

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

[3. Level 2 Quality information per product](#)

[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

[3.2 Plot of level 2 quality information per product \(world map\)](#)

[4. Level 1 Quality information per product \(stored on level 2 products\)](#)

[4.1 Plot of level 1 quality information per product \(time dependant\)](#)

[4.1.1 Plot of level 1 quality information per product \(time dependant\): ASCENDING](#)

[4.1.2 Plot of level 1 quality information per product \(time dependant\): DESCENDING](#)

[4.2 Plot of level 1 quality information per product \(world map\)](#)

[4.2.1 Plot of level 1 quality information per product \(world map\): ASCENDING](#)

[4.2.2 Plot of level 1 quality information per product \(world map\): DESCENDING](#)

[5. Ozone profiles based on quality statistics and other trace gas profiles](#)

[5.1 Ozone statistics based on quality of products](#)

[5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

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

[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

[5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

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

[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

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

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

Item	Value
Time of report generation	24APR2013 00:06:23
Data source version	GOMOS/6.01
Start time of products	19-06-2006 (19JUN2006 00:00:00)
Stop time of products	20-06-2006 (20JUN2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	238
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

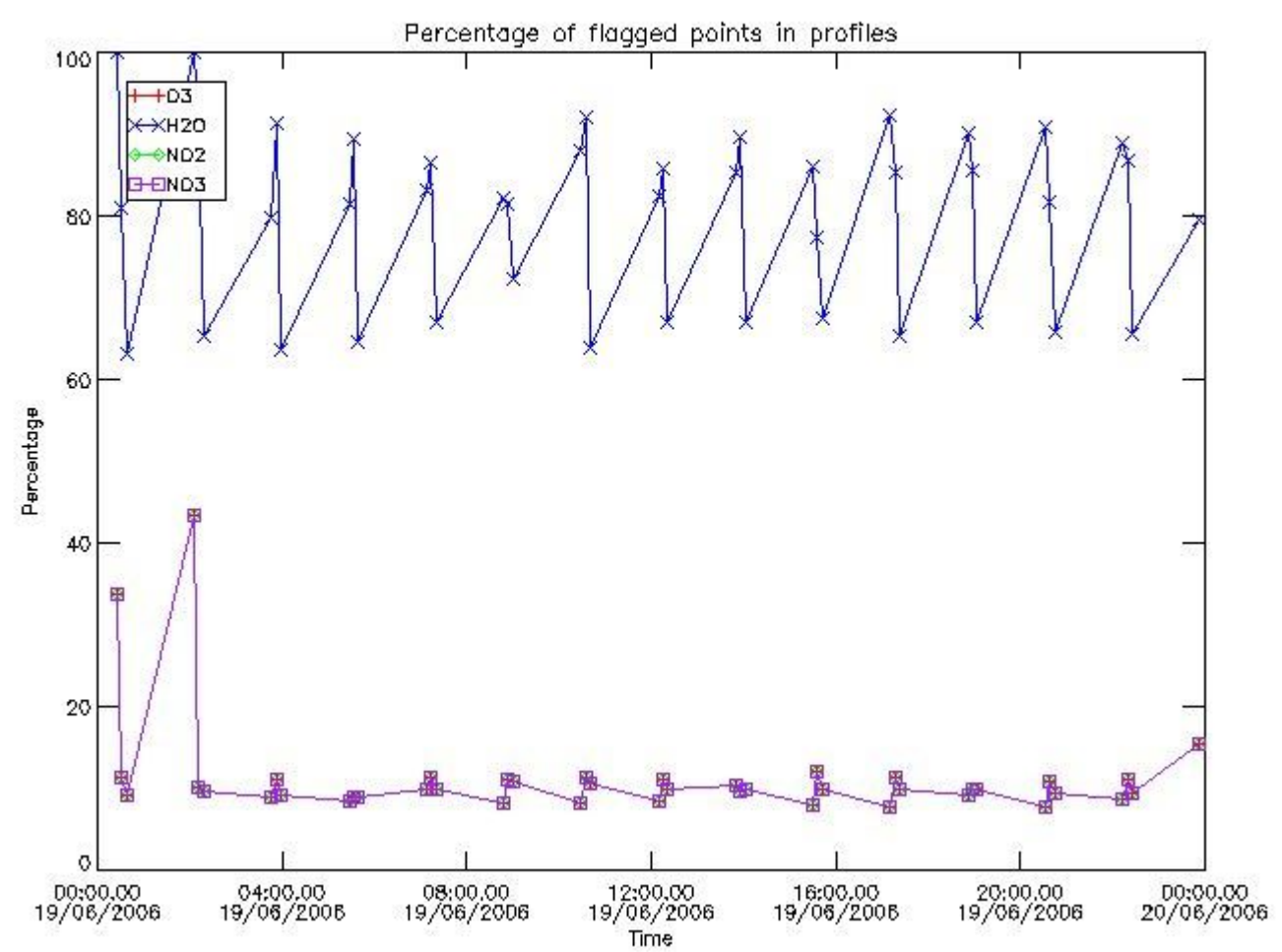
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20060619_000233_000000422048_00388_22486_9240.N1	19-JUN-2006 00:02:33	Bright	42.000	73	57Gam1And	2.2600	13100.	84	22486	No
2	GOM_NL__2PRFIN20060619_000452_000000452048_00388_22486_9241.N1	19-JUN-2006 00:04:52	Bright	44.500	173	4Bet Tri	3.0040	8900.0	89	22486	No
3	GOM_NL__2PRFIN20060619_000833_000000542048_00388_22486_9242.N1	19-JUN-2006 00:08:33	Twilight	53.500	50	13Alp Ari	2.0070	4250.0	107	22486	No
4	GOM_NL__2PRFIN20060619_002452_000000532048_00388_22486_9243.N1	19-JUN-2006 00:24:52	Dark	52.500	52	16Bet Cet	2.0370	4500.0	105	22486	No
5	GOM_NL__2PRFIN20060619_003053_000000452048_00388_22486_9244.N1	19-JUN-2006 00:30:53	Dark	45.000	84	Alp Phe	2.3970	4500.0	90	22486	No
6	GOM_NL__2PRFIN20060619_003713_000000562048_00389_22487_9227.N1	19-JUN-2006 00:37:13	Dark	56.000	63	Bet Gru	2.1500	2800.0	112	22487	No
7	GOM_NL__2PRFIN20060619_003916_000000492048_00389_22487_9228.N1	19-JUN-2006 00:39:16	Straylight	48.500	31	Alp Gru	1.7340	15200.	97	22487	No
8	GOM_NL__2PRFIN20060619_004250_000000422048_00389_22487_9229.N1	19-JUN-2006 00:42:50	Straylight	42.000	45	Alp Pav	1.9400	26000.	84	22487	No
9	GOM_NL__2PRFIN20060619_005219_000000442048_00389_22487_9230.N1	19-JUN-2006 00:52:19	Twilight	44.000	38	20Eps Sgr	1.8360	11000.	88	22487	No
10	GOM_NL__2PRFIN20060619_005347_000000482048_00389_22487_9231.N1	19-JUN-2006 00:53:47	Twilight	47.500	116	19Del Sgr	2.7000	4100.0	95	22487	No
11	GOM_NL__2PRFIN20060619_005505_000000472048_00389_22487_9232.N1	19-JUN-2006 00:55:05	Bright	47.000	137	22Lam Sgr	2.8240	4400.0	94	22487	No
12	GOM_NL__2PRFIN20060619_010517_000000422048_00389_22487_9233.N1	19-JUN-2006 01:05:17	Bright	41.500	126	60Bet Oph	2.7700	4250.0	83	22487	No
13	GOM_NL__2PRFIN20060619_010745_000000412048_00389_22487_9234.N1	19-JUN-2006 01:07:45	Bright	41.000	59	55Alp Oph	2.0800	8900.0	82	22487	No
14	GOM_NL__2PRFIN20060619_011251_000000382048_00389_22487_9235.N1	19-JUN-2006 01:12:51	Bright	38.000	133	40Zet Her	2.8070	6000.0	76	22487	No
15	GOM_NL__2PRFIN20060619_011931_000000402048_00389_22487_9236.N1	19-JUN-2006 01:19:31	Bright	39.500	130	23Bet Dra	2.7990	5800.0	79	22487	No
16	GOM_NL__2PRFIN20060619_012941_000000472048_00389_22487_9237.N1	19-JUN-2006 01:29:41	Bright	46.500	89	5Alp Cep	2.4510	8000.0	93	22487	No
17	GOM_NL__2PRFIN20060619_013748_000000432048_00389_22487_9238.N1	19-JUN-2006 01:37:48	Bright	43.000	68	18Alp Cas	2.2250	4500.0	86	22487	No
18	GOM_NL__2PRFIN20060619_014309_000000422048_00389_22487_9239.N1	19-JUN-2006 01:43:09	Bright	42.000	73	57Gam1And	2.2600	13100.	84	22487	No
19	GOM_NL__2PRFIN20060619_014528_000000452048_00389_22487_9240.N1	19-JUN-2006 01:45:28	Bright	44.500	173	4Bet Tri	3.0040	8900.0	89	22487	No
20	GOM_NL__2PRFIN20060619_014909_000000572048_00389_22487_9241.N1	19-JUN-2006 01:49:09	Twilight	57.000	50	13Alp Ari	2.0070	4250.0	114	22487	No
21	GOM_NL__2PRFIN20060619_020529_000000612048_00389_22487_9242.N1	19-JUN-2006 02:05:29	Dark	60.500	52	16Bet Cet	2.0370	4500.0	121	22487	No
22	GOM_NL__2PRFIN20060619_021130_000000552048_00389_22487_9243.N1	19-JUN-2006 02:11:30	Dark	55.000	84	Alp Phe	2.3970	4500.0	110	22487	No
23	GOM_NL__2PRFIN20060619_021750_000000532048_00390_22488_9227.N1	19-JUN-2006 02:17:50	Dark	52.500	63	Bet Gru	2.1500	2800.0	105	22488	No
24	GOM_NL__2PRFIN20060619_021953_000000482048_00390_22488_9228.N1	19-JUN-2006 02:19:53	Straylight	48.000	31	Alp Gru	1.7340	15200.	96	22488	No
25	GOM_NL__2PRFIN20060619_022326_000000442048_00390_22488_9229.N1	19-JUN-2006 02:23:26	Straylight	43.500	45	Alp Pav	1.9400	26000.	87	22488	No
26	GOM_NL__2PRFIN20060619_023255_000000462048_00390_22488_9230.N1	19-JUN-2006 02:32:55	Twilight	46.000	38	20Eps Sgr	1.8360	11000.	92	22488	No
27	GOM_NL__2PRFIN20060619_023423_000000512048_00390_22488_9231.N1	19-JUN-2006 02:34:23	Twilight	50.500	116	19Del Sgr	2.7000	4100.0	101	22488	No
28	GOM_NL__2PRFIN20060619_023541_000000472048_00390_22488_9232.N1	19-JUN-2006 02:35:41	Bright	46.500	137	22Lam Sgr	2.8240	4400.0	93	22488	No
29	GOM_NL__2PRFIN20060619_024552_000000422048_00390_22488_9233.N1	19-JUN-2006 02:45:52	Bright	41.500	126	60Bet Oph	2.7700	4250.0	83	22488	No
30	GOM_NL__2PRFIN20060619_024820_000000412048_00390_22488_9234.N1	19-JUN-2006 02:48:20	Bright	41.000	59	55Alp Oph	2.0800	8900.0	82	22488	No
31	GOM_NL__2PRFIN20060619_025327_000000362048_00390_22488_9235.N1	19-JUN-2006 02:53:27	Bright	35.500	133	40Zet Her	2.8070	6000.0	71	22488	No
32	GOM_NL__2PRFIN20060619_030006_000000392048_00390_22488_9236.N1	19-JUN-2006 03:00:06	Bright	39.000	130	23Bet Dra	2.7990	5800.0	78	22488	No
33	GOM_NL__2PRFIN20060619_031017_000000662048_00390_22488_9237.N1	19-JUN-2006 03:10:17	Bright	65.500	89	5Alp Cep	2.4510	8000.0	131	22488	No
34	GOM_NL__2PRFIN20060619_031657_000000432048_00390_22488_9238.N1	19-JUN-2006 03:16:57	Bright	43.000	74	11Bet Cas	2.2680	6600.0	86	22488	No
35	GOM_NL__2PRFIN20060619_031824_000000452048_00390_22488_9239.N1	19-JUN-2006 03:18:24	Bright	44.500	68	18Alp Cas	2.2250	4500.0	89	22488	No
36	GOM_NL__2PRFIN20060619_032345_000000582048_00390_22488_9240.N1	19-JUN-2006 03:23:45	Bright	58.000	73	57Gam1And	2.2600	13100.	116	22488	No
37	GOM_NL__2PRFIN20060619_032604_000000442048_00390_22488_9241.N1	19-JUN-2006 03:26:04	Bright	44.000	173	4Bet Tri	3.0040	8900.0	88	22488	No
38	GOM_NL__2PRFIN20060619_032945_000000502048_00390_22488_9242.N1	19-JUN-2006 03:29:45	Twilight	49.500	50	13Alp Ari	2.0070	4250.0	99	22488	No
39	GOM_NL__2PRFIN20060619_034606_000000572048_00390_22488_9243.N1	19-JUN-2006 03:46:06	Dark	57.000	52	16Bet Cet	2.0370	4500.0	114	22488	No
40	GOM_NL__2PRFIN20060619_035207_000000462048_00390_22488_9244.N1	19-JUN-2006 03:52:07	Dark	46.000	84	Alp Phe	2.3970	4500.0	92	22488	No
41	GOM_NL__2PRFIN20060619_035827_000000562048_00391_22489_9228.N1	19-JUN-2006 03:58:27	Dark	55.500	63	Bet Gru	2.1500	2800.0	111	22489	No
42	GOM_NL__2PRFIN20060619_040030_000000482048_00391_22489_9229.N1	19-JUN-2006 04:00:30	Straylight	48.000	31	Alp Gru	1.7340	15200.	96	22489	No

220	GOM_NL__2PRFIN20060619_215241_000000452048_00401_22499_9314.N1	19-JUN-2006 21:52:41	Bright	44.500	173	4Bet Tri	3.0040	8900.0	89	22499	No
221	GOM_NL__2PRFIN20060619_215624_000000492048_00401_22499_9315.N1	19-JUN-2006 21:56:24	Twilight	49.000	50	13Alp Ari	2.0070	4250.0	98	22499	No
222	GOM_NL__2PRFIN20060619_221254_000000602048_00401_22499_9316.N1	19-JUN-2006 22:12:54	Dark	59.500	52	16Bet Cet	2.0370	4500.0	119	22499	No
223	GOM_NL__2PRFIN20060619_221851_000000462048_00401_22499_9317.N1	19-JUN-2006 22:18:51	Dark	45.500	84	Alp Phe	2.3970	4500.0	91	22499	No
224	GOM_NL__2PRFIN20060619_222513_000000542048_00402_22500_9323.N1	19-JUN-2006 22:25:13	Dark	54.000	63	Bet Gru	2.1500	2800.0	108	22500	No
225	GOM_NL__2PRFIN20060619_222716_000000512048_00402_22500_9324.N1	19-JUN-2006 22:27:16	Straylight	50.500	31	Alp Gru	1.7340	15200.	101	22500	No
226	GOM_NL__2PRFIN20060619_223045_000000432048_00402_22500_9325.N1	19-JUN-2006 22:30:45	Straylight	43.000	45	Alp Pav	1.9400	26000.	86	22500	No
227	GOM_NL__2PRFIN20060619_224011_000000472048_00402_22500_9326.N1	19-JUN-2006 22:40:11	Tw_i_and_stray	46.500	38	20Eps Sgr	1.8360	11000.	93	22500	No
228	GOM_NL__2PRFIN20060619_224138_000000502048_00402_22500_9327.N1	19-JUN-2006 22:41:38	Tw_i_and_stray	50.000	116	19Del Sgr	2.7000	4100.0	100	22500	No
229	GOM_NL__2PRFIN20060619_225302_000000412048_00402_22500_9328.N1	19-JUN-2006 22:53:02	Bright	41.000	126	60Bet Oph	2.7700	4250.0	82	22500	No
230	GOM_NL__2PRFIN20060619_225529_000000402048_00402_22500_9329.N1	19-JUN-2006 22:55:29	Bright	39.500	59	55Alp Oph	2.0800	8900.0	79	22500	No
231	GOM_NL__2PRFIN20060619_230714_000000402048_00402_22500_9330.N1	19-JUN-2006 23:07:14	Bright	39.500	130	23Bet Dra	2.7990	5800.0	79	22500	No
232	GOM_NL__2PRFIN20060619_231720_000000462048_00402_22500_9331.N1	19-JUN-2006 23:17:20	Bright	46.000	89	5Alp Cep	2.4510	8000.0	92	22500	No
233	GOM_NL__2PRFIN20060619_232404_000000552048_00402_22500_9332.N1	19-JUN-2006 23:24:04	Bright	54.500	74	11Bet Cas	2.2680	6600.0	109	22500	No
234	GOM_NL__2PRFIN20060619_232532_000000462048_00402_22500_9333.N1	19-JUN-2006 23:25:32	Bright	45.500	68	18Alp Cas	2.2250	4500.0	91	22500	No
235	GOM_NL__2PRFIN20060619_233056_000000422048_00402_22500_9334.N1	19-JUN-2006 23:30:56	Bright	42.000	73	57Gam1And	2.2600	13100.	84	22500	No
236	GOM_NL__2PRFIN20060619_233320_000000572048_00402_22500_9335.N1	19-JUN-2006 23:33:20	Tw_i_and_stray	57.000	53	43Bet And	2.0480	3300.0	114	22500	No
237	GOM_NL__2PRFIN20060619_233700_000000542048_00402_22500_9336.N1	19-JUN-2006 23:37:00	Twilight	53.500	50	13Alp Ari	2.0070	4250.0	107	22500	No
238	GOM_NL__2PRFIN20060619_235332_000000592048_00402_22500_9337.N1	19-JUN-2006 23:53:32	Dark	59.000	52	16Bet Cet	2.0370	4500.0	118	22500	No

3. Quality information per product

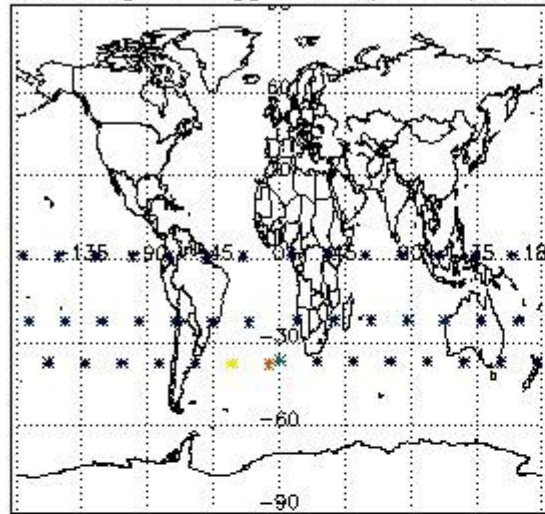
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

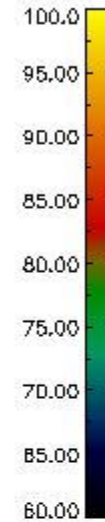
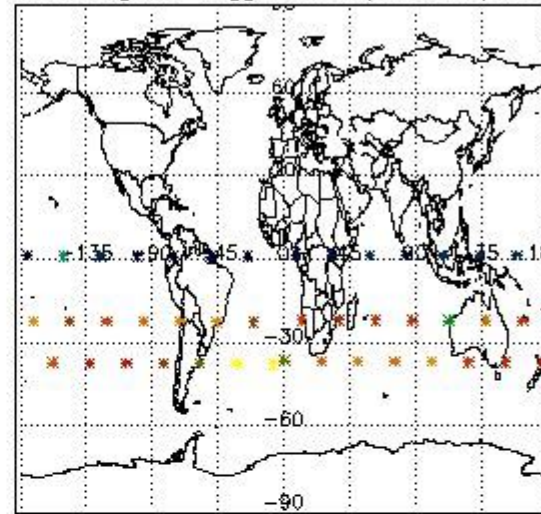


3.2 Plot quality information per product (world map)

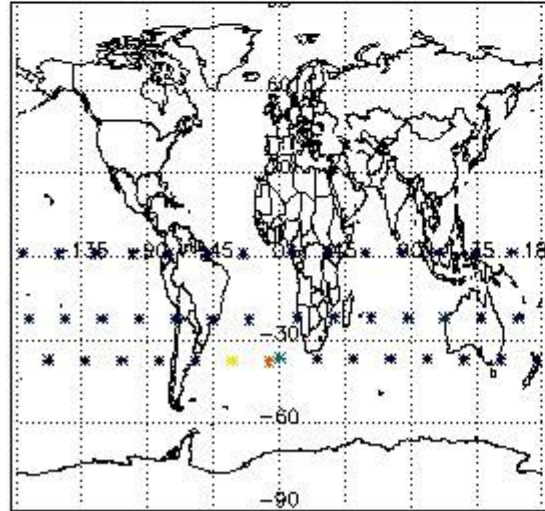
Percentage of flagged data per O3 profile



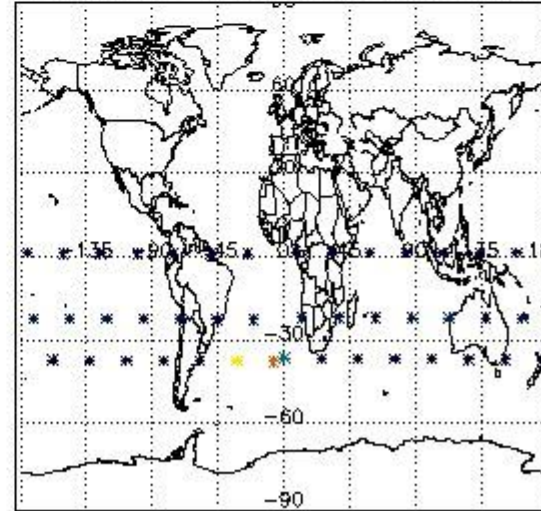
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

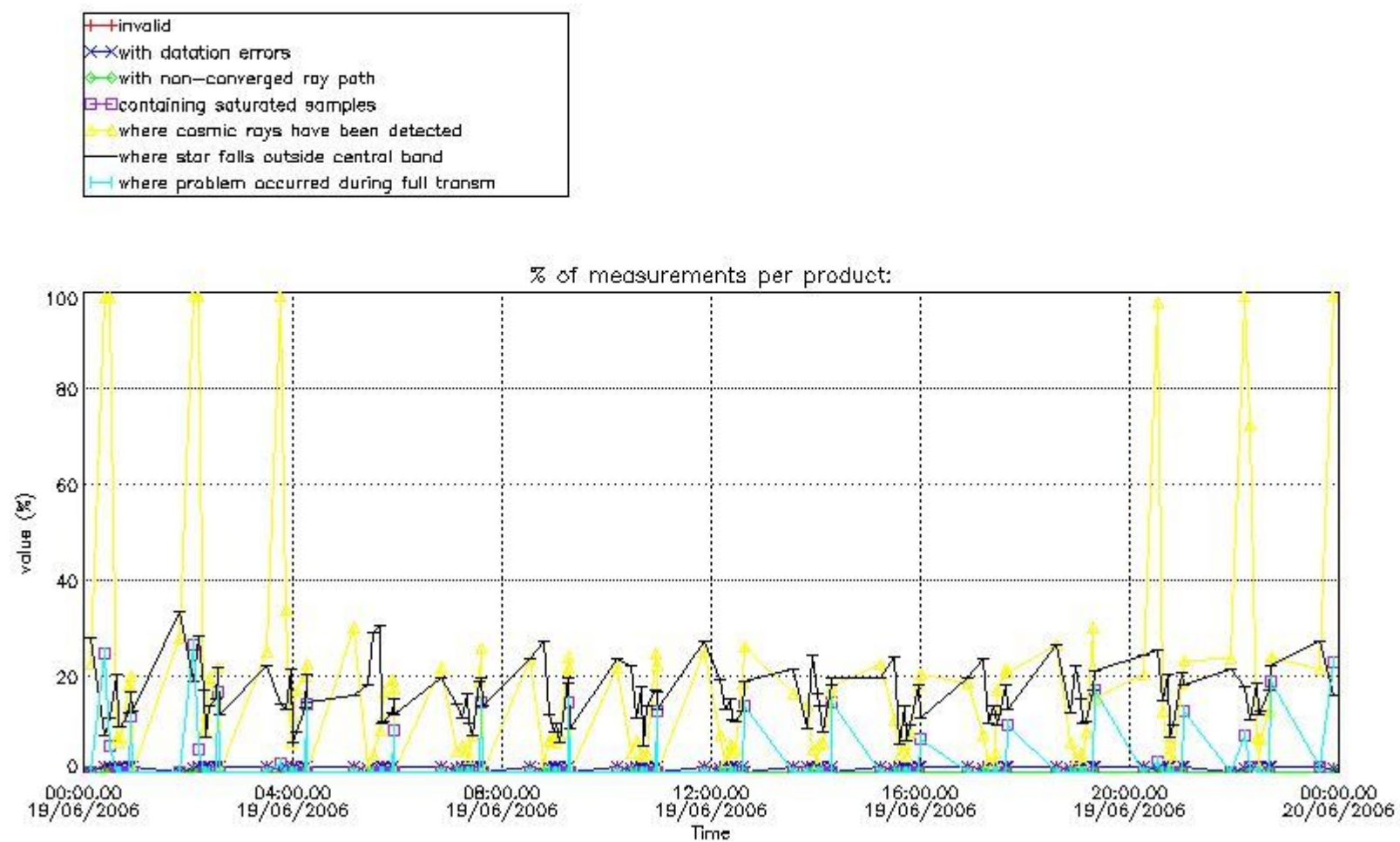


4. Level 1 quality information per product

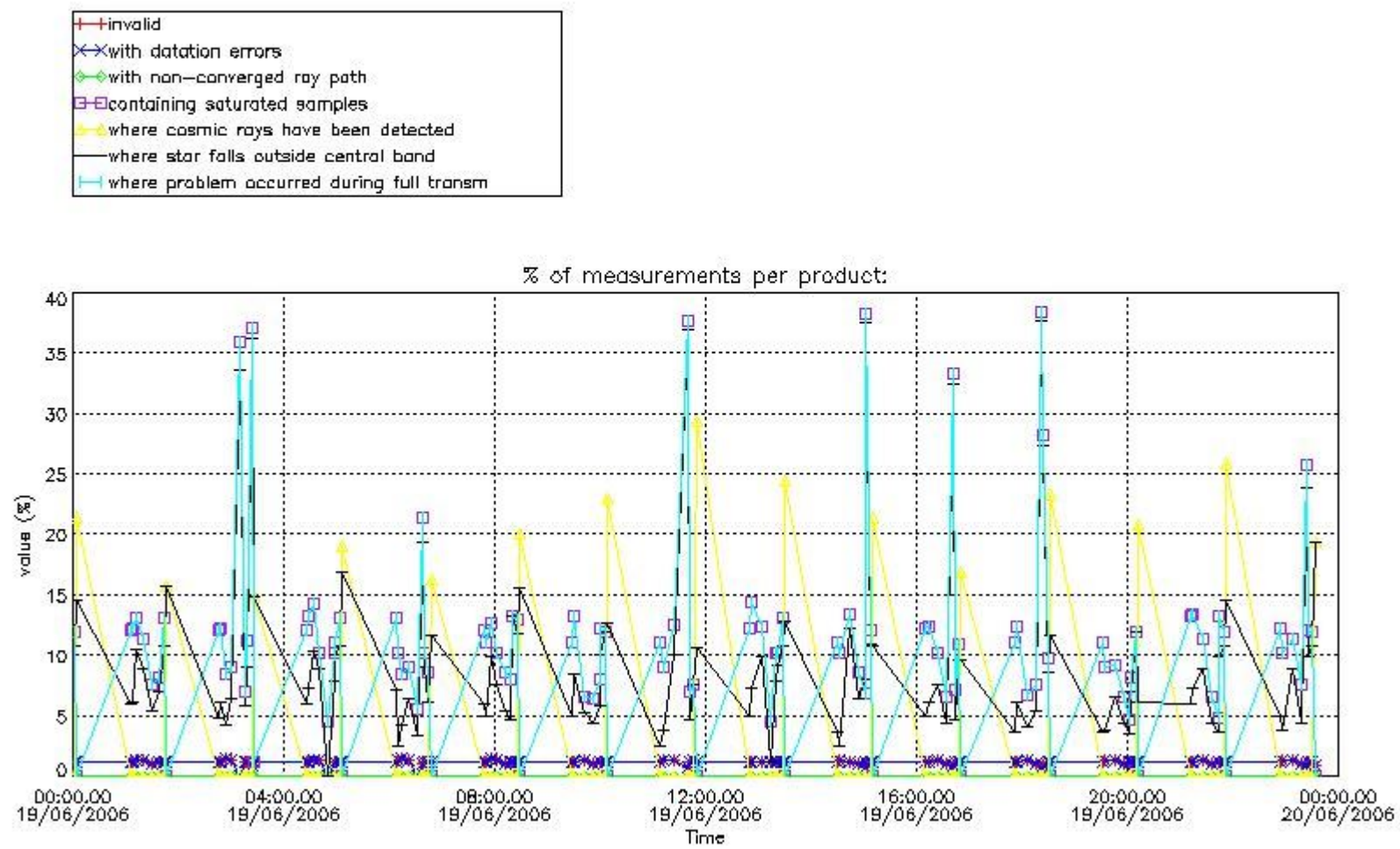
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

