

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 11:16:12
Data source version	GOMOS/6.01
Start time of products	13-03-2011 (13MAR2011 00:00:00)
Stop time of products	14-03-2011 (14MAR2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	308
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

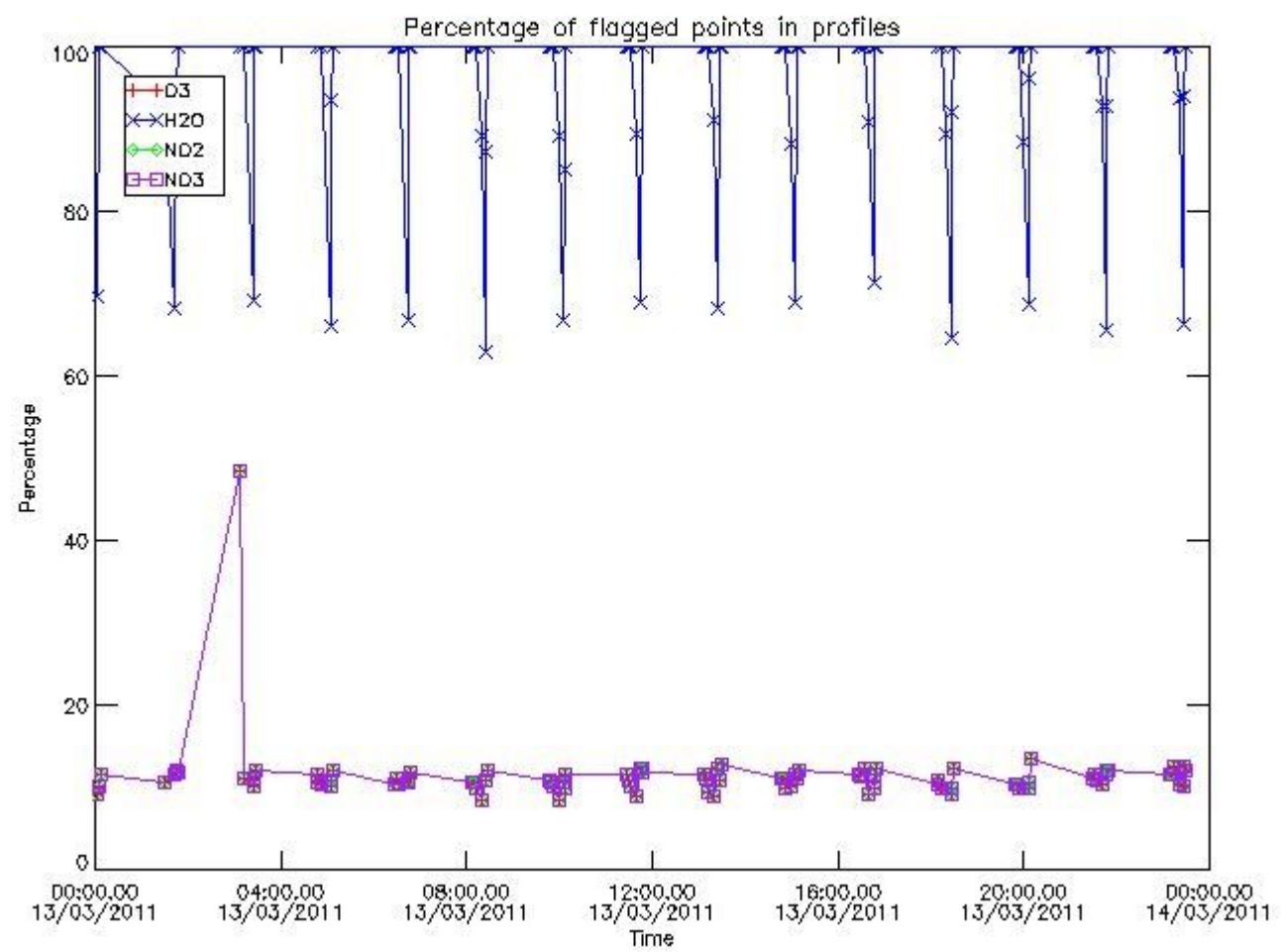
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110313_000317_000000553100_00232_47229_6406.N1	13-MAR-2011 00:03:17	Dark	55.000	4	Alp1Cen	-0.010000	5800.0	110	47229	No
2	GOM_NL__2PRFIN20110313_000431_000000513100_00232_47229_6407.N1	13-MAR-2011 00:04:31	Dark	50.500	10	Bet Cen	0.610000	28000.	101	47229	No
3	GOM_NL__2PRFIN20110313_000633_000000453100_00232_47229_6408.N1	13-MAR-2011 00:06:33	Dark	44.500	77	Eps Cen	2.3030	28000.	89	47229	No
4	GOM_NL__2PRFIN20110313_000933_000000413100_00232_47229_6409.N1	13-MAR-2011 00:09:33	Straylight	41.000	54	5The Cen	2.0550	4500.0	82	47229	No
5	GOM_NL__2PRFIN20110313_001133_000000533100_00232_47229_6410.N1	13-MAR-2011 00:11:33	Straylight	53.000	123	lot Cen	2.7500	10200.	106	47229	No
6	GOM_NL__2PRFIN20110313_001733_000000593100_00232_47229_6411.N1	13-MAR-2011 00:17:33	Straylight	59.000	106	9Bet Crv	2.6480	5600.0	118	47229	No
7	GOM_NL__2PRFIN20110313_001958_000000523100_00232_47229_6412.N1	13-MAR-2011 00:19:58	Straylight	51.500	100	4Gam Crv	2.5800	13100.	103	47229	No
8	GOM_NL__2PRFIN20110313_003143_000000413100_00232_47229_6413.N1	13-MAR-2011 00:31:43	Bright	40.500	51	41Gam1Leo	2.0100	4500.0	81	47229	No
9	GOM_NL__2PRFIN20110313_003938_000000423100_00232_47229_6414.N1	13-MAR-2011 00:39:38	Bright	42.000	174	52Psi UMa	3.0040	4400.0	84	47229	No
10	GOM_NL__2PRFIN20110313_004245_000000573100_00232_47229_6415.N1	13-MAR-2011 00:42:45	Bright	57.000	82	48Bet UMa	2.3650	10600.	114	47229	No
11	GOM_NL__2PRFIN20110313_004413_000000403100_00232_47229_6416.N1	13-MAR-2011 00:44:13	Bright	39.500	36	50Alp UMa	1.8000	6300.0	79	47229	No
12	GOM_NL__2PRFIN20110313_004605_000000443100_00232_47229_6417.N1	13-MAR-2011 00:46:05	Bright	44.000	32	77Eps UMa	1.7630	11000.	88	47229	No
13	GOM_NL__2PRFIN20110313_005120_000000423100_00232_47229_6418.N1	13-MAR-2011 00:51:20	Bright	42.000	60	7Bet UMi	2.0810	3950.0	84	47229	No
14	GOM_NL__2PRFIN20110313_005532_000000493100_00232_47229_6419.N1	13-MAR-2011 00:55:32	Bright	48.500	119	14Eta Dra	2.7270	4700.0	97	47229	No
15	GOM_NL__2PRFIN20110313_010117_000000503100_00232_47229_6420.N1	13-MAR-2011 01:01:17	Bright	50.000	69	33Gam Dra	2.2310	3800.0	100	47229	No
16	GOM_NL__2PRFIN20110313_010425_000000573100_00232_47229_6421.N1	13-MAR-2011 01:04:25	Bright	57.000	144	18Del Cyg	2.8600	11000.	114	47229	No
17	GOM_NL__2PRFIN20110313_010548_000000363100_00232_47229_6422.N1	13-MAR-2011 01:05:48	Bright	35.500	66	37Gam Cyg	2.2080	5900.0	71	47229	No
18	GOM_NL__2PRFIN20110313_011536_000000503100_00232_47229_6423.N1	13-MAR-2011 01:15:36	Bright	50.000	11	53Alp Aql	0.76500	8000.0	100	47229	No
19	GOM_NL__2PRFIN20110313_013053_000000493100_00232_47229_6424.N1	13-MAR-2011 01:30:53	Dark	48.500	38	20Eps Sgr	1.8360	11000.	97	47229	No
20	GOM_NL__2PRFIN20110313_014331_000000453100_00233_47230_6416.N1	13-MAR-2011 01:43:31	Dark	44.500	4	Alp1Cen	-0.010000	5800.0	89	47230	No
21	GOM_NL__2PRFIN20110313_014445_000000433100_00233_47230_6417.N1	13-MAR-2011 01:44:45	Dark	42.500	10	Bet Cen	0.610000	28000.	85	47230	No
22	GOM_NL__2PRFIN20110313_014647_000000433100_00233_47230_6418.N1	13-MAR-2011 01:46:47	Dark	43.000	77	Eps Cen	2.3030	28000.	86	47230	No
23	GOM_NL__2PRFIN20110313_014948_000000433100_00233_47230_6419.N1	13-MAR-2011 01:49:48	Straylight	43.000	54	5The Cen	2.0550	4500.0	86	47230	No
24	GOM_NL__2PRFIN20110313_015148_000000523100_00233_47230_6420.N1	13-MAR-2011 01:51:48	Straylight	52.000	123	lot Cen	2.7500	10200.	104	47230	No
25	GOM_NL__2PRFIN20110313_015748_000000593100_00233_47230_6421.N1	13-MAR-2011 01:57:48	Straylight	58.500	106	9Bet Crv	2.6480	5600.0	117	47230	No
26	GOM_NL__2PRFIN20110313_020012_000000533100_00233_47230_6422.N1	13-MAR-2011 02:00:12	Straylight	52.500	100	4Gam Crv	2.5800	13100.	105	47230	No
27	GOM_NL__2PRFIN20110313_021157_000000403100_00233_47230_6423.N1	13-MAR-2011 02:11:57	Bright	39.500	51	41Gam1Leo	2.0100	4500.0	79	47230	No
28	GOM_NL__2PRFIN20110313_021952_000000413100_00233_47230_6424.N1	13-MAR-2011 02:19:52	Bright	40.500	174	52Psi UMa	3.0040	4400.0	81	47230	No
29	GOM_NL__2PRFIN20110313_022259_000000573100_00233_47230_6425.N1	13-MAR-2011 02:22:59	Bright	57.000	82	48Bet UMa	2.3650	10600.	114	47230	No
30	GOM_NL__2PRFIN20110313_022427_000000383100_00233_47230_6426.N1	13-MAR-2011 02:24:27	Bright	37.500	36	50Alp UMa	1.8000	6300.0	75	47230	No
31	GOM_NL__2PRFIN20110313_022619_000000463100_00233_47230_6427.N1	13-MAR-2011 02:26:19	Bright	46.000	32	77Eps UMa	1.7630	11000.	92	47230	No
32	GOM_NL__2PRFIN20110313_023134_000000403100_00233_47230_6428.N1	13-MAR-2011 02:31:34	Bright	40.000	60	7Bet UMi	2.0810	3950.0	80	47230	No
33	GOM_NL__2PRFIN20110313_023545_000000483100_00233_47230_6429.N1	13-MAR-2011 02:35:45	Bright	48.000	119	14Eta Dra	2.7270	4700.0	96	47230	No
34	GOM_NL__2PRFIN20110313_024130_000000513100_00233_47230_6430.N1	13-MAR-2011 02:41:30	Bright	50.500	69	33Gam Dra	2.2310	3800.0	101	47230	No
35	GOM_NL__2PRFIN20110313_024439_000000573100_00233_47230_6431.N1	13-MAR-2011 02:44:39	Bright	57.000	144	18Del Cyg	2.8600	11000.	114	47230	No
36	GOM_NL__2PRFIN20110313_024602_000000373100_00233_47230_6432.N1	13-MAR-2011 02:46:02	Bright	37.000	66	37Gam Cyg	2.2080	5900.0	74	47230	No
37	GOM_NL__2PRFIN20110313_025550_000000513100_00233_47230_6433.N1	13-MAR-2011 02:55:50	Bright	51.000	11	53Alp Aql	0.76500	8000.0	102	47230	No
38	GOM_NL__2PRFIN20110313_030744_000000443100_00233_47230_6434.N1	13-MAR-2011 03:07:44	Dark	44.000	57	34Sig Sgr	2.0660	26000.	88	47230	No
39	GOM_NL__2PRFIN20110313_031108_000000513100_00233_47230_6435.N1	13-MAR-2011 03:11:08	Dark	51.000	38	20Eps Sgr	1.8360	11000.	102	47230	No
40	GOM_NL__2PRFIN20110313_032346_000000563100_00234_47231_6483.N1	13-MAR-2011 03:23:46	Dark	55.500	4	Alp1Cen	-0.010000	5800.0	111	47231	No
41	GOM_NL__2PRFIN20110313_032500_000000513100_00234_47231_6484.N1	13-MAR-2011 03:25:00	Dark	51.000	10	Bet Cen	0.610000	28000.	102	47231	No
42	GOM_NL__2PRFIN20110313_032702_000000433100_00234_47231_6485.N1	13-MAR-2011 03:27:02	Dark	42.500	77	Eps Cen	2.3030	28000.	85	47231	No

279	GOM_NL__2PRFIN20110313_214626_000000443100_00245_47242_7041.N1	13-MAR-2011 21:46:26	Dark	44.000	4	Alp1Cen	-0.010000	5800.0	88	47242	No
280	GOM_NL__2PRFIN20110313_214740_000000423100_00245_47242_7042.N1	13-MAR-2011 21:47:40	Dark	42.000	10	Bet Cen	0.61000	28000.	84	47242	No
281	GOM_NL__2PRFIN20110313_214942_000000423100_00245_47242_7043.N1	13-MAR-2011 21:49:42	Dark	42.000	77	Eps Cen	2.3030	28000.	84	47242	No
282	GOM_NL__2PRFIN20110313_215247_000000563100_00245_47242_7044.N1	13-MAR-2011 21:52:47	Straylight	56.000	54	5The Cen	2.0550	4500.0	112	47242	No
283	GOM_NL__2PRFIN20110313_215443_000000503100_00245_47242_7045.N1	13-MAR-2011 21:54:43	Straylight	49.500	123	lot Cen	2.7500	10200.	99	47242	No
284	GOM_NL__2PRFIN20110313_220039_000000583100_00245_47242_7046.N1	13-MAR-2011 22:00:39	Straylight	57.500	106	9Bet Crv	2.6480	5600.0	115	47242	No
285	GOM_NL__2PRFIN20110313_220302_000000523100_00245_47242_7047.N1	13-MAR-2011 22:03:02	Straylight	52.000	100	4Gam Crv	2.5800	13100.	104	47242	No
286	GOM_NL__2PRFIN20110313_221444_000000393100_00245_47242_7048.N1	13-MAR-2011 22:14:44	Bright	38.500	51	41Gam1Leo	2.0100	4500.0	77	47242	No
287	GOM_NL__2PRFIN20110313_222235_000000513100_00245_47242_7049.N1	13-MAR-2011 22:22:35	Bright	50.500	174	52Psi UMa	3.0040	4400.0	101	47242	No
288	GOM_NL__2PRFIN20110313_222544_000000383100_00245_47242_7050.N1	13-MAR-2011 22:25:44	Bright	38.000	82	48Bet UMa	2.3650	10600.	76	47242	No
289	GOM_NL__2PRFIN20110313_222712_000000403100_00245_47242_7051.N1	13-MAR-2011 22:27:12	Bright	39.500	36	50Alp UMa	1.8000	6300.0	79	47242	No
290	GOM_NL__2PRFIN20110313_222858_000000463100_00245_47242_7052.N1	13-MAR-2011 22:28:58	Bright	45.500	32	77Eps UMa	1.7630	11000.	91	47242	No
291	GOM_NL__2PRFIN20110313_223418_000000423100_00245_47242_7053.N1	13-MAR-2011 22:34:18	Bright	41.500	60	7Bet UMi	2.0810	3950.0	83	47242	No
292	GOM_NL__2PRFIN20110313_223826_000000453100_00245_47242_7054.N1	13-MAR-2011 22:38:26	Bright	45.000	119	14Eta Dra	2.7270	4700.0	90	47242	No
293	GOM_NL__2PRFIN20110313_224414_000000503100_00245_47242_7055.N1	13-MAR-2011 22:44:14	Bright	49.500	69	33Gam Dra	2.2310	3800.0	99	47242	No
294	GOM_NL__2PRFIN20110313_224718_000000383100_00245_47242_7056.N1	13-MAR-2011 22:47:18	Bright	37.500	19	50Alp Cyg	1.2460	10500.	75	47242	No
295	GOM_NL__2PRFIN20110313_224851_000000373100_00245_47242_7057.N1	13-MAR-2011 22:48:51	Bright	37.000	66	37Gam Cyg	2.2080	5900.0	74	47242	No
296	GOM_NL__2PRFIN20110313_225843_000000533100_00245_47242_7058.N1	13-MAR-2011 22:58:43	Tw_i_and_stray	52.500	11	53Alp Aql	0.76500	8000.0	105	47242	No
297	GOM_NL__2PRFIN20110313_230842_000000453100_00245_47242_7059.N1	13-MAR-2011 23:08:42	Dark	44.500	155	41Pi Sgr	2.9000	6600.0	89	47242	No
298	GOM_NL__2PRFIN20110313_231041_000000453100_00245_47242_7060.N1	13-MAR-2011 23:10:41	Dark	44.500	57	34Sig Sgr	2.0660	26000.	89	47242	No
299	GOM_NL__2PRFIN20110313_231407_000000493100_00245_47242_7061.N1	13-MAR-2011 23:14:07	Dark	48.500	38	20Eps Sgr	1.8360	11000.	97	47242	No
300	GOM_NL__2PRFIN20110313_232044_000000493100_00246_47243_7090.N1	13-MAR-2011 23:20:44	Dark	49.000	75	26Eps Sco	2.2910	4250.0	98	47243	No
301	GOM_NL__2PRFIN20110313_232641_000000453100_00246_47243_7091.N1	13-MAR-2011 23:26:41	Dark	45.000	4	Alp1Cen	-0.010000	5800.0	90	47243	No
302	GOM_NL__2PRFIN20110313_232754_000000503100_00246_47243_7092.N1	13-MAR-2011 23:27:54	Dark	50.000	10	Bet Cen	0.61000	28000.	100	47243	No
303	GOM_NL__2PRFIN20110313_232957_000000423100_00246_47243_7093.N1	13-MAR-2011 23:29:57	Dark	42.000	77	Eps Cen	2.3030	28000.	84	47243	No
304	GOM_NL__2PRFIN20110313_233301_000000563100_00246_47243_7094.N1	13-MAR-2011 23:33:01	Straylight	56.000	54	5The Cen	2.0550	4500.0	112	47243	No
305	GOM_NL__2PRFIN20110313_233458_000000513100_00246_47243_7095.N1	13-MAR-2011 23:34:58	Straylight	51.000	123	lot Cen	2.7500	10200.	102	47243	No
306	GOM_NL__2PRFIN20110313_234053_000000553100_00246_47243_7096.N1	13-MAR-2011 23:40:53	Straylight	54.500	106	9Bet Crv	2.6480	5600.0	109	47243	No
307	GOM_NL__2PRFIN20110313_234316_000000533100_00246_47243_7097.N1	13-MAR-2011 23:43:16	Straylight	52.500	100	4Gam Crv	2.5800	13100.	105	47243	No
308	GOM_NL__2PRFIN20110313_235458_000000393100_00246_47243_7098.N1	13-MAR-2011 23:54:58	Bright	39.000	51	41Gam1Leo	2.0100	4500.0	78	47243	No

3. Quality information per product

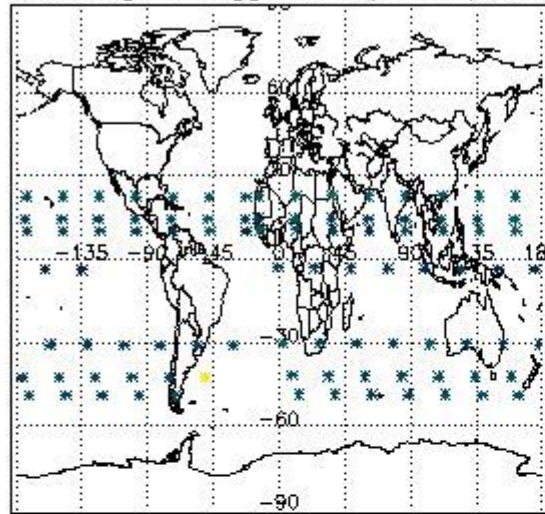
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

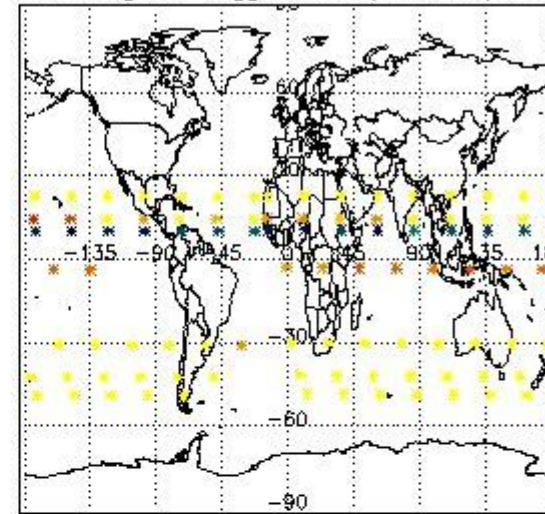


3.2 Plot quality information per product (world map)

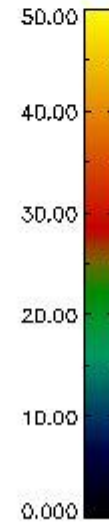
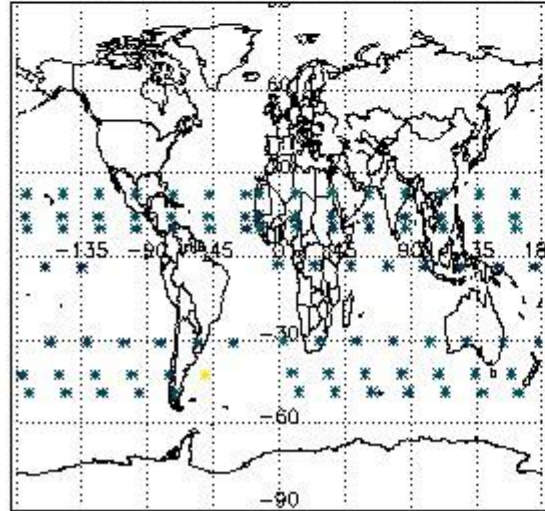
Percentage of flagged data per O3 profile



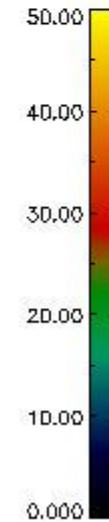
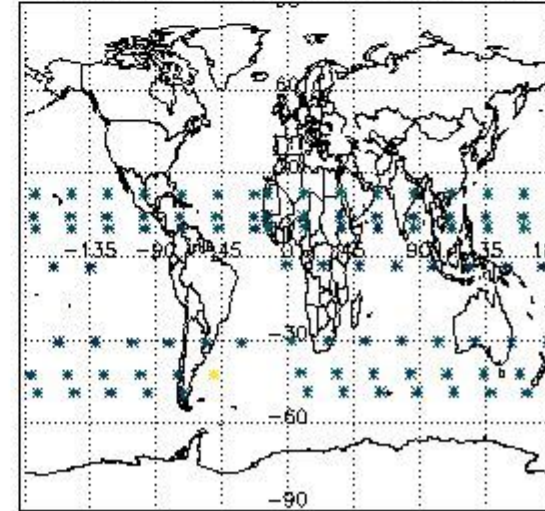
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

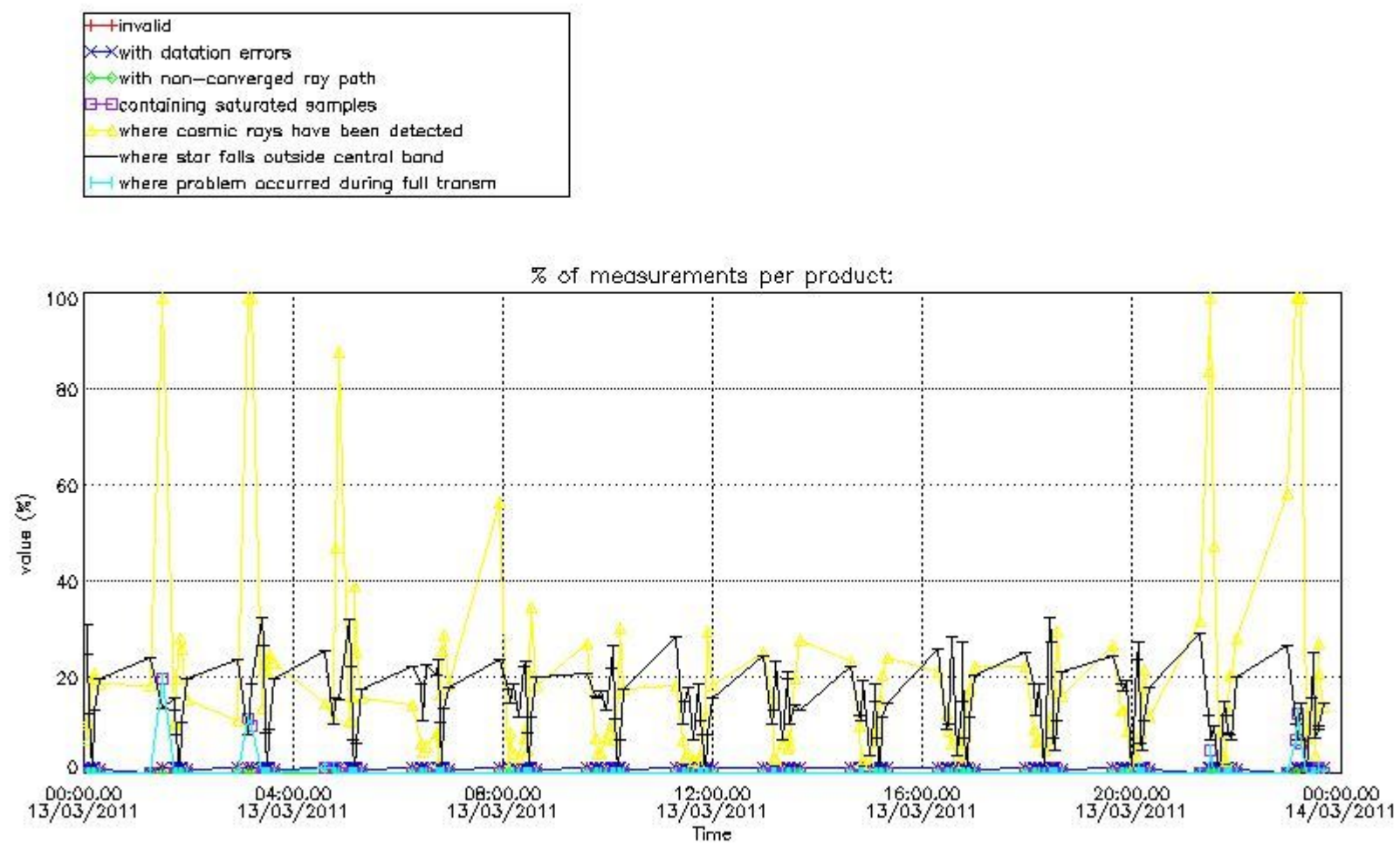


4. Level 1 quality information per product

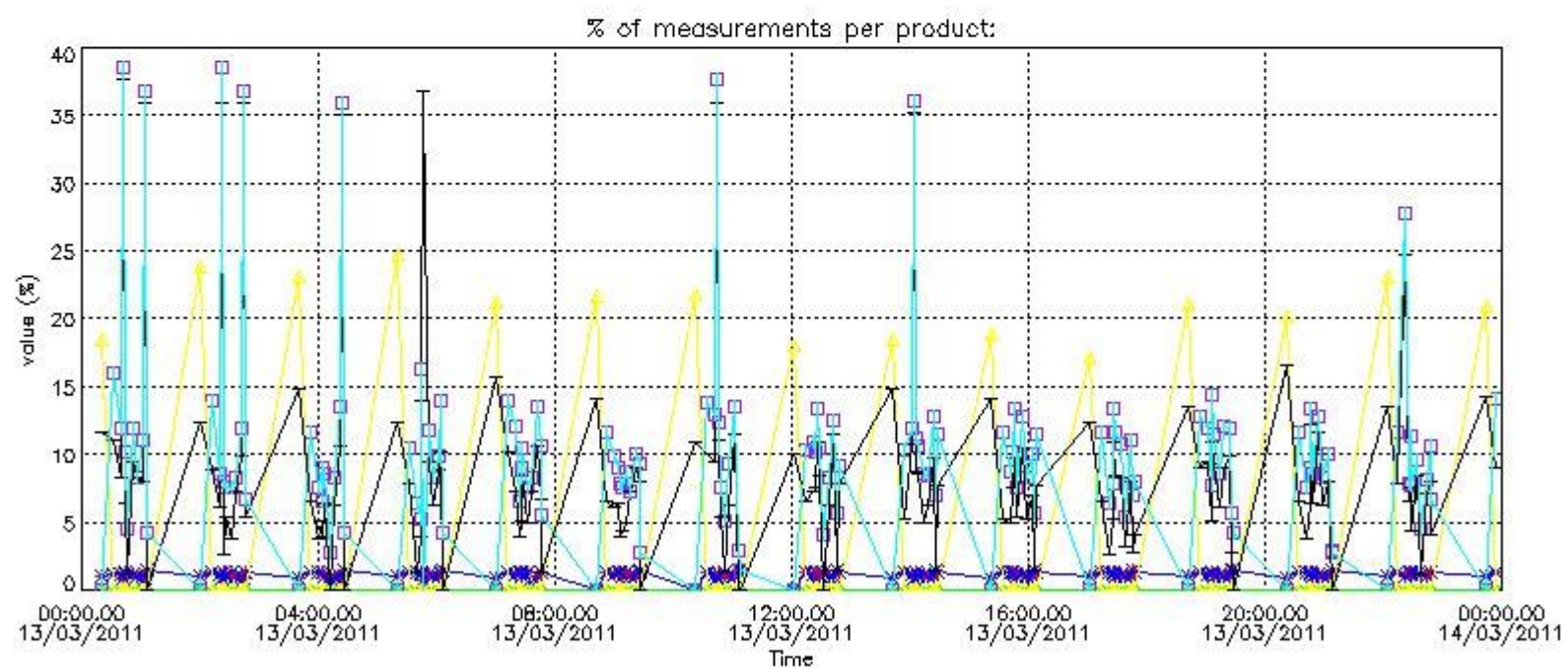
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

