

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 22:16:19
Data source version	GOMOS/6.01
Start time of products	18-11-2008 (18NOV2008 00:00:00)
Stop time of products	19-11-2008 (19NOV2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	70
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

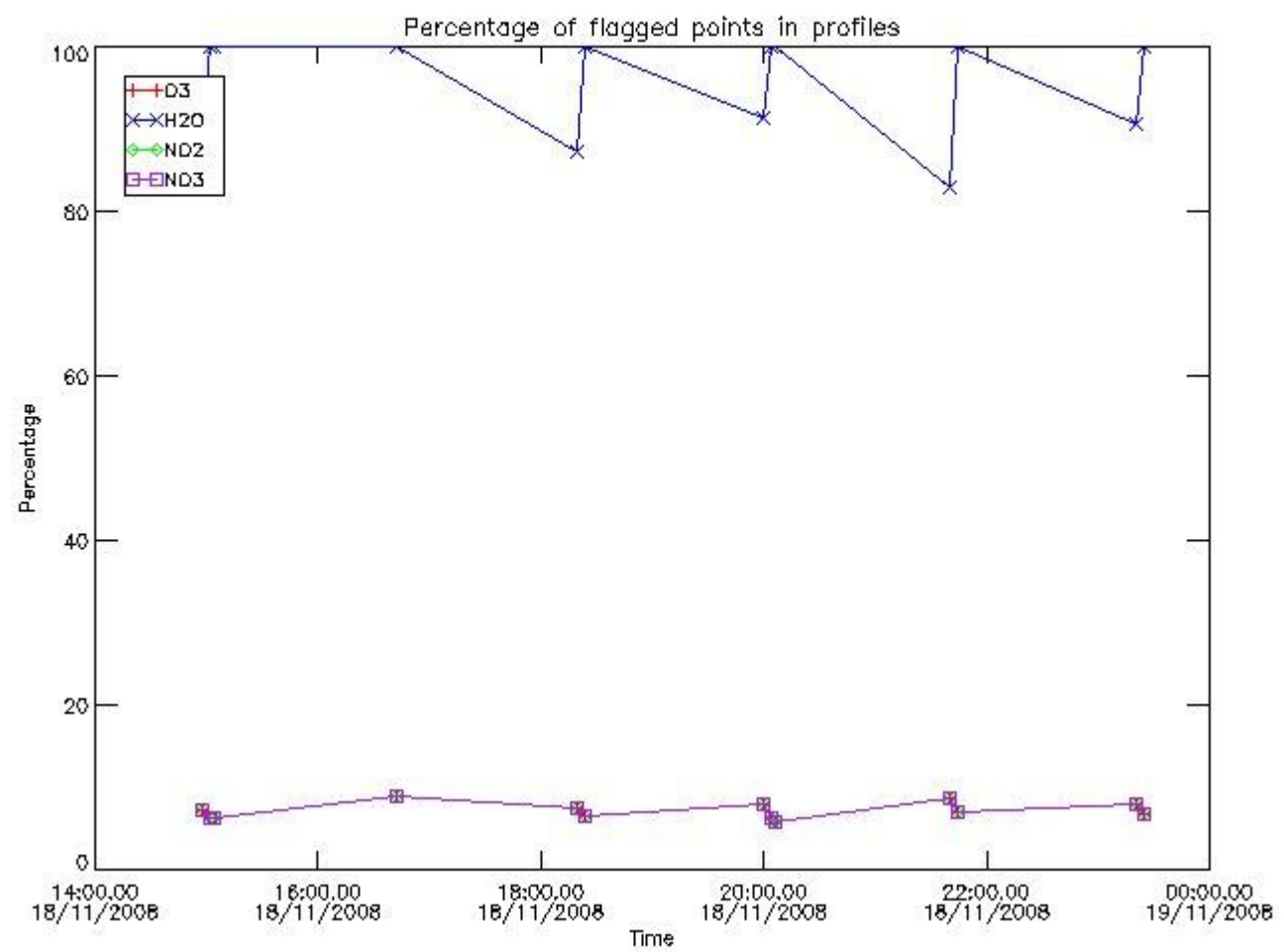
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20081118_145754_000000712074_00011_35135_2636.N1	18-NOV-2008 14:57:54	Dark	70.500	117	Pi Pup	2.7060	3800.0	141	35135	No
2	GOM_NL__2PRFIN20081118_150158_000000812074_00011_35135_2637.N1	18-NOV-2008 15:01:58	Dark	81.000	23	21Eps CMa	1.5020	26000.	162	35135	No
3	GOM_NL__2PRFIN20081118_150418_000000912074_00011_35135_2638.N1	18-NOV-2008 15:04:18	Dark	90.500	179	24Omi2CMa	3.0320	24000.	181	35135	No
4	GOM_NL__2PRFIN20081118_150952_000001022074_00011_35135_2639.N1	18-NOV-2008 15:09:52	Straylight	101.50	47	2Bet CMa	1.9760	28000.	203	35135	No
5	GOM_NL__2PRFIN20081118_151506_000000792074_00011_35135_2640.N1	18-NOV-2008 15:15:06	Straylight	79.000	7	19Bet Ori	0.10000	14000.	158	35135	No
6	GOM_NL__2PRFIN20081118_153515_000000532074_00011_35135_2641.N1	18-NOV-2008 15:35:15	Bright	53.000	6	13Alp Aur	0.080000	3400.0	106	35135	No
7	GOM_NL__2PRFIN20081118_153801_000000562074_00011_35135_2642.N1	18-NOV-2008 15:38:01	Bright	56.000	42	34Bet Aur	1.9000	10200.	112	35135	No
8	GOM_NL__2PRFIN20081118_160445_000000502074_00011_35135_2643.N1	18-NOV-2008 16:04:45	Bright	50.000	96	68Del Leo	2.5600	9300.0	100	35135	No
9	GOM_NL__2PRFIN20081118_160710_000000792074_00011_35135_2644.N1	18-NOV-2008 16:07:10	Bright	79.000	51	41Gam1Leo	2.0100	4500.0	158	35135	No
10	GOM_NL__2PRFIN20081118_161215_000001092074_00011_35135_2645.N1	18-NOV-2008 16:12:15	Straylight	109.00	22	32Alp Leo	1.3600	15200.	218	35135	No
11	GOM_NL__2PRFIN20081118_164236_000000802074_00012_35136_2649.N1	18-NOV-2008 16:42:36	Dark	80.000	23	21Eps CMa	1.5020	26000.	160	35136	No
12	GOM_NL__2PRFIN20081118_164455_000000952074_00012_35136_2650.N1	18-NOV-2008 16:44:55	Straylight	95.000	179	24Omi2CMa	3.0320	24000.	190	35136	No
13	GOM_NL__2PRFIN20081118_165029_000001012074_00012_35136_2651.N1	18-NOV-2008 16:50:29	Straylight	100.50	47	2Bet CMa	1.9760	28000.	201	35136	No
14	GOM_NL__2PRFIN20081118_165542_000000782074_00012_35136_2652.N1	18-NOV-2008 16:55:42	Straylight	78.000	7	19Bet Ori	0.10000	14000.	156	35136	No
15	GOM_NL__2PRFIN20081118_170002_000000672074_00012_35136_2653.N1	18-NOV-2008 17:00:02	Bright	67.000	33	50Zet Ori	1.7660	30000.	134	35136	No
16	GOM_NL__2PRFIN20081118_170444_000000582074_00012_35136_2654.N1	18-NOV-2008 17:04:44	Bright	57.500	13	87Alp Tau	0.86700	3800.0	115	35136	No
17	GOM_NL__2PRFIN20081118_171126_000000542074_00012_35136_2655.N1	18-NOV-2008 17:11:26	Bright	54.000	114	3Iot Aur	2.6930	4600.0	108	35136	No
18	GOM_NL__2PRFIN20081118_171550_000000562074_00012_35136_2656.N1	18-NOV-2008 17:15:50	Bright	55.500	6	13Alp Aur	0.080000	3400.0	111	35136	No
19	GOM_NL__2PRFIN20081118_171835_000000592074_00012_35136_2657.N1	18-NOV-2008 17:18:35	Bright	59.000	42	34Bet Aur	1.9000	10200.	118	35136	No
20	GOM_NL__2PRFIN20081118_174521_000000502074_00012_35136_2658.N1	18-NOV-2008 17:45:21	Bright	50.000	96	68Del Leo	2.5600	9300.0	100	35136	No
21	GOM_NL__2PRFIN20081118_174746_000000912074_00012_35136_2659.N1	18-NOV-2008 17:47:46	Bright	90.500	51	41Gam1Leo	2.0100	4500.0	181	35136	No
22	GOM_NL__2PRFIN20081118_175253_000001132074_00012_35136_2660.N1	18-NOV-2008 17:52:53	Straylight	112.50	22	32Alp Leo	1.3600	15200.	225	35136	No
23	GOM_NL__2PRFIN20081118_181908_000000682074_00013_35137_2665.N1	18-NOV-2008 18:19:08	Dark	67.500	117	Pi Pup	2.7060	3800.0	135	35137	No
24	GOM_NL__2PRFIN20081118_182313_000000792074_00013_35137_2666.N1	18-NOV-2008 18:23:13	Dark	78.500	23	21Eps CMa	1.5020	26000.	157	35137	No
25	GOM_NL__2PRFIN20081118_182532_000000962074_00013_35137_2667.N1	18-NOV-2008 18:25:32	Straylight	95.500	179	24Omi2CMa	3.0320	24000.	191	35137	No
26	GOM_NL__2PRFIN20081118_183105_000000932074_00013_35137_2668.N1	18-NOV-2008 18:31:05	Straylight	92.500	47	2Bet CMa	1.9760	28000.	185	35137	No
27	GOM_NL__2PRFIN20081118_183618_000000782074_00013_35137_2669.N1	18-NOV-2008 18:36:18	Straylight	78.000	7	19Bet Ori	0.10000	14000.	156	35137	No
28	GOM_NL__2PRFIN20081118_184036_000000672074_00013_35137_2670.N1	18-NOV-2008 18:40:36	Bright	67.000	33	50Zet Ori	1.7660	30000.	134	35137	No
29	GOM_NL__2PRFIN20081118_184520_000000602074_00013_35137_2671.N1	18-NOV-2008 18:45:20	Bright	59.500	13	87Alp Tau	0.86700	3800.0	119	35137	No
30	GOM_NL__2PRFIN20081118_185201_000000582074_00013_35137_2672.N1	18-NOV-2008 18:52:01	Bright	57.500	114	3Iot Aur	2.6930	4600.0	115	35137	No
31	GOM_NL__2PRFIN20081118_185625_000000552074_00013_35137_2673.N1	18-NOV-2008 18:56:25	Bright	55.000	6	13Alp Aur	0.080000	3400.0	110	35137	No
32	GOM_NL__2PRFIN20081118_185910_000000562074_00013_35137_2674.N1	18-NOV-2008 18:59:10	Bright	56.000	42	34Bet Aur	1.9000	10200.	112	35137	No
33	GOM_NL__2PRFIN20081118_192558_000000522074_00013_35137_2675.N1	18-NOV-2008 19:25:58	Bright	51.500	96	68Del Leo	2.5600	9300.0	103	35137	No
34	GOM_NL__2PRFIN20081118_192823_000001052074_00013_35137_2676.N1	18-NOV-2008 19:28:23	Bright	104.50	51	41Gam1Leo	2.0100	4500.0	209	35137	No
35	GOM_NL__2PRFIN20081118_193331_000001102074_00013_35137_2677.N1	18-NOV-2008 19:33:31	Straylight	109.50	22	32Alp Leo	1.3600	15200.	219	35137	No
36	GOM_NL__2PRFIN20081118_195945_000000652074_00014_35138_2676.N1	18-NOV-2008 19:59:45	Dark	64.500	117	Pi Pup	2.7060	3800.0	129	35138	No
37	GOM_NL__2PRFIN20081118_200350_000000822074_00014_35138_2677.N1	18-NOV-2008 20:03:50	Dark	81.500	23	21Eps CMa	1.5020	26000.	163	35138	No
38	GOM_NL__2PRFIN20081118_200609_000000902074_00014_35138_2678.N1	18-NOV-2008 20:06:09	Dark	89.500	179	24Omi2CMa	3.0320	24000.	179	35138	No
39	GOM_NL__2PRFIN20081118_201142_000000982074_00014_35138_2679.N1	18-NOV-2008 20:11:42	Straylight	97.500	47	2Bet CMa	1.9760	28000.	195	35138	No
40	GOM_NL__2PRFIN20081118_201653_000000872074_00014_35138_2680.N1	18-NOV-2008 20:16:53	Straylight	87.000	7	19Bet Ori	0.10000	14000.	174	35138	No
41	GOM_NL__2PRFIN20081118_202111_000000732074_00014_35138_2681.N1	18-NOV-2008 20:21:11	Bright	73.000	33	50Zet Ori	1.7660	30000.	146	35138	No
42	GOM_NL__2PRFIN20081118_202555_000000592074_00014_35138_2682.N1	18-NOV-2008 20:25:55	Bright	58.500	13	87Alp Tau	0.86700	3800.0	117	35138	No

43	GOM_NL__2PRFIN20081118_203236_000000552074_00014_35138_2683.N1	18-NOV-2008 20:32:36	Bright	54.500	114	3Iot Aur	2.6930	4600.0	109	35138	No
44	GOM_NL__2PRFIN20081118_203700_000000552074_00014_35138_2684.N1	18-NOV-2008 20:37:00	Bright	55.000	6	13Alp Aur	0.080000	3400.0	110	35138	No
45	GOM_NL__2PRFIN20081118_203945_000000582074_00014_35138_2685.N1	18-NOV-2008 20:39:45	Bright	58.000	42	34Bet Aur	1.9000	10200.	116	35138	No
46	GOM_NL__2PRFIN20081118_210634_000000522074_00014_35138_2686.N1	18-NOV-2008 21:06:34	Bright	52.000	96	68Del Leo	2.5600	9300.0	104	35138	No
47	GOM_NL__2PRFIN20081118_210900_000000932074_00014_35138_2687.N1	18-NOV-2008 21:09:00	Bright	93.000	51	41Gam1Leo	2.0100	4500.0	186	35138	No
48	GOM_NL__2PRFIN20081118_211409_000001122074_00014_35138_2688.N1	18-NOV-2008 21:14:09	Straylight	112.00	22	32Alp Leo	1.3600	15200.	224	35138	No
49	GOM_NL__2PRFIN20081118_214022_000000592074_00015_35139_2700.N1	18-NOV-2008 21:40:22	Dark	59.000	117	Pi Pup	2.7060	3800.0	118	35139	No
50	GOM_NL__2PRFIN20081118_214426_000000802074_00015_35139_2701.N1	18-NOV-2008 21:44:26	Dark	79.500	23	21Eps CMa	1.5020	26000.	159	35139	No
51	GOM_NL__2PRFIN20081118_214646_000000912074_00015_35139_2702.N1	18-NOV-2008 21:46:46	Straylight	91.000	179	24Omi2CMa	3.0320	24000.	182	35139	No
52	GOM_NL__2PRFIN20081118_215218_000000902074_00015_35139_2703.N1	18-NOV-2008 21:52:18	Straylight	90.000	47	2Bet CMa	1.9760	28000.	180	35139	No
53	GOM_NL__2PRFIN20081118_215729_000000732074_00015_35139_2704.N1	18-NOV-2008 21:57:29	Straylight	73.000	7	19Bet Ori	0.10000	14000.	146	35139	No
54	GOM_NL__2PRFIN20081118_220146_000000732074_00015_35139_2705.N1	18-NOV-2008 22:01:46	Bright	73.000	33	50Zet Ori	1.7660	30000.	146	35139	No
55	GOM_NL__2PRFIN20081118_221311_000000542074_00015_35139_2706.N1	18-NOV-2008 22:13:11	Bright	54.000	114	3Iot Aur	2.6930	4600.0	108	35139	No
56	GOM_NL__2PRFIN20081118_221734_000000542074_00015_35139_2707.N1	18-NOV-2008 22:17:34	Bright	53.500	6	13Alp Aur	0.080000	3400.0	107	35139	No
57	GOM_NL__2PRFIN20081118_222019_000000572074_00015_35139_2708.N1	18-NOV-2008 22:20:19	Bright	57.000	42	34Bet Aur	1.9000	10200.	114	35139	No
58	GOM_NL__2PRFIN20081118_224710_000000492074_00015_35139_2709.N1	18-NOV-2008 22:47:10	Bright	49.000	96	68Del Leo	2.5600	9300.0	98	35139	No
59	GOM_NL__2PRFIN20081118_224937_000000942074_00015_35139_2710.N1	18-NOV-2008 22:49:37	Bright	94.000	51	41Gam1Leo	2.0100	4500.0	188	35139	No
60	GOM_NL__2PRFIN20081118_225446_000001092074_00015_35139_2711.N1	18-NOV-2008 22:54:46	Straylight	108.50	22	32Alp Leo	1.3600	15200.	217	35139	No
61	GOM_NL__2PRFIN20081118_232059_000000652074_00016_35140_2716.N1	18-NOV-2008 23:20:59	Dark	64.500	117	Pi Pup	2.7060	3800.0	129	35140	No
62	GOM_NL__2PRFIN20081118_232503_000000752074_00016_35140_2717.N1	18-NOV-2008 23:25:03	Dark	74.500	23	21Eps CMa	1.5020	26000.	149	35140	No
63	GOM_NL__2PRFIN20081118_232723_000000962074_00016_35140_2718.N1	18-NOV-2008 23:27:23	Straylight	96.000	179	24Omi2CMa	3.0320	24000.	192	35140	No
64	GOM_NL__2PRFIN20081118_233254_000000962074_00016_35140_2719.N1	18-NOV-2008 23:32:54	Straylight	95.500	47	2Bet CMa	1.9760	28000.	191	35140	No
65	GOM_NL__2PRFIN20081118_233804_000000762074_00016_35140_2720.N1	18-NOV-2008 23:38:04	Straylight	75.500	7	19Bet Ori	0.10000	14000.	151	35140	No
66	GOM_NL__2PRFIN20081118_234221_000000802074_00016_35140_2721.N1	18-NOV-2008 23:42:21	Bright	80.000	33	50Zet Ori	1.7660	30000.	160	35140	No
67	GOM_NL__2PRFIN20081118_234705_000000592074_00016_35140_2722.N1	18-NOV-2008 23:47:05	Bright	59.000	13	87Alp Tau	0.86700	3800.0	118	35140	No
68	GOM_NL__2PRFIN20081118_235346_000000542074_00016_35140_2723.N1	18-NOV-2008 23:53:46	Bright	53.500	114	3Iot Aur	2.6930	4600.0	107	35140	No
69	GOM_NL__2PRFIN20081118_235809_000000532074_00016_35140_2724.N1	18-NOV-2008 23:58:09	Bright	53.000	6	13Alp Aur	0.080000	3400.0	106	35140	No
70	GOM_NL__2PRFIN20081118_235959_000000692074_00016_35140_2725.N1	18-NOV-2008 23:59:59	Bright	68.500	107	37The Aur	2.6490	11000.	137	35140	No

3. Quality information per product

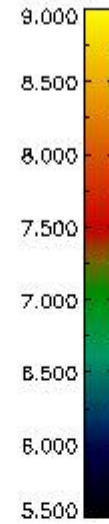
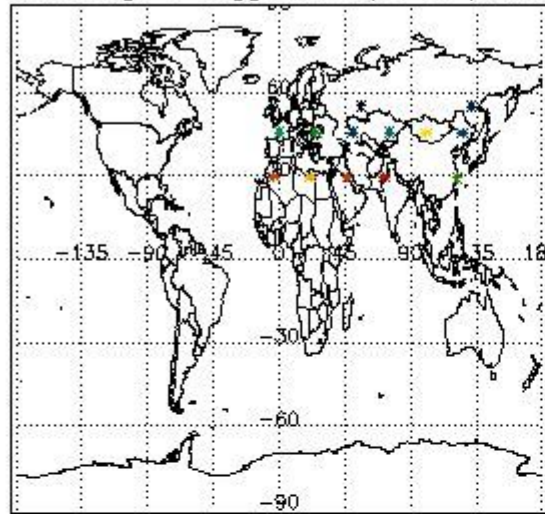
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

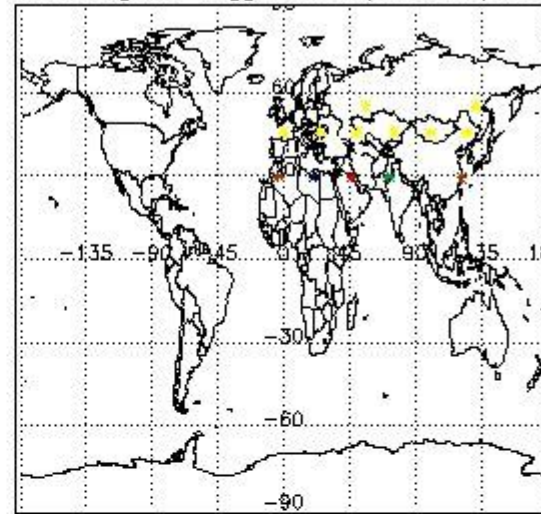


3.2 Plot quality information per product (world map)

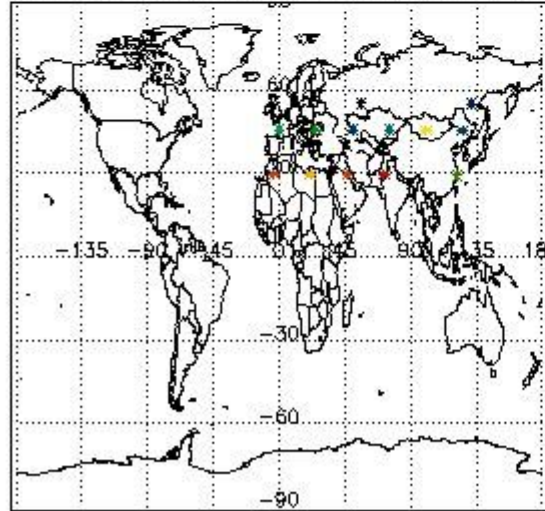
Percentage of flagged data per O3 profile



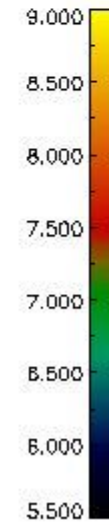
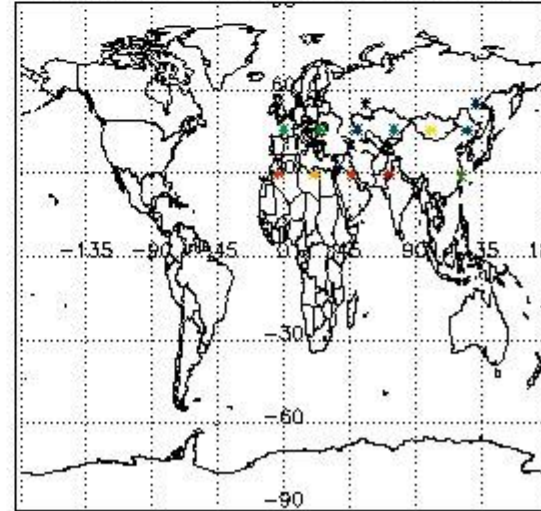
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

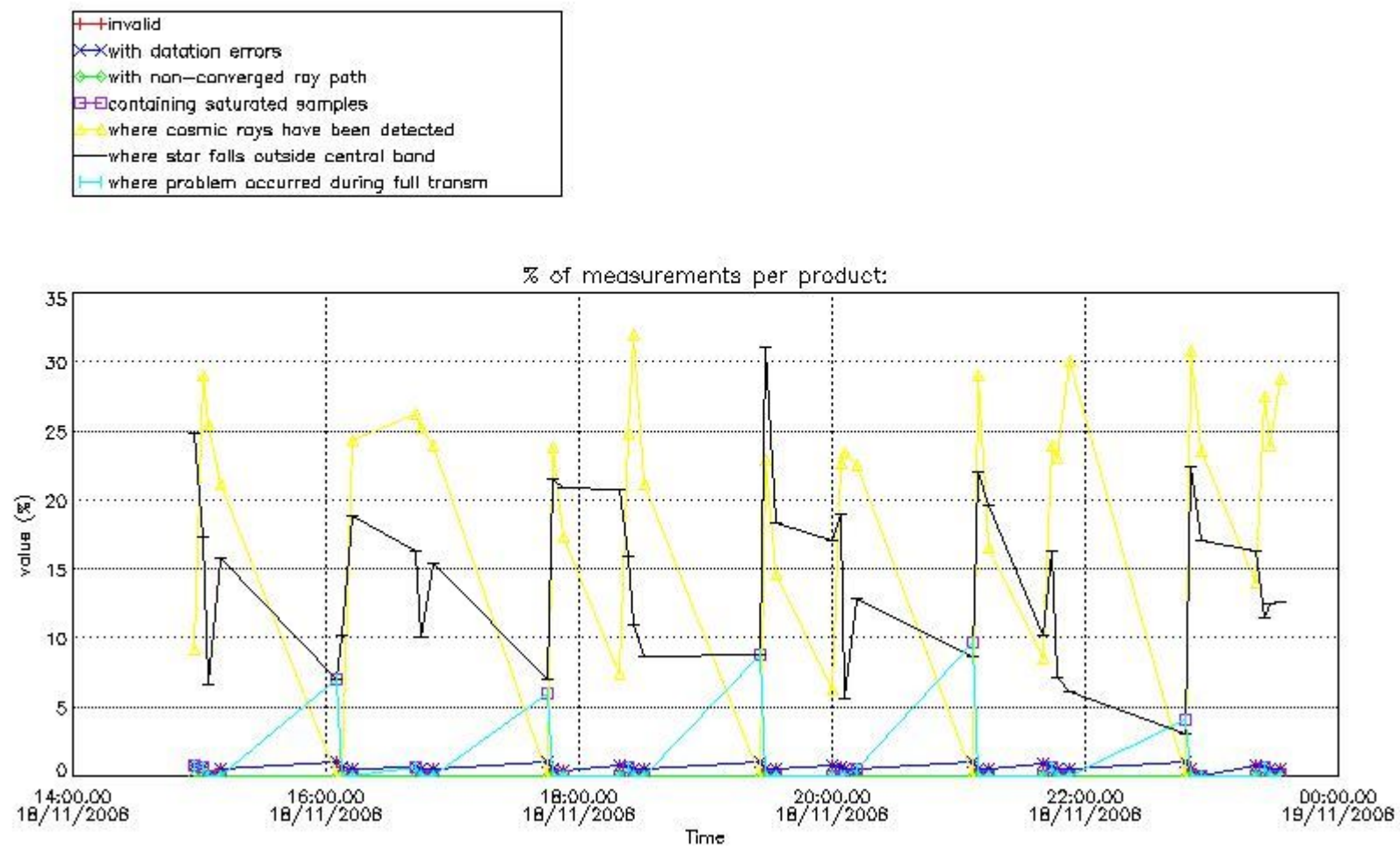


4. Level 1 quality information per product

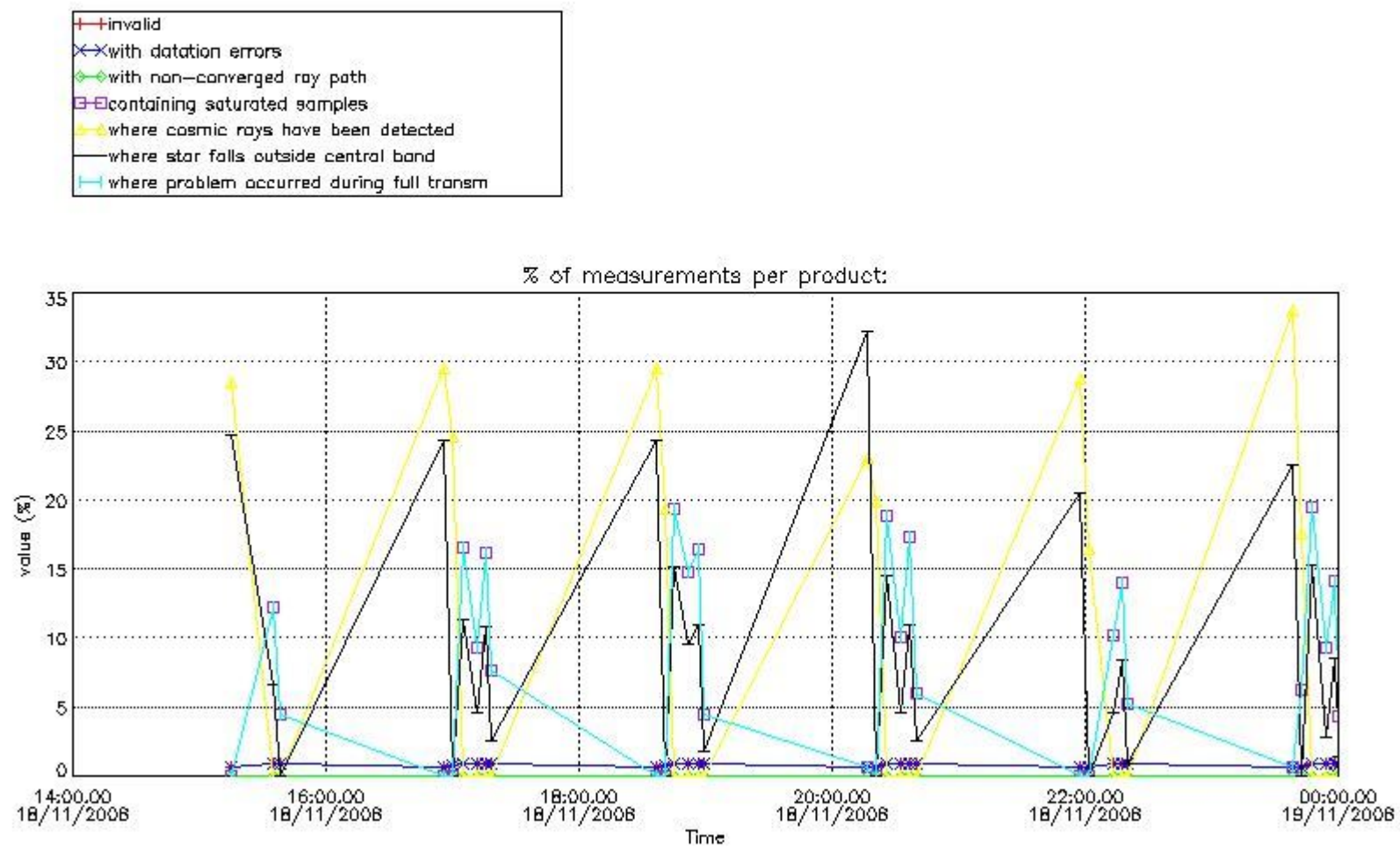
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



