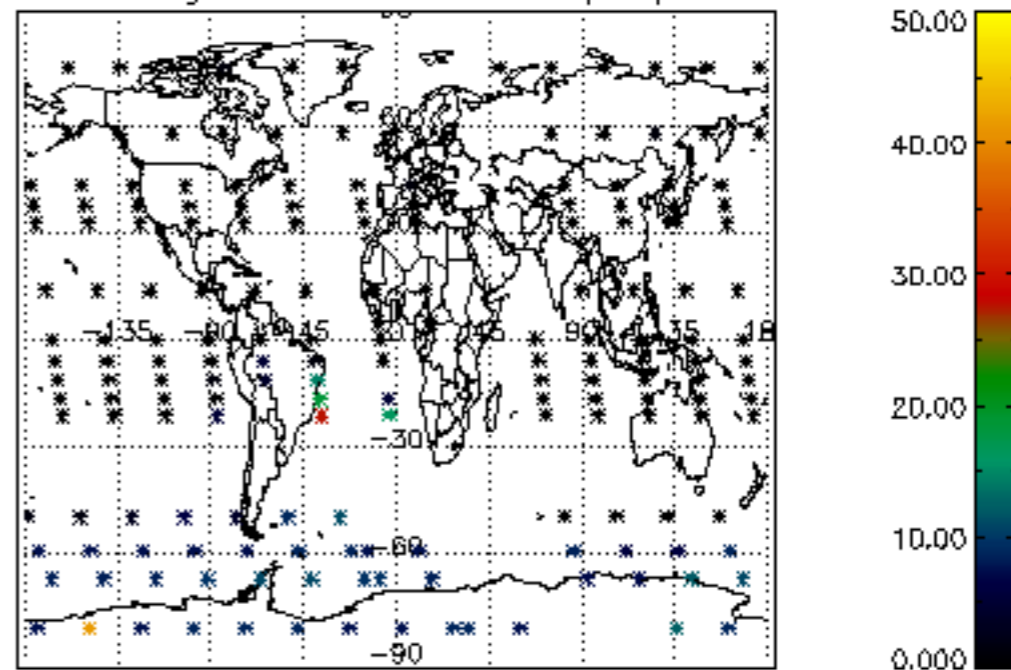
Percentage of datation errors per profile



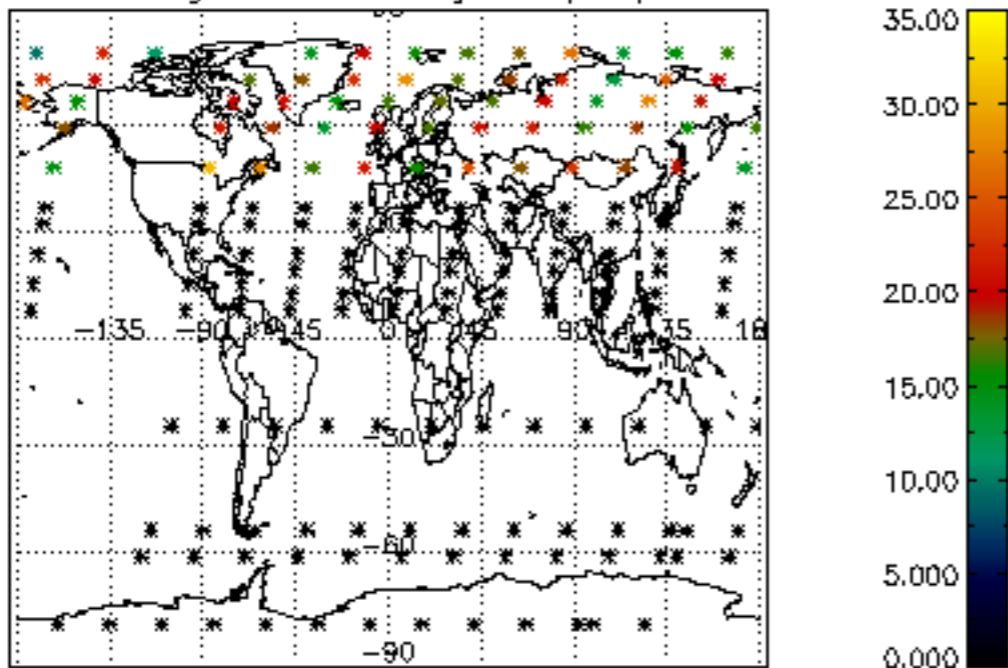
Percentage of star falling outside central band per profile



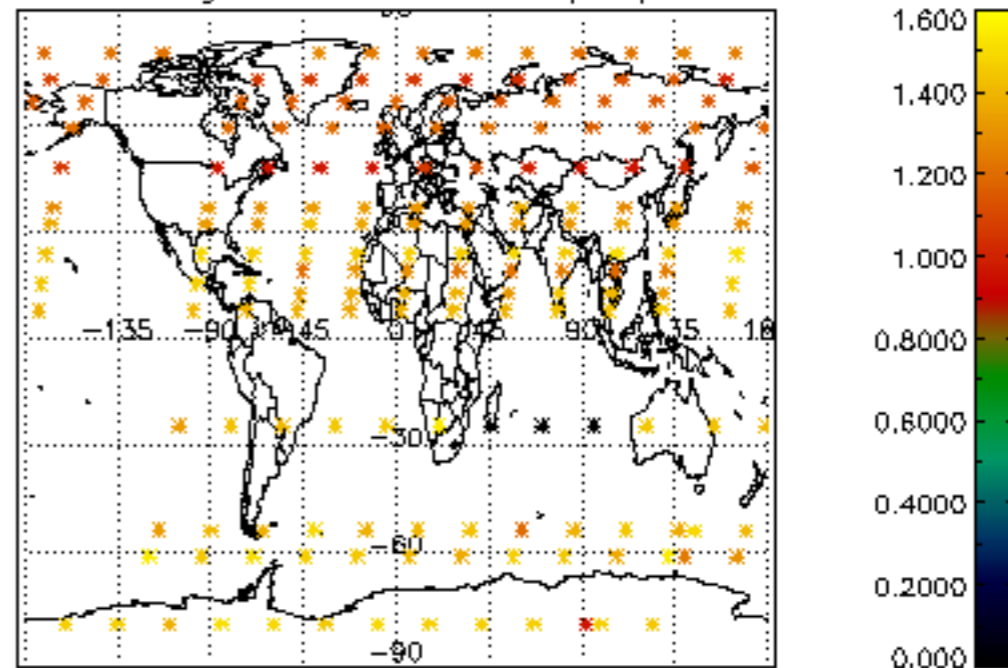
Percentage of saturation errors per profile



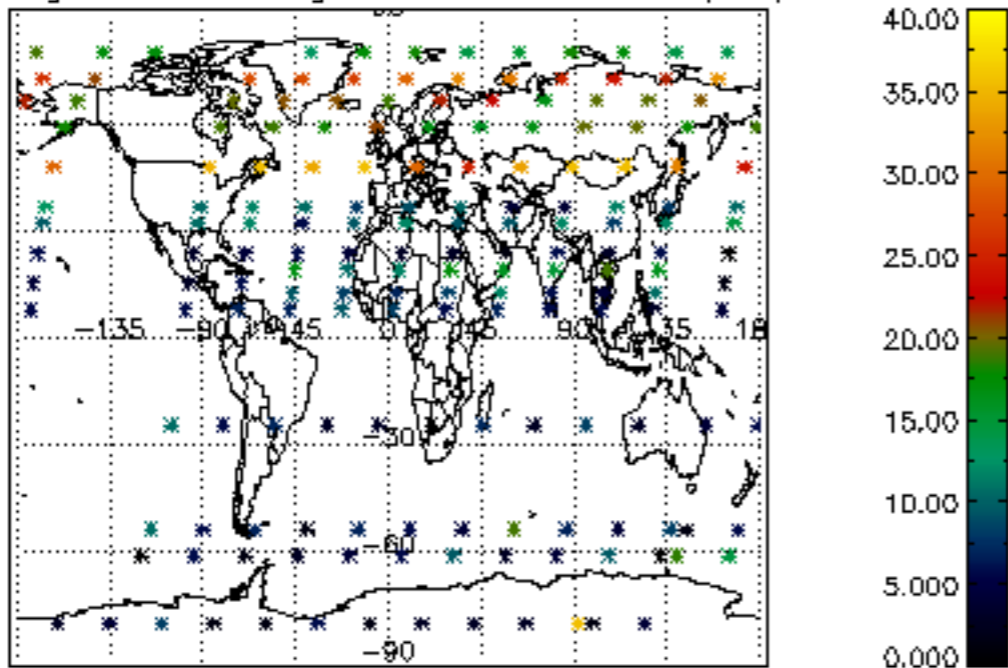
Percentage of cosmic ray hits per profile



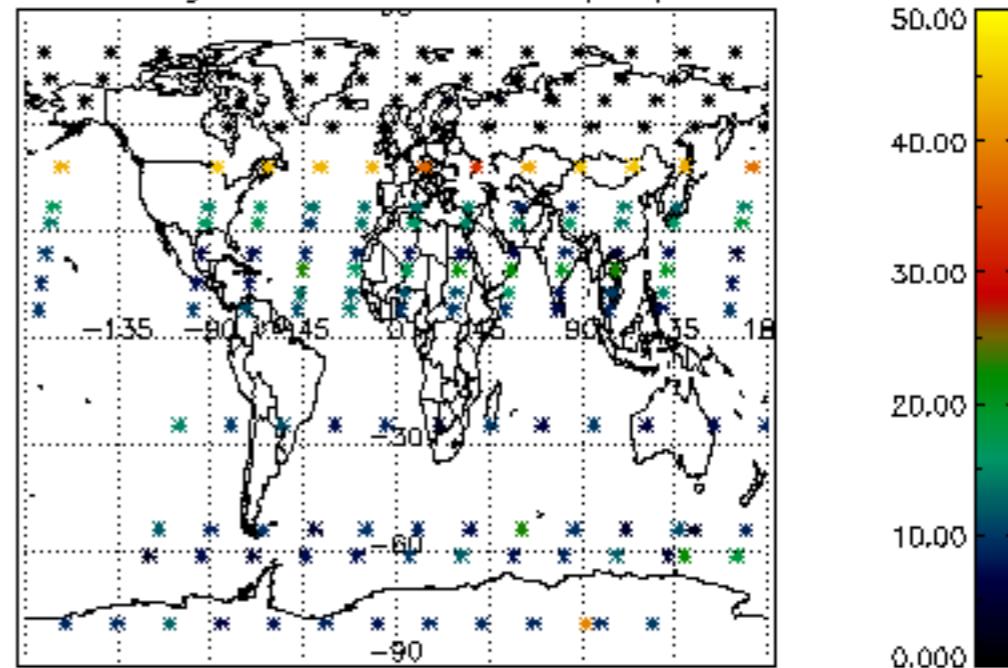
Percentage of datation errors per profile

