

# 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 22:42:11
Data source version	GOMOS/6.01
Start time of products	25-11-2008 (25NOV2008 00:00:00)
Stop time of products	26-11-2008 (26NOV2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	211
Nb of prods with errors	0

## 2. Summary of processed GOM\_NL\_\_2P products.

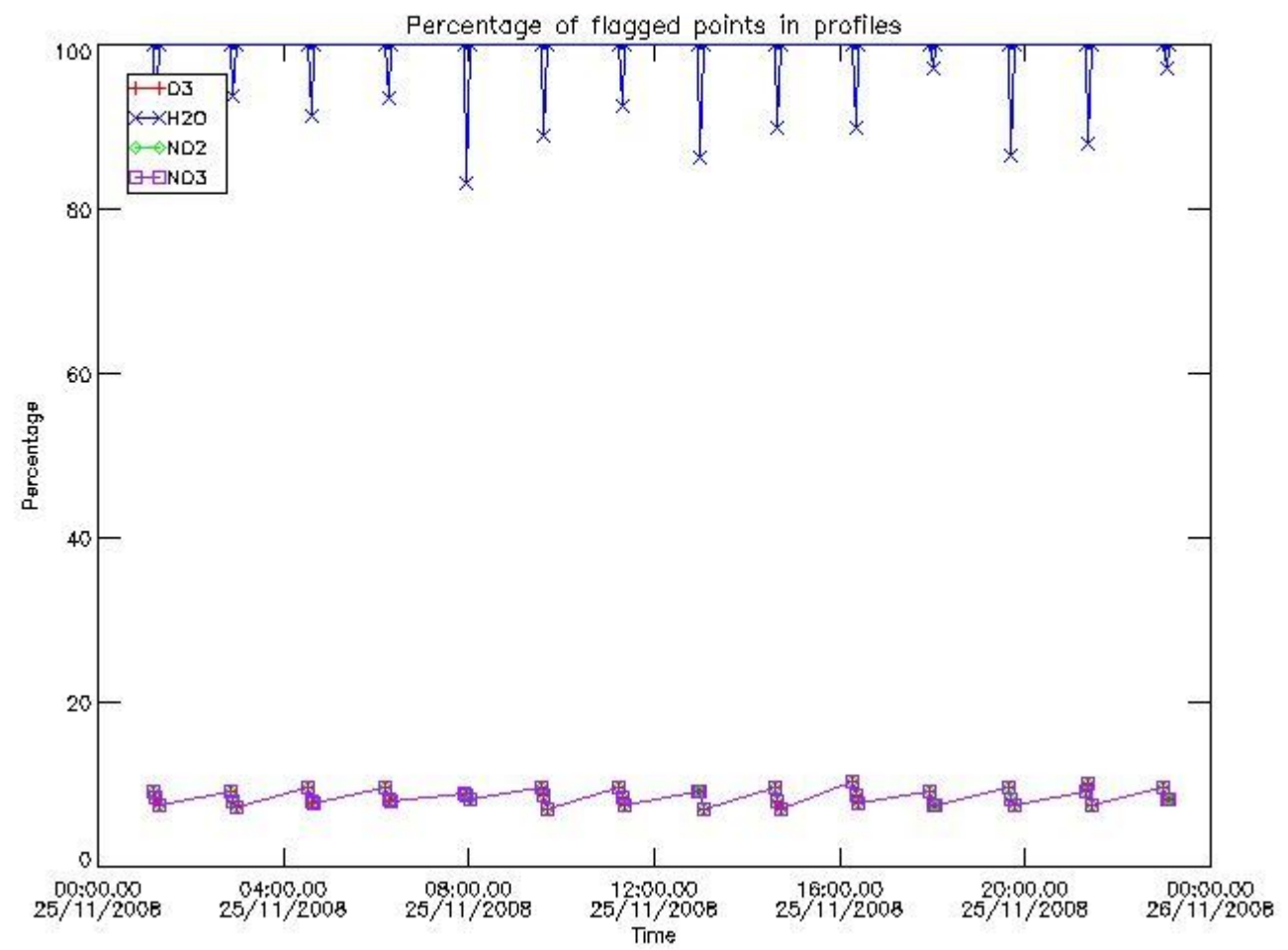
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20081125_000358_00000502074_00102_35226_5162.N1	25-NOV-2008 00:03:58	Bright	49.500	114	3Iot Aur	2.6930	4600.0	99	35226	No
2	GOM_NL__2PRFIN20081125_000825_00000502074_00102_35226_5163.N1	25-NOV-2008 00:08:25	Bright	49.500	6	13Alp Aur	0.080000	3400.0	99	35226	No
3	GOM_NL__2PRFIN20081125_001040_00000562074_00102_35226_5164.N1	25-NOV-2008 00:10:40	Bright	56.000	42	34Bet Aur	1.9000	10200.	112	35226	No
4	GOM_NL__2PRFIN20081125_003001_00000482074_00102_35226_5165.N1	25-NOV-2008 00:30:01	Bright	48.000	174	52Psi UMa	3.0040	4400.0	96	35226	No
5	GOM_NL__2PRFIN20081125_004002_00000602074_00102_35226_5166.N1	25-NOV-2008 00:40:02	Bright	60.000	96	68Del Leo	2.5600	9300.0	120	35226	No
6	GOM_NL__2PRFIN20081125_004333_00000722074_00102_35226_5167.N1	25-NOV-2008 00:43:33	Twilight	71.500	51	41Gam1Leo	2.0100	4500.0	143	35226	No
7	GOM_NL__2PRFIN20081125_011054_00000552074_00103_35227_6274.N1	25-NOV-2008 01:10:54	Dark	55.000	70	Zet Pup	2.2460	39000.	110	35227	No
8	GOM_NL__2PRFIN20081125_011437_00000602074_00103_35227_6275.N1	25-NOV-2008 01:14:37	Dark	60.000	117	Pi Pup	2.7060	3800.0	120	35227	No
9	GOM_NL__2PRFIN20081125_011835_00000752074_00103_35227_6276.N1	25-NOV-2008 01:18:35	Dark	75.000	23	21Eps CMa	1.5020	26000.	150	35227	No
10	GOM_NL__2PRFIN20081125_012051_00000812074_00103_35227_6277.N1	25-NOV-2008 01:20:51	Straylight	80.500	179	24Omi2CMa	3.0320	24000.	161	35227	No
11	GOM_NL__2PRFIN20081125_012552_000001062074_00103_35227_6278.N1	25-NOV-2008 01:25:52	Straylight	106.00	1	9Alp CMa	-1.4400	11000.	212	35227	No
12	GOM_NL__2PRFIN20081125_012954_00000662074_00103_35227_6279.N1	25-NOV-2008 01:29:54	Straylight	65.500	7	19Bet Ori	0.10000	14000.	131	35227	No
13	GOM_NL__2PRFIN20081125_013326_00000742074_00103_35227_6280.N1	25-NOV-2008 01:33:26	Twilight	73.500	30	46Eps Ori	1.6940	30000.	147	35227	No
14	GOM_NL__2PRFIN20081125_013819_00000552074_00103_35227_6281.N1	25-NOV-2008 01:38:19	Bright	54.500	13	87Alp Tau	0.86700	3800.0	109	35227	No
15	GOM_NL__2PRFIN20081125_014433_00000492074_00103_35227_6282.N1	25-NOV-2008 01:44:33	Bright	49.000	114	3Iot Aur	2.6930	4600.0	98	35227	No
16	GOM_NL__2PRFIN20081125_014900_00000492074_00103_35227_6283.N1	25-NOV-2008 01:49:00	Bright	49.000	6	13Alp Aur	0.080000	3400.0	98	35227	No
17	GOM_NL__2PRFIN20081125_015115_00000532074_00103_35227_6284.N1	25-NOV-2008 01:51:15	Bright	52.500	42	34Bet Aur	1.9000	10200.	105	35227	No
18	GOM_NL__2PRFIN20081125_021037_00000482074_00103_35227_6285.N1	25-NOV-2008 02:10:37	Bright	48.000	174	52Psi UMa	3.0040	4400.0	96	35227	No
19	GOM_NL__2PRFIN20081125_022038_00000562074_00103_35227_6286.N1	25-NOV-2008 02:20:38	Bright	56.000	96	68Del Leo	2.5600	9300.0	112	35227	No
20	GOM_NL__2PRFIN20081125_022411_00000722074_00103_35227_6287.N1	25-NOV-2008 02:24:11	Twilight	72.000	51	41Gam1Leo	2.0100	4500.0	144	35227	No
21	GOM_NL__2PRFIN20081125_025131_00000552074_00104_35228_6267.N1	25-NOV-2008 02:51:31	Dark	55.000	70	Zet Pup	2.2460	39000.	110	35228	No
22	GOM_NL__2PRFIN20081125_025514_00000652074_00104_35228_6268.N1	25-NOV-2008 02:55:14	Dark	64.500	117	Pi Pup	2.7060	3800.0	129	35228	No
23	GOM_NL__2PRFIN20081125_025912_00000712074_00104_35228_6269.N1	25-NOV-2008 02:59:12	Dark	70.500	23	21Eps CMa	1.5020	26000.	141	35228	No
24	GOM_NL__2PRFIN20081125_030128_00000822074_00104_35228_6270.N1	25-NOV-2008 03:01:28	Straylight	81.500	179	24Omi2CMa	3.0320	24000.	163	35228	No
25	GOM_NL__2PRFIN20081125_030628_000001102074_00104_35228_6271.N1	25-NOV-2008 03:06:28	Straylight	109.50	1	9Alp CMa	-1.4400	11000.	219	35228	No
26	GOM_NL__2PRFIN20081125_031029_00000652074_00104_35228_6272.N1	25-NOV-2008 03:10:29	Straylight	65.000	7	19Bet Ori	0.10000	14000.	130	35228	No
27	GOM_NL__2PRFIN20081125_031401_00000722074_00104_35228_6273.N1	25-NOV-2008 03:14:01	Twilight	72.000	30	46Eps Ori	1.6940	30000.	144	35228	No
28	GOM_NL__2PRFIN20081125_031658_00000752074_00104_35228_6274.N1	25-NOV-2008 03:16:58	Bright	74.500	27	24Gam Ori	1.6360	26000.	149	35228	No
29	GOM_NL__2PRFIN20081125_031929_00000862074_00104_35228_6275.N1	25-NOV-2008 03:19:29	Bright	86.000	14	58Alp Ori	0.87000	3000.0	172	35228	No
30	GOM_NL__2PRFIN20081125_032509_00000502074_00104_35228_6276.N1	25-NOV-2008 03:25:09	Bright	50.000	114	3Iot Aur	2.6930	4600.0	100	35228	No
31	GOM_NL__2PRFIN20081125_032935_00000562074_00104_35228_6277.N1	25-NOV-2008 03:29:35	Bright	55.500	6	13Alp Aur	0.080000	3400.0	111	35228	No
32	GOM_NL__2PRFIN20081125_033150_00000532074_00104_35228_6278.N1	25-NOV-2008 03:31:50	Bright	53.000	42	34Bet Aur	1.9000	10200.	106	35228	No
33	GOM_NL__2PRFIN20081125_035113_00000552074_00104_35228_6279.N1	25-NOV-2008 03:51:13	Bright	54.500	174	52Psi UMa	3.0040	4400.0	109	35228	No
34	GOM_NL__2PRFIN20081125_040115_00000592074_00104_35228_6280.N1	25-NOV-2008 04:01:15	Bright	59.000	96	68Del Leo	2.5600	9300.0	118	35228	No
35	GOM_NL__2PRFIN20081125_040449_00000642074_00104_35228_6281.N1	25-NOV-2008 04:04:49	Twilight	64.000	51	41Gam1Leo	2.0100	4500.0	128	35228	No
36	GOM_NL__2PRFIN20081125_043208_00000542074_00105_35229_5167.N1	25-NOV-2008 04:32:08	Dark	53.500	70	Zet Pup	2.2460	39000.	107	35229	No
37	GOM_NL__2PRFIN20081125_043551_00000652074_00105_35229_5168.N1	25-NOV-2008 04:35:51	Dark	64.500	117	Pi Pup	2.7060	3800.0	129	35229	No
38	GOM_NL__2PRFIN20081125_043949_00000732074_00105_35229_5169.N1	25-NOV-2008 04:39:49	Dark	73.000	23	21Eps CMa	1.5020	26000.	146	35229	No
39	GOM_NL__2PRFIN20081125_044205_00000802074_00105_35229_5170.N1	25-NOV-2008 04:42:05	Straylight	80.000	179	24Omi2CMa	3.0320	24000.	160	35229	No
40	GOM_NL__2PRFIN20081125_044704_000001102074_00105_35229_5171.N1	25-NOV-2008 04:47:04	Straylight	110.00	1	9Alp CMa	-1.4400	11000.	220	35229	No
41	GOM_NL__2PRFIN20081125_045105_00000692074_00105_35229_5172.N1	25-NOV-2008 04:51:05	Straylight	68.500	7	19Bet Ori	0.10000	14000.	137	35229	No
42	GOM_NL__2PRFIN20081125_045437_00000752074_00105_35229_5173.N1	25-NOV-2008 04:54:37	Twilight	75.000	30	46Eps Ori	1.6940	30000.	150	35229	No





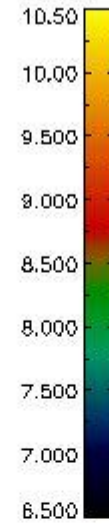
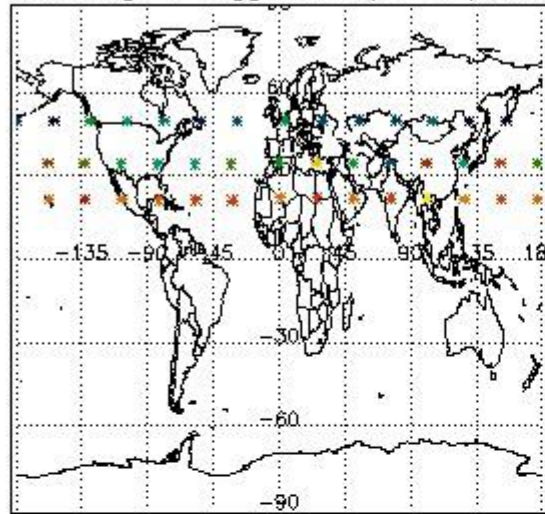


3.1 Plot quality information per product (time dependant)

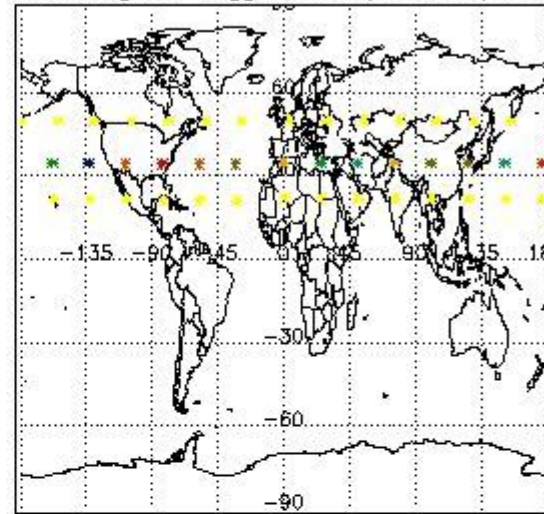


3.2 Plot quality information per product (world map)

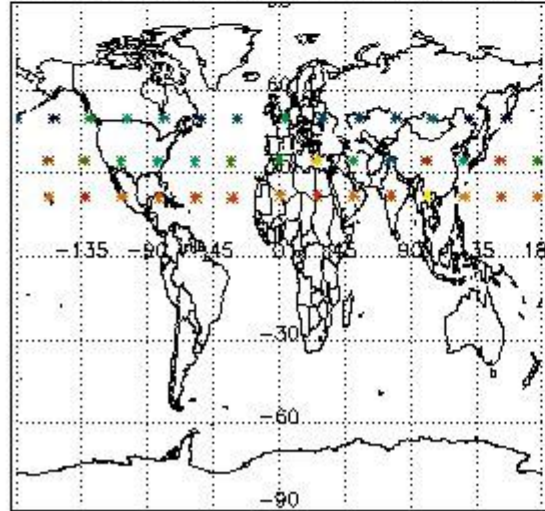
Percentage of flagged data per O3 profile



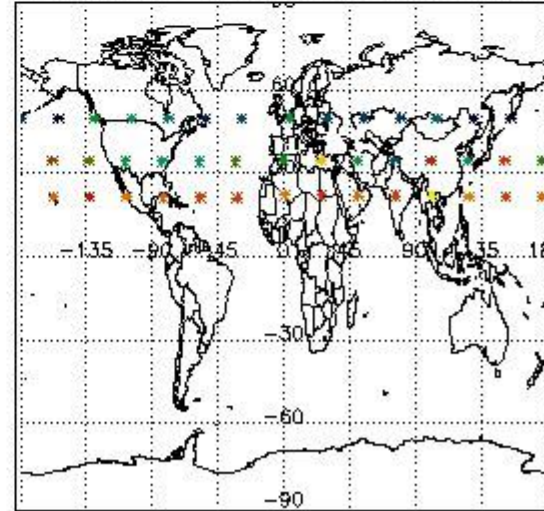
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

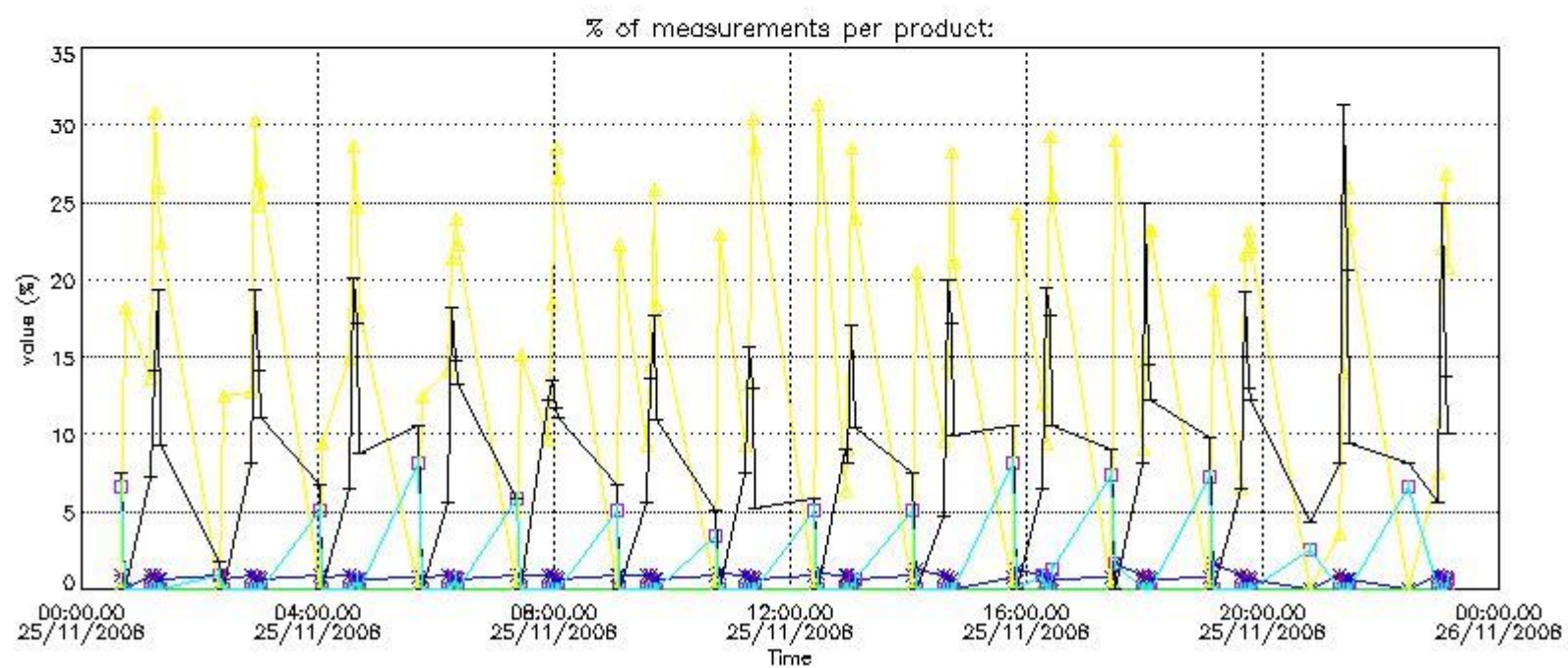
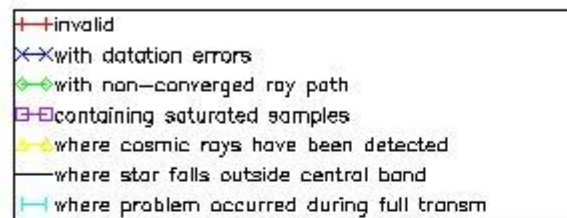


#### 4. Level 1 quality information per product

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

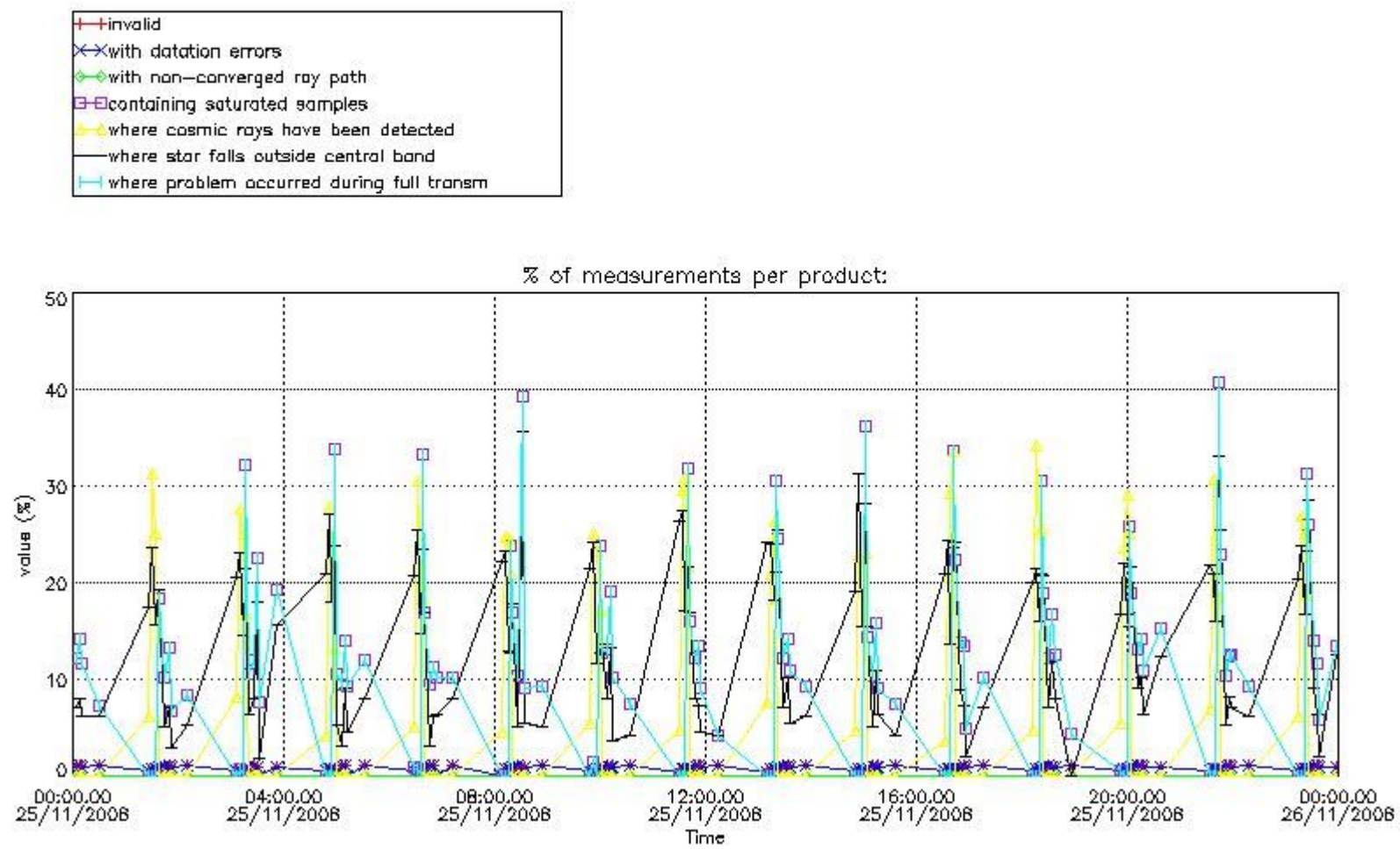
##### 4.1 Plot quality information per product (time dependant) coming from level 1b processing

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



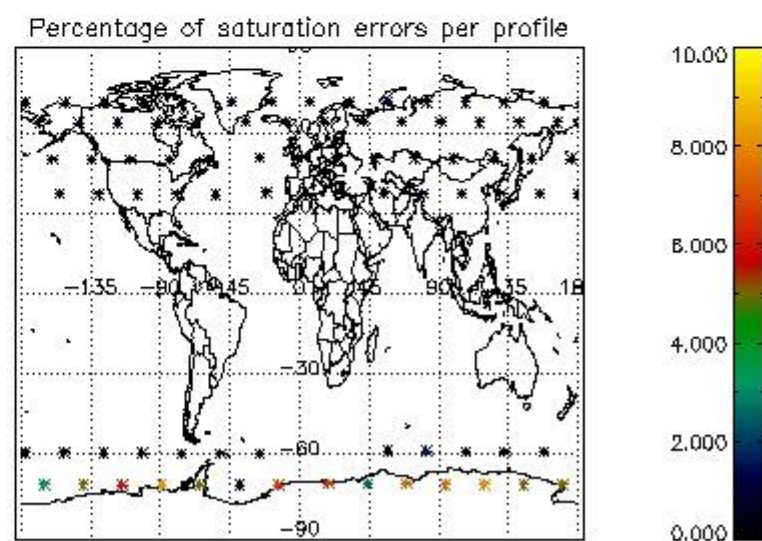
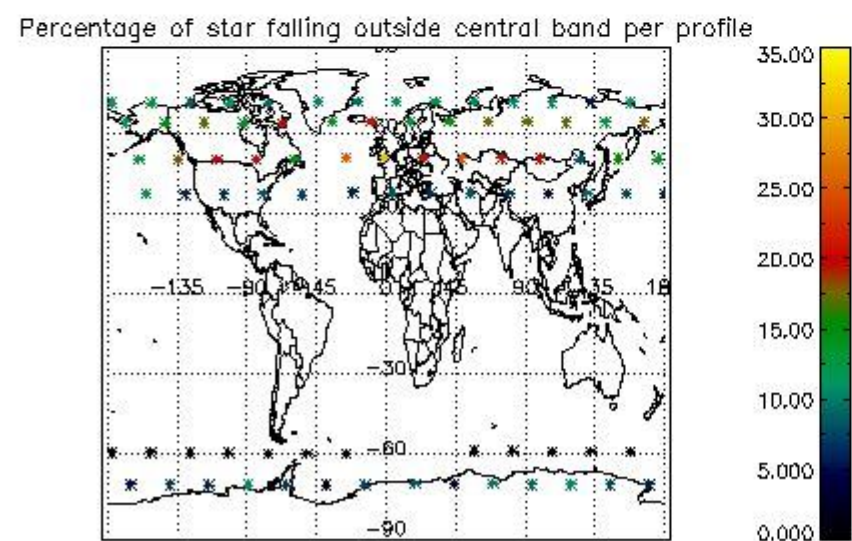
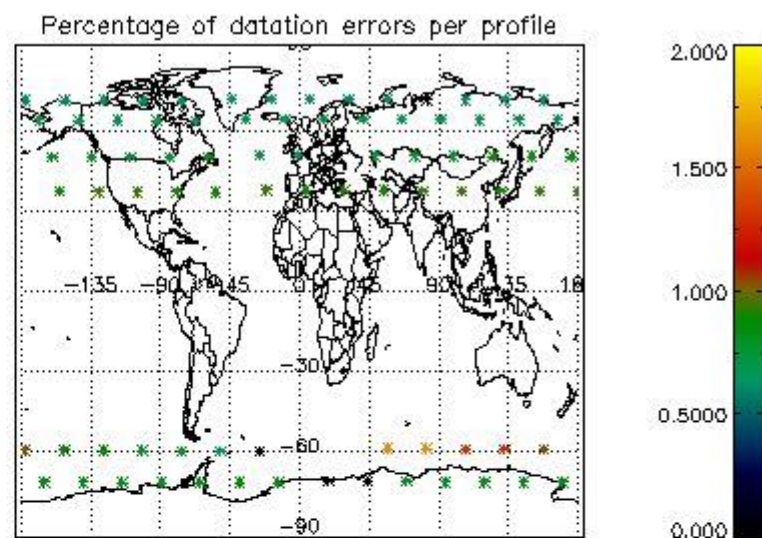
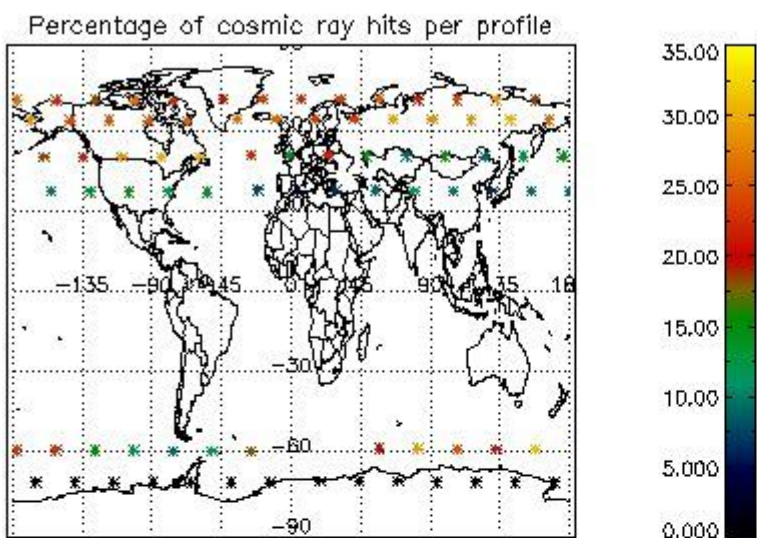
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