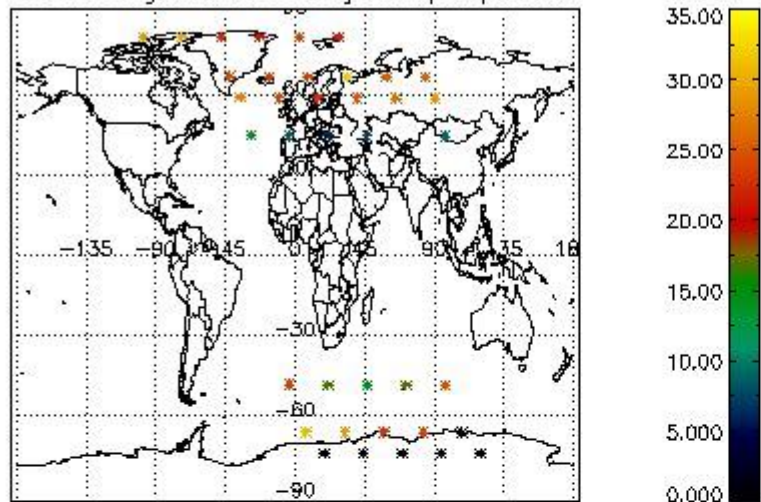
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



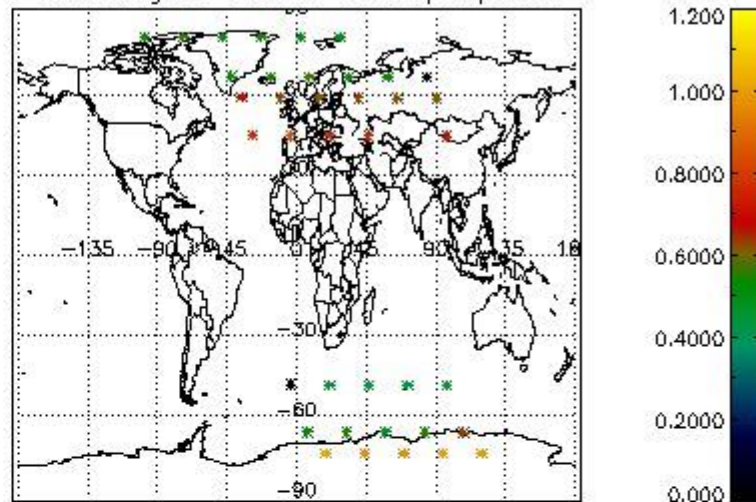
4.2 Plot quality information per product coming from level 1b processing (world map)

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

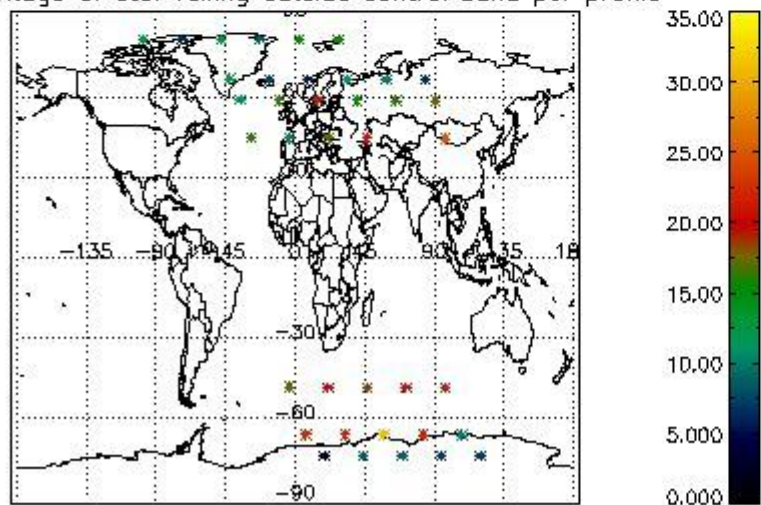
Percentage of cosmic ray hits per profile



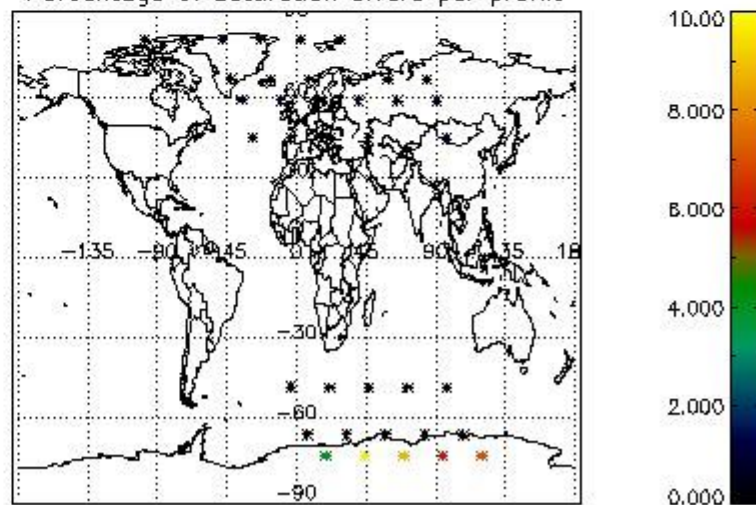
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

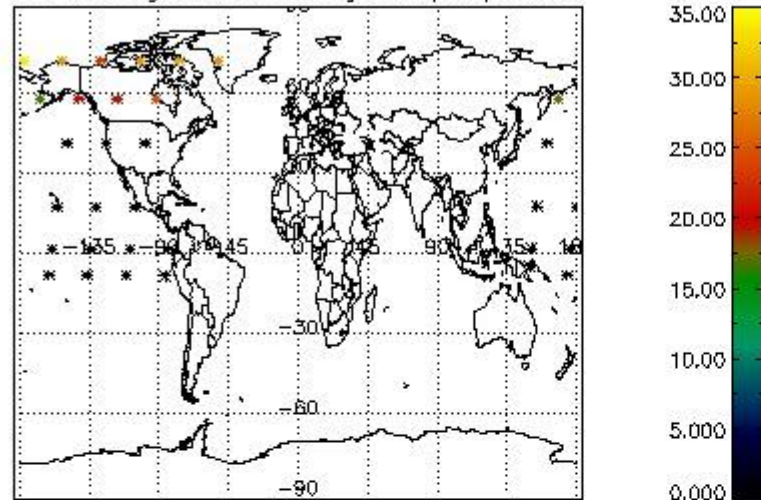


Percentage of saturation errors per profile

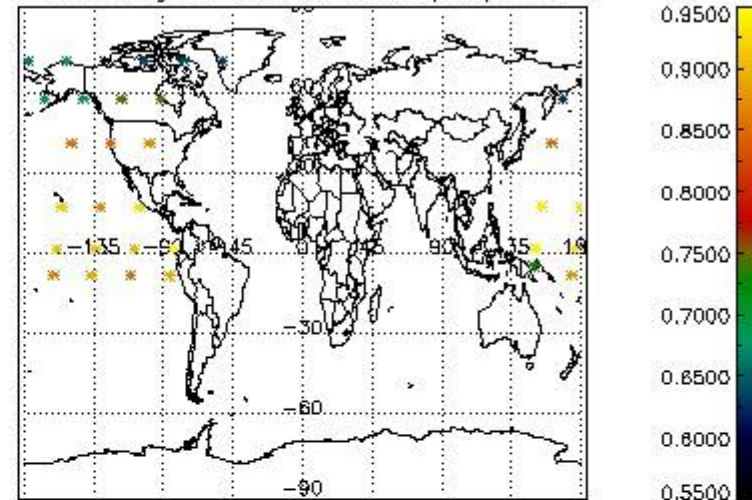


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

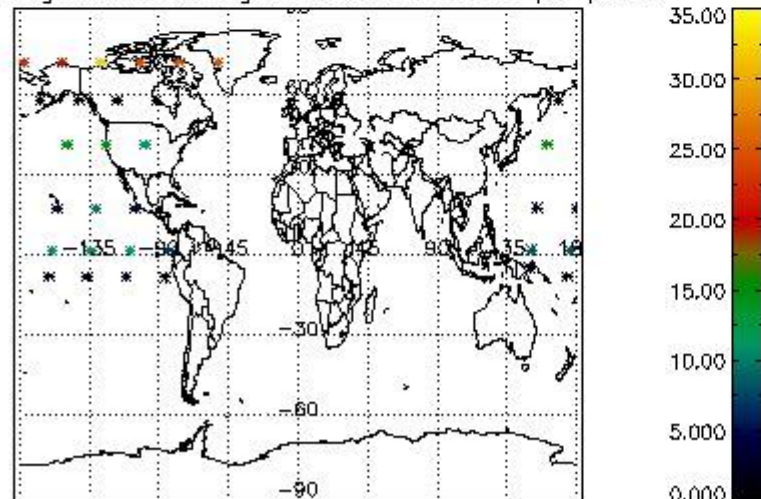
Percentage of cosmic ray hits per profile



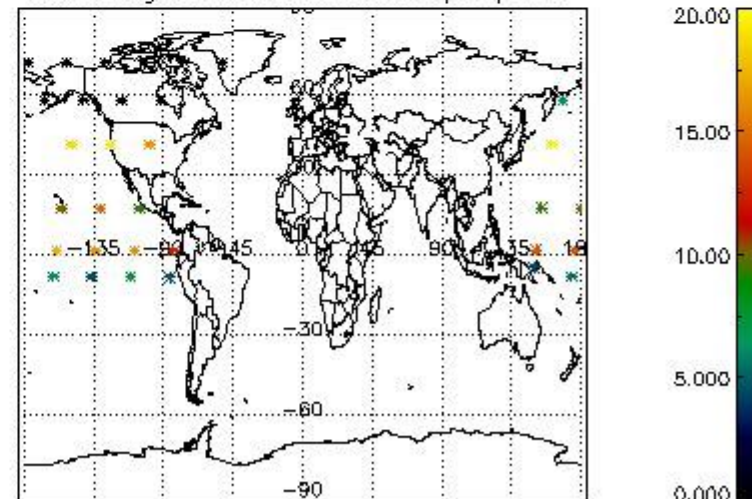
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

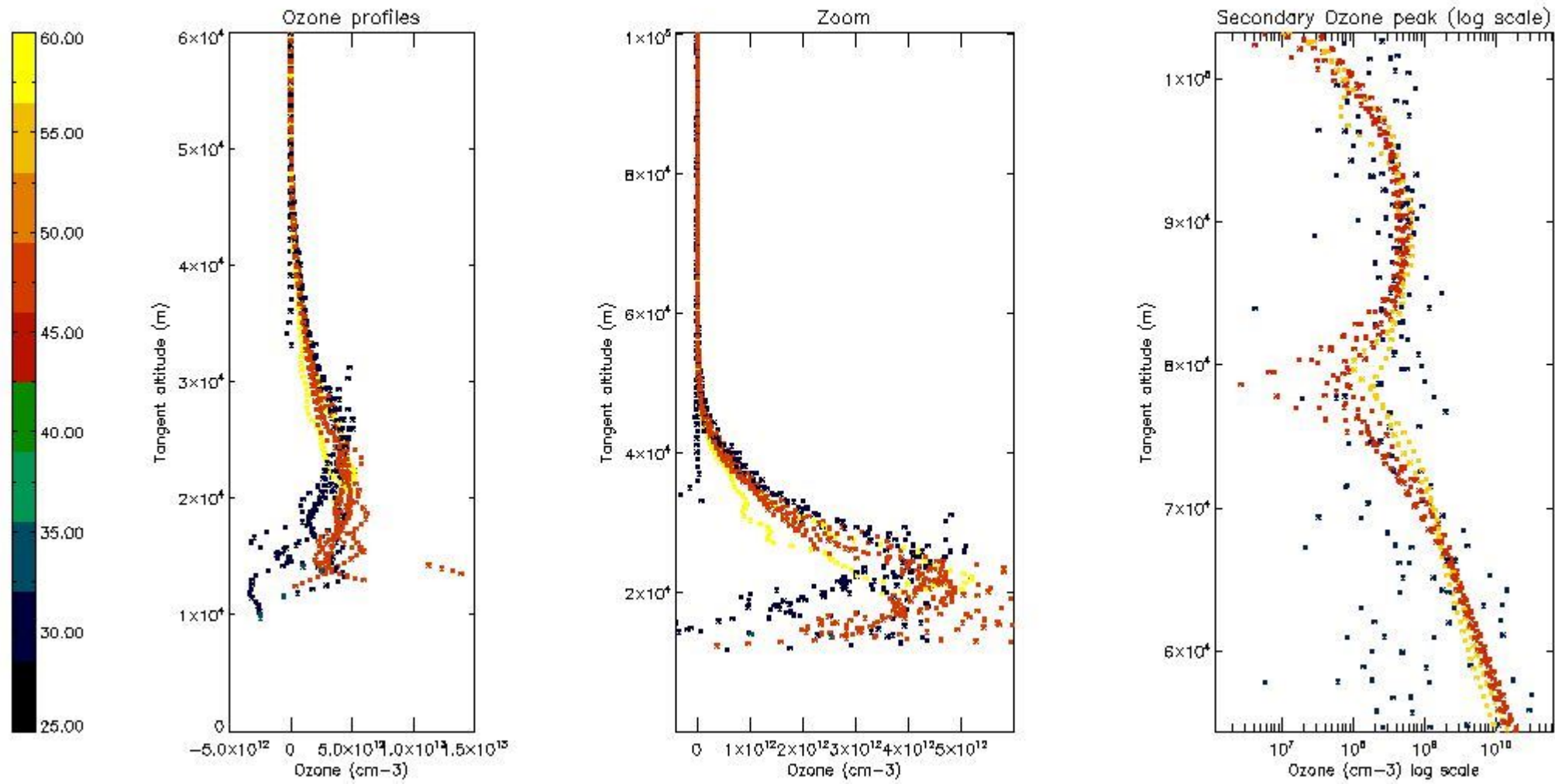
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	19
STD < 20	11

STD < 10	9
STD < 5	7

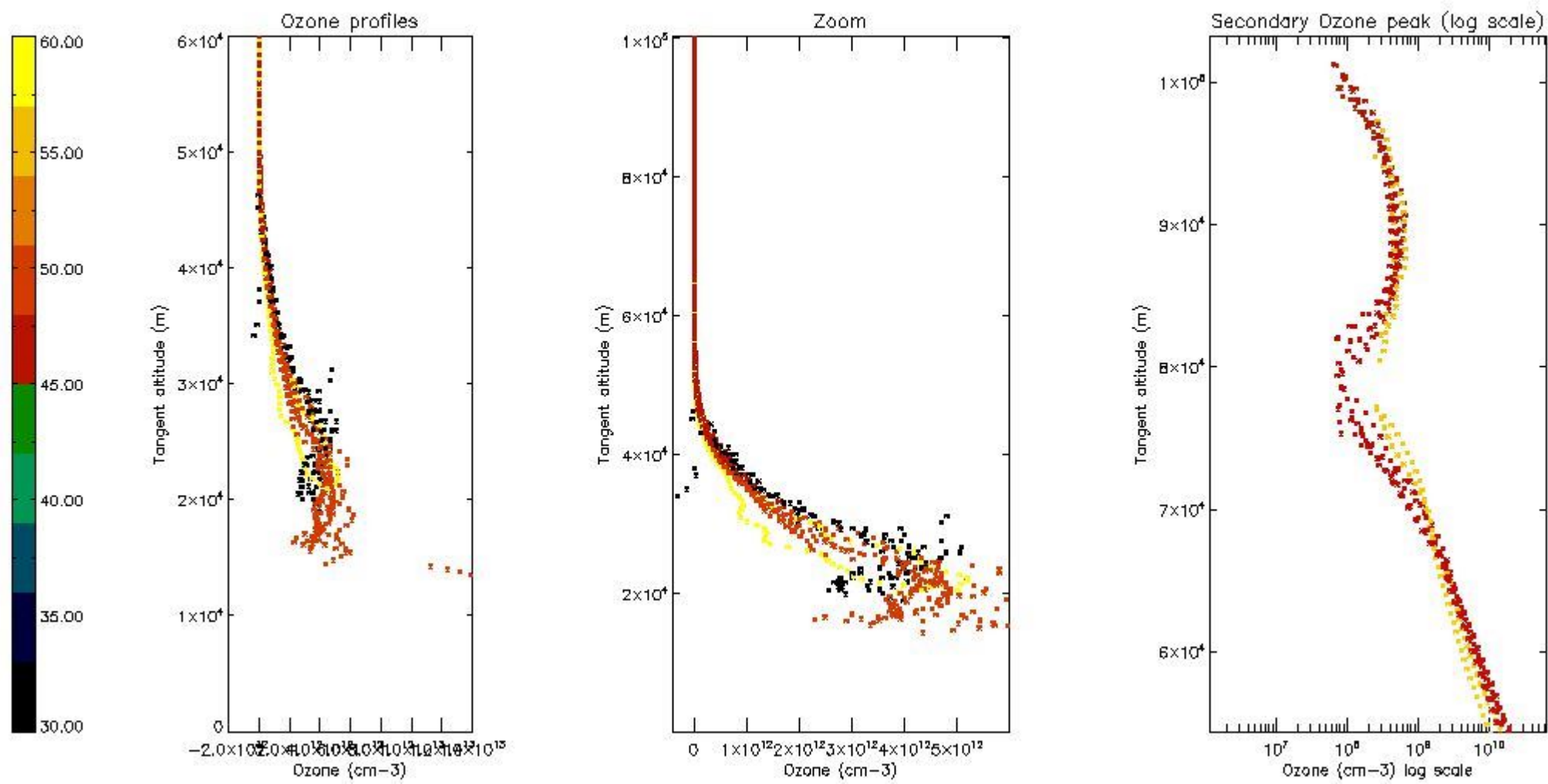
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



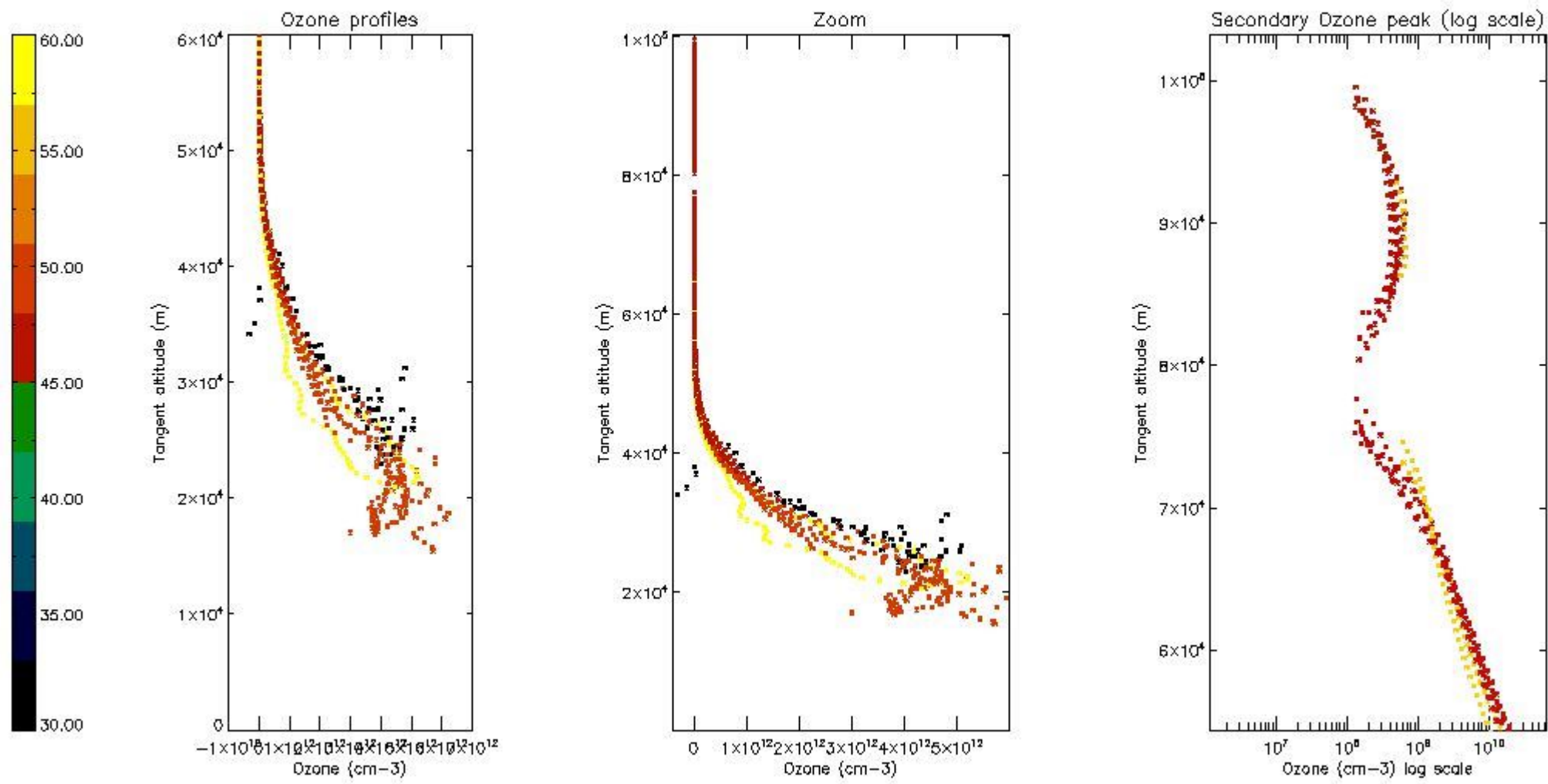
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



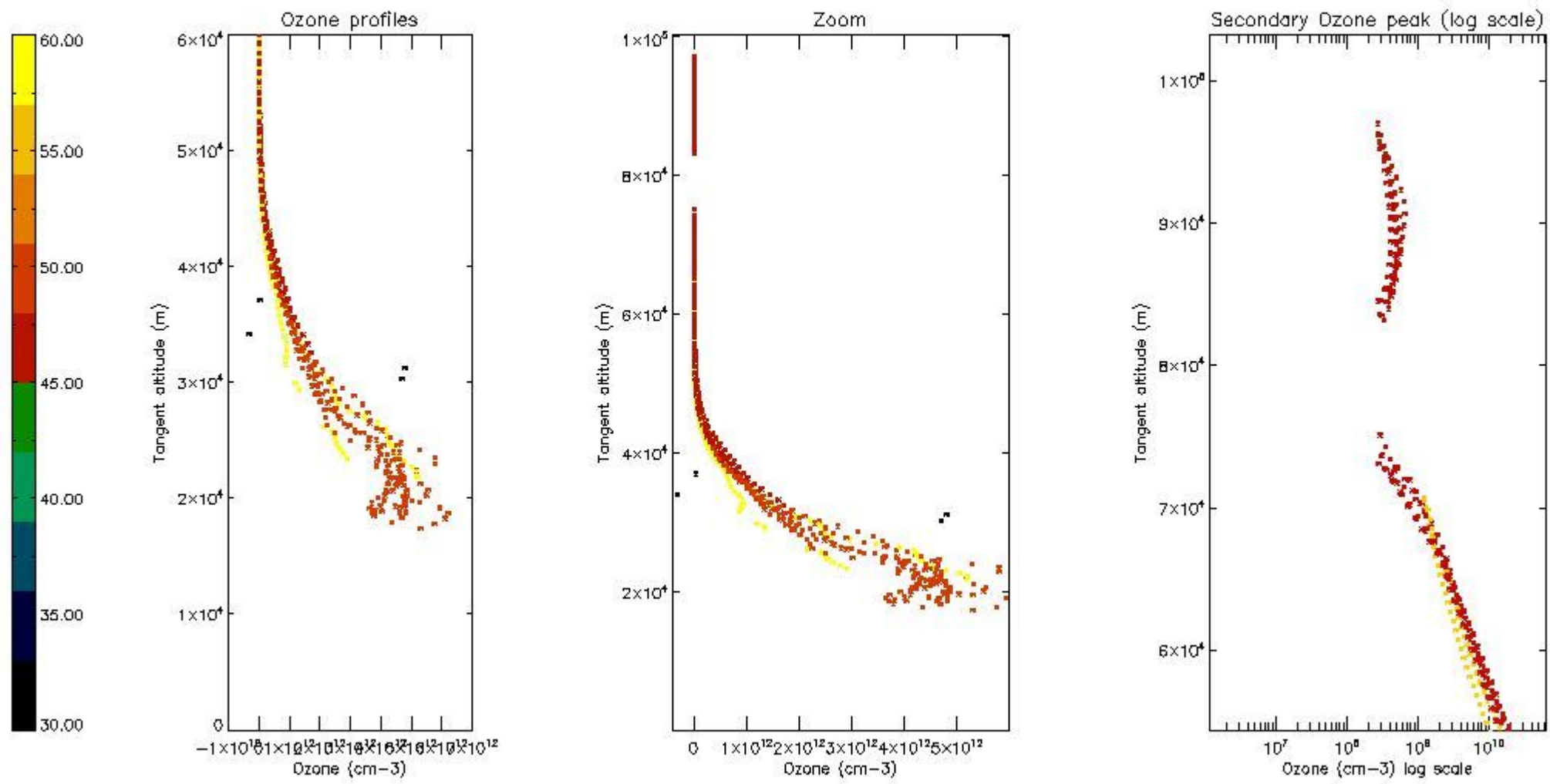
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



