

GOMOS Level 2 Daily Report

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

Item	Value
Time of report generation	24APR2013 09:47:15
Data source version	GOMOS/6.01
Start time of products	30-01-2011 (30JAN2011 00:00:00)
Stop time of products	31-01-2011 (31JAN2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	279
Nb of prods with errors	0

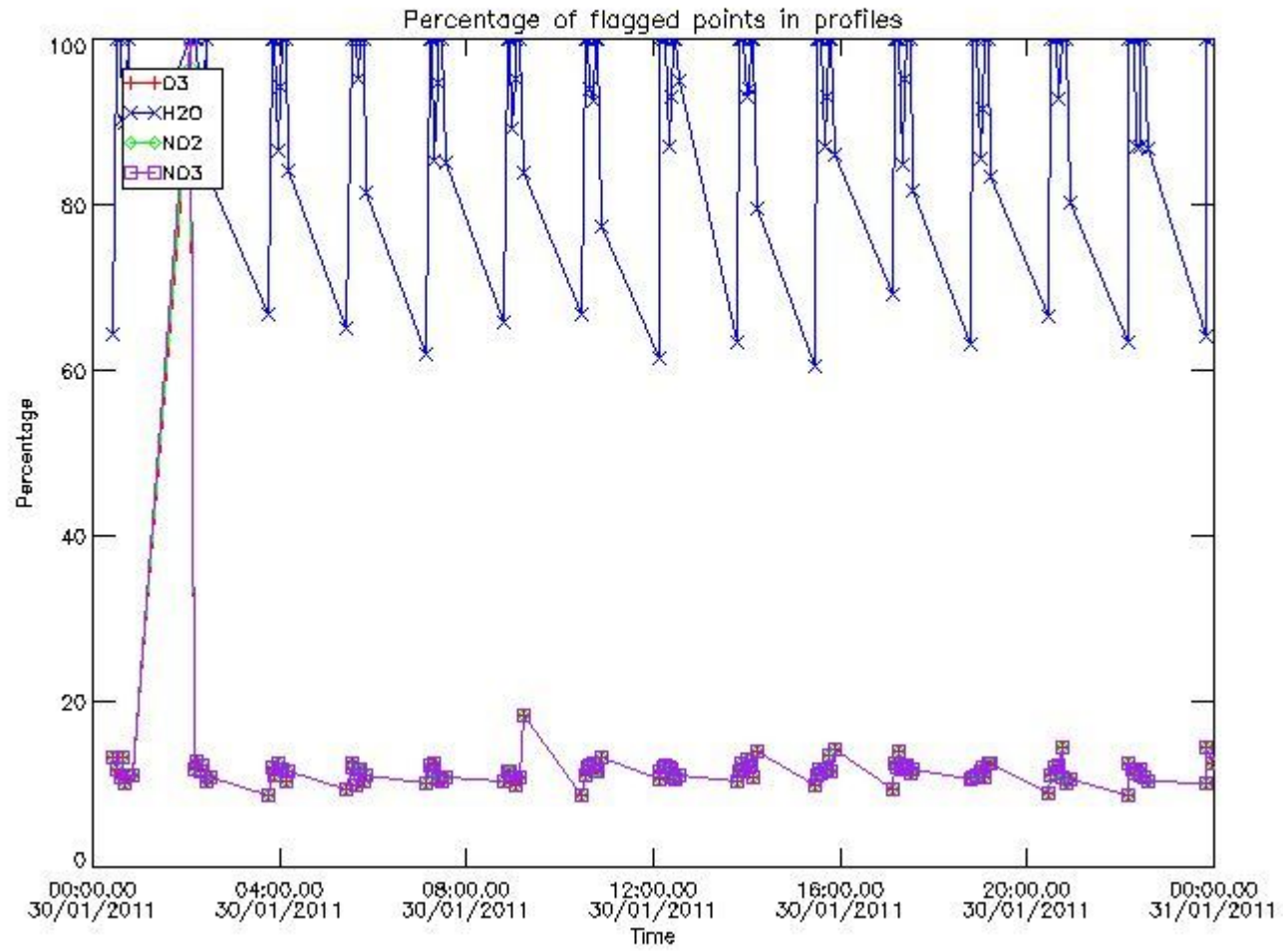
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110130_000116_000000553099_00059_46625_3701.N1	30-JAN-2011 00:01:16	Bright	55.000	130	23Bet Dra	2.7990	5800.0	110	46625	No
2	GOM_NL__2PRFIN20110130_000750_000000613099_00059_46625_3702.N1	30-JAN-2011 00:07:50	Bright	61.000	133	40Zet Her	2.8070	6000.0	122	46625	No
3	GOM_NL__2PRFIN20110130_001122_000000653099_00059_46625_3703.N1	30-JAN-2011 00:11:22	Bright	65.000	127	27Bet Her	2.7810	4700.0	130	46625	No
4	GOM_NL__2PRFIN20110130_001257_000000373099_00059_46625_3704.N1	30-JAN-2011 00:12:57	Bright	37.000	59	55Alp Oph	2.0800	8900.0	74	46625	No
5	GOM_NL__2PRFIN20110130_002126_000000463099_00059_46625_3705.N1	30-JAN-2011 00:21:26	Twilight	45.500	86	35Eta Oph	2.4300	10200.0	91	46625	No
6	GOM_NL__2PRFIN20110130_002539_000000503099_00059_46625_3706.N1	30-JAN-2011 00:25:39	Dark	49.500	16	21Alp Sco	1.0200	3000.0	99	46625	No
7	GOM_NL__2PRFIN20110130_003122_000000433099_00059_46625_3707.N1	30-JAN-2011 00:31:22	Dark	43.000	131	Gam Lup	2.8000	26000.0	86	46625	No
8	GOM_NL__2PRFIN20110130_003443_000000483099_00060_46626_3701.N1	30-JAN-2011 00:34:43	Dark	47.500	81	Eta Cen	2.3560	28000.0	95	46626	No
9	GOM_NL__2PRFIN20110130_003749_000000423099_00060_46626_3702.N1	30-JAN-2011 00:37:49	Dark	42.000	10	Bet Cen	0.61000	28000.0	84	46626	No
10	GOM_NL__2PRFIN20110130_004113_000000503099_00060_46626_3703.N1	30-JAN-2011 00:41:13	Dark	50.000	12	Alp1Cru	0.77500	30000.0	100	46626	No
11	GOM_NL__2PRFIN20110130_004654_000000463099_00060_46626_3704.N1	30-JAN-2011 00:46:54	Dark	45.500	113	Mu Vel	2.6920	5000.0	91	46626	No
12	GOM_NL__2PRFIN20110130_005125_000000463099_00060_46626_3705.N1	30-JAN-2011 00:51:25	Dark	45.500	65	Lam Vel	2.2040	4400.0	91	46626	No
13	GOM_NL__2PRFIN20110130_005755_000000413099_00060_46626_3706.N1	30-JAN-2011 00:57:55	Straylight	41.000	132	15Rho Pup	2.8030	6900.0	82	46626	No
14	GOM_NL__2PRFIN20110130_010643_000000543099_00060_46626_3707.N1	30-JAN-2011 01:06:43	Twilight	54.000	8	10Alp CMi	0.40000	6500.0	108	46626	No
15	GOM_NL__2PRFIN20110130_011326_000000423099_00060_46626_3708.N1	30-JAN-2011 01:13:26	Bright	41.500	17	78Bet Gem	1.1610	4500.0	83	46626	No
16	GOM_NL__2PRFIN20110130_012827_000000433099_00060_46626_3709.N1	30-JAN-2011 01:28:27	Bright	43.000	36	50Alp UMa	1.8000	6300.0	86	46626	No
17	GOM_NL__2PRFIN20110130_013344_000000423099_00060_46626_3710.N1	30-JAN-2011 01:33:44	Bright	41.500	60	7Bet UMi	2.0810	3950.0	83	46626	No
18	GOM_NL__2PRFIN20110130_013824_000000403099_00060_46626_3711.N1	30-JAN-2011 01:38:24	Bright	40.000	119	14Eta Dra	2.7270	4700.0	80	46626	No
19	GOM_NL__2PRFIN20110130_014130_000000393099_00060_46626_3712.N1	30-JAN-2011 01:41:30	Bright	38.500	130	23Bet Dra	2.7990	5800.0	77	46626	No
20	GOM_NL__2PRFIN20110130_014805_000000413099_00060_46626_3713.N1	30-JAN-2011 01:48:05	Bright	40.500	133	40Zet Her	2.8070	6000.0	81	46626	No
21	GOM_NL__2PRFIN20110130_015137_000000583099_00060_46626_3714.N1	30-JAN-2011 01:51:37	Bright	57.500	127	27Bet Her	2.7810	4700.0	115	46626	No
22	GOM_NL__2PRFIN20110130_015311_000000373099_00060_46626_3715.N1	30-JAN-2011 01:53:11	Bright	36.500	59	55Alp Oph	2.0800	8900.0	73	46626	No
23	GOM_NL__2PRFIN20110130_020141_000000433099_00060_46626_3716.N1	30-JAN-2011 02:01:41	Twilight	42.500	86	35Eta Oph	2.4300	10200.0	85	46626	No
24	GOM_NL__2PRFIN20110130_020554_000000593099_00060_46626_3717.N1	30-JAN-2011 02:05:54	Dark	59.000	16	21Alp Sco	1.0200	3000.0	118	46626	No
25	GOM_NL__2PRFIN20110130_021137_000000443099_00060_46626_3718.N1	30-JAN-2011 02:11:37	Dark	43.500	131	Gam Lup	2.8000	26000.0	87	46626	No
26	GOM_NL__2PRFIN20110130_021348_000000443099_00060_46626_3719.N1	30-JAN-2011 02:13:48	Dark	43.500	109	Bet Lup	2.6770	26000.0	87	46626	No
27	GOM_NL__2PRFIN20110130_021804_000000443099_00061_46627_3712.N1	30-JAN-2011 02:18:04	Dark	44.000	10	Bet Cen	0.61000	28000.0	88	46627	No
28	GOM_NL__2PRFIN20110130_022128_000000423099_00061_46627_3713.N1	30-JAN-2011 02:21:28	Dark	41.500	12	Alp1Cru	0.77500	30000.0	83	46627	No
29	GOM_NL__2PRFIN20110130_022709_000000503099_00061_46627_3714.N1	30-JAN-2011 02:27:09	Dark	49.500	113	Mu Vel	2.6920	5000.0	99	46627	No
30	GOM_NL__2PRFIN20110130_023139_000000473099_00061_46627_3715.N1	30-JAN-2011 02:31:39	Dark	47.000	65	Lam Vel	2.2040	4400.0	94	46627	No
31	GOM_NL__2PRFIN20110130_023810_000000453099_00061_46627_3716.N1	30-JAN-2011 02:38:10	Straylight	44.500	132	15Rho Pup	2.8030	6900.0	89	46627	No
32	GOM_NL__2PRFIN20110130_024657_000000473099_00061_46627_3717.N1	30-JAN-2011 02:46:57	Twilight	46.500	8	10Alp CMi	0.40000	6500.0	93	46627	No
33	GOM_NL__2PRFIN20110130_025341_000000423099_00061_46627_3718.N1	30-JAN-2011 02:53:41	Bright	42.000	17	78Bet Gem	1.1610	4500.0	84	46627	No
34	GOM_NL__2PRFIN20110130_030840_000000473099_00061_46627_3719.N1	30-JAN-2011 03:08:40	Bright	47.000	36	50Alp UMa	1.8000	6300.0	94	46627	No
35	GOM_NL__2PRFIN20110130_031357_000000413099_00061_46627_3720.N1	30-JAN-2011 03:13:57	Bright	41.000	60	7Bet UMi	2.0810	3950.0	82	46627	No
36	GOM_NL__2PRFIN20110130_031837_000000403099_00061_46627_3721.N1	30-JAN-2011 03:18:37	Bright	40.000	119	14Eta Dra	2.7270	4700.0	80	46627	No
37	GOM_NL__2PRFIN20110130_032144_000000383099_00061_46627_3722.N1	30-JAN-2011 03:21:44	Bright	38.000	130	23Bet Dra	2.7990	5800.0	76	46627	No
38	GOM_NL__2PRFIN20110130_032819_000000423099_00061_46627_3723.N1	30-JAN-2011 03:28:19	Bright	41.500	133	40Zet Her	2.8070	6000.0	83	46627	No
39	GOM_NL__2PRFIN20110130_033151_000000653099_00061_46627_3724.N1	30-JAN-2011 03:31:51	Bright	65.000	127	27Bet Her	2.7810	4700.0	130	46627	No
40	GOM_NL__2PRFIN20110130_033325_000000363099_00061_46627_3725.N1	30-JAN-2011 03:33:25	Bright	36.000	59	55Alp Oph	2.0800	8900.0	72	46627	No
41	GOM_NL__2PRFIN20110130_034156_000000423099_00061_46627_3726.N1	30-JAN-2011 03:41:56	Twilight	42.000	86	35Eta Oph	2.4300	10200.0	84	46627	No
42	GOM_NL__2PRFIN20110130_034608_000000593099_00061_46627_3727.N1	30-JAN-2011 03:46:08	Dark	59.000	16	21Alp Sco	1.0200	3000.0	118	46627	No

3. Quality information per product

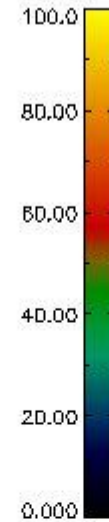
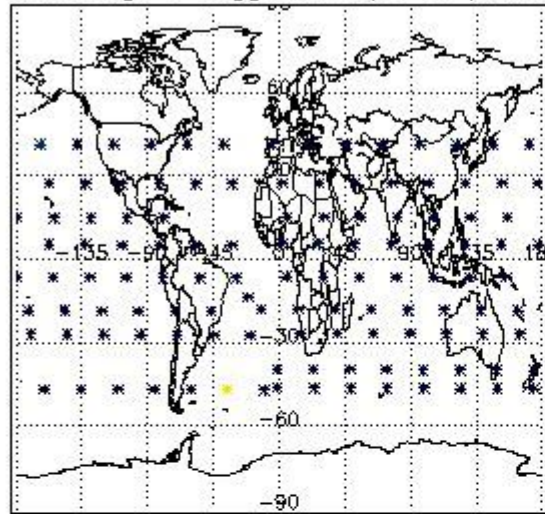
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

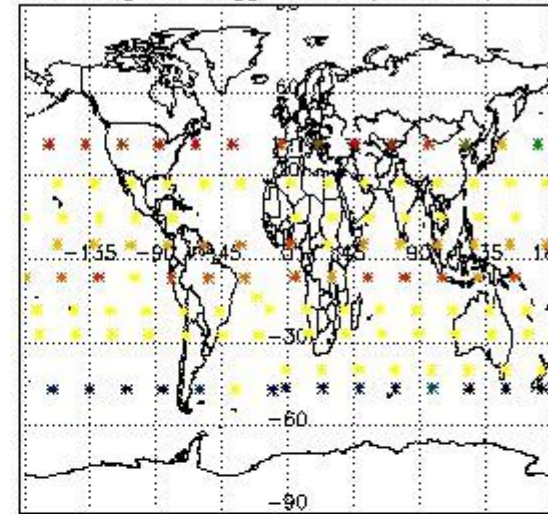


3.2 Plot quality information per product (world map)

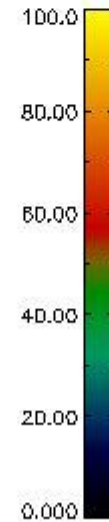
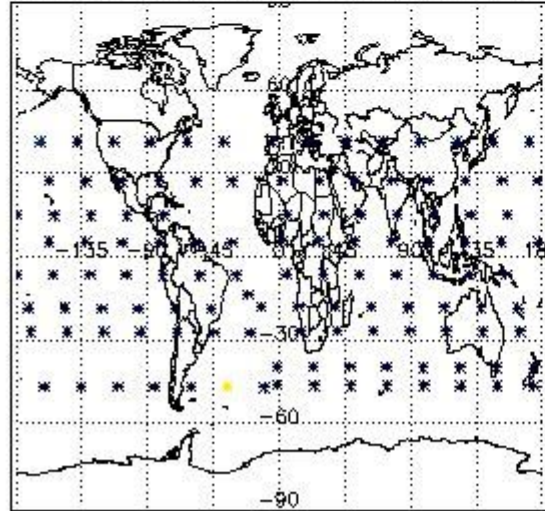
Percentage of flagged data per O3 profile



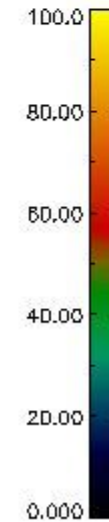
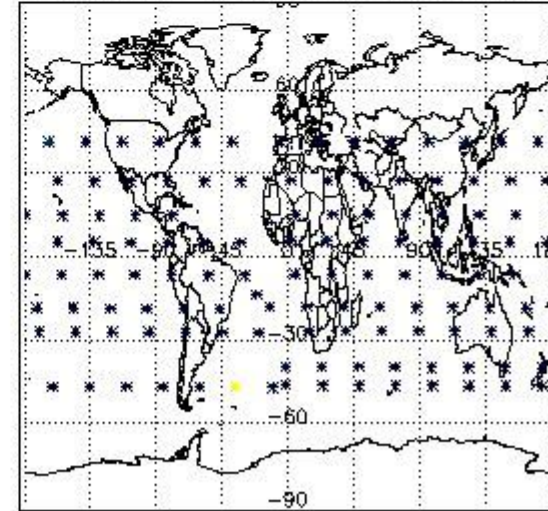
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

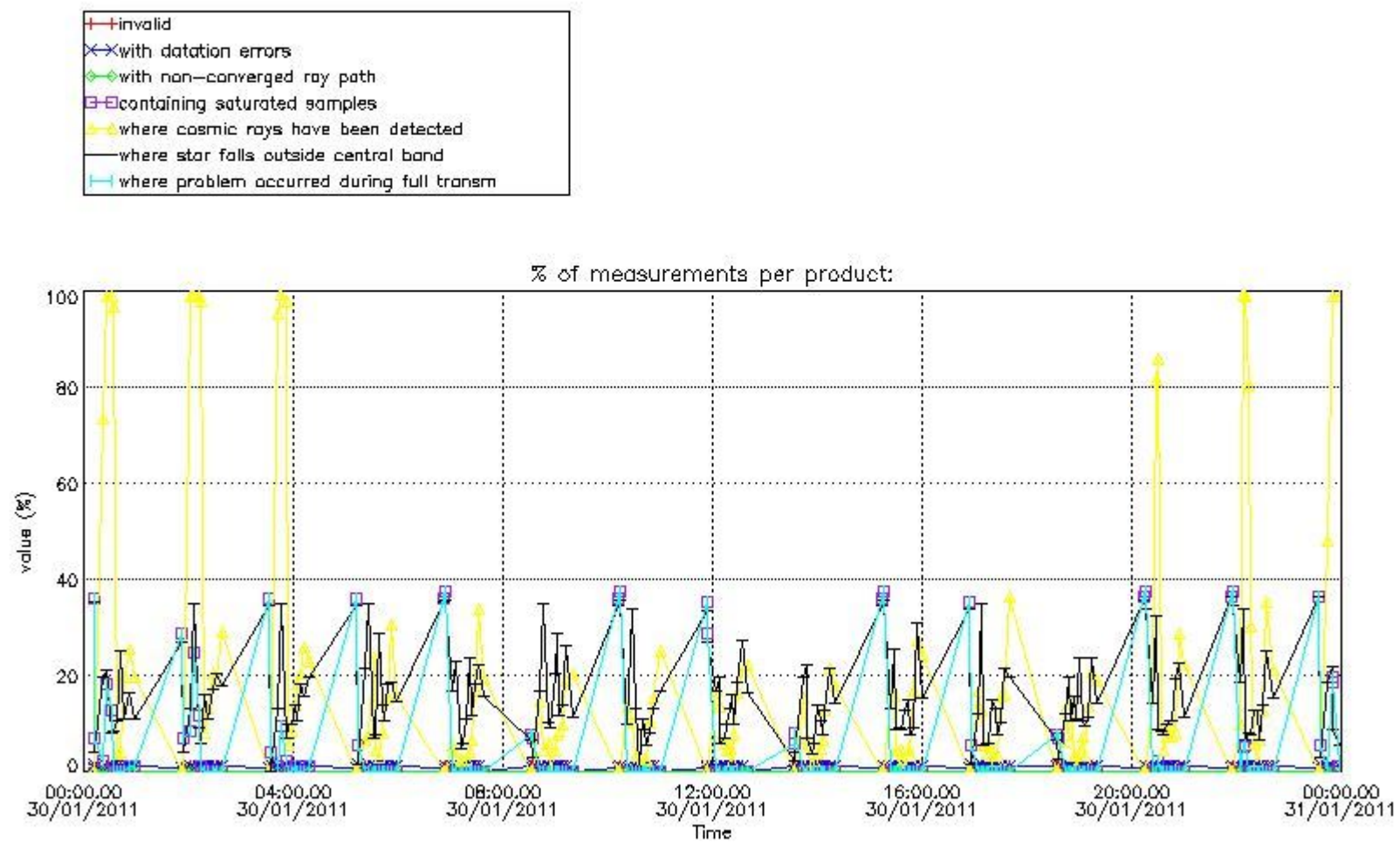


4. Level 1 quality information per product

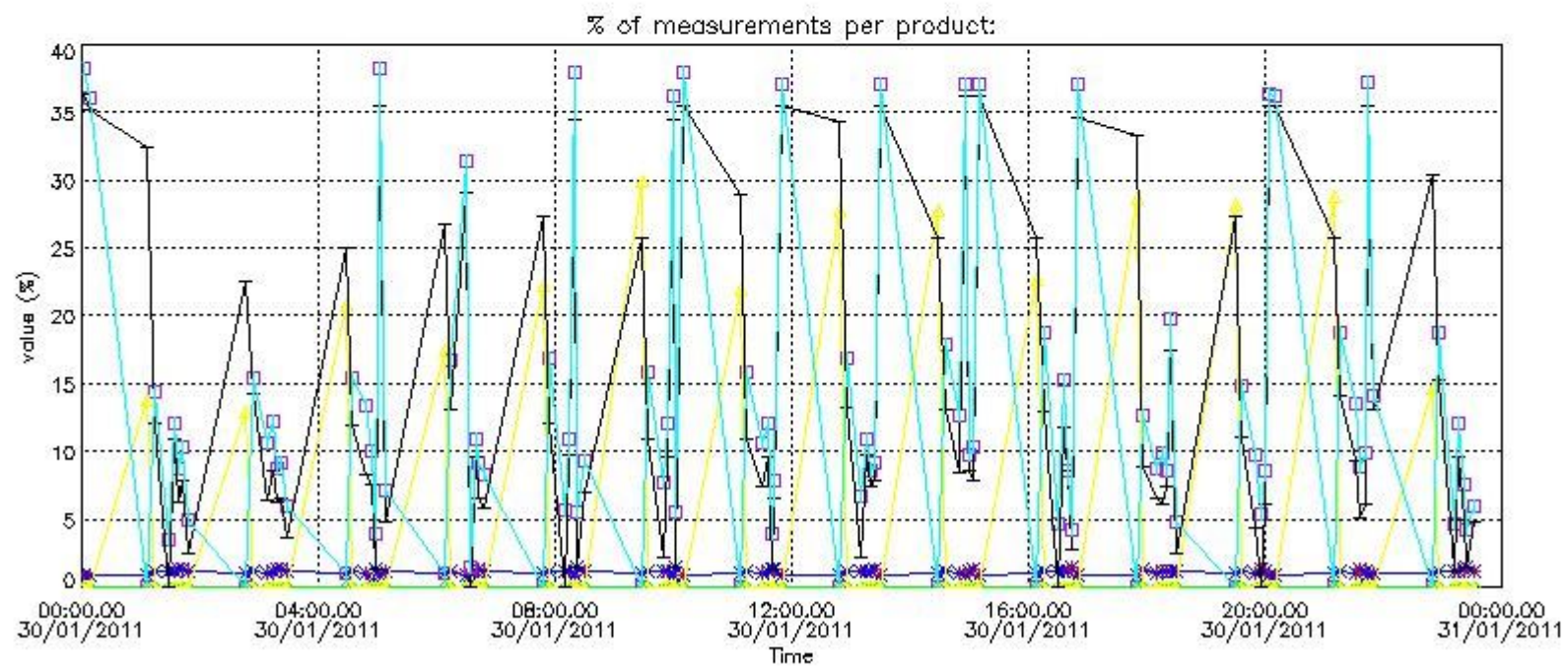
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



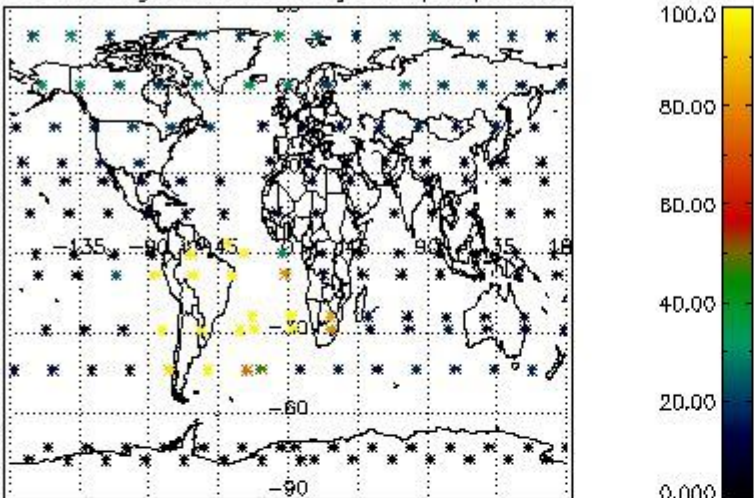
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



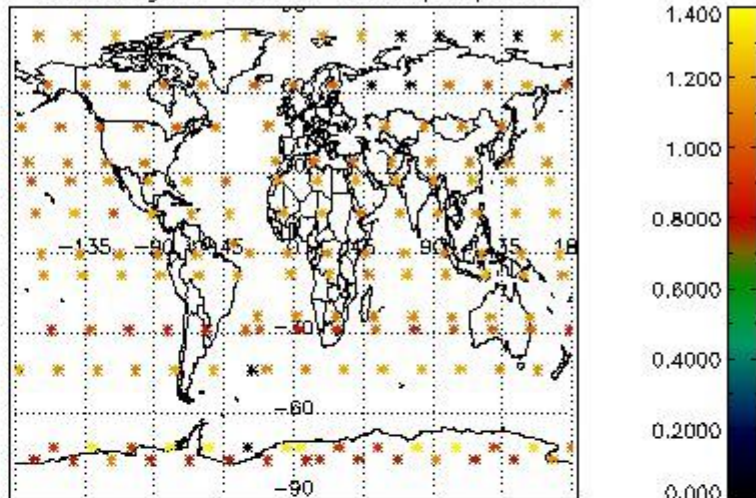
4.2 Plot quality information per product coming from level 1b processing (world map)

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

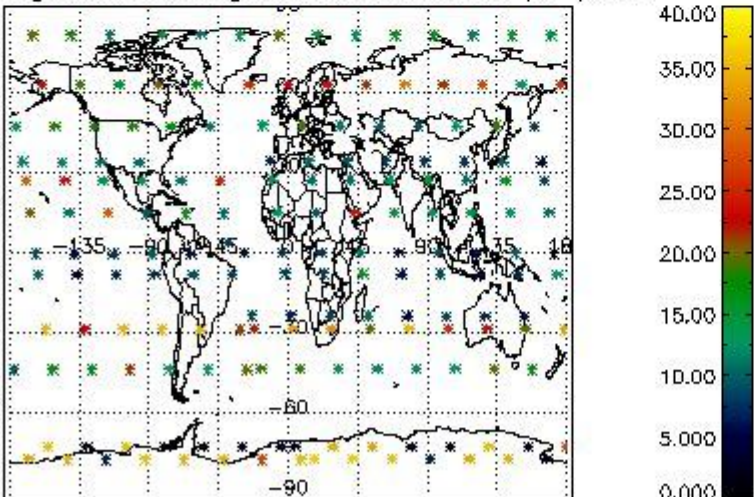
Percentage of cosmic ray hits per profile



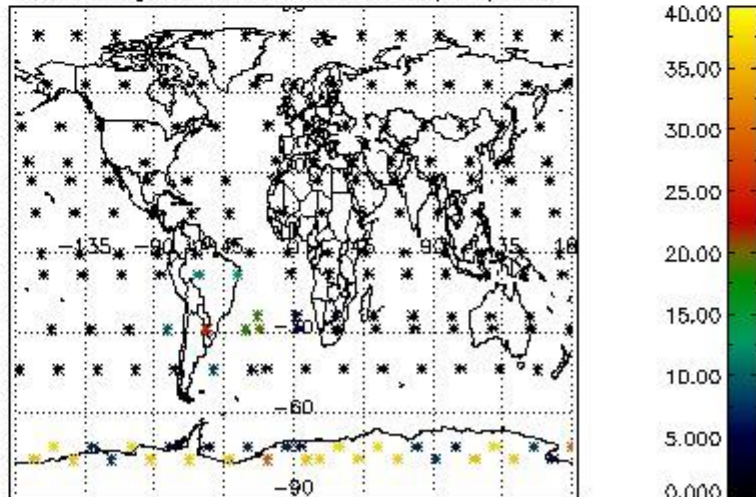
Percentage of datation errors per profile