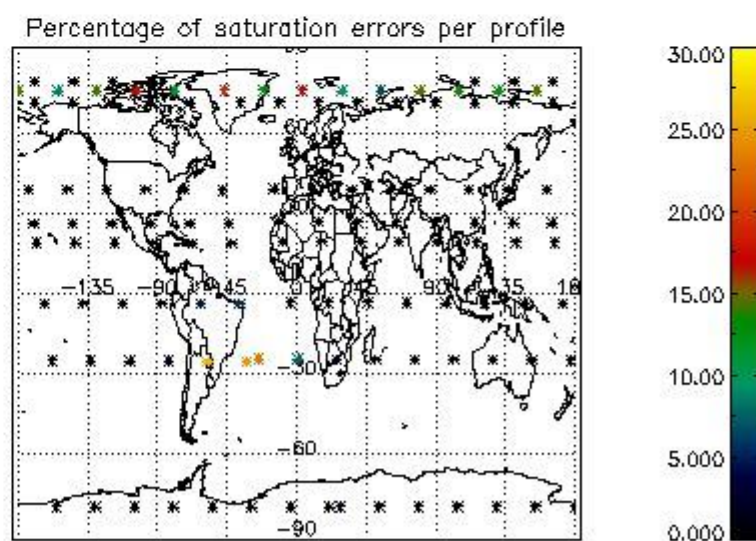
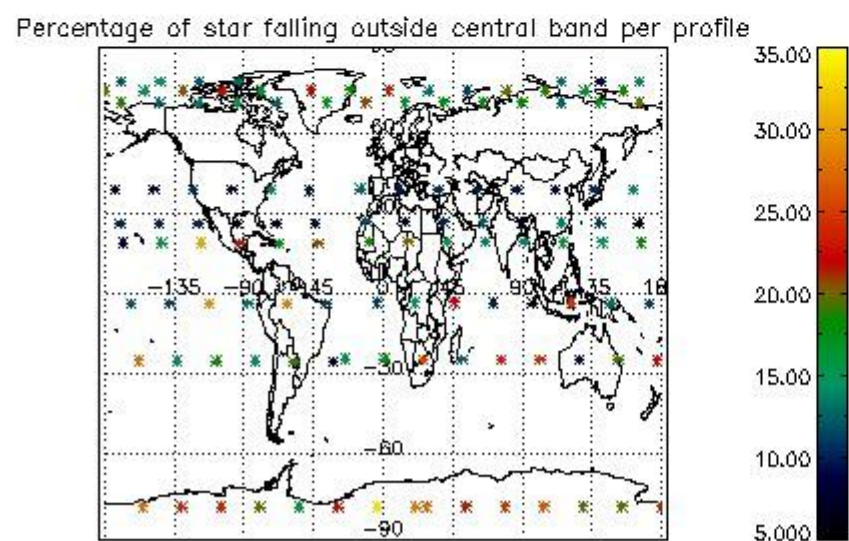
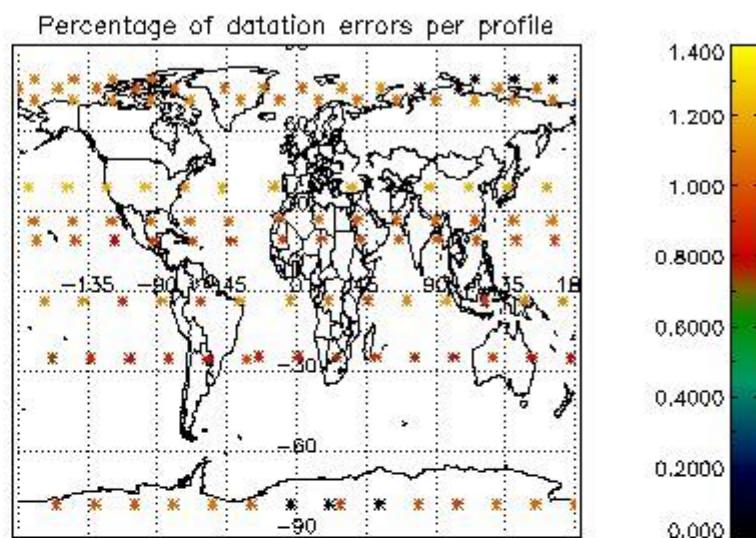
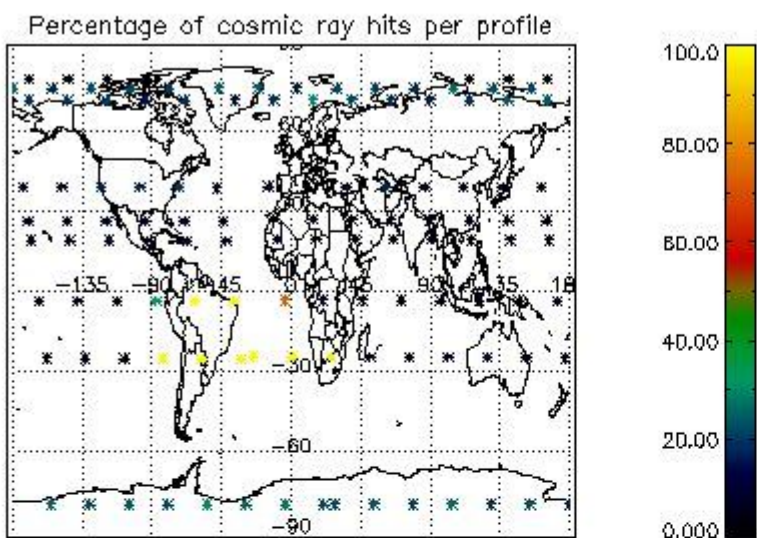


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

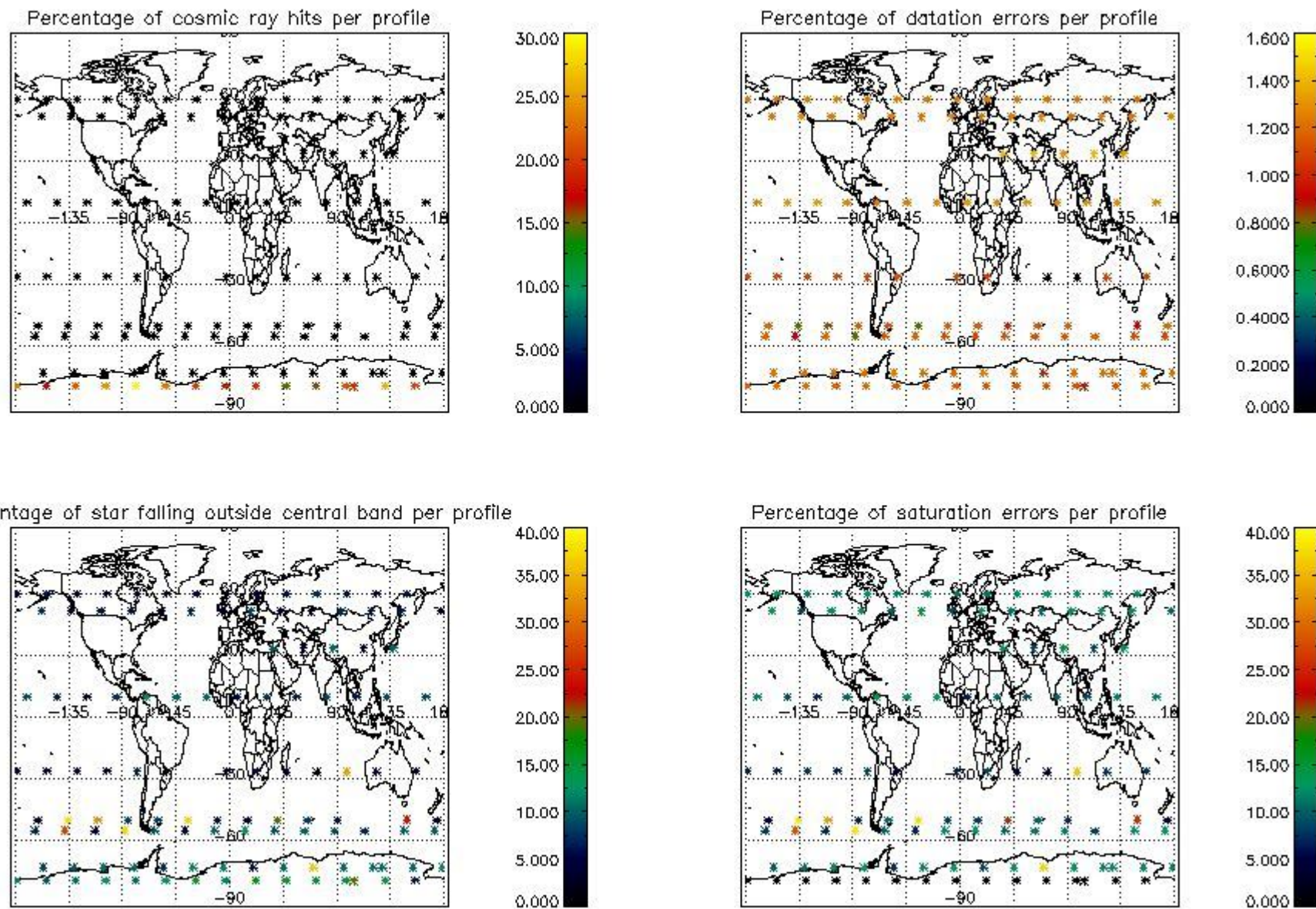


4.2 Plot quality information per product coming from level 1b processing (world map)

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

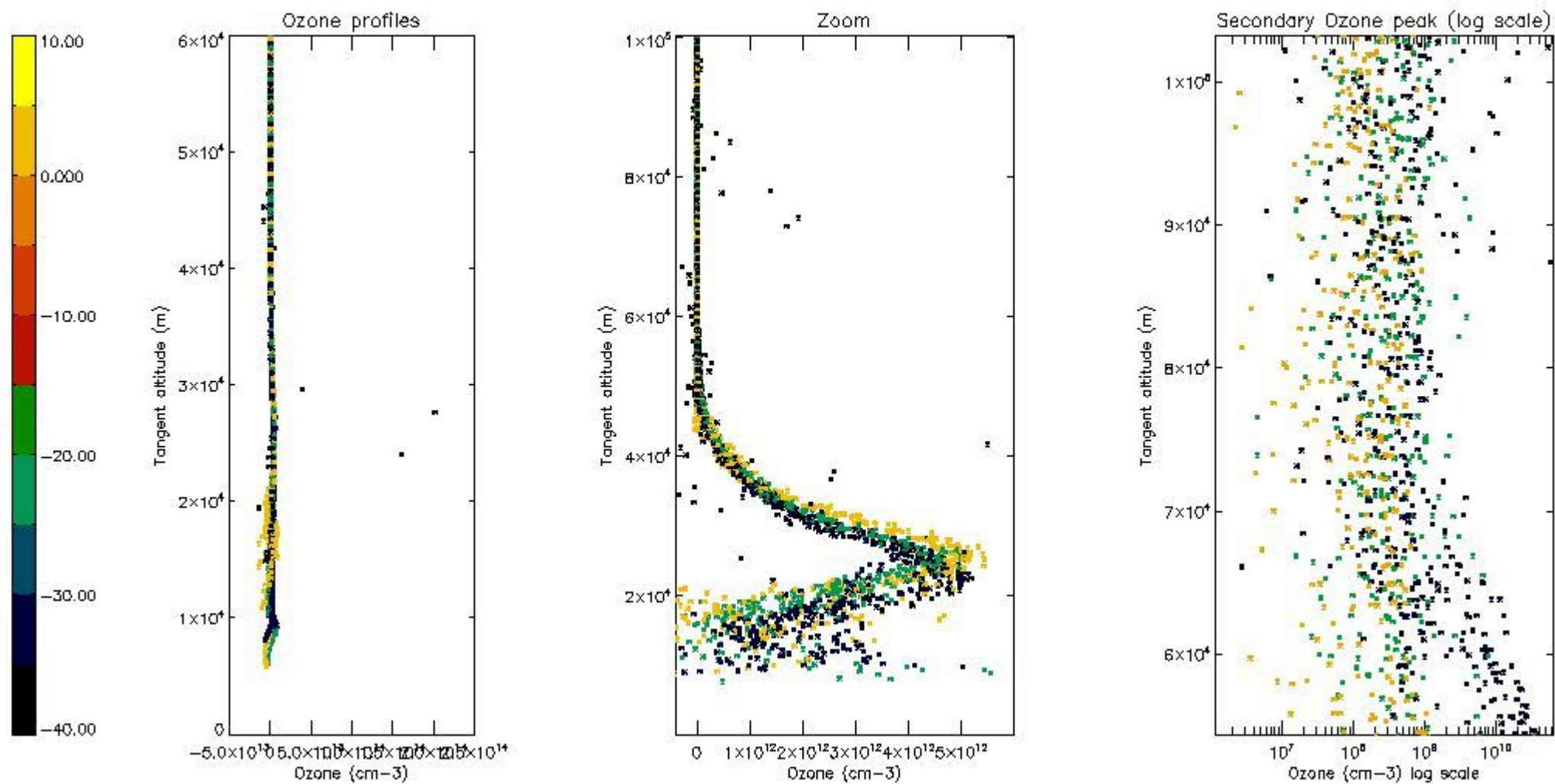
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	21
STD < 20	6

STD < 10	3
STD < 5	0

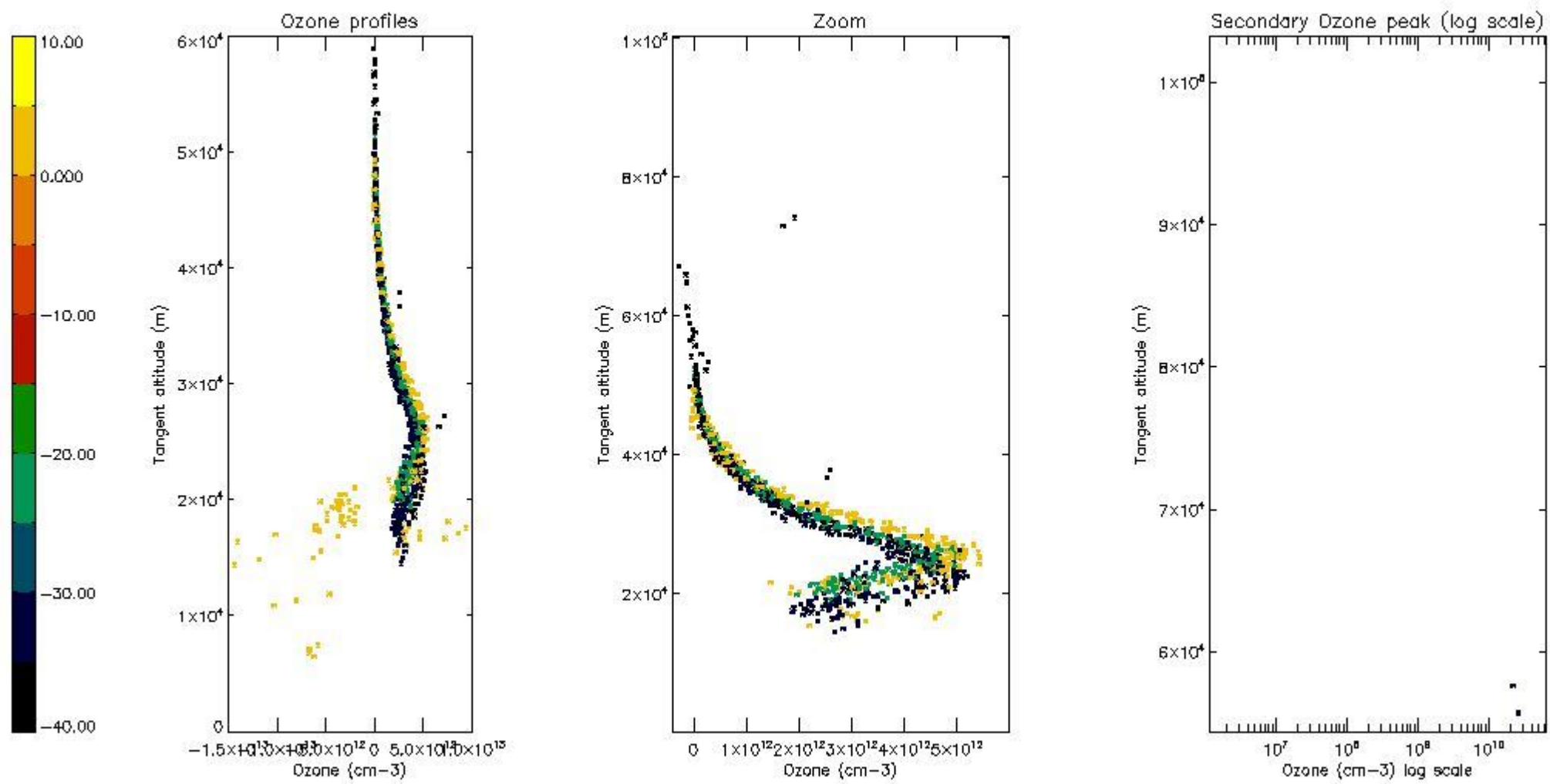
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



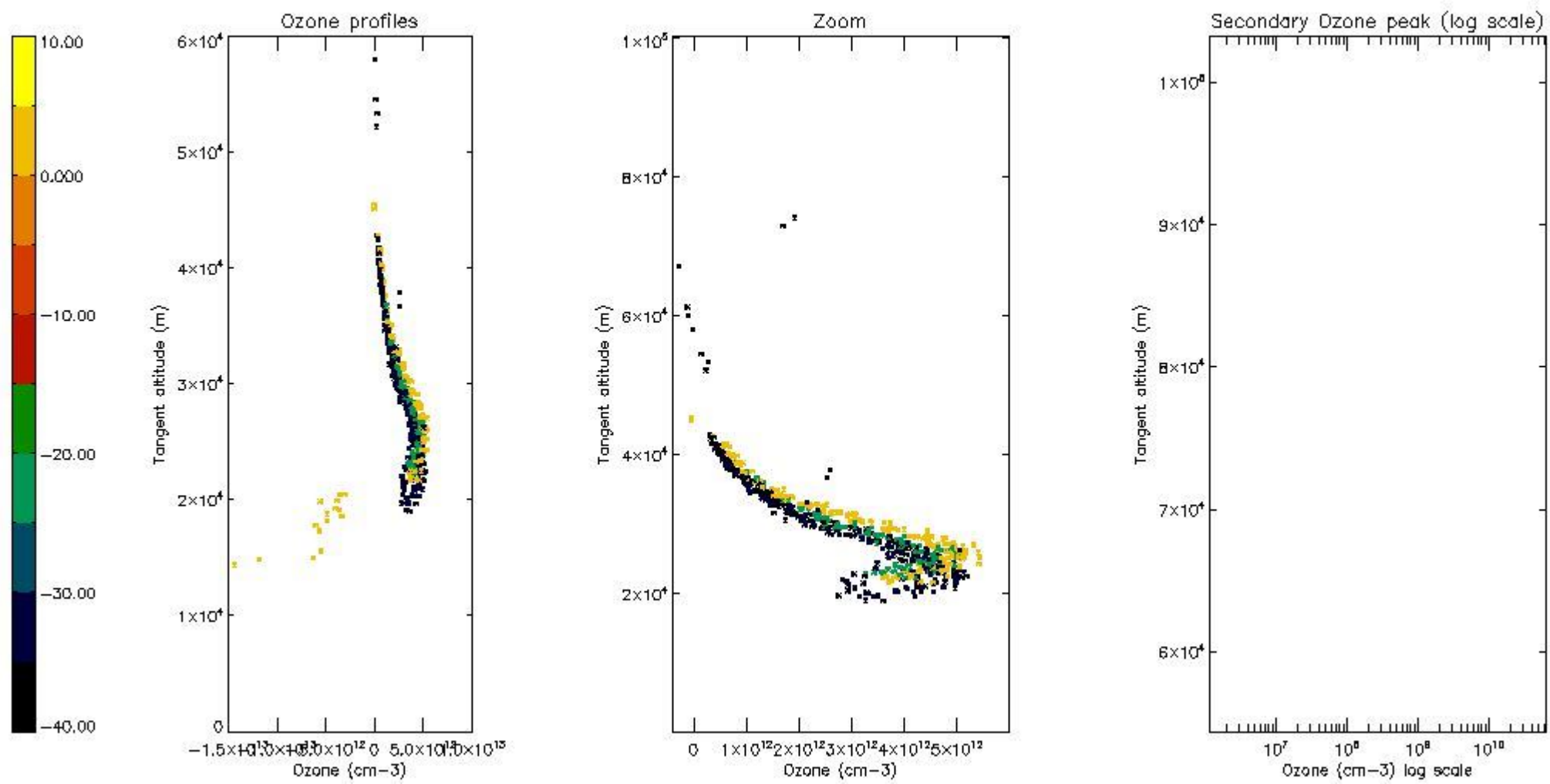
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



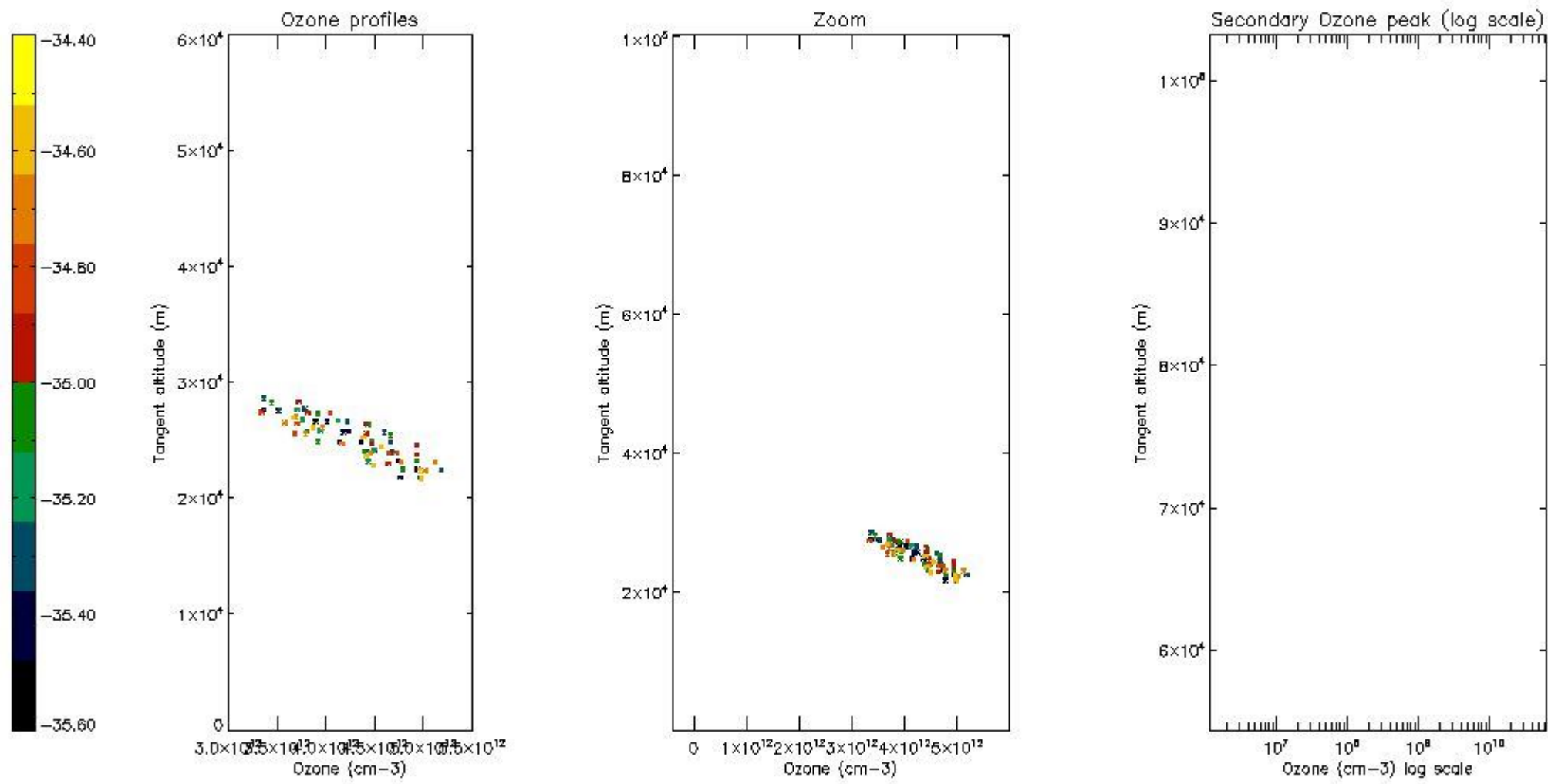
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



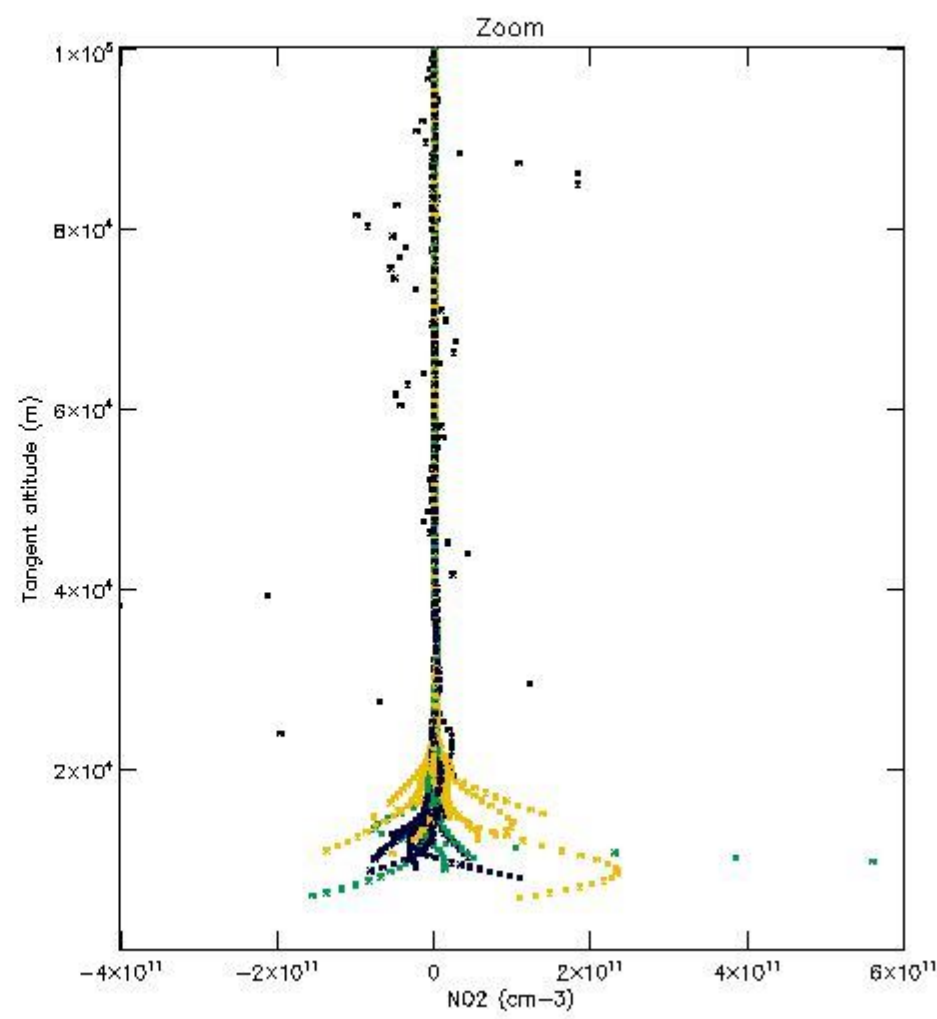
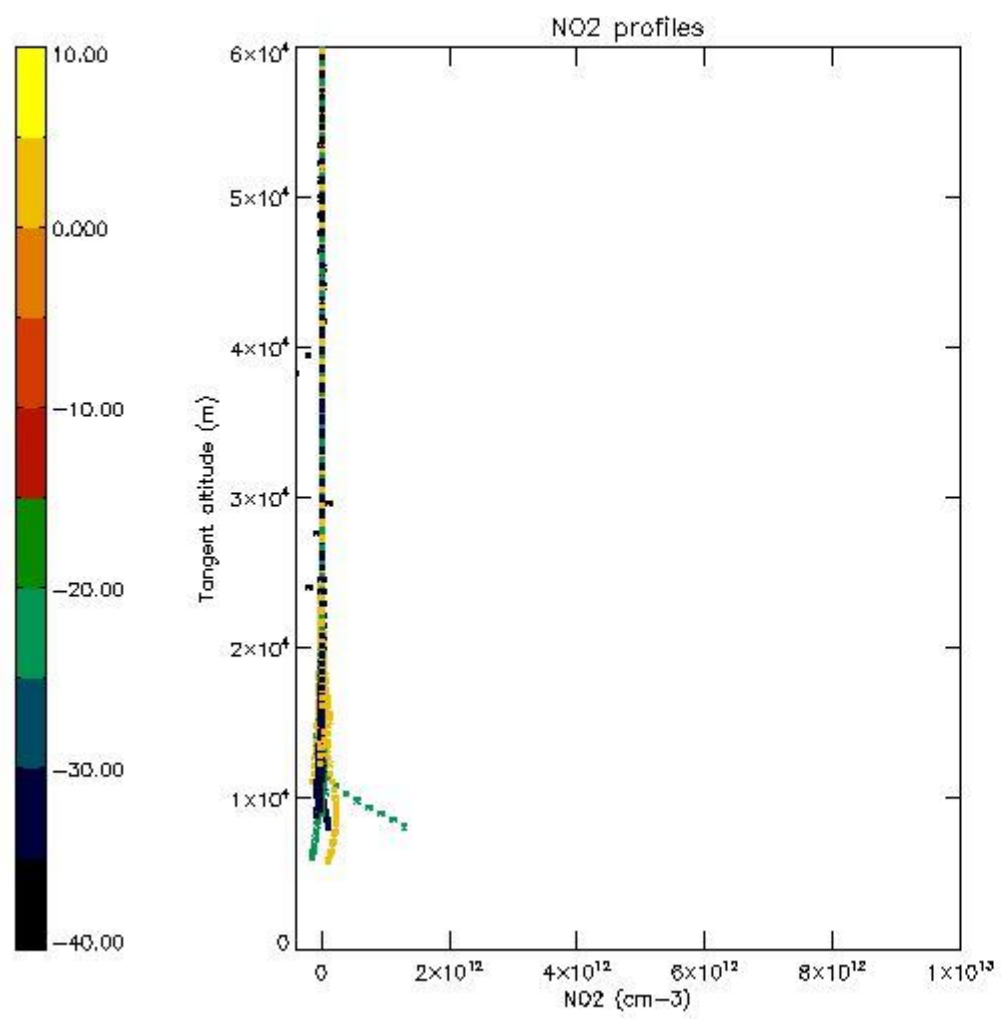
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



