

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](#)

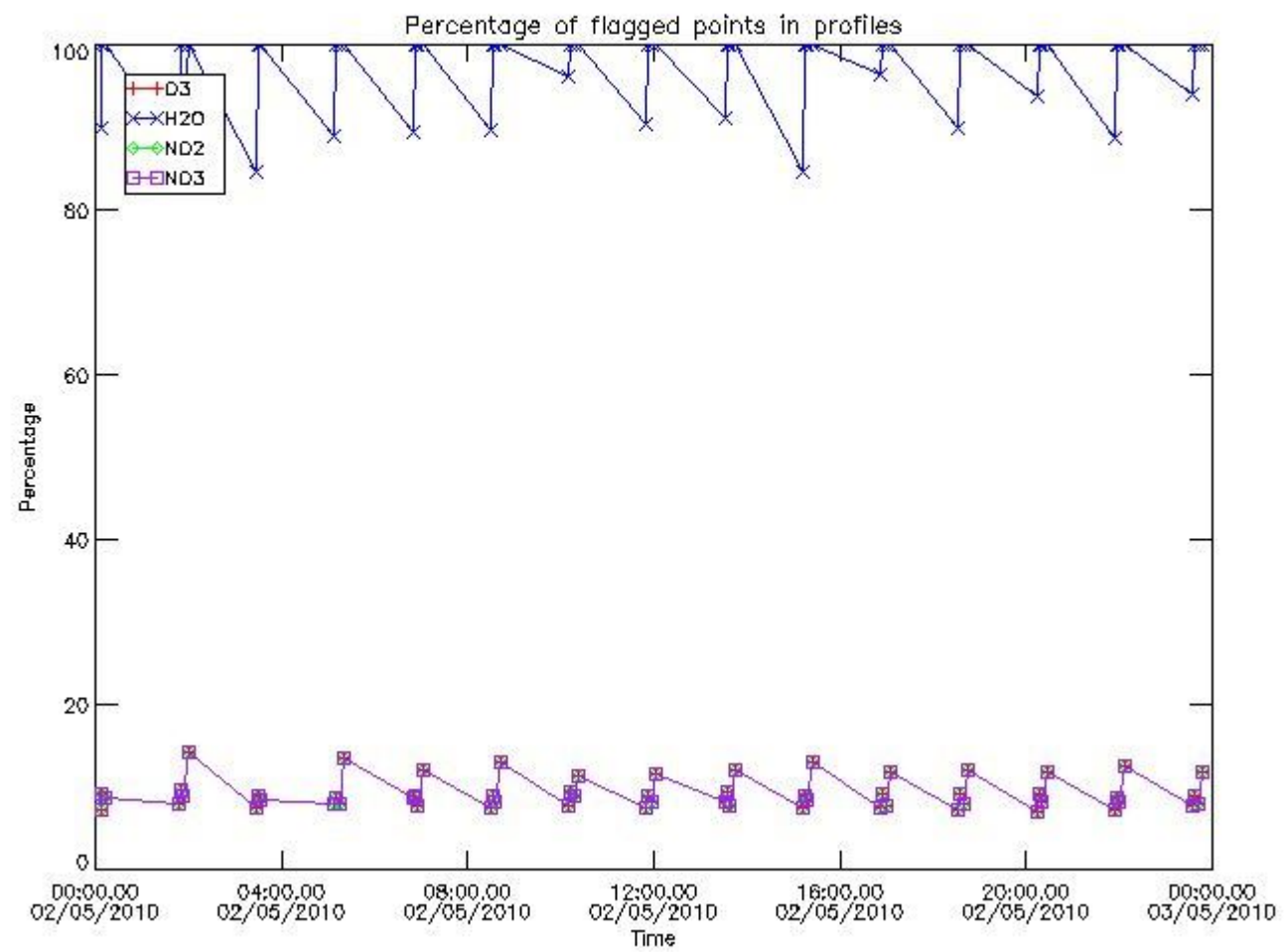
This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also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

Item	Value
Time of report generation	29APR2013 10:19:35
Data source version	GOMOS/6.01
Start time of products	02-05-2010 (02MAY2010 00:00:00)
Stop time of products	03-05-2010 (03MAY2010 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	271
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

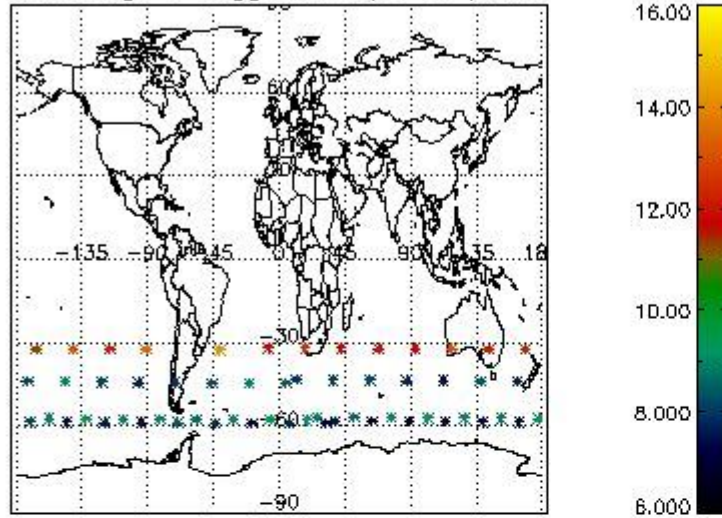
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20100502_000203_000000452089_00073_42712_7211.N1	02-MAY-2010 00:02:03	Twilight	44.500	90	54Alp Peg	2.4870	11000.	89	42712	No
2	GOM_NL__2PRFIN20100502_000627_000000702089_00073_42712_7212.N1	02-MAY-2010 00:06:27	Dark	69.500	61	8Eps Peg	2.1000	3900.0	139	42712	No
3	GOM_NL__2PRFIN20100502_000853_000000562089_00073_42712_7213.N1	02-MAY-2010 00:08:53	Dark	55.500	162	34Alp Aqr	2.9440	5350.0	111	42712	No
4	GOM_NL__2PRFIN20100502_001241_000000602089_00073_42712_7214.N1	02-MAY-2010 00:12:41	Dark	59.500	154	22Bet Aqr	2.8990	5700.0	119	42712	No
5	GOM_NL__2PRFIN20100502_003345_000000432089_00074_42713_7205.N1	02-MAY-2010 00:33:45	Straylight	42.500	141	Bet Ara	2.8400	4600.0	85	42713	No
6	GOM_NL__2PRFIN20100502_003540_000000572089_00074_42713_7206.N1	02-MAY-2010 00:35:40	Straylight	56.500	40	The Sco	1.8590	7100.0	113	42713	No
7	GOM_NL__2PRFIN20100502_003726_000000592089_00074_42713_7207.N1	02-MAY-2010 00:37:26	Straylight	59.000	25	35Lam Sco	1.6200	28000.	118	42713	No
8	GOM_NL__2PRFIN20100502_004030_000000592089_00074_42713_7208.N1	02-MAY-2010 00:40:30	Straylight	59.000	75	26Eps Sco	2.2910	4250.0	118	42713	No
9	GOM_NL__2PRFIN20100502_004413_000000692089_00074_42713_7209.N1	02-MAY-2010 00:44:13	Tw_i_and_stray	68.500	16	21Alp Sco	1.0200	3000.0	137	42713	No
10	GOM_NL__2PRFIN20100502_004626_000000592089_00074_42713_7210.N1	02-MAY-2010 00:46:26	Tw_i_and_stray	58.500	80	7Del Sco	2.3160	30000.	117	42713	No
11	GOM_NL__2PRFIN20100502_004933_000000462089_00074_42713_7211.N1	02-MAY-2010 00:49:33	Bright	46.000	122	9Alp2Lib	2.7470	9700.0	92	42713	No
12	GOM_NL__2PRFIN20100502_005149_000000482089_00074_42713_7212.N1	02-MAY-2010 00:51:49	Bright	48.000	104	27Bet Lib	2.6140	13100.	96	42713	No
13	GOM_NL__2PRFIN20100502_010013_000000392089_00074_42713_7213.N1	02-MAY-2010 01:00:13	Bright	38.500	111	8Eta Boo	2.6800	6000.0	77	42713	No
14	GOM_NL__2PRFIN20100502_010351_000000442089_00074_42713_7214.N1	02-MAY-2010 01:03:51	Bright	43.500	83		2.3780	11000.	87	42713	No
15	GOM_NL__2PRFIN20100502_010652_000000412089_00074_42713_7215.N1	02-MAY-2010 01:06:52	Bright	41.000	180	27Gam Boo	3.0400	8000.0	82	42713	No
16	GOM_NL__2PRFIN20100502_011625_000000462089_00074_42713_7216.N1	02-MAY-2010 01:16:25	Bright	45.500	119	14Eta Dra	2.7270	4700.0	91	42713	No
17	GOM_NL__2PRFIN20100502_012646_000000432089_00074_42713_7217.N1	02-MAY-2010 01:26:46	Bright	42.500	89	5Alp Cep	2.4510	8000.0	85	42713	No
18	GOM_NL__2PRFIN20100502_013812_000000432089_00074_42713_7218.N1	02-MAY-2010 01:38:12	Bright	42.500	164	44Eta Peg	2.9480	5400.0	85	42713	No
19	GOM_NL__2PRFIN20100502_014240_000000452089_00074_42713_7219.N1	02-MAY-2010 01:42:40	Twilight	44.500	90	54Alp Peg	2.4870	11000.	89	42713	No
20	GOM_NL__2PRFIN20100502_014704_000000652089_00074_42713_7220.N1	02-MAY-2010 01:47:04	Dark	65.000	61	8Eps Peg	2.1000	3900.0	130	42713	No
21	GOM_NL__2PRFIN20100502_014930_000000542089_00074_42713_7221.N1	02-MAY-2010 01:49:30	Dark	53.500	162	34Alp Aqr	2.9440	5350.0	107	42713	No
22	GOM_NL__2PRFIN20100502_015318_000000632089_00074_42713_7222.N1	02-MAY-2010 01:53:18	Dark	62.500	154	22Bet Aqr	2.8990	5700.0	125	42713	No
23	GOM_NL__2PRFIN20100502_015948_000000432089_00074_42713_7223.N1	02-MAY-2010 01:59:48	Dark	43.000	172	Gam Gru	3.0030	13100.	86	42713	No
24	GOM_NL__2PRFIN20100502_021422_000000412089_00075_42714_7213.N1	02-MAY-2010 02:14:22	Straylight	41.000	141	Bet Ara	2.8400	4600.0	82	42714	No
25	GOM_NL__2PRFIN20100502_021617_000000592089_00075_42714_7214.N1	02-MAY-2010 02:16:17	Straylight	58.500	40	The Sco	1.8590	7100.0	117	42714	No
26	GOM_NL__2PRFIN20100502_021803_000000582089_00075_42714_7215.N1	02-MAY-2010 02:18:03	Straylight	58.000	25	35Lam Sco	1.6200	28000.	116	42714	No
27	GOM_NL__2PRFIN20100502_022107_000000622089_00075_42714_7216.N1	02-MAY-2010 02:21:07	Straylight	62.000	75	26Eps Sco	2.2910	4250.0	124	42714	No
28	GOM_NL__2PRFIN20100502_022450_000000682089_00075_42714_7217.N1	02-MAY-2010 02:24:50	Tw_i_and_stray	67.500	16	21Alp Sco	1.0200	3000.0	135	42714	No
29	GOM_NL__2PRFIN20100502_022702_000000592089_00075_42714_7218.N1	02-MAY-2010 02:27:02	Tw_i_and_stray	58.500	80	7Del Sco	2.3160	30000.	117	42714	No
30	GOM_NL__2PRFIN20100502_023009_000000462089_00075_42714_7219.N1	02-MAY-2010 02:30:09	Bright	45.500	122	9Alp2Lib	2.7470	9700.0	91	42714	No
31	GOM_NL__2PRFIN20100502_023225_000000492089_00075_42714_7220.N1	02-MAY-2010 02:32:25	Bright	48.500	104	27Bet Lib	2.6140	13100.	97	42714	No
32	GOM_NL__2PRFIN20100502_024049_000000392089_00075_42714_7221.N1	02-MAY-2010 02:40:49	Bright	38.500	111	8Eta Boo	2.6800	6000.0	77	42714	No
33	GOM_NL__2PRFIN20100502_024427_000000462089_00075_42714_7222.N1	02-MAY-2010 02:44:27	Bright	45.500	83		2.3780	11000.	91	42714	No
34	GOM_NL__2PRFIN20100502_024628_000000292089_00075_42714_7223.N1	02-MAY-2010 02:46:28	Tw_i_and_stray	29.000	67	5Alp CrB	2.2210	11000.	58	42714	No
35	GOM_NL__2PRFIN20100502_024728_000000412089_00075_42714_7224.N1	02-MAY-2010 02:47:28	Bright	40.500	180	27Gam Boo	3.0400	8000.0	81	42714	No
36	GOM_NL__2PRFIN20100502_025700_000000452089_00075_42714_7225.N1	02-MAY-2010 02:57:00	Bright	44.500	119	14Eta Dra	2.7270	4700.0	89	42714	No
37	GOM_NL__2PRFIN20100502_030722_000000432089_00075_42714_7226.N1	02-MAY-2010 03:07:22	Bright	43.000	89	5Alp Cep	2.4510	8000.0	86	42714	No
38	GOM_NL__2PRFIN20100502_031848_000000522089_00075_42714_7227.N1	02-MAY-2010 03:18:48	Bright	51.500	164	44Eta Peg	2.9480	5400.0	103	42714	No
39	GOM_NL__2PRFIN20100502_032316_000000442089_00075_42714_7228.N1	02-MAY-2010 03:23:16	Twilight	44.000	90	54Alp Peg	2.4870	11000.	88	42714	No
40	GOM_NL__2PRFIN20100502_032741_000000692089_00075_42714_7229.N1	02-MAY-2010 03:27:41	Dark	69.000	61	8Eps Peg	2.1000	3900.0	138	42714	No
41	GOM_NL__2PRFIN20100502_033007_000000572089_00075_42714_7230.N1	02-MAY-2010 03:30:07	Dark	56.500	162	34Alp Aqr	2.9440	5350.0	113	42714	No
42	GOM_NL__2PRFIN20100502_033356_000000612089_00075_42714_7231.N1	02-MAY-2010 03:33:56	Dark	61.000	154	22Bet Aqr	2.8990	5700.0	122	42714	No

3.1 Plot quality information per product (time dependant)

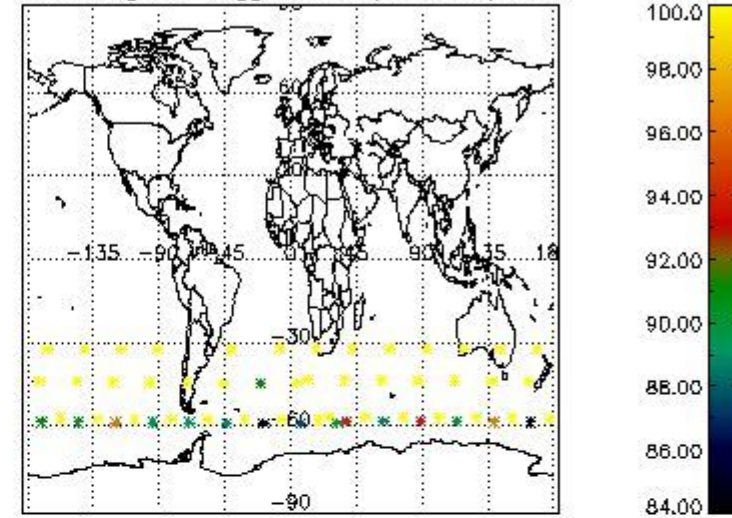


3.2 Plot quality information per product (world map)

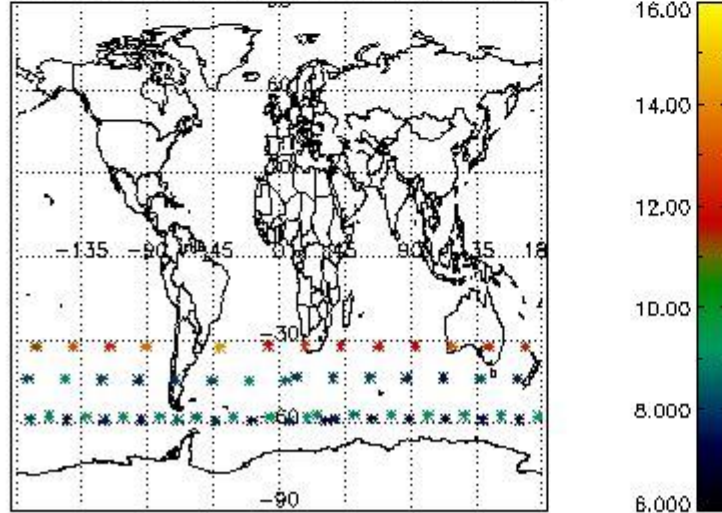
Percentage of flagged data per O3 profile



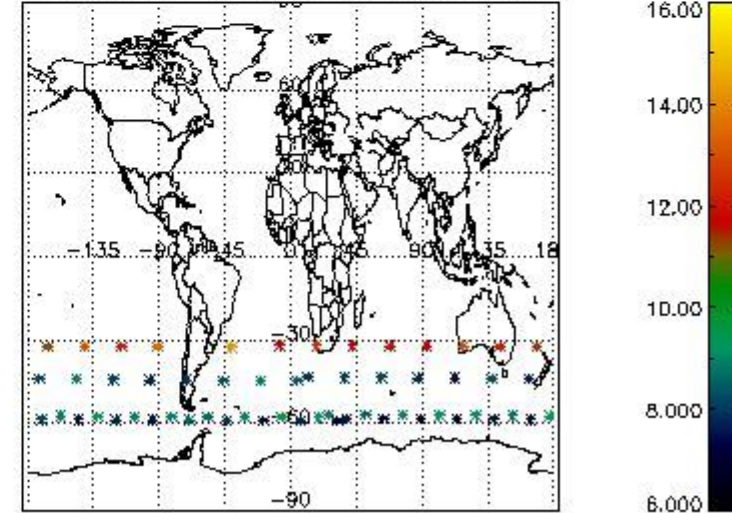
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

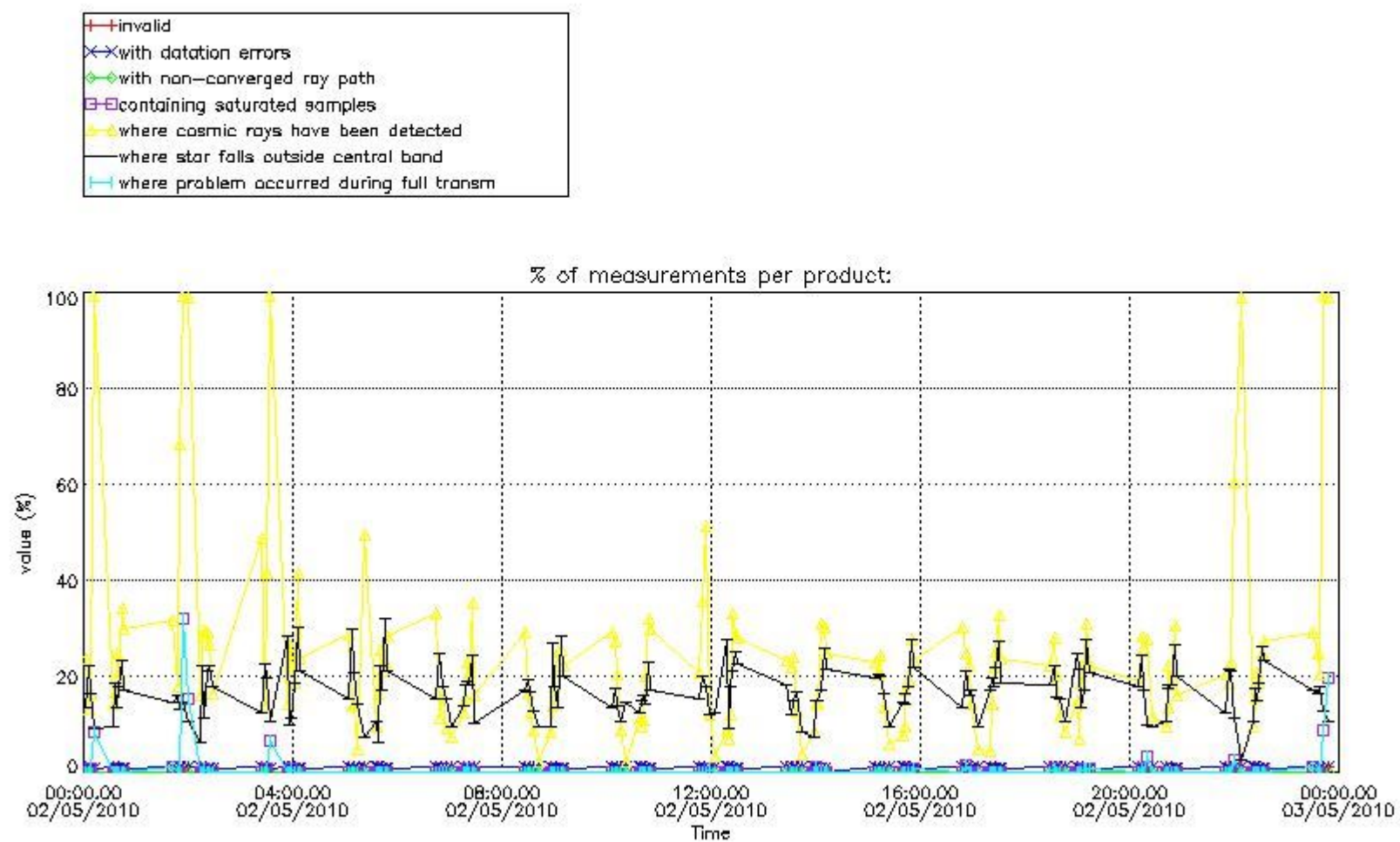


4. Level 1 quality information per product

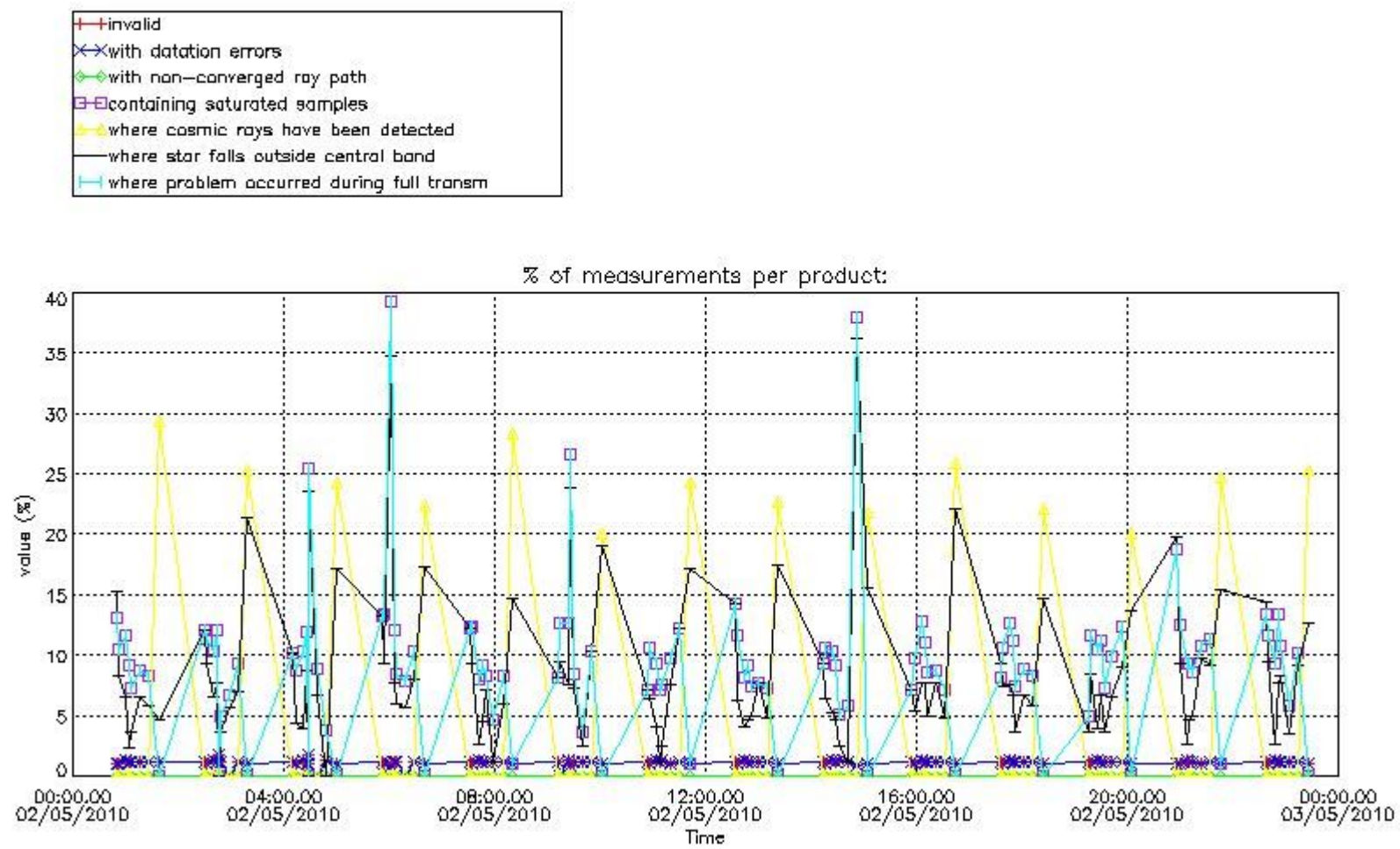
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



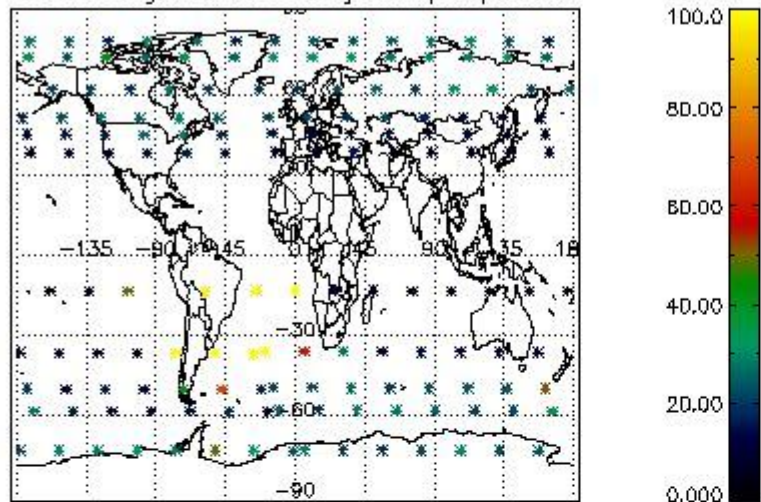
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



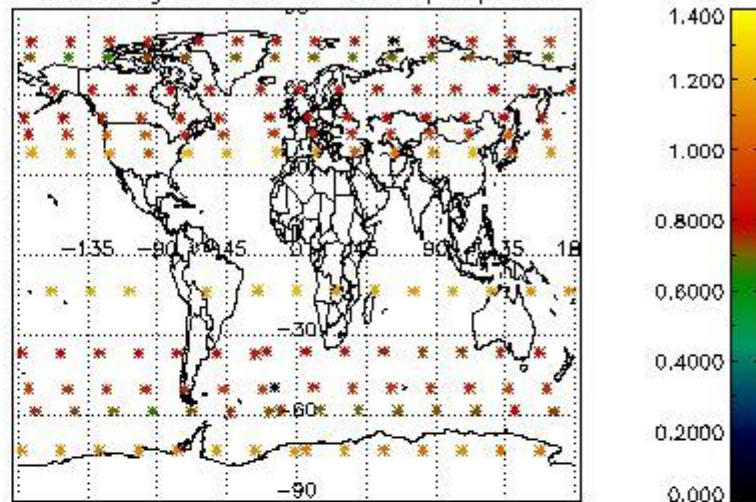
4.2 Plot quality information per product coming from level 1b processing (world map)

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

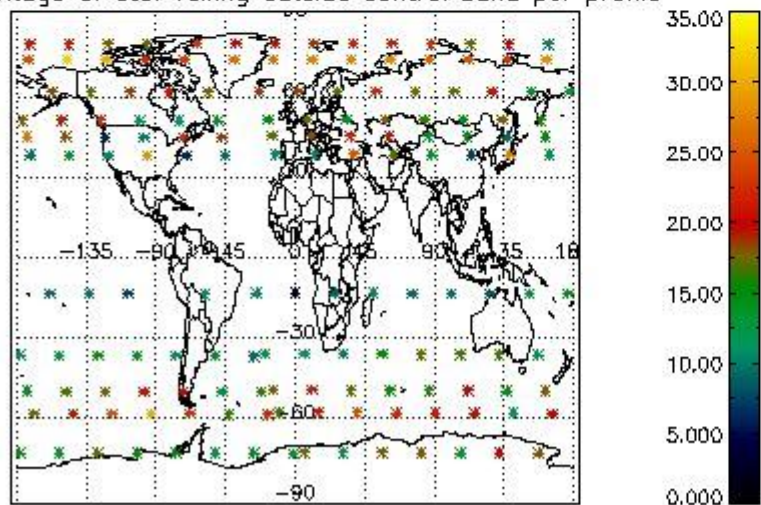
Percentage of cosmic ray hits per profile



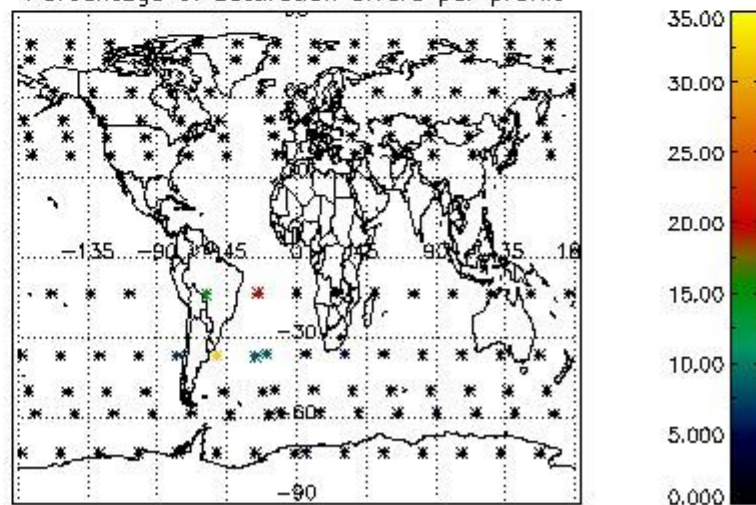
Percentage of datation errors per profile



