

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	25APR2013 19:55:54
Data source version	GOMOS/6.01
Start time of products	14-09-2008 (14SEP2008 00:00:00)
Stop time of products	15-09-2008 (15SEP2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	169
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

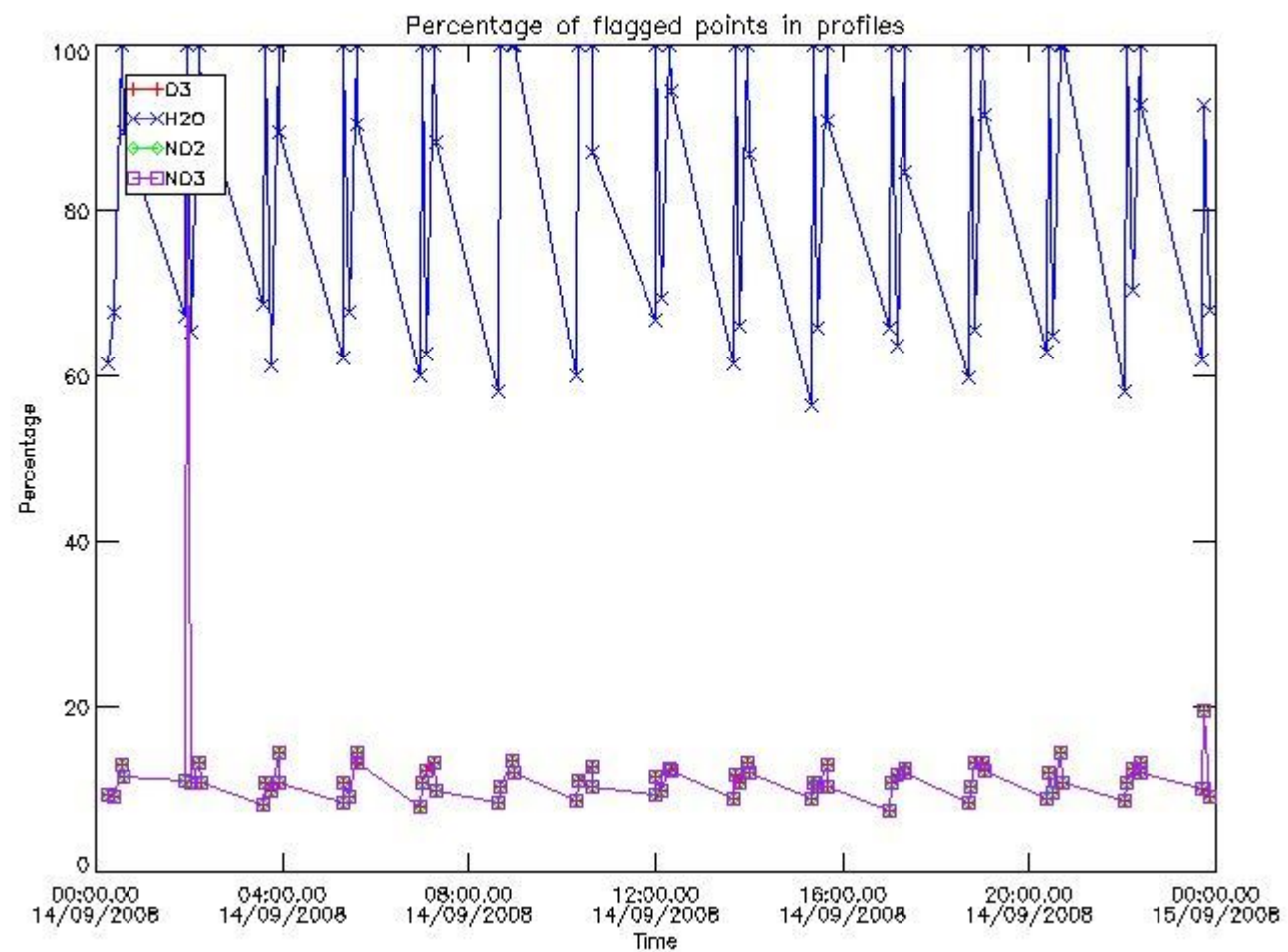
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080914_000545_000000602072_00073_34195_5648.N1	14-SEP-2008 00:05:45	Twilight	60.000	8	10Alp CMi	0.40000	6500.0	120	34195	No
2	GOM_NL__2PRFIN20080914_001439_000000602072_00073_34195_5649.N1	14-SEP-2008 00:14:39	Dark	60.000	1	9Alp CMa	-1.4400	11000.	120	34195	No
3	GOM_NL__2PRFIN20080914_002319_000000562072_00074_34196_5657.N1	14-SEP-2008 00:23:19	Dark	56.000	2	Alp Car	-0.73600	7000.0	112	34196	No
4	GOM_NL__2PRFIN20080914_003337_000000402072_00074_34196_5658.N1	14-SEP-2008 00:33:37	Dark	39.500	143	Alp Hyi	2.8570	7200.0	79	34196	No
5	GOM_NL__2PRFIN20080914_003502_000000482072_00074_34196_5659.N1	14-SEP-2008 00:35:02	Dark	48.000	9	Alp Eri	0.45300	24000.	96	34196	No
6	GOM_NL__2PRFIN20080914_004048_000000452072_00074_34196_5660.N1	14-SEP-2008 00:40:48	Straylight	44.500	84	Alp Phe	2.3970	4500.0	89	34196	No
7	GOM_NL__2PRFIN20080914_005934_000000412072_00074_34196_5661.N1	14-SEP-2008 00:59:34	Bright	40.500	90	54Alp Peg	2.4870	11000.	81	34196	No
8	GOM_NL__2PRFIN20080914_010329_000000402072_00074_34196_5662.N1	14-SEP-2008 01:03:29	Bright	40.000	93	53Bet Peg	2.5200	3100.0	80	34196	No
9	GOM_NL__2PRFIN20080914_011349_000000402072_00074_34196_5663.N1	14-SEP-2008 01:13:49	Bright	40.000	74	11Bet Cas	2.2680	6600.0	80	34196	No
10	GOM_NL__2PRFIN20080914_011539_000000432072_00074_34196_5664.N1	14-SEP-2008 01:15:39	Bright	43.000	76	27Gam Cas	2.3000	30000.	86	34196	No
11	GOM_NL__2PRFIN20080914_013749_000000432072_00074_34196_5665.N1	14-SEP-2008 01:37:49	Bright	43.000	24	66Alp Gem	1.5800	10200.	86	34196	No
12	GOM_NL__2PRFIN20080914_014621_000000552072_00074_34196_5666.N1	14-SEP-2008 01:46:21	Twilight	54.500	8	10Alp CMi	0.40000	6500.0	109	34196	No
13	GOM_NL__2PRFIN20080914_015516_000000562072_00074_34196_5667.N1	14-SEP-2008 01:55:16	Dark	55.500	1	9Alp CMa	-1.4400	11000.	111	34196	No
14	GOM_NL__2PRFIN20080914_015734_000000492072_00074_34196_5668.N1	14-SEP-2008 01:57:34	Dark	49.000	23	21Eps CMa	1.5020	26000.	98	34196	No
15	GOM_NL__2PRFIN20080914_020355_000000472072_00075_34197_5667.N1	14-SEP-2008 02:03:55	Dark	46.500	2	Alp Car	-0.73600	7000.0	93	34197	No
16	GOM_NL__2PRFIN20080914_021414_000000392072_00075_34197_5668.N1	14-SEP-2008 02:14:14	Dark	38.500	143	Alp Hyi	2.8570	7200.0	77	34197	No
17	GOM_NL__2PRFIN20080914_021539_000000472072_00075_34197_5669.N1	14-SEP-2008 02:15:39	Dark	46.500	9	Alp Eri	0.45300	24000.	93	34197	No
18	GOM_NL__2PRFIN20080914_022125_000000462072_00075_34197_5670.N1	14-SEP-2008 02:21:25	Straylight	45.500	84	Alp Phe	2.3970	4500.0	91	34197	No
19	GOM_NL__2PRFIN20080914_024010_000000402072_00075_34197_5671.N1	14-SEP-2008 02:40:10	Bright	40.000	90	54Alp Peg	2.4870	11000.	80	34197	No
20	GOM_NL__2PRFIN20080914_024405_000000412072_00075_34197_5672.N1	14-SEP-2008 02:44:05	Bright	40.500	93	53Bet Peg	2.5200	3100.0	81	34197	No
21	GOM_NL__2PRFIN20080914_025424_000000392072_00075_34197_5673.N1	14-SEP-2008 02:54:24	Bright	38.500	74	11Bet Cas	2.2680	6600.0	77	34197	No
22	GOM_NL__2PRFIN20080914_025615_000000432072_00075_34197_5674.N1	14-SEP-2008 02:56:15	Bright	42.500	76	27Gam Cas	2.3000	30000.	85	34197	No
23	GOM_NL__2PRFIN20080914_031825_000000422072_00075_34197_5675.N1	14-SEP-2008 03:18:25	Bright	42.000	24	66Alp Gem	1.5800	10200.	84	34197	No
24	GOM_NL__2PRFIN20080914_032658_000000602072_00075_34197_5676.N1	14-SEP-2008 03:26:58	Twilight	60.000	8	10Alp CMi	0.40000	6500.0	120	34197	No
25	GOM_NL__2PRFIN20080914_033553_000000682072_00075_34197_5677.N1	14-SEP-2008 03:35:53	Dark	67.500	1	9Alp CMa	-1.4400	11000.	135	34197	No
26	GOM_NL__2PRFIN20080914_033811_000000472072_00075_34197_5678.N1	14-SEP-2008 03:38:11	Dark	46.500	23	21Eps CMa	1.5020	26000.	93	34197	No
27	GOM_NL__2PRFIN20080914_034432_000000562072_00076_34198_5691.N1	14-SEP-2008 03:44:32	Dark	56.000	2	Alp Car	-0.73600	7000.0	112	34198	No
28	GOM_NL__2PRFIN20080914_035450_000000392072_00076_34198_5692.N1	14-SEP-2008 03:54:50	Dark	39.000	143	Alp Hyi	2.8570	7200.0	78	34198	No
29	GOM_NL__2PRFIN20080914_035615_000000482072_00076_34198_5693.N1	14-SEP-2008 03:56:15	Dark	47.500	9	Alp Eri	0.45300	24000.	95	34198	No
30	GOM_NL__2PRFIN20080914_040201_000000462072_00076_34198_5694.N1	14-SEP-2008 04:02:01	Straylight	45.500	84	Alp Phe	2.3970	4500.0	91	34198	No
31	GOM_NL__2PRFIN20080914_042046_000000402072_00076_34198_5695.N1	14-SEP-2008 04:20:46	Bright	40.000	90	54Alp Peg	2.4870	11000.	80	34198	No
32	GOM_NL__2PRFIN20080914_042440_000000412072_00076_34198_5696.N1	14-SEP-2008 04:24:40	Bright	40.500	93	53Bet Peg	2.5200	3100.0	81	34198	No
33	GOM_NL__2PRFIN20080914_043500_000000372072_00076_34198_5697.N1	14-SEP-2008 04:35:00	Bright	37.000	74	11Bet Cas	2.2680	6600.0	74	34198	No
34	GOM_NL__2PRFIN20080914_043650_000000432072_00076_34198_5698.N1	14-SEP-2008 04:36:50	Bright	42.500	76	27Gam Cas	2.3000	30000.	85	34198	No
35	GOM_NL__2PRFIN20080914_045901_000000432072_00076_34198_5699.N1	14-SEP-2008 04:59:01	Bright	42.500	24	66Alp Gem	1.5800	10200.	85	34198	No
36	GOM_NL__2PRFIN20080914_050734_000000532072_00076_34198_5700.N1	14-SEP-2008 05:07:34	Twilight	52.500	8	10Alp CMi	0.40000	6500.0	105	34198	No
37	GOM_NL__2PRFIN20080914_051630_000000602072_00076_34198_5701.N1	14-SEP-2008 05:16:30	Dark	60.000	1	9Alp CMa	-1.4400	11000.	120	34198	No
38	GOM_NL__2PRFIN20080914_051848_000000472072_00076_34198_5702.N1	14-SEP-2008 05:18:48	Dark	47.000	23	21Eps CMa	1.5020	26000.	94	34198	No
39	GOM_NL__2PRFIN20080914_052509_000000562072_00077_34199_5704.N1	14-SEP-2008 05:25:09	Dark	56.000	2	Alp Car	-0.73600	7000.0	112	34199	No
40	GOM_NL__2PRFIN20080914_053527_000000392072_00077_34199_5705.N1	14-SEP-2008 05:35:27	Dark	39.000	143	Alp Hyi	2.8570	7200.0	78	34199	No
41	GOM_NL__2PRFIN20080914_053652_000000422072_00077_34199_5706.N1	14-SEP-2008 05:36:52	Dark	42.000	9	Alp Eri	0.45300	24000.	84	34199	No
42	GOM_NL__2PRFIN20080914_054238_000000462072_00077_34199_5707.N1	14-SEP-2008 05:42:38	Straylight	46.000	84	Alp Phe	2.3970	4500.0	92	34199	No

161	GOM_NL__2PRFIN20080914_224719_000000392072_00087_34209_5858.N1	14-SEP-2008 22:47:19	Bright	39.000	90	54Alp Peg	2.4870	11000.	78	34209	No
162	GOM_NL__2PRFIN20080914_225113_000000402072_00087_34209_5859.N1	14-SEP-2008 22:51:13	Bright	40.000	93	53Bet Peg	2.5200	3100.0	80	34209	No
163	GOM_NL__2PRFIN20080914_230130_000000432072_00087_34209_5860.N1	14-SEP-2008 23:01:30	Bright	43.000	74	11Bet Cas	2.2680	6600.0	86	34209	No
164	GOM_NL__2PRFIN20080914_230319_000000432072_00087_34209_5861.N1	14-SEP-2008 23:03:19	Bright	42.500	76	27Gam Cas	2.3000	30000.	85	34209	No
165	GOM_NL__2PRFIN20080914_232538_000000442072_00087_34209_5862.N1	14-SEP-2008 23:25:38	Bright	44.000	24	66Alp Gem	1.5800	10200.	88	34209	No
166	GOM_NL__2PRFIN20080914_233415_000000602072_00087_34209_5863.N1	14-SEP-2008 23:34:15	Twilight	59.500	8	10Alp CMI	0.40000	6500.0	119	34209	No
167	GOM_NL__2PRFIN20080914_234317_000000612072_00087_34209_5864.N1	14-SEP-2008 23:43:17	Dark	61.000	1	9Alp CMA	-1.4400	11000.	122	34209	No
168	GOM_NL__2PRFIN20080914_234532_000000502072_00087_34209_5865.N1	14-SEP-2008 23:45:32	Dark	49.500	23	21Eps CMA	1.5020	26000.	99	34209	No
169	GOM_NL__2PRFIN20080914_235150_000000552072_00088_34210_5869.N1	14-SEP-2008 23:51:50	Dark	55.000	2	Alp Car	-0.73600	7000.0	110	34210	No

3. Quality information per product

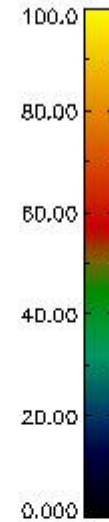
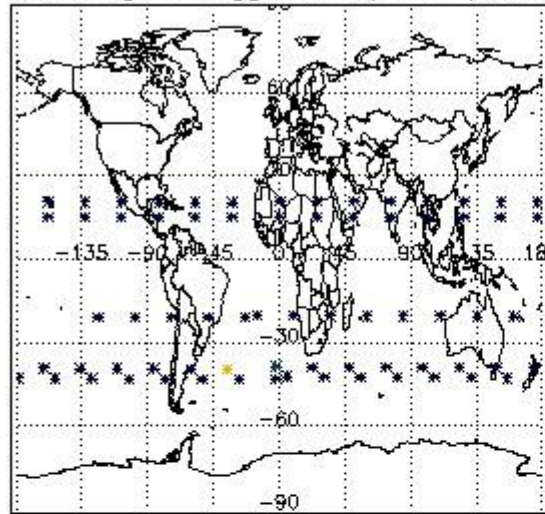
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

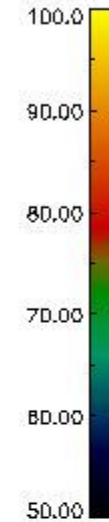
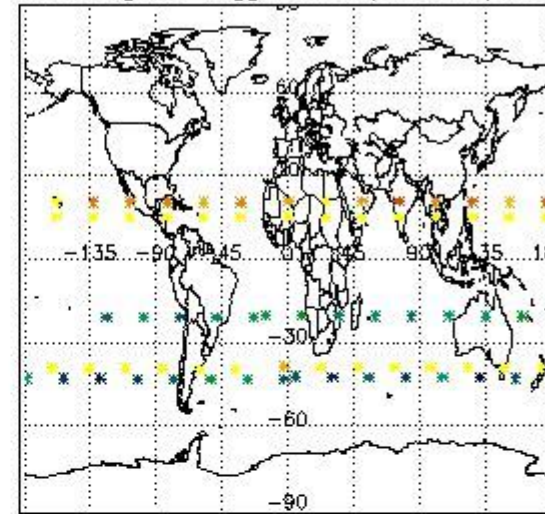


3.2 Plot quality information per product (world map)

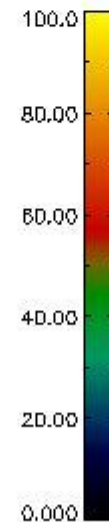
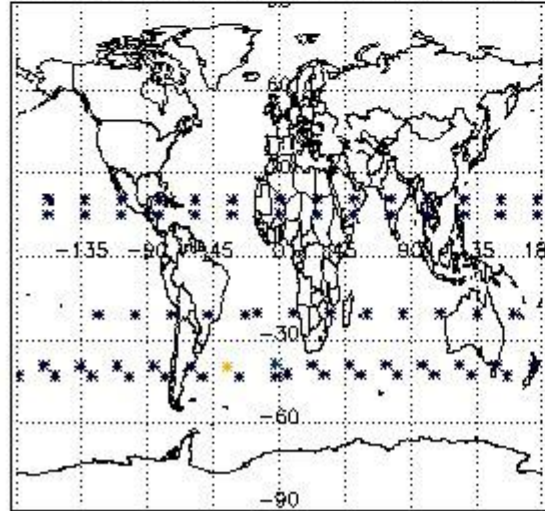
Percentage of flagged data per O3 profile



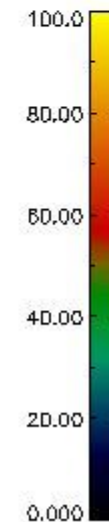
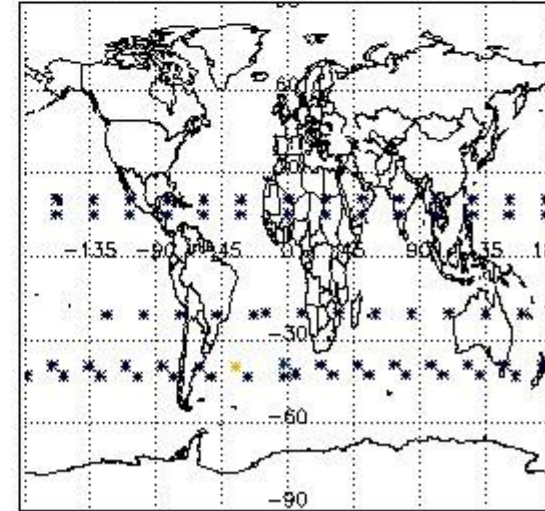
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

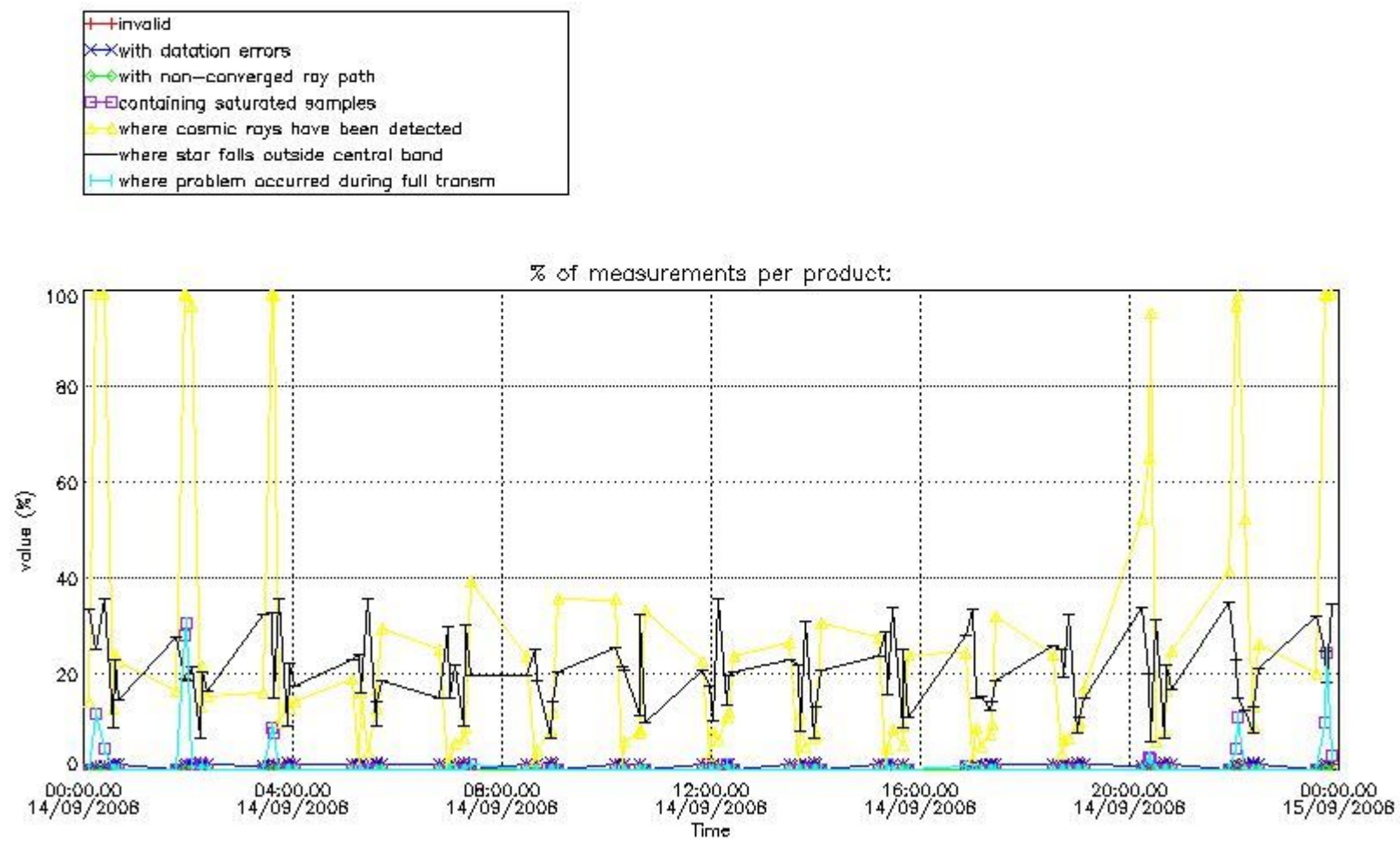


4. Level 1 quality information per product

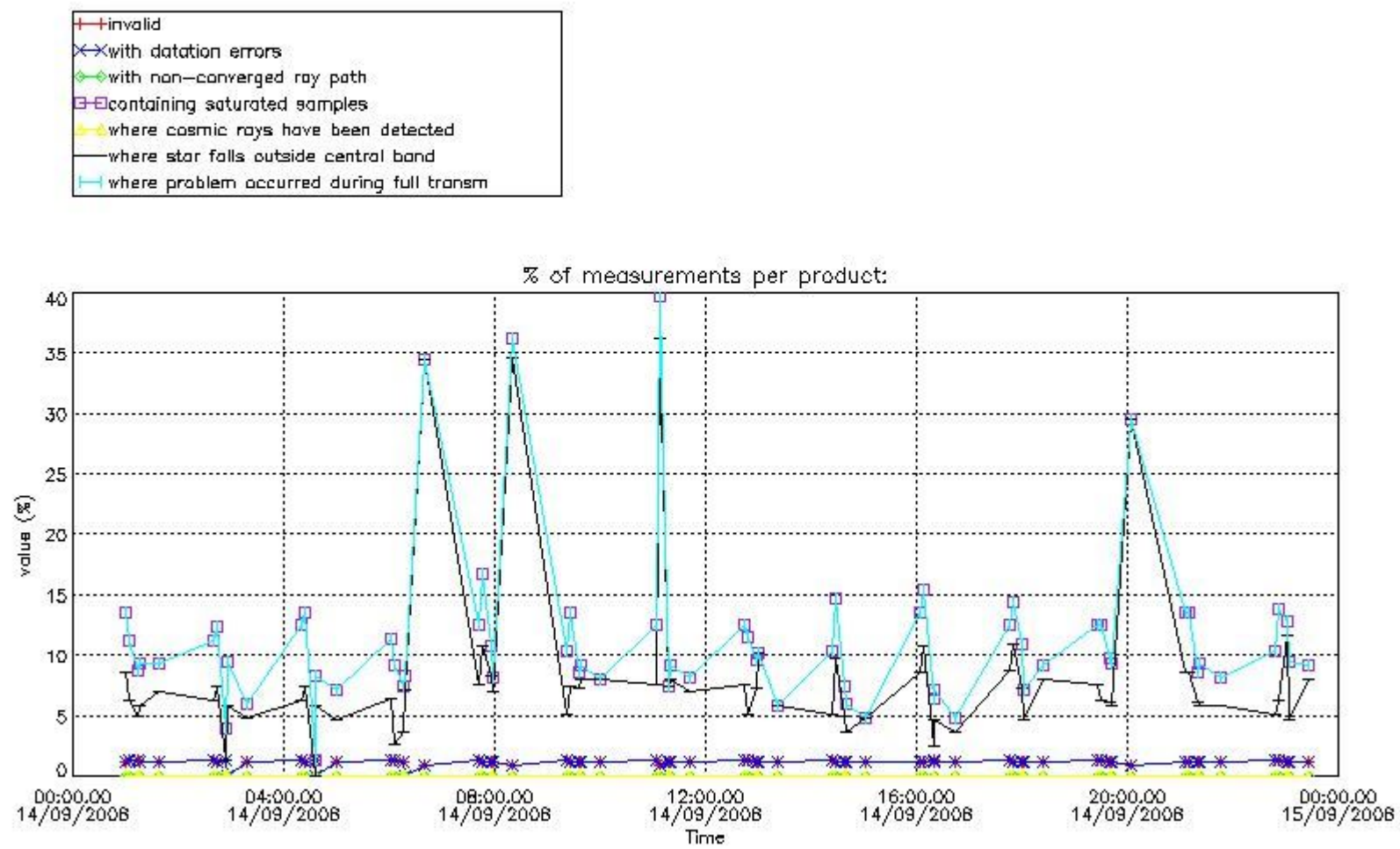
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

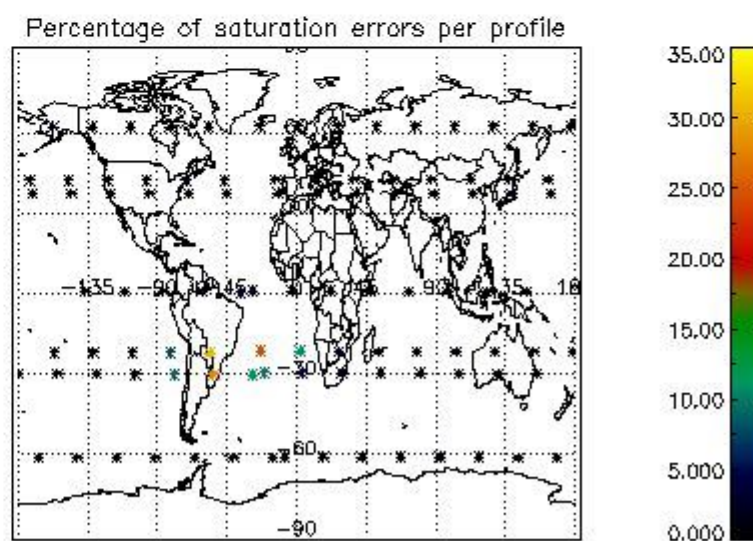
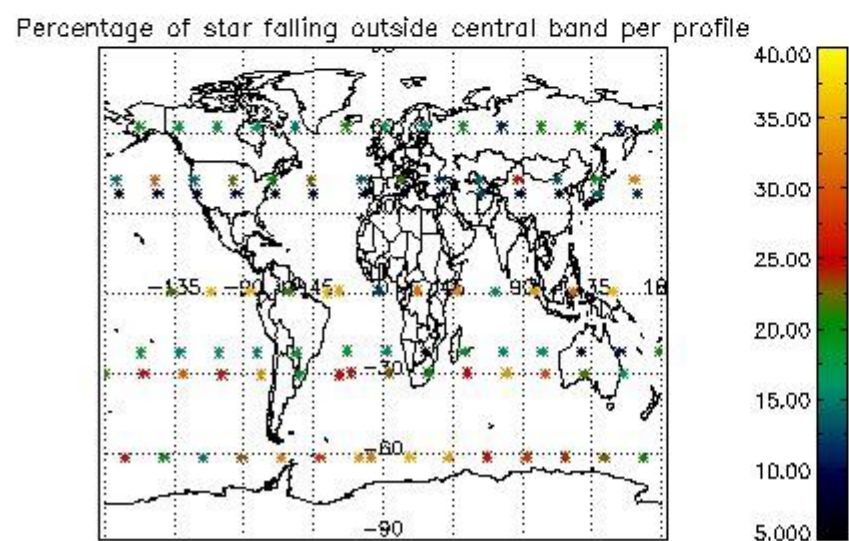
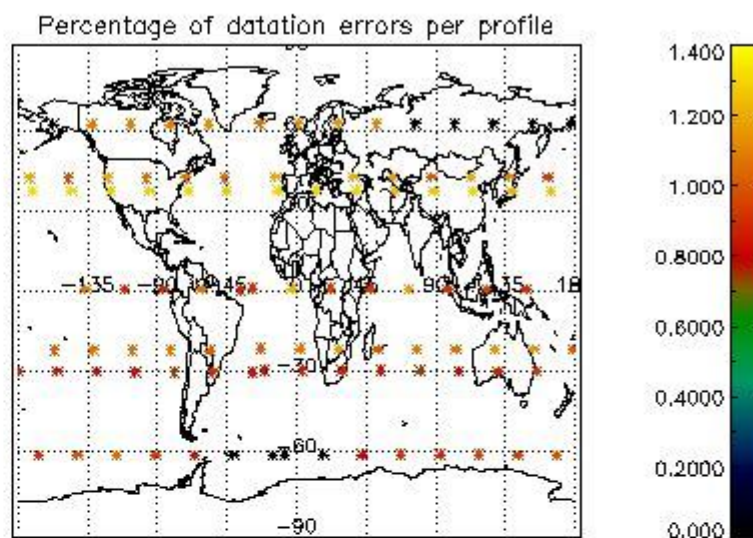
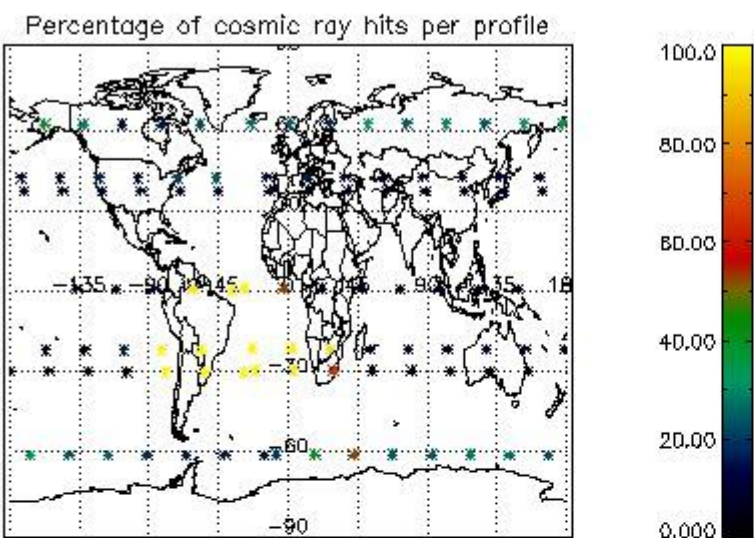