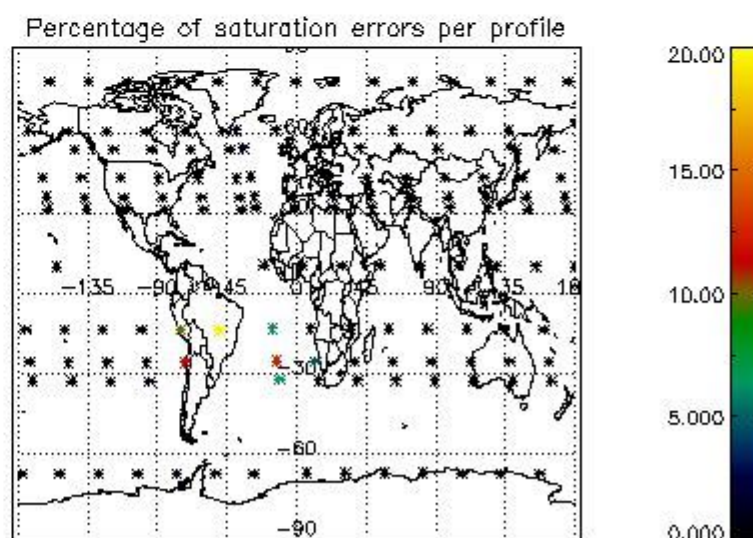
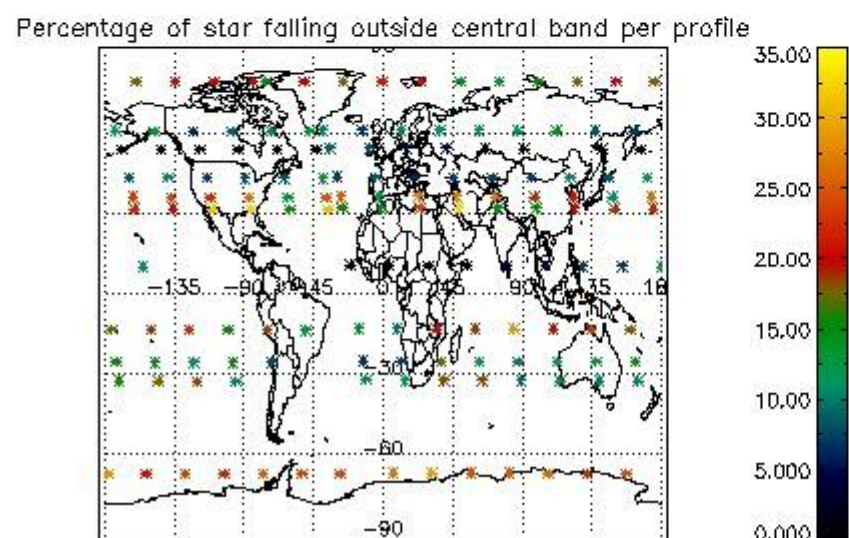
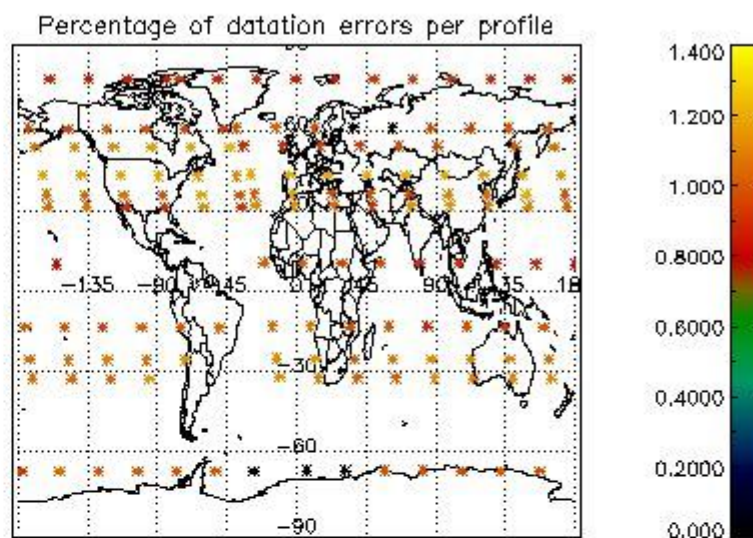
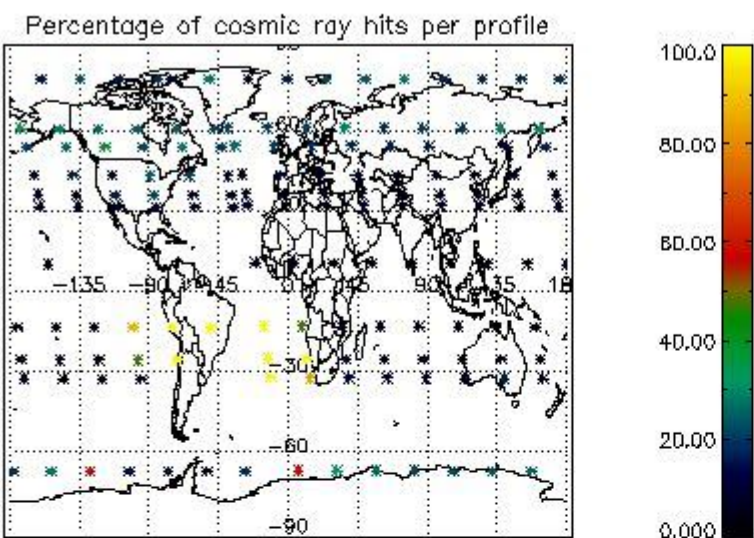


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

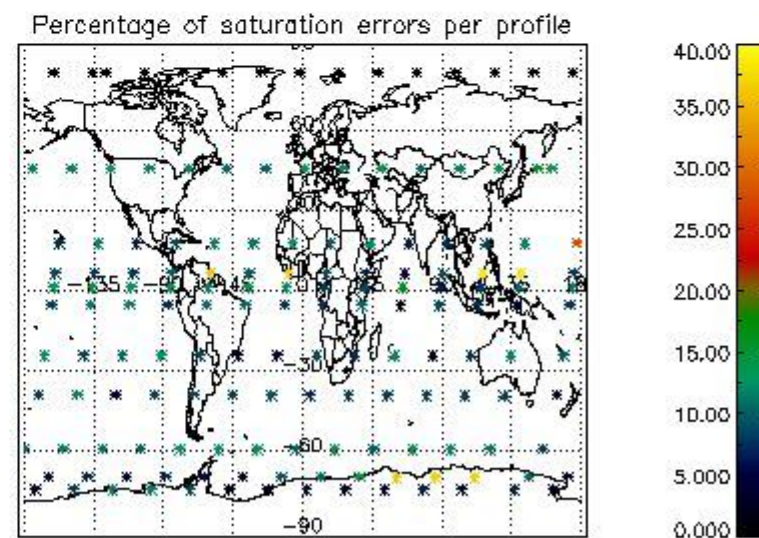
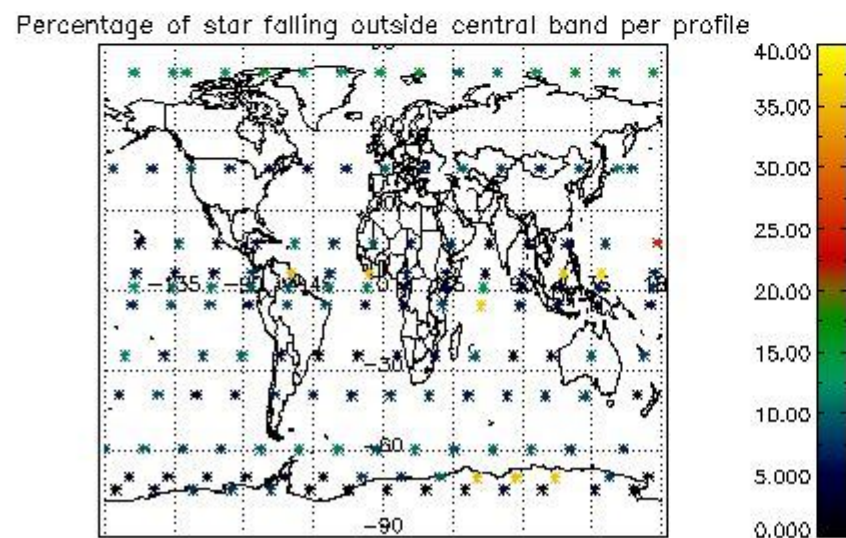
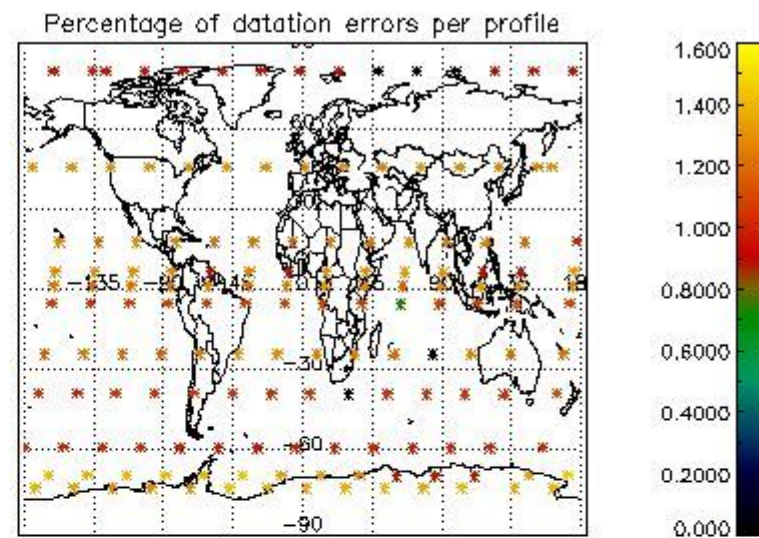
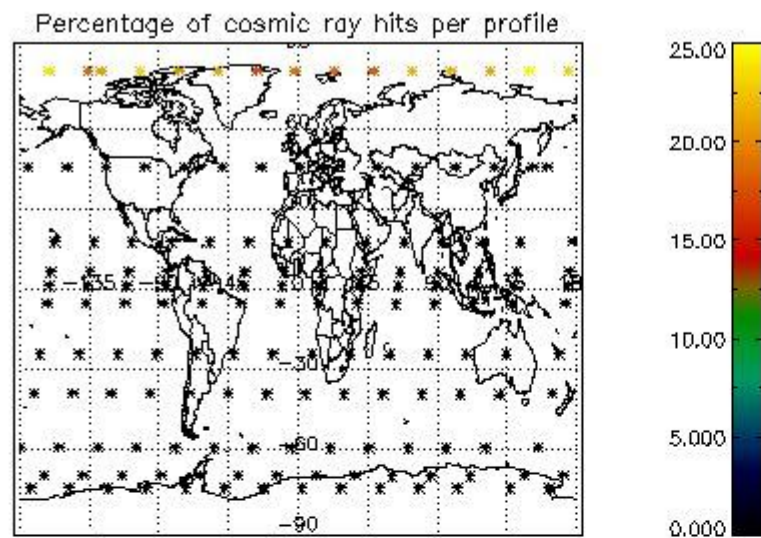


4.2 Plot quality information per product coming from level 1b processing (world map)

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

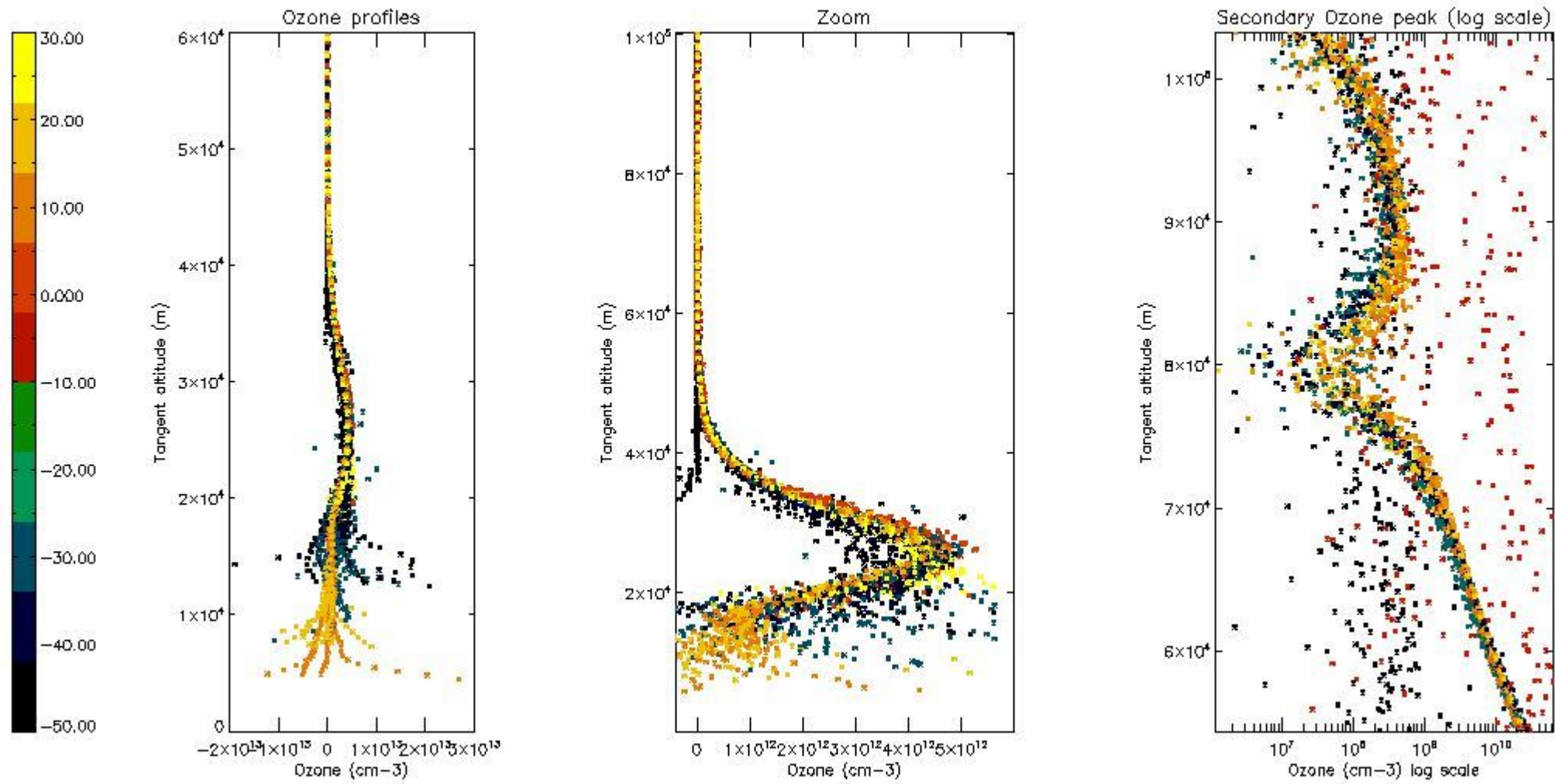
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	32
STD < 20	16

STD < 10	13
STD < 5	10

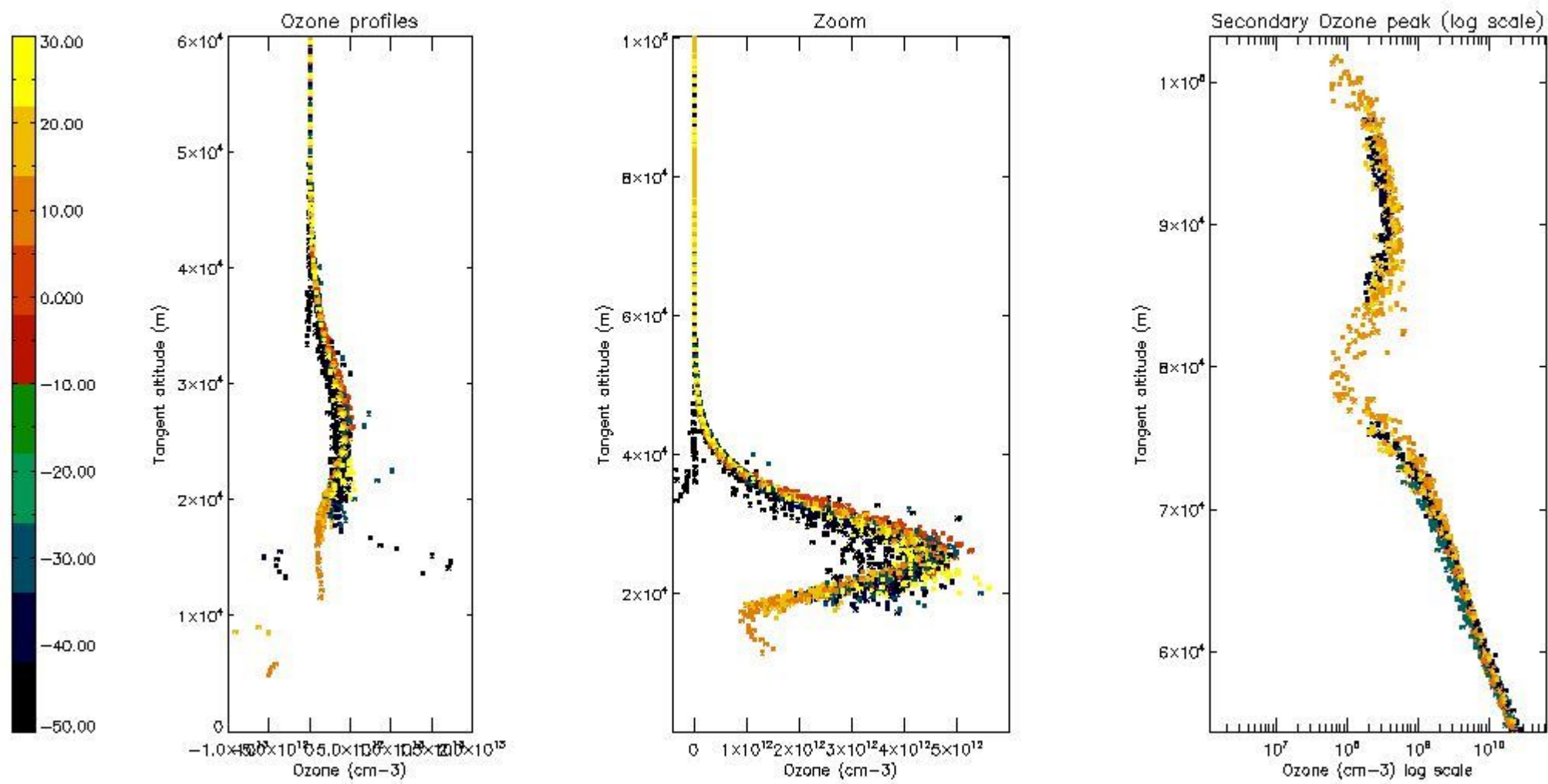
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



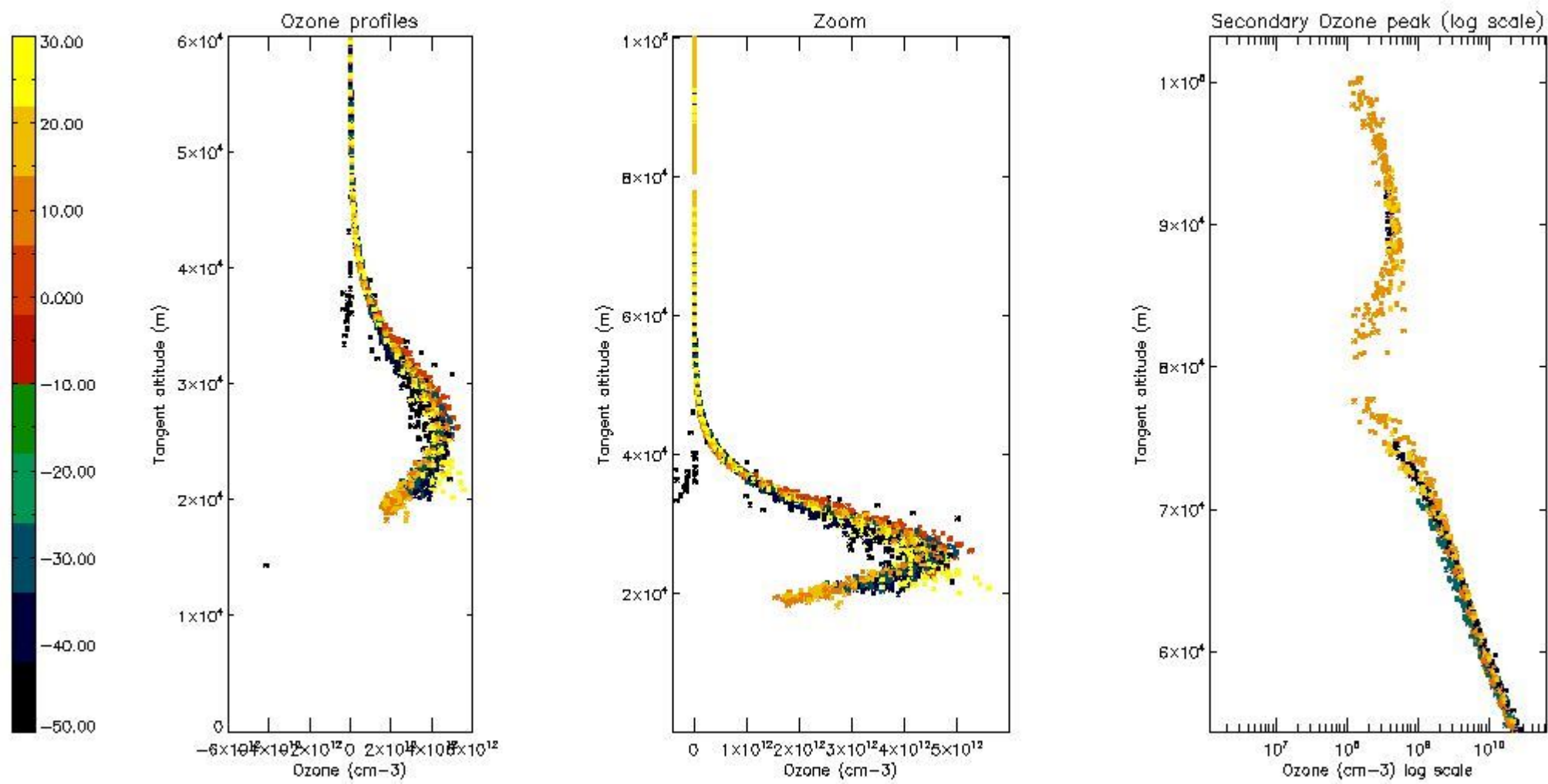
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



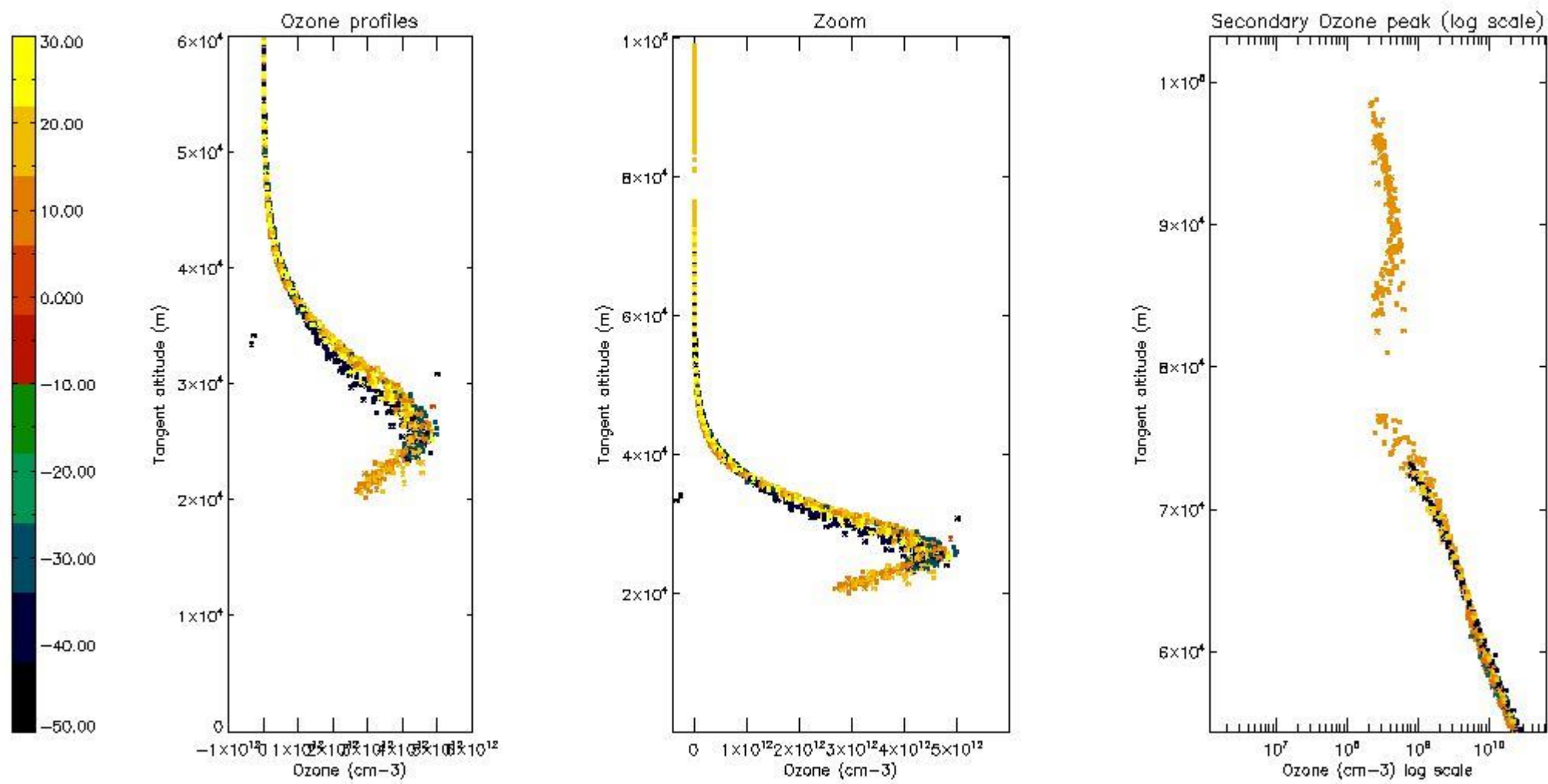
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



