

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 19:35:30
Data source version	GOMOS/6.01
Start time of products	03-09-2008 (03SEP2008 00:00:00)
Stop time of products	04-09-2008 (04SEP2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	282
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

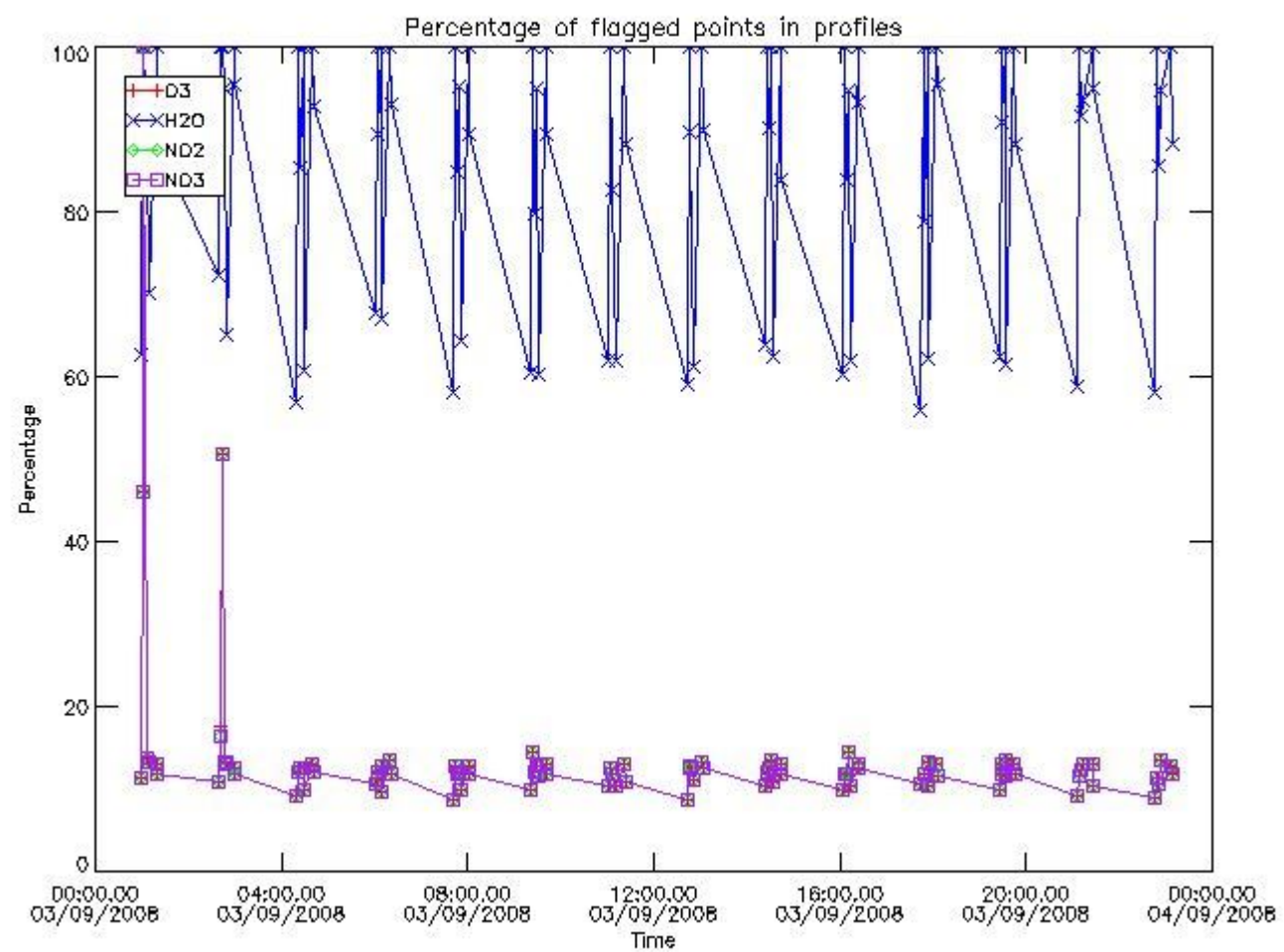
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080903_000010_000000402071_00417_34038_2025.N1	03-SEP-2008 00:00:10	Bright	39.500	162	34Alp Aqr	2.9440	5350.0	79	34038	No
2	GOM_NL__2PRFIN20080903_000309_000000392071_00417_34038_2026.N1	03-SEP-2008 00:03:09	Bright	38.500	61	8Eps Peg	2.1000	3900.0	77	34038	No
3	GOM_NL__2PRFIN20080903_001004_000000342071_00417_34038_2027.N1	03-SEP-2008 00:10:04	Bright	34.000	92	53Eps Cyg	2.5000	4500.0	68	34038	No
4	GOM_NL__2PRFIN20080903_001314_000000362071_00417_34038_2028.N1	03-SEP-2008 00:13:14	Bright	36.000	19	50Alp Cyg	1.2460	10500.	72	34038	No
5	GOM_NL__2PRFIN20080903_001807_000000342071_00417_34038_2029.N1	03-SEP-2008 00:18:07	Bright	33.500	89	5Alp Cep	2.4510	8000.0	67	34038	No
6	GOM_NL__2PRFIN20080903_002549_000000332071_00417_34038_2030.N1	03-SEP-2008 00:25:49	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	34038	No
7	GOM_NL__2PRFIN20080903_004251_000000372071_00417_34038_2031.N1	03-SEP-2008 00:42:51	Bright	37.000	24	66Alp Gem	1.5800	10200.	74	34038	No
8	GOM_NL__2PRFIN20080903_005040_000000402071_00417_34038_2032.N1	03-SEP-2008 00:50:40	Twilight	40.000	8	10Alp CMi	0.40000	6500.0	80	34038	No
9	GOM_NL__2PRFIN20080903_005830_000000582071_00417_34038_2033.N1	03-SEP-2008 00:58:30	Dark	58.000	1	9Alp CMa	-1.4400	11000.	116	34038	No
10	GOM_NL__2PRFIN20080903_010112_000000452071_00417_34038_2034.N1	03-SEP-2008 01:01:12	Dark	45.000	23	21Eps CMa	1.5020	26000.	90	34038	No
11	GOM_NL__2PRFIN20080903_010242_000000442071_00417_34038_2035.N1	03-SEP-2008 01:02:42	Dark	44.000	117	Pi Pup	2.7060	3800.0	88	34038	No
12	GOM_NL__2PRFIN20080903_010644_000000372071_00417_34038_2036.N1	03-SEP-2008 01:06:44	Dark	37.000	161	Tau Pup	2.9310	4500.0	74	34038	No
13	GOM_NL__2PRFIN20080903_010754_000000542071_00417_34038_2037.N1	03-SEP-2008 01:07:54	Dark	54.000	2	Alp Car	-0.73600	7000.0	108	34038	No
14	GOM_NL__2PRFIN20080903_011816_000000392071_00418_34039_2054.N1	03-SEP-2008 01:18:16	Dark	39.000	143	Alp Hyi	2.8570	7200.0	78	34039	No
15	GOM_NL__2PRFIN20080903_011935_000000442071_00418_34039_2055.N1	03-SEP-2008 01:19:35	Dark	43.500	9	Alp Eri	0.45300	24000.	87	34039	No
16	GOM_NL__2PRFIN20080903_012531_000000482071_00418_34039_2056.N1	03-SEP-2008 01:25:31	Straylight	47.500	84	Alp Phe	2.3970	4500.0	95	34039	No
17	GOM_NL__2PRFIN20080903_012723_000000402071_00418_34039_2057.N1	03-SEP-2008 01:27:23	Straylight	40.000	31	Alp Gru	1.7340	15200.	80	34039	No
18	GOM_NL__2PRFIN20080903_013129_000000442071_00418_34039_2058.N1	03-SEP-2008 01:31:29	Straylight	43.500	18	24Alp PsA	1.1660	9700.0	87	34039	No
19	GOM_NL__2PRFIN20080903_013614_000000452071_00418_34039_2059.N1	03-SEP-2008 01:36:14	Bright	44.500	142	49Del Cap	2.8500	8900.0	89	34039	No
20	GOM_NL__2PRFIN20080903_013921_000000382071_00418_34039_2060.N1	03-SEP-2008 01:39:21	Bright	37.500	154	22Bet Aqr	2.8990	5700.0	75	34039	No
21	GOM_NL__2PRFIN20080903_014045_000000402071_00418_34039_2061.N1	03-SEP-2008 01:40:45	Bright	39.500	162	34Alp Aqr	2.9440	5350.0	79	34039	No
22	GOM_NL__2PRFIN20080903_014345_000000382071_00418_34039_2062.N1	03-SEP-2008 01:43:45	Bright	38.000	61	8Eps Peg	2.1000	3900.0	76	34039	No
23	GOM_NL__2PRFIN20080903_015040_000000372071_00418_34039_2063.N1	03-SEP-2008 01:50:40	Bright	36.500	92	53Eps Cyg	2.5000	4500.0	73	34039	No
24	GOM_NL__2PRFIN20080903_015350_000000382071_00418_34039_2064.N1	03-SEP-2008 01:53:50	Bright	37.500	19	50Alp Cyg	1.2460	10500.	75	34039	No
25	GOM_NL__2PRFIN20080903_015843_000000362071_00418_34039_2065.N1	03-SEP-2008 01:58:43	Bright	35.500	89	5Alp Cep	2.4510	8000.0	71	34039	No
26	GOM_NL__2PRFIN20080903_020624_000000332071_00418_34039_2066.N1	03-SEP-2008 02:06:24	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	34039	No
27	GOM_NL__2PRFIN20080903_022327_000000382071_00418_34039_2067.N1	03-SEP-2008 02:23:27	Bright	38.000	24	66Alp Gem	1.5800	10200.	76	34039	No
28	GOM_NL__2PRFIN20080903_023116_000000402071_00418_34039_2068.N1	03-SEP-2008 02:31:16	Twilight	40.000	8	10Alp CMi	0.40000	6500.0	80	34039	No
29	GOM_NL__2PRFIN20080903_023906_000000572071_00418_34039_2069.N1	03-SEP-2008 02:39:06	Dark	56.500	1	9Alp CMa	-1.4400	11000.	113	34039	No
30	GOM_NL__2PRFIN20080903_024148_000000442071_00418_34039_2070.N1	03-SEP-2008 02:41:48	Dark	43.500	23	21Eps CMa	1.5020	26000.	87	34039	No
31	GOM_NL__2PRFIN20080903_024319_000000472071_00418_34039_2071.N1	03-SEP-2008 02:43:19	Dark	47.000	117	Pi Pup	2.7060	3800.0	94	34039	No
32	GOM_NL__2PRFIN20080903_024720_000000402071_00418_34039_2072.N1	03-SEP-2008 02:47:20	Dark	39.500	161	Tau Pup	2.9310	4500.0	79	34039	No
33	GOM_NL__2PRFIN20080903_024830_000000422071_00418_34039_2073.N1	03-SEP-2008 02:48:30	Dark	42.000	2	Alp Car	-0.73600	7000.0	84	34039	No
34	GOM_NL__2PRFIN20080903_025852_000000412071_00419_34040_2068.N1	03-SEP-2008 02:58:52	Dark	40.500	143	Alp Hyi	2.8570	7200.0	81	34040	No
35	GOM_NL__2PRFIN20080903_030011_000000442071_00419_34040_2069.N1	03-SEP-2008 03:00:11	Dark	43.500	9	Alp Eri	0.45300	24000.	87	34040	No
36	GOM_NL__2PRFIN20080903_030608_000000522071_00419_34040_2070.N1	03-SEP-2008 03:06:08	Straylight	51.500	84	Alp Phe	2.3970	4500.0	103	34040	No
37	GOM_NL__2PRFIN20080903_030759_000000382071_00419_34040_2071.N1	03-SEP-2008 03:07:59	Straylight	38.000	31	Alp Gru	1.7340	15200.	76	34040	No
38	GOM_NL__2PRFIN20080903_031205_000000482071_00419_34040_2072.N1	03-SEP-2008 03:12:05	Straylight	48.000	18	24Alp PsA	1.1660	9700.0	96	34040	No
39	GOM_NL__2PRFIN20080903_031650_000000402071_00419_34040_2073.N1	03-SEP-2008 03:16:50	Bright	40.000	142	49Del Cap	2.8500	8900.0	80	34040	No
40	GOM_NL__2PRFIN20080903_031957_000000372071_00419_34040_2074.N1	03-SEP-2008 03:19:57	Bright	37.000	154	22Bet Aqr	2.8990	5700.0	74	34040	No
41	GOM_NL__2PRFIN20080903_032122_000000392071_00419_34040_2075.N1	03-SEP-2008 03:21:22	Bright	38.500	162	34Alp Aqr	2.9440	5350.0	77	34040	No
42	GOM_NL__2PRFIN20080903_032421_000000382071_00419_34040_2076.N1	03-SEP-2008 03:24:21	Bright	37.500	61	8Eps Peg	2.1000	3900.0	75	34040	No

279	GOM_NL__2PRFIN20080903_233829_000000342071_00431_34052_2371.N1	03-SEP-2008 23:38:29	Bright	34.000	92	53Eps Cyg	2.5000	4500.0	68	34052	No
280	GOM_NL__2PRFIN20080903_234138_000000372071_00431_34052_2372.N1	03-SEP-2008 23:41:38	Bright	37.000	19	50Alp Cyg	1.2460	10500.	74	34052	No
281	GOM_NL__2PRFIN20080903_234629_000000362071_00431_34052_2373.N1	03-SEP-2008 23:46:29	Bright	35.500	89	5Alp Cep	2.4510	8000.0	71	34052	No
282	GOM_NL__2PRFIN20080903_235411_000000362071_00431_34052_2374.N1	03-SEP-2008 23:54:11	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	34052	No

3. Quality information per product

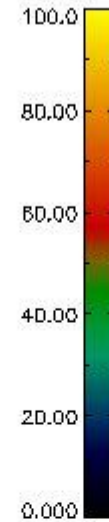
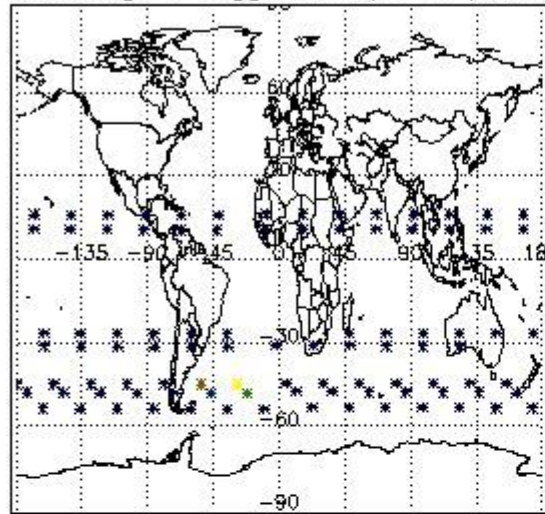
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

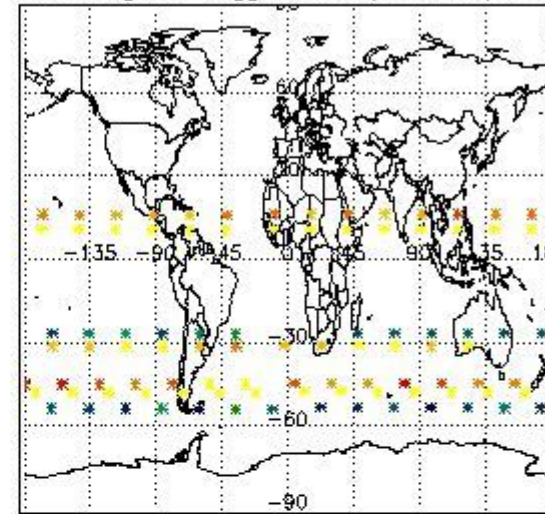


3.2 Plot quality information per product (world map)

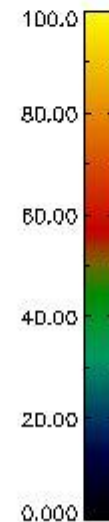
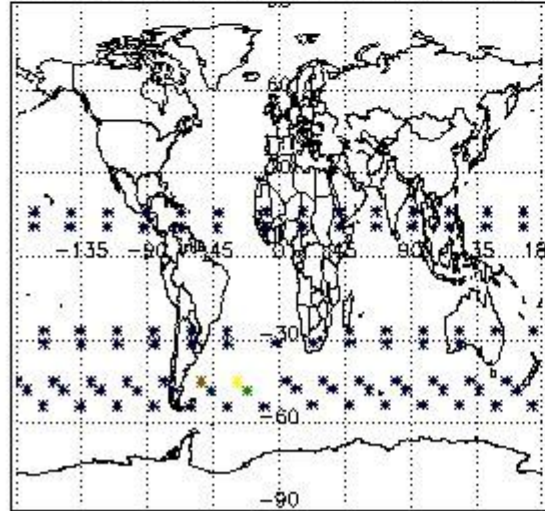
Percentage of flagged data per O3 profile



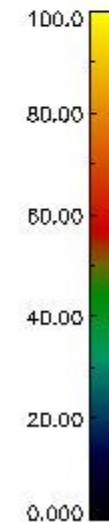
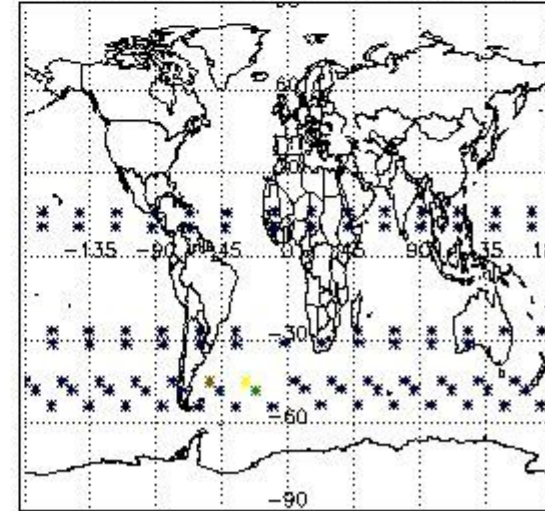
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

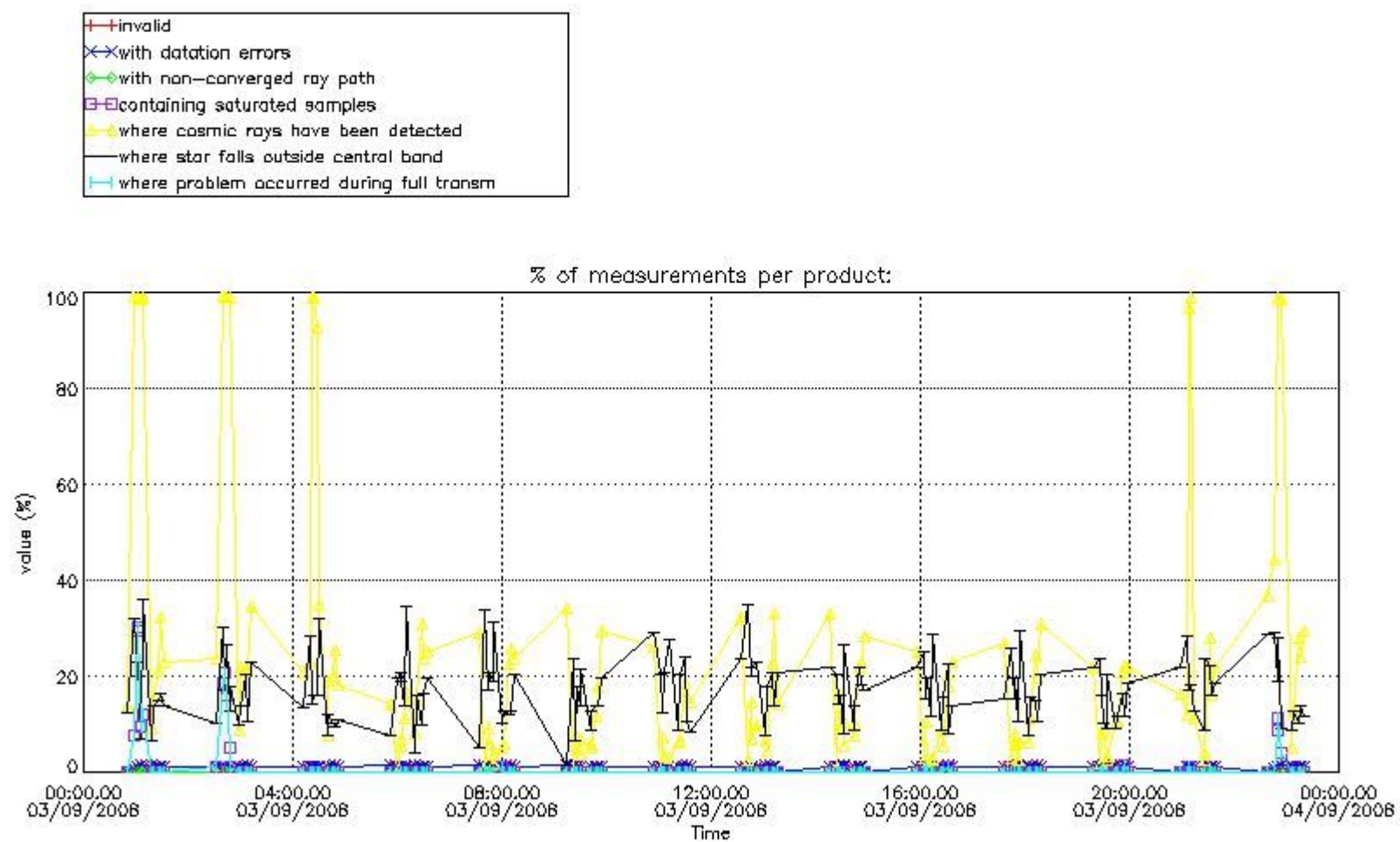


4. Level 1 quality information per product

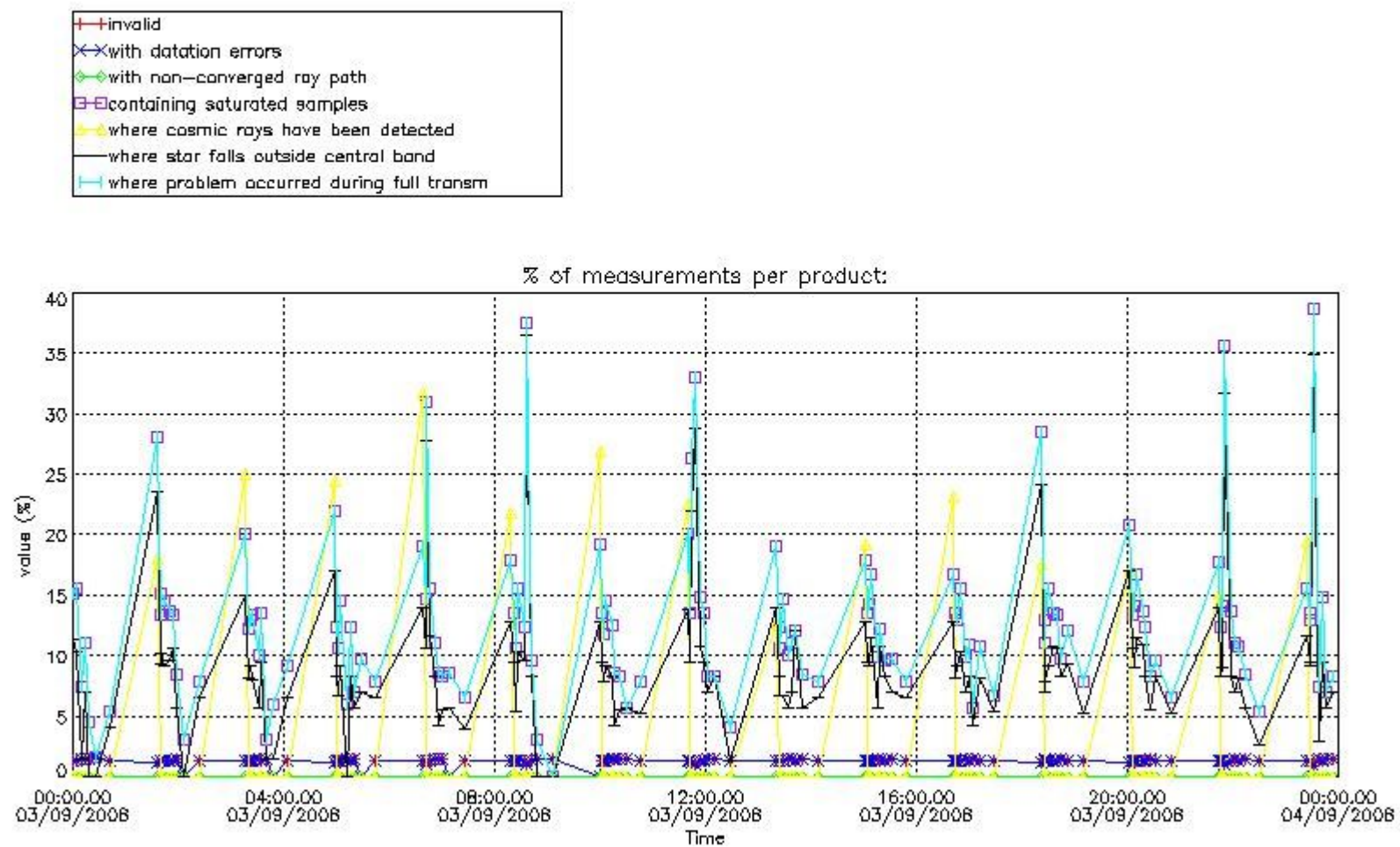
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



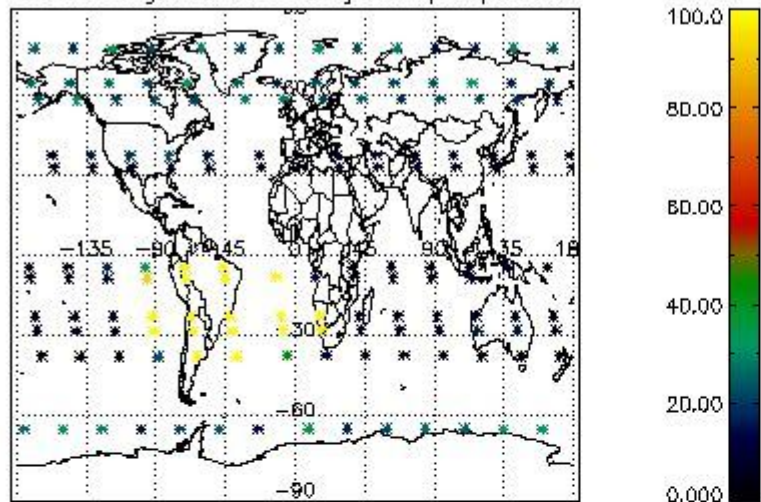
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



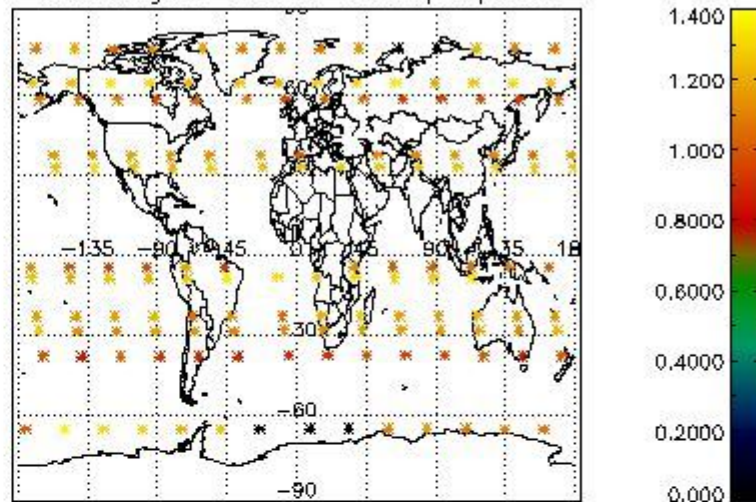
4.2 Plot quality information per product coming from level 1b processing (world map)