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

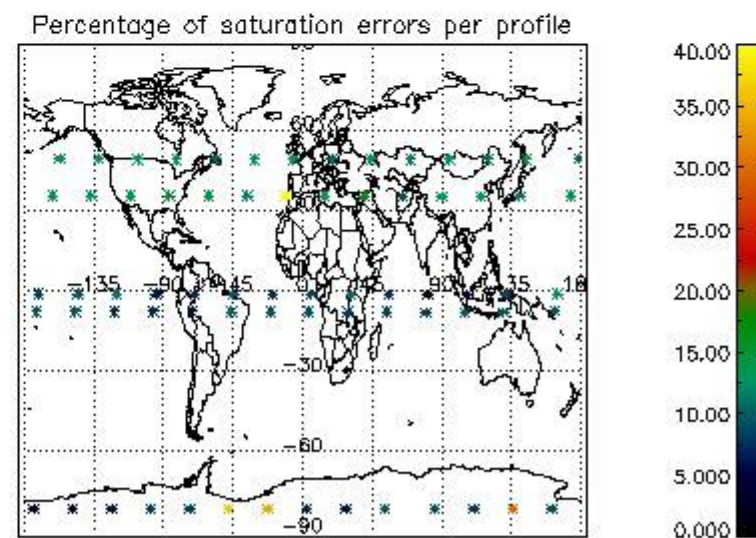
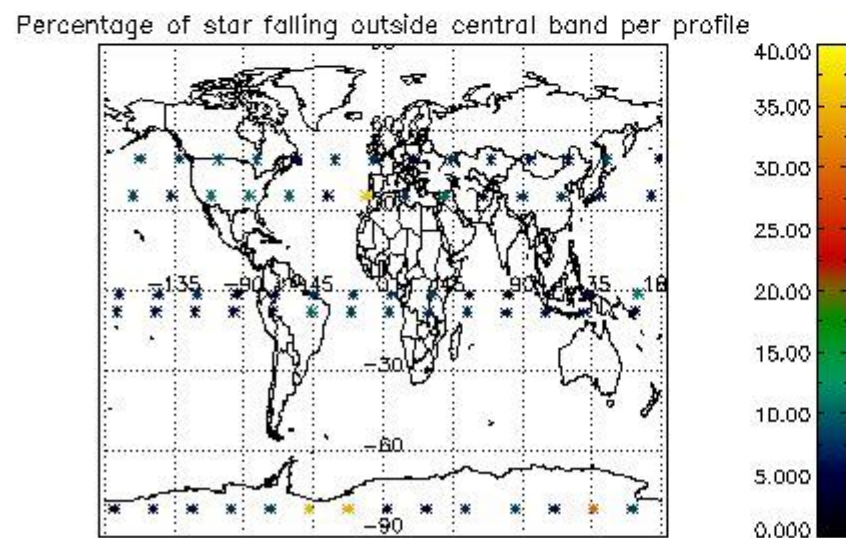
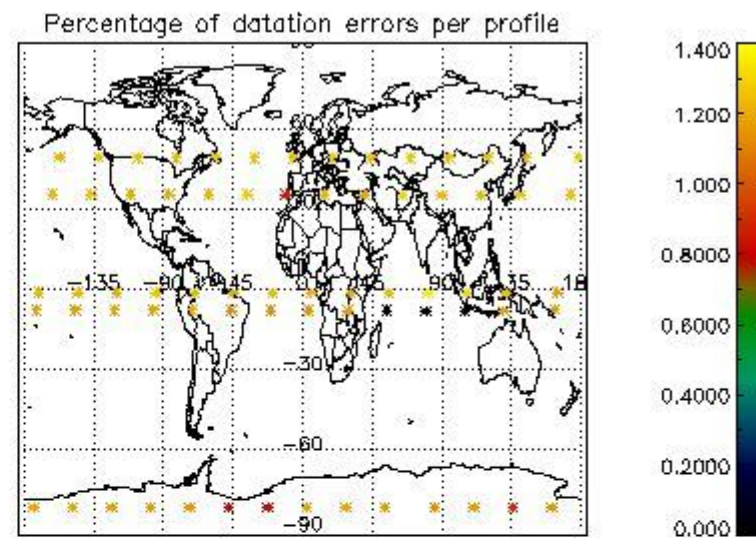
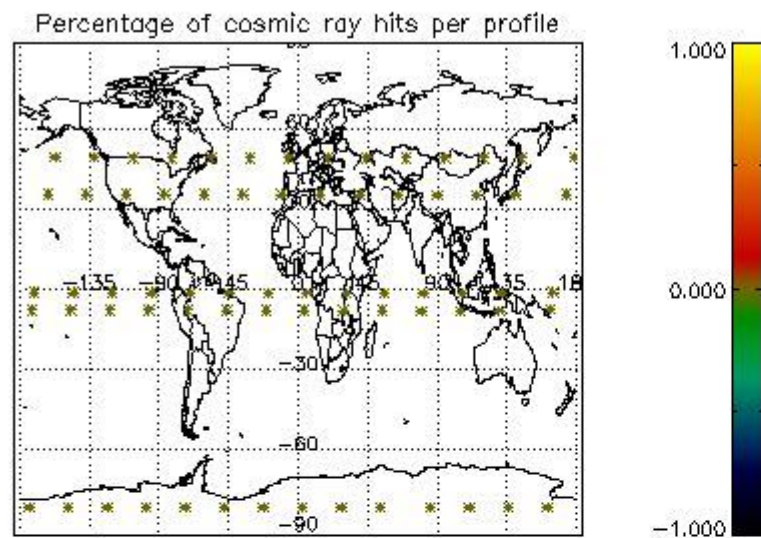


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

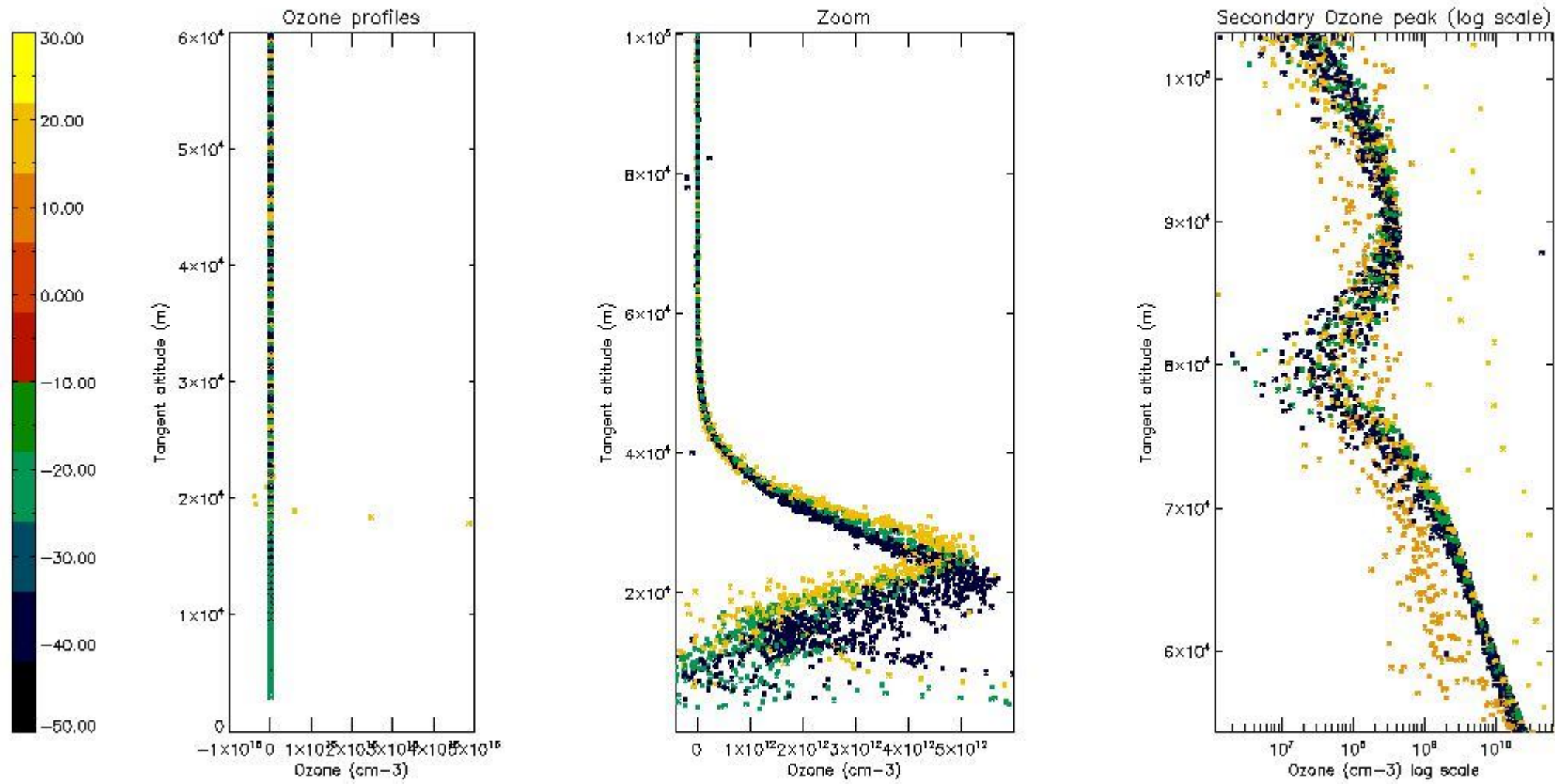
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	44
STD < 20	29

STD < 10	25
STD < 5	20

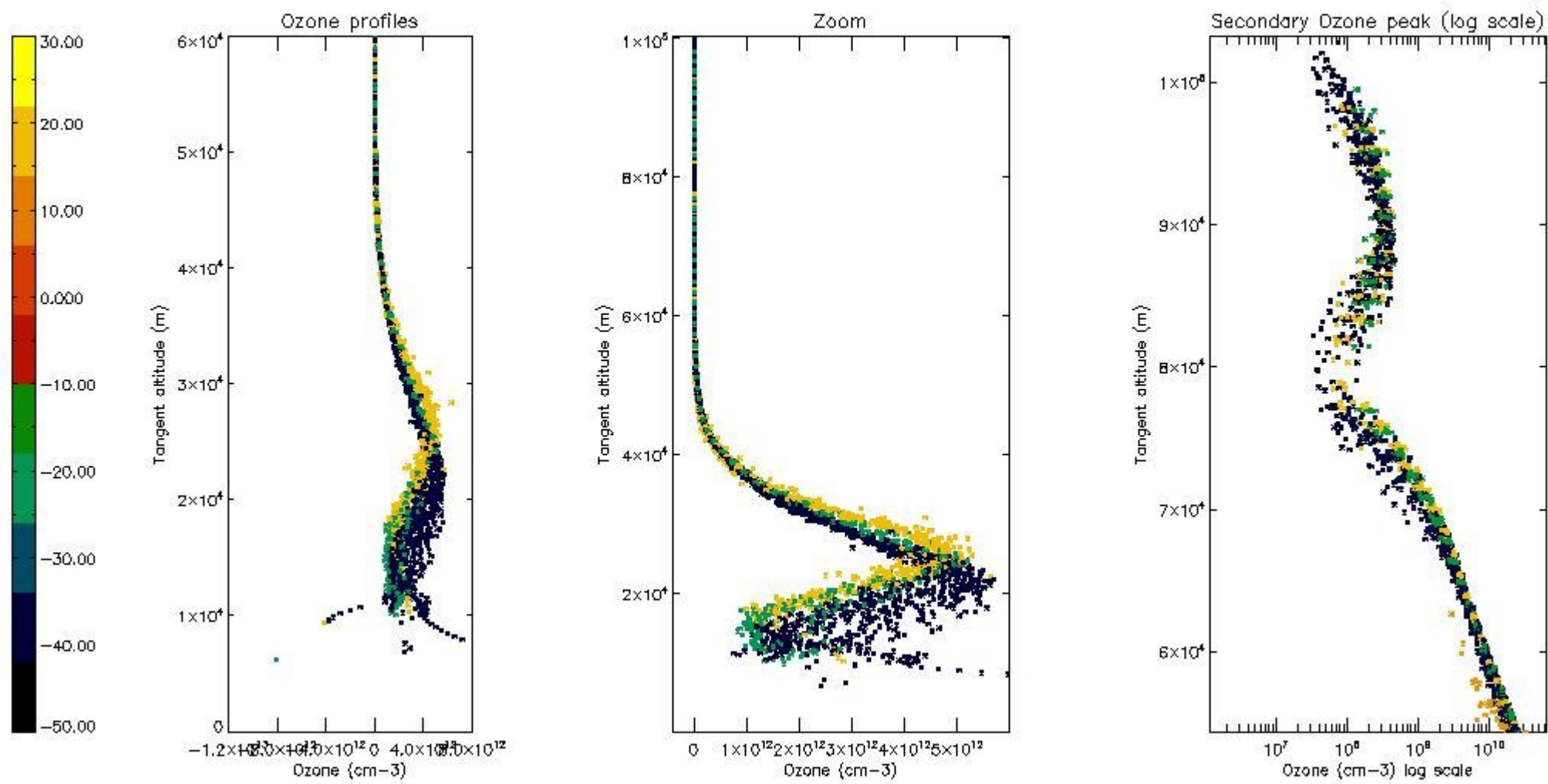
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



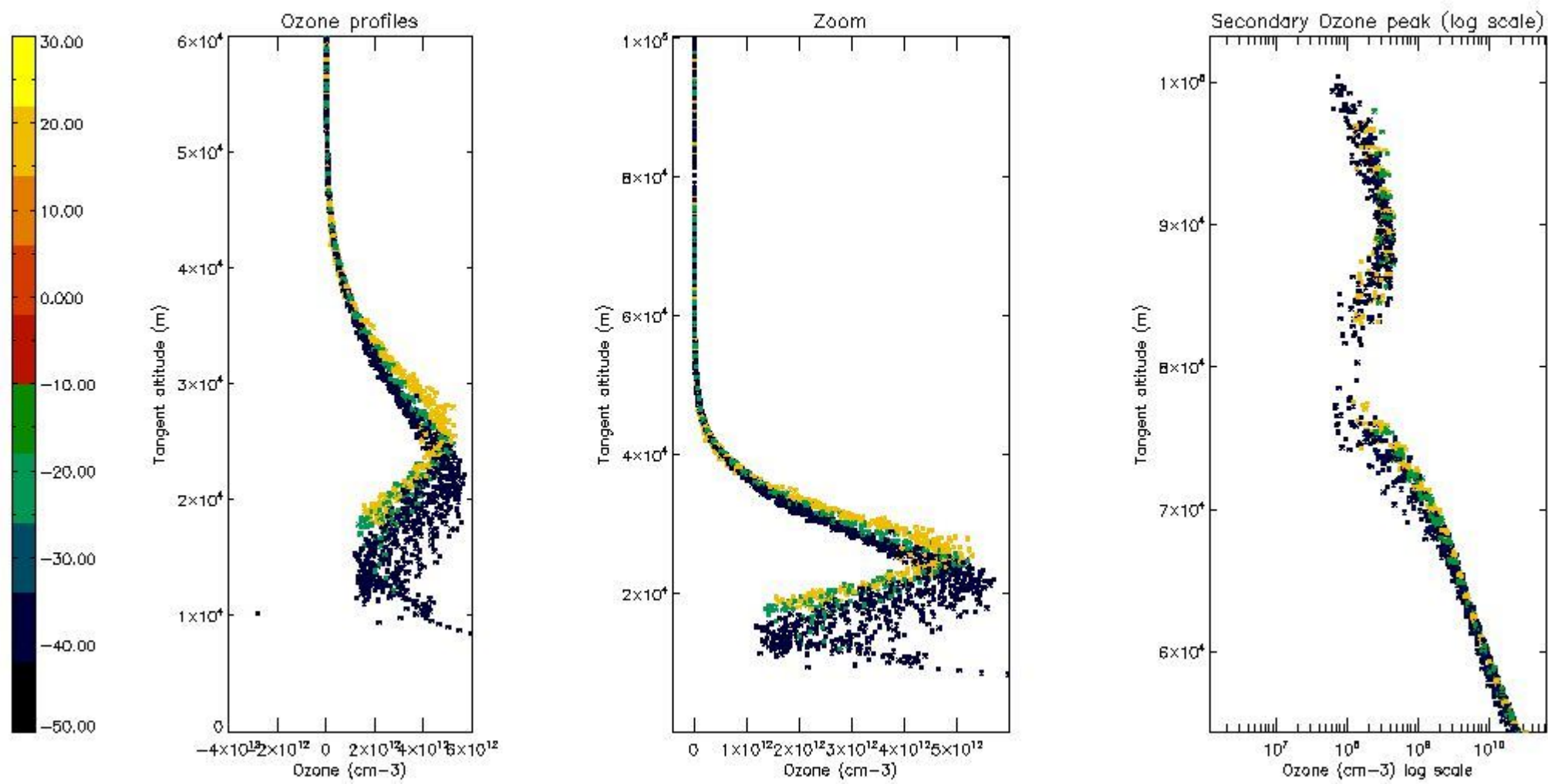
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



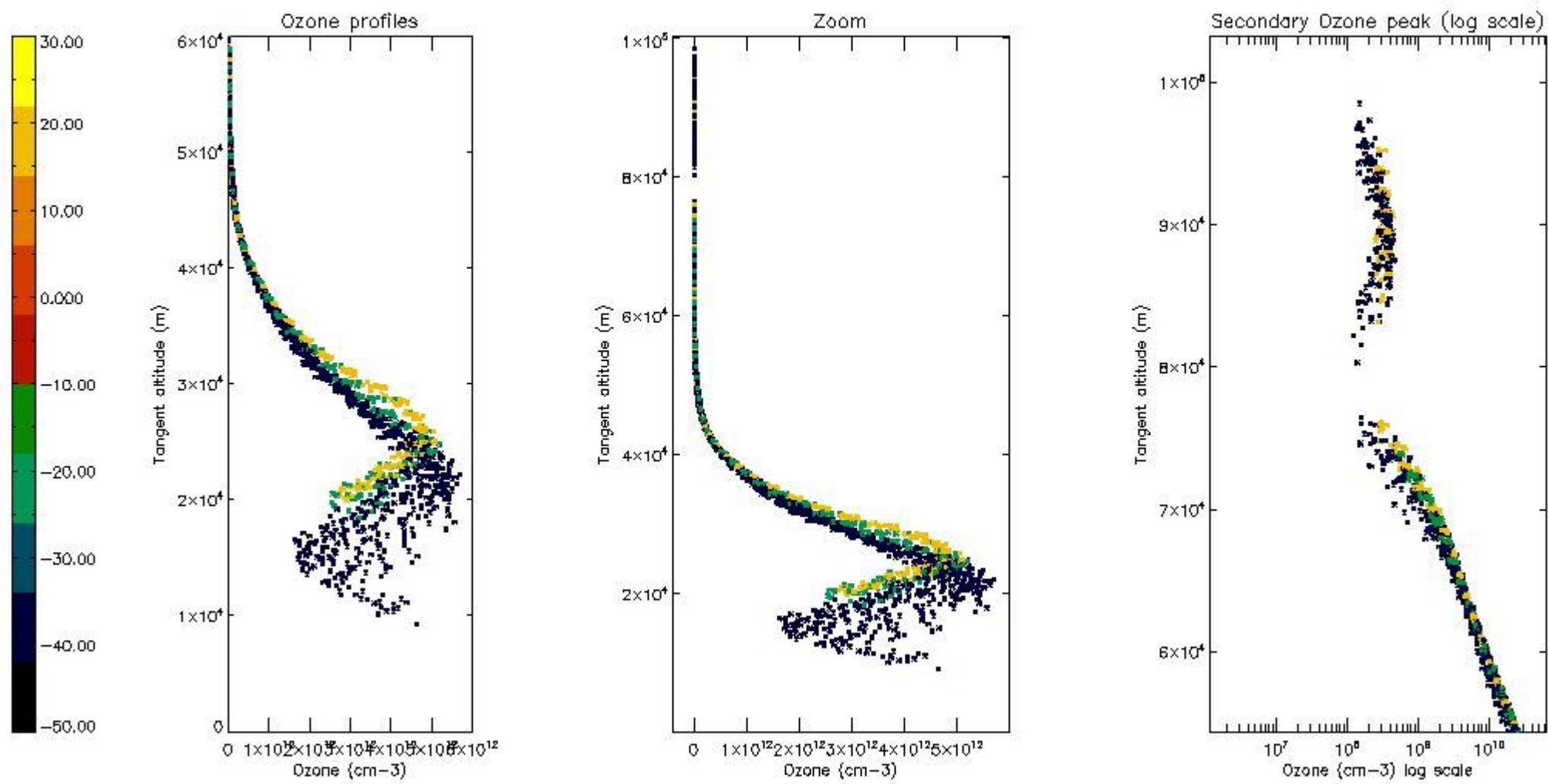
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



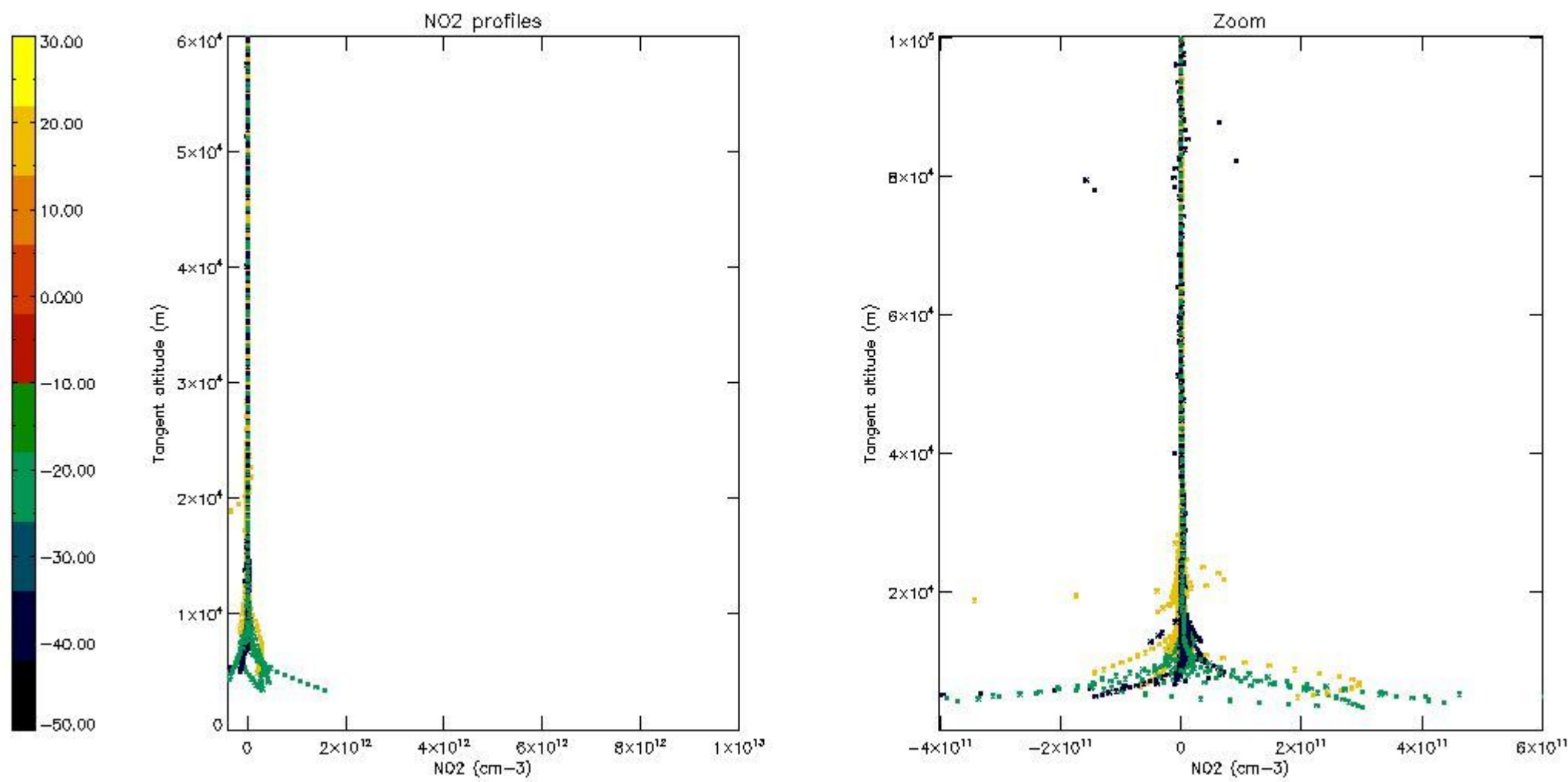
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



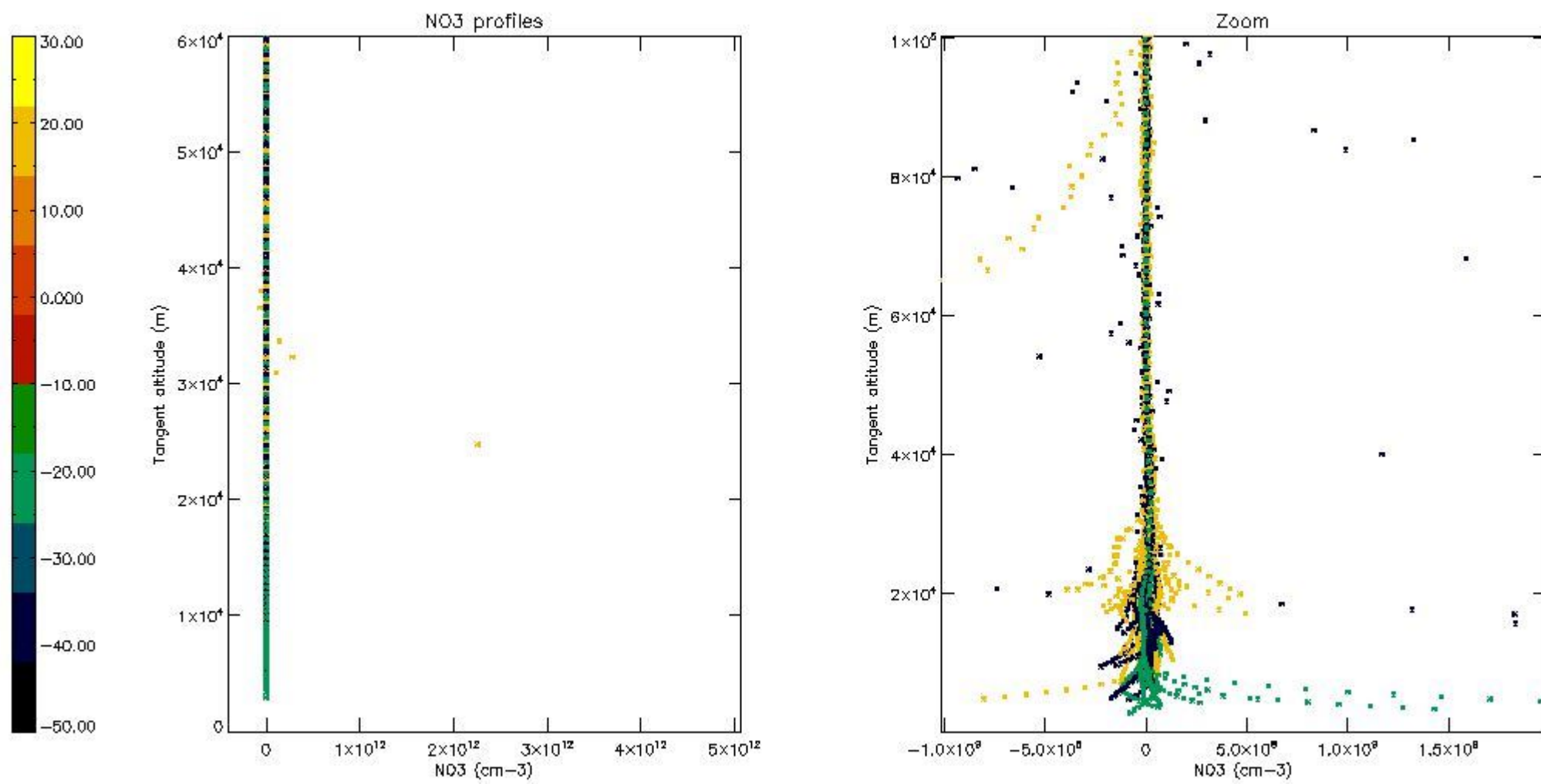
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