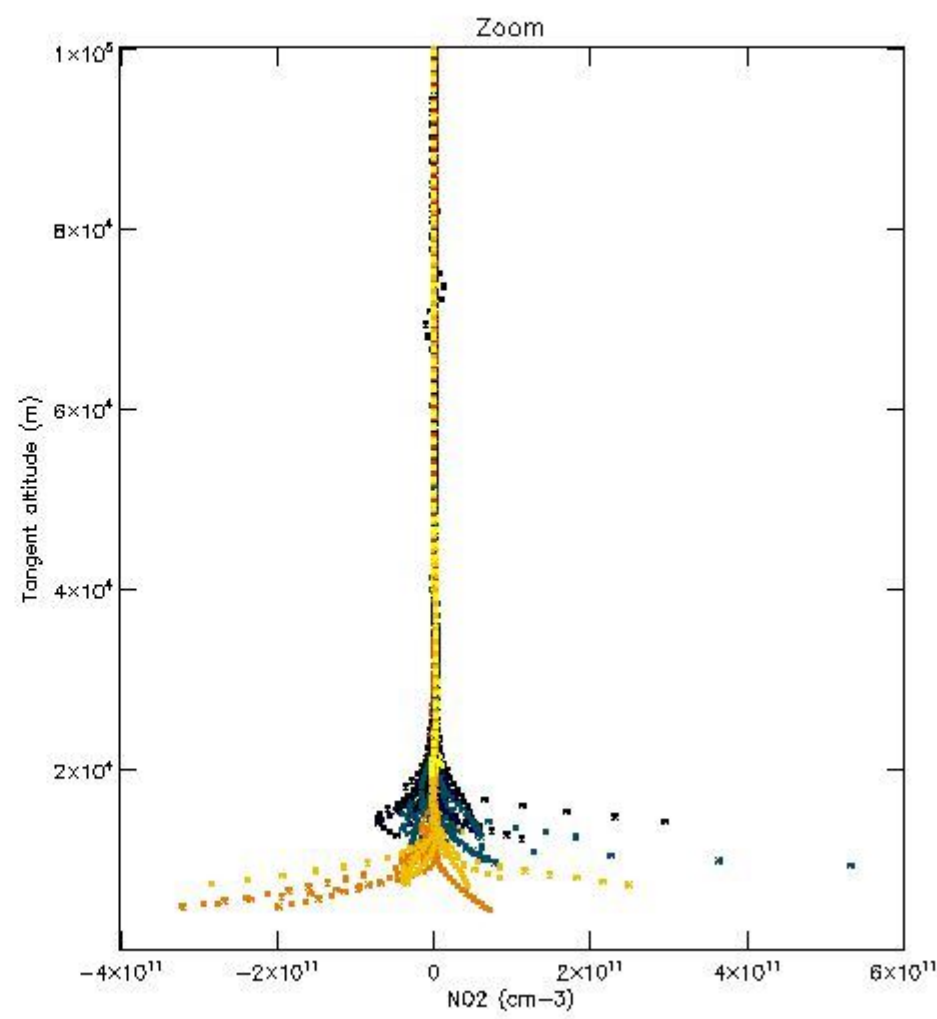
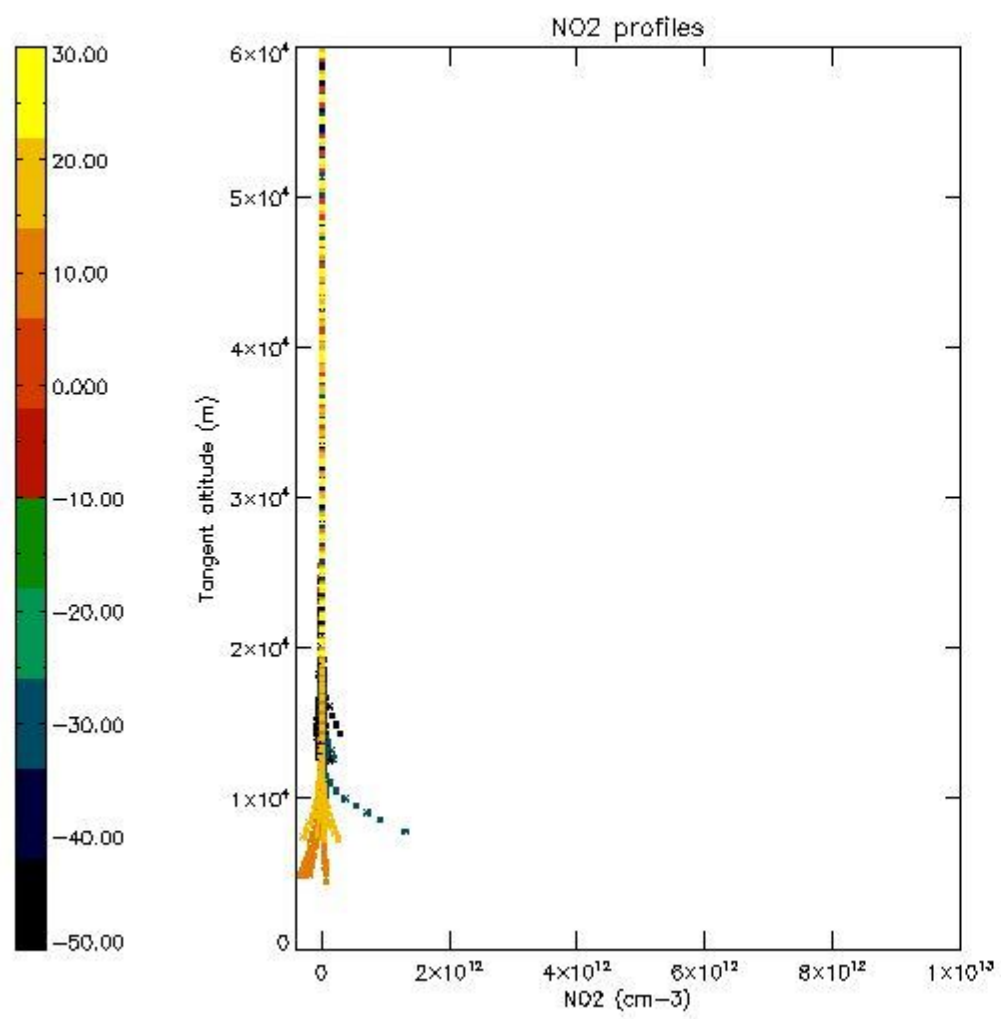
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



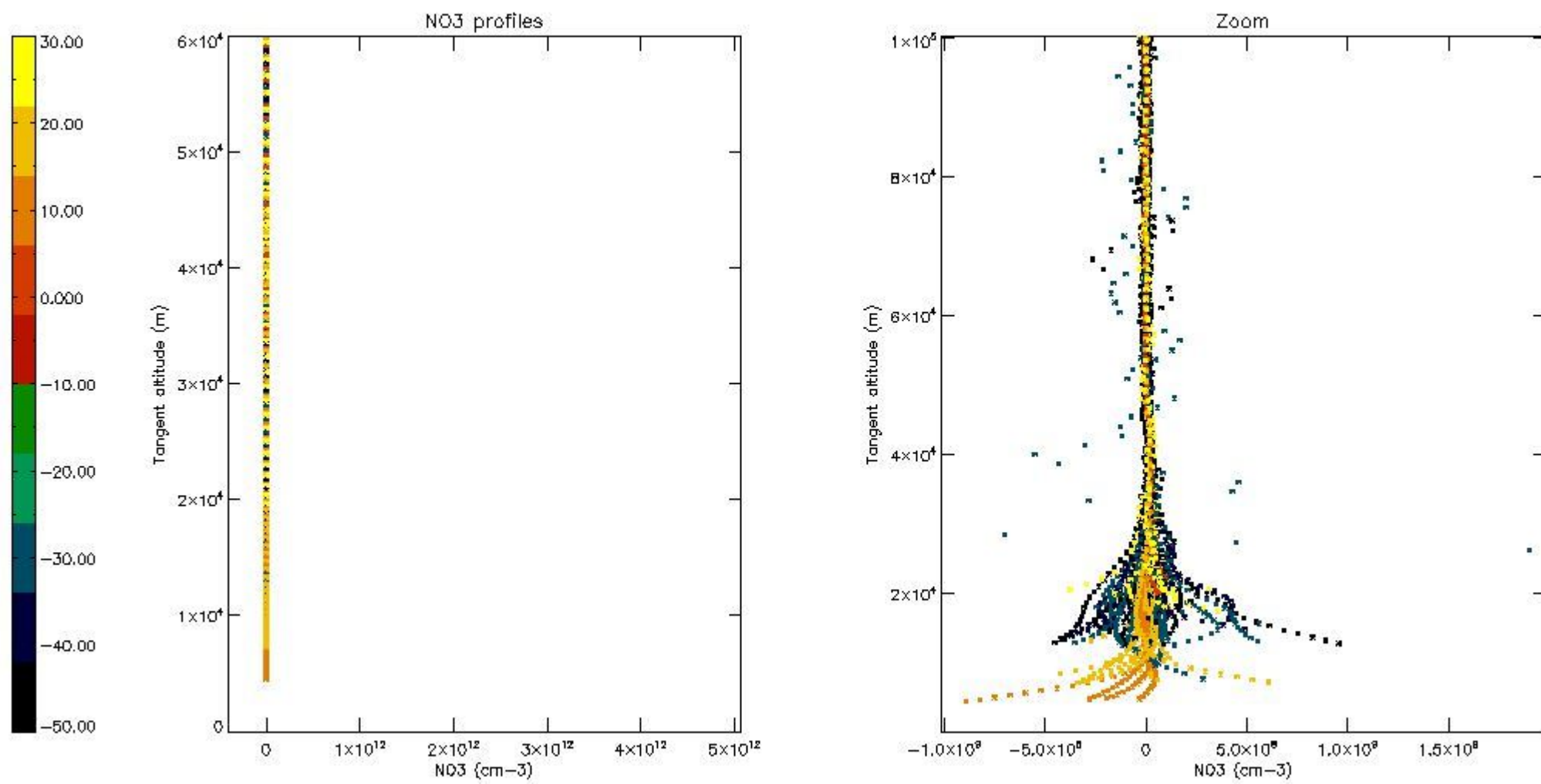
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



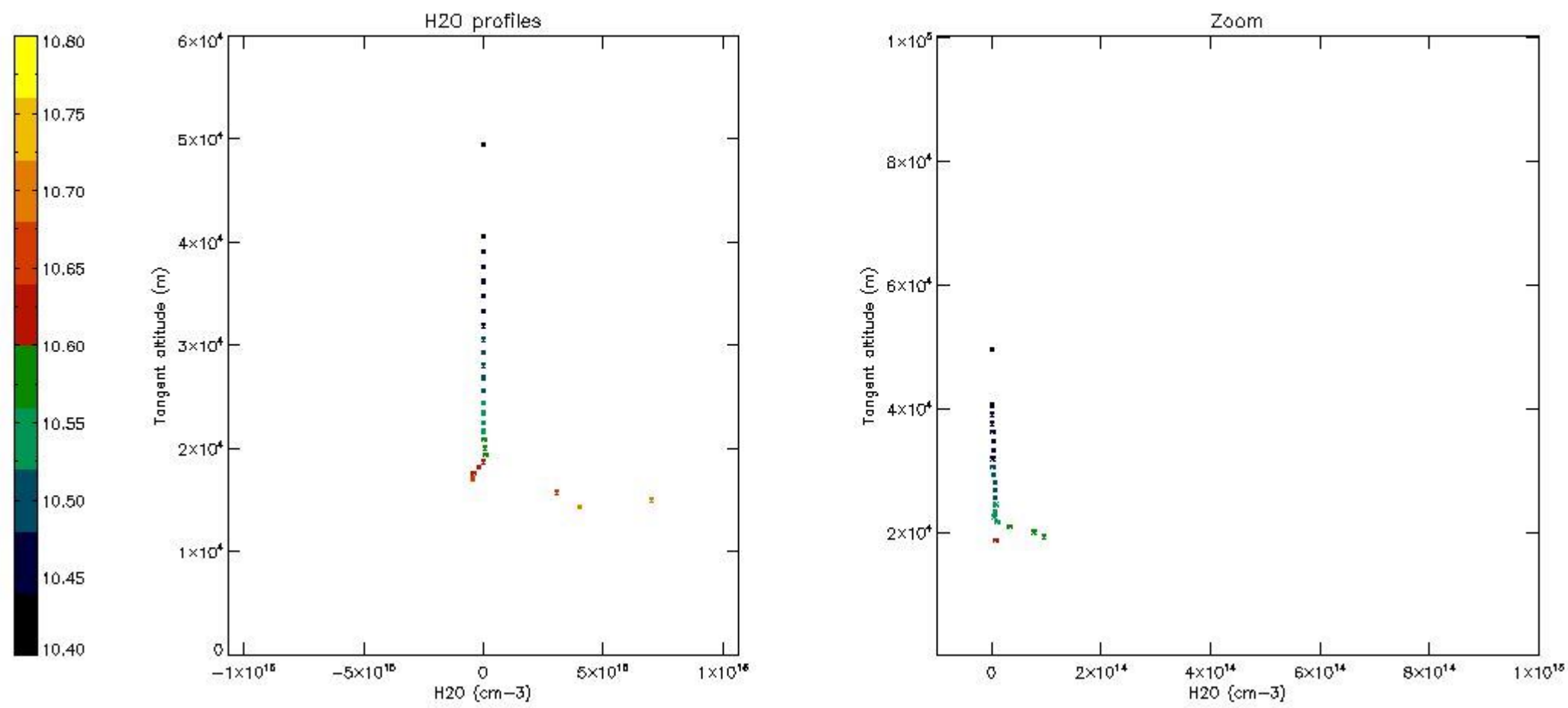
5.7 Plot NO3 profiles for all STD (dark without errors)

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	13-MAR-2011 00:03:17
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	13-MAR-2011 00:03:17
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	13-MAR-2011 00:03:17

GOMOS Level 2 Daily Report

SUMMARY

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[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

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[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](#)

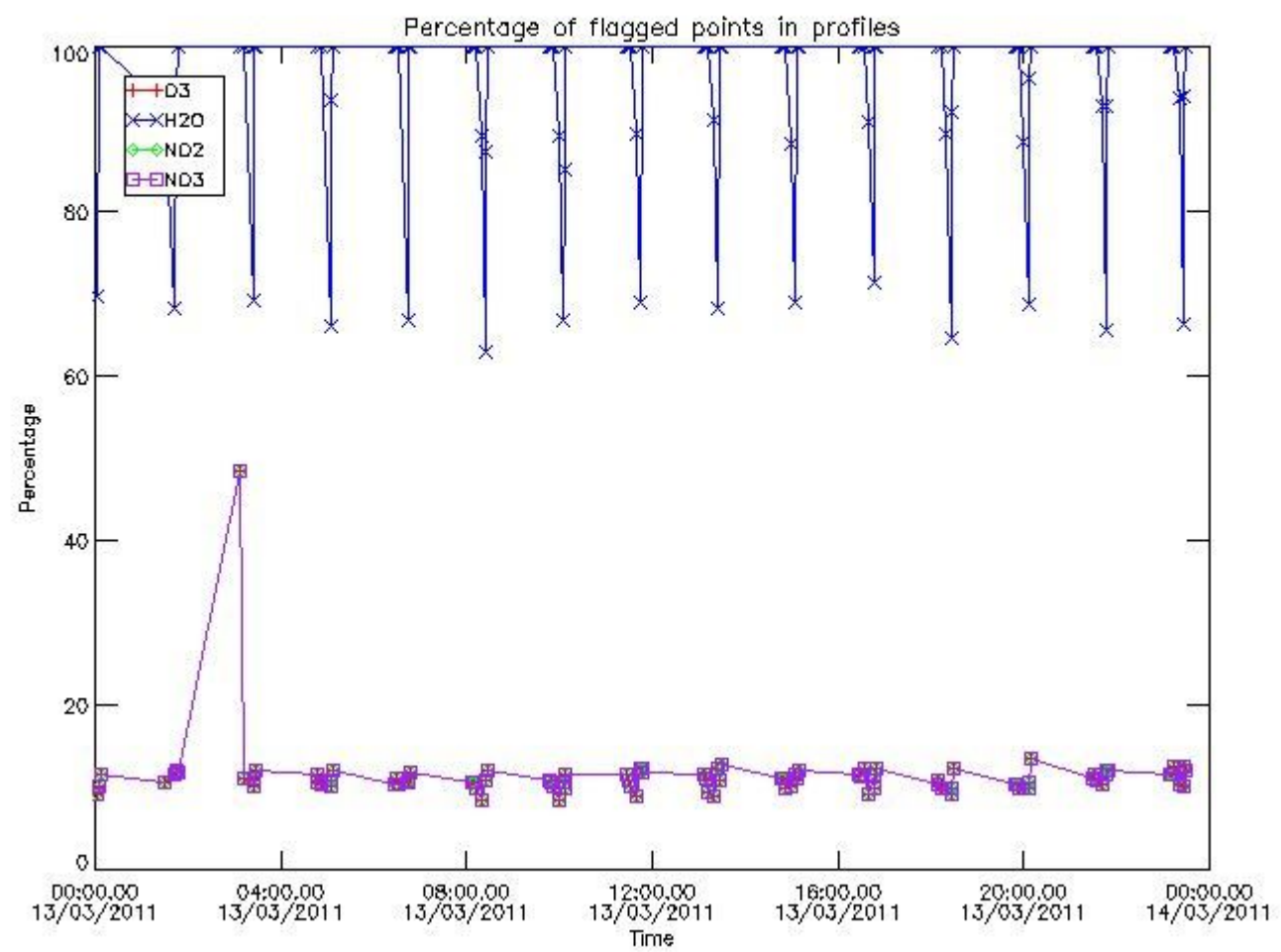
[6. Auxiliary Data Files used for the production reported in section 2](#)

279	GOM_NL__2PRFIN20110313_214626_000000443100_00245_47242_7041.N1	13-MAR-2011 21:46:26	Dark	44.000	4	Alp1Cen	-0.010000	5800.0	88	47242	No
280	GOM_NL__2PRFIN20110313_214740_000000423100_00245_47242_7042.N1	13-MAR-2011 21:47:40	Dark	42.000	10	Bet Cen	0.61000	28000.	84	47242	No
281	GOM_NL__2PRFIN20110313_214942_000000423100_00245_47242_7043.N1	13-MAR-2011 21:49:42	Dark	42.000	77	Eps Cen	2.3030	28000.	84	47242	No
282	GOM_NL__2PRFIN20110313_215247_000000563100_00245_47242_7044.N1	13-MAR-2011 21:52:47	Straylight	56.000	54	5The Cen	2.0550	4500.0	112	47242	No
283	GOM_NL__2PRFIN20110313_215443_000000503100_00245_47242_7045.N1	13-MAR-2011 21:54:43	Straylight	49.500	123	lot Cen	2.7500	10200.	99	47242	No
284	GOM_NL__2PRFIN20110313_220039_000000583100_00245_47242_7046.N1	13-MAR-2011 22:00:39	Straylight	57.500	106	9Bet Crv	2.6480	5600.0	115	47242	No
285	GOM_NL__2PRFIN20110313_220302_000000523100_00245_47242_7047.N1	13-MAR-2011 22:03:02	Straylight	52.000	100	4Gam Crv	2.5800	13100.	104	47242	No
286	GOM_NL__2PRFIN20110313_221444_000000393100_00245_47242_7048.N1	13-MAR-2011 22:14:44	Bright	38.500	51	41Gam1Leo	2.0100	4500.0	77	47242	No
287	GOM_NL__2PRFIN20110313_222235_000000513100_00245_47242_7049.N1	13-MAR-2011 22:22:35	Bright	50.500	174	52Psi UMa	3.0040	4400.0	101	47242	No
288	GOM_NL__2PRFIN20110313_222544_000000383100_00245_47242_7050.N1	13-MAR-2011 22:25:44	Bright	38.000	82	48Bet UMa	2.3650	10600.	76	47242	No
289	GOM_NL__2PRFIN20110313_222712_000000403100_00245_47242_7051.N1	13-MAR-2011 22:27:12	Bright	39.500	36	50Alp UMa	1.8000	6300.0	79	47242	No
290	GOM_NL__2PRFIN20110313_222858_000000463100_00245_47242_7052.N1	13-MAR-2011 22:28:58	Bright	45.500	32	77Eps UMa	1.7630	11000.	91	47242	No
291	GOM_NL__2PRFIN20110313_223418_000000423100_00245_47242_7053.N1	13-MAR-2011 22:34:18	Bright	41.500	60	7Bet UMi	2.0810	3950.0	83	47242	No
292	GOM_NL__2PRFIN20110313_223826_000000453100_00245_47242_7054.N1	13-MAR-2011 22:38:26	Bright	45.000	119	14Eta Dra	2.7270	4700.0	90	47242	No
293	GOM_NL__2PRFIN20110313_224414_000000503100_00245_47242_7055.N1	13-MAR-2011 22:44:14	Bright	49.500	69	33Gam Dra	2.2310	3800.0	99	47242	No
294	GOM_NL__2PRFIN20110313_224718_000000383100_00245_47242_7056.N1	13-MAR-2011 22:47:18	Bright	37.500	19	50Alp Cyg	1.2460	10500.	75	47242	No
295	GOM_NL__2PRFIN20110313_224851_000000373100_00245_47242_7057.N1	13-MAR-2011 22:48:51	Bright	37.000	66	37Gam Cyg	2.2080	5900.0	74	47242	No
296	GOM_NL__2PRFIN20110313_225843_000000533100_00245_47242_7058.N1	13-MAR-2011 22:58:43	Tw_i_and_stray	52.500	11	53Alp Aql	0.76500	8000.0	105	47242	No
297	GOM_NL__2PRFIN20110313_230842_000000453100_00245_47242_7059.N1	13-MAR-2011 23:08:42	Dark	44.500	155	41Pi Sgr	2.9000	6600.0	89	47242	No
298	GOM_NL__2PRFIN20110313_231041_000000453100_00245_47242_7060.N1	13-MAR-2011 23:10:41	Dark	44.500	57	34Sig Sgr	2.0660	26000.	89	47242	No
299	GOM_NL__2PRFIN20110313_231407_000000493100_00245_47242_7061.N1	13-MAR-2011 23:14:07	Dark	48.500	38	20Eps Sgr	1.8360	11000.	97	47242	No
300	GOM_NL__2PRFIN20110313_232044_000000493100_00246_47243_7090.N1	13-MAR-2011 23:20:44	Dark	49.000	75	26Eps Sco	2.2910	4250.0	98	47243	No
301	GOM_NL__2PRFIN20110313_232641_000000453100_00246_47243_7091.N1	13-MAR-2011 23:26:41	Dark	45.000	4	Alp1Cen	-0.010000	5800.0	90	47243	No
302	GOM_NL__2PRFIN20110313_232754_000000503100_00246_47243_7092.N1	13-MAR-2011 23:27:54	Dark	50.000	10	Bet Cen	0.61000	28000.	100	47243	No
303	GOM_NL__2PRFIN20110313_232957_000000423100_00246_47243_7093.N1	13-MAR-2011 23:29:57	Dark	42.000	77	Eps Cen	2.3030	28000.	84	47243	No
304	GOM_NL__2PRFIN20110313_233301_000000563100_00246_47243_7094.N1	13-MAR-2011 23:33:01	Straylight	56.000	54	5The Cen	2.0550	4500.0	112	47243	No
305	GOM_NL__2PRFIN20110313_233458_000000513100_00246_47243_7095.N1	13-MAR-2011 23:34:58	Straylight	51.000	123	lot Cen	2.7500	10200.	102	47243	No
306	GOM_NL__2PRFIN20110313_234053_000000553100_00246_47243_7096.N1	13-MAR-2011 23:40:53	Straylight	54.500	106	9Bet Crv	2.6480	5600.0	109	47243	No
307	GOM_NL__2PRFIN20110313_234316_000000533100_00246_47243_7097.N1	13-MAR-2011 23:43:16	Straylight	52.500	100	4Gam Crv	2.5800	13100.	105	47243	No
308	GOM_NL__2PRFIN20110313_235458_000000393100_00246_47243_7098.N1	13-MAR-2011 23:54:58	Bright	39.000	51	41Gam1Leo	2.0100	4500.0	78	47243	No

3. Quality information per product

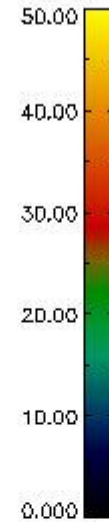
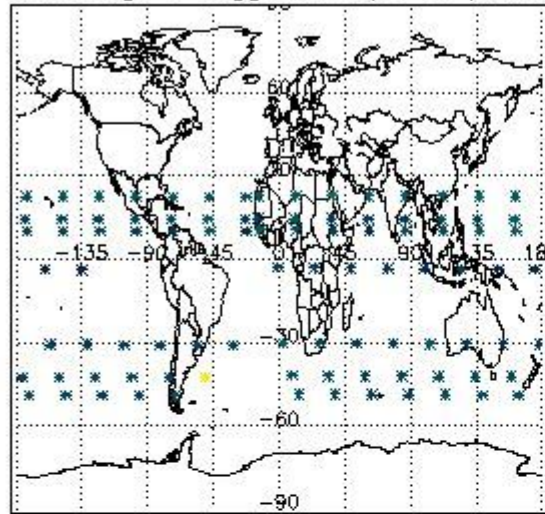
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

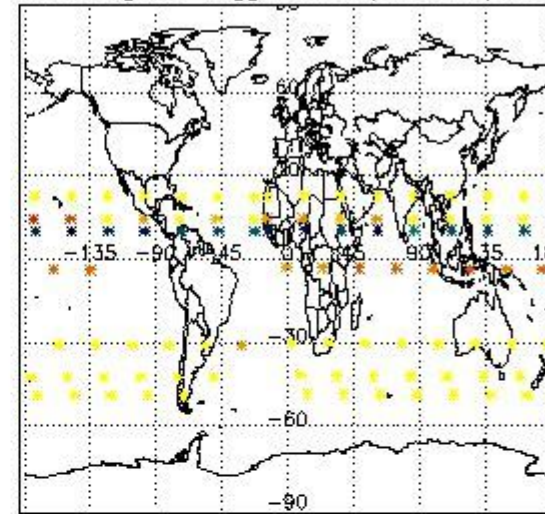


3.2 Plot quality information per product (world map)

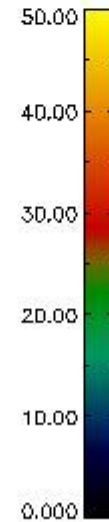
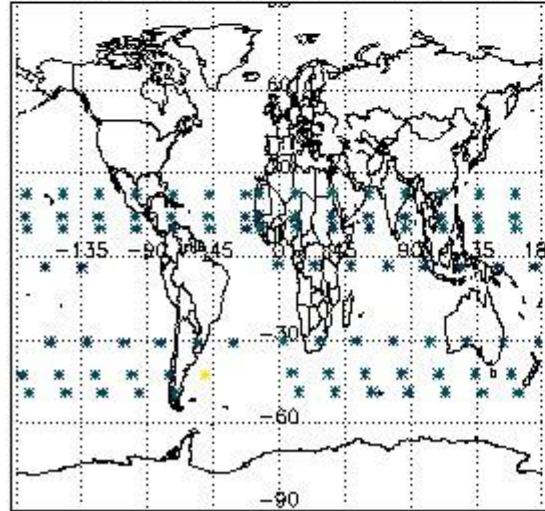
Percentage of flagged data per O3 profile



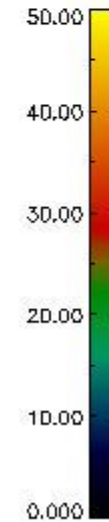
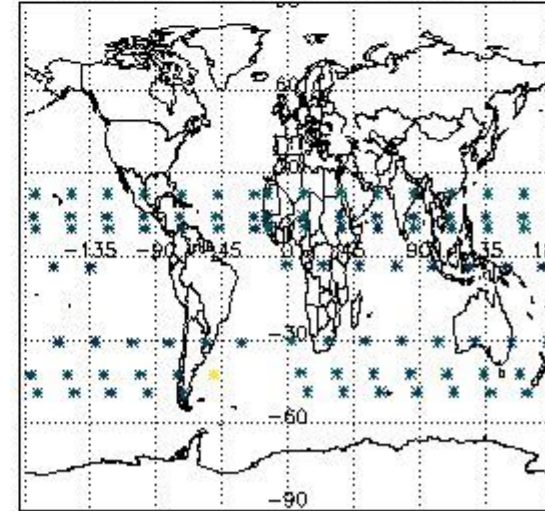
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

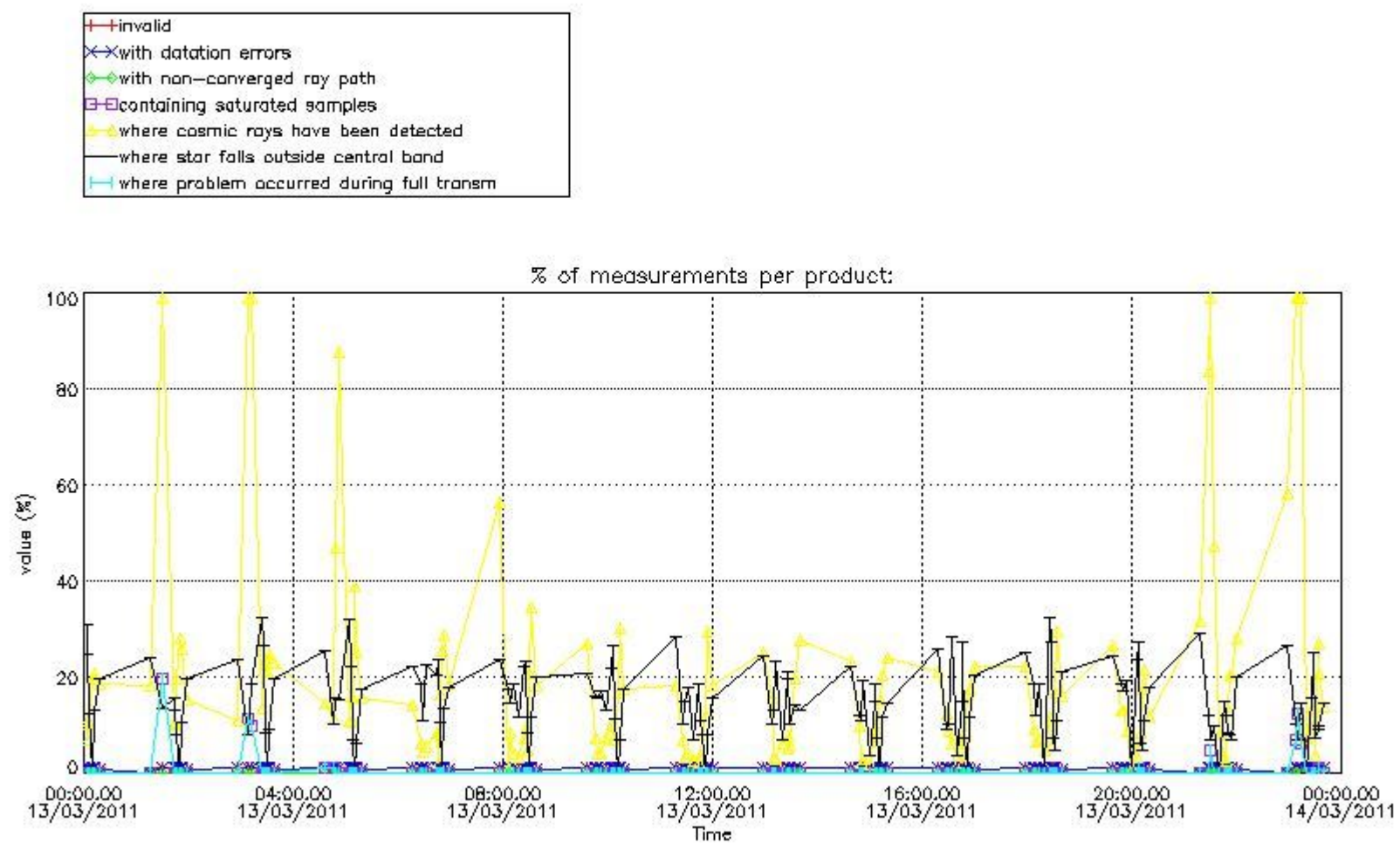


4. Level 1 quality information per product

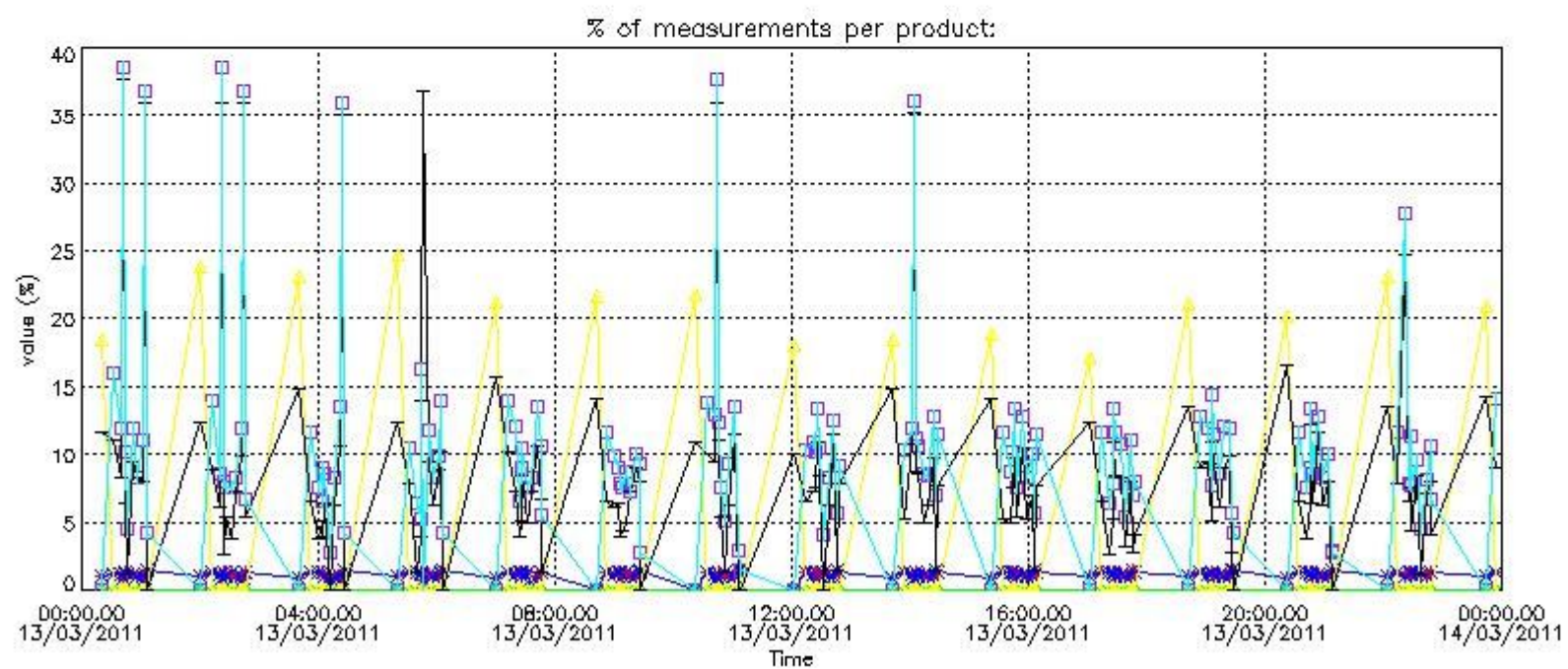
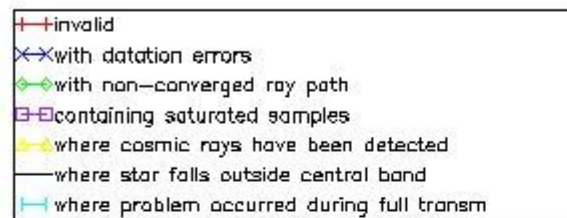
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