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

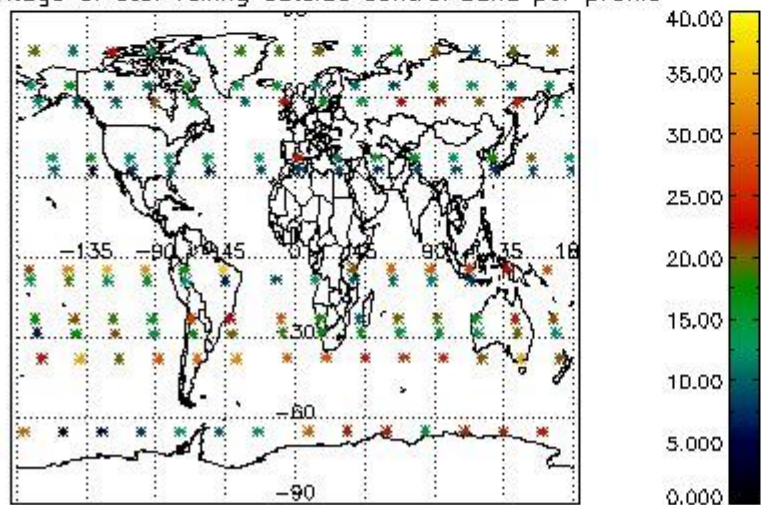
Percentage of cosmic ray hits per profile



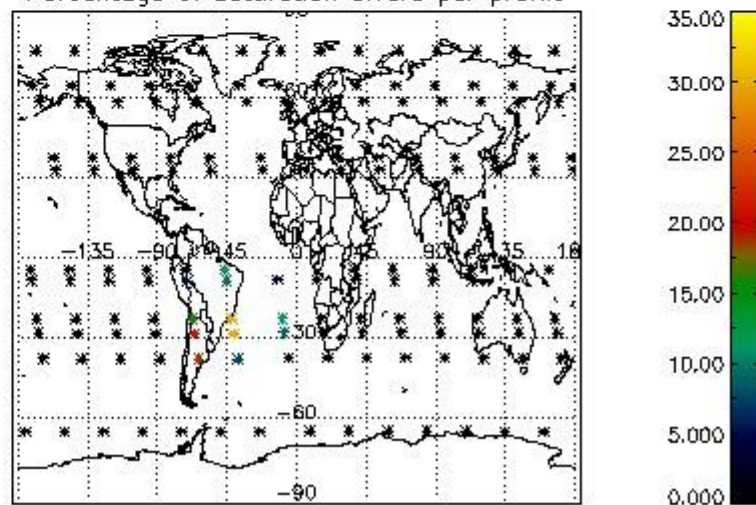
Percentage of datation errors per profile



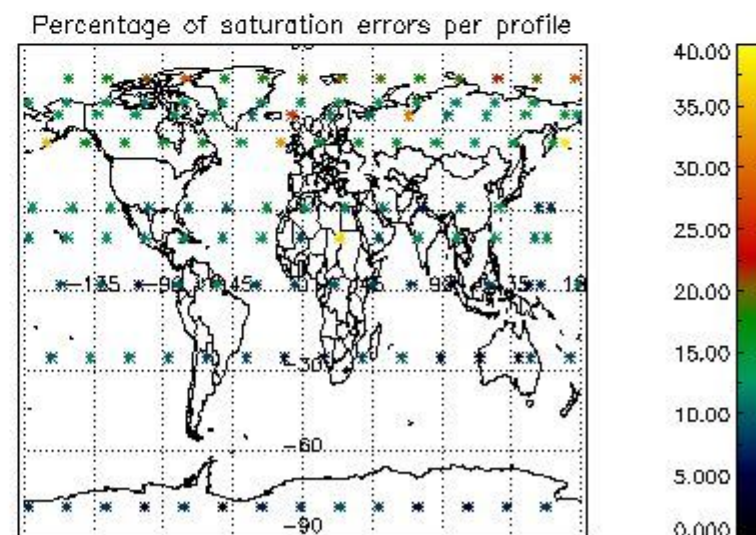
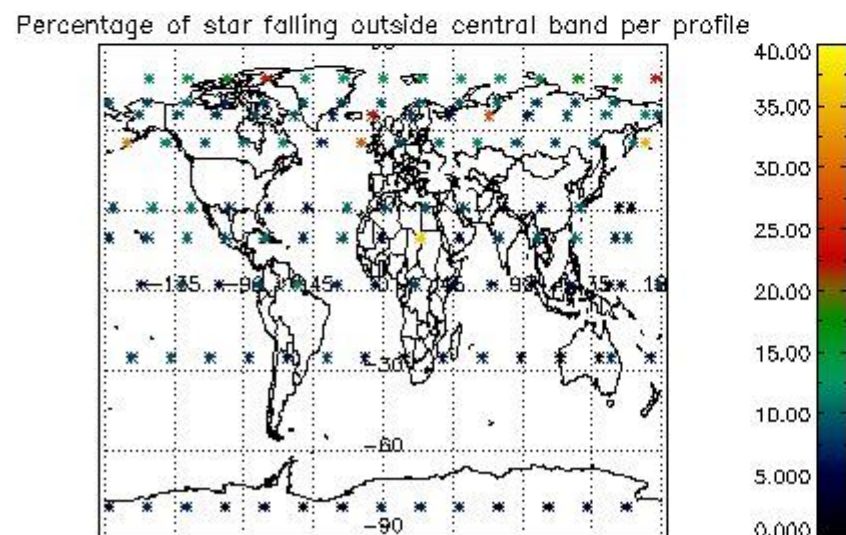
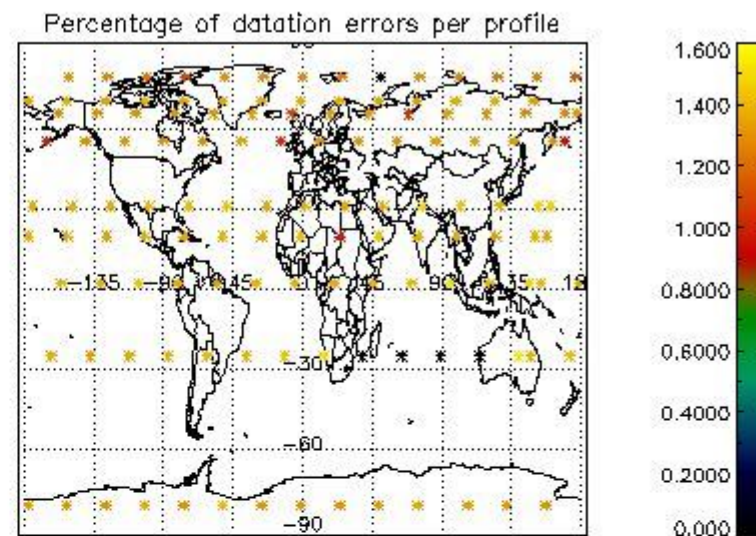
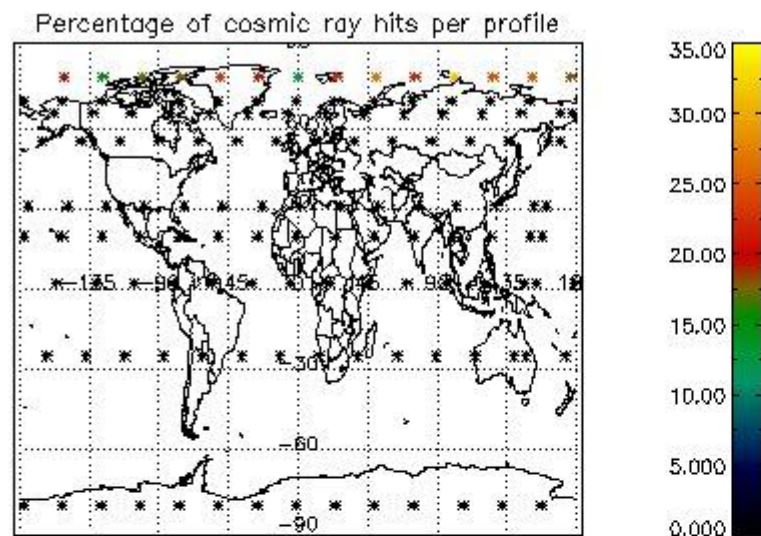
Percentage of star falling outside central band per profile



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

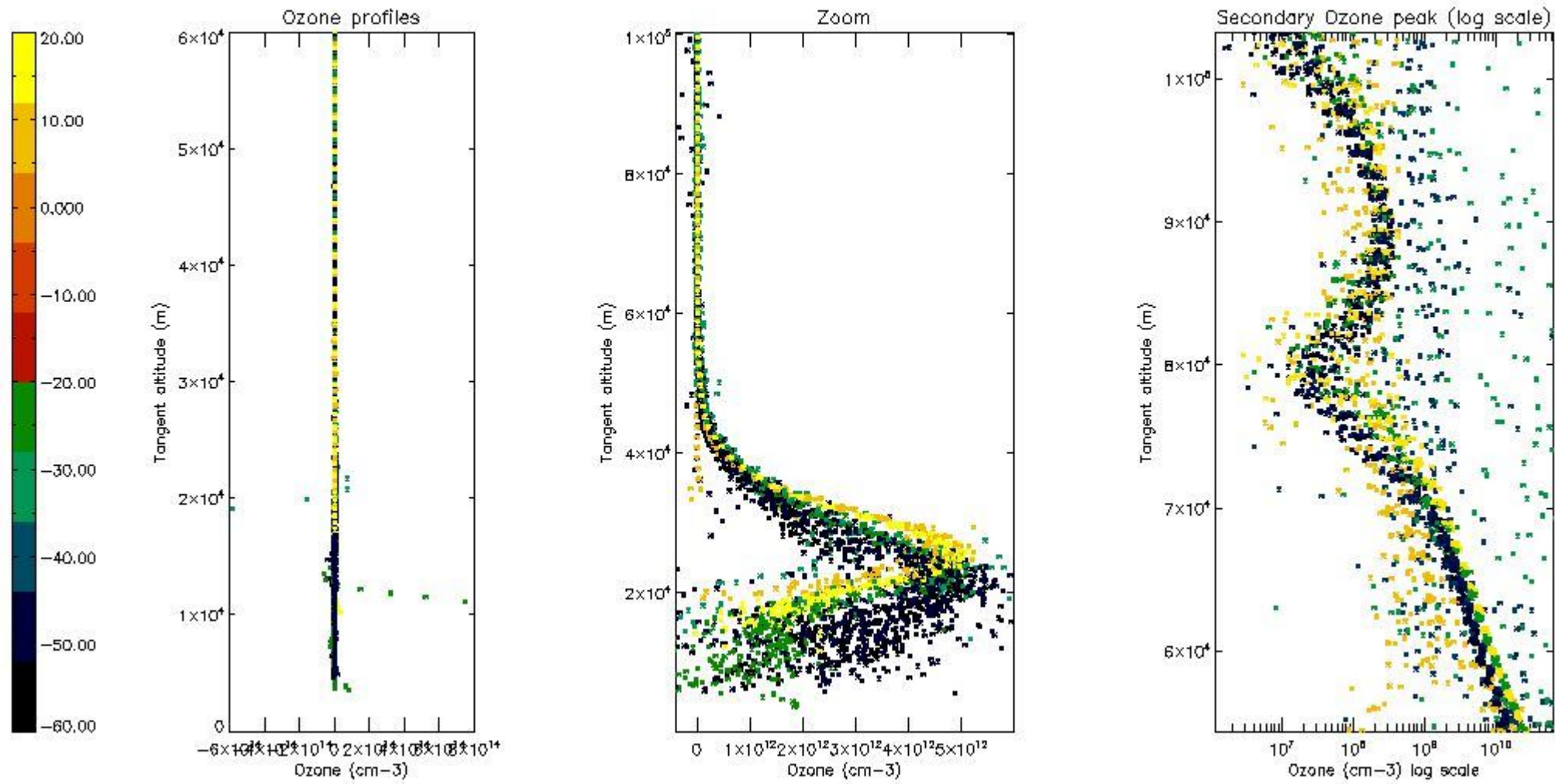
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	20

STD < 10	16
STD < 5	12

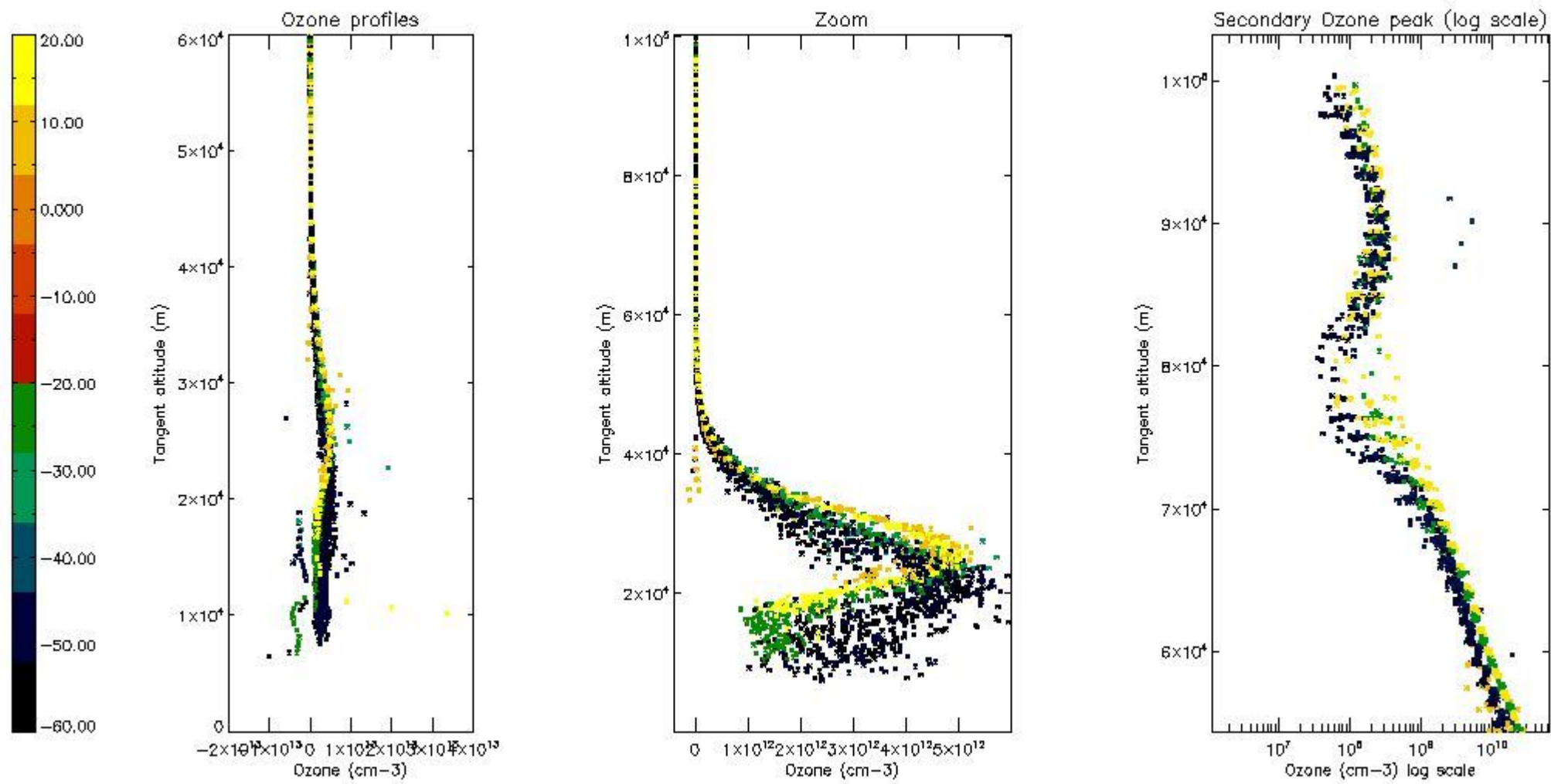
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



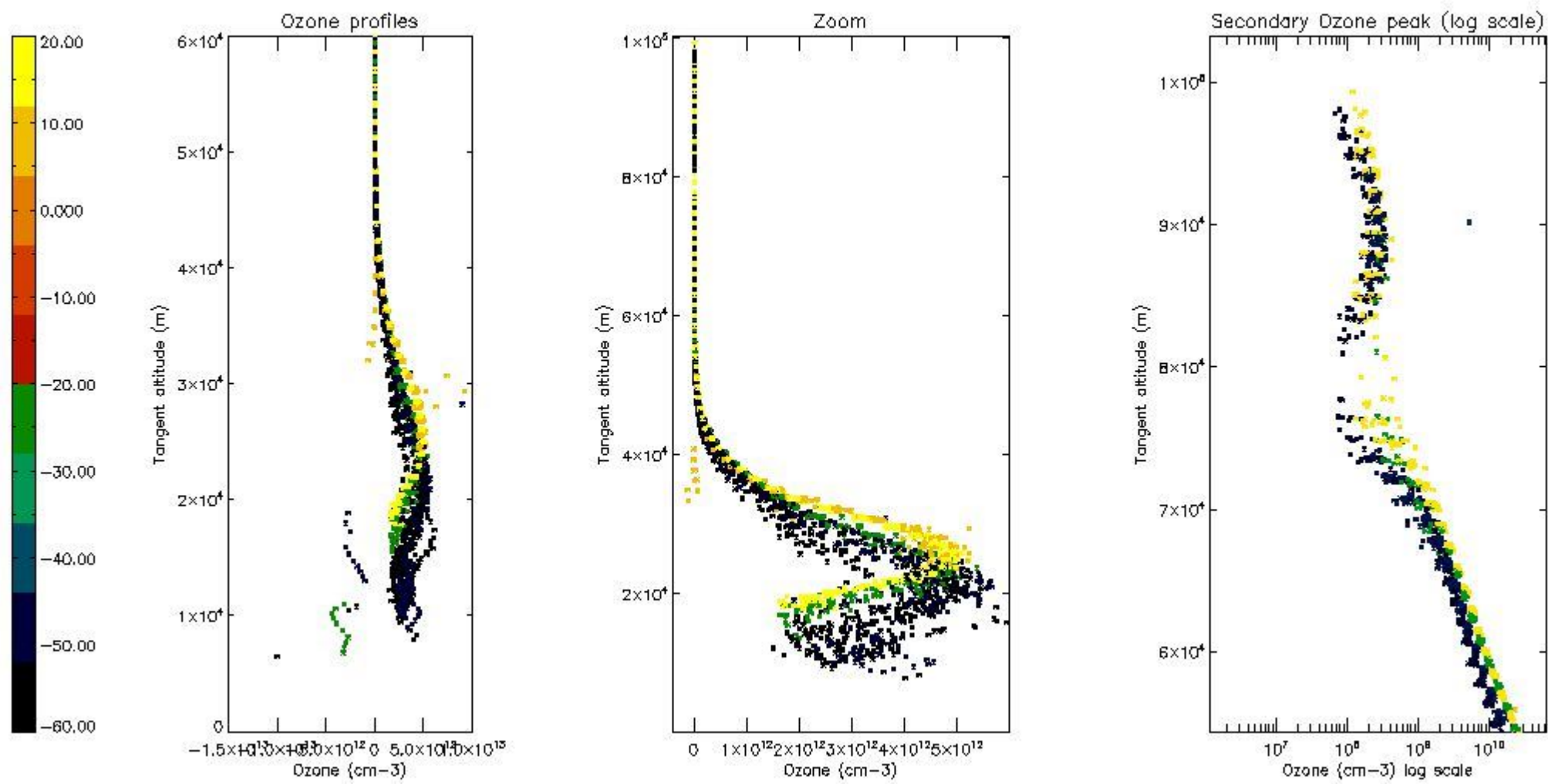
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



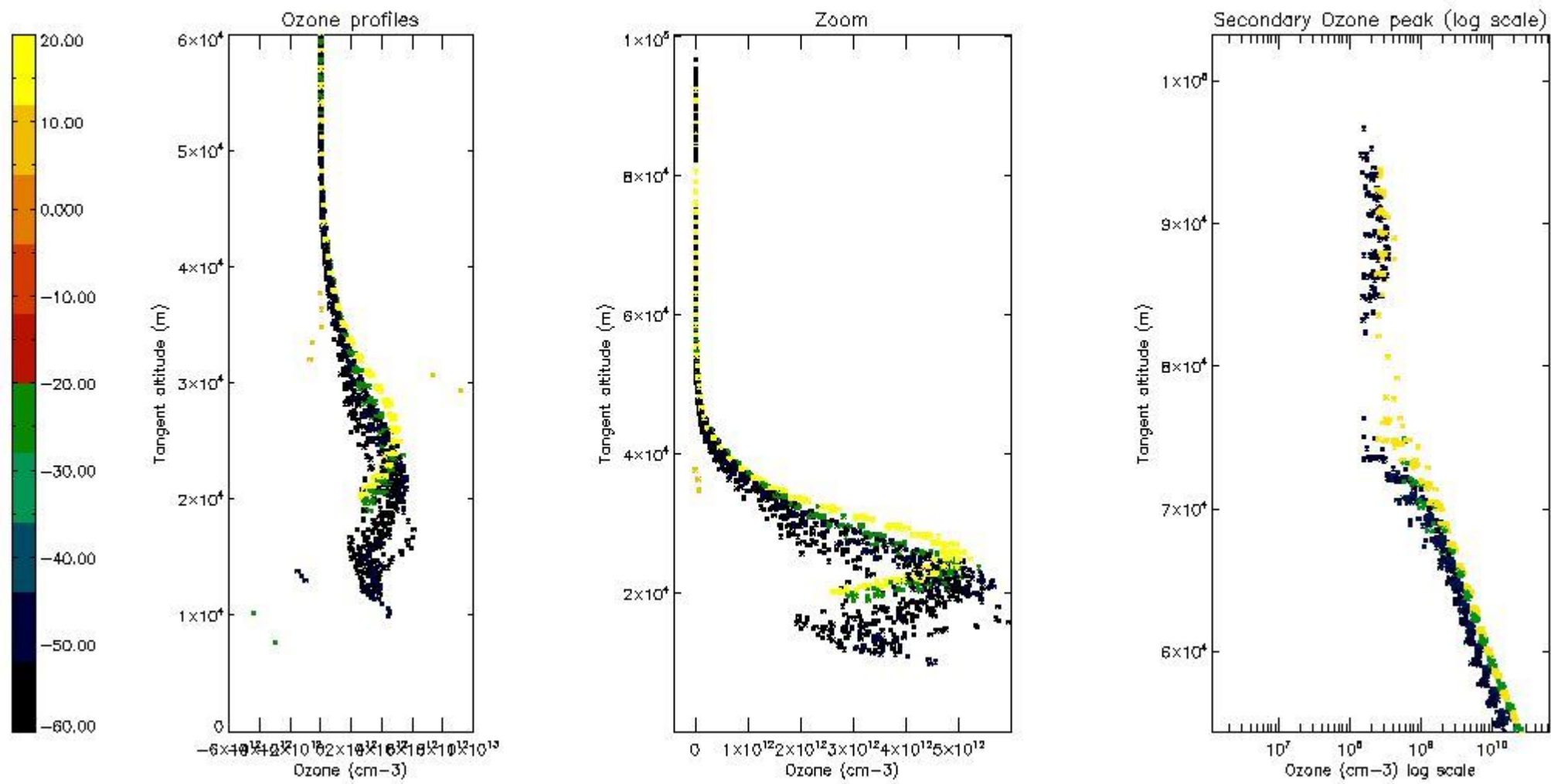
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



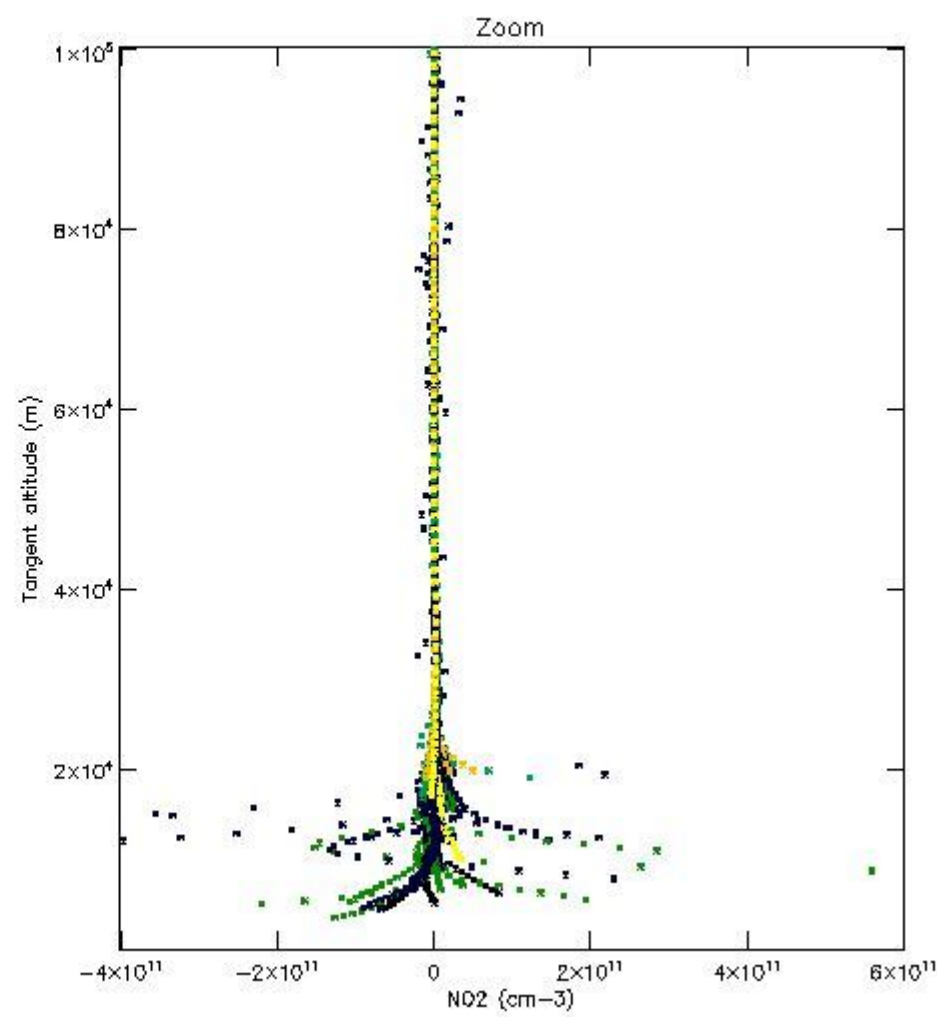
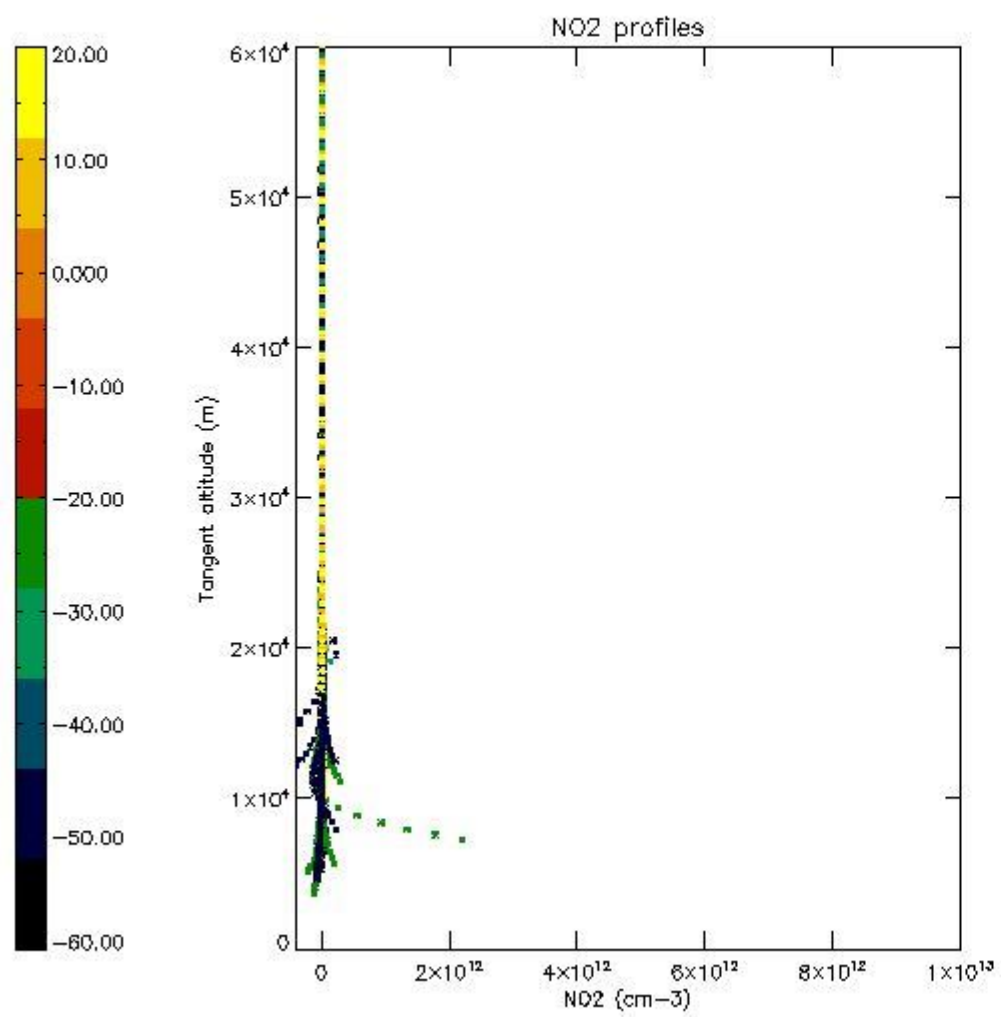
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