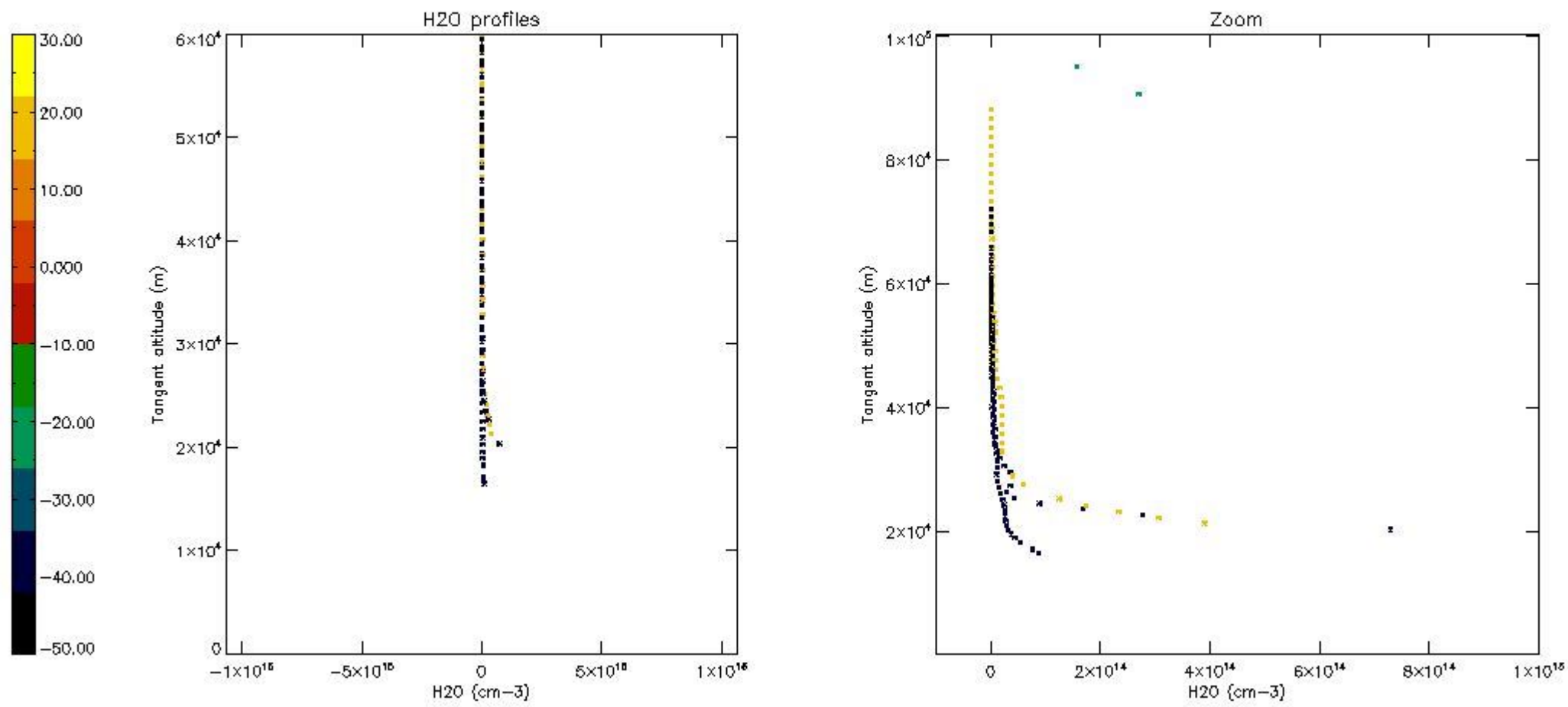
5.7 Plot NO3 profiles for all STD (dark without errors)

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	14-SEP-2008 00:05:45
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	14-SEP-2008 00:05:45
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	14-SEP-2008 00:05:45

GOMOS Level 2 Daily Report

SUMMARY

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[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	25APR2013 19:55:54
Data source version	GOMOS/6.01
Start time of products	14-09-2008 (14SEP2008 00:00:00)
Stop time of products	15-09-2008 (15SEP2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	169
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

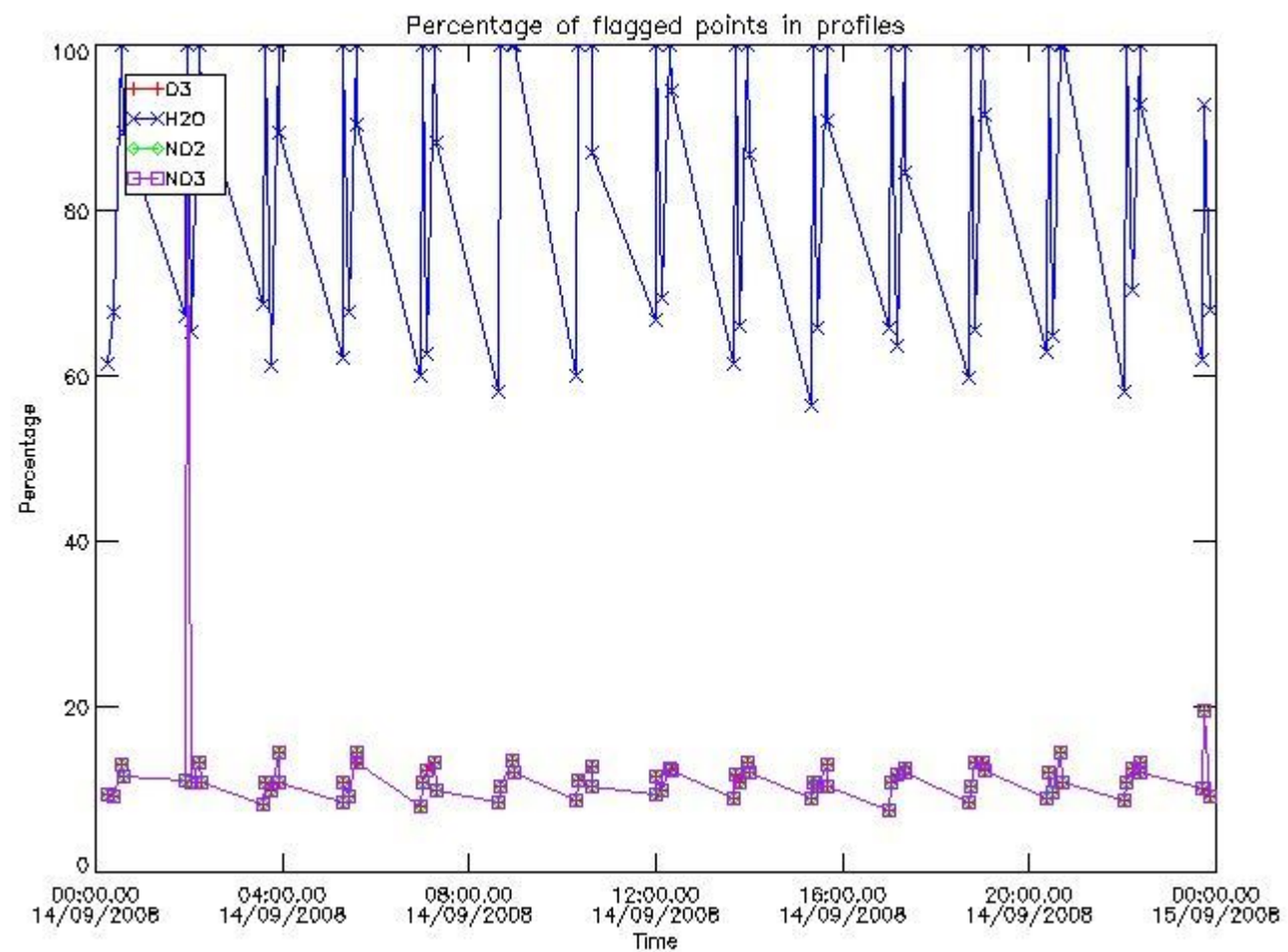
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080914_000545_000000602072_00073_34195_5648.N1	14-SEP-2008 00:05:45	Twilight	60.000	8	10Alp CMi	0.40000	6500.0	120	34195	No
2	GOM_NL__2PRFIN20080914_001439_000000602072_00073_34195_5649.N1	14-SEP-2008 00:14:39	Dark	60.000	1	9Alp CMa	-1.4400	11000.	120	34195	No
3	GOM_NL__2PRFIN20080914_002319_000000562072_00074_34196_5657.N1	14-SEP-2008 00:23:19	Dark	56.000	2	Alp Car	-0.73600	7000.0	112	34196	No
4	GOM_NL__2PRFIN20080914_003337_000000402072_00074_34196_5658.N1	14-SEP-2008 00:33:37	Dark	39.500	143	Alp Hyi	2.8570	7200.0	79	34196	No
5	GOM_NL__2PRFIN20080914_003502_000000482072_00074_34196_5659.N1	14-SEP-2008 00:35:02	Dark	48.000	9	Alp Eri	0.45300	24000.	96	34196	No
6	GOM_NL__2PRFIN20080914_004048_000000452072_00074_34196_5660.N1	14-SEP-2008 00:40:48	Straylight	44.500	84	Alp Phe	2.3970	4500.0	89	34196	No
7	GOM_NL__2PRFIN20080914_005934_000000412072_00074_34196_5661.N1	14-SEP-2008 00:59:34	Bright	40.500	90	54Alp Peg	2.4870	11000.	81	34196	No
8	GOM_NL__2PRFIN20080914_010329_000000402072_00074_34196_5662.N1	14-SEP-2008 01:03:29	Bright	40.000	93	53Bet Peg	2.5200	3100.0	80	34196	No
9	GOM_NL__2PRFIN20080914_011349_000000402072_00074_34196_5663.N1	14-SEP-2008 01:13:49	Bright	40.000	74	11Bet Cas	2.2680	6600.0	80	34196	No
10	GOM_NL__2PRFIN20080914_011539_000000432072_00074_34196_5664.N1	14-SEP-2008 01:15:39	Bright	43.000	76	27Gam Cas	2.3000	30000.	86	34196	No
11	GOM_NL__2PRFIN20080914_013749_000000432072_00074_34196_5665.N1	14-SEP-2008 01:37:49	Bright	43.000	24	66Alp Gem	1.5800	10200.	86	34196	No
12	GOM_NL__2PRFIN20080914_014621_000000552072_00074_34196_5666.N1	14-SEP-2008 01:46:21	Twilight	54.500	8	10Alp CMi	0.40000	6500.0	109	34196	No
13	GOM_NL__2PRFIN20080914_015516_000000562072_00074_34196_5667.N1	14-SEP-2008 01:55:16	Dark	55.500	1	9Alp CMa	-1.4400	11000.	111	34196	No
14	GOM_NL__2PRFIN20080914_015734_000000492072_00074_34196_5668.N1	14-SEP-2008 01:57:34	Dark	49.000	23	21Eps CMa	1.5020	26000.	98	34196	No
15	GOM_NL__2PRFIN20080914_020355_000000472072_00075_34197_5667.N1	14-SEP-2008 02:03:55	Dark	46.500	2	Alp Car	-0.73600	7000.0	93	34197	No
16	GOM_NL__2PRFIN20080914_021414_000000392072_00075_34197_5668.N1	14-SEP-2008 02:14:14	Dark	38.500	143	Alp Hyi	2.8570	7200.0	77	34197	No
17	GOM_NL__2PRFIN20080914_021539_000000472072_00075_34197_5669.N1	14-SEP-2008 02:15:39	Dark	46.500	9	Alp Eri	0.45300	24000.	93	34197	No
18	GOM_NL__2PRFIN20080914_022125_000000462072_00075_34197_5670.N1	14-SEP-2008 02:21:25	Straylight	45.500	84	Alp Phe	2.3970	4500.0	91	34197	No
19	GOM_NL__2PRFIN20080914_024010_000000402072_00075_34197_5671.N1	14-SEP-2008 02:40:10	Bright	40.000	90	54Alp Peg	2.4870	11000.	80	34197	No
20	GOM_NL__2PRFIN20080914_024405_000000412072_00075_34197_5672.N1	14-SEP-2008 02:44:05	Bright	40.500	93	53Bet Peg	2.5200	3100.0	81	34197	No
21	GOM_NL__2PRFIN20080914_025424_000000392072_00075_34197_5673.N1	14-SEP-2008 02:54:24	Bright	38.500	74	11Bet Cas	2.2680	6600.0	77	34197	No
22	GOM_NL__2PRFIN20080914_025615_000000432072_00075_34197_5674.N1	14-SEP-2008 02:56:15	Bright	42.500	76	27Gam Cas	2.3000	30000.	85	34197	No
23	GOM_NL__2PRFIN20080914_031825_000000422072_00075_34197_5675.N1	14-SEP-2008 03:18:25	Bright	42.000	24	66Alp Gem	1.5800	10200.	84	34197	No
24	GOM_NL__2PRFIN20080914_032658_000000602072_00075_34197_5676.N1	14-SEP-2008 03:26:58	Twilight	60.000	8	10Alp CMi	0.40000	6500.0	120	34197	No
25	GOM_NL__2PRFIN20080914_033553_000000682072_00075_34197_5677.N1	14-SEP-2008 03:35:53	Dark	67.500	1	9Alp CMa	-1.4400	11000.	135	34197	No
26	GOM_NL__2PRFIN20080914_033811_000000472072_00075_34197_5678.N1	14-SEP-2008 03:38:11	Dark	46.500	23	21Eps CMa	1.5020	26000.	93	34197	No
27	GOM_NL__2PRFIN20080914_034432_000000562072_00076_34198_5691.N1	14-SEP-2008 03:44:32	Dark	56.000	2	Alp Car	-0.73600	7000.0	112	34198	No
28	GOM_NL__2PRFIN20080914_035450_000000392072_00076_34198_5692.N1	14-SEP-2008 03:54:50	Dark	39.000	143	Alp Hyi	2.8570	7200.0	78	34198	No
29	GOM_NL__2PRFIN20080914_035615_000000482072_00076_34198_5693.N1	14-SEP-2008 03:56:15	Dark	47.500	9	Alp Eri	0.45300	24000.	95	34198	No
30	GOM_NL__2PRFIN20080914_040201_000000462072_00076_34198_5694.N1	14-SEP-2008 04:02:01	Straylight	45.500	84	Alp Phe	2.3970	4500.0	91	34198	No
31	GOM_NL__2PRFIN20080914_042046_000000402072_00076_34198_5695.N1	14-SEP-2008 04:20:46	Bright	40.000	90	54Alp Peg	2.4870	11000.	80	34198	No
32	GOM_NL__2PRFIN20080914_042440_000000412072_00076_34198_5696.N1	14-SEP-2008 04:24:40	Bright	40.500	93	53Bet Peg	2.5200	3100.0	81	34198	No
33	GOM_NL__2PRFIN20080914_043500_000000372072_00076_34198_5697.N1	14-SEP-2008 04:35:00	Bright	37.000	74	11Bet Cas	2.2680	6600.0	74	34198	No
34	GOM_NL__2PRFIN20080914_043650_000000432072_00076_34198_5698.N1	14-SEP-2008 04:36:50	Bright	42.500	76	27Gam Cas	2.3000	30000.	85	34198	No
35	GOM_NL__2PRFIN20080914_045901_000000432072_00076_34198_5699.N1	14-SEP-2008 04:59:01	Bright	42.500	24	66Alp Gem	1.5800	10200.	85	34198	No
36	GOM_NL__2PRFIN20080914_050734_000000532072_00076_34198_5700.N1	14-SEP-2008 05:07:34	Twilight	52.500	8	10Alp CMi	0.40000	6500.0	105	34198	No
37	GOM_NL__2PRFIN20080914_051630_000000602072_00076_34198_5701.N1	14-SEP-2008 05:16:30	Dark	60.000	1	9Alp CMa	-1.4400	11000.	120	34198	No
38	GOM_NL__2PRFIN20080914_051848_000000472072_00076_34198_5702.N1	14-SEP-2008 05:18:48	Dark	47.000	23	21Eps CMa	1.5020	26000.	94	34198	No
39	GOM_NL__2PRFIN20080914_052509_000000562072_00077_34199_5704.N1	14-SEP-2008 05:25:09	Dark	56.000	2	Alp Car	-0.73600	7000.0	112	34199	No
40	GOM_NL__2PRFIN20080914_053527_000000392072_00077_34199_5705.N1	14-SEP-2008 05:35:27	Dark	39.000	143	Alp Hyi	2.8570	7200.0	78	34199	No
41	GOM_NL__2PRFIN20080914_053652_000000422072_00077_34199_5706.N1	14-SEP-2008 05:36:52	Dark	42.000	9	Alp Eri	0.45300	24000.	84	34199	No
42	GOM_NL__2PRFIN20080914_054238_000000462072_00077_34199_5707.N1	14-SEP-2008 05:42:38	Straylight	46.000	84	Alp Phe	2.3970	4500.0	92	34199	No

161	GOM_NL__2PRFIN20080914_224719_000000392072_00087_34209_5858.N1	14-SEP-2008 22:47:19	Bright	39.000	90	54Alp Peg	2.4870	11000.	78	34209	No
162	GOM_NL__2PRFIN20080914_225113_000000402072_00087_34209_5859.N1	14-SEP-2008 22:51:13	Bright	40.000	93	53Bet Peg	2.5200	3100.0	80	34209	No
163	GOM_NL__2PRFIN20080914_230130_000000432072_00087_34209_5860.N1	14-SEP-2008 23:01:30	Bright	43.000	74	11Bet Cas	2.2680	6600.0	86	34209	No
164	GOM_NL__2PRFIN20080914_230319_000000432072_00087_34209_5861.N1	14-SEP-2008 23:03:19	Bright	42.500	76	27Gam Cas	2.3000	30000.	85	34209	No
165	GOM_NL__2PRFIN20080914_232538_000000442072_00087_34209_5862.N1	14-SEP-2008 23:25:38	Bright	44.000	24	66Alp Gem	1.5800	10200.	88	34209	No
166	GOM_NL__2PRFIN20080914_233415_000000602072_00087_34209_5863.N1	14-SEP-2008 23:34:15	Twilight	59.500	8	10Alp CMi	0.40000	6500.0	119	34209	No
167	GOM_NL__2PRFIN20080914_234317_000000612072_00087_34209_5864.N1	14-SEP-2008 23:43:17	Dark	61.000	1	9Alp CMa	-1.4400	11000.	122	34209	No
168	GOM_NL__2PRFIN20080914_234532_000000502072_00087_34209_5865.N1	14-SEP-2008 23:45:32	Dark	49.500	23	21Eps CMa	1.5020	26000.	99	34209	No
169	GOM_NL__2PRFIN20080914_235150_000000552072_00088_34210_5869.N1	14-SEP-2008 23:51:50	Dark	55.000	2	Alp Car	-0.73600	7000.0	110	34210	No

3. Quality information per product

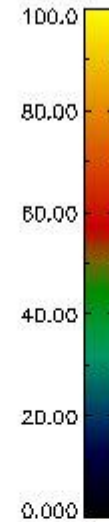
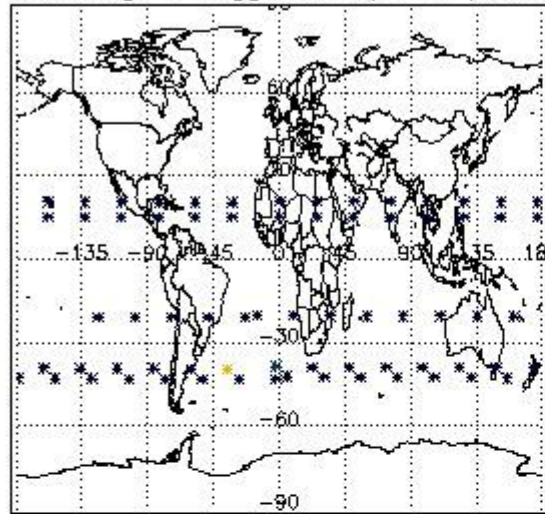
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

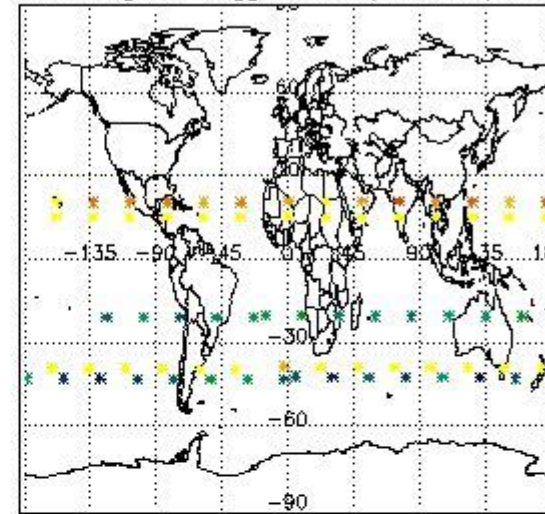


3.2 Plot quality information per product (world map)

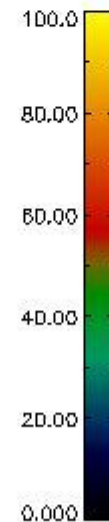
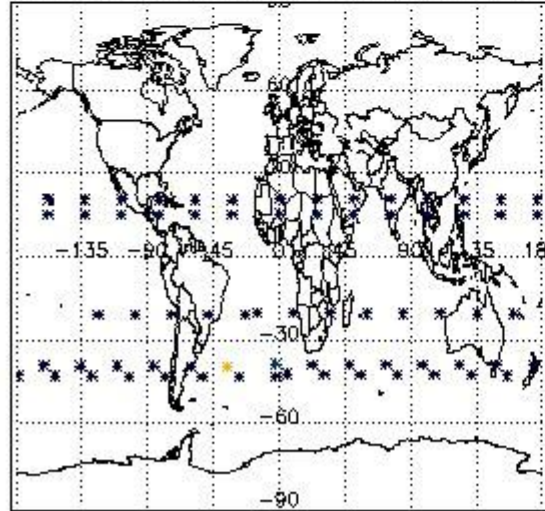
Percentage of flagged data per O3 profile



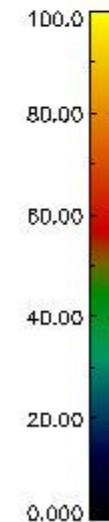
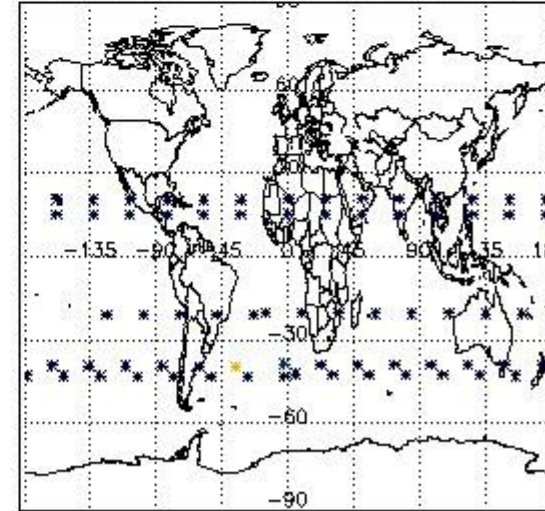
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

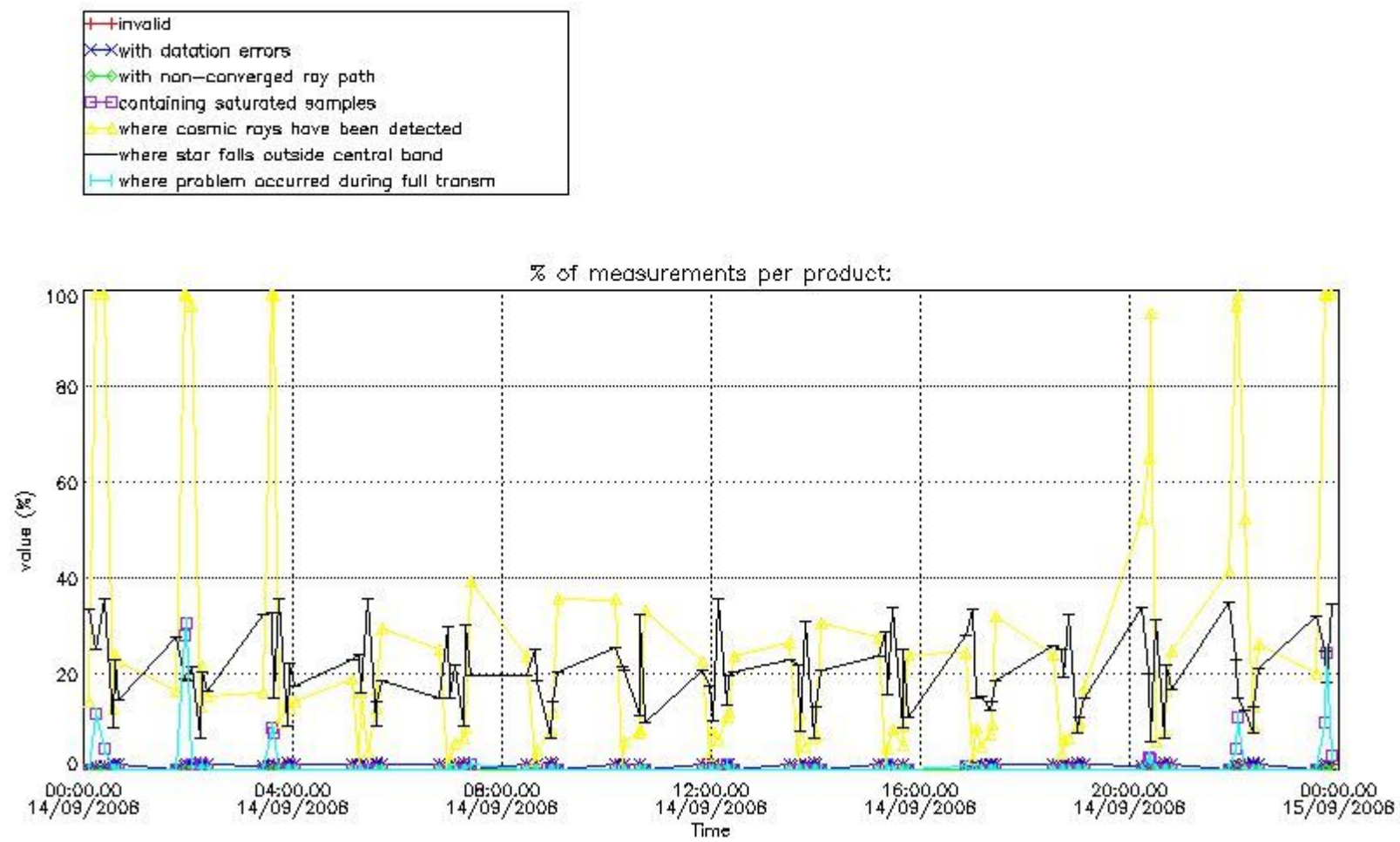


4. Level 1 quality information per product

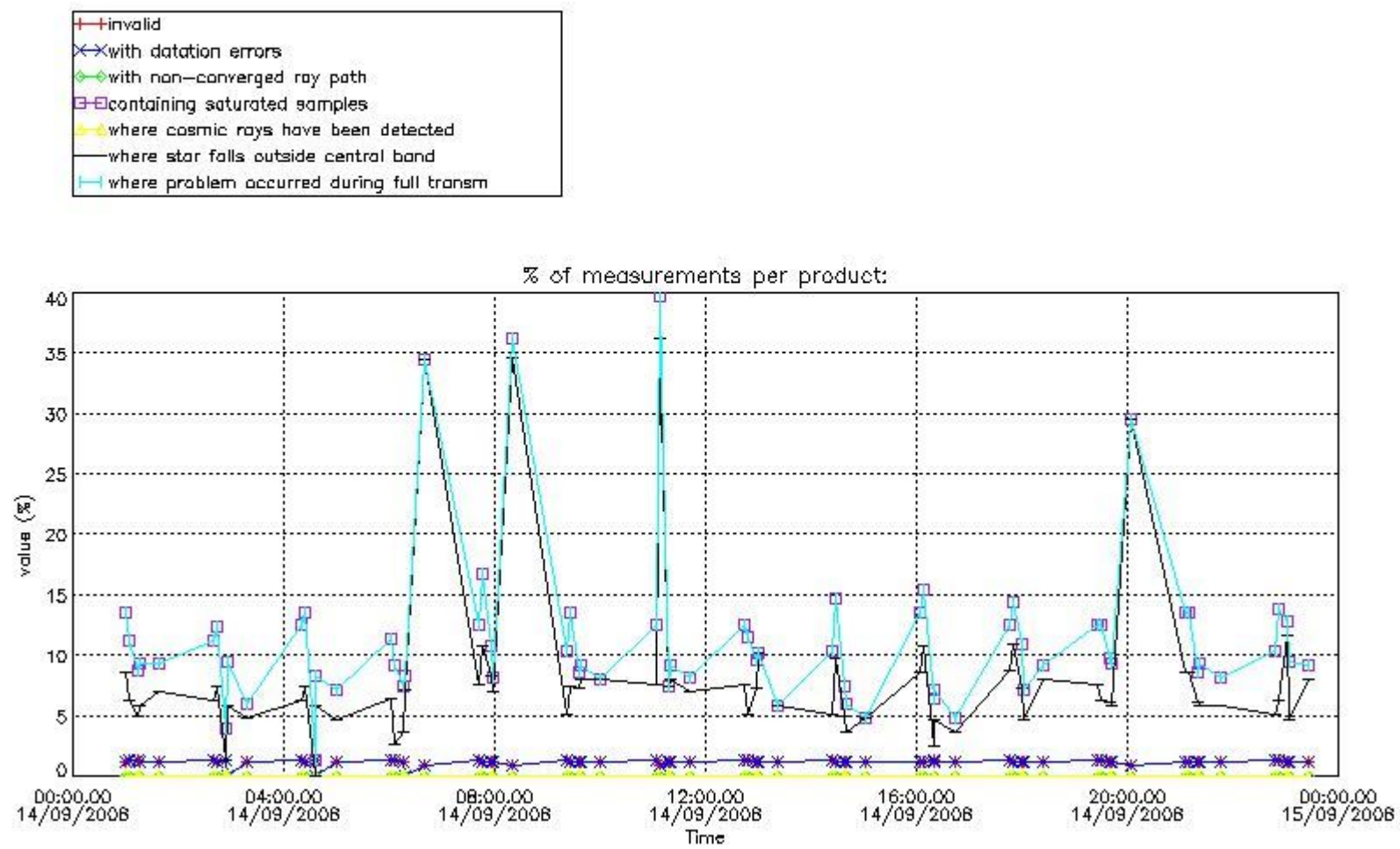
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



