

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](#)

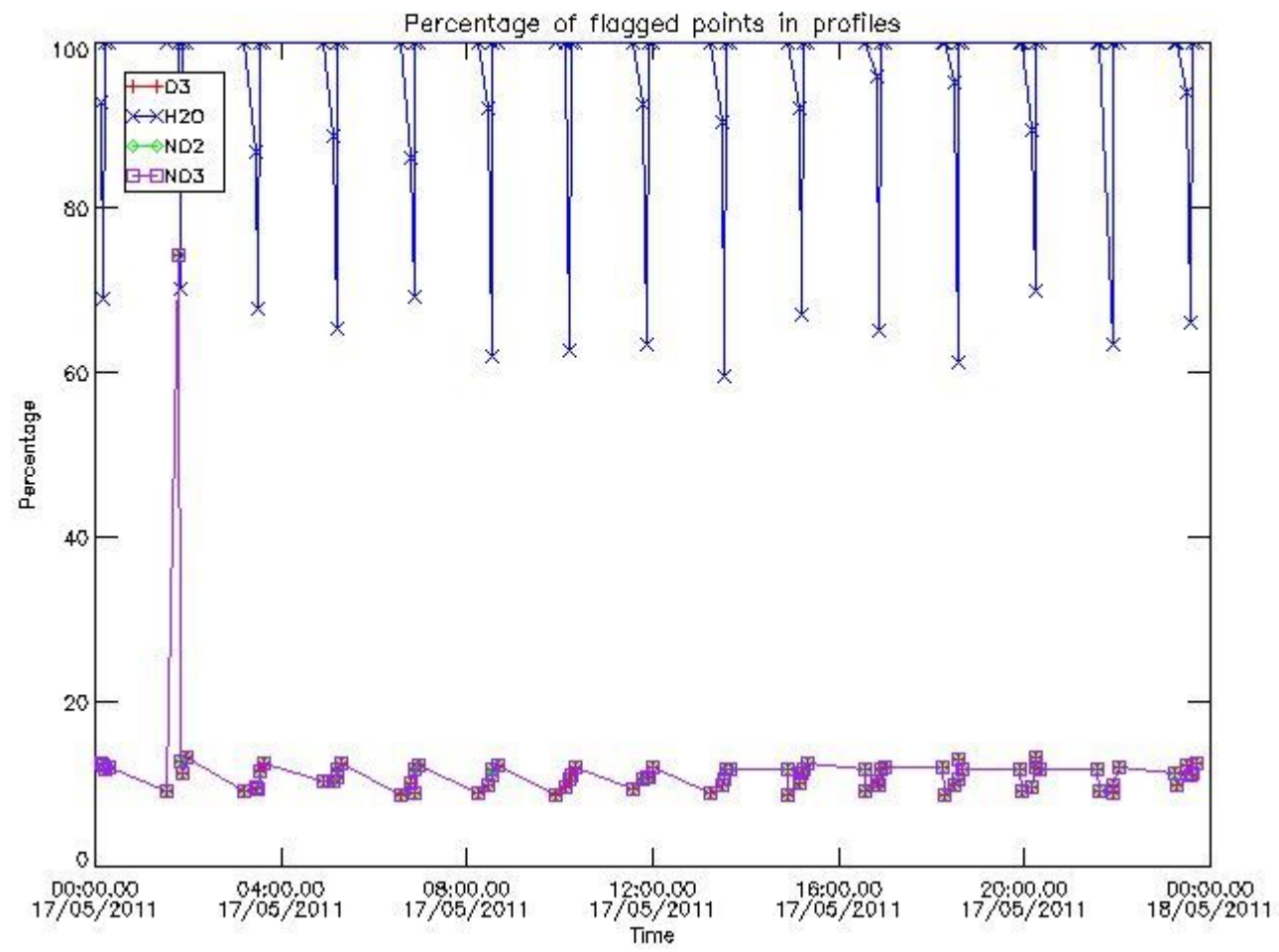
This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also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

Item	Value
Time of report generation	24APR2013 13:43:18
Data source version	GOMOS/6.01
Start time of products	17-05-2011 (17MAY2011 00:00:00)
Stop time of products	18-05-2011 (18MAY2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	330
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

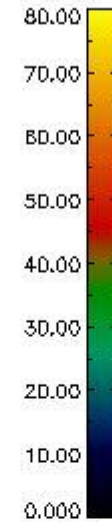
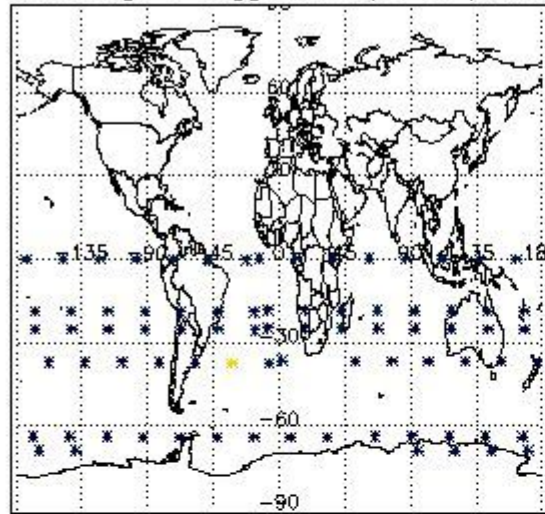
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110517_000636_000000493102_00303_48162_8618.N1	17-MAY-2011 00:06:36	Dark	49.000	18	24Alp PsA	1.1660	9700.0	98	48162	No
2	GOM_NL__2PRFIN20110517_001052_000000463102_00303_48162_8619.N1	17-MAY-2011 00:10:52	Dark	45.500	63	Bet Gru	2.1500	2800.0	91	48162	No
3	GOM_NL__2PRFIN20110517_001223_000000443102_00303_48162_8597.N1	17-MAY-2011 00:12:23	Dark	43.500	31	Alp Gru	1.7340	15200.	87	48162	No
4	GOM_NL__2PRFIN20110517_001754_000000433102_00304_48163_8598.N1	17-MAY-2011 00:17:54	Dark	42.500	45	Alp Pav	1.9400	26000.	85	48163	No
5	GOM_NL__2PRFIN20110517_002459_000000443102_00304_48163_8599.N1	17-MAY-2011 00:24:59	Straylight	43.500	141	Bet Ara	2.8400	4600.0	87	48163	No
6	GOM_NL__2PRFIN20110517_002735_000000473102_00304_48163_8600.N1	17-MAY-2011 00:27:35	Straylight	46.500	40	The Sco	1.8590	7100.0	93	48163	No
7	GOM_NL__2PRFIN20110517_002926_000000553102_00304_48163_8601.N1	17-MAY-2011 00:29:26	Straylight	55.000	25	35Lam Sco	1.6200	28000.	110	48163	No
8	GOM_NL__2PRFIN20110517_003142_000000503102_00304_48163_8602.N1	17-MAY-2011 00:31:42	Twilight	50.000	75	26Eps Sco	2.2910	4250.0	100	48163	No
9	GOM_NL__2PRFIN20110517_003444_000000523102_00304_48163_8603.N1	17-MAY-2011 00:34:44	Twilight	51.500	16	21Alp Sco	1.0200	3000.0	103	48163	No
10	GOM_NL__2PRFIN20110517_003717_000000453102_00304_48163_8604.N1	17-MAY-2011 00:37:17	Bright	44.500	97	8Bet1Sco	2.5610	30000.	89	48163	No
11	GOM_NL__2PRFIN20110517_004054_000000393102_00304_48163_8605.N1	17-MAY-2011 00:40:54	Bright	39.000	104	27Bet Lib	2.6140	13100.	78	48163	No
12	GOM_NL__2PRFIN20110517_004256_000000493102_00304_48163_8606.N1	17-MAY-2011 00:42:56	Bright	48.500	120	1Del Oph	2.7340	3200.0	97	48163	No
13	GOM_NL__2PRFIN20110517_004605_000000433102_00304_48163_8607.N1	17-MAY-2011 00:46:05	Bright	43.000	102	24Alp Ser	2.6000	4250.0	86	48163	No
14	GOM_NL__2PRFIN20110517_005142_000000403102_00304_48163_8608.N1	17-MAY-2011 00:51:42	Bright	39.500	83		2.3780	11000.	79	48163	No
15	GOM_NL__2PRFIN20110517_005450_000000353102_00304_48163_8609.N1	17-MAY-2011 00:54:50	Bright	35.000	180	27Gam Boo	3.0400	8000.0	70	48163	No
16	GOM_NL__2PRFIN20110517_010321_000000423102_00304_48163_8610.N1	17-MAY-2011 01:03:21	Bright	42.000	119	14Eta Dra	2.7270	4700.0	84	48163	No
17	GOM_NL__2PRFIN20110517_010500_000000403102_00304_48163_8611.N1	17-MAY-2011 01:05:00	Bright	39.500	60	7Bet UMi	2.0810	3950.0	79	48163	No
18	GOM_NL__2PRFIN20110517_011414_000000453102_00304_48163_8612.N1	17-MAY-2011 01:14:14	Bright	44.500	89	5Alp Cep	2.4510	8000.0	89	48163	No
19	GOM_NL__2PRFIN20110517_011735_000000533102_00304_48163_8613.N1	17-MAY-2011 01:17:35	Bright	53.000	76	27Gam Cas	2.3000	30000.	106	48163	No
20	GOM_NL__2PRFIN20110517_011848_000000543102_00304_48163_8614.N1	17-MAY-2011 01:18:48	Bright	54.000	68	18Alp Cas	2.2250	4500.0	108	48163	No
21	GOM_NL__2PRFIN20110517_012713_000000463102_00304_48163_8615.N1	17-MAY-2011 01:27:13	Bright	46.000	58	21Alp And	2.0730	11000.	92	48163	No
22	GOM_NL__2PRFIN20110517_013125_000000423102_00304_48163_8616.N1	17-MAY-2011 01:31:25	Twilight	41.500	140	88Gam Peg	2.8340	26000.	83	48163	No
23	GOM_NL__2PRFIN20110517_013307_000000563102_00304_48163_8617.N1	17-MAY-2011 01:33:07	Dark	55.500	90	54Alp Peg	2.4870	11000.	111	48163	No
24	GOM_NL__2PRFIN20110517_014650_000000513102_00304_48163_8618.N1	17-MAY-2011 01:46:50	Dark	51.000	18	24Alp PsA	1.1660	9700.0	102	48163	No
25	GOM_NL__2PRFIN20110517_015106_000000563102_00304_48163_8619.N1	17-MAY-2011 01:51:06	Dark	55.500	63	Bet Gru	2.1500	2800.0	111	48163	No
26	GOM_NL__2PRFIN20110517_015237_000000453102_00304_48163_8617.N1	17-MAY-2011 01:52:37	Dark	45.000	31	Alp Gru	1.7340	15200.	90	48163	No
27	GOM_NL__2PRFIN20110517_015808_000000433102_00305_48164_8618.N1	17-MAY-2011 01:58:08	Dark	42.500	45	Alp Pav	1.9400	26000.	85	48164	No
28	GOM_NL__2PRFIN20110517_020514_000000483102_00305_48164_8619.N1	17-MAY-2011 02:05:14	Straylight	47.500	141	Bet Ara	2.8400	4600.0	95	48164	No
29	GOM_NL__2PRFIN20110517_020749_000000543102_00305_48164_8620.N1	17-MAY-2011 02:07:49	Straylight	53.500	40	The Sco	1.8590	7100.0	107	48164	No
30	GOM_NL__2PRFIN20110517_020941_000000543102_00305_48164_8621.N1	17-MAY-2011 02:09:41	Straylight	53.500	25	35Lam Sco	1.6200	28000.	107	48164	No
31	GOM_NL__2PRFIN20110517_021157_000000503102_00305_48164_8622.N1	17-MAY-2011 02:11:57	Twilight	50.000	75	26Eps Sco	2.2910	4250.0	100	48164	No
32	GOM_NL__2PRFIN20110517_021458_000000613102_00305_48164_8623.N1	17-MAY-2011 02:14:58	Twilight	60.500	16	21Alp Sco	1.0200	3000.0	121	48164	No
33	GOM_NL__2PRFIN20110517_021731_000000453102_00305_48164_8624.N1	17-MAY-2011 02:17:31	Bright	44.500	97	8Bet1Sco	2.5610	30000.	89	48164	No
34	GOM_NL__2PRFIN20110517_022108_000000393102_00305_48164_8625.N1	17-MAY-2011 02:21:08	Bright	39.000	104	27Bet Lib	2.6140	13100.	78	48164	No
35	GOM_NL__2PRFIN20110517_022310_000000493102_00305_48164_8626.N1	17-MAY-2011 02:23:10	Bright	48.500	120	1Del Oph	2.7340	3200.0	97	48164	No
36	GOM_NL__2PRFIN20110517_022619_000000443102_00305_48164_8627.N1	17-MAY-2011 02:26:19	Bright	43.500	102	24Alp Ser	2.6000	4250.0	87	48164	No
37	GOM_NL__2PRFIN20110517_023155_000000393102_00305_48164_8628.N1	17-MAY-2011 02:31:55	Bright	39.000	83		2.3780	11000.	78	48164	No
38	GOM_NL__2PRFIN20110517_023503_000000543102_00305_48164_8629.N1	17-MAY-2011 02:35:03	Bright	54.000	180	27Gam Boo	3.0400	8000.0	108	48164	No
39	GOM_NL__2PRFIN20110517_024334_000000393102_00305_48164_8630.N1	17-MAY-2011 02:43:34	Bright	38.500	119	14Eta Dra	2.7270	4700.0	77	48164	No
40	GOM_NL__2PRFIN20110517_024514_000000353102_00305_48164_8631.N1	17-MAY-2011 02:45:14	Bright	34.500	60	7Bet UMi	2.0810	3950.0	69	48164	No
41	GOM_NL__2PRFIN20110517_025428_000000453102_00305_48164_8632.N1	17-MAY-2011 02:54:28	Bright	45.000	89	5Alp Cep	2.4510	8000.0	90	48164	No
42	GOM_NL__2PRFIN20110517_025749_000000533102_00305_48164_8633.N1	17-MAY-2011 02:57:49	Bright	53.000	76	27Gam Cas	2.3000	30000.	106	48164	No

3.1 Plot quality information per product (time dependant)

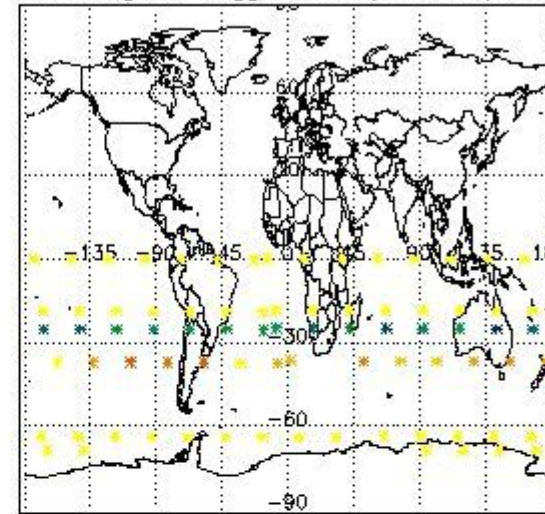


3.2 Plot quality information per product (world map)

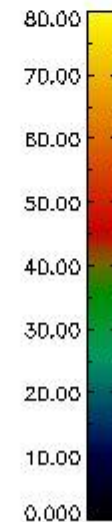
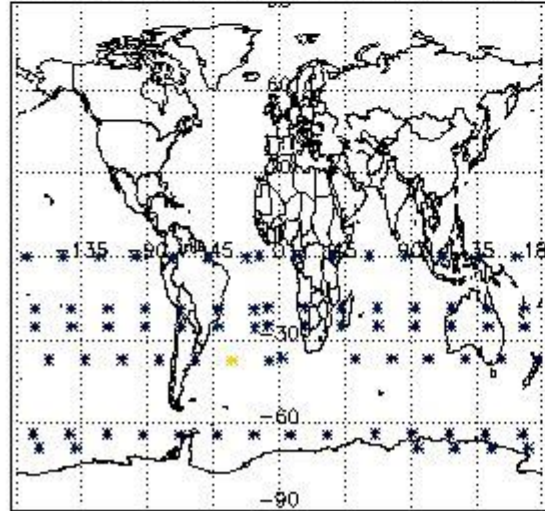
Percentage of flagged data per O3 profile



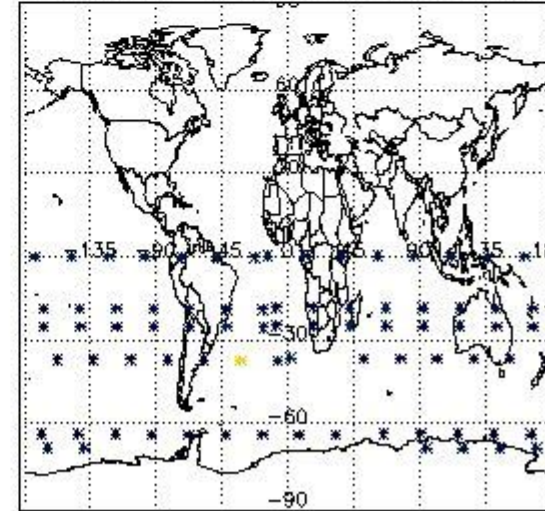
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

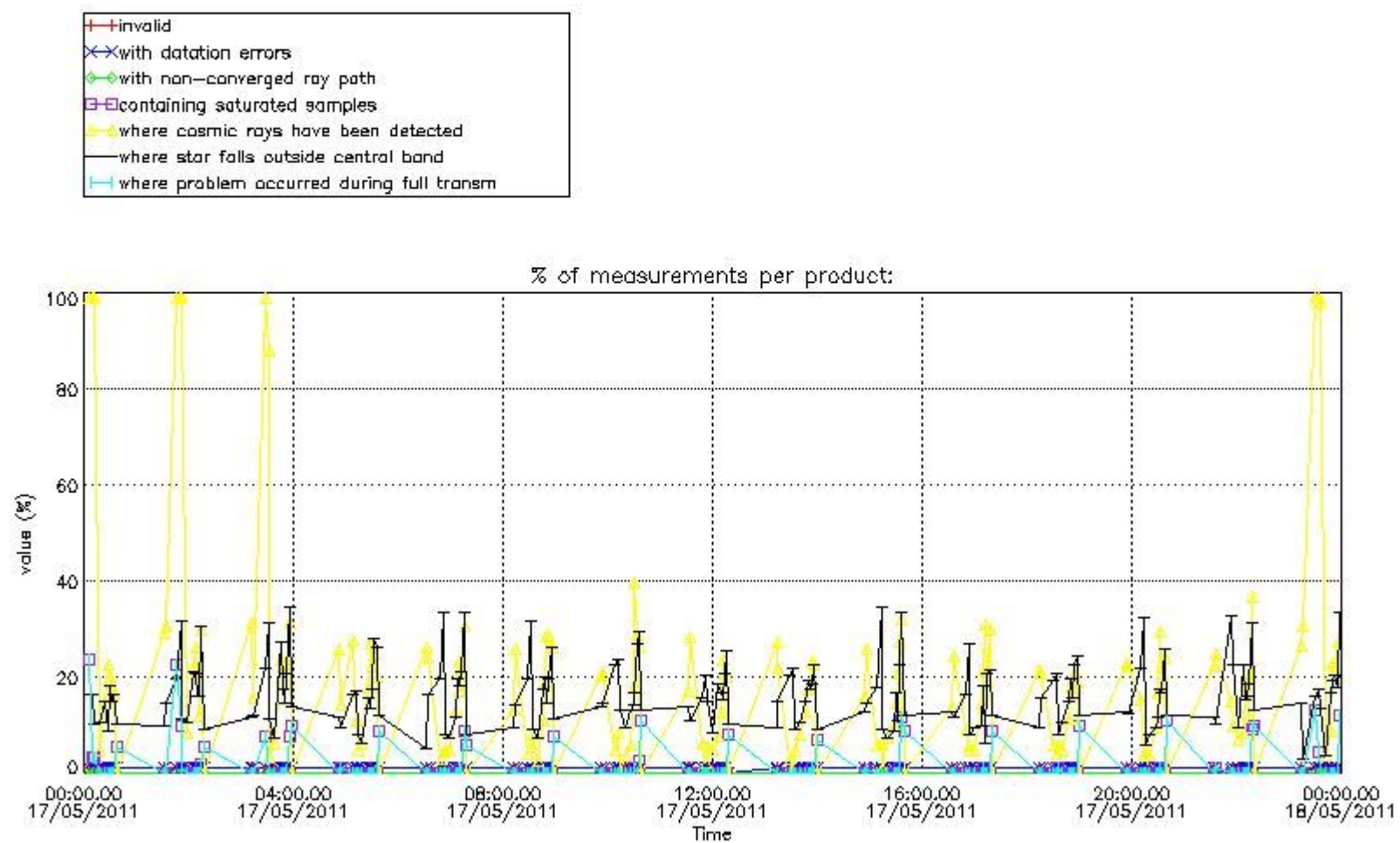


4. Level 1 quality information per product

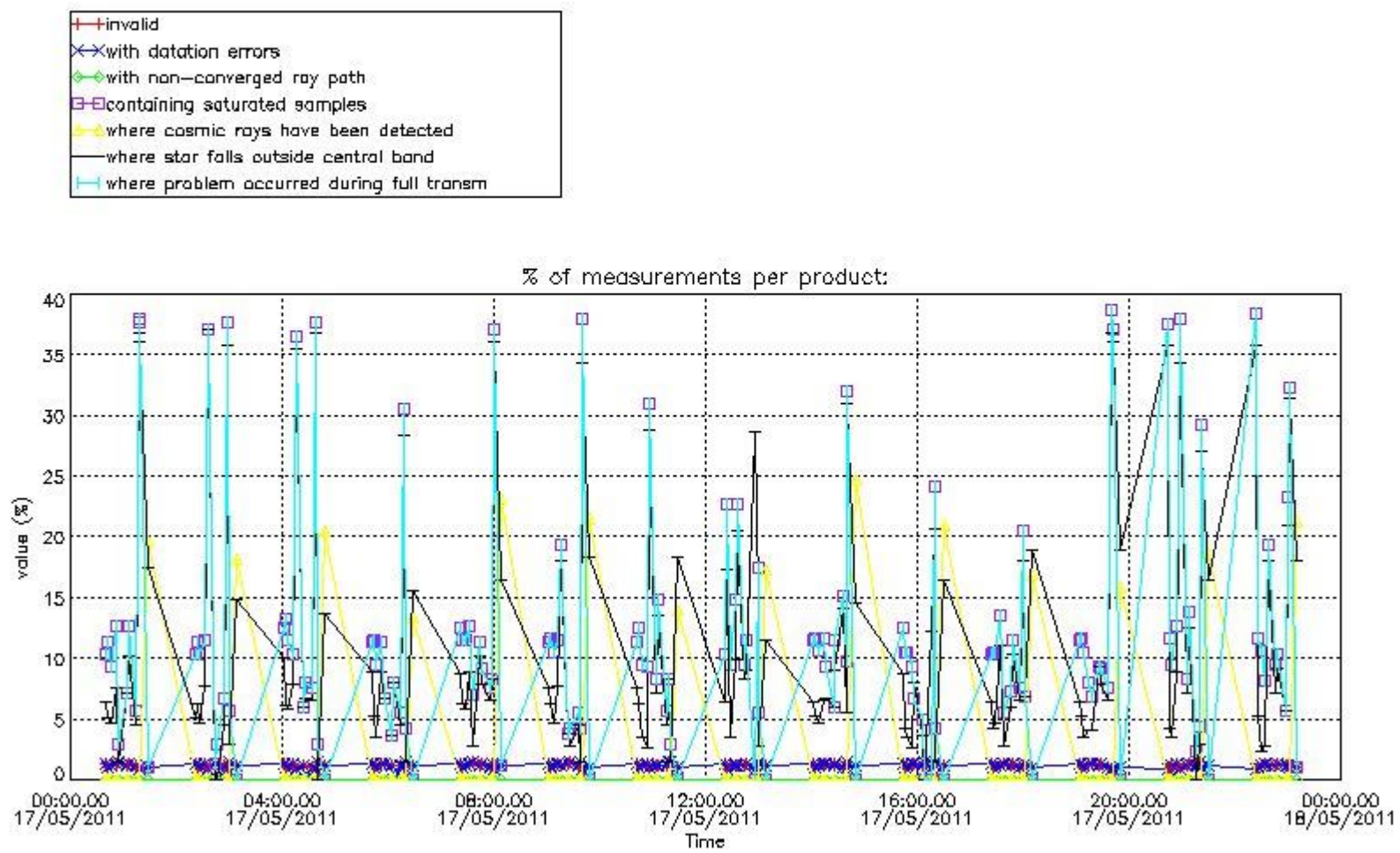
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

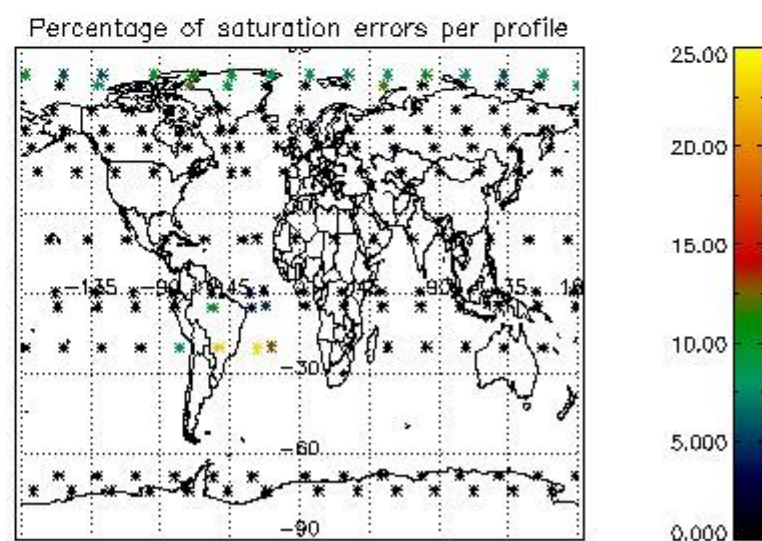
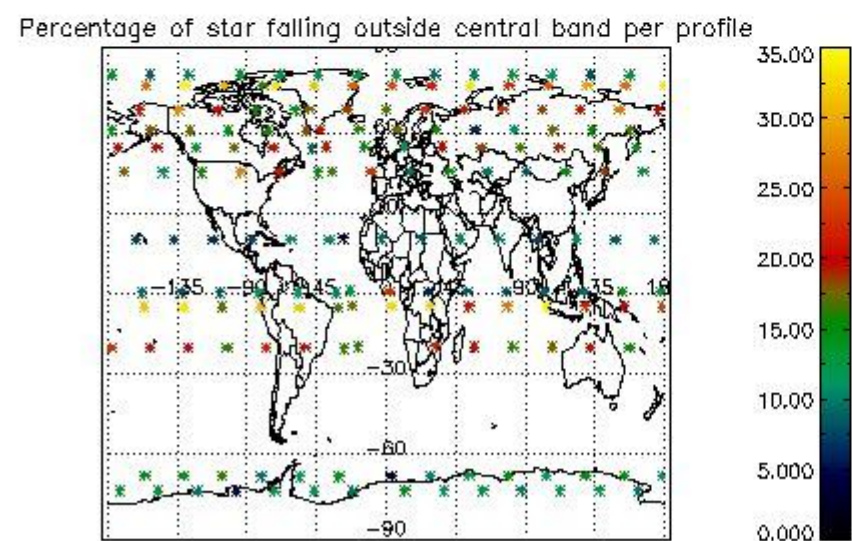
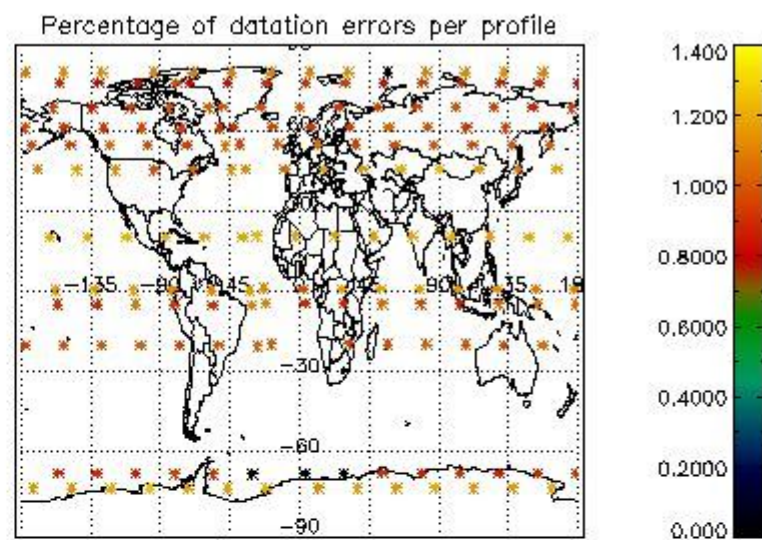
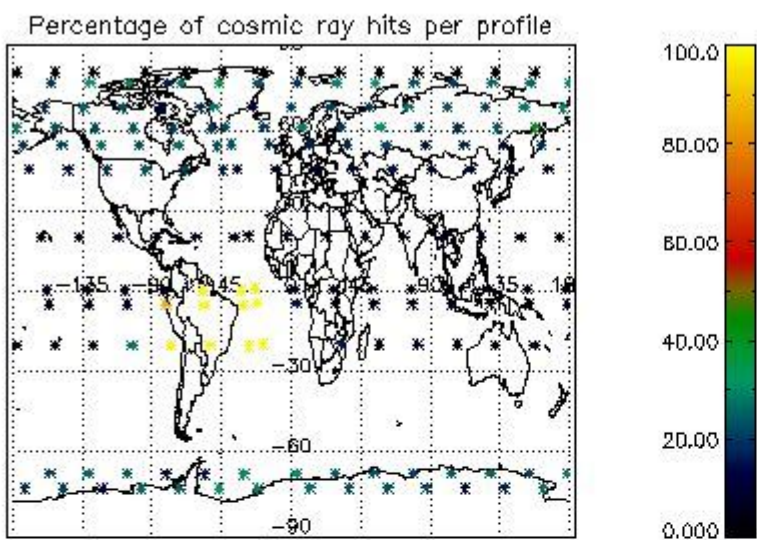