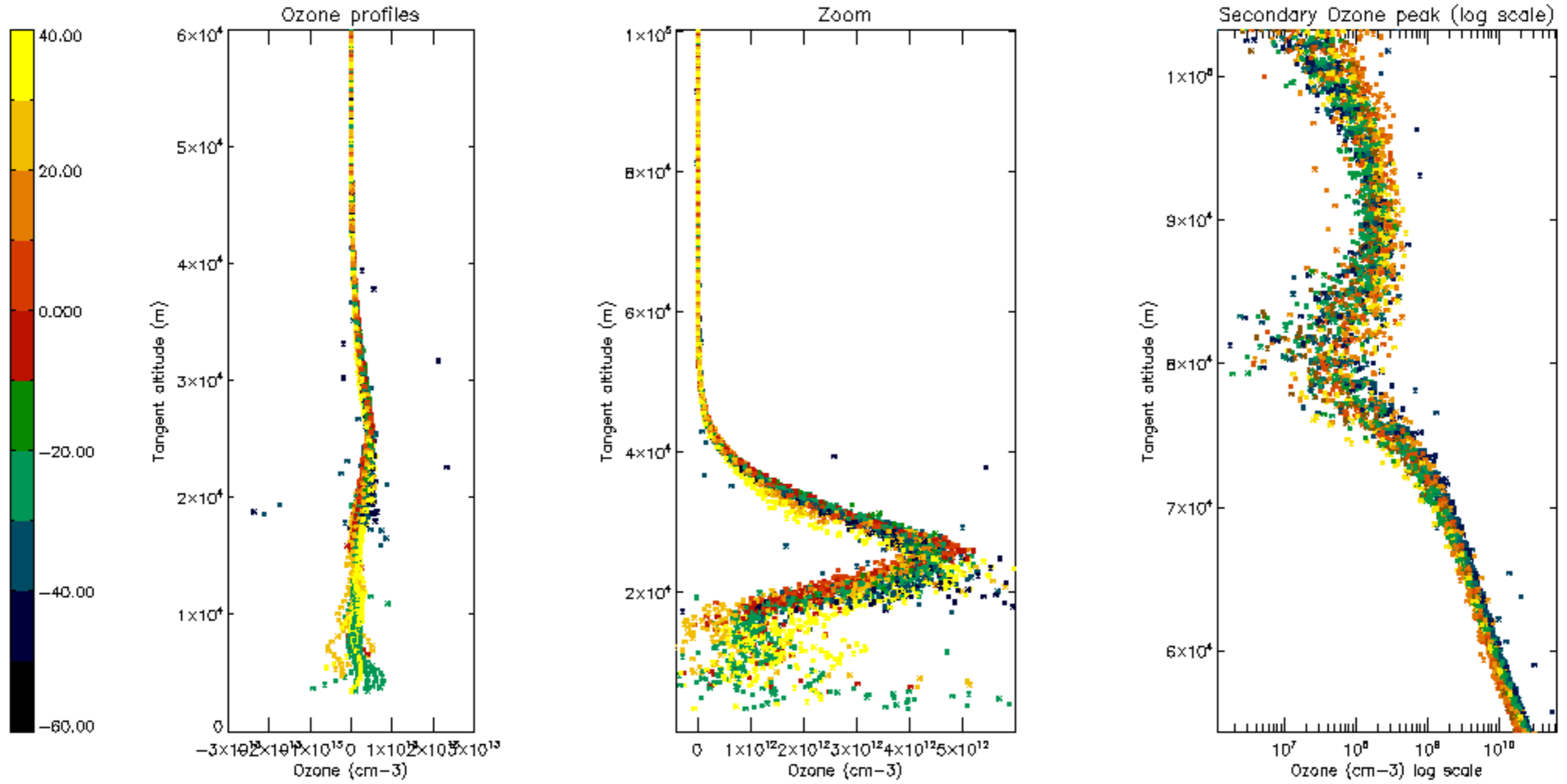


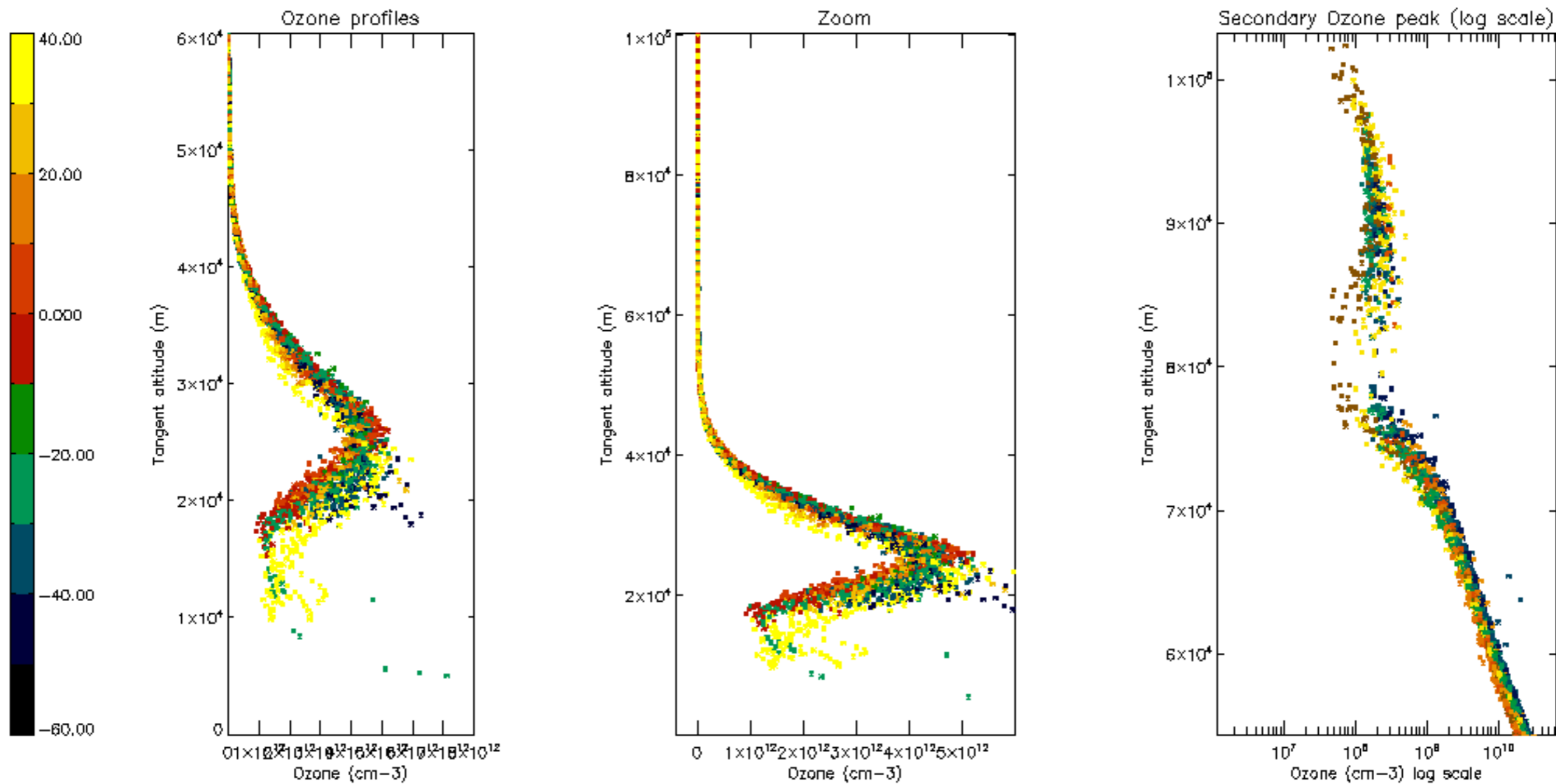
Percentage of star falling outside central band per profile

