

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 16:43:41
Data source version	GOMOS/6.01
Start time of products	10-08-2011 (10AUG2011 00:00:00)
Stop time of products	11-08-2011 (11AUG2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	297
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

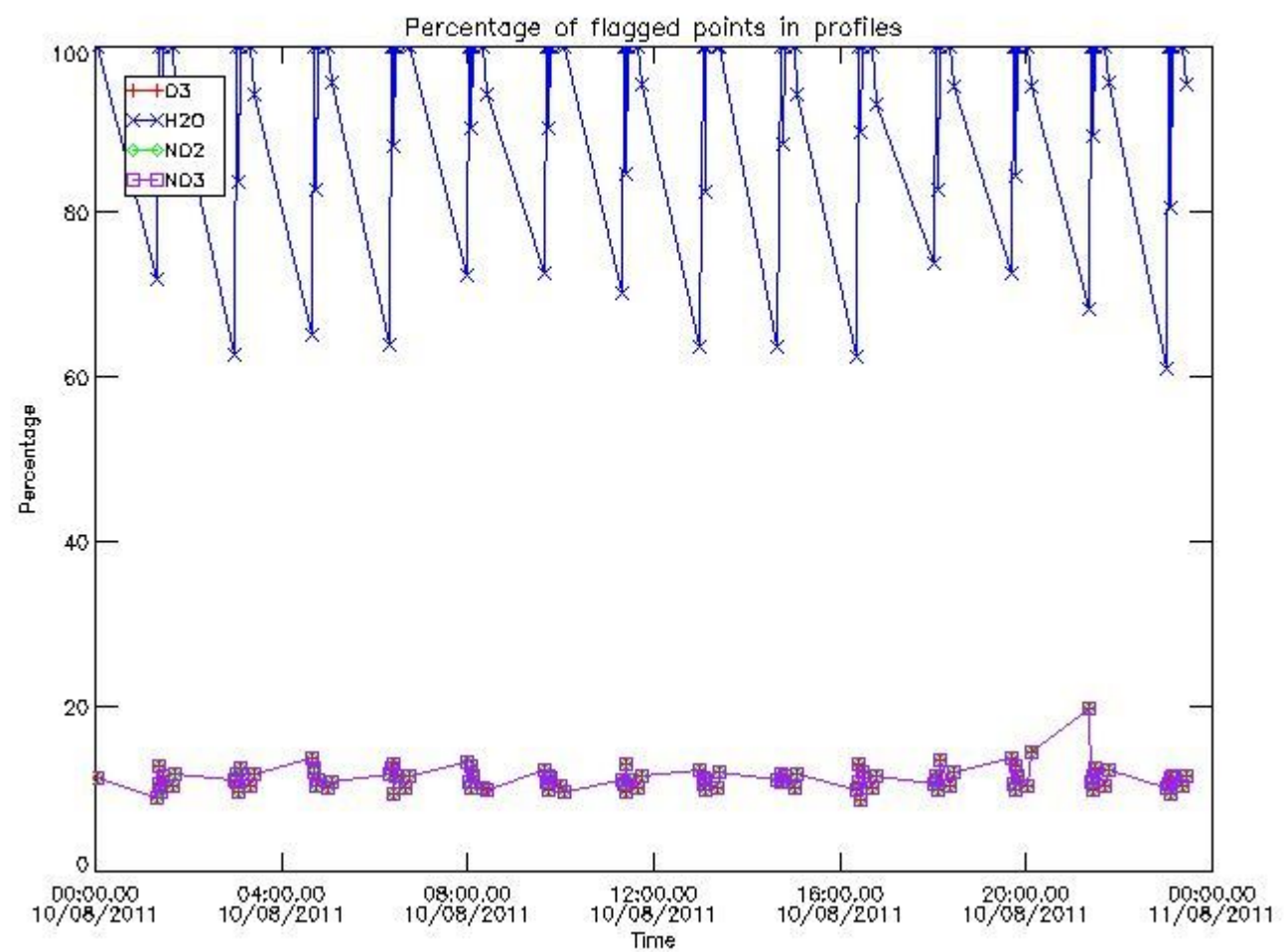
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110810_000328_000000493105_00232_49384_8947.N1	10-AUG-2011 00:03:28	Dark	49.000	9	Alp Eri	0.45300	24000.	98	49384	No
2	GOM_NL__2PRFIN20110810_000855_000000543105_00232_49384_8948.N1	10-AUG-2011 00:08:55	Straylight	54.000	84	Alp Phe	2.3970	4500.0	108	49384	No
3	GOM_NL__2PRFIN20110810_001306_000000423105_00232_49384_8949.N1	10-AUG-2011 00:13:06	Straylight	42.000	31	Alp Gru	1.7340	15200.	84	49384	No
4	GOM_NL__2PRFIN20110810_001657_000000593105_00232_49384_8950.N1	10-AUG-2011 00:16:57	Twilight_and_stray	59.000	18	24Alp PsA	1.1660	9700.0	118	49384	No
5	GOM_NL__2PRFIN20110810_002302_000000483105_00232_49384_8951.N1	10-AUG-2011 00:23:02	Bright	47.500	142	49Del Cap	2.8500	8900.0	95	49384	No
6	GOM_NL__2PRFIN20110810_002641_000000453105_00232_49384_8952.N1	10-AUG-2011 00:26:41	Bright	45.000	154	22Bet Aqr	2.8990	5700.0	90	49384	No
7	GOM_NL__2PRFIN20110810_003218_000000483105_00232_49384_8953.N1	10-AUG-2011 00:32:18	Bright	48.000	61	8Eps Peg	2.1000	3900.0	96	49384	No
8	GOM_NL__2PRFIN20110810_003836_000000373105_00232_49384_8954.N1	10-AUG-2011 00:38:36	Bright	37.000	92	53Eps Cyg	2.5000	4500.0	74	49384	No
9	GOM_NL__2PRFIN20110810_004004_000000363105_00232_49384_8955.N1	10-AUG-2011 00:40:04	Bright	35.500	66	37Gam Cyg	2.2080	5900.0	71	49384	No
10	GOM_NL__2PRFIN20110810_004147_000000413105_00232_49384_8956.N1	10-AUG-2011 00:41:47	Bright	40.500	19	50Alp Cyg	1.2460	10500.	81	49384	No
11	GOM_NL__2PRFIN20110810_004711_000000403105_00232_49384_8957.N1	10-AUG-2011 00:47:11	Bright	39.500	89	5Alp Cep	2.4510	8000.0	79	49384	No
12	GOM_NL__2PRFIN20110810_010626_000000463105_00232_49384_8958.N1	10-AUG-2011 01:06:26	Bright	45.500	6	13Alp Aur	0.080000	3400.0	91	49384	No
13	GOM_NL__2PRFIN20110810_010909_000000393105_00232_49384_8959.N1	10-AUG-2011 01:09:09	Bright	39.000	107	37The Aur	2.6490	11000.	78	49384	No
14	GOM_NL__2PRFIN20110810_011206_000000513105_00232_49384_8960.N1	10-AUG-2011 01:12:06	Twilight_and_stray	50.500	28	12Bet Tau	1.6500	15200.	101	49384	No
15	GOM_NL__2PRFIN20110810_011420_000000453105_00232_49384_8961.N1	10-AUG-2011 01:14:20	Twilight_and_stray	45.000	176	23Zet Tau	3.0200	22000.	90	49384	No
16	GOM_NL__2PRFIN20110810_011809_000000573105_00232_49384_8962.N1	10-AUG-2011 01:18:09	Dark	57.000	14	58Alp Ori	0.87000	3000.0	114	49384	No
17	GOM_NL__2PRFIN20110810_012108_000000483105_00232_49384_8963.N1	10-AUG-2011 01:21:08	Dark	48.000	30	46Eps Ori	1.6940	30000.	96	49384	No
18	GOM_NL__2PRFIN20110810_012231_000000443105_00232_49384_8964.N1	10-AUG-2011 01:22:31	Dark	43.500	125	44Iot Ori	2.7700	30000.	87	49384	No
19	GOM_NL__2PRFIN20110810_012354_000000543105_00232_49384_8965.N1	10-AUG-2011 01:23:54	Dark	53.500	7	19Bet Ori	0.10000	14000.	107	49384	No
20	GOM_NL__2PRFIN20110810_012554_000000443105_00232_49384_8966.N1	10-AUG-2011 01:25:54	Dark	44.000	101	11Alp Lep	2.5820	7000.0	88	49384	No
21	GOM_NL__2PRFIN20110810_013902_000000503105_00233_49385_8975.N1	10-AUG-2011 01:39:02	Dark	49.500	157	The1Eri	2.9060	9300.0	99	49385	No
22	GOM_NL__2PRFIN20110810_014342_000000443105_00233_49385_8976.N1	10-AUG-2011 01:43:42	Dark	43.500	9	Alp Eri	0.45300	24000.	87	49385	No
23	GOM_NL__2PRFIN20110810_014910_000000563105_00233_49385_8977.N1	10-AUG-2011 01:49:10	Straylight	55.500	84	Alp Phe	2.3970	4500.0	111	49385	No
24	GOM_NL__2PRFIN20110810_015321_000000443105_00233_49385_8978.N1	10-AUG-2011 01:53:21	Straylight	43.500	31	Alp Gru	1.7340	15200.	87	49385	No
25	GOM_NL__2PRFIN20110810_015711_000000553105_00233_49385_8979.N1	10-AUG-2011 01:57:11	Twilight_and_stray	55.000	18	24Alp PsA	1.1660	9700.0	110	49385	No
26	GOM_NL__2PRFIN20110810_020316_000000473105_00233_49385_8980.N1	10-AUG-2011 02:03:16	Bright	47.000	142	49Del Cap	2.8500	8900.0	94	49385	No
27	GOM_NL__2PRFIN20110810_020655_000000453105_00233_49385_8981.N1	10-AUG-2011 02:06:55	Bright	45.000	154	22Bet Aqr	2.8990	5700.0	90	49385	No
28	GOM_NL__2PRFIN20110810_021231_000000513105_00233_49385_8982.N1	10-AUG-2011 02:12:31	Bright	50.500	61	8Eps Peg	2.1000	3900.0	101	49385	No
29	GOM_NL__2PRFIN20110810_021850_000000413105_00233_49385_8983.N1	10-AUG-2011 02:18:50	Bright	41.000	92	53Eps Cyg	2.5000	4500.0	82	49385	No
30	GOM_NL__2PRFIN20110810_022018_000000393105_00233_49385_8984.N1	10-AUG-2011 02:20:18	Bright	39.000	66	37Gam Cyg	2.2080	5900.0	78	49385	No
31	GOM_NL__2PRFIN20110810_022201_000000403105_00233_49385_8985.N1	10-AUG-2011 02:22:01	Bright	40.000	19	50Alp Cyg	1.2460	10500.	80	49385	No
32	GOM_NL__2PRFIN20110810_022724_000000363105_00233_49385_8986.N1	10-AUG-2011 02:27:24	Bright	36.000	89	5Alp Cep	2.4510	8000.0	72	49385	No
33	GOM_NL__2PRFIN20110810_024640_000000473105_00233_49385_8987.N1	10-AUG-2011 02:46:40	Bright	47.000	6	13Alp Aur	0.080000	3400.0	94	49385	No
34	GOM_NL__2PRFIN20110810_024923_000000453105_00233_49385_8988.N1	10-AUG-2011 02:49:23	Bright	45.000	107	37The Aur	2.6490	11000.	90	49385	No
35	GOM_NL__2PRFIN20110810_025220_000000493105_00233_49385_8989.N1	10-AUG-2011 02:52:20	Twilight_and_stray	49.000	28	12Bet Tau	1.6500	15200.	98	49385	No
36	GOM_NL__2PRFIN20110810_025434_000000443105_00233_49385_8990.N1	10-AUG-2011 02:54:34	Twilight_and_stray	43.500	176	23Zet Tau	3.0200	22000.	87	49385	No
37	GOM_NL__2PRFIN20110810_025823_000000503105_00233_49385_8991.N1	10-AUG-2011 02:58:23	Dark	50.000	14	58Alp Ori	0.87000	3000.0	100	49385	No
38	GOM_NL__2PRFIN20110810_030123_000000483105_00233_49385_8992.N1	10-AUG-2011 03:01:23	Dark	47.500	30	46Eps Ori	1.6940	30000.	95	49385	No
39	GOM_NL__2PRFIN20110810_030245_000000443105_00233_49385_8993.N1	10-AUG-2011 03:02:45	Dark	43.500	125	44Iot Ori	2.7700	30000.	87	49385	No
40	GOM_NL__2PRFIN20110810_030408_000000533105_00233_49385_8994.N1	10-AUG-2011 03:04:08	Dark	52.500	7	19Bet Ori	0.10000	14000.	105	49385	No
41	GOM_NL__2PRFIN20110810_030608_000000453105_00233_49385_8995.N1	10-AUG-2011 03:06:08	Dark	44.500	101	11Alp Lep	2.5820	7000.0	89	49385	No
42	GOM_NL__2PRFIN20110810_031917_000000493105_00234_49386_8996.N1	10-AUG-2011 03:19:17	Dark	49.000	157	The1Eri	2.9060	9300.0	98	49386	No

279	GOM_NL__2PRFIN20110810_222445_000000403105_00245_49397_9460.N1	10-AUG-2011 22:24:45	Bright	39.500	19	50Alp Cyg	1.2460	10500.	79	49397	No
280	GOM_NL__2PRFIN20110810_223009_000000403105_00245_49397_9461.N1	10-AUG-2011 22:30:09	Bright	40.000	89	5Alp Cep	2.4510	8000.0	80	49397	No
281	GOM_NL__2PRFIN20110810_224927_000000463105_00245_49397_9462.N1	10-AUG-2011 22:49:27	Bright	45.500	6	13Alp Aur	0.080000	3400.0	91	49397	No
282	GOM_NL__2PRFIN20110810_225212_000000363105_00245_49397_9463.N1	10-AUG-2011 22:52:12	Bright	36.000	107	37The Aur	2.6490	11000.	72	49397	No
283	GOM_NL__2PRFIN20110810_225510_000000503105_00245_49397_9464.N1	10-AUG-2011 22:55:10	Twilight	49.500	28	12Bet Tau	1.6500	15200.	99	49397	No
284	GOM_NL__2PRFIN20110810_225725_000000453105_00245_49397_9465.N1	10-AUG-2011 22:57:25	Twilight	45.000	176	23Zet Tau	3.0200	22000.	90	49397	No
285	GOM_NL__2PRFIN20110810_230115_000000513105_00245_49397_9466.N1	10-AUG-2011 23:01:15	Dark	50.500	14	58Alp Ori	0.87000	3000.0	101	49397	No
286	GOM_NL__2PRFIN20110810_230416_000000493105_00245_49397_9467.N1	10-AUG-2011 23:04:16	Dark	48.500	30	46Eps Ori	1.6940	30000.	97	49397	No
287	GOM_NL__2PRFIN20110810_230539_000000453105_00245_49397_9468.N1	10-AUG-2011 23:05:39	Dark	45.000	125	44Iot Ori	2.7700	30000.	90	49397	No
288	GOM_NL__2PRFIN20110810_230704_000000543105_00245_49397_9469.N1	10-AUG-2011 23:07:04	Dark	54.000	7	19Bet Ori	0.10000	14000.	108	49397	No
289	GOM_NL__2PRFIN20110810_230903_000000453105_00245_49397_9470.N1	10-AUG-2011 23:09:03	Dark	44.500	101	11Alp Lep	2.5820	7000.0	89	49397	No
290	GOM_NL__2PRFIN20110810_232218_000000493105_00246_49398_9516.N1	10-AUG-2011 23:22:18	Dark	49.000	157	The1Eri	2.9060	9300.0	98	49398	No
291	GOM_NL__2PRFIN20110810_232653_000000443105_00246_49398_9517.N1	10-AUG-2011 23:26:53	Dark	44.000	9	Alp Eri	0.45300	24000.	88	49398	No
292	GOM_NL__2PRFIN20110810_233224_000000523105_00246_49398_9518.N1	10-AUG-2011 23:32:24	Straylight	51.500	84	Alp Phe	2.3970	4500.0	103	49398	No
293	GOM_NL__2PRFIN20110810_233628_000000453105_00246_49398_9519.N1	10-AUG-2011 23:36:28	Straylight	44.500	31	Alp Gru	1.7340	15200.	89	49398	No
294	GOM_NL__2PRFIN20110810_234019_000000583105_00246_49398_9520.N1	10-AUG-2011 23:40:19	Twilight	58.000	18	24Alp PsA	1.1660	9700.0	116	49398	No
295	GOM_NL__2PRFIN20110810_234619_000000463105_00246_49398_9521.N1	10-AUG-2011 23:46:19	Bright	46.000	142	49Del Cap	2.8500	8900.0	92	49398	No
296	GOM_NL__2PRFIN20110810_234956_000000453105_00246_49398_9522.N1	10-AUG-2011 23:49:56	Bright	44.500	154	22Bet Aqr	2.8990	5700.0	89	49398	No
297	GOM_NL__2PRFIN20110810_235528_000000503105_00246_49398_9523.N1	10-AUG-2011 23:55:28	Bright	49.500	61	8Eps Peg	2.1000	3900.0	99	49398	No

3. Quality information per product

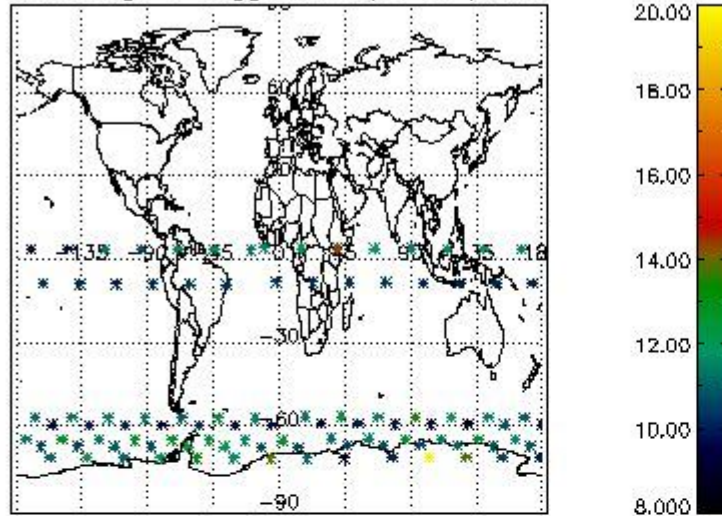
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

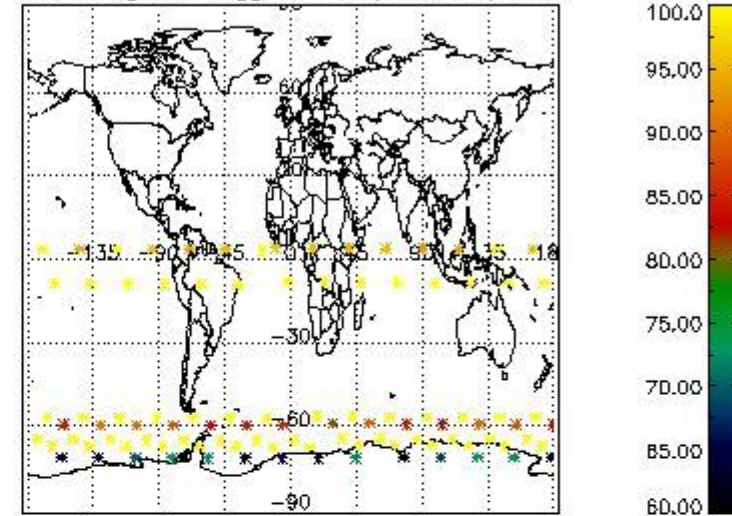


3.2 Plot quality information per product (world map)

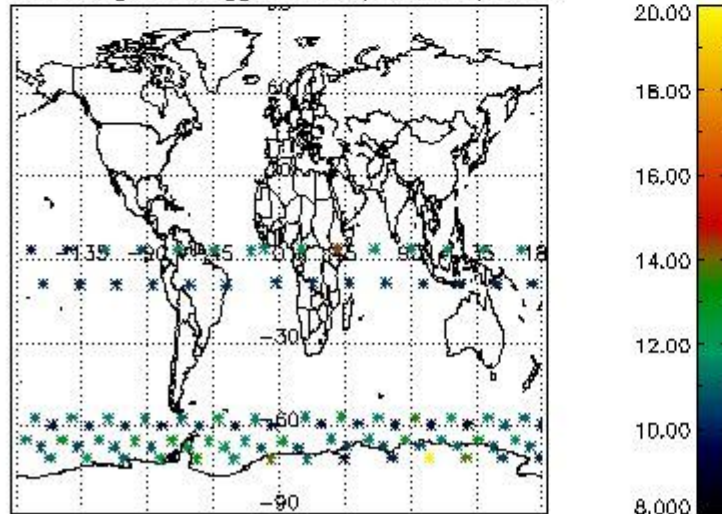
Percentage of flagged data per O3 profile



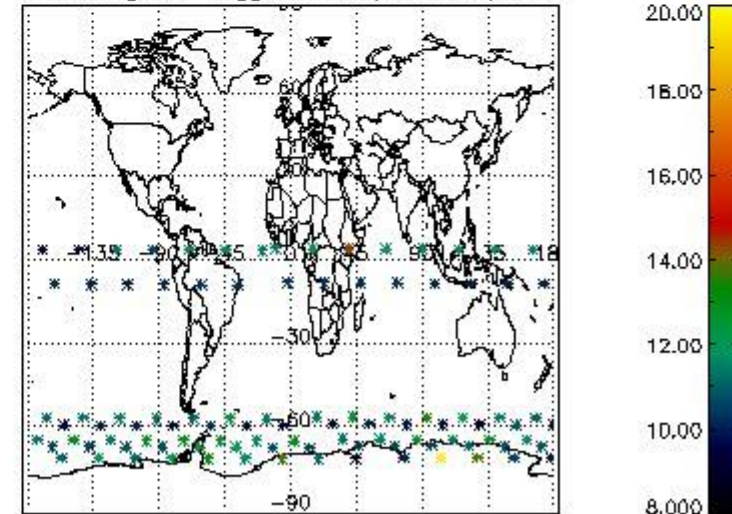
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

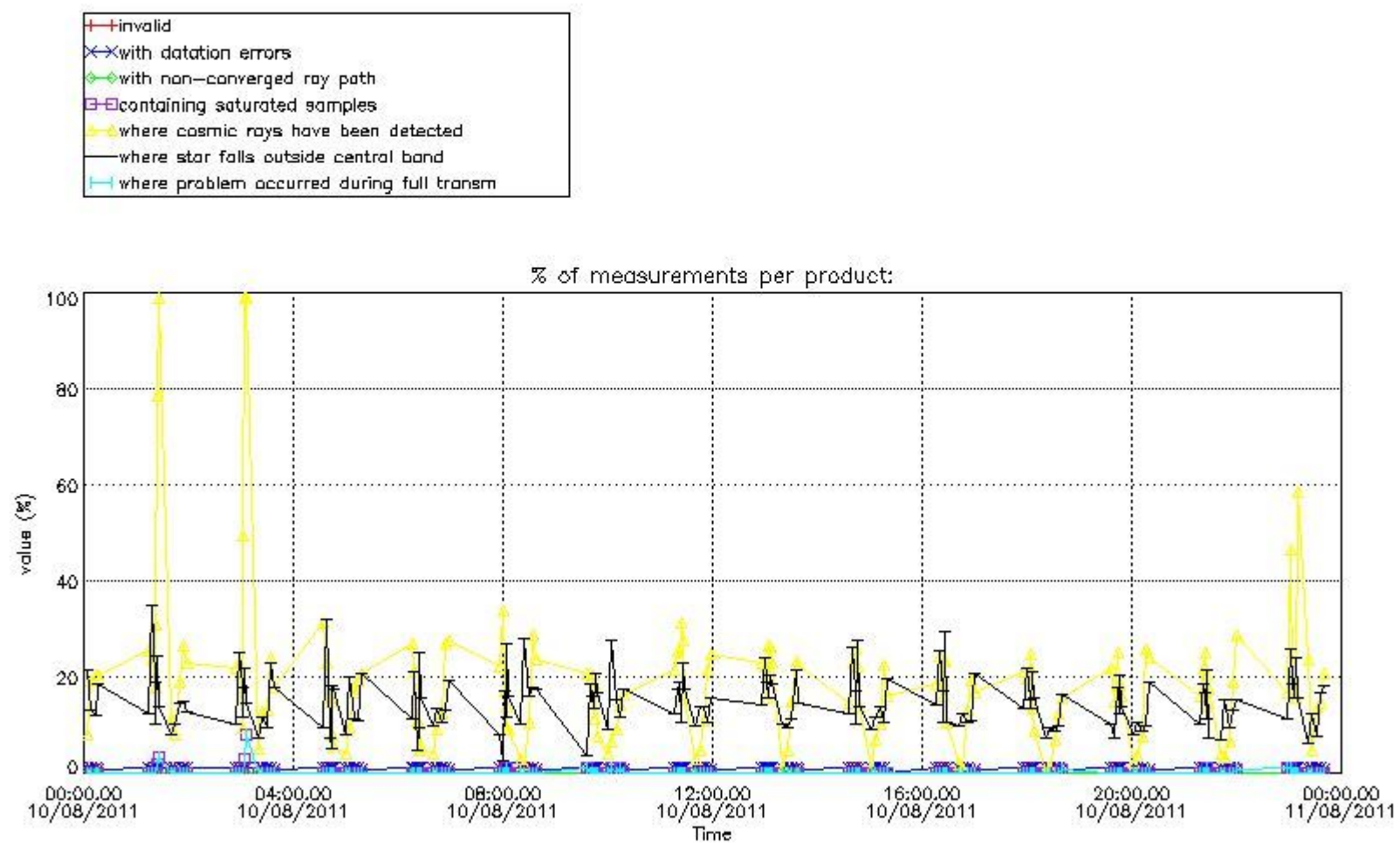


4. Level 1 quality information per product

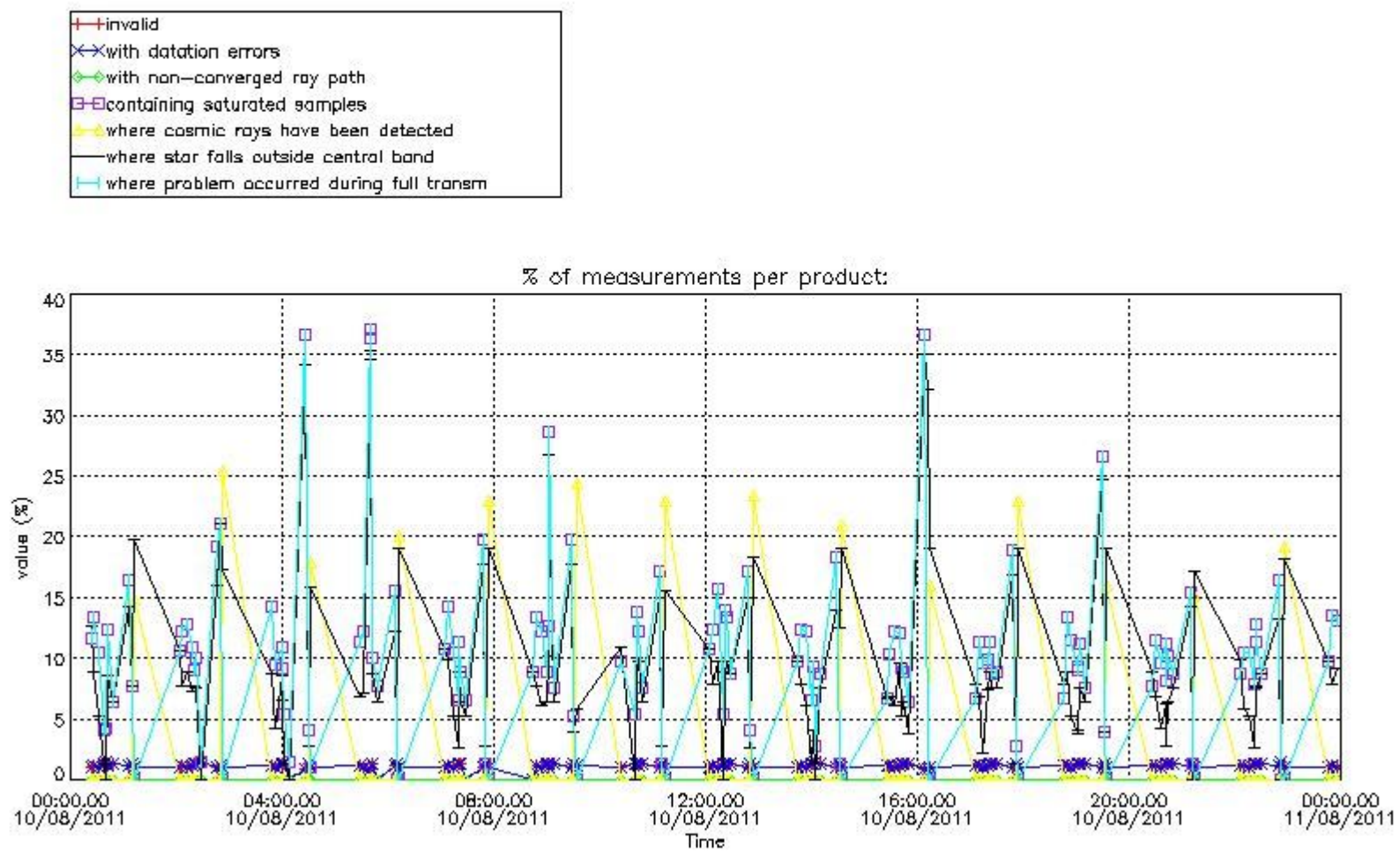
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes



