

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 14:42:34
Data source version	GOMOS/6.01
Start time of products	13-06-2011 (13JUN2011 00:00:00)
Stop time of products	14-06-2011 (14JUN2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	286
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

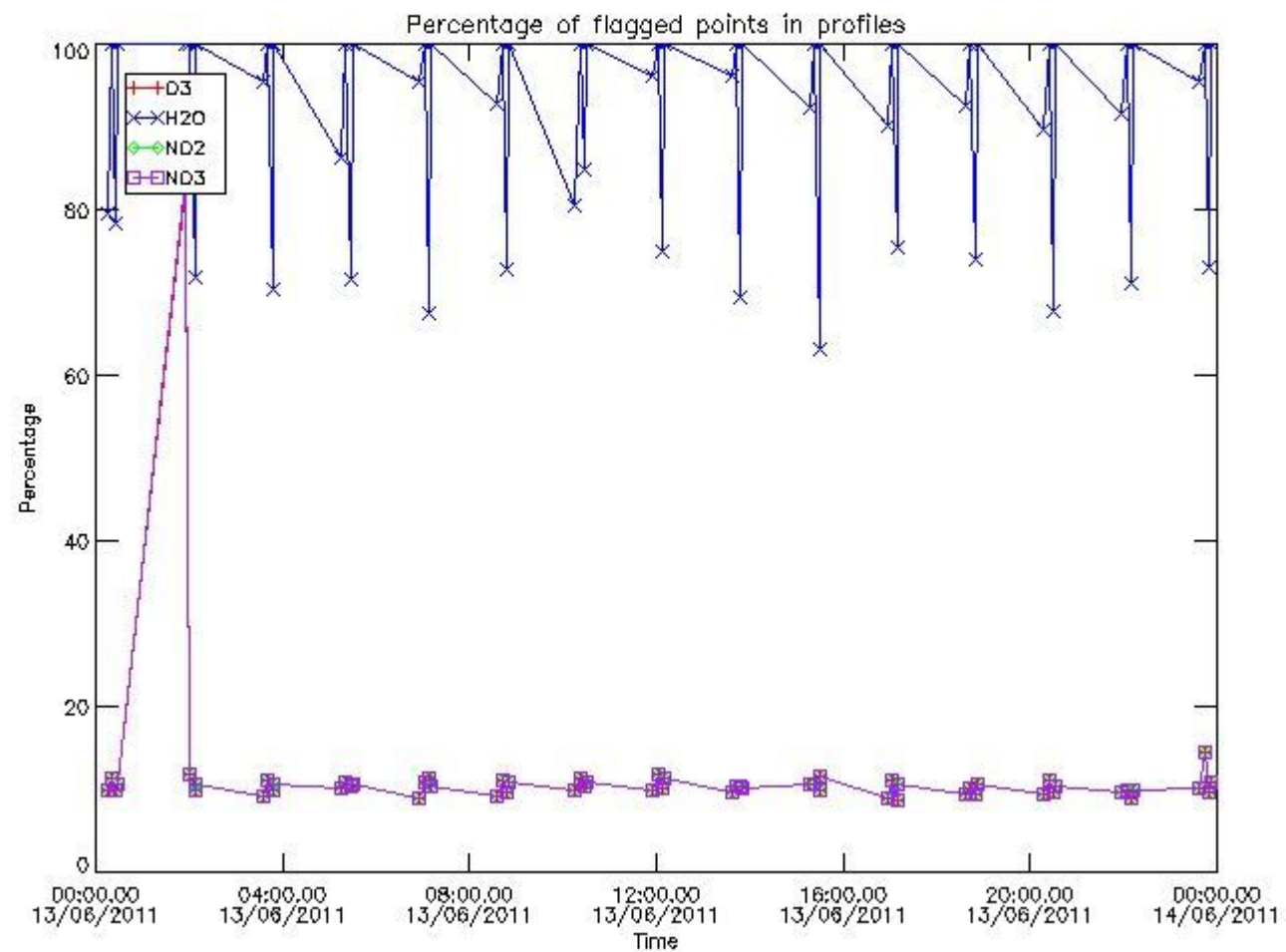
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110613_001415_000000523103_00260_48550_3586.N1	13-JUN-2011 00:14:15	Dark	51.500	52	16Bet Cet	2.0370	4500.0	103	48550	No
2	GOM_NL__2PRFIN20110613_002034_000000453103_00260_48550_3587.N1	13-JUN-2011 00:20:34	Dark	45.000	84	Alp Phe	2.3970	4500.0	90	48550	No
3	GOM_NL__2PRFIN20110613_002640_000000633103_00261_48551_3581.N1	13-JUN-2011 00:26:40	Dark	62.500	63	Bet Gru	2.1500	2800.0	125	48551	No
4	GOM_NL__2PRFIN20110613_002842_000000483103_00261_48551_3582.N1	13-JUN-2011 00:28:42	Dark	48.000	31	Alp Gru	1.7340	15200.	96	48551	No
5	GOM_NL__2PRFIN20110613_003025_000000593103_00261_48551_3583.N1	13-JUN-2011 00:30:25	Straylight	58.500	172	Gam Gru	3.0030	13100.	117	48551	No
6	GOM_NL__2PRFIN20110613_003243_000000423103_00261_48551_3584.N1	13-JUN-2011 00:32:43	Straylight	42.000	45	Alp Pav	1.9400	26000.	84	48551	No
7	GOM_NL__2PRFIN20110613_004242_000000453103_00261_48551_3585.N1	13-JUN-2011 00:42:42	Twilight	45.000	25	35Lam Sco	1.6200	28000.	90	48551	No
8	GOM_NL__2PRFIN20110613_004424_000000743103_00261_48551_3586.N1	13-JUN-2011 00:44:24	Bright	74.000	57	34Sig Sgr	2.0660	26000.	148	48551	No
9	GOM_NL__2PRFIN20110613_004922_000000403103_00261_48551_3587.N1	13-JUN-2011 00:49:22	Bright	40.000	86	35Eta Oph	2.4300	10200.	80	48551	No
10	GOM_NL__2PRFIN20110613_005605_000000473103_00261_48551_3588.N1	13-JUN-2011 00:56:05	Bright	46.500	126	60Bet Oph	2.7700	4250.0	93	48551	No
11	GOM_NL__2PRFIN20110613_005837_000000463103_00261_48551_3589.N1	13-JUN-2011 00:58:37	Bright	45.500	59	55Alp Oph	2.0800	8900.0	91	48551	No
12	GOM_NL__2PRFIN20110613_010029_000000383103_00261_48551_3590.N1	13-JUN-2011 01:00:29	Bright	38.000	127	27Bet Her	2.7810	4700.0	76	48551	No
13	GOM_NL__2PRFIN20110613_010333_000000413103_00261_48551_3591.N1	13-JUN-2011 01:03:33	Bright	40.500	133	40Zet Her	2.8070	6000.0	81	48551	No
14	GOM_NL__2PRFIN20110613_011026_000000383103_00261_48551_3592.N1	13-JUN-2011 01:10:26	Bright	38.000	130	23Bet Dra	2.7990	5800.0	76	48551	No
15	GOM_NL__2PRFIN20110613_011152_000000393103_00261_48551_3593.N1	13-JUN-2011 01:11:52	Bright	38.500	119	14Eta Dra	2.7270	4700.0	77	48551	No
16	GOM_NL__2PRFIN20110613_012055_000000483103_00261_48551_3594.N1	13-JUN-2011 01:20:55	Bright	48.000	89	5Alp Cep	2.4510	8000.0	96	48551	No
17	GOM_NL__2PRFIN20110613_012710_000000643103_00261_48551_3595.N1	13-JUN-2011 01:27:10	Bright	64.000	74	11Bet Cas	2.2680	6600.0	128	48551	No
18	GOM_NL__2PRFIN20110613_013330_000000563103_00261_48551_3596.N1	13-JUN-2011 01:33:30	Bright	56.000	73	57Gam1And	2.2600	13100.	112	48551	No
19	GOM_NL__2PRFIN20110613_013549_000000543103_00261_48551_3597.N1	13-JUN-2011 01:35:49	Twilight	54.000	53	43Bet And	2.0480	3300.0	108	48551	No
20	GOM_NL__2PRFIN20110613_013914_000000503103_00261_48551_3598.N1	13-JUN-2011 01:39:14	Twilight	50.000	50	13Alp Ari	2.0070	4250.0	100	48551	No
21	GOM_NL__2PRFIN20110613_015429_000000563103_00261_48551_3599.N1	13-JUN-2011 01:54:29	Dark	56.000	52	16Bet Cet	2.0370	4500.0	112	48551	No
22	GOM_NL__2PRFIN20110613_020049_000000433103_00261_48551_3600.N1	13-JUN-2011 02:00:49	Dark	43.000	84	Alp Phe	2.3970	4500.0	86	48551	No
23	GOM_NL__2PRFIN20110613_020655_000000523103_00262_48552_3599.N1	13-JUN-2011 02:06:55	Dark	52.000	63	Bet Gru	2.1500	2800.0	104	48552	No
24	GOM_NL__2PRFIN20110613_020857_000000483103_00262_48552_3600.N1	13-JUN-2011 02:08:57	Dark	48.000	31	Alp Gru	1.7340	15200.	96	48552	No
25	GOM_NL__2PRFIN20110613_021040_000000573103_00262_48552_3601.N1	13-JUN-2011 02:10:40	Straylight	57.000	172	Gam Gru	3.0030	13100.	114	48552	No
26	GOM_NL__2PRFIN20110613_021257_000000453103_00262_48552_3602.N1	13-JUN-2011 02:12:57	Straylight	45.000	45	Alp Pav	1.9400	26000.	90	48552	No
27	GOM_NL__2PRFIN20110613_022257_000000463103_00262_48552_3603.N1	13-JUN-2011 02:22:57	Twilight	45.500	25	35Lam Sco	1.6200	28000.	91	48552	No
28	GOM_NL__2PRFIN20110613_022439_000000683103_00262_48552_3604.N1	13-JUN-2011 02:24:39	Bright	68.000	57	34Sig Sgr	2.0660	26000.	136	48552	No
29	GOM_NL__2PRFIN20110613_022936_000000403103_00262_48552_3605.N1	13-JUN-2011 02:29:36	Bright	39.500	86	35Eta Oph	2.4300	10200.	79	48552	No
30	GOM_NL__2PRFIN20110613_023618_000000473103_00262_48552_3606.N1	13-JUN-2011 02:36:18	Bright	46.500	126	60Bet Oph	2.7700	4250.0	93	48552	No
31	GOM_NL__2PRFIN20110613_023851_000000483103_00262_48552_3607.N1	13-JUN-2011 02:38:51	Bright	47.500	59	55Alp Oph	2.0800	8900.0	95	48552	No
32	GOM_NL__2PRFIN20110613_024043_000000383103_00262_48552_3608.N1	13-JUN-2011 02:40:43	Bright	38.000	127	27Bet Her	2.7810	4700.0	76	48552	No
33	GOM_NL__2PRFIN20110613_024347_000000403103_00262_48552_3609.N1	13-JUN-2011 02:43:47	Bright	40.000	133	40Zet Her	2.8070	6000.0	80	48552	No
34	GOM_NL__2PRFIN20110613_025040_000000413103_00262_48552_3610.N1	13-JUN-2011 02:50:40	Bright	41.000	130	23Bet Dra	2.7990	5800.0	82	48552	No
35	GOM_NL__2PRFIN20110613_025206_000000363103_00262_48552_3611.N1	13-JUN-2011 02:52:06	Bright	35.500	119	14Eta Dra	2.7270	4700.0	71	48552	No
36	GOM_NL__2PRFIN20110613_030109_000000453103_00262_48552_3612.N1	13-JUN-2011 03:01:09	Bright	44.500	89	5Alp Cep	2.4510	8000.0	89	48552	No
37	GOM_NL__2PRFIN20110613_030723_000000423103_00262_48552_3613.N1	13-JUN-2011 03:07:23	Bright	41.500	74	11Bet Cas	2.2680	6600.0	83	48552	No
38	GOM_NL__2PRFIN20110613_031344_000000393103_00262_48552_3614.N1	13-JUN-2011 03:13:44	Bright	39.000	73	57Gam1And	2.2600	13100.	78	48552	No
39	GOM_NL__2PRFIN20110613_031603_000000543103_00262_48552_3615.N1	13-JUN-2011 03:16:03	Twilight	53.500	53	43Bet And	2.0480	3300.0	107	48552	No
40	GOM_NL__2PRFIN20110613_031928_000000533103_00262_48552_3616.N1	13-JUN-2011 03:19:28	Twilight	52.500	50	13Alp Ari	2.0070	4250.0	105	48552	No
41	GOM_NL__2PRFIN20110613_033445_000000553103_00262_48552_3617.N1	13-JUN-2011 03:34:45	Dark	55.000	52	16Bet Cet	2.0370	4500.0	110	48552	No
42	GOM_NL__2PRFIN20110613_034104_000000513103_00262_48552_3618.N1	13-JUN-2011 03:41:04	Dark	50.500	84	Alp Phe	2.3970	4500.0	101	48552	No

279	GOM_NL__2PRFIN20110613_231852_000000523103_00274_48564_3976.N1	13-JUN-2011 23:18:52	Twilight	51.500	53	43Bet And	2.0480	3300.0	103	48564	No
280	GOM_NL__2PRFIN20110613_232219_000000473103_00274_48564_3977.N1	13-JUN-2011 23:22:19	Twilight	46.500	50	13Alp Ari	2.0070	4250.0	93	48564	No
281	GOM_NL__2PRFIN20110613_233744_000000563103_00274_48564_3978.N1	13-JUN-2011 23:37:44	Dark	55.500	52	16Bet Cet	2.0370	4500.0	111	48564	No
282	GOM_NL__2PRFIN20110613_234401_000000433103_00274_48564_3979.N1	13-JUN-2011 23:44:01	Dark	42.500	84	Alp Phe	2.3970	4500.0	85	48564	No
283	GOM_NL__2PRFIN20110613_235009_000000583103_00275_48565_3974.N1	13-JUN-2011 23:50:09	Dark	58.000	63	Bet Gru	2.1500	2800.0	116	48565	No
284	GOM_NL__2PRFIN20110613_235211_000000473103_00275_48565_3975.N1	13-JUN-2011 23:52:11	Dark	47.000	31	Alp Gru	1.7340	15200.	94	48565	No
285	GOM_NL__2PRFIN20110613_235359_000000583103_00275_48565_3976.N1	13-JUN-2011 23:53:59	Straylight	57.500	172	Gam Gru	3.0030	13100.	115	48565	No
286	GOM_NL__2PRFIN20110613_235607_000000423103_00275_48565_3977.N1	13-JUN-2011 23:56:07	Straylight	42.000	45	Alp Pav	1.9400	26000.	84	48565	No

3. Quality information per product

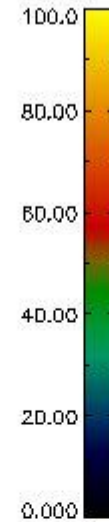
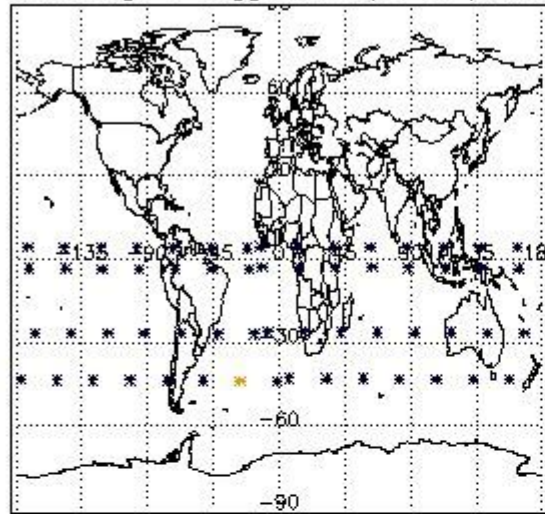
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

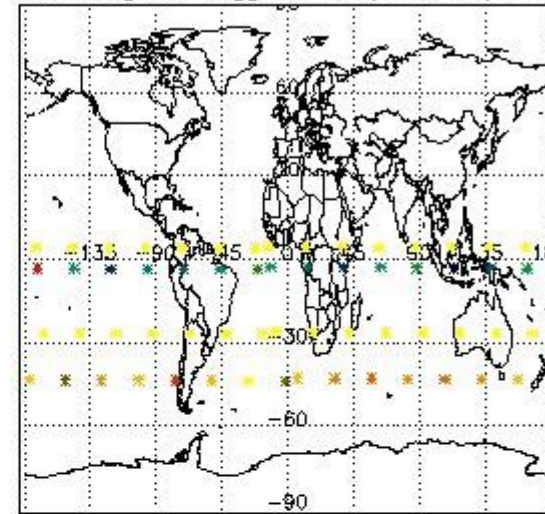


3.2 Plot quality information per product (world map)

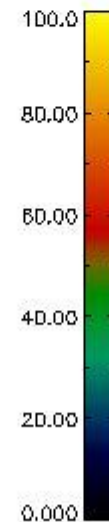
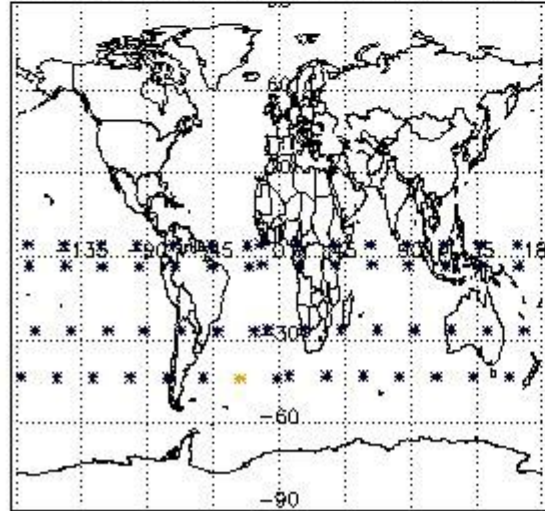
Percentage of flagged data per O3 profile



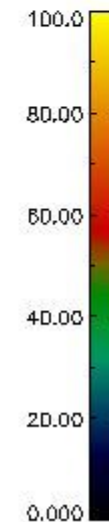
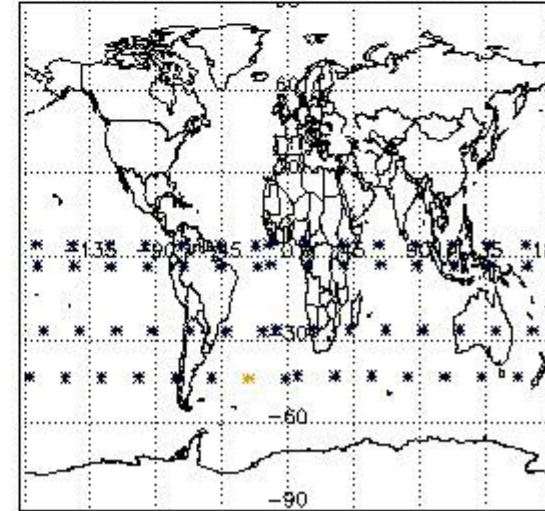
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

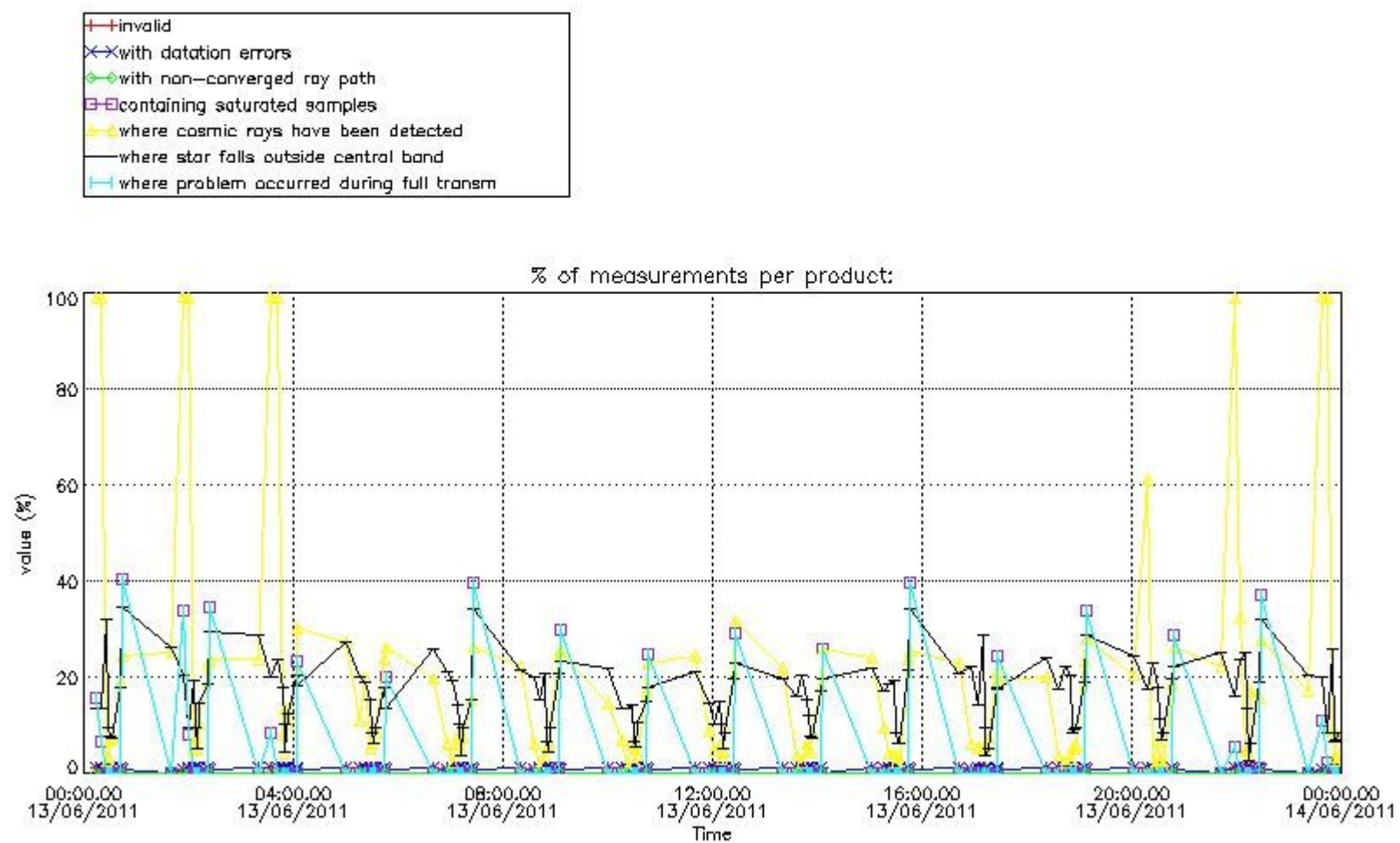


4. Level 1 quality information per product

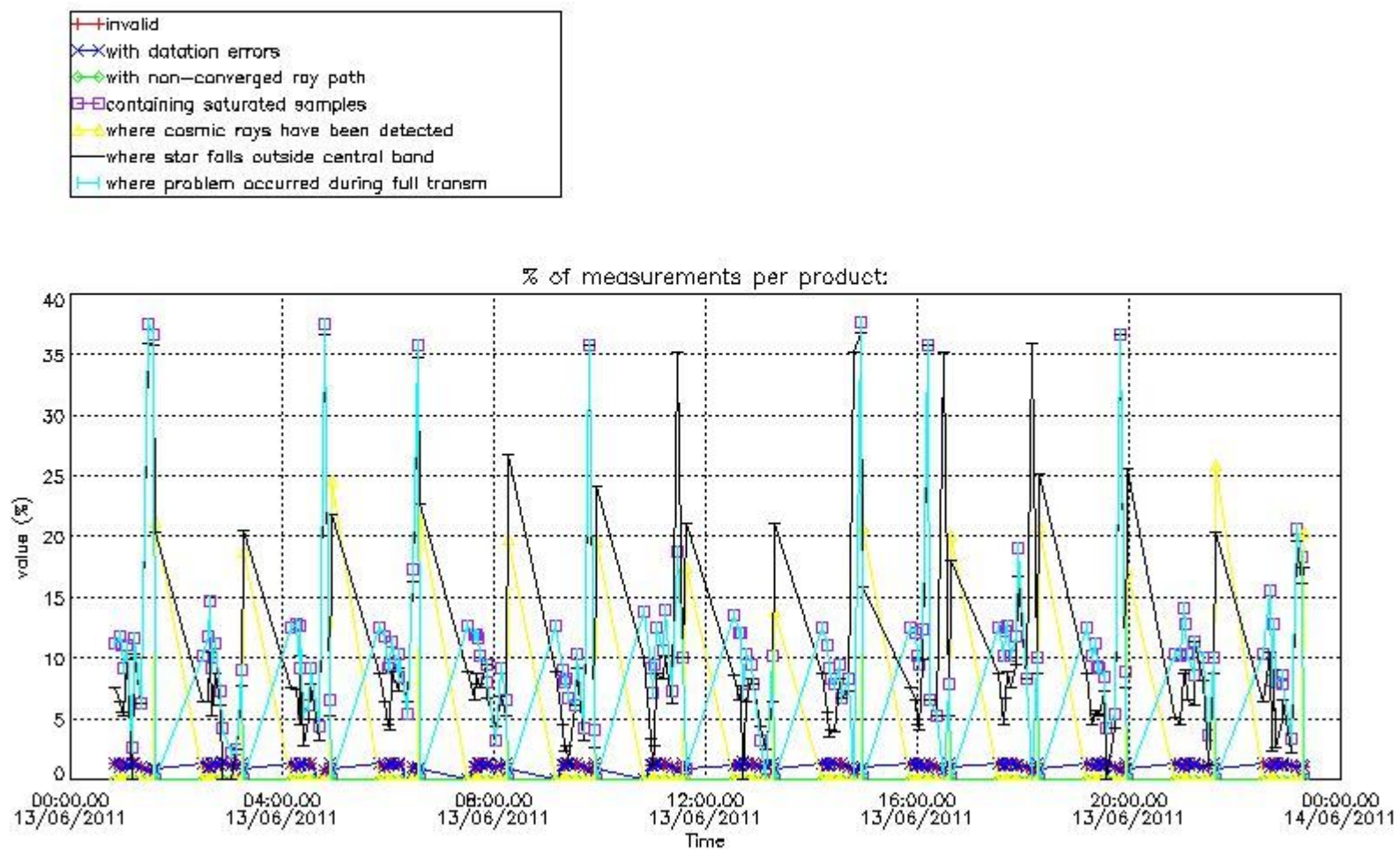
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

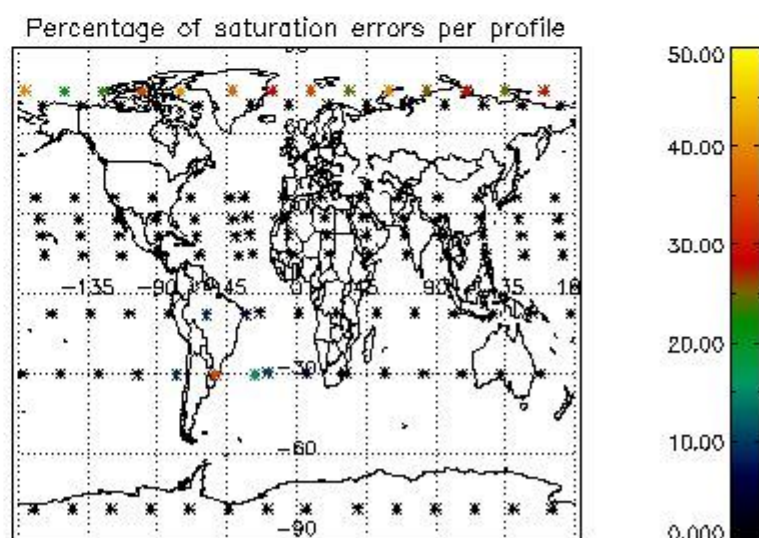
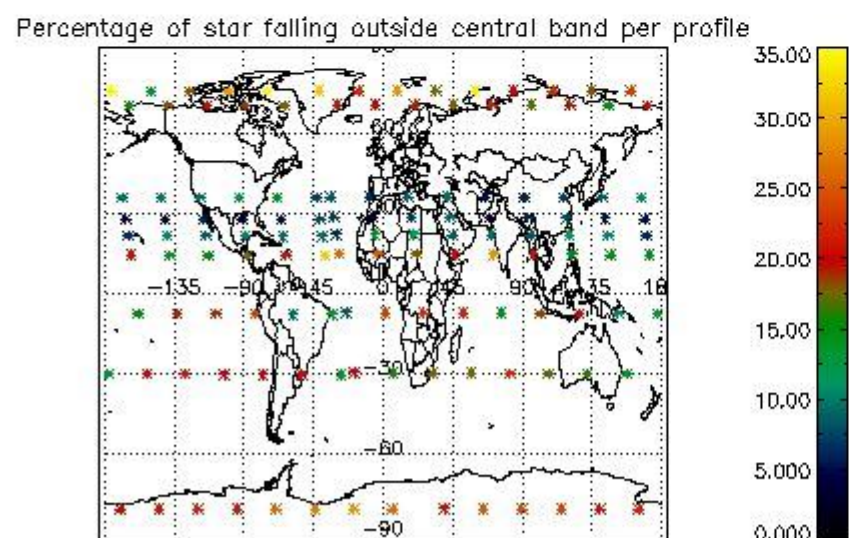
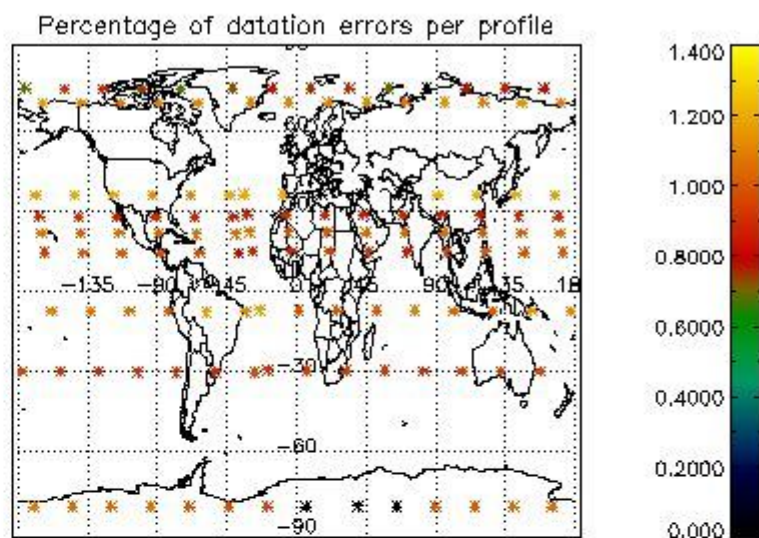
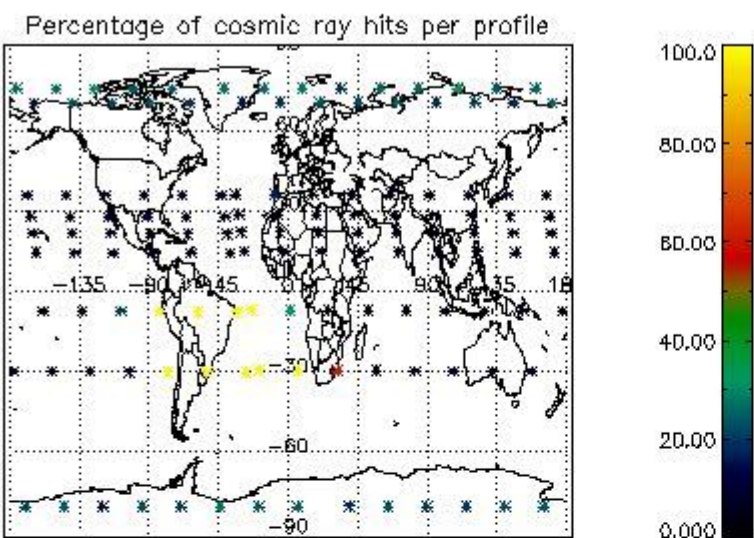


