

GOMOS Level 2 Daily Report

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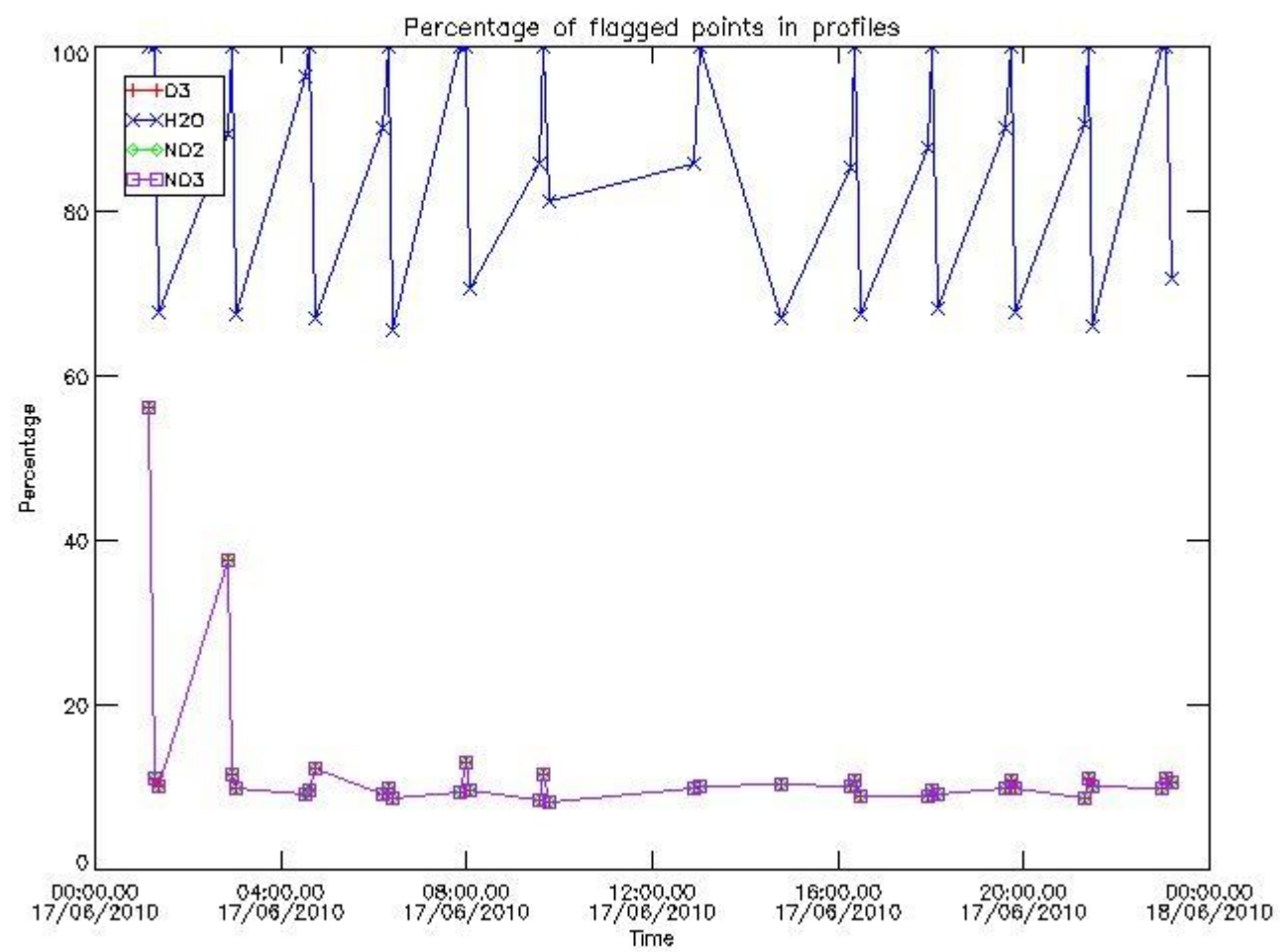
[6. Auxiliary Data Files used for the production reported in section 2](#)

220	GOM_NL__2PRFIN20100617_205157_000000532090_00243_43383_5191.N1	17-JUN-2010 20:51:57	Bright	53.000	160	23Gam Per	2.9300	4700.0	106	43383	No
221	GOM_NL__2PRFIN20100617_205524_000000432090_00243_43383_5192.N1	17-JUN-2010 20:55:24	Bright	42.500	73	57Gam1And	2.2600	13100.	85	43383	No
222	GOM_NL__2PRFIN20100617_205747_000000592090_00243_43383_5193.N1	17-JUN-2010 20:57:47	Twilight	58.500	53	43Bet And	2.0480	3300.0	117	43383	No
223	GOM_NL__2PRFIN20100617_210120_000000502090_00243_43383_5194.N1	17-JUN-2010 21:01:20	Twilight	50.000	50	13Alp Ari	2.0070	4250.0	100	43383	No
224	GOM_NL__2PRFIN20100617_211725_000000592090_00243_43383_5195.N1	17-JUN-2010 21:17:25	Dark	58.500	52	16Bet Cet	2.0370	4500.0	117	43383	No
225	GOM_NL__2PRFIN20100617_212330_000000462090_00243_43383_5196.N1	17-JUN-2010 21:23:30	Dark	46.000	84	Alp Phe	2.3970	4500.0	92	43383	No
226	GOM_NL__2PRFIN20100617_212948_000000512090_00244_43384_5184.N1	17-JUN-2010 21:29:48	Dark	50.500	63	Bet Gru	2.1500	2800.0	101	43384	No
227	GOM_NL__2PRFIN20100617_213152_000000512090_00244_43384_5185.N1	17-JUN-2010 21:31:52	Straylight	50.500	31	Alp Gru	1.7340	15200.	101	43384	No
228	GOM_NL__2PRFIN20100617_213532_000000412090_00244_43384_5186.N1	17-JUN-2010 21:35:32	Straylight	41.000	45	Alp Pav	1.9400	26000.	82	43384	No
229	GOM_NL__2PRFIN20100617_214516_000000442090_00244_43384_5187.N1	17-JUN-2010 21:45:16	Twilight	43.500	25	35Lam Sco	1.6200	28000.	87	43384	No
230	GOM_NL__2PRFIN20100617_214639_000000452090_00244_43384_5188.N1	17-JUN-2010 21:46:39	Twilight	44.500	167	10Gam2Sgr	2.9840	4500.0	89	43384	No
231	GOM_NL__2PRFIN20100617_215147_000000402090_00244_43384_5189.N1	17-JUN-2010 21:51:47	Bright	40.000	86	35Eta Oph	2.4300	10200.	80	43384	No
232	GOM_NL__2PRFIN20100617_215812_000000432090_00244_43384_5190.N1	17-JUN-2010 21:58:12	Bright	42.500	126	60Bet Oph	2.7700	4250.0	85	43384	No
233	GOM_NL__2PRFIN20100617_220041_000000422090_00244_43384_5191.N1	17-JUN-2010 22:00:41	Bright	42.000	59	55Alp Oph	2.0800	8900.0	84	43384	No
234	GOM_NL__2PRFIN20100617_220245_000000362090_00244_43384_5192.N1	17-JUN-2010 22:02:45	Bright	36.000	127	27Bet Her	2.7810	4700.0	72	43384	No
235	GOM_NL__2PRFIN20100617_220545_000000392090_00244_43384_5193.N1	17-JUN-2010 22:05:45	Bright	39.000	133	40Zet Her	2.8070	6000.0	78	43384	No
236	GOM_NL__2PRFIN20100617_221228_000000412090_00244_43384_5194.N1	17-JUN-2010 22:12:28	Bright	41.000	130	23Bet Dra	2.7990	5800.0	82	43384	No
237	GOM_NL__2PRFIN20100617_221408_000000402090_00244_43384_5195.N1	17-JUN-2010 22:14:08	Bright	39.500	119	14Eta Dra	2.7270	4700.0	79	43384	No
238	GOM_NL__2PRFIN20100617_222244_000000482090_00244_43384_5196.N1	17-JUN-2010 22:22:44	Bright	48.000	89	5Alp Cep	2.4510	8000.0	96	43384	No
239	GOM_NL__2PRFIN20100617_222919_000000652090_00244_43384_5197.N1	17-JUN-2010 22:29:19	Bright	65.000	74	11Bet Cas	2.2680	6600.0	130	43384	No
240	GOM_NL__2PRFIN20100617_223044_000000632090_00244_43384_5198.N1	17-JUN-2010 22:30:44	Bright	63.000	68	18Alp Cas	2.2250	4500.0	126	43384	No
241	GOM_NL__2PRFIN20100617_223233_000000532090_00244_43384_5199.N1	17-JUN-2010 22:32:33	Bright	53.000	160	23Gam Per	2.9300	4700.0	106	43384	No
242	GOM_NL__2PRFIN20100617_223600_000000422090_00244_43384_5200.N1	17-JUN-2010 22:36:00	Bright	42.000	73	57Gam1And	2.2600	13100.	84	43384	No
243	GOM_NL__2PRFIN20100617_223822_000000682090_00244_43384_5201.N1	17-JUN-2010 22:38:22	Twilight	67.500	53	43Bet And	2.0480	3300.0	135	43384	No
244	GOM_NL__2PRFIN20100617_224156_000000492090_00244_43384_5202.N1	17-JUN-2010 22:41:56	Twilight	48.500	50	13Alp Ari	2.0070	4250.0	97	43384	No
245	GOM_NL__2PRFIN20100617_225801_000000522090_00244_43384_5203.N1	17-JUN-2010 22:58:01	Dark	51.500	52	16Bet Cet	2.0370	4500.0	103	43384	No
246	GOM_NL__2PRFIN20100617_230407_000000512090_00244_43384_5204.N1	17-JUN-2010 23:04:07	Dark	51.000	84	Alp Phe	2.3970	4500.0	102	43384	No
247	GOM_NL__2PRFIN20100617_231025_000000492090_00245_43385_5192.N1	17-JUN-2010 23:10:25	Dark	48.500	63	Bet Gru	2.1500	2800.0	97	43385	No
248	GOM_NL__2PRFIN20100617_231228_000000492090_00245_43385_5193.N1	17-JUN-2010 23:12:28	Straylight	48.500	31	Alp Gru	1.7340	15200.	97	43385	No
249	GOM_NL__2PRFIN20100617_231608_000000432090_00245_43385_5194.N1	17-JUN-2010 23:16:08	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	43385	No
250	GOM_NL__2PRFIN20100617_232552_000000442090_00245_43385_5195.N1	17-JUN-2010 23:25:52	Twilight	43.500	25	35Lam Sco	1.6200	28000.	87	43385	No
251	GOM_NL__2PRFIN20100617_232715_000000462090_00245_43385_5196.N1	17-JUN-2010 23:27:15	Twilight	45.500	167	10Gam2Sgr	2.9840	4500.0	91	43385	No
252	GOM_NL__2PRFIN20100617_233223_000000402090_00245_43385_5197.N1	17-JUN-2010 23:32:23	Bright	40.000	86	35Eta Oph	2.4300	10200.	80	43385	No
253	GOM_NL__2PRFIN20100617_233847_000000432090_00245_43385_5198.N1	17-JUN-2010 23:38:47	Bright	42.500	126	60Bet Oph	2.7700	4250.0	85	43385	No
254	GOM_NL__2PRFIN20100617_234117_000000432090_00245_43385_5199.N1	17-JUN-2010 23:41:17	Bright	42.500	59	55Alp Oph	2.0800	8900.0	85	43385	No
255	GOM_NL__2PRFIN20100617_234321_000000392090_00245_43385_5200.N1	17-JUN-2010 23:43:21	Bright	38.500	127	27Bet Her	2.7810	4700.0	77	43385	No
256	GOM_NL__2PRFIN20100617_234620_000000392090_00245_43385_5201.N1	17-JUN-2010 23:46:20	Bright	38.500	133	40Zet Her	2.8070	6000.0	77	43385	No
257	GOM_NL__2PRFIN20100617_235304_000000412090_00245_43385_5202.N1	17-JUN-2010 23:53:04	Bright	40.500	130	23Bet Dra	2.7990	5800.0	81	43385	No
258	GOM_NL__2PRFIN20100617_235444_000000382090_00245_43385_5203.N1	17-JUN-2010 23:54:44	Bright	38.000	119	14Eta Dra	2.7270	4700.0	76	43385	No

3. Quality information per product

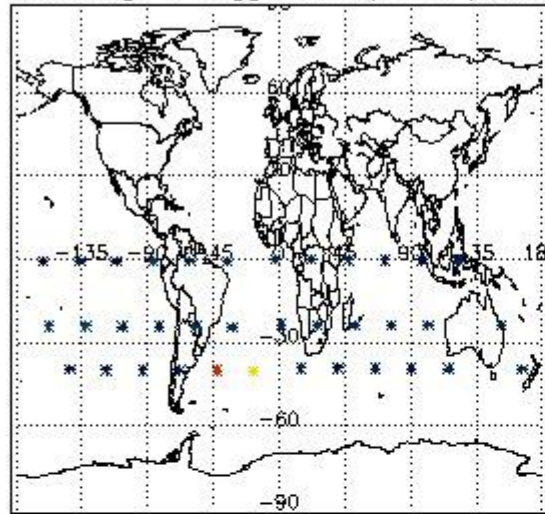
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

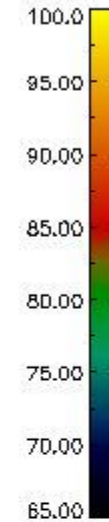
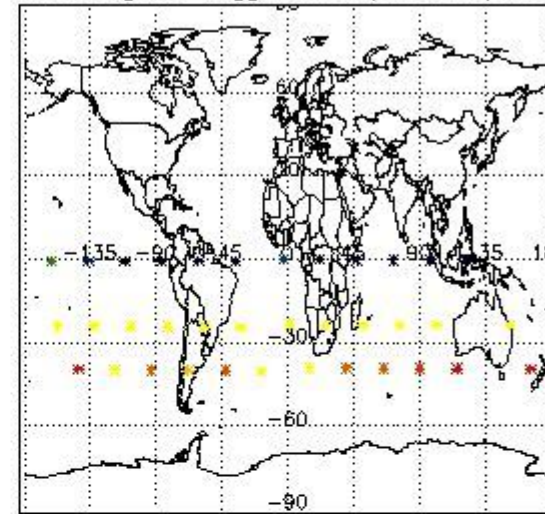


3.2 Plot quality information per product (world map)

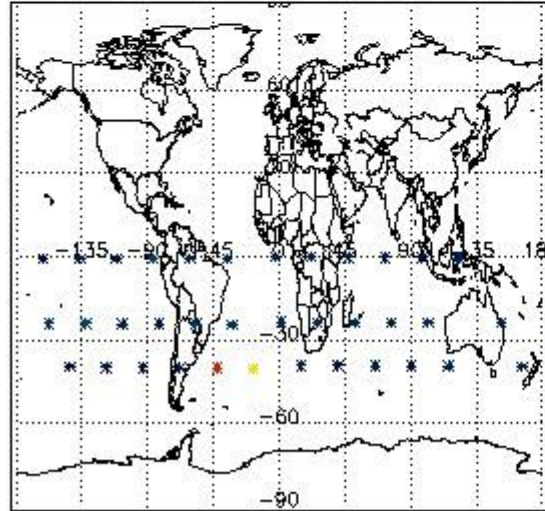
Percentage of flagged data per O3 profile



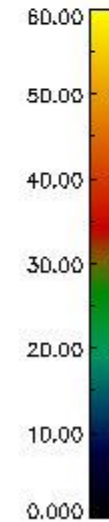
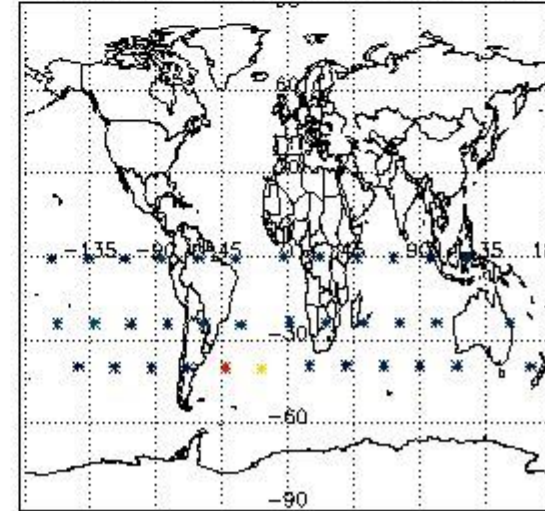
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

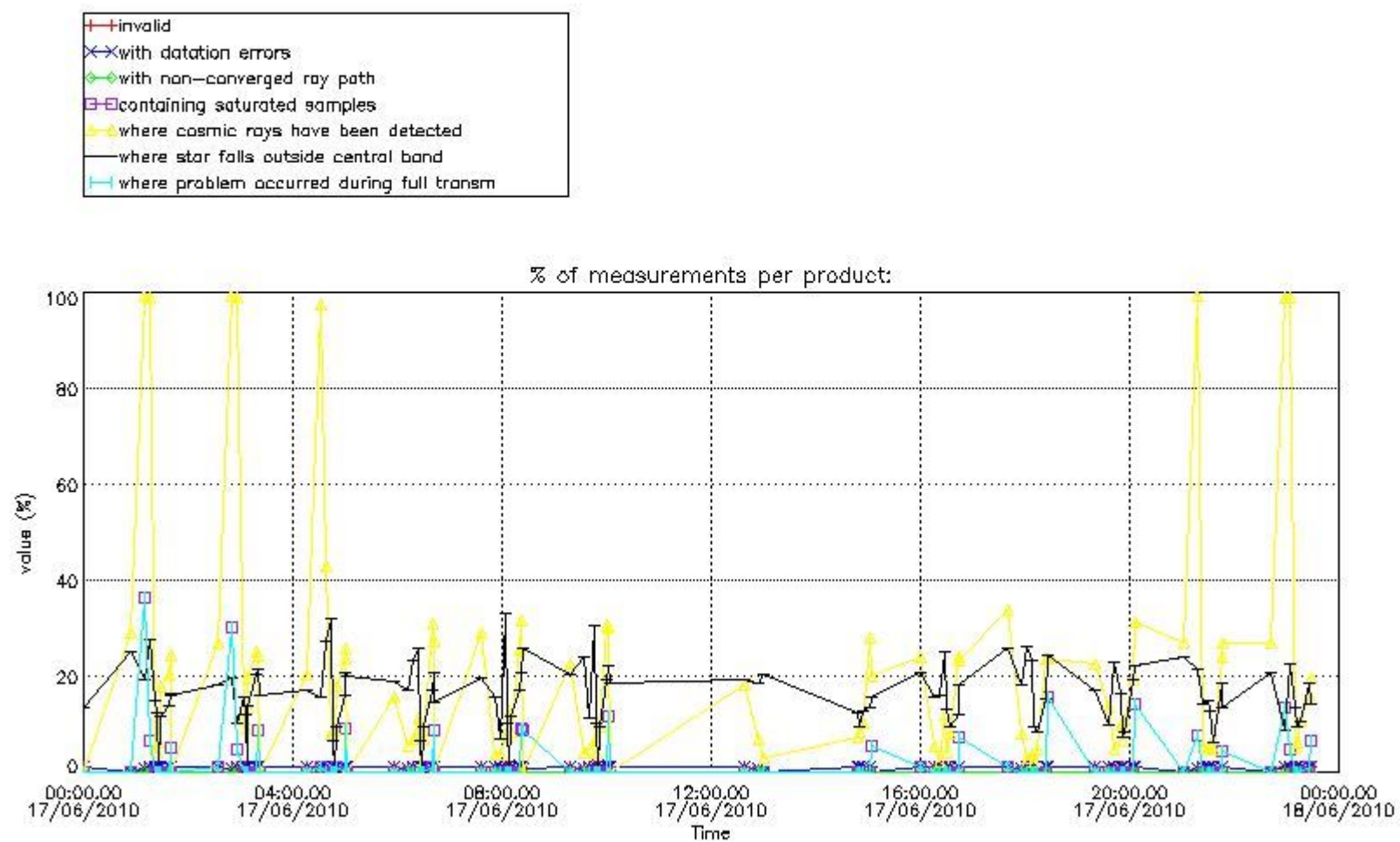


4. Level 1 quality information per product

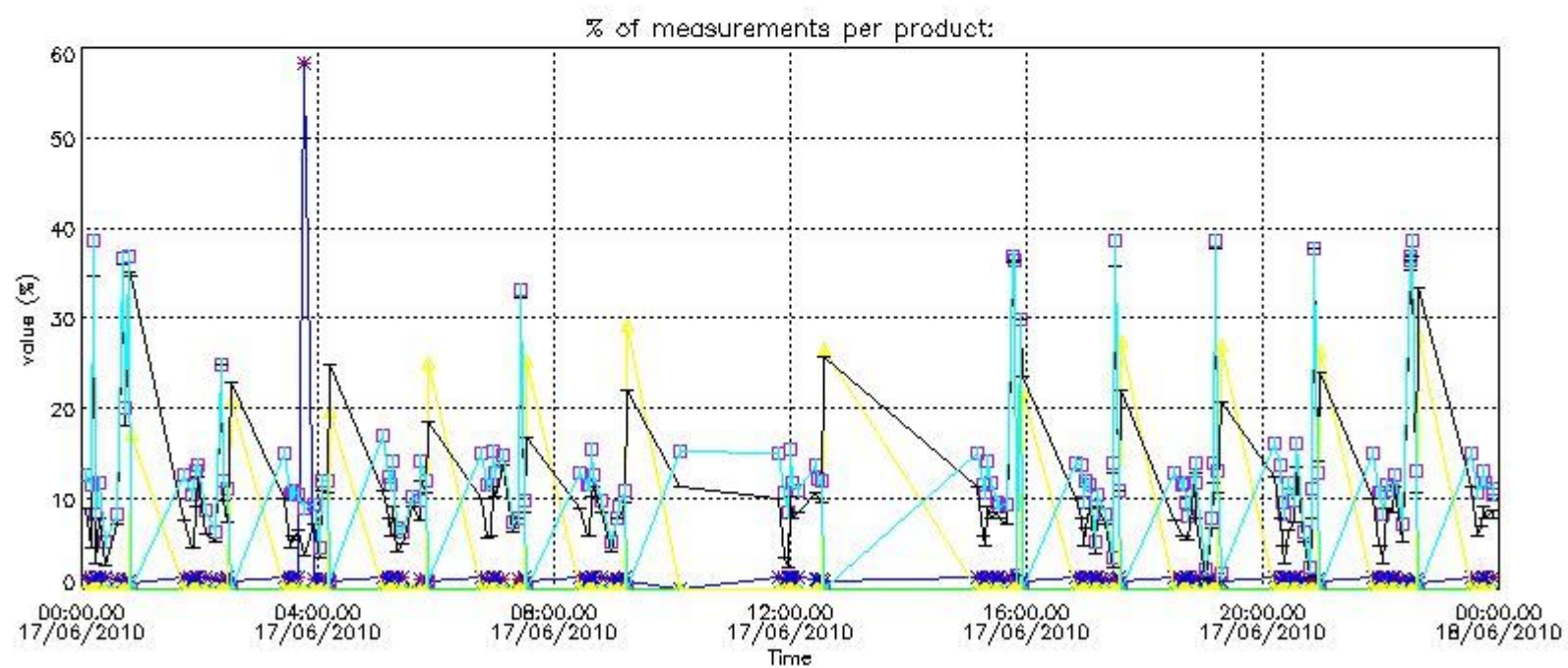
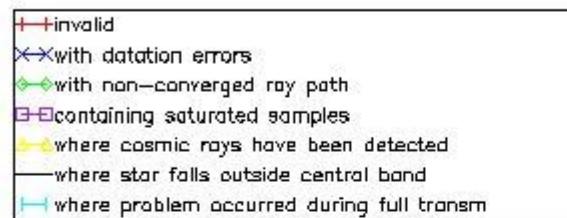
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

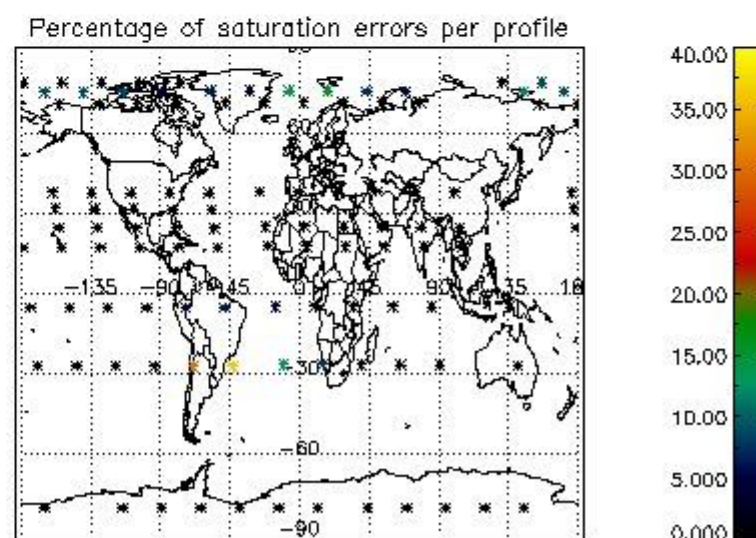
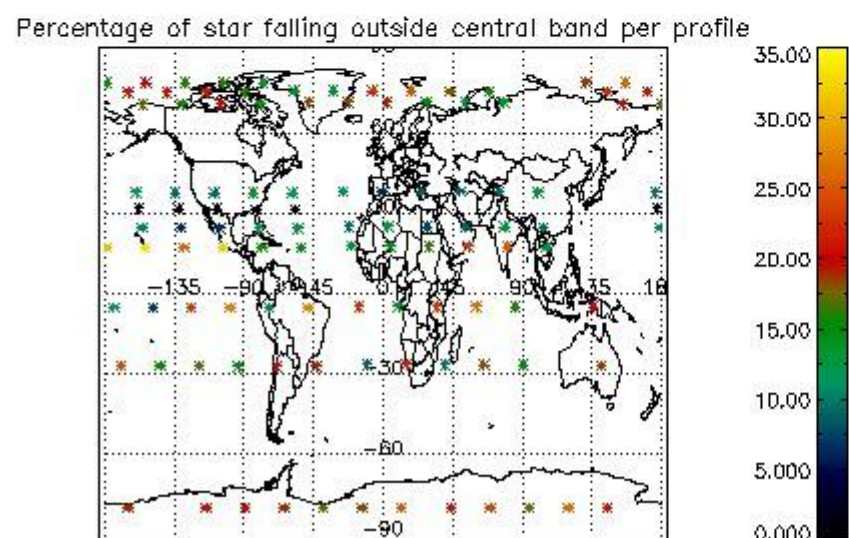
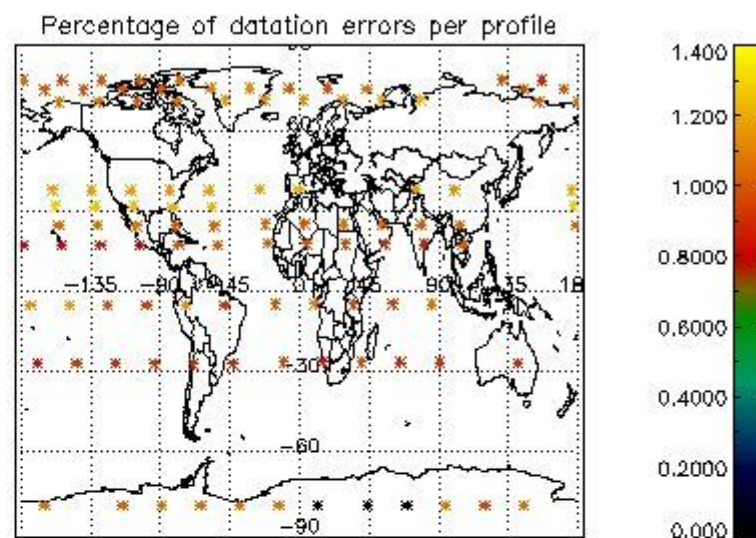
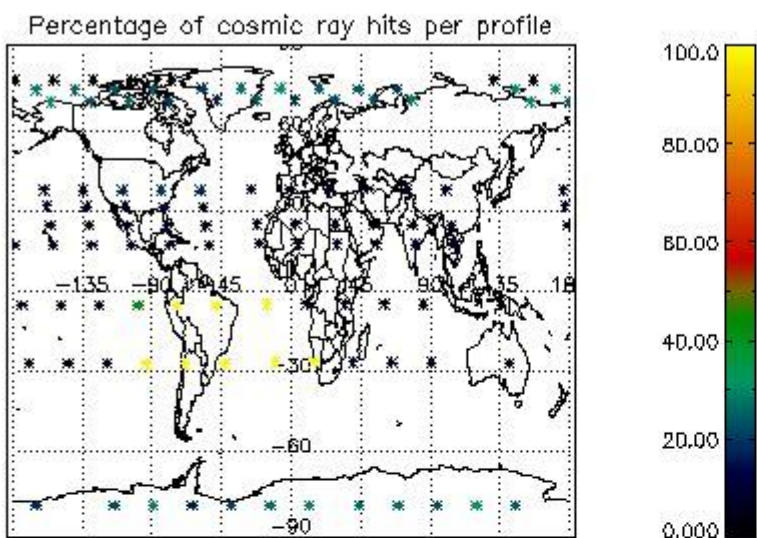