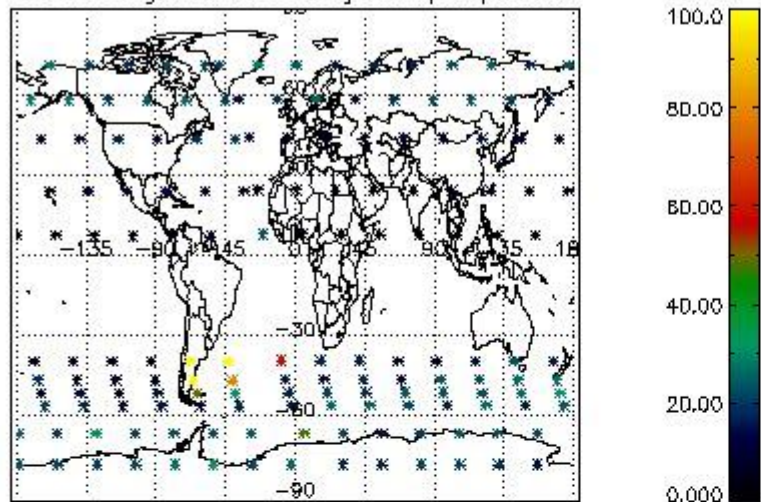
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



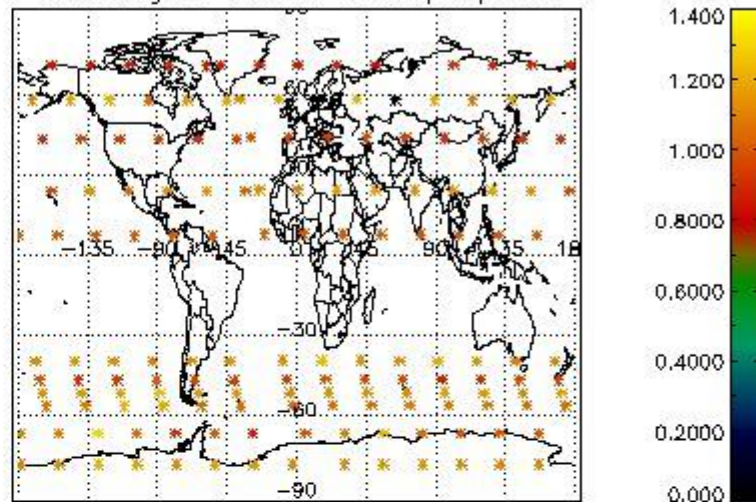
4.2 Plot quality information per product coming from level 1b processing (world map)

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

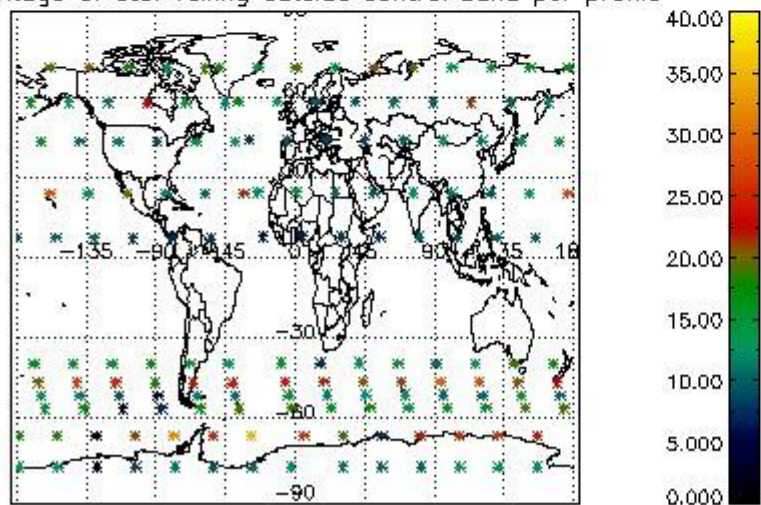
Percentage of cosmic ray hits per profile



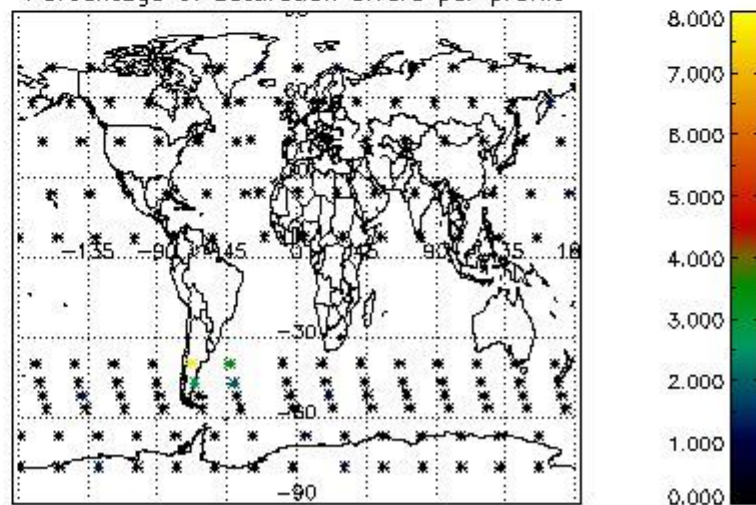
Percentage of datation errors per profile



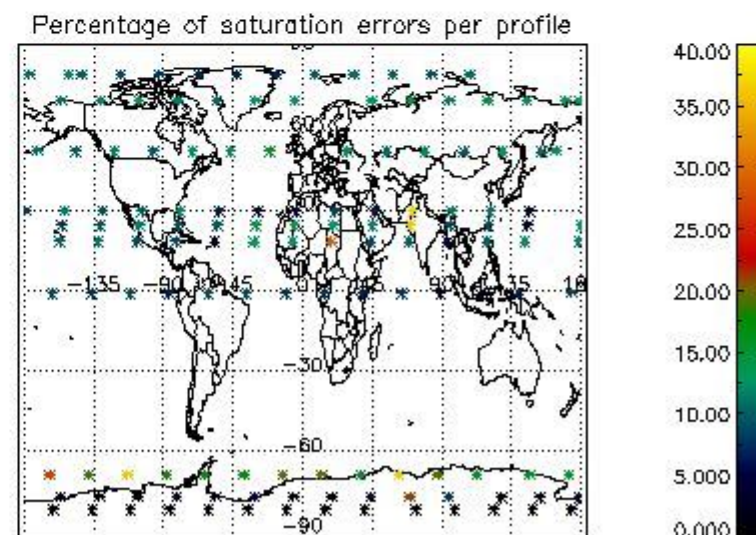
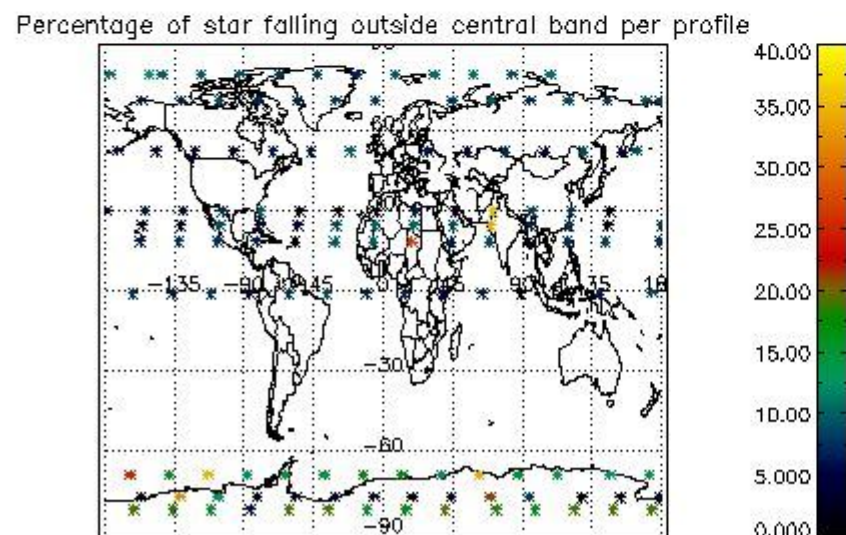
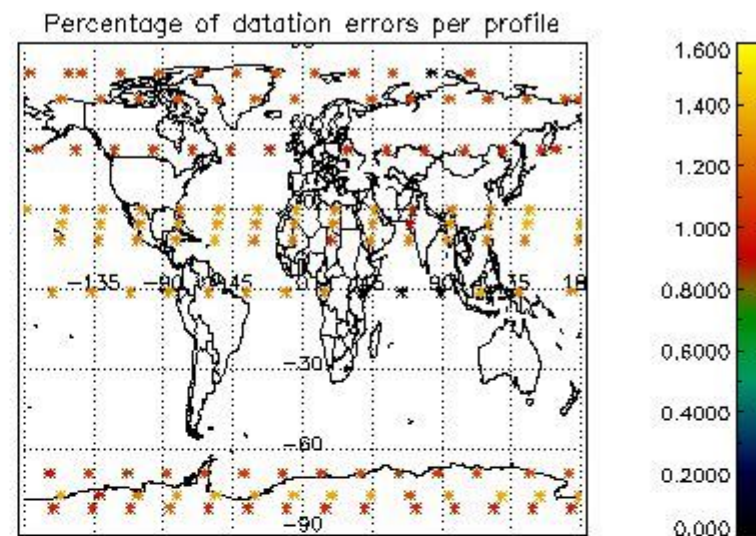
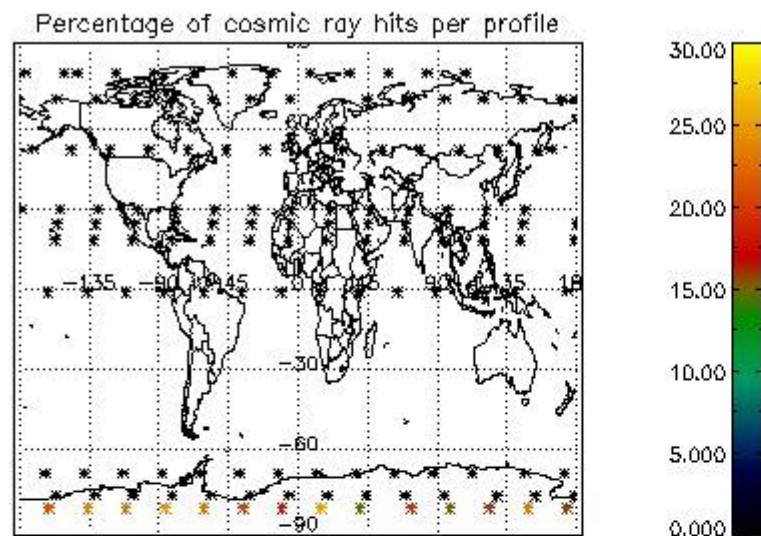
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

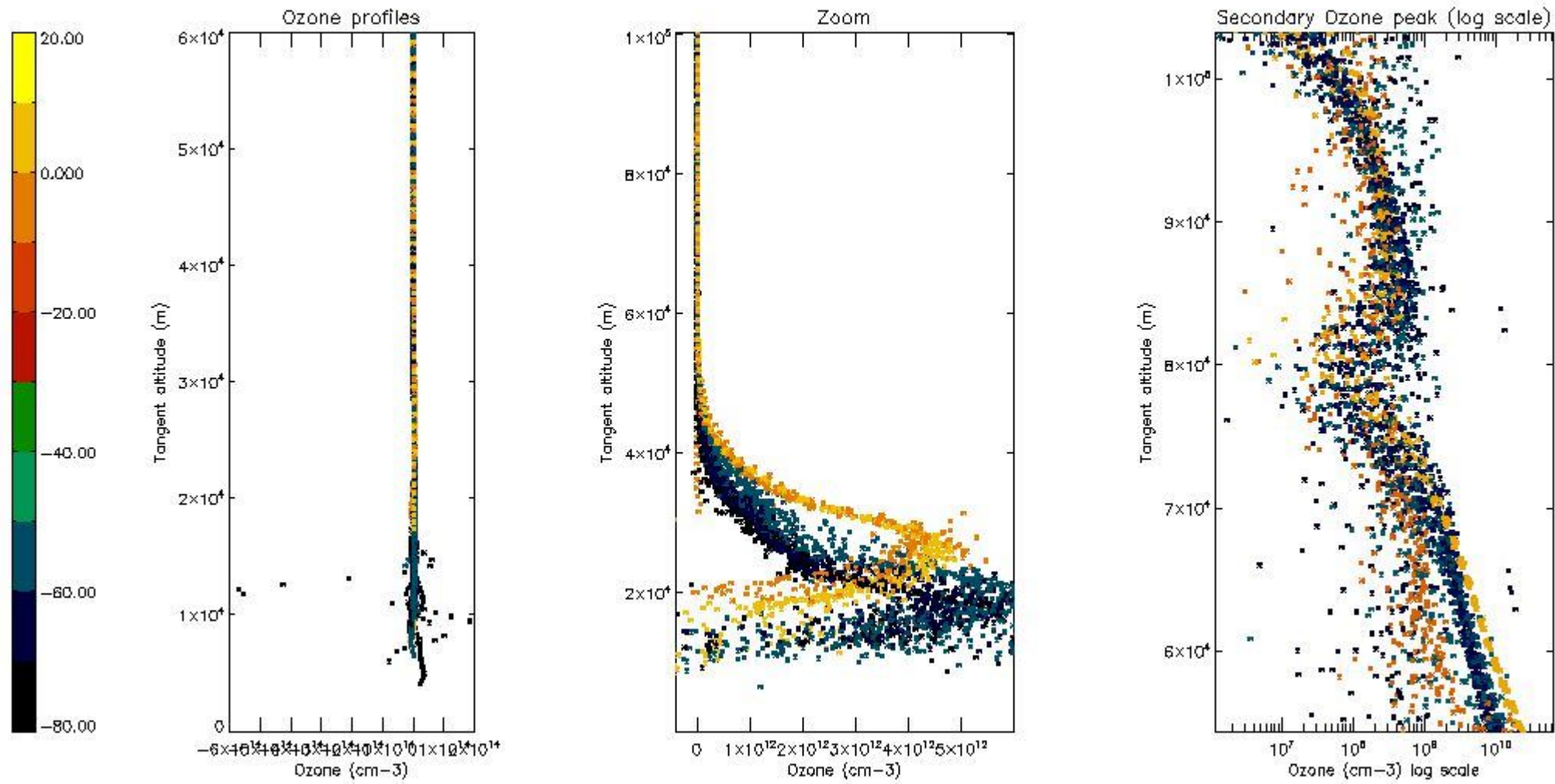
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	35
STD < 20	19

STD < 10	14
STD < 5	10

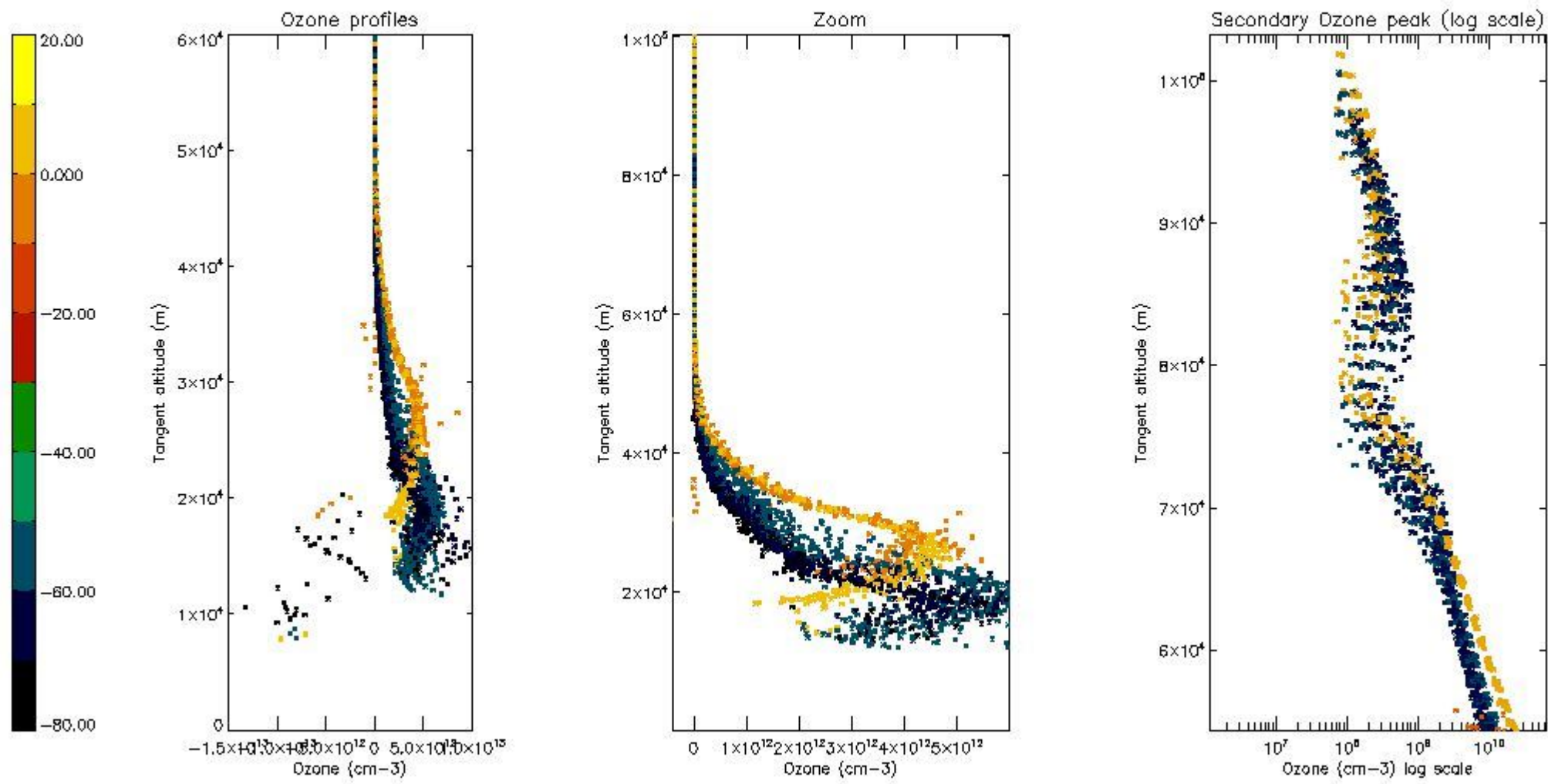
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



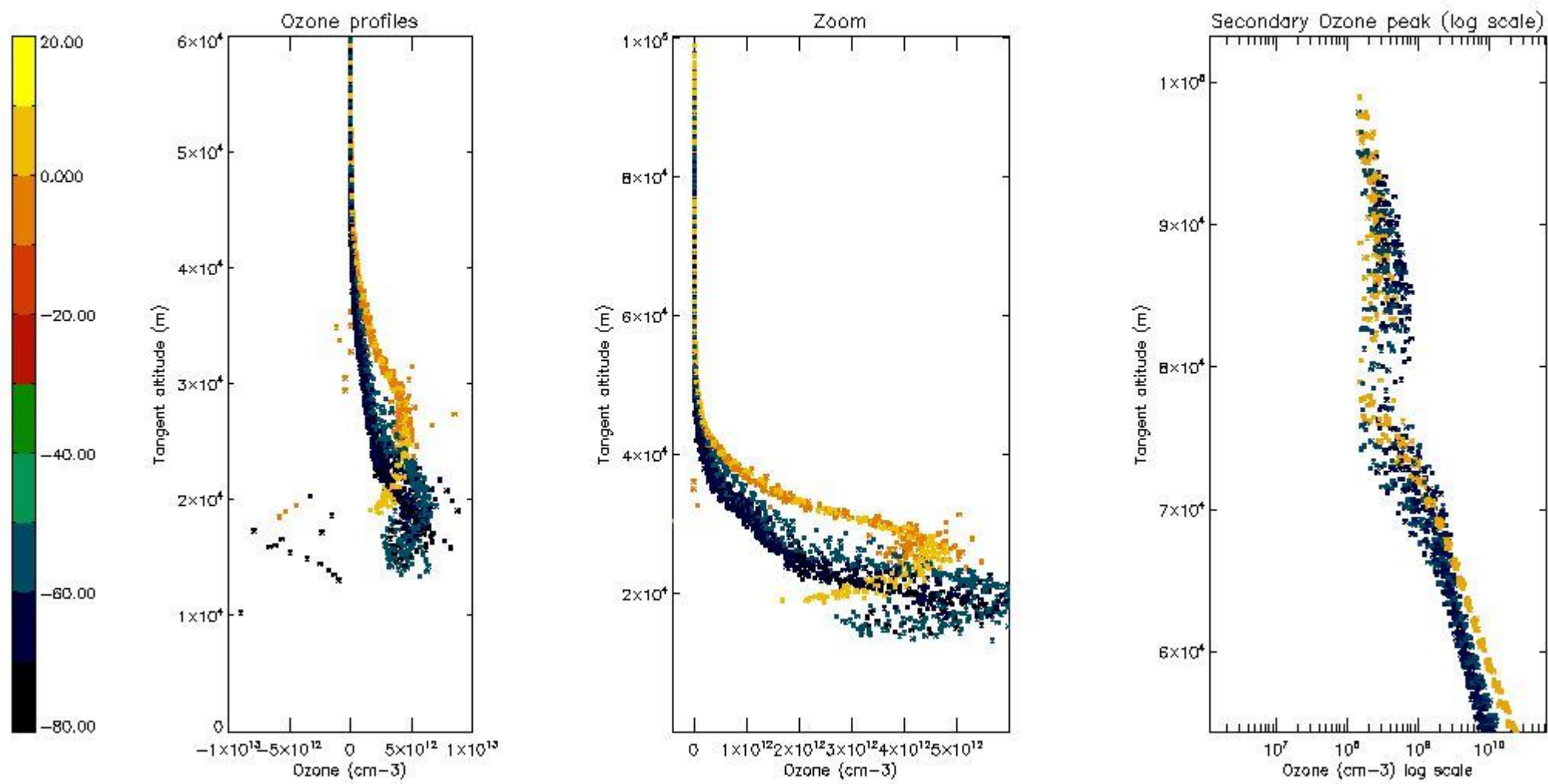
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



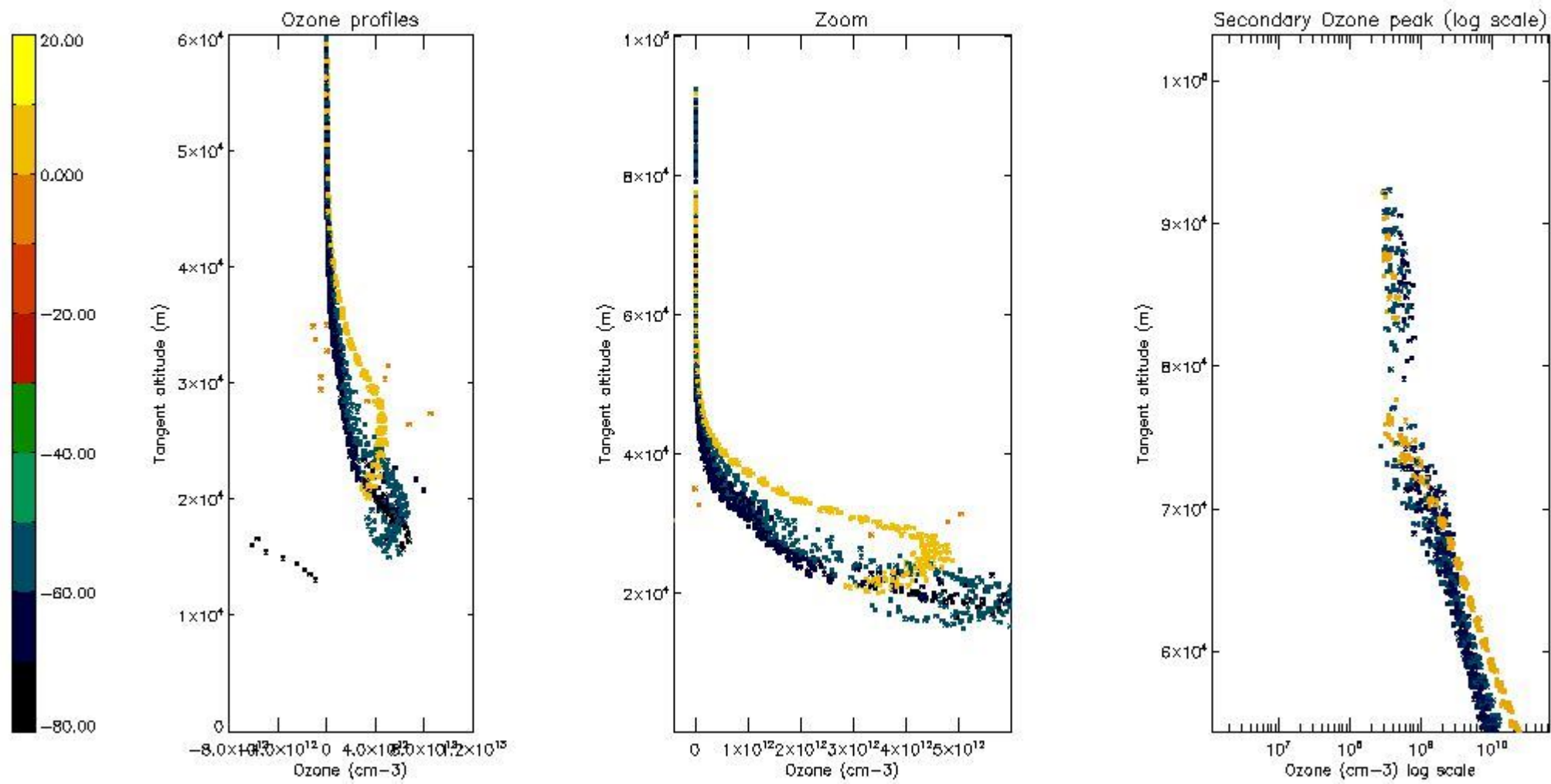
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



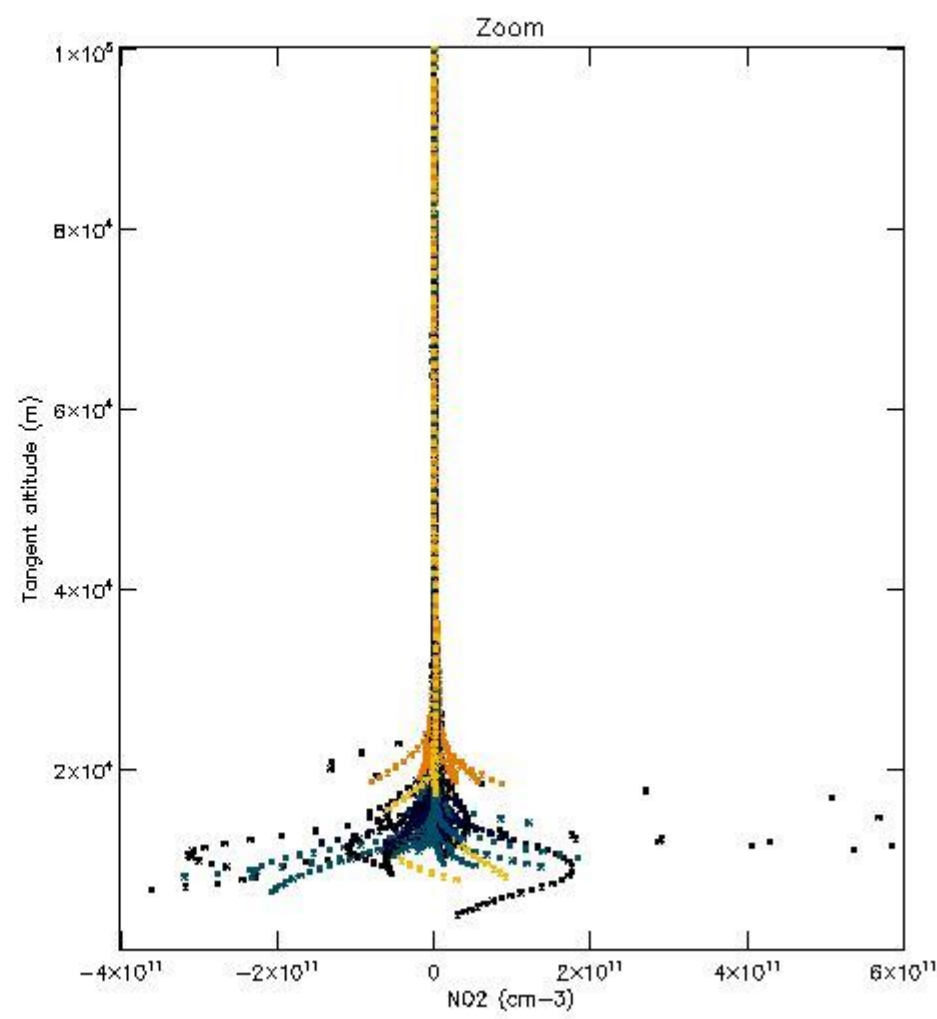
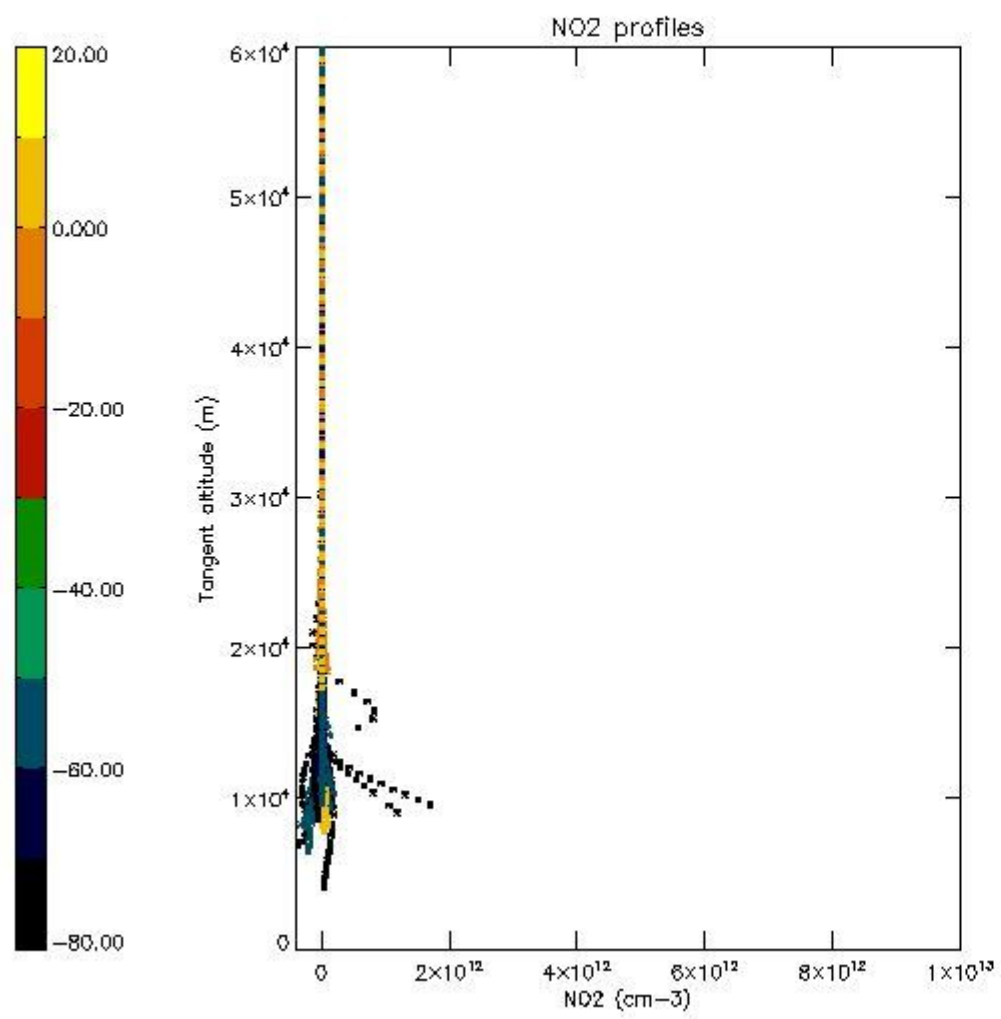
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