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

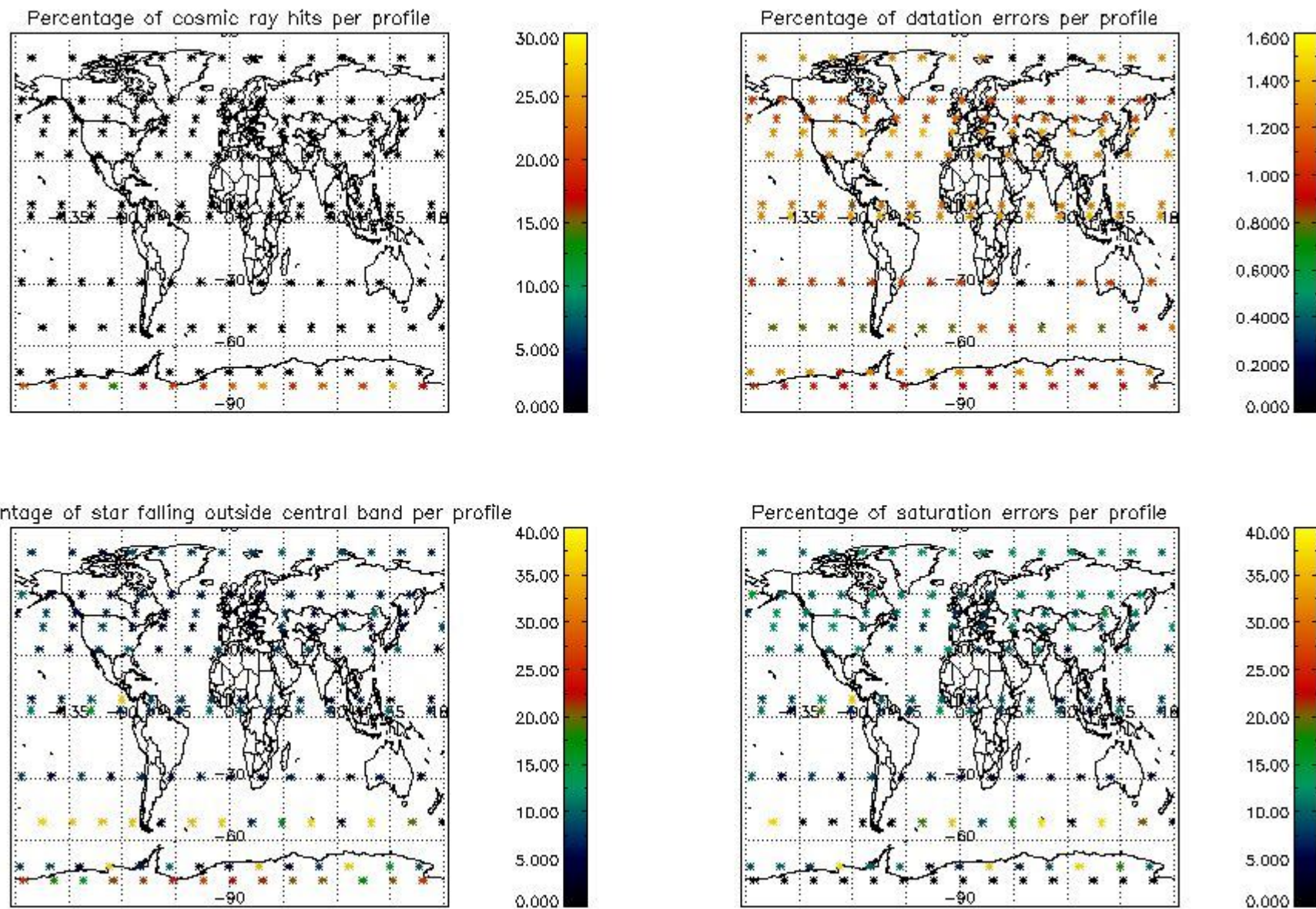


4.2 Plot quality information per product coming from level 1b processing (world map)

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

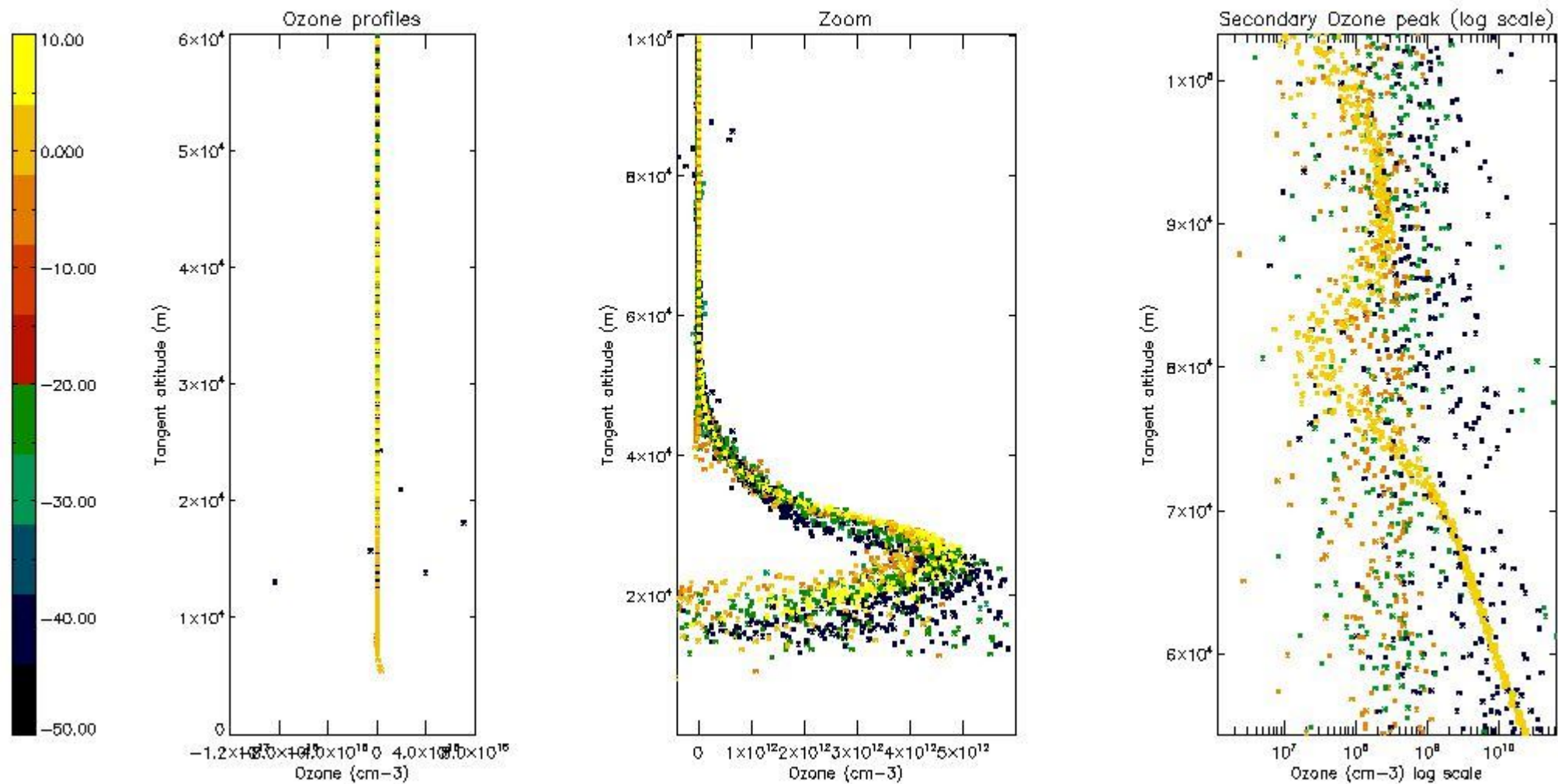
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	23
STD < 20	8

STD < 10	5
STD < 5	3

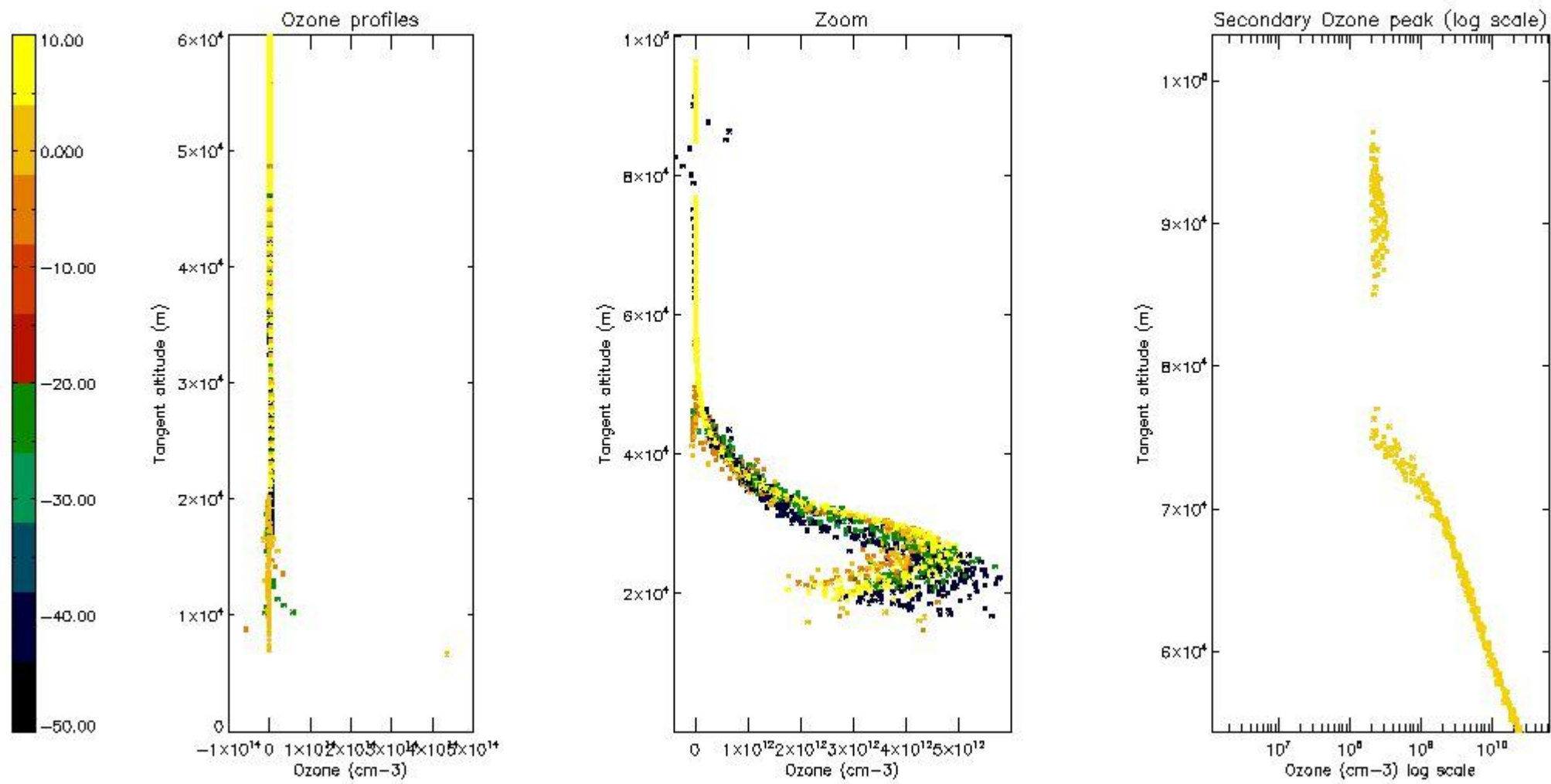
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



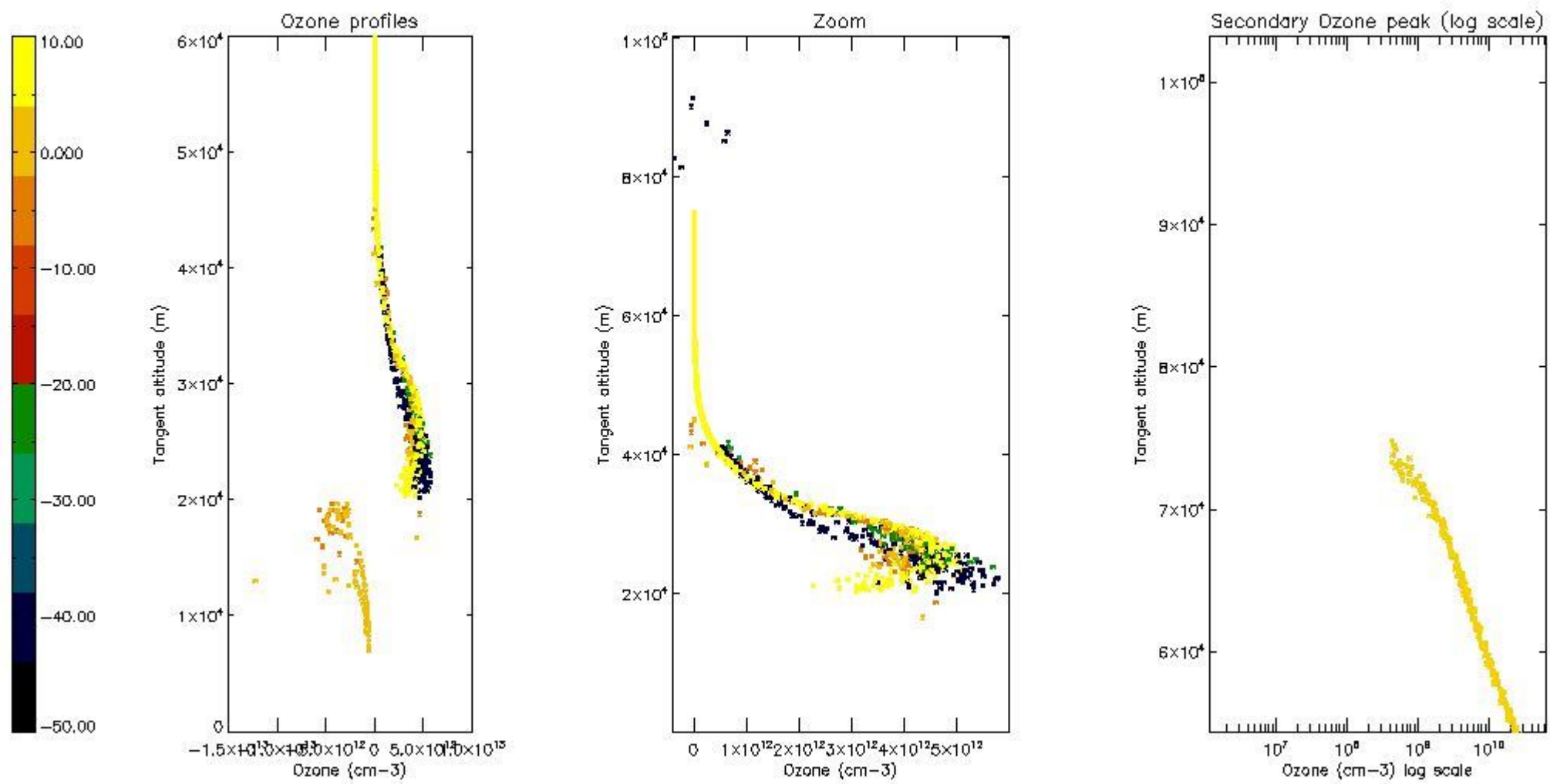
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



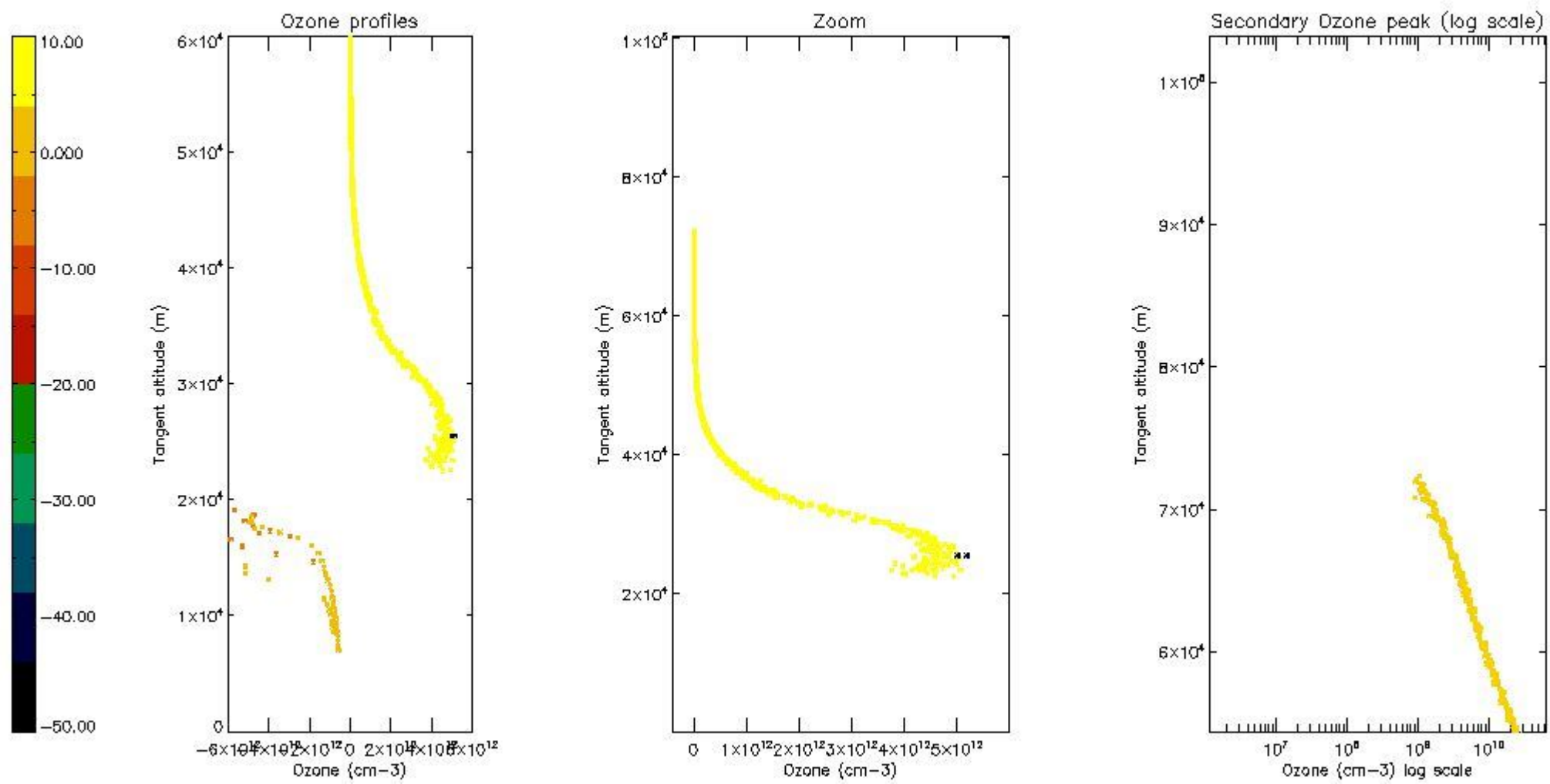
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



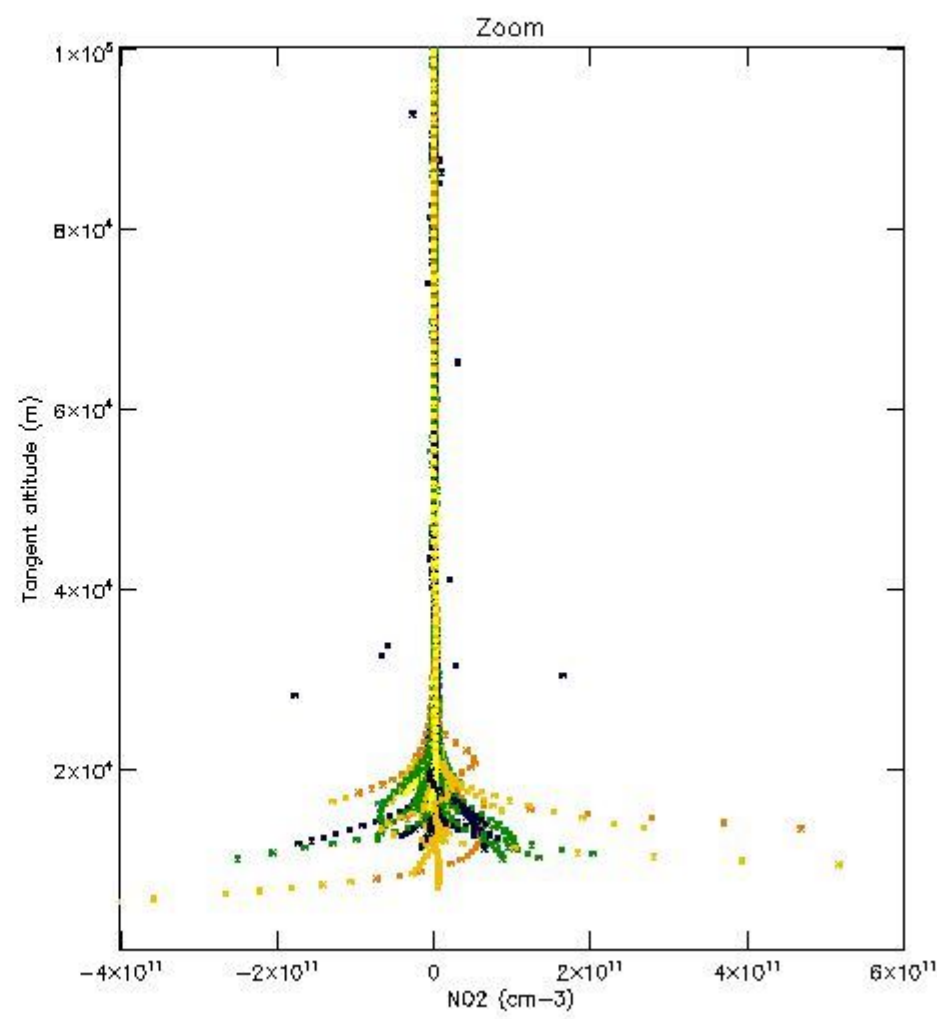
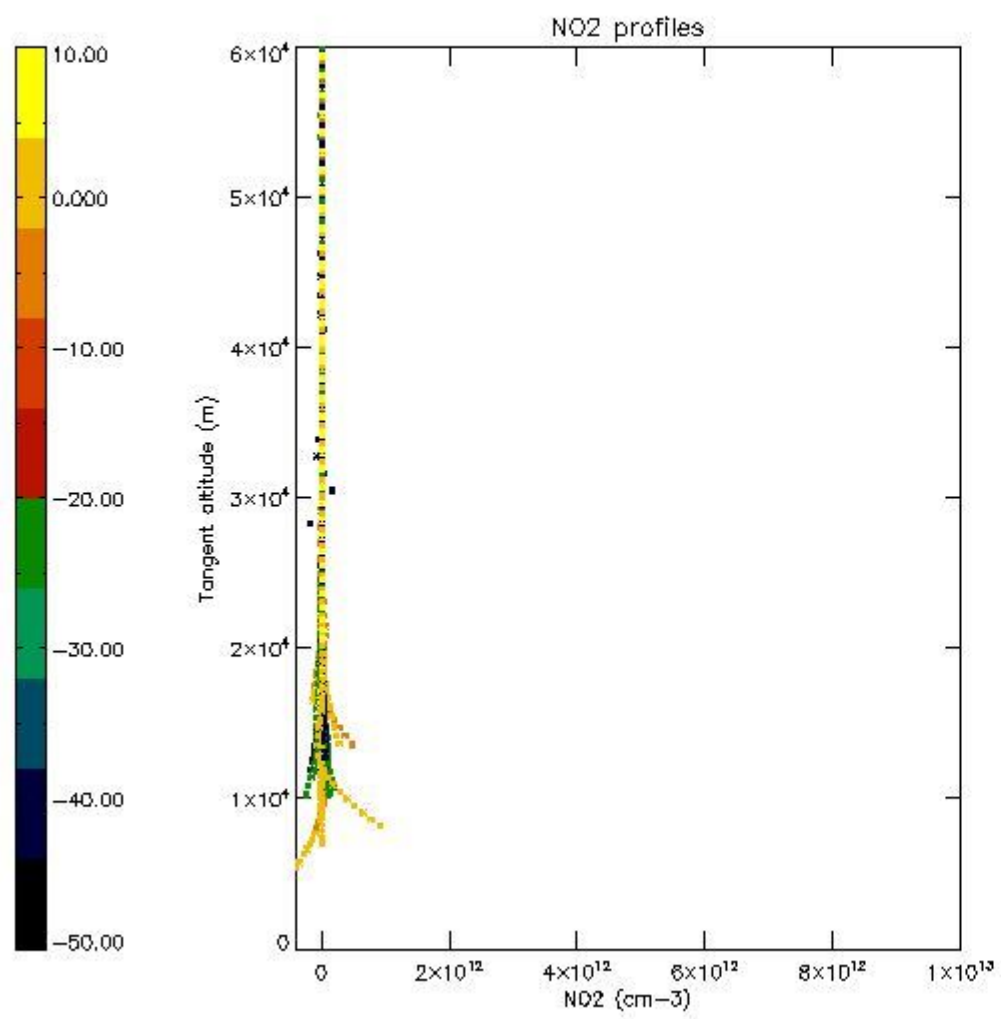
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



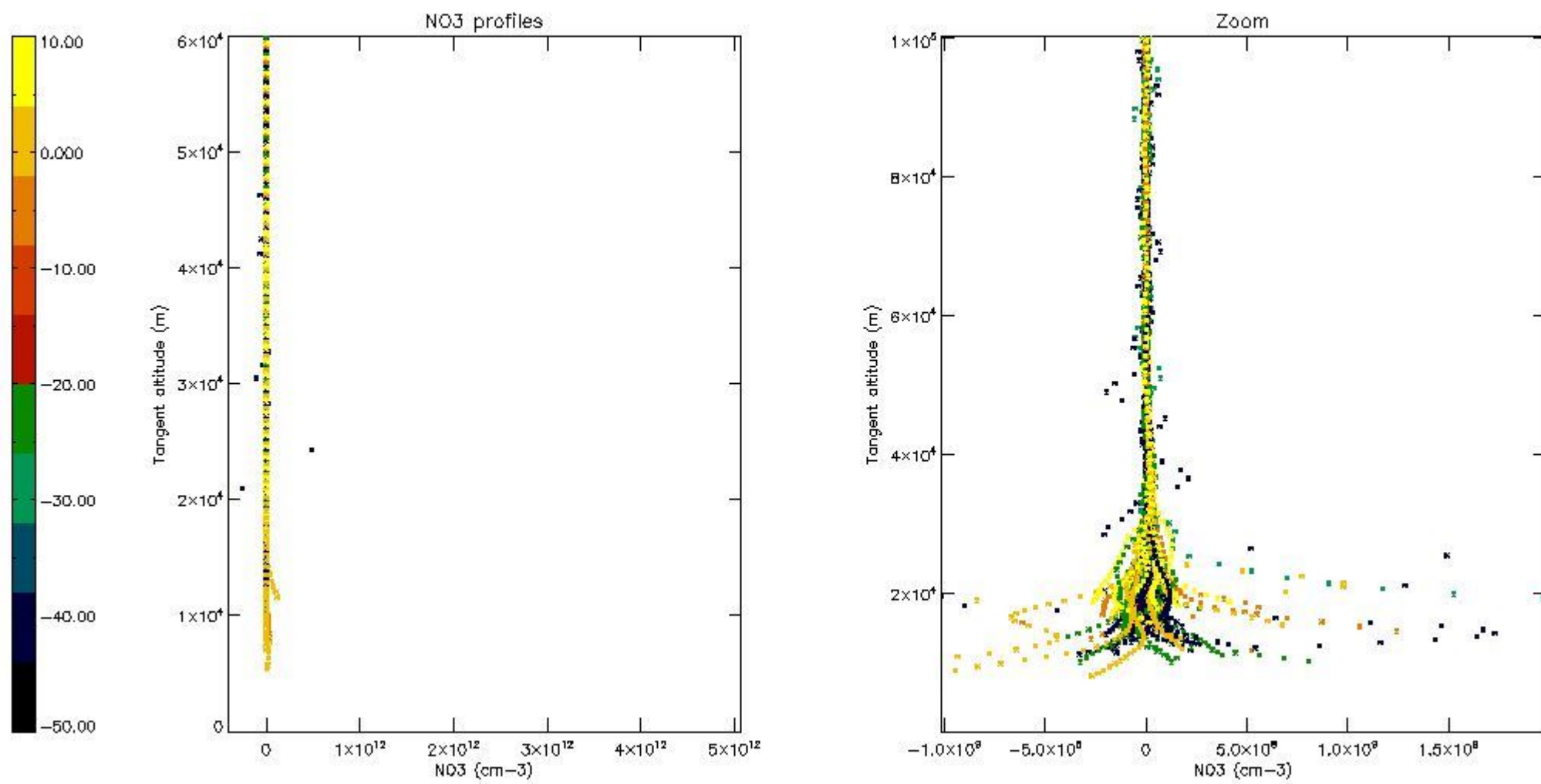
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



