

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

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

[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

[3.2 Plot of level 2 quality information per product \(world map\)](#)

[4. Level 1 Quality information per product \(stored on level 2 products\)](#)

[4.1 Plot of level 1 quality information per product \(time dependant\)](#)

[4.1.1 Plot of level 1 quality information per product \(time dependant\): ASCENDING](#)

[4.1.2 Plot of level 1 quality information per product \(time dependant\): DESCENDING](#)

[4.2 Plot of level 1 quality information per product \(world map\)](#)

[4.2.1 Plot of level 1 quality information per product \(world map\): ASCENDING](#)

[4.2.2 Plot of level 1 quality information per product \(world map\): DESCENDING](#)

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

[5.1 Ozone statistics based on quality of products](#)

[5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

[5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

[5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

[6. Auxiliary Data Files used for the production reported in section 2](#)

This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also given.

Item	Value
Time of report generation	19APR2013 10:10:36
Data source version	GOMOS/6.01
Start time of products	03-09-2004 (03SEP2004 00:00:00)
Stop time of products	04-09-2004 (04SEP2004 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	292
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

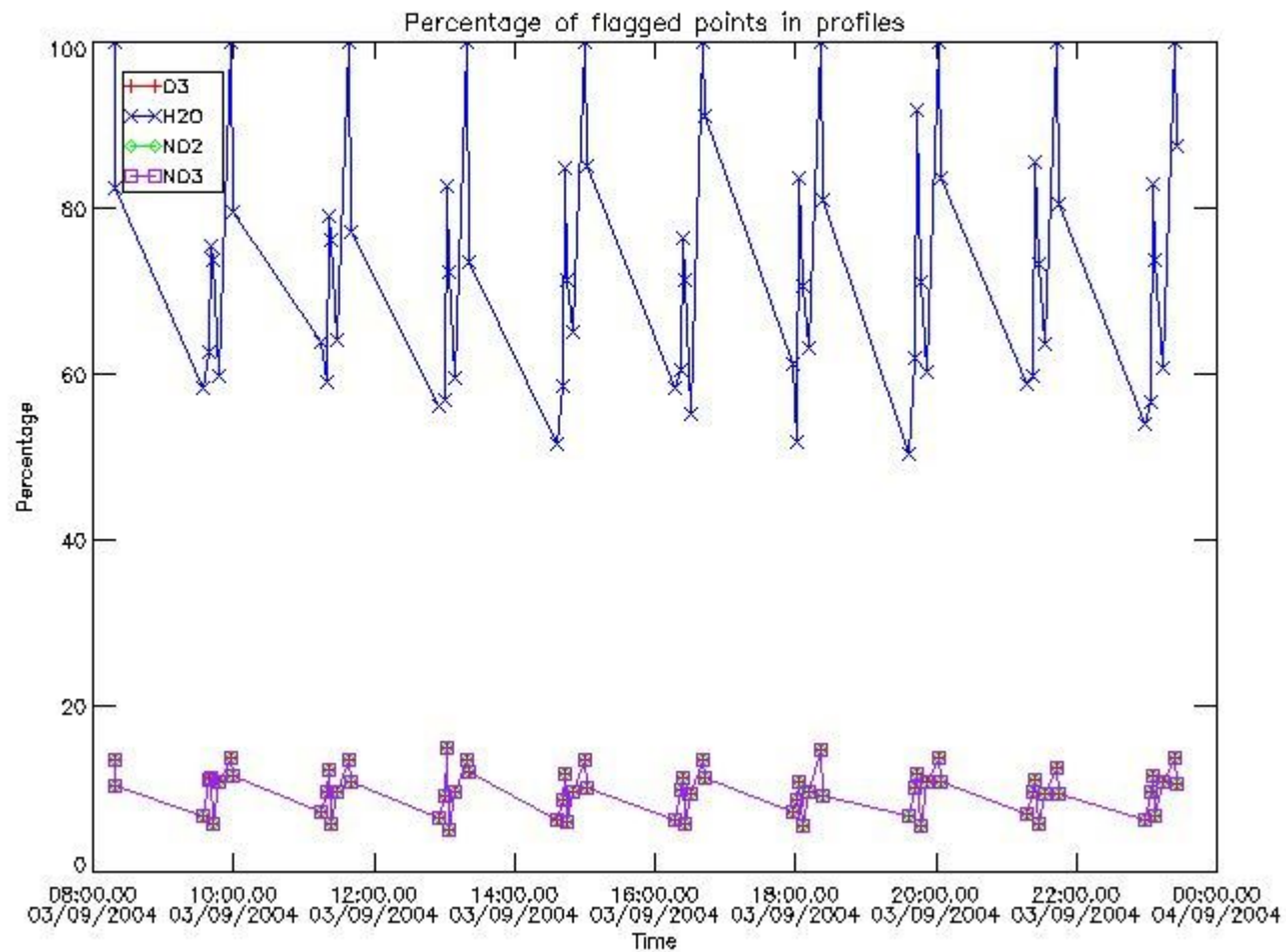
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20040903_081800_000000382030_00050_13130_3473.N1	03-SEP-2004 08:18:00	Dark	38.000	135	Bet Hyi	2.8200	5800.0	76	13130	No
2	GOM_NL__2PRFIN20040903_081928_000000492030_00050_13130_3474.N1	03-SEP-2004 08:19:28	Dark	49.000	9	Alp Eri	0.45300	24000.	98	13130	No
3	GOM_NL__2PRFIN20040903_082335_000000412030_00050_13130_3475.N1	03-SEP-2004 08:23:35	Straylight	40.500	148	Alp Tuc	2.8780	4100.0	81	13130	No
4	GOM_NL__2PRFIN20040903_082524_000000502030_00050_13130_3476.N1	03-SEP-2004 08:25:24	Straylight	50.000	84	Alp Phe	2.3970	4500.0	100	13130	No
5	GOM_NL__2PRFIN20040903_082715_000000412030_00050_13130_3477.N1	03-SEP-2004 08:27:15	Straylight	41.000	31	Alp Gru	1.7340	15200.	82	13130	No
6	GOM_NL__2PRFIN20040903_083121_000000492030_00050_13130_3478.N1	03-SEP-2004 08:31:21	Straylight	48.500	18	24Alp PsA	1.1660	9700.0	97	13130	No