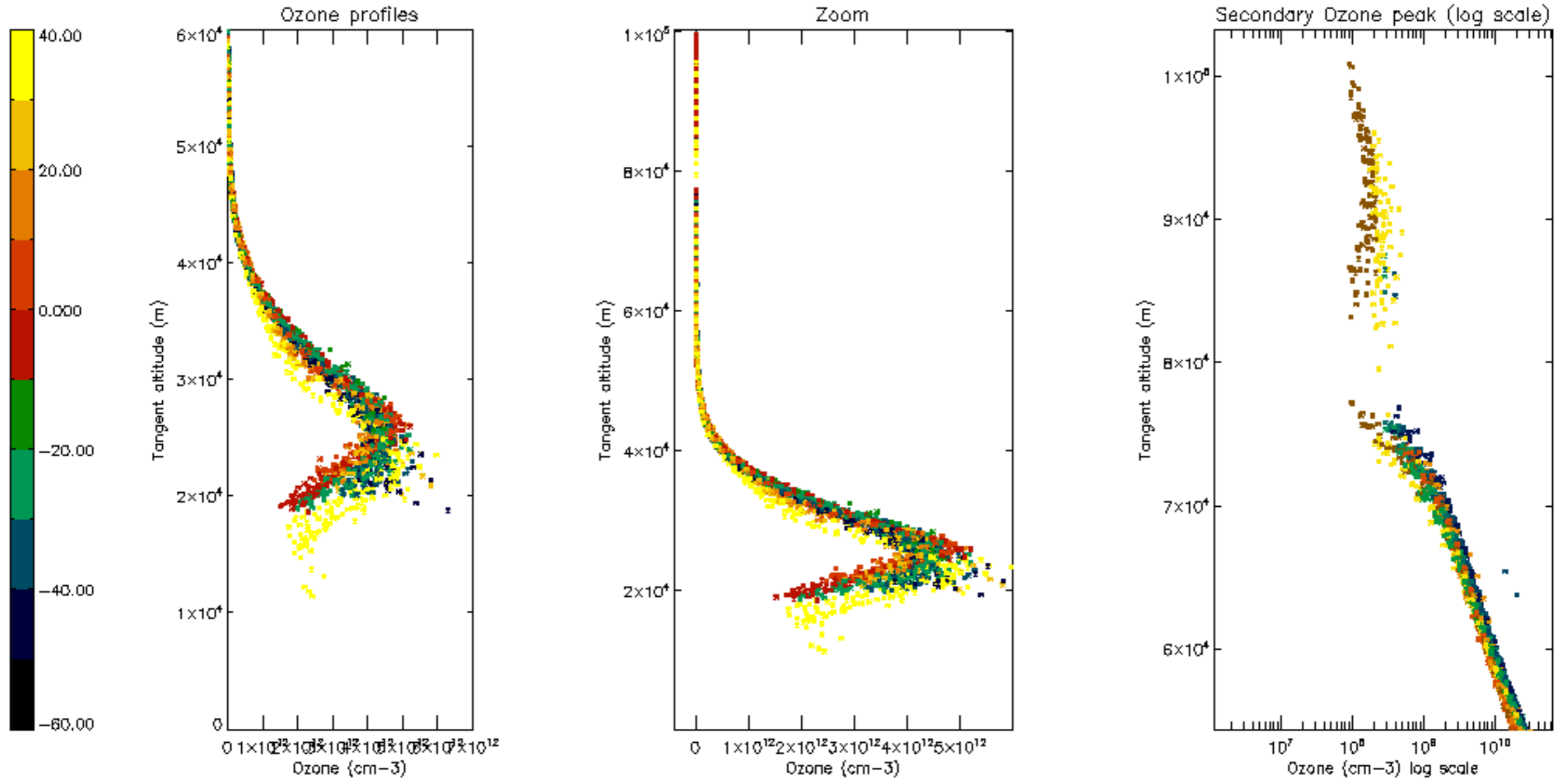


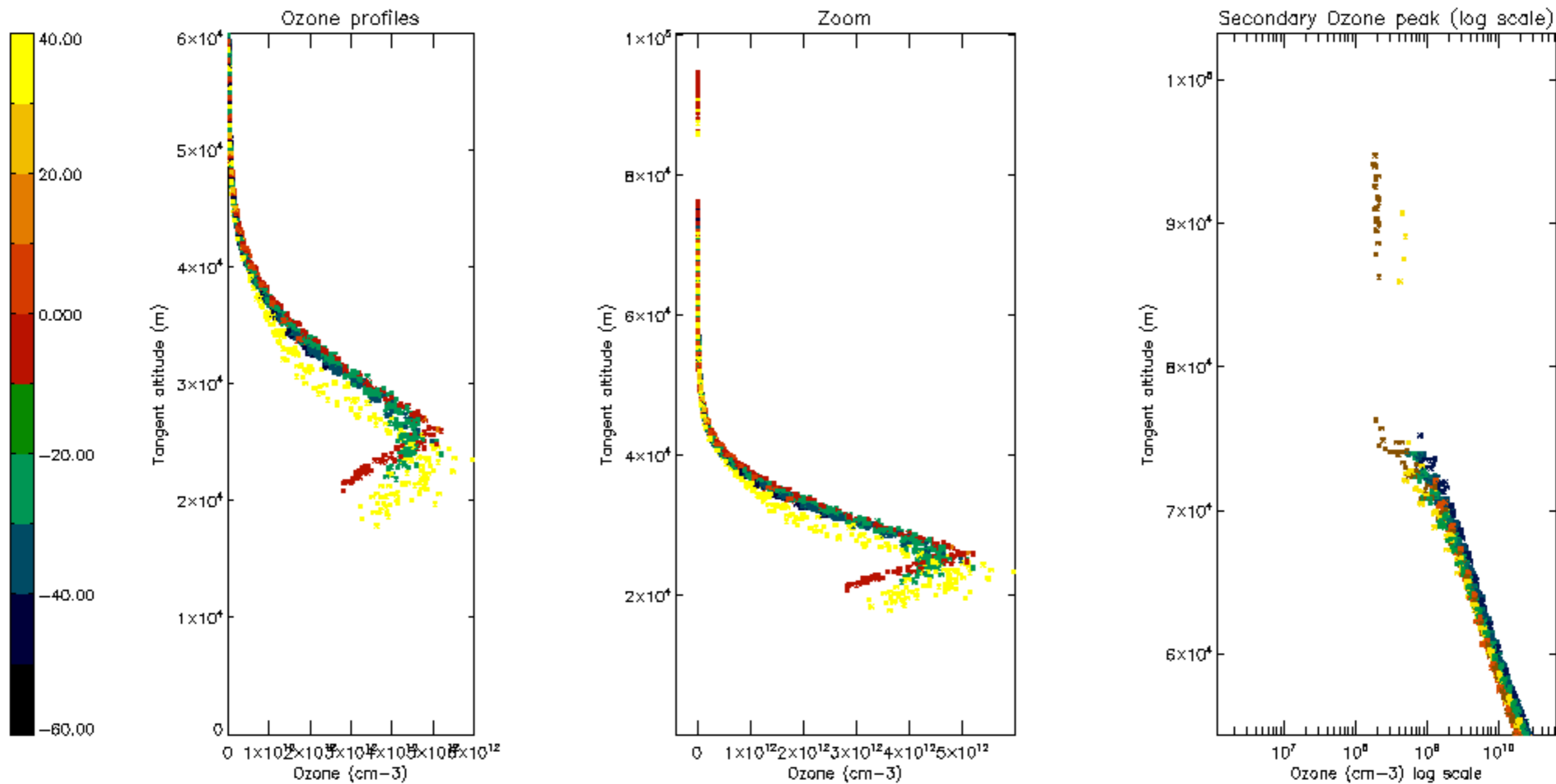
Percentage of saturation errors per profile

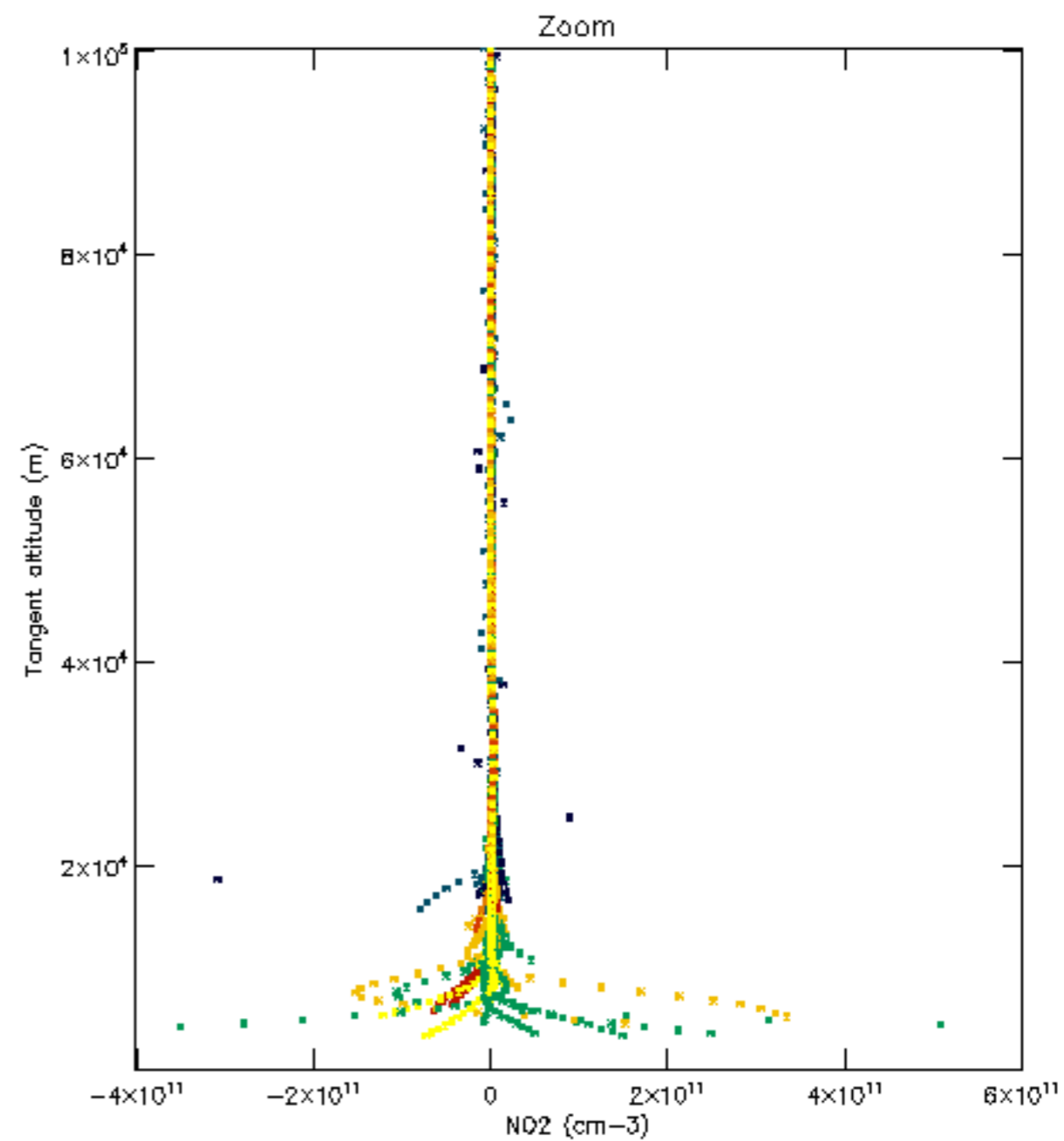
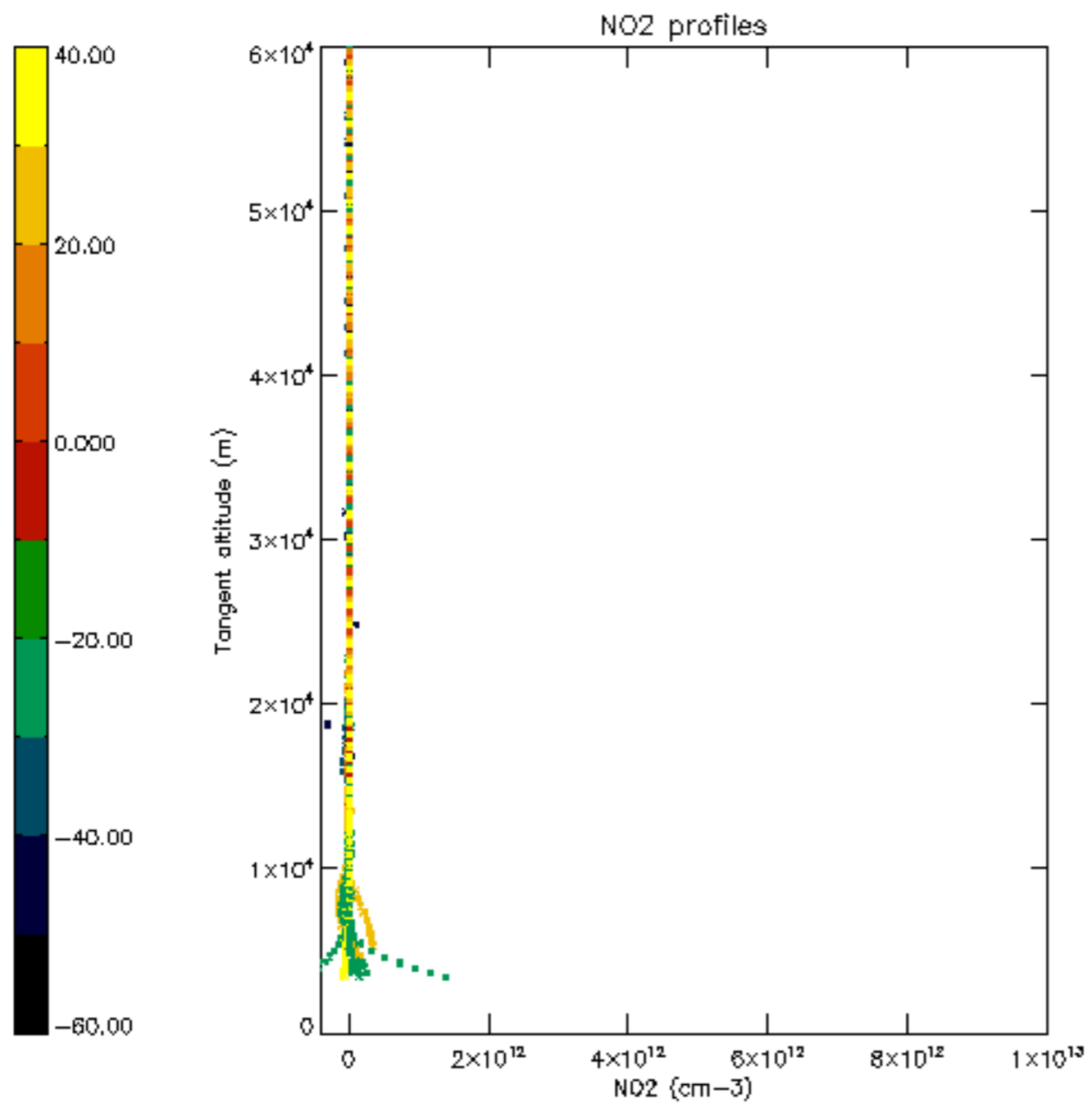