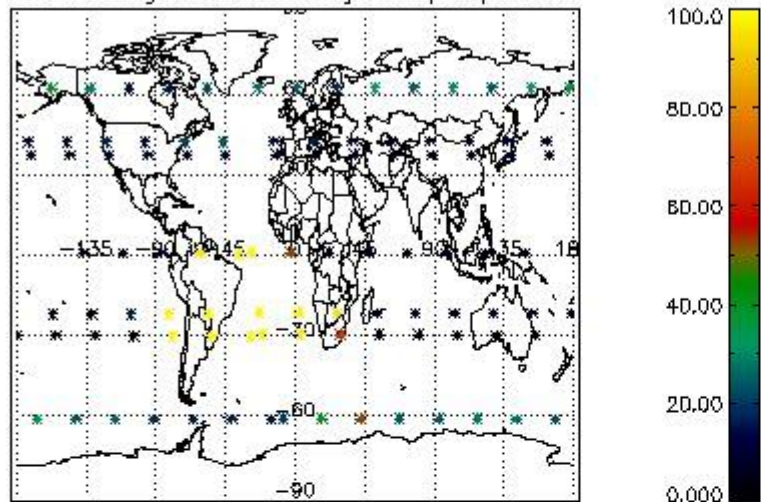
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



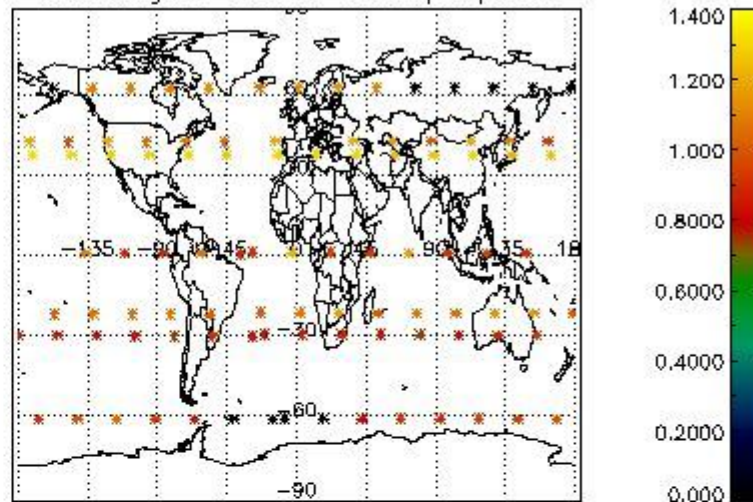
4.2 Plot quality information per product coming from level 1b processing (world map)

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

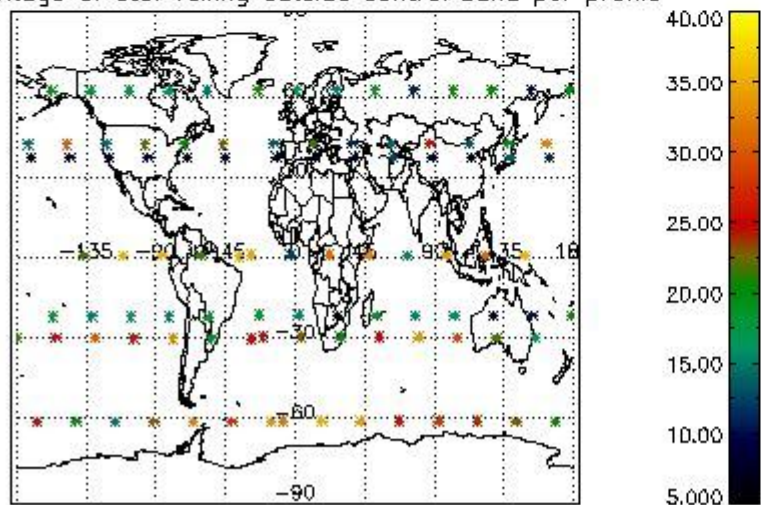
Percentage of cosmic ray hits per profile



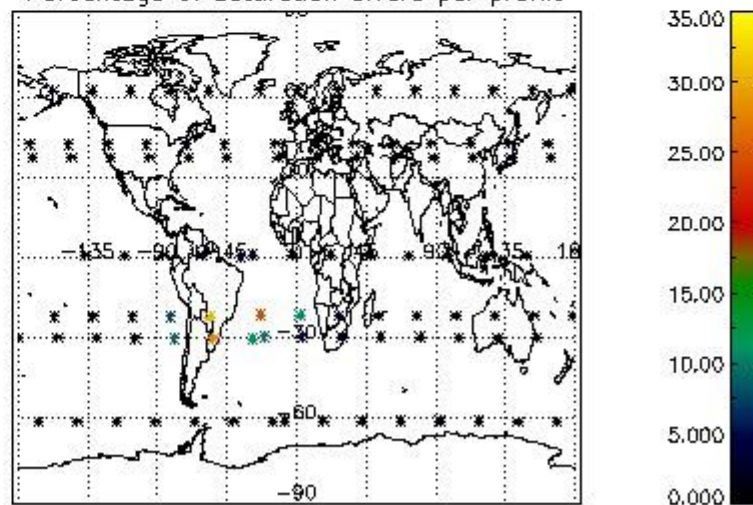
Percentage of datation errors per profile



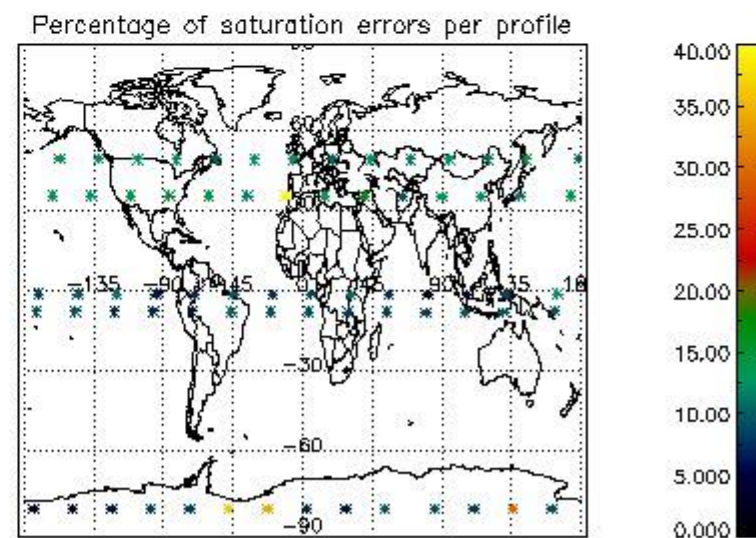
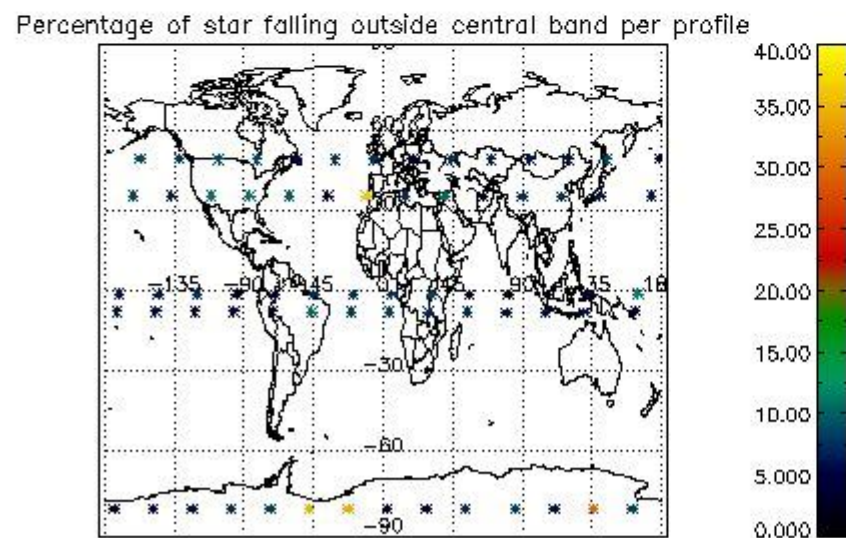
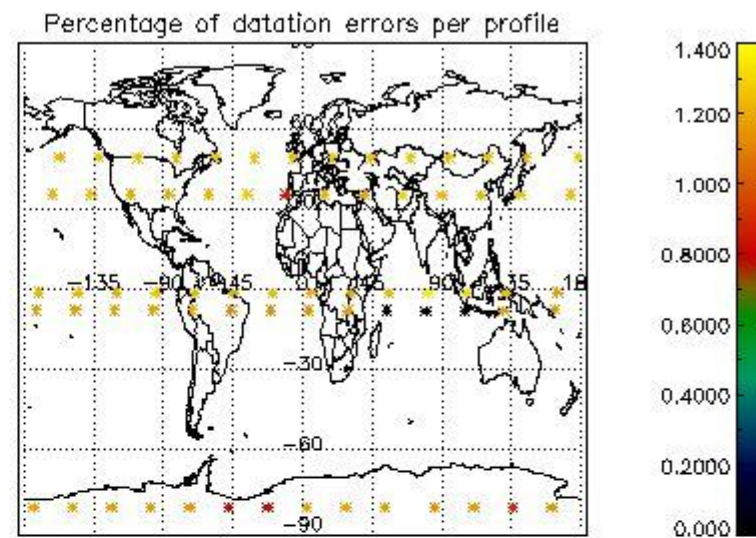
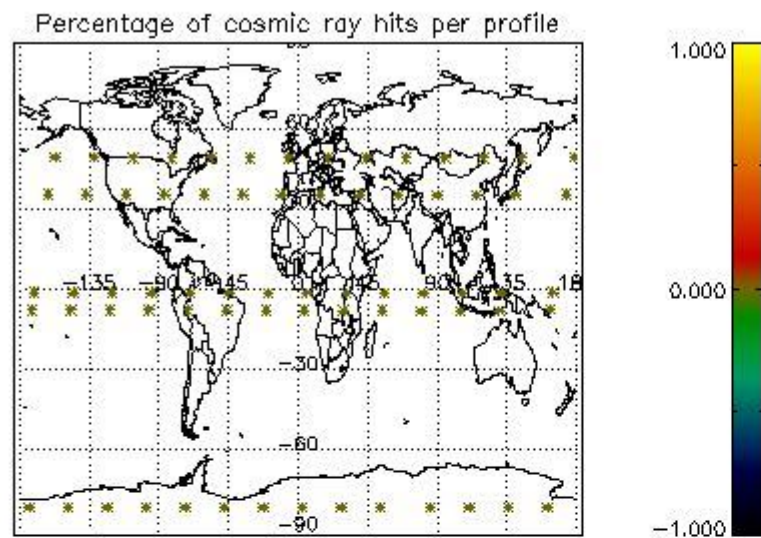
Percentage of star falling outside central band per profile



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

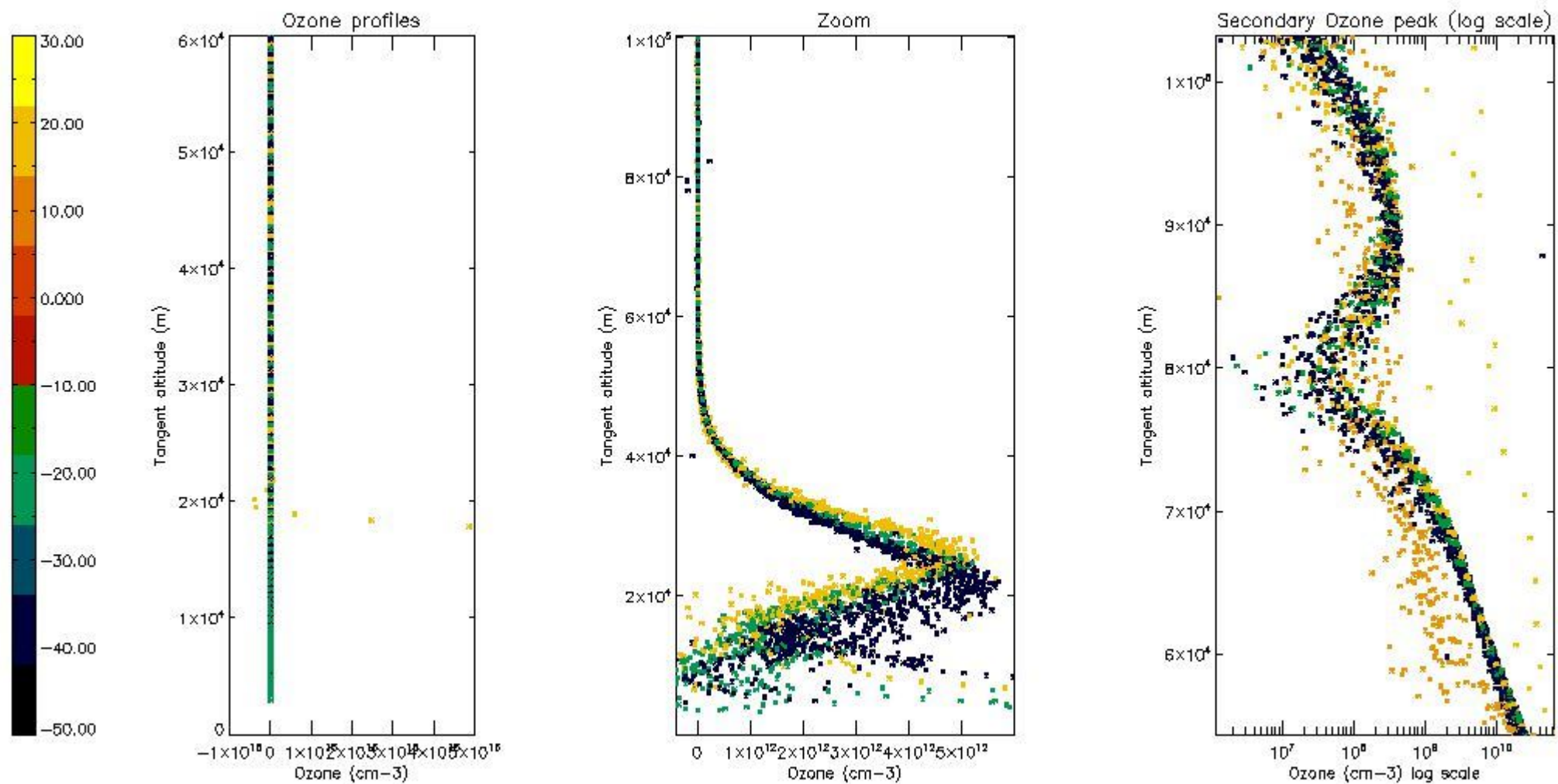
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	44
STD < 20	29

STD < 10	25
STD < 5	20

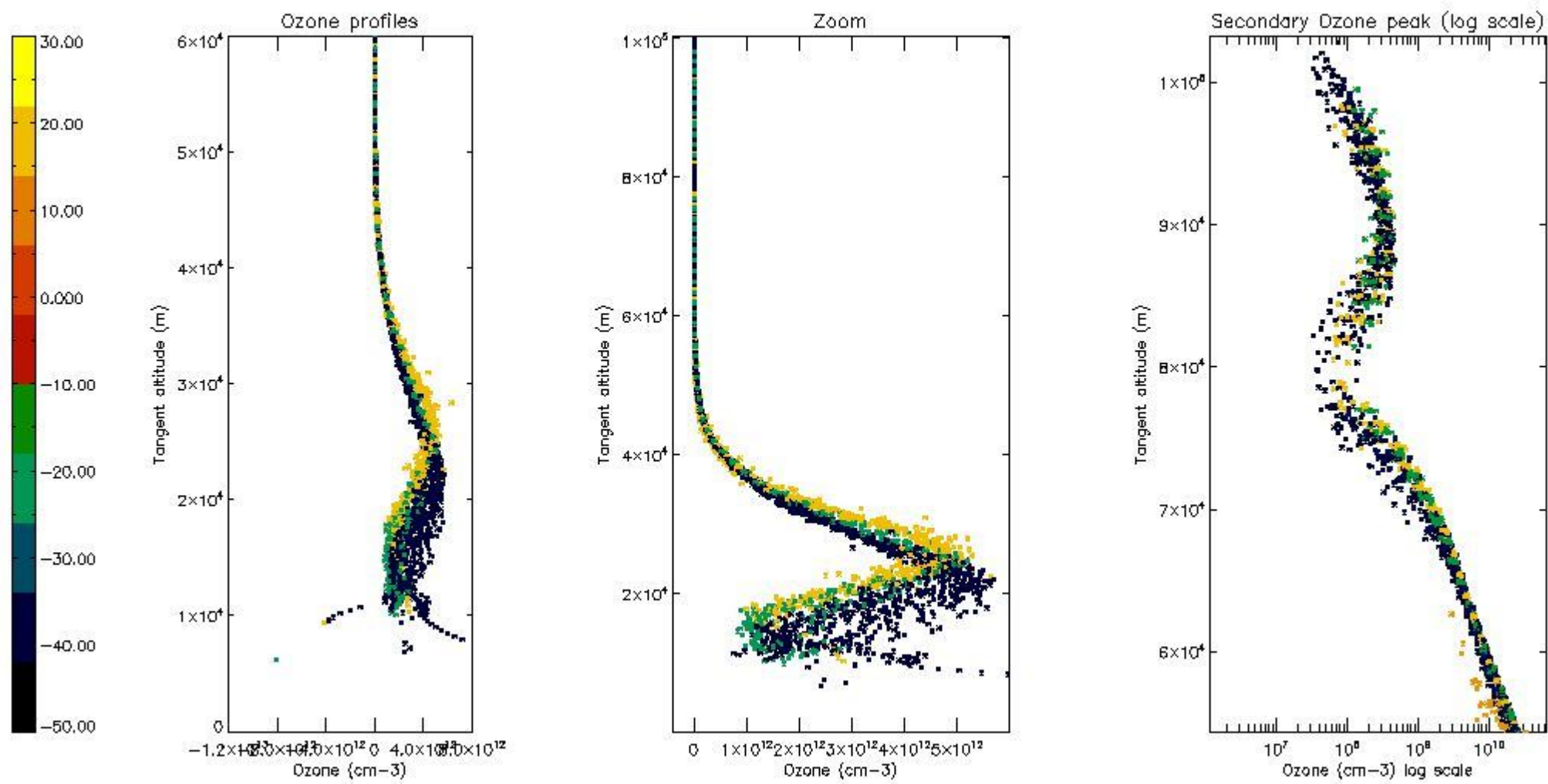
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



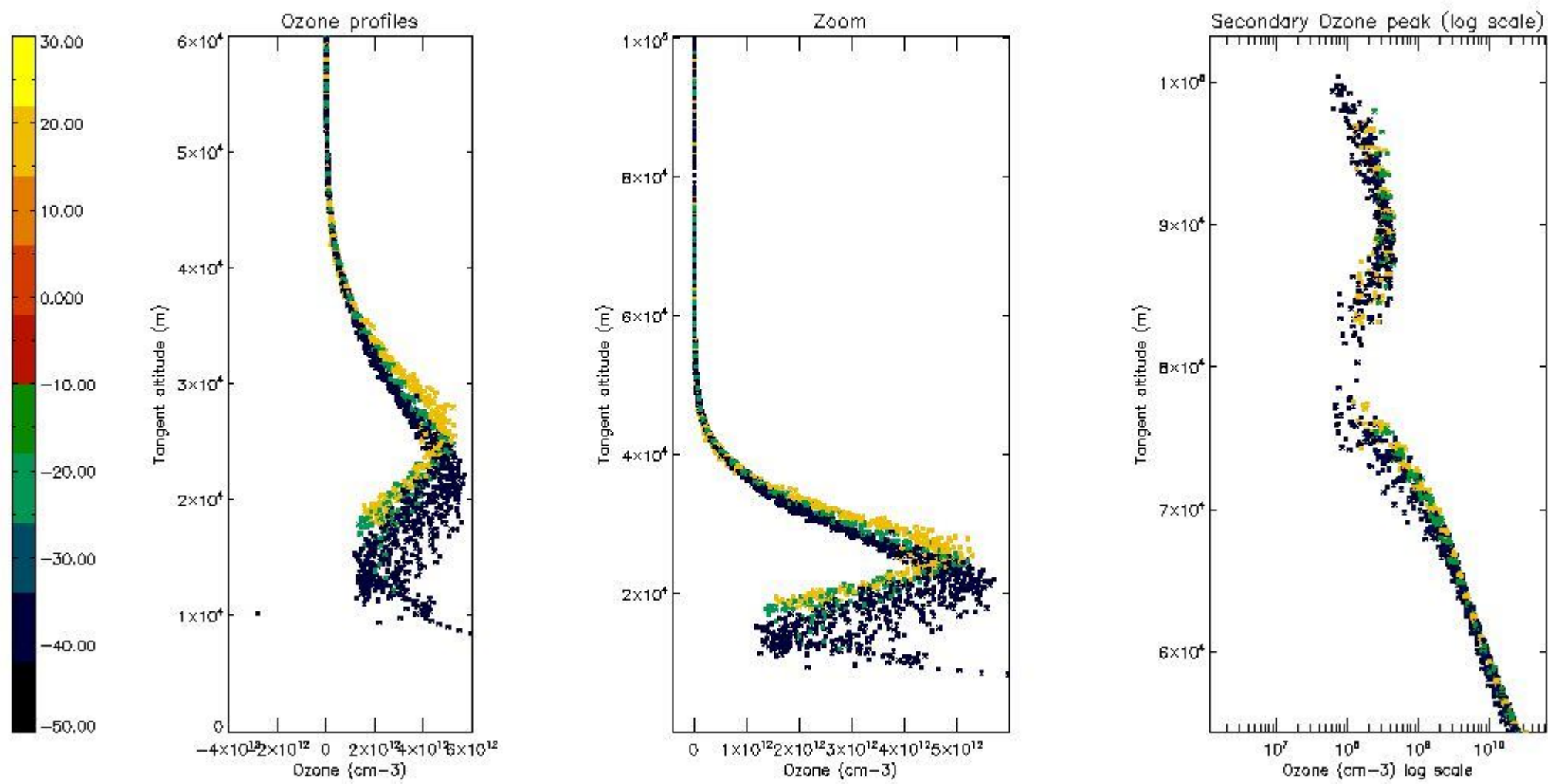
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



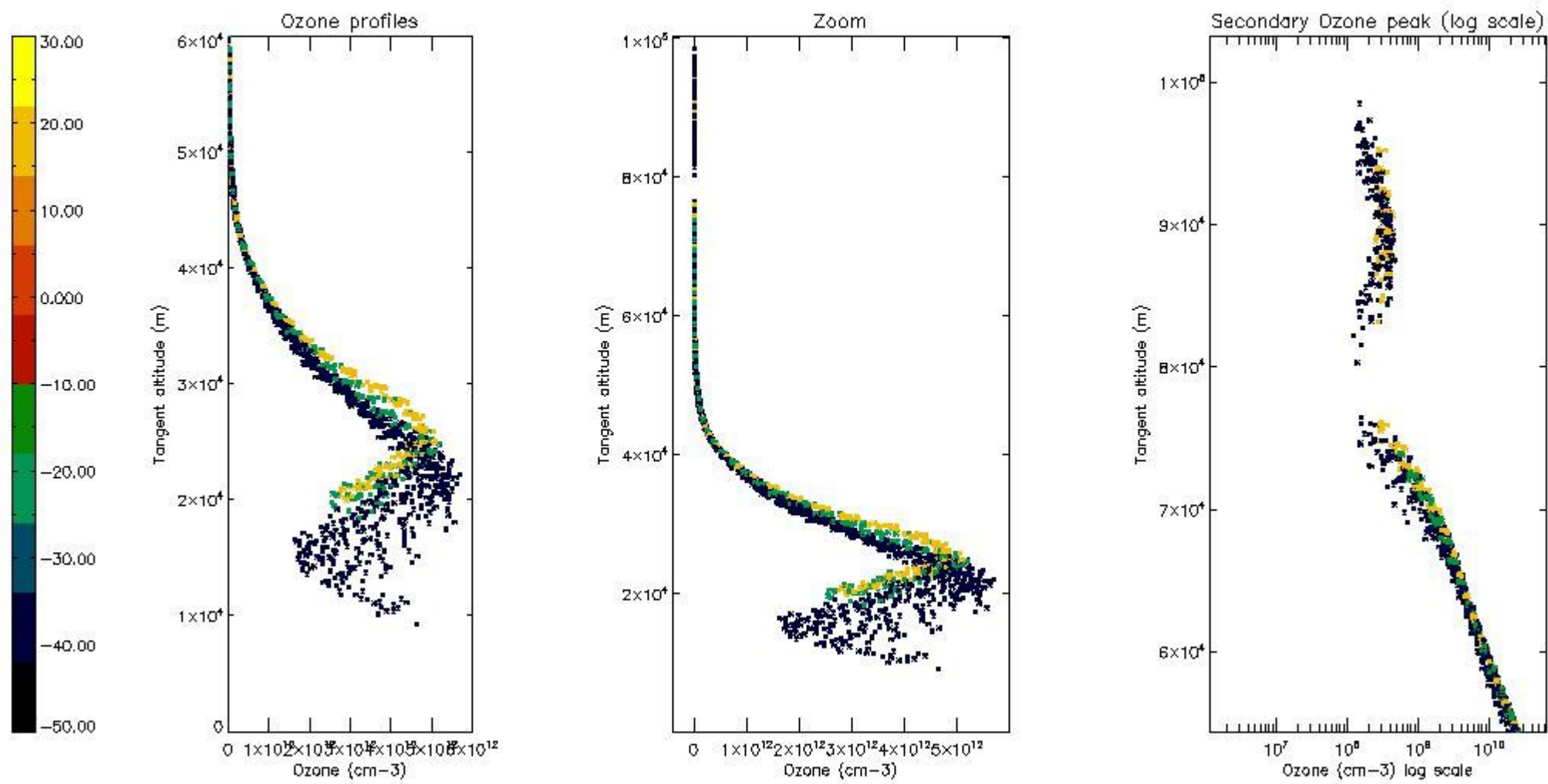
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



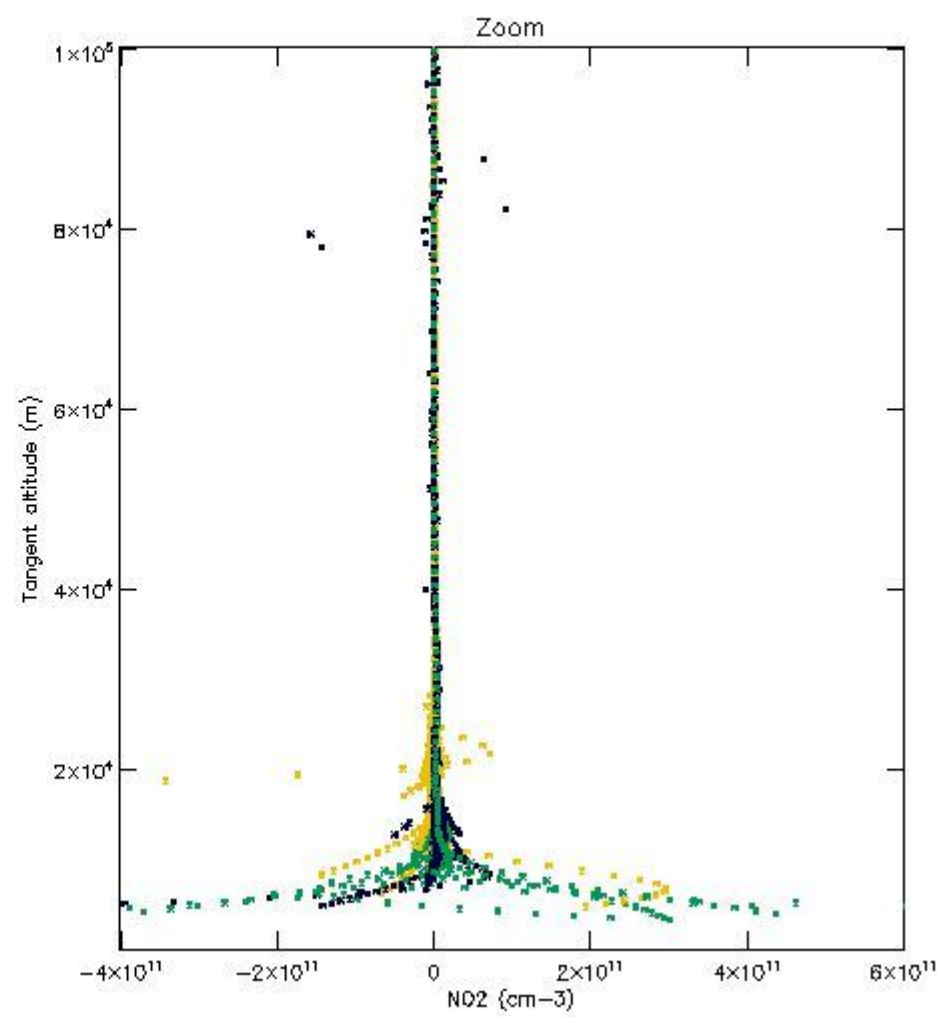
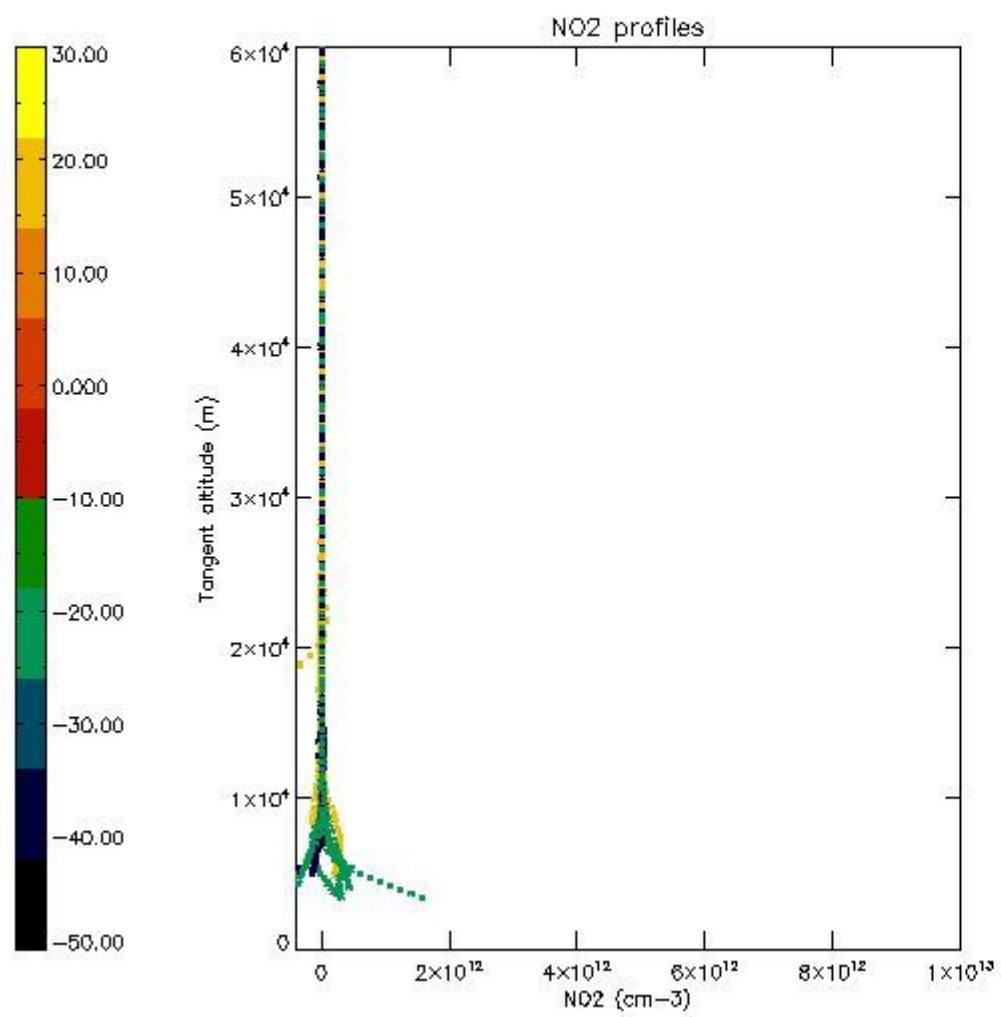
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



