

GOMOS Level 2 Daily Report

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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	22APR2013 20:52:59
Data source version	GOMOS/6.01
Start time of products	18-06-2007 (18JUN2007 00:00:00)
Stop time of products	19-06-2007 (19JUN2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	275
Nb of prods with errors	0

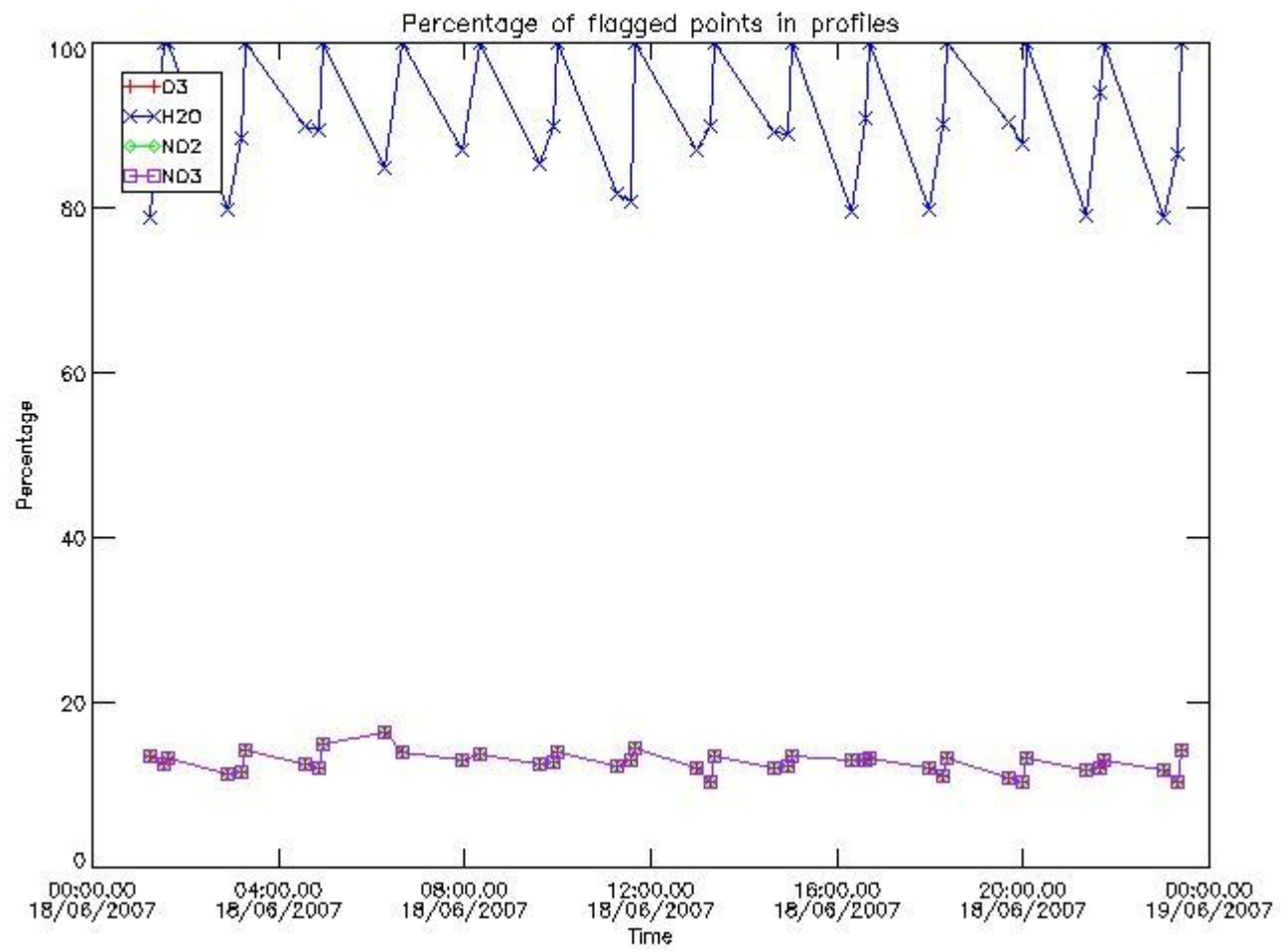
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070618_000717_000000402059_00088_27697_0645.N1	18-JUN-2007 00:07:17	Straylight	40.000	141	Bet Ara	2.8400	4600.0	80	27697	No
2	GOM_NL__2PRFIN20070618_000840_000000402059_00088_27697_0646.N1	18-JUN-2007 00:08:40	Straylight	39.500	147	Alp Ara	2.8770	26000.	79	27697	No
3	GOM_NL__2PRFIN20070618_001025_000000422059_00088_27697_0647.N1	18-JUN-2007 00:10:25	Twilight_stray	42.000	40	The Sco	1.8590	7100.0	84	27697	No
4	GOM_NL__2PRFIN20070618_001207_000000432059_00088_27697_0648.N1	18-JUN-2007 00:12:07	Twilight_stray	42.500	25	35Lam Sco	1.6200	28000.	85	27697	No
5	GOM_NL__2PRFIN20070618_001333_000000422059_00088_27697_0649.N1	18-JUN-2007 00:13:33	Twilight_stray	41.500	75	26Eps Sco	2.2910	4250.0	83	27697	No
6	GOM_NL__2PRFIN20070618_001618_000000372059_00088_27697_0650.N1	18-JUN-2007 00:16:18	Bright	36.500	156	20Sig Sco	2.9030	28000.	73	27697	No
7	GOM_NL__2PRFIN20070618_001804_000000362059_00088_27697_0651.N1	18-JUN-2007 00:18:04	Bright	36.000	97	8Bet1Sco	2.5610	30000.	72	27697	No
8	GOM_NL__2PRFIN20070618_002023_000000372059_00088_27697_0652.N1	18-JUN-2007 00:20:23	Bright	37.000	98	13Zet Oph	2.5710	30000.	74	27697	No
9	GOM_NL__2PRFIN20070618_002229_000000372059_00088_27697_0653.N1	18-JUN-2007 00:22:29	Bright	36.500	120	1Del Oph	2.7340	3200.0	73	27697	No
10	GOM_NL__2PRFIN20070618_002532_000000352059_00088_27697_0654.N1	18-JUN-2007 00:25:32	Bright	35.000	102	24Alp Ser	2.6000	4250.0	70	27697	No
11	GOM_NL__2PRFIN20070618_002938_000000392059_00088_27697_0655.N1	18-JUN-2007 00:29:38	Bright	38.500	127	27Bet Her	2.7810	4700.0	77	27697	No
12	GOM_NL__2PRFIN20070618_003114_000000372059_00088_27697_0656.N1	18-JUN-2007 00:31:14	Bright	37.000	67	5Alp CrB	2.2210	11000.	74	27697	No
13	GOM_NL__2PRFIN20070618_004101_000000372059_00088_27697_0657.N1	18-JUN-2007 00:41:01	Bright	36.500	119	14Eta Dra	2.7270	4700.0	73	27697	No
14	GOM_NL__2PRFIN20070618_004433_000000362059_00088_27697_0658.N1	18-JUN-2007 00:44:33	Bright	36.000	60	7Bet UMi	2.0810	3950.0	72	27697	No
15	GOM_NL__2PRFIN20070618_004909_000000342059_00088_27697_0659.N1	18-JUN-2007 00:49:09	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	27697	No
16	GOM_NL__2PRFIN20070618_005925_000000532059_00088_27697_0660.N1	18-JUN-2007 00:59:25	Bright	53.000	160	23Gam Per	2.9300	4700.0	106	27697	No
17	GOM_NL__2PRFIN20070618_011335_000000452059_00088_27697_0661.N1	18-JUN-2007 01:13:35	Dark	45.000	94	92Alp Cet	2.5260	3100.0	90	27697	No
18	GOM_NL__2PRFIN20070618_013132_000000452059_00088_27697_0662.N1	18-JUN-2007 01:31:32	Dark	44.500	9	Alp Eri	0.45300	24000.	89	27697	No
19	GOM_NL__2PRFIN20070618_013653_000000392059_00089_27698_0652.N1	18-JUN-2007 01:36:53	Dark	38.500	135	Bet Hyi	2.8200	5800.0	77	27698	No
20	GOM_NL__2PRFIN20070618_014753_000000402059_00089_27698_0653.N1	18-JUN-2007 01:47:53	Straylight	40.000	141	Bet Ara	2.8400	4600.0	80	27698	No
21	GOM_NL__2PRFIN20070618_014916_000000412059_00089_27698_0654.N1	18-JUN-2007 01:49:16	Straylight	40.500	147	Alp Ara	2.8770	26000.	81	27698	No
22	GOM_NL__2PRFIN20070618_015101_000000442059_00089_27698_0655.N1	18-JUN-2007 01:51:01	Twilight_stray	43.500	40	The Sco	1.8590	7100.0	87	27698	No
23	GOM_NL__2PRFIN20070618_015243_000000452059_00089_27698_0656.N1	18-JUN-2007 01:52:43	Twilight_stray	44.500	25	35Lam Sco	1.6200	28000.	89	27698	No
24	GOM_NL__2PRFIN20070618_015409_000000412059_00089_27698_0657.N1	18-JUN-2007 01:54:09	Twilight_stray	40.500	75	26Eps Sco	2.2910	4250.0	81	27698	No
25	GOM_NL__2PRFIN20070618_015654_000000372059_00089_27698_0658.N1	18-JUN-2007 01:56:54	Bright	36.500	156	20Sig Sco	2.9030	28000.	73	27698	No
26	GOM_NL__2PRFIN20070618_015840_000000362059_00089_27698_0659.N1	18-JUN-2007 01:58:40	Bright	35.500	97	8Bet1Sco	2.5610	30000.	71	27698	No
27	GOM_NL__2PRFIN20070618_020059_000000372059_00089_27698_0660.N1	18-JUN-2007 02:00:59	Bright	37.000	98	13Zet Oph	2.5710	30000.	74	27698	No
28	GOM_NL__2PRFIN20070618_020305_000000372059_00089_27698_0661.N1	18-JUN-2007 02:03:05	Bright	36.500	120	1Del Oph	2.7340	3200.0	73	27698	No
29	GOM_NL__2PRFIN20070618_020608_000000352059_00089_27698_0662.N1	18-JUN-2007 02:06:08	Bright	35.000	102	24Alp Ser	2.6000	4250.0	70	27698	No
30	GOM_NL__2PRFIN20070618_021013_000000362059_00089_27698_0663.N1	18-JUN-2007 02:10:13	Bright	35.500	127	27Bet Her	2.7810	4700.0	71	27698	No
31	GOM_NL__2PRFIN20070618_021150_000000372059_00089_27698_0664.N1	18-JUN-2007 02:11:50	Bright	36.500	67	5Alp CrB	2.2210	11000.	73	27698	No
32	GOM_NL__2PRFIN20070618_022137_000000352059_00089_27698_0665.N1	18-JUN-2007 02:21:37	Bright	35.000	119	14Eta Dra	2.7270	4700.0	70	27698	No
33	GOM_NL__2PRFIN20070618_022509_000000352059_00089_27698_0666.N1	18-JUN-2007 02:25:09	Bright	34.500	60	7Bet UMi	2.0810	3950.0	69	27698	No
34	GOM_NL__2PRFIN20070618_022944_000000322059_00089_27698_0667.N1	18-JUN-2007 02:29:44	Bright	31.500	49	1Alp UMi	1.9900	6300.0	63	27698	No
35	GOM_NL__2PRFIN20070618_024002_000000472059_00089_27698_0668.N1	18-JUN-2007 02:40:02	Bright	46.500	160	23Gam Per	2.9300	4700.0	93	27698	No
36	GOM_NL__2PRFIN20070618_025411_000000452059_00089_27698_0669.N1	18-JUN-2007 02:54:11	Dark	45.000	94	92Alp Cet	2.5260	3100.0	90	27698	No
37	GOM_NL__2PRFIN20070618_031208_000000442059_00089_27698_0670.N1	18-JUN-2007 03:12:08	Dark	44.000	9	Alp Eri	0.45300	24000.	88	27698	No
38	GOM_NL__2PRFIN20070618_031729_000000362059_00090_27699_0660.N1	18-JUN-2007 03:17:29	Dark	36.000	135	Bet Hyi	2.8200	5800.0	72	27699	No
39	GOM_NL__2PRFIN20070618_032829_000000412059_00090_27699_0661.N1	18-JUN-2007 03:28:29	Straylight	40.500	141	Bet Ara	2.8400	4600.0	81	27699	No
40	GOM_NL__2PRFIN20070618_032952_000000402059_00090_27699_0662.N1	18-JUN-2007 03:29:52	Straylight	39.500	147	Alp Ara	2.8770	26000.	79	27699	No
41	GOM_NL__2PRFIN20070618_033138_000000412059_00090_27699_0663.N1	18-JUN-2007 03:31:38	Twilight_stray	41.000	40	The Sco	1.8590	7100.0	82	27699	No
42	GOM_NL__2PRFIN20070618_033320_000000422059_00090_27699_0664.N1	18-JUN-2007 03:33:20	Twilight_stray	41.500	25	35Lam Sco	1.6200	28000.	83	27699	No

3. Quality information per product

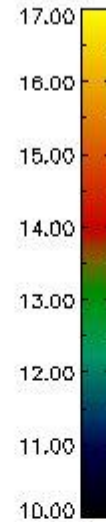
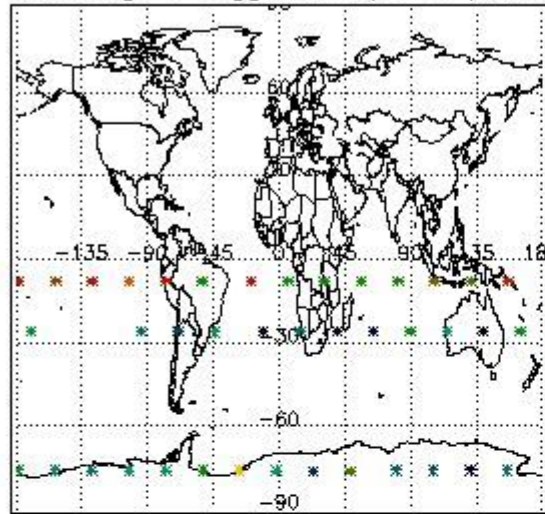
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

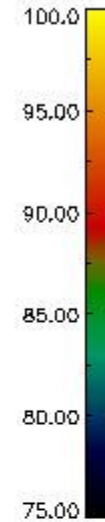
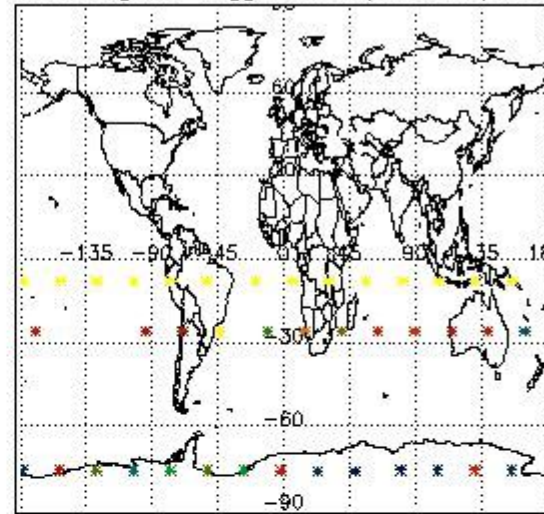


3.2 Plot quality information per product (world map)

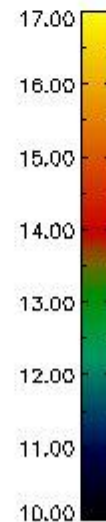
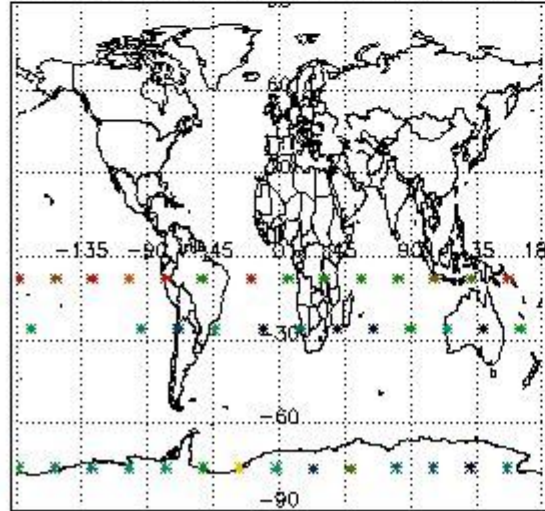
Percentage of flagged data per O3 profile



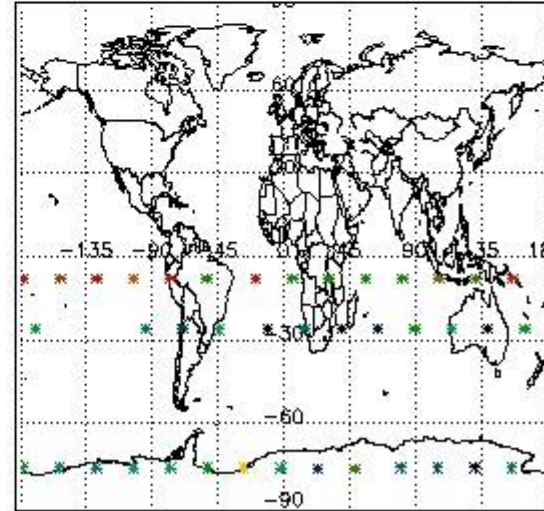
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

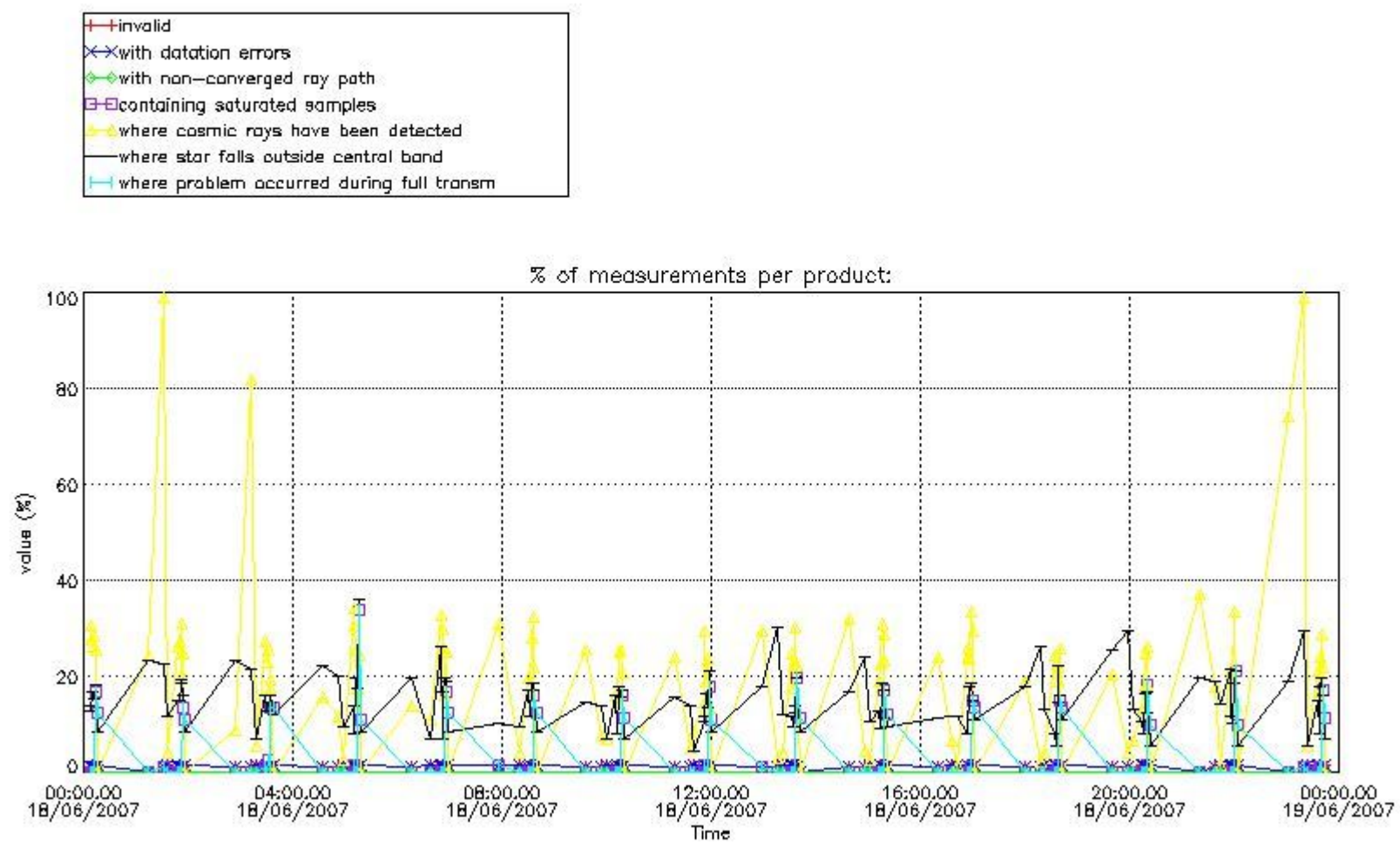


4. Level 1 quality information per product

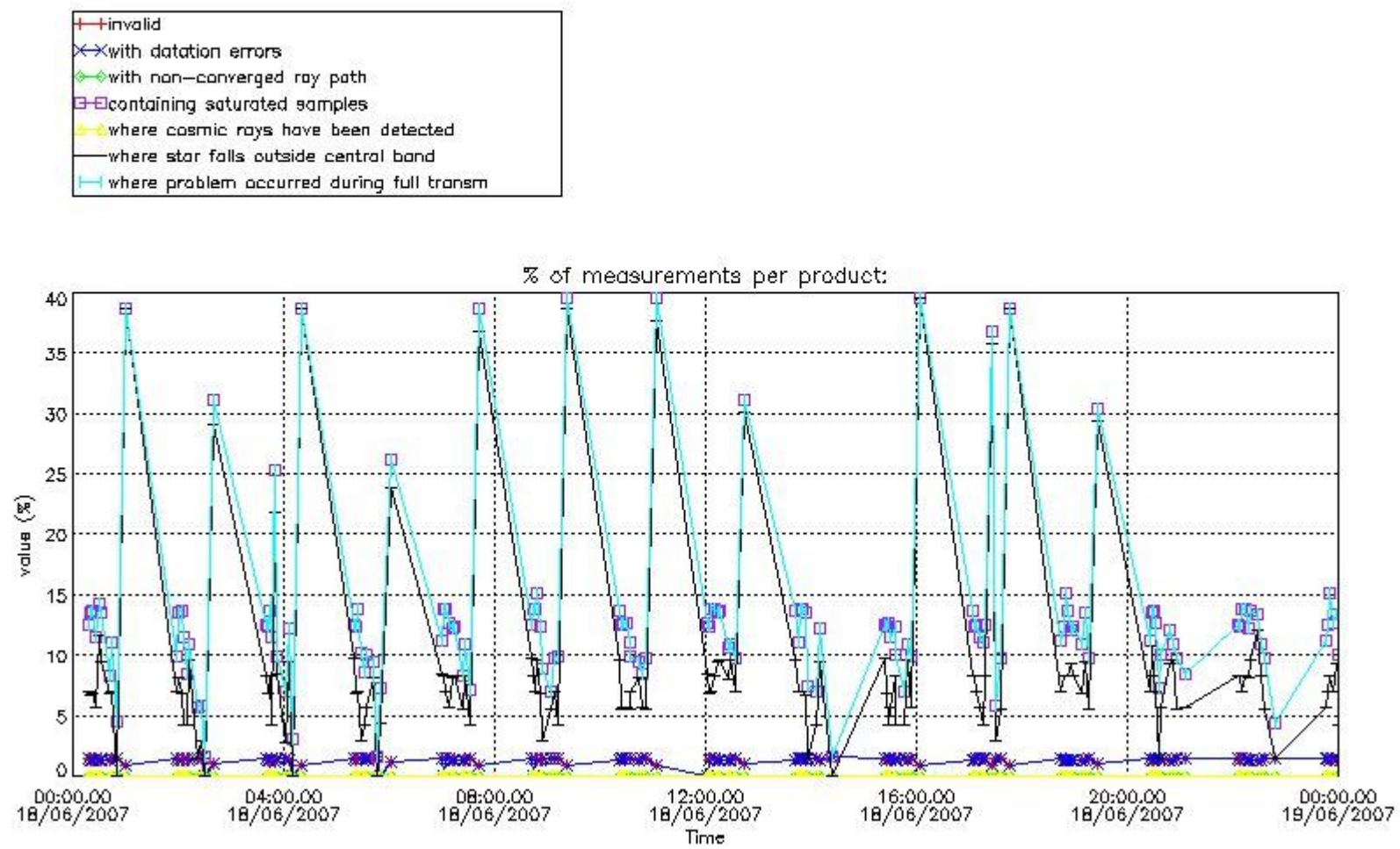
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



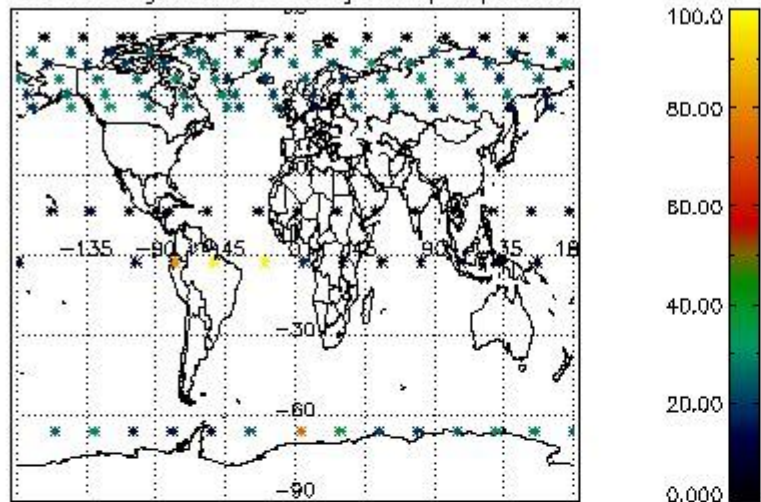
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



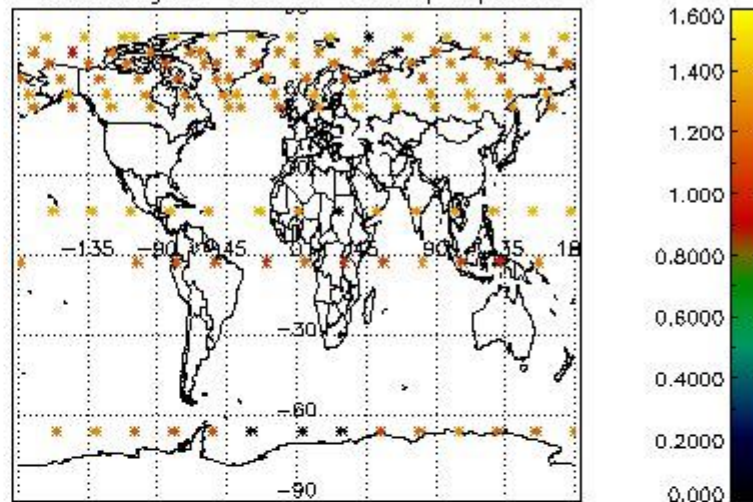
4.2 Plot quality information per product coming from level 1b processing (world map)

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

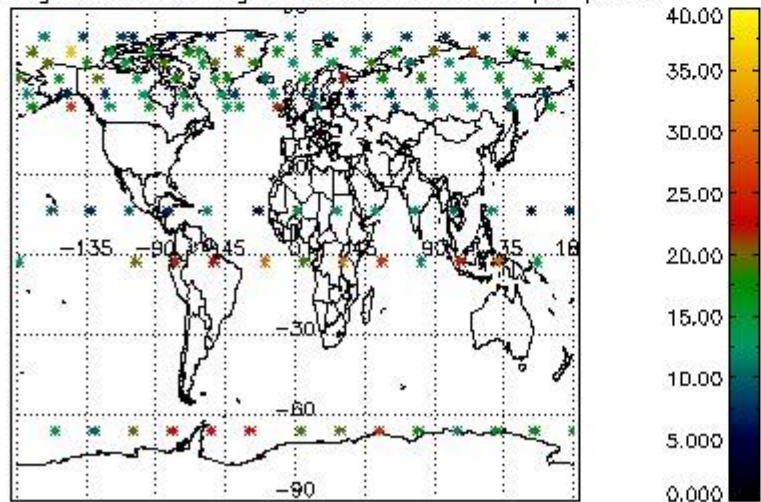
Percentage of cosmic ray hits per profile