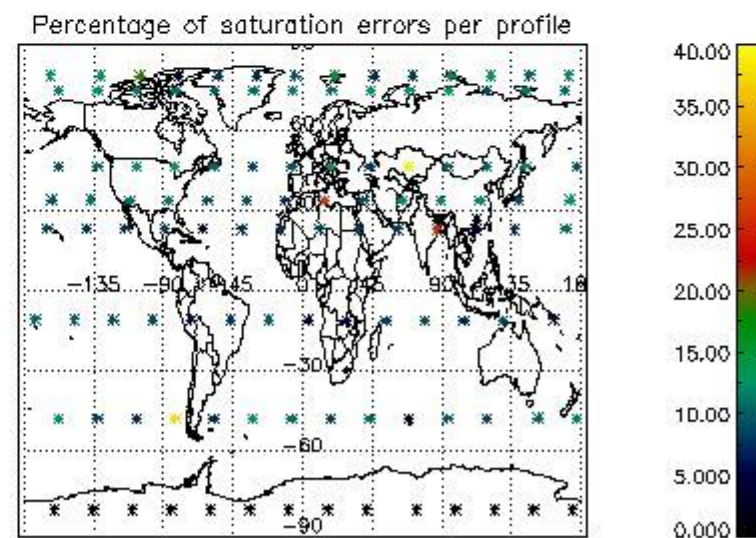
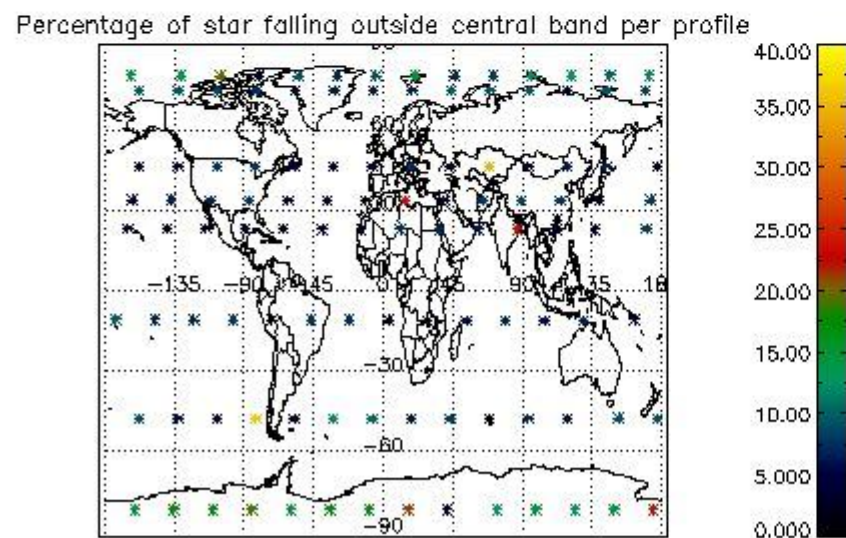
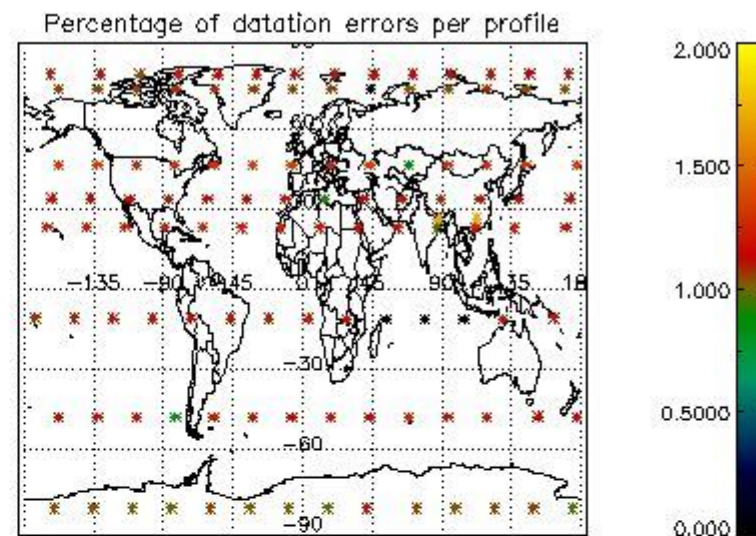
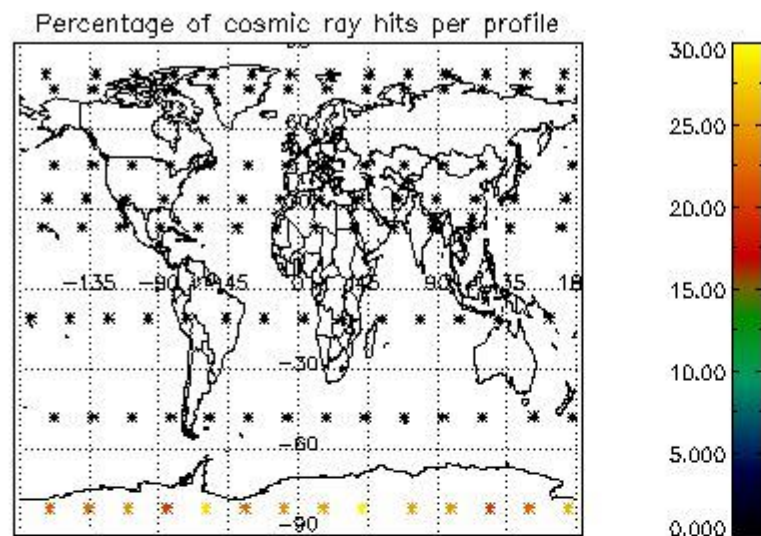
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

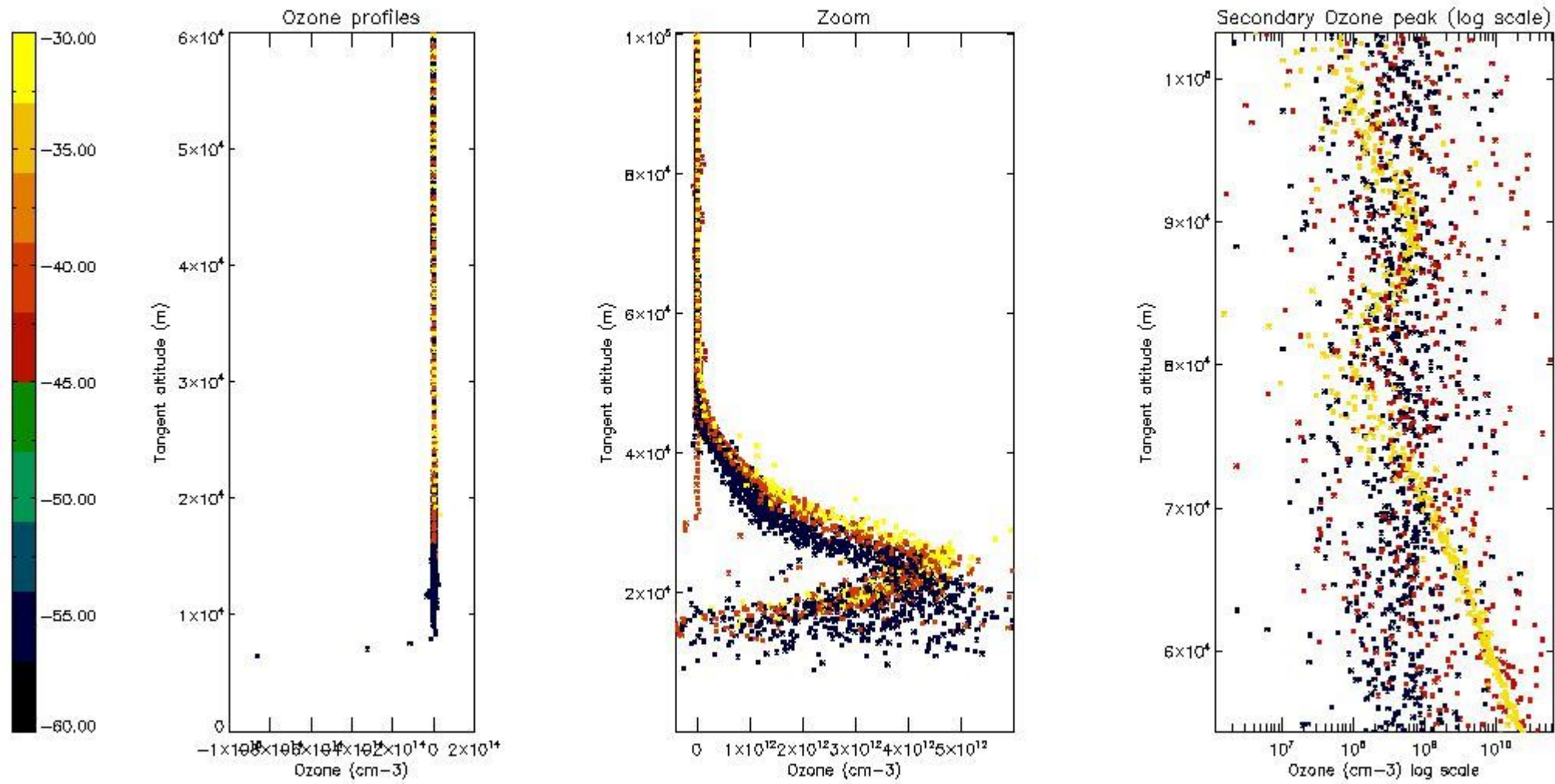
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	25
STD < 20	7

STD < 10	3
STD < 5	0

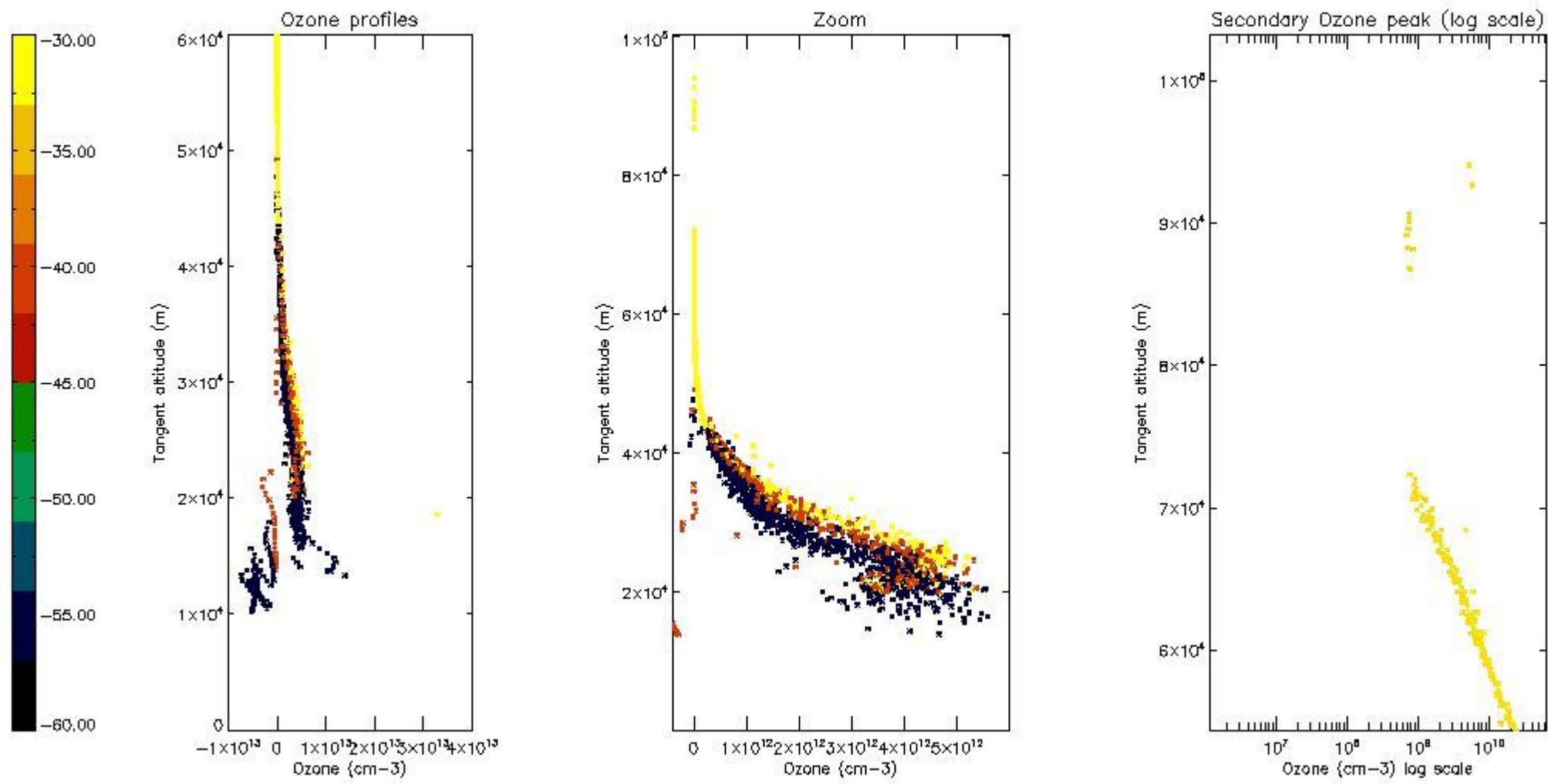
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



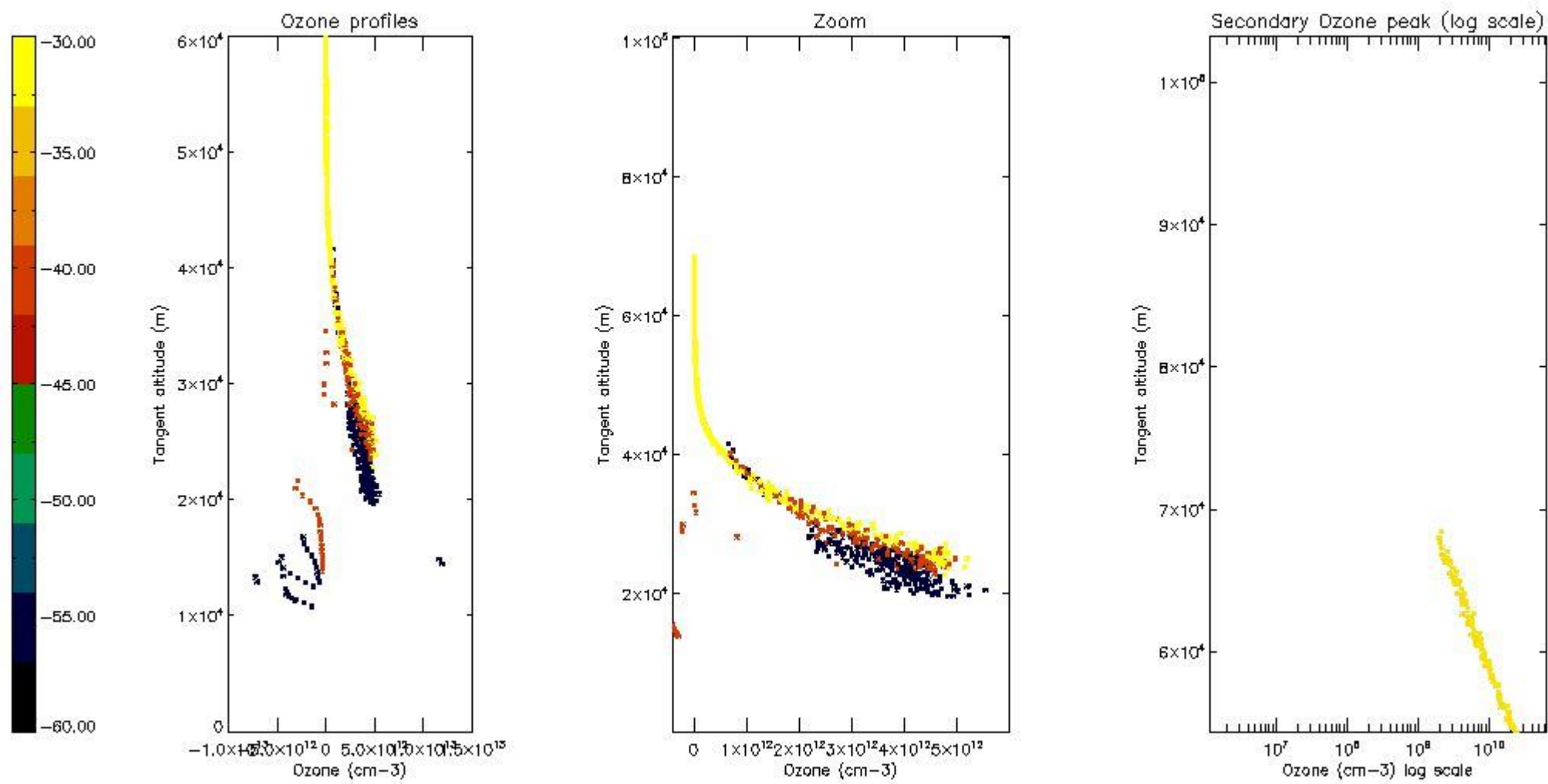
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



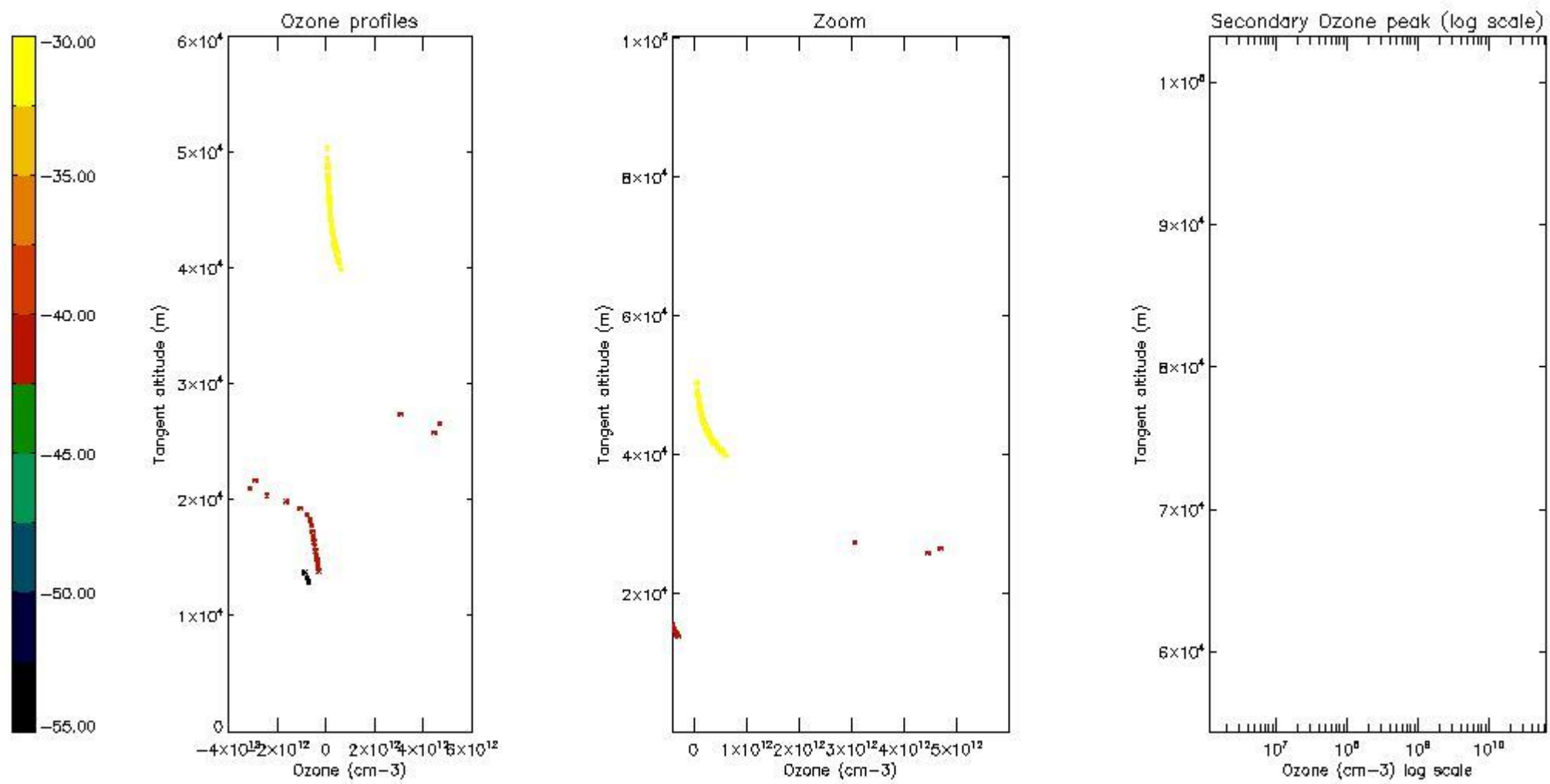
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



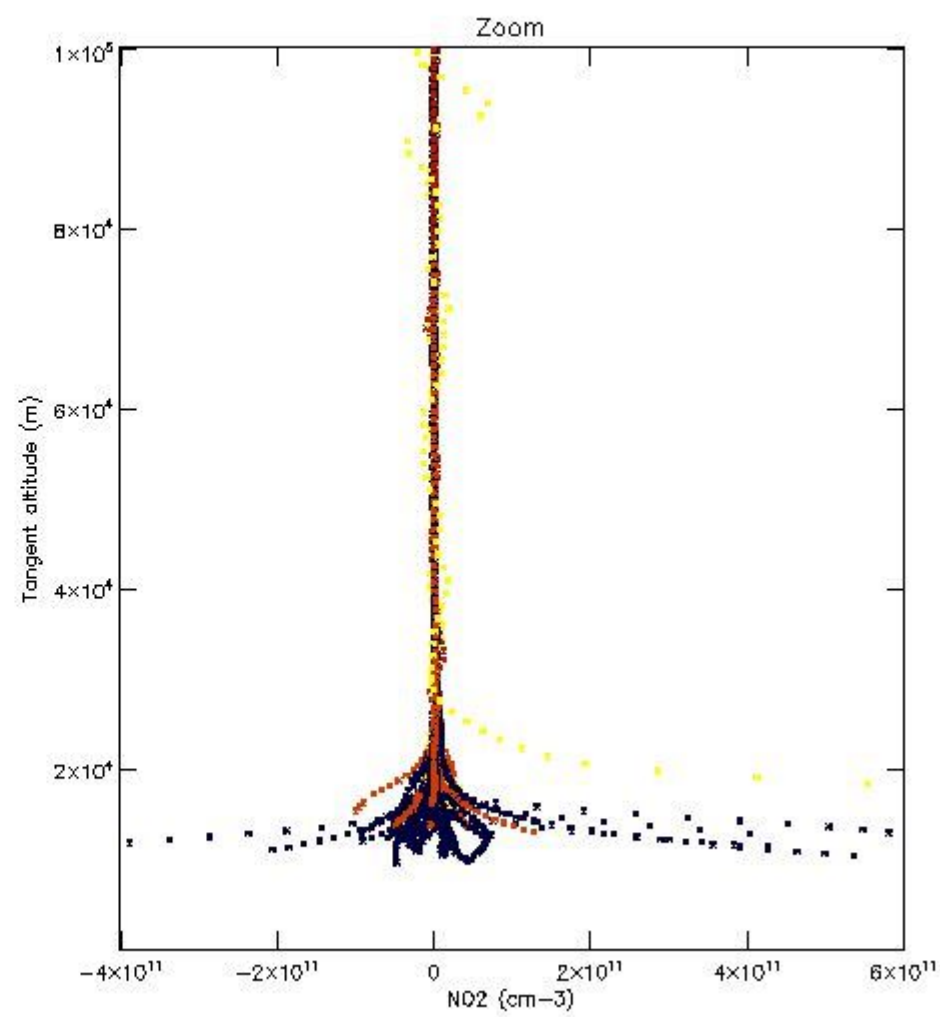
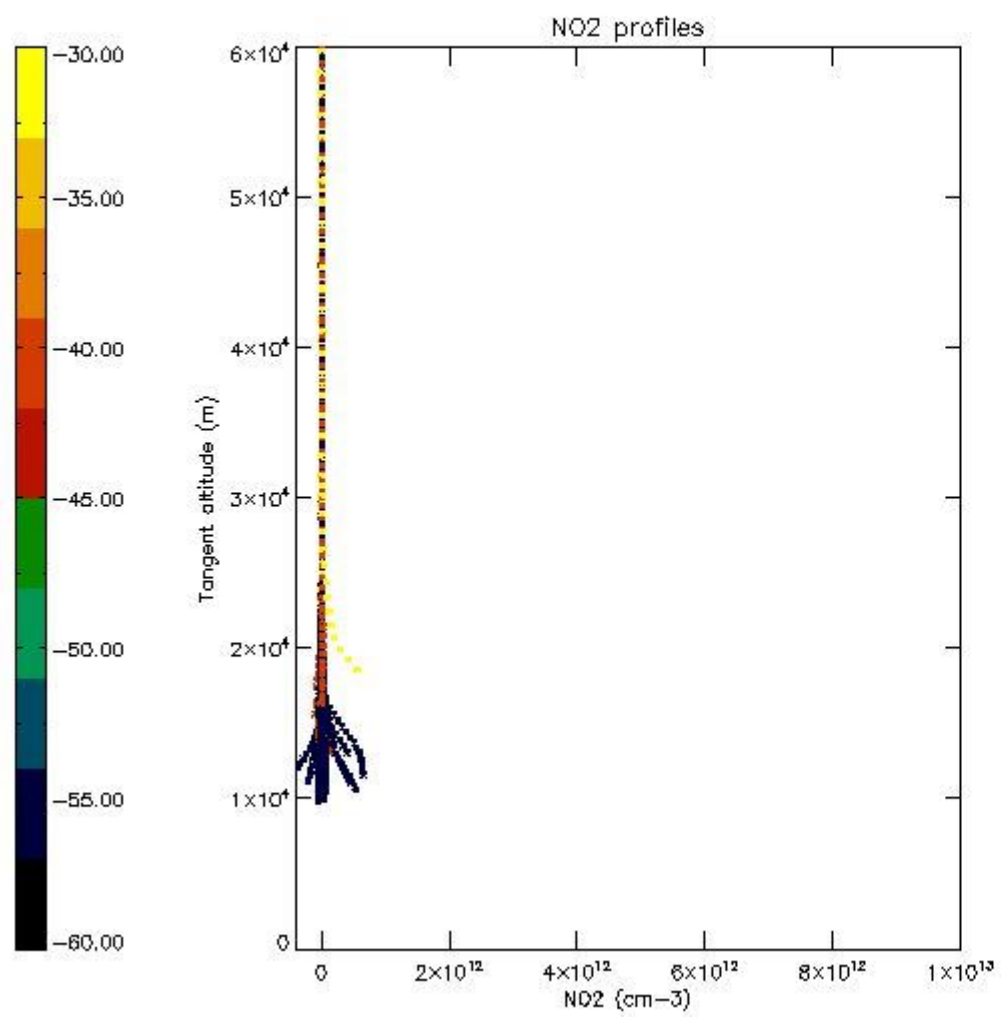
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