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

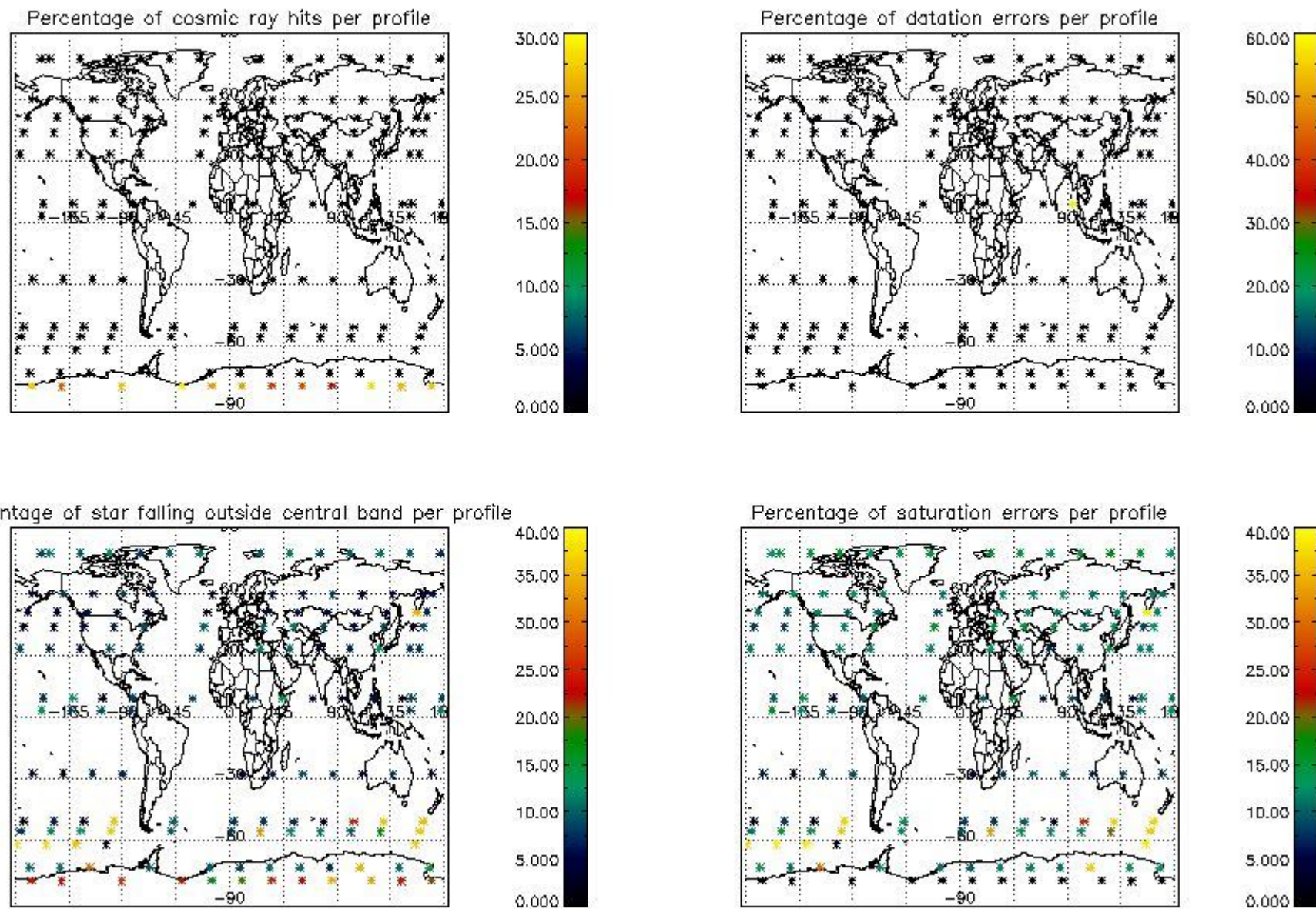


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

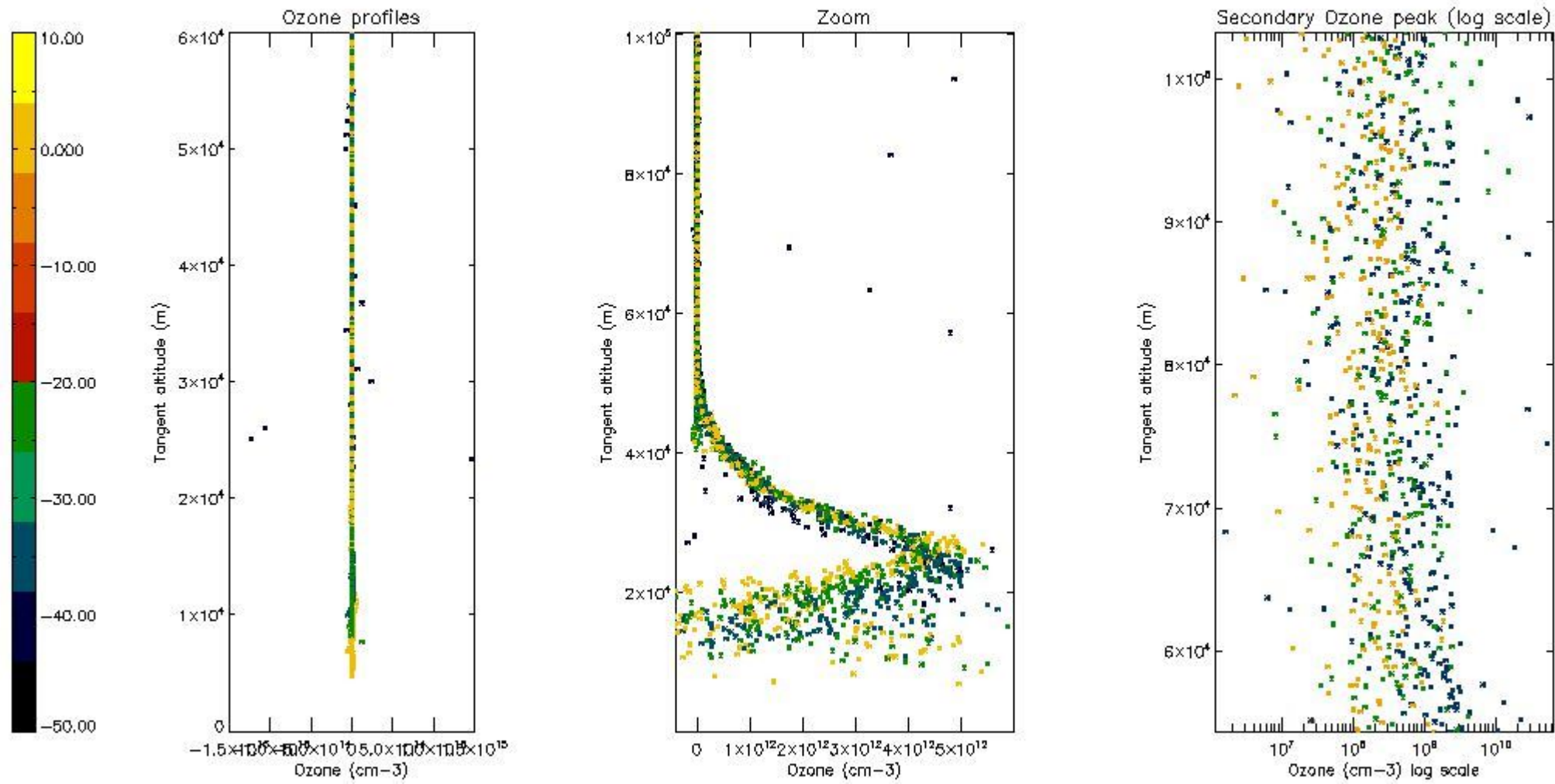
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	16
STD < 20	4

STD < 10	2
STD < 5	0

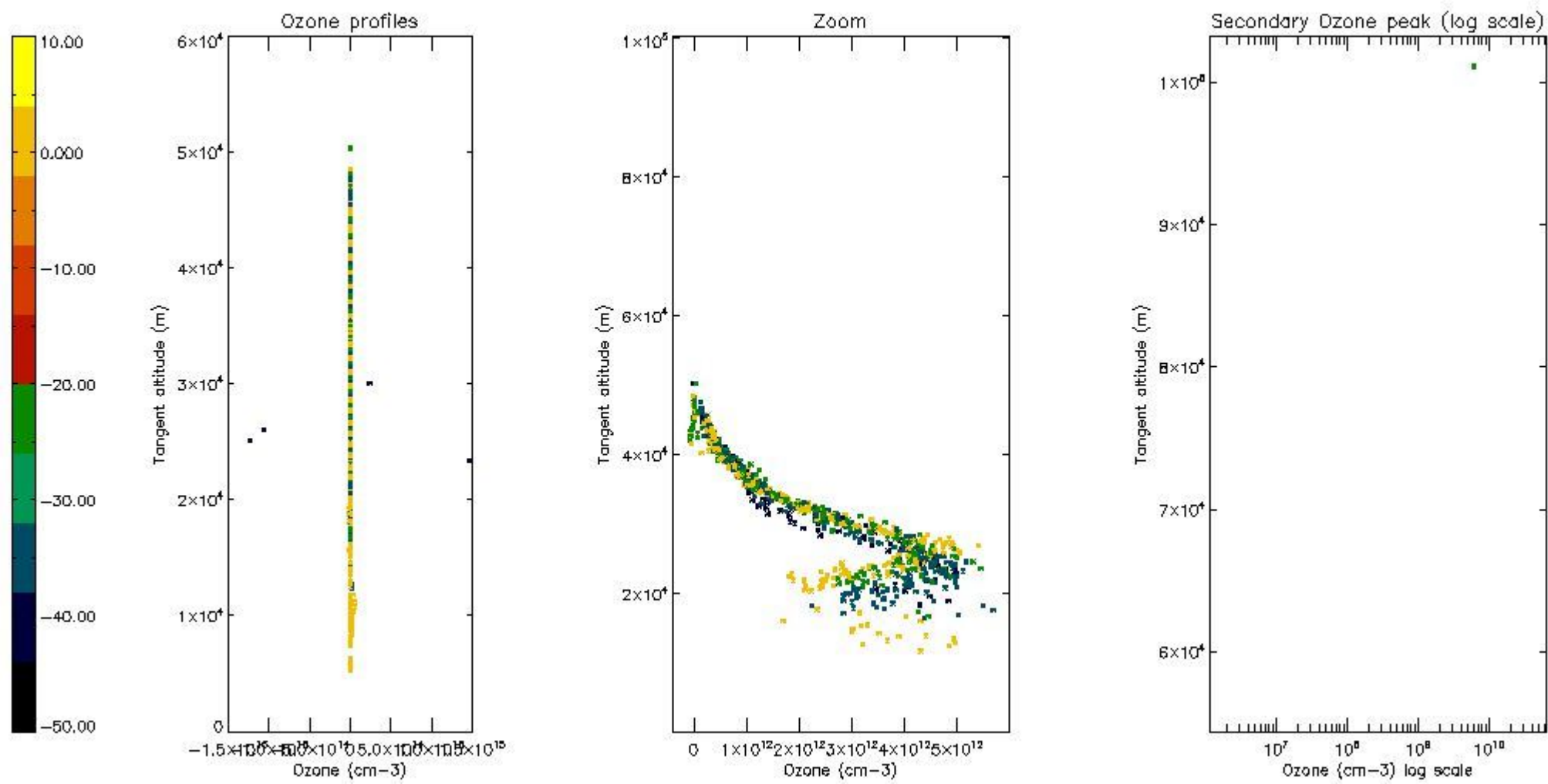
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



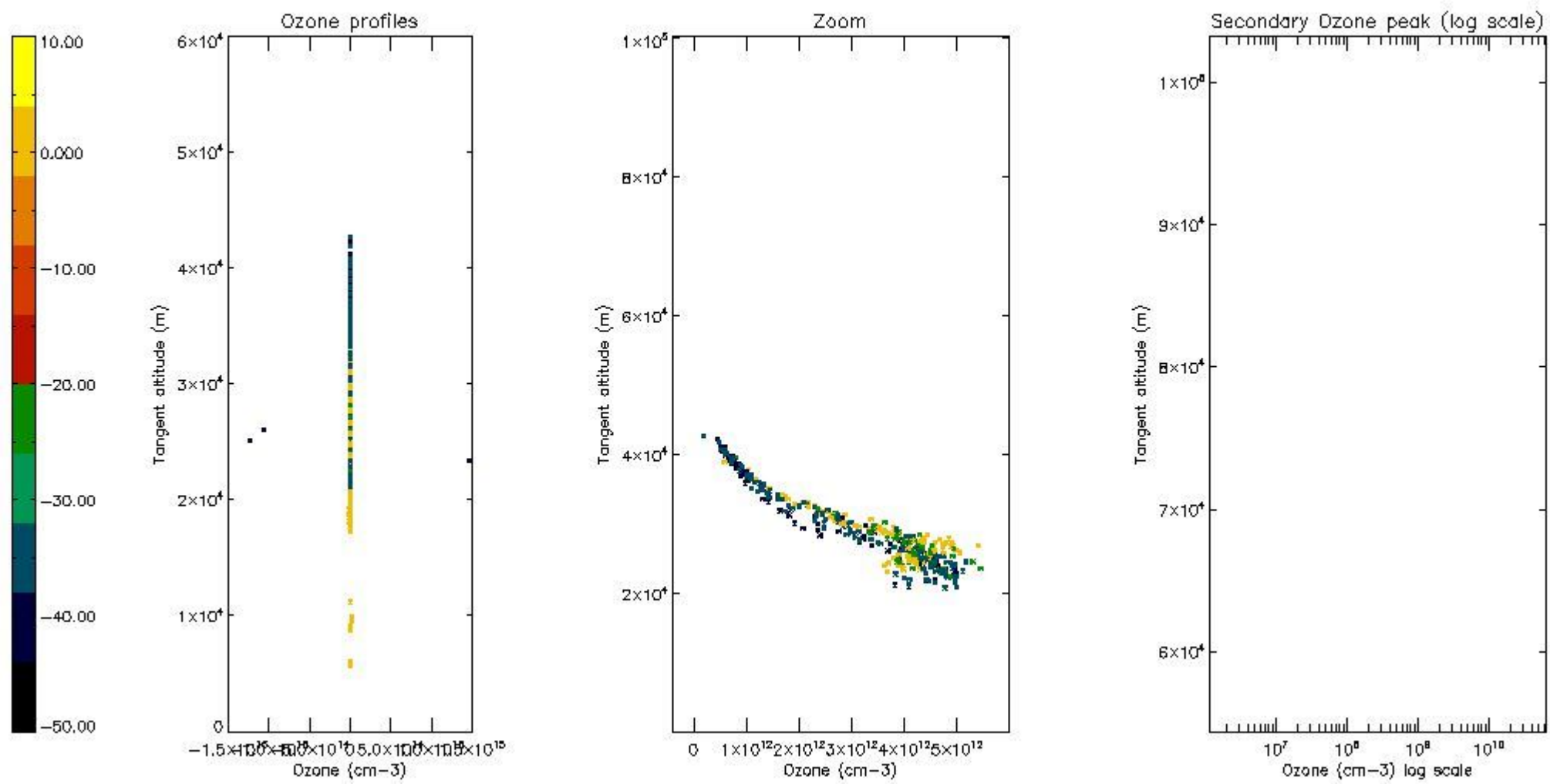
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



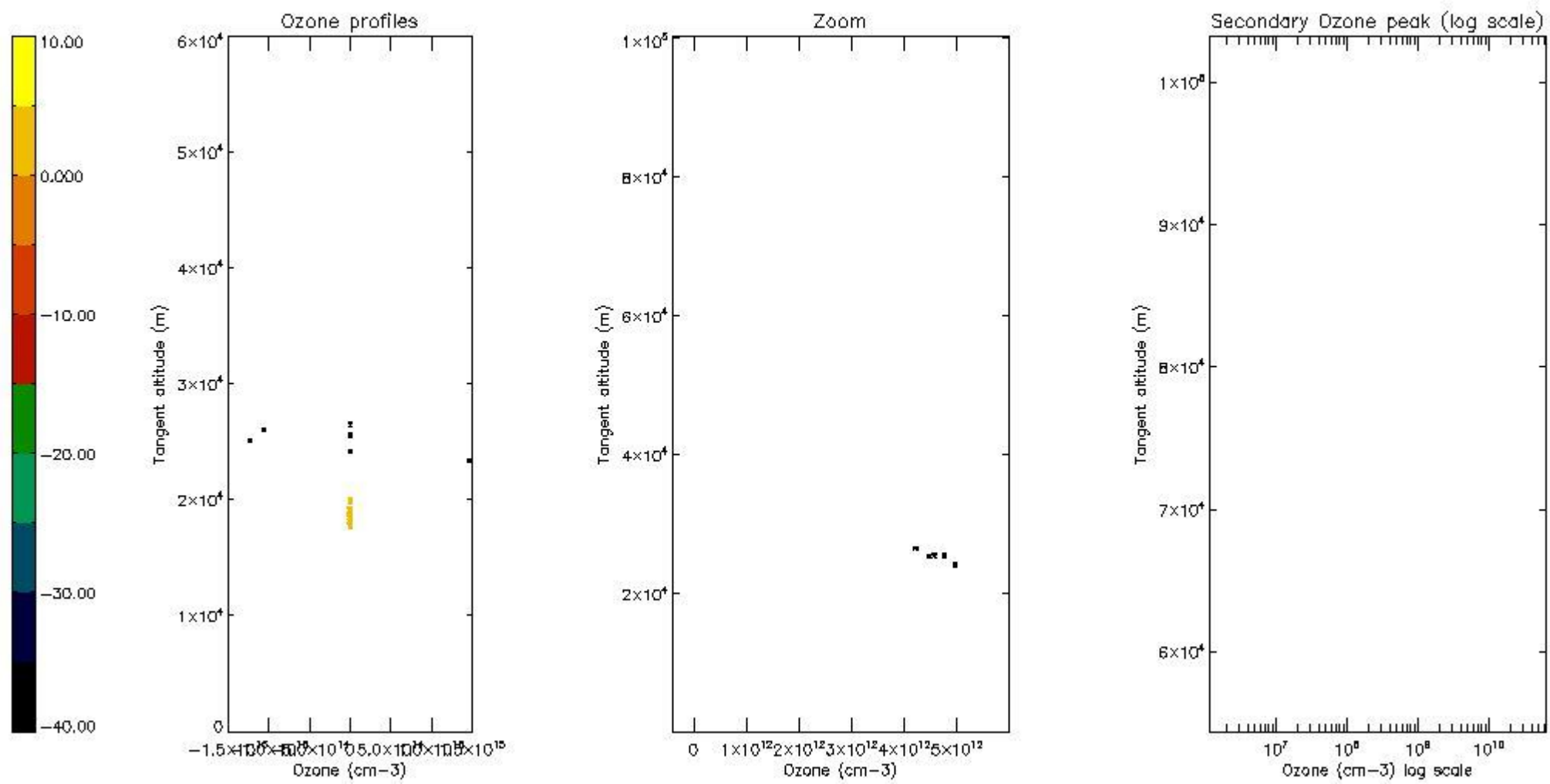
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



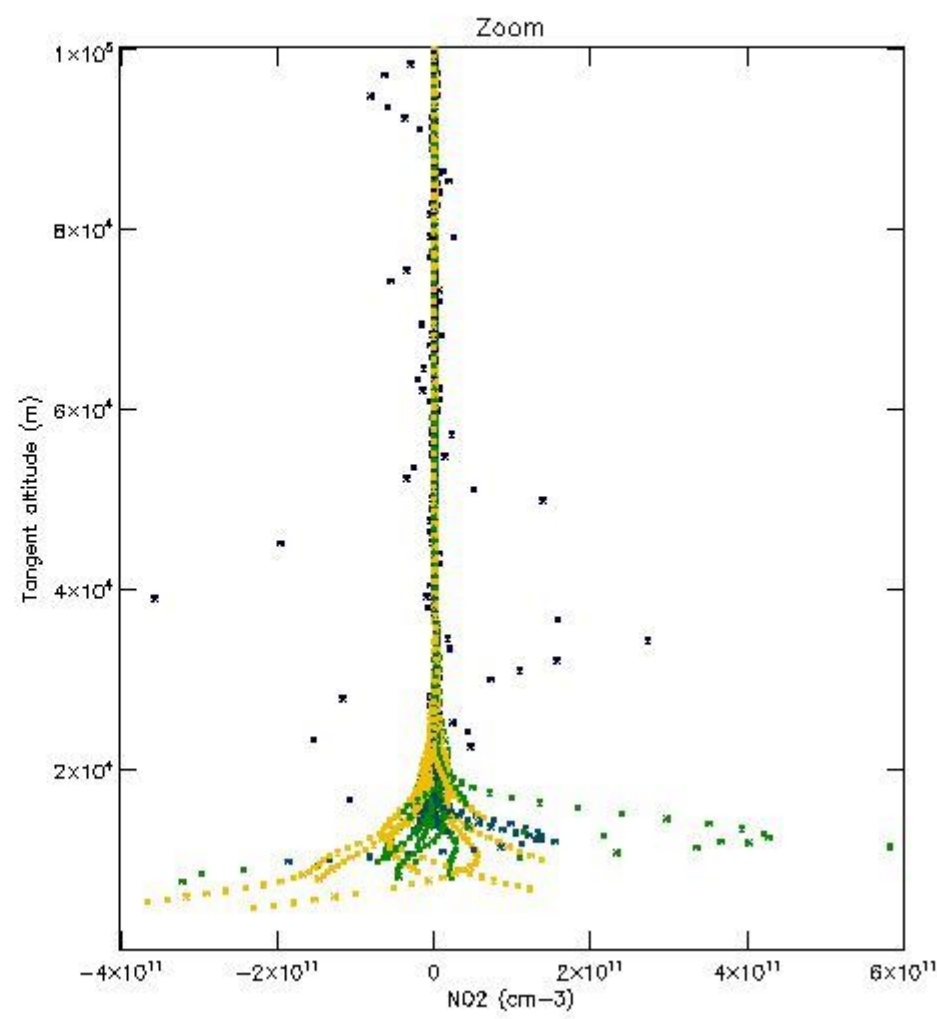
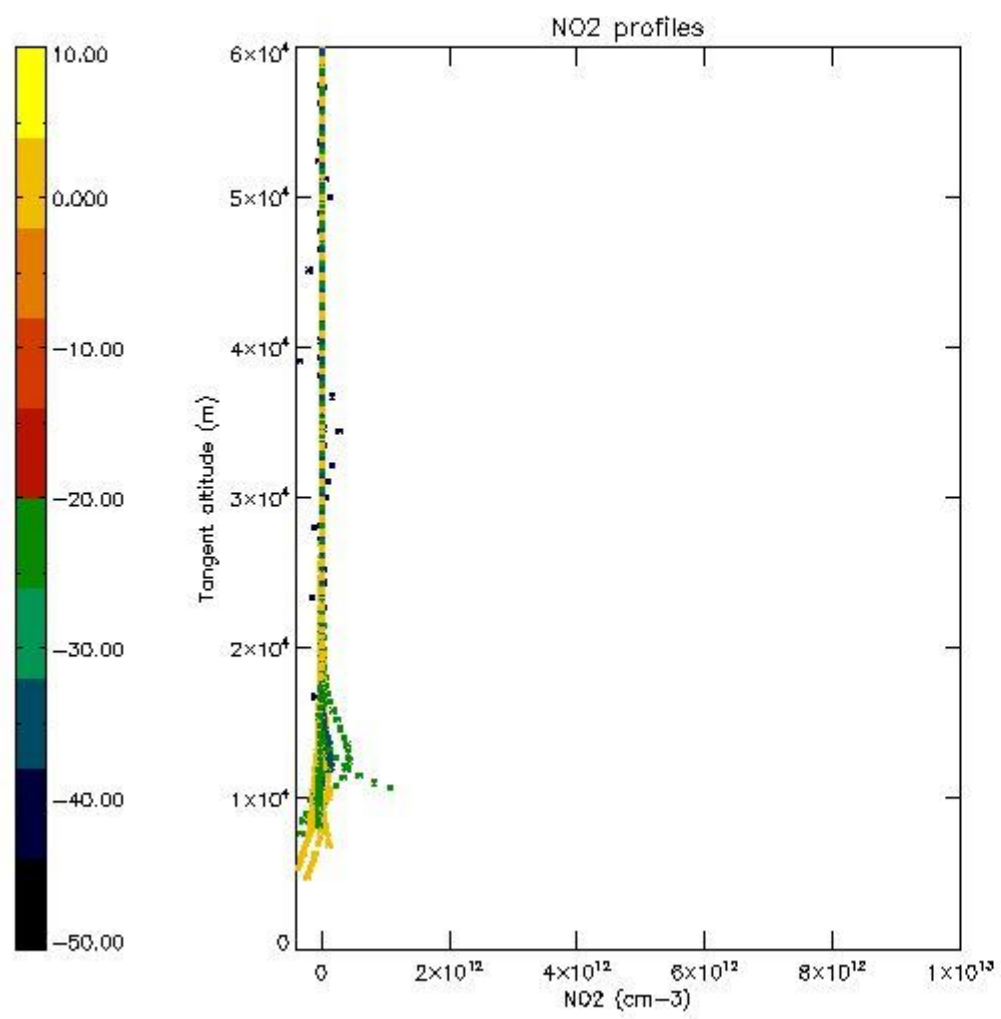
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



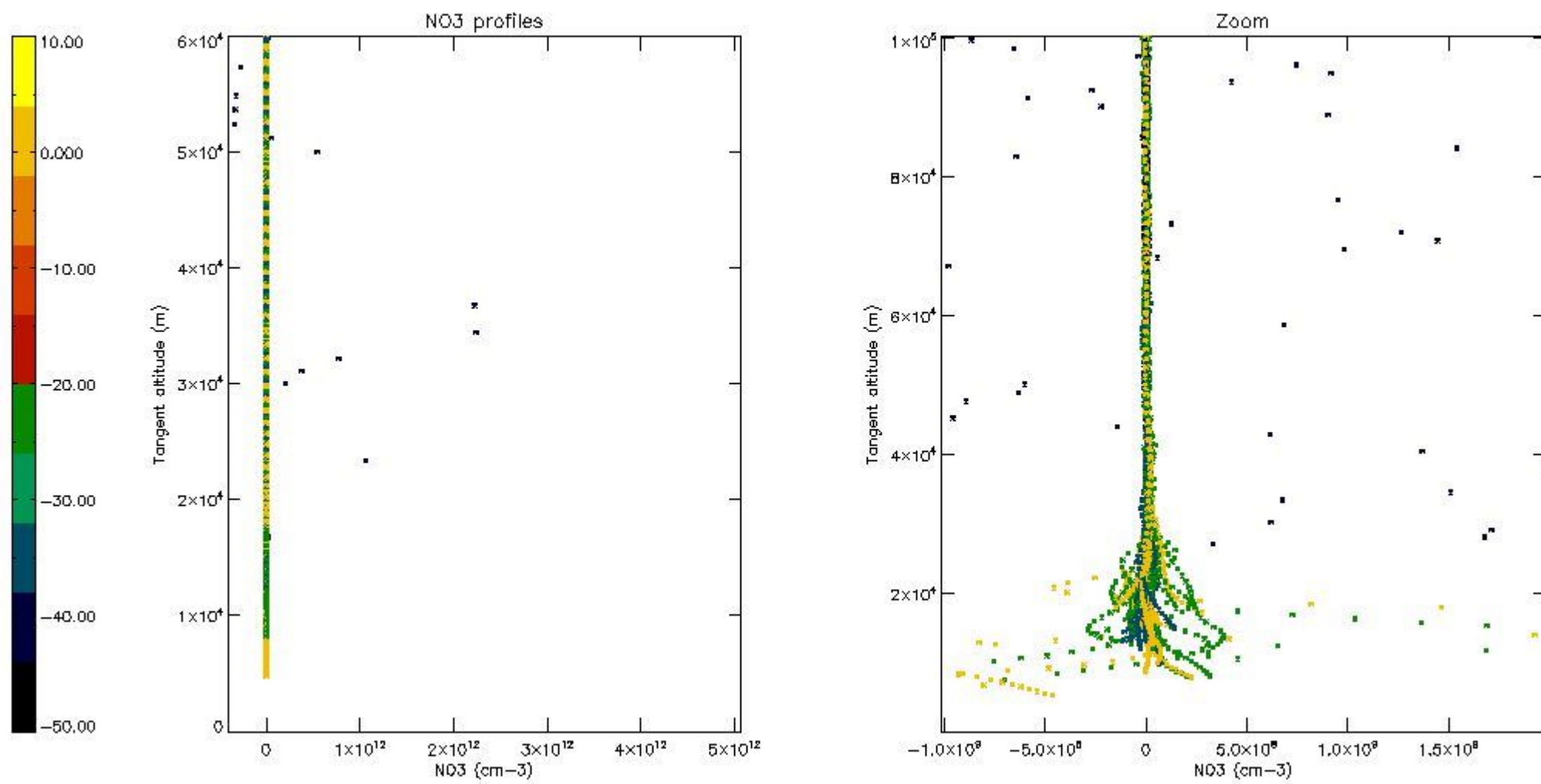
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



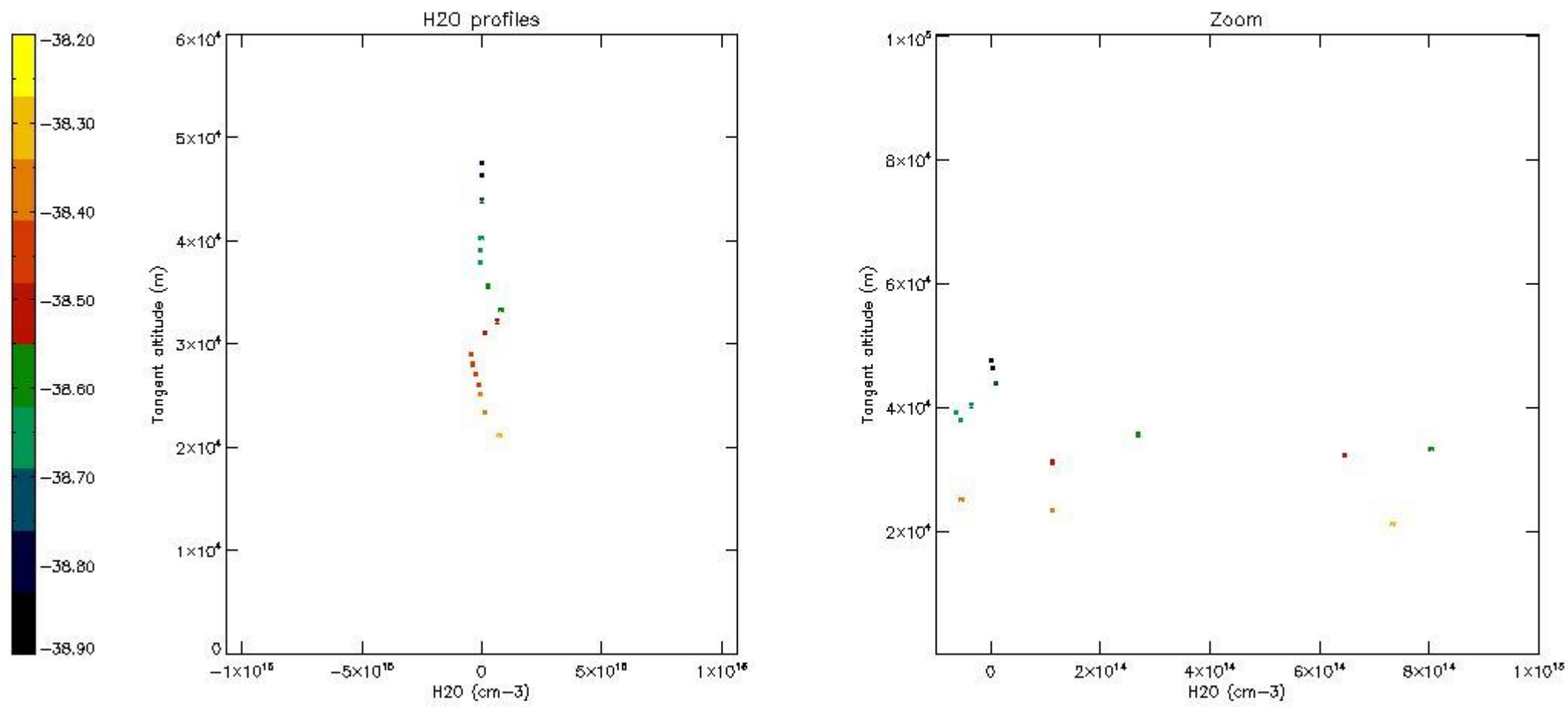
5.7 Plot NO3 profiles for all STD (dark without errors)