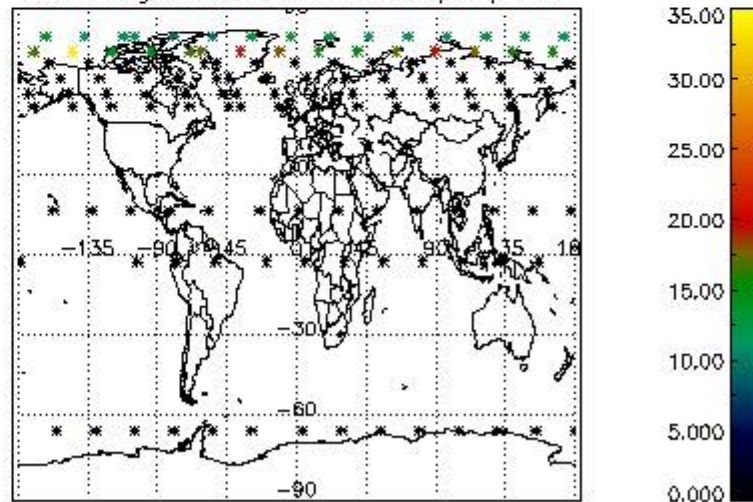
Percentage of datation errors per profile



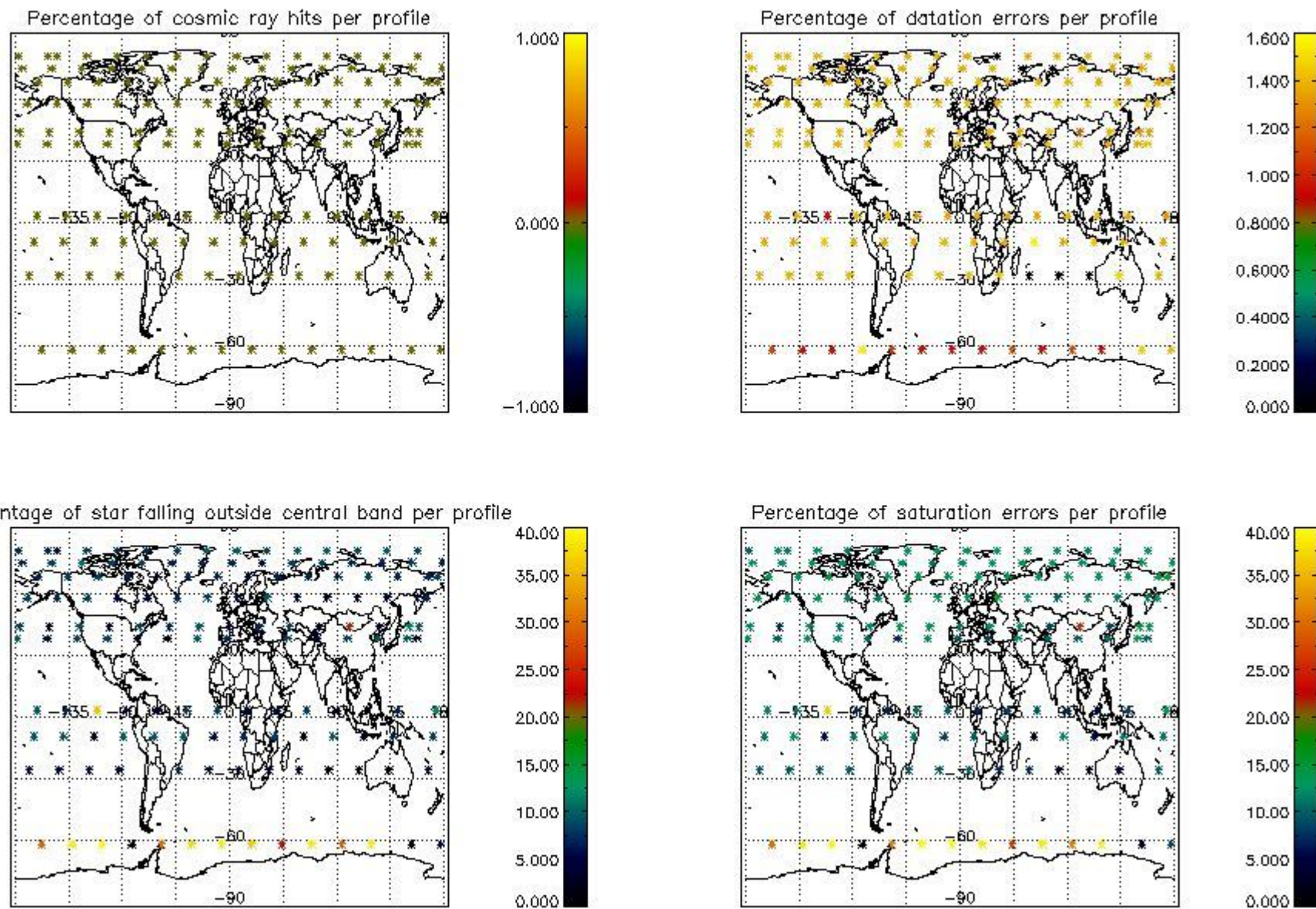
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

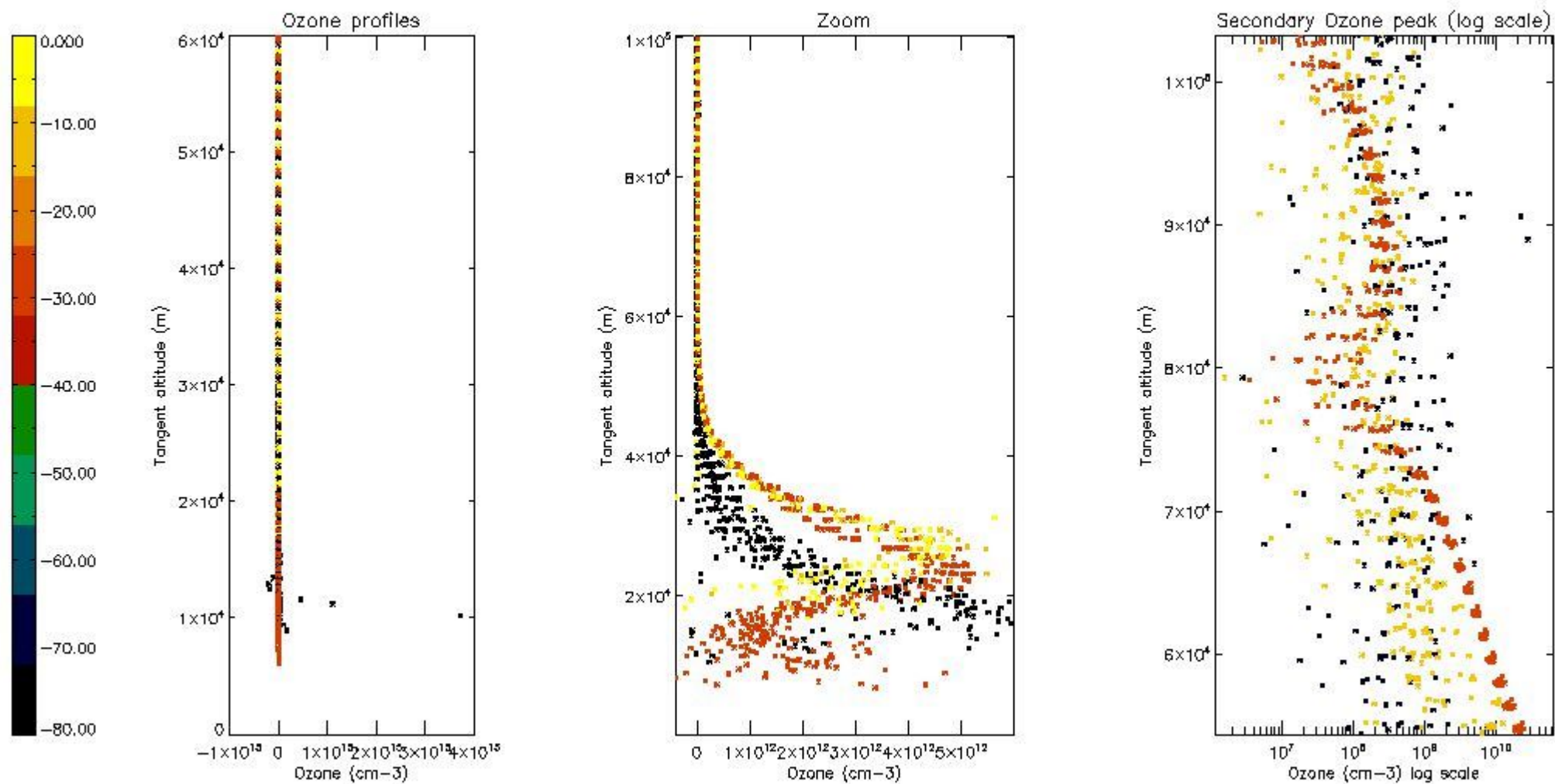
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	16
STD < 20	6

STD < 10	4
STD < 5	3

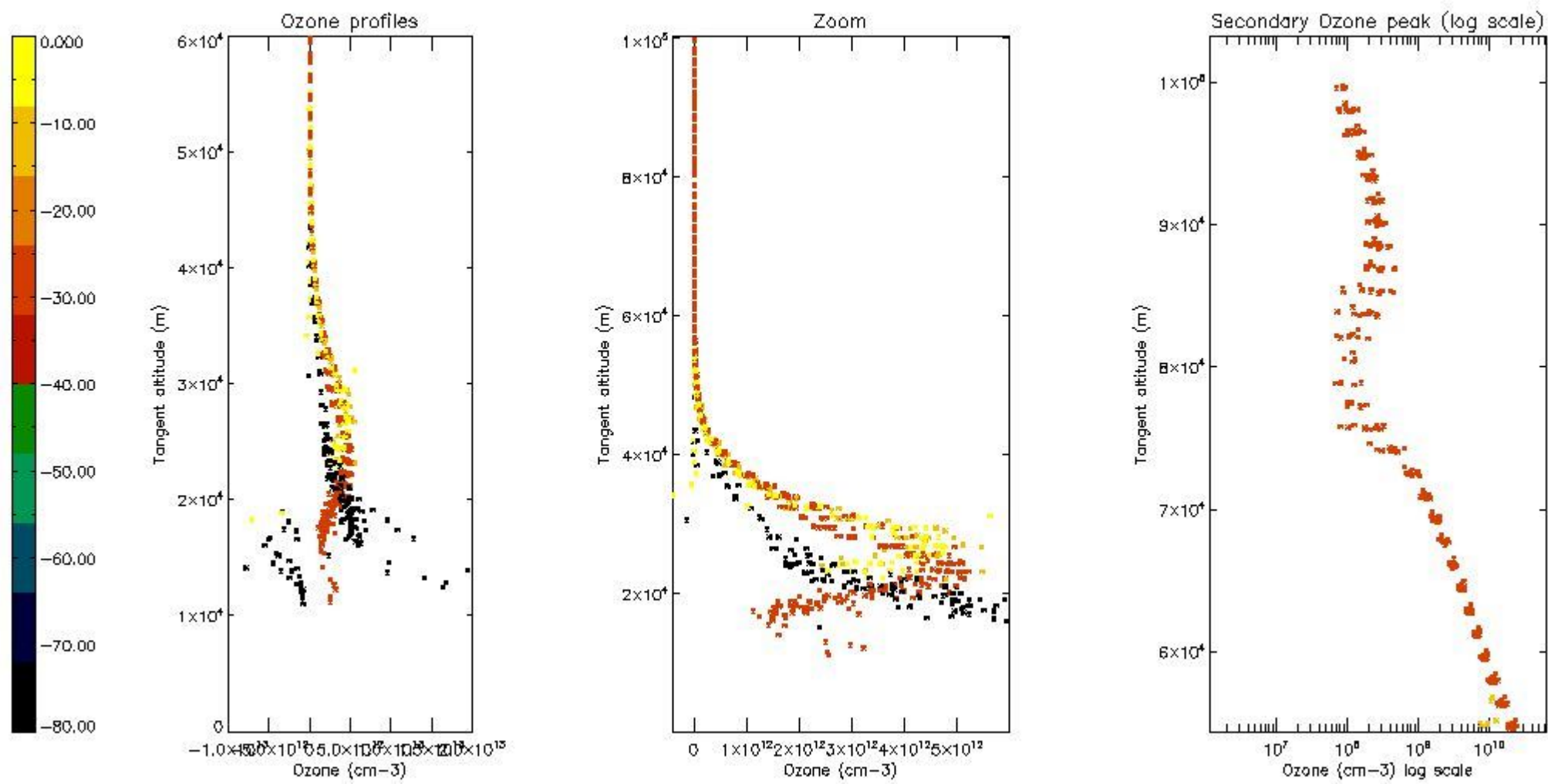
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



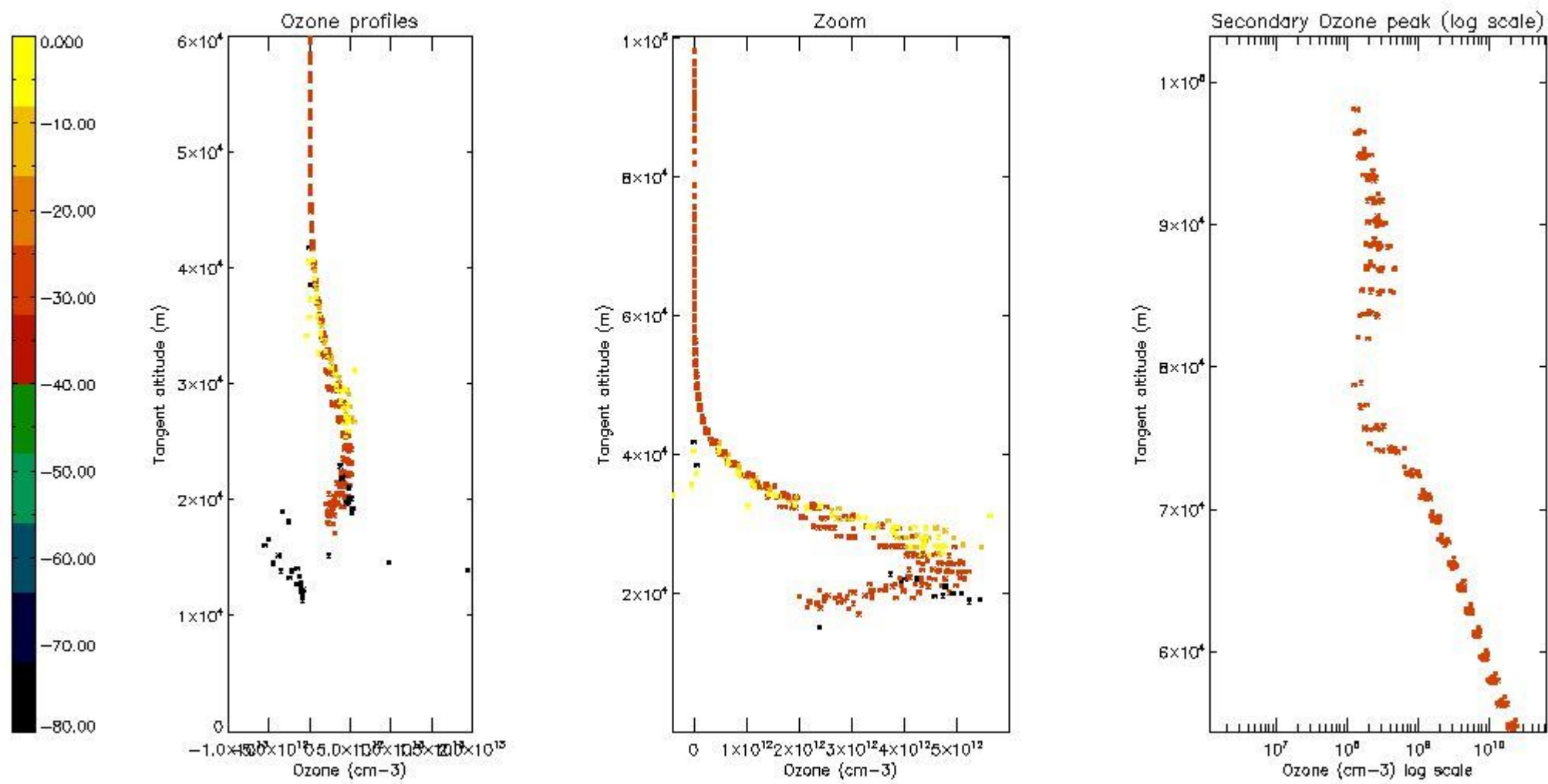
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



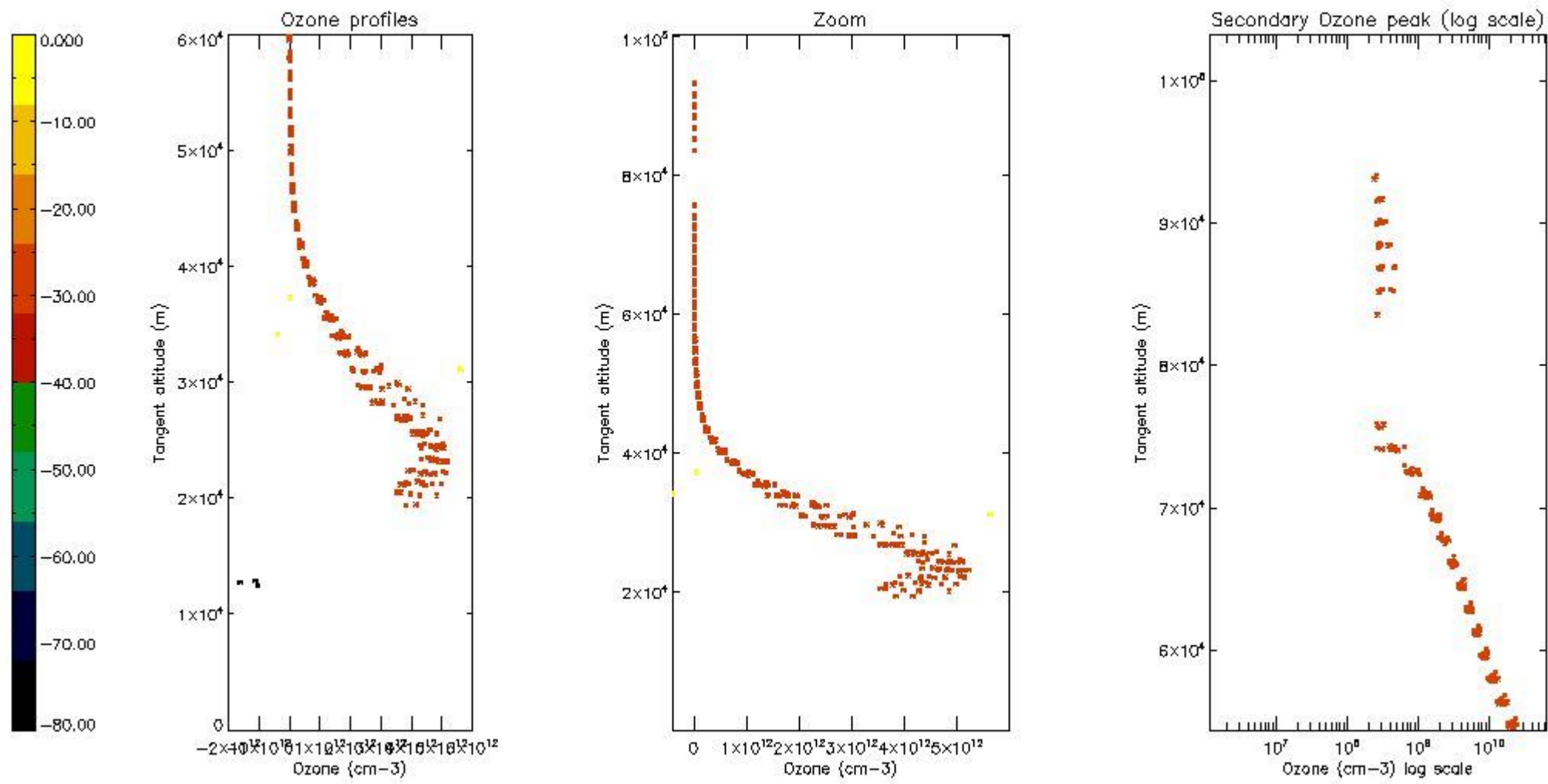
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



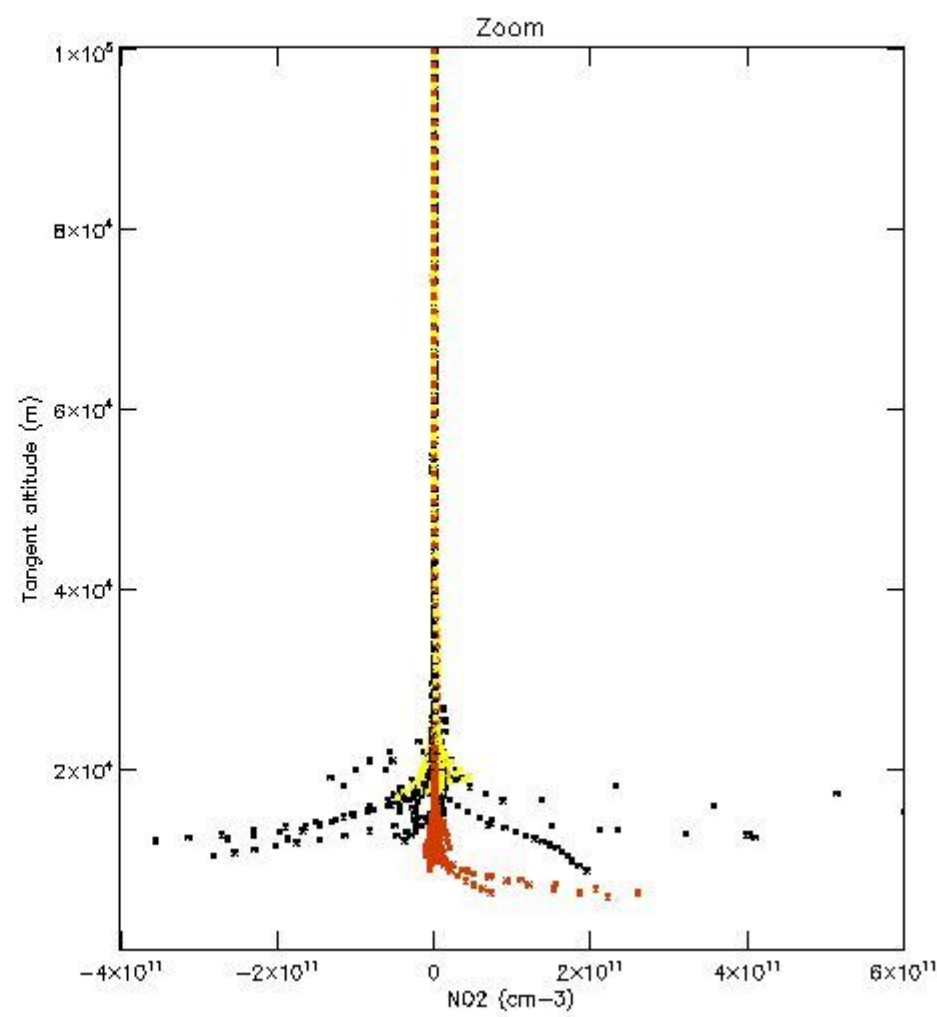
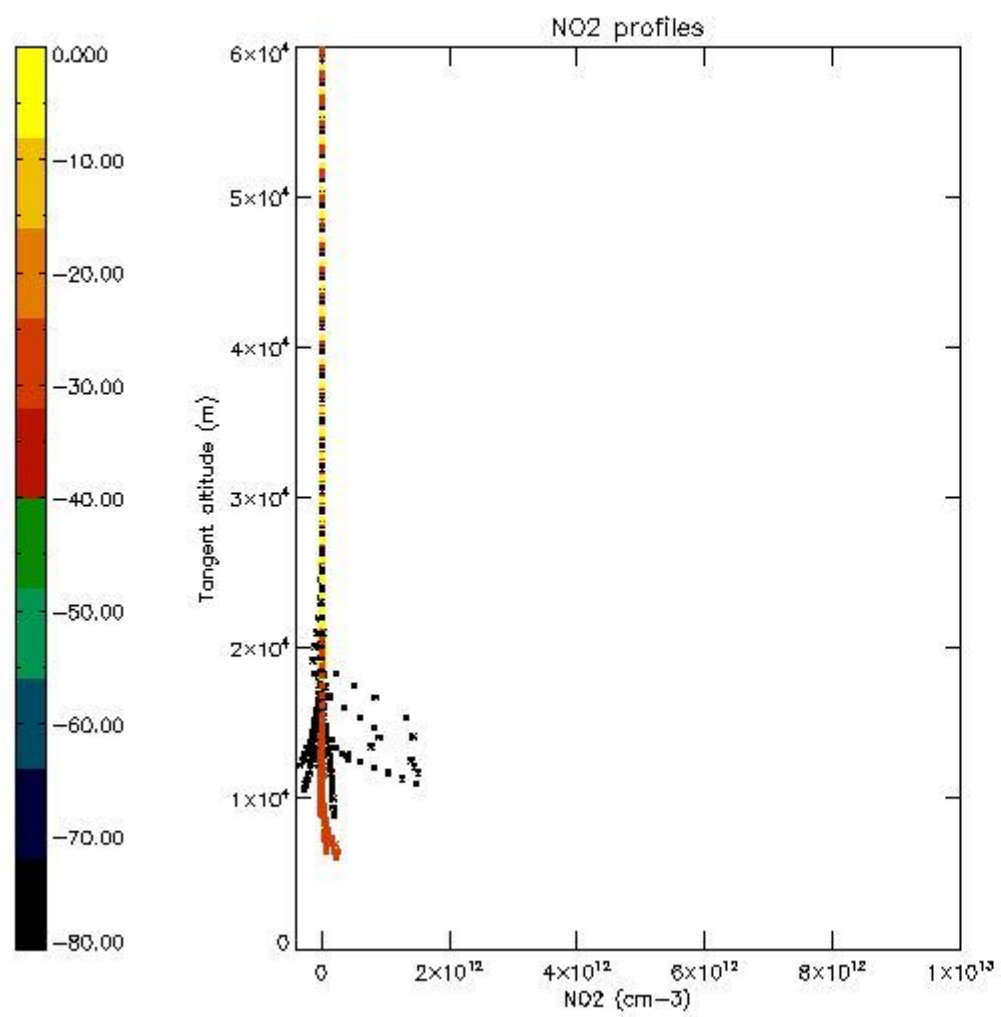
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



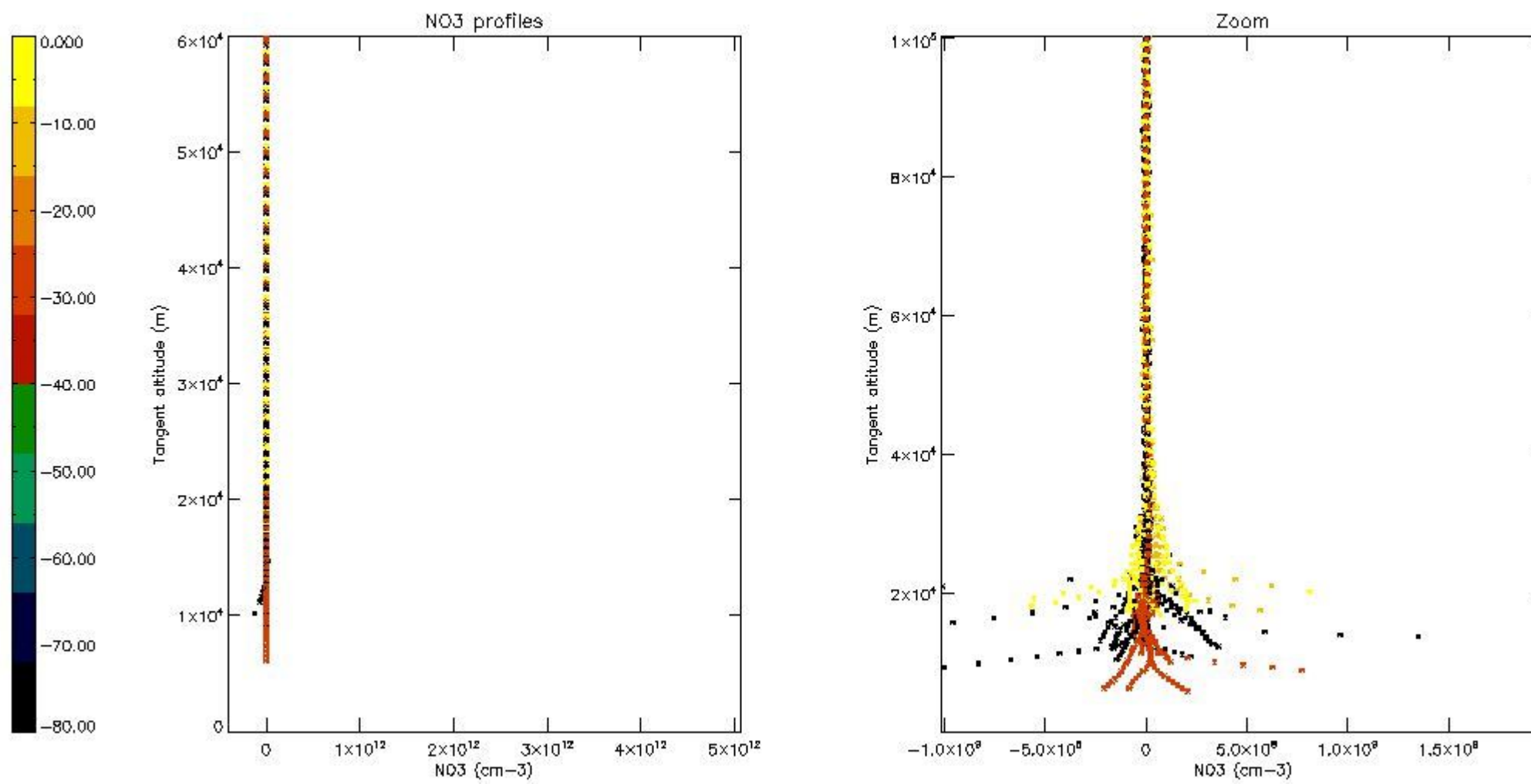
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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	18-JUN-2007 00:07:17
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	18-JUN-2007 00:07:17
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	18-JUN-2007 00:07:17