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

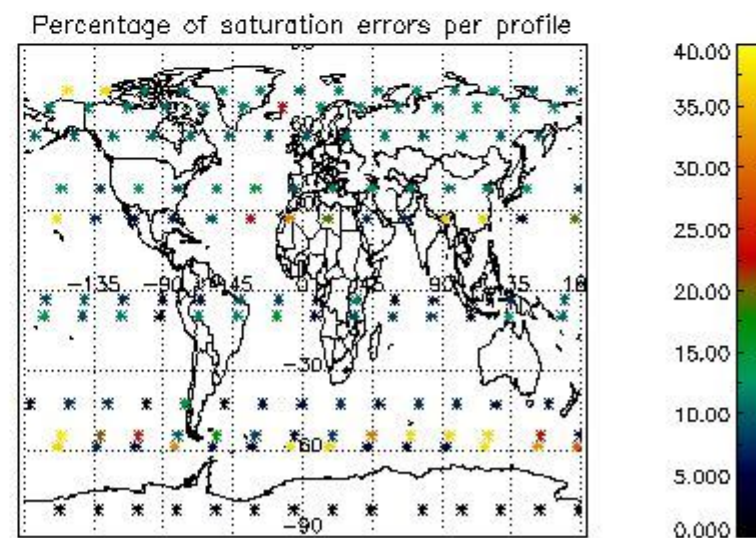
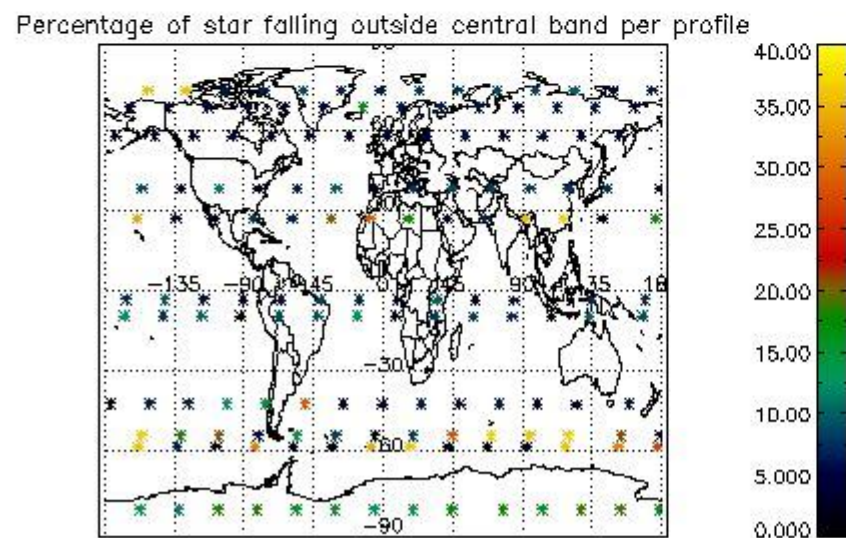
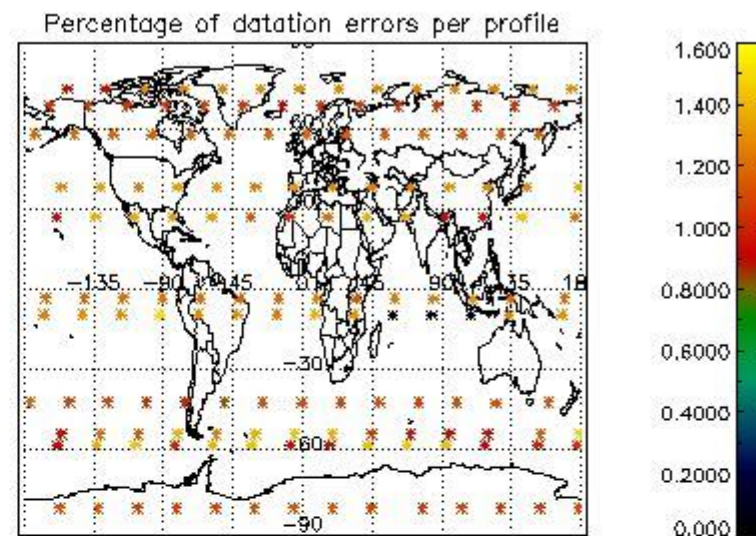
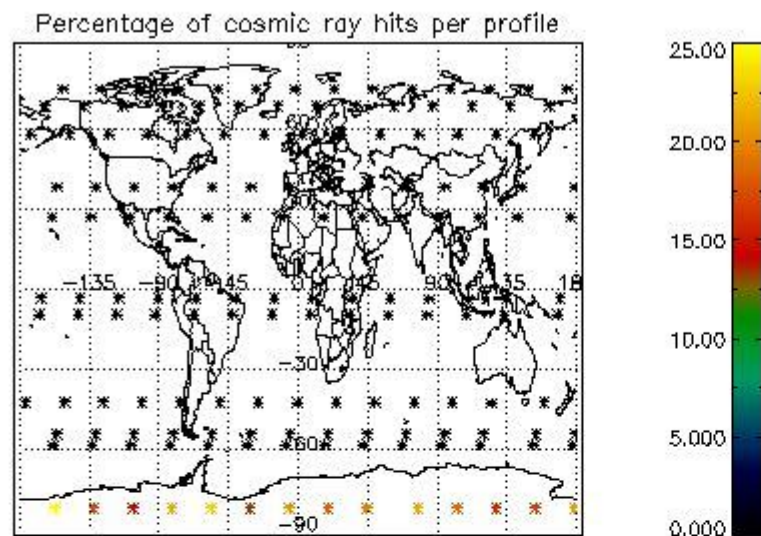


4.2 Plot quality information per product coming from level 1b processing (world map)

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

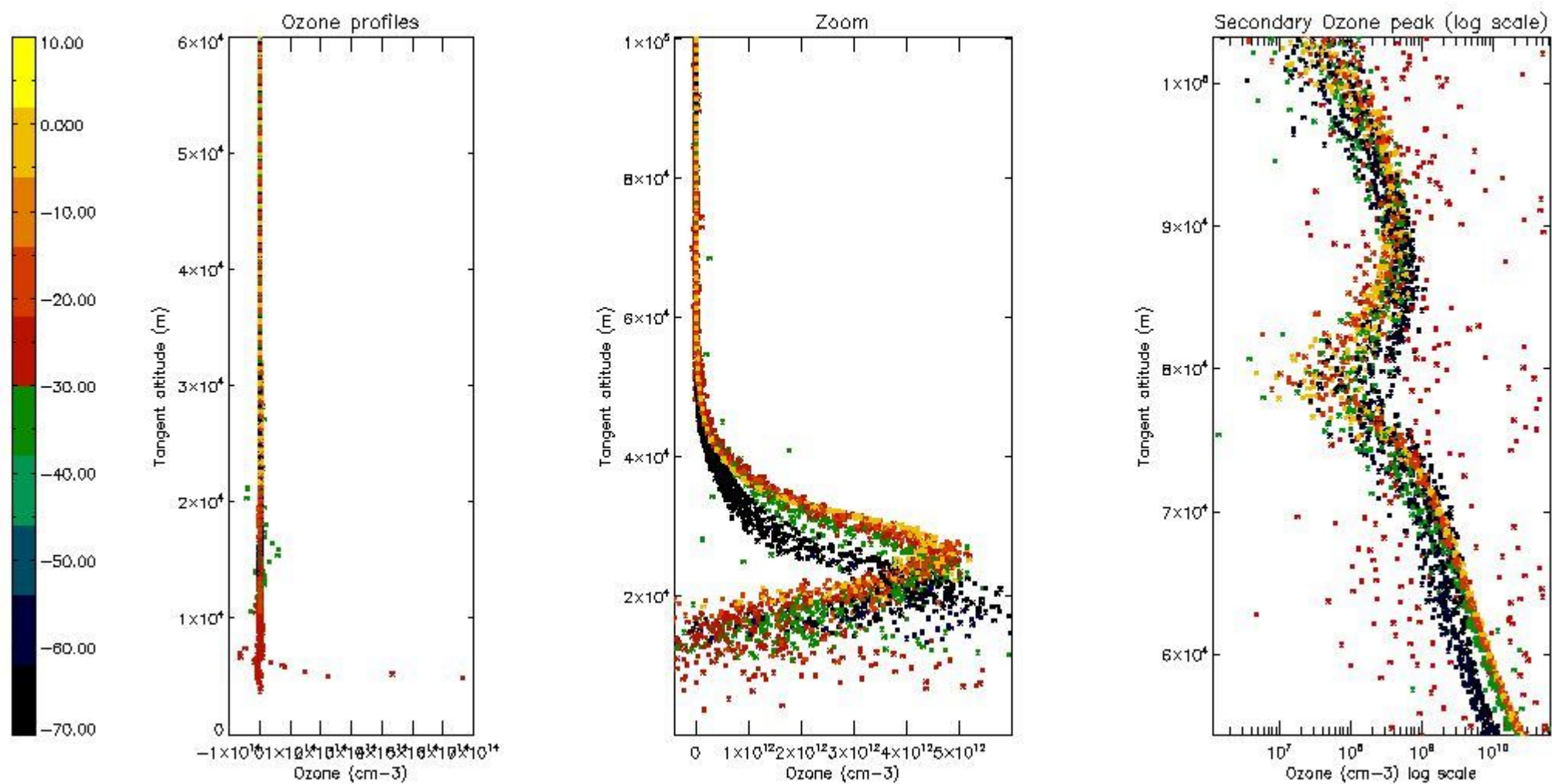
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	25
STD < 20	13

STD < 10	10
STD < 5	6

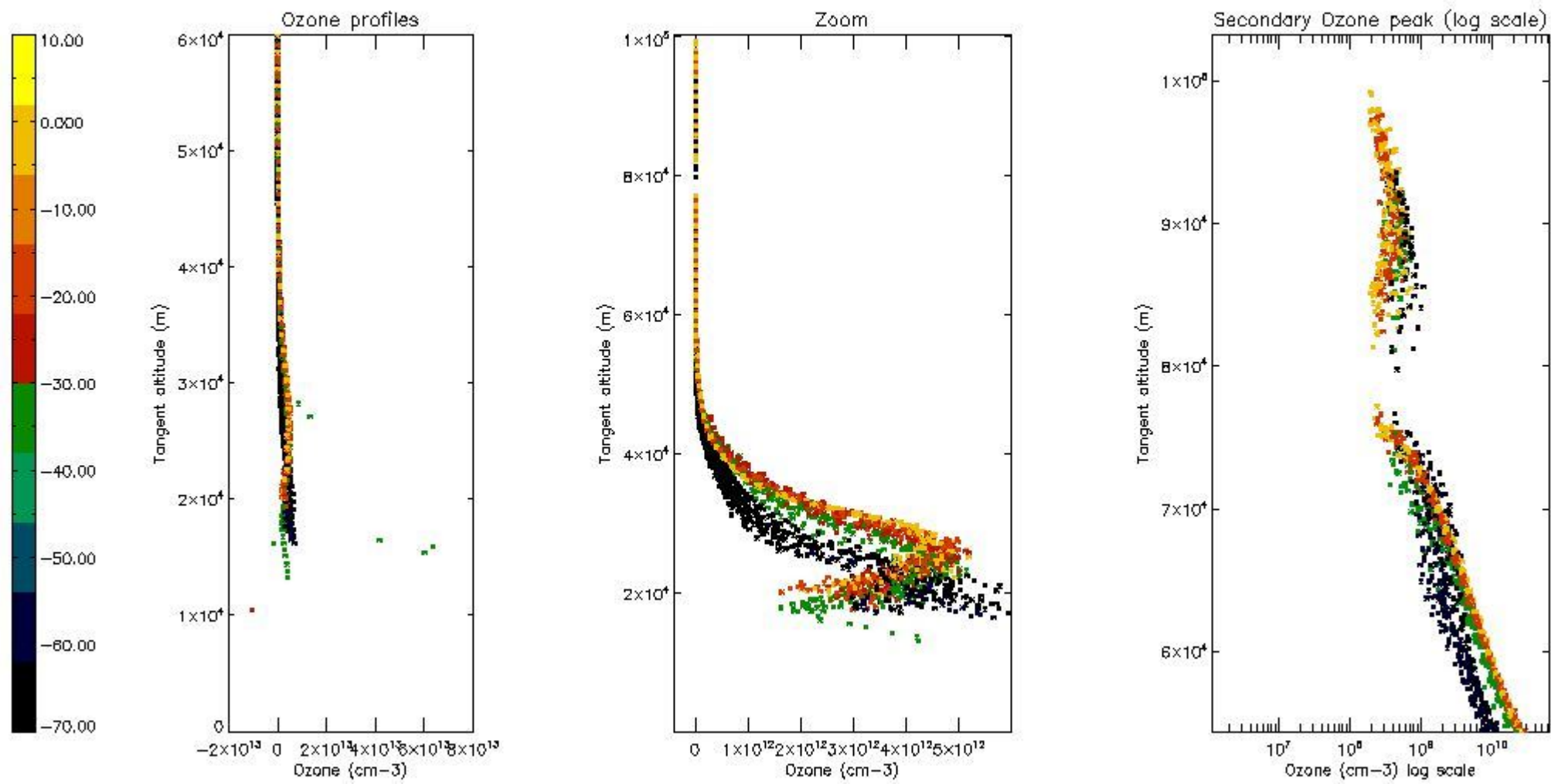
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



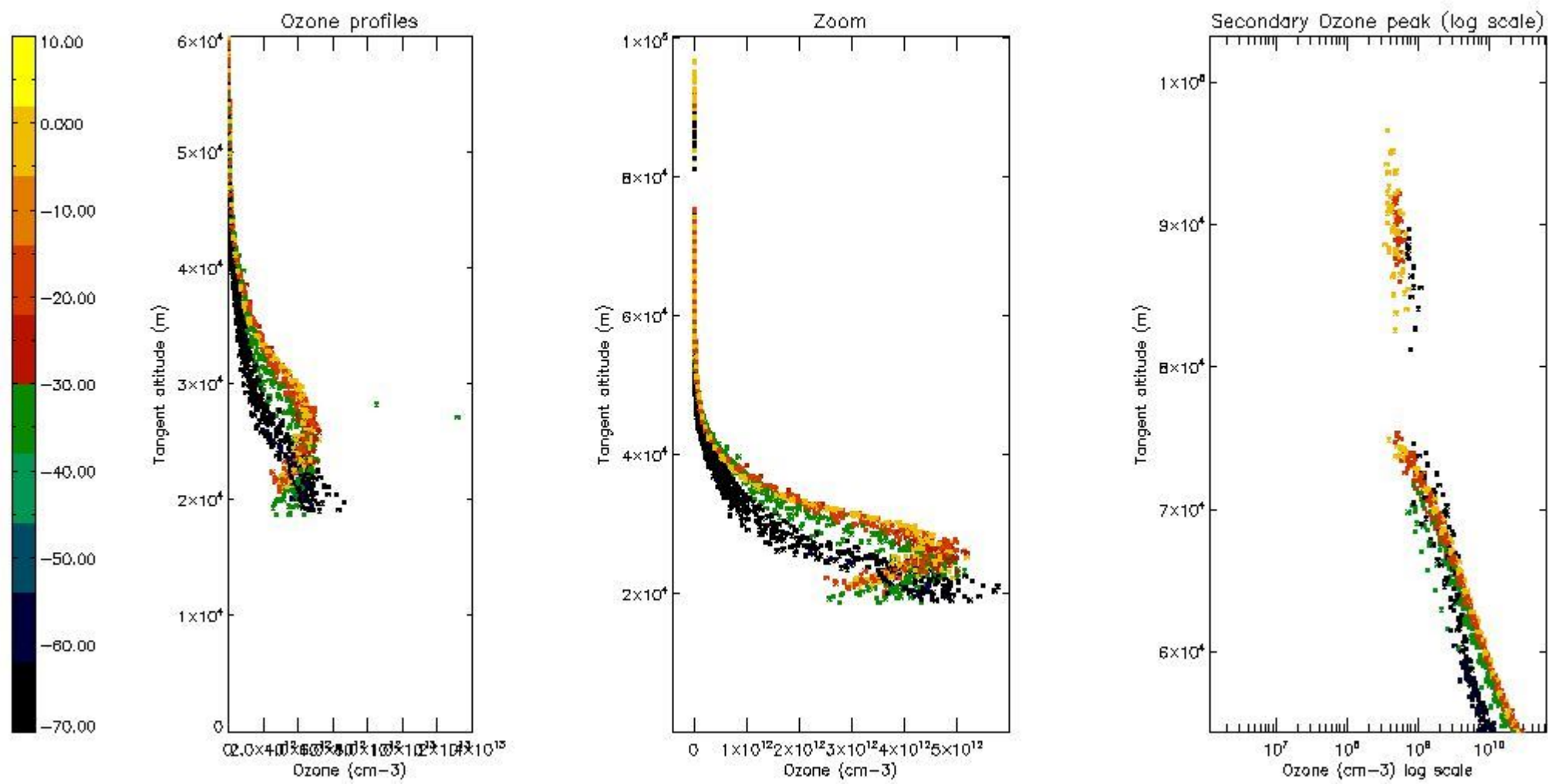
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



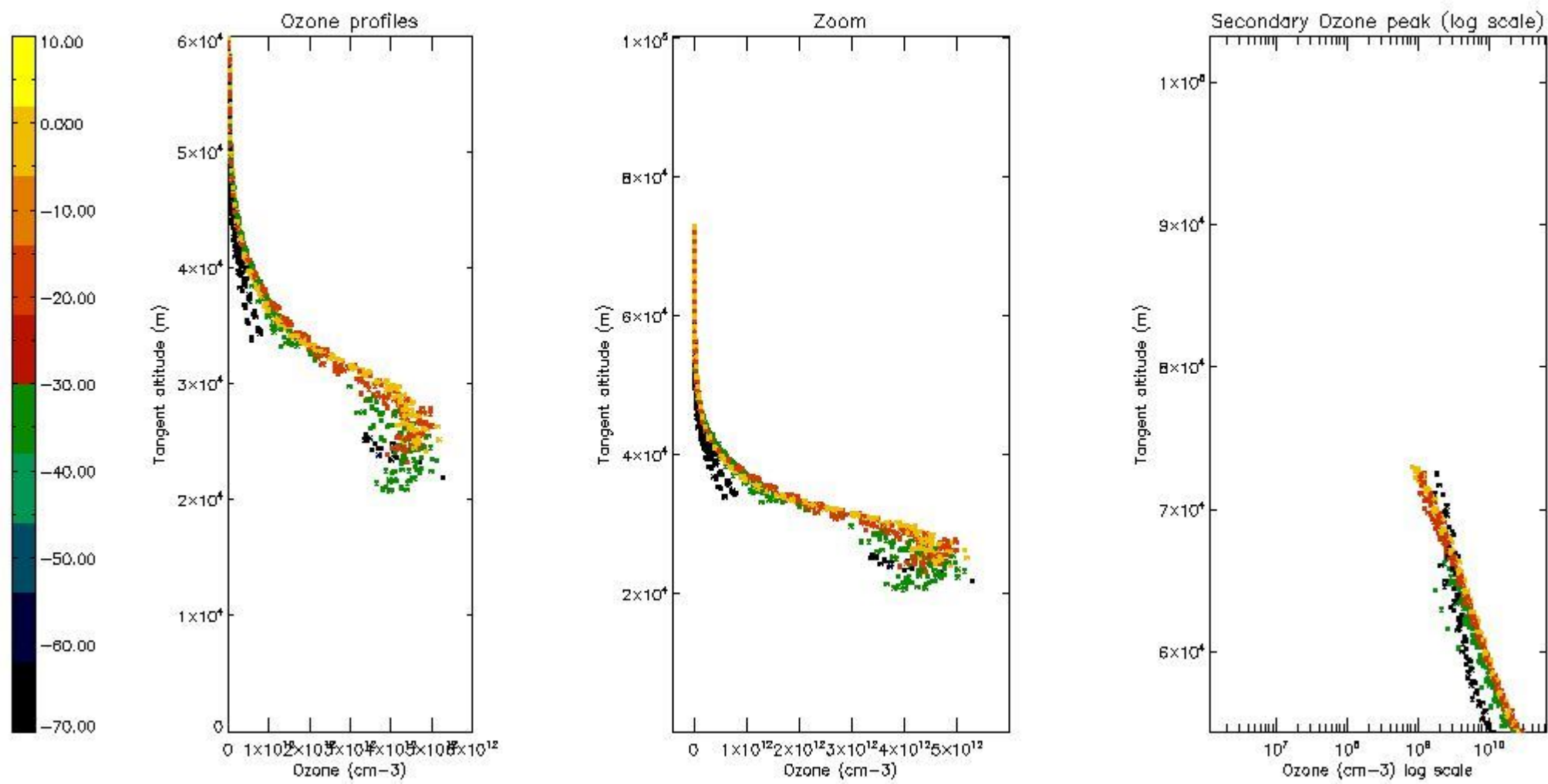
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



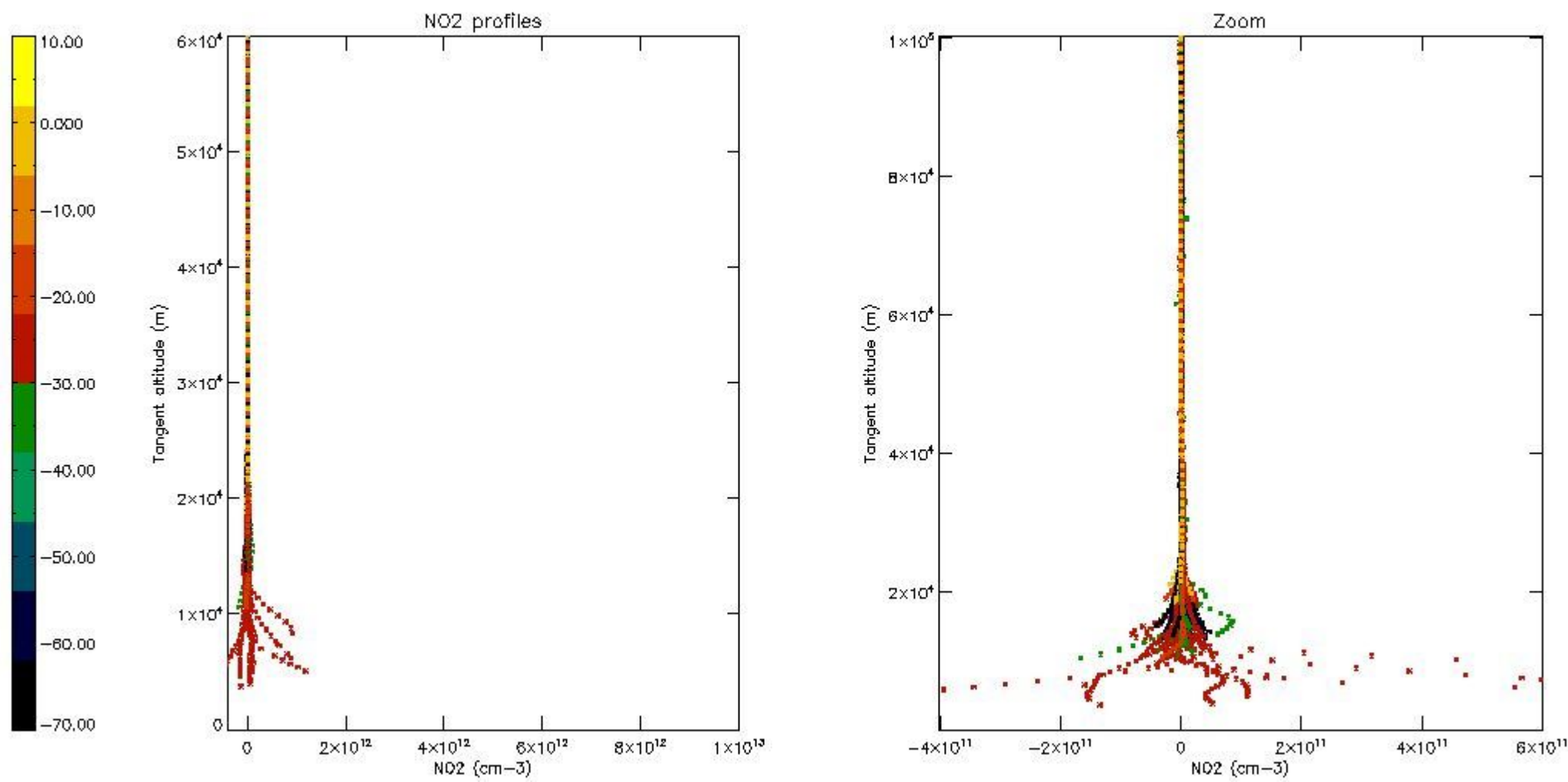
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



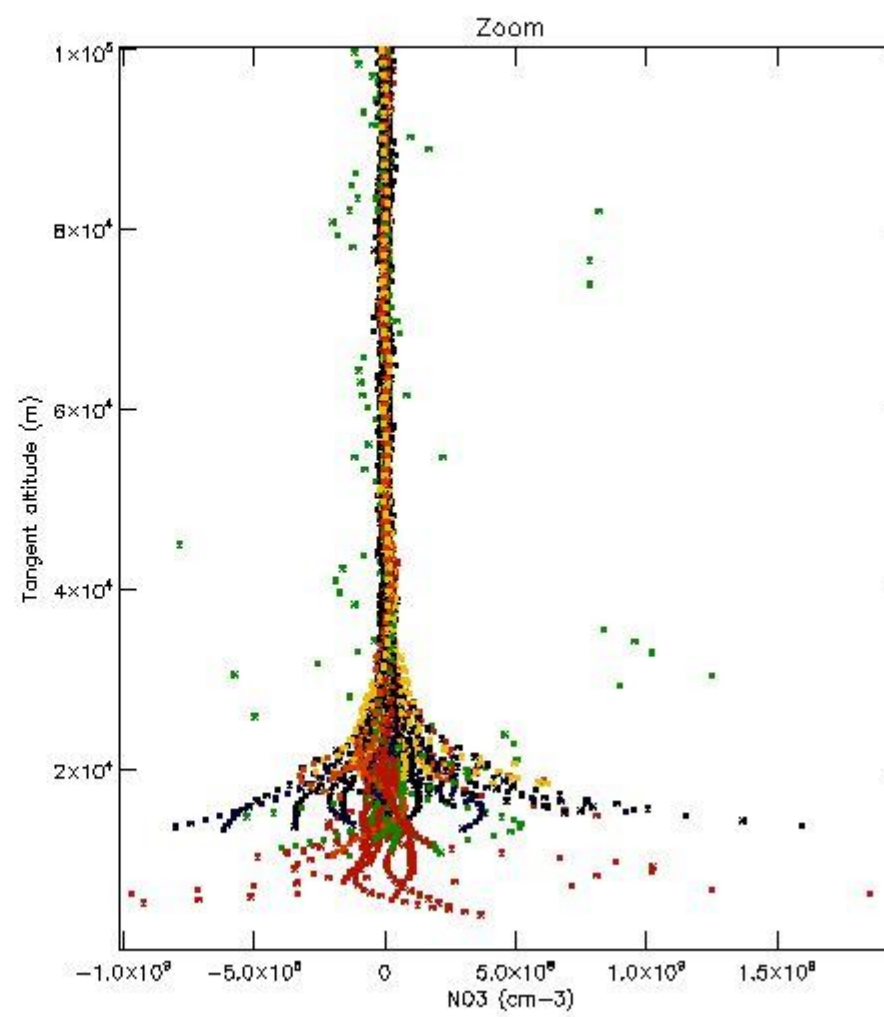
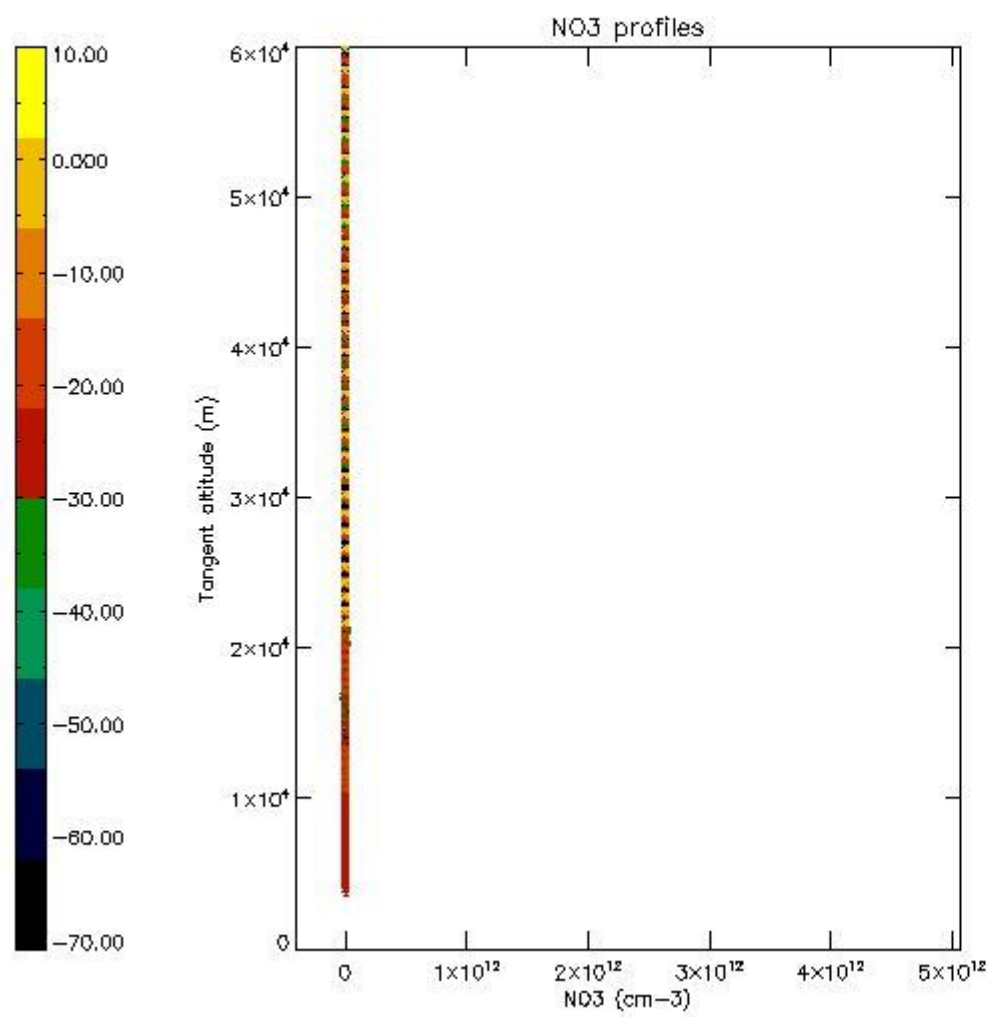
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



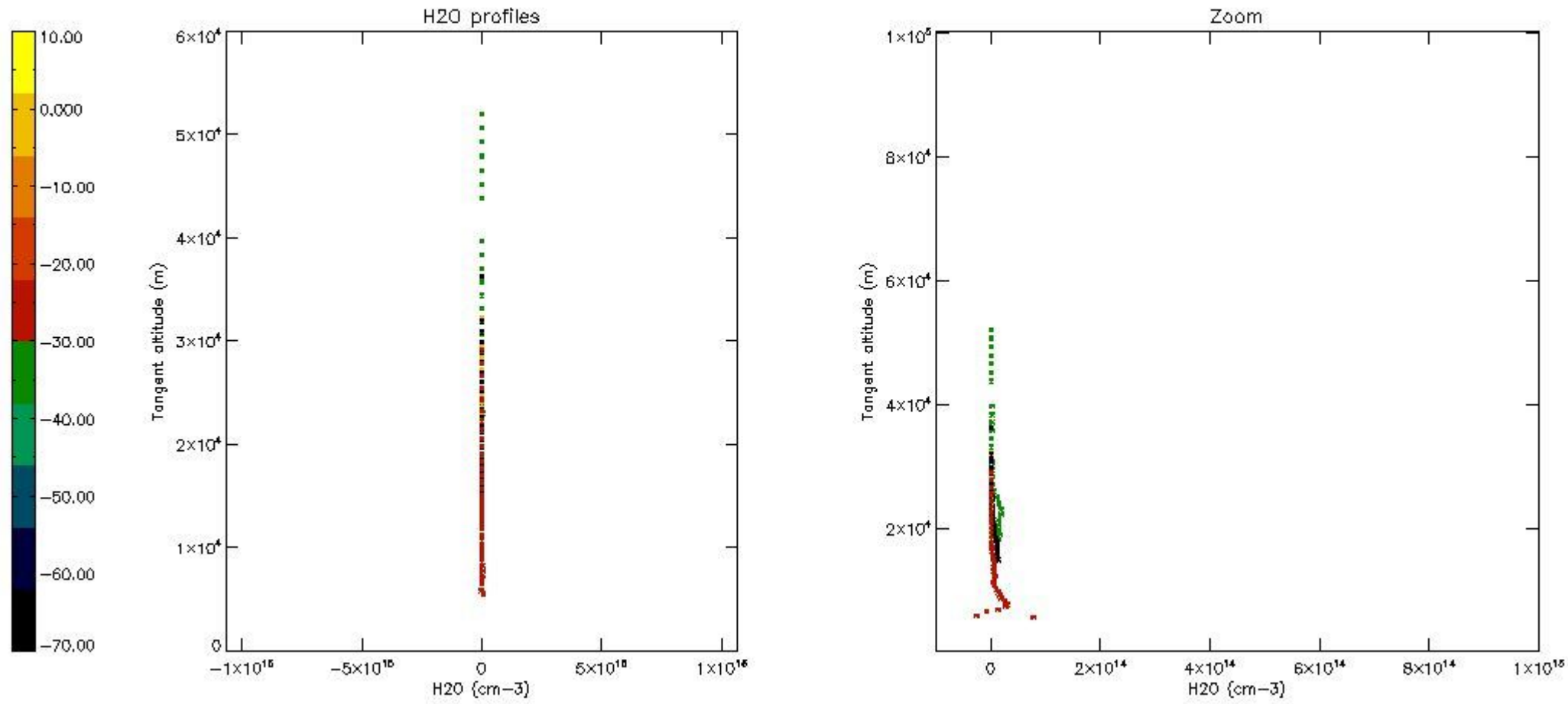
5.7 Plot NO3 profiles for all STD (dark without errors)

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	17-MAY-2011 00:06:36
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	17-MAY-2011 00:06:36
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	17-MAY-2011 00:06:36

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[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](#)

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

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

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

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

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.