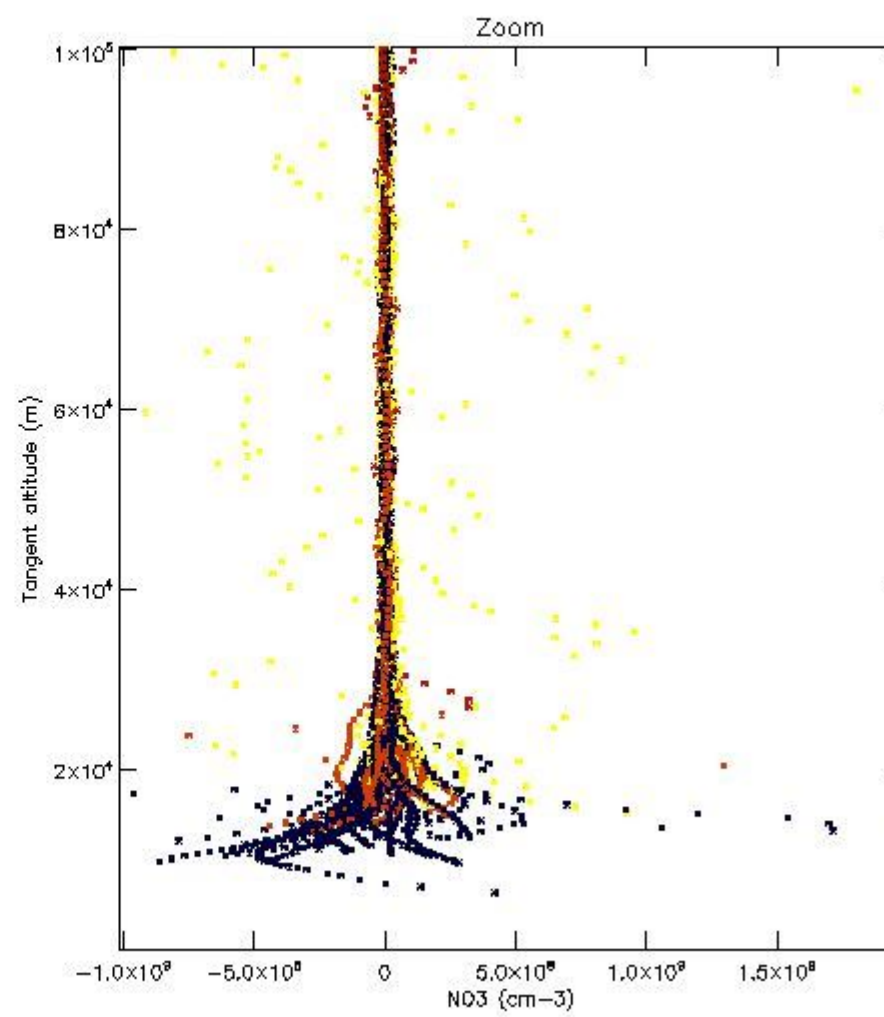
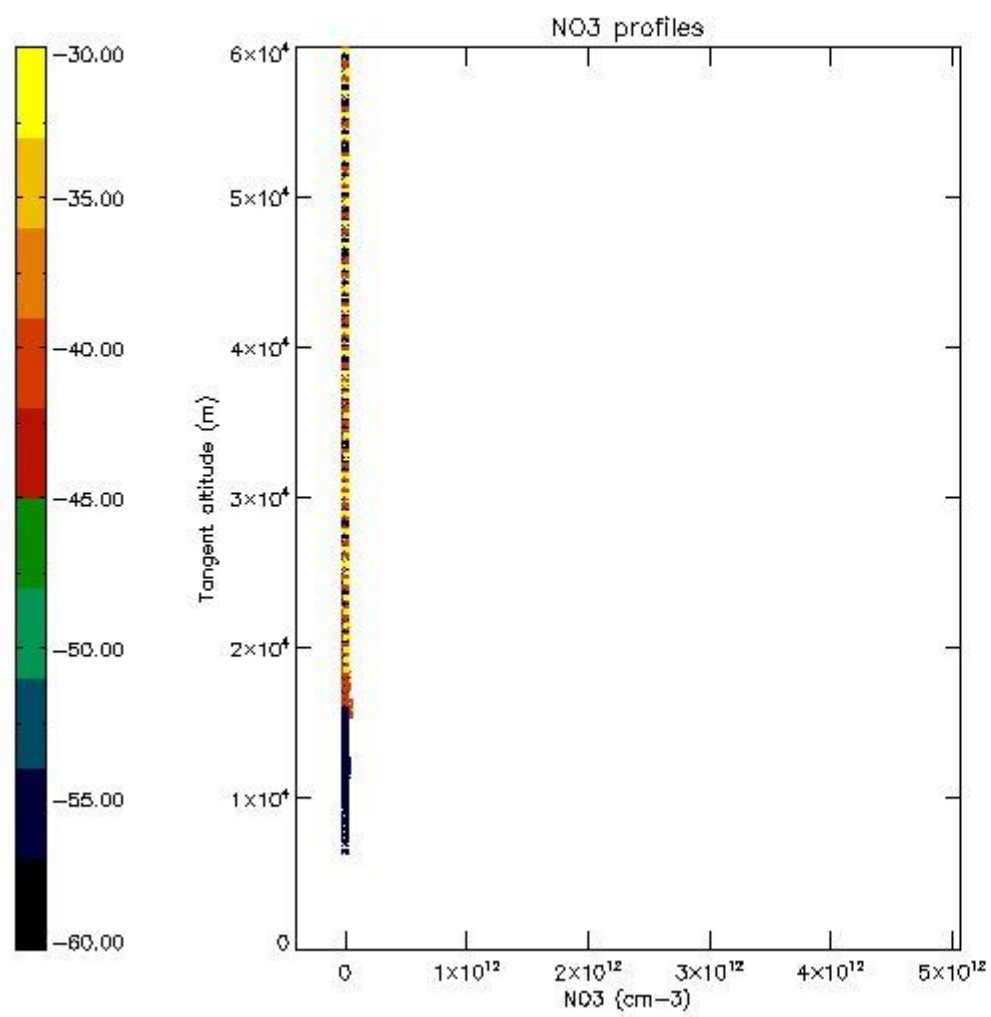
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



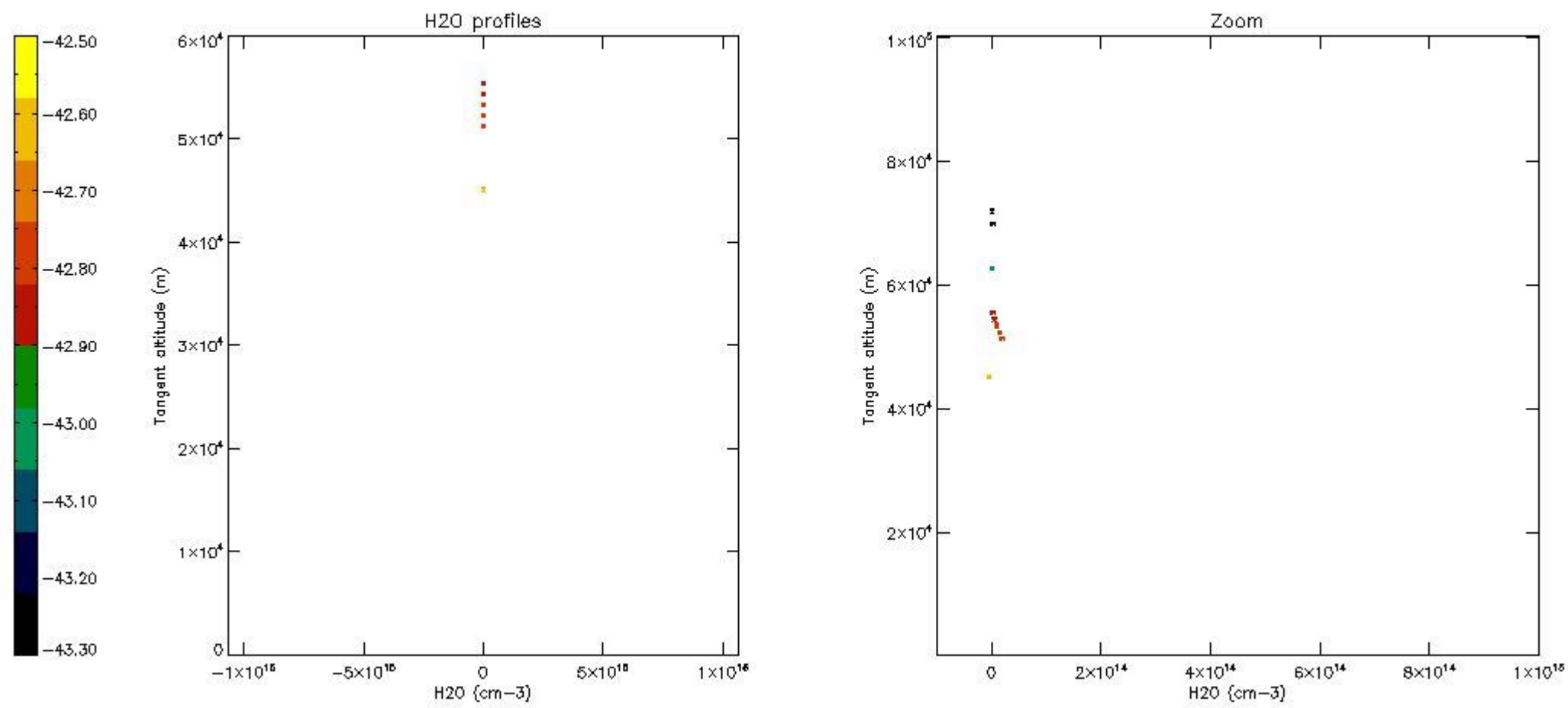
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

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

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	02-MAY-2010 00:02:03
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	02-MAY-2010 00:02:03
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	02-MAY-2010 00:02:03

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

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

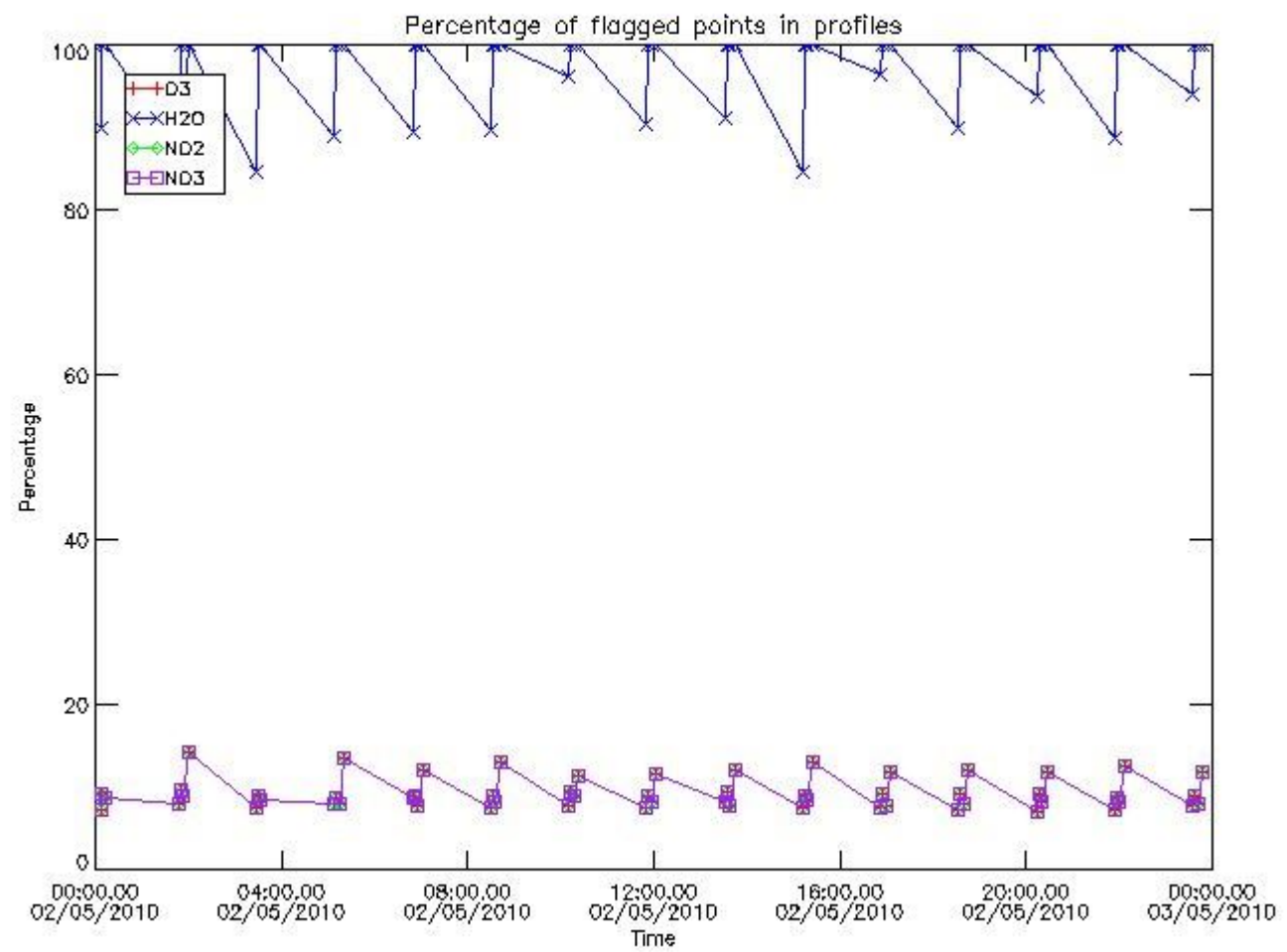
This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also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

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Time of report generation	29APR2013 10:19:35
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Start time of products	02-05-2010 (02MAY2010 00:00:00)
Stop time of products	03-05-2010 (03MAY2010 00:00:00)
Store outputs in DB	Yes
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Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

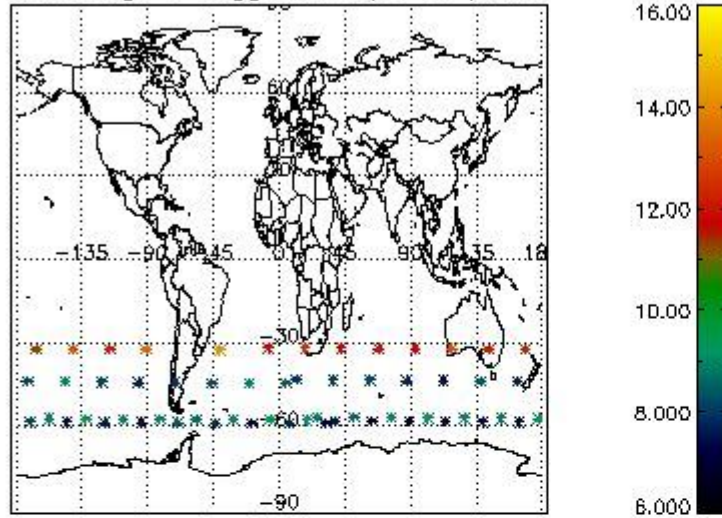
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20100502_000203_000000452089_00073_42712_7211.N1	02-MAY-2010 00:02:03	Twilight	44.500	90	54Alp Peg	2.4870	11000.	89	42712	No
2	GOM_NL__2PRFIN20100502_000627_000000702089_00073_42712_7212.N1	02-MAY-2010 00:06:27	Dark	69.500	61	8Eps Peg	2.1000	3900.0	139	42712	No
3	GOM_NL__2PRFIN20100502_000853_000000562089_00073_42712_7213.N1	02-MAY-2010 00:08:53	Dark	55.500	162	34Alp Aqr	2.9440	5350.0	111	42712	No
4	GOM_NL__2PRFIN20100502_001241_000000602089_00073_42712_7214.N1	02-MAY-2010 00:12:41	Dark	59.500	154	22Bet Aqr	2.8990	5700.0	119	42712	No
5	GOM_NL__2PRFIN20100502_003345_000000432089_00074_42713_7205.N1	02-MAY-2010 00:33:45	Straylight	42.500	141	Bet Ara	2.8400	4600.0	85	42713	No
6	GOM_NL__2PRFIN20100502_003540_000000572089_00074_42713_7206.N1	02-MAY-2010 00:35:40	Straylight	56.500	40	The Sco	1.8590	7100.0	113	42713	No
7	GOM_NL__2PRFIN20100502_003726_000000592089_00074_42713_7207.N1	02-MAY-2010 00:37:26	Straylight	59.000	25	35Lam Sco	1.6200	28000.	118	42713	No
8	GOM_NL__2PRFIN20100502_004030_000000592089_00074_42713_7208.N1	02-MAY-2010 00:40:30	Straylight	59.000	75	26Eps Sco	2.2910	4250.0	118	42713	No
9	GOM_NL__2PRFIN20100502_004413_000000692089_00074_42713_7209.N1	02-MAY-2010 00:44:13	Twilight	68.500	16	21Alp Sco	1.0200	3000.0	137	42713	No
10	GOM_NL__2PRFIN20100502_004626_000000592089_00074_42713_7210.N1	02-MAY-2010 00:46:26	Twilight	58.500	80	7Del Sco	2.3160	30000.	117	42713	No
11	GOM_NL__2PRFIN20100502_004933_000000462089_00074_42713_7211.N1	02-MAY-2010 00:49:33	Bright	46.000	122	9Alp2Lib	2.7470	9700.0	92	42713	No
12	GOM_NL__2PRFIN20100502_005149_000000482089_00074_42713_7212.N1	02-MAY-2010 00:51:49	Bright	48.000	104	27Bet Lib	2.6140	13100.	96	42713	No
13	GOM_NL__2PRFIN20100502_010013_000000392089_00074_42713_7213.N1	02-MAY-2010 01:00:13	Bright	38.500	111	8Eta Boo	2.6800	6000.0	77	42713	No
14	GOM_NL__2PRFIN20100502_010351_000000442089_00074_42713_7214.N1	02-MAY-2010 01:03:51	Bright	43.500	83		2.3780	11000.	87	42713	No
15	GOM_NL__2PRFIN20100502_010652_000000412089_00074_42713_7215.N1	02-MAY-2010 01:06:52	Bright	41.000	180	27Gam Boo	3.0400	8000.0	82	42713	No
16	GOM_NL__2PRFIN20100502_011625_000000462089_00074_42713_7216.N1	02-MAY-2010 01:16:25	Bright	45.500	119	14Eta Dra	2.7270	4700.0	91	42713	No
17	GOM_NL__2PRFIN20100502_012646_000000432089_00074_42713_7217.N1	02-MAY-2010 01:26:46	Bright	42.500	89	5Alp Cep	2.4510	8000.0	85	42713	No
18	GOM_NL__2PRFIN20100502_013812_000000432089_00074_42713_7218.N1	02-MAY-2010 01:38:12	Bright	42.500	164	44Eta Peg	2.9480	5400.0	85	42713	No
19	GOM_NL__2PRFIN20100502_014240_000000452089_00074_42713_7219.N1	02-MAY-2010 01:42:40	Twilight	44.500	90	54Alp Peg	2.4870	11000.	89	42713	No
20	GOM_NL__2PRFIN20100502_014704_000000652089_00074_42713_7220.N1	02-MAY-2010 01:47:04	Dark	65.000	61	8Eps Peg	2.1000	3900.0	130	42713	No
21	GOM_NL__2PRFIN20100502_014930_000000542089_00074_42713_7221.N1	02-MAY-2010 01:49:30	Dark	53.500	162	34Alp Aqr	2.9440	5350.0	107	42713	No
22	GOM_NL__2PRFIN20100502_015318_000000632089_00074_42713_7222.N1	02-MAY-2010 01:53:18	Dark	62.500	154	22Bet Aqr	2.8990	5700.0	125	42713	No
23	GOM_NL__2PRFIN20100502_015948_000000432089_00074_42713_7223.N1	02-MAY-2010 01:59:48	Dark	43.000	172	Gam Gru	3.0030	13100.	86	42713	No
24	GOM_NL__2PRFIN20100502_021422_000000412089_00075_42714_7213.N1	02-MAY-2010 02:14:22	Straylight	41.000	141	Bet Ara	2.8400	4600.0	82	42714	No
25	GOM_NL__2PRFIN20100502_021617_000000592089_00075_42714_7214.N1	02-MAY-2010 02:16:17	Straylight	58.500	40	The Sco	1.8590	7100.0	117	42714	No
26	GOM_NL__2PRFIN20100502_021803_000000582089_00075_42714_7215.N1	02-MAY-2010 02:18:03	Straylight	58.000	25	35Lam Sco	1.6200	28000.	116	42714	No
27	GOM_NL__2PRFIN20100502_022107_000000622089_00075_42714_7216.N1	02-MAY-2010 02:21:07	Straylight	62.000	75	26Eps Sco	2.2910	4250.0	124	42714	No
28	GOM_NL__2PRFIN20100502_022450_000000682089_00075_42714_7217.N1	02-MAY-2010 02:24:50	Twilight	67.500	16	21Alp Sco	1.0200	3000.0	135	42714	No
29	GOM_NL__2PRFIN20100502_022702_000000592089_00075_42714_7218.N1	02-MAY-2010 02:27:02	Twilight	58.500	80	7Del Sco	2.3160	30000.	117	42714	No
30	GOM_NL__2PRFIN20100502_023009_000000462089_00075_42714_7219.N1	02-MAY-2010 02:30:09	Bright	45.500	122	9Alp2Lib	2.7470	9700.0	91	42714	No
31	GOM_NL__2PRFIN20100502_023225_000000492089_00075_42714_7220.N1	02-MAY-2010 02:32:25	Bright	48.500	104	27Bet Lib	2.6140	13100.	97	42714	No
32	GOM_NL__2PRFIN20100502_024049_000000392089_00075_42714_7221.N1	02-MAY-2010 02:40:49	Bright	38.500	111	8Eta Boo	2.6800	6000.0	77	42714	No
33	GOM_NL__2PRFIN20100502_024427_000000462089_00075_42714_7222.N1	02-MAY-2010 02:44:27	Bright	45.500	83		2.3780	11000.	91	42714	No
34	GOM_NL__2PRFIN20100502_024628_000000292089_00075_42714_7223.N1	02-MAY-2010 02:46:28	Twilight	29.000	67	5Alp CrB	2.2210	11000.	58	42714	No
35	GOM_NL__2PRFIN20100502_024728_000000412089_00075_42714_7224.N1	02-MAY-2010 02:47:28	Bright	40.500	180	27Gam Boo	3.0400	8000.0	81	42714	No
36	GOM_NL__2PRFIN20100502_025700_000000452089_00075_42714_7225.N1	02-MAY-2010 02:57:00	Bright	44.500	119	14Eta Dra	2.7270	4700.0	89	42714	No
37	GOM_NL__2PRFIN20100502_030722_000000432089_00075_42714_7226.N1	02-MAY-2010 03:07:22	Bright	43.000	89	5Alp Cep	2.4510	8000.0	86	42714	No
38	GOM_NL__2PRFIN20100502_031848_000000522089_00075_42714_7227.N1	02-MAY-2010 03:18:48	Bright	51.500	164	44Eta Peg	2.9480	5400.0	103	42714	No
39	GOM_NL__2PRFIN20100502_032316_000000442089_00075_42714_7228.N1	02-MAY-2010 03:23:16	Twilight	44.000	90	54Alp Peg	2.4870	11000.	88	42714	No
40	GOM_NL__2PRFIN20100502_032741_000000692089_00075_42714_7229.N1	02-MAY-2010 03:27:41	Dark	69.000	61	8Eps Peg	2.1000	3900.0	138	42714	No
41	GOM_NL__2PRFIN20100502_033007_000000572089_00075_42714_7230.N1	02-MAY-2010 03:30:07	Dark	56.500	162	34Alp Aqr	2.9440	5350.0	113	42714	No
42	GOM_NL__2PRFIN20100502_033356_000000612089_00075_42714_7231.N1	02-MAY-2010 03:33:56	Dark	61.000	154	22Bet Aqr	2.8990	5700.0	122	42714	No

3.1 Plot quality information per product (time dependant)

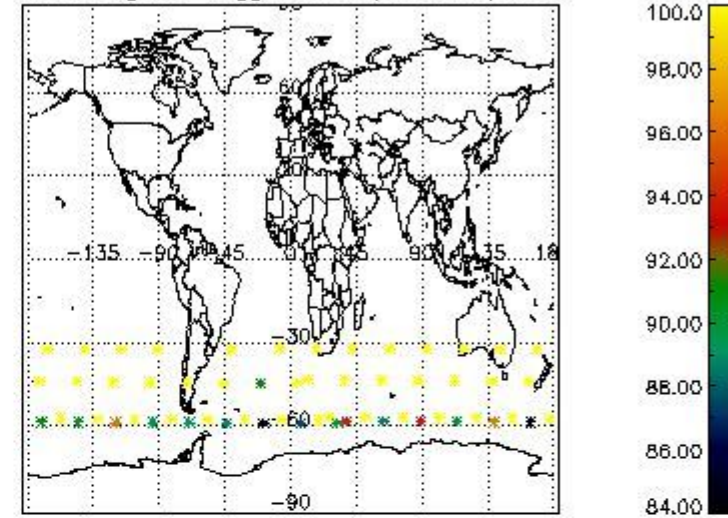


3.2 Plot quality information per product (world map)

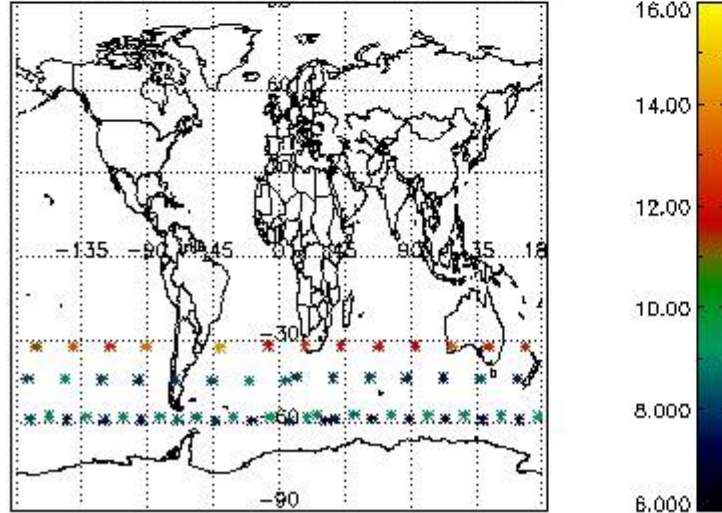
Percentage of flagged data per O3 profile



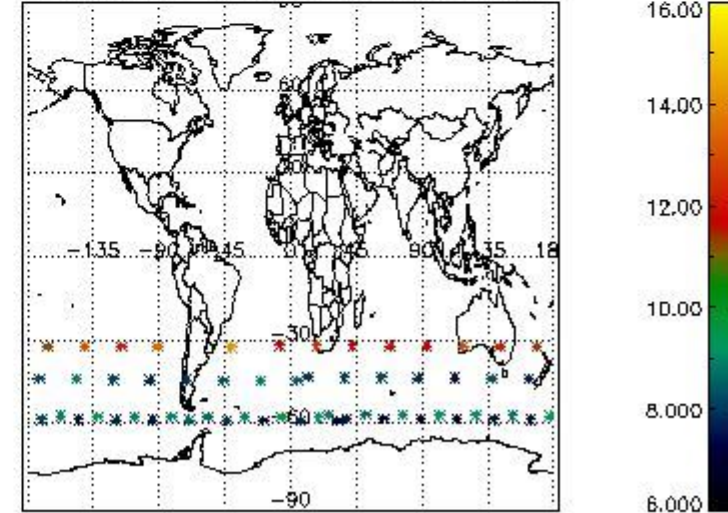
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

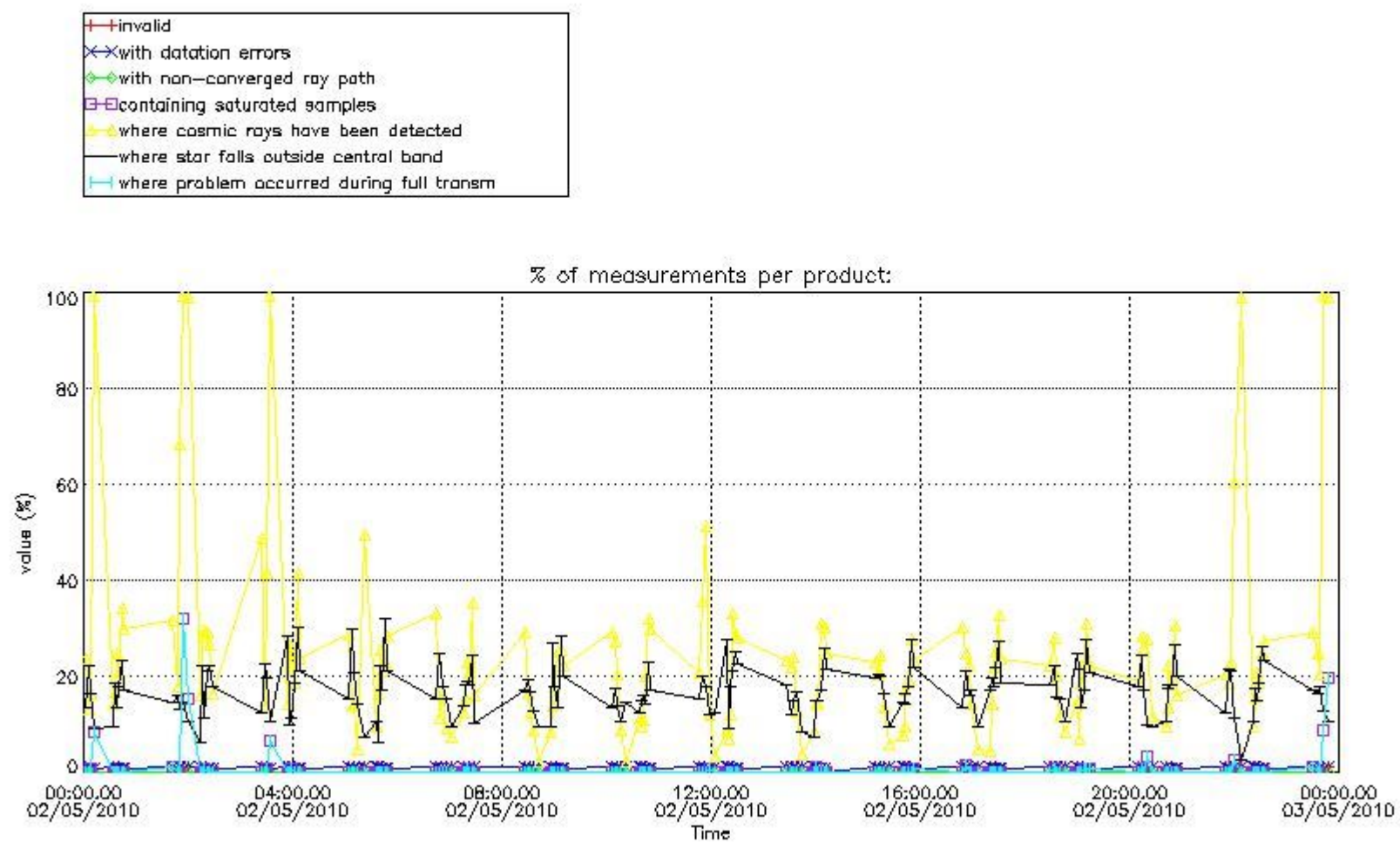


4. Level 1 quality information per product

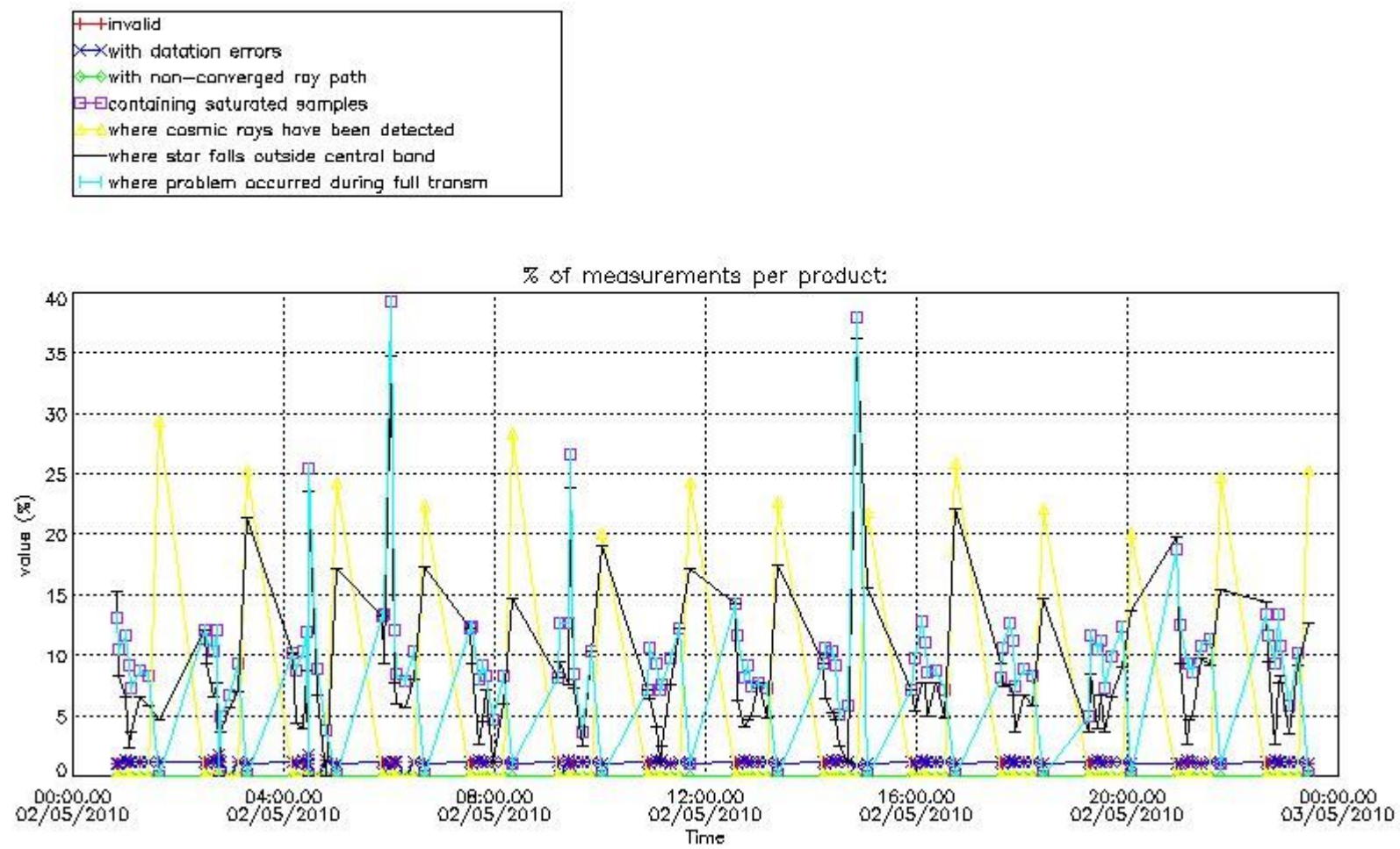
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