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[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	22APR2013 20:52:59
Data source version	GOMOS/6.01
Start time of products	18-06-2007 (18JUN2007 00:00:00)
Stop time of products	19-06-2007 (19JUN2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	275
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

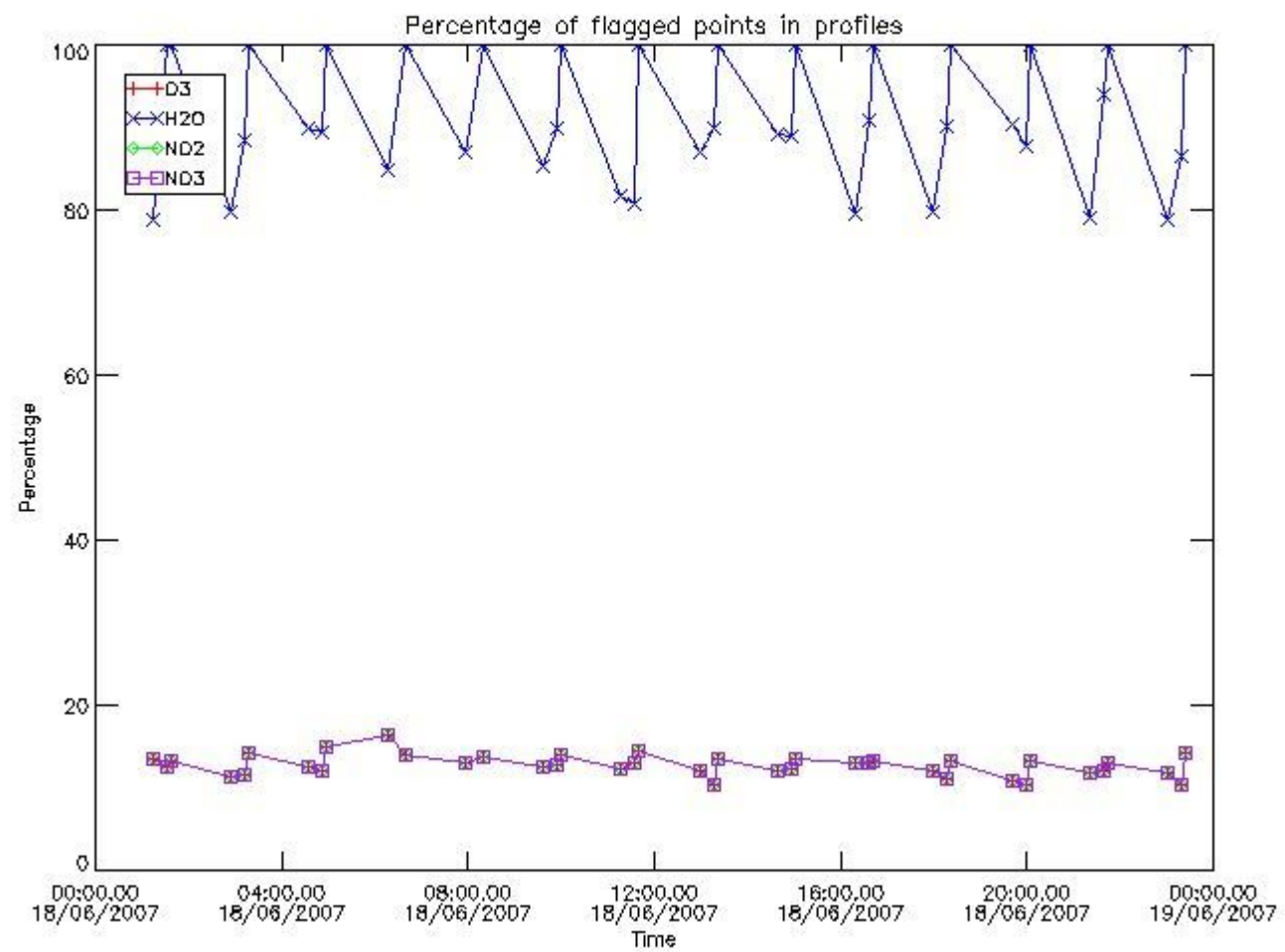
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070618_000717_000000402059_00088_27697_0645.N1	18-JUN-2007 00:07:17	Straylight	40.000	141	Bet Ara	2.8400	4600.0	80	27697	No
2	GOM_NL__2PRFIN20070618_000840_000000402059_00088_27697_0646.N1	18-JUN-2007 00:08:40	Straylight	39.500	147	Alp Ara	2.8770	26000.	79	27697	No
3	GOM_NL__2PRFIN20070618_001025_000000422059_00088_27697_0647.N1	18-JUN-2007 00:10:25	Twilight_stray	42.000	40	The Sco	1.8590	7100.0	84	27697	No
4	GOM_NL__2PRFIN20070618_001207_000000432059_00088_27697_0648.N1	18-JUN-2007 00:12:07	Twilight_stray	42.500	25	35Lam Sco	1.6200	28000.	85	27697	No
5	GOM_NL__2PRFIN20070618_001333_000000422059_00088_27697_0649.N1	18-JUN-2007 00:13:33	Twilight_stray	41.500	75	26Eps Sco	2.2910	4250.0	83	27697	No
6	GOM_NL__2PRFIN20070618_001618_000000372059_00088_27697_0650.N1	18-JUN-2007 00:16:18	Bright	36.500	156	20Sig Sco	2.9030	28000.	73	27697	No
7	GOM_NL__2PRFIN20070618_001804_000000362059_00088_27697_0651.N1	18-JUN-2007 00:18:04	Bright	36.000	97	8Bet1Sco	2.5610	30000.	72	27697	No
8	GOM_NL__2PRFIN20070618_002023_000000372059_00088_27697_0652.N1	18-JUN-2007 00:20:23	Bright	37.000	98	13Zet Oph	2.5710	30000.	74	27697	No
9	GOM_NL__2PRFIN20070618_002229_000000372059_00088_27697_0653.N1	18-JUN-2007 00:22:29	Bright	36.500	120	1Del Oph	2.7340	3200.0	73	27697	No
10	GOM_NL__2PRFIN20070618_002532_000000352059_00088_27697_0654.N1	18-JUN-2007 00:25:32	Bright	35.000	102	24Alp Ser	2.6000	4250.0	70	27697	No
11	GOM_NL__2PRFIN20070618_002938_000000392059_00088_27697_0655.N1	18-JUN-2007 00:29:38	Bright	38.500	127	27Bet Her	2.7810	4700.0	77	27697	No
12	GOM_NL__2PRFIN20070618_003114_000000372059_00088_27697_0656.N1	18-JUN-2007 00:31:14	Bright	37.000	67	5Alp CrB	2.2210	11000.	74	27697	No
13	GOM_NL__2PRFIN20070618_004101_000000372059_00088_27697_0657.N1	18-JUN-2007 00:41:01	Bright	36.500	119	14Eta Dra	2.7270	4700.0	73	27697	No
14	GOM_NL__2PRFIN20070618_004433_000000362059_00088_27697_0658.N1	18-JUN-2007 00:44:33	Bright	36.000	60	7Bet UMi	2.0810	3950.0	72	27697	No
15	GOM_NL__2PRFIN20070618_004909_000000342059_00088_27697_0659.N1	18-JUN-2007 00:49:09	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	27697	No
16	GOM_NL__2PRFIN20070618_005925_000000532059_00088_27697_0660.N1	18-JUN-2007 00:59:25	Bright	53.000	160	23Gam Per	2.9300	4700.0	106	27697	No
17	GOM_NL__2PRFIN20070618_011335_000000452059_00088_27697_0661.N1	18-JUN-2007 01:13:35	Dark	45.000	94	92Alp Cet	2.5260	3100.0	90	27697	No
18	GOM_NL__2PRFIN20070618_013132_000000452059_00088_27697_0662.N1	18-JUN-2007 01:31:32	Dark	44.500	9	Alp Eri	0.45300	24000.	89	27697	No
19	GOM_NL__2PRFIN20070618_013653_000000392059_00089_27698_0652.N1	18-JUN-2007 01:36:53	Dark	38.500	135	Bet Hyi	2.8200	5800.0	77	27698	No
20	GOM_NL__2PRFIN20070618_014753_000000402059_00089_27698_0653.N1	18-JUN-2007 01:47:53	Straylight	40.000	141	Bet Ara	2.8400	4600.0	80	27698	No
21	GOM_NL__2PRFIN20070618_014916_000000412059_00089_27698_0654.N1	18-JUN-2007 01:49:16	Straylight	40.500	147	Alp Ara	2.8770	26000.	81	27698	No
22	GOM_NL__2PRFIN20070618_015101_000000442059_00089_27698_0655.N1	18-JUN-2007 01:51:01	Twilight_stray	43.500	40	The Sco	1.8590	7100.0	87	27698	No
23	GOM_NL__2PRFIN20070618_015243_000000452059_00089_27698_0656.N1	18-JUN-2007 01:52:43	Twilight_stray	44.500	25	35Lam Sco	1.6200	28000.	89	27698	No
24	GOM_NL__2PRFIN20070618_015409_000000412059_00089_27698_0657.N1	18-JUN-2007 01:54:09	Twilight_stray	40.500	75	26Eps Sco	2.2910	4250.0	81	27698	No
25	GOM_NL__2PRFIN20070618_015654_000000372059_00089_27698_0658.N1	18-JUN-2007 01:56:54	Bright	36.500	156	20Sig Sco	2.9030	28000.	73	27698	No
26	GOM_NL__2PRFIN20070618_015840_000000362059_00089_27698_0659.N1	18-JUN-2007 01:58:40	Bright	35.500	97	8Bet1Sco	2.5610	30000.	71	27698	No
27	GOM_NL__2PRFIN20070618_020059_000000372059_00089_27698_0660.N1	18-JUN-2007 02:00:59	Bright	37.000	98	13Zet Oph	2.5710	30000.	74	27698	No
28	GOM_NL__2PRFIN20070618_020305_000000372059_00089_27698_0661.N1	18-JUN-2007 02:03:05	Bright	36.500	120	1Del Oph	2.7340	3200.0	73	27698	No
29	GOM_NL__2PRFIN20070618_020608_000000352059_00089_27698_0662.N1	18-JUN-2007 02:06:08	Bright	35.000	102	24Alp Ser	2.6000	4250.0	70	27698	No
30	GOM_NL__2PRFIN20070618_021013_000000362059_00089_27698_0663.N1	18-JUN-2007 02:10:13	Bright	35.500	127	27Bet Her	2.7810	4700.0	71	27698	No
31	GOM_NL__2PRFIN20070618_021150_000000372059_00089_27698_0664.N1	18-JUN-2007 02:11:50	Bright	36.500	67	5Alp CrB	2.2210	11000.	73	27698	No
32	GOM_NL__2PRFIN20070618_022137_000000352059_00089_27698_0665.N1	18-JUN-2007 02:21:37	Bright	35.000	119	14Eta Dra	2.7270	4700.0	70	27698	No
33	GOM_NL__2PRFIN20070618_022509_000000352059_00089_27698_0666.N1	18-JUN-2007 02:25:09	Bright	34.500	60	7Bet UMi	2.0810	3950.0	69	27698	No
34	GOM_NL__2PRFIN20070618_022944_000000322059_00089_27698_0667.N1	18-JUN-2007 02:29:44	Bright	31.500	49	1Alp UMi	1.9900	6300.0	63	27698	No
35	GOM_NL__2PRFIN20070618_024002_000000472059_00089_27698_0668.N1	18-JUN-2007 02:40:02	Bright	46.500	160	23Gam Per	2.9300	4700.0	93	27698	No
36	GOM_NL__2PRFIN20070618_025411_000000452059_00089_27698_0669.N1	18-JUN-2007 02:54:11	Dark	45.000	94	92Alp Cet	2.5260	3100.0	90	27698	No
37	GOM_NL__2PRFIN20070618_031208_000000442059_00089_27698_0670.N1	18-JUN-2007 03:12:08	Dark	44.000	9	Alp Eri	0.45300	24000.	88	27698	No
38	GOM_NL__2PRFIN20070618_031729_000000362059_00090_27699_0660.N1	18-JUN-2007 03:17:29	Dark	36.000	135	Bet Hyi	2.8200	5800.0	72	27699	No
39	GOM_NL__2PRFIN20070618_032829_000000412059_00090_27699_0661.N1	18-JUN-2007 03:28:29	Straylight	40.500	141	Bet Ara	2.8400	4600.0	81	27699	No
40	GOM_NL__2PRFIN20070618_032952_000000402059_00090_27699_0662.N1	18-JUN-2007 03:29:52	Straylight	39.500	147	Alp Ara	2.8770	26000.	79	27699	No
41	GOM_NL__2PRFIN20070618_033138_000000412059_00090_27699_0663.N1	18-JUN-2007 03:31:38	Twilight_stray	41.000	40	The Sco	1.8590	7100.0	82	27699	No
42	GOM_NL__2PRFIN20070618_033320_000000422059_00090_27699_0664.N1	18-JUN-2007 03:33:20	Twilight_stray	41.500	25	35Lam Sco	1.6200	28000.	83	27699	No

220	GOM_NL__2PRFIN20070618_191109_000000372059_00099_27708_0954.N1	18-JUN-2007 19:11:09	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	27708	No
221	GOM_NL__2PRFIN20070618_191544_000000362059_00099_27708_0955.N1	18-JUN-2007 19:15:44	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	27708	No
222	GOM_NL__2PRFIN20070618_192601_000000462059_00099_27708_0956.N1	18-JUN-2007 19:26:01	Bright	46.000	160	23Gam Per	2.9300	4700.0	92	27708	No
223	GOM_NL__2PRFIN20070618_194013_000000472059_00099_27708_0957.N1	18-JUN-2007 19:40:13	Dark	47.000	94	92Alp Cet	2.5260	3100.0	94	27708	No
224	GOM_NL__2PRFIN20070618_195811_000000492059_00099_27708_0958.N1	18-JUN-2007 19:58:11	Dark	49.000	9	Alp Eri	0.45300	24000.	98	27708	No
225	GOM_NL__2PRFIN20070618_200331_000000382059_00100_27709_0957.N1	18-JUN-2007 20:03:31	Dark	38.000	135	Bet Hyi	2.8200	5800.0	76	27709	No
226	GOM_NL__2PRFIN20070618_201431_000000382059_00100_27709_0958.N1	18-JUN-2007 20:14:31	Straylight	38.000	141	Bet Ara	2.8400	4600.0	76	27709	No
227	GOM_NL__2PRFIN20070618_201554_000000382059_00100_27709_0959.N1	18-JUN-2007 20:15:54	Straylight	37.500	147	Alp Ara	2.8770	26000.	75	27709	No
228	GOM_NL__2PRFIN20070618_201740_000000432059_00100_27709_0960.N1	18-JUN-2007 20:17:40	Twi_and_stray	42.500	40	The Sco	1.8590	7100.0	85	27709	No
229	GOM_NL__2PRFIN20070618_201922_000000402059_00100_27709_0961.N1	18-JUN-2007 20:19:22	Twi_and_stray	40.000	25	35Lam Sco	1.6200	28000.	80	27709	No
230	GOM_NL__2PRFIN20070618_202046_000000422059_00100_27709_0962.N1	18-JUN-2007 20:20:46	Twi_and_stray	41.500	75	26Eps Sco	2.2910	4250.0	83	27709	No
231	GOM_NL__2PRFIN20070618_202331_000000362059_00100_27709_0963.N1	18-JUN-2007 20:23:31	Bright	35.500	156	20Sig Sco	2.9030	28000.	71	27709	No
232	GOM_NL__2PRFIN20070618_202517_000000362059_00100_27709_0964.N1	18-JUN-2007 20:25:17	Bright	35.500	97	8Bet1Sco	2.5610	30000.	71	27709	No
233	GOM_NL__2PRFIN20070618_202736_000000372059_00100_27709_0965.N1	18-JUN-2007 20:27:36	Bright	37.000	98	13Zet Oph	2.5710	30000.	74	27709	No
234	GOM_NL__2PRFIN20070618_202942_000000372059_00100_27709_0966.N1	18-JUN-2007 20:29:42	Bright	36.500	120	1Del Oph	2.7340	3200.0	73	27709	No
235	GOM_NL__2PRFIN20070618_203246_000000362059_00100_27709_0967.N1	18-JUN-2007 20:32:46	Bright	35.500	102	24Alp Ser	2.6000	4250.0	71	27709	No
236	GOM_NL__2PRFIN20070618_203648_000000352059_00100_27709_0968.N1	18-JUN-2007 20:36:48	Bright	34.500	127	27Bet Her	2.7810	4700.0	69	27709	No
237	GOM_NL__2PRFIN20070618_203827_000000352059_00100_27709_0969.N1	18-JUN-2007 20:38:27	Bright	35.000	67	5Alp CrB	2.2210	11000.	70	27709	No
238	GOM_NL__2PRFIN20070618_204811_000000382059_00100_27709_0970.N1	18-JUN-2007 20:48:11	Bright	37.500	119	14Eta Dra	2.7270	4700.0	75	27709	No
239	GOM_NL__2PRFIN20070618_205145_000000372059_00100_27709_0971.N1	18-JUN-2007 20:51:45	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	27709	No
240	GOM_NL__2PRFIN20070618_205620_000000362059_00100_27709_0972.N1	18-JUN-2007 20:56:20	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	27709	No
241	GOM_NL__2PRFIN20070618_210637_000000362059_00100_27709_0973.N1	18-JUN-2007 21:06:37	Bright	35.500	160	23Gam Per	2.9300	4700.0	71	27709	No
242	GOM_NL__2PRFIN20070618_212049_000000432059_00100_27709_0974.N1	18-JUN-2007 21:20:49	Dark	43.000	94	92Alp Cet	2.5260	3100.0	86	27709	No
243	GOM_NL__2PRFIN20070618_213848_000000432059_00100_27709_0975.N1	18-JUN-2007 21:38:48	Dark	42.500	9	Alp Eri	0.45300	24000.	85	27709	No
244	GOM_NL__2PRFIN20070618_214407_000000392059_00101_27710_0967.N1	18-JUN-2007 21:44:07	Dark	39.000	135	Bet Hyi	2.8200	5800.0	78	27710	No
245	GOM_NL__2PRFIN20070618_215507_000000442059_00101_27710_0968.N1	18-JUN-2007 21:55:07	Straylight	44.000	141	Bet Ara	2.8400	4600.0	88	27710	No
246	GOM_NL__2PRFIN20070618_215630_000000392059_00101_27710_0969.N1	18-JUN-2007 21:56:30	Straylight	39.000	147	Alp Ara	2.8770	26000.	78	27710	No
247	GOM_NL__2PRFIN20070618_215816_000000392059_00101_27710_0970.N1	18-JUN-2007 21:58:16	Twi_and_stray	39.000	40	The Sco	1.8590	7100.0	78	27710	No
248	GOM_NL__2PRFIN20070618_215958_000000442059_00101_27710_0971.N1	18-JUN-2007 21:59:58	Twi_and_stray	43.500	25	35Lam Sco	1.6200	28000.	87	27710	No
249	GOM_NL__2PRFIN20070618_220122_000000432059_00101_27710_0972.N1	18-JUN-2007 22:01:22	Bright	43.000	75	26Eps Sco	2.2910	4250.0	86	27710	No
250	GOM_NL__2PRFIN20070618_220407_000000362059_00101_27710_0973.N1	18-JUN-2007 22:04:07	Bright	35.500	156	20Sig Sco	2.9030	28000.	71	27710	No
251	GOM_NL__2PRFIN20070618_220553_000000362059_00101_27710_0974.N1	18-JUN-2007 22:05:53	Bright	36.000	97	8Bet1Sco	2.5610	30000.	72	27710	No
252	GOM_NL__2PRFIN20070618_220812_000000372059_00101_27710_0975.N1	18-JUN-2007 22:08:12	Bright	36.500	98	13Zet Oph	2.5710	30000.	73	27710	No
253	GOM_NL__2PRFIN20070618_221018_000000362059_00101_27710_0976.N1	18-JUN-2007 22:10:18	Bright	36.000	120	1Del Oph	2.7340	3200.0	72	27710	No
254	GOM_NL__2PRFIN20070618_221322_000000362059_00101_27710_0977.N1	18-JUN-2007 22:13:22	Bright	36.000	102	24Alp Ser	2.6000	4250.0	72	27710	No
255	GOM_NL__2PRFIN20070618_221724_000000372059_00101_27710_0978.N1	18-JUN-2007 22:17:24	Bright	37.000	127	27Bet Her	2.7810	4700.0	74	27710	No
256	GOM_NL__2PRFIN20070618_221903_000000372059_00101_27710_0979.N1	18-JUN-2007 22:19:03	Bright	36.500	67	5Alp CrB	2.2210	11000.	73	27710	No
257	GOM_NL__2PRFIN20070618_222847_000000382059_00101_27710_0980.N1	18-JUN-2007 22:28:47	Bright	37.500	119	14Eta Dra	2.7270	4700.0	75	27710	No
258	GOM_NL__2PRFIN20070618_223221_000000372059_00101_27710_0981.N1	18-JUN-2007 22:32:21	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	27710	No
259	GOM_NL__2PRFIN20070618_223656_000000362059_00101_27710_0982.N1	18-JUN-2007 22:36:56	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	27710	No
260	GOM_NL__2PRFIN20070618_224713_000000342059_00101_27710_0983.N1	18-JUN-2007 22:47:13	Bright	34.000	160	23Gam Per	2.9300	4700.0	68	27710	No
261	GOM_NL__2PRFIN20070618_230125_000000432059_00101_27710_0984.N1	18-JUN-2007 23:01:25	Dark	42.500	94	92Alp Cet	2.5260	3100.0	85	27710	No
262	GOM_NL__2PRFIN20070618_231924_000000492059_00101_27710_0985.N1	18-JUN-2007 23:19:24	Dark	49.000	9	Alp Eri	0.45300	24000.	98	27710	No
263	GOM_NL__2PRFIN20070618_232443_000000362059_00102_27711_0990.N1	18-JUN-2007 23:24:43	Dark	36.000	135	Bet Hyi	2.8200	5800.0	72	27711	No
264	GOM_NL__2PRFIN20070618_233543_000000412059_00102_27711_0991.N1	18-JUN-2007 23:35:43	Straylight	40.500	141	Bet Ara	2.8400	4600.0	81	27711	No
265	GOM_NL__2PRFIN20070618_233707_000000382059_00102_27711_0992.N1	18-JUN-2007 23:37:07	Straylight	37.500	147	Alp Ara	2.8770	26000.	75	27711	No
266	GOM_NL__2PRFIN20070618_233852_000000422059_00102_27711_0993.N1	18-JUN-2007 23:38:52	Twi_and_stray	42.000	40	The Sco	1.8590	7100.0	84	27711	No
267	GOM_NL__2PRFIN20070618_234034_000000442059_00102_27711_0994.N1	18-JUN-2007 23:40:34	Twi_and_stray	43.500	25	35Lam Sco	1.6200	28000.	87	27711	No
268	GOM_NL__2PRFIN20070618_234159_000000412059_00102_27711_0995.N1	18-JUN-2007 23:41:59	Twi_and_stray	41.000	75	26Eps Sco	2.2910	4250.0	82	27711	No
269	GOM_NL__2PRFIN20070618_234443_000000362059_00102_27711_0996.N1	18-JUN-2007 23:44:43	Bright	36.000	156	20Sig Sco	2.9030	28000.	72	27711	No
270	GOM_NL__2PRFIN20070618_234629_000000362059_00102_27711_0997.N1	18-JUN-2007 23:46:29	Bright	35.500	97	8Bet1Sco	2.5610	30000.	71	27711	No
271	GOM_NL__2PRFIN20070618_234848_000000362059_00102_27711_0998.N1	18-JUN-2007 23:48:48	Bright	36.000	98	13Zet Oph	2.5710	30000.	72	27711	No
272	GOM_NL__2PRFIN20070618_235054_000000372059_00102_27711_0999.N1	18-JUN-2007 23:50:54	Bright	36.500	120	1Del Oph	2.7340	3200.0	73	27711	No
273	GOM_NL__2PRFIN20070618_235358_000000362059_00102_27711_1000.N1	18-JUN-2007 23:53:58	Bright	35.500	102	24Alp Ser	2.6000	4250.0	71	27711	No
274	GOM_NL__2PRFIN20070618_235800_000000382059_00102_27711_1001.N1	18-JUN-2007 23:58:00	Bright	37.500	127	27Bet Her	2.7810	4700.0	75	27711	No
275	GOM_NL__2PRFIN20070618_235939_000000352059_00102_27711_1002.N1	18-JUN-2007 23:59:39	Bright	35.000	67	5Alp CrB	2.2210	11000.	70	27711	No

3. Quality information per product

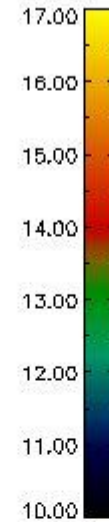
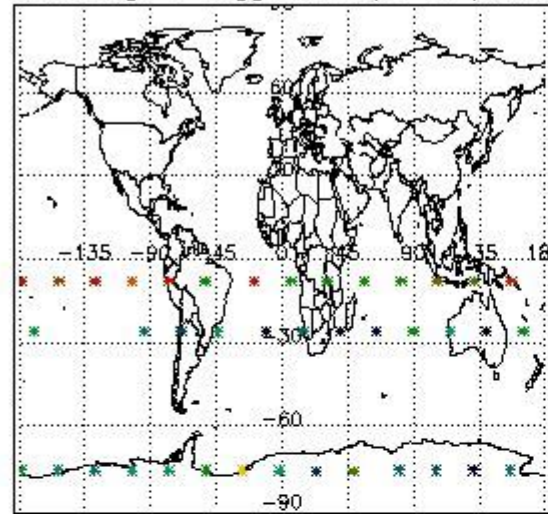
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

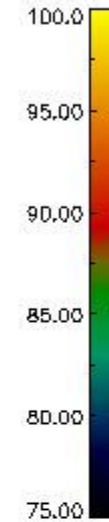
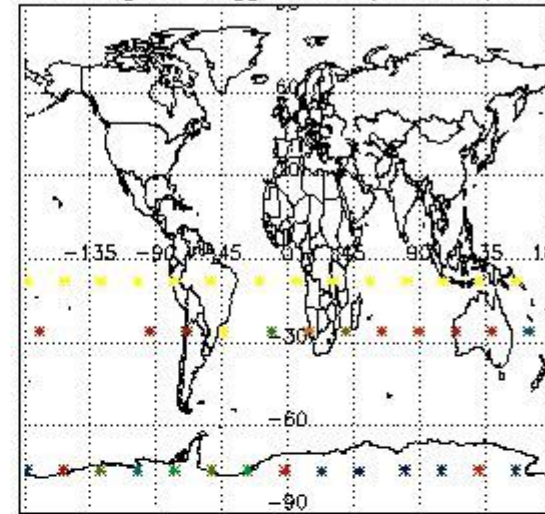