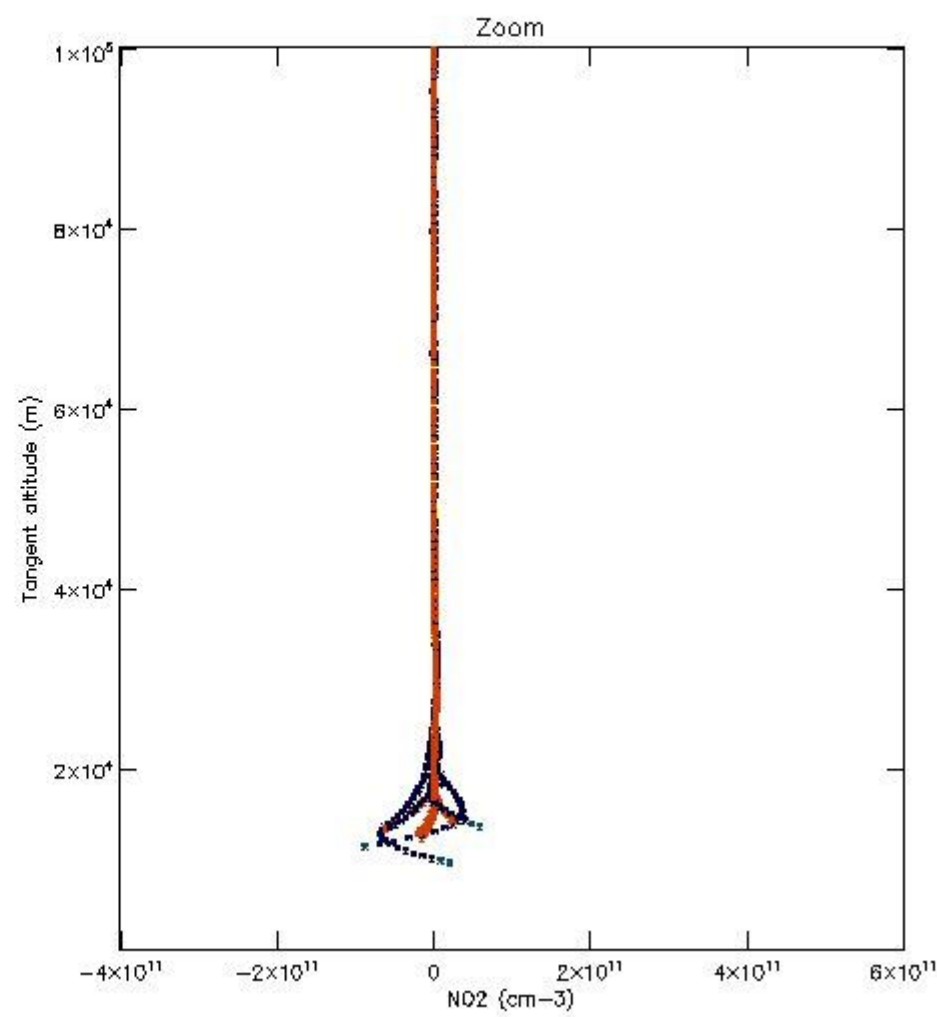
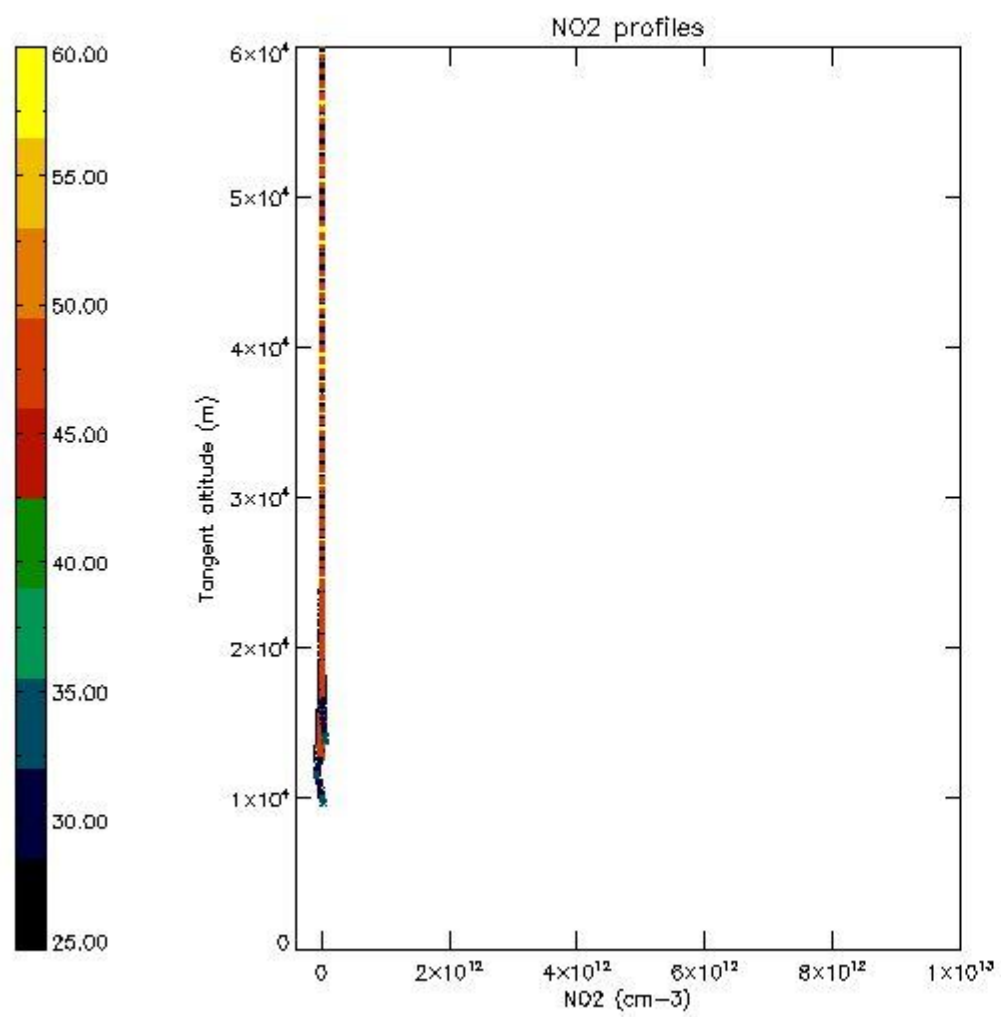
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



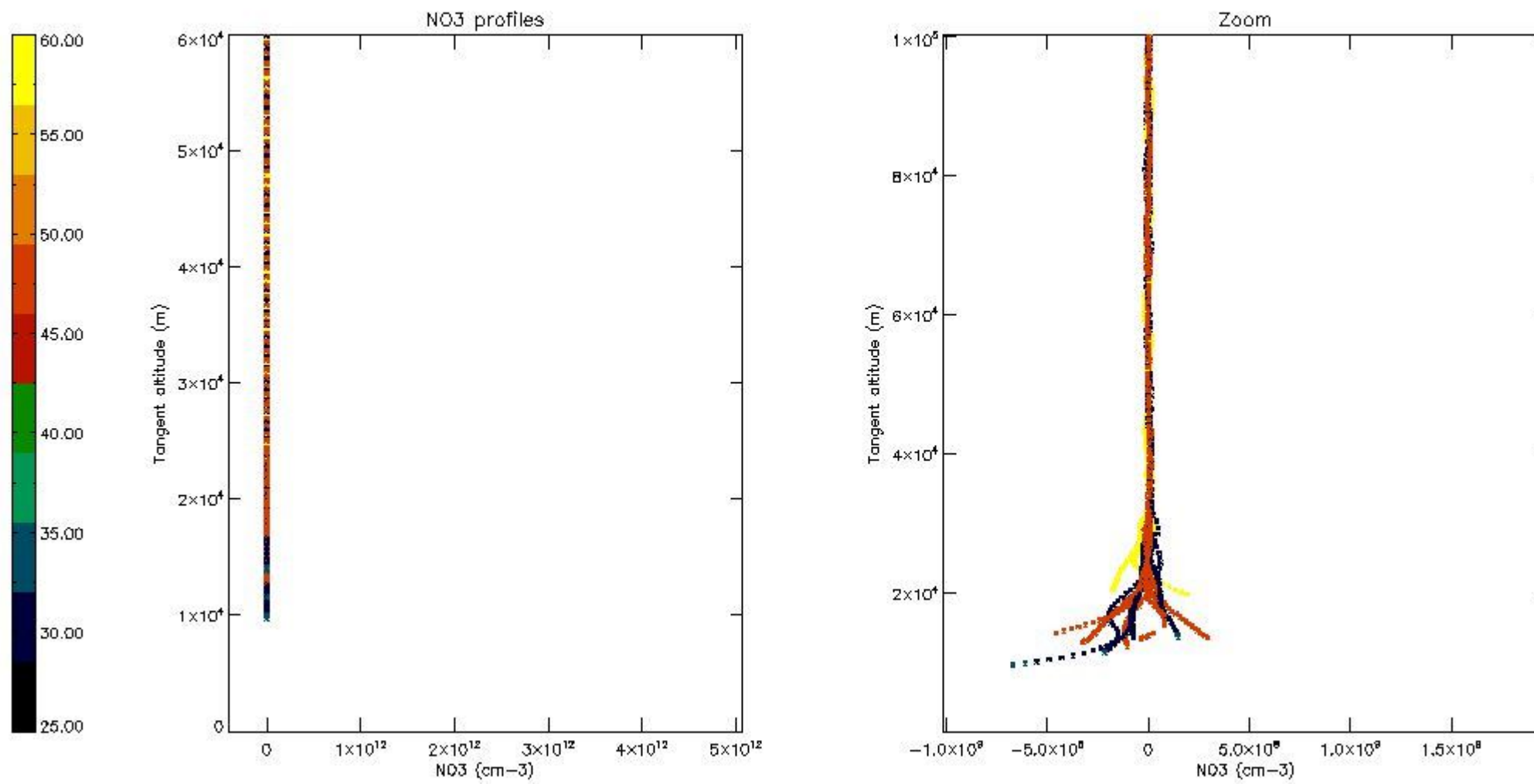
5.6 Plot NO₂ profiles for all STD (dark without errors)

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-NOV-2008 14:57:54
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	18-NOV-2008 14:57:54
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	18-NOV-2008 14:57:54

GOMOS Level 2 Daily Report

SUMMARY

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[3. Level 2 Quality information per product](#)

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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	25APR2013 22:16:19
Data source version	GOMOS/6.01
Start time of products	18-11-2008 (18NOV2008 00:00:00)
Stop time of products	19-11-2008 (19NOV2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	70
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

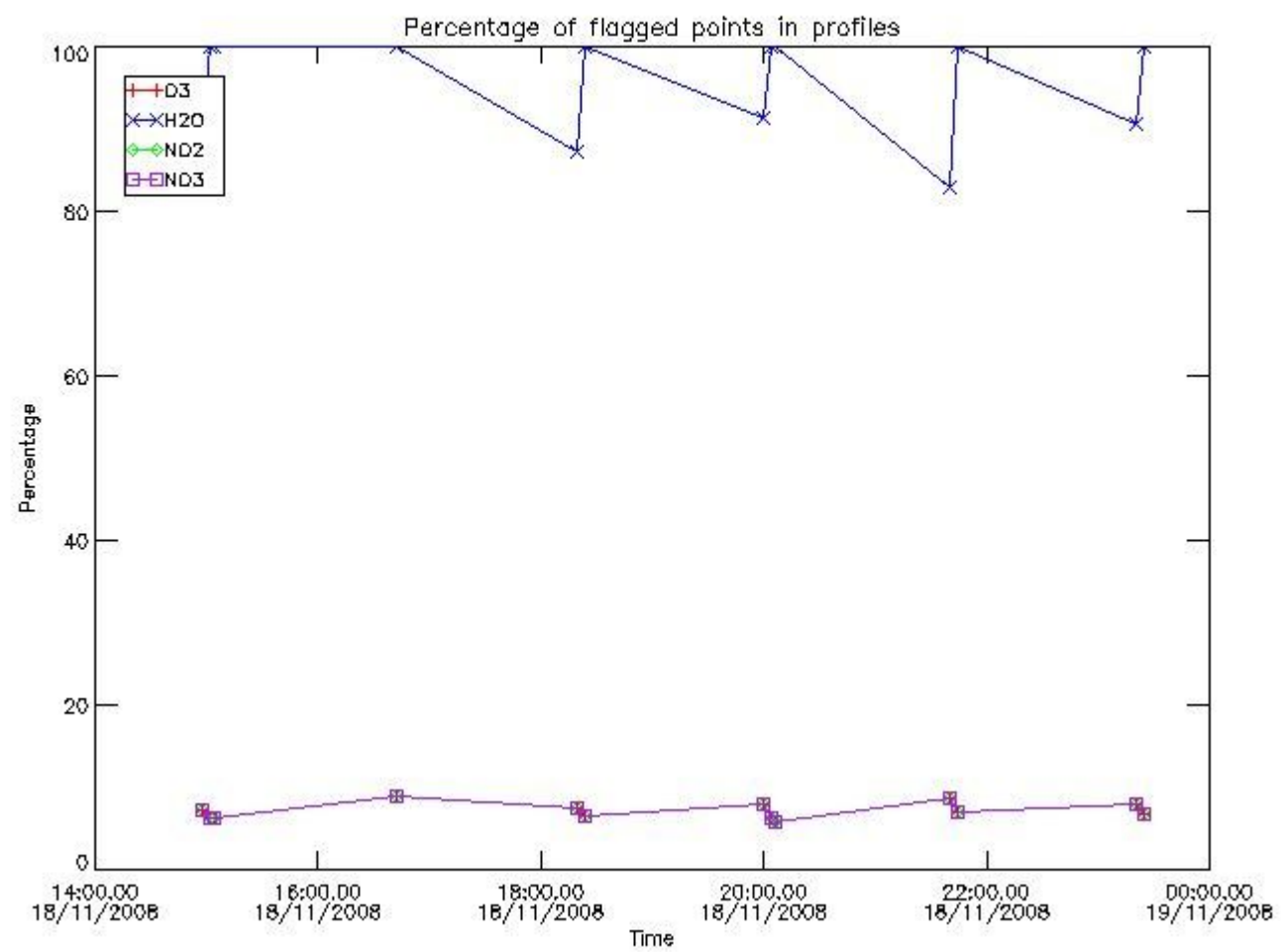
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20081118_145754_000000712074_00011_35135_2636.N1	18-NOV-2008 14:57:54	Dark	70.500	117	Pi Pup	2.7060	3800.0	141	35135	No
2	GOM_NL__2PRFIN20081118_150158_000000812074_00011_35135_2637.N1	18-NOV-2008 15:01:58	Dark	81.000	23	21Eps CMa	1.5020	26000.	162	35135	No
3	GOM_NL__2PRFIN20081118_150418_000000912074_00011_35135_2638.N1	18-NOV-2008 15:04:18	Dark	90.500	179	24Omi2CMa	3.0320	24000.	181	35135	No
4	GOM_NL__2PRFIN20081118_150952_000001022074_00011_35135_2639.N1	18-NOV-2008 15:09:52	Straylight	101.50	47	2Bet CMa	1.9760	28000.	203	35135	No
5	GOM_NL__2PRFIN20081118_151506_000000792074_00011_35135_2640.N1	18-NOV-2008 15:15:06	Straylight	79.000	7	19Bet Ori	0.10000	14000.	158	35135	No
6	GOM_NL__2PRFIN20081118_153515_000000532074_00011_35135_2641.N1	18-NOV-2008 15:35:15	Bright	53.000	6	13Alp Aur	0.080000	3400.0	106	35135	No
7	GOM_NL__2PRFIN20081118_153801_000000562074_00011_35135_2642.N1	18-NOV-2008 15:38:01	Bright	56.000	42	34Bet Aur	1.9000	10200.	112	35135	No
8	GOM_NL__2PRFIN20081118_160445_000000502074_00011_35135_2643.N1	18-NOV-2008 16:04:45	Bright	50.000	96	68Del Leo	2.5600	9300.0	100	35135	No
9	GOM_NL__2PRFIN20081118_160710_000000792074_00011_35135_2644.N1	18-NOV-2008 16:07:10	Bright	79.000	51	41Gam1Leo	2.0100	4500.0	158	35135	No
10	GOM_NL__2PRFIN20081118_161215_000001092074_00011_35135_2645.N1	18-NOV-2008 16:12:15	Straylight	109.00	22	32Alp Leo	1.3600	15200.	218	35135	No
11	GOM_NL__2PRFIN20081118_164236_000000802074_00012_35136_2649.N1	18-NOV-2008 16:42:36	Dark	80.000	23	21Eps CMa	1.5020	26000.	160	35136	No
12	GOM_NL__2PRFIN20081118_164455_000000952074_00012_35136_2650.N1	18-NOV-2008 16:44:55	Straylight	95.000	179	24Omi2CMa	3.0320	24000.	190	35136	No
13	GOM_NL__2PRFIN20081118_165029_000001012074_00012_35136_2651.N1	18-NOV-2008 16:50:29	Straylight	100.50	47	2Bet CMa	1.9760	28000.	201	35136	No
14	GOM_NL__2PRFIN20081118_165542_000000782074_00012_35136_2652.N1	18-NOV-2008 16:55:42	Straylight	78.000	7	19Bet Ori	0.10000	14000.	156	35136	No
15	GOM_NL__2PRFIN20081118_170002_000000672074_00012_35136_2653.N1	18-NOV-2008 17:00:02	Bright	67.000	33	50Zet Ori	1.7660	30000.	134	35136	No
16	GOM_NL__2PRFIN20081118_170444_000000582074_00012_35136_2654.N1	18-NOV-2008 17:04:44	Bright	57.500	13	87Alp Tau	0.86700	3800.0	115	35136	No
17	GOM_NL__2PRFIN20081118_171126_000000542074_00012_35136_2655.N1	18-NOV-2008 17:11:26	Bright	54.000	114	3Iot Aur	2.6930	4600.0	108	35136	No
18	GOM_NL__2PRFIN20081118_171550_000000562074_00012_35136_2656.N1	18-NOV-2008 17:15:50	Bright	55.500	6	13Alp Aur	0.080000	3400.0	111	35136	No
19	GOM_NL__2PRFIN20081118_171835_000000592074_00012_35136_2657.N1	18-NOV-2008 17:18:35	Bright	59.000	42	34Bet Aur	1.9000	10200.	118	35136	No
20	GOM_NL__2PRFIN20081118_174521_000000502074_00012_35136_2658.N1	18-NOV-2008 17:45:21	Bright	50.000	96	68Del Leo	2.5600	9300.0	100	35136	No
21	GOM_NL__2PRFIN20081118_174746_000000912074_00012_35136_2659.N1	18-NOV-2008 17:47:46	Bright	90.500	51	41Gam1Leo	2.0100	4500.0	181	35136	No
22	GOM_NL__2PRFIN20081118_175253_000001132074_00012_35136_2660.N1	18-NOV-2008 17:52:53	Straylight	112.50	22	32Alp Leo	1.3600	15200.	225	35136	No
23	GOM_NL__2PRFIN20081118_181908_000000682074_00013_35137_2665.N1	18-NOV-2008 18:19:08	Dark	67.500	117	Pi Pup	2.7060	3800.0	135	35137	No
24	GOM_NL__2PRFIN20081118_182313_000000792074_00013_35137_2666.N1	18-NOV-2008 18:23:13	Dark	78.500	23	21Eps CMa	1.5020	26000.	157	35137	No
25	GOM_NL__2PRFIN20081118_182532_000000962074_00013_35137_2667.N1	18-NOV-2008 18:25:32	Straylight	95.500	179	24Omi2CMa	3.0320	24000.	191	35137	No
26	GOM_NL__2PRFIN20081118_183105_000000932074_00013_35137_2668.N1	18-NOV-2008 18:31:05	Straylight	92.500	47	2Bet CMa	1.9760	28000.	185	35137	No
27	GOM_NL__2PRFIN20081118_183618_000000782074_00013_35137_2669.N1	18-NOV-2008 18:36:18	Straylight	78.000	7	19Bet Ori	0.10000	14000.	156	35137	No
28	GOM_NL__2PRFIN20081118_184036_000000672074_00013_35137_2670.N1	18-NOV-2008 18:40:36	Bright	67.000	33	50Zet Ori	1.7660	30000.	134	35137	No
29	GOM_NL__2PRFIN20081118_184520_000000602074_00013_35137_2671.N1	18-NOV-2008 18:45:20	Bright	59.500	13	87Alp Tau	0.86700	3800.0	119	35137	No
30	GOM_NL__2PRFIN20081118_185201_000000582074_00013_35137_2672.N1	18-NOV-2008 18:52:01	Bright	57.500	114	3Iot Aur	2.6930	4600.0	115	35137	No
31	GOM_NL__2PRFIN20081118_185625_000000552074_00013_35137_2673.N1	18-NOV-2008 18:56:25	Bright	55.000	6	13Alp Aur	0.080000	3400.0	110	35137	No
32	GOM_NL__2PRFIN20081118_185910_000000562074_00013_35137_2674.N1	18-NOV-2008 18:59:10	Bright	56.000	42	34Bet Aur	1.9000	10200.	112	35137	No
33	GOM_NL__2PRFIN20081118_192558_000000522074_00013_35137_2675.N1	18-NOV-2008 19:25:58	Bright	51.500	96	68Del Leo	2.5600	9300.0	103	35137	No
34	GOM_NL__2PRFIN20081118_192823_000001052074_00013_35137_2676.N1	18-NOV-2008 19:28:23	Bright	104.50	51	41Gam1Leo	2.0100	4500.0	209	35137	No
35	GOM_NL__2PRFIN20081118_193331_000001102074_00013_35137_2677.N1	18-NOV-2008 19:33:31	Straylight	109.50	22	32Alp Leo	1.3600	15200.	219	35137	No
36	GOM_NL__2PRFIN20081118_195945_000000652074_00014_35138_2676.N1	18-NOV-2008 19:59:45	Dark	64.500	117	Pi Pup	2.7060	3800.0	129	35138	No
37	GOM_NL__2PRFIN20081118_200350_000000822074_00014_35138_2677.N1	18-NOV-2008 20:03:50	Dark	81.500	23	21Eps CMa	1.5020	26000.	163	35138	No
38	GOM_NL__2PRFIN20081118_200609_000000902074_00014_35138_2678.N1	18-NOV-2008 20:06:09	Dark	89.500	179	24Omi2CMa	3.0320	24000.	179	35138	No
39	GOM_NL__2PRFIN20081118_201142_000000982074_00014_35138_2679.N1	18-NOV-2008 20:11:42	Straylight	97.500	47	2Bet CMa	1.9760	28000.	195	35138	No
40	GOM_NL__2PRFIN20081118_201653_000000872074_00014_35138_2680.N1	18-NOV-2008 20:16:53	Straylight	87.000	7	19Bet Ori	0.10000	14000.	174	35138	No
41	GOM_NL__2PRFIN20081118_202111_000000732074_00014_35138_2681.N1	18-NOV-2008 20:21:11	Bright	73.000	33	50Zet Ori	1.7660	30000.	146	35138	No
42	GOM_NL__2PRFIN20081118_202555_000000592074_00014_35138_2682.N1	18-NOV-2008 20:25:55	Bright	58.500	13	87Alp Tau	0.86700	3800.0	117	35138	No

43	GOM_NL__2PRFIN20081118_203236_000000552074_00014_35138_2683.N1	18-NOV-2008 20:32:36	Bright	54.500	114	3lot Aur	2.6930	4600.0	109	35138	No
44	GOM_NL__2PRFIN20081118_203700_000000552074_00014_35138_2684.N1	18-NOV-2008 20:37:00	Bright	55.000	6	13Alp Aur	0.080000	3400.0	110	35138	No
45	GOM_NL__2PRFIN20081118_203945_000000582074_00014_35138_2685.N1	18-NOV-2008 20:39:45	Bright	58.000	42	34Bet Aur	1.9000	10200.	116	35138	No
46	GOM_NL__2PRFIN20081118_210634_000000522074_00014_35138_2686.N1	18-NOV-2008 21:06:34	Bright	52.000	96	68Del Leo	2.5600	9300.0	104	35138	No
47	GOM_NL__2PRFIN20081118_210900_000000932074_00014_35138_2687.N1	18-NOV-2008 21:09:00	Bright	93.000	51	41Gam1Leo	2.0100	4500.0	186	35138	No
48	GOM_NL__2PRFIN20081118_211409_000001122074_00014_35138_2688.N1	18-NOV-2008 21:14:09	Straylight	112.00	22	32Alp Leo	1.3600	15200.	224	35138	No
49	GOM_NL__2PRFIN20081118_214022_000000592074_00015_35139_2700.N1	18-NOV-2008 21:40:22	Dark	59.000	117	Pi Pup	2.7060	3800.0	118	35139	No
50	GOM_NL__2PRFIN20081118_214426_000000802074_00015_35139_2701.N1	18-NOV-2008 21:44:26	Dark	79.500	23	21Eps CMa	1.5020	26000.	159	35139	No
51	GOM_NL__2PRFIN20081118_214646_000000912074_00015_35139_2702.N1	18-NOV-2008 21:46:46	Straylight	91.000	179	24Omi2CMa	3.0320	24000.	182	35139	No
52	GOM_NL__2PRFIN20081118_215218_000000902074_00015_35139_2703.N1	18-NOV-2008 21:52:18	Straylight	90.000	47	2Bet CMa	1.9760	28000.	180	35139	No
53	GOM_NL__2PRFIN20081118_215729_000000732074_00015_35139_2704.N1	18-NOV-2008 21:57:29	Straylight	73.000	7	19Bet Ori	0.10000	14000.	146	35139	No
54	GOM_NL__2PRFIN20081118_220146_000000732074_00015_35139_2705.N1	18-NOV-2008 22:01:46	Bright	73.000	33	50Zet Ori	1.7660	30000.	146	35139	No
55	GOM_NL__2PRFIN20081118_221311_000000542074_00015_35139_2706.N1	18-NOV-2008 22:13:11	Bright	54.000	114	3lot Aur	2.6930	4600.0	108	35139	No
56	GOM_NL__2PRFIN20081118_221734_000000542074_00015_35139_2707.N1	18-NOV-2008 22:17:34	Bright	53.500	6	13Alp Aur	0.080000	3400.0	107	35139	No
57	GOM_NL__2PRFIN20081118_222019_000000572074_00015_35139_2708.N1	18-NOV-2008 22:20:19	Bright	57.000	42	34Bet Aur	1.9000	10200.	114	35139	No
58	GOM_NL__2PRFIN20081118_224710_000000492074_00015_35139_2709.N1	18-NOV-2008 22:47:10	Bright	49.000	96	68Del Leo	2.5600	9300.0	98	35139	No
59	GOM_NL__2PRFIN20081118_224937_000000942074_00015_35139_2710.N1	18-NOV-2008 22:49:37	Bright	94.000	51	41Gam1Leo	2.0100	4500.0	188	35139	No
60	GOM_NL__2PRFIN20081118_225446_000001092074_00015_35139_2711.N1	18-NOV-2008 22:54:46	Straylight	108.50	22	32Alp Leo	1.3600	15200.	217	35139	No
61	GOM_NL__2PRFIN20081118_232059_000000652074_00016_35140_2716.N1	18-NOV-2008 23:20:59	Dark	64.500	117	Pi Pup	2.7060	3800.0	129	35140	No
62	GOM_NL__2PRFIN20081118_232503_000000752074_00016_35140_2717.N1	18-NOV-2008 23:25:03	Dark	74.500	23	21Eps CMa	1.5020	26000.	149	35140	No
63	GOM_NL__2PRFIN20081118_232723_000000962074_00016_35140_2718.N1	18-NOV-2008 23:27:23	Straylight	96.000	179	24Omi2CMa	3.0320	24000.	192	35140	No
64	GOM_NL__2PRFIN20081118_233254_000000962074_00016_35140_2719.N1	18-NOV-2008 23:32:54	Straylight	95.500	47	2Bet CMa	1.9760	28000.	191	35140	No
65	GOM_NL__2PRFIN20081118_233804_000000762074_00016_35140_2720.N1	18-NOV-2008 23:38:04	Straylight	75.500	7	19Bet Ori	0.10000	14000.	151	35140	No
66	GOM_NL__2PRFIN20081118_234221_000000802074_00016_35140_2721.N1	18-NOV-2008 23:42:21	Bright	80.000	33	50Zet Ori	1.7660	30000.	160	35140	No
67	GOM_NL__2PRFIN20081118_234705_000000592074_00016_35140_2722.N1	18-NOV-2008 23:47:05	Bright	59.000	13	87Alp Tau	0.86700	3800.0	118	35140	No
68	GOM_NL__2PRFIN20081118_235346_000000542074_00016_35140_2723.N1	18-NOV-2008 23:53:46	Bright	53.500	114	3lot Aur	2.6930	4600.0	107	35140	No
69	GOM_NL__2PRFIN20081118_235809_000000532074_00016_35140_2724.N1	18-NOV-2008 23:58:09	Bright	53.000	6	13Alp Aur	0.080000	3400.0	106	35140	No
70	GOM_NL__2PRFIN20081118_235959_000000692074_00016_35140_2725.N1	18-NOV-2008 23:59:59	Bright	68.500	107	37The Aur	2.6490	11000.	137	35140	No

3. Quality information per product

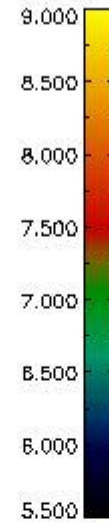
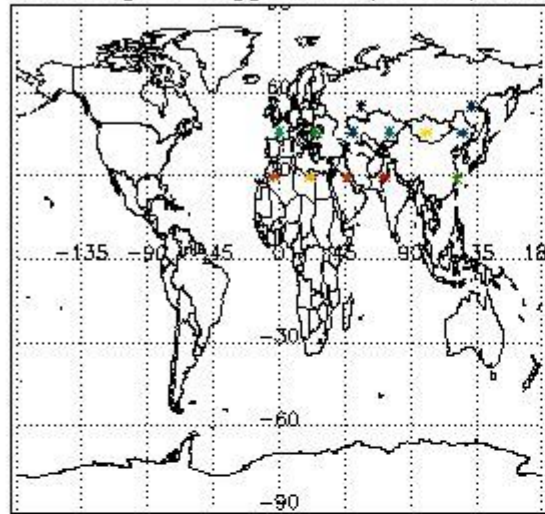
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