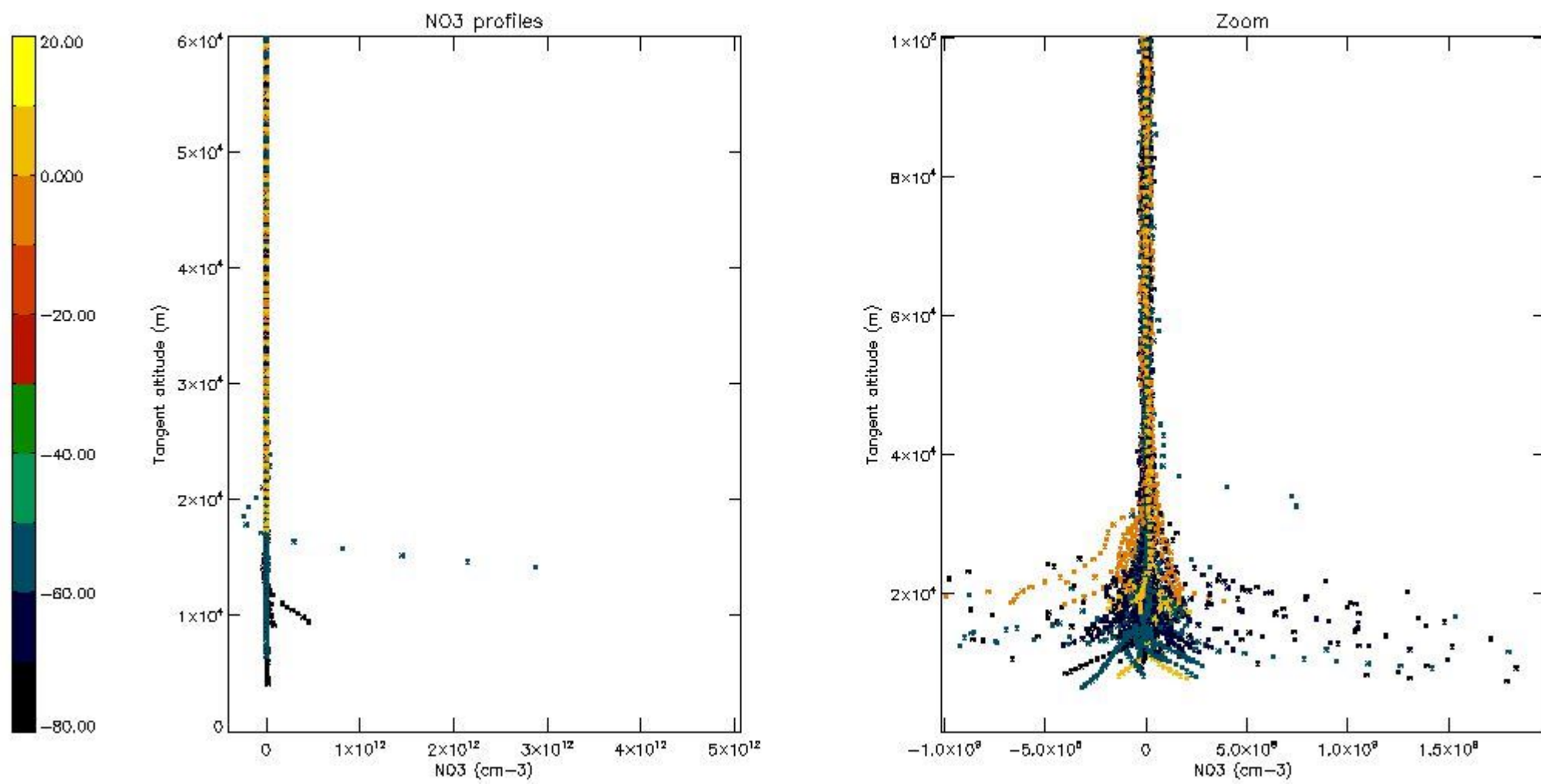
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



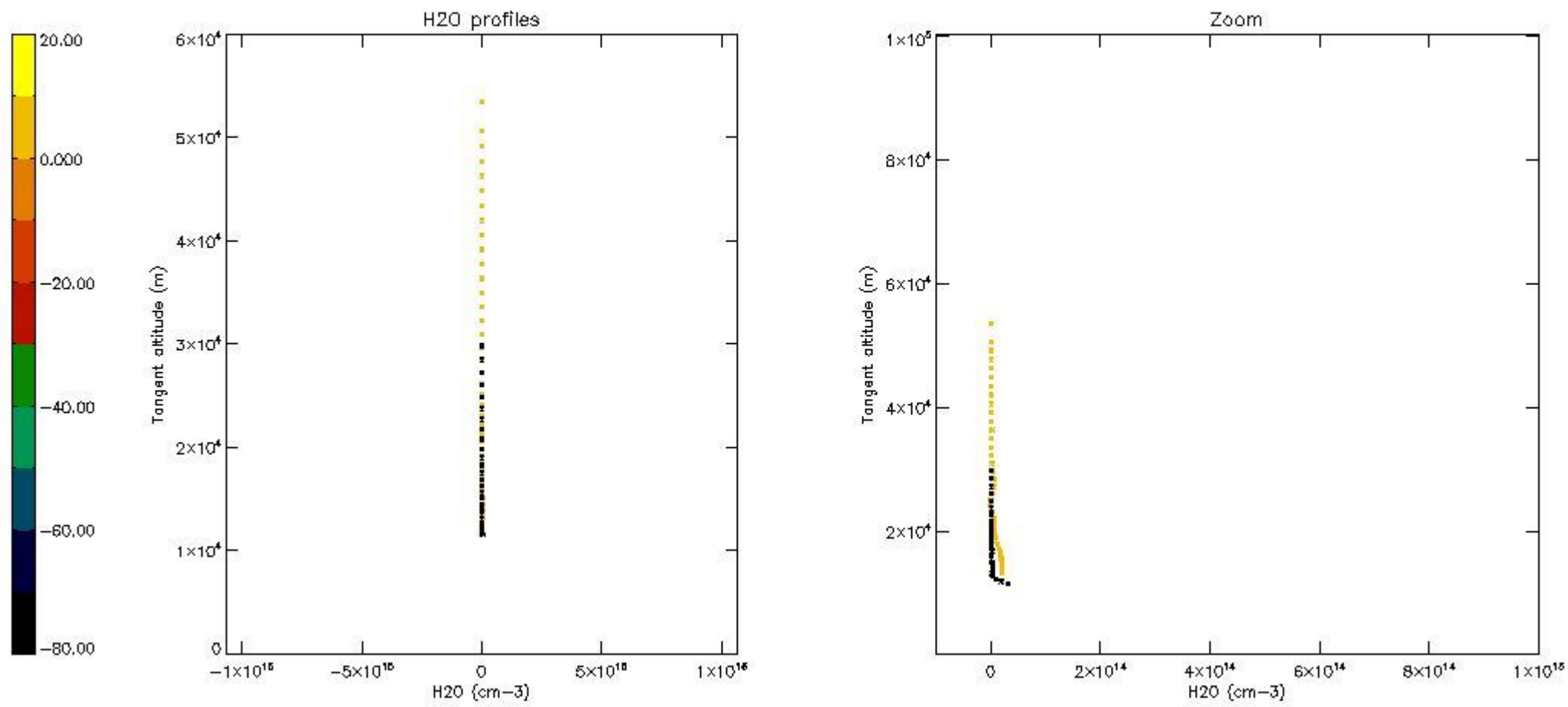
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	10-AUG-2011 00:03:28
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	10-AUG-2011 00:03:28
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	10-AUG-2011 00:03:28

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](#)

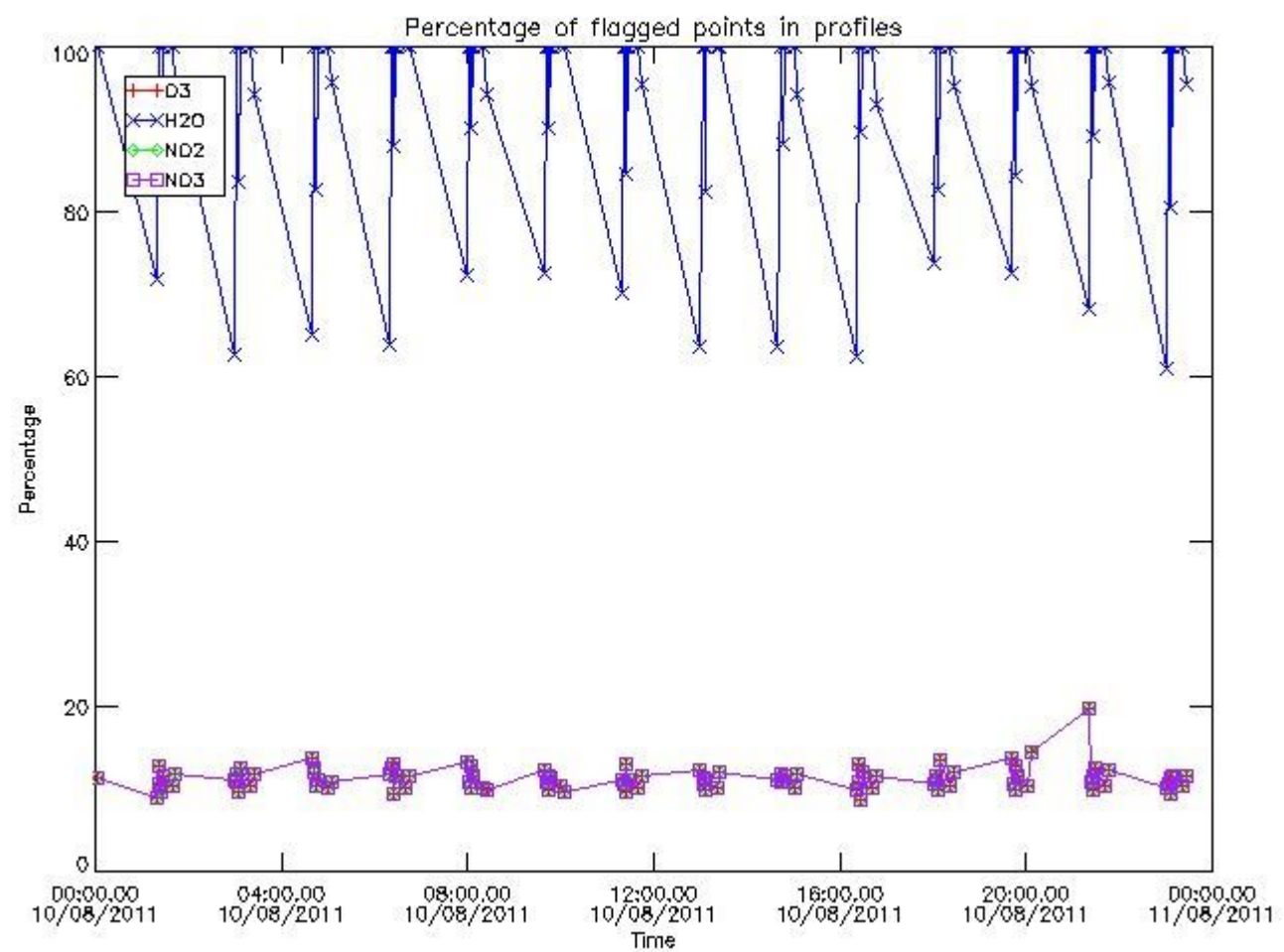
[6. Auxiliary Data Files used for the production reported in section 2](#)

279	GOM_NL__2PRFIN20110810_222445_000000403105_00245_49397_9460.N1	10-AUG-2011 22:24:45	Bright	39.500	19	50Alp Cyg	1.2460	10500.	79	49397	No
280	GOM_NL__2PRFIN20110810_223009_000000403105_00245_49397_9461.N1	10-AUG-2011 22:30:09	Bright	40.000	89	5Alp Cep	2.4510	8000.0	80	49397	No
281	GOM_NL__2PRFIN20110810_224927_000000463105_00245_49397_9462.N1	10-AUG-2011 22:49:27	Bright	45.500	6	13Alp Aur	0.080000	3400.0	91	49397	No
282	GOM_NL__2PRFIN20110810_225212_000000363105_00245_49397_9463.N1	10-AUG-2011 22:52:12	Bright	36.000	107	37The Aur	2.6490	11000.	72	49397	No
283	GOM_NL__2PRFIN20110810_225510_000000503105_00245_49397_9464.N1	10-AUG-2011 22:55:10	Twilight	49.500	28	12Bet Tau	1.6500	15200.	99	49397	No
284	GOM_NL__2PRFIN20110810_225725_000000453105_00245_49397_9465.N1	10-AUG-2011 22:57:25	Twilight	45.000	176	23Zet Tau	3.0200	22000.	90	49397	No
285	GOM_NL__2PRFIN20110810_230115_000000513105_00245_49397_9466.N1	10-AUG-2011 23:01:15	Dark	50.500	14	58Alp Ori	0.87000	3000.0	101	49397	No
286	GOM_NL__2PRFIN20110810_230416_000000493105_00245_49397_9467.N1	10-AUG-2011 23:04:16	Dark	48.500	30	46Eps Ori	1.6940	30000.	97	49397	No
287	GOM_NL__2PRFIN20110810_230539_000000453105_00245_49397_9468.N1	10-AUG-2011 23:05:39	Dark	45.000	125	44Iot Ori	2.7700	30000.	90	49397	No
288	GOM_NL__2PRFIN20110810_230704_000000543105_00245_49397_9469.N1	10-AUG-2011 23:07:04	Dark	54.000	7	19Bet Ori	0.10000	14000.	108	49397	No
289	GOM_NL__2PRFIN20110810_230903_000000453105_00245_49397_9470.N1	10-AUG-2011 23:09:03	Dark	44.500	101	11Alp Lep	2.5820	7000.0	89	49397	No
290	GOM_NL__2PRFIN20110810_232218_000000493105_00246_49398_9516.N1	10-AUG-2011 23:22:18	Dark	49.000	157	The1Eri	2.9060	9300.0	98	49398	No
291	GOM_NL__2PRFIN20110810_232653_000000443105_00246_49398_9517.N1	10-AUG-2011 23:26:53	Dark	44.000	9	Alp Eri	0.45300	24000.	88	49398	No
292	GOM_NL__2PRFIN20110810_233224_000000523105_00246_49398_9518.N1	10-AUG-2011 23:32:24	Straylight	51.500	84	Alp Phe	2.3970	4500.0	103	49398	No
293	GOM_NL__2PRFIN20110810_233628_000000453105_00246_49398_9519.N1	10-AUG-2011 23:36:28	Straylight	44.500	31	Alp Gru	1.7340	15200.	89	49398	No
294	GOM_NL__2PRFIN20110810_234019_000000583105_00246_49398_9520.N1	10-AUG-2011 23:40:19	Twilight	58.000	18	24Alp PsA	1.1660	9700.0	116	49398	No
295	GOM_NL__2PRFIN20110810_234619_000000463105_00246_49398_9521.N1	10-AUG-2011 23:46:19	Bright	46.000	142	49Del Cap	2.8500	8900.0	92	49398	No
296	GOM_NL__2PRFIN20110810_234956_000000453105_00246_49398_9522.N1	10-AUG-2011 23:49:56	Bright	44.500	154	22Bet Aqr	2.8990	5700.0	89	49398	No
297	GOM_NL__2PRFIN20110810_235528_000000503105_00246_49398_9523.N1	10-AUG-2011 23:55:28	Bright	49.500	61	8Eps Peg	2.1000	3900.0	99	49398	No

3. Quality information per product

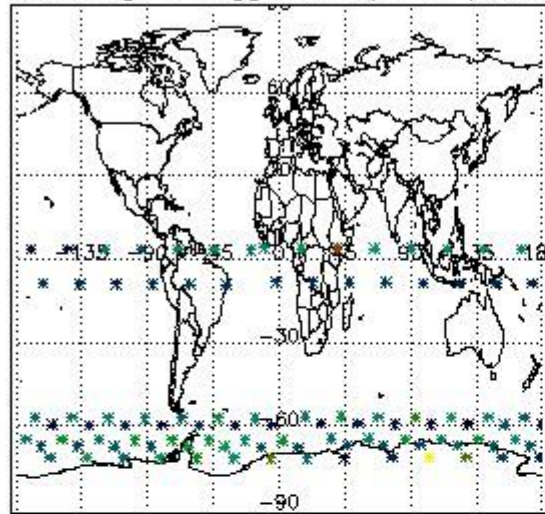
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

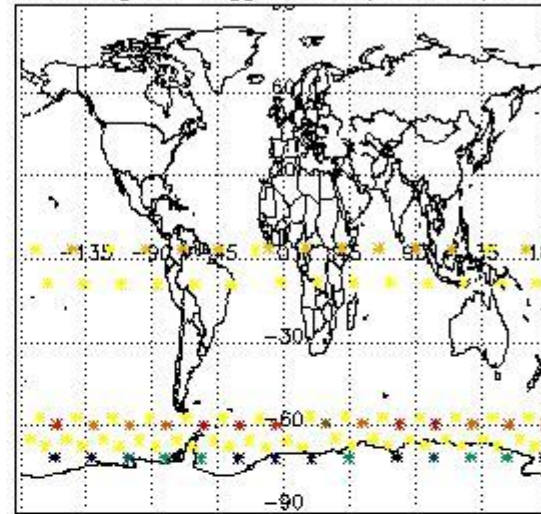


3.2 Plot quality information per product (world map)

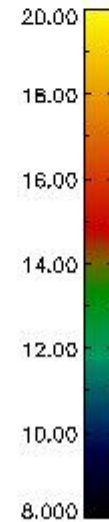
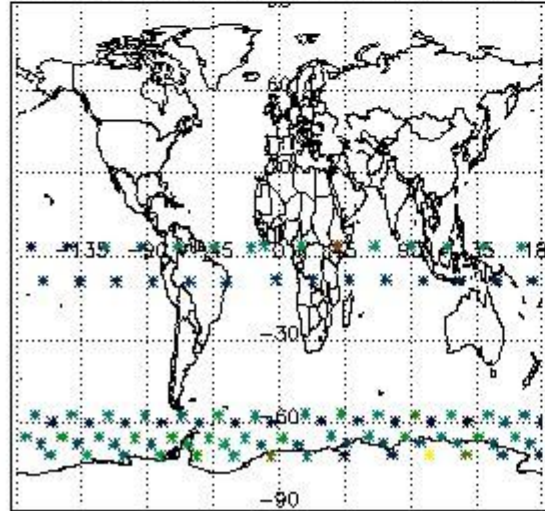
Percentage of flagged data per O3 profile



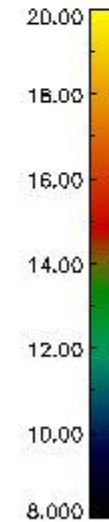
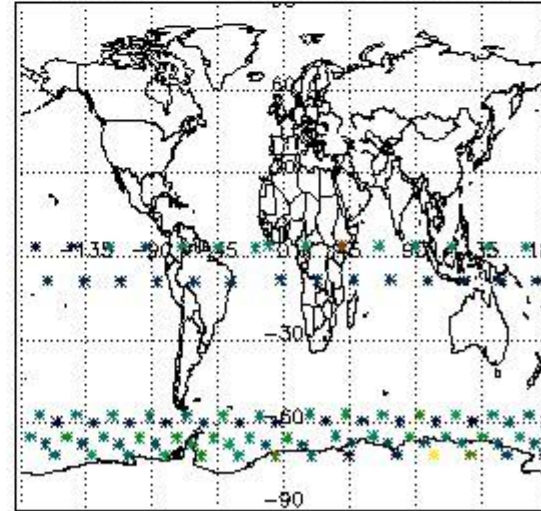
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

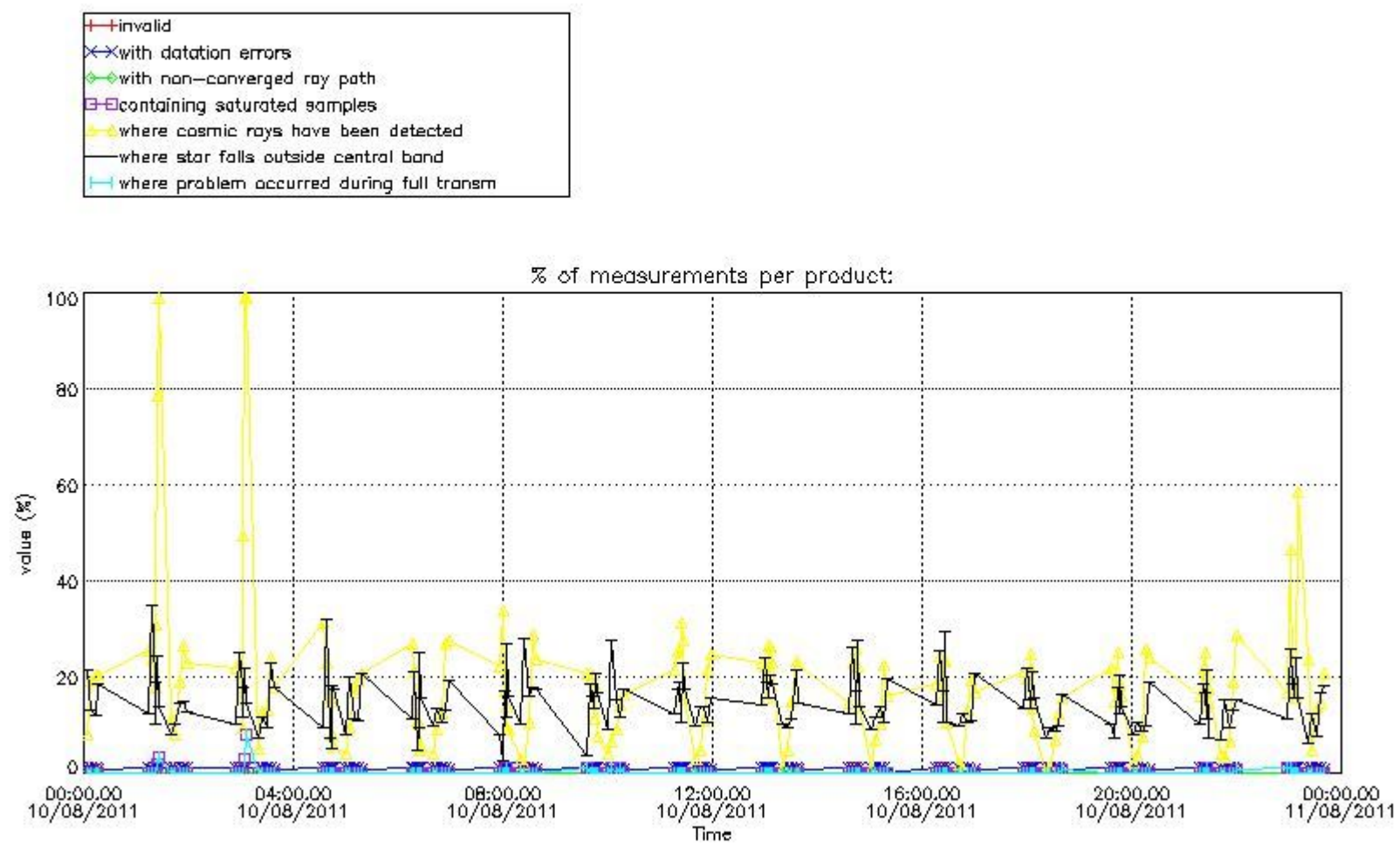


4. Level 1 quality information per product

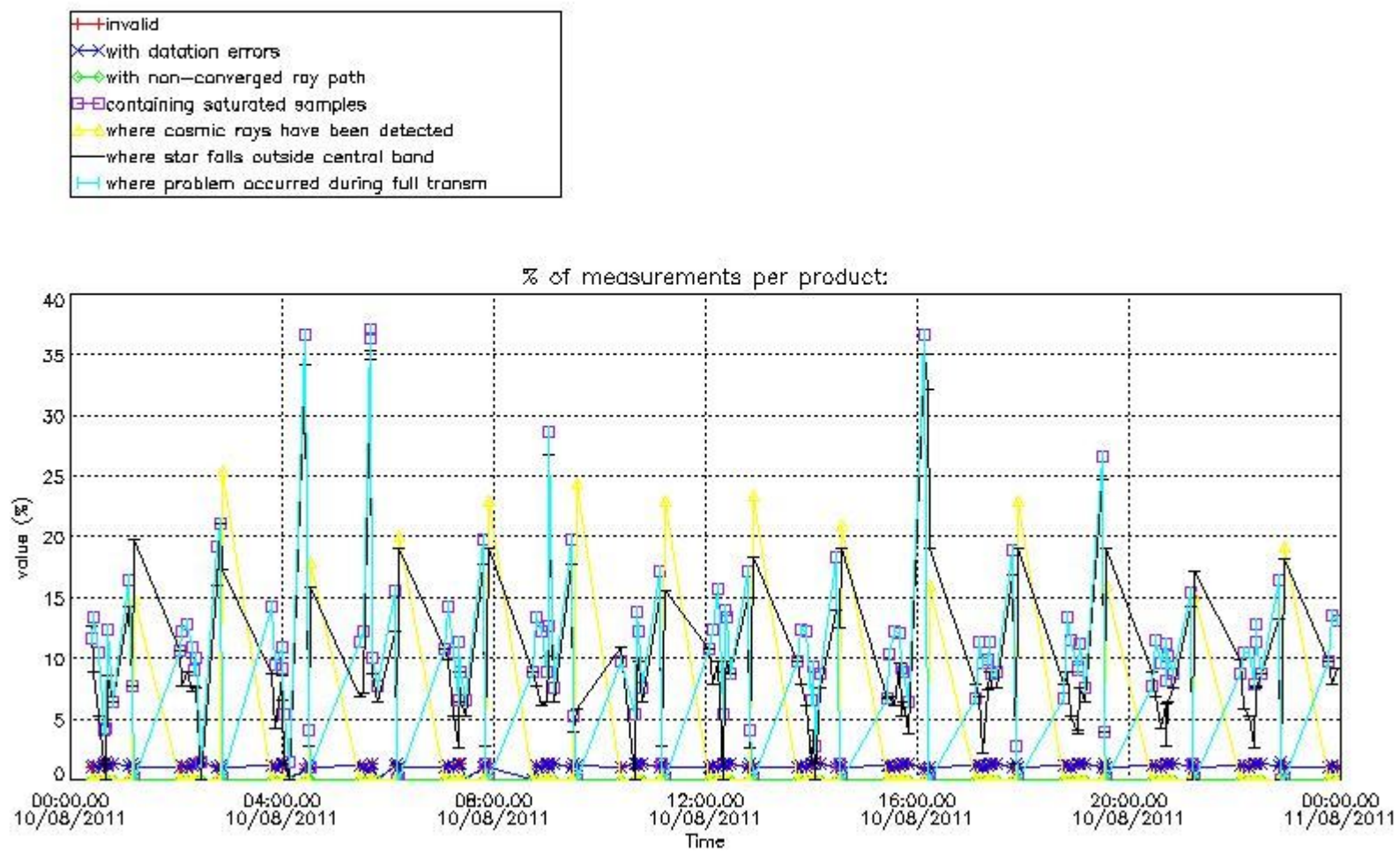
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