7	GOM_NL__2PRFIN20040903_083401_000000792030_00050_13130_3479.N1	03-SEP-2004 08:34:01	Twilight	78.500	52	16Bet Cet	2.0370	4500.0	157	13130	No
8	GOM_NL__2PRFIN20040903_083912_000000392030_00050_13130_3480.N1	03-SEP-2004 08:39:12	Bright	39.000	154	22Bet Aqr	2.8990	5700.0	78	13130	No
9	GOM_NL__2PRFIN20040903_084036_000000412030_00050_13130_3481.N1	03-SEP-2004 08:40:36	Bright	40.500	162	34Alp Aqr	2.9440	5350.0	81	13130	No
10	GOM_NL__2PRFIN20040903_084335_000000402030_00050_13130_3482.N1	03-SEP-2004 08:43:35	Bright	40.000	61	8Eps Peg	2.1000	3900.0	80	13130	No
11	GOM_NL__2PRFIN20040903_084613_000000472030_00050_13130_3483.N1	03-SEP-2004 08:46:13	Bright	46.500	90	54Alp Peg	2.4870	11000.	93	13130	No
12	GOM_NL__2PRFIN20040903_085032_000000372030_00050_13130_3484.N1	03-SEP-2004 08:50:32	Bright	36.500	92	53Eps Cyg	2.5000	4500.0	73	13130	No
13	GOM_NL__2PRFIN20040903_085228_000000382030_00050_13130_3485.N1	03-SEP-2004 08:52:28	Bright	38.000	66	37Gam Cyg	2.2080	5900.0	76	13130	No
14	GOM_NL__2PRFIN20040903_085342_000000402030_00050_13130_3486.N1	03-SEP-2004 08:53:42	Bright	39.500	19	50Alp Cyg	1.2460	10500.	79	13130	No
15	GOM_NL__2PRFIN20040903_085834_000000372030_00050_13130_3487.N1	03-SEP-2004 08:58:34	Bright	37.000	89	5Alp Cep	2.4510	8000.0	74	13130	No
16	GOM_NL__2PRFIN20040903_090102_000000432030_00050_13130_3488.N1	03-SEP-2004 09:01:02	Bright	43.000	74	11Bet Cas	2.2680	6600.0	86	13130	No
17	GOM_NL__2PRFIN20040903_090307_000000442030_00050_13130_3489.N1	03-SEP-2004 09:03:07	Bright	44.000	76	27Gam Cas	2.3000	30000.	88	13130	No
18	GOM_NL__2PRFIN20040903_091251_000000372030_00050_13130_3490.N1	03-SEP-2004 09:12:51	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	13130	No
19	GOM_NL__2PRFIN20040903_091414_000000362030_00050_13130_3491.N1	03-SEP-2004 09:14:14	Bright	35.500	82	48Bet UMa	2.3650	10600.	71	13130	No
20	GOM_NL__2PRFIN20040903_091808_000000622030_00050_13130_3492.N1	03-SEP-2004 09:18:08	Bright	61.500	6	13Alp Aur	0.080000	3400.0	123	13130	No
21	GOM_NL__2PRFIN20040903_092201_000000502030_00050_13130_3493.N1	03-SEP-2004 09:22:01	Bright	49.500	107	37The Aur	2.6490	11000.	99	13130	No
22	GOM_NL__2PRFIN20040903_092423_000000412030_00050_13130_3494.N1	03-SEP-2004 09:24:23	Bright	40.500	17	78Bet Gem	1.1610	4500.0	81	13130	No
23	GOM_NL__2PRFIN20040903_092602_000000752030_00050_13130_3495.N1	03-SEP-2004 09:26:02	Twilight	74.500	28	12Bet Tau	1.6500	15200.	149	13130	No
24	GOM_NL__2PRFIN20040903_092910_000000532030_00050_13130_3496.N1	03-SEP-2004 09:29:10	Twilight	53.000	44	24Gam Gem	1.9280	11000.	106	13130	No