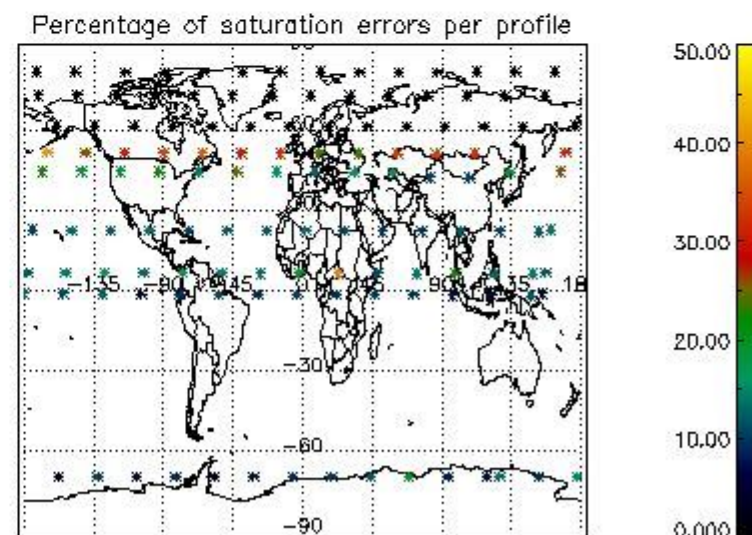
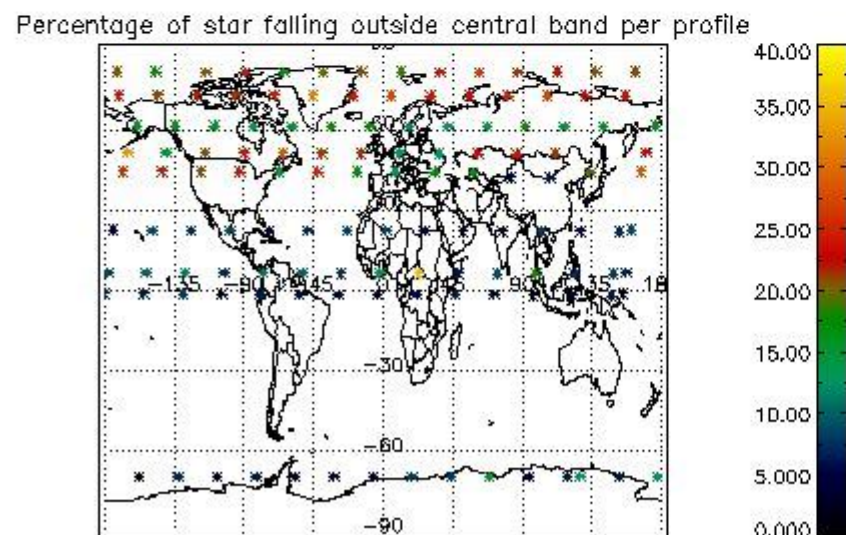
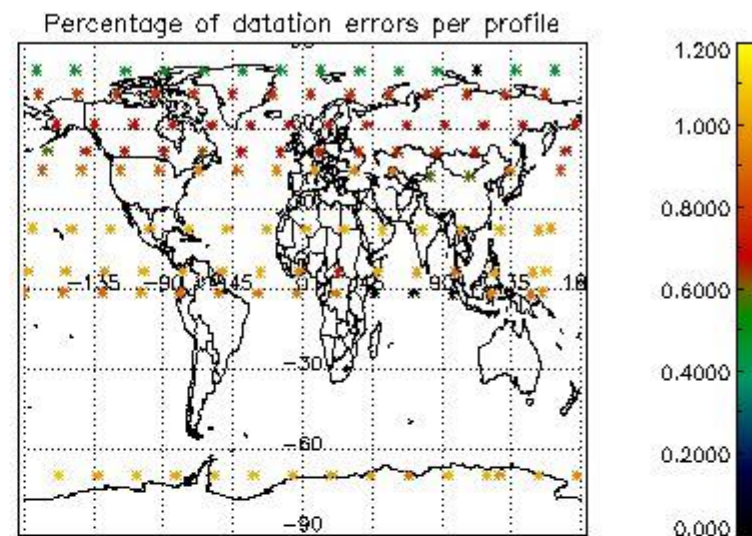
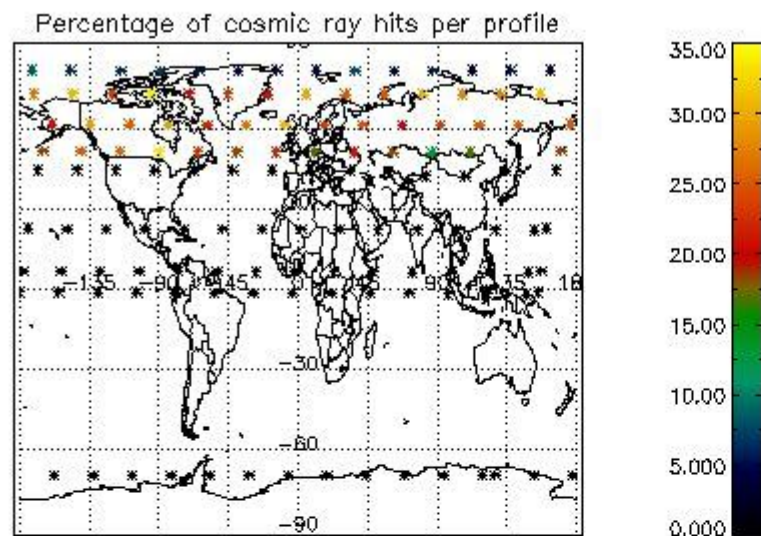


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

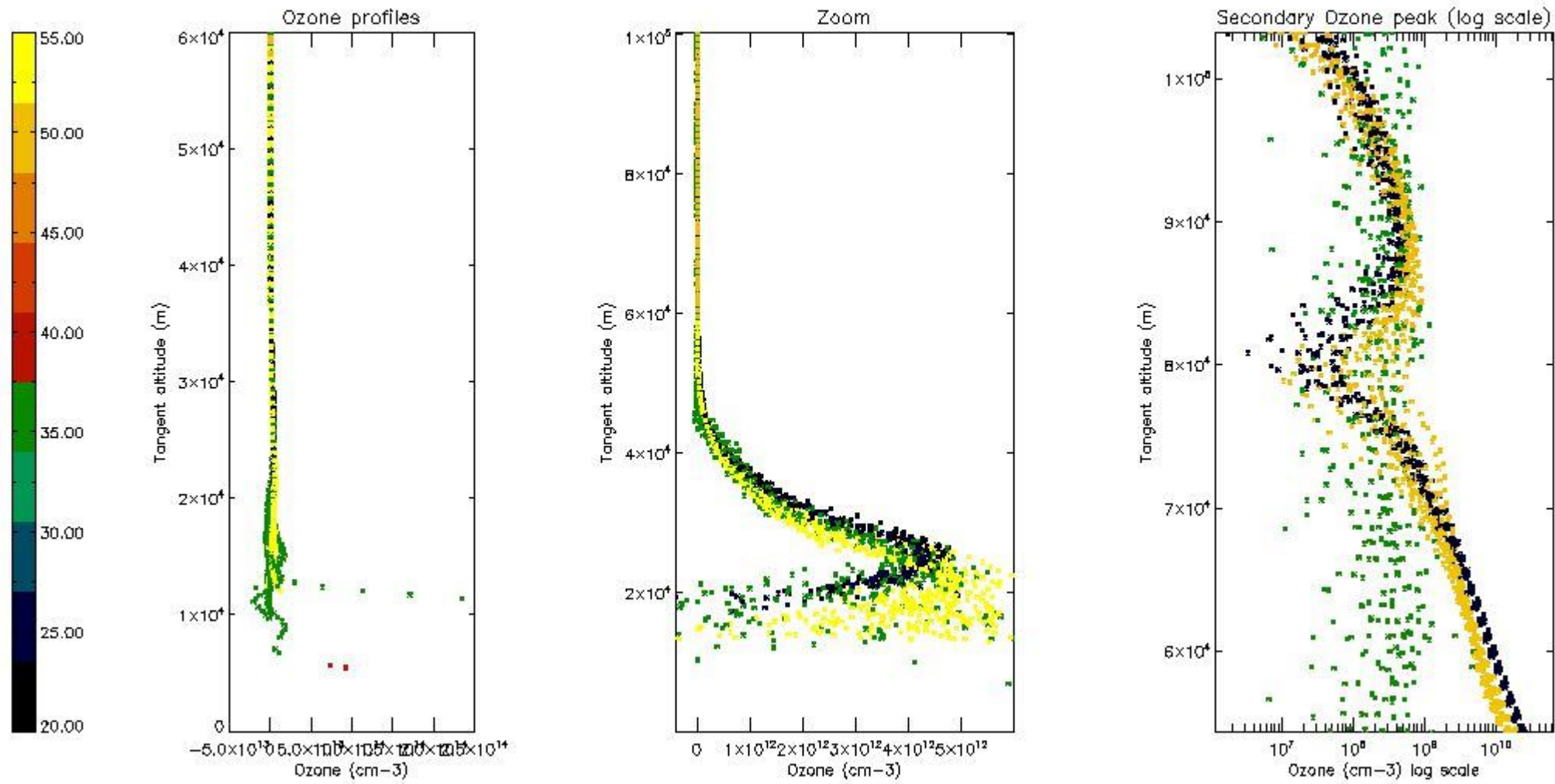
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	20
STD < 20	12

STD < 10	10
STD < 5	8

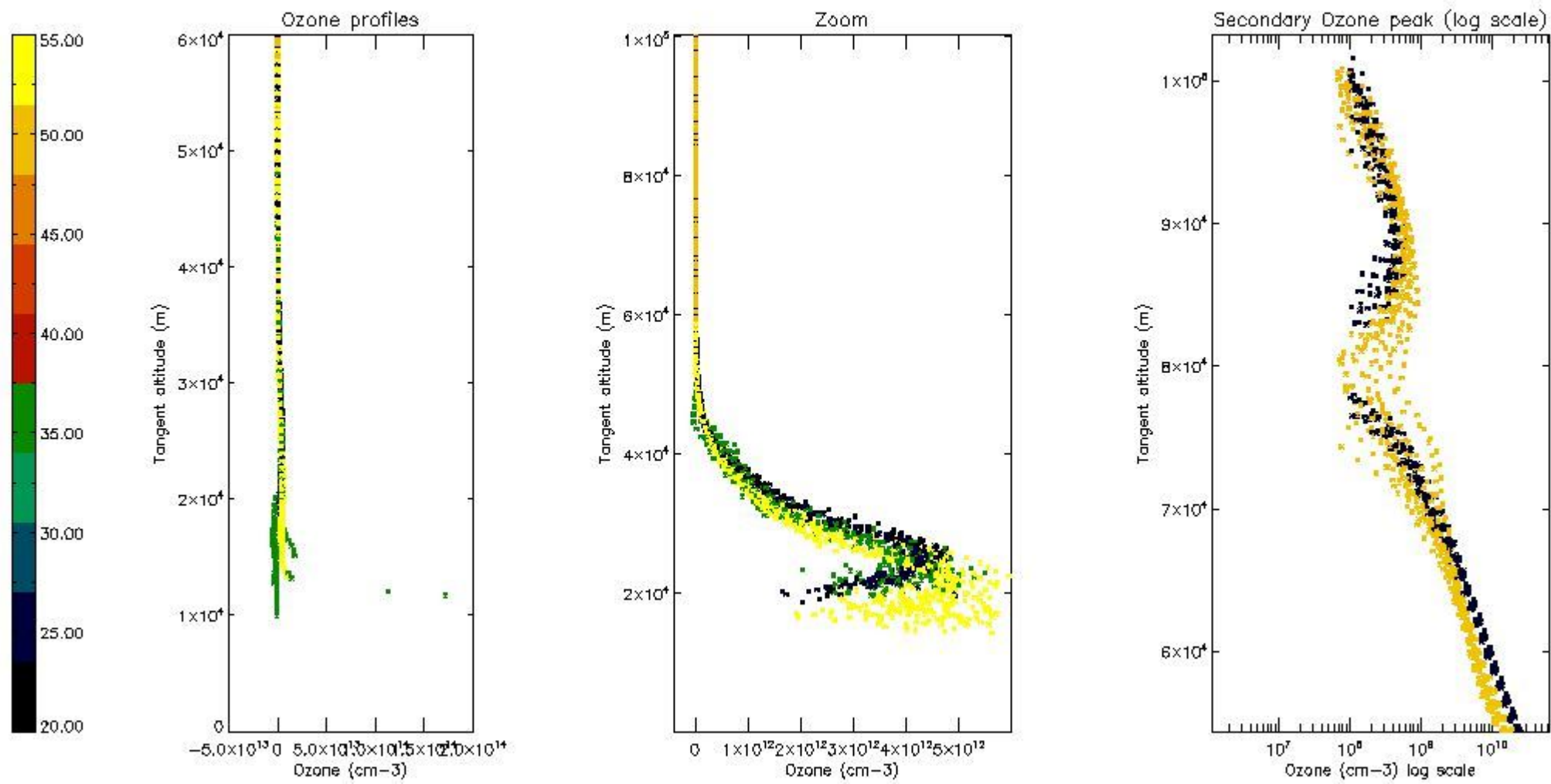
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



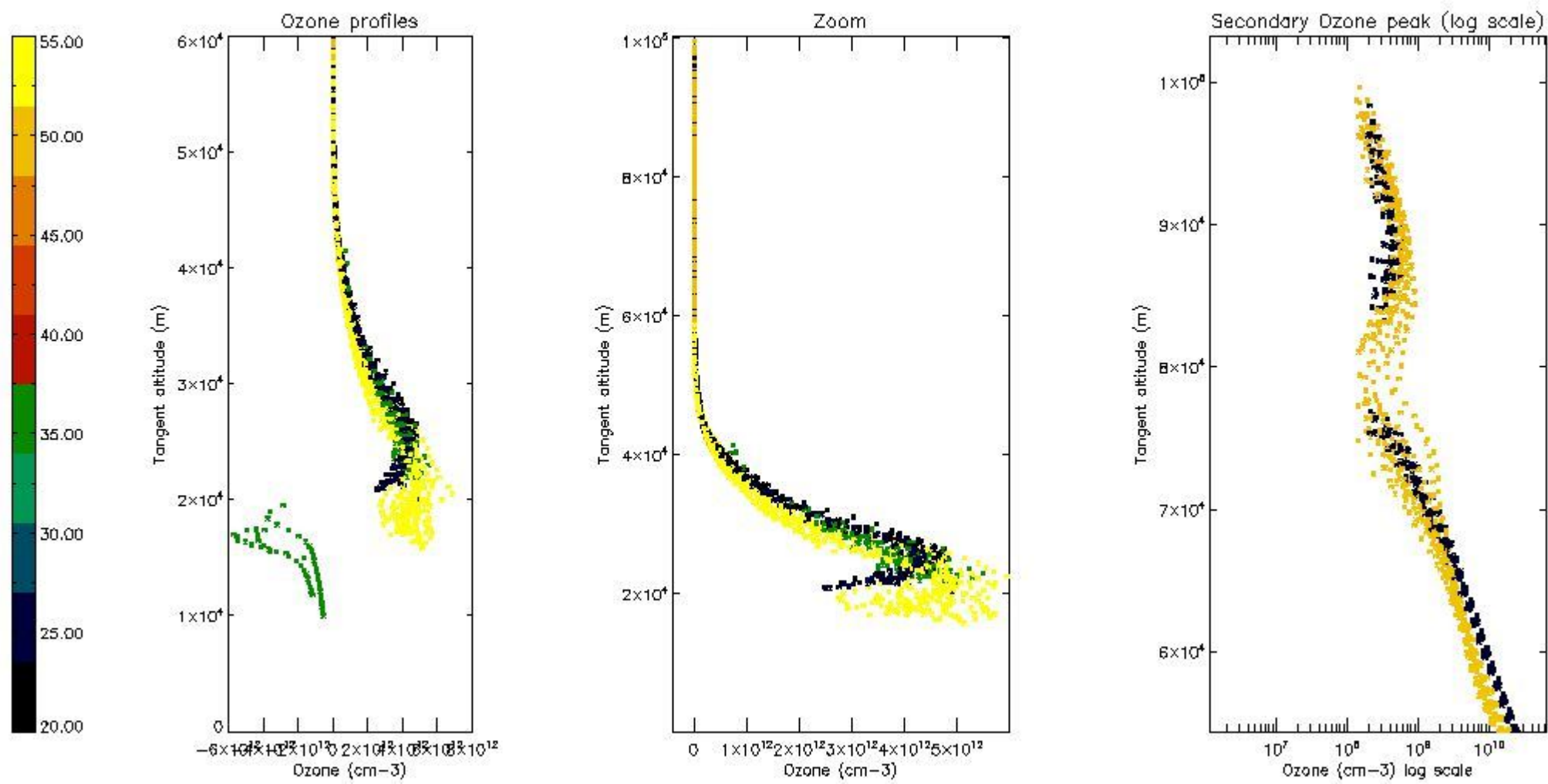
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



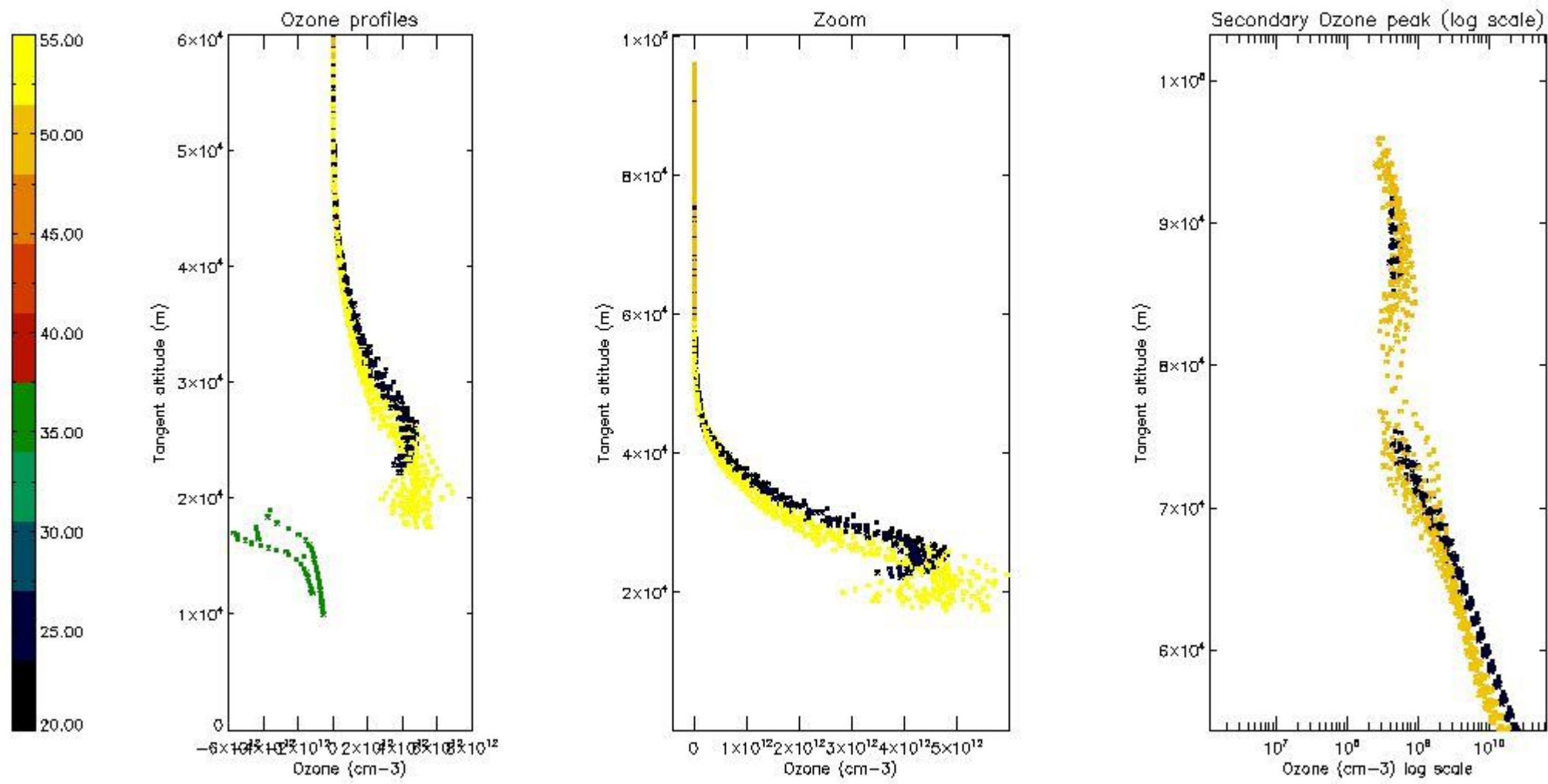
*5.4 Plot ozone profiles where STD < 10% (dark without errors)*

The colorbar represents the latitude.



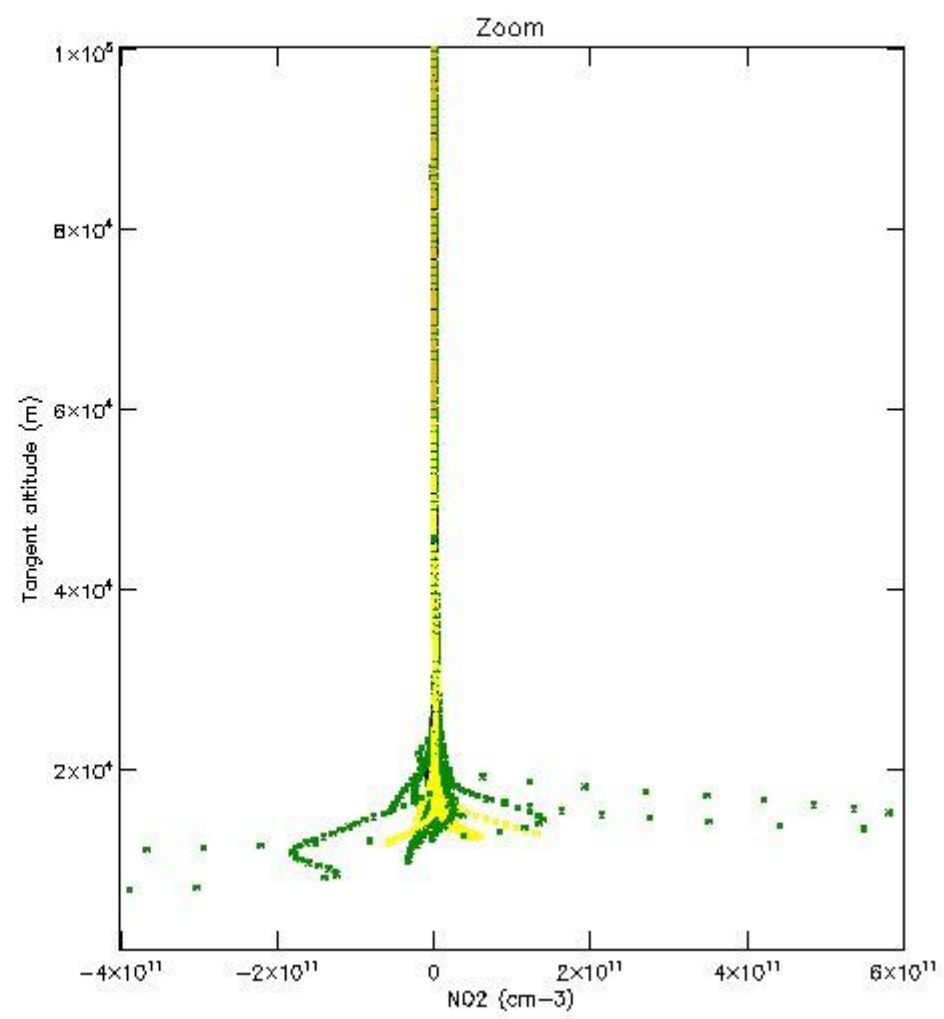
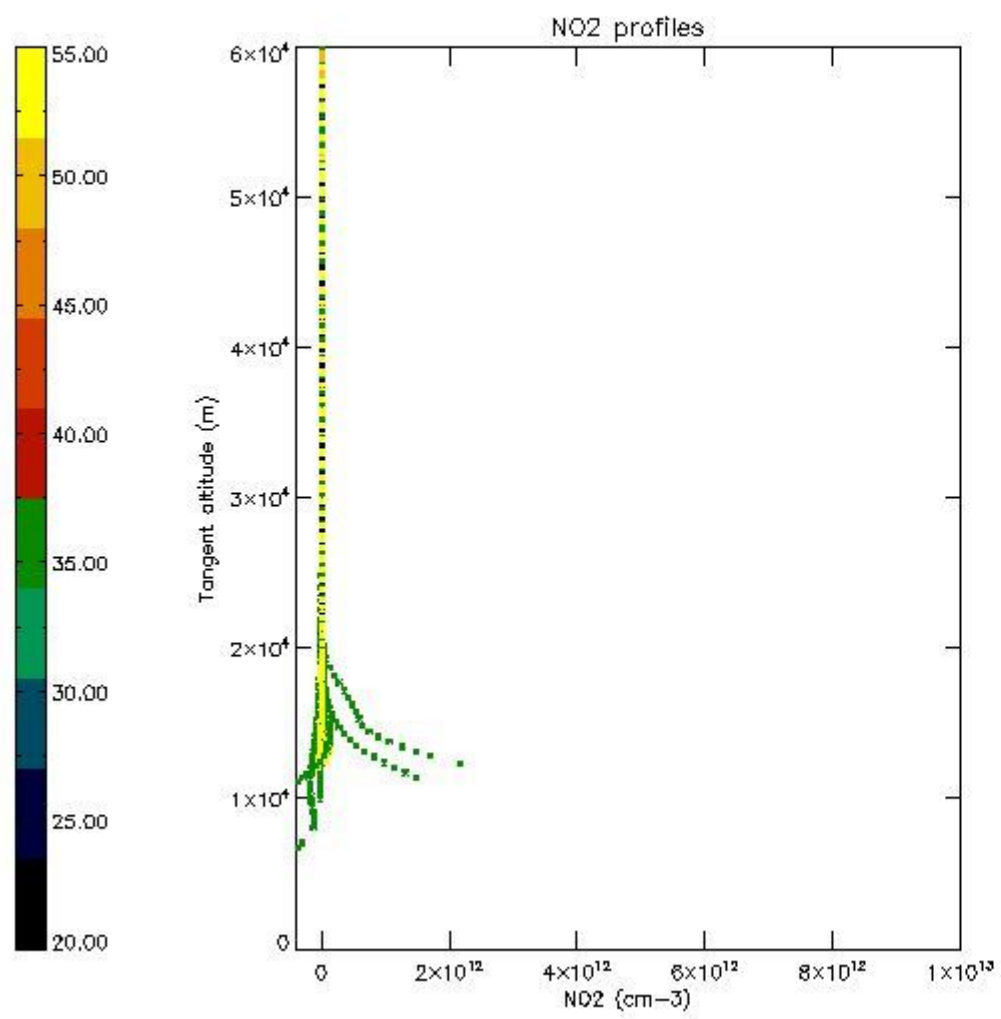
*5.5 Plot ozone profiles where STD < 5% (dark without errors)*

The colorbar represents the latitude.