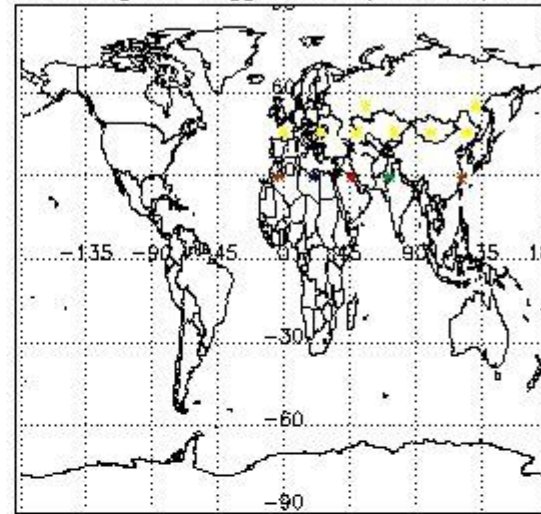


3.2 Plot quality information per product (world map)

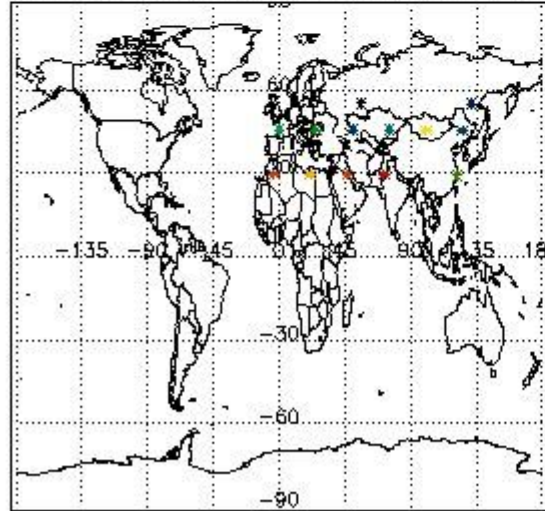
Percentage of flagged data per O3 profile



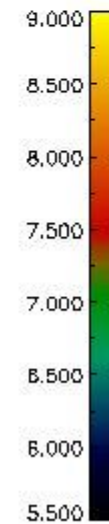
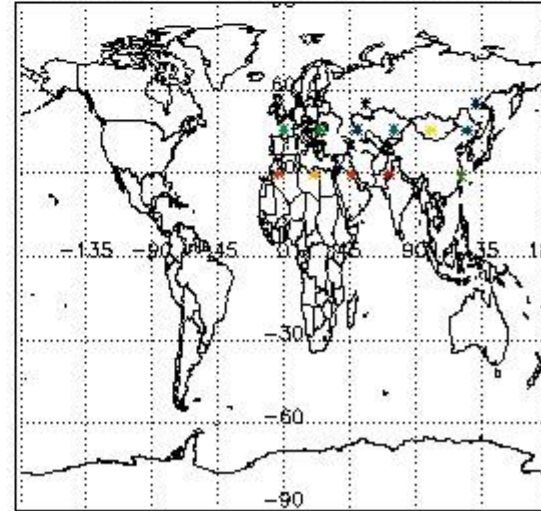
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

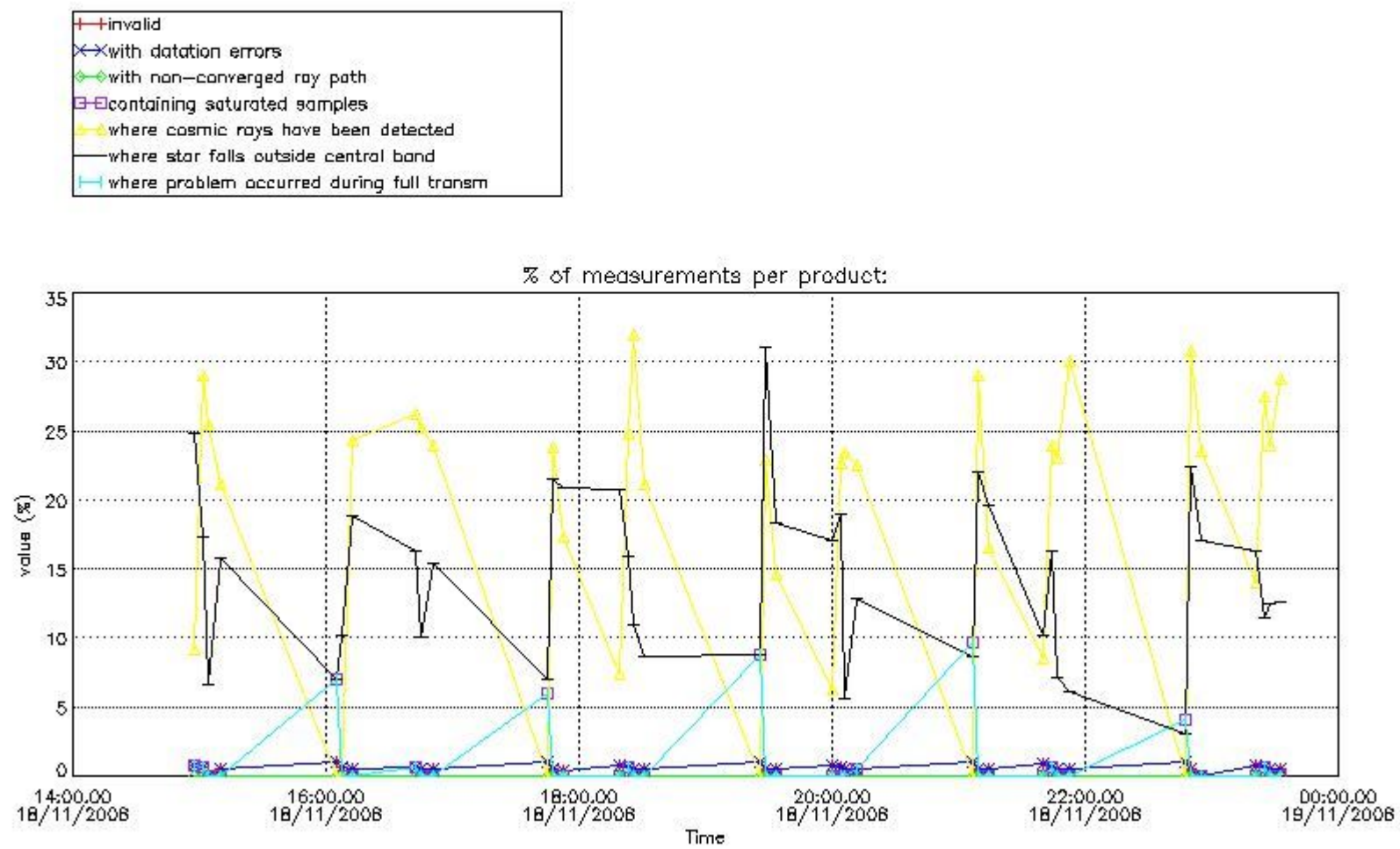


4. Level 1 quality information per product

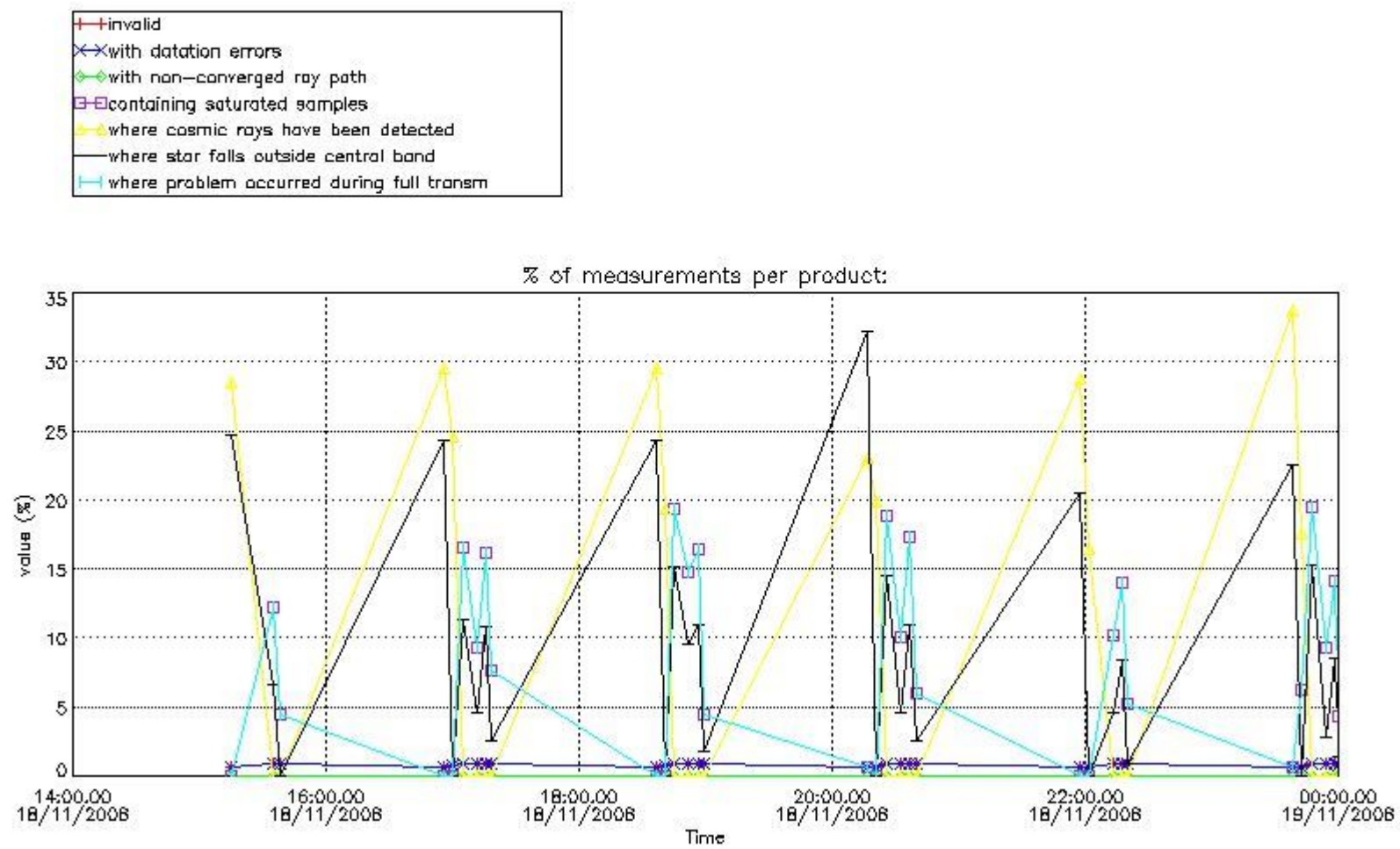
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



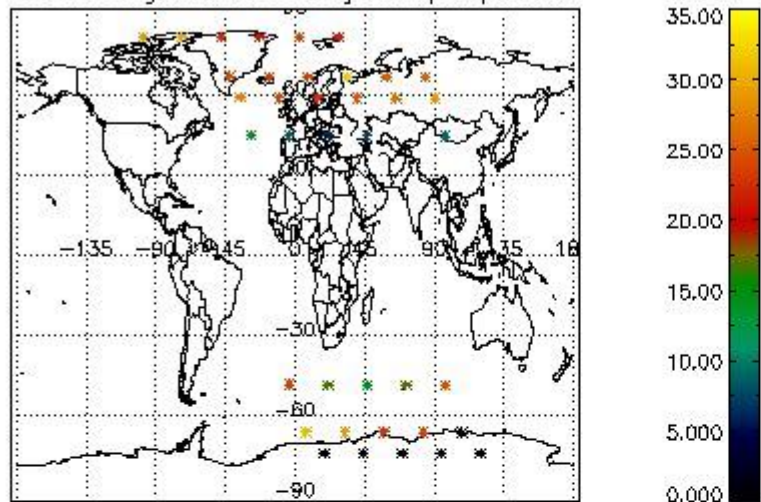
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



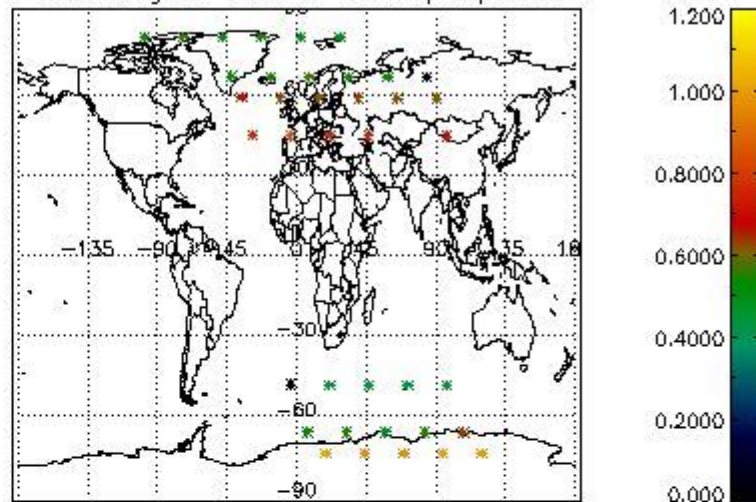
4.2 Plot quality information per product coming from level 1b processing (world map)

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

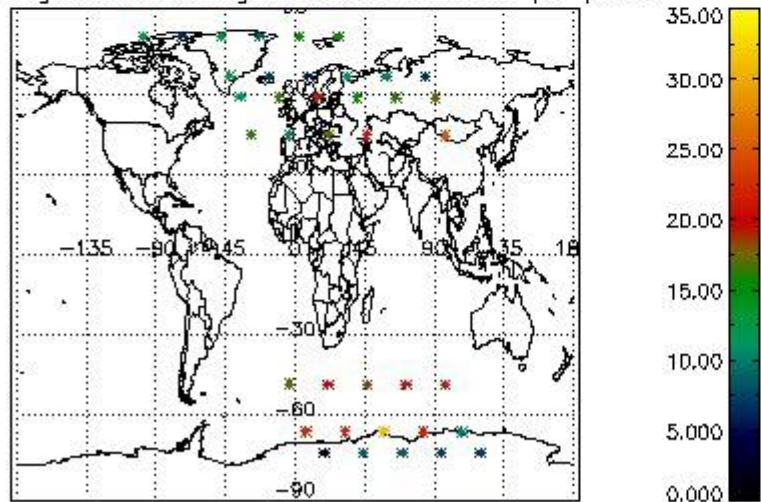
Percentage of cosmic ray hits per profile



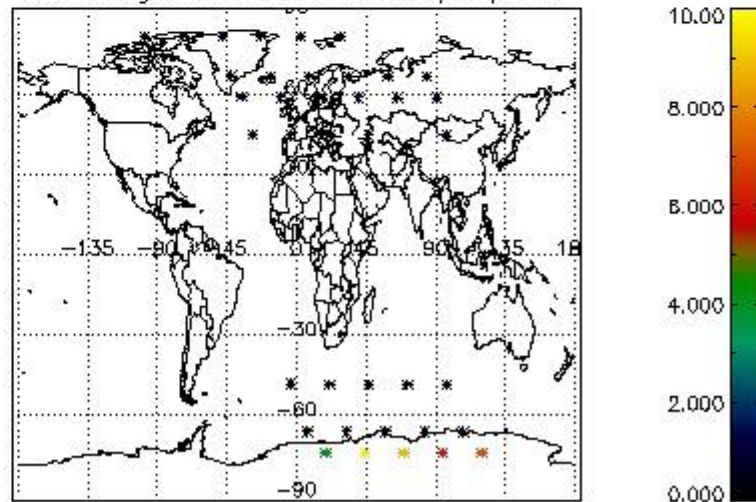
Percentage of datation errors per profile



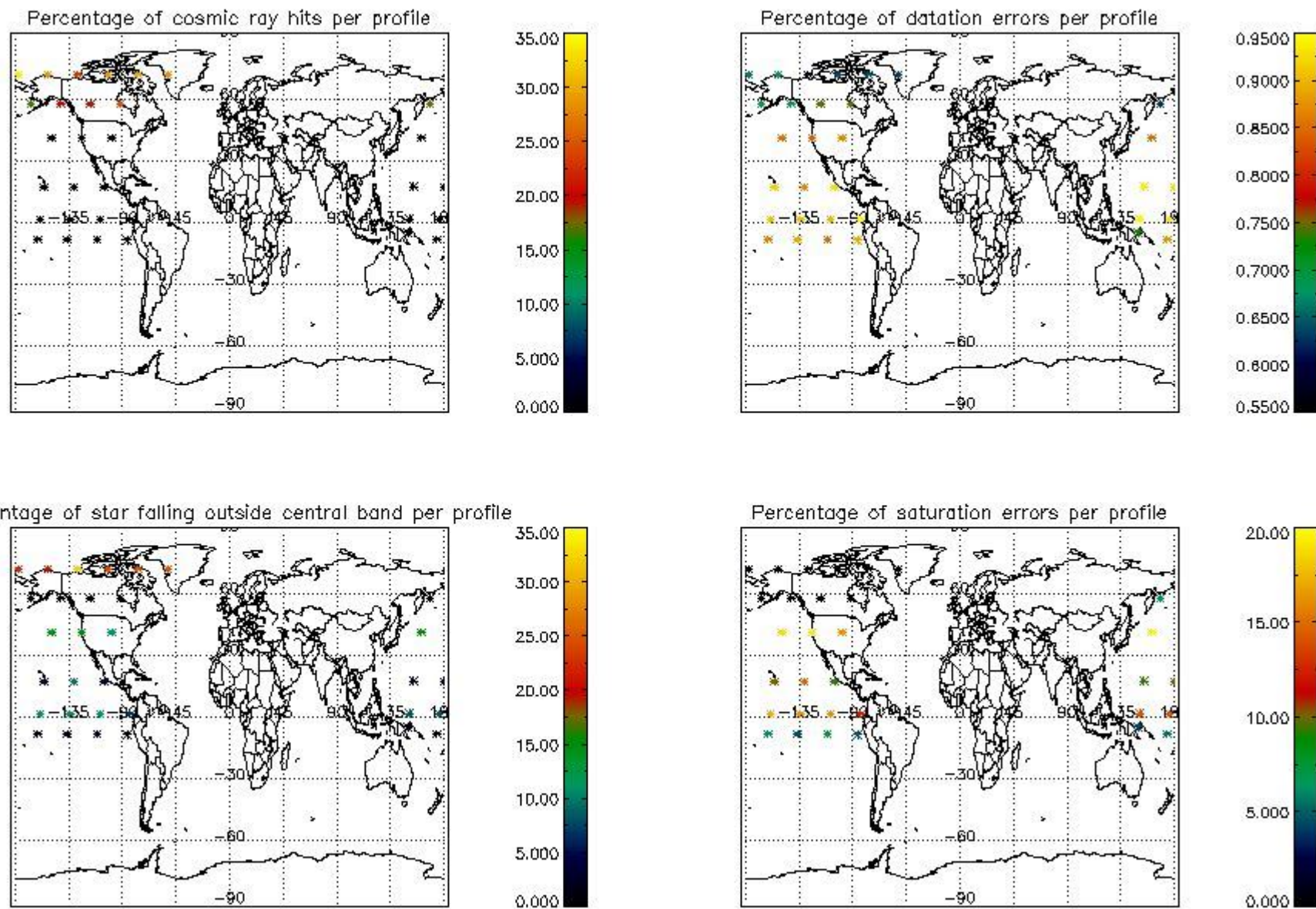
Percentage of star falling outside central band per profile



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

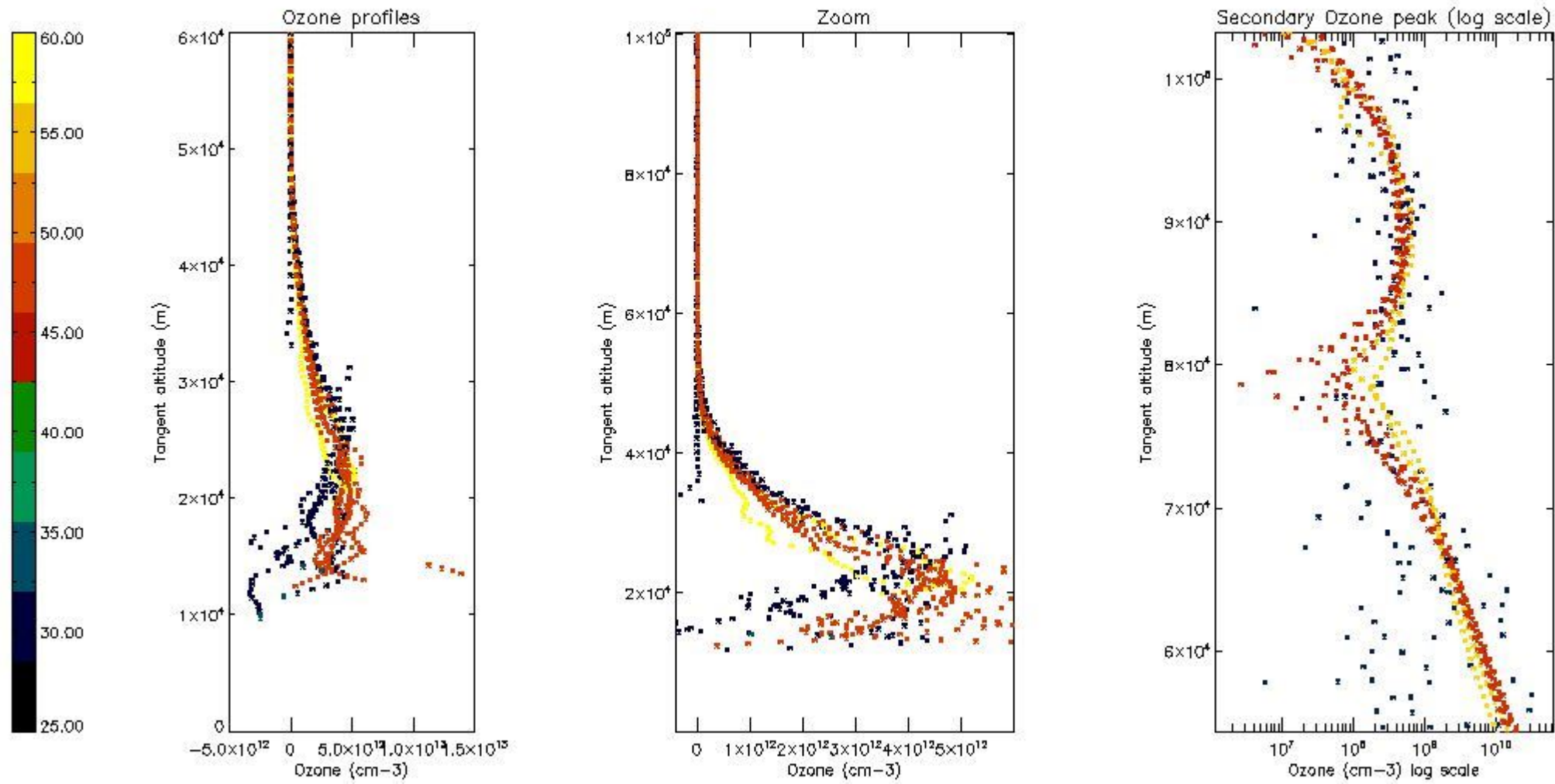
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	19
STD < 20	11

STD < 10	9
STD < 5	7

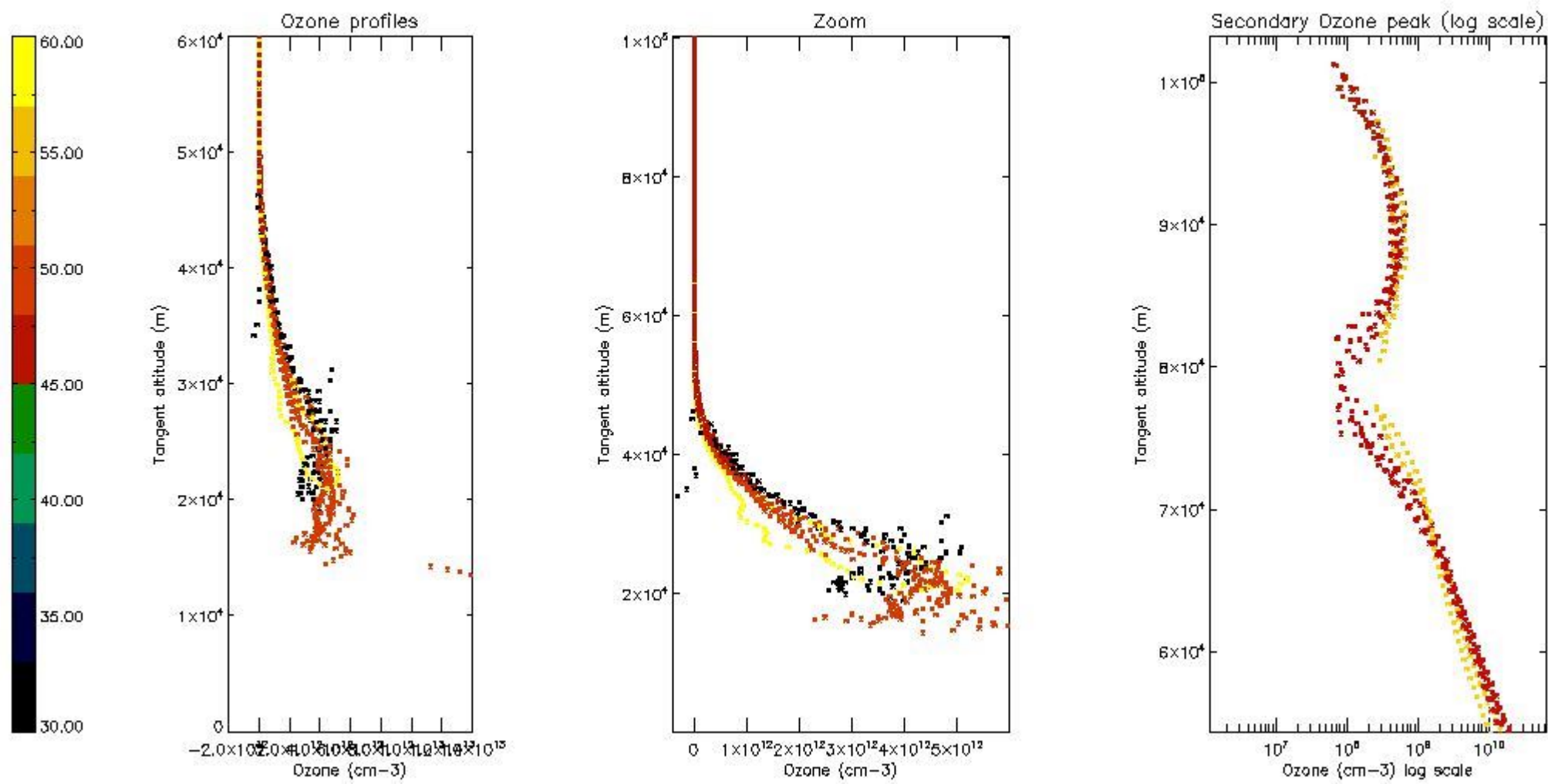
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