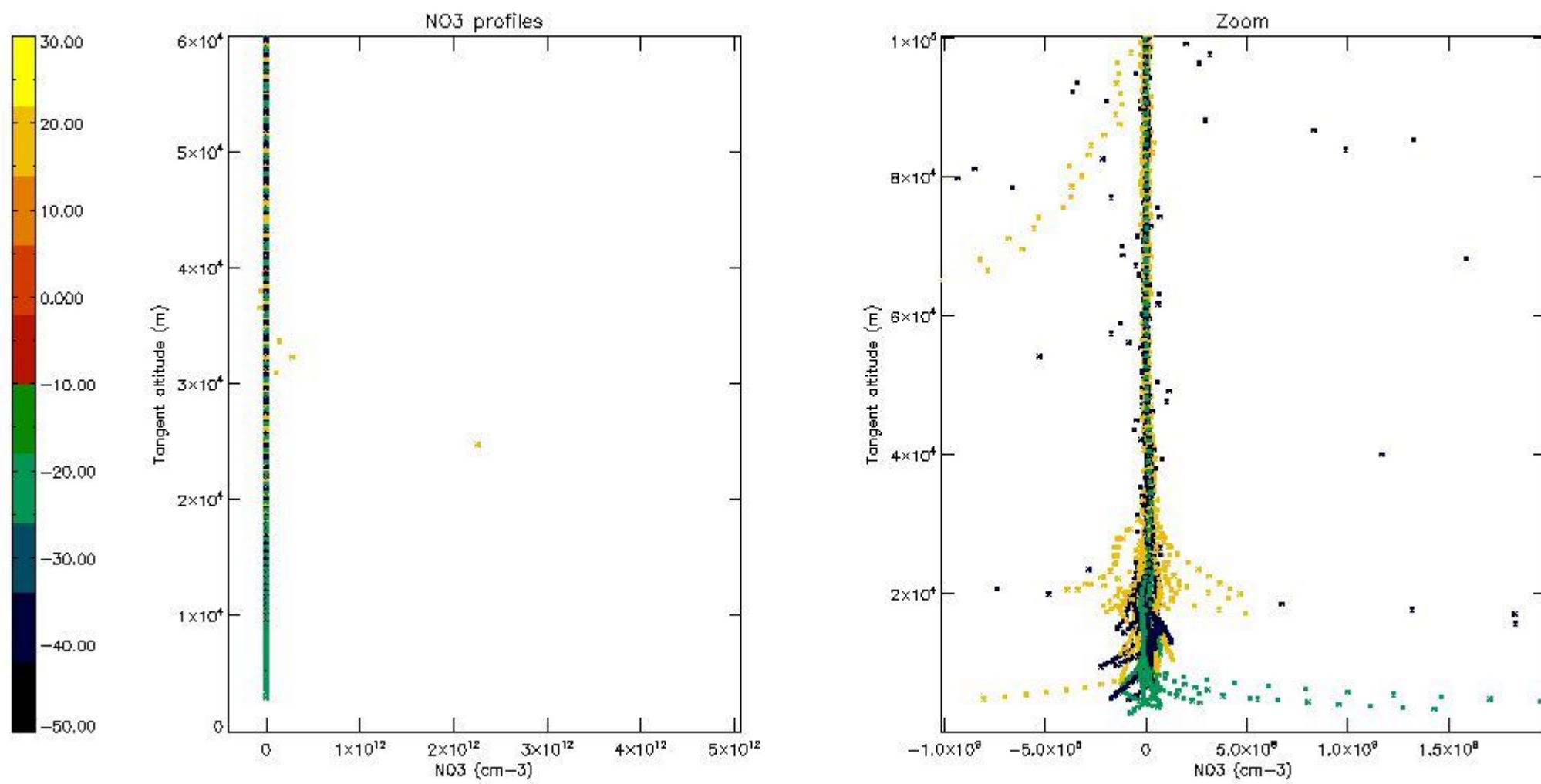
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



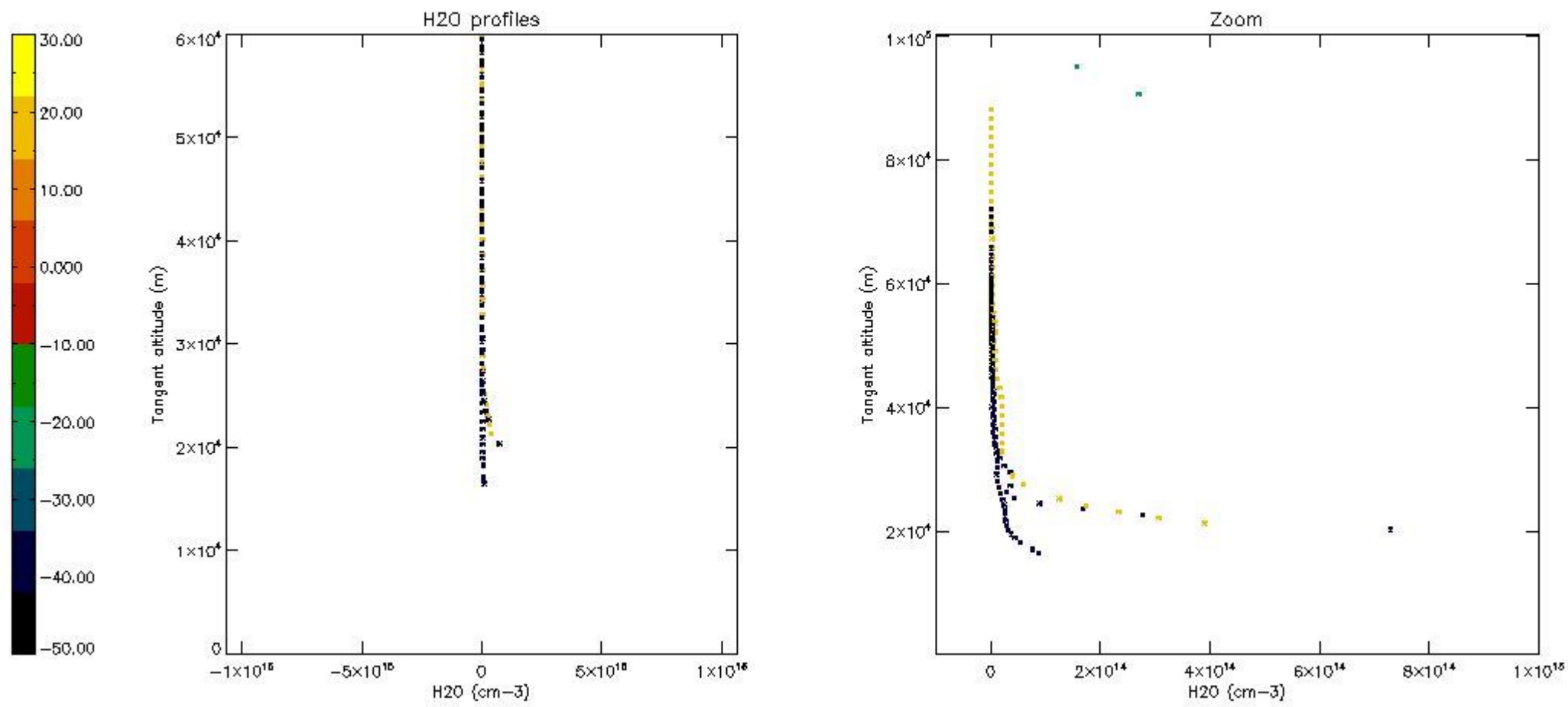
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

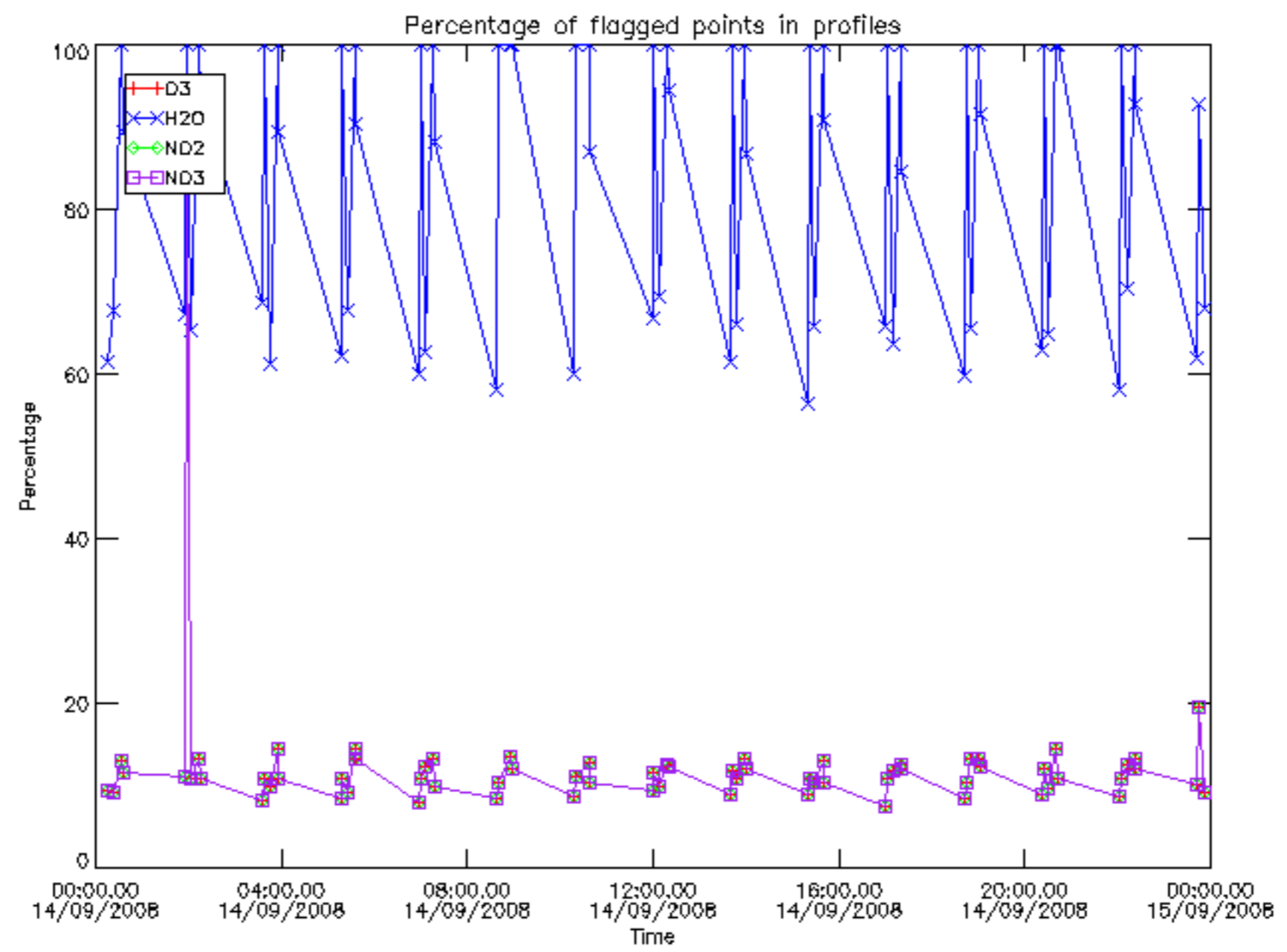
The colorbar represents the latitude.



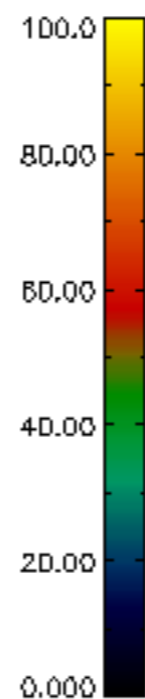
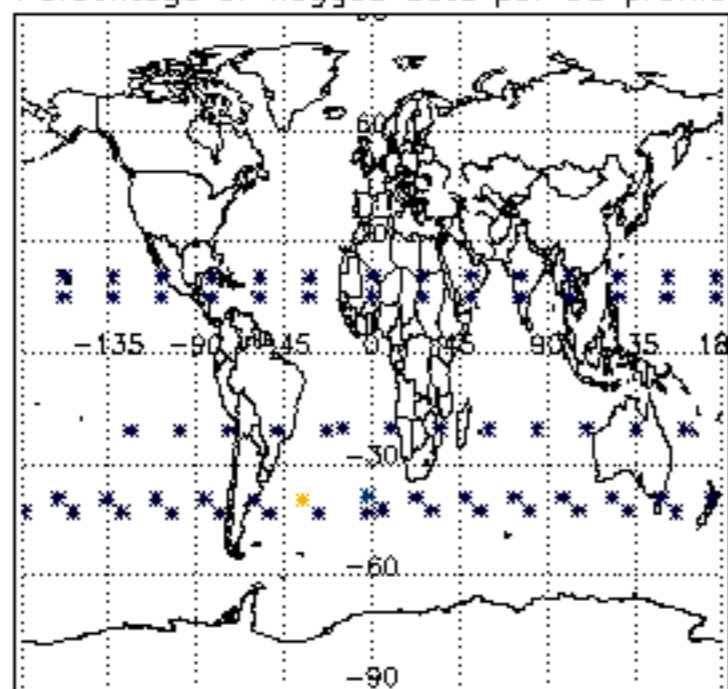
6. Auxiliary Data Files used for the production reported in section 2

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.

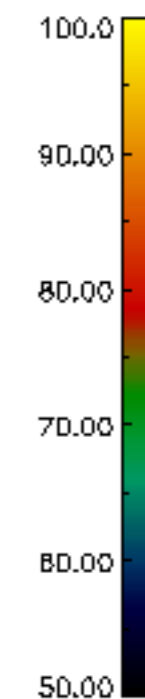
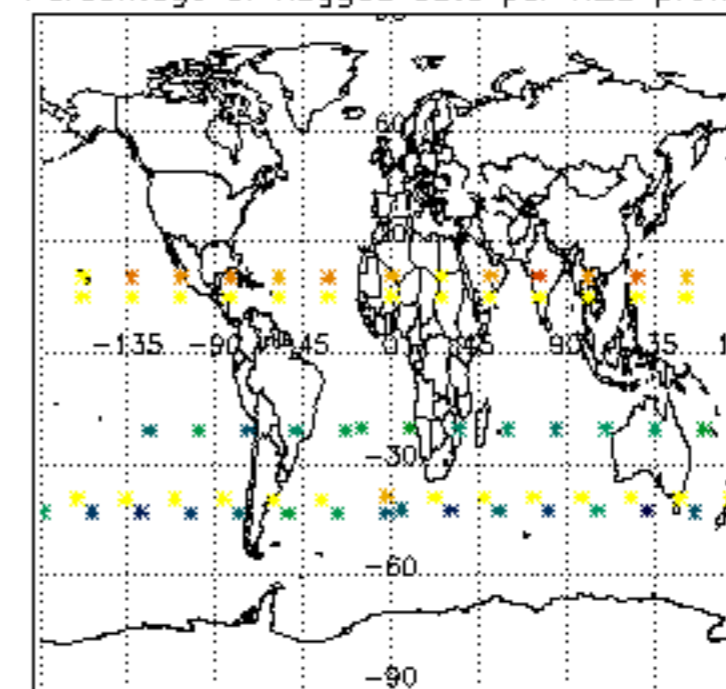
Type	Auxiliary Filename	Used since product	Used since product date
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LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	14-SEP-2008 00:05:45
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	14-SEP-2008 00:05:45



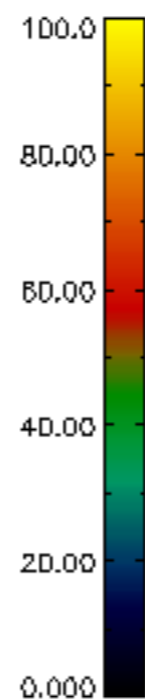
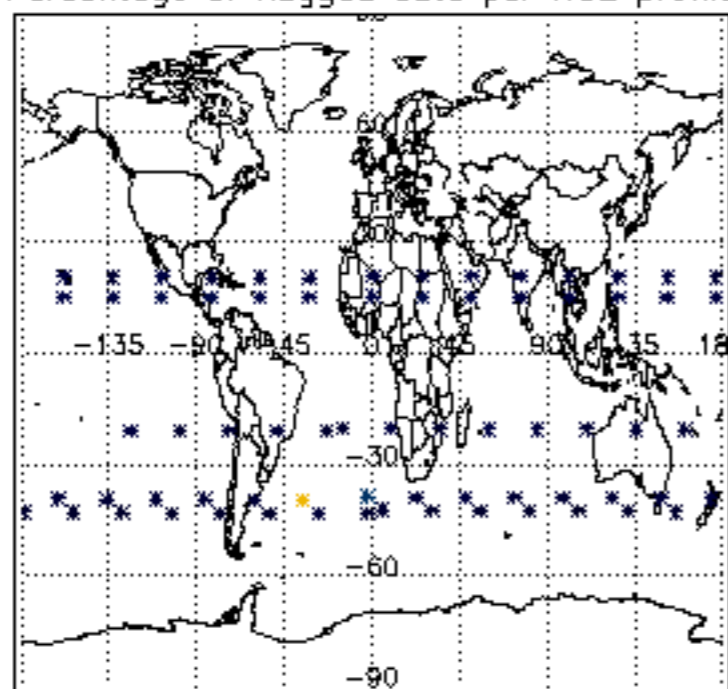
Percentage of flagged data per D3 profile



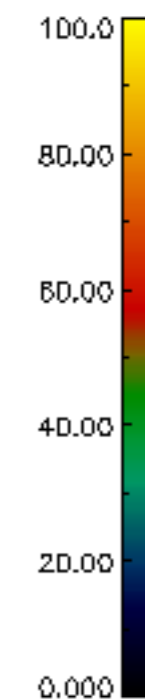
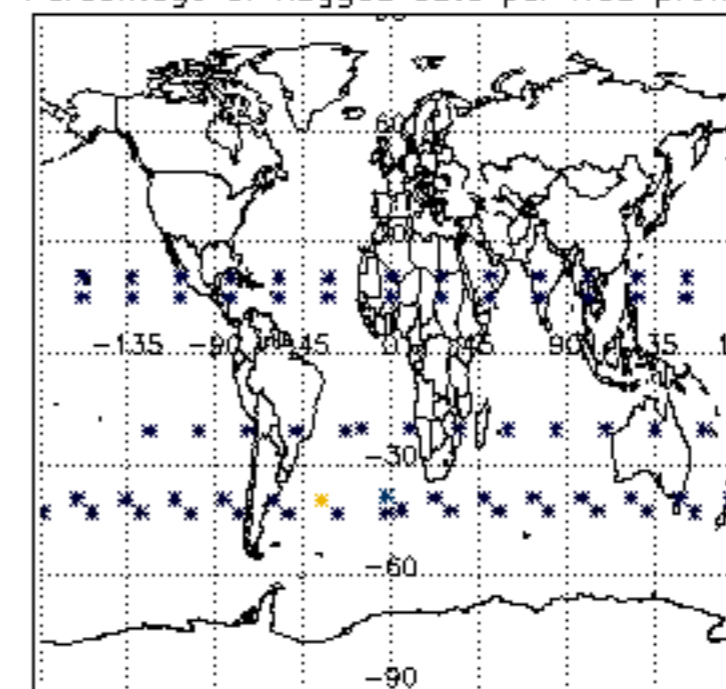
Percentage of flagged data per H2O profile

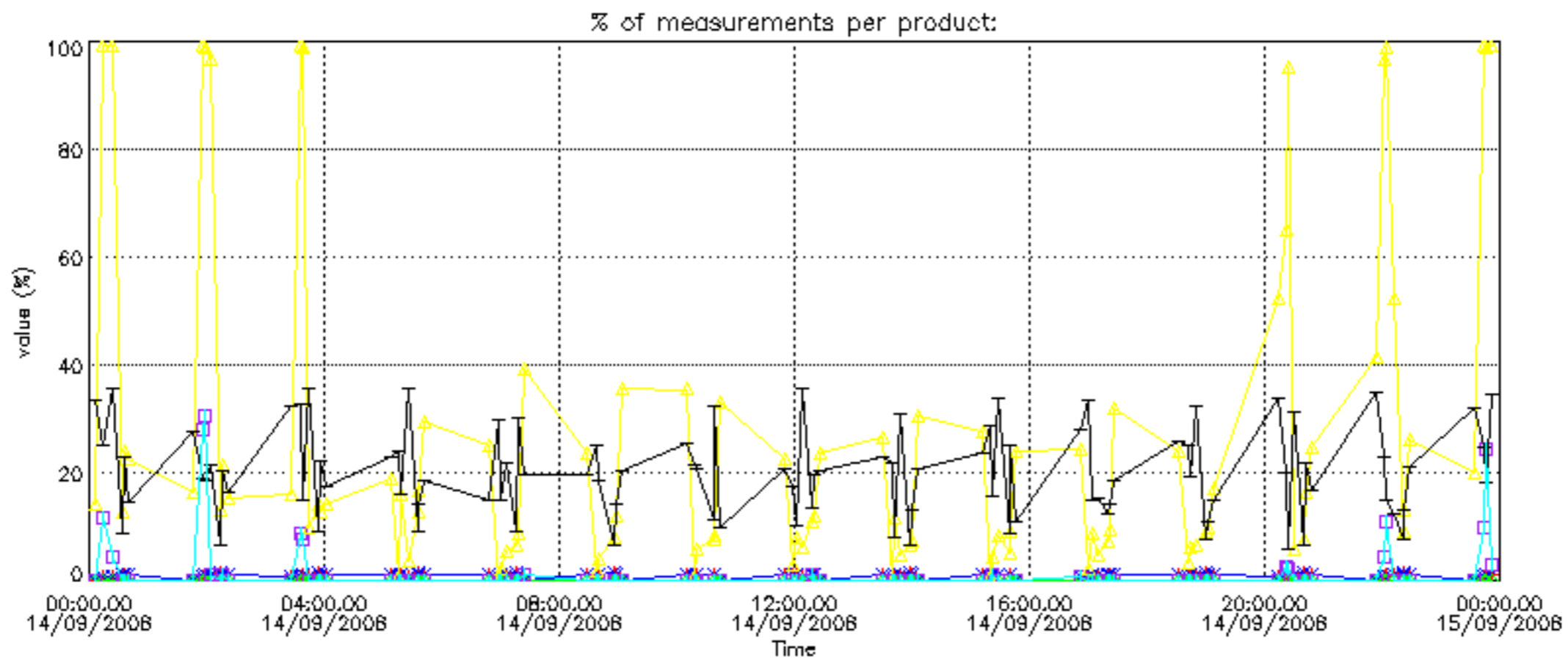


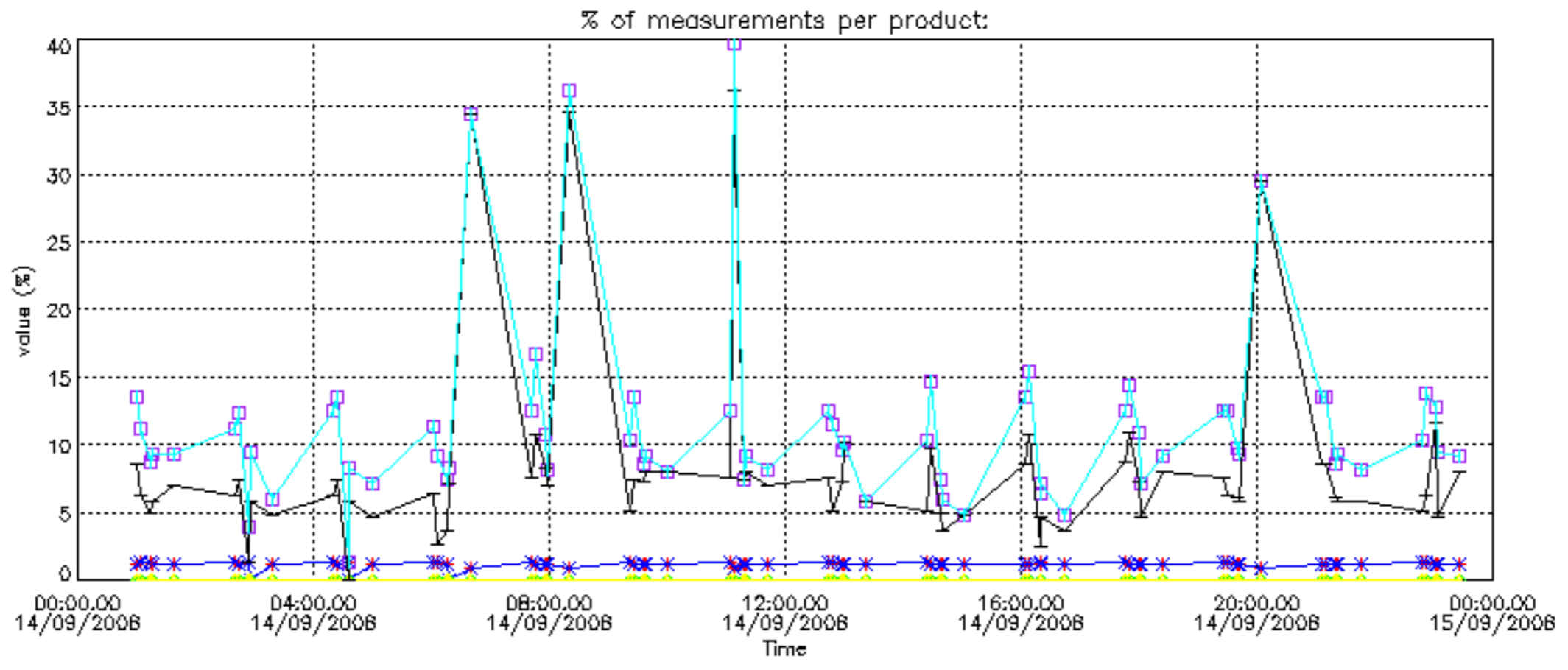
Percentage of flagged data per NO2 profile



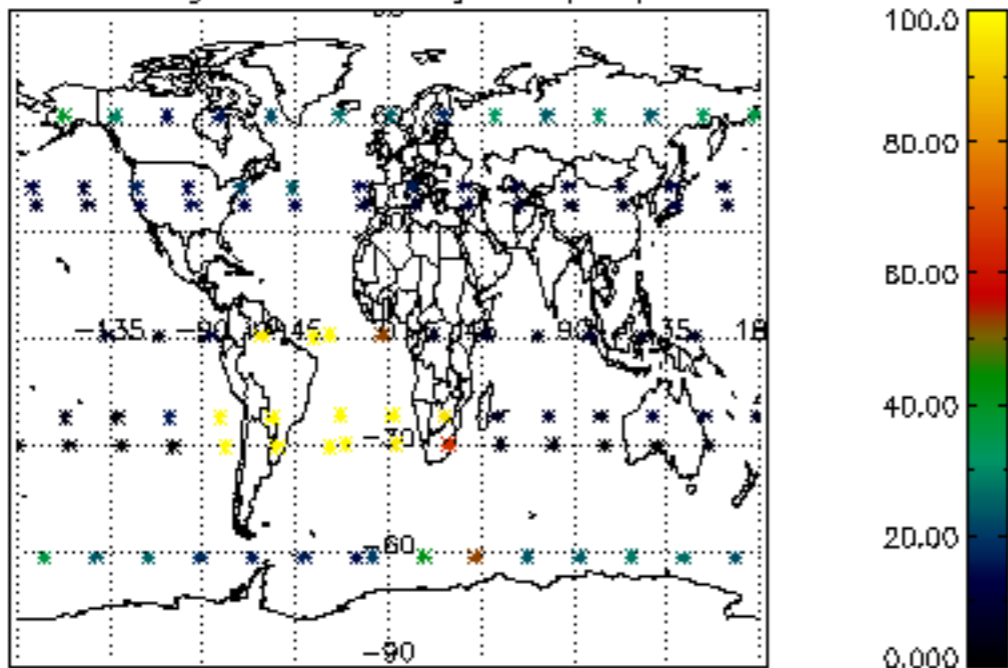
Percentage of flagged data per NO3 profile



