

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 13:23:47
Data source version	GOMOS/6.01
Start time of products	09-05-2011 (09MAY2011 00:00:00)
Stop time of products	10-05-2011 (10MAY2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	293
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

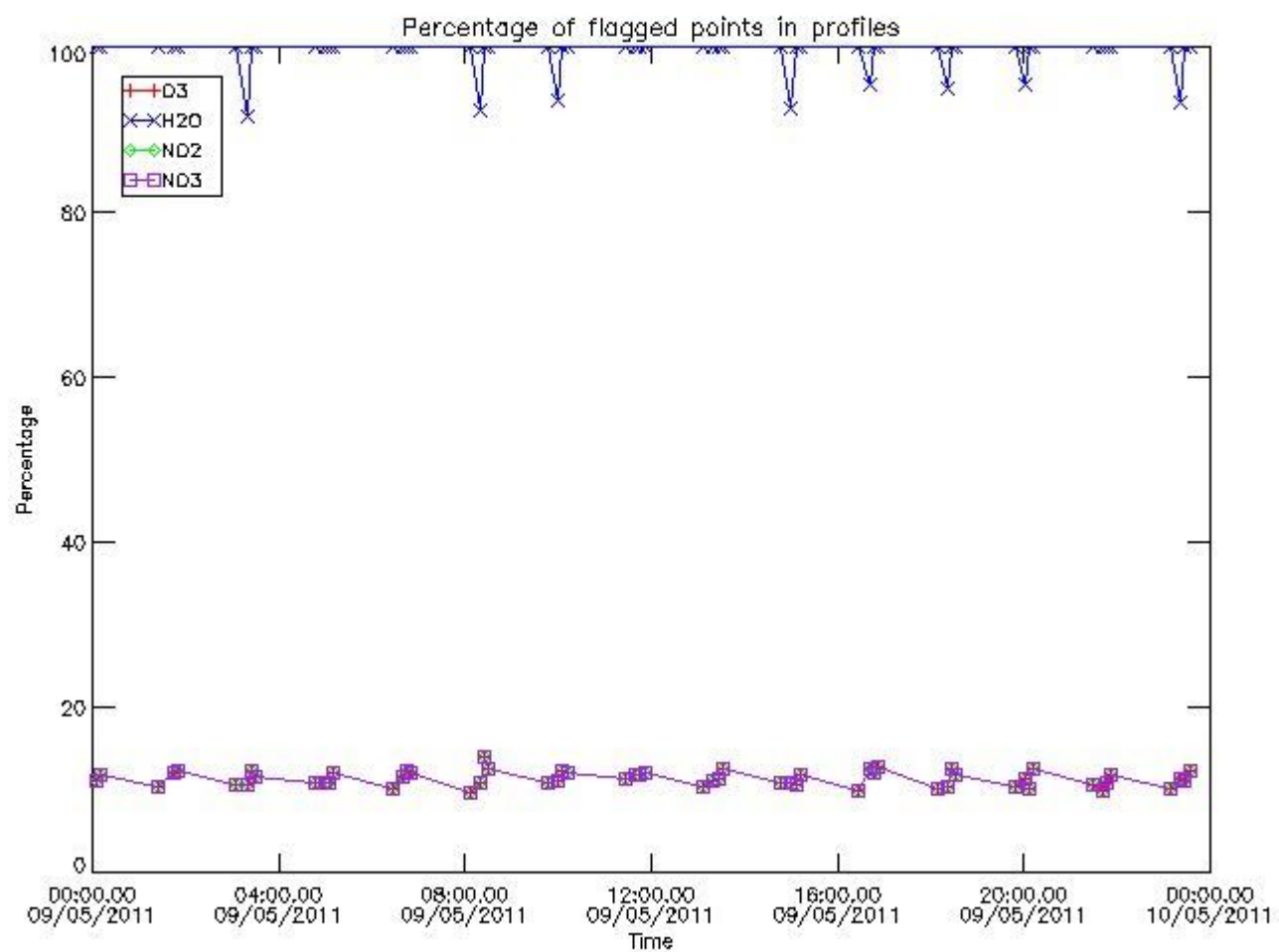
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110509_000410_000000463102_00188_48047_5425.N1	09-MAY-2011 00:04:10	Dark	45.500	31	Alp Gru	1.7340	15200.	91	48047	No
2	GOM_NL__2PRFIN20110509_000944_000000443102_00189_48048_5441.N1	09-MAY-2011 00:09:44	Dark	43.500	45	Alp Pav	1.9400	26000.	87	48048	No
3	GOM_NL__2PRFIN20110509_001709_000000473102_00189_48048_5442.N1	09-MAY-2011 00:17:09	Straylight	47.000	141	Bet Ara	2.8400	4600.0	94	48048	No
4	GOM_NL__2PRFIN20110509_001927_000000543102_00189_48048_5443.N1	09-MAY-2011 00:19:27	Straylight	54.000	40	The Sco	1.8590	7100.0	108	48048	No
5	GOM_NL__2PRFIN20110509_002117_000000593102_00189_48048_5444.N1	09-MAY-2011 00:21:17	Straylight	58.500	25	35Lam Sco	1.6200	28000.	117	48048	No
6	GOM_NL__2PRFIN20110509_002356_000000603102_00189_48048_5445.N1	09-MAY-2011 00:23:56	Straylight	59.500	75	26Eps Sco	2.2910	4250.0	119	48048	No
7	GOM_NL__2PRFIN20110509_002716_000000673102_00189_48048_5446.N1	09-MAY-2011 00:27:16	Twilight_stray	67.000	16	21Alp Sco	1.0200	3000.0	134	48048	No
8	GOM_NL__2PRFIN20110509_002910_000000563102_00189_48048_5447.N1	09-MAY-2011 00:29:10	Bright	55.500	80	7Del Sco	2.3160	30000.	111	48048	No
9	GOM_NL__2PRFIN20110509_003201_000000413102_00189_48048_5448.N1	09-MAY-2011 00:32:01	Bright	40.500	122	9Alp2Lib	2.7470	9700.0	81	48048	No
10	GOM_NL__2PRFIN20110509_003401_000000523102_00189_48048_5449.N1	09-MAY-2011 00:34:01	Bright	52.000	104	27Bet Lib	2.6140	13100.	104	48048	No
11	GOM_NL__2PRFIN20110509_004235_000000383102_00189_48048_5450.N1	09-MAY-2011 00:42:35	Bright	38.000	3	16Alp Boo	-0.050000	4250.0	76	48048	No
12	GOM_NL__2PRFIN20110509_004518_000000443102_00189_48048_5451.N1	09-MAY-2011 00:45:18	Bright	43.500	83		2.3780	11000.	87	48048	No
13	GOM_NL__2PRFIN20110509_004824_000000383102_00189_48048_5452.N1	09-MAY-2011 00:48:24	Bright	37.500	180	27Gam Boo	3.0400	8000.0	75	48048	No
14	GOM_NL__2PRFIN20110509_005103_000000383102_00189_48048_5453.N1	09-MAY-2011 00:51:03	Bright	37.500	39	85Eta UMa	1.8540	24000.	75	48048	No
15	GOM_NL__2PRFIN20110509_005728_000000413102_00189_48048_5454.N1	09-MAY-2011 00:57:28	Bright	40.500	119	14Eta Dra	2.7270	4700.0	81	48048	No
16	GOM_NL__2PRFIN20110509_010814_000000423102_00189_48048_5455.N1	09-MAY-2011 01:08:14	Bright	41.500	89	5Alp Cep	2.4510	8000.0	83	48048	No
17	GOM_NL__2PRFIN20110509_011113_000000543102_00189_48048_5456.N1	09-MAY-2011 01:11:13	Bright	54.000	74	11Bet Cas	2.2680	6600.0	108	48048	No
18	GOM_NL__2PRFIN20110509_012105_000000633102_00189_48048_5457.N1	09-MAY-2011 01:21:05	Twilight_stray	62.500	93	53Bet Peg	2.5200	3100.0	125	48048	No
19	GOM_NL__2PRFIN20110509_012523_000000493102_00189_48048_5458.N1	09-MAY-2011 01:25:23	Dark	49.000	90	54Alp Peg	2.4870	11000.	98	48048	No
20	GOM_NL__2PRFIN20110509_014425_000000433102_00189_48048_5459.N1	09-MAY-2011 01:44:25	Dark	42.500	31	Alp Gru	1.7340	15200.	85	48048	No
21	GOM_NL__2PRFIN20110509_014959_000000423102_00190_48049_5445.N1	09-MAY-2011 01:49:59	Dark	41.500	45	Alp Pav	1.9400	26000.	83	48049	No
22	GOM_NL__2PRFIN20110509_015724_000000453102_00190_48049_5446.N1	09-MAY-2011 01:57:24	Straylight	45.000	141	Bet Ara	2.8400	4600.0	90	48049	No
23	GOM_NL__2PRFIN20110509_015941_000000533102_00190_48049_5447.N1	09-MAY-2011 01:59:41	Straylight	53.000	40	The Sco	1.8590	7100.0	106	48049	No
24	GOM_NL__2PRFIN20110509_020132_000000553102_00190_48049_5448.N1	09-MAY-2011 02:01:32	Straylight	55.000	25	35Lam Sco	1.6200	28000.	110	48049	No
25	GOM_NL__2PRFIN20110509_020410_000000543102_00190_48049_5449.N1	09-MAY-2011 02:04:10	Straylight	53.500	75	26Eps Sco	2.2910	4250.0	107	48049	No
26	GOM_NL__2PRFIN20110509_020730_000000713102_00190_48049_5450.N1	09-MAY-2011 02:07:30	Twilight_stray	71.000	16	21Alp Sco	1.0200	3000.0	142	48049	No
27	GOM_NL__2PRFIN20110509_020925_000000633102_00190_48049_5451.N1	09-MAY-2011 02:09:25	Bright	62.500	80	7Del Sco	2.3160	30000.	125	48049	No
28	GOM_NL__2PRFIN20110509_021215_000000413102_00190_48049_5452.N1	09-MAY-2011 02:12:15	Bright	40.500	122	9Alp2Lib	2.7470	9700.0	81	48049	No
29	GOM_NL__2PRFIN20110509_021415_000000443102_00190_48049_5453.N1	09-MAY-2011 02:14:15	Bright	43.500	104	27Bet Lib	2.6140	13100.	87	48049	No
30	GOM_NL__2PRFIN20110509_022248_000000393102_00190_48049_5454.N1	09-MAY-2011 02:22:48	Bright	38.500	3	16Alp Boo	-0.050000	4250.0	77	48049	No
31	GOM_NL__2PRFIN20110509_022532_000000413102_00190_48049_5455.N1	09-MAY-2011 02:25:32	Bright	40.500	83		2.3780	11000.	81	48049	No
32	GOM_NL__2PRFIN20110509_022837_000000383102_00190_48049_5456.N1	09-MAY-2011 02:28:37	Bright	37.500	180	27Gam Boo	3.0400	8000.0	75	48049	No
33	GOM_NL__2PRFIN20110509_023116_000000353102_00190_48049_5457.N1	09-MAY-2011 02:31:16	Bright	34.500	39	85Eta UMa	1.8540	24000.	69	48049	No
34	GOM_NL__2PRFIN20110509_023742_000000413102_00190_48049_5458.N1	09-MAY-2011 02:37:42	Bright	41.000	119	14Eta Dra	2.7270	4700.0	82	48049	No
35	GOM_NL__2PRFIN20110509_024827_000000443102_00190_48049_5459.N1	09-MAY-2011 02:48:27	Bright	43.500	89	5Alp Cep	2.4510	8000.0	87	48049	No
36	GOM_NL__2PRFIN20110509_025127_000000543102_00190_48049_5460.N1	09-MAY-2011 02:51:27	Bright	54.000	74	11Bet Cas	2.2680	6600.0	108	48049	No
37	GOM_NL__2PRFIN20110509_030119_000000573102_00190_48049_5461.N1	09-MAY-2011 03:01:19	Twilight_stray	56.500	93	53Bet Peg	2.5200	3100.0	113	48049	No
38	GOM_NL__2PRFIN20110509_030537_000000493102_00190_48049_5462.N1	09-MAY-2011 03:05:37	Dark	48.500	90	54Alp Peg	2.4870	11000.	97	48049	No
39	GOM_NL__2PRFIN20110509_031850_000000483102_00190_48049_5463.N1	09-MAY-2011 03:18:50	Dark	48.000	18	24Alp PsA	1.1660	9700.0	96	48049	No
40	GOM_NL__2PRFIN20110509_032440_000000423102_00190_48049_5464.N1	09-MAY-2011 03:24:40	Dark	41.500	31	Alp Gru	1.7340	15200.	83	48049	No
41	GOM_NL__2PRFIN20110509_033014_000000443102_00191_48050_5460.N1	09-MAY-2011 03:30:14	Dark	44.000	45	Alp Pav	1.9400	26000.	88	48050	No
42	GOM_NL__2PRFIN20110509_033738_000000533102_00191_48050_5461.N1	09-MAY-2011 03:37:38	Straylight	52.500	141	Bet Ara	2.8400	4600.0	105	48050	No

279	GOM_NL__2PRFIN20110509_225111_000000453102_00202_48061_5891.N1	09-MAY-2011 22:51:11	Bright	45.000	89	5Alp Cep	2.4510	8000.0	90	48061	No
280	GOM_NL__2PRFIN20110509_225415_000000543102_00202_48061_5892.N1	09-MAY-2011 22:54:15	Bright	54.000	74	11Bet Cas	2.2680	6600.0	108	48061	No
281	GOM_NL__2PRFIN20110509_230409_000000523102_00202_48061_5893.N1	09-MAY-2011 23:04:09	Twilight	51.500	93	53Bet Peg	2.5200	3100.0	103	48061	No
282	GOM_NL__2PRFIN20110509_230830_000000503102_00202_48061_5894.N1	09-MAY-2011 23:08:30	Dark	49.500	90	54Alp Peg	2.4870	11000.	99	48061	No
283	GOM_NL__2PRFIN20110509_232146_000000453102_00202_48061_5895.N1	09-MAY-2011 23:21:46	Dark	45.000	18	24Alp PsA	1.1660	9700.0	90	48061	No
284	GOM_NL__2PRFIN20110509_232735_000000463102_00202_48061_5896.N1	09-MAY-2011 23:27:35	Dark	46.000	31	Alp Gru	1.7340	15200.	92	48061	No
285	GOM_NL__2PRFIN20110509_233310_000000423102_00203_48062_5881.N1	09-MAY-2011 23:33:10	Dark	41.500	45	Alp Pav	1.9400	26000.	83	48062	No
286	GOM_NL__2PRFIN20110509_234033_000000423102_00203_48062_5882.N1	09-MAY-2011 23:40:33	Straylight	42.000	141	Bet Ara	2.8400	4600.0	84	48062	No
287	GOM_NL__2PRFIN20110509_234253_000000573102_00203_48062_5883.N1	09-MAY-2011 23:42:53	Straylight	56.500	40	The Sco	1.8590	7100.0	113	48062	No
288	GOM_NL__2PRFIN20110509_234443_000000583102_00203_48062_5884.N1	09-MAY-2011 23:44:43	Straylight	57.500	25	35Lam Sco	1.6200	28000.	115	48062	No
289	GOM_NL__2PRFIN20110509_234720_000000603102_00203_48062_5885.N1	09-MAY-2011 23:47:20	Straylight	59.500	75	26Eps Sco	2.2910	4250.0	119	48062	No
290	GOM_NL__2PRFIN20110509_235037_000000703102_00203_48062_5886.N1	09-MAY-2011 23:50:37	Twilight	70.000	16	21Alp Sco	1.0200	3000.0	140	48062	No
291	GOM_NL__2PRFIN20110509_235229_000000593102_00203_48062_5887.N1	09-MAY-2011 23:52:29	Bright	59.000	80	7Del Sco	2.3160	30000.	118	48062	No
292	GOM_NL__2PRFIN20110509_235519_000000403102_00203_48062_5888.N1	09-MAY-2011 23:55:19	Bright	40.000	122	9Alp2Lib	2.7470	9700.0	80	48062	No
293	GOM_NL__2PRFIN20110509_235717_000000413102_00203_48062_5889.N1	09-MAY-2011 23:57:17	Bright	41.000	104	27Bet Lib	2.6140	13100.	82	48062	No

3. Quality information per product

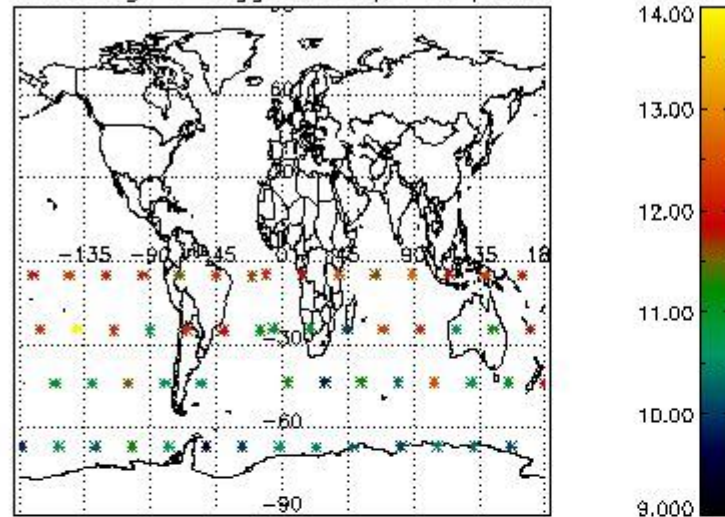
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

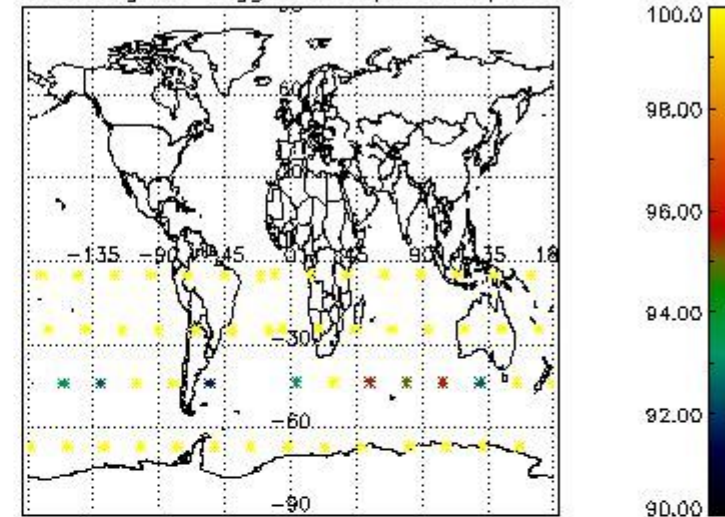


3.2 Plot quality information per product (world map)

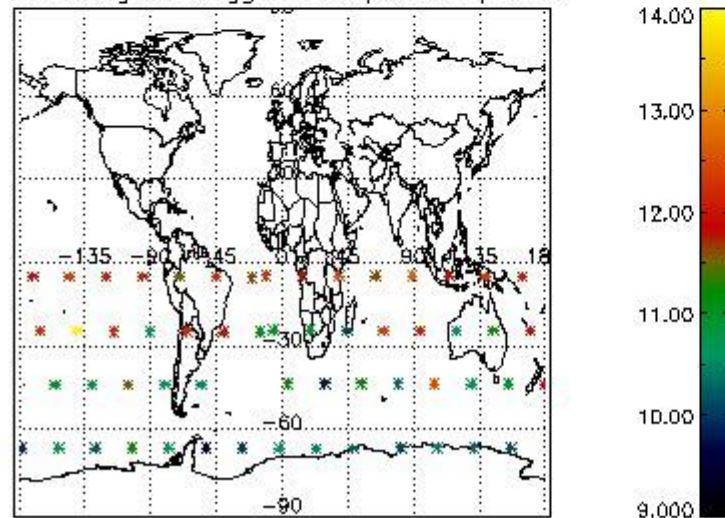
Percentage of flagged data per O3 profile



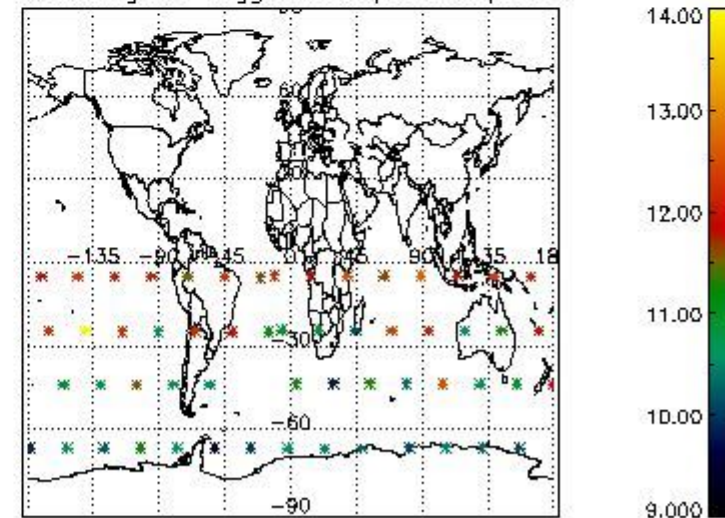
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

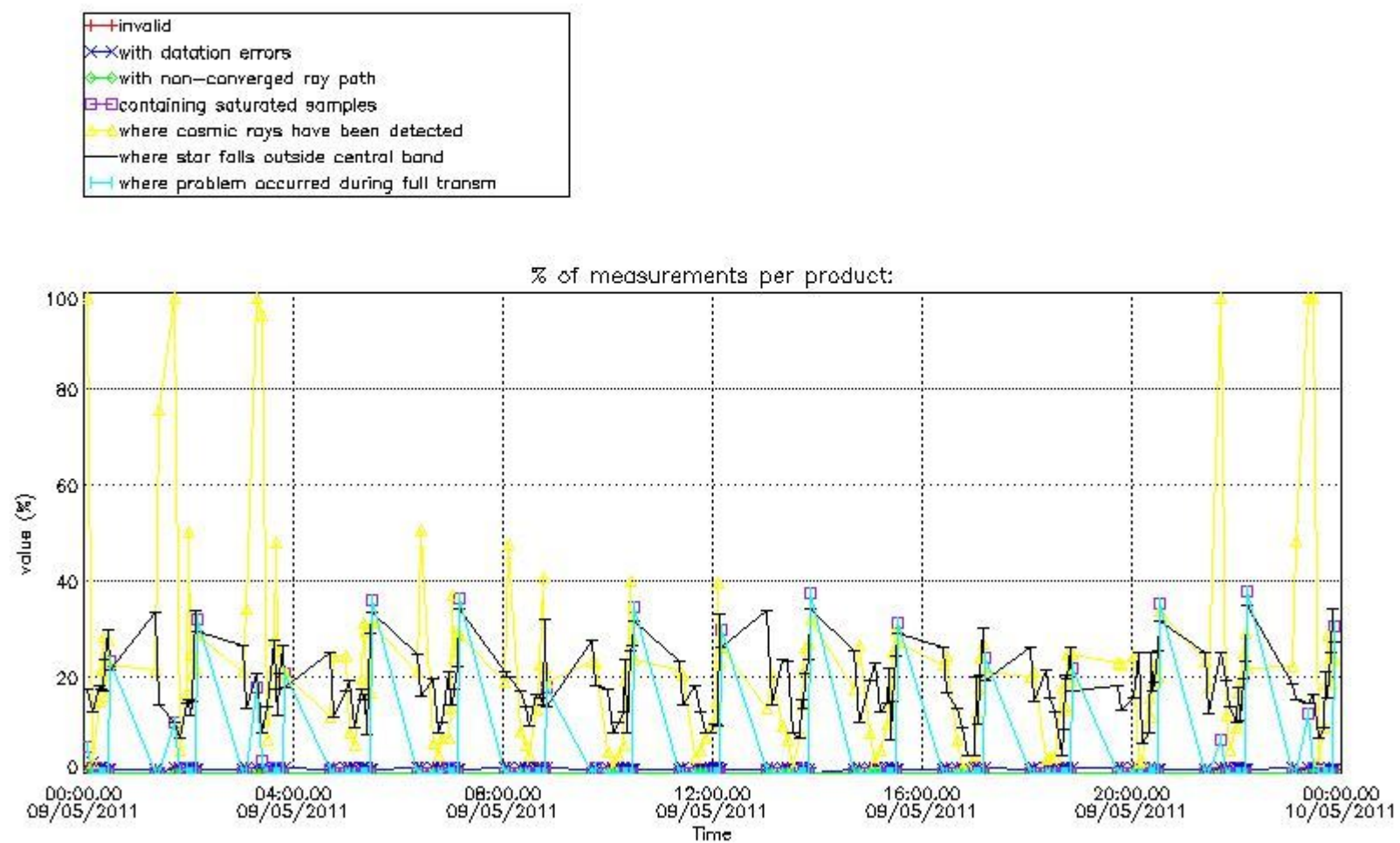


4. Level 1 quality information per product

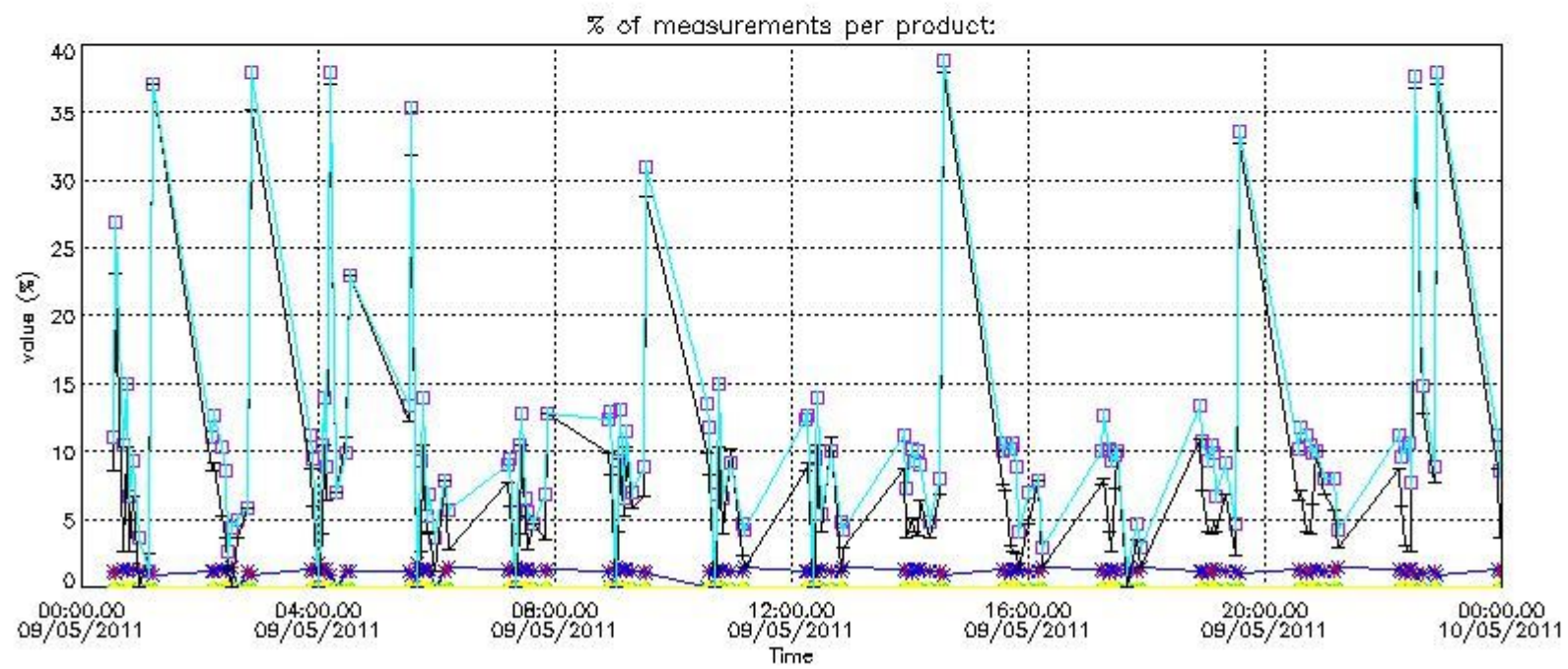
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