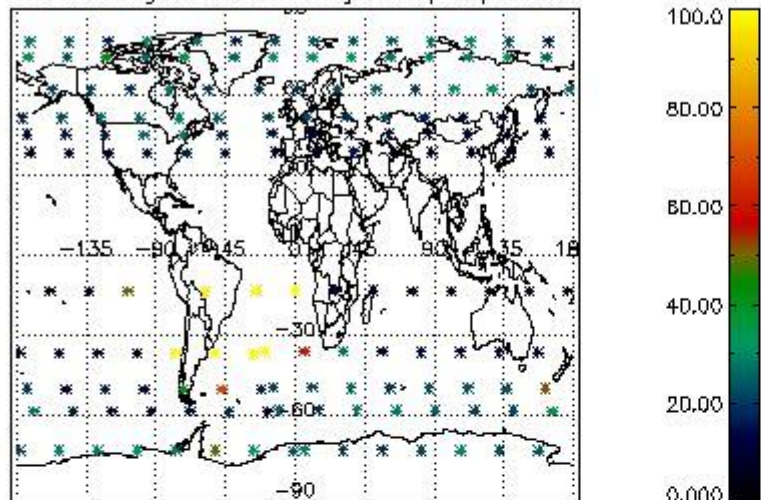
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



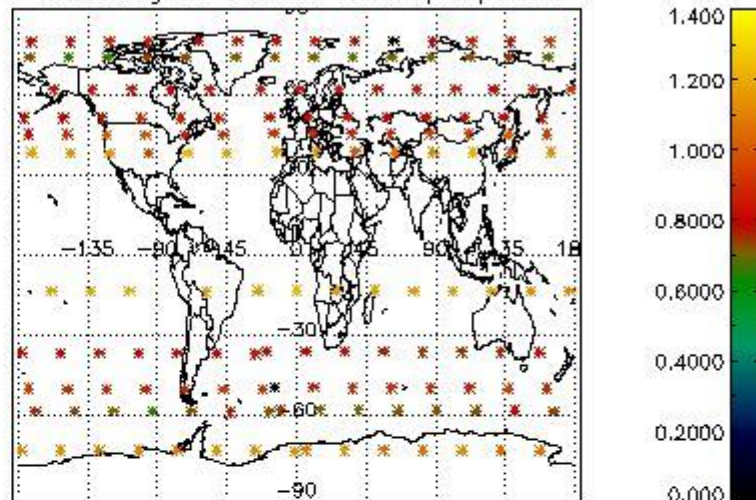
4.2 Plot quality information per product coming from level 1b processing (world map)

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

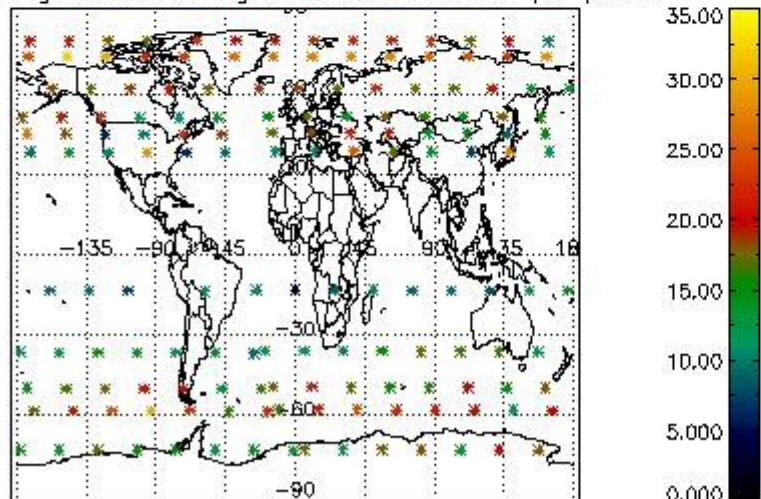
Percentage of cosmic ray hits per profile



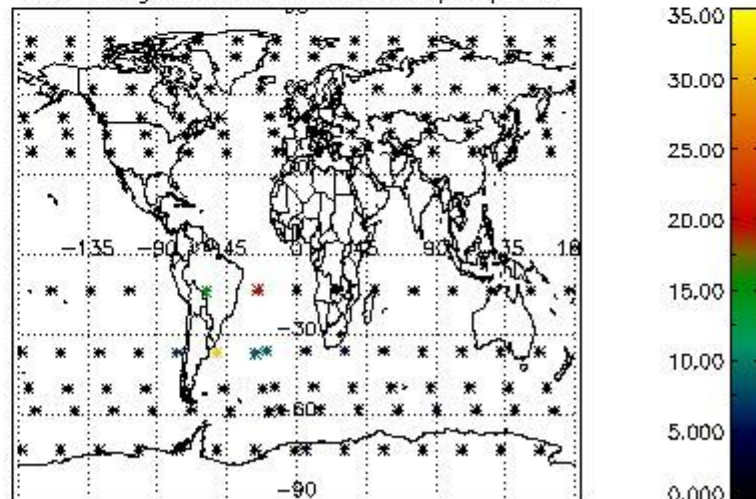
Percentage of datation errors per profile



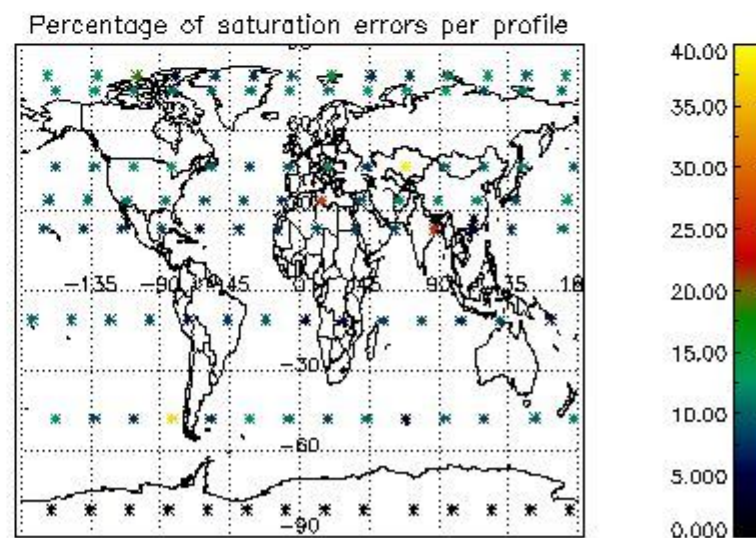
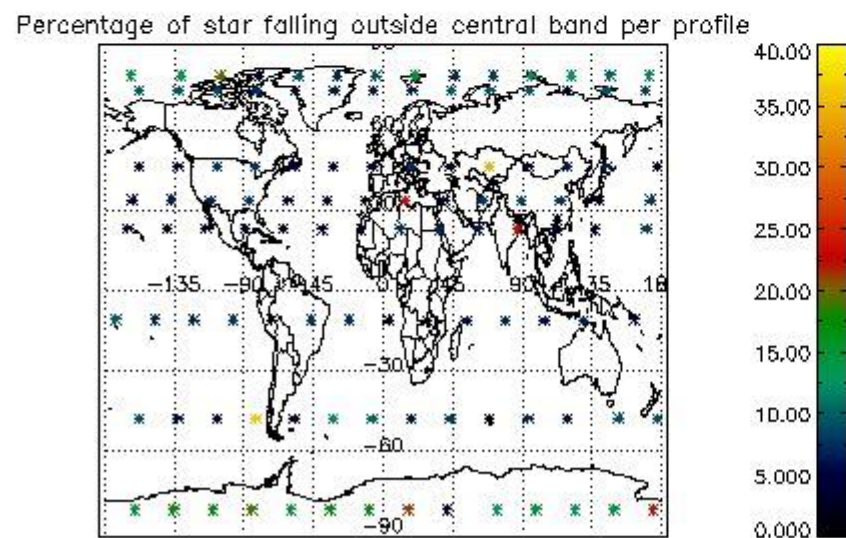
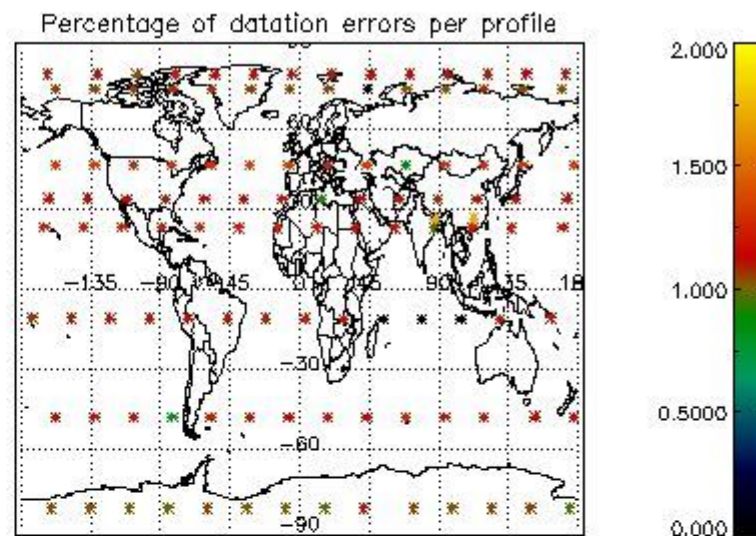
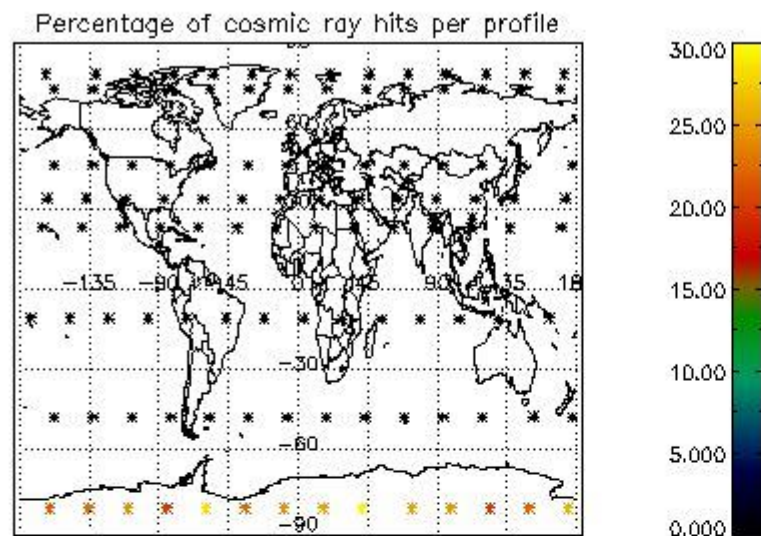
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

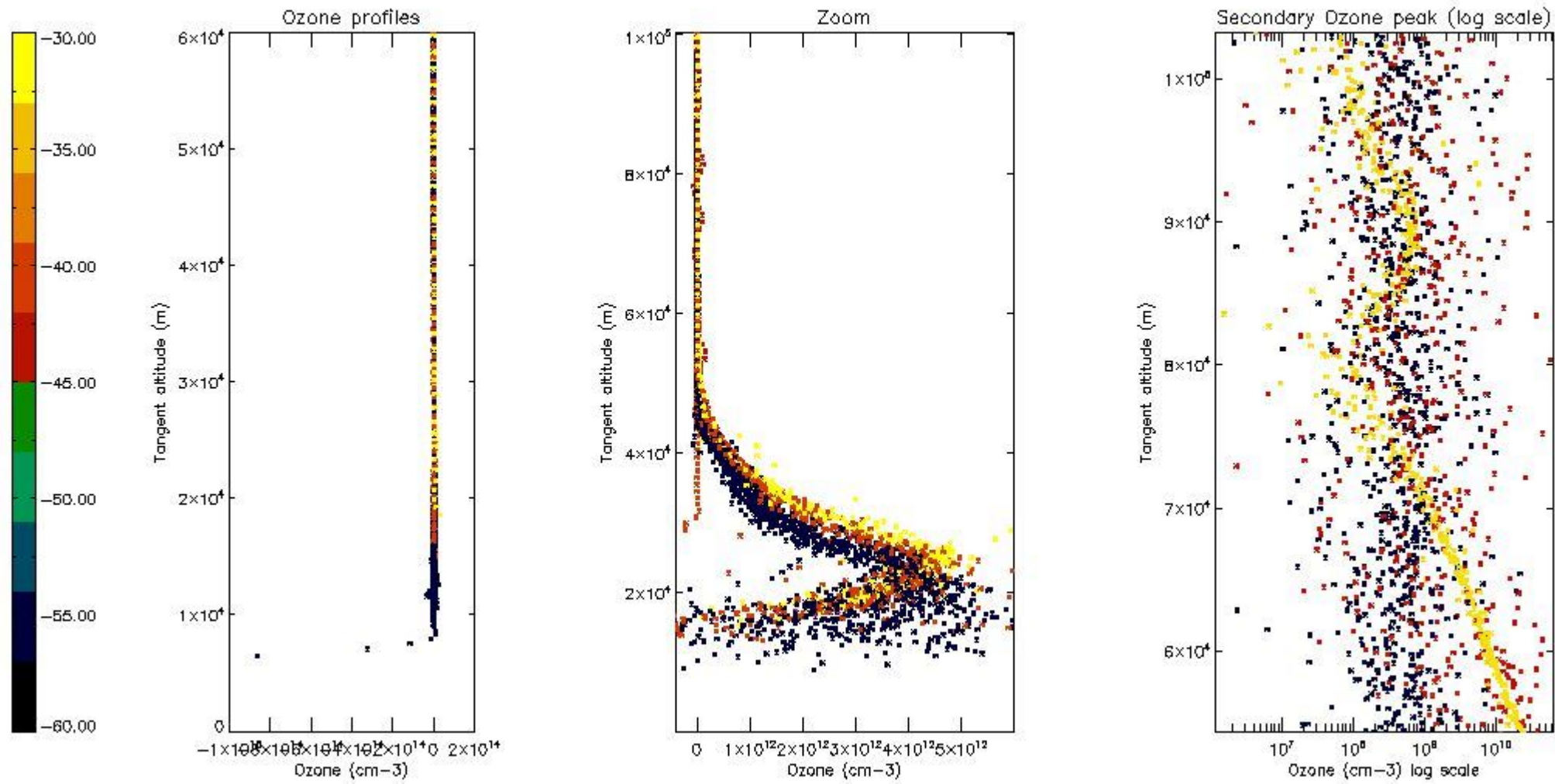
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	25
STD < 20	7

STD < 10	3
STD < 5	0

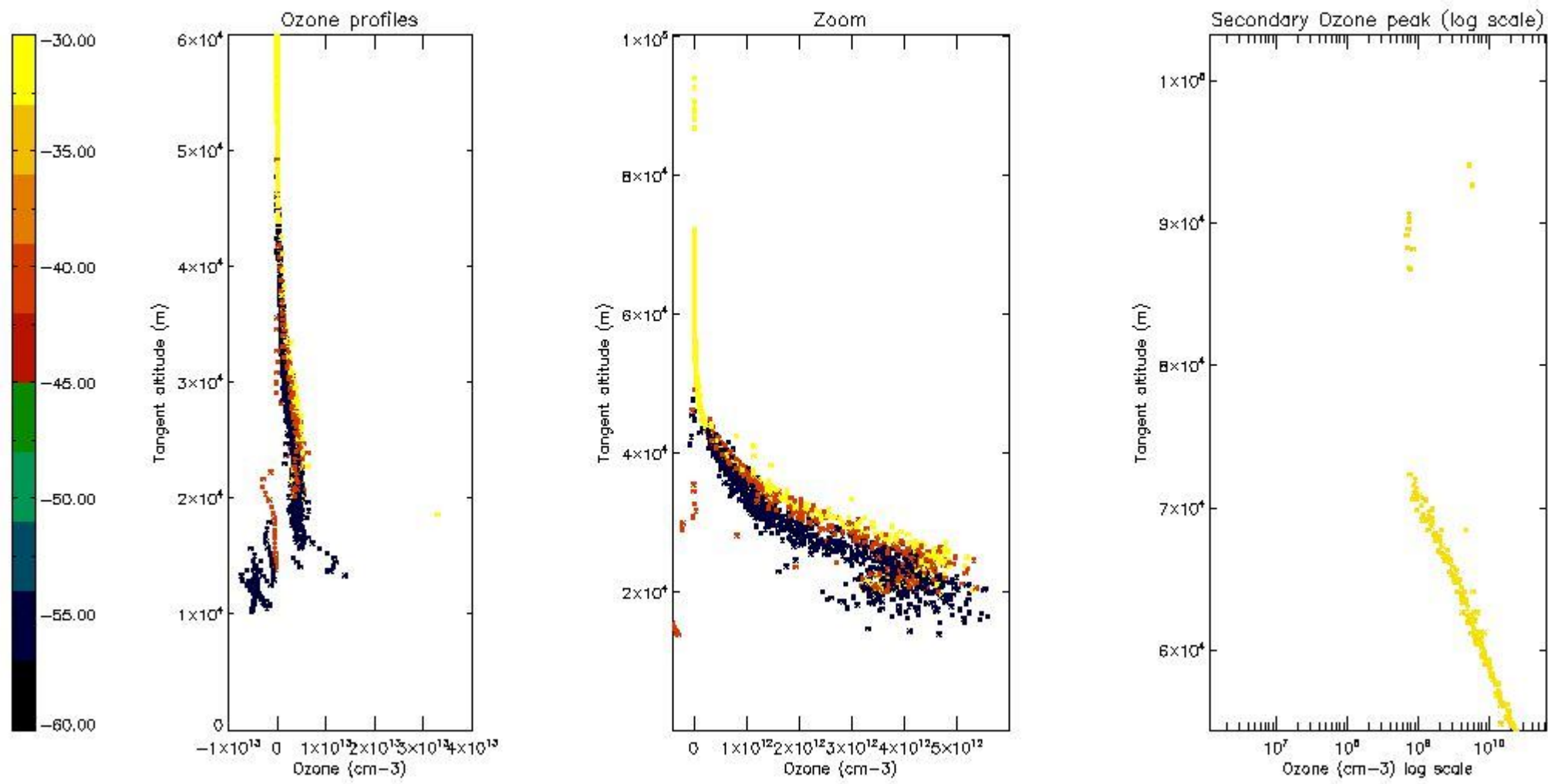
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



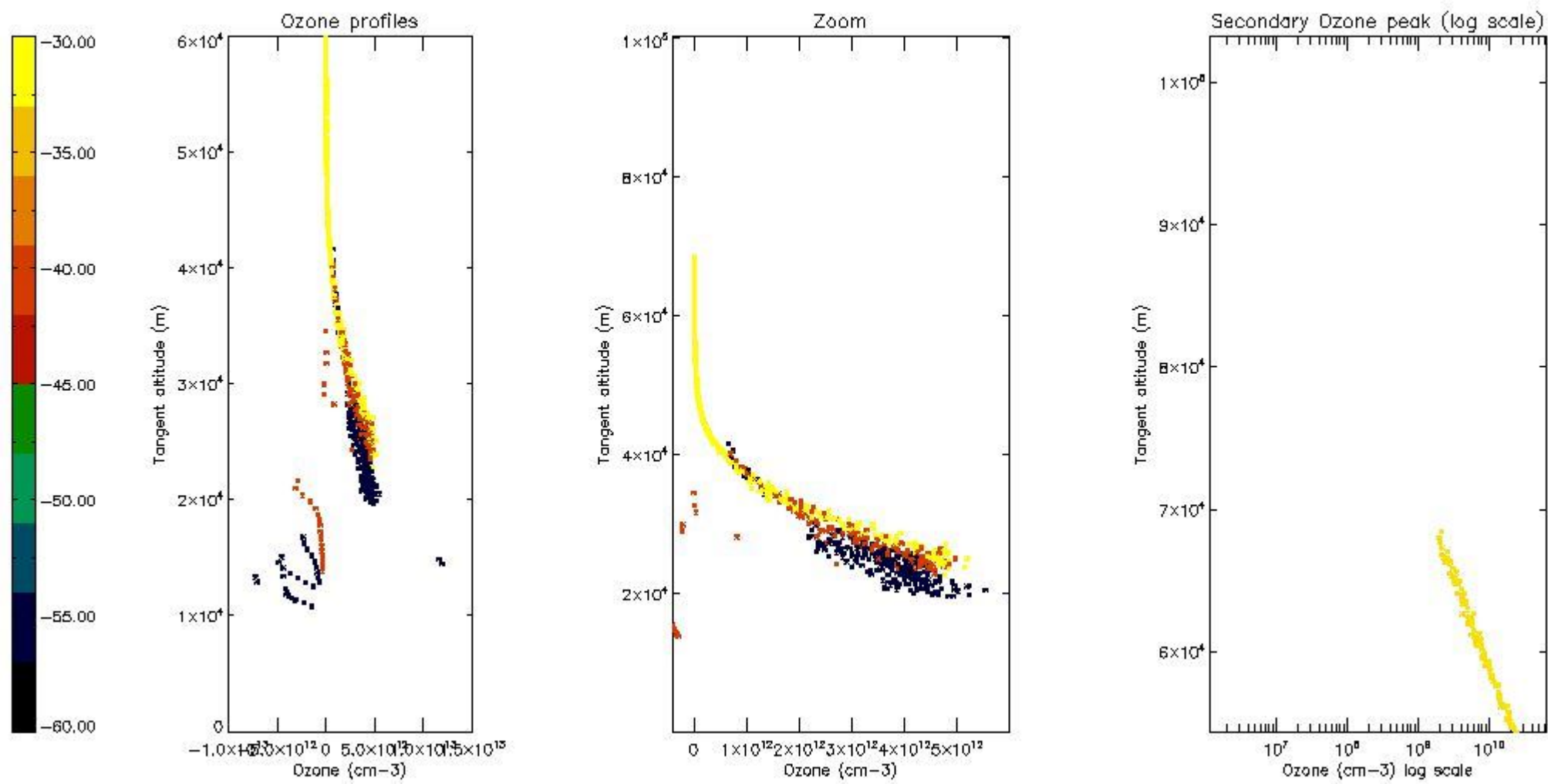
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



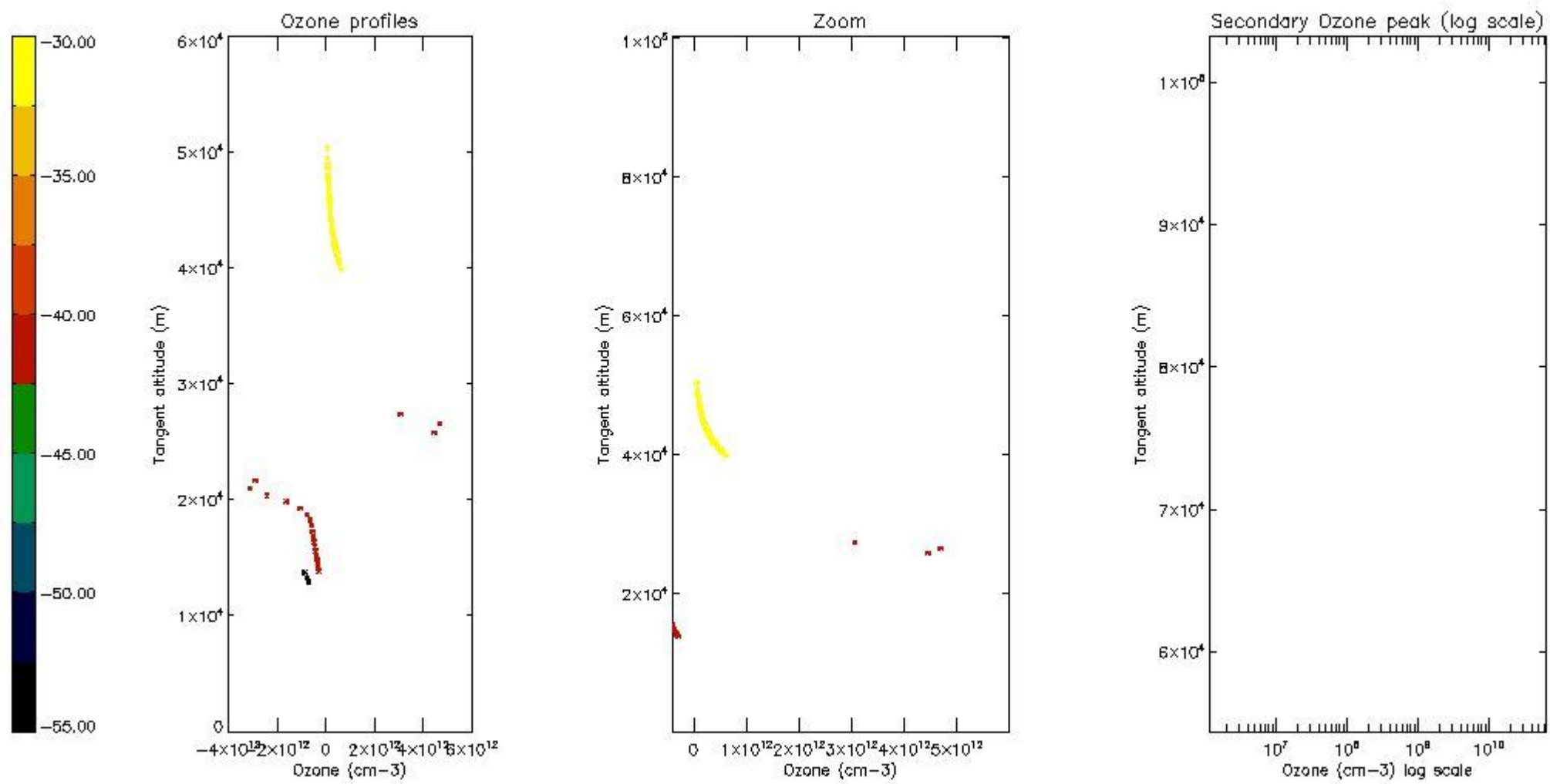
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