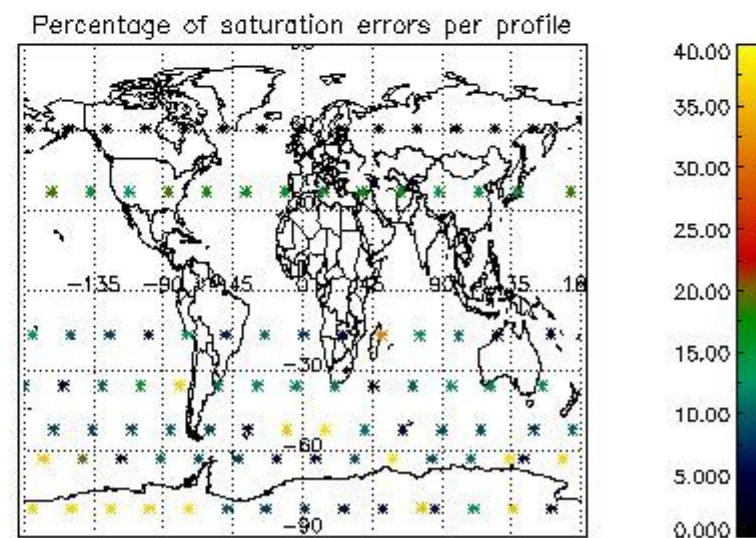
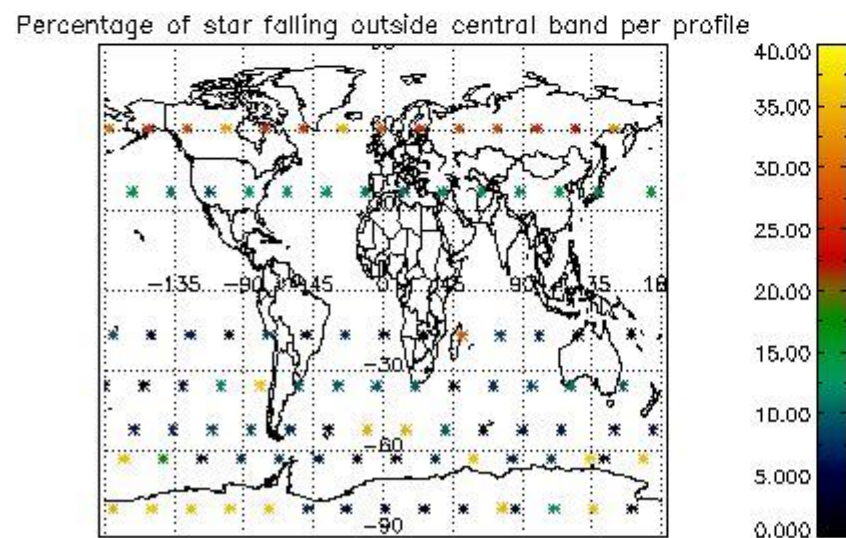
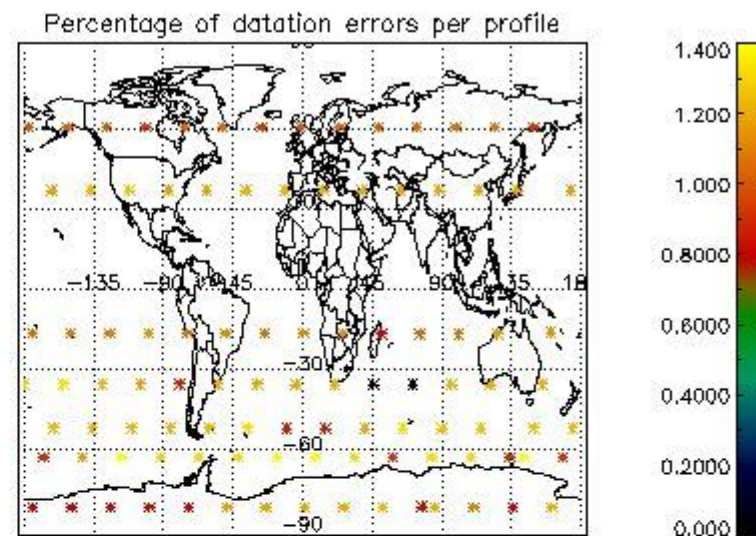
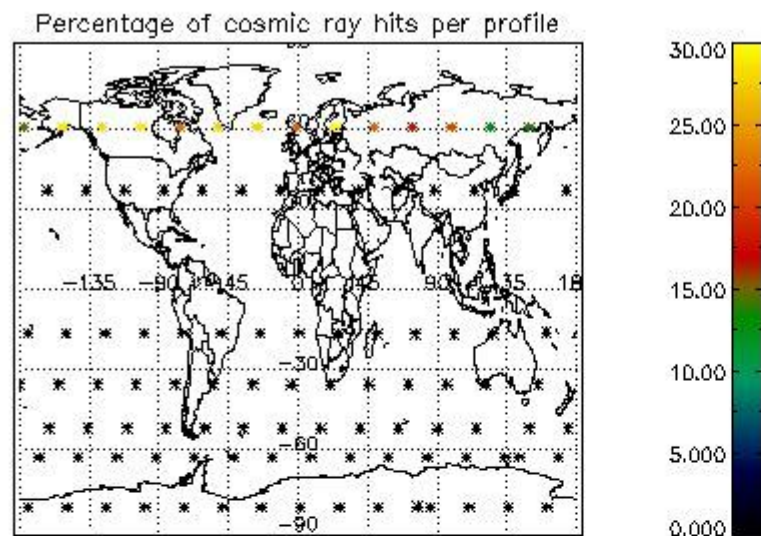
Percentage of star falling outside central band per profile



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

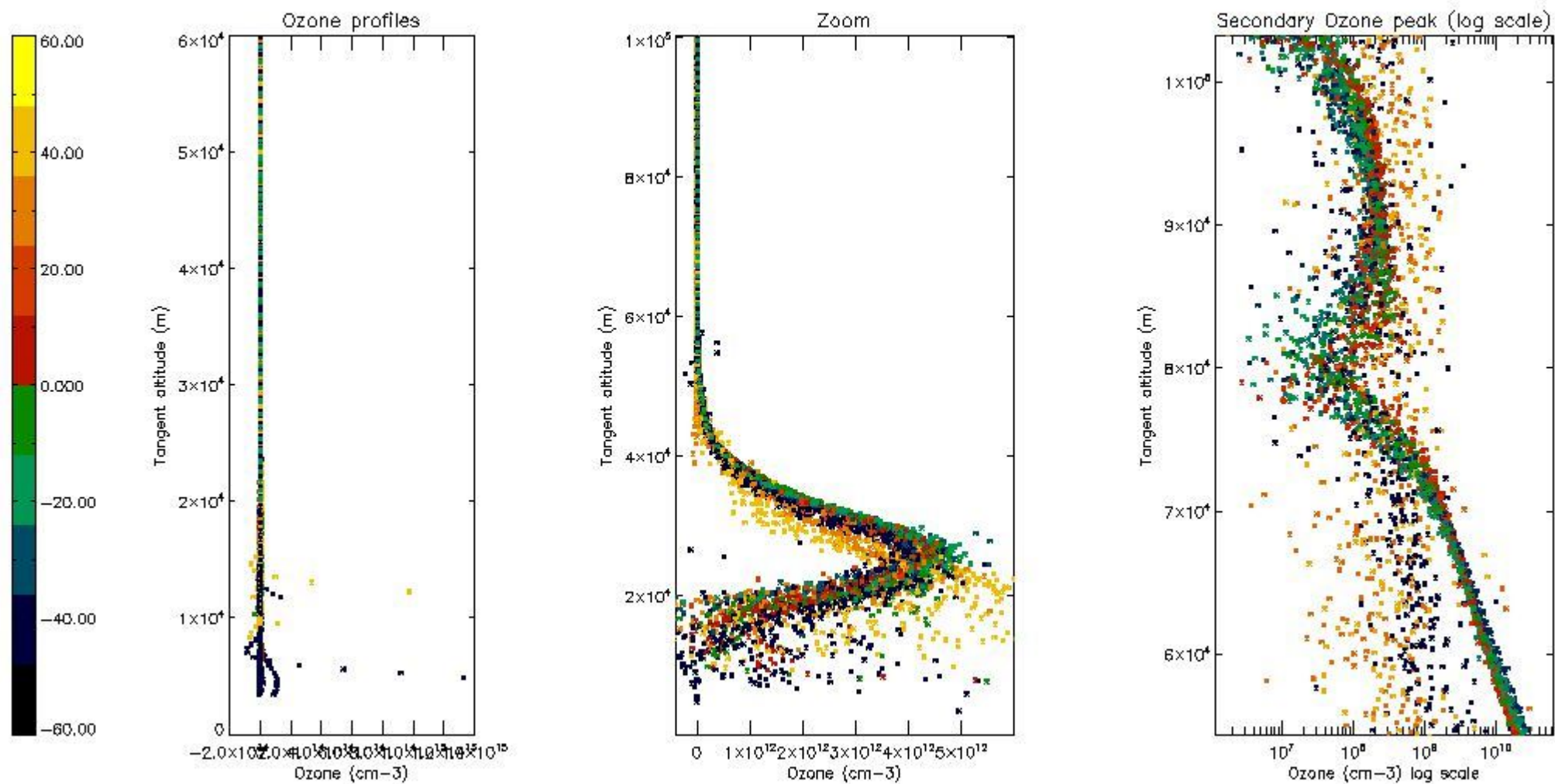
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	44
STD < 20	21

STD < 10	17
STD < 5	12

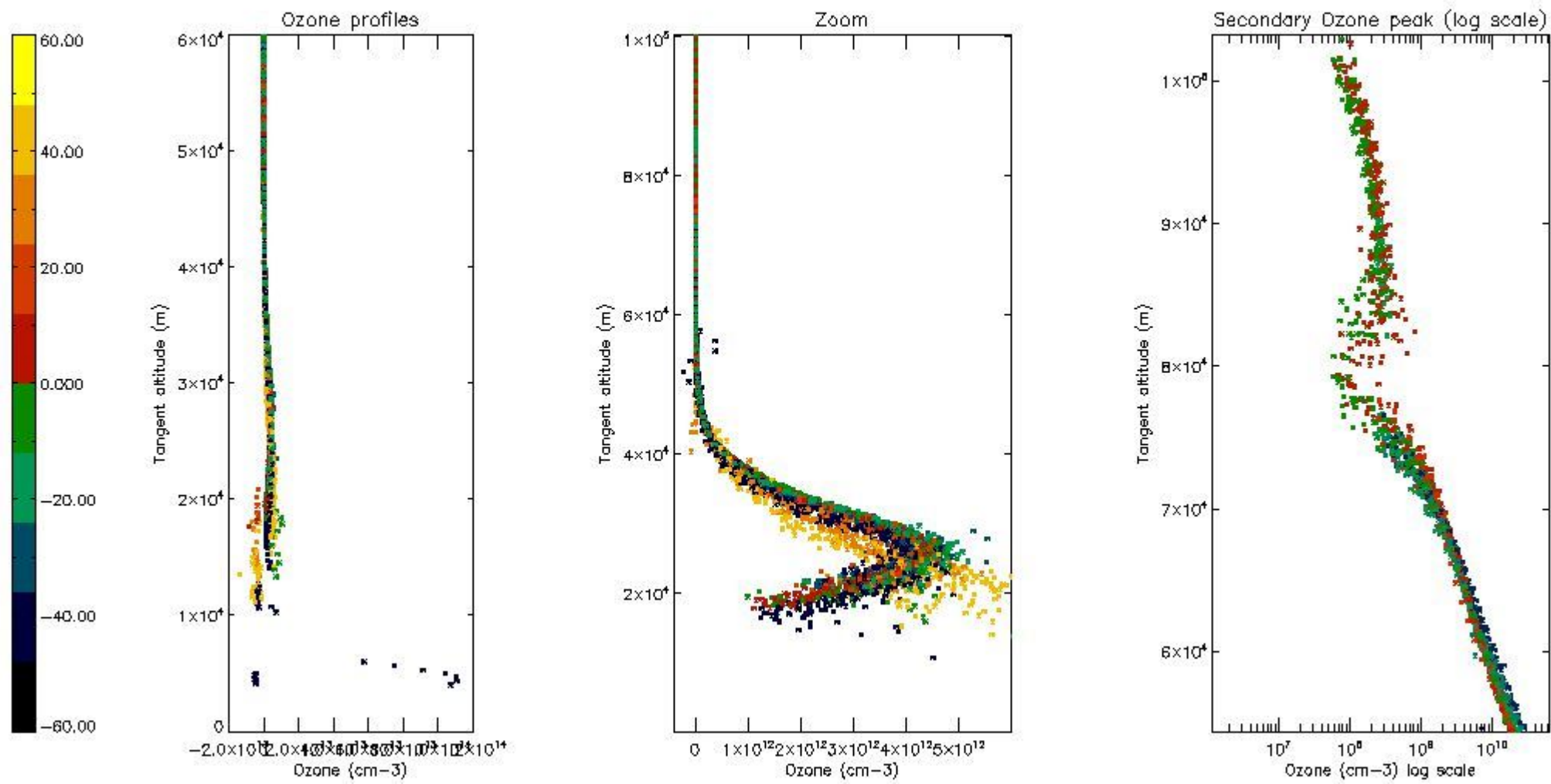
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



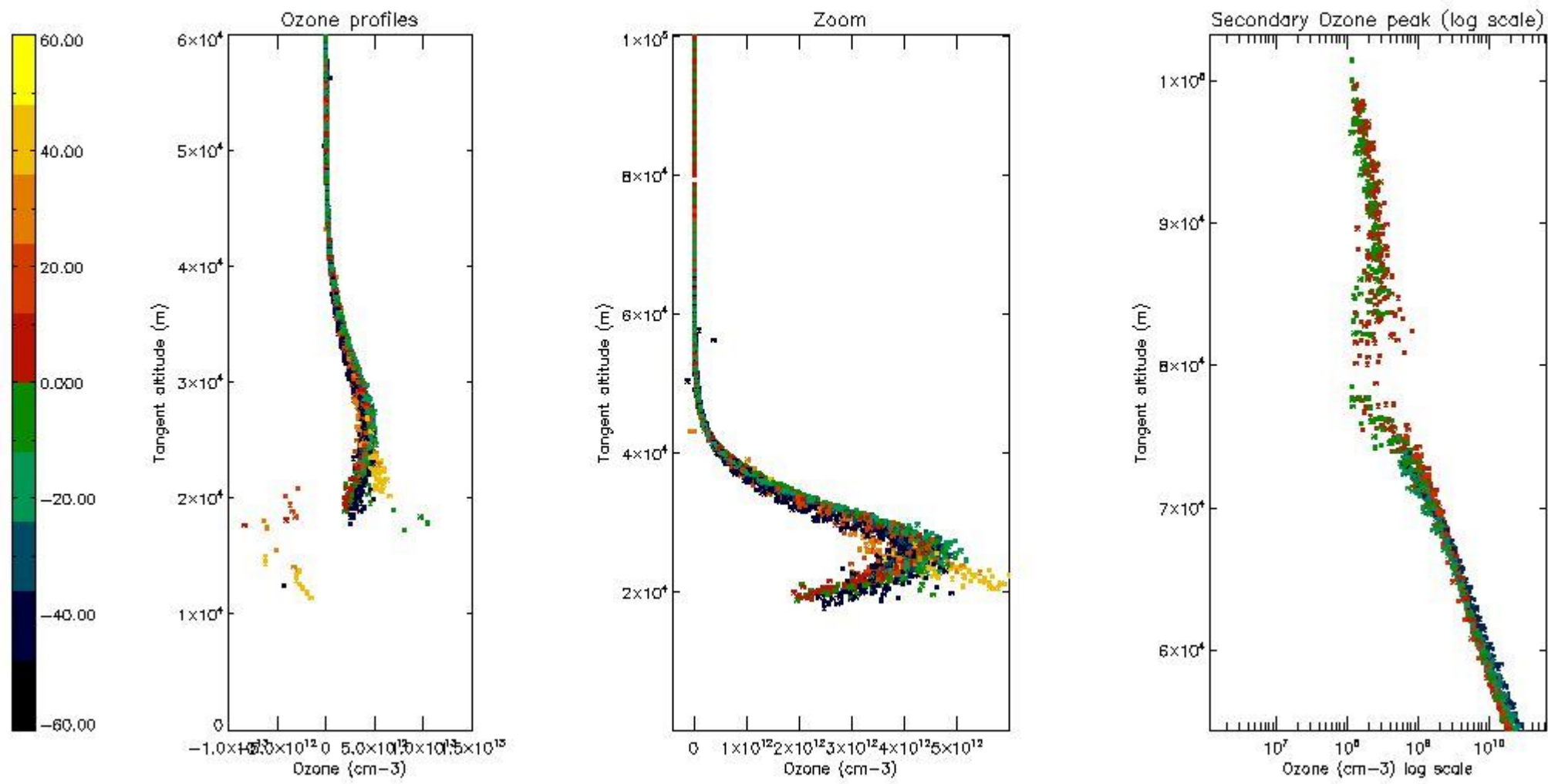
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



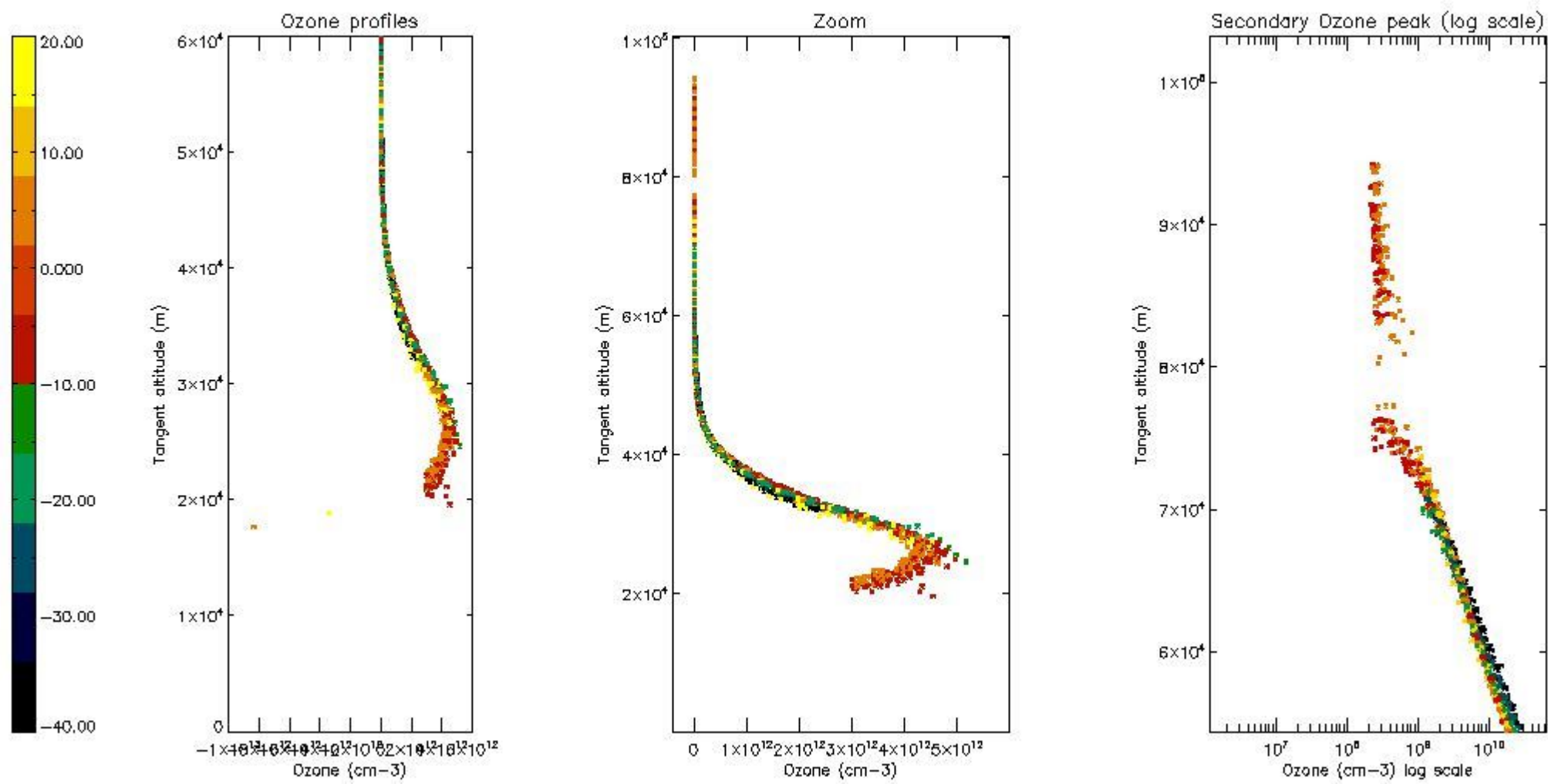
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



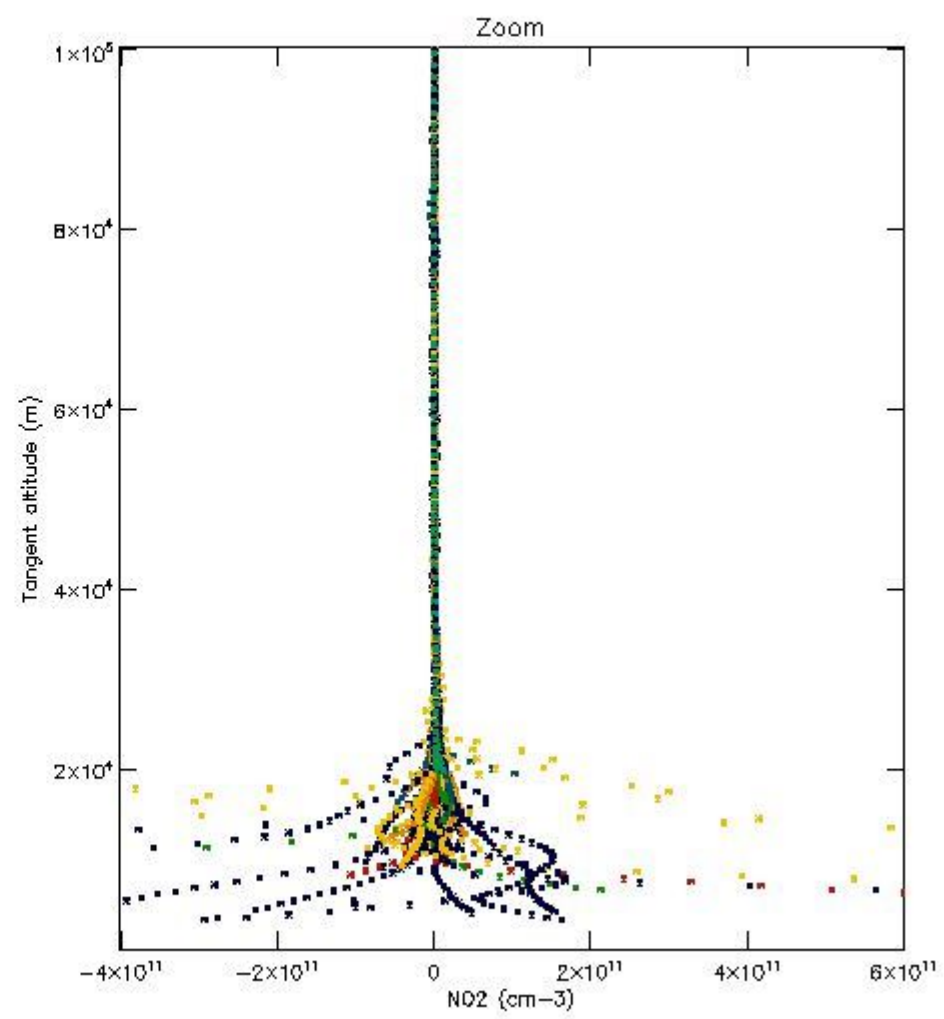
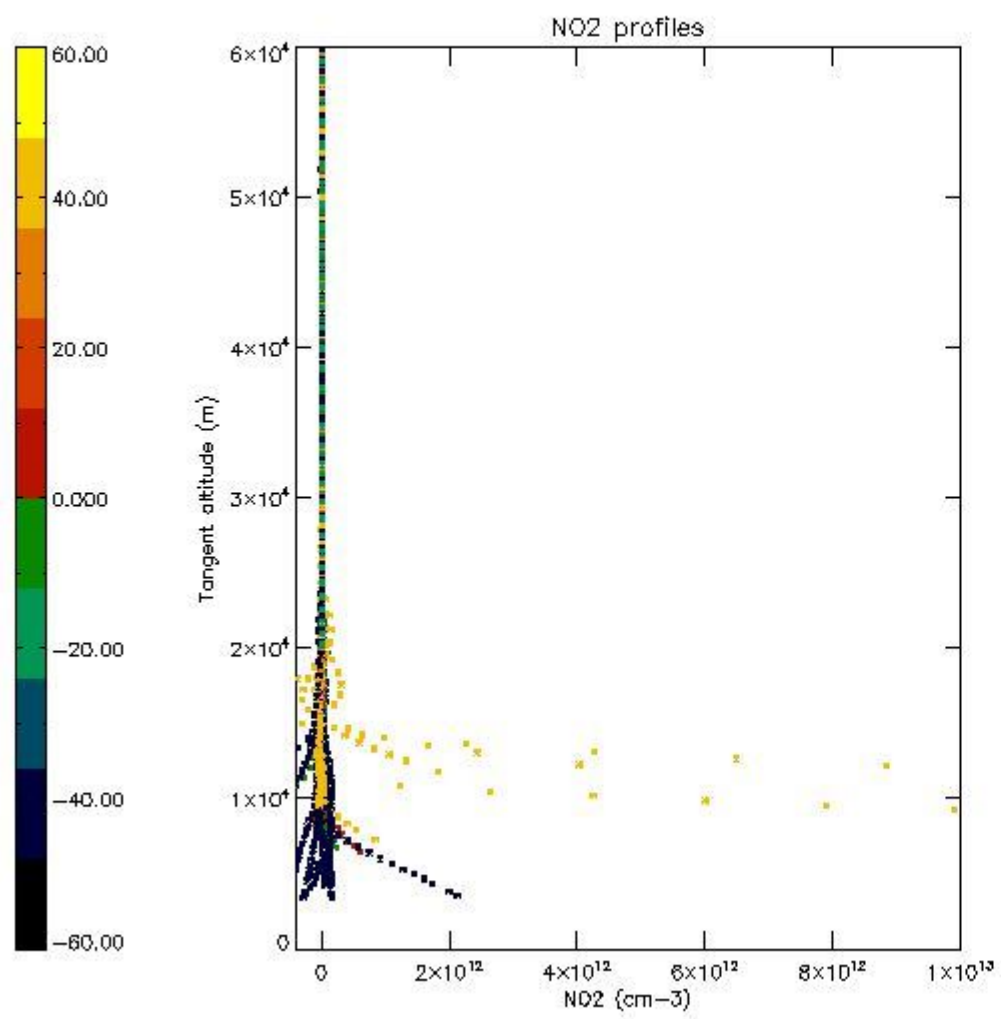
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



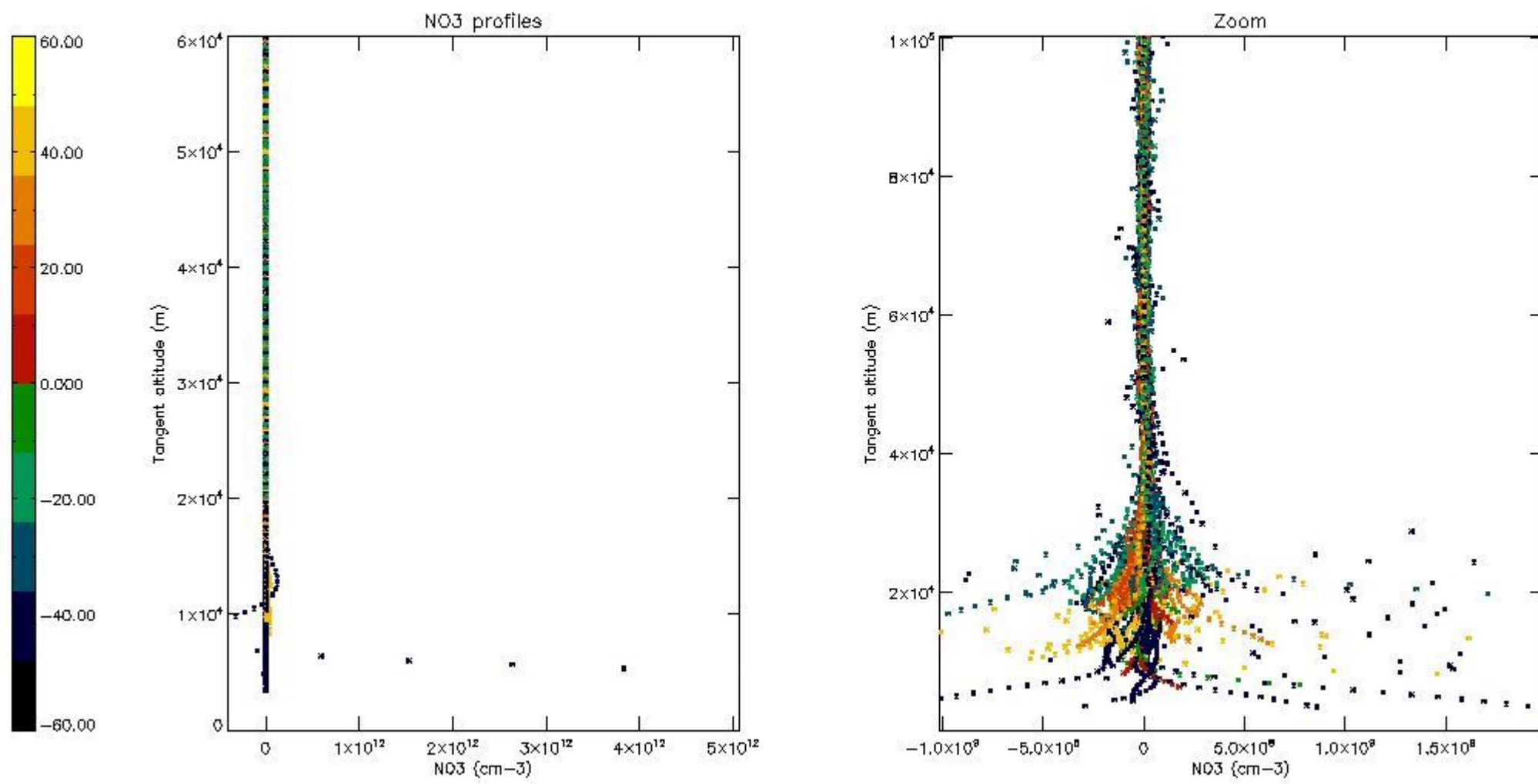
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