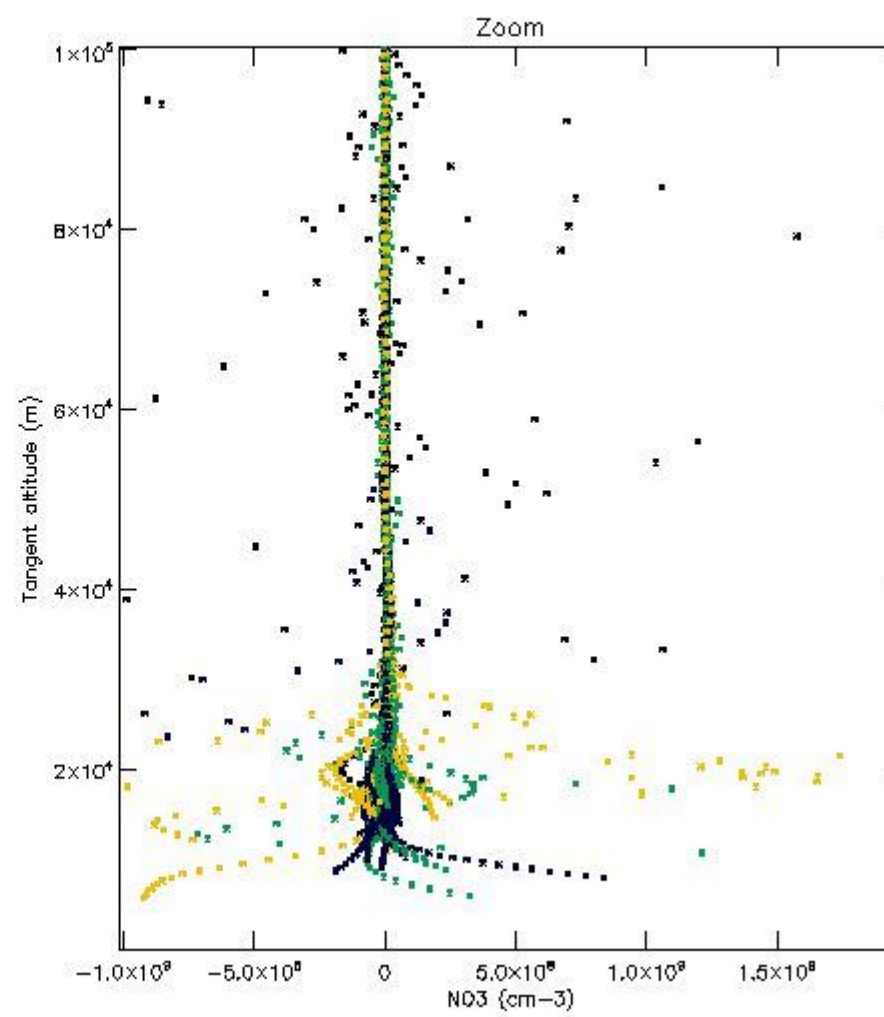
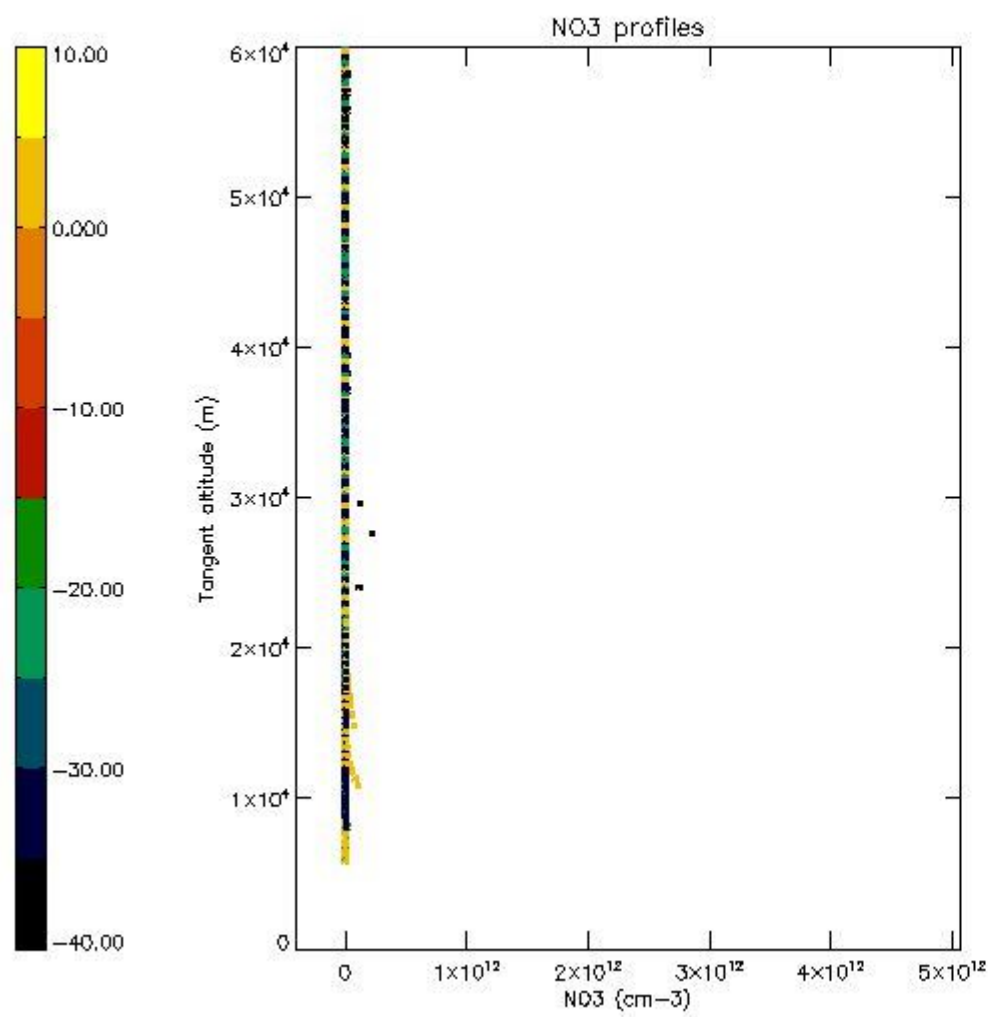
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



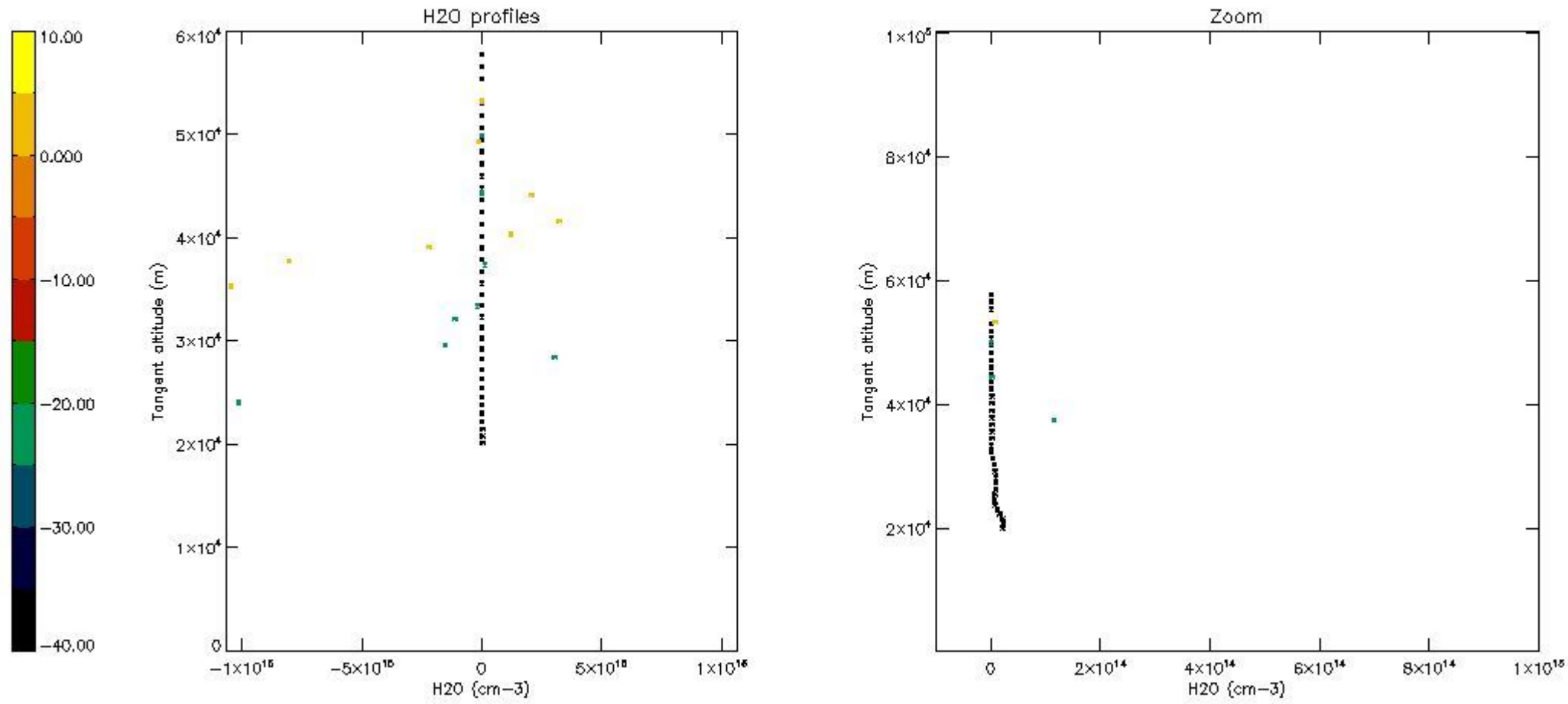
5.7 Plot NO3 profiles for all STD (dark without errors)

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	19-JUN-2006 00:02:33
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	19-JUN-2006 00:02:33
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	19-JUN-2006 00:02:33

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

[3. Level 2 Quality information per product](#)

[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

[3.2 Plot of level 2 quality information per product \(world map\)](#)

[4. Level 1 Quality information per product \(stored on level 2 products\)](#)

[4.1 Plot of level 1 quality information per product \(time dependant\)](#)

[4.1.1 Plot of level 1 quality information per product \(time dependant\): ASCENDING](#)

[4.1.2 Plot of level 1 quality information per product \(time dependant\): DESCENDING](#)

[4.2 Plot of level 1 quality information per product \(world map\)](#)

[4.2.1 Plot of level 1 quality information per product \(world map\): ASCENDING](#)

[4.2.2 Plot of level 1 quality information per product \(world map\): DESCENDING](#)

[5. Ozone profiles based on quality statistics and other trace gas profiles](#)

[5.1 Ozone statistics based on quality of products](#)

[5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

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

[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

[5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

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

[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

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

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

Item	Value
Time of report generation	24APR2013 00:06:23
Data source version	GOMOS/6.01
Start time of products	19-06-2006 (19JUN2006 00:00:00)
Stop time of products	20-06-2006 (20JUN2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	238
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

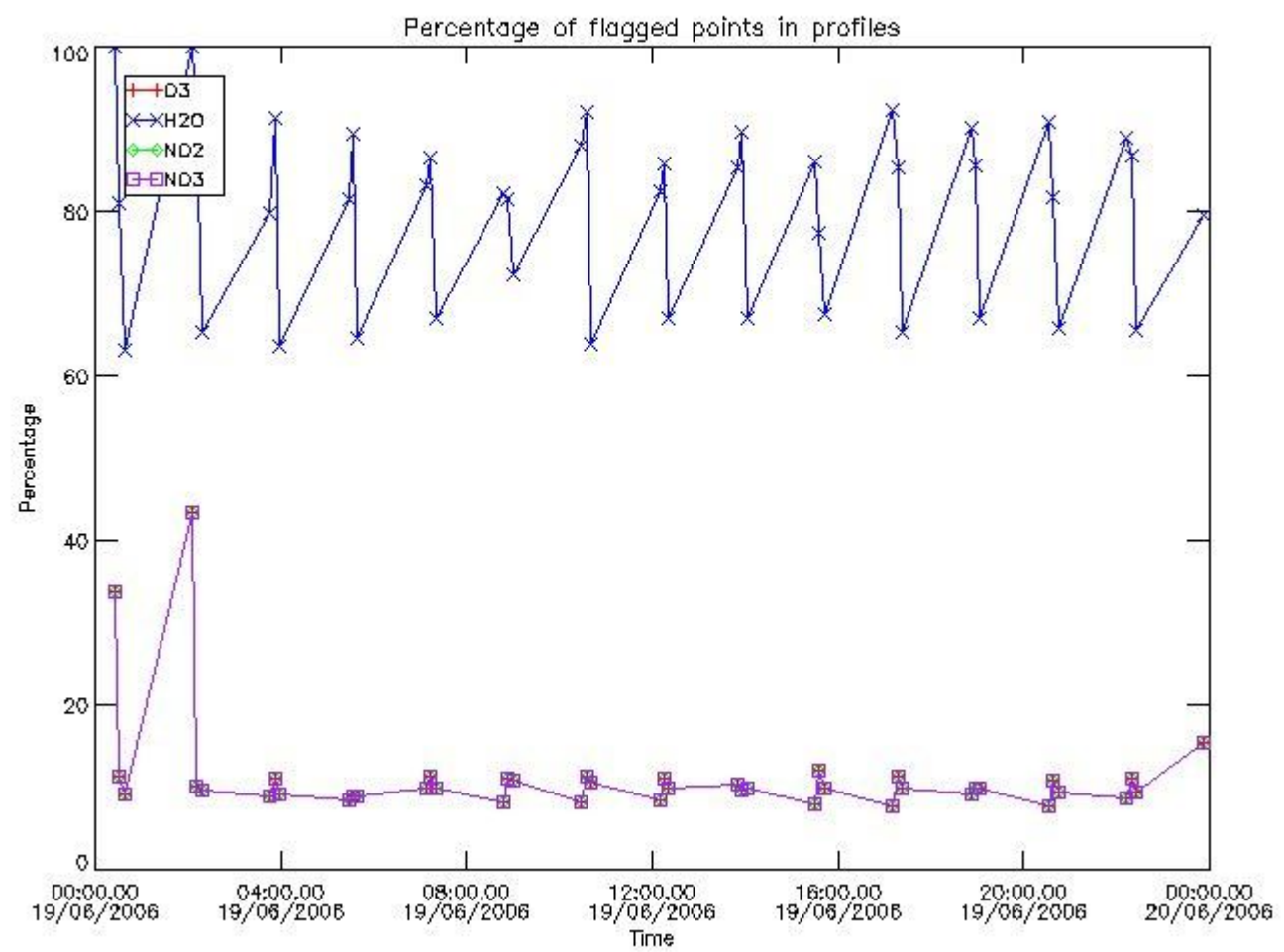
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20060619_000233_000000422048_00388_22486_9240.N1	19-JUN-2006 00:02:33	Bright	42.000	73	57Gam1And	2.2600	13100.	84	22486	No
2	GOM_NL__2PRFIN20060619_000452_000000452048_00388_22486_9241.N1	19-JUN-2006 00:04:52	Bright	44.500	173	4Bet Tri	3.0040	8900.0	89	22486	No
3	GOM_NL__2PRFIN20060619_000833_000000542048_00388_22486_9242.N1	19-JUN-2006 00:08:33	Twilight	53.500	50	13Alp Ari	2.0070	4250.0	107	22486	No
4	GOM_NL__2PRFIN20060619_002452_000000532048_00388_22486_9243.N1	19-JUN-2006 00:24:52	Dark	52.500	52	16Bet Cet	2.0370	4500.0	105	22486	No
5	GOM_NL__2PRFIN20060619_003053_000000452048_00388_22486_9244.N1	19-JUN-2006 00:30:53	Dark	45.000	84	Alp Phe	2.3970	4500.0	90	22486	No
6	GOM_NL__2PRFIN20060619_003713_000000562048_00389_22487_9227.N1	19-JUN-2006 00:37:13	Dark	56.000	63	Bet Gru	2.1500	2800.0	112	22487	No
7	GOM_NL__2PRFIN20060619_003916_000000492048_00389_22487_9228.N1	19-JUN-2006 00:39:16	Straylight	48.500	31	Alp Gru	1.7340	15200.	97	22487	No
8	GOM_NL__2PRFIN20060619_004250_000000422048_00389_22487_9229.N1	19-JUN-2006 00:42:50	Straylight	42.000	45	Alp Pav	1.9400	26000.	84	22487	No
9	GOM_NL__2PRFIN20060619_005219_000000442048_00389_22487_9230.N1	19-JUN-2006 00:52:19	Twilight	44.000	38	20Eps Sgr	1.8360	11000.	88	22487	No
10	GOM_NL__2PRFIN20060619_005347_000000482048_00389_22487_9231.N1	19-JUN-2006 00:53:47	Twilight	47.500	116	19Del Sgr	2.7000	4100.0	95	22487	No
11	GOM_NL__2PRFIN20060619_005505_000000472048_00389_22487_9232.N1	19-JUN-2006 00:55:05	Bright	47.000	137	22Lam Sgr	2.8240	4400.0	94	22487	No
12	GOM_NL__2PRFIN20060619_010517_000000422048_00389_22487_9233.N1	19-JUN-2006 01:05:17	Bright	41.500	126	60Bet Oph	2.7700	4250.0	83	22487	No
13	GOM_NL__2PRFIN20060619_010745_000000412048_00389_22487_9234.N1	19-JUN-2006 01:07:45	Bright	41.000	59	55Alp Oph	2.0800	8900.0	82	22487	No
14	GOM_NL__2PRFIN20060619_011251_000000382048_00389_22487_9235.N1	19-JUN-2006 01:12:51	Bright	38.000	133	40Zet Her	2.8070	6000.0	76	22487	No
15	GOM_NL__2PRFIN20060619_011931_000000402048_00389_22487_9236.N1	19-JUN-2006 01:19:31	Bright	39.500	130	23Bet Dra	2.7990	5800.0	79	22487	No
16	GOM_NL__2PRFIN20060619_012941_000000472048_00389_22487_9237.N1	19-JUN-2006 01:29:41	Bright	46.500	89	5Alp Cep	2.4510	8000.0	93	22487	No
17	GOM_NL__2PRFIN20060619_013748_000000432048_00389_22487_9238.N1	19-JUN-2006 01:37:48	Bright	43.000	68	18Alp Cas	2.2250	4500.0	86	22487	No
18	GOM_NL__2PRFIN20060619_014309_000000422048_00389_22487_9239.N1	19-JUN-2006 01:43:09	Bright	42.000	73	57Gam1And	2.2600	13100.	84	22487	No
19	GOM_NL__2PRFIN20060619_014528_000000452048_00389_22487_9240.N1	19-JUN-2006 01:45:28	Bright	44.500	173	4Bet Tri	3.0040	8900.0	89	22487	No
20	GOM_NL__2PRFIN20060619_014909_000000572048_00389_22487_9241.N1	19-JUN-2006 01:49:09	Twilight	57.000	50	13Alp Ari	2.0070	4250.0	114	22487	No
21	GOM_NL__2PRFIN20060619_020529_000000612048_00389_22487_9242.N1	19-JUN-2006 02:05:29	Dark	60.500	52	16Bet Cet	2.0370	4500.0	121	22487	No
22	GOM_NL__2PRFIN20060619_021130_000000552048_00389_22487_9243.N1	19-JUN-2006 02:11:30	Dark	55.000	84	Alp Phe	2.3970	4500.0	110	22487	No
23	GOM_NL__2PRFIN20060619_021750_000000532048_00390_22488_9227.N1	19-JUN-2006 02:17:50	Dark	52.500	63	Bet Gru	2.1500	2800.0	105	22488	No
24	GOM_NL__2PRFIN20060619_021953_000000482048_00390_22488_9228.N1	19-JUN-2006 02:19:53	Straylight	48.000	31	Alp Gru	1.7340	15200.	96	22488	No
25	GOM_NL__2PRFIN20060619_022326_000000442048_00390_22488_9229.N1	19-JUN-2006 02:23:26	Straylight	43.500	45	Alp Pav	1.9400	26000.	87	22488	No
26	GOM_NL__2PRFIN20060619_023255_000000462048_00390_22488_9230.N1	19-JUN-2006 02:32:55	Twilight	46.000	38	20Eps Sgr	1.8360	11000.	92	22488	No
27	GOM_NL__2PRFIN20060619_023423_000000512048_00390_22488_9231.N1	19-JUN-2006 02:34:23	Twilight	50.500	116	19Del Sgr	2.7000	4100.0	101	22488	No
28	GOM_NL__2PRFIN20060619_023541_000000472048_00390_22488_9232.N1	19-JUN-2006 02:35:41	Bright	46.500	137	22Lam Sgr	2.8240	4400.0	93	22488	No
29	GOM_NL__2PRFIN20060619_024552_000000422048_00390_22488_9233.N1	19-JUN-2006 02:45:52	Bright	41.500	126	60Bet Oph	2.7700	4250.0	83	22488	No
30	GOM_NL__2PRFIN20060619_024820_000000412048_00390_22488_9234.N1	19-JUN-2006 02:48:20	Bright	41.000	59	55Alp Oph	2.0800	8900.0	82	22488	No
31	GOM_NL__2PRFIN20060619_025327_000000362048_00390_22488_9235.N1	19-JUN-2006 02:53:27	Bright	35.500	133	40Zet Her	2.8070	6000.0	71	22488	No
32	GOM_NL__2PRFIN20060619_030006_000000392048_00390_22488_9236.N1	19-JUN-2006 03:00:06	Bright	39.000	130	23Bet Dra	2.7990	5800.0	78	22488	No
33	GOM_NL__2PRFIN20060619_031017_000000662048_00390_22488_9237.N1	19-JUN-2006 03:10:17	Bright	65.500	89	5Alp Cep	2.4510	8000.0	131	22488	No
34	GOM_NL__2PRFIN20060619_031657_000000432048_00390_22488_9238.N1	19-JUN-2006 03:16:57	Bright	43.000	74	11Bet Cas	2.2680	6600.0	86	22488	No
35	GOM_NL__2PRFIN20060619_031824_000000452048_00390_22488_9239.N1	19-JUN-2006 03:18:24	Bright	44.500	68	18Alp Cas	2.2250	4500.0	89	22488	No
36	GOM_NL__2PRFIN20060619_032345_000000582048_00390_22488_9240.N1	19-JUN-2006 03:23:45	Bright	58.000	73	57Gam1And	2.2600	13100.	116	22488	No
37	GOM_NL__2PRFIN20060619_032604_000000442048_00390_22488_9241.N1	19-JUN-2006 03:26:04	Bright	44.000	173	4Bet Tri	3.0040	8900.0	88	22488	No
38	GOM_NL__2PRFIN20060619_032945_000000502048_00390_22488_9242.N1	19-JUN-2006 03:29:45	Twilight	49.500	50	13Alp Ari	2.0070	4250.0	99	22488	No
39	GOM_NL__2PRFIN20060619_034606_000000572048_00390_22488_9243.N1	19-JUN-2006 03:46:06	Dark	57.000	52	16Bet Cet	2.0370	4500.0	114	22488	No
40	GOM_NL__2PRFIN20060619_035207_000000462048_00390_22488_9244.N1	19-JUN-2006 03:52:07	Dark	46.000	84	Alp Phe	2.3970	4500.0	92	22488	No
41	GOM_NL__2PRFIN20060619_035827_000000562048_00391_22489_9228.N1	19-JUN-2006 03:58:27	Dark	55.500	63	Bet Gru	2.1500	2800.0	111	22489	No
42	GOM_NL__2PRFIN20060619_040030_000000482048_00391_22489_9229.N1	19-JUN-2006 04:00:30	Straylight	48.000	31	Alp Gru	1.7340	15200.	96	22489	No

220	GOM_NL__2PRFIN20060619_215241_000000452048_00401_22499_9314.N1	19-JUN-2006 21:52:41	Bright	44.500	173	4Bet Tri	3.0040	8900.0	89	22499	No
221	GOM_NL__2PRFIN20060619_215624_000000492048_00401_22499_9315.N1	19-JUN-2006 21:56:24	Twilight	49.000	50	13Alp Ari	2.0070	4250.0	98	22499	No
222	GOM_NL__2PRFIN20060619_221254_000000602048_00401_22499_9316.N1	19-JUN-2006 22:12:54	Dark	59.500	52	16Bet Cet	2.0370	4500.0	119	22499	No
223	GOM_NL__2PRFIN20060619_221851_000000462048_00401_22499_9317.N1	19-JUN-2006 22:18:51	Dark	45.500	84	Alp Phe	2.3970	4500.0	91	22499	No
224	GOM_NL__2PRFIN20060619_222513_000000542048_00402_22500_9323.N1	19-JUN-2006 22:25:13	Dark	54.000	63	Bet Gru	2.1500	2800.0	108	22500	No
225	GOM_NL__2PRFIN20060619_222716_000000512048_00402_22500_9324.N1	19-JUN-2006 22:27:16	Straylight	50.500	31	Alp Gru	1.7340	15200.	101	22500	No
226	GOM_NL__2PRFIN20060619_223045_000000432048_00402_22500_9325.N1	19-JUN-2006 22:30:45	Straylight	43.000	45	Alp Pav	1.9400	26000.	86	22500	No
227	GOM_NL__2PRFIN20060619_224011_000000472048_00402_22500_9326.N1	19-JUN-2006 22:40:11	Tw_i_and_stray	46.500	38	20Eps Sgr	1.8360	11000.	93	22500	No
228	GOM_NL__2PRFIN20060619_224138_000000502048_00402_22500_9327.N1	19-JUN-2006 22:41:38	Tw_i_and_stray	50.000	116	19Del Sgr	2.7000	4100.0	100	22500	No
229	GOM_NL__2PRFIN20060619_225302_000000412048_00402_22500_9328.N1	19-JUN-2006 22:53:02	Bright	41.000	126	60Bet Oph	2.7700	4250.0	82	22500	No
230	GOM_NL__2PRFIN20060619_225529_000000402048_00402_22500_9329.N1	19-JUN-2006 22:55:29	Bright	39.500	59	55Alp Oph	2.0800	8900.0	79	22500	No
231	GOM_NL__2PRFIN20060619_230714_000000402048_00402_22500_9330.N1	19-JUN-2006 23:07:14	Bright	39.500	130	23Bet Dra	2.7990	5800.0	79	22500	No
232	GOM_NL__2PRFIN20060619_231720_000000462048_00402_22500_9331.N1	19-JUN-2006 23:17:20	Bright	46.000	89	5Alp Cep	2.4510	8000.0	92	22500	No
233	GOM_NL__2PRFIN20060619_232404_000000552048_00402_22500_9332.N1	19-JUN-2006 23:24:04	Bright	54.500	74	11Bet Cas	2.2680	6600.0	109	22500	No
234	GOM_NL__2PRFIN20060619_232532_000000462048_00402_22500_9333.N1	19-JUN-2006 23:25:32	Bright	45.500	68	18Alp Cas	2.2250	4500.0	91	22500	No
235	GOM_NL__2PRFIN20060619_233056_000000422048_00402_22500_9334.N1	19-JUN-2006 23:30:56	Bright	42.000	73	57Gam1And	2.2600	13100.	84	22500	No
236	GOM_NL__2PRFIN20060619_233320_000000572048_00402_22500_9335.N1	19-JUN-2006 23:33:20	Tw_i_and_stray	57.000	53	43Bet And	2.0480	3300.0	114	22500	No
237	GOM_NL__2PRFIN20060619_233700_000000542048_00402_22500_9336.N1	19-JUN-2006 23:37:00	Twilight	53.500	50	13Alp Ari	2.0070	4250.0	107	22500	No
238	GOM_NL__2PRFIN20060619_235332_000000592048_00402_22500_9337.N1	19-JUN-2006 23:53:32	Dark	59.000	52	16Bet Cet	2.0370	4500.0	118	22500	No

3. Quality information per product

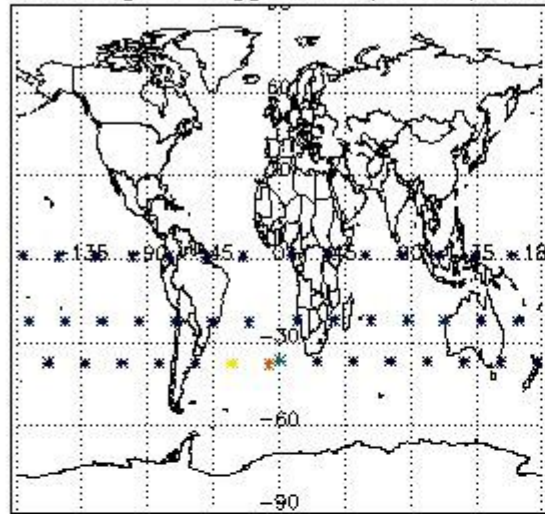
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

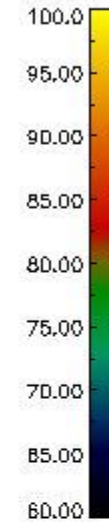
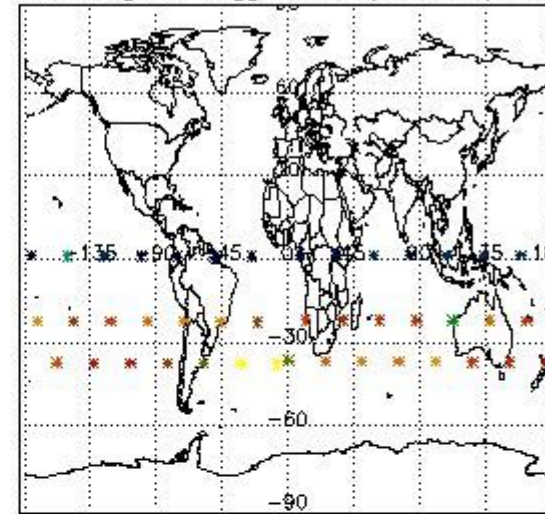


3.2 Plot quality information per product (world map)

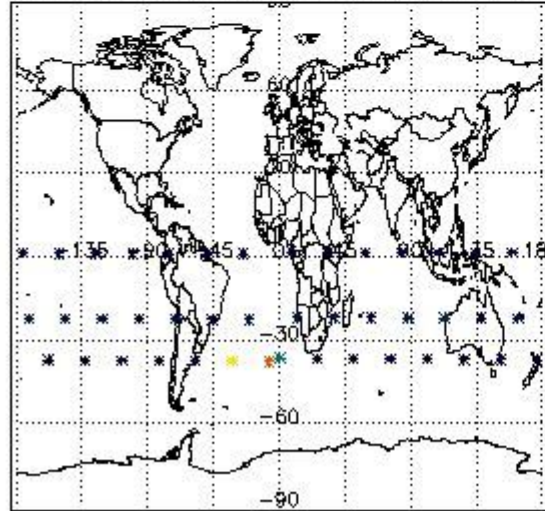
Percentage of flagged data per O3 profile



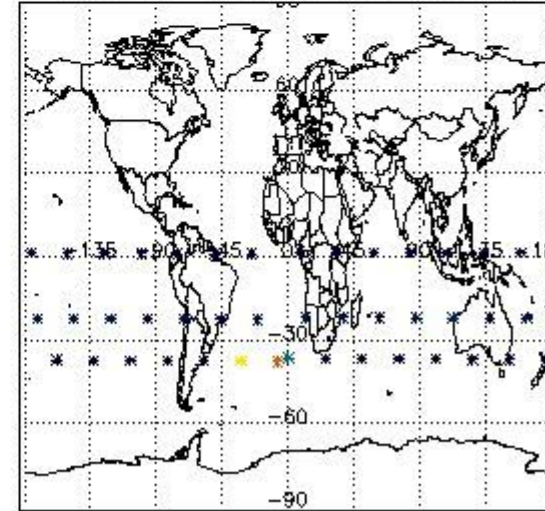
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