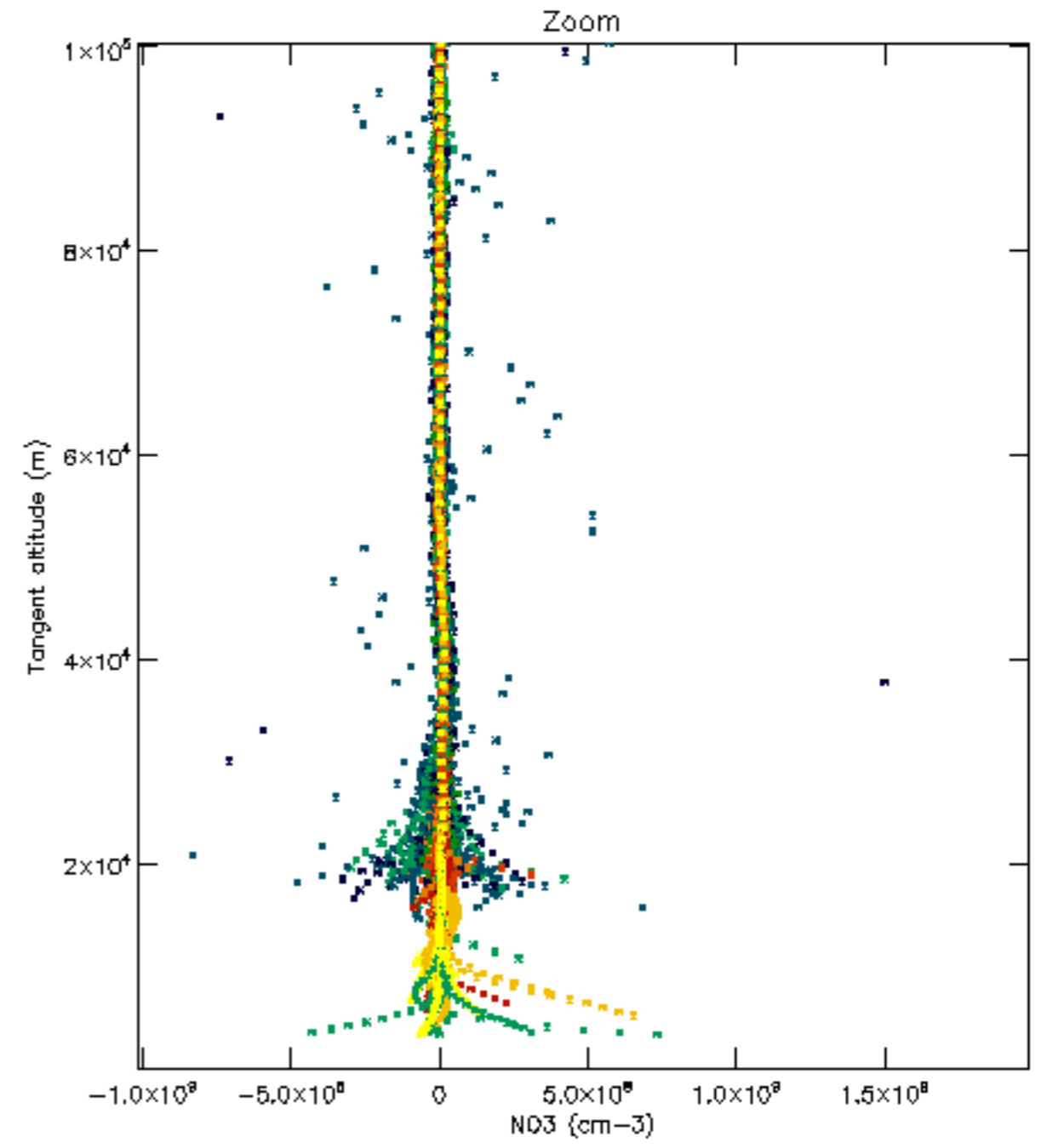
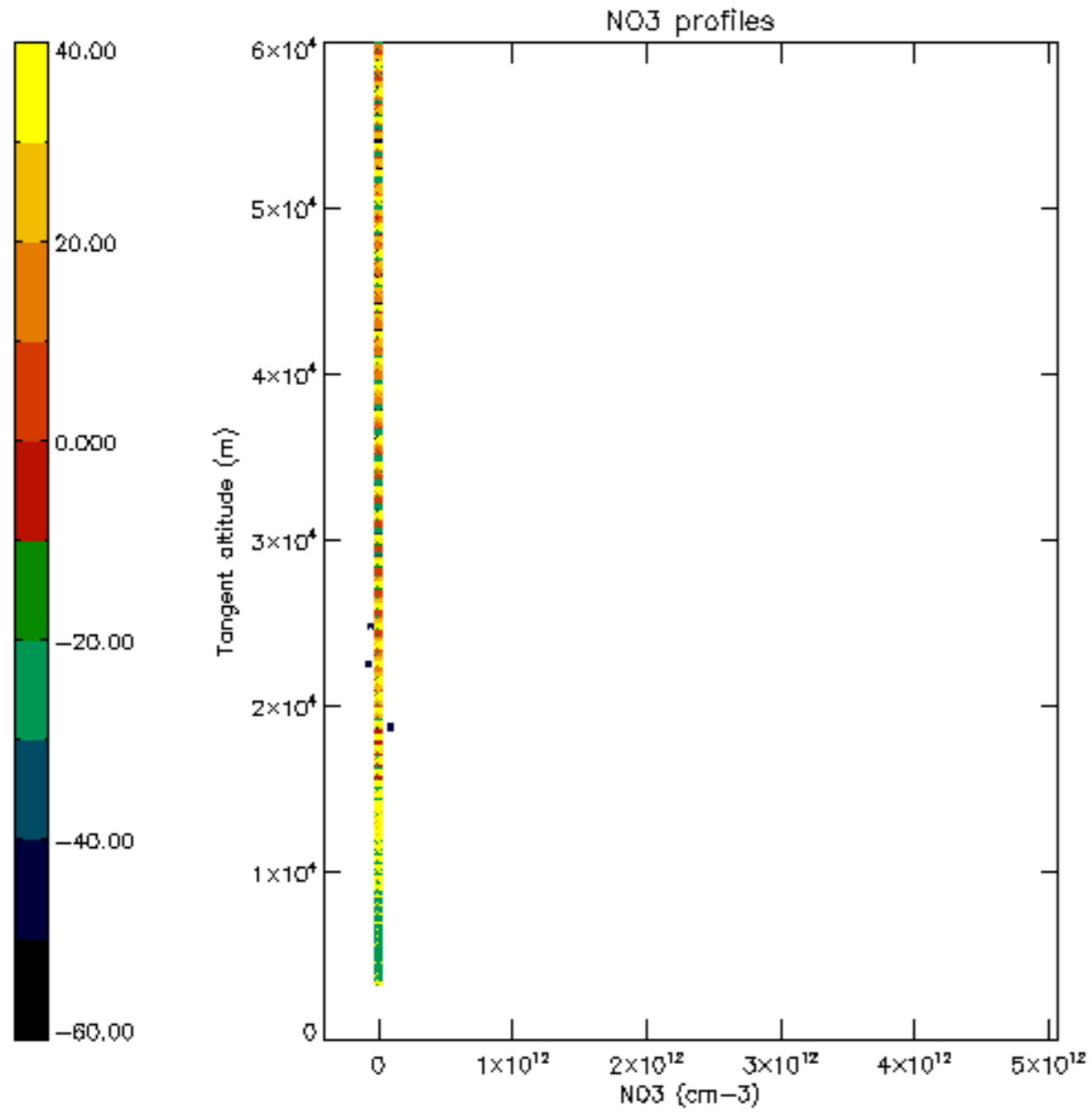