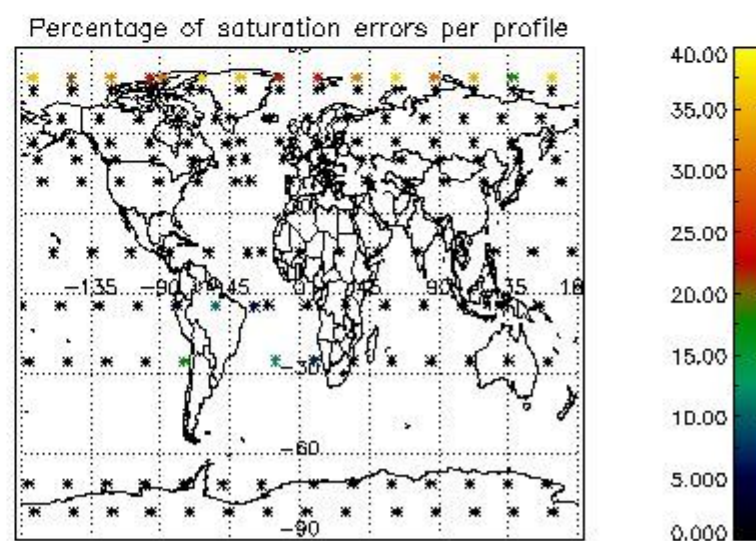
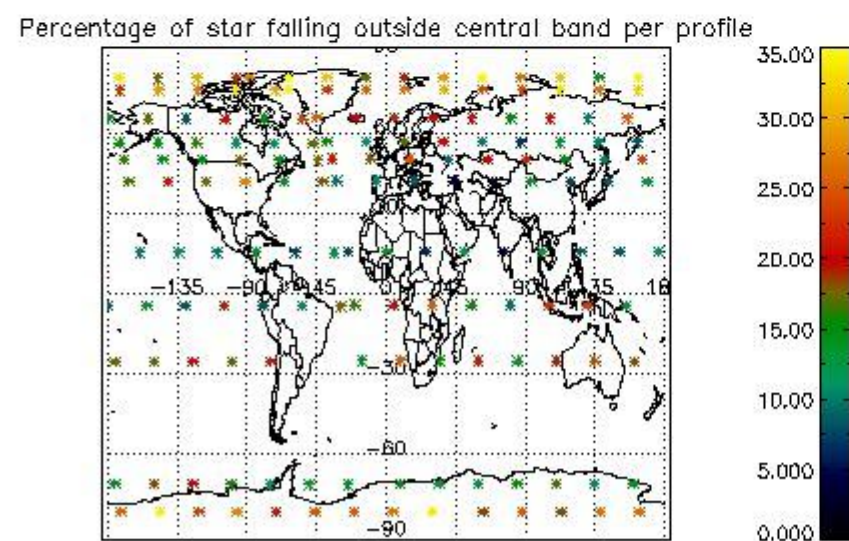
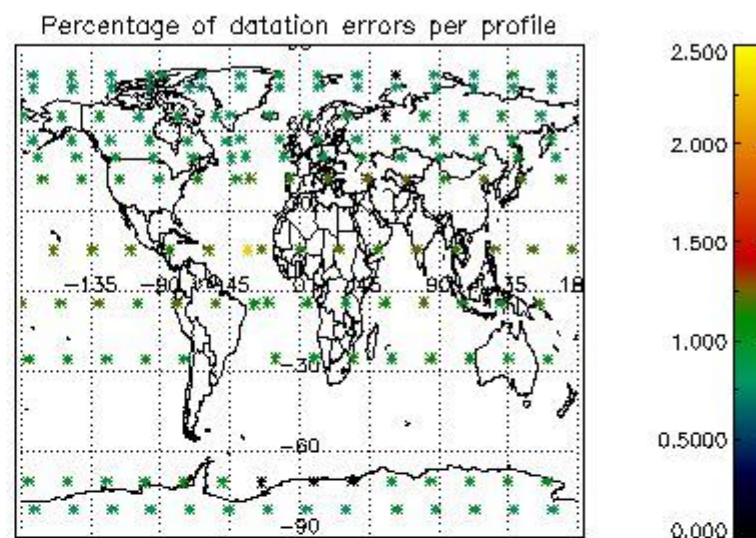
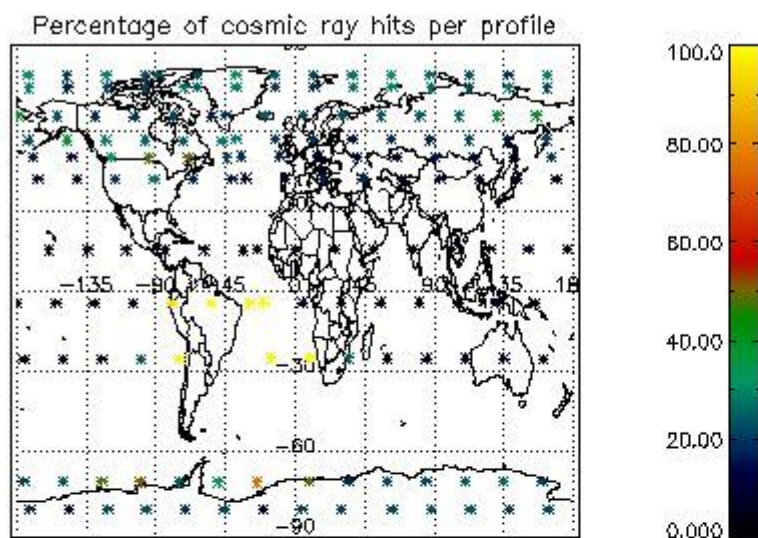


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

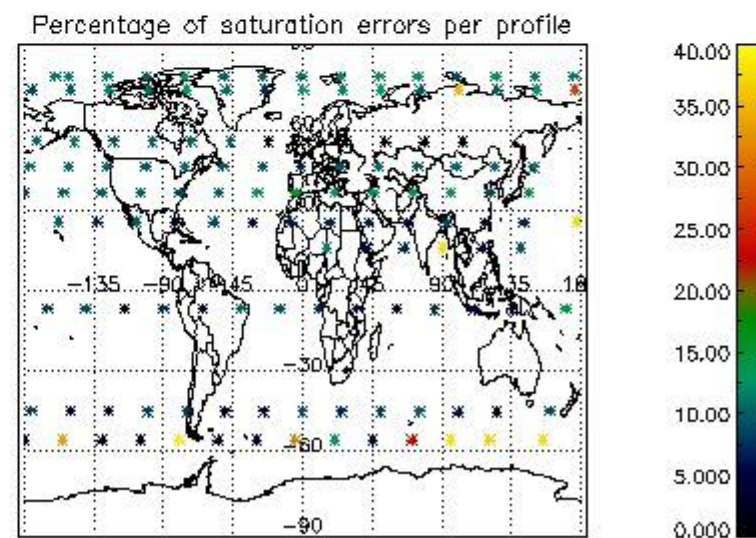
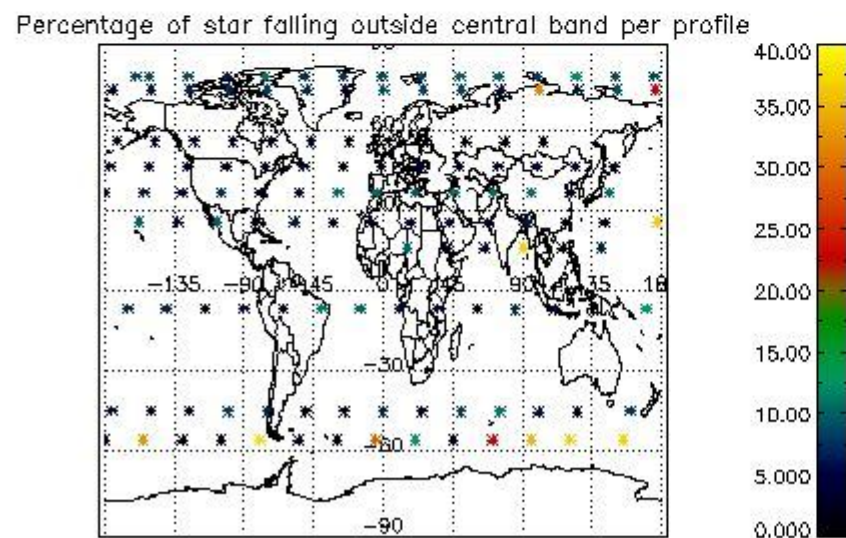
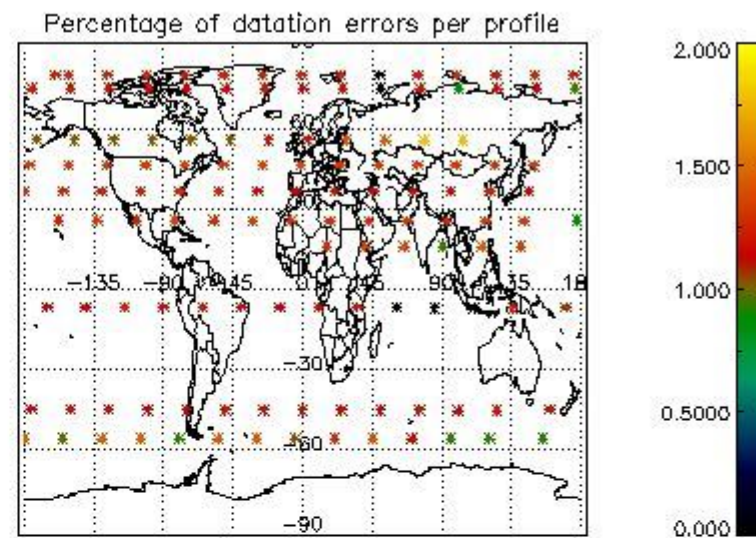
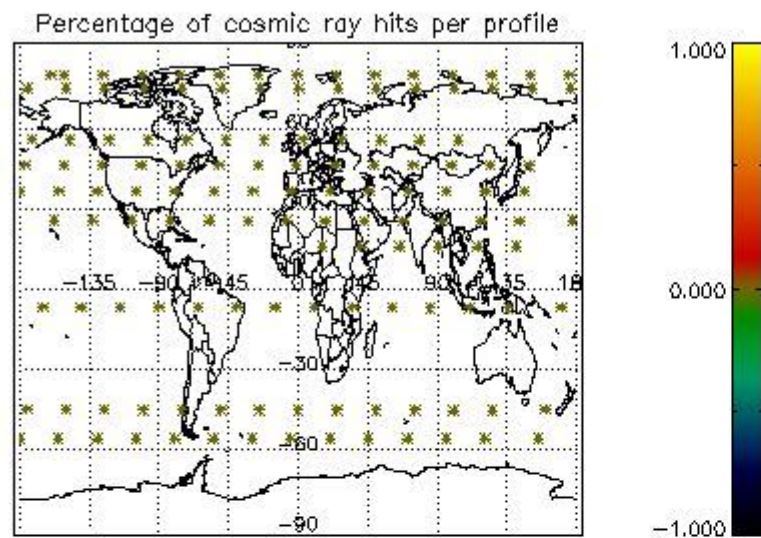


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

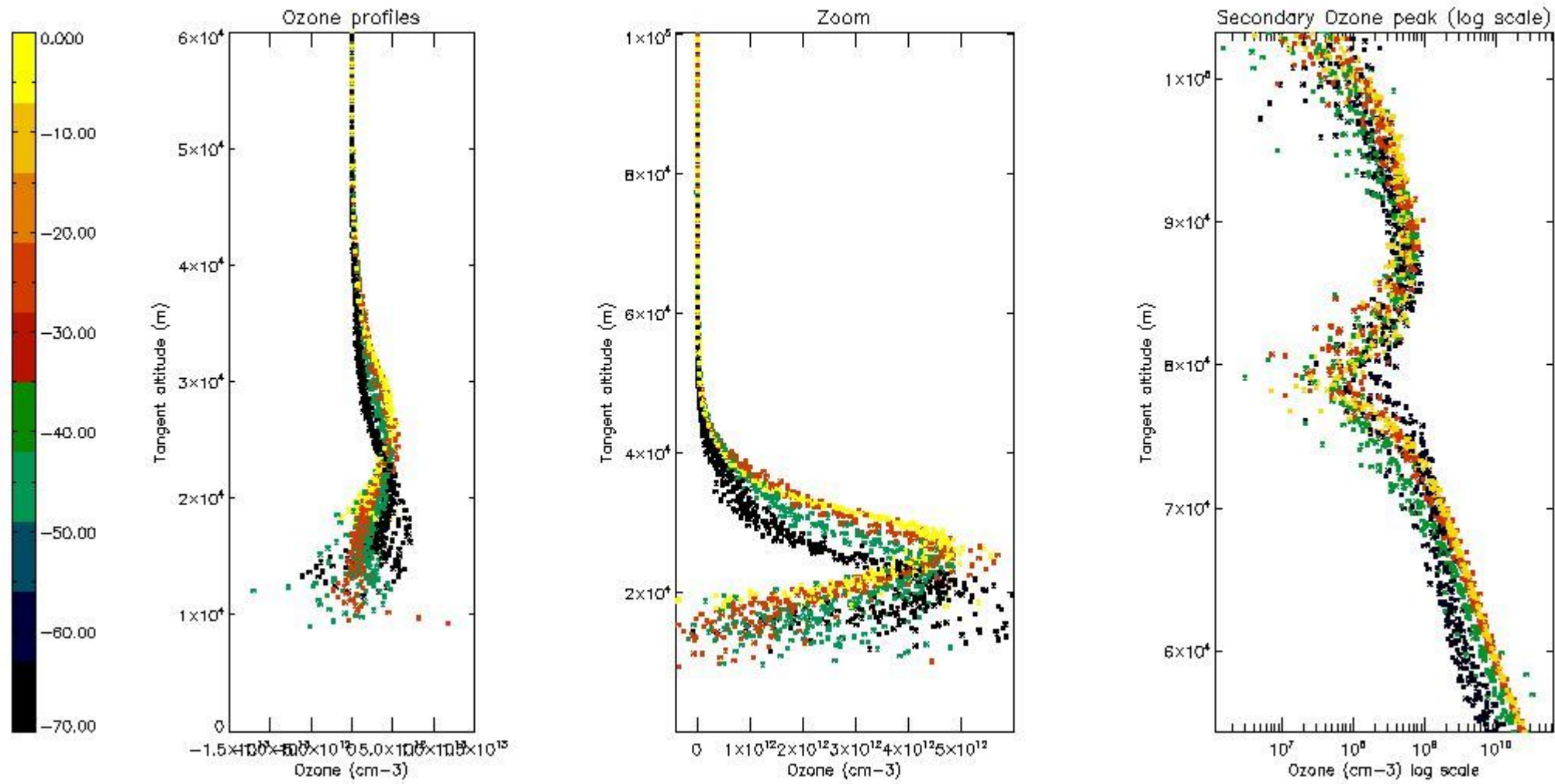
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	19
STD < 20	12

STD < 10	9
STD < 5	5

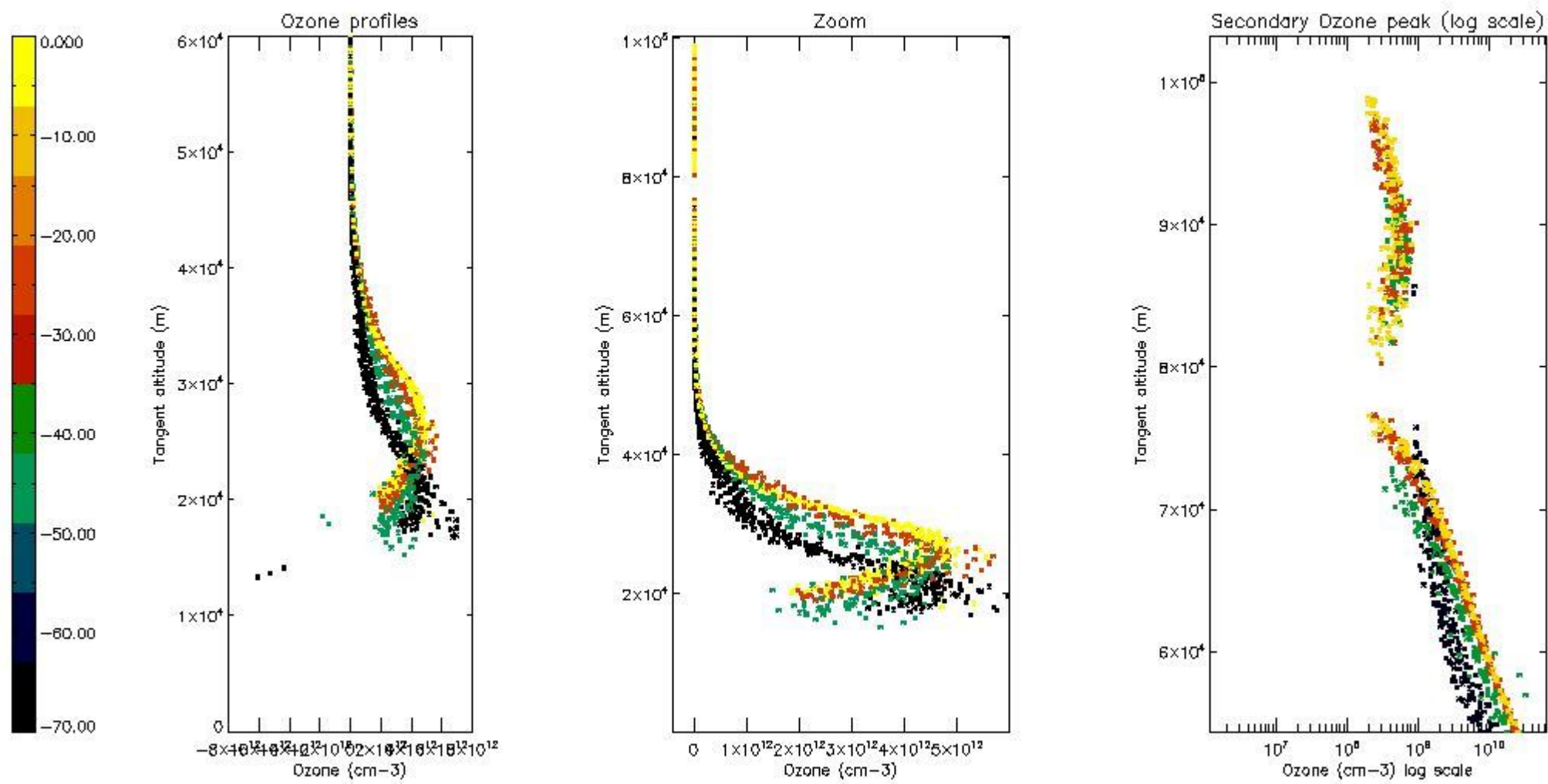
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



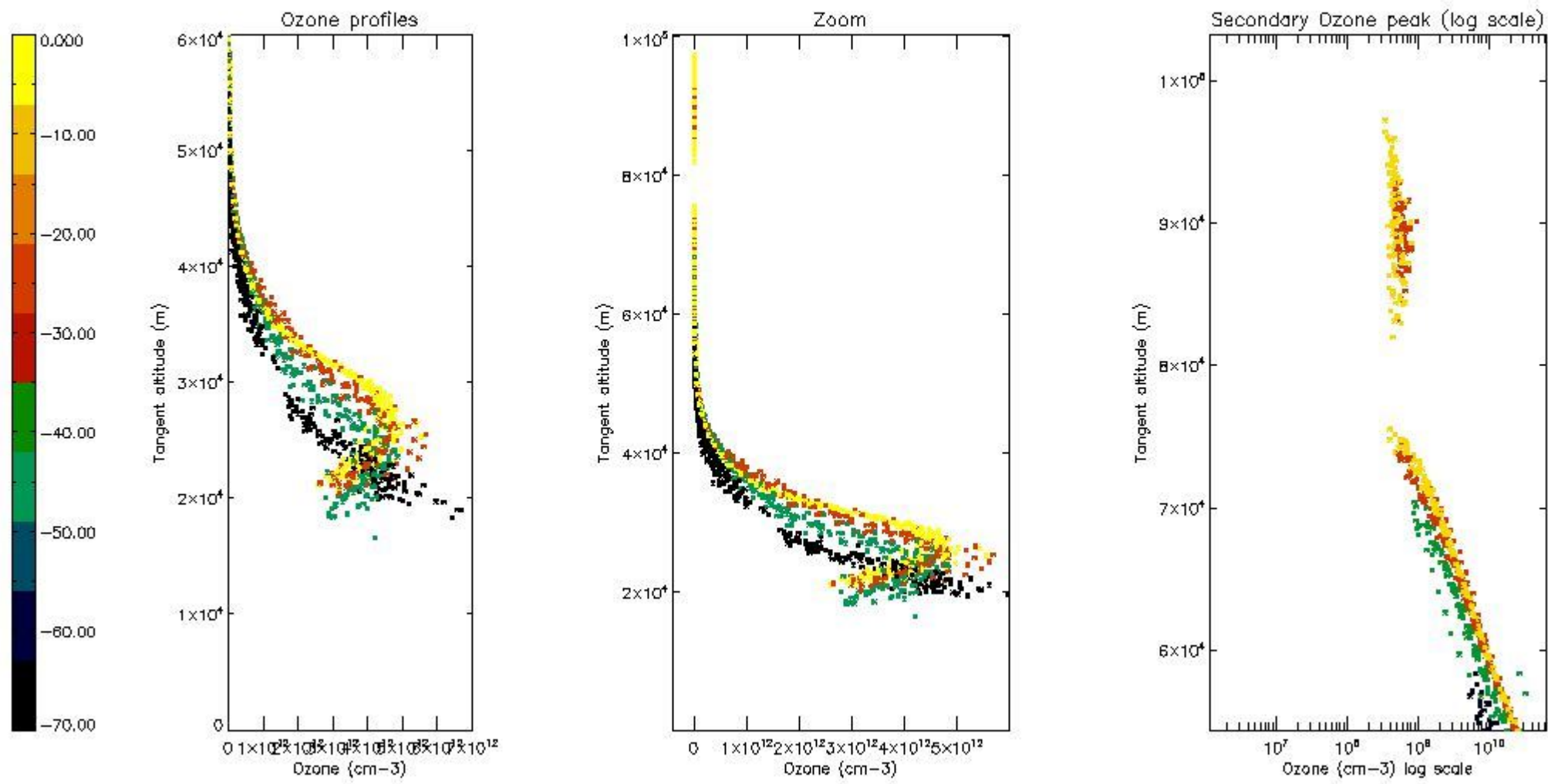
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



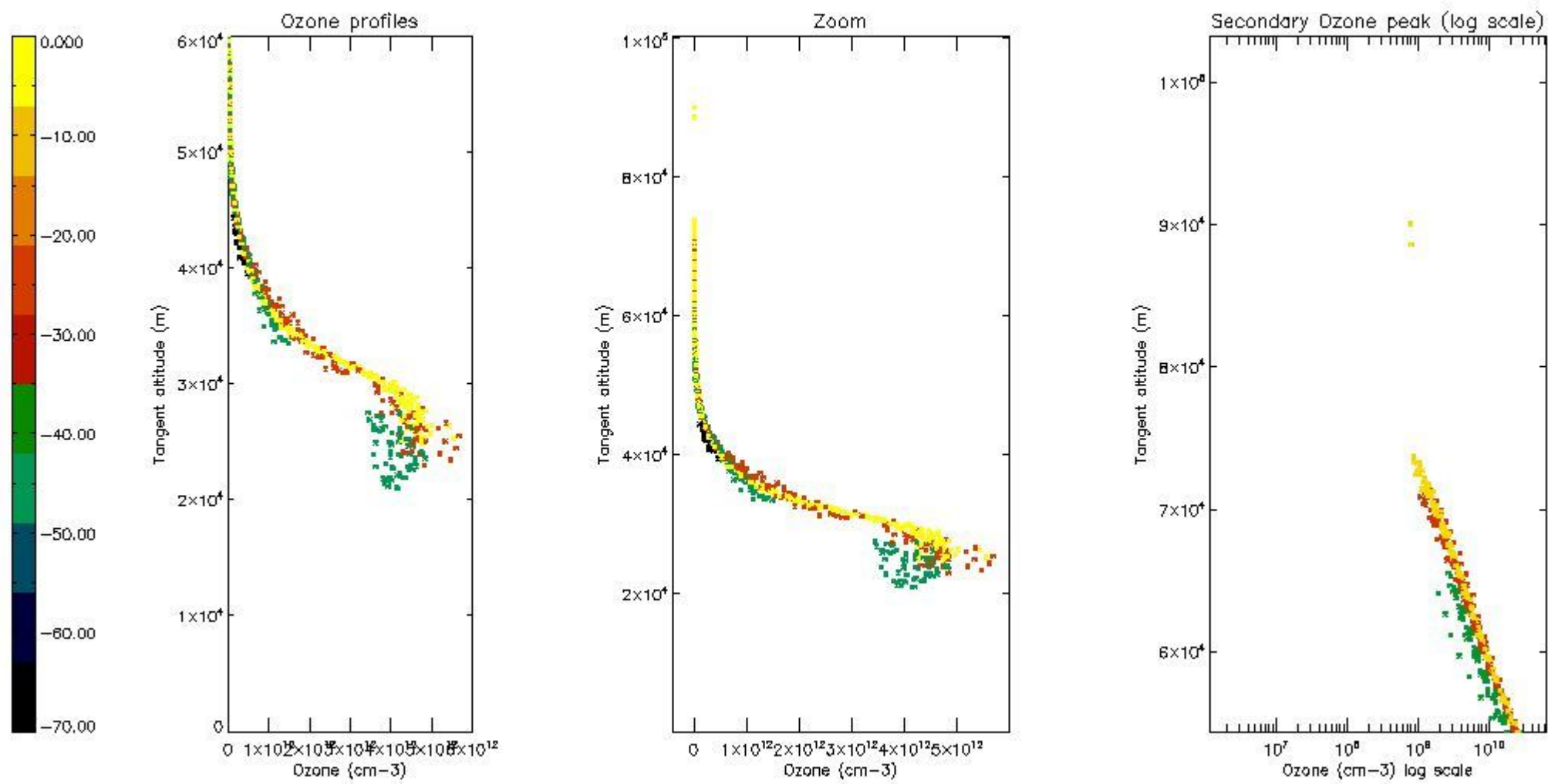
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



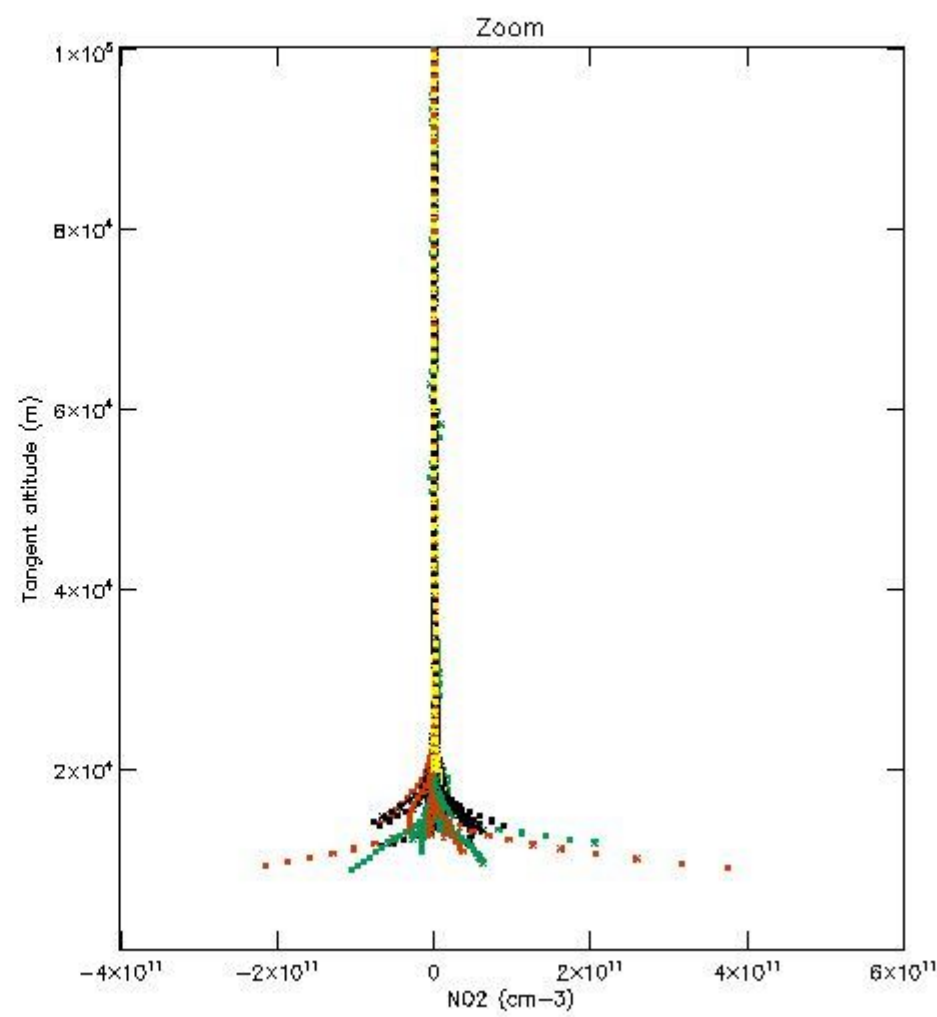
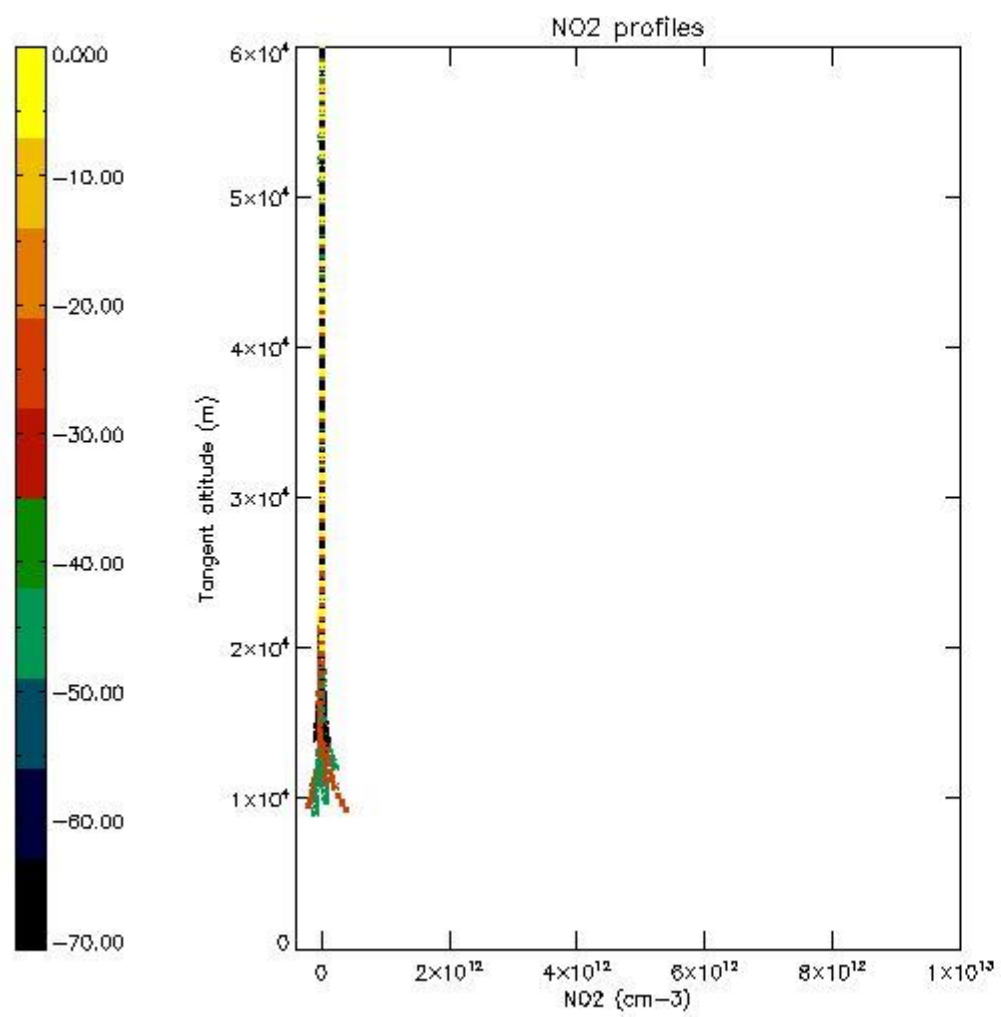
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