*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

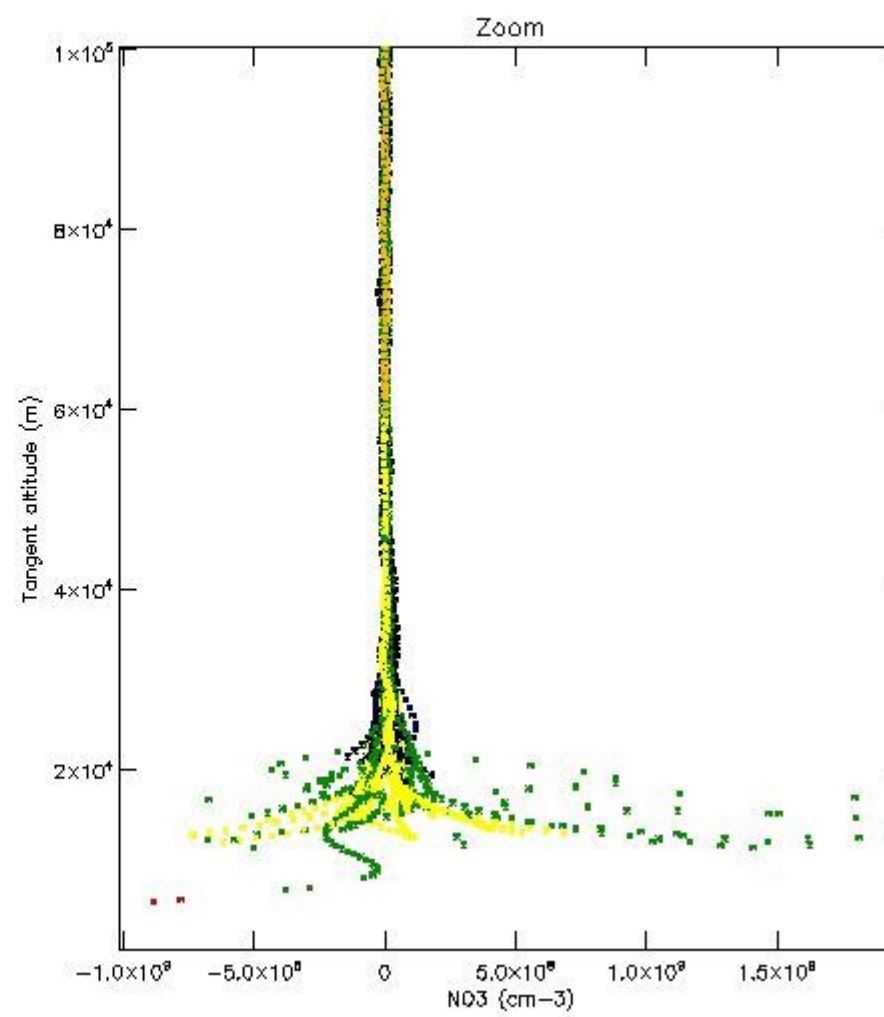
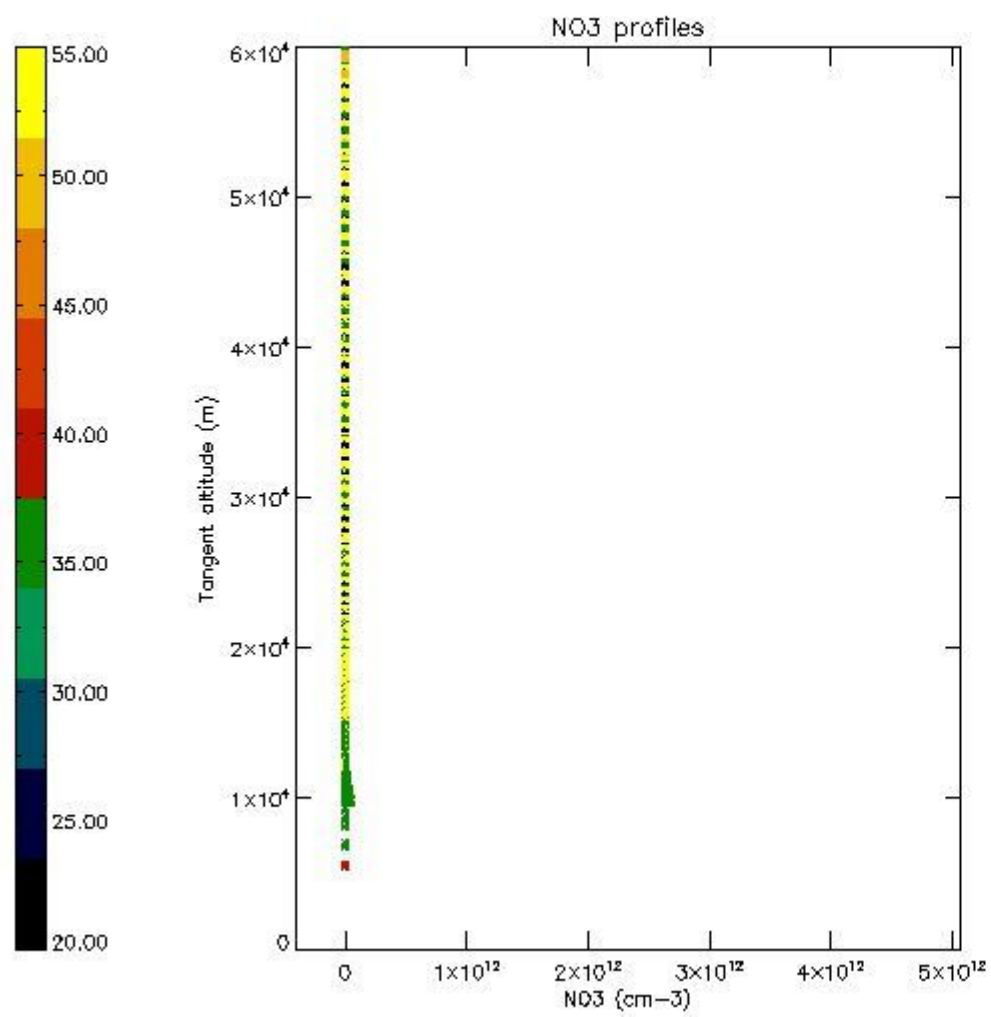
The colorbar represents the latitude.



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

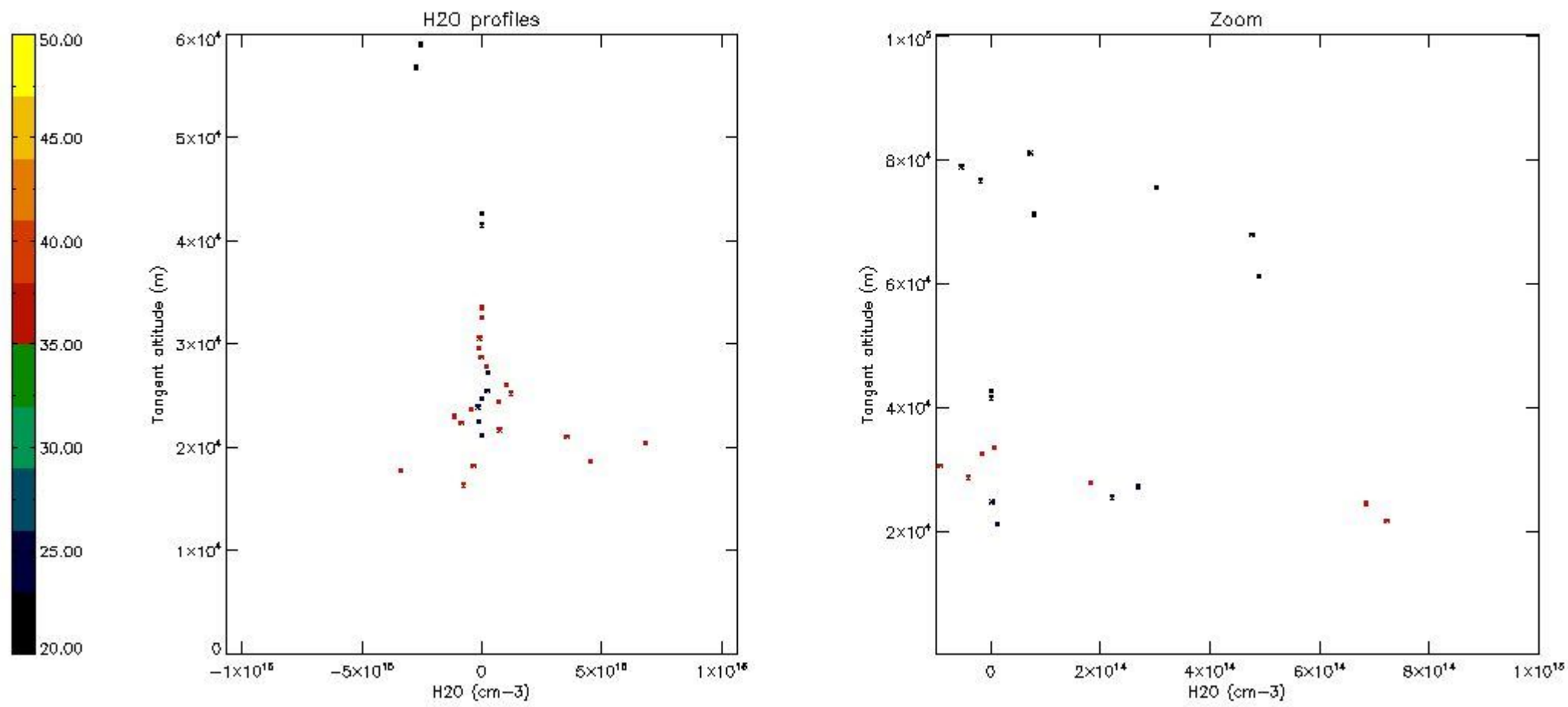
The colorbar represents the latitude.





5.8 Plot H<sub>2</sub>O 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	25-NOV-2008 00:03:58
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	25-NOV-2008 00:03:58
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	25-NOV-2008 00:03:58

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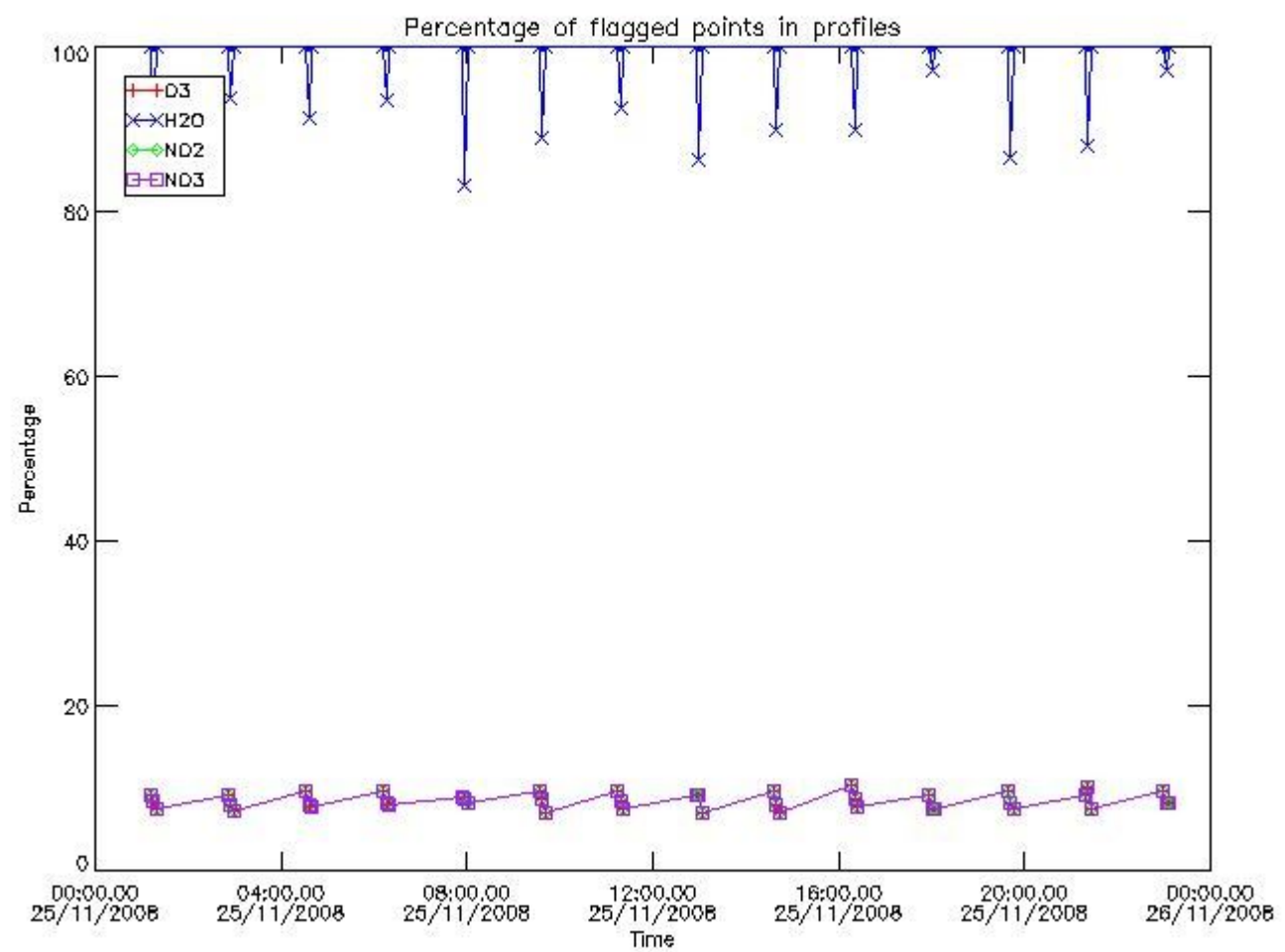
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20081125_000358_00000502074_00102_35226_5162.N1	25-NOV-2008 00:03:58	Bright	49.500	114	3Iot Aur	2.6930	4600.0	99	35226	No
2	GOM_NL__2PRFIN20081125_000825_00000502074_00102_35226_5163.N1	25-NOV-2008 00:08:25	Bright	49.500	6	13Alp Aur	0.080000	3400.0	99	35226	No
3	GOM_NL__2PRFIN20081125_001040_00000562074_00102_35226_5164.N1	25-NOV-2008 00:10:40	Bright	56.000	42	34Bet Aur	1.9000	10200.	112	35226	No
4	GOM_NL__2PRFIN20081125_003001_00000482074_00102_35226_5165.N1	25-NOV-2008 00:30:01	Bright	48.000	174	52Psi UMa	3.0040	4400.0	96	35226	No
5	GOM_NL__2PRFIN20081125_004002_00000602074_00102_35226_5166.N1	25-NOV-2008 00:40:02	Bright	60.000	96	68Del Leo	2.5600	9300.0	120	35226	No
6	GOM_NL__2PRFIN20081125_004333_00000722074_00102_35226_5167.N1	25-NOV-2008 00:43:33	Twilight	71.500	51	41Gam1Leo	2.0100	4500.0	143	35226	No
7	GOM_NL__2PRFIN20081125_011054_00000552074_00103_35227_6274.N1	25-NOV-2008 01:10:54	Dark	55.000	70	Zet Pup	2.2460	39000.	110	35227	No
8	GOM_NL__2PRFIN20081125_011437_00000602074_00103_35227_6275.N1	25-NOV-2008 01:14:37	Dark	60.000	117	Pi Pup	2.7060	3800.0	120	35227	No
9	GOM_NL__2PRFIN20081125_011835_00000752074_00103_35227_6276.N1	25-NOV-2008 01:18:35	Dark	75.000	23	21Eps CMa	1.5020	26000.	150	35227	No
10	GOM_NL__2PRFIN20081125_012051_00000812074_00103_35227_6277.N1	25-NOV-2008 01:20:51	Straylight	80.500	179	24Omi2CMa	3.0320	24000.	161	35227	No
11	GOM_NL__2PRFIN20081125_012552_000001062074_00103_35227_6278.N1	25-NOV-2008 01:25:52	Straylight	106.00	1	9Alp CMa	-1.4400	11000.	212	35227	No
12	GOM_NL__2PRFIN20081125_012954_00000662074_00103_35227_6279.N1	25-NOV-2008 01:29:54	Straylight	65.500	7	19Bet Ori	0.10000	14000.	131	35227	No
13	GOM_NL__2PRFIN20081125_013326_00000742074_00103_35227_6280.N1	25-NOV-2008 01:33:26	Twilight	73.500	30	46Eps Ori	1.6940	30000.	147	35227	No
14	GOM_NL__2PRFIN20081125_013819_00000552074_00103_35227_6281.N1	25-NOV-2008 01:38:19	Bright	54.500	13	87Alp Tau	0.86700	3800.0	109	35227	No
15	GOM_NL__2PRFIN20081125_014433_00000492074_00103_35227_6282.N1	25-NOV-2008 01:44:33	Bright	49.000	114	3Iot Aur	2.6930	4600.0	98	35227	No
16	GOM_NL__2PRFIN20081125_014900_00000492074_00103_35227_6283.N1	25-NOV-2008 01:49:00	Bright	49.000	6	13Alp Aur	0.080000	3400.0	98	35227	No
17	GOM_NL__2PRFIN20081125_015115_00000532074_00103_35227_6284.N1	25-NOV-2008 01:51:15	Bright	52.500	42	34Bet Aur	1.9000	10200.	105	35227	No
18	GOM_NL__2PRFIN20081125_021037_00000482074_00103_35227_6285.N1	25-NOV-2008 02:10:37	Bright	48.000	174	52Psi UMa	3.0040	4400.0	96	35227	No
19	GOM_NL__2PRFIN20081125_022038_00000562074_00103_35227_6286.N1	25-NOV-2008 02:20:38	Bright	56.000	96	68Del Leo	2.5600	9300.0	112	35227	No
20	GOM_NL__2PRFIN20081125_022411_00000722074_00103_35227_6287.N1	25-NOV-2008 02:24:11	Twilight	72.000	51	41Gam1Leo	2.0100	4500.0	144	35227	No
21	GOM_NL__2PRFIN20081125_025131_00000552074_00104_35228_6267.N1	25-NOV-2008 02:51:31	Dark	55.000	70	Zet Pup	2.2460	39000.	110	35228	No
22	GOM_NL__2PRFIN20081125_025514_00000652074_00104_35228_6268.N1	25-NOV-2008 02:55:14	Dark	64.500	117	Pi Pup	2.7060	3800.0	129	35228	No
23	GOM_NL__2PRFIN20081125_025912_00000712074_00104_35228_6269.N1	25-NOV-2008 02:59:12	Dark	70.500	23	21Eps CMa	1.5020	26000.	141	35228	No
24	GOM_NL__2PRFIN20081125_030128_00000822074_00104_35228_6270.N1	25-NOV-2008 03:01:28	Straylight	81.500	179	24Omi2CMa	3.0320	24000.	163	35228	No
25	GOM_NL__2PRFIN20081125_030628_000001102074_00104_35228_6271.N1	25-NOV-2008 03:06:28	Straylight	109.50	1	9Alp CMa	-1.4400	11000.	219	35228	No
26	GOM_NL__2PRFIN20081125_031029_00000652074_00104_35228_6272.N1	25-NOV-2008 03:10:29	Straylight	65.000	7	19Bet Ori	0.10000	14000.	130	35228	No
27	GOM_NL__2PRFIN20081125_031401_00000722074_00104_35228_6273.N1	25-NOV-2008 03:14:01	Twilight	72.000	30	46Eps Ori	1.6940	30000.	144	35228	No
28	GOM_NL__2PRFIN20081125_031658_00000752074_00104_35228_6274.N1	25-NOV-2008 03:16:58	Bright	74.500	27	24Gam Ori	1.6360	26000.	149	35228	No
29	GOM_NL__2PRFIN20081125_031929_00000862074_00104_35228_6275.N1	25-NOV-2008 03:19:29	Bright	86.000	14	58Alp Ori	0.87000	3000.0	172	35228	No
30	GOM_NL__2PRFIN20081125_032509_00000502074_00104_35228_6276.N1	25-NOV-2008 03:25:09	Bright	50.000	114	3Iot Aur	2.6930	4600.0	100	35228	No
31	GOM_NL__2PRFIN20081125_032935_00000562074_00104_35228_6277.N1	25-NOV-2008 03:29:35	Bright	55.500	6	13Alp Aur	0.080000	3400.0	111	35228	No
32	GOM_NL__2PRFIN20081125_033150_00000532074_00104_35228_6278.N1	25-NOV-2008 03:31:50	Bright	53.000	42	34Bet Aur	1.9000	10200.	106	35228	No
33	GOM_NL__2PRFIN20081125_035113_00000552074_00104_35228_6279.N1	25-NOV-2008 03:51:13	Bright	54.500	174	52Psi UMa	3.0040	4400.0	109	35228	No
34	GOM_NL__2PRFIN20081125_040115_00000592074_00104_35228_6280.N1	25-NOV-2008 04:01:15	Bright	59.000	96	68Del Leo	2.5600	9300.0	118	35228	No
35	GOM_NL__2PRFIN20081125_040449_00000642074_00104_35228_6281.N1	25-NOV-2008 04:04:49	Twilight	64.000	51	41Gam1Leo	2.0100	4500.0	128	35228	No
36	GOM_NL__2PRFIN20081125_043208_00000542074_00105_35229_5167.N1	25-NOV-2008 04:32:08	Dark	53.500	70	Zet Pup	2.2460	39000.	107	35229	No
37	GOM_NL__2PRFIN20081125_043551_00000652074_00105_35229_5168.N1	25-NOV-2008 04:35:51	Dark	64.500	117	Pi Pup	2.7060	3800.0	129	35229	No
38	GOM_NL__2PRFIN20081125_043949_00000732074_00105_35229_5169.N1	25-NOV-2008 04:39:49	Dark	73.000	23	21Eps CMa	1.5020	26000.	146	35229	No
39	GOM_NL__2PRFIN20081125_044205_00000802074_00105_35229_5170.N1	25-NOV-2008 04:42:05	Straylight	80.000	179	24Omi2CMa	3.0320	24000.	160	35229	No
40	GOM_NL__2PRFIN20081125_044704_000001102074_00105_35229_5171.N1	25-NOV-2008 04:47:04	Straylight	110.00	1	9Alp CMa	-1.4400	11000.	220	35229	No
41	GOM_NL__2PRFIN20081125_045105_00000692074_00105_35229_5172.N1	25-NOV-2008 04:51:05	Straylight	68.500	7	19Bet Ori	0.10000	14000.	137	35229	No
42	GOM_NL__2PRFIN20081125_045437_00000752074_00105_35229_5173.N1	25-NOV-2008 04:54:37	Twilight	75.000	30	46Eps Ori	1.6940	30000.	150	35229	No







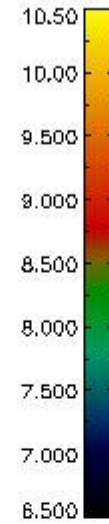
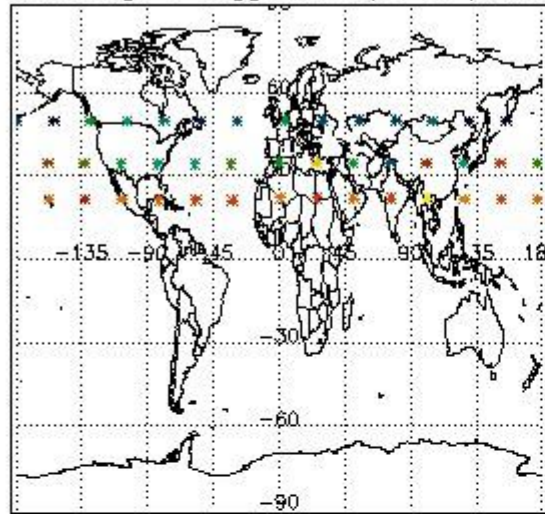
3.1 Plot quality information per product (time dependant)



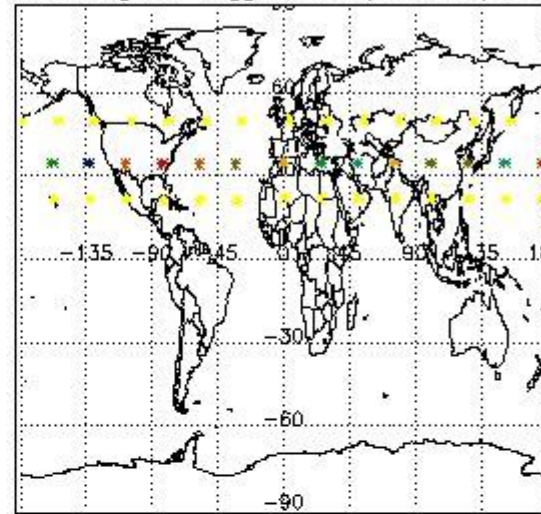
3.2 Plot quality information per product (world map)



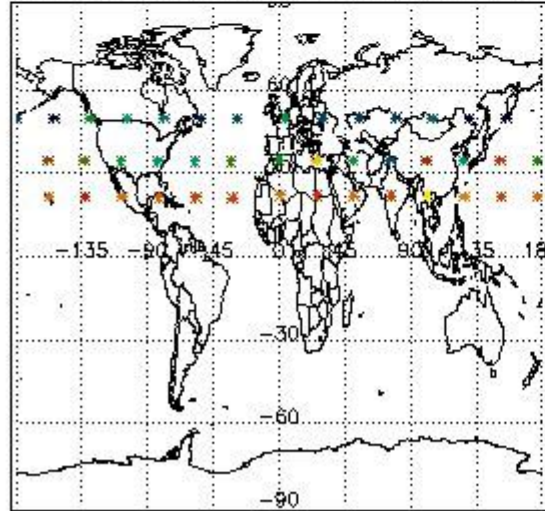
Percentage of flagged data per O3 profile



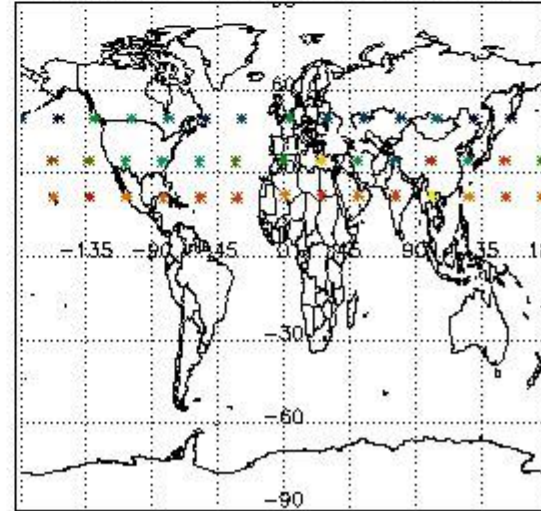
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

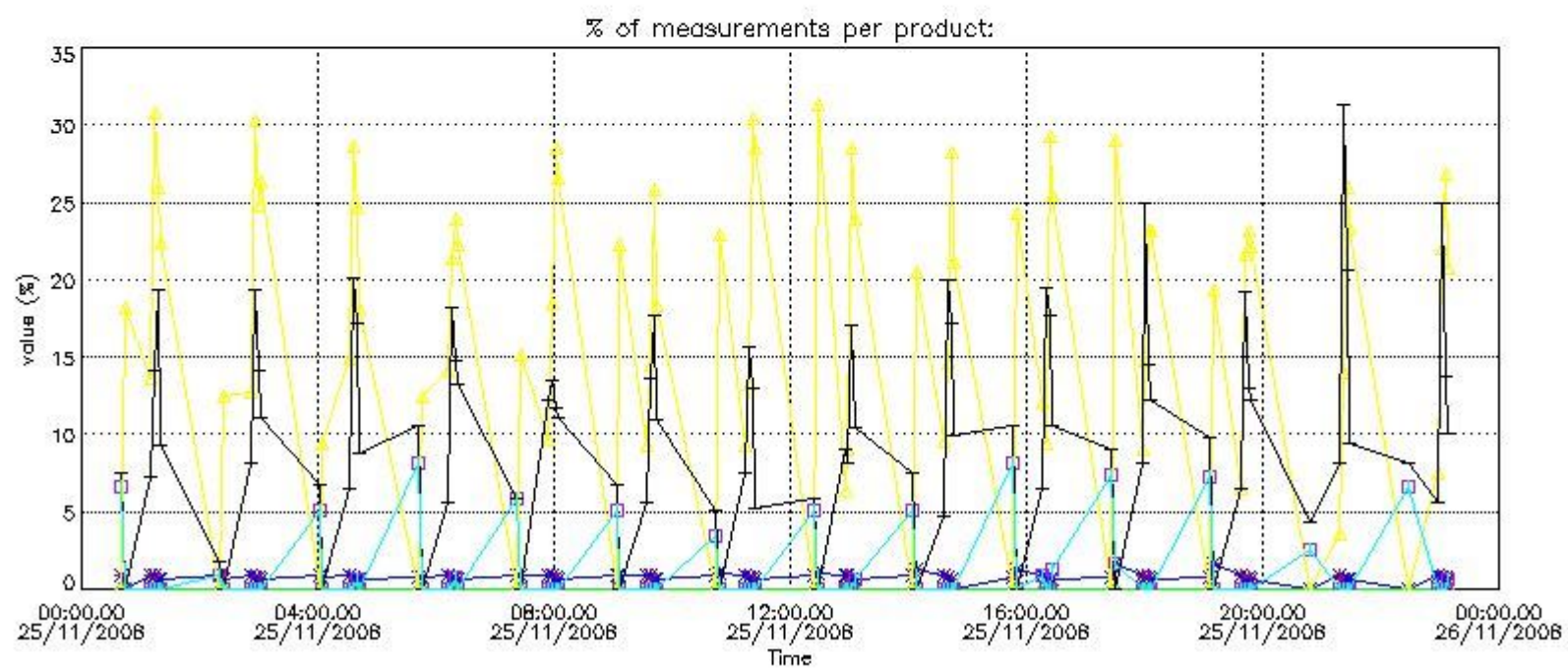


#### 4. Level 1 quality information per product

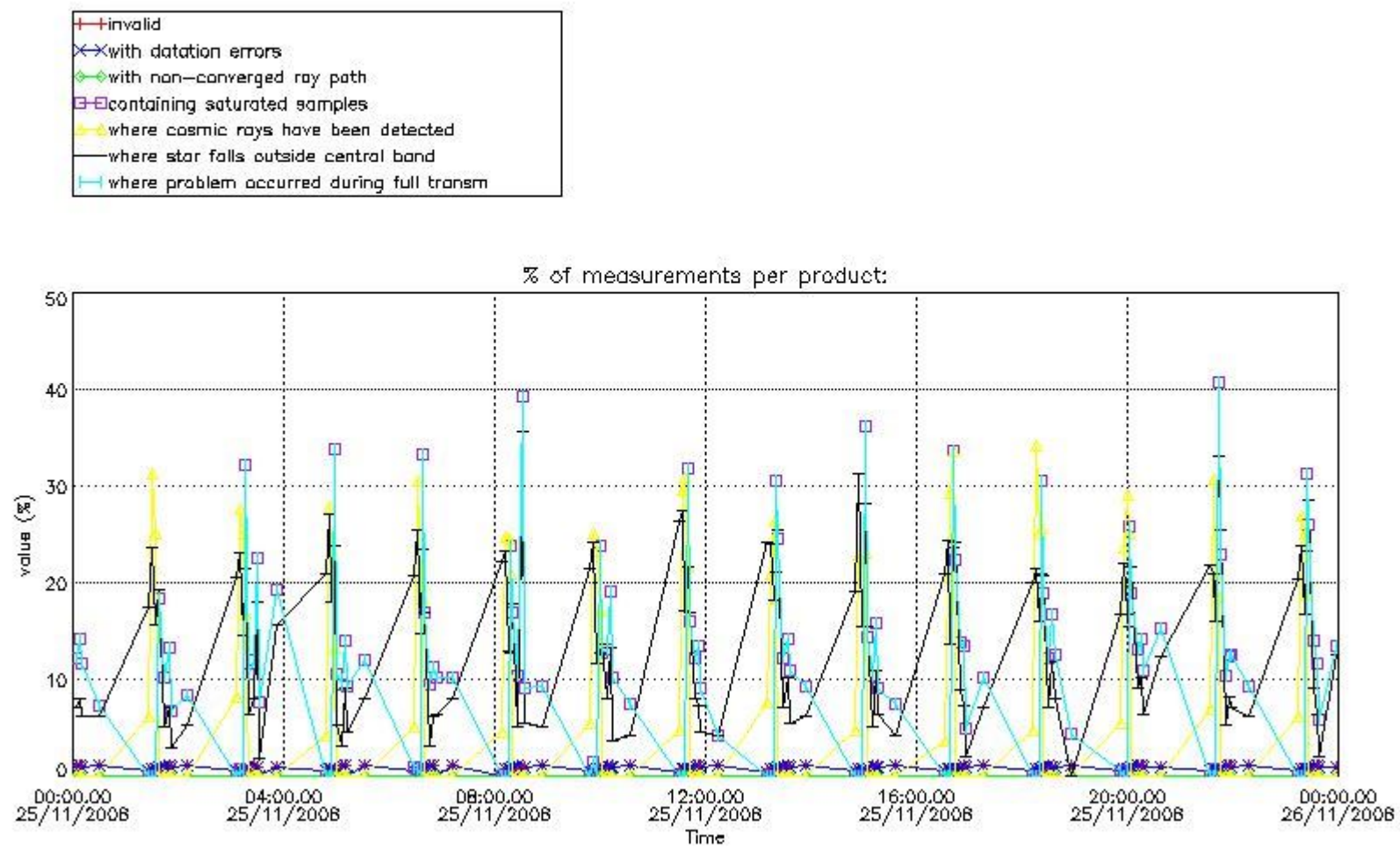
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