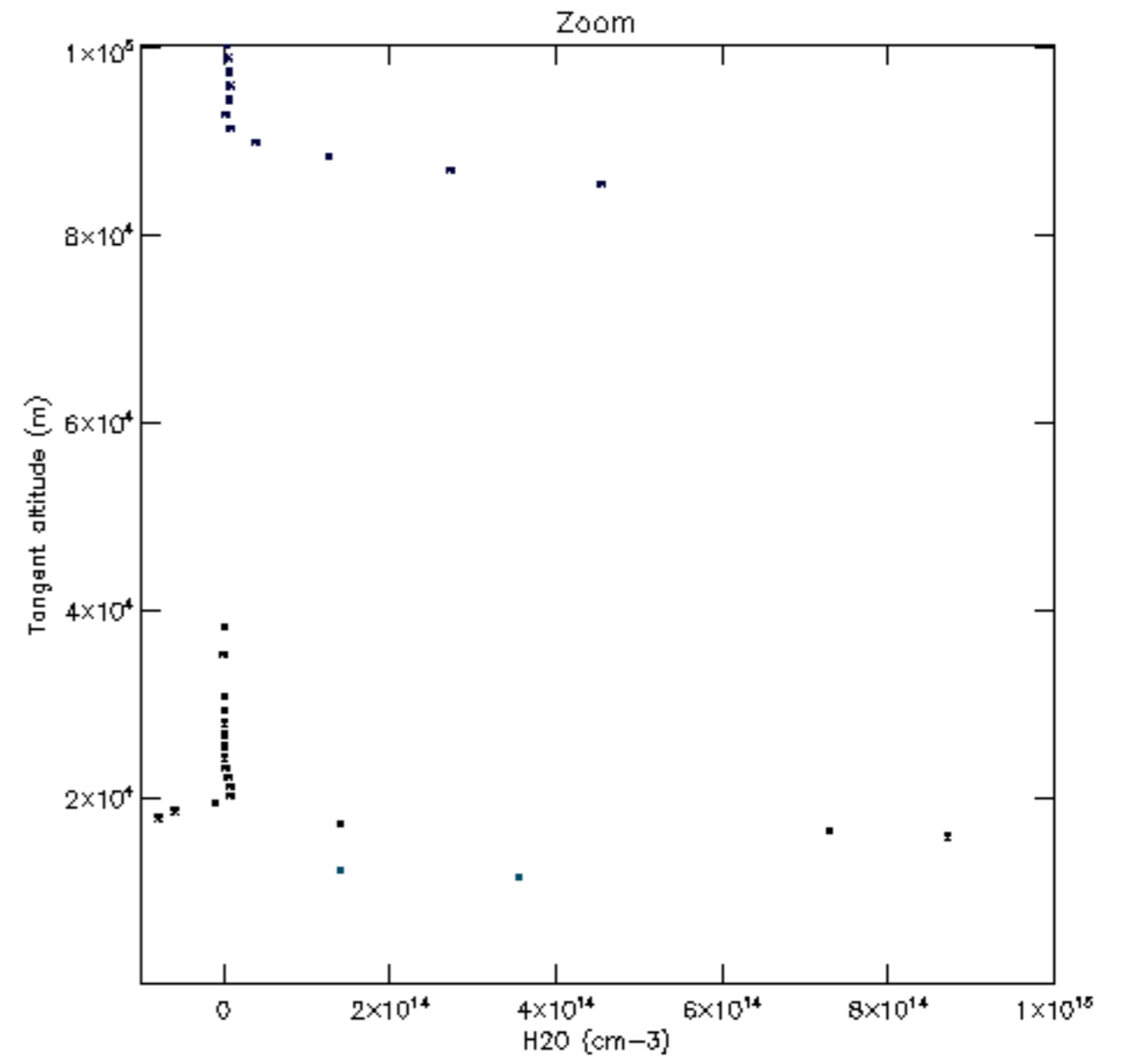
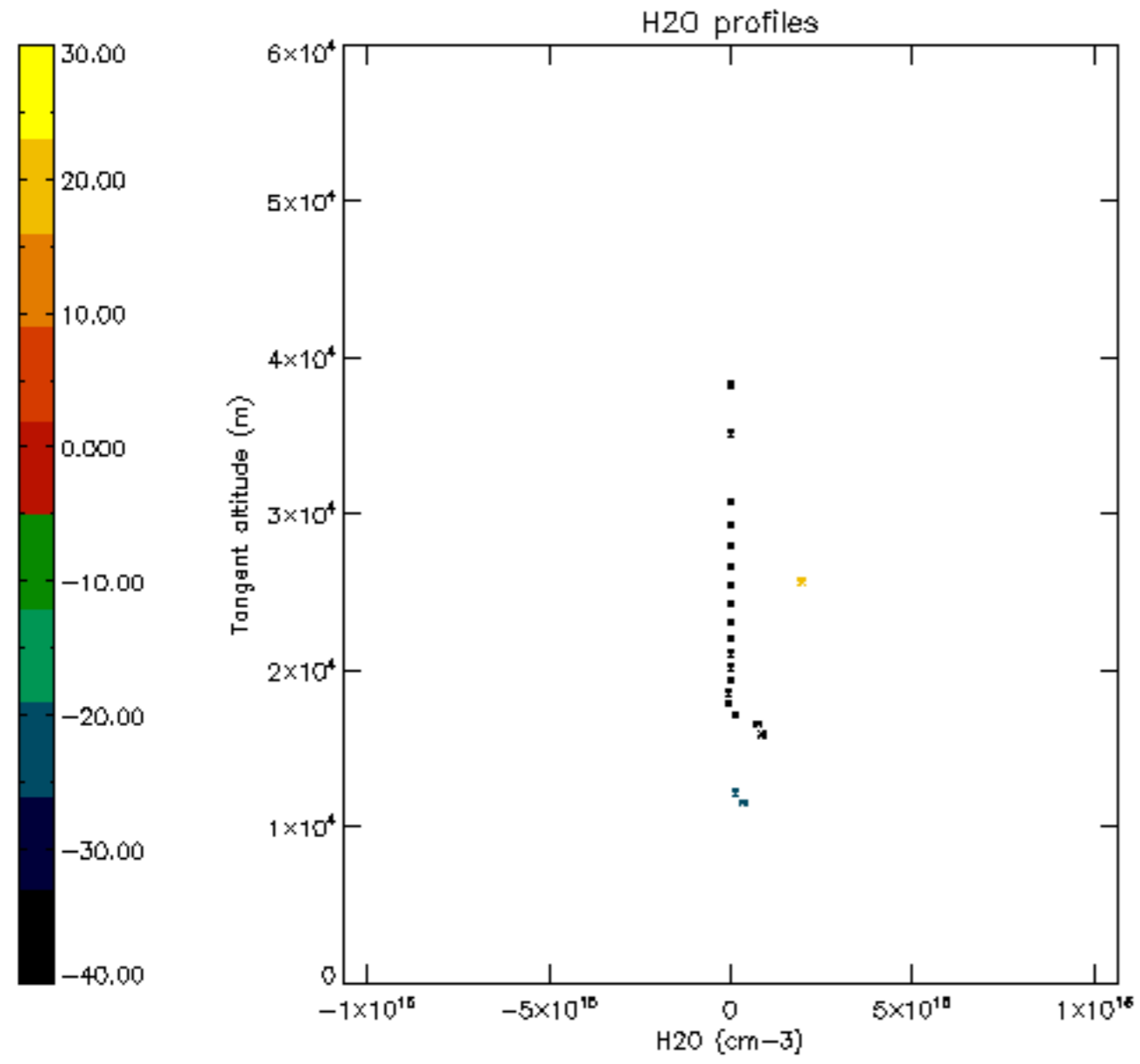