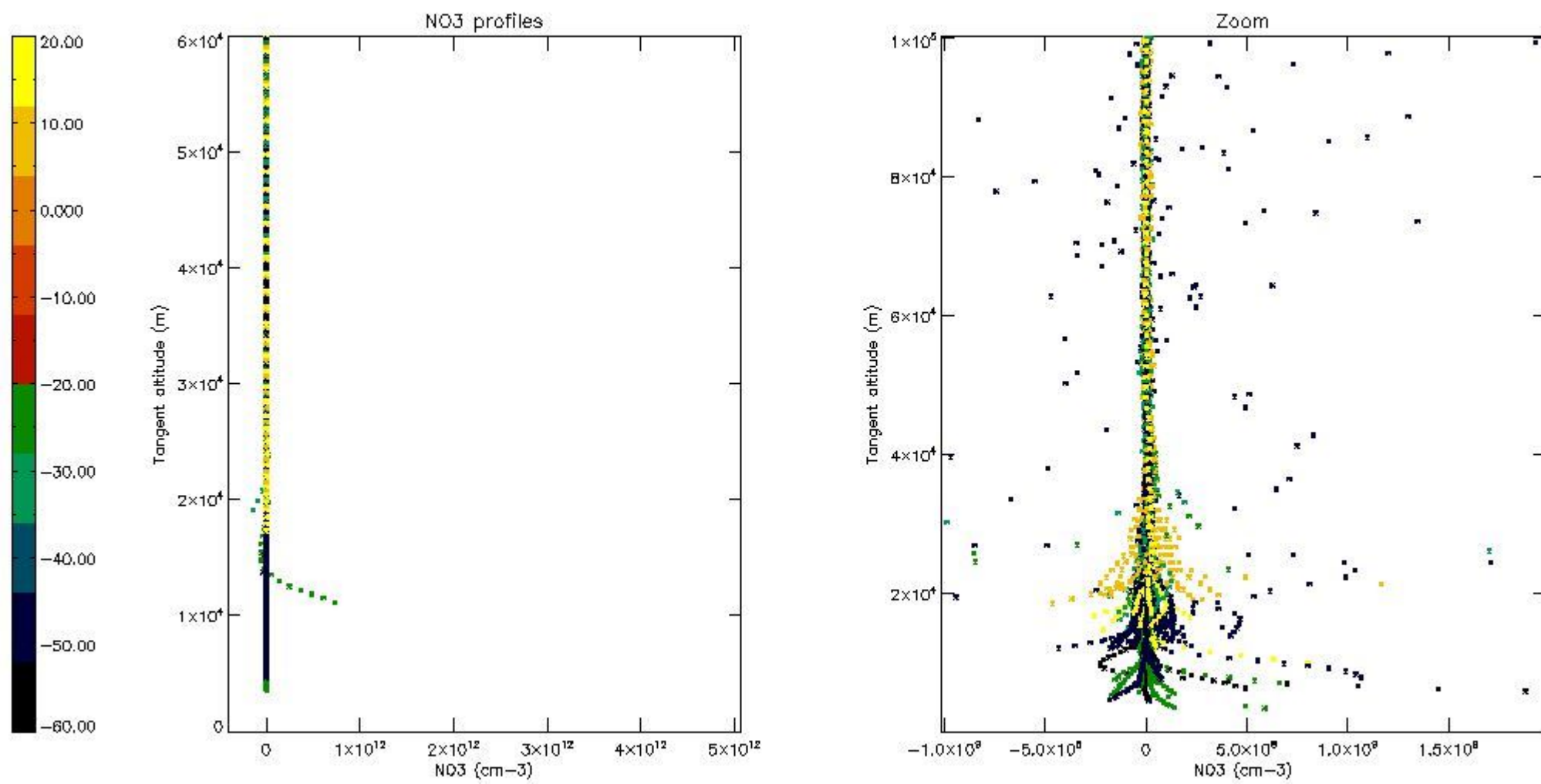
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



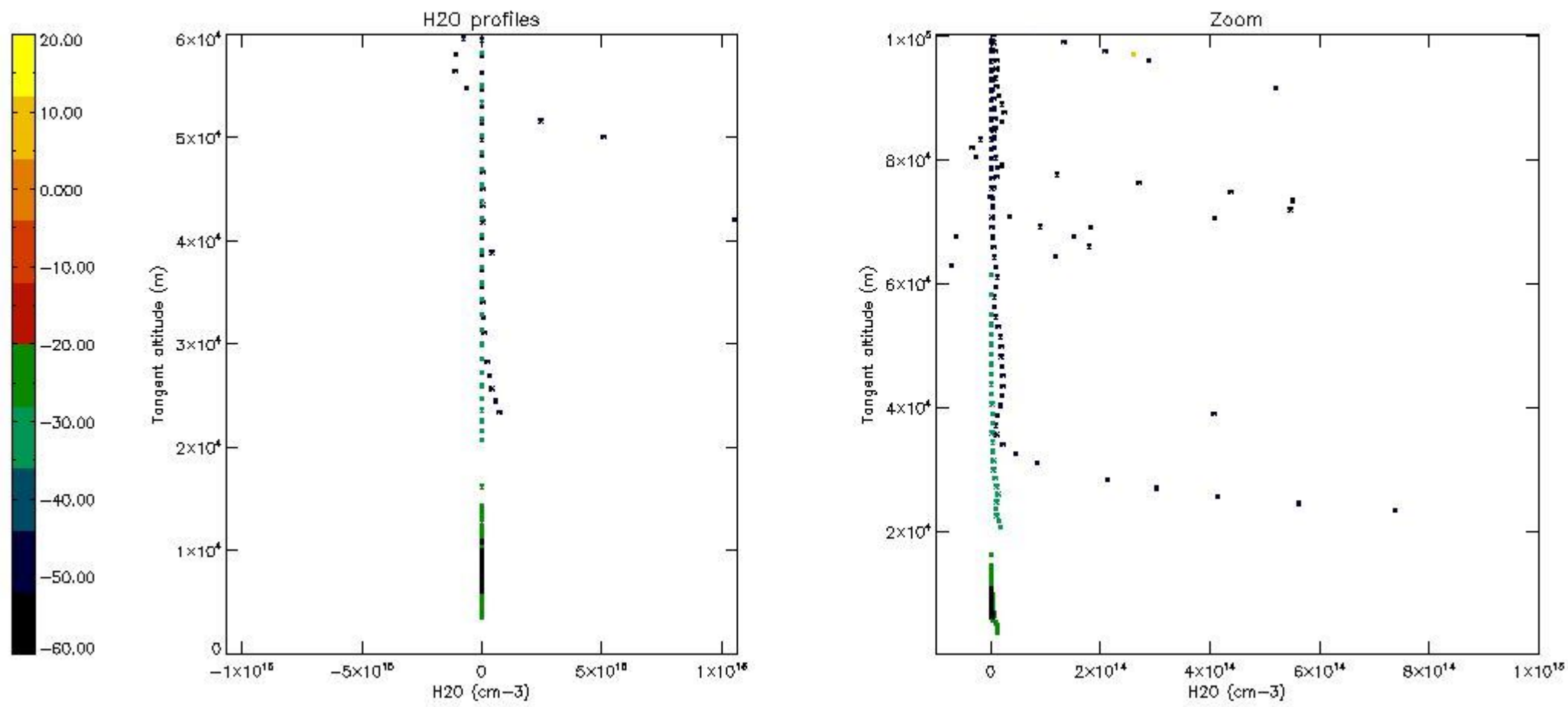
5.7 Plot NO3 profiles for all STD (dark without errors)

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	03-SEP-2008 00:00:10
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	03-SEP-2008 00:00:10
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	03-SEP-2008 00:00:10

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[5. Ozone profiles based on quality statistics and other trace gas profiles](#)

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[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 19:35:30
Data source version	GOMOS/6.01
Start time of products	03-09-2008 (03SEP2008 00:00:00)
Stop time of products	04-09-2008 (04SEP2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	282
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

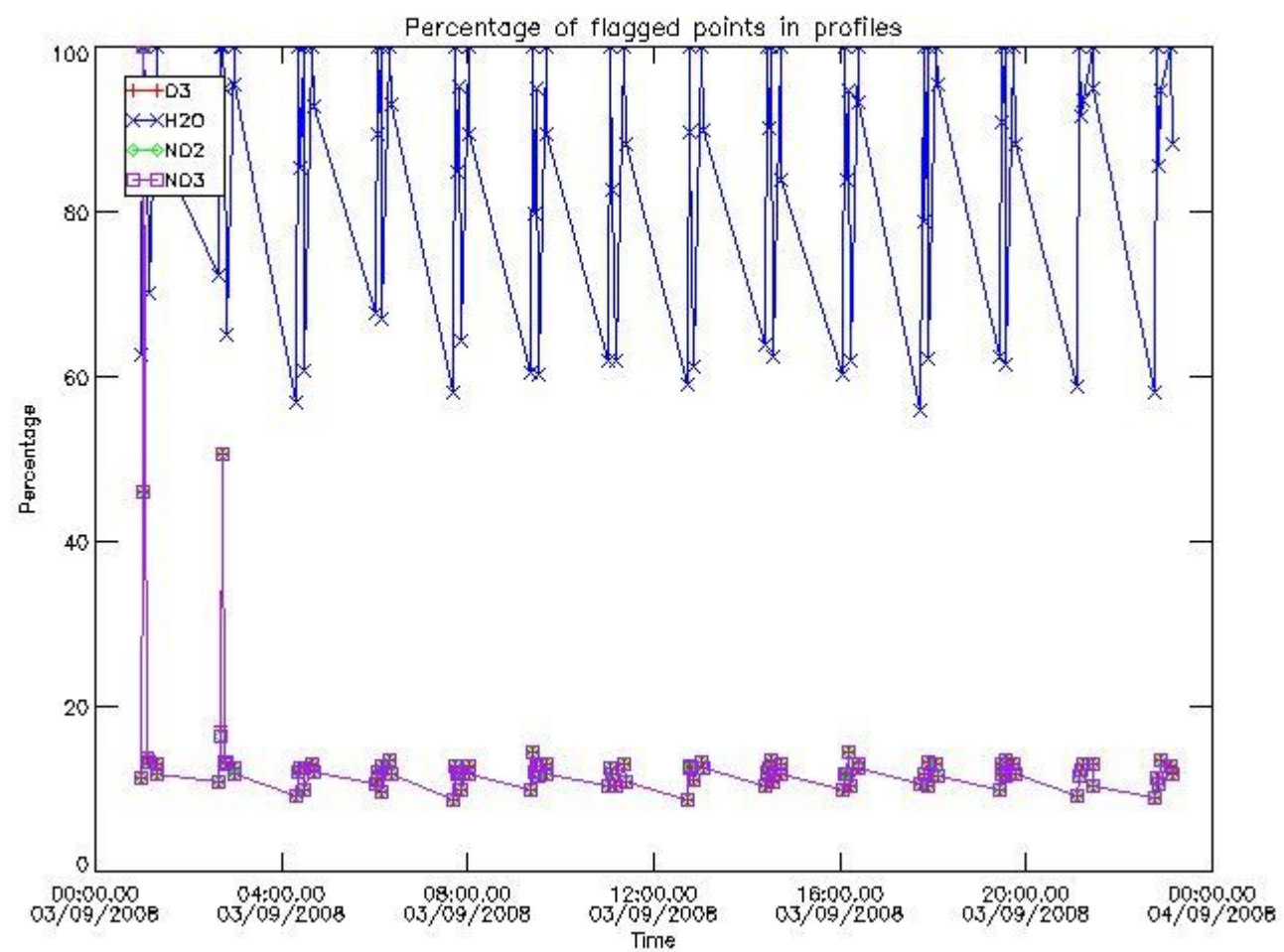
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080903_000010_000000402071_00417_34038_2025.N1	03-SEP-2008 00:00:10	Bright	39.500	162	34Alp Aqr	2.9440	5350.0	79	34038	No
2	GOM_NL__2PRFIN20080903_000309_000000392071_00417_34038_2026.N1	03-SEP-2008 00:03:09	Bright	38.500	61	8Eps Peg	2.1000	3900.0	77	34038	No
3	GOM_NL__2PRFIN20080903_001004_000000342071_00417_34038_2027.N1	03-SEP-2008 00:10:04	Bright	34.000	92	53Eps Cyg	2.5000	4500.0	68	34038	No
4	GOM_NL__2PRFIN20080903_001314_000000362071_00417_34038_2028.N1	03-SEP-2008 00:13:14	Bright	36.000	19	50Alp Cyg	1.2460	10500.	72	34038	No
5	GOM_NL__2PRFIN20080903_001807_000000342071_00417_34038_2029.N1	03-SEP-2008 00:18:07	Bright	33.500	89	5Alp Cep	2.4510	8000.0	67	34038	No
6	GOM_NL__2PRFIN20080903_002549_000000332071_00417_34038_2030.N1	03-SEP-2008 00:25:49	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	34038	No
7	GOM_NL__2PRFIN20080903_004251_000000372071_00417_34038_2031.N1	03-SEP-2008 00:42:51	Bright	37.000	24	66Alp Gem	1.5800	10200.	74	34038	No
8	GOM_NL__2PRFIN20080903_005040_000000402071_00417_34038_2032.N1	03-SEP-2008 00:50:40	Twilight	40.000	8	10Alp CMi	0.40000	6500.0	80	34038	No
9	GOM_NL__2PRFIN20080903_005830_000000582071_00417_34038_2033.N1	03-SEP-2008 00:58:30	Dark	58.000	1	9Alp CMa	-1.4400	11000.	116	34038	No
10	GOM_NL__2PRFIN20080903_010112_000000452071_00417_34038_2034.N1	03-SEP-2008 01:01:12	Dark	45.000	23	21Eps CMa	1.5020	26000.	90	34038	No
11	GOM_NL__2PRFIN20080903_010242_000000442071_00417_34038_2035.N1	03-SEP-2008 01:02:42	Dark	44.000	117	Pi Pup	2.7060	3800.0	88	34038	No
12	GOM_NL__2PRFIN20080903_010644_000000372071_00417_34038_2036.N1	03-SEP-2008 01:06:44	Dark	37.000	161	Tau Pup	2.9310	4500.0	74	34038	No
13	GOM_NL__2PRFIN20080903_010754_000000542071_00417_34038_2037.N1	03-SEP-2008 01:07:54	Dark	54.000	2	Alp Car	-0.73600	7000.0	108	34038	No
14	GOM_NL__2PRFIN20080903_011816_000000392071_00418_34039_2054.N1	03-SEP-2008 01:18:16	Dark	39.000	143	Alp Hyi	2.8570	7200.0	78	34039	No
15	GOM_NL__2PRFIN20080903_011935_000000442071_00418_34039_2055.N1	03-SEP-2008 01:19:35	Dark	43.500	9	Alp Eri	0.45300	24000.	87	34039	No
16	GOM_NL__2PRFIN20080903_012531_000000482071_00418_34039_2056.N1	03-SEP-2008 01:25:31	Straylight	47.500	84	Alp Phe	2.3970	4500.0	95	34039	No
17	GOM_NL__2PRFIN20080903_012723_000000402071_00418_34039_2057.N1	03-SEP-2008 01:27:23	Straylight	40.000	31	Alp Gru	1.7340	15200.	80	34039	No
18	GOM_NL__2PRFIN20080903_013129_000000442071_00418_34039_2058.N1	03-SEP-2008 01:31:29	Straylight	43.500	18	24Alp PsA	1.1660	9700.0	87	34039	No
19	GOM_NL__2PRFIN20080903_013614_000000452071_00418_34039_2059.N1	03-SEP-2008 01:36:14	Bright	44.500	142	49Del Cap	2.8500	8900.0	89	34039	No
20	GOM_NL__2PRFIN20080903_013921_000000382071_00418_34039_2060.N1	03-SEP-2008 01:39:21	Bright	37.500	154	22Bet Aqr	2.8990	5700.0	75	34039	No
21	GOM_NL__2PRFIN20080903_014045_000000402071_00418_34039_2061.N1	03-SEP-2008 01:40:45	Bright	39.500	162	34Alp Aqr	2.9440	5350.0	79	34039	No
22	GOM_NL__2PRFIN20080903_014345_000000382071_00418_34039_2062.N1	03-SEP-2008 01:43:45	Bright	38.000	61	8Eps Peg	2.1000	3900.0	76	34039	No
23	GOM_NL__2PRFIN20080903_015040_000000372071_00418_34039_2063.N1	03-SEP-2008 01:50:40	Bright	36.500	92	53Eps Cyg	2.5000	4500.0	73	34039	No
24	GOM_NL__2PRFIN20080903_015350_000000382071_00418_34039_2064.N1	03-SEP-2008 01:53:50	Bright	37.500	19	50Alp Cyg	1.2460	10500.	75	34039	No
25	GOM_NL__2PRFIN20080903_015843_000000362071_00418_34039_2065.N1	03-SEP-2008 01:58:43	Bright	35.500	89	5Alp Cep	2.4510	8000.0	71	34039	No
26	GOM_NL__2PRFIN20080903_020624_000000332071_00418_34039_2066.N1	03-SEP-2008 02:06:24	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	34039	No
27	GOM_NL__2PRFIN20080903_022327_000000382071_00418_34039_2067.N1	03-SEP-2008 02:23:27	Bright	38.000	24	66Alp Gem	1.5800	10200.	76	34039	No
28	GOM_NL__2PRFIN20080903_023116_000000402071_00418_34039_2068.N1	03-SEP-2008 02:31:16	Twilight	40.000	8	10Alp CMi	0.40000	6500.0	80	34039	No
29	GOM_NL__2PRFIN20080903_023906_000000572071_00418_34039_2069.N1	03-SEP-2008 02:39:06	Dark	56.500	1	9Alp CMa	-1.4400	11000.	113	34039	No
30	GOM_NL__2PRFIN20080903_024148_000000442071_00418_34039_2070.N1	03-SEP-2008 02:41:48	Dark	43.500	23	21Eps CMa	1.5020	26000.	87	34039	No
31	GOM_NL__2PRFIN20080903_024319_000000472071_00418_34039_2071.N1	03-SEP-2008 02:43:19	Dark	47.000	117	Pi Pup	2.7060	3800.0	94	34039	No
32	GOM_NL__2PRFIN20080903_024720_000000402071_00418_34039_2072.N1	03-SEP-2008 02:47:20	Dark	39.500	161	Tau Pup	2.9310	4500.0	79	34039	No
33	GOM_NL__2PRFIN20080903_024830_000000422071_00418_34039_2073.N1	03-SEP-2008 02:48:30	Dark	42.000	2	Alp Car	-0.73600	7000.0	84	34039	No
34	GOM_NL__2PRFIN20080903_025852_000000412071_00419_34040_2068.N1	03-SEP-2008 02:58:52	Dark	40.500	143	Alp Hyi	2.8570	7200.0	81	34040	No
35	GOM_NL__2PRFIN20080903_030011_000000442071_00419_34040_2069.N1	03-SEP-2008 03:00:11	Dark	43.500	9	Alp Eri	0.45300	24000.	87	34040	No
36	GOM_NL__2PRFIN20080903_030608_000000522071_00419_34040_2070.N1	03-SEP-2008 03:06:08	Straylight	51.500	84	Alp Phe	2.3970	4500.0	103	34040	No
37	GOM_NL__2PRFIN20080903_030759_000000382071_00419_34040_2071.N1	03-SEP-2008 03:07:59	Straylight	38.000	31	Alp Gru	1.7340	15200.	76	34040	No
38	GOM_NL__2PRFIN20080903_031205_000000482071_00419_34040_2072.N1	03-SEP-2008 03:12:05	Straylight	48.000	18	24Alp PsA	1.1660	9700.0	96	34040	No
39	GOM_NL__2PRFIN20080903_031650_000000402071_00419_34040_2073.N1	03-SEP-2008 03:16:50	Bright	40.000	142	49Del Cap	2.8500	8900.0	80	34040	No
40	GOM_NL__2PRFIN20080903_031957_000000372071_00419_34040_2074.N1	03-SEP-2008 03:19:57	Bright	37.000	154	22Bet Aqr	2.8990	5700.0	74	34040	No
41	GOM_NL__2PRFIN20080903_032122_000000392071_00419_34040_2075.N1	03-SEP-2008 03:21:22	Bright	38.500	162	34Alp Aqr	2.9440	5350.0	77	34040	No
42	GOM_NL__2PRFIN20080903_032421_000000382071_00419_34040_2076.N1	03-SEP-2008 03:24:21	Bright	37.500	61	8Eps Peg	2.1000	3900.0	75	34040	No

279	GOM_NL__2PRFIN20080903_233829_000000342071_00431_34052_2371.N1	03-SEP-2008 23:38:29	Bright	34.000	92	53Eps Cyg	2.5000	4500.0	68	34052	No
280	GOM_NL__2PRFIN20080903_234138_000000372071_00431_34052_2372.N1	03-SEP-2008 23:41:38	Bright	37.000	19	50Alp Cyg	1.2460	10500.	74	34052	No
281	GOM_NL__2PRFIN20080903_234629_000000362071_00431_34052_2373.N1	03-SEP-2008 23:46:29	Bright	35.500	89	5Alp Cep	2.4510	8000.0	71	34052	No
282	GOM_NL__2PRFIN20080903_235411_000000362071_00431_34052_2374.N1	03-SEP-2008 23:54:11	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	34052	No

3. Quality information per product

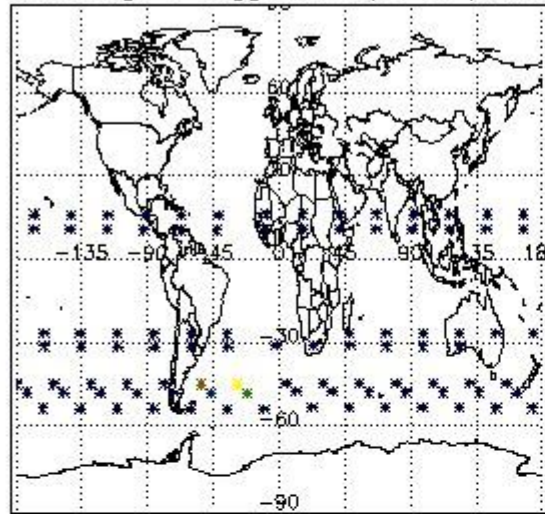
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

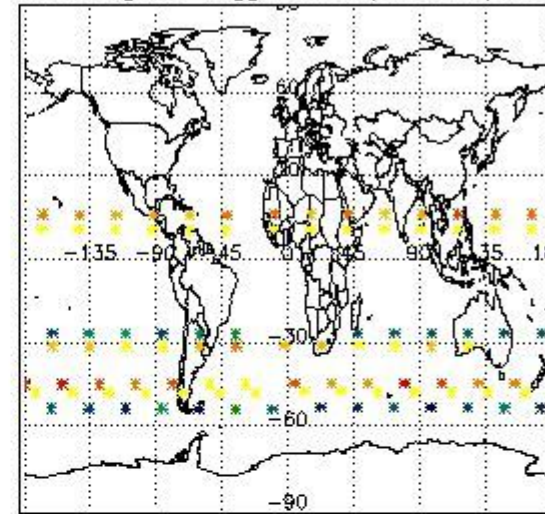


3.2 Plot quality information per product (world map)

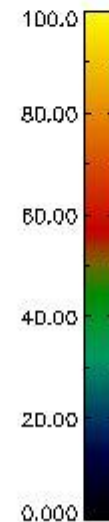
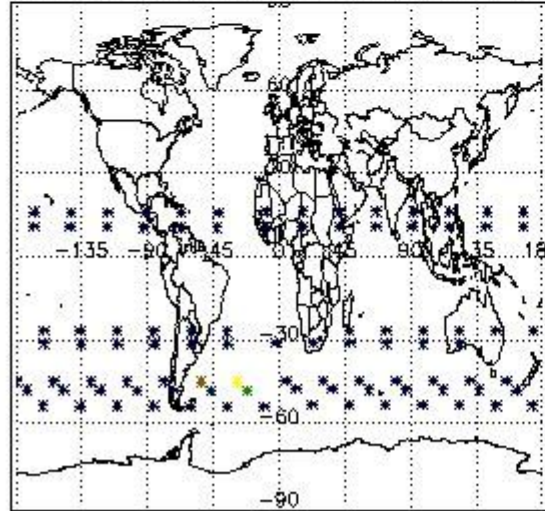
Percentage of flagged data per O3 profile



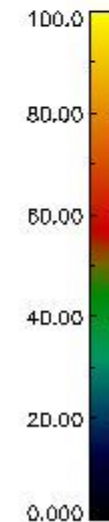
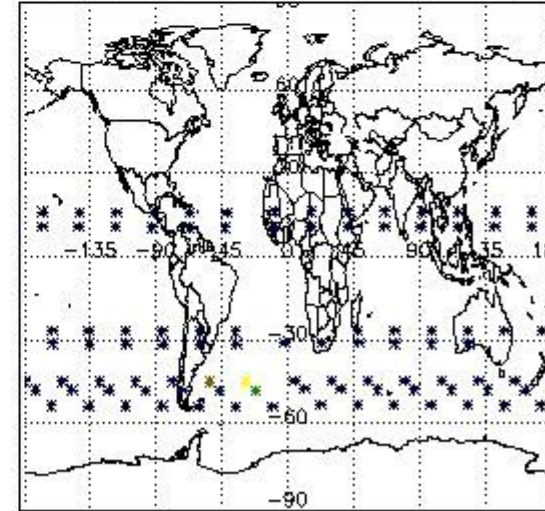
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