3.2 Plot quality information per product (world map)

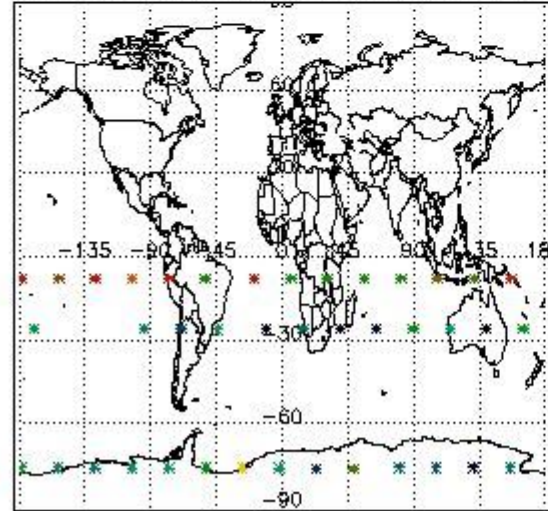
Percentage of flagged data per O3 profile



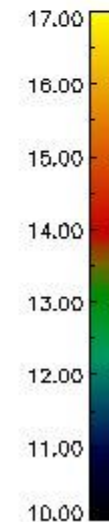
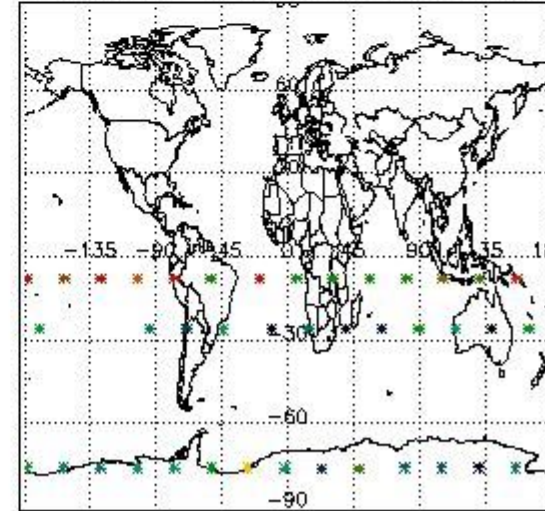
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

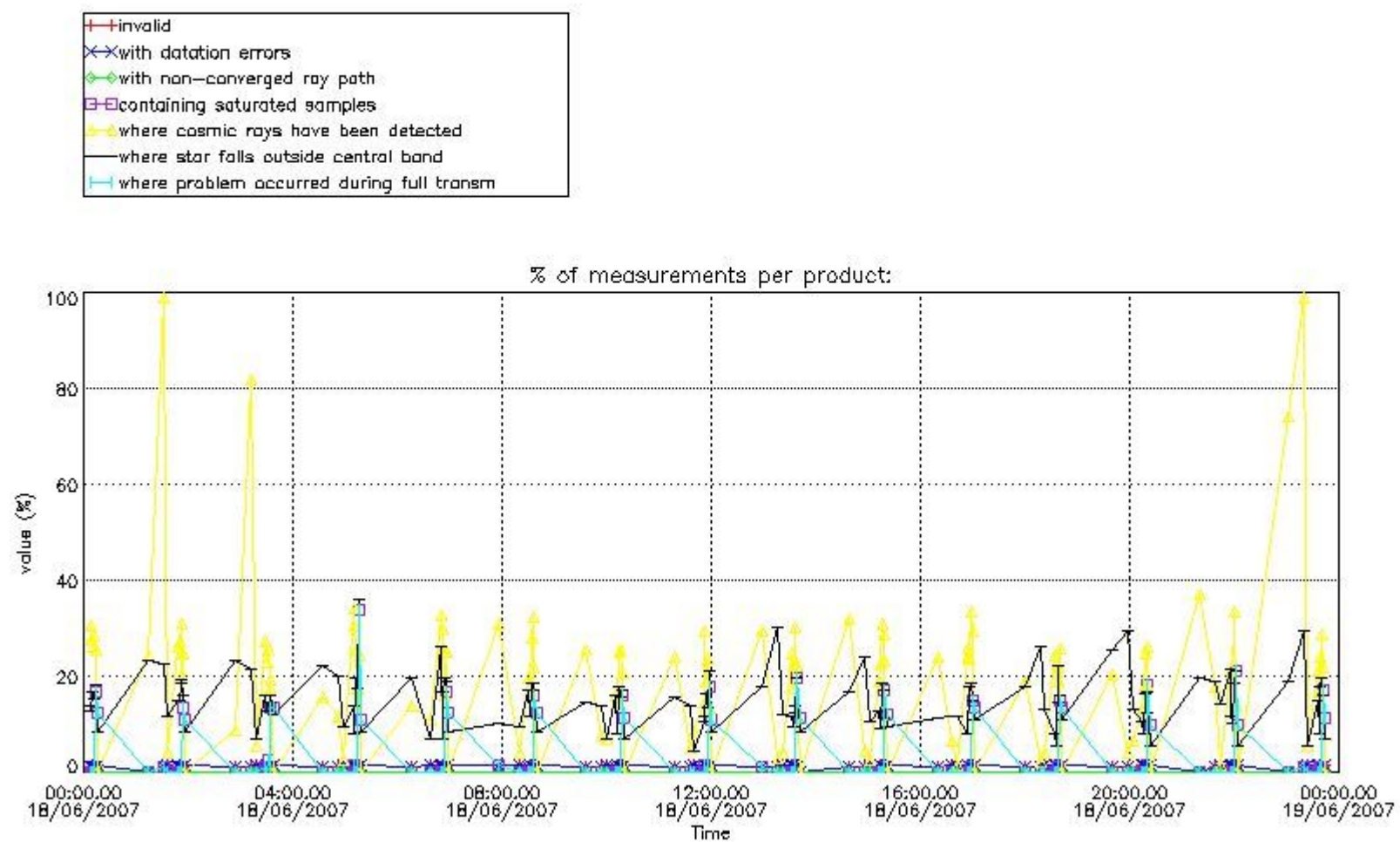


4. Level 1 quality information per product

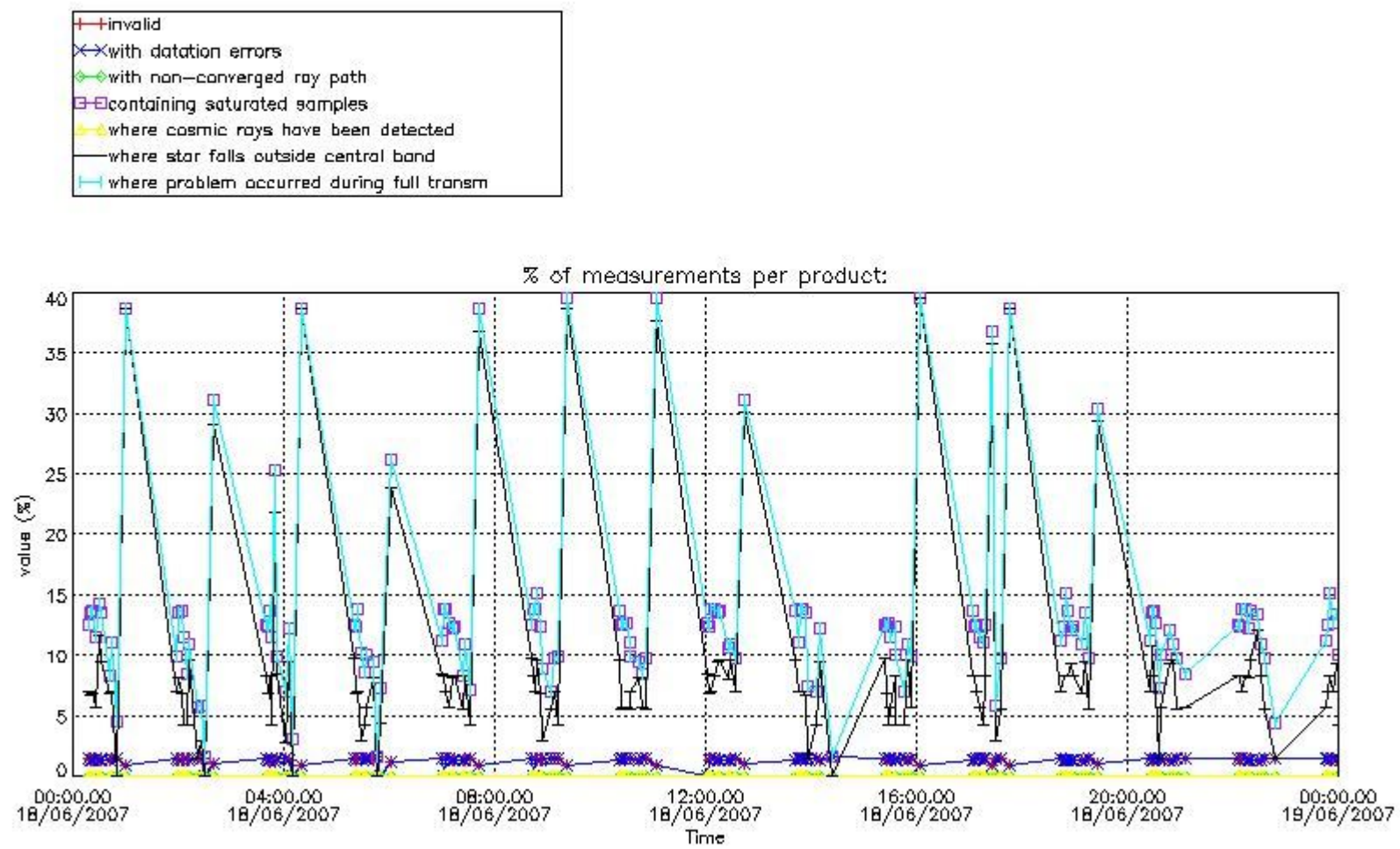
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



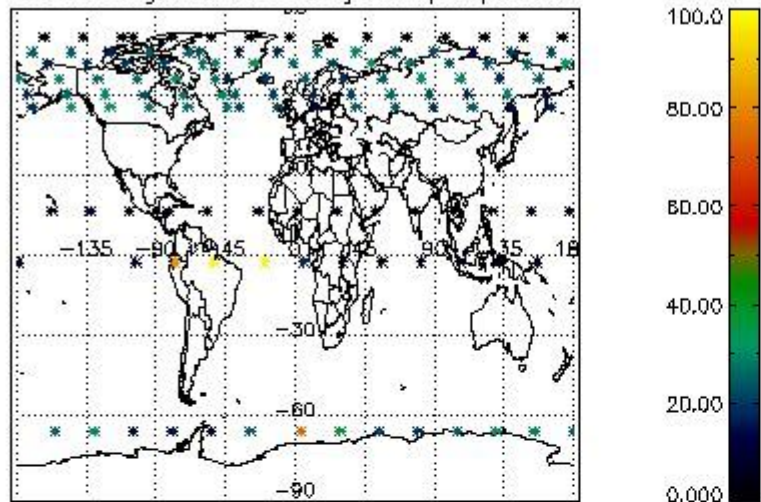
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



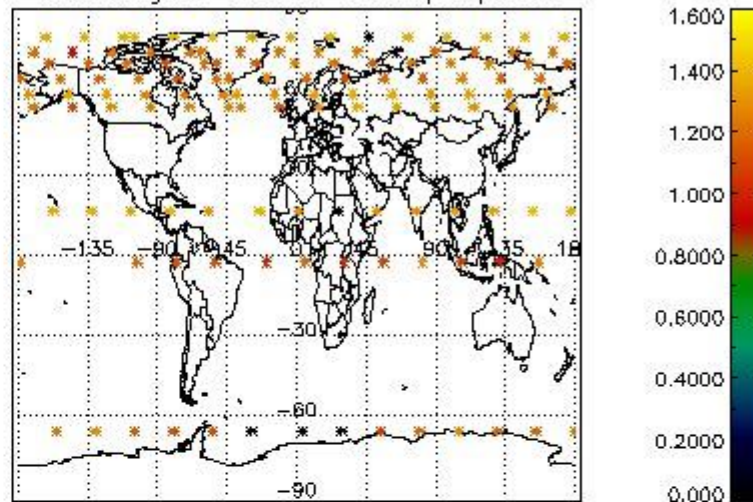
4.2 Plot quality information per product coming from level 1b processing (world map)

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

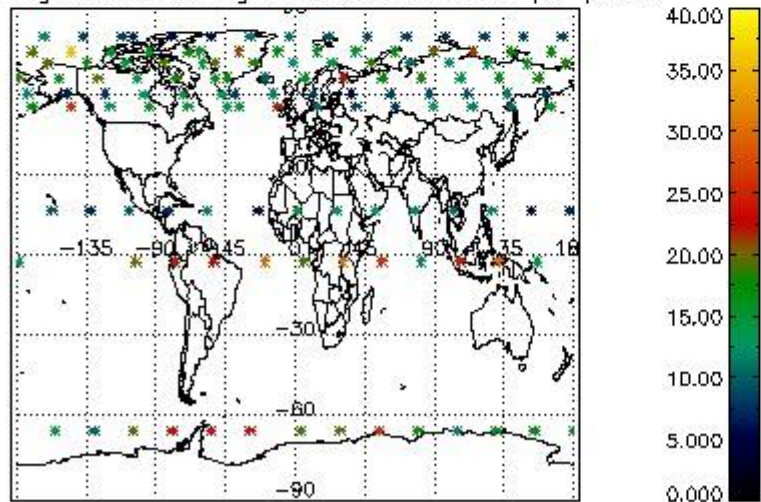
Percentage of cosmic ray hits per profile



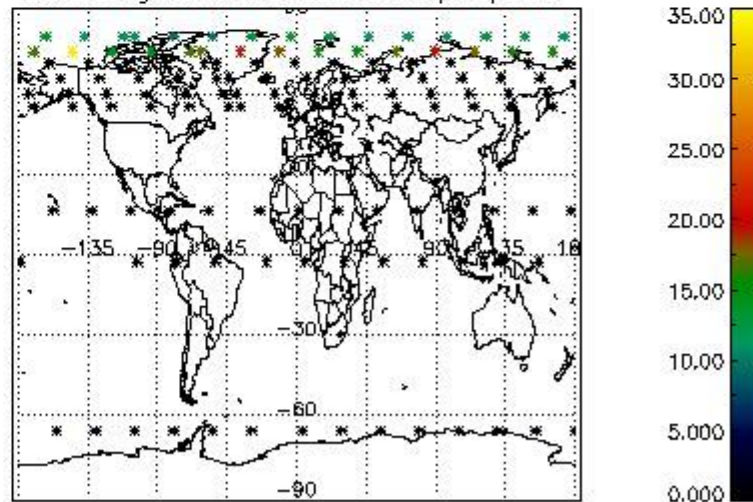
Percentage of datation errors per profile



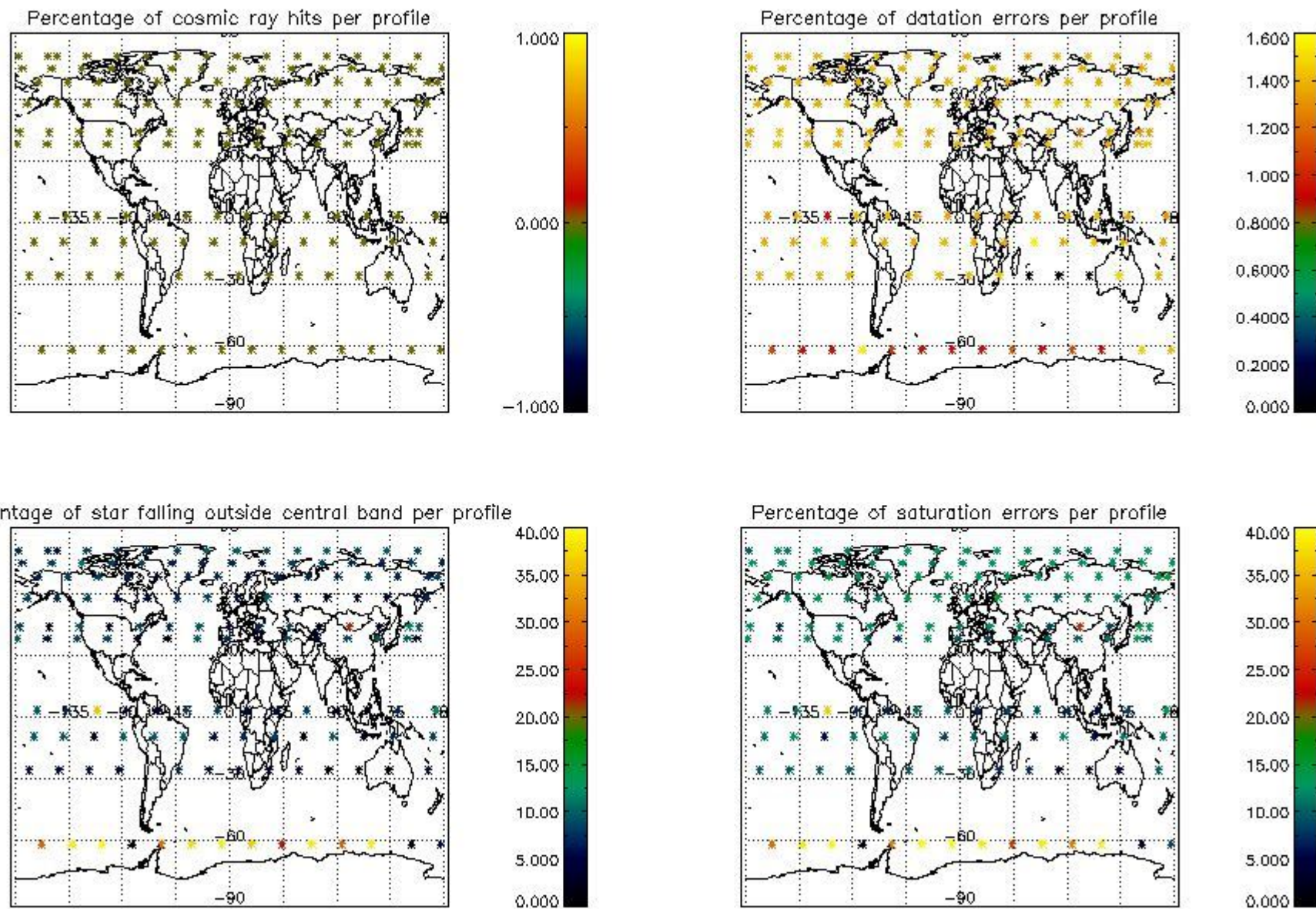
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

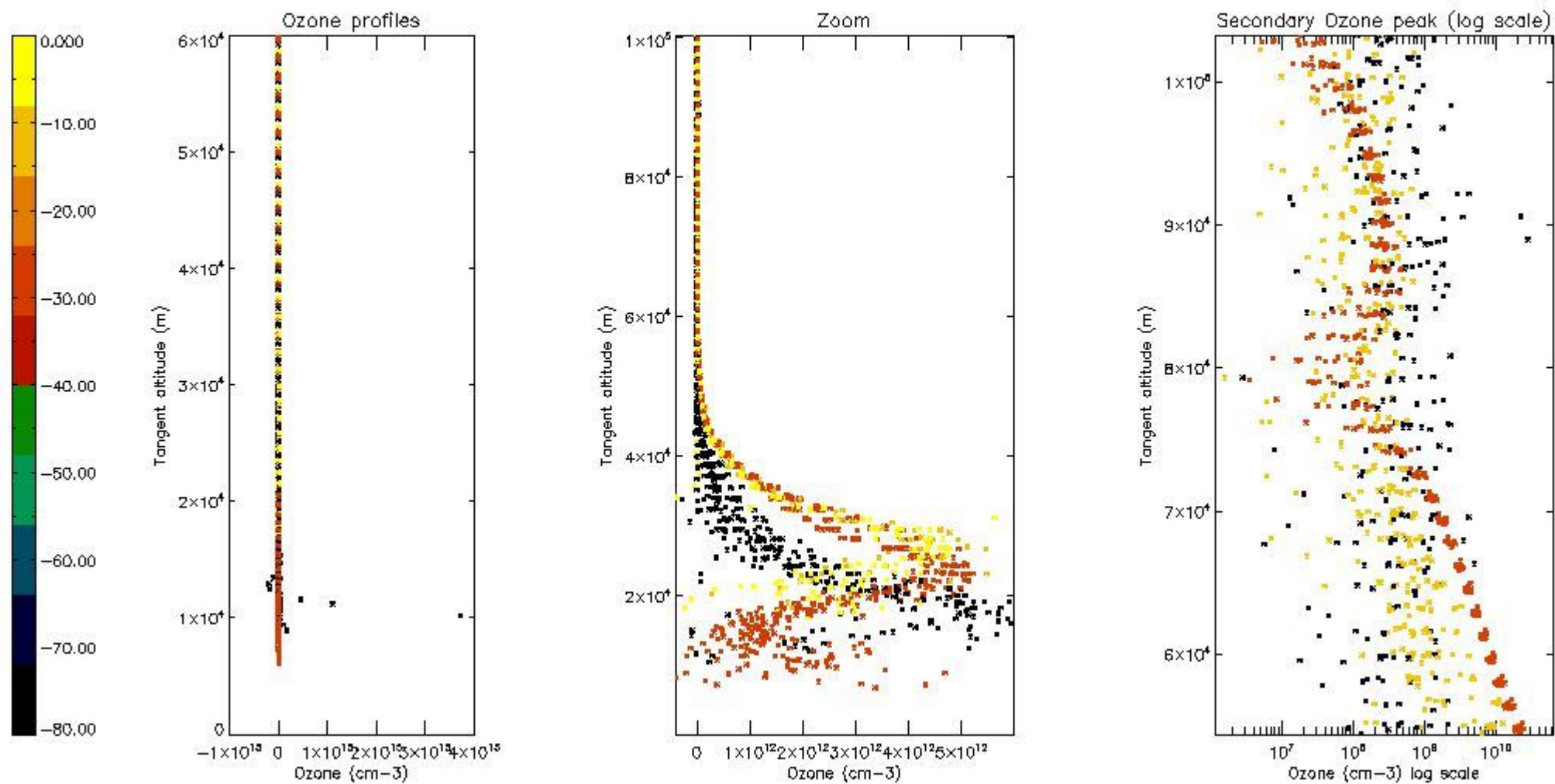
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	16
STD < 20	6

STD < 10	4
STD < 5	3

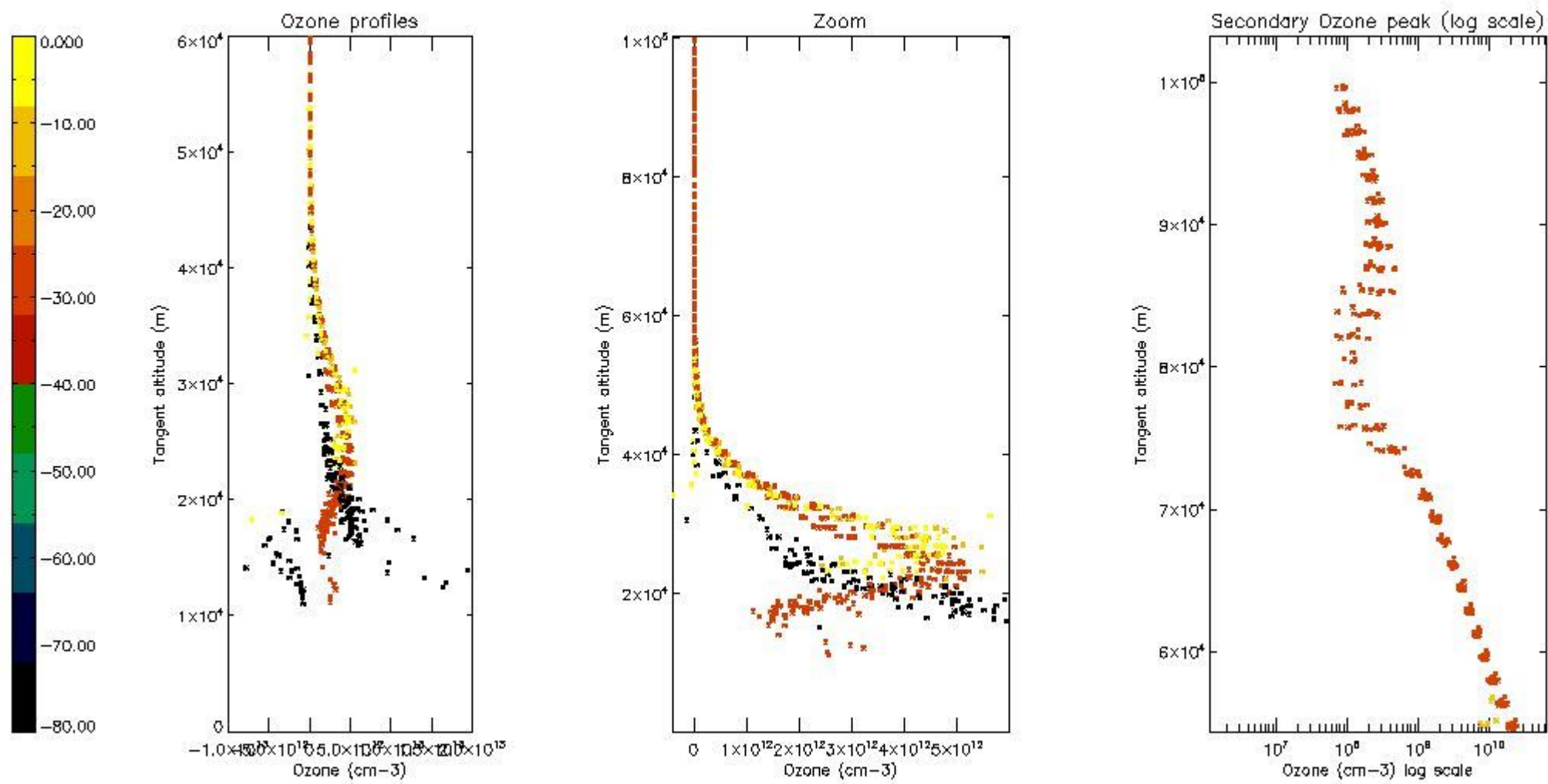
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



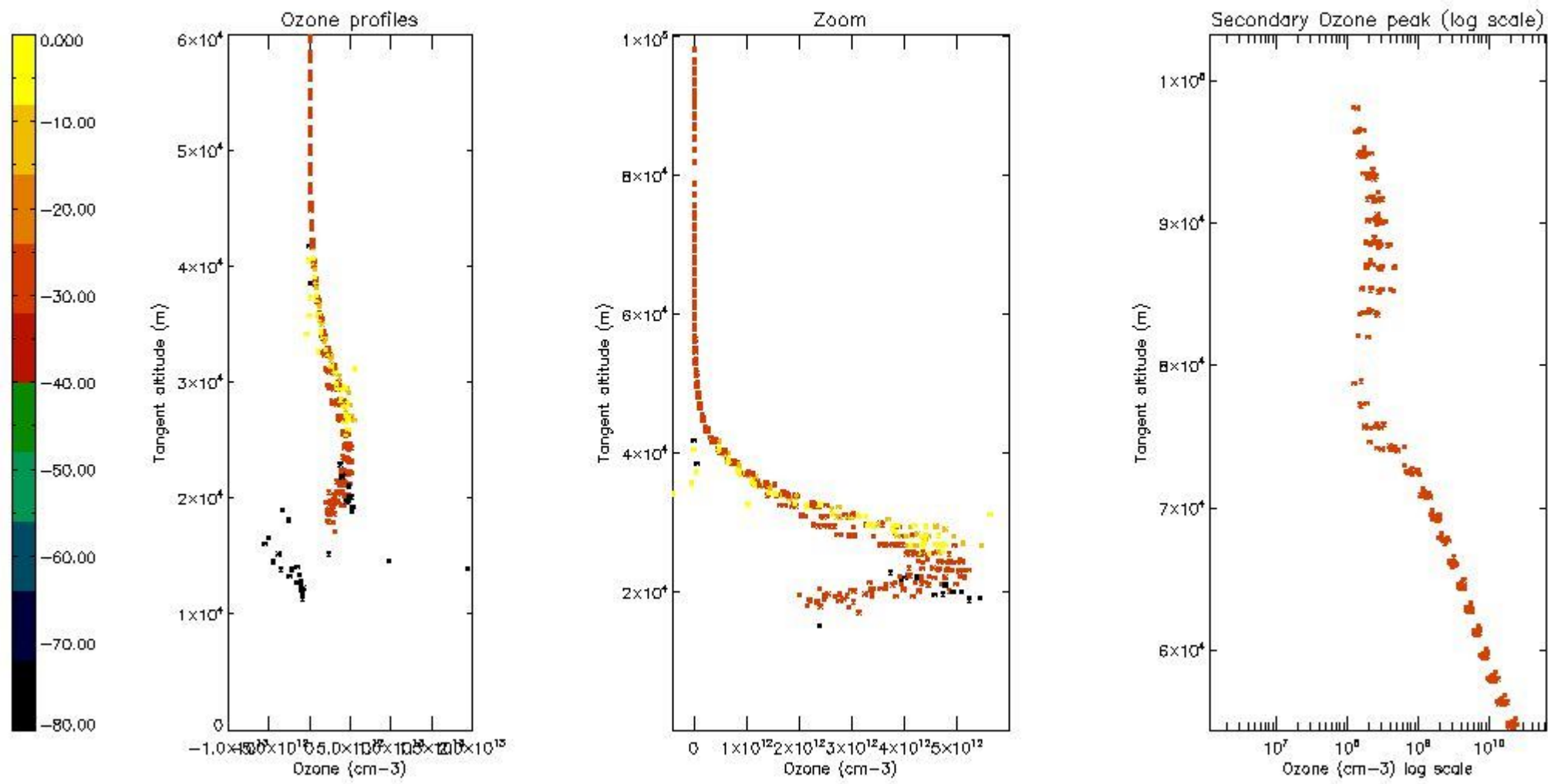
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