25	GOM_NL__2PRFIN20040903_093109_000000492030_00050_13130_3497.N1	03-SEP-2004 09:31:09	Twilight	49.000	8	10Alp CMi	0.40000	6500.0	98	13130	No
26	GOM_NL__2PRFIN20040903_093404_000000832030_00050_13130_3498.N1	03-SEP-2004 09:34:04	Dark	83.000	14	58Alp Ori	0.87000	3000.0	166	13130	No
27	GOM_NL__2PRFIN20040903_093900_000000502030_00050_13130_3499.N1	03-SEP-2004 09:39:00	Dark	50.000	1	9Alp CMa	-1.4400	11000.	100	13130	No
28	GOM_NL__2PRFIN20040903_094043_000000452030_00050_13130_3500.N1	03-SEP-2004 09:40:43	Dark	45.000	37	25Del CMa	1.8300	5900.0	90	13130	No
29	GOM_NL__2PRFIN20040903_094248_000000902030_00050_13130_3501.N1	03-SEP-2004 09:42:48	Dark	90.000	7	19Bet Ori	0.10000	14000.	180	13130	No
30	GOM_NL__2PRFIN20040903_094824_000000472030_00050_13130_3502.N1	03-SEP-2004 09:48:24	Dark	46.500	2	Alp Car	-0.73600	7000.0	93	13130	No
31	GOM_NL__2PRFIN20040903_095837_000000372030_00051_13131_3473.N1	03-SEP-2004 09:58:37	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	13131	No
32	GOM_NL__2PRFIN20040903_100005_000000452030_00051_13131_3474.N1	03-SEP-2004 10:00:05	Dark	44.500	9	Alp Eri	0.45300	24000.	89	13131	No
33	GOM_NL__2PRFIN20040903_100411_000000392030_00051_13131_3475.N1	03-SEP-2004 10:04:11	Straylight	39.000	148	Alp Tuc	2.8780	4100.0	78	13131	No
34	GOM_NL__2PRFIN20040903_100601_000000562030_00051_13131_3476.N1	03-SEP-2004 10:06:01	Straylight	55.500	84	Alp Phe	2.3970	4500.0	111	13131	No
35	GOM_NL__2PRFIN20040903_100752_000000402030_00051_13131_3477.N1	03-SEP-2004 10:07:52	Straylight	39.500	31	Alp Gru	1.7340	15200.	79	13131	No
36	GOM_NL__2PRFIN20040903_101157_000000472030_00051_13131_3478.N1	03-SEP-2004 10:11:57	Straylight	47.000	18	24Alp PsA	1.1660	9700.0	94	13131	No
37	GOM_NL__2PRFIN20040903_101437_000000802030_00051_13131_3479.N1	03-SEP-2004 10:14:37	Twilight	79.500	52	16Bet Cet	2.0370	4500.0	159	13131	No
38	GOM_NL__2PRFIN20040903_101949_000000392030_00051_13131_3480.N1	03-SEP-2004 10:19:49	Bright	38.500	154	22Bet Aqr	2.8990	5700.0	77	13131	No
39	GOM_NL__2PRFIN20040903_102113_000000402030_00051_13131_3481.N1	03-SEP-2004 10:21:13	Bright	40.000	162	34Alp Aqr	2.9440	5350.0	80	13131	No
40	GOM_NL__2PRFIN20040903_102412_000000392030_00051_13131_3482.N1	03-SEP-2004 10:24:12	Bright	39.000	61	8Eps Peg	2.1000	3900.0	78	13131	No
41	GOM_NL__2PRFIN20040903_102649_000000482030_00051_13131_3483.N1	03-SEP-2004 10:26:49	Bright	47.500	90	54Alp Peg	2.4870	11000.	95	13131	No
42	GOM_NL__2PRFIN20040903_103108_000000392030_00051_13131_3484.N1	03-SEP-2004 10:31:08	Bright	38.500	92	53Eps Cyg	2.5000	4500.0	77	13131	No