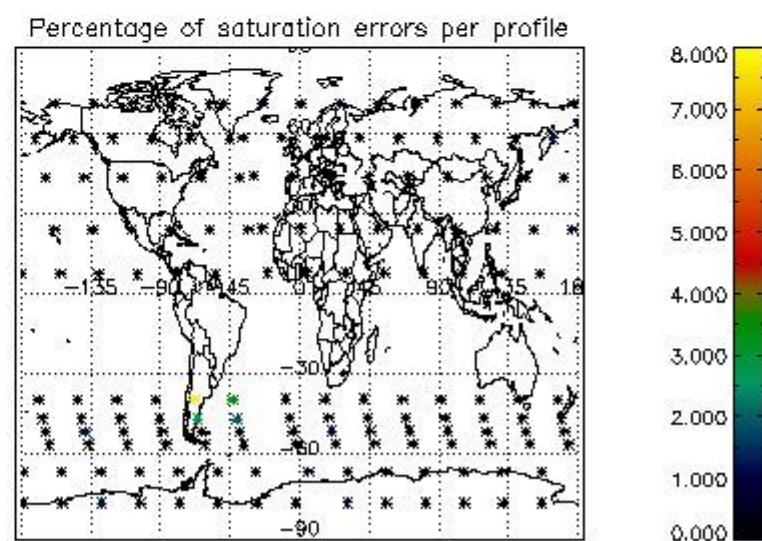
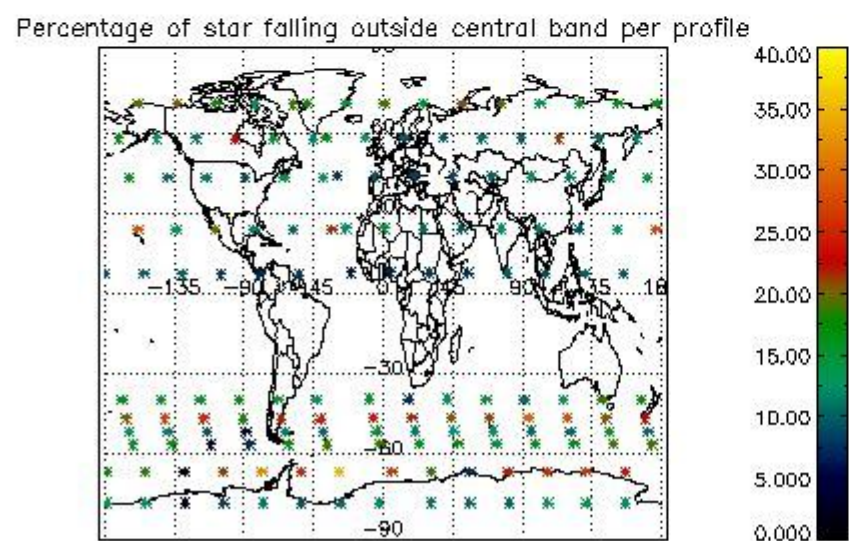
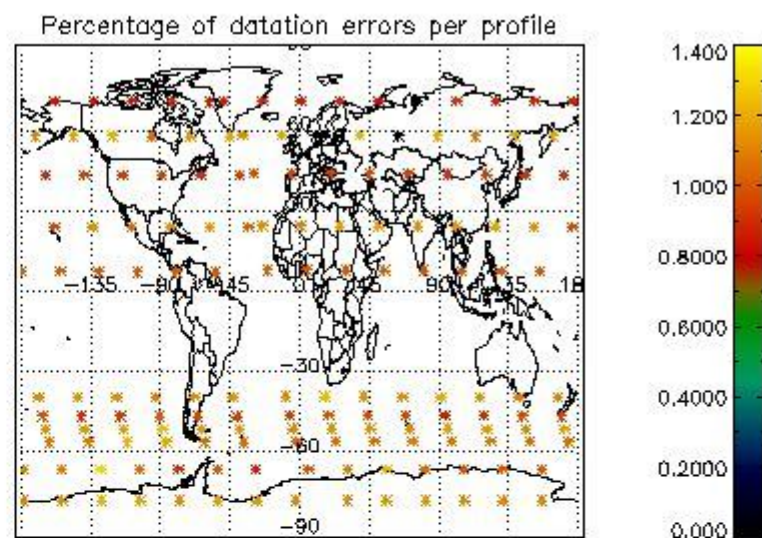
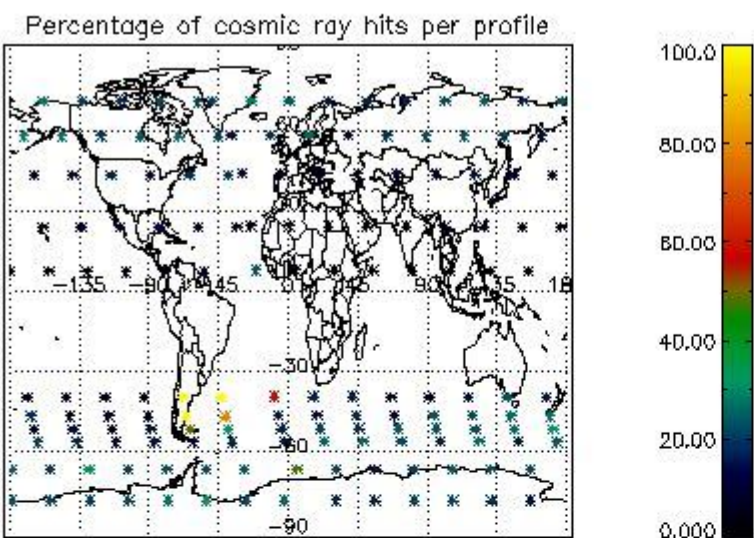


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

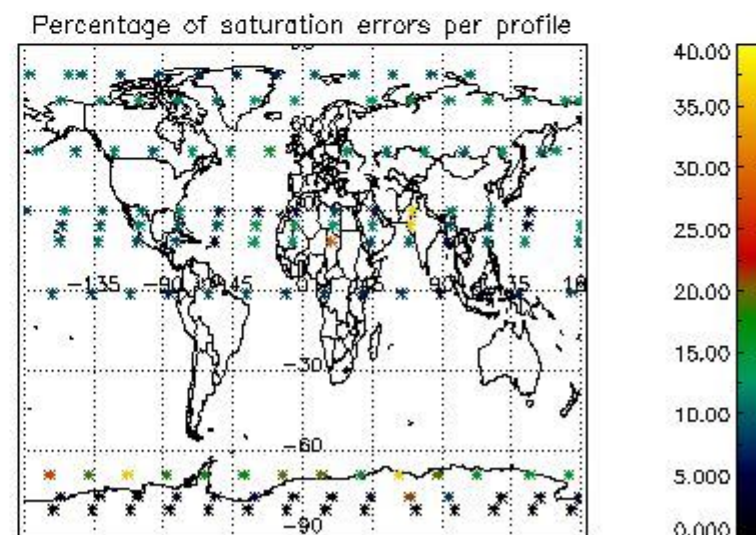
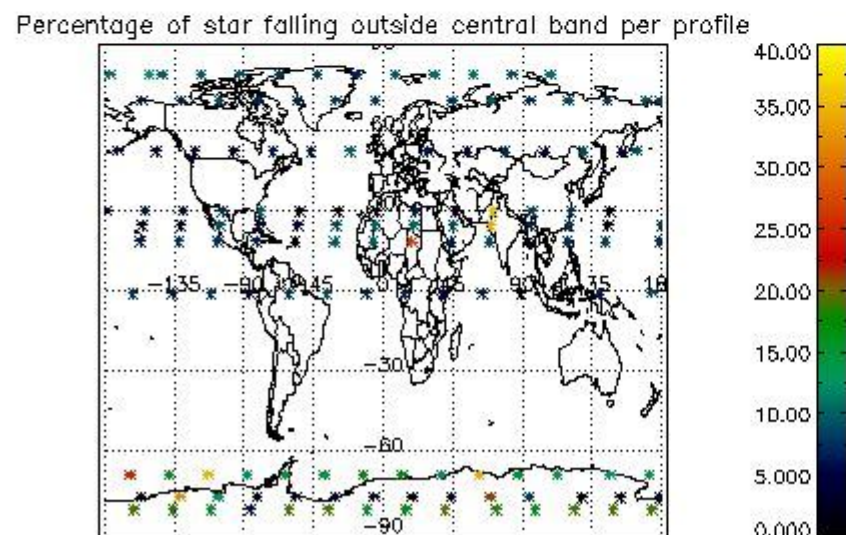
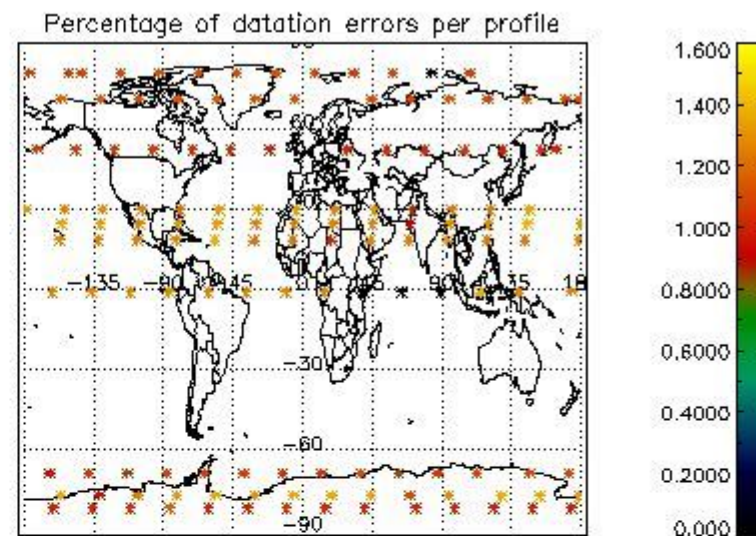
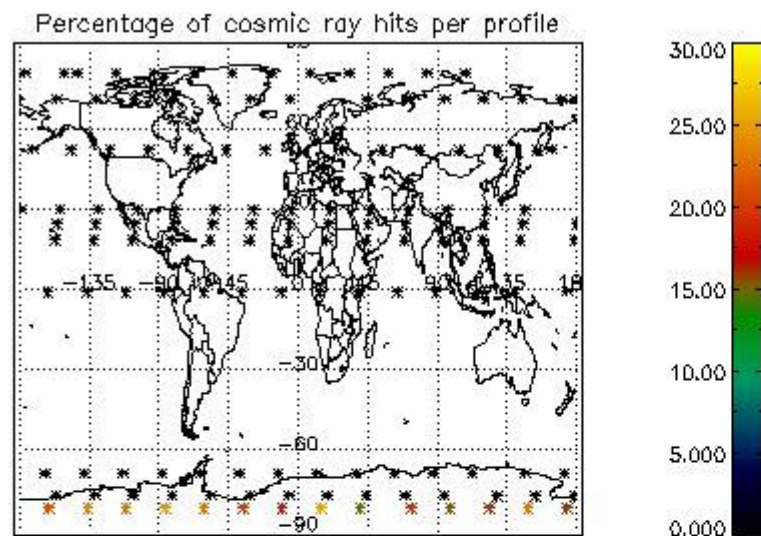


4.2 Plot quality information per product coming from level 1b processing (world map)

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

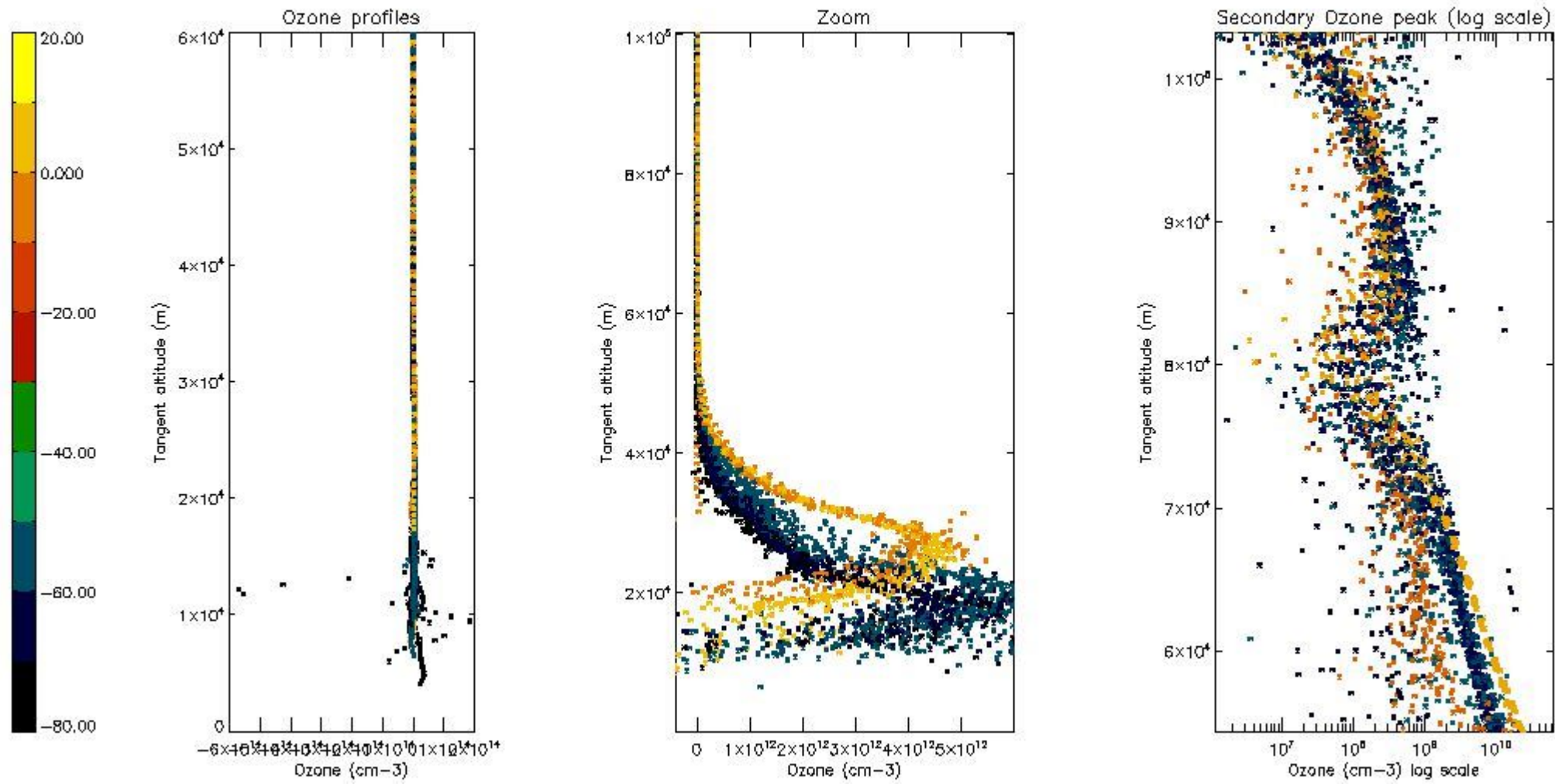
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	35
STD < 20	19

STD < 10	14
STD < 5	10

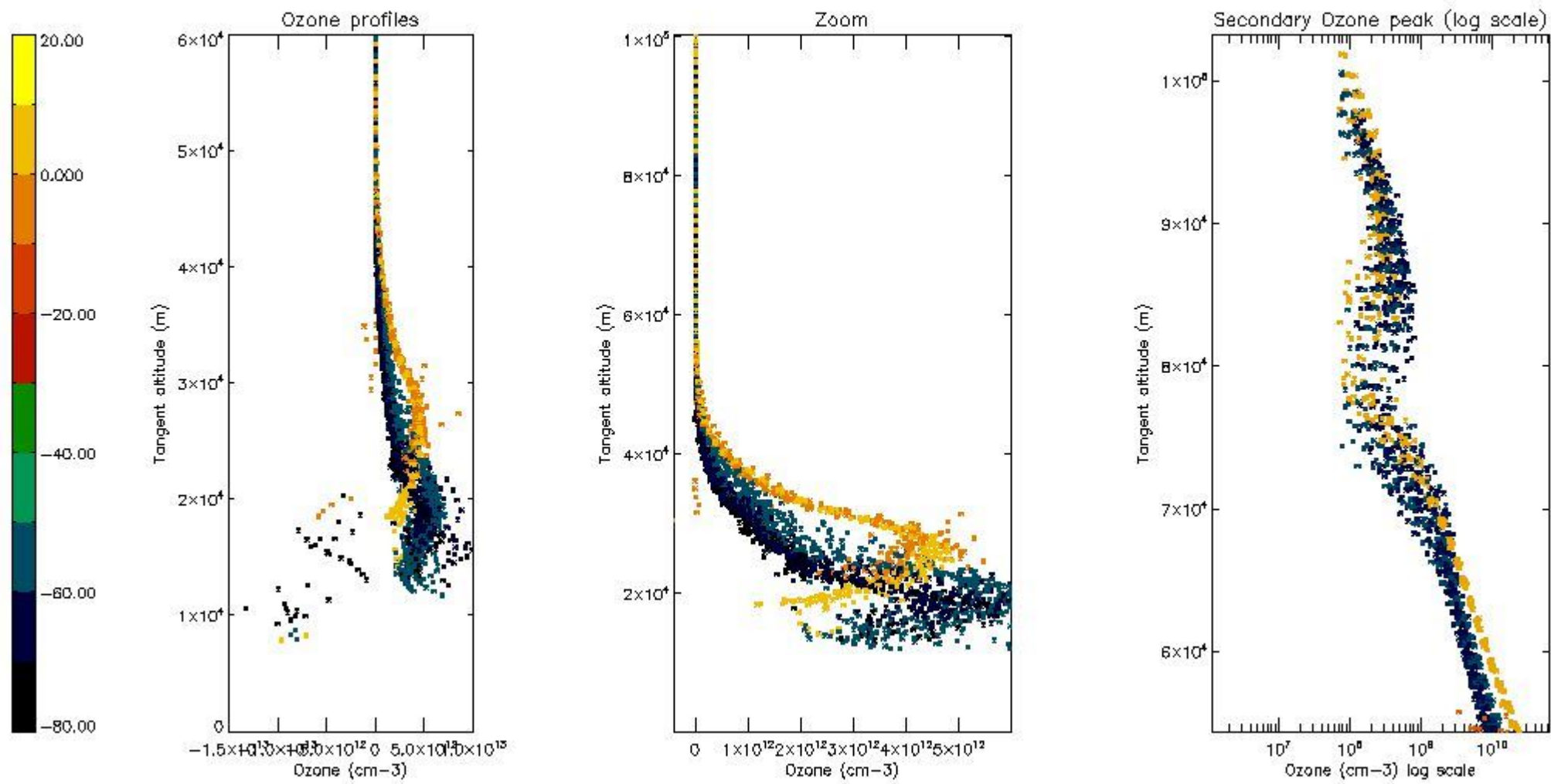
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



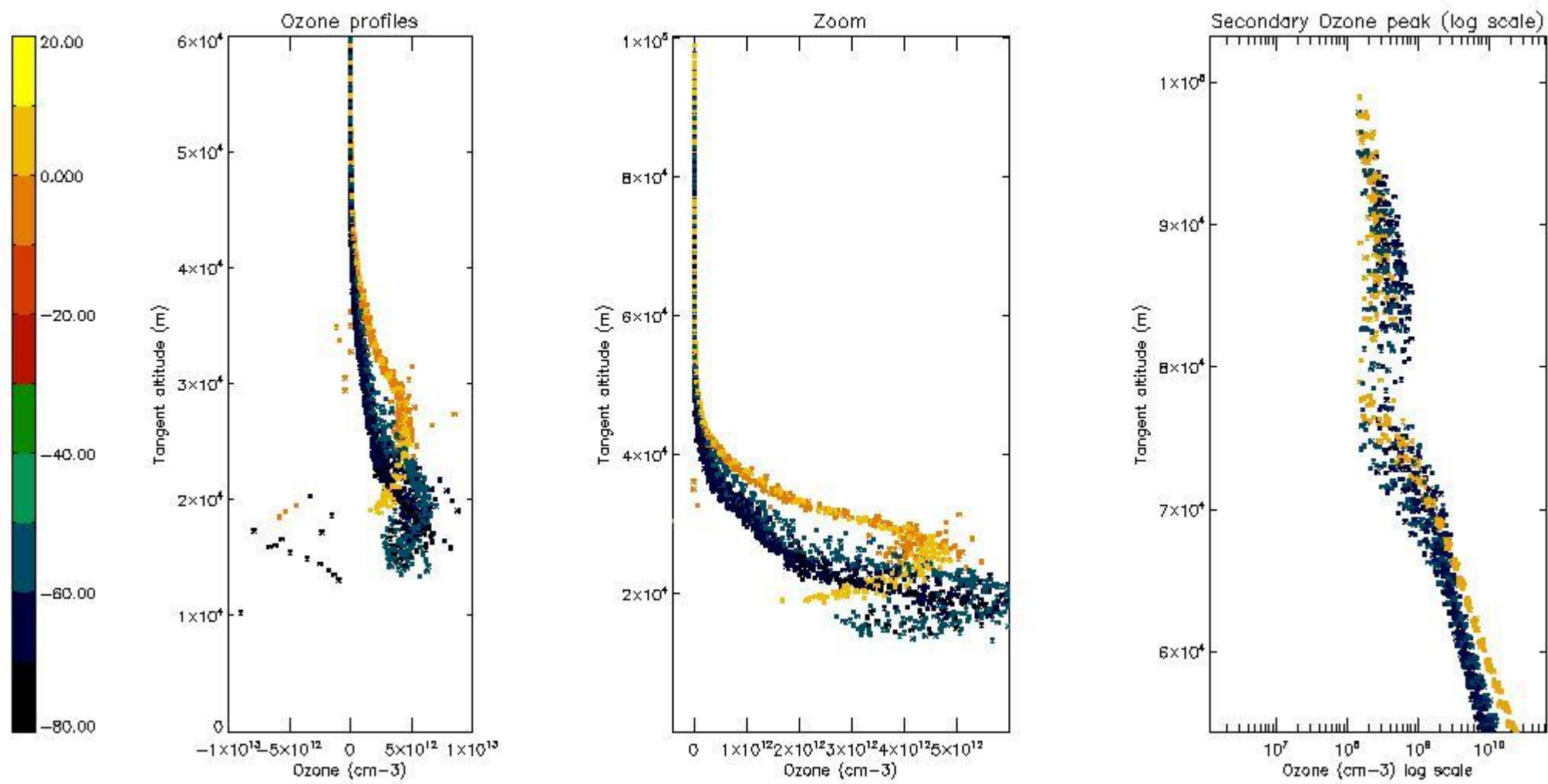
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



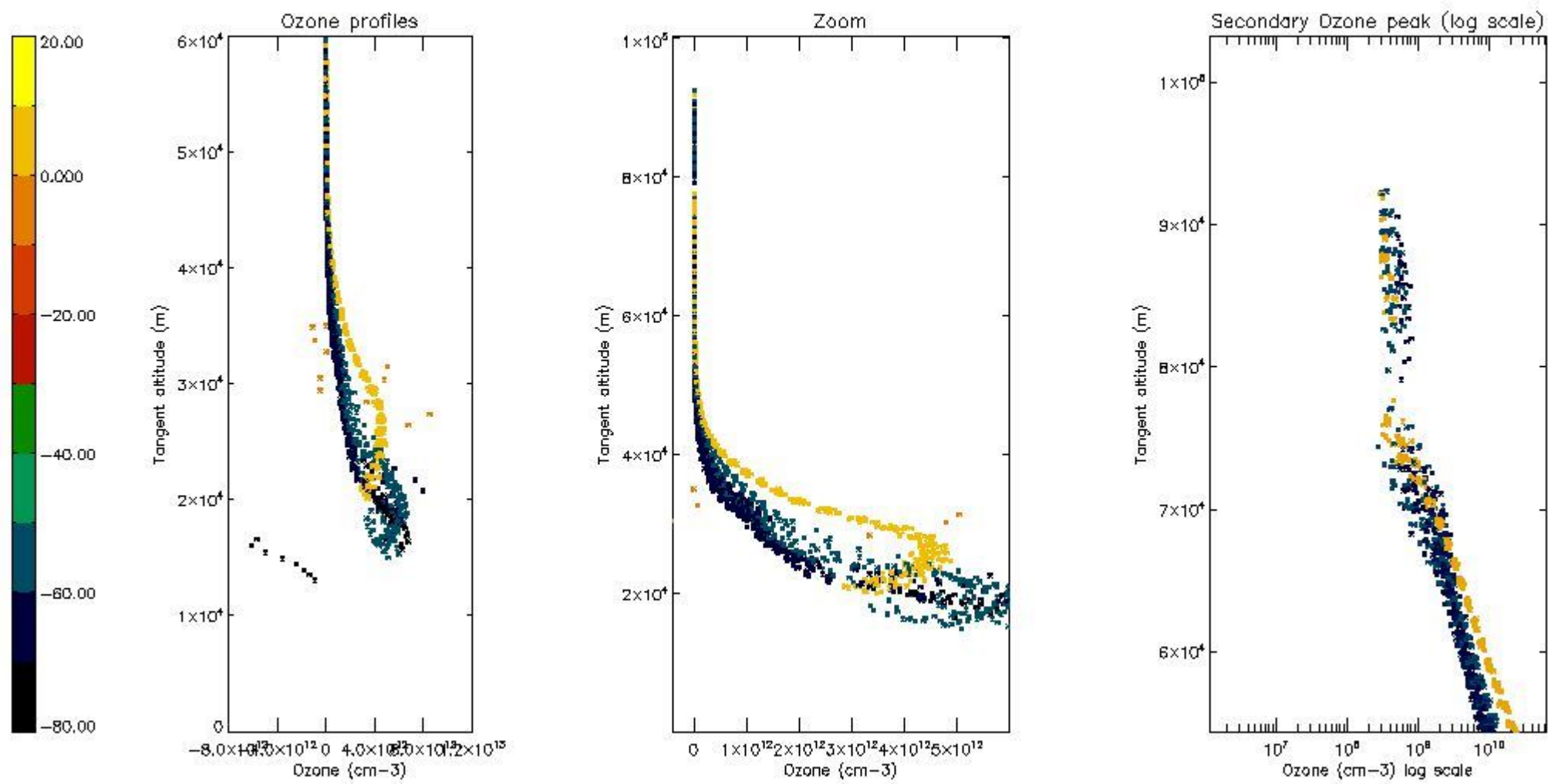
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



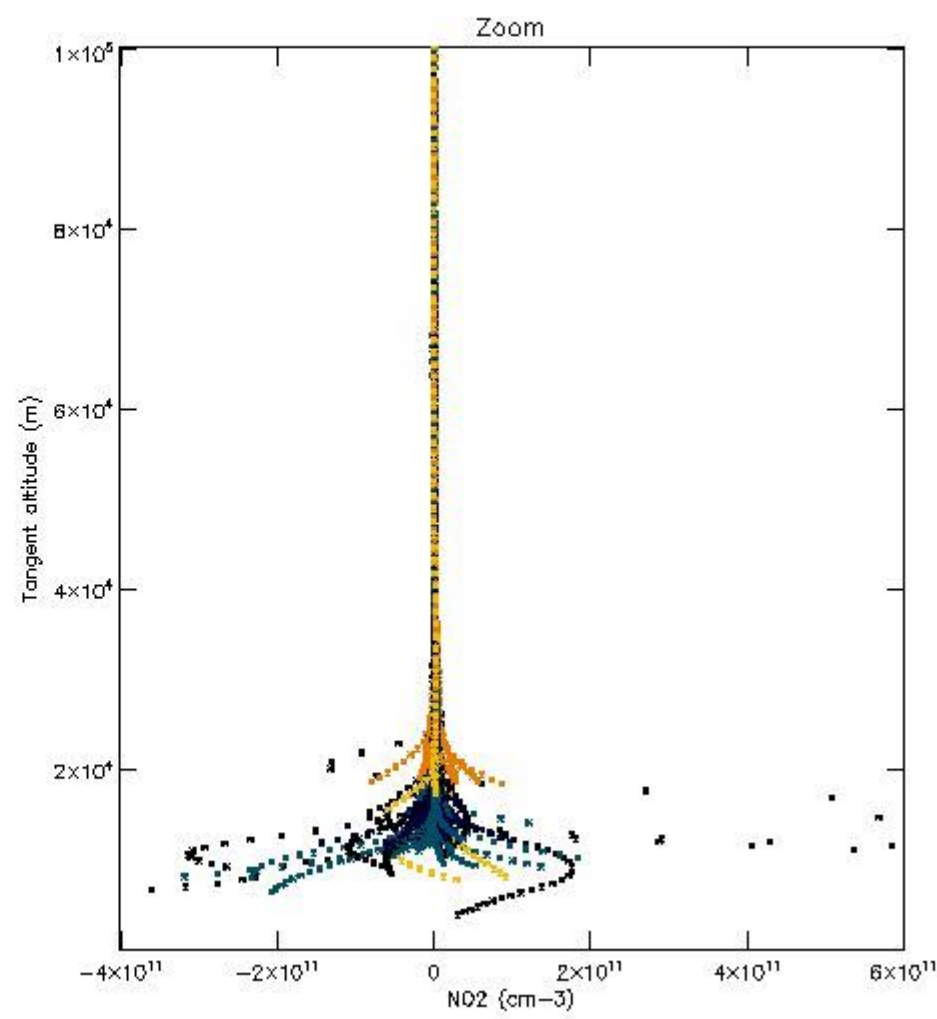
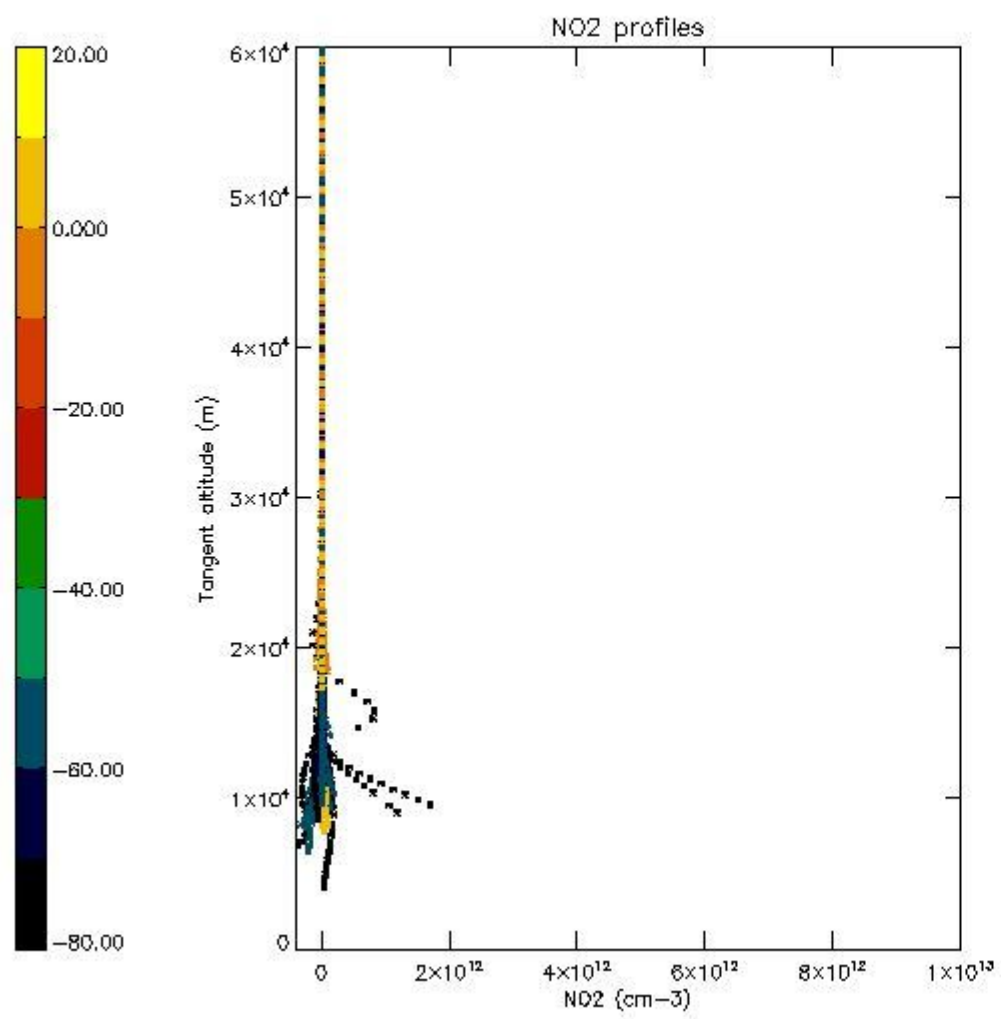
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