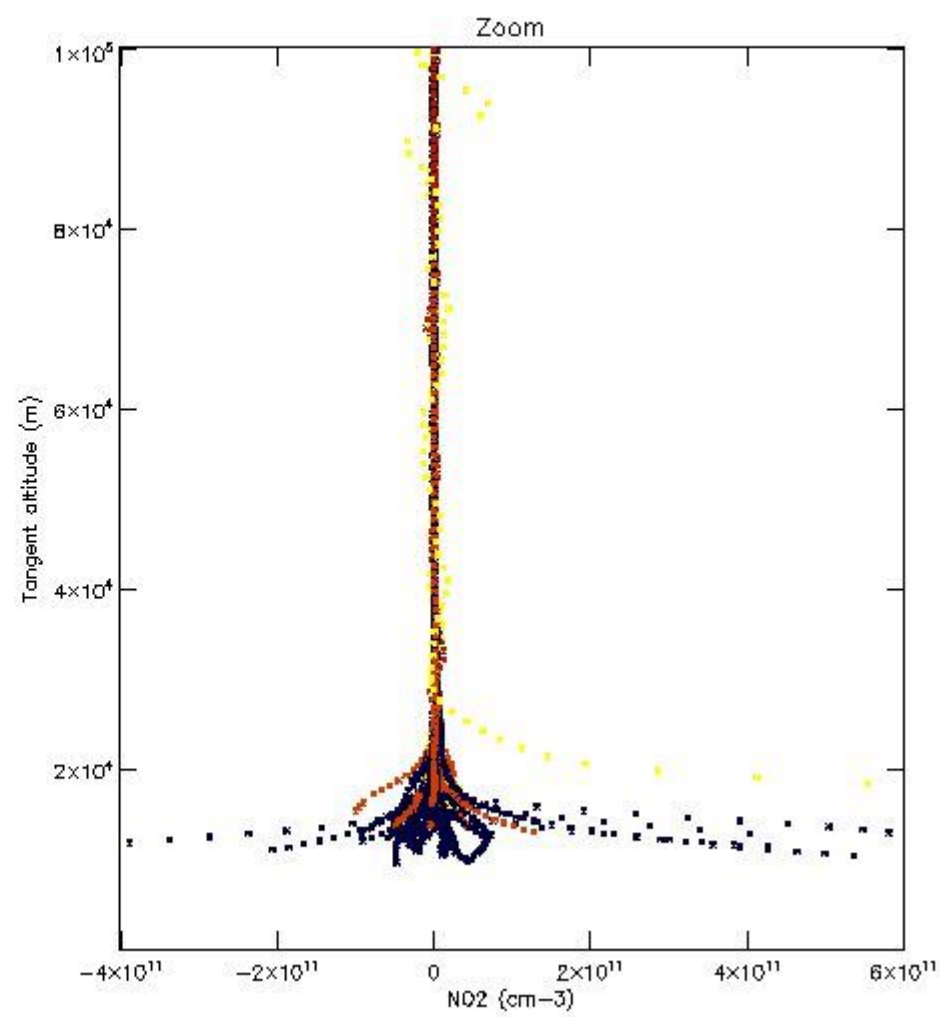
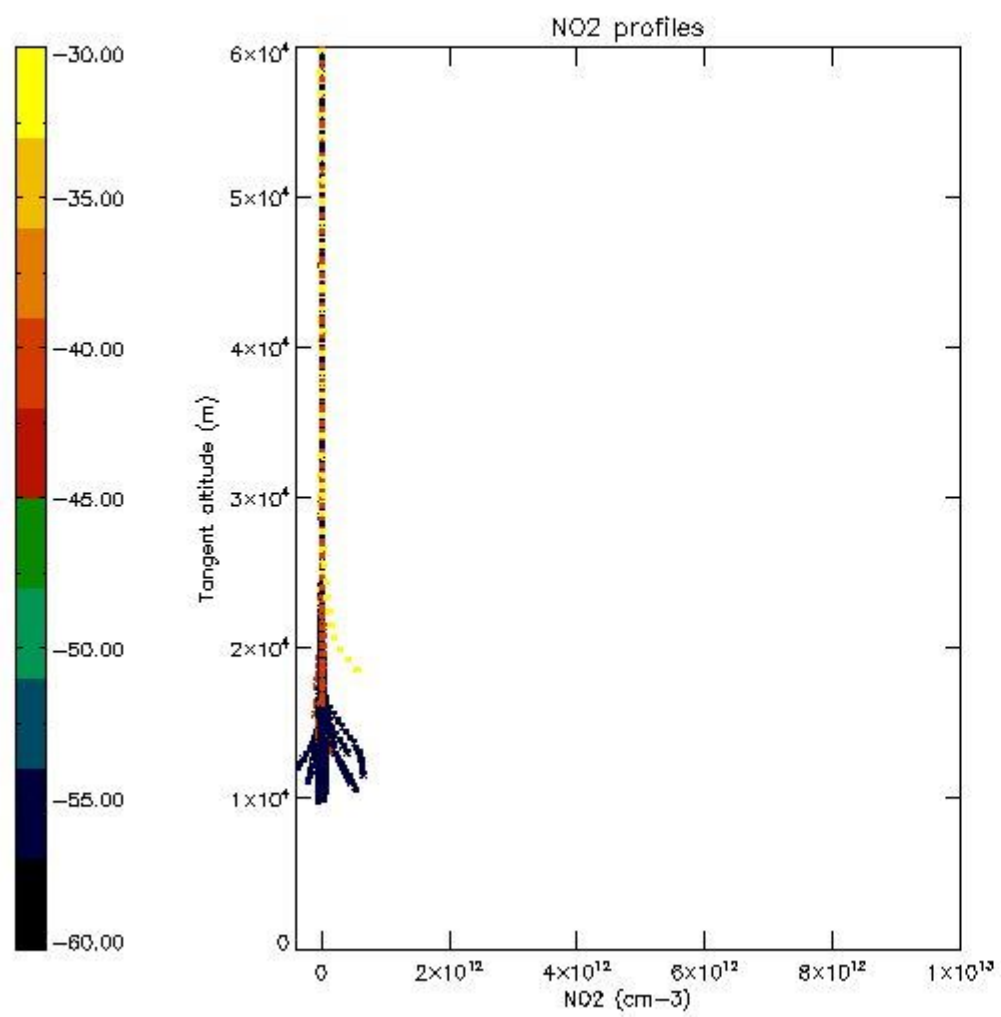
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



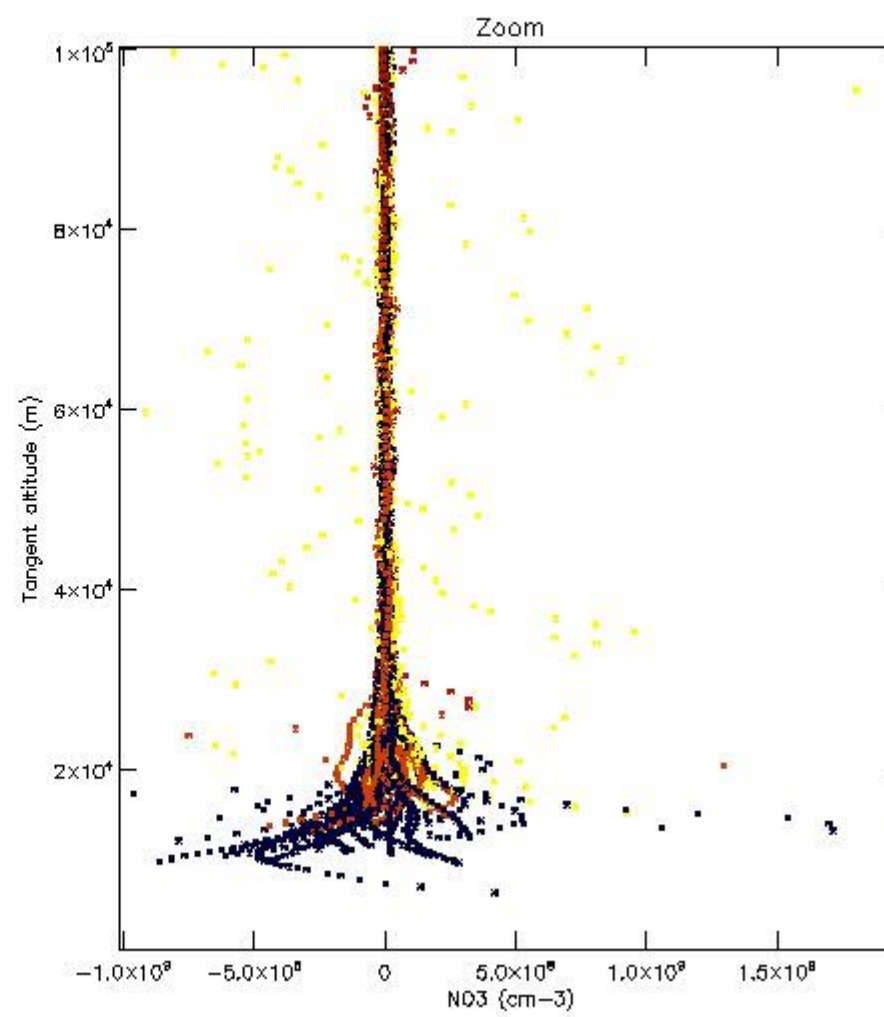
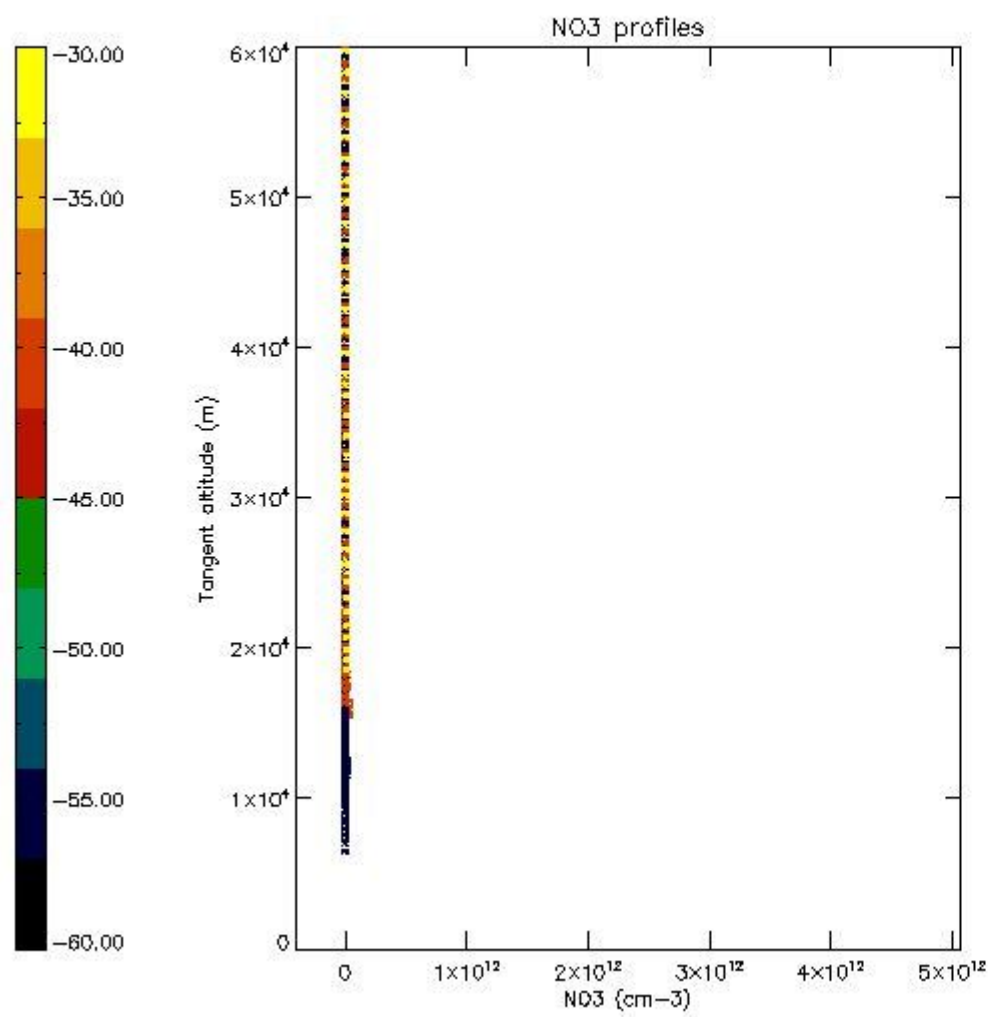
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



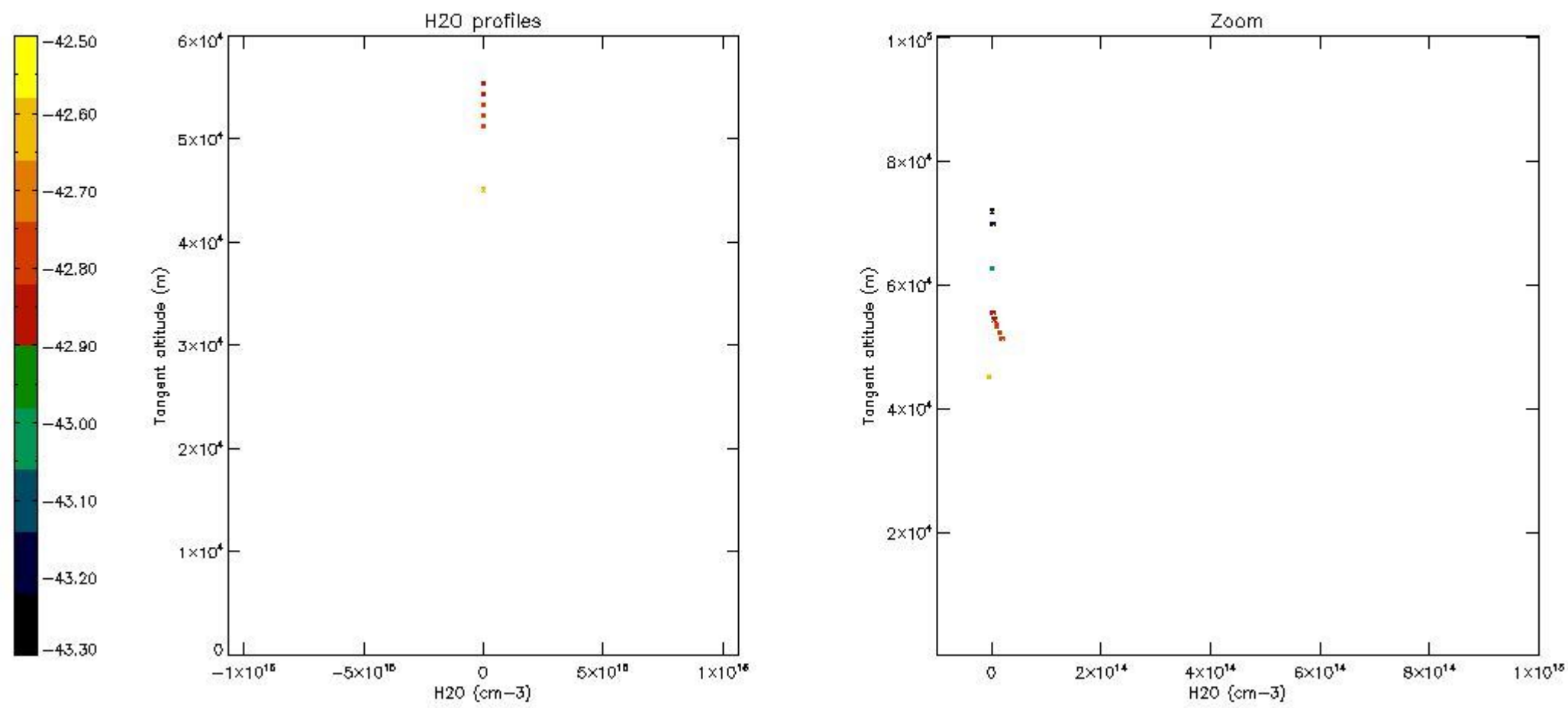
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

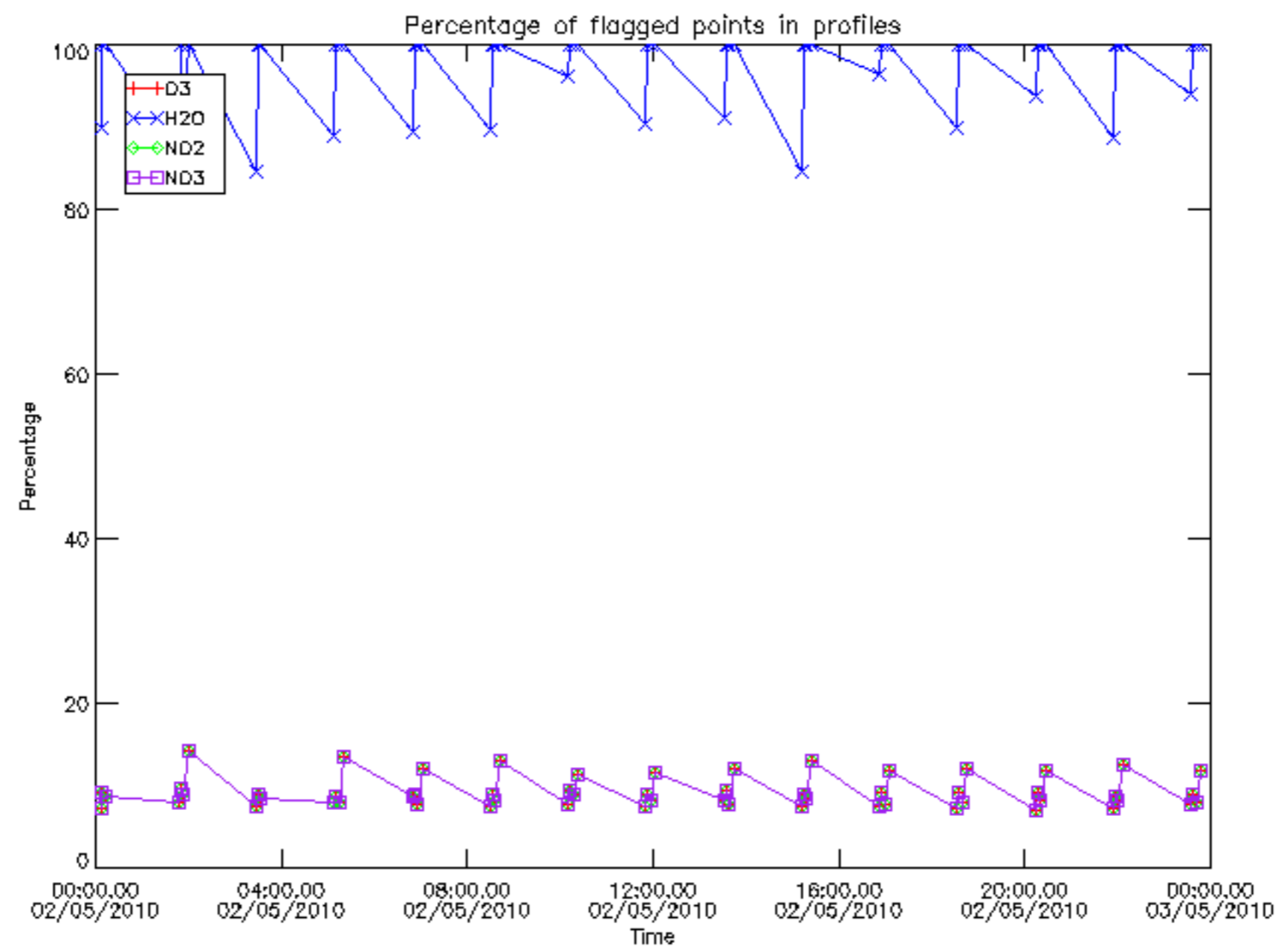
The colorbar represents the latitude.



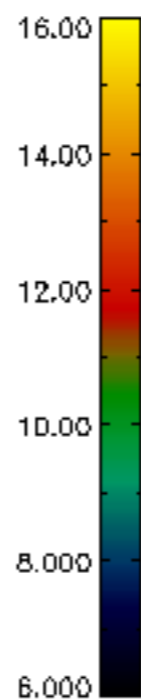
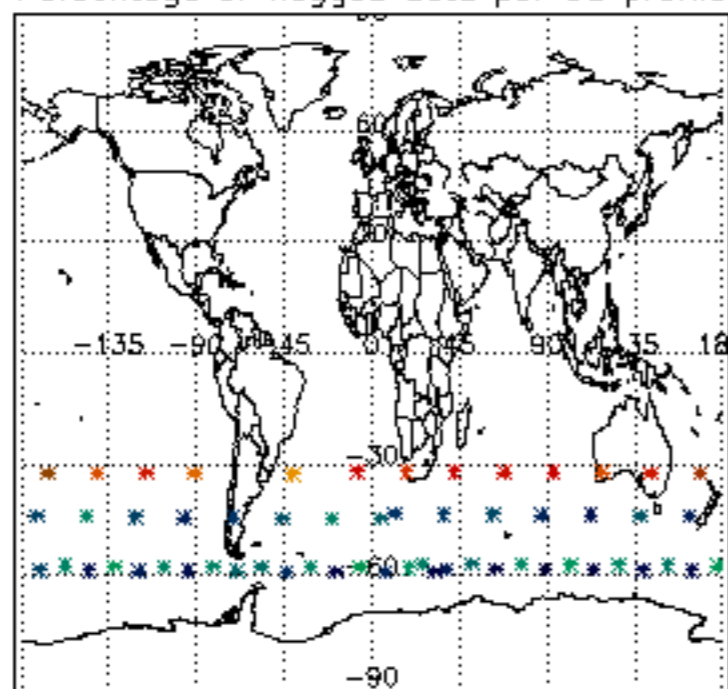
6. Auxiliary Data Files used for the production reported in section 2

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

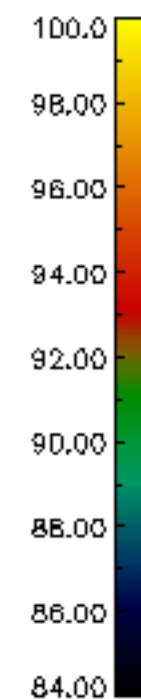
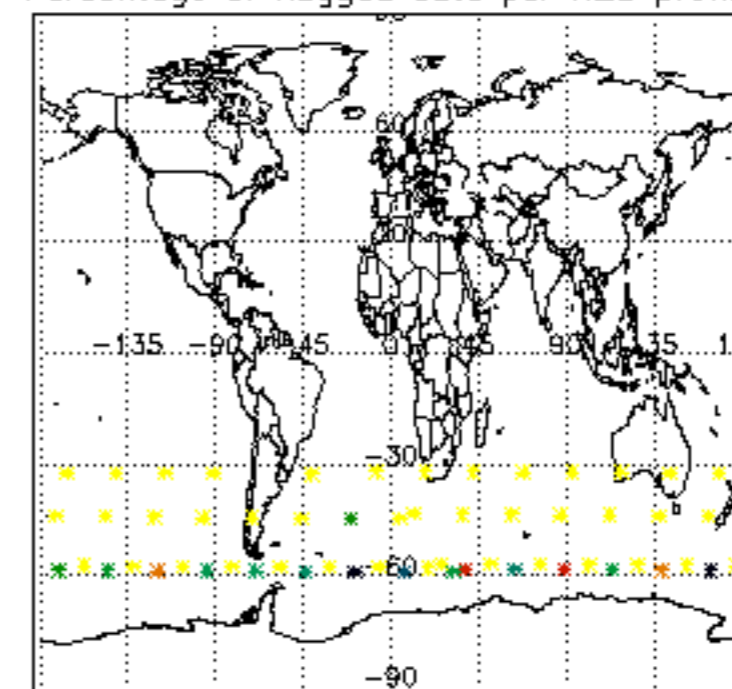
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	02-MAY-2010 00:02:03
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	02-MAY-2010 00:02:03
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	02-MAY-2010 00:02:03



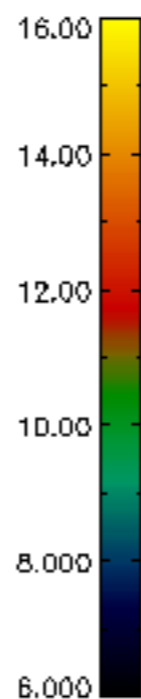
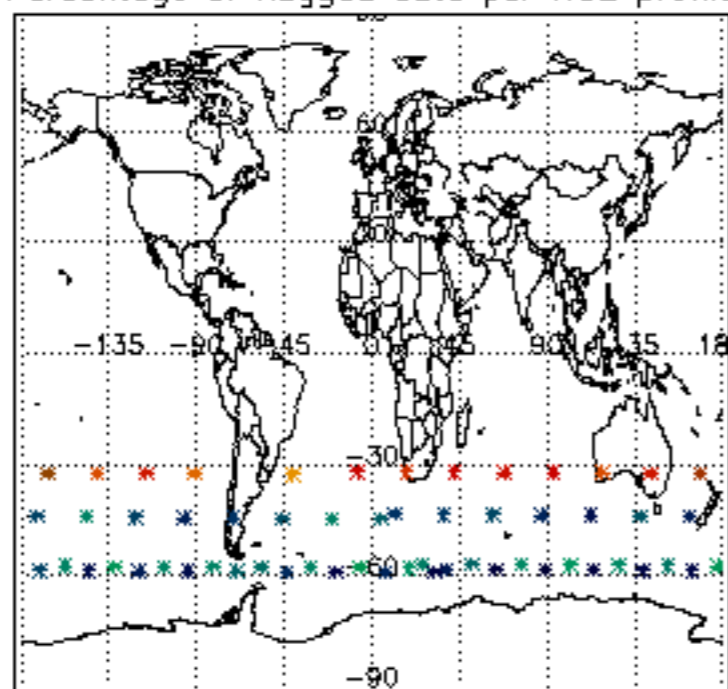
Percentage of flagged data per D3 profile



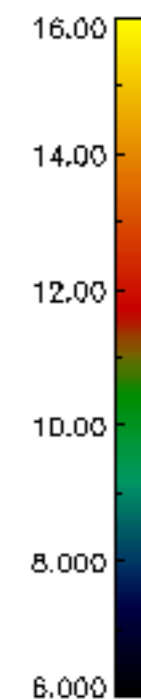
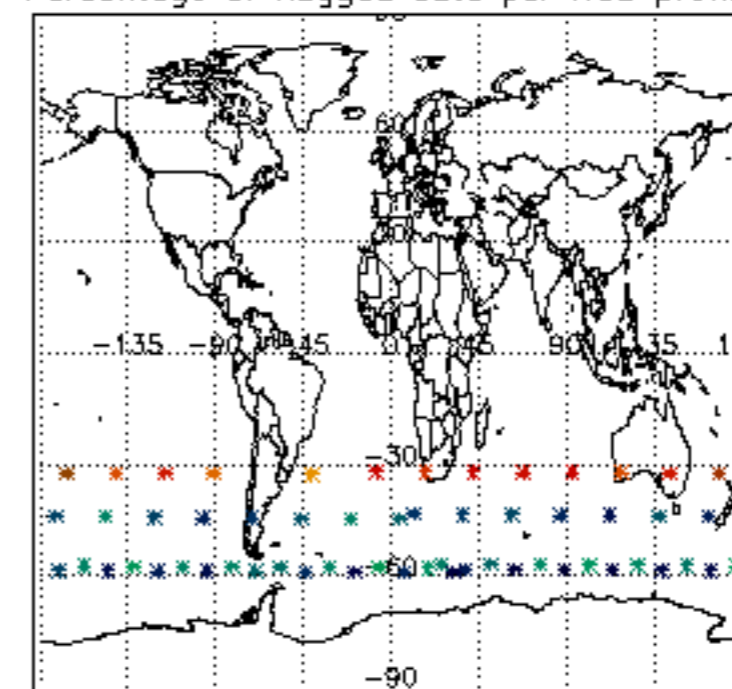
Percentage of flagged data per H2O profile

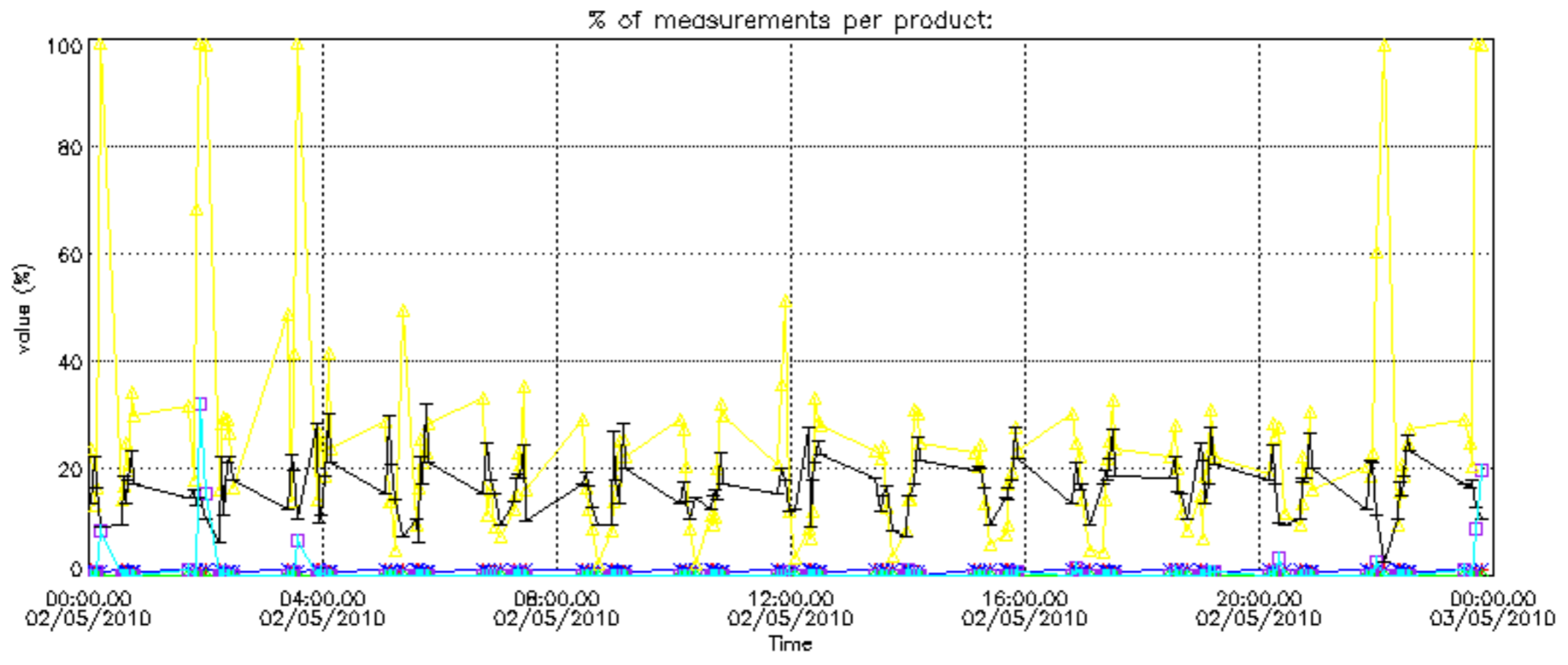


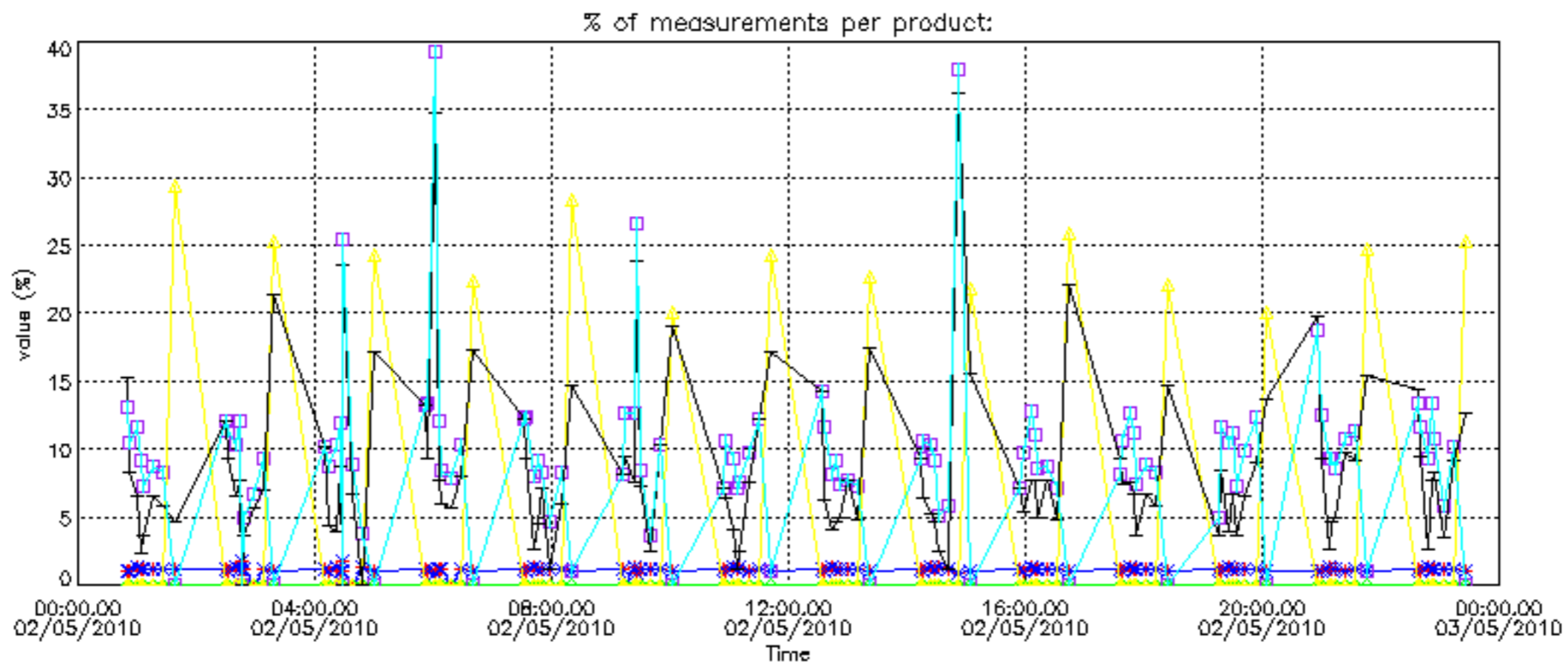
Percentage of flagged data per NO2 profile