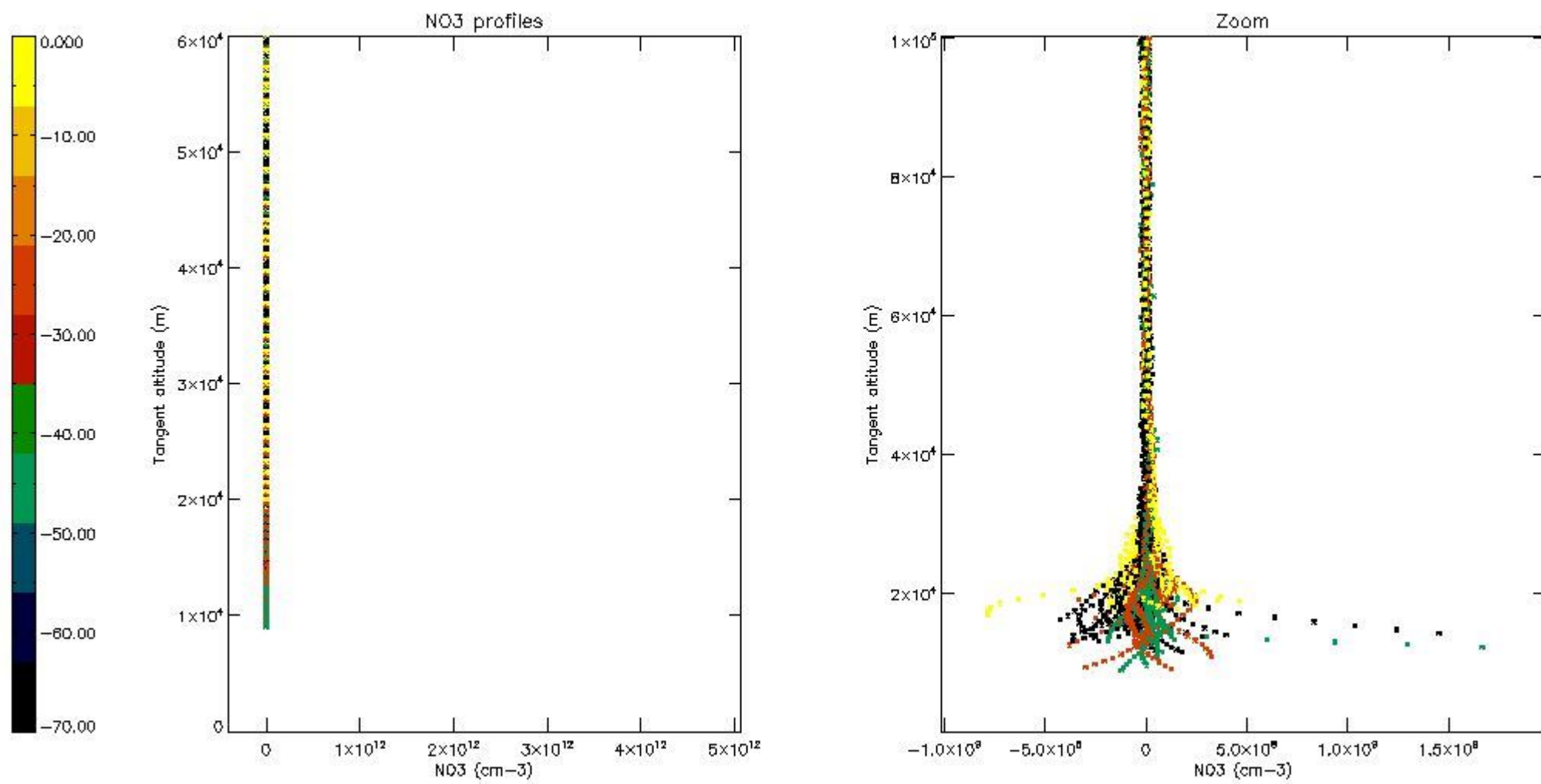
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



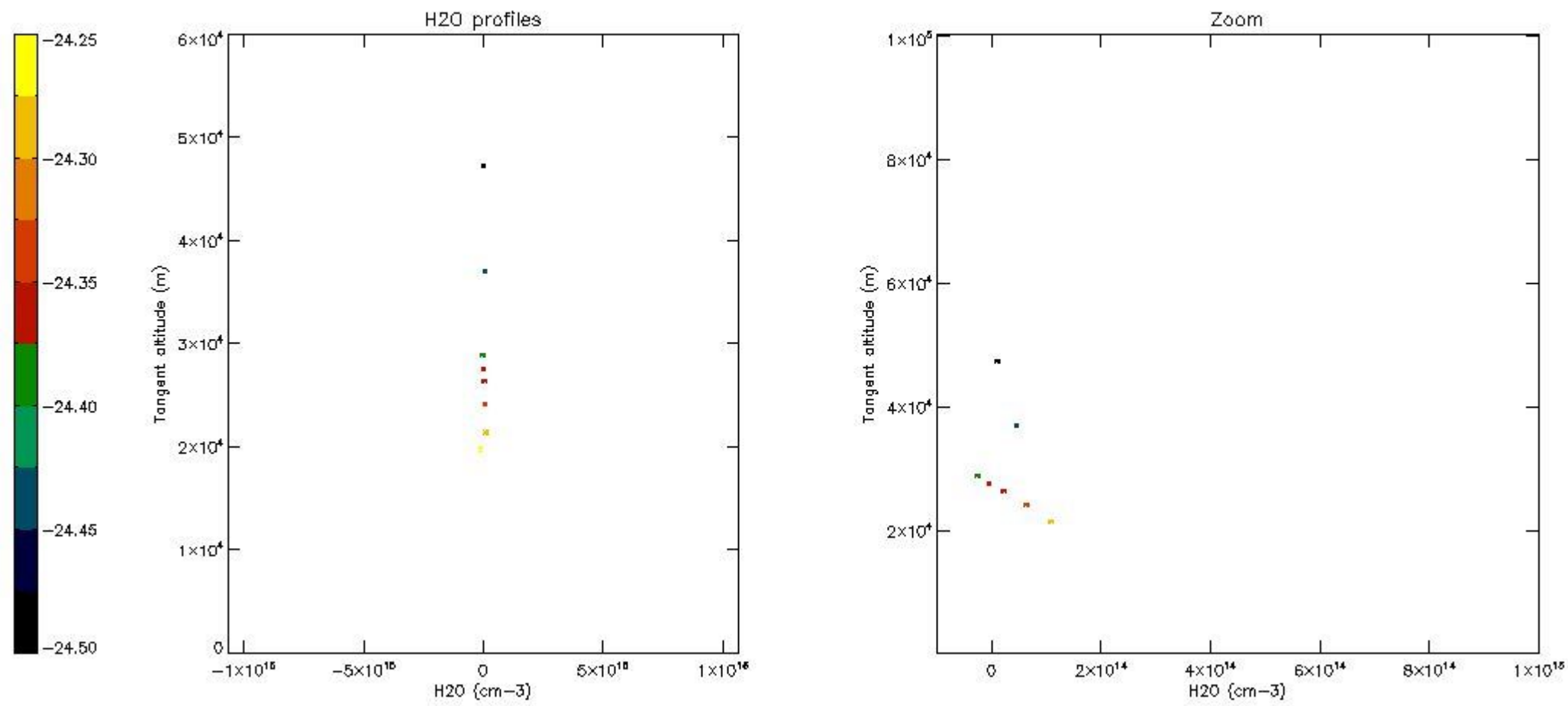
5.7 Plot NO3 profiles for all STD (dark without errors)

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	09-MAY-2011 00:04:10
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	09-MAY-2011 00:04:10
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	09-MAY-2011 00:04:10

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 13:23:47
Data source version	GOMOS/6.01
Start time of products	09-05-2011 (09MAY2011 00:00:00)
Stop time of products	10-05-2011 (10MAY2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	293
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

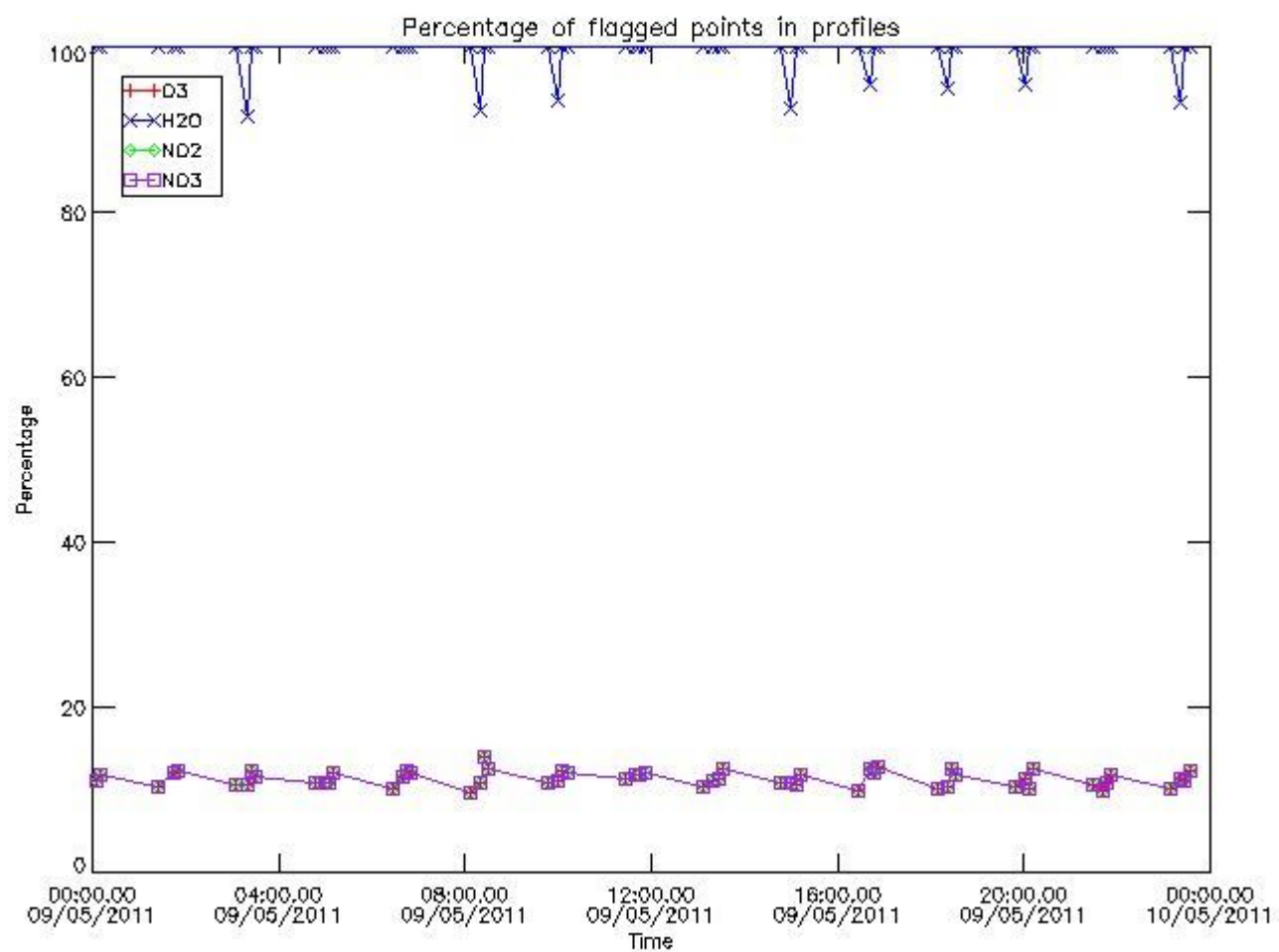
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110509_000410_000000463102_00188_48047_5425.N1	09-MAY-2011 00:04:10	Dark	45.500	31	Alp Gru	1.7340	15200.	91	48047	No
2	GOM_NL__2PRFIN20110509_000944_000000443102_00189_48048_5441.N1	09-MAY-2011 00:09:44	Dark	43.500	45	Alp Pav	1.9400	26000.	87	48048	No
3	GOM_NL__2PRFIN20110509_001709_000000473102_00189_48048_5442.N1	09-MAY-2011 00:17:09	Straylight	47.000	141	Bet Ara	2.8400	4600.0	94	48048	No
4	GOM_NL__2PRFIN20110509_001927_000000543102_00189_48048_5443.N1	09-MAY-2011 00:19:27	Straylight	54.000	40	The Sco	1.8590	7100.0	108	48048	No
5	GOM_NL__2PRFIN20110509_002117_000000593102_00189_48048_5444.N1	09-MAY-2011 00:21:17	Straylight	58.500	25	35Lam Sco	1.6200	28000.	117	48048	No
6	GOM_NL__2PRFIN20110509_002356_000000603102_00189_48048_5445.N1	09-MAY-2011 00:23:56	Straylight	59.500	75	26Eps Sco	2.2910	4250.0	119	48048	No
7	GOM_NL__2PRFIN20110509_002716_000000673102_00189_48048_5446.N1	09-MAY-2011 00:27:16	Twilight_stray	67.000	16	21Alp Sco	1.0200	3000.0	134	48048	No
8	GOM_NL__2PRFIN20110509_002910_000000563102_00189_48048_5447.N1	09-MAY-2011 00:29:10	Bright	55.500	80	7Del Sco	2.3160	30000.	111	48048	No
9	GOM_NL__2PRFIN20110509_003201_000000413102_00189_48048_5448.N1	09-MAY-2011 00:32:01	Bright	40.500	122	9Alp2Lib	2.7470	9700.0	81	48048	No
10	GOM_NL__2PRFIN20110509_003401_000000523102_00189_48048_5449.N1	09-MAY-2011 00:34:01	Bright	52.000	104	27Bet Lib	2.6140	13100.	104	48048	No
11	GOM_NL__2PRFIN20110509_004235_000000383102_00189_48048_5450.N1	09-MAY-2011 00:42:35	Bright	38.000	3	16Alp Boo	-0.050000	4250.0	76	48048	No
12	GOM_NL__2PRFIN20110509_004518_000000443102_00189_48048_5451.N1	09-MAY-2011 00:45:18	Bright	43.500	83		2.3780	11000.	87	48048	No
13	GOM_NL__2PRFIN20110509_004824_000000383102_00189_48048_5452.N1	09-MAY-2011 00:48:24	Bright	37.500	180	27Gam Boo	3.0400	8000.0	75	48048	No
14	GOM_NL__2PRFIN20110509_005103_000000383102_00189_48048_5453.N1	09-MAY-2011 00:51:03	Bright	37.500	39	85Eta UMa	1.8540	24000.	75	48048	No
15	GOM_NL__2PRFIN20110509_005728_000000413102_00189_48048_5454.N1	09-MAY-2011 00:57:28	Bright	40.500	119	14Eta Dra	2.7270	4700.0	81	48048	No
16	GOM_NL__2PRFIN20110509_010814_000000423102_00189_48048_5455.N1	09-MAY-2011 01:08:14	Bright	41.500	89	5Alp Cep	2.4510	8000.0	83	48048	No
17	GOM_NL__2PRFIN20110509_011113_000000543102_00189_48048_5456.N1	09-MAY-2011 01:11:13	Bright	54.000	74	11Bet Cas	2.2680	6600.0	108	48048	No
18	GOM_NL__2PRFIN20110509_012105_000000633102_00189_48048_5457.N1	09-MAY-2011 01:21:05	Twilight_stray	62.500	93	53Bet Peg	2.5200	3100.0	125	48048	No
19	GOM_NL__2PRFIN20110509_012523_000000493102_00189_48048_5458.N1	09-MAY-2011 01:25:23	Dark	49.000	90	54Alp Peg	2.4870	11000.	98	48048	No
20	GOM_NL__2PRFIN20110509_014425_000000433102_00189_48048_5459.N1	09-MAY-2011 01:44:25	Dark	42.500	31	Alp Gru	1.7340	15200.	85	48048	No
21	GOM_NL__2PRFIN20110509_014959_000000423102_00190_48049_5445.N1	09-MAY-2011 01:49:59	Dark	41.500	45	Alp Pav	1.9400	26000.	83	48049	No
22	GOM_NL__2PRFIN20110509_015724_000000453102_00190_48049_5446.N1	09-MAY-2011 01:57:24	Straylight	45.000	141	Bet Ara	2.8400	4600.0	90	48049	No
23	GOM_NL__2PRFIN20110509_015941_000000533102_00190_48049_5447.N1	09-MAY-2011 01:59:41	Straylight	53.000	40	The Sco	1.8590	7100.0	106	48049	No
24	GOM_NL__2PRFIN20110509_020132_000000553102_00190_48049_5448.N1	09-MAY-2011 02:01:32	Straylight	55.000	25	35Lam Sco	1.6200	28000.	110	48049	No
25	GOM_NL__2PRFIN20110509_020410_000000543102_00190_48049_5449.N1	09-MAY-2011 02:04:10	Straylight	53.500	75	26Eps Sco	2.2910	4250.0	107	48049	No
26	GOM_NL__2PRFIN20110509_020730_000000713102_00190_48049_5450.N1	09-MAY-2011 02:07:30	Twilight_stray	71.000	16	21Alp Sco	1.0200	3000.0	142	48049	No
27	GOM_NL__2PRFIN20110509_020925_000000633102_00190_48049_5451.N1	09-MAY-2011 02:09:25	Bright	62.500	80	7Del Sco	2.3160	30000.	125	48049	No
28	GOM_NL__2PRFIN20110509_021215_000000413102_00190_48049_5452.N1	09-MAY-2011 02:12:15	Bright	40.500	122	9Alp2Lib	2.7470	9700.0	81	48049	No
29	GOM_NL__2PRFIN20110509_021415_000000443102_00190_48049_5453.N1	09-MAY-2011 02:14:15	Bright	43.500	104	27Bet Lib	2.6140	13100.	87	48049	No
30	GOM_NL__2PRFIN20110509_022248_000000393102_00190_48049_5454.N1	09-MAY-2011 02:22:48	Bright	38.500	3	16Alp Boo	-0.050000	4250.0	77	48049	No
31	GOM_NL__2PRFIN20110509_022532_000000413102_00190_48049_5455.N1	09-MAY-2011 02:25:32	Bright	40.500	83		2.3780	11000.	81	48049	No
32	GOM_NL__2PRFIN20110509_022837_000000383102_00190_48049_5456.N1	09-MAY-2011 02:28:37	Bright	37.500	180	27Gam Boo	3.0400	8000.0	75	48049	No
33	GOM_NL__2PRFIN20110509_023116_000000353102_00190_48049_5457.N1	09-MAY-2011 02:31:16	Bright	34.500	39	85Eta UMa	1.8540	24000.	69	48049	No
34	GOM_NL__2PRFIN20110509_023742_000000413102_00190_48049_5458.N1	09-MAY-2011 02:37:42	Bright	41.000	119	14Eta Dra	2.7270	4700.0	82	48049	No
35	GOM_NL__2PRFIN20110509_024827_000000443102_00190_48049_5459.N1	09-MAY-2011 02:48:27	Bright	43.500	89	5Alp Cep	2.4510	8000.0	87	48049	No
36	GOM_NL__2PRFIN20110509_025127_000000543102_00190_48049_5460.N1	09-MAY-2011 02:51:27	Bright	54.000	74	11Bet Cas	2.2680	6600.0	108	48049	No
37	GOM_NL__2PRFIN20110509_030119_000000573102_00190_48049_5461.N1	09-MAY-2011 03:01:19	Twilight_stray	56.500	93	53Bet Peg	2.5200	3100.0	113	48049	No
38	GOM_NL__2PRFIN20110509_030537_000000493102_00190_48049_5462.N1	09-MAY-2011 03:05:37	Dark	48.500	90	54Alp Peg	2.4870	11000.	97	48049	No
39	GOM_NL__2PRFIN20110509_031850_000000483102_00190_48049_5463.N1	09-MAY-2011 03:18:50	Dark	48.000	18	24Alp PsA	1.1660	9700.0	96	48049	No
40	GOM_NL__2PRFIN20110509_032440_000000423102_00190_48049_5464.N1	09-MAY-2011 03:24:40	Dark	41.500	31	Alp Gru	1.7340	15200.	83	48049	No
41	GOM_NL__2PRFIN20110509_033014_000000443102_00191_48050_5460.N1	09-MAY-2011 03:30:14	Dark	44.000	45	Alp Pav	1.9400	26000.	88	48050	No
42	GOM_NL__2PRFIN20110509_033738_000000533102_00191_48050_5461.N1	09-MAY-2011 03:37:38	Straylight	52.500	141	Bet Ara	2.8400	4600.0	105	48050	No

279	GOM_NL__2PRFIN20110509_225111_000000453102_00202_48061_5891.N1	09-MAY-2011 22:51:11	Bright	45.000	89	5Alp Cep	2.4510	8000.0	90	48061	No
280	GOM_NL__2PRFIN20110509_225415_000000543102_00202_48061_5892.N1	09-MAY-2011 22:54:15	Bright	54.000	74	11Bet Cas	2.2680	6600.0	108	48061	No
281	GOM_NL__2PRFIN20110509_230409_000000523102_00202_48061_5893.N1	09-MAY-2011 23:04:09	Twilight	51.500	93	53Bet Peg	2.5200	3100.0	103	48061	No
282	GOM_NL__2PRFIN20110509_230830_000000503102_00202_48061_5894.N1	09-MAY-2011 23:08:30	Dark	49.500	90	54Alp Peg	2.4870	11000.	99	48061	No
283	GOM_NL__2PRFIN20110509_232146_000000453102_00202_48061_5895.N1	09-MAY-2011 23:21:46	Dark	45.000	18	24Alp PsA	1.1660	9700.0	90	48061	No
284	GOM_NL__2PRFIN20110509_232735_000000463102_00202_48061_5896.N1	09-MAY-2011 23:27:35	Dark	46.000	31	Alp Gru	1.7340	15200.	92	48061	No
285	GOM_NL__2PRFIN20110509_233310_000000423102_00203_48062_5881.N1	09-MAY-2011 23:33:10	Dark	41.500	45	Alp Pav	1.9400	26000.	83	48062	No
286	GOM_NL__2PRFIN20110509_234033_000000423102_00203_48062_5882.N1	09-MAY-2011 23:40:33	Straylight	42.000	141	Bet Ara	2.8400	4600.0	84	48062	No
287	GOM_NL__2PRFIN20110509_234253_000000573102_00203_48062_5883.N1	09-MAY-2011 23:42:53	Straylight	56.500	40	The Sco	1.8590	7100.0	113	48062	No
288	GOM_NL__2PRFIN20110509_234443_000000583102_00203_48062_5884.N1	09-MAY-2011 23:44:43	Straylight	57.500	25	35Lam Sco	1.6200	28000.	115	48062	No
289	GOM_NL__2PRFIN20110509_234720_000000603102_00203_48062_5885.N1	09-MAY-2011 23:47:20	Straylight	59.500	75	26Eps Sco	2.2910	4250.0	119	48062	No
290	GOM_NL__2PRFIN20110509_235037_000000703102_00203_48062_5886.N1	09-MAY-2011 23:50:37	Twilight	70.000	16	21Alp Sco	1.0200	3000.0	140	48062	No
291	GOM_NL__2PRFIN20110509_235229_000000593102_00203_48062_5887.N1	09-MAY-2011 23:52:29	Bright	59.000	80	7Del Sco	2.3160	30000.	118	48062	No
292	GOM_NL__2PRFIN20110509_235519_000000403102_00203_48062_5888.N1	09-MAY-2011 23:55:19	Bright	40.000	122	9Alp2Lib	2.7470	9700.0	80	48062	No
293	GOM_NL__2PRFIN20110509_235717_000000413102_00203_48062_5889.N1	09-MAY-2011 23:57:17	Bright	41.000	104	27Bet Lib	2.6140	13100.	82	48062	No

3. Quality information per product

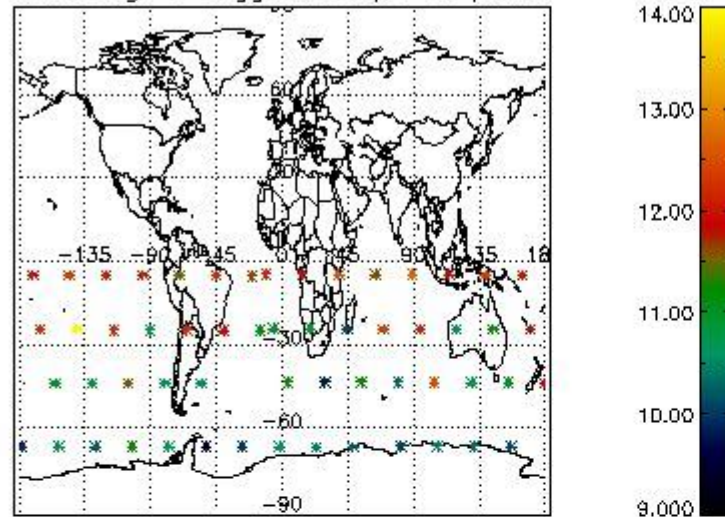
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

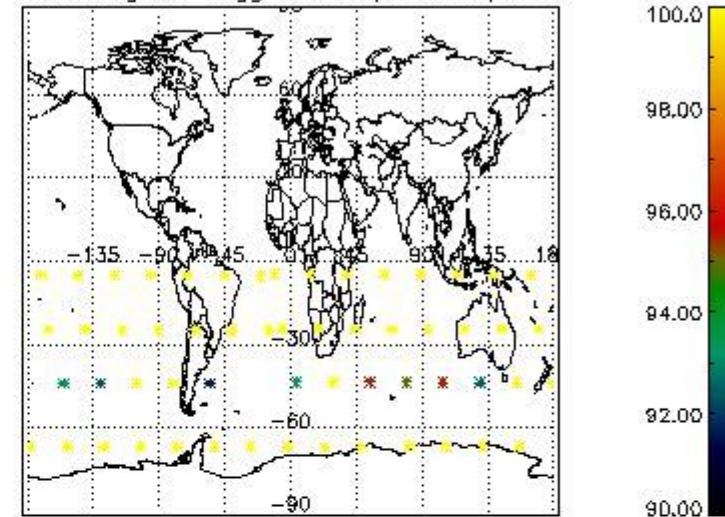


3.2 Plot quality information per product (world map)

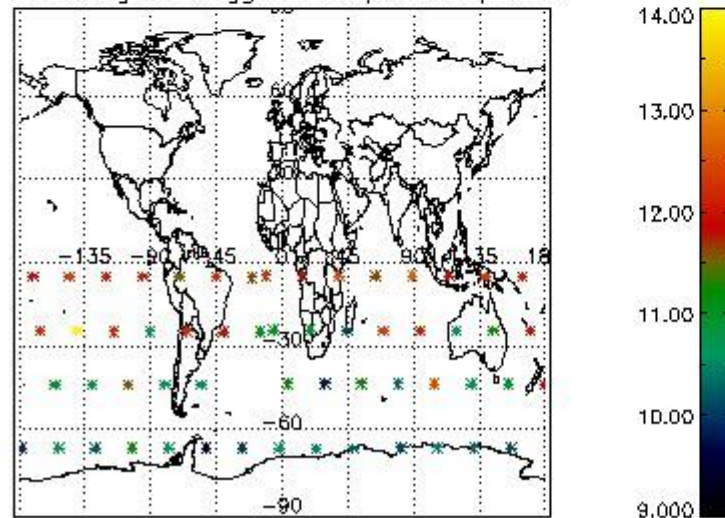
Percentage of flagged data per O3 profile



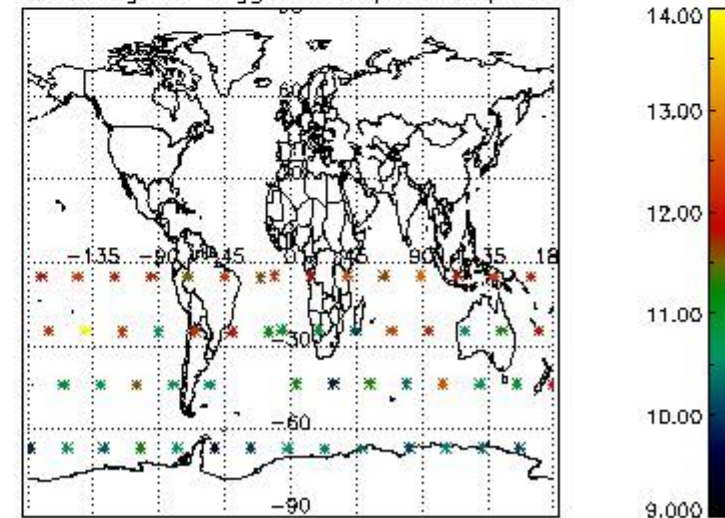
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