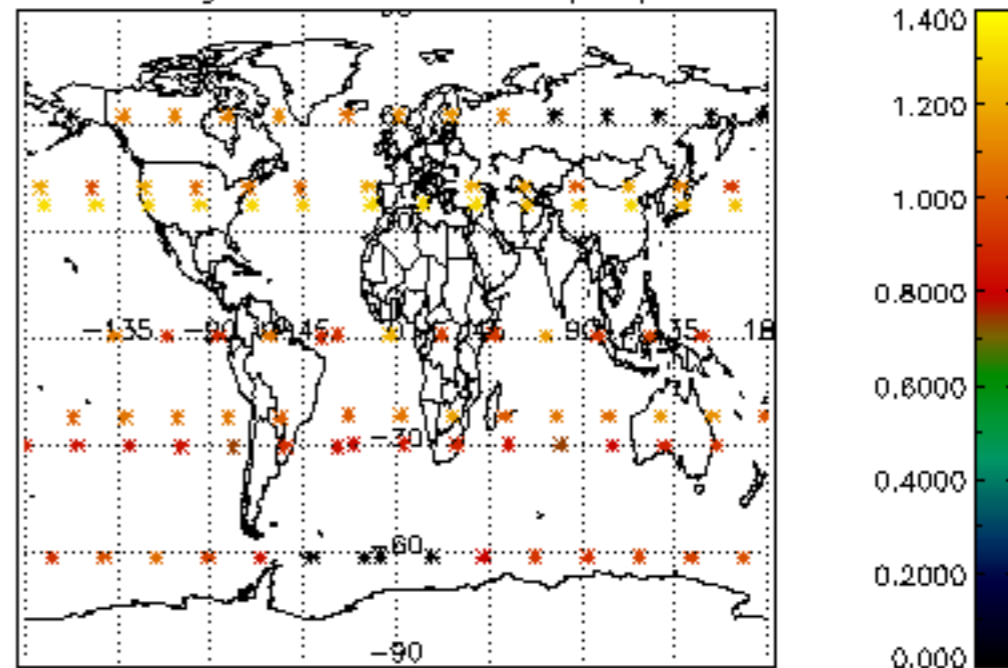




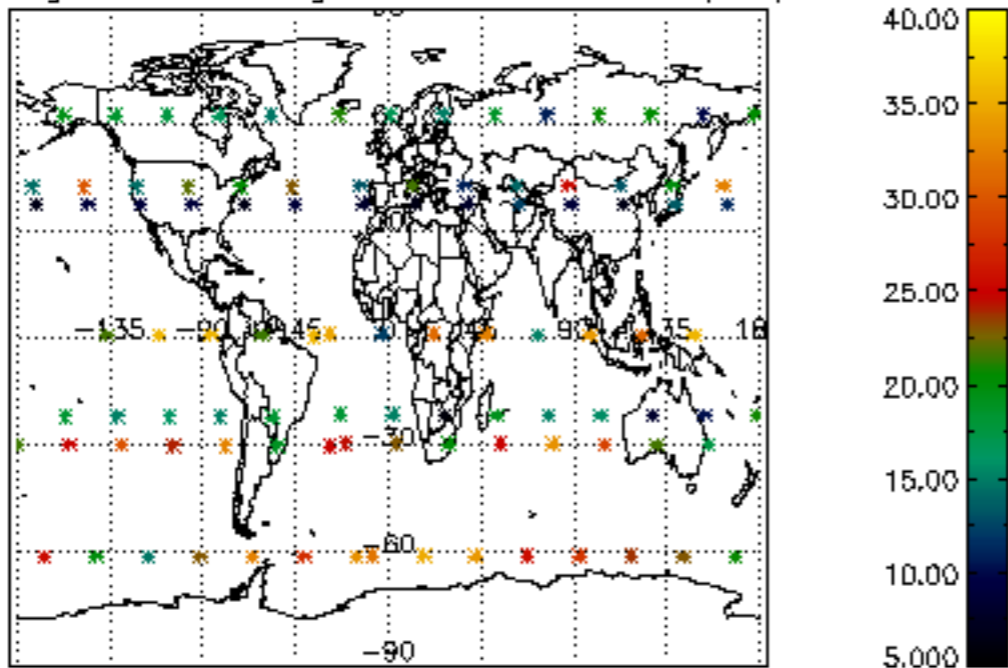
Percentage of cosmic ray hits per profile



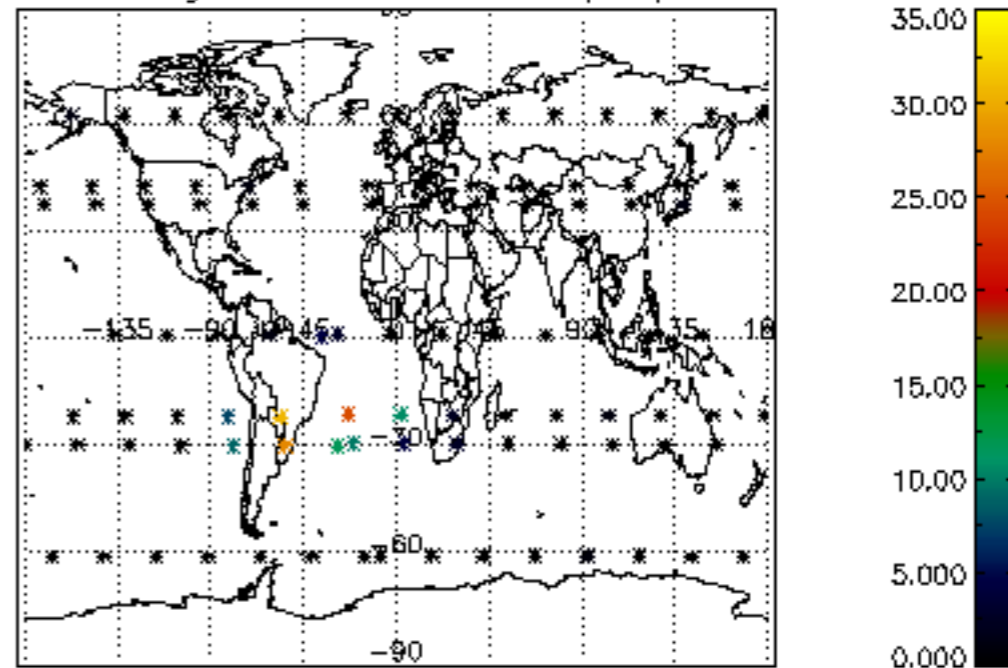
Percentage of datation errors per profile



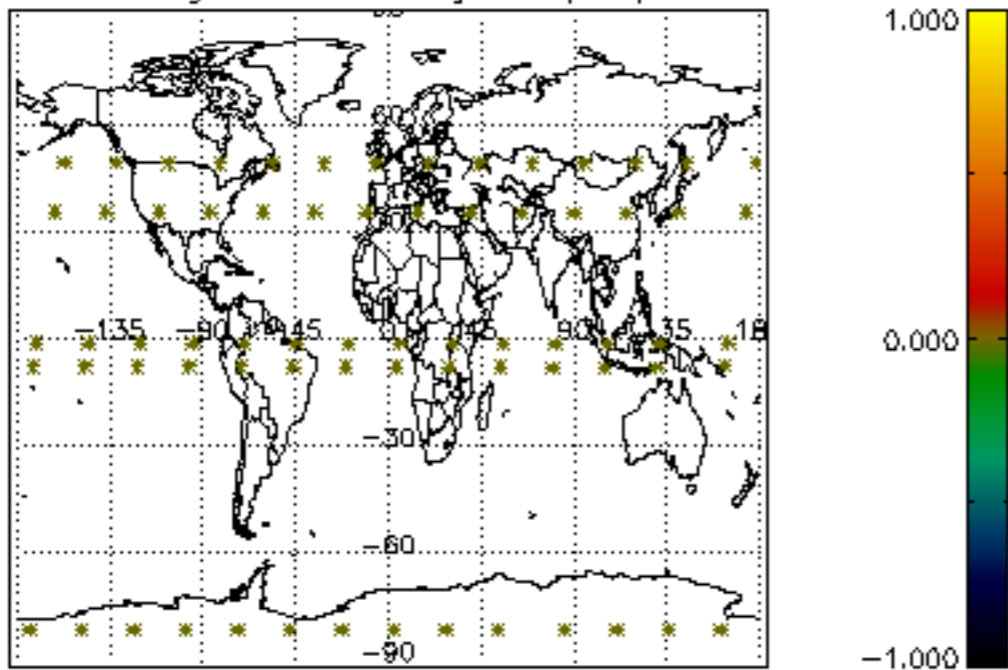
Percentage of star falling outside central band per profile



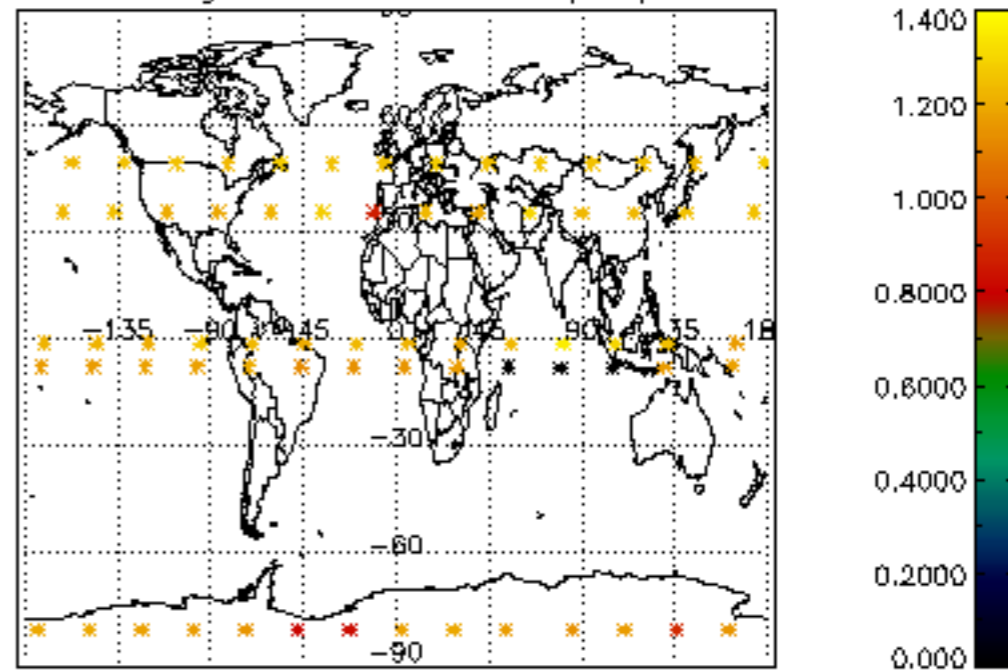
Percentage of saturation errors per profile



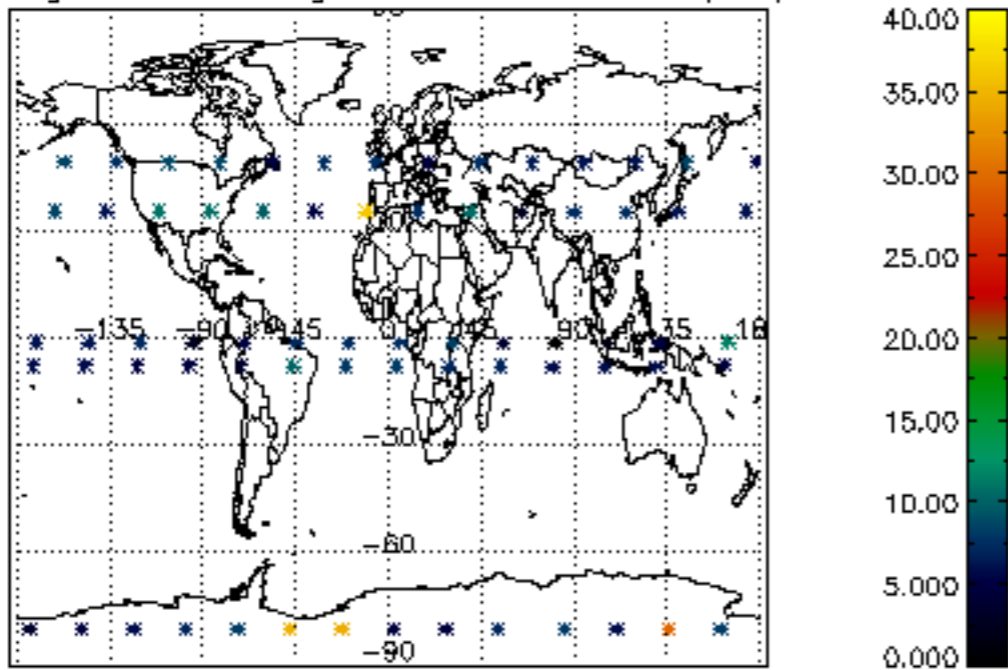
Percentage of cosmic ray hits per profile



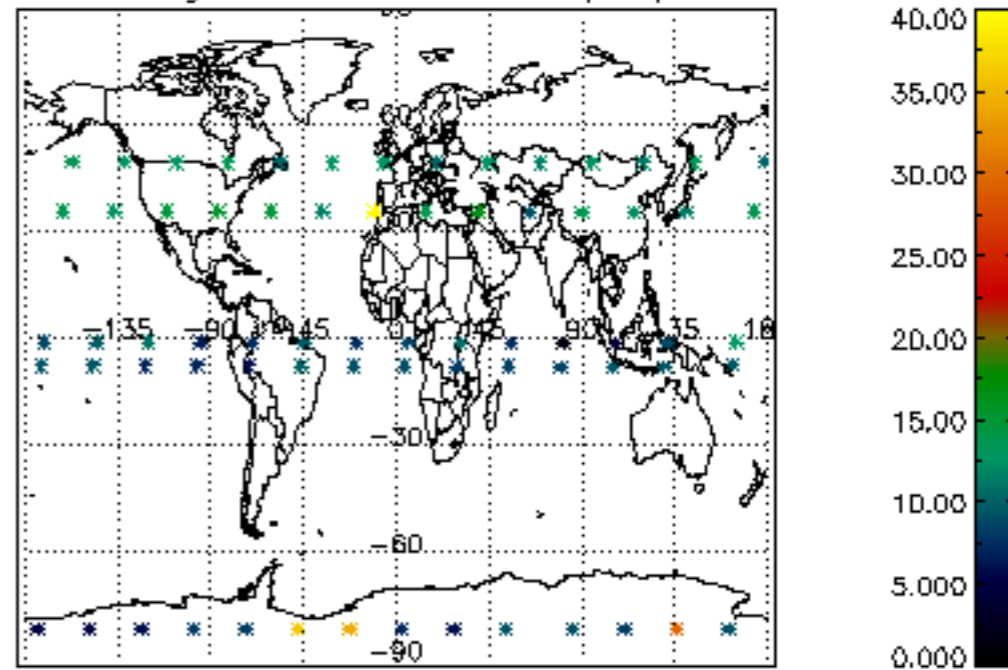
Percentage of datation errors per profile

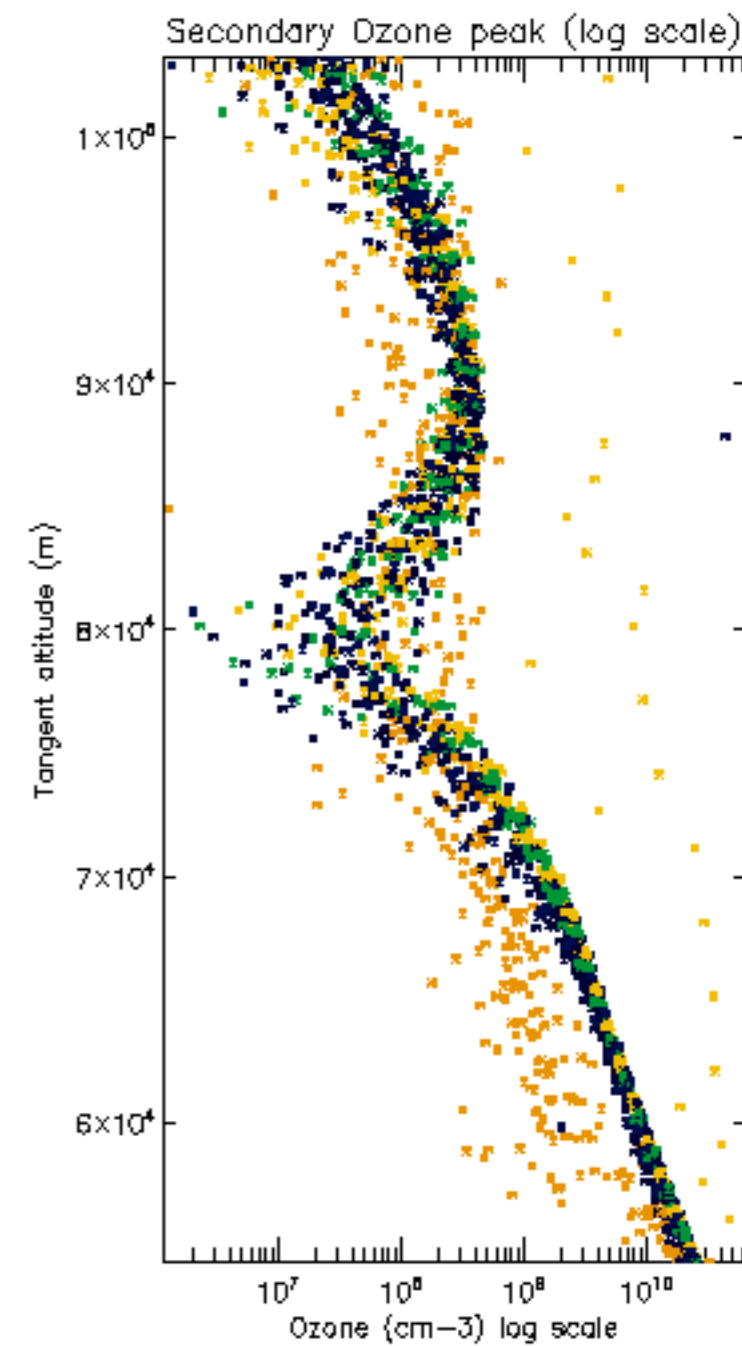
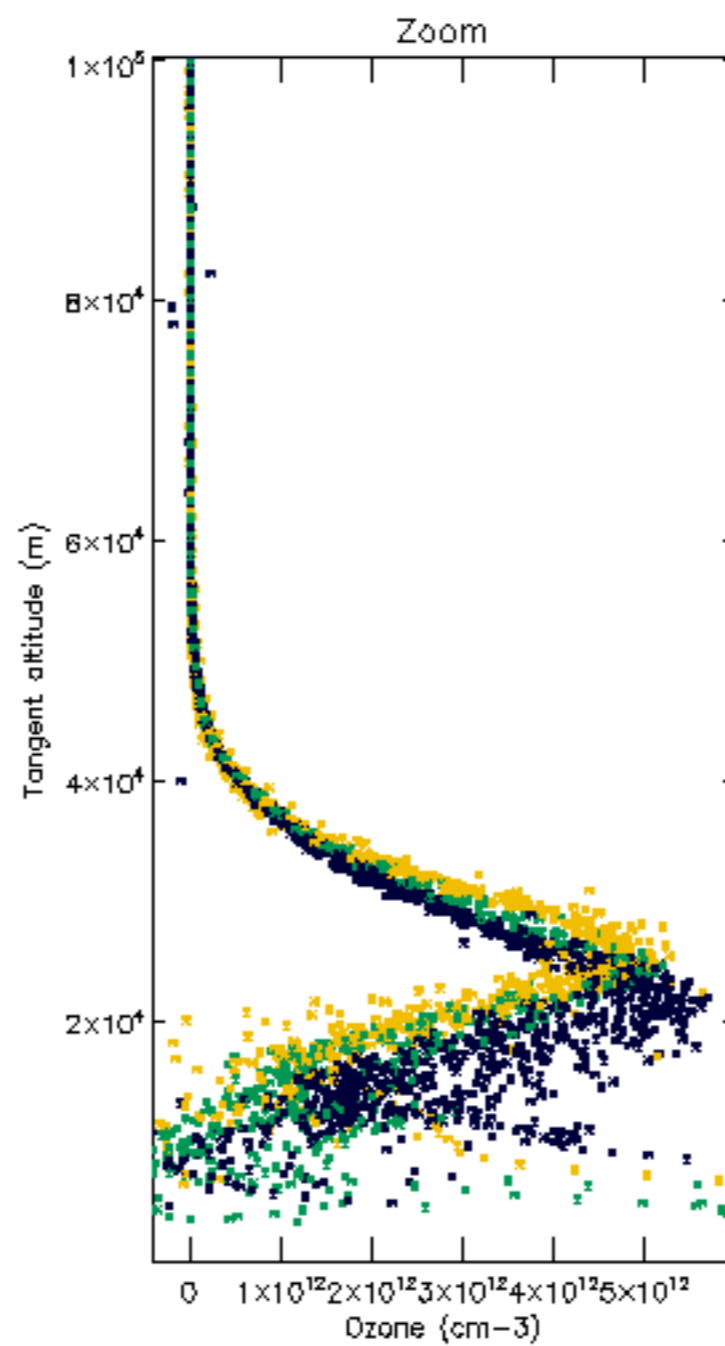
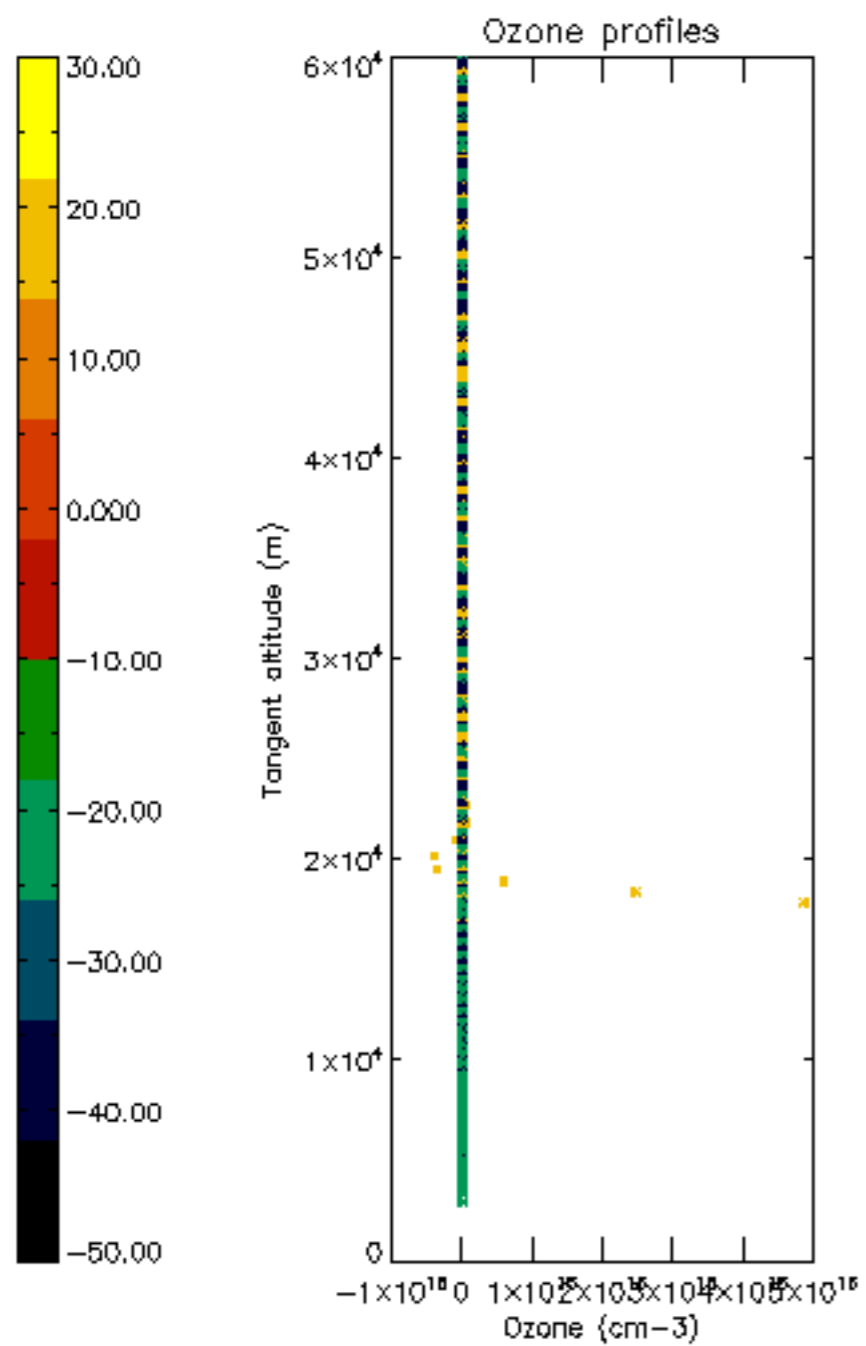


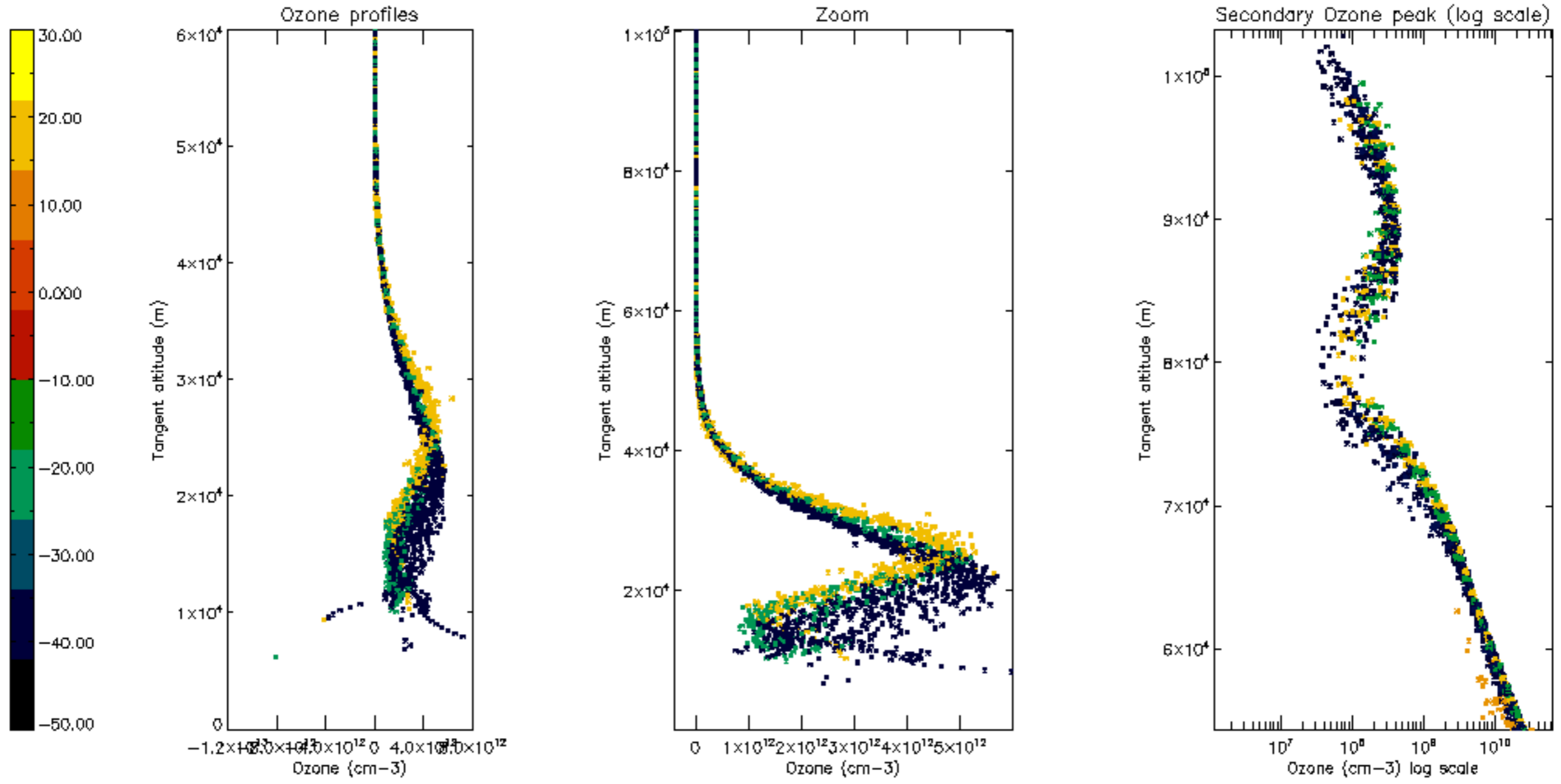
Percentage of star falling outside central band per profile