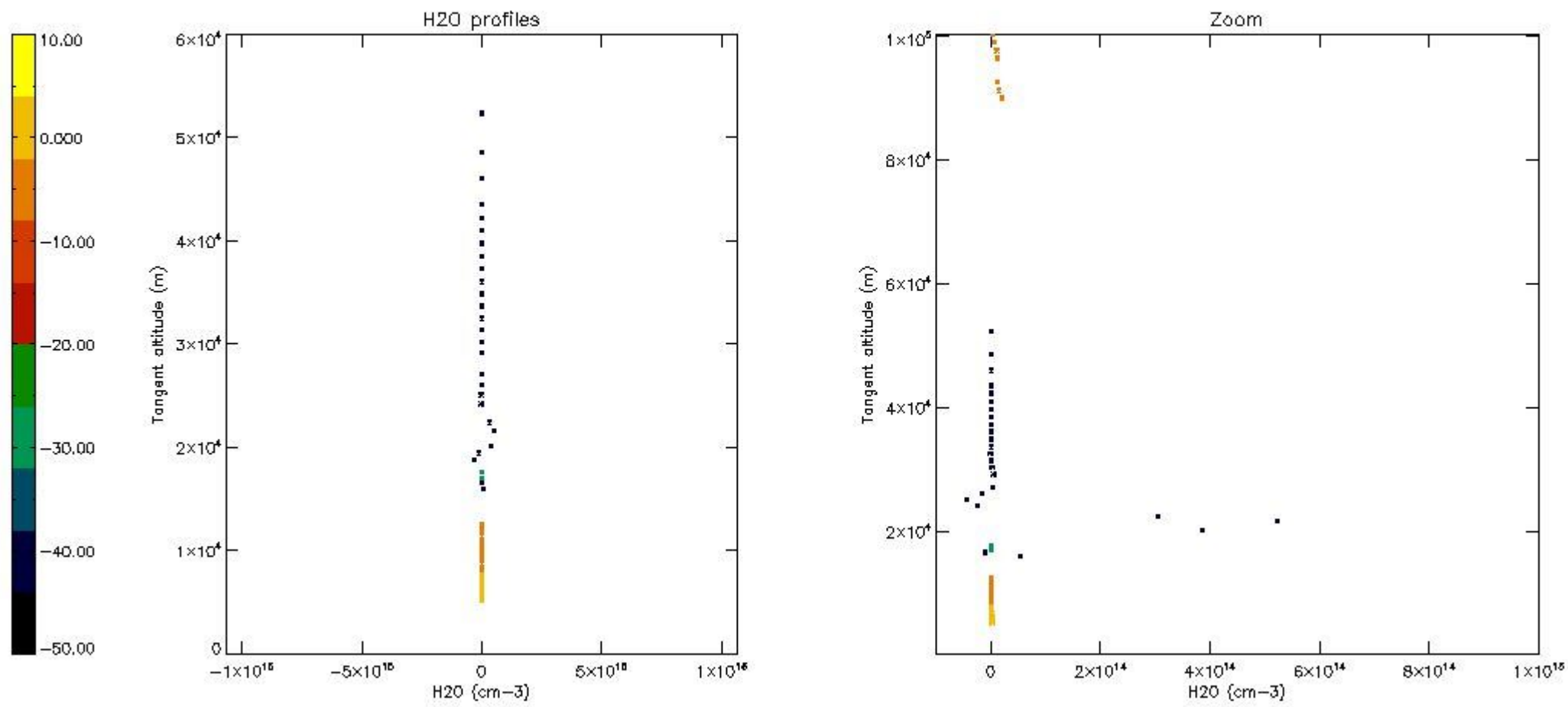
5.7 Plot NO3 profiles for all STD (dark without errors)

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-JUN-2011 00:14:15
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	13-JUN-2011 00:14:15
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	13-JUN-2011 00:14:15

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[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	24APR2013 14:42:34
Data source version	GOMOS/6.01
Start time of products	13-06-2011 (13JUN2011 00:00:00)
Stop time of products	14-06-2011 (14JUN2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	286
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

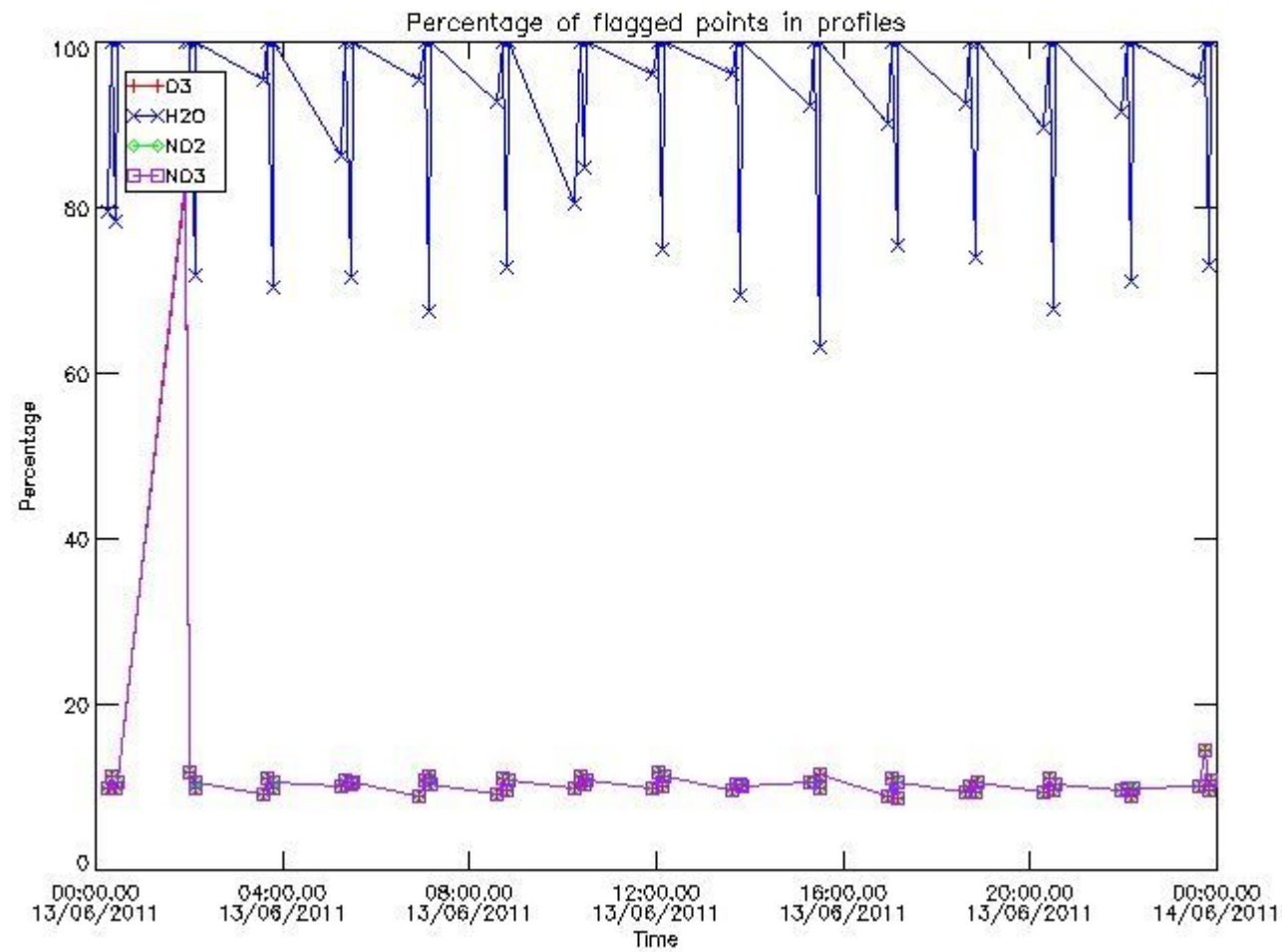
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110613_001415_000000523103_00260_48550_3586.N1	13-JUN-2011 00:14:15	Dark	51.500	52	16Bet Cet	2.0370	4500.0	103	48550	No
2	GOM_NL__2PRFIN20110613_002034_000000453103_00260_48550_3587.N1	13-JUN-2011 00:20:34	Dark	45.000	84	Alp Phe	2.3970	4500.0	90	48550	No
3	GOM_NL__2PRFIN20110613_002640_000000633103_00261_48551_3581.N1	13-JUN-2011 00:26:40	Dark	62.500	63	Bet Gru	2.1500	2800.0	125	48551	No
4	GOM_NL__2PRFIN20110613_002842_000000483103_00261_48551_3582.N1	13-JUN-2011 00:28:42	Dark	48.000	31	Alp Gru	1.7340	15200.	96	48551	No
5	GOM_NL__2PRFIN20110613_003025_000000593103_00261_48551_3583.N1	13-JUN-2011 00:30:25	Straylight	58.500	172	Gam Gru	3.0030	13100.	117	48551	No
6	GOM_NL__2PRFIN20110613_003243_000000423103_00261_48551_3584.N1	13-JUN-2011 00:32:43	Straylight	42.000	45	Alp Pav	1.9400	26000.	84	48551	No
7	GOM_NL__2PRFIN20110613_004242_000000453103_00261_48551_3585.N1	13-JUN-2011 00:42:42	Twilight	45.000	25	35Lam Sco	1.6200	28000.	90	48551	No
8	GOM_NL__2PRFIN20110613_004424_000000743103_00261_48551_3586.N1	13-JUN-2011 00:44:24	Bright	74.000	57	34Sig Sgr	2.0660	26000.	148	48551	No
9	GOM_NL__2PRFIN20110613_004922_000000403103_00261_48551_3587.N1	13-JUN-2011 00:49:22	Bright	40.000	86	35Eta Oph	2.4300	10200.	80	48551	No
10	GOM_NL__2PRFIN20110613_005605_000000473103_00261_48551_3588.N1	13-JUN-2011 00:56:05	Bright	46.500	126	60Bet Oph	2.7700	4250.0	93	48551	No
11	GOM_NL__2PRFIN20110613_005837_000000463103_00261_48551_3589.N1	13-JUN-2011 00:58:37	Bright	45.500	59	55Alp Oph	2.0800	8900.0	91	48551	No
12	GOM_NL__2PRFIN20110613_010029_000000383103_00261_48551_3590.N1	13-JUN-2011 01:00:29	Bright	38.000	127	27Bet Her	2.7810	4700.0	76	48551	No
13	GOM_NL__2PRFIN20110613_010333_000000413103_00261_48551_3591.N1	13-JUN-2011 01:03:33	Bright	40.500	133	40Zet Her	2.8070	6000.0	81	48551	No
14	GOM_NL__2PRFIN20110613_011026_000000383103_00261_48551_3592.N1	13-JUN-2011 01:10:26	Bright	38.000	130	23Bet Dra	2.7990	5800.0	76	48551	No
15	GOM_NL__2PRFIN20110613_011152_000000393103_00261_48551_3593.N1	13-JUN-2011 01:11:52	Bright	38.500	119	14Eta Dra	2.7270	4700.0	77	48551	No
16	GOM_NL__2PRFIN20110613_012055_000000483103_00261_48551_3594.N1	13-JUN-2011 01:20:55	Bright	48.000	89	5Alp Cep	2.4510	8000.0	96	48551	No
17	GOM_NL__2PRFIN20110613_012710_000000643103_00261_48551_3595.N1	13-JUN-2011 01:27:10	Bright	64.000	74	11Bet Cas	2.2680	6600.0	128	48551	No
18	GOM_NL__2PRFIN20110613_013330_000000563103_00261_48551_3596.N1	13-JUN-2011 01:33:30	Bright	56.000	73	57Gam1And	2.2600	13100.	112	48551	No
19	GOM_NL__2PRFIN20110613_013549_000000543103_00261_48551_3597.N1	13-JUN-2011 01:35:49	Twilight	54.000	53	43Bet And	2.0480	3300.0	108	48551	No
20	GOM_NL__2PRFIN20110613_013914_000000503103_00261_48551_3598.N1	13-JUN-2011 01:39:14	Twilight	50.000	50	13Alp Ari	2.0070	4250.0	100	48551	No
21	GOM_NL__2PRFIN20110613_015429_000000563103_00261_48551_3599.N1	13-JUN-2011 01:54:29	Dark	56.000	52	16Bet Cet	2.0370	4500.0	112	48551	No
22	GOM_NL__2PRFIN20110613_020049_000000433103_00261_48551_3600.N1	13-JUN-2011 02:00:49	Dark	43.000	84	Alp Phe	2.3970	4500.0	86	48551	No
23	GOM_NL__2PRFIN20110613_020655_000000523103_00262_48552_3599.N1	13-JUN-2011 02:06:55	Dark	52.000	63	Bet Gru	2.1500	2800.0	104	48552	No
24	GOM_NL__2PRFIN20110613_020857_000000483103_00262_48552_3600.N1	13-JUN-2011 02:08:57	Dark	48.000	31	Alp Gru	1.7340	15200.	96	48552	No
25	GOM_NL__2PRFIN20110613_021040_000000573103_00262_48552_3601.N1	13-JUN-2011 02:10:40	Straylight	57.000	172	Gam Gru	3.0030	13100.	114	48552	No
26	GOM_NL__2PRFIN20110613_021257_000000453103_00262_48552_3602.N1	13-JUN-2011 02:12:57	Straylight	45.000	45	Alp Pav	1.9400	26000.	90	48552	No
27	GOM_NL__2PRFIN20110613_022257_000000463103_00262_48552_3603.N1	13-JUN-2011 02:22:57	Twilight	45.500	25	35Lam Sco	1.6200	28000.	91	48552	No
28	GOM_NL__2PRFIN20110613_022439_000000683103_00262_48552_3604.N1	13-JUN-2011 02:24:39	Bright	68.000	57	34Sig Sgr	2.0660	26000.	136	48552	No
29	GOM_NL__2PRFIN20110613_022936_000000403103_00262_48552_3605.N1	13-JUN-2011 02:29:36	Bright	39.500	86	35Eta Oph	2.4300	10200.	79	48552	No
30	GOM_NL__2PRFIN20110613_023618_000000473103_00262_48552_3606.N1	13-JUN-2011 02:36:18	Bright	46.500	126	60Bet Oph	2.7700	4250.0	93	48552	No
31	GOM_NL__2PRFIN20110613_023851_000000483103_00262_48552_3607.N1	13-JUN-2011 02:38:51	Bright	47.500	59	55Alp Oph	2.0800	8900.0	95	48552	No
32	GOM_NL__2PRFIN20110613_024043_000000383103_00262_48552_3608.N1	13-JUN-2011 02:40:43	Bright	38.000	127	27Bet Her	2.7810	4700.0	76	48552	No
33	GOM_NL__2PRFIN20110613_024347_000000403103_00262_48552_3609.N1	13-JUN-2011 02:43:47	Bright	40.000	133	40Zet Her	2.8070	6000.0	80	48552	No
34	GOM_NL__2PRFIN20110613_025040_000000413103_00262_48552_3610.N1	13-JUN-2011 02:50:40	Bright	41.000	130	23Bet Dra	2.7990	5800.0	82	48552	No
35	GOM_NL__2PRFIN20110613_025206_000000363103_00262_48552_3611.N1	13-JUN-2011 02:52:06	Bright	35.500	119	14Eta Dra	2.7270	4700.0	71	48552	No
36	GOM_NL__2PRFIN20110613_030109_000000453103_00262_48552_3612.N1	13-JUN-2011 03:01:09	Bright	44.500	89	5Alp Cep	2.4510	8000.0	89	48552	No
37	GOM_NL__2PRFIN20110613_030723_000000423103_00262_48552_3613.N1	13-JUN-2011 03:07:23	Bright	41.500	74	11Bet Cas	2.2680	6600.0	83	48552	No
38	GOM_NL__2PRFIN20110613_031344_000000393103_00262_48552_3614.N1	13-JUN-2011 03:13:44	Bright	39.000	73	57Gam1And	2.2600	13100.	78	48552	No
39	GOM_NL__2PRFIN20110613_031603_000000543103_00262_48552_3615.N1	13-JUN-2011 03:16:03	Twilight	53.500	53	43Bet And	2.0480	3300.0	107	48552	No
40	GOM_NL__2PRFIN20110613_031928_000000533103_00262_48552_3616.N1	13-JUN-2011 03:19:28	Twilight	52.500	50	13Alp Ari	2.0070	4250.0	105	48552	No
41	GOM_NL__2PRFIN20110613_033445_000000553103_00262_48552_3617.N1	13-JUN-2011 03:34:45	Dark	55.000	52	16Bet Cet	2.0370	4500.0	110	48552	No
42	GOM_NL__2PRFIN20110613_034104_000000513103_00262_48552_3618.N1	13-JUN-2011 03:41:04	Dark	50.500	84	Alp Phe	2.3970	4500.0	101	48552	No

279	GOM_NL__2PRFIN20110613_231852_000000523103_00274_48564_3976.N1	13-JUN-2011 23:18:52	Twilight	51.500	53	43Bet And	2.0480	3300.0	103	48564	No
280	GOM_NL__2PRFIN20110613_232219_000000473103_00274_48564_3977.N1	13-JUN-2011 23:22:19	Twilight	46.500	50	13Alp Ari	2.0070	4250.0	93	48564	No
281	GOM_NL__2PRFIN20110613_233744_000000563103_00274_48564_3978.N1	13-JUN-2011 23:37:44	Dark	55.500	52	16Bet Cet	2.0370	4500.0	111	48564	No
282	GOM_NL__2PRFIN20110613_234401_000000433103_00274_48564_3979.N1	13-JUN-2011 23:44:01	Dark	42.500	84	Alp Phe	2.3970	4500.0	85	48564	No
283	GOM_NL__2PRFIN20110613_235009_000000583103_00275_48565_3974.N1	13-JUN-2011 23:50:09	Dark	58.000	63	Bet Gru	2.1500	2800.0	116	48565	No
284	GOM_NL__2PRFIN20110613_235211_000000473103_00275_48565_3975.N1	13-JUN-2011 23:52:11	Dark	47.000	31	Alp Gru	1.7340	15200.	94	48565	No
285	GOM_NL__2PRFIN20110613_235359_000000583103_00275_48565_3976.N1	13-JUN-2011 23:53:59	Straylight	57.500	172	Gam Gru	3.0030	13100.	115	48565	No
286	GOM_NL__2PRFIN20110613_235607_000000423103_00275_48565_3977.N1	13-JUN-2011 23:56:07	Straylight	42.000	45	Alp Pav	1.9400	26000.	84	48565	No

3. Quality information per product

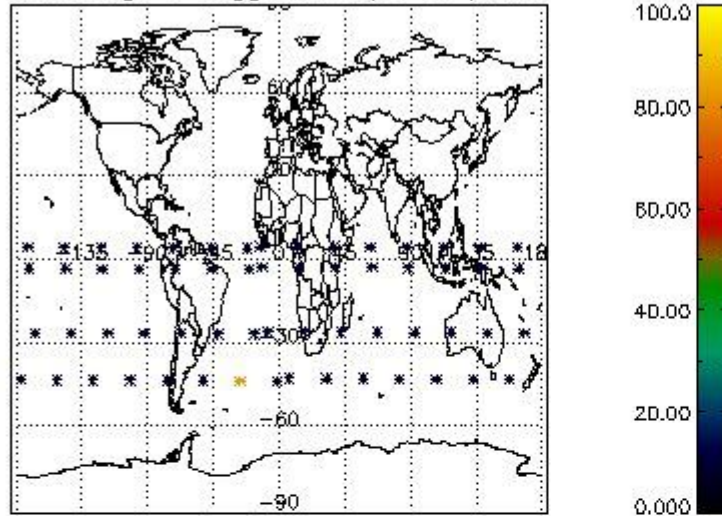
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

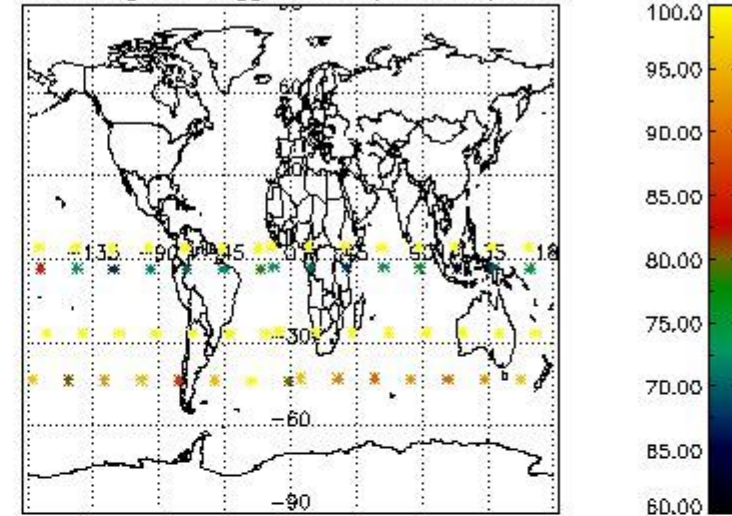


3.2 Plot quality information per product (world map)

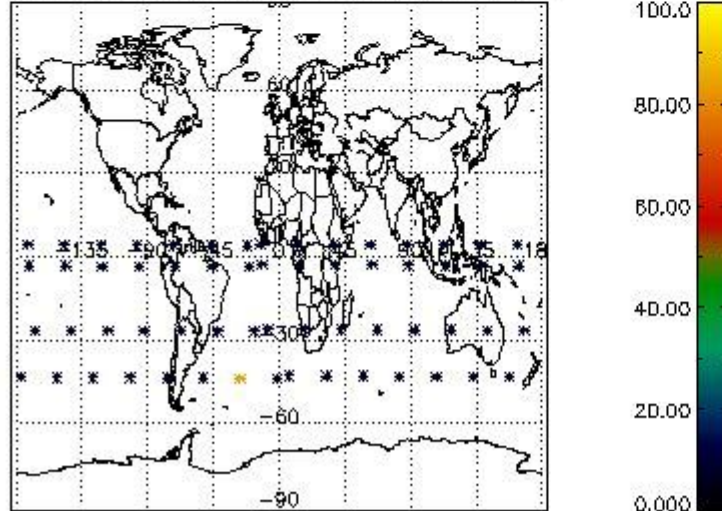
Percentage of flagged data per O3 profile



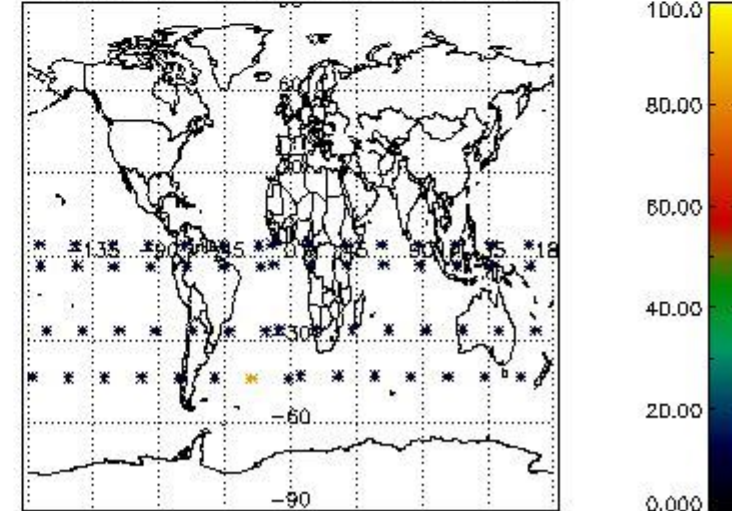
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

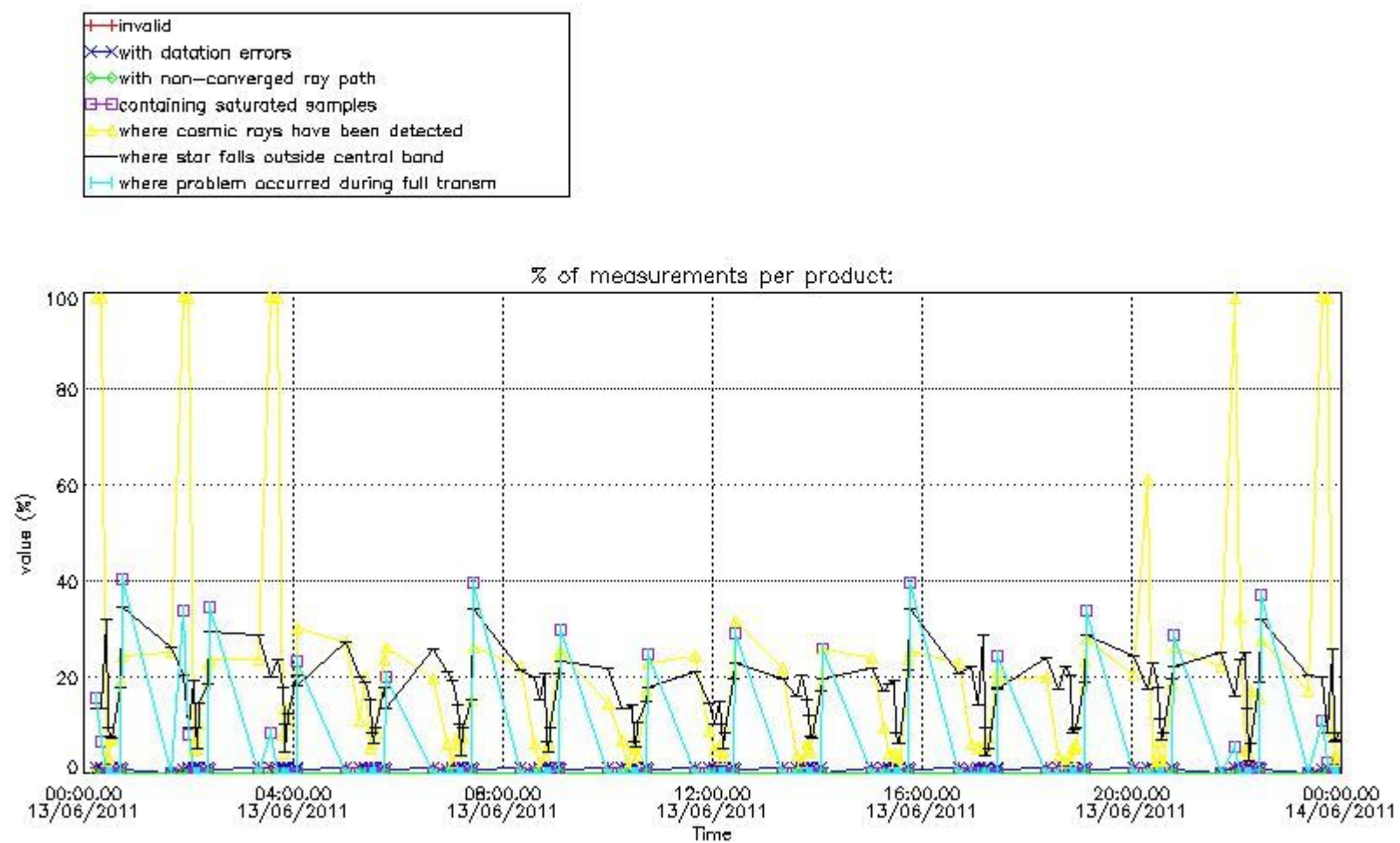


4. Level 1 quality information per product

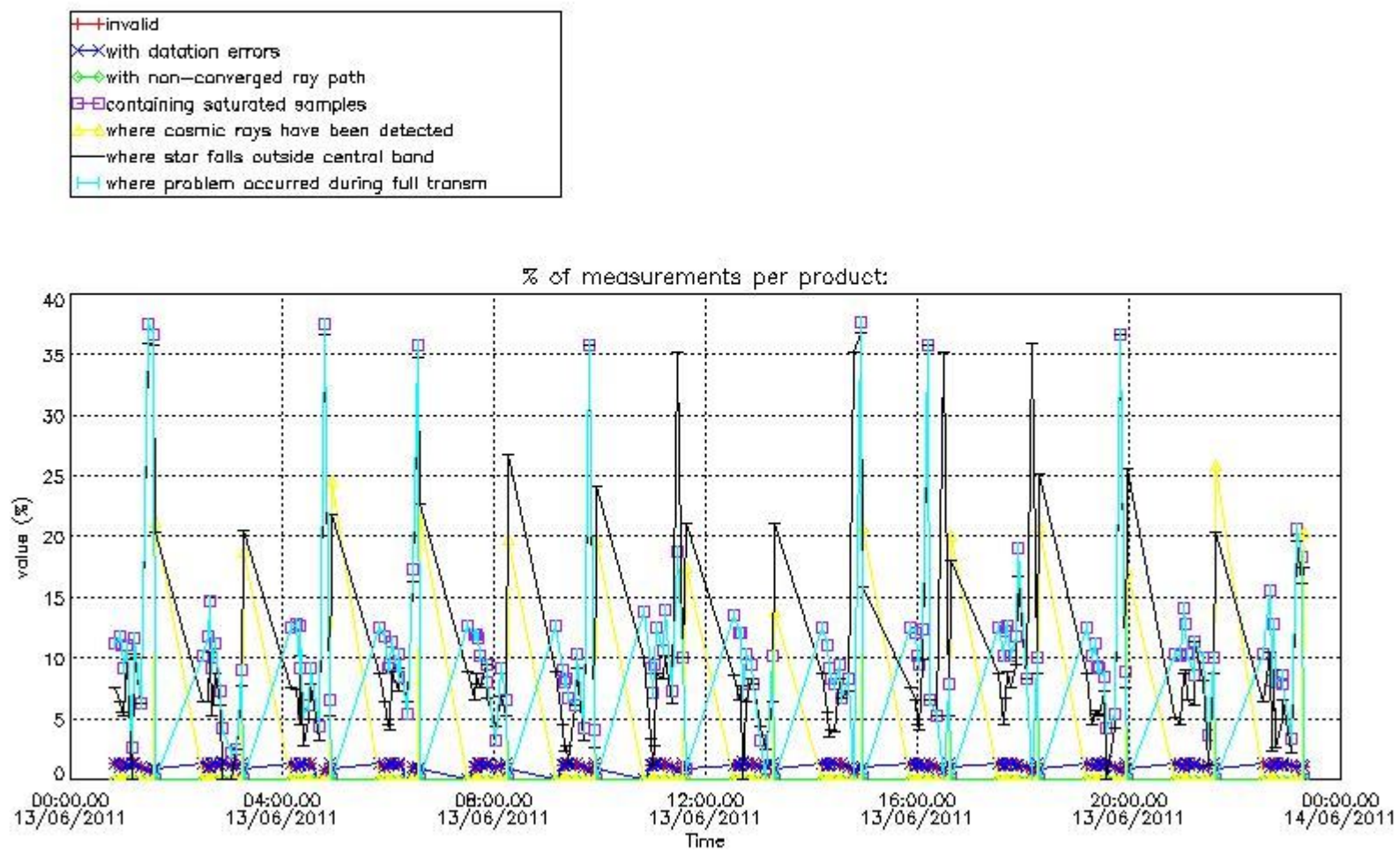
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