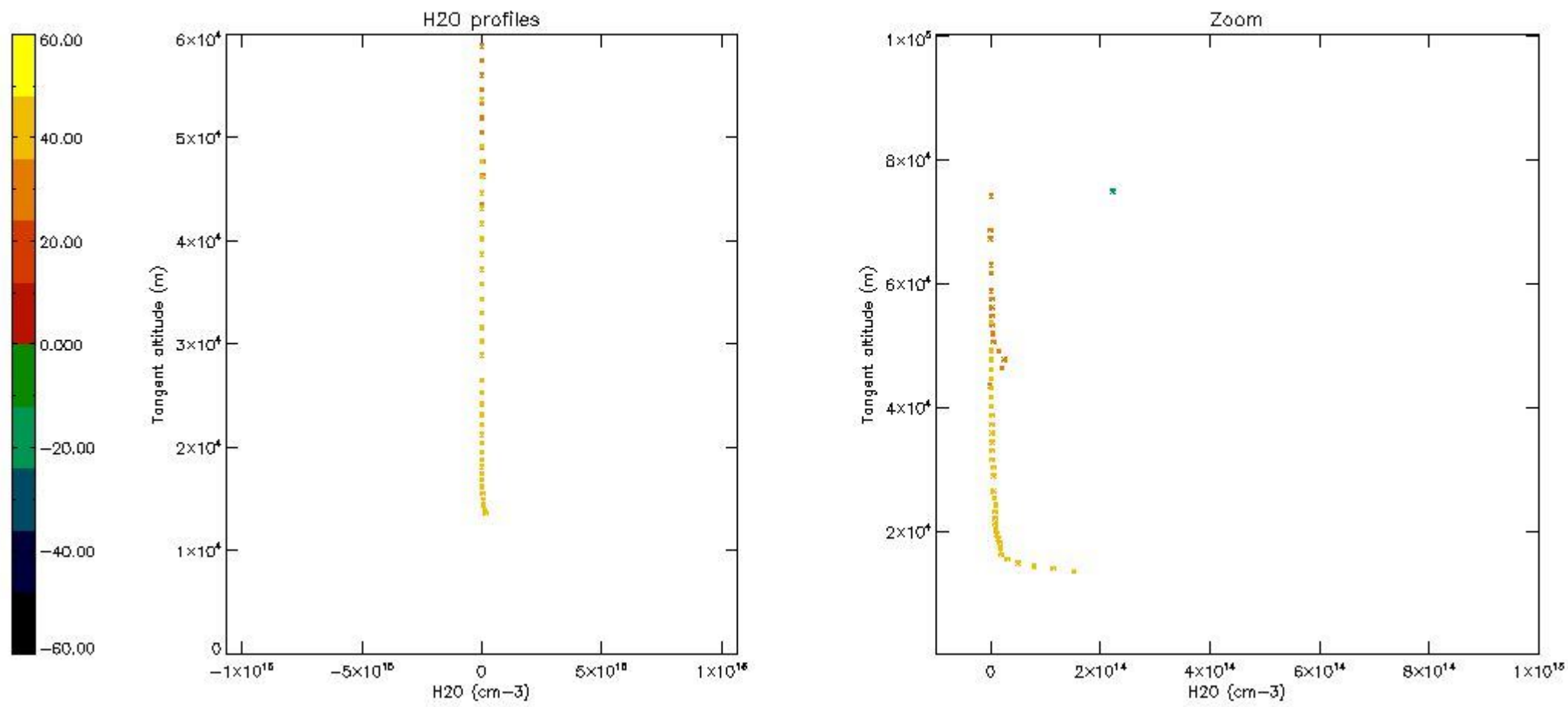
5.7 Plot NO3 profiles for all STD (dark without errors)

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	30-JAN-2011 00:01:16
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	30-JAN-2011 00:01:16
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	30-JAN-2011 00:01:16

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

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

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Store outputs in DB	Yes
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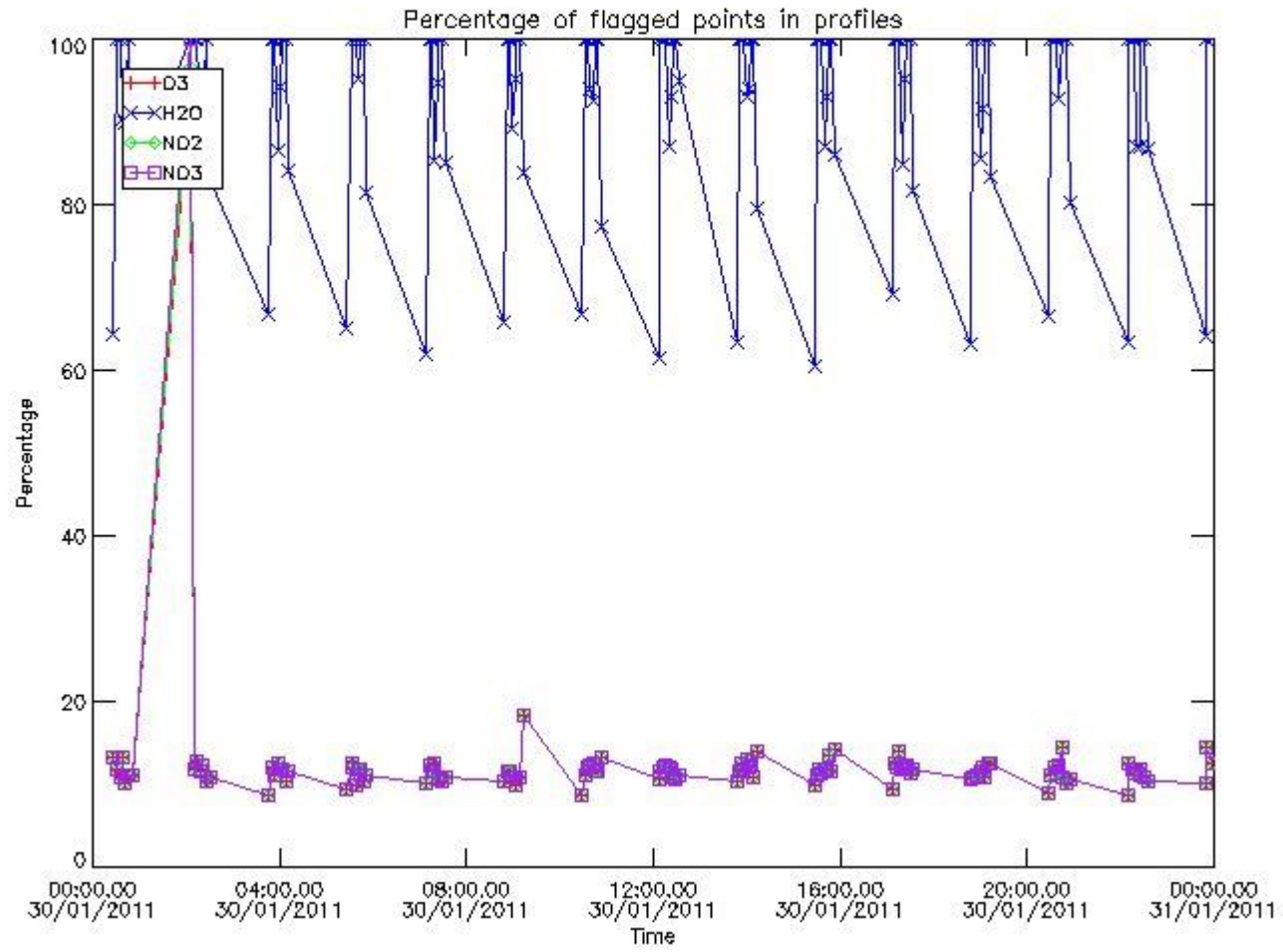
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110130_000116_000000553099_00059_46625_3701.N1	30-JAN-2011 00:01:16	Bright	55.000	130	23Bet Dra	2.7990	5800.0	110	46625	No
2	GOM_NL__2PRFIN20110130_000750_000000613099_00059_46625_3702.N1	30-JAN-2011 00:07:50	Bright	61.000	133	40Zet Her	2.8070	6000.0	122	46625	No
3	GOM_NL__2PRFIN20110130_001122_000000653099_00059_46625_3703.N1	30-JAN-2011 00:11:22	Bright	65.000	127	27Bet Her	2.7810	4700.0	130	46625	No
4	GOM_NL__2PRFIN20110130_001257_000000373099_00059_46625_3704.N1	30-JAN-2011 00:12:57	Bright	37.000	59	55Alp Oph	2.0800	8900.0	74	46625	No
5	GOM_NL__2PRFIN20110130_002126_000000463099_00059_46625_3705.N1	30-JAN-2011 00:21:26	Twilight	45.500	86	35Eta Oph	2.4300	10200.	91	46625	No
6	GOM_NL__2PRFIN20110130_002539_000000503099_00059_46625_3706.N1	30-JAN-2011 00:25:39	Dark	49.500	16	21Alp Sco	1.0200	3000.0	99	46625	No
7	GOM_NL__2PRFIN20110130_003122_000000433099_00059_46625_3707.N1	30-JAN-2011 00:31:22	Dark	43.000	131	Gam Lup	2.8000	26000.	86	46625	No
8	GOM_NL__2PRFIN20110130_003443_000000483099_00060_46626_3701.N1	30-JAN-2011 00:34:43	Dark	47.500	81	Eta Cen	2.3560	28000.	95	46626	No
9	GOM_NL__2PRFIN20110130_003749_000000423099_00060_46626_3702.N1	30-JAN-2011 00:37:49	Dark	42.000	10	Bet Cen	0.61000	28000.	84	46626	No
10	GOM_NL__2PRFIN20110130_004113_000000503099_00060_46626_3703.N1	30-JAN-2011 00:41:13	Dark	50.000	12	Alp1Cru	0.77500	30000.	100	46626	No
11	GOM_NL__2PRFIN20110130_004654_000000463099_00060_46626_3704.N1	30-JAN-2011 00:46:54	Dark	45.500	113	Mu Vel	2.6920	5000.0	91	46626	No
12	GOM_NL__2PRFIN20110130_005125_000000463099_00060_46626_3705.N1	30-JAN-2011 00:51:25	Dark	45.500	65	Lam Vel	2.2040	4400.0	91	46626	No
13	GOM_NL__2PRFIN20110130_005755_000000413099_00060_46626_3706.N1	30-JAN-2011 00:57:55	Straylight	41.000	132	15Rho Pup	2.8030	6900.0	82	46626	No
14	GOM_NL__2PRFIN20110130_010643_000000543099_00060_46626_3707.N1	30-JAN-2011 01:06:43	Twilight	54.000	8	10Alp CMi	0.40000	6500.0	108	46626	No
15	GOM_NL__2PRFIN20110130_011326_000000423099_00060_46626_3708.N1	30-JAN-2011 01:13:26	Bright	41.500	17	78Bet Gem	1.1610	4500.0	83	46626	No
16	GOM_NL__2PRFIN20110130_012827_000000433099_00060_46626_3709.N1	30-JAN-2011 01:28:27	Bright	43.000	36	50Alp UMa	1.8000	6300.0	86	46626	No
17	GOM_NL__2PRFIN20110130_013344_000000423099_00060_46626_3710.N1	30-JAN-2011 01:33:44	Bright	41.500	60	7Bet UMi	2.0810	3950.0	83	46626	No
18	GOM_NL__2PRFIN20110130_013824_000000403099_00060_46626_3711.N1	30-JAN-2011 01:38:24	Bright	40.000	119	14Eta Dra	2.7270	4700.0	80	46626	No
19	GOM_NL__2PRFIN20110130_014130_000000393099_00060_46626_3712.N1	30-JAN-2011 01:41:30	Bright	38.500	130	23Bet Dra	2.7990	5800.0	77	46626	No
20	GOM_NL__2PRFIN20110130_014805_000000413099_00060_46626_3713.N1	30-JAN-2011 01:48:05	Bright	40.500	133	40Zet Her	2.8070	6000.0	81	46626	No
21	GOM_NL__2PRFIN20110130_015137_000000583099_00060_46626_3714.N1	30-JAN-2011 01:51:37	Bright	57.500	127	27Bet Her	2.7810	4700.0	115	46626	No
22	GOM_NL__2PRFIN20110130_015311_000000373099_00060_46626_3715.N1	30-JAN-2011 01:53:11	Bright	36.500	59	55Alp Oph	2.0800	8900.0	73	46626	No
23	GOM_NL__2PRFIN20110130_020141_000000433099_00060_46626_3716.N1	30-JAN-2011 02:01:41	Twilight	42.500	86	35Eta Oph	2.4300	10200.	85	46626	No
24	GOM_NL__2PRFIN20110130_020554_000000593099_00060_46626_3717.N1	30-JAN-2011 02:05:54	Dark	59.000	16	21Alp Sco	1.0200	3000.0	118	46626	No
25	GOM_NL__2PRFIN20110130_021137_000000443099_00060_46626_3718.N1	30-JAN-2011 02:11:37	Dark	43.500	131	Gam Lup	2.8000	26000.	87	46626	No
26	GOM_NL__2PRFIN20110130_021348_000000443099_00060_46626_3719.N1	30-JAN-2011 02:13:48	Dark	43.500	109	Bet Lup	2.6770	26000.	87	46626	No
27	GOM_NL__2PRFIN20110130_021804_000000443099_00061_46627_3712.N1	30-JAN-2011 02:18:04	Dark	44.000	10	Bet Cen	0.61000	28000.	88	46627	No
28	GOM_NL__2PRFIN20110130_022128_000000423099_00061_46627_3713.N1	30-JAN-2011 02:21:28	Dark	41.500	12	Alp1Cru	0.77500	30000.	83	46627	No
29	GOM_NL__2PRFIN20110130_022709_000000503099_00061_46627_3714.N1	30-JAN-2011 02:27:09	Dark	49.500	113	Mu Vel	2.6920	5000.0	99	46627	No
30	GOM_NL__2PRFIN20110130_023139_000000473099_00061_46627_3715.N1	30-JAN-2011 02:31:39	Dark	47.000	65	Lam Vel	2.2040	4400.0	94	46627	No
31	GOM_NL__2PRFIN20110130_023810_000000453099_00061_46627_3716.N1	30-JAN-2011 02:38:10	Straylight	44.500	132	15Rho Pup	2.8030	6900.0	89	46627	No
32	GOM_NL__2PRFIN20110130_024657_000000473099_00061_46627_3717.N1	30-JAN-2011 02:46:57	Twilight	46.500	8	10Alp CMi	0.40000	6500.0	93	46627	No
33	GOM_NL__2PRFIN20110130_025341_000000423099_00061_46627_3718.N1	30-JAN-2011 02:53:41	Bright	42.000	17	78Bet Gem	1.1610	4500.0	84	46627	No
34	GOM_NL__2PRFIN20110130_030840_000000473099_00061_46627_3719.N1	30-JAN-2011 03:08:40	Bright	47.000	36	50Alp UMa	1.8000	6300.0	94	46627	No
35	GOM_NL__2PRFIN20110130_031357_000000413099_00061_46627_3720.N1	30-JAN-2011 03:13:57	Bright	41.000	60	7Bet UMi	2.0810	3950.0	82	46627	No
36	GOM_NL__2PRFIN20110130_031837_000000403099_00061_46627_3721.N1	30-JAN-2011 03:18:37	Bright	40.000	119	14Eta Dra	2.7270	4700.0	80	46627	No
37	GOM_NL__2PRFIN20110130_032144_000000383099_00061_46627_3722.N1	30-JAN-2011 03:21:44	Bright	38.000	130	23Bet Dra	2.7990	5800.0	76	46627	No
38	GOM_NL__2PRFIN20110130_032819_000000423099_00061_46627_3723.N1	30-JAN-2011 03:28:19	Bright	41.500	133	40Zet Her	2.8070	6000.0	83	46627	No
39	GOM_NL__2PRFIN20110130_033151_000000653099_00061_46627_3724.N1	30-JAN-2011 03:31:51	Bright	65.000	127	27Bet Her	2.7810	4700.0	130	46627	No
40	GOM_NL__2PRFIN20110130_033325_000000363099_00061_46627_3725.N1	30-JAN-2011 03:33:25	Bright	36.000	59	55Alp Oph	2.0800	8900.0	72	46627	No
41	GOM_NL__2PRFIN20110130_034156_000000423099_00061_46627_3726.N1	30-JAN-2011 03:41:56	Twilight	42.000	86	35Eta Oph	2.4300	10200.	84	46627	No
42	GOM_NL__2PRFIN20110130_034608_000000593099_00061_46627_3727.N1	30-JAN-2011 03:46:08	Dark	59.000	16	21Alp Sco	1.0200	3000.0	118	46627	No

3. Quality information per product

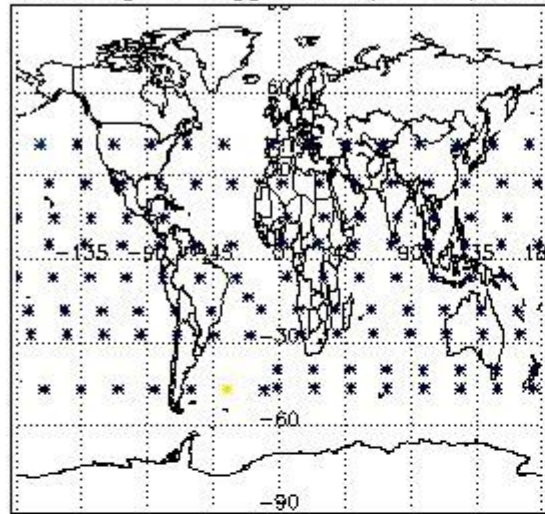
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

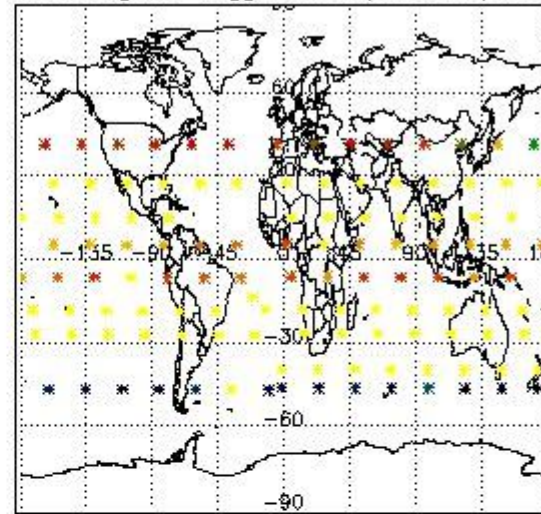


3.2 Plot quality information per product (world map)

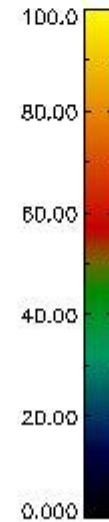
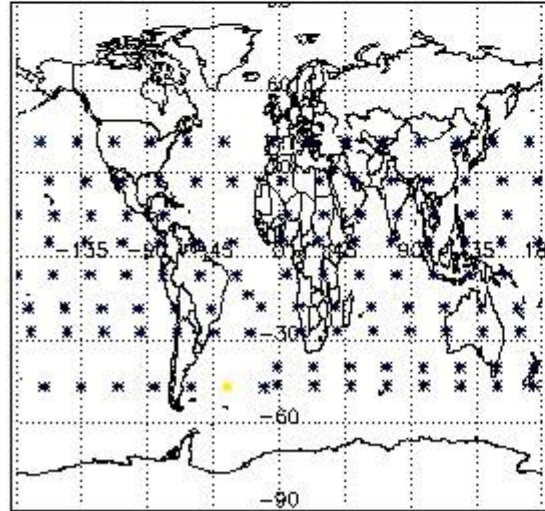
Percentage of flagged data per O3 profile



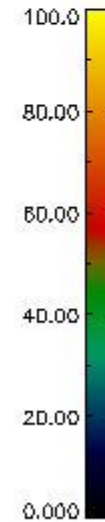
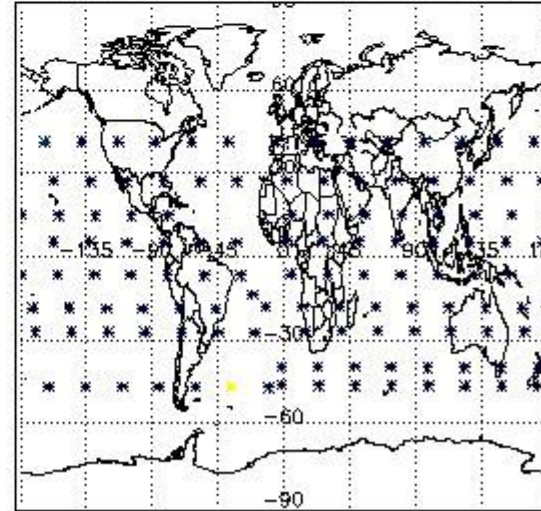
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

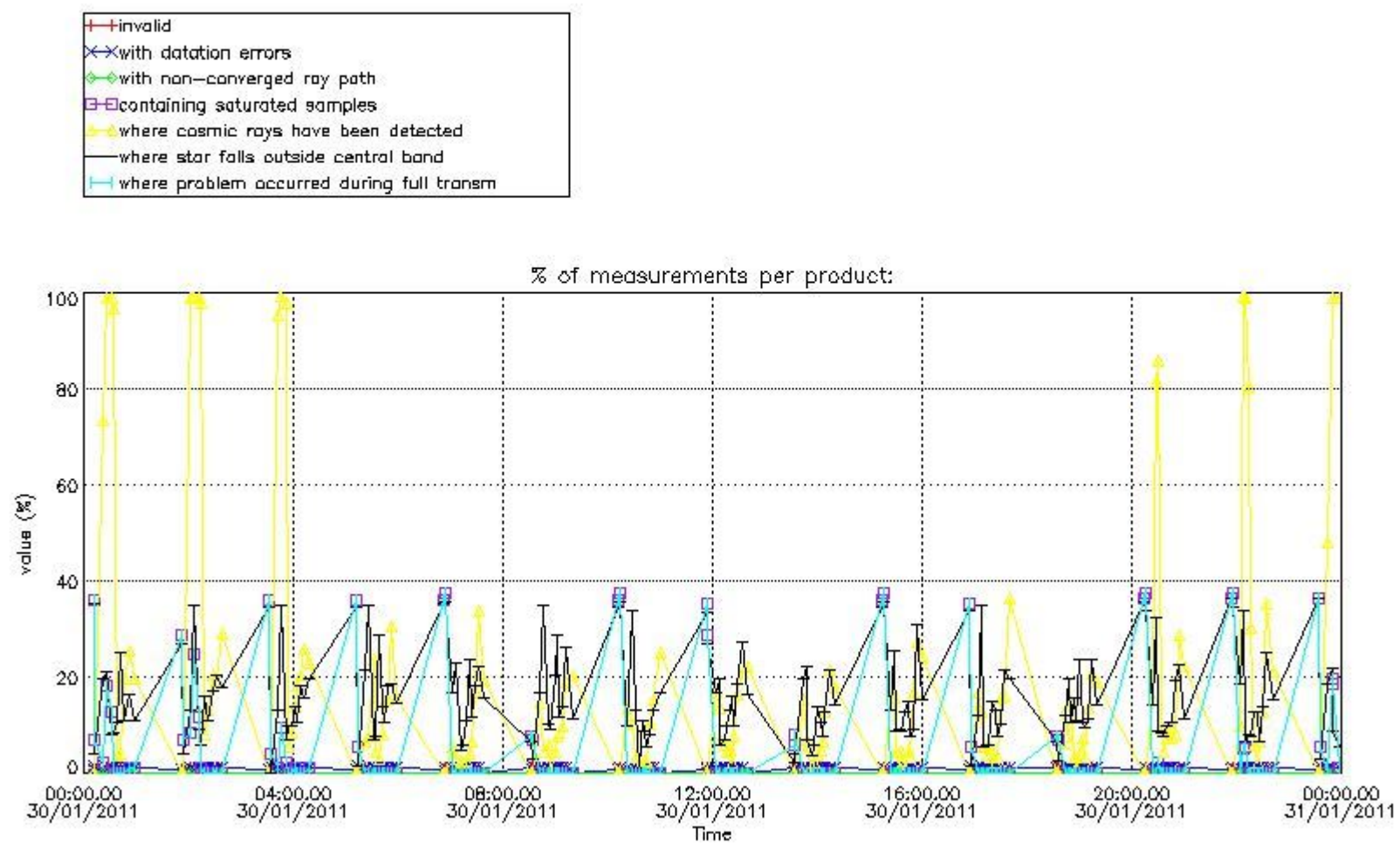


4. Level 1 quality information per product

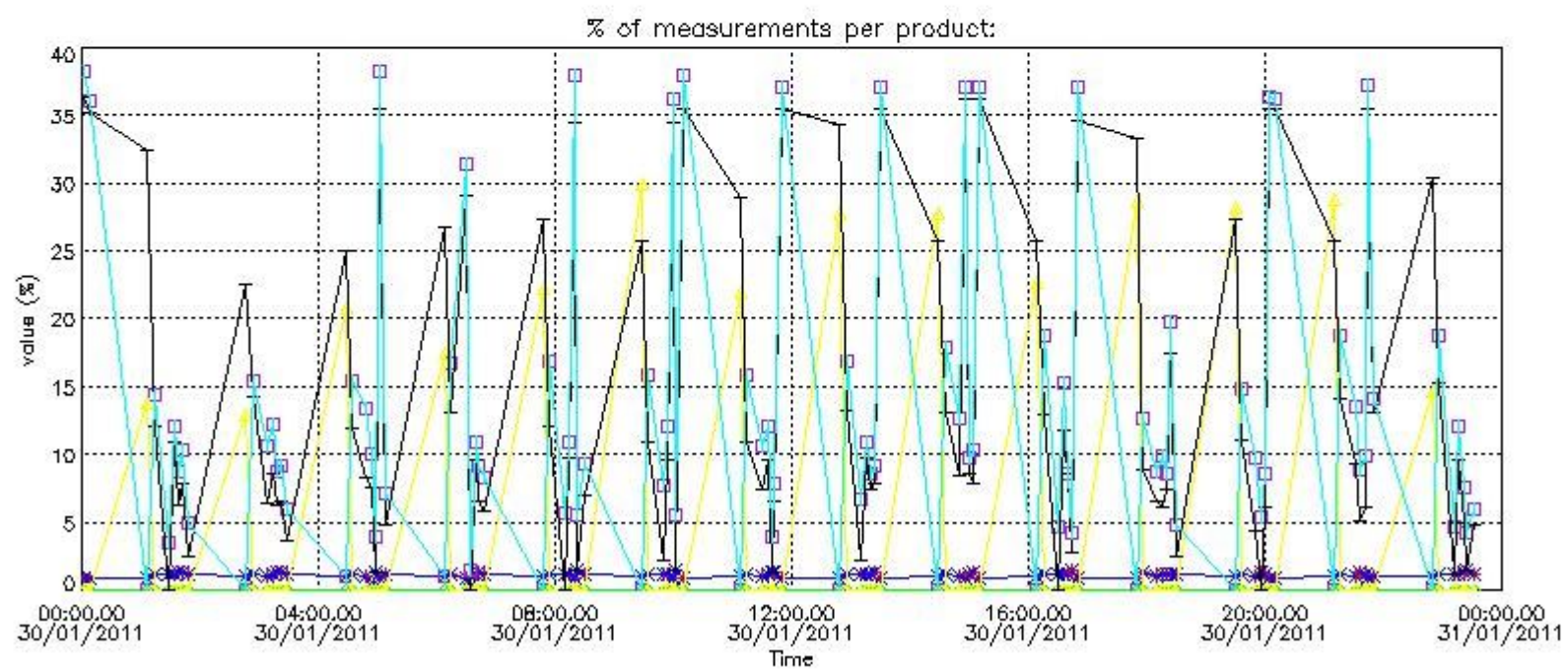
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