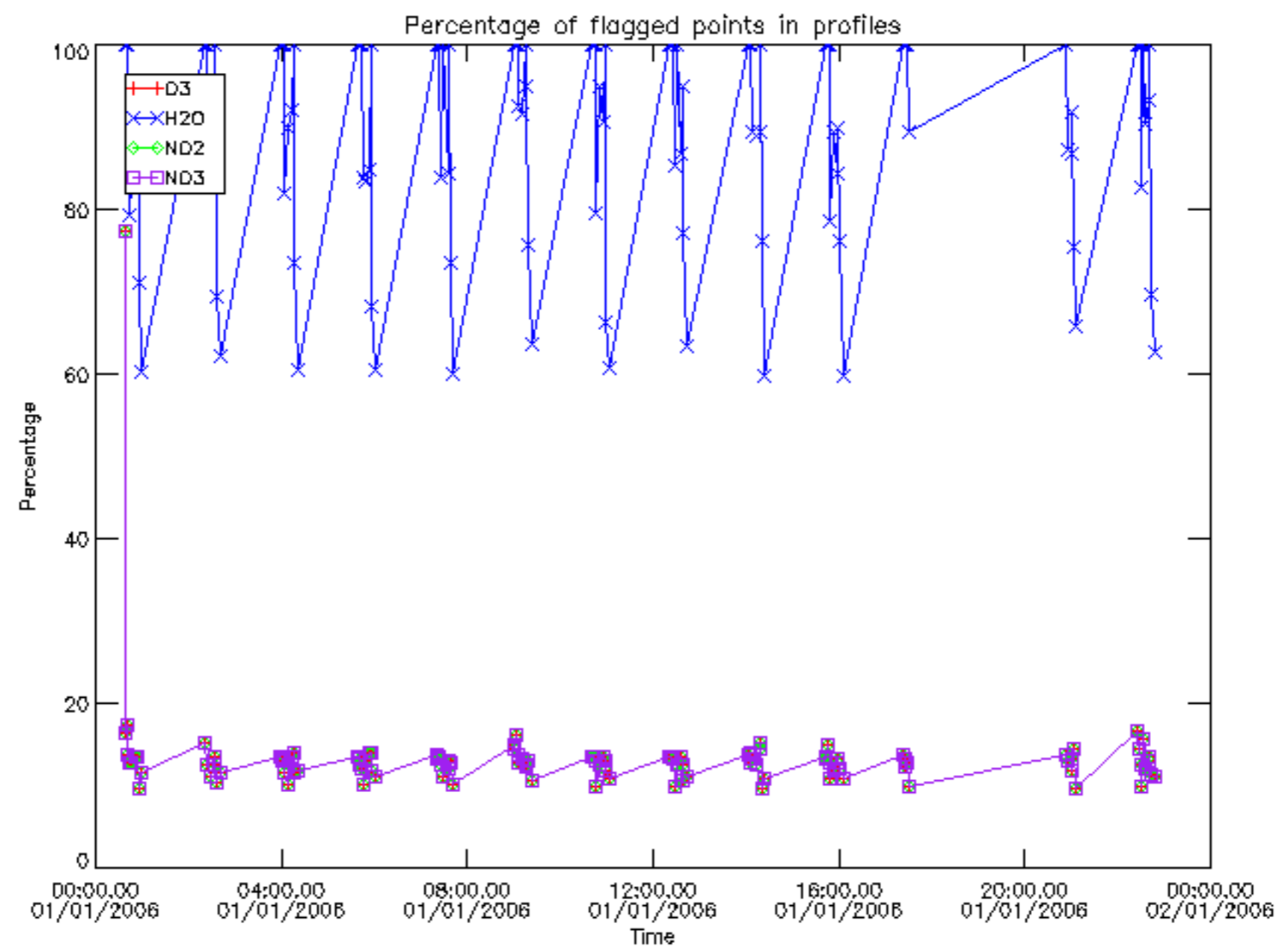




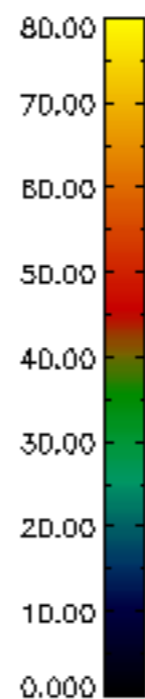
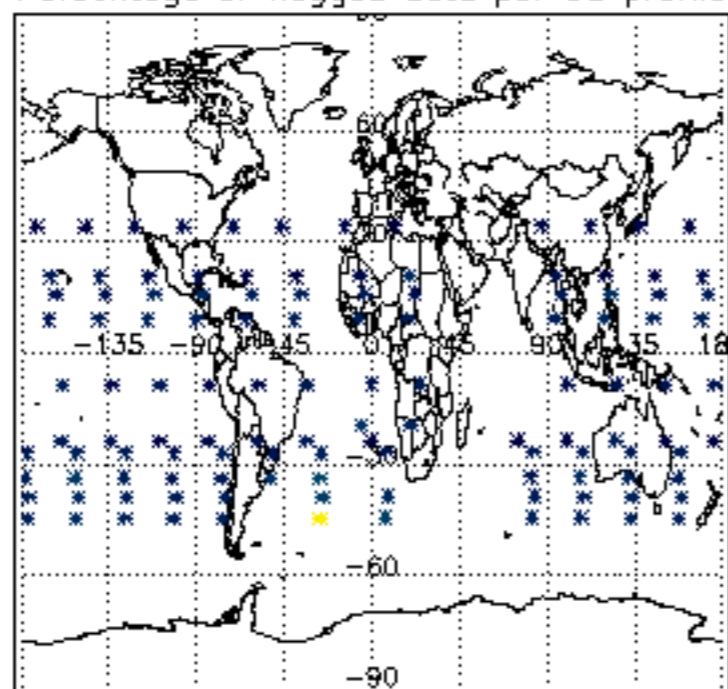




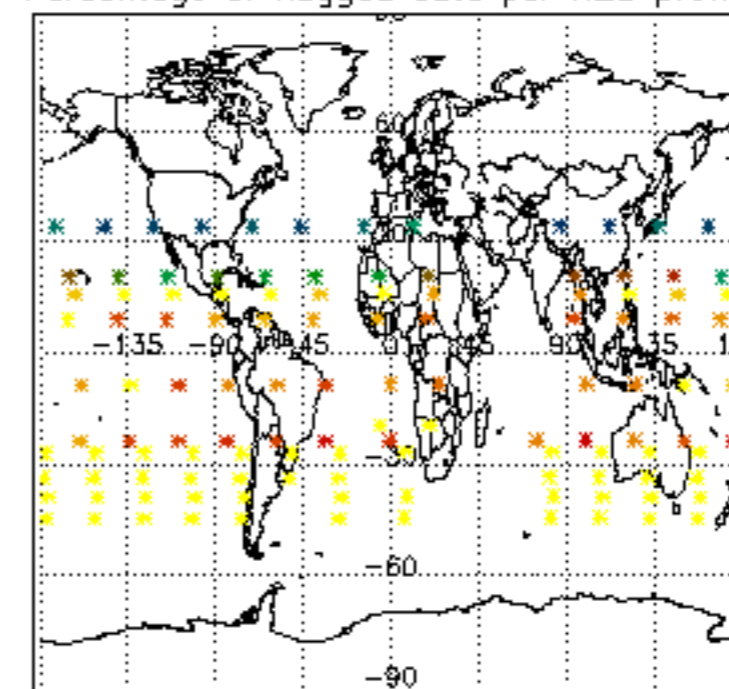




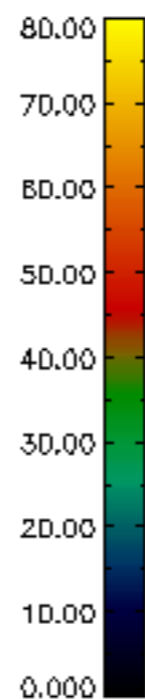
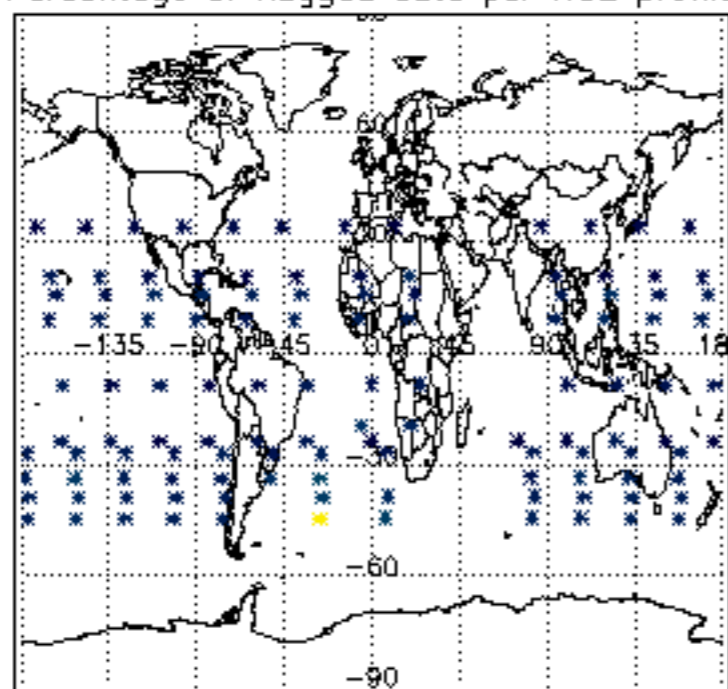
Percentage of flagged data per D3 profile



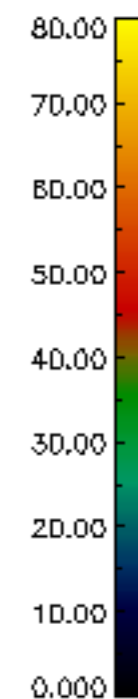
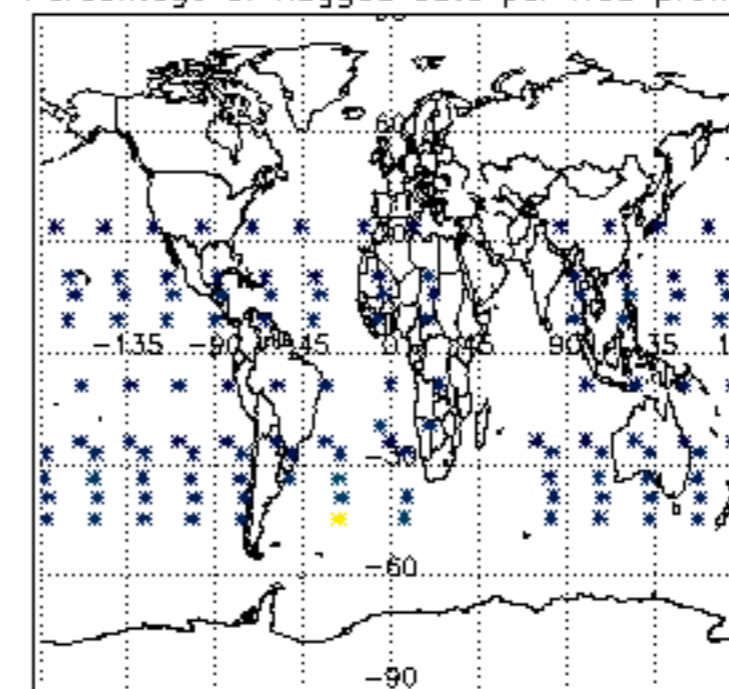
Percentage of flagged data per H2O profile