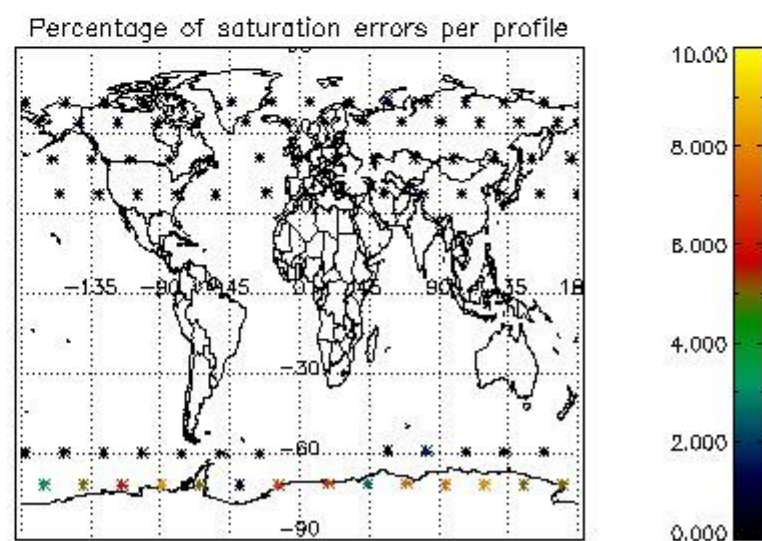
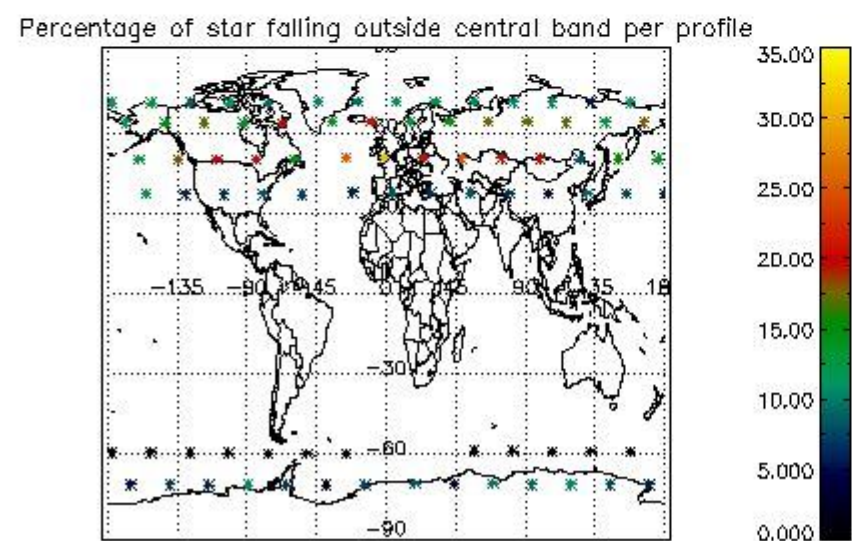
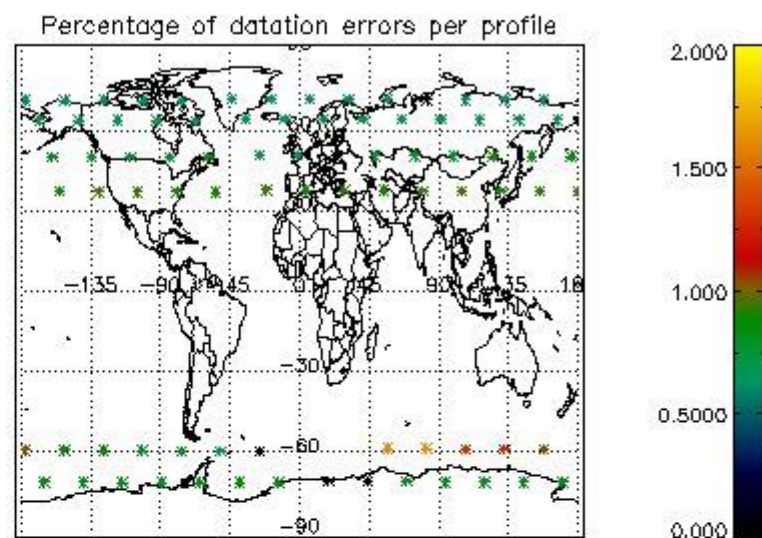
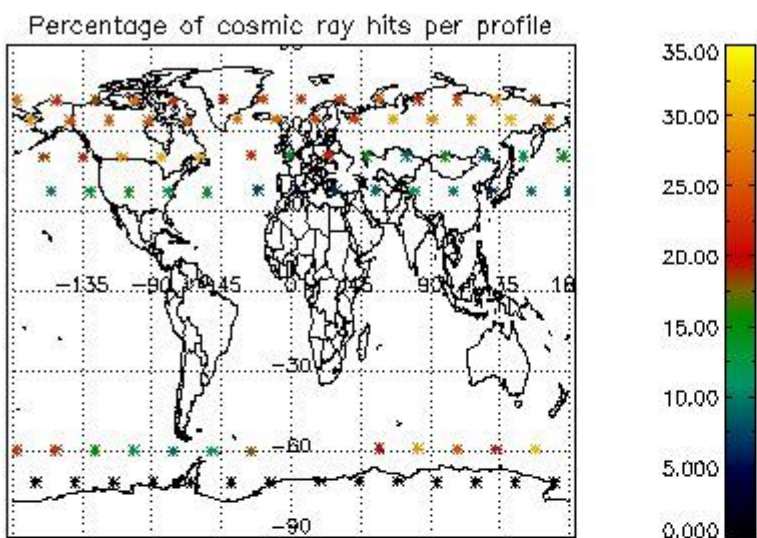


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

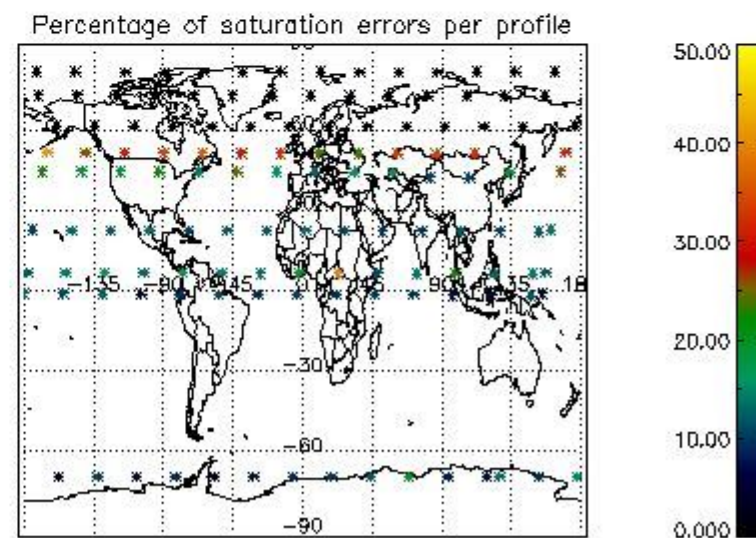
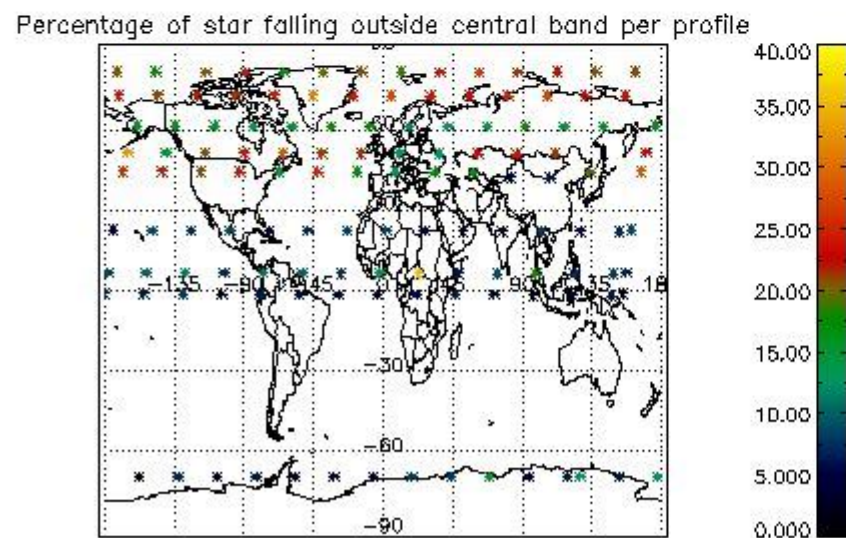
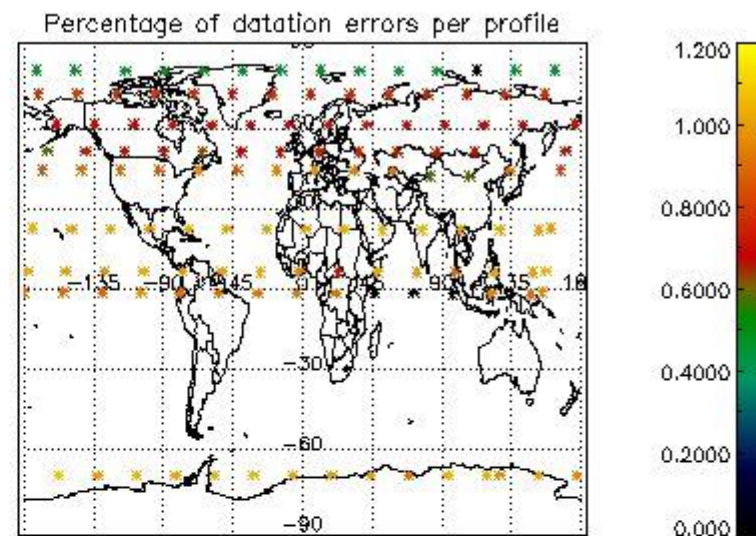
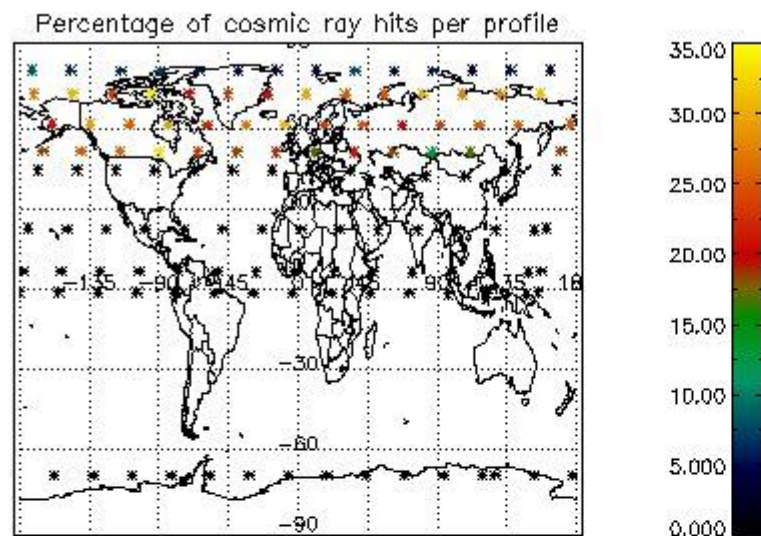


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

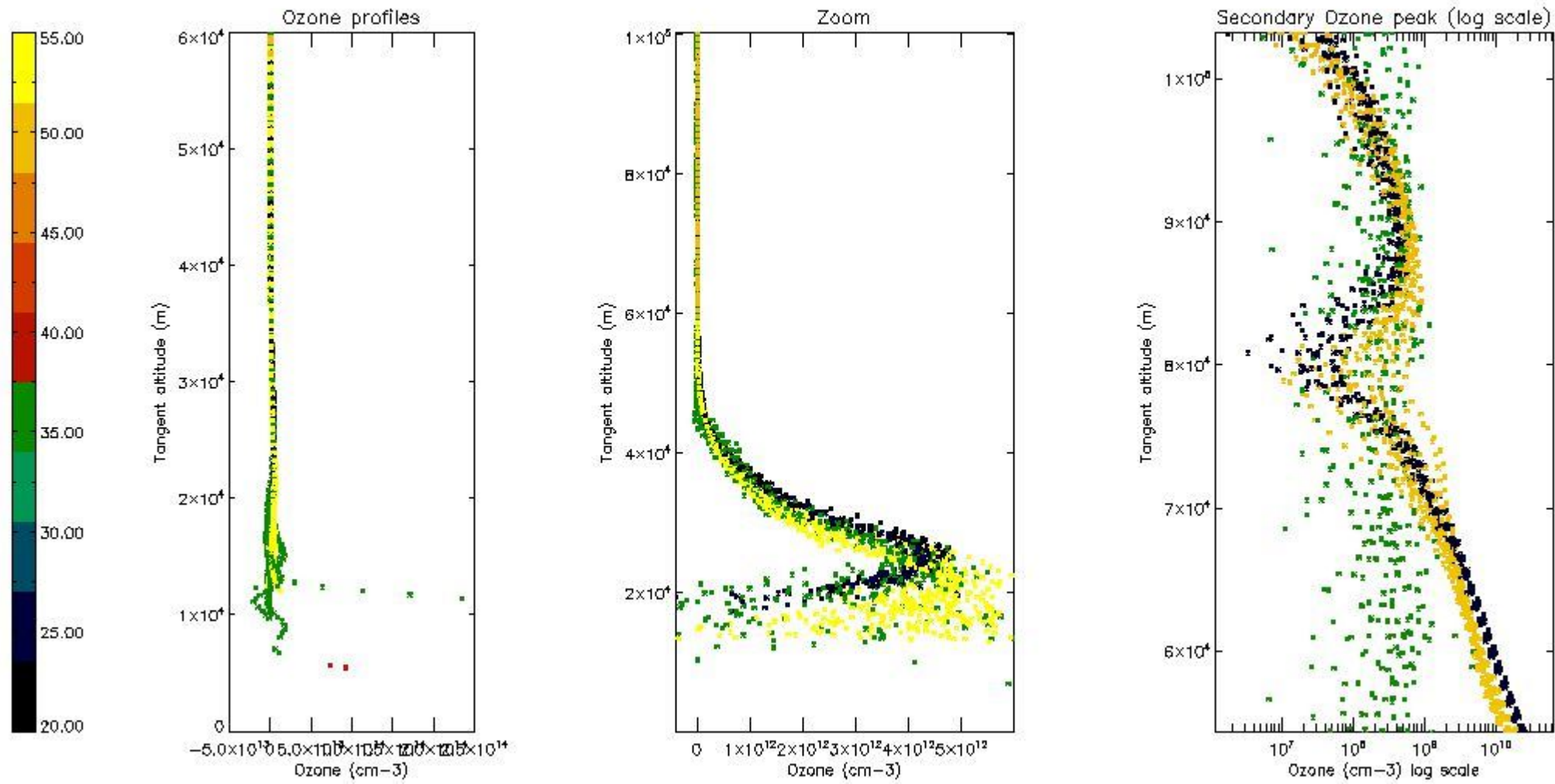
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	20
STD < 20	12

STD < 10	10
STD < 5	8

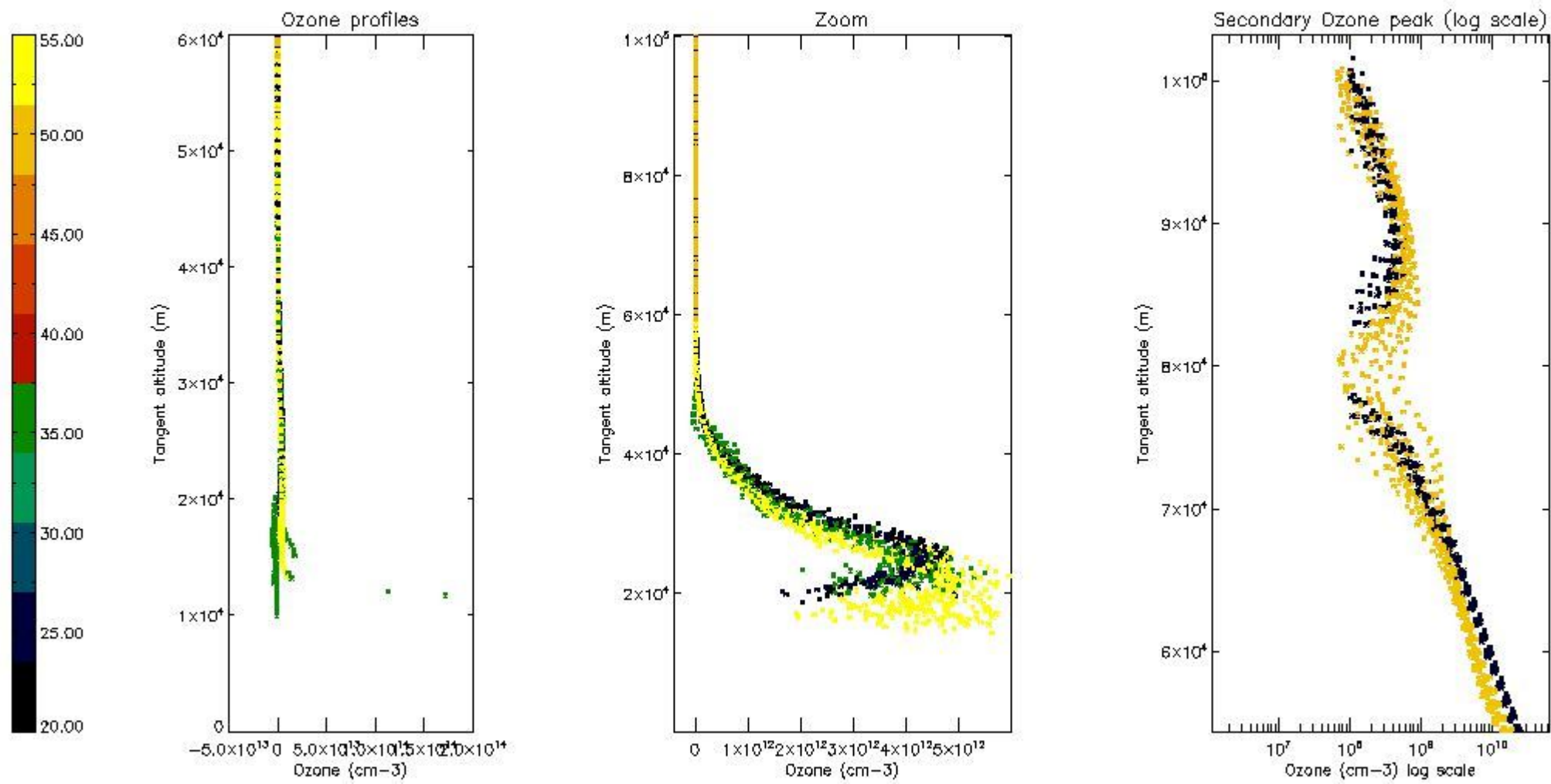
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



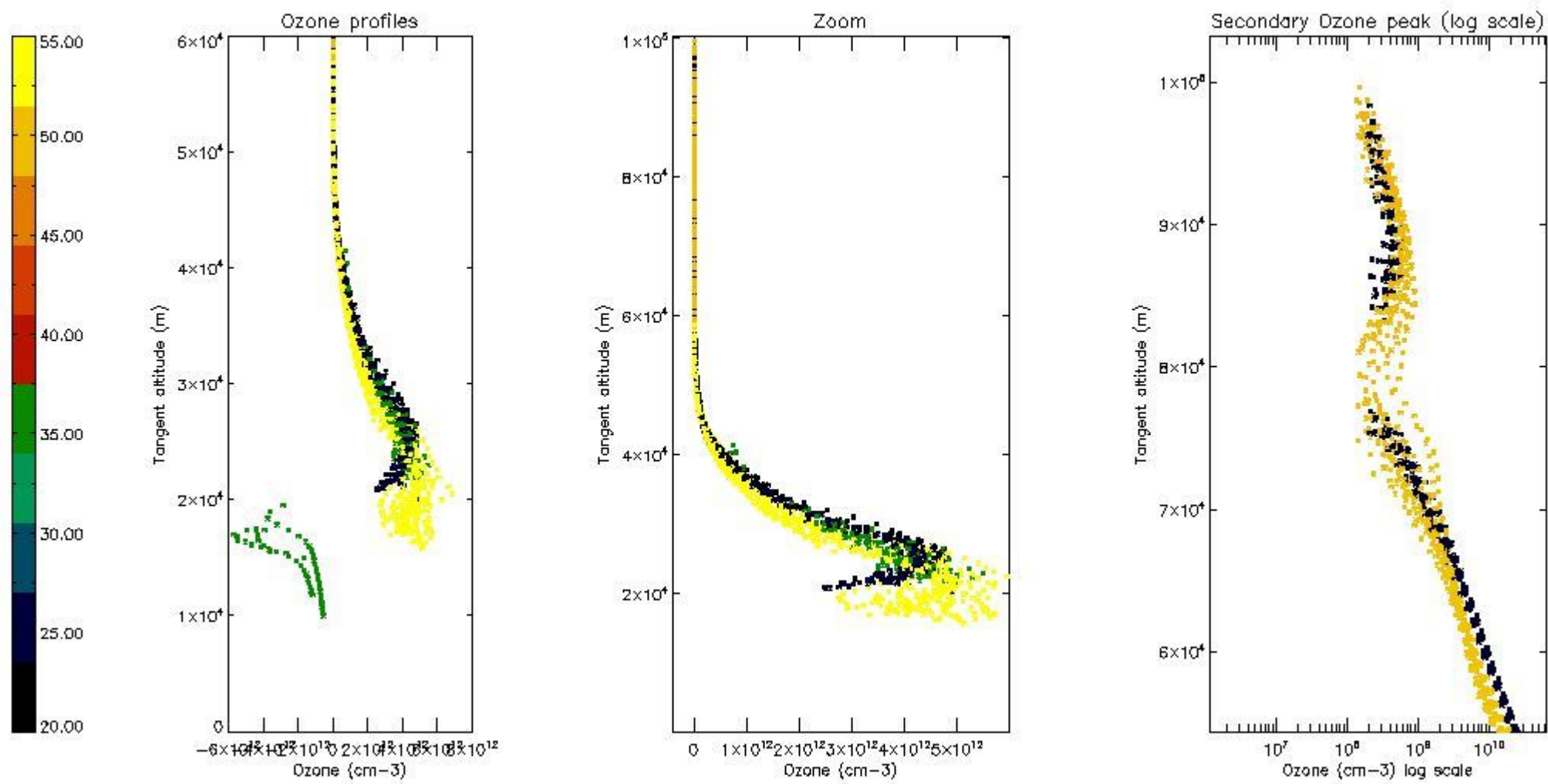
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



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

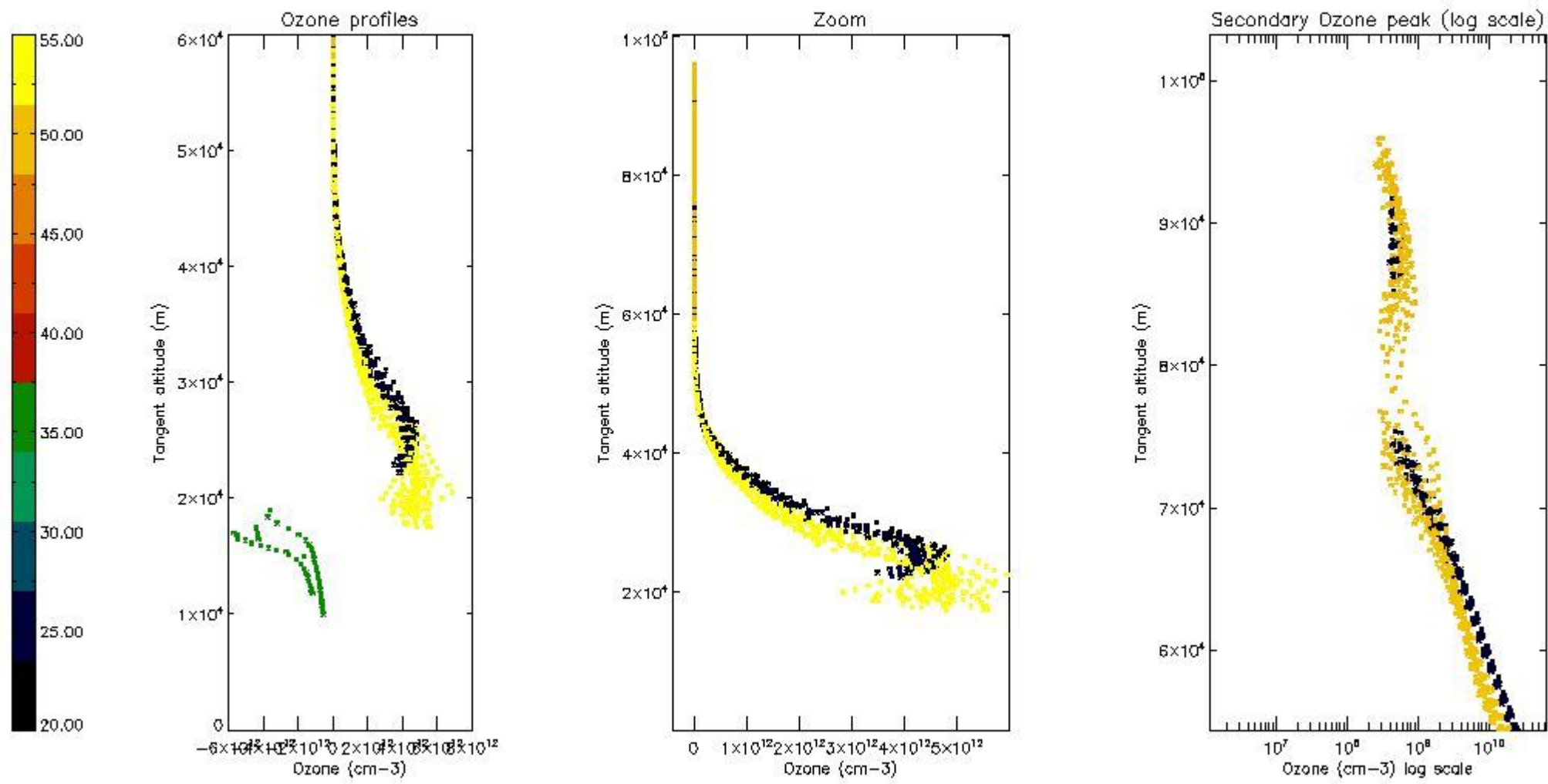
The colorbar represents the latitude.