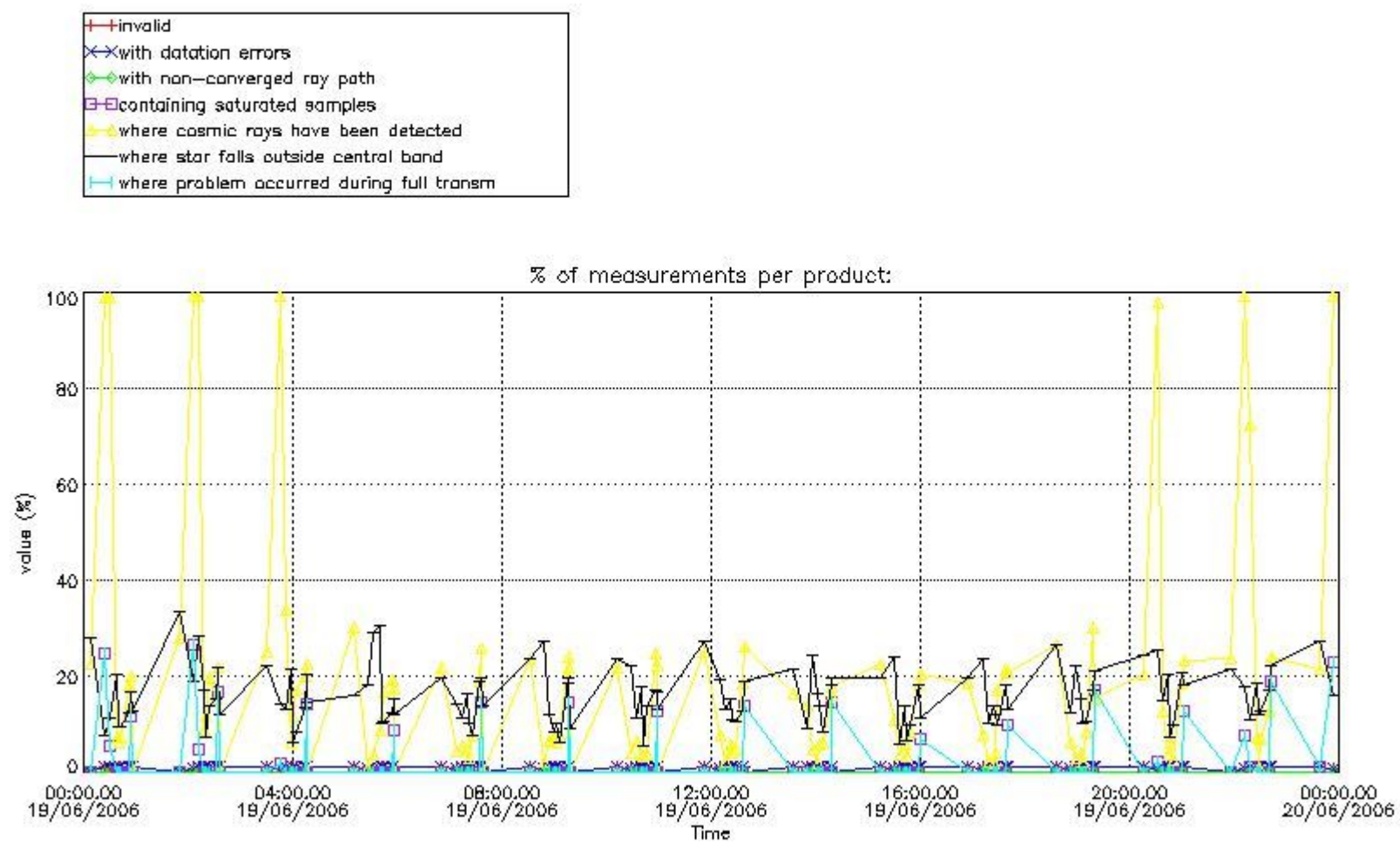


4. Level 1 quality information per product

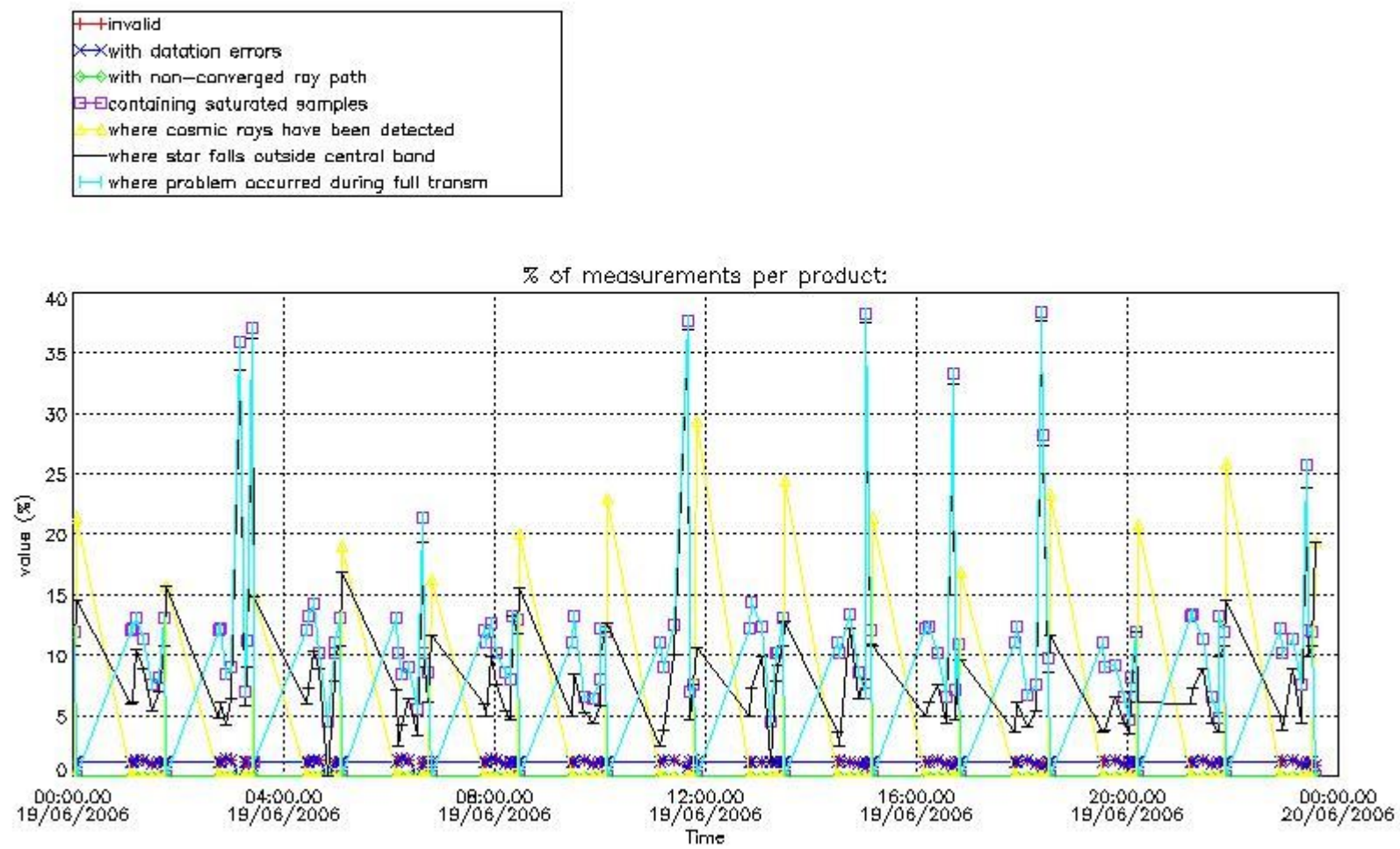
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

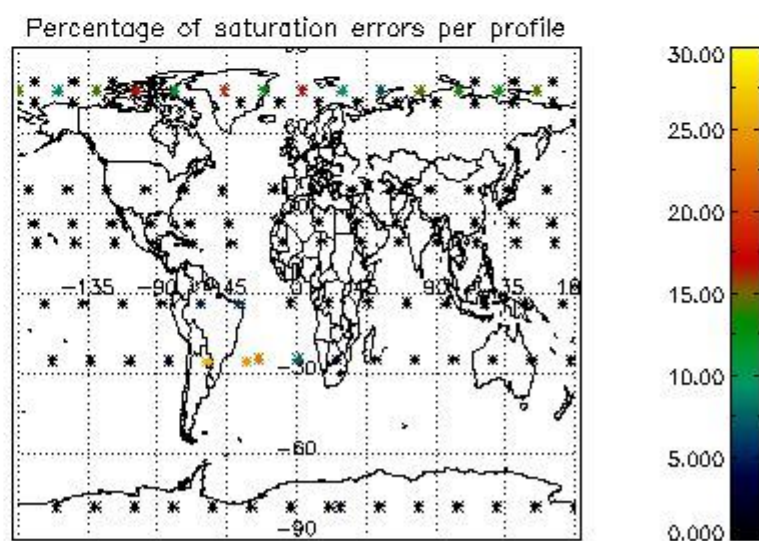
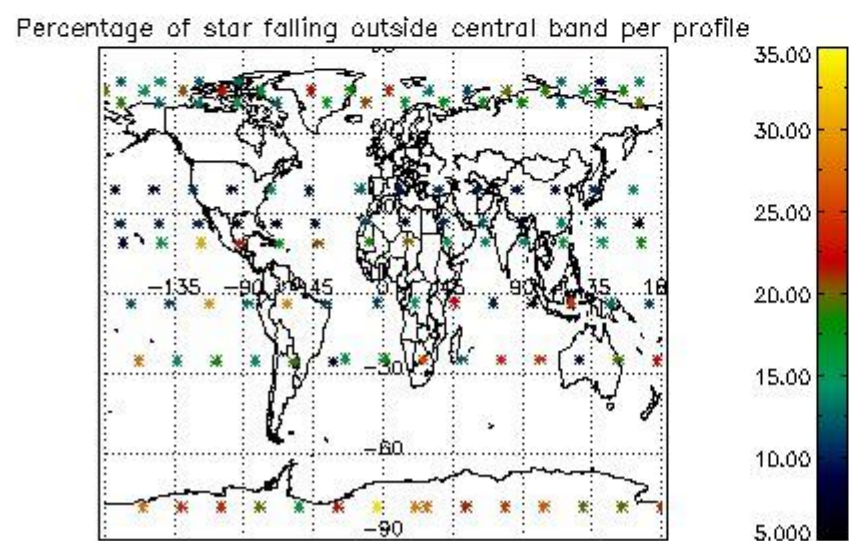
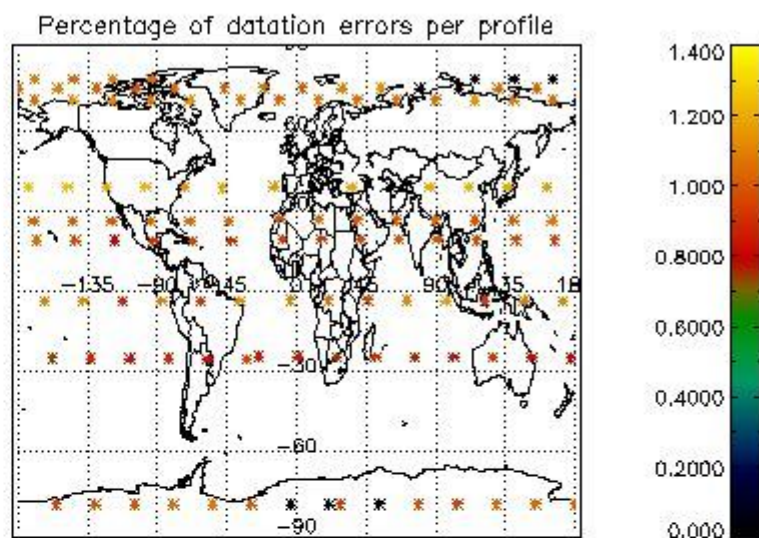
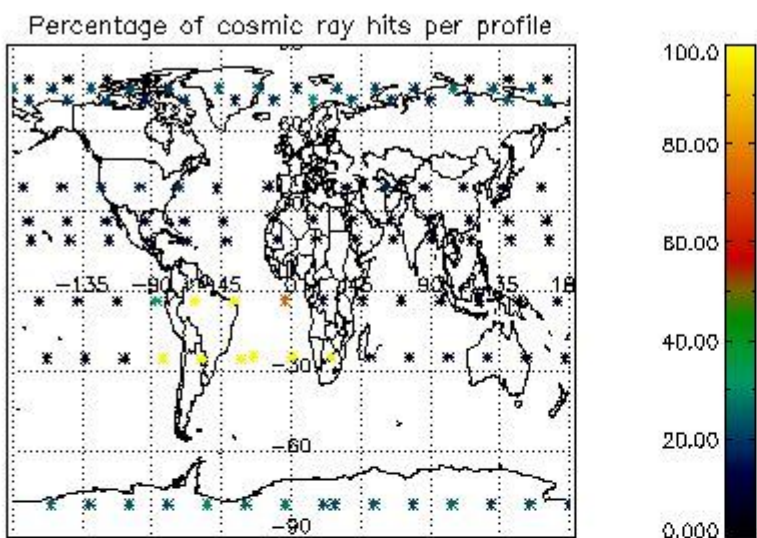


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

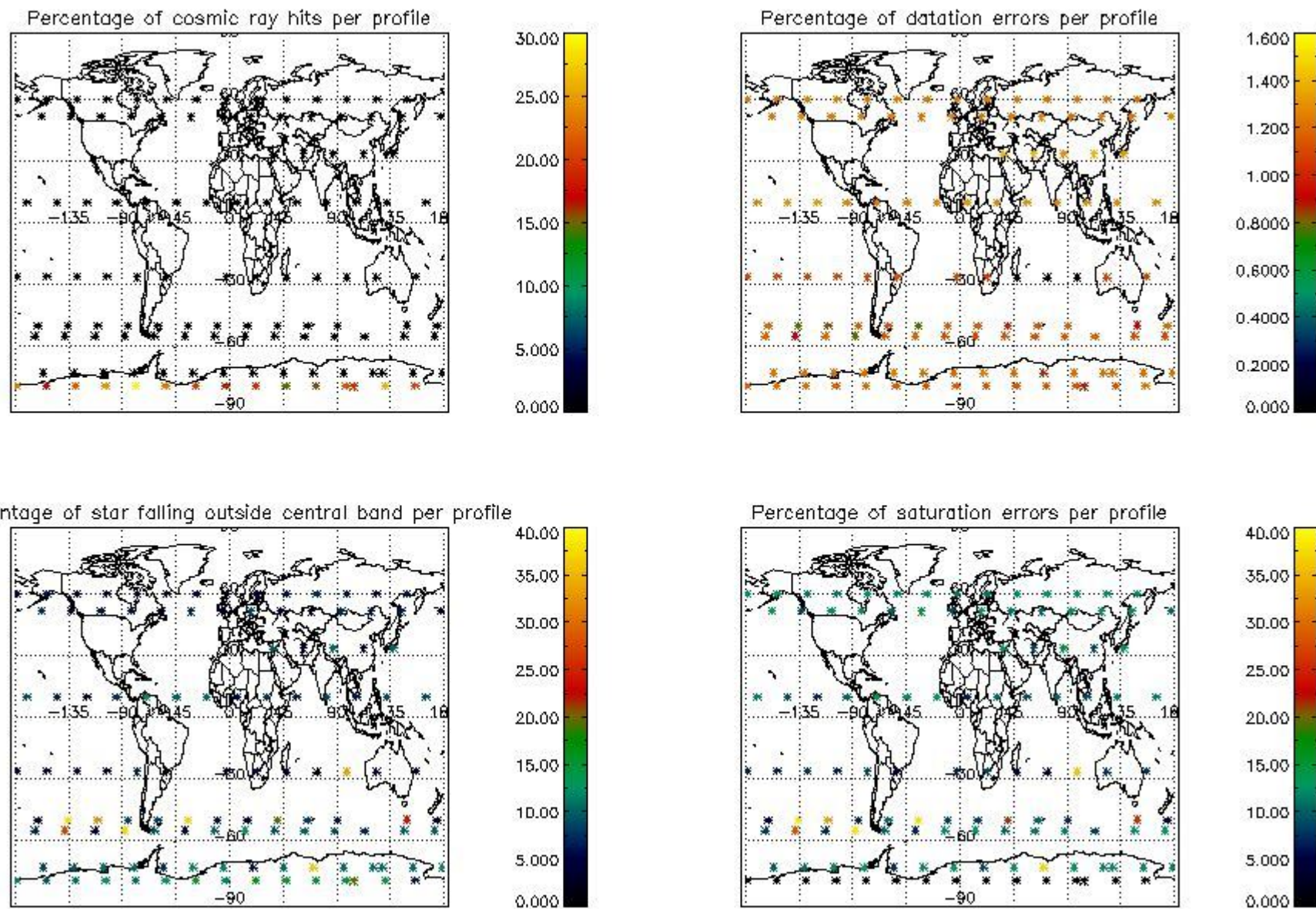


4.2 Plot quality information per product coming from level 1b processing (world map)

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

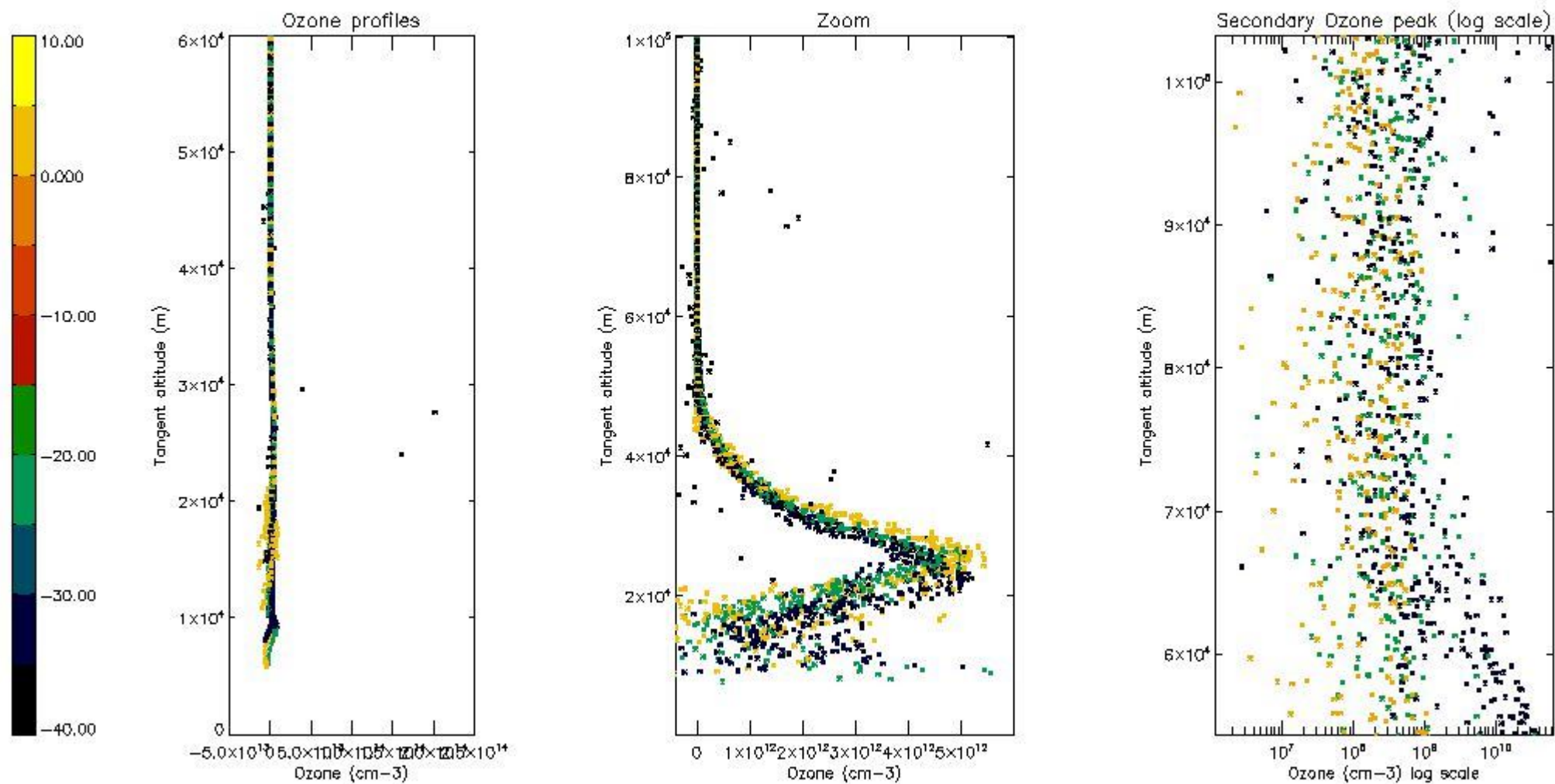
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	21
STD < 20	6

STD < 10	3
STD < 5	0

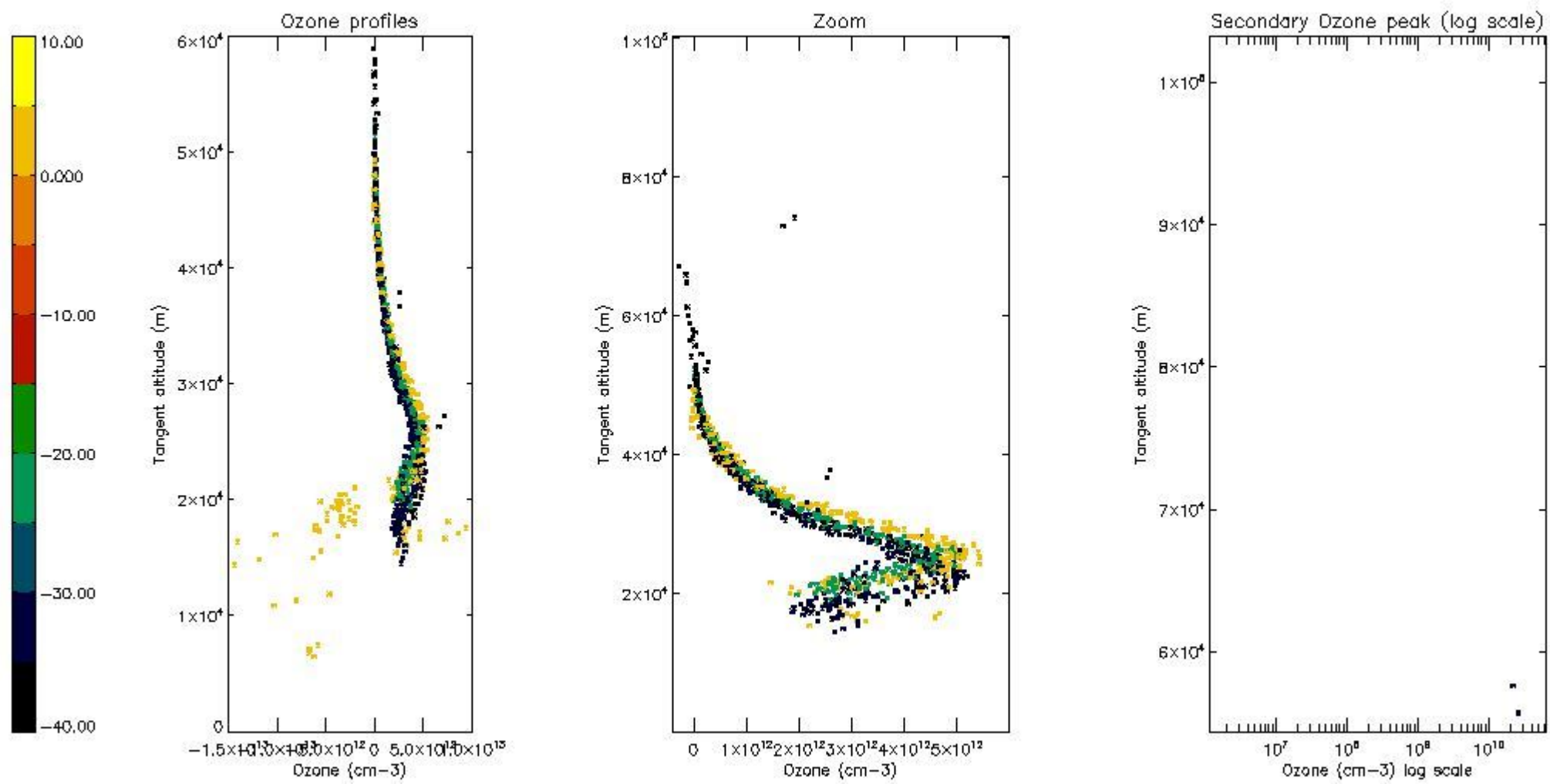
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



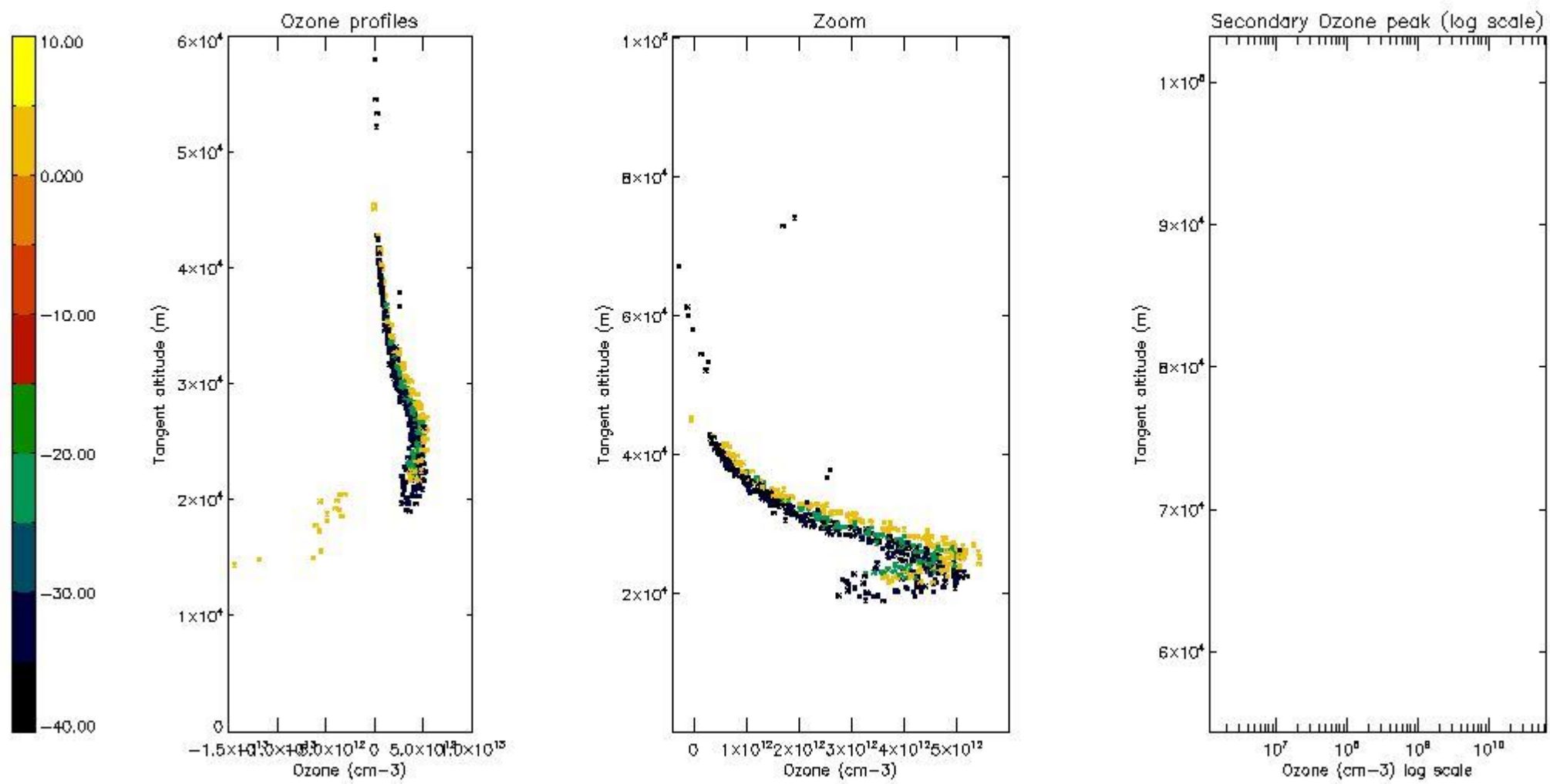
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



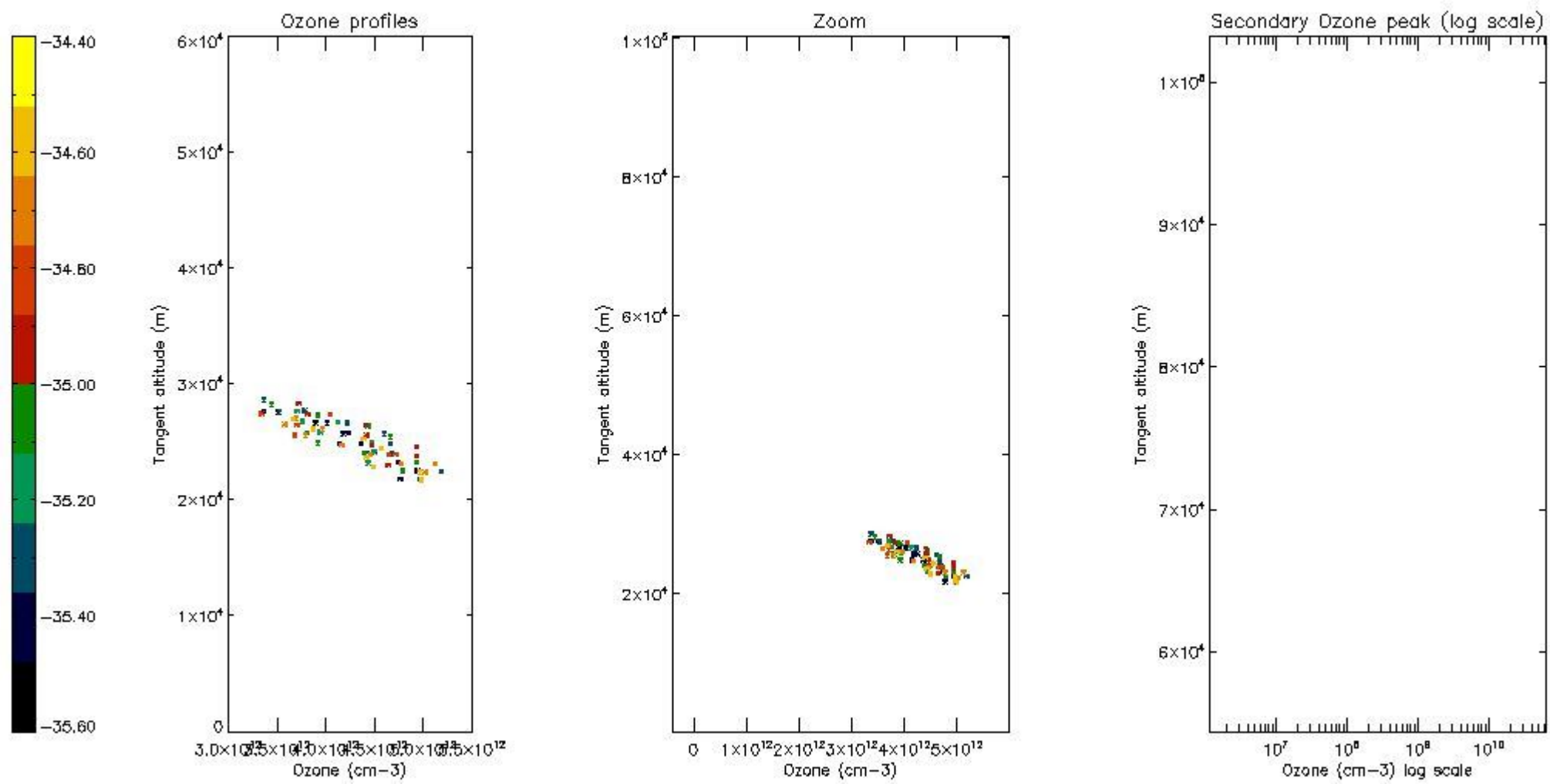
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