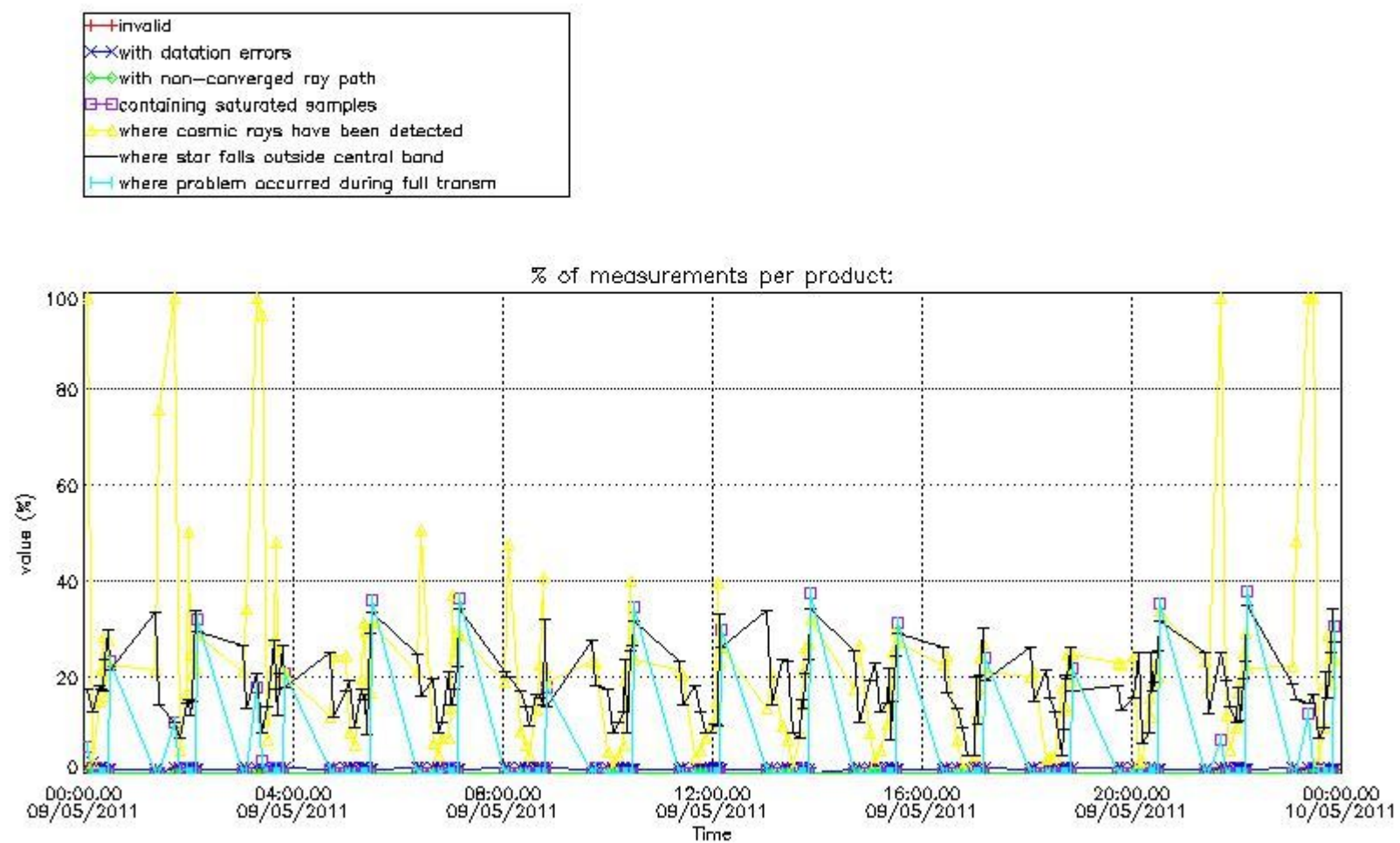


4. Level 1 quality information per product

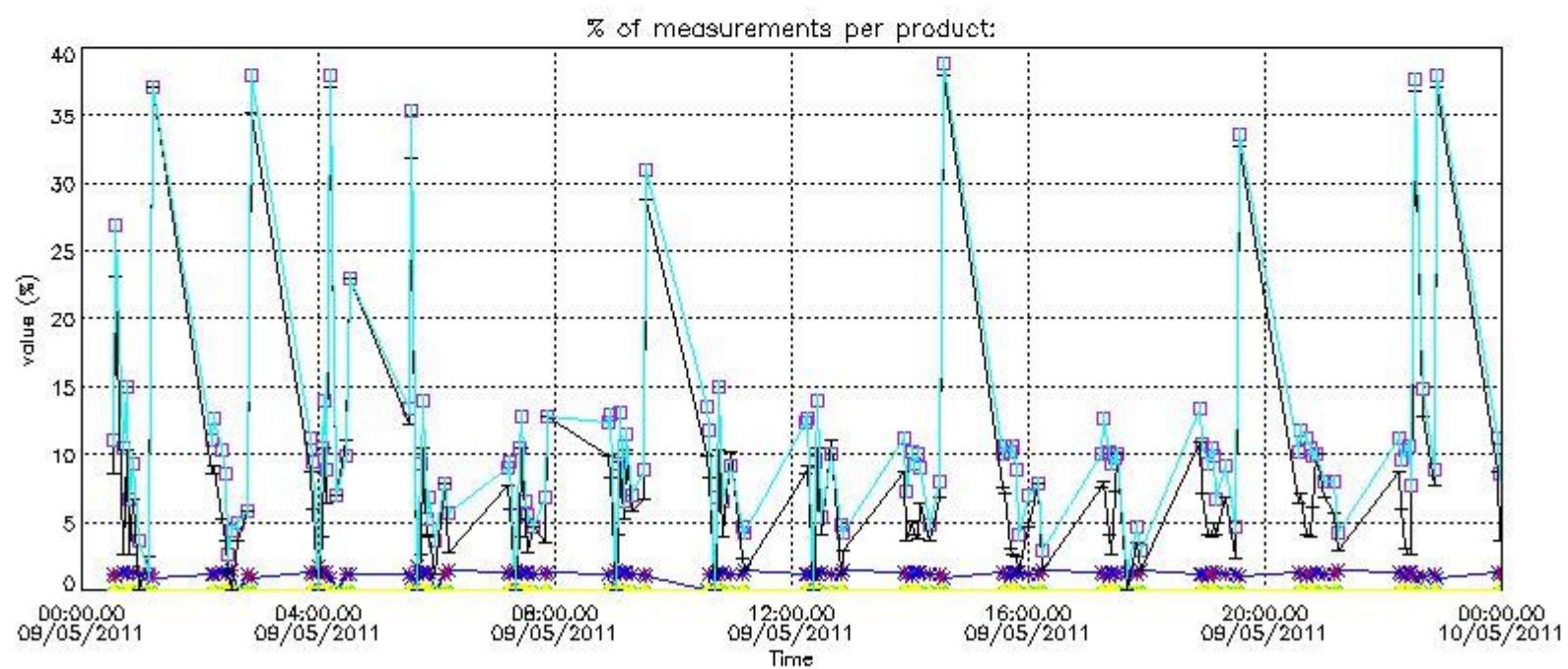
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

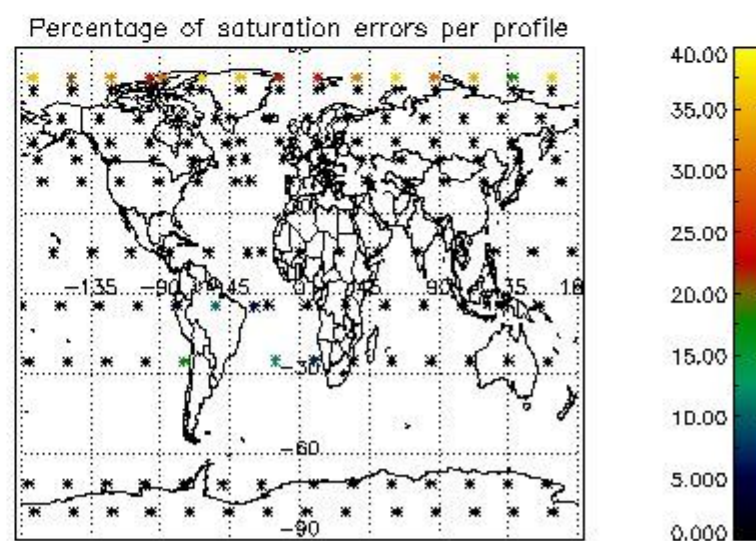
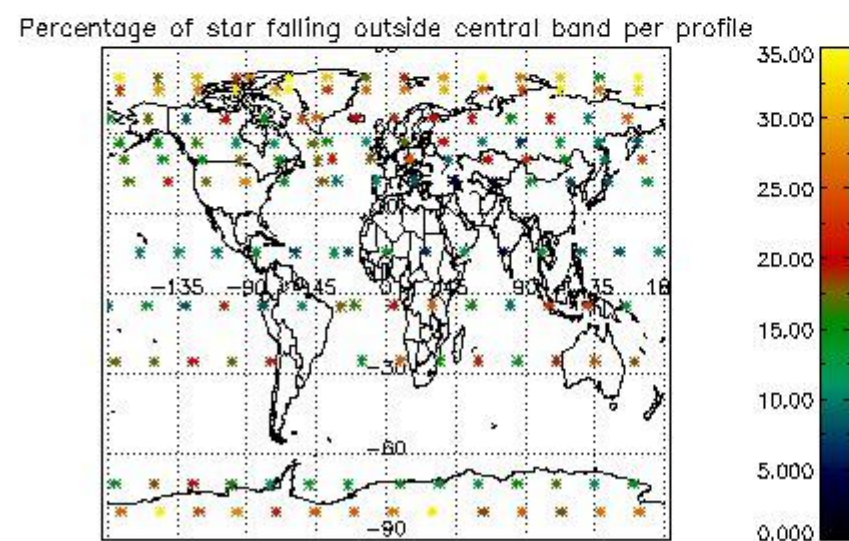
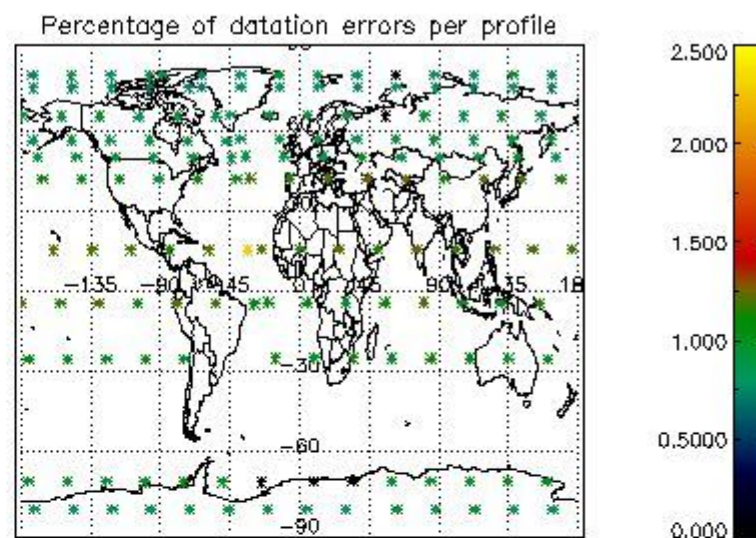
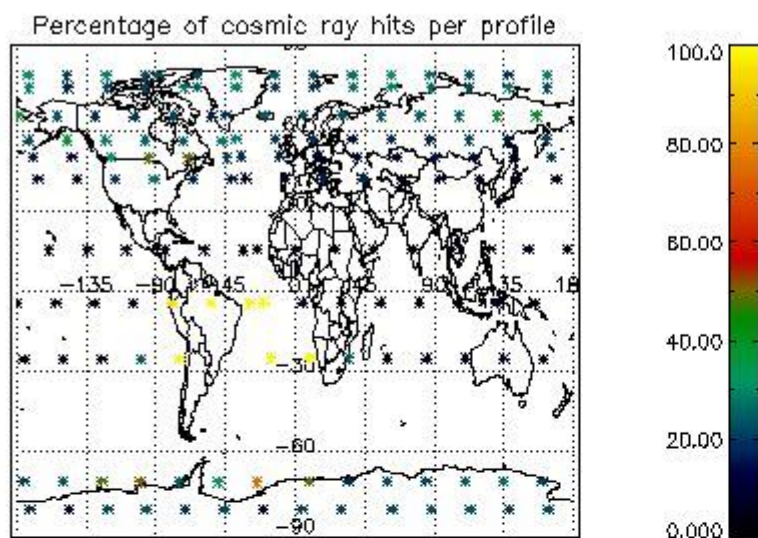


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

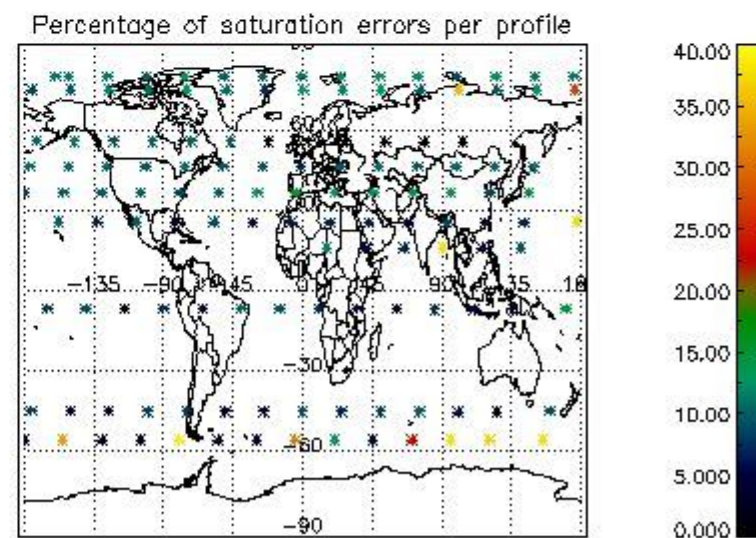
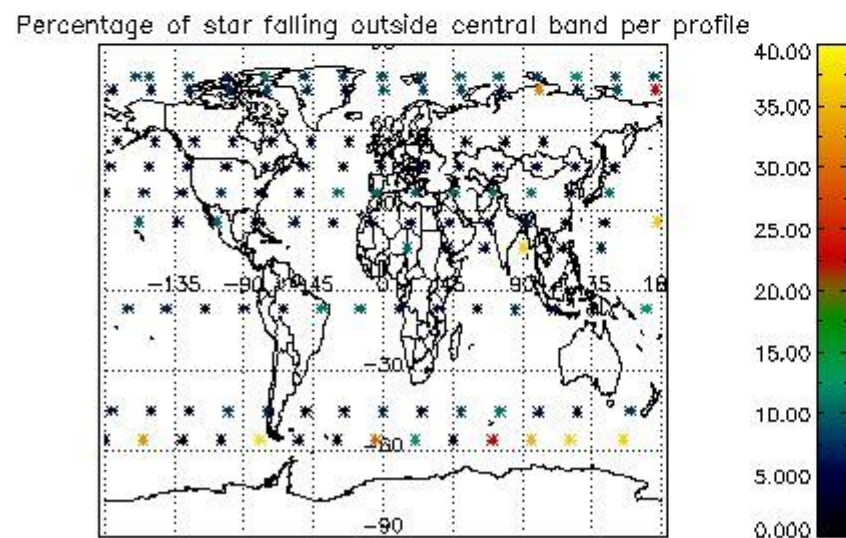
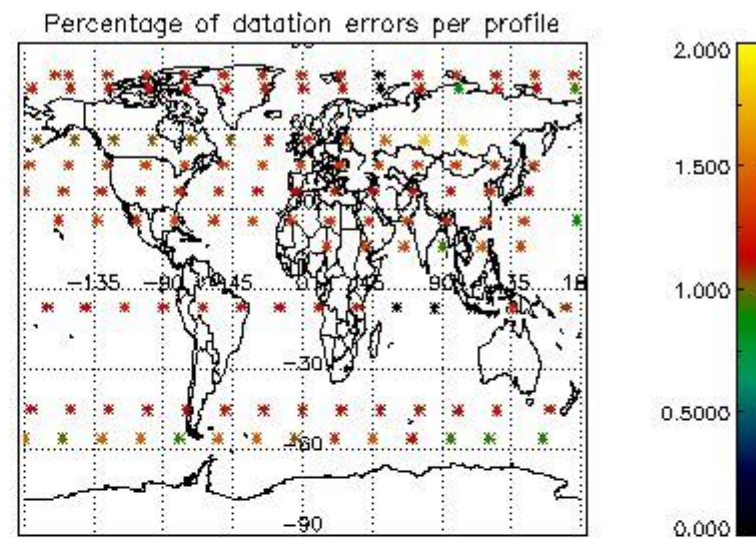
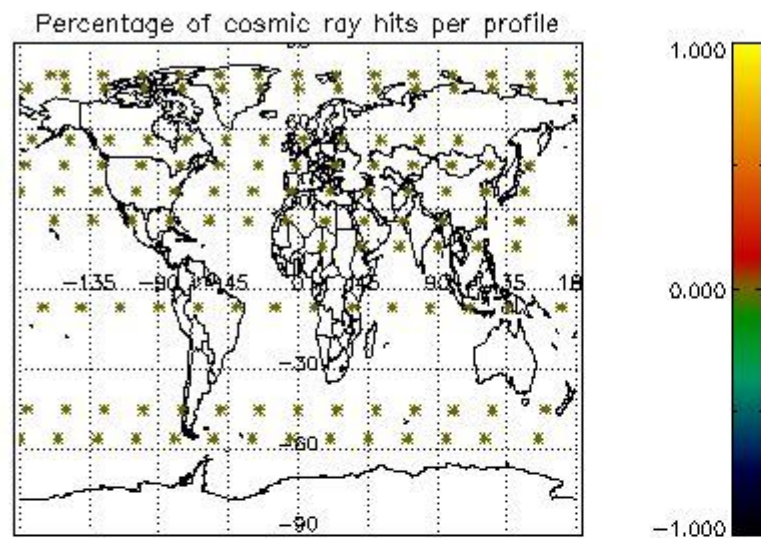


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

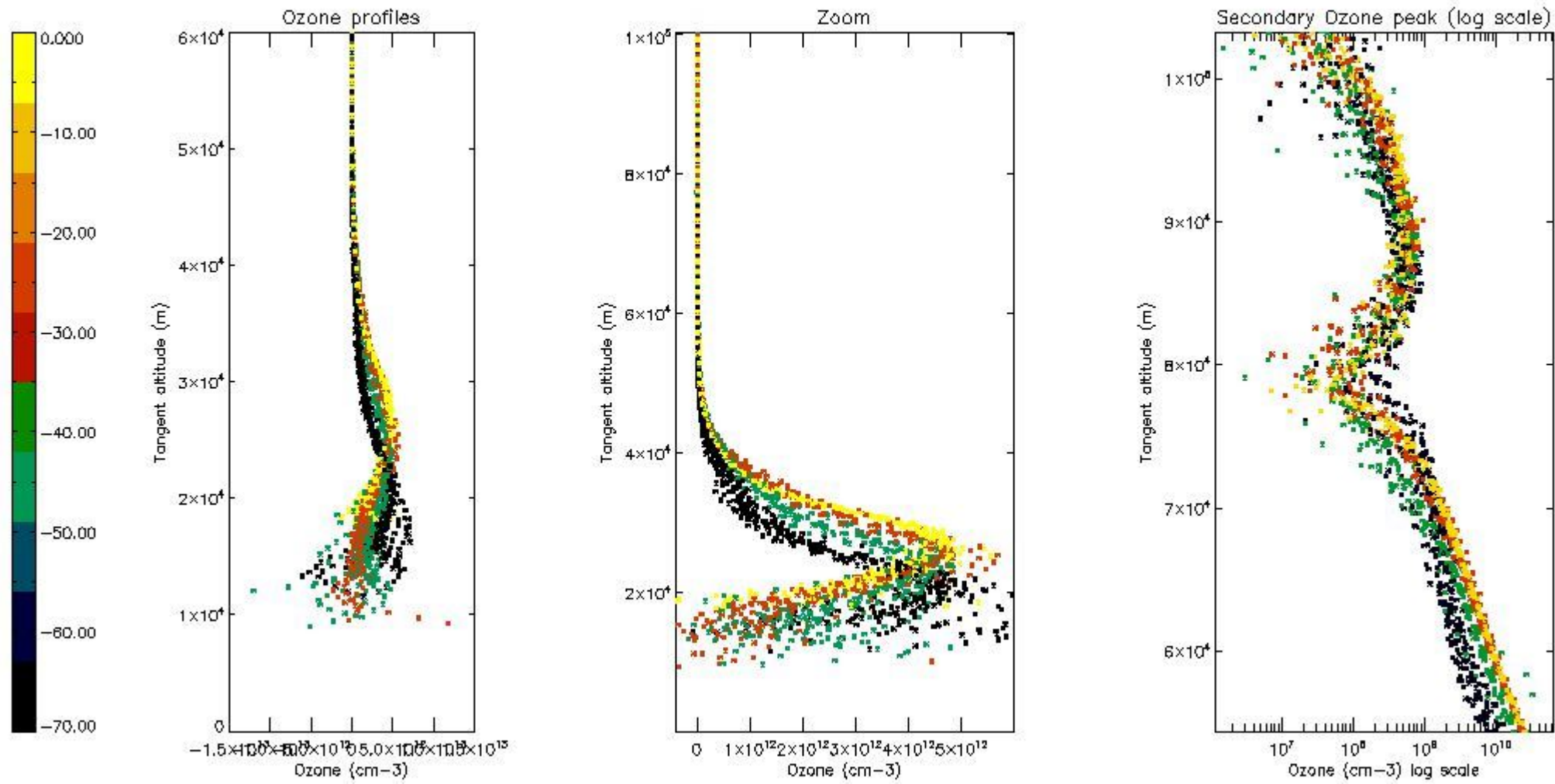
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	19
STD < 20	12

STD < 10	9
STD < 5	5

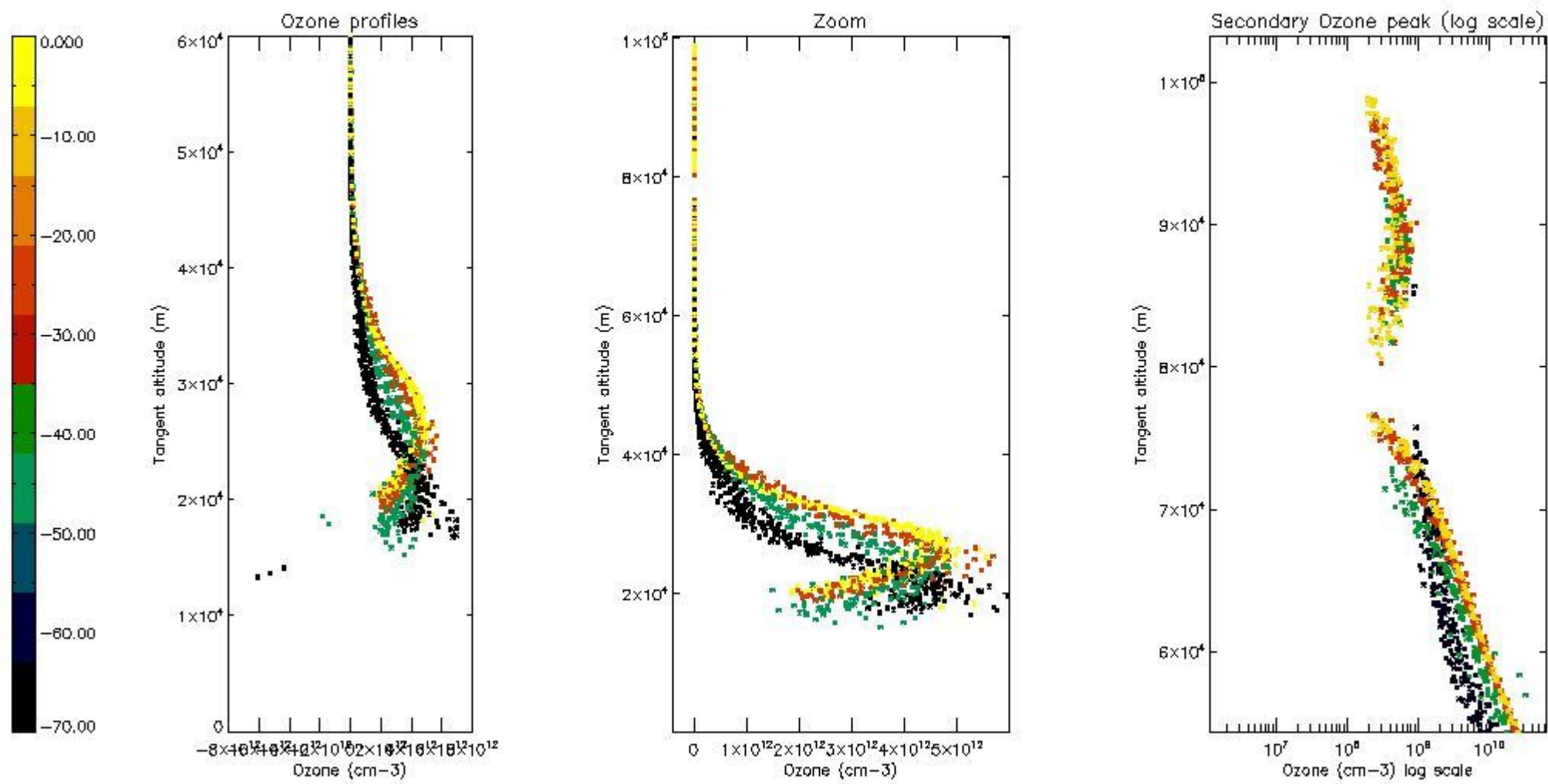
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



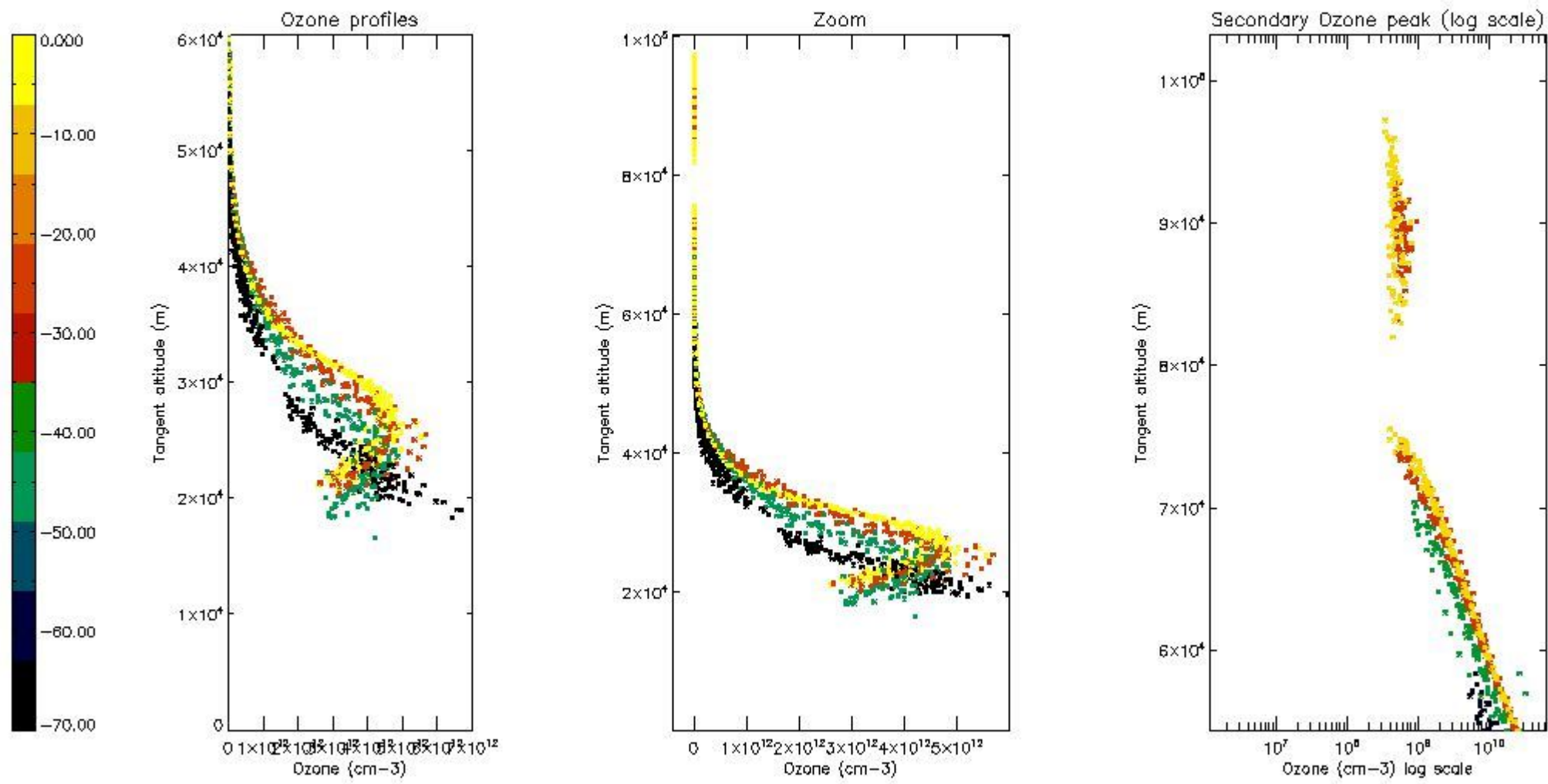
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



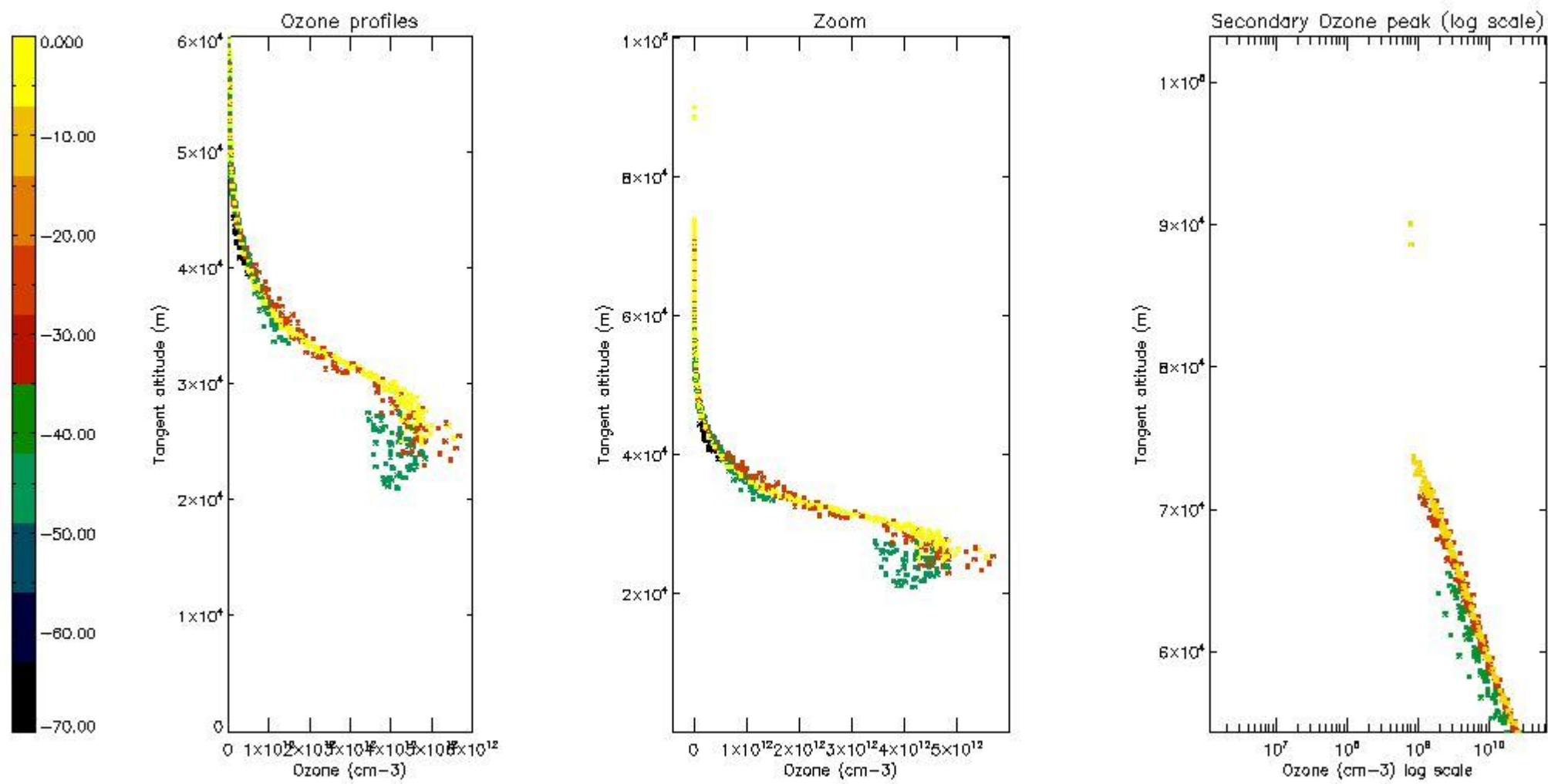
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