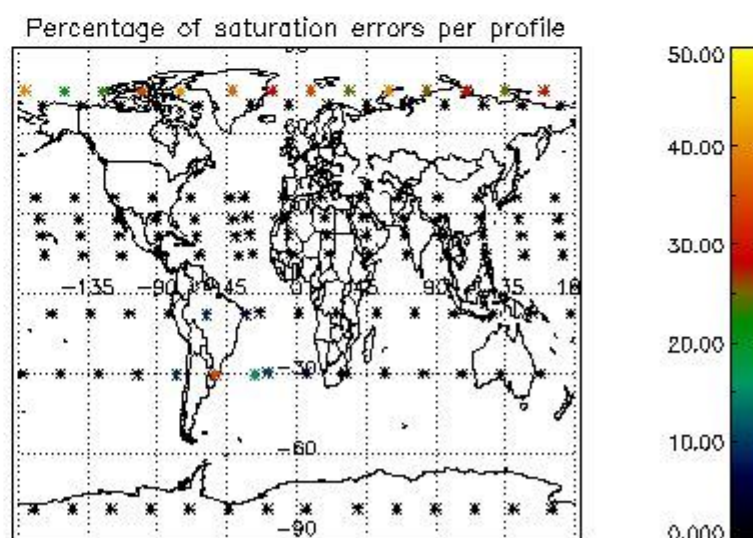
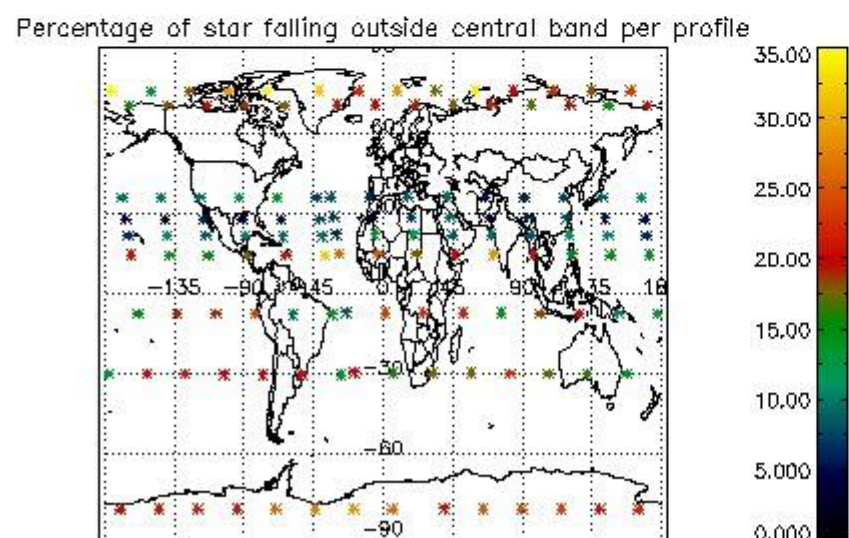
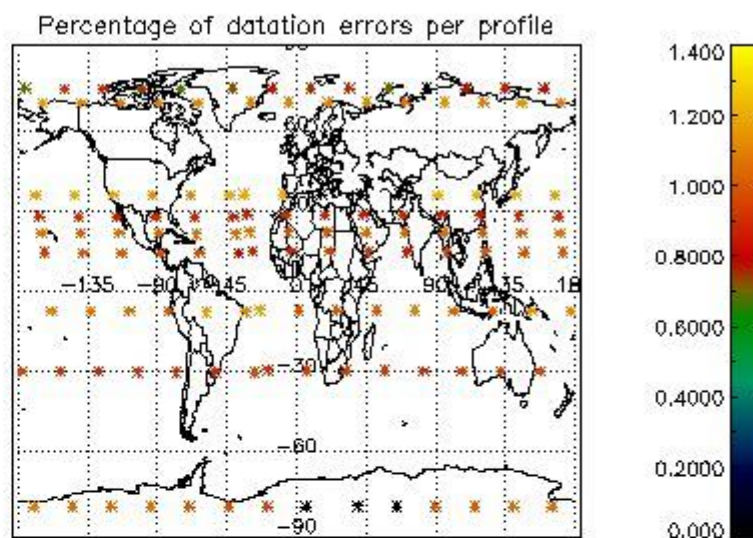
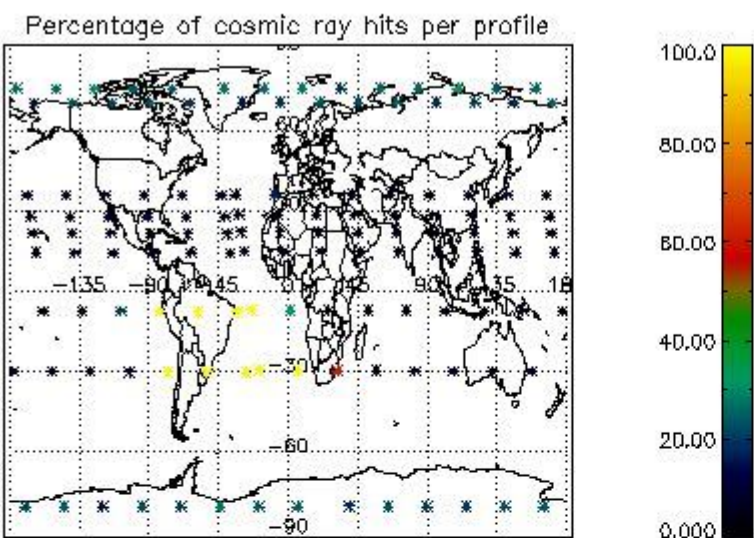


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

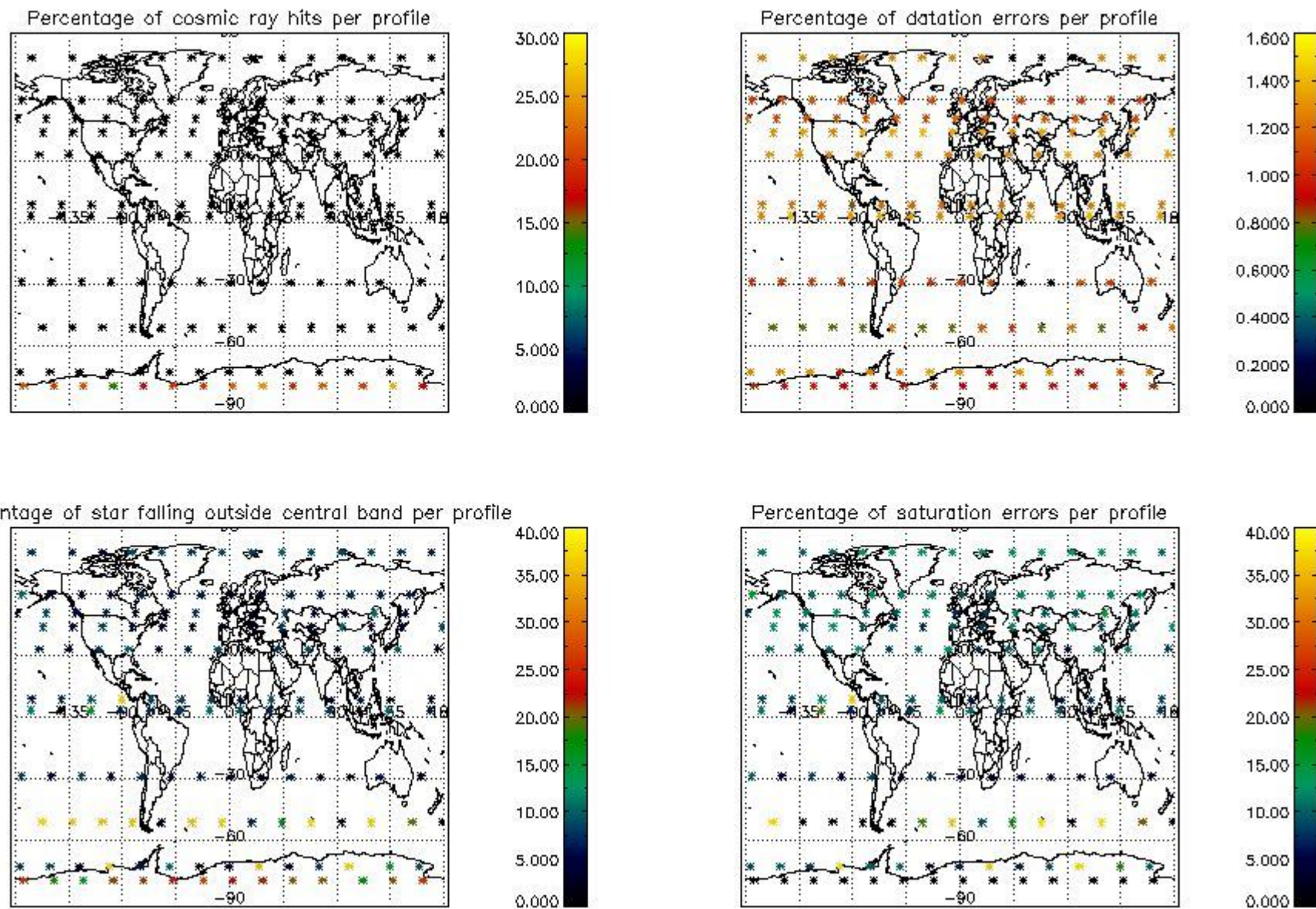


4.2 Plot quality information per product coming from level 1b processing (world map)

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

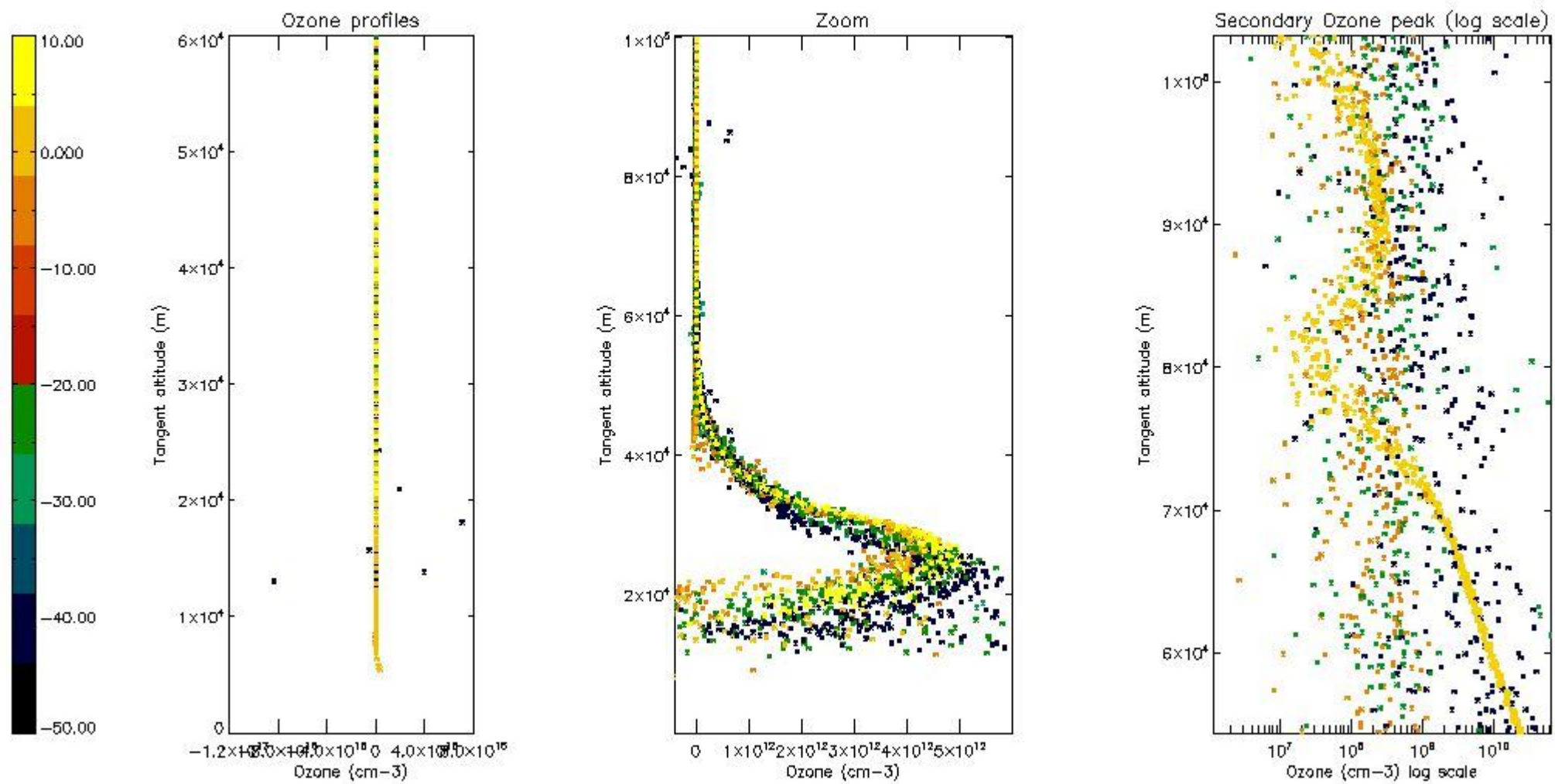
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	23
STD < 20	8

STD < 10	5
STD < 5	3

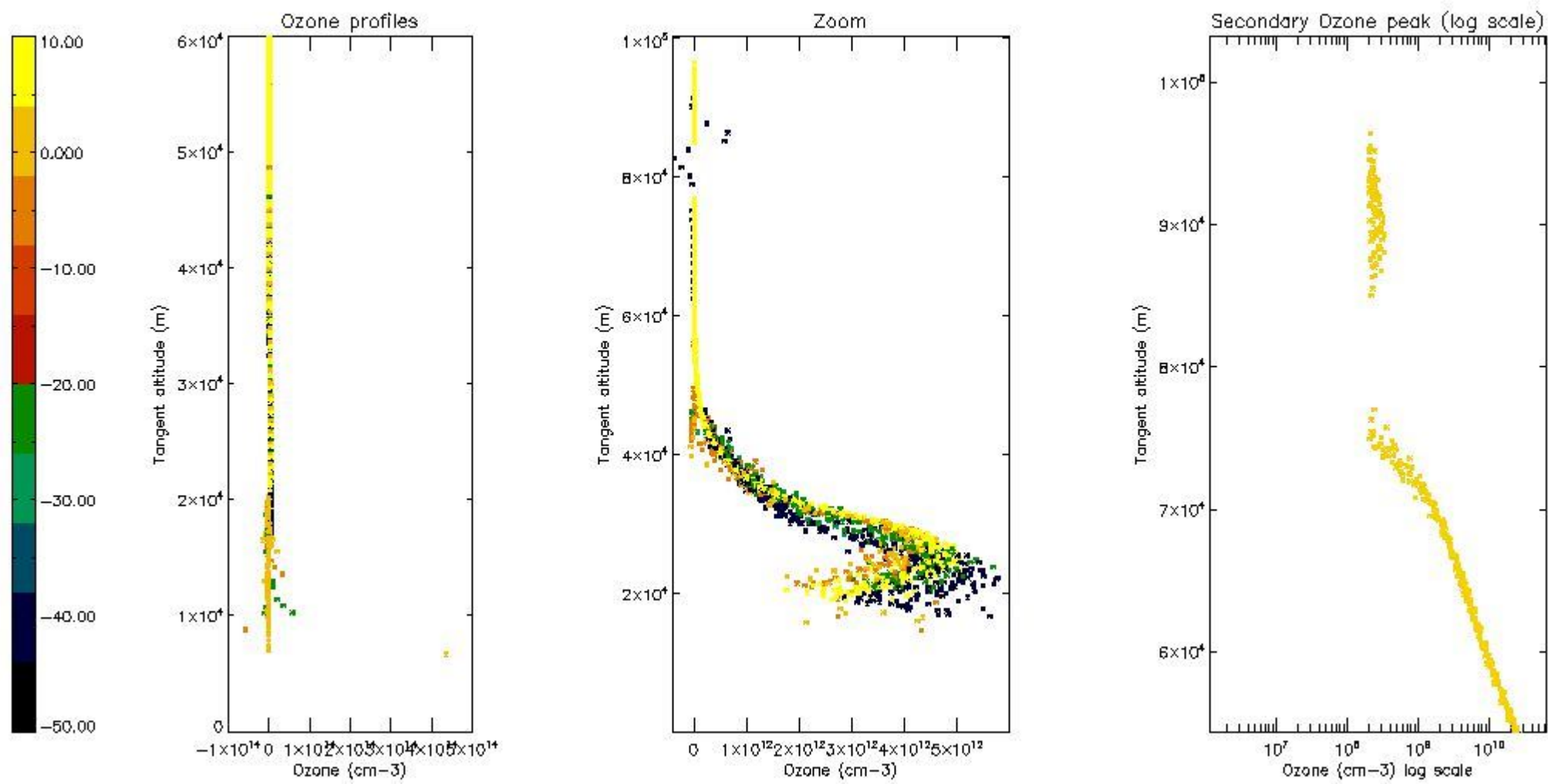
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



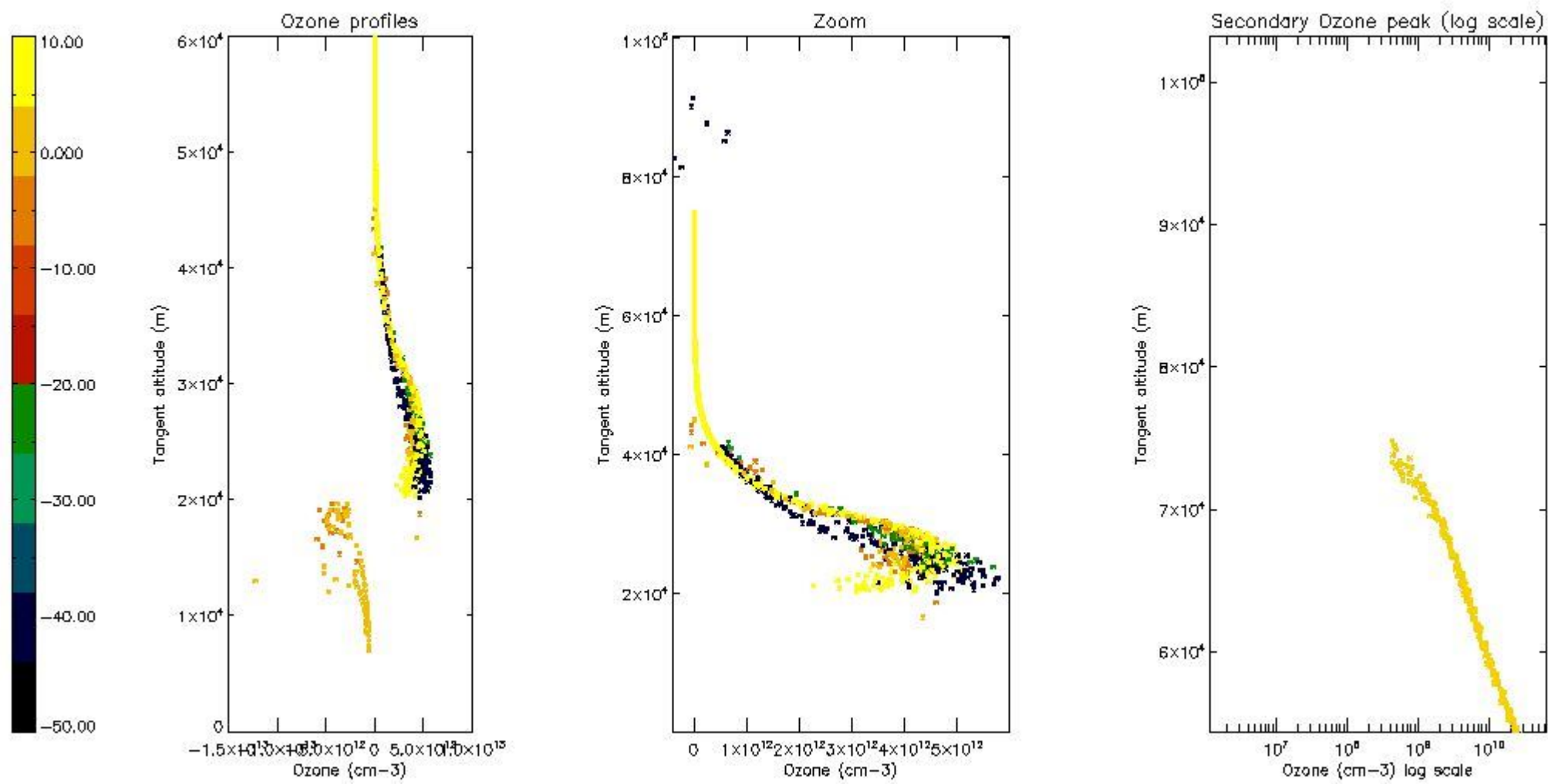
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



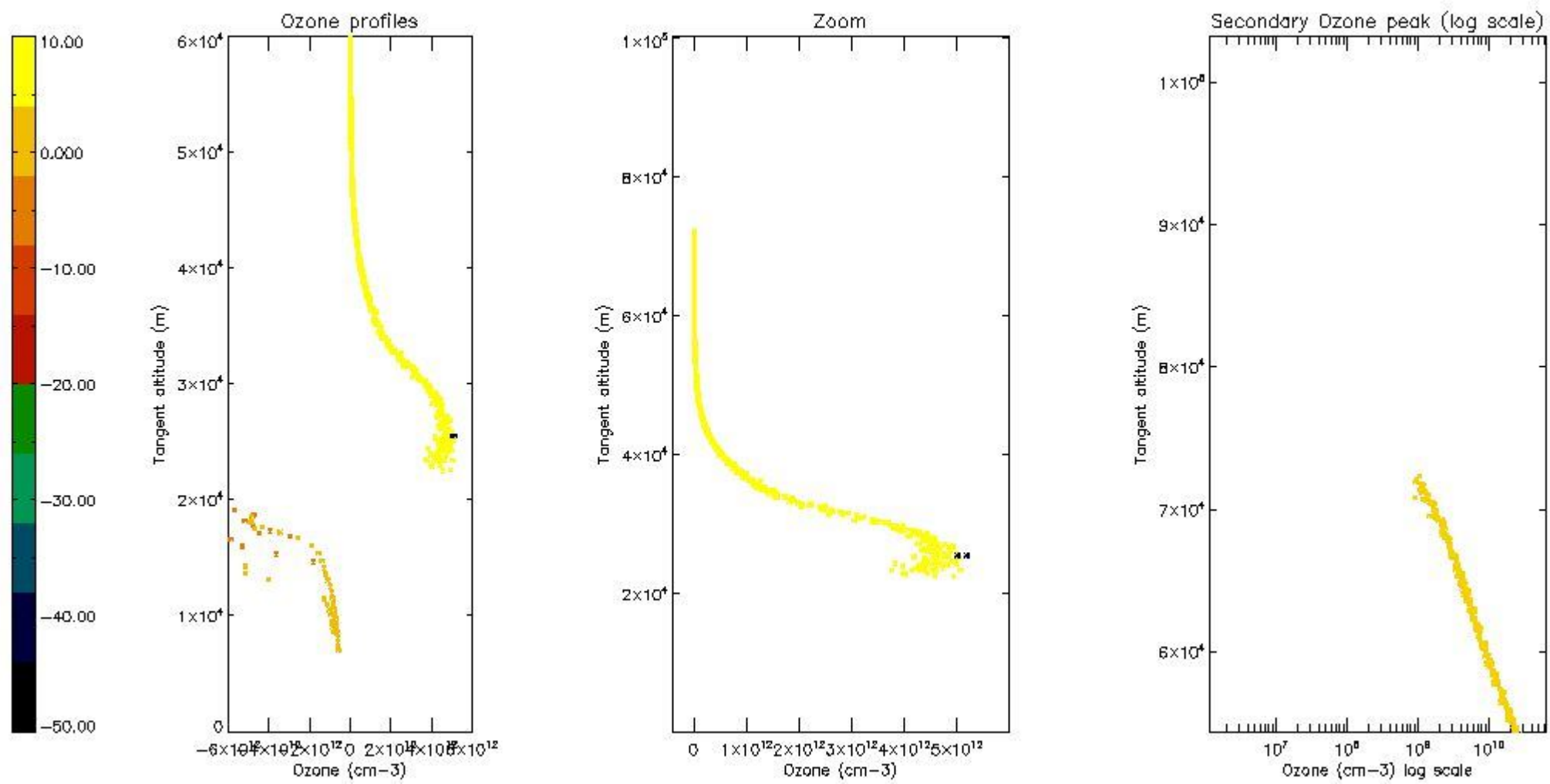
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



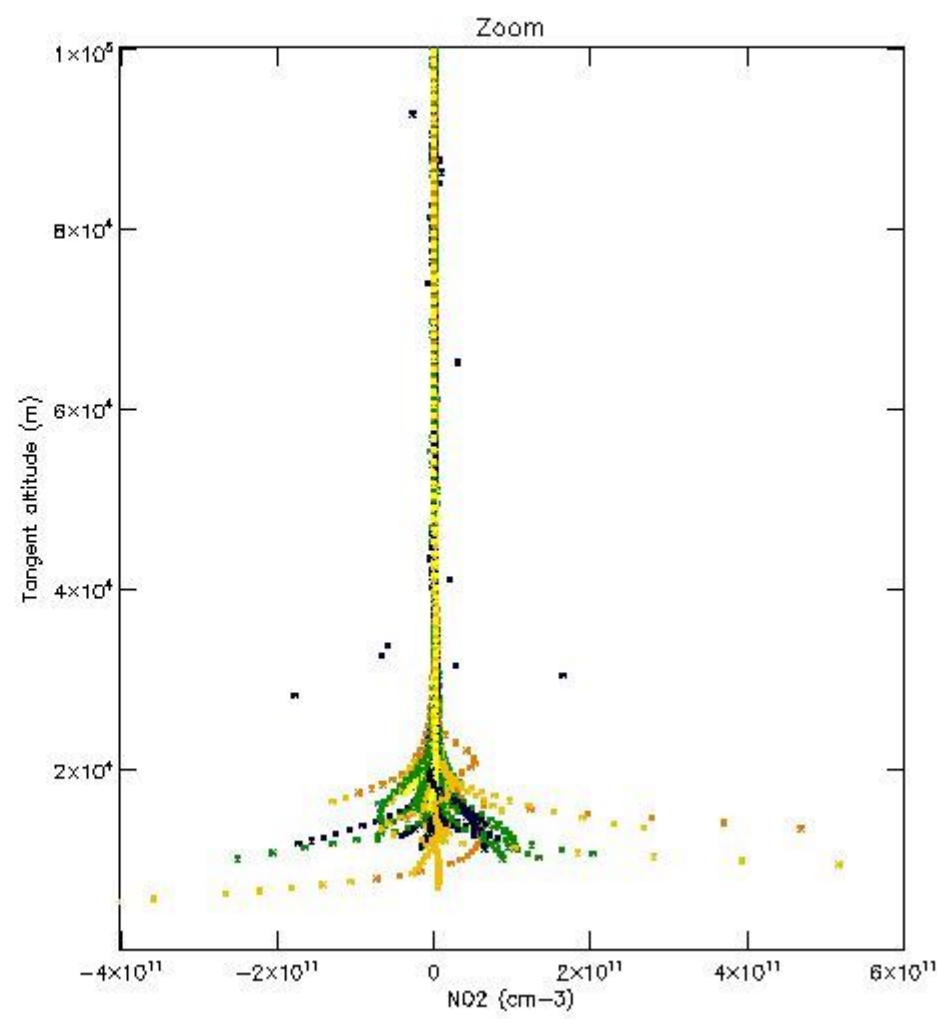
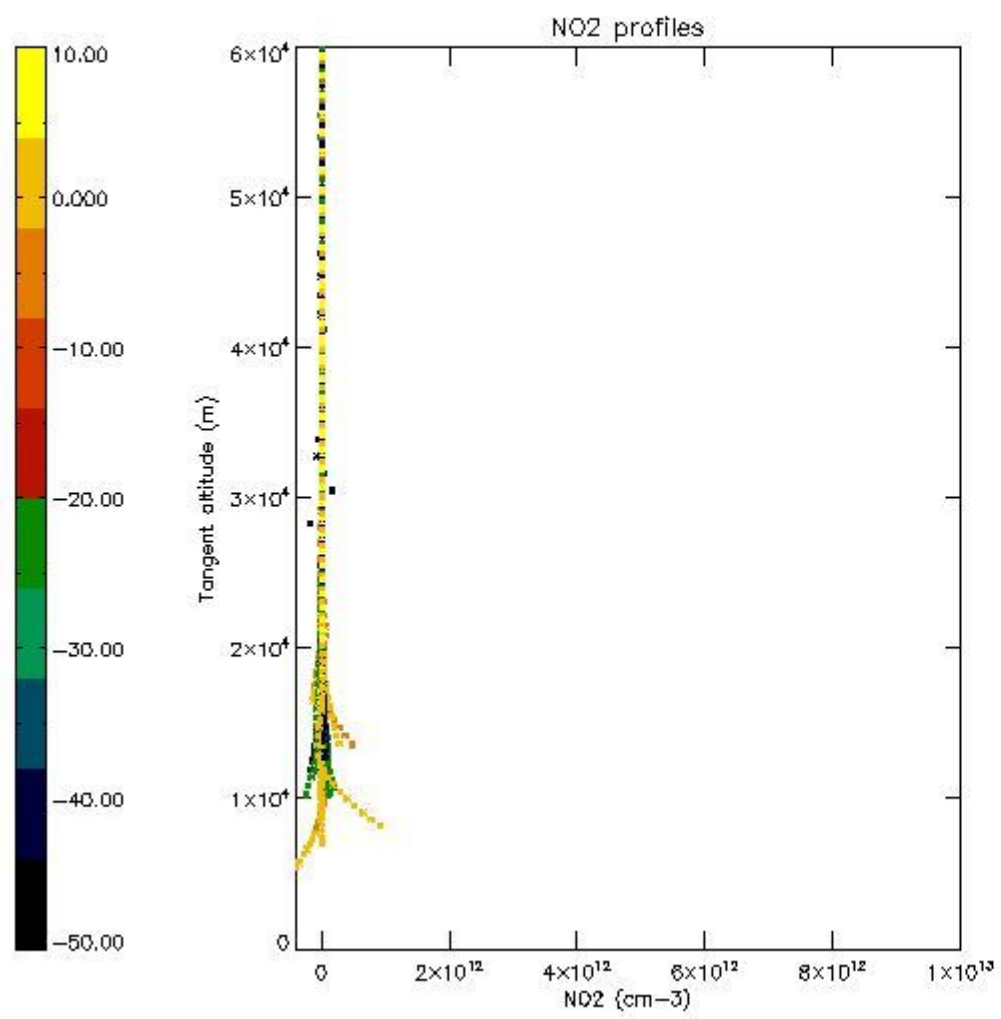
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