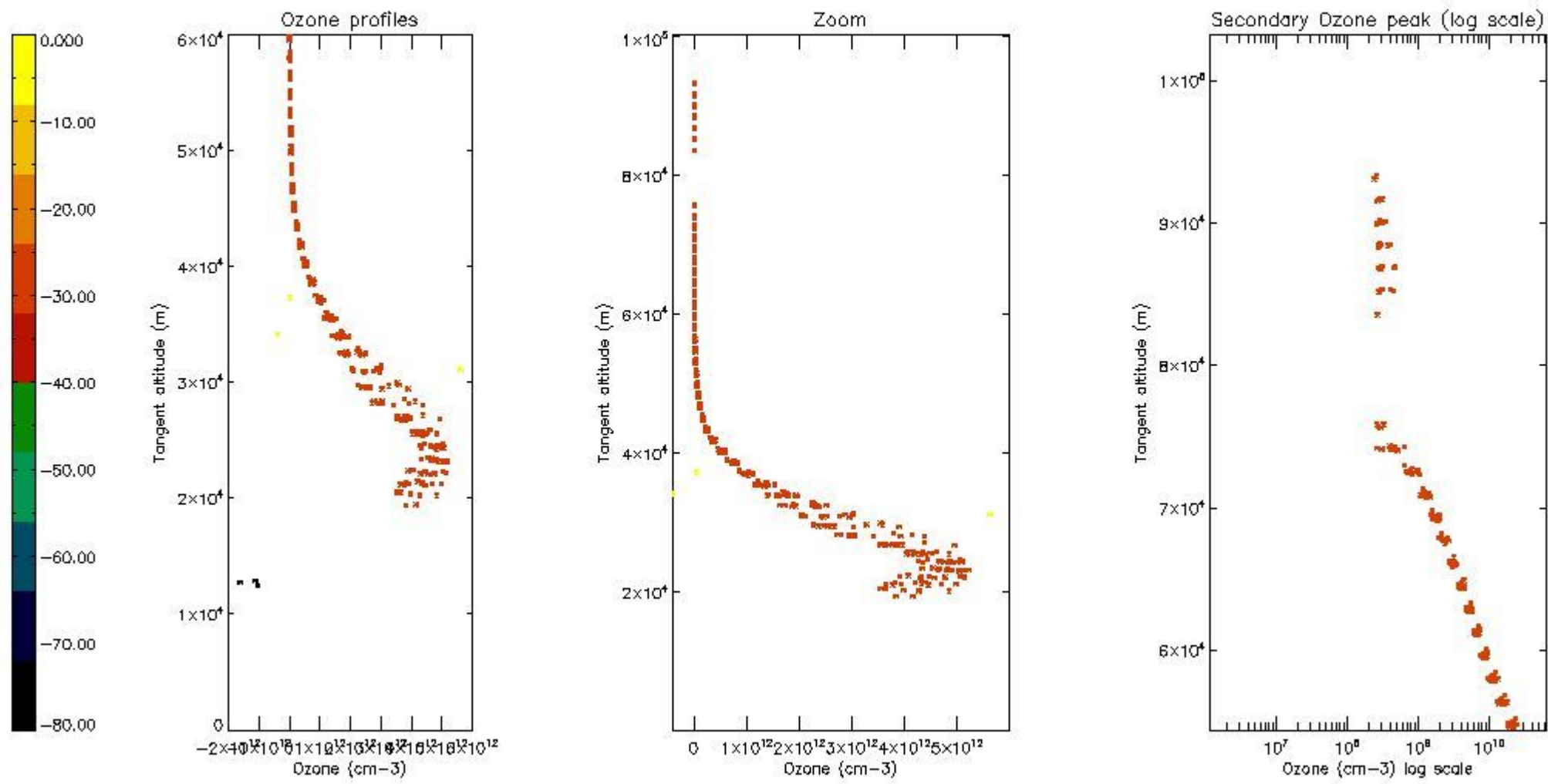
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



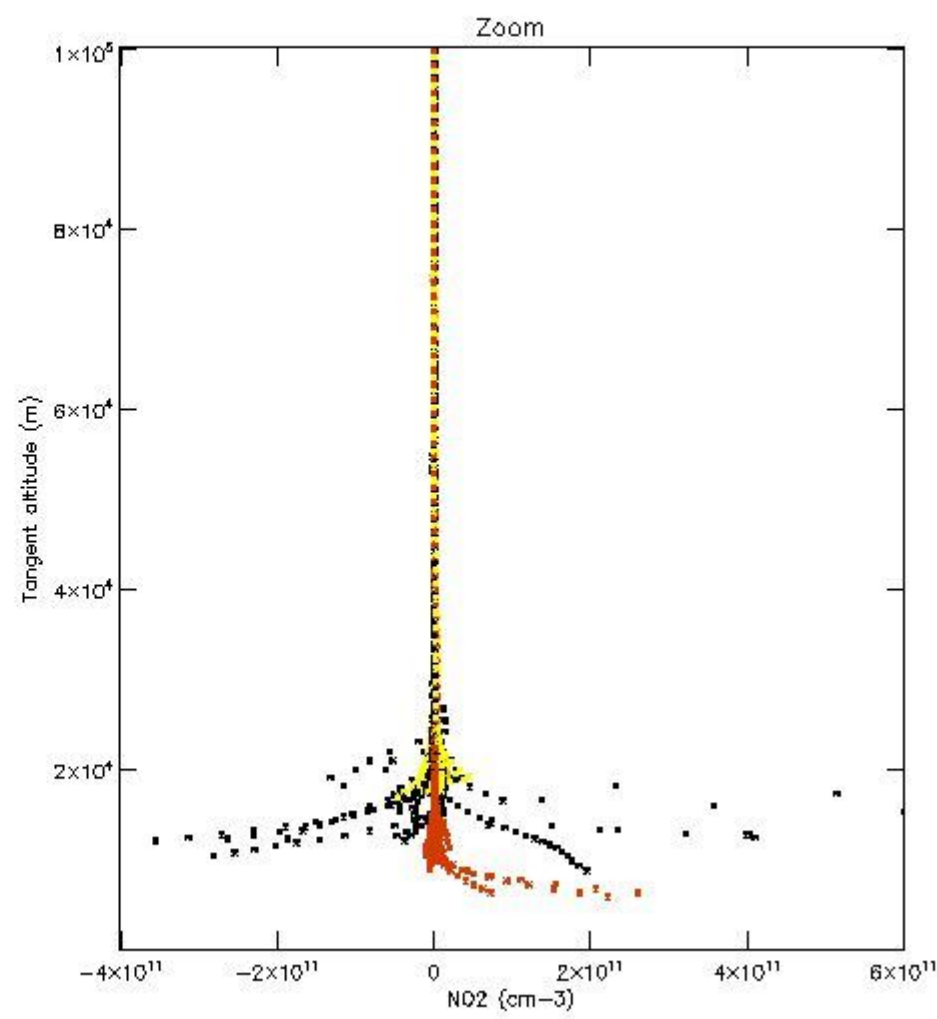
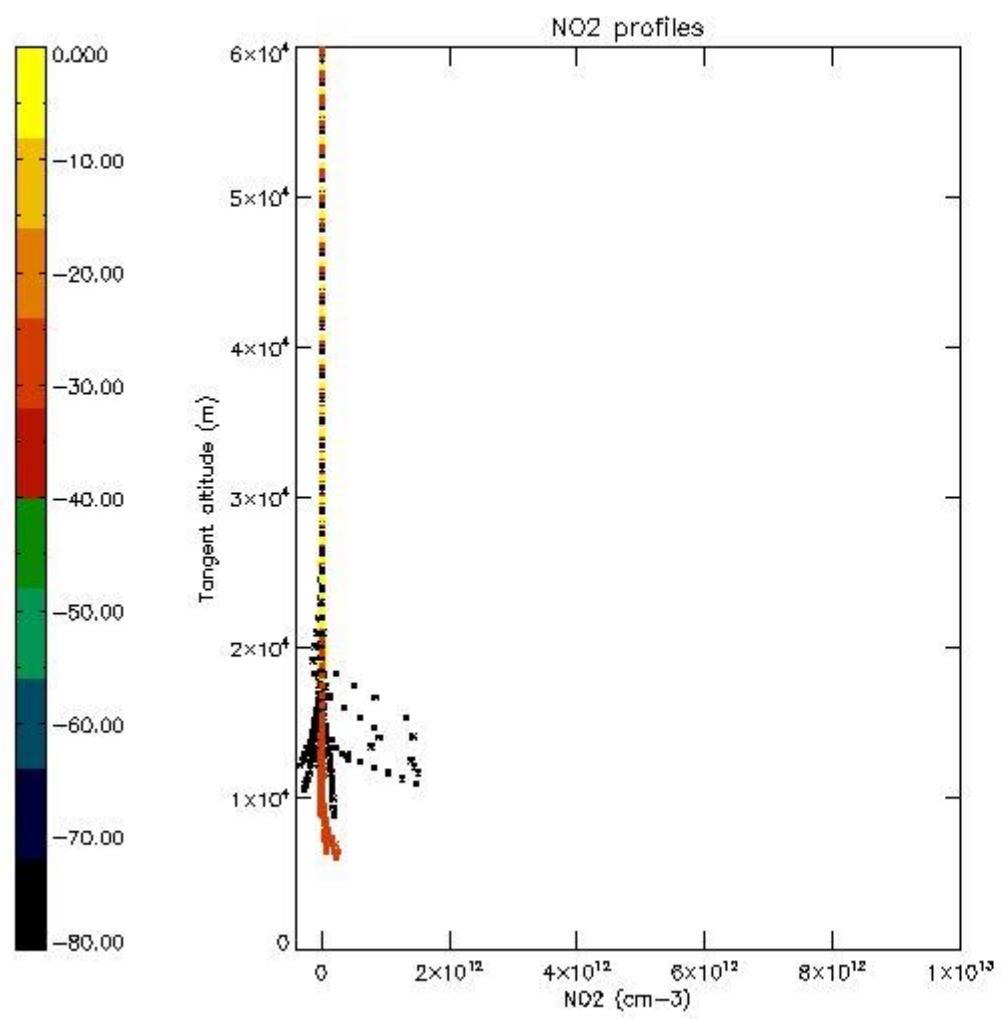
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



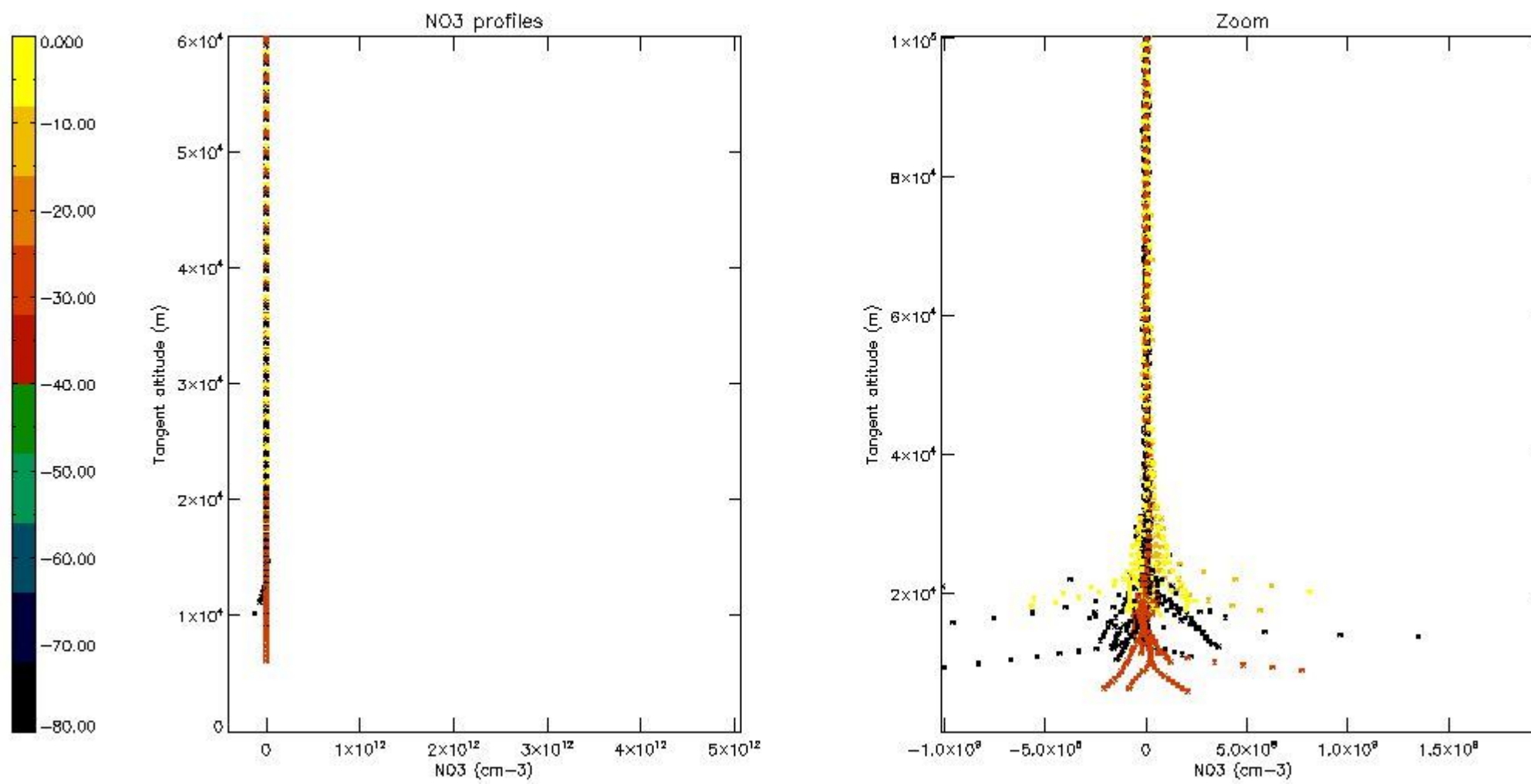
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

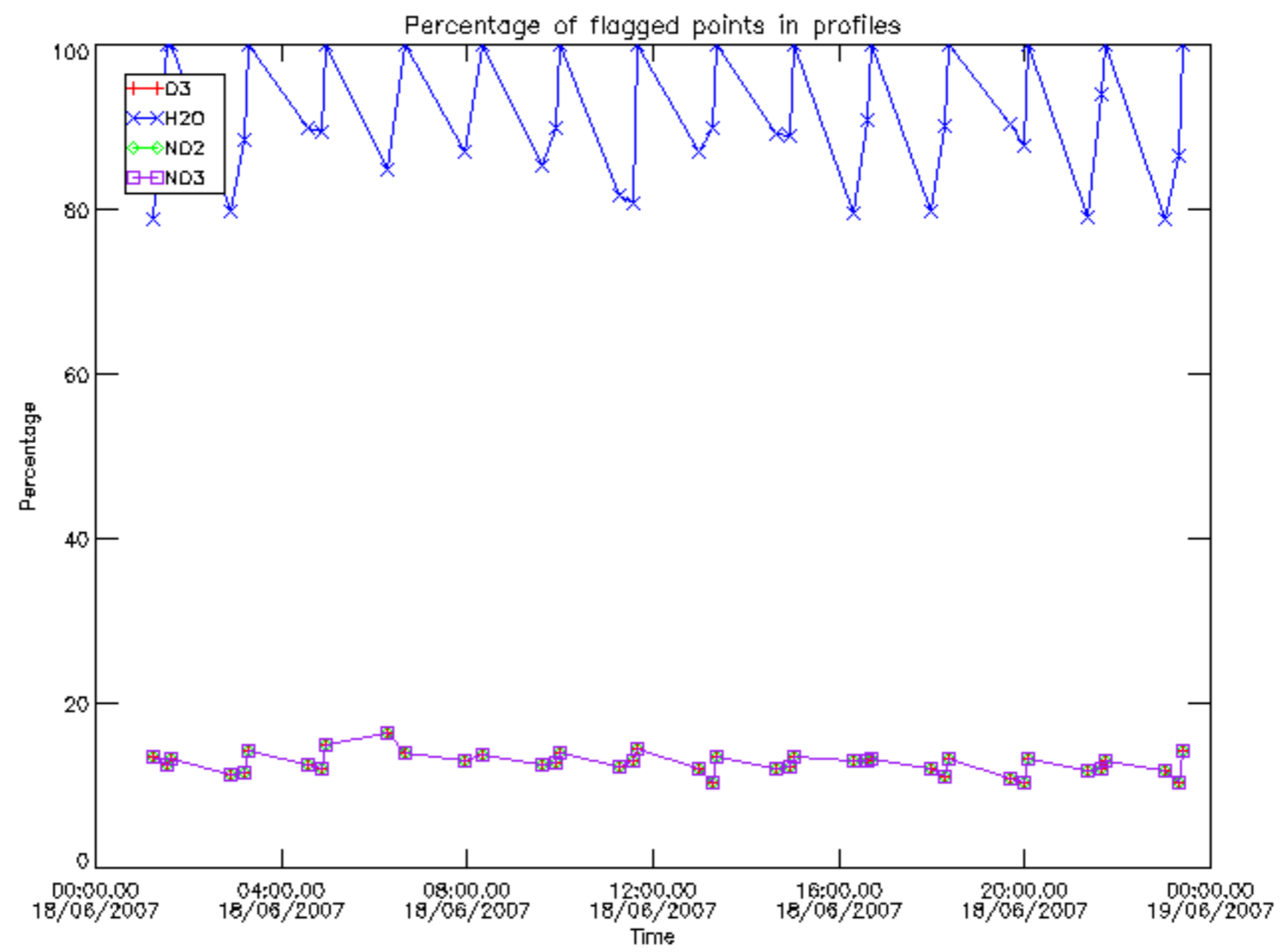
The colorbar represents the latitude.



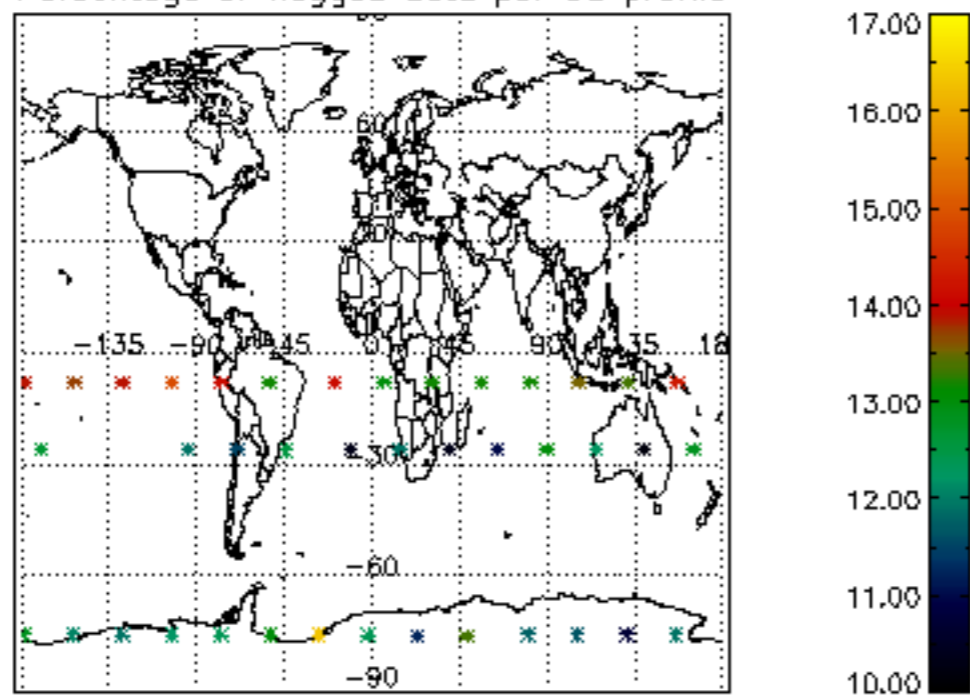
6. Auxiliary Data Files used for the production reported in section 2

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.

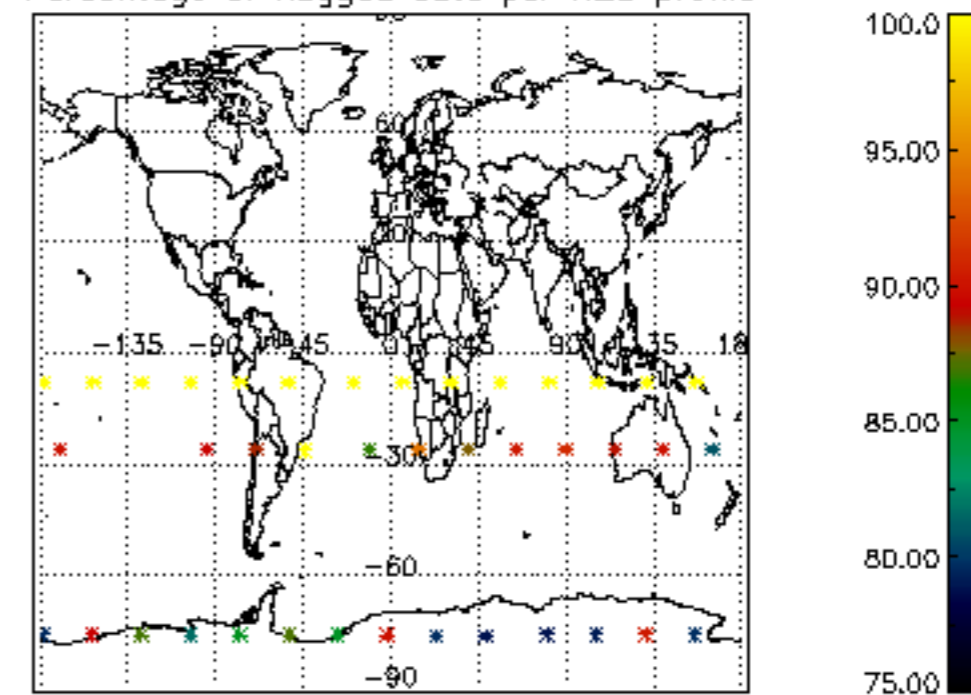
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	18-JUN-2007 00:07:17
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	18-JUN-2007 00:07:17
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	18-JUN-2007 00:07:17



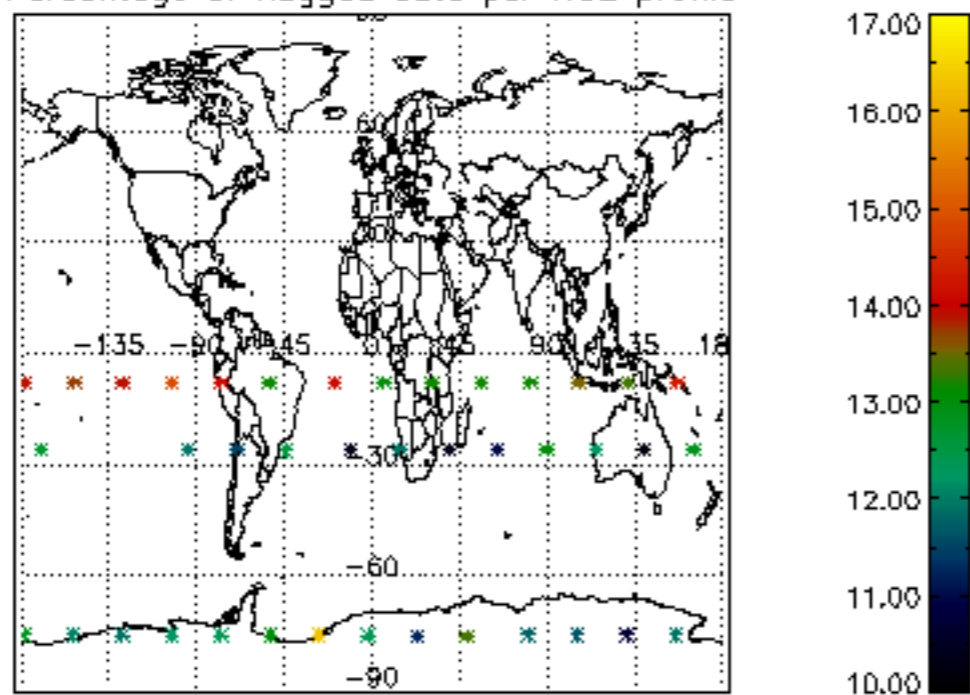
Percentage of flagged data per D3 profile



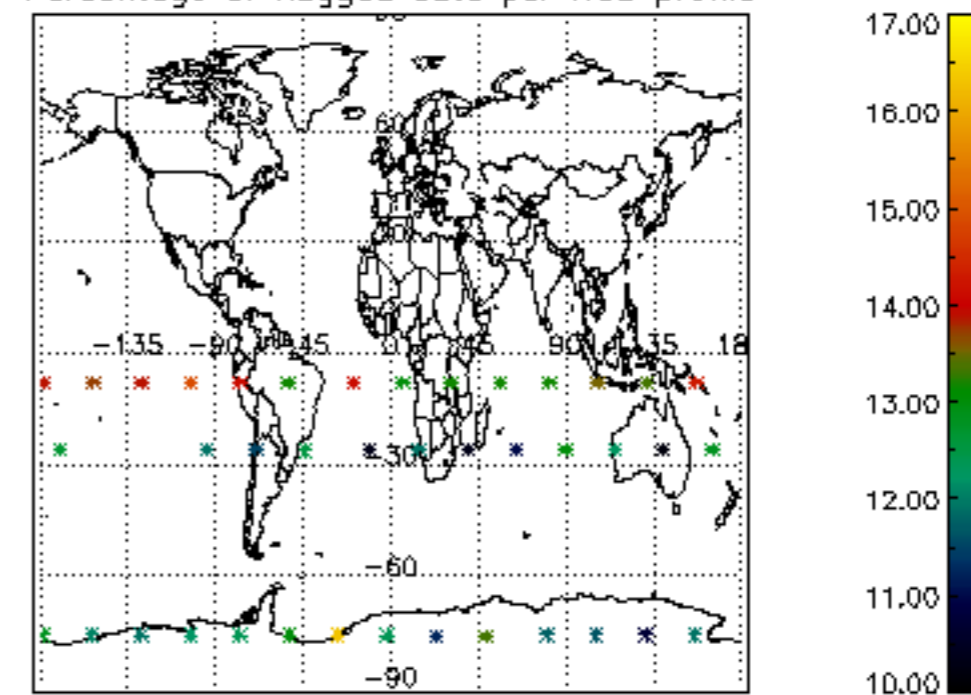
Percentage of flagged data per H2O profile