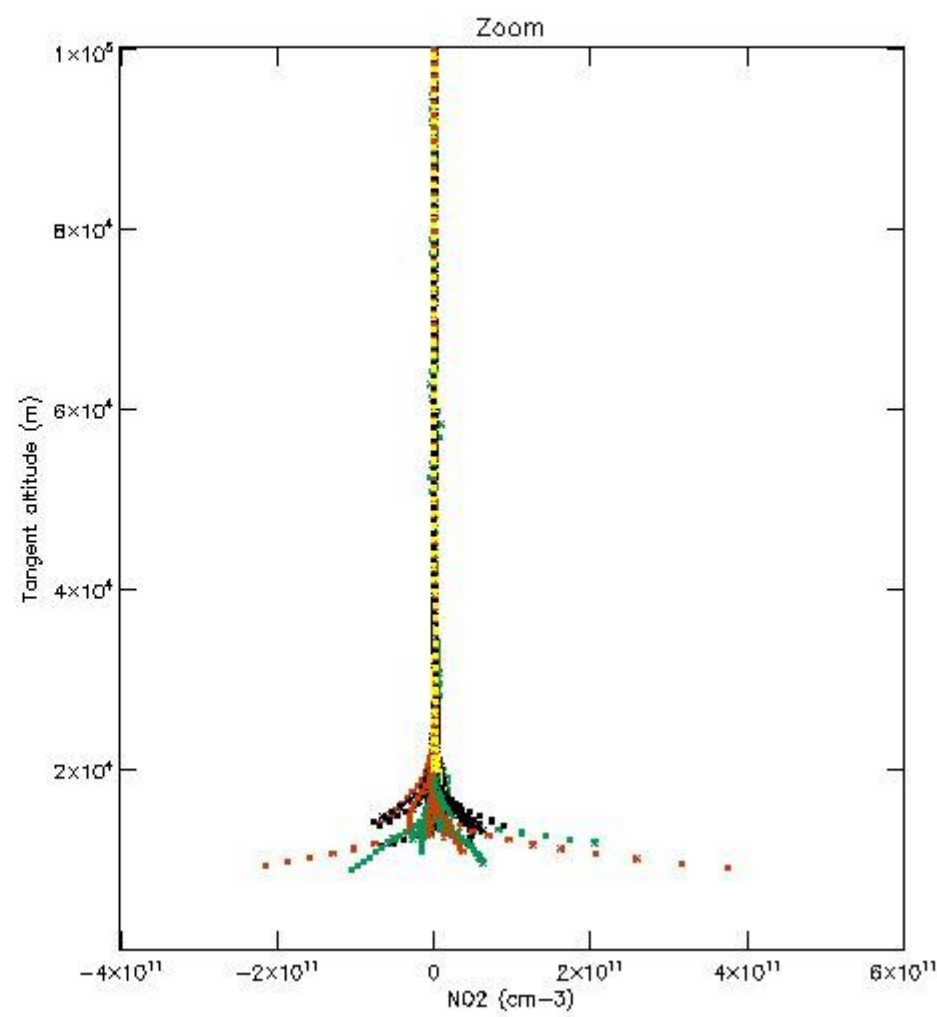
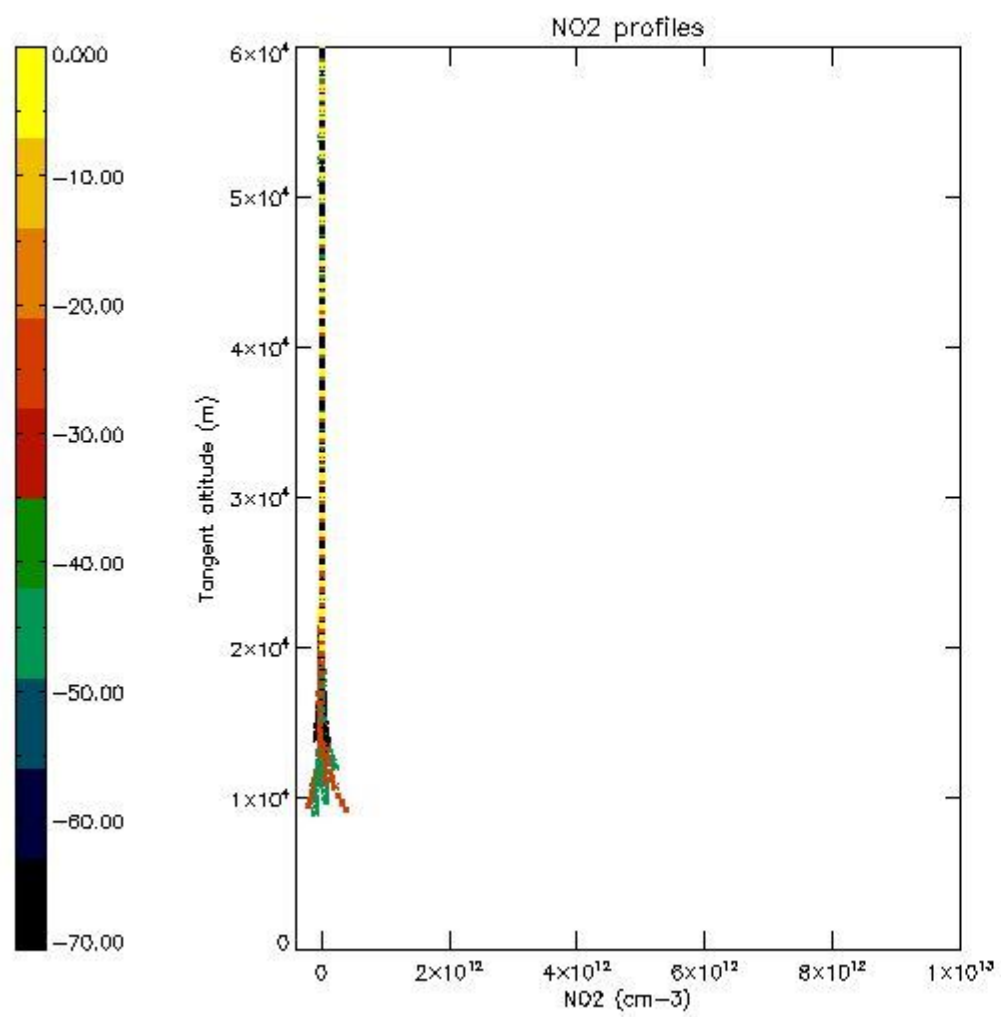
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



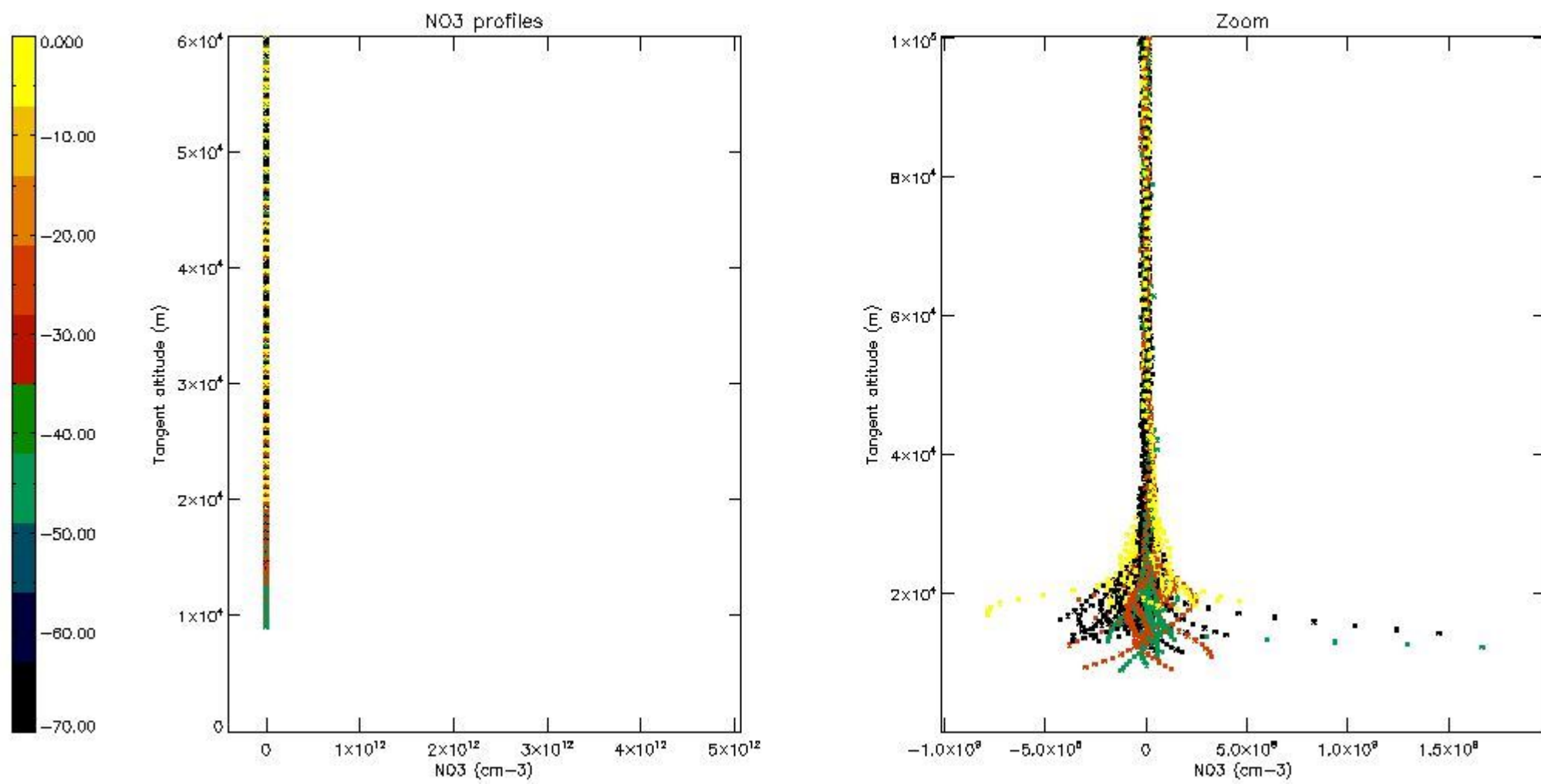
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



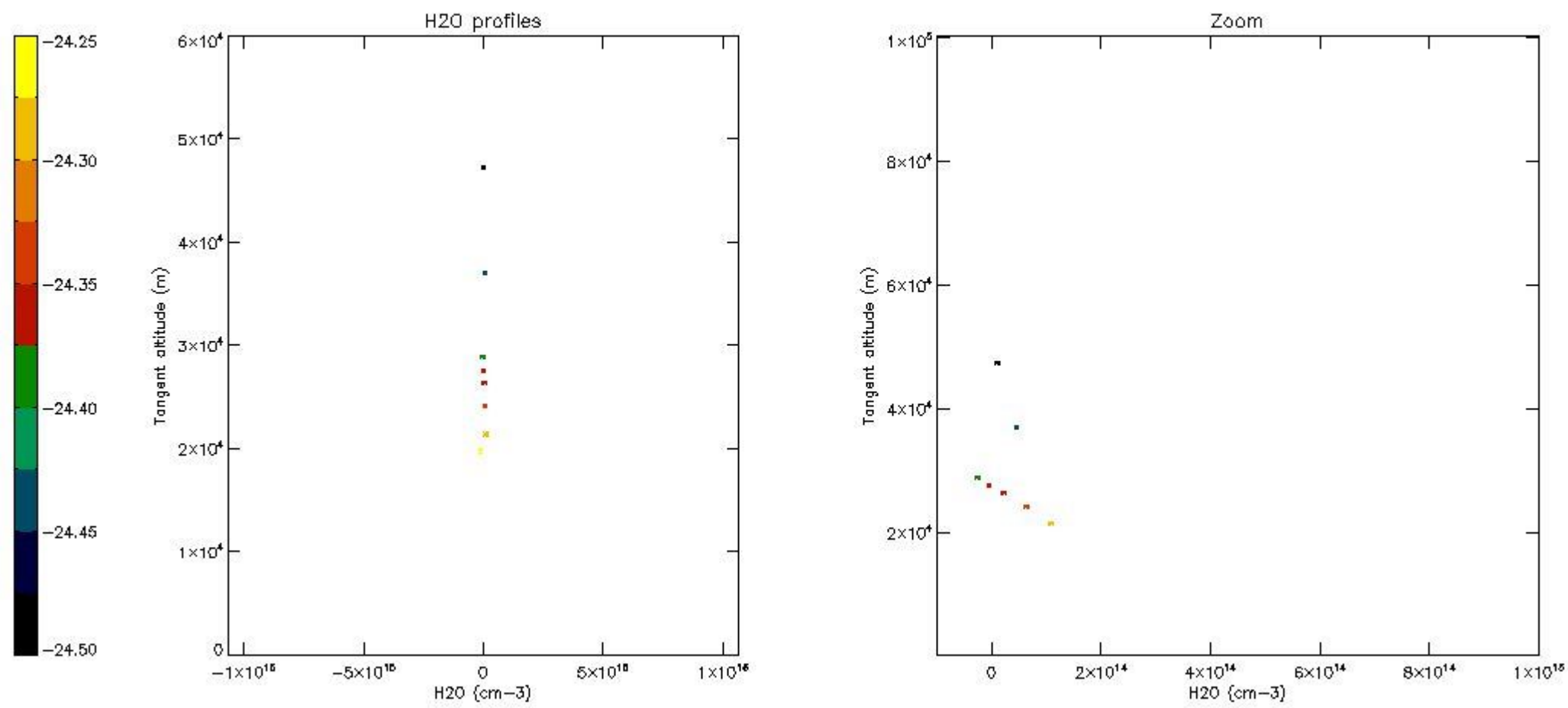
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

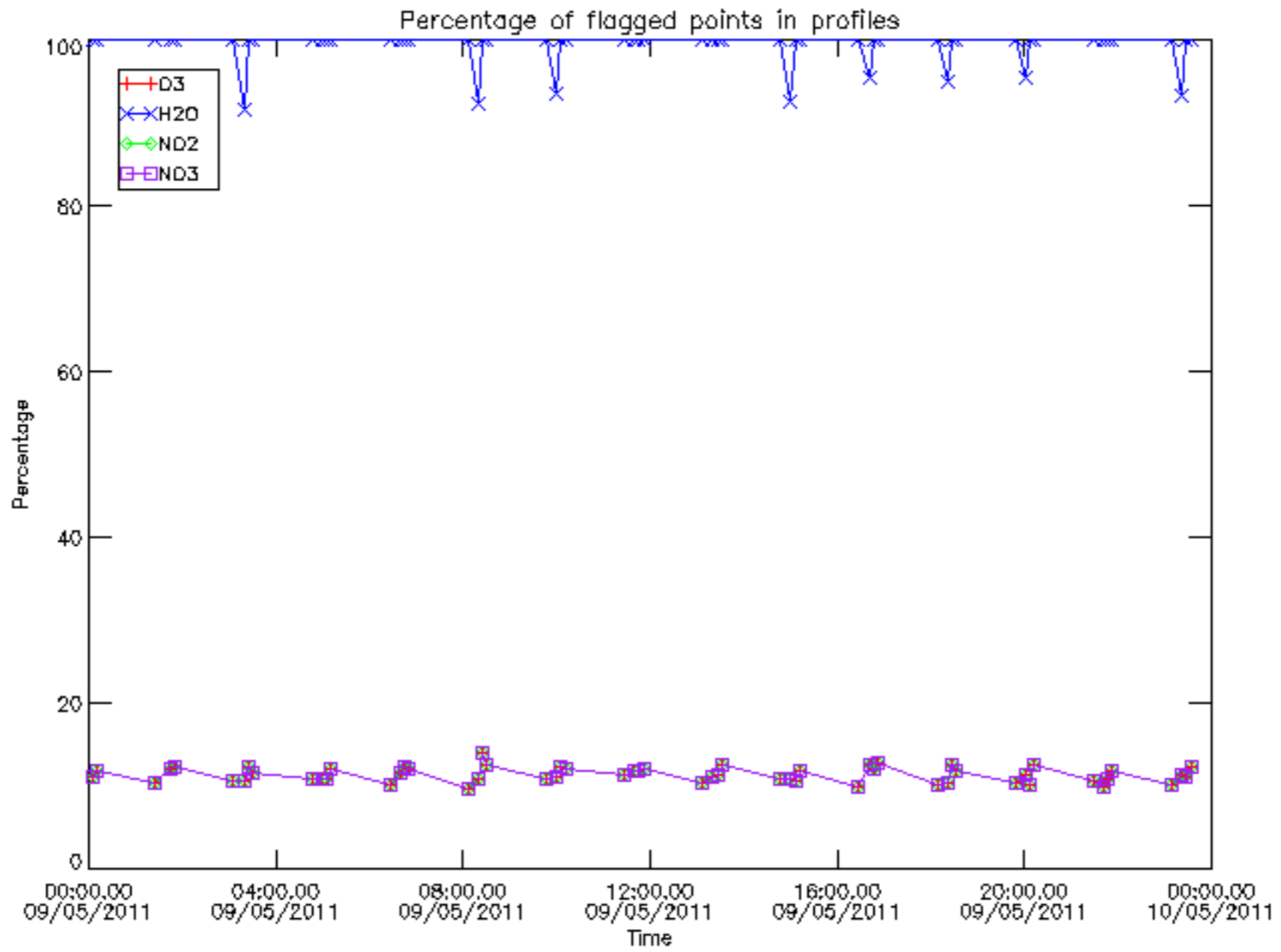
The colorbar represents the latitude.



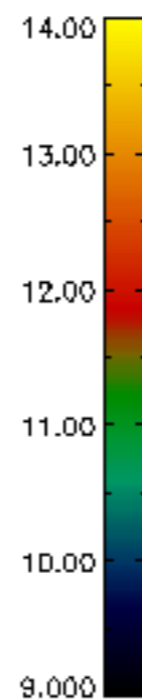
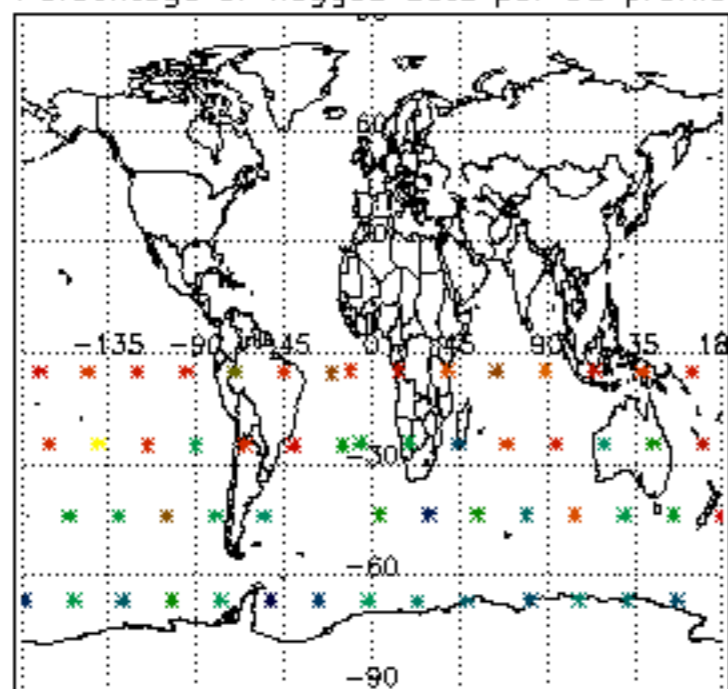
6. Auxiliary Data Files used for the production reported in section 2

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.

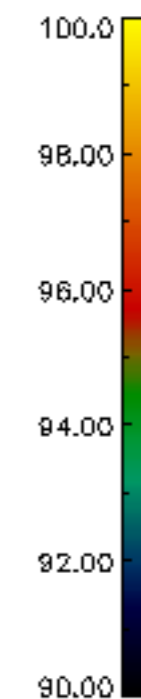
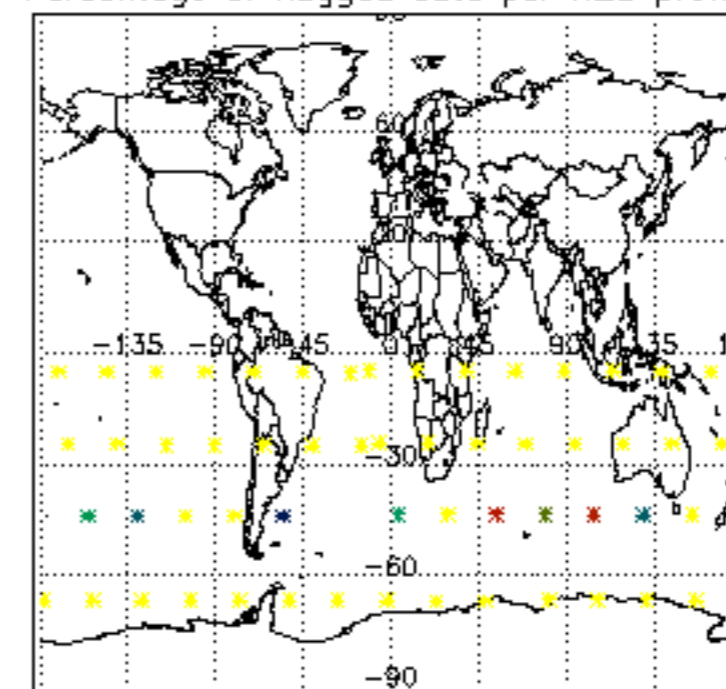
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	09-MAY-2011 00:04:10
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	09-MAY-2011 00:04:10
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	09-MAY-2011 00:04:10



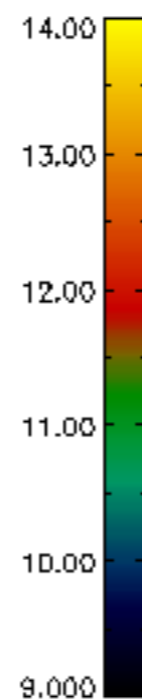
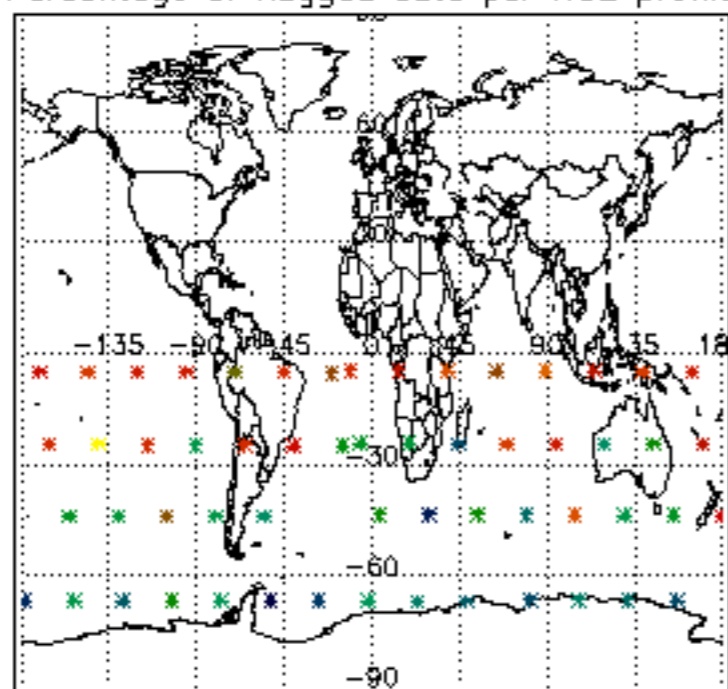
Percentage of flagged data per D3 profile



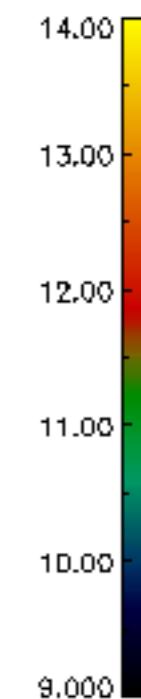
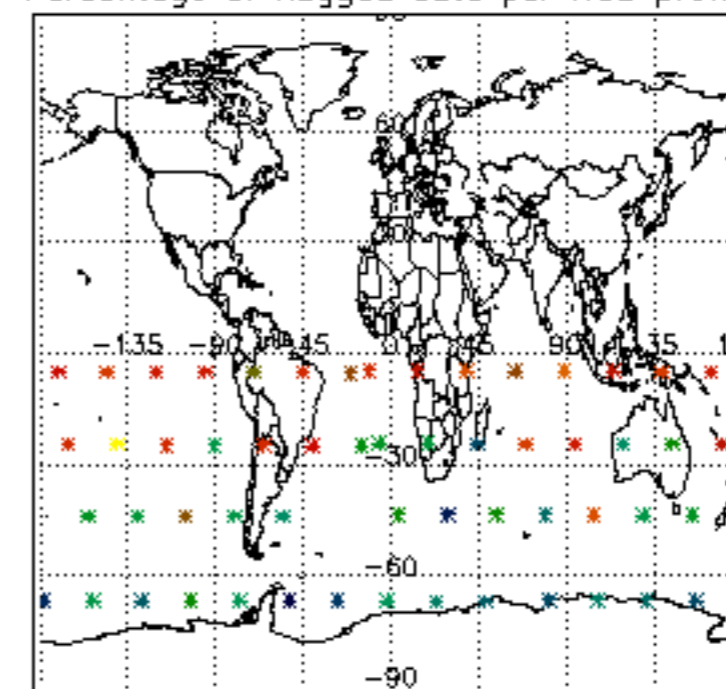
Percentage of flagged data per H2O profile

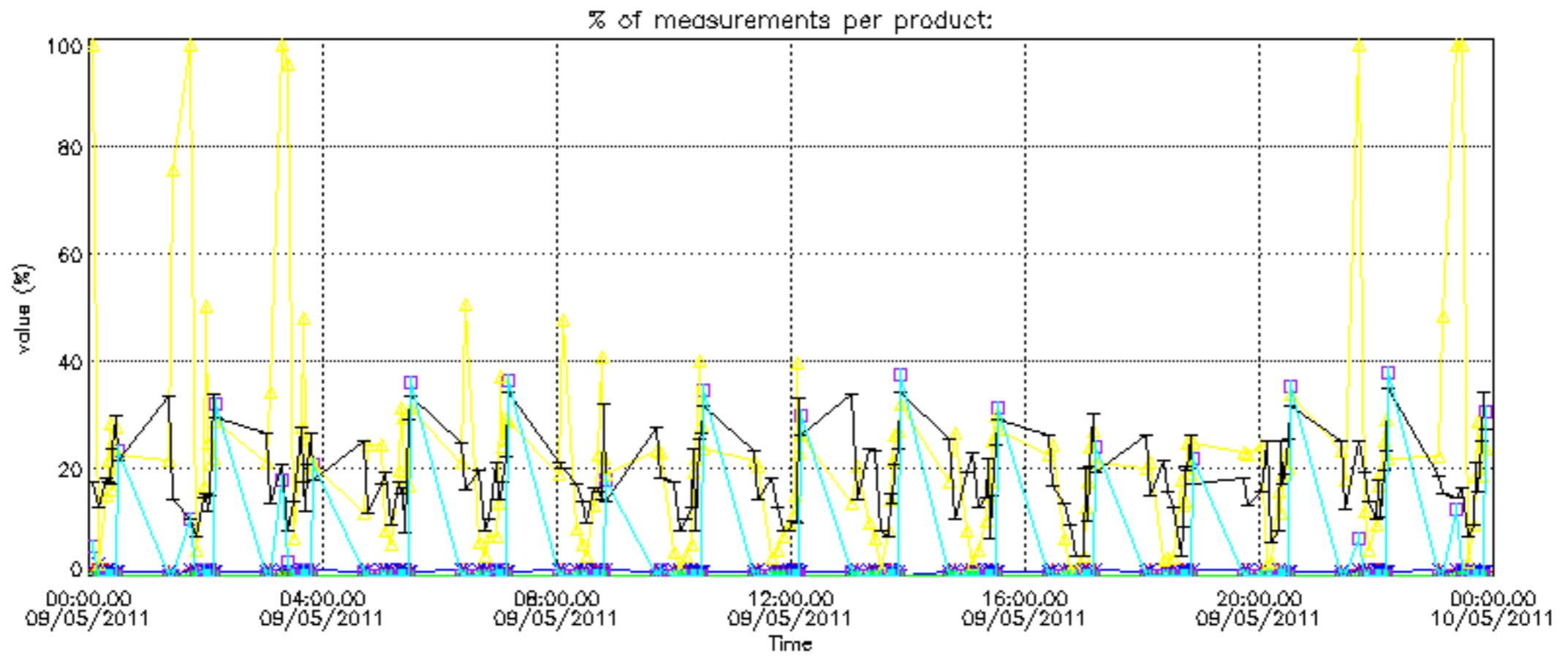


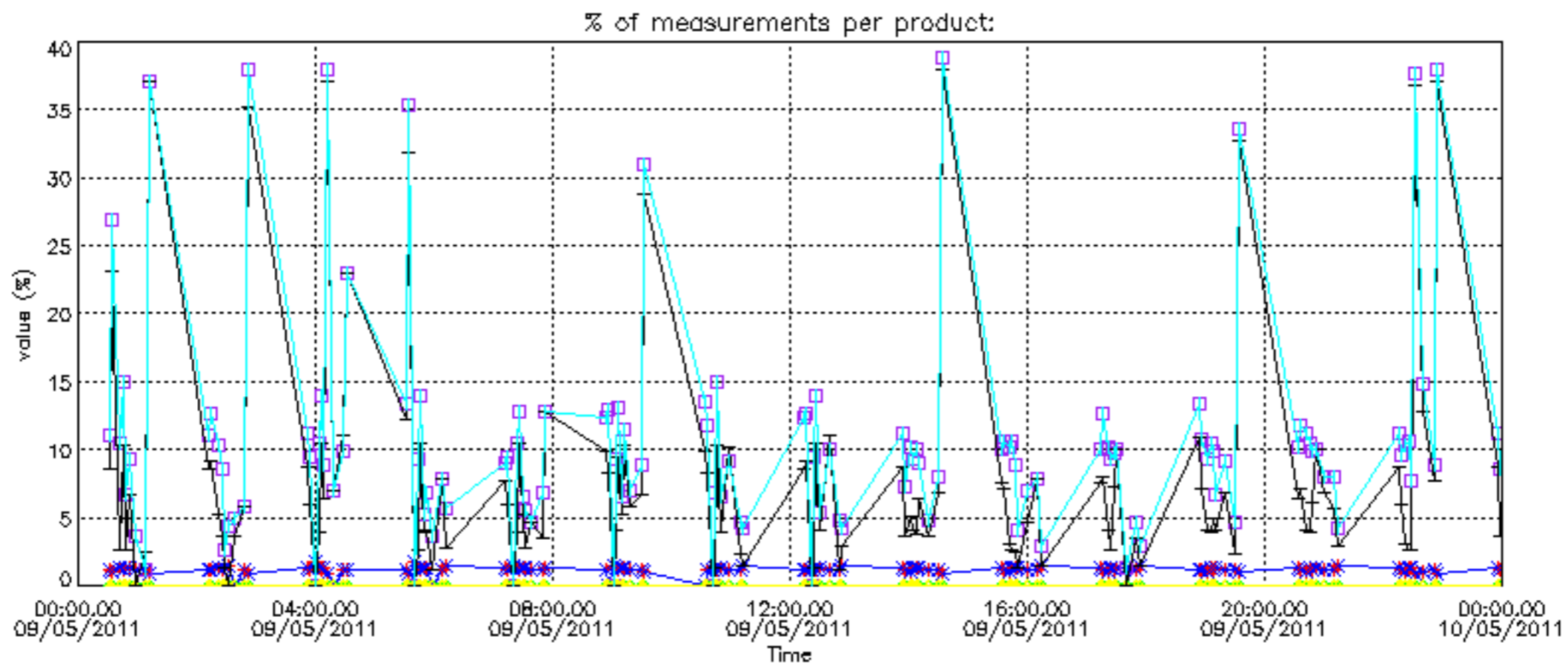
Percentage of flagged data per NO2 profile