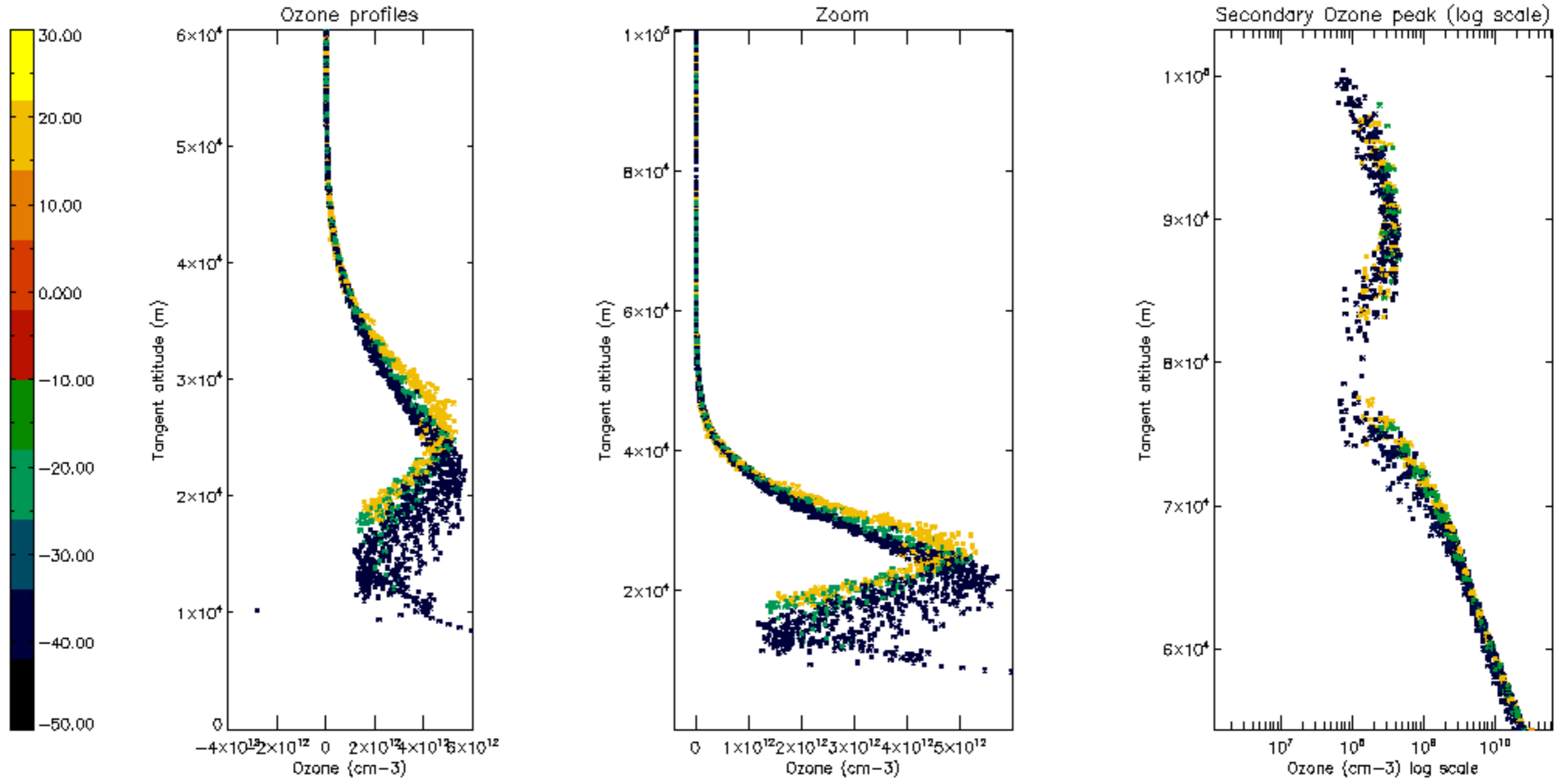


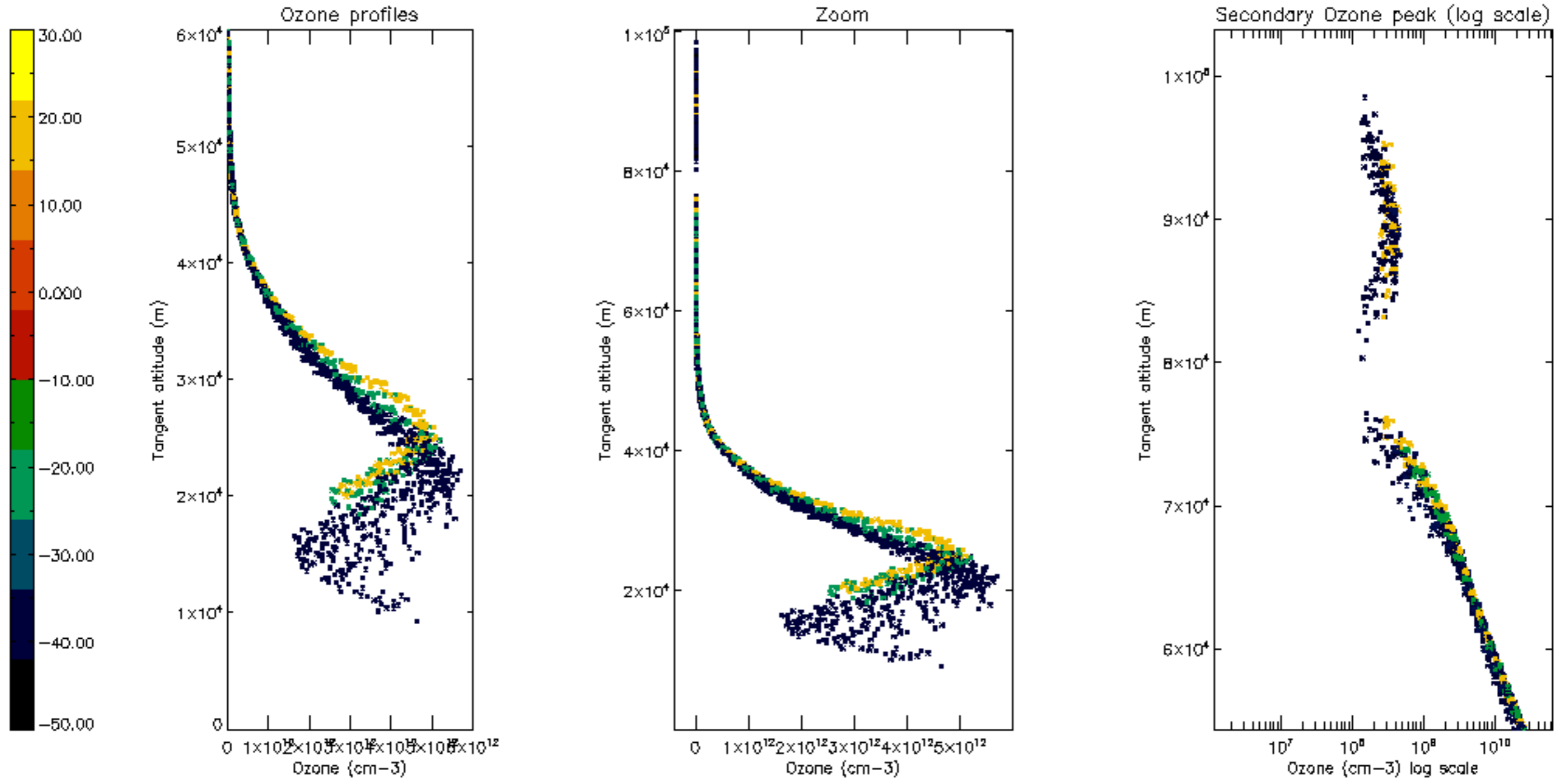
Percentage of saturation errors per profile

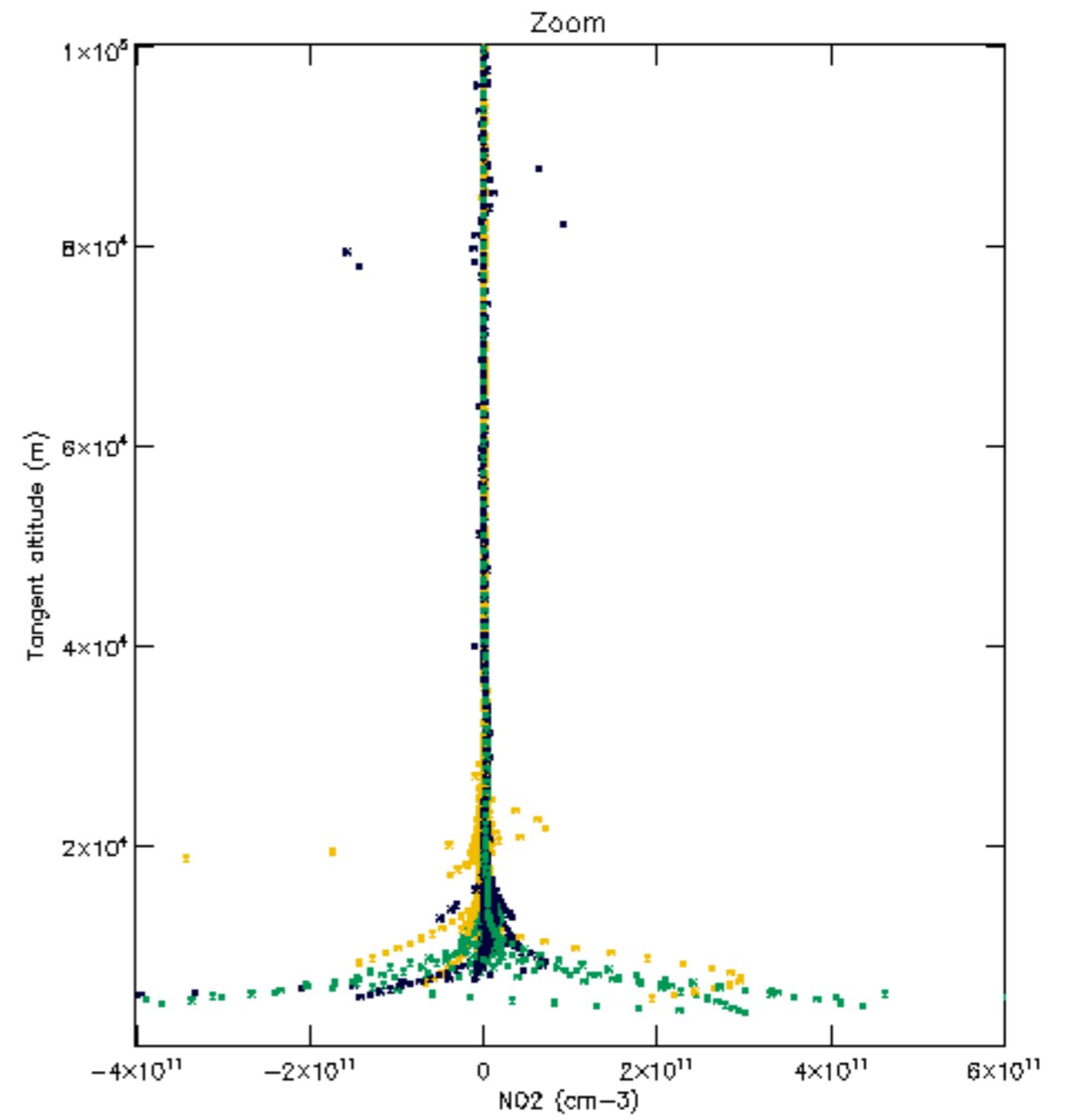
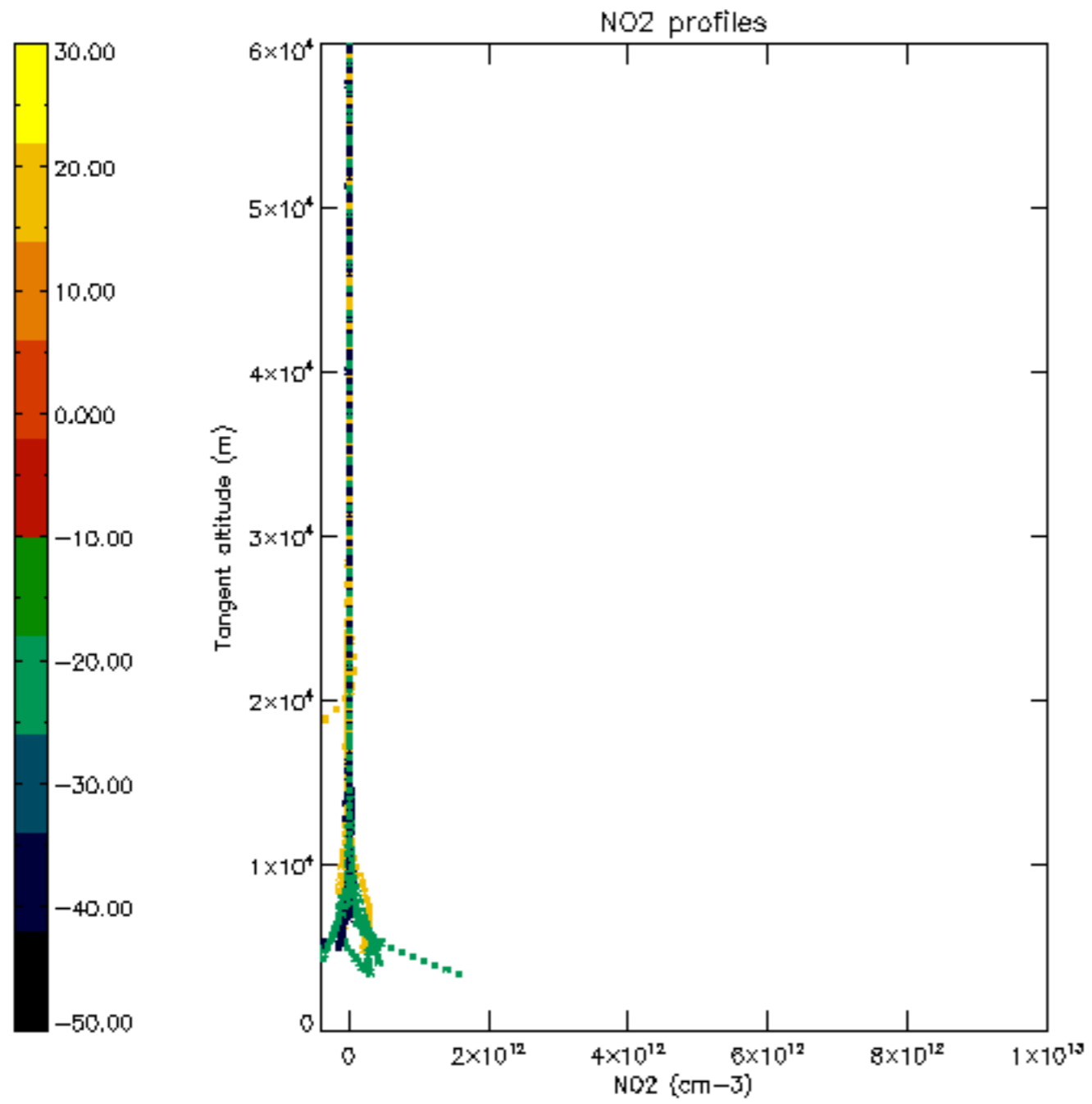


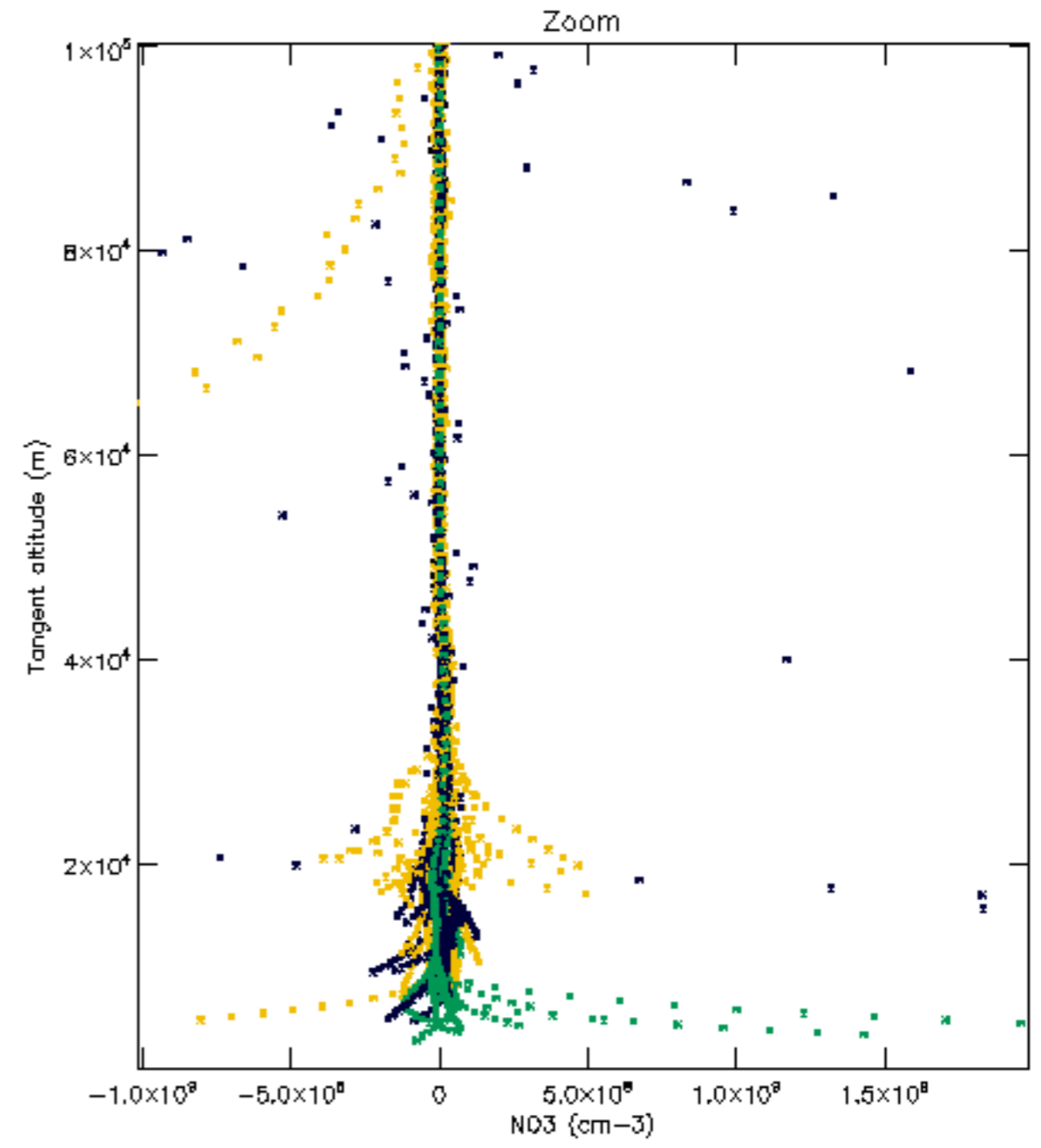
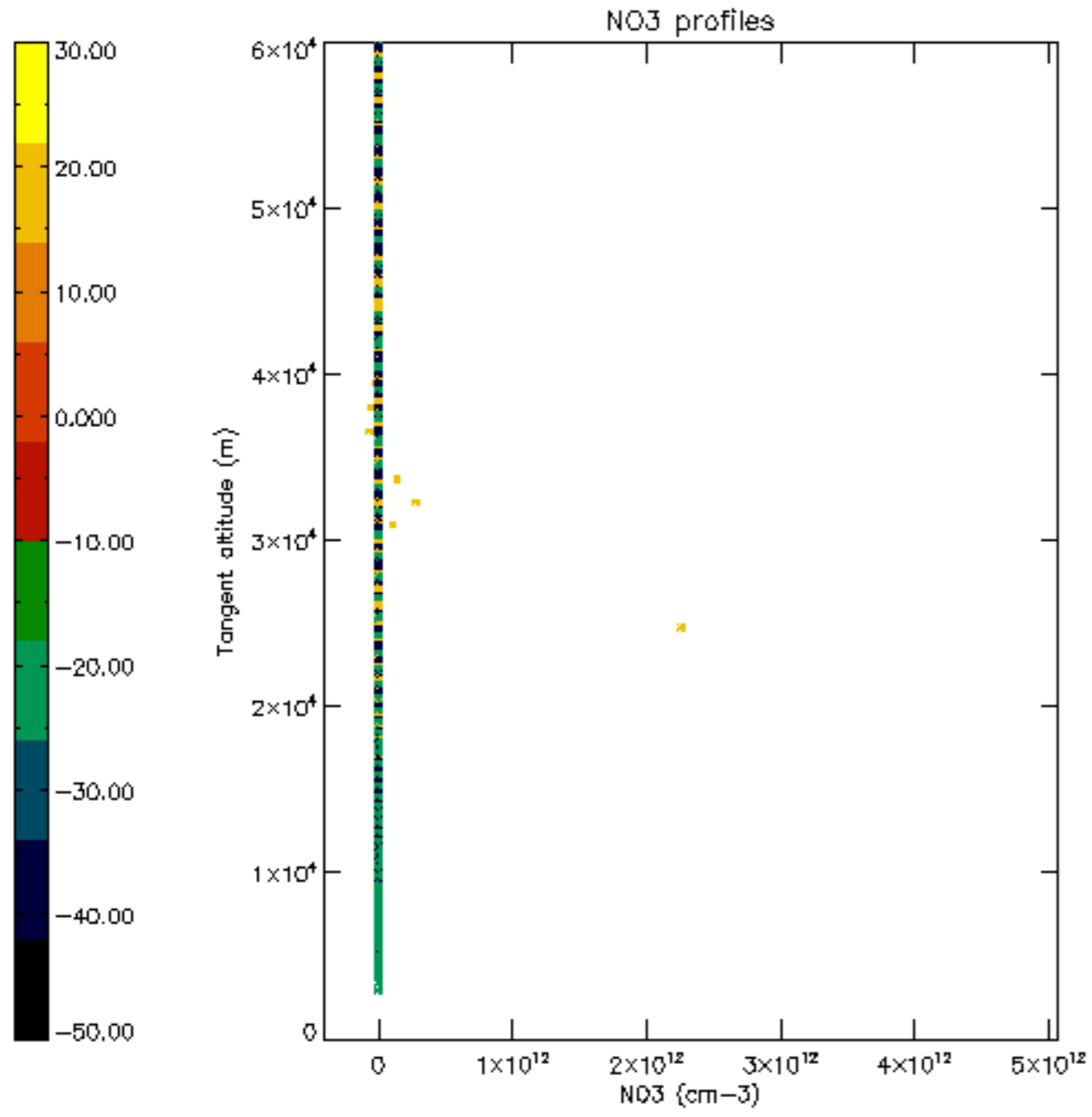


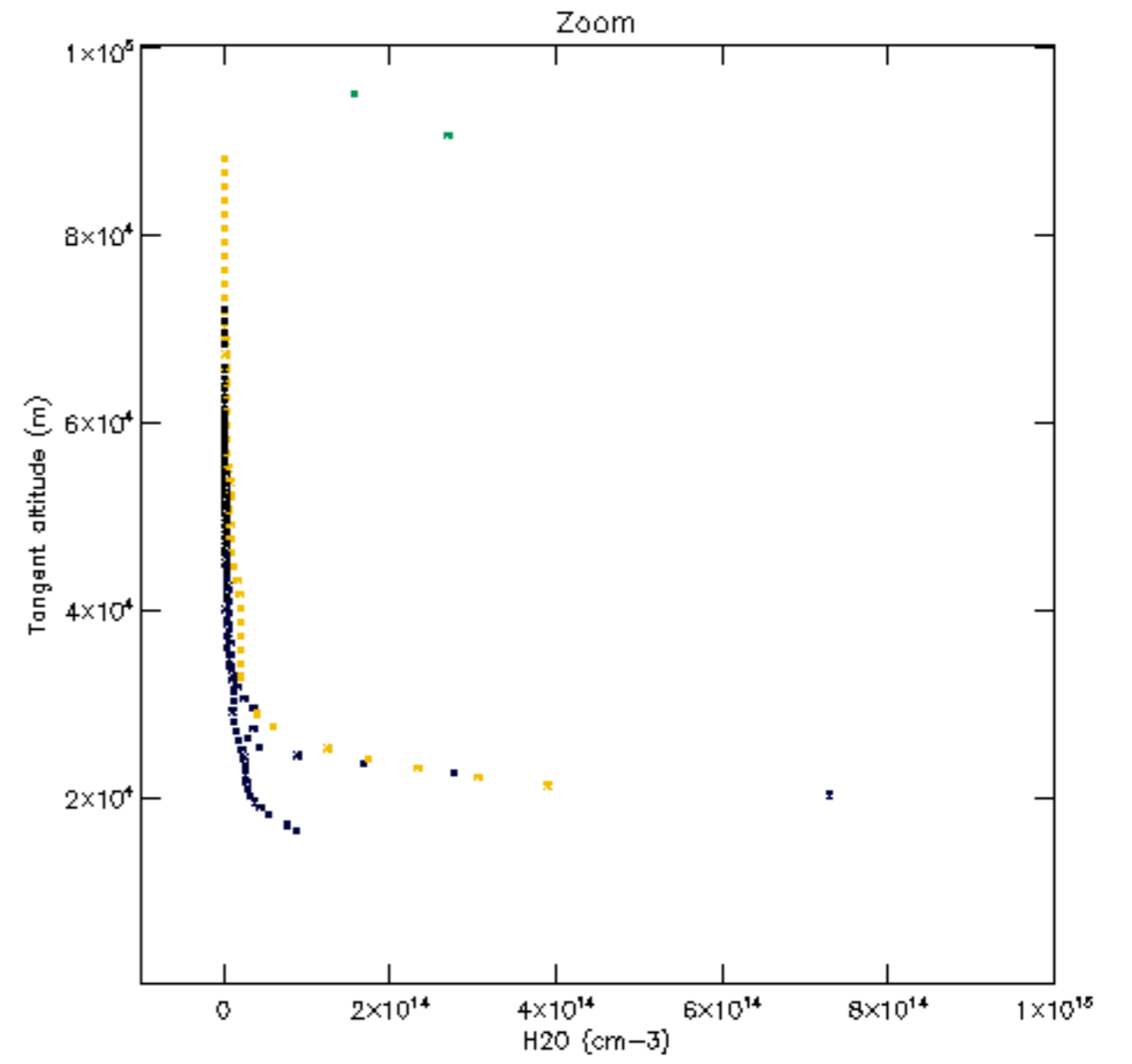
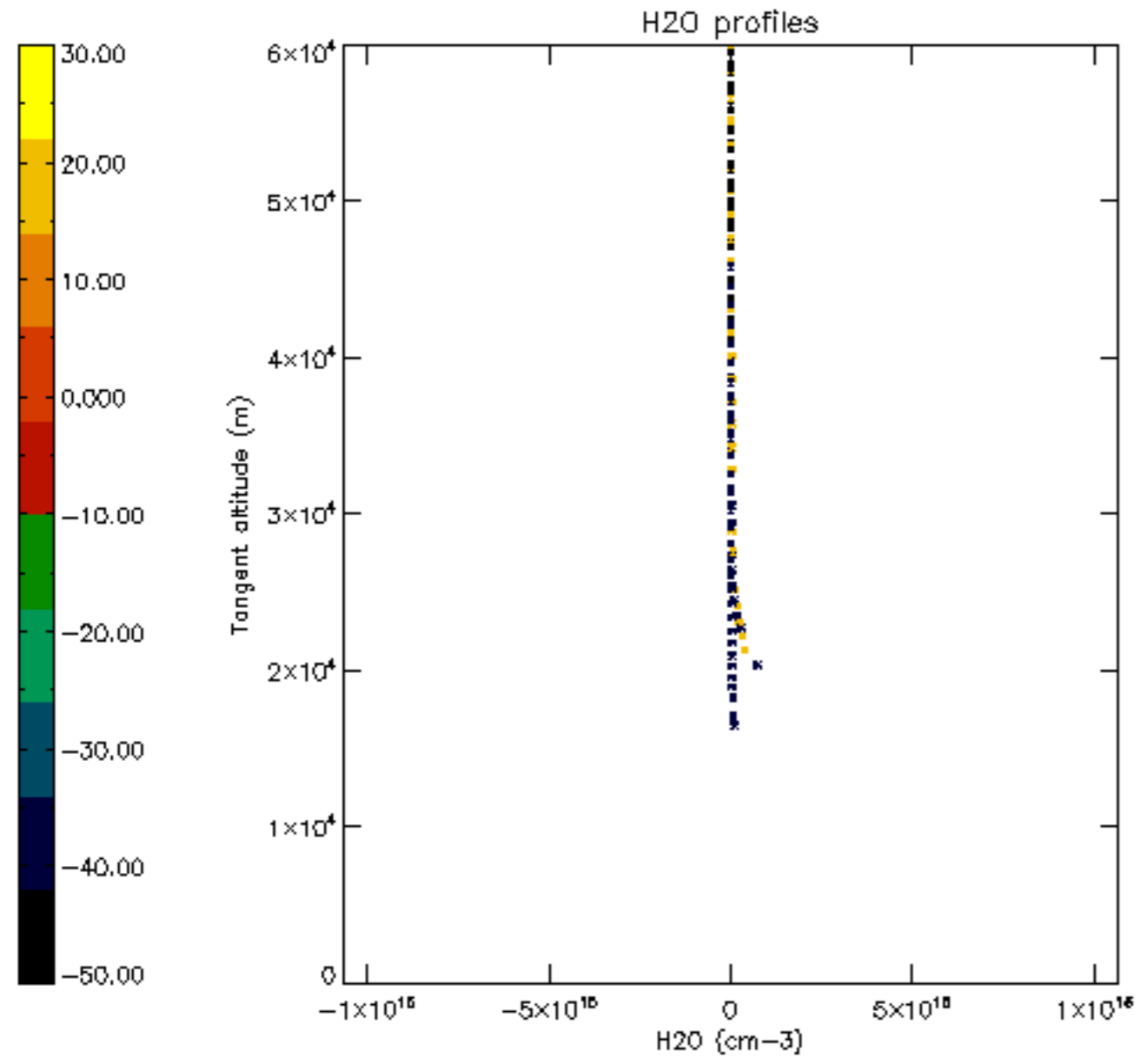