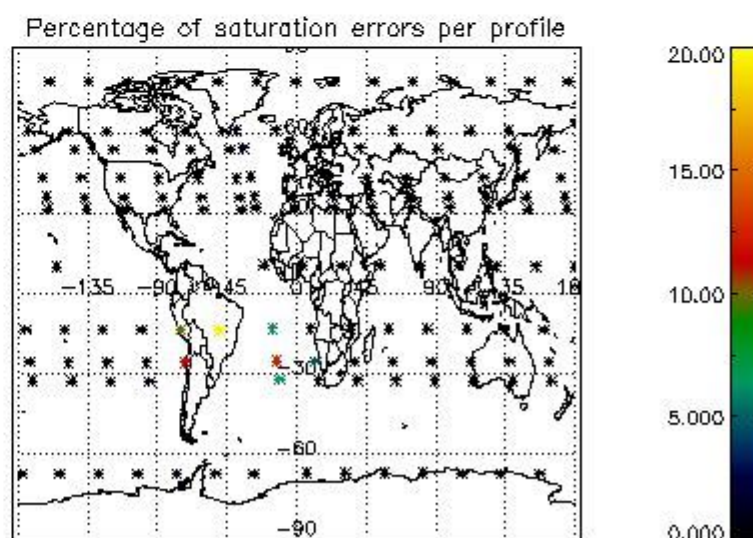
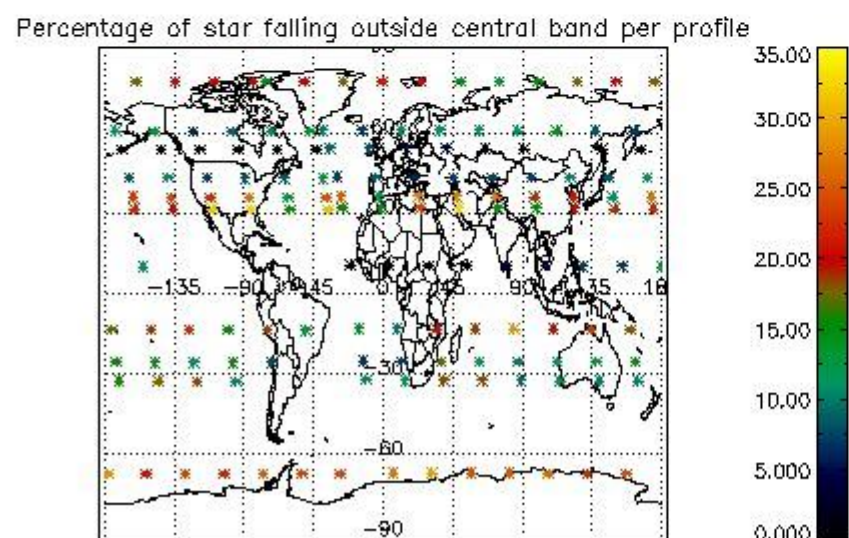
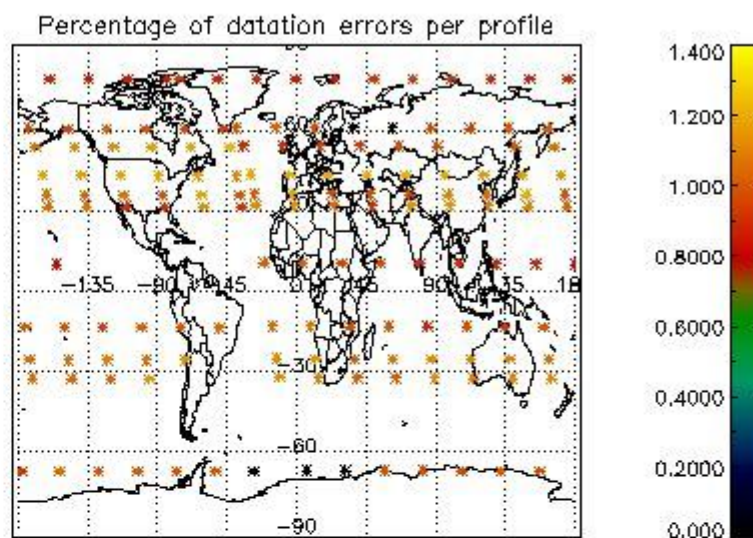
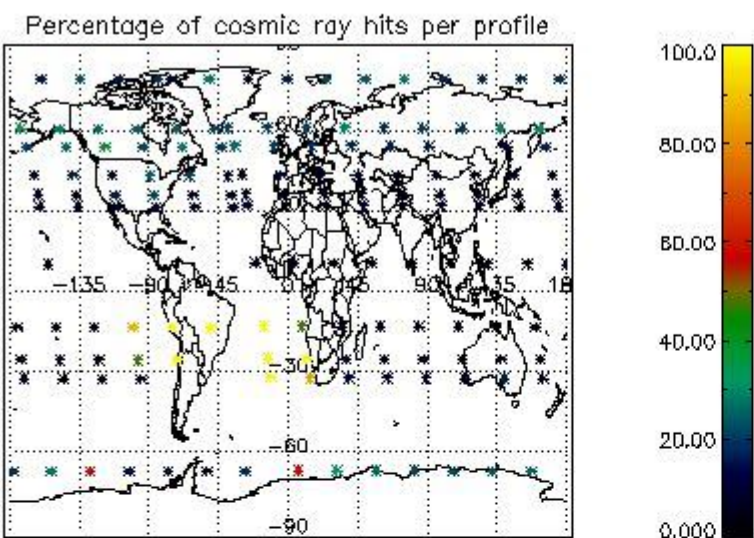


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

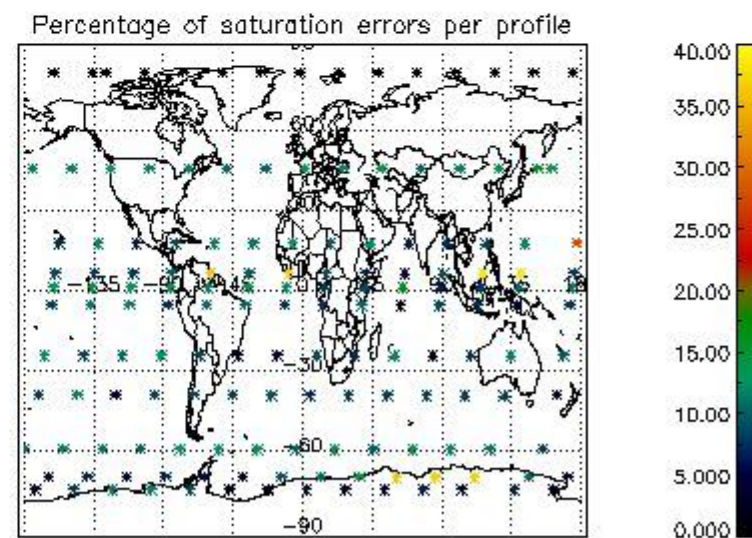
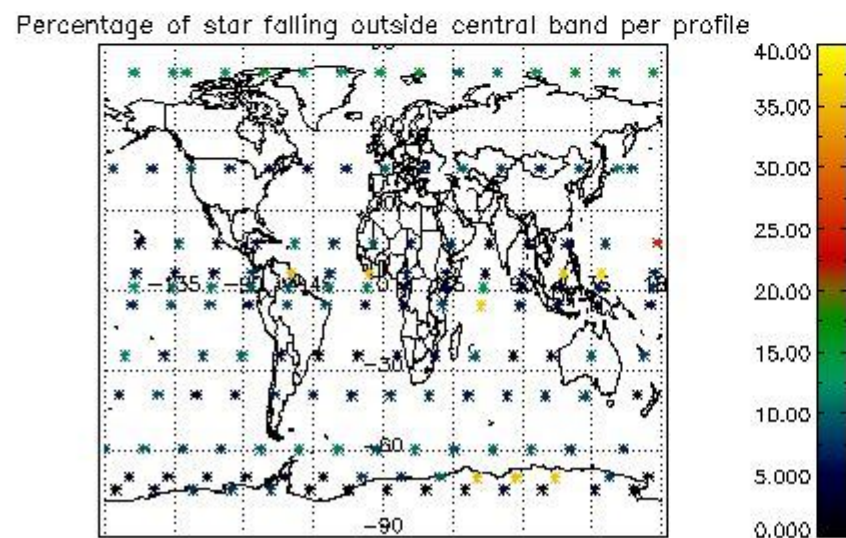
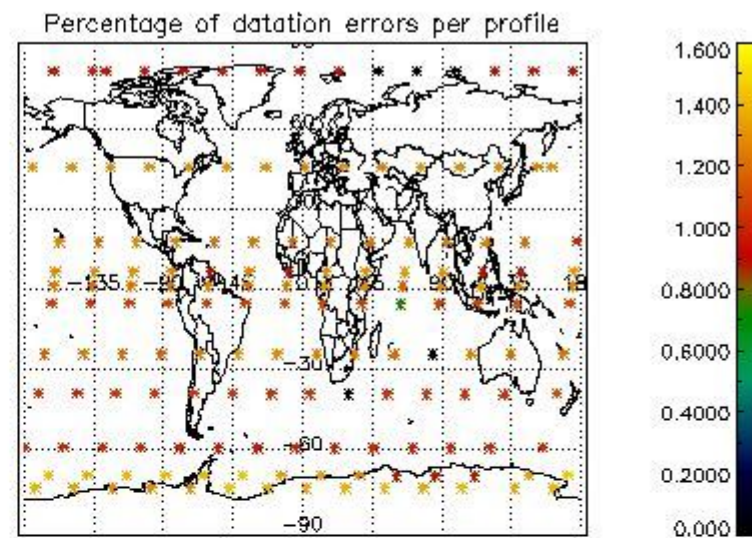
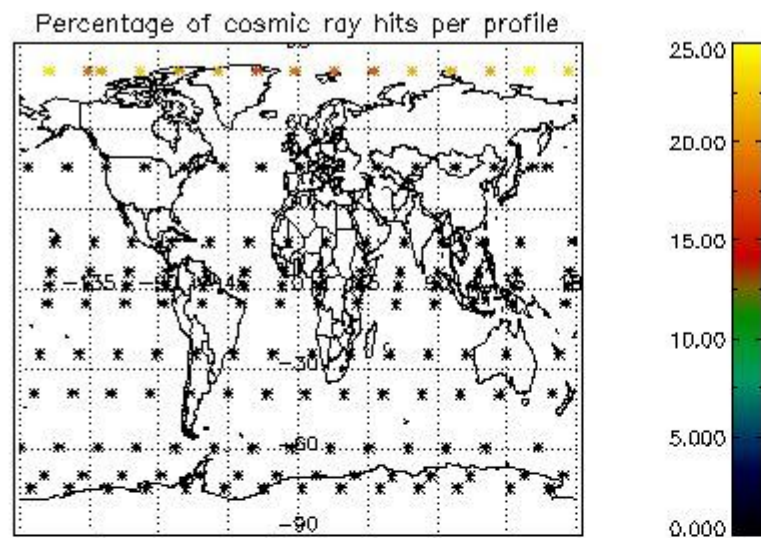


4.2 Plot quality information per product coming from level 1b processing (world map)

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

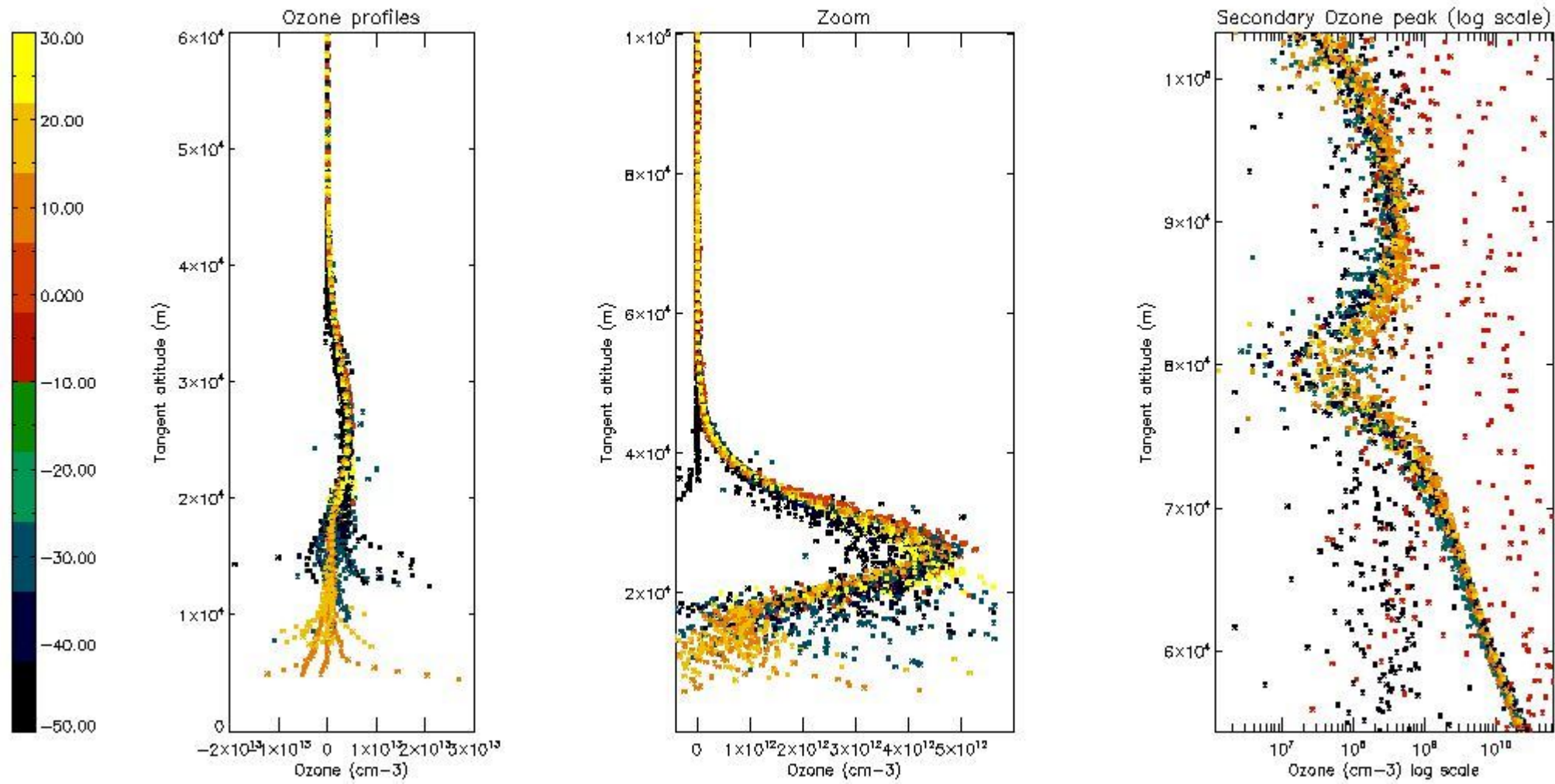
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	32
STD < 20	16

STD < 10	13
STD < 5	10

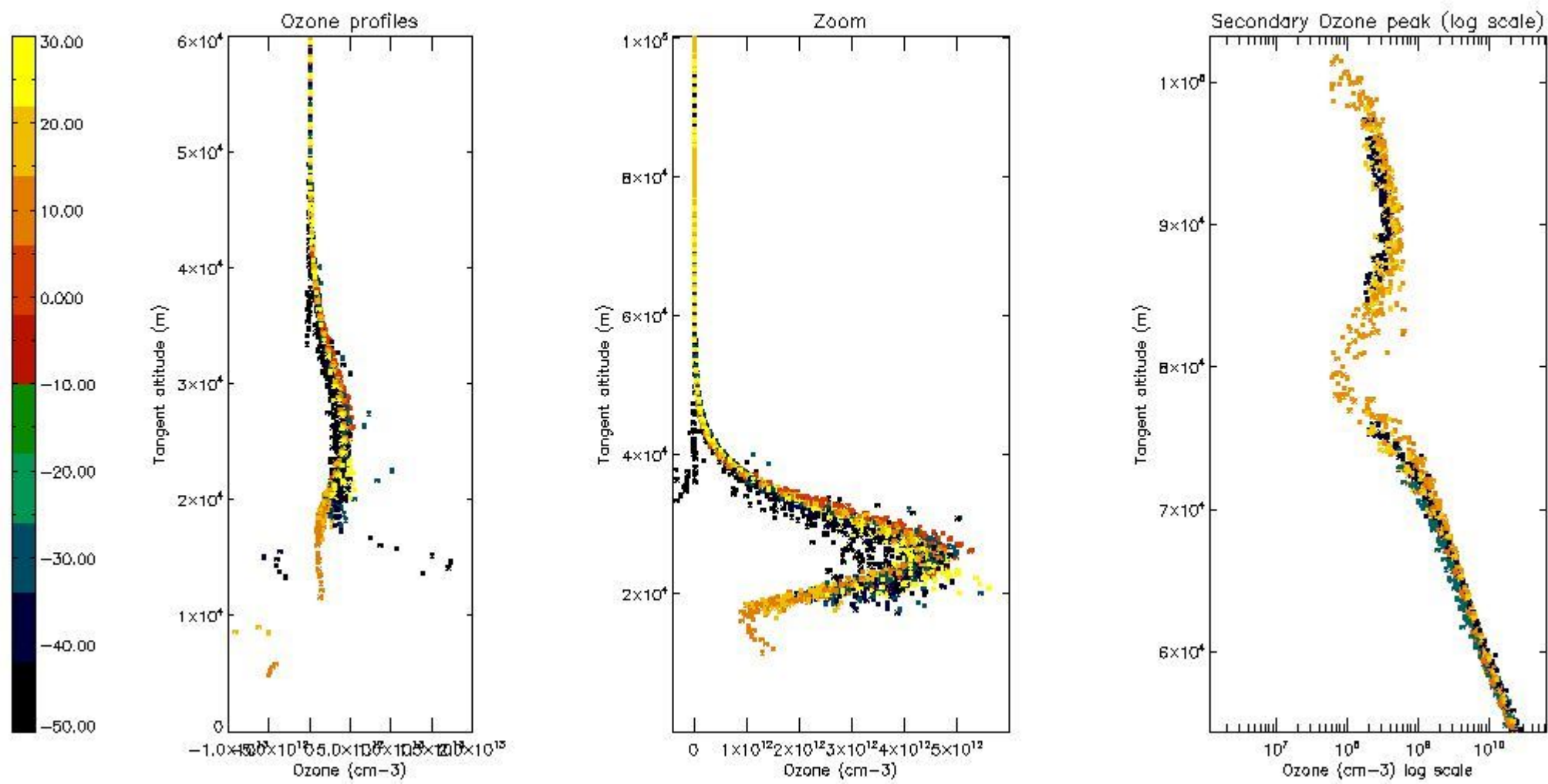
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



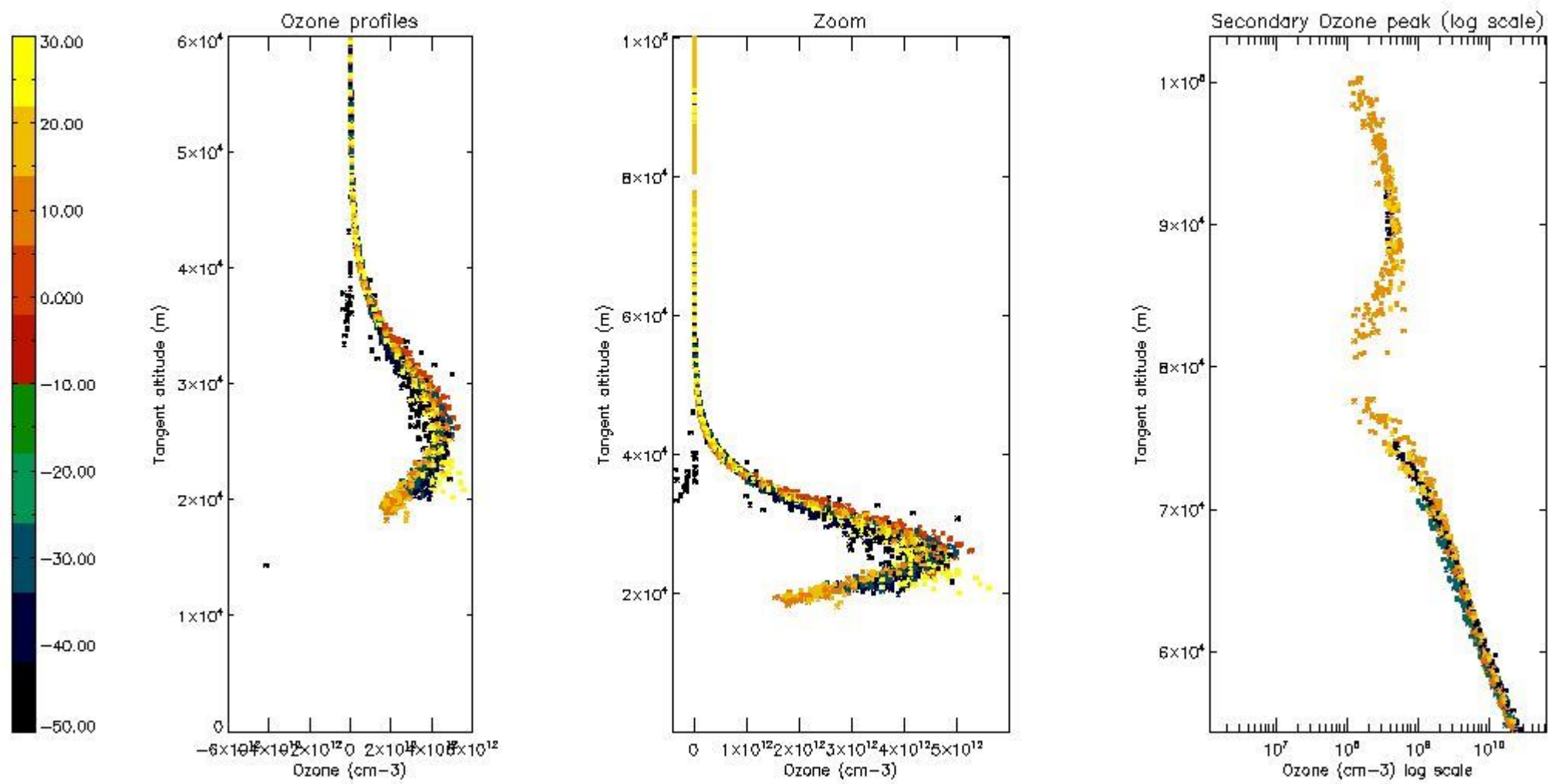
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



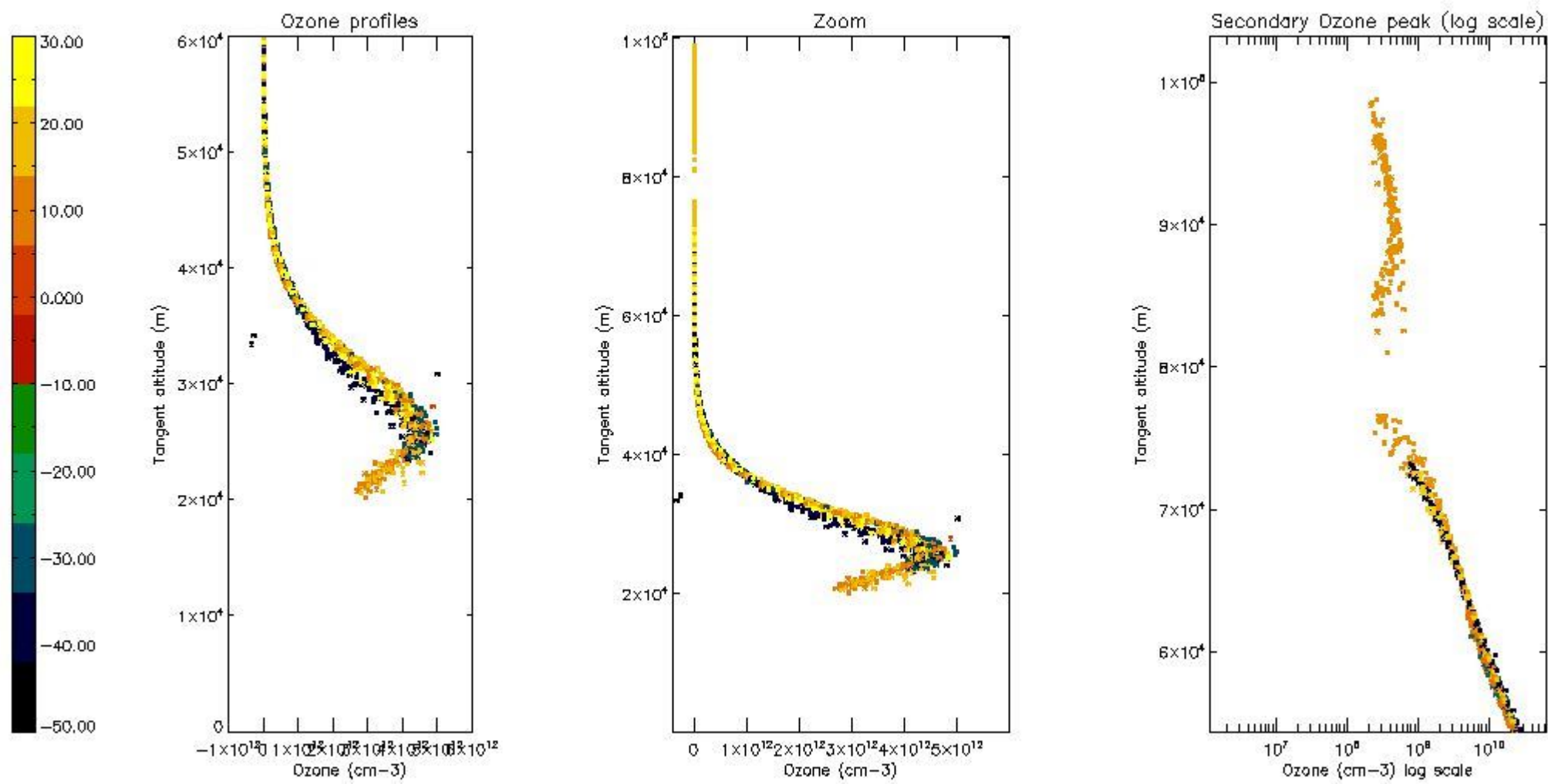
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