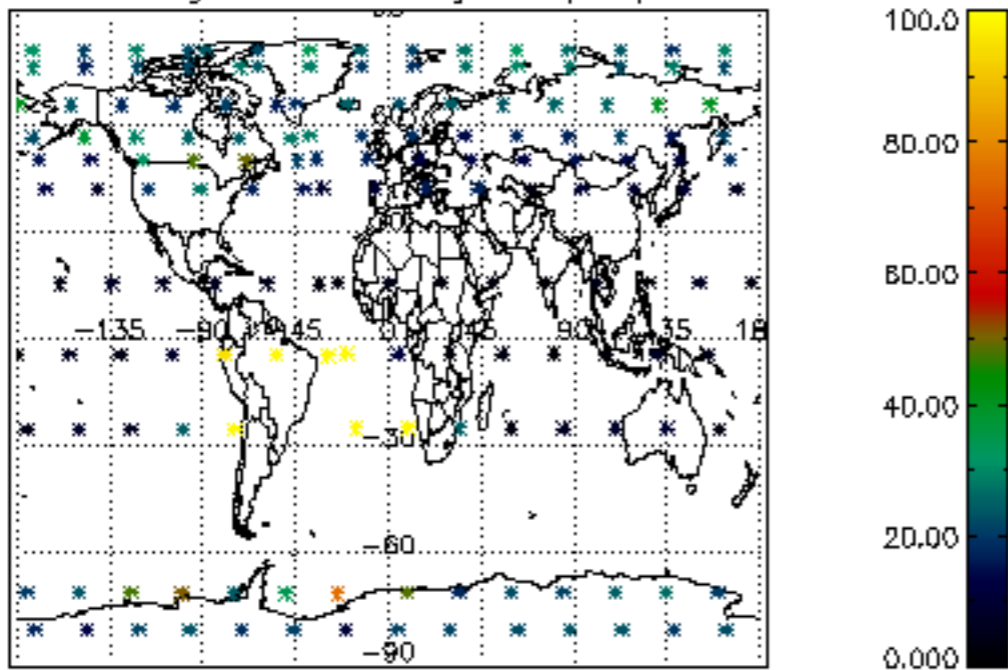
Percentage of flagged data per NO3 profile



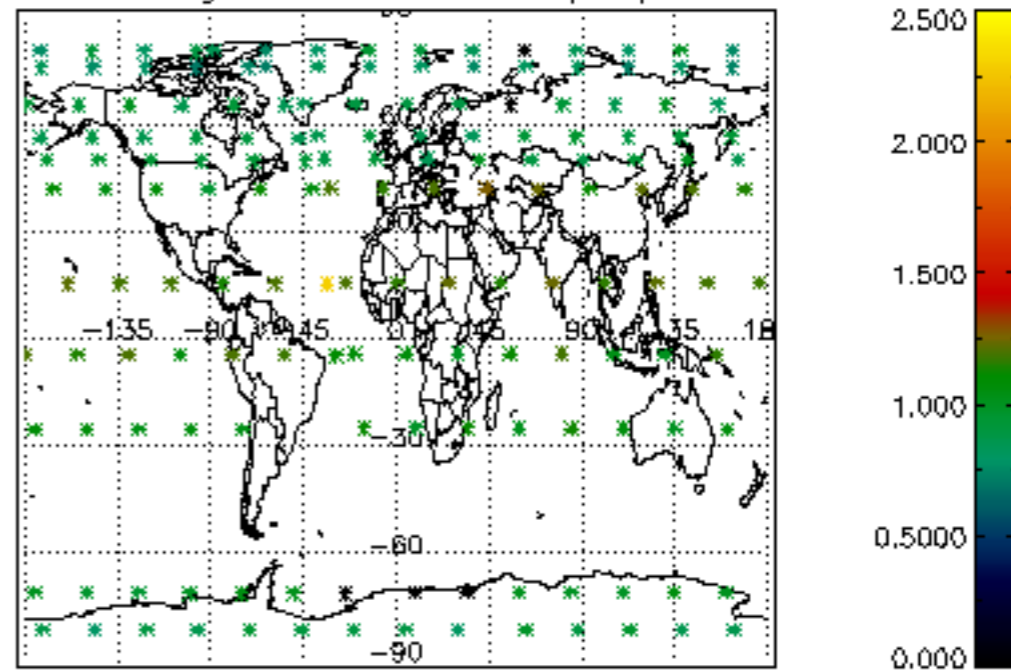




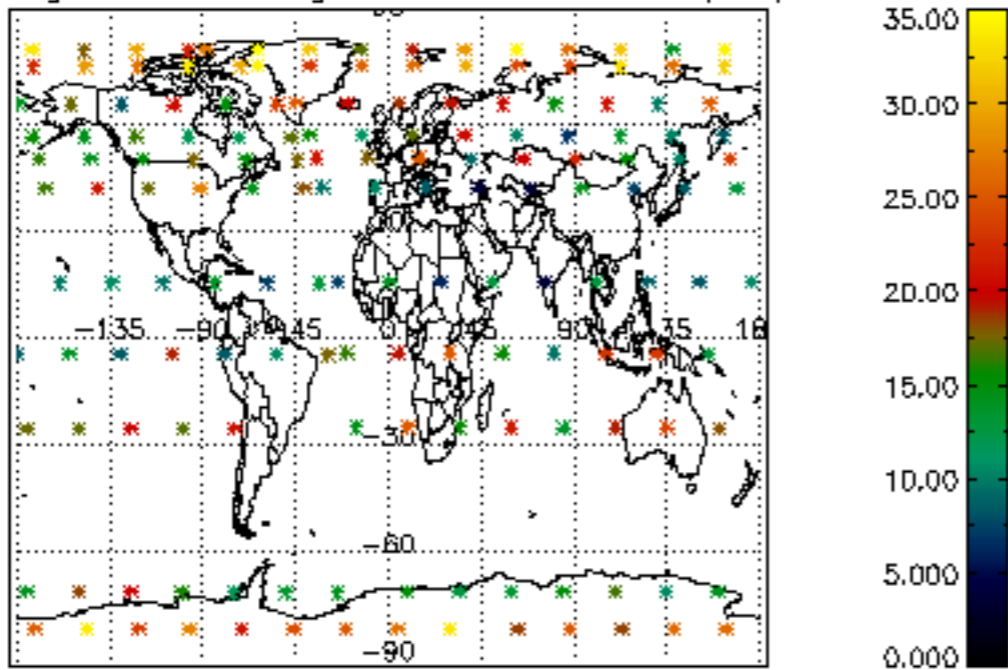
Percentage of cosmic ray hits per profile



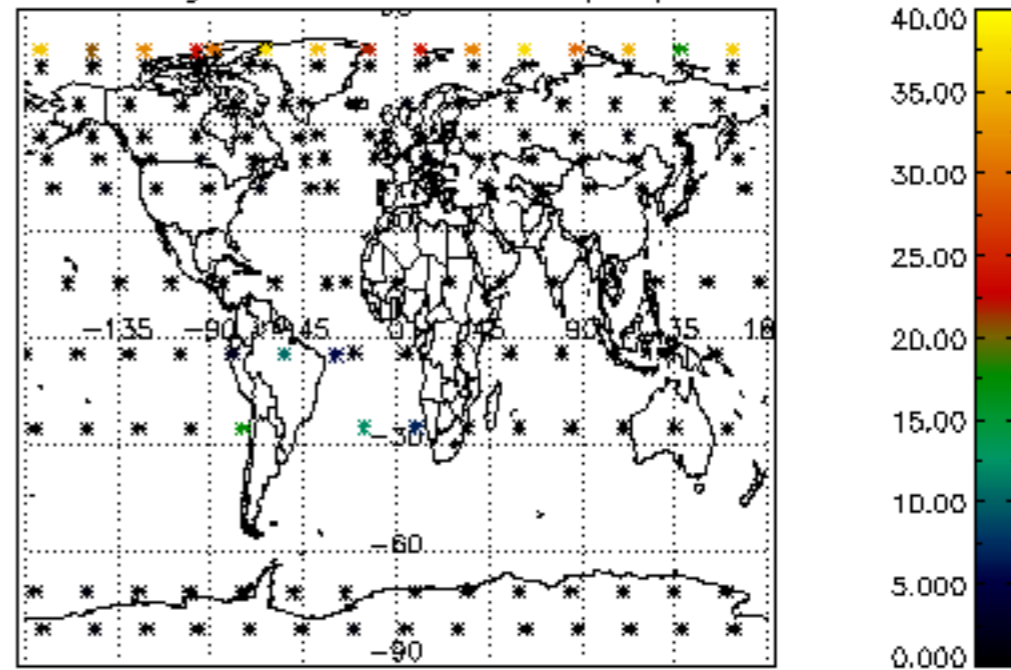
Percentage of datation errors per profile



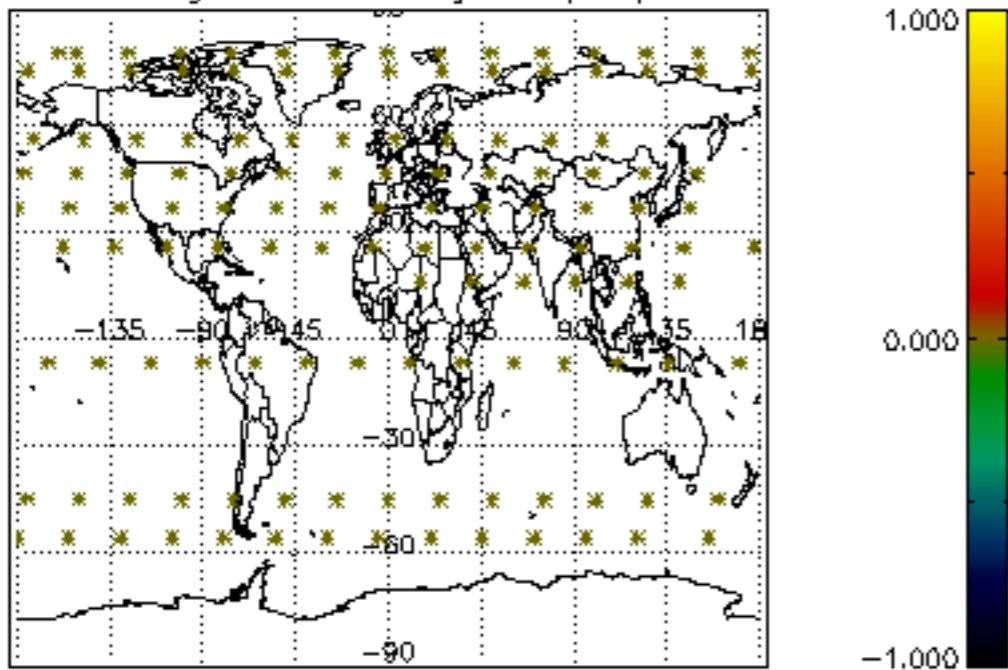
Percentage of star falling outside central band per profile



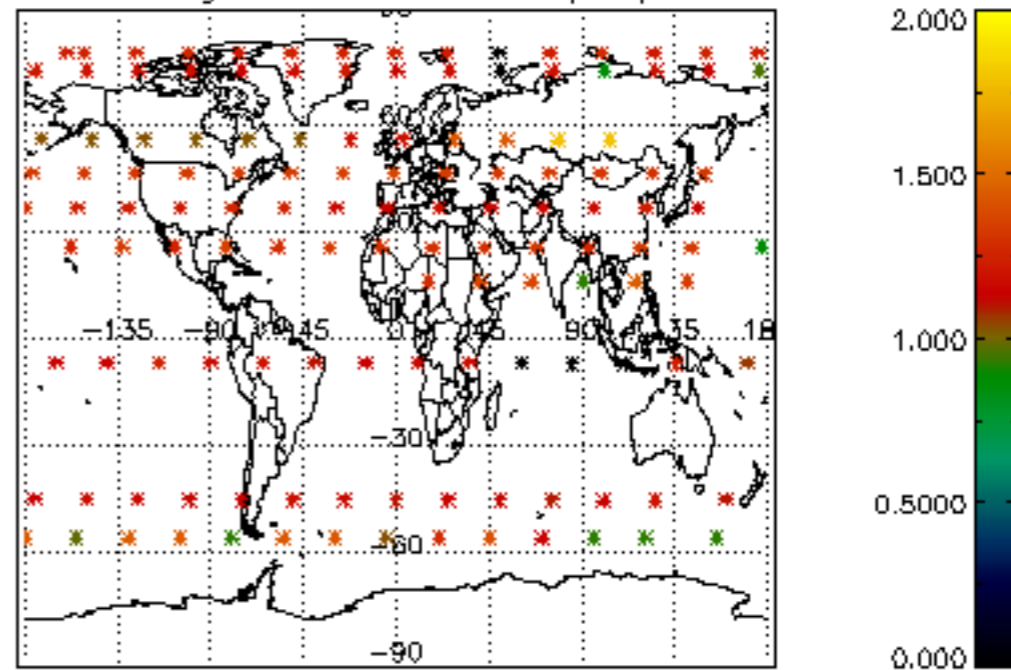
Percentage of saturation errors per profile



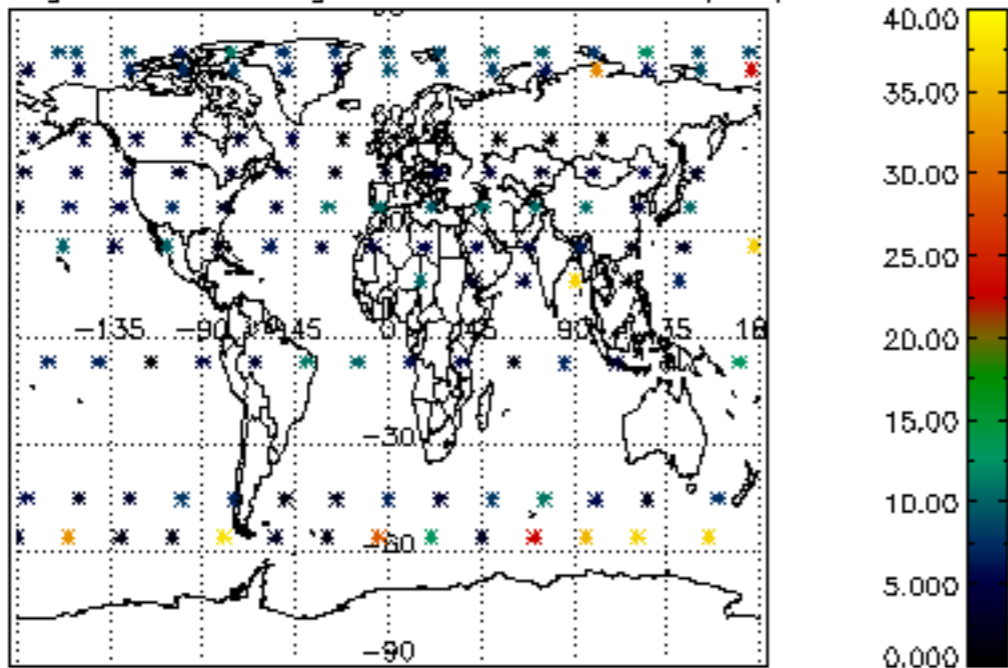
Percentage of cosmic ray hits per profile



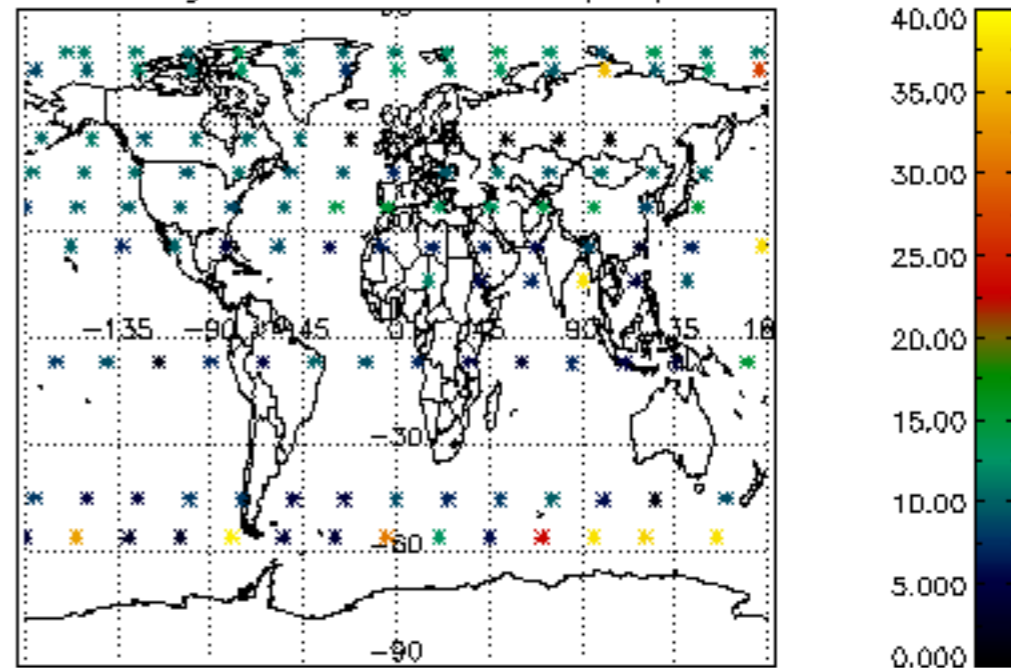
Percentage of datation errors per profile

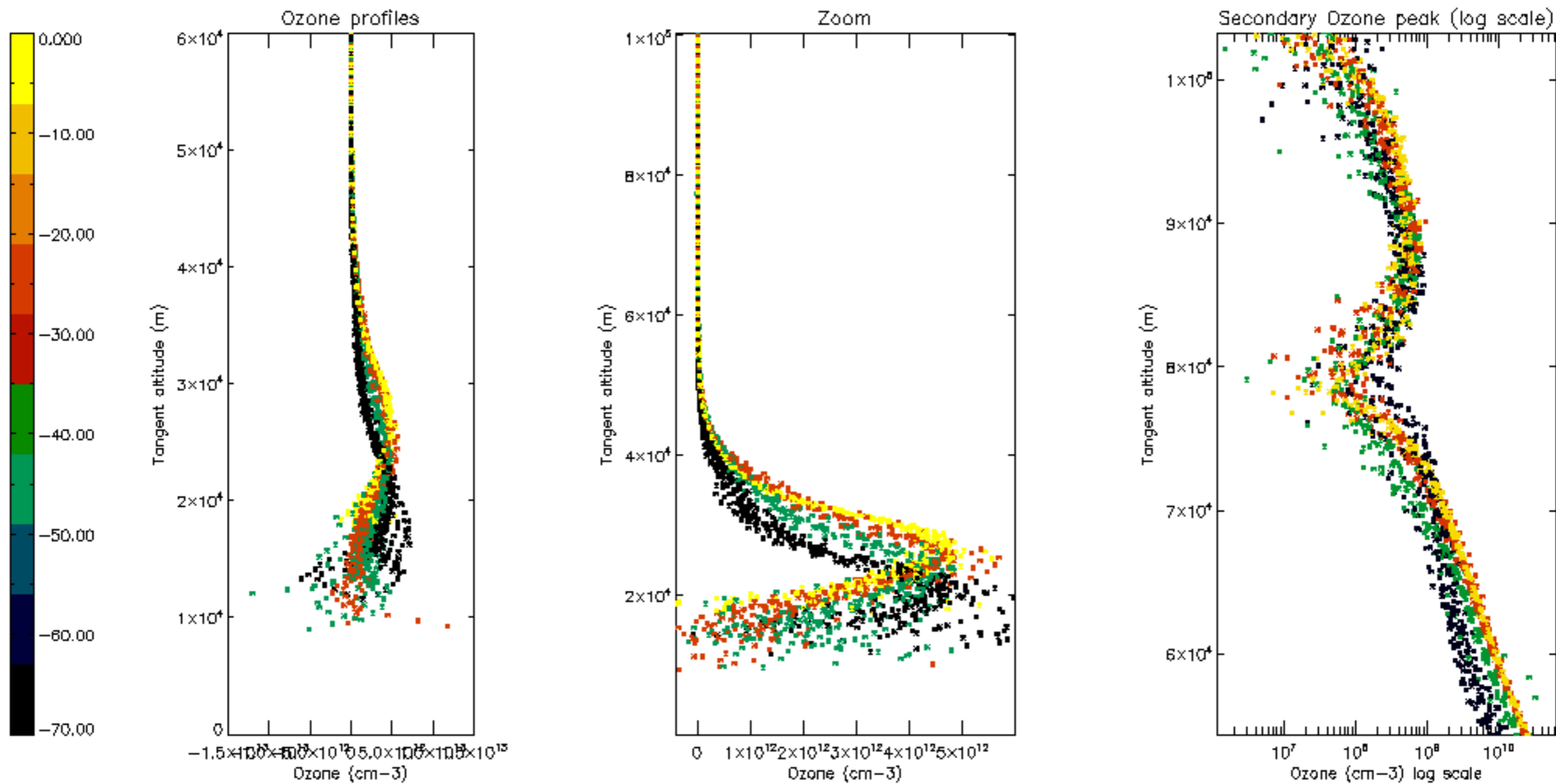


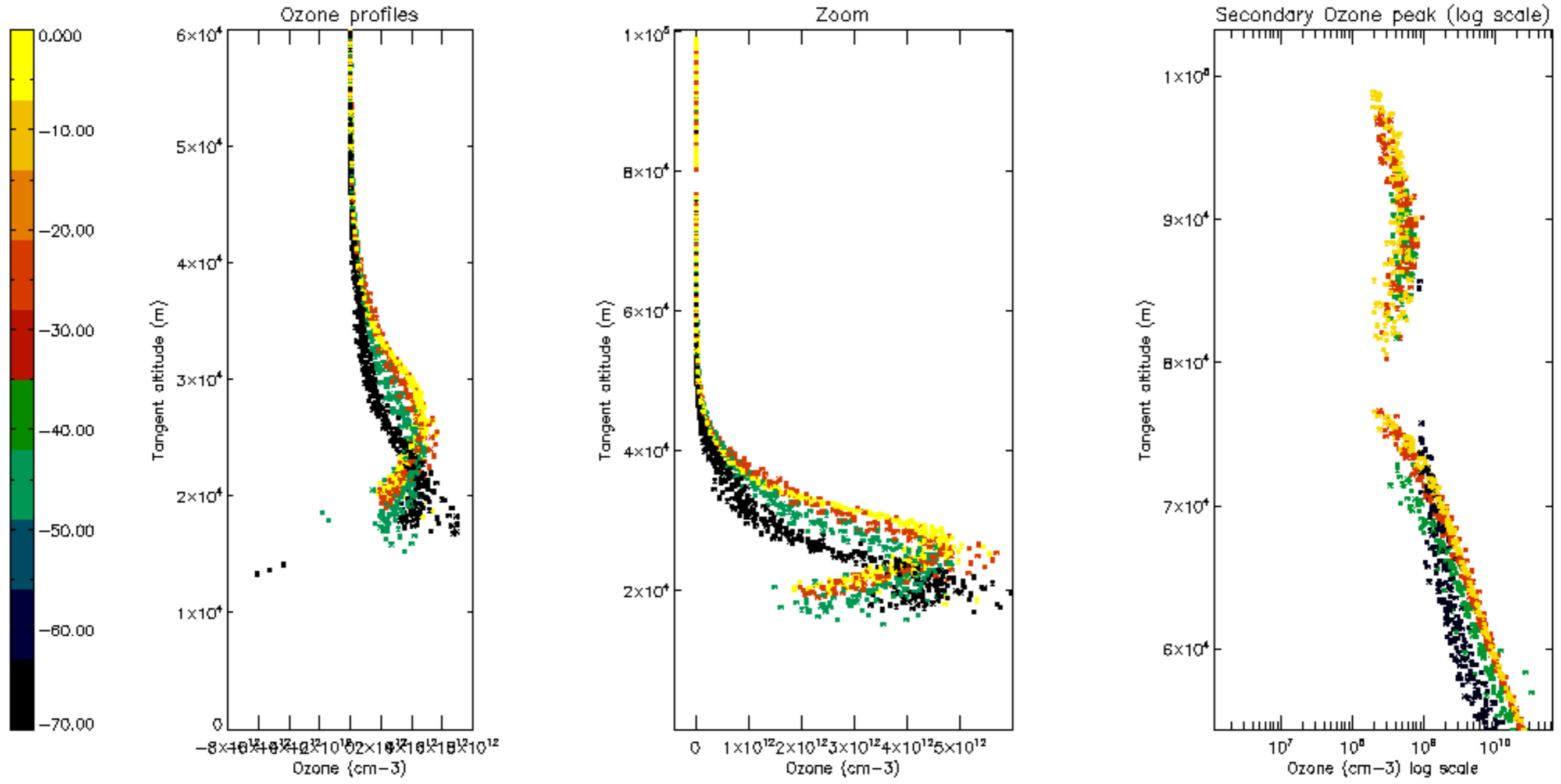
Percentage of star falling outside central band per profile