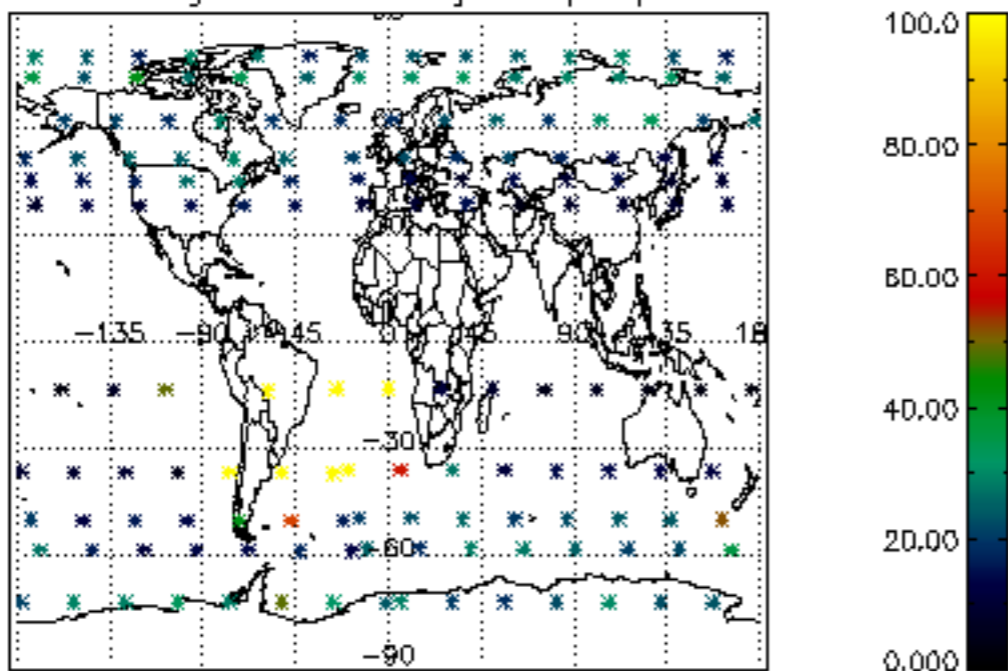
Percentage of flagged data per NO3 profile



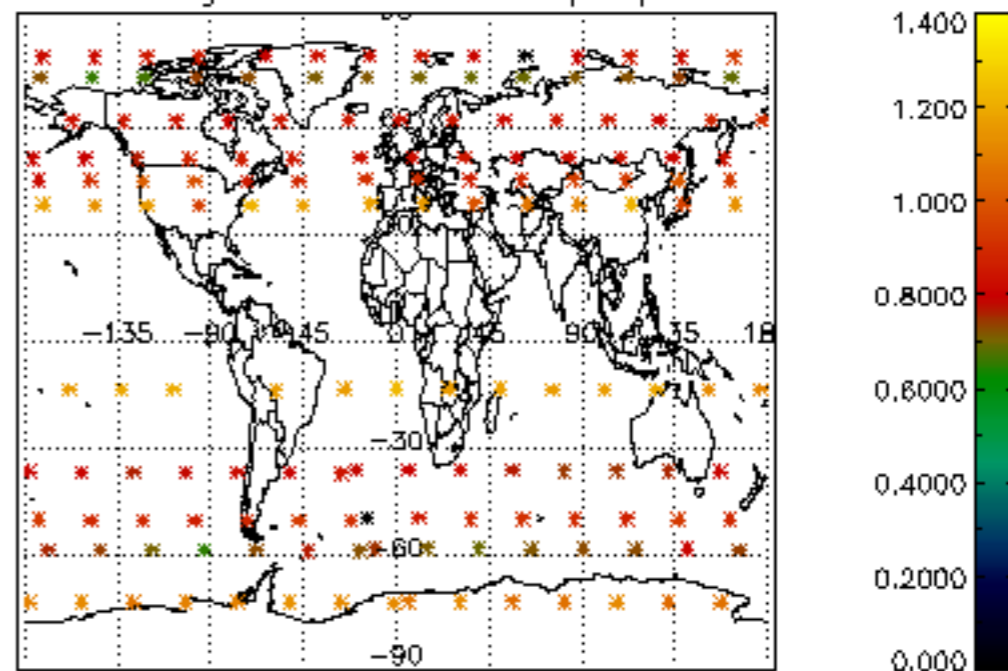




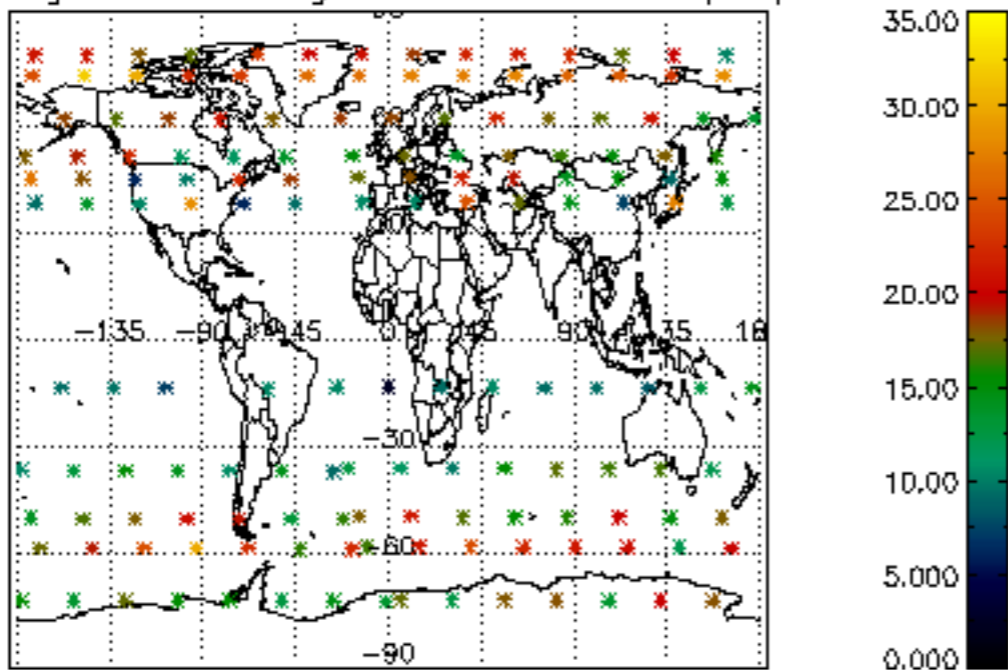
Percentage of cosmic ray hits per profile



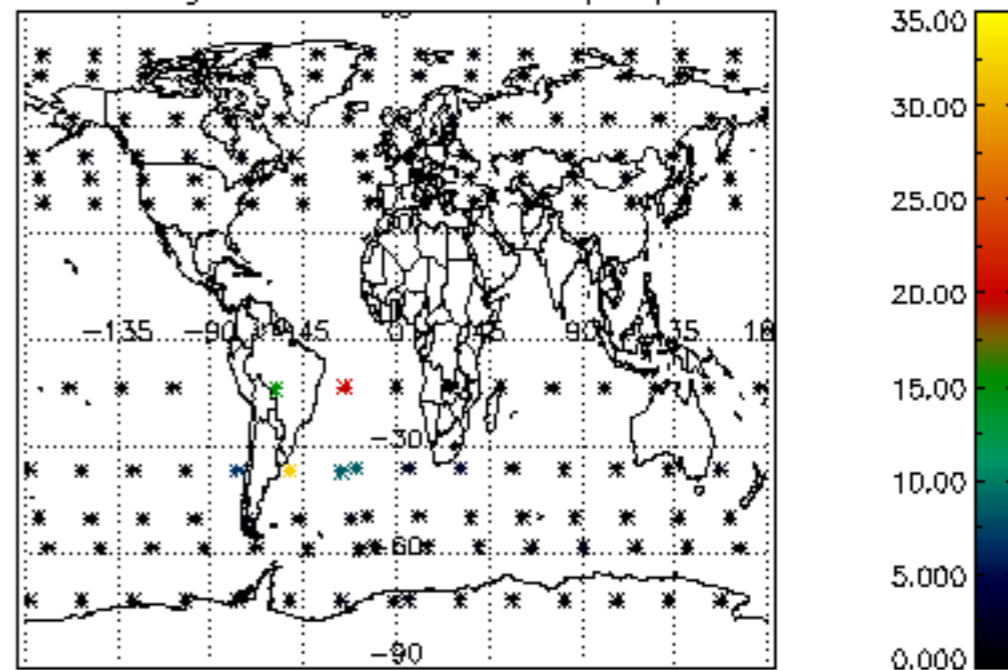
Percentage of datation errors per profile



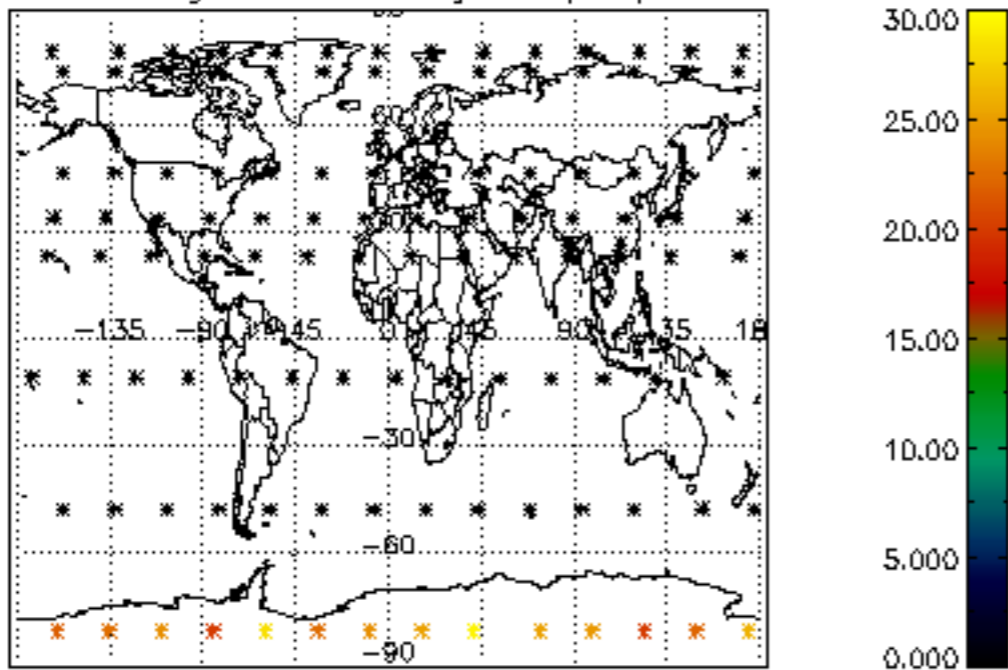
Percentage of star falling outside central band per profile



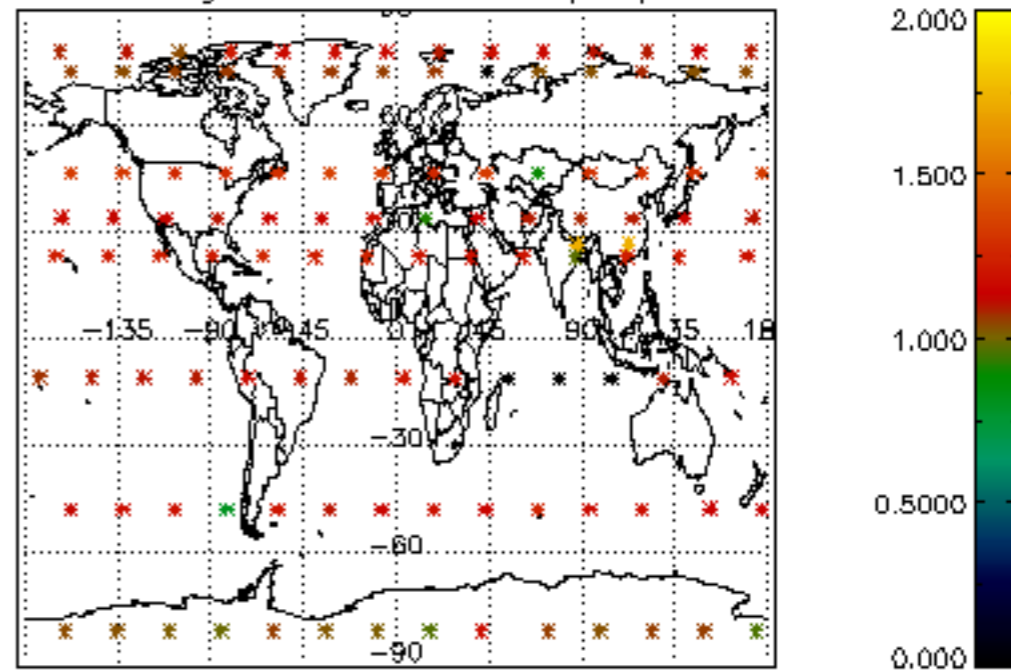
Percentage of saturation errors per profile



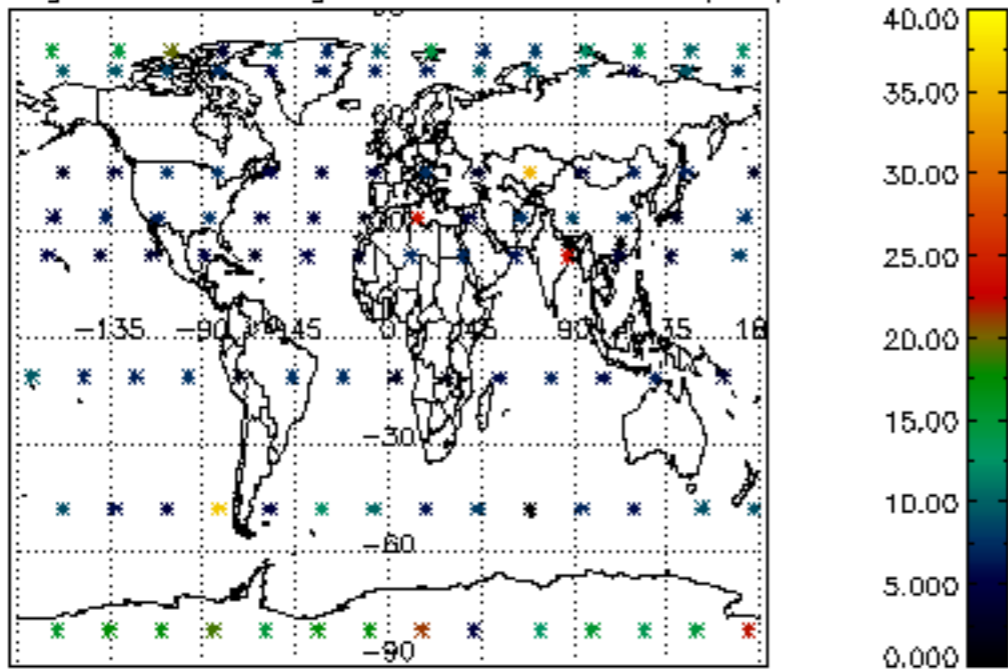
Percentage of cosmic ray hits per profile



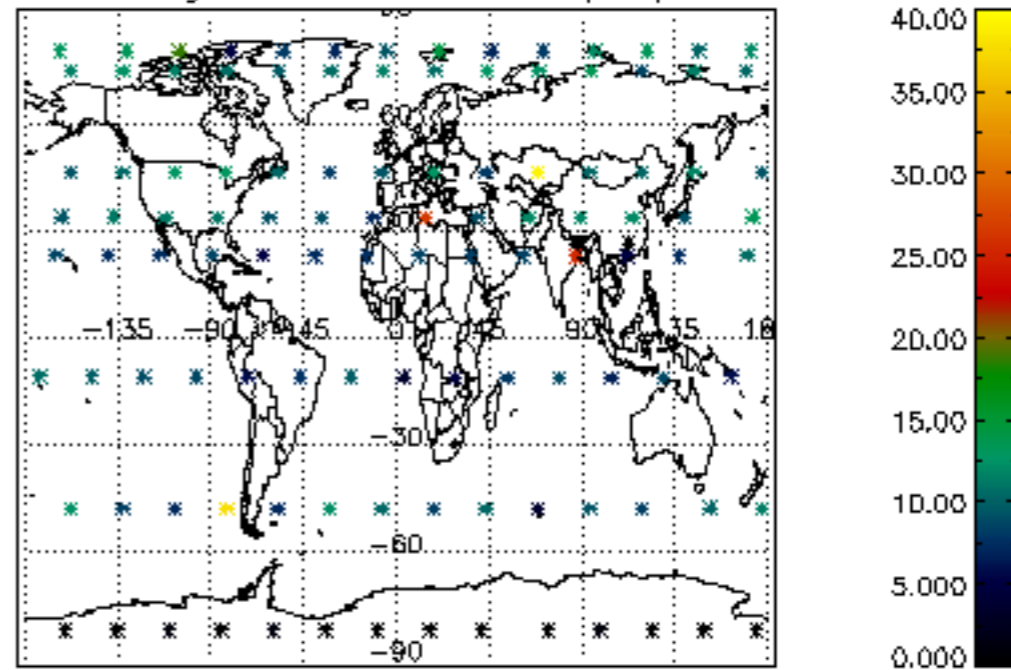
Percentage of datation errors per profile

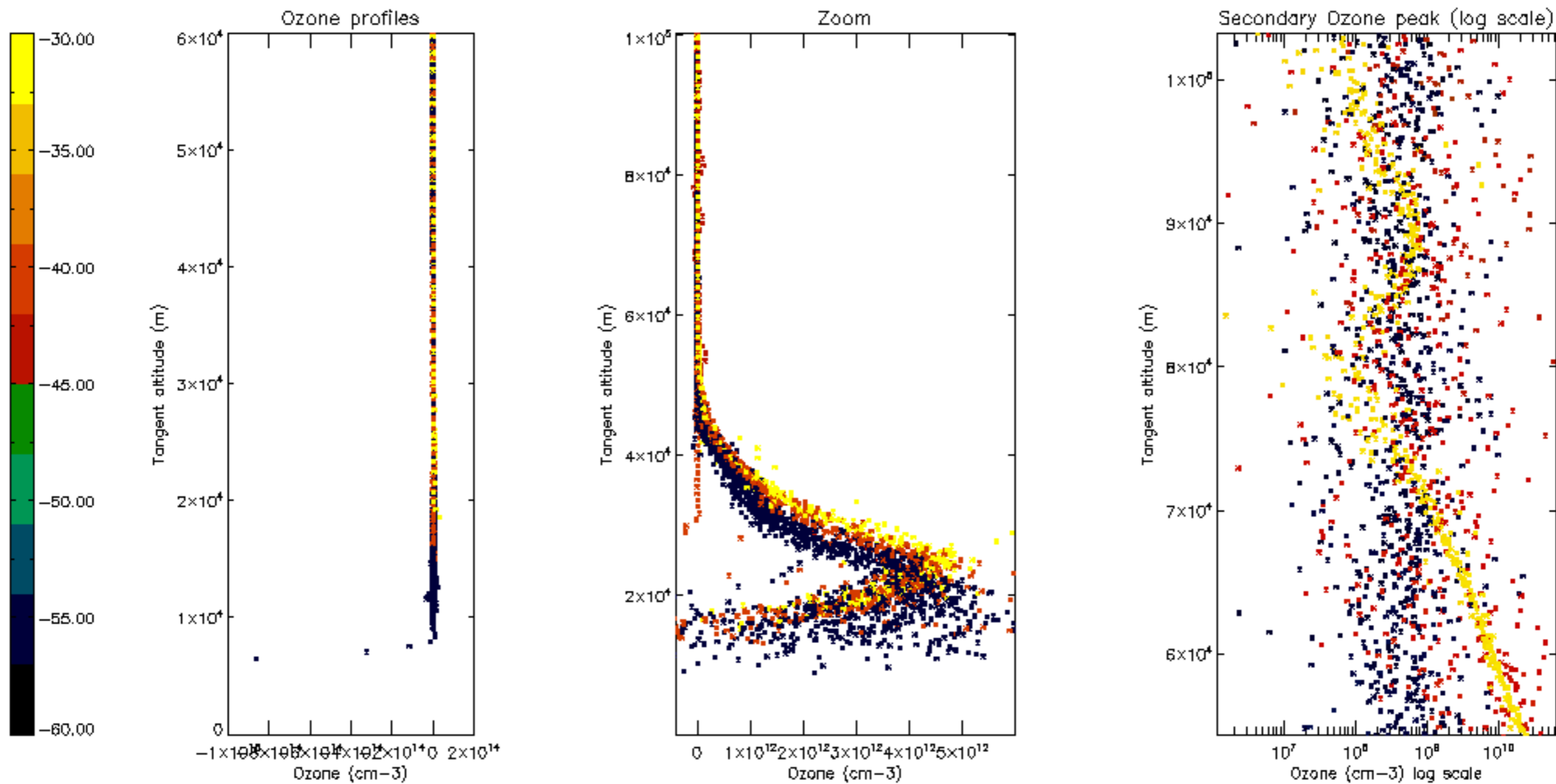


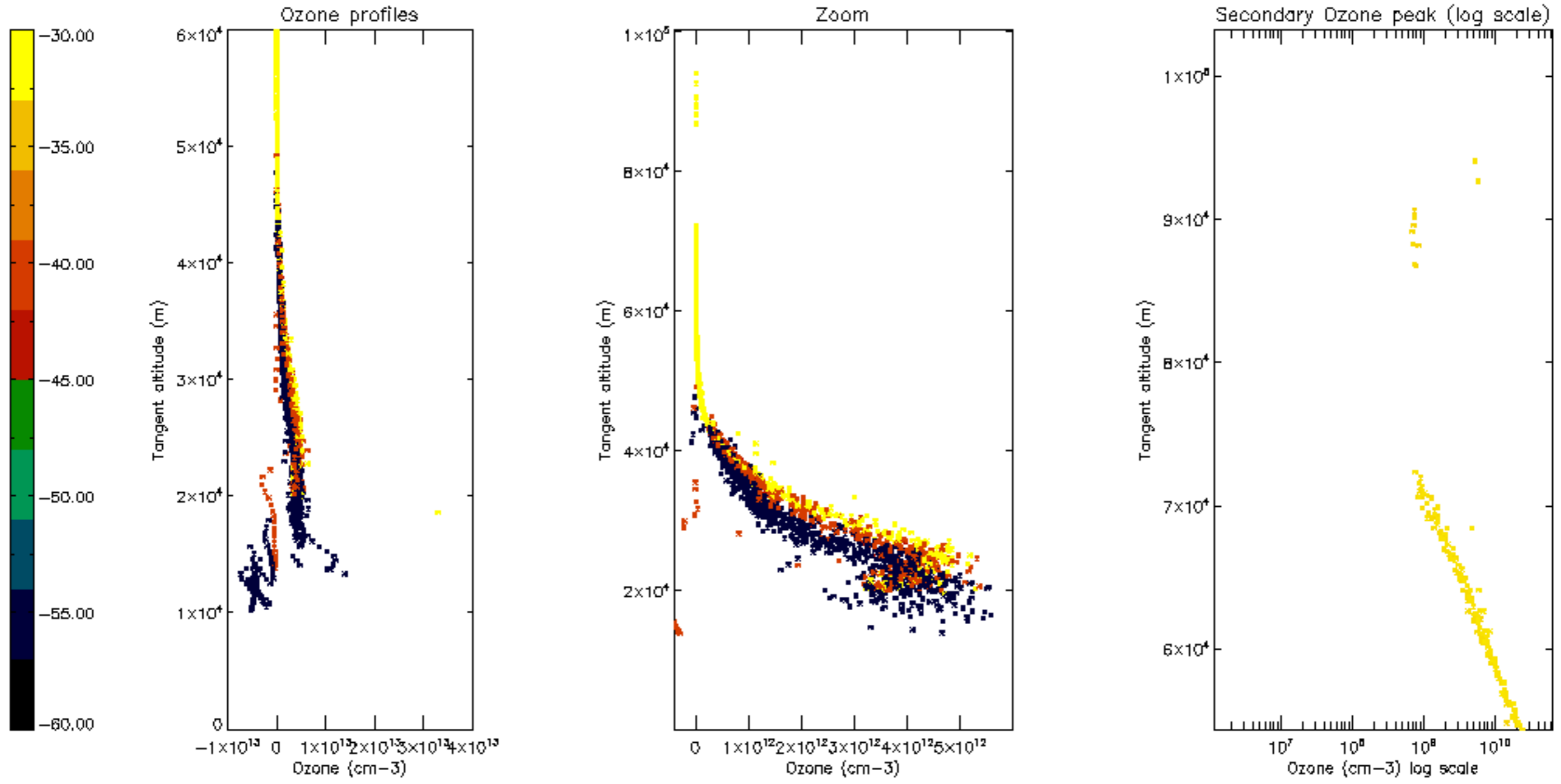
Percentage of star falling outside central band per profile