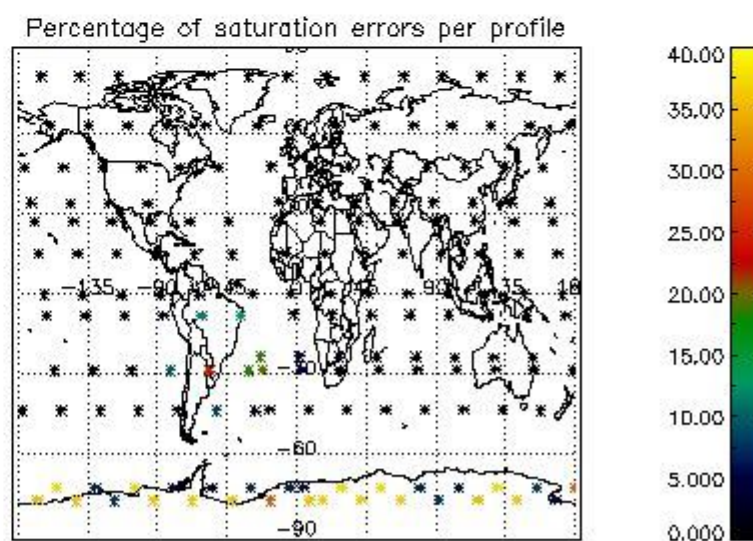
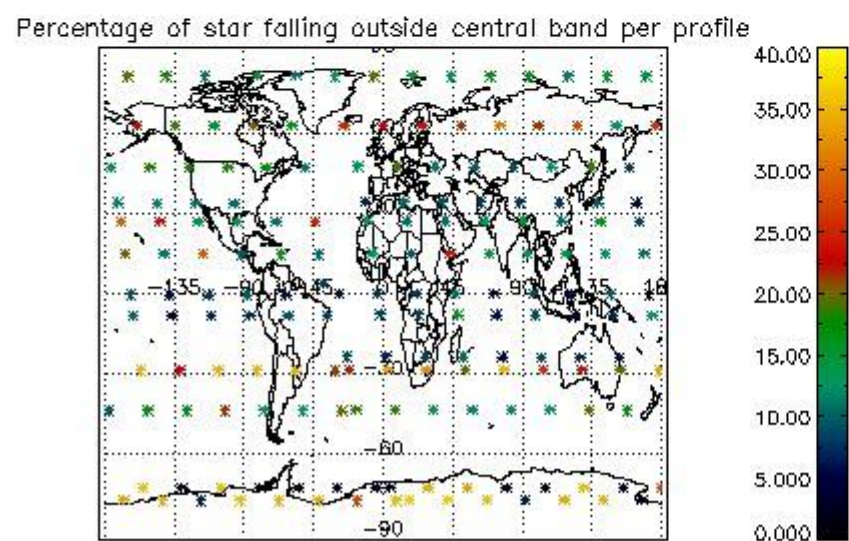
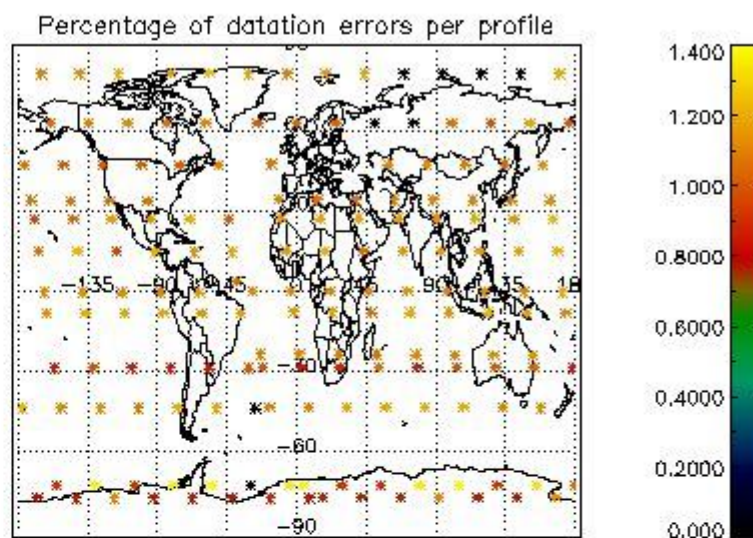
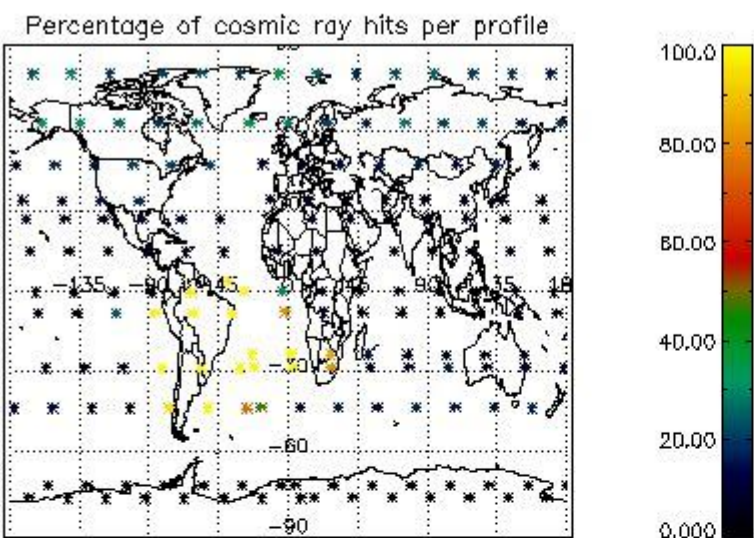


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

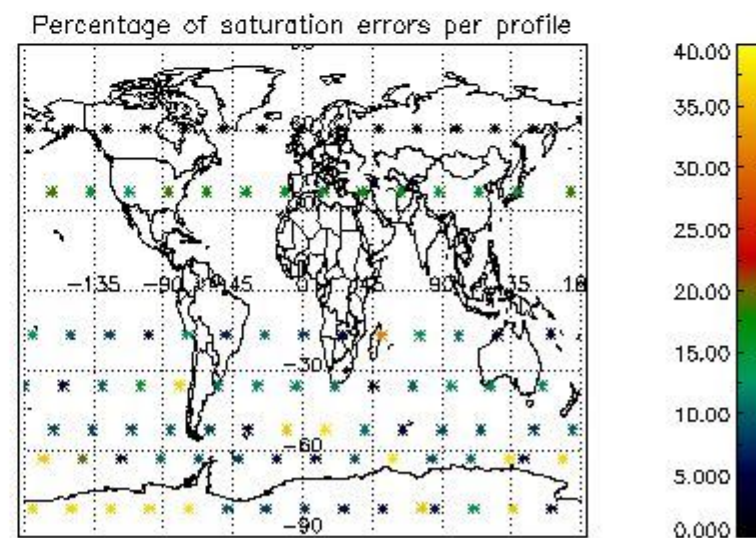
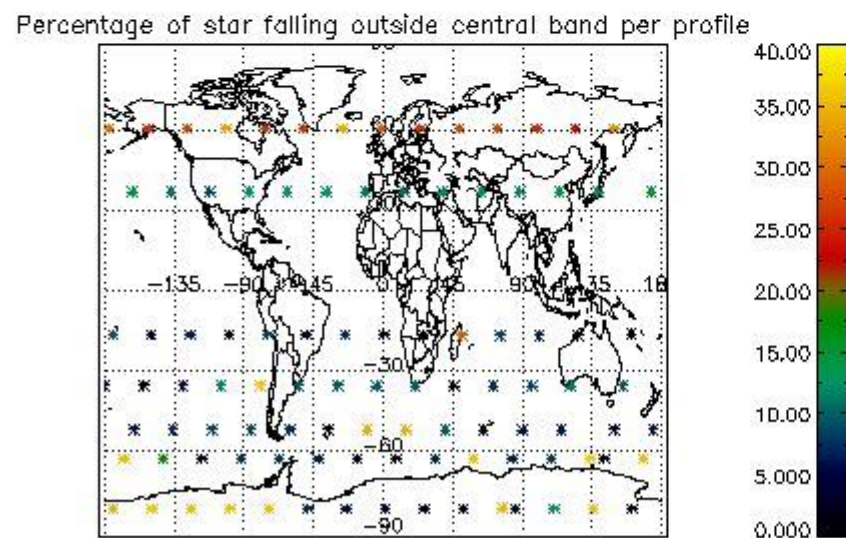
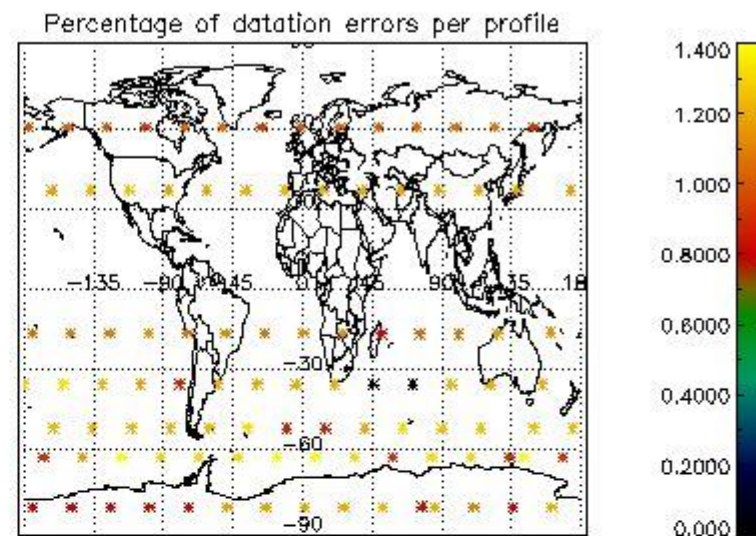
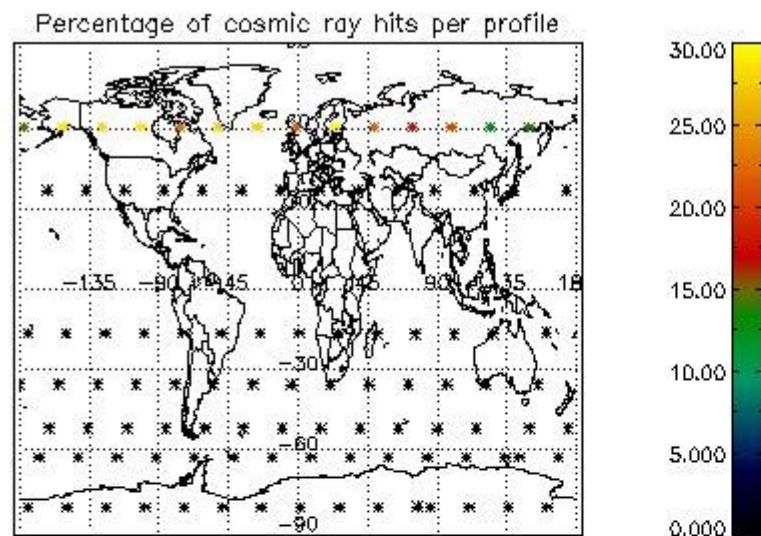


4.2 Plot quality information per product coming from level 1b processing (world map)

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

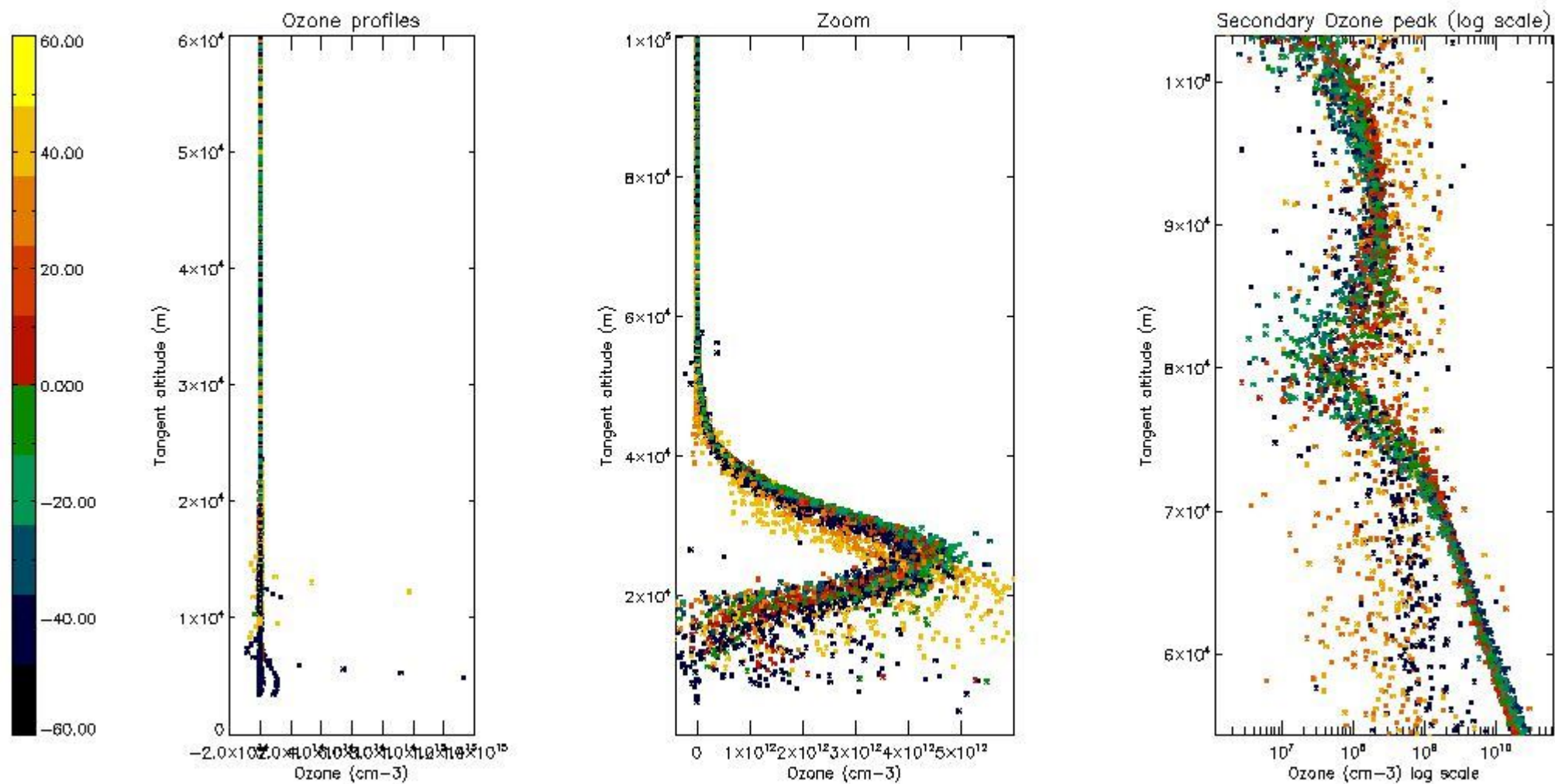
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	44
STD < 20	21

STD < 10	17
STD < 5	12

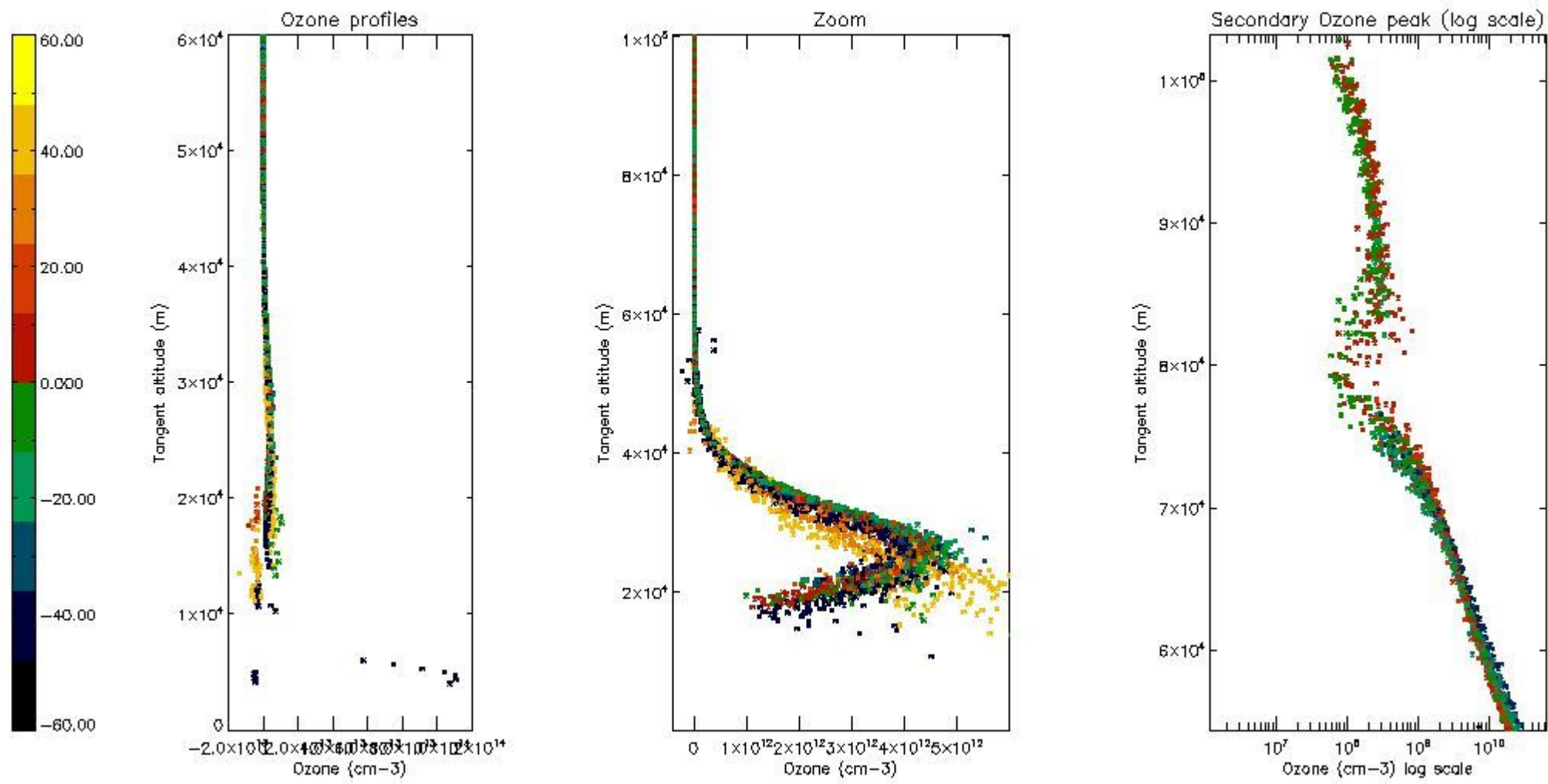
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



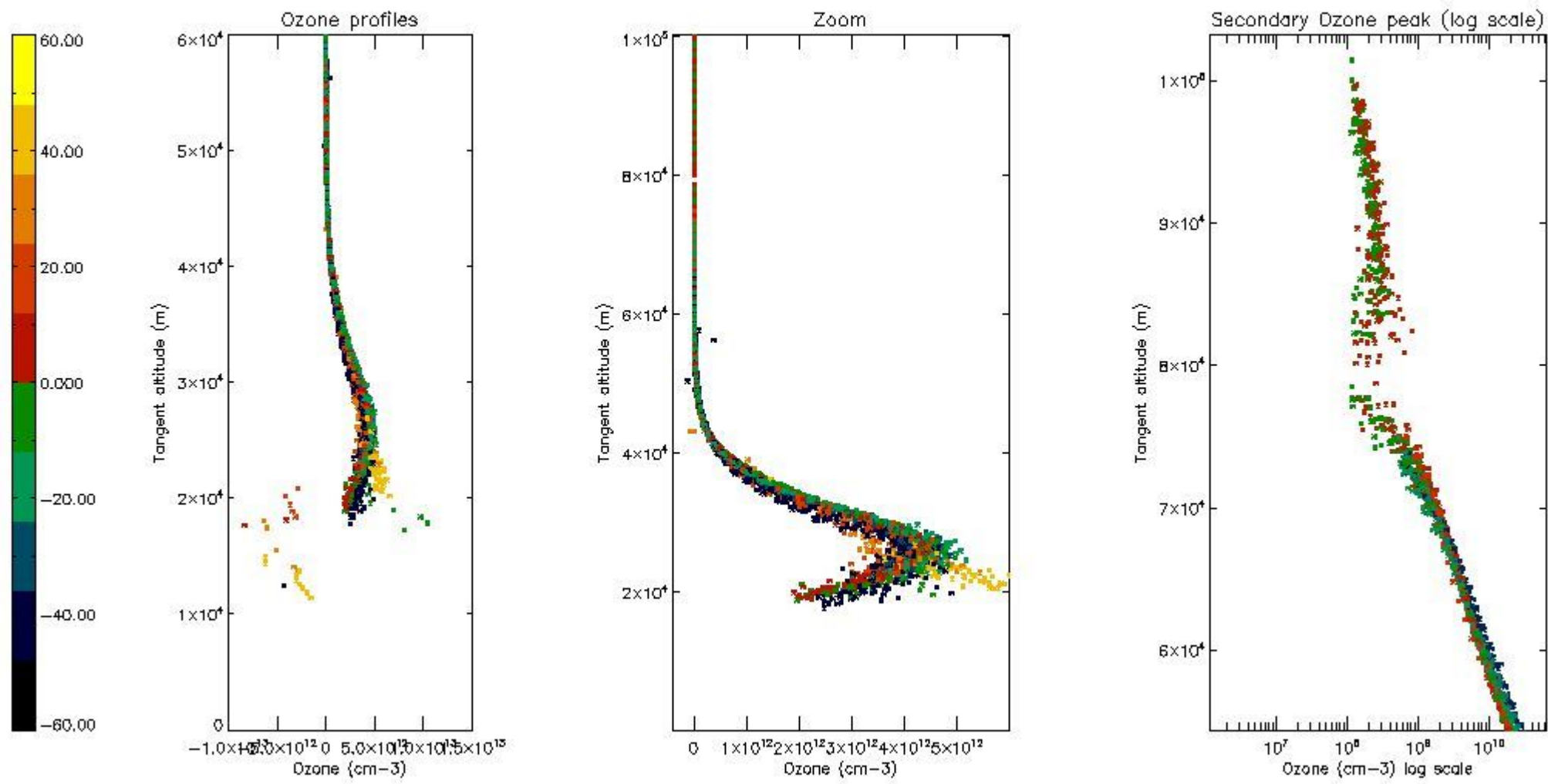
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



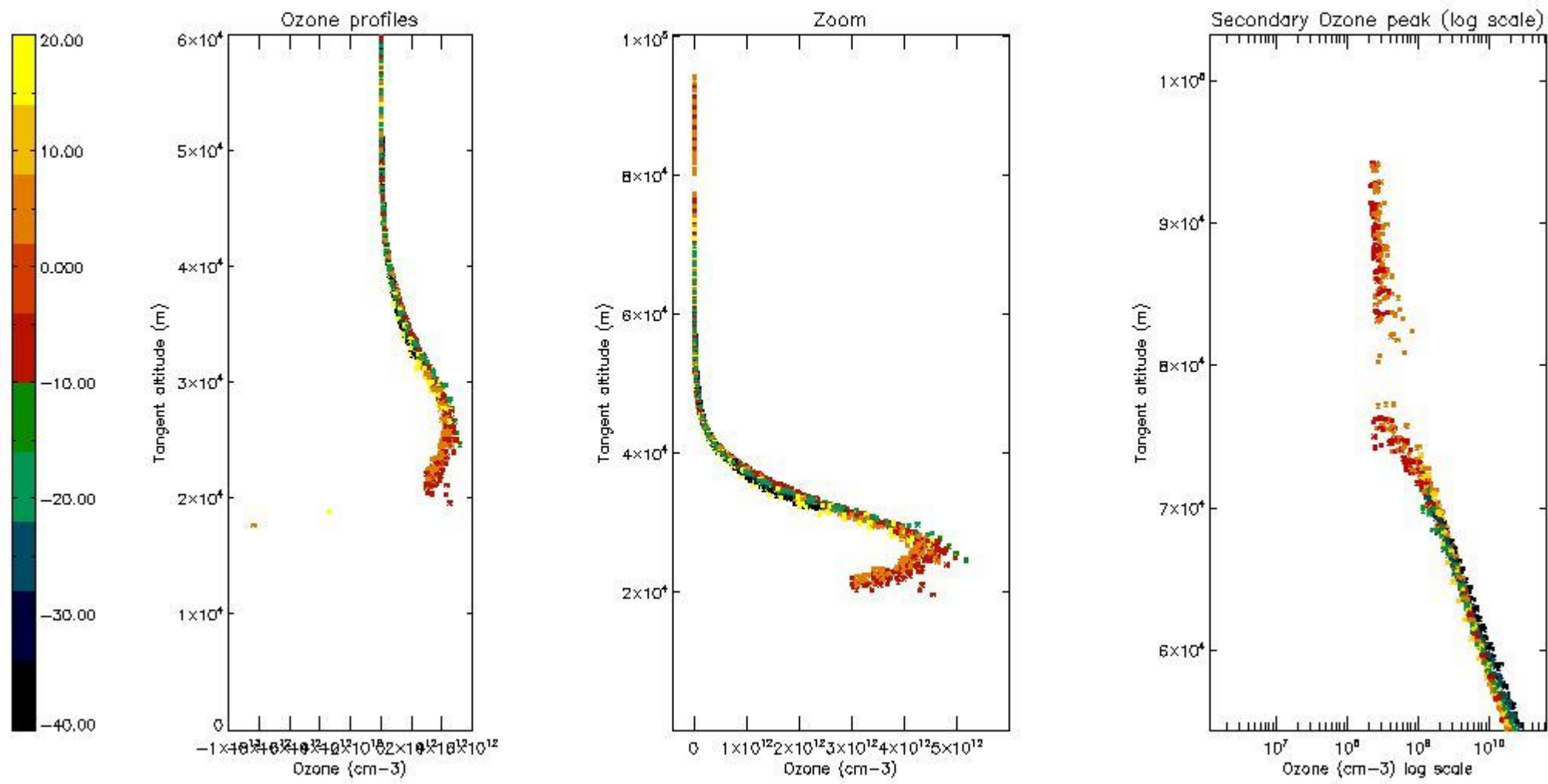
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



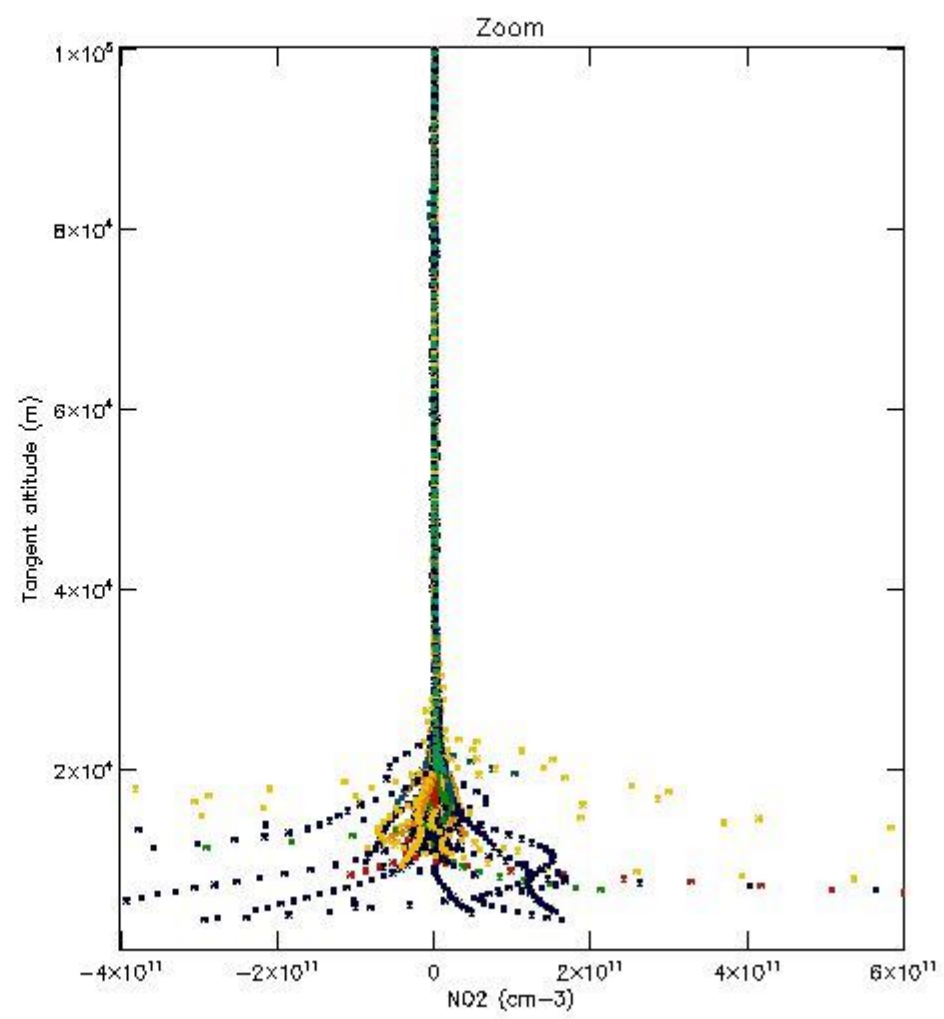
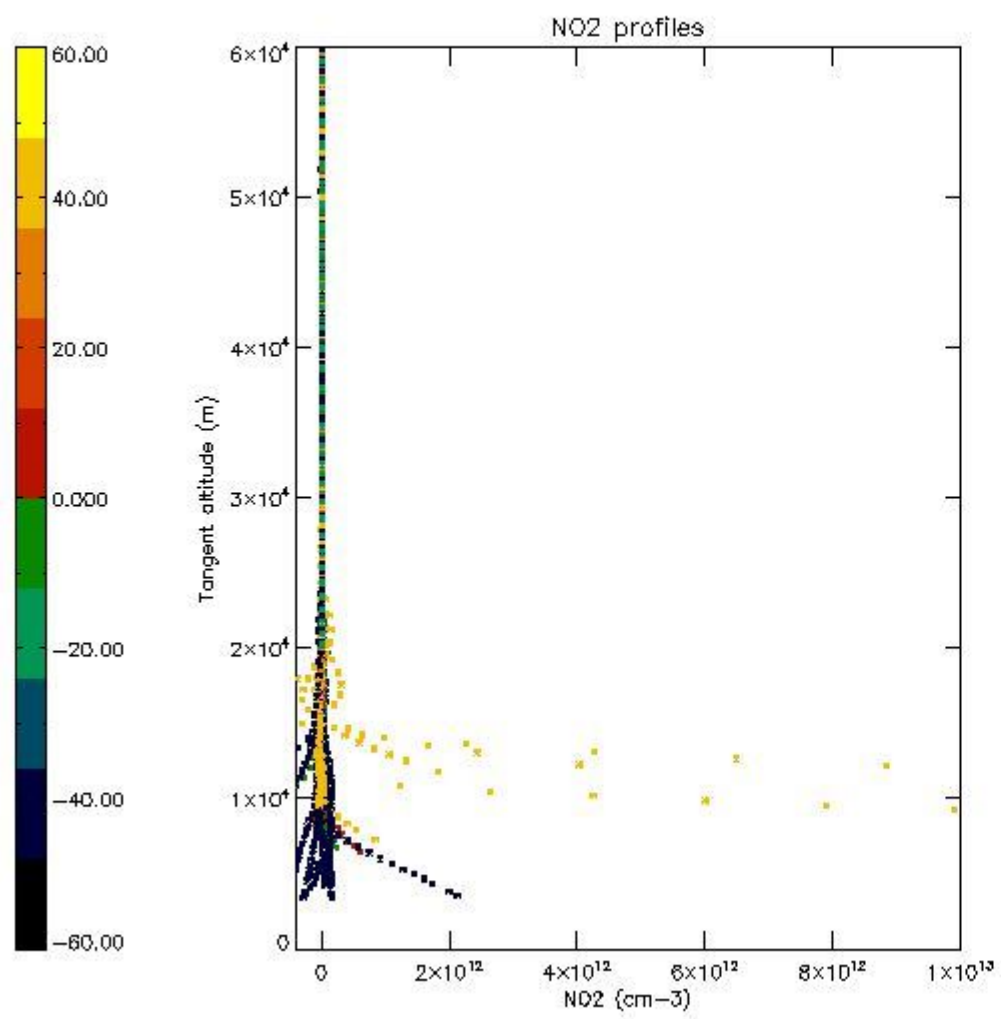
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