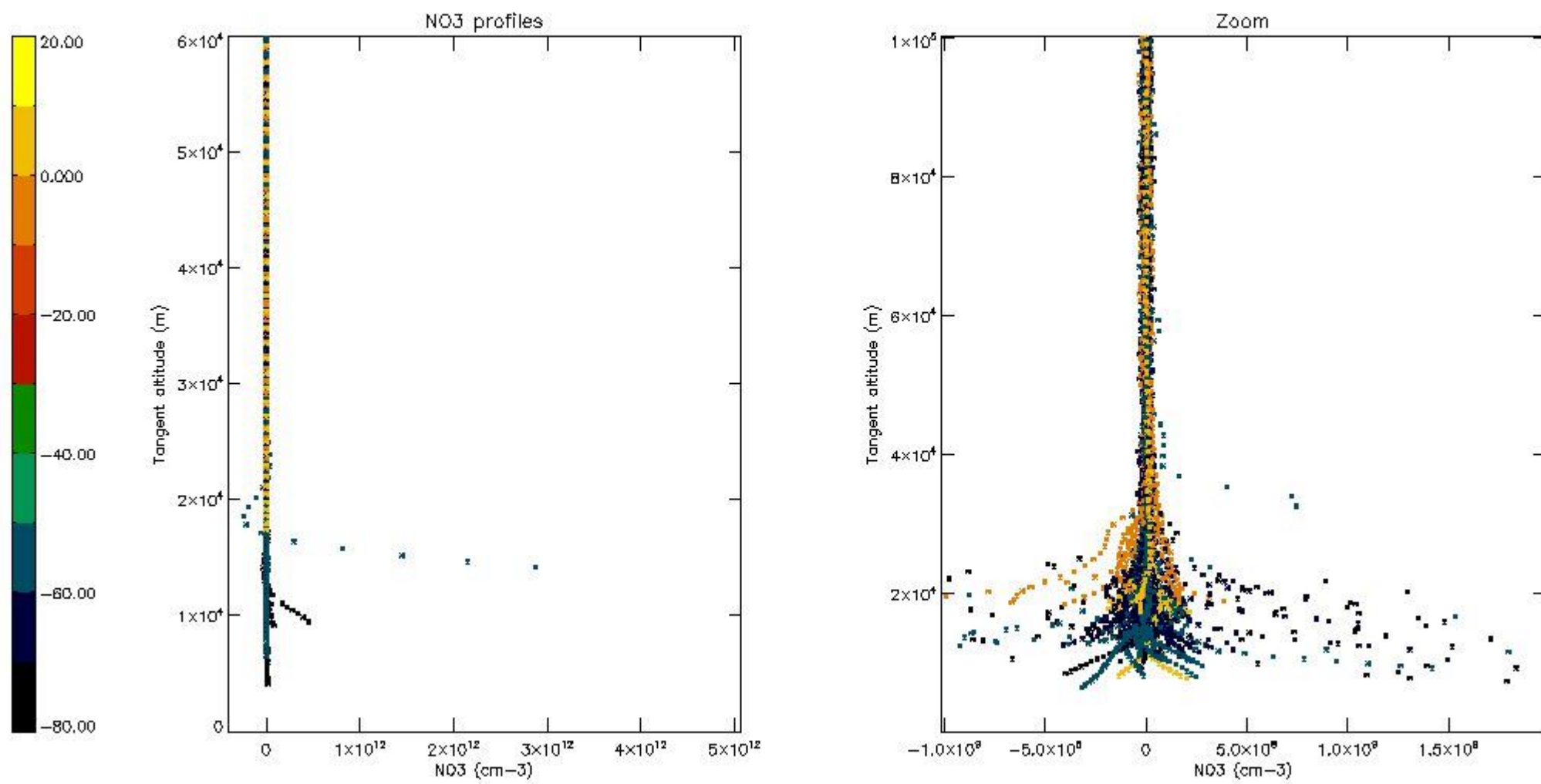
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



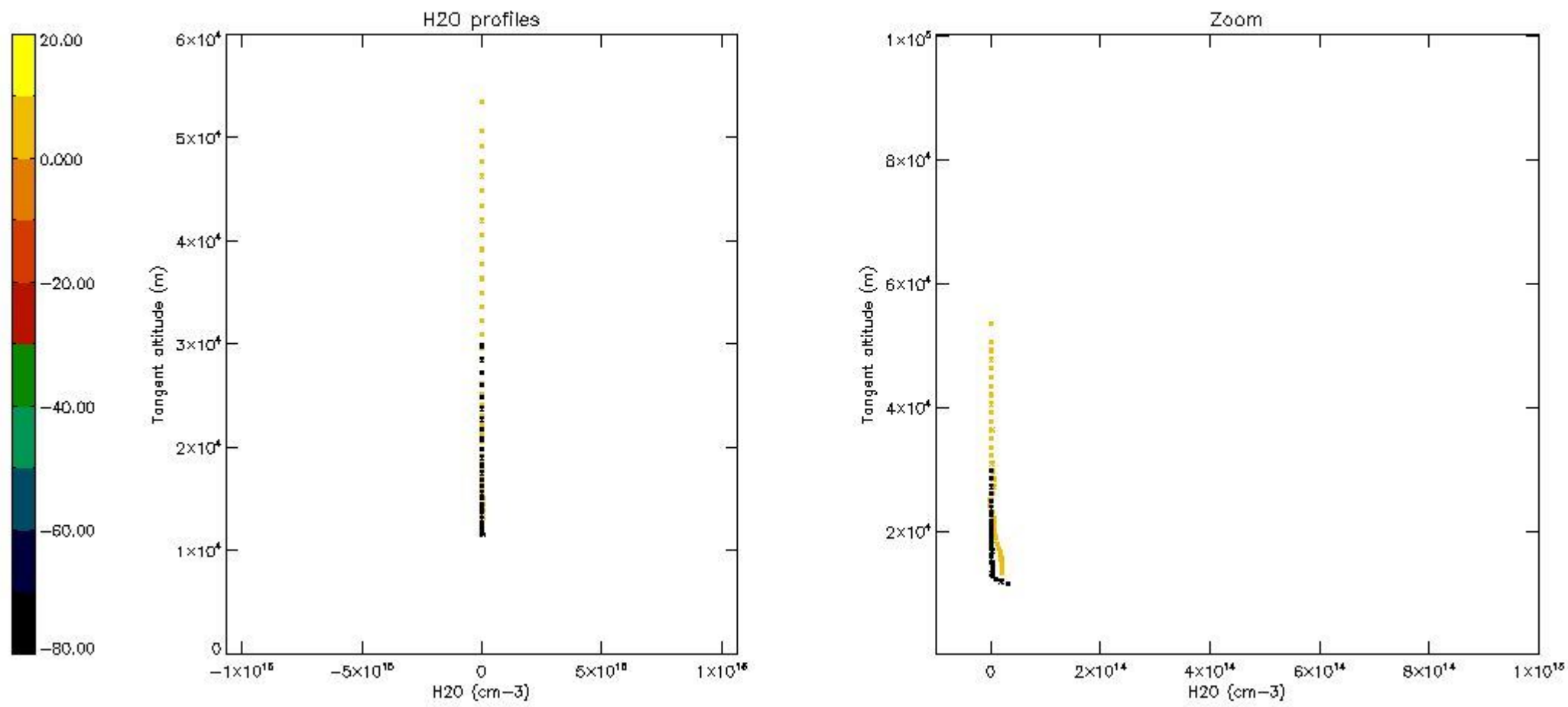
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

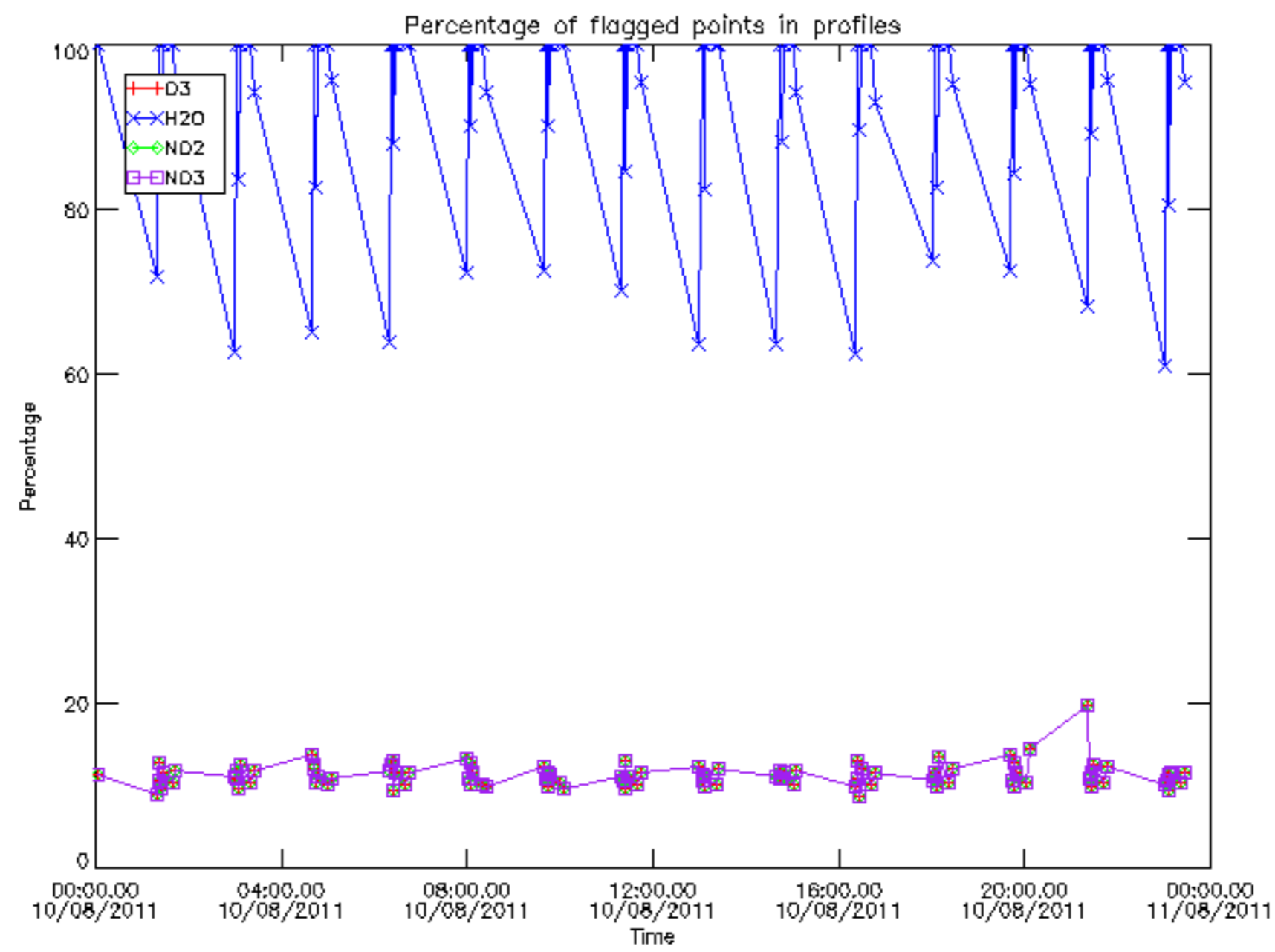
The colorbar represents the latitude.



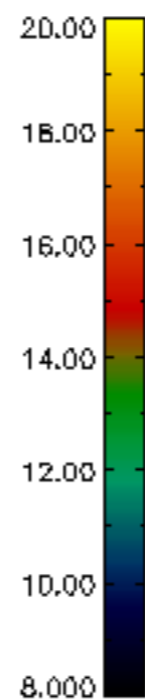
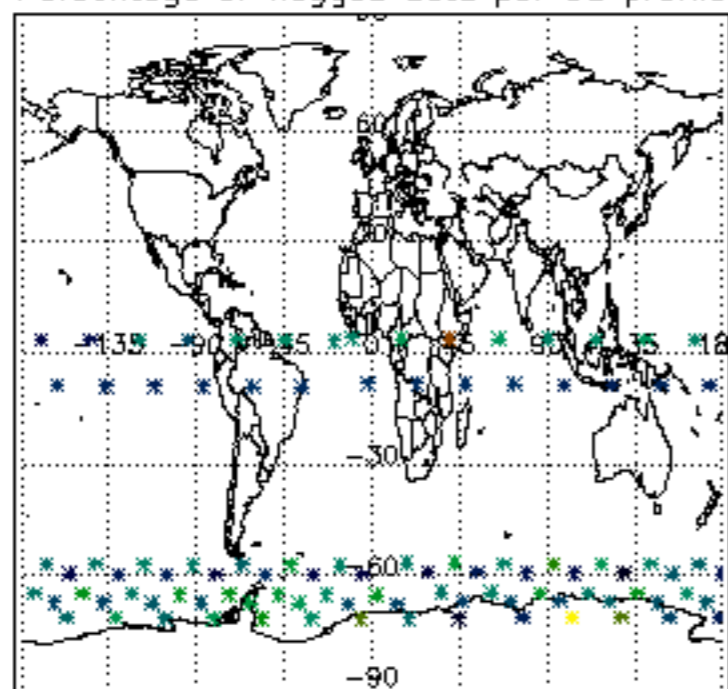
6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

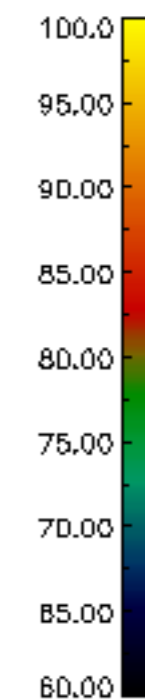
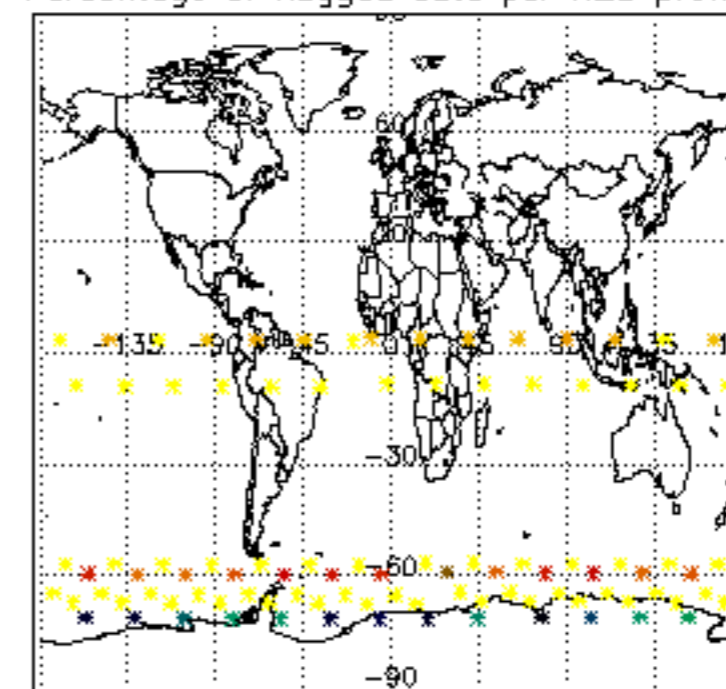
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	10-AUG-2011 00:03:28
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	10-AUG-2011 00:03:28
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	10-AUG-2011 00:03:28



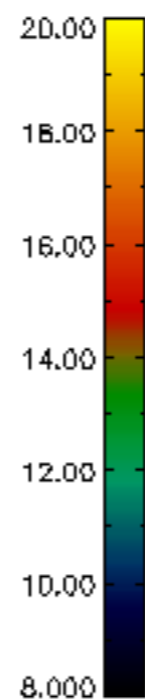
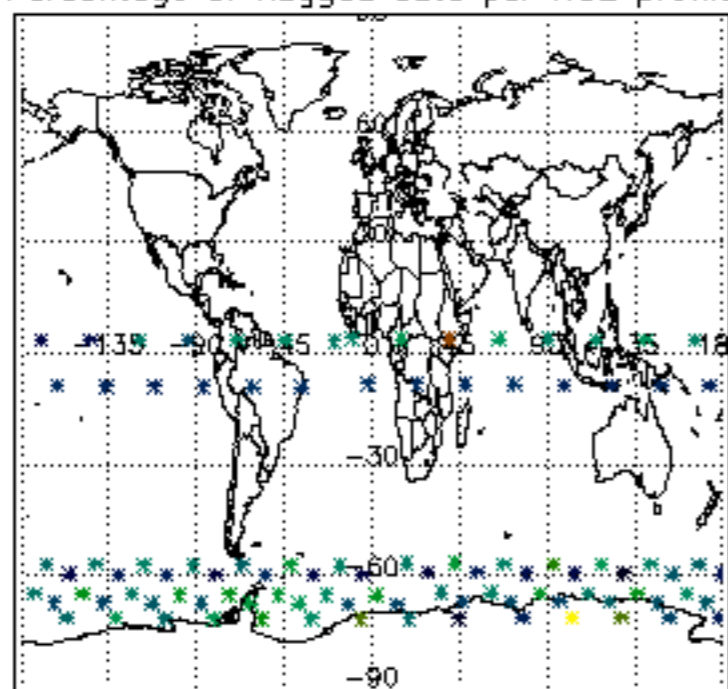
Percentage of flagged data per D3 profile



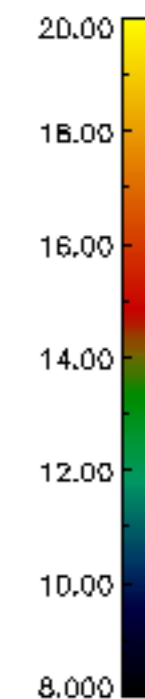
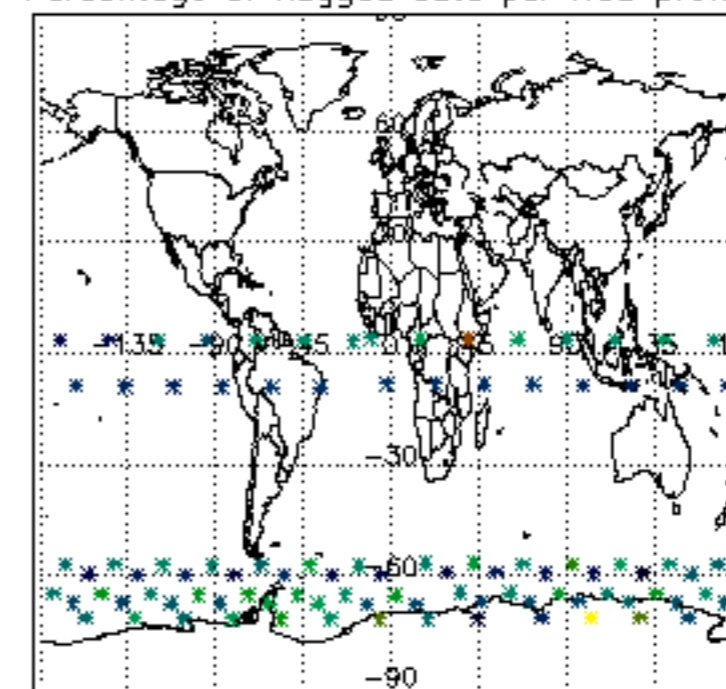
Percentage of flagged data per H2O profile

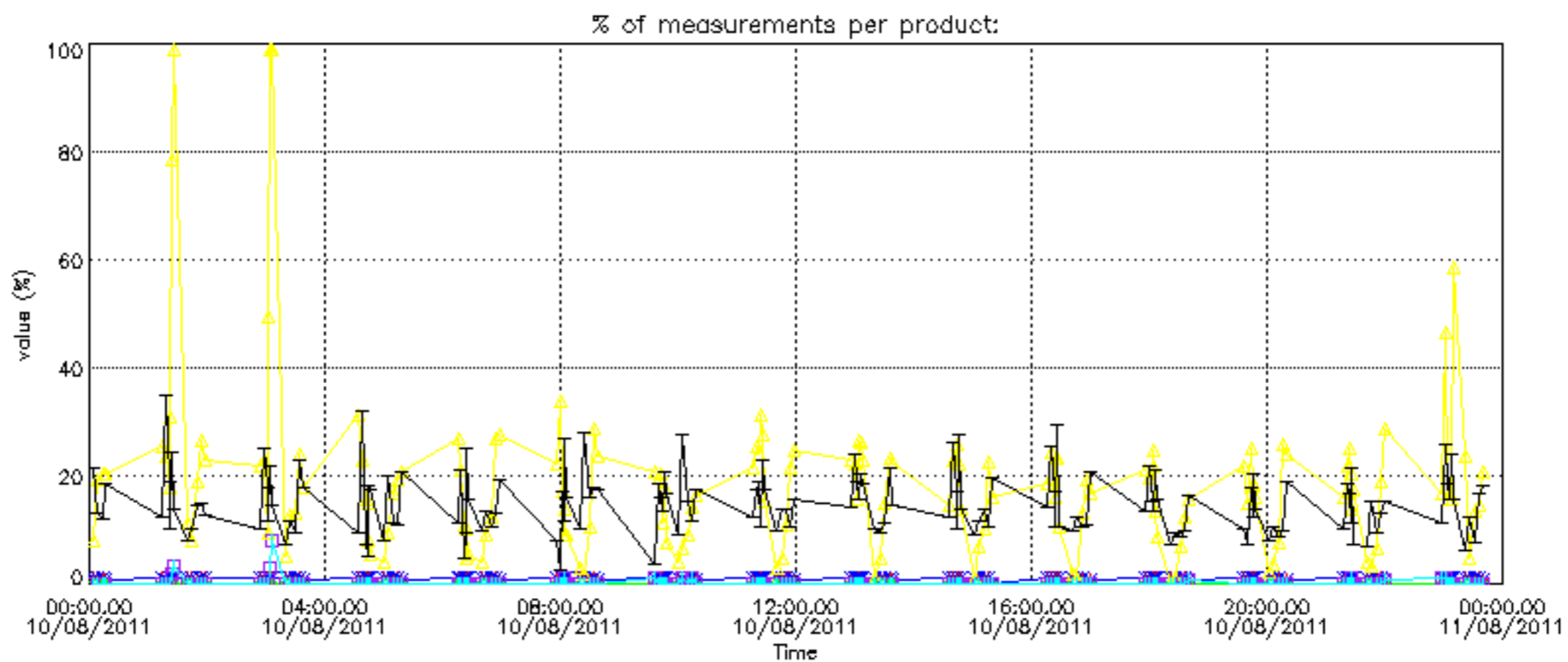
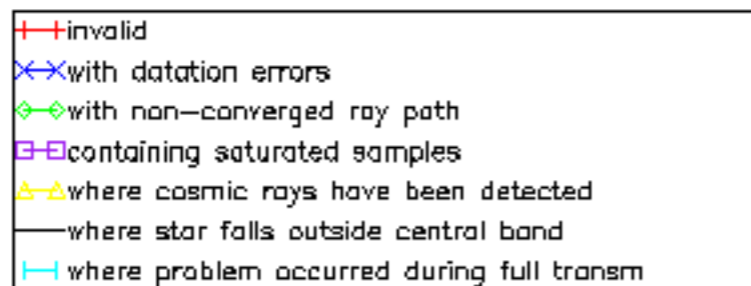


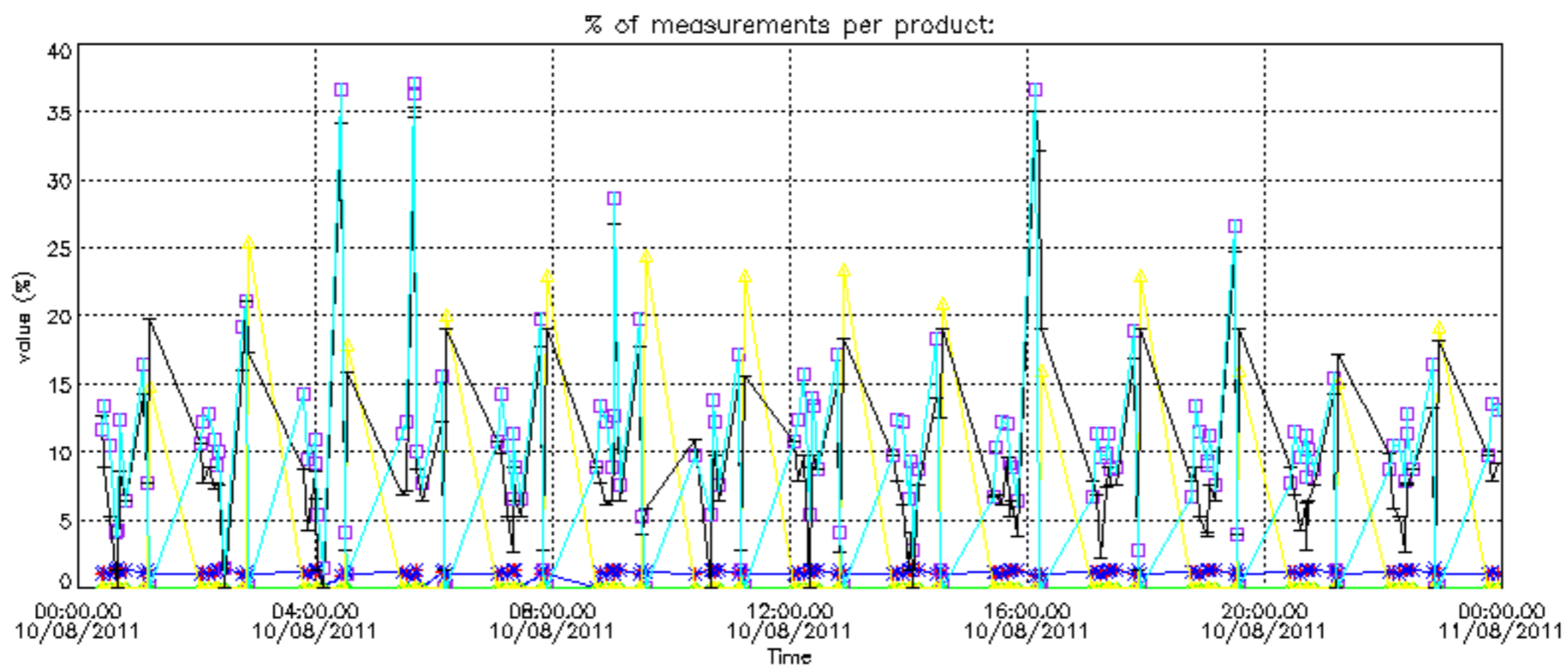
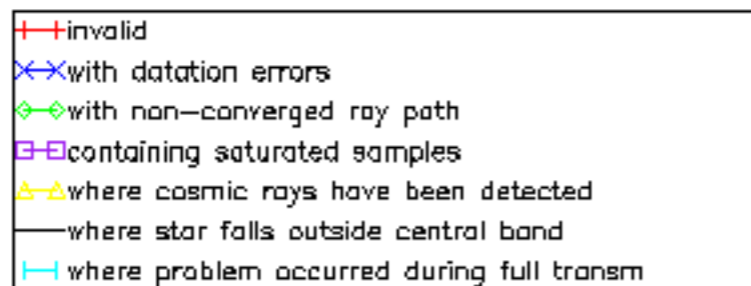
Percentage of flagged data per NO2 profile