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Time of report generation	24APR2013 13:43:18
Data source version	GOMOS/6.01
Start time of products	17-05-2011 (17MAY2011 00:00:00)
Stop time of products	18-05-2011 (18MAY2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	330
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

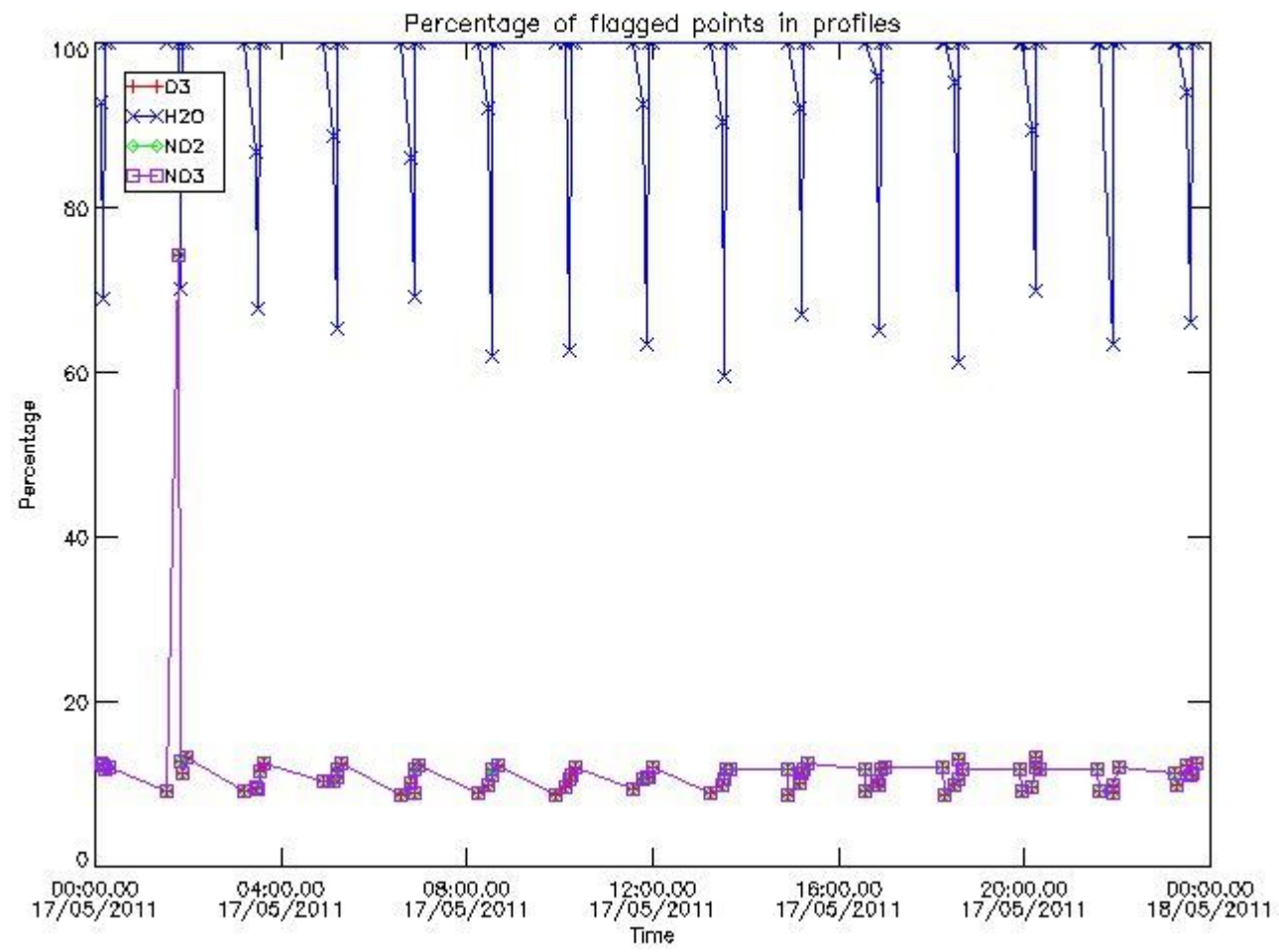
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110517_000636_000000493102_00303_48162_8618.N1	17-MAY-2011 00:06:36	Dark	49.000	18	24Alp PsA	1.1660	9700.0	98	48162	No
2	GOM_NL__2PRFIN20110517_001052_000000463102_00303_48162_8619.N1	17-MAY-2011 00:10:52	Dark	45.500	63	Bet Gru	2.1500	2800.0	91	48162	No
3	GOM_NL__2PRFIN20110517_001223_000000443102_00303_48162_8597.N1	17-MAY-2011 00:12:23	Dark	43.500	31	Alp Gru	1.7340	15200.	87	48162	No
4	GOM_NL__2PRFIN20110517_001754_000000433102_00304_48163_8598.N1	17-MAY-2011 00:17:54	Dark	42.500	45	Alp Pav	1.9400	26000.	85	48163	No
5	GOM_NL__2PRFIN20110517_002459_000000443102_00304_48163_8599.N1	17-MAY-2011 00:24:59	Straylight	43.500	141	Bet Ara	2.8400	4600.0	87	48163	No
6	GOM_NL__2PRFIN20110517_002735_000000473102_00304_48163_8600.N1	17-MAY-2011 00:27:35	Straylight	46.500	40	The Sco	1.8590	7100.0	93	48163	No
7	GOM_NL__2PRFIN20110517_002926_000000553102_00304_48163_8601.N1	17-MAY-2011 00:29:26	Straylight	55.000	25	35Lam Sco	1.6200	28000.	110	48163	No
8	GOM_NL__2PRFIN20110517_003142_000000503102_00304_48163_8602.N1	17-MAY-2011 00:31:42	Twilight	50.000	75	26Eps Sco	2.2910	4250.0	100	48163	No
9	GOM_NL__2PRFIN20110517_003444_000000523102_00304_48163_8603.N1	17-MAY-2011 00:34:44	Twilight	51.500	16	21Alp Sco	1.0200	3000.0	103	48163	No
10	GOM_NL__2PRFIN20110517_003717_000000453102_00304_48163_8604.N1	17-MAY-2011 00:37:17	Bright	44.500	97	8Bet1Sco	2.5610	30000.	89	48163	No
11	GOM_NL__2PRFIN20110517_004054_000000393102_00304_48163_8605.N1	17-MAY-2011 00:40:54	Bright	39.000	104	27Bet Lib	2.6140	13100.	78	48163	No
12	GOM_NL__2PRFIN20110517_004256_000000493102_00304_48163_8606.N1	17-MAY-2011 00:42:56	Bright	48.500	120	1Del Oph	2.7340	3200.0	97	48163	No
13	GOM_NL__2PRFIN20110517_004605_000000433102_00304_48163_8607.N1	17-MAY-2011 00:46:05	Bright	43.000	102	24Alp Ser	2.6000	4250.0	86	48163	No
14	GOM_NL__2PRFIN20110517_005142_000000403102_00304_48163_8608.N1	17-MAY-2011 00:51:42	Bright	39.500	83		2.3780	11000.	79	48163	No
15	GOM_NL__2PRFIN20110517_005450_000000353102_00304_48163_8609.N1	17-MAY-2011 00:54:50	Bright	35.000	180	27Gam Boo	3.0400	8000.0	70	48163	No
16	GOM_NL__2PRFIN20110517_010321_000000423102_00304_48163_8610.N1	17-MAY-2011 01:03:21	Bright	42.000	119	14Eta Dra	2.7270	4700.0	84	48163	No
17	GOM_NL__2PRFIN20110517_010500_000000403102_00304_48163_8611.N1	17-MAY-2011 01:05:00	Bright	39.500	60	7Bet UMi	2.0810	3950.0	79	48163	No
18	GOM_NL__2PRFIN20110517_011414_000000453102_00304_48163_8612.N1	17-MAY-2011 01:14:14	Bright	44.500	89	5Alp Cep	2.4510	8000.0	89	48163	No
19	GOM_NL__2PRFIN20110517_011735_000000533102_00304_48163_8613.N1	17-MAY-2011 01:17:35	Bright	53.000	76	27Gam Cas	2.3000	30000.	106	48163	No
20	GOM_NL__2PRFIN20110517_011848_000000543102_00304_48163_8614.N1	17-MAY-2011 01:18:48	Bright	54.000	68	18Alp Cas	2.2250	4500.0	108	48163	No
21	GOM_NL__2PRFIN20110517_012713_000000463102_00304_48163_8615.N1	17-MAY-2011 01:27:13	Bright	46.000	58	21Alp And	2.0730	11000.	92	48163	No
22	GOM_NL__2PRFIN20110517_013125_000000423102_00304_48163_8616.N1	17-MAY-2011 01:31:25	Twilight	41.500	140	88Gam Peg	2.8340	26000.	83	48163	No
23	GOM_NL__2PRFIN20110517_013307_000000563102_00304_48163_8617.N1	17-MAY-2011 01:33:07	Dark	55.500	90	54Alp Peg	2.4870	11000.	111	48163	No
24	GOM_NL__2PRFIN20110517_014650_000000513102_00304_48163_8618.N1	17-MAY-2011 01:46:50	Dark	51.000	18	24Alp PsA	1.1660	9700.0	102	48163	No
25	GOM_NL__2PRFIN20110517_015106_000000563102_00304_48163_8619.N1	17-MAY-2011 01:51:06	Dark	55.500	63	Bet Gru	2.1500	2800.0	111	48163	No
26	GOM_NL__2PRFIN20110517_015237_000000453102_00304_48163_8617.N1	17-MAY-2011 01:52:37	Dark	45.000	31	Alp Gru	1.7340	15200.	90	48163	No
27	GOM_NL__2PRFIN20110517_015808_000000433102_00305_48164_8618.N1	17-MAY-2011 01:58:08	Dark	42.500	45	Alp Pav	1.9400	26000.	85	48164	No
28	GOM_NL__2PRFIN20110517_020514_000000483102_00305_48164_8619.N1	17-MAY-2011 02:05:14	Straylight	47.500	141	Bet Ara	2.8400	4600.0	95	48164	No
29	GOM_NL__2PRFIN20110517_020749_000000543102_00305_48164_8620.N1	17-MAY-2011 02:07:49	Straylight	53.500	40	The Sco	1.8590	7100.0	107	48164	No
30	GOM_NL__2PRFIN20110517_020941_000000543102_00305_48164_8621.N1	17-MAY-2011 02:09:41	Straylight	53.500	25	35Lam Sco	1.6200	28000.	107	48164	No
31	GOM_NL__2PRFIN20110517_021157_000000503102_00305_48164_8622.N1	17-MAY-2011 02:11:57	Twilight	50.000	75	26Eps Sco	2.2910	4250.0	100	48164	No
32	GOM_NL__2PRFIN20110517_021458_000000613102_00305_48164_8623.N1	17-MAY-2011 02:14:58	Twilight	60.500	16	21Alp Sco	1.0200	3000.0	121	48164	No
33	GOM_NL__2PRFIN20110517_021731_000000453102_00305_48164_8624.N1	17-MAY-2011 02:17:31	Bright	44.500	97	8Bet1Sco	2.5610	30000.	89	48164	No
34	GOM_NL__2PRFIN20110517_022108_000000393102_00305_48164_8625.N1	17-MAY-2011 02:21:08	Bright	39.000	104	27Bet Lib	2.6140	13100.	78	48164	No
35	GOM_NL__2PRFIN20110517_022310_000000493102_00305_48164_8626.N1	17-MAY-2011 02:23:10	Bright	48.500	120	1Del Oph	2.7340	3200.0	97	48164	No
36	GOM_NL__2PRFIN20110517_022619_000000443102_00305_48164_8627.N1	17-MAY-2011 02:26:19	Bright	43.500	102	24Alp Ser	2.6000	4250.0	87	48164	No
37	GOM_NL__2PRFIN20110517_023155_000000393102_00305_48164_8628.N1	17-MAY-2011 02:31:55	Bright	39.000	83		2.3780	11000.	78	48164	No
38	GOM_NL__2PRFIN20110517_023503_000000543102_00305_48164_8629.N1	17-MAY-2011 02:35:03	Bright	54.000	180	27Gam Boo	3.0400	8000.0	108	48164	No
39	GOM_NL__2PRFIN20110517_024334_000000393102_00305_48164_8630.N1	17-MAY-2011 02:43:34	Bright	38.500	119	14Eta Dra	2.7270	4700.0	77	48164	No
40	GOM_NL__2PRFIN20110517_024514_000000353102_00305_48164_8631.N1	17-MAY-2011 02:45:14	Bright	34.500	60	7Bet UMi	2.0810	3950.0	69	48164	No
41	GOM_NL__2PRFIN20110517_025428_000000453102_00305_48164_8632.N1	17-MAY-2011 02:54:28	Bright	45.000	89	5Alp Cep	2.4510	8000.0	90	48164	No
42	GOM_NL__2PRFIN20110517_025749_000000533102_00305_48164_8633.N1	17-MAY-2011 02:57:49	Bright	53.000	76	27Gam Cas	2.3000	30000.	106	48164	No

279	GOM_NL__2PRFIN20110517_201520_000000433102_00316_48175_8637.N1	17-MAY-2011 20:15:20	Dark	42.500	31	Alp Gru	1.7340	15200.	85	48175	No
280	GOM_NL__2PRFIN20110517_202050_000000433102_00316_48175_8638.N1	17-MAY-2011 20:20:50	Dark	43.000	45	Alp Pav	1.9400	26000.	86	48175	No
281	GOM_NL__2PRFIN20110517_202753_000000423102_00316_48175_8639.N1	17-MAY-2011 20:27:53	Straylight	42.000	141	Bet Ara	2.8400	4600.0	84	48175	No
282	GOM_NL__2PRFIN20110517_203031_000000483102_00316_48175_8640.N1	17-MAY-2011 20:30:31	Straylight	47.500	40	The Sco	1.8590	7100.0	95	48175	No
283	GOM_NL__2PRFIN20110517_203221_000000553102_00316_48175_8641.N1	17-MAY-2011 20:32:21	Straylight	54.500	25	35Lam Sco	1.6200	28000.	109	48175	No
284	GOM_NL__2PRFIN20110517_203435_000000513102_00316_48175_8642.N1	17-MAY-2011 20:34:35	Tw_i_and_stray	50.500	75	26Eps Sco	2.2910	4250.0	101	48175	No
285	GOM_NL__2PRFIN20110517_203736_000000573102_00316_48175_8643.N1	17-MAY-2011 20:37:36	Tw_i_and_stray	56.500	16	21Alp Sco	1.0200	3000.0	113	48175	No
286	GOM_NL__2PRFIN20110517_204007_000000463102_00316_48175_8644.N1	17-MAY-2011 20:40:07	Bright	46.000	97	8Bet1Sco	2.5610	30000.	92	48175	No
287	GOM_NL__2PRFIN20110517_204343_000000563102_00316_48175_8645.N1	17-MAY-2011 20:43:43	Bright	56.000	104	27Bet Lib	2.6140	13100.	112	48175	No
288	GOM_NL__2PRFIN20110517_204542_000000483102_00316_48175_8646.N1	17-MAY-2011 20:45:42	Bright	47.500	120	1Del Oph	2.7340	3200.0	95	48175	No
289	GOM_NL__2PRFIN20110517_204850_000000433102_00316_48175_8647.N1	17-MAY-2011 20:48:50	Bright	42.500	102	24Alp Ser	2.6000	4250.0	85	48175	No
290	GOM_NL__2PRFIN20110517_205428_000000403102_00316_48175_8648.N1	17-MAY-2011 20:54:28	Bright	39.500	83		2.3780	11000.	79	48175	No
291	GOM_NL__2PRFIN20110517_205736_000000543102_00316_48175_8649.N1	17-MAY-2011 20:57:36	Bright	54.000	180	27Gam Boo	3.0400	8000.0	108	48175	No
292	GOM_NL__2PRFIN20110517_210604_000000423102_00316_48175_8650.N1	17-MAY-2011 21:06:04	Bright	42.000	119	14Eta Dra	2.7270	4700.0	84	48175	No
293	GOM_NL__2PRFIN20110517_210747_000000403102_00316_48175_8651.N1	17-MAY-2011 21:07:47	Bright	40.000	60	7Bet UMi	2.0810	3950.0	80	48175	No
294	GOM_NL__2PRFIN20110517_211657_000000433102_00316_48175_8652.N1	17-MAY-2011 21:16:57	Bright	42.500	89	5Alp Cep	2.4510	8000.0	85	48175	No
295	GOM_NL__2PRFIN20110517_212024_000000343102_00316_48175_8653.N1	17-MAY-2011 21:20:24	Bright	34.000	76	27Gam Cas	2.3000	30000.	68	48175	No
296	GOM_NL__2PRFIN20110517_212136_000000483102_00316_48175_8654.N1	17-MAY-2011 21:21:36	Bright	48.000	68	18Alp Cas	2.2250	4500.0	96	48175	No
297	GOM_NL__2PRFIN20110517_213003_000000463102_00316_48175_8655.N1	17-MAY-2011 21:30:03	Tw_i_and_stray	45.500	58	21Alp And	2.0730	11000.	91	48175	No
298	GOM_NL__2PRFIN20110517_213417_000000433102_00316_48175_8656.N1	17-MAY-2011 21:34:17	Dark	43.000	140	88Gam Peg	2.8340	26000.	86	48175	No
299	GOM_NL__2PRFIN20110517_213602_000000553102_00316_48175_8657.N1	17-MAY-2011 21:36:02	Dark	54.500	90	54Alp Peg	2.4870	11000.	109	48175	No
300	GOM_NL__2PRFIN20110517_215403_000000573102_00316_48175_8658.N1	17-MAY-2011 21:54:03	Dark	56.500	63	Bet Gru	2.1500	2800.0	113	48175	No
301	GOM_NL__2PRFIN20110517_215535_000000513102_00317_48176_8637.N1	17-MAY-2011 21:55:35	Dark	51.000	31	Alp Gru	1.7340	15200.	102	48176	No
302	GOM_NL__2PRFIN20110517_220105_000000433102_00317_48176_8638.N1	17-MAY-2011 22:01:05	Dark	42.500	45	Alp Pav	1.9400	26000.	85	48176	No
303	GOM_NL__2PRFIN20110517_220807_000000493102_00317_48176_8639.N1	17-MAY-2011 22:08:07	Straylight	48.500	141	Bet Ara	2.8400	4600.0	97	48176	No
304	GOM_NL__2PRFIN20110517_221045_000000503102_00317_48176_8640.N1	17-MAY-2011 22:10:45	Straylight	49.500	40	The Sco	1.8590	7100.0	99	48176	No
305	GOM_NL__2PRFIN20110517_221236_000000533102_00317_48176_8641.N1	17-MAY-2011 22:12:36	Straylight	53.000	25	35Lam Sco	1.6200	28000.	106	48176	No
306	GOM_NL__2PRFIN20110517_221450_000000523102_00317_48176_8642.N1	17-MAY-2011 22:14:50	Tw_i_and_stray	51.500	75	26Eps Sco	2.2910	4250.0	103	48176	No
307	GOM_NL__2PRFIN20110517_221750_000000613102_00317_48176_8643.N1	17-MAY-2011 22:17:50	Tw_i_and_stray	61.000	16	21Alp Sco	1.0200	3000.0	122	48176	No
308	GOM_NL__2PRFIN20110517_222021_000000463102_00317_48176_8644.N1	17-MAY-2011 22:20:21	Bright	45.500	97	8Bet1Sco	2.5610	30000.	91	48176	No
309	GOM_NL__2PRFIN20110517_222357_000000563102_00317_48176_8645.N1	17-MAY-2011 22:23:57	Bright	56.000	104	27Bet Lib	2.6140	13100.	112	48176	No
310	GOM_NL__2PRFIN20110517_222556_000000483102_00317_48176_8646.N1	17-MAY-2011 22:25:56	Bright	47.500	120	1Del Oph	2.7340	3200.0	95	48176	No
311	GOM_NL__2PRFIN20110517_222904_000000433102_00317_48176_8647.N1	17-MAY-2011 22:29:04	Bright	42.500	102	24Alp Ser	2.6000	4250.0	85	48176	No
312	GOM_NL__2PRFIN20110517_223442_000000373102_00317_48176_8648.N1	17-MAY-2011 22:34:42	Bright	37.000	83		2.3780	11000.	74	48176	No
313	GOM_NL__2PRFIN20110517_223750_000000423102_00317_48176_8649.N1	17-MAY-2011 22:37:50	Bright	41.500	180	27Gam Boo	3.0400	8000.0	83	48176	No
314	GOM_NL__2PRFIN20110517_224617_000000433102_00317_48176_8650.N1	17-MAY-2011 22:46:17	Bright	42.500	119	14Eta Dra	2.7270	4700.0	85	48176	No
315	GOM_NL__2PRFIN20110517_224801_000000393102_00317_48176_8651.N1	17-MAY-2011 22:48:01	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	48176	No
316	GOM_NL__2PRFIN20110517_225711_000000453102_00317_48176_8652.N1	17-MAY-2011 22:57:11	Bright	44.500	89	5Alp Cep	2.4510	8000.0	89	48176	No
317	GOM_NL__2PRFIN20110517_230037_000000433102_00317_48176_8653.N1	17-MAY-2011 23:00:37	Bright	43.000	76	27Gam Cas	2.3000	30000.	86	48176	No
318	GOM_NL__2PRFIN20110517_230150_000000513102_00317_48176_8654.N1	17-MAY-2011 23:01:50	Bright	51.000	68	18Alp Cas	2.2250	4500.0	102	48176	No
319	GOM_NL__2PRFIN20110517_231017_000000473102_00317_48176_8655.N1	17-MAY-2011 23:10:17	Tw_i_and_stray	47.000	58	21Alp And	2.0730	11000.	94	48176	No
320	GOM_NL__2PRFIN20110517_231431_000000453102_00317_48176_8656.N1	17-MAY-2011 23:14:31	Dark	45.000	140	88Gam Peg	2.8340	26000.	90	48176	No
321	GOM_NL__2PRFIN20110517_231617_000000513102_00317_48176_8657.N1	17-MAY-2011 23:16:17	Dark	50.500	90	54Alp Peg	2.4870	11000.	101	48176	No
322	GOM_NL__2PRFIN20110517_233003_000000503102_00317_48176_8658.N1	17-MAY-2011 23:30:03	Dark	49.500	18	24Alp PsA	1.1660	9700.0	99	48176	No
323	GOM_NL__2PRFIN20110517_233417_000000463102_00317_48176_8659.N1	17-MAY-2011 23:34:17	Dark	46.000	63	Bet Gru	2.1500	2800.0	92	48176	No
324	GOM_NL__2PRFIN20110517_233550_000000453102_00318_48177_8637.N1	17-MAY-2011 23:35:50	Dark	45.000	31	Alp Gru	1.7340	15200.	90	48177	No
325	GOM_NL__2PRFIN20110517_234119_000000413102_00318_48177_8638.N1	17-MAY-2011 23:41:19	Dark	41.000	45	Alp Pav	1.9400	26000.	82	48177	No
326	GOM_NL__2PRFIN20110517_234822_000000453102_00318_48177_8639.N1	17-MAY-2011 23:48:22	Straylight	45.000	141	Bet Ara	2.8400	4600.0	90	48177	No
327	GOM_NL__2PRFIN20110517_235059_000000523102_00318_48177_8640.N1	17-MAY-2011 23:50:59	Straylight	52.000	40	The Sco	1.8590	7100.0	104	48177	No
328	GOM_NL__2PRFIN20110517_235251_000000563102_00318_48177_8641.N1	17-MAY-2011 23:52:51	Straylight	56.000	25	35Lam Sco	1.6200	28000.	112	48177	No
329	GOM_NL__2PRFIN20110517_235504_000000513102_00318_48177_8642.N1	17-MAY-2011 23:55:04	Tw_i_and_stray	51.000	75	26Eps Sco	2.2910	4250.0	102	48177	No
330	GOM_NL__2PRFIN20110517_235804_000000633102_00318_48177_8643.N1	17-MAY-2011 23:58:04	Tw_i_and_stray	62.500	16	21Alp Sco	1.0200	3000.0	125	48177	No

3. Quality information per product

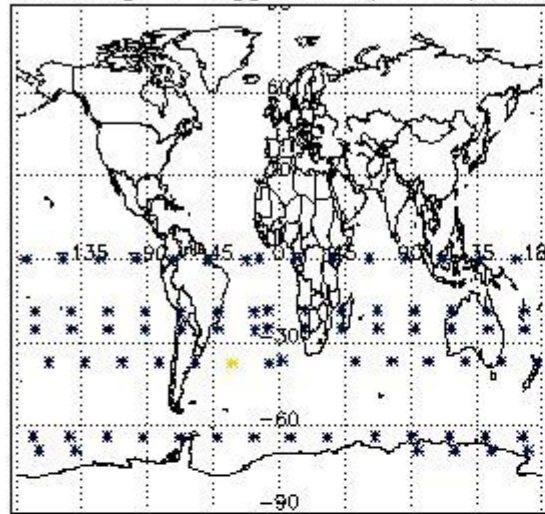
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

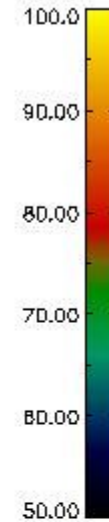
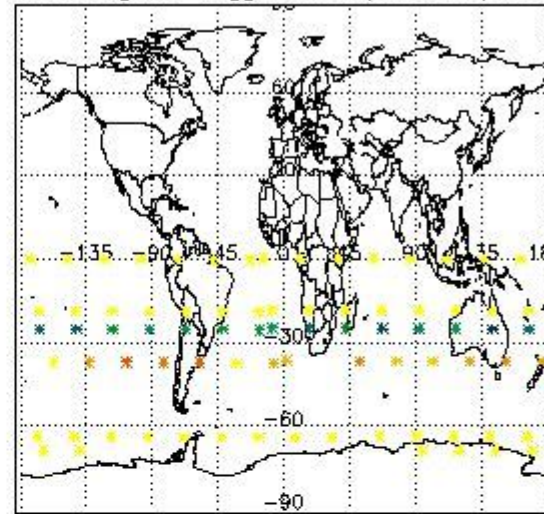


3.2 Plot quality information per product (world map)

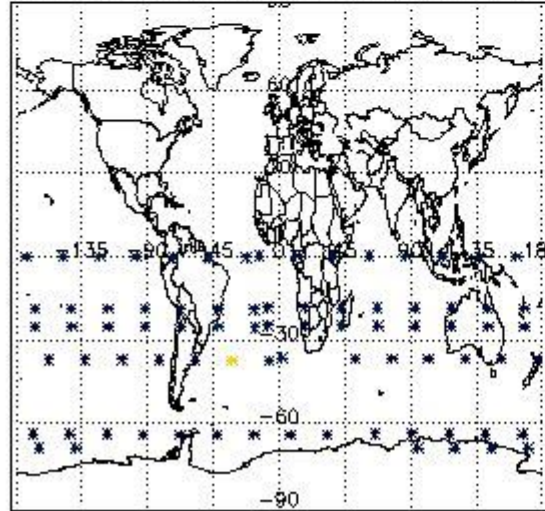
Percentage of flagged data per O3 profile