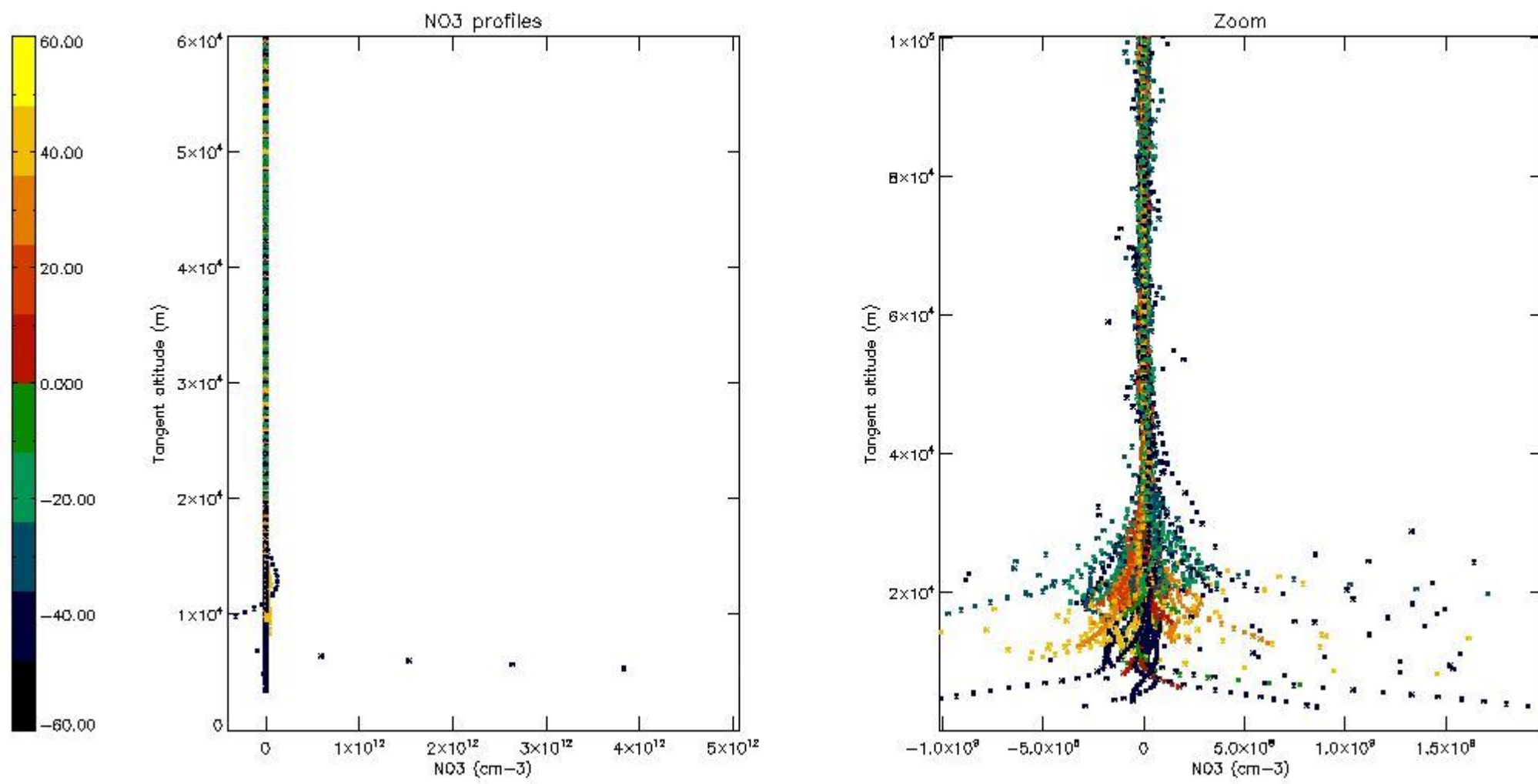
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



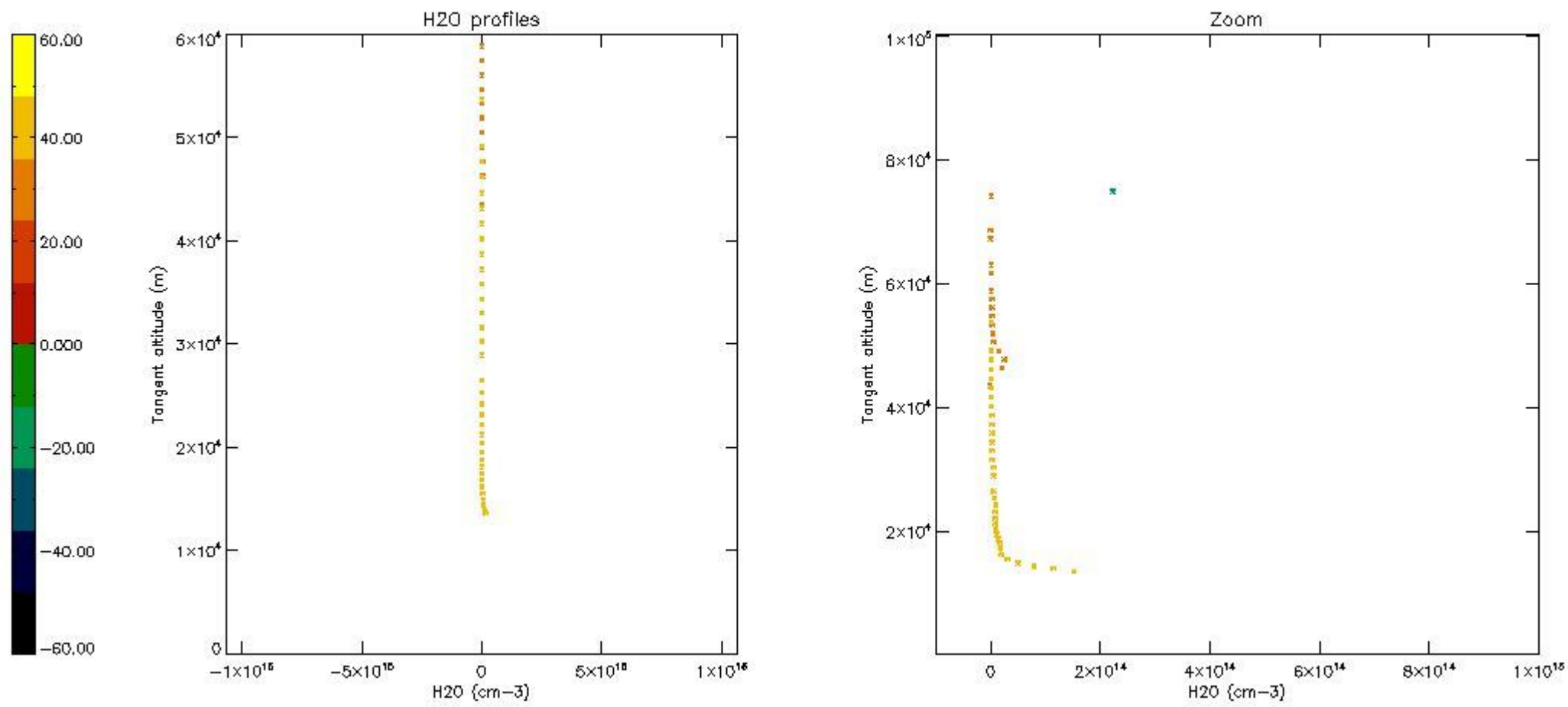
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

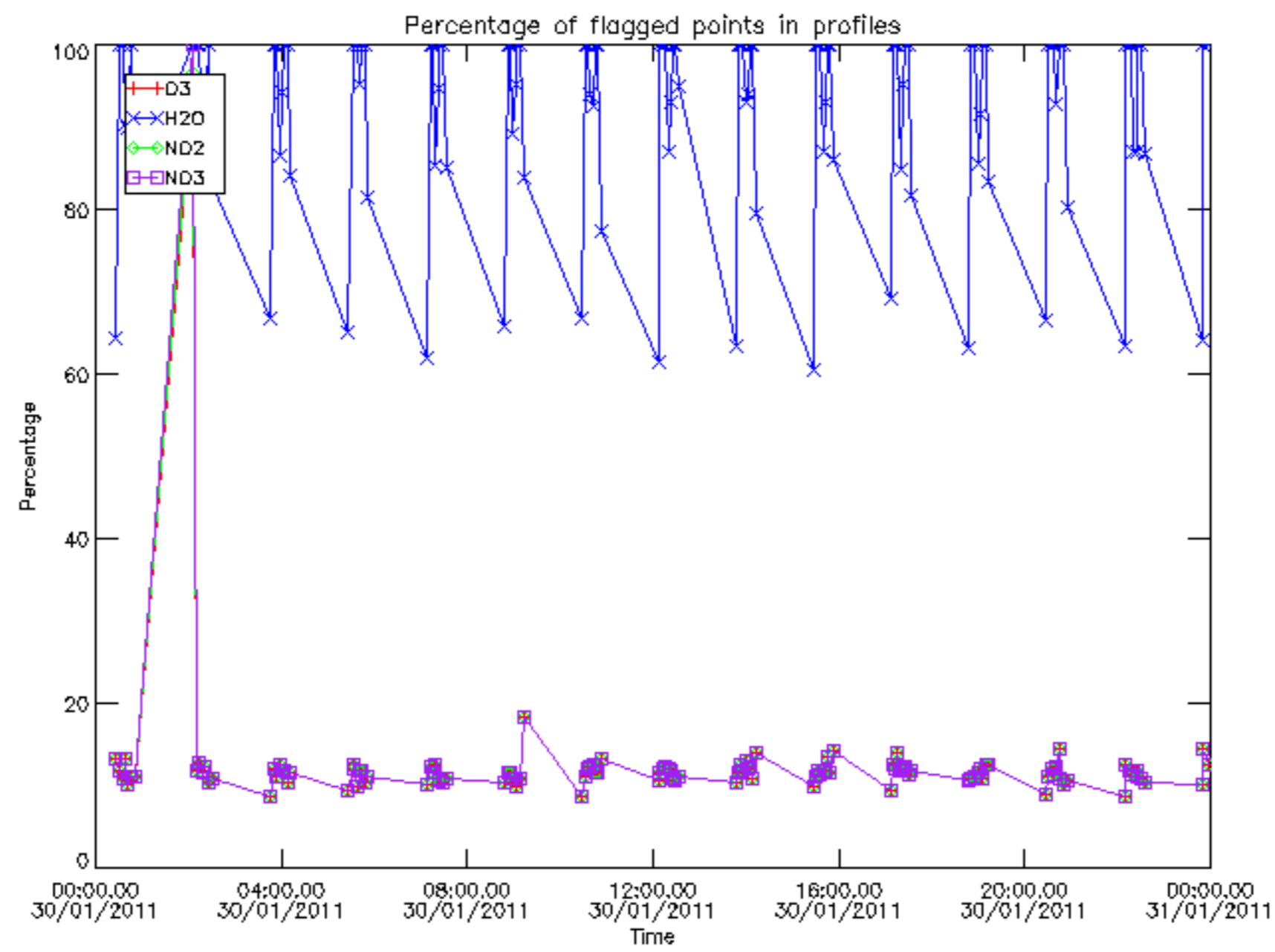
The colorbar represents the latitude.



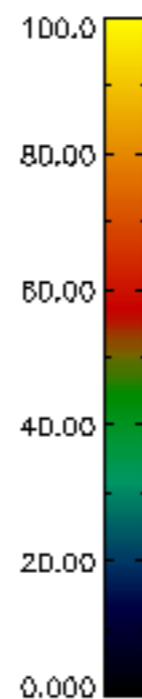
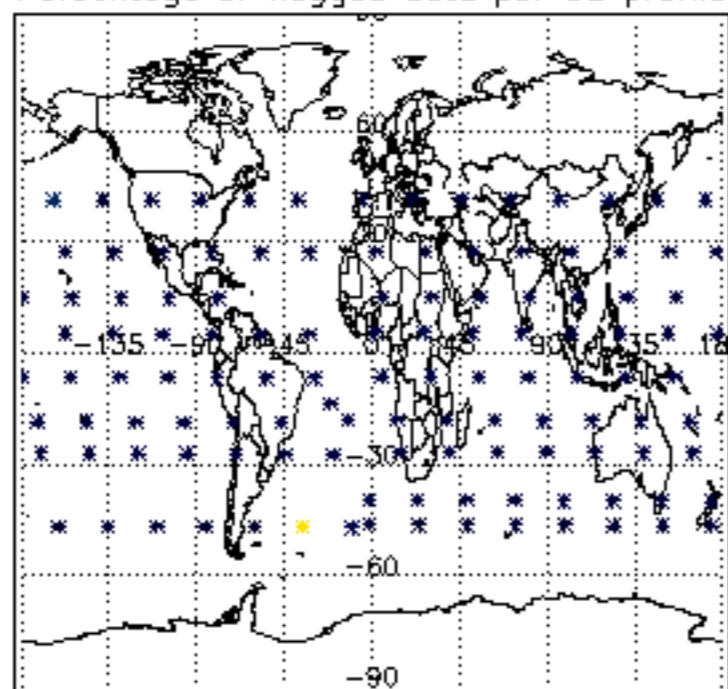
6. Auxiliary Data Files used for the production reported in section 2

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.

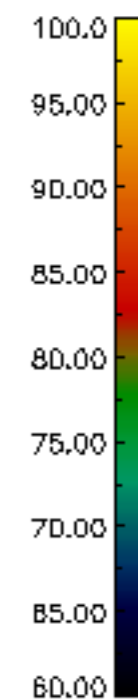
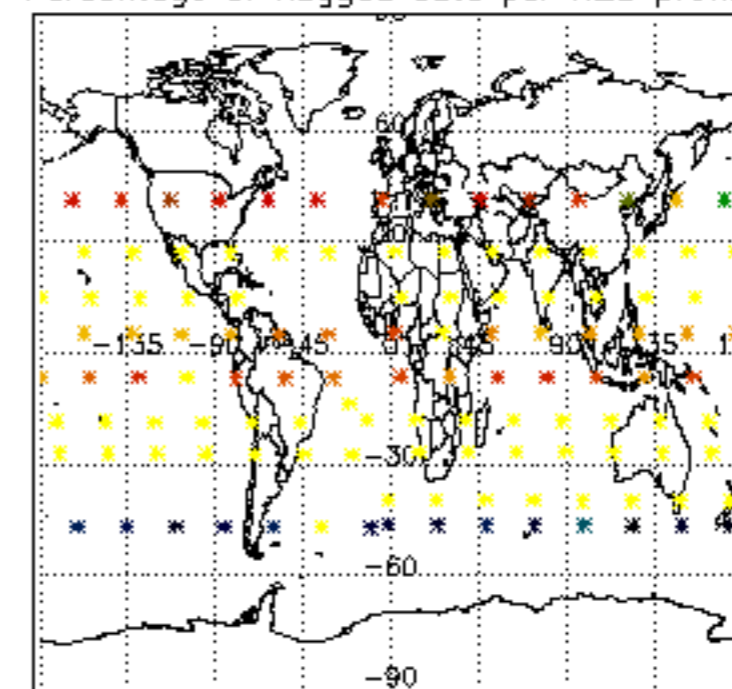
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	30-JAN-2011 00:01:16
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	30-JAN-2011 00:01:16
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	30-JAN-2011 00:01:16



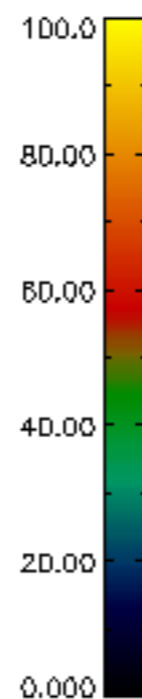
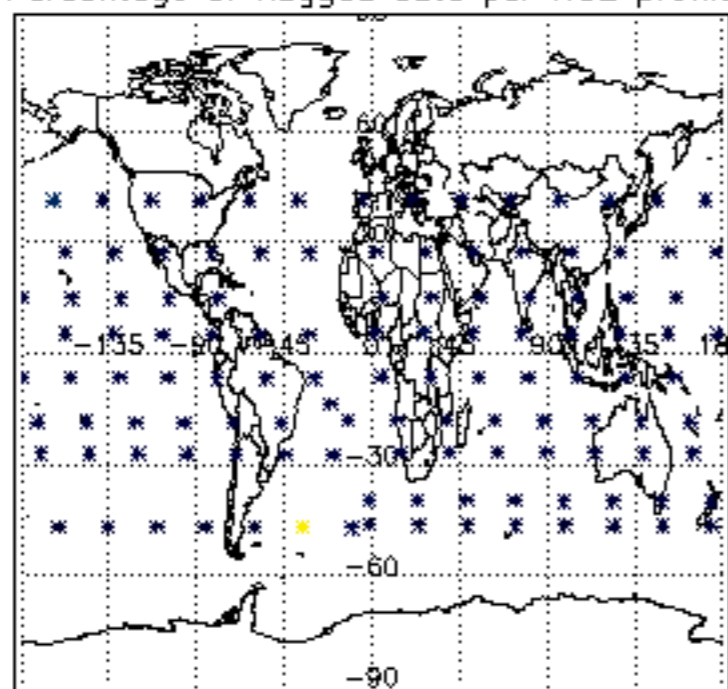
Percentage of flagged data per D3 profile



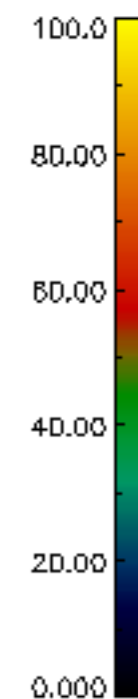
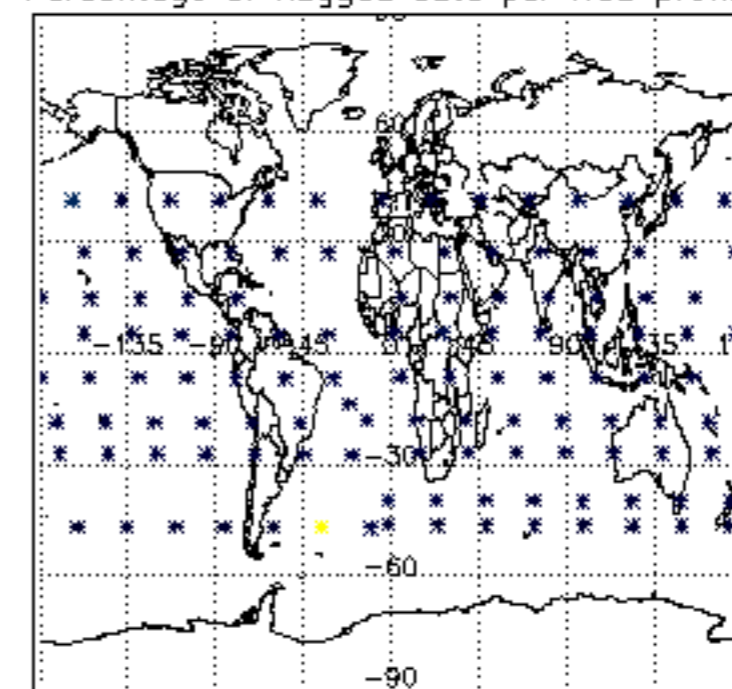
Percentage of flagged data per H2O profile

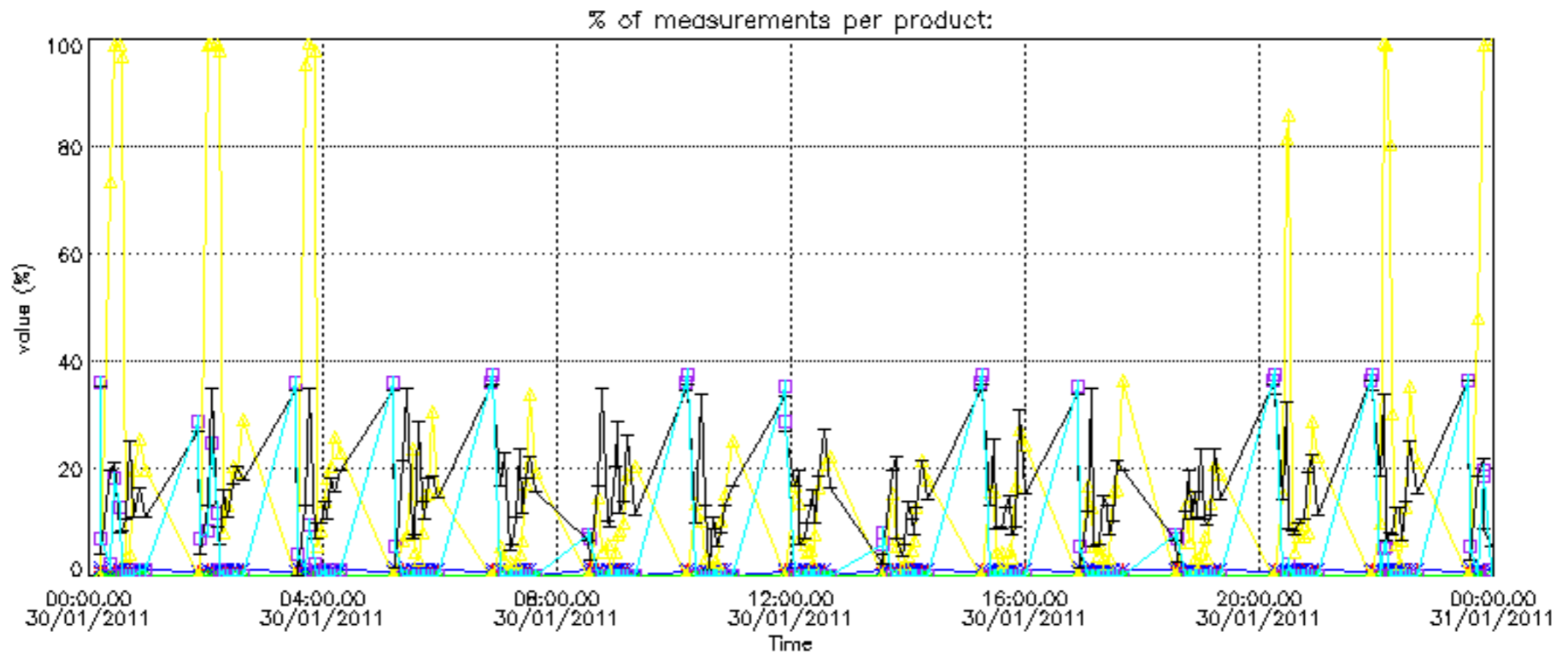


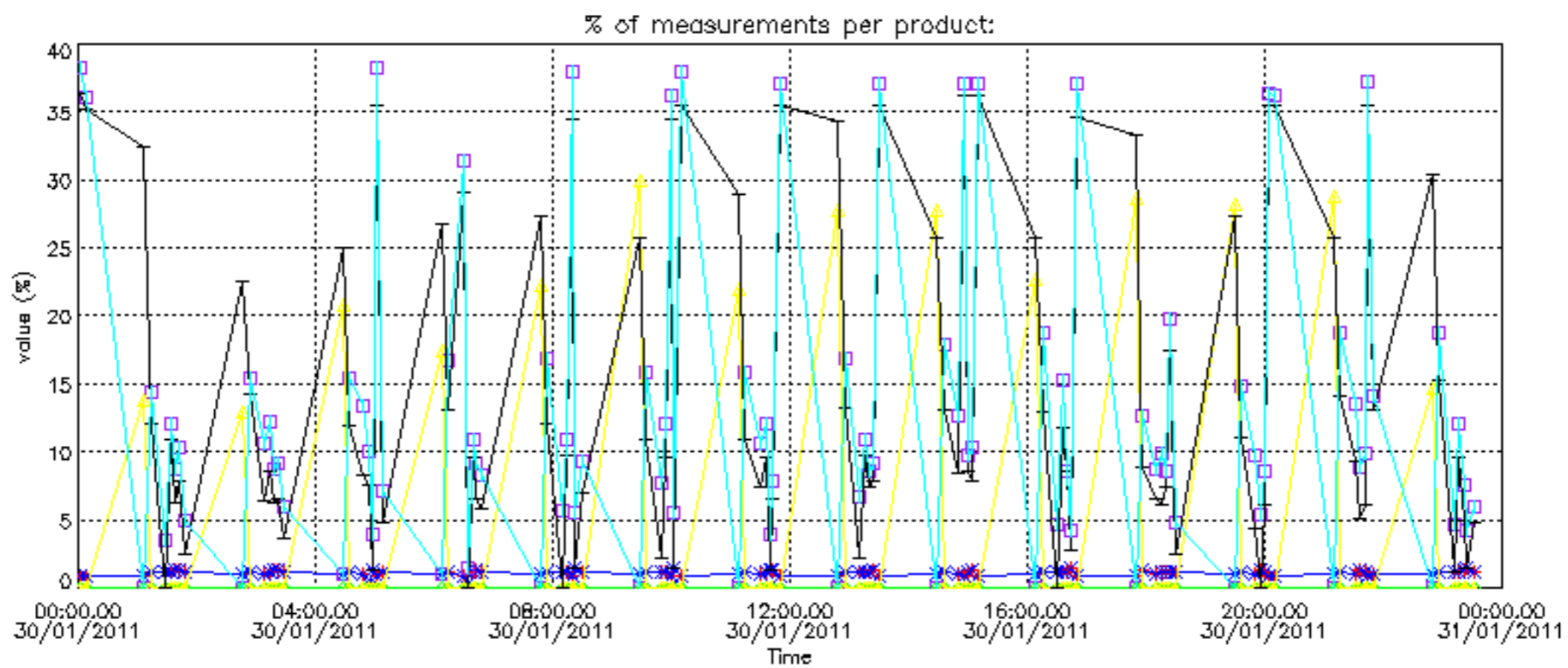
Percentage of flagged data per NO2 profile



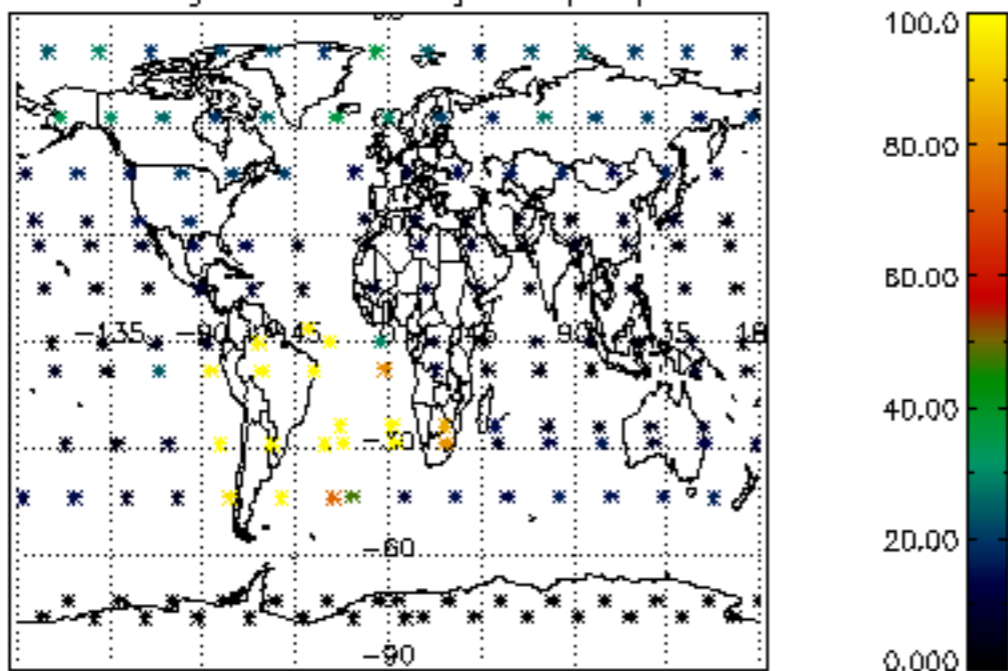
Percentage of flagged data per NO3 profile



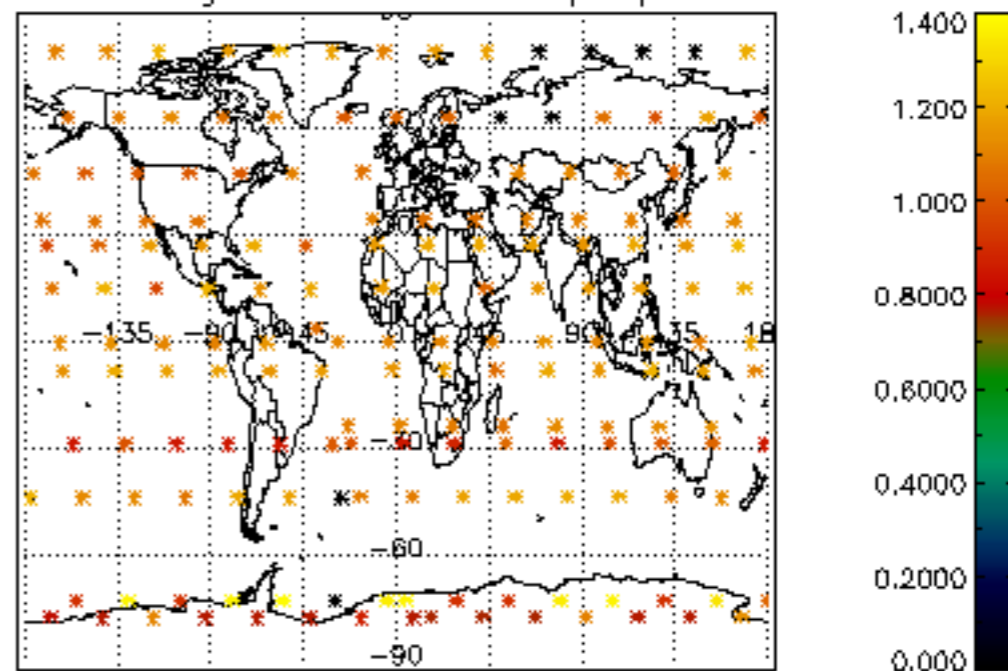




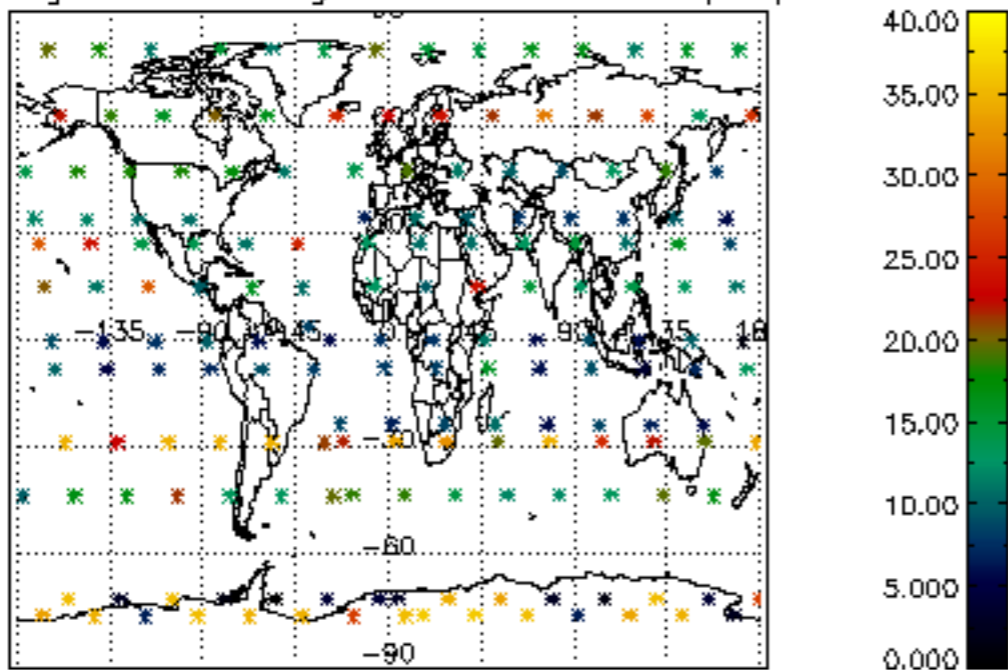
Percentage of cosmic ray hits per profile