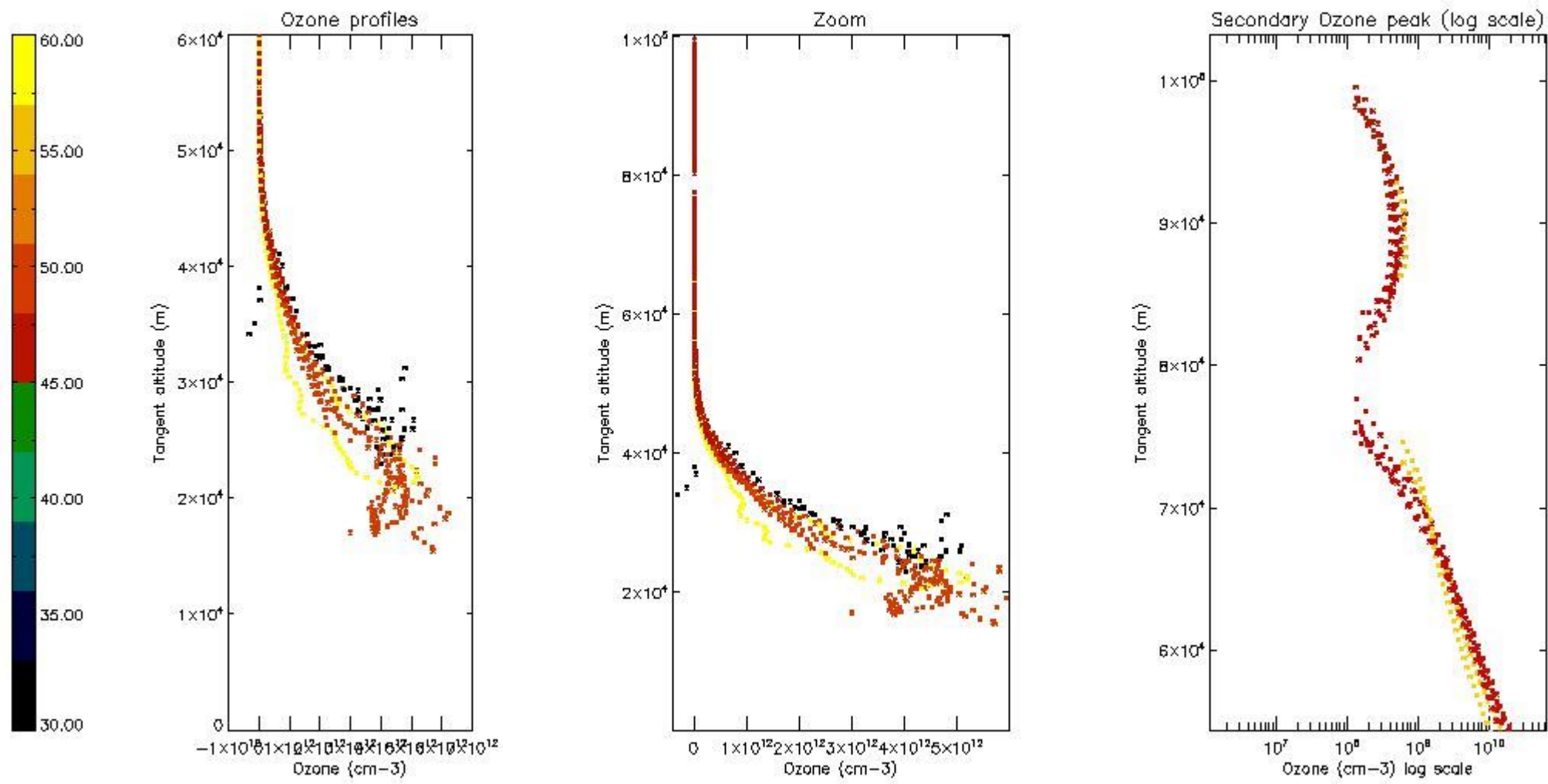
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



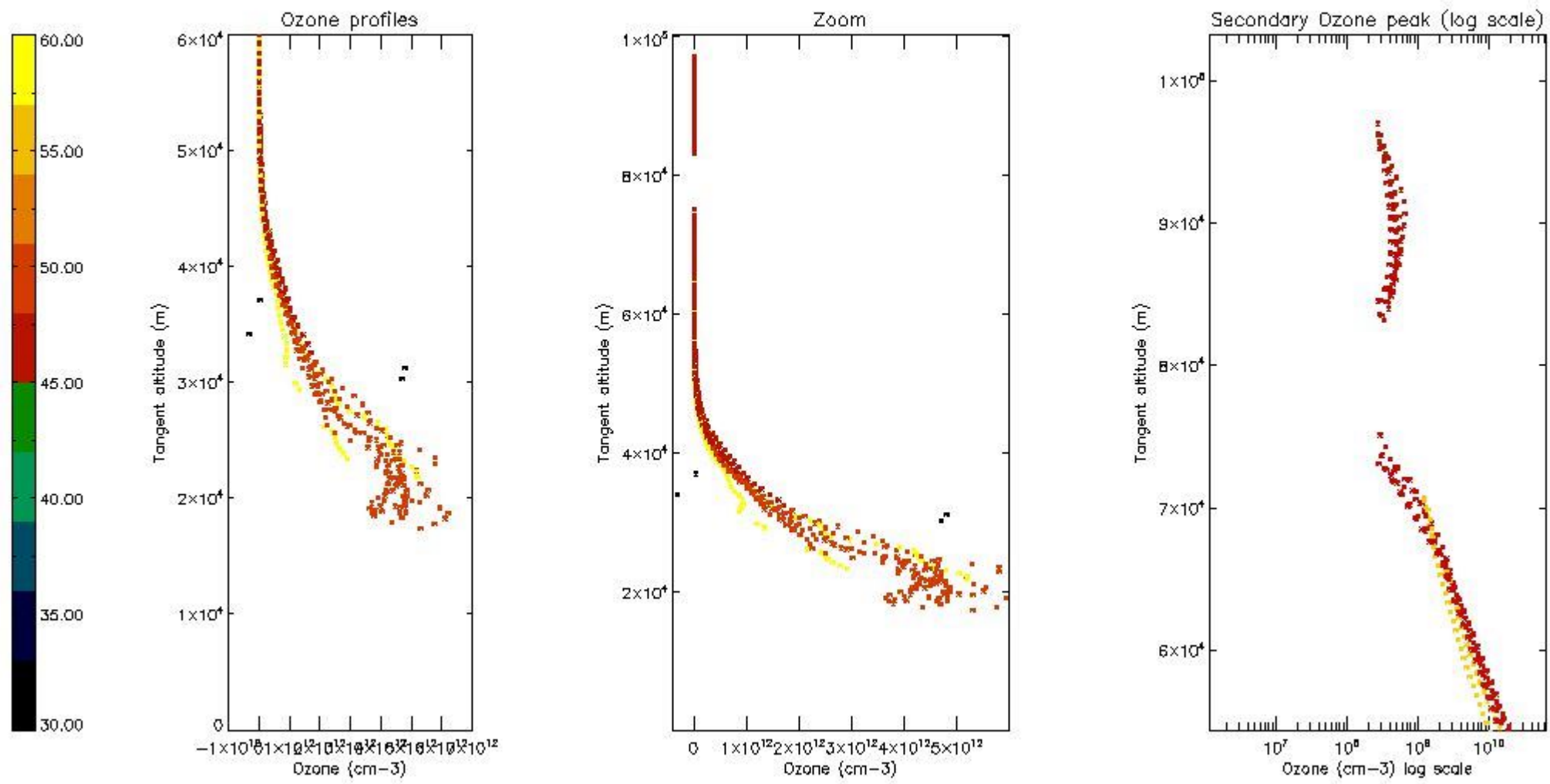
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



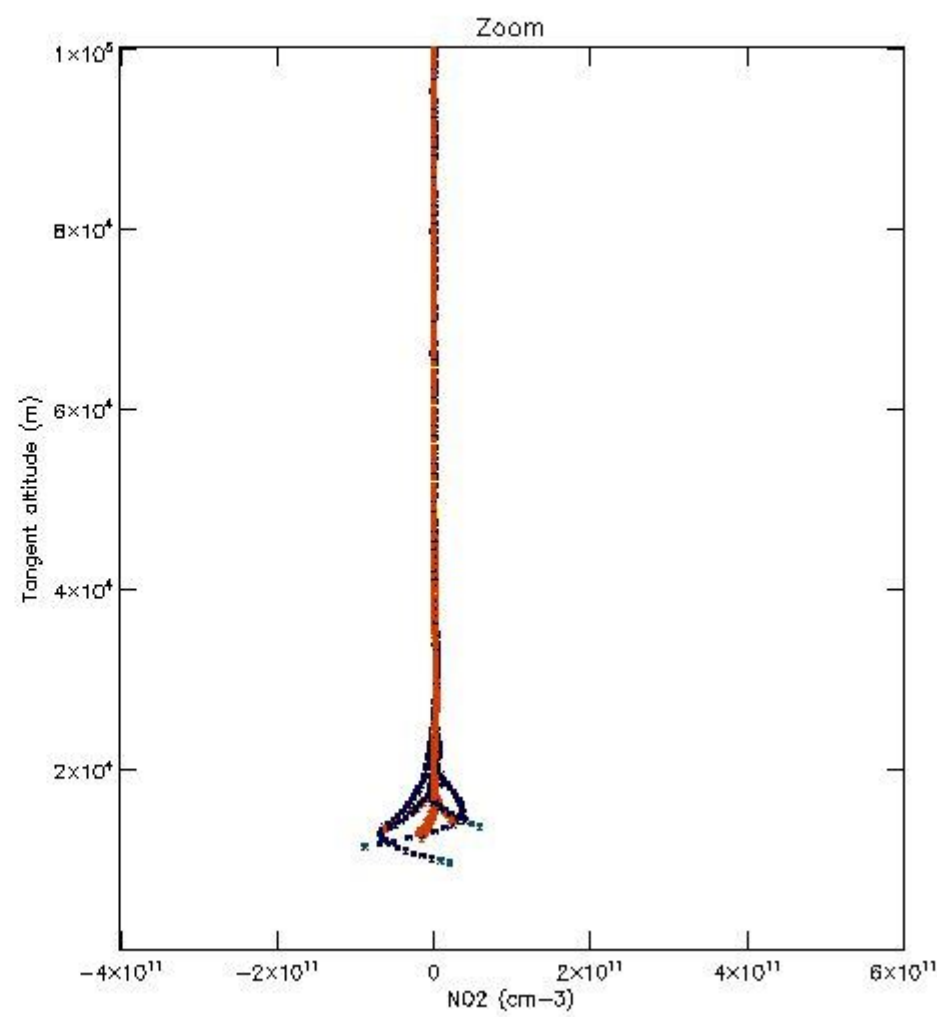
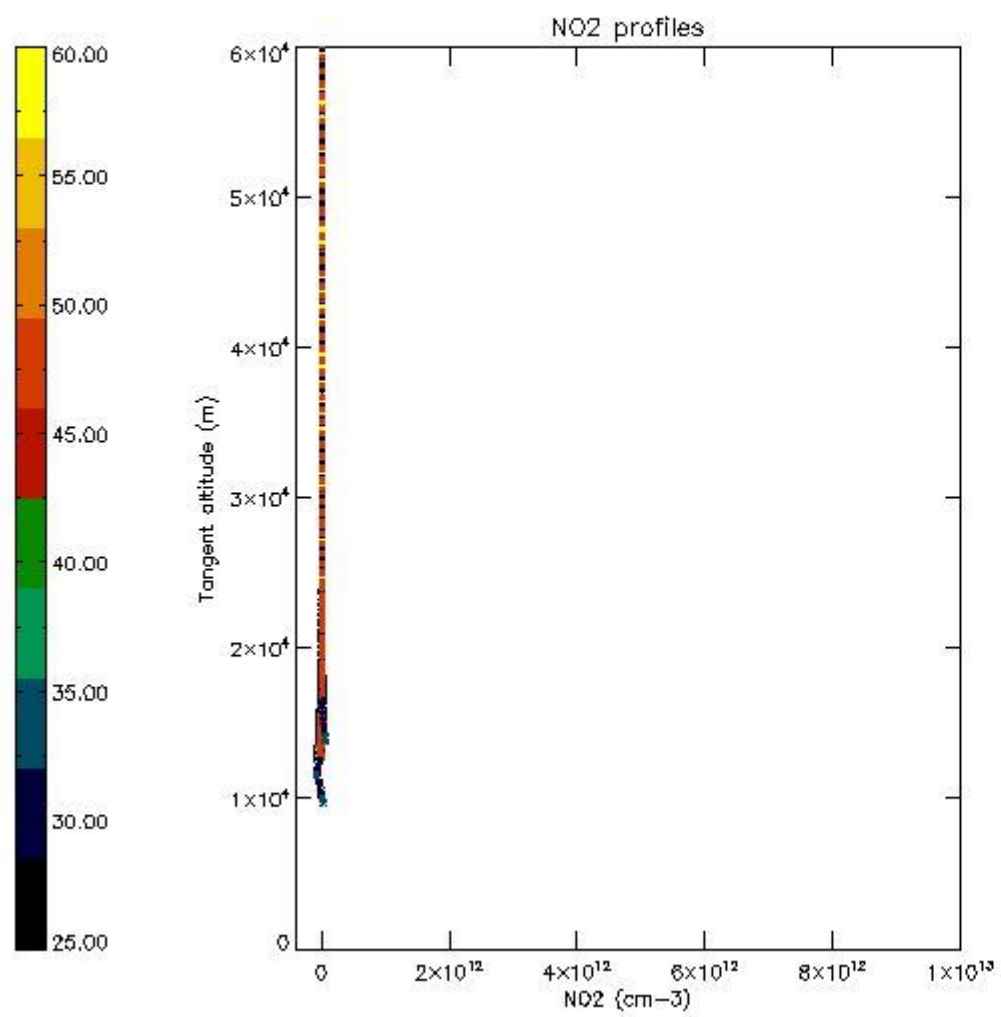
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



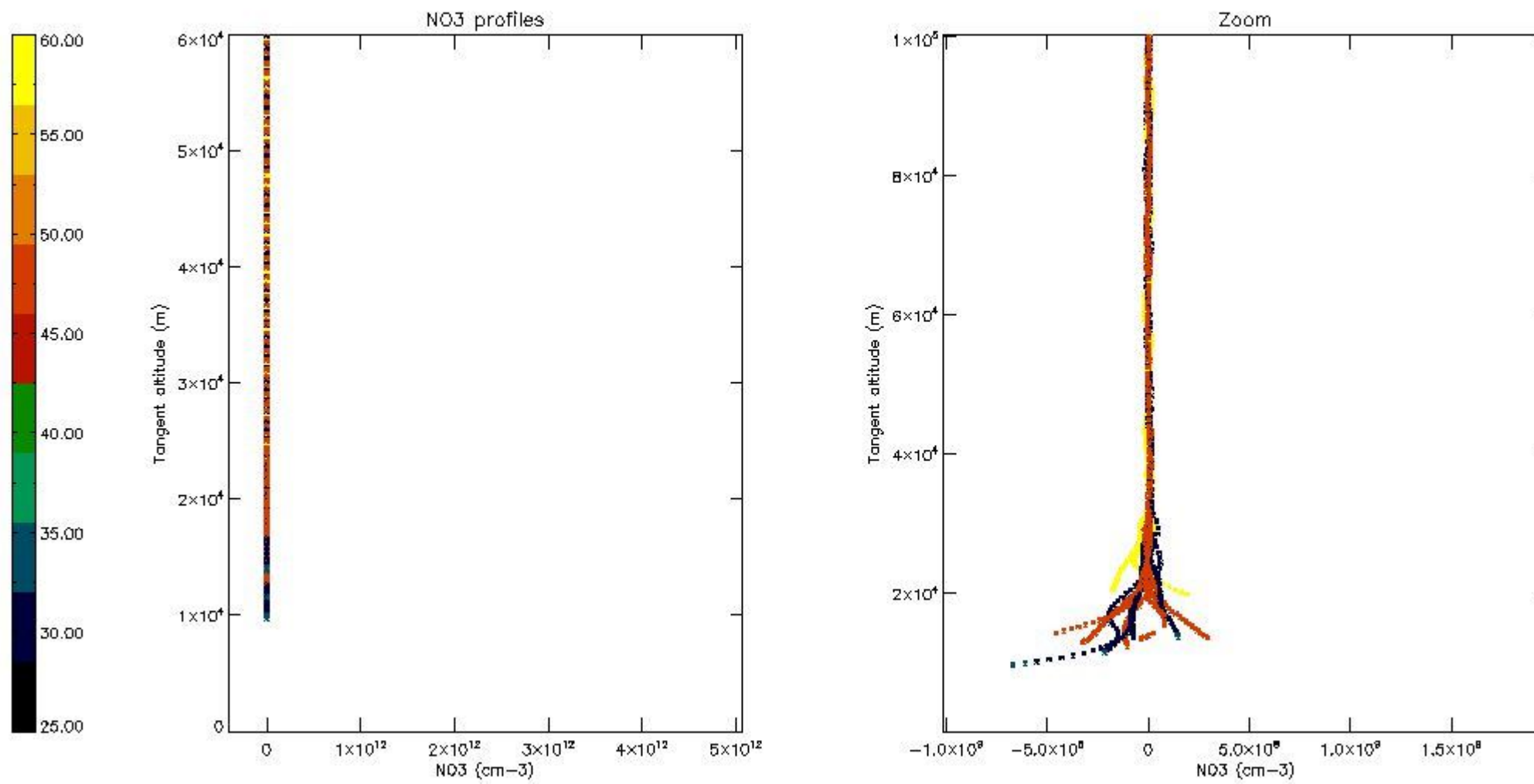
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

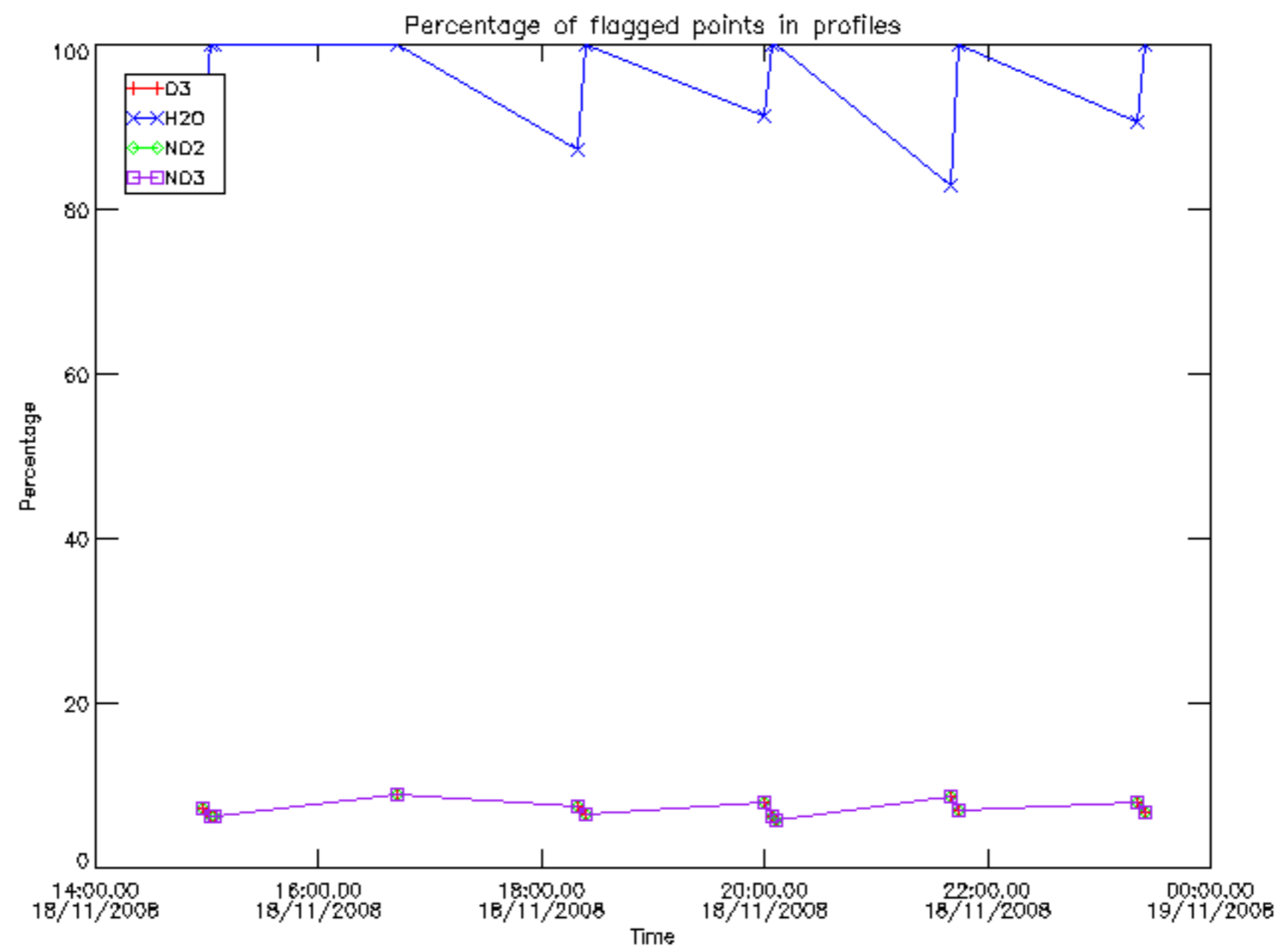
The colorbar represents the latitude.



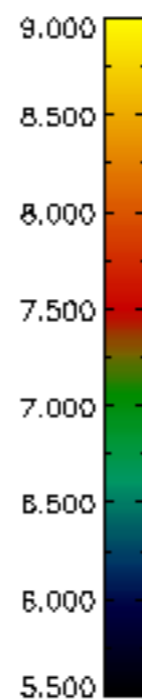
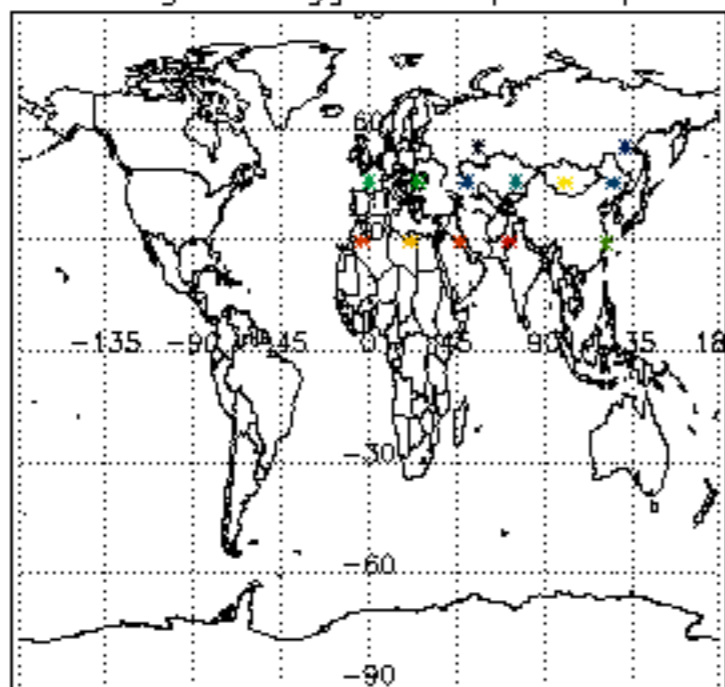
6. Auxiliary Data Files used for the production reported in section 2

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.

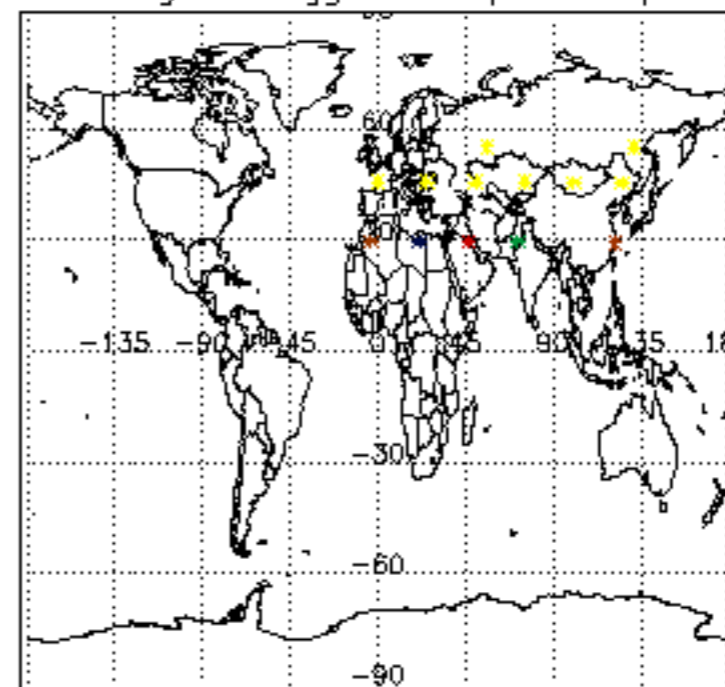
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	18-NOV-2008 14:57:54
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	18-NOV-2008 14:57:54
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	18-NOV-2008 14:57:54



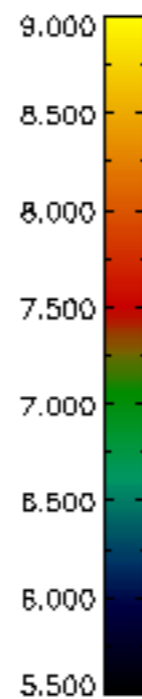
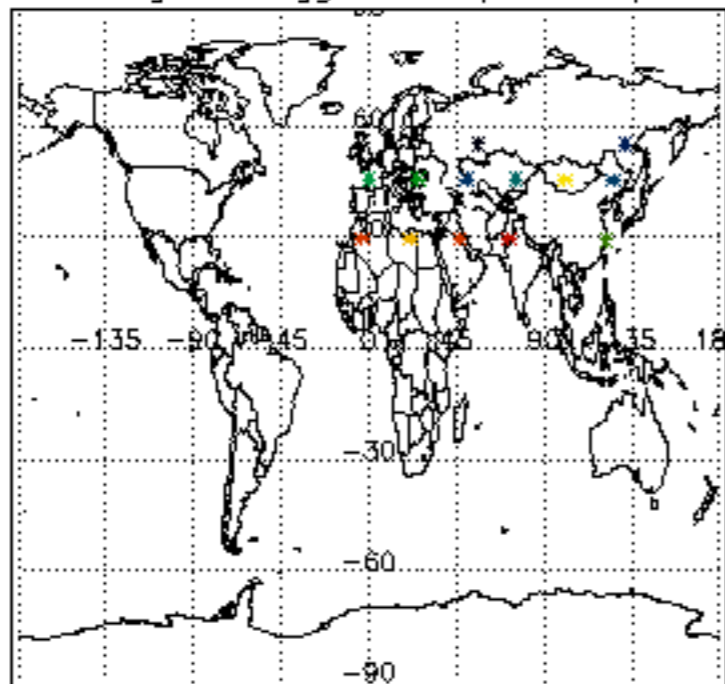
Percentage of flagged data per D3 profile



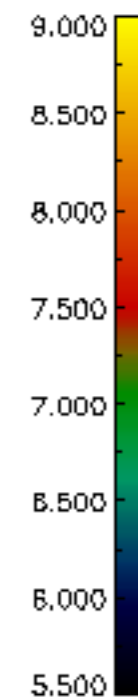
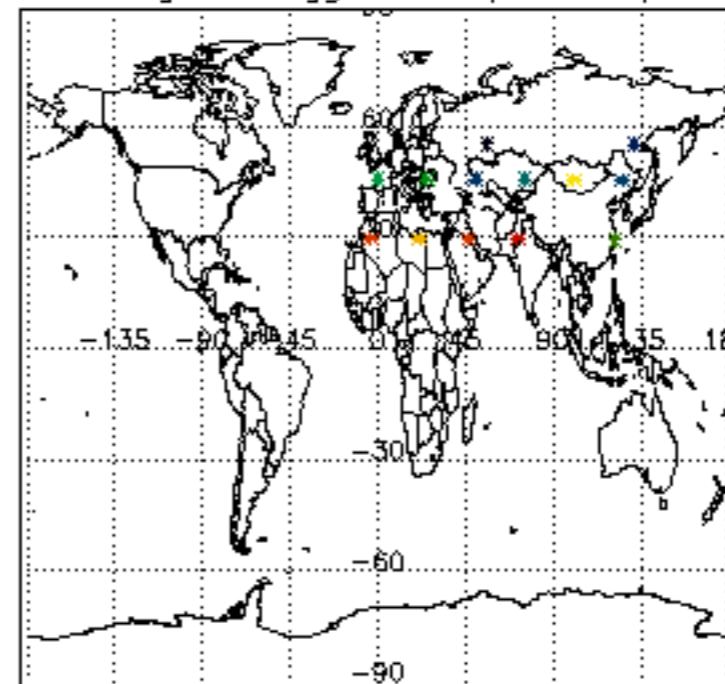
Percentage of flagged data per H2O profile