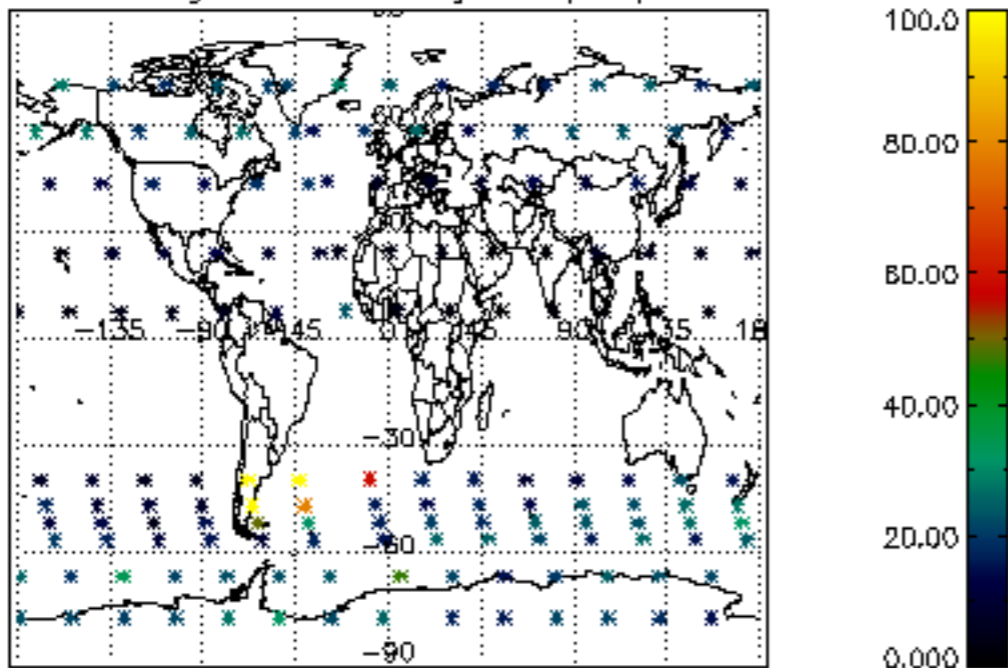
Percentage of flagged data per NO3 profile



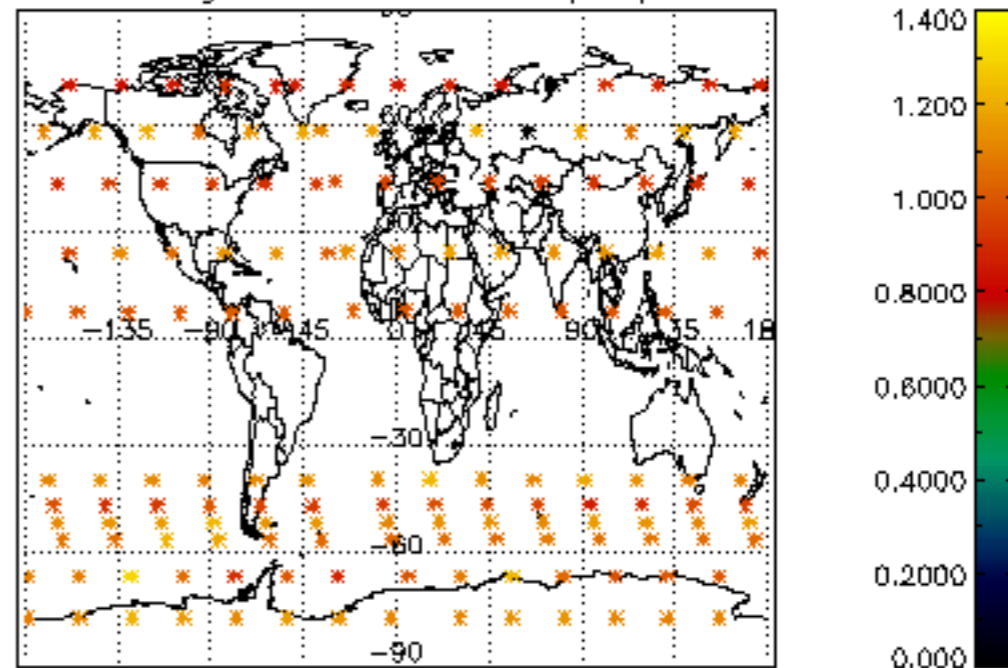




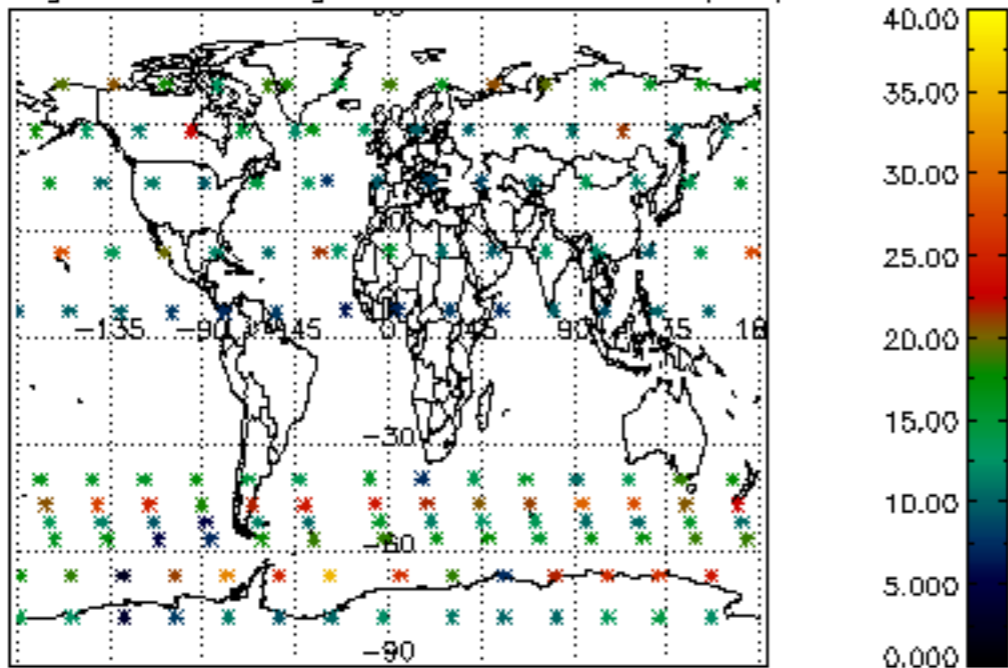
Percentage of cosmic ray hits per profile



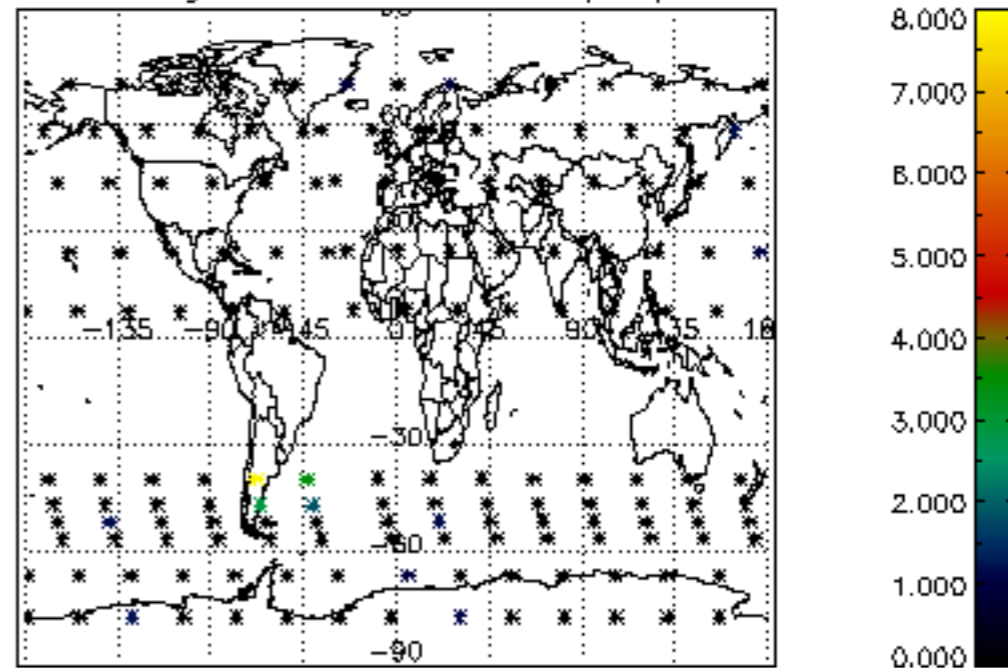
Percentage of datation errors per profile



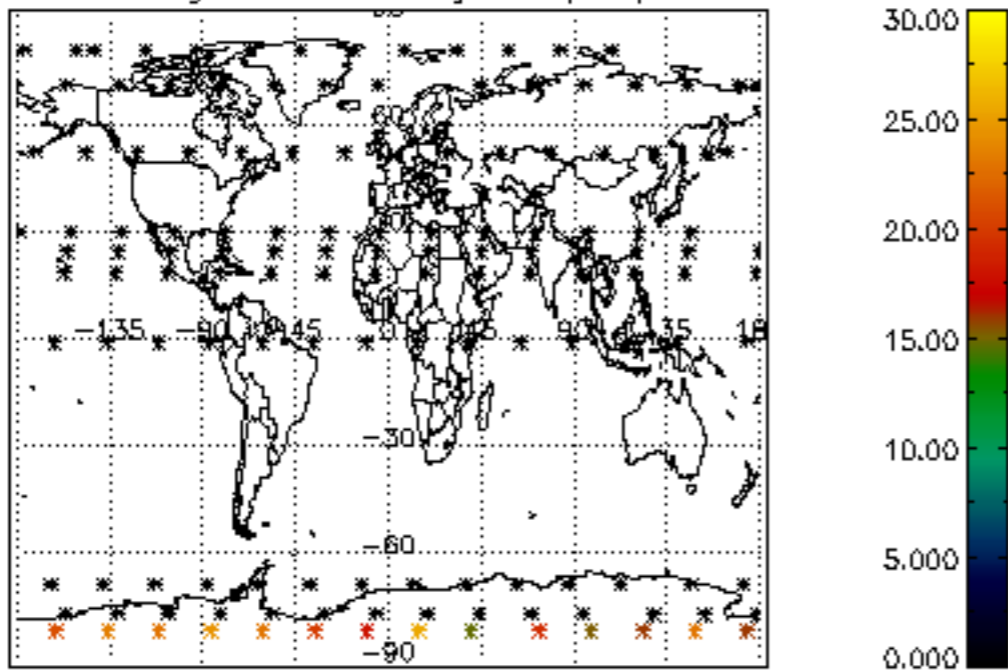
Percentage of star falling outside central band per profile



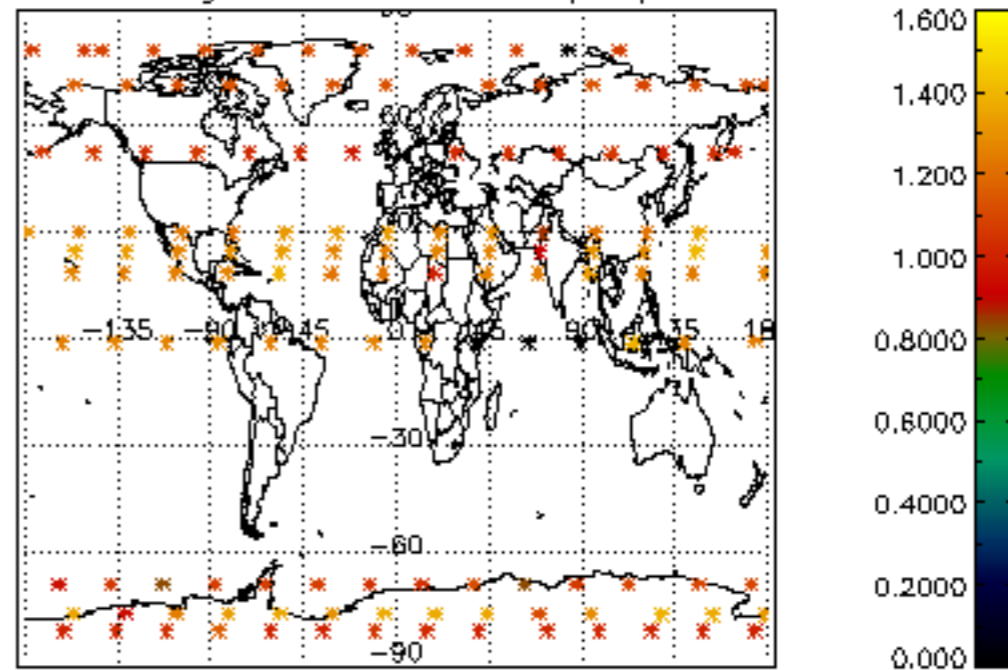
Percentage of saturation errors per profile



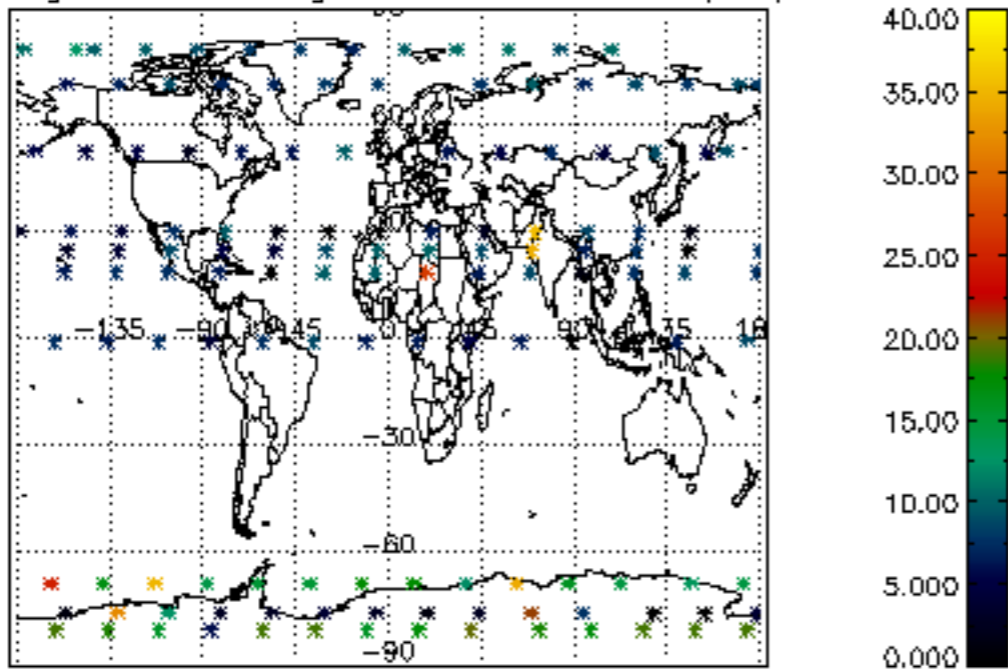
Percentage of cosmic ray hits per profile



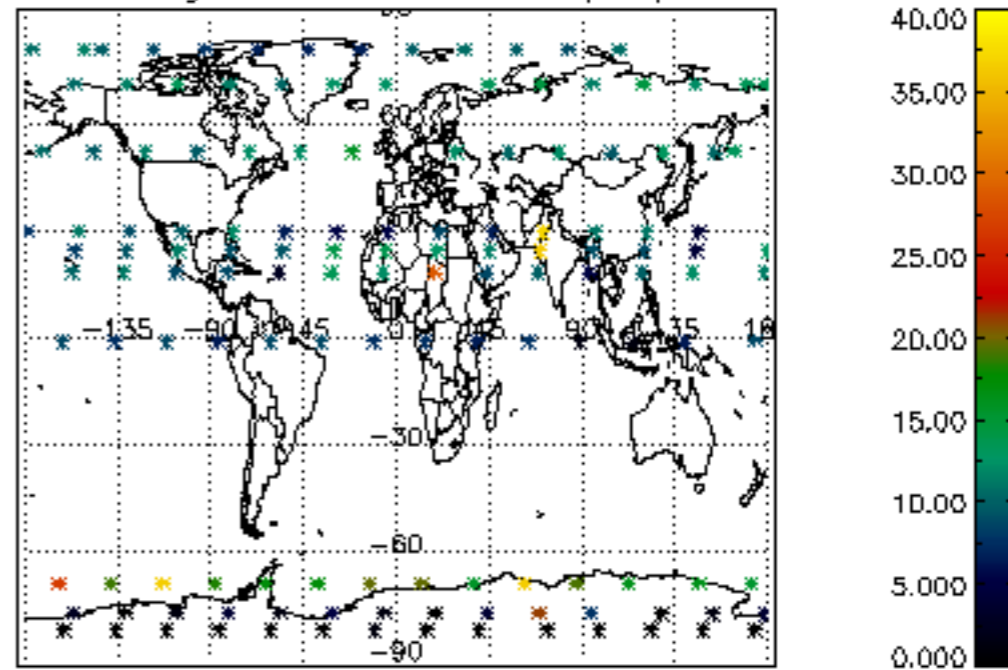
Percentage of datation errors per profile

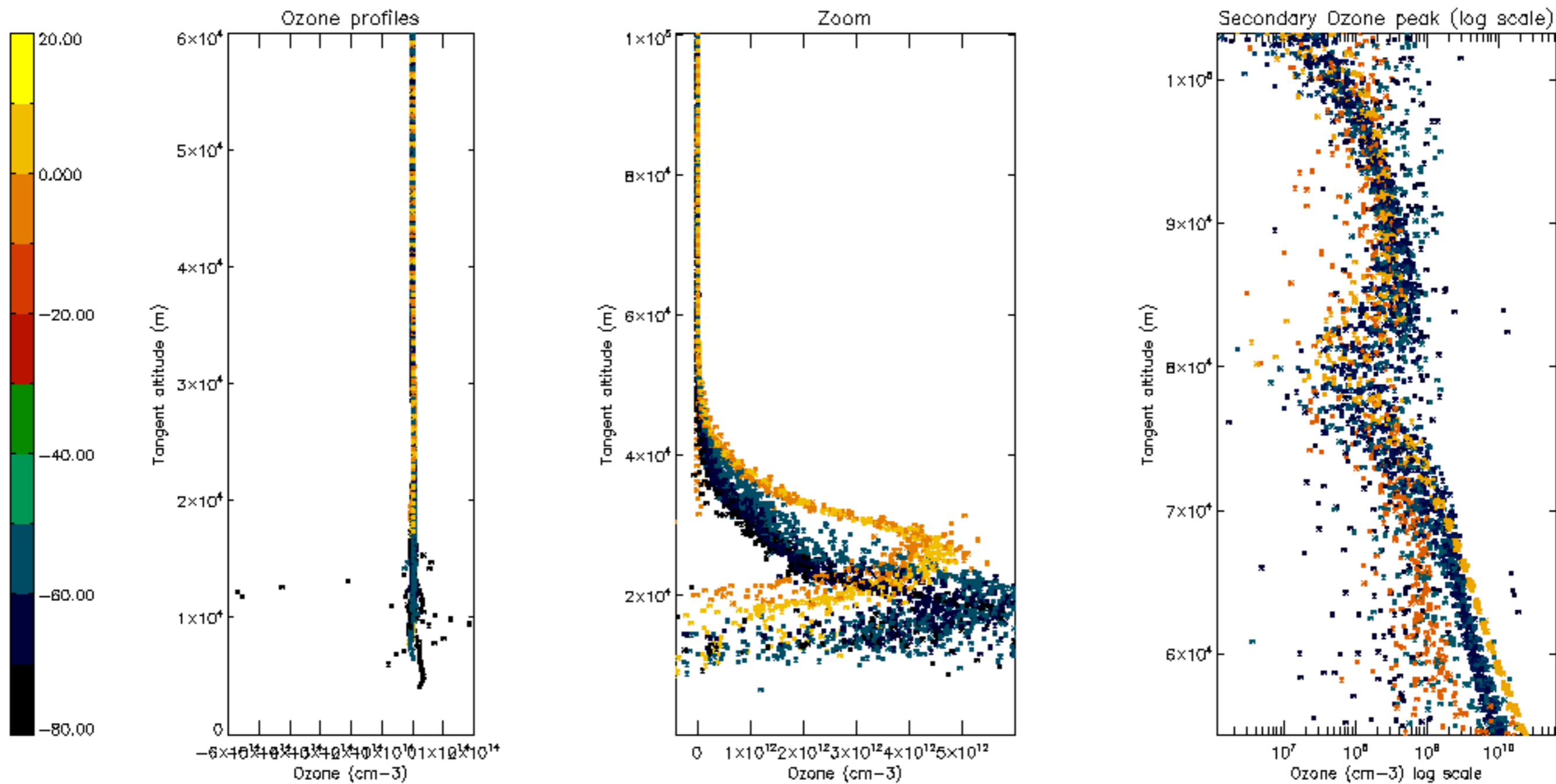


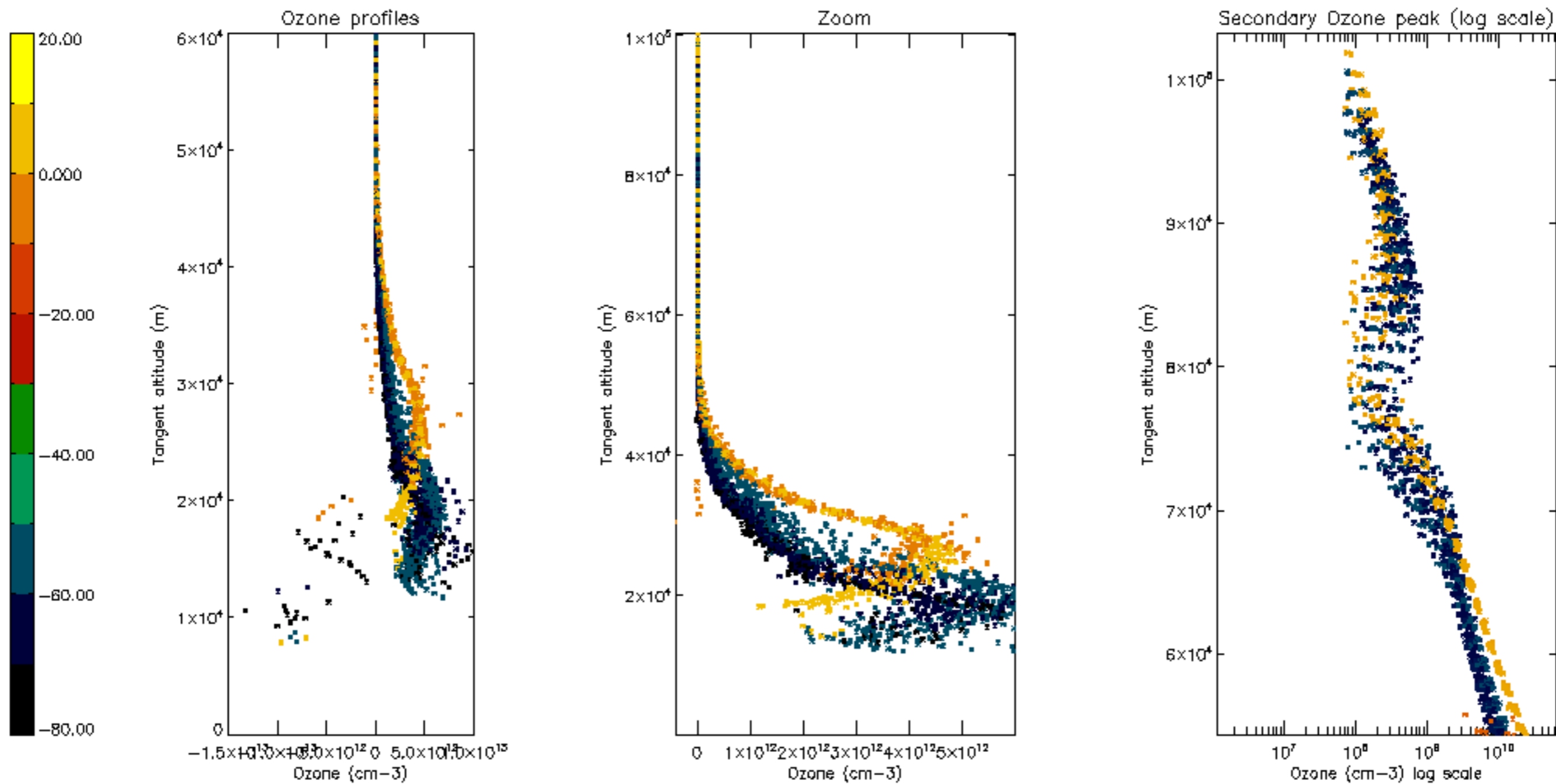
Percentage of star falling outside central band per profile

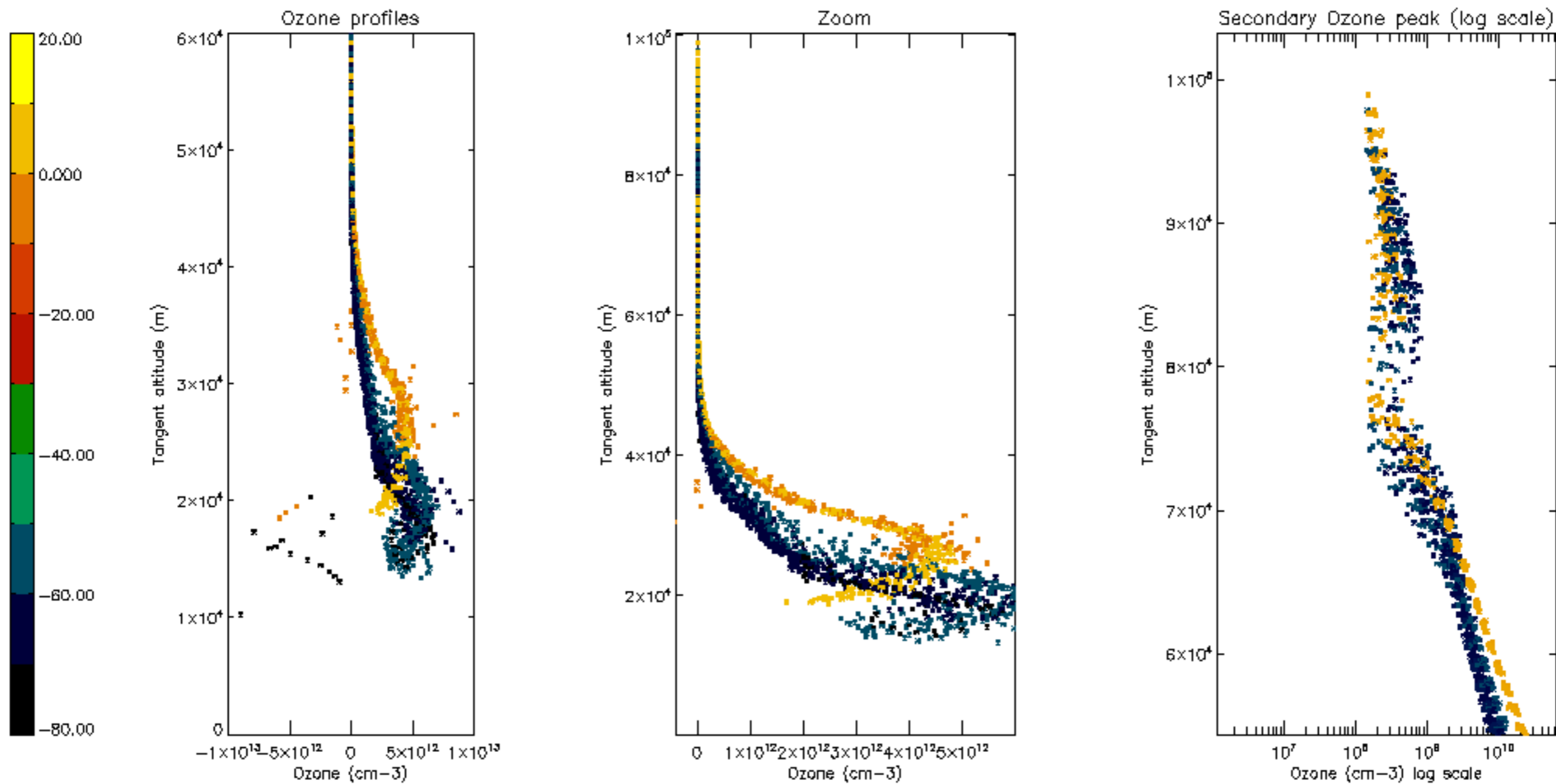


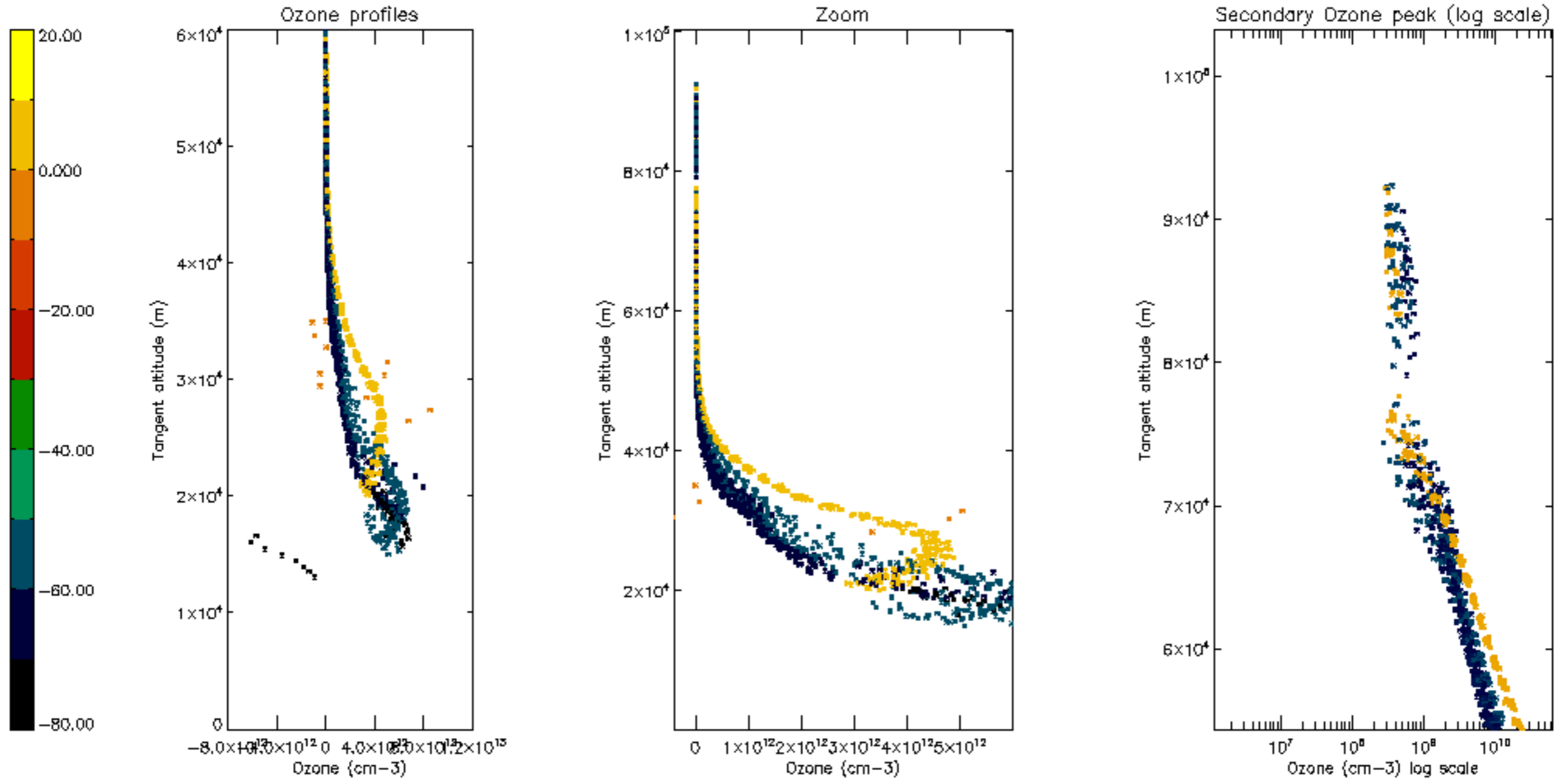
Percentage of saturation errors per profile