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

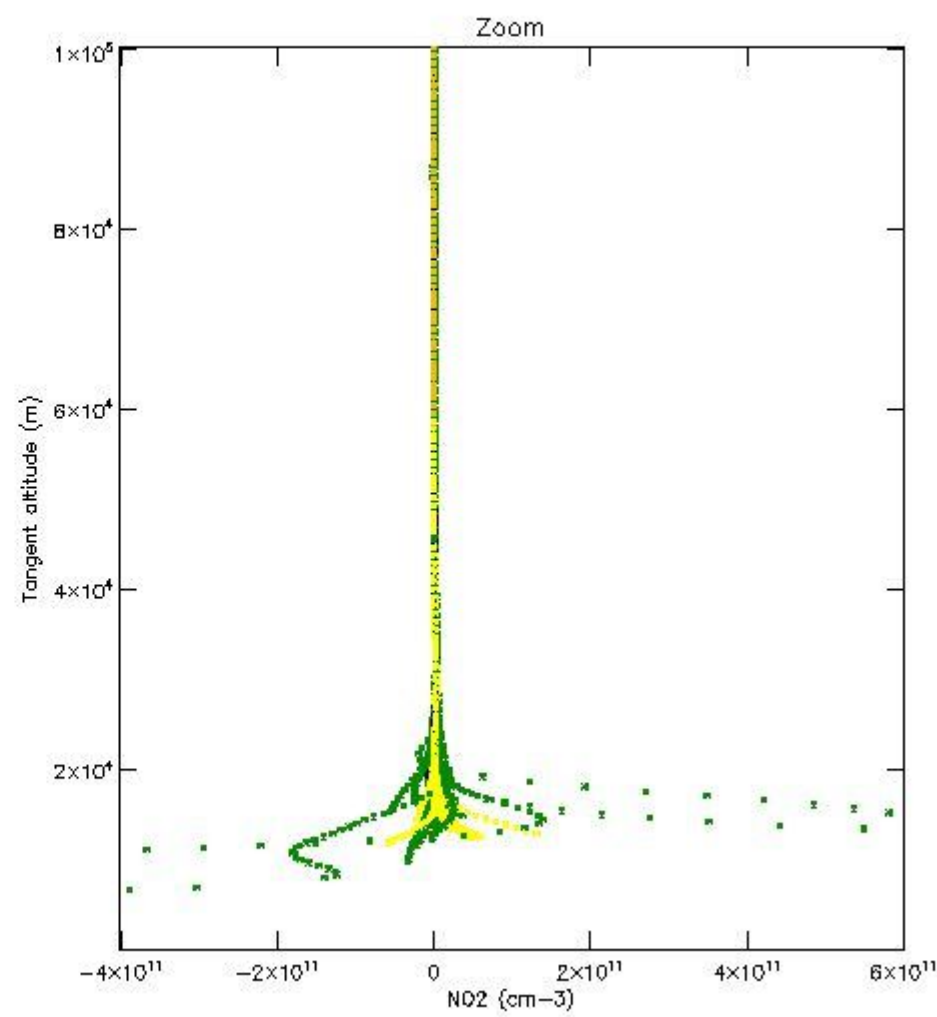
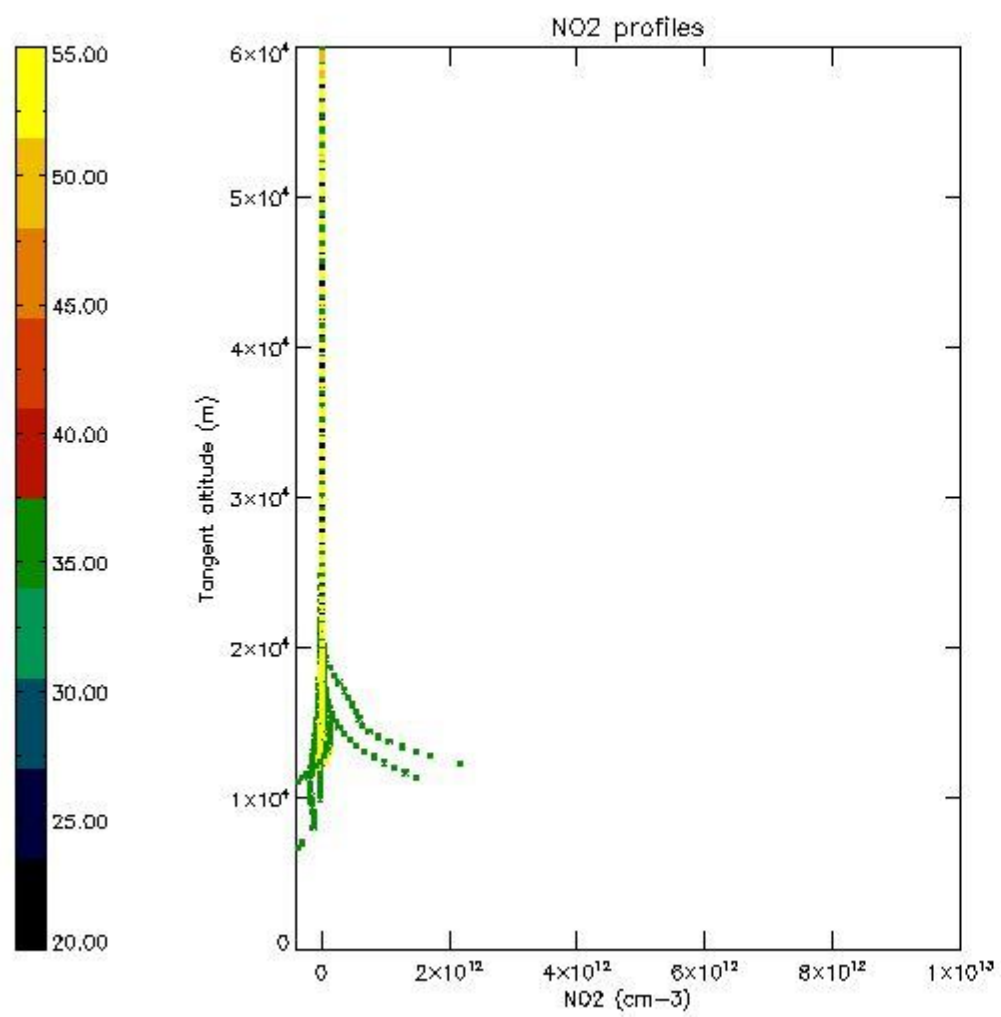
The colorbar represents the latitude.





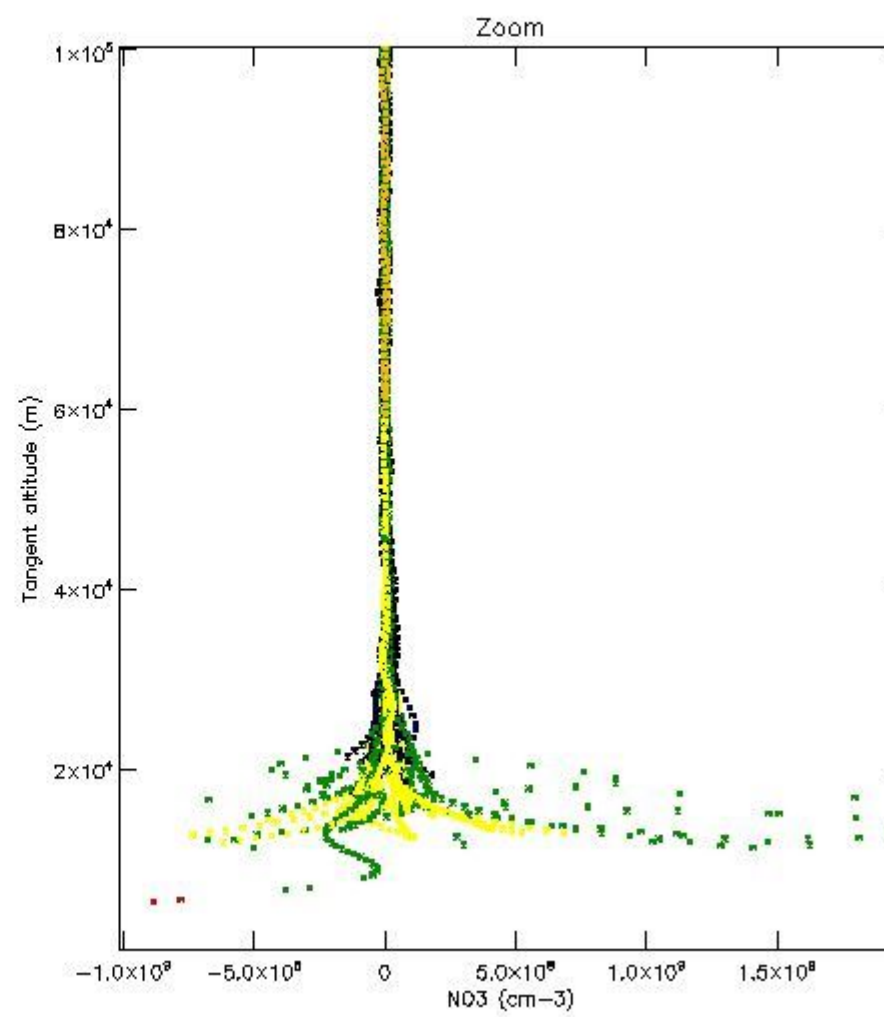
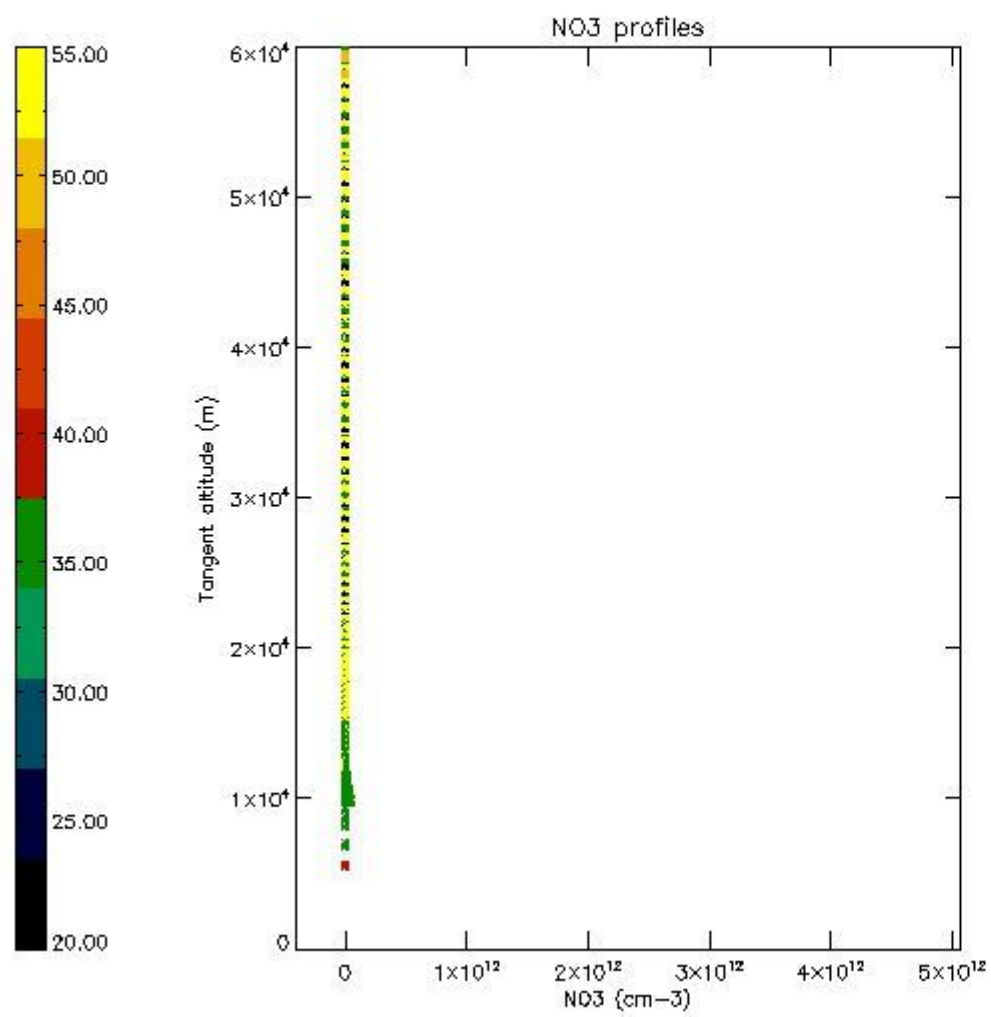
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



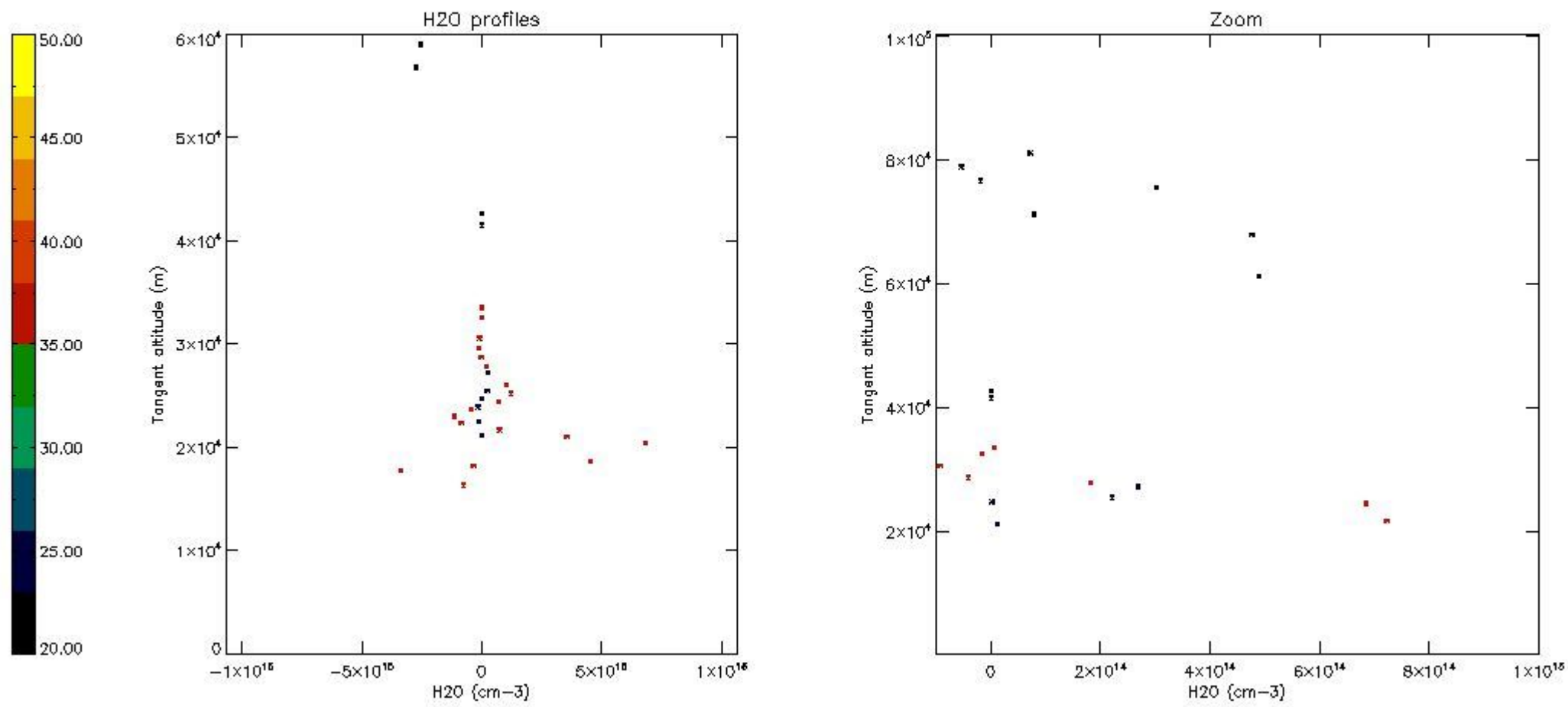
*5.7 Plot NO3 profiles for all STD (dark without errors)*

The colorbar represents the latitude.



5.8 Plot H<sub>2</sub>O profiles for all STD (only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors)

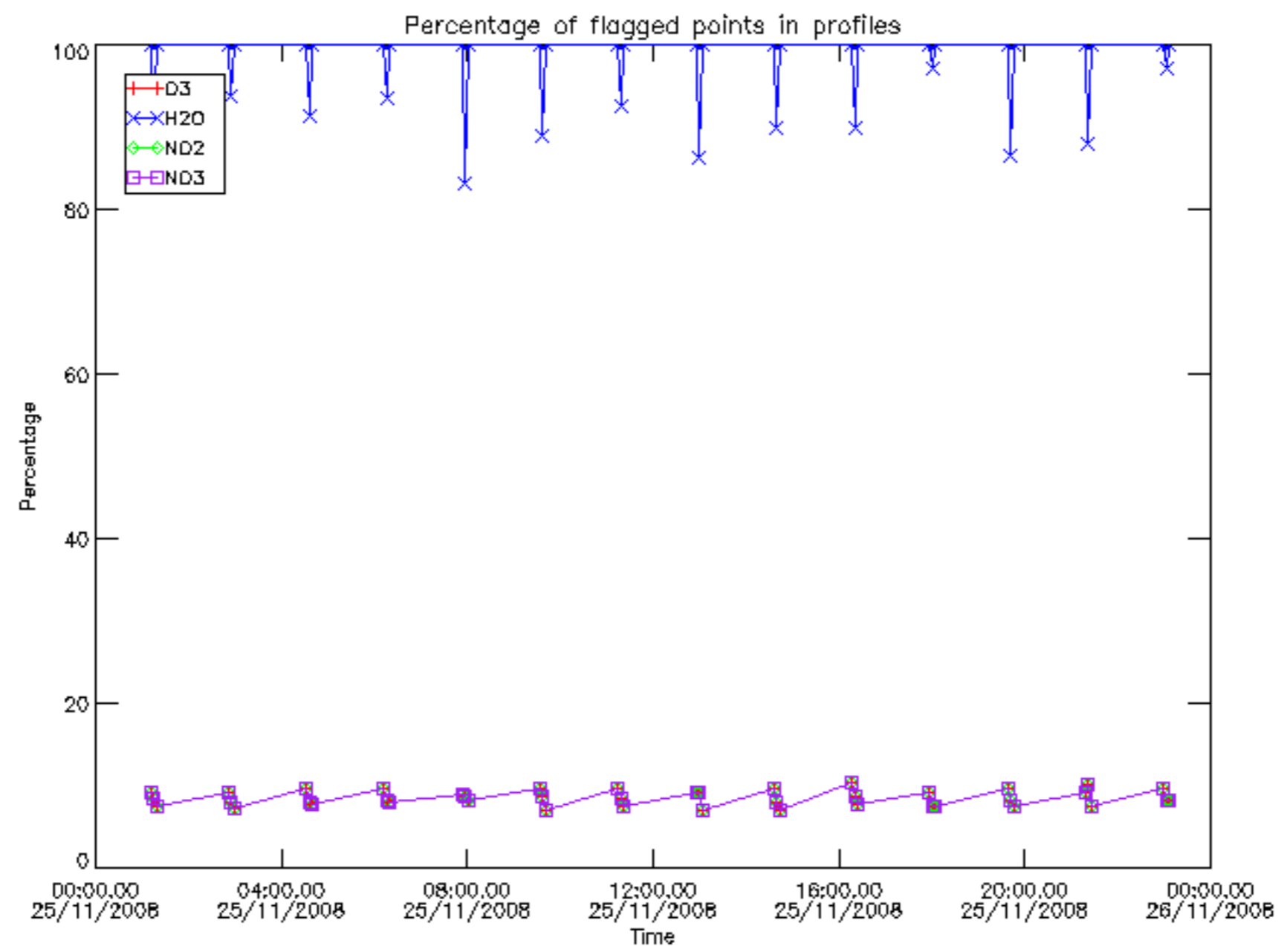
The colorbar represents the latitude.



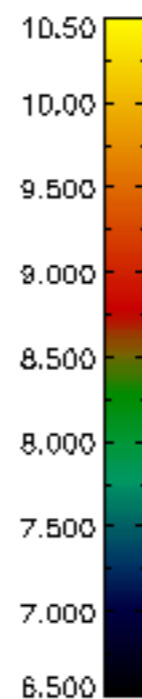
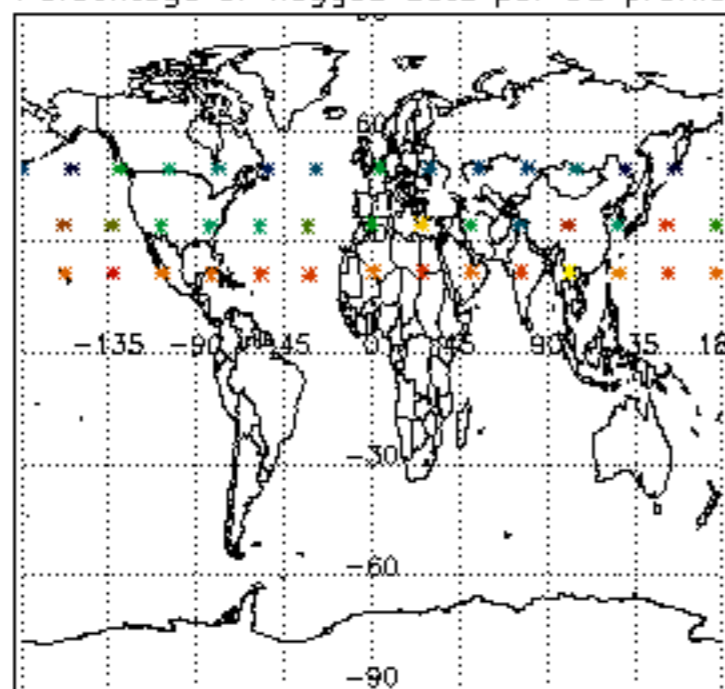
## 6. Auxiliary Data Files used for the production reported in section 2

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.

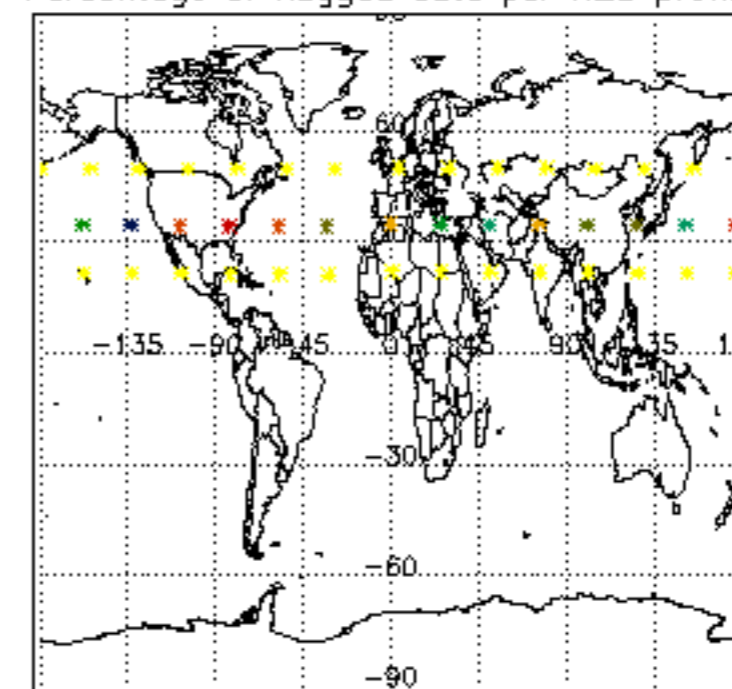
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	25-NOV-2008 00:03:58
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	25-NOV-2008 00:03:58
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	25-NOV-2008 00:03:58



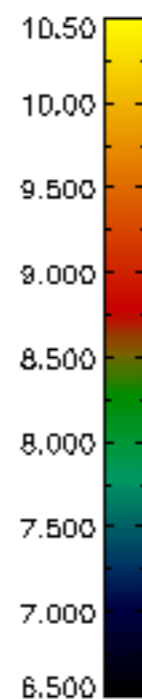
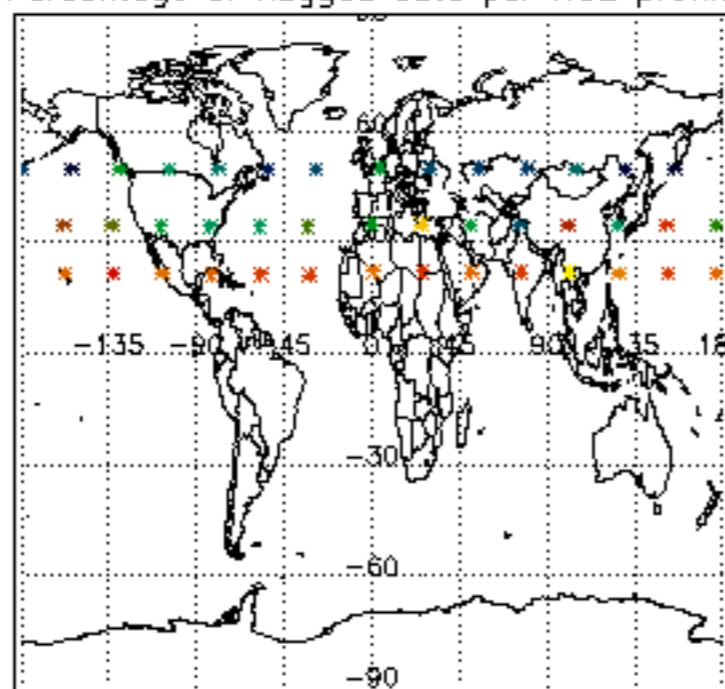
Percentage of flagged data per D3 profile



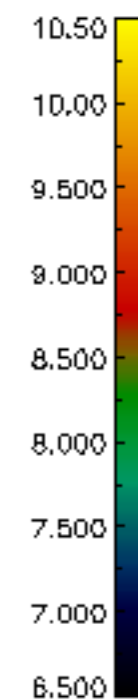
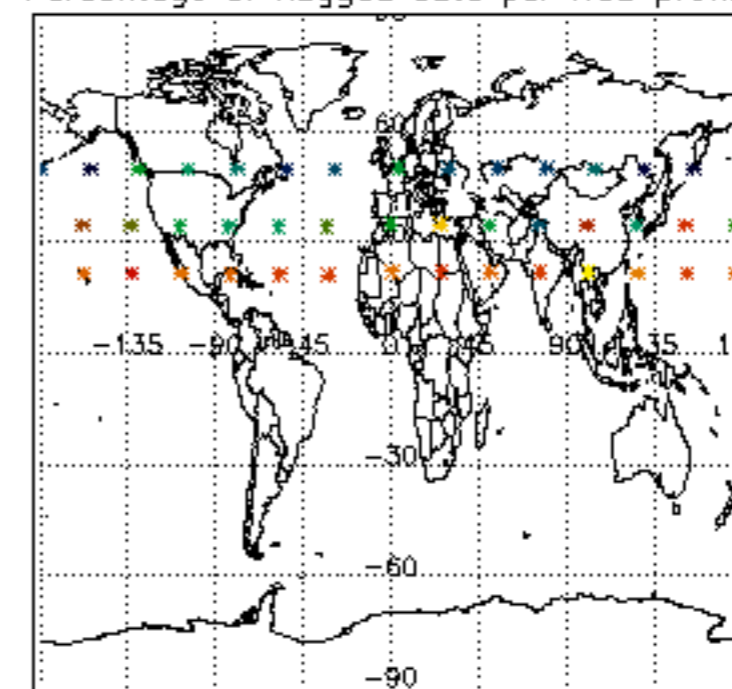
Percentage of flagged data per H2O profile

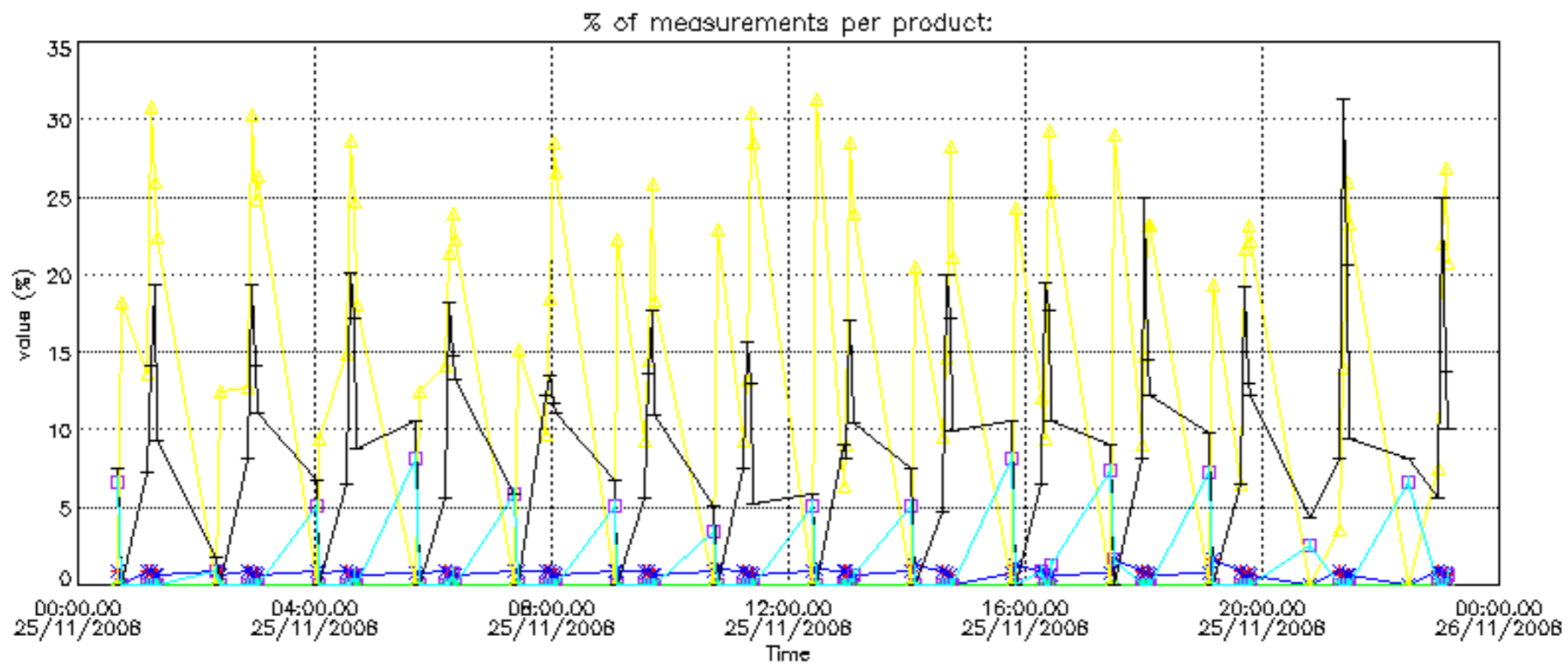


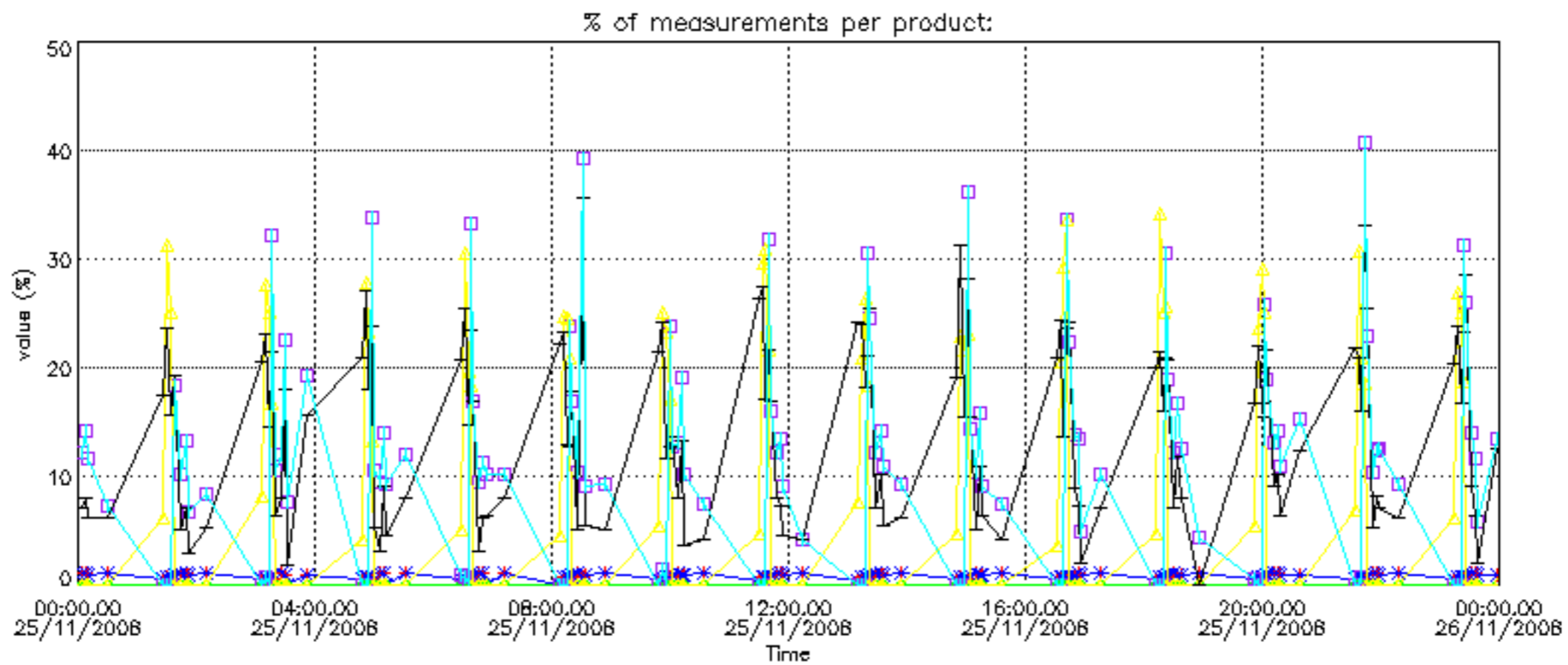
Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