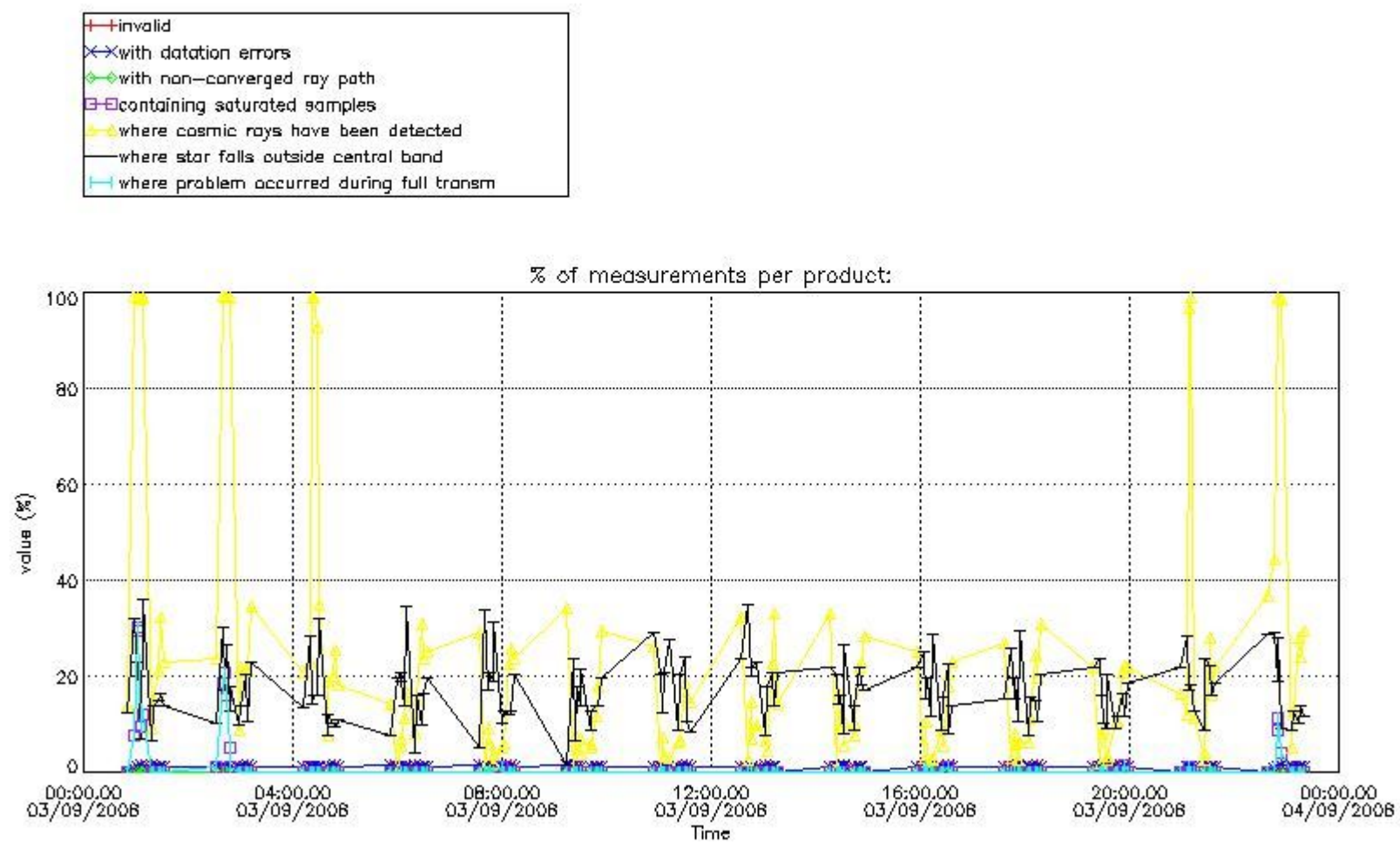


4. Level 1 quality information per product

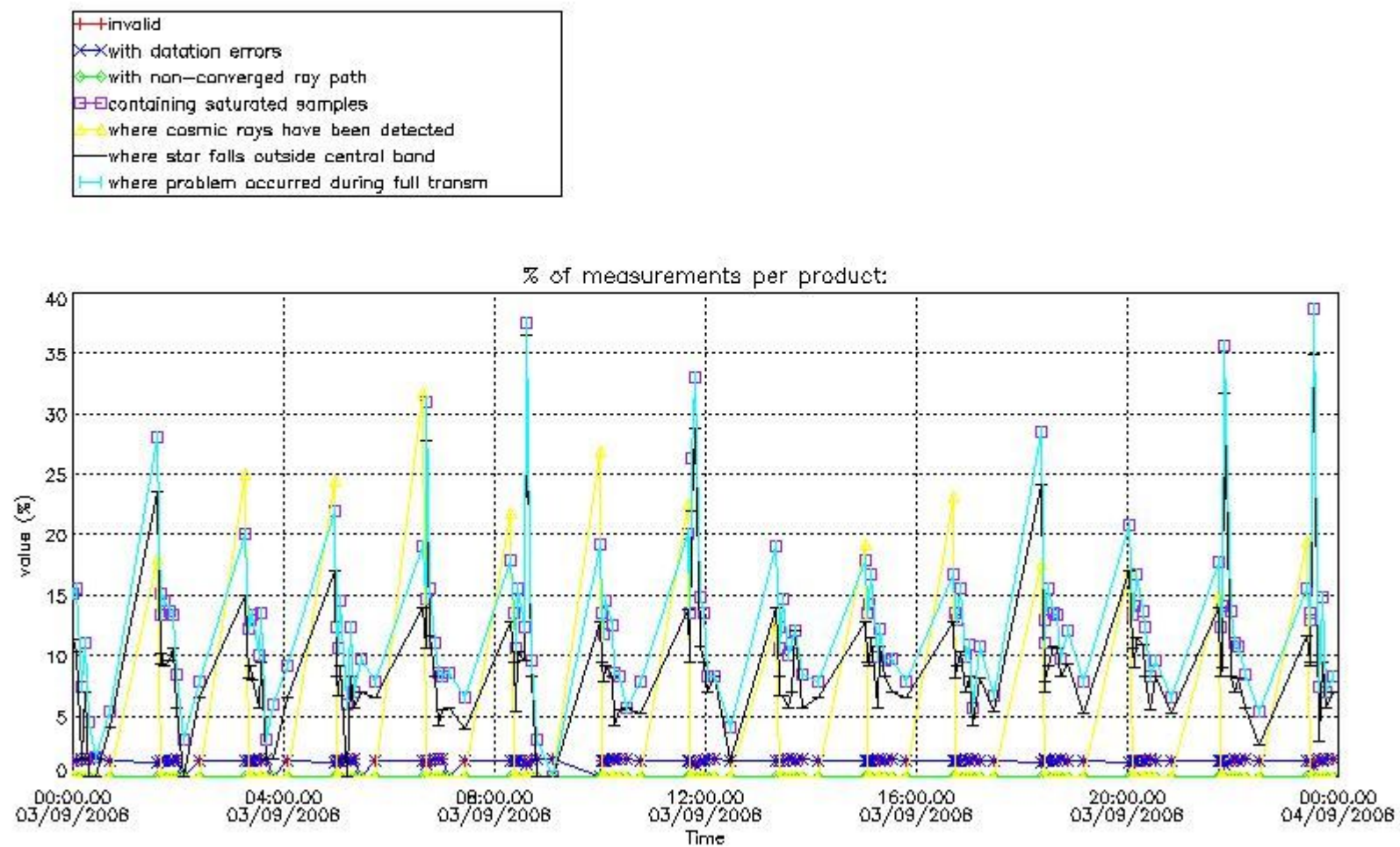
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



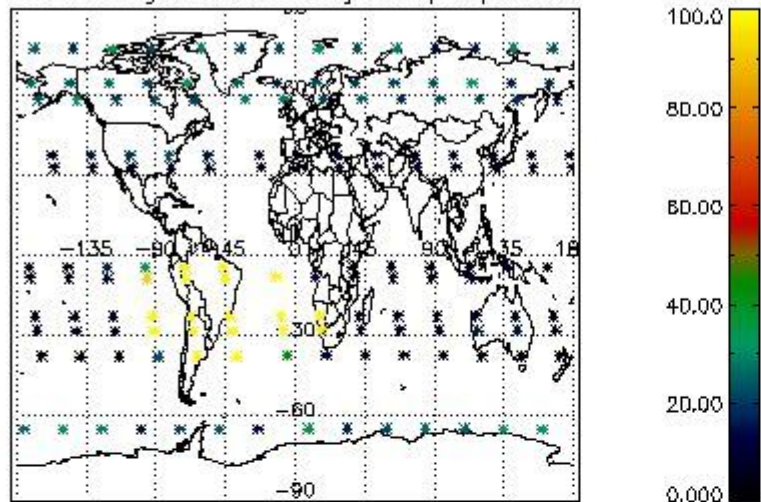
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



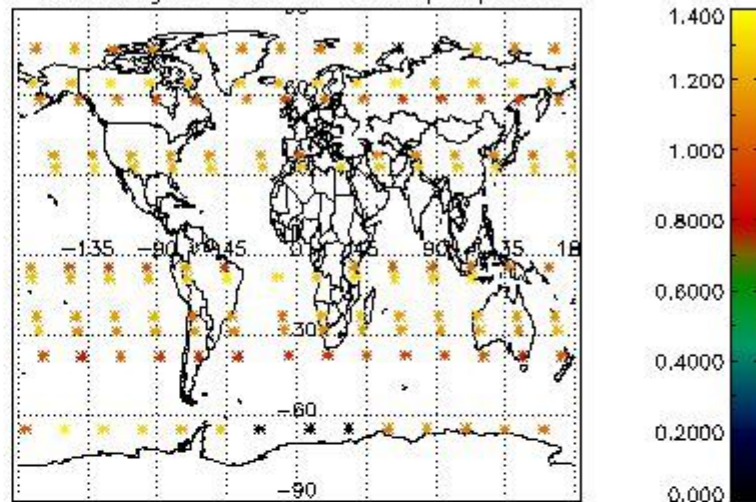
4.2 Plot quality information per product coming from level 1b processing (world map)

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

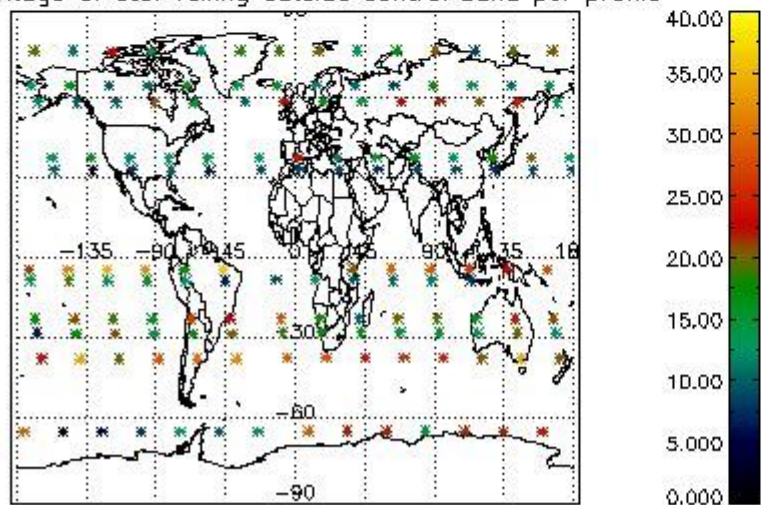
Percentage of cosmic ray hits per profile



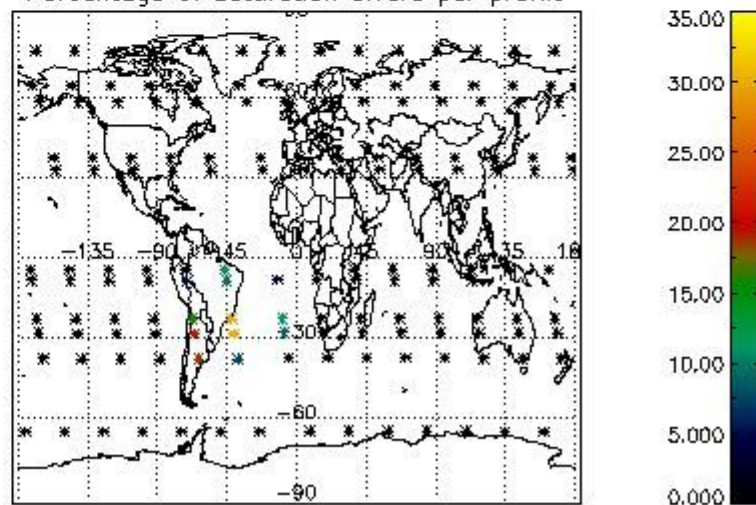
Percentage of datation errors per profile



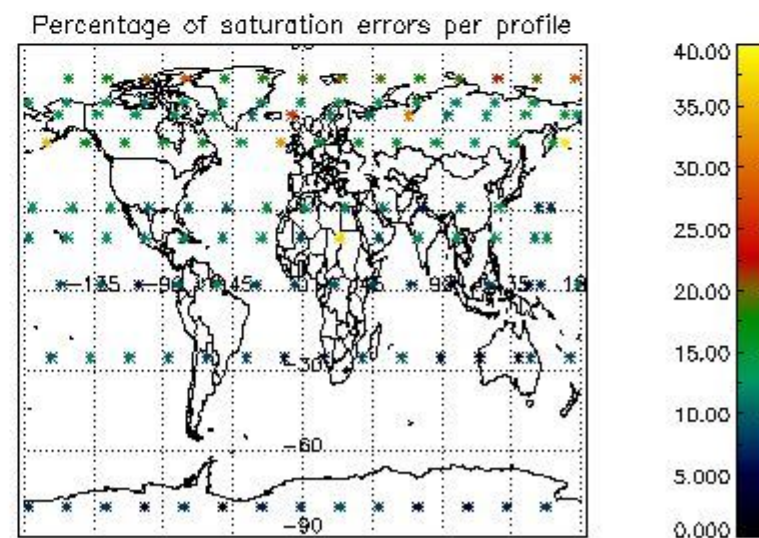
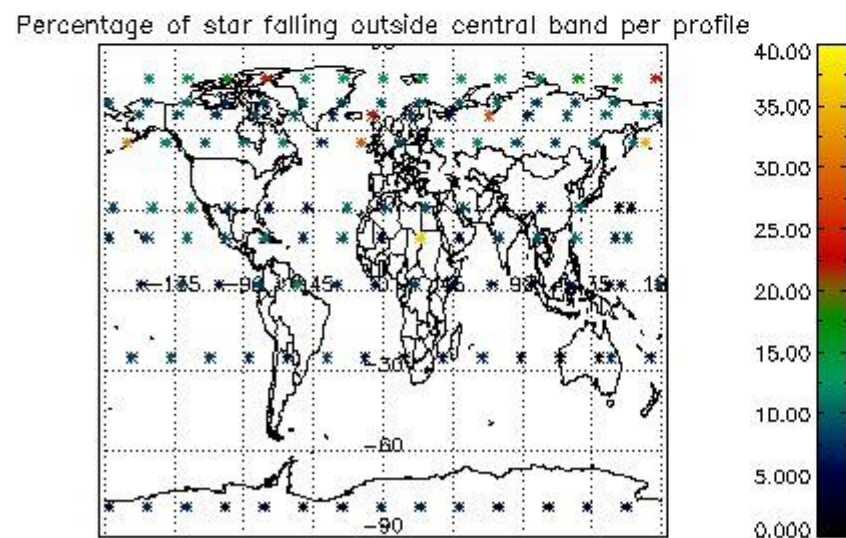
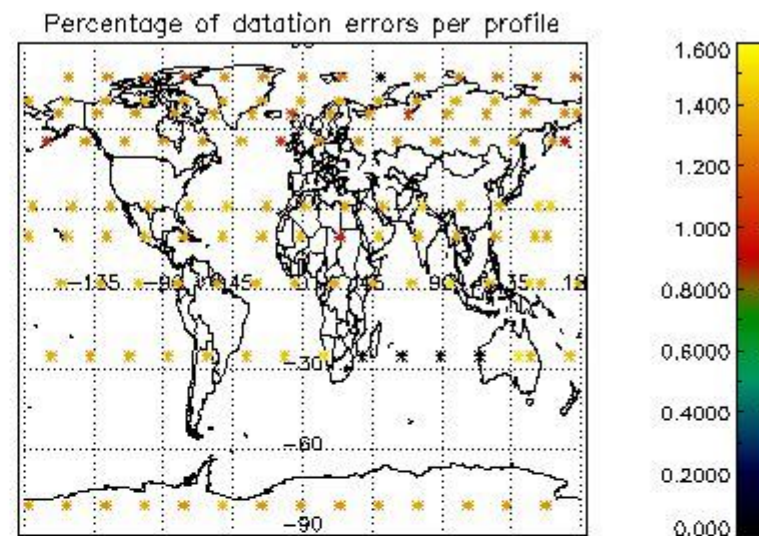
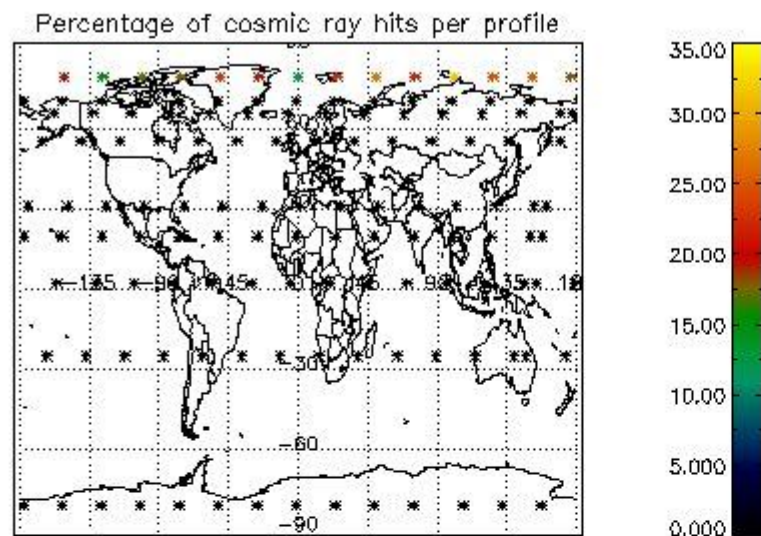
Percentage of star falling outside central band per profile



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

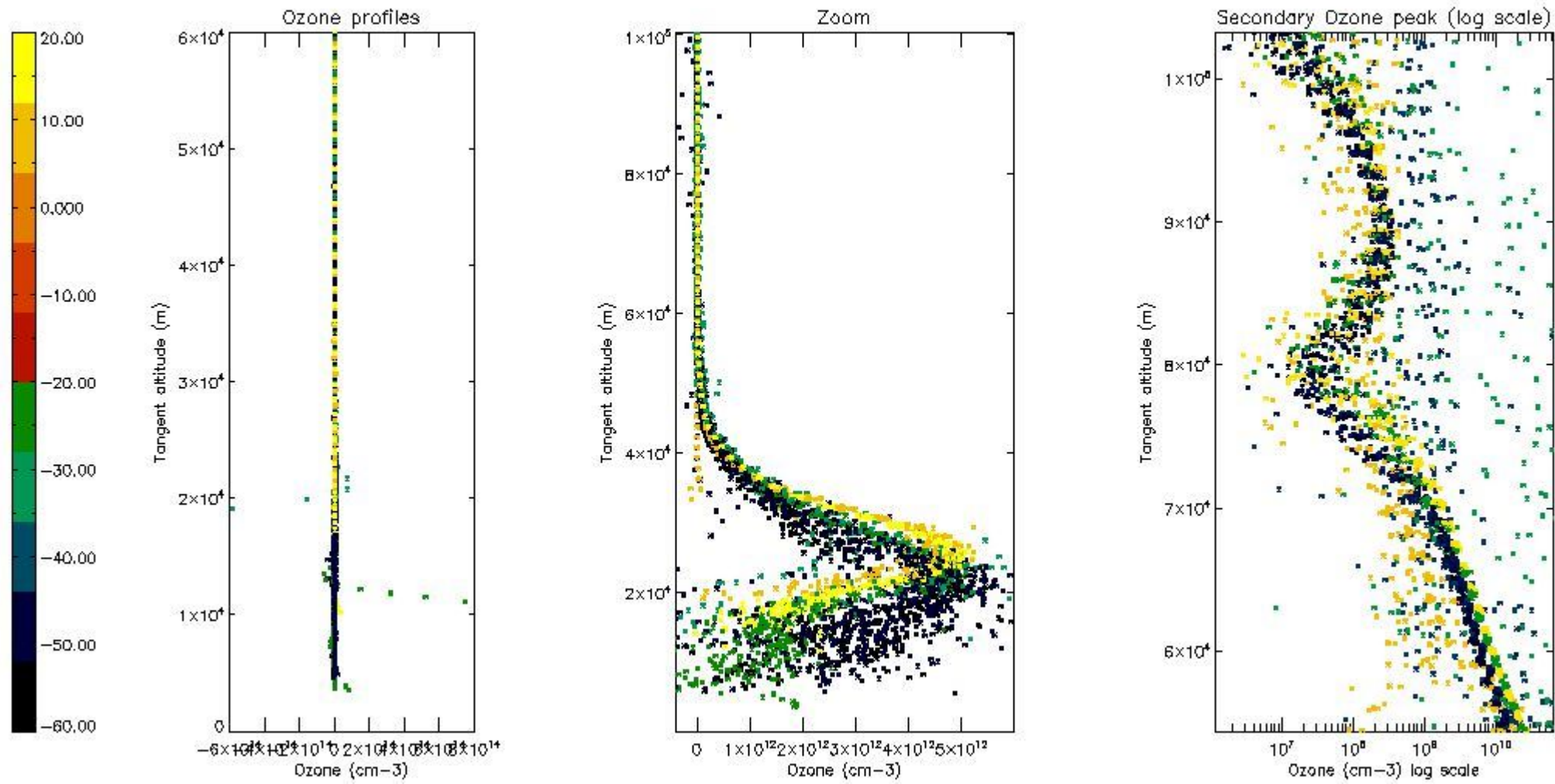
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	20

STD < 10	16
STD < 5	12

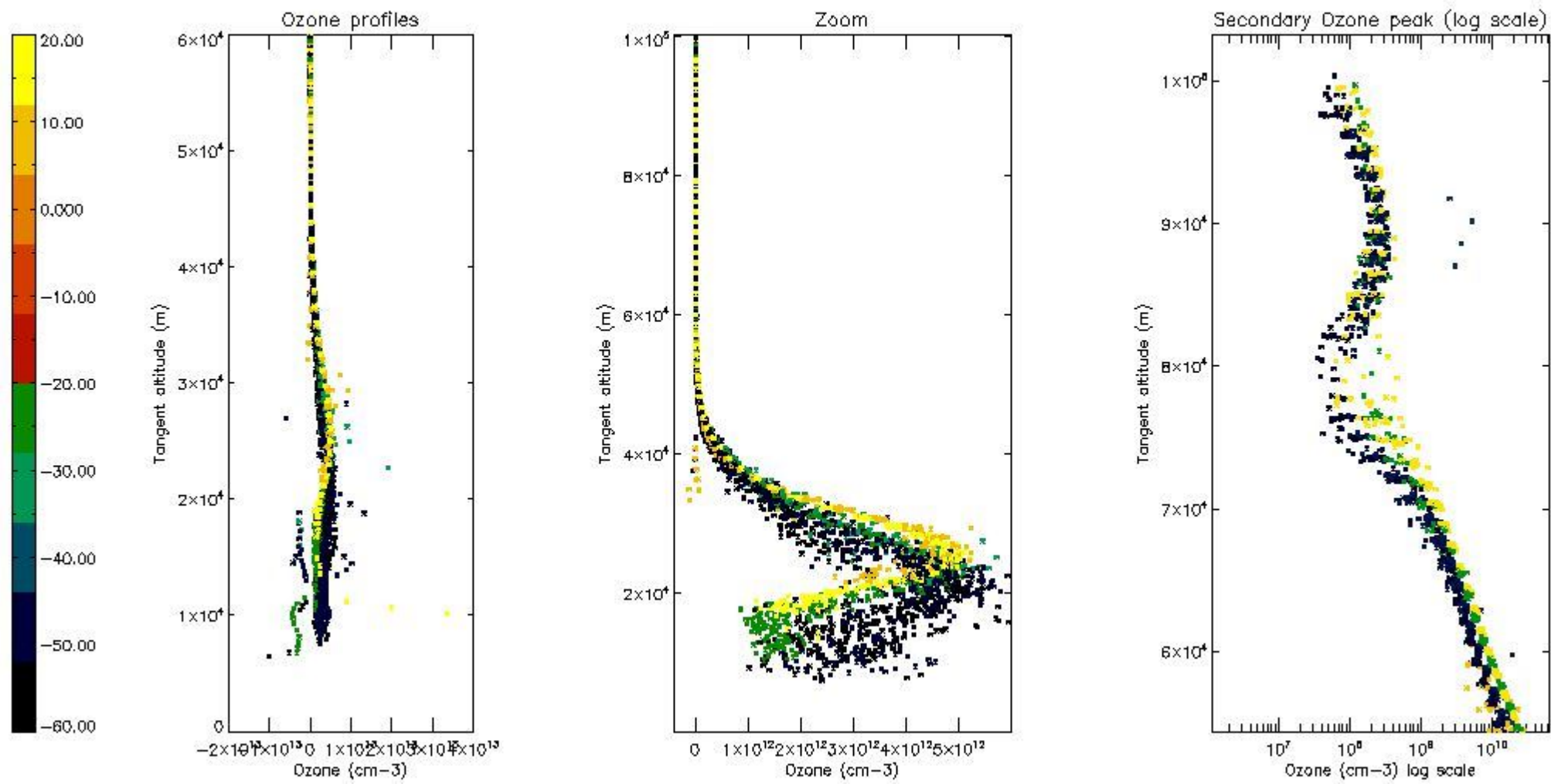
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



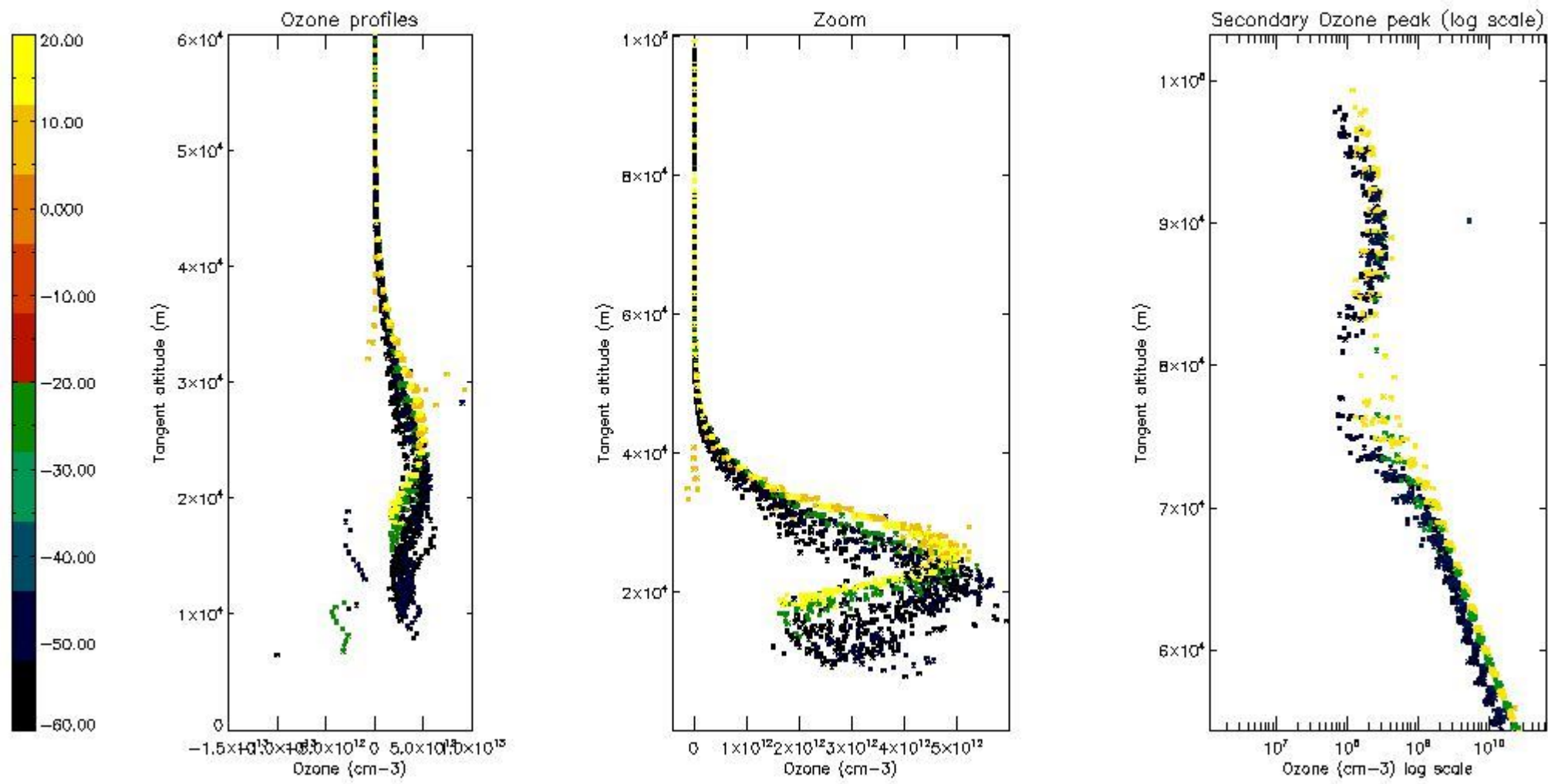
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