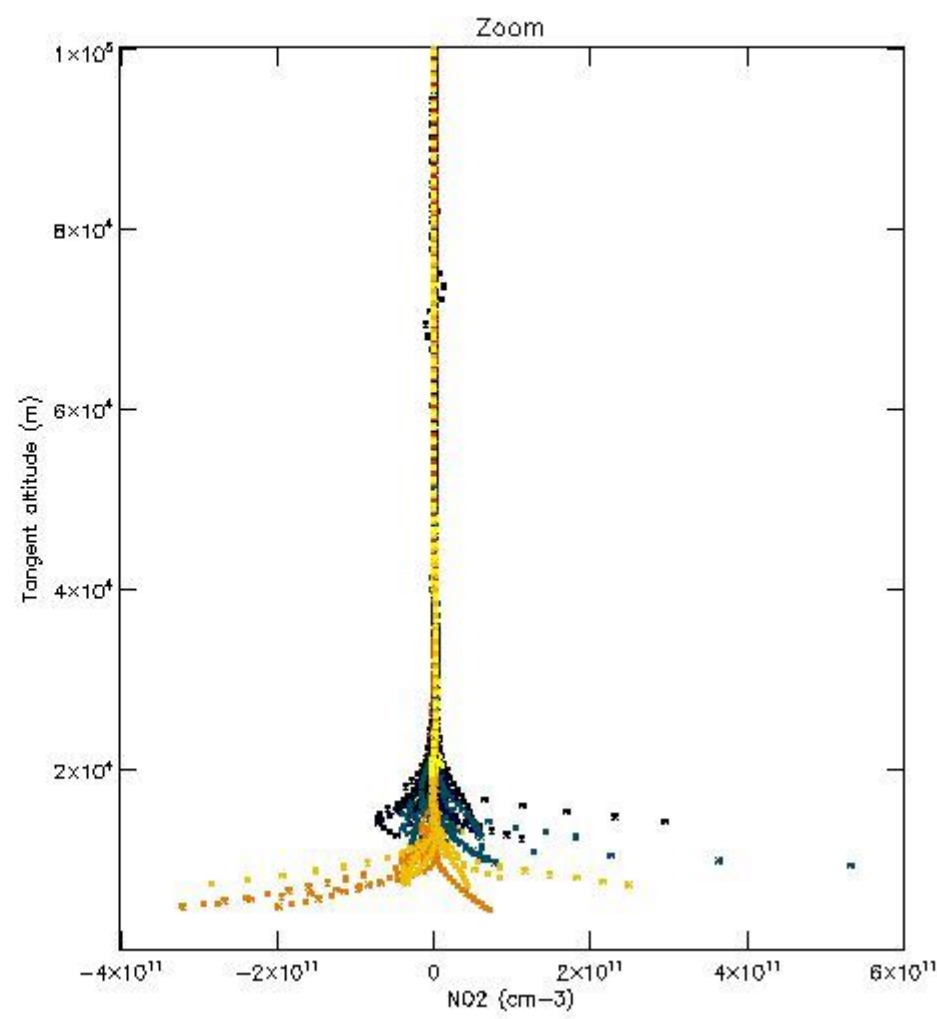
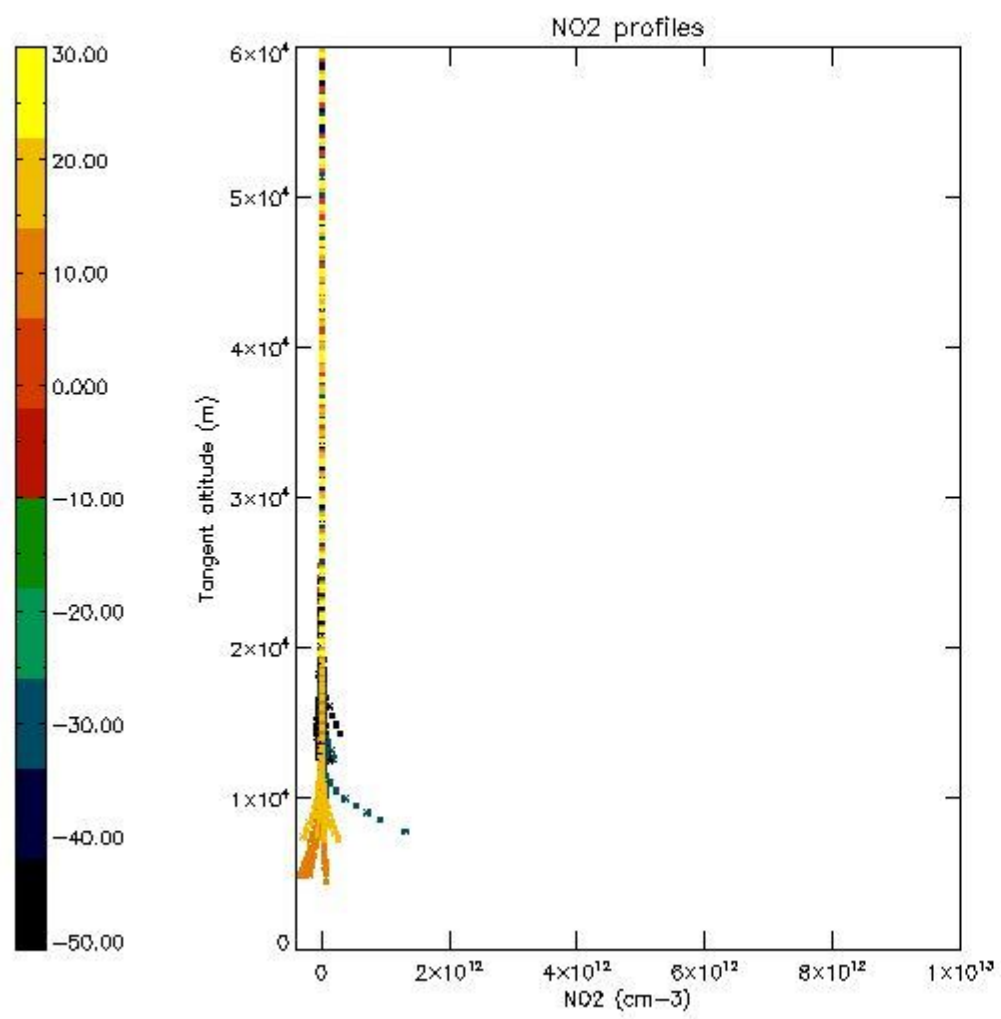
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



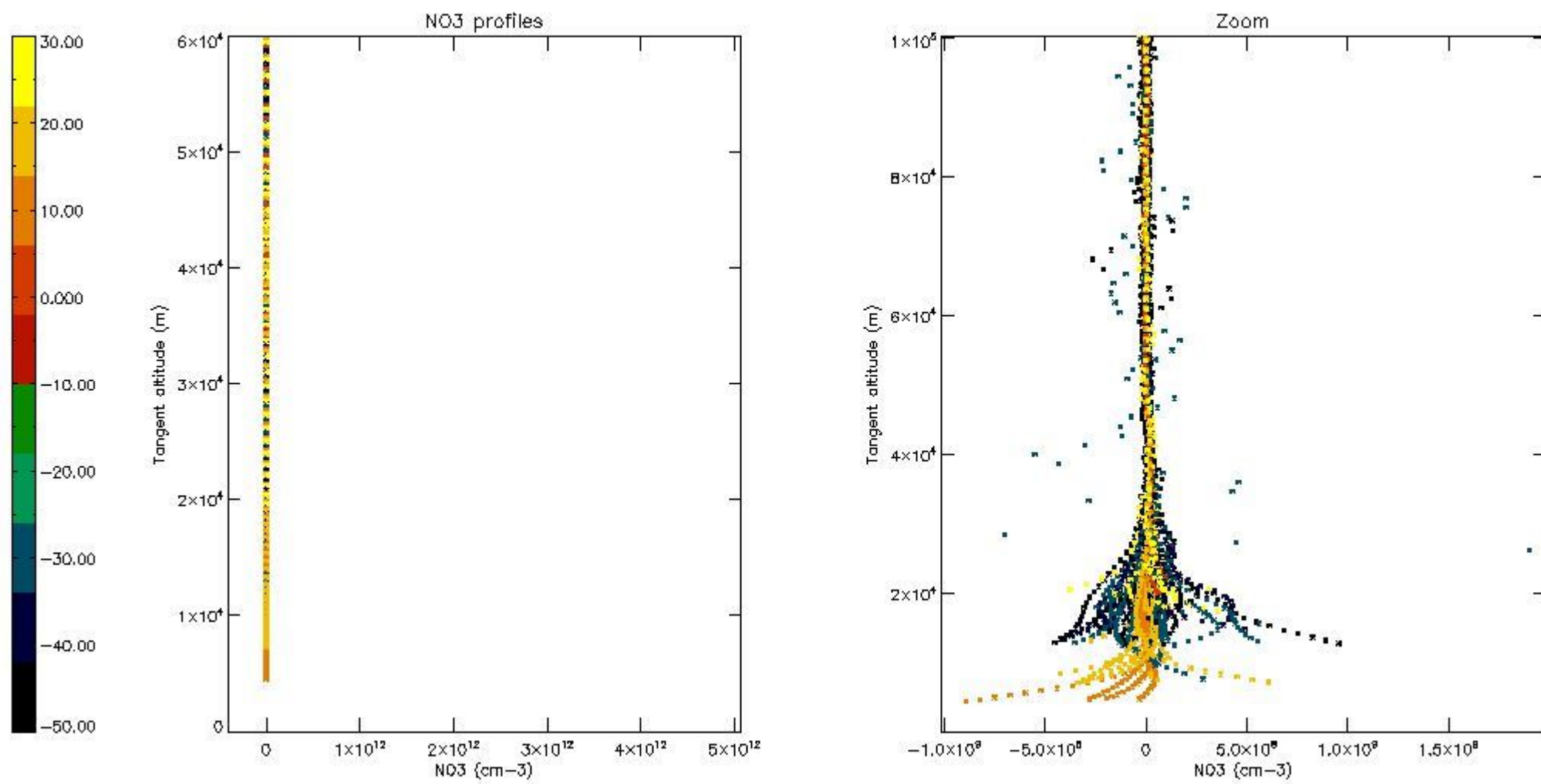
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



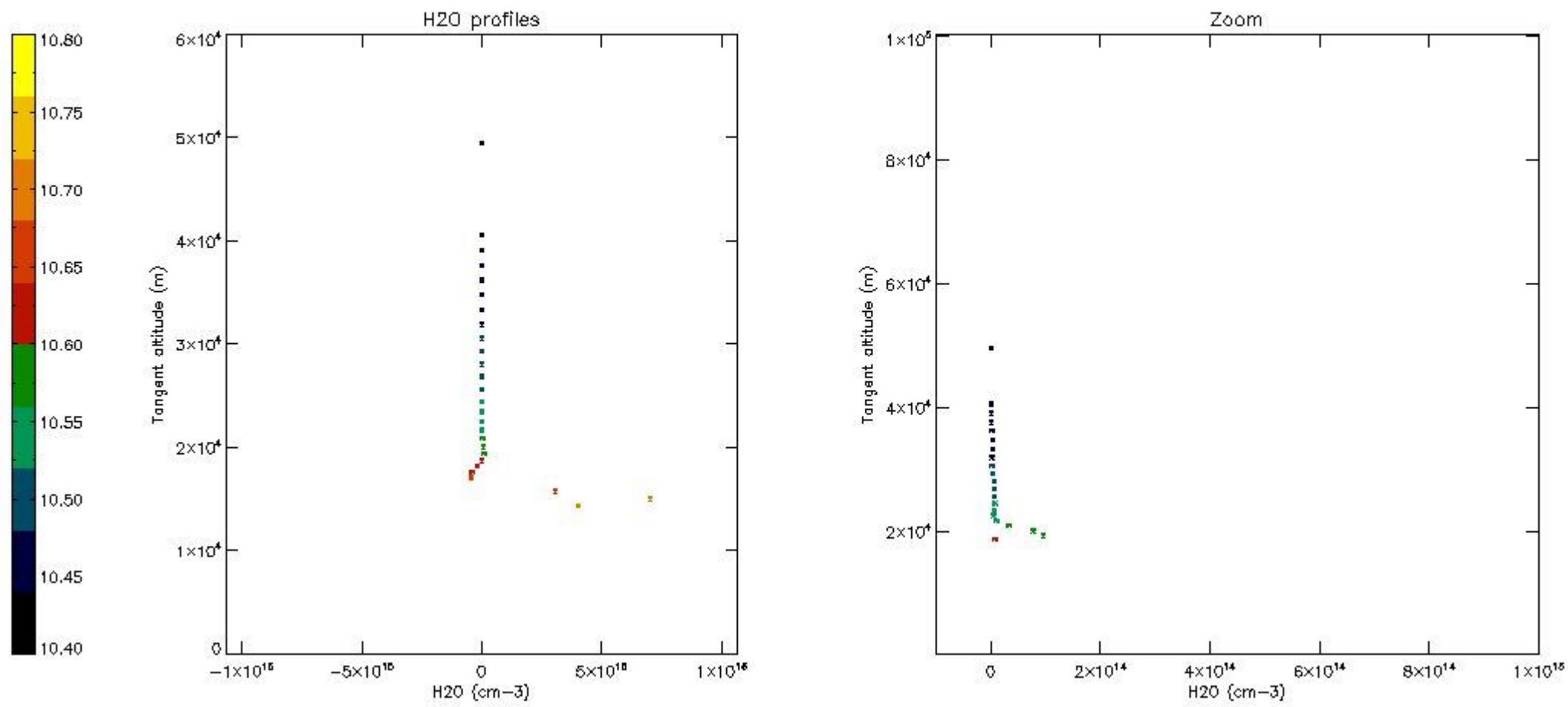
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

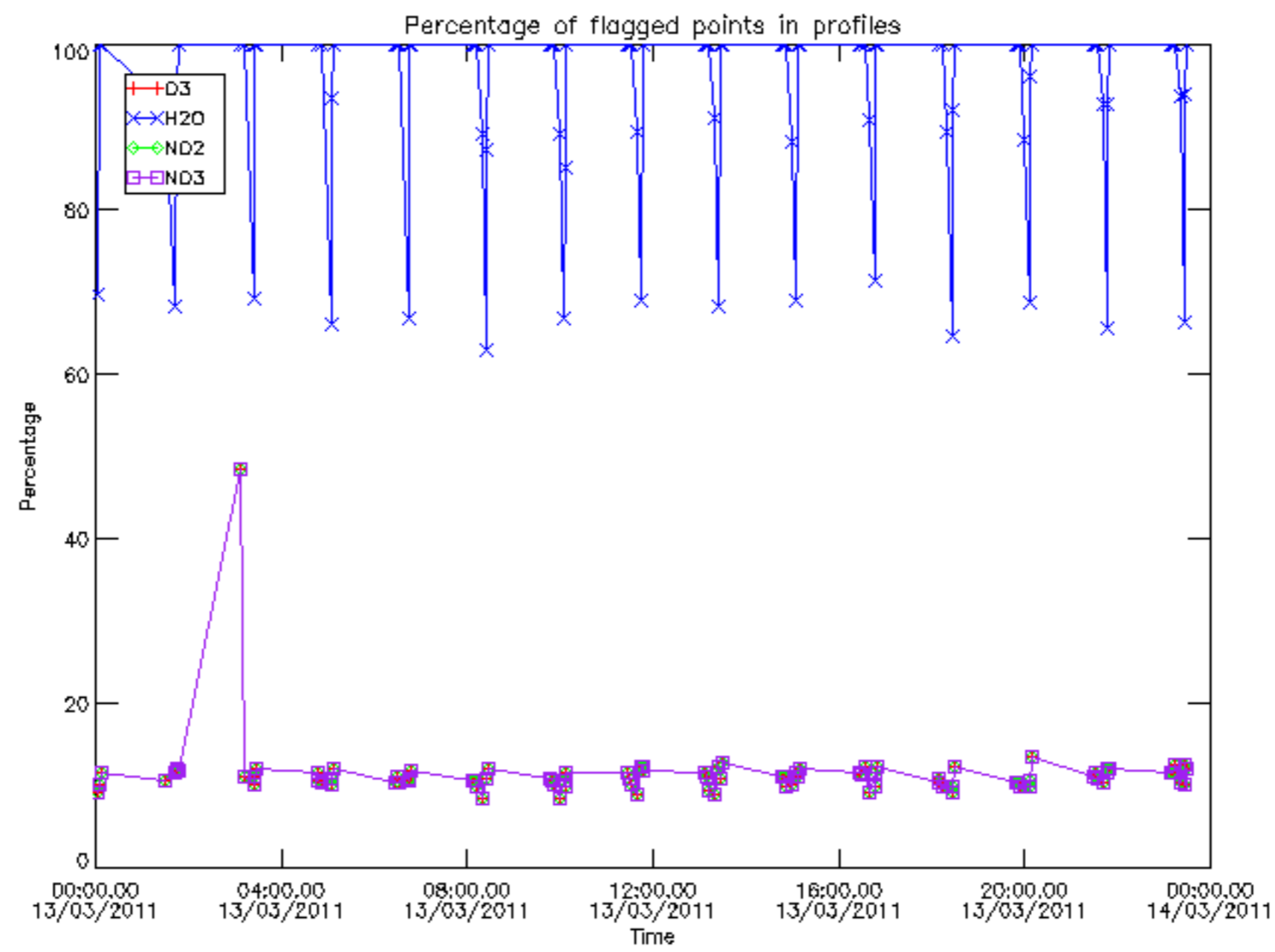
The colorbar represents the latitude.



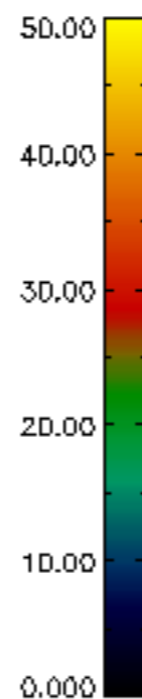
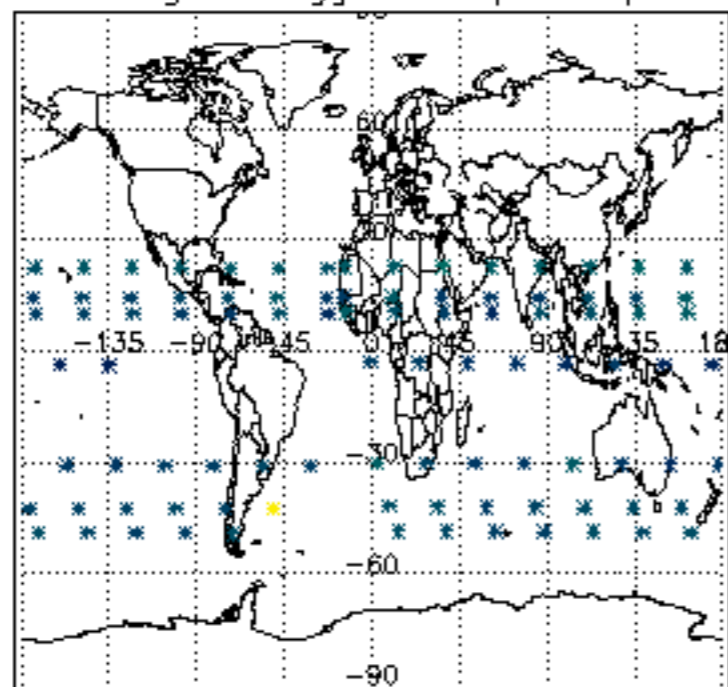
6. Auxiliary Data Files used for the production reported in section 2

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.

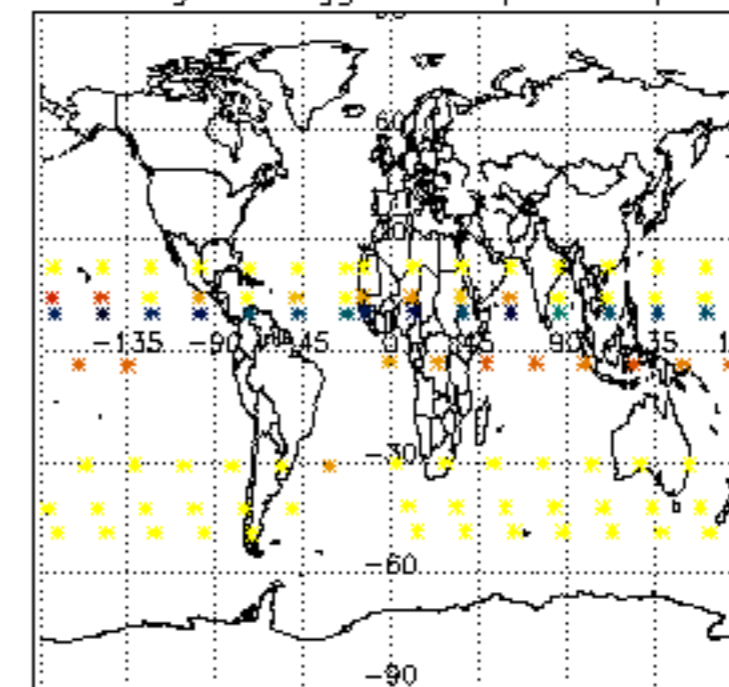
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	13-MAR-2011 00:03:17
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	13-MAR-2011 00:03:17
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	13-MAR-2011 00:03:17



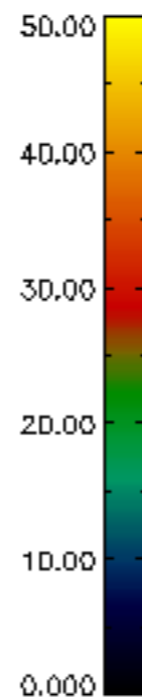
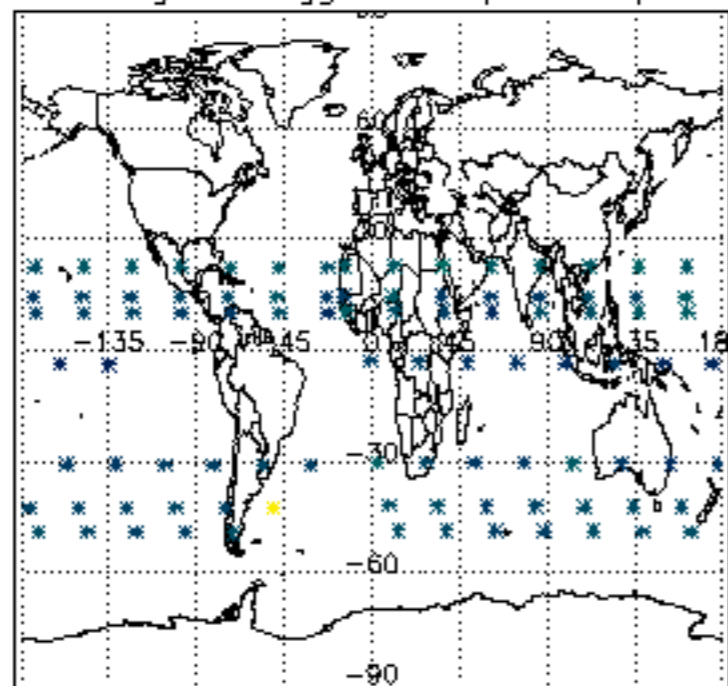
Percentage of flagged data per D3 profile



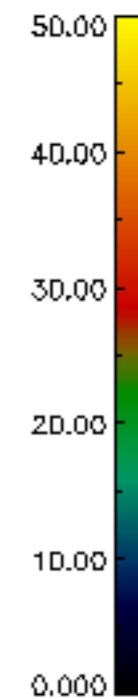
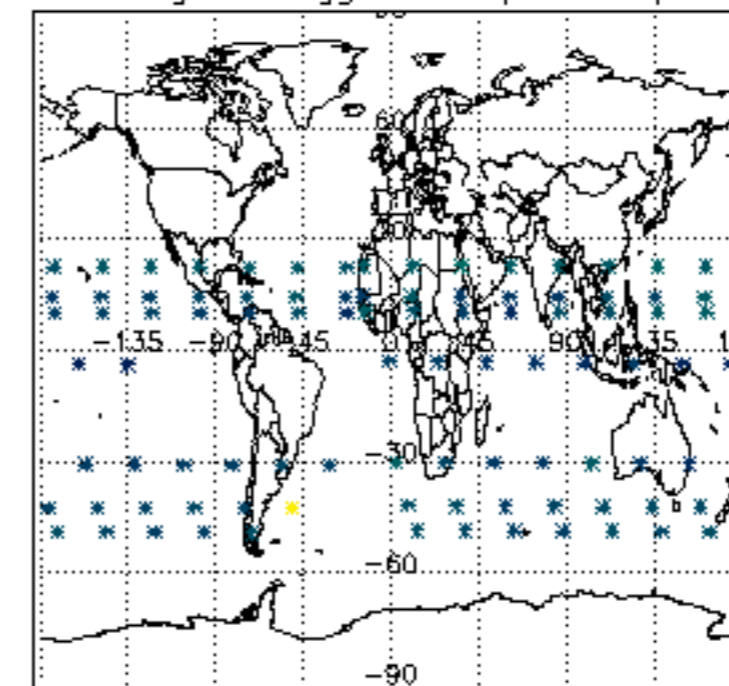
Percentage of flagged data per H2O profile

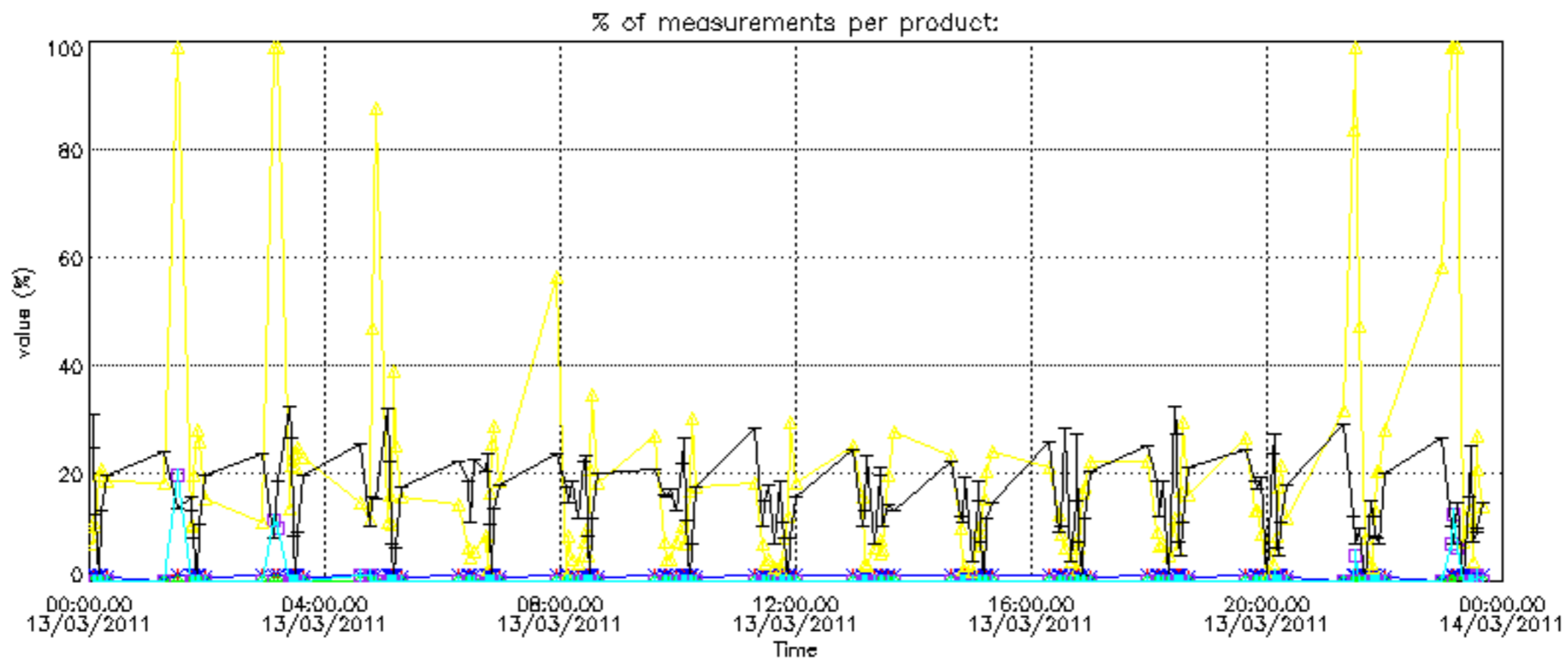


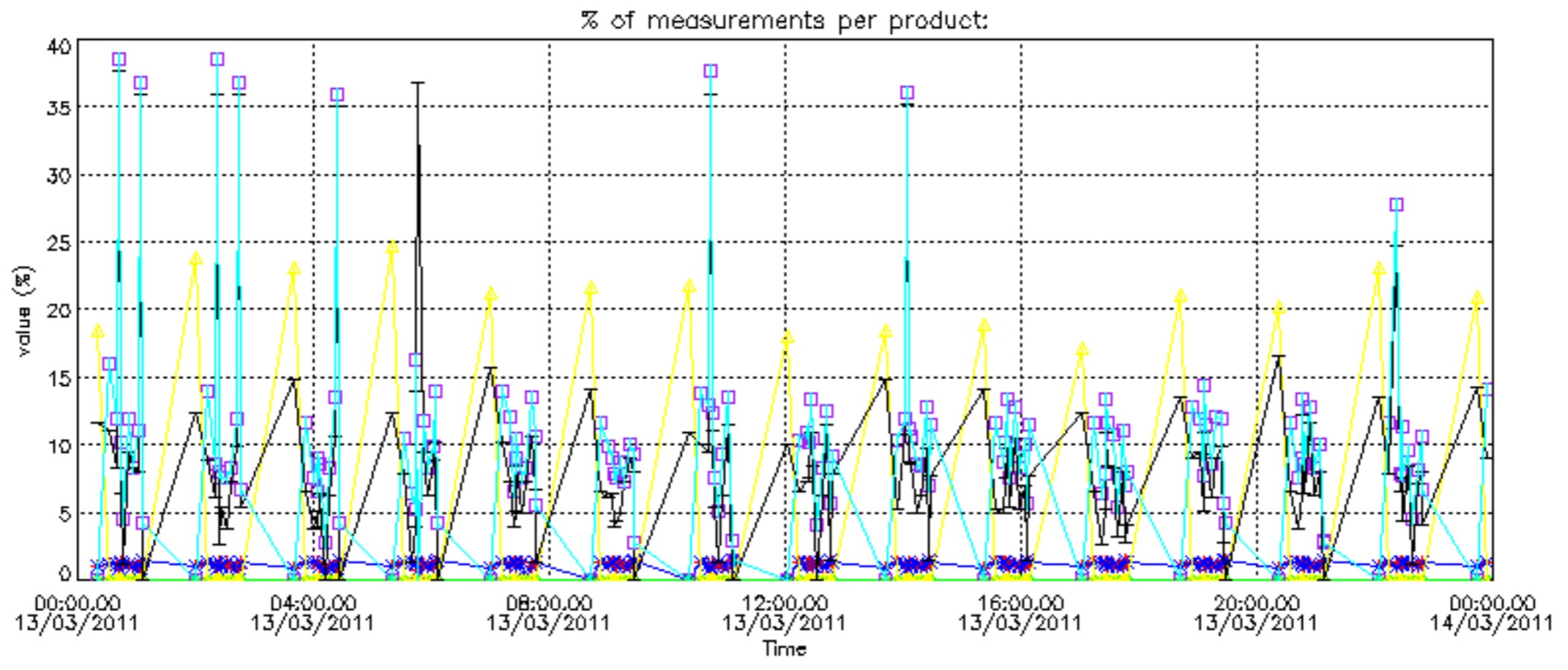
Percentage of flagged data per NO2 profile