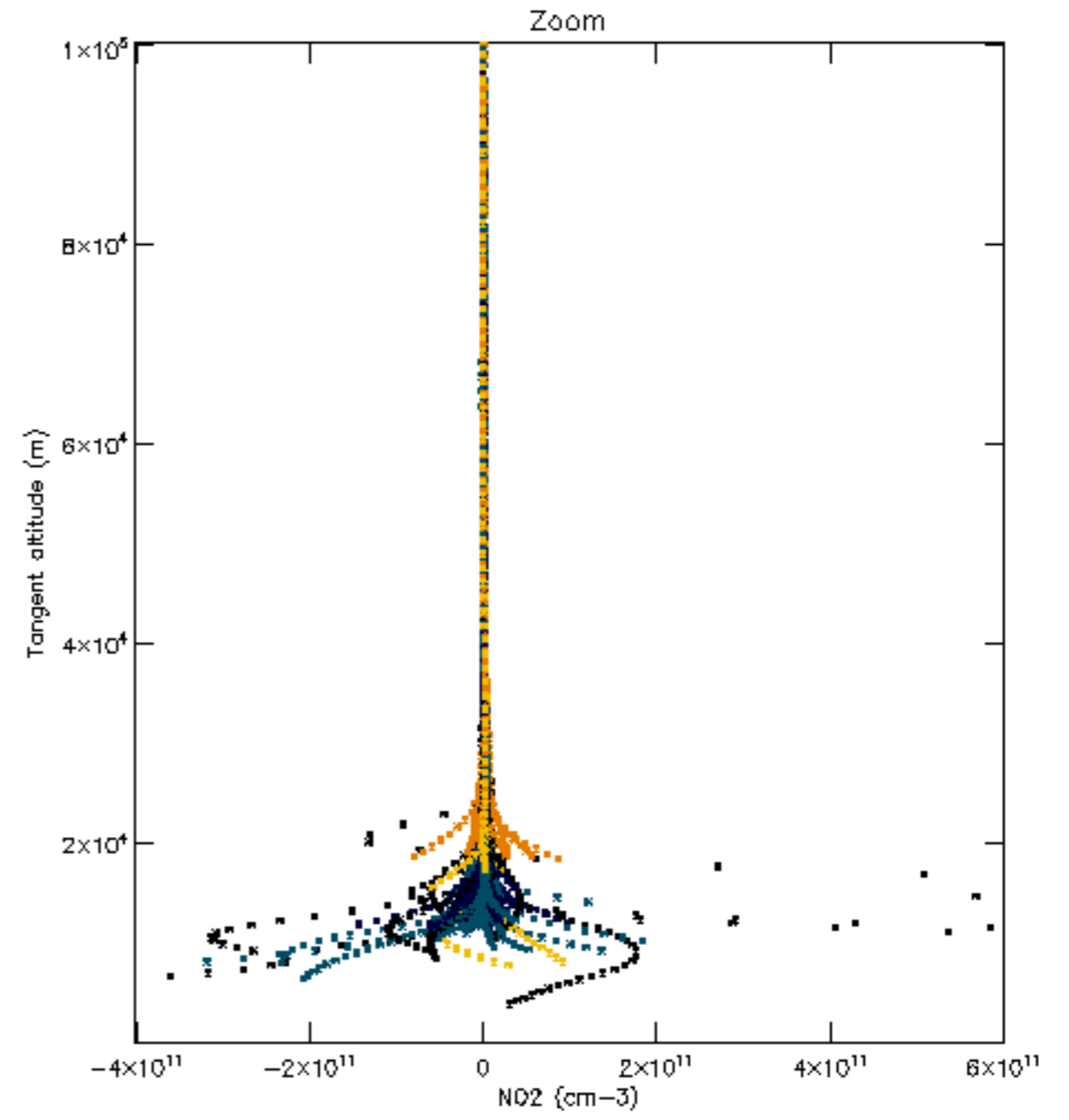
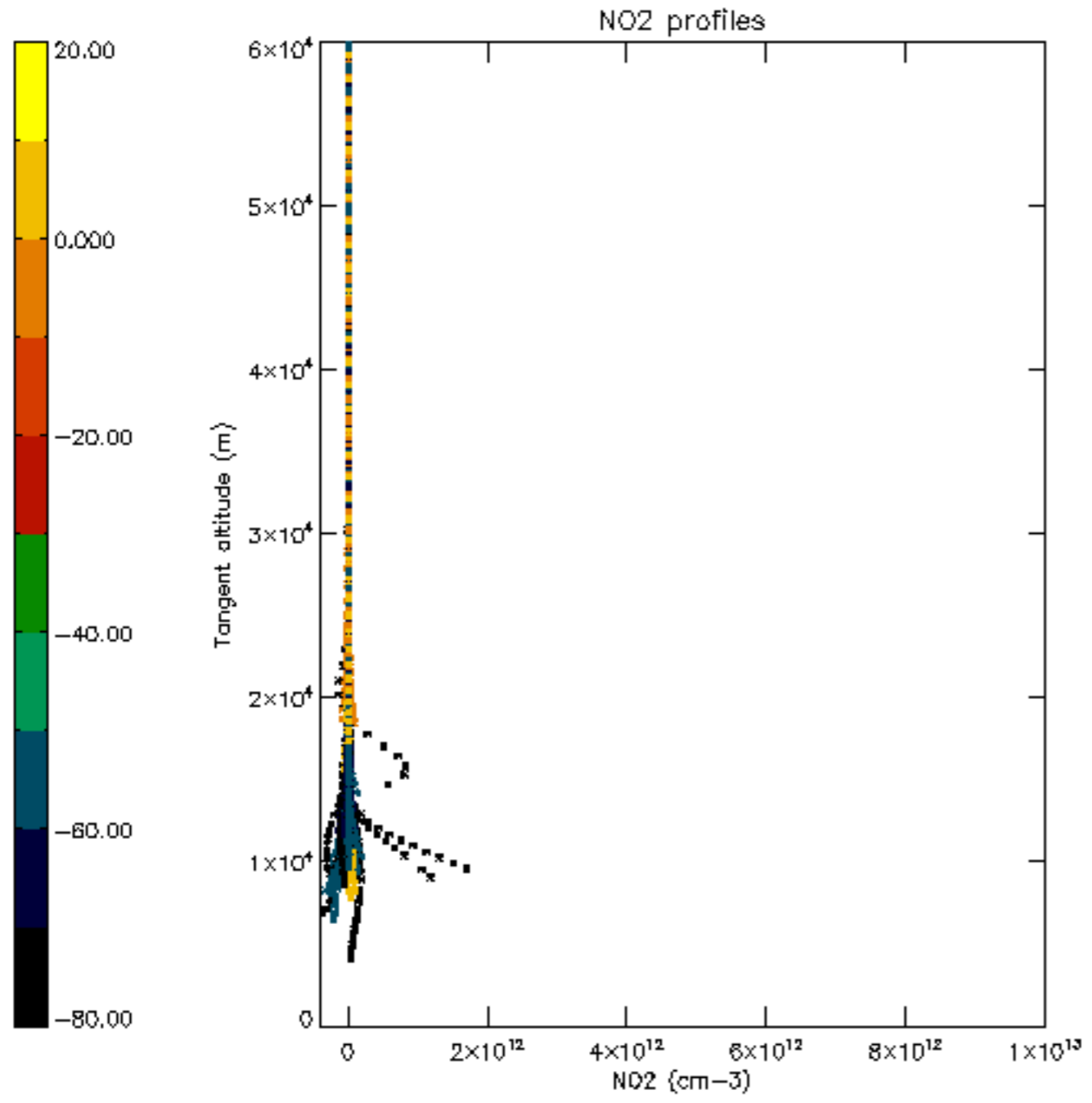


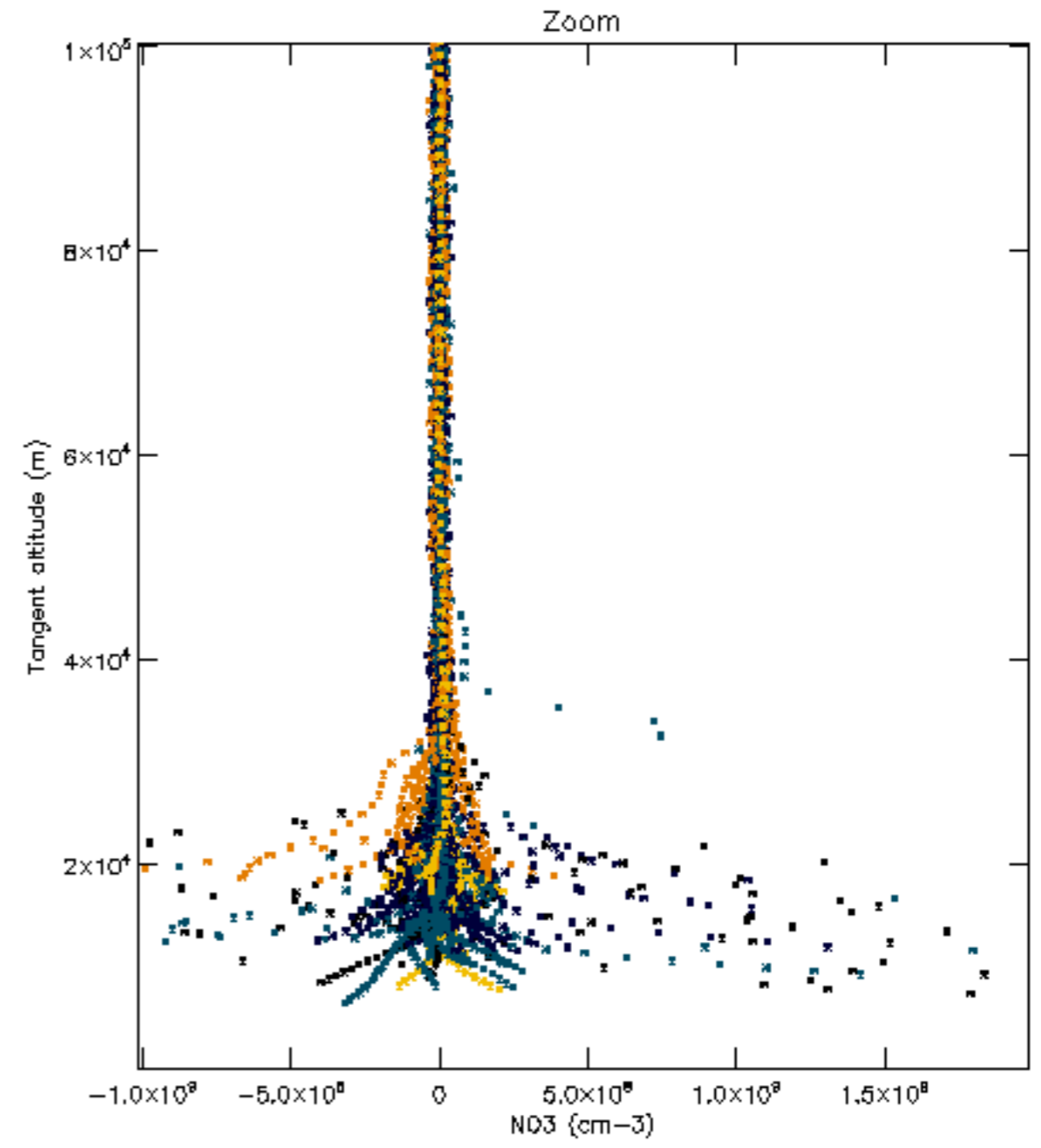
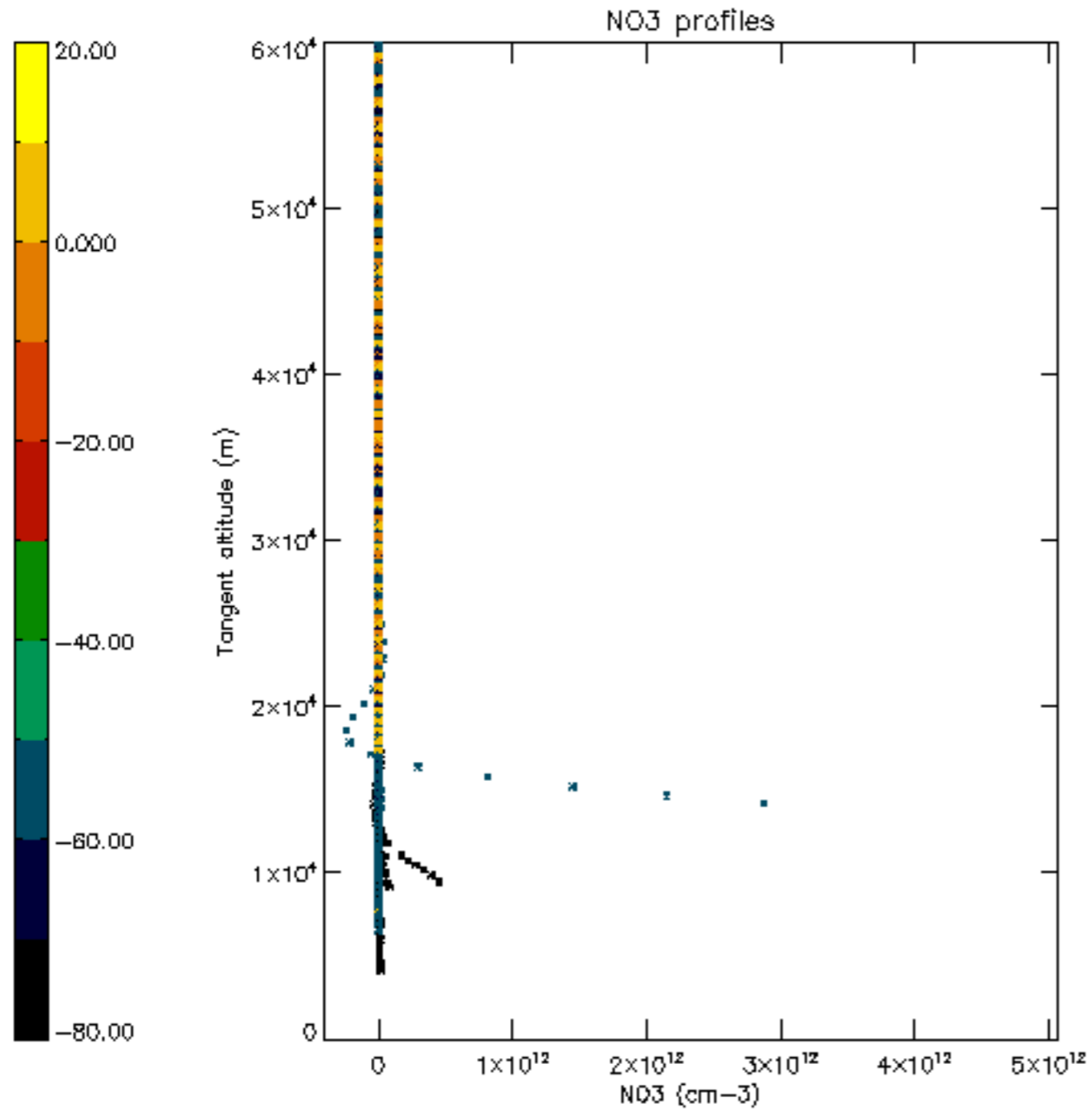


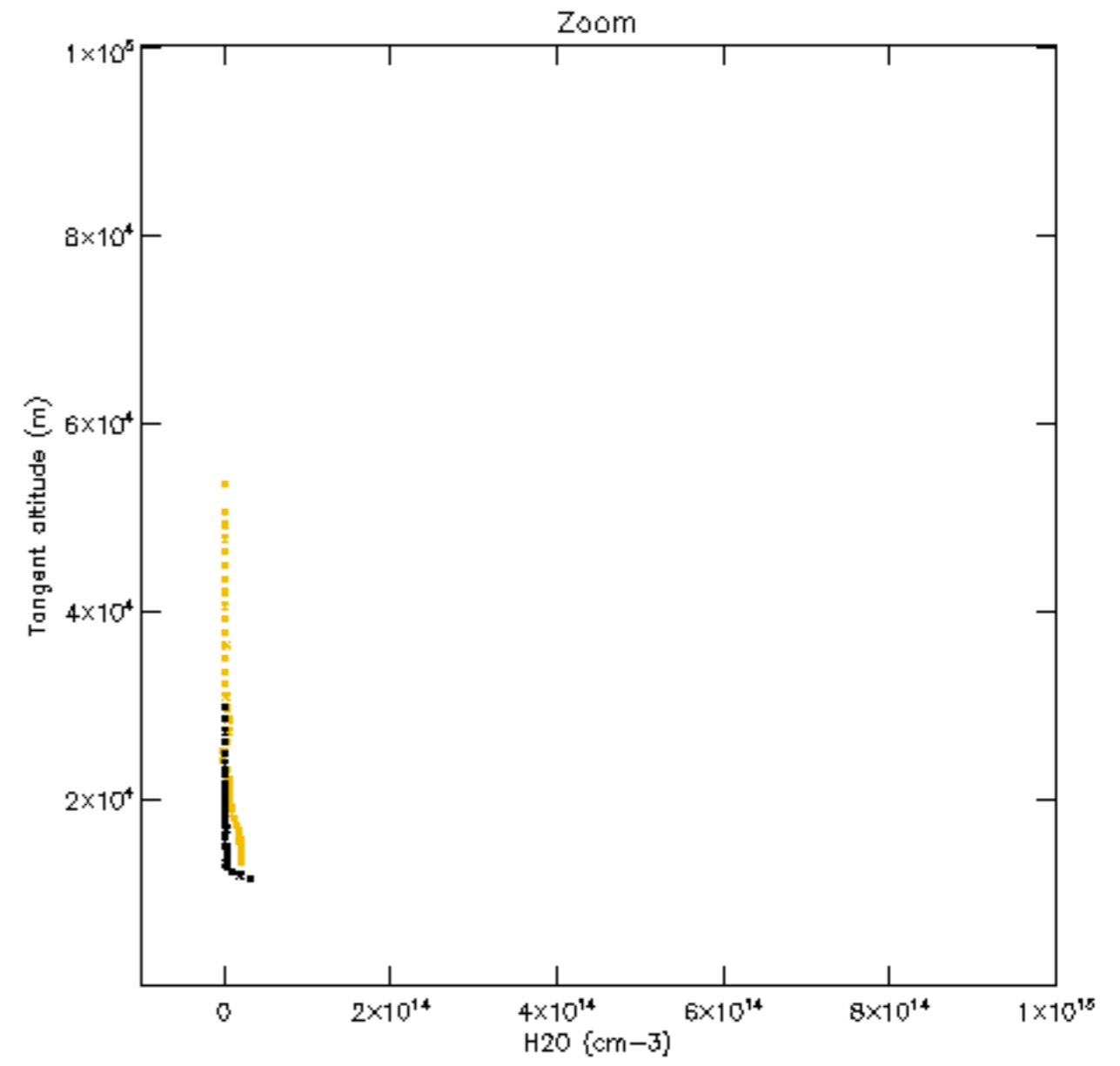
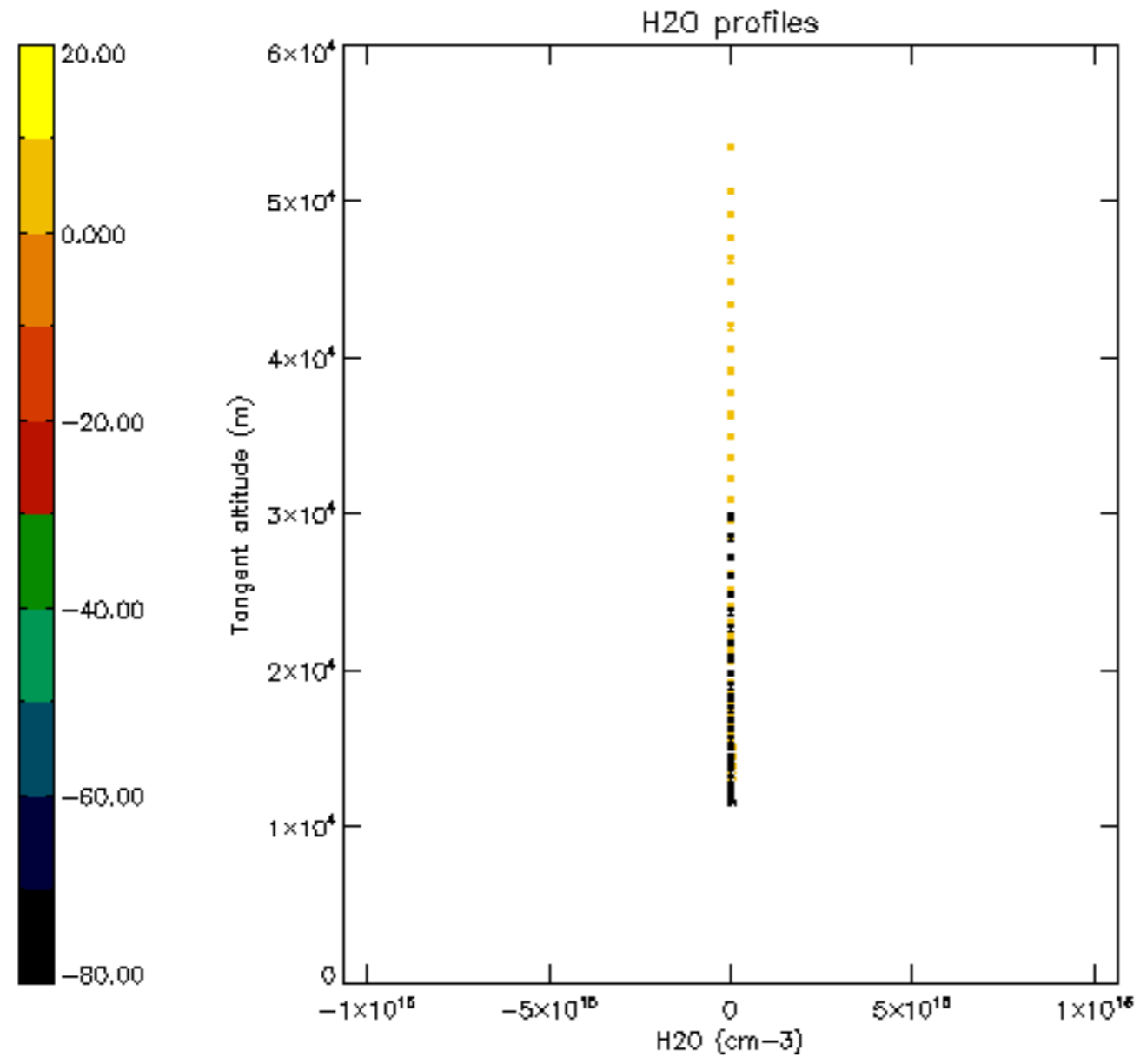