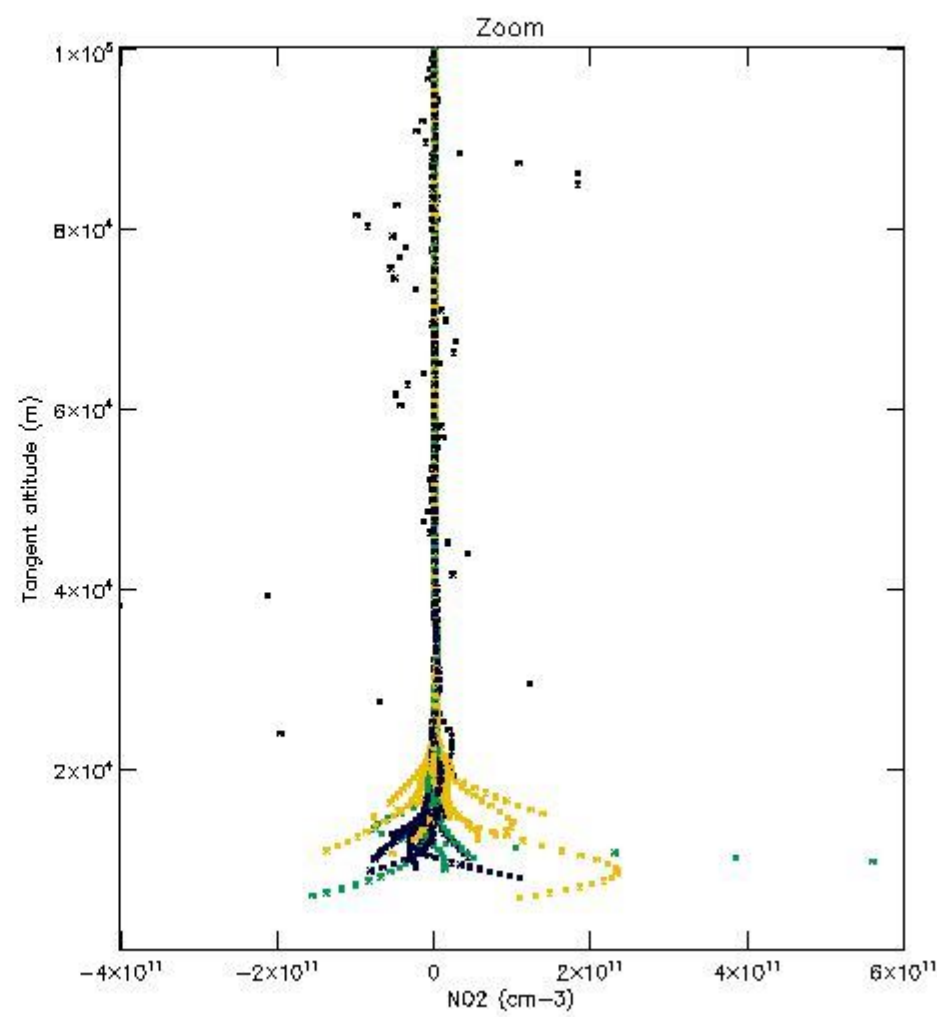
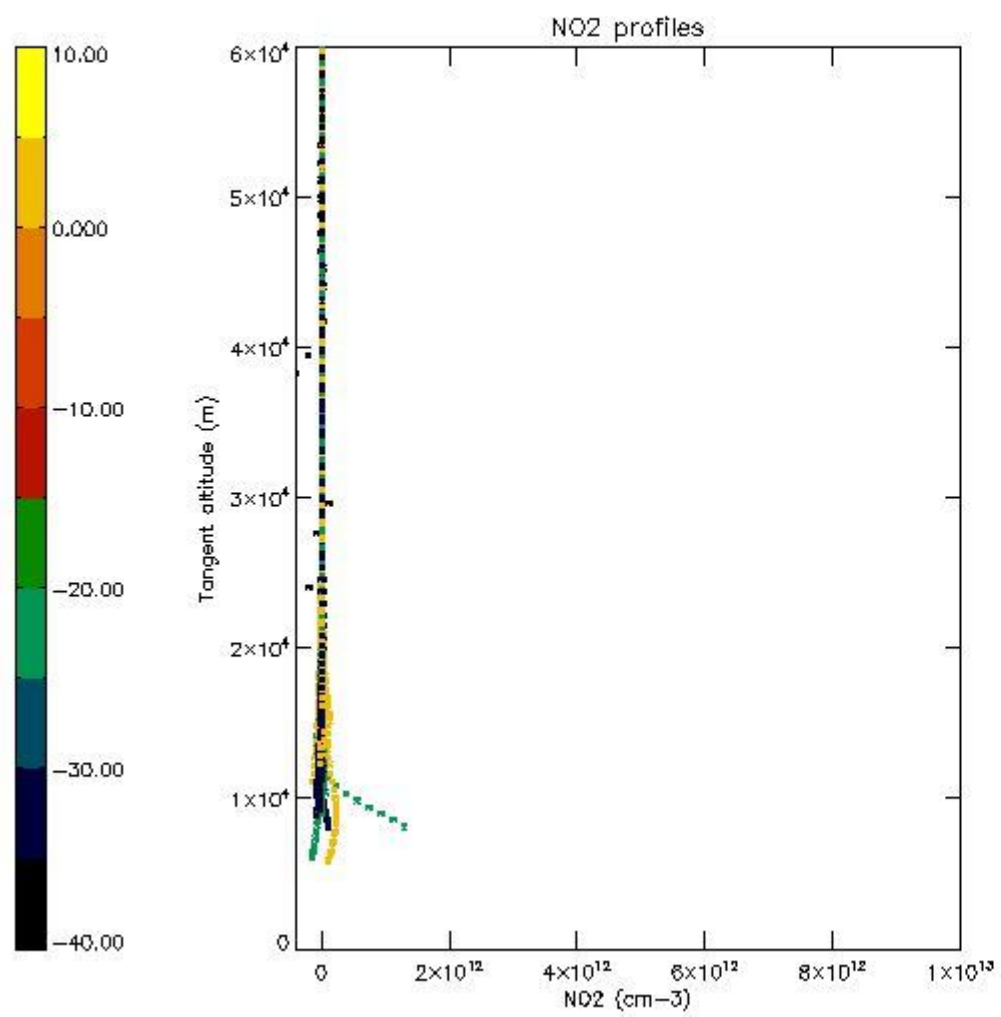
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



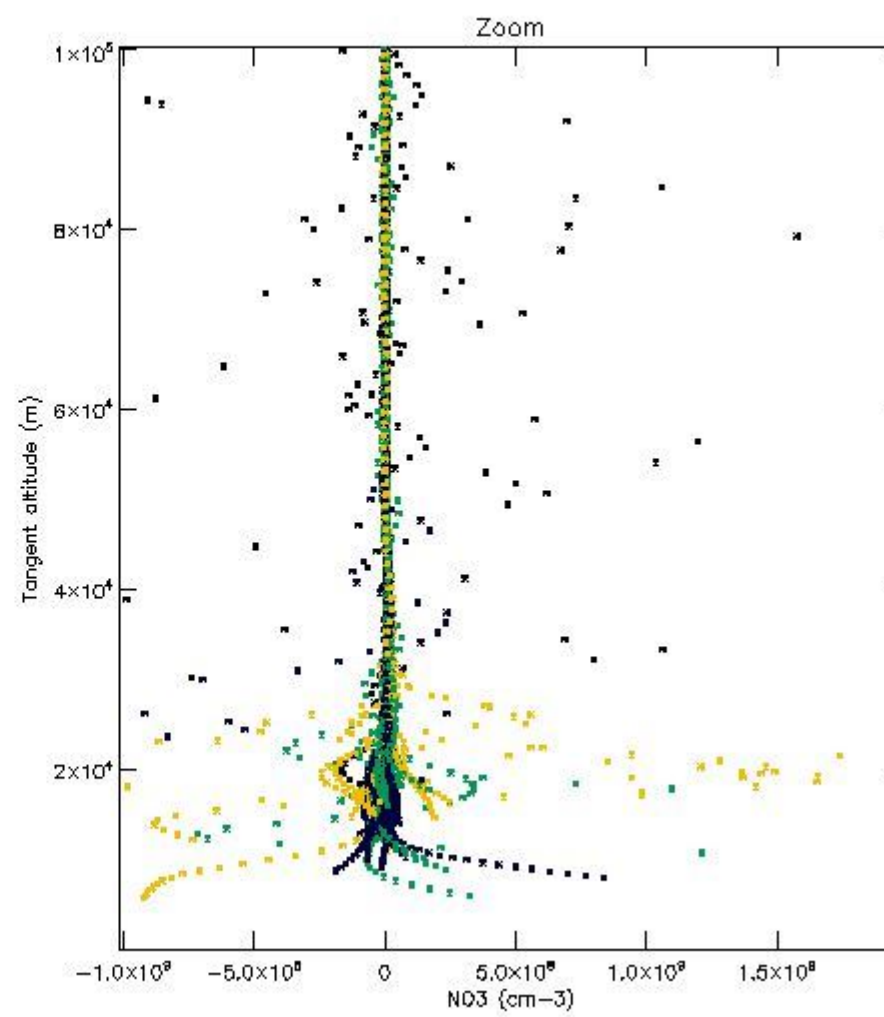
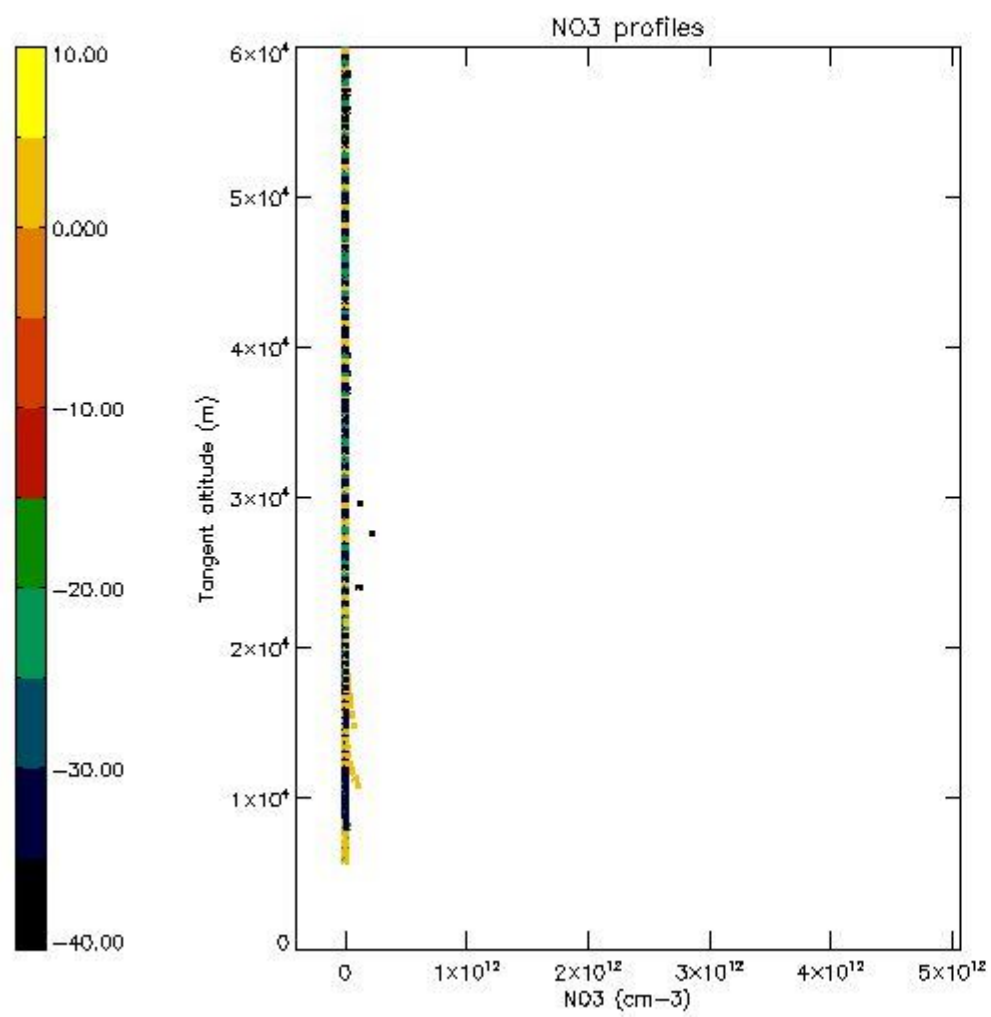
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



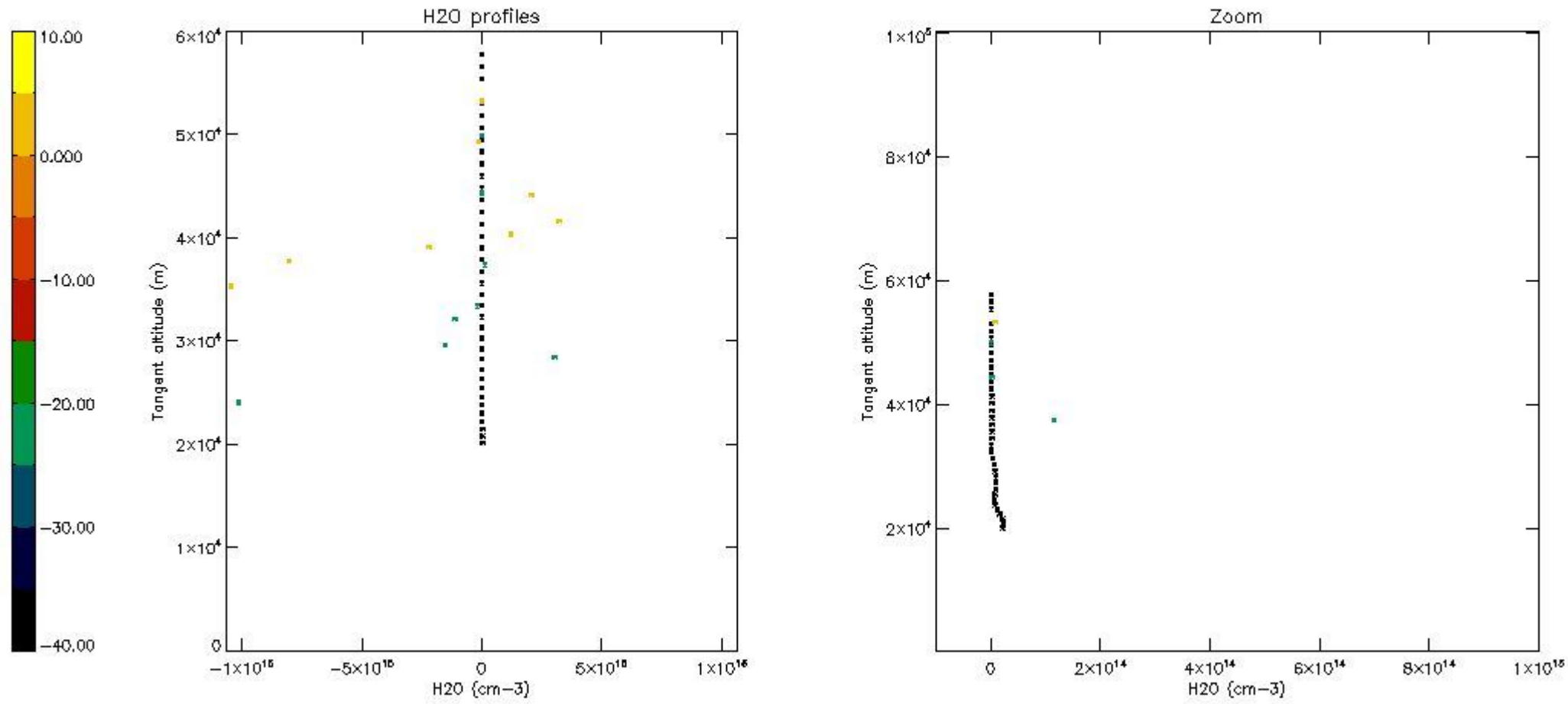
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

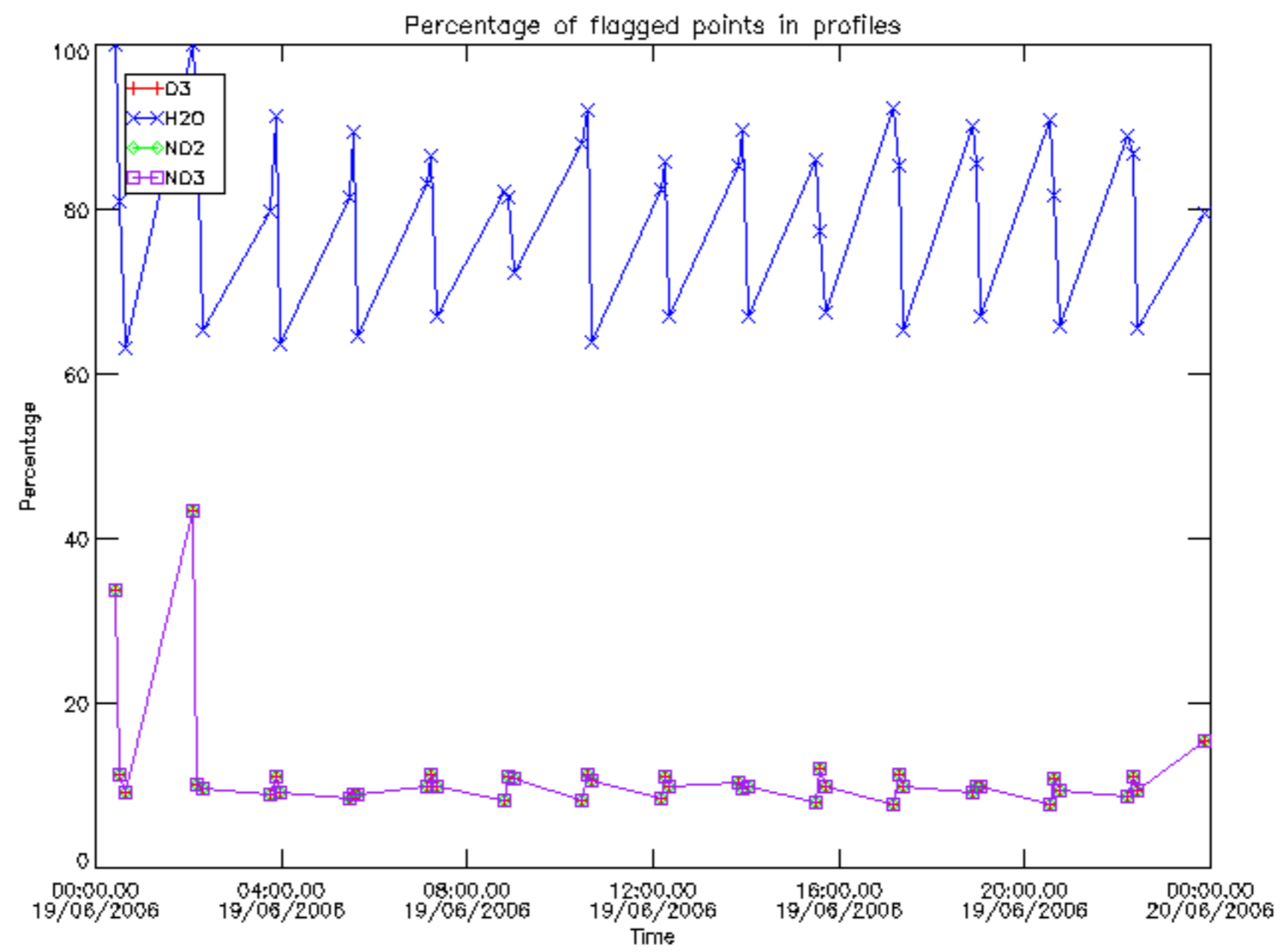
The colorbar represents the latitude.



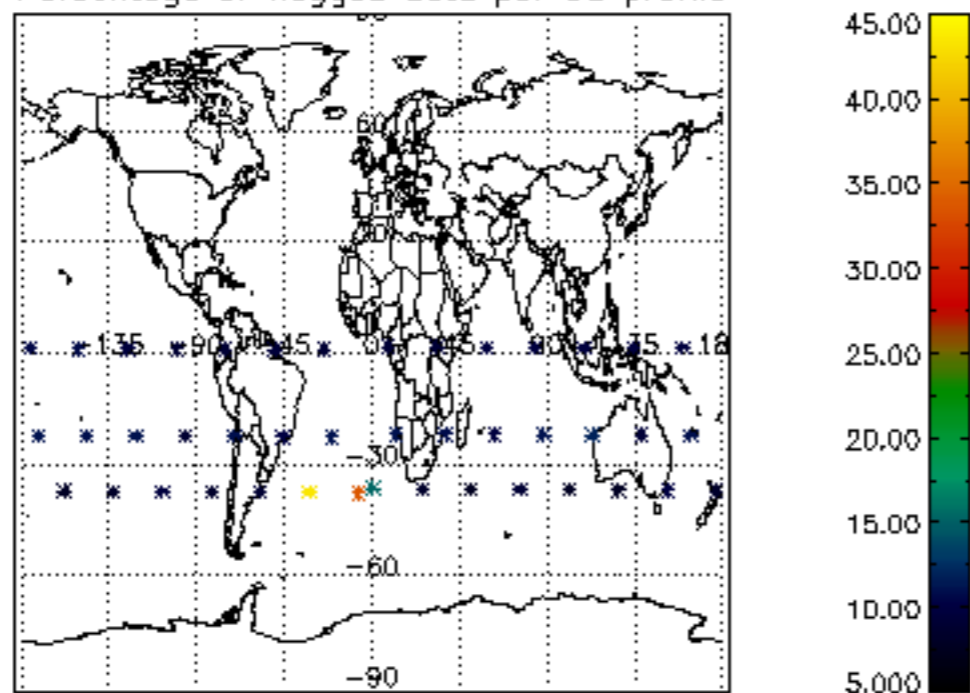
6. Auxiliary Data Files used for the production reported in section 2

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.

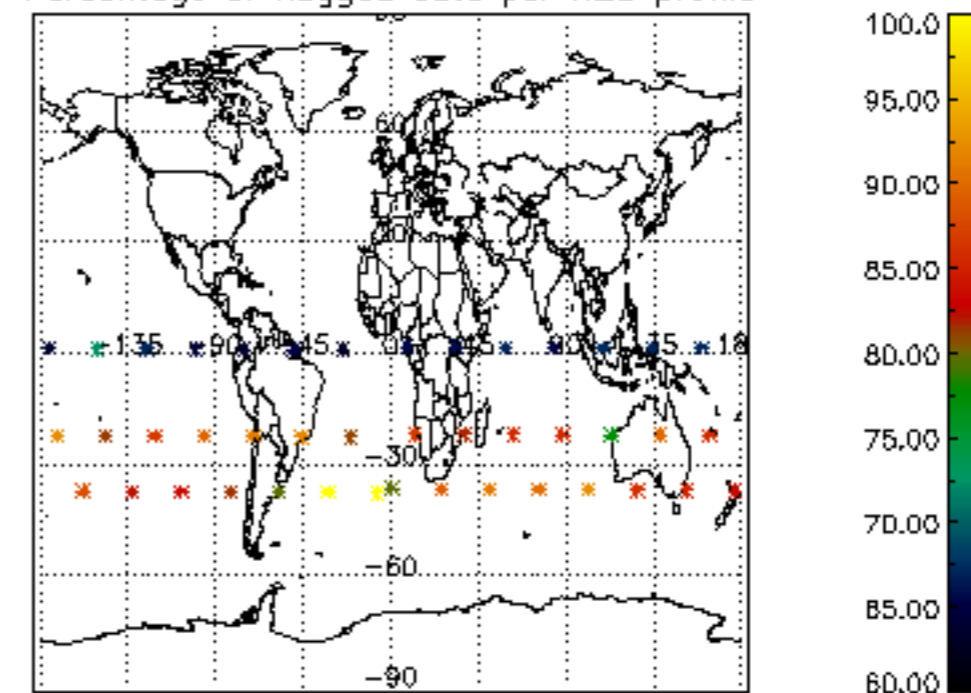
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	19-JUN-2006 00:02:33
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	19-JUN-2006 00:02:33
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	19-JUN-2006 00:02:33



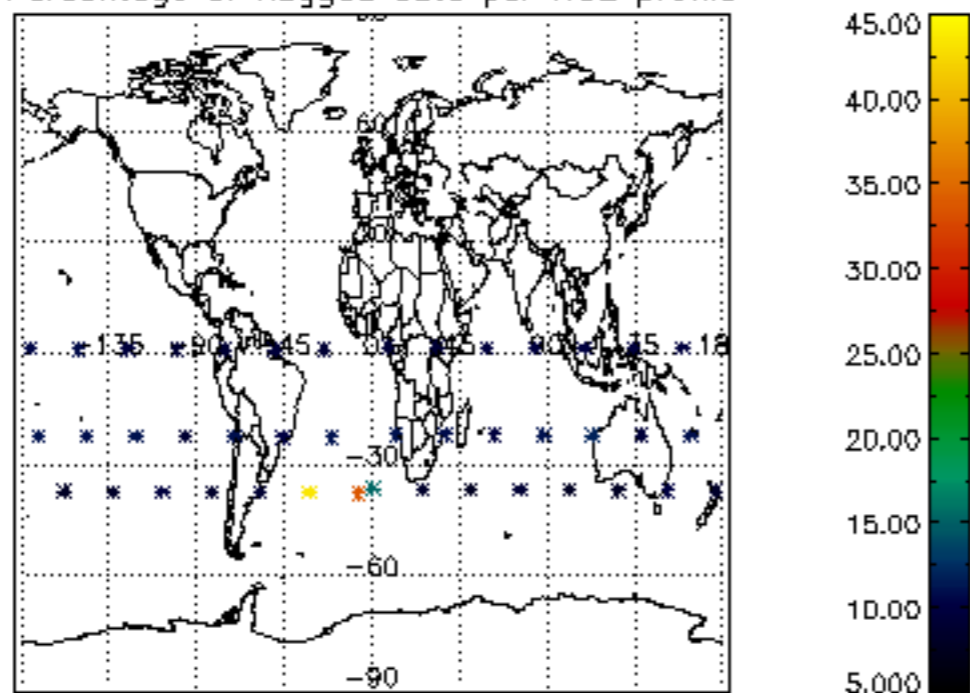
Percentage of flagged data per D3 profile



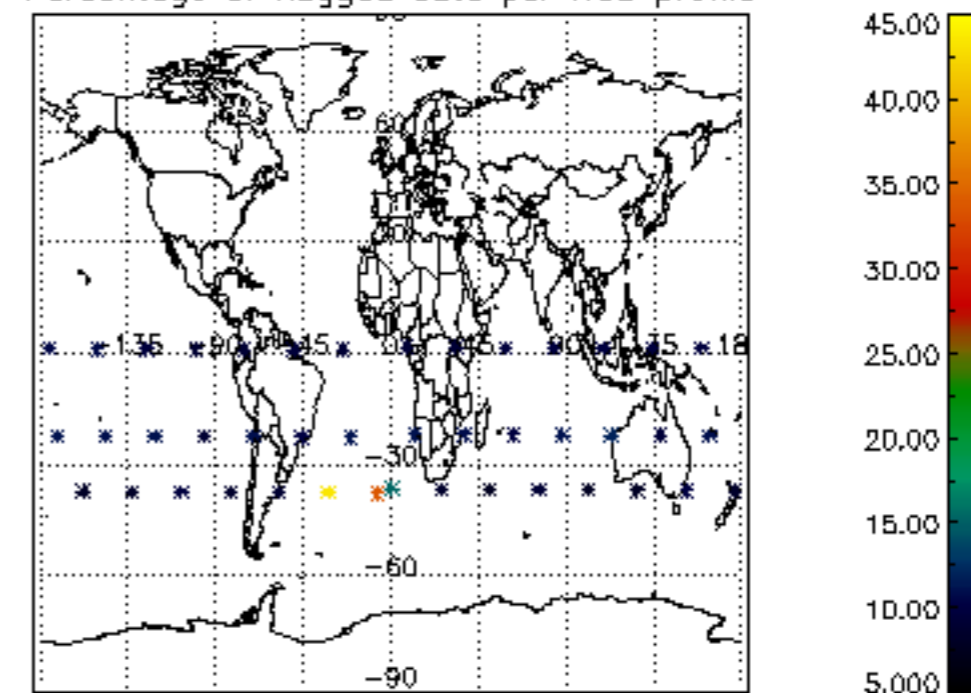
Percentage of flagged data per H2O profile

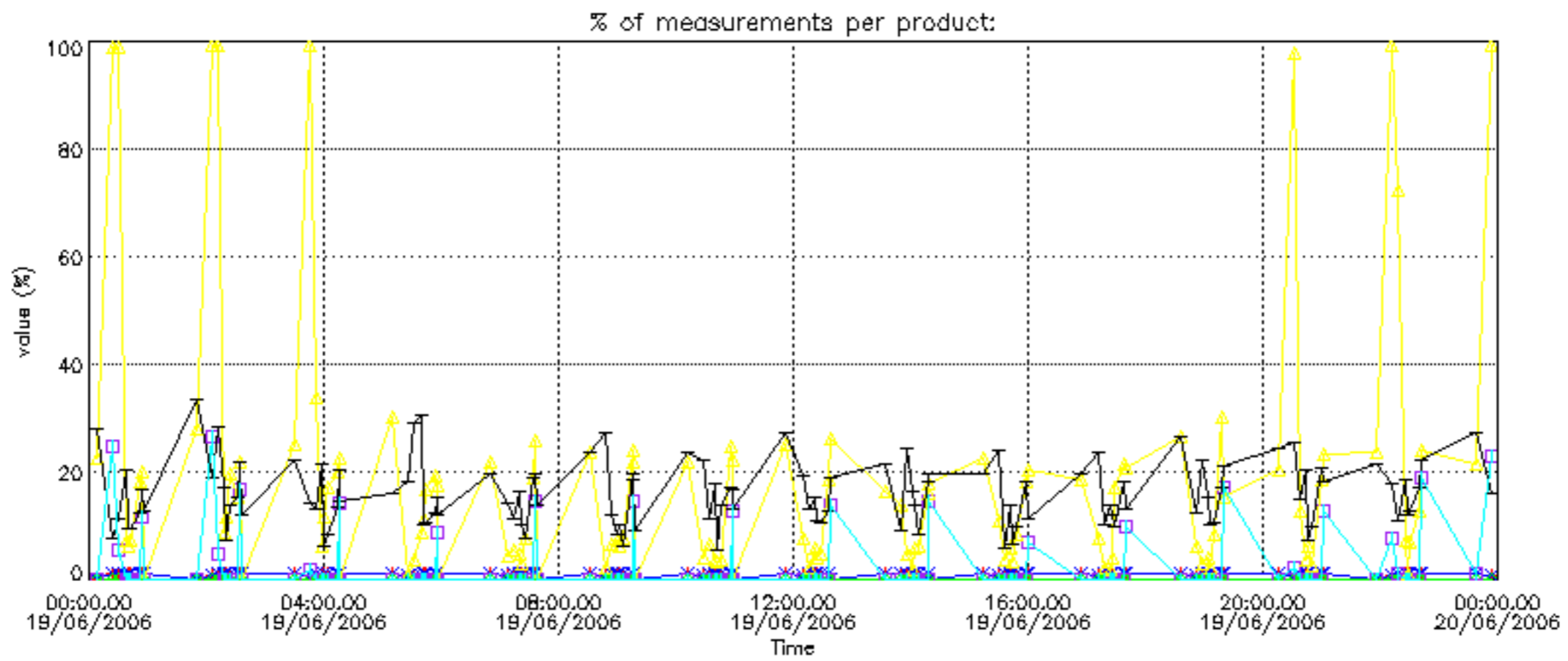
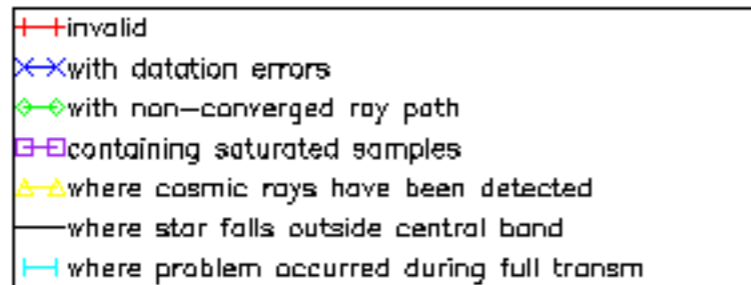