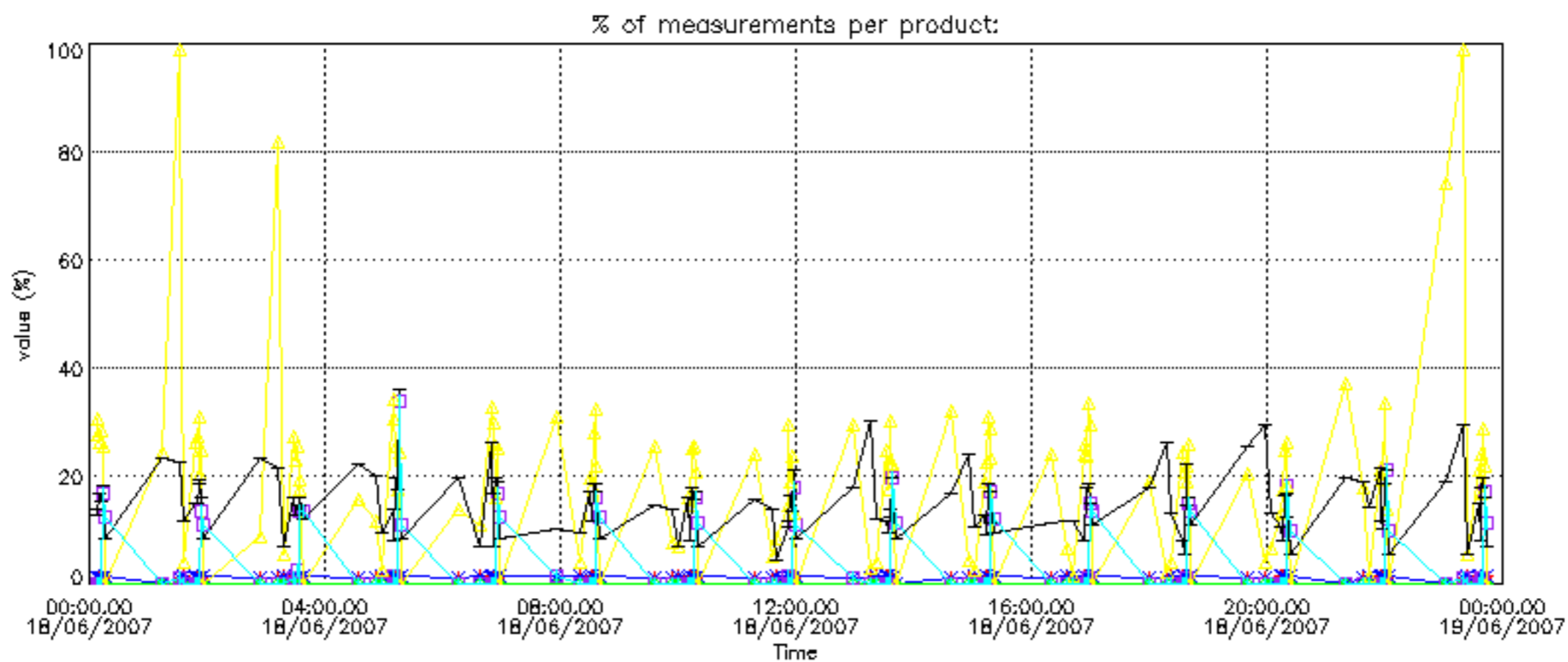


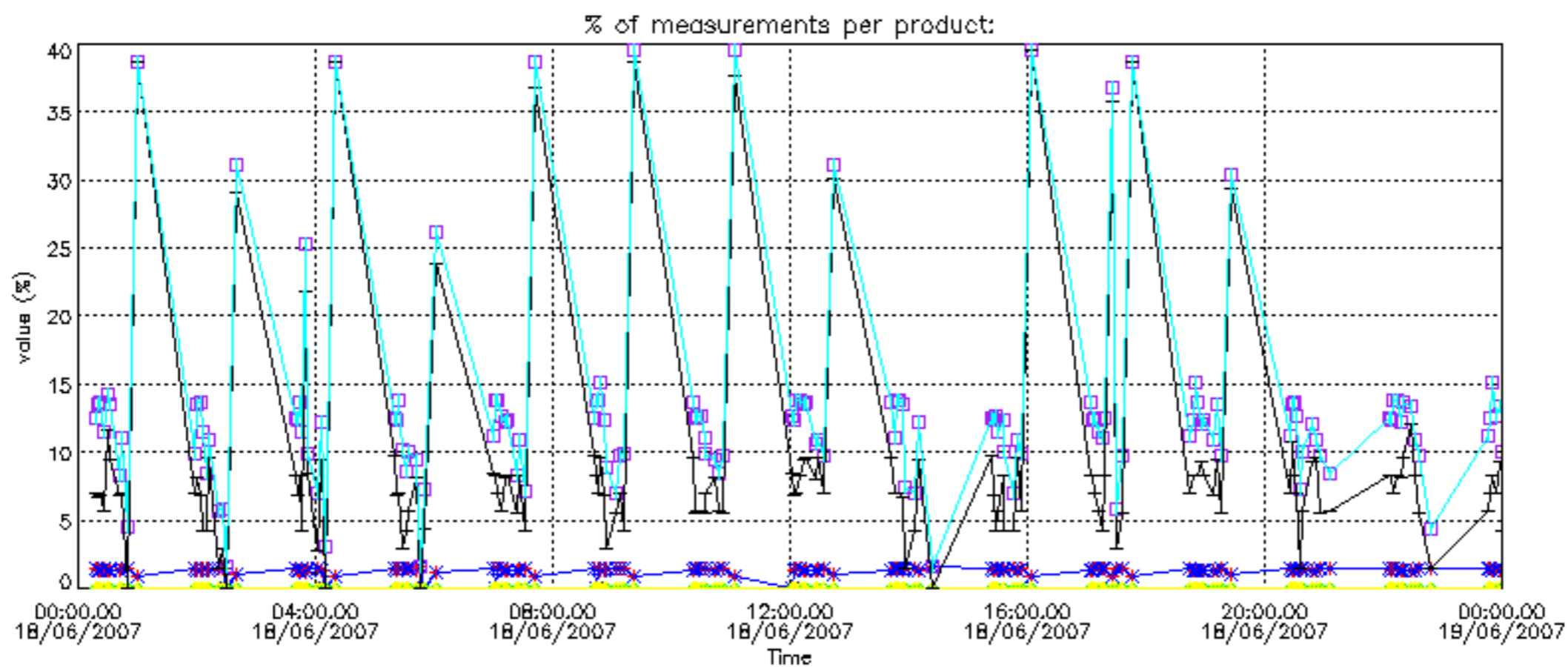
Percentage of flagged data per NO2 profile



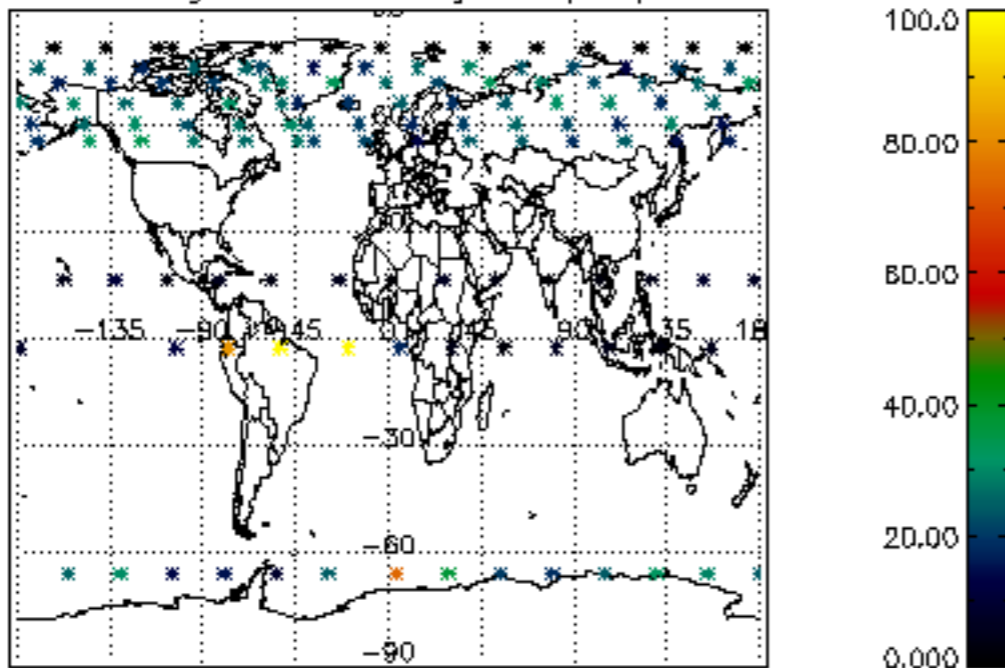
Percentage of flagged data per NO3 profile



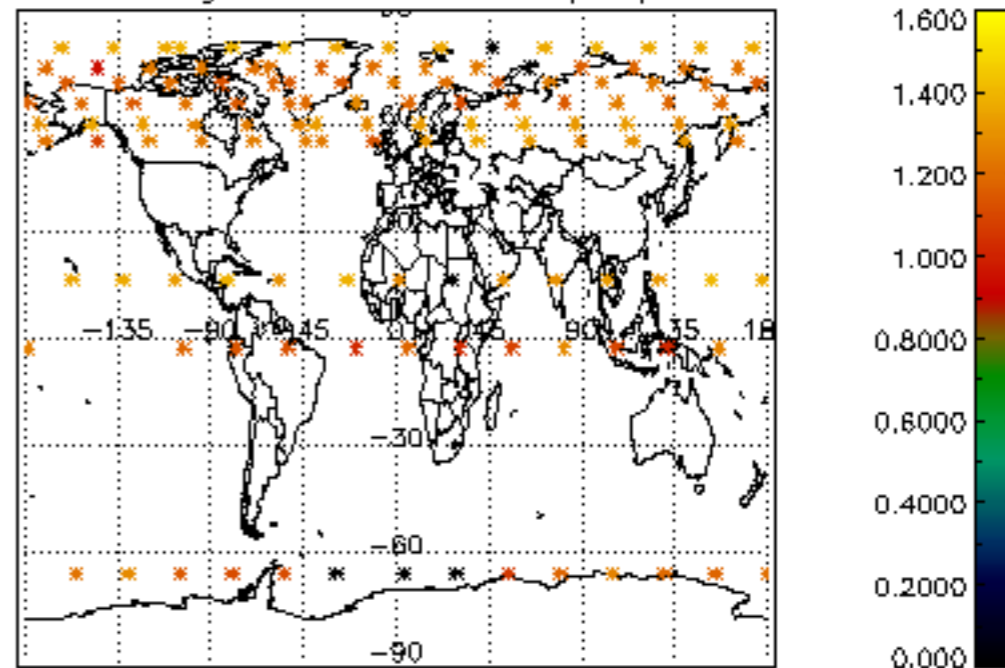




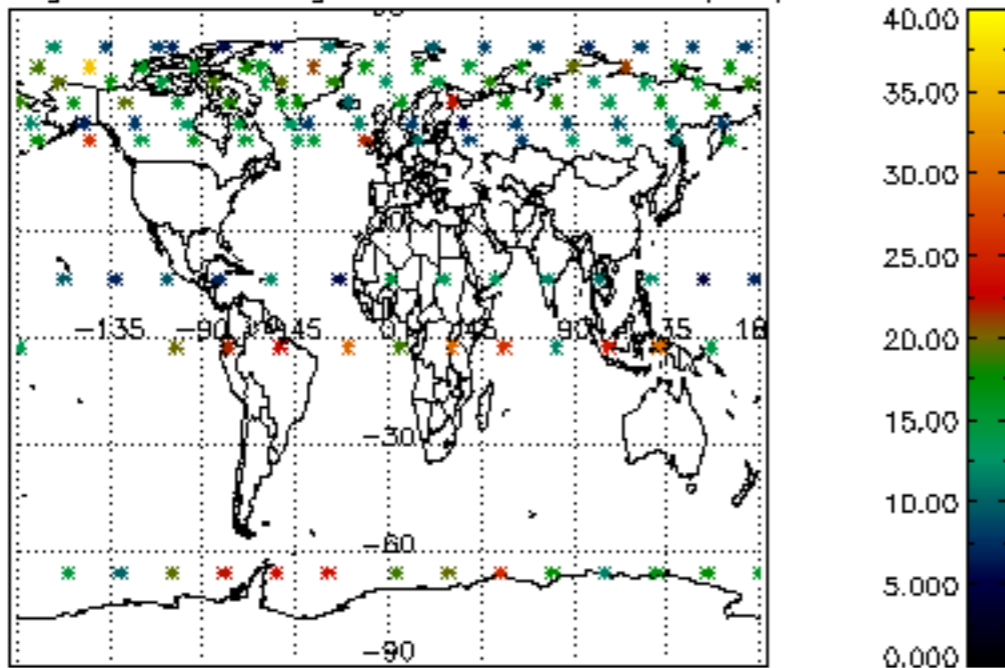
Percentage of cosmic ray hits per profile



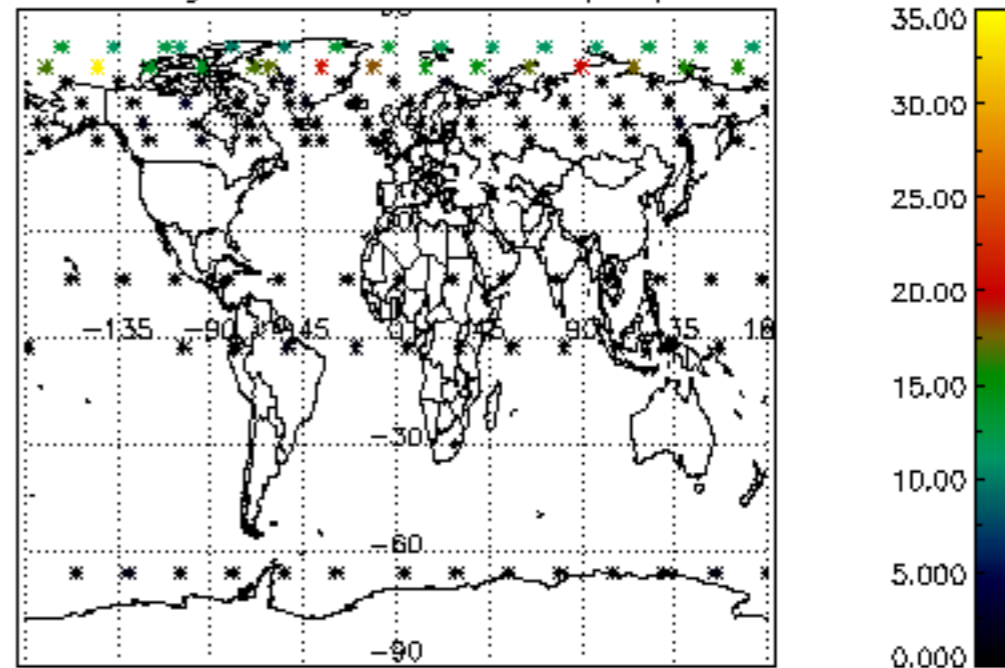
Percentage of datation errors per profile



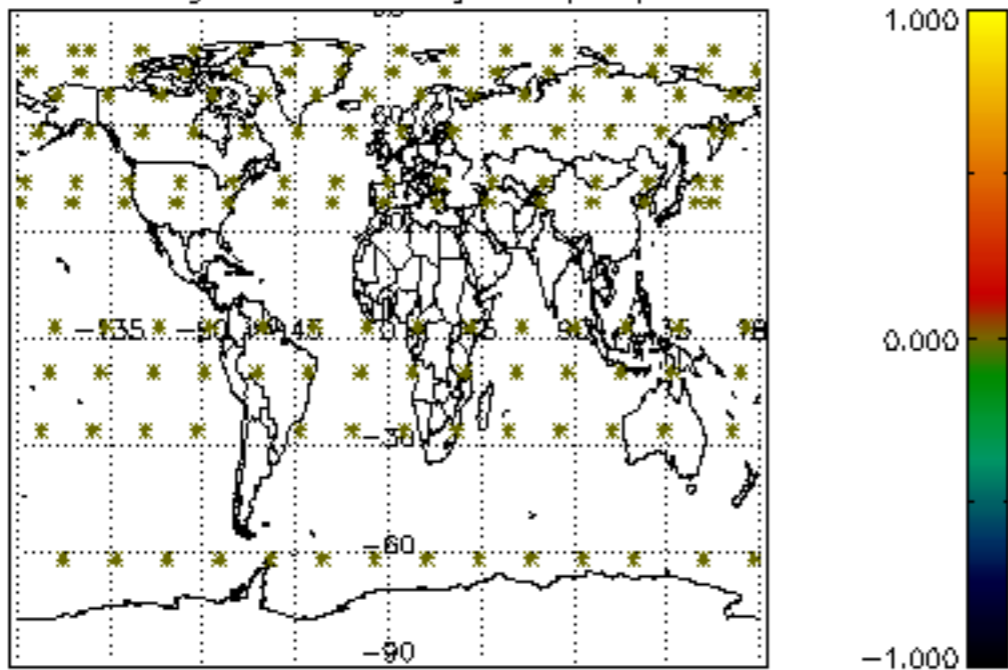
Percentage of star falling outside central band per profile



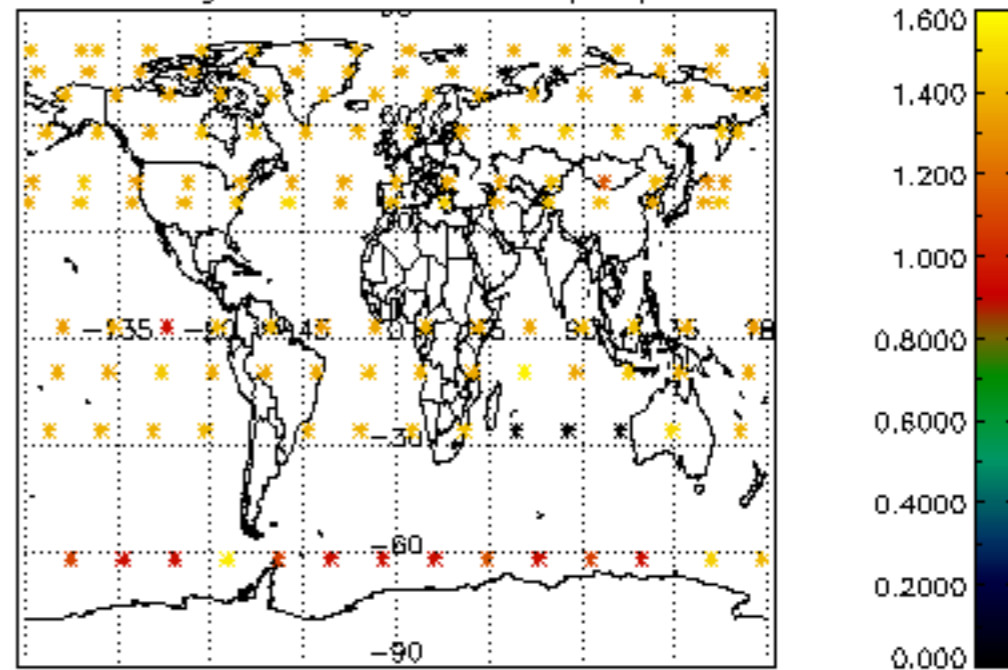
Percentage of saturation errors per profile



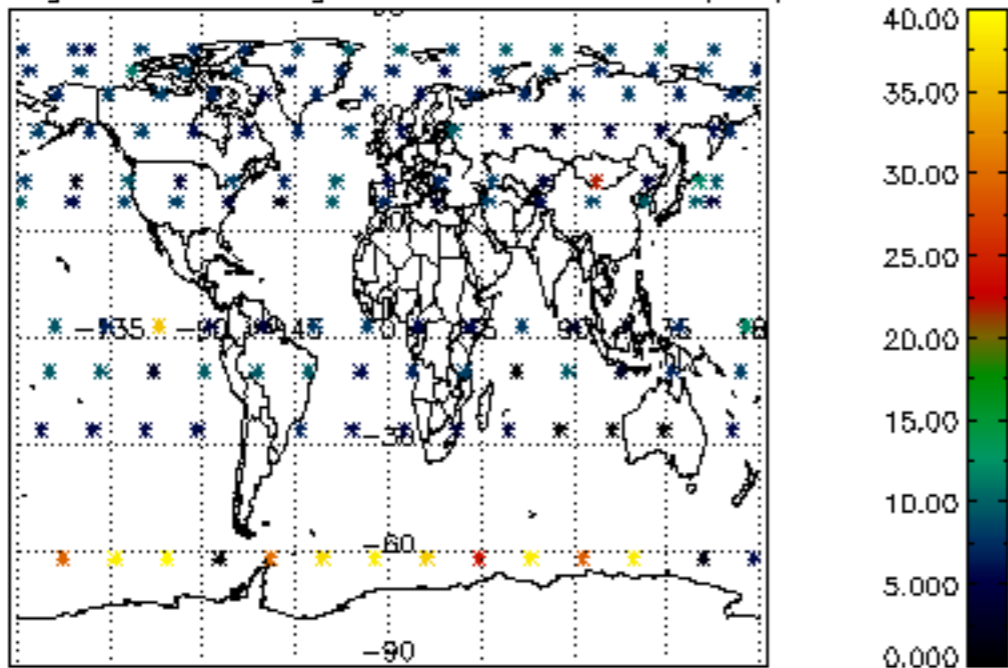
Percentage of cosmic ray hits per profile



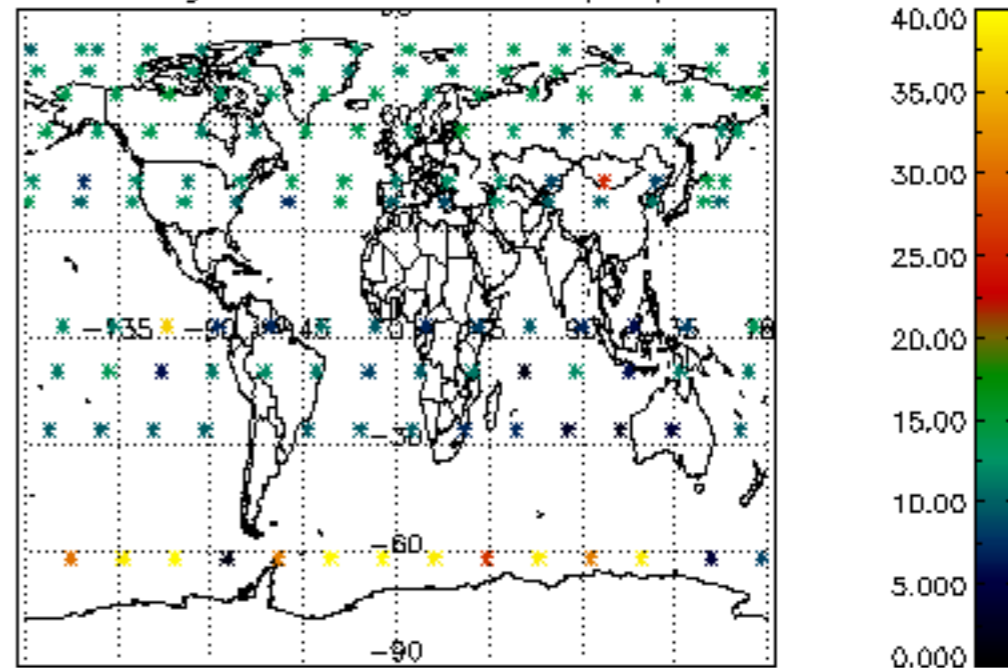
Percentage of datation errors per profile

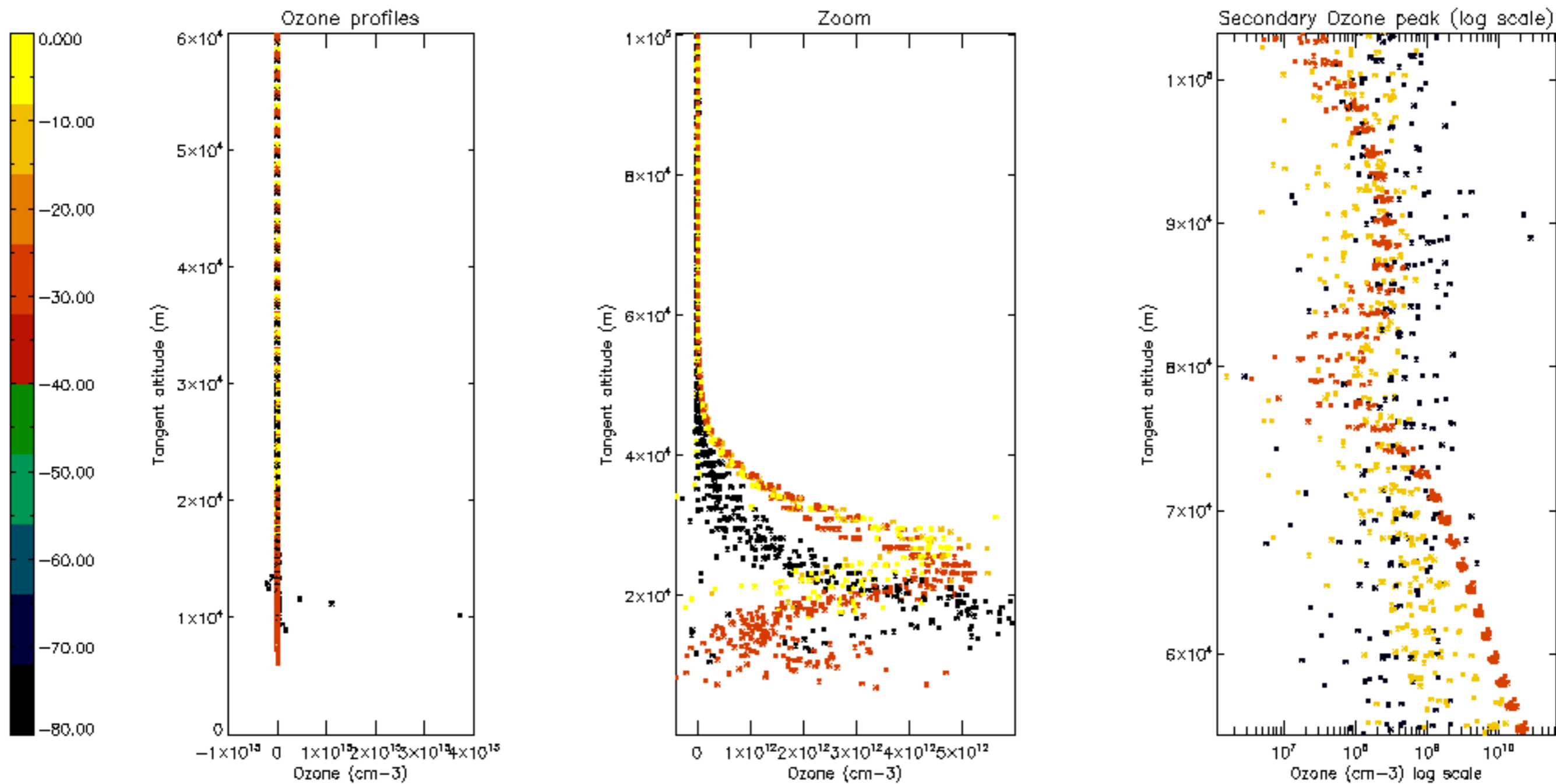


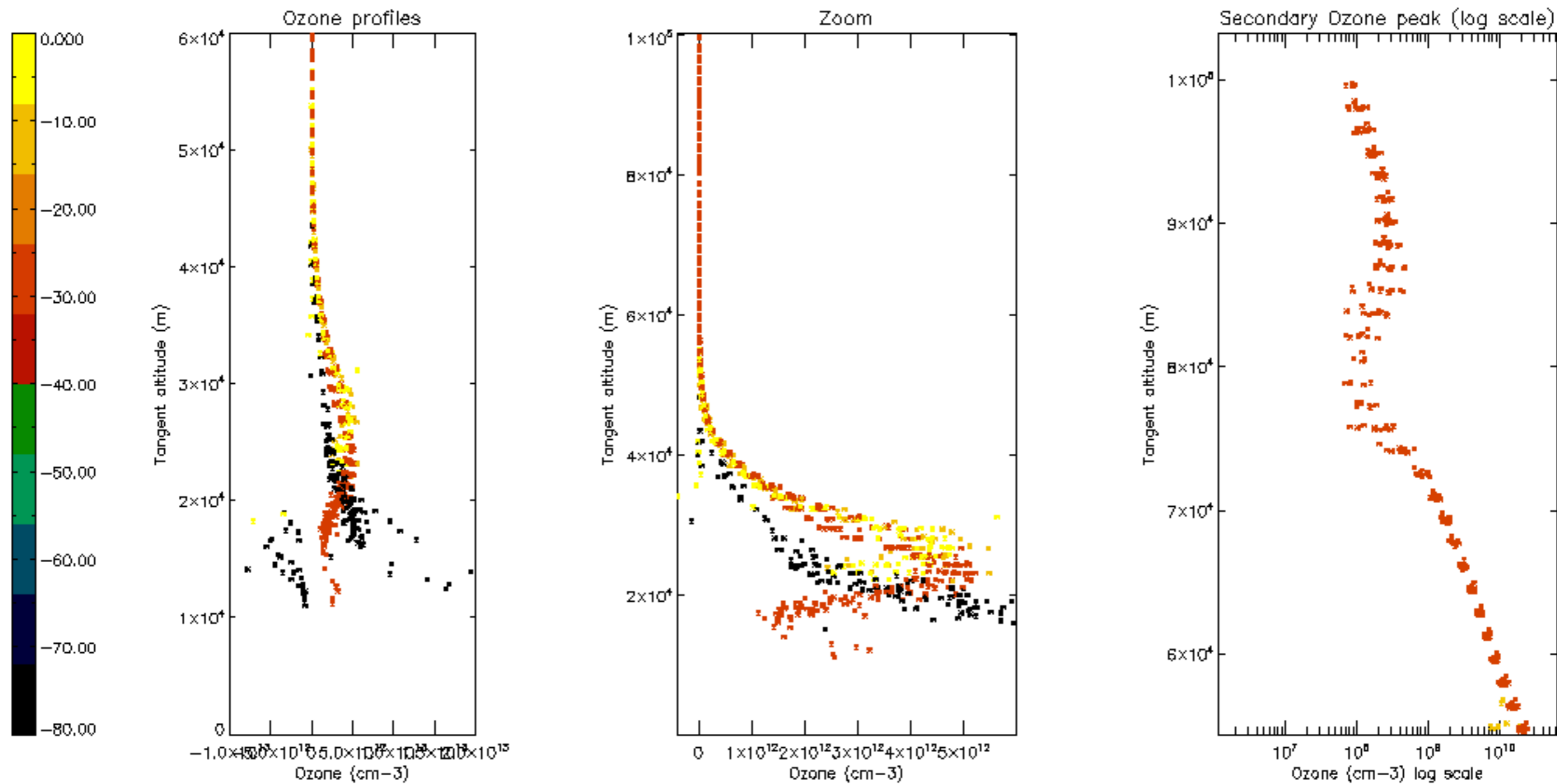
Percentage of star falling outside central band per profile