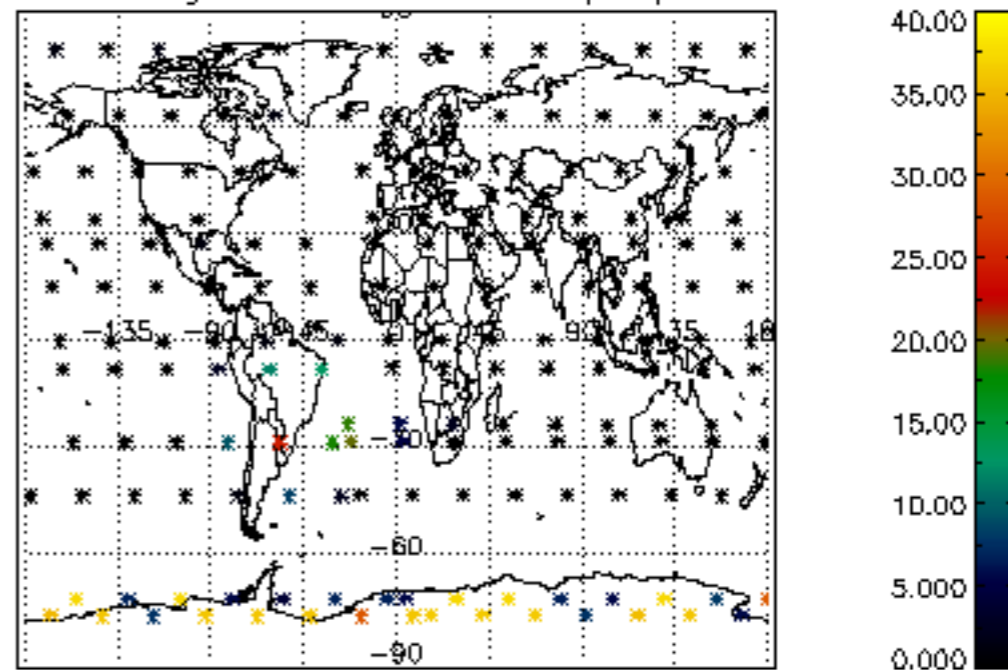
Percentage of datation errors per profile



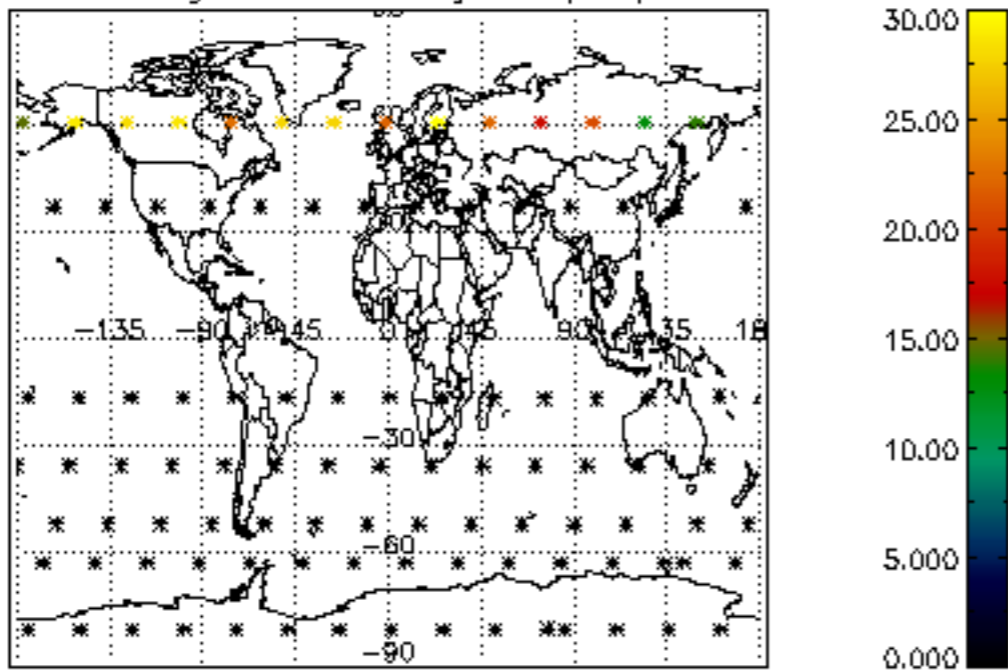
Percentage of star falling outside central band per profile



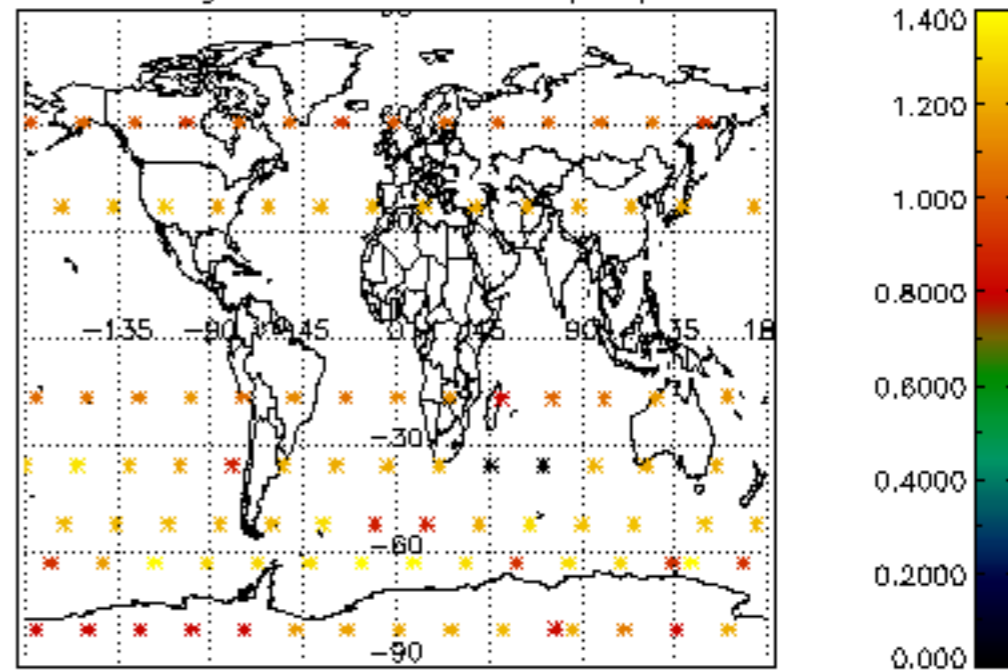
Percentage of saturation errors per profile



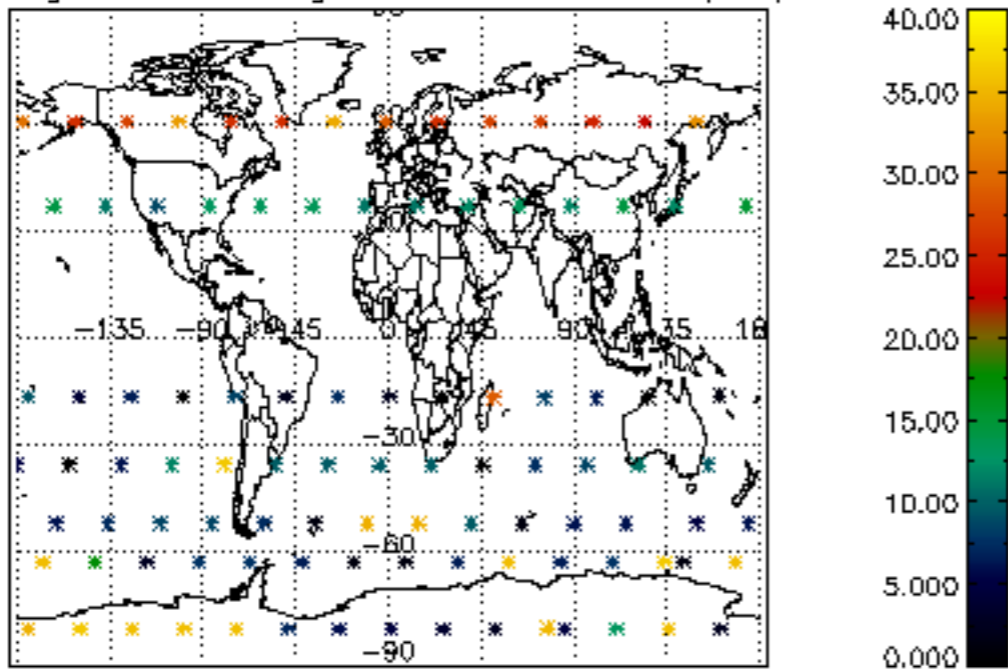
Percentage of cosmic ray hits per profile



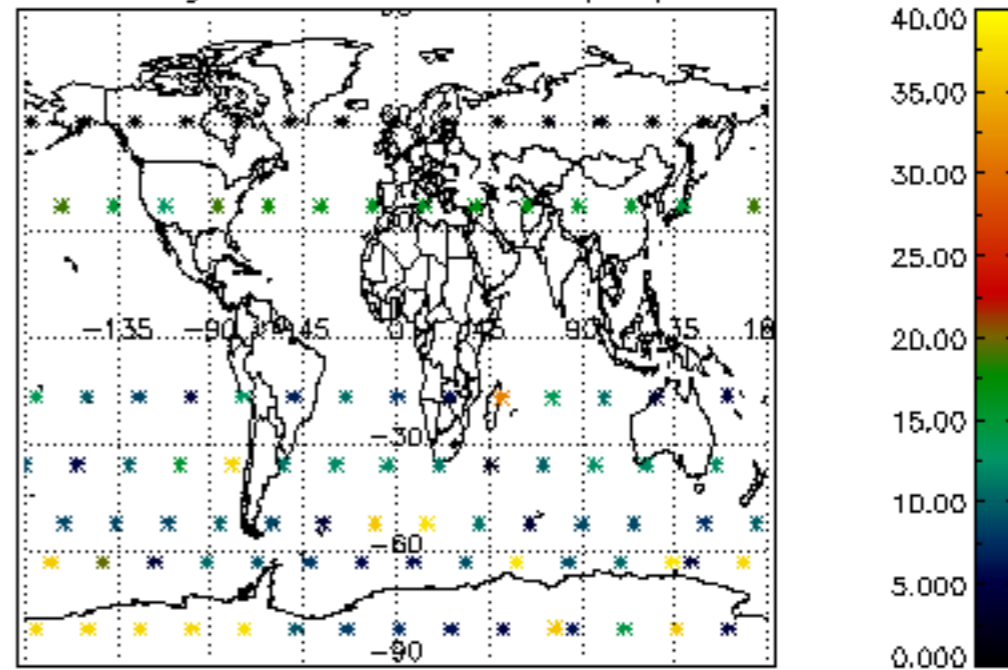
Percentage of datation errors per profile

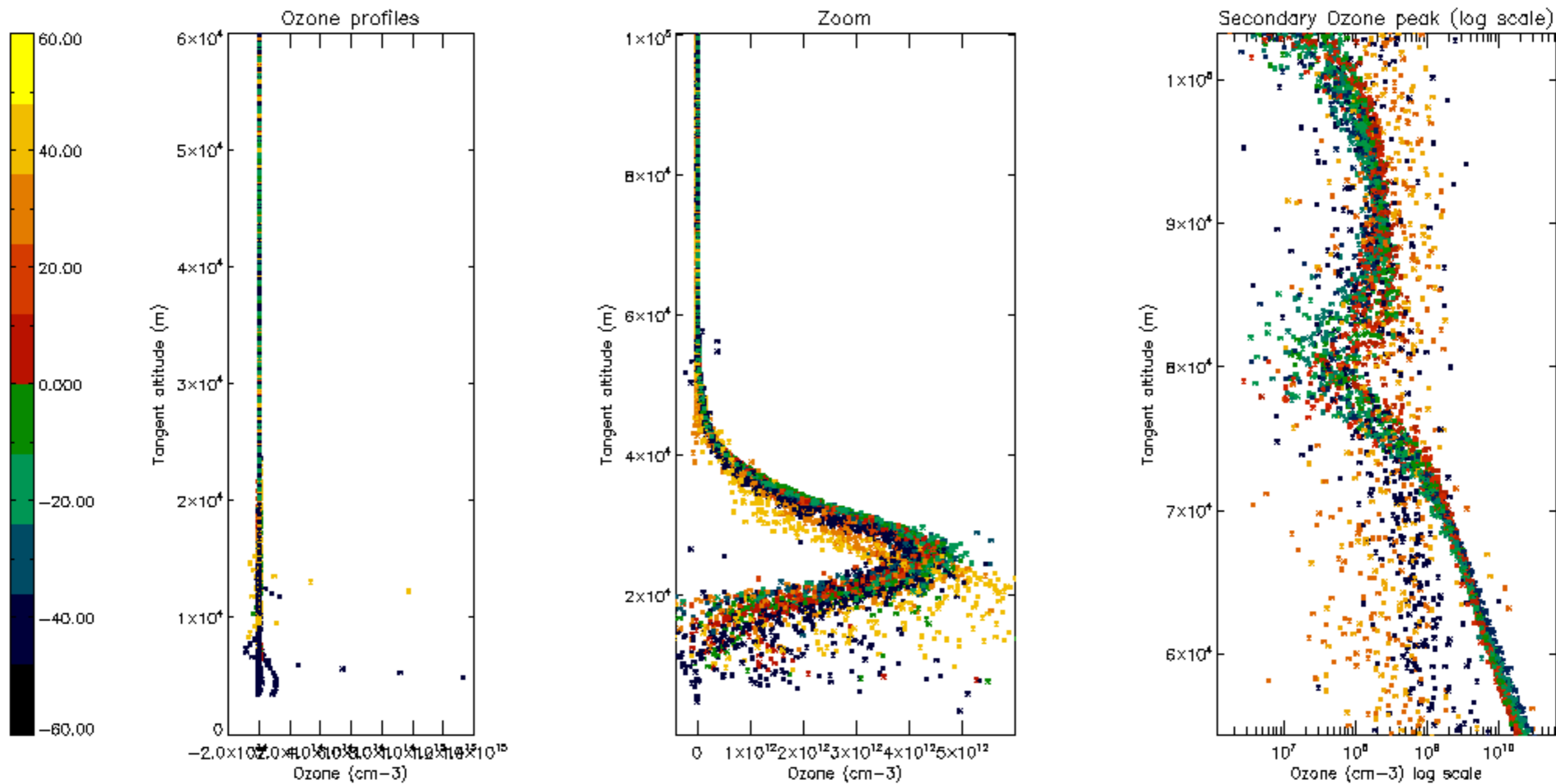


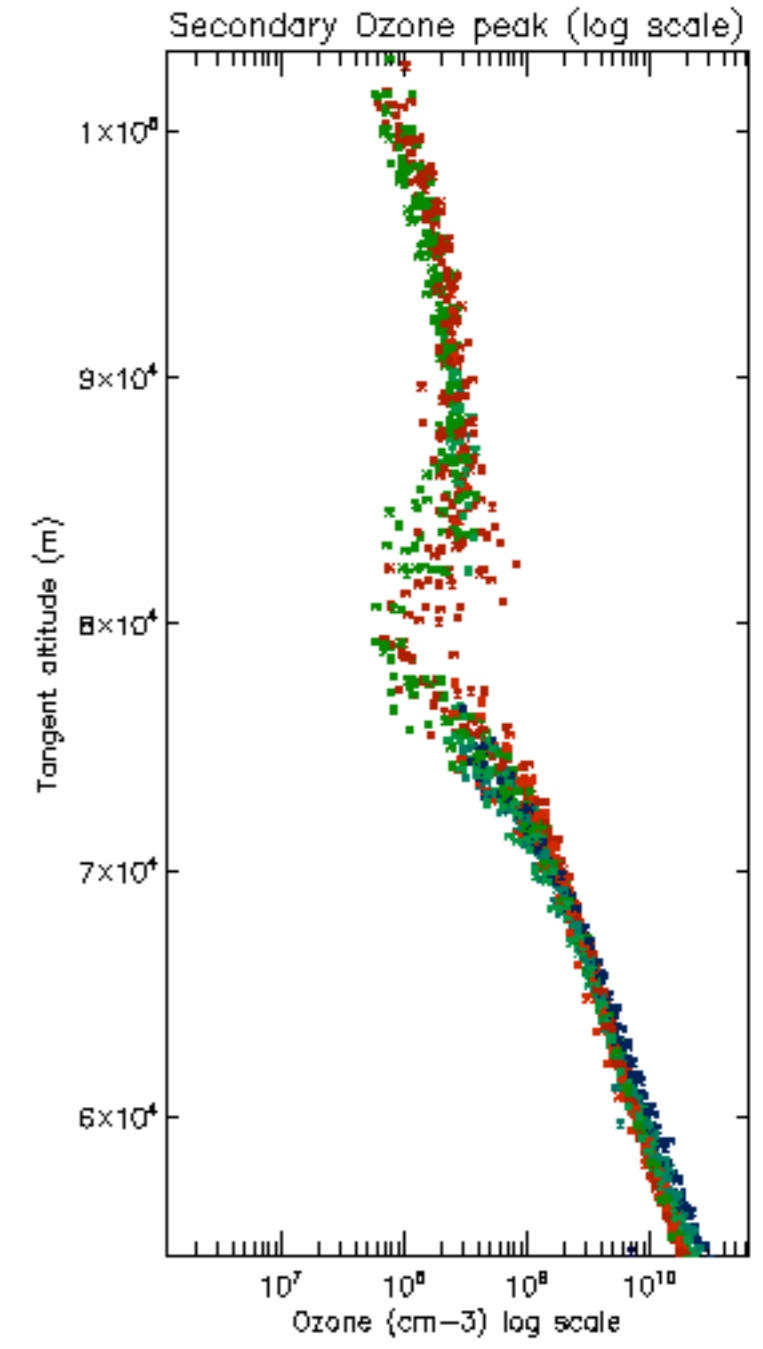
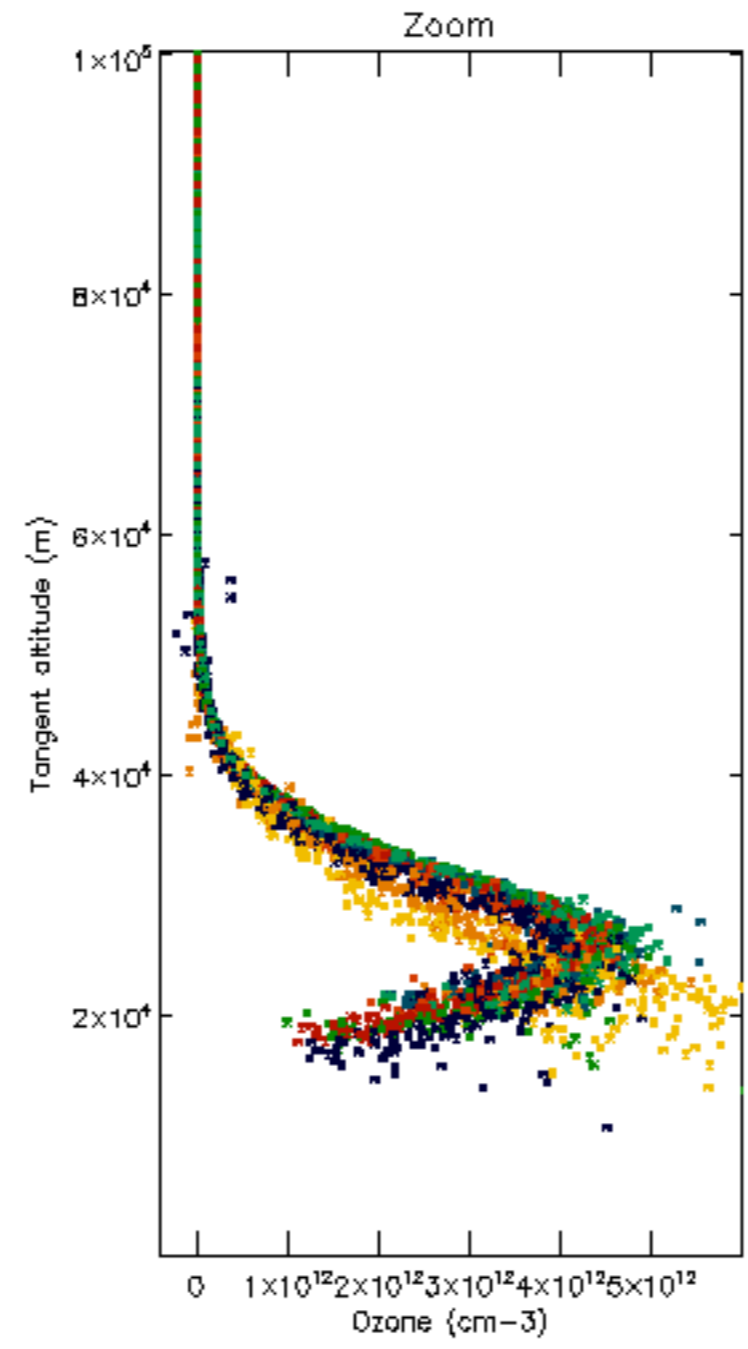
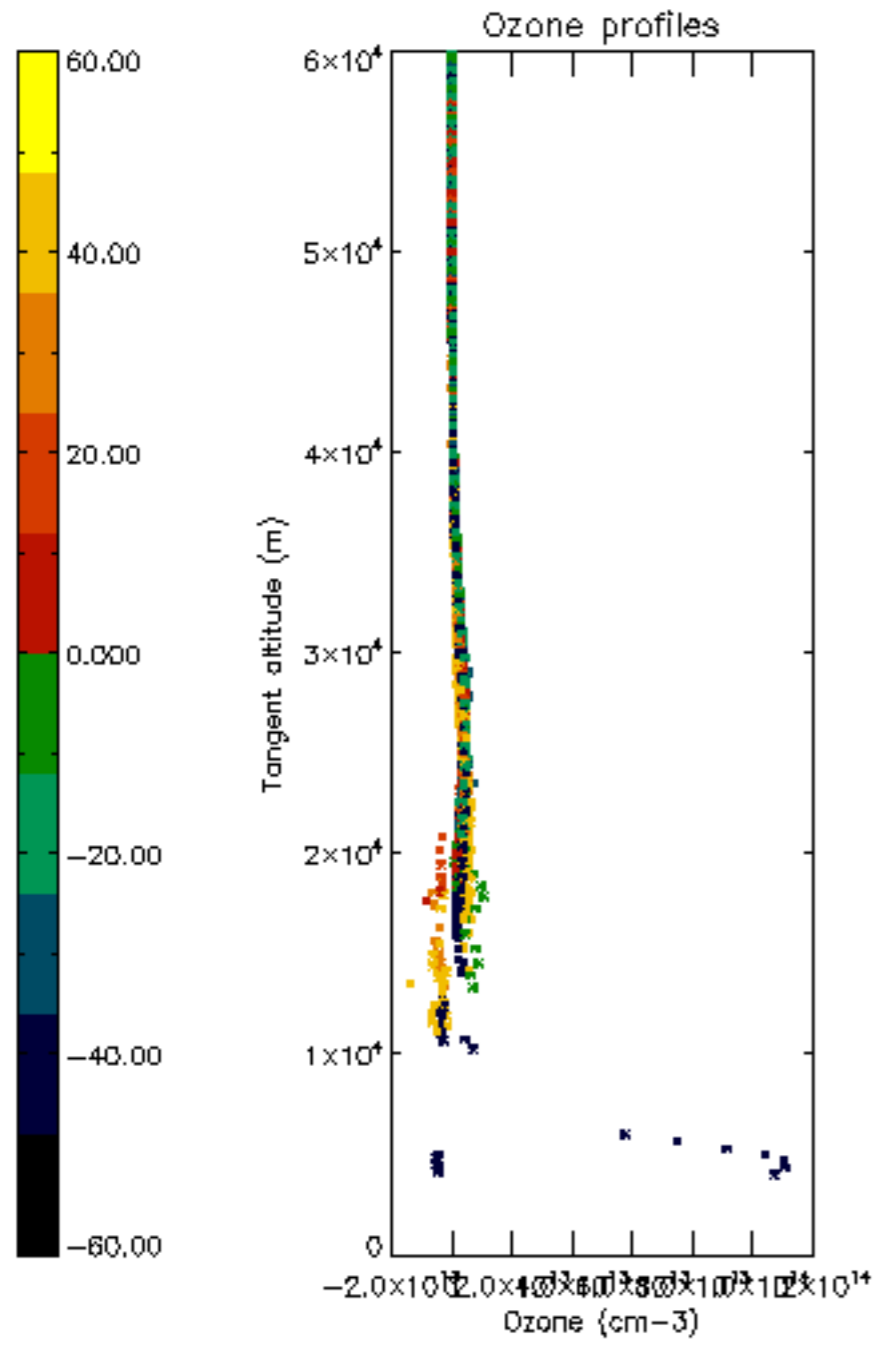
Percentage of star falling outside central band per profile