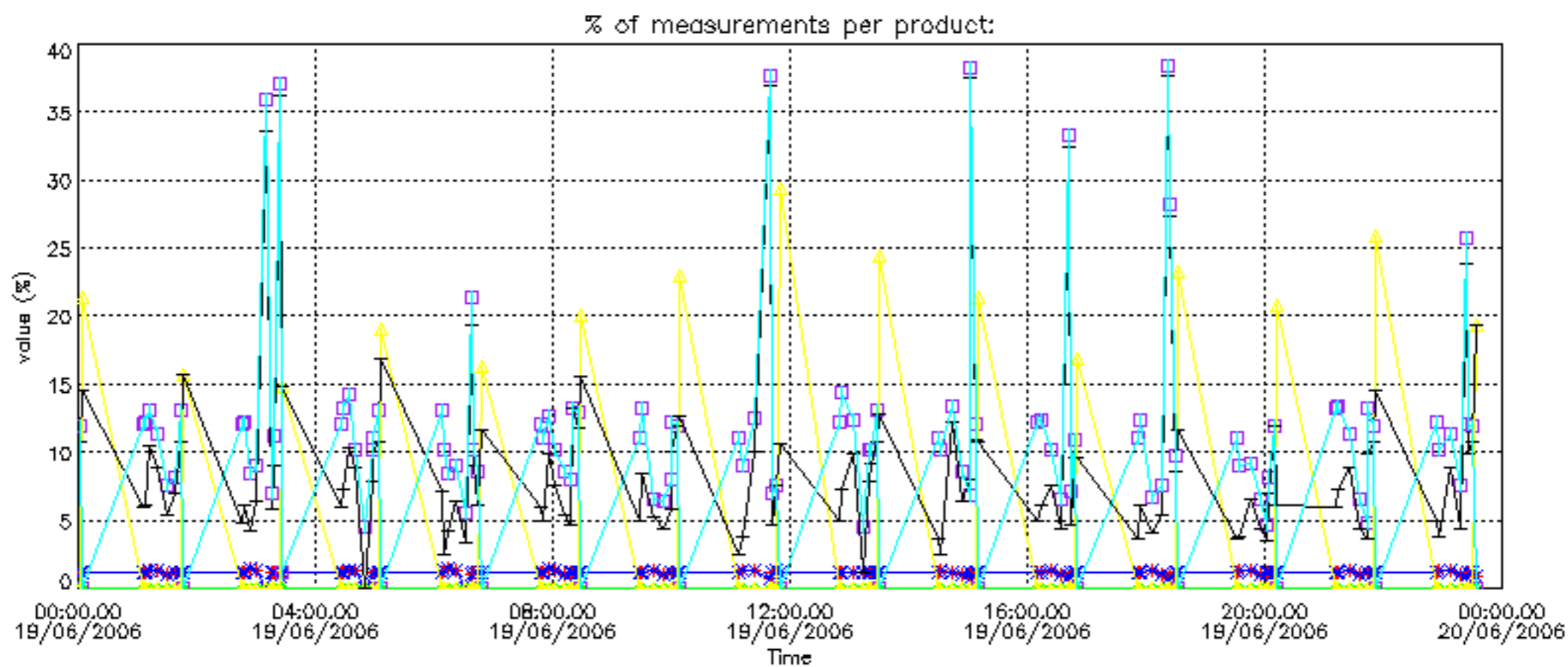
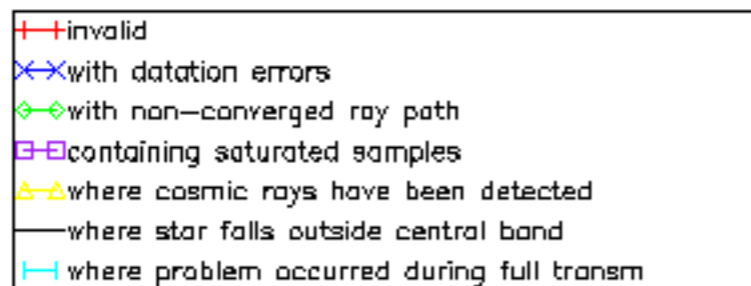
Percentage of flagged data per NO2 profile



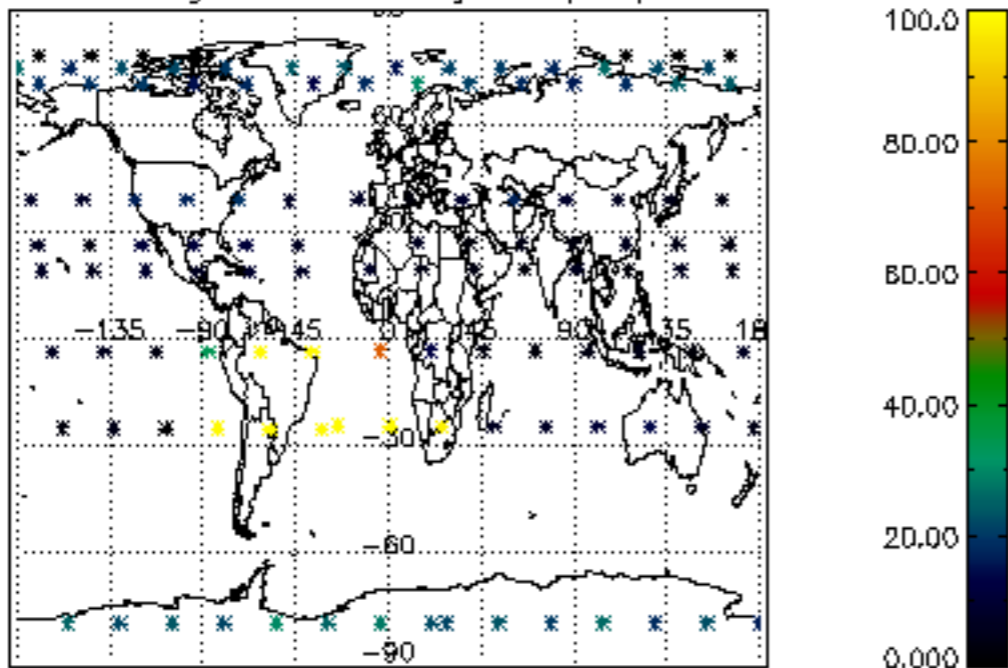
Percentage of flagged data per NO3 profile



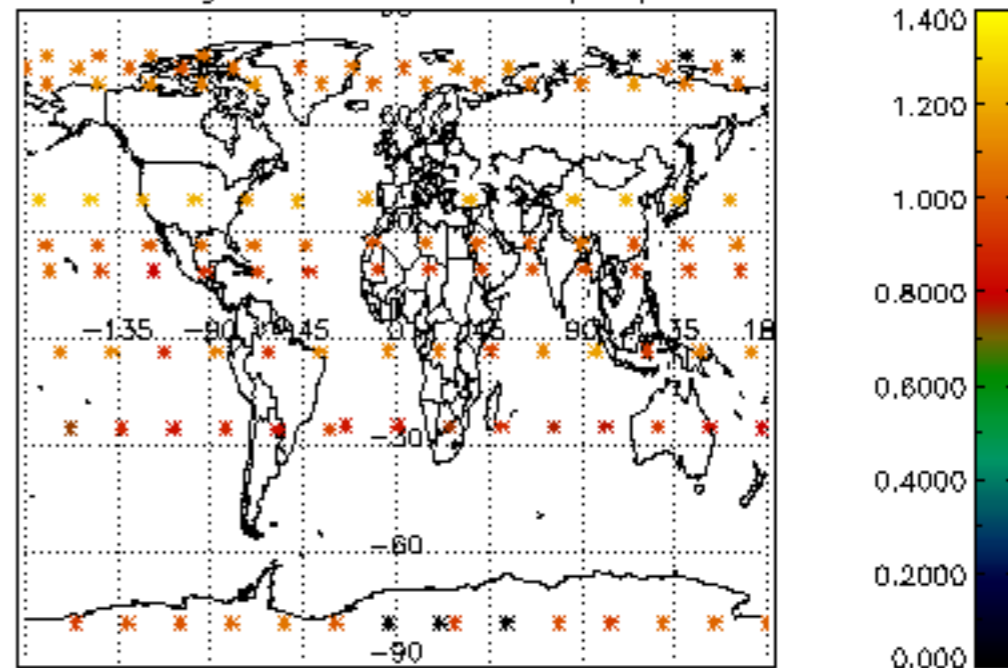




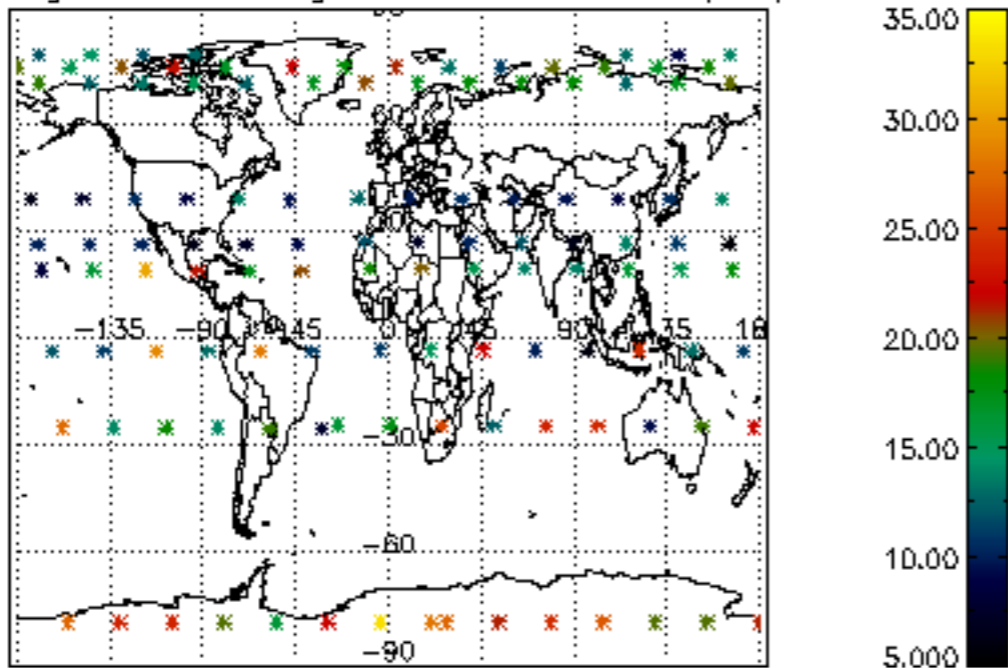
Percentage of cosmic ray hits per profile



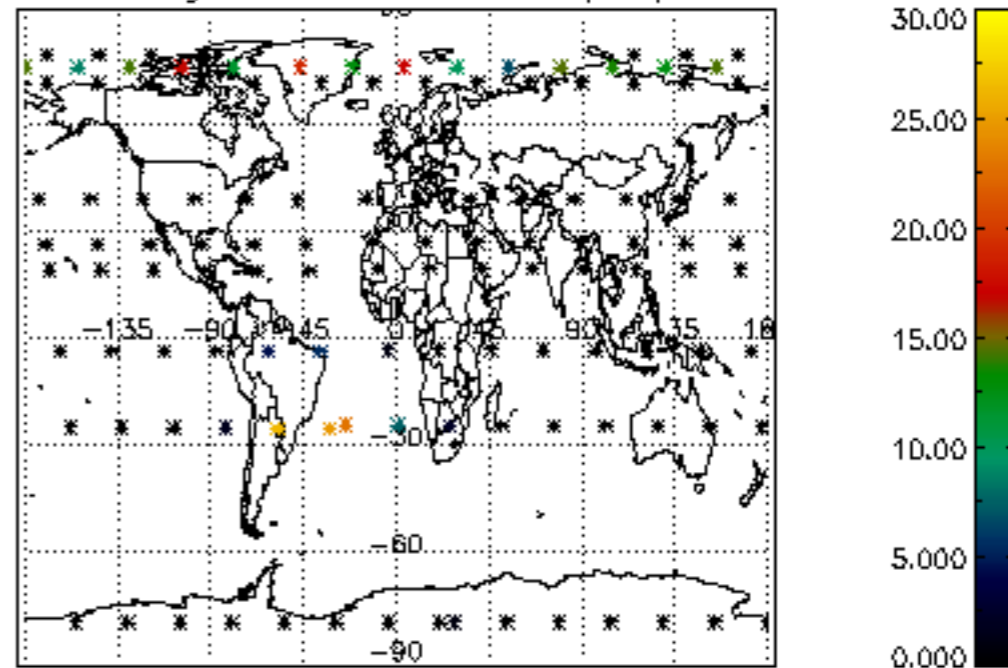
Percentage of datation errors per profile



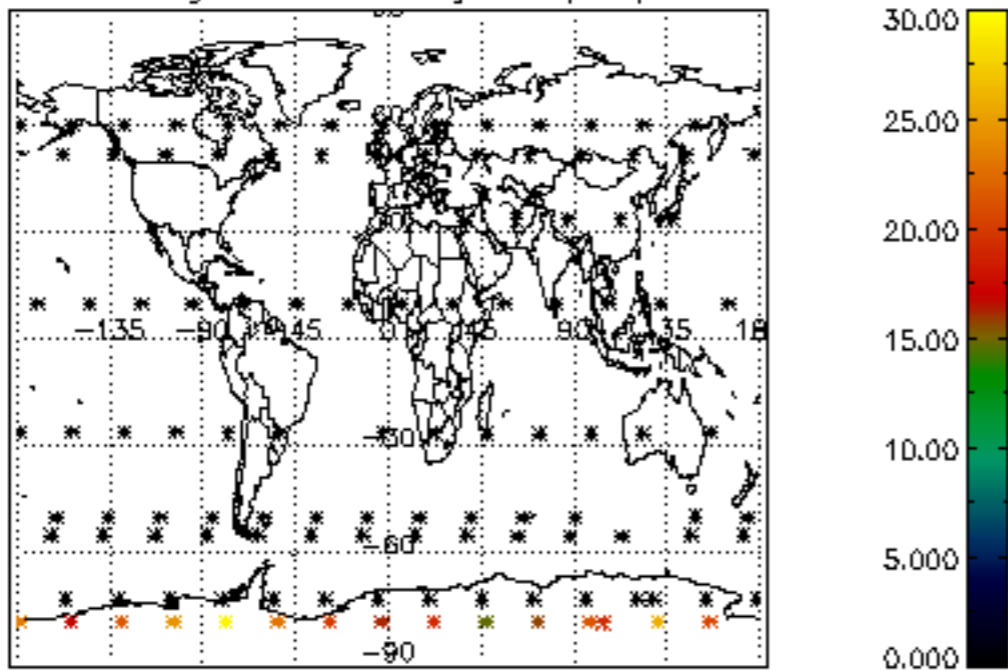
Percentage of star falling outside central band per profile



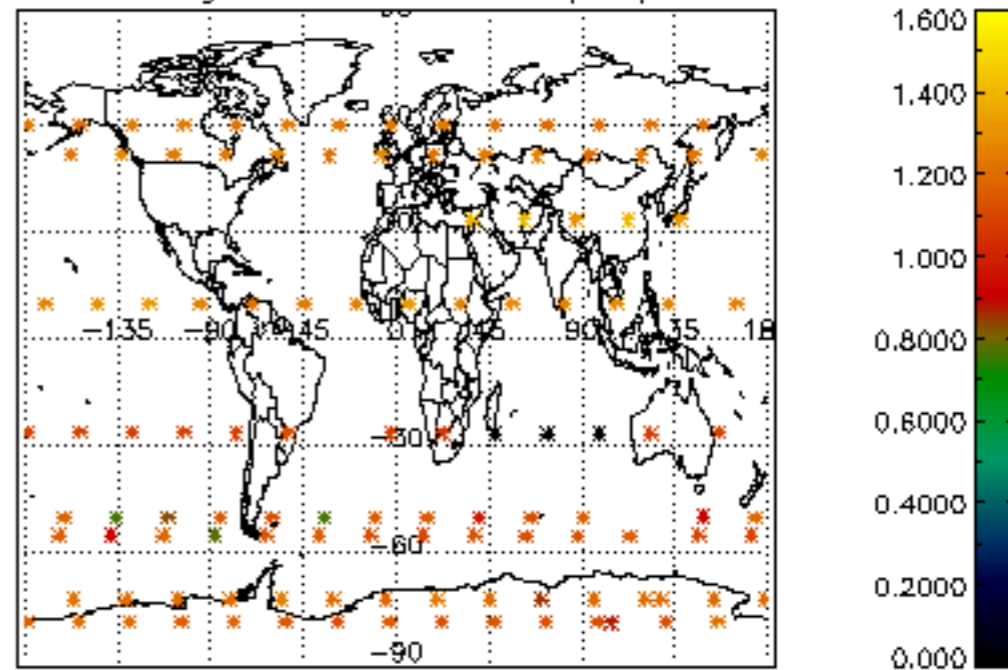
Percentage of saturation errors per profile



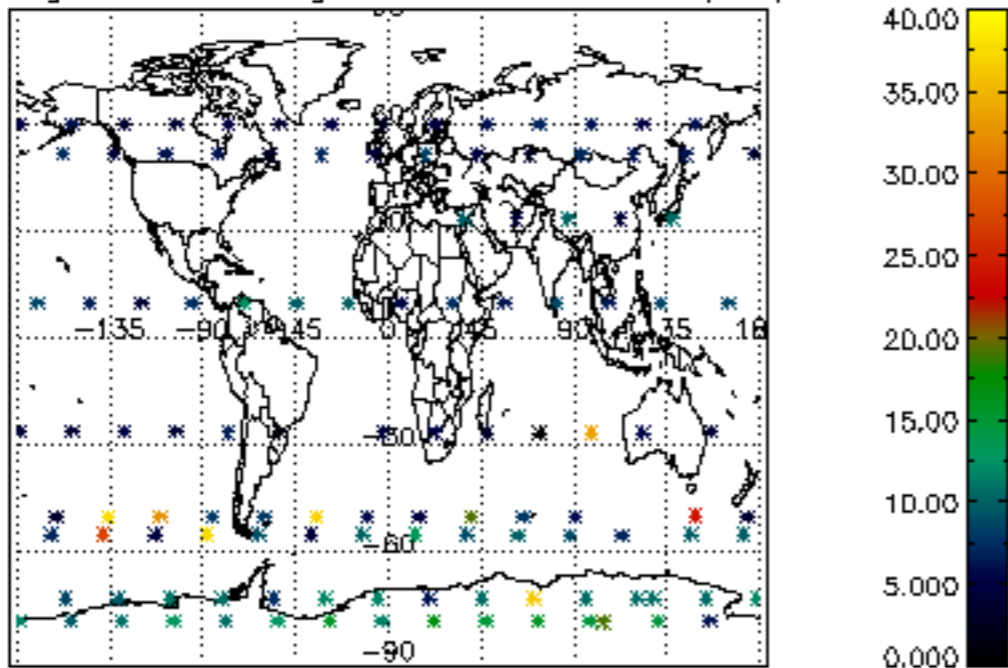
Percentage of cosmic ray hits per profile



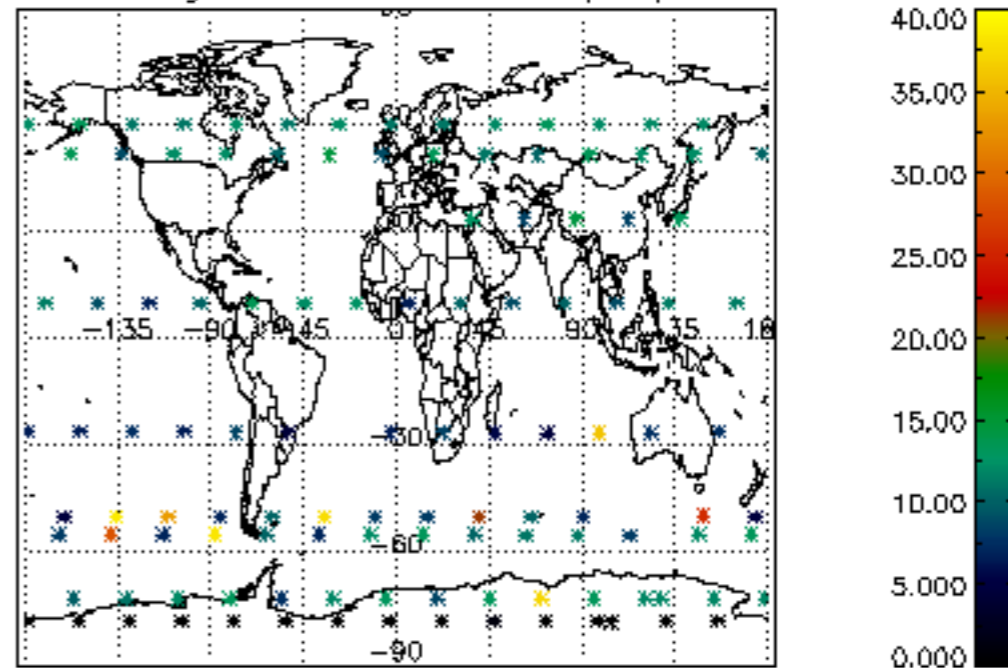
Percentage of datation errors per profile

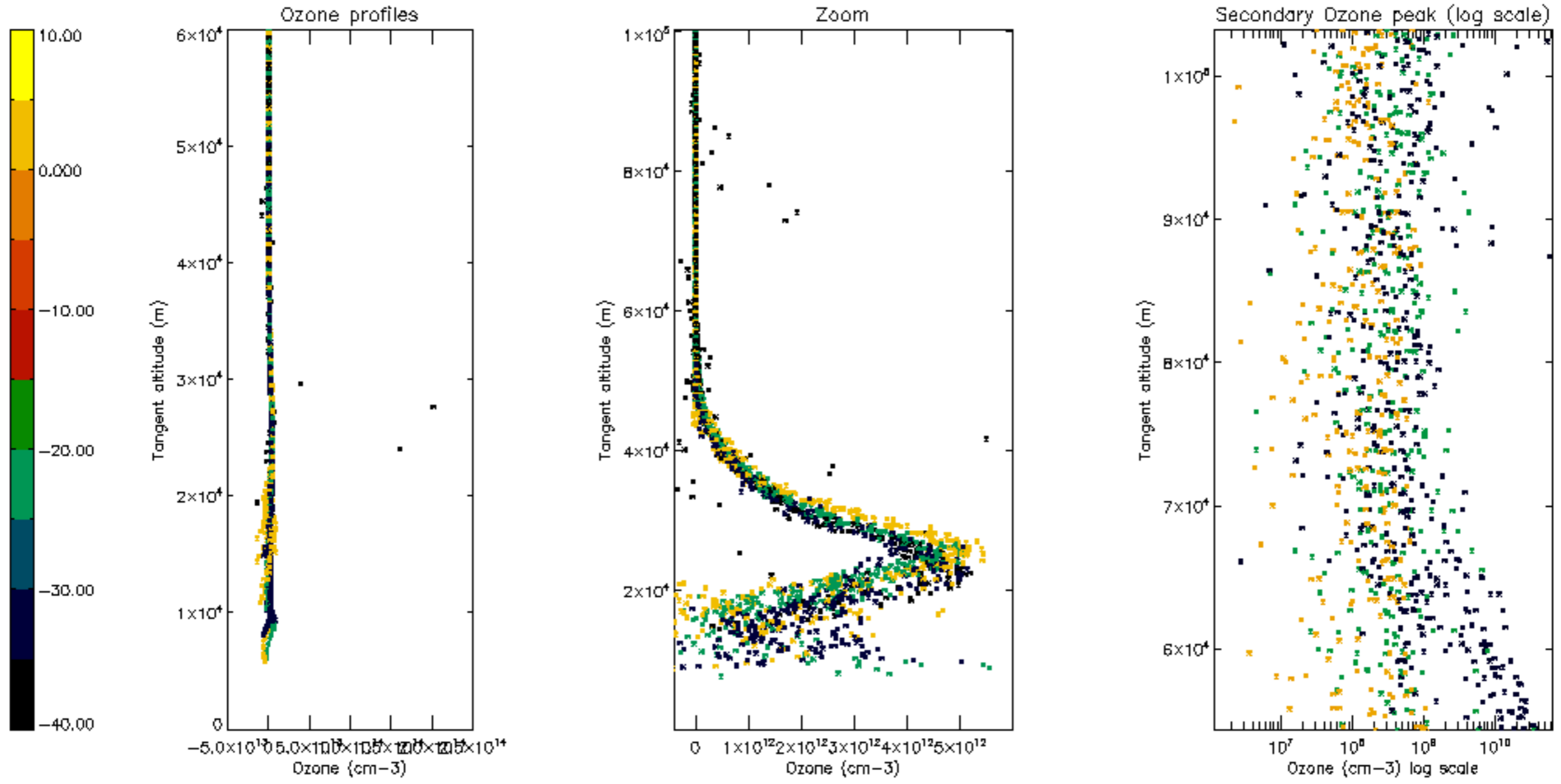


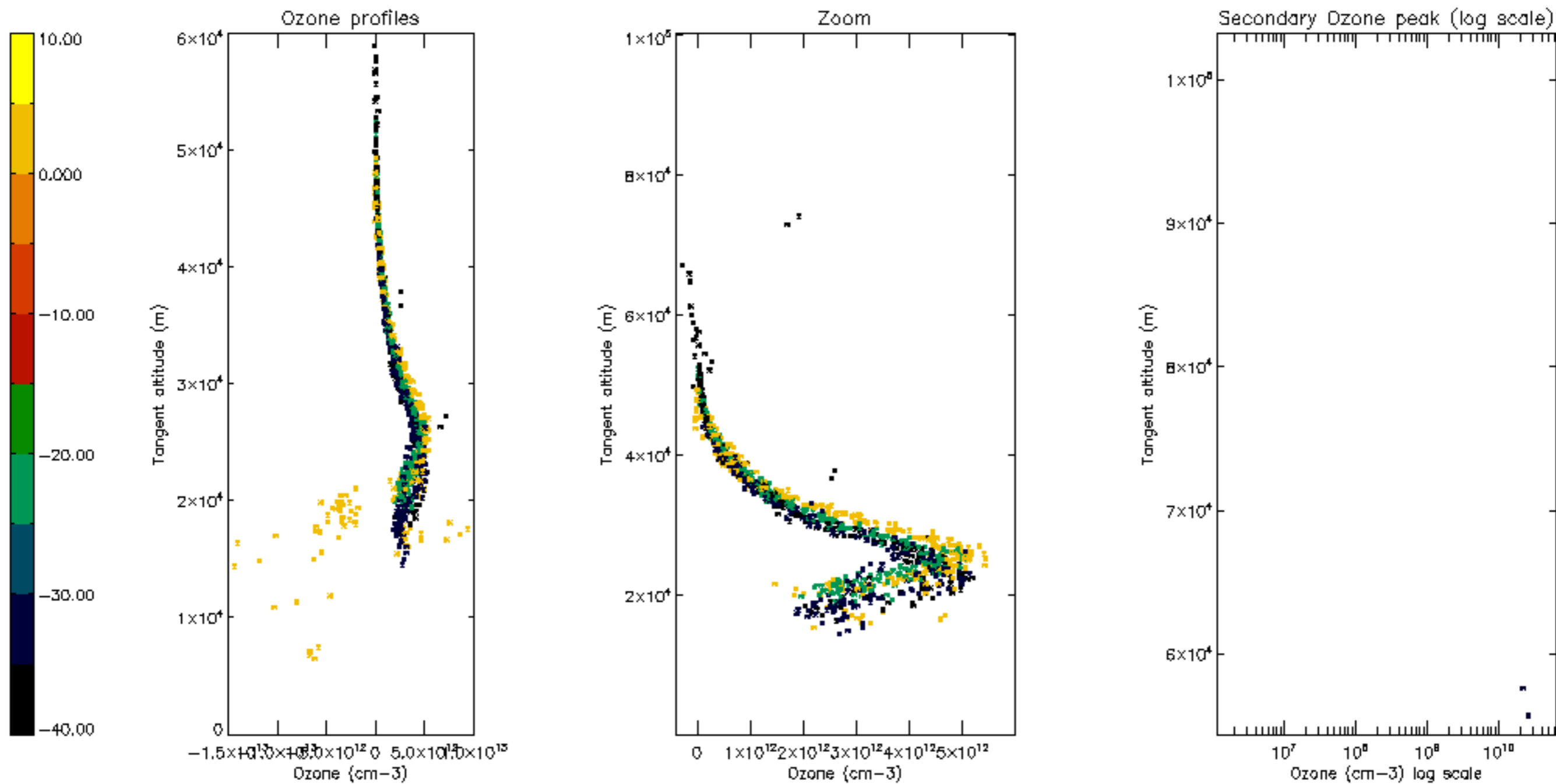
Percentage of star falling outside central band per profile