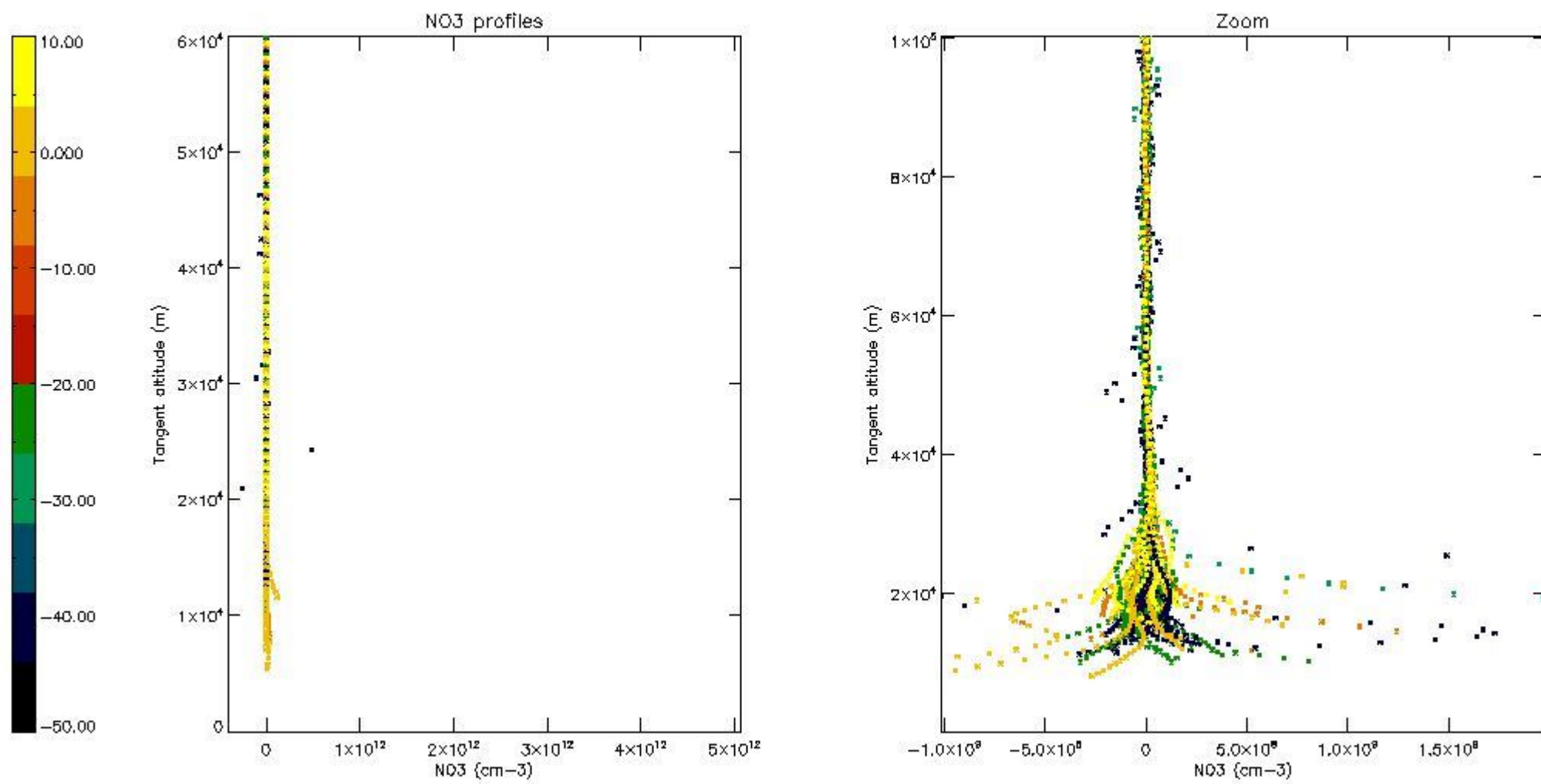
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



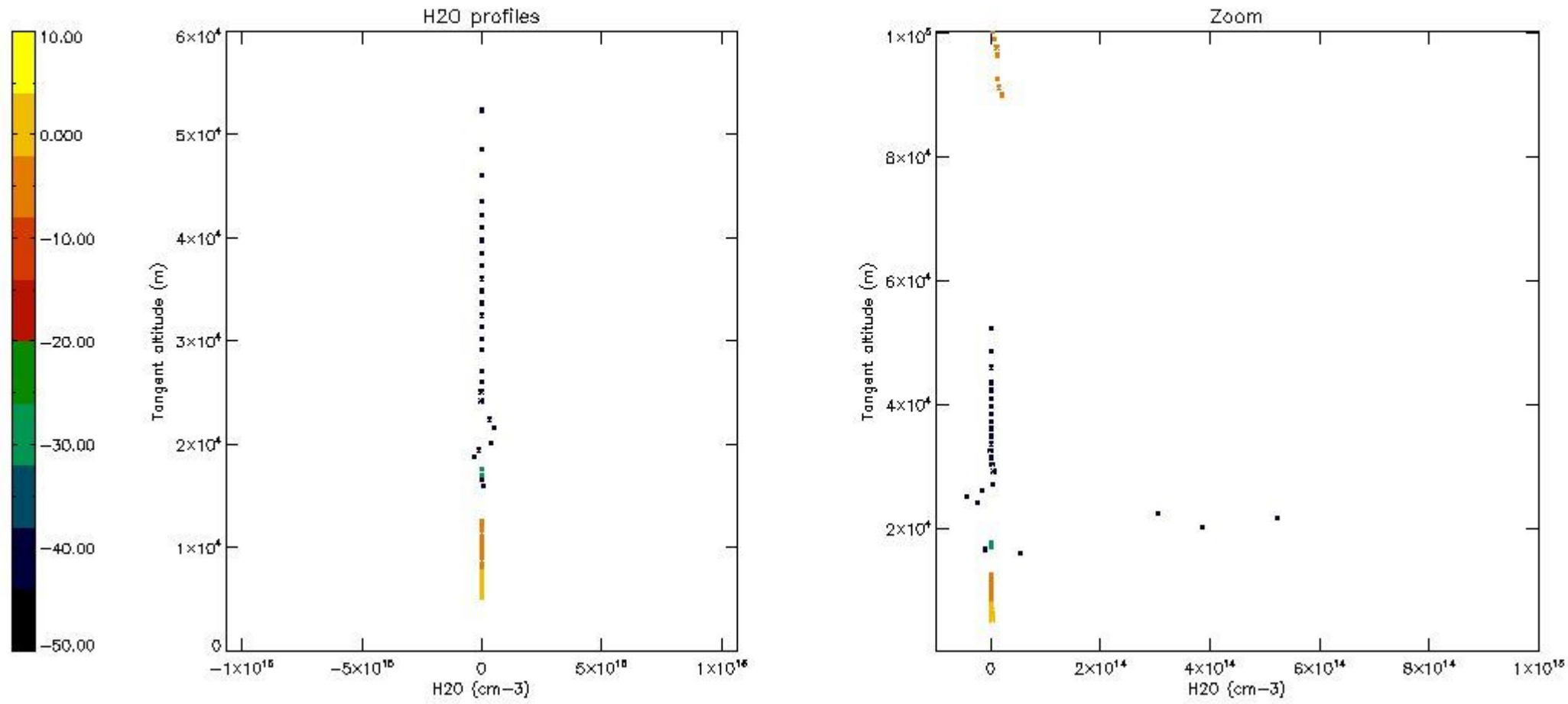
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

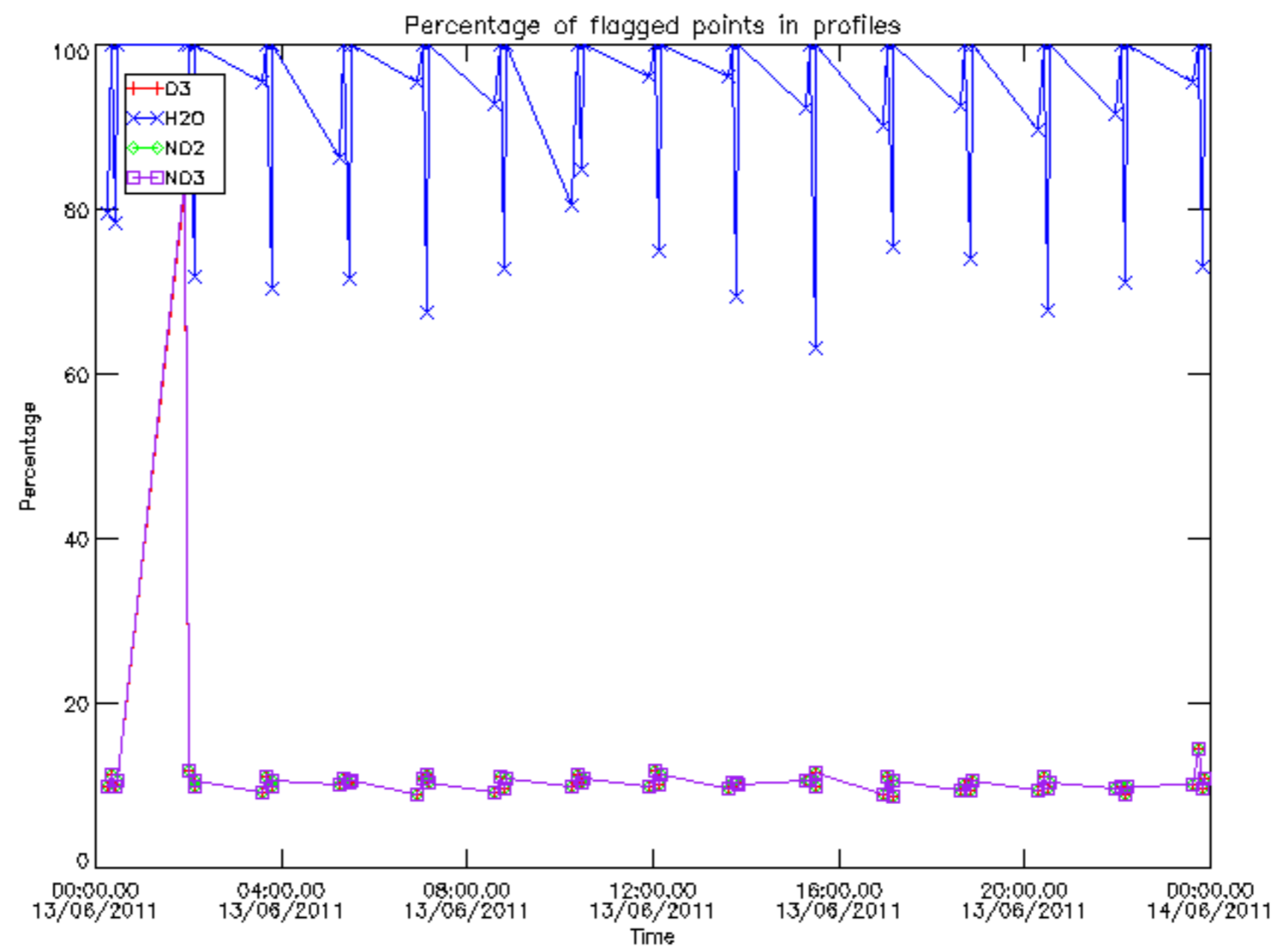
The colorbar represents the latitude.



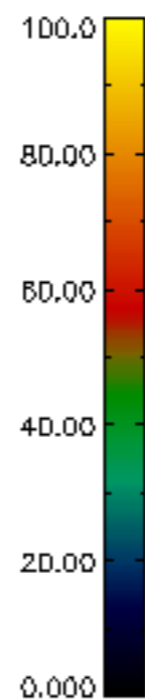
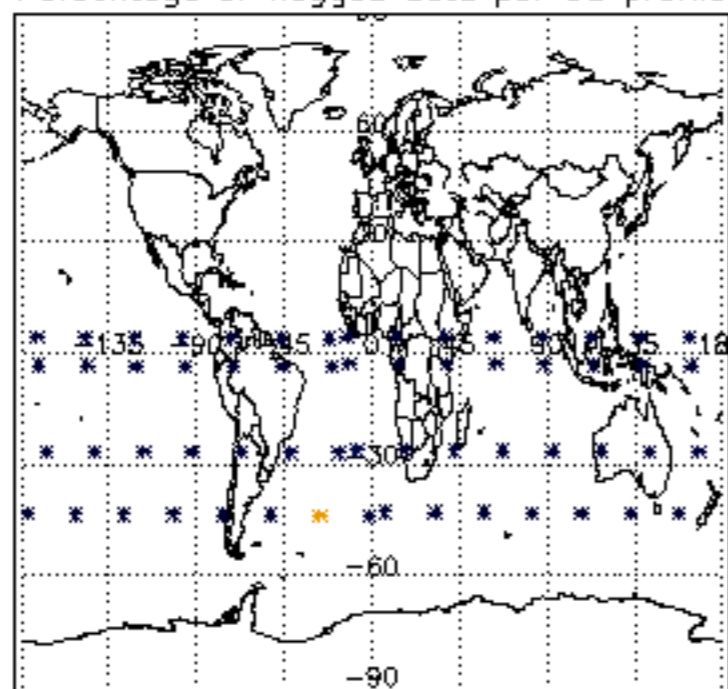
6. Auxiliary Data Files used for the production reported in section 2

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.

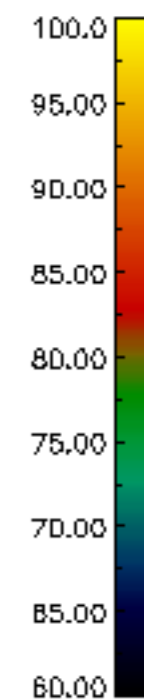
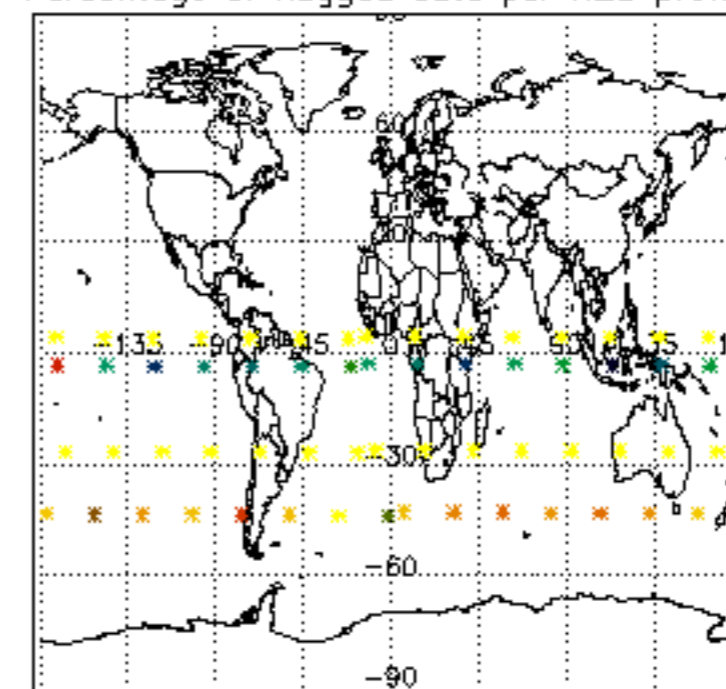
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	13-JUN-2011 00:14:15
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	13-JUN-2011 00:14:15
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	13-JUN-2011 00:14:15



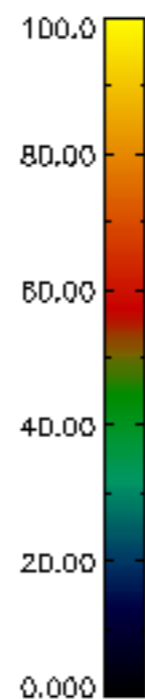
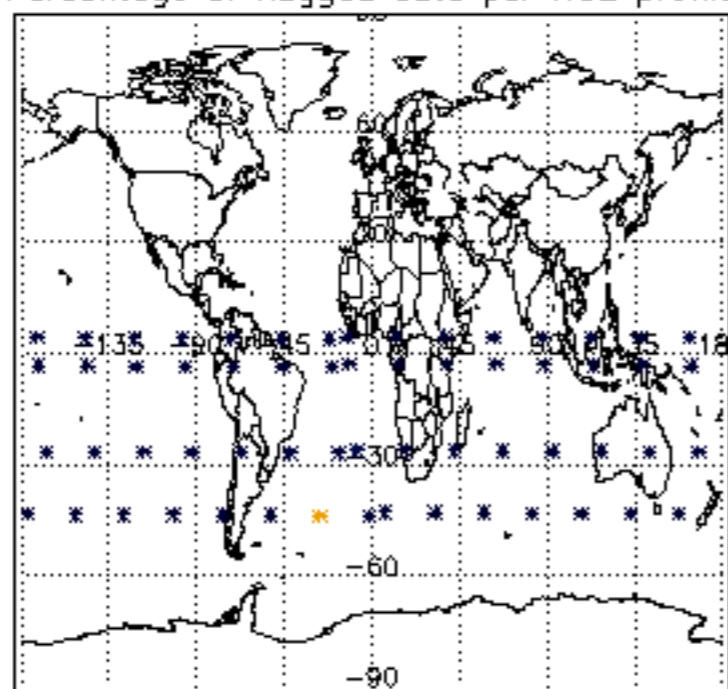
Percentage of flagged data per D3 profile



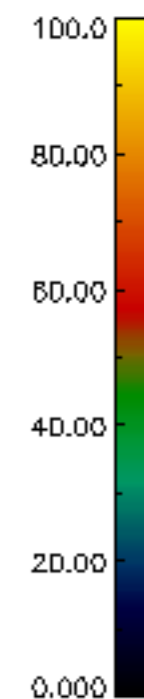
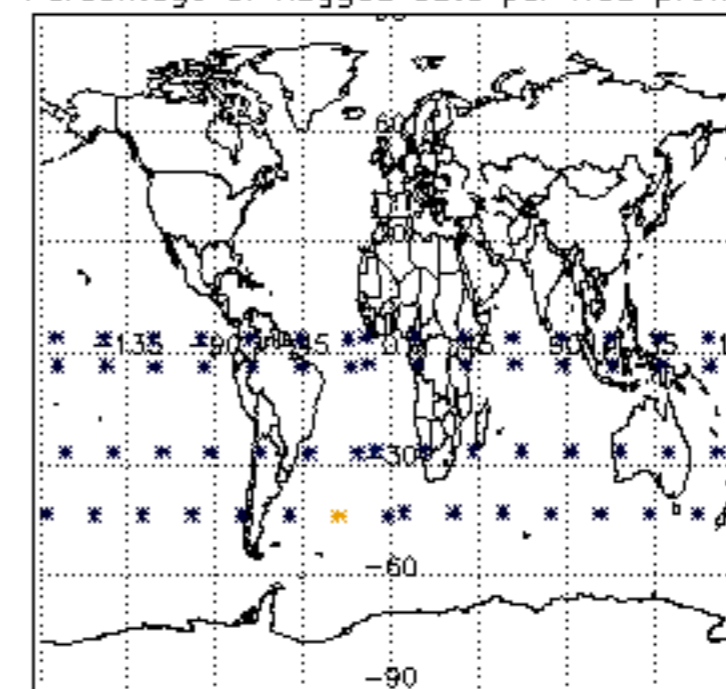
Percentage of flagged data per H2O profile

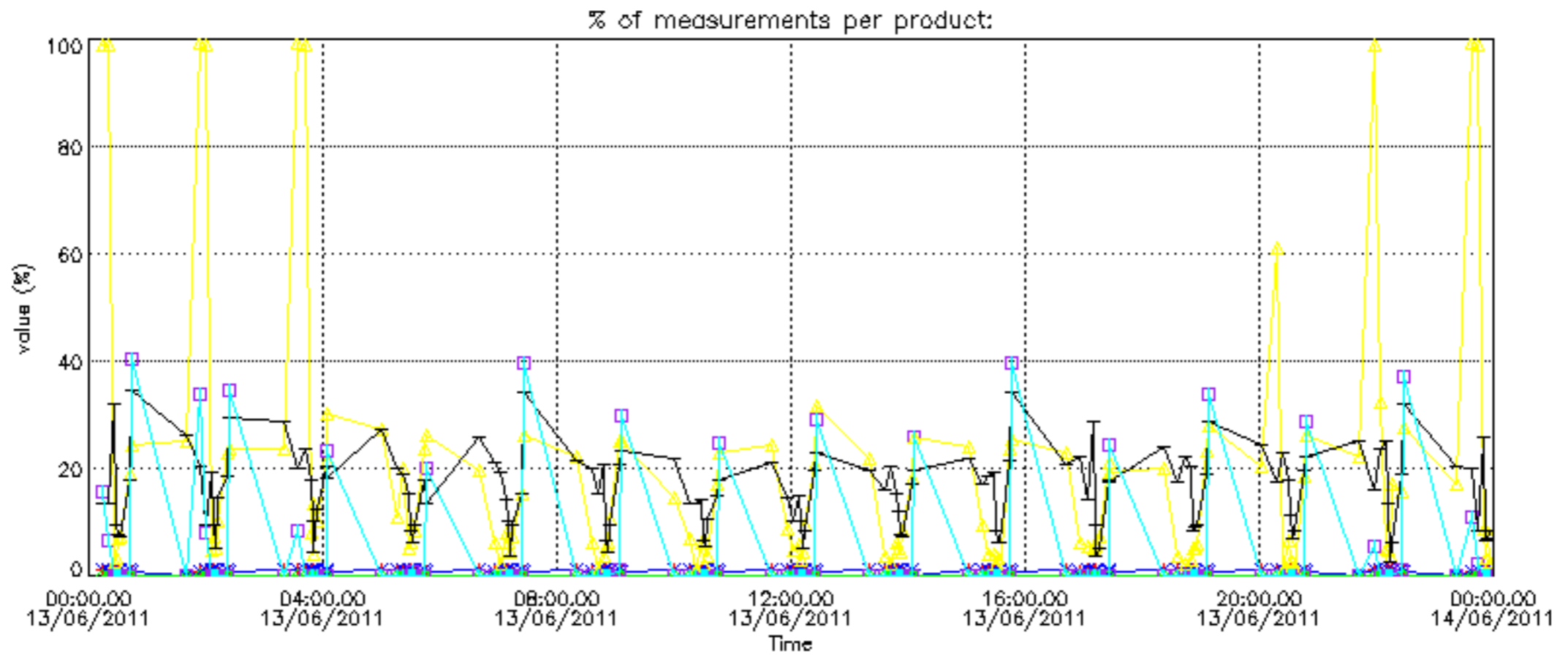


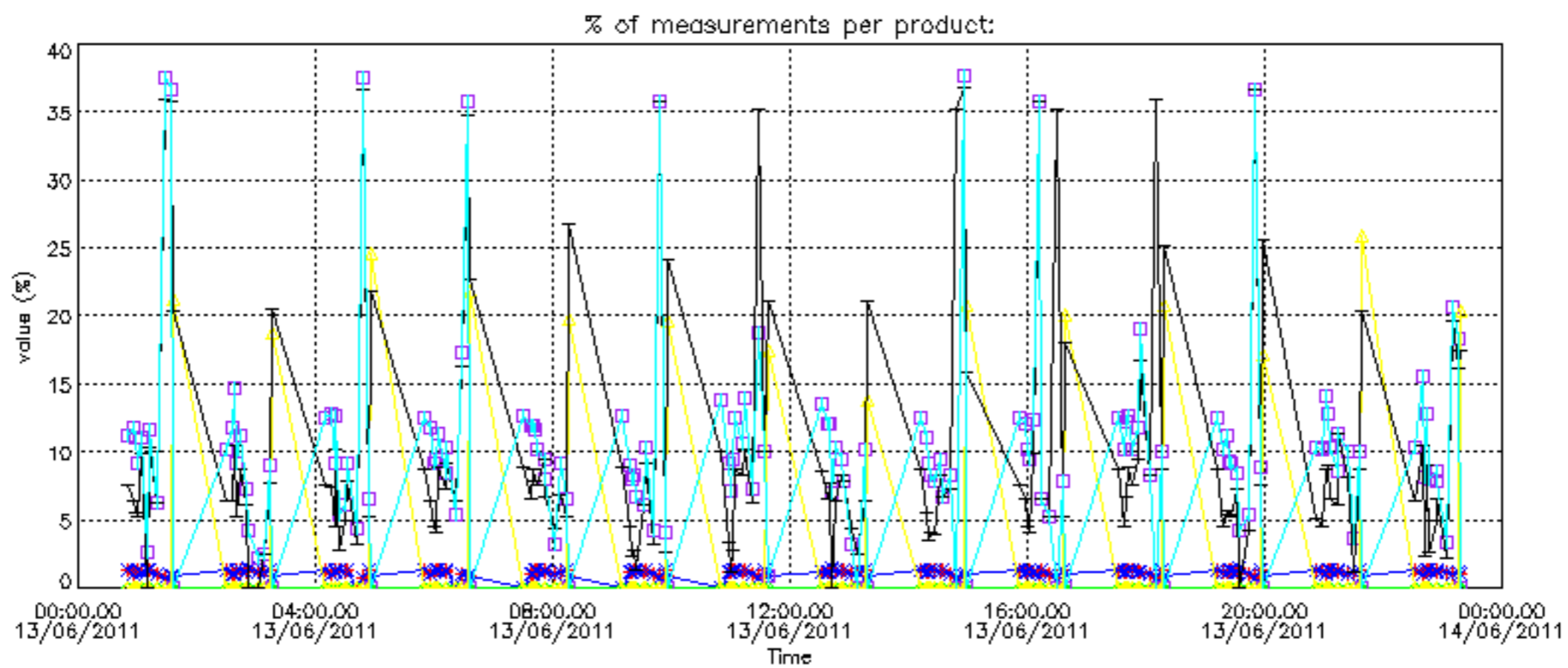
Percentage of flagged data per NO2 profile



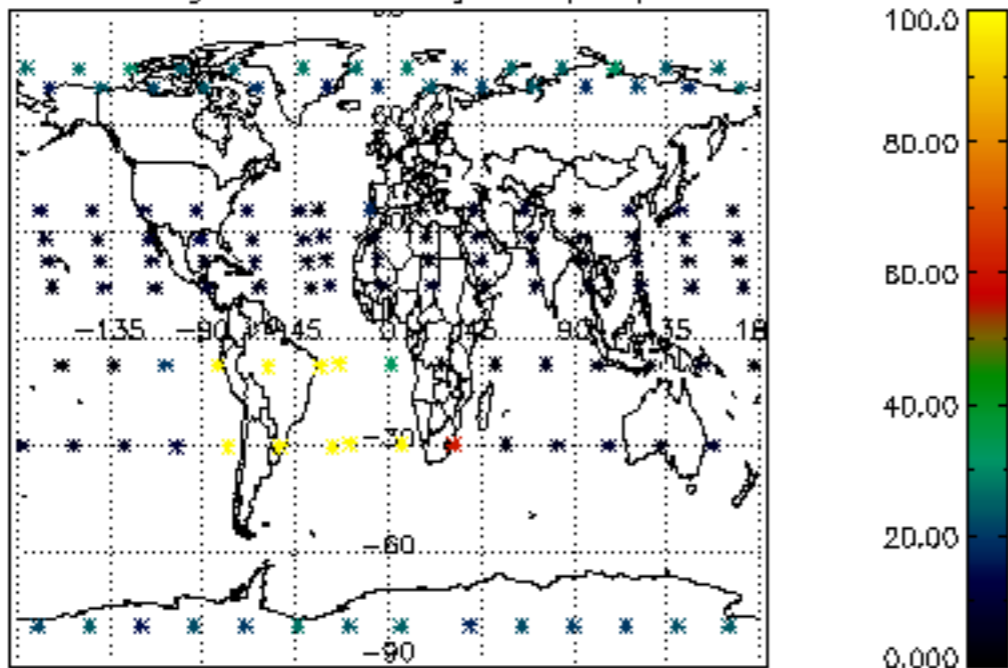
Percentage of flagged data per NO3 profile