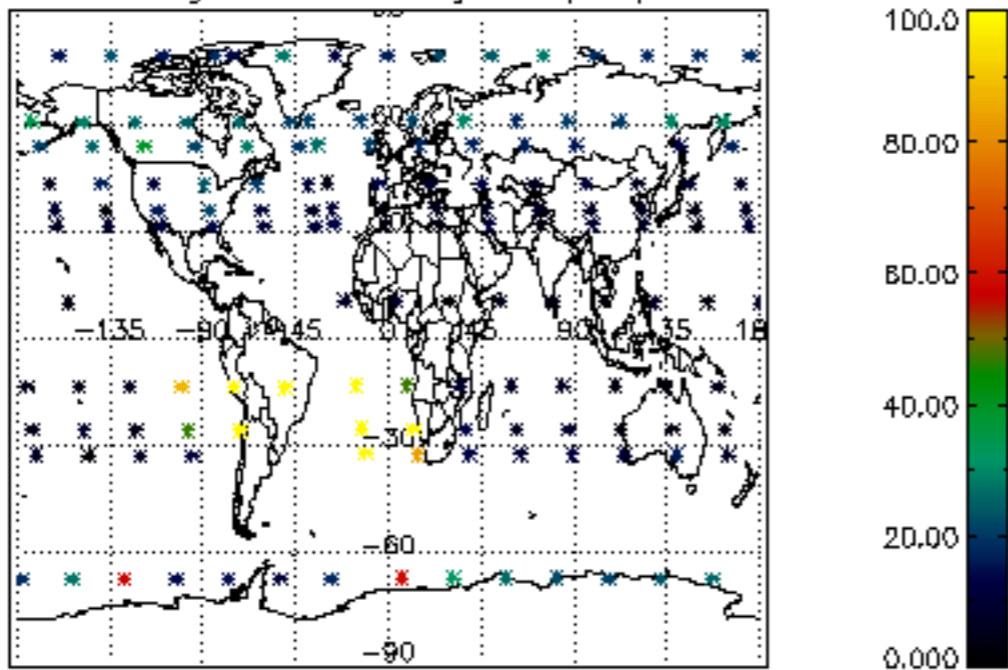
Percentage of flagged data per NO3 profile



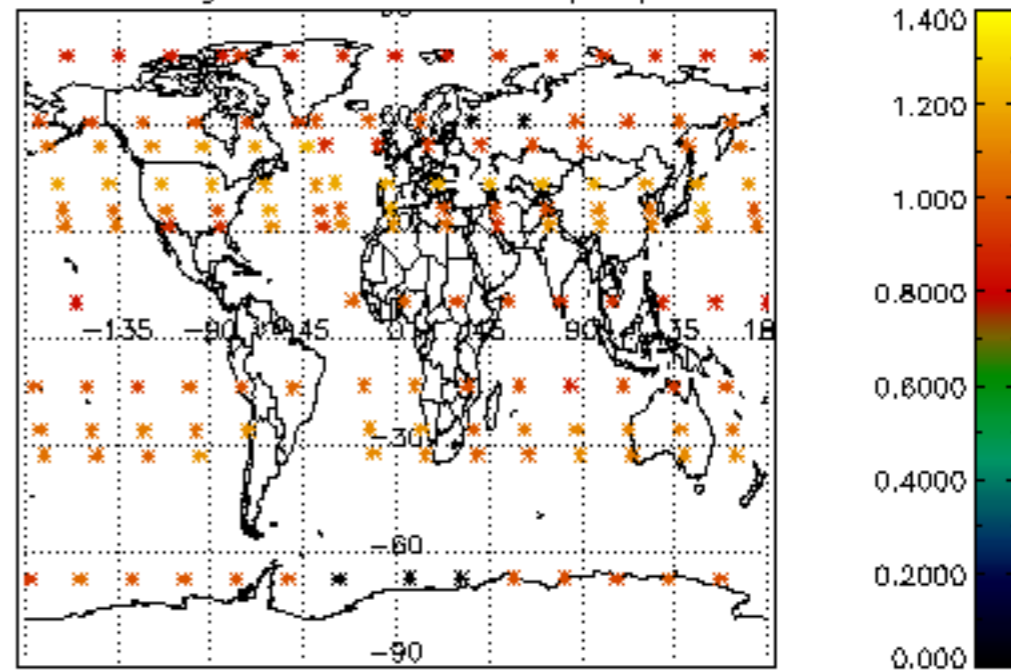




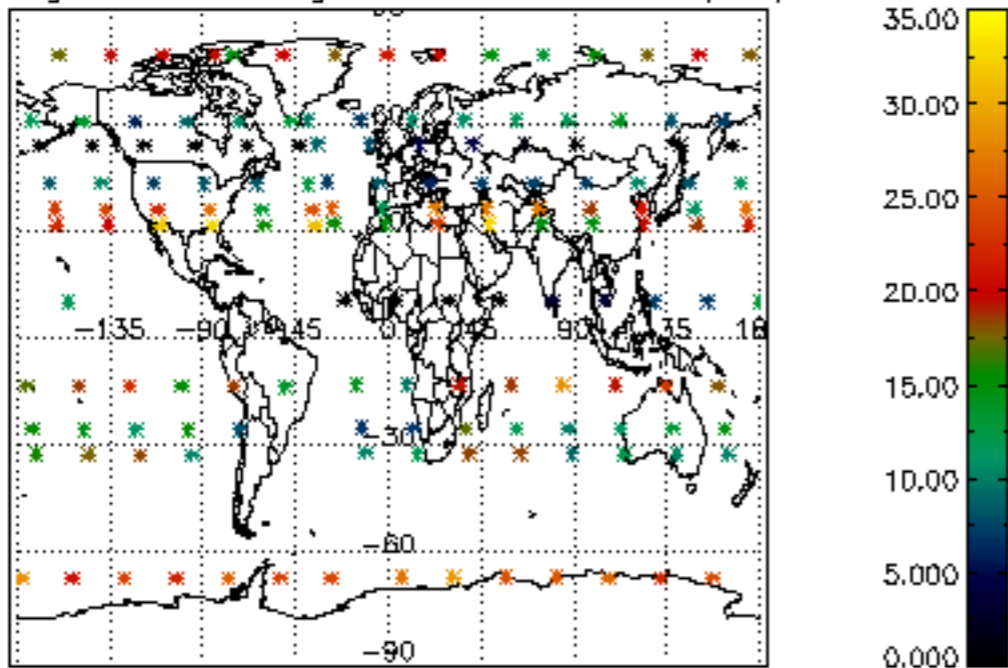
Percentage of cosmic ray hits per profile



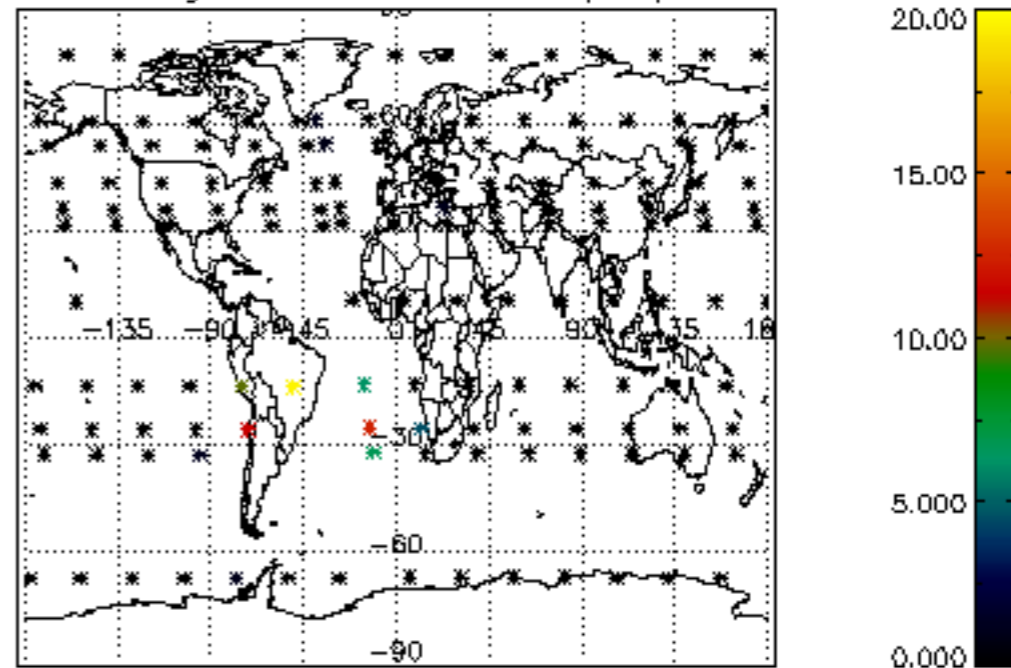
Percentage of datation errors per profile



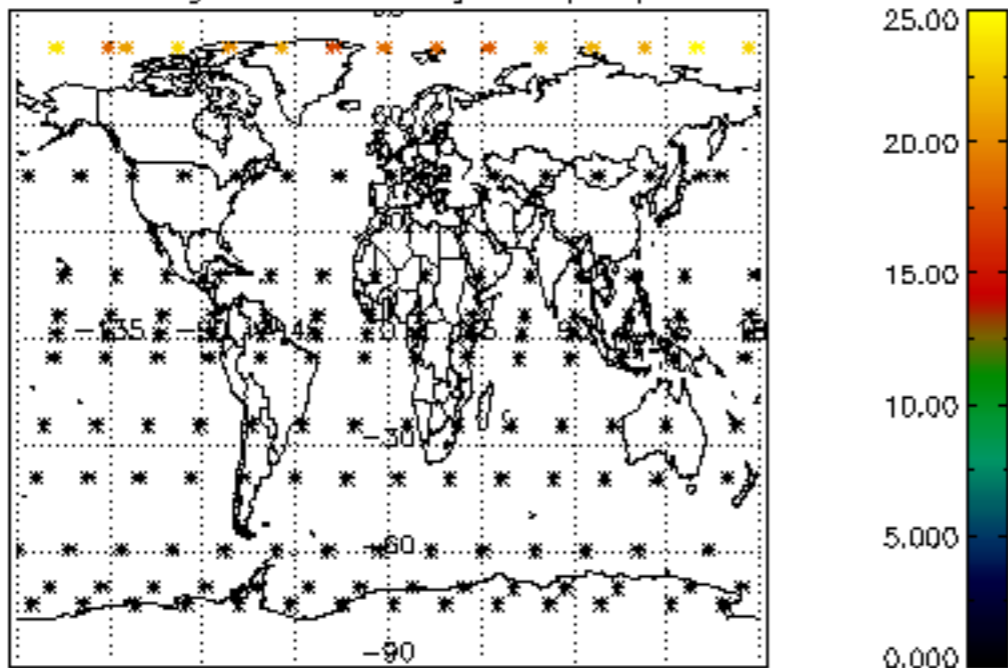
Percentage of star falling outside central band per profile



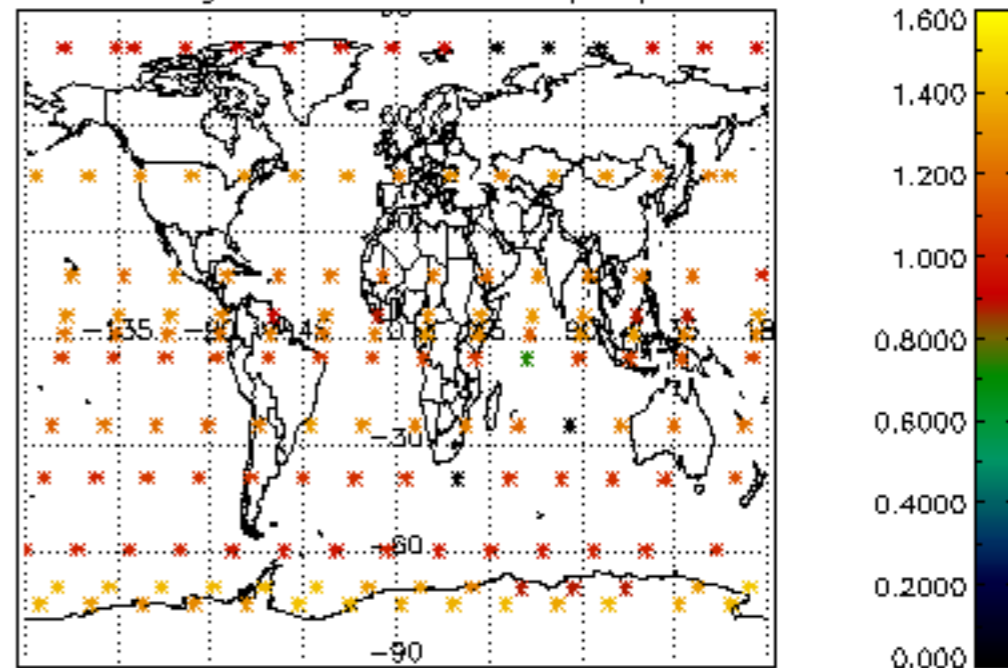
Percentage of saturation errors per profile



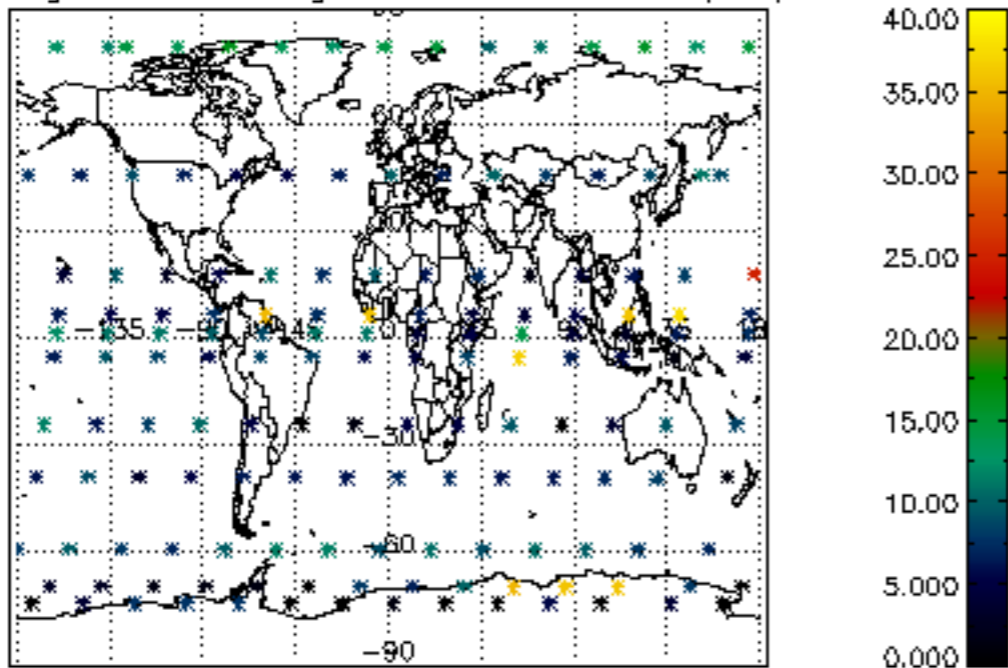
Percentage of cosmic ray hits per profile



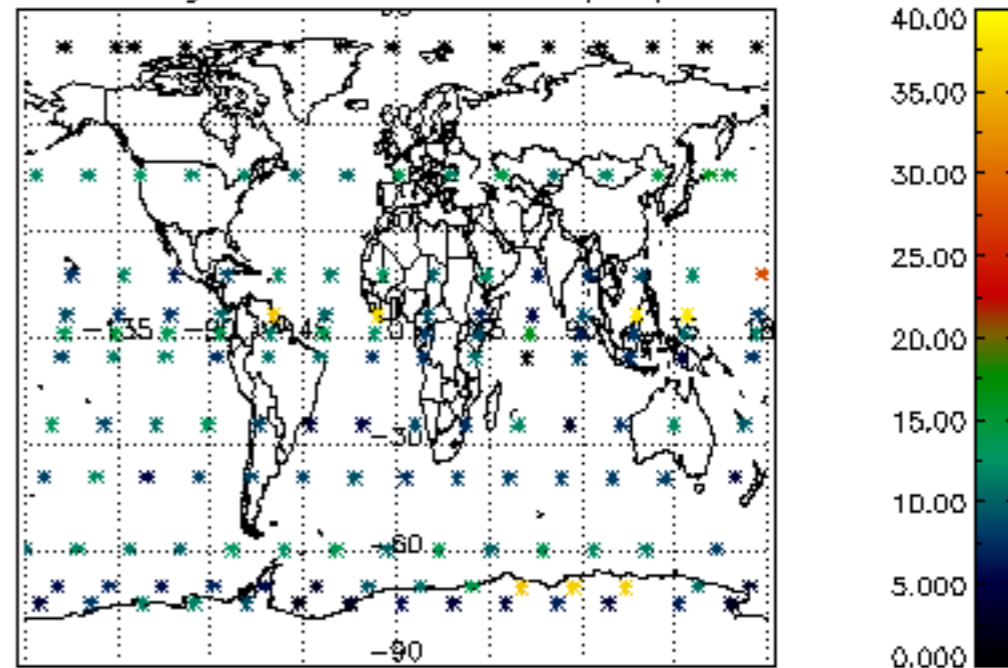
Percentage of datation errors per profile

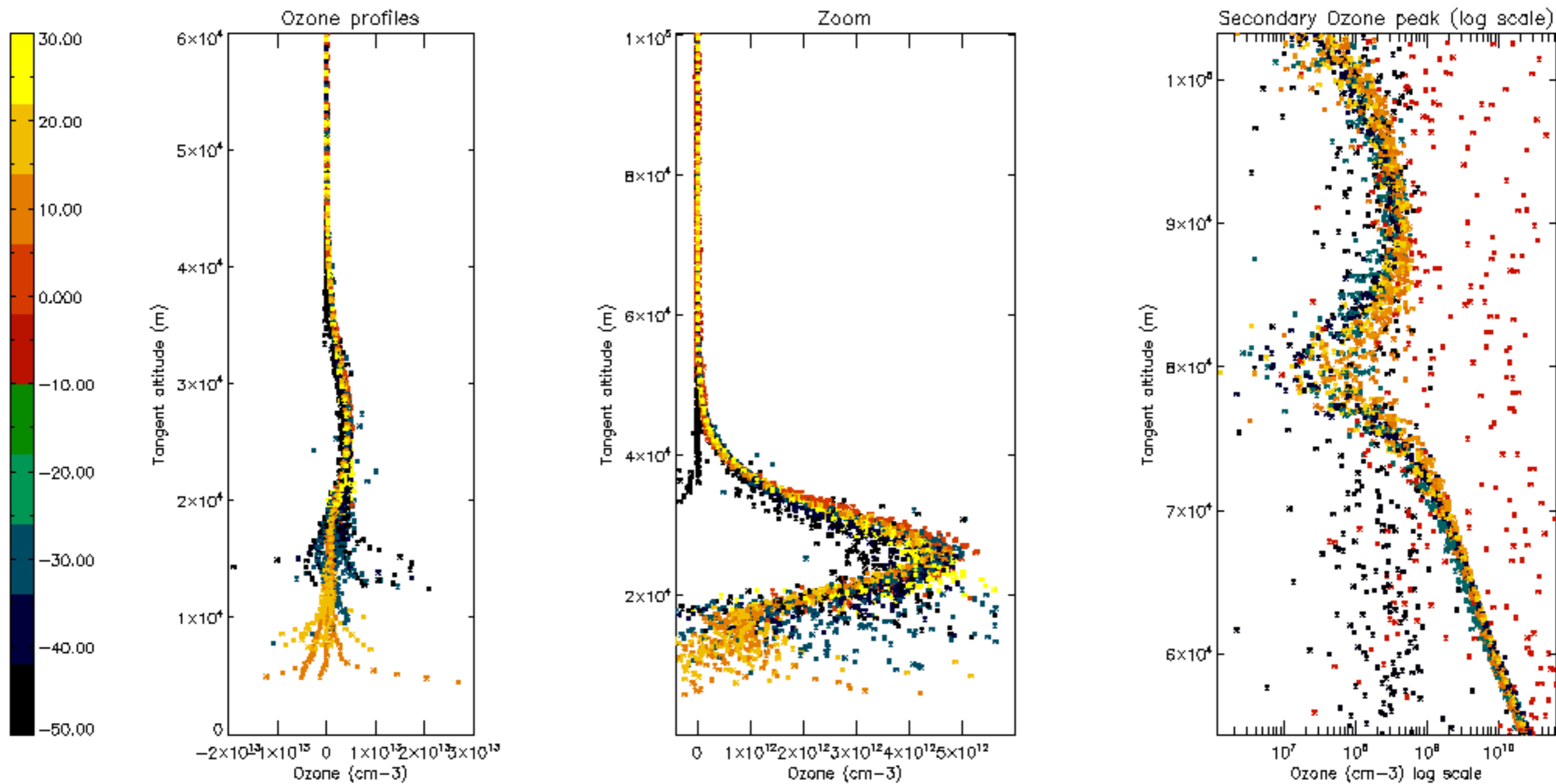


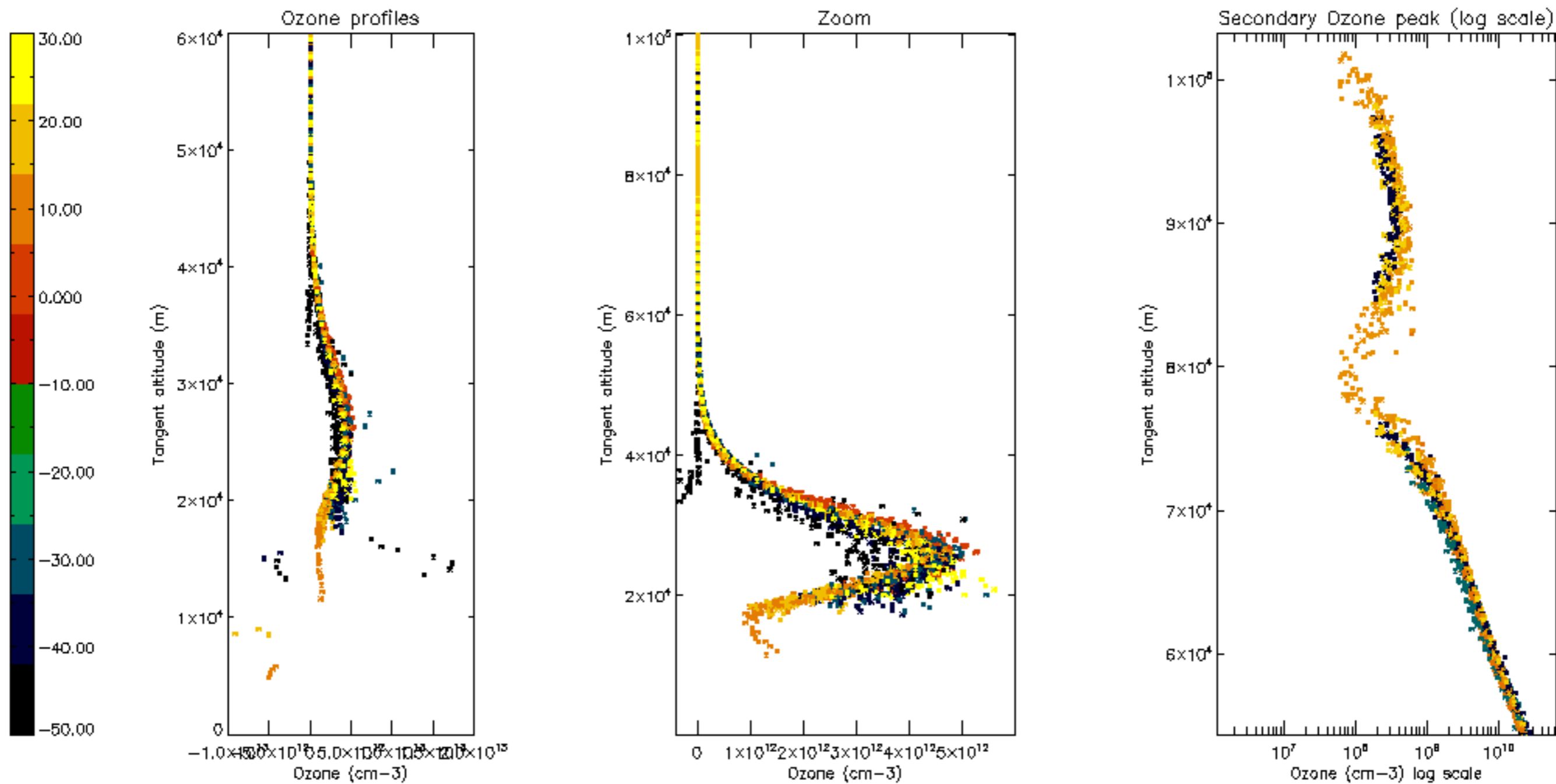
Percentage of star falling outside central band per profile