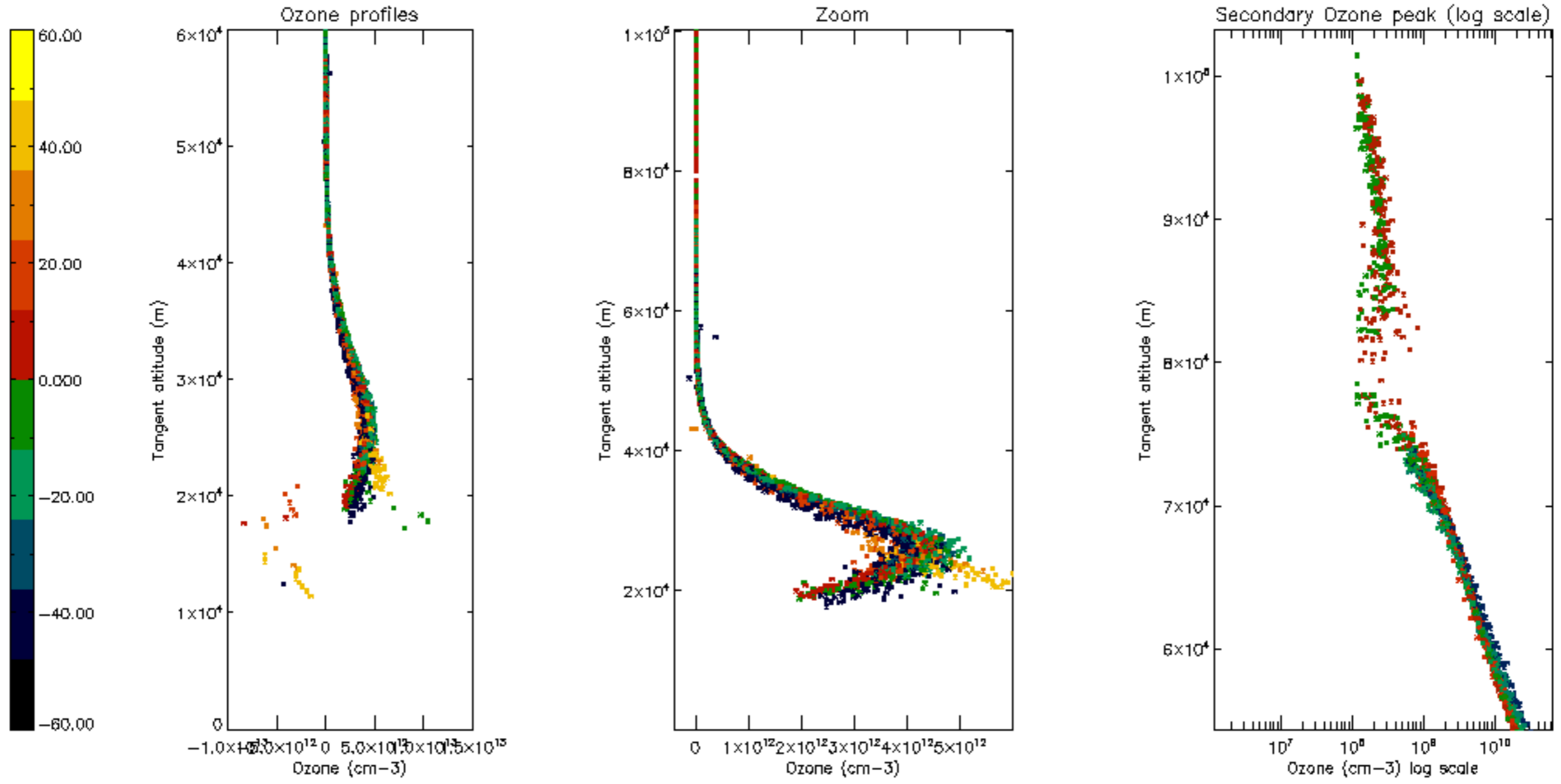


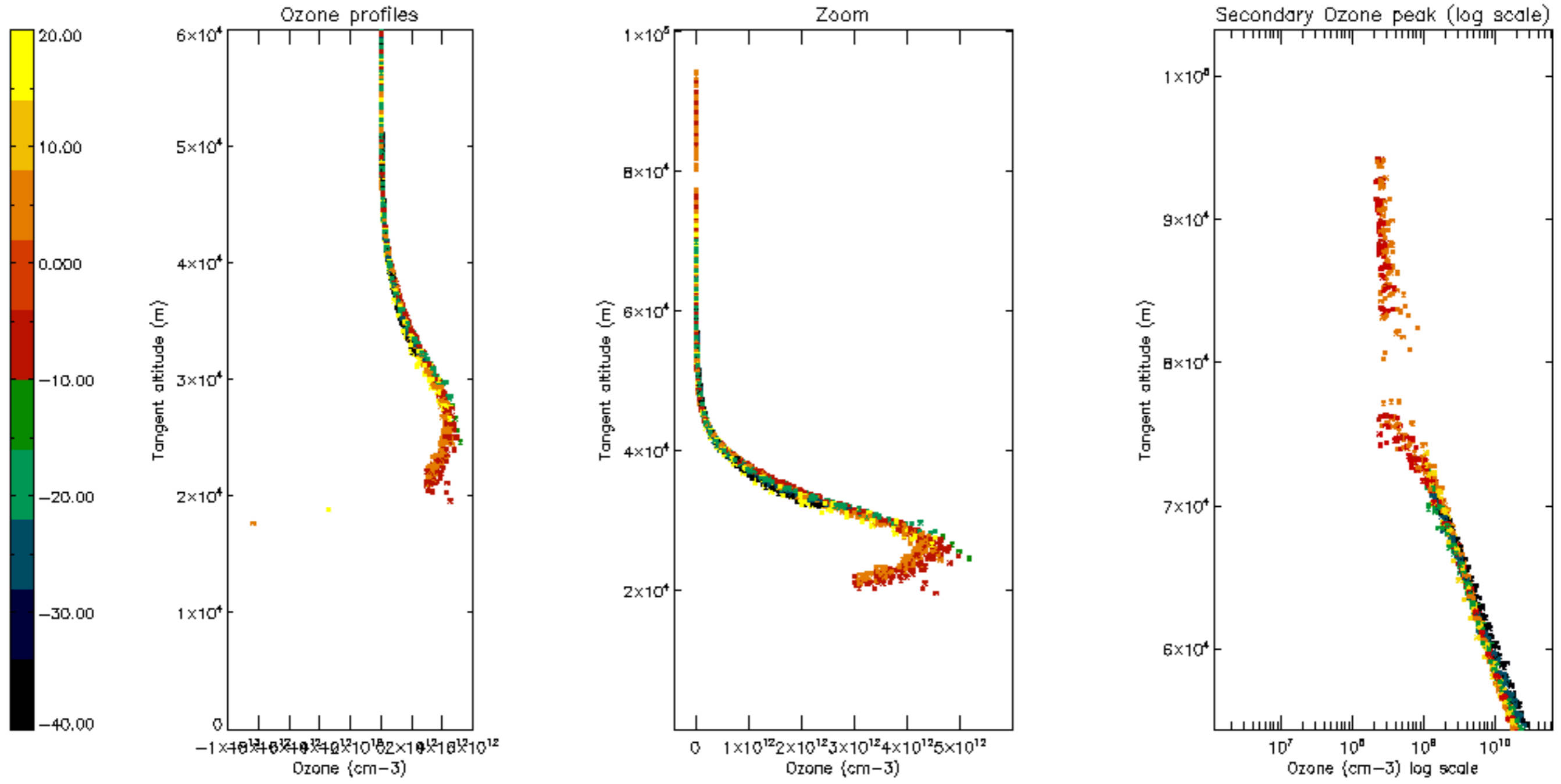
Percentage of saturation errors per profile

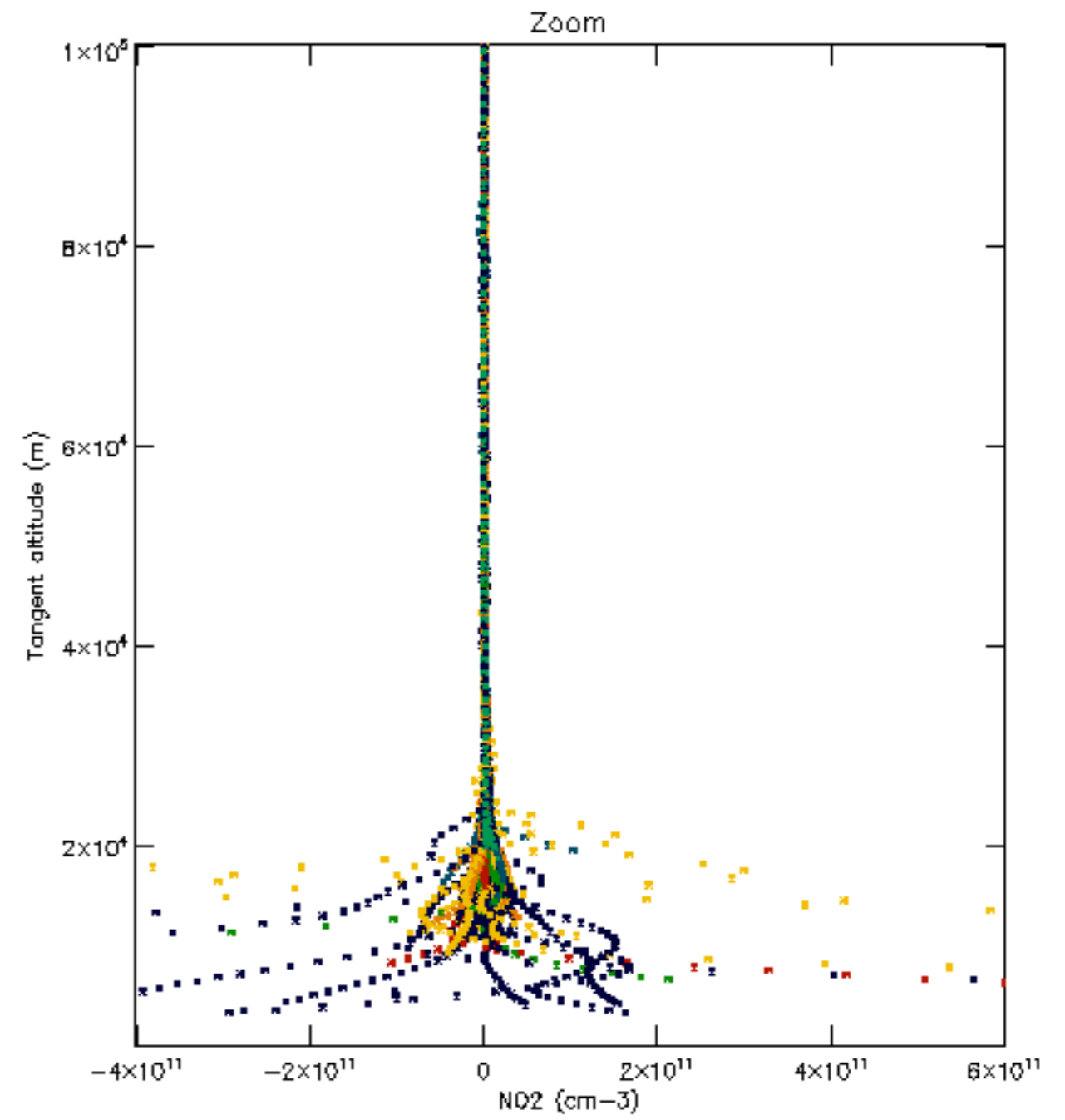
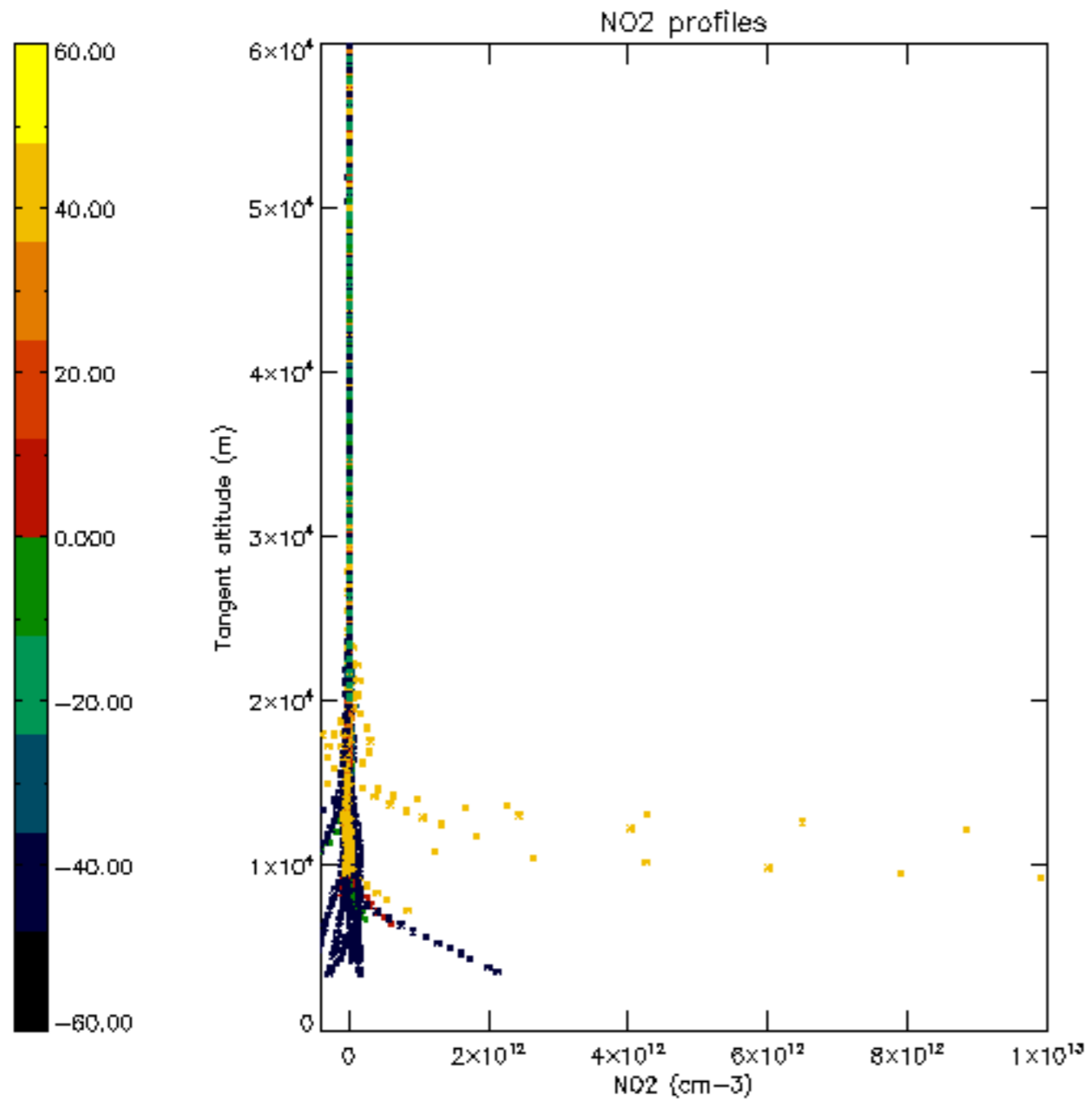


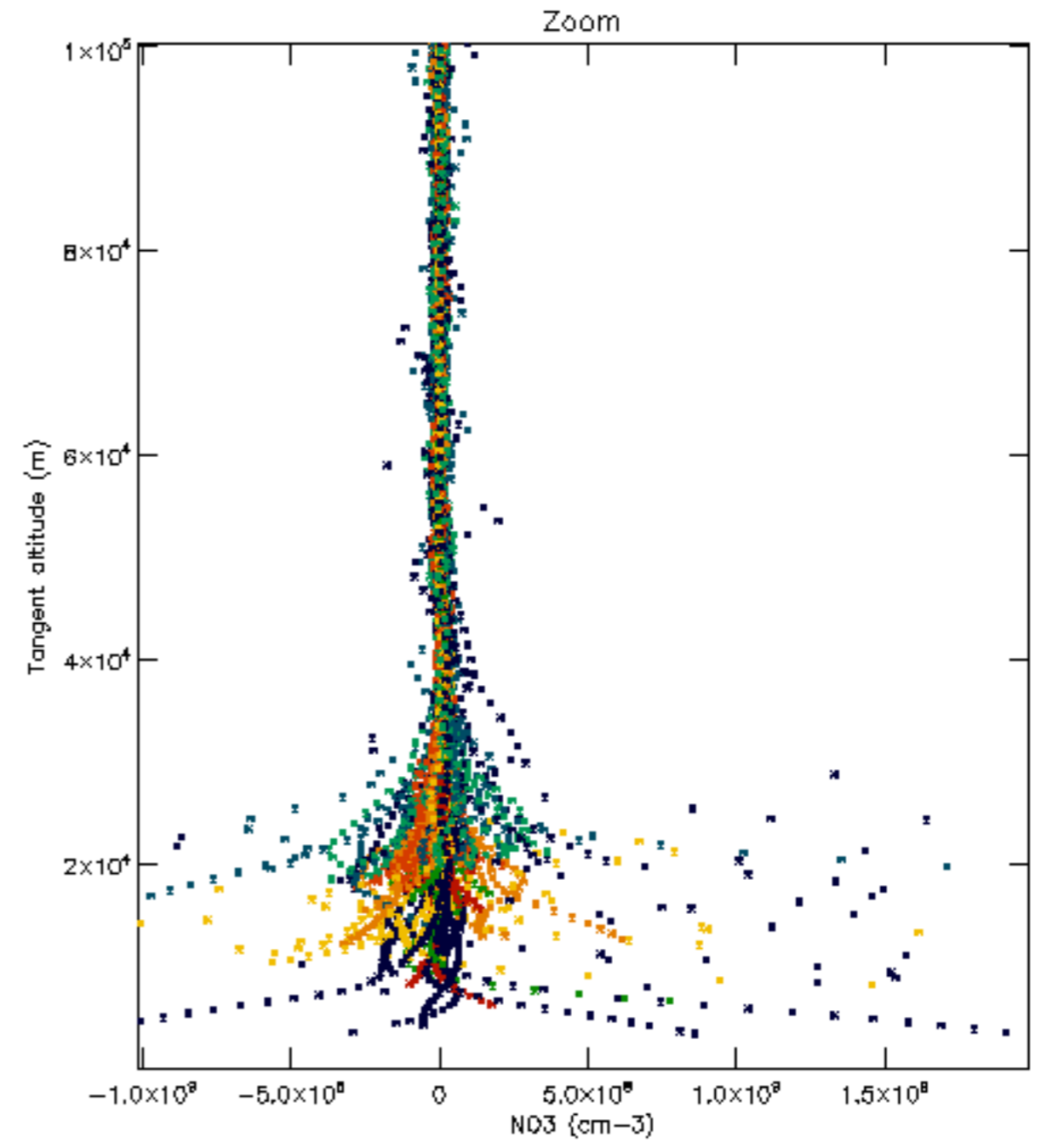
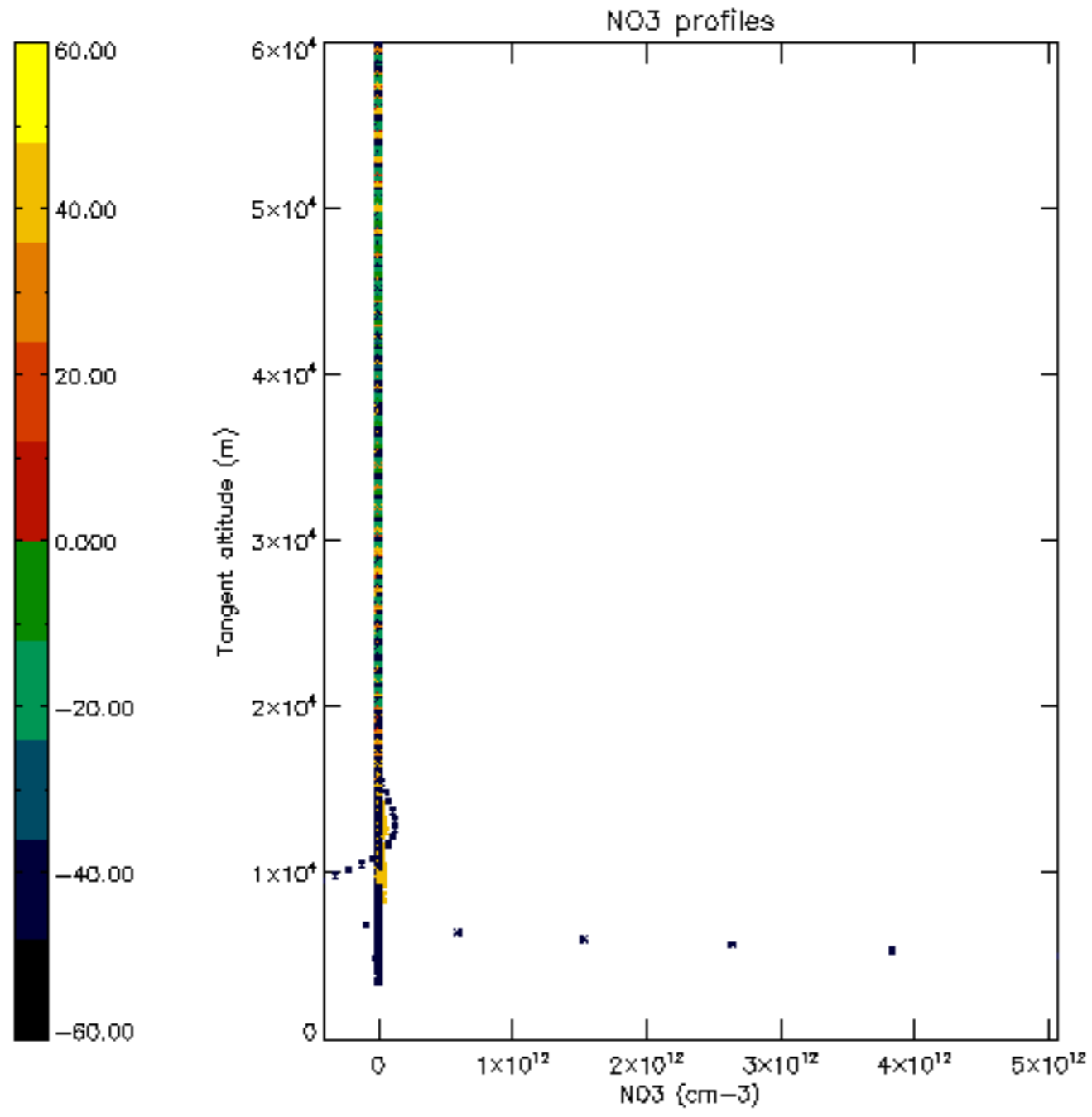


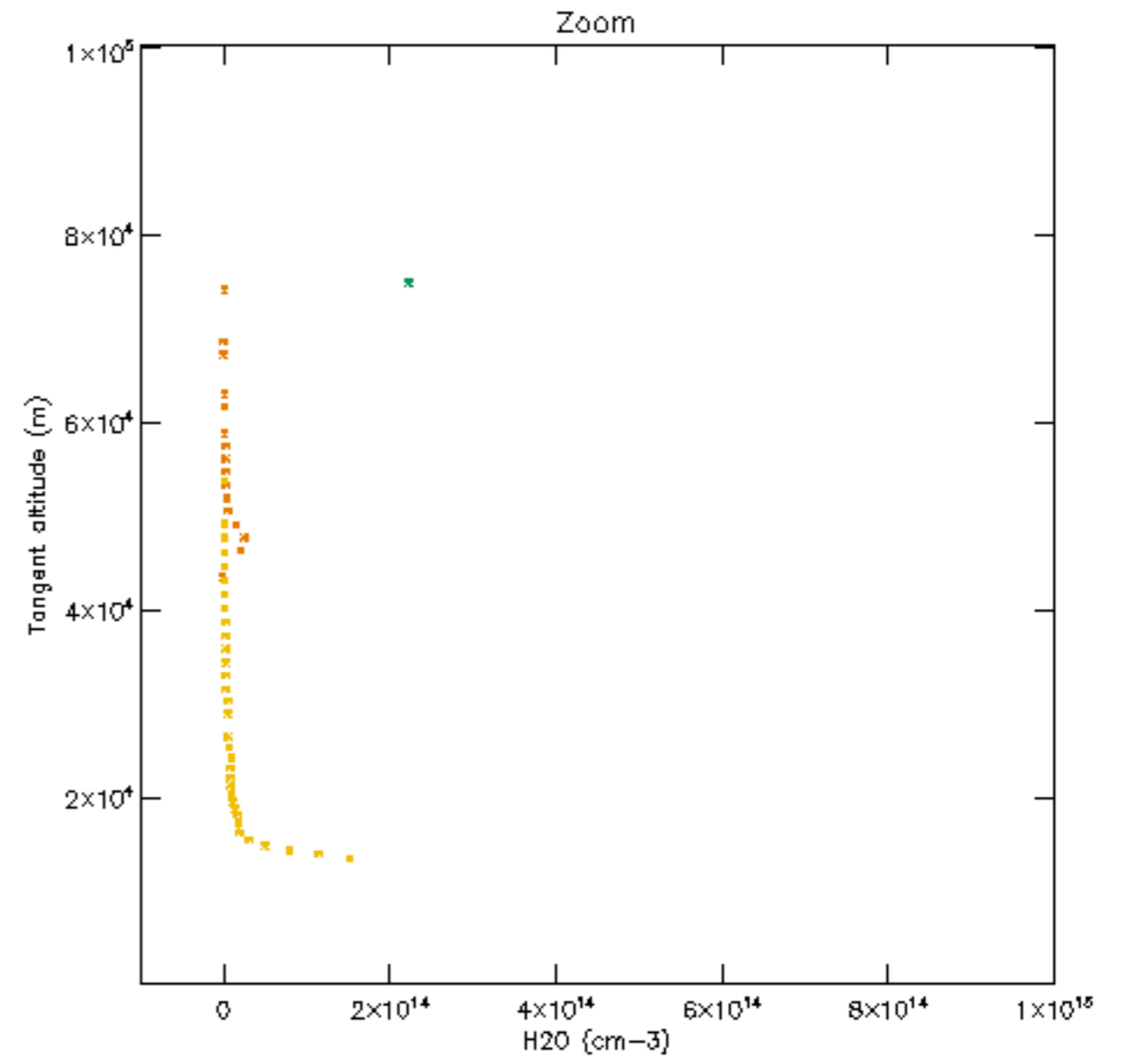
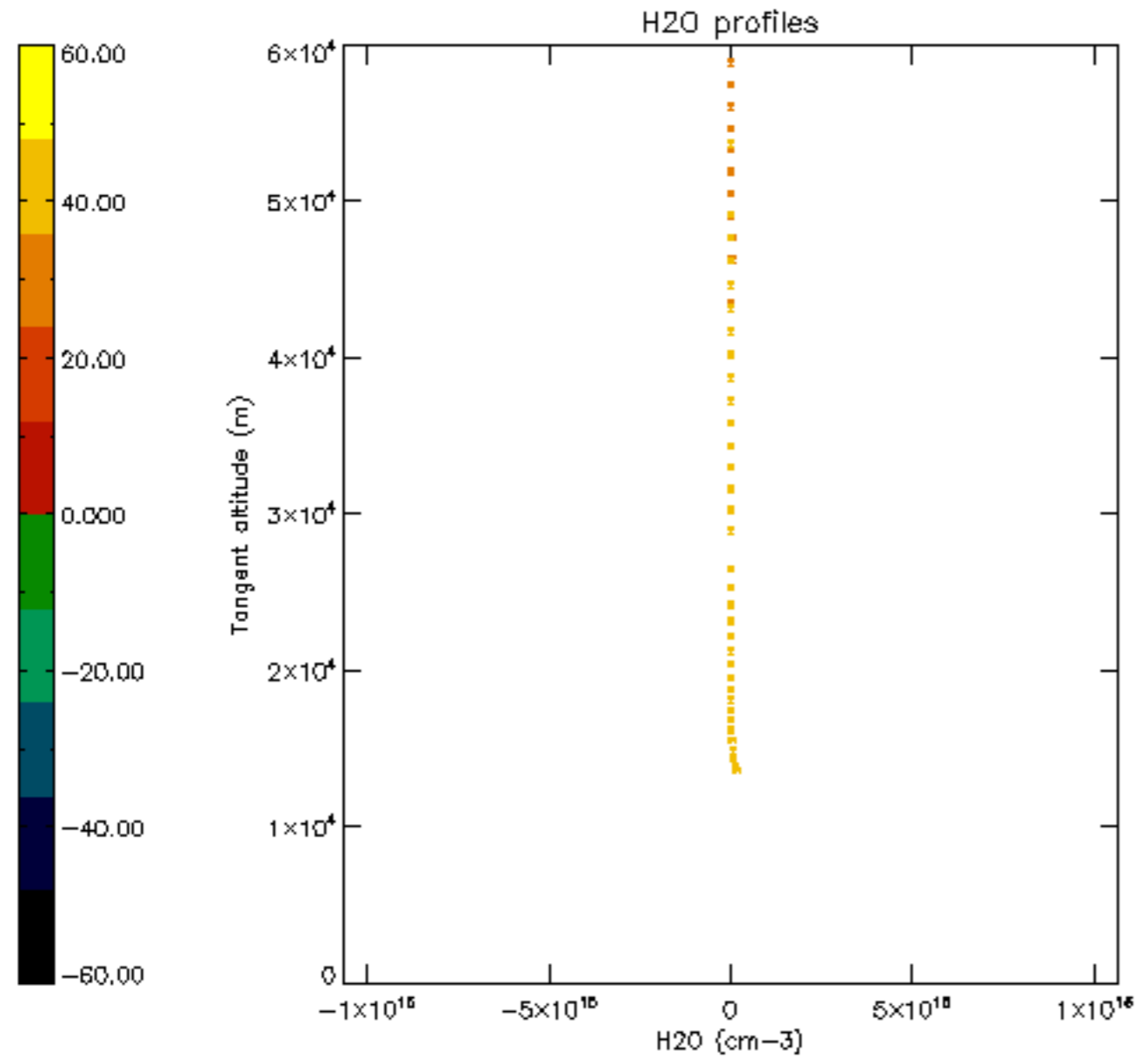


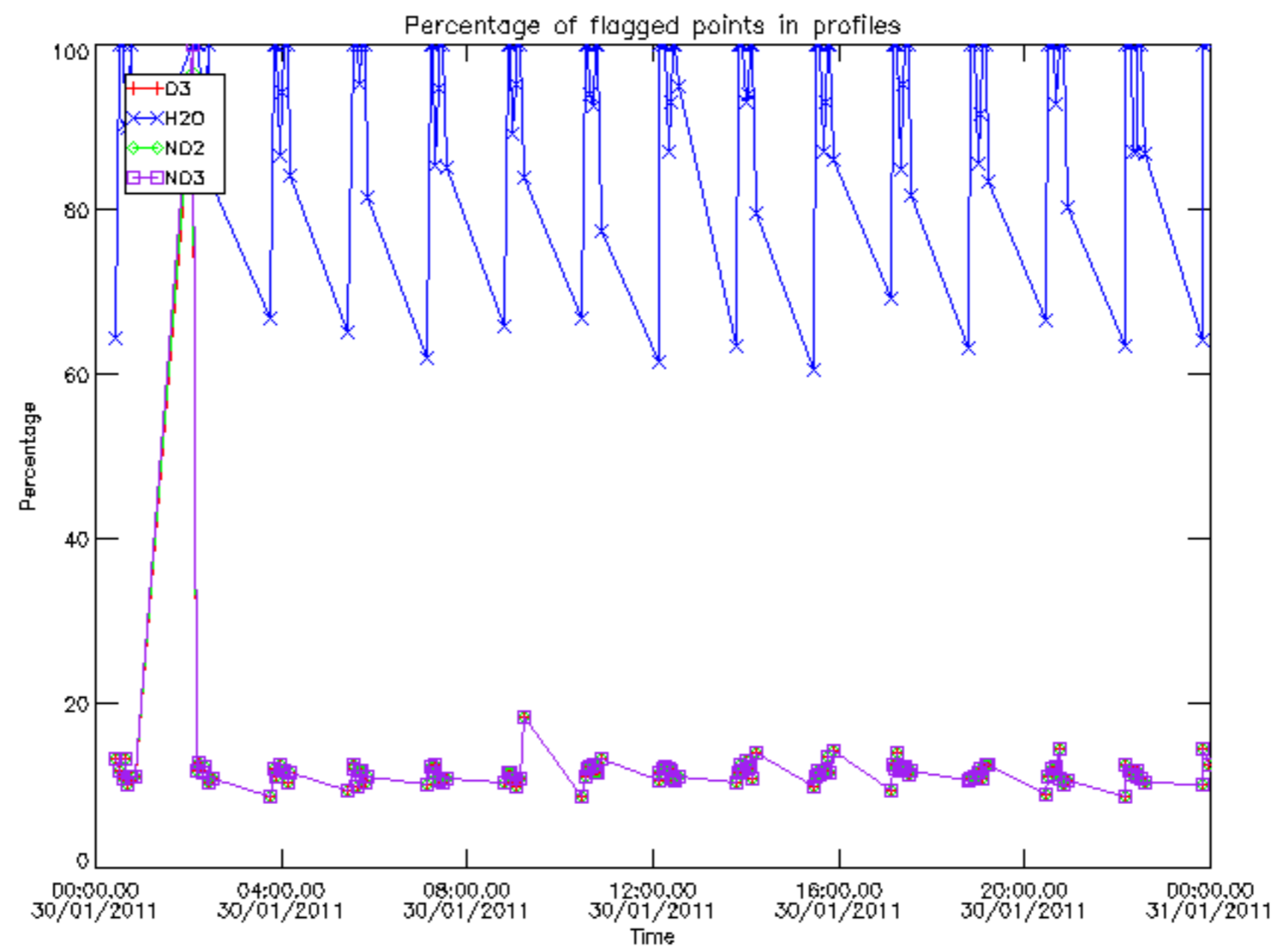




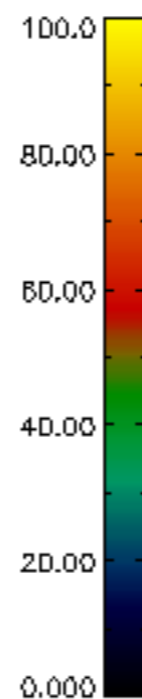
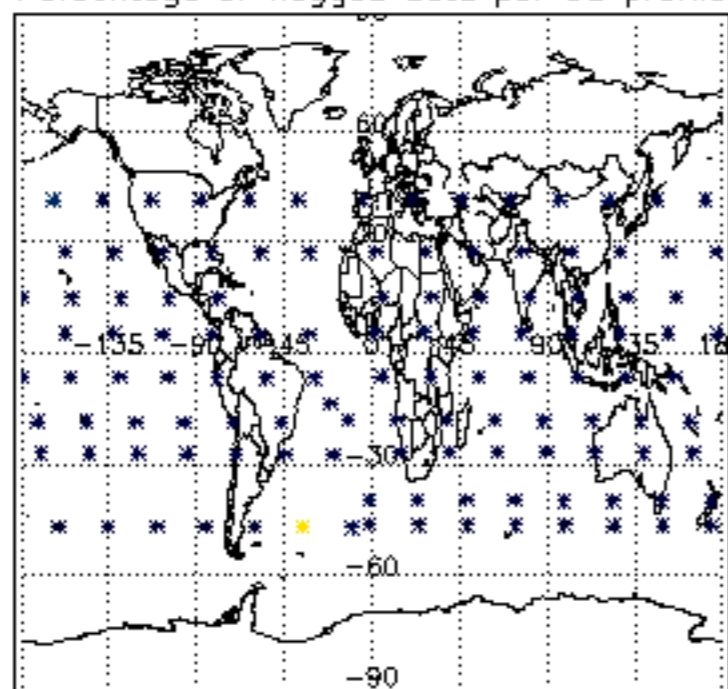