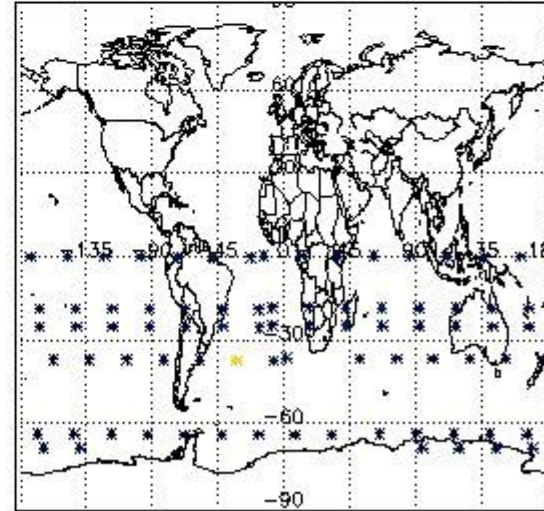
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

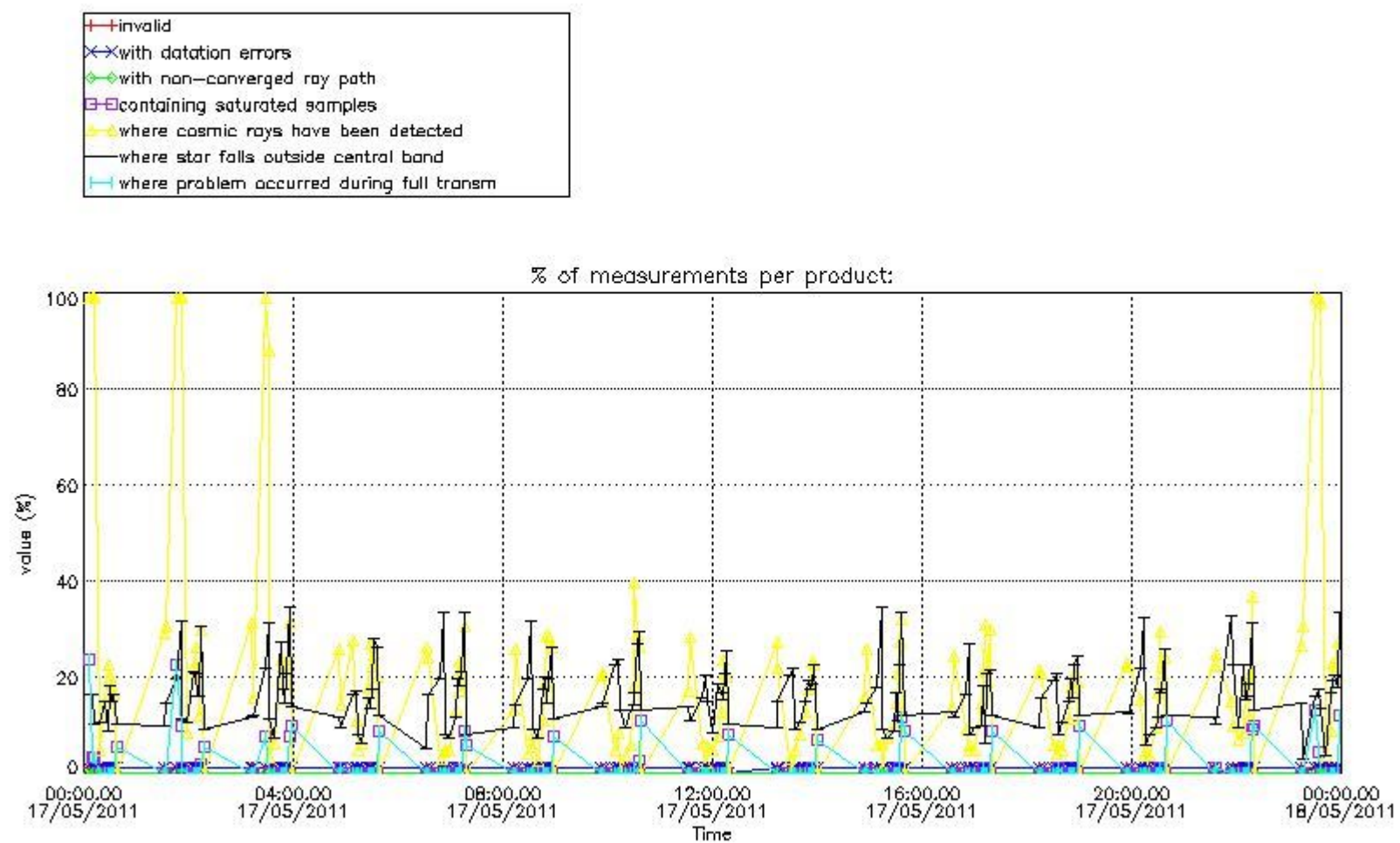


4. Level 1 quality information per product

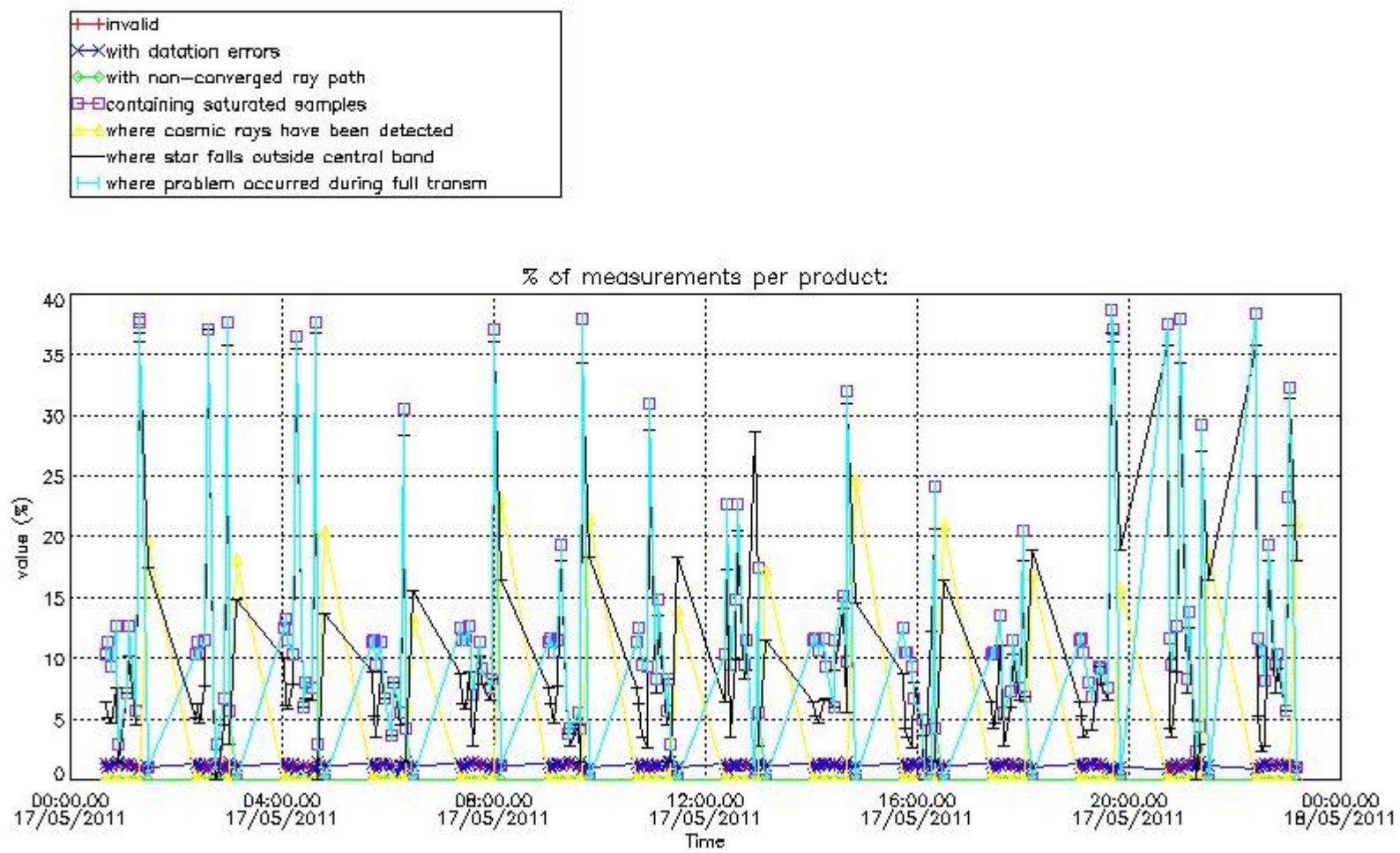
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

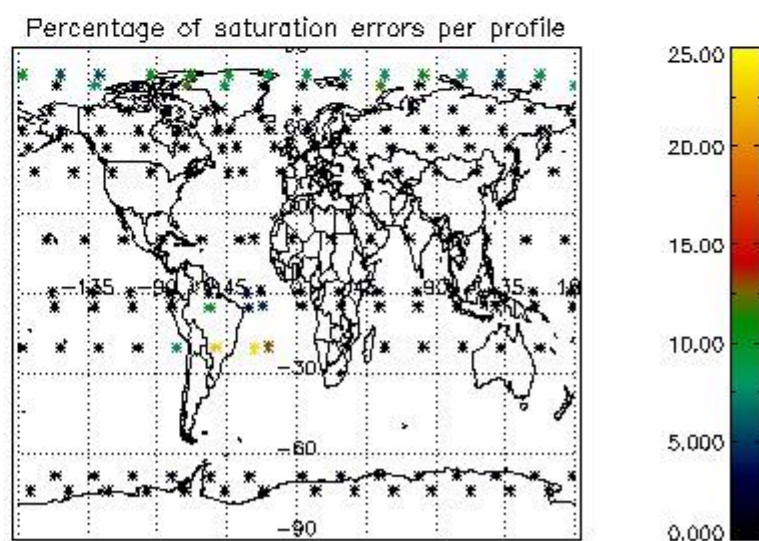
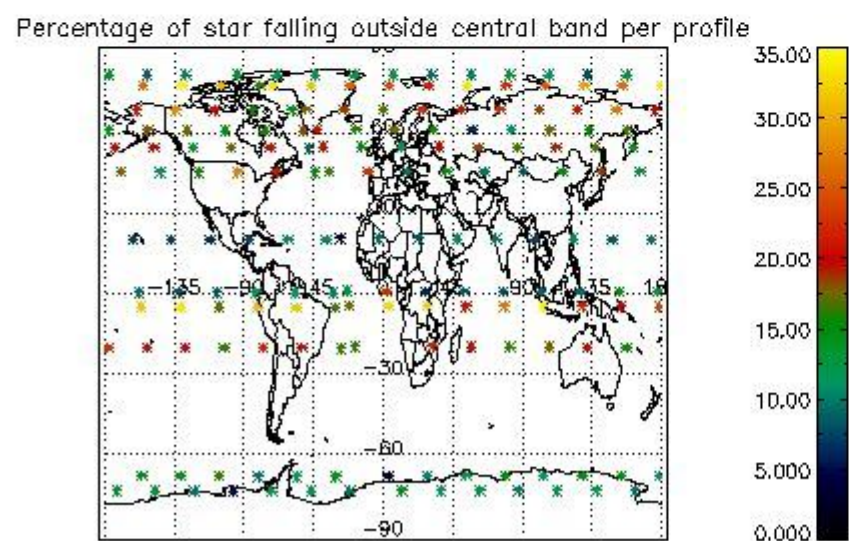
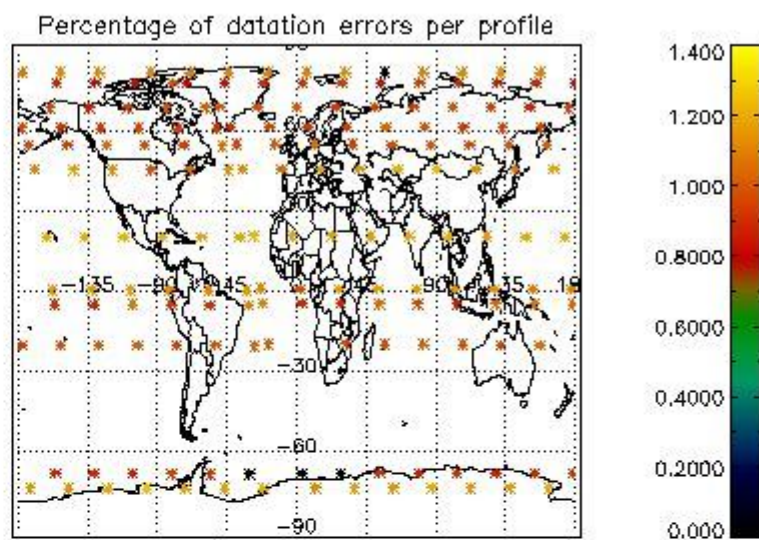
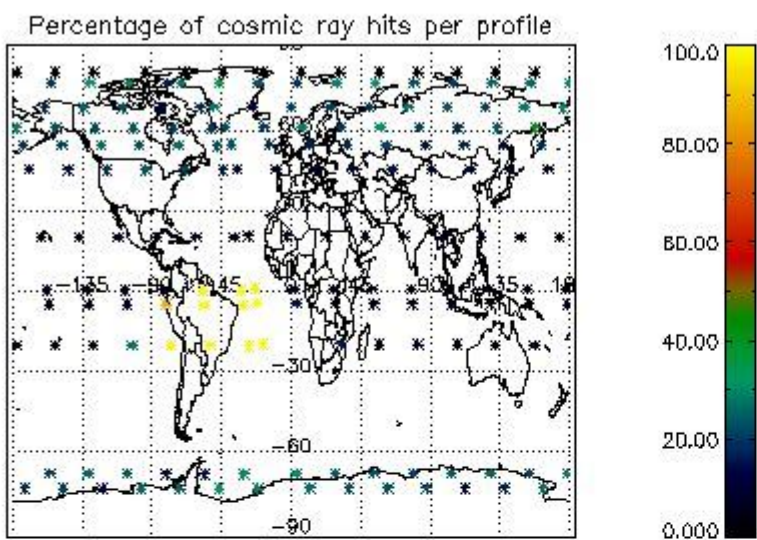


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

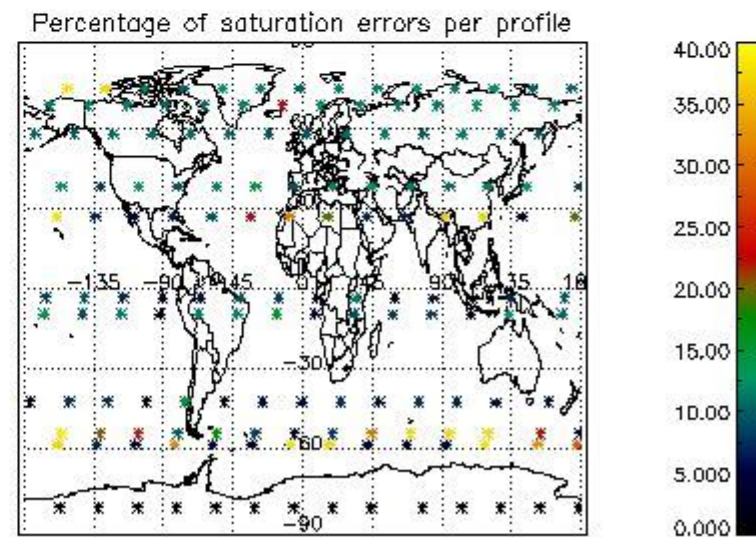
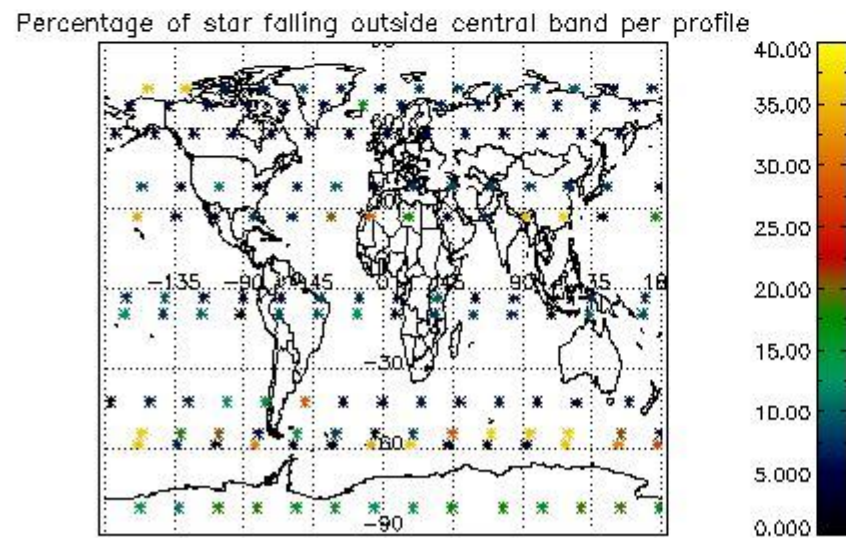
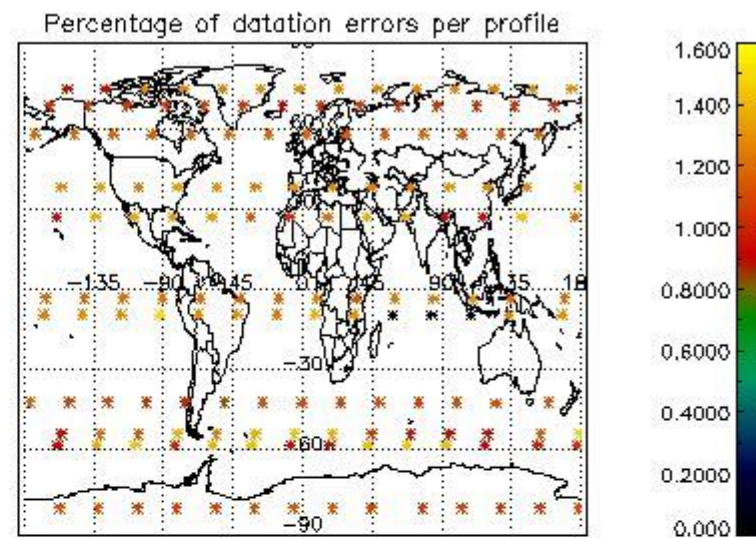
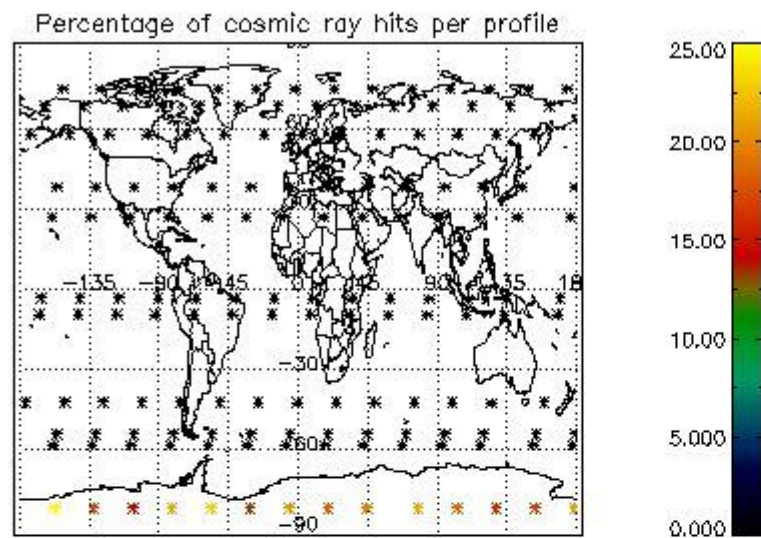


4.2 Plot quality information per product coming from level 1b processing (world map)

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

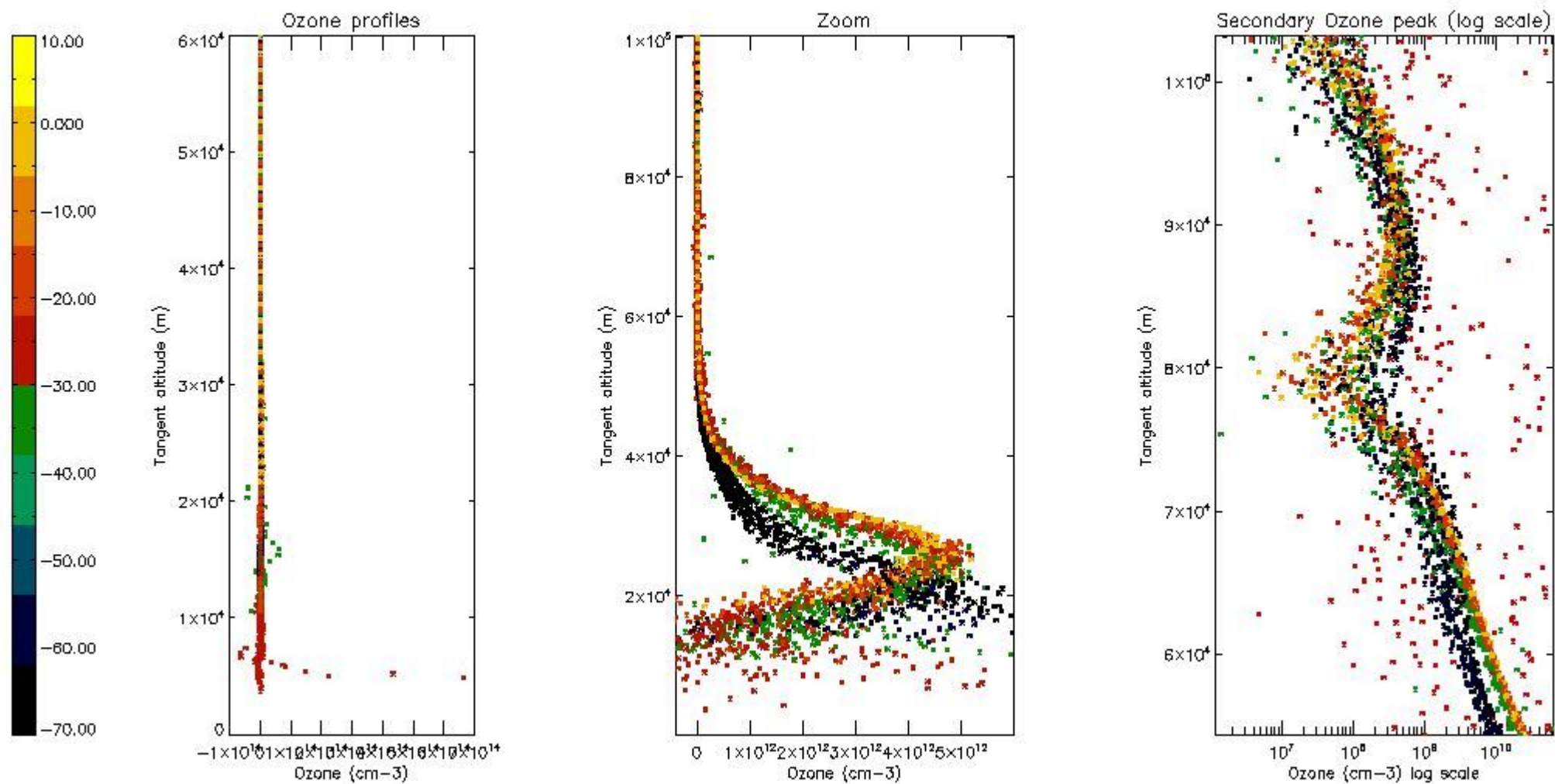
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	25
STD < 20	13

STD < 10	10
STD < 5	6

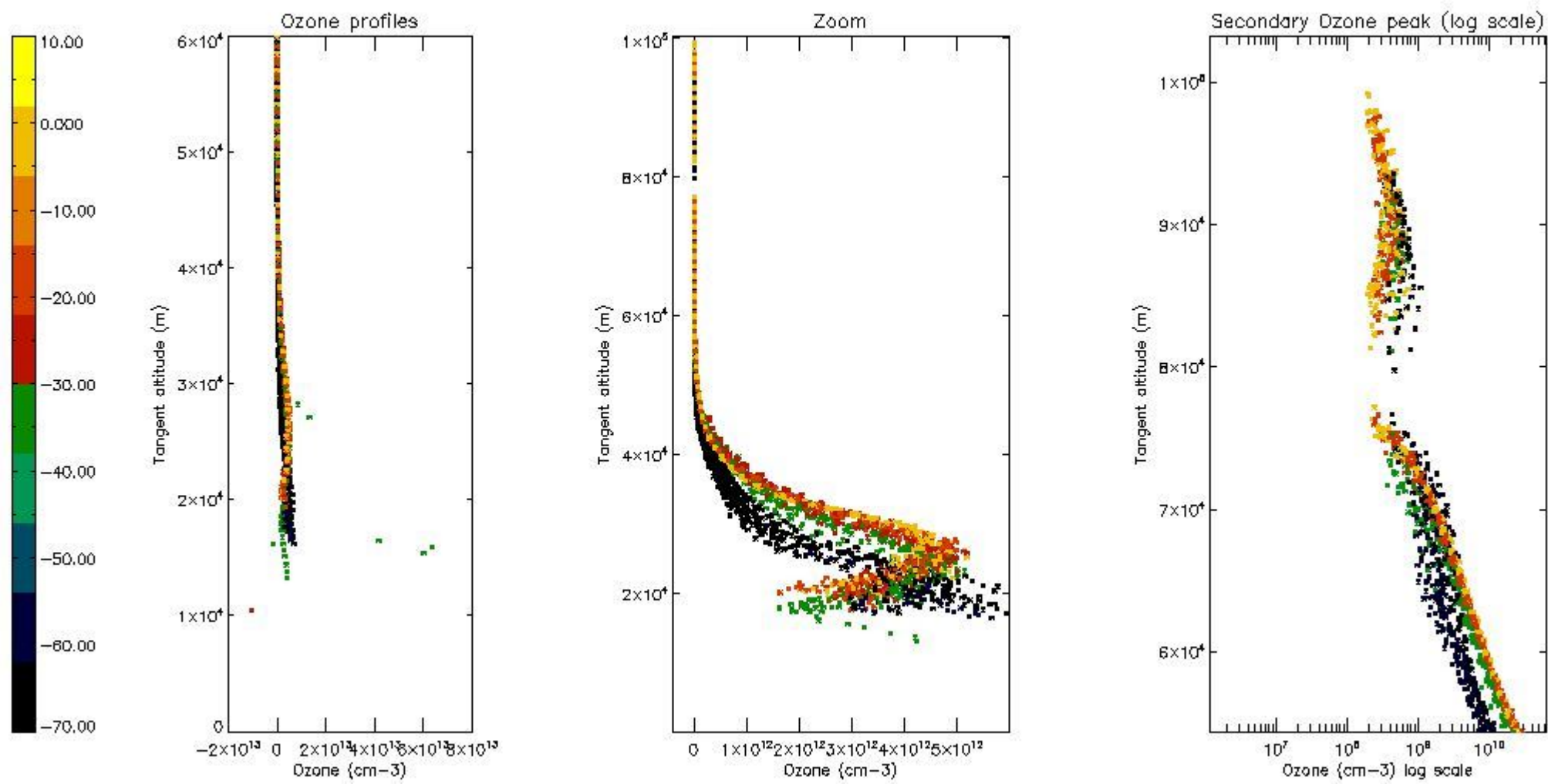
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



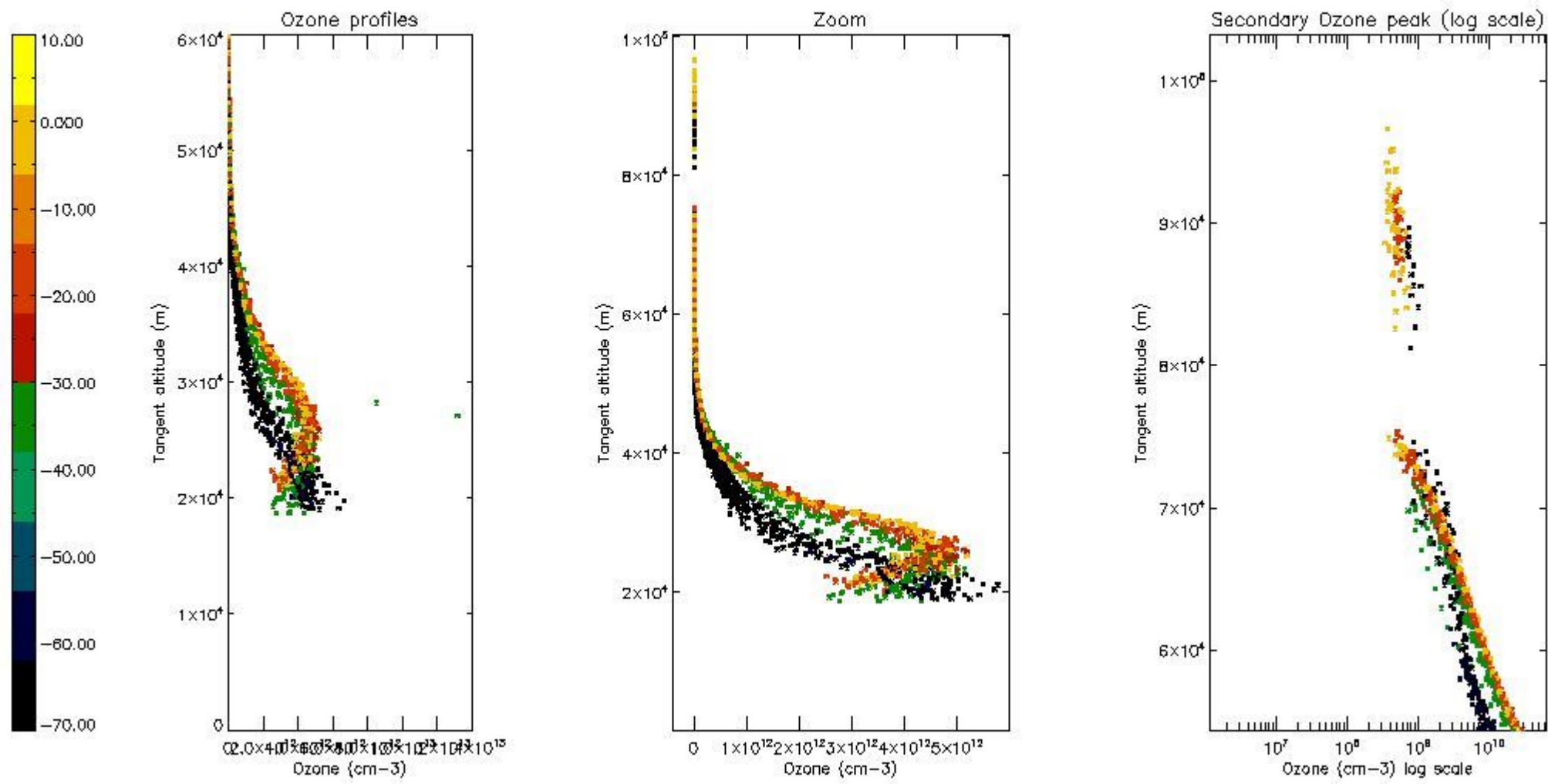
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