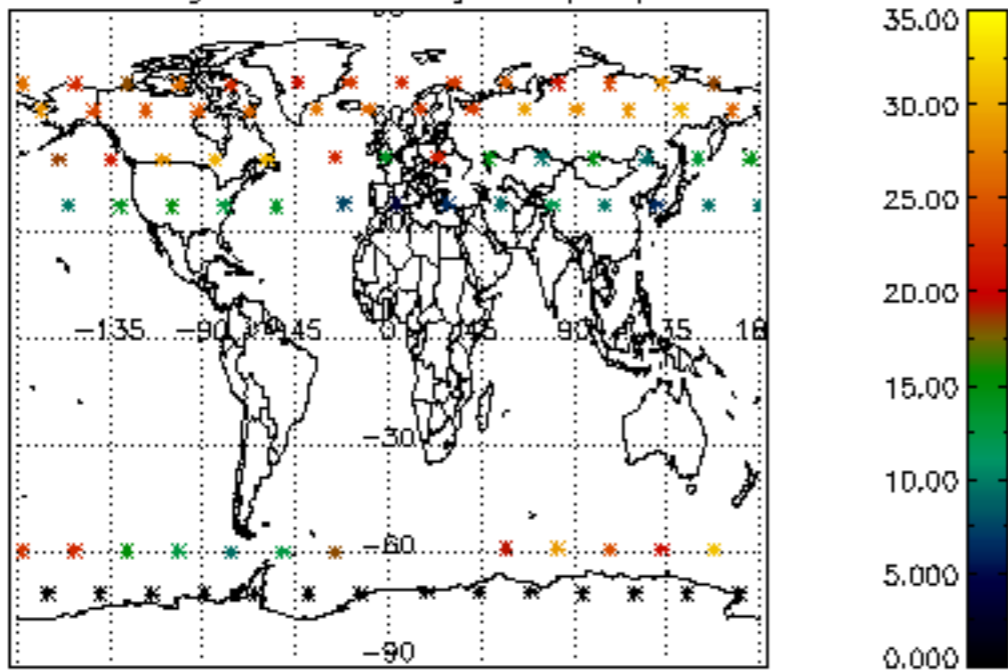




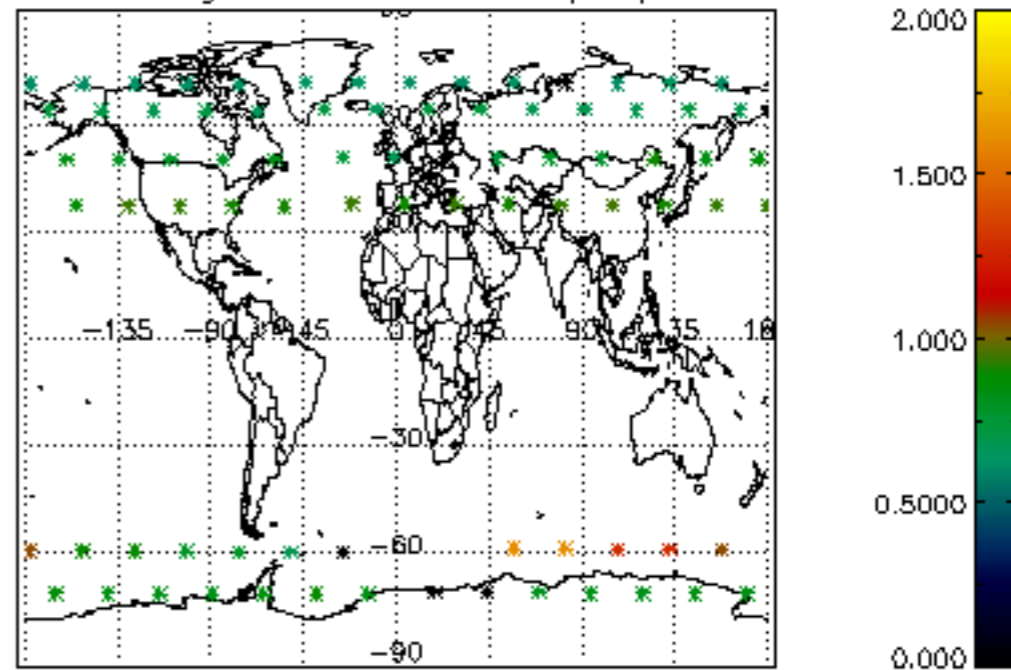




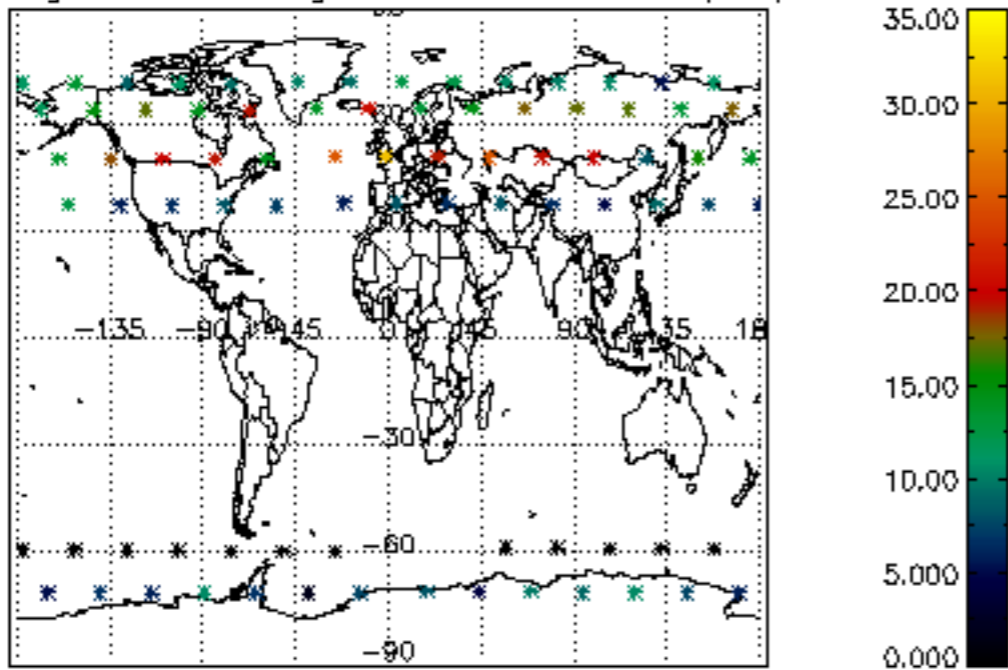
Percentage of cosmic ray hits per profile



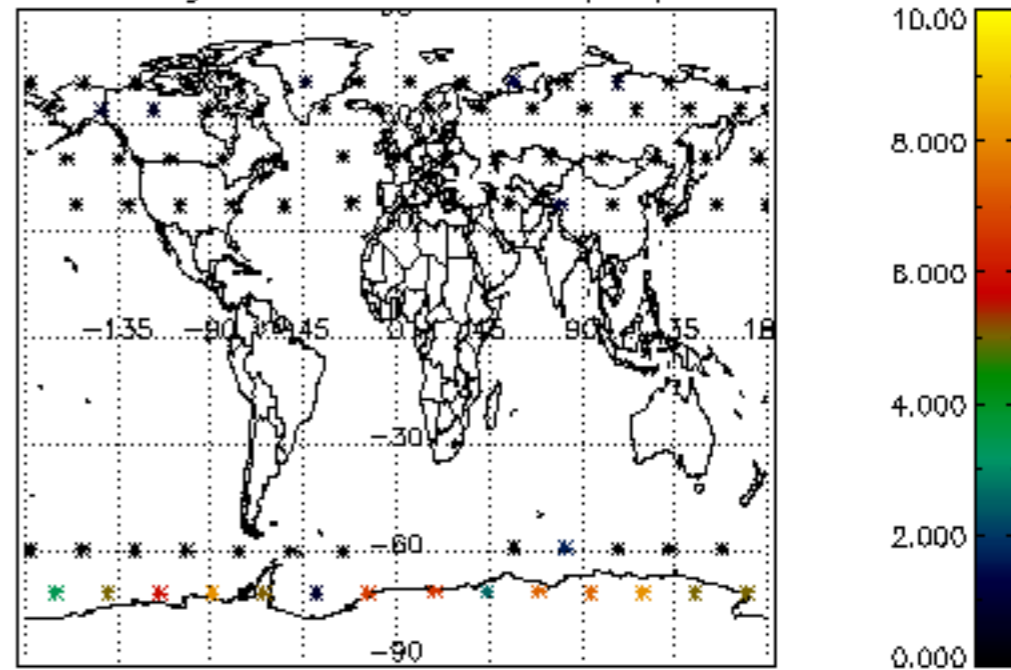
Percentage of datation errors per profile



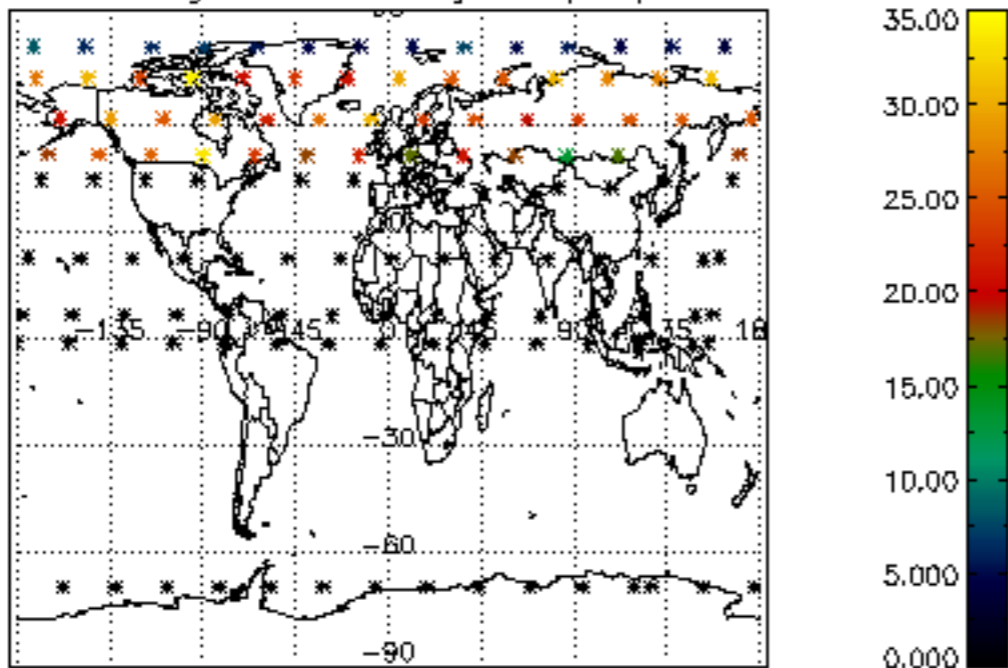
Percentage of star falling outside central band per profile



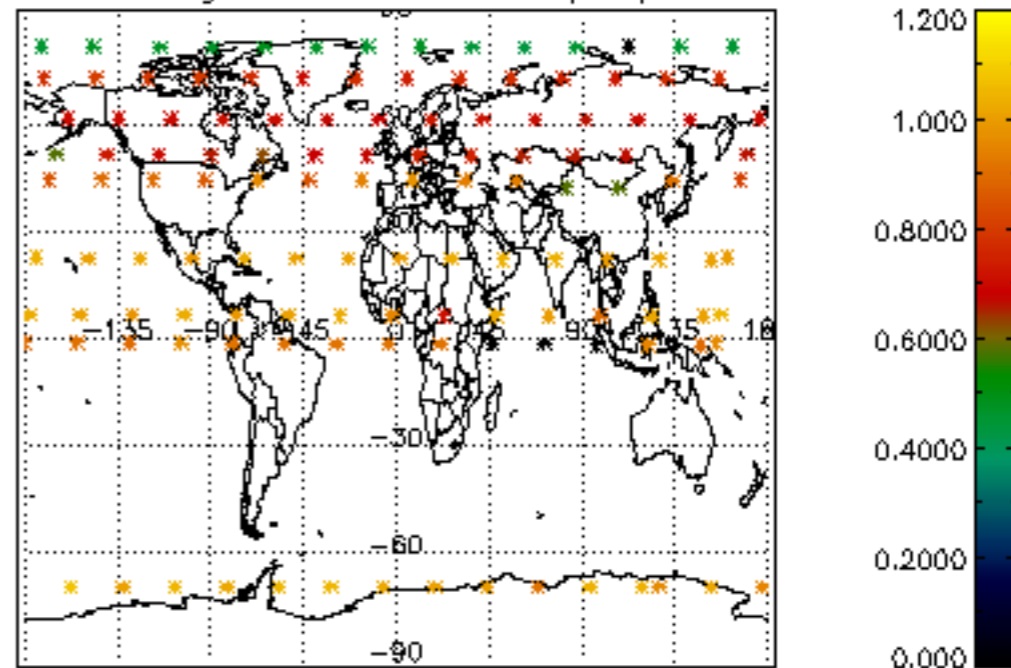
Percentage of saturation errors per profile



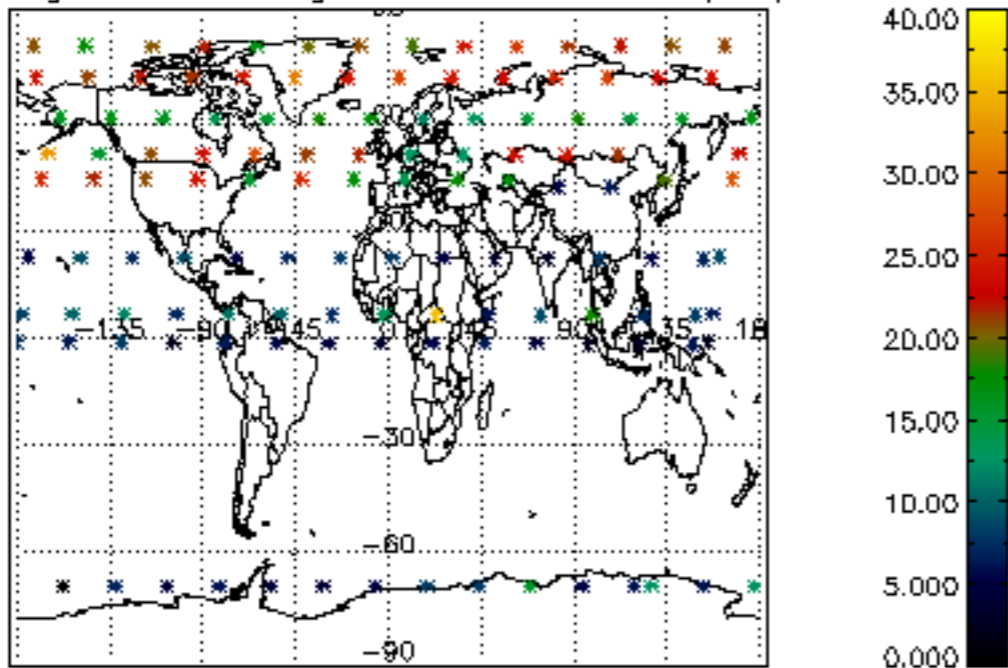
Percentage of cosmic ray hits per profile



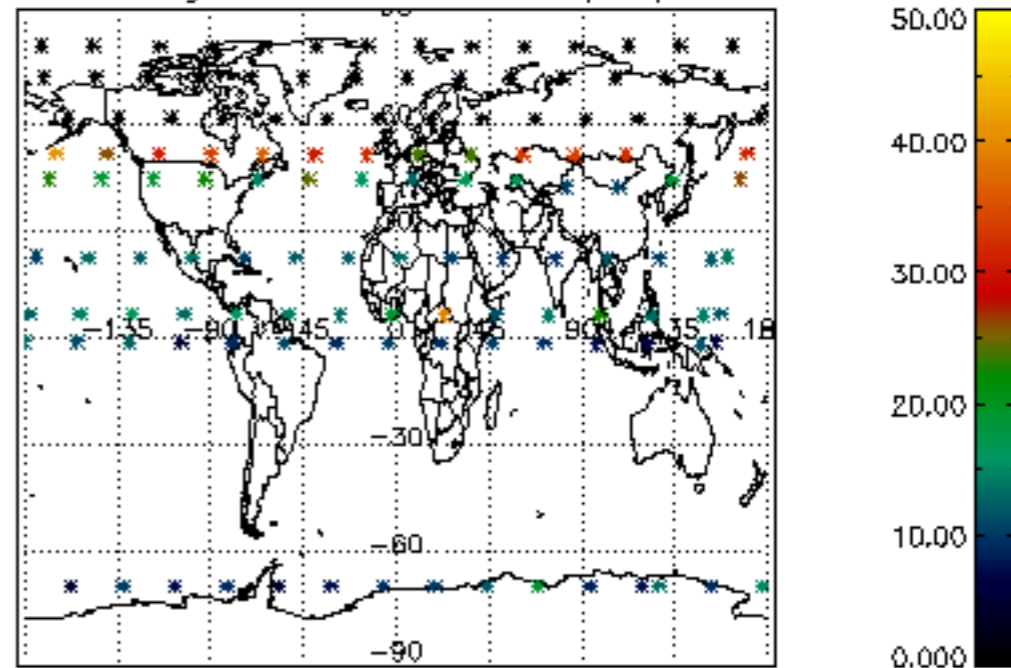
Percentage of datation errors per profile

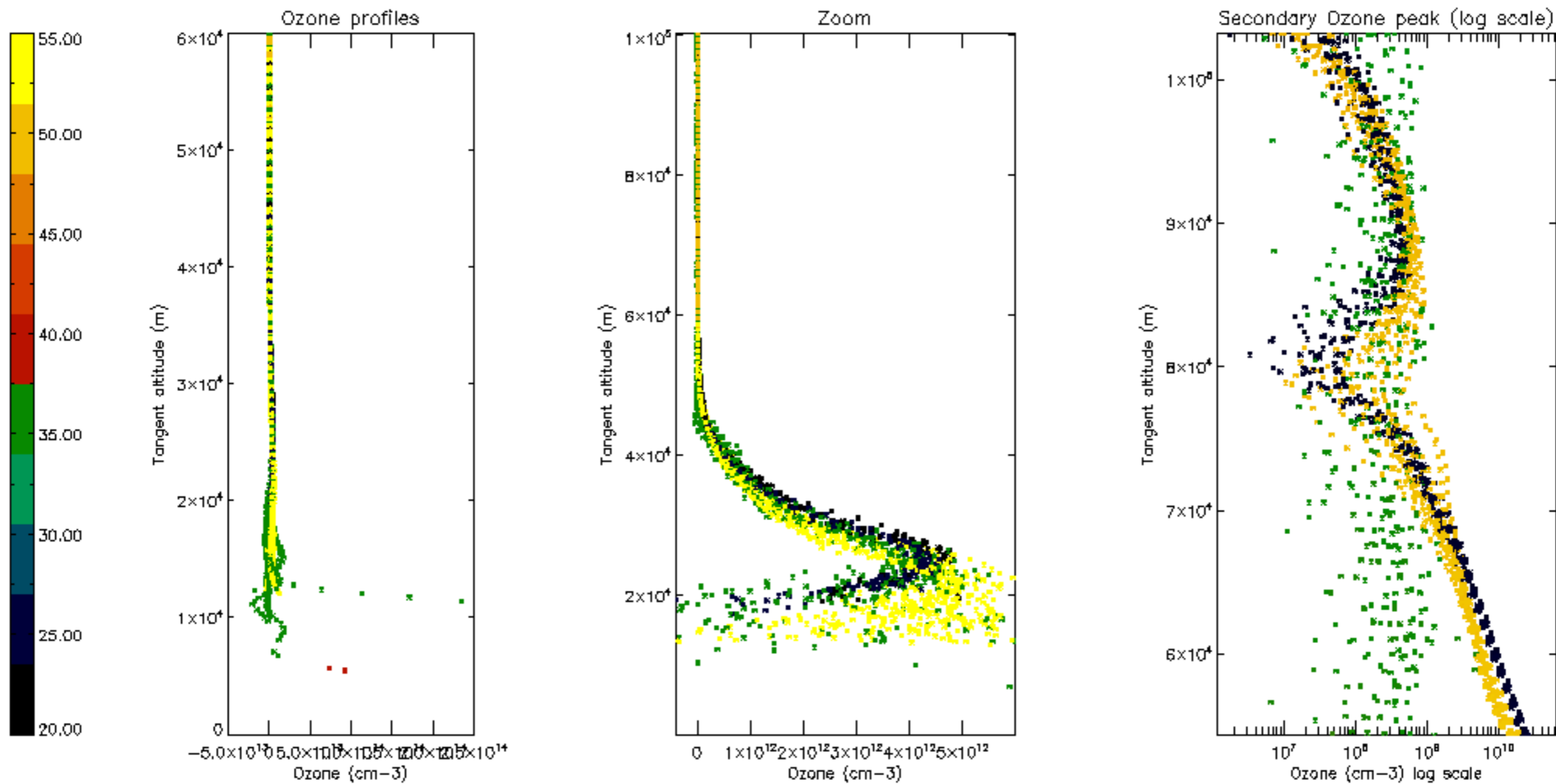


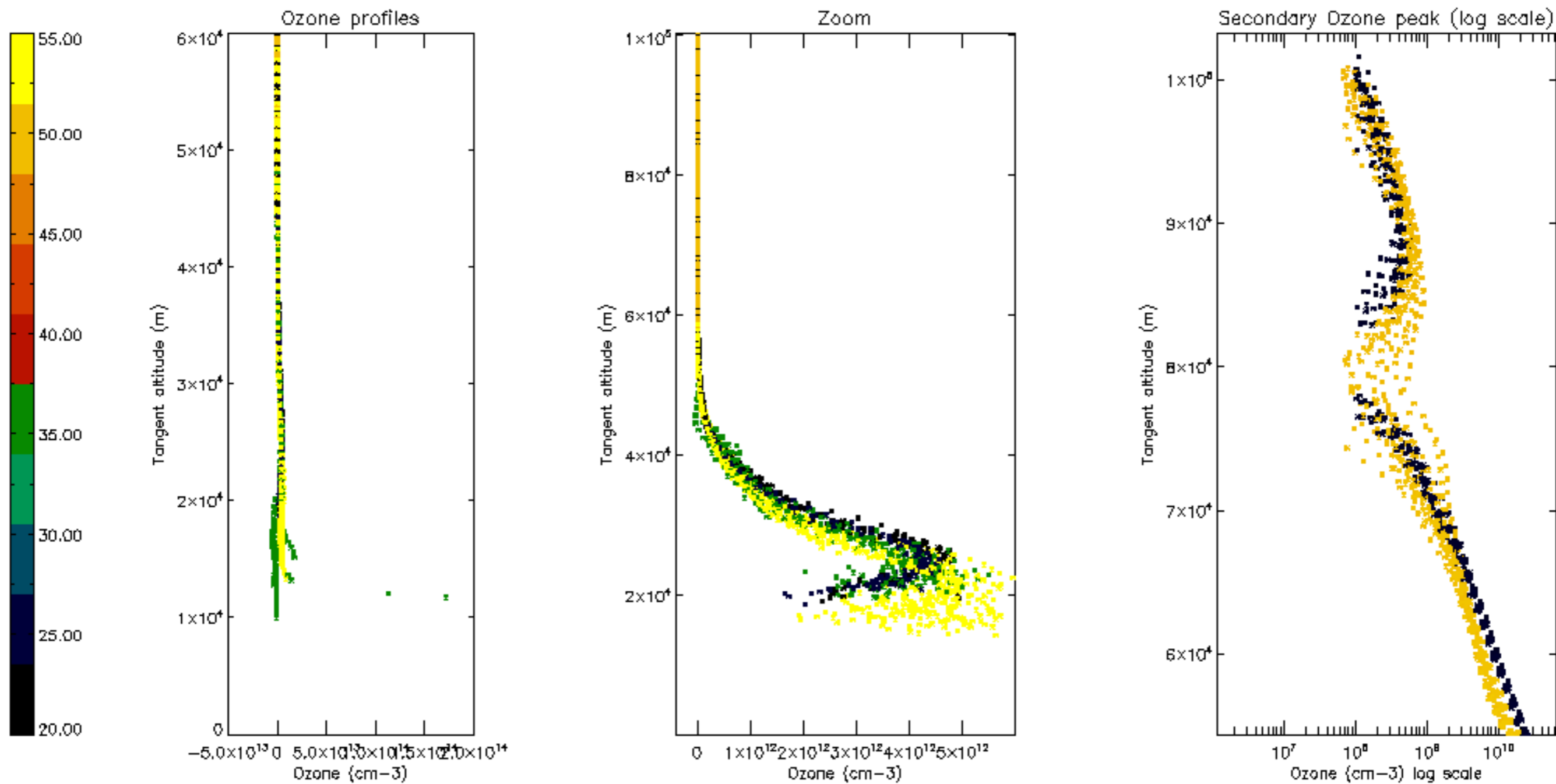
Percentage of star falling outside central band per profile