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	17-JUN-2010 00:00:02
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	17-JUN-2010 00:00:02
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	17-JUN-2010 00:00:02

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[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% \(dark without errors\)](#)

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[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	29APR2013 12:02:42
Data source version	GOMOS/6.01
Start time of products	17-06-2010 (17JUN2010 00:00:00)
Stop time of products	18-06-2010 (18JUN2010 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	258
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

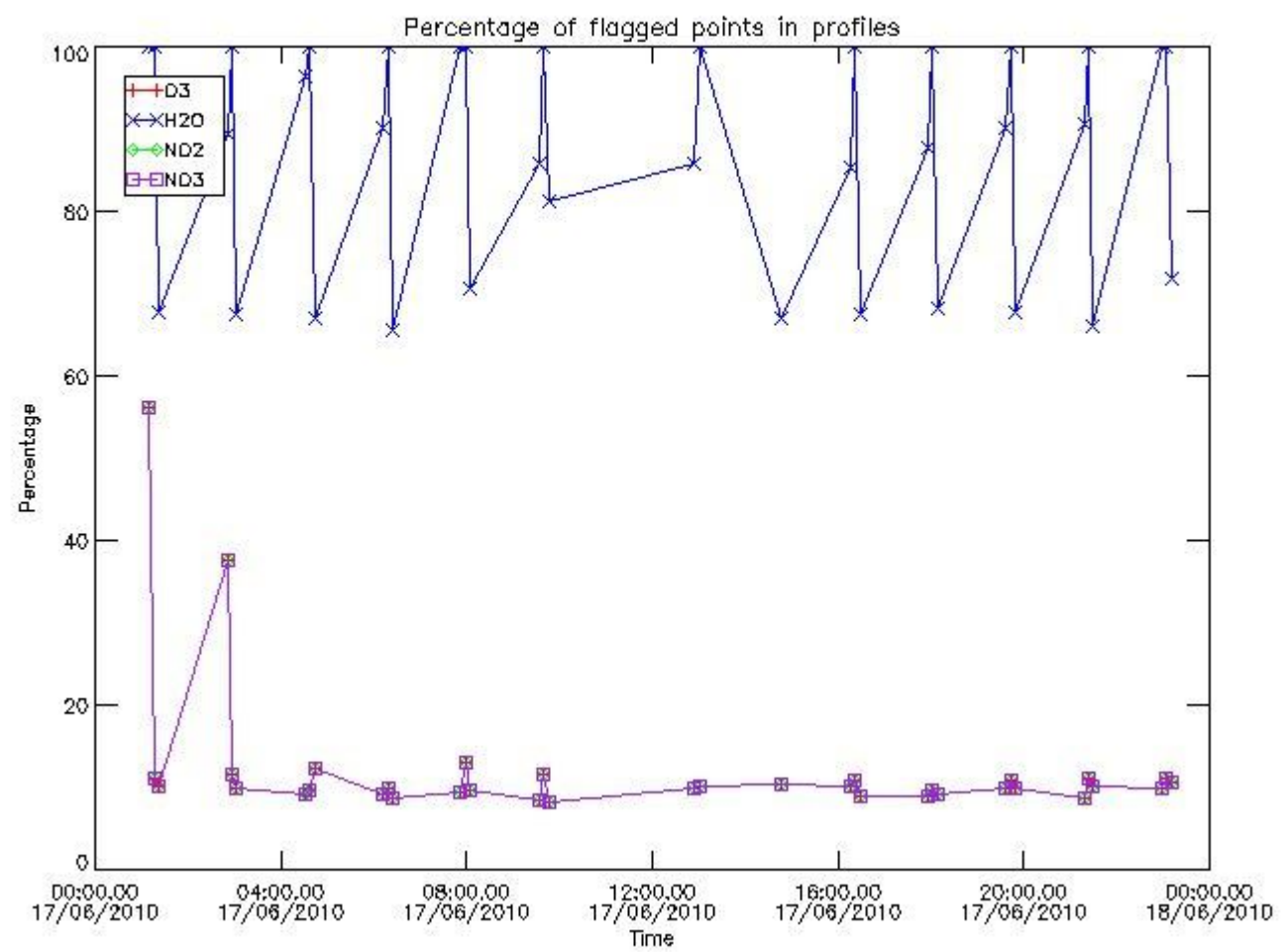
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20100617_000002_000000492090_00231_43371_5045.N1	17-JUN-2010 00:00:02	Bright	48.500	137	22Lam Sgr	2.8240	4400.0	97	43371	No
2	GOM_NL__2PRFIN20100617_000358_000000402090_00231_43371_5046.N1	17-JUN-2010 00:03:58	Bright	39.500	86	35Eta Oph	2.4300	10200.	79	43371	No
3	GOM_NL__2PRFIN20100617_001027_000000442090_00231_43371_5047.N1	17-JUN-2010 00:10:27	Bright	43.500	126	60Bet Oph	2.7700	4250.0	87	43371	No
4	GOM_NL__2PRFIN20100617_001258_000000622090_00231_43371_5048.N1	17-JUN-2010 00:12:58	Bright	62.000	59	55Alp Oph	2.0800	8900.0	124	43371	No
5	GOM_NL__2PRFIN20100617_001459_000000362090_00231_43371_5049.N1	17-JUN-2010 00:14:59	Bright	36.000	127	27Bet Her	2.7810	4700.0	72	43371	No
6	GOM_NL__2PRFIN20100617_001800_000000392090_00231_43371_5050.N1	17-JUN-2010 00:18:00	Bright	38.500	133	40Zet Her	2.8070	6000.0	77	43371	No
7	GOM_NL__2PRFIN20100617_002446_000000382090_00231_43371_5051.N1	17-JUN-2010 00:24:46	Bright	38.000	130	23Bet Dra	2.7990	5800.0	76	43371	No
8	GOM_NL__2PRFIN20100617_003506_000000482090_00231_43371_5052.N1	17-JUN-2010 00:35:06	Bright	48.000	89	5Alp Cep	2.4510	8000.0	96	43371	No
9	GOM_NL__2PRFIN20100617_004136_000000642090_00231_43371_5053.N1	17-JUN-2010 00:41:36	Bright	64.000	74	11Bet Cas	2.2680	6600.0	128	43371	No
10	GOM_NL__2PRFIN20100617_004300_000000502090_00231_43371_5054.N1	17-JUN-2010 00:43:00	Bright	50.000	68	18Alp Cas	2.2250	4500.0	100	43371	No
11	GOM_NL__2PRFIN20100617_004813_000000572090_00231_43371_5055.N1	17-JUN-2010 00:48:13	Bright	57.000	73	57Gam1And	2.2600	13100.	114	43371	No
12	GOM_NL__2PRFIN20100617_005035_000000672090_00231_43371_5056.N1	17-JUN-2010 00:50:35	Twilight	66.500	53	43Bet And	2.0480	3300.0	133	43371	No
13	GOM_NL__2PRFIN20100617_005407_000000502090_00231_43371_5057.N1	17-JUN-2010 00:54:07	Twilight	50.000	50	13Alp Ari	2.0070	4250.0	100	43371	No
14	GOM_NL__2PRFIN20100617_011000_000000582090_00231_43371_5058.N1	17-JUN-2010 01:10:00	Dark	57.500	52	16Bet Cet	2.0370	4500.0	115	43371	No
15	GOM_NL__2PRFIN20100617_011610_000000552090_00231_43371_5059.N1	17-JUN-2010 01:16:10	Dark	54.500	84	Alp Phe	2.3970	4500.0	109	43371	No
16	GOM_NL__2PRFIN20100617_012225_000000502090_00232_43372_5067.N1	17-JUN-2010 01:22:25	Dark	50.000	63	Bet Gru	2.1500	2800.0	100	43372	No
17	GOM_NL__2PRFIN20100617_012429_000000492090_00232_43372_5068.N1	17-JUN-2010 01:24:29	Straylight	48.500	31	Alp Gru	1.7340	15200.	97	43372	No
18	GOM_NL__2PRFIN20100617_012629_000000412090_00232_43372_5069.N1	17-JUN-2010 01:26:29	Straylight	41.000	172	Gam Gru	3.0030	13100.	82	43372	No
19	GOM_NL__2PRFIN20100617_012813_000000432090_00232_43372_5070.N1	17-JUN-2010 01:28:13	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	43372	No
20	GOM_NL__2PRFIN20100617_013749_000000472090_00232_43372_5071.N1	17-JUN-2010 01:37:49	Twilight	46.500	38	20Eps Sgr	1.8360	11000.	93	43372	No
21	GOM_NL__2PRFIN20100617_013919_000000492090_00232_43372_5072.N1	17-JUN-2010 01:39:19	Twilight	49.000	116	19Del Sgr	2.7000	4100.0	98	43372	No
22	GOM_NL__2PRFIN20100617_014038_000000502090_00232_43372_5073.N1	17-JUN-2010 01:40:38	Bright	50.000	137	22Lam Sgr	2.8240	4400.0	100	43372	No
23	GOM_NL__2PRFIN20100617_014434_000000402090_00232_43372_5074.N1	17-JUN-2010 01:44:34	Bright	39.500	86	35Eta Oph	2.4300	10200.	79	43372	No
24	GOM_NL__2PRFIN20100617_015103_000000432090_00232_43372_5075.N1	17-JUN-2010 01:51:03	Bright	43.000	126	60Bet Oph	2.7700	4250.0	86	43372	No
25	GOM_NL__2PRFIN20100617_015333_000000432090_00232_43372_5076.N1	17-JUN-2010 01:53:33	Bright	43.000	59	55Alp Oph	2.0800	8900.0	86	43372	No
26	GOM_NL__2PRFIN20100617_015535_000000392090_00232_43372_5077.N1	17-JUN-2010 01:55:35	Bright	38.500	127	27Bet Her	2.7810	4700.0	77	43372	No
27	GOM_NL__2PRFIN20100617_015835_000000402090_00232_43372_5078.N1	17-JUN-2010 01:58:35	Bright	40.000	133	40Zet Her	2.8070	6000.0	80	43372	No
28	GOM_NL__2PRFIN20100617_020521_000000412090_00232_43372_5079.N1	17-JUN-2010 02:05:21	Bright	40.500	130	23Bet Dra	2.7990	5800.0	81	43372	No
29	GOM_NL__2PRFIN20100617_021541_000000482090_00232_43372_5080.N1	17-JUN-2010 02:15:41	Bright	47.500	89	5Alp Cep	2.4510	8000.0	95	43372	No
30	GOM_NL__2PRFIN20100617_022212_000000552090_00232_43372_5081.N1	17-JUN-2010 02:22:12	Bright	54.500	74	11Bet Cas	2.2680	6600.0	109	43372	No
31	GOM_NL__2PRFIN20100617_022336_000000462090_00232_43372_5082.N1	17-JUN-2010 02:23:36	Bright	45.500	68	18Alp Cas	2.2250	4500.0	91	43372	No
32	GOM_NL__2PRFIN20100617_022849_000000412090_00232_43372_5083.N1	17-JUN-2010 02:28:49	Bright	40.500	73	57Gam1And	2.2600	13100.	81	43372	No
33	GOM_NL__2PRFIN20100617_023111_000000572090_00232_43372_5084.N1	17-JUN-2010 02:31:11	Twilight	57.000	53	43Bet And	2.0480	3300.0	114	43372	No
34	GOM_NL__2PRFIN20100617_023443_000000472090_00232_43372_5085.N1	17-JUN-2010 02:34:43	Twilight	46.500	50	13Alp Ari	2.0070	4250.0	93	43372	No
35	GOM_NL__2PRFIN20100617_025037_000000572090_00232_43372_5086.N1	17-JUN-2010 02:50:37	Dark	56.500	52	16Bet Cet	2.0370	4500.0	113	43372	No
36	GOM_NL__2PRFIN20100617_025646_000000442090_00232_43372_5087.N1	17-JUN-2010 02:56:46	Dark	44.000	84	Alp Phe	2.3970	4500.0	88	43372	No
37	GOM_NL__2PRFIN20100617_030303_000000512090_00233_43373_5088.N1	17-JUN-2010 03:03:03	Dark	51.000	63	Bet Gru	2.1500	2800.0	102	43373	No
38	GOM_NL__2PRFIN20100617_030506_000000502090_00233_43373_5076.N1	17-JUN-2010 03:05:06	Straylight	50.000	31	Alp Gru	1.7340	15200.	100	43373	No
39	GOM_NL__2PRFIN20100617_030706_000000412090_00233_43373_5077.N1	17-JUN-2010 03:07:06	Straylight	41.000	172	Gam Gru	3.0030	13100.	82	43373	No
40	GOM_NL__2PRFIN20100617_030850_000000442090_00233_43373_5078.N1	17-JUN-2010 03:08:50	Straylight	43.500	45	Alp Pav	1.9400	26000.	87	43373	No
41	GOM_NL__2PRFIN20100617_031826_000000502090_00233_43373_5079.N1	17-JUN-2010 03:18:26	Twilight	49.500	38	20Eps Sgr	1.8360	11000.	99	43373	No
42	GOM_NL__2PRFIN20100617_031955_000000512090_00233_43373_5080.N1	17-JUN-2010 03:19:55	Twilight	51.000	116	19Del Sgr	2.7000	4100.0	102	43373	No

220	GOM_NL__2PRFIN20100617_205157_000000532090_00243_43383_5191.N1	17-JUN-2010 20:51:57	Bright	53.000	160	23Gam Per	2.9300	4700.0	106	43383	No
221	GOM_NL__2PRFIN20100617_205524_000000432090_00243_43383_5192.N1	17-JUN-2010 20:55:24	Bright	42.500	73	57Gam1And	2.2600	13100.	85	43383	No
222	GOM_NL__2PRFIN20100617_205747_000000592090_00243_43383_5193.N1	17-JUN-2010 20:57:47	Twilight	58.500	53	43Bet And	2.0480	3300.0	117	43383	No
223	GOM_NL__2PRFIN20100617_210120_000000502090_00243_43383_5194.N1	17-JUN-2010 21:01:20	Twilight	50.000	50	13Alp Ari	2.0070	4250.0	100	43383	No
224	GOM_NL__2PRFIN20100617_211725_000000592090_00243_43383_5195.N1	17-JUN-2010 21:17:25	Dark	58.500	52	16Bet Cet	2.0370	4500.0	117	43383	No
225	GOM_NL__2PRFIN20100617_212330_000000462090_00243_43383_5196.N1	17-JUN-2010 21:23:30	Dark	46.000	84	Alp Phe	2.3970	4500.0	92	43383	No
226	GOM_NL__2PRFIN20100617_212948_000000512090_00244_43384_5184.N1	17-JUN-2010 21:29:48	Dark	50.500	63	Bet Gru	2.1500	2800.0	101	43384	No
227	GOM_NL__2PRFIN20100617_213152_000000512090_00244_43384_5185.N1	17-JUN-2010 21:31:52	Straylight	50.500	31	Alp Gru	1.7340	15200.	101	43384	No
228	GOM_NL__2PRFIN20100617_213532_000000412090_00244_43384_5186.N1	17-JUN-2010 21:35:32	Straylight	41.000	45	Alp Pav	1.9400	26000.	82	43384	No
229	GOM_NL__2PRFIN20100617_214516_000000442090_00244_43384_5187.N1	17-JUN-2010 21:45:16	Twilight	43.500	25	35Lam Sco	1.6200	28000.	87	43384	No
230	GOM_NL__2PRFIN20100617_214639_000000452090_00244_43384_5188.N1	17-JUN-2010 21:46:39	Twilight	44.500	167	10Gam2Sgr	2.9840	4500.0	89	43384	No
231	GOM_NL__2PRFIN20100617_215147_000000402090_00244_43384_5189.N1	17-JUN-2010 21:51:47	Bright	40.000	86	35Eta Oph	2.4300	10200.	80	43384	No
232	GOM_NL__2PRFIN20100617_215812_000000432090_00244_43384_5190.N1	17-JUN-2010 21:58:12	Bright	42.500	126	60Bet Oph	2.7700	4250.0	85	43384	No
233	GOM_NL__2PRFIN20100617_220041_000000422090_00244_43384_5191.N1	17-JUN-2010 22:00:41	Bright	42.000	59	55Alp Oph	2.0800	8900.0	84	43384	No
234	GOM_NL__2PRFIN20100617_220245_000000362090_00244_43384_5192.N1	17-JUN-2010 22:02:45	Bright	36.000	127	27Bet Her	2.7810	4700.0	72	43384	No
235	GOM_NL__2PRFIN20100617_220545_000000392090_00244_43384_5193.N1	17-JUN-2010 22:05:45	Bright	39.000	133	40Zet Her	2.8070	6000.0	78	43384	No
236	GOM_NL__2PRFIN20100617_221228_000000412090_00244_43384_5194.N1	17-JUN-2010 22:12:28	Bright	41.000	130	23Bet Dra	2.7990	5800.0	82	43384	No
237	GOM_NL__2PRFIN20100617_221408_000000402090_00244_43384_5195.N1	17-JUN-2010 22:14:08	Bright	39.500	119	14Eta Dra	2.7270	4700.0	79	43384	No
238	GOM_NL__2PRFIN20100617_222244_000000482090_00244_43384_5196.N1	17-JUN-2010 22:22:44	Bright	48.000	89	5Alp Cep	2.4510	8000.0	96	43384	No
239	GOM_NL__2PRFIN20100617_222919_000000652090_00244_43384_5197.N1	17-JUN-2010 22:29:19	Bright	65.000	74	11Bet Cas	2.2680	6600.0	130	43384	No
240	GOM_NL__2PRFIN20100617_223044_000000632090_00244_43384_5198.N1	17-JUN-2010 22:30:44	Bright	63.000	68	18Alp Cas	2.2250	4500.0	126	43384	No
241	GOM_NL__2PRFIN20100617_223233_000000532090_00244_43384_5199.N1	17-JUN-2010 22:32:33	Bright	53.000	160	23Gam Per	2.9300	4700.0	106	43384	No
242	GOM_NL__2PRFIN20100617_223600_000000422090_00244_43384_5200.N1	17-JUN-2010 22:36:00	Bright	42.000	73	57Gam1And	2.2600	13100.	84	43384	No
243	GOM_NL__2PRFIN20100617_223822_000000682090_00244_43384_5201.N1	17-JUN-2010 22:38:22	Twilight	67.500	53	43Bet And	2.0480	3300.0	135	43384	No
244	GOM_NL__2PRFIN20100617_224156_000000492090_00244_43384_5202.N1	17-JUN-2010 22:41:56	Twilight	48.500	50	13Alp Ari	2.0070	4250.0	97	43384	No
245	GOM_NL__2PRFIN20100617_225801_000000522090_00244_43384_5203.N1	17-JUN-2010 22:58:01	Dark	51.500	52	16Bet Cet	2.0370	4500.0	103	43384	No
246	GOM_NL__2PRFIN20100617_230407_000000512090_00244_43384_5204.N1	17-JUN-2010 23:04:07	Dark	51.000	84	Alp Phe	2.3970	4500.0	102	43384	No
247	GOM_NL__2PRFIN20100617_231025_000000492090_00245_43385_5192.N1	17-JUN-2010 23:10:25	Dark	48.500	63	Bet Gru	2.1500	2800.0	97	43385	No
248	GOM_NL__2PRFIN20100617_231228_000000492090_00245_43385_5193.N1	17-JUN-2010 23:12:28	Straylight	48.500	31	Alp Gru	1.7340	15200.	97	43385	No
249	GOM_NL__2PRFIN20100617_231608_000000432090_00245_43385_5194.N1	17-JUN-2010 23:16:08	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	43385	No
250	GOM_NL__2PRFIN20100617_232552_000000442090_00245_43385_5195.N1	17-JUN-2010 23:25:52	Twilight	43.500	25	35Lam Sco	1.6200	28000.	87	43385	No
251	GOM_NL__2PRFIN20100617_232715_000000462090_00245_43385_5196.N1	17-JUN-2010 23:27:15	Twilight	45.500	167	10Gam2Sgr	2.9840	4500.0	91	43385	No
252	GOM_NL__2PRFIN20100617_233223_000000402090_00245_43385_5197.N1	17-JUN-2010 23:32:23	Bright	40.000	86	35Eta Oph	2.4300	10200.	80	43385	No
253	GOM_NL__2PRFIN20100617_233847_000000432090_00245_43385_5198.N1	17-JUN-2010 23:38:47	Bright	42.500	126	60Bet Oph	2.7700	4250.0	85	43385	No
254	GOM_NL__2PRFIN20100617_234117_000000432090_00245_43385_5199.N1	17-JUN-2010 23:41:17	Bright	42.500	59	55Alp Oph	2.0800	8900.0	85	43385	No
255	GOM_NL__2PRFIN20100617_234321_000000392090_00245_43385_5200.N1	17-JUN-2010 23:43:21	Bright	38.500	127	27Bet Her	2.7810	4700.0	77	43385	No
256	GOM_NL__2PRFIN20100617_234620_000000392090_00245_43385_5201.N1	17-JUN-2010 23:46:20	Bright	38.500	133	40Zet Her	2.8070	6000.0	77	43385	No
257	GOM_NL__2PRFIN20100617_235304_000000412090_00245_43385_5202.N1	17-JUN-2010 23:53:04	Bright	40.500	130	23Bet Dra	2.7990	5800.0	81	43385	No
258	GOM_NL__2PRFIN20100617_235444_000000382090_00245_43385_5203.N1	17-JUN-2010 23:54:44	Bright	38.000	119	14Eta Dra	2.7270	4700.0	76	43385	No

3. Quality information per product

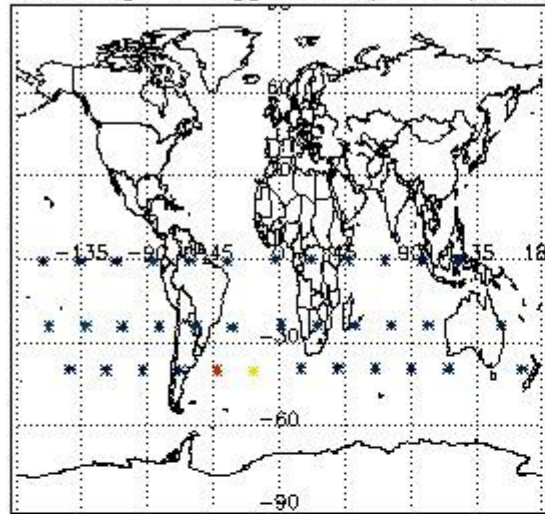
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

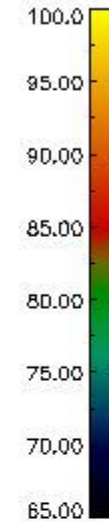
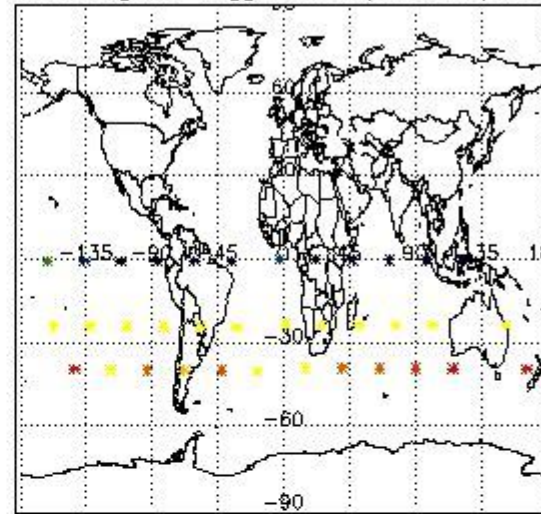


3.2 Plot quality information per product (world map)

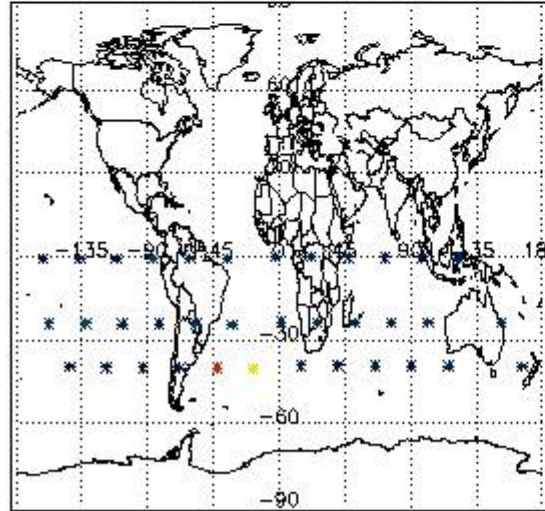
Percentage of flagged data per O3 profile



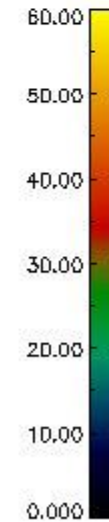
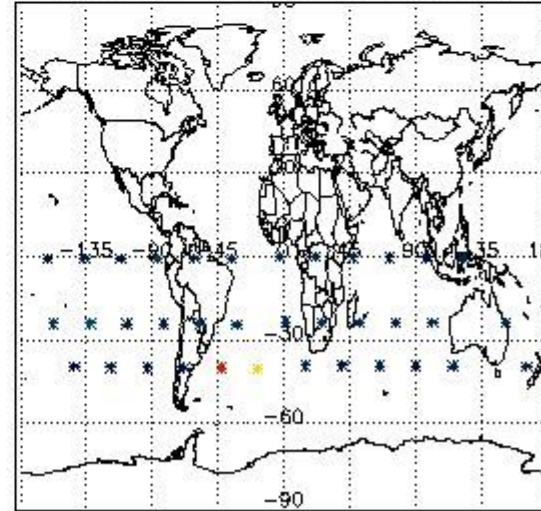
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