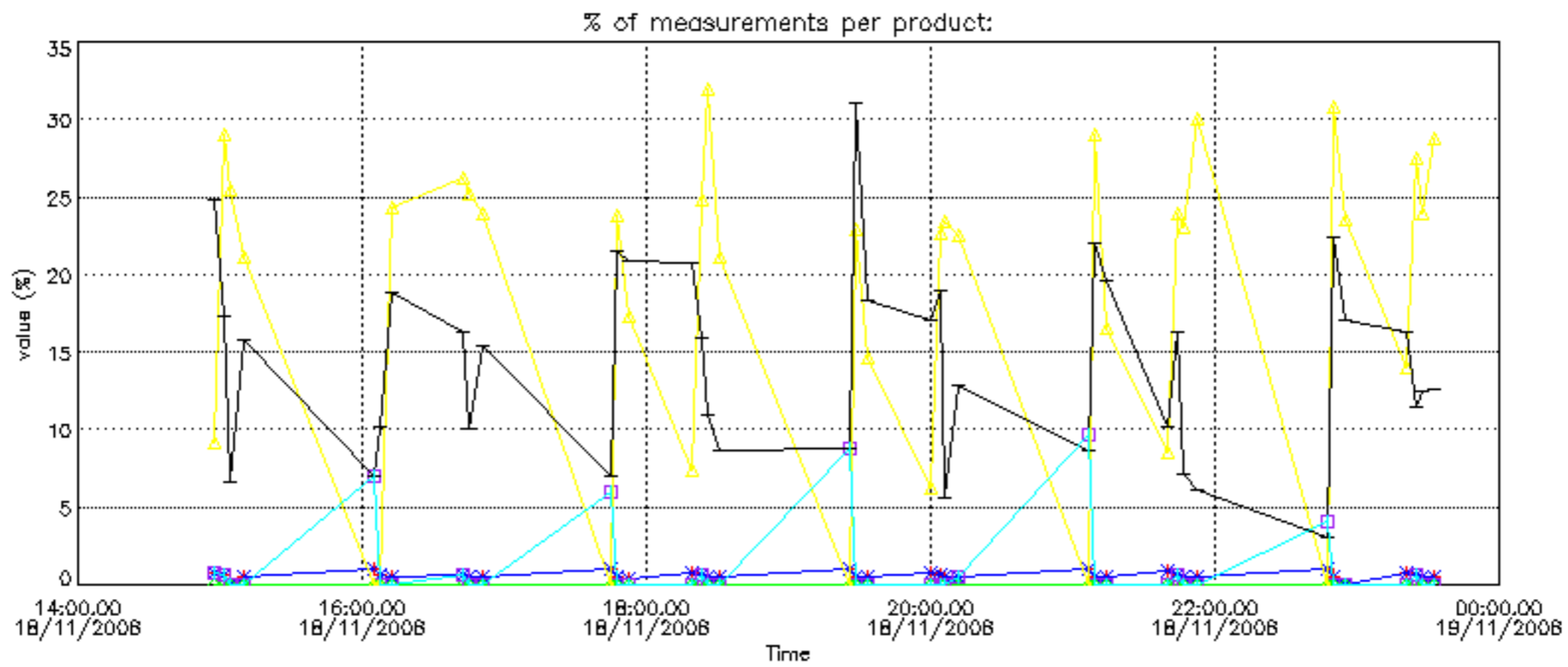


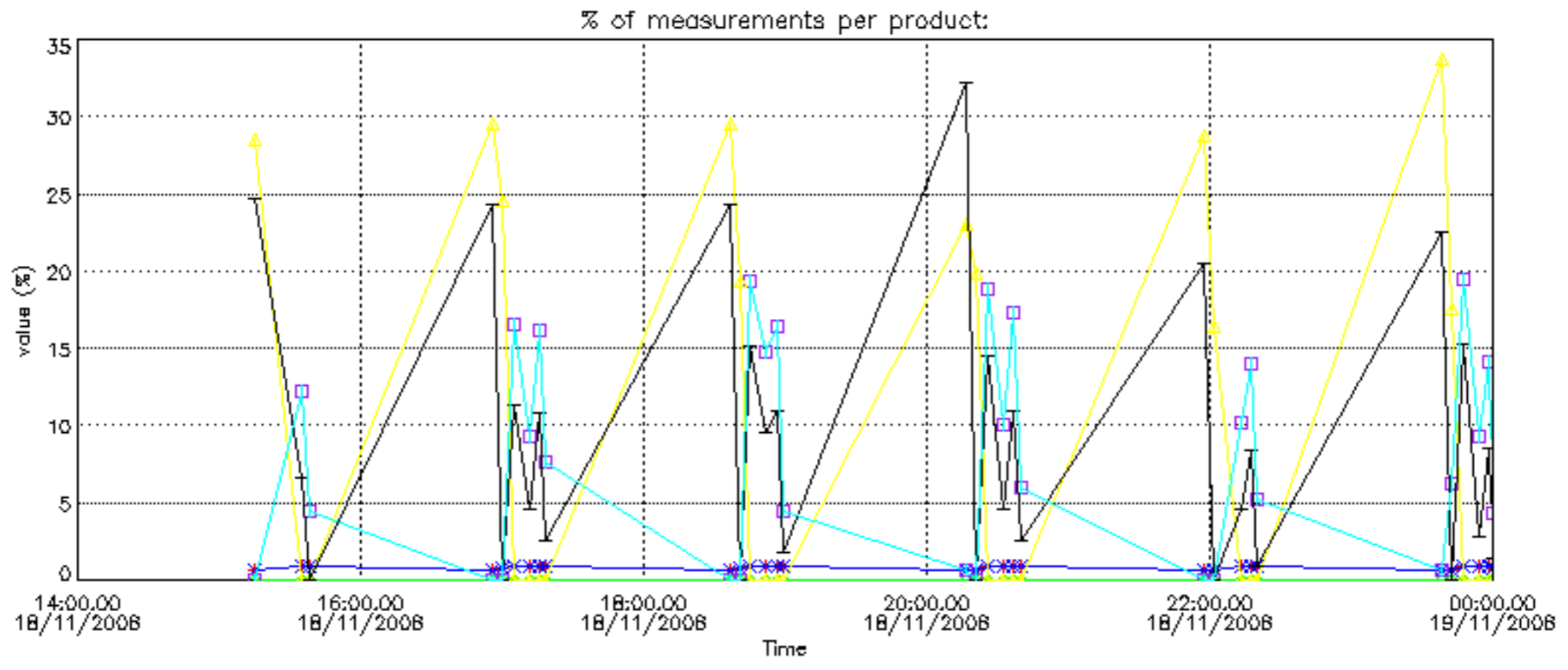
Percentage of flagged data per NO2 profile



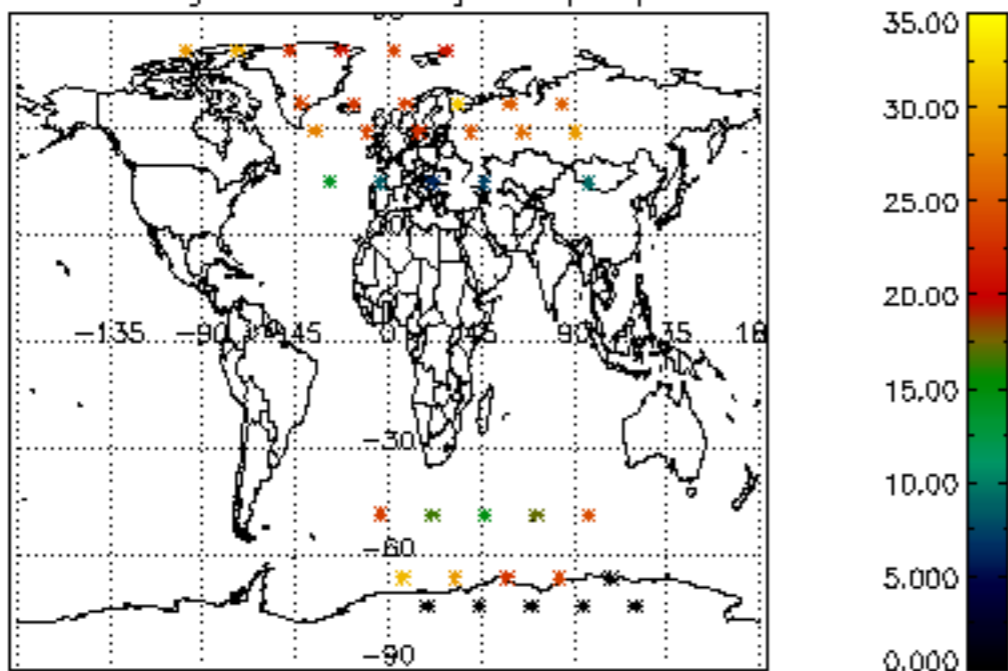
Percentage of flagged data per NO3 profile



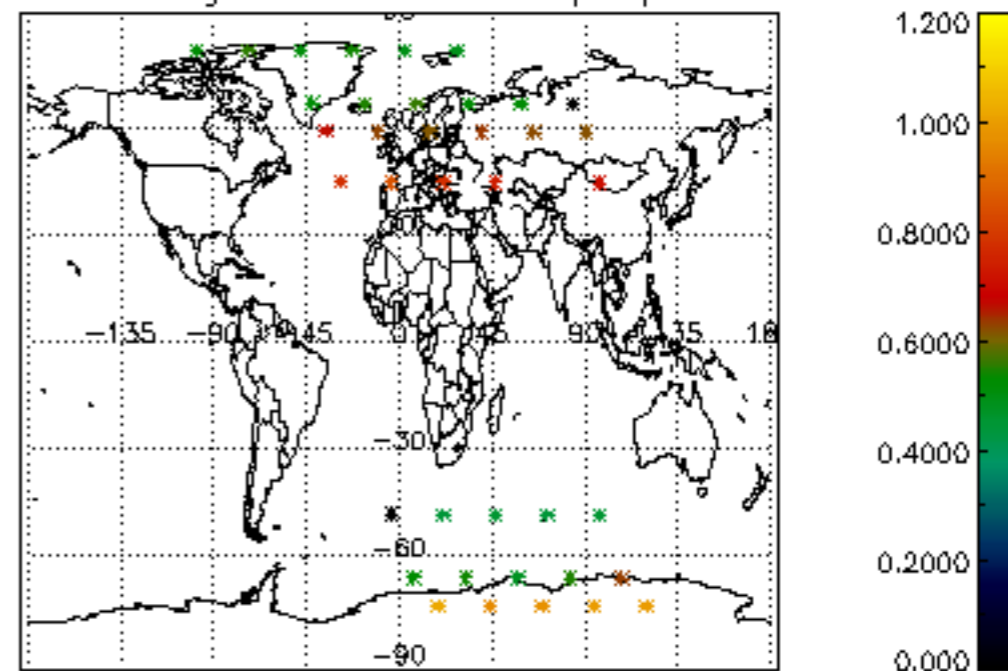




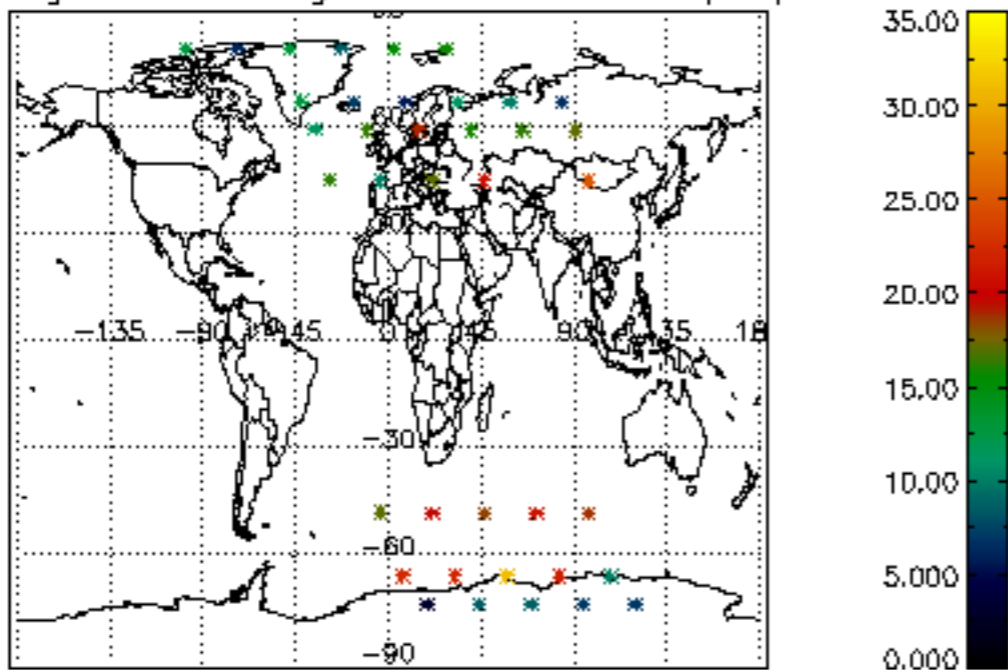
Percentage of cosmic ray hits per profile



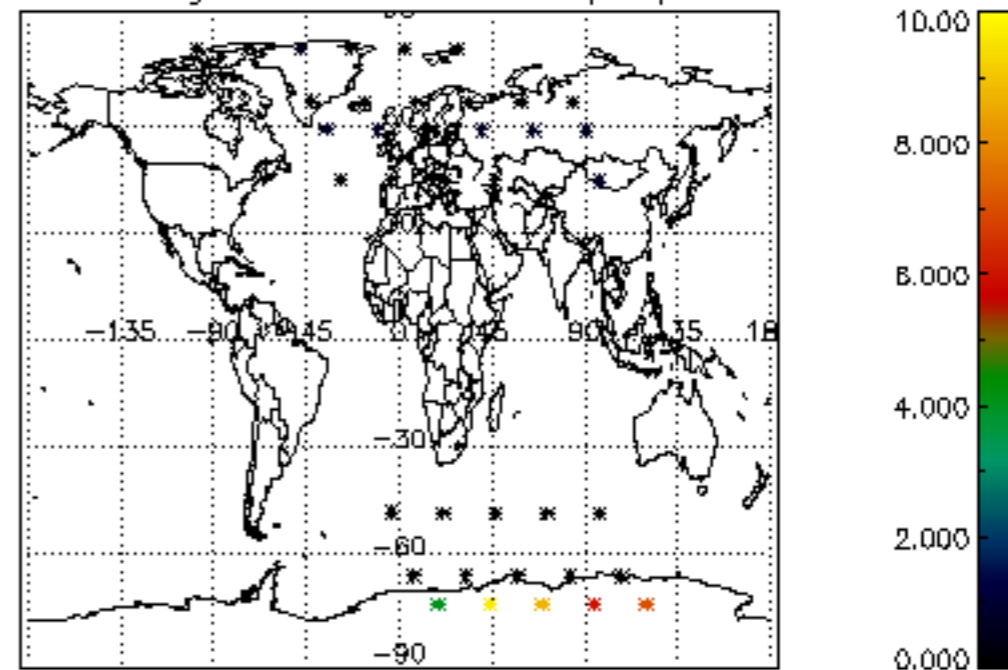
Percentage of datation errors per profile



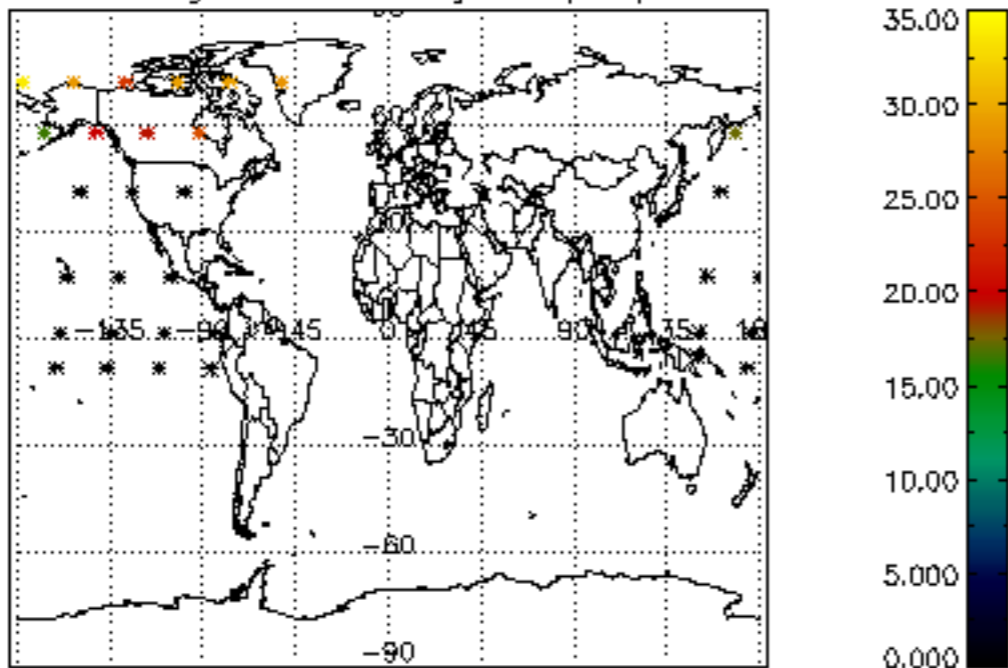
Percentage of star falling outside central band per profile



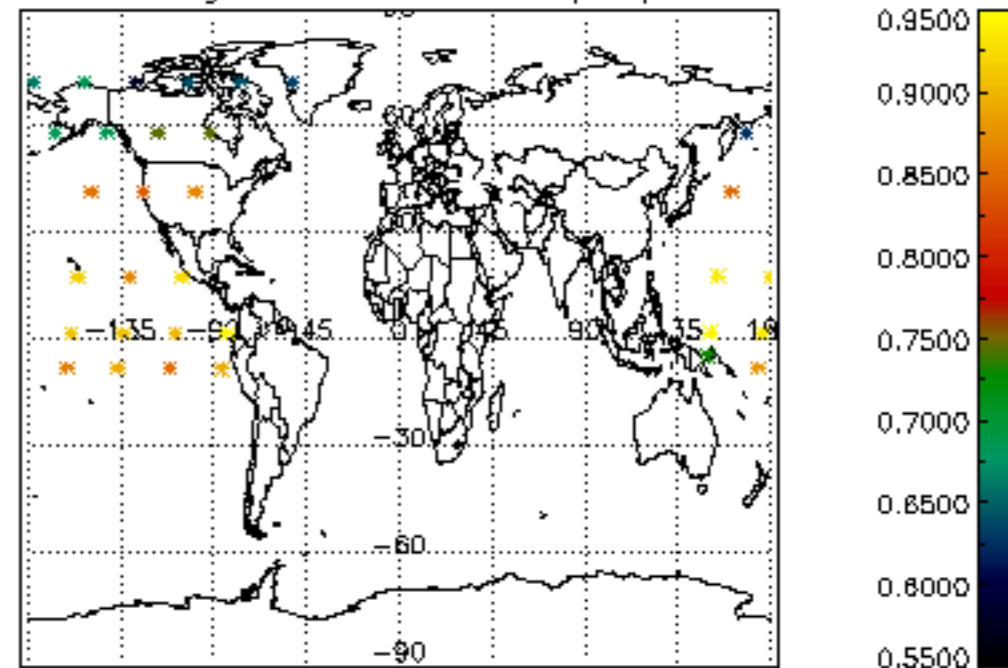
Percentage of saturation errors per profile



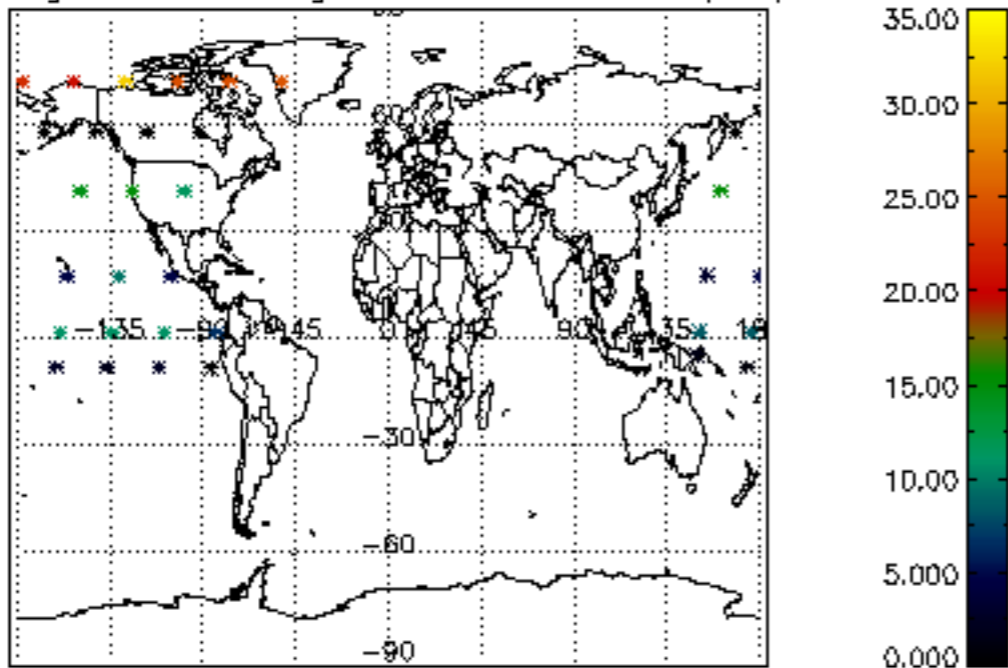
Percentage of cosmic ray hits per profile



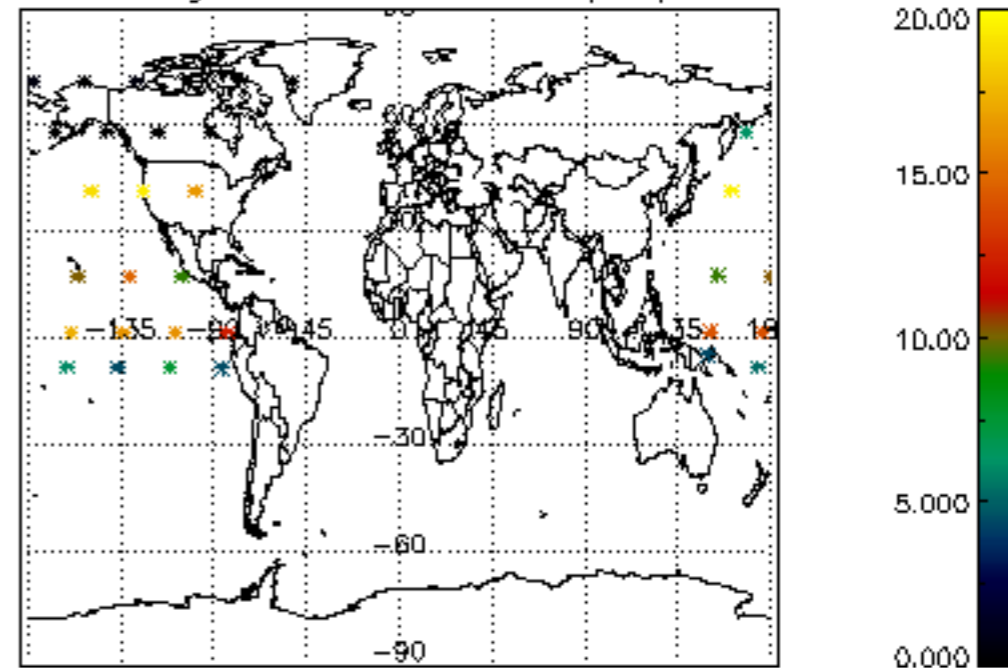
Percentage of datation errors per profile

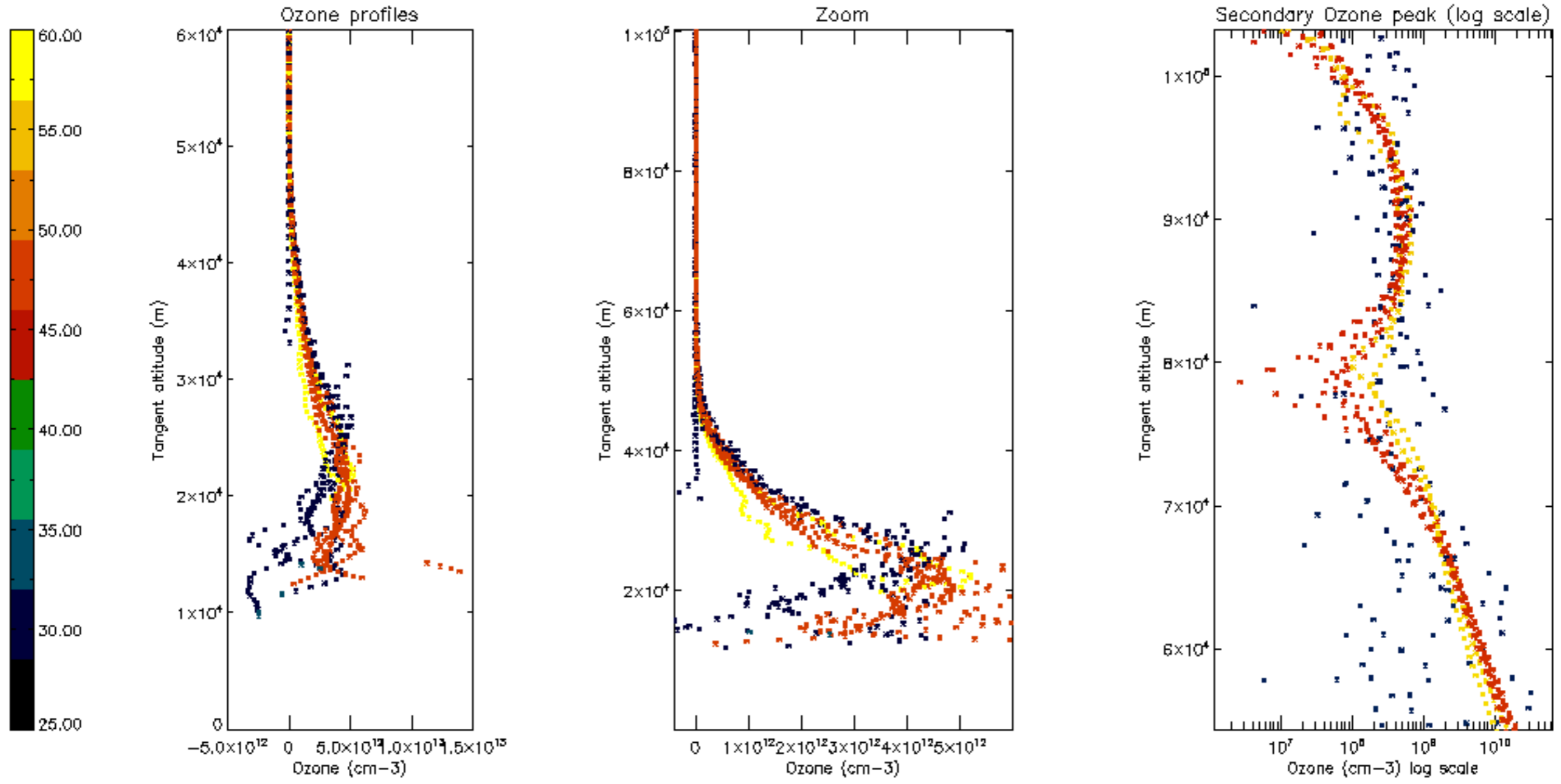


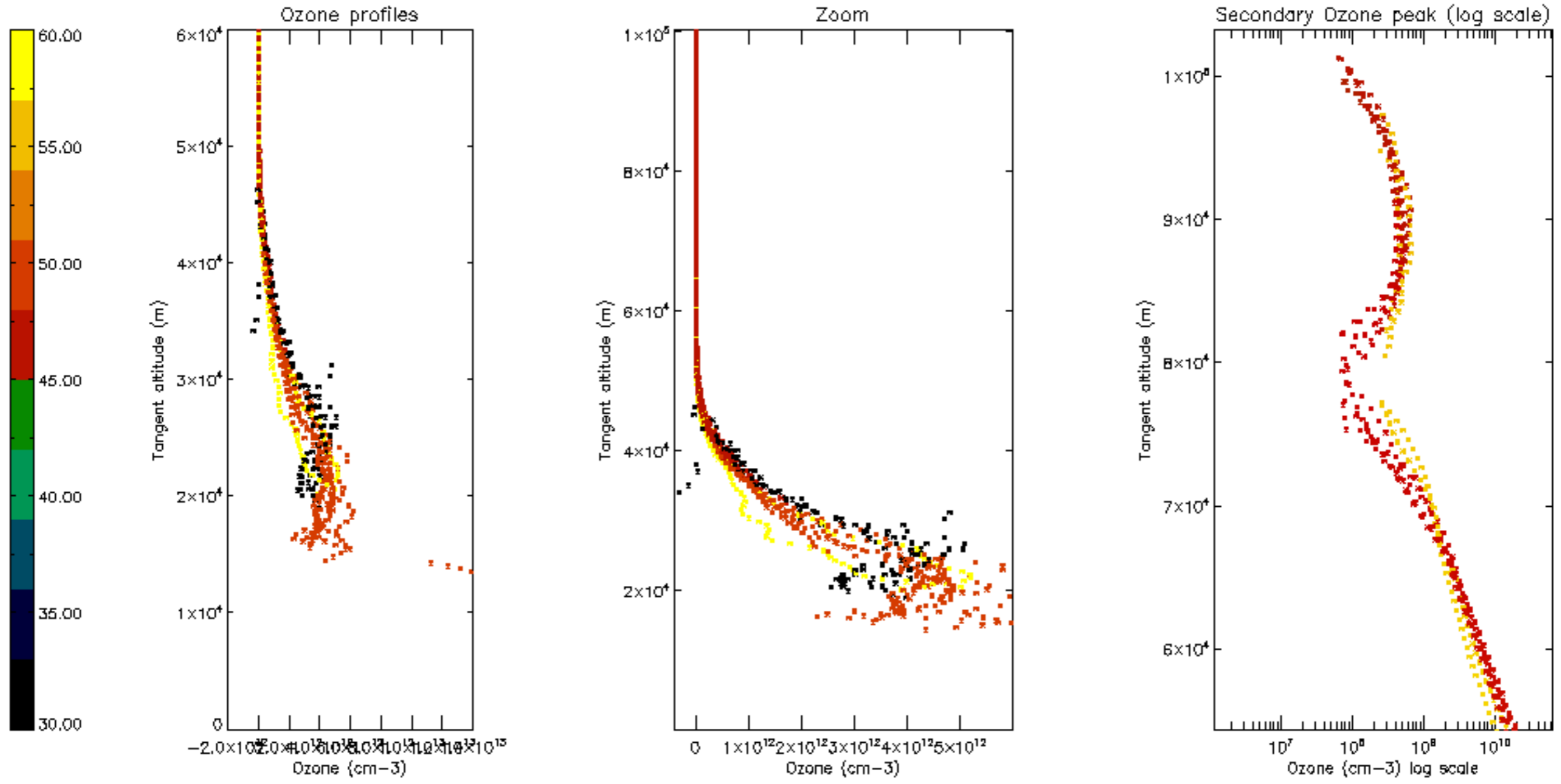
Percentage of star falling outside central band per profile