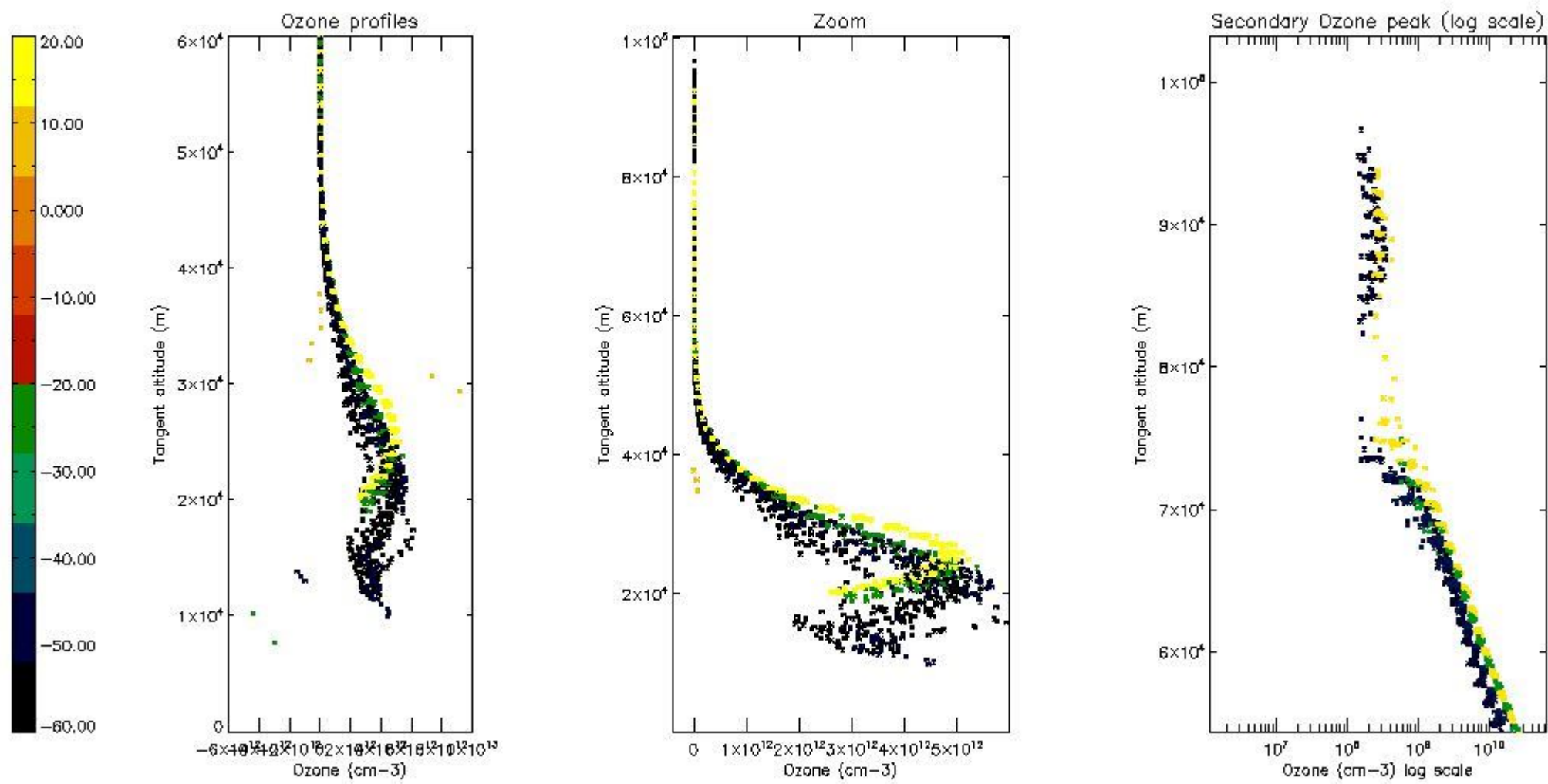
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



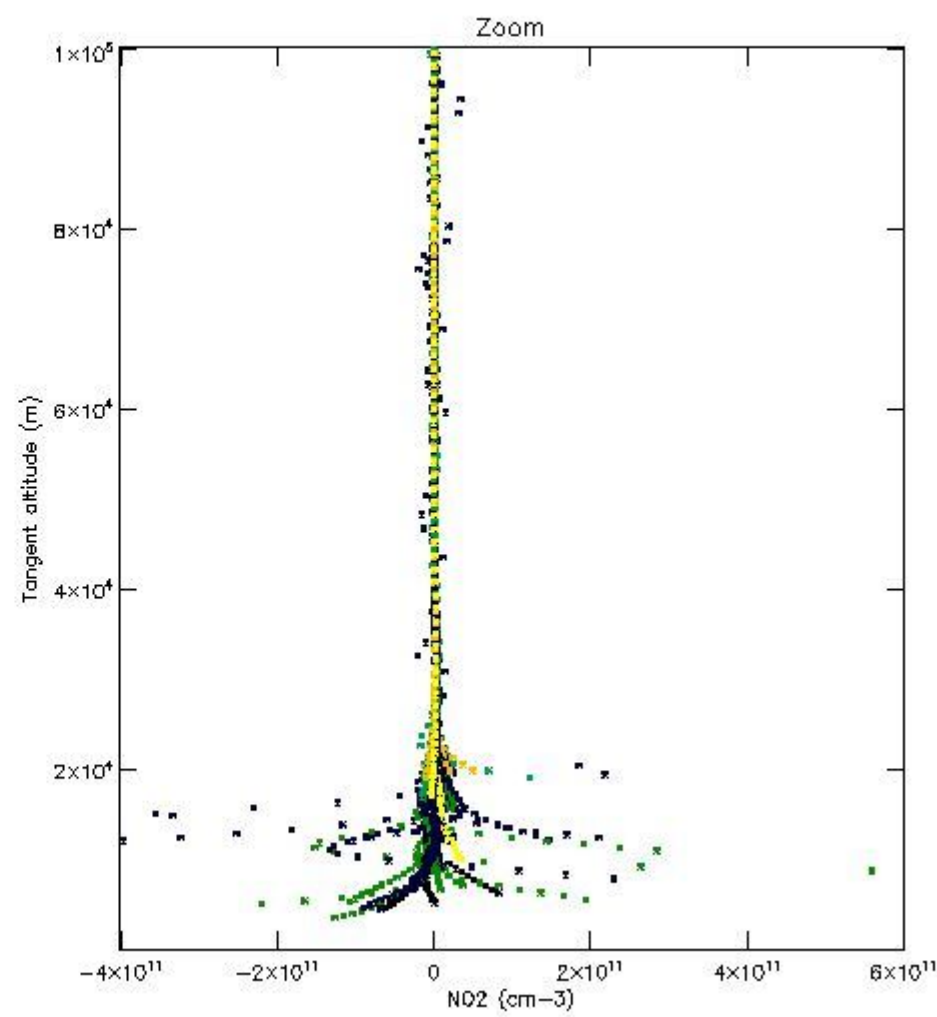
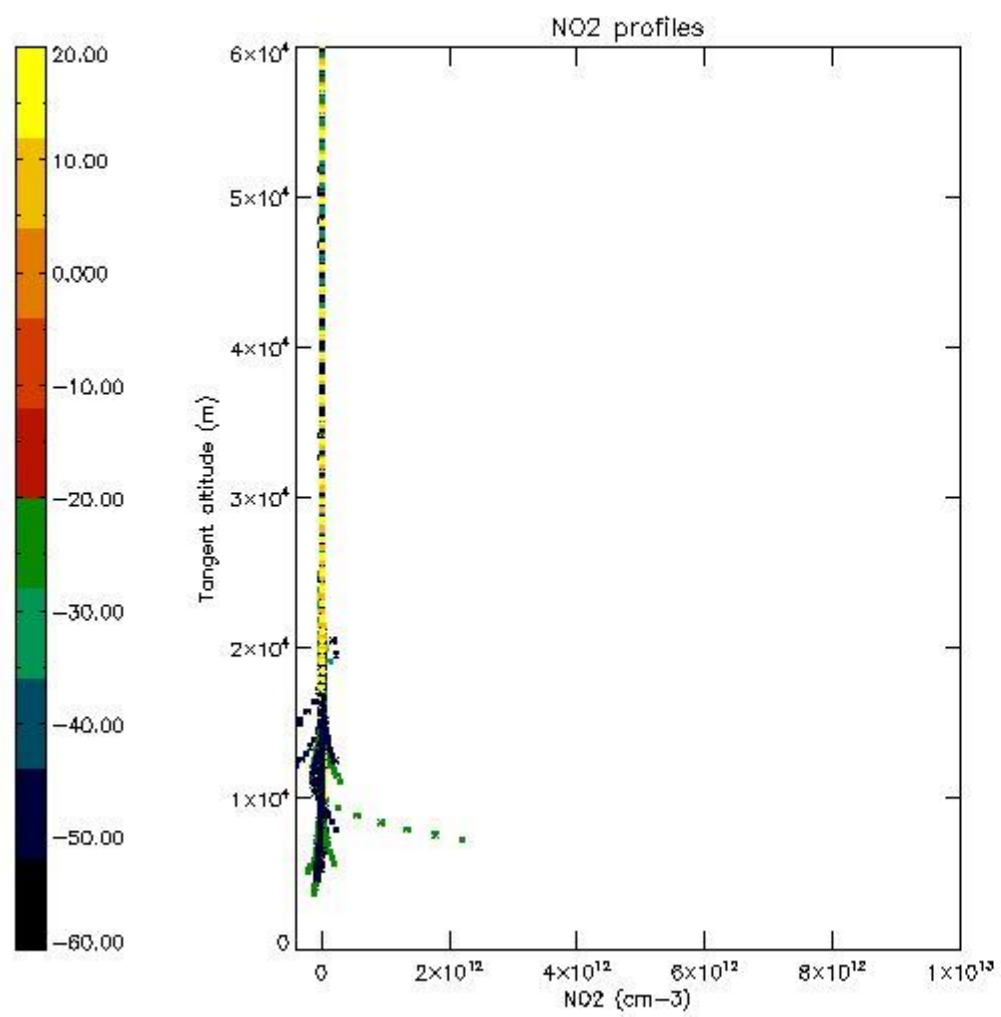
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



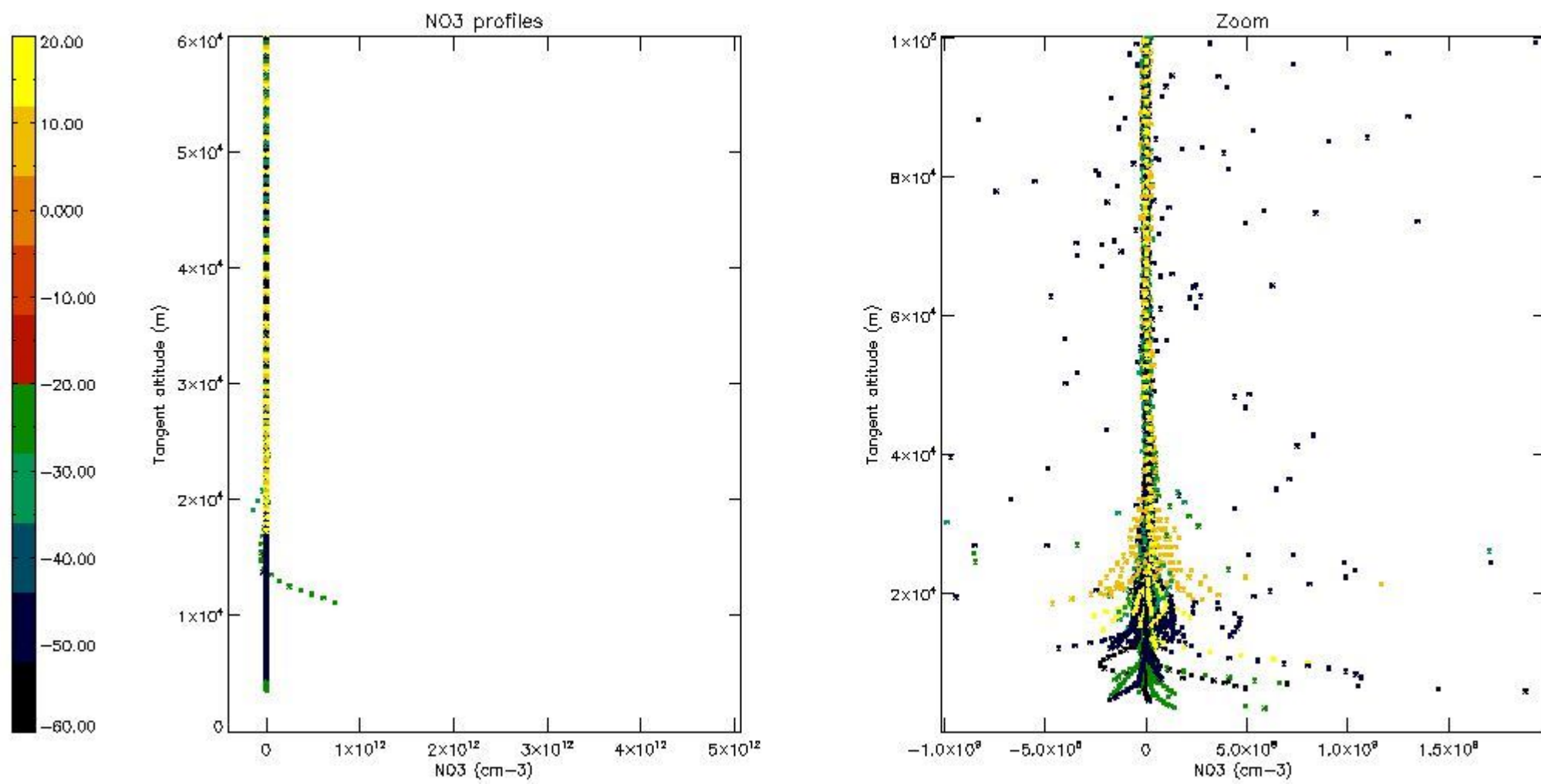
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



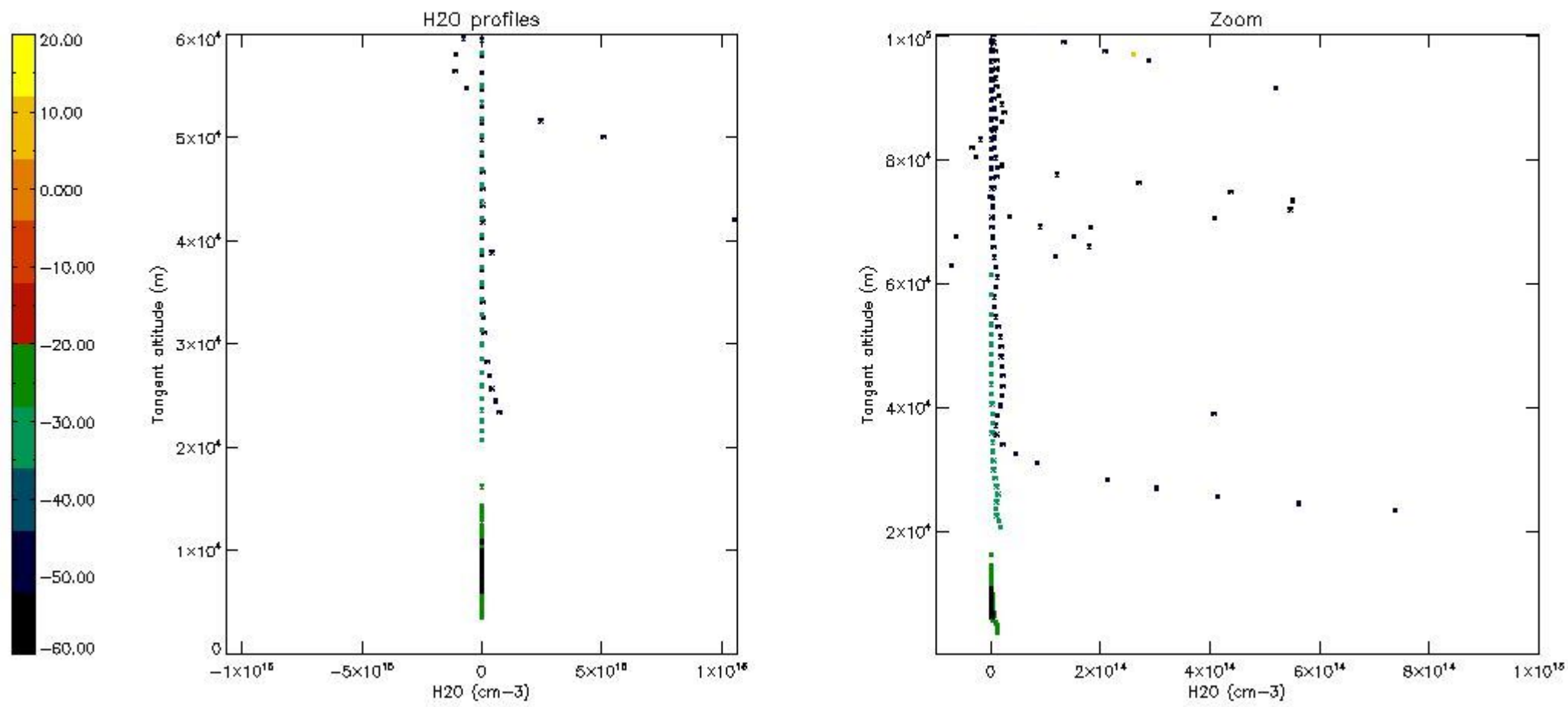
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

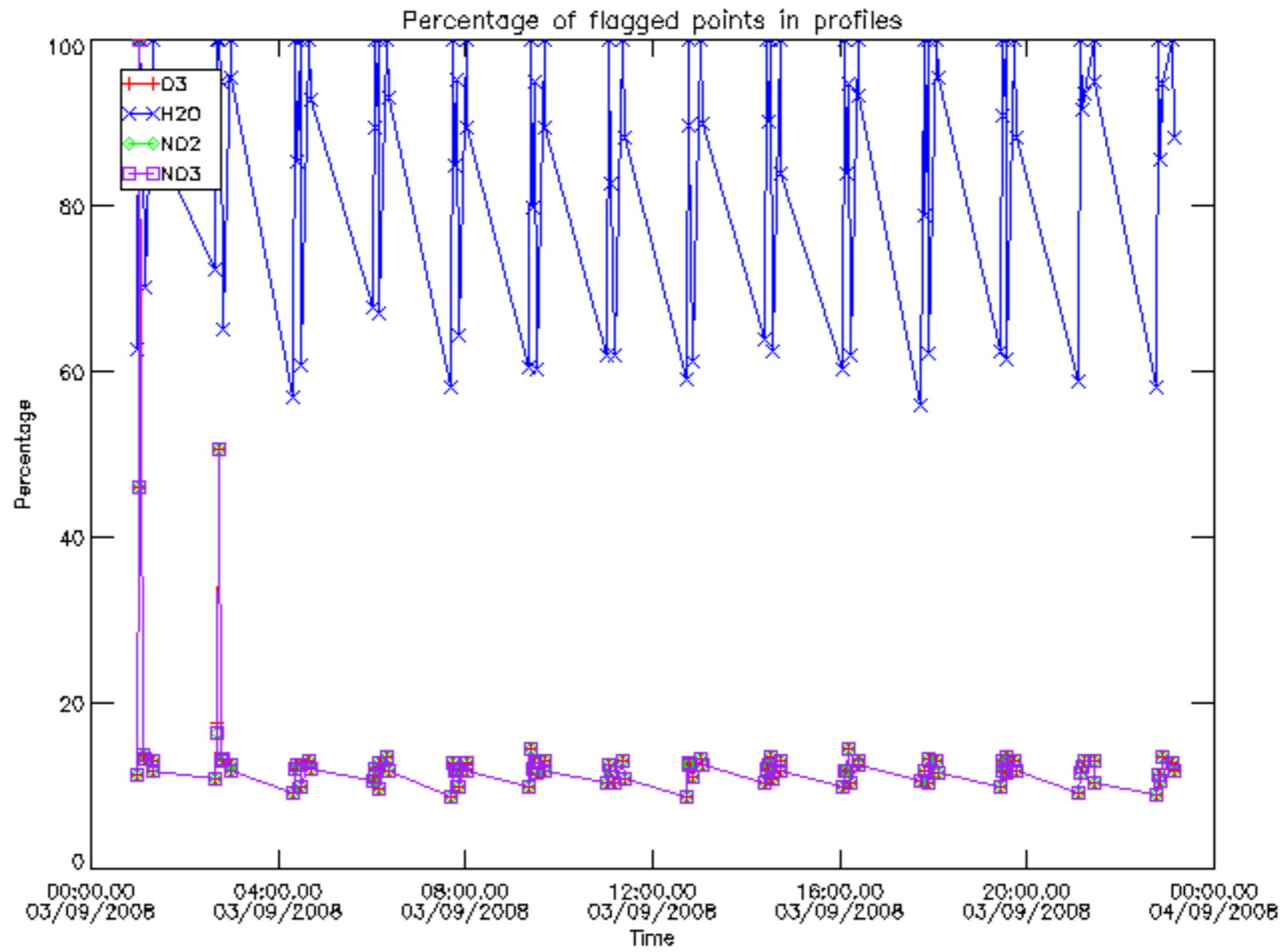
The colorbar represents the latitude.



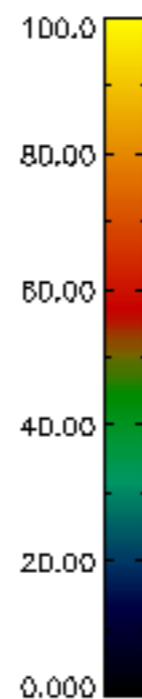
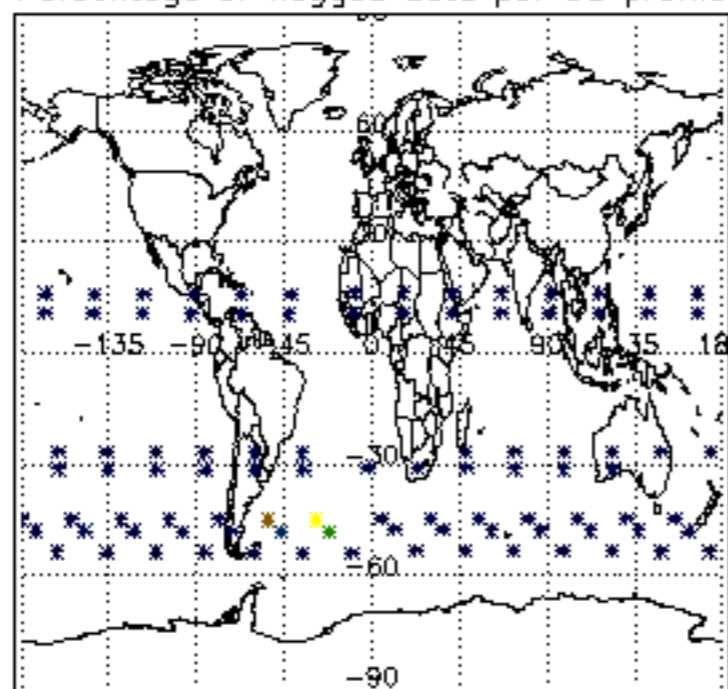
6. Auxiliary Data Files used for the production reported in section 2

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.