279	GOM_NL__2PRFIN20040903_232327_000000372030_00059_13139_3495.N1	03-SEP-2004 23:23:27	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	13139	No
280	GOM_NL__2PRFIN20040903_232458_000000482030_00059_13139_3496.N1	03-SEP-2004 23:24:58	Dark	48.000	9	Alp Eri	0.45300	24000.	96	13139	No
281	GOM_NL__2PRFIN20040903_232902_000000472030_00059_13139_3497.N1	03-SEP-2004 23:29:02	Straylight	46.500	148	Alp Tuc	2.8780	4100.0	93	13139	No
282	GOM_NL__2PRFIN20040903_233054_000000532030_00059_13139_3498.N1	03-SEP-2004 23:30:54	Straylight	52.500	84	Alp Phe	2.3970	4500.0	105	13139	No
283	GOM_NL__2PRFIN20040903_233242_000000452030_00059_13139_3499.N1	03-SEP-2004 23:32:42	Straylight	44.500	31	Alp Gru	1.7340	15200.	89	13139	No
284	GOM_NL__2PRFIN20040903_233648_000000452030_00059_13139_3500.N1	03-SEP-2004 23:36:48	Straylight	45.000	18	24Alp PsA	1.1660	9700.0	90	13139	No
285	GOM_NL__2PRFIN20040903_233926_000000762030_00059_13139_3501.N1	03-SEP-2004 23:39:26	Twilight_stray	76.000	52	16Bet Cet	2.0370	4500.0	152	13139	No
286	GOM_NL__2PRFIN20040903_234439_000000362030_00059_13139_3502.N1	03-SEP-2004 23:44:39	Bright	35.500	154	22Bet Aqr	2.8990	5700.0	71	13139	No
287	GOM_NL__2PRFIN20040903_234601_000000382030_00059_13139_3503.N1	03-SEP-2004 23:46:01	Bright	37.500	162	34Alp Aqr	2.9440	5350.0	75	13139	No
288	GOM_NL__2PRFIN20040903_234901_000000362030_00059_13139_3504.N1	03-SEP-2004 23:49:01	Bright	36.000	61	8Eps Peg	2.1000	3900.0	72	13139	No
289	GOM_NL__2PRFIN20040903_235134_000000452030_00059_13139_3505.N1	03-SEP-2004 23:51:34	Bright	45.000	90	54Alp Peg	2.4870	11000.	90	13139	No
290	GOM_NL__2PRFIN20040903_235558_000000372030_00059_13139_3506.N1	03-SEP-2004 23:55:58	Bright	36.500	92	53Eps Cyg	2.5000	4500.0	73	13139	No
291	GOM_NL__2PRFIN20040903_235754_000000362030_00059_13139_3507.N1	03-SEP-2004 23:57:54	Bright	36.000	66	37Gam Cyg	2.2080	5900.0	72	13139	No
292	GOM_NL__2PRFIN20040903_235907_000000372030_00059_13139_3508.N1	03-SEP-2004 23:59:07	Bright	36.500	19	50Alp Cyg	1.2460	10500.	73	13139	No