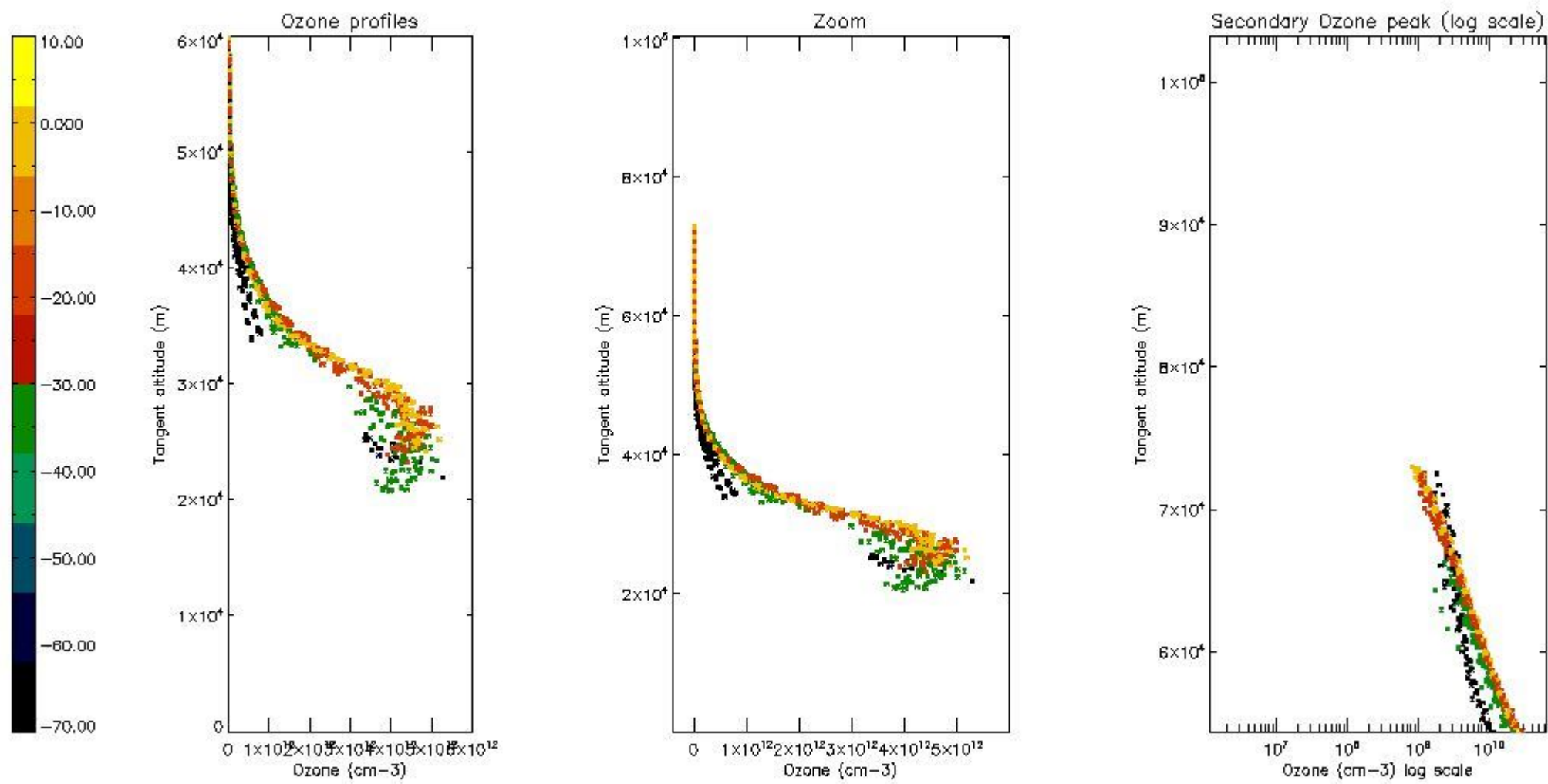
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



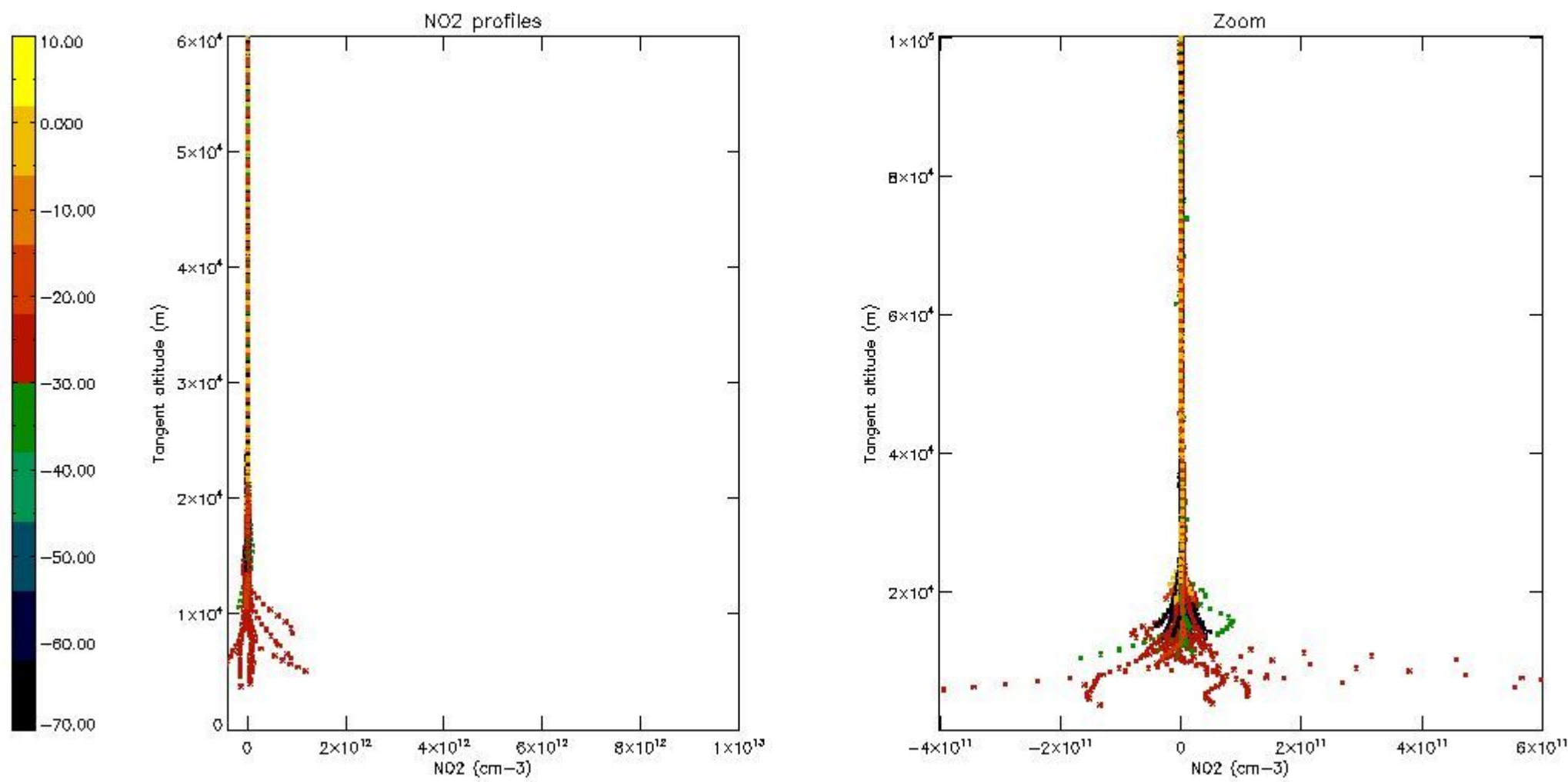
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



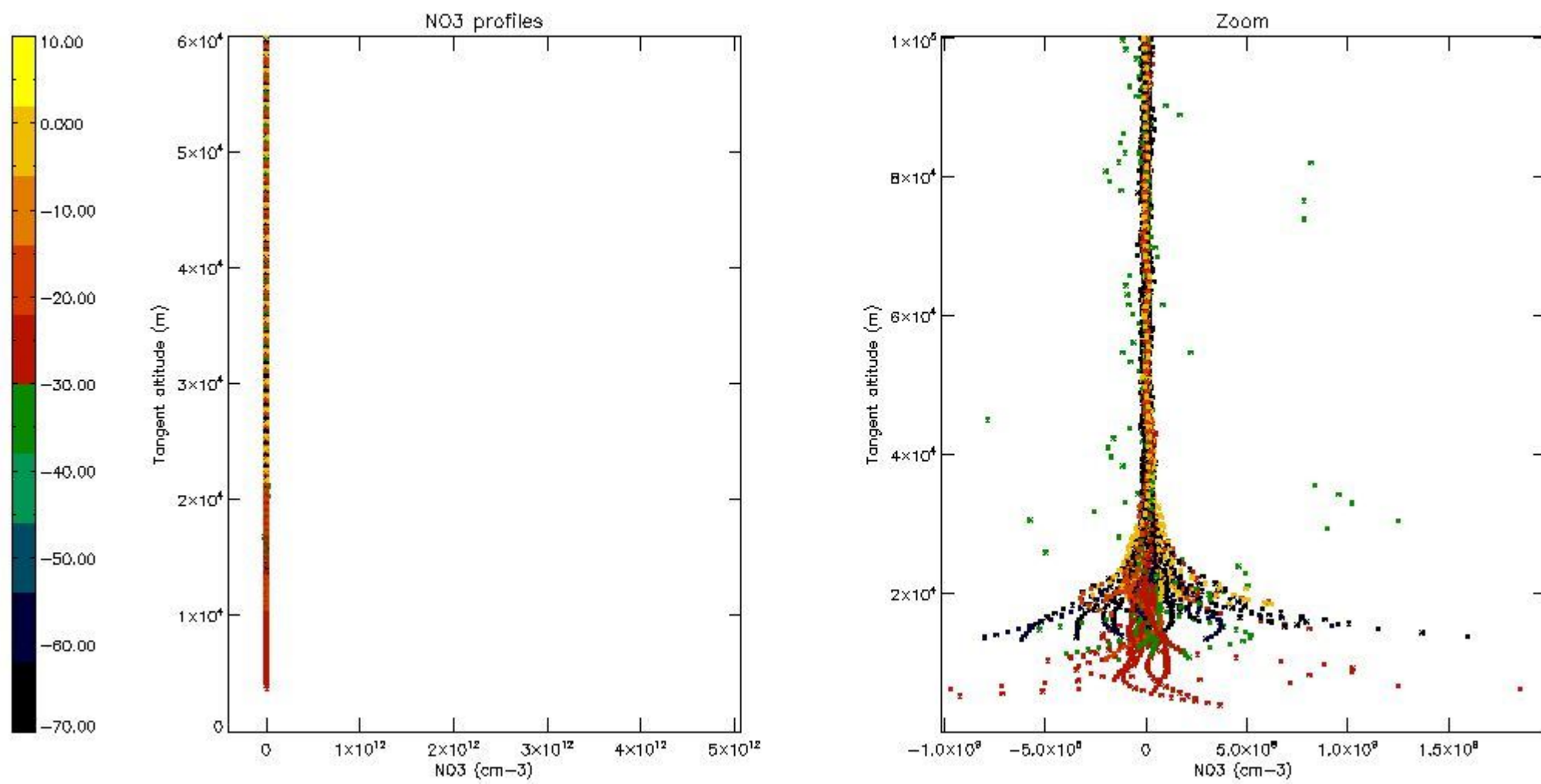
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



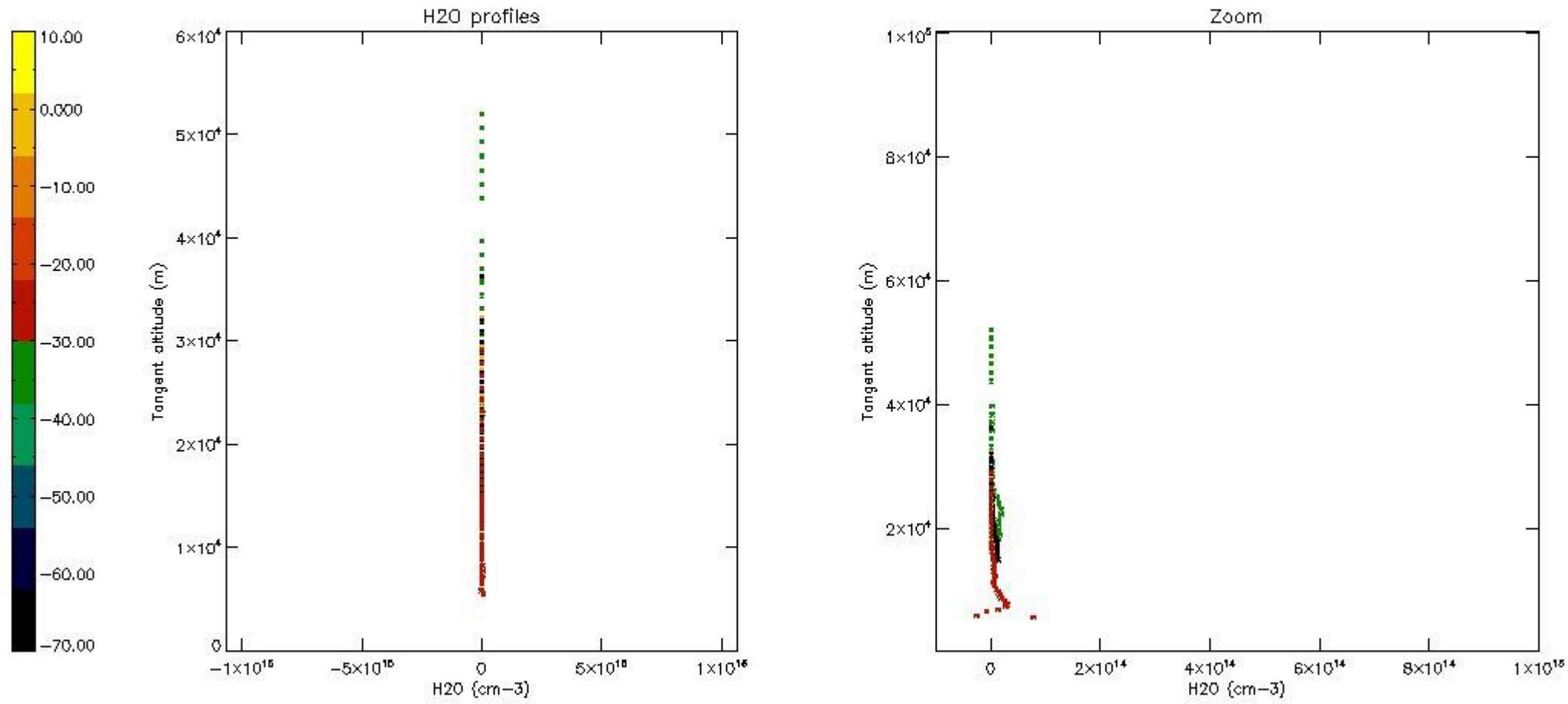
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

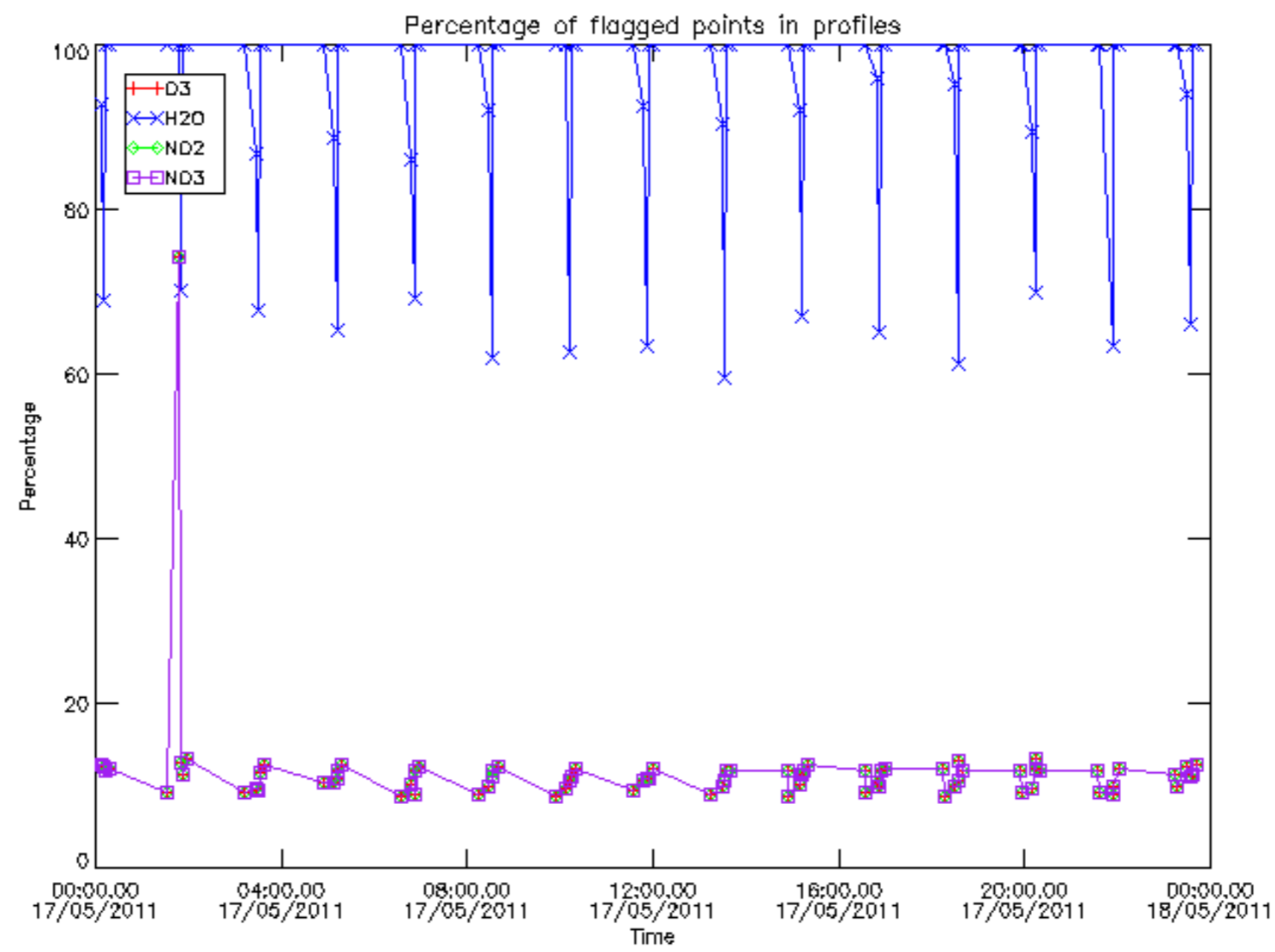
The colorbar represents the latitude.



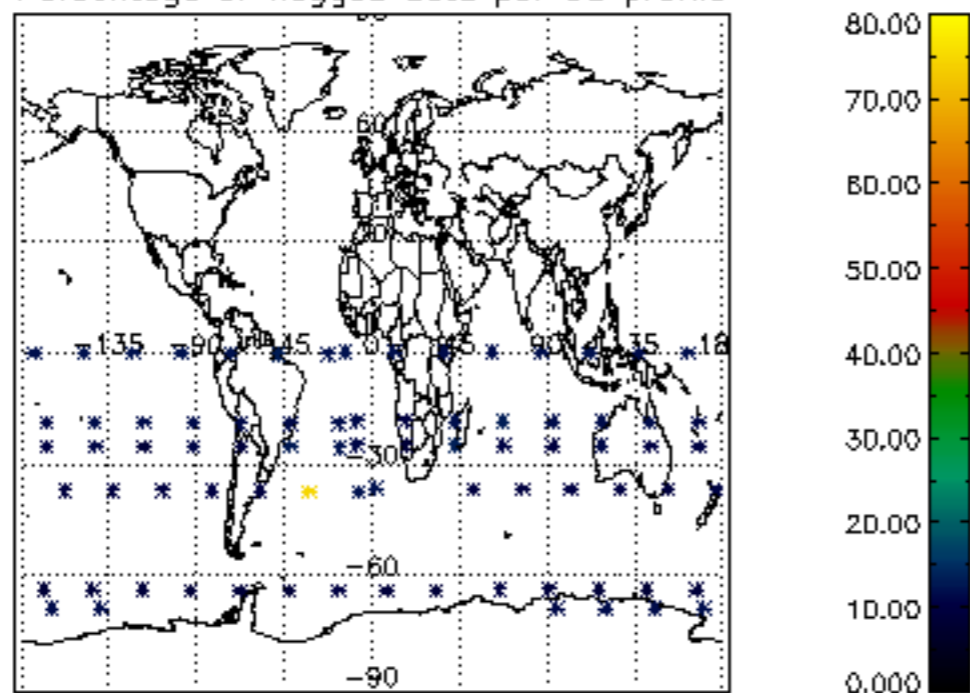
6. Auxiliary Data Files used for the production reported in section 2

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.

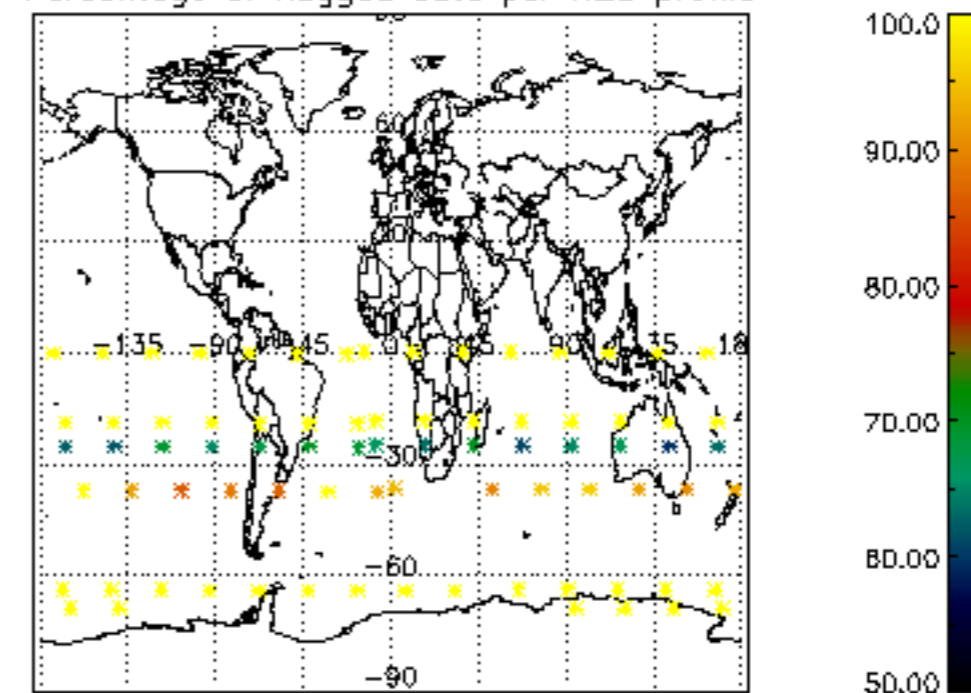
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	17-MAY-2011 00:06:36
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	17-MAY-2011 00:06:36
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	17-MAY-2011 00:06:36



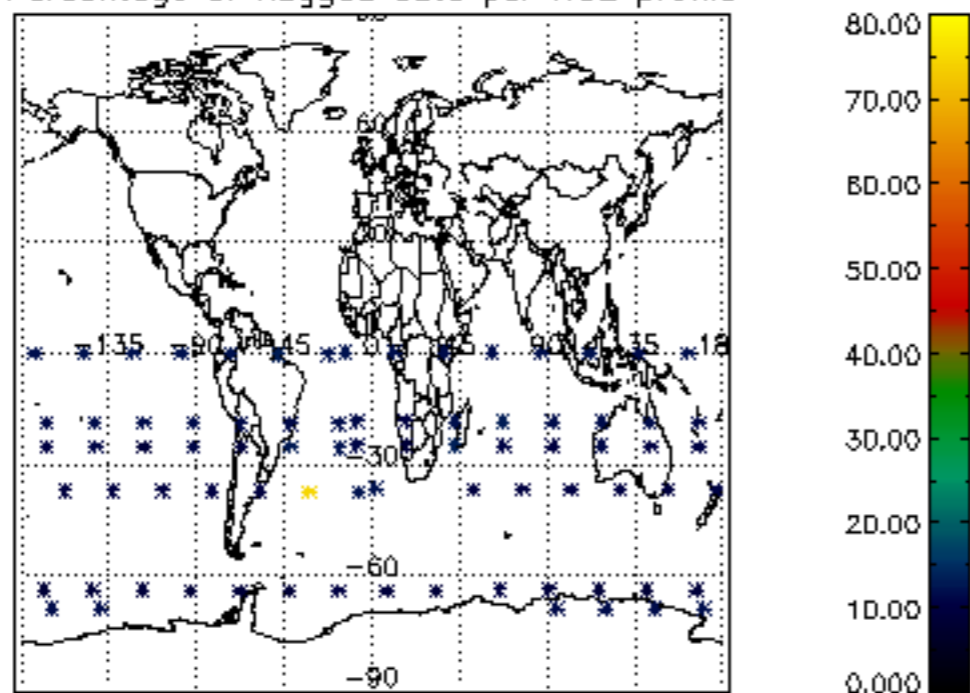
Percentage of flagged data per D3 profile



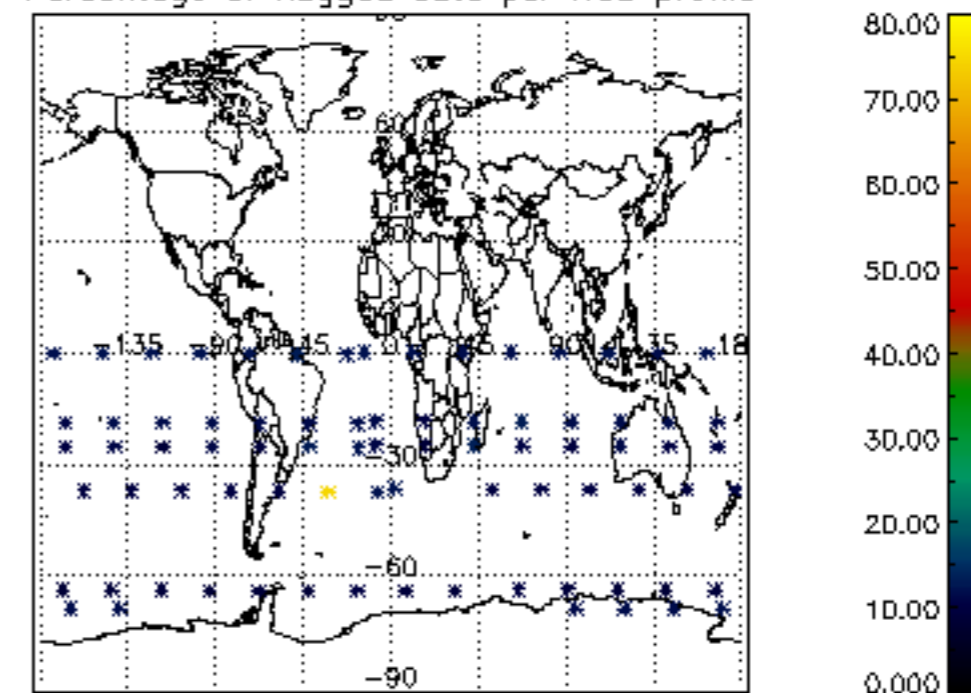
Percentage of flagged data per H2O profile