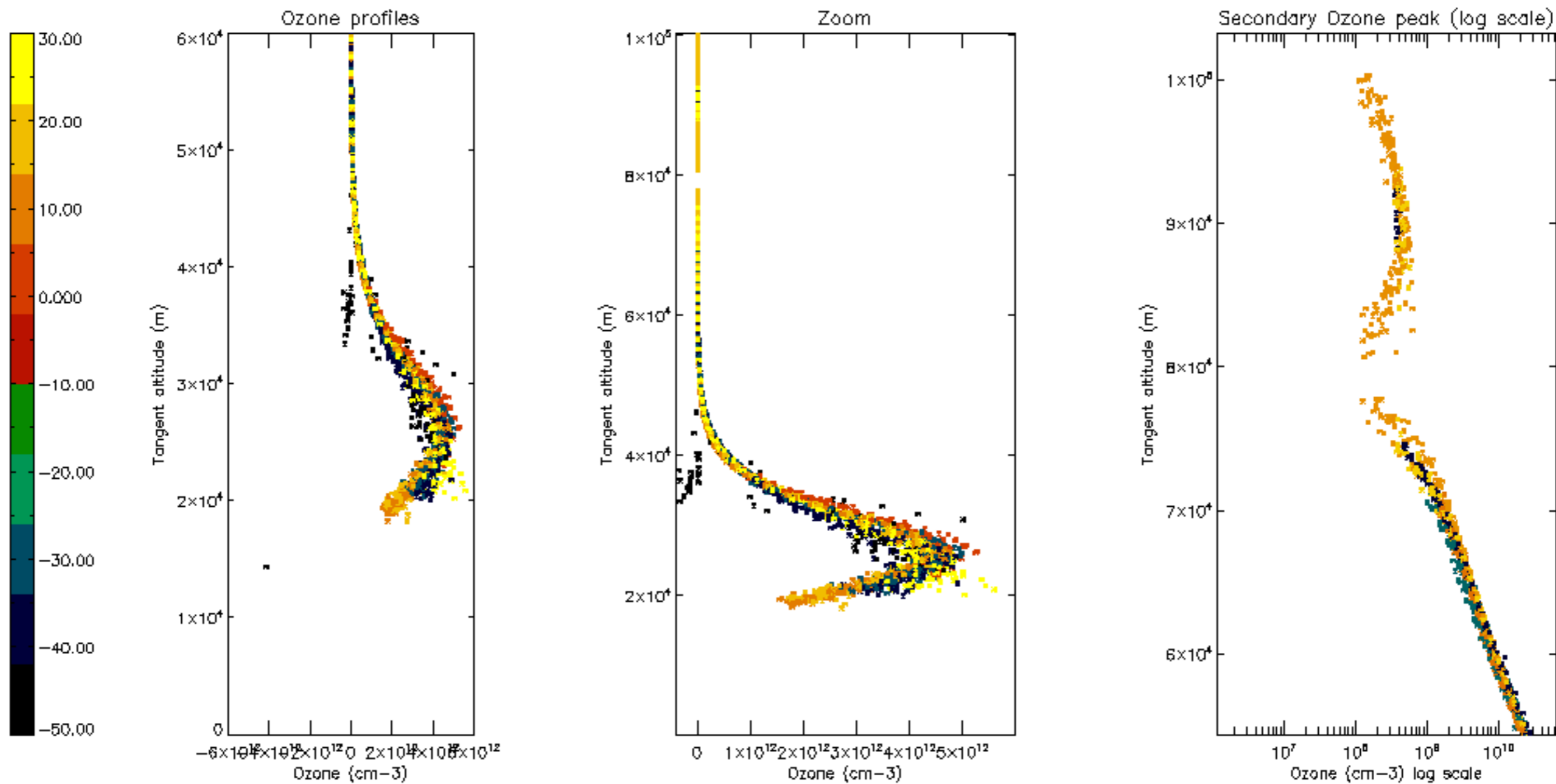


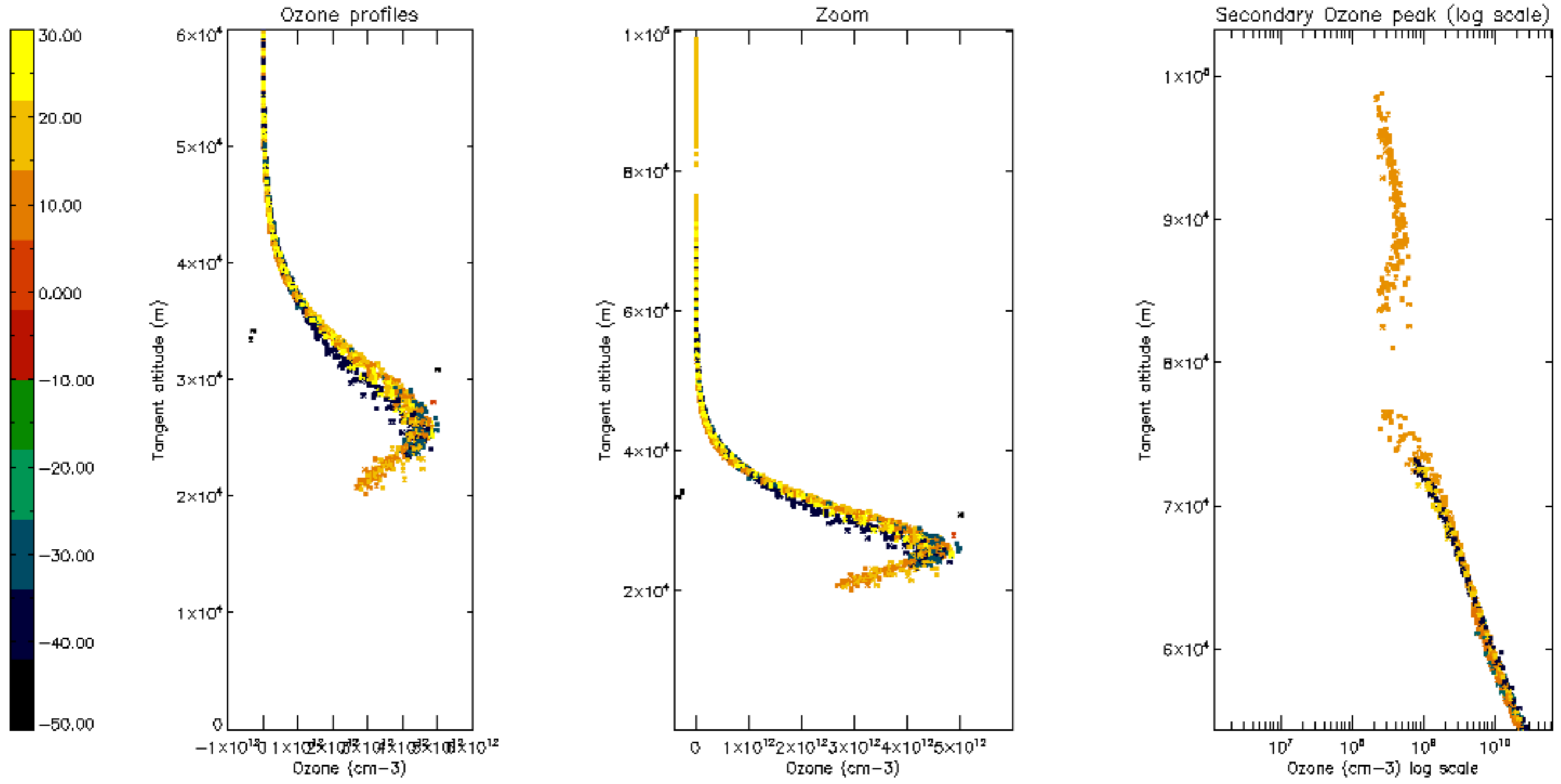
Percentage of saturation errors per profile

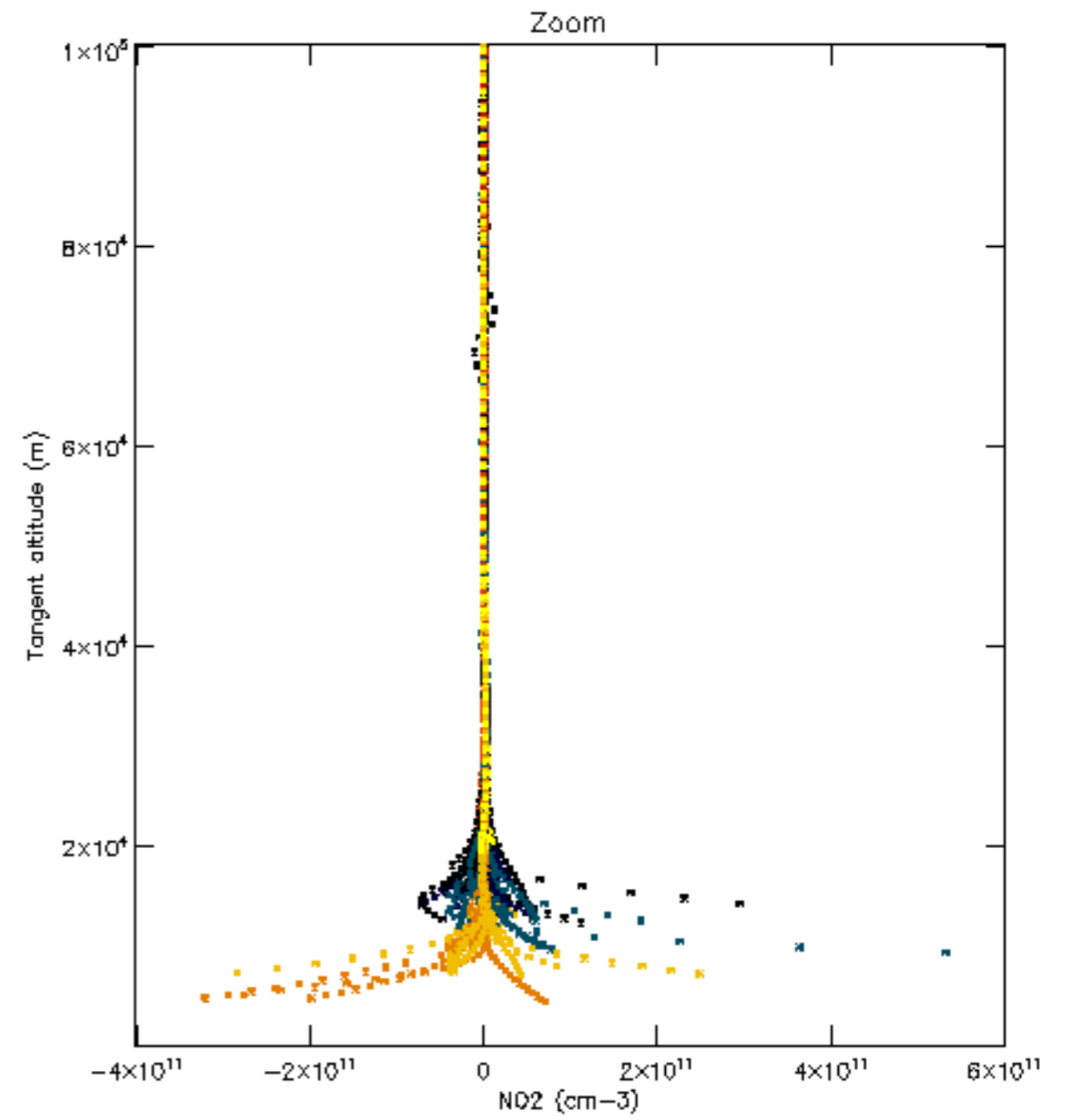
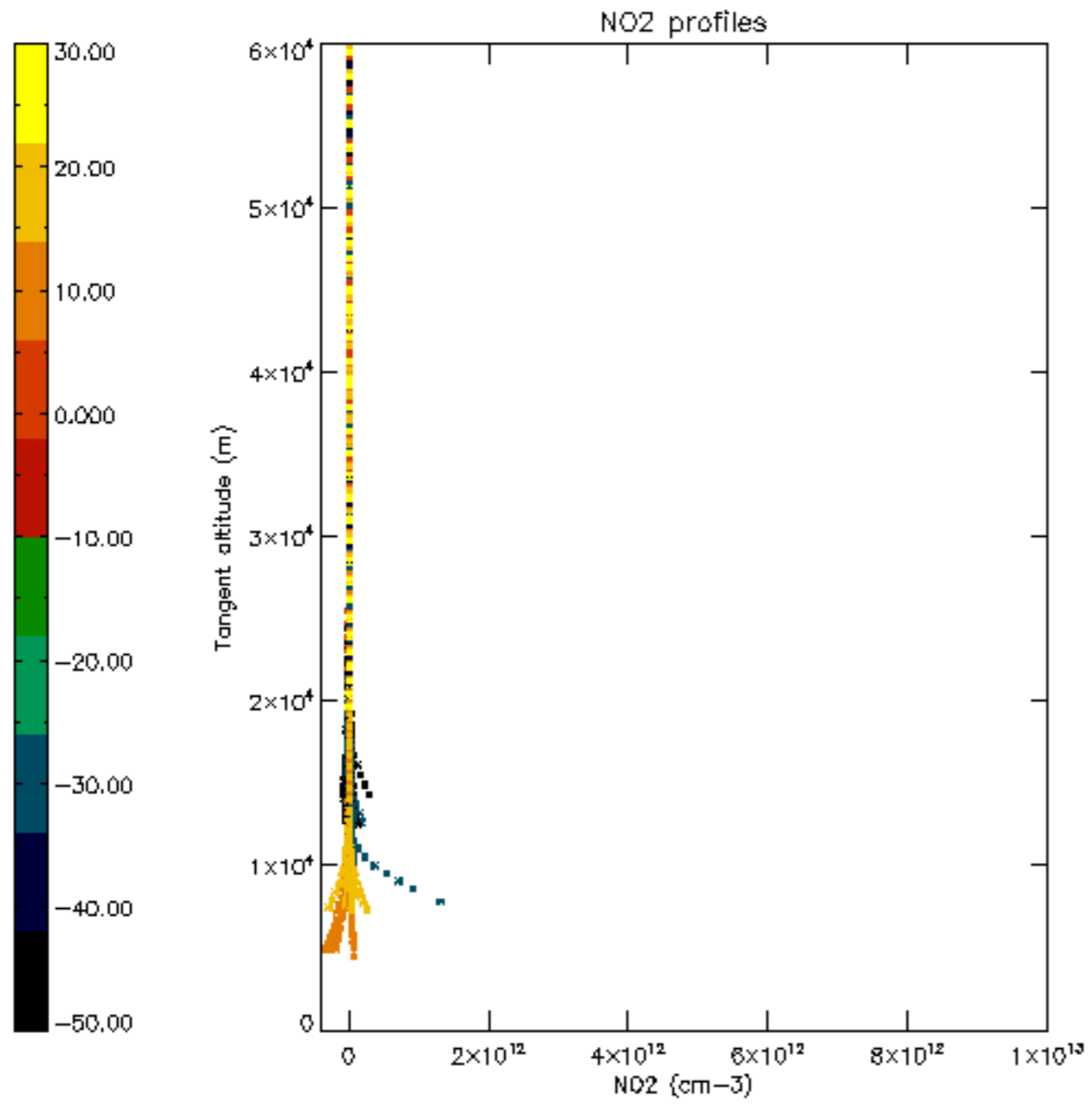


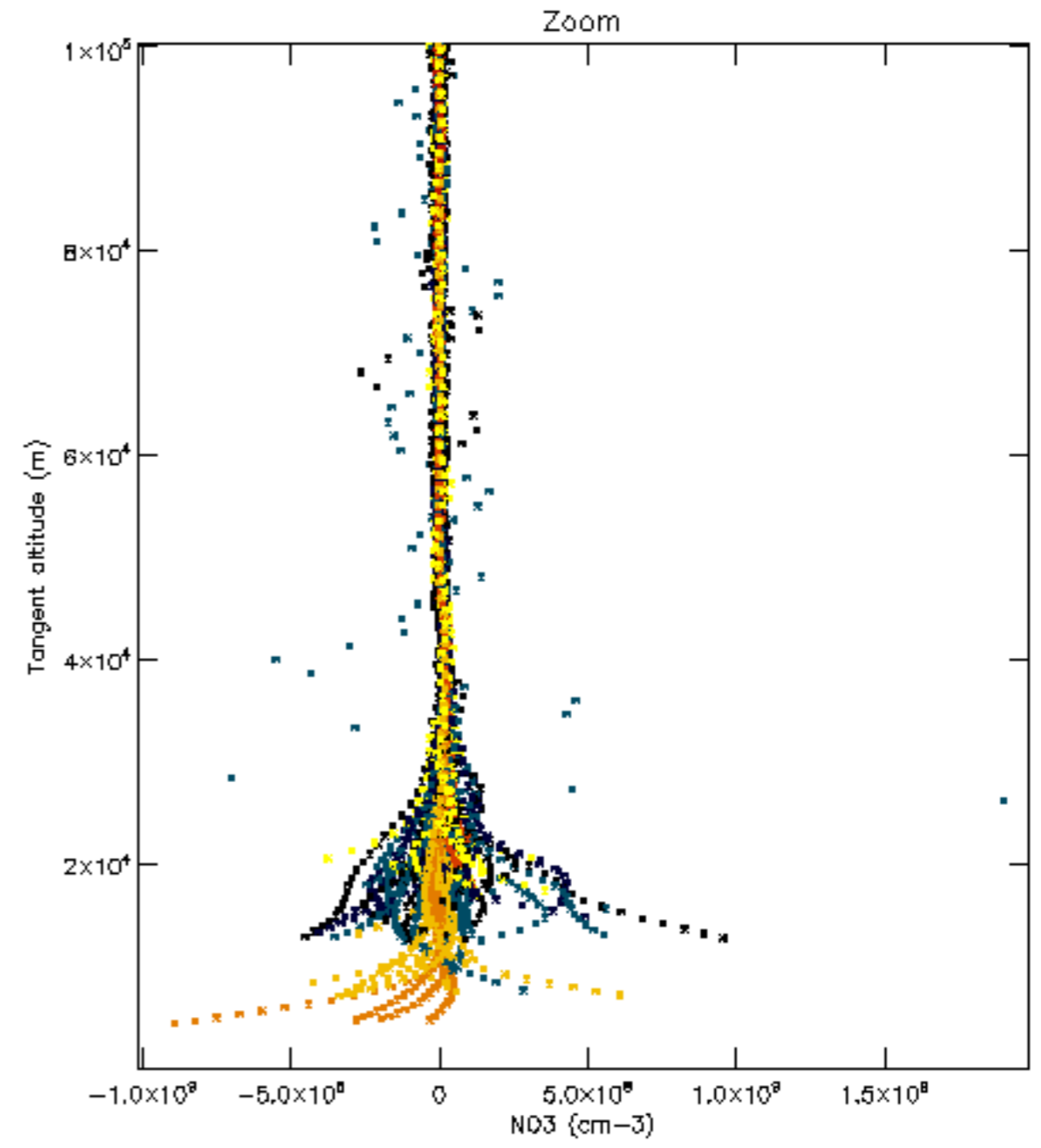
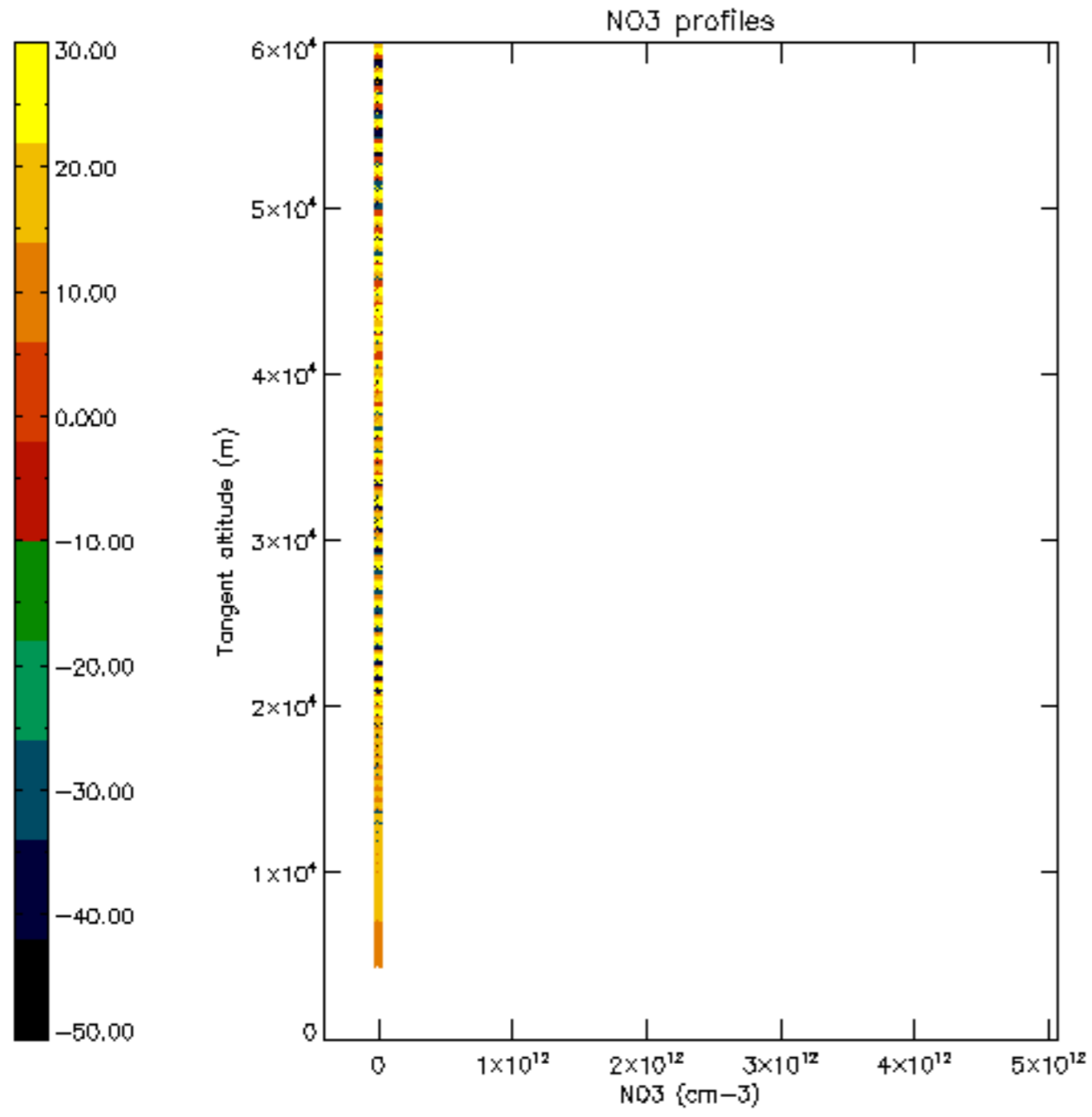


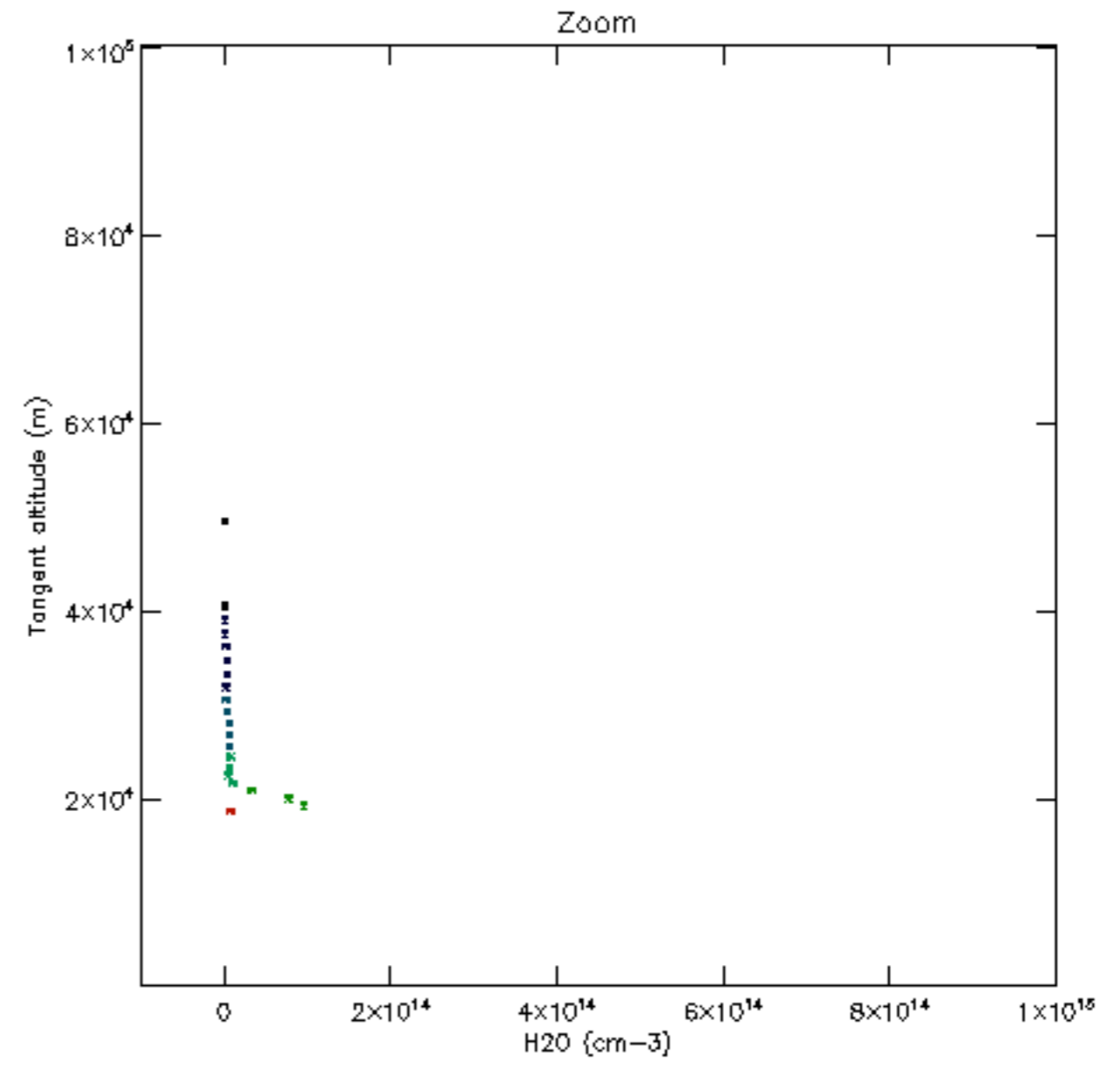
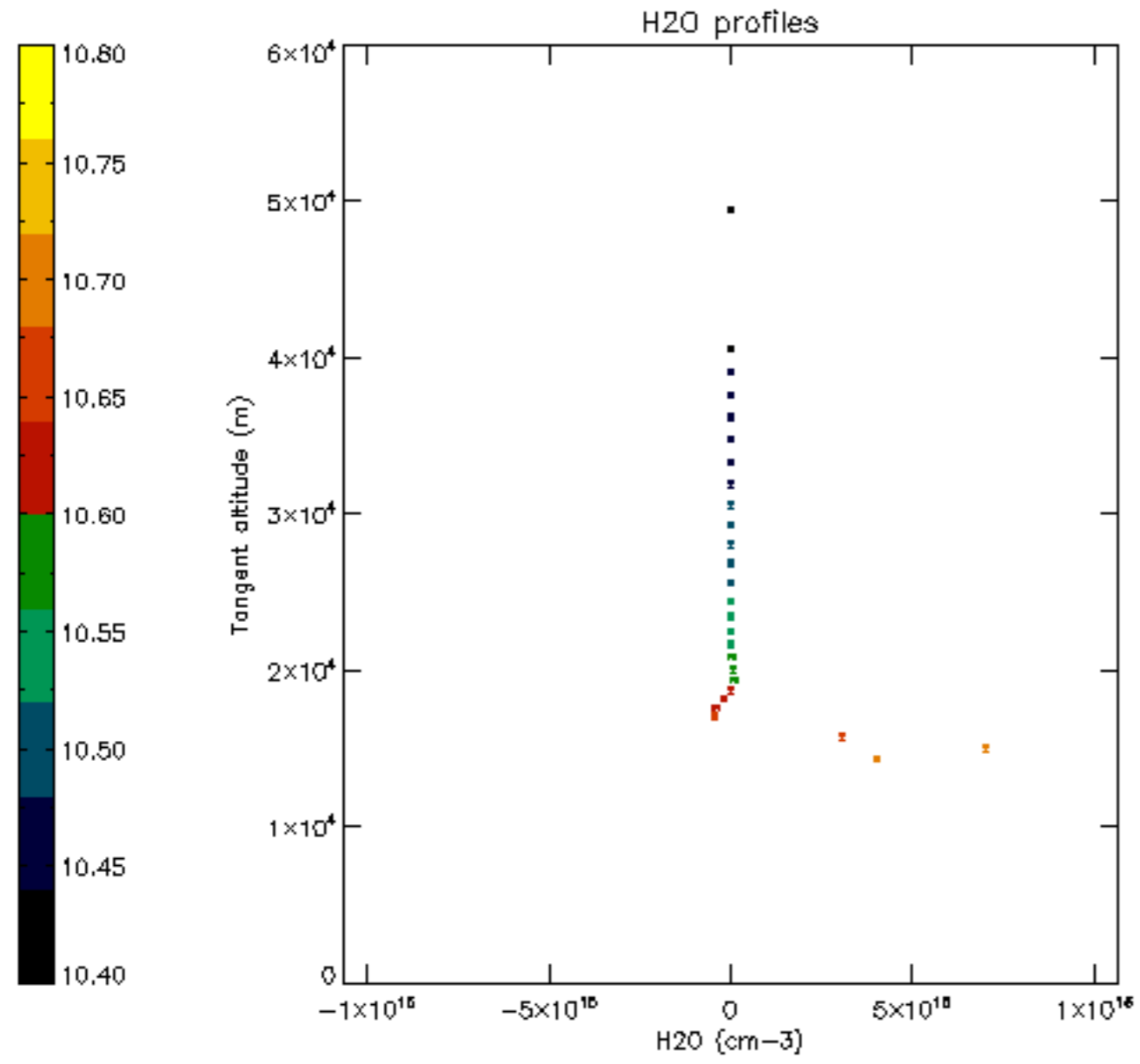


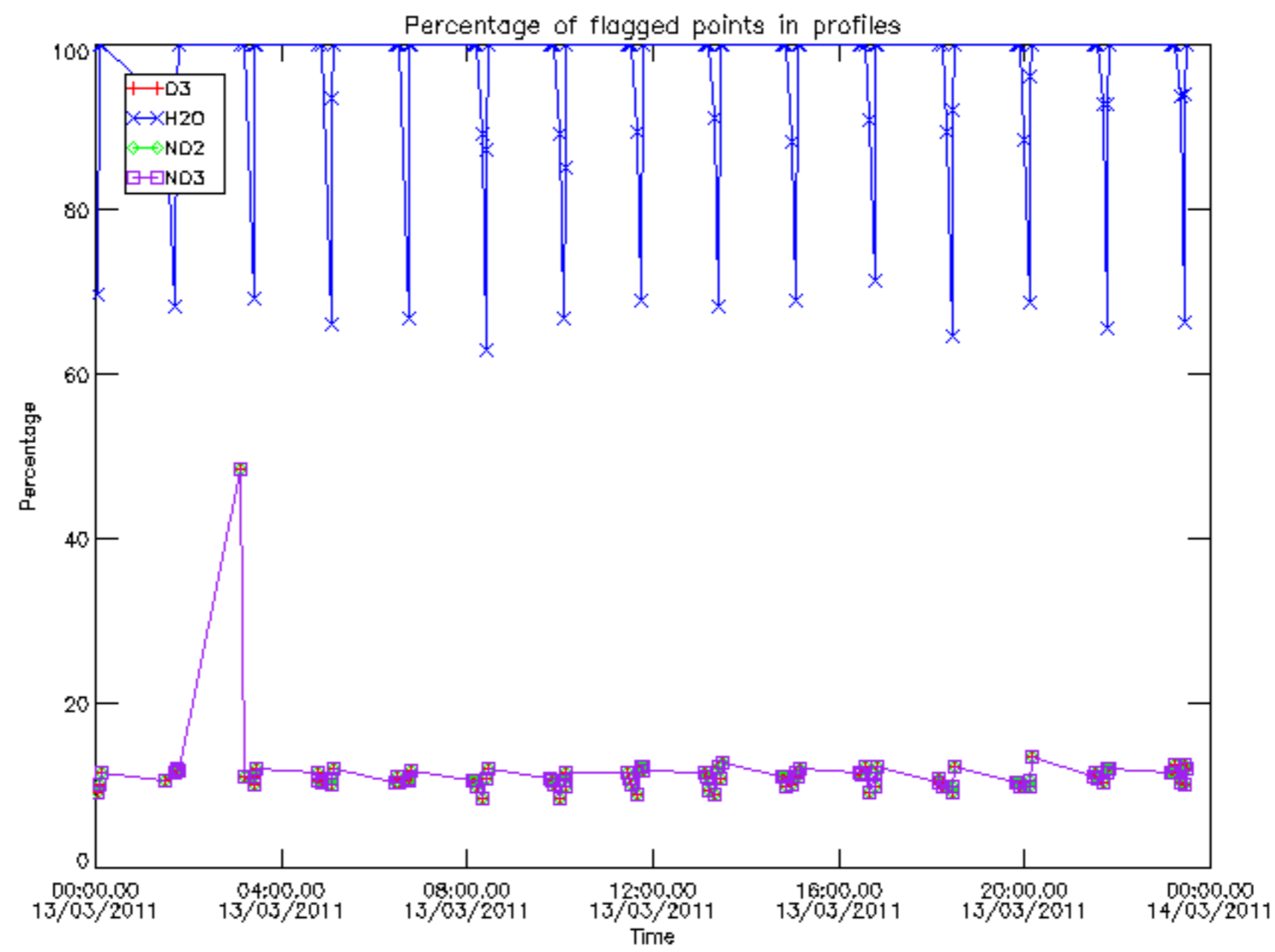




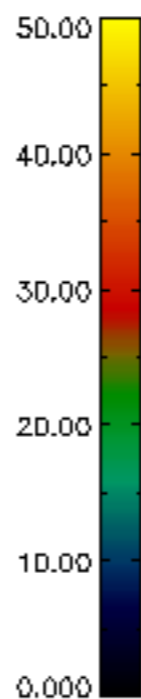
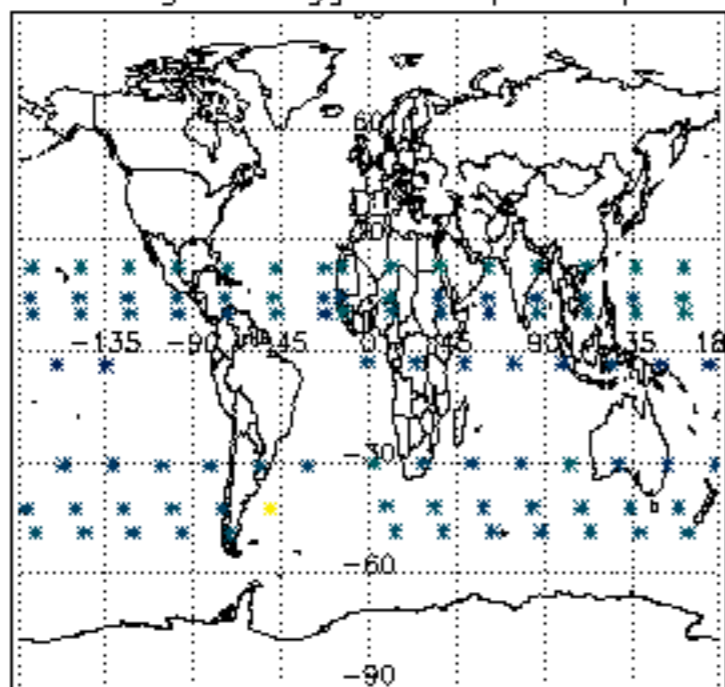