3. Quality information per product

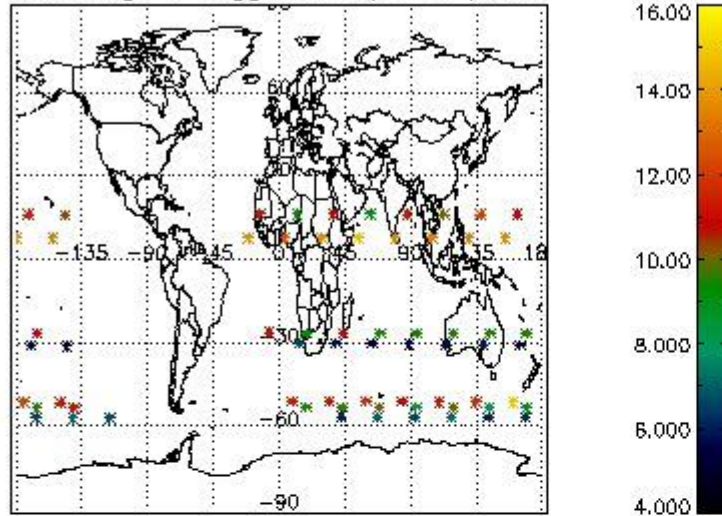
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

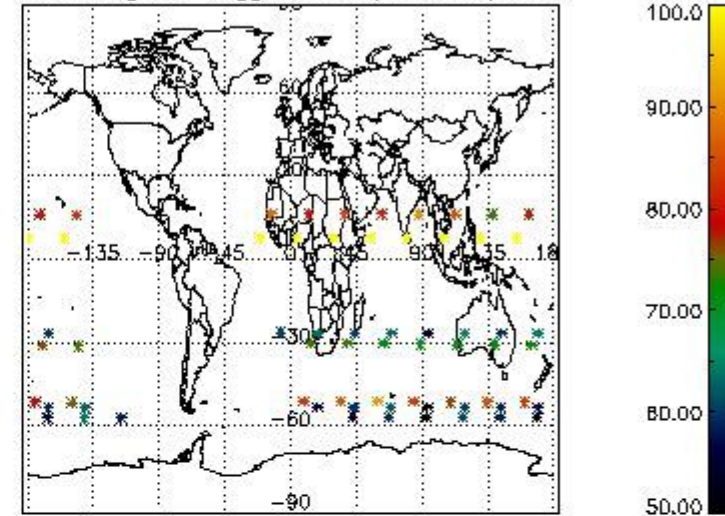


3.2 Plot quality information per product (world map)

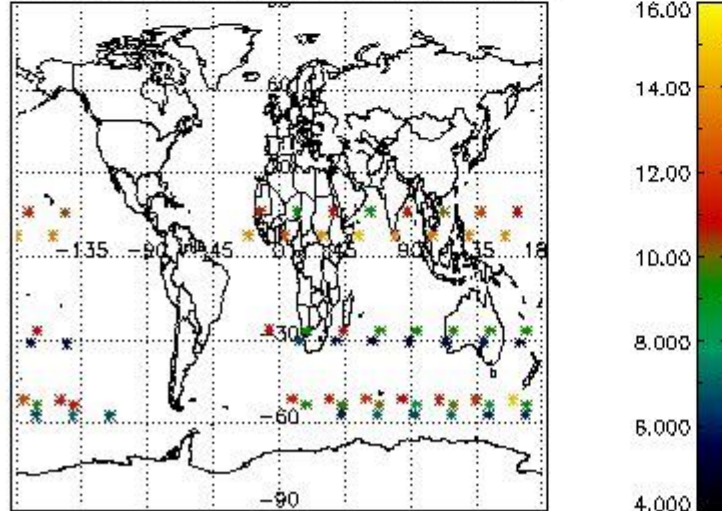
Percentage of flagged data per O3 profile