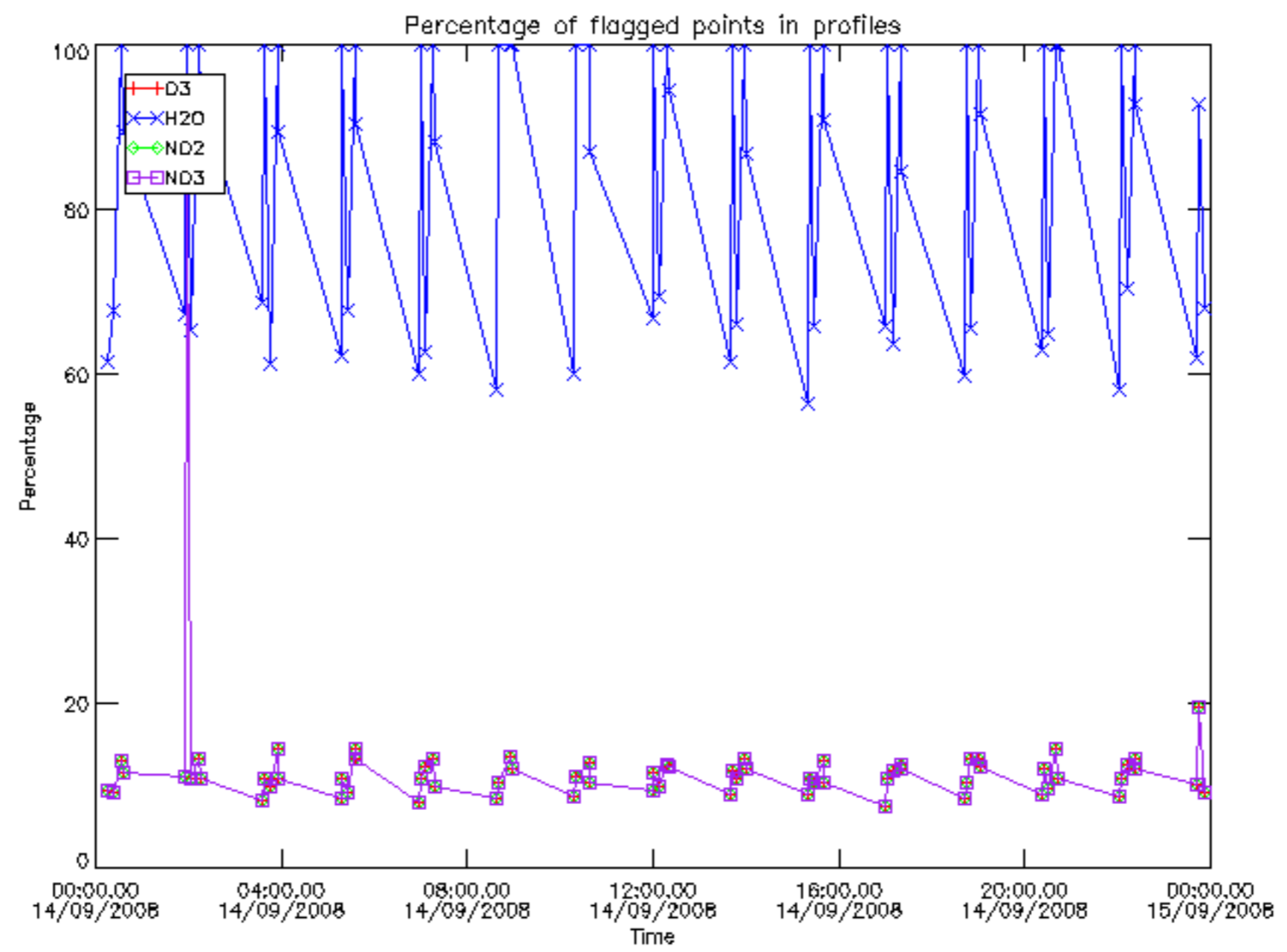




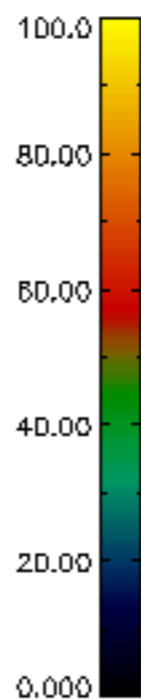
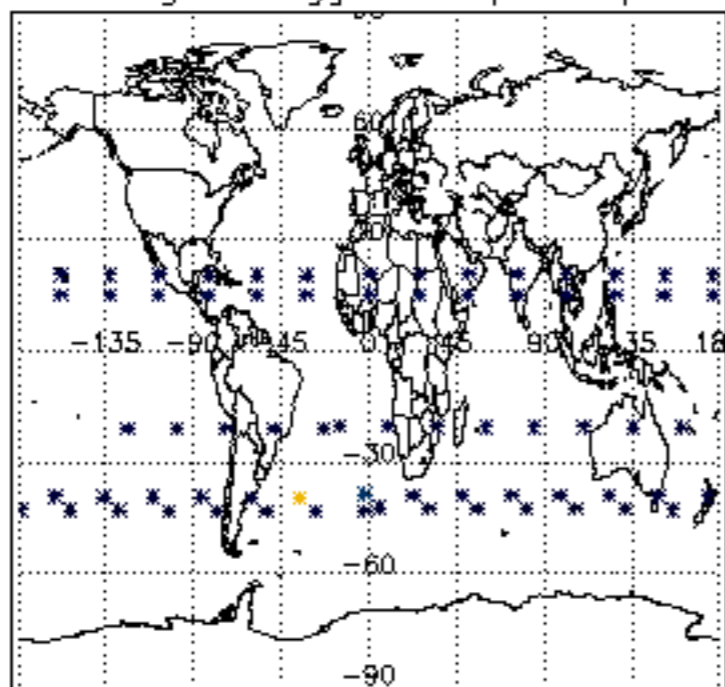




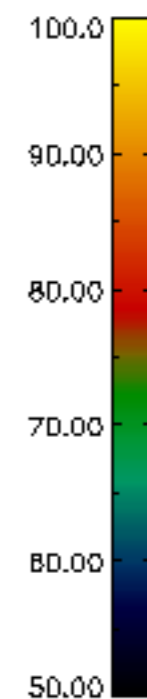
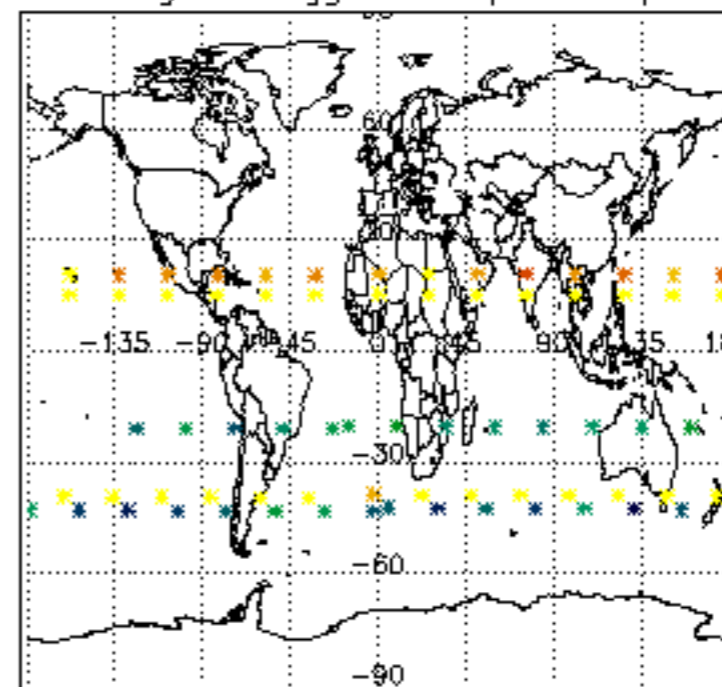




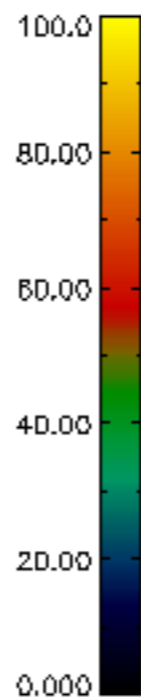
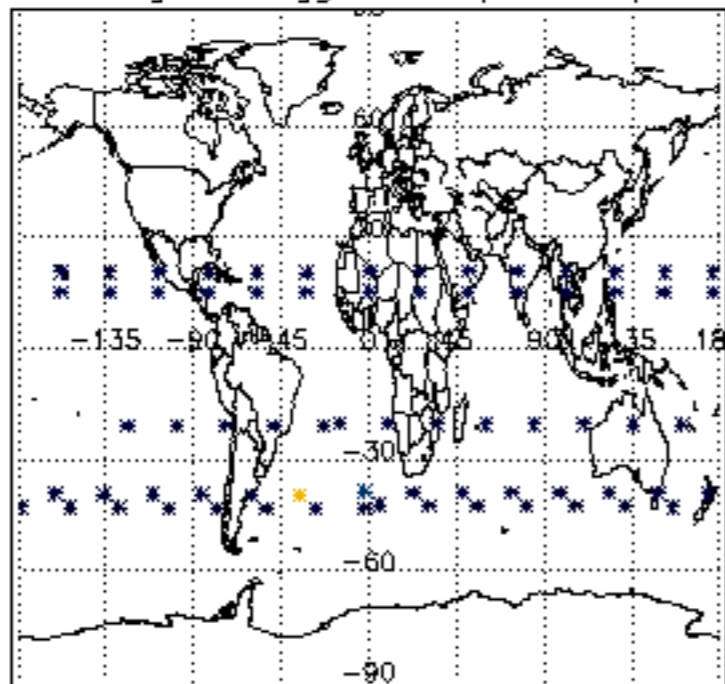
Percentage of flagged data per D3 profile



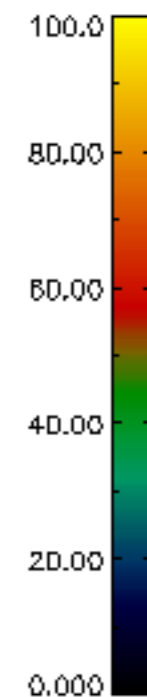
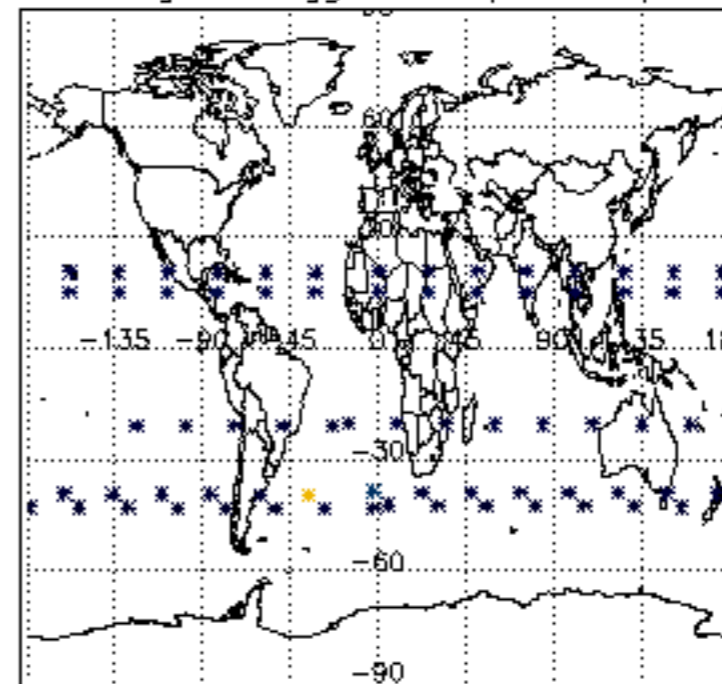
Percentage of flagged data per H2O profile

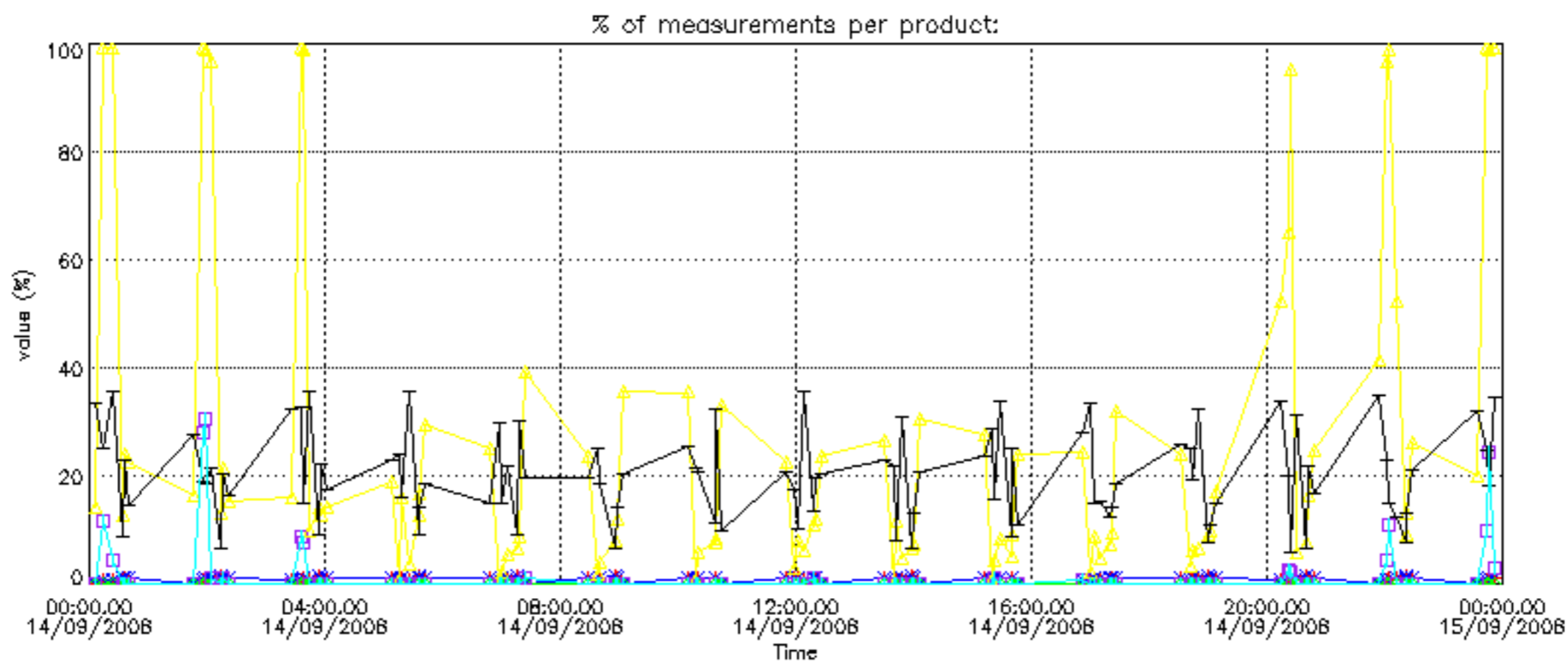


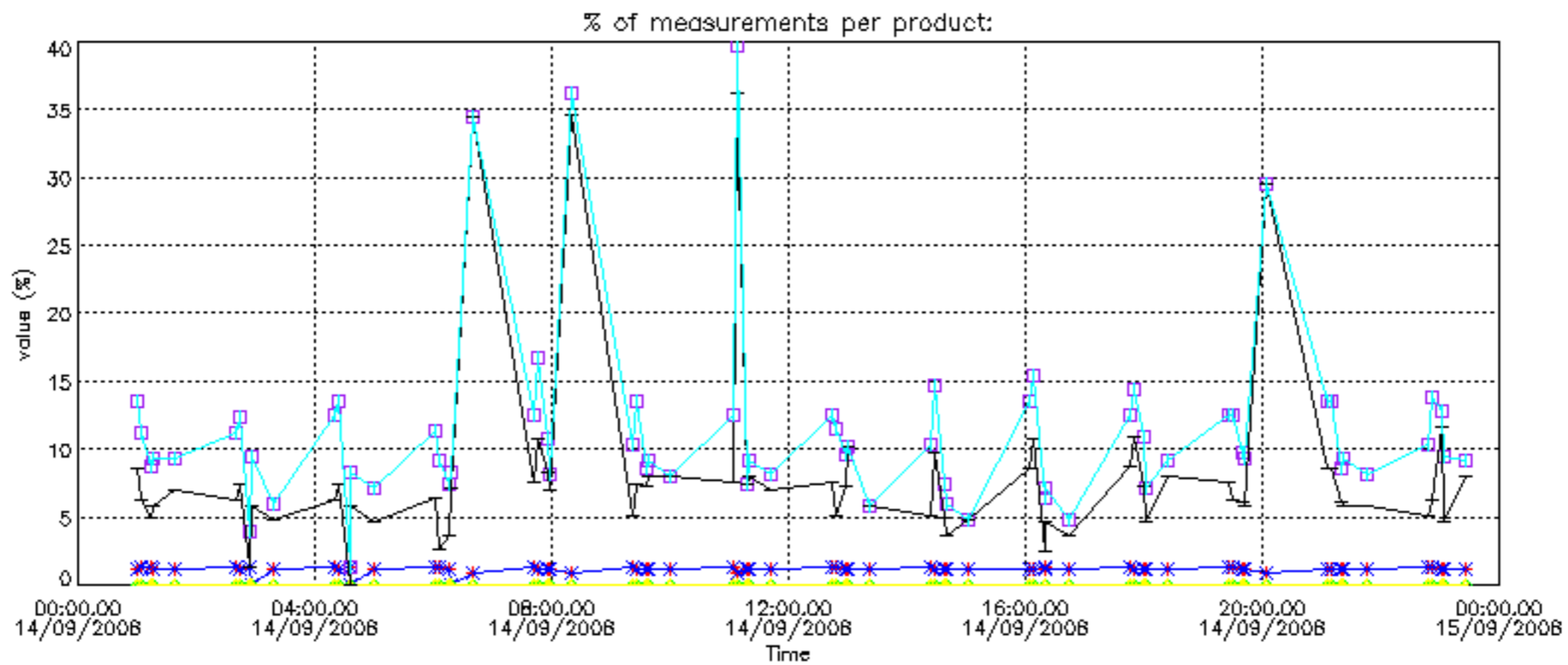
Percentage of flagged data per NO2 profile



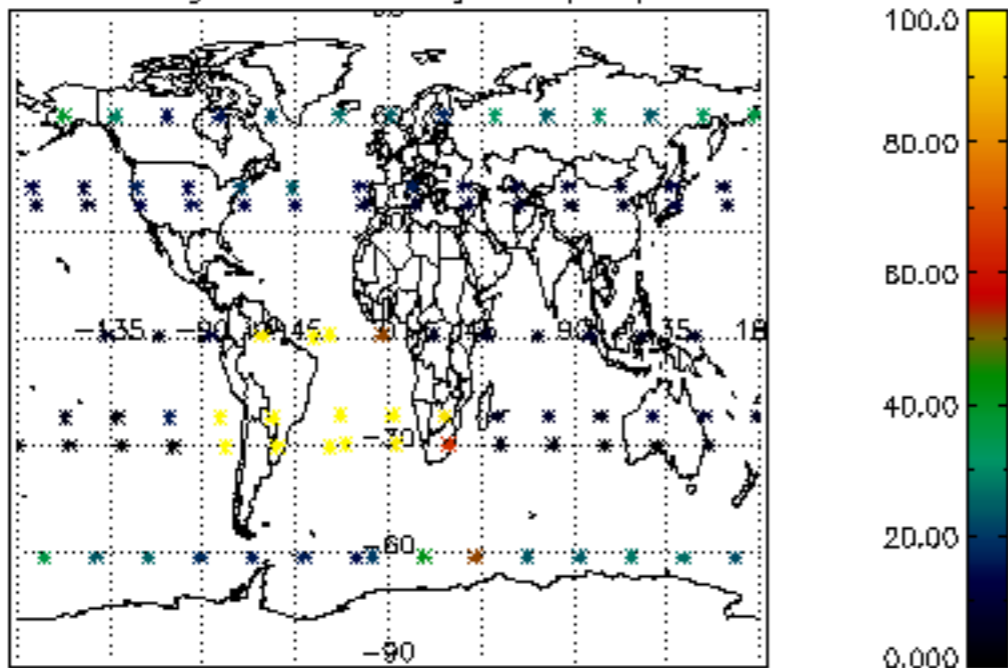
Percentage of flagged data per NO3 profile



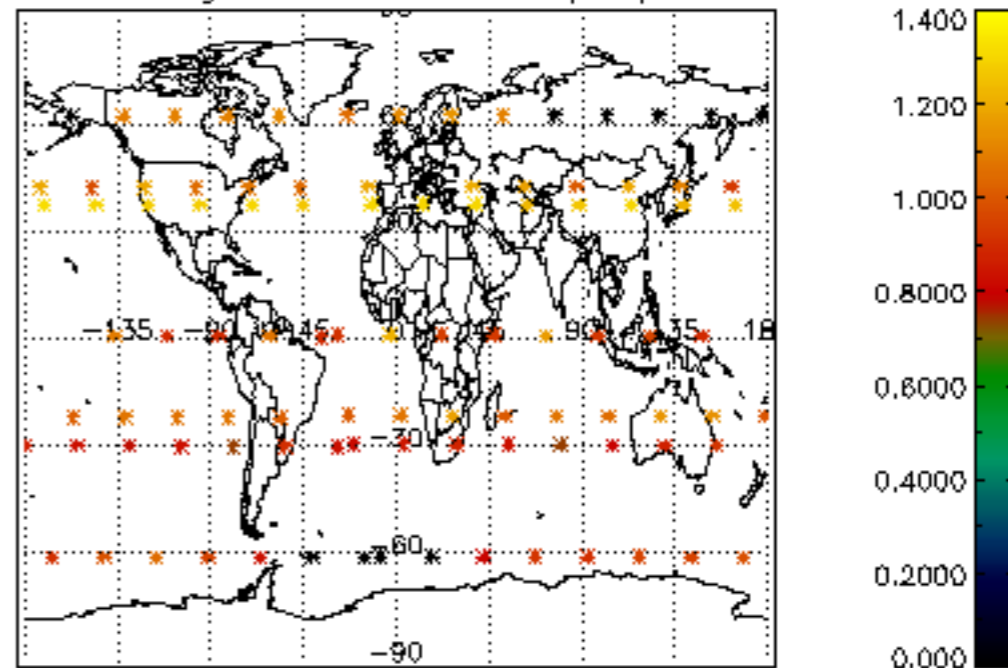




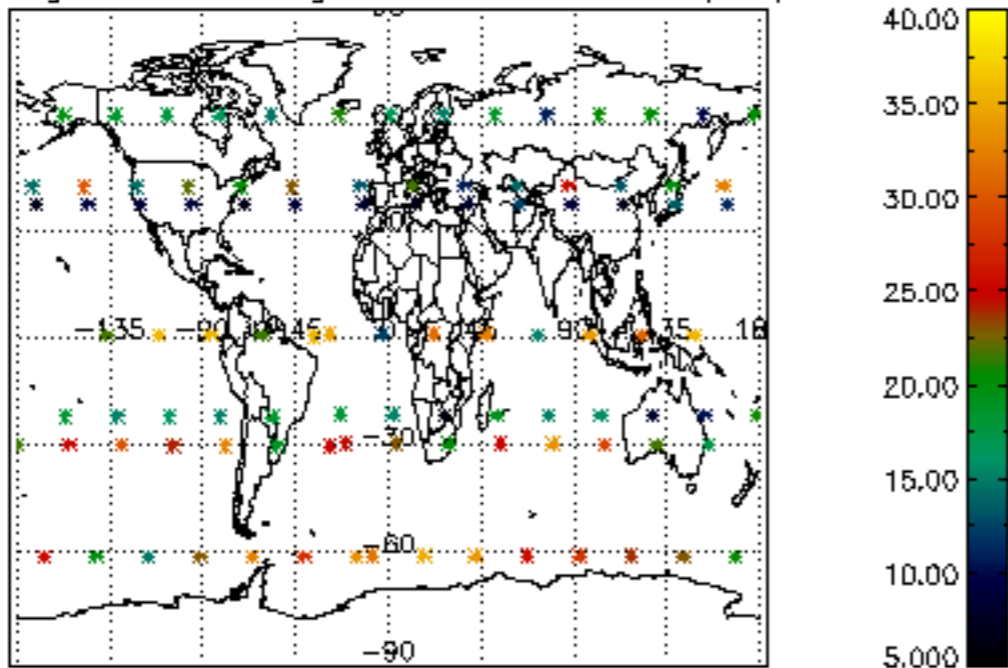
Percentage of cosmic ray hits per profile



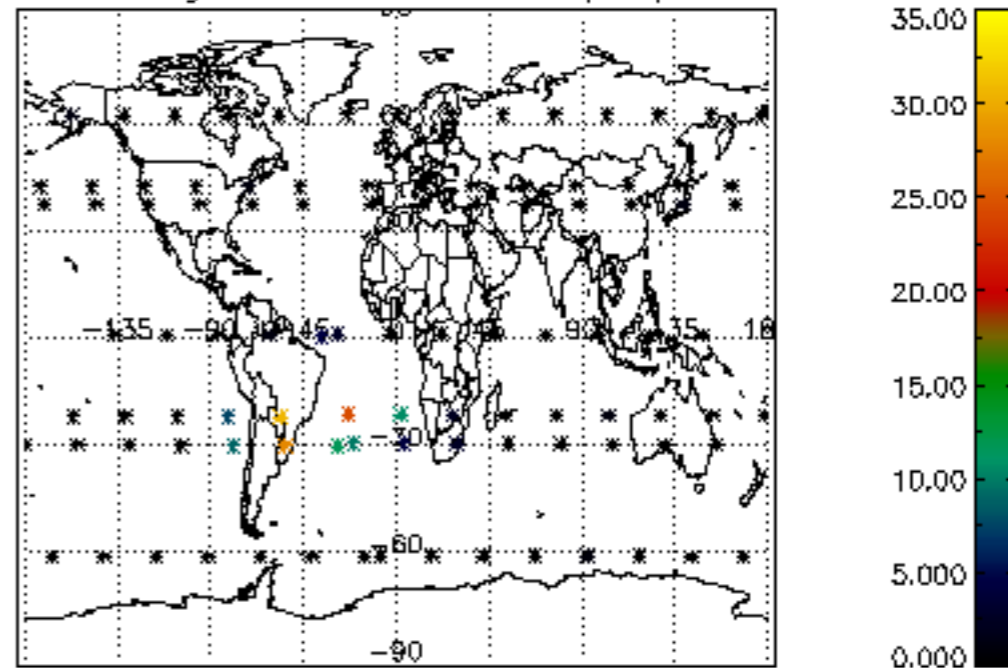
Percentage of datation errors per profile



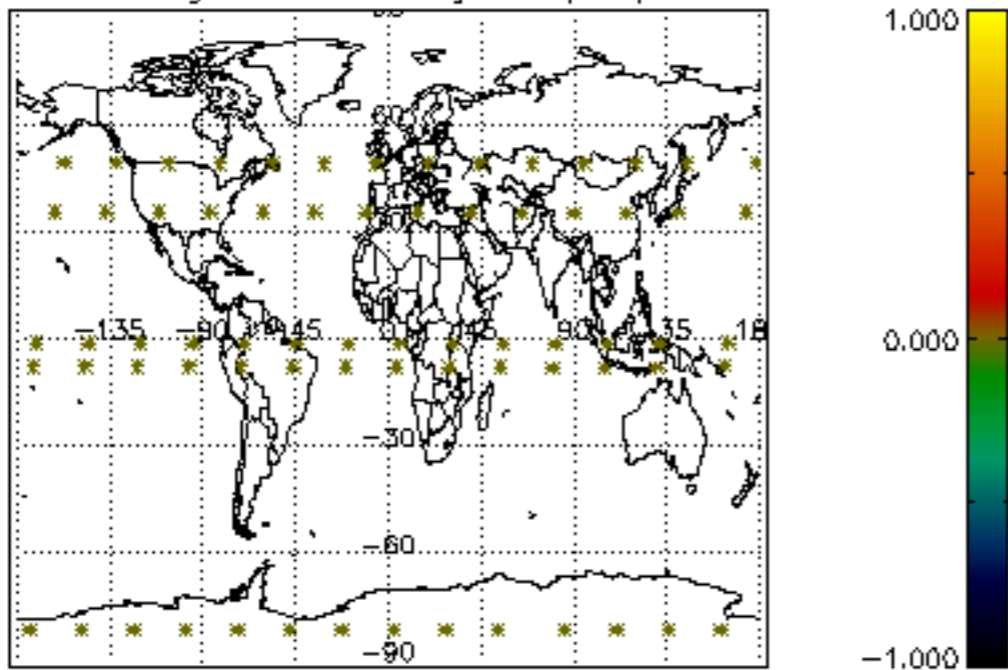
Percentage of star falling outside central band per profile



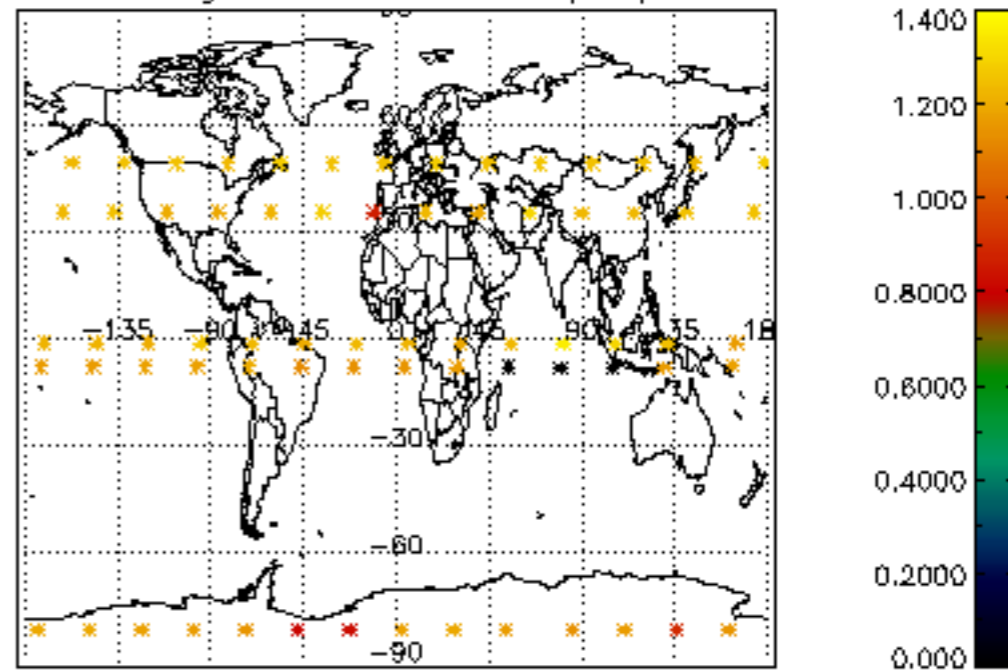
Percentage of saturation errors per profile



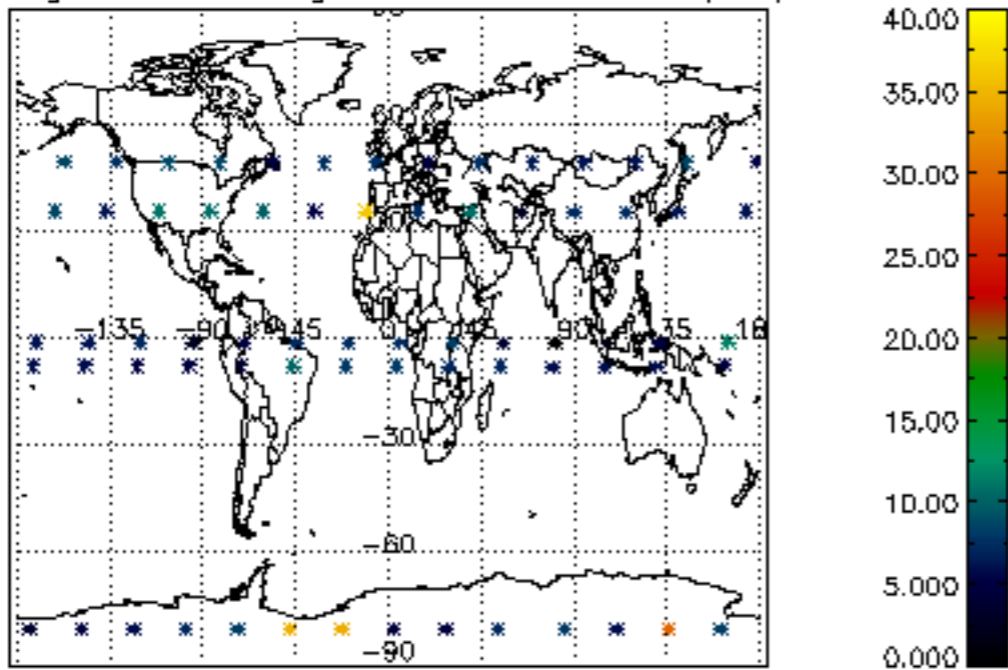
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