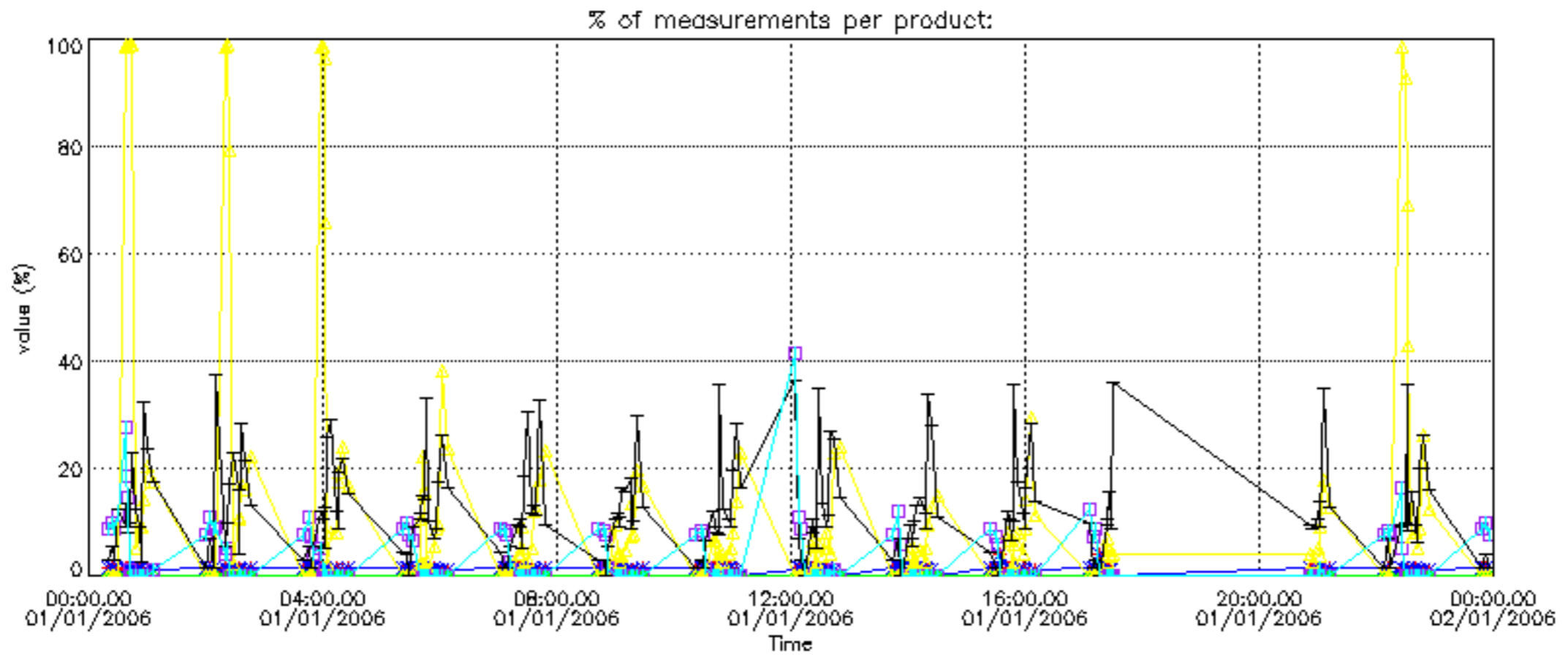


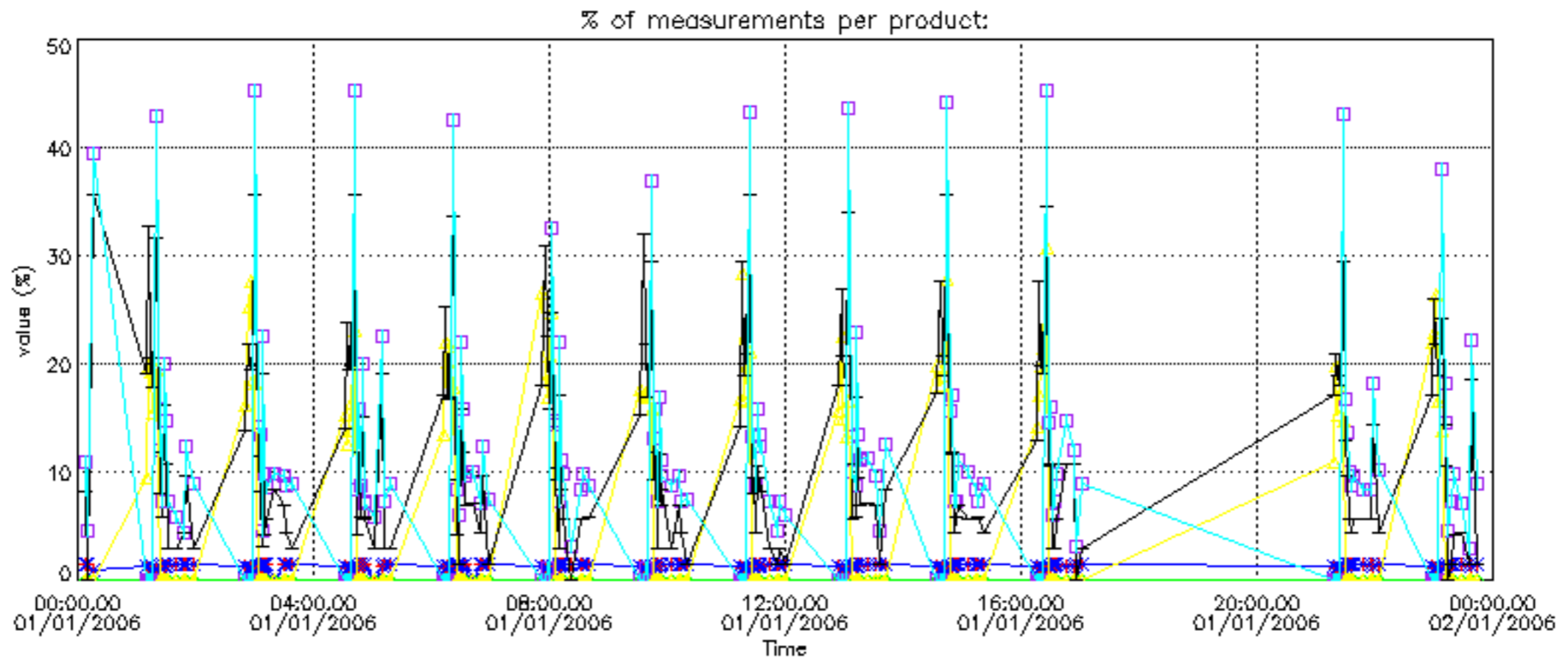
Percentage of flagged data per NO2 profile



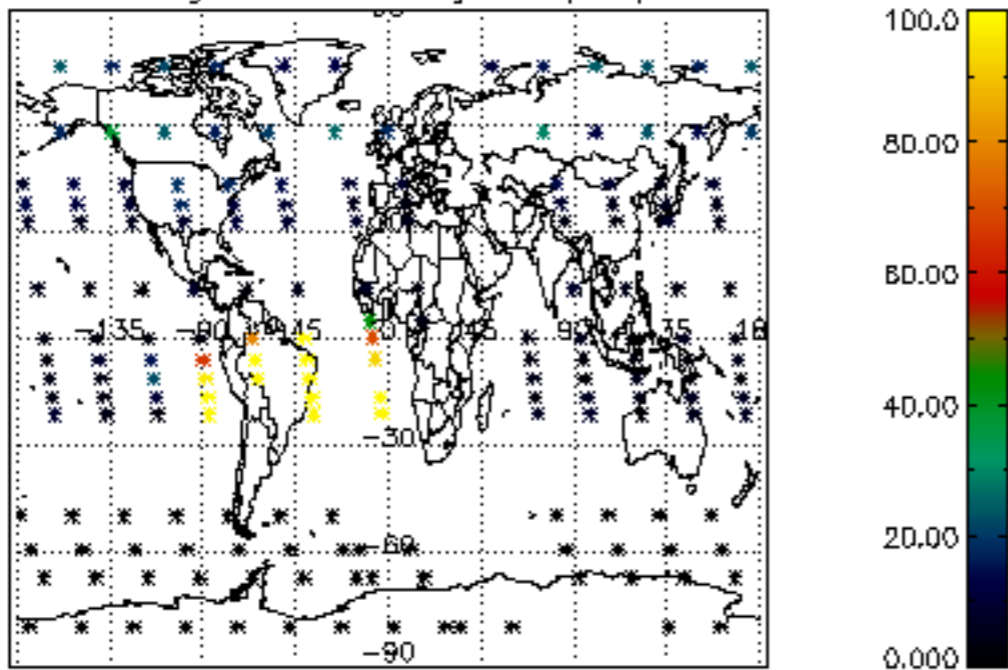
Percentage of flagged data per NO3 profile