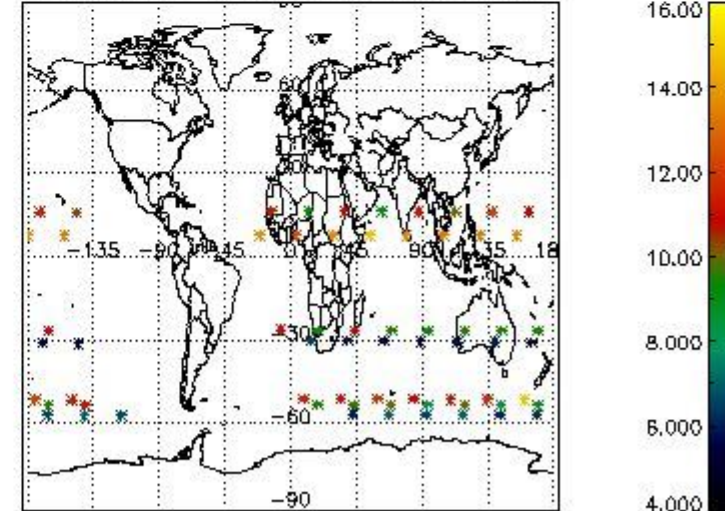
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

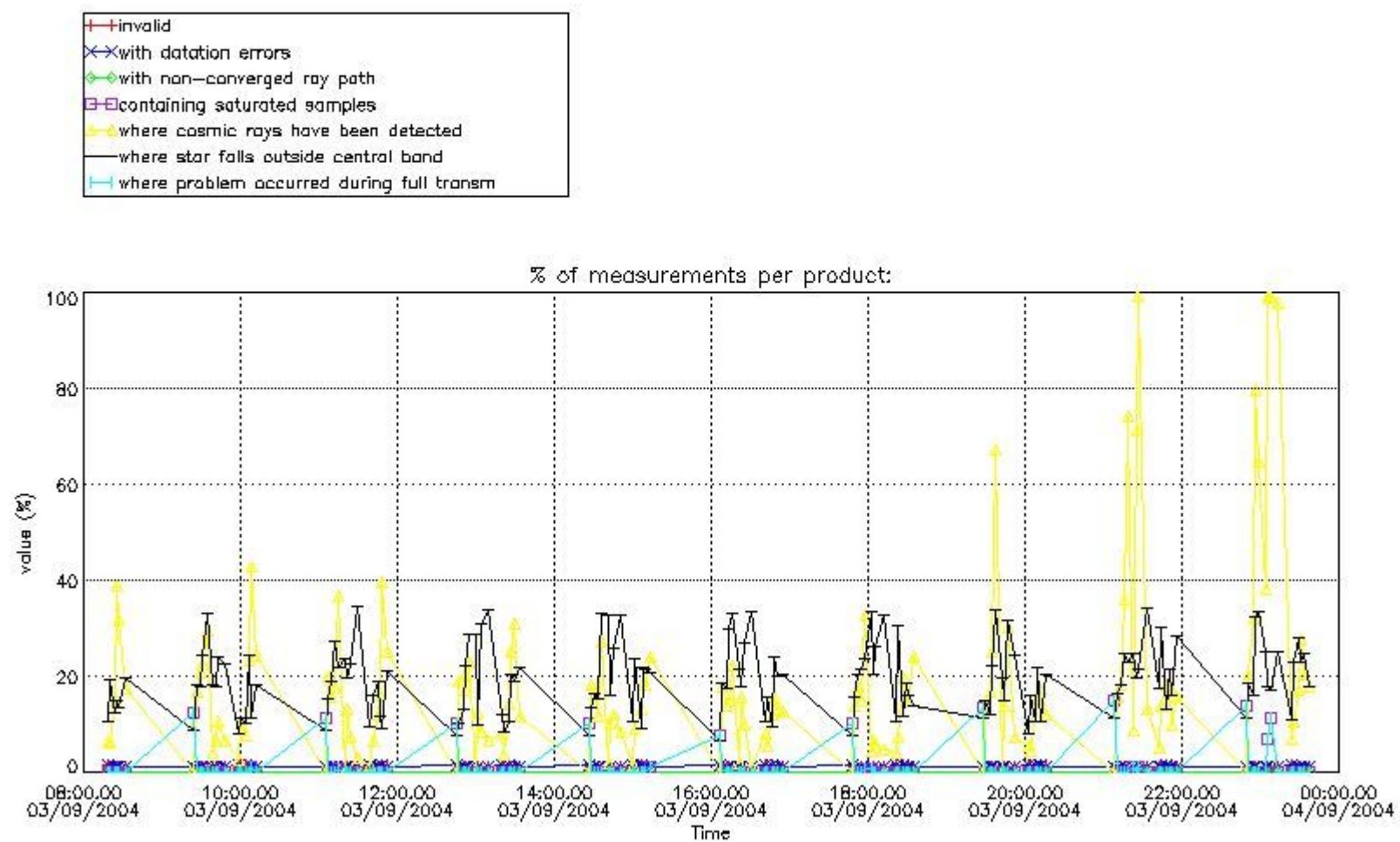


4. Level 1 quality information per product

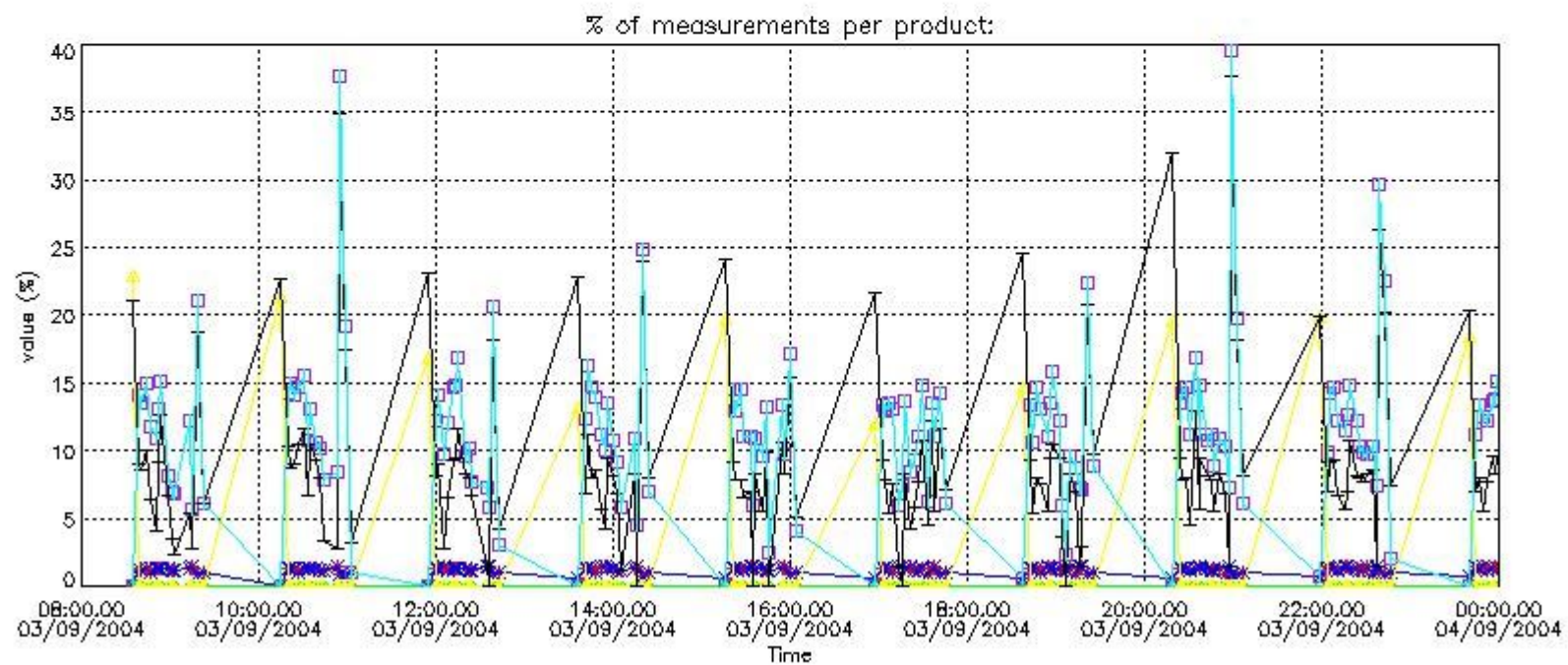
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