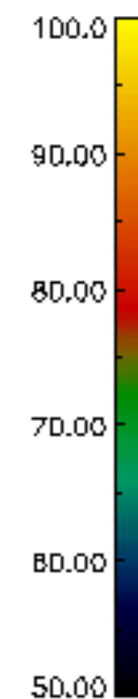
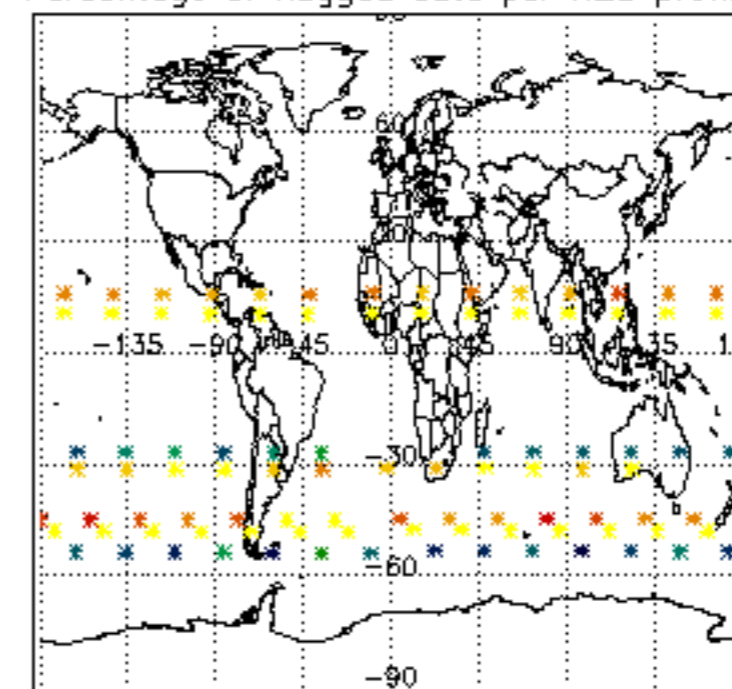
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	03-SEP-2008 00:00:10
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	03-SEP-2008 00:00:10
CROSS_SECTIONS_FILE	GOM_CR2_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	03-SEP-2008 00:00:10



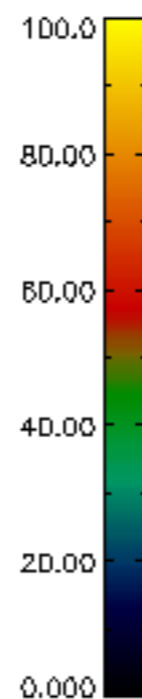
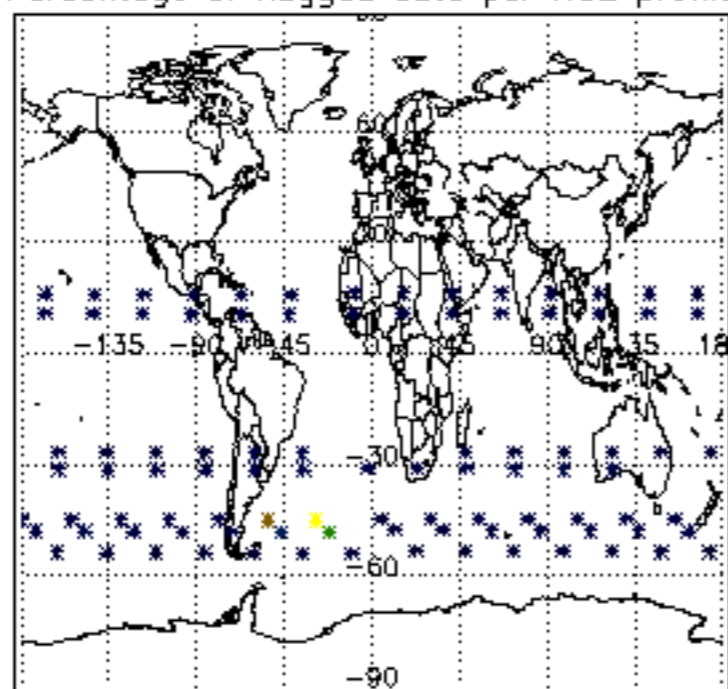
Percentage of flagged data per D3 profile



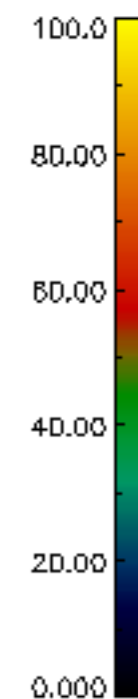
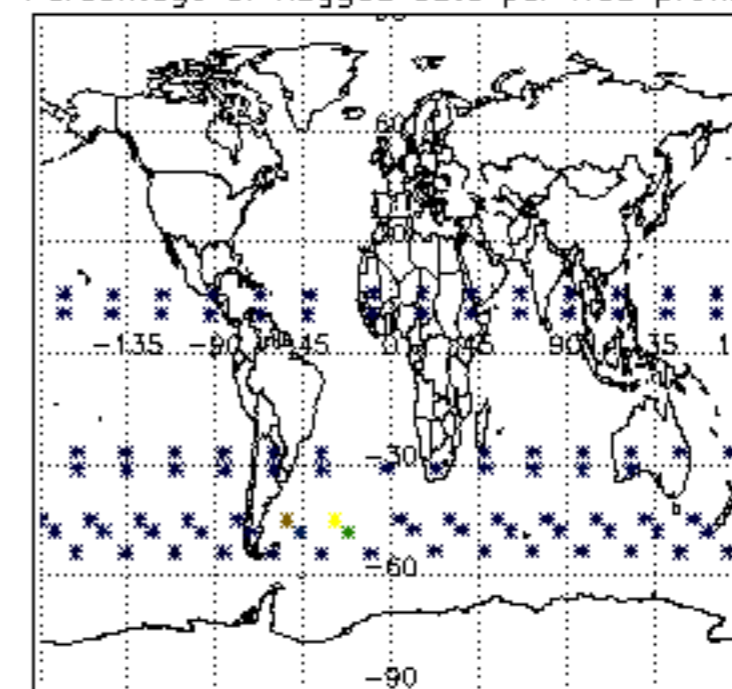
Percentage of flagged data per H2O profile

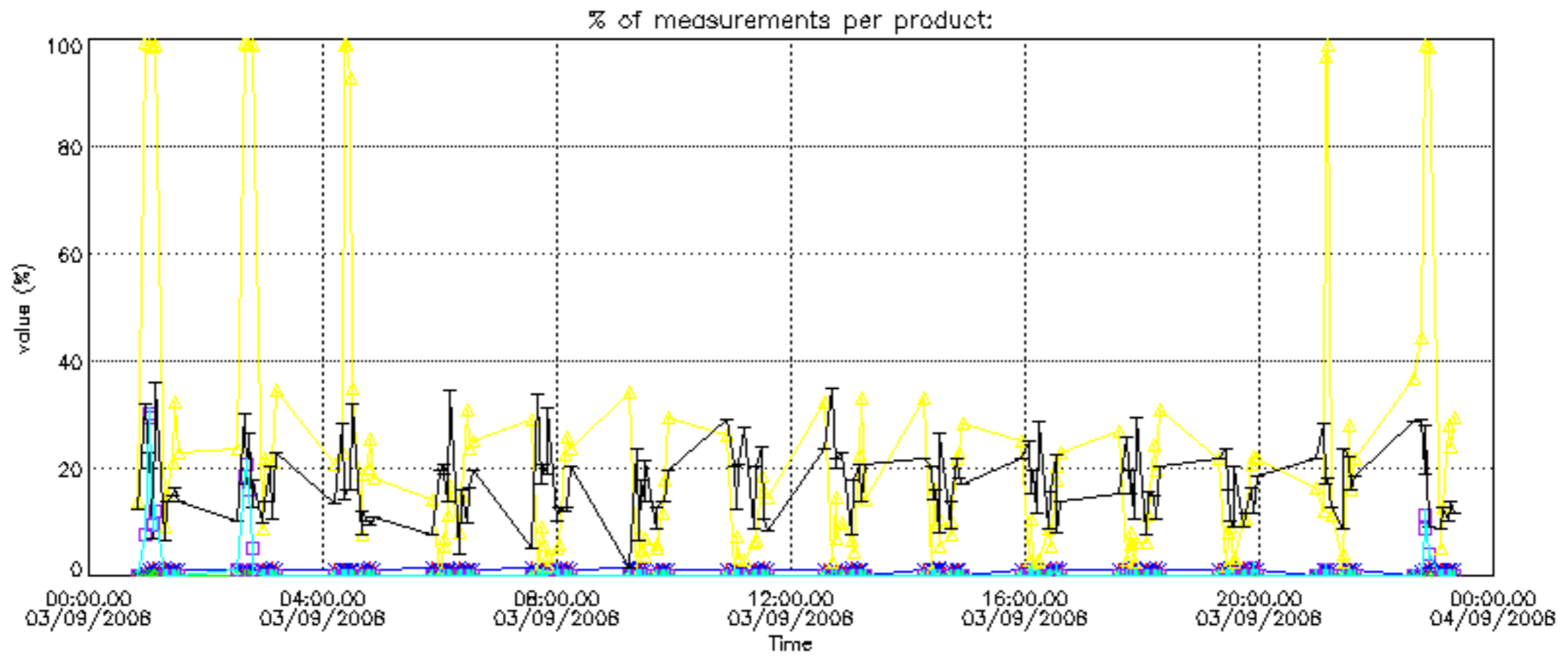


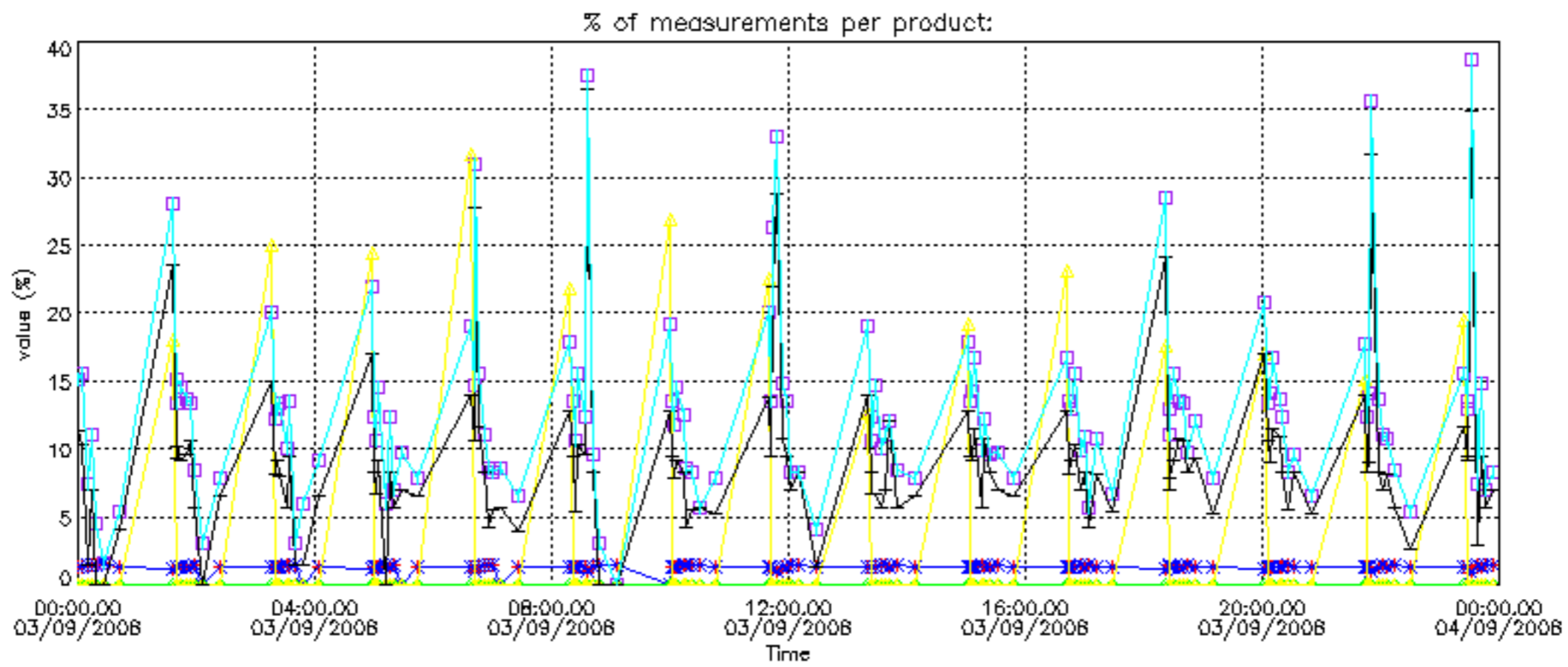
Percentage of flagged data per NO2 profile



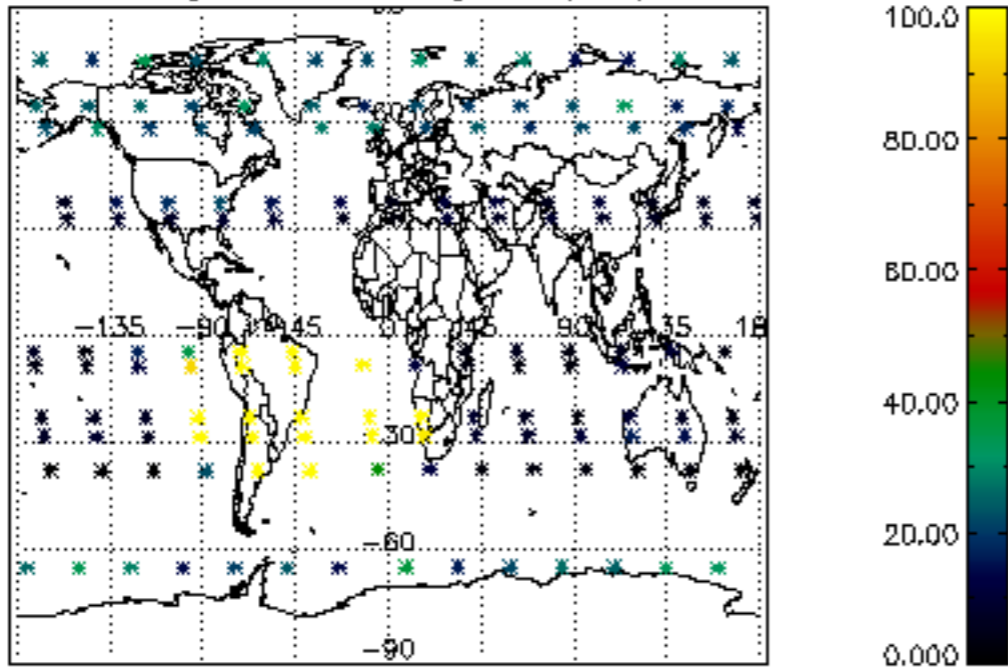
Percentage of flagged data per NO3 profile



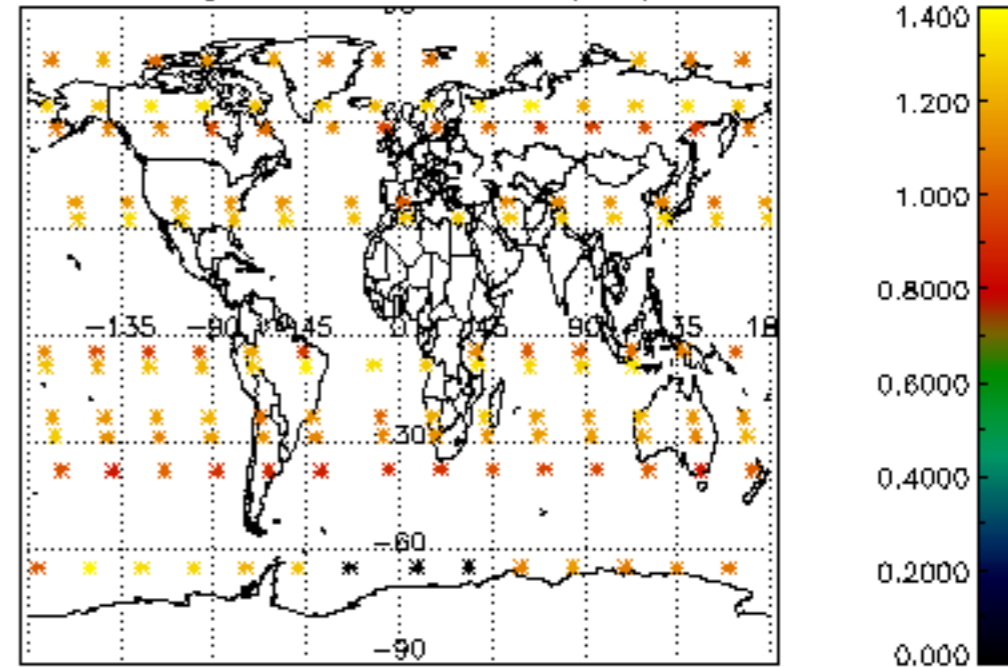




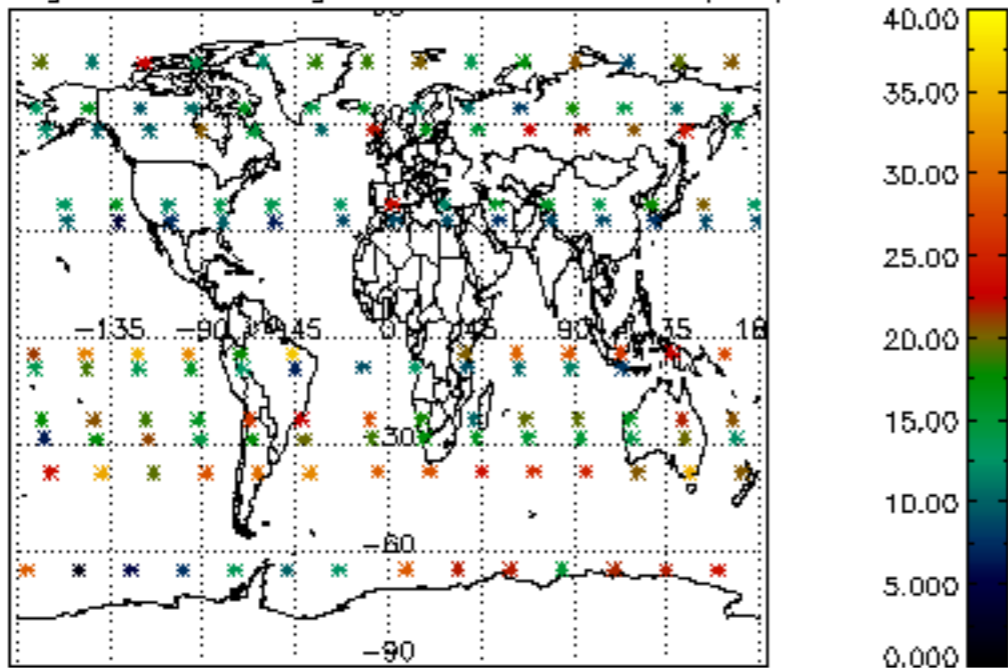
Percentage of cosmic ray hits per profile



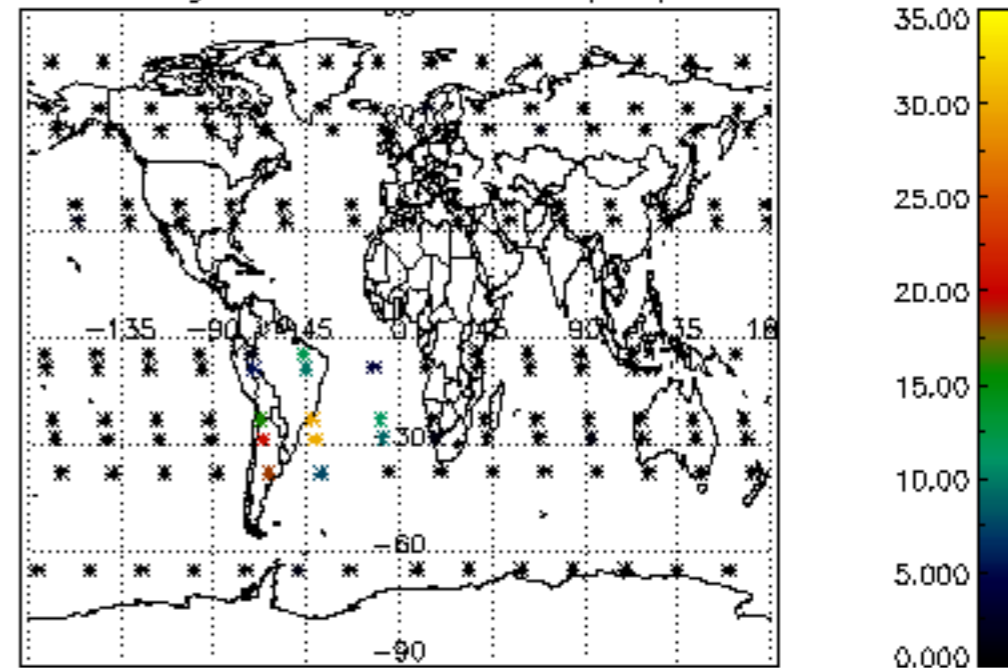
Percentage of datation errors per profile



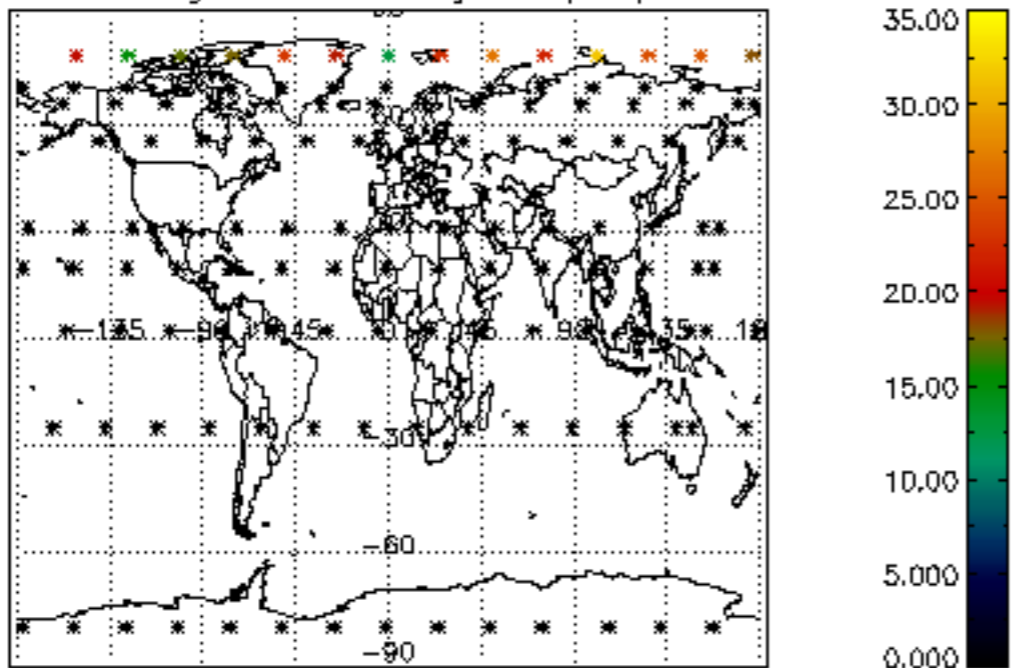
Percentage of star falling outside central band per profile



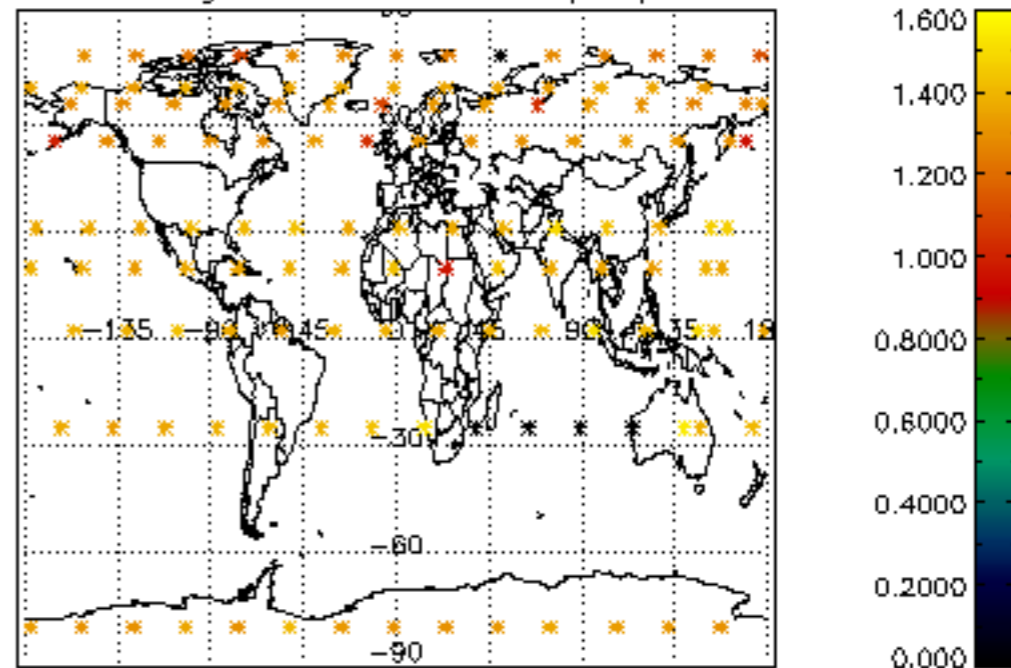
Percentage of saturation errors per profile



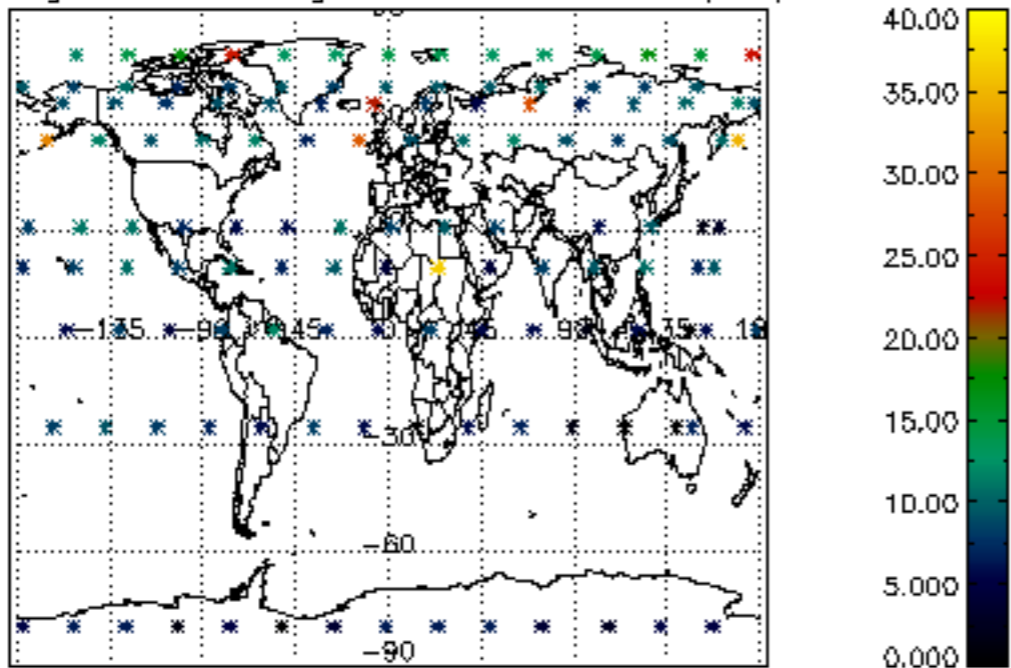
Percentage of cosmic ray hits per profile



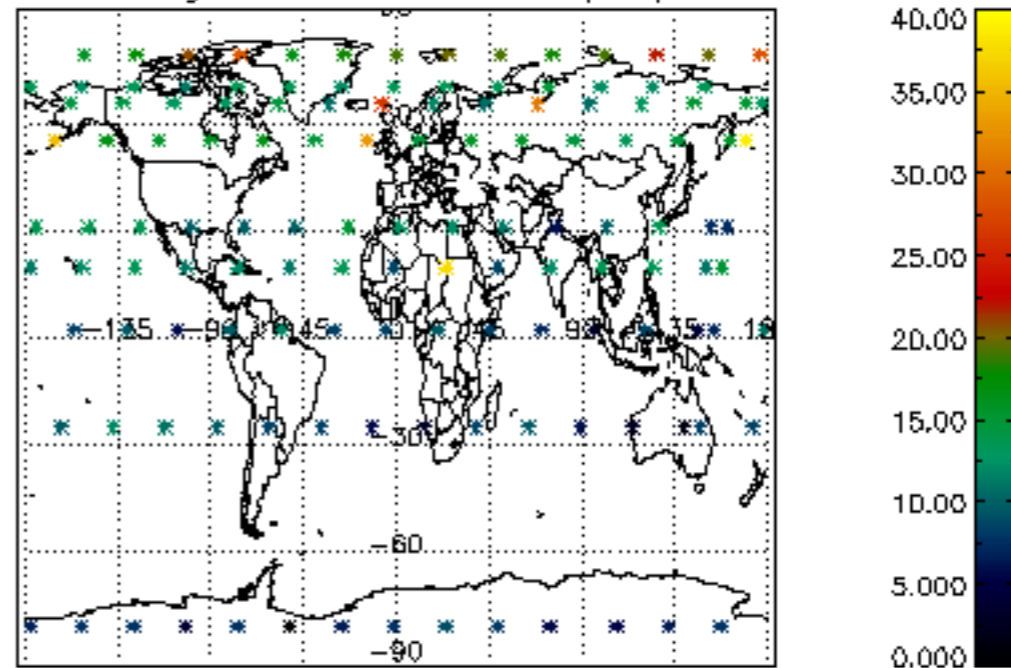
Percentage of datation errors per profile