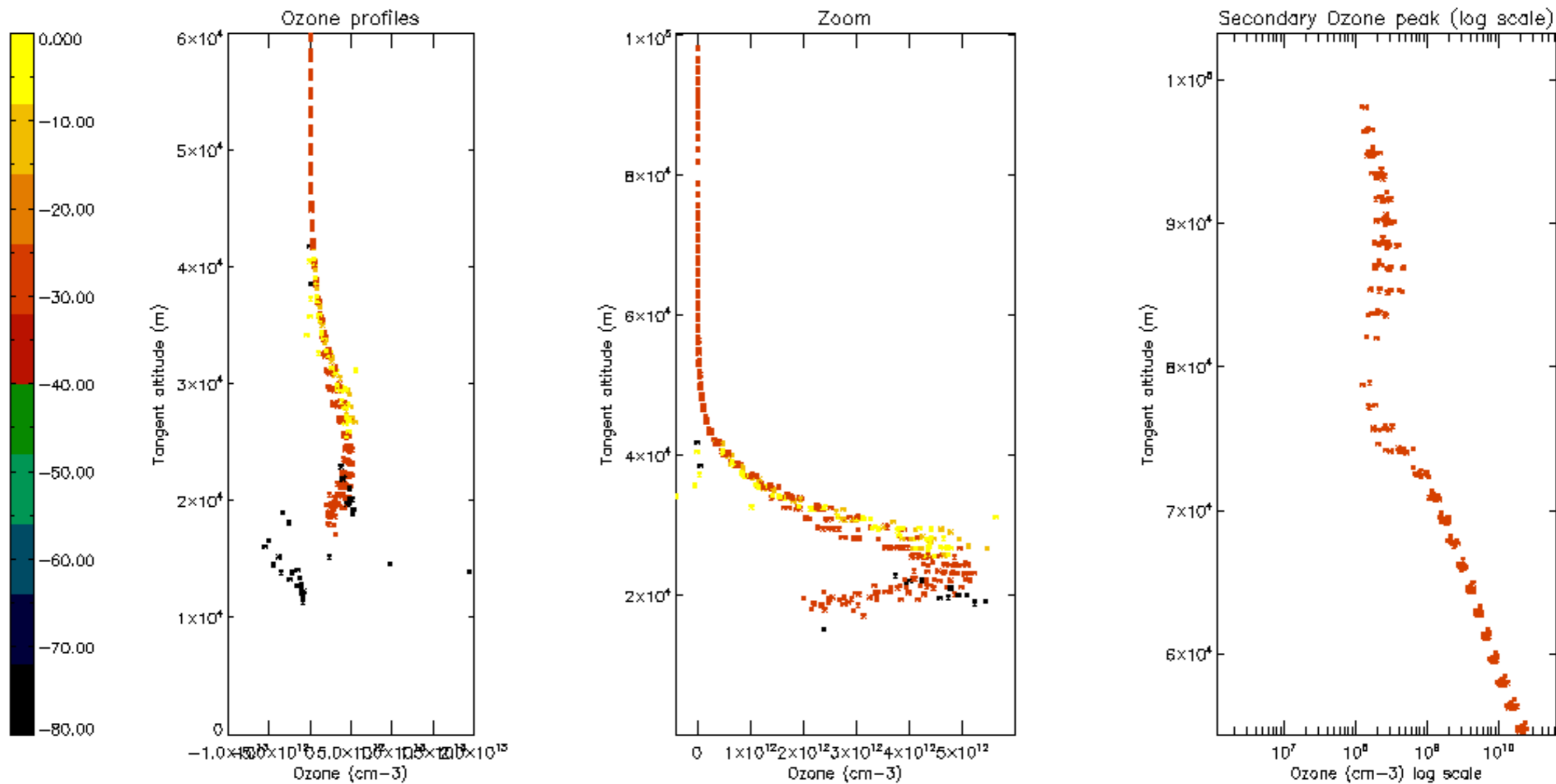


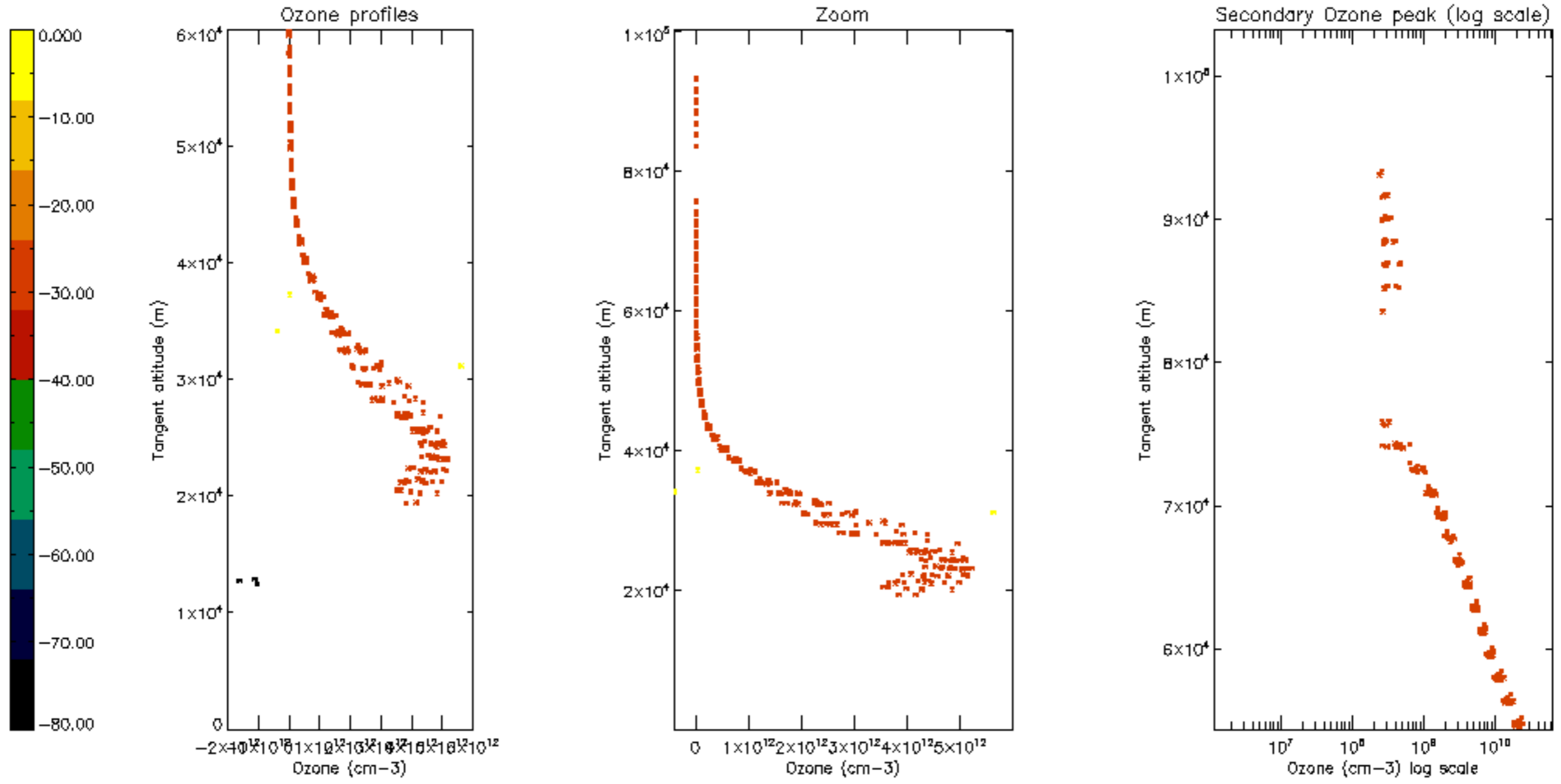
Percentage of saturation errors per profile

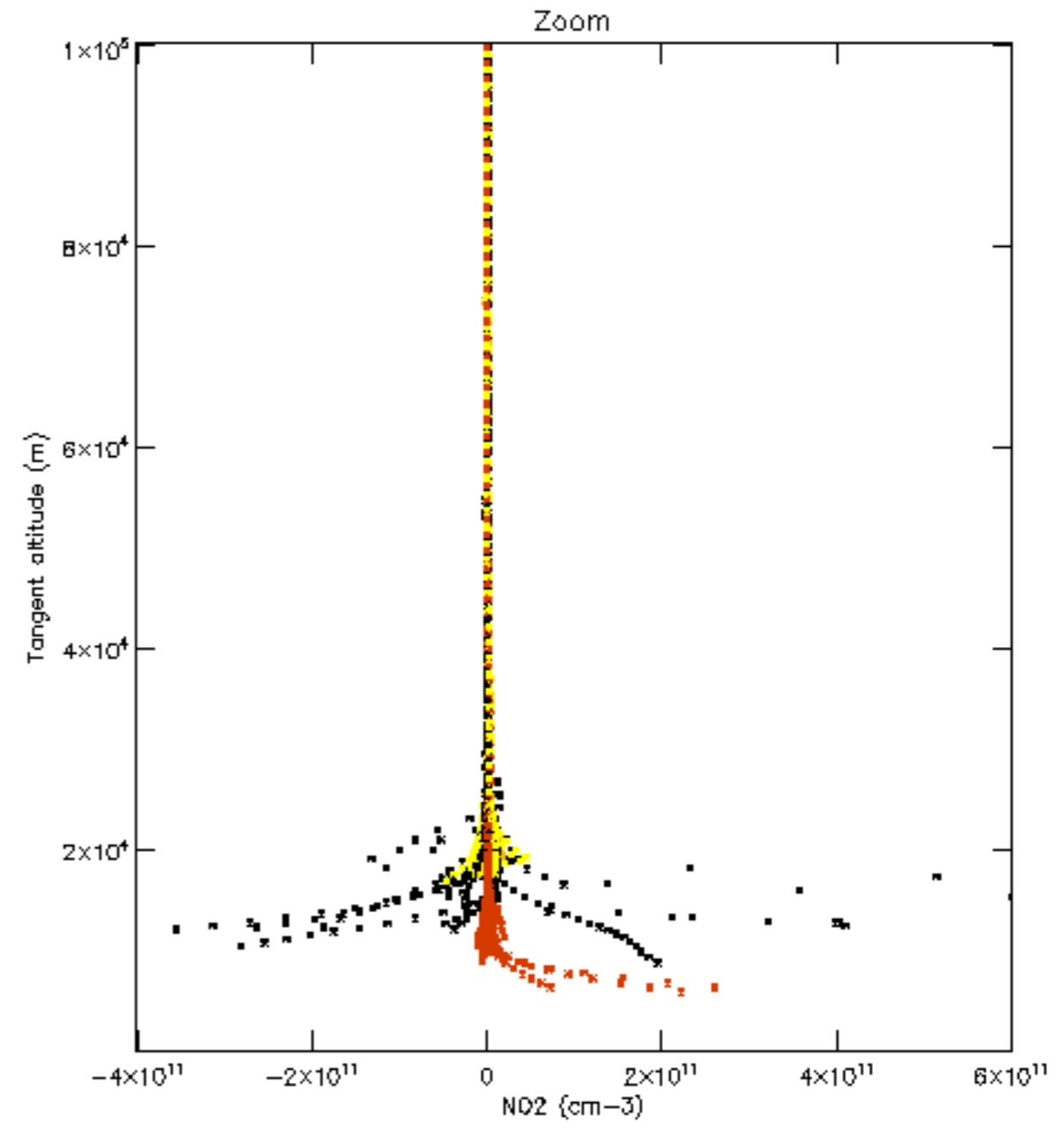
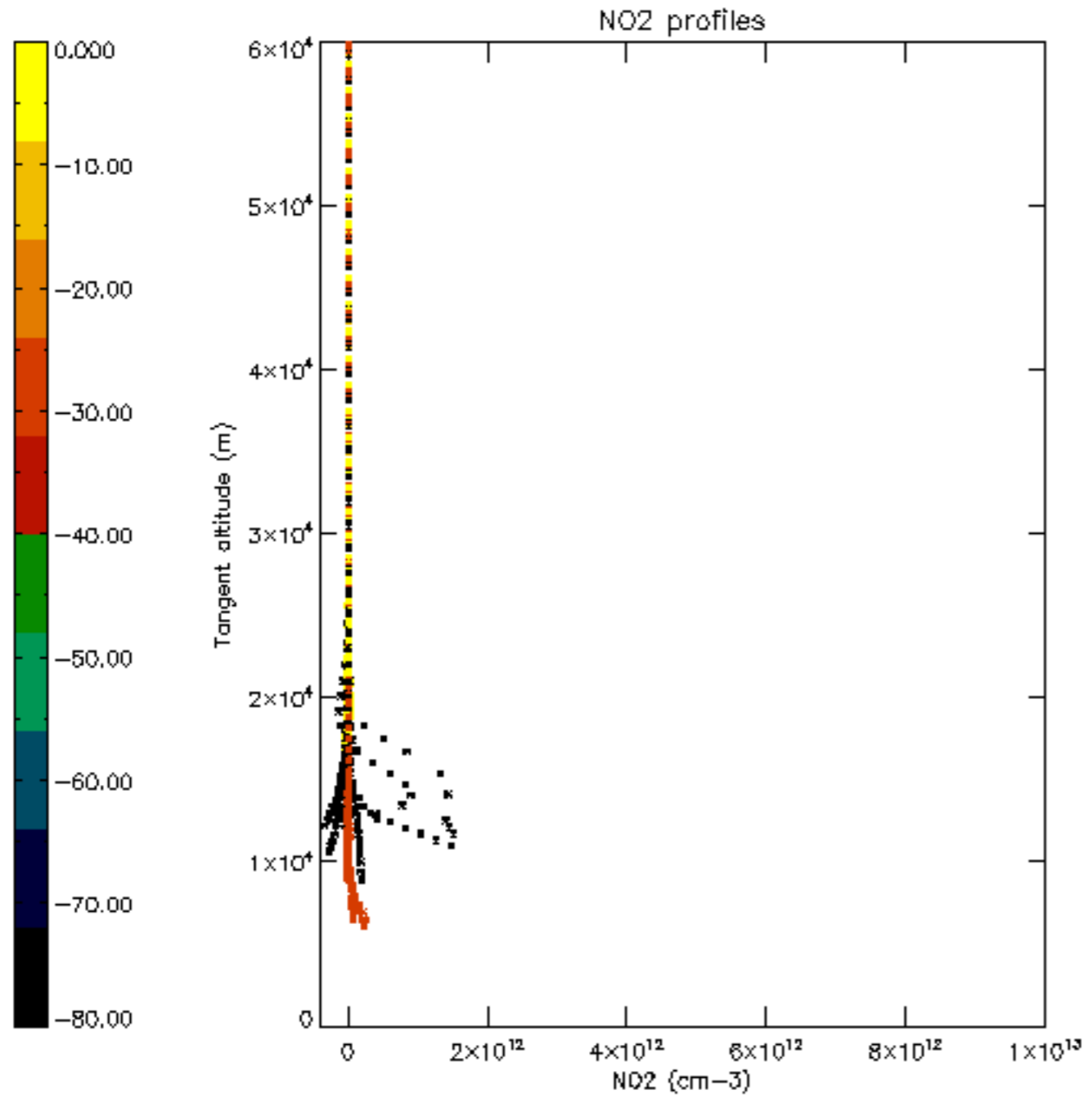


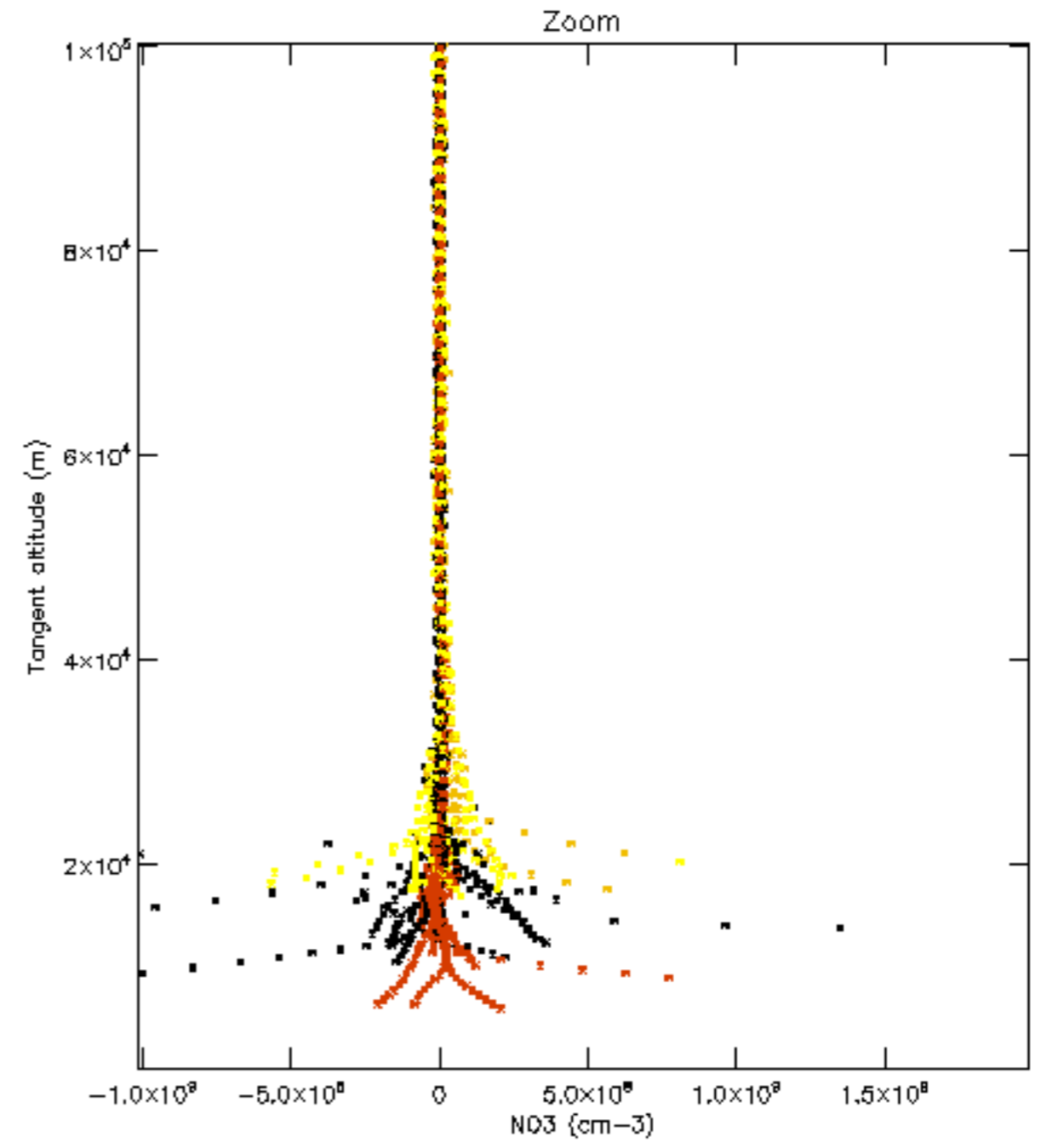
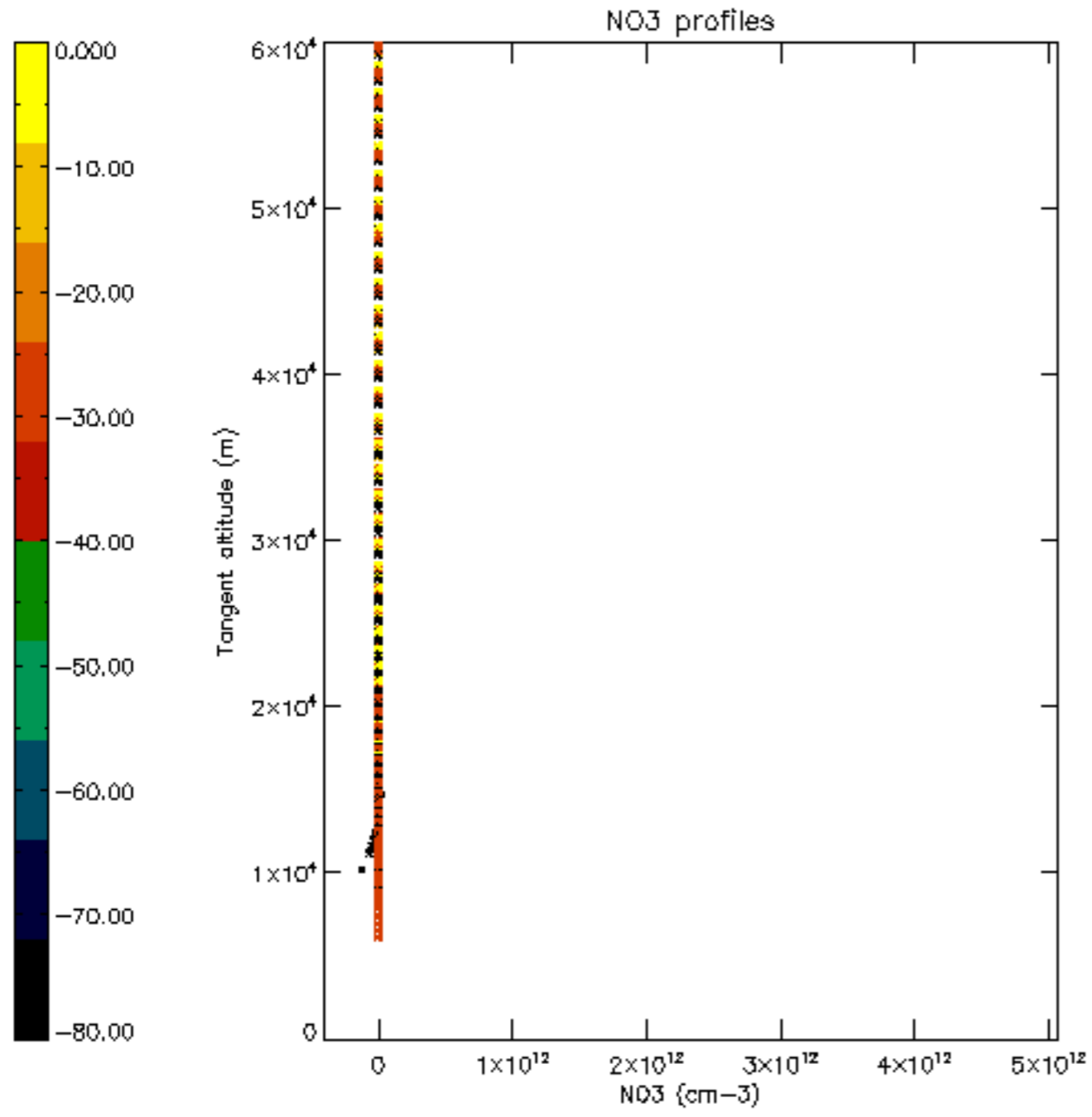