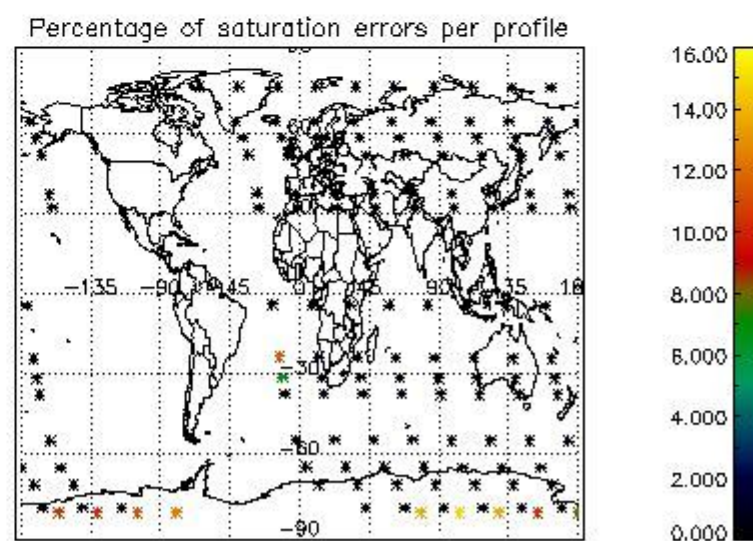
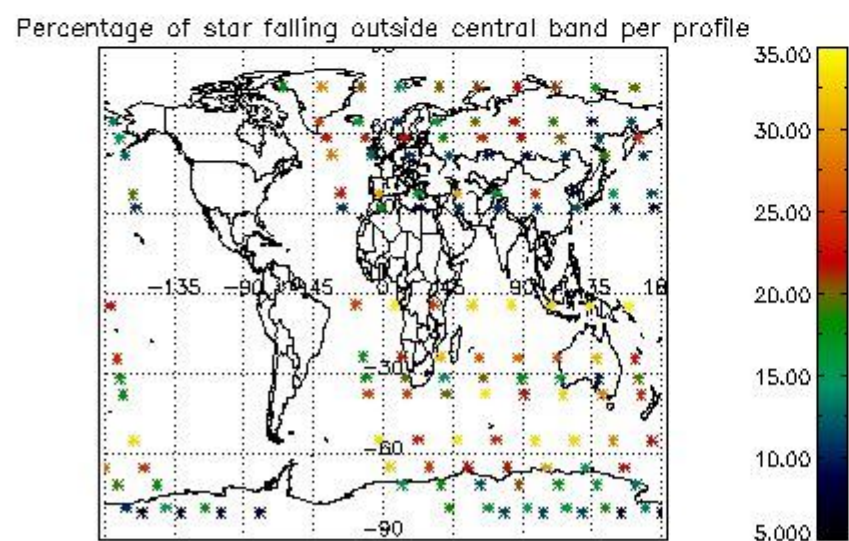
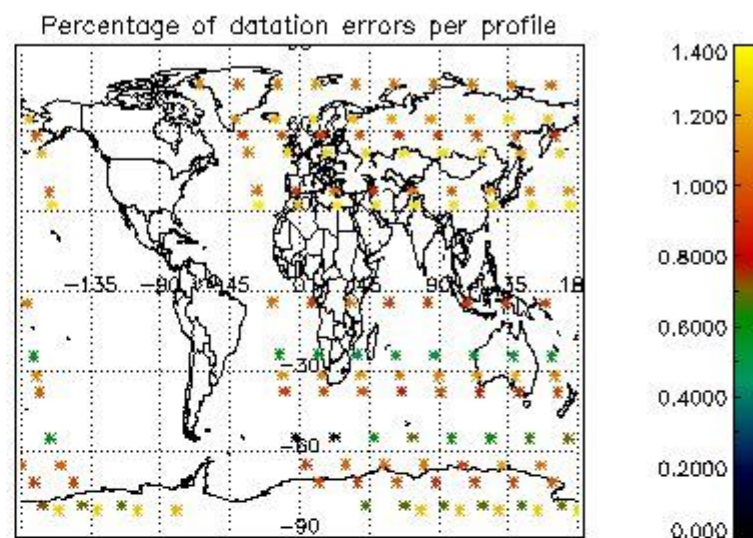
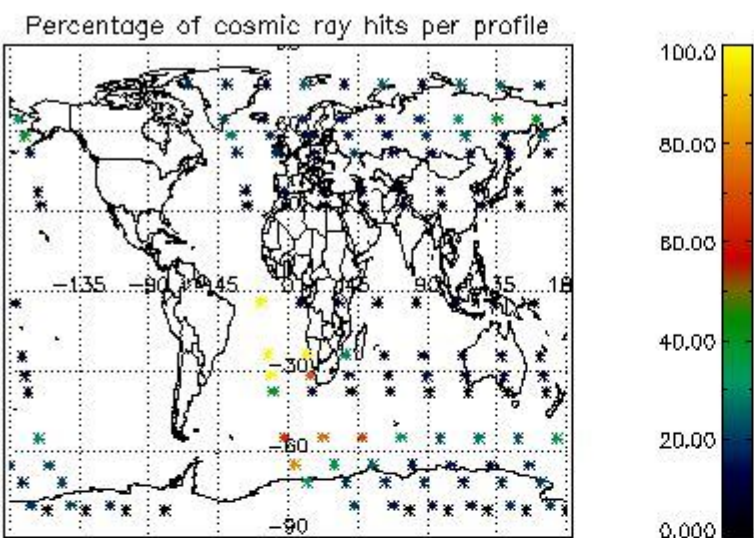