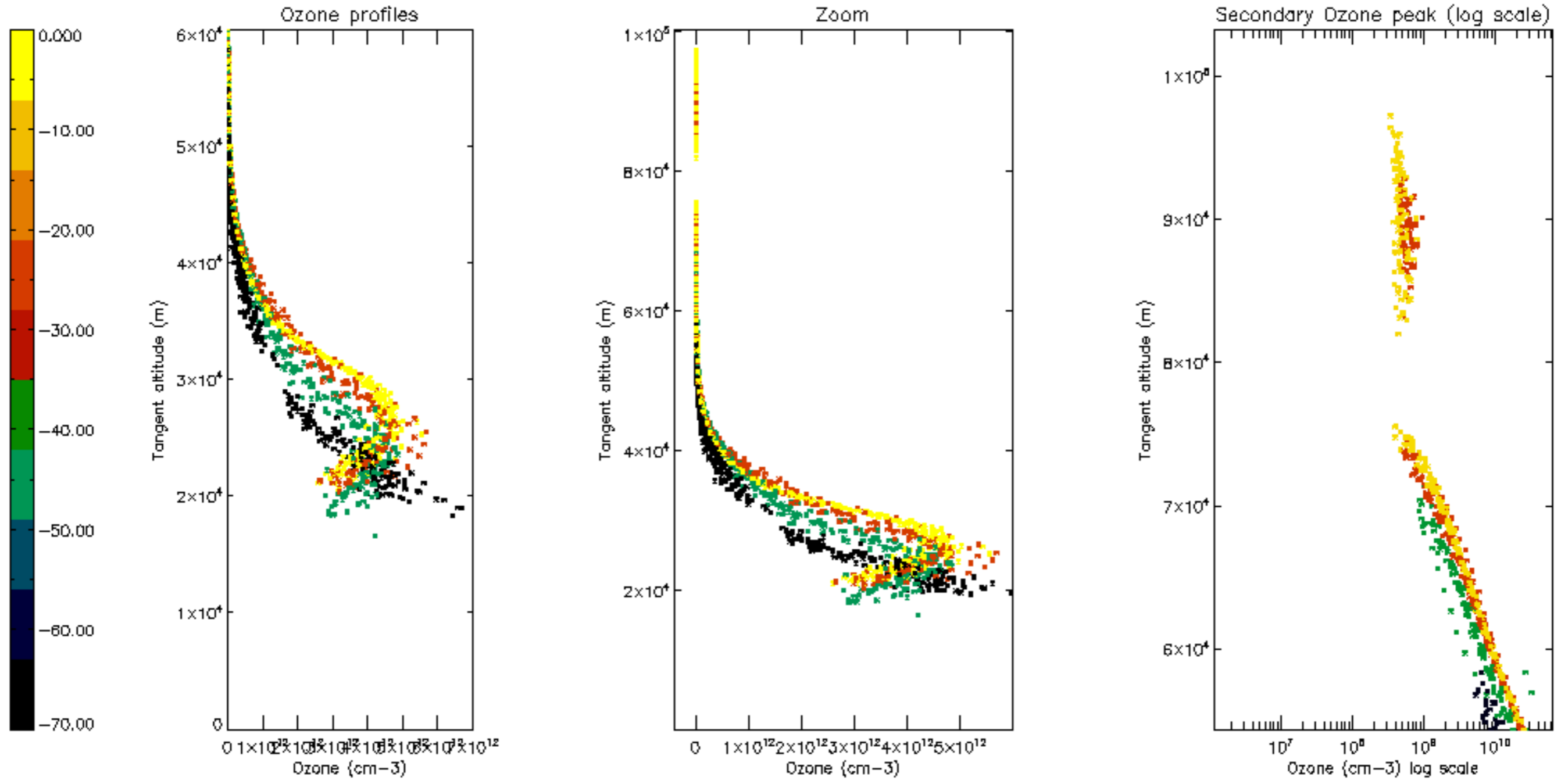


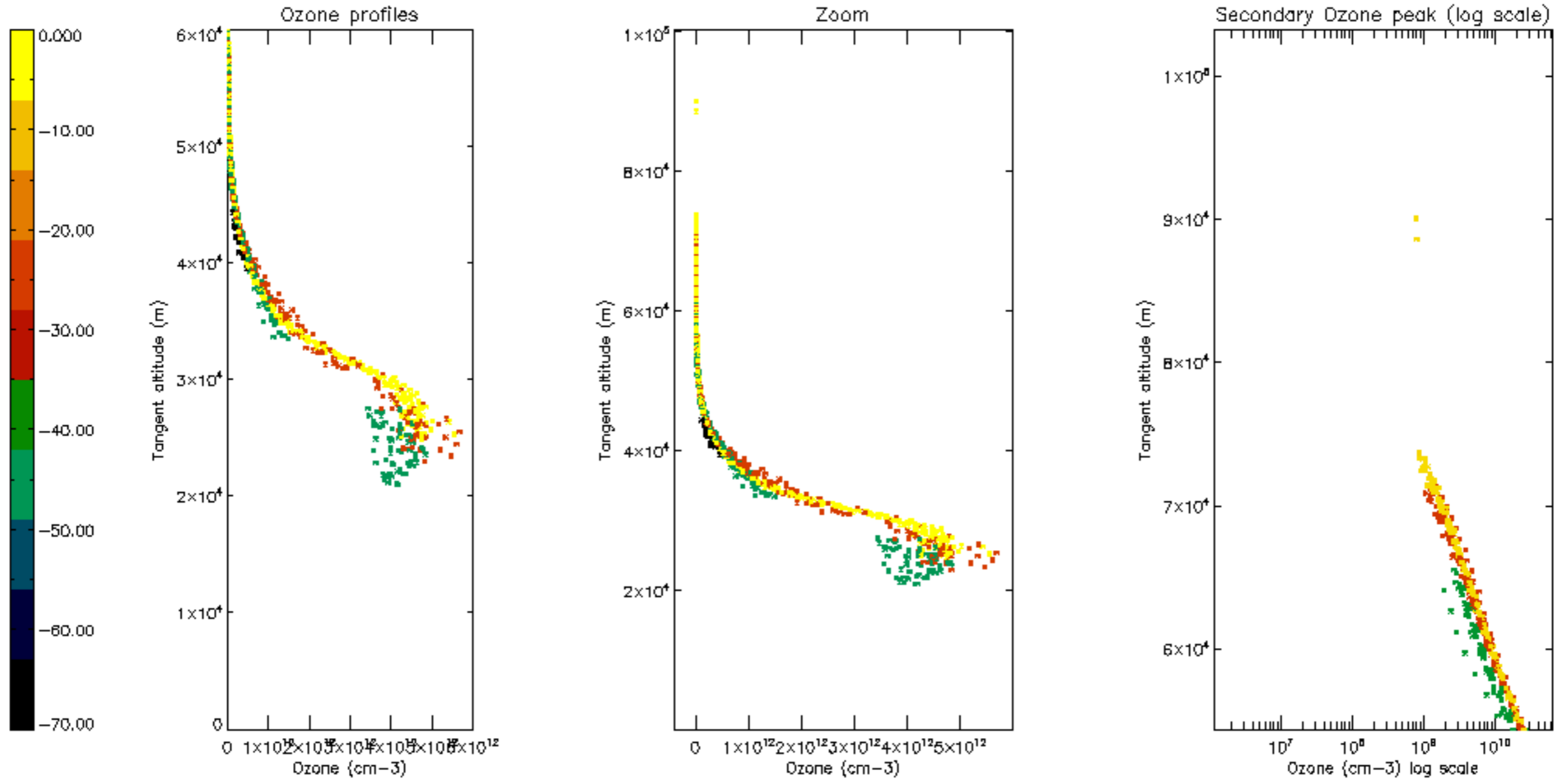
Percentage of saturation errors per profile

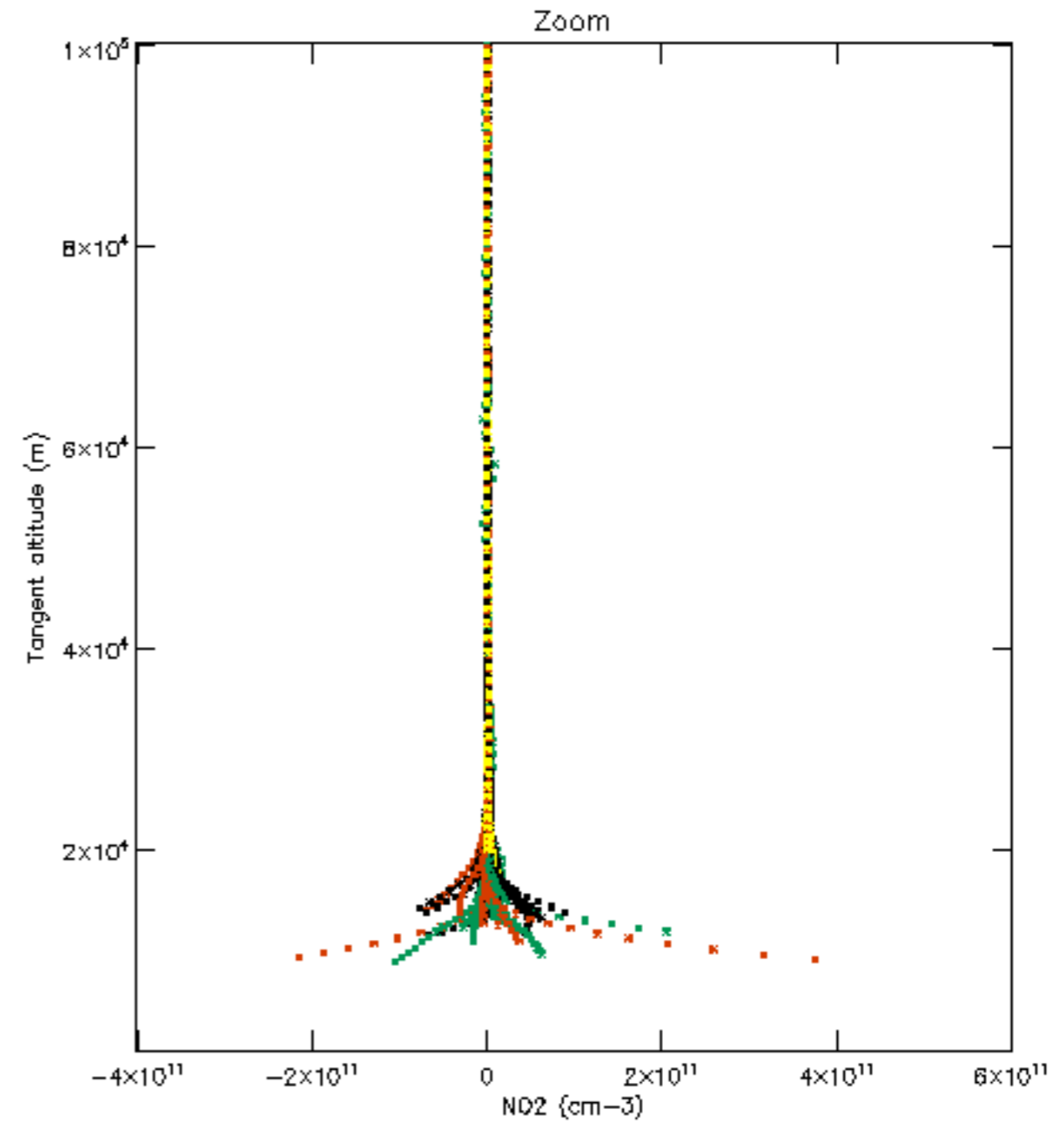
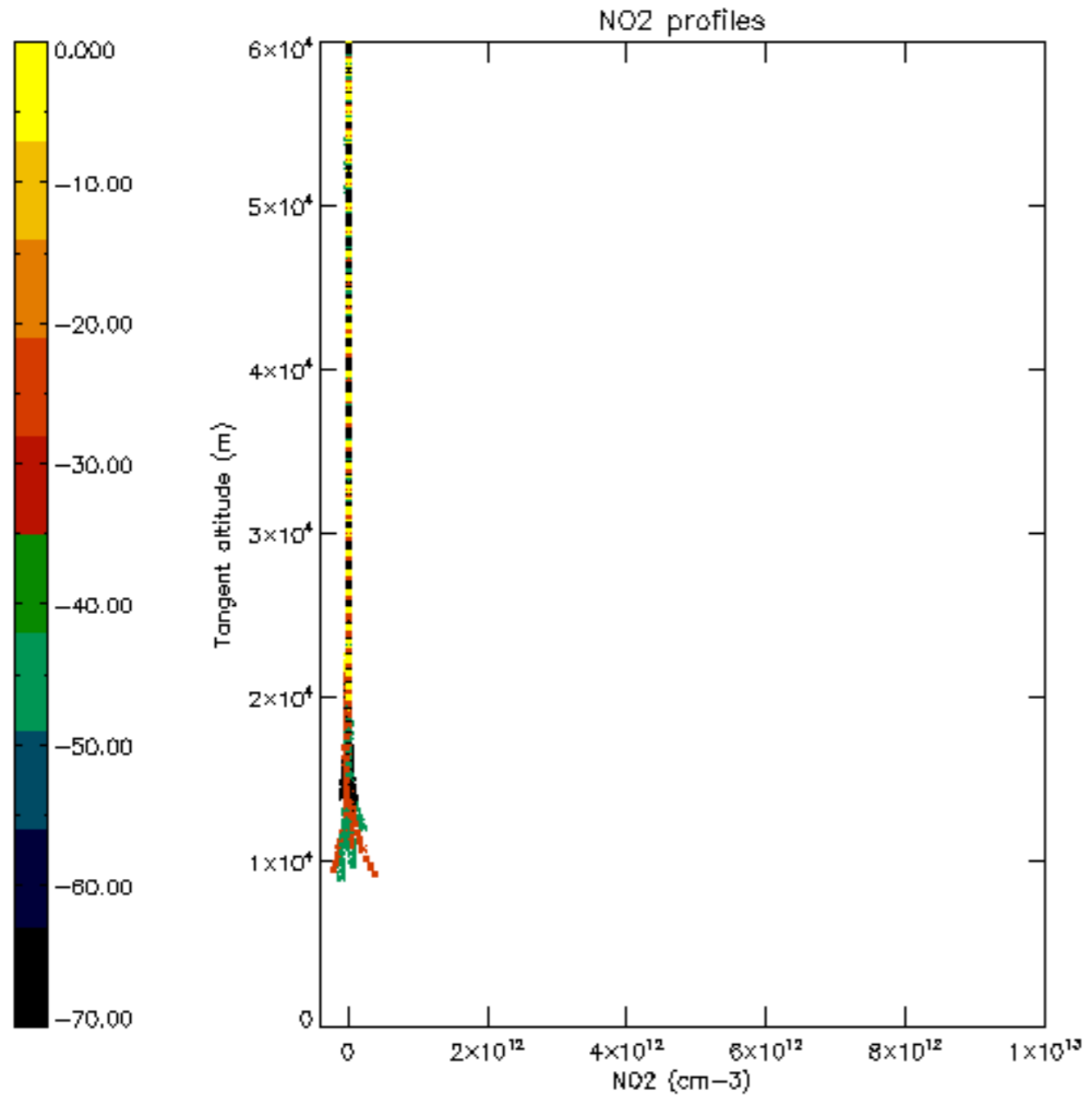


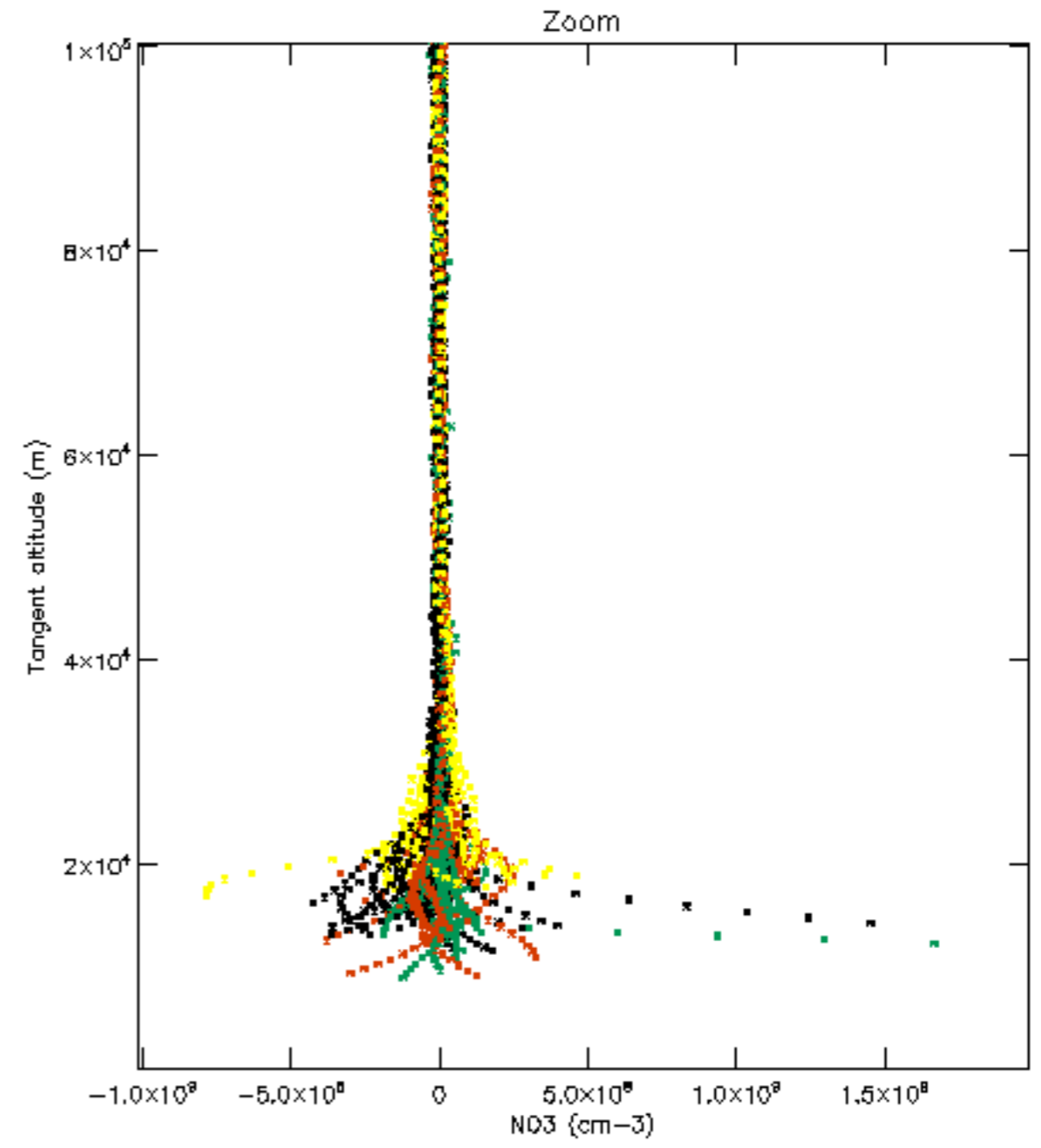
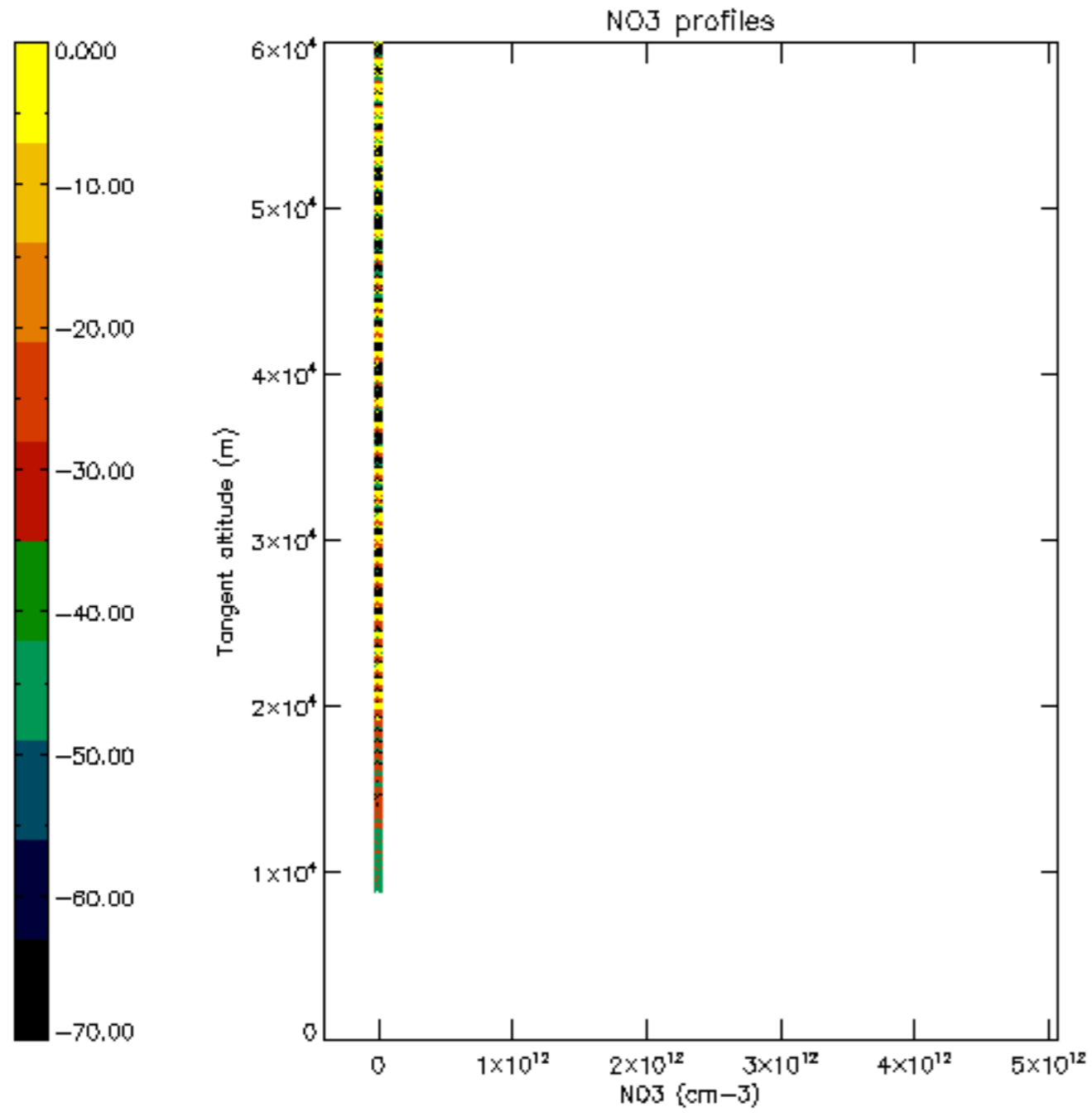


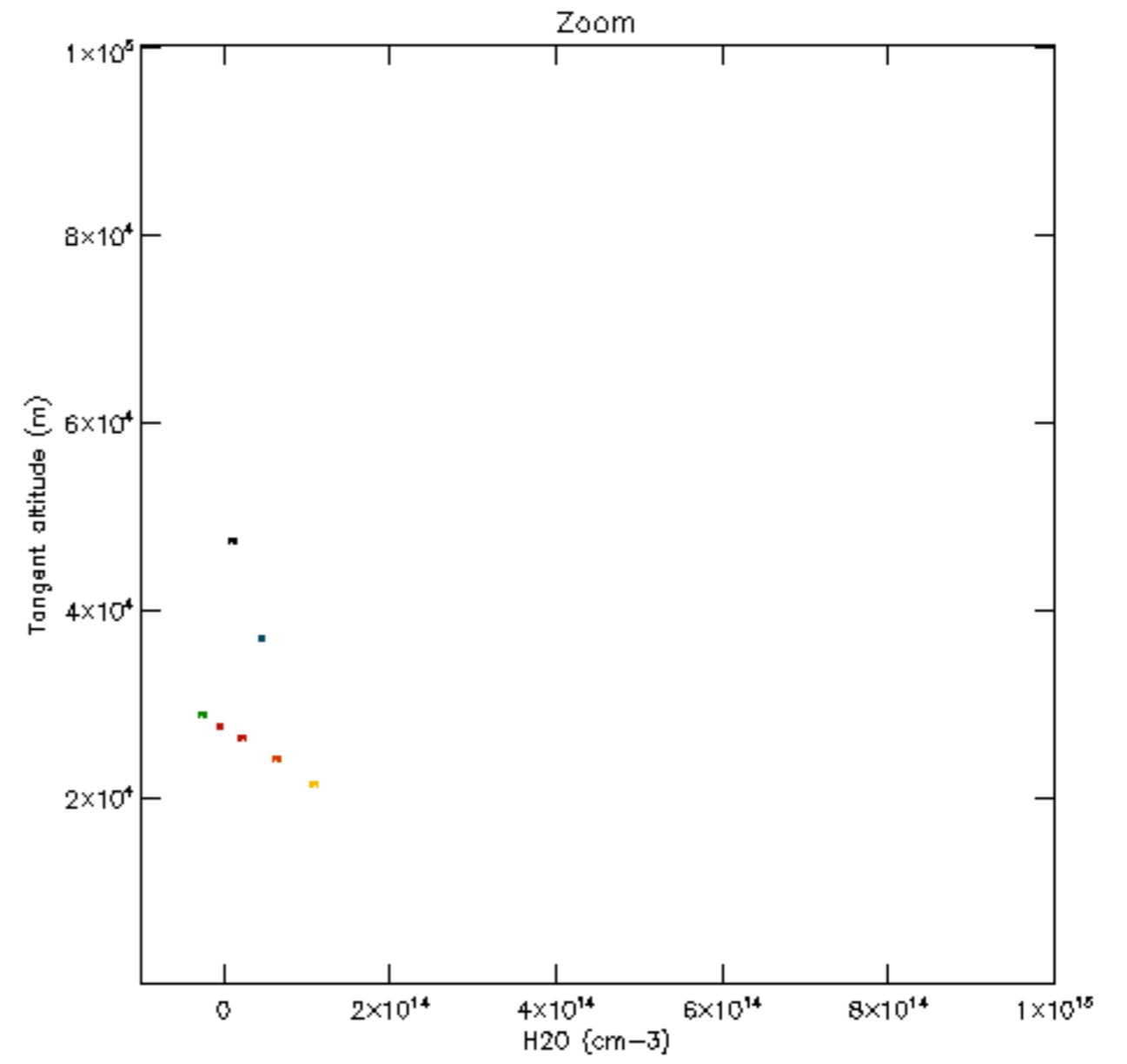
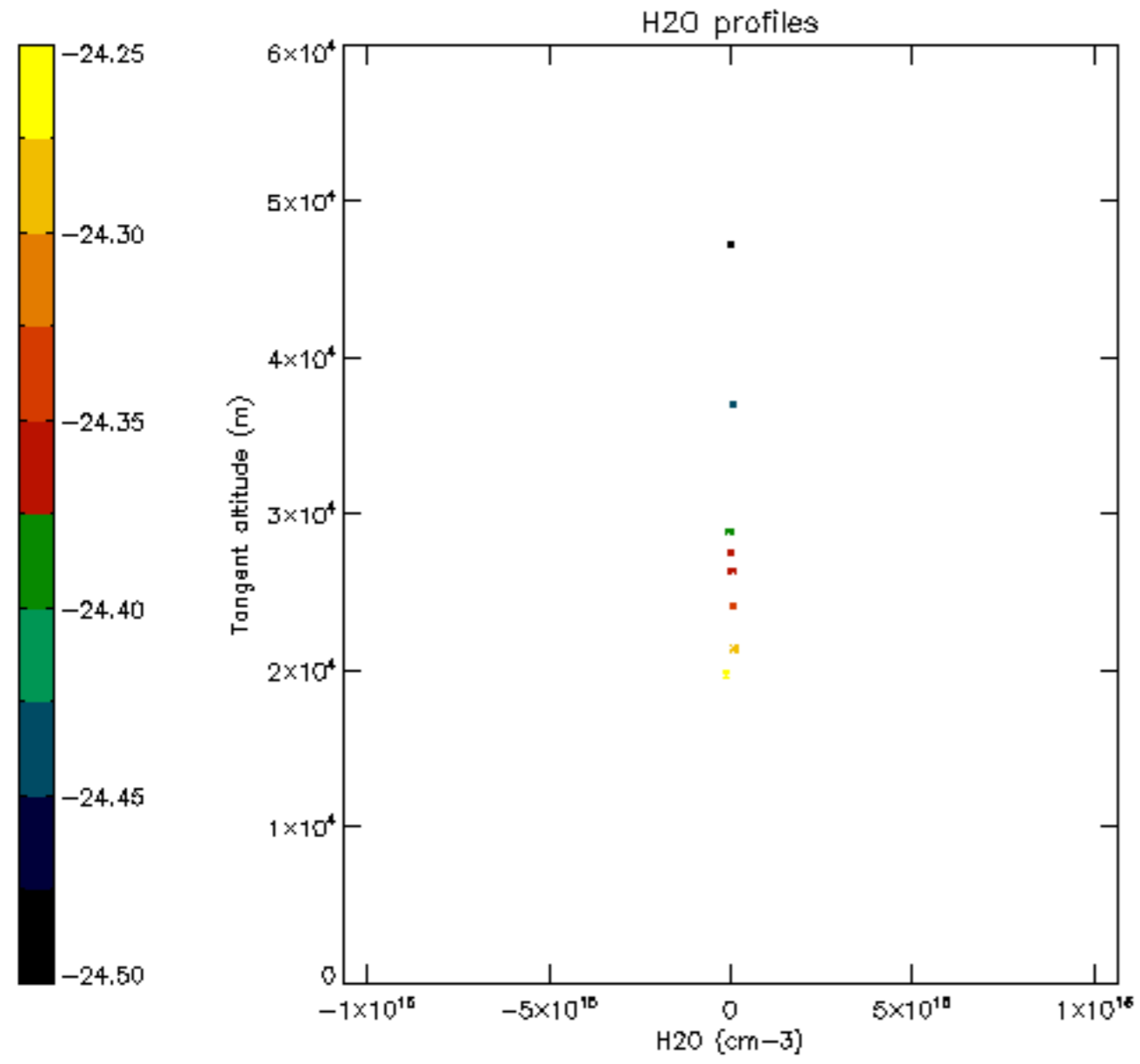