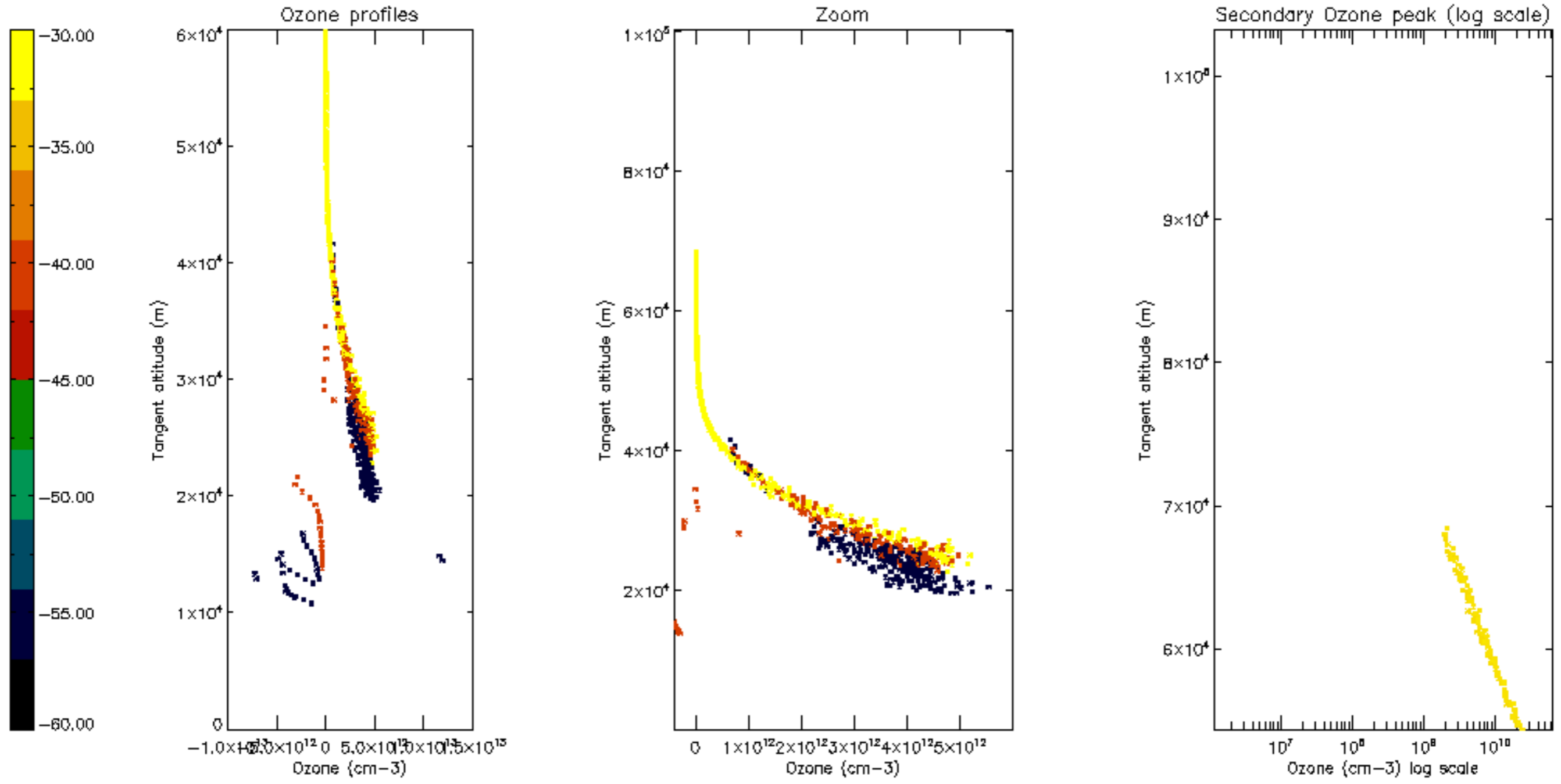


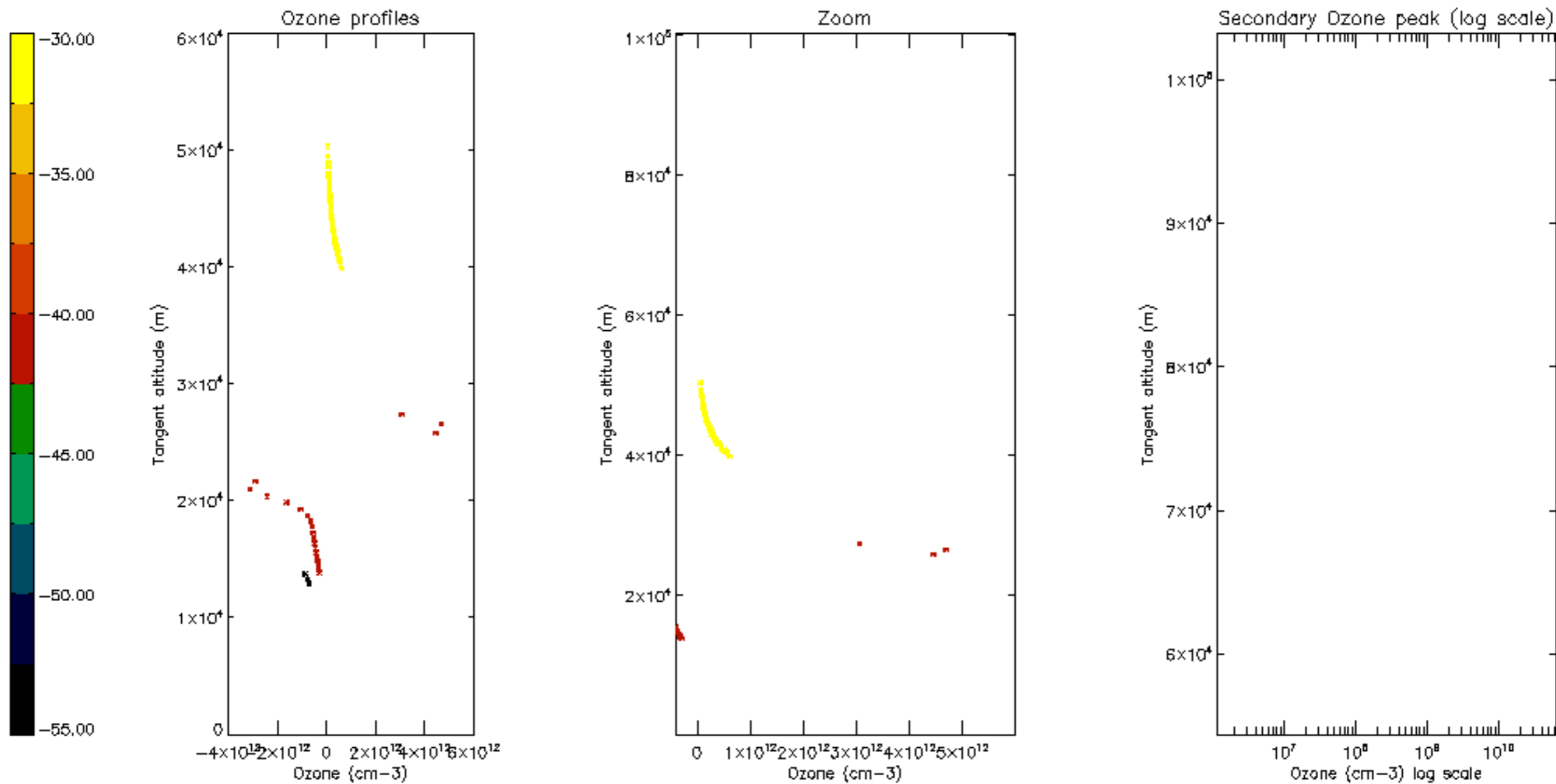
Percentage of saturation errors per profile

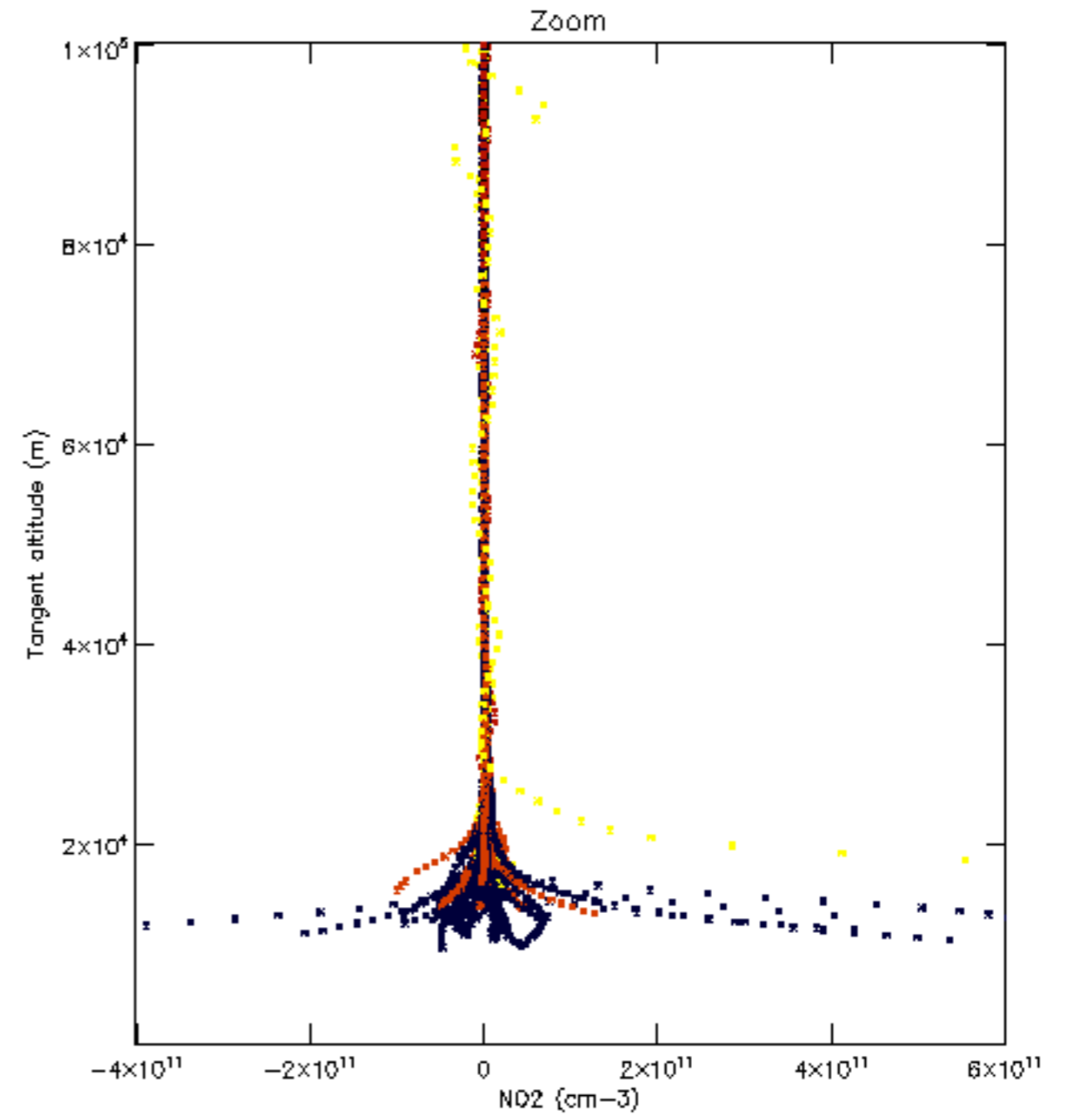
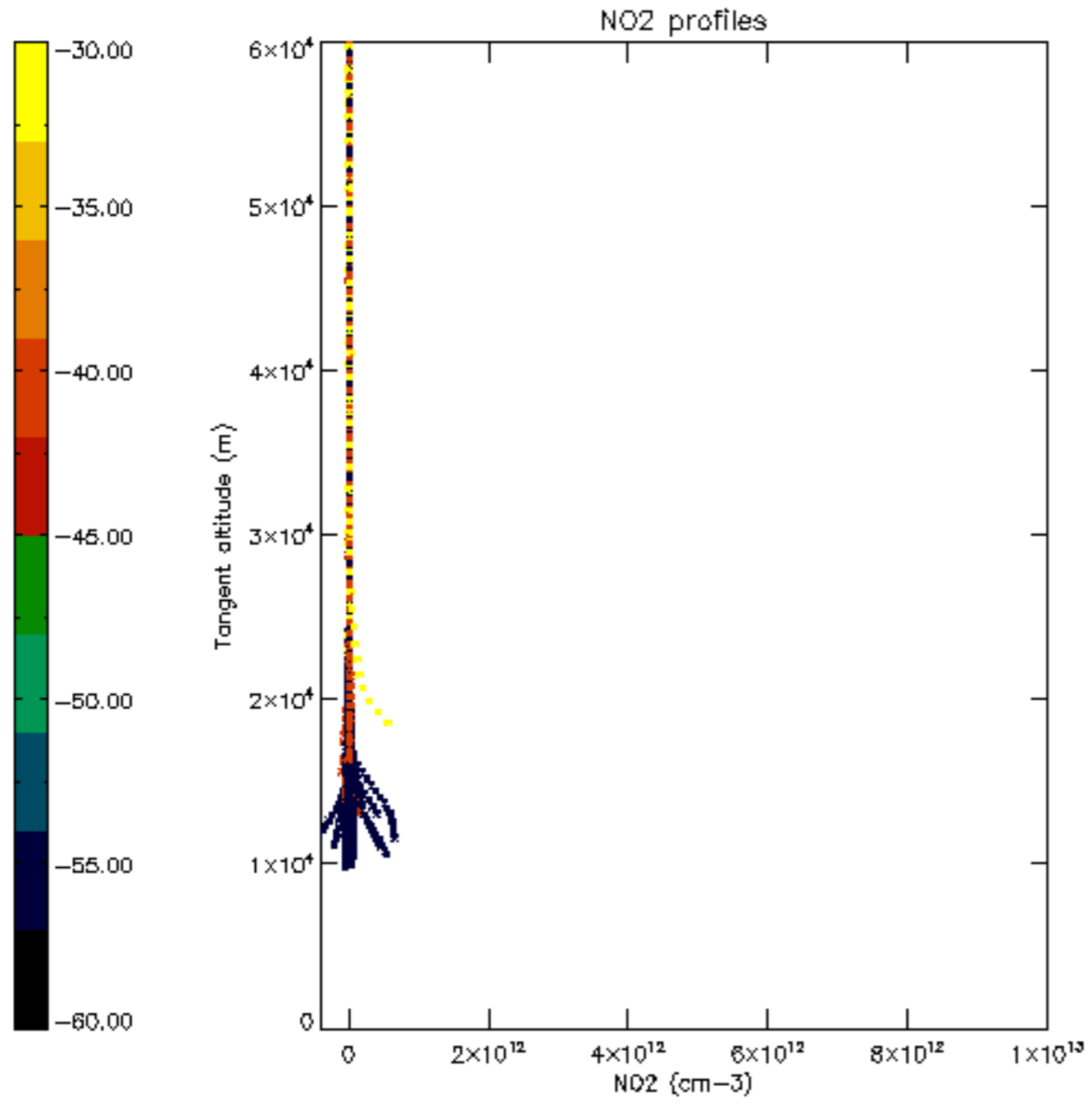


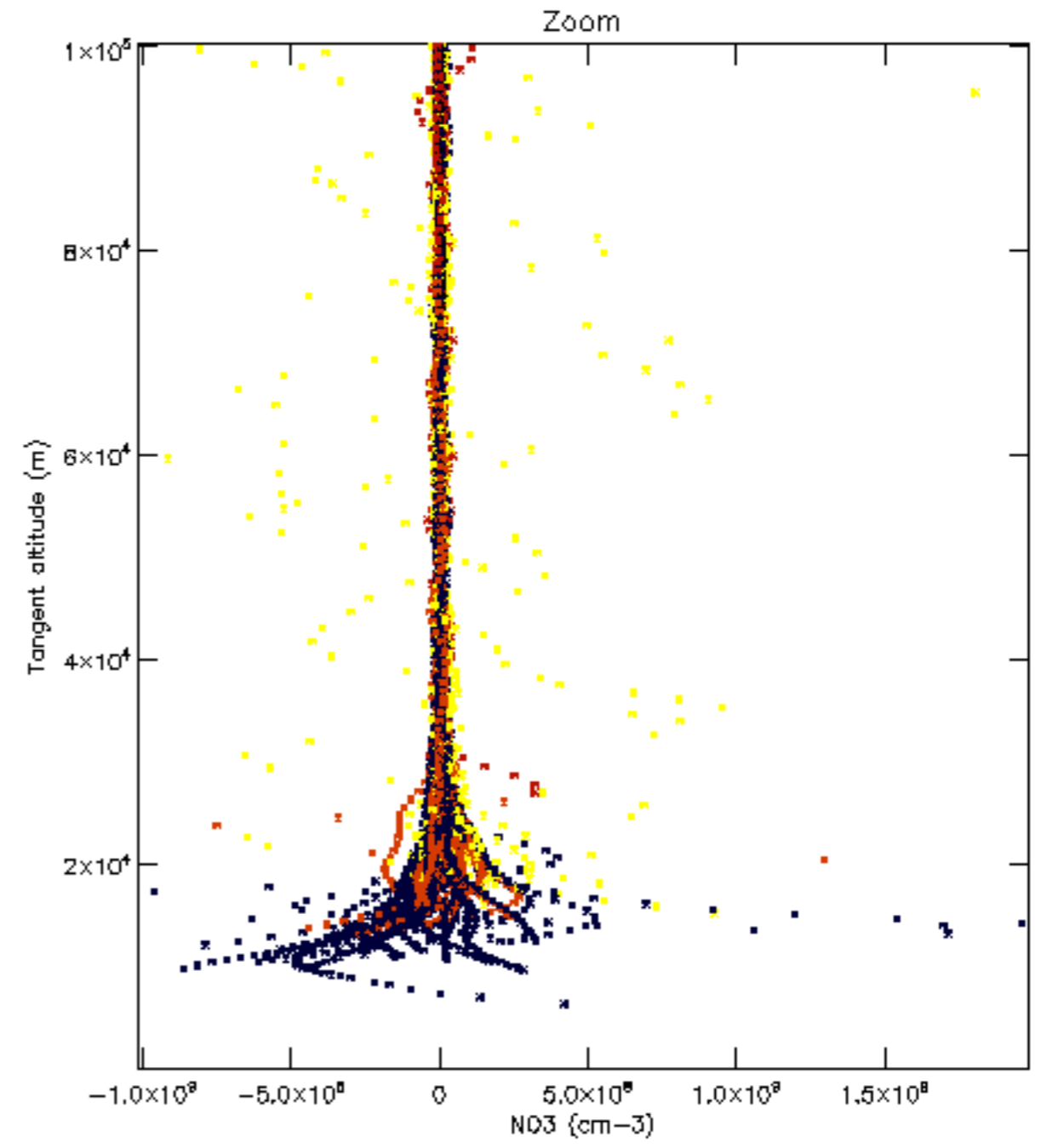
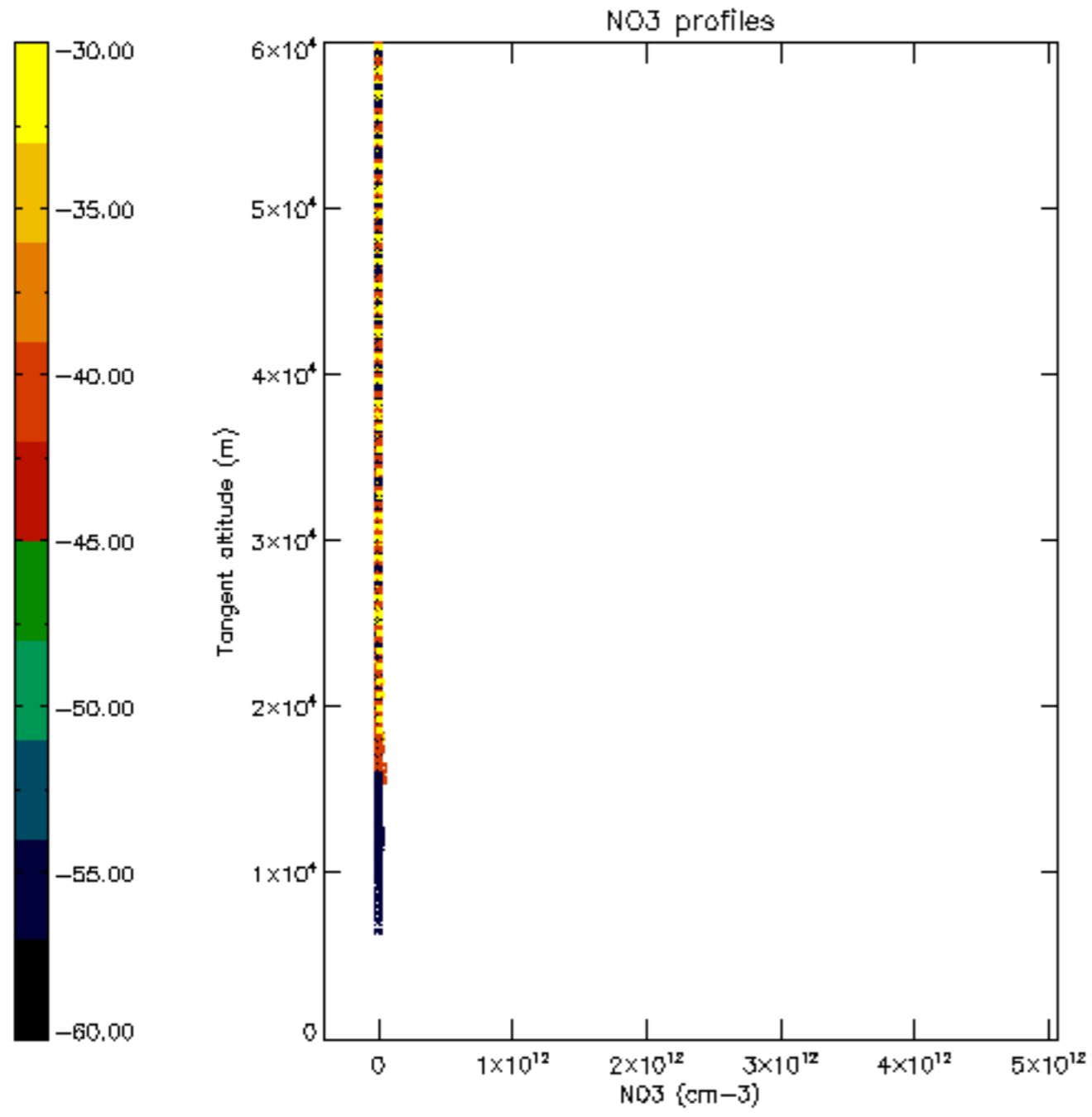


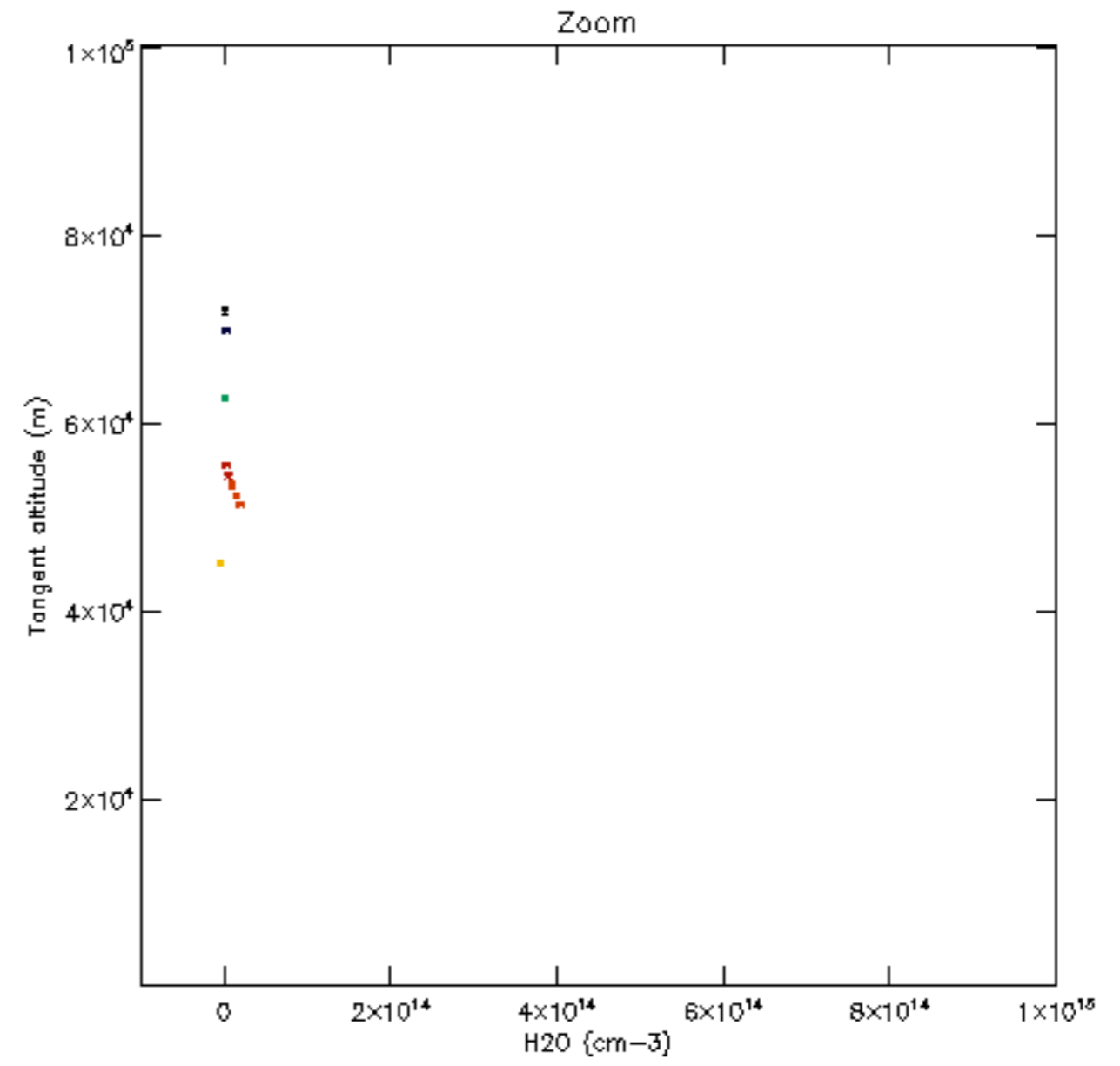
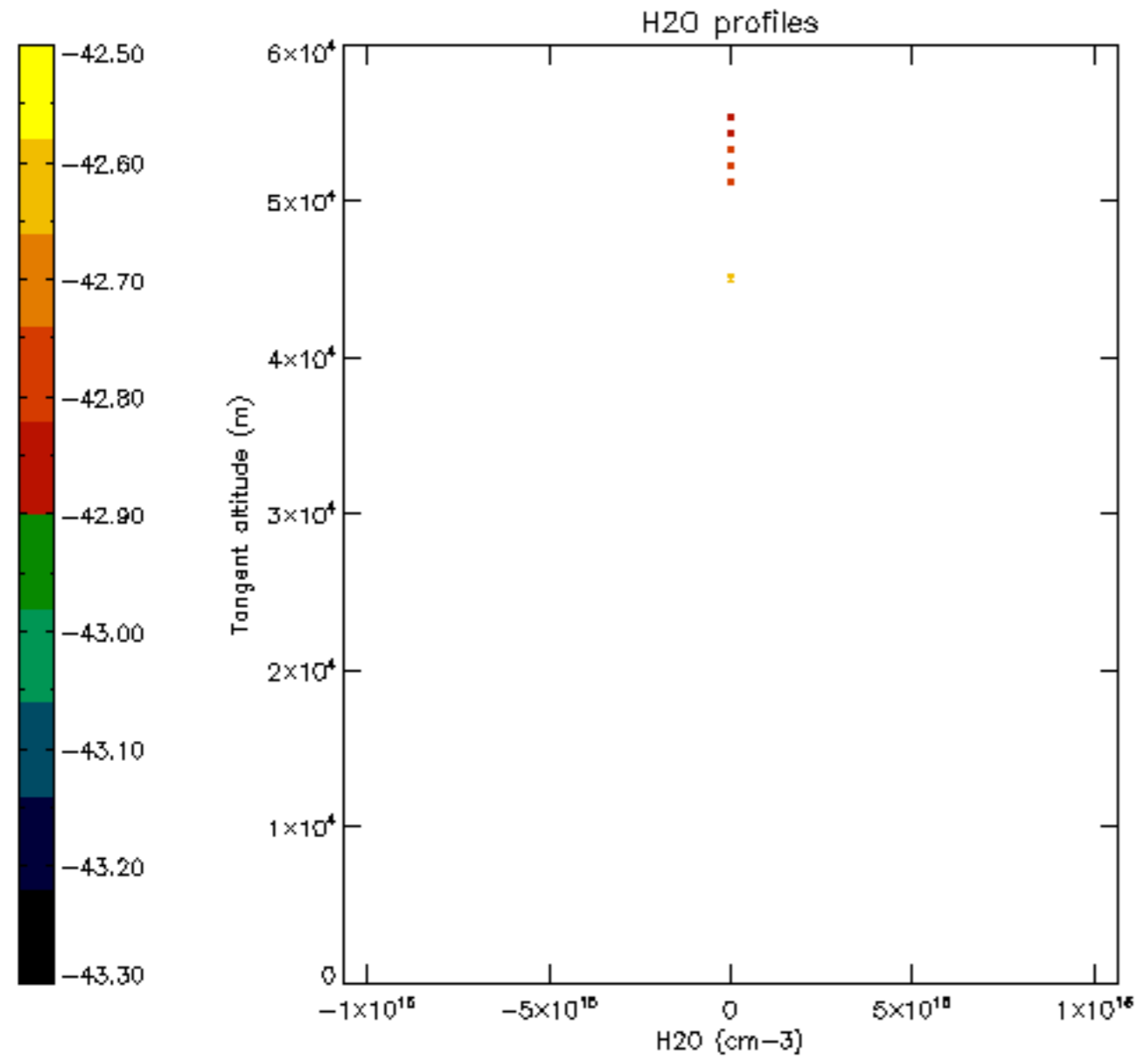