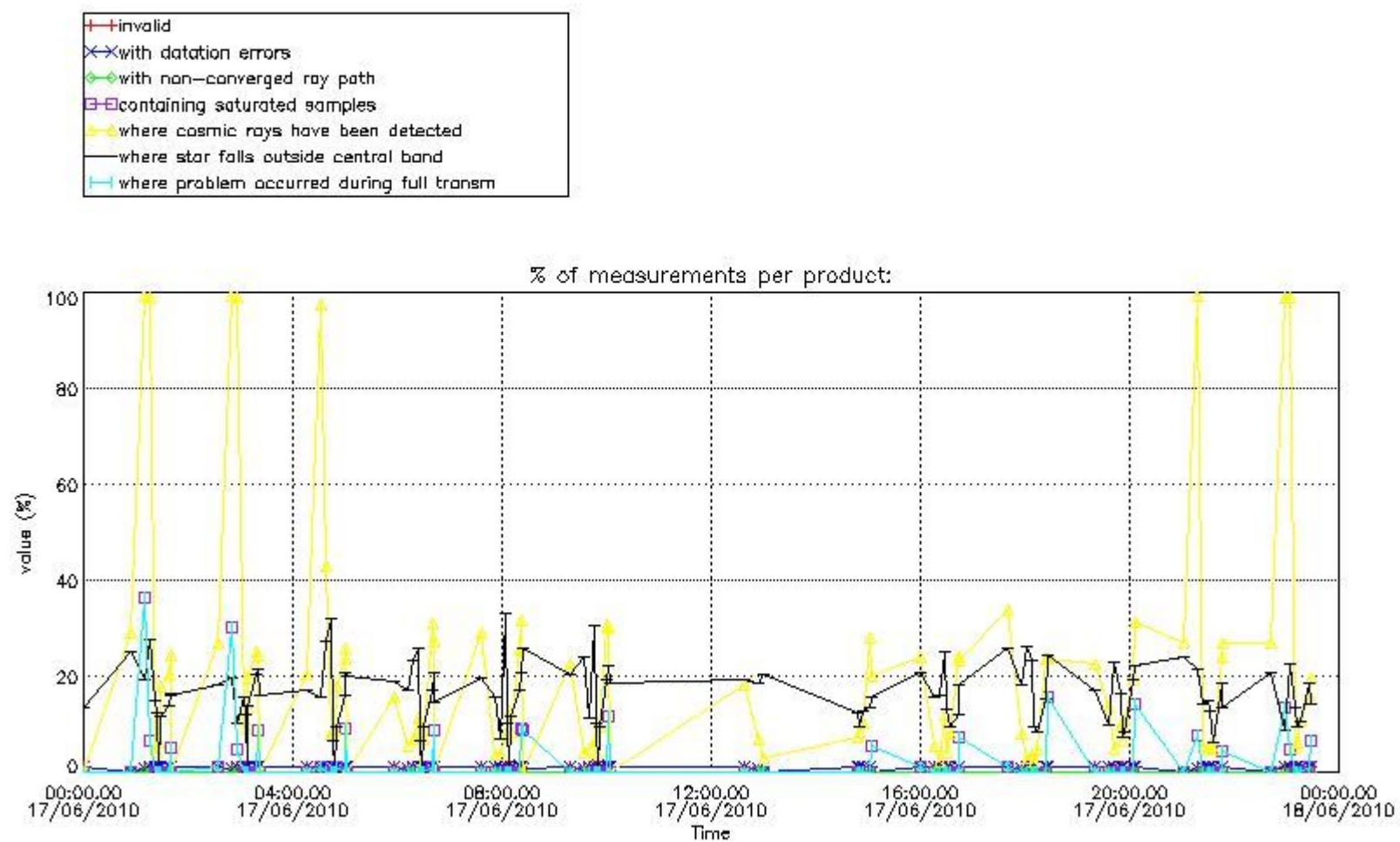


4. Level 1 quality information per product

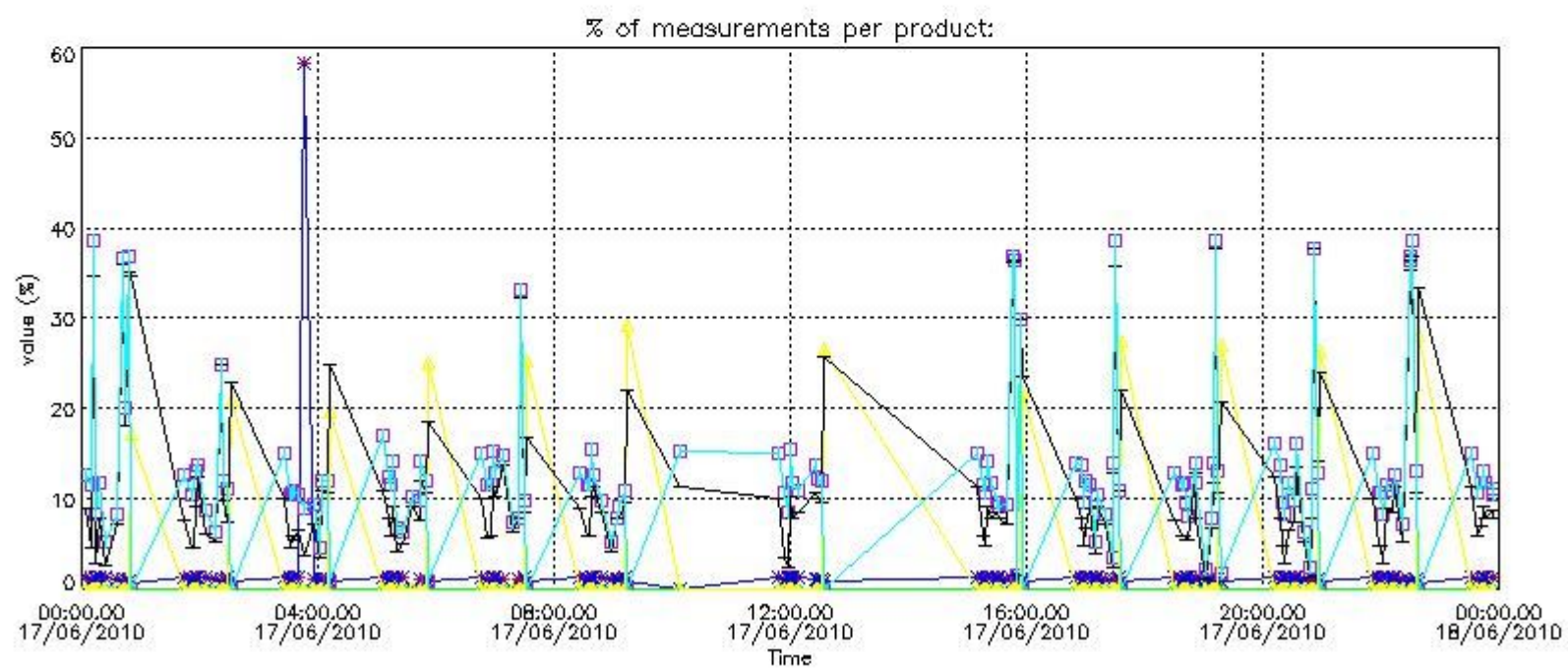
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

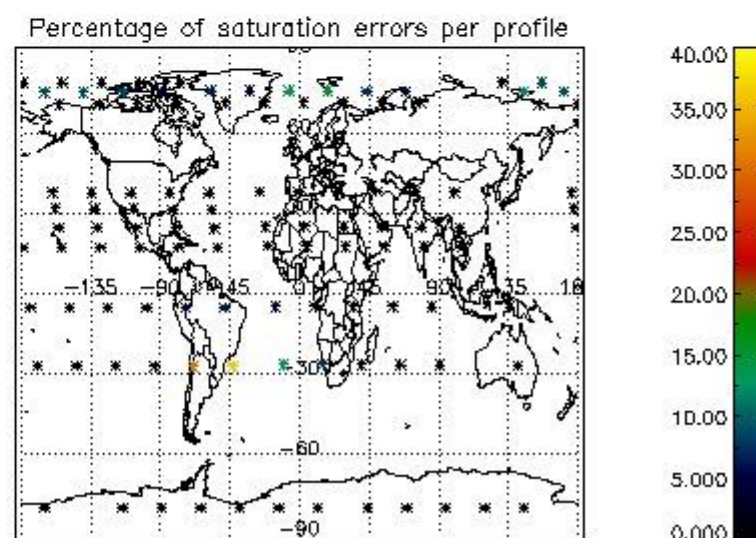
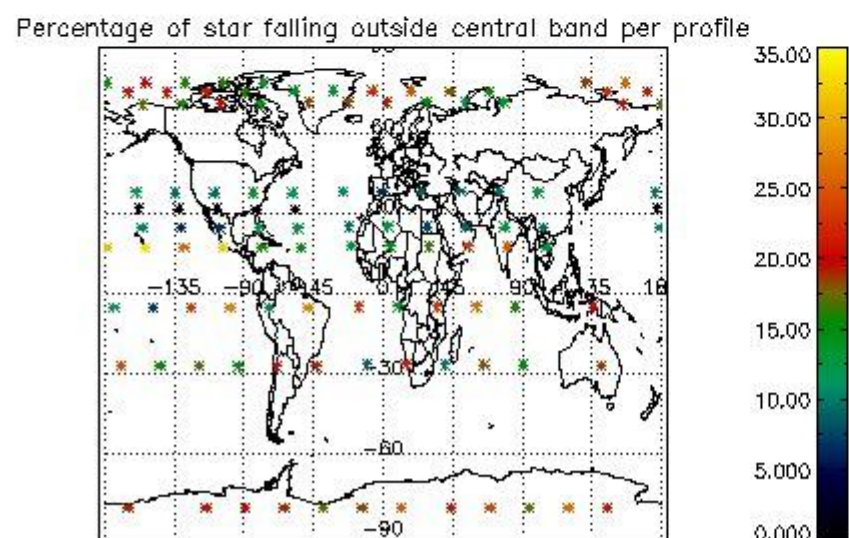
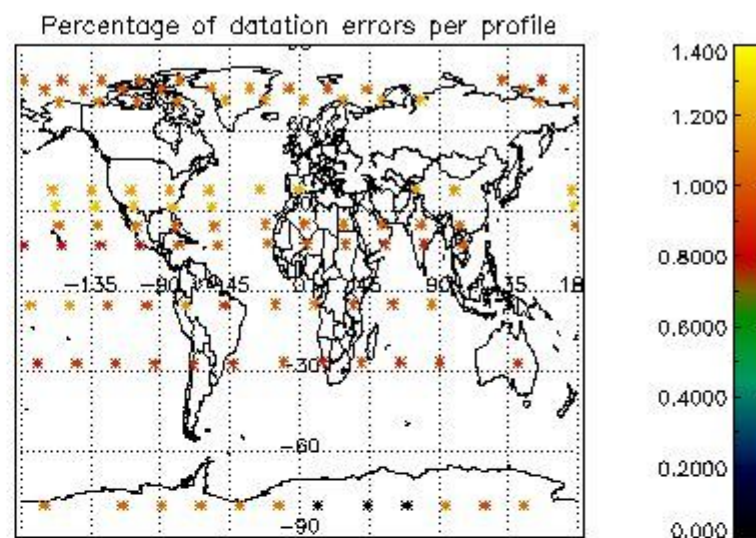
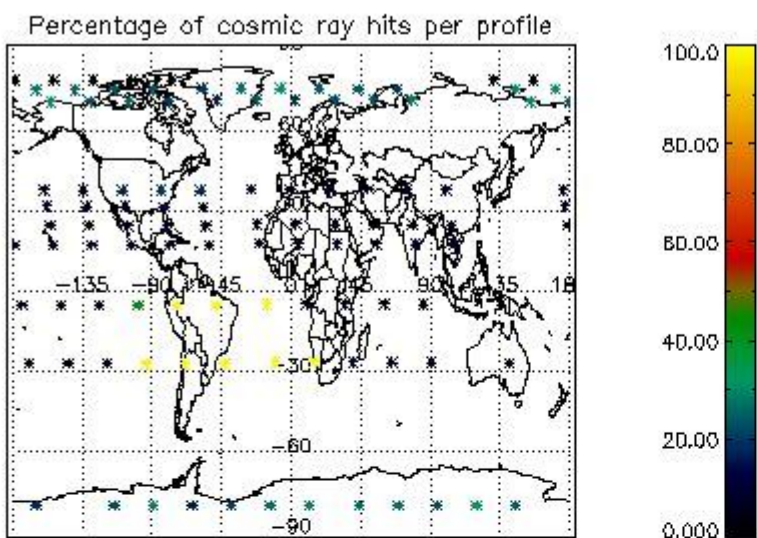


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

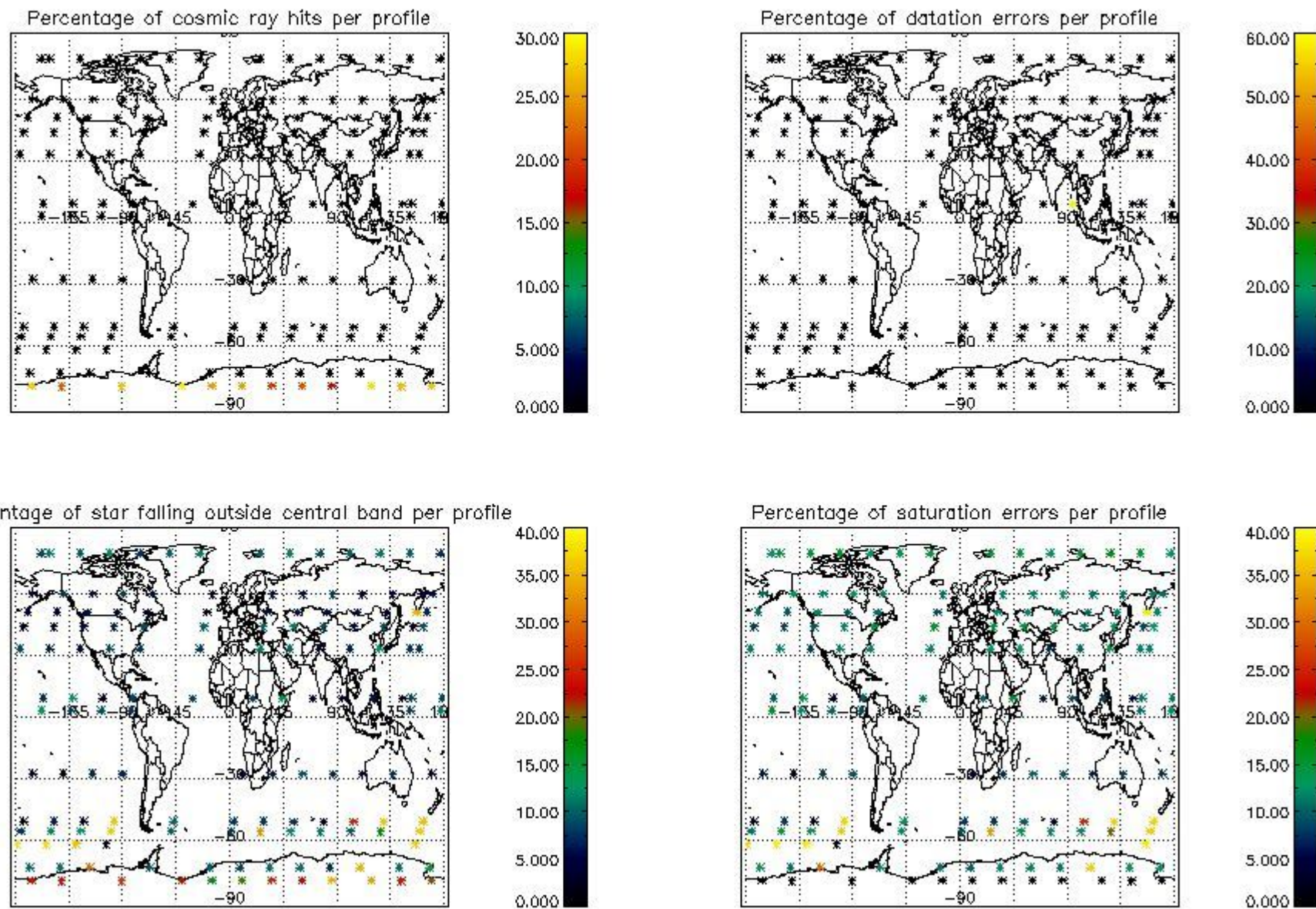


4.2 Plot quality information per product coming from level 1b processing (world map)

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

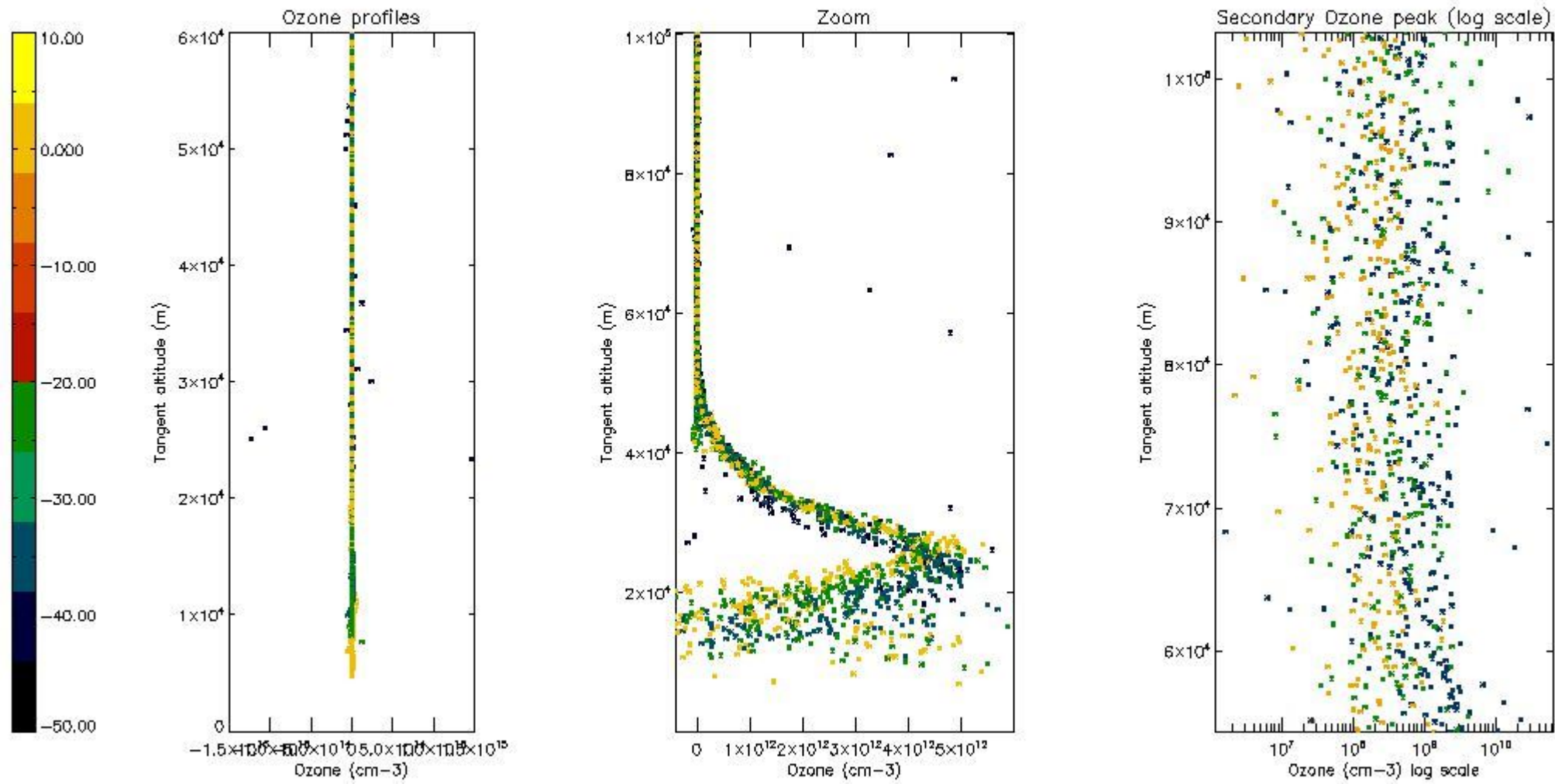
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	16
STD < 20	4

STD < 10	2
STD < 5	0

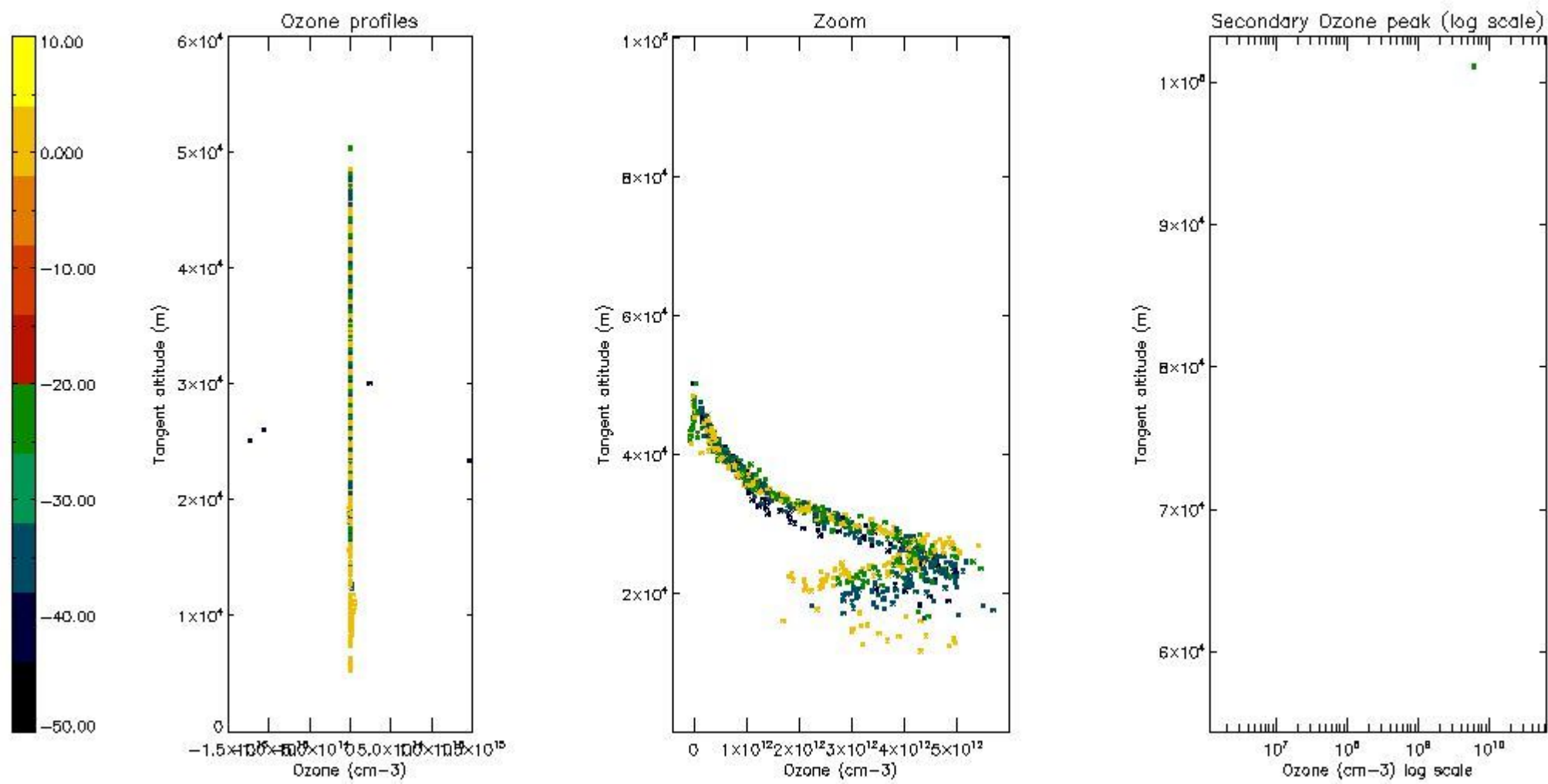
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



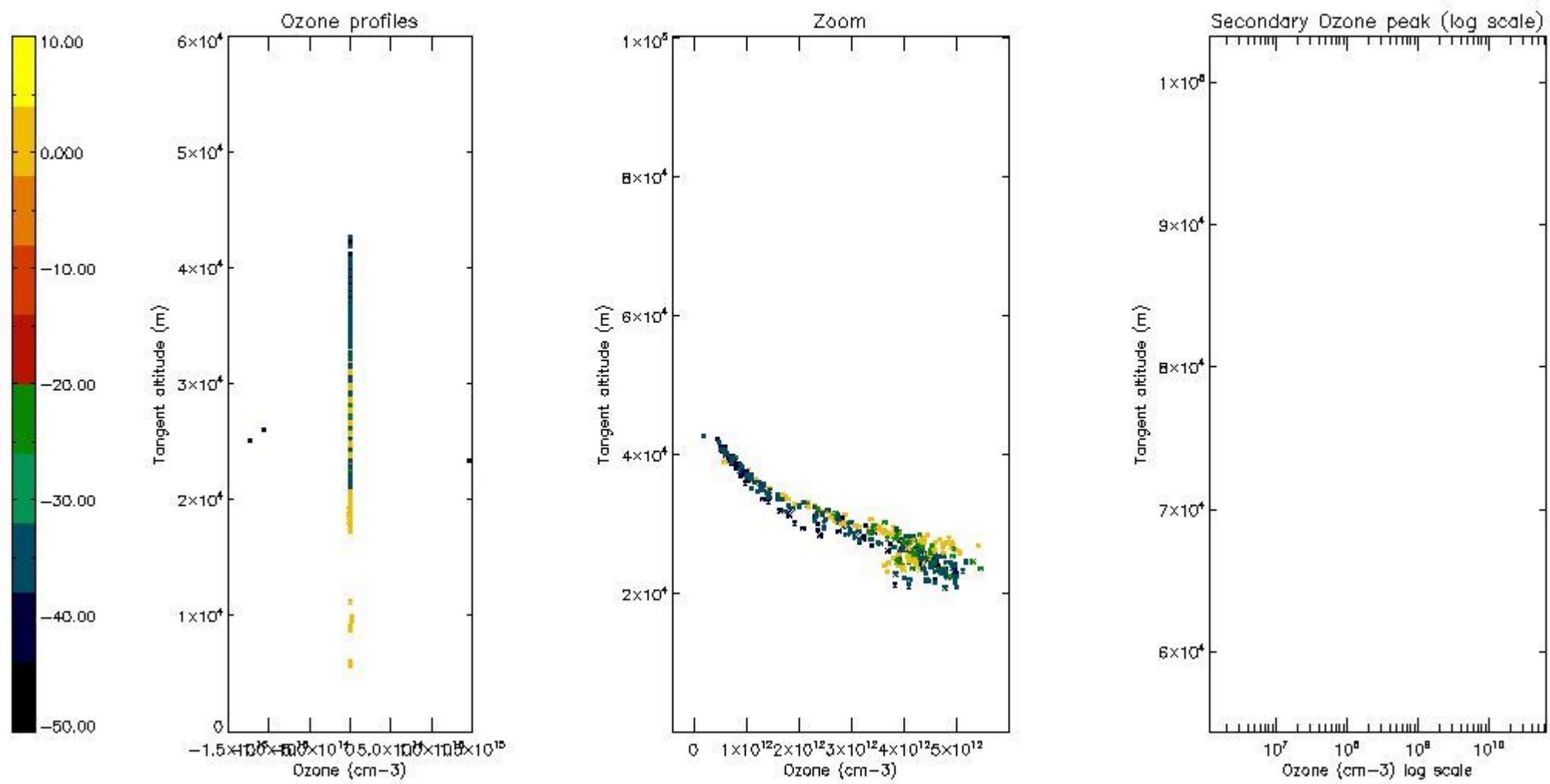
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



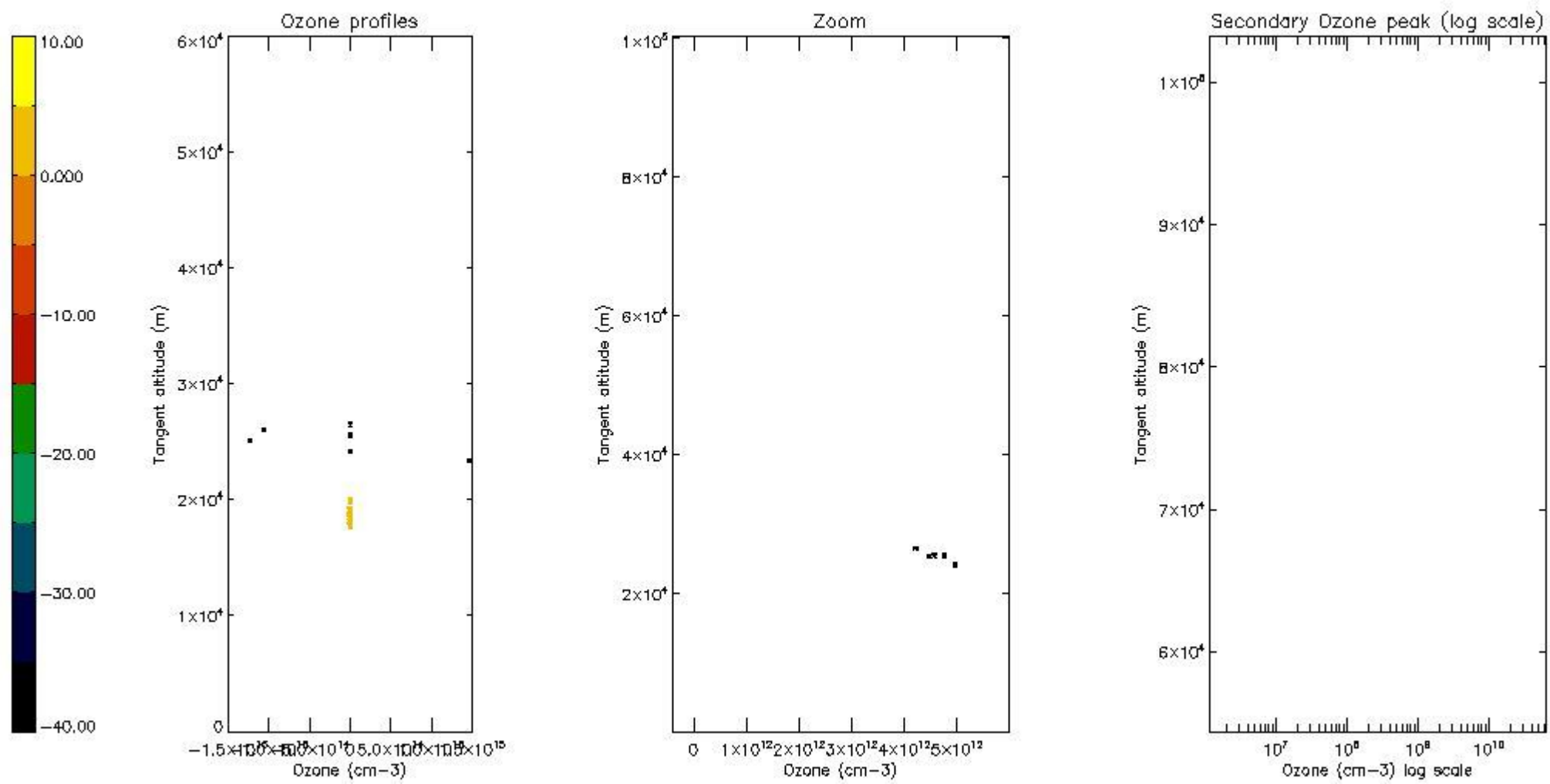
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