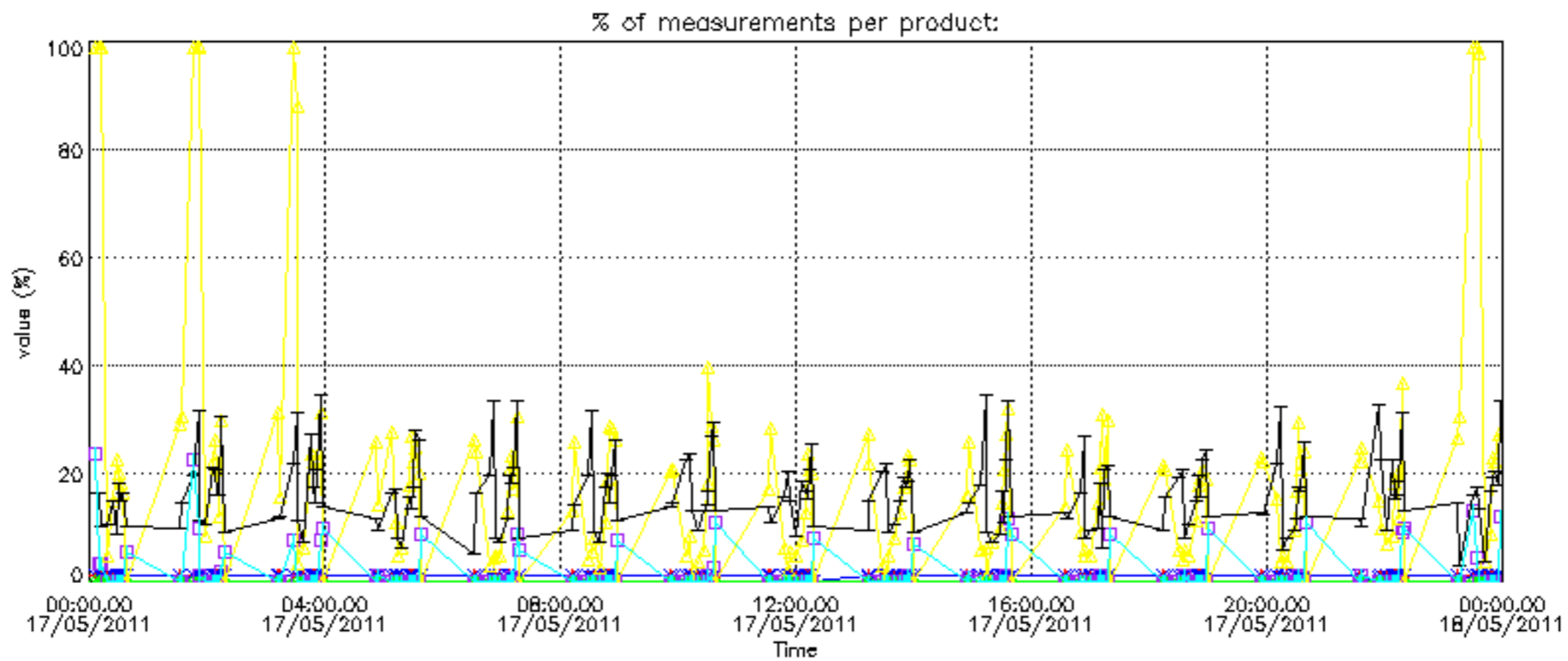


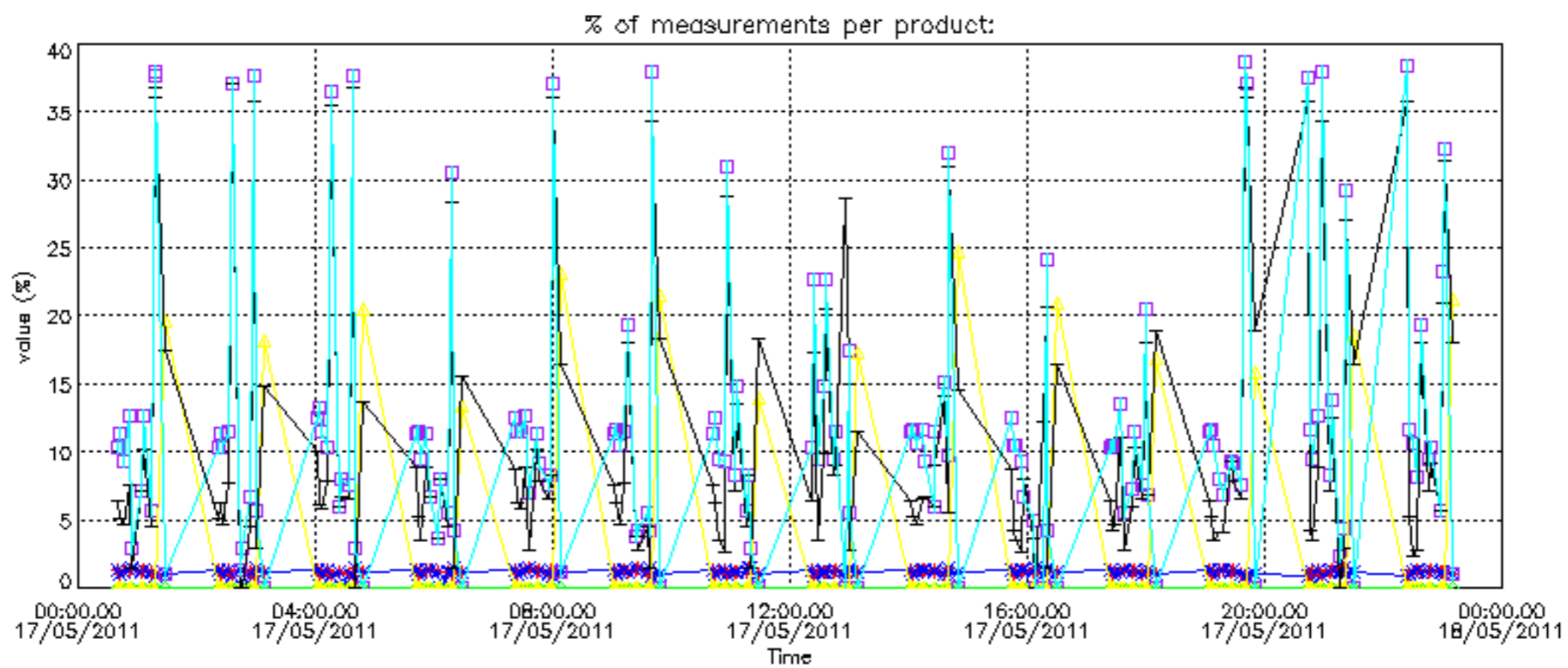
Percentage of flagged data per NO2 profile



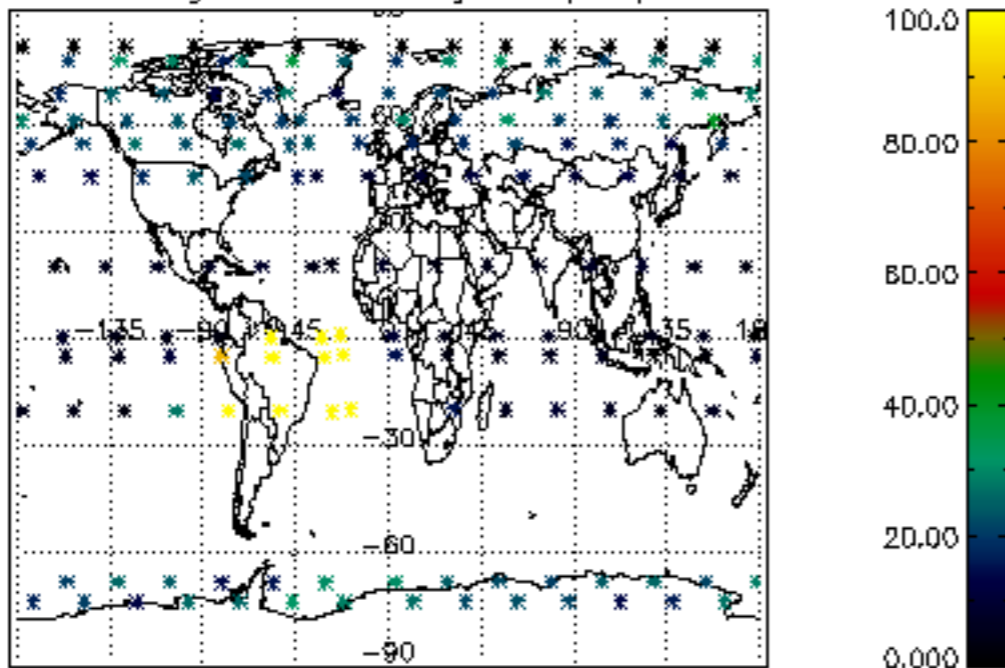
Percentage of flagged data per NO3 profile



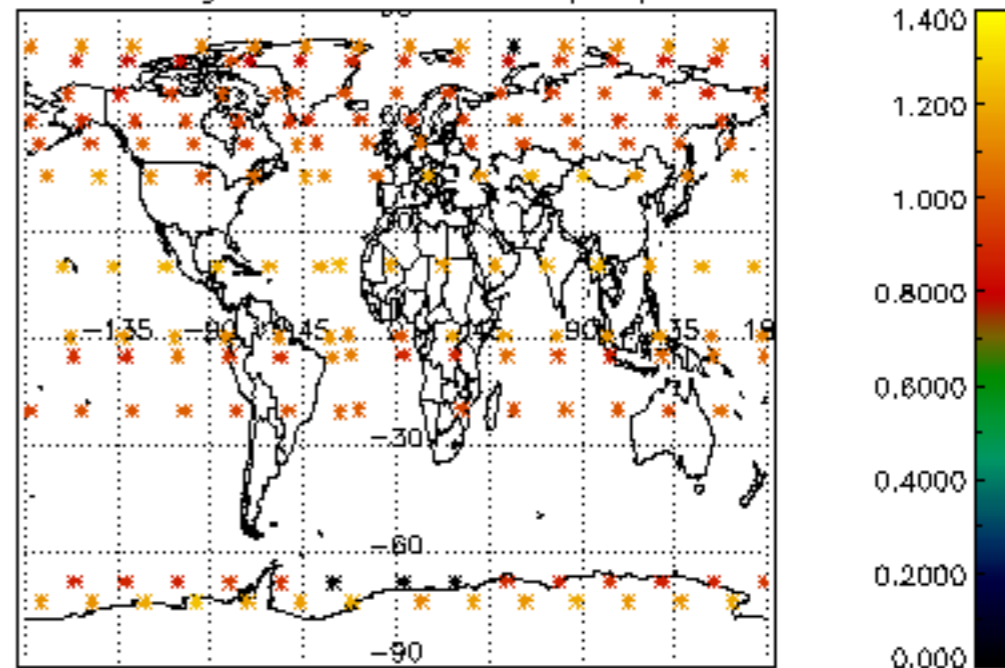




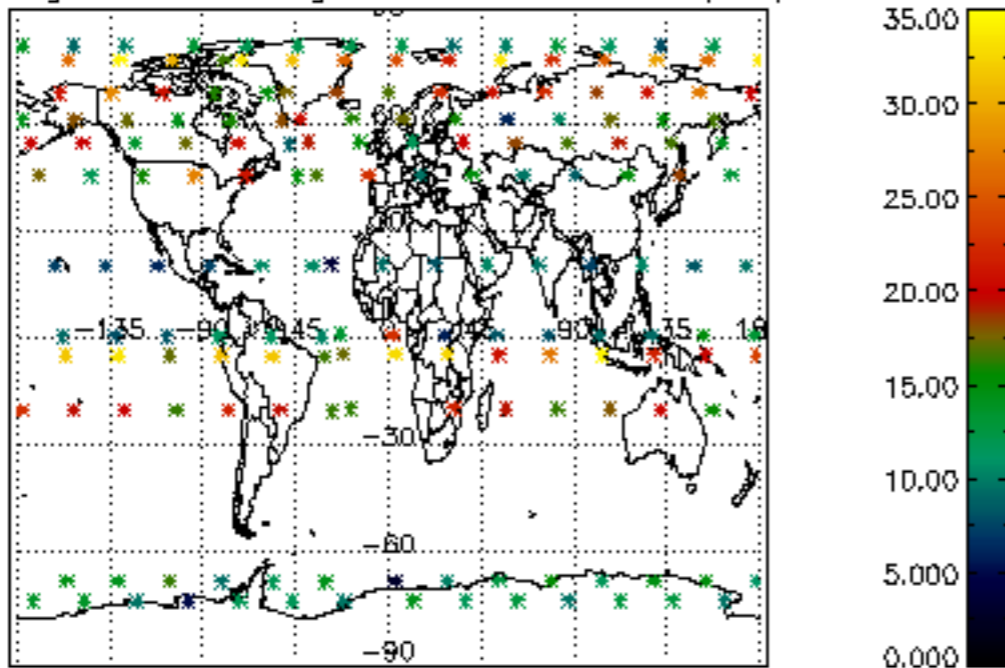
Percentage of cosmic ray hits per profile



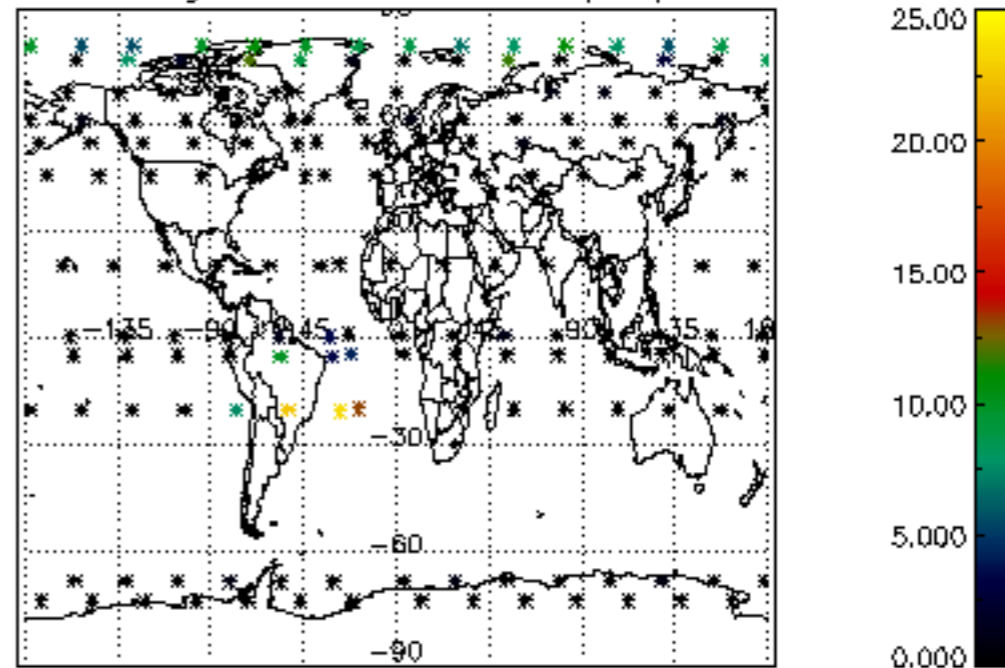
Percentage of datation errors per profile



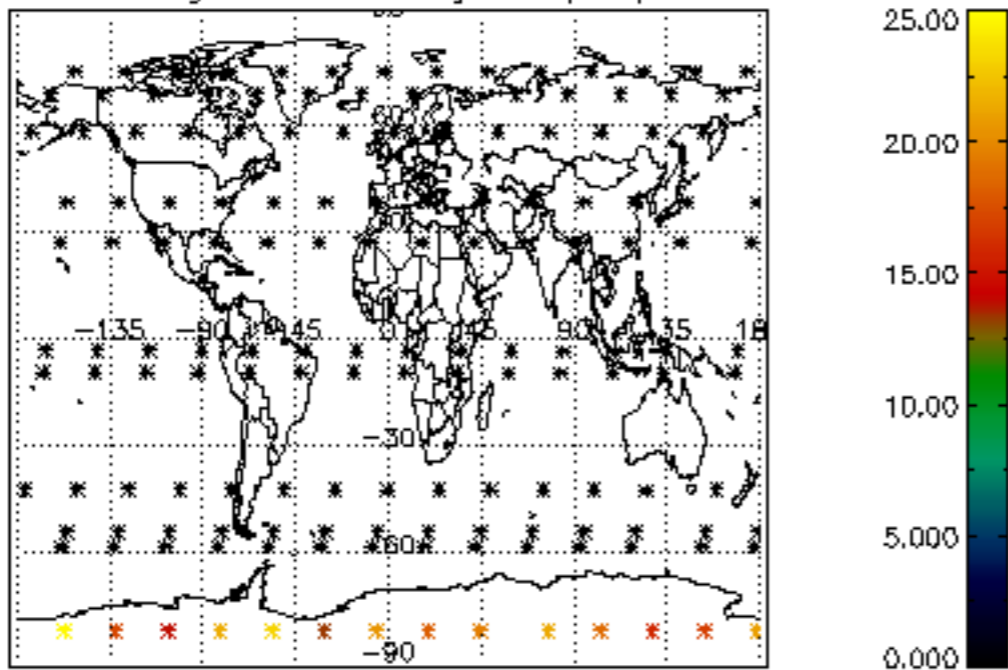
Percentage of star falling outside central band per profile



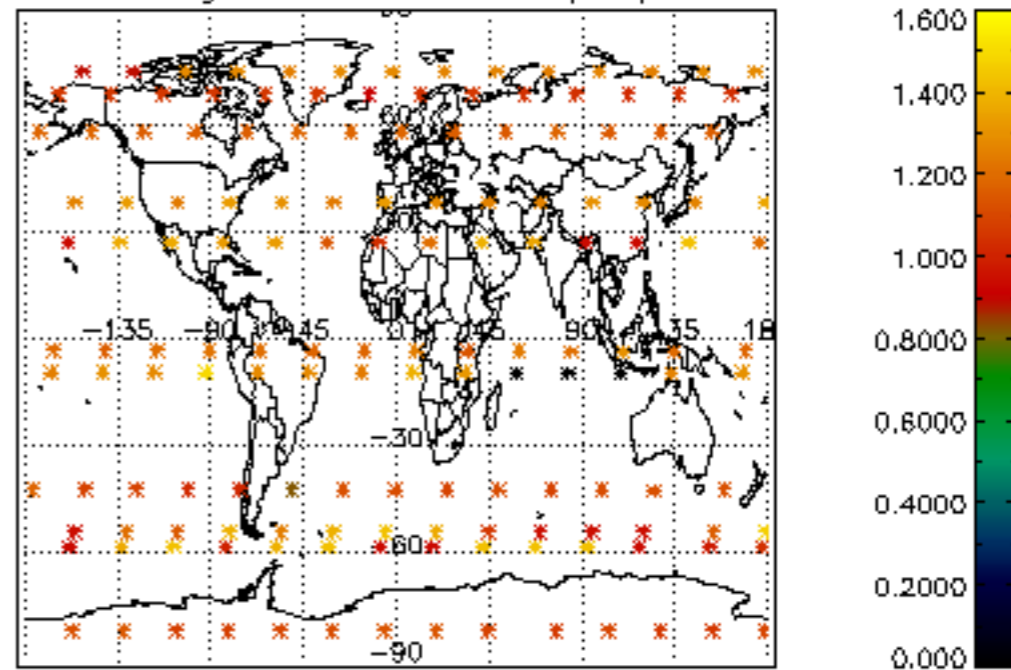
Percentage of saturation errors per profile



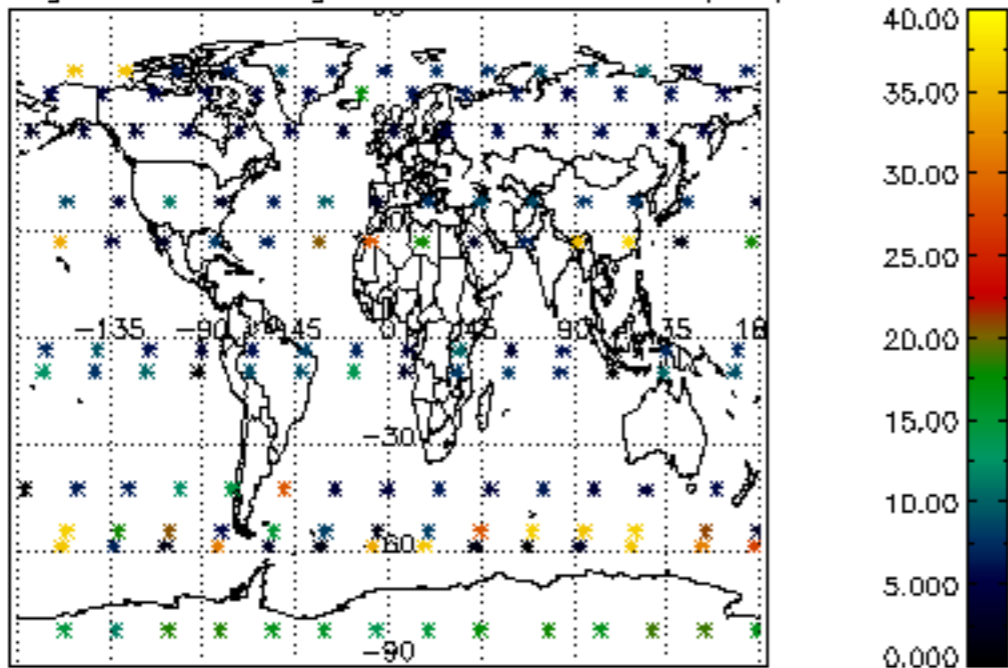
Percentage of cosmic ray hits per profile



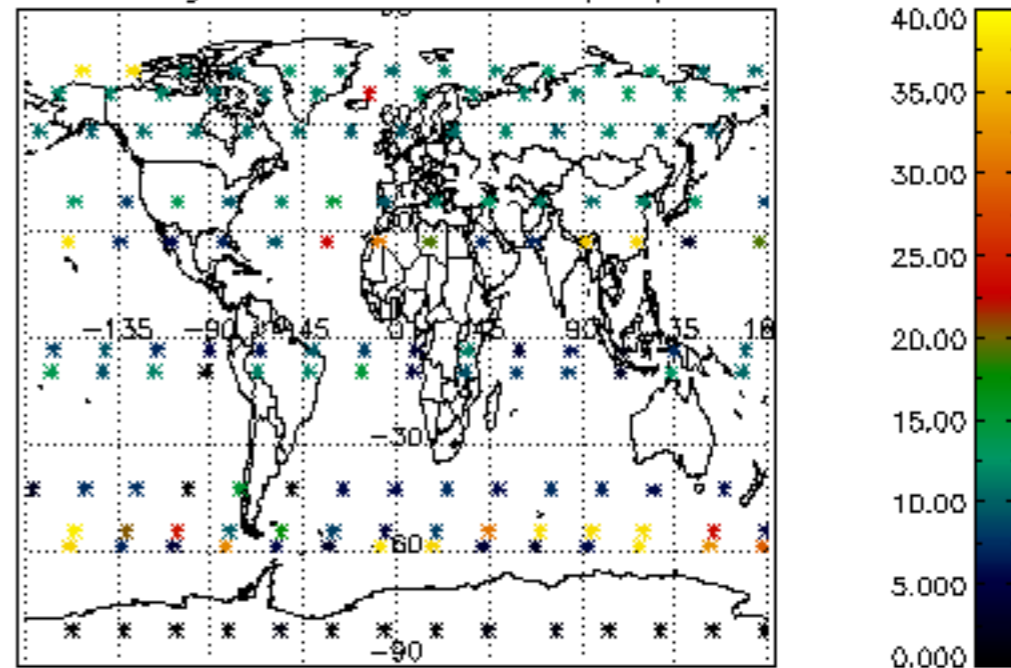
Percentage of datation errors per profile

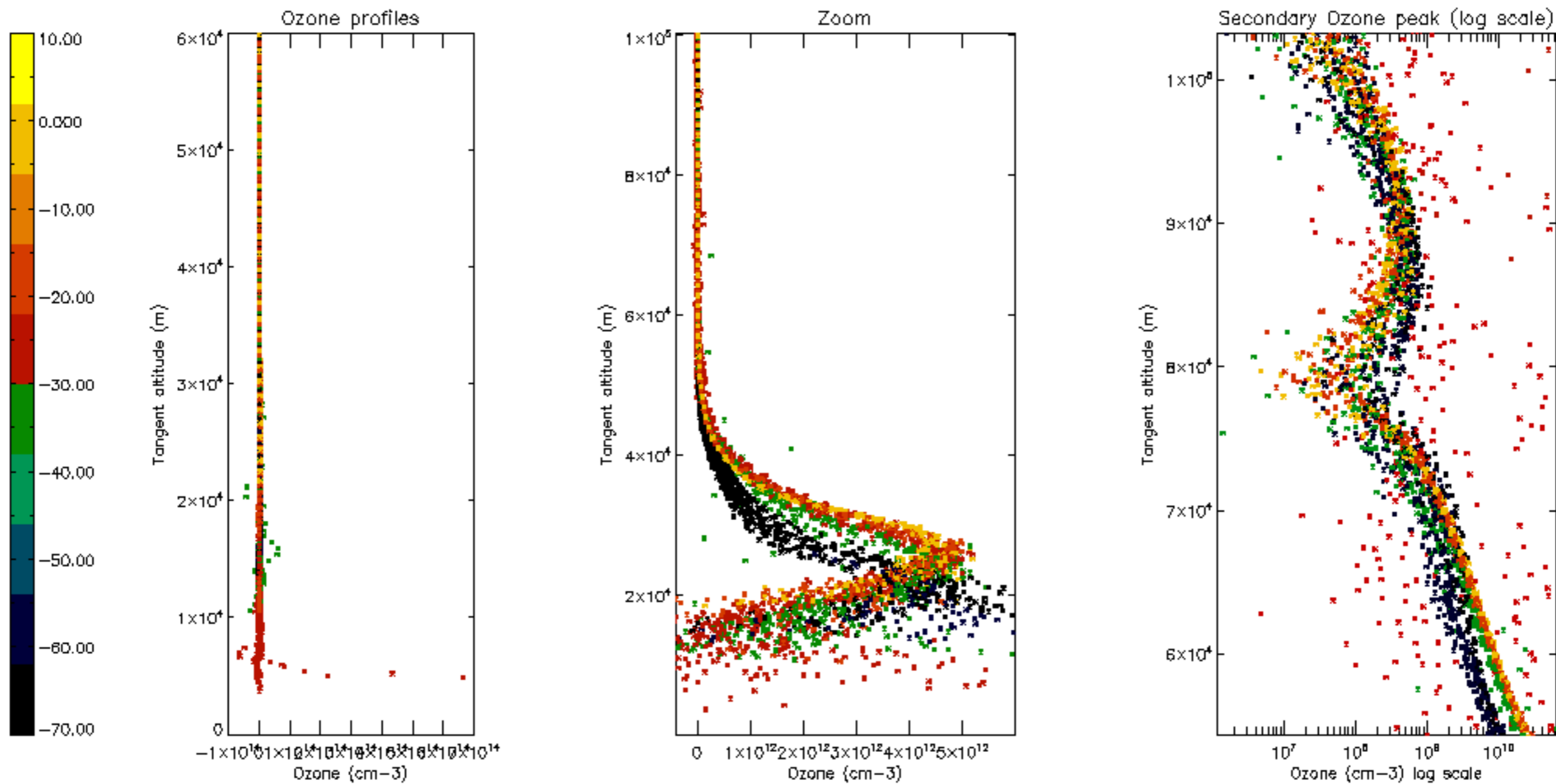


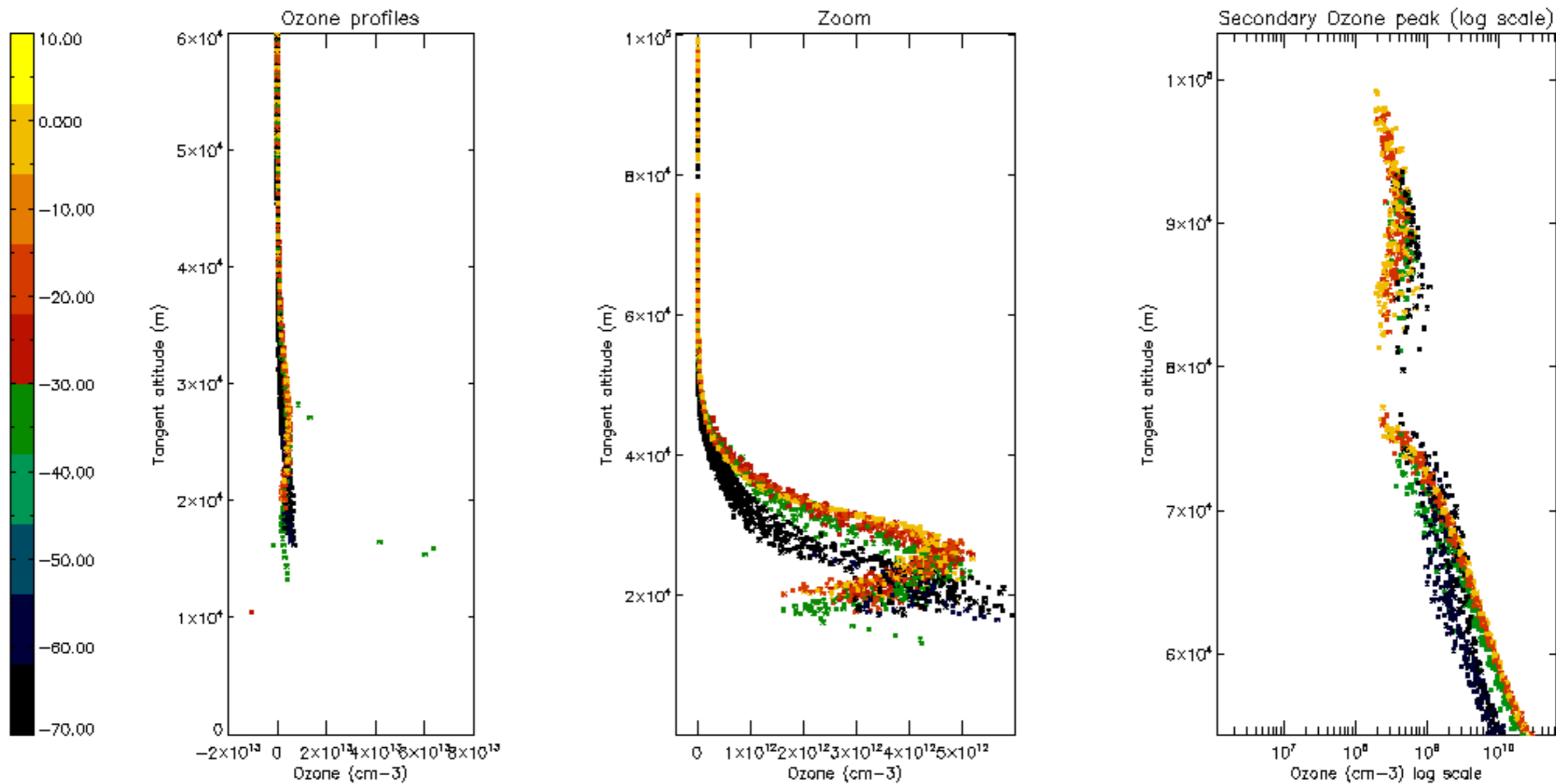
Percentage of star falling outside central band per profile