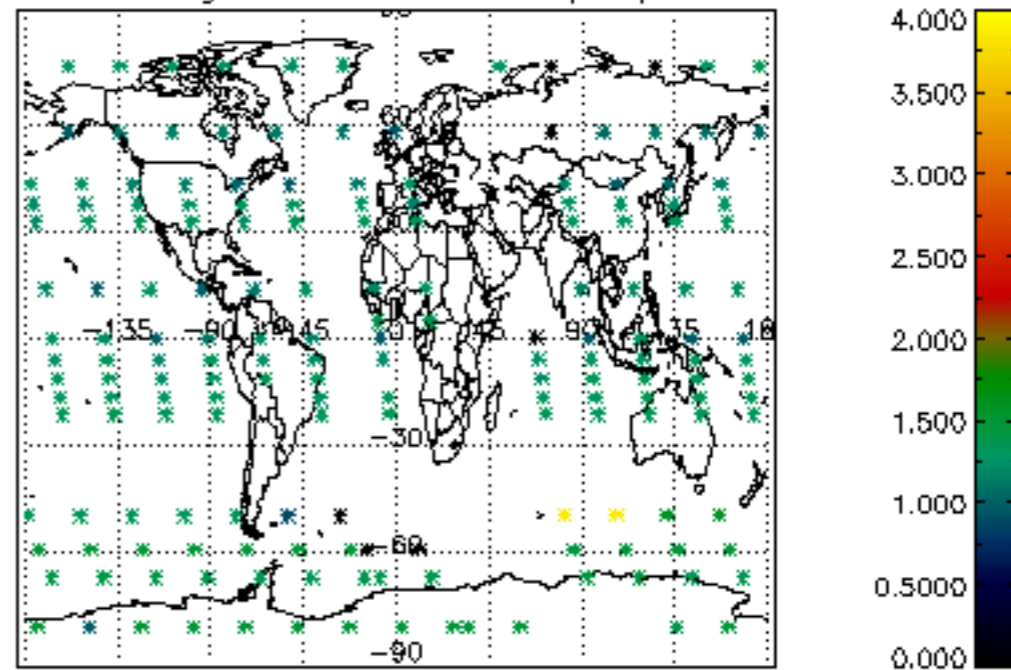




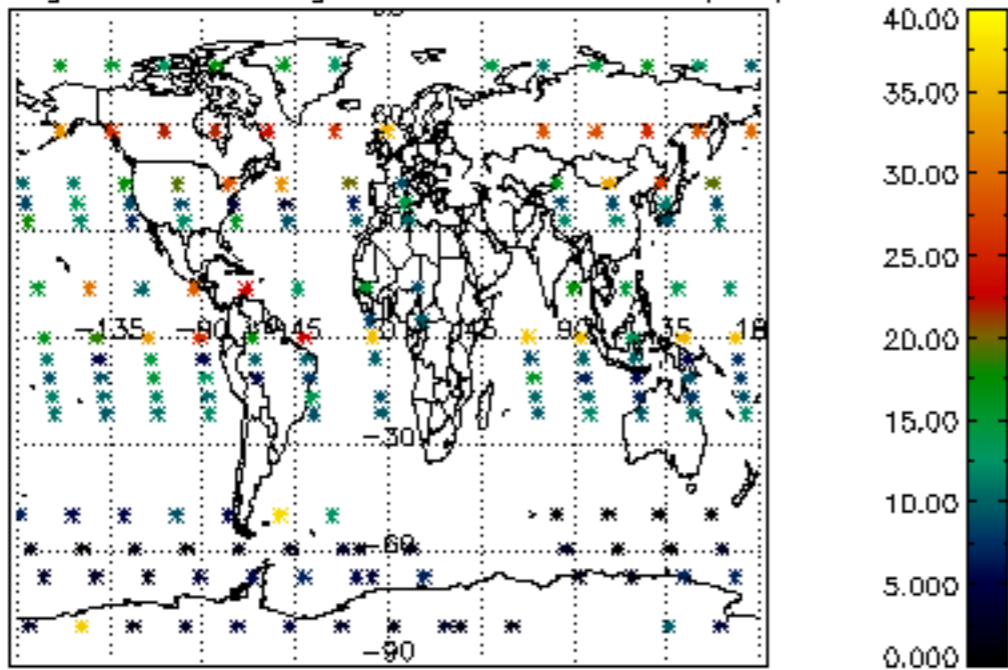
Percentage of cosmic ray hits per profile



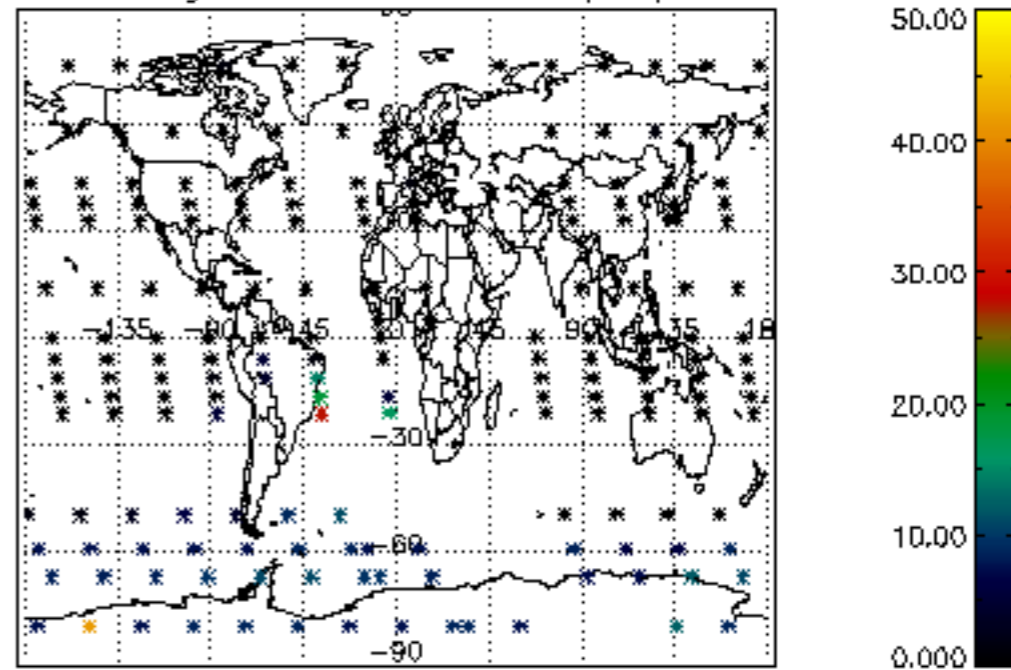
Percentage of datation errors per profile



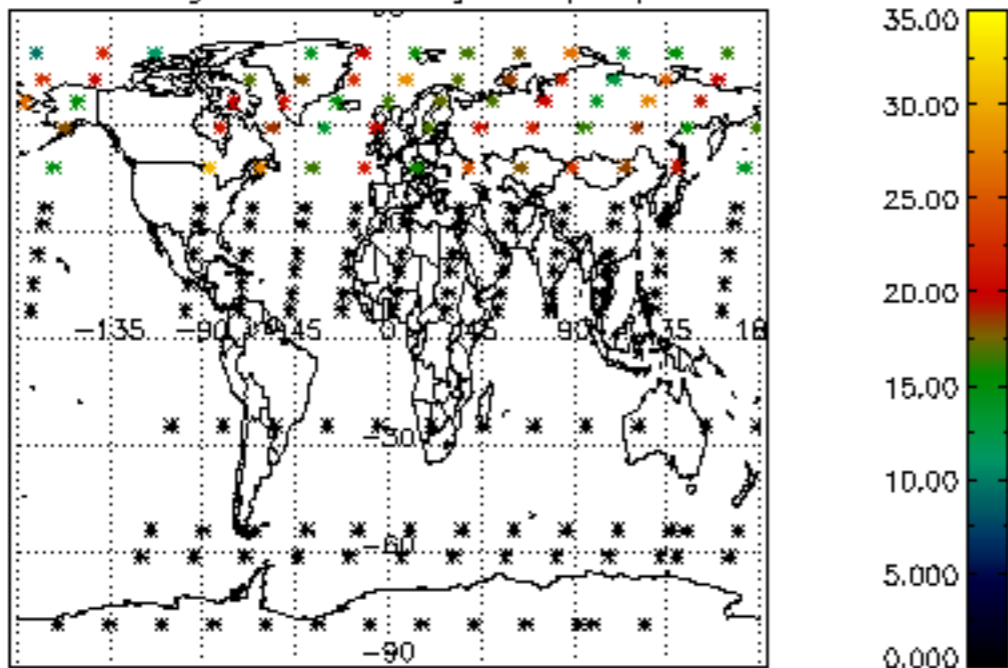
Percentage of star falling outside central band per profile



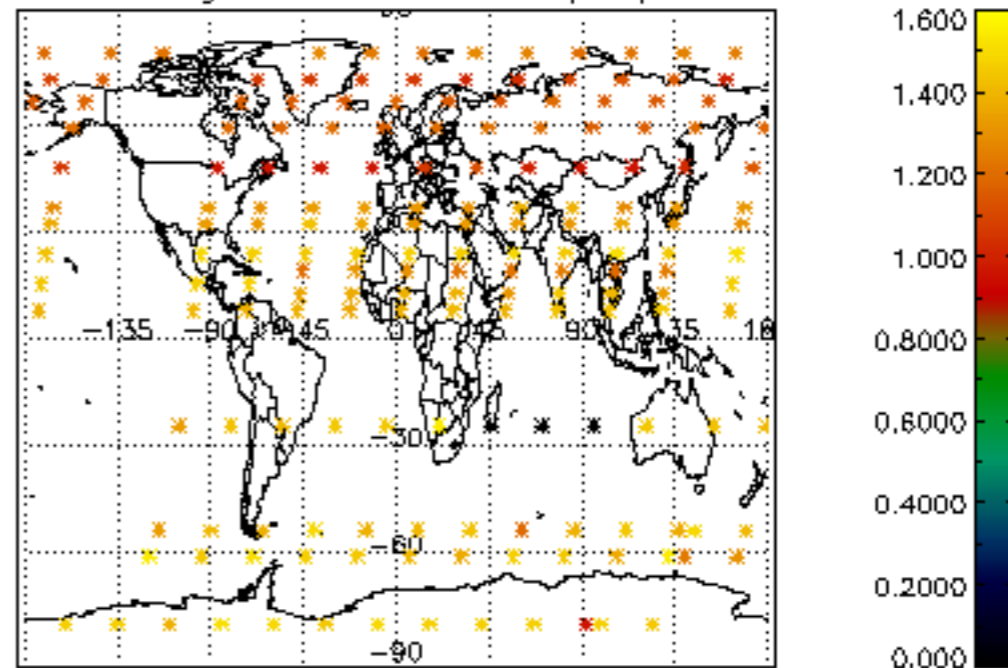
Percentage of saturation errors per profile



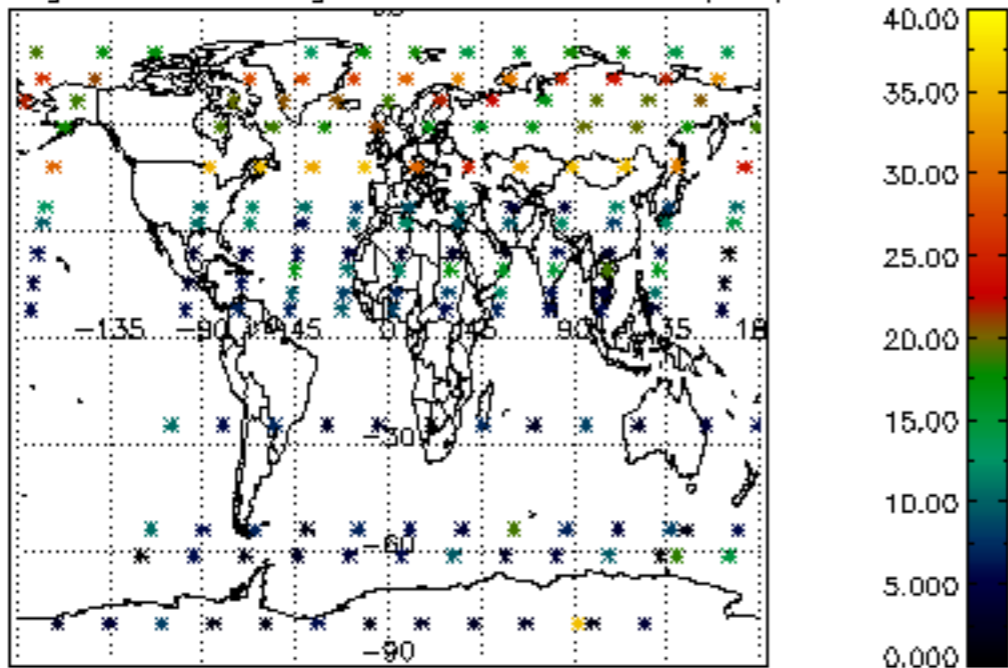
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