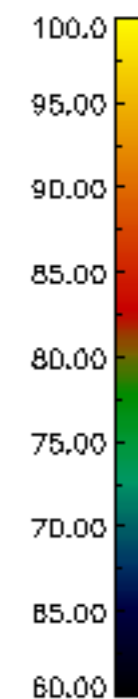
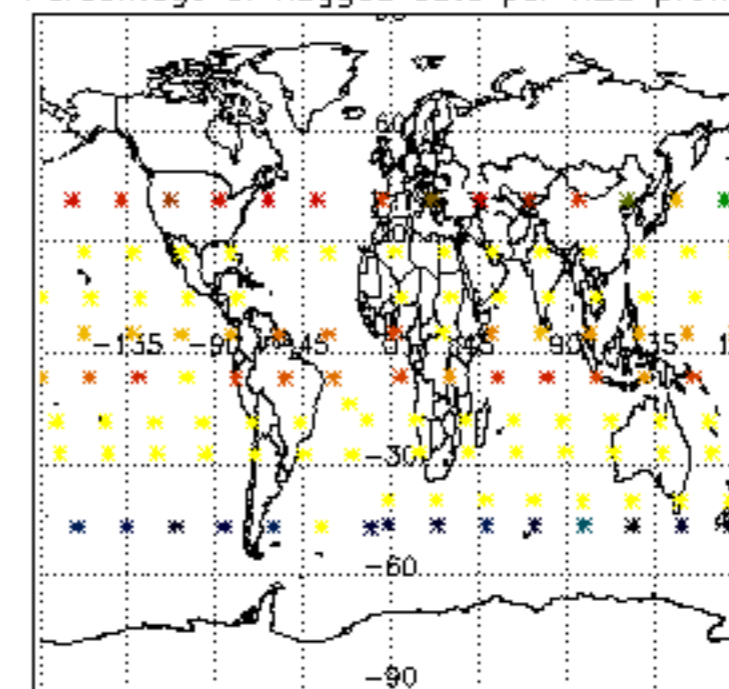




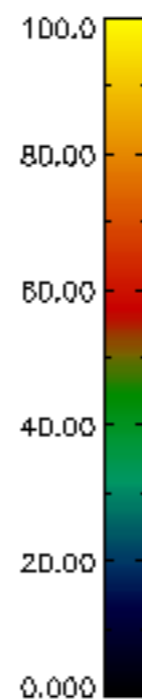
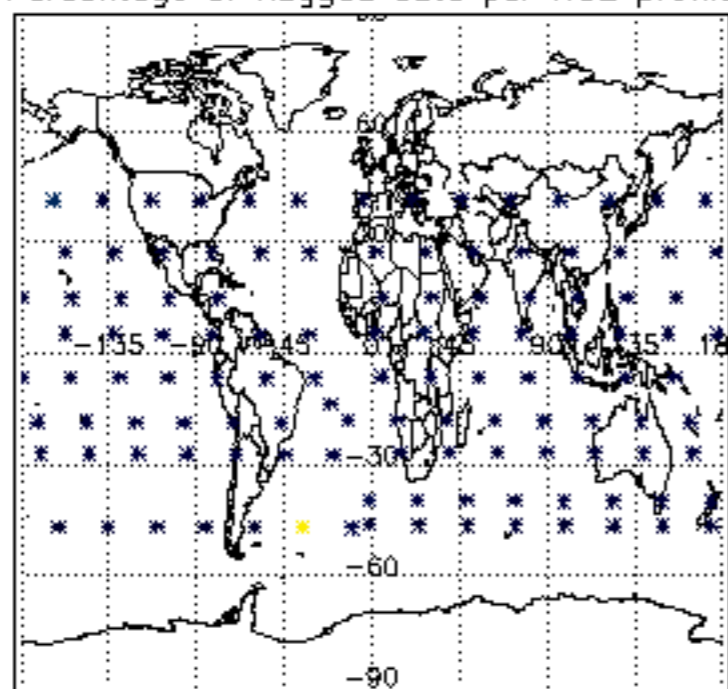
Percentage of flagged data per D3 profile



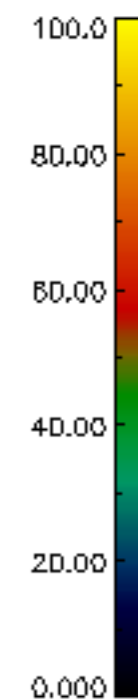
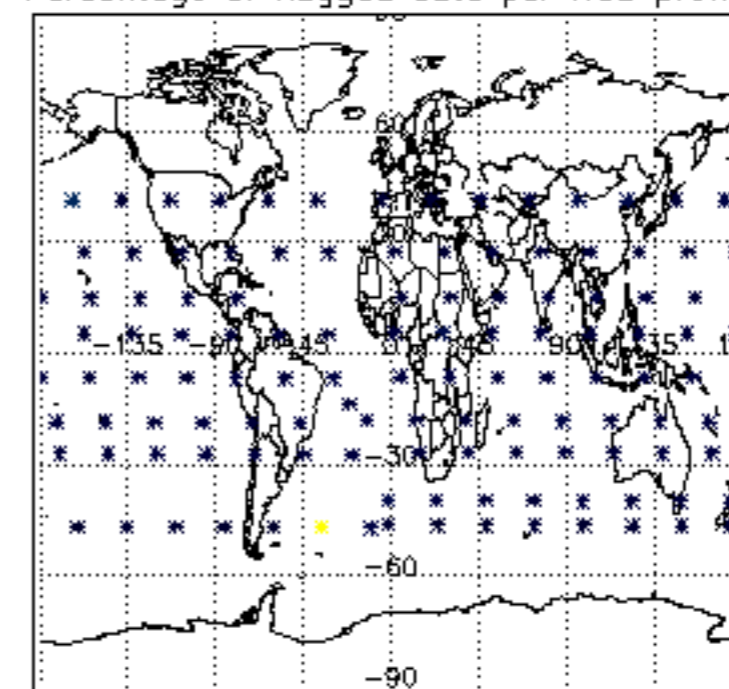
Percentage of flagged data per H2O profile

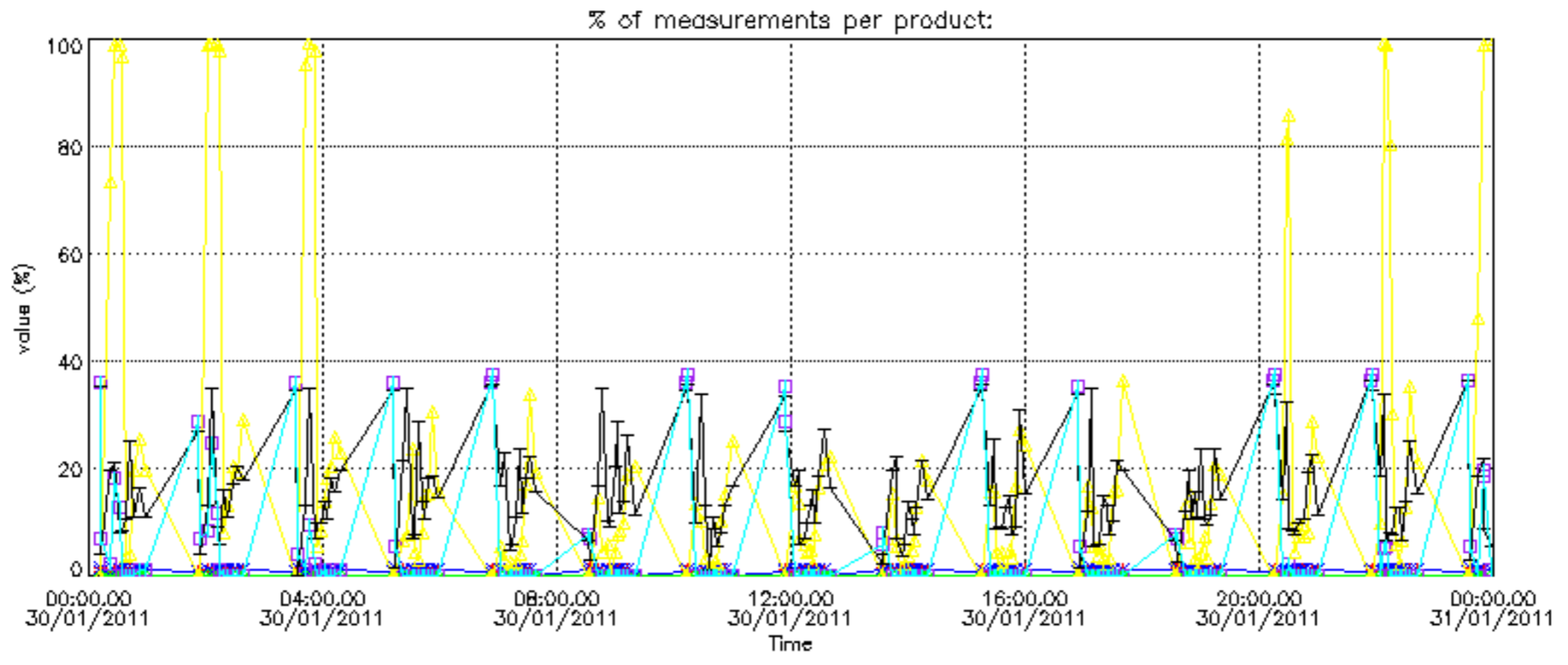


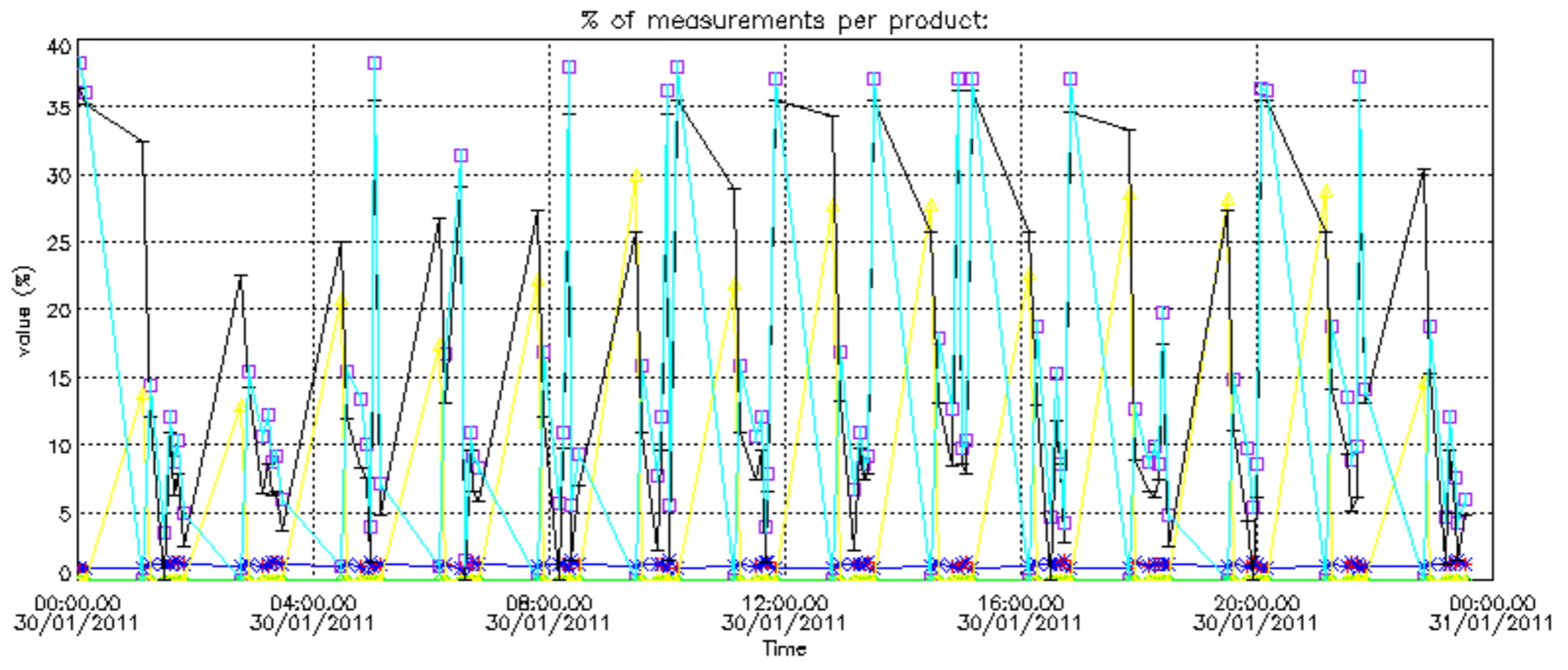
Percentage of flagged data per NO2 profile



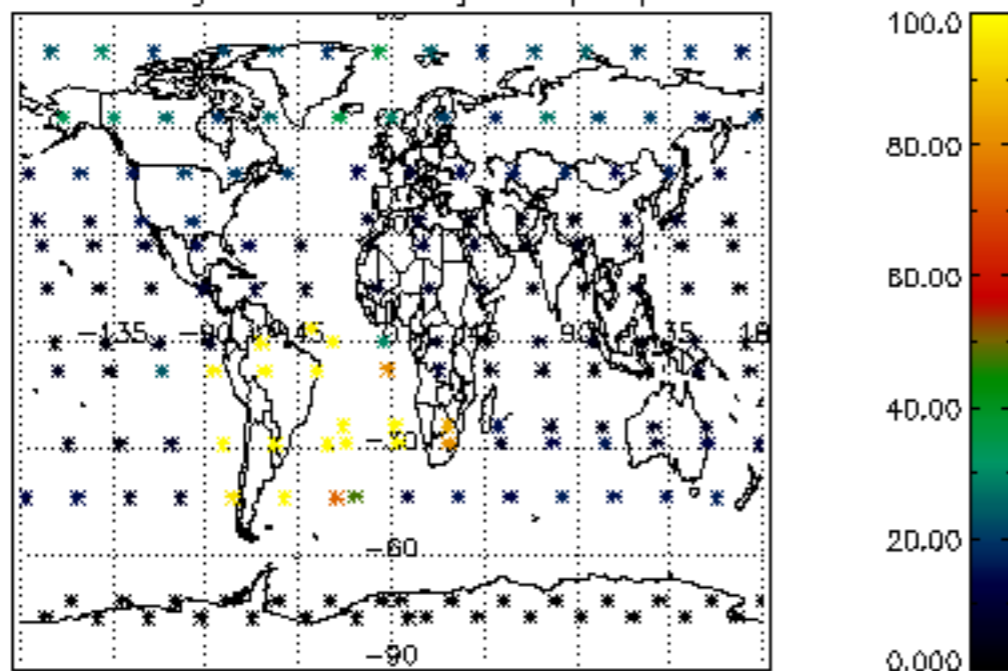
Percentage of flagged data per NO3 profile



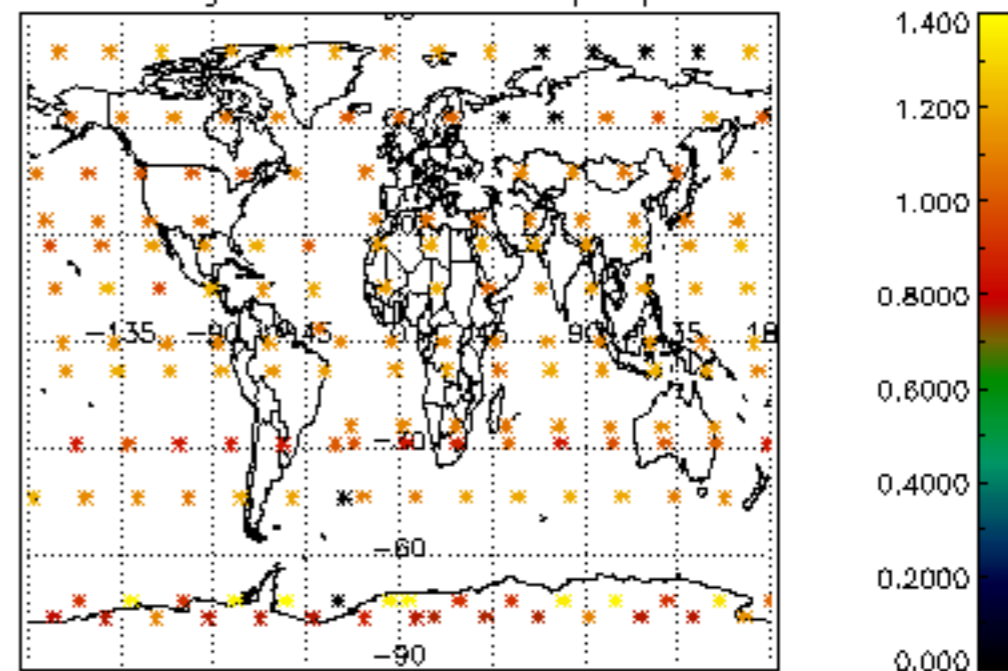




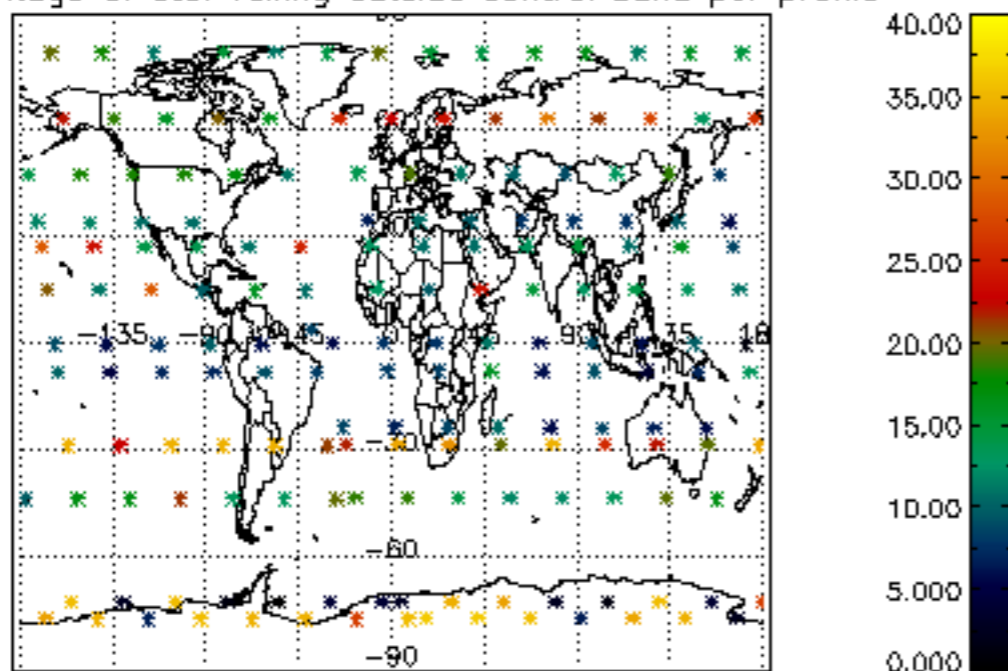
Percentage of cosmic ray hits per profile



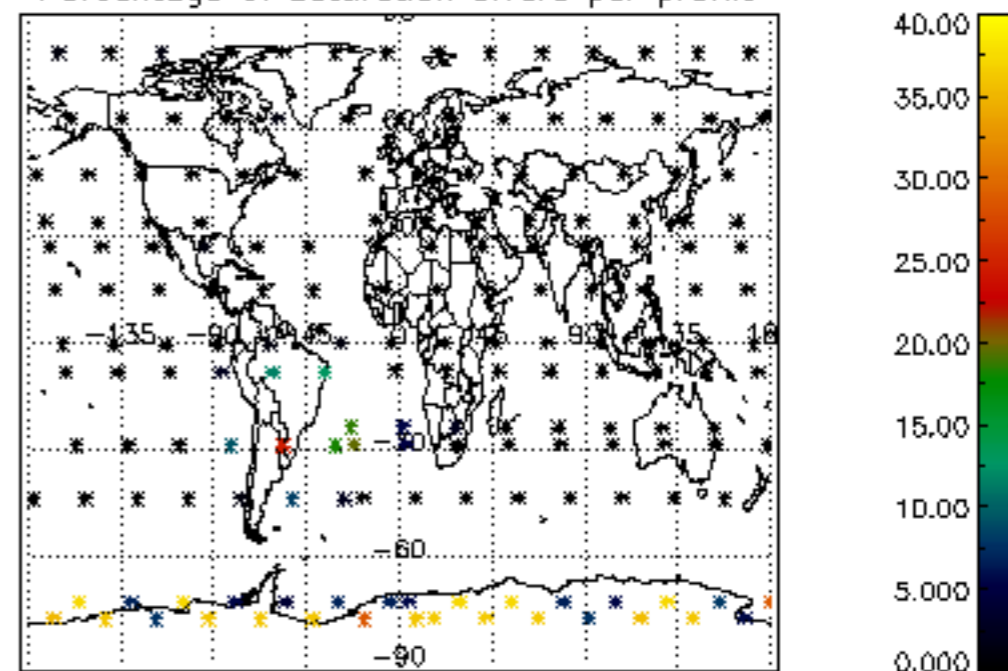
Percentage of datation errors per profile



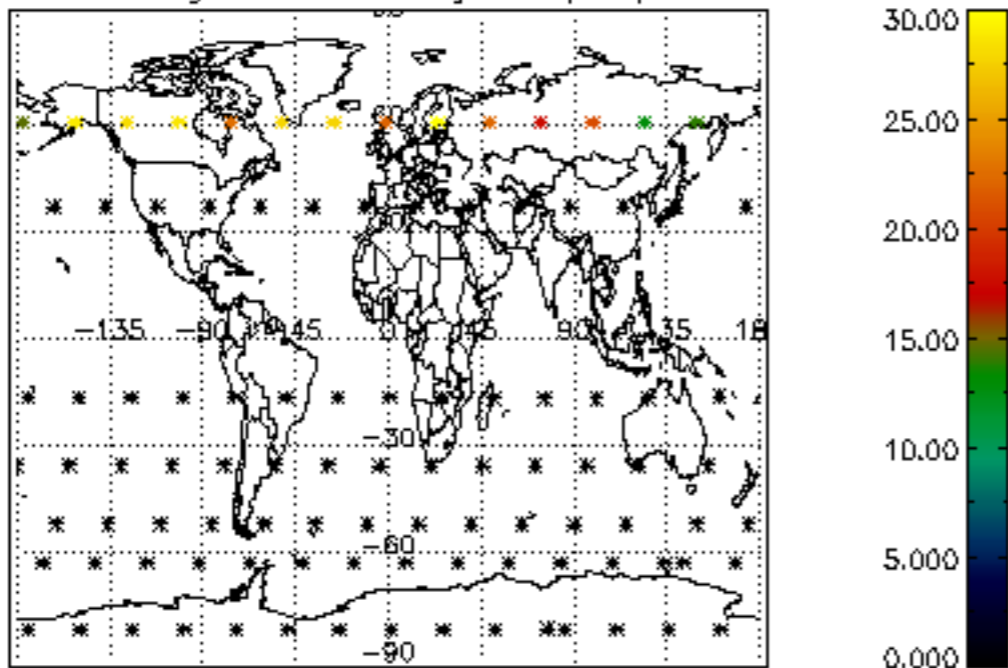
Percentage of star falling outside central band per profile



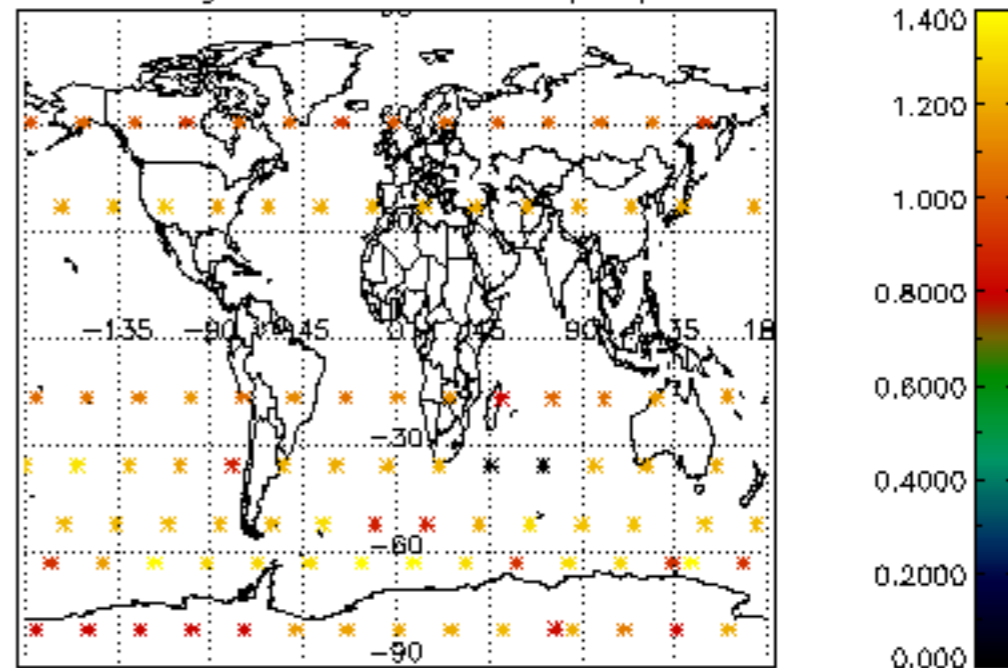
Percentage of saturation errors per profile



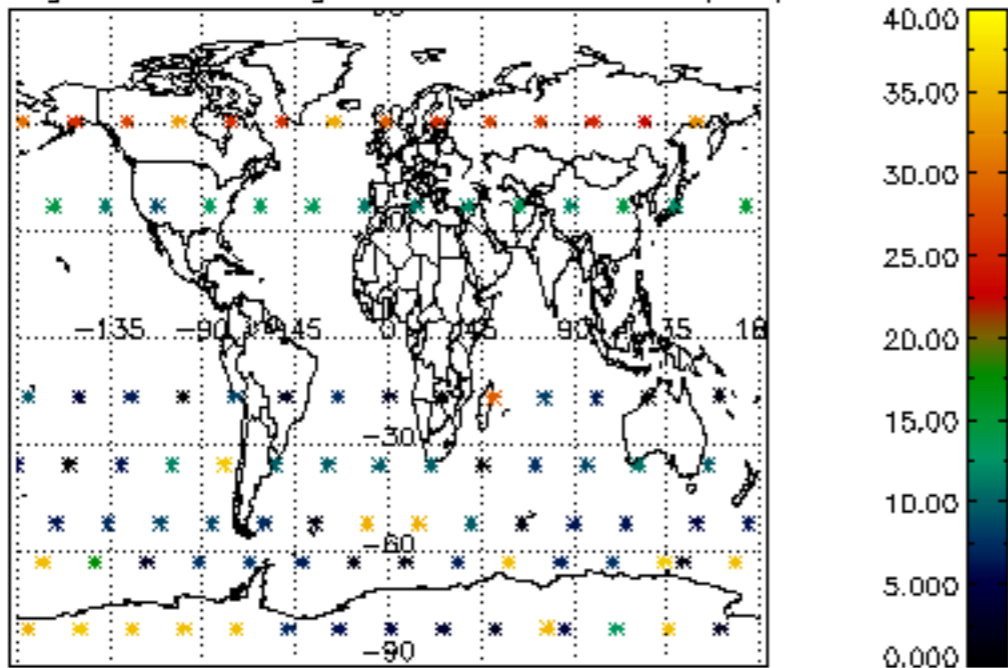
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