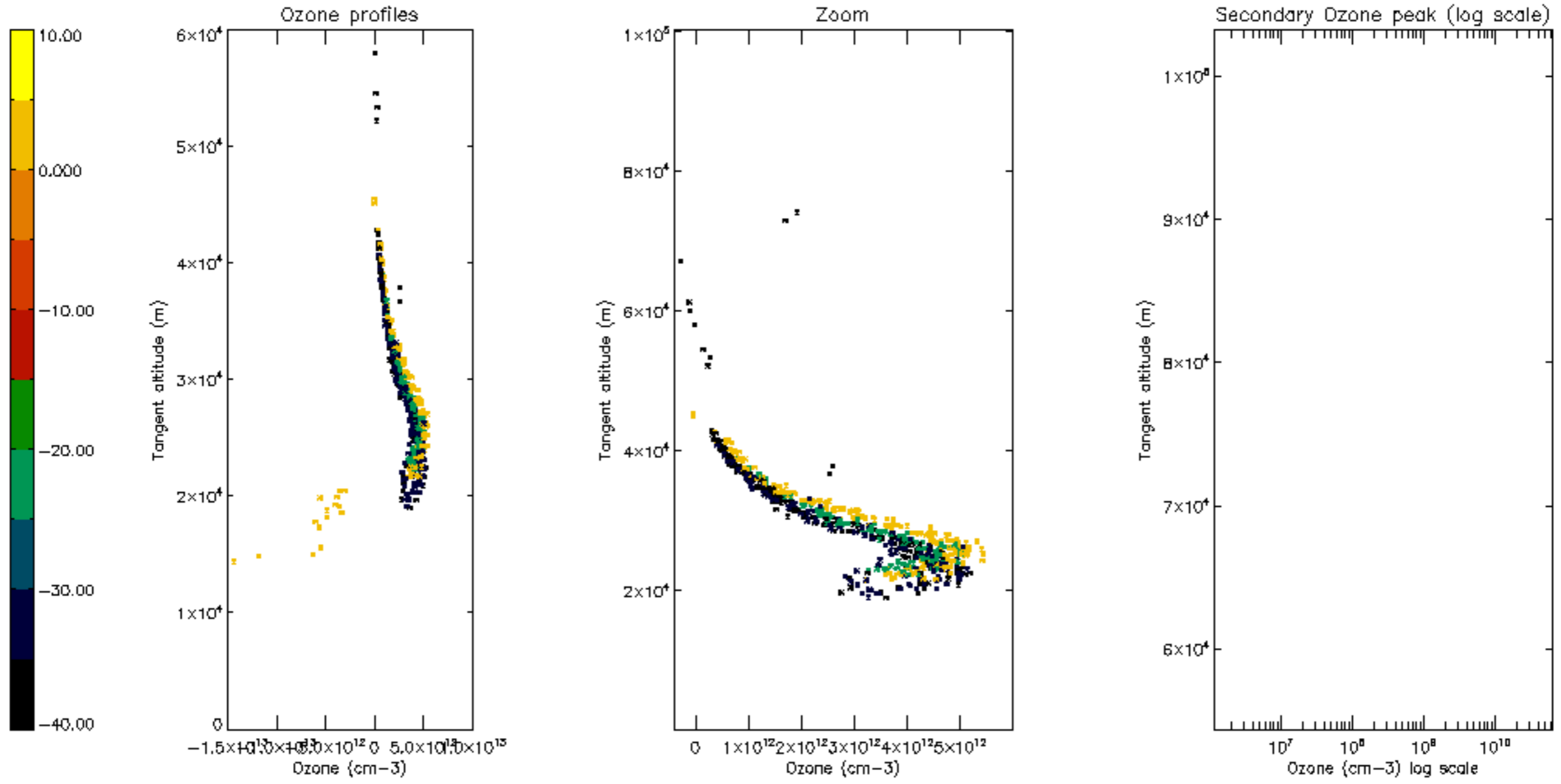


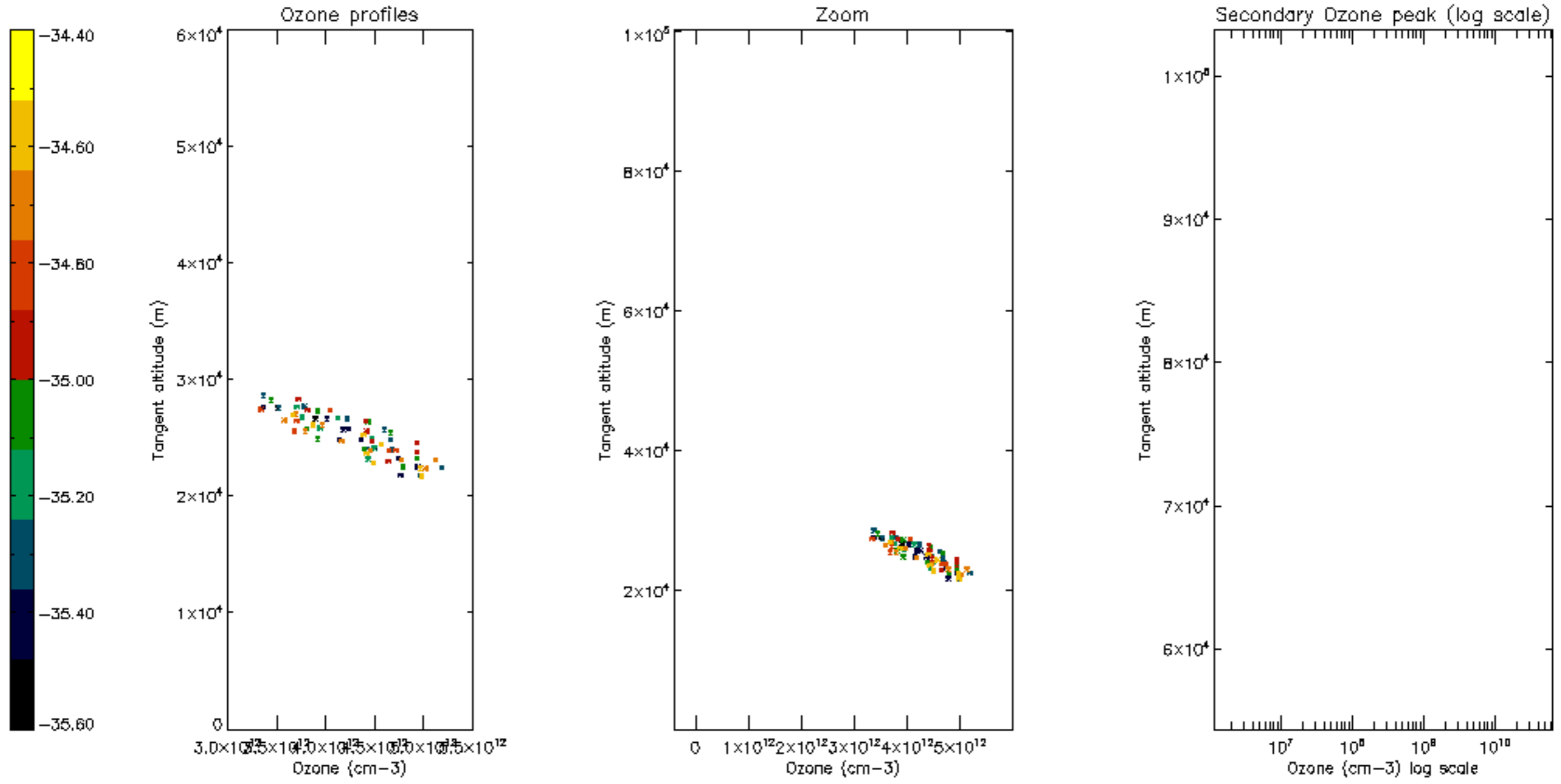
Percentage of saturation errors per profile

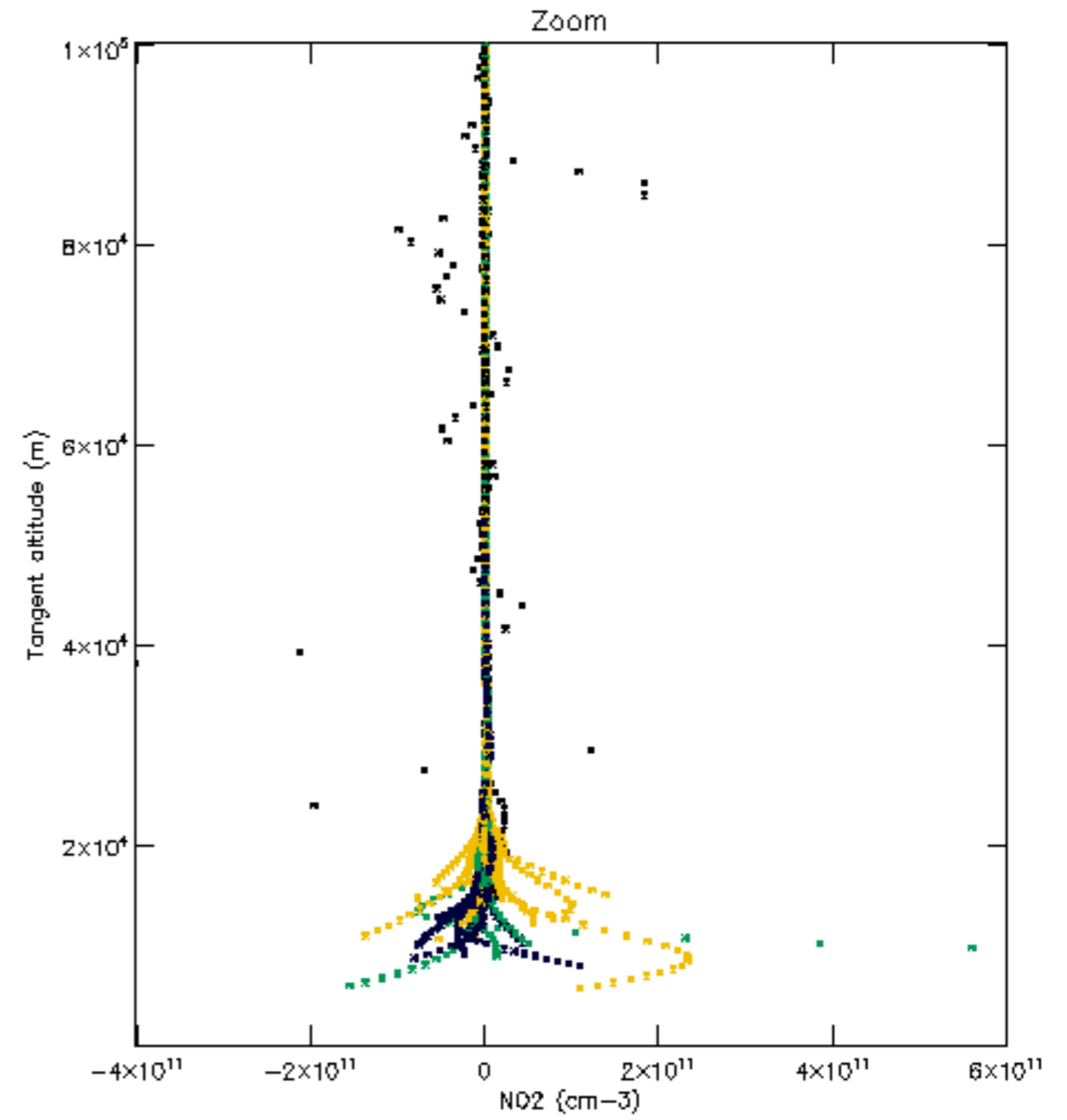
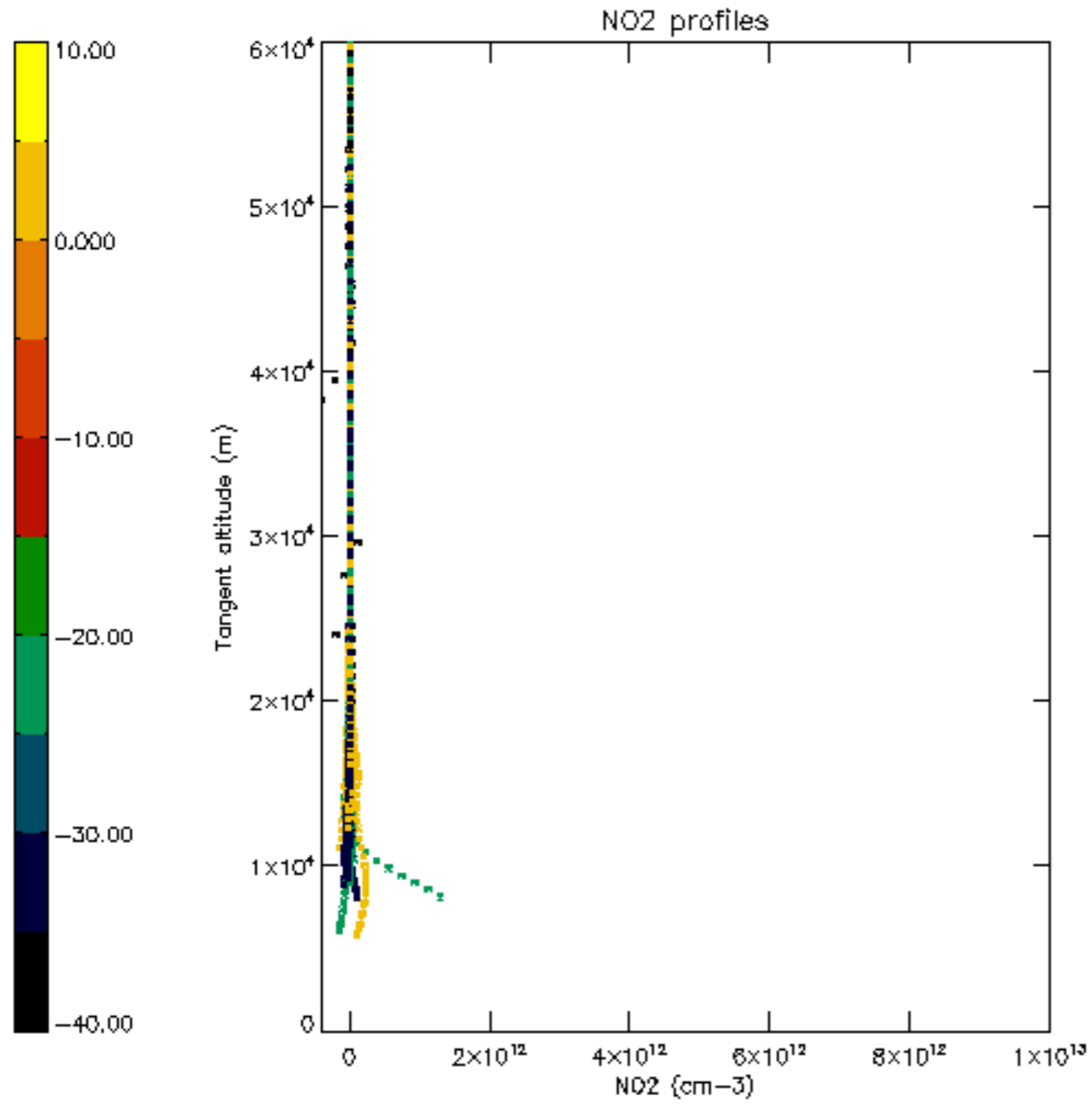


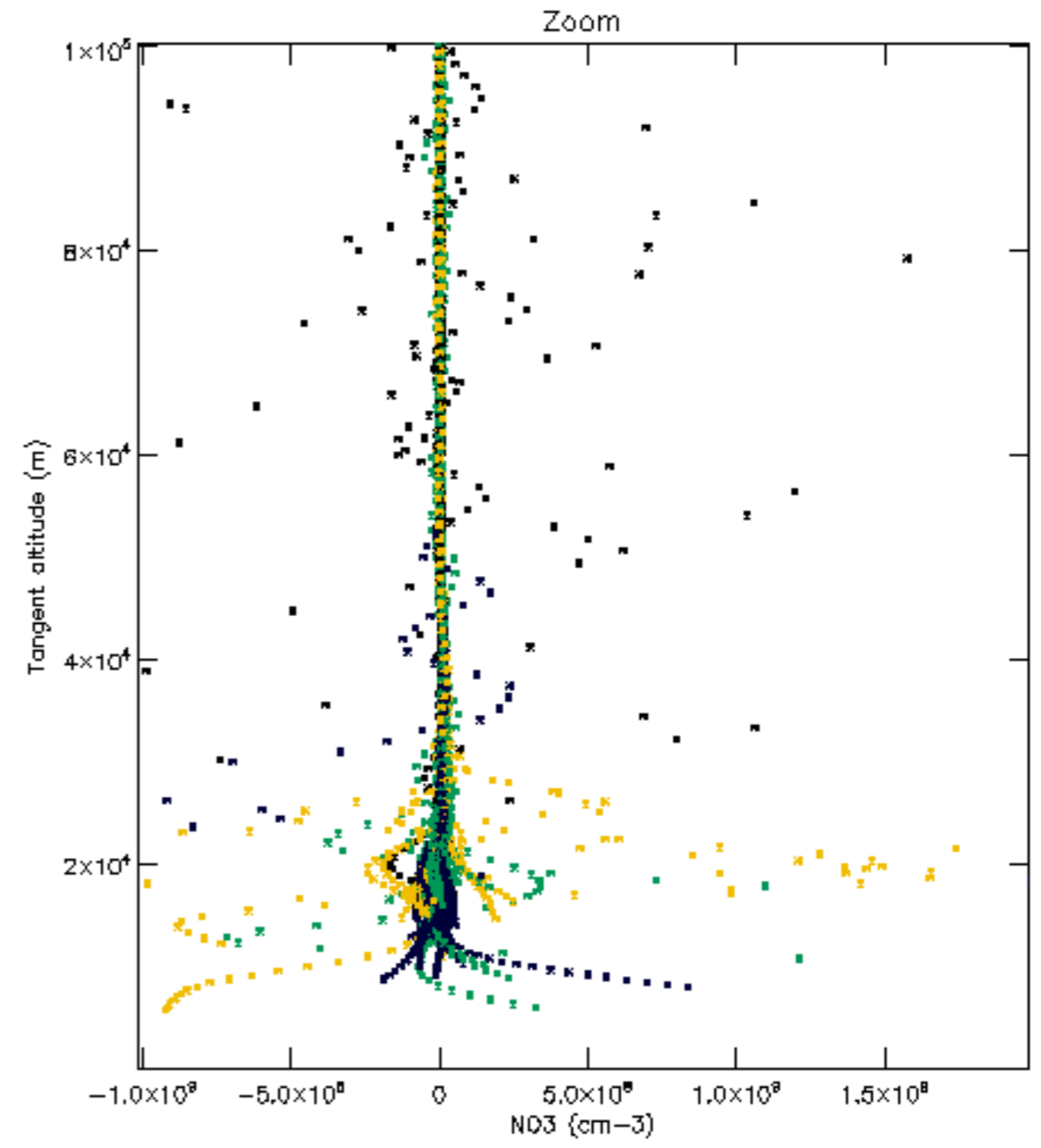
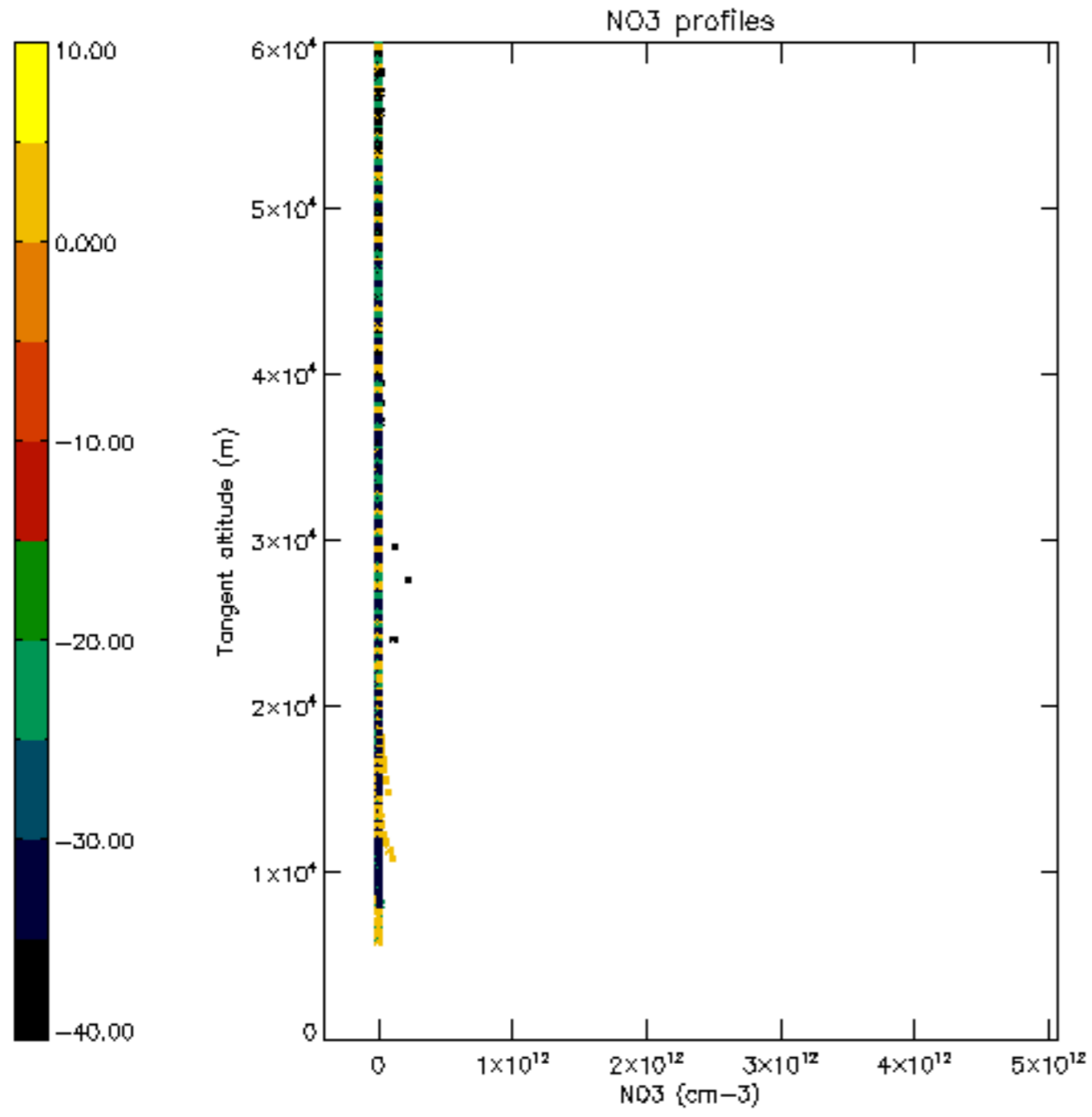


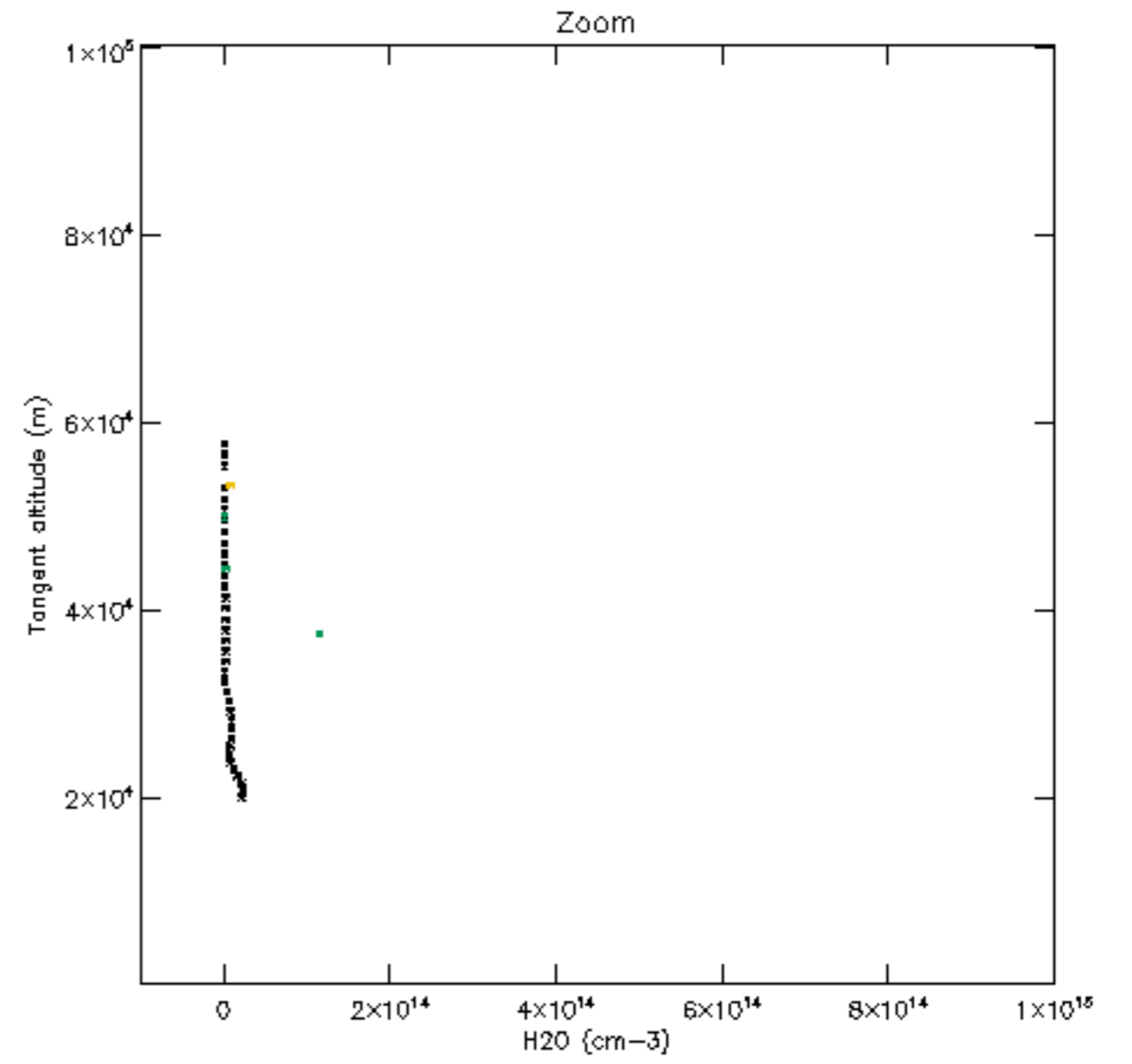
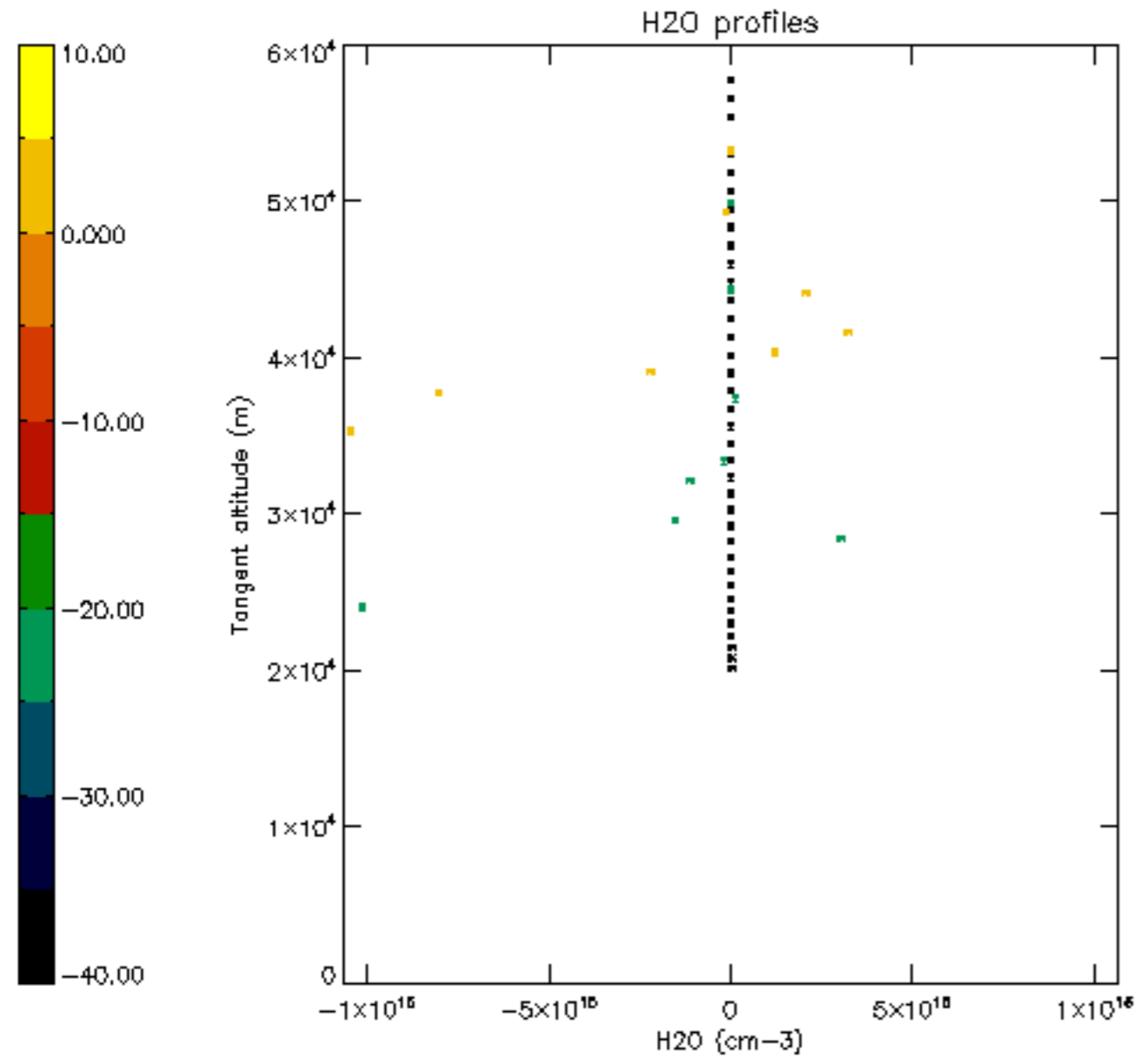