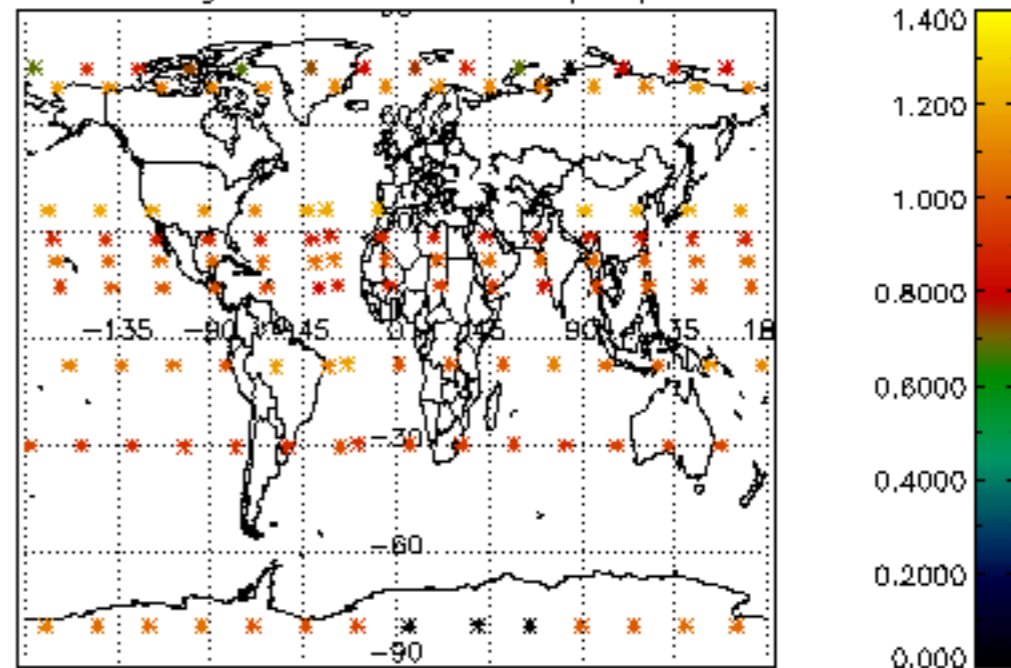




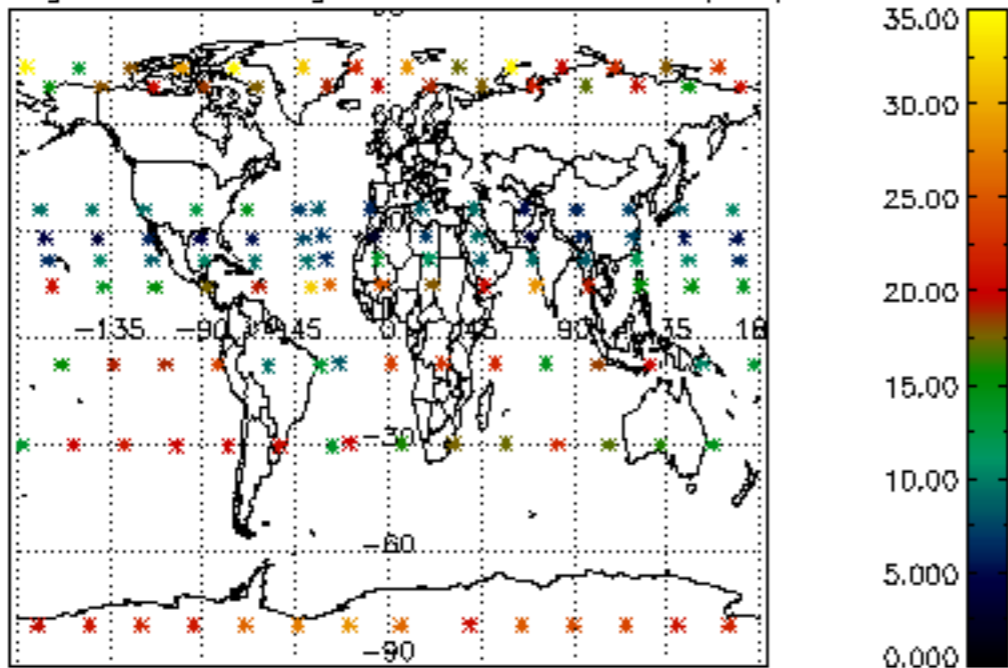
Percentage of cosmic ray hits per profile



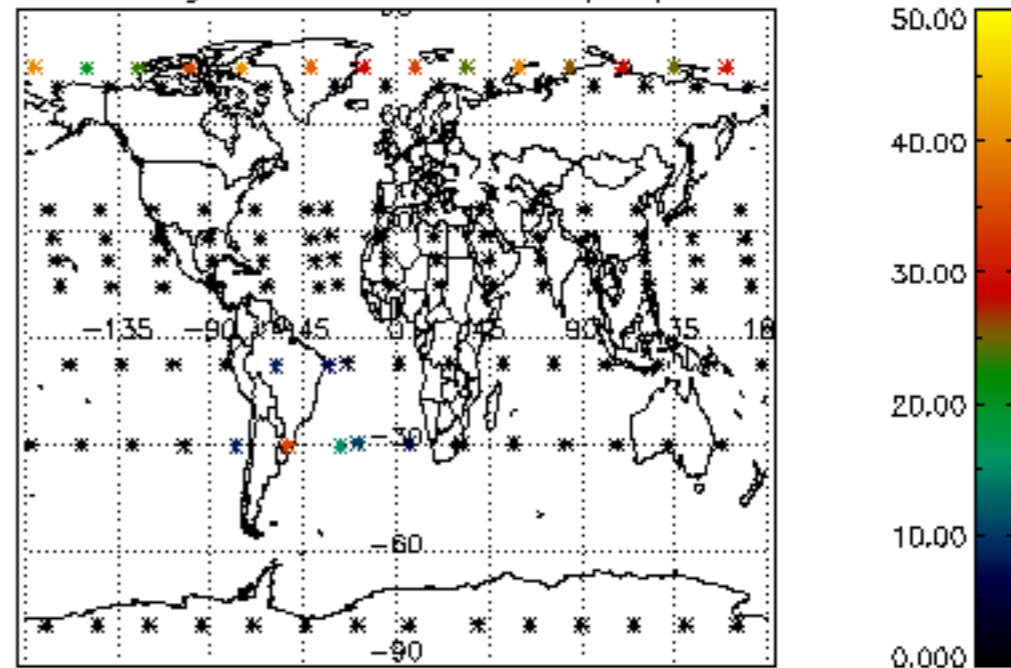
Percentage of datation errors per profile



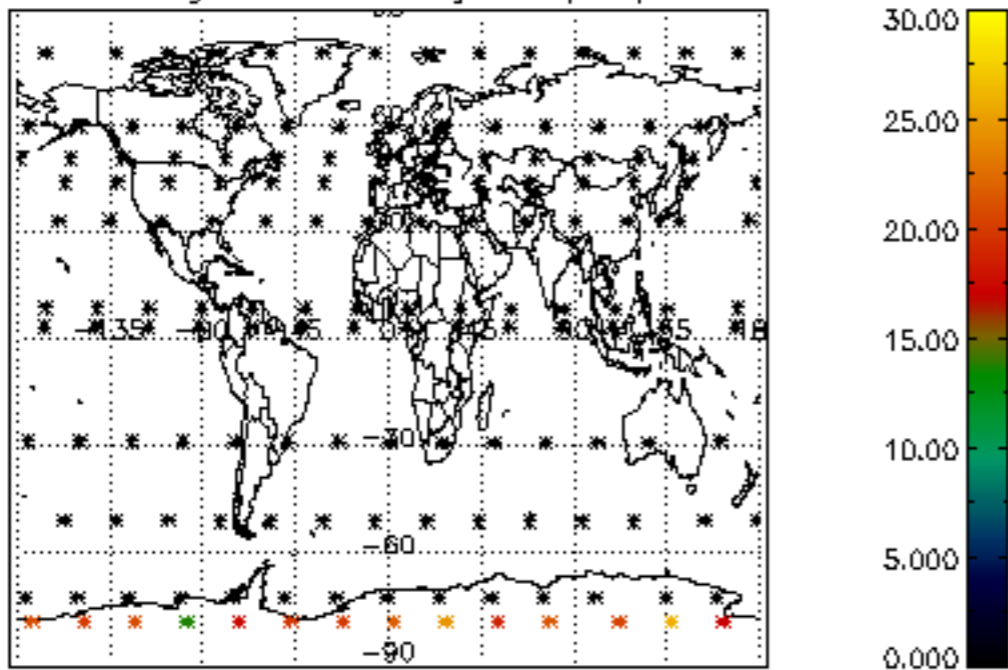
Percentage of star falling outside central band per profile



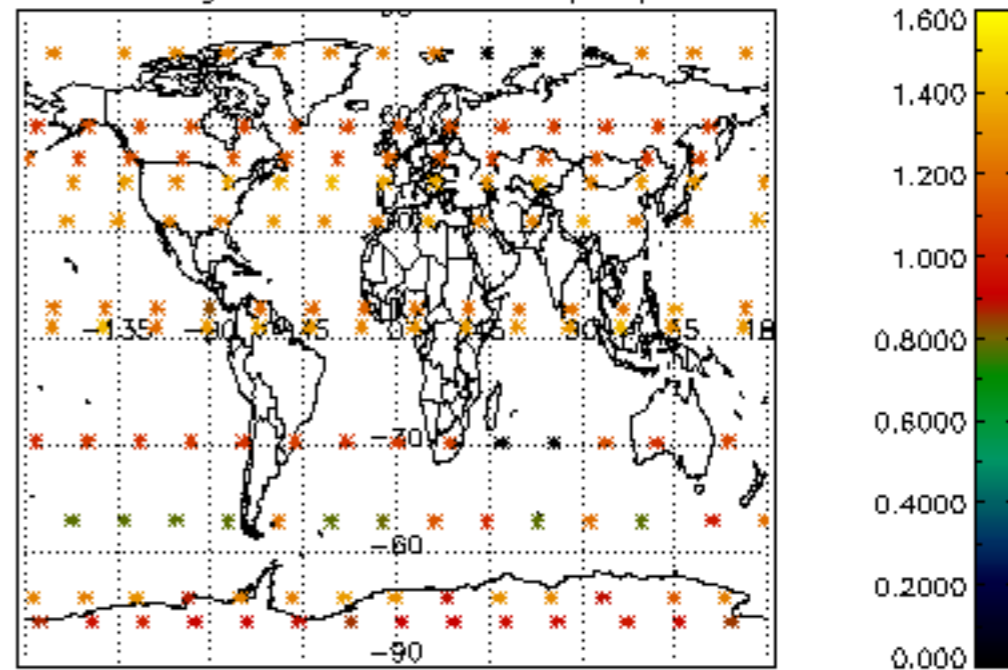
Percentage of saturation errors per profile



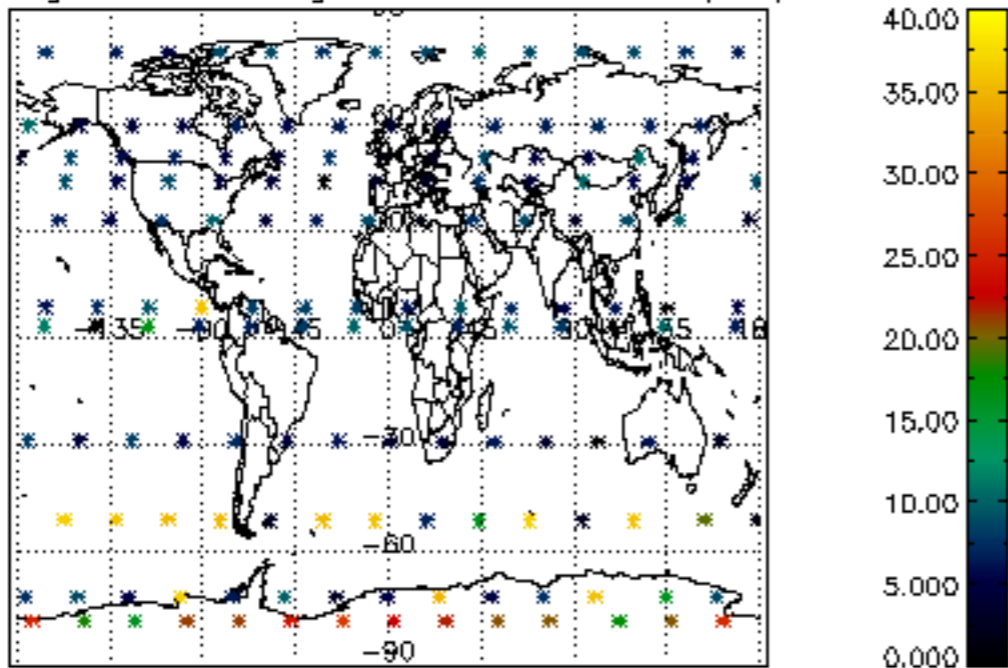
Percentage of cosmic ray hits per profile



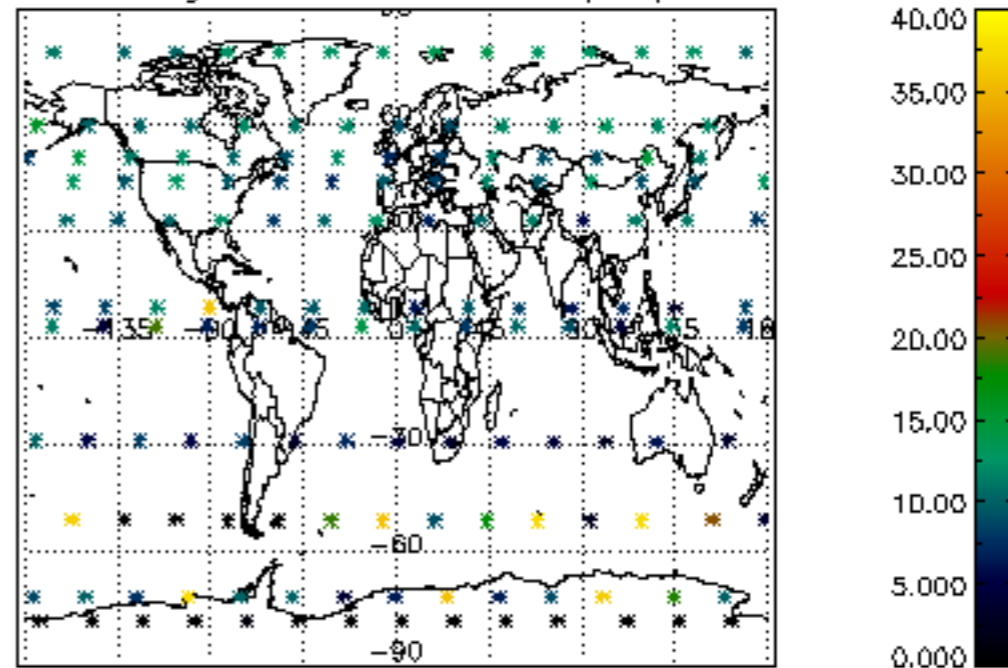
Percentage of datation errors per profile

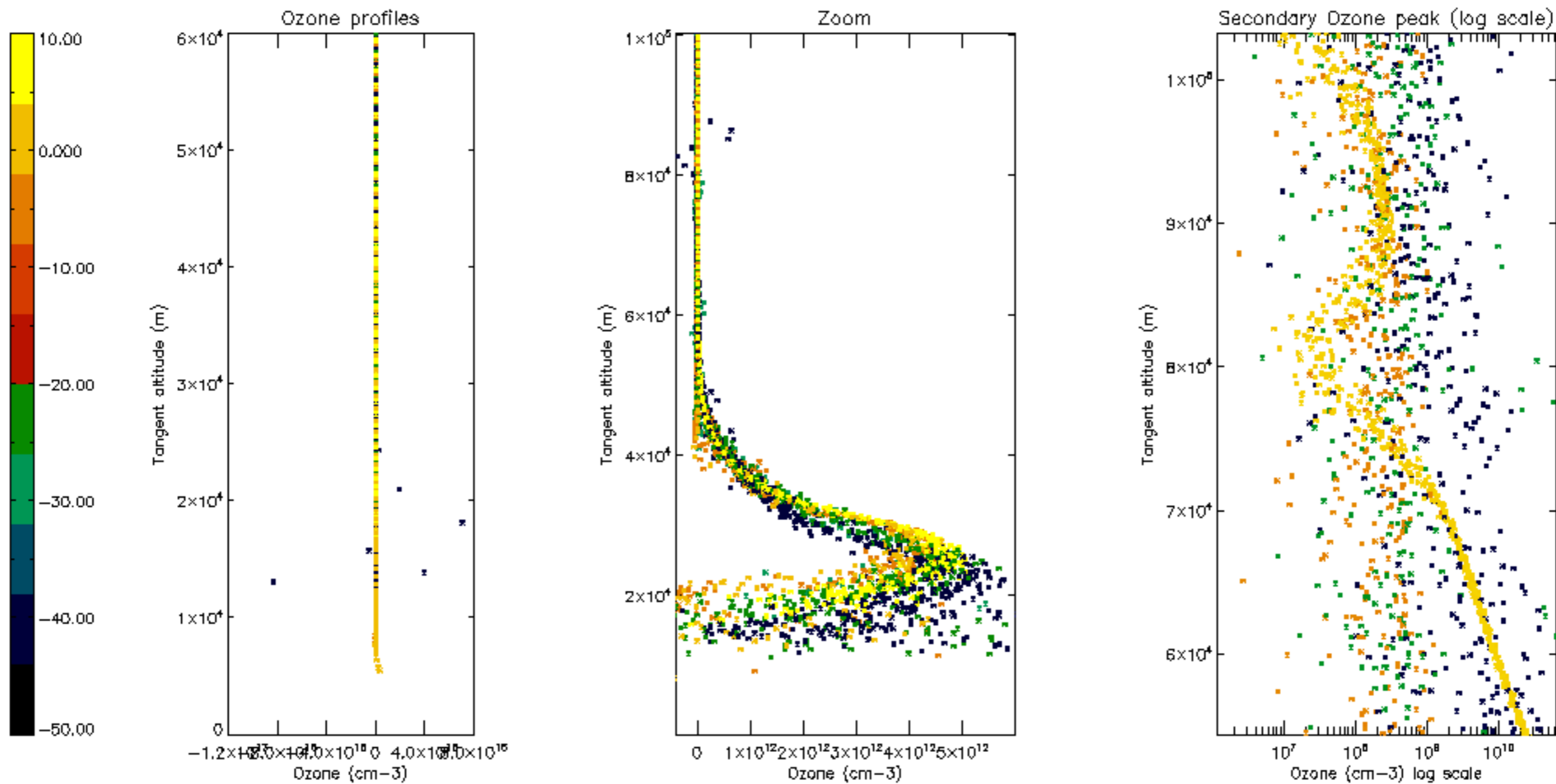


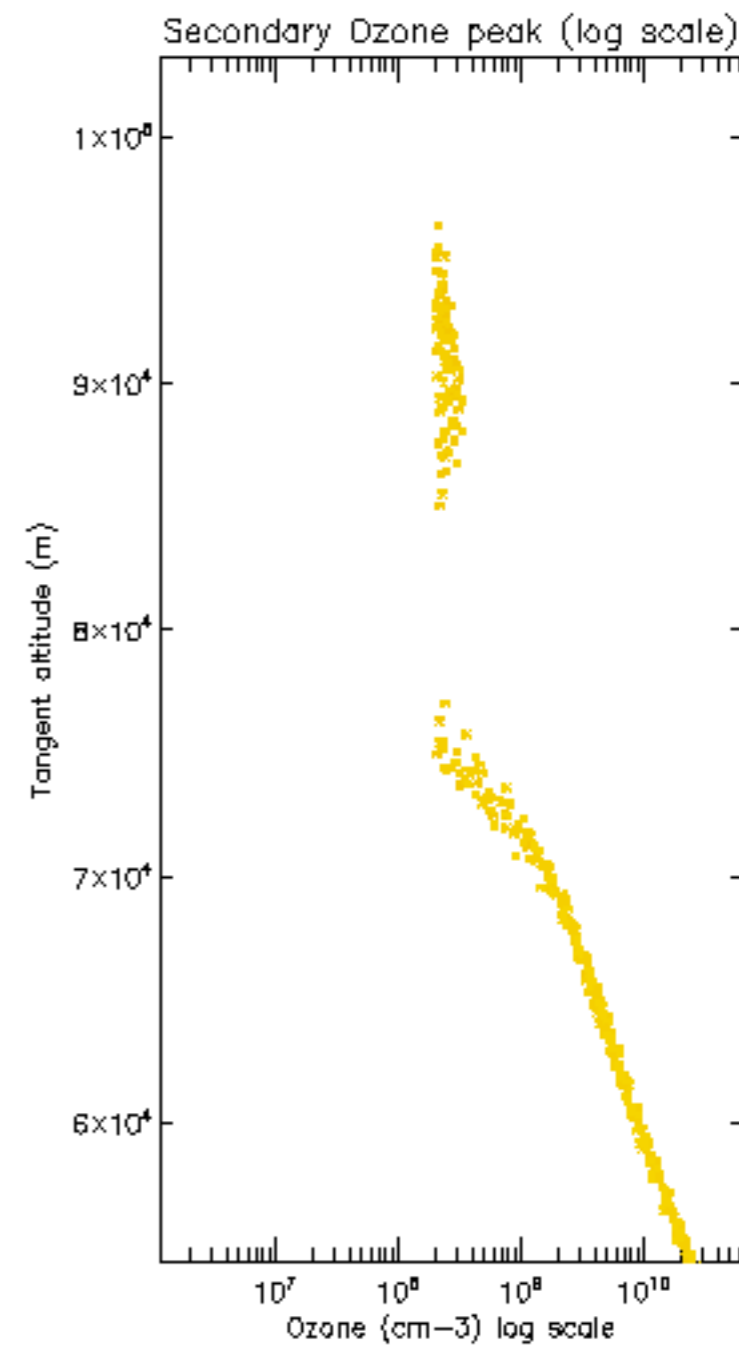
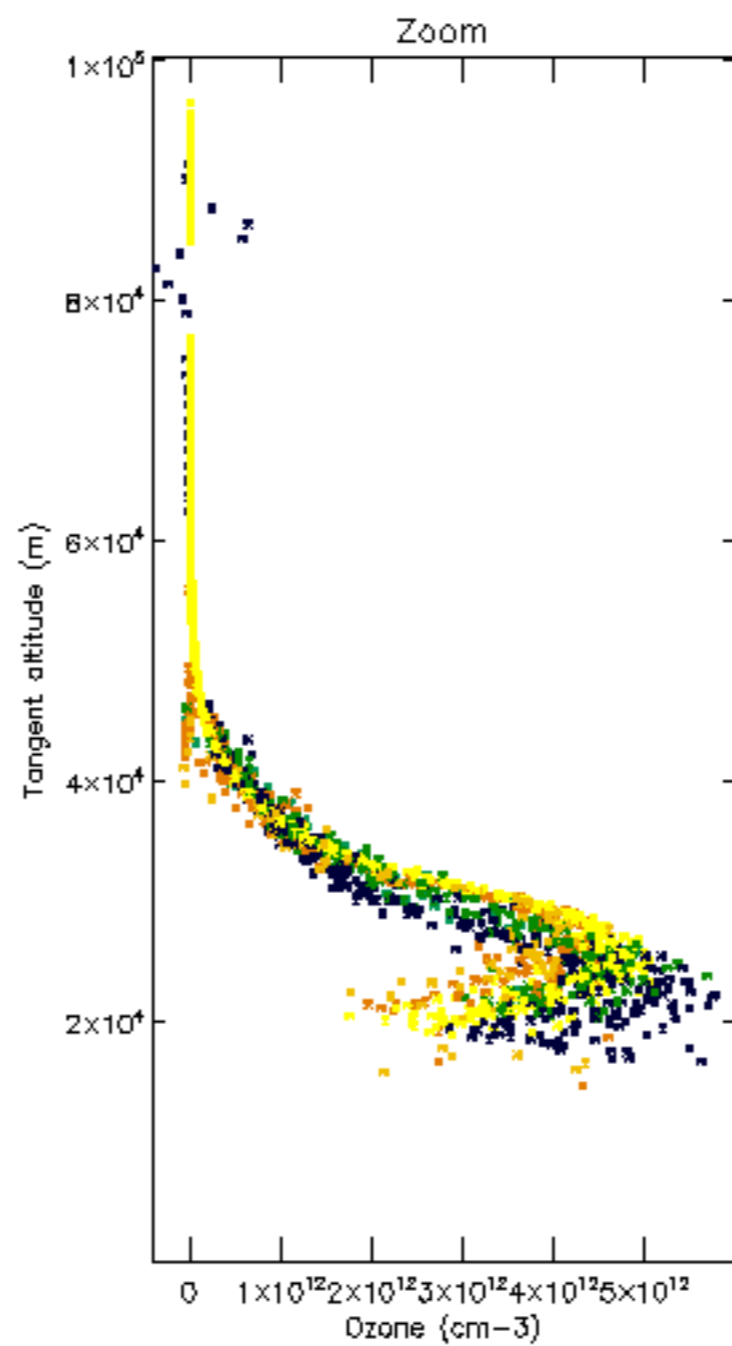
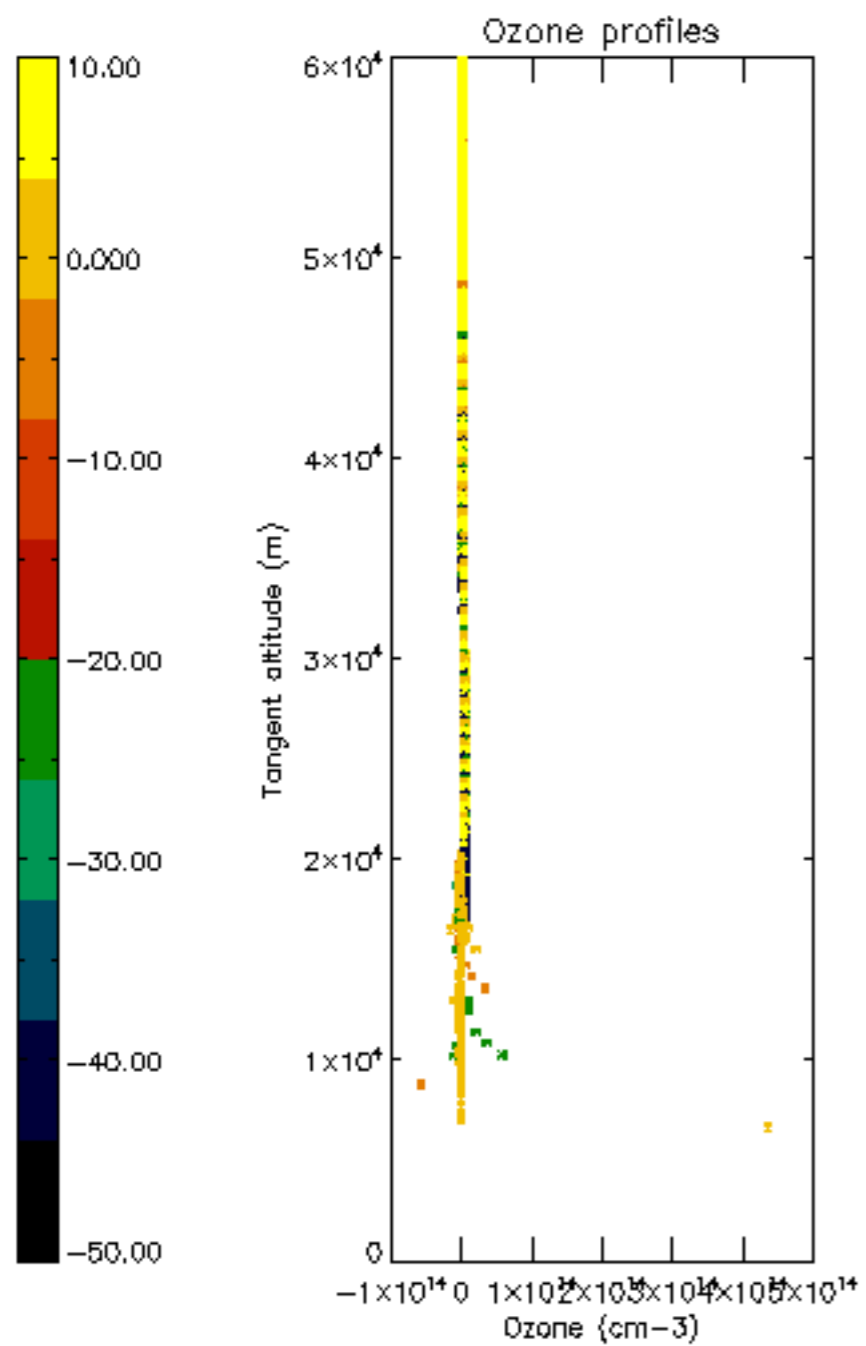
Percentage of star falling outside central band per profile