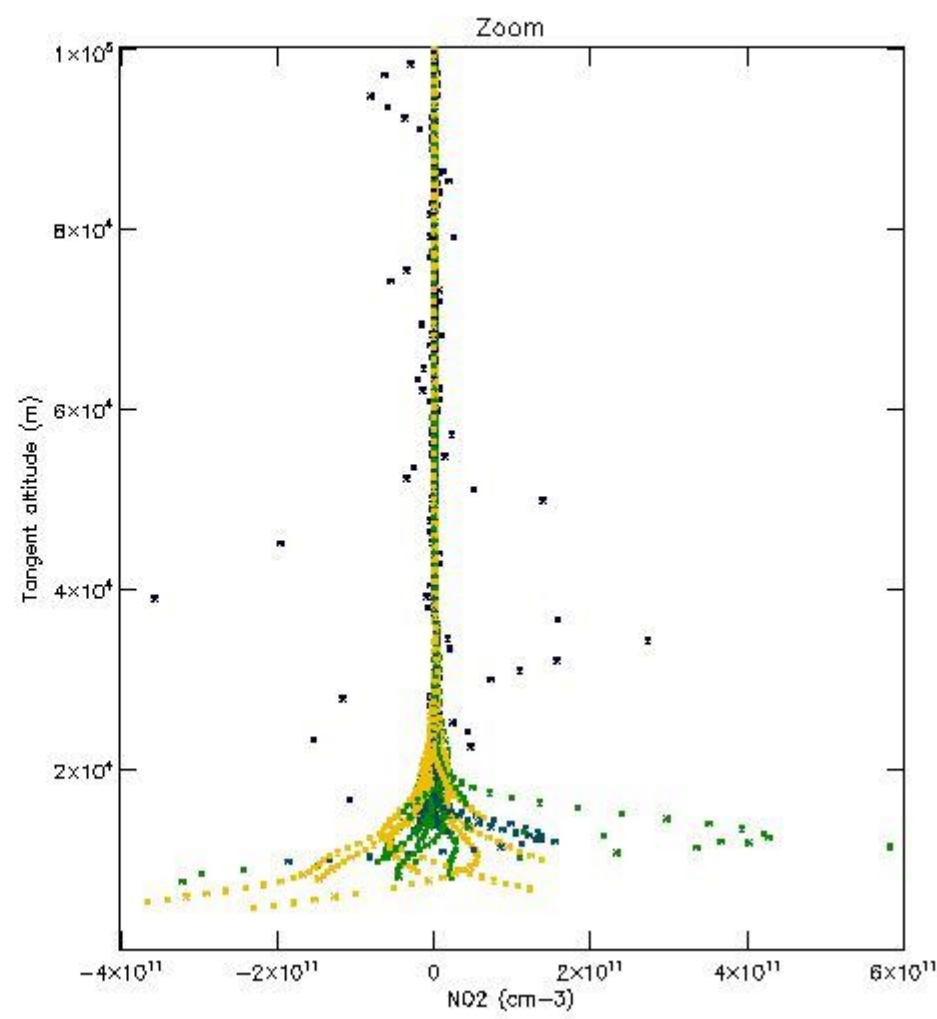
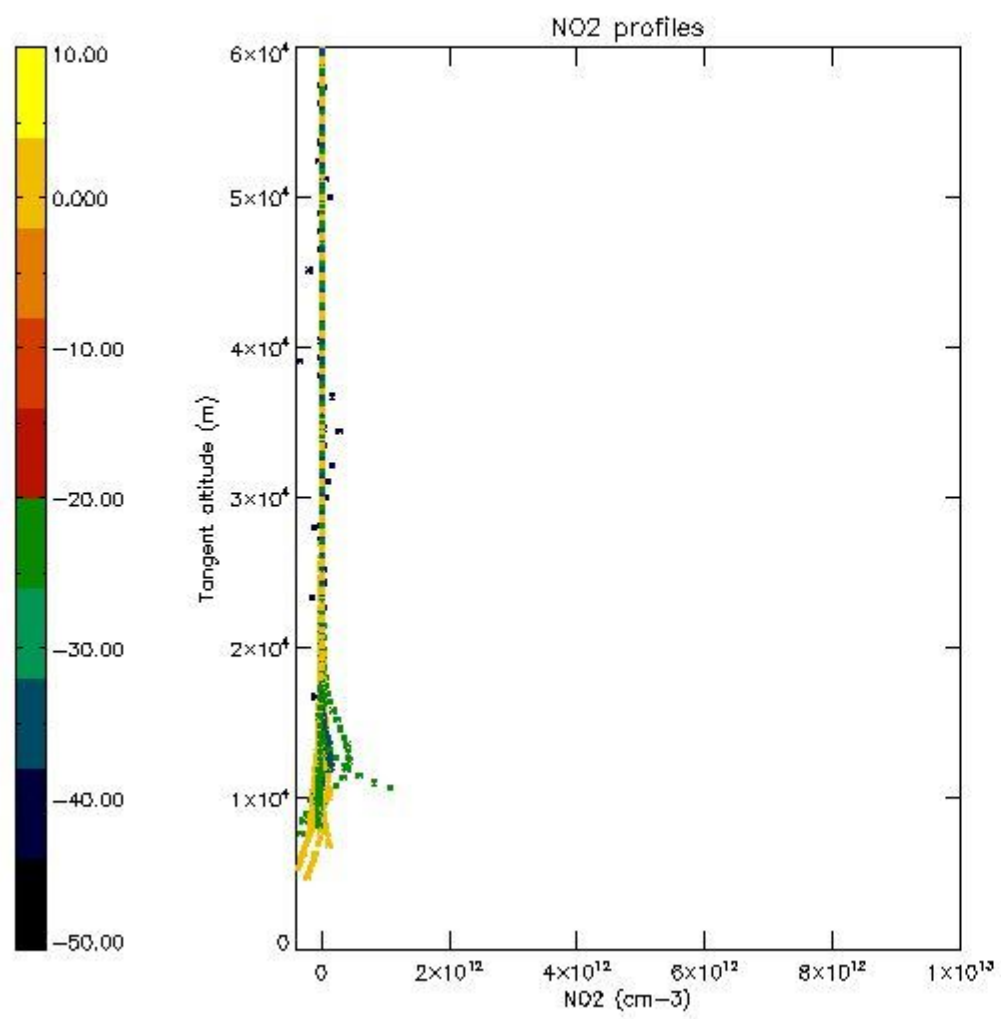
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



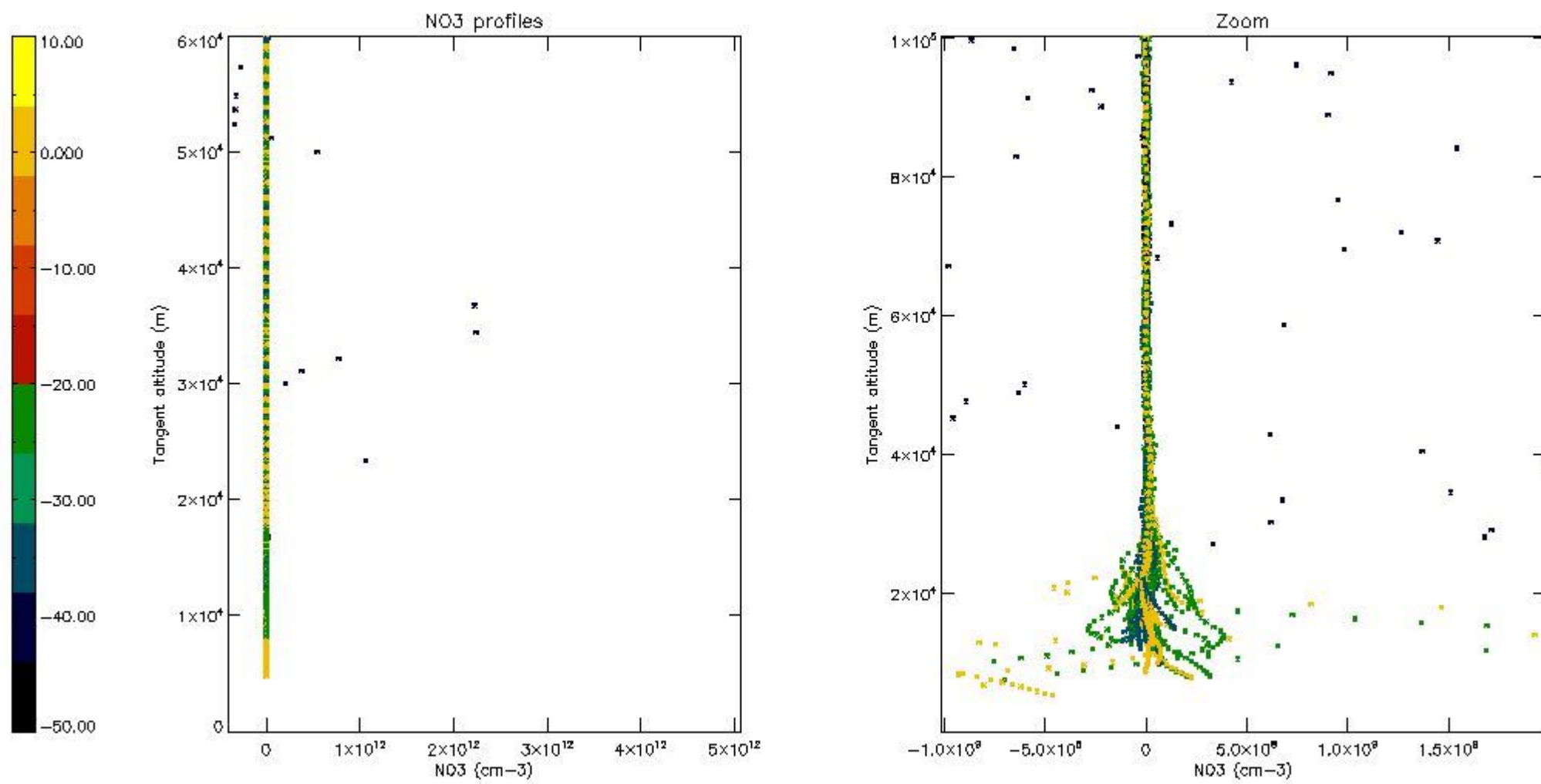
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



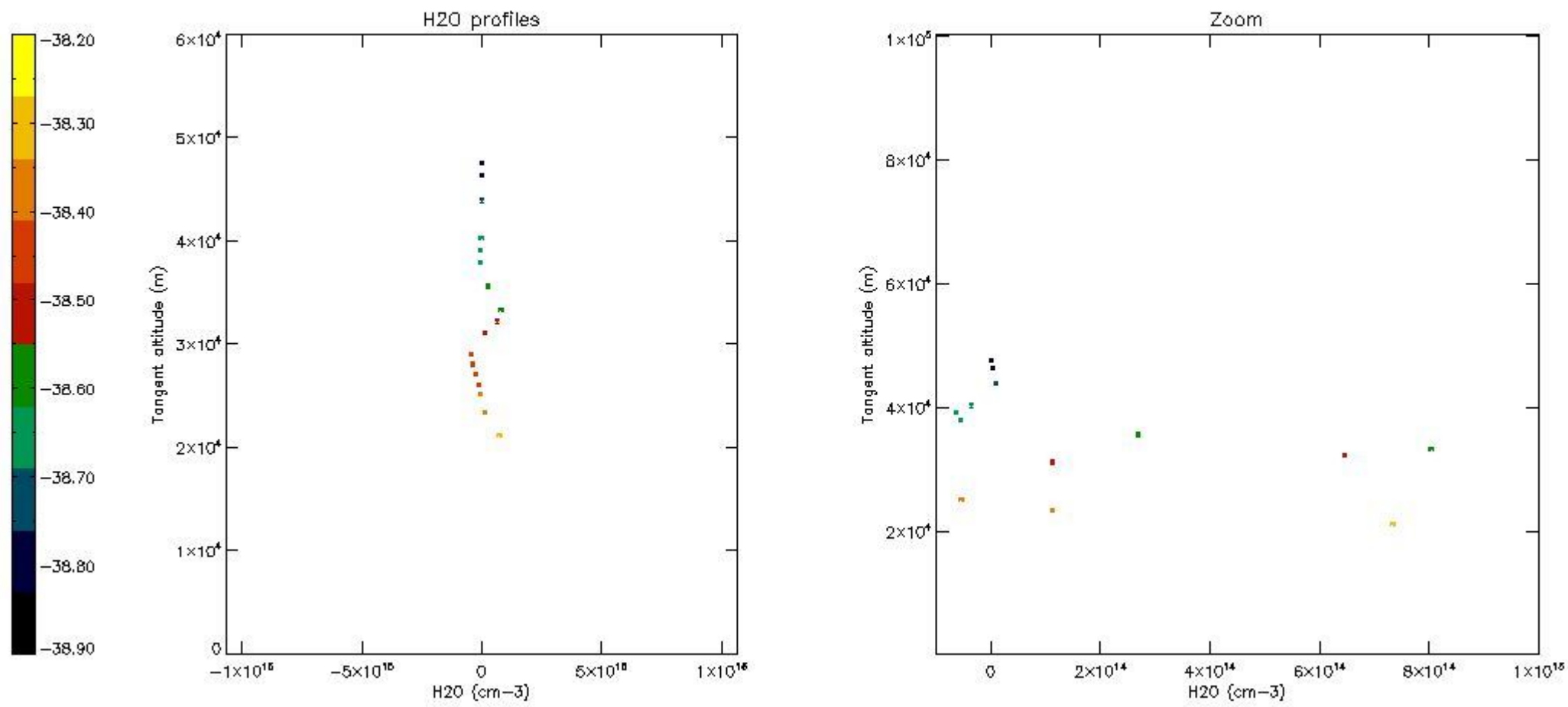
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

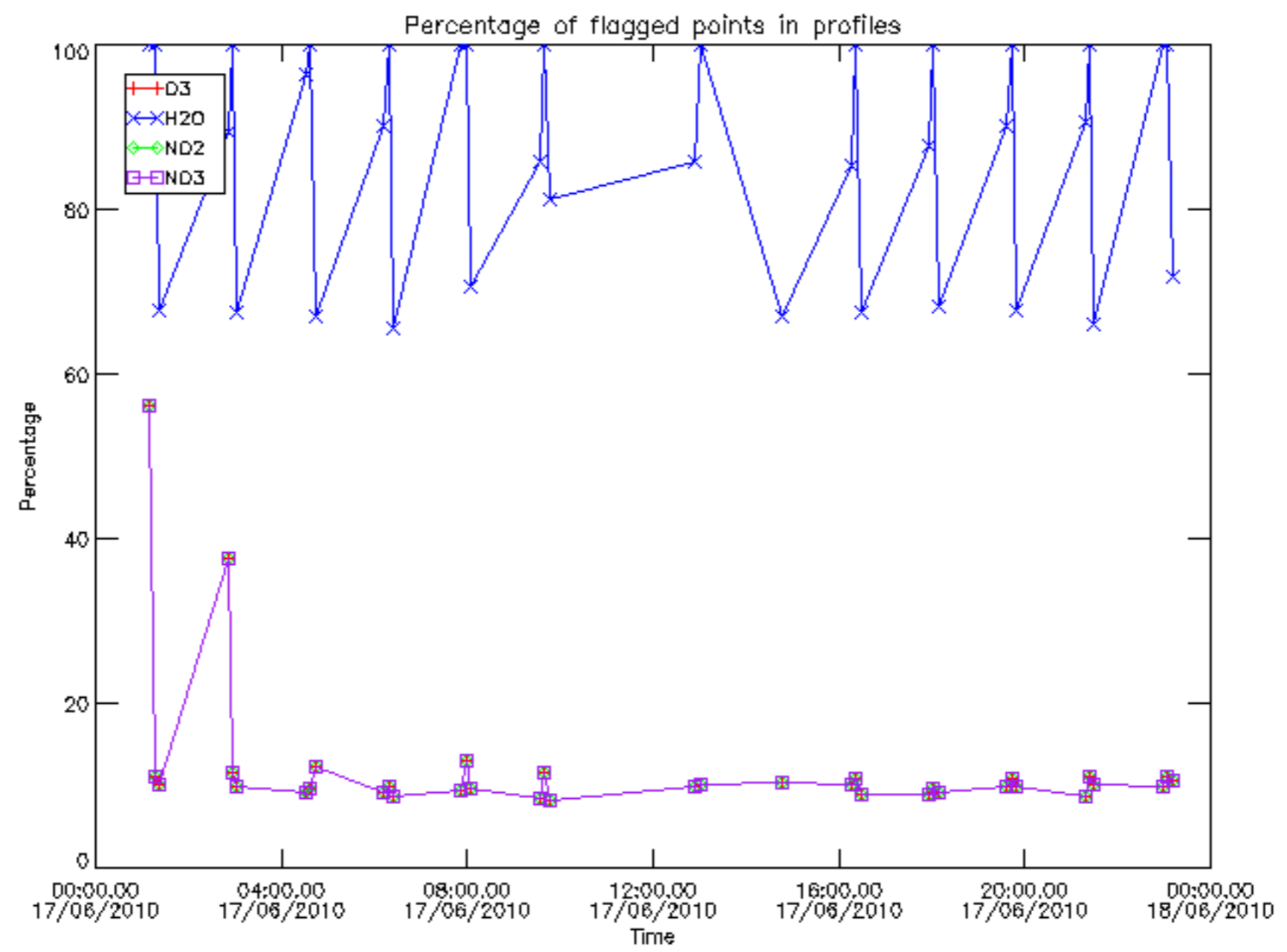
The colorbar represents the latitude.



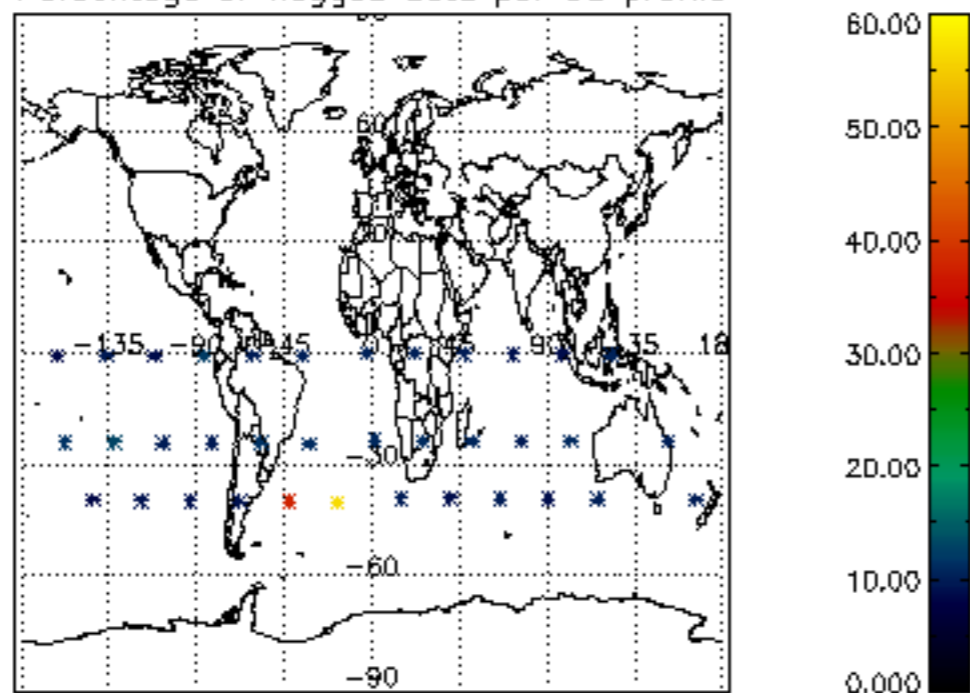
6. Auxiliary Data Files used for the production reported in section 2

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.

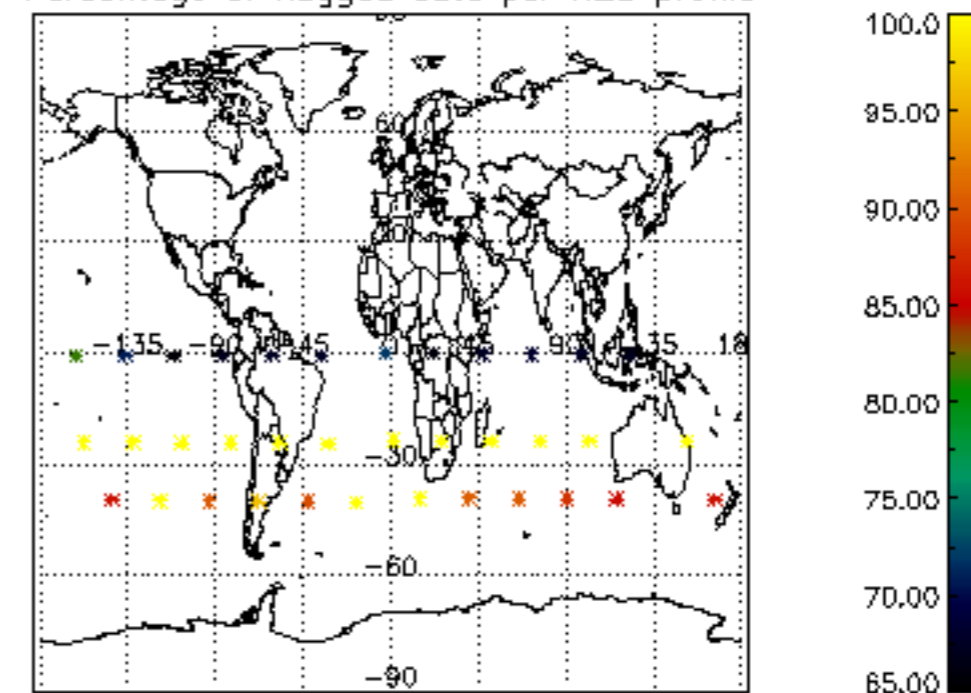
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	17-JUN-2010 00:00:02
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	17-JUN-2010 00:00:02
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	17-JUN-2010 00:00:02



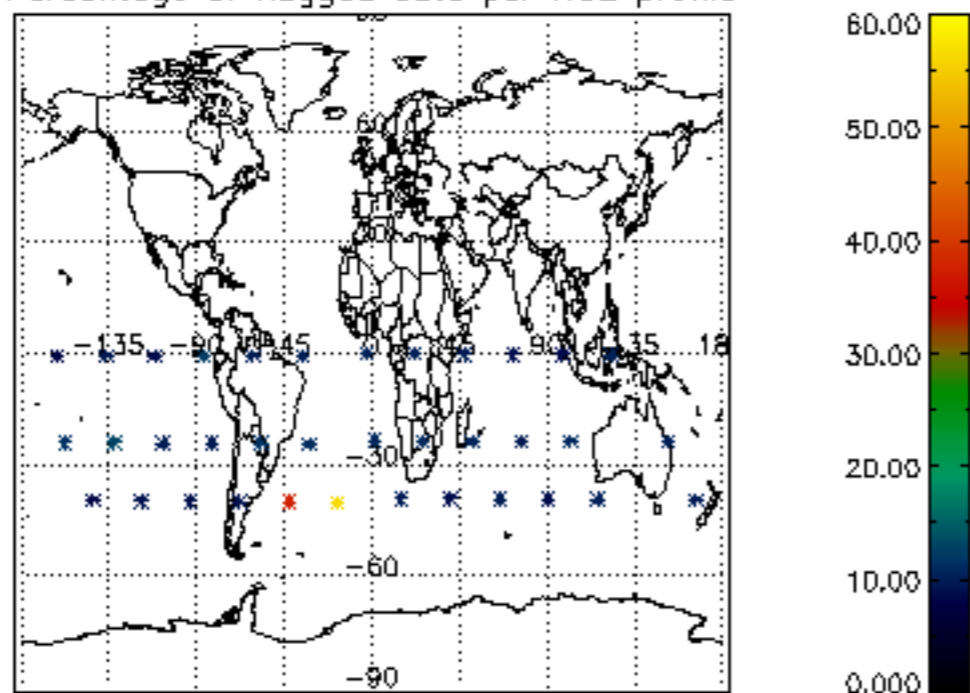
Percentage of flagged data per D3 profile



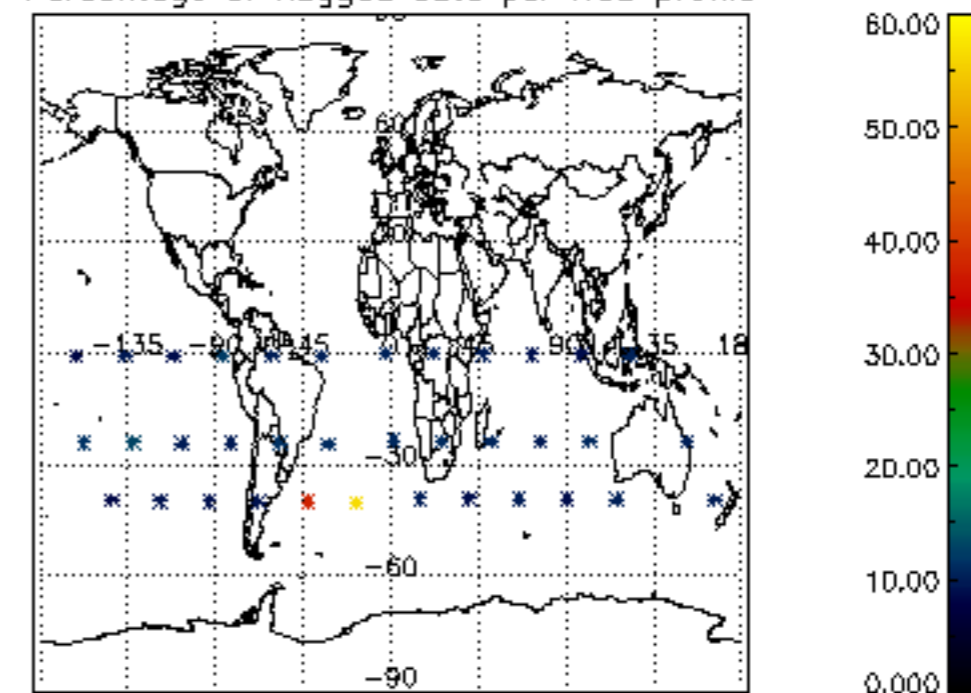
Percentage of flagged data per H2O profile

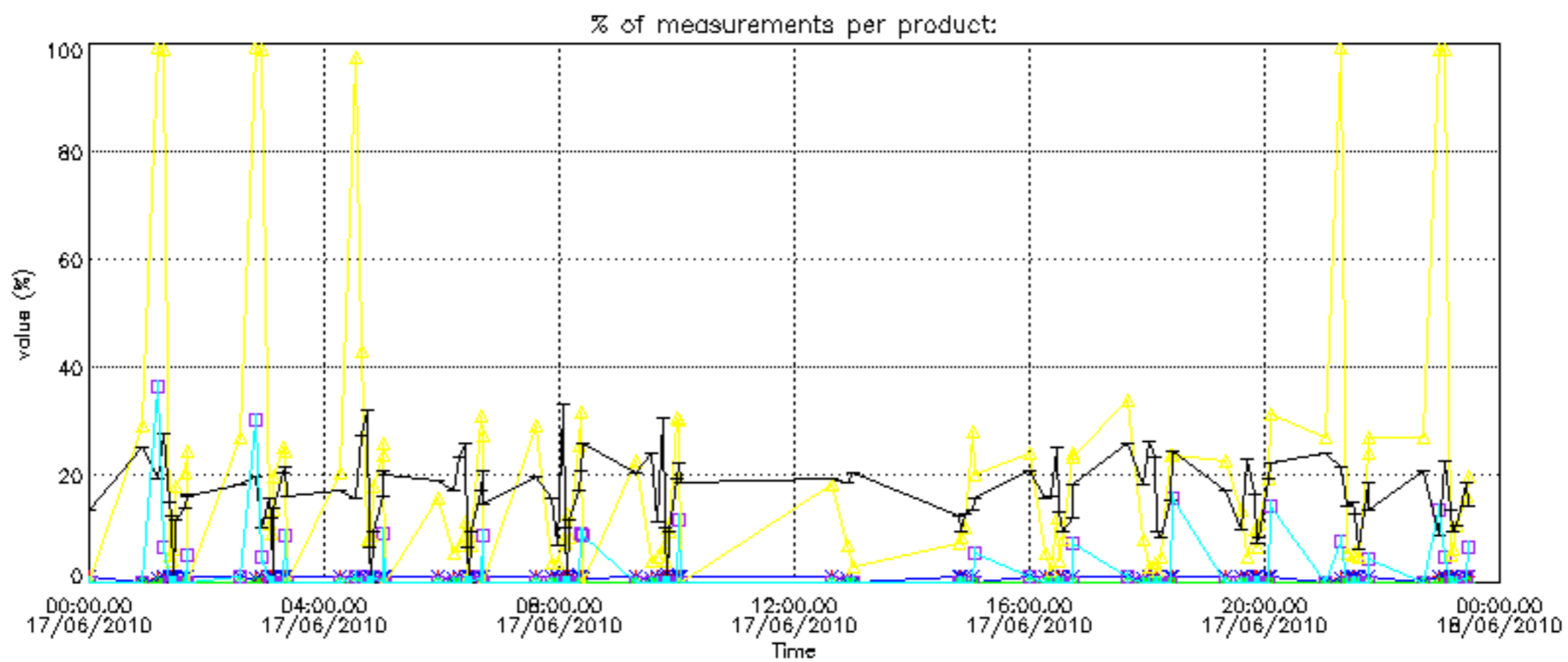


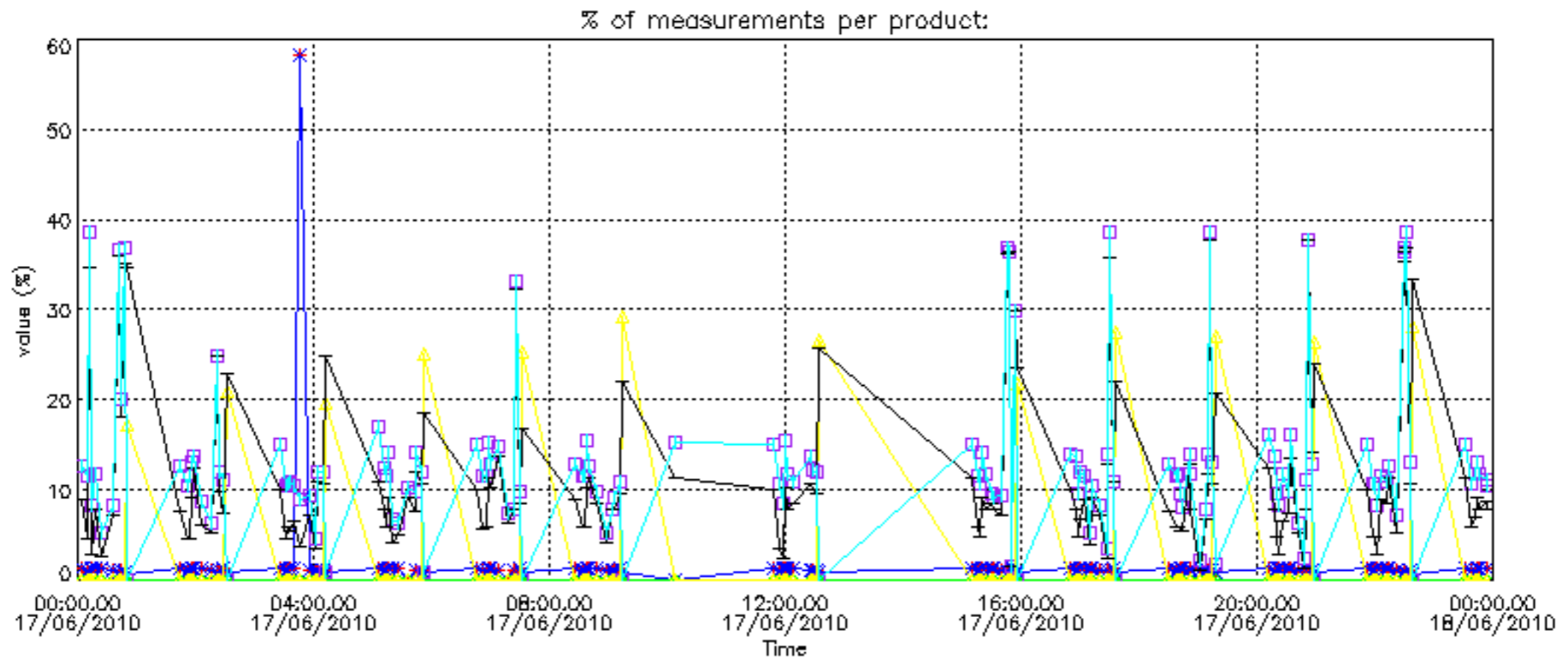
Percentage of flagged data per NO2 profile