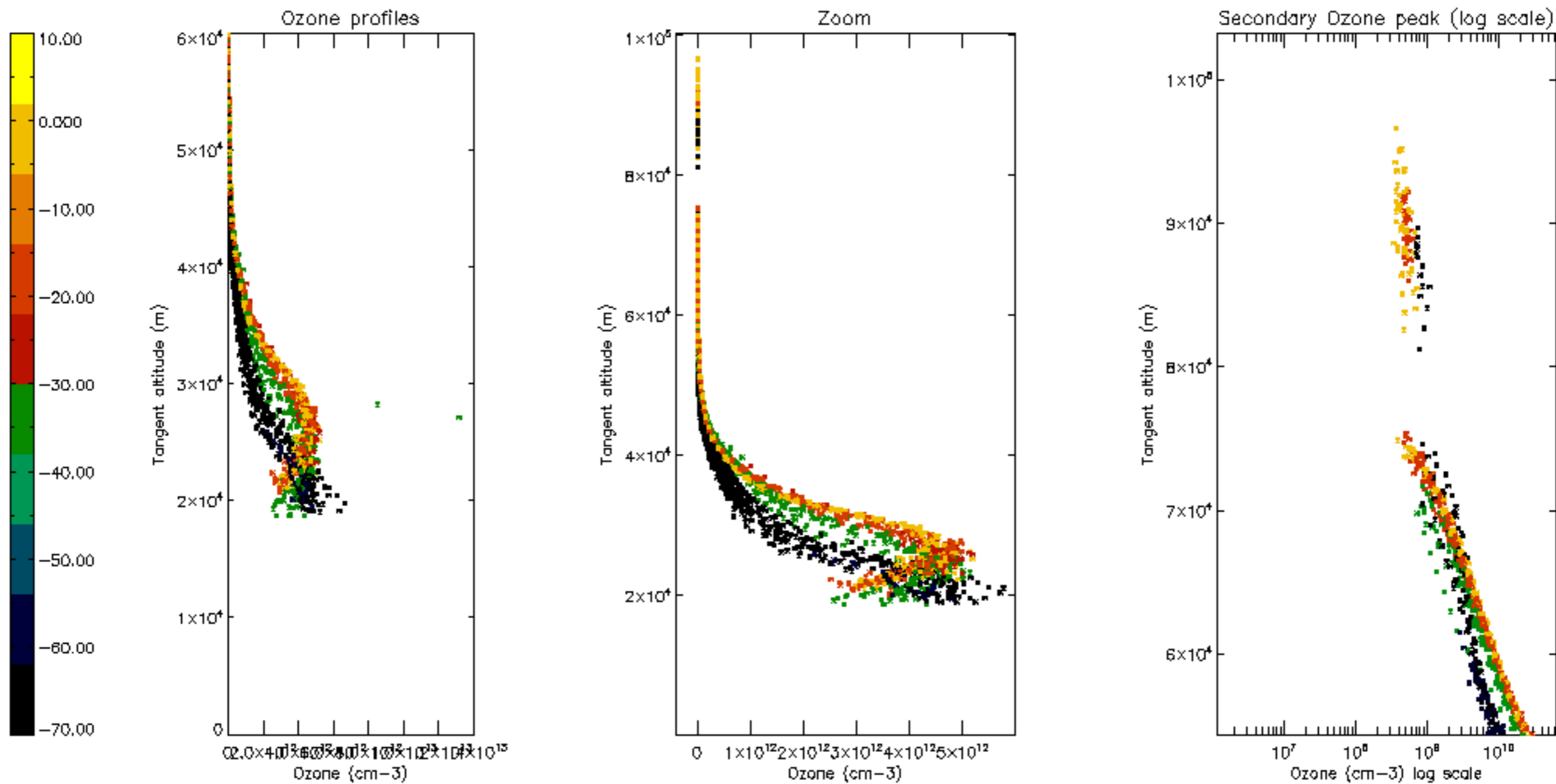


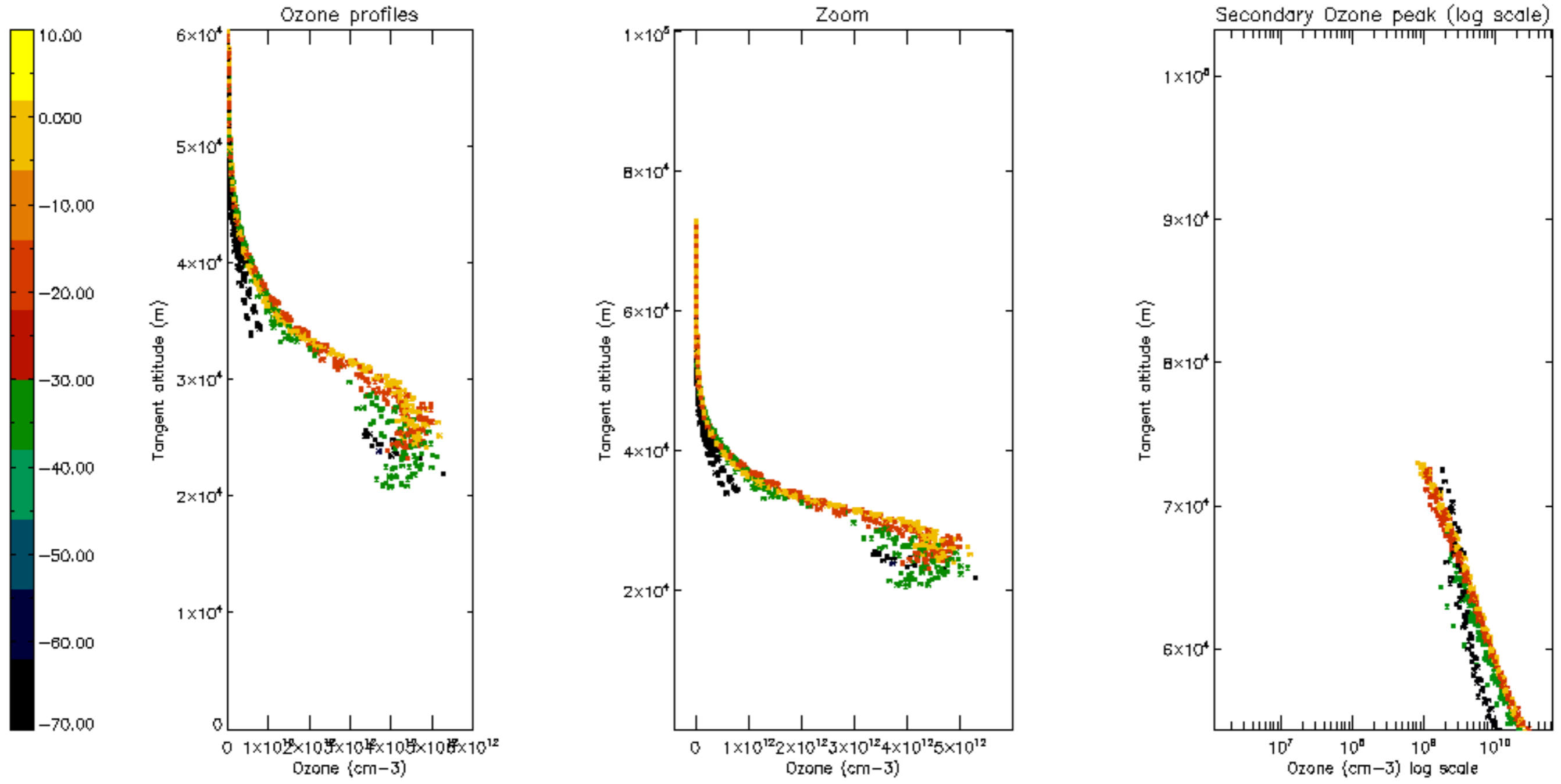
Percentage of saturation errors per profile

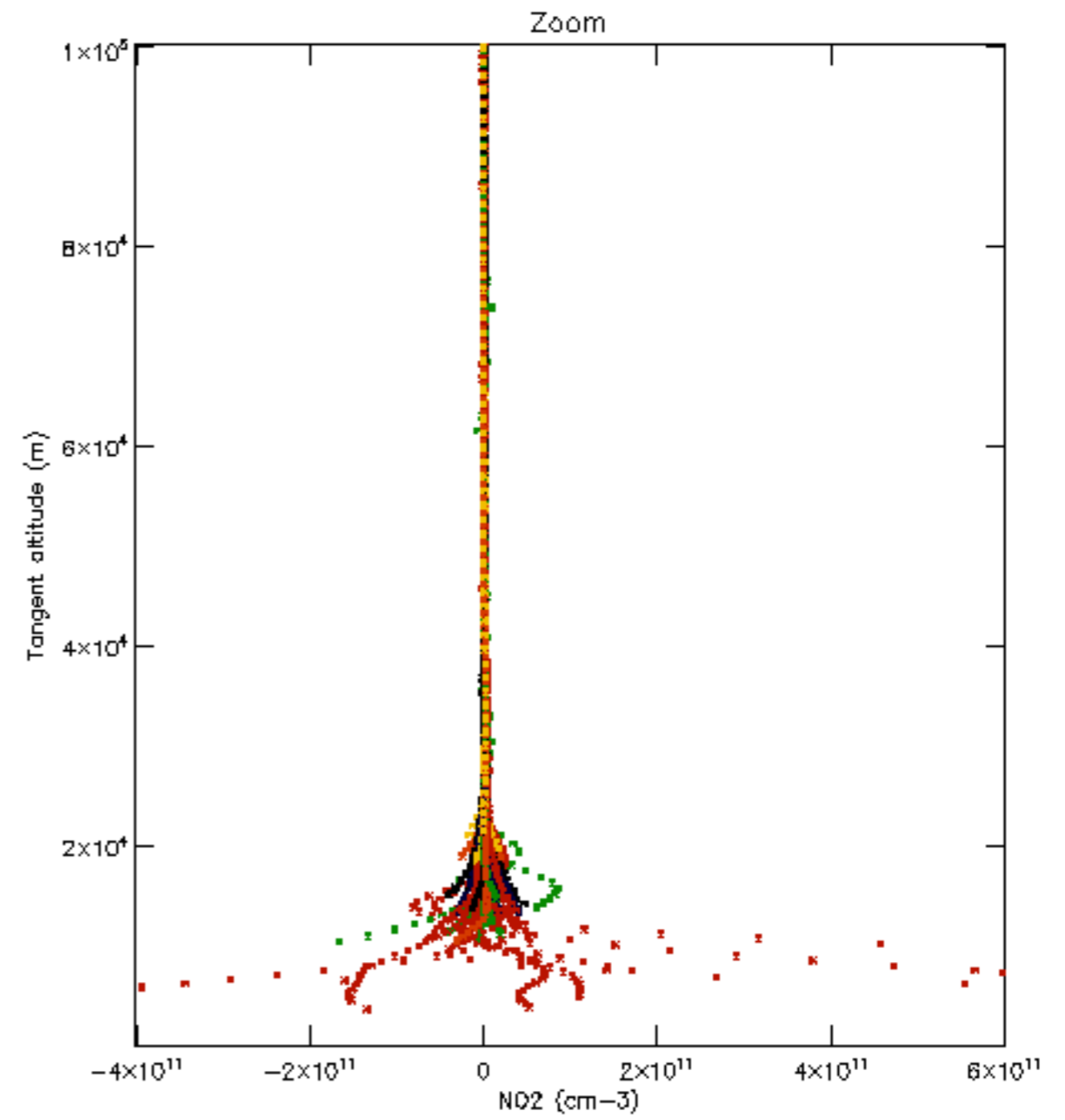
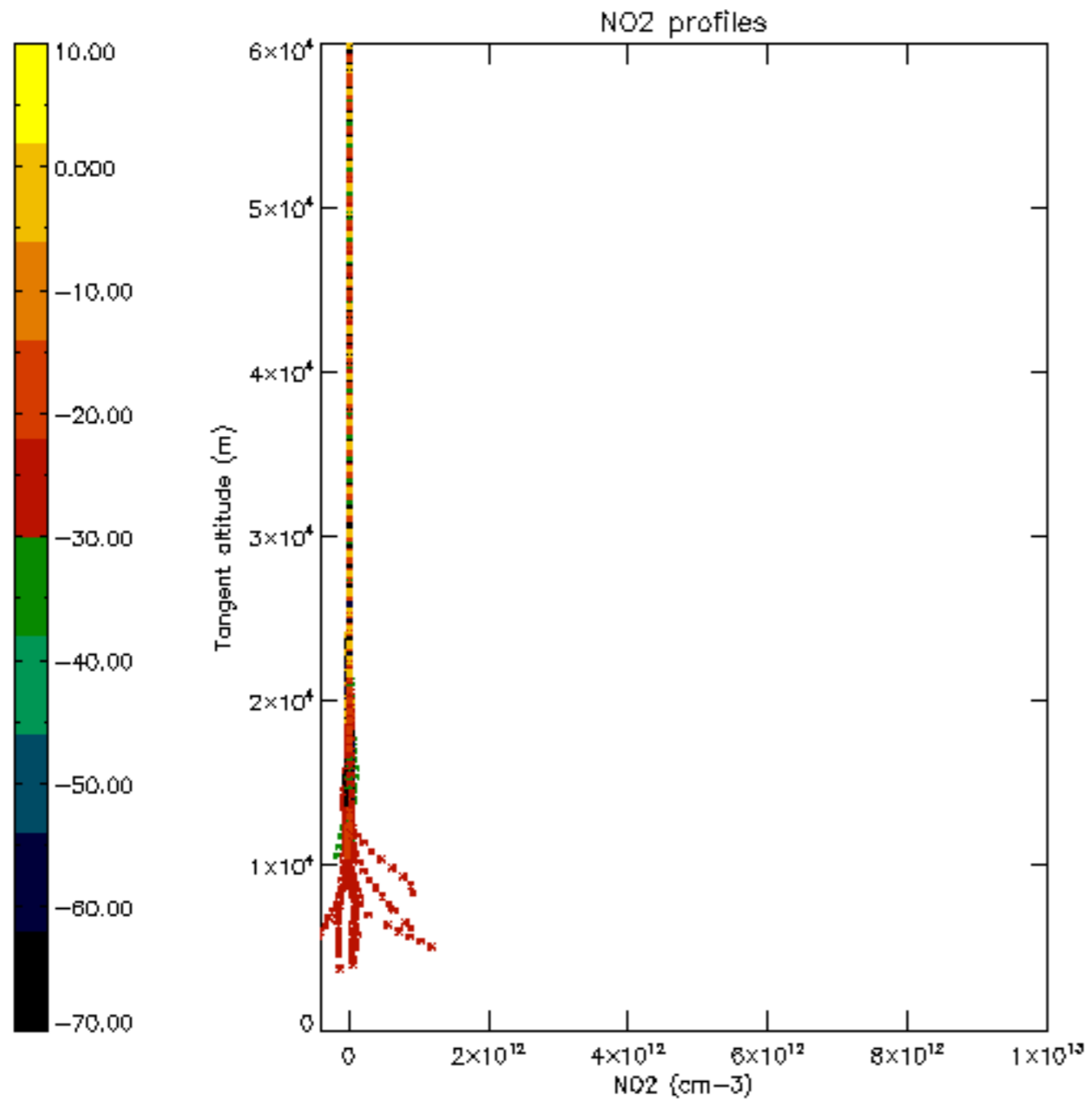


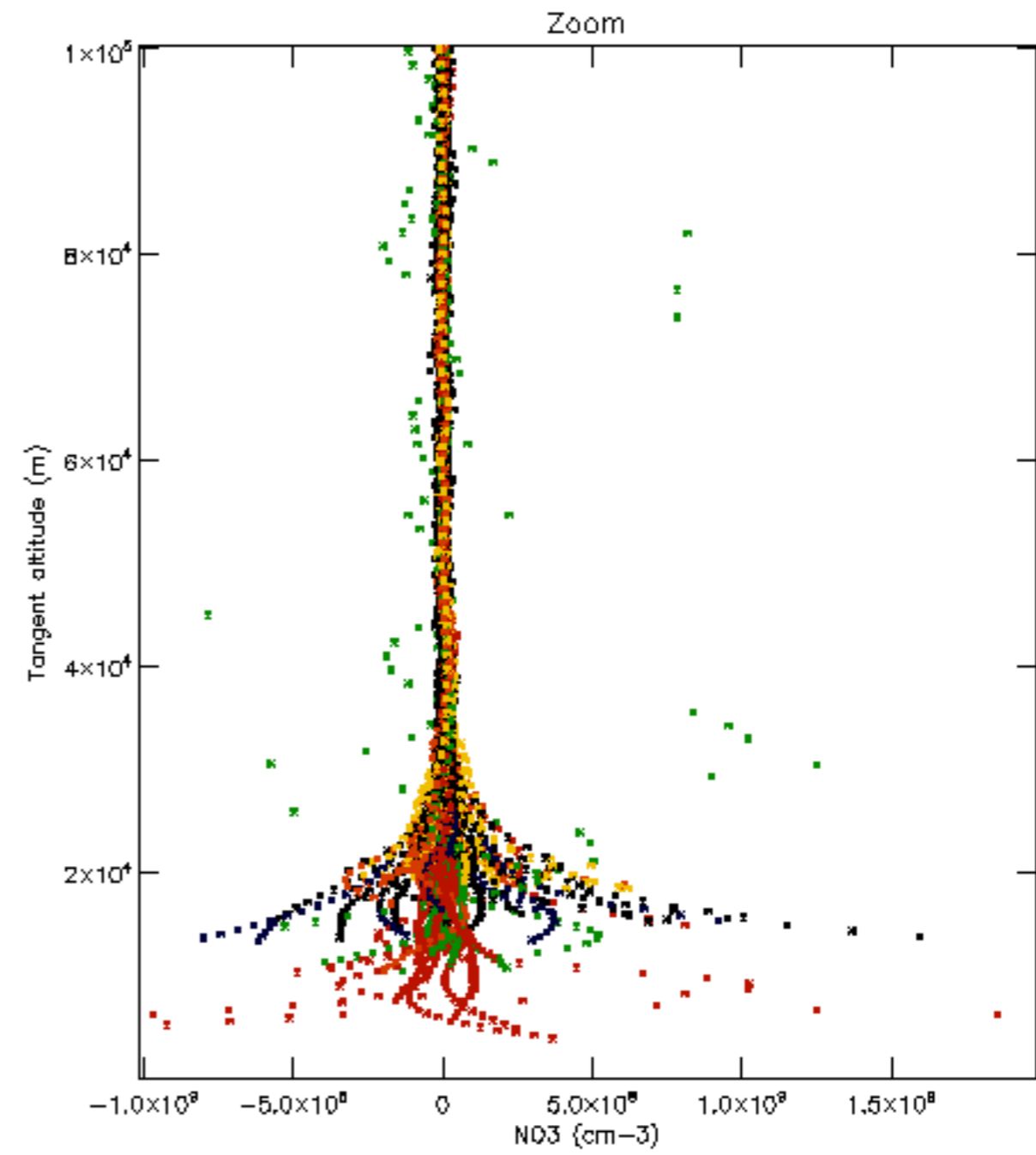
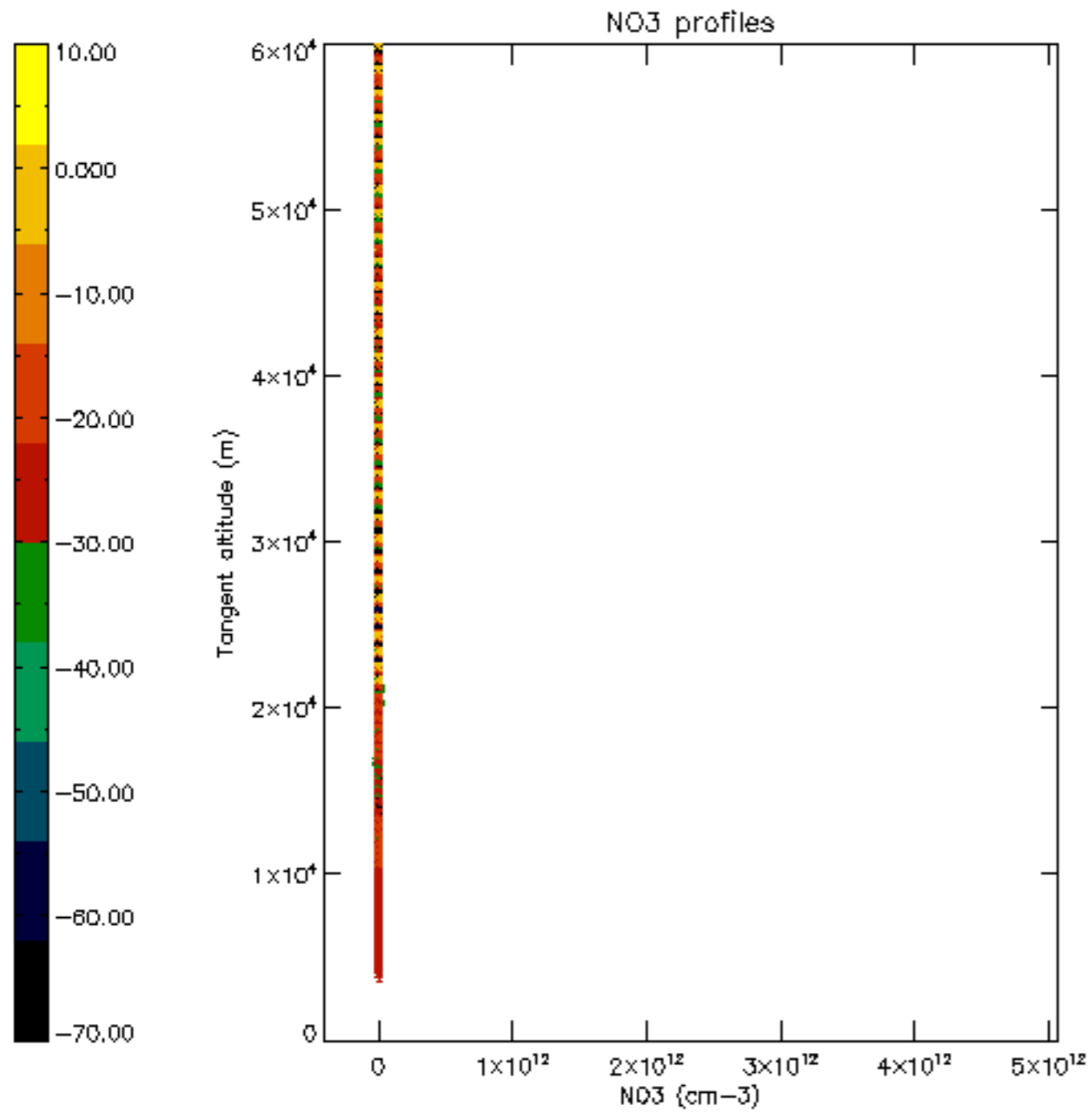


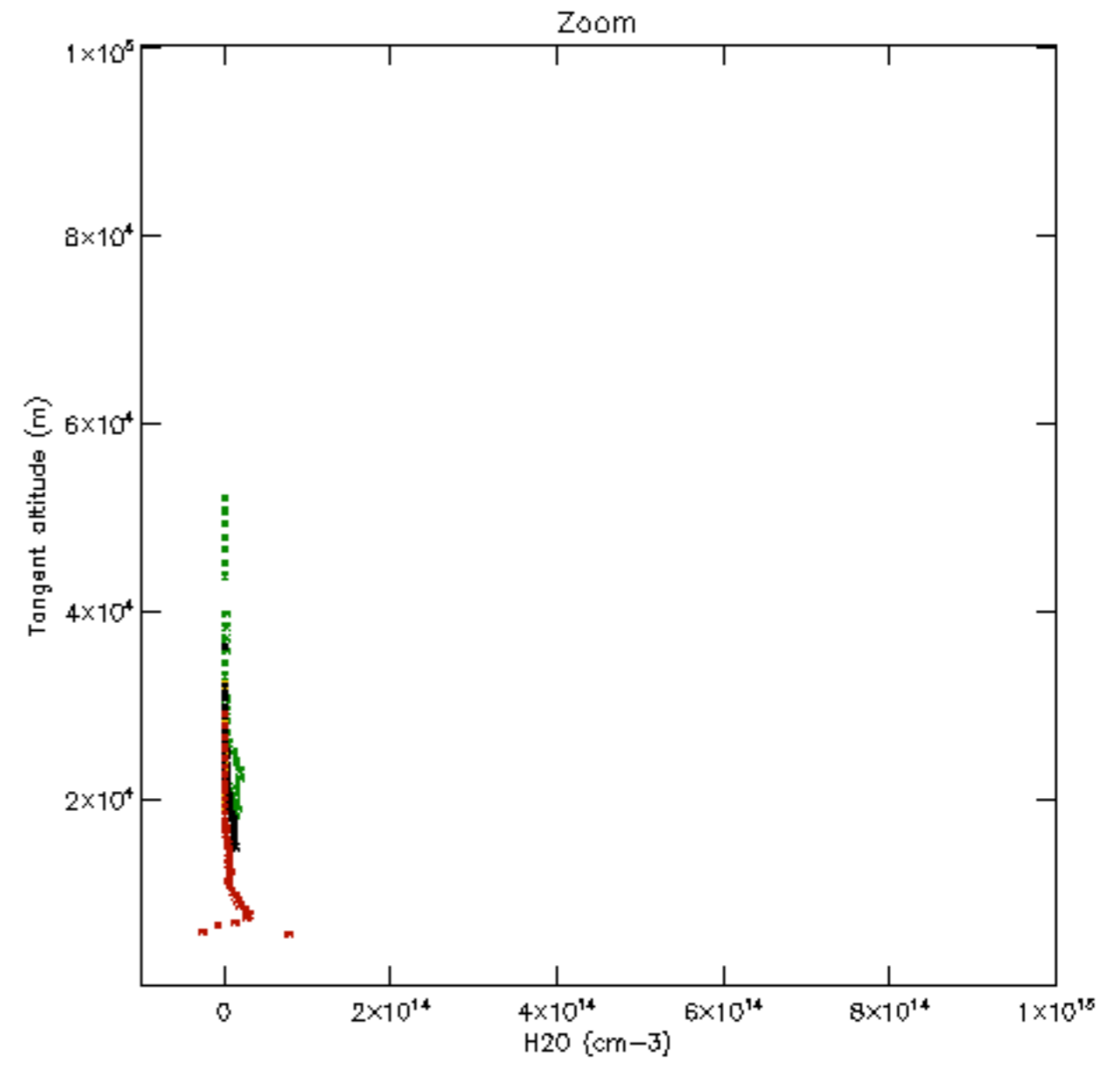
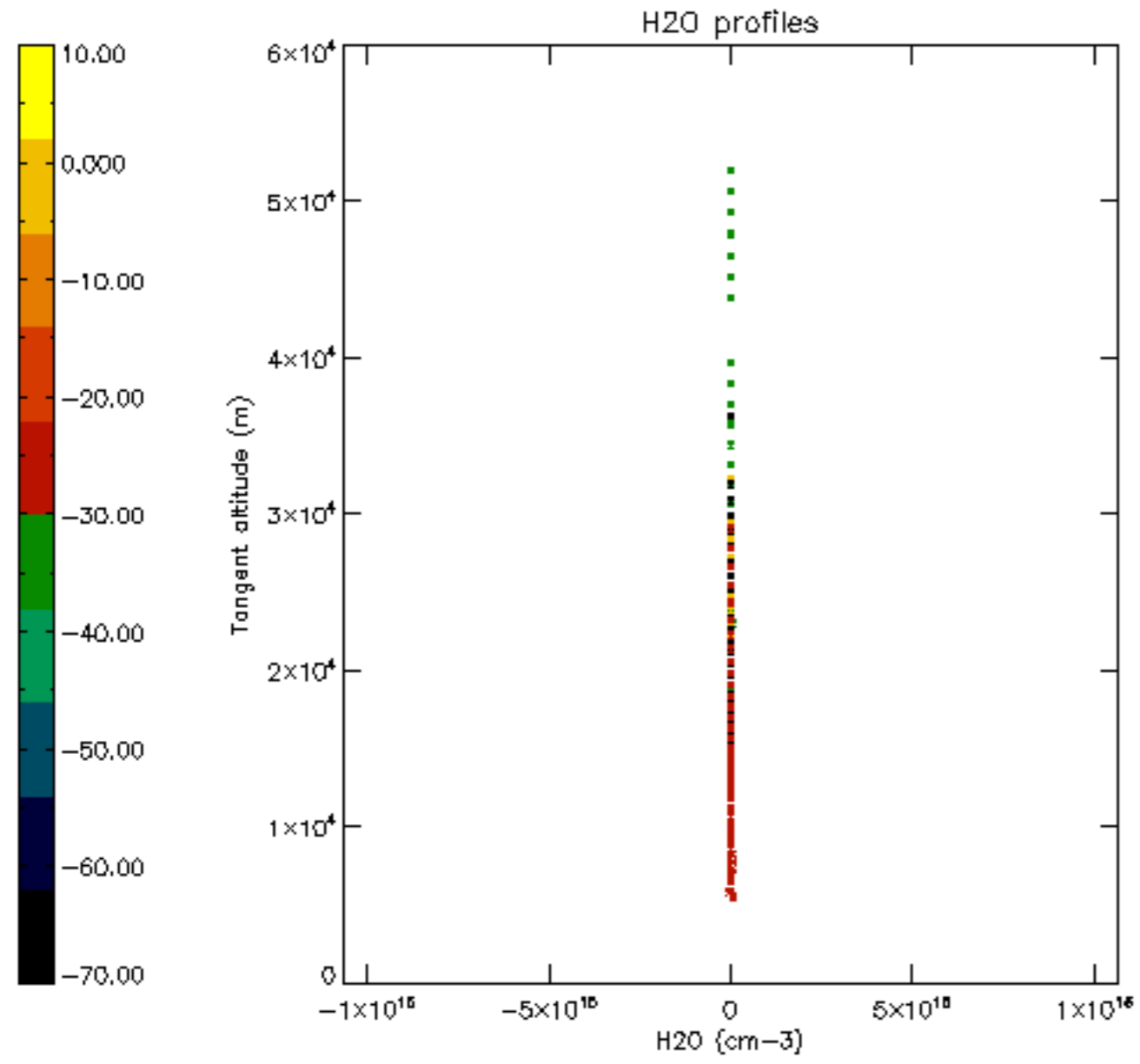