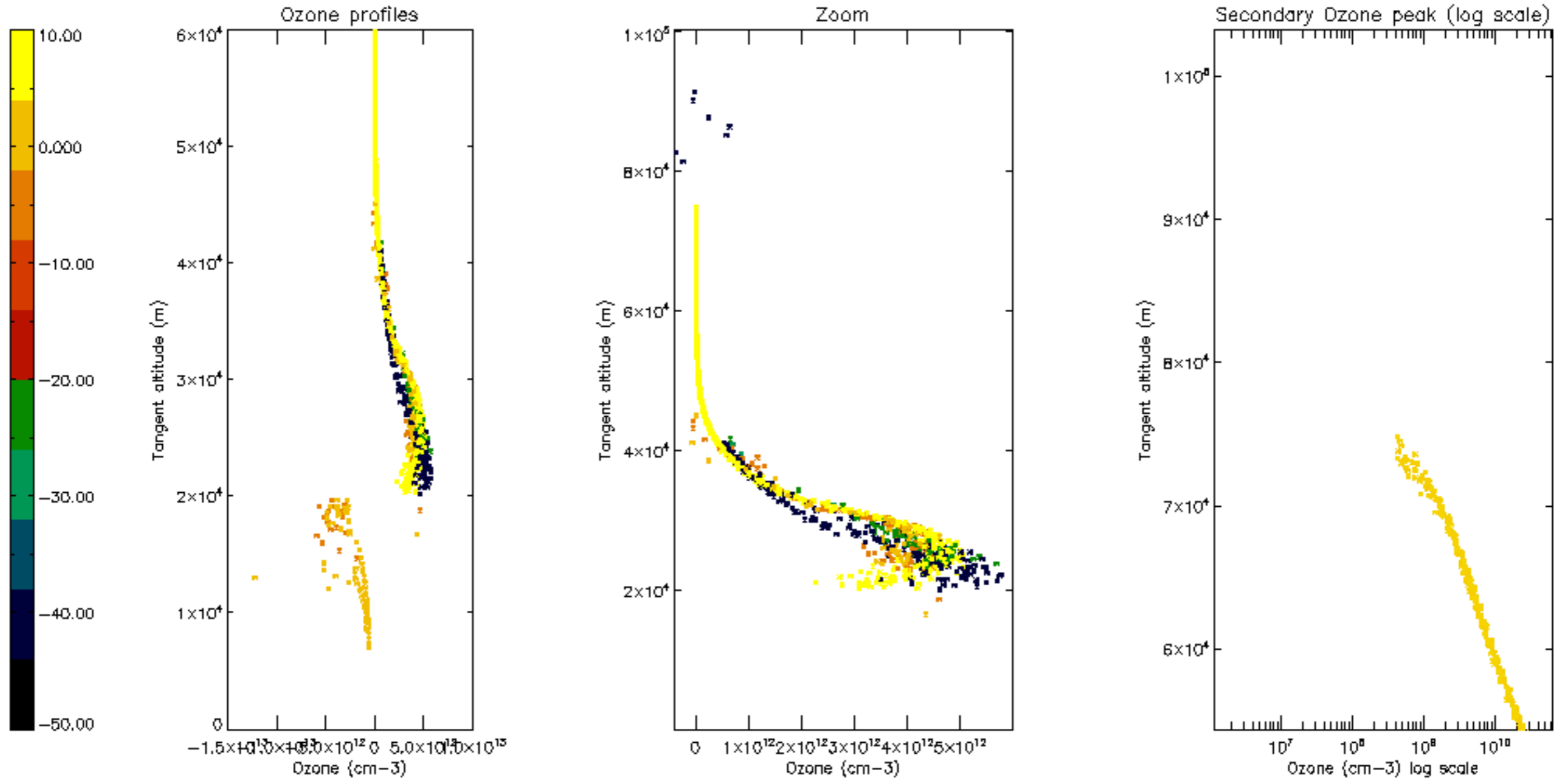


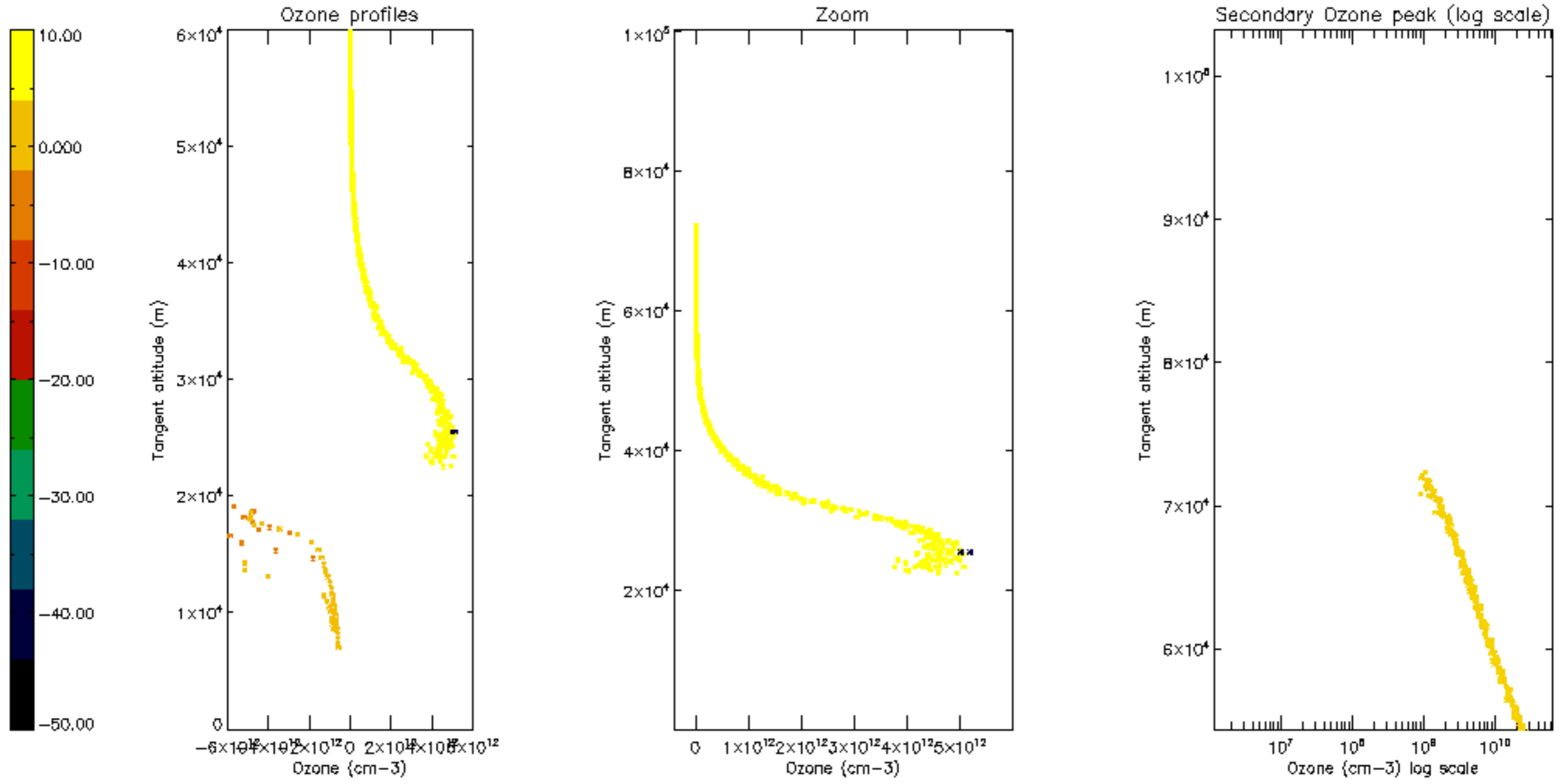
Percentage of saturation errors per profile

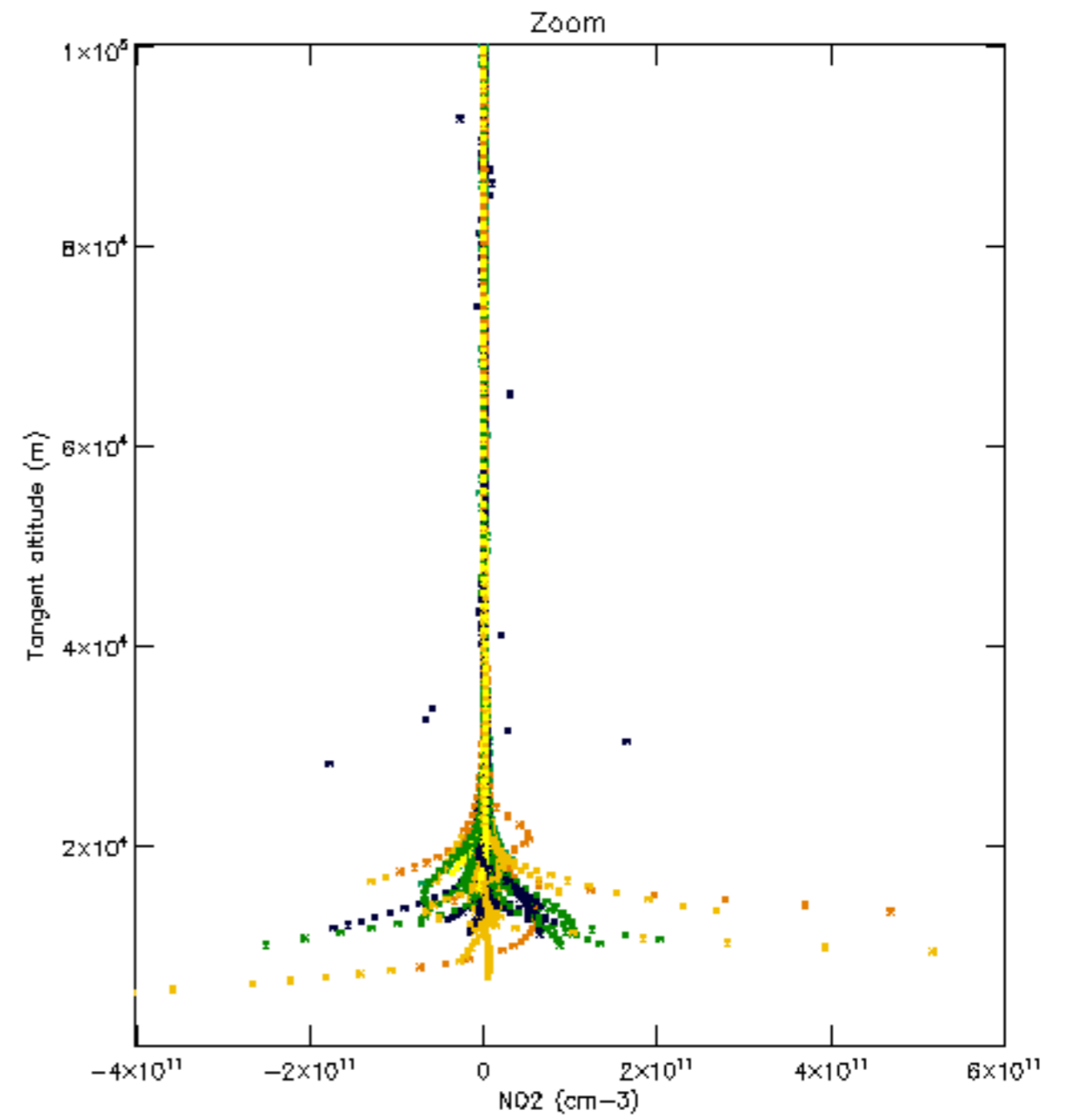
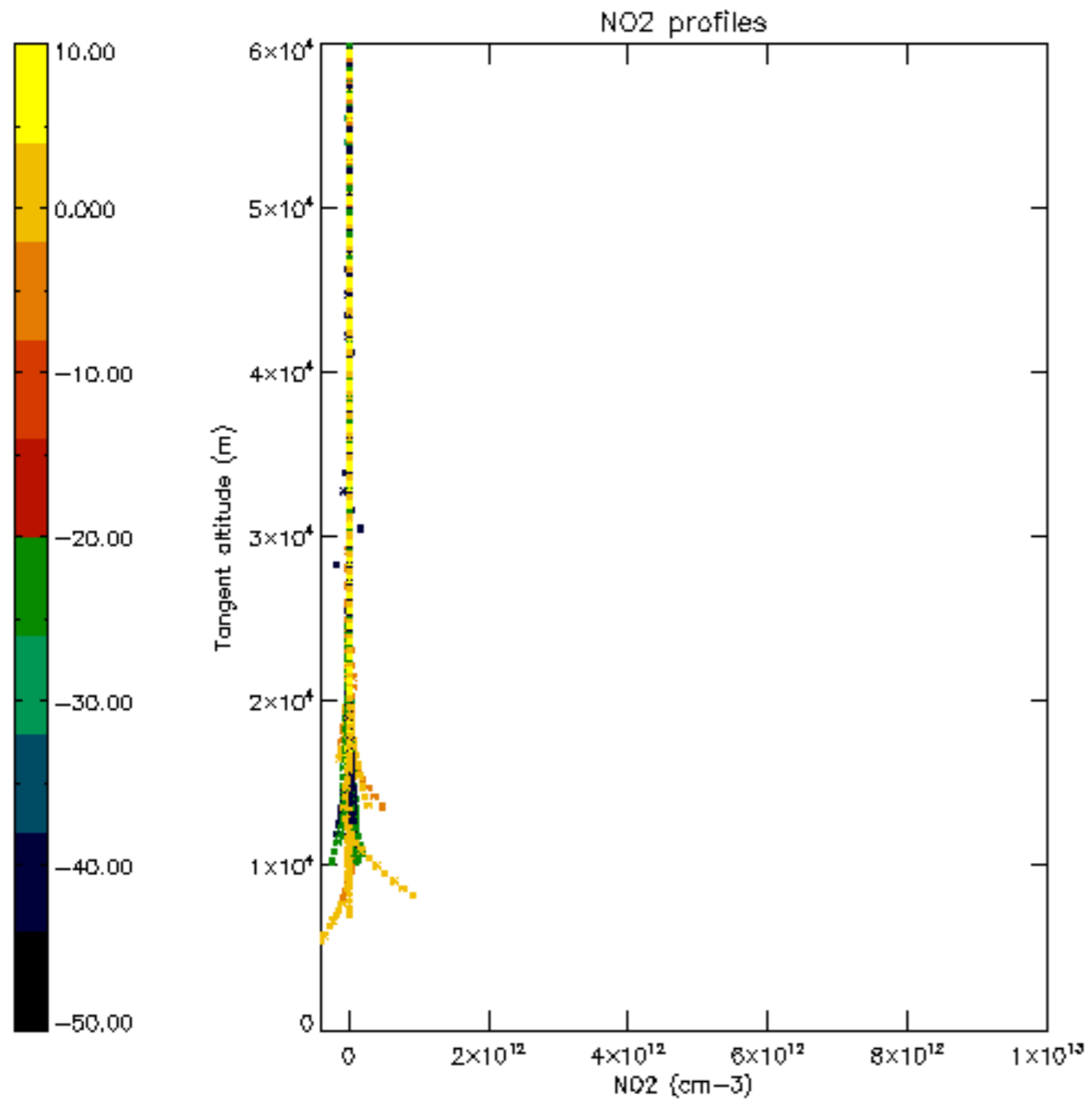


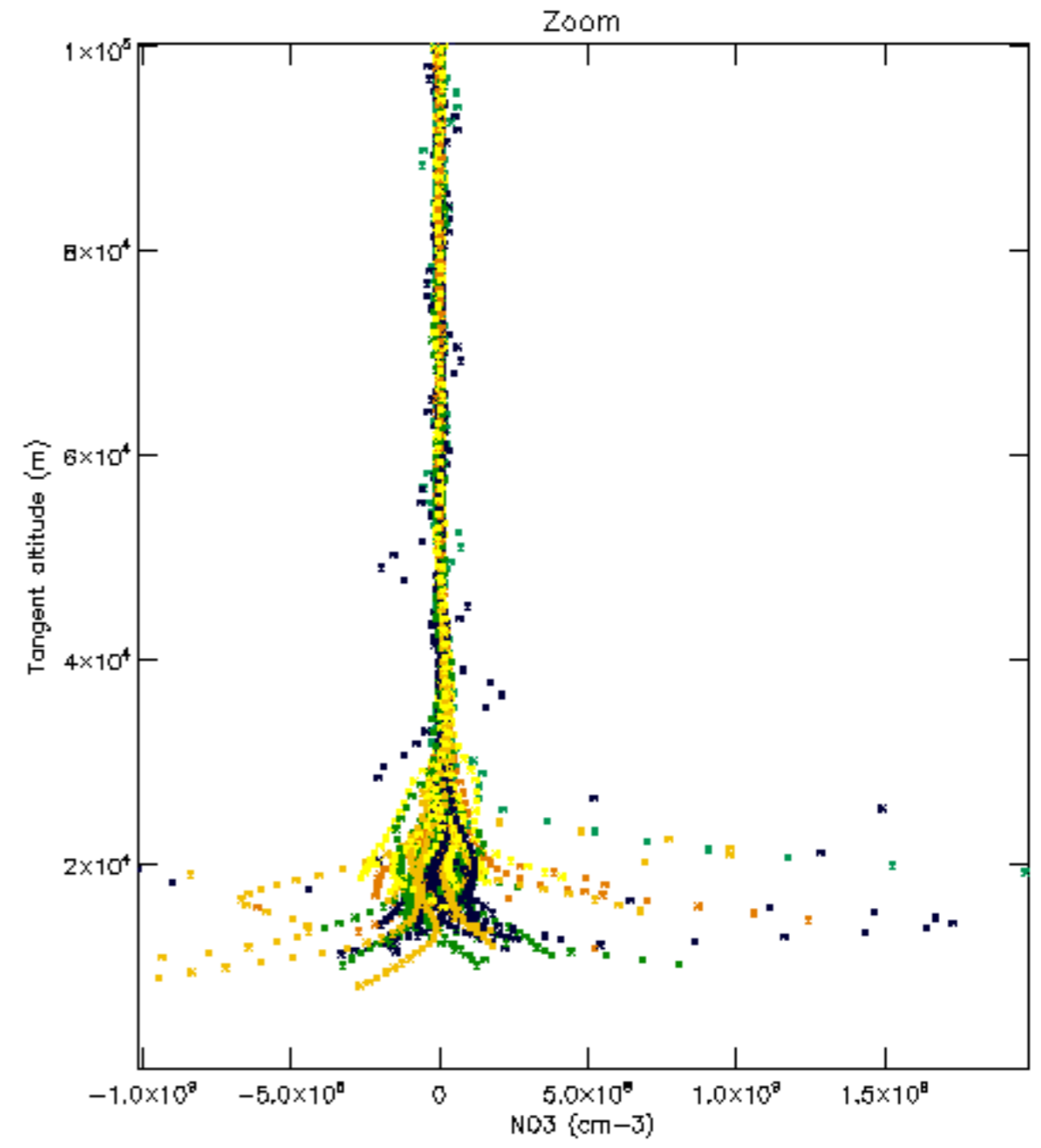
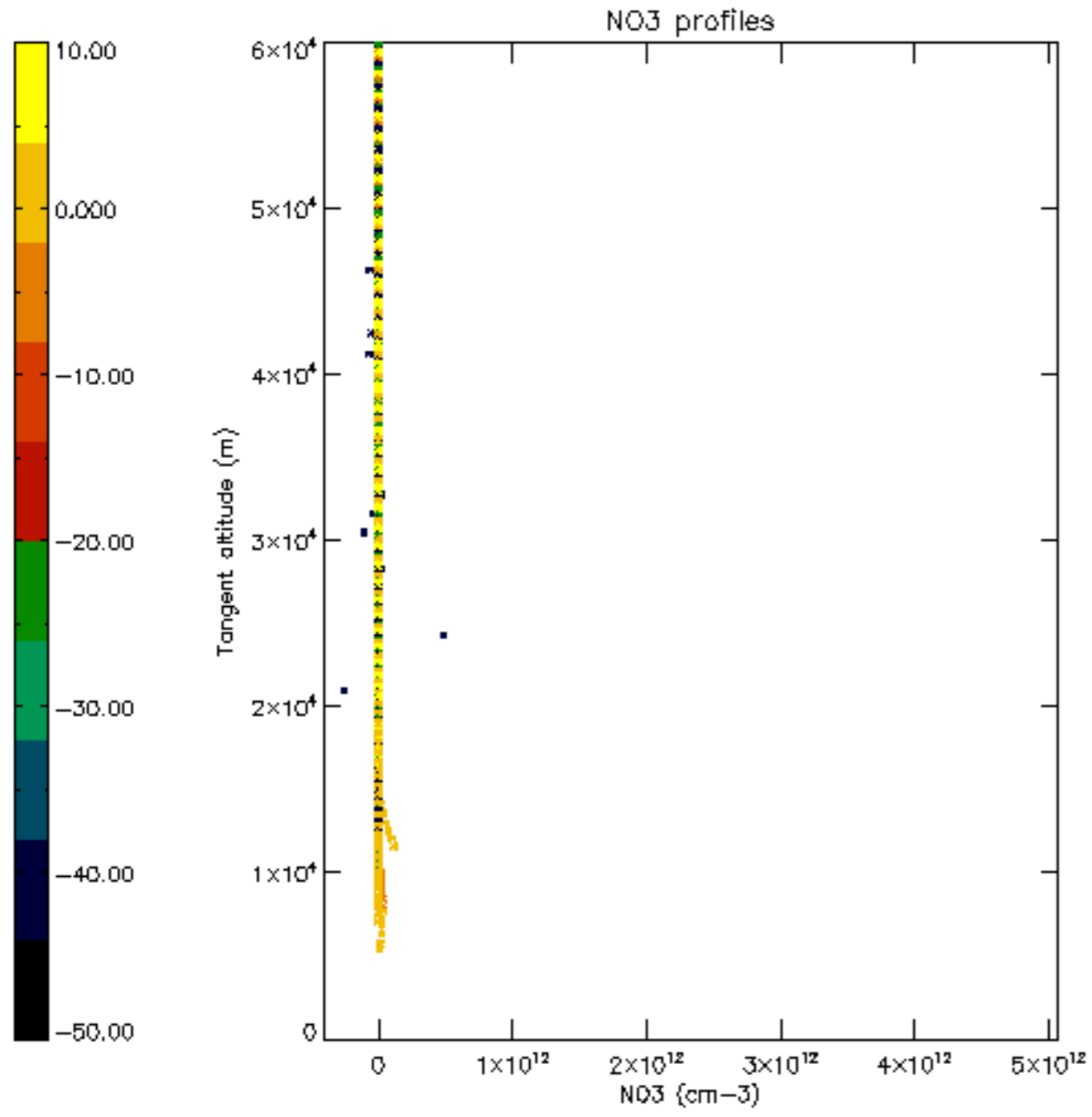


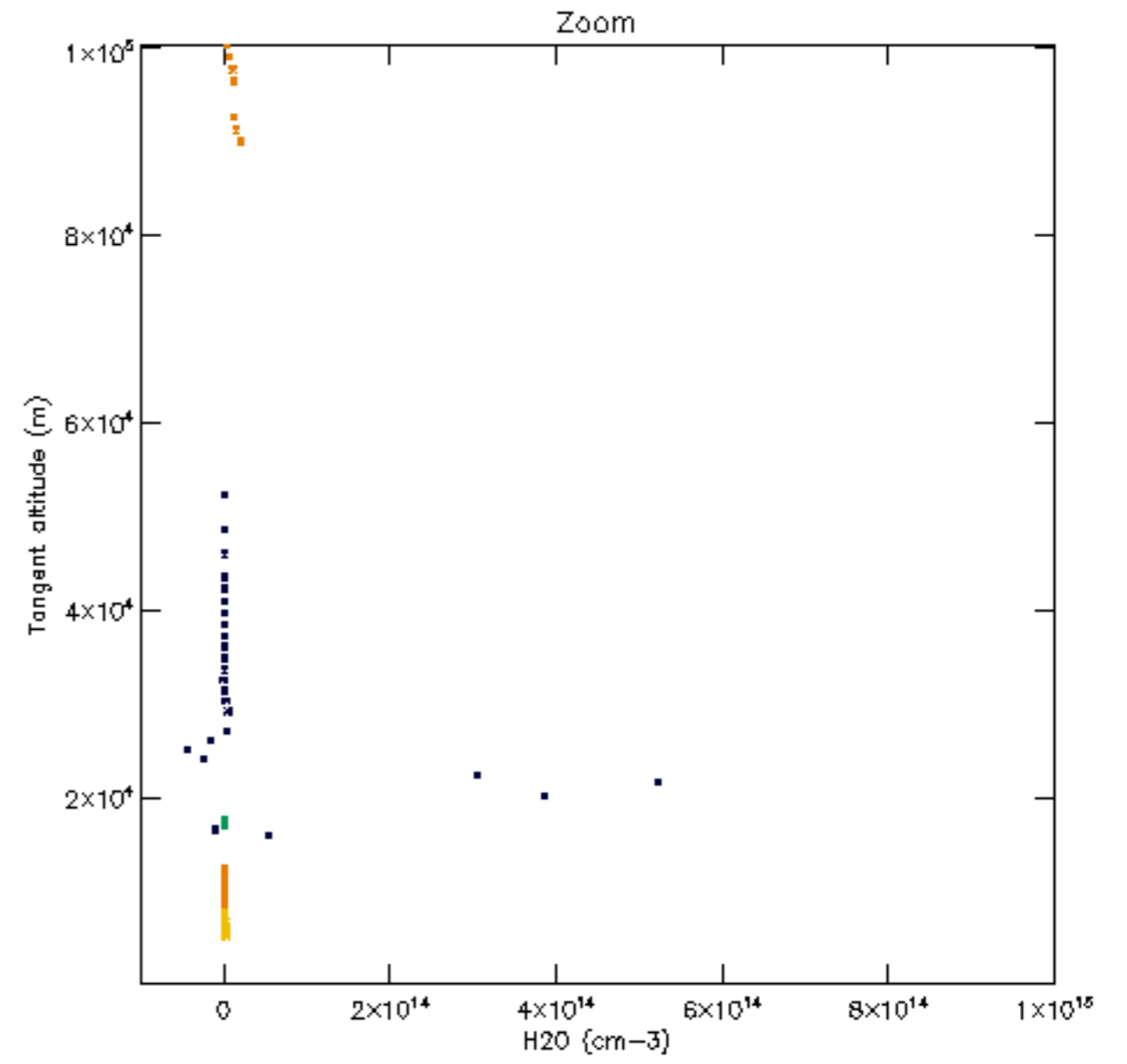
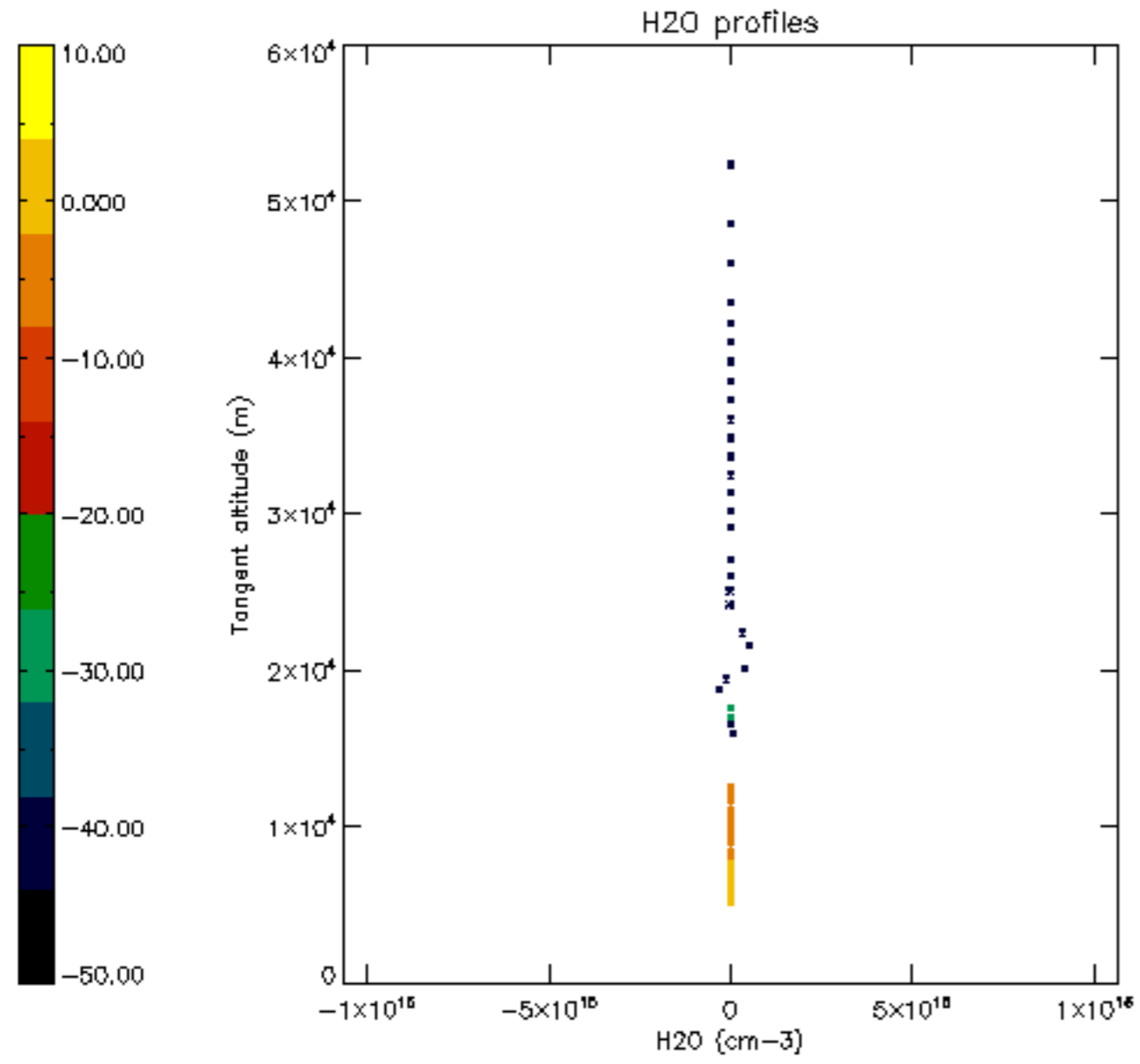


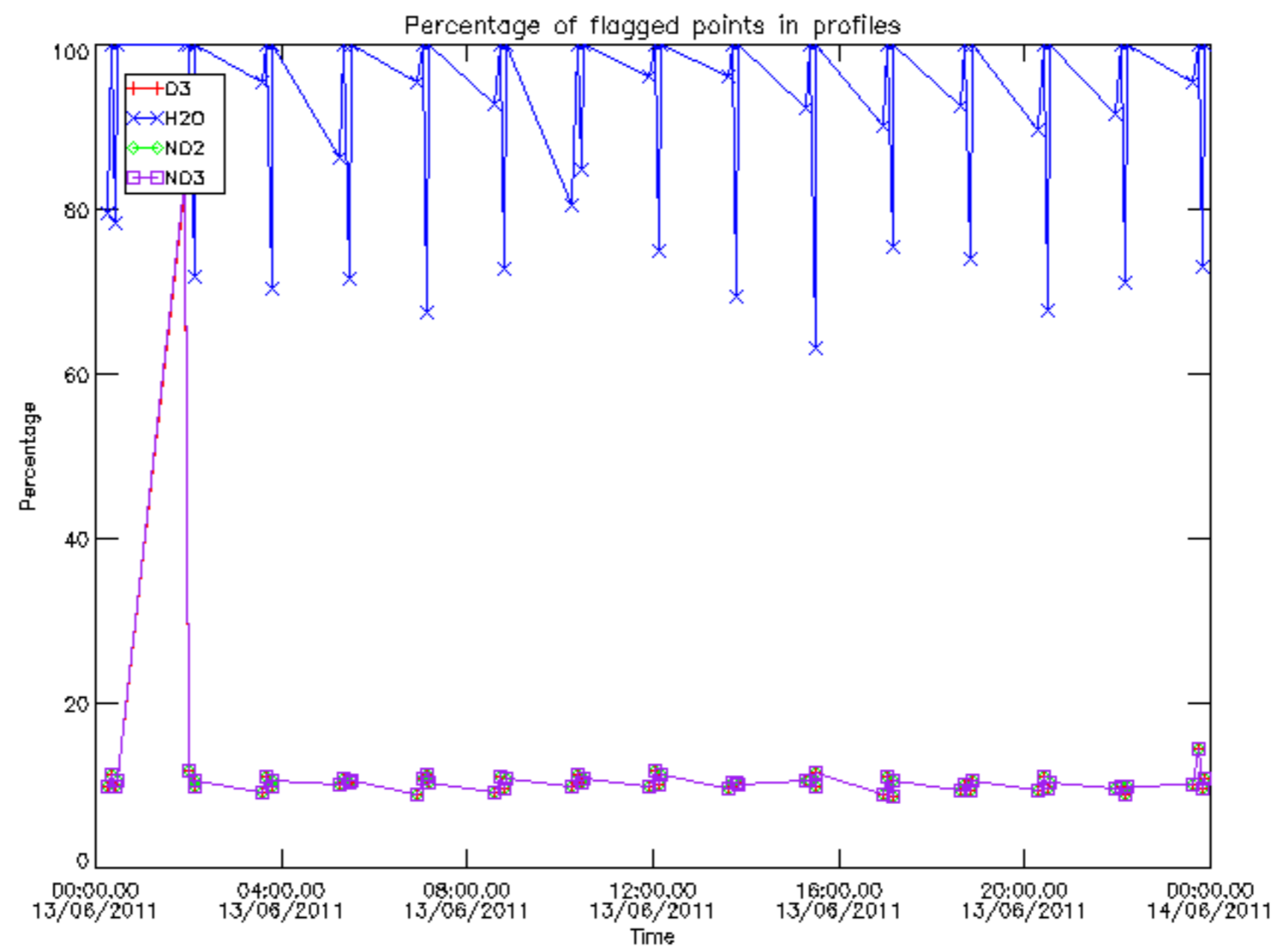




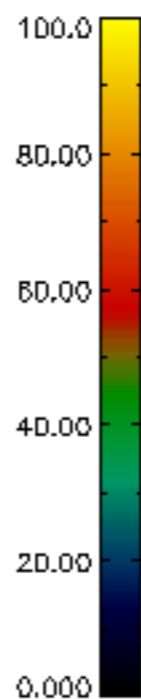
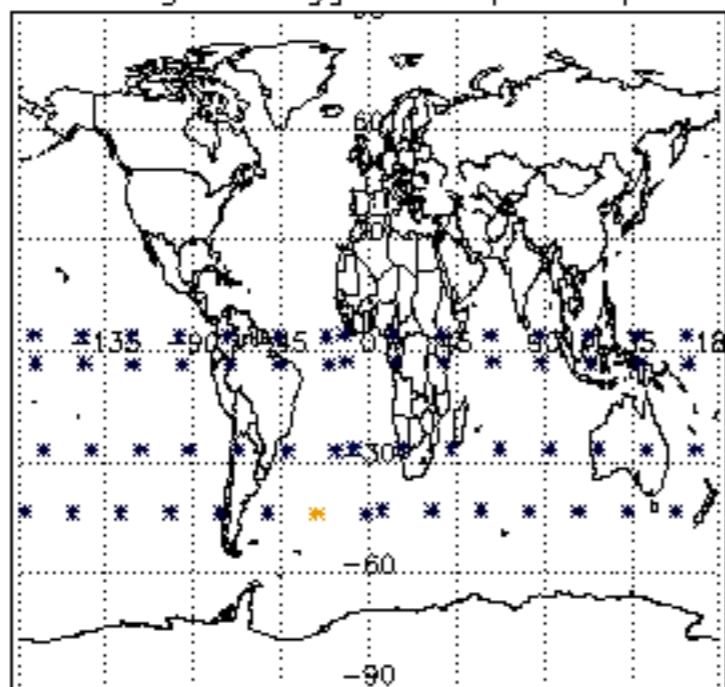