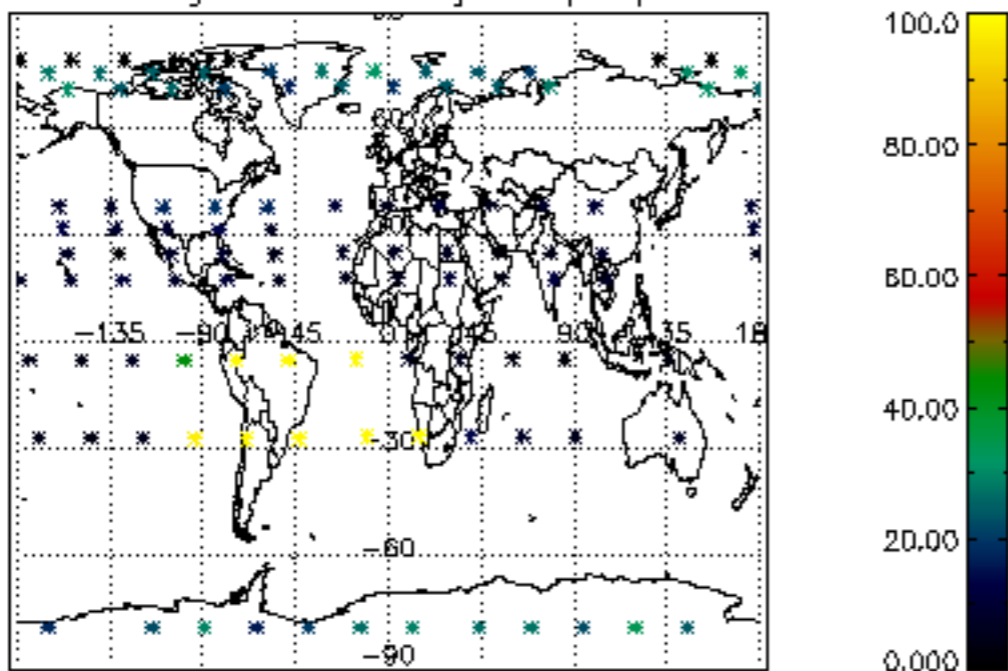
Percentage of flagged data per NO3 profile



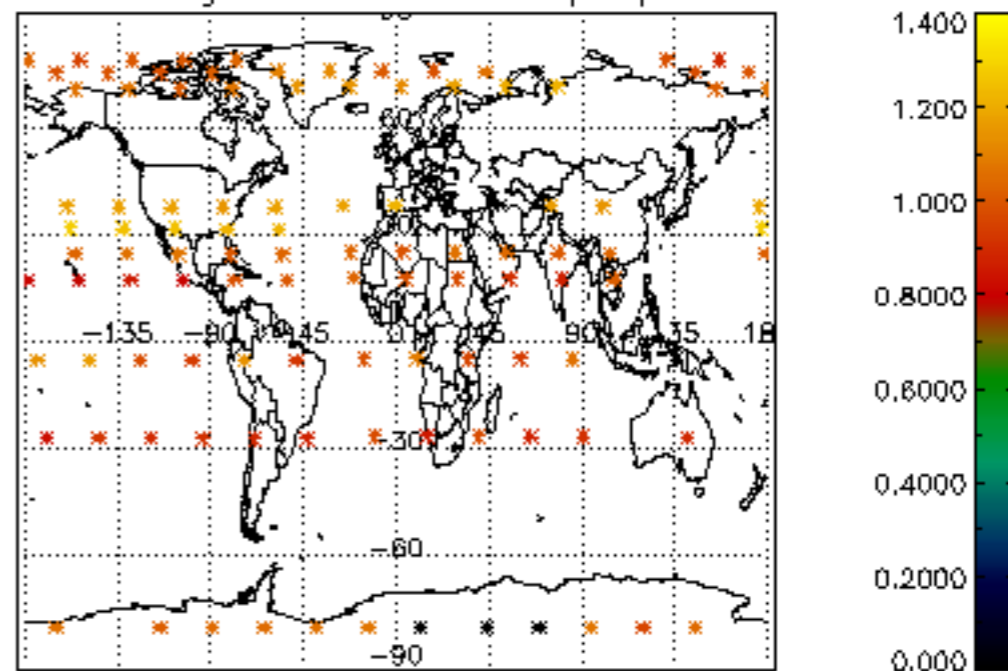




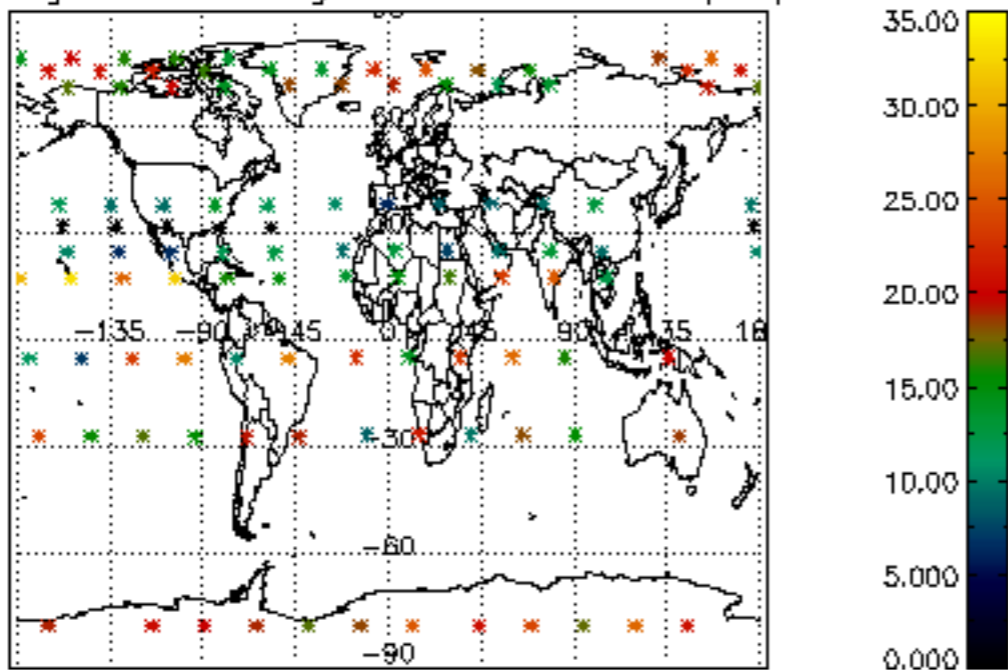
Percentage of cosmic ray hits per profile



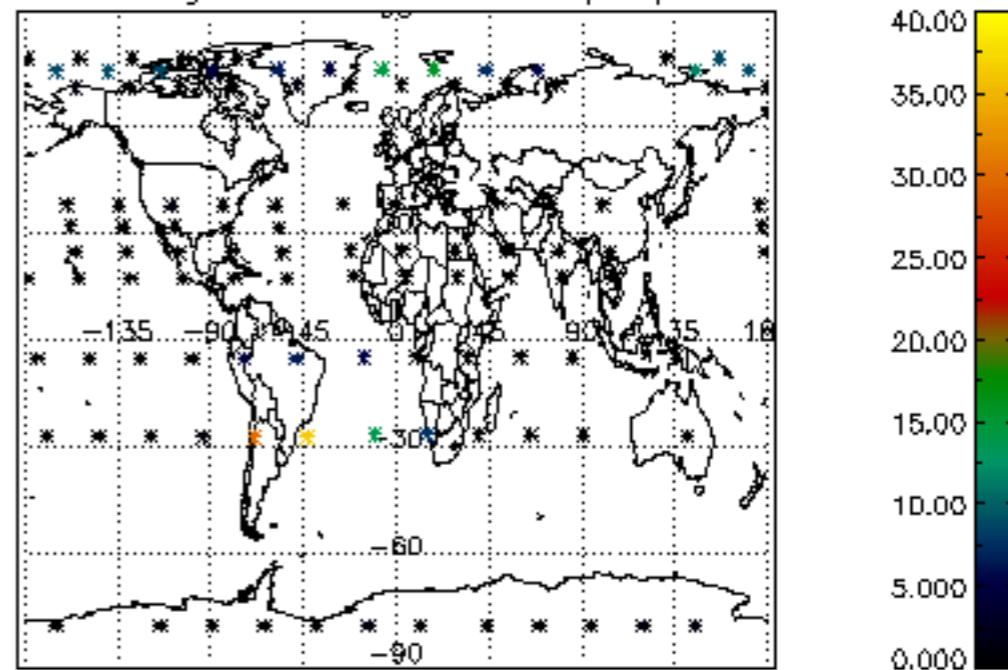
Percentage of datation errors per profile



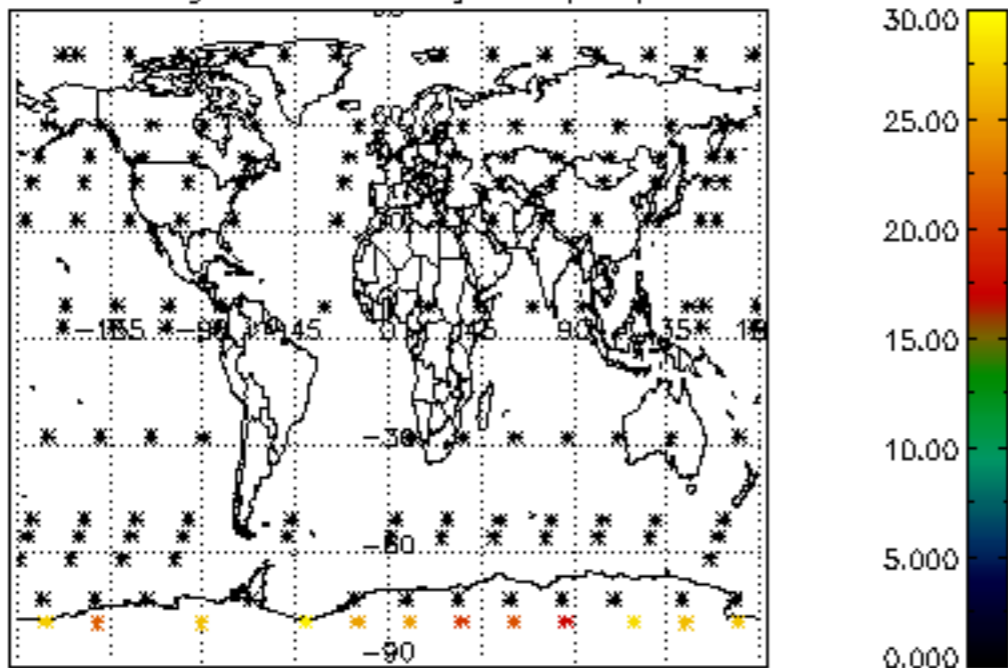
Percentage of star falling outside central band per profile



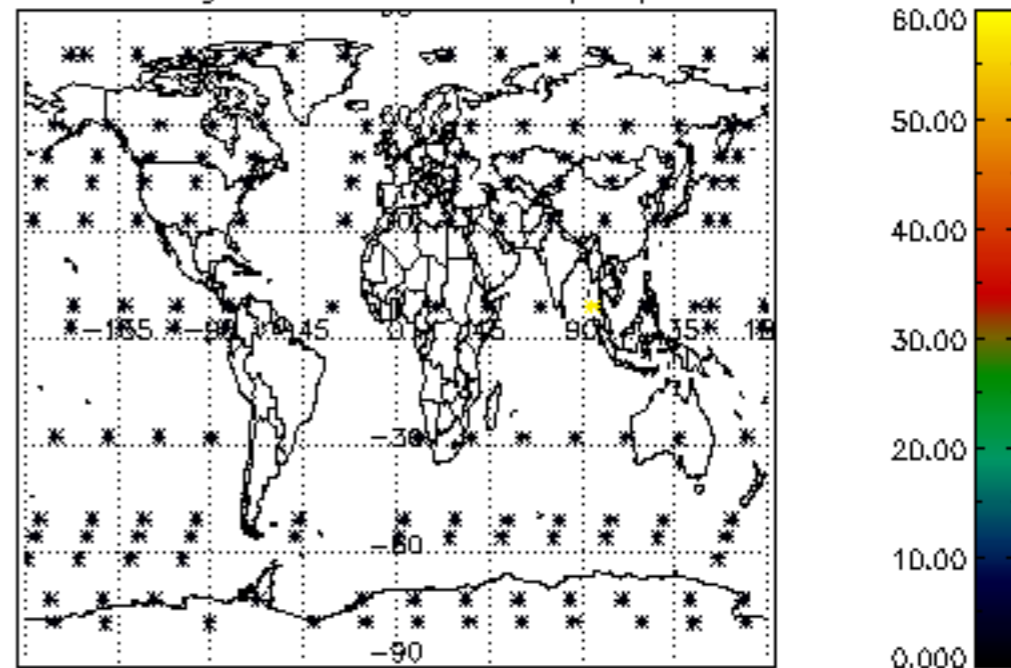
Percentage of saturation errors per profile



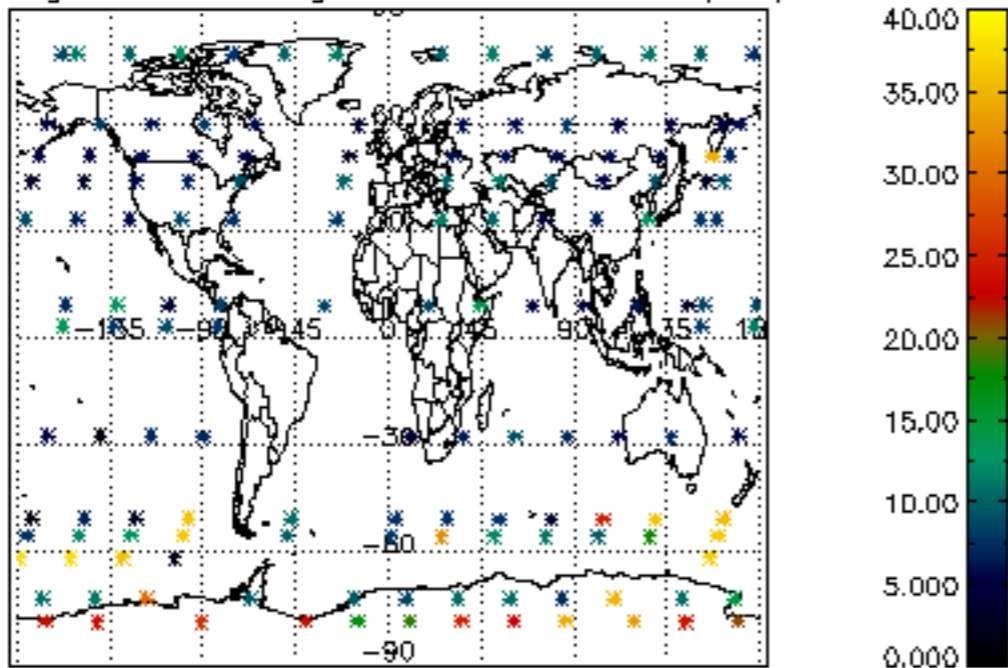
Percentage of cosmic ray hits per profile



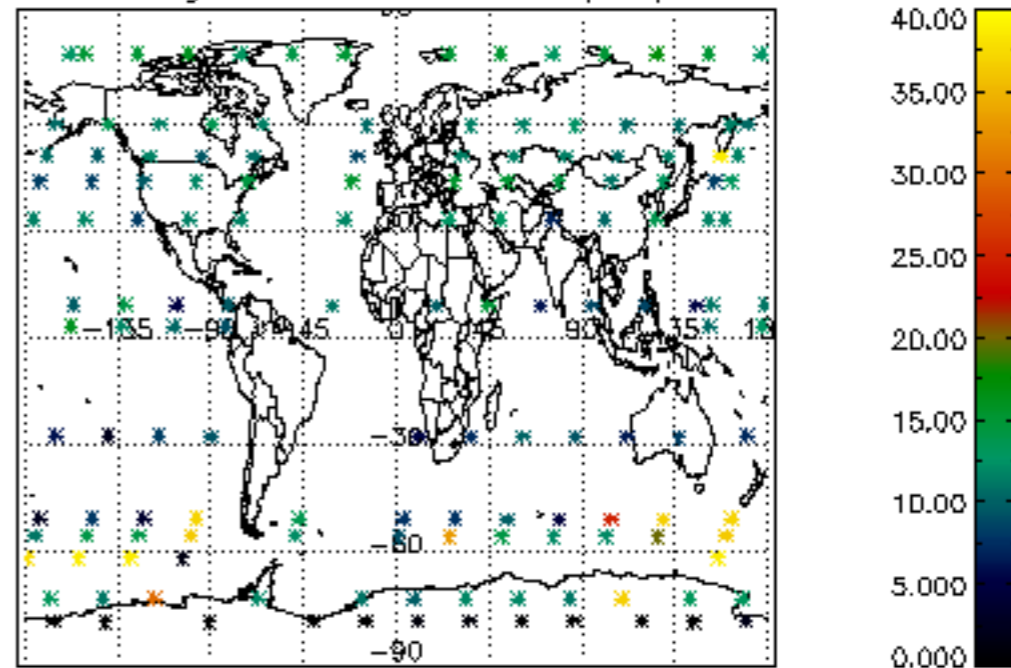
Percentage of datation errors per profile

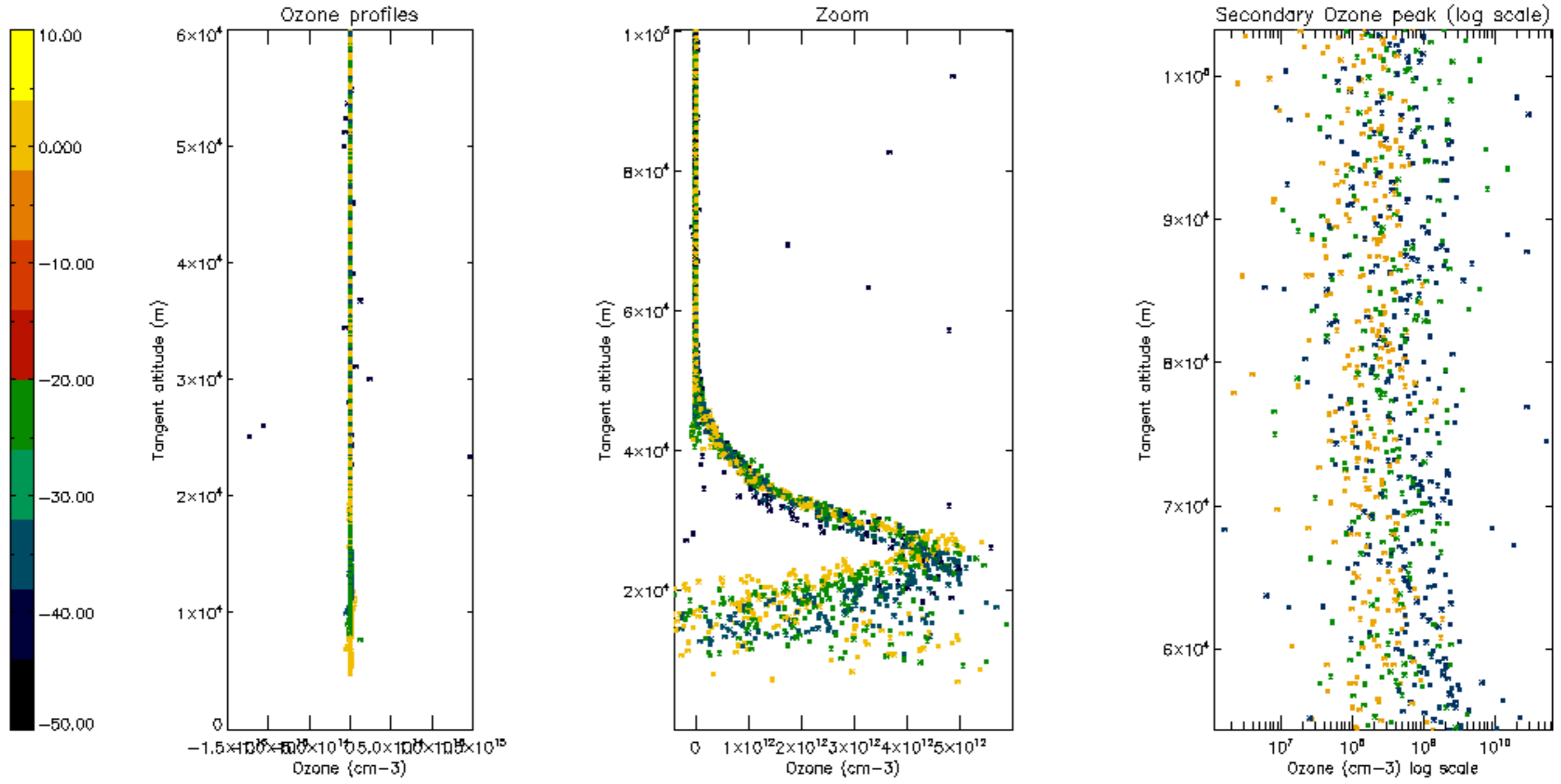


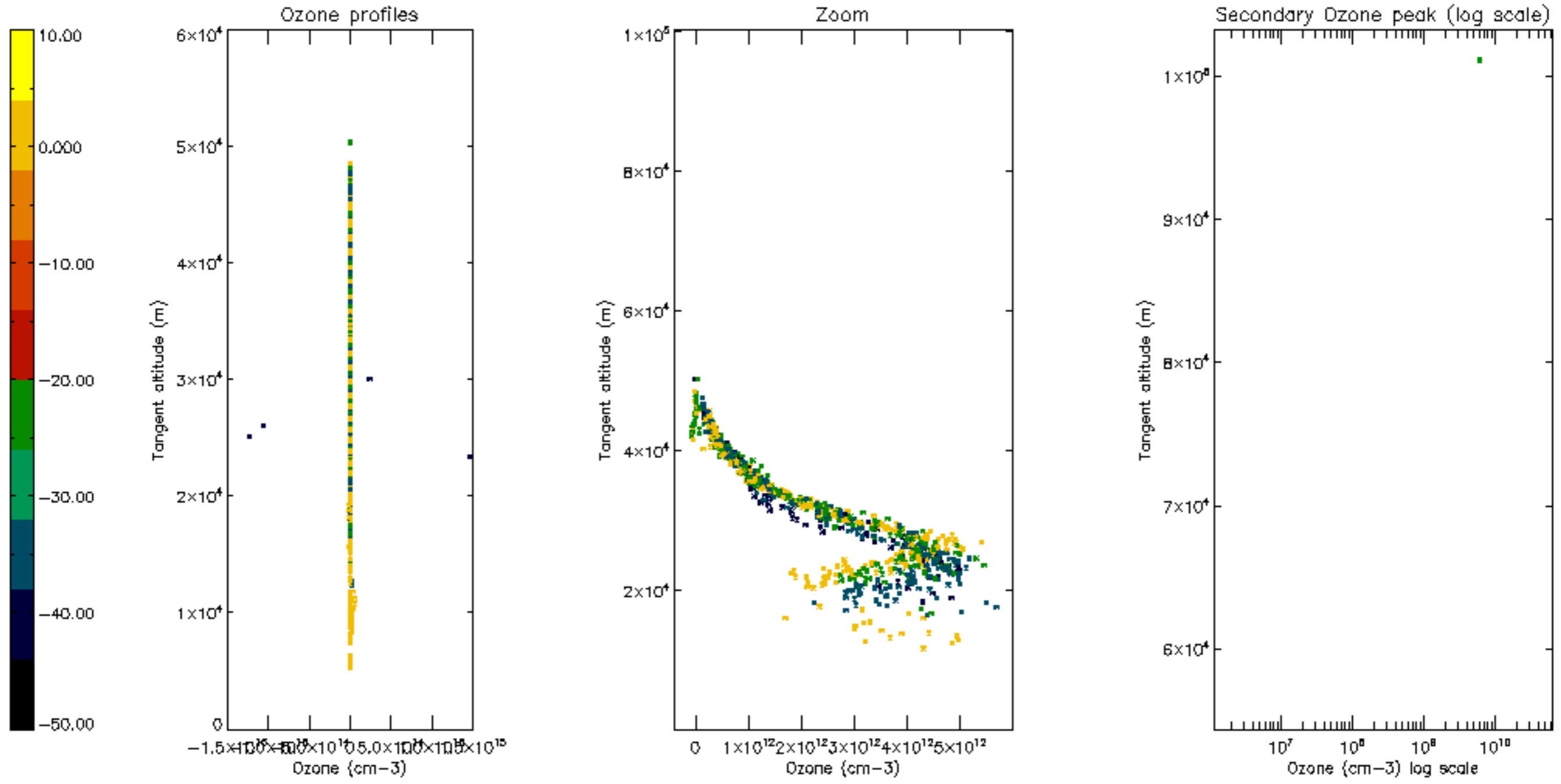
Percentage of star falling outside central band per profile

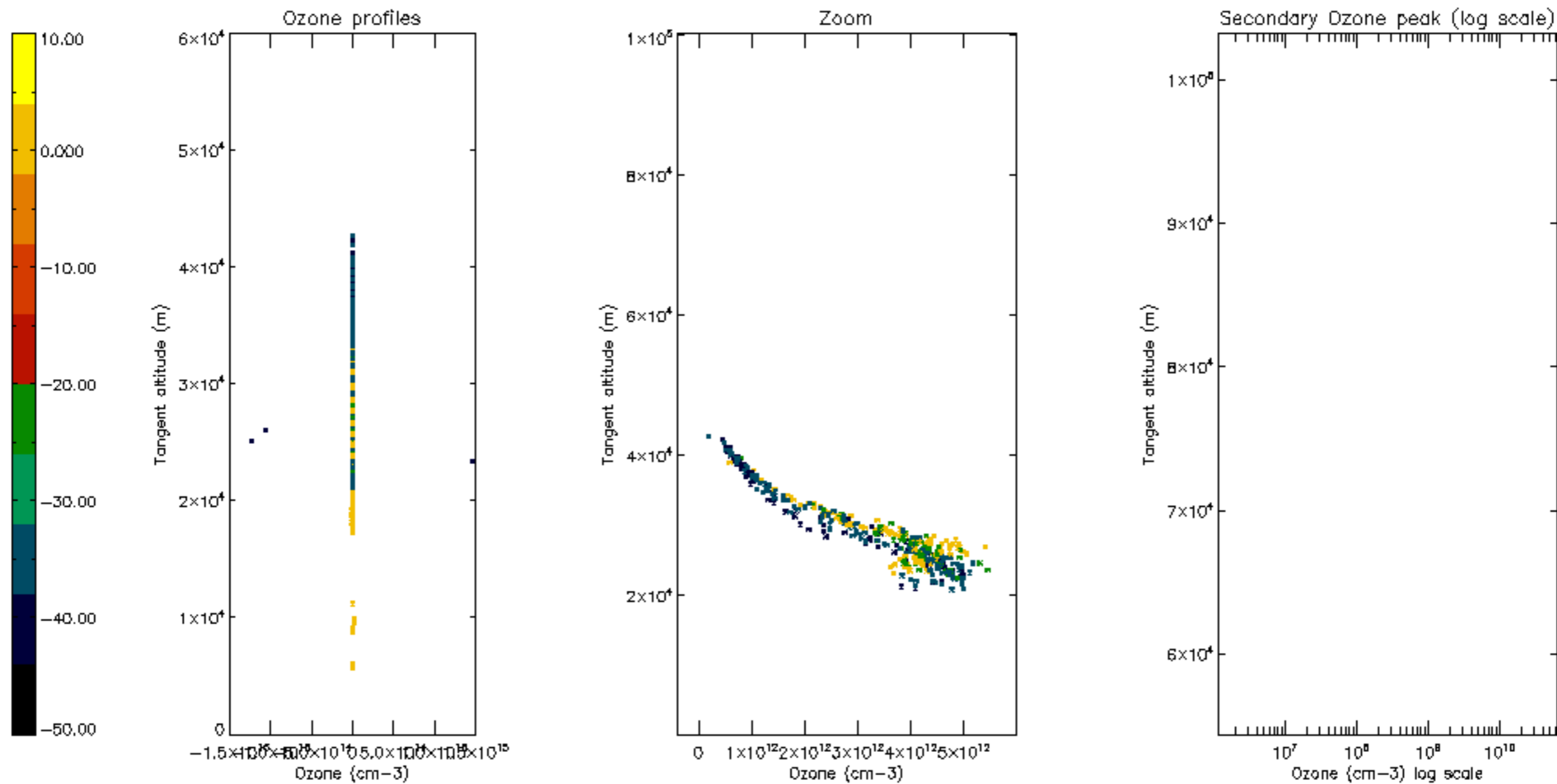


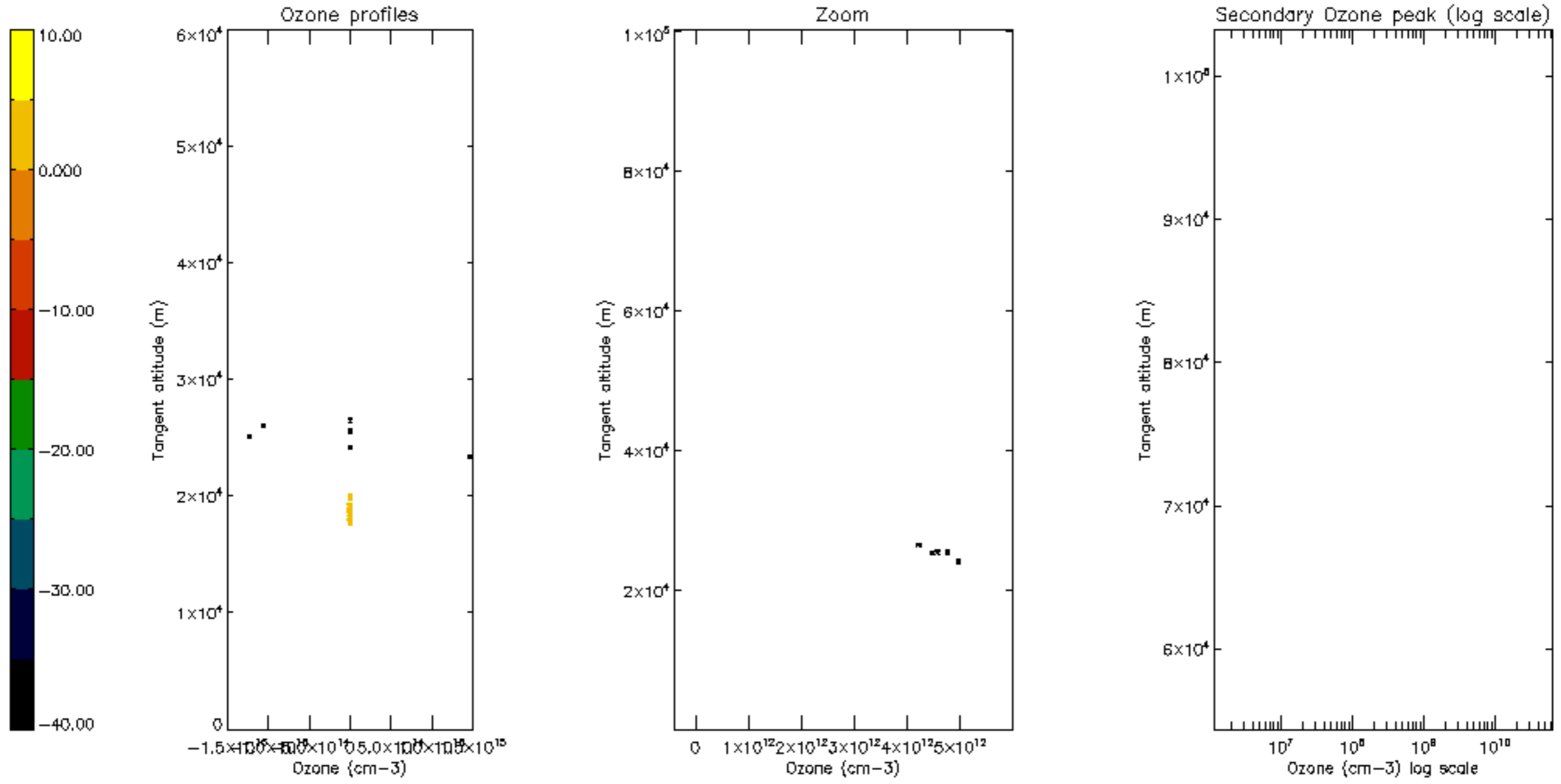
Percentage of saturation errors per profile