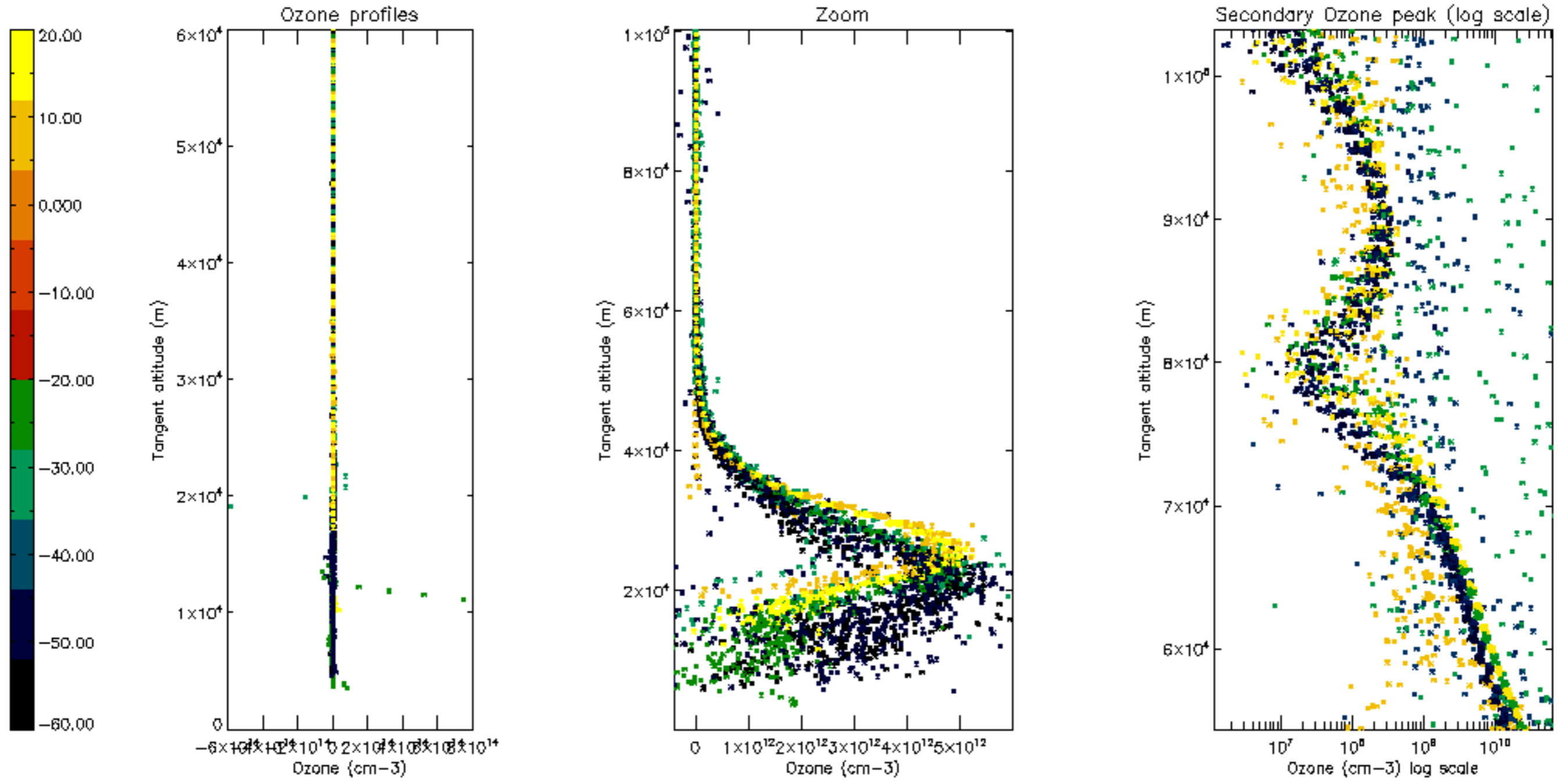


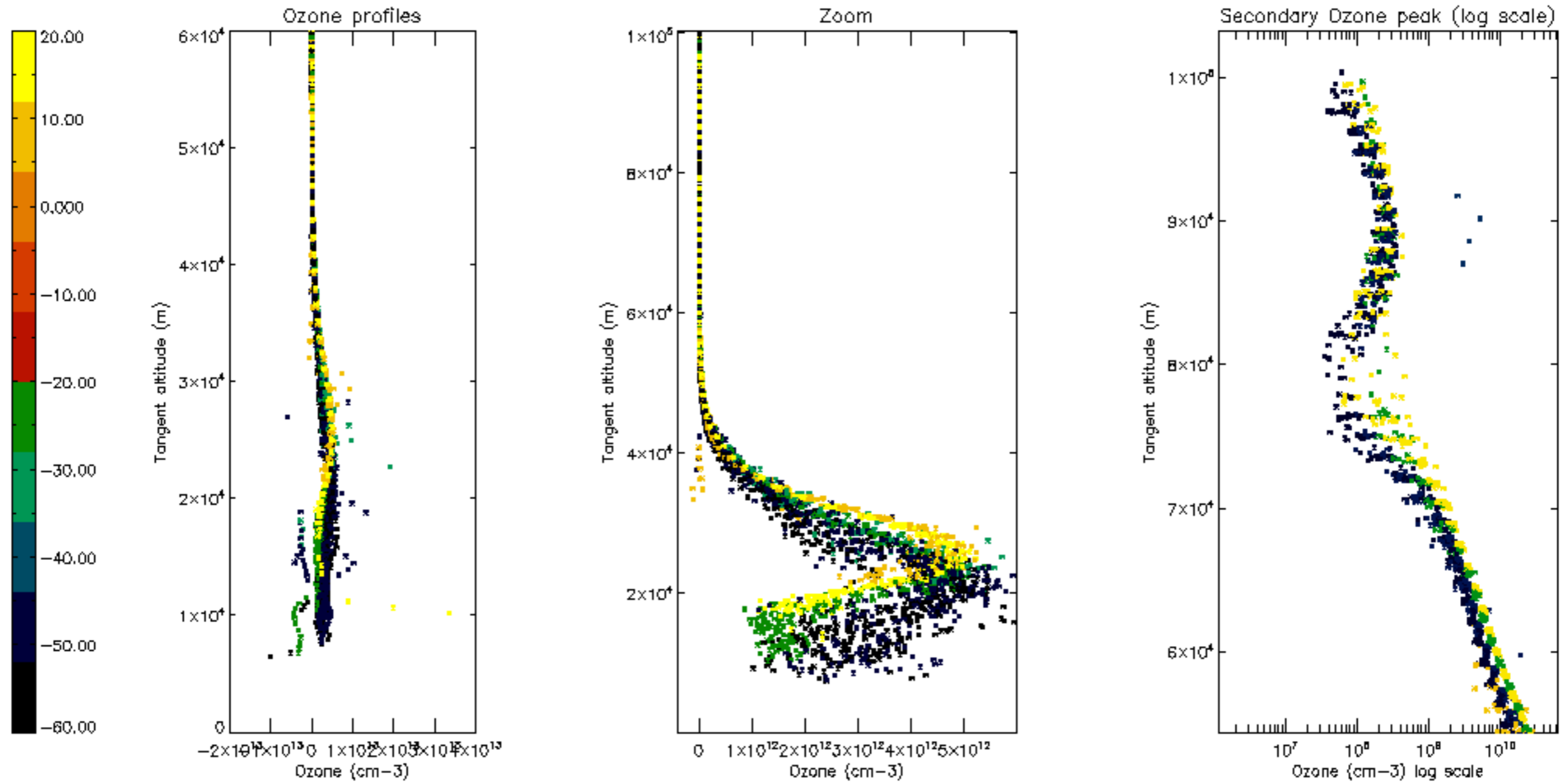
Percentage of star falling outside central band per profile

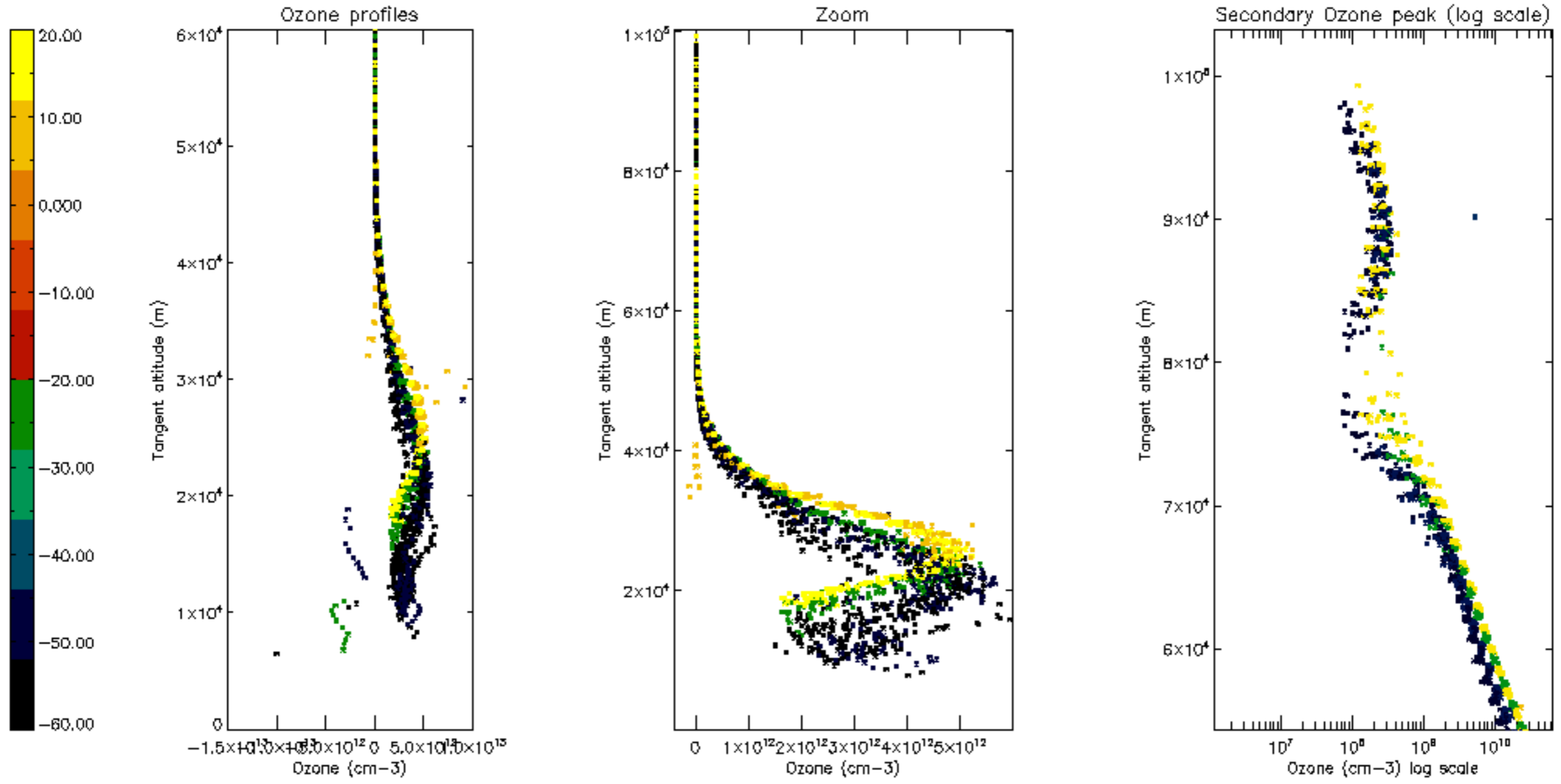


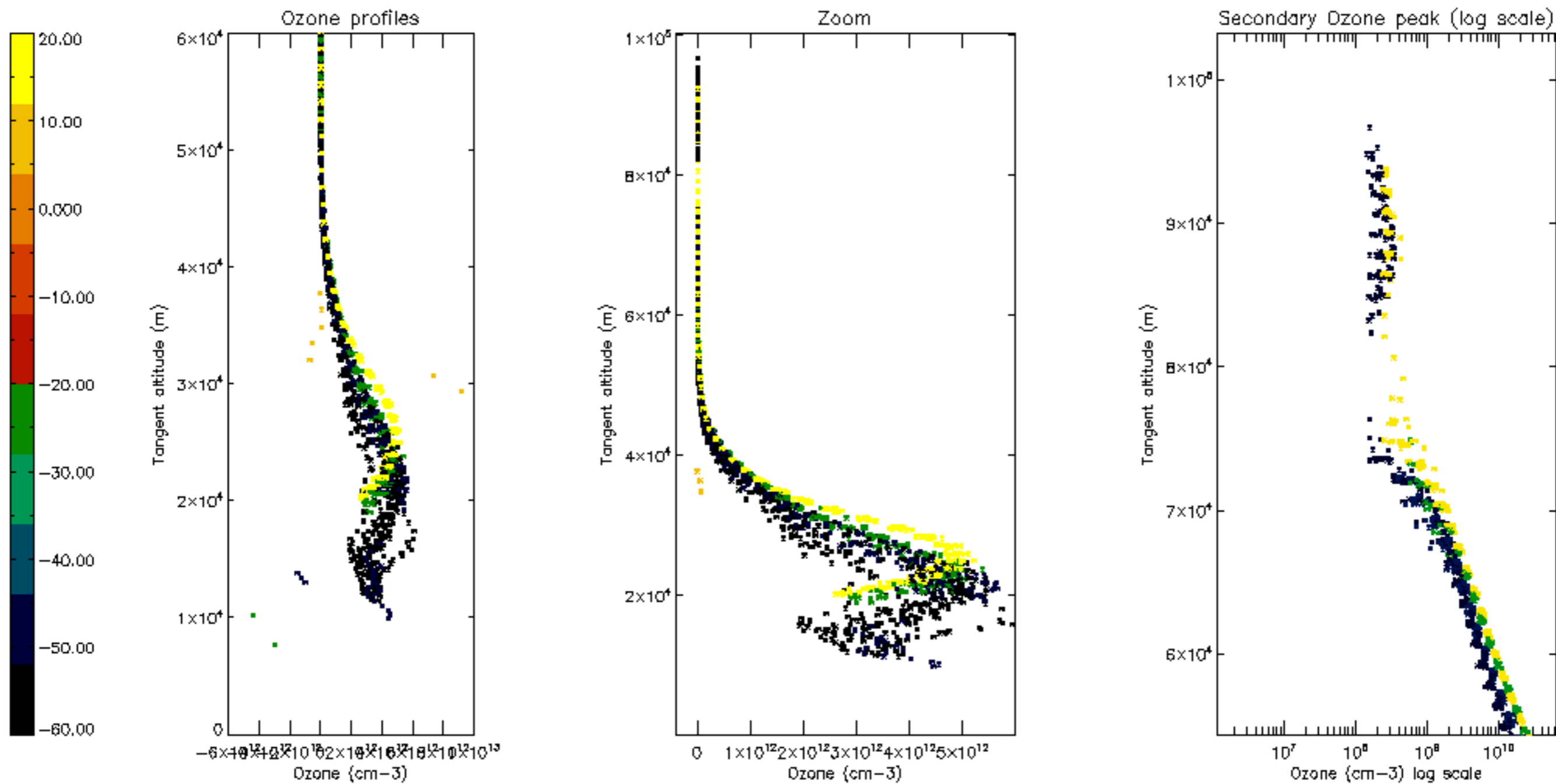
Percentage of saturation errors per profile

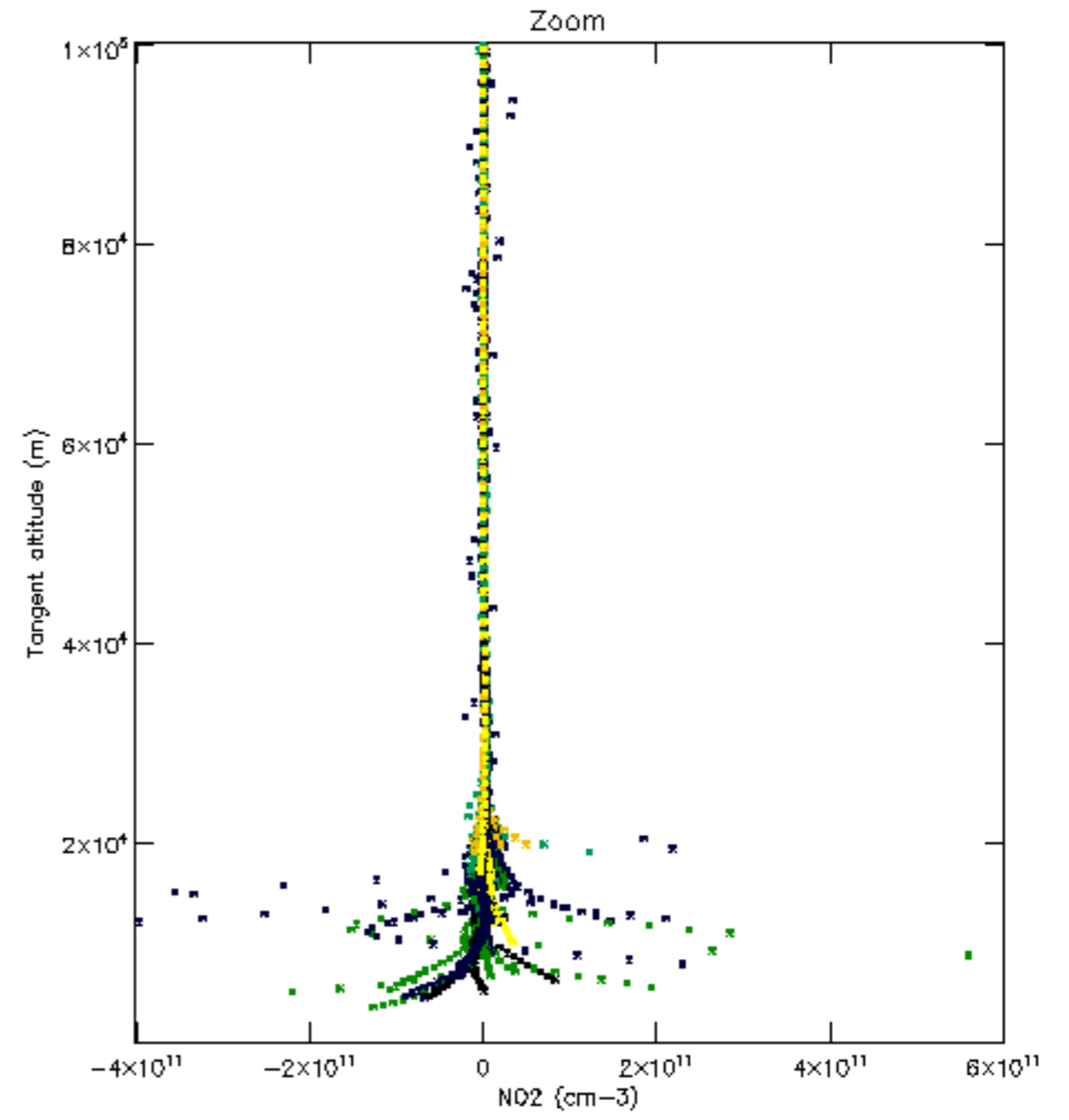
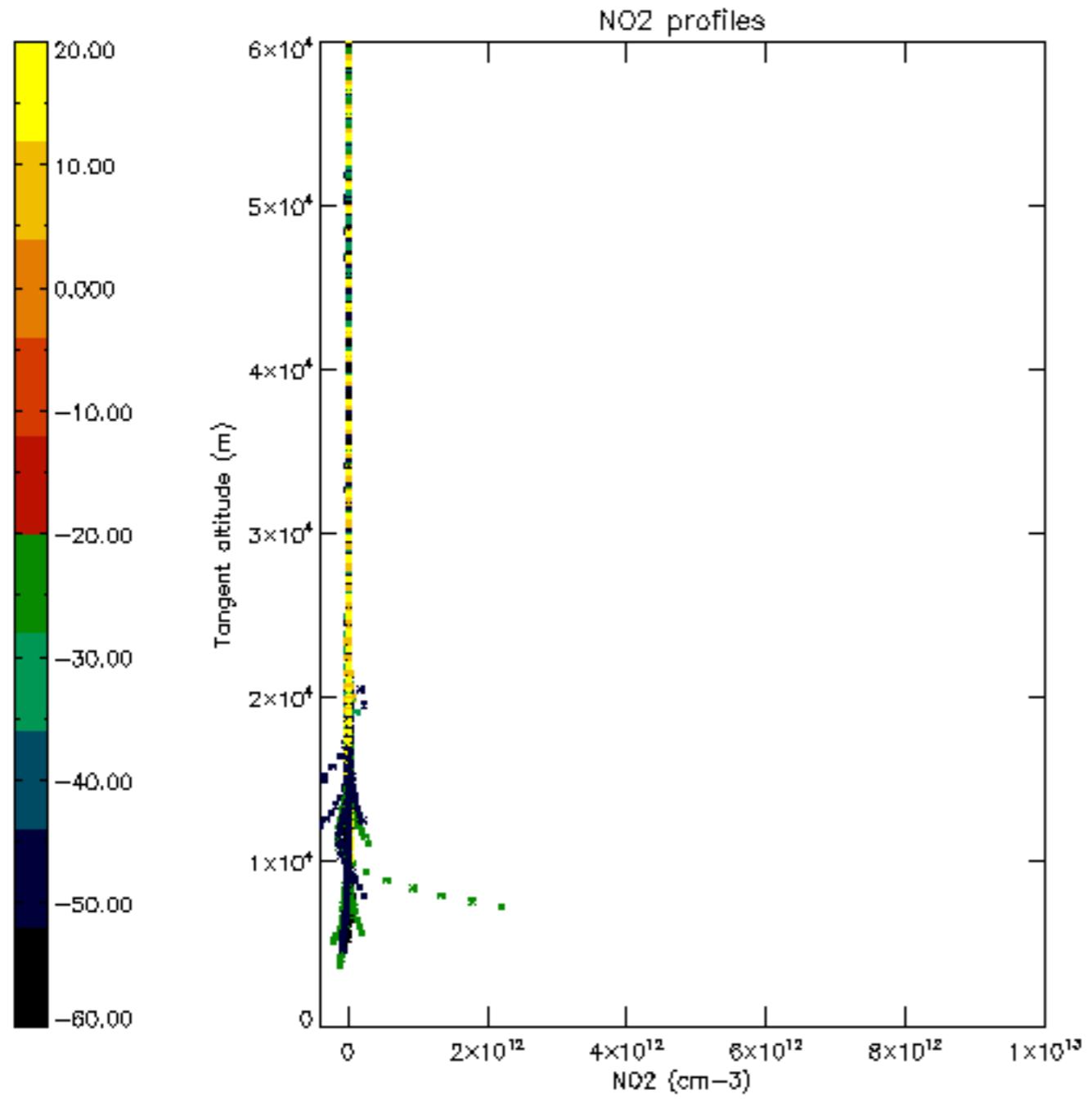


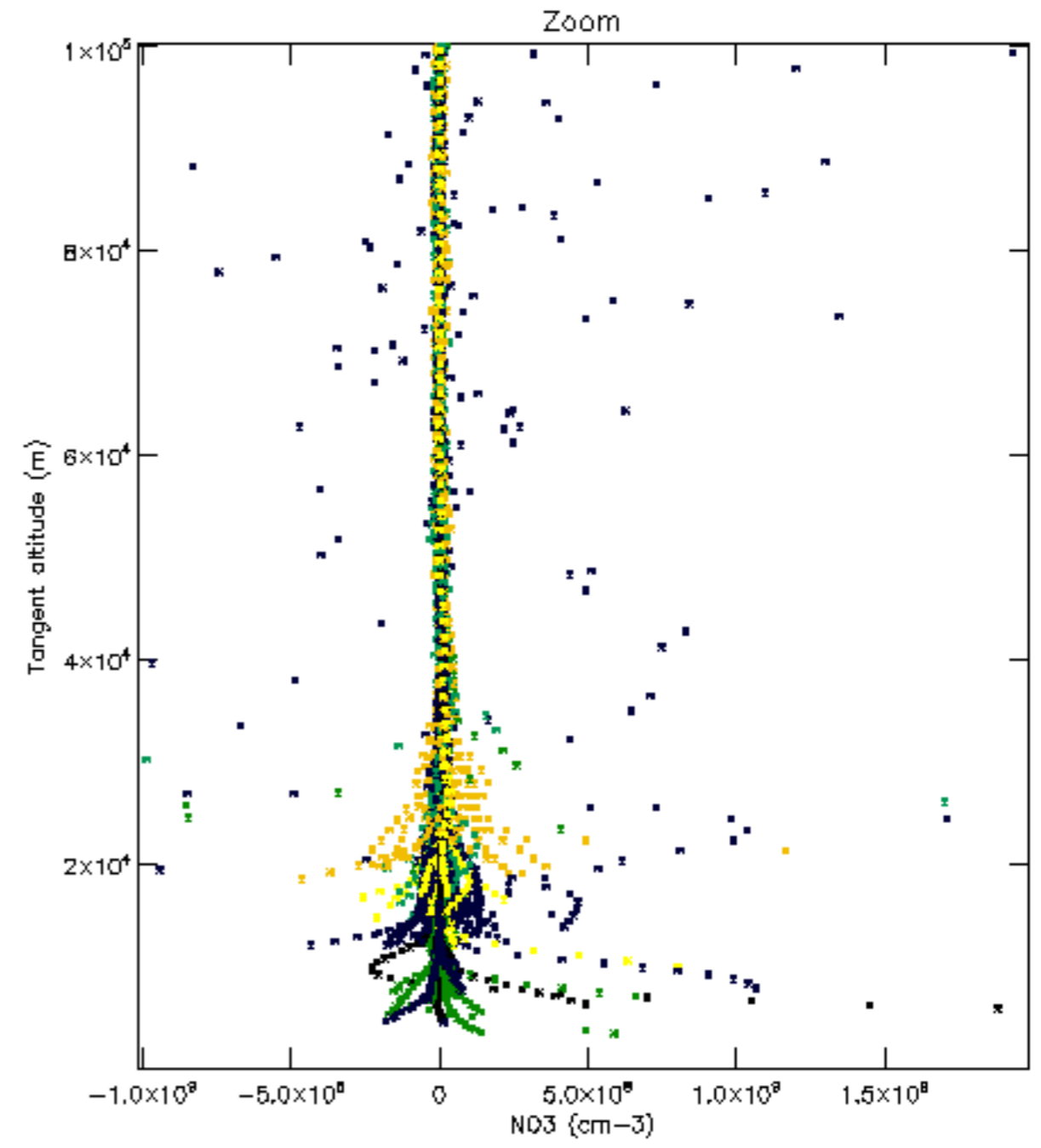
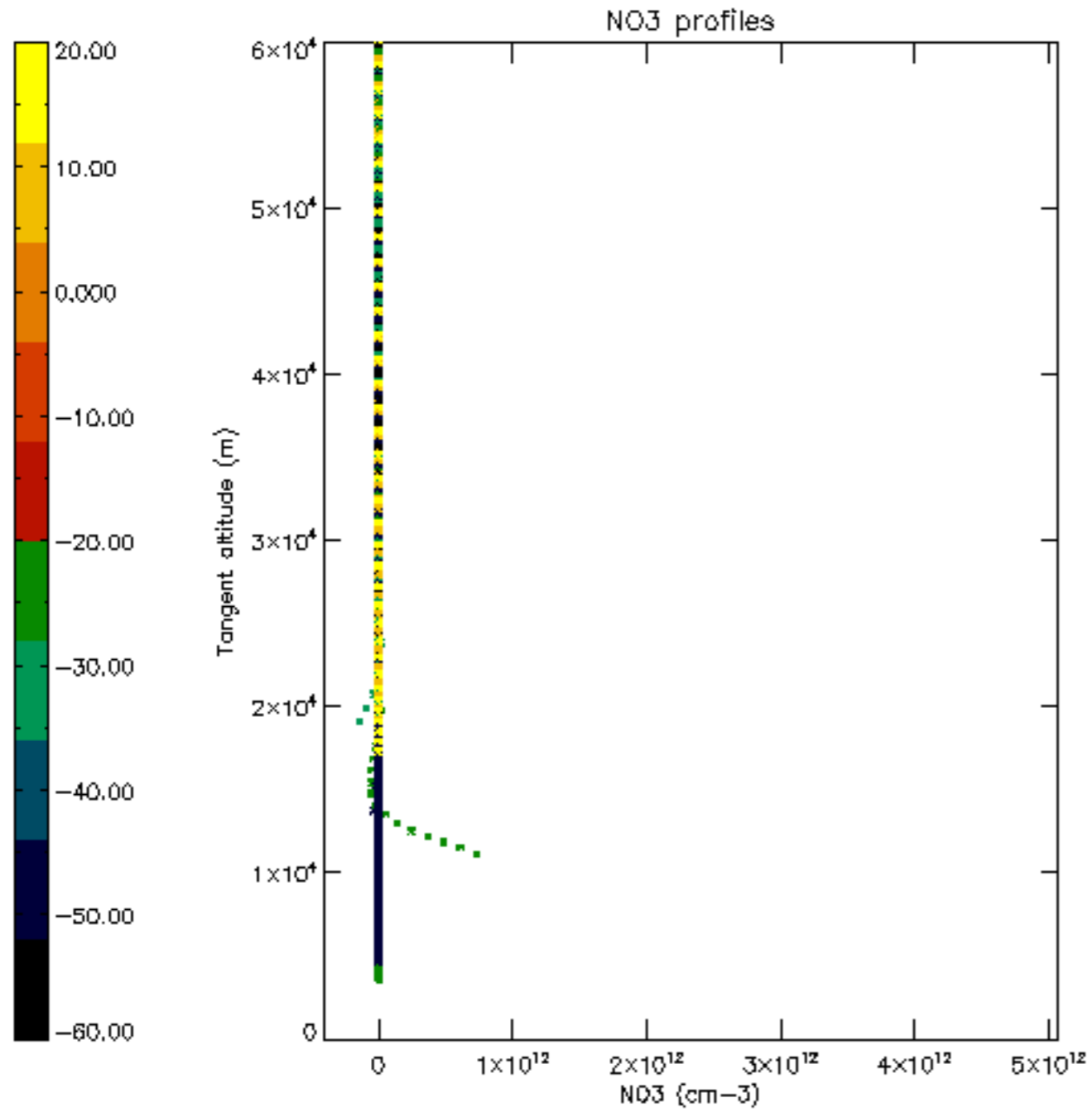