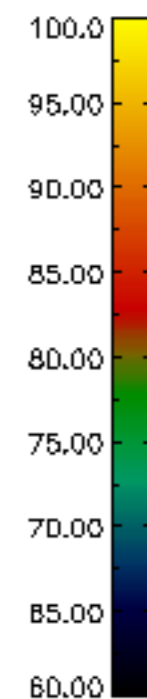
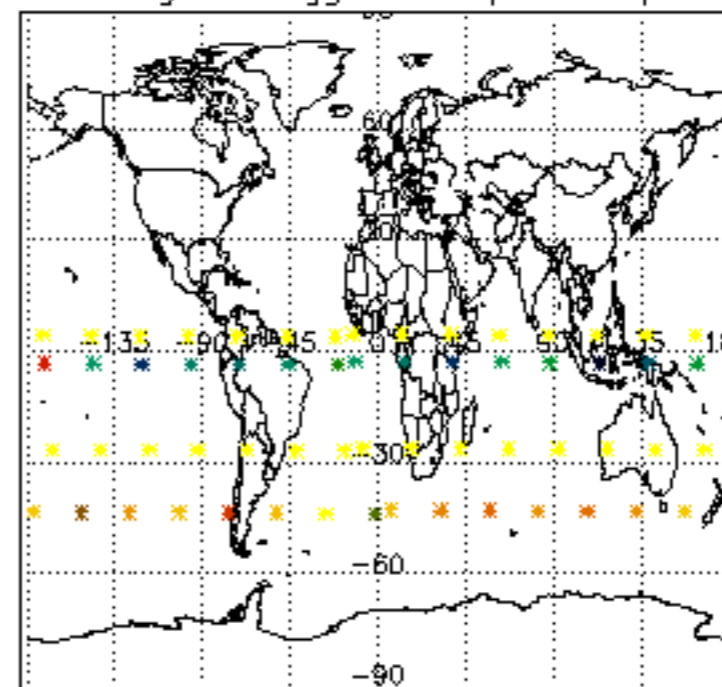




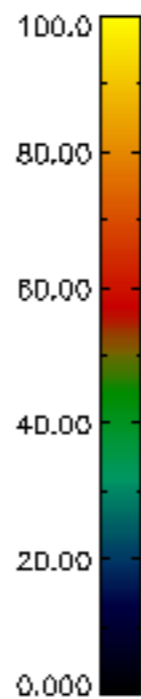
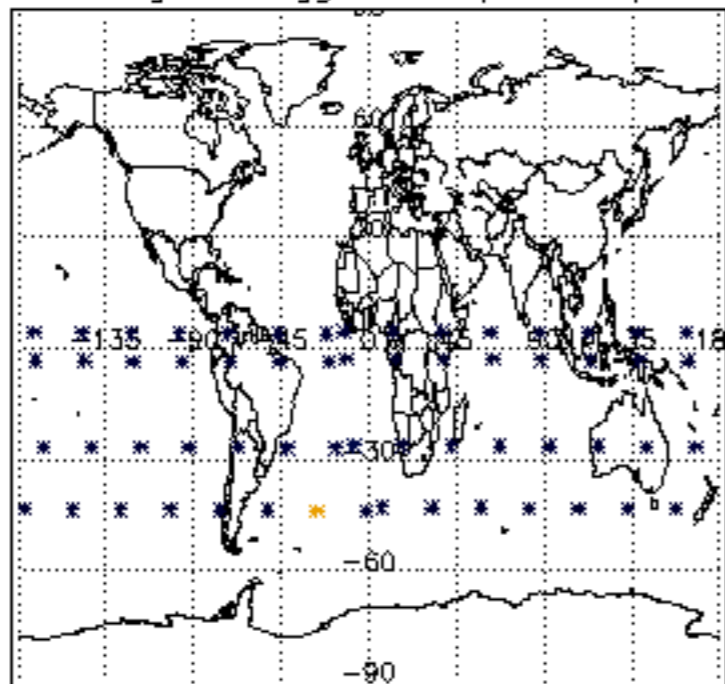
Percentage of flagged data per D3 profile



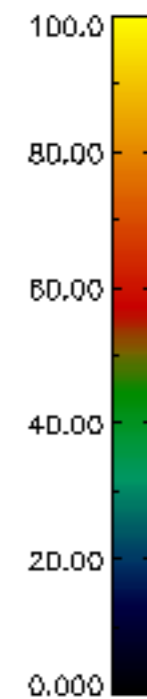
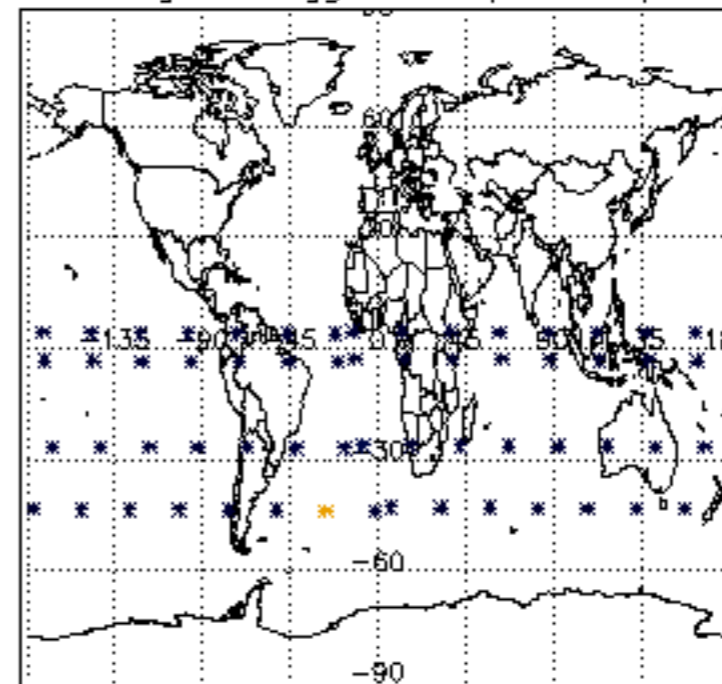
Percentage of flagged data per H2O profile

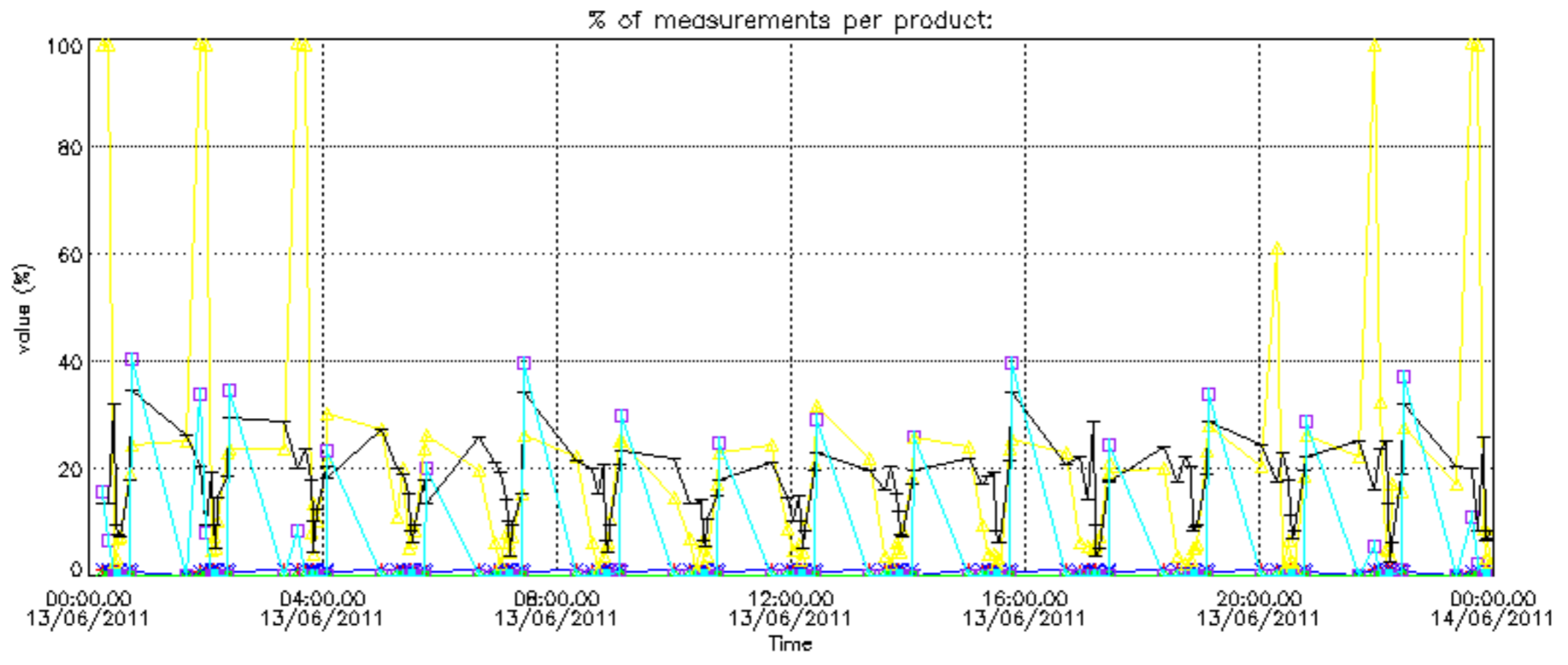


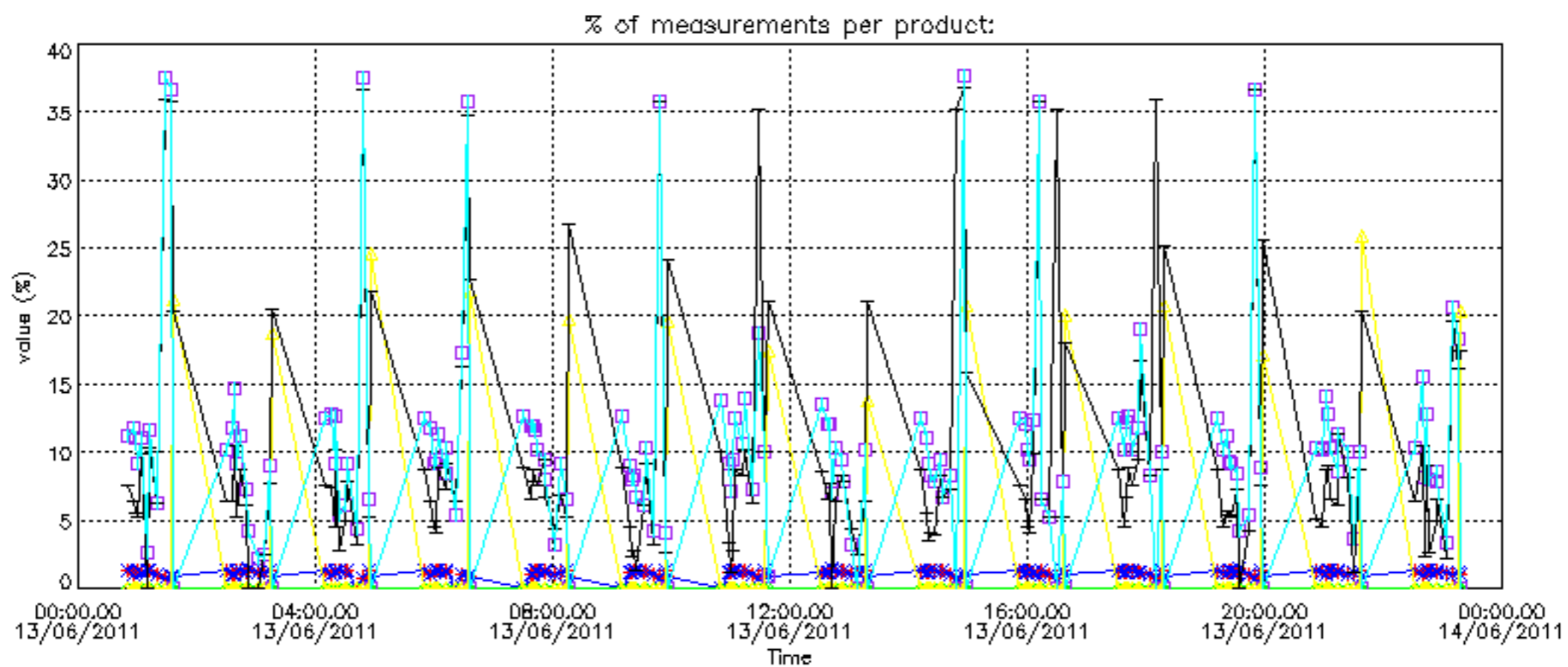
Percentage of flagged data per NO2 profile



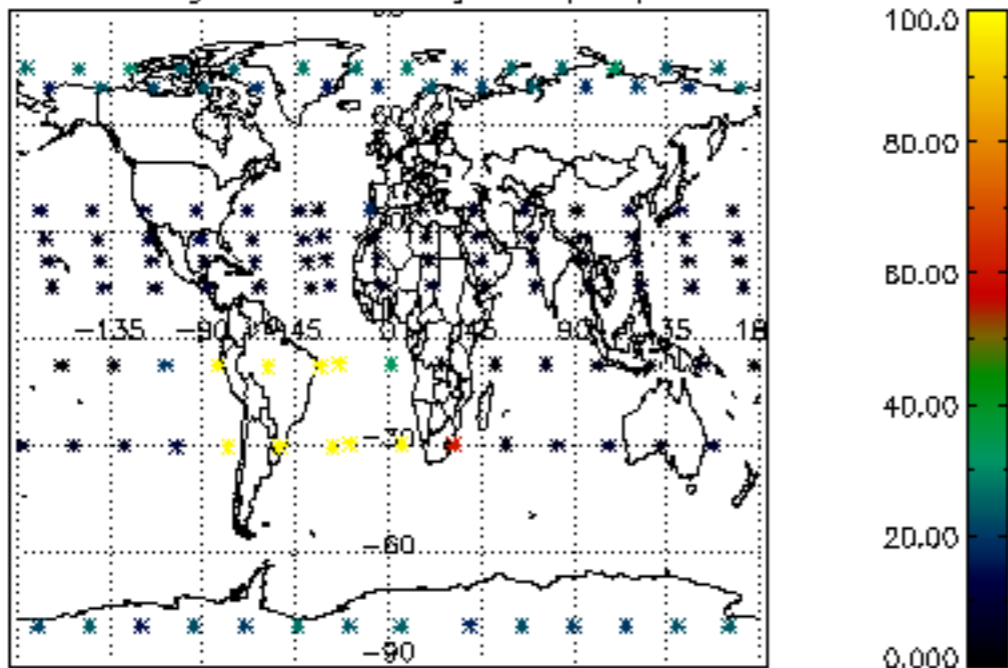
Percentage of flagged data per NO3 profile



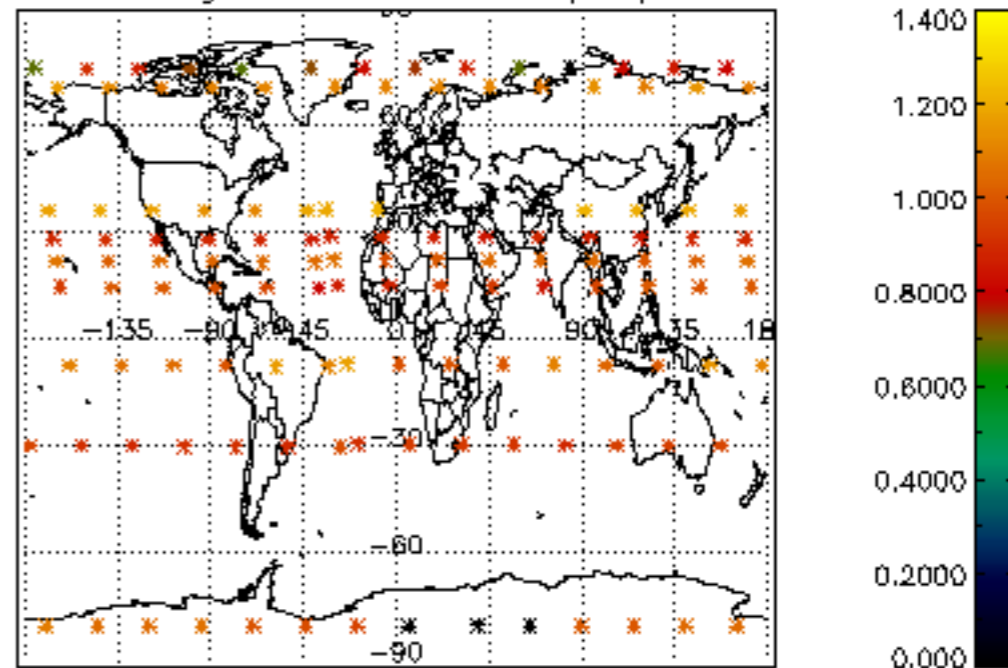




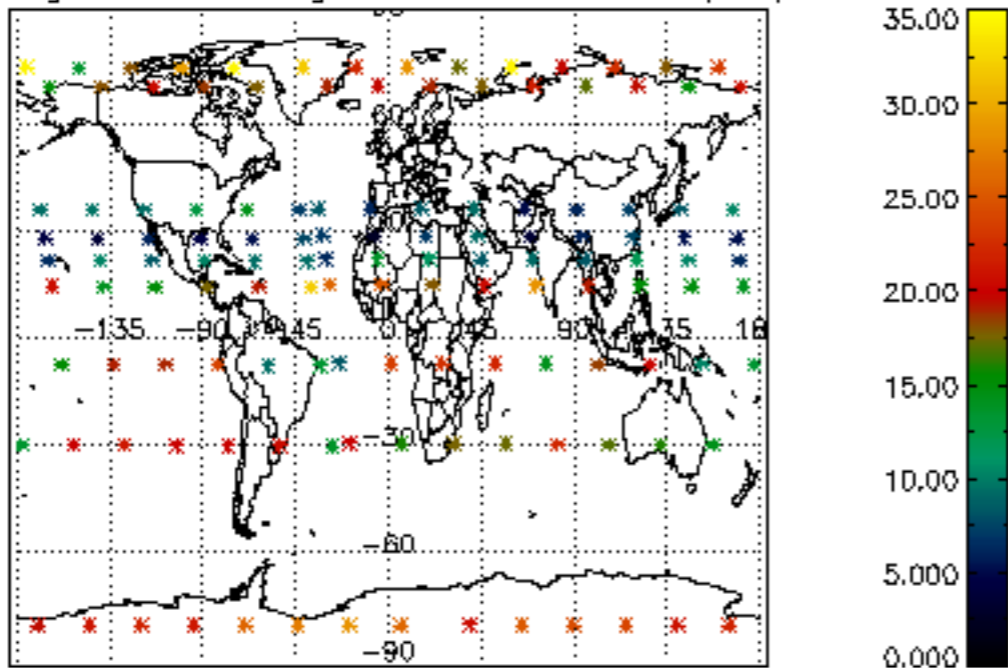
Percentage of cosmic ray hits per profile



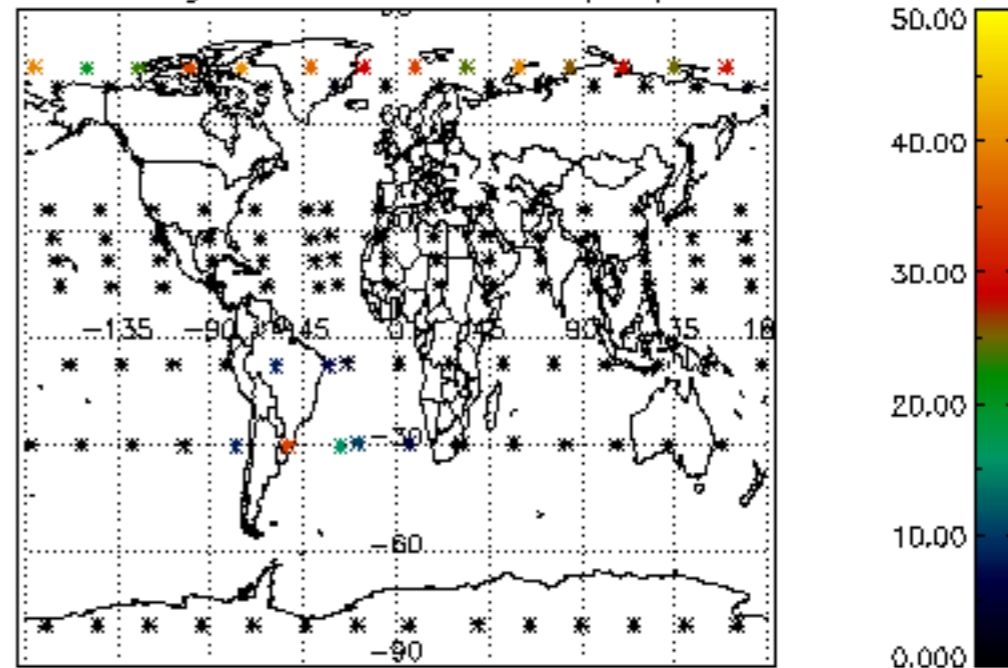
Percentage of datation errors per profile



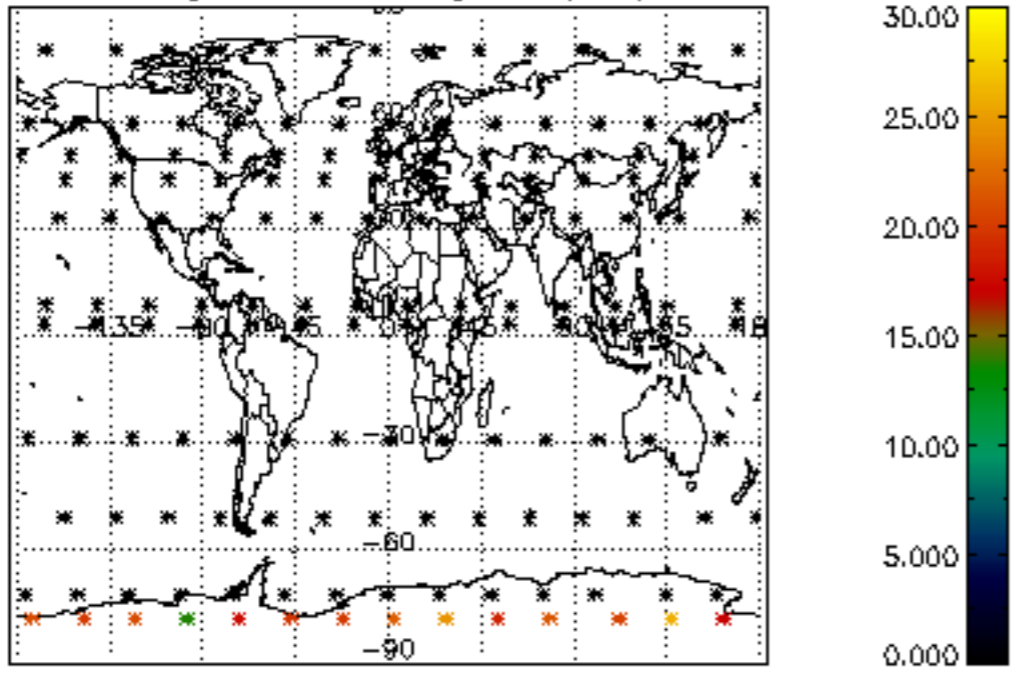
Percentage of star falling outside central band per profile



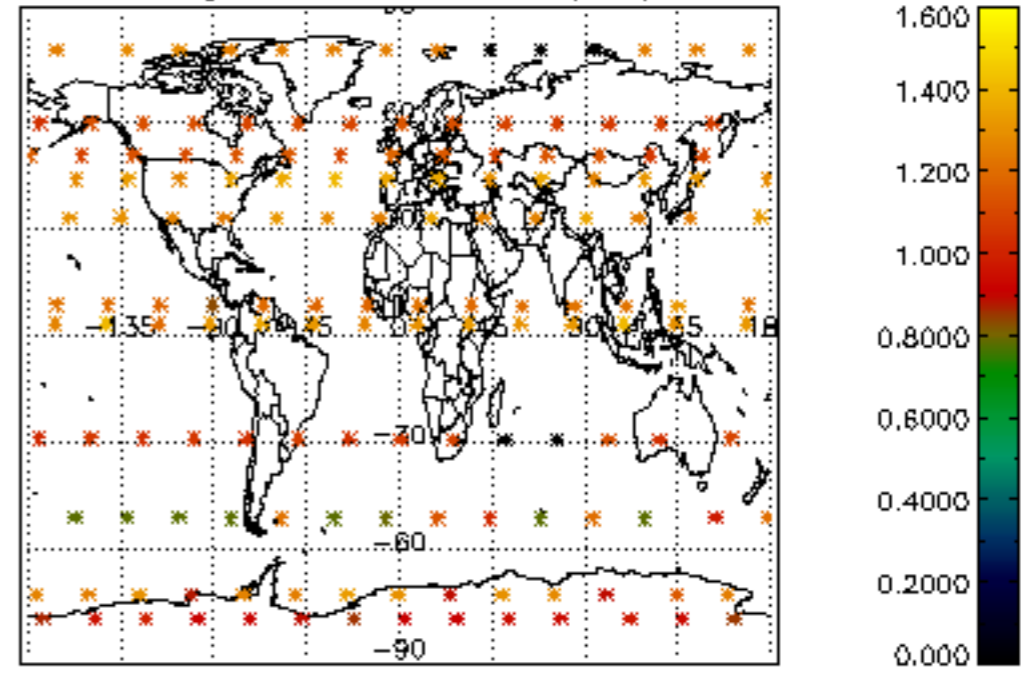
Percentage of saturation errors per profile



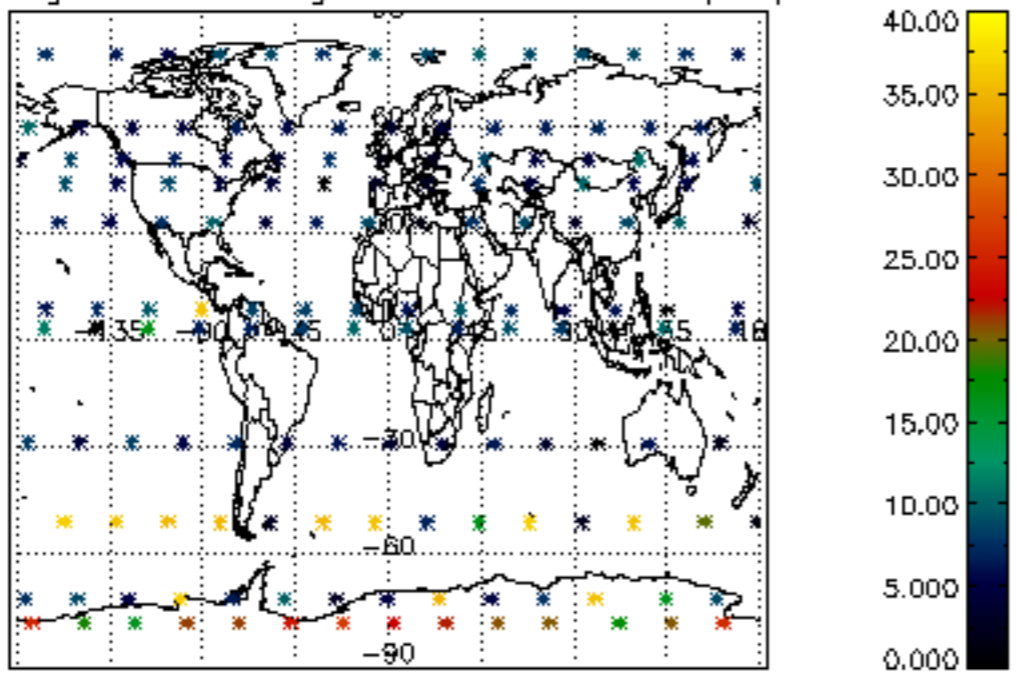
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