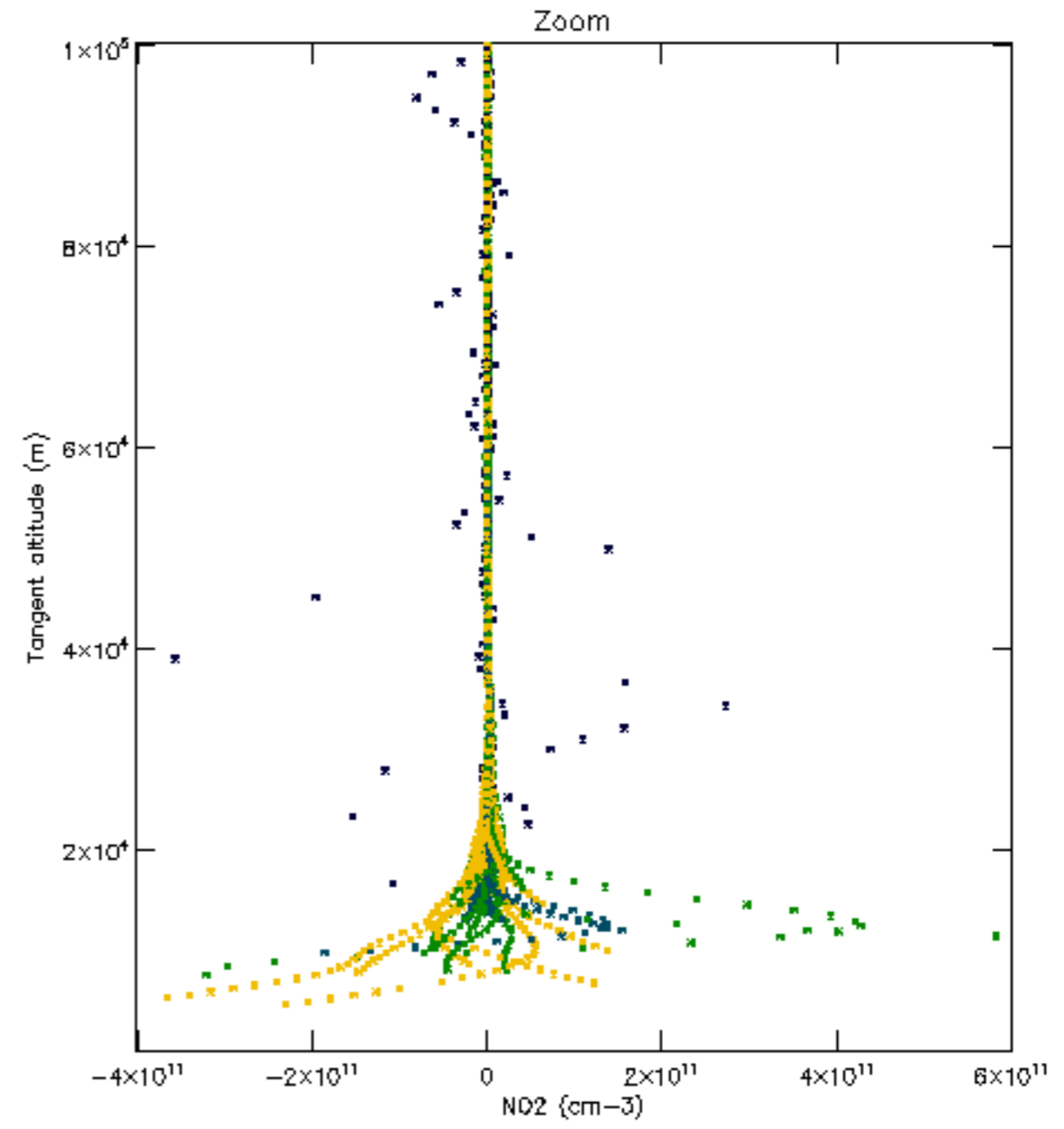
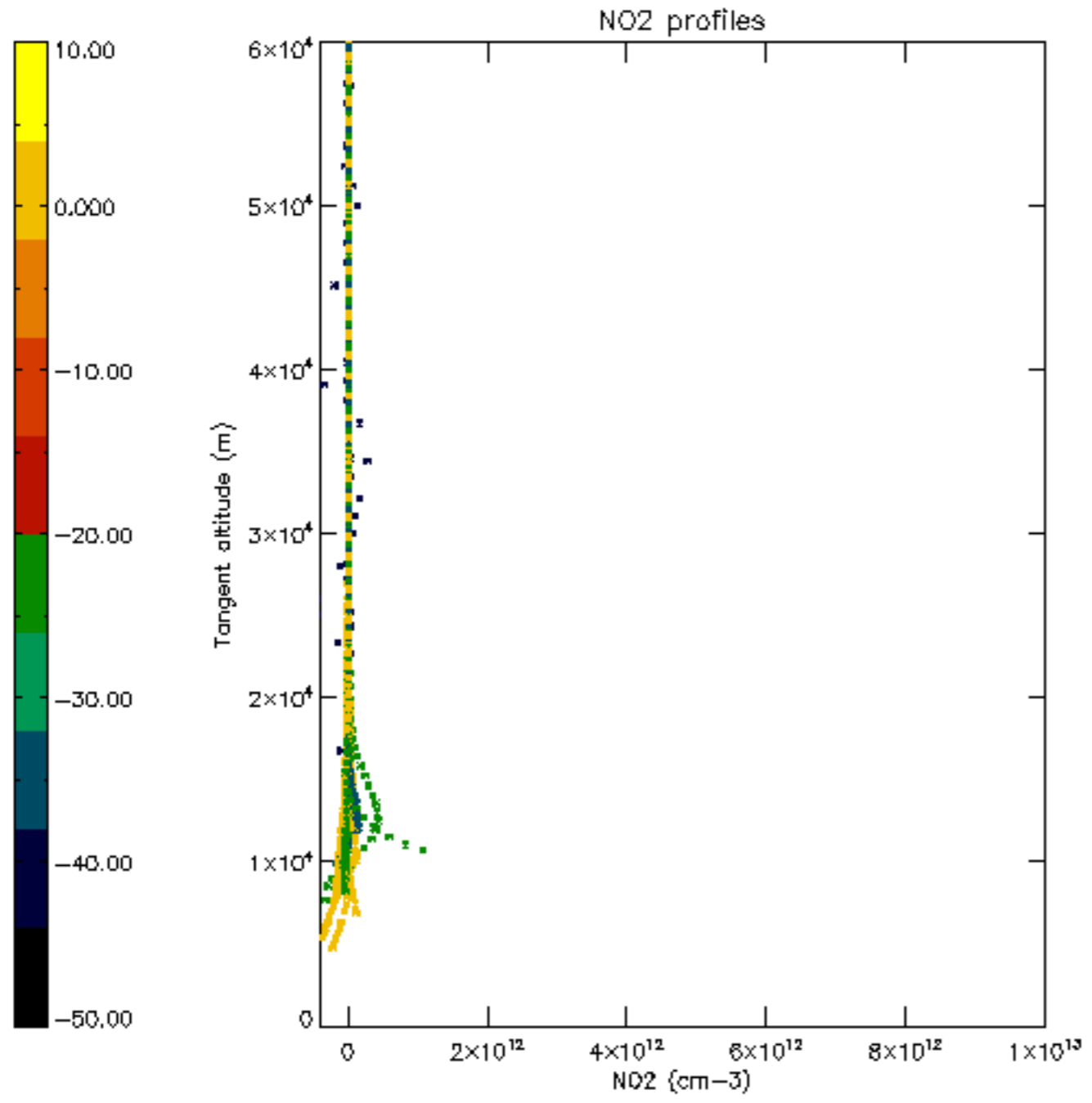


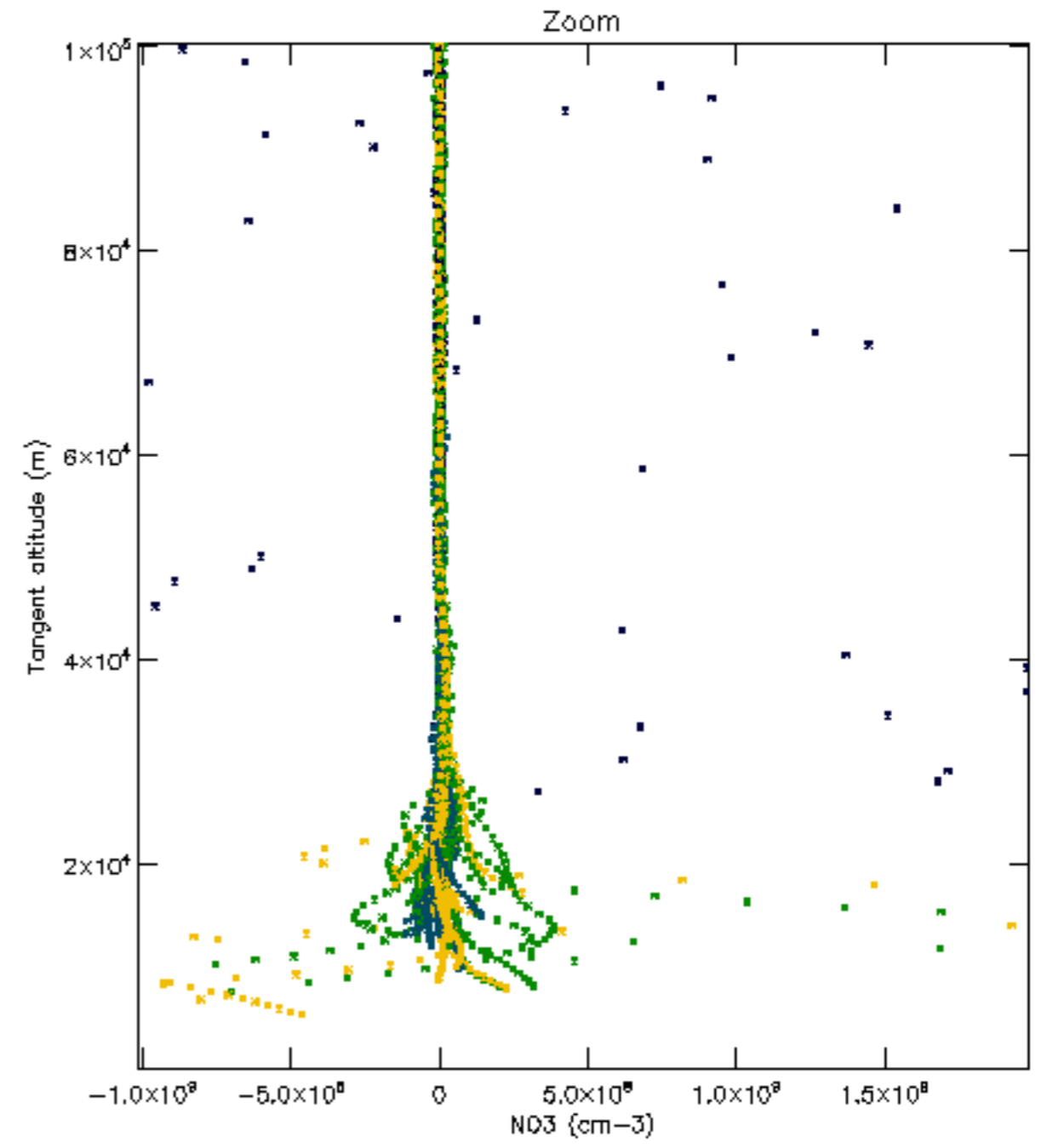
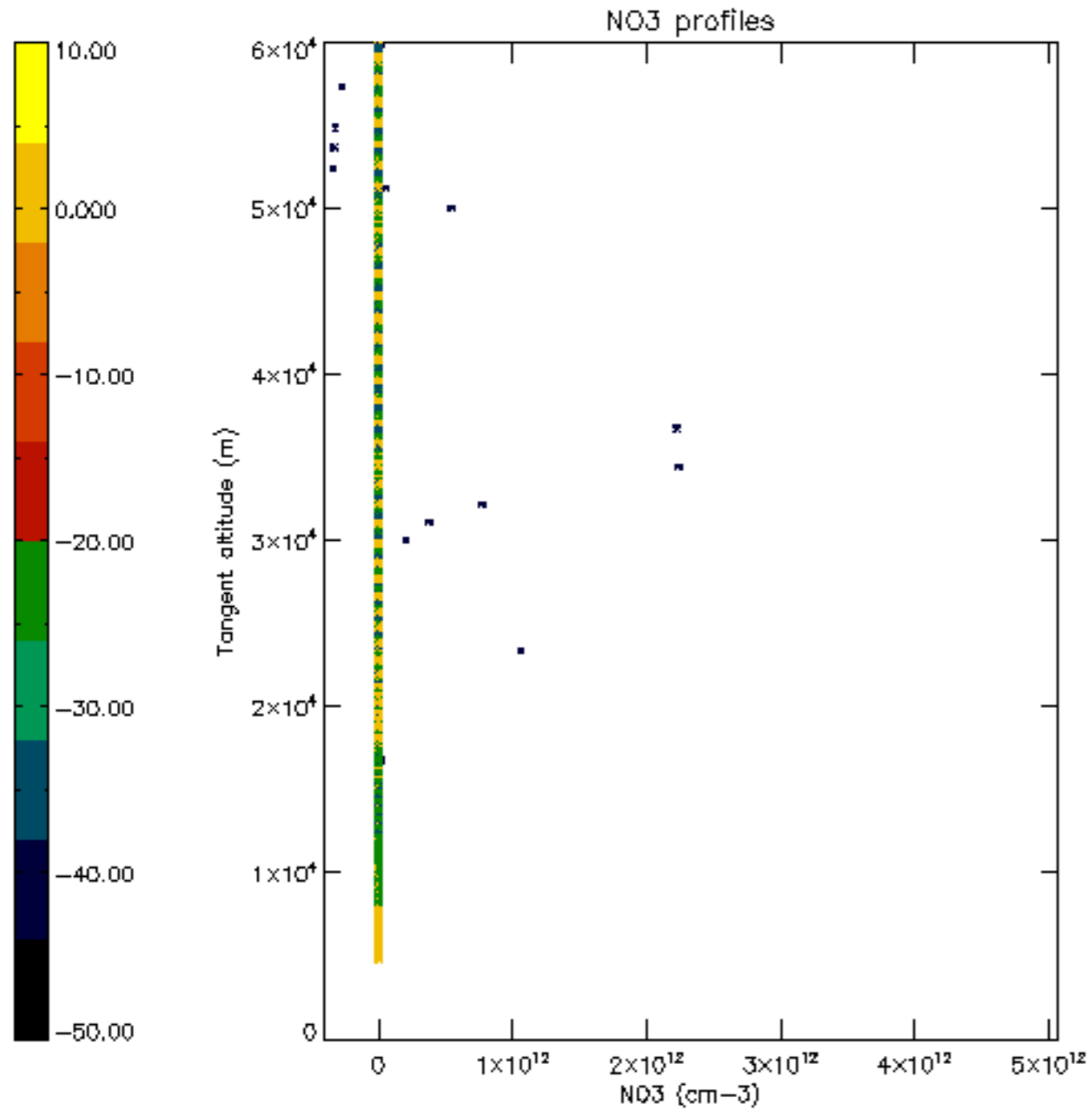


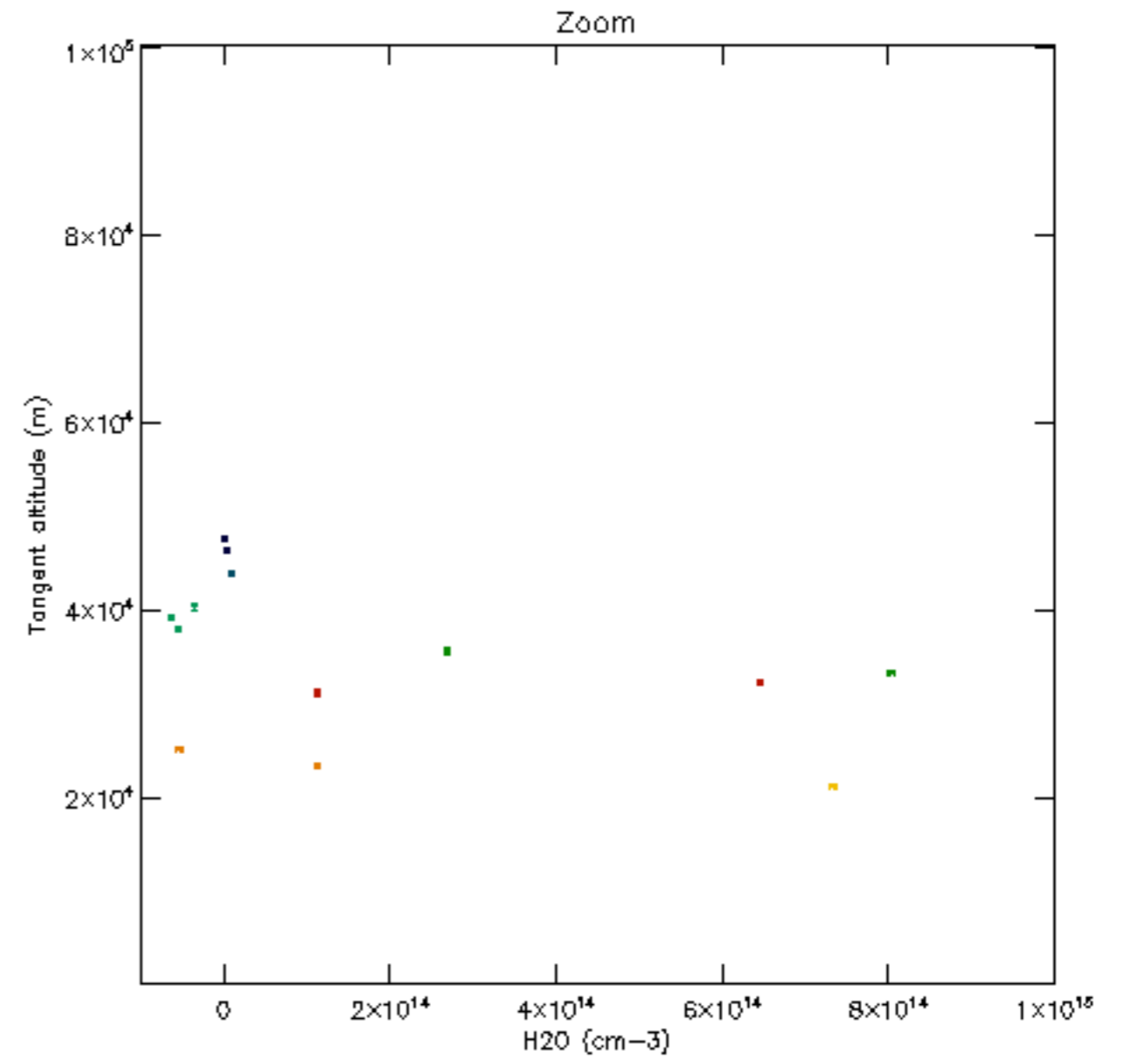
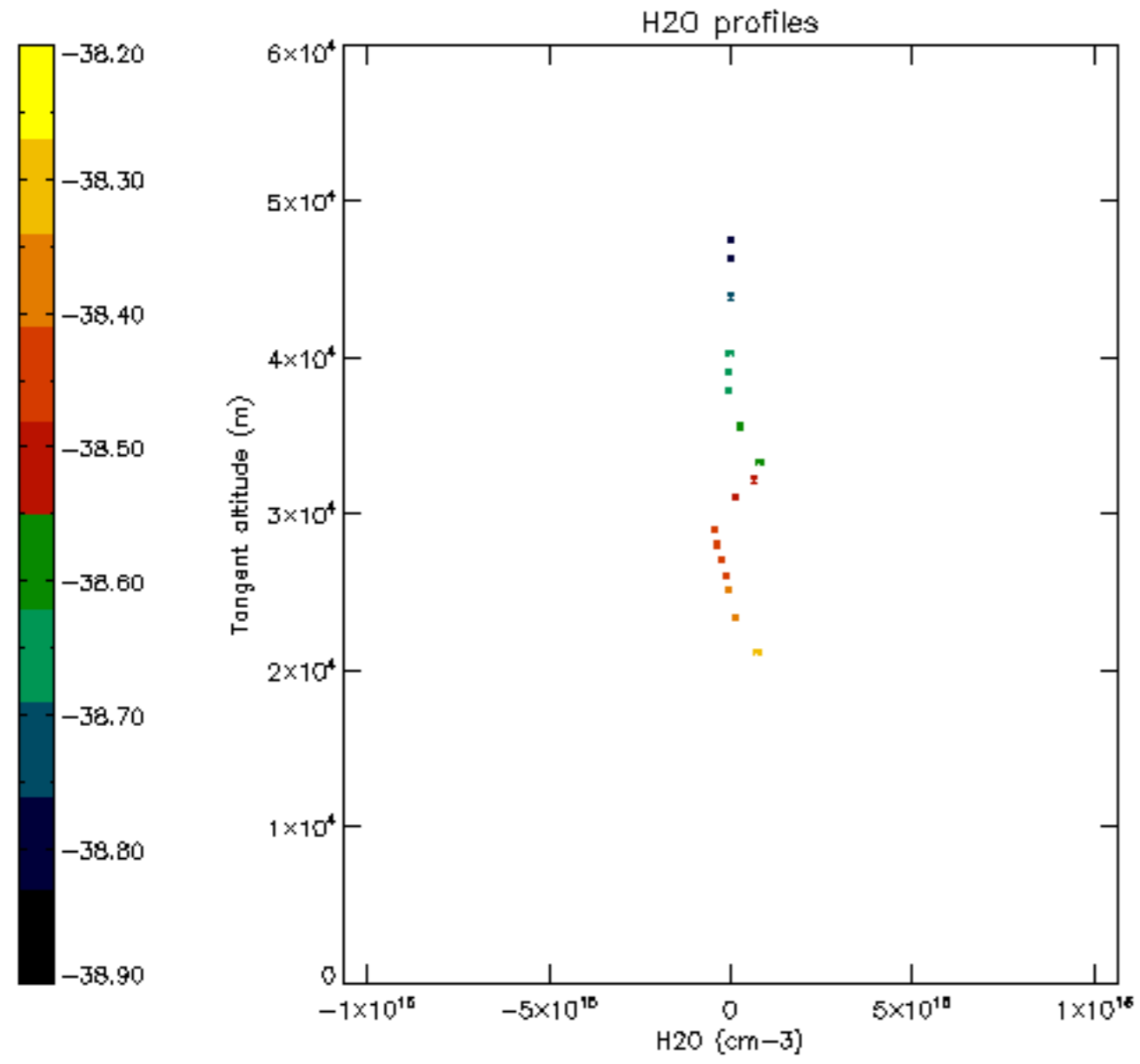