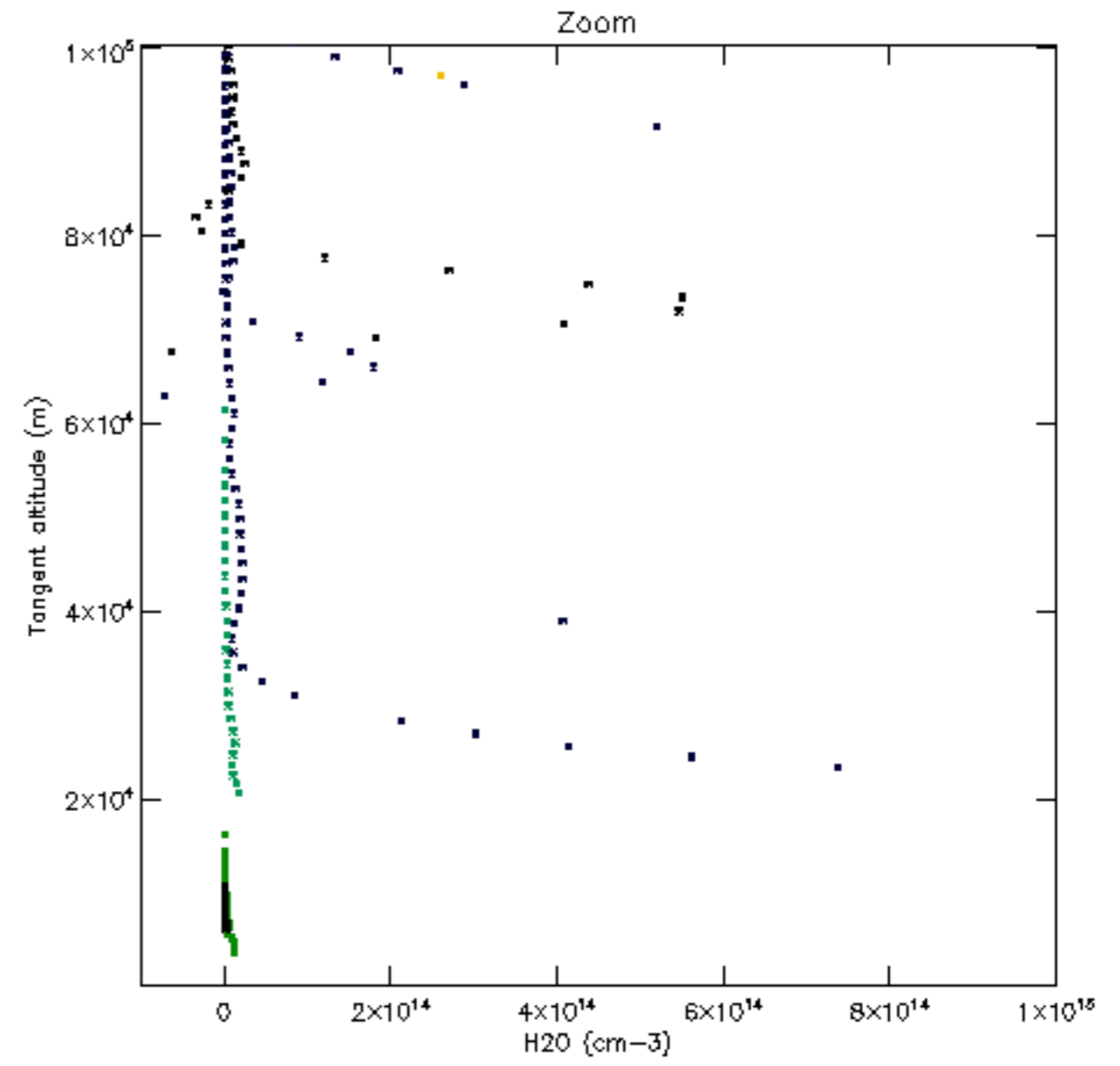
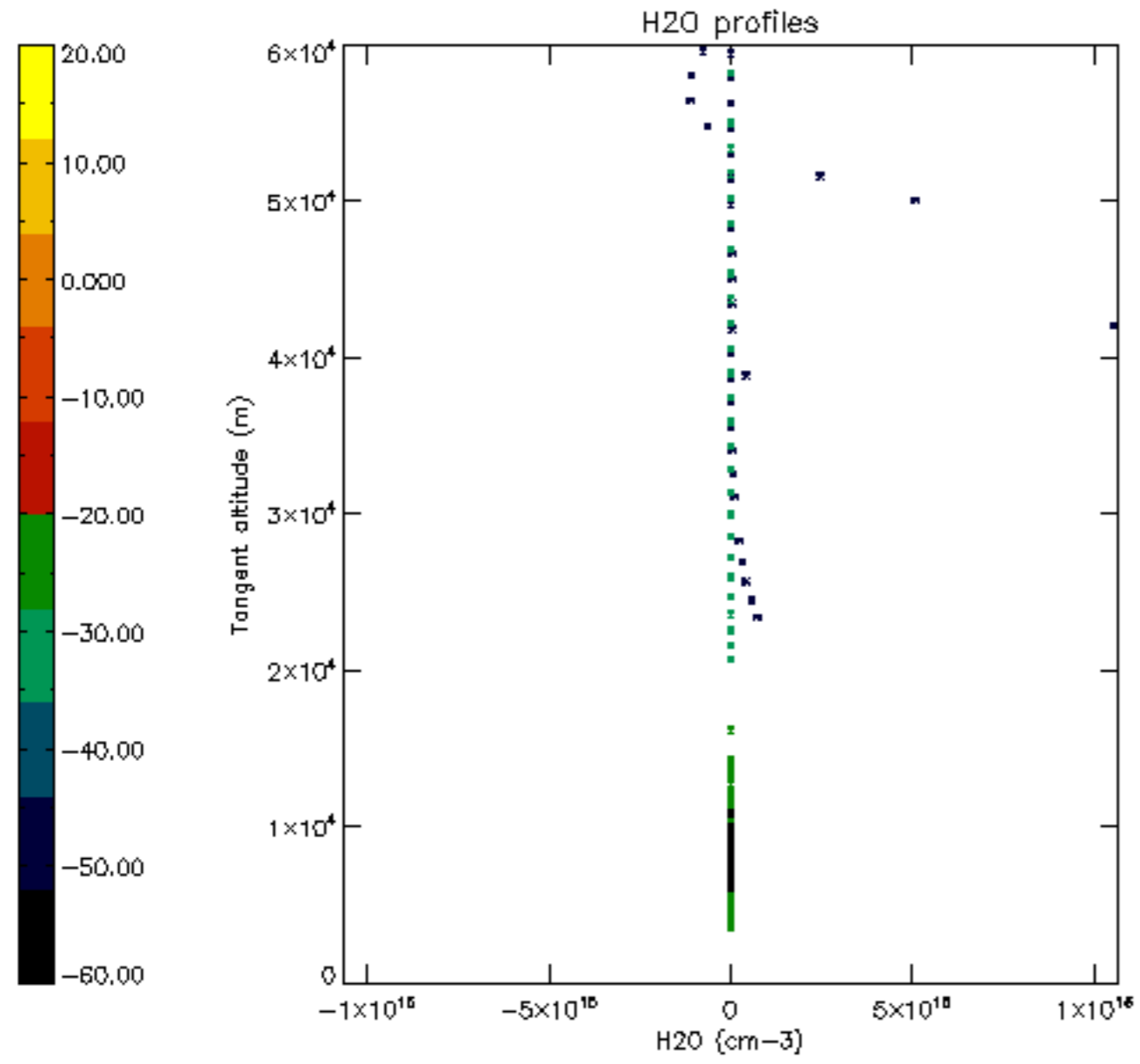


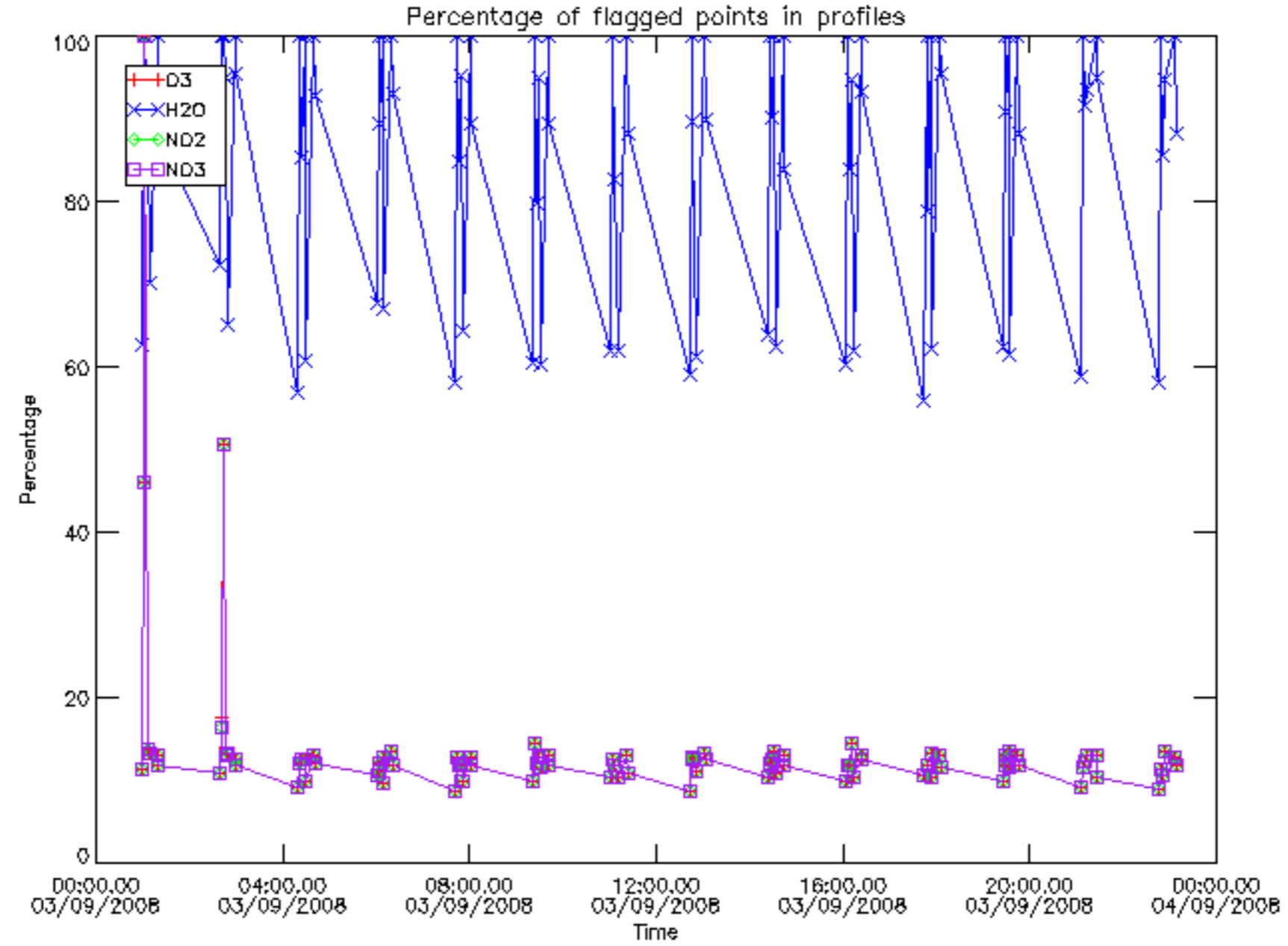


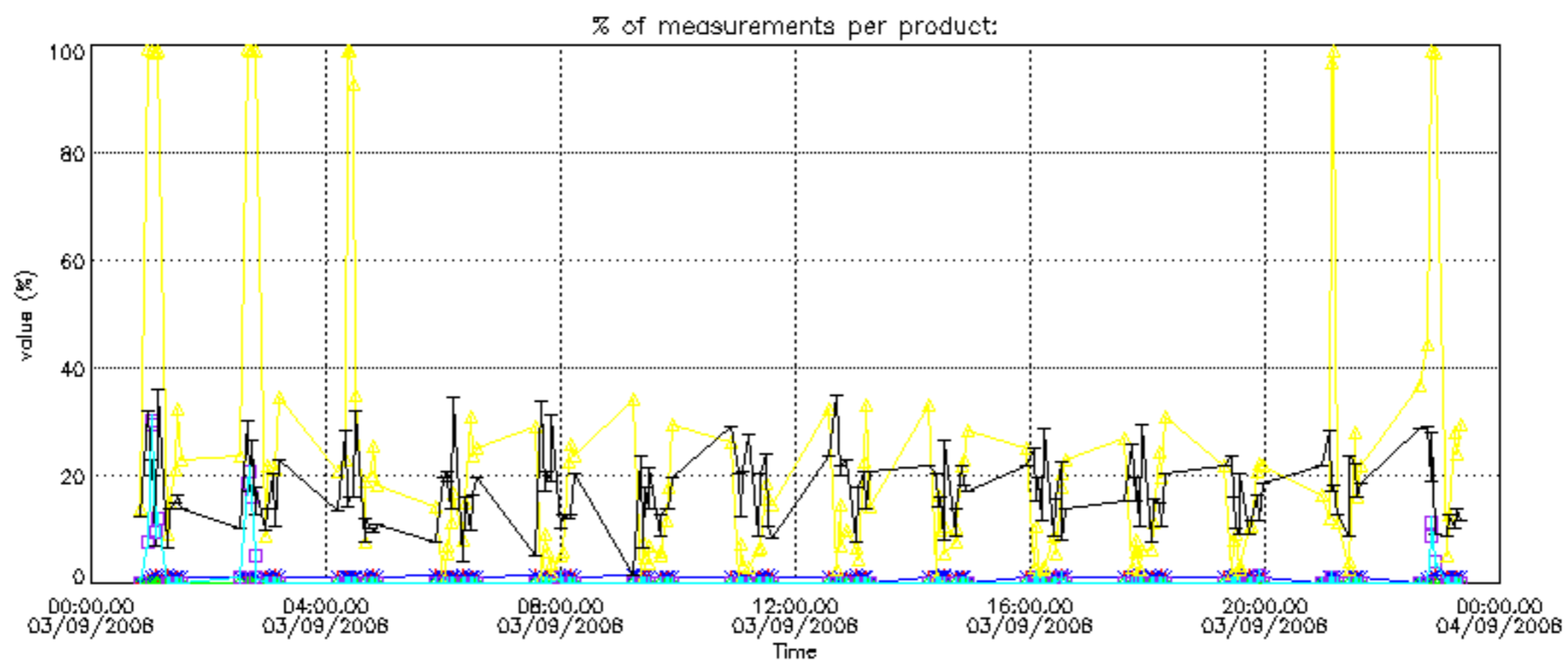
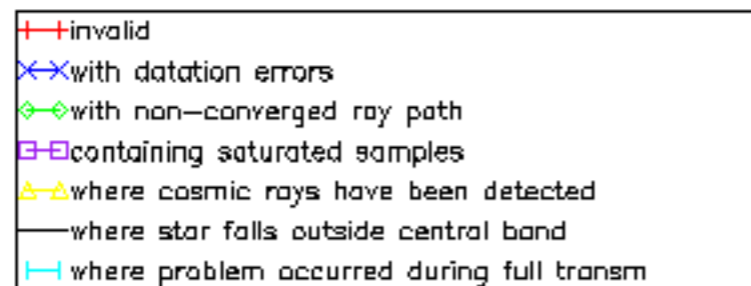


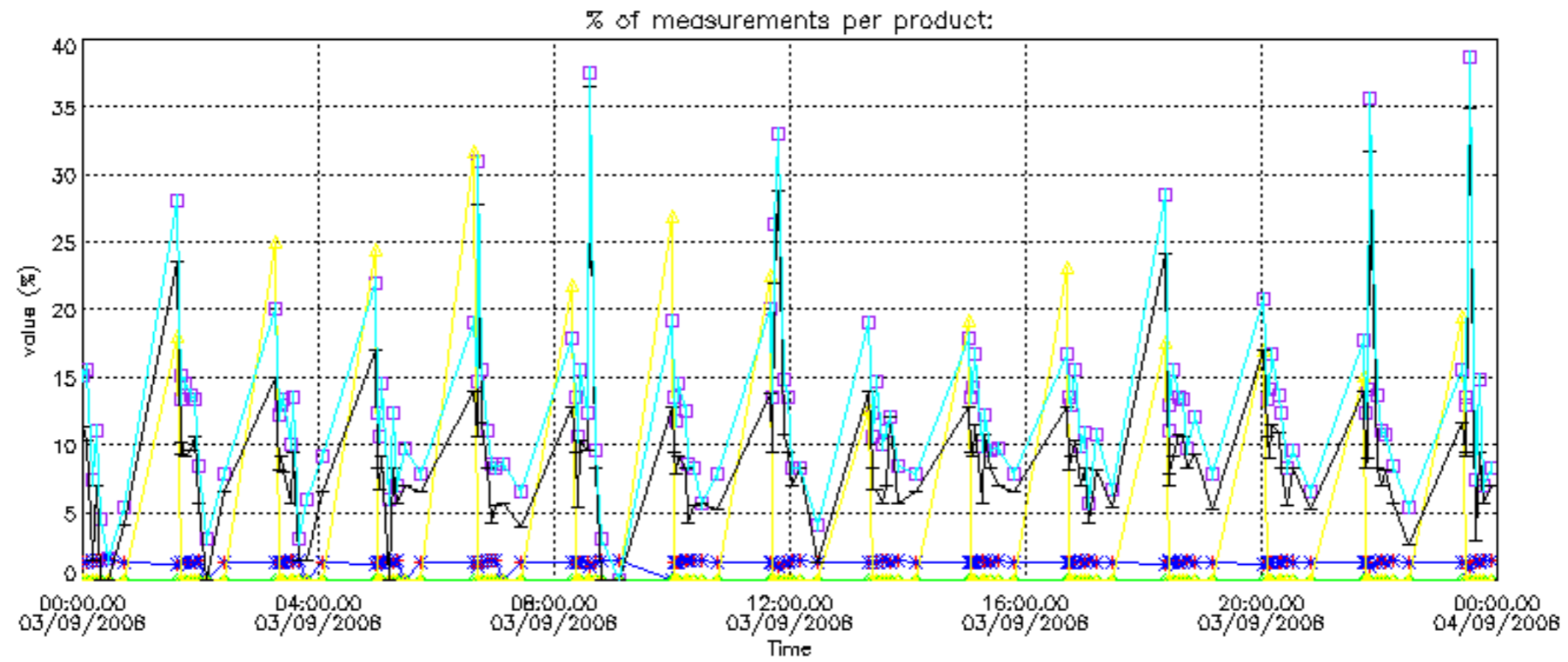
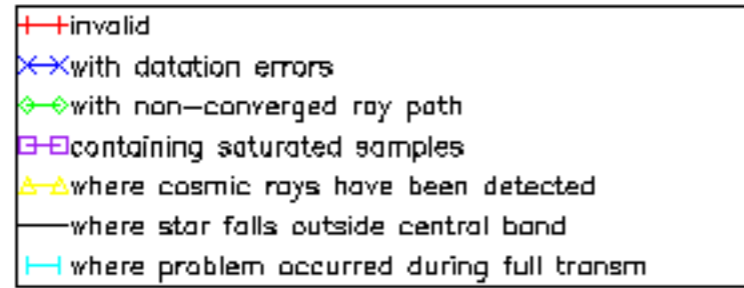




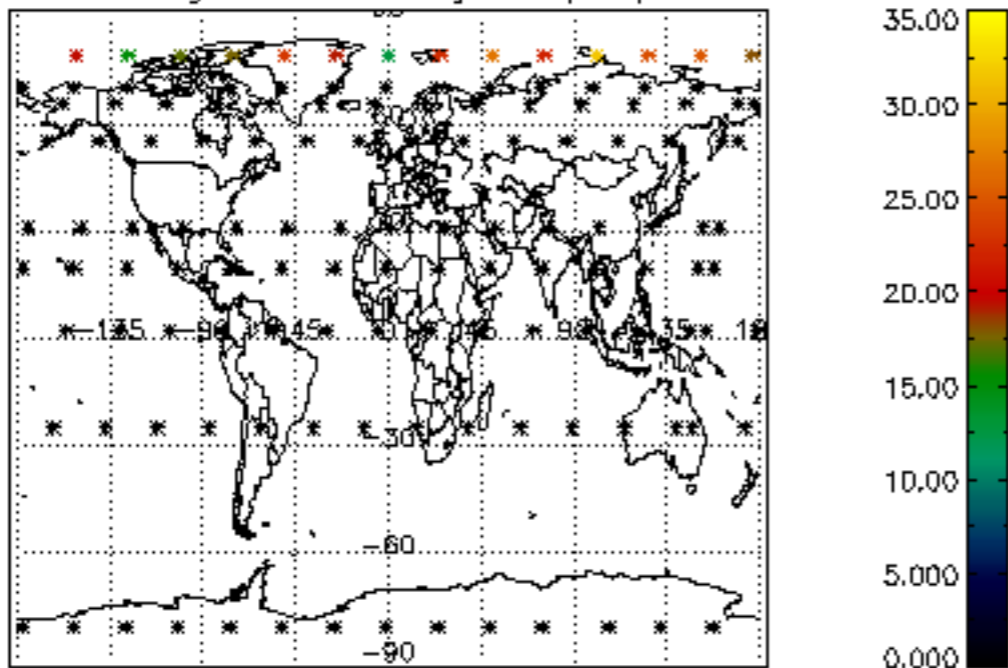




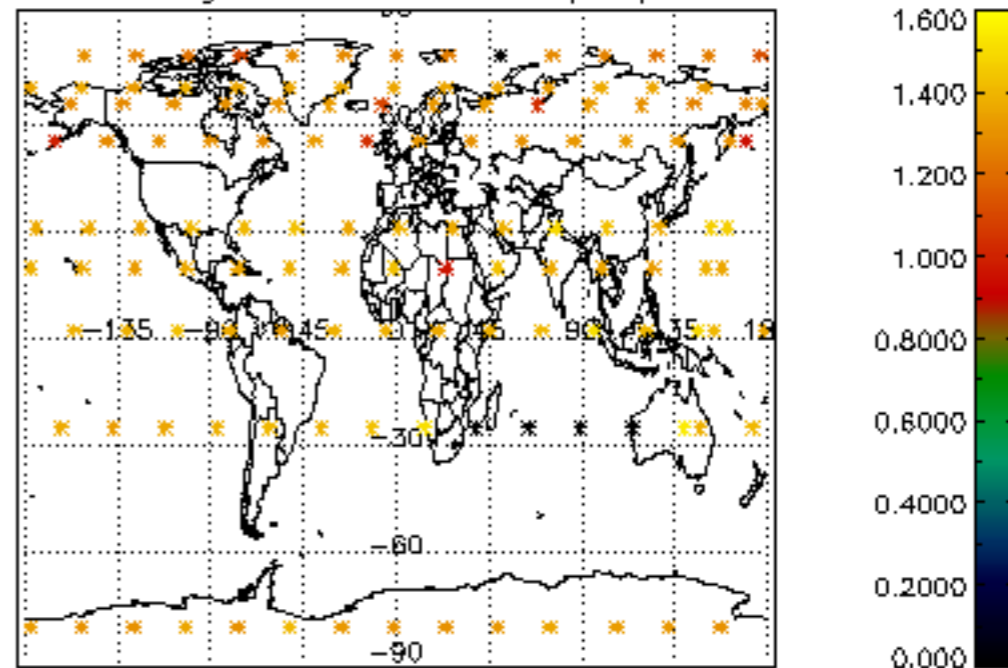




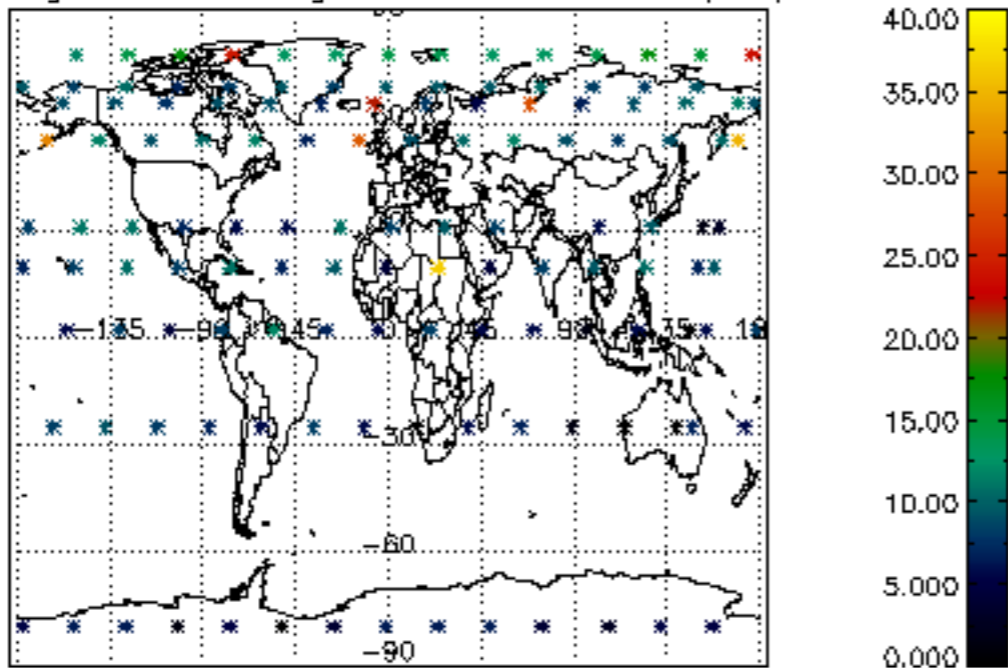
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