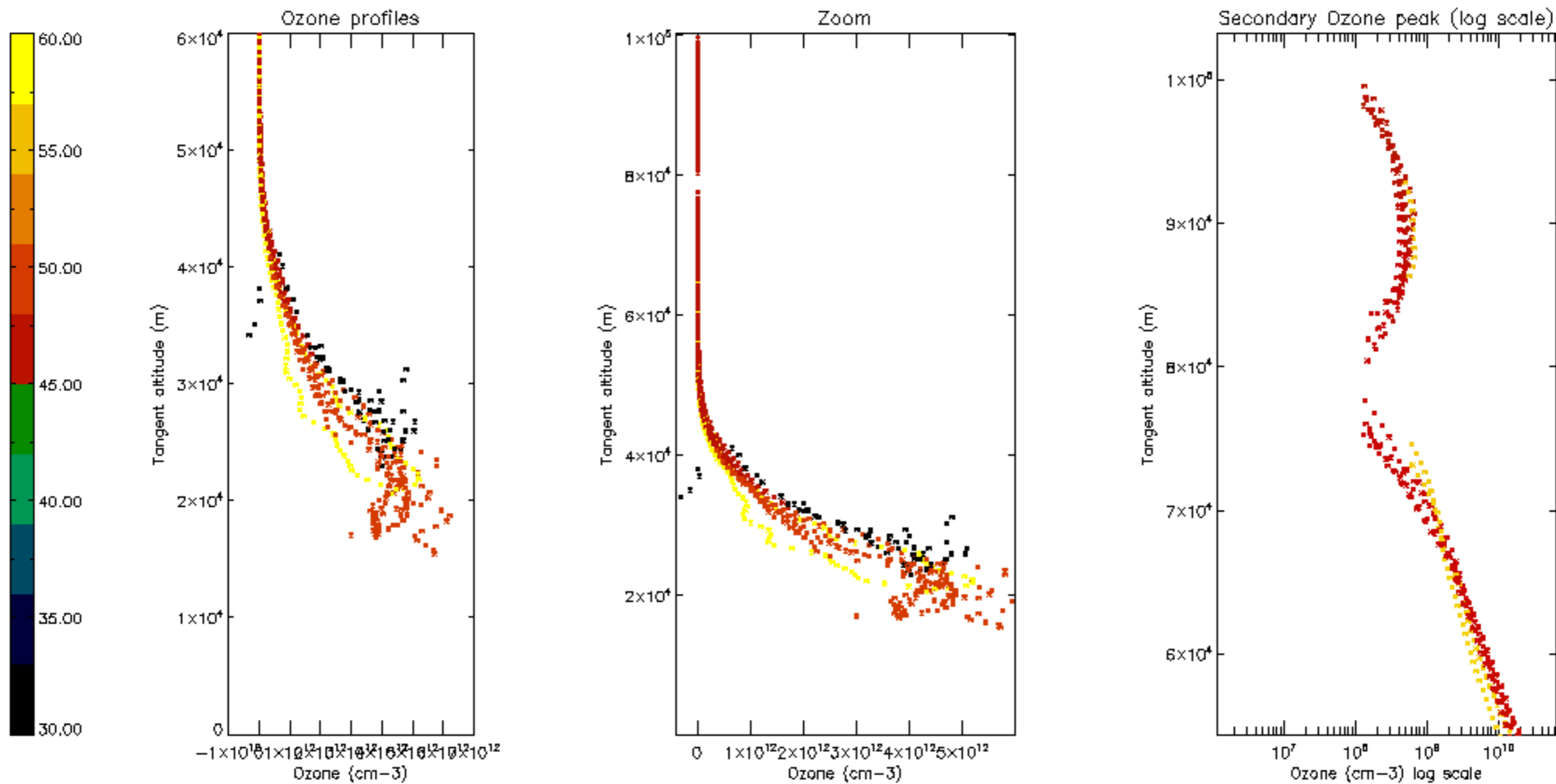


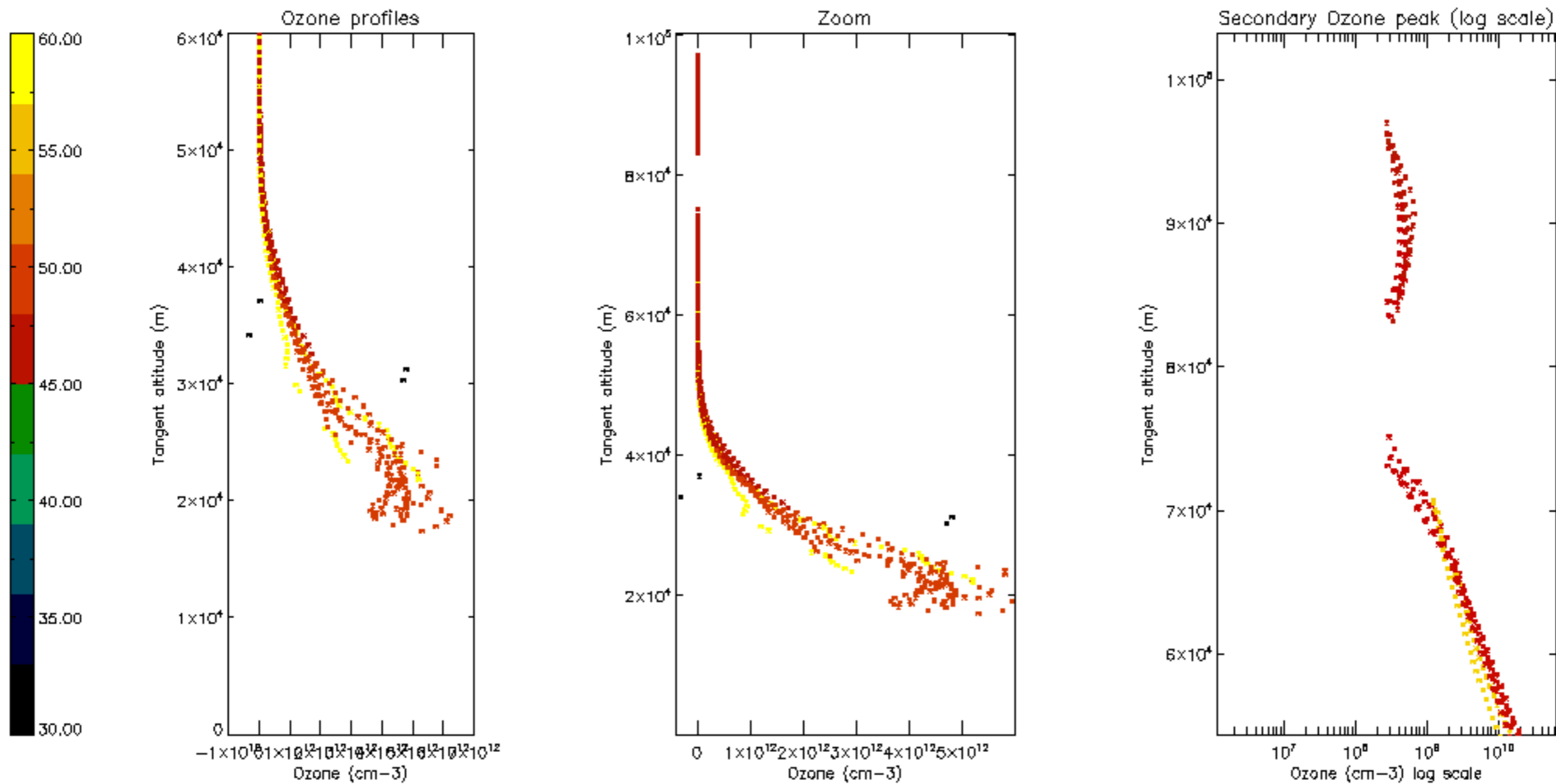
Percentage of saturation errors per profile

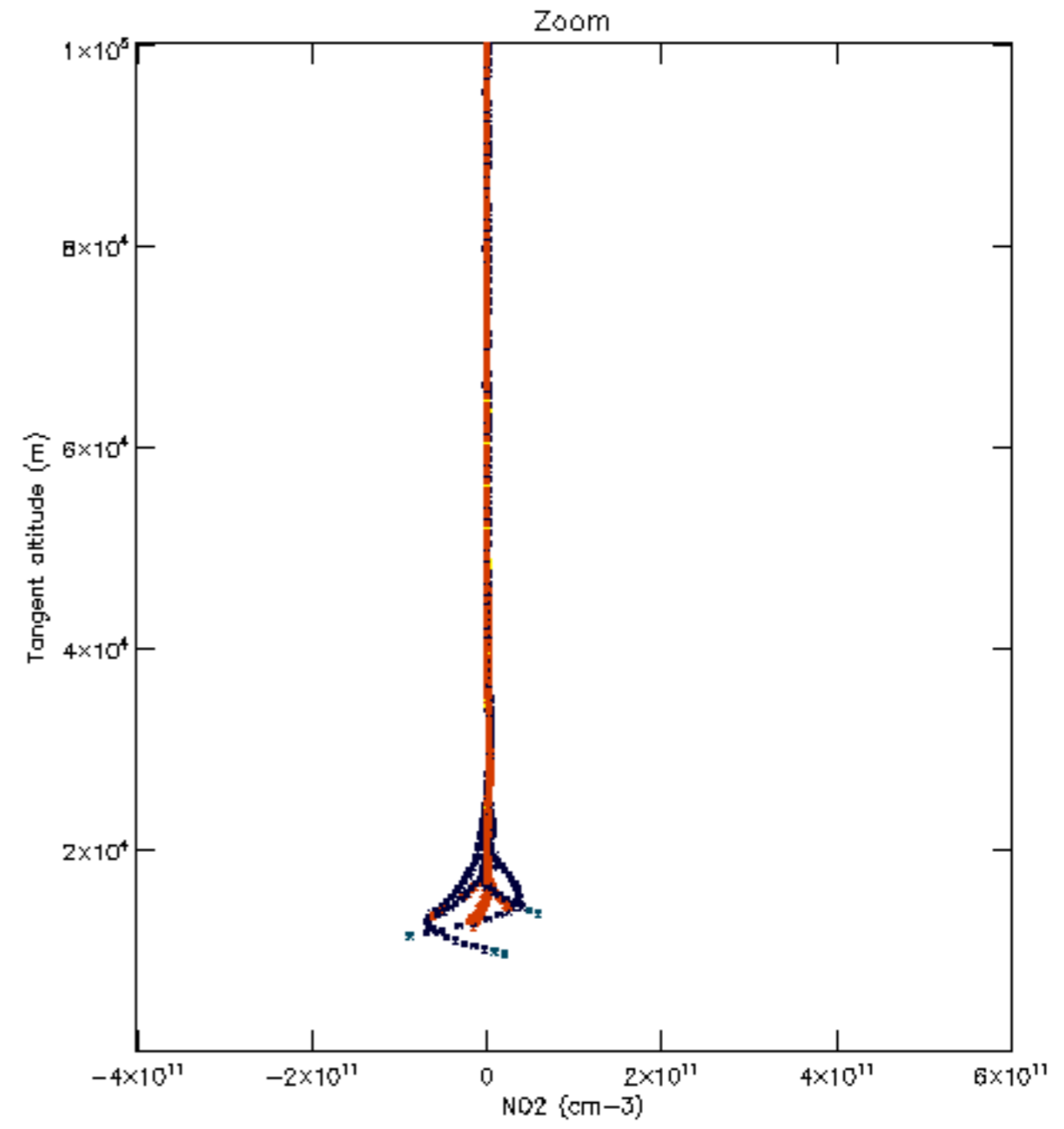
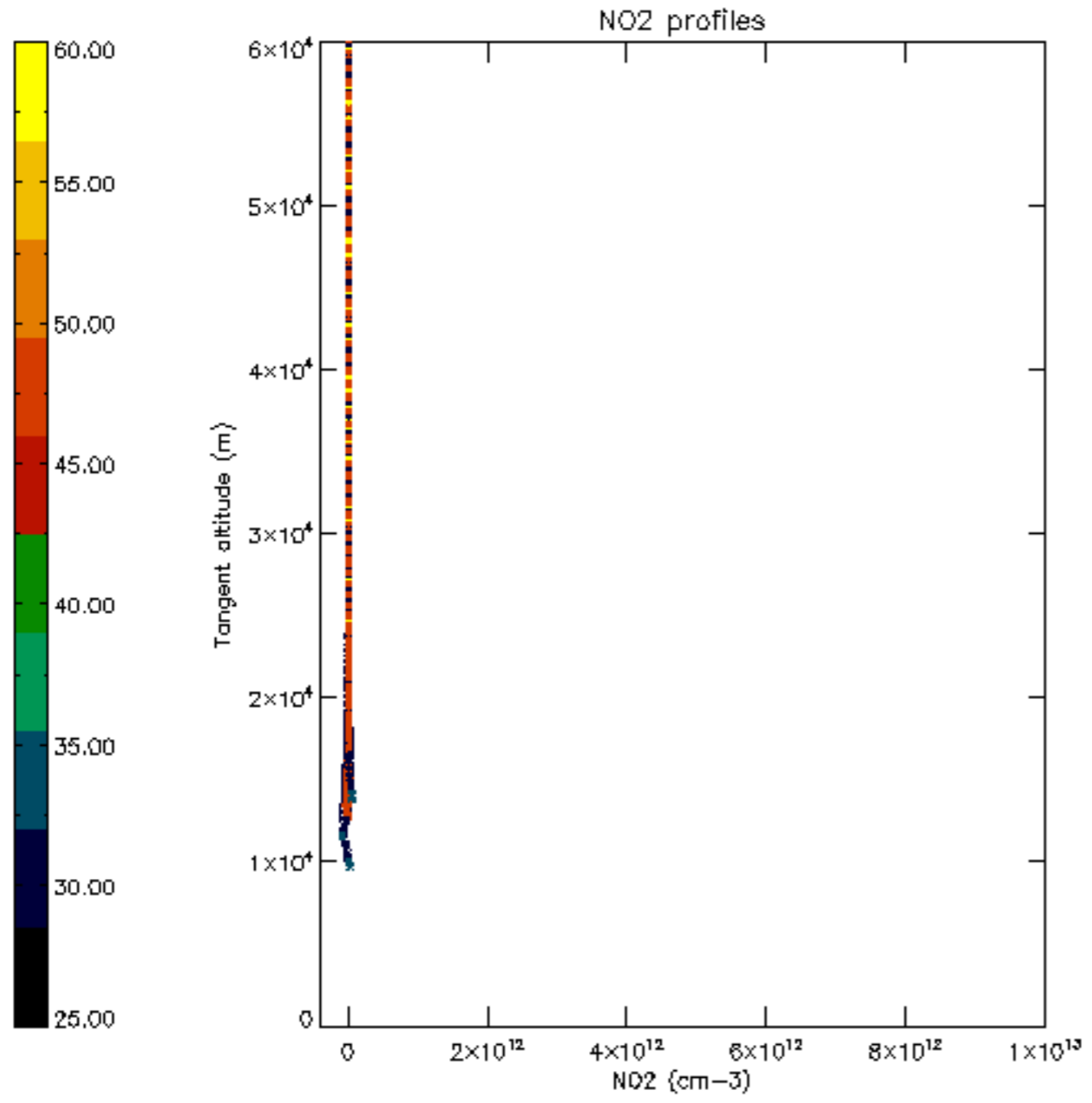


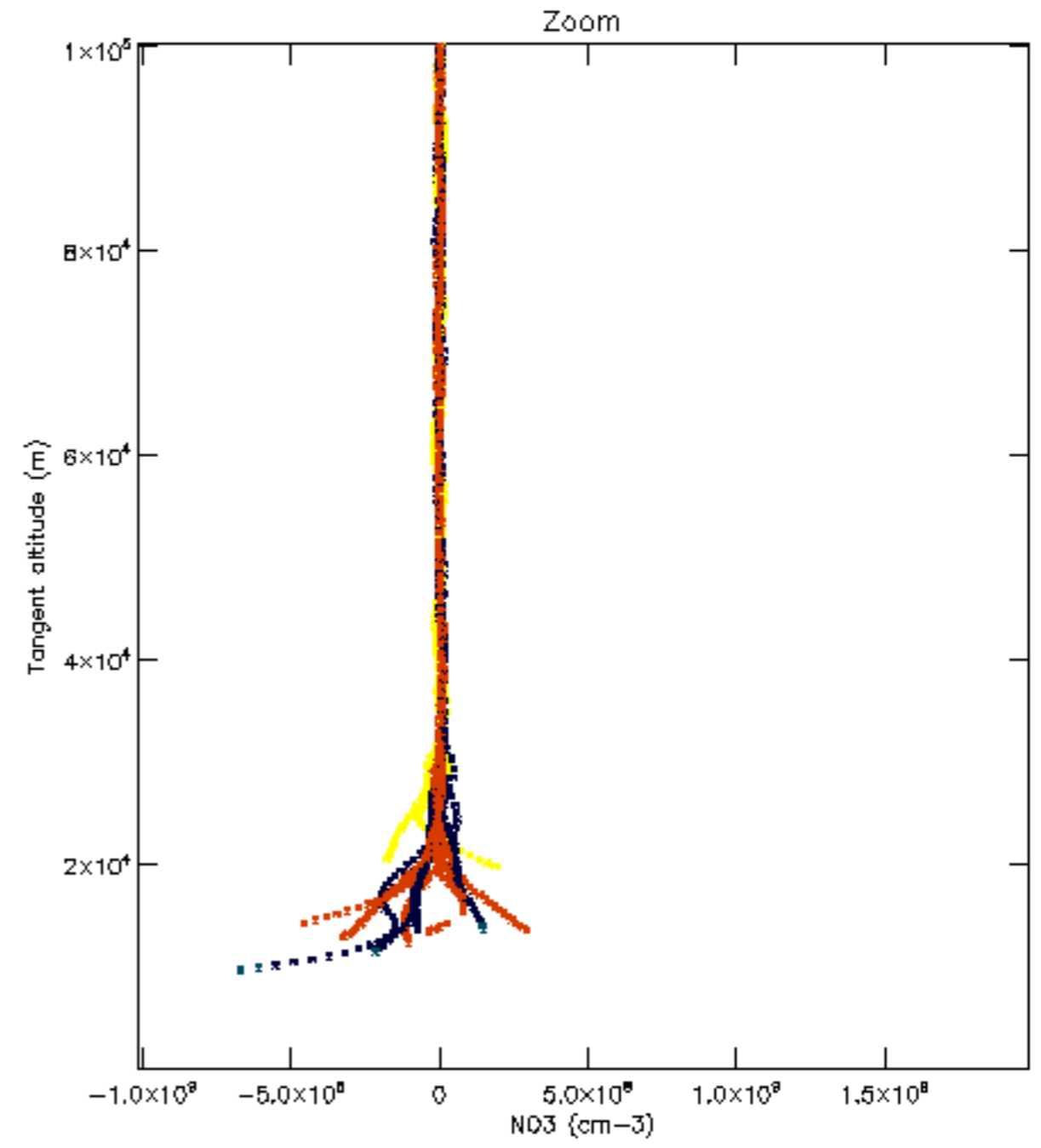
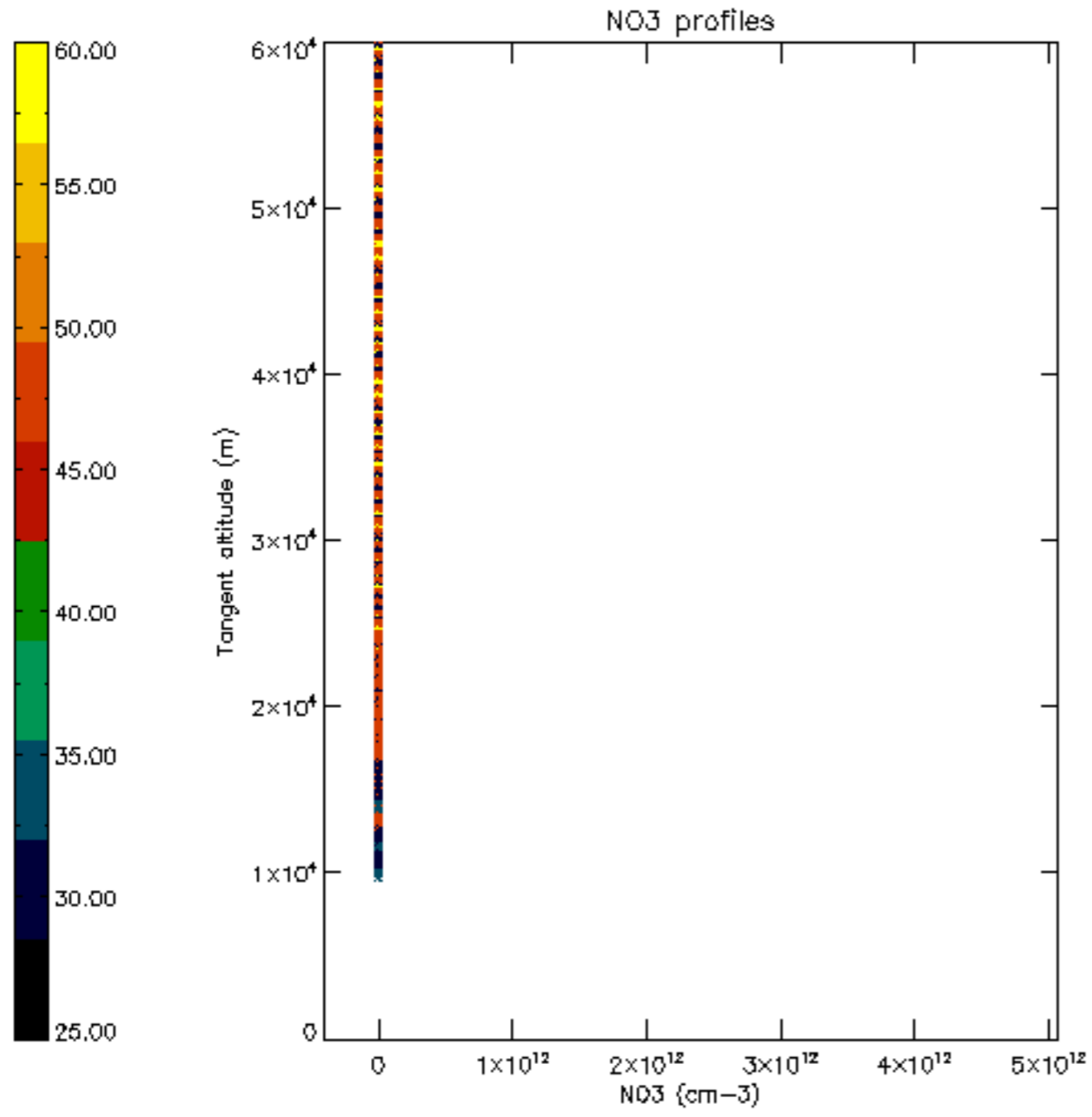


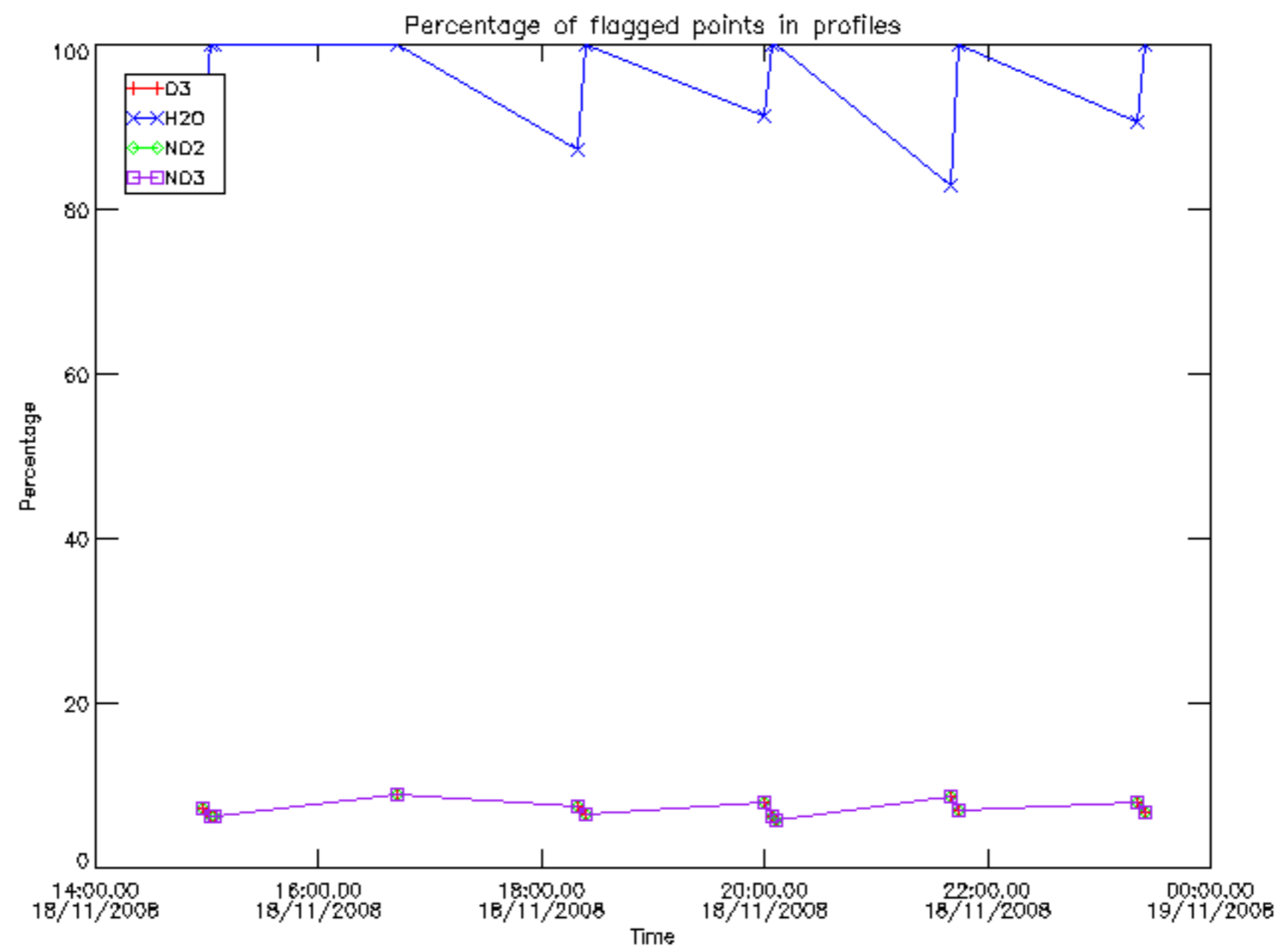




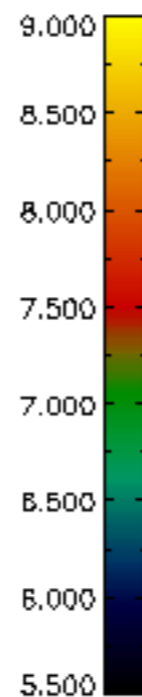
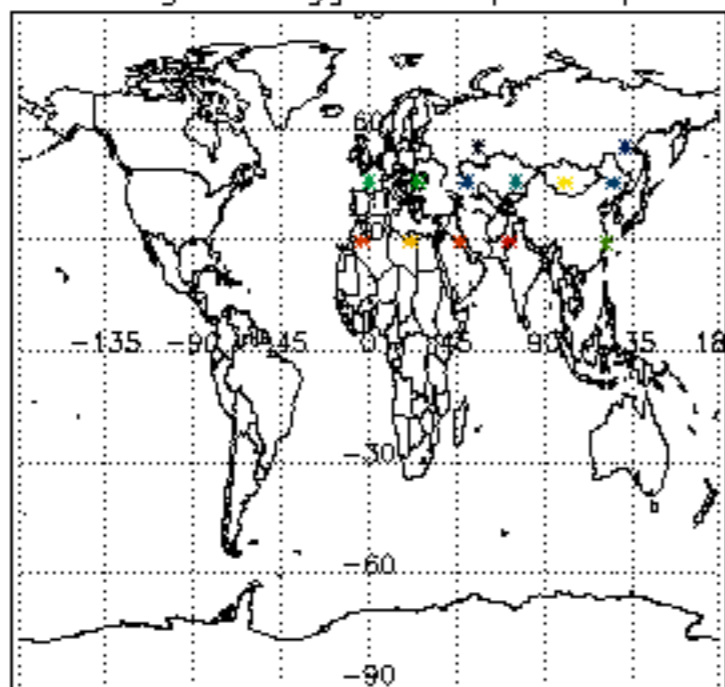