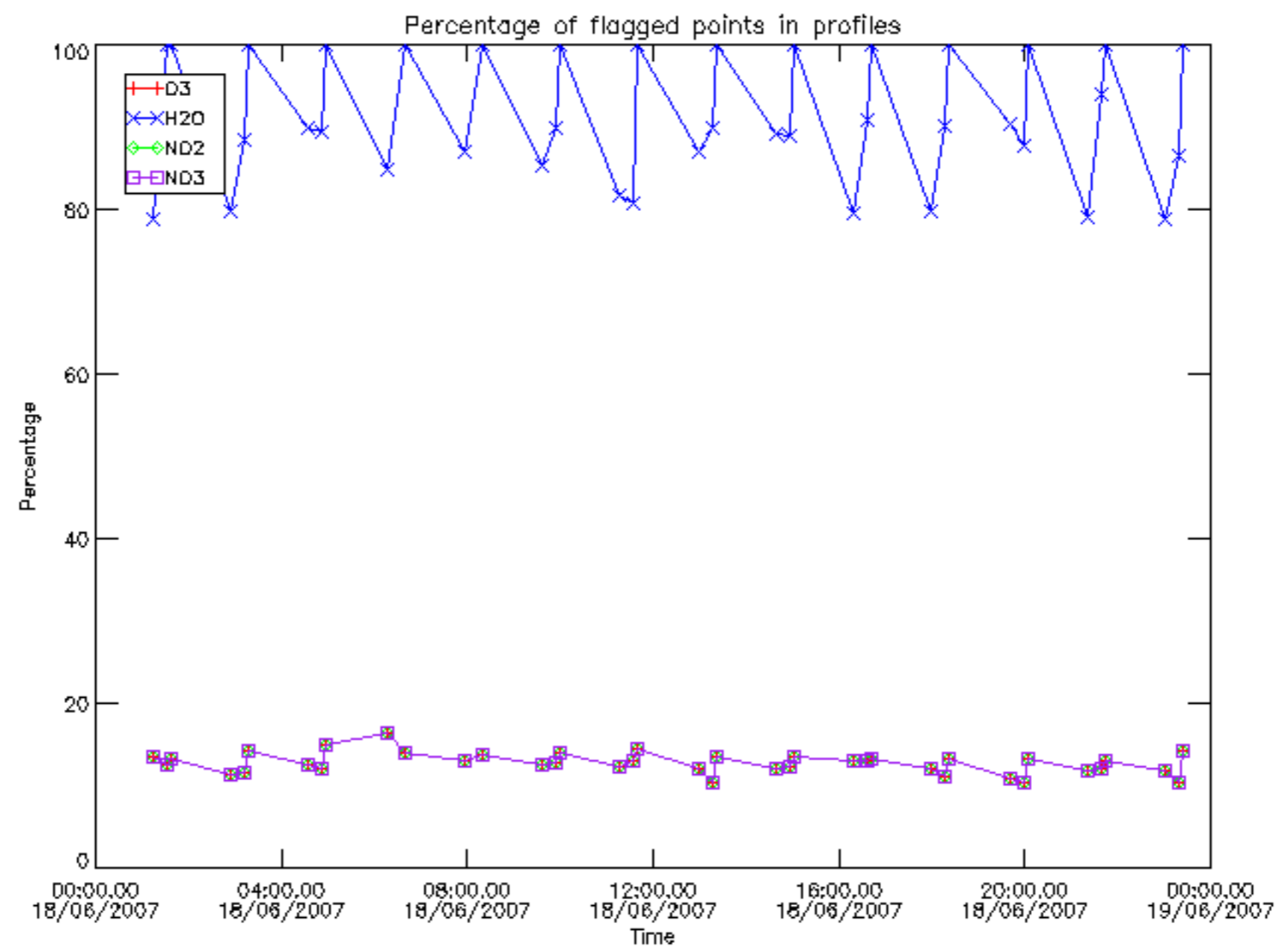




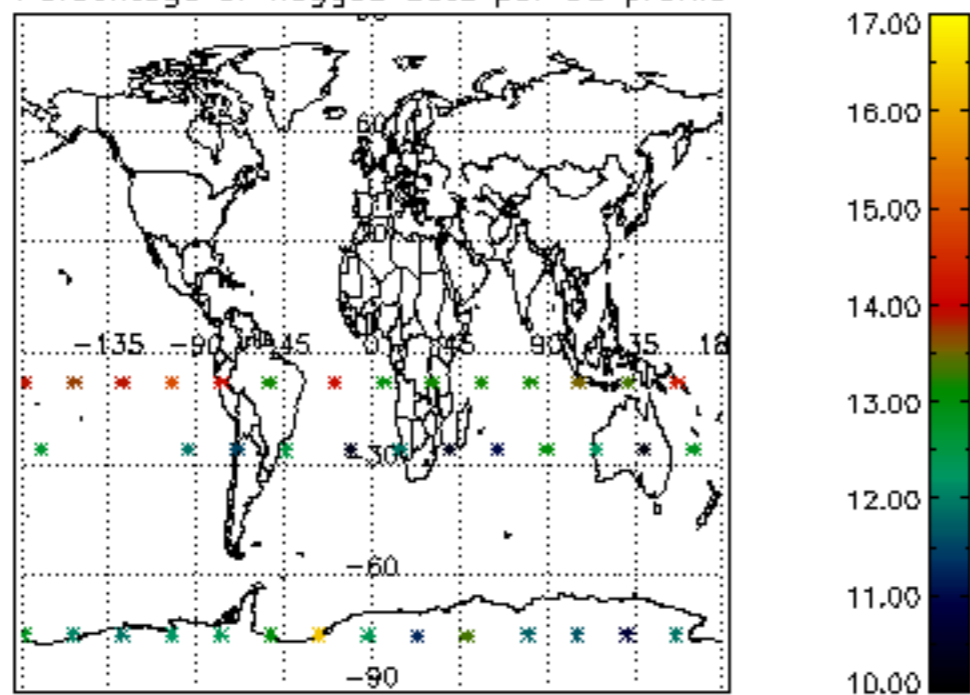




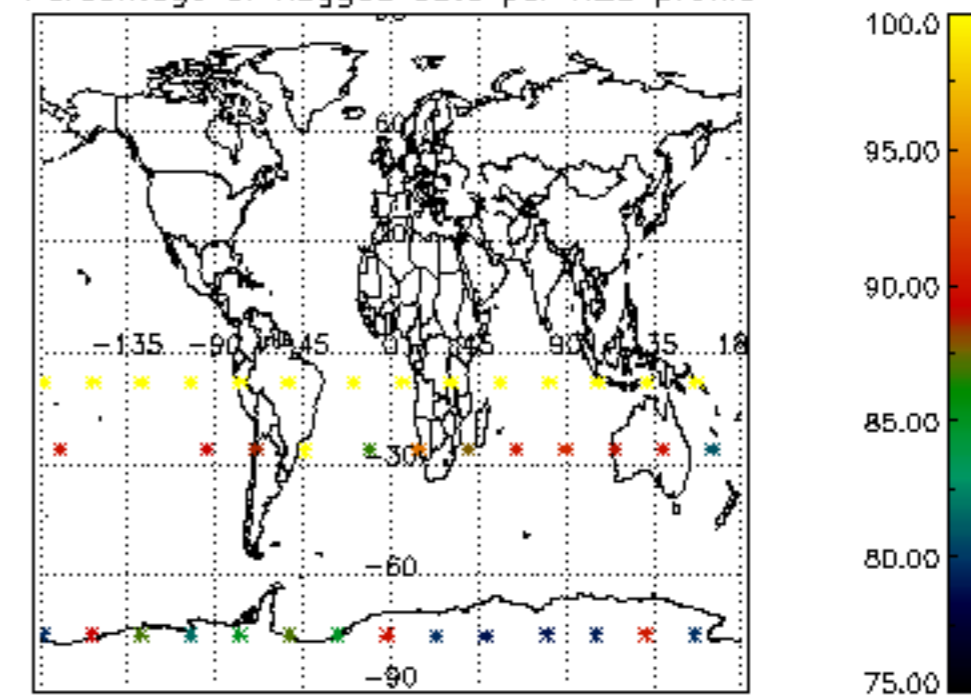




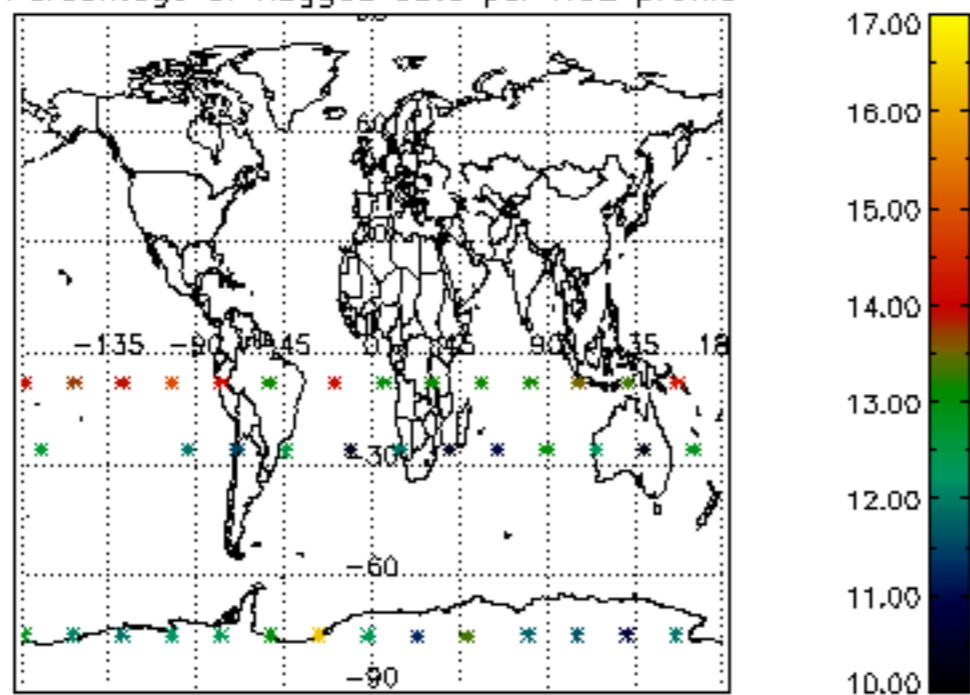
Percentage of flagged data per D3 profile



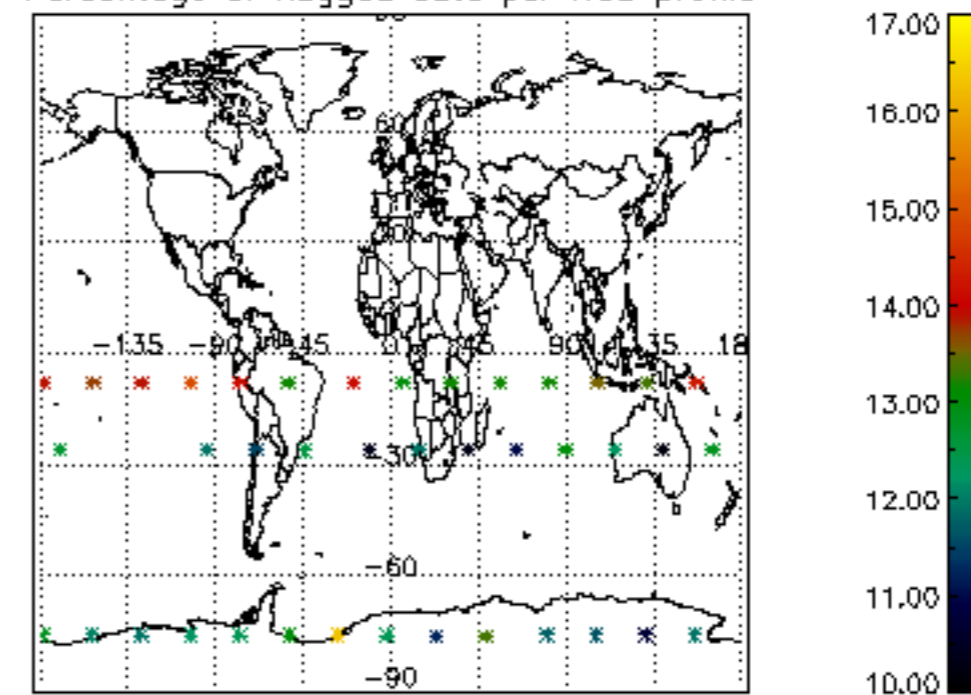
Percentage of flagged data per H2O profile

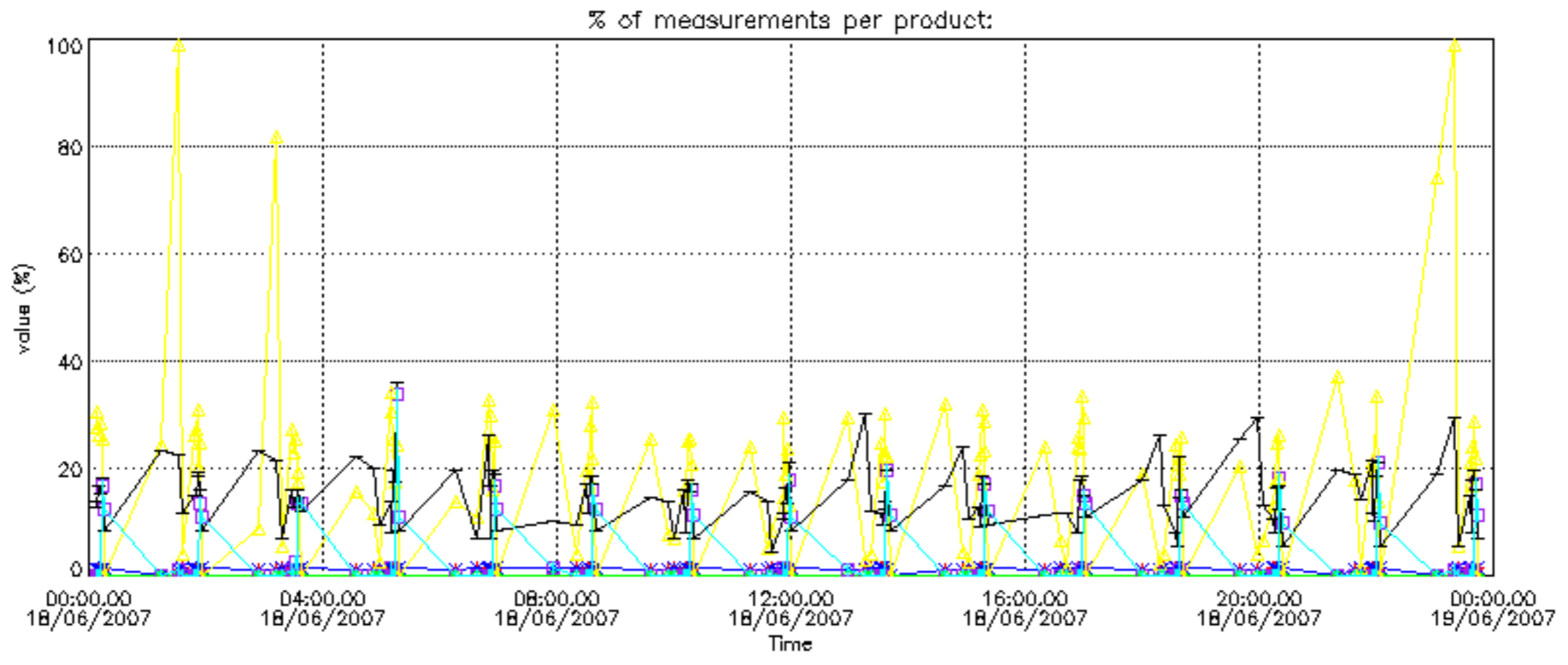


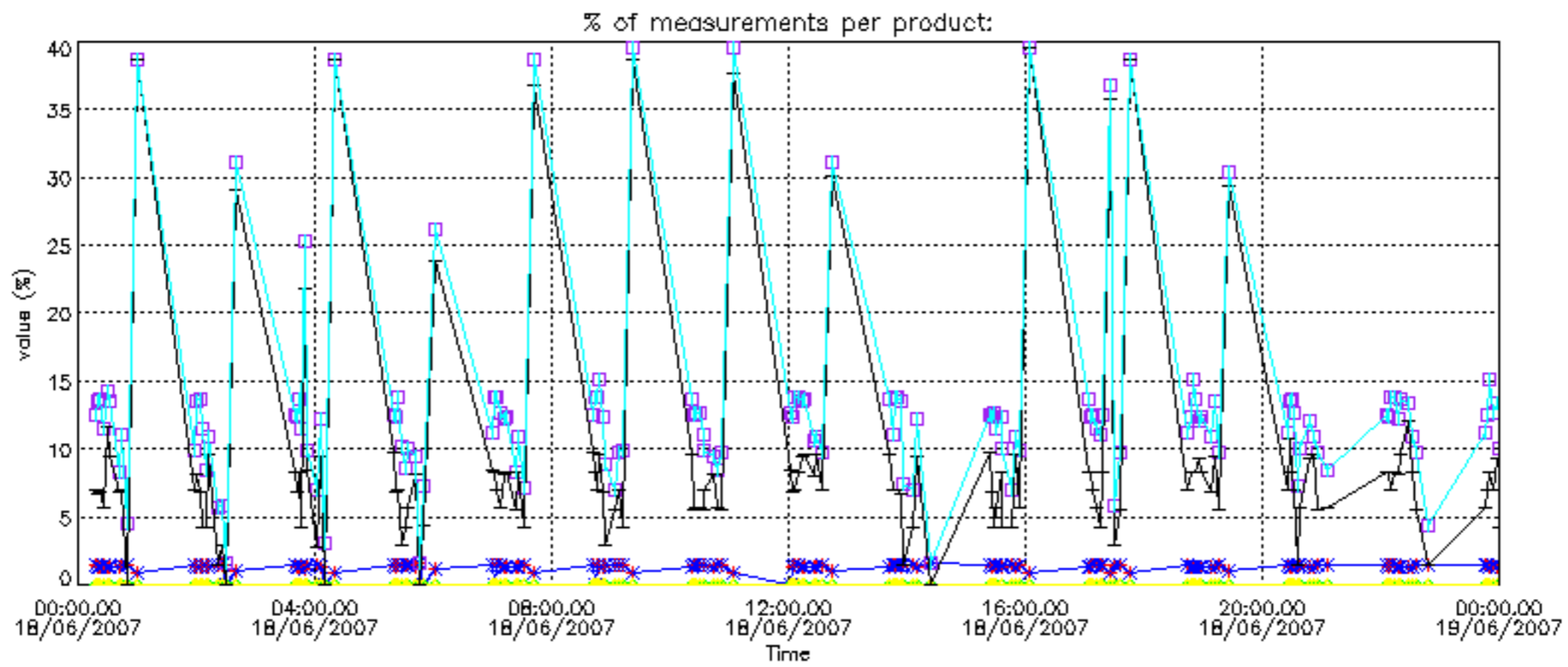
Percentage of flagged data per NO2 profile



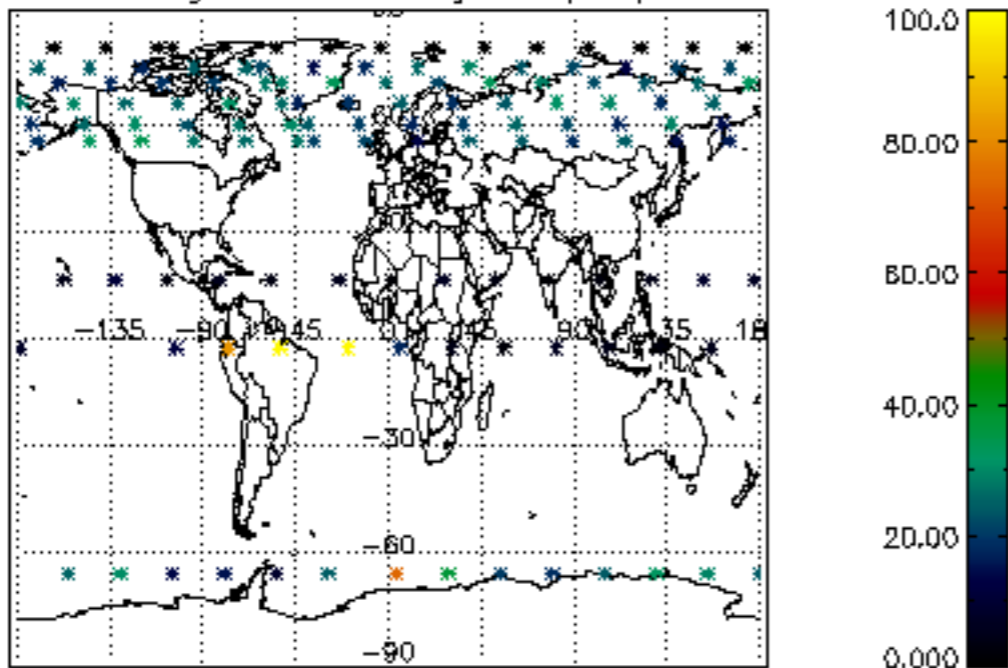
Percentage of flagged data per NO3 profile



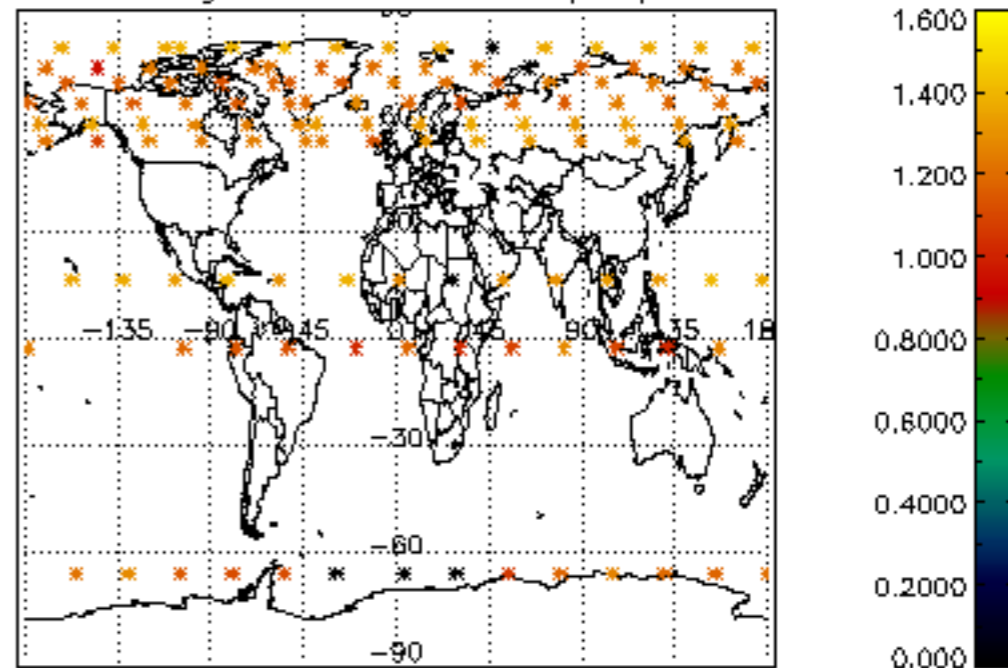




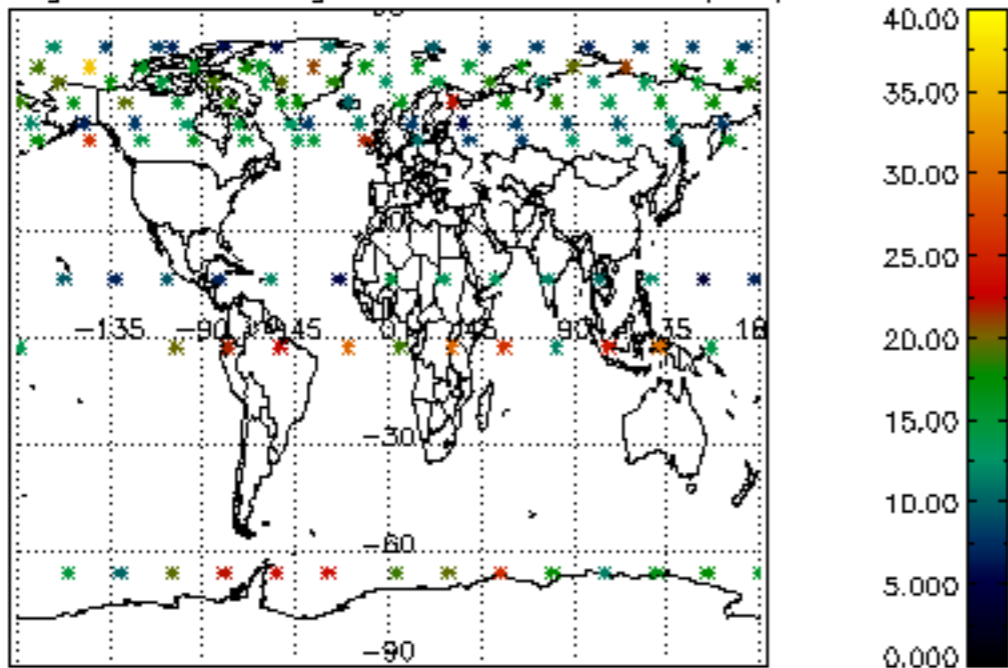
Percentage of cosmic ray hits per profile



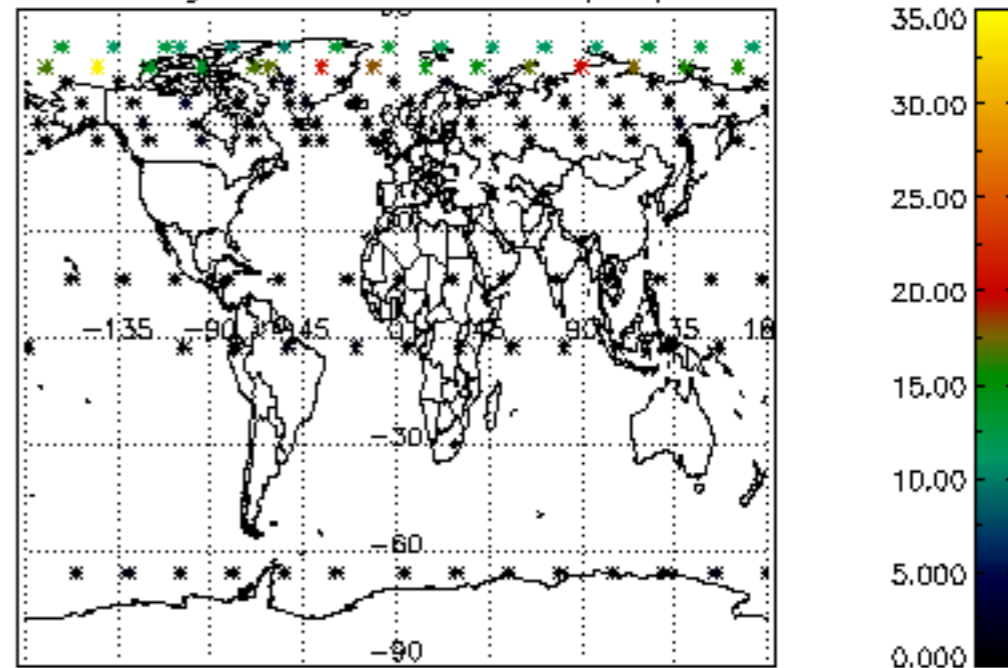
Percentage of datation errors per profile



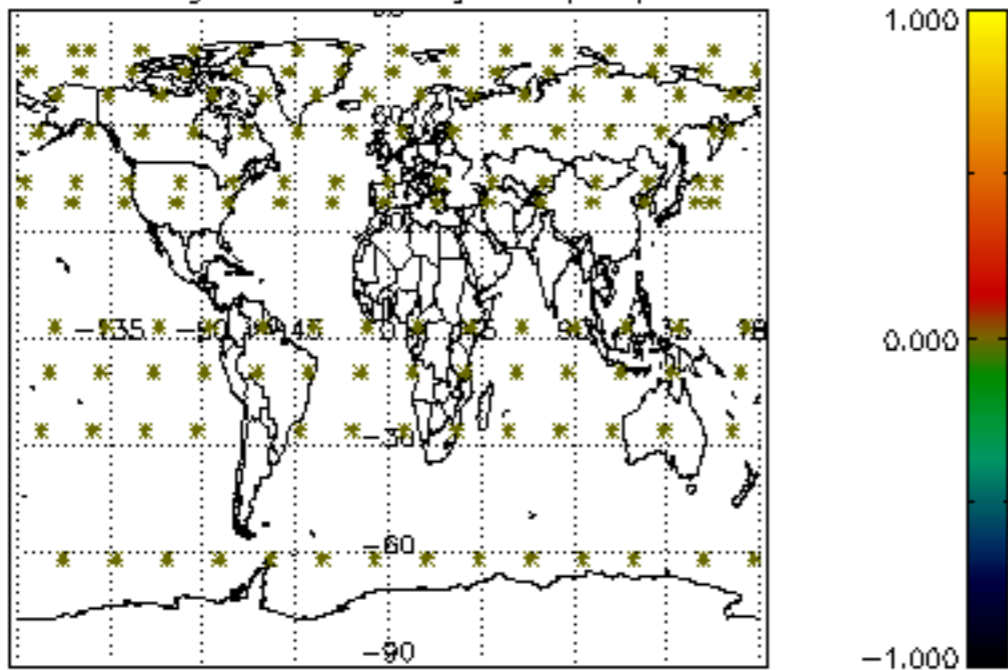
Percentage of star falling outside central band per profile



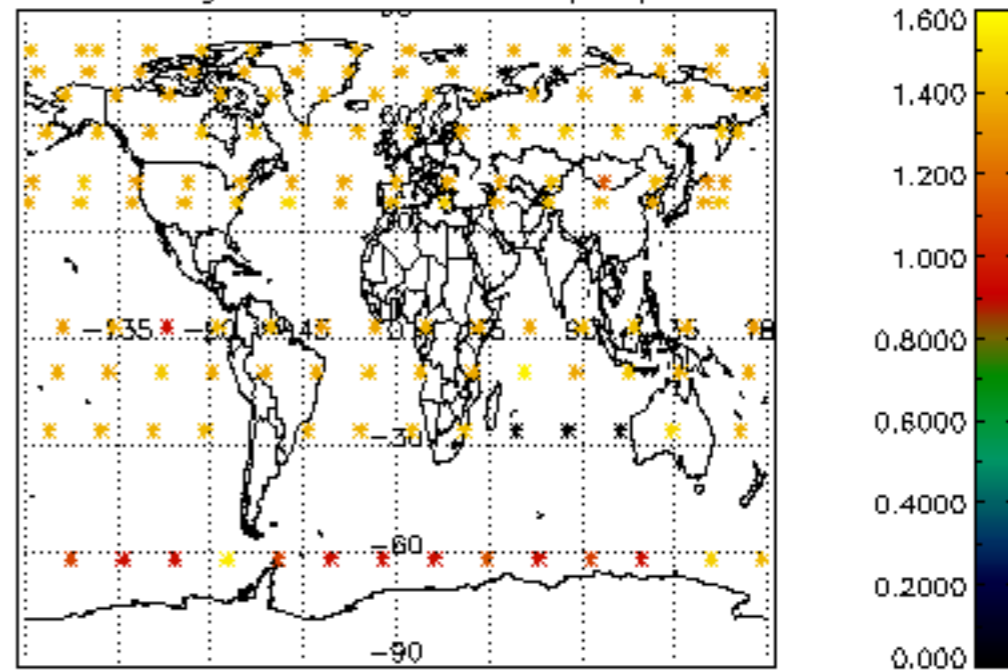
Percentage of saturation errors per profile



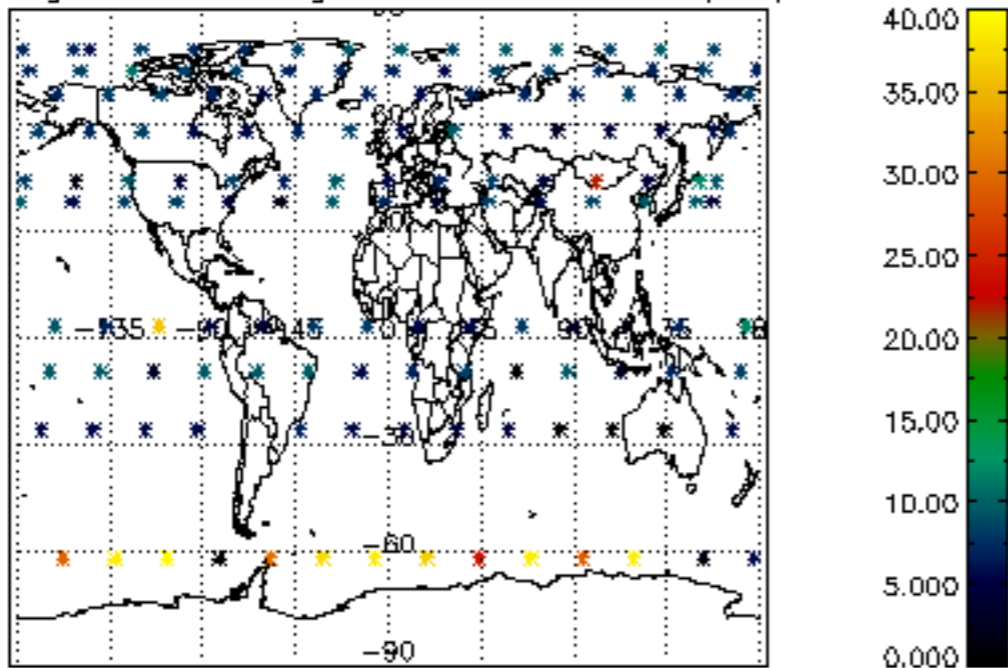
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