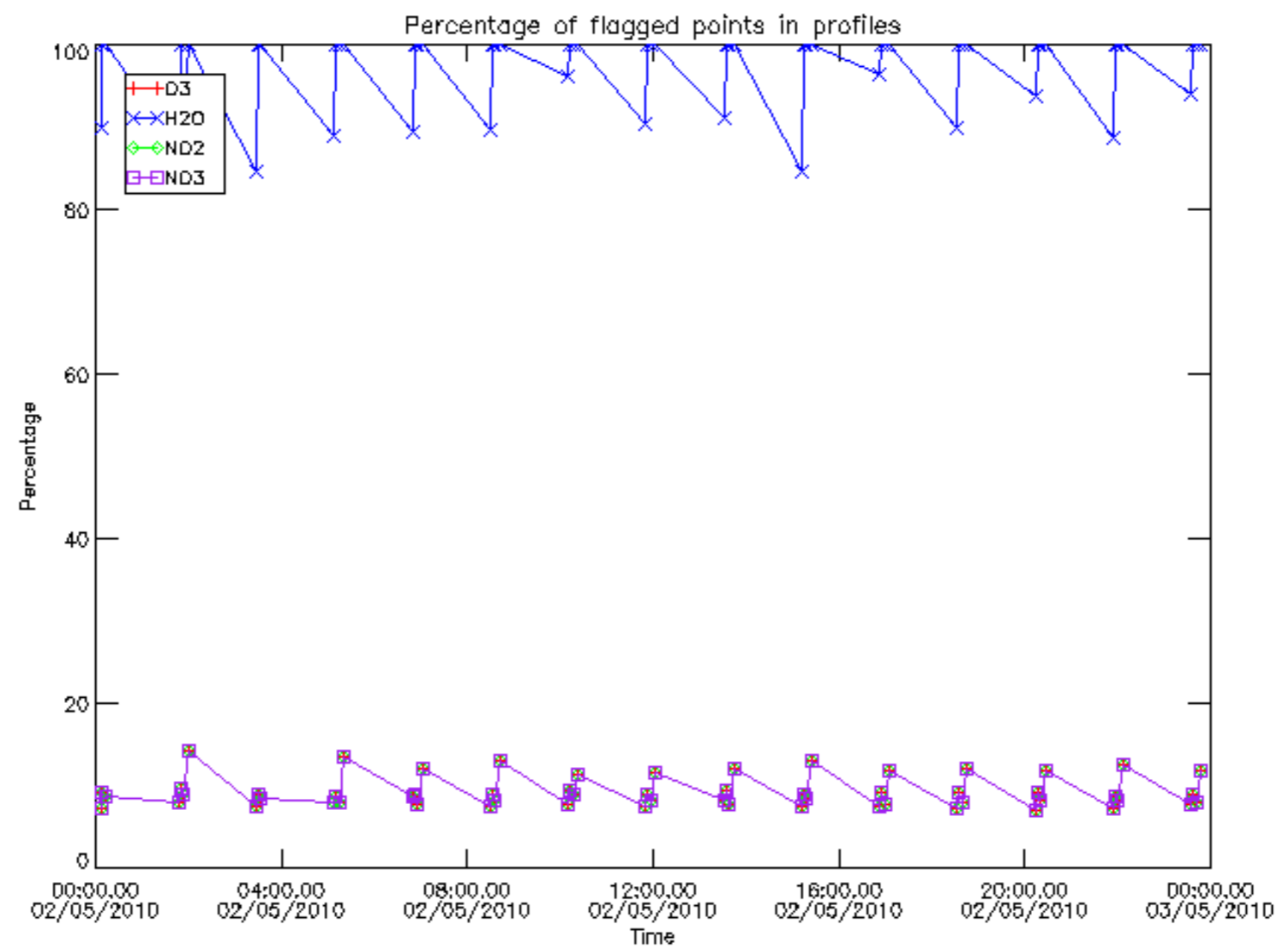




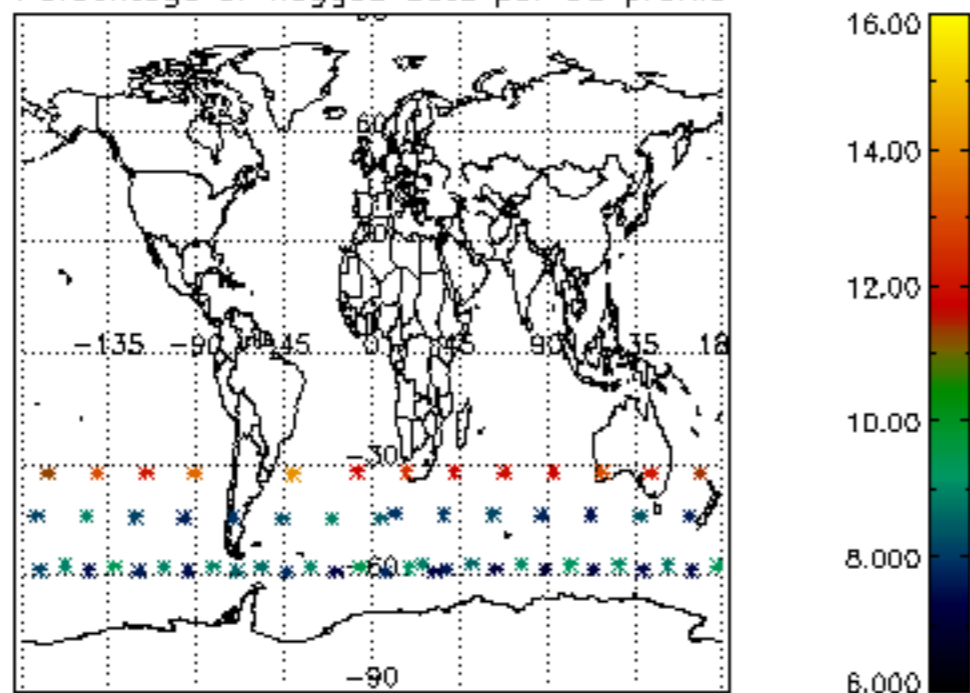




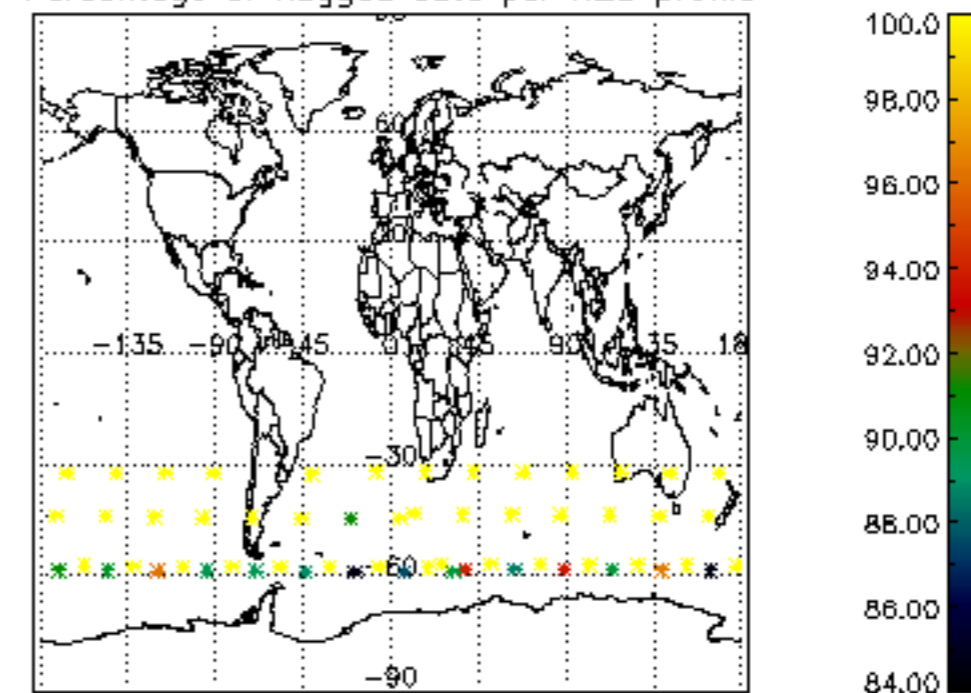




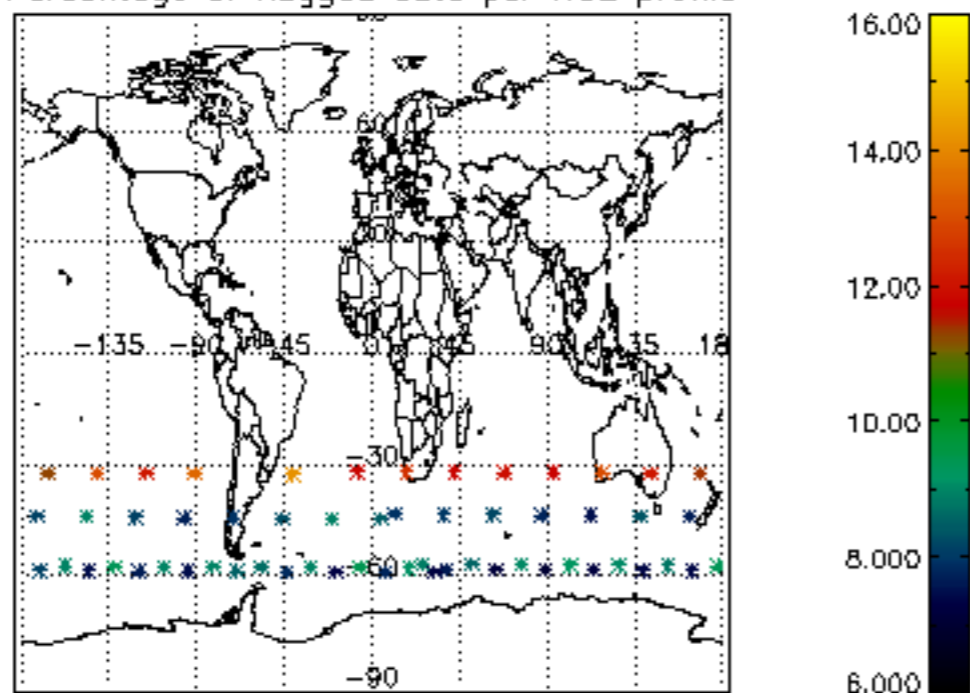
Percentage of flagged data per D3 profile



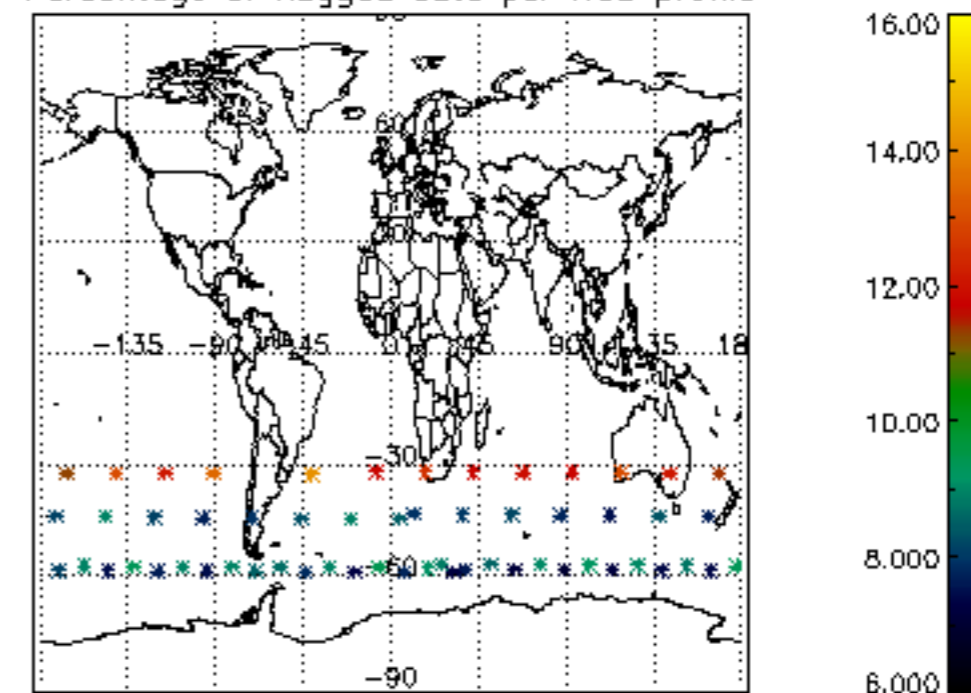
Percentage of flagged data per H2O profile

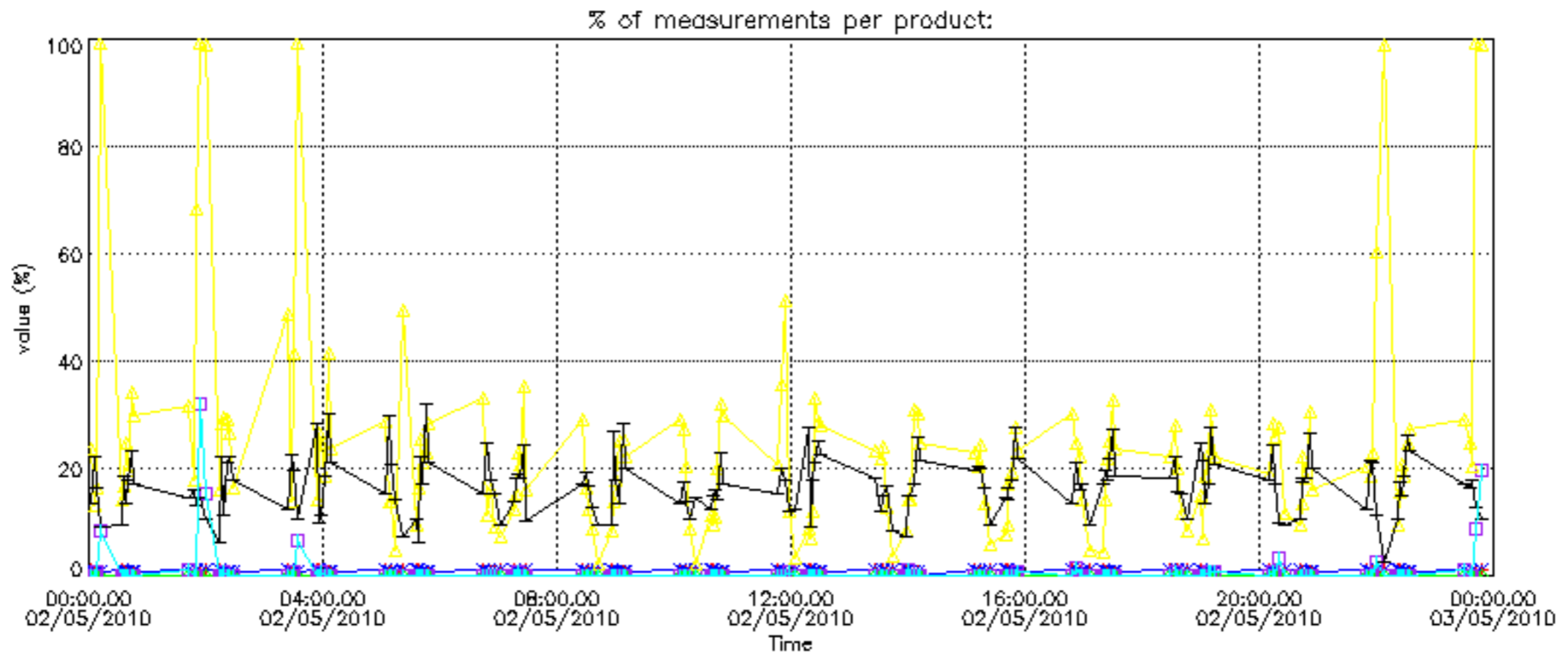


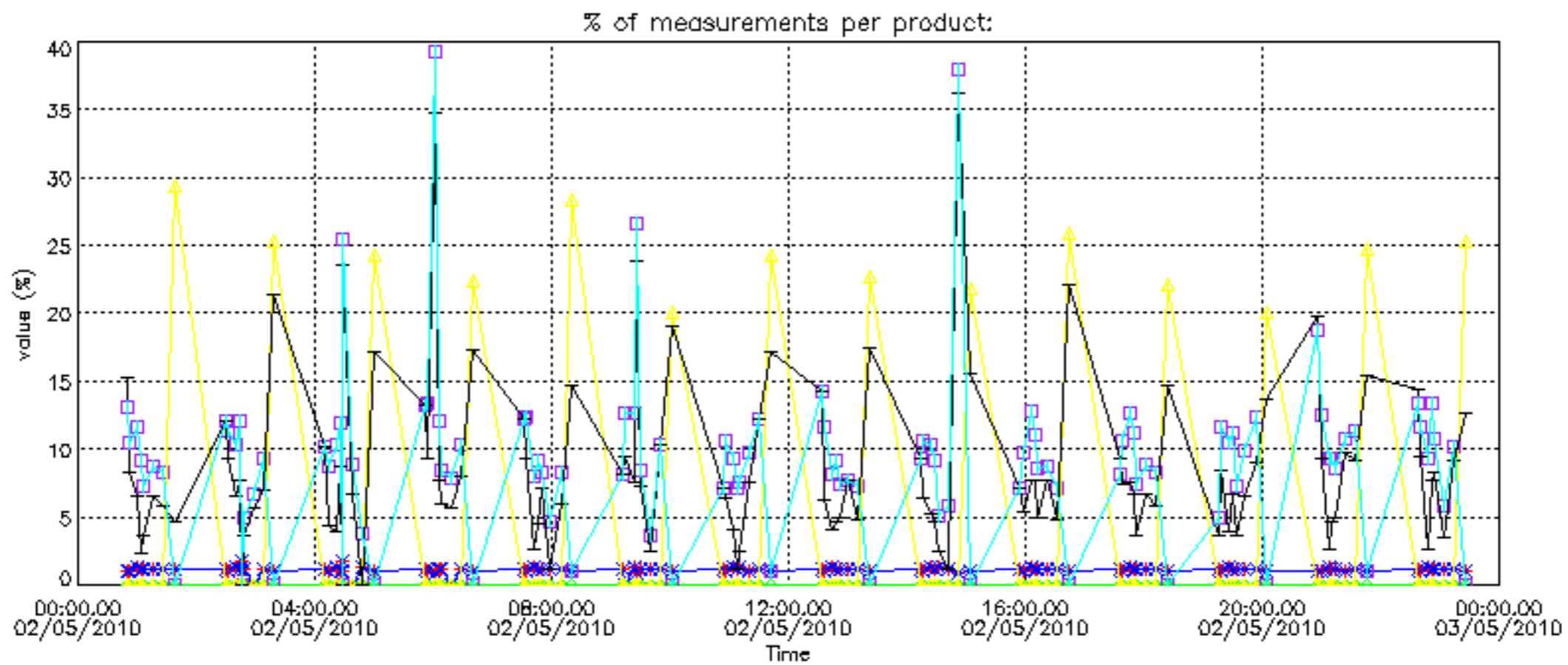
Percentage of flagged data per NO2 profile



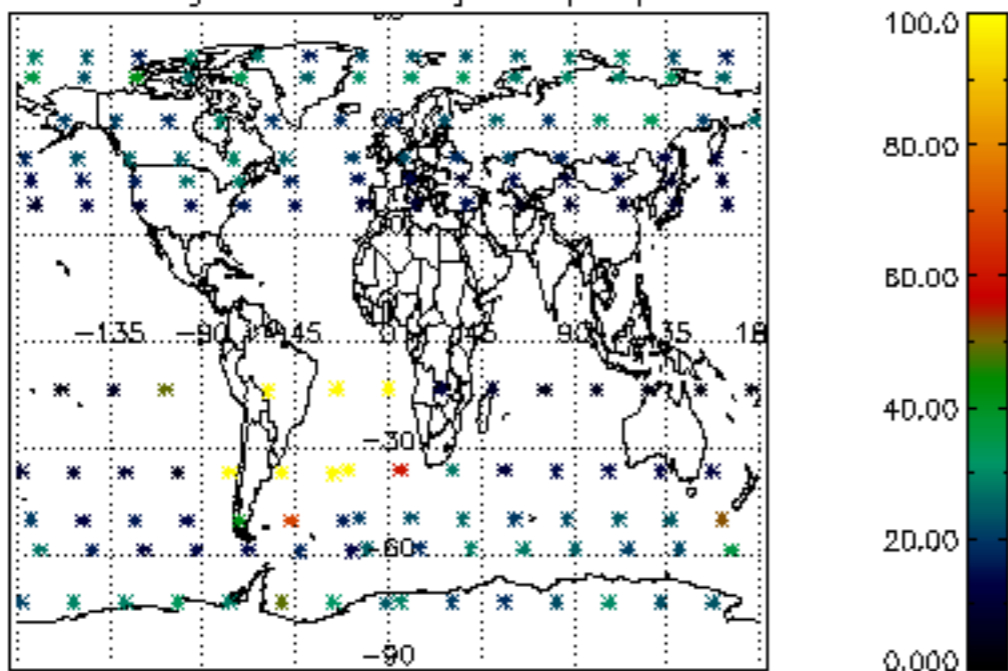
Percentage of flagged data per NO3 profile



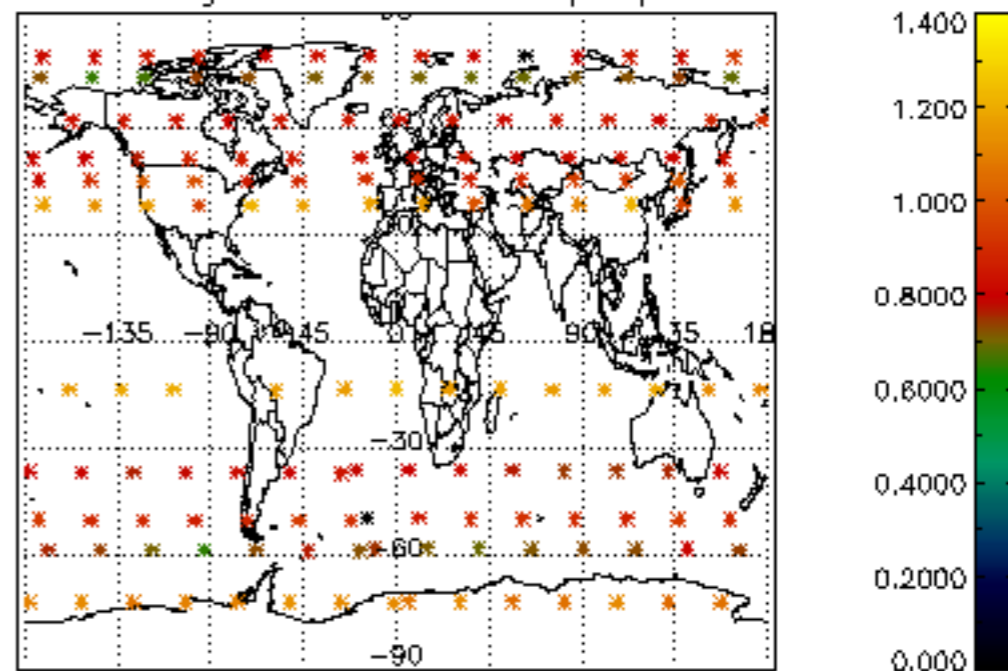




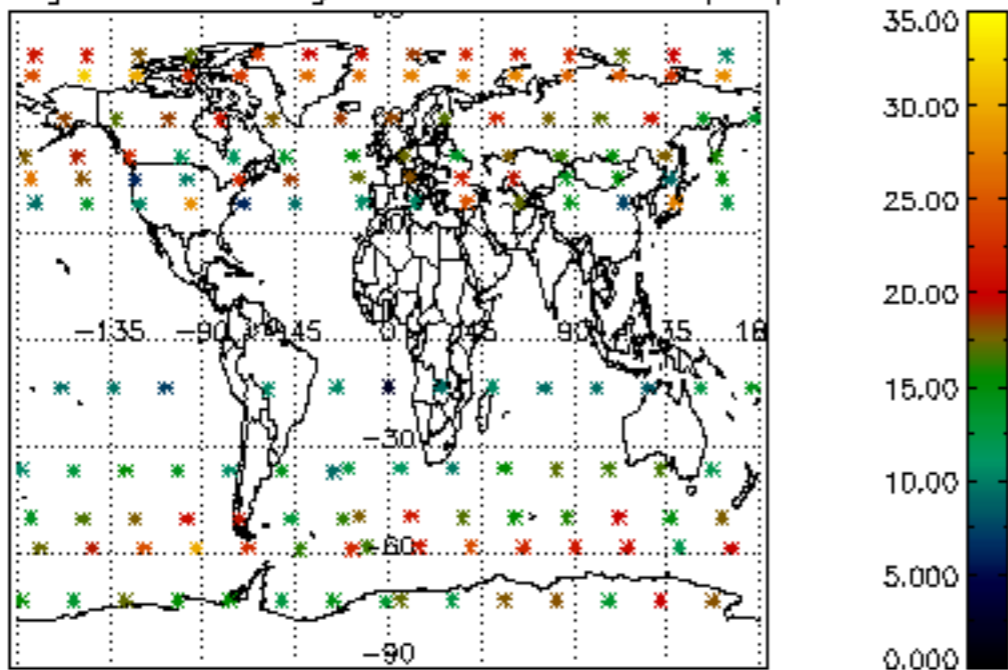
Percentage of cosmic ray hits per profile



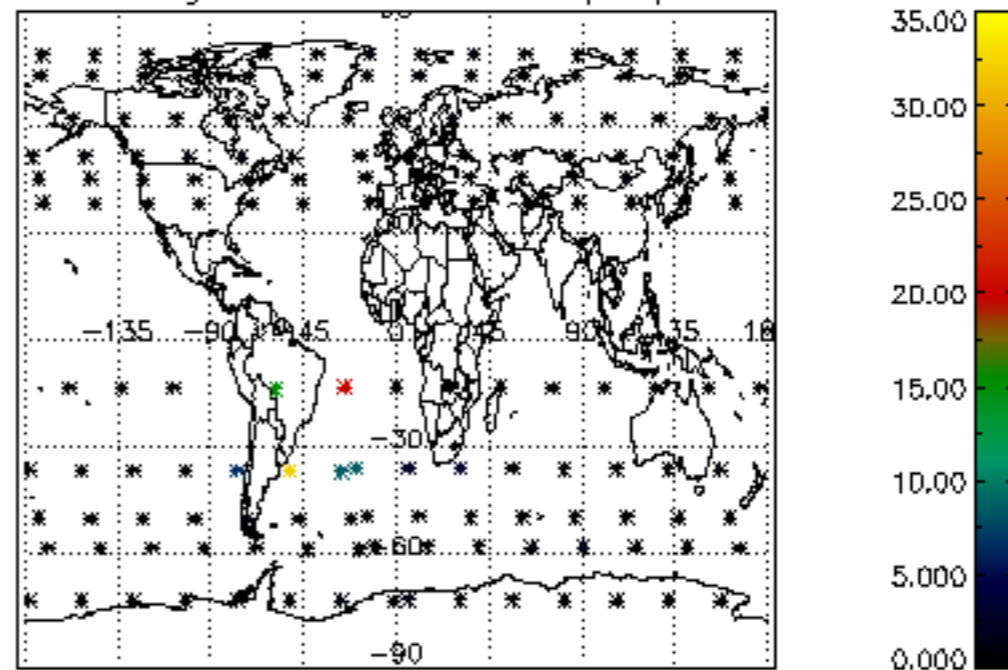
Percentage of datation errors per profile



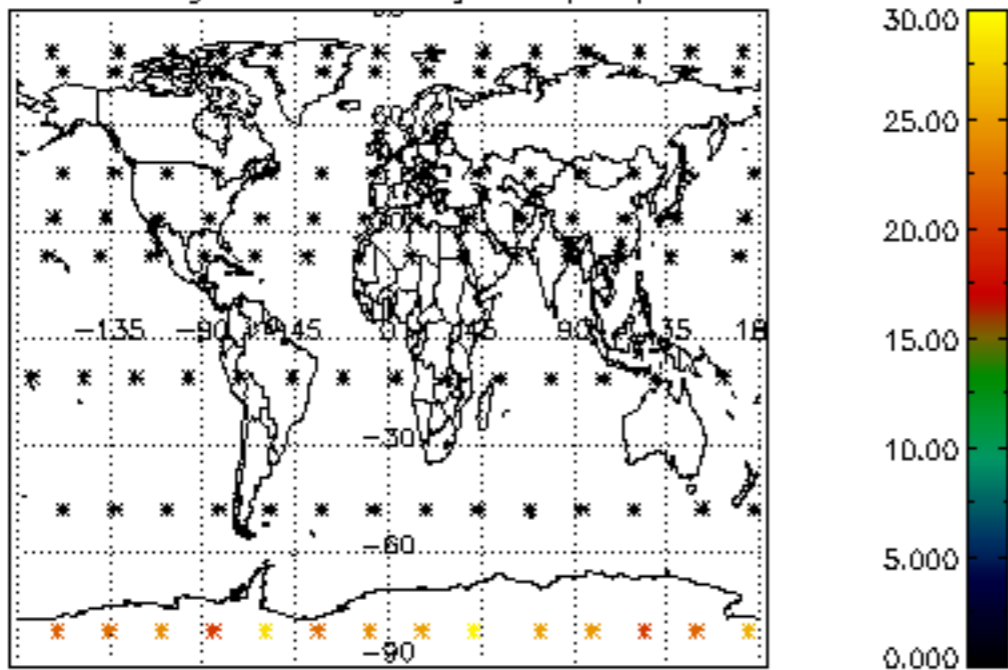
Percentage of star falling outside central band per profile



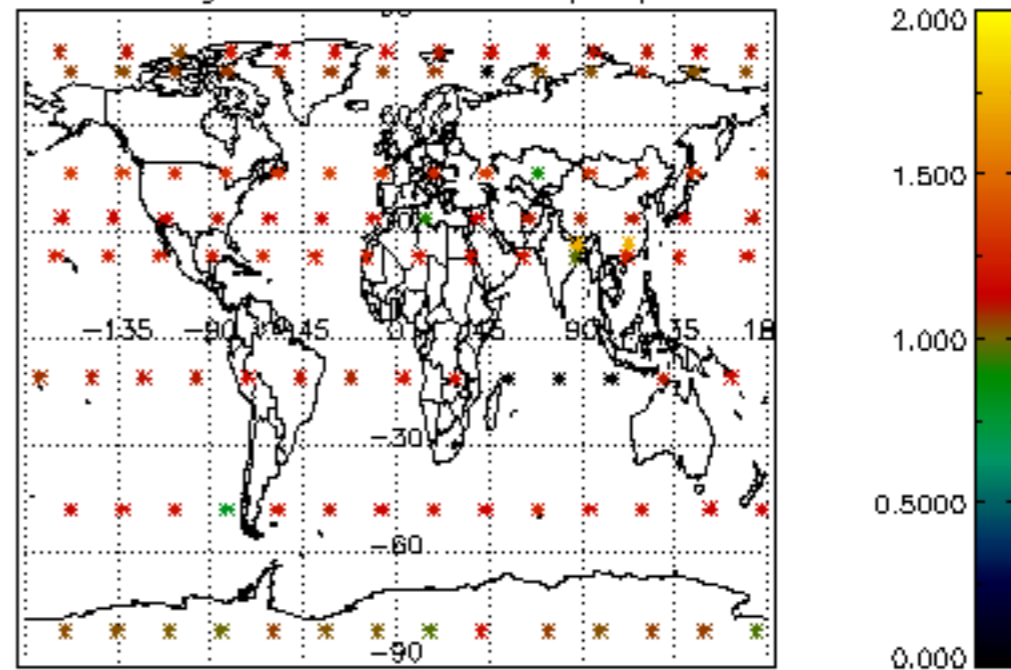
Percentage of saturation errors per profile



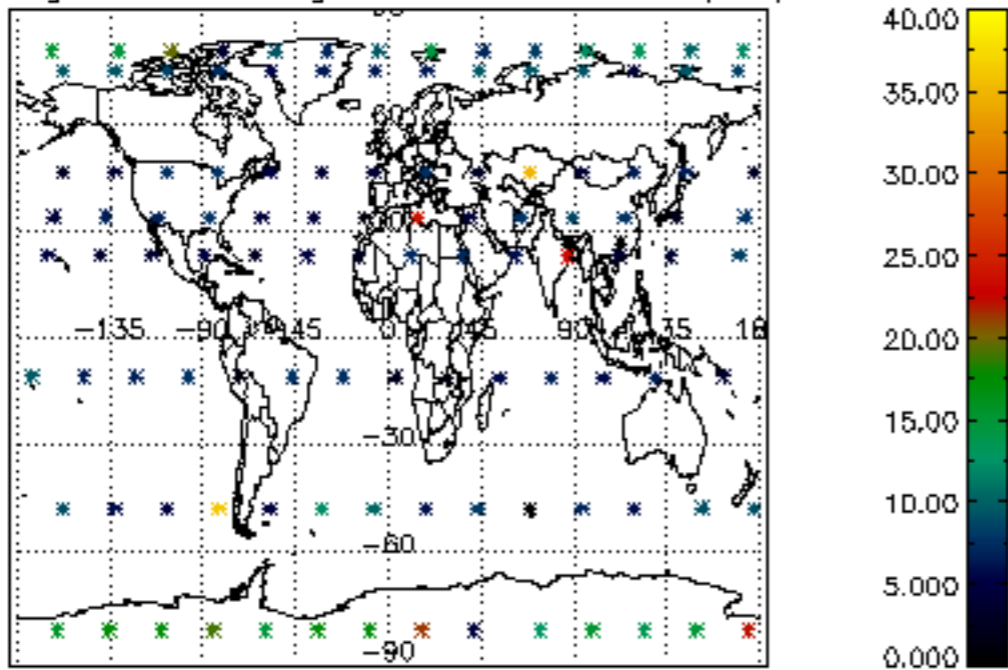
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