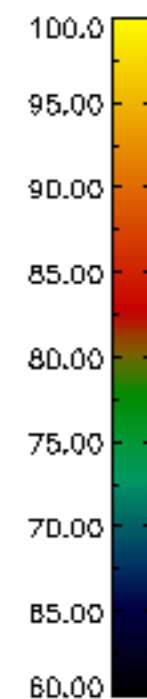
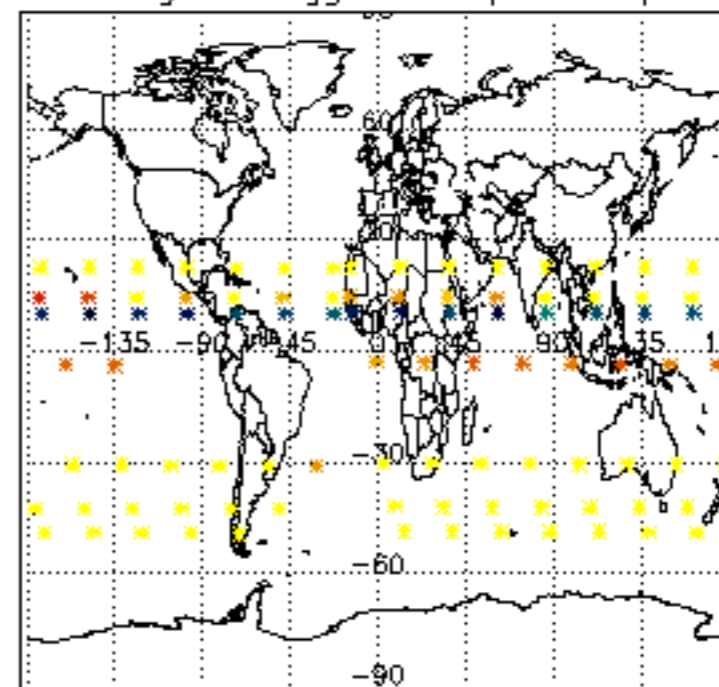




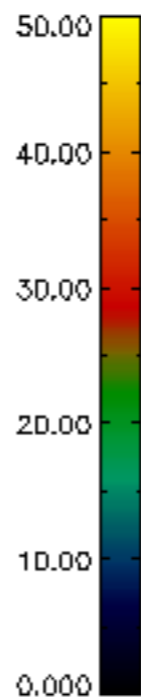
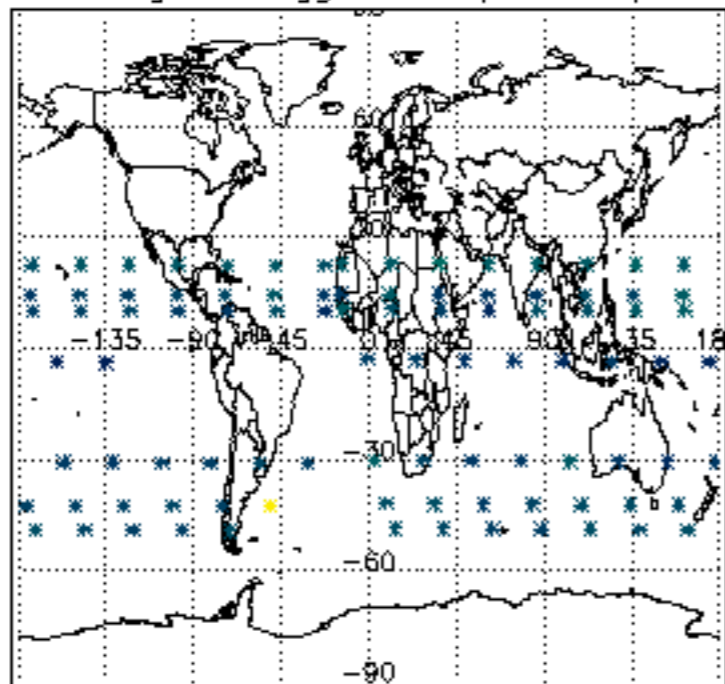
Percentage of flagged data per D3 profile



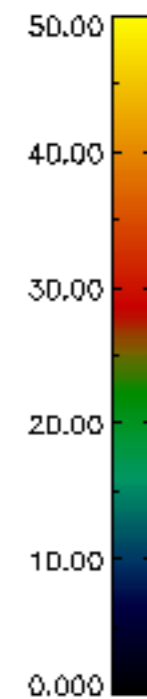
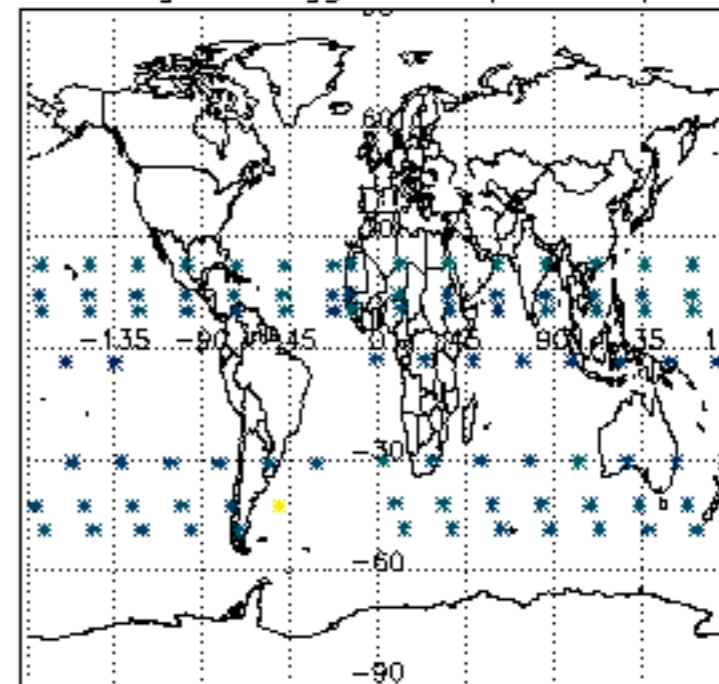
Percentage of flagged data per H2O profile

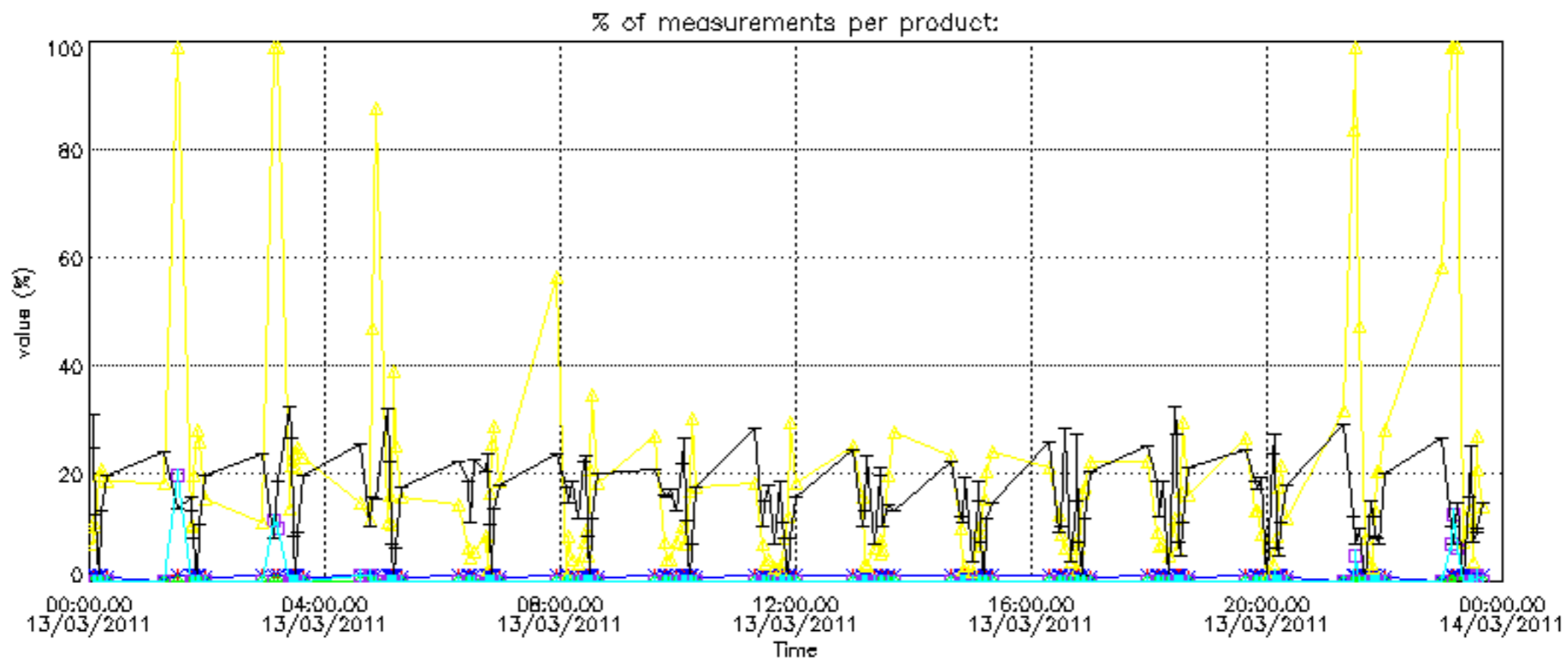


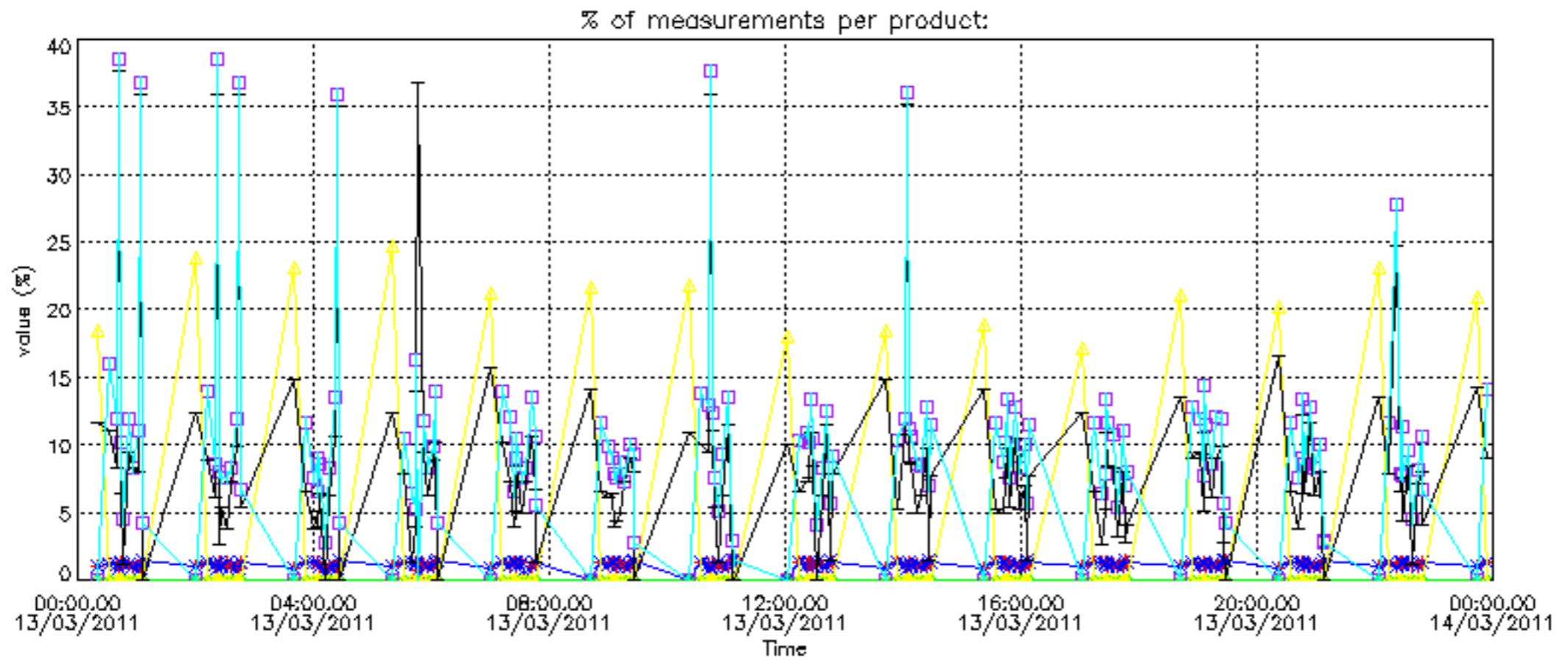
Percentage of flagged data per NO2 profile



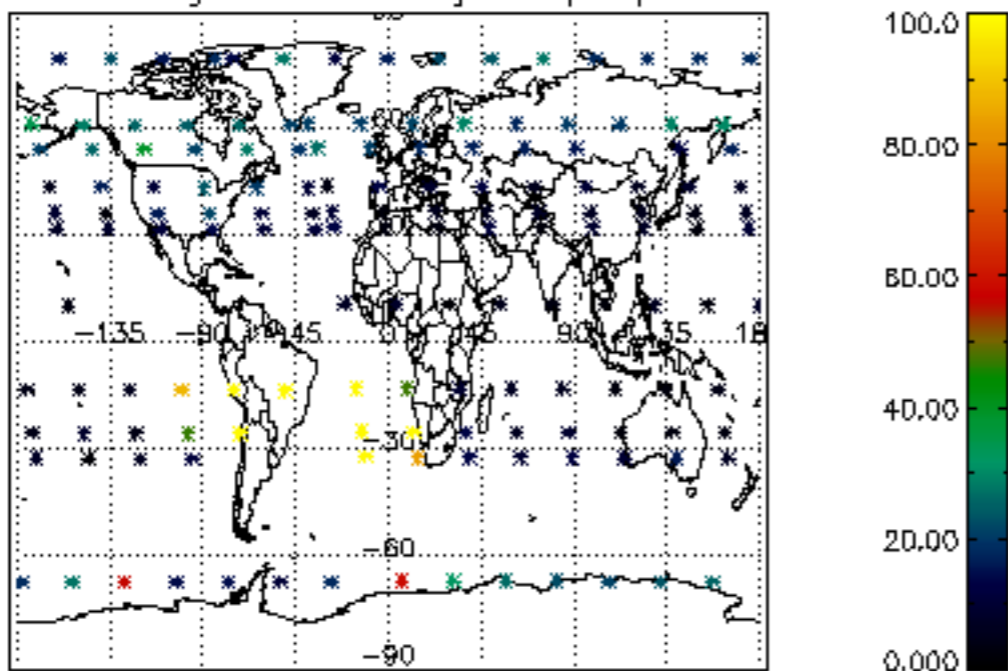
Percentage of flagged data per NO3 profile



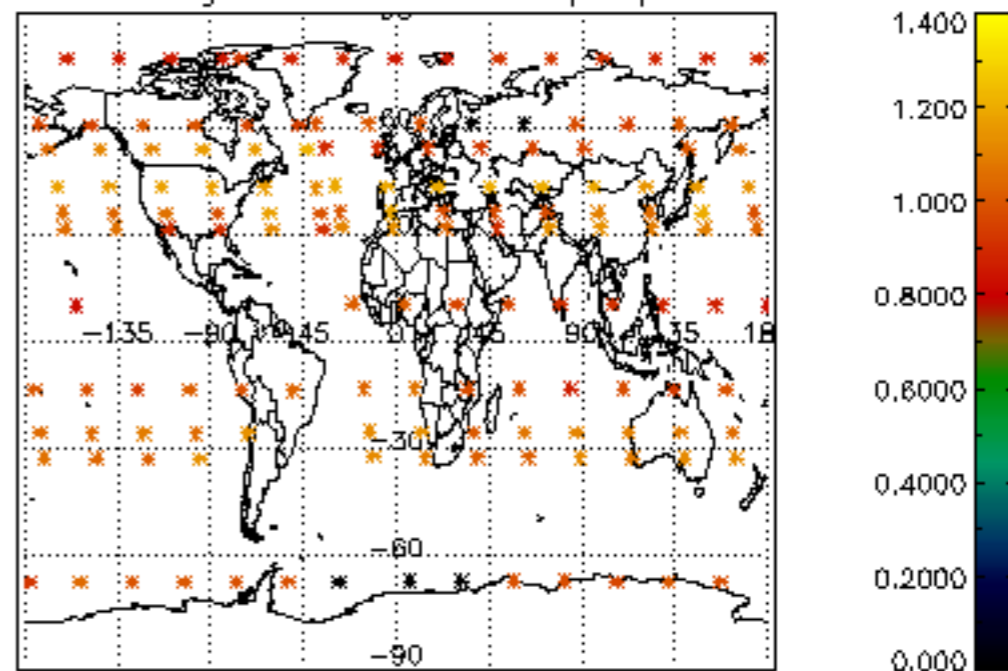




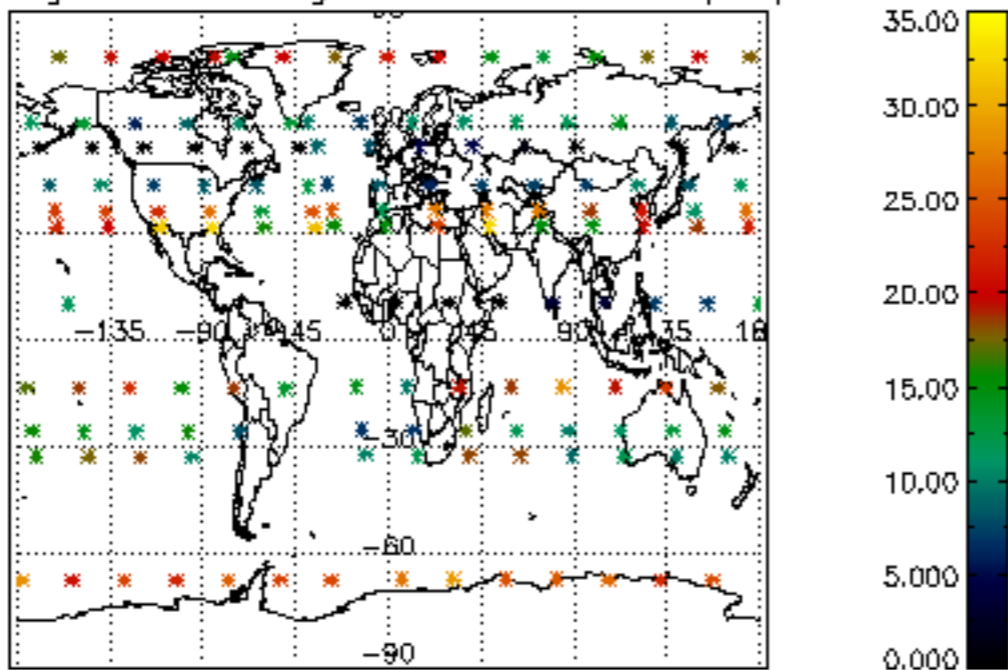
Percentage of cosmic ray hits per profile



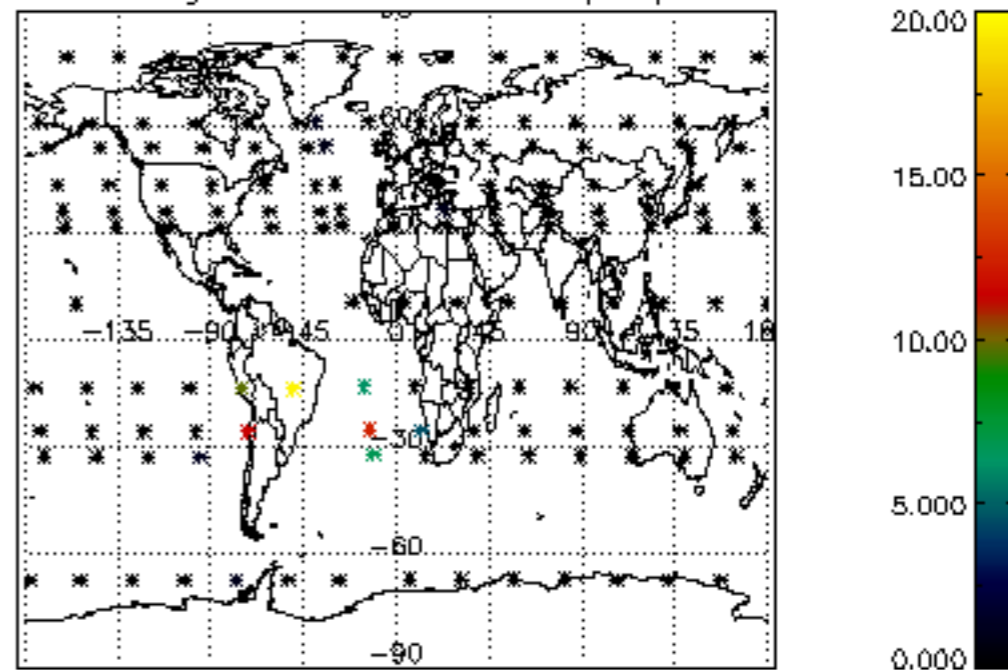
Percentage of datation errors per profile



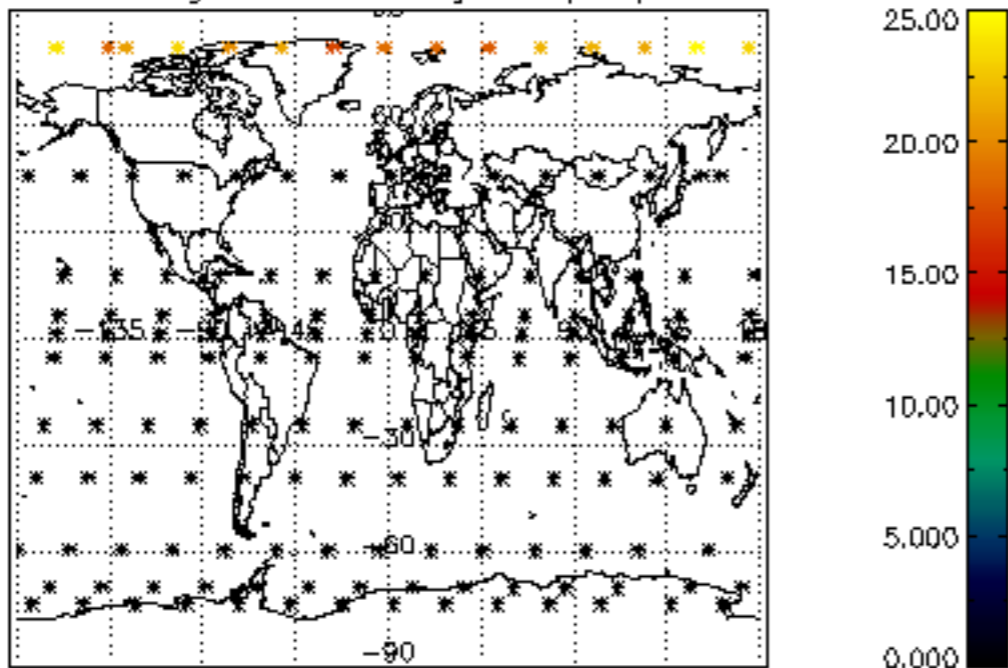
Percentage of star falling outside central band per profile



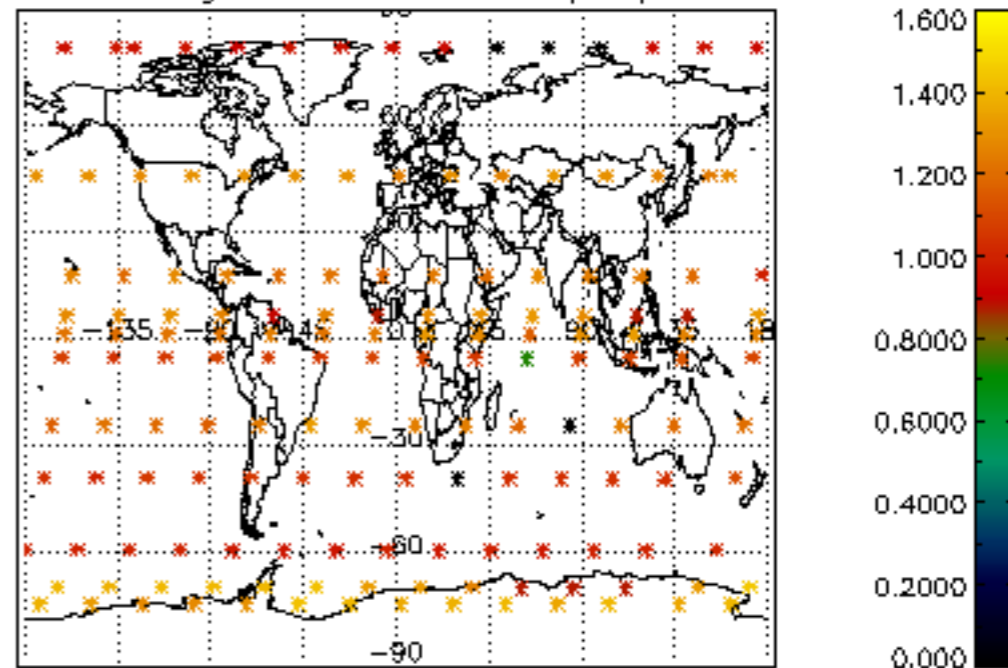
Percentage of saturation errors per profile



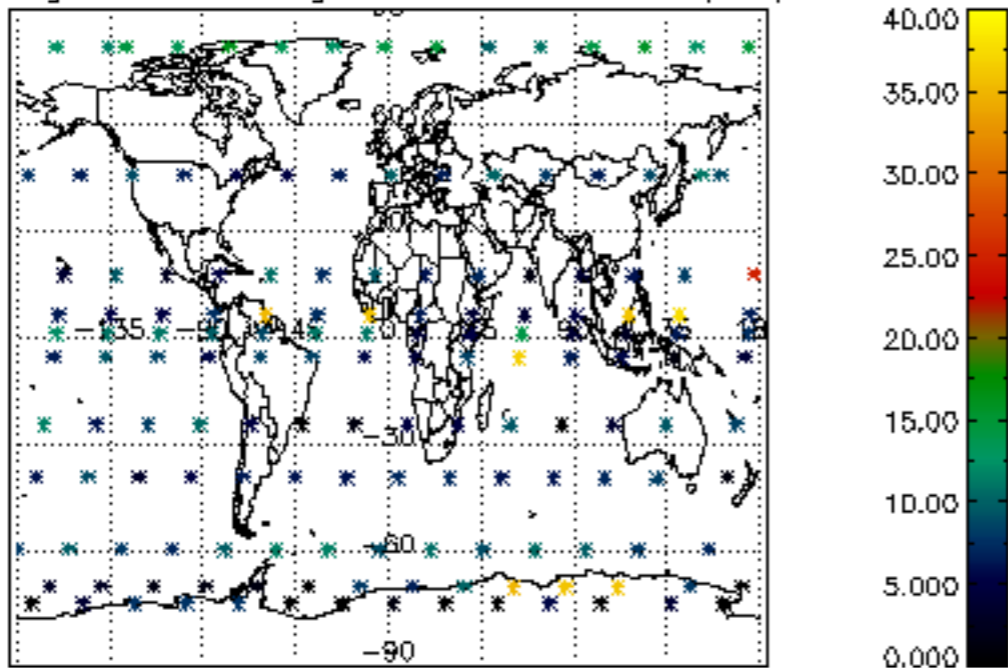
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