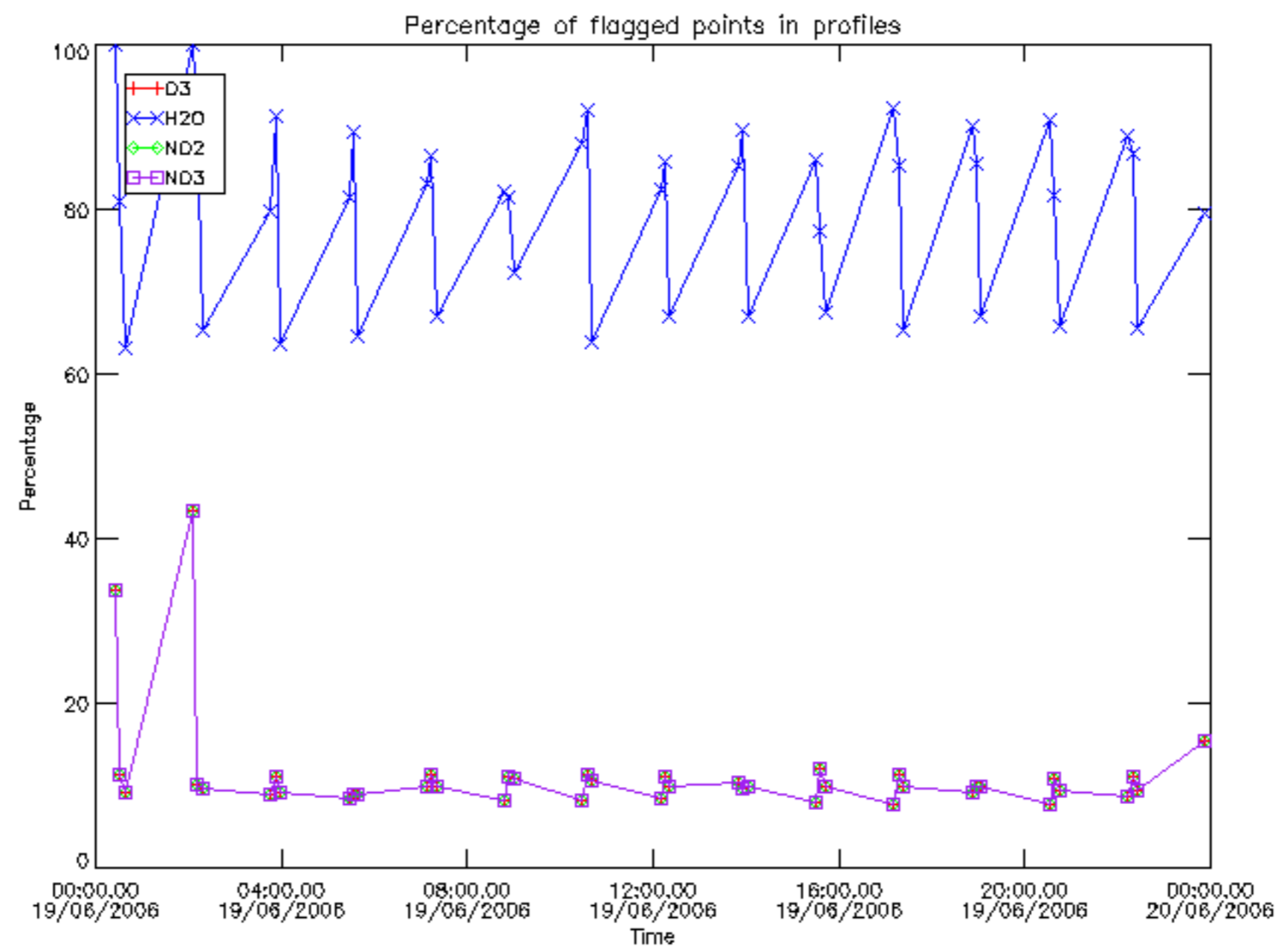




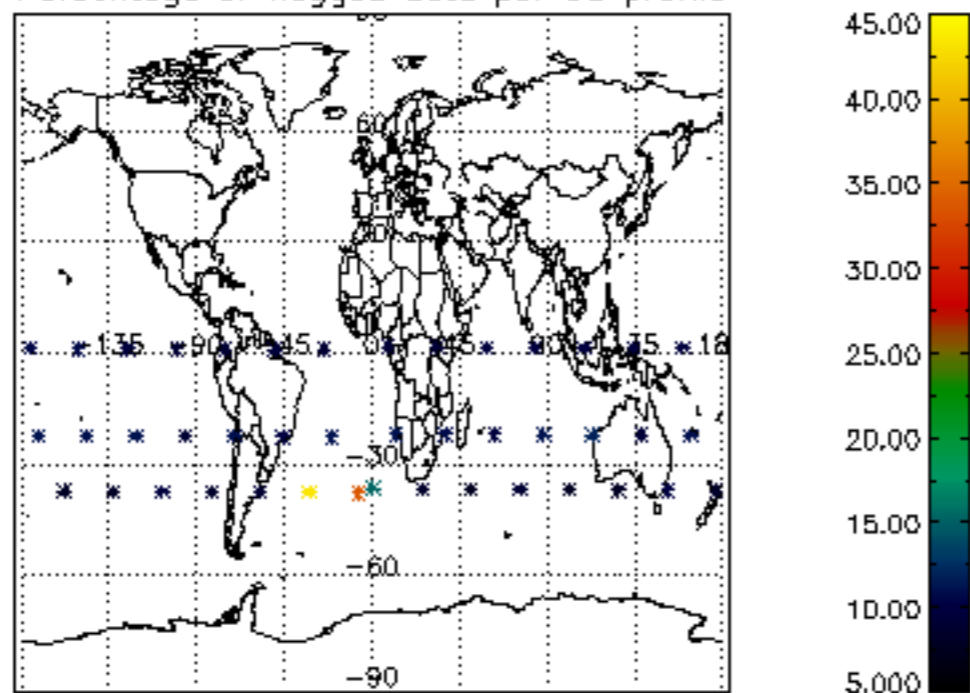




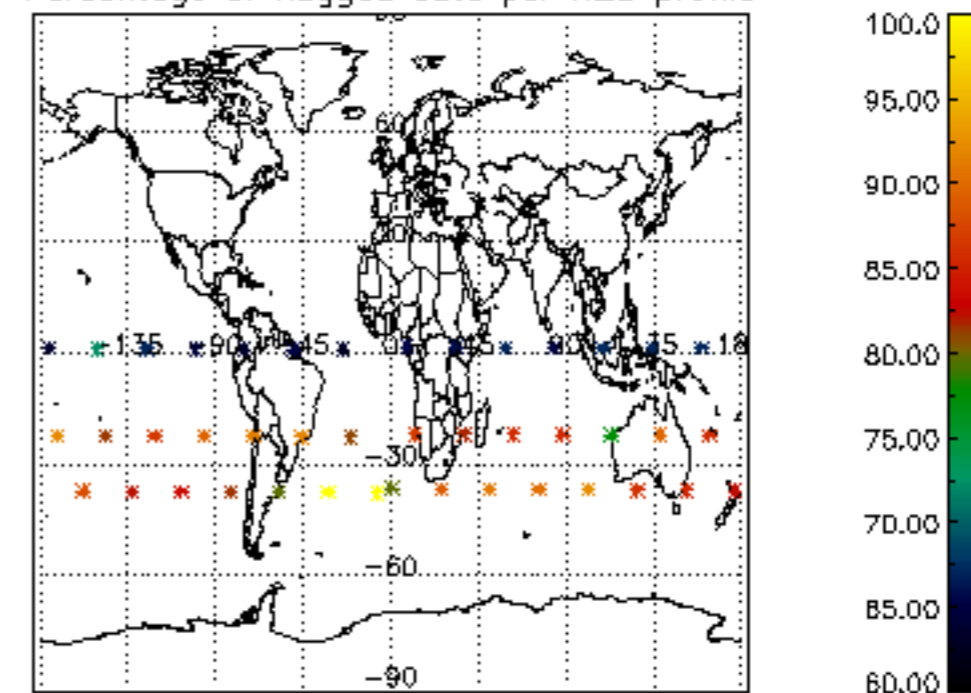




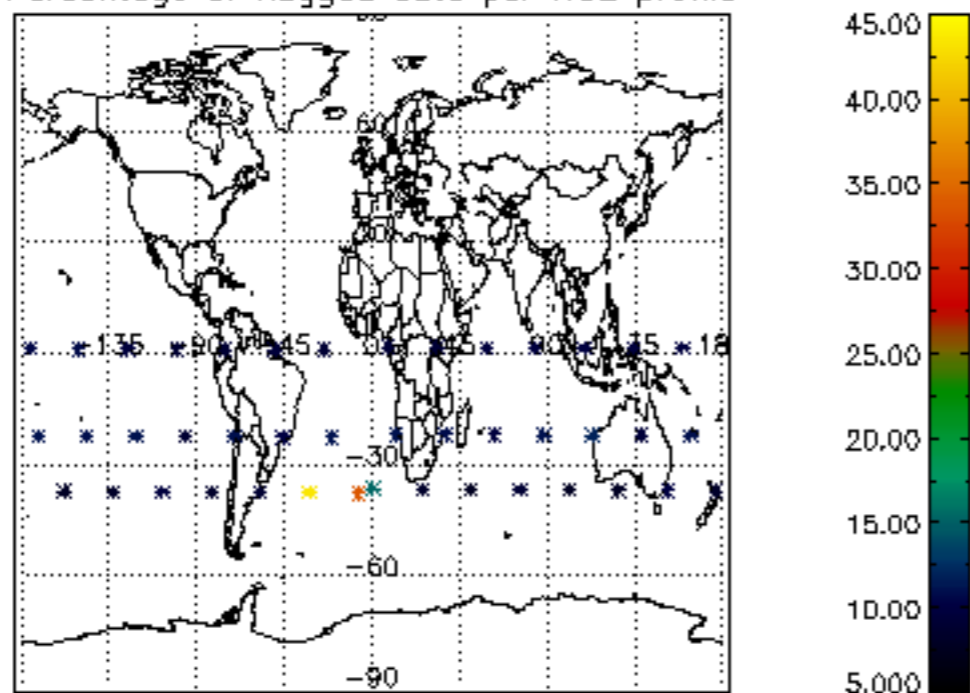
Percentage of flagged data per D3 profile



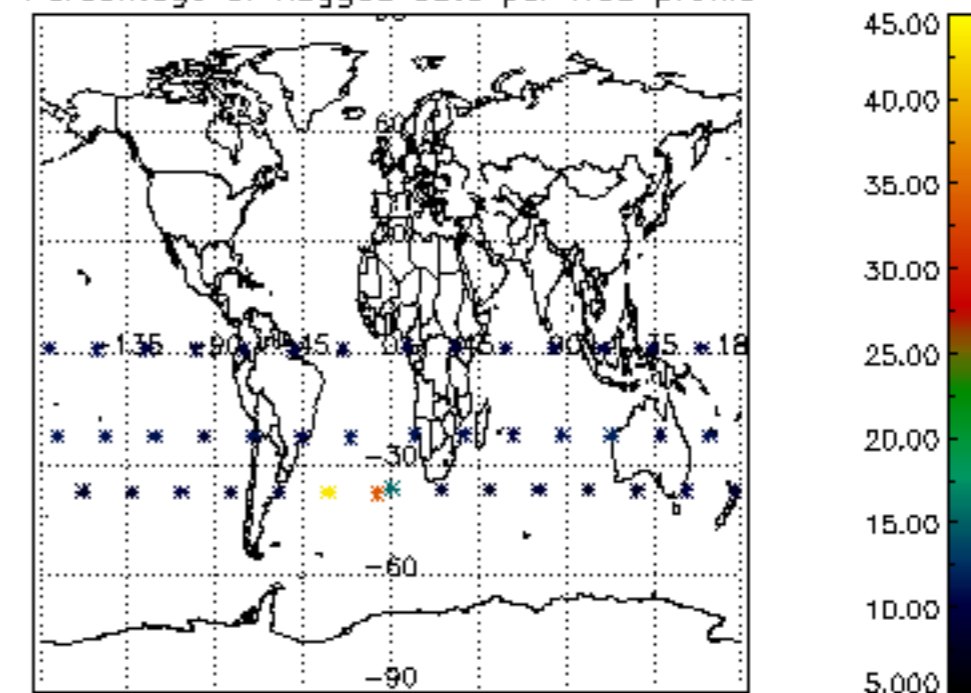
Percentage of flagged data per H2O profile

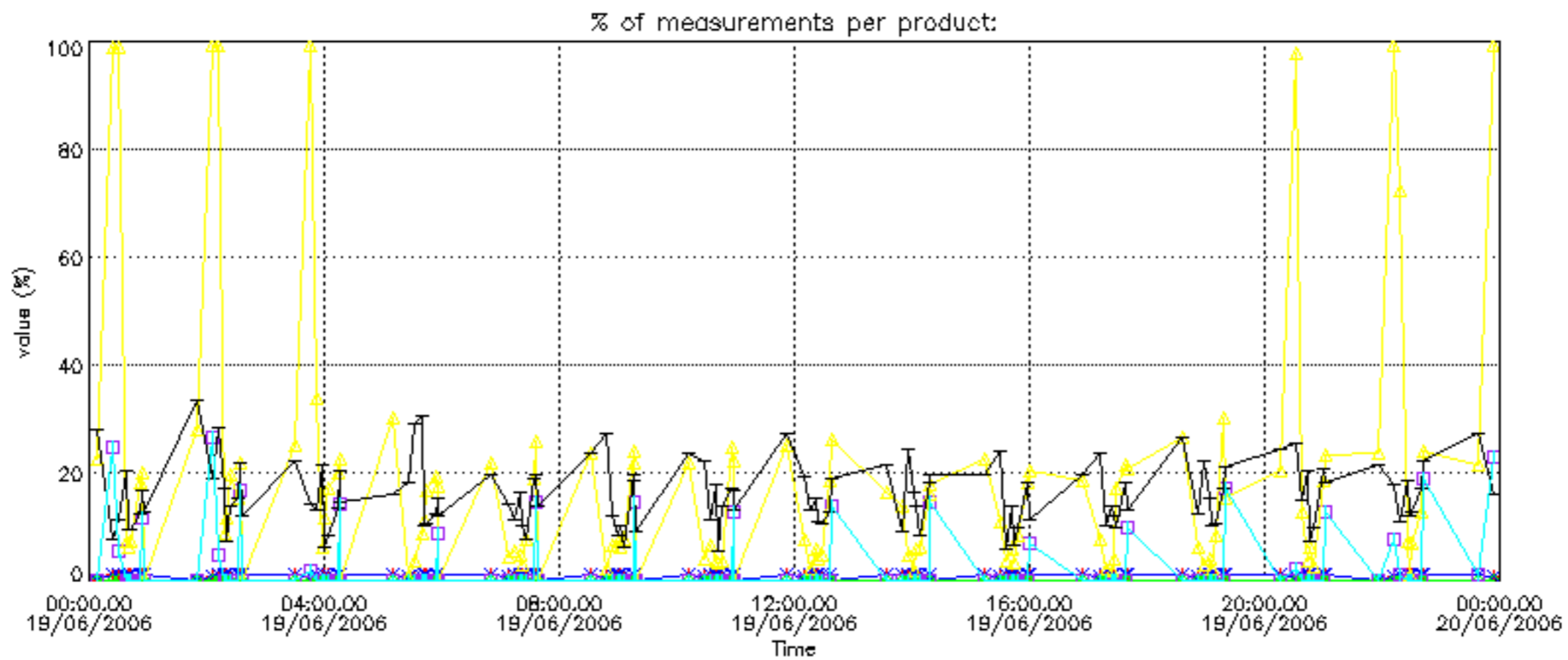
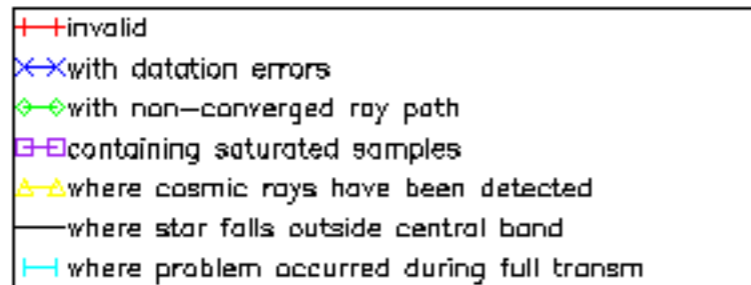


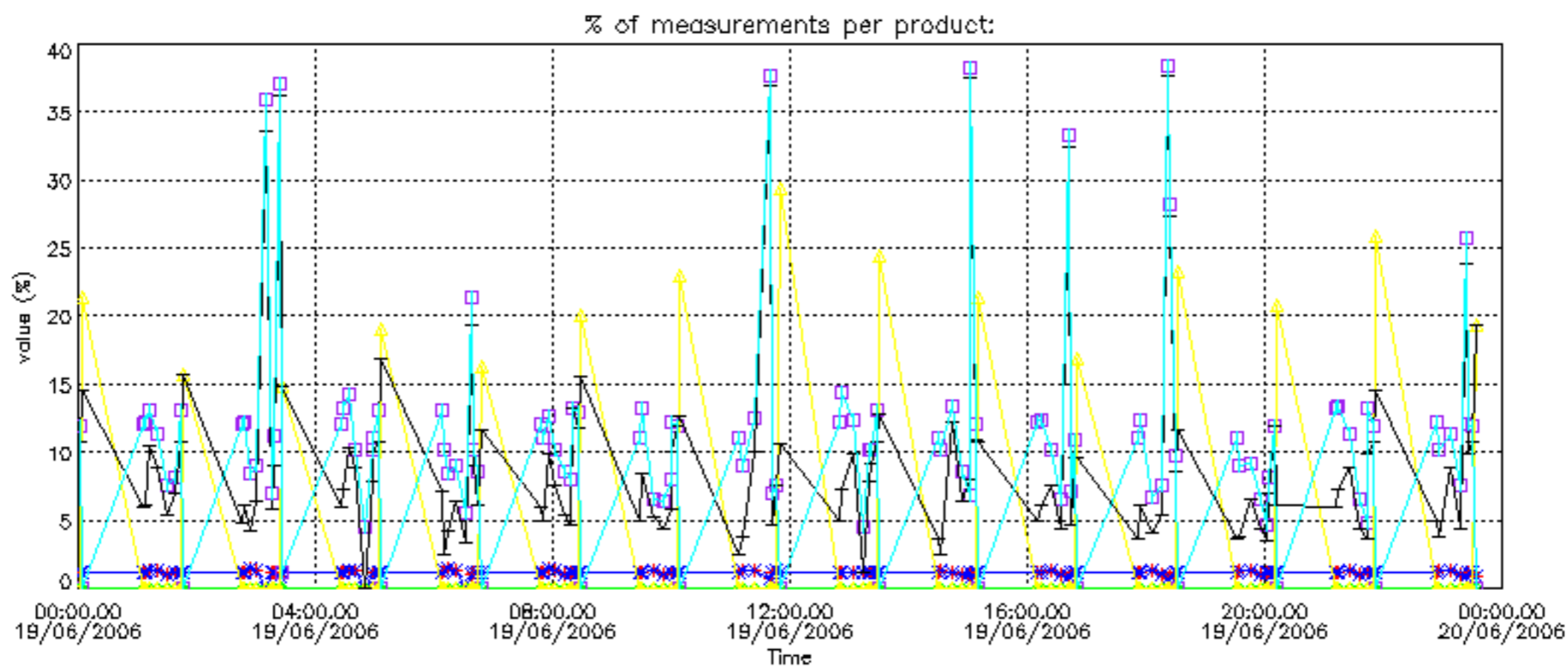
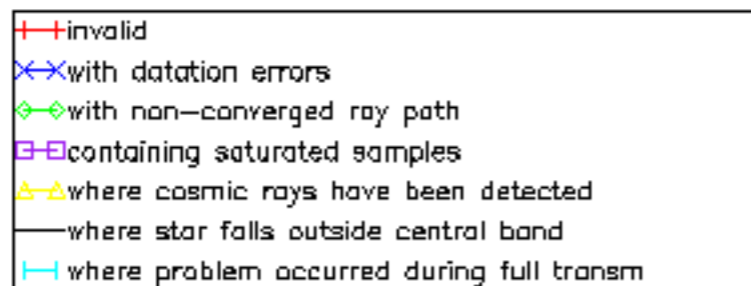
Percentage of flagged data per NO2 profile



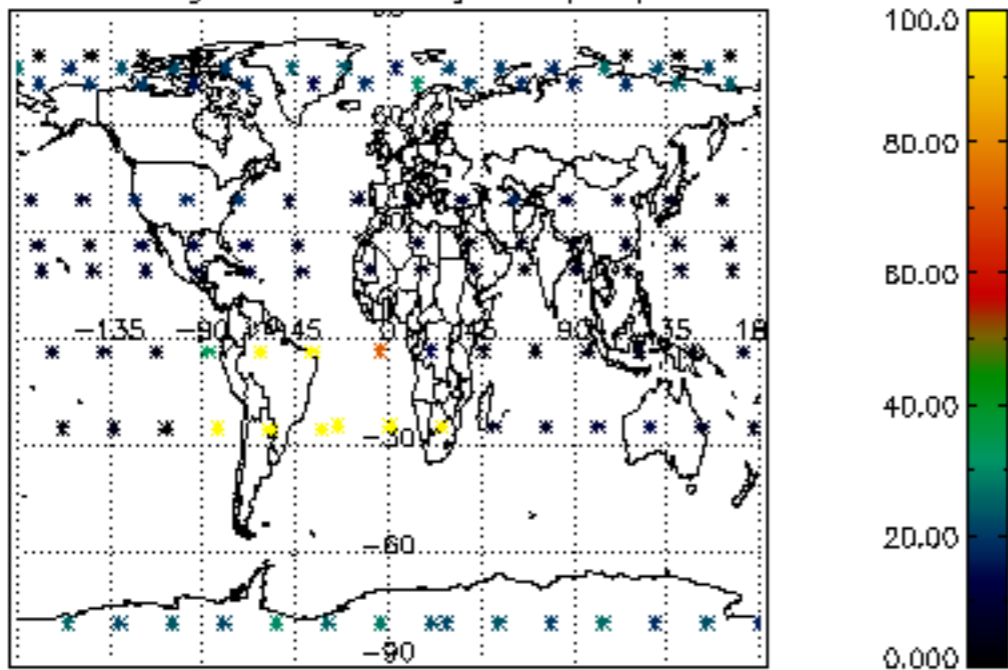
Percentage of flagged data per NO3 profile



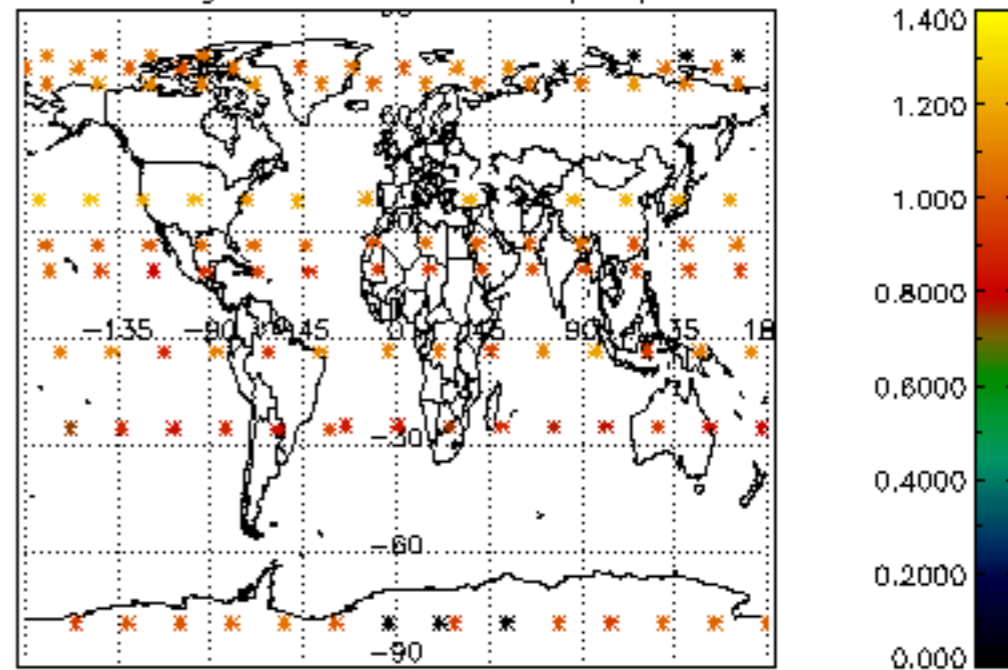




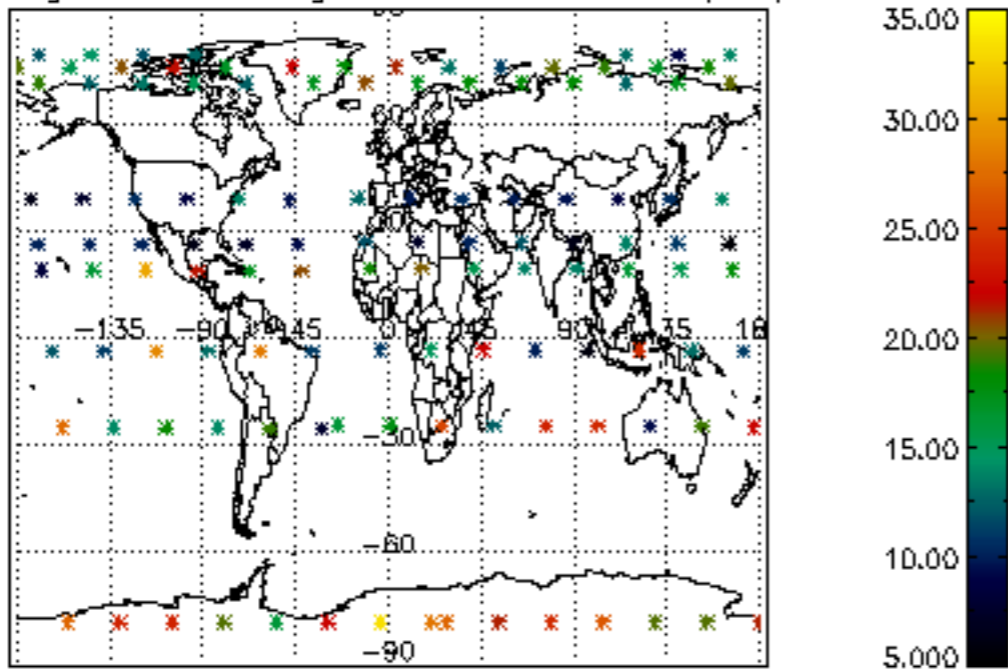
Percentage of cosmic ray hits per profile



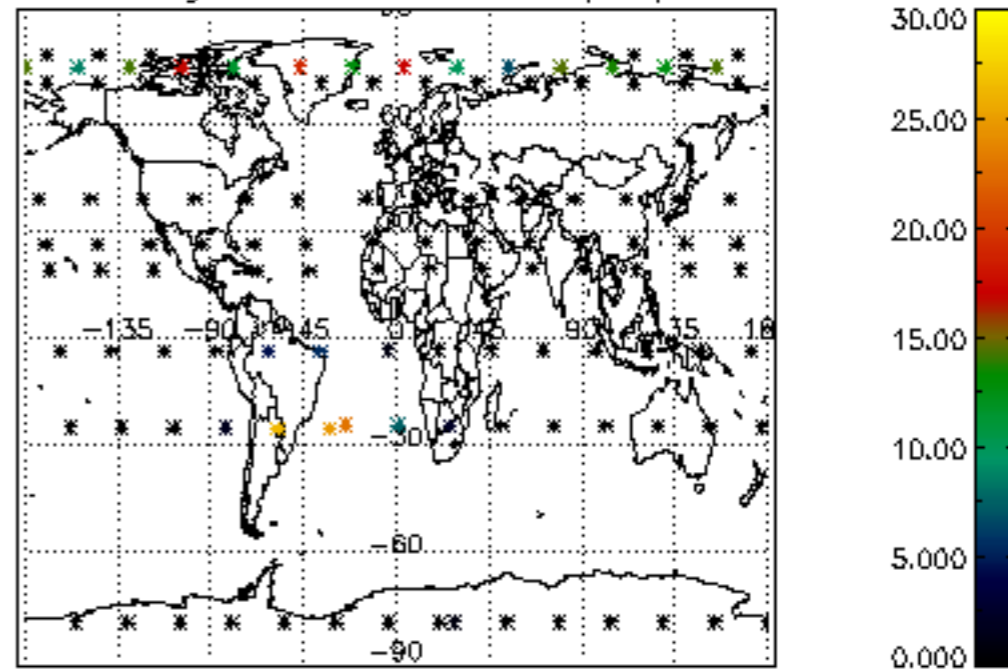
Percentage of datation errors per profile



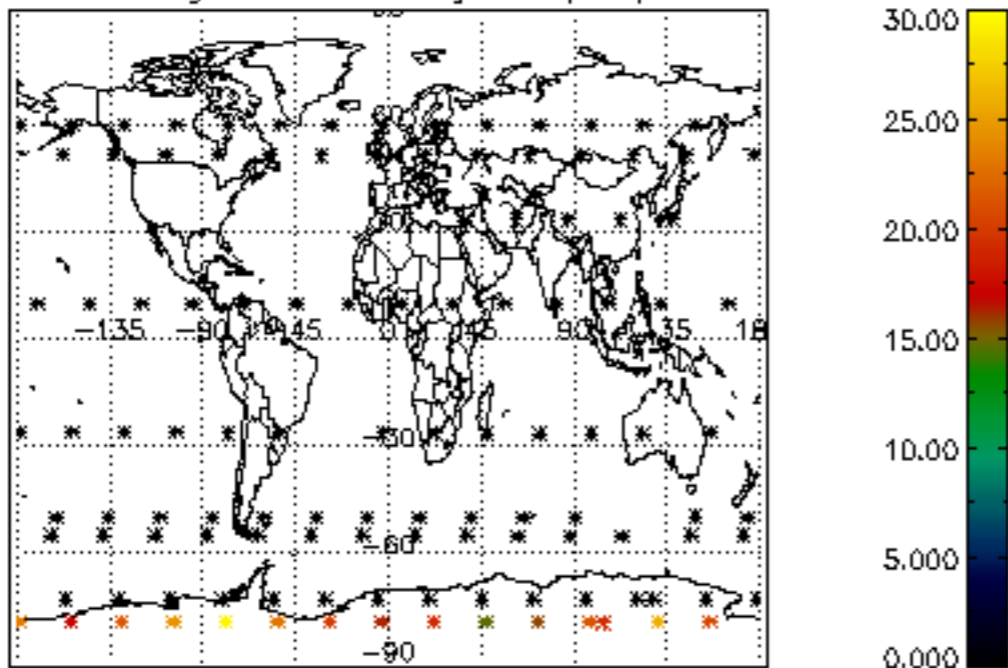
Percentage of star falling outside central band per profile



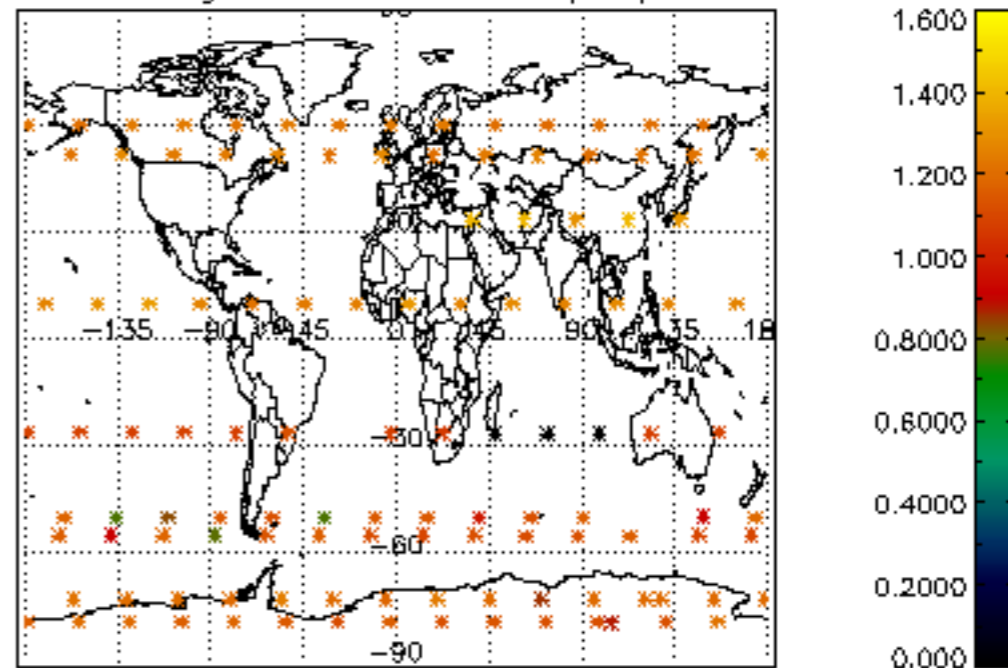
Percentage of saturation errors per profile



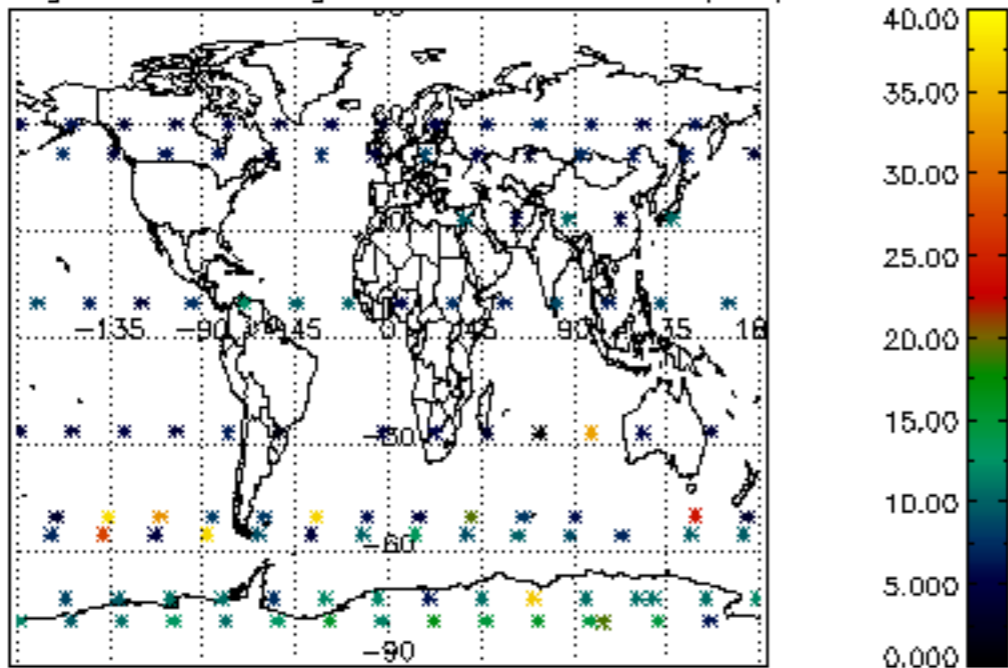
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