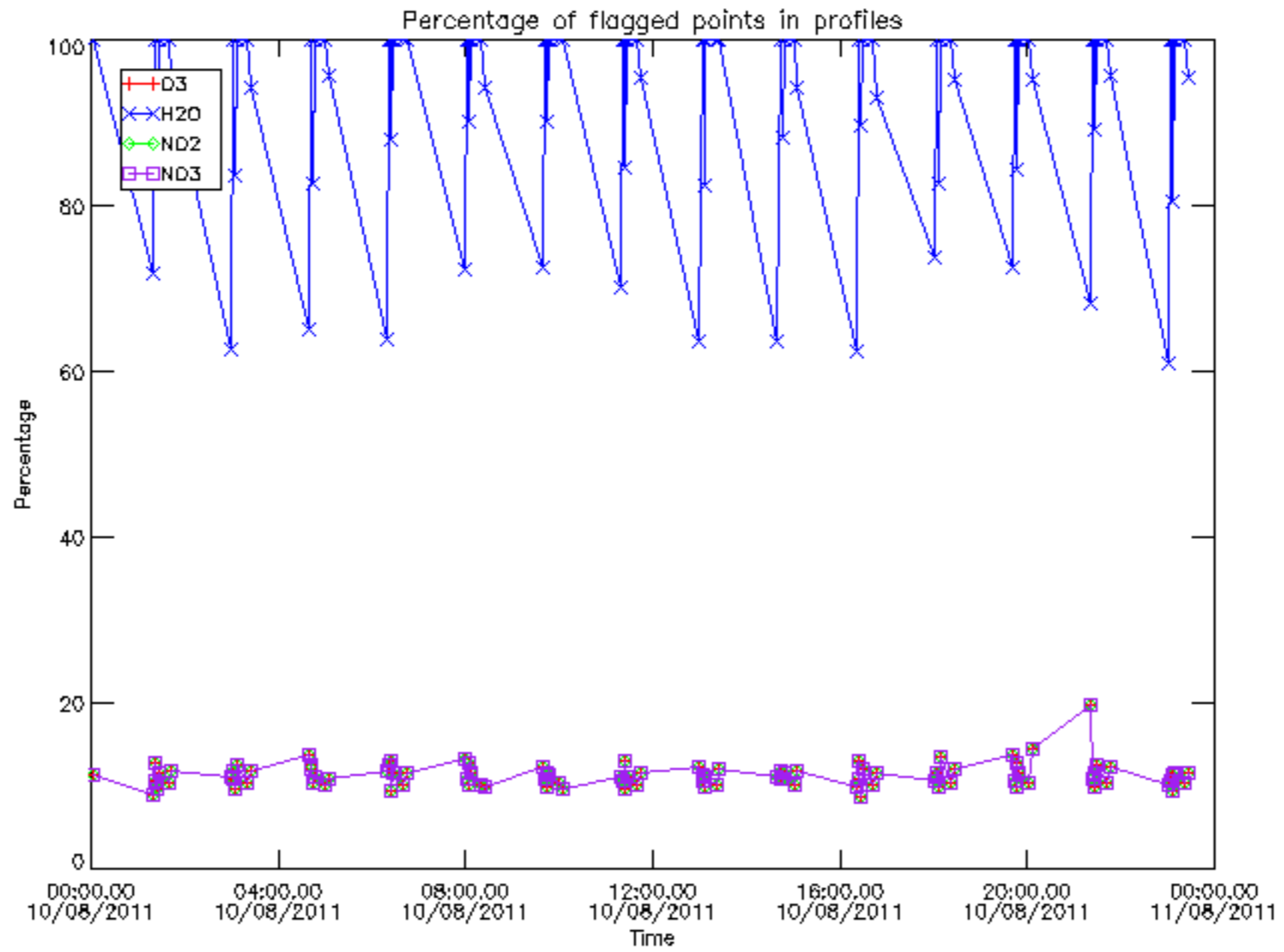




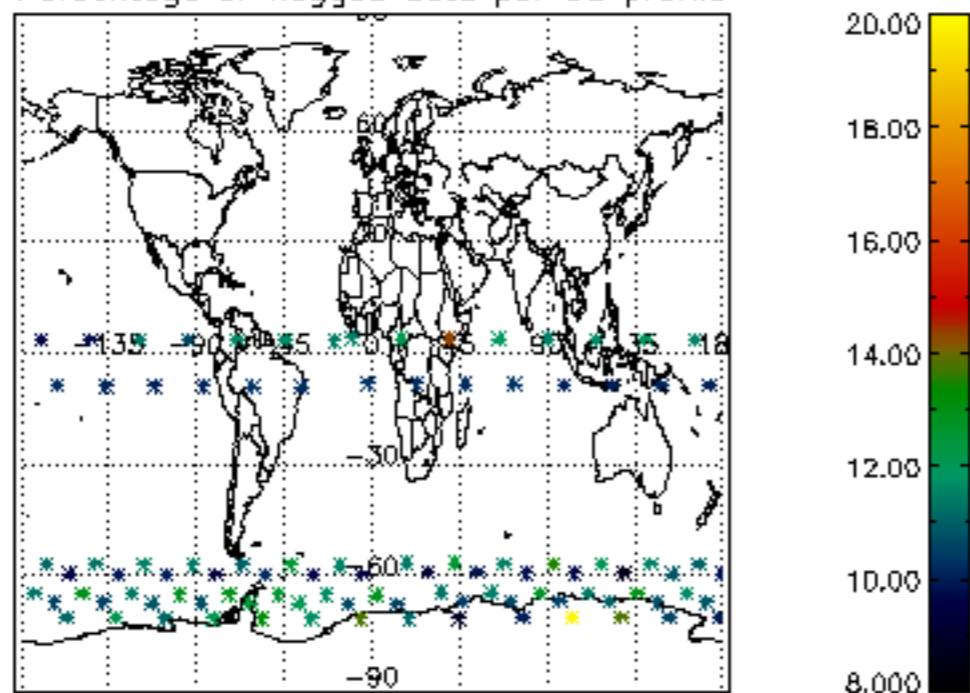




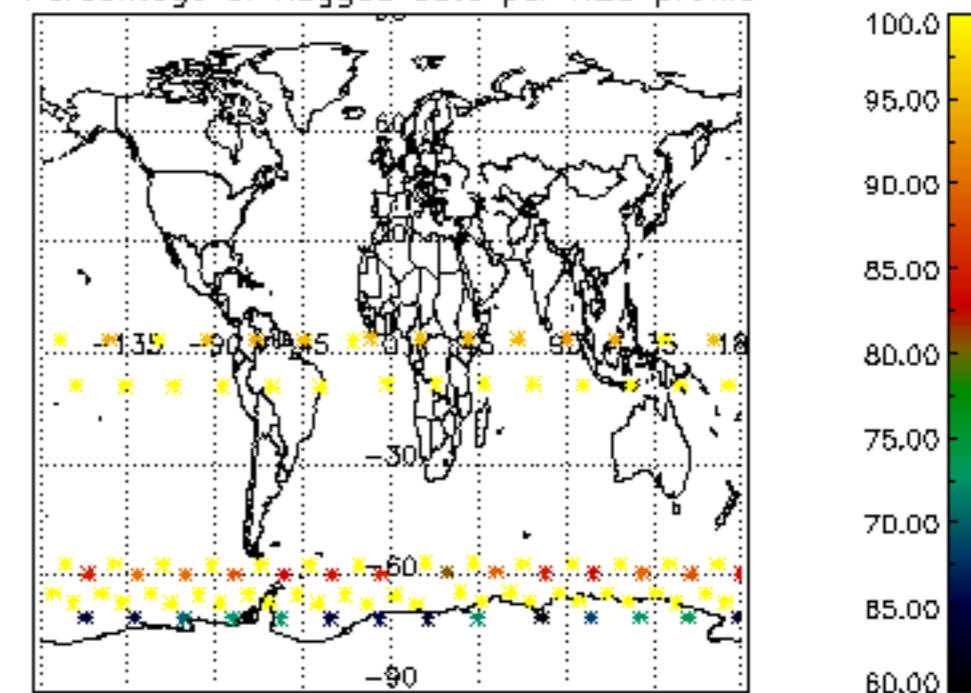




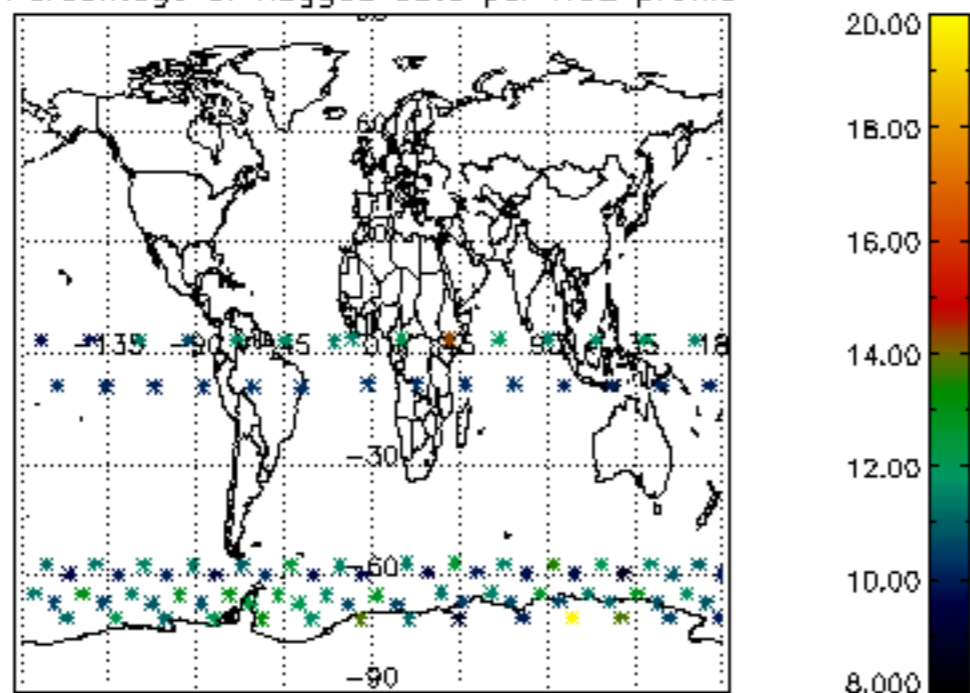
Percentage of flagged data per D3 profile



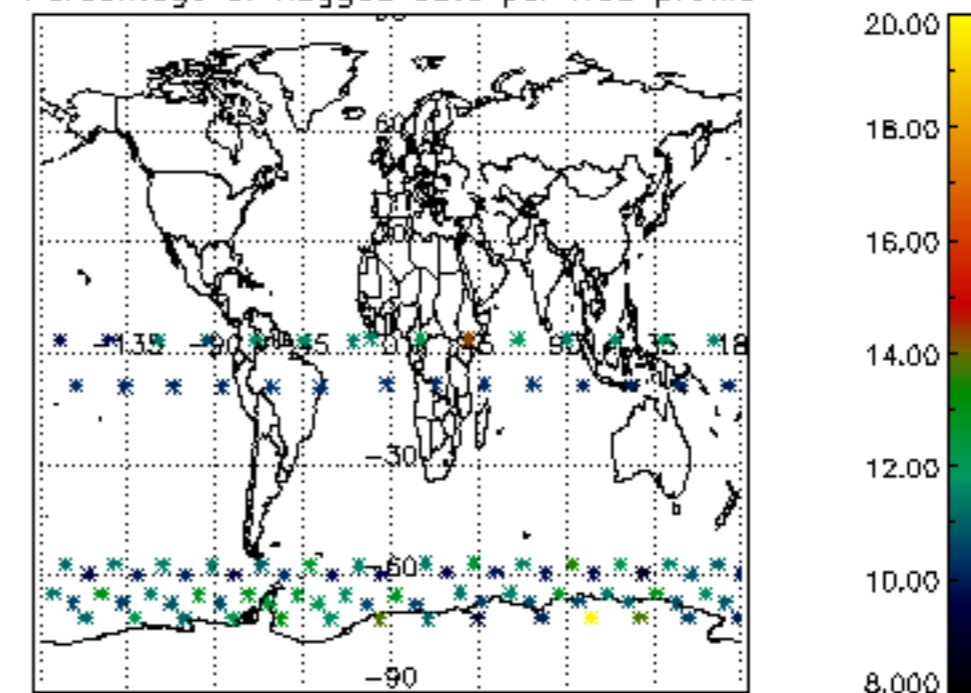
Percentage of flagged data per H2O profile

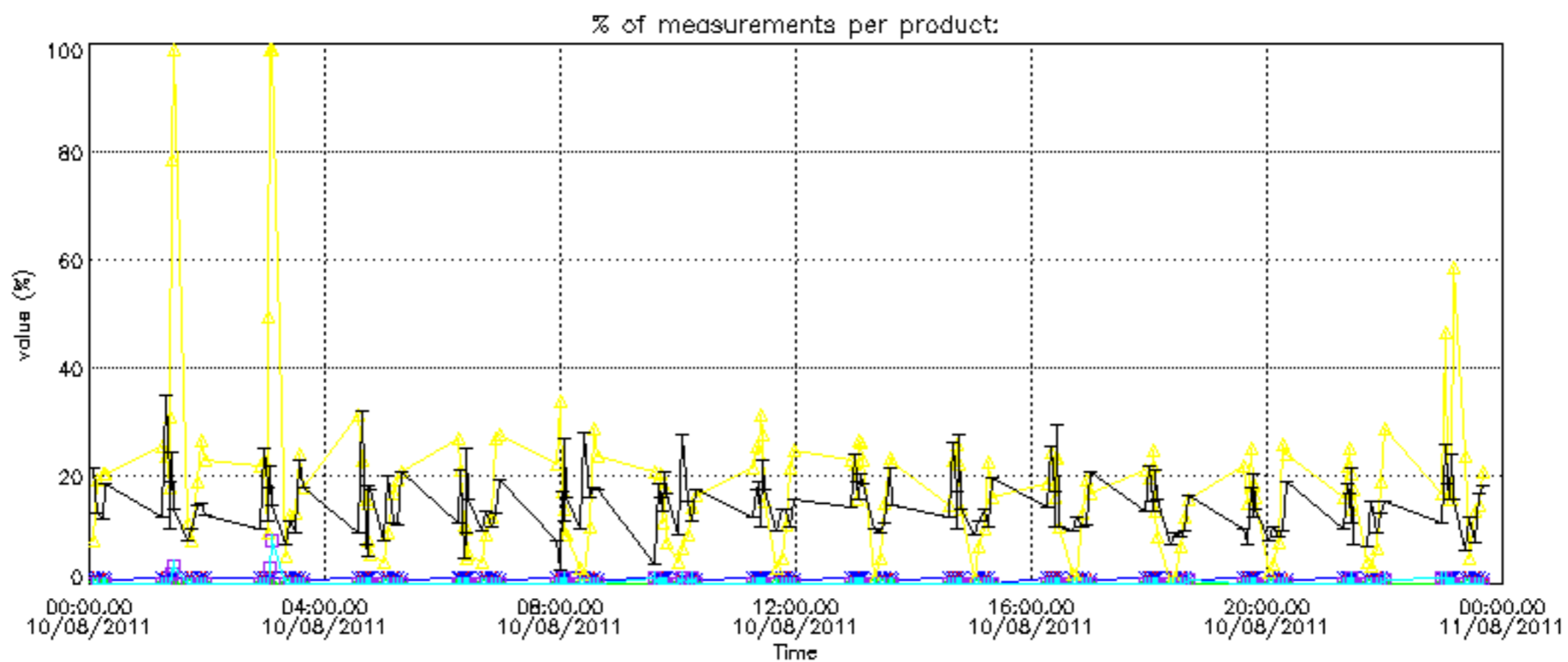
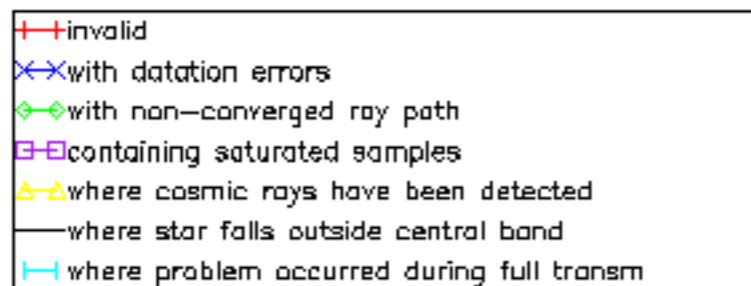


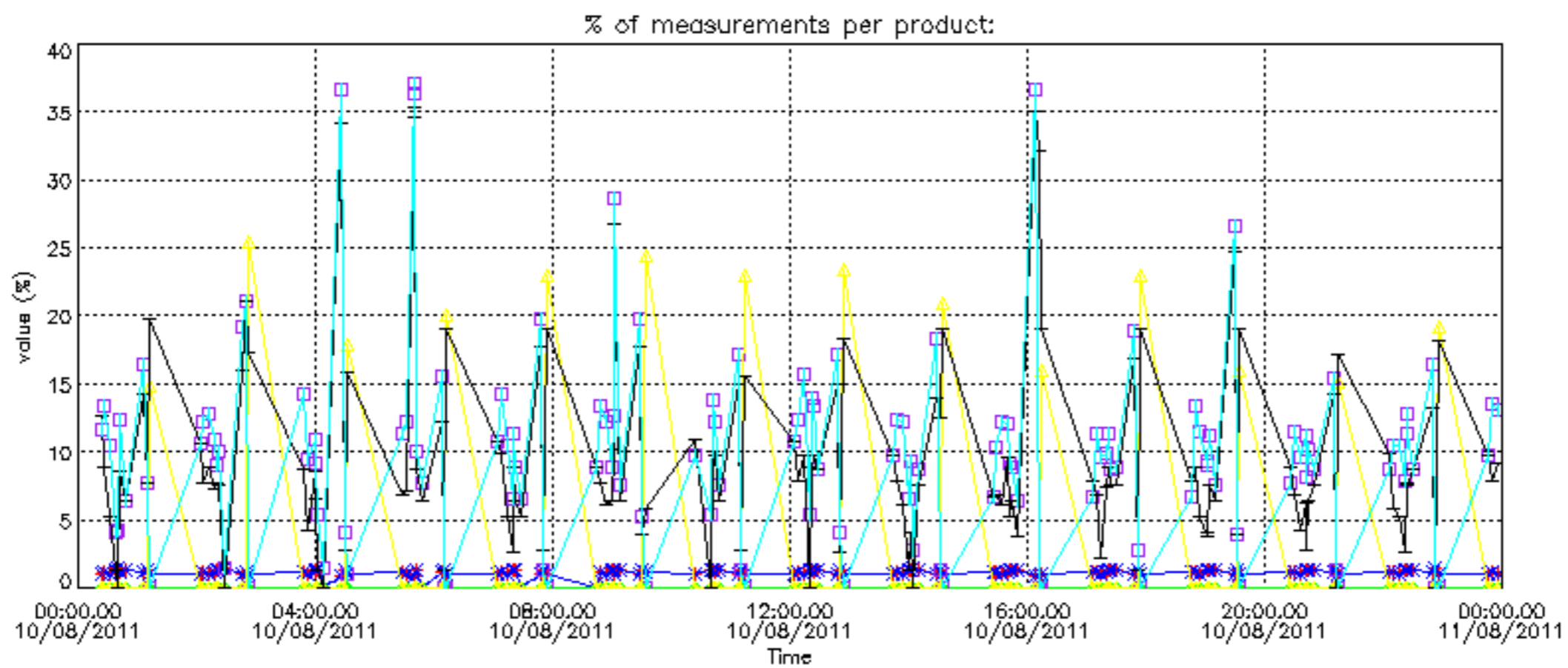
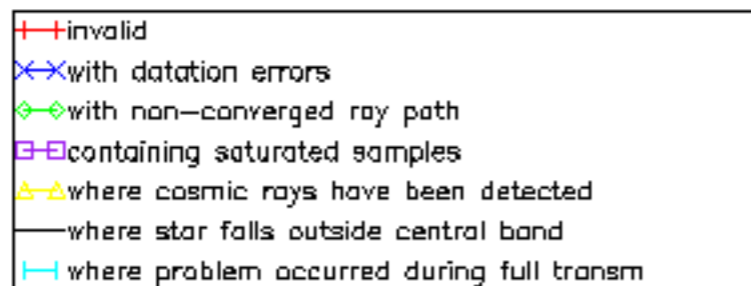
Percentage of flagged data per NO2 profile



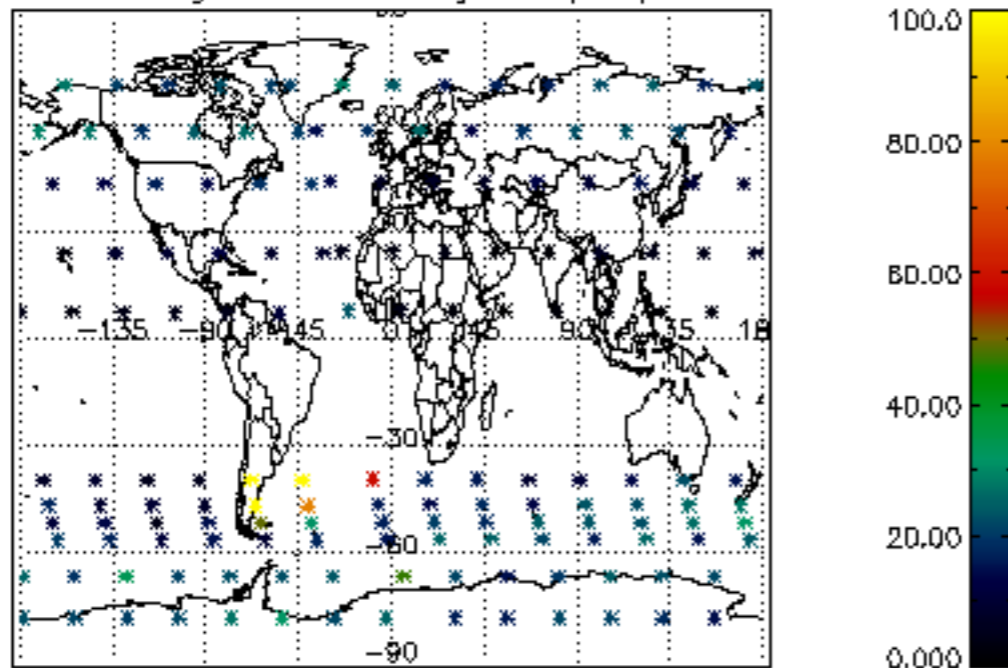
Percentage of flagged data per NO3 profile



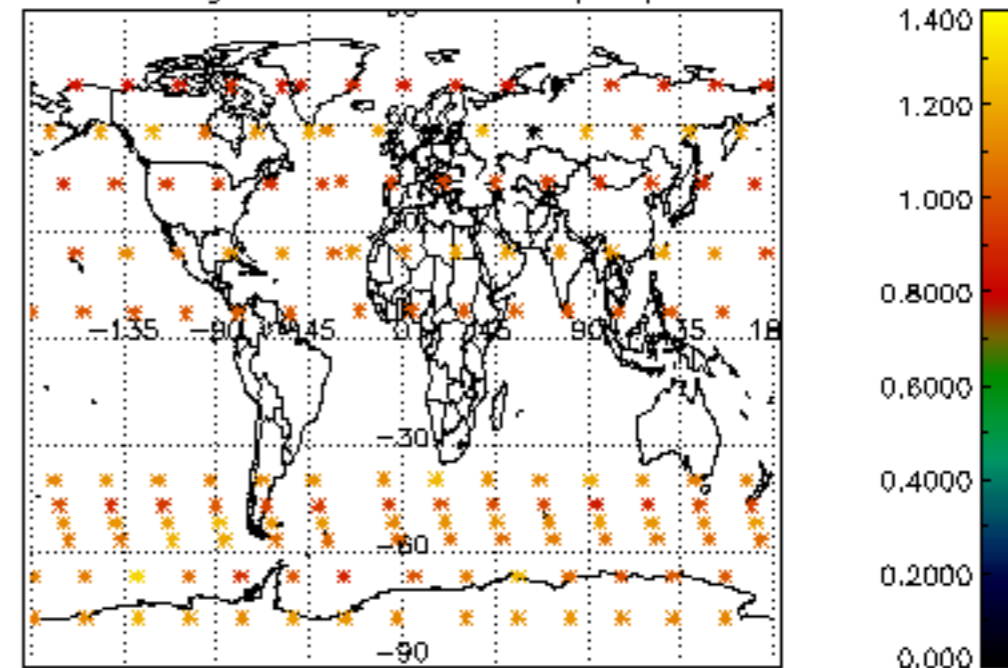




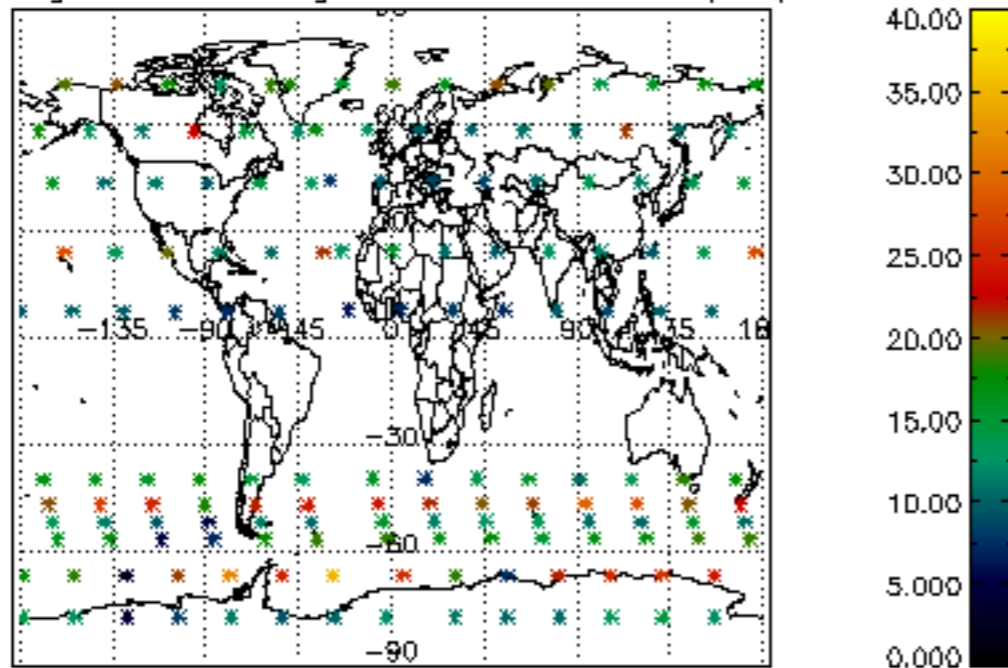
Percentage of cosmic ray hits per profile



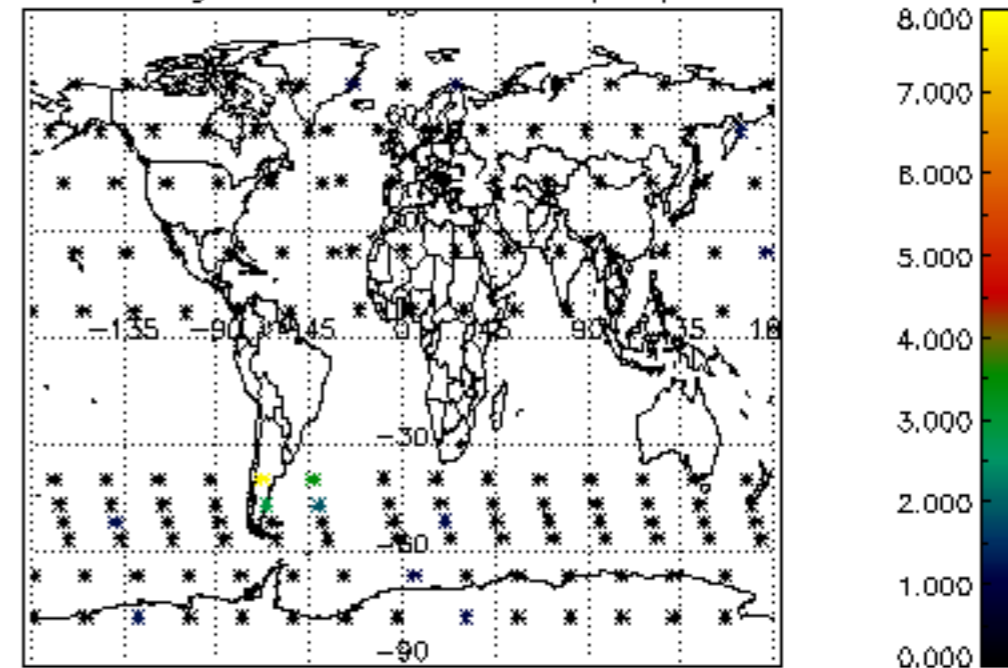
Percentage of datation errors per profile



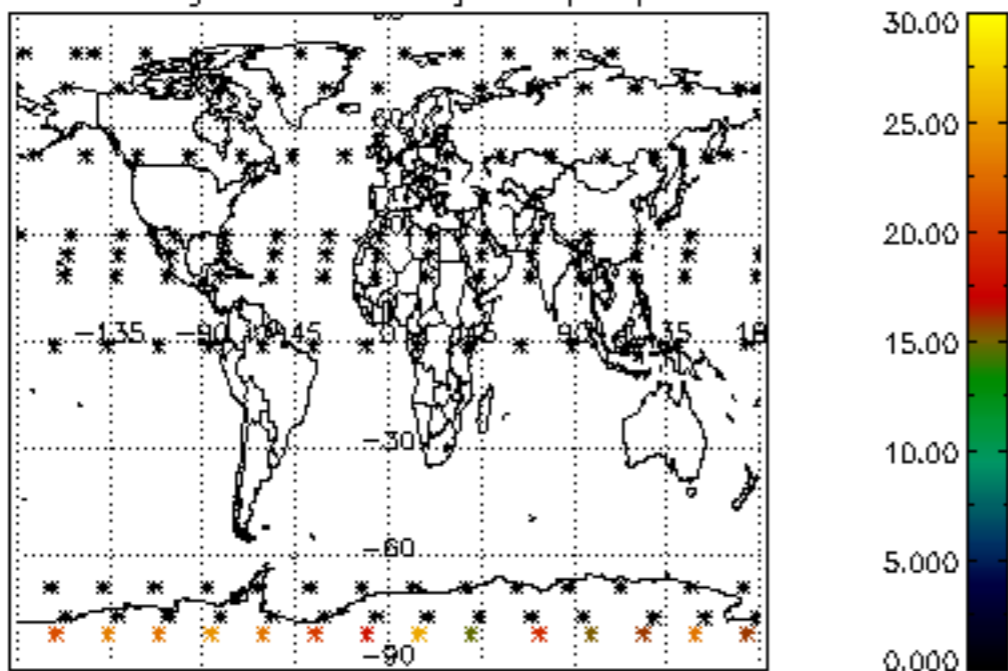
Percentage of star falling outside central band per profile



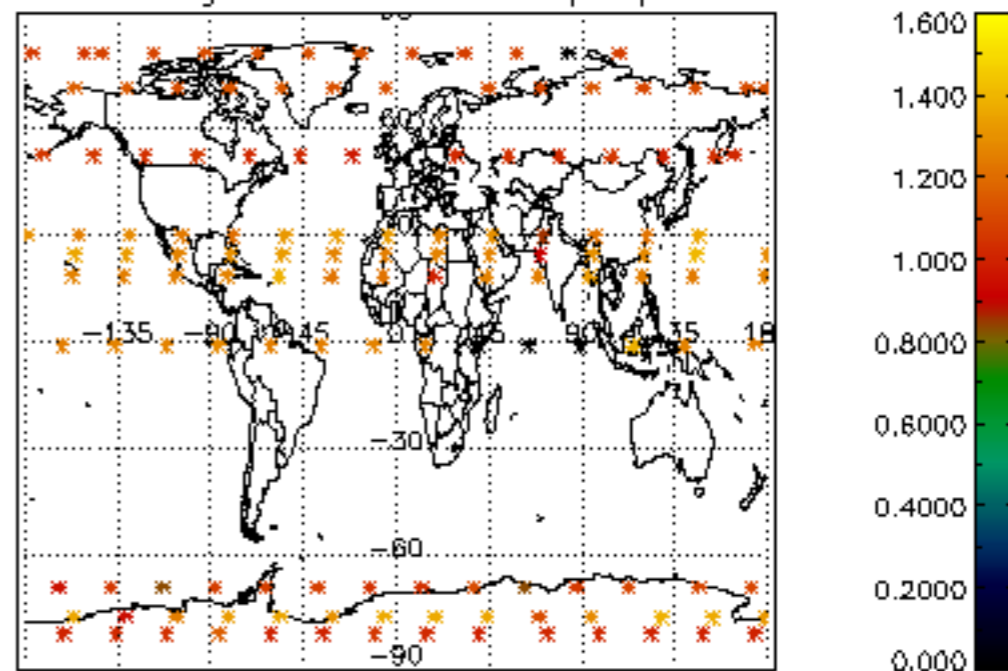
Percentage of saturation errors per profile



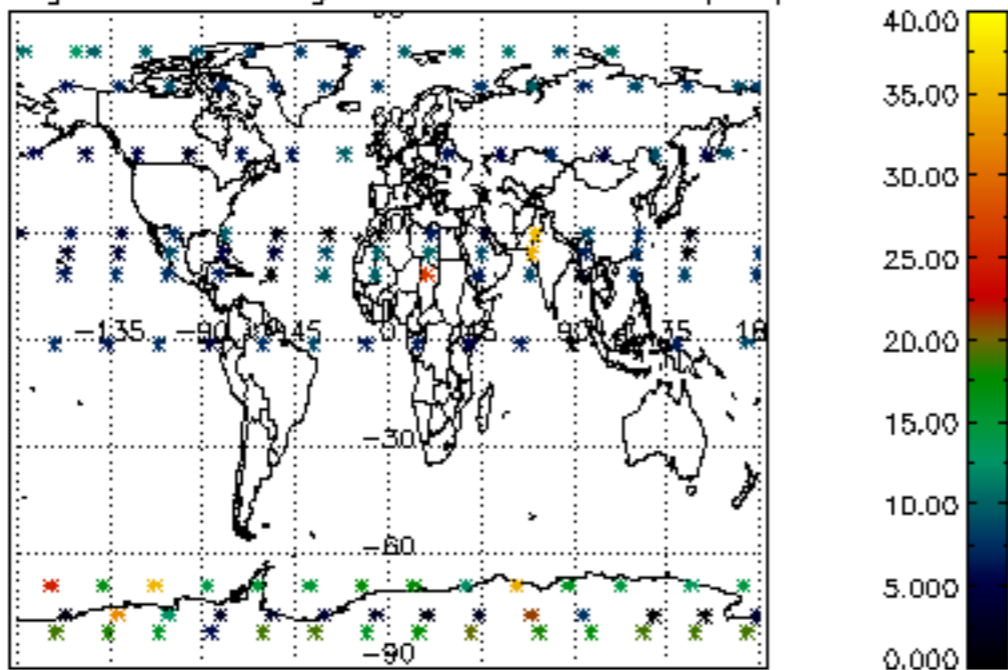
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