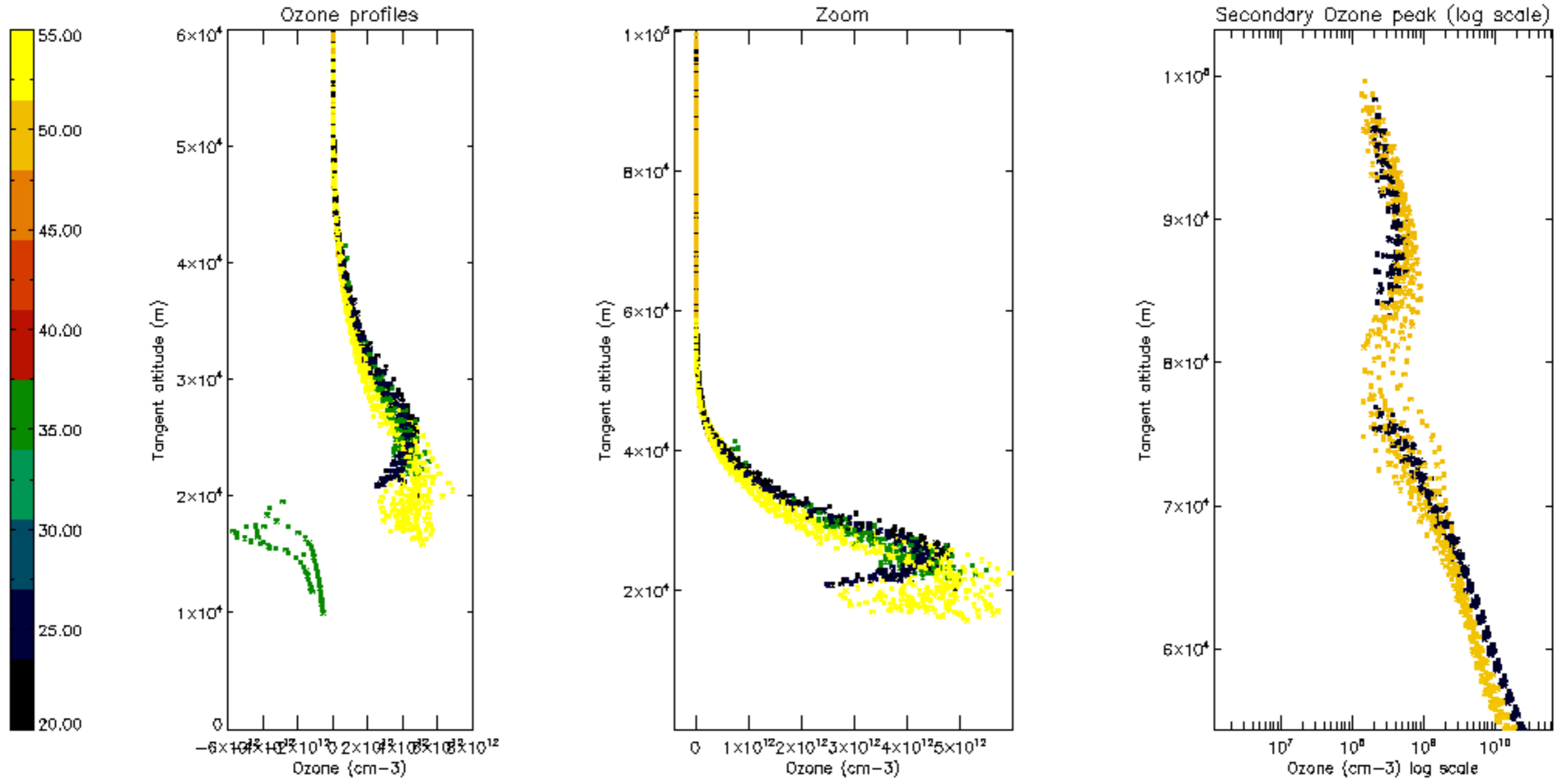


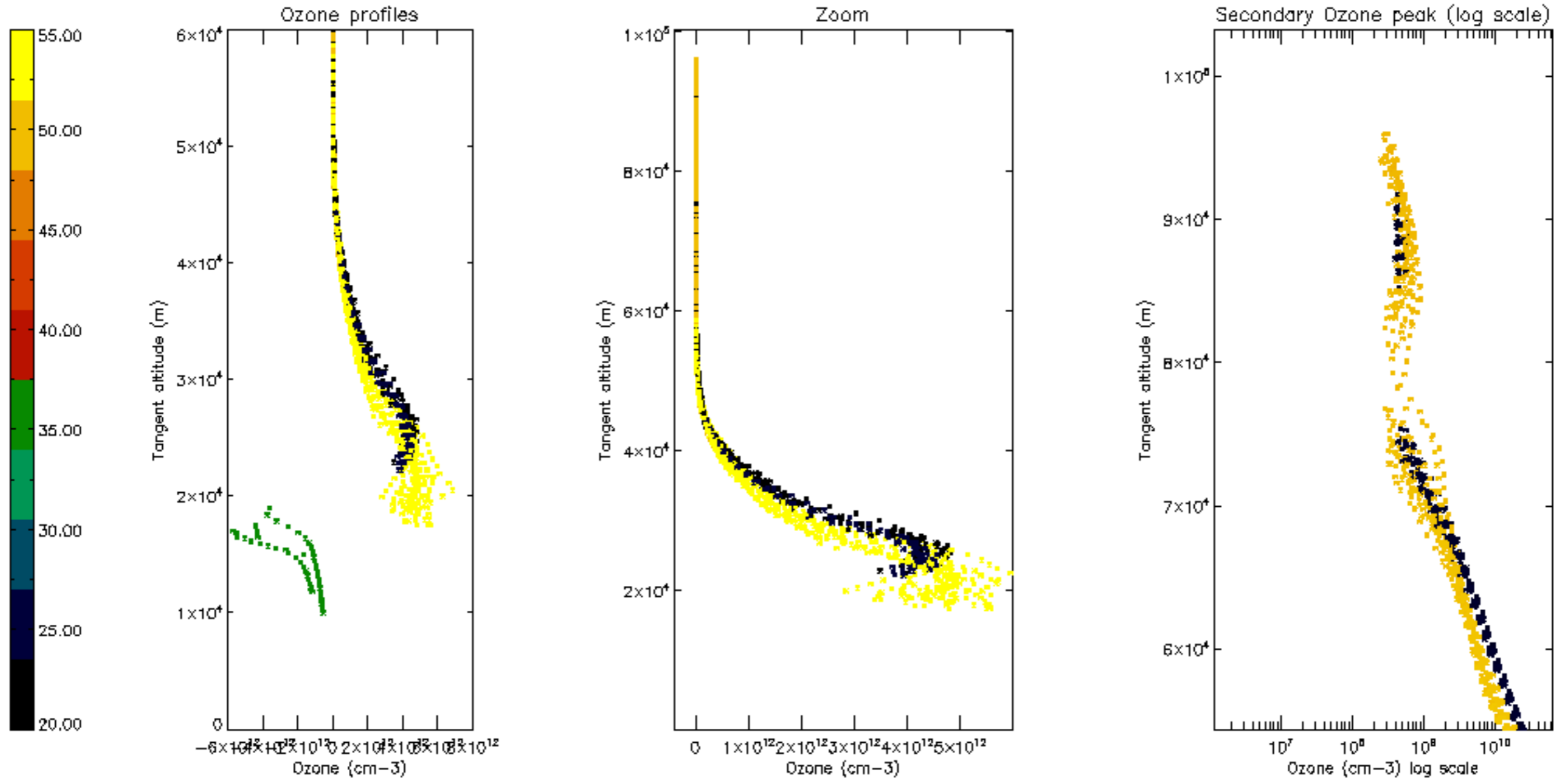
Percentage of saturation errors per profile

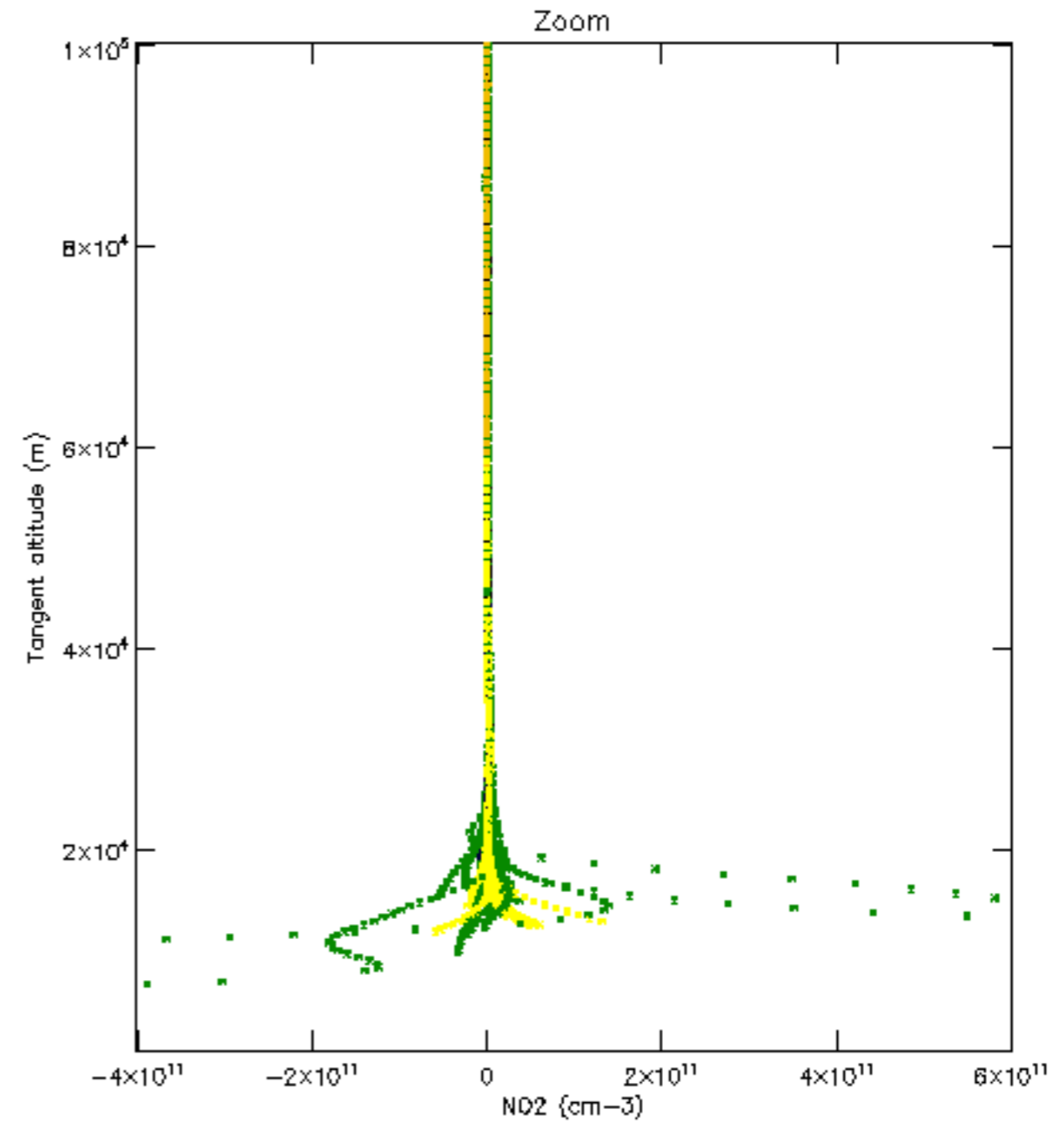
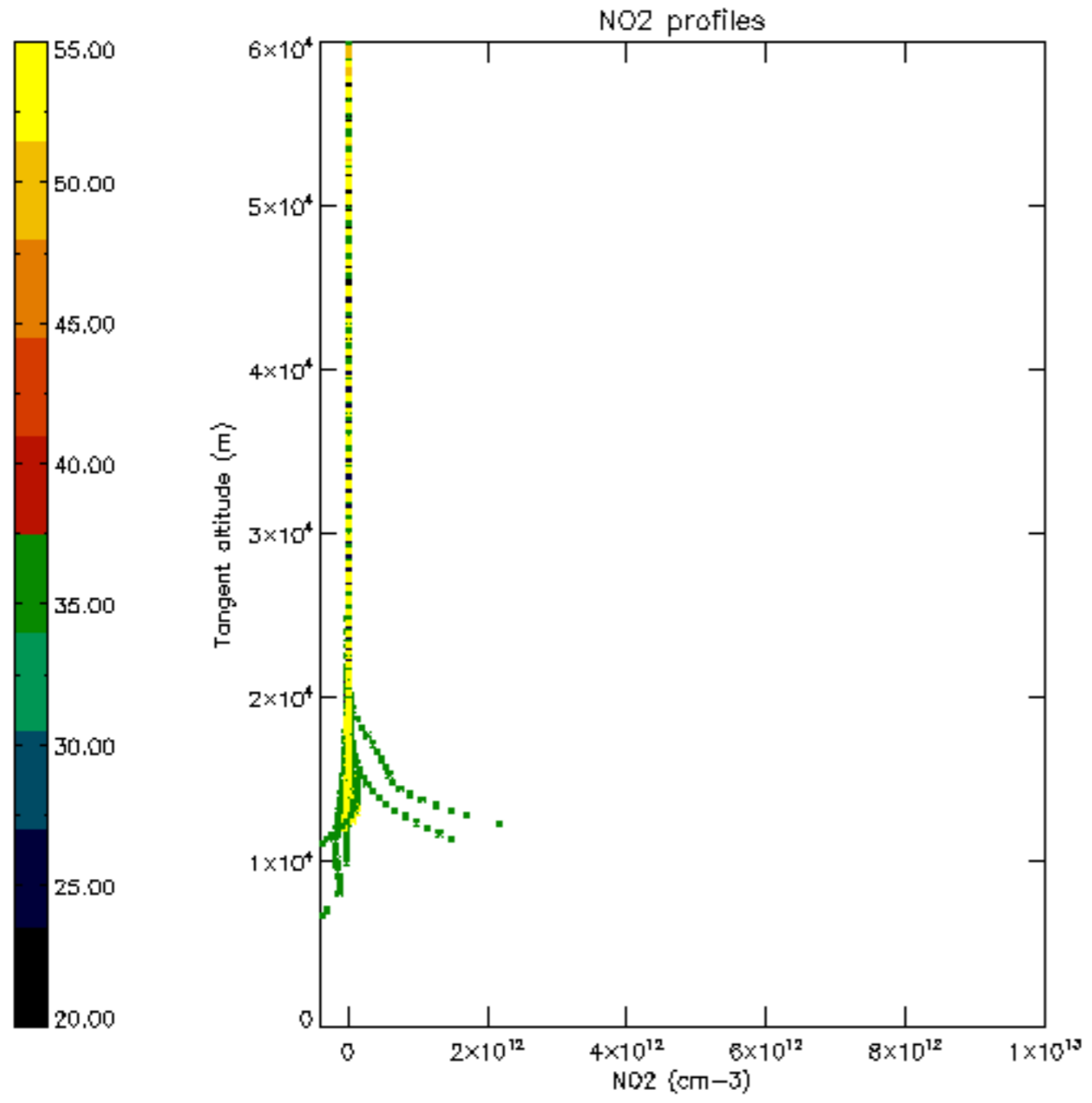


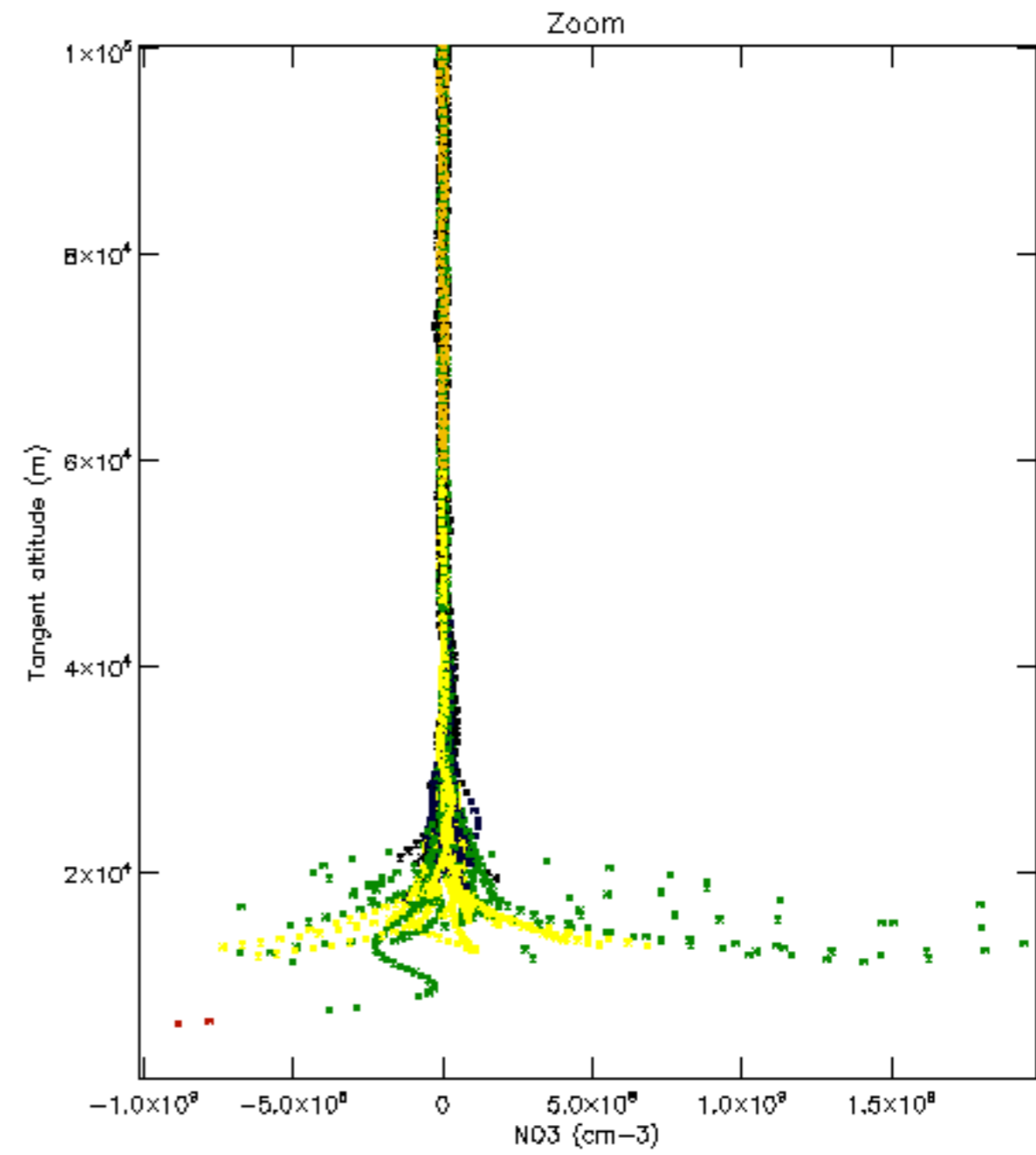
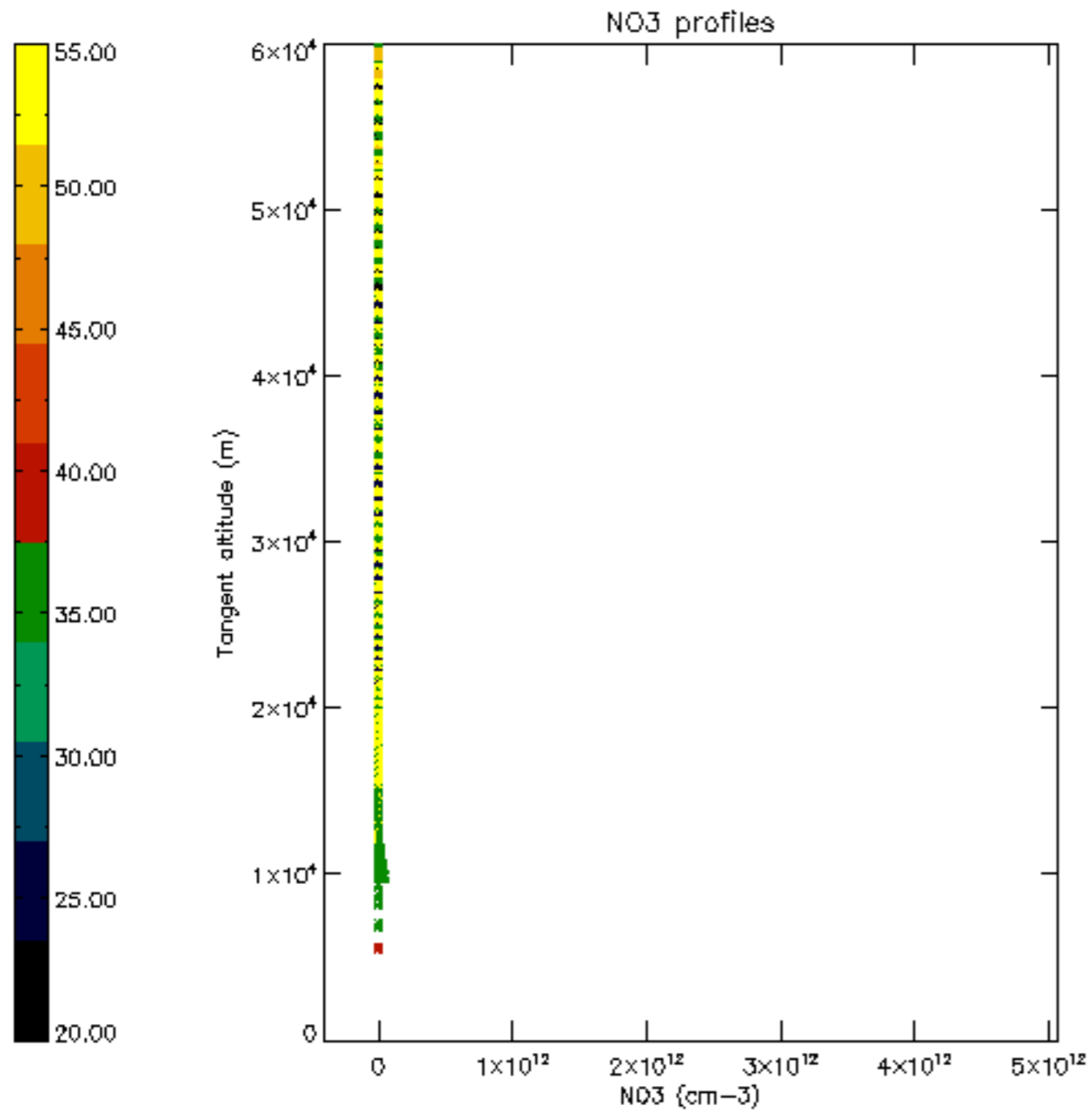




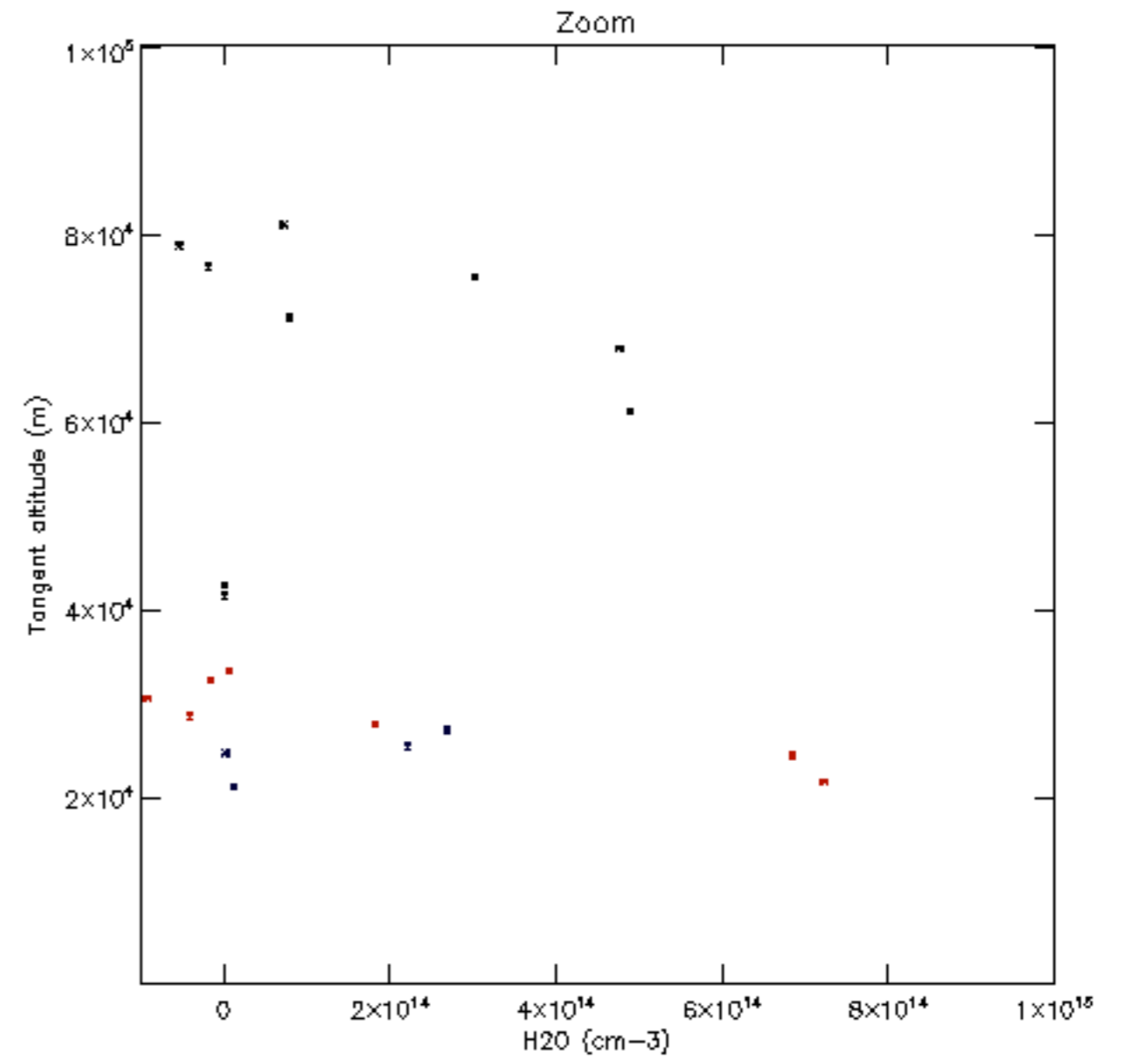
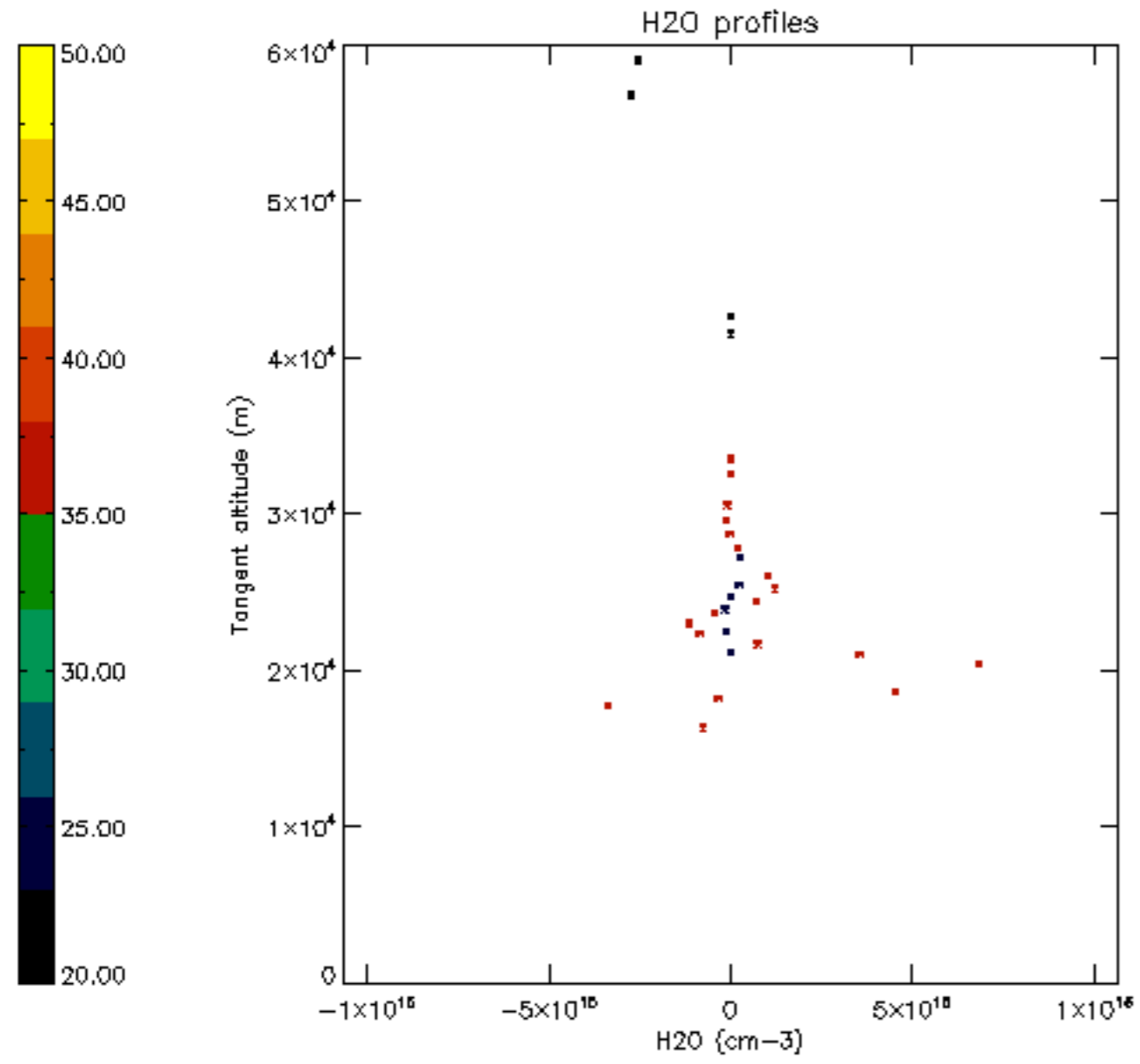


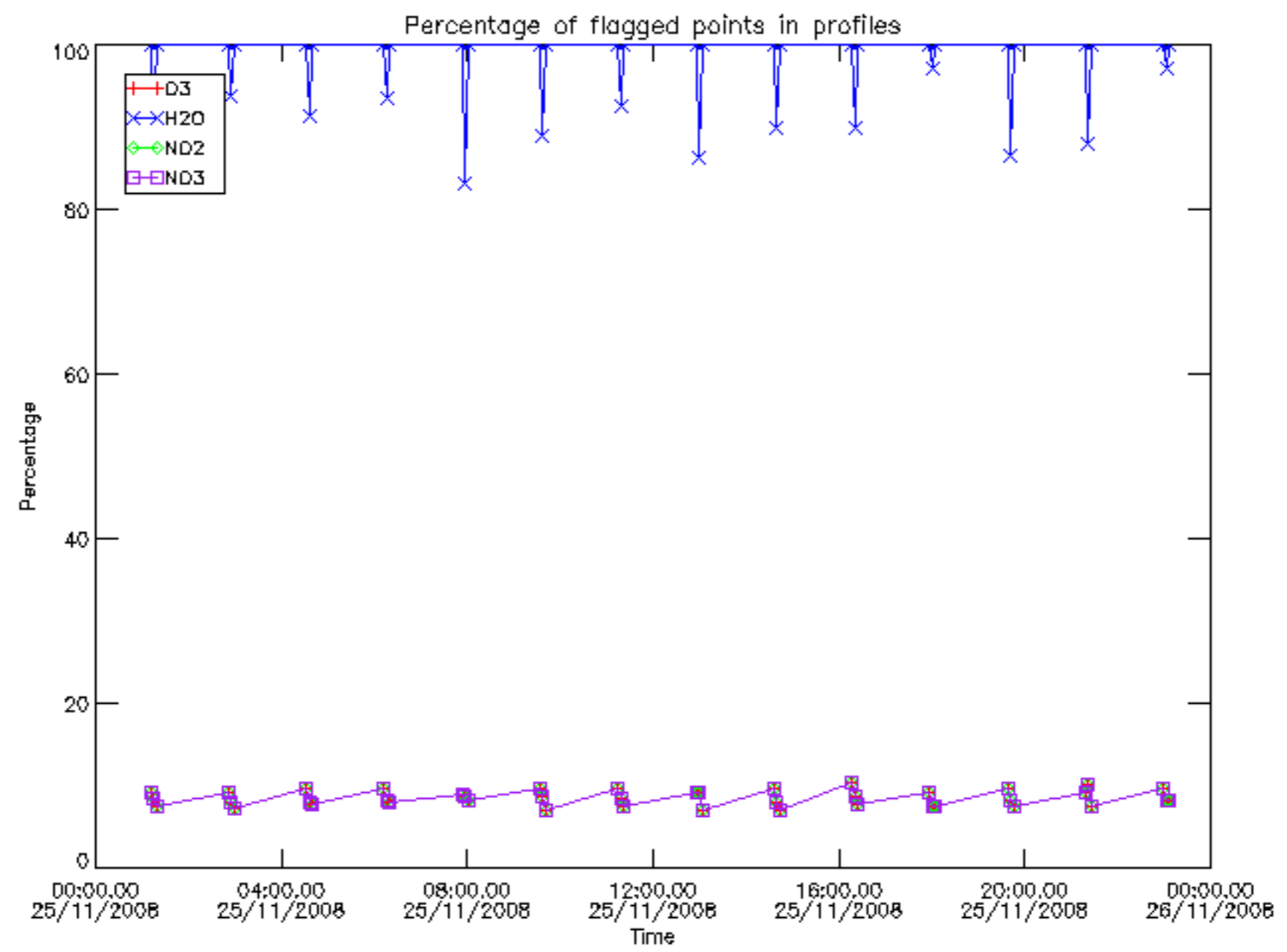




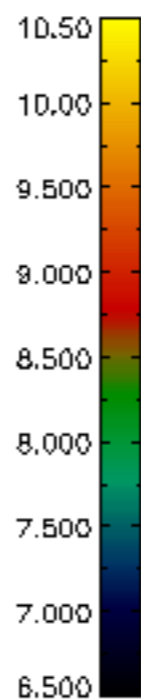
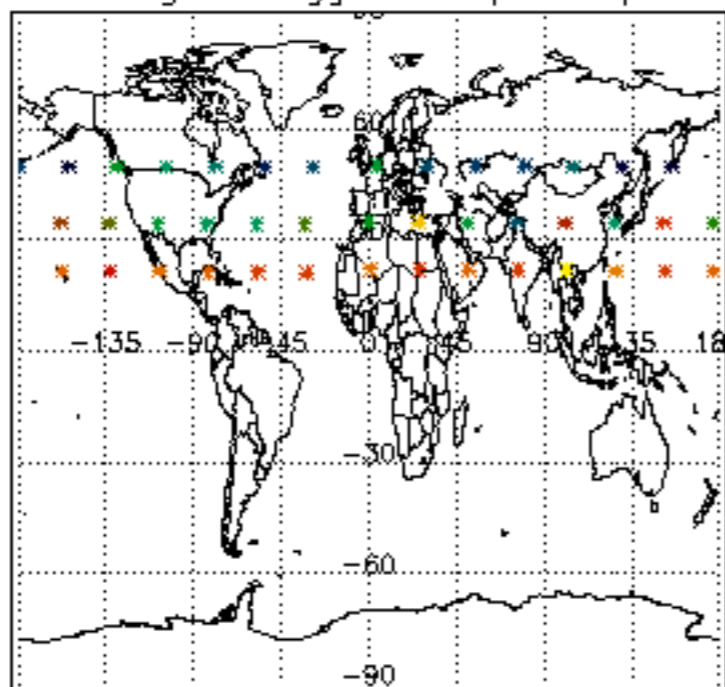