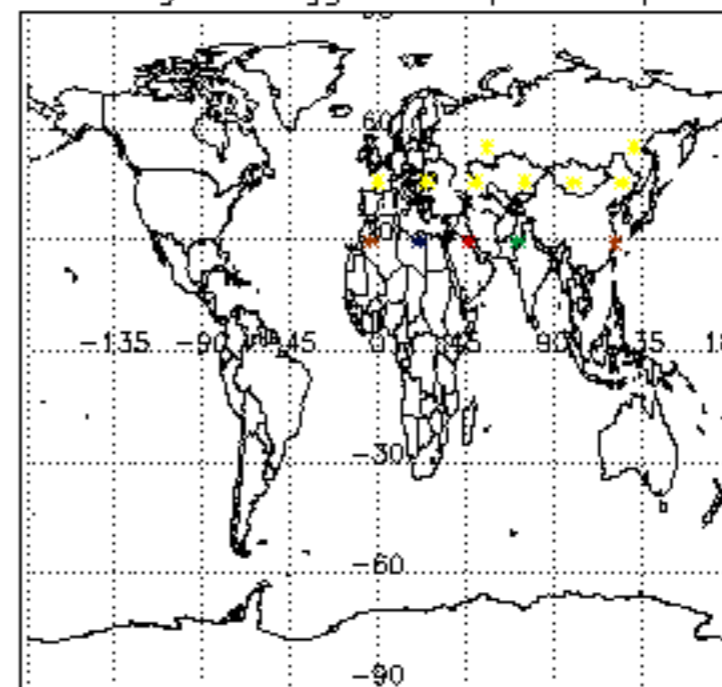




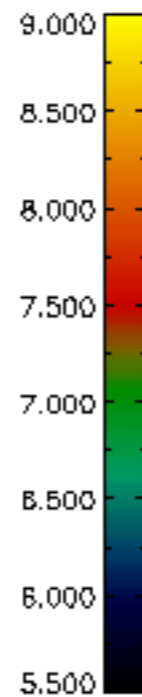
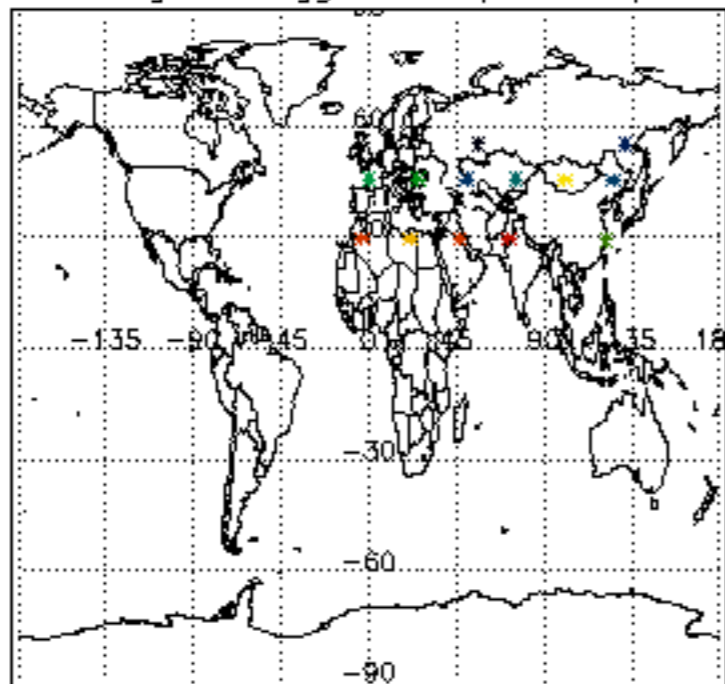
Percentage of flagged data per D3 profile



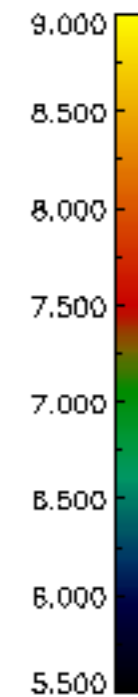
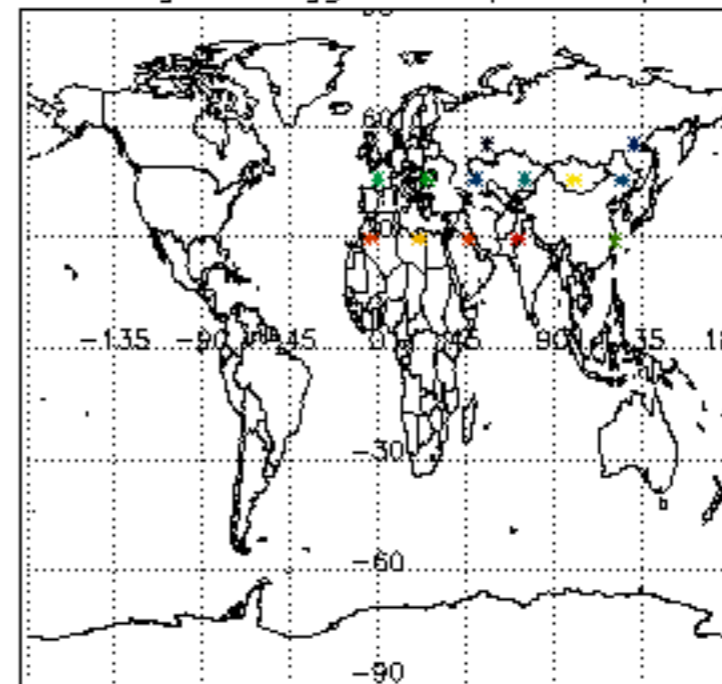
Percentage of flagged data per H2O profile

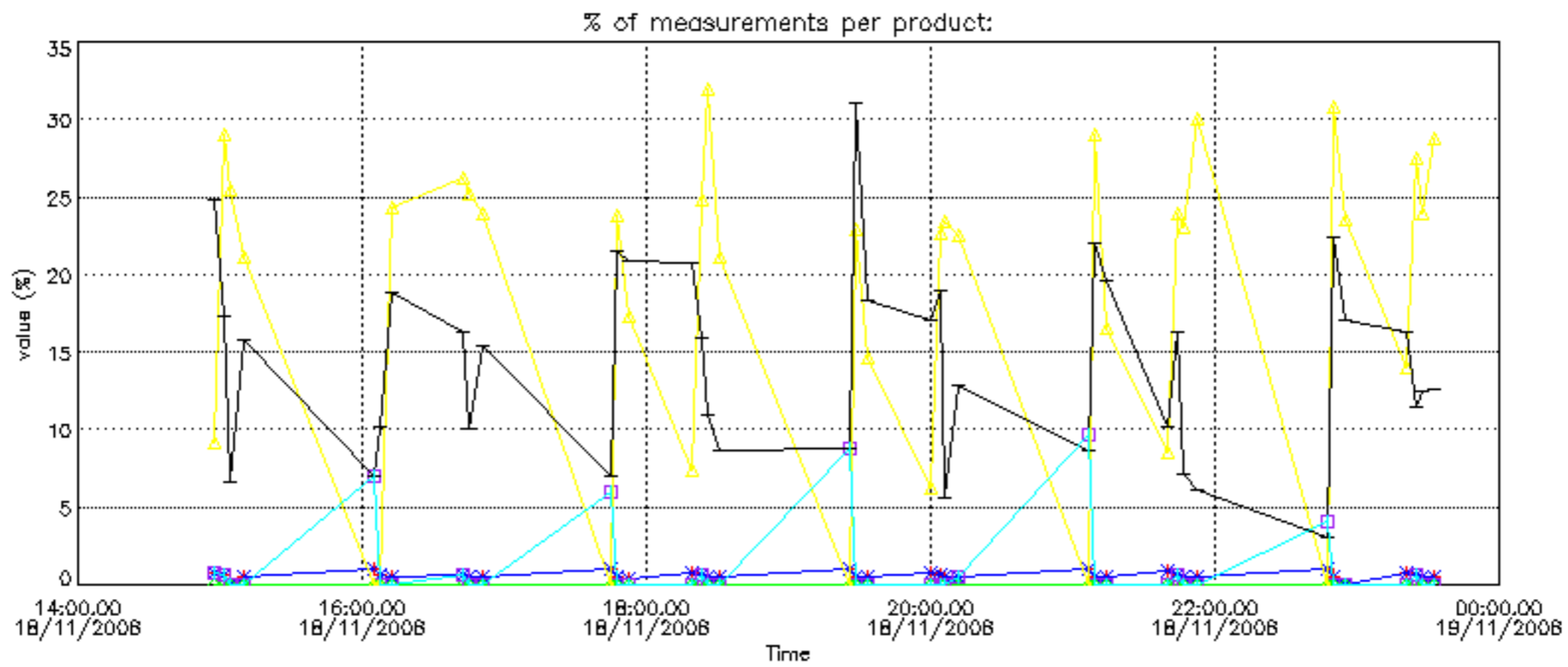


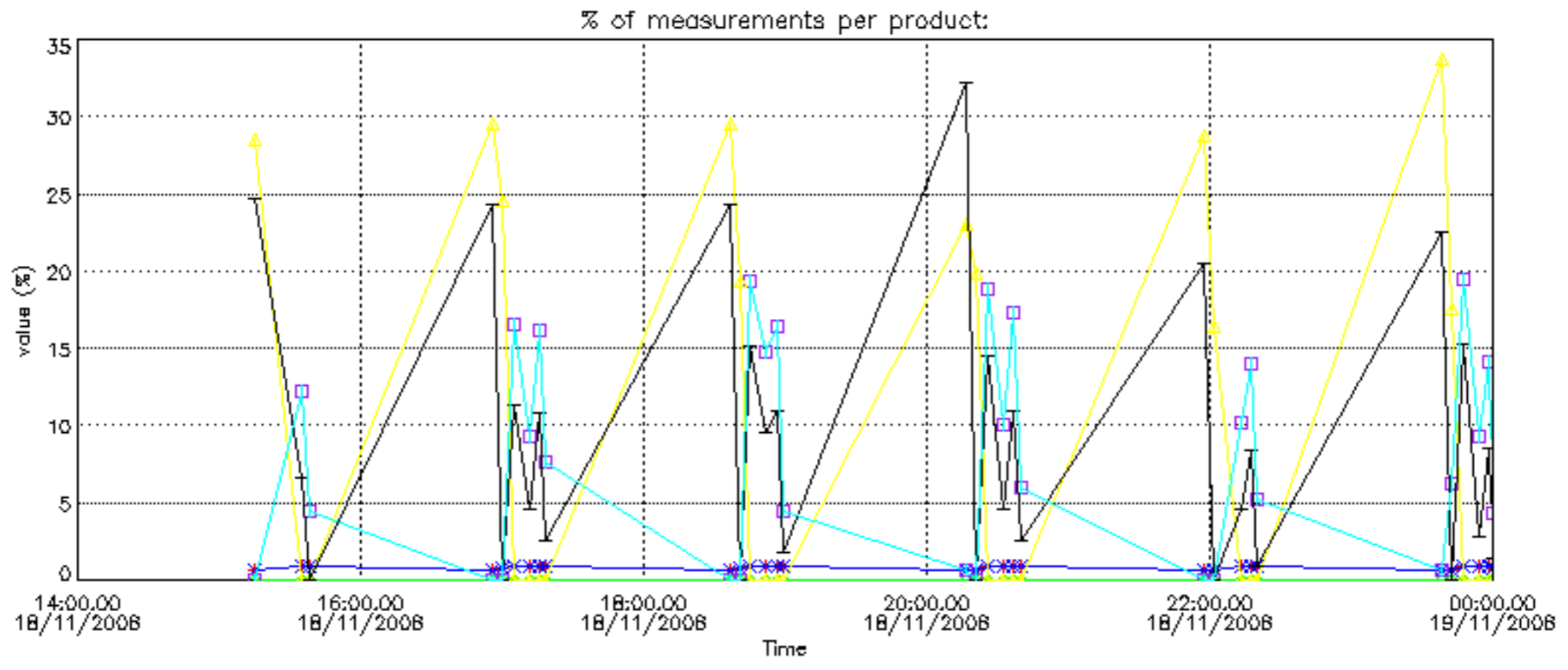
Percentage of flagged data per NO2 profile



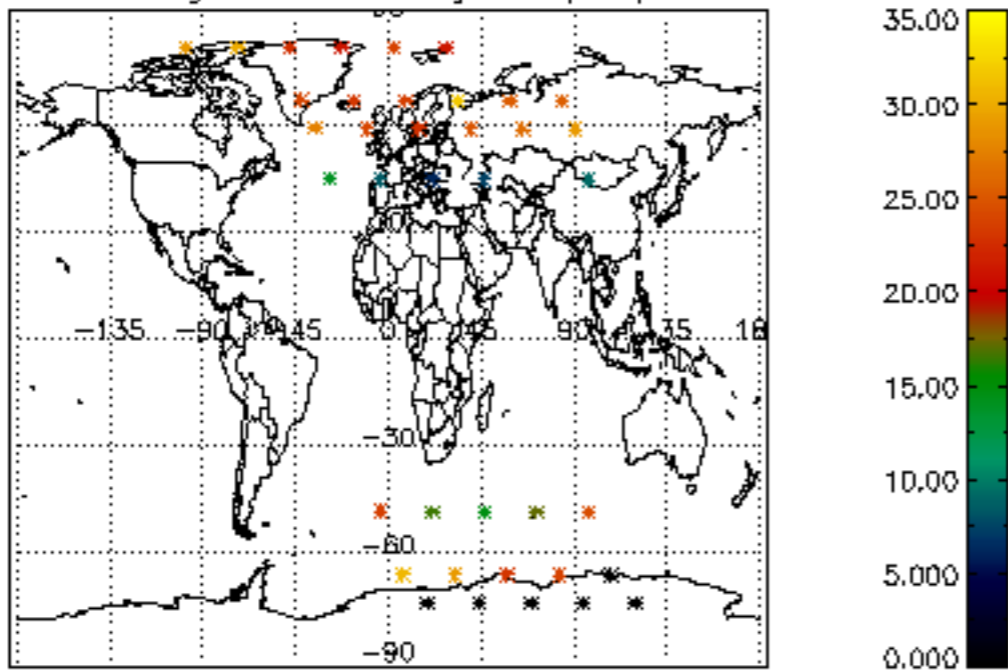
Percentage of flagged data per NO3 profile



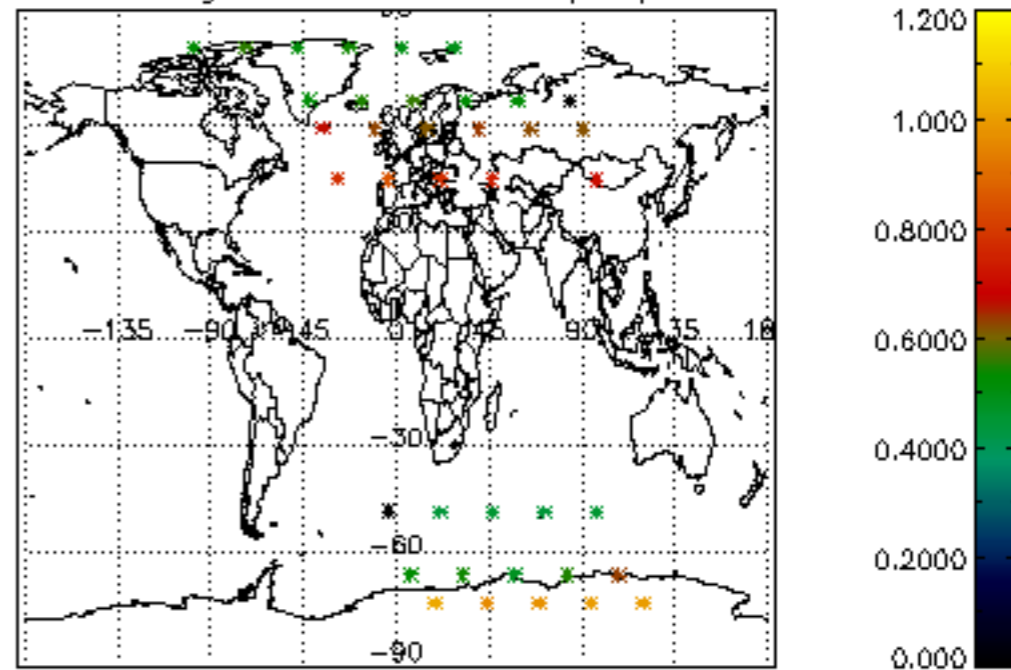




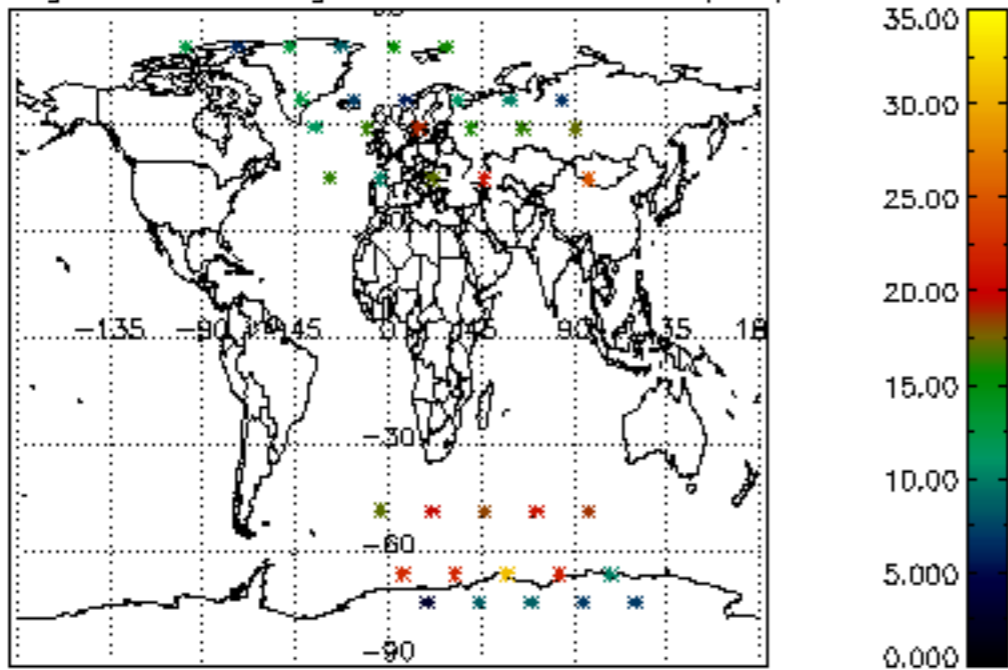
Percentage of cosmic ray hits per profile



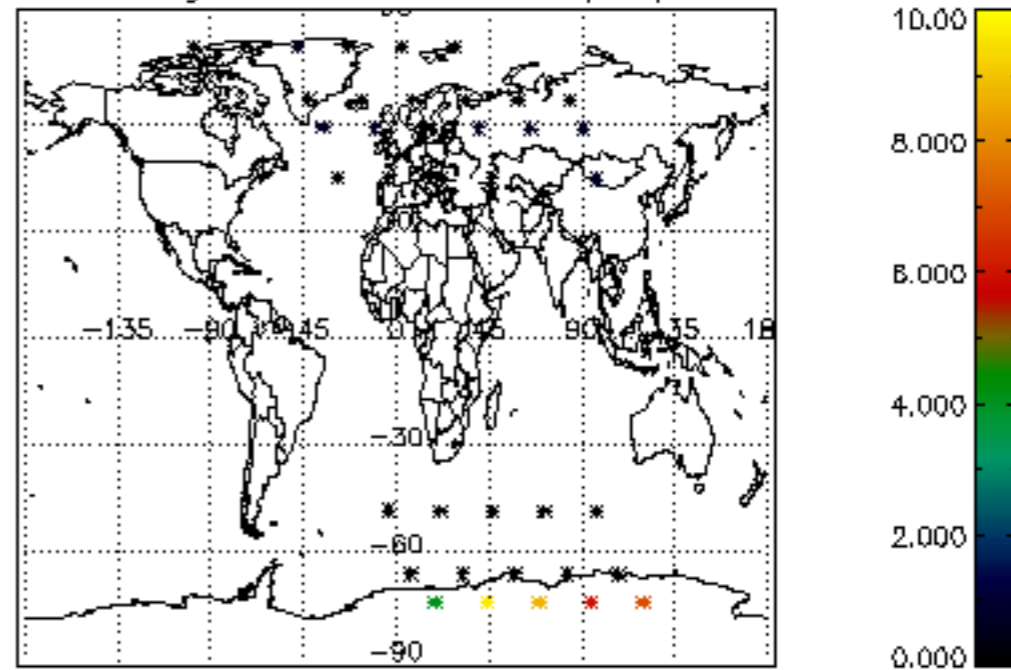
Percentage of datation errors per profile



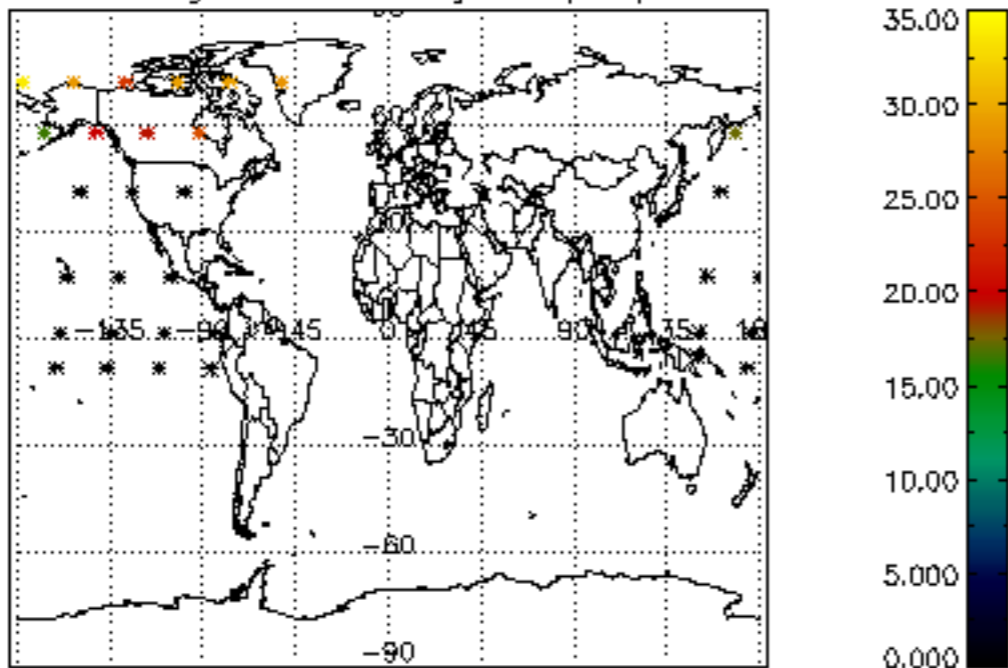
Percentage of star falling outside central band per profile



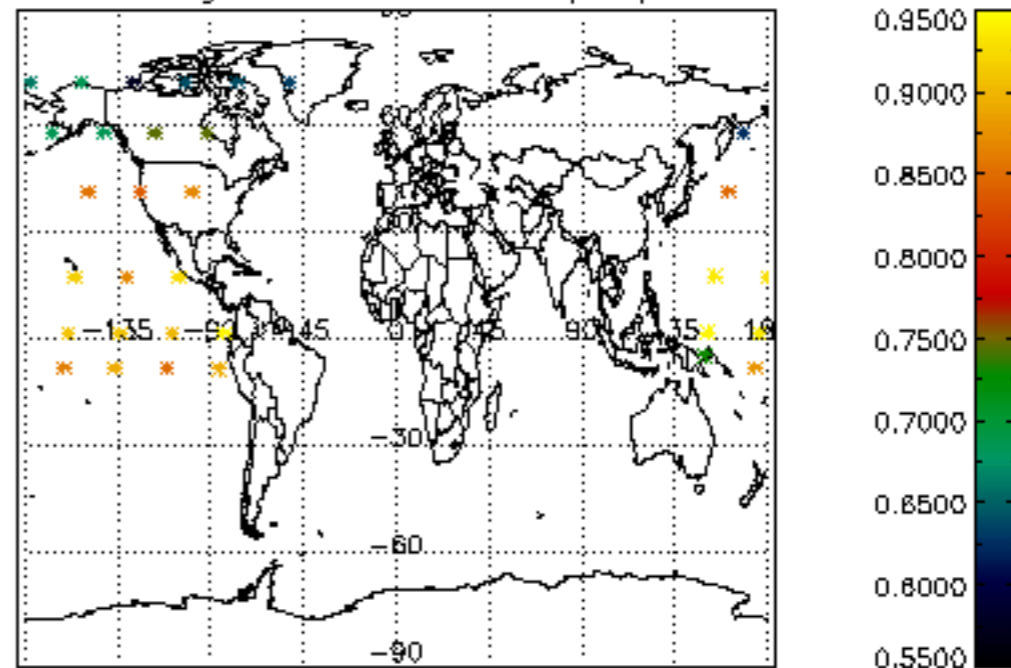
Percentage of saturation errors per profile



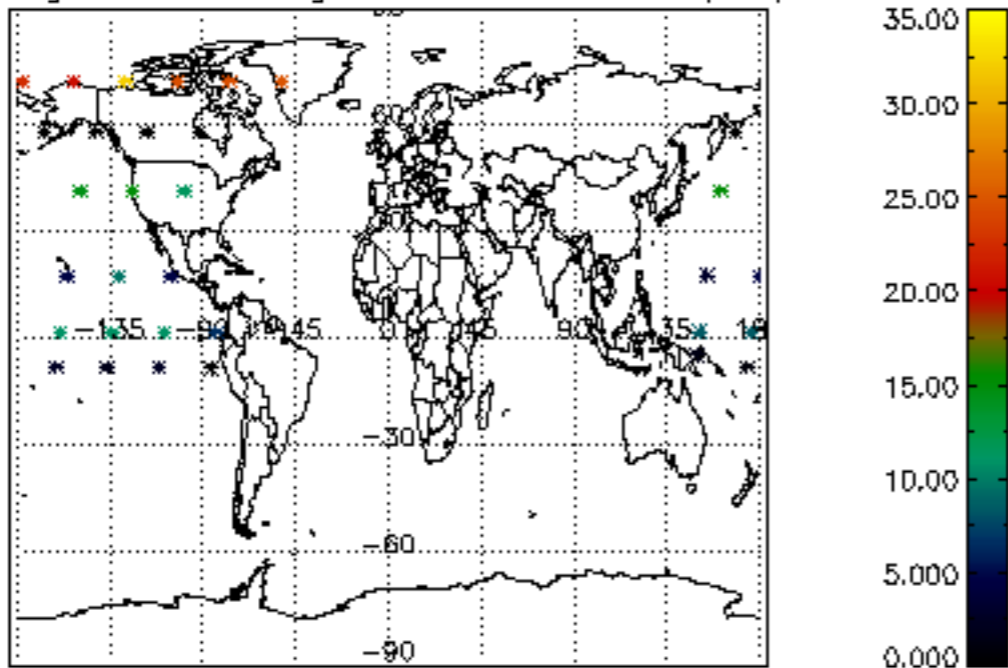
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