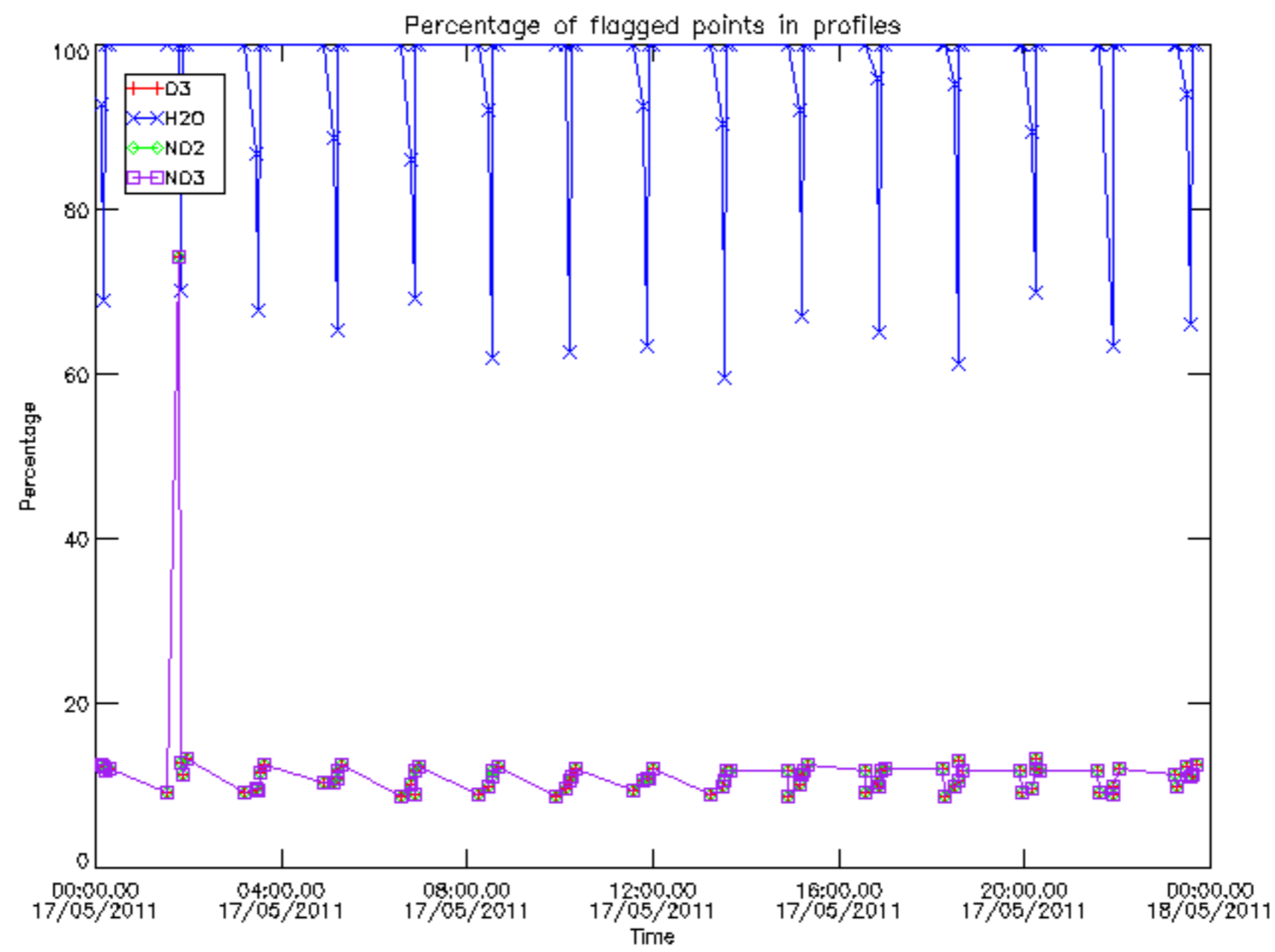




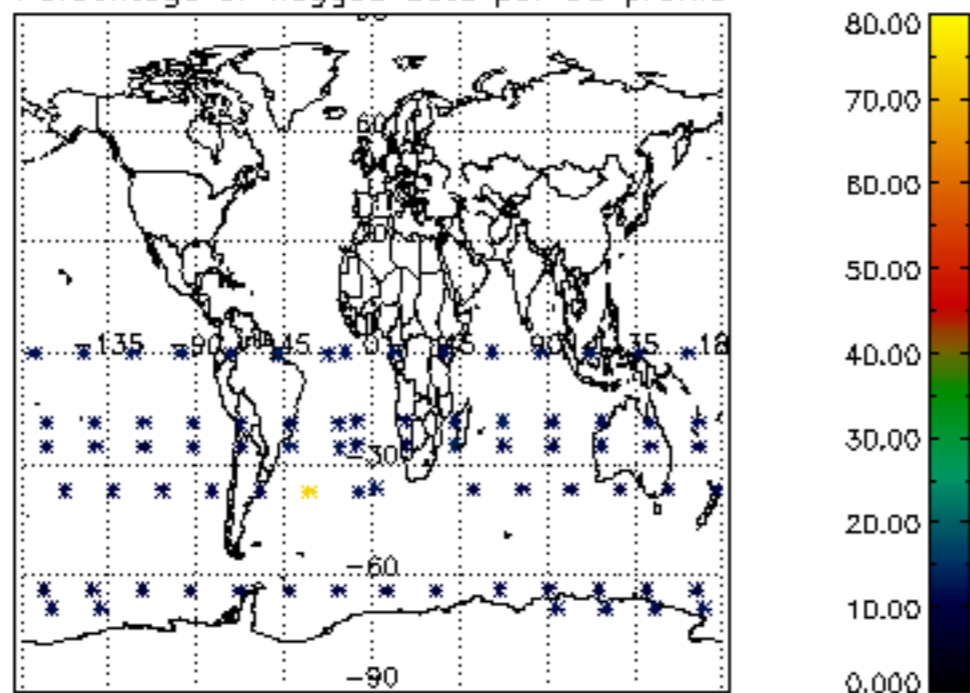




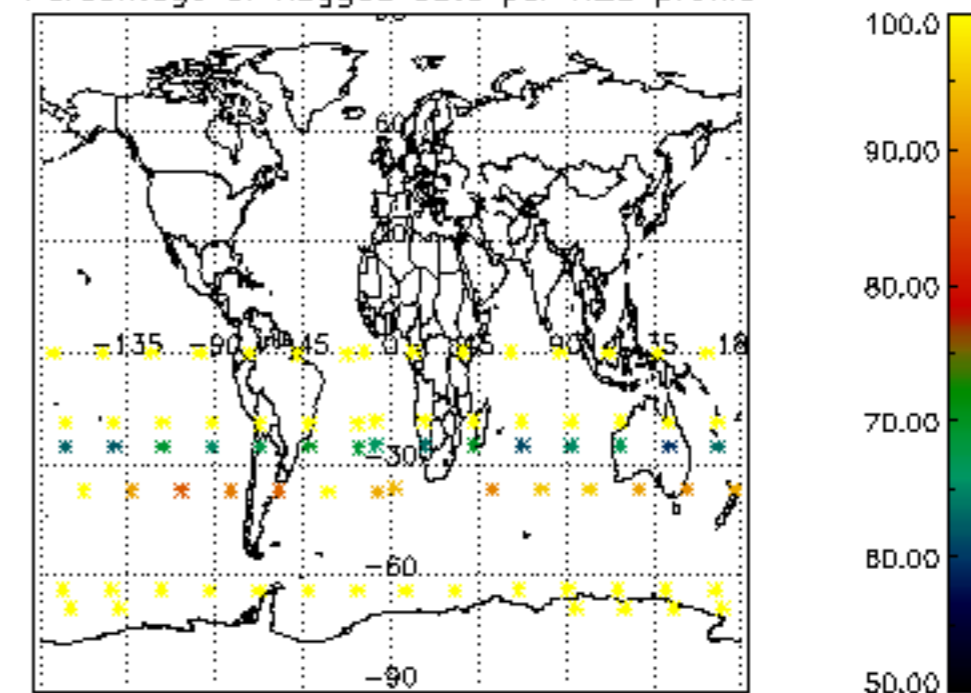




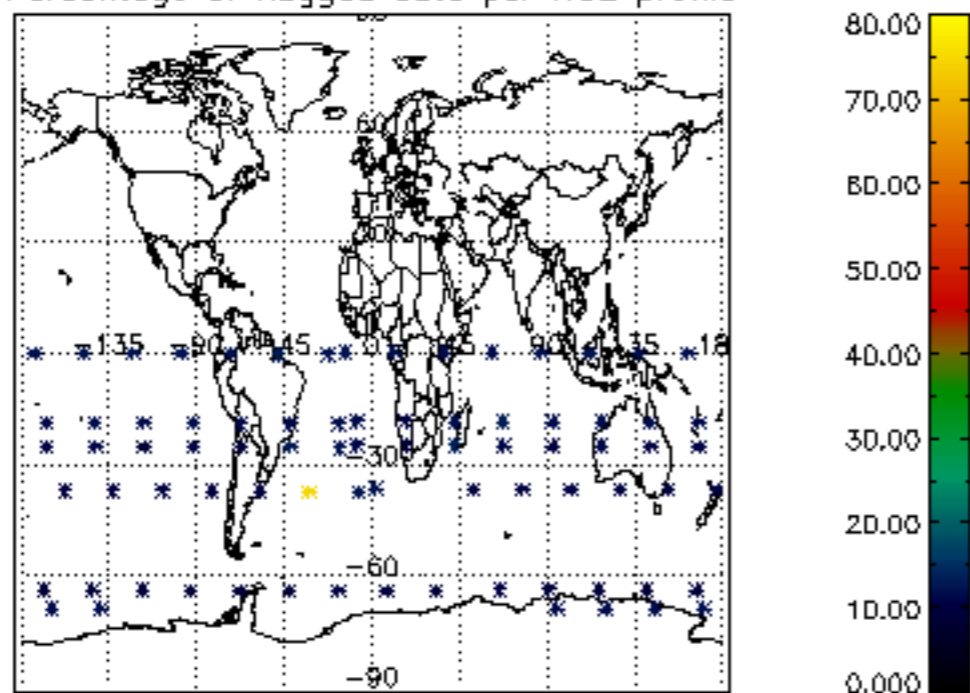
Percentage of flagged data per D3 profile



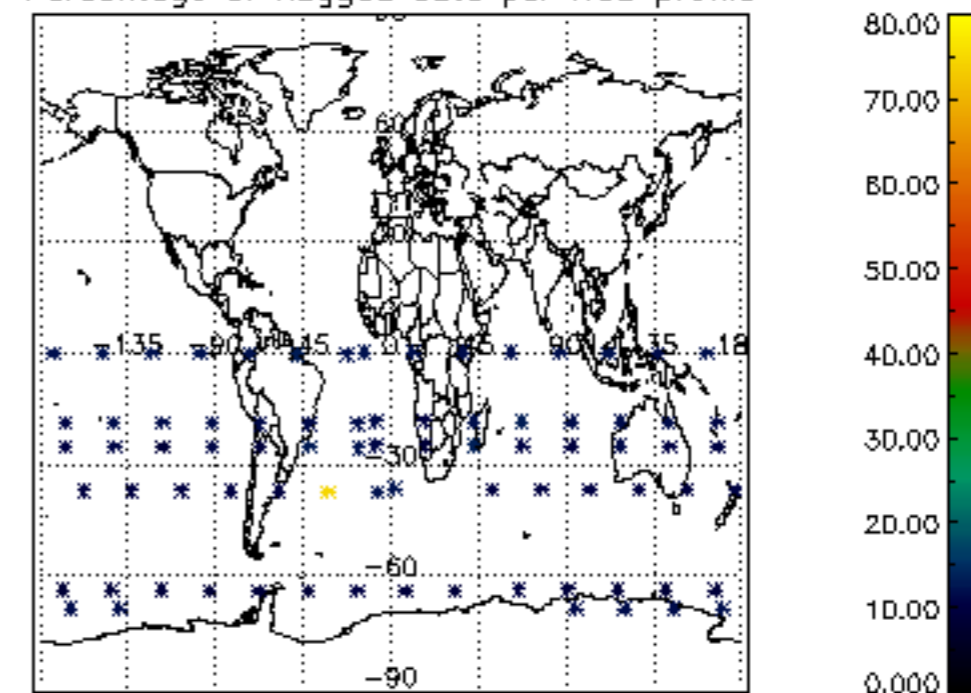
Percentage of flagged data per H2O profile

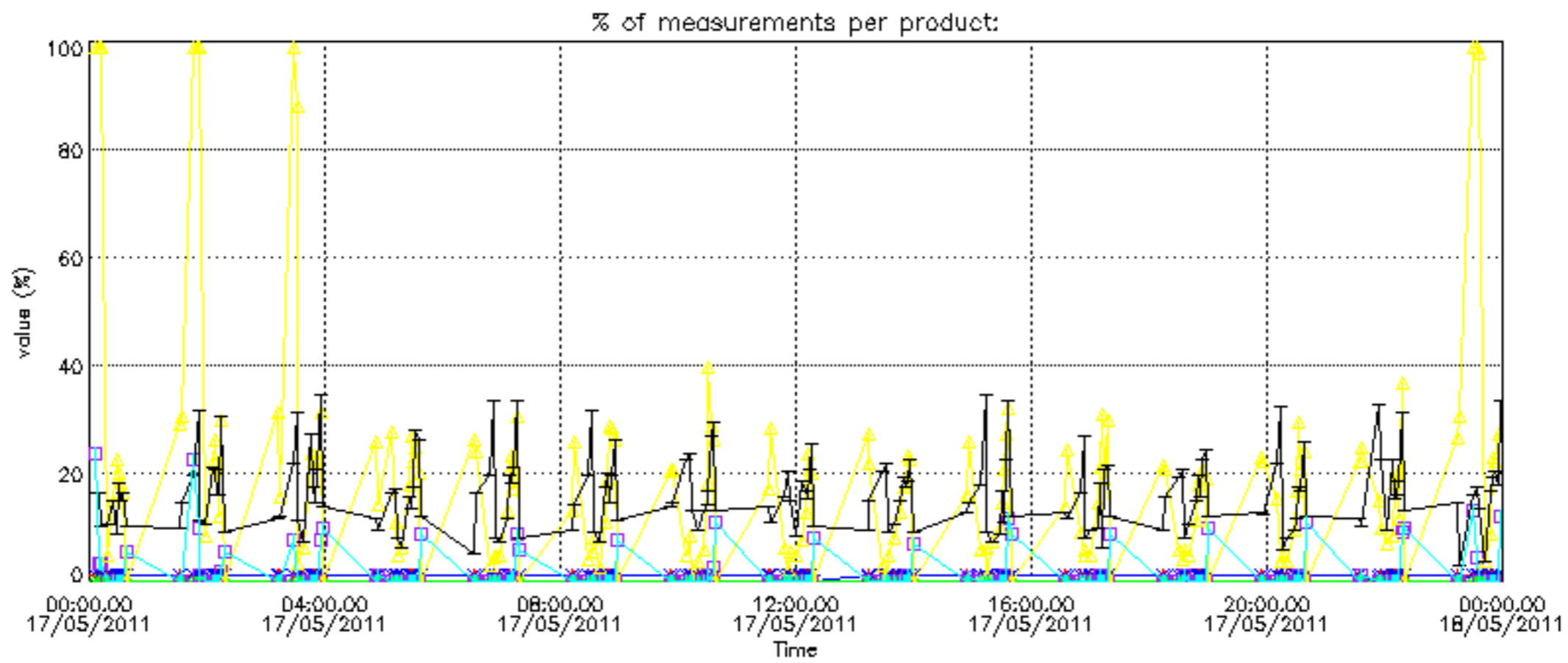


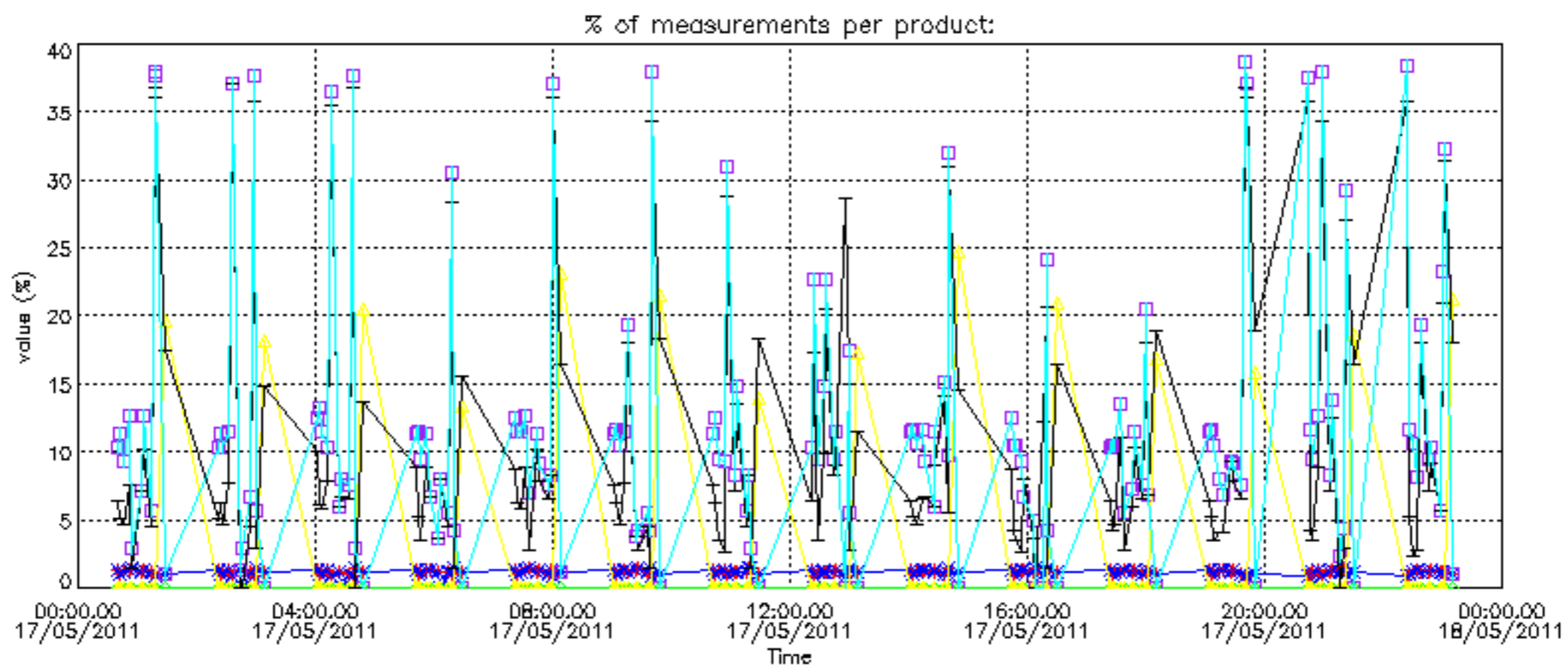
Percentage of flagged data per NO2 profile



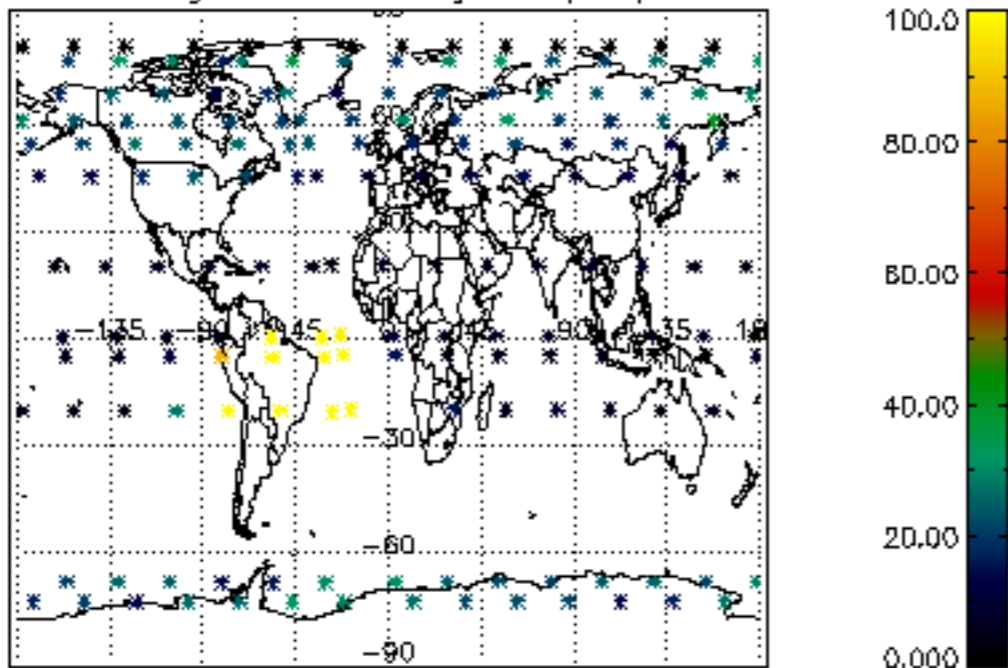
Percentage of flagged data per NO3 profile



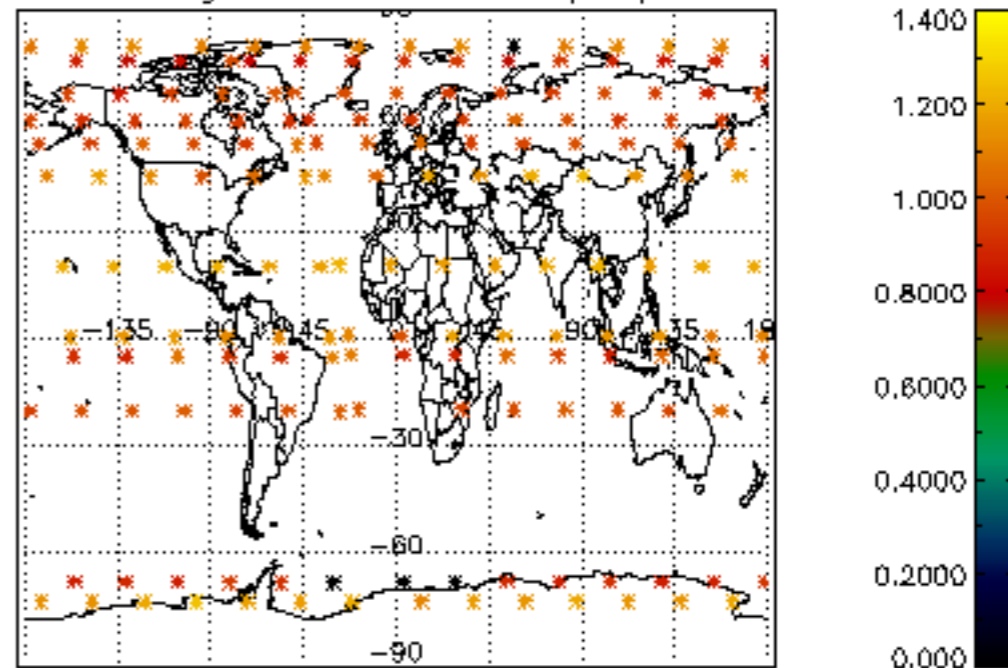




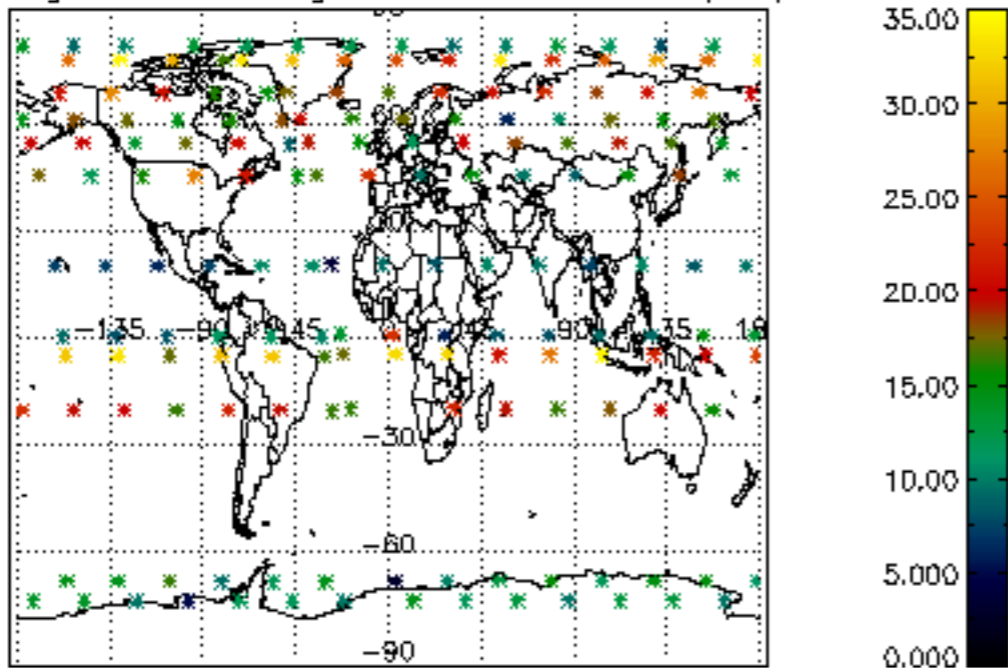
Percentage of cosmic ray hits per profile



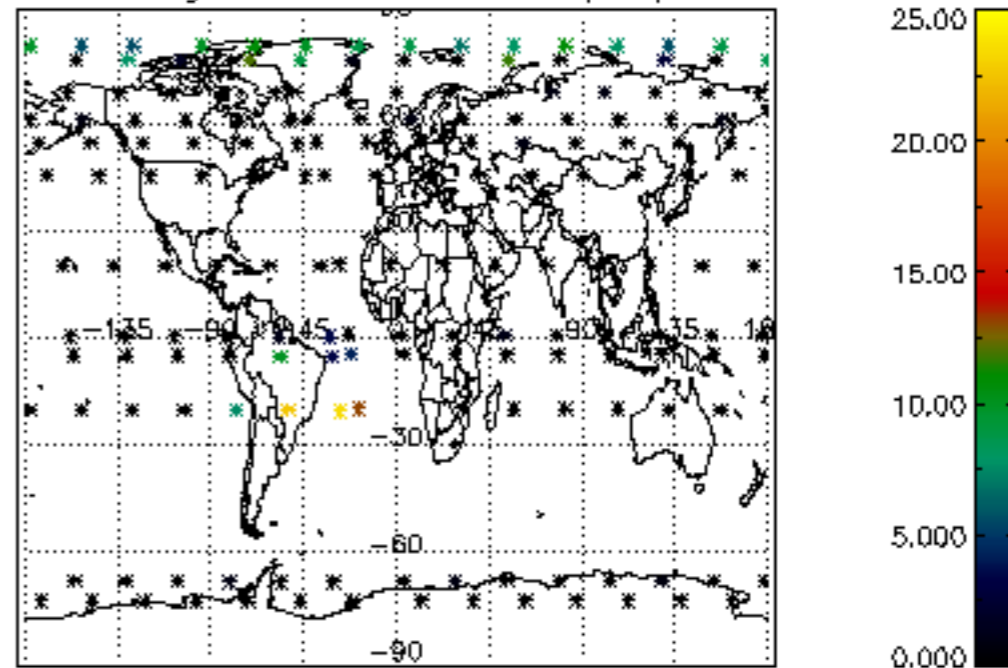
Percentage of datation errors per profile



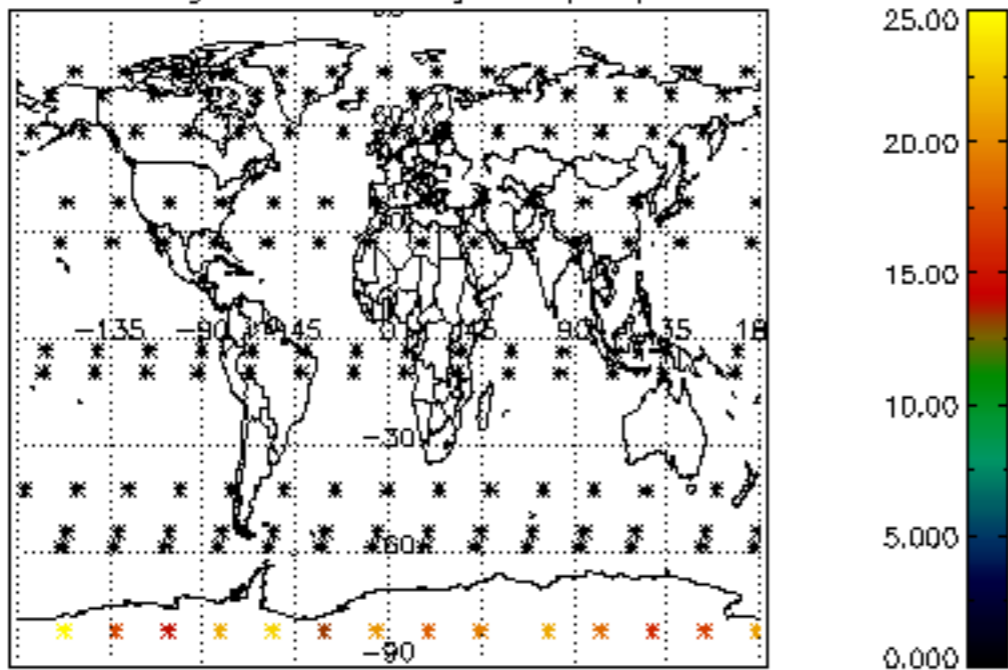
Percentage of star falling outside central band per profile



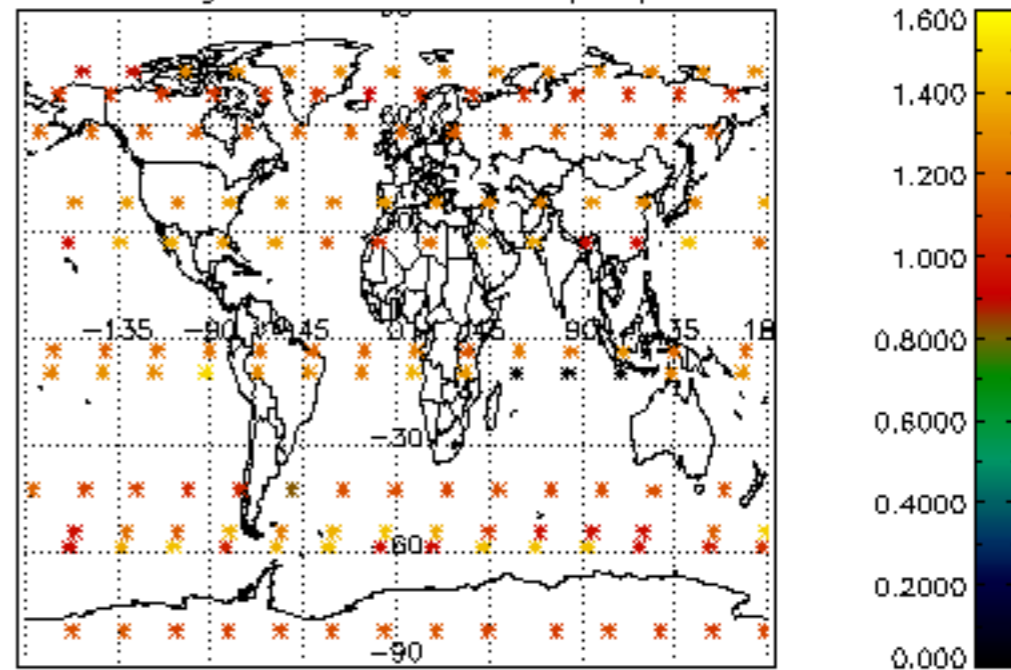
Percentage of saturation errors per profile



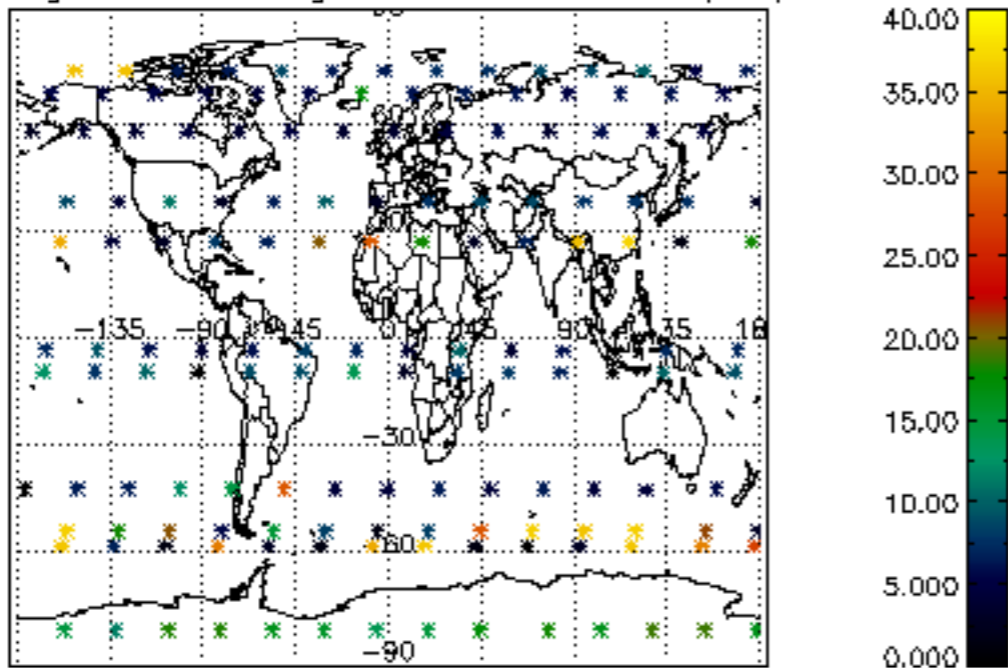
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