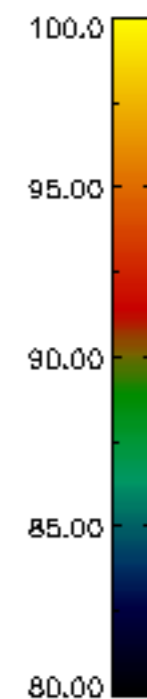
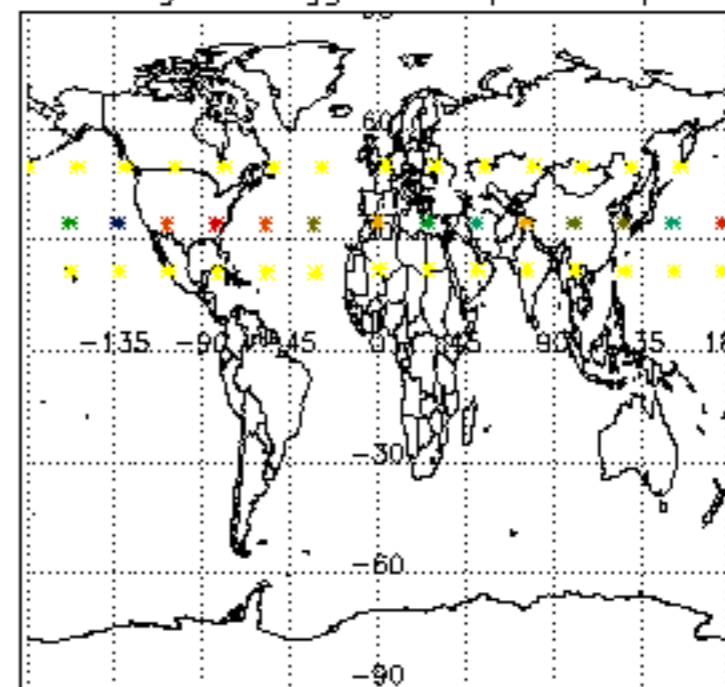




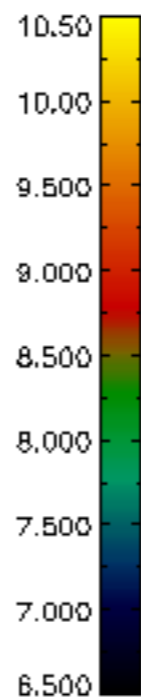
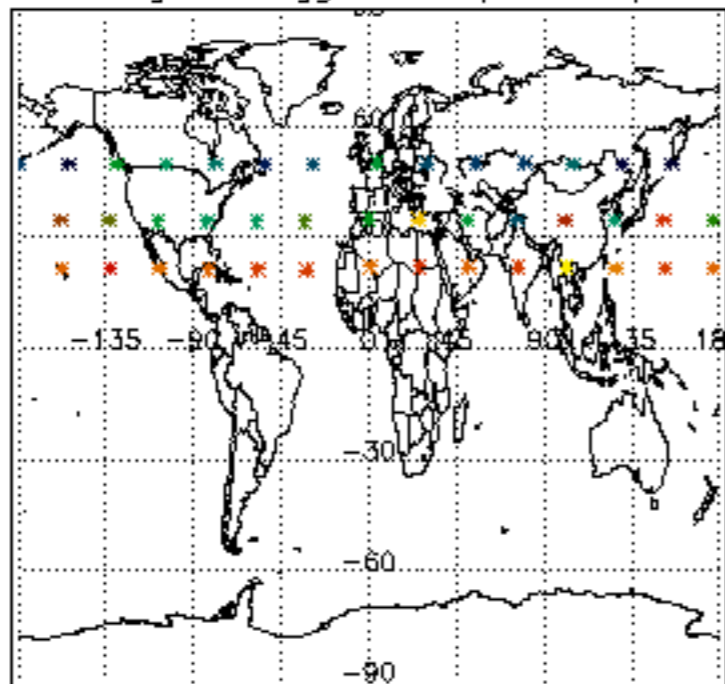
Percentage of flagged data per D3 profile



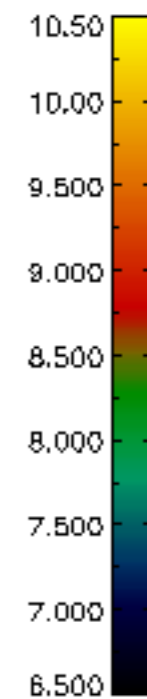
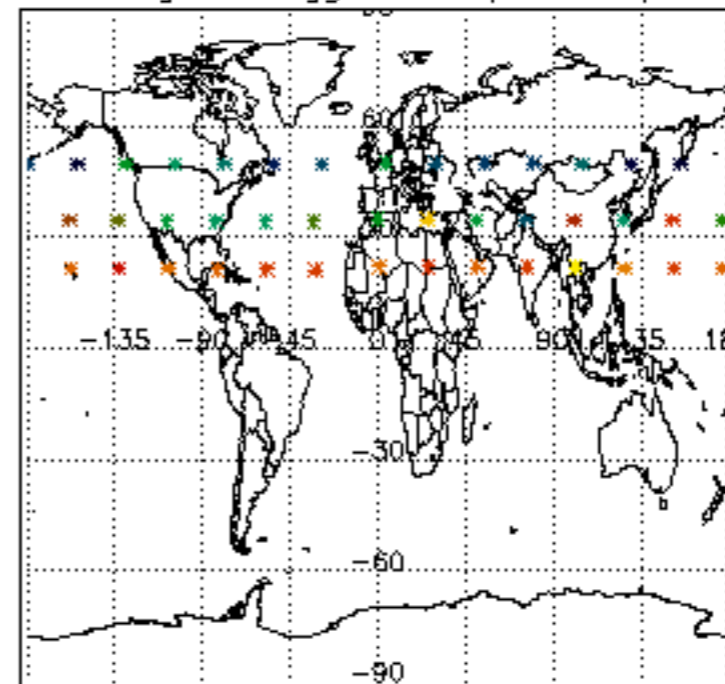
Percentage of flagged data per H2O profile

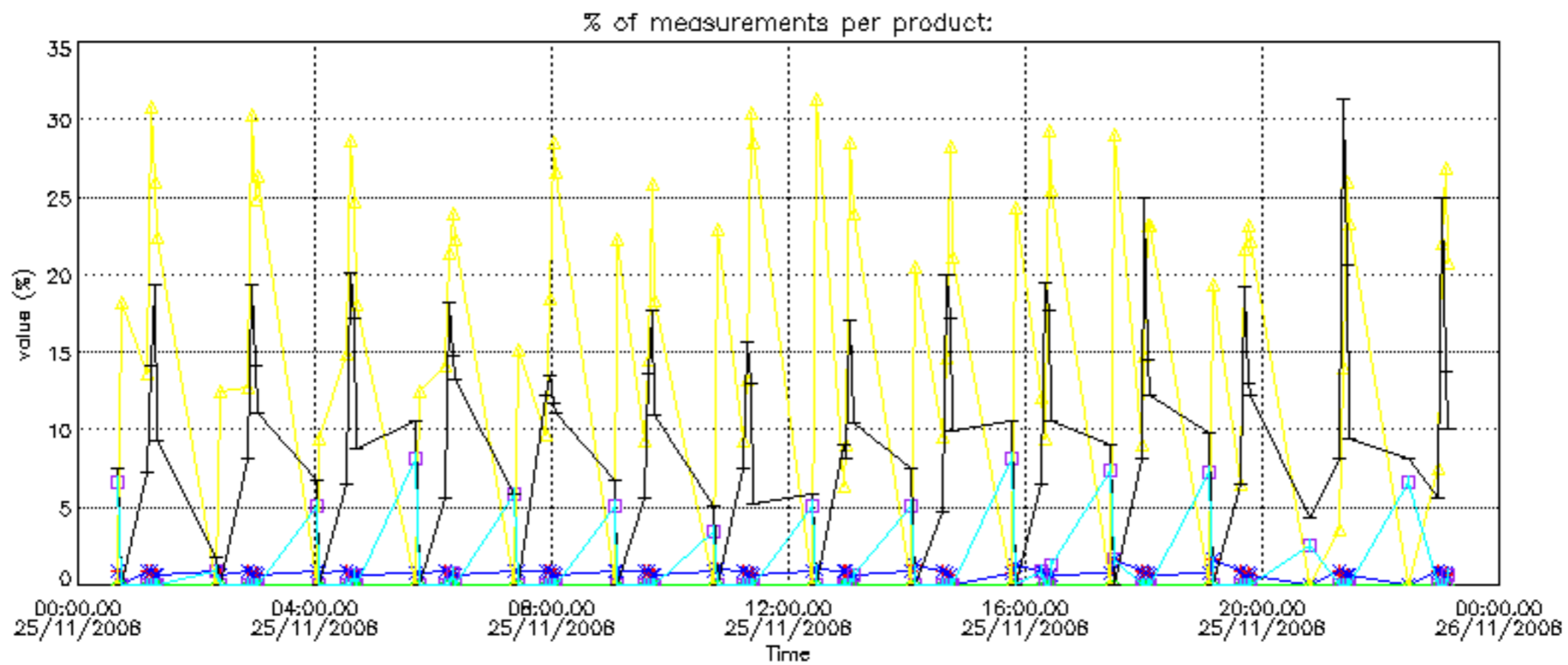


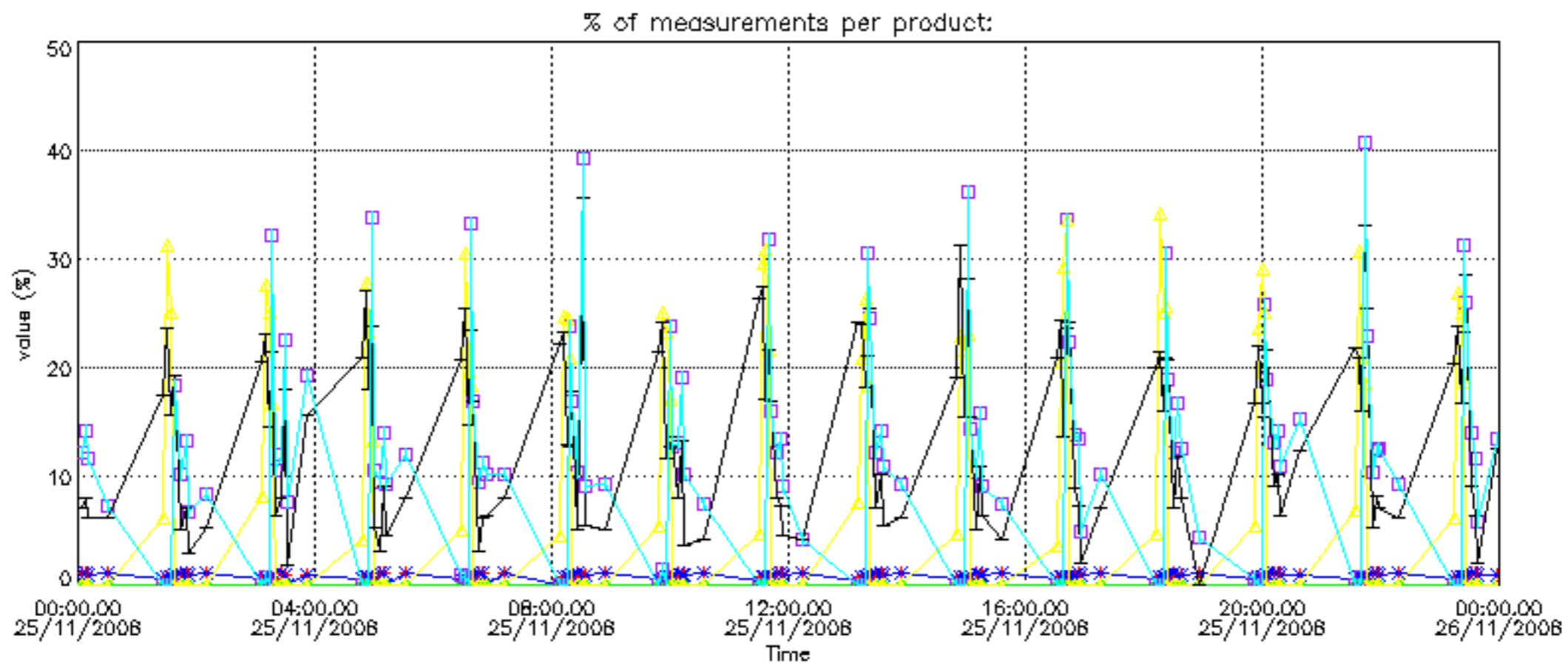
Percentage of flagged data per NO2 profile



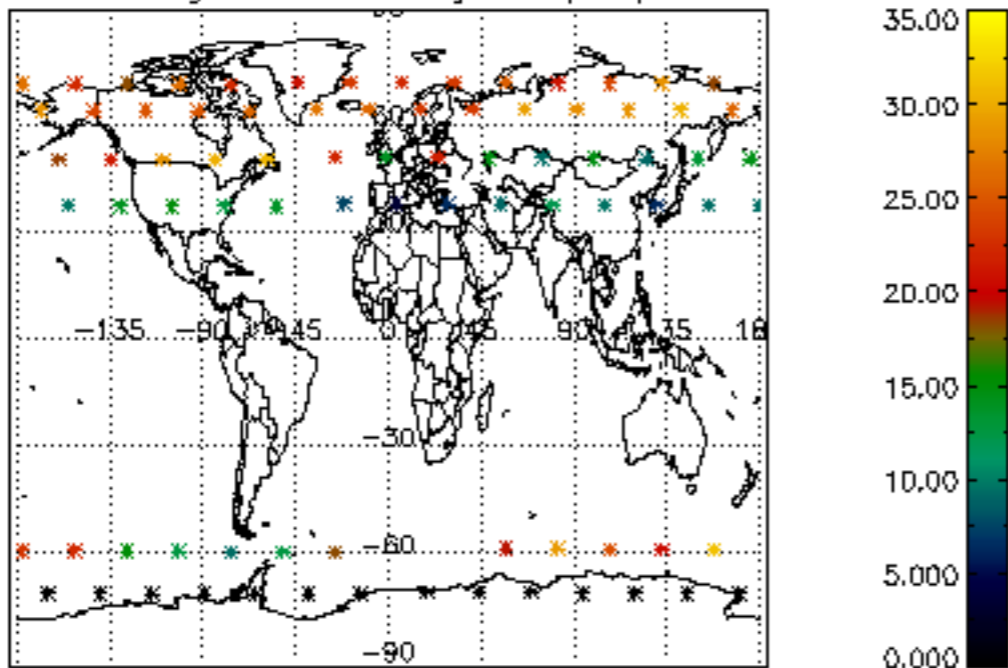
Percentage of flagged data per NO3 profile



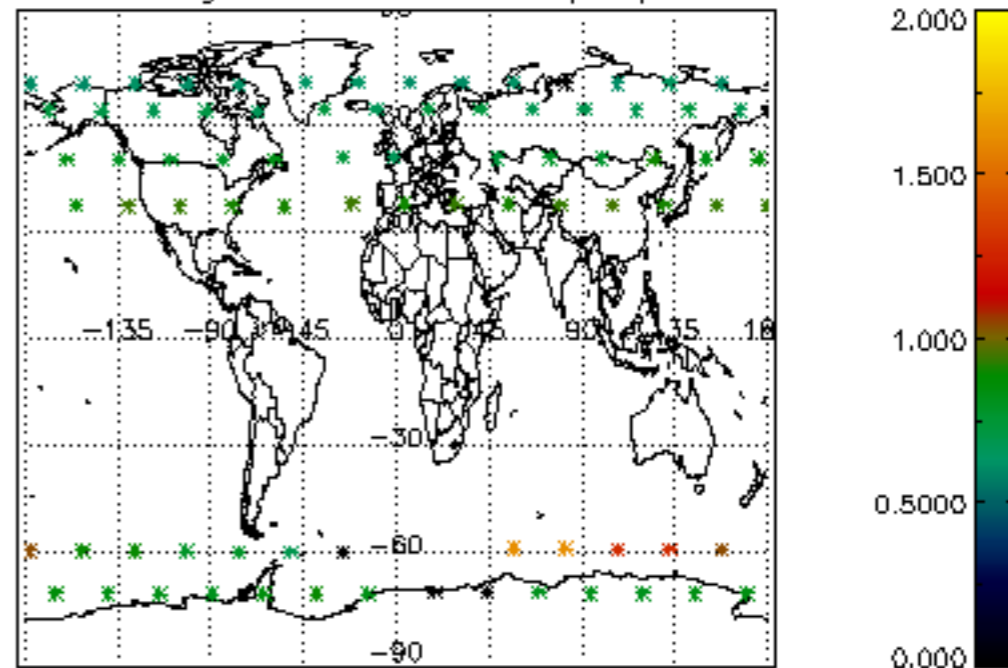




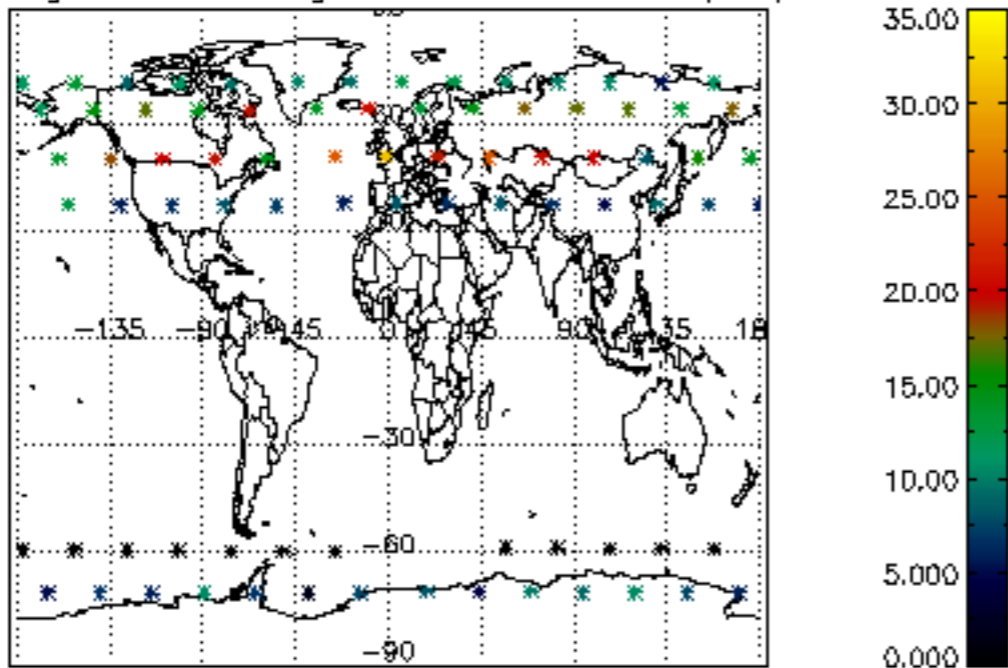
Percentage of cosmic ray hits per profile



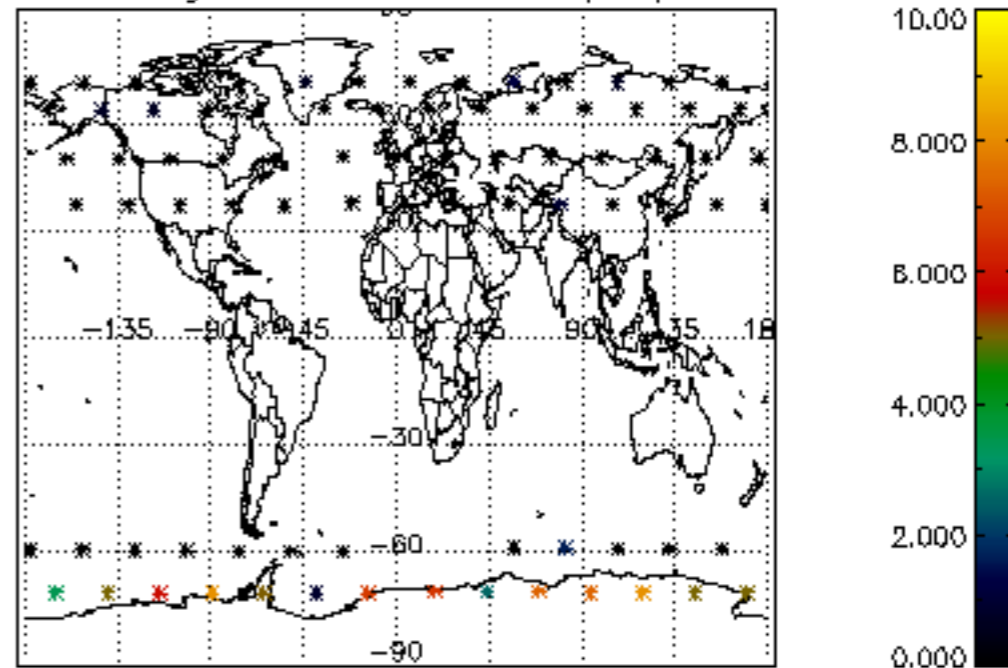
Percentage of datation errors per profile



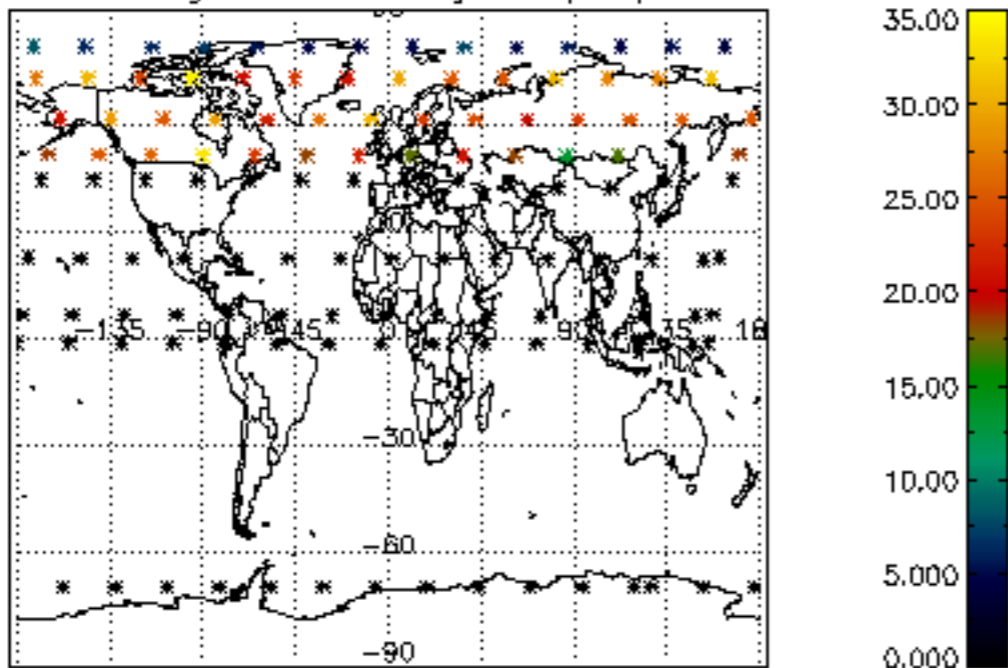
Percentage of star falling outside central band per profile



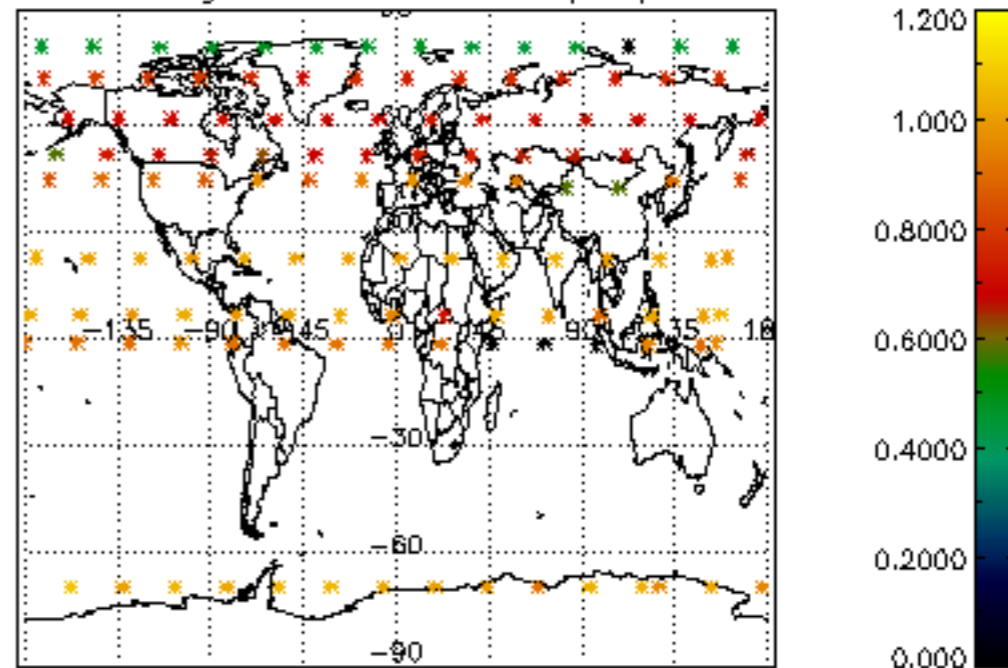
Percentage of saturation errors per profile



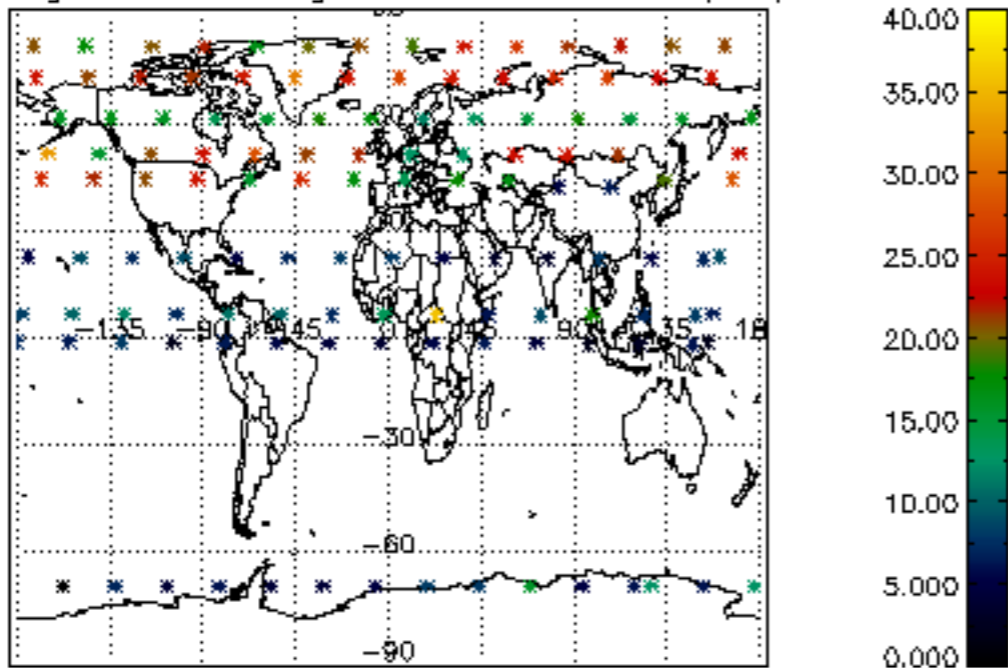
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