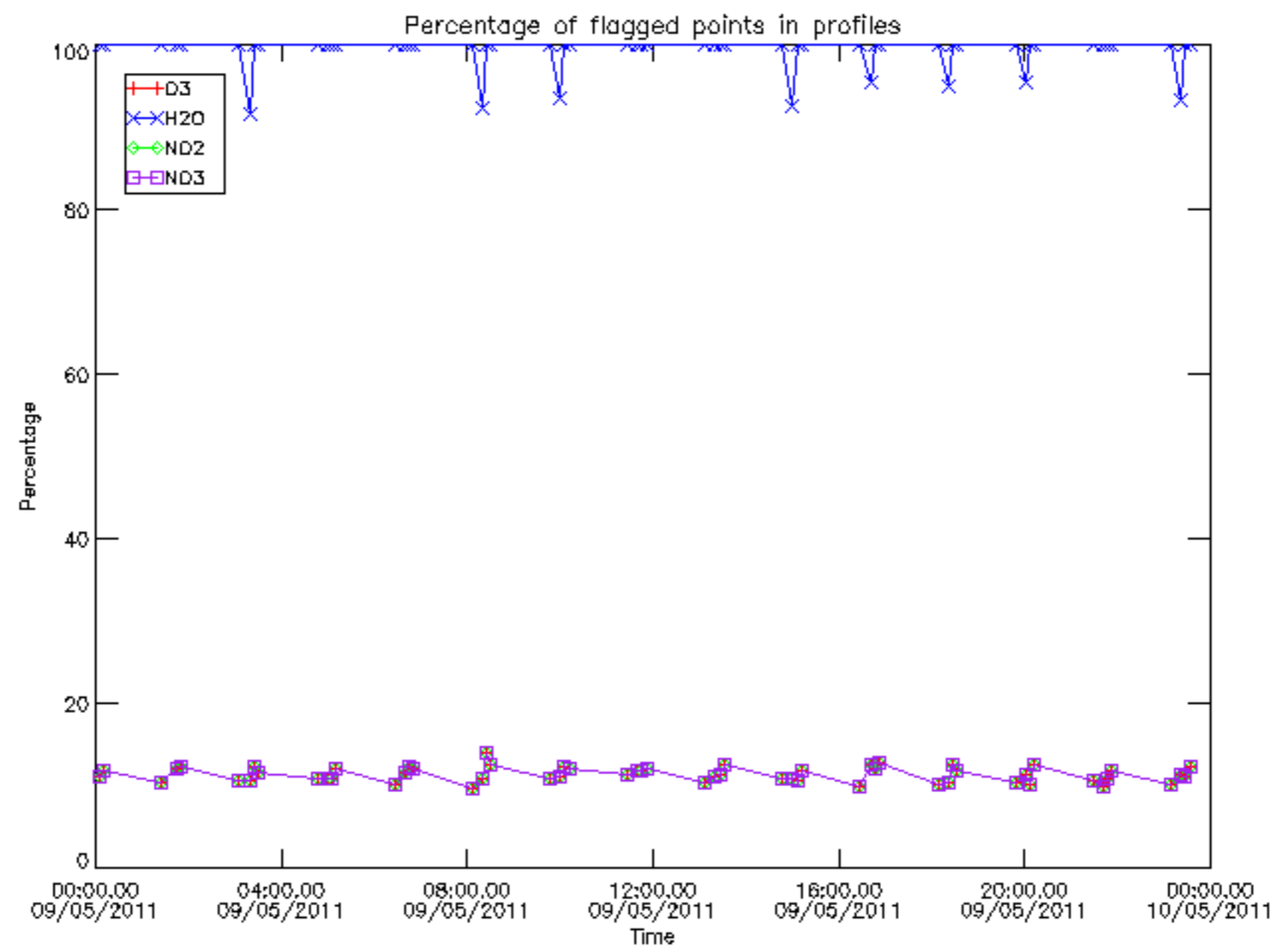




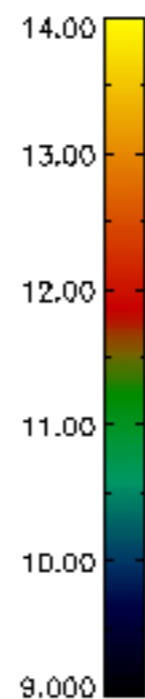
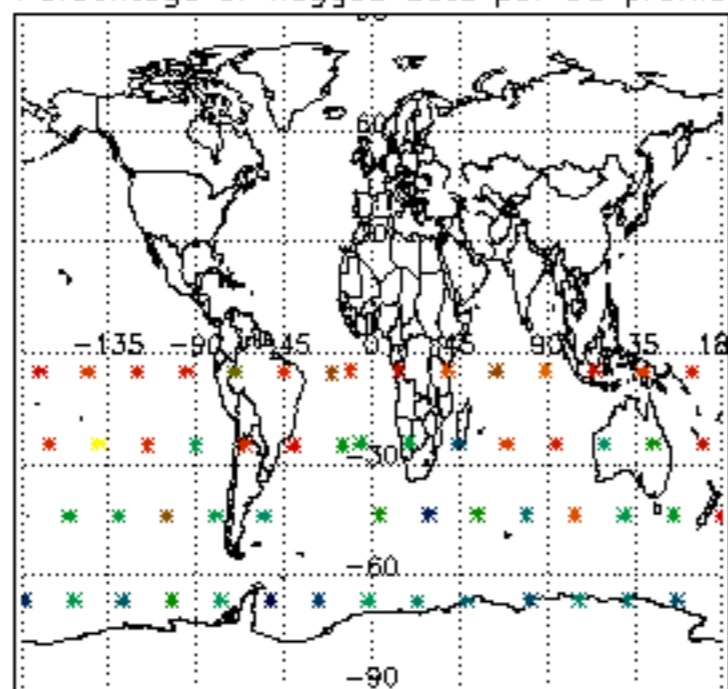




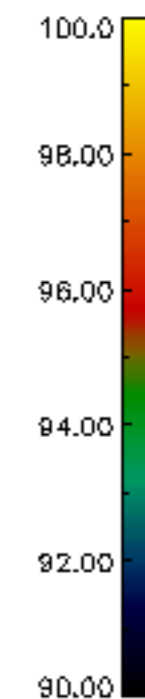
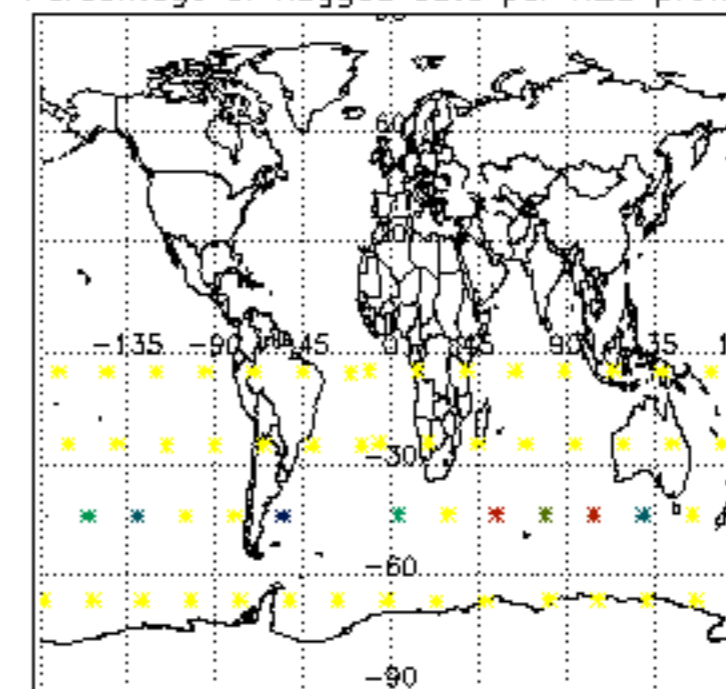




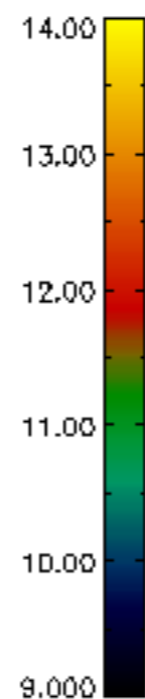
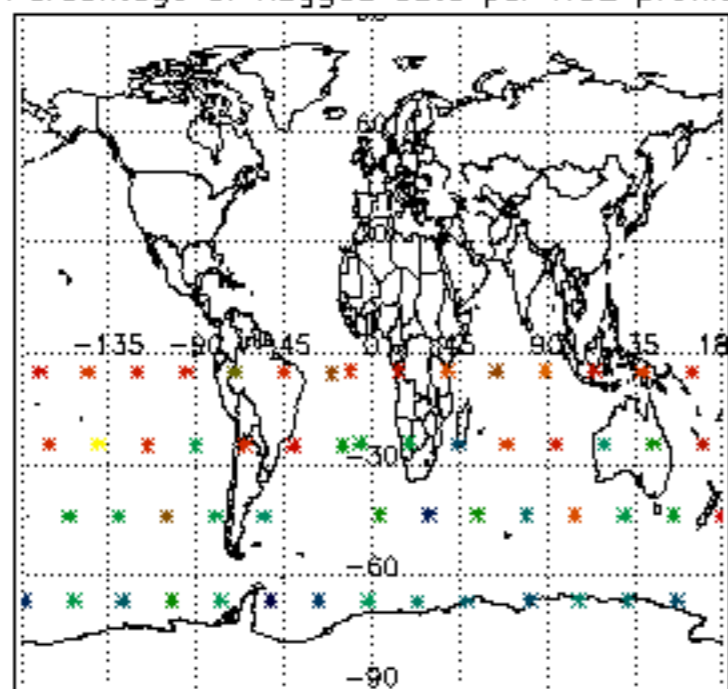
Percentage of flagged data per D3 profile



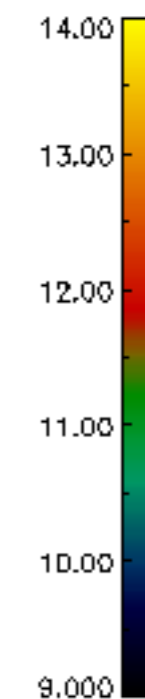
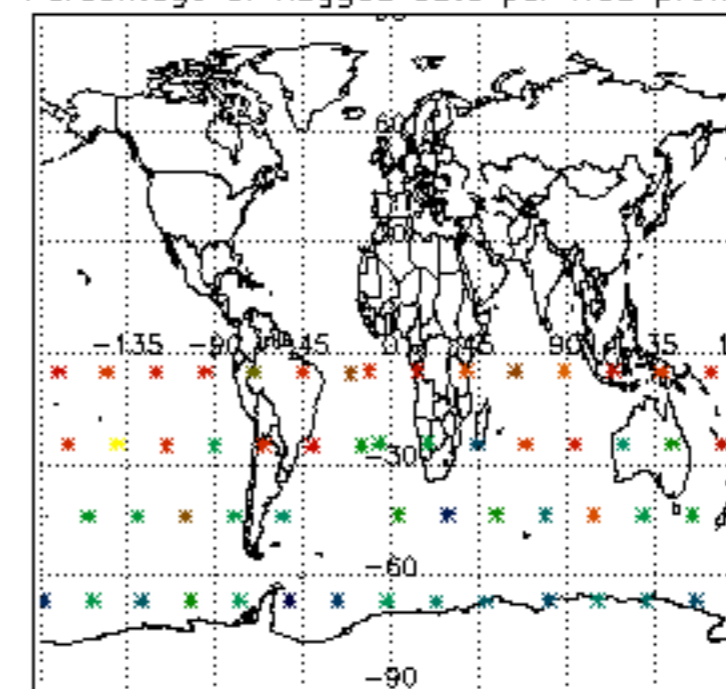
Percentage of flagged data per H2O profile

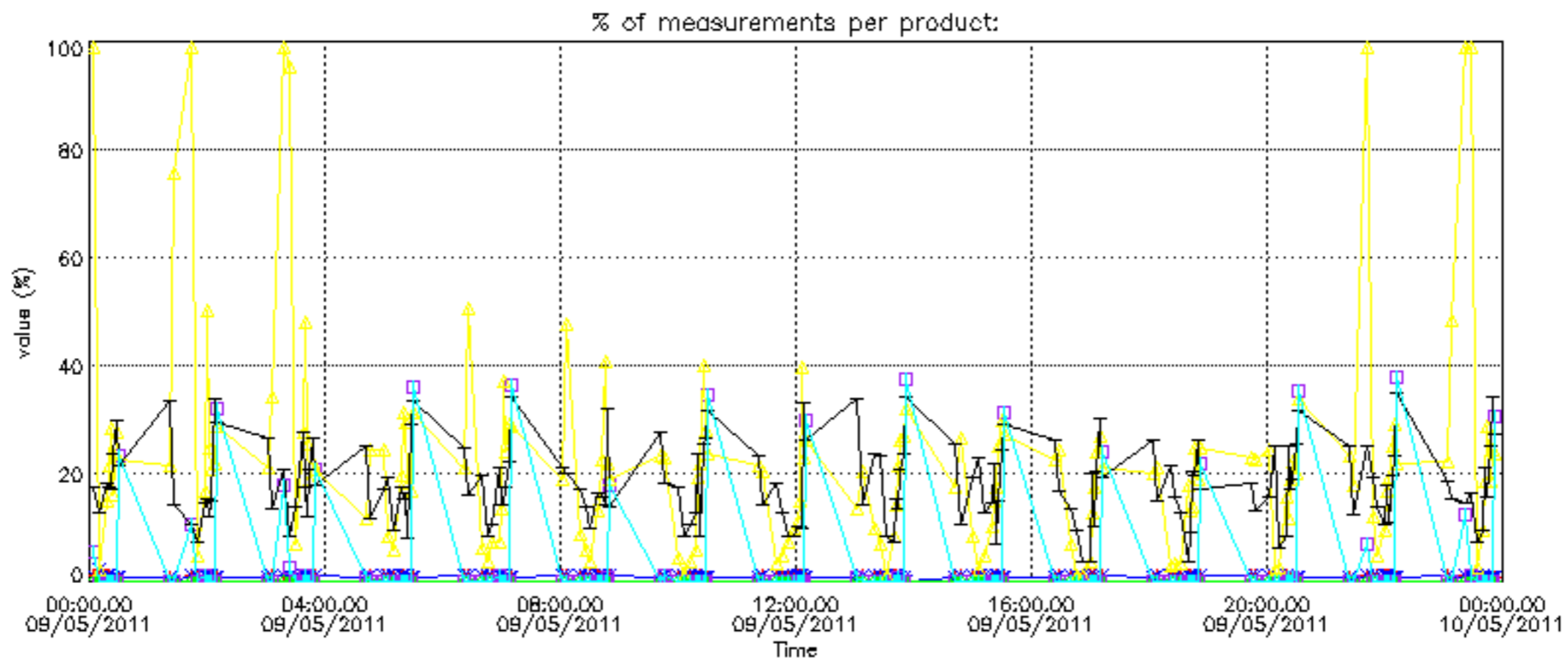


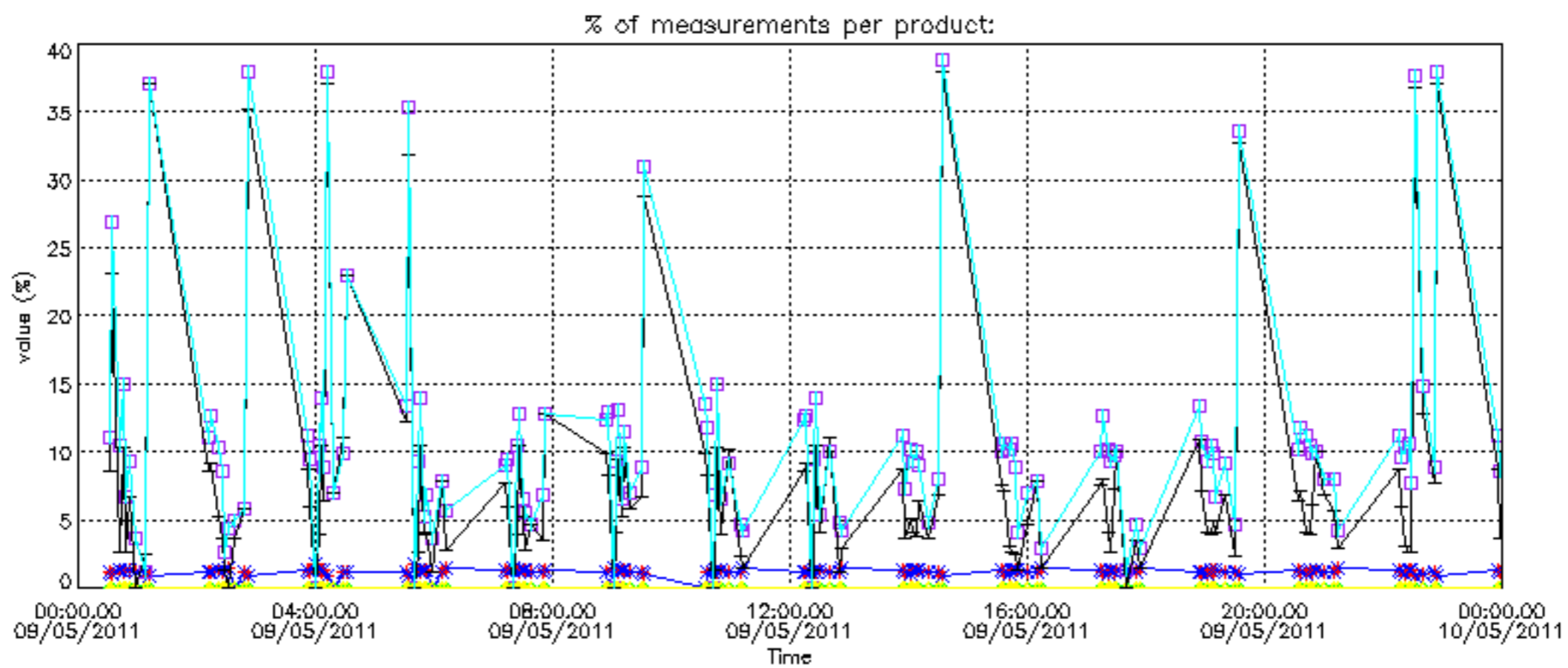
Percentage of flagged data per NO2 profile



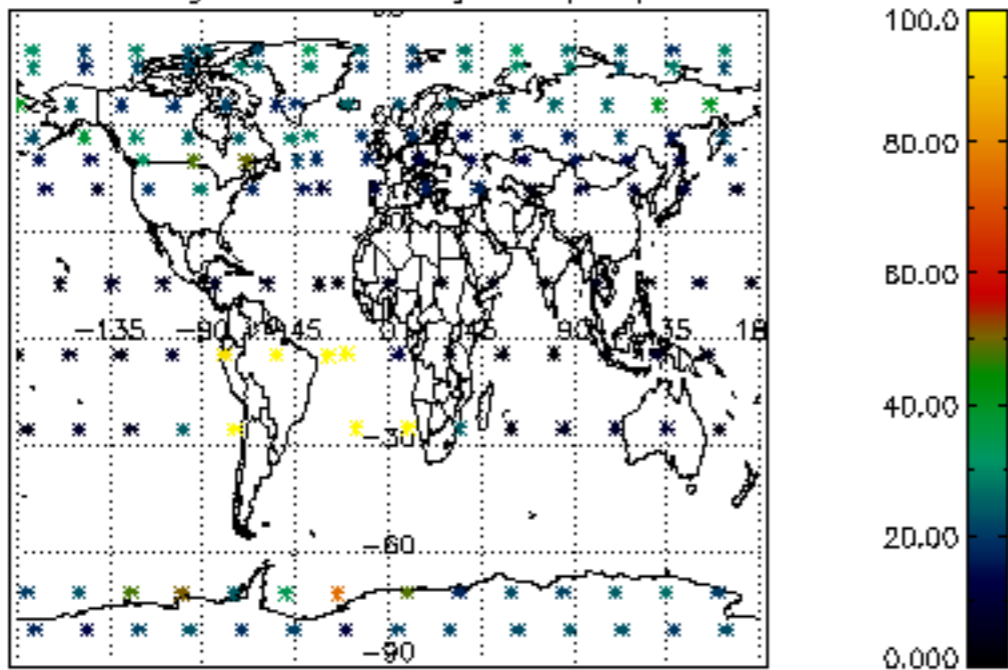
Percentage of flagged data per NO3 profile



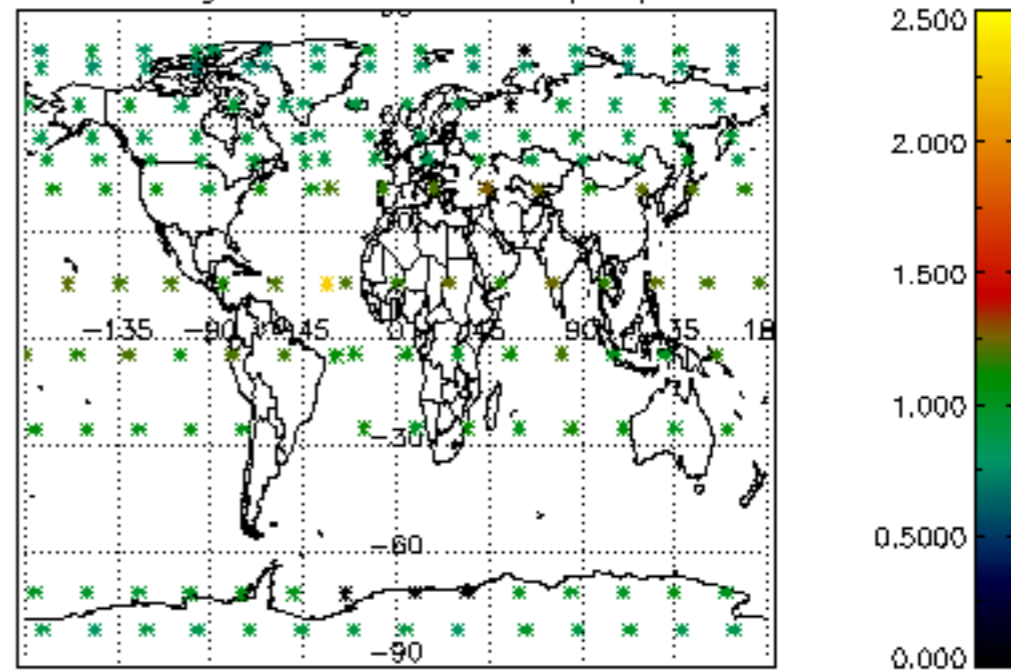




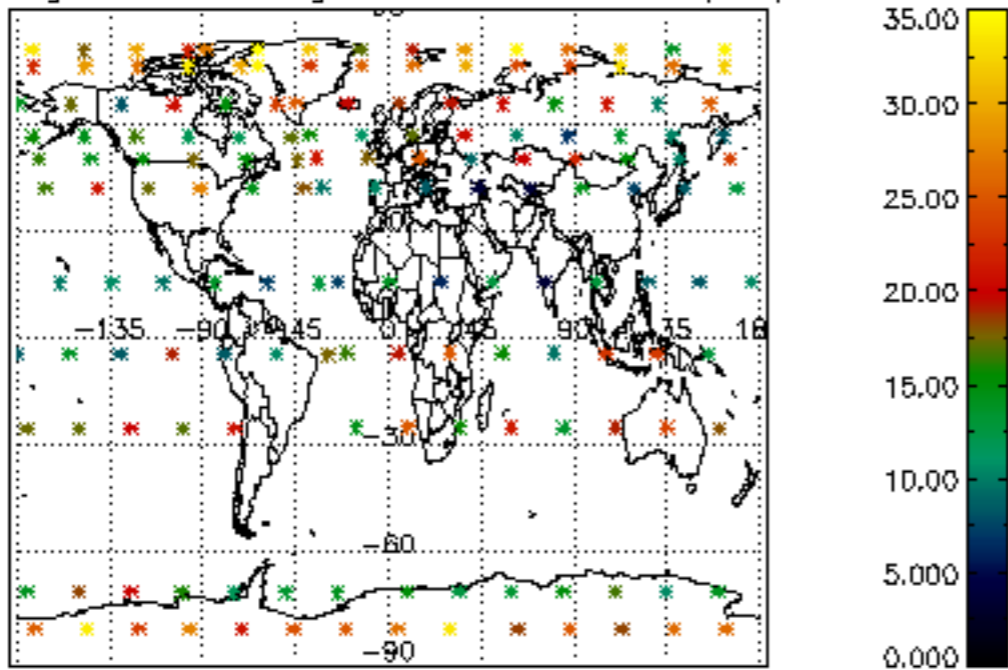
Percentage of cosmic ray hits per profile



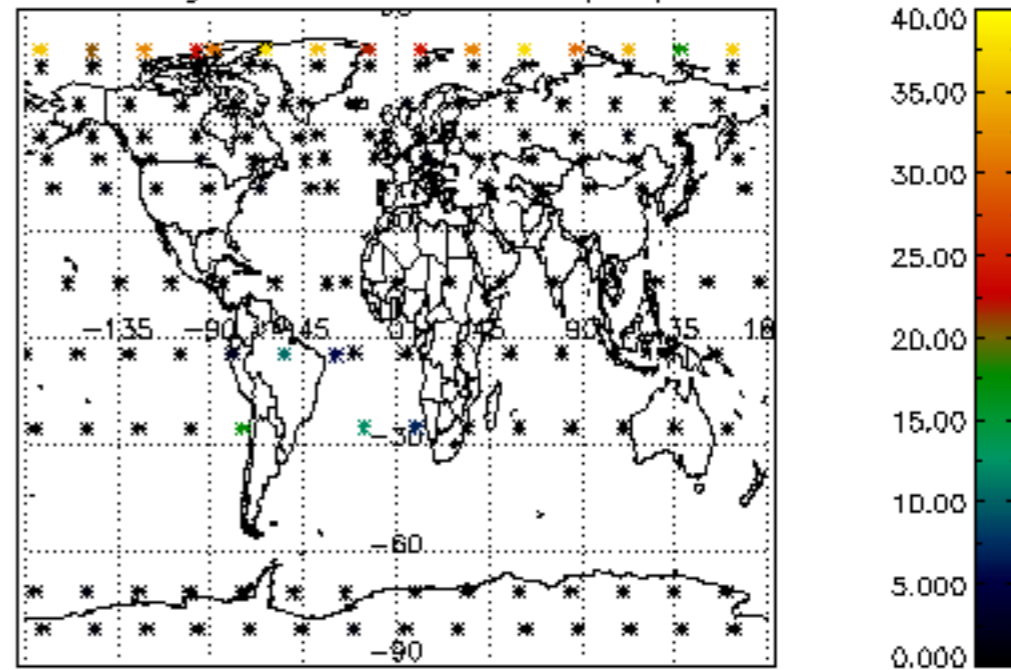
Percentage of datation errors per profile



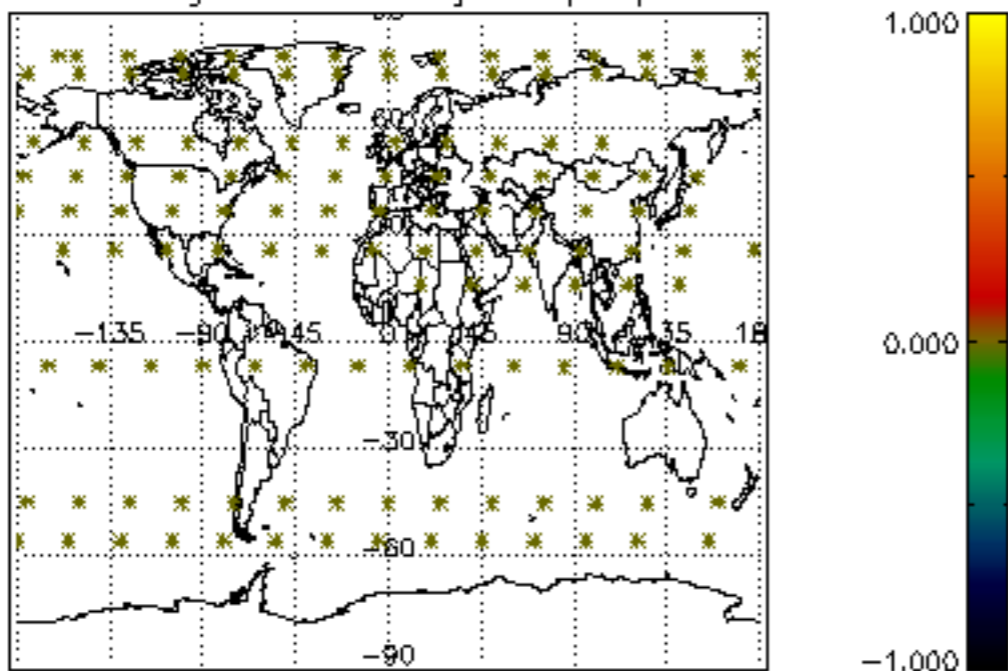
Percentage of star falling outside central band per profile



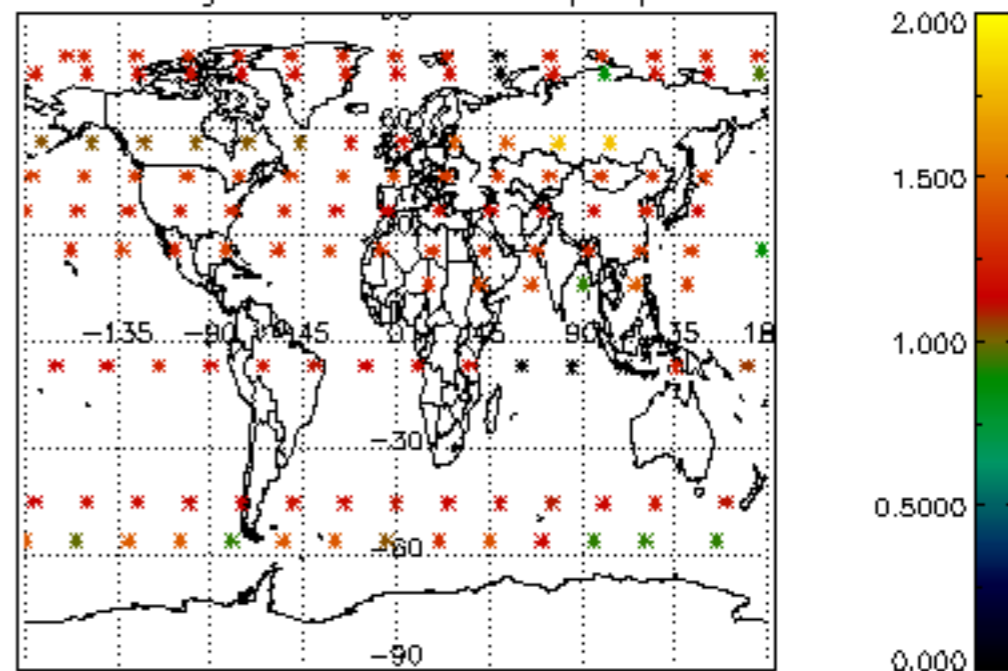
Percentage of saturation errors per profile



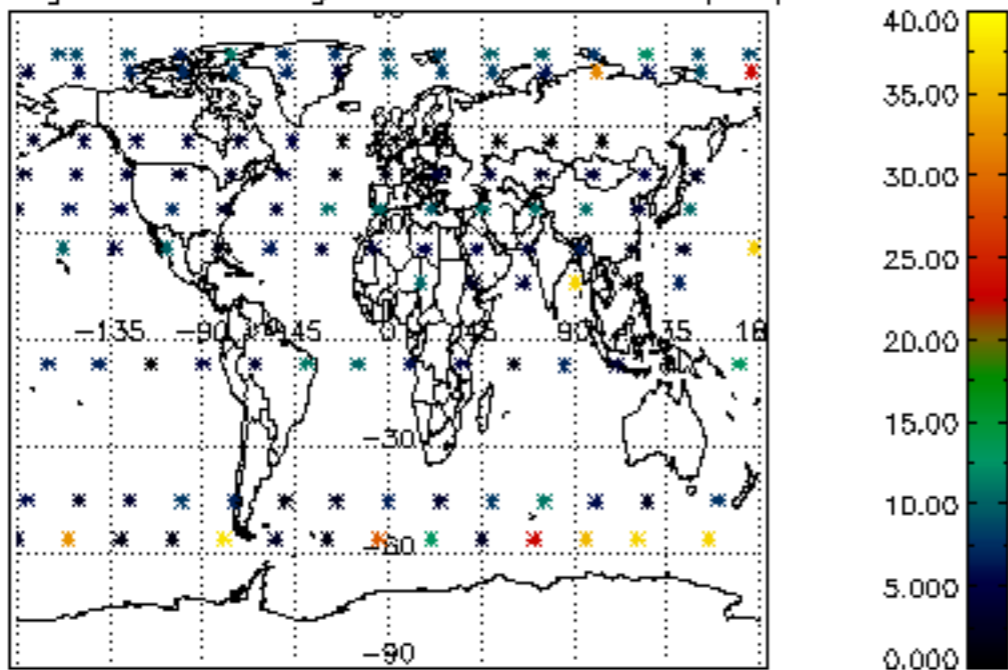
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