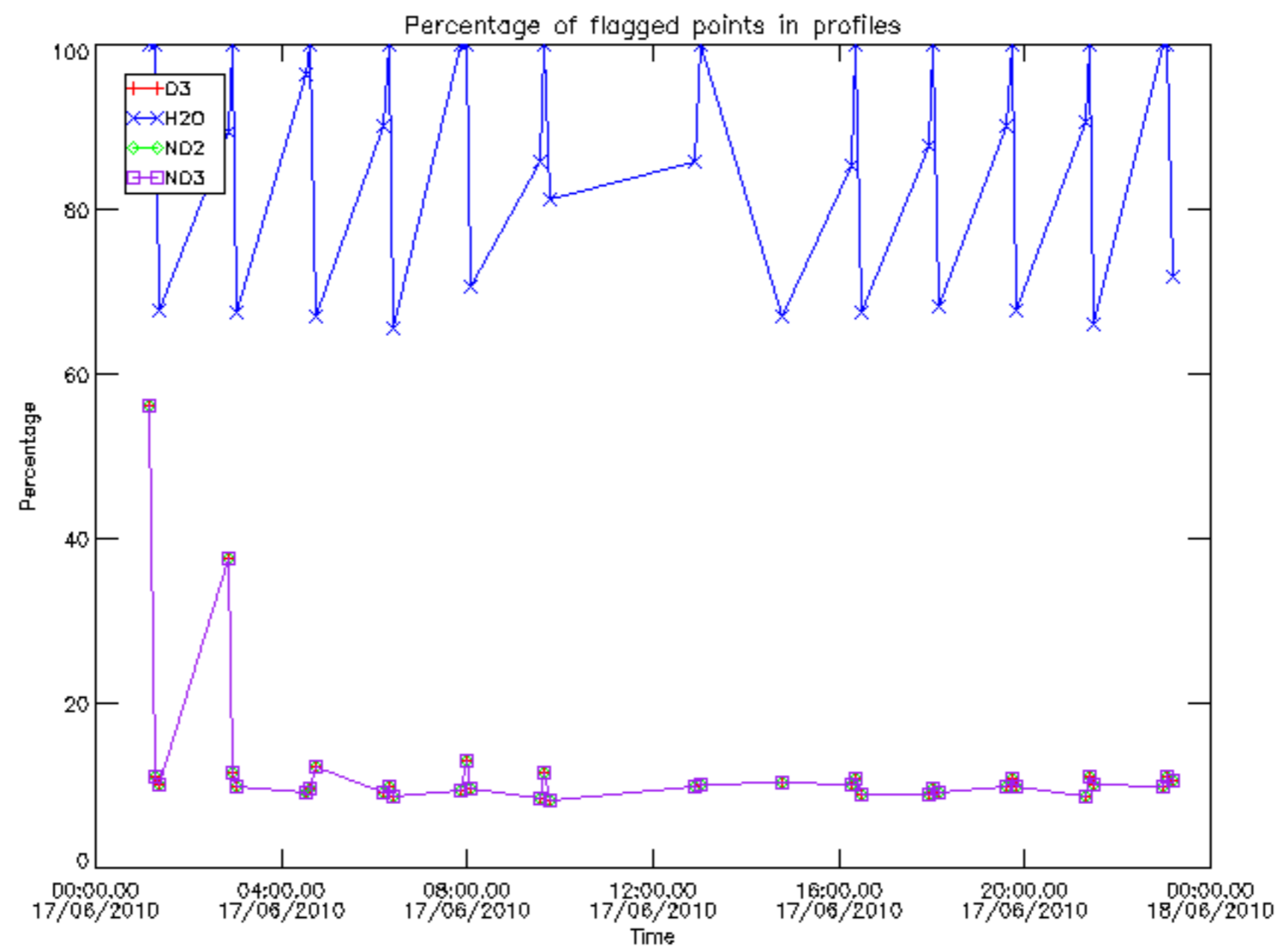




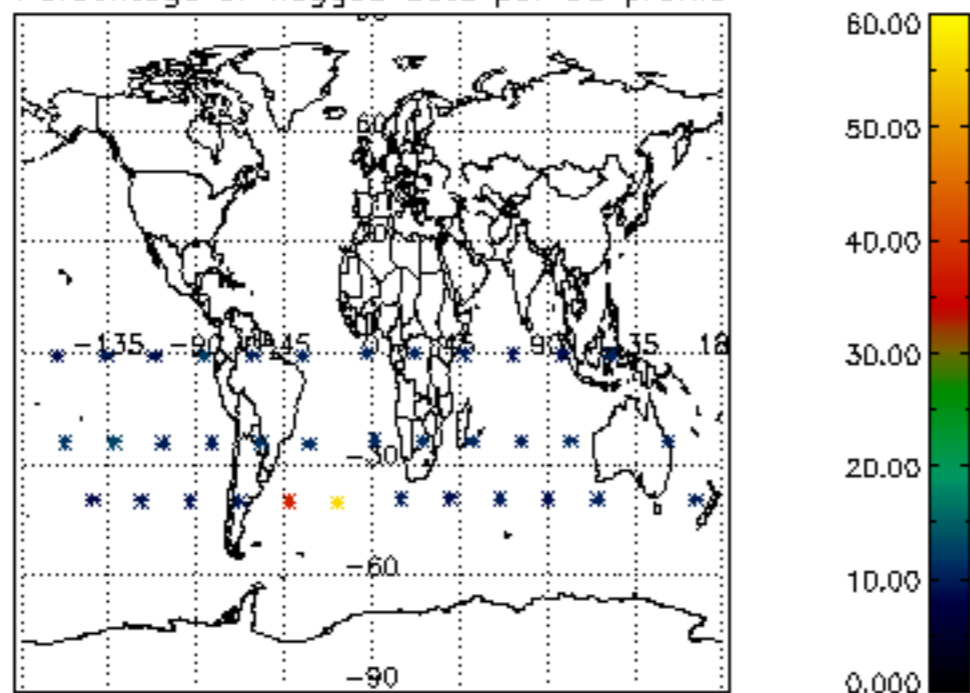




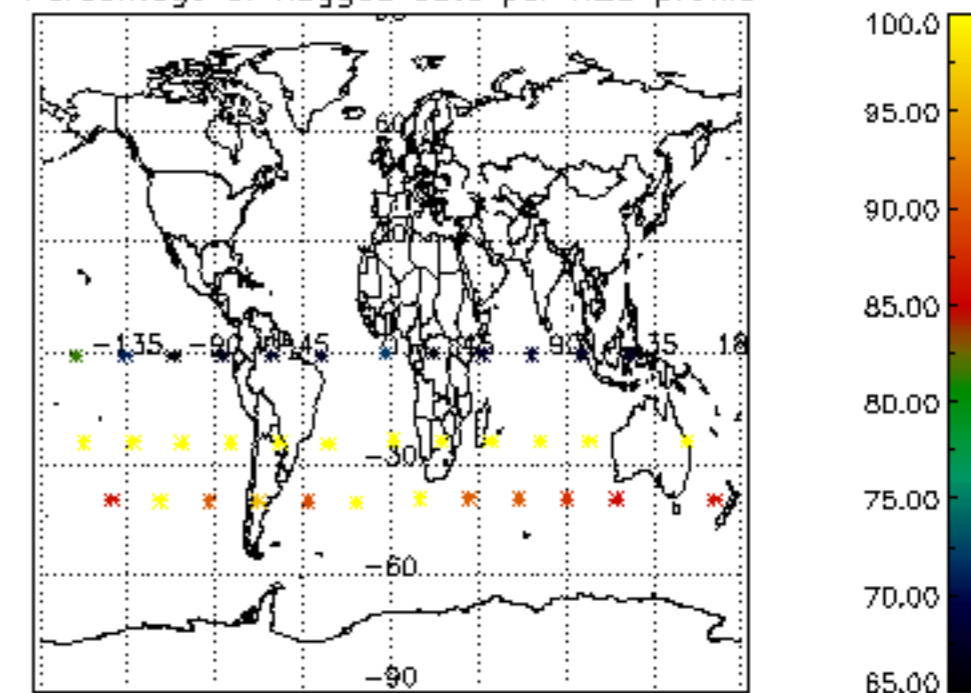




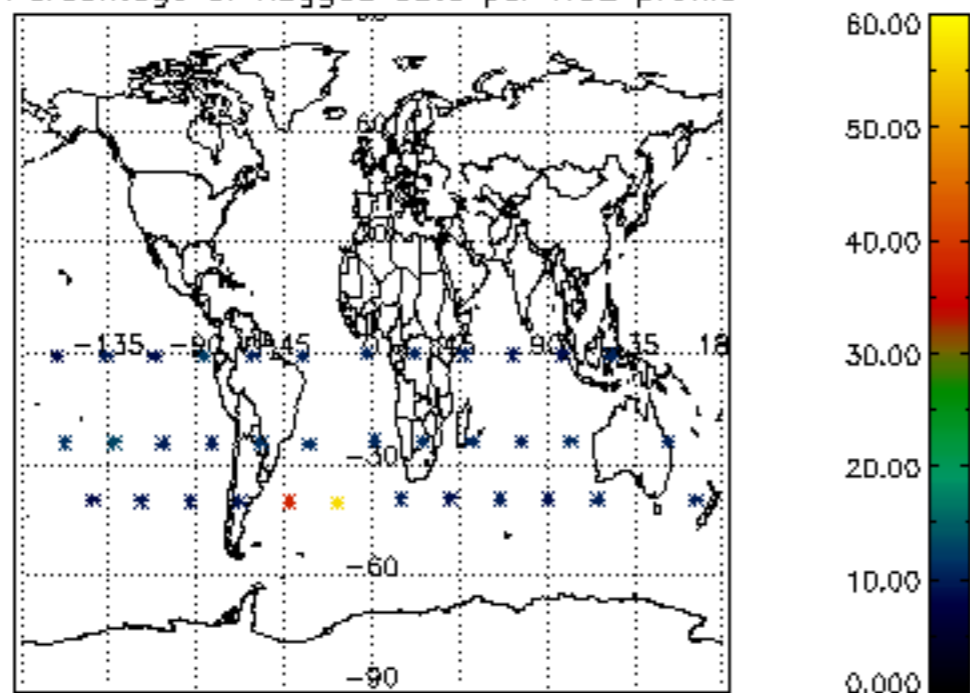
Percentage of flagged data per D3 profile



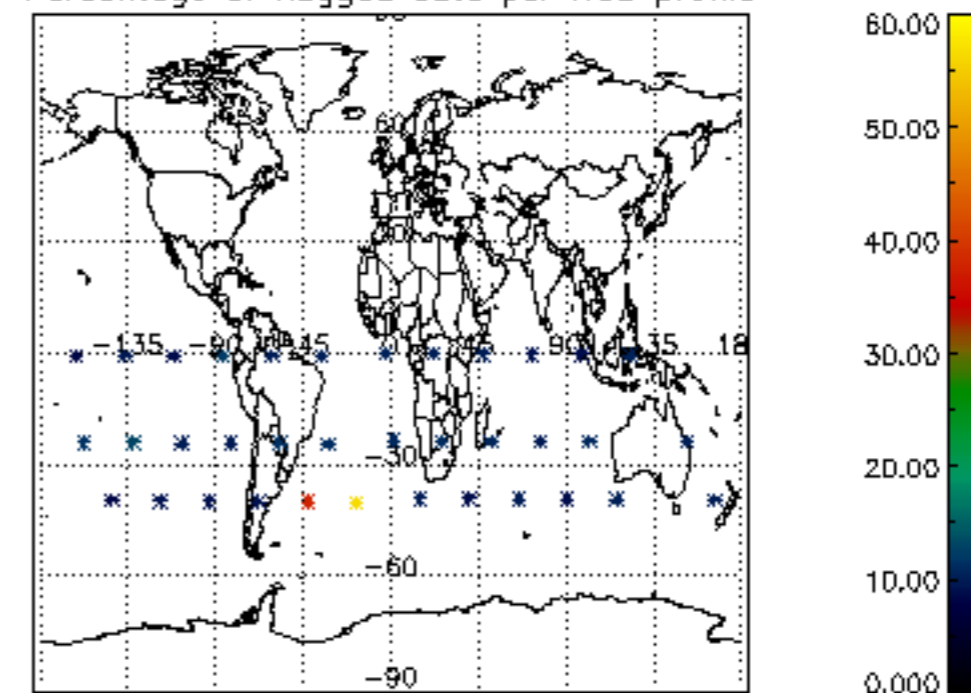
Percentage of flagged data per H2O profile

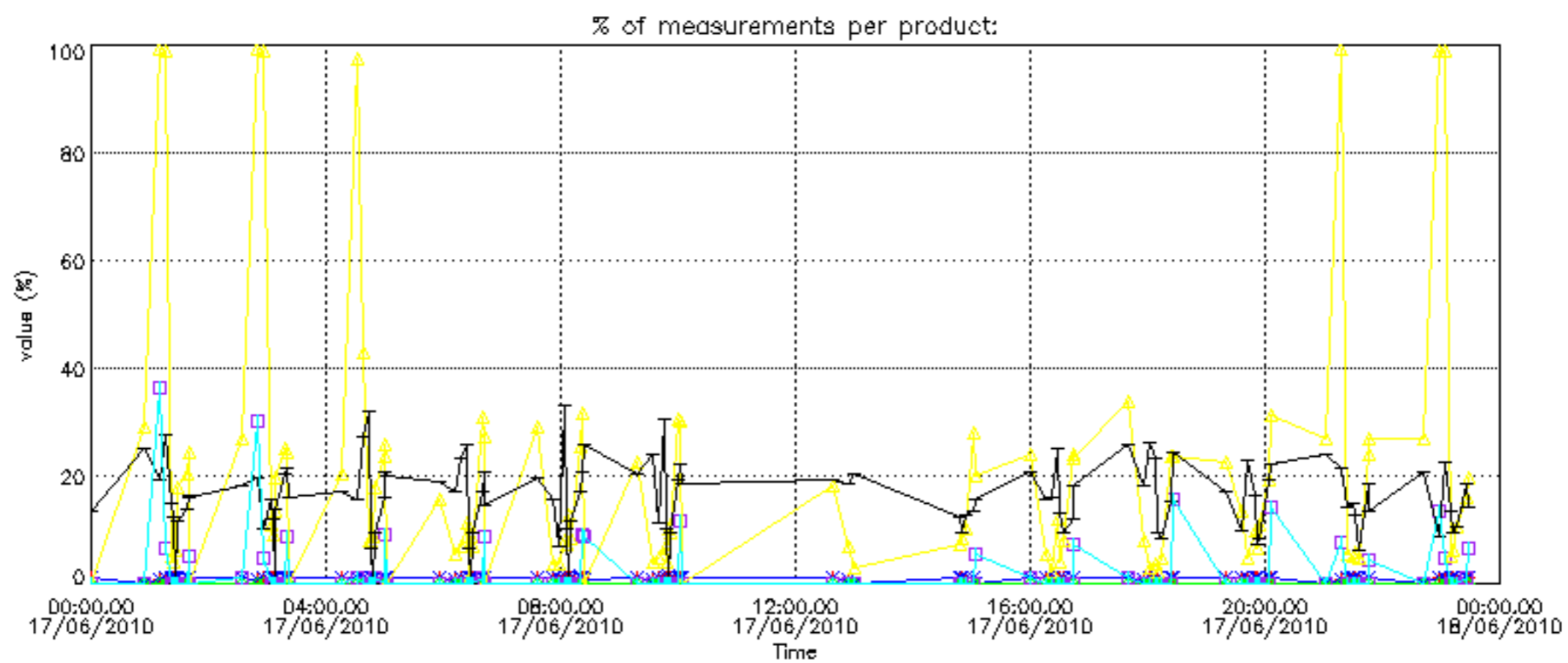
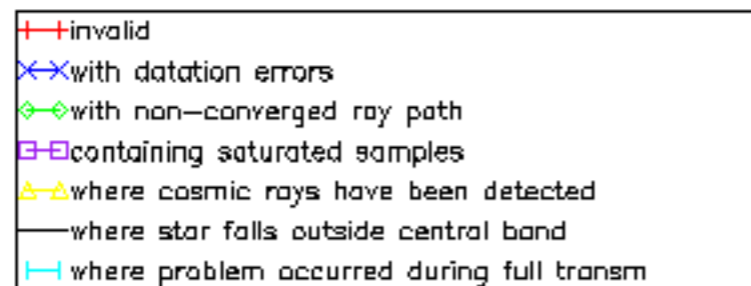


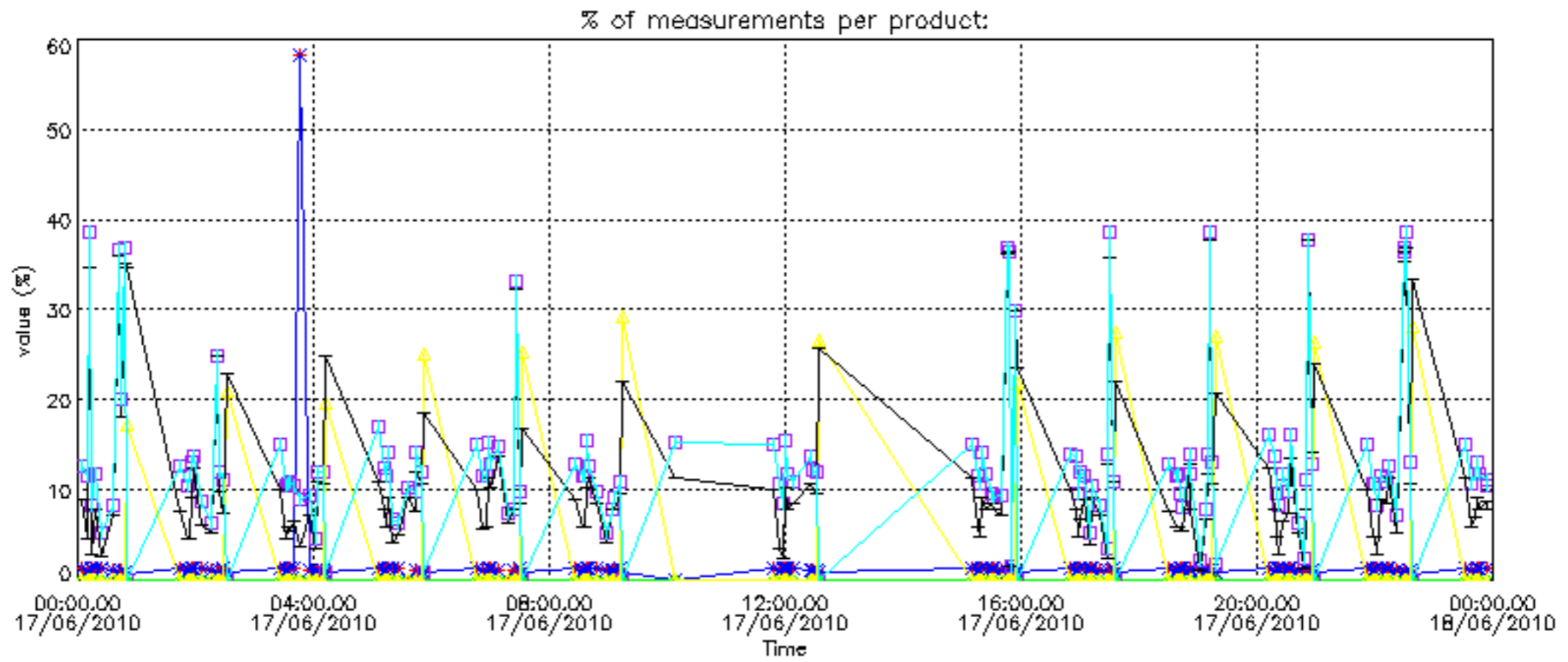
Percentage of flagged data per NO2 profile



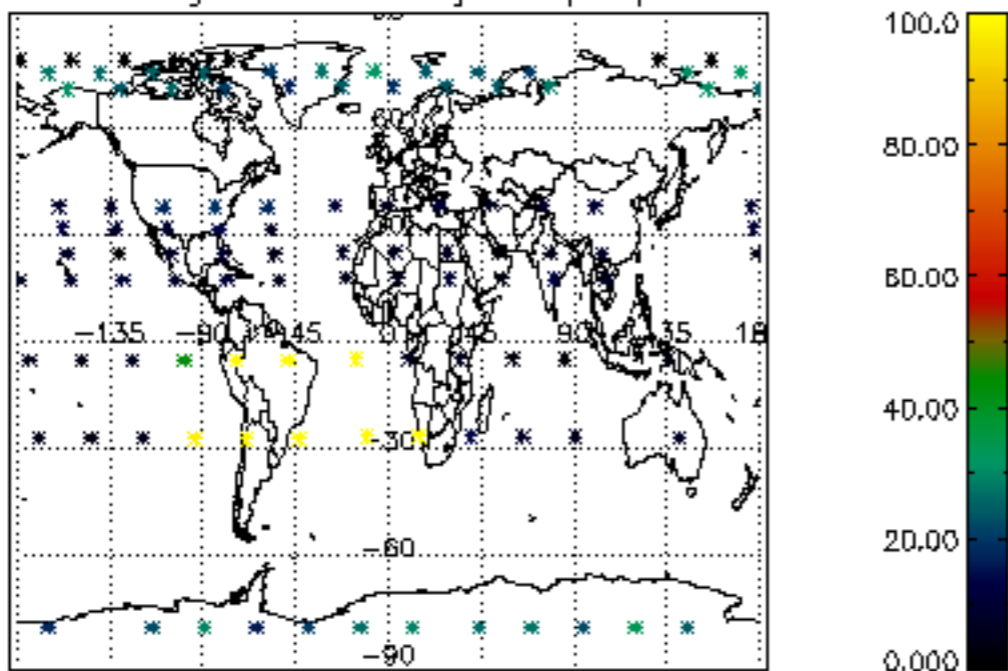
Percentage of flagged data per NO3 profile



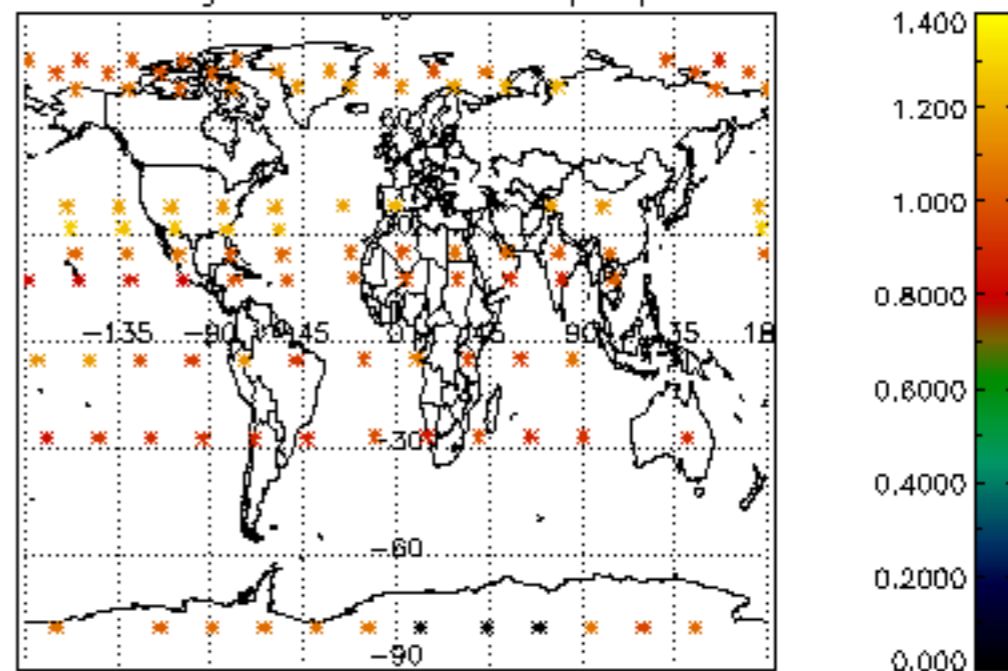




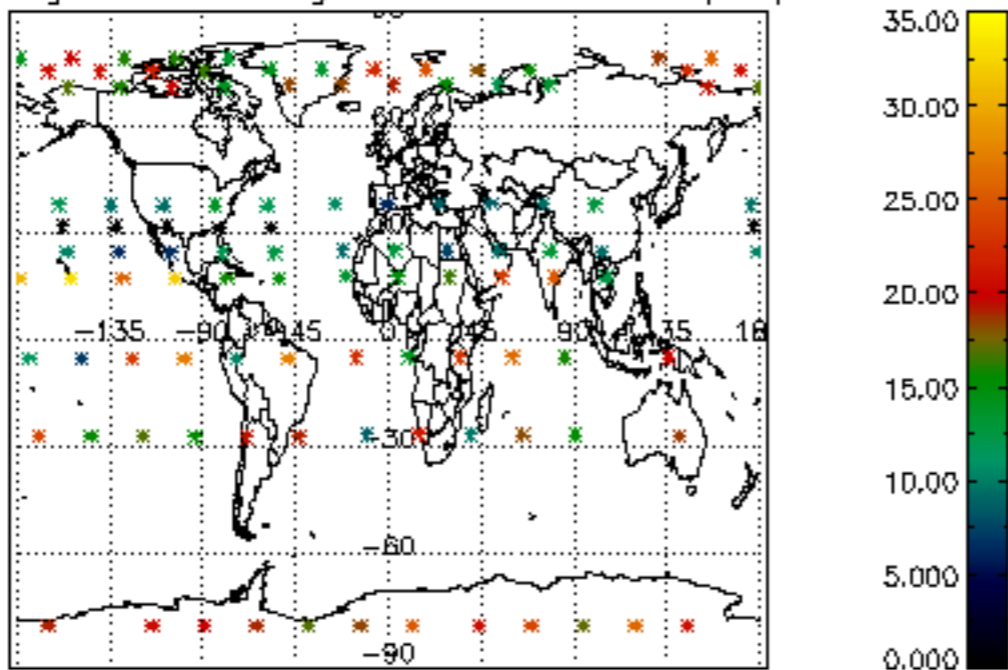
Percentage of cosmic ray hits per profile



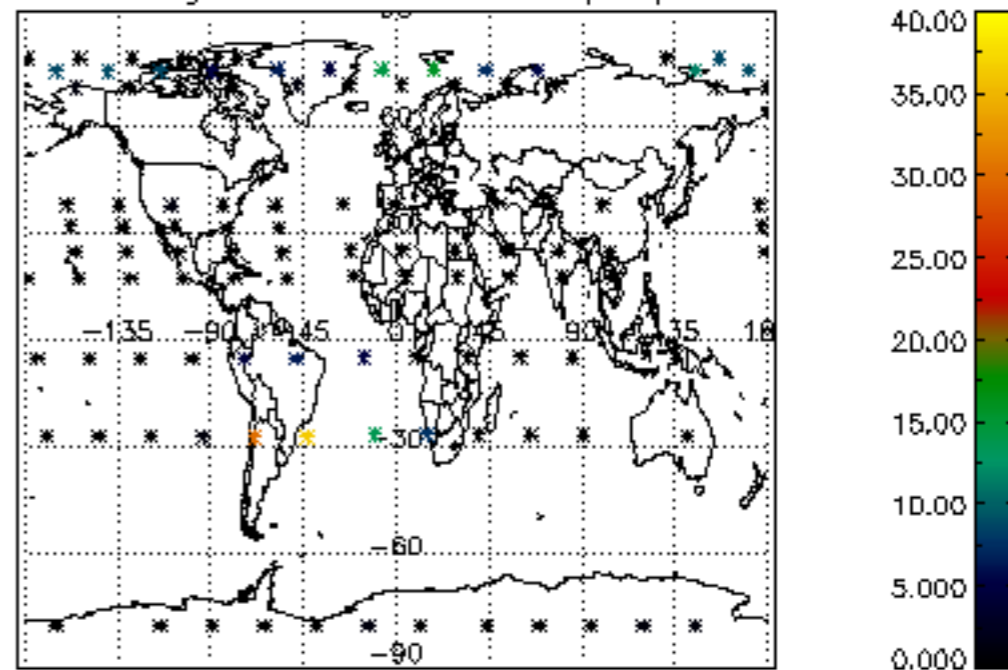
Percentage of datation errors per profile



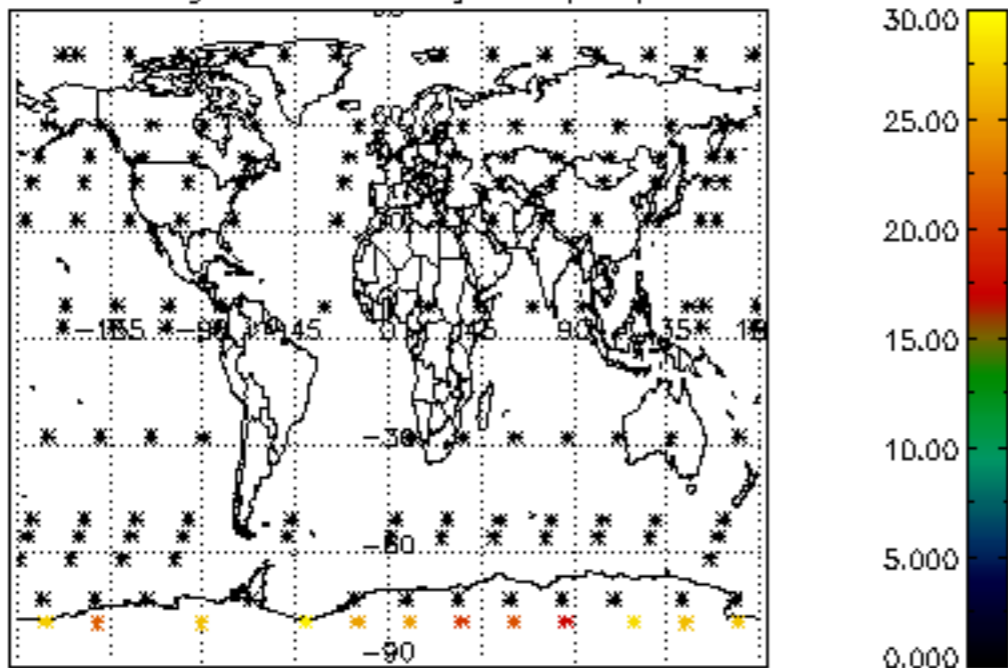
Percentage of star falling outside central band per profile



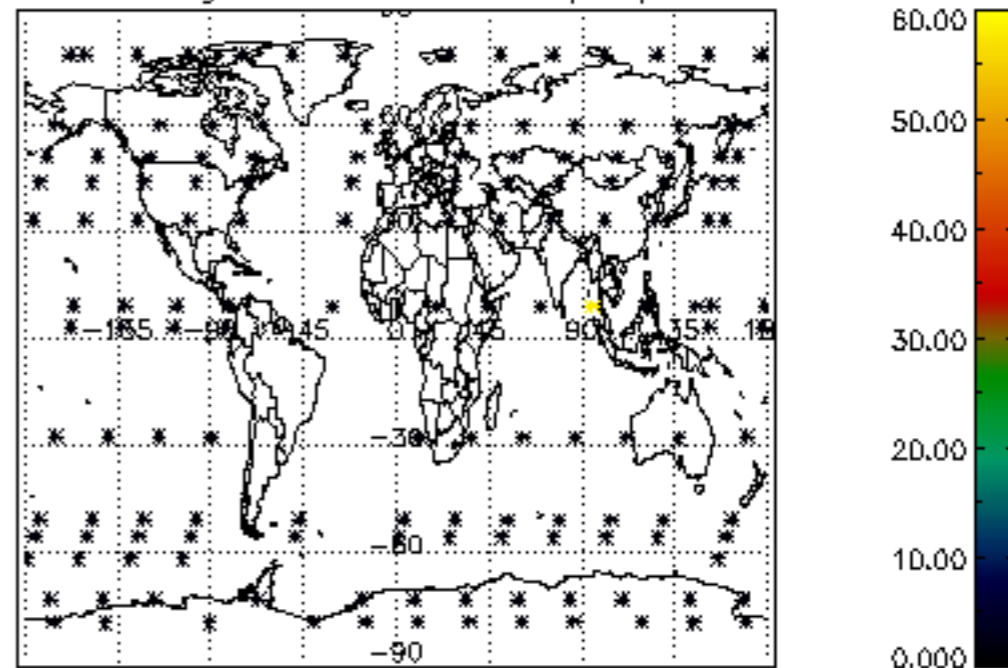
Percentage of saturation errors per profile



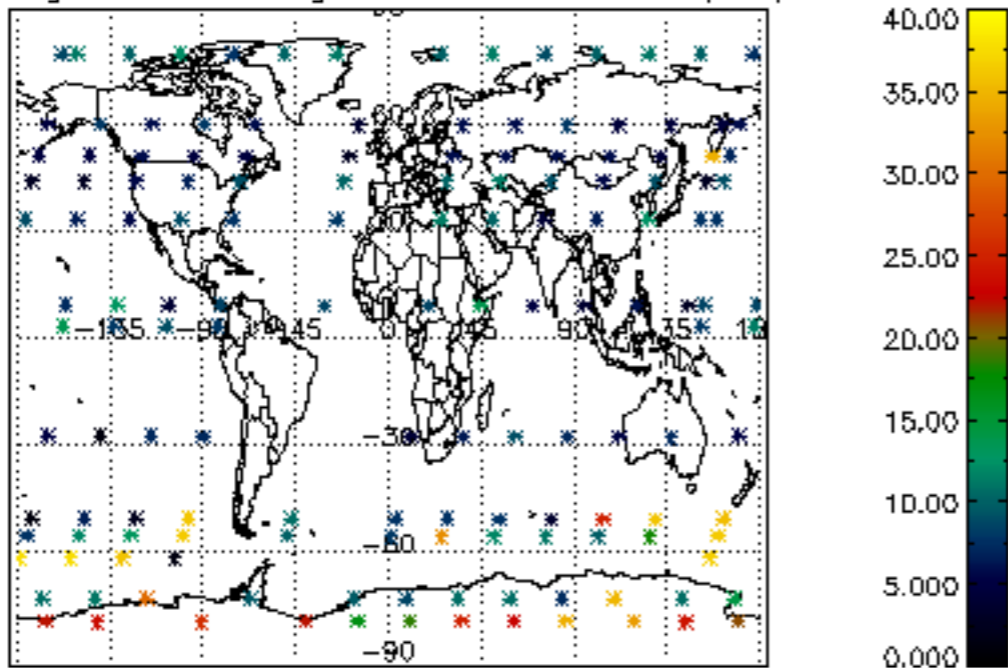
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