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

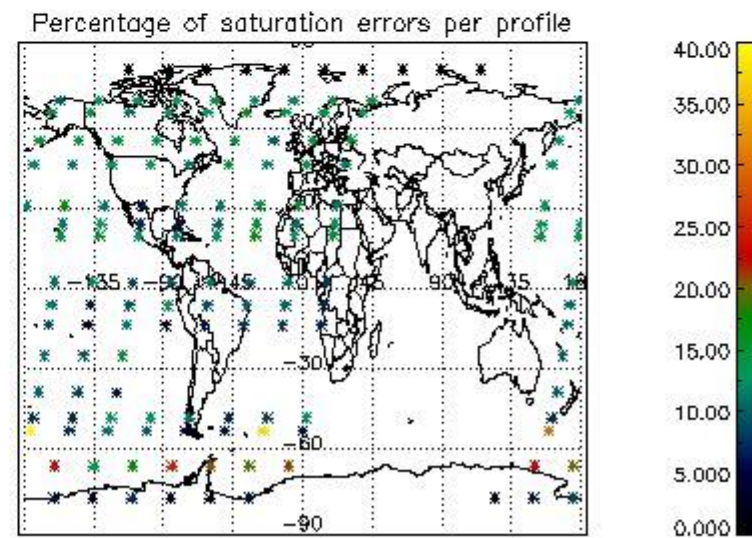
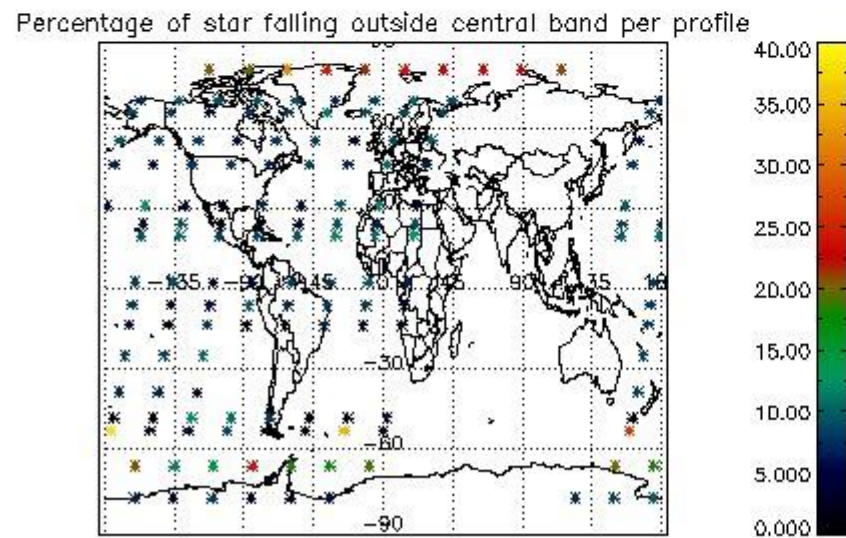
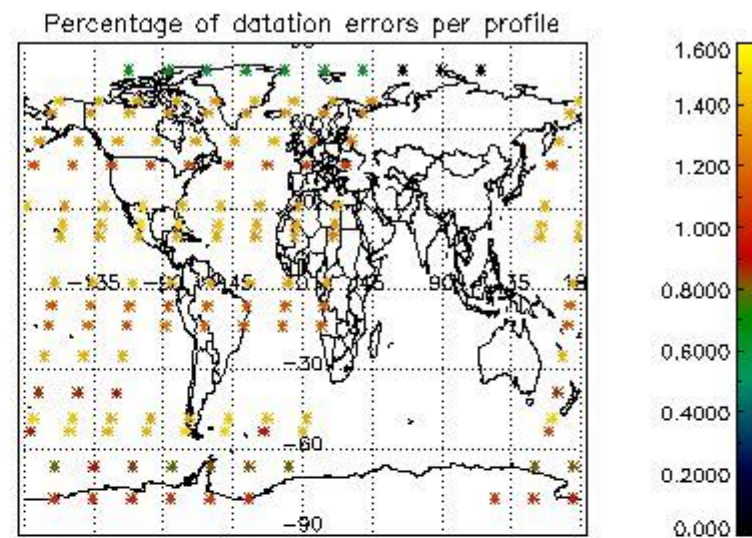
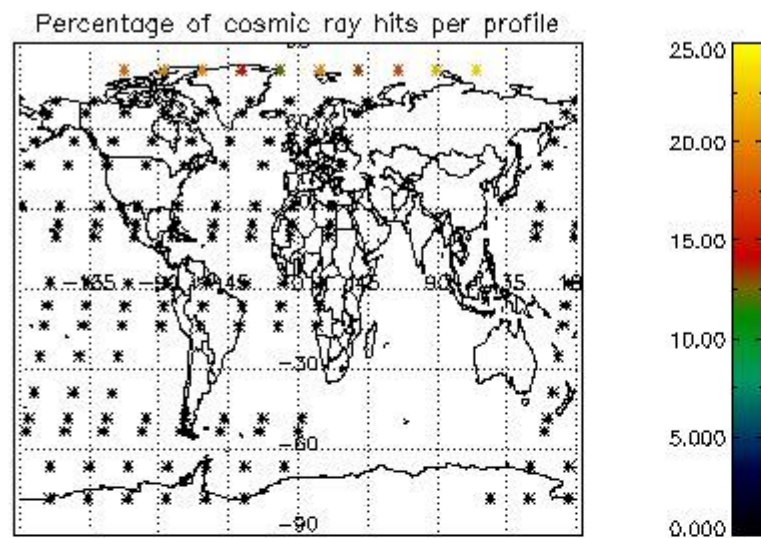


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

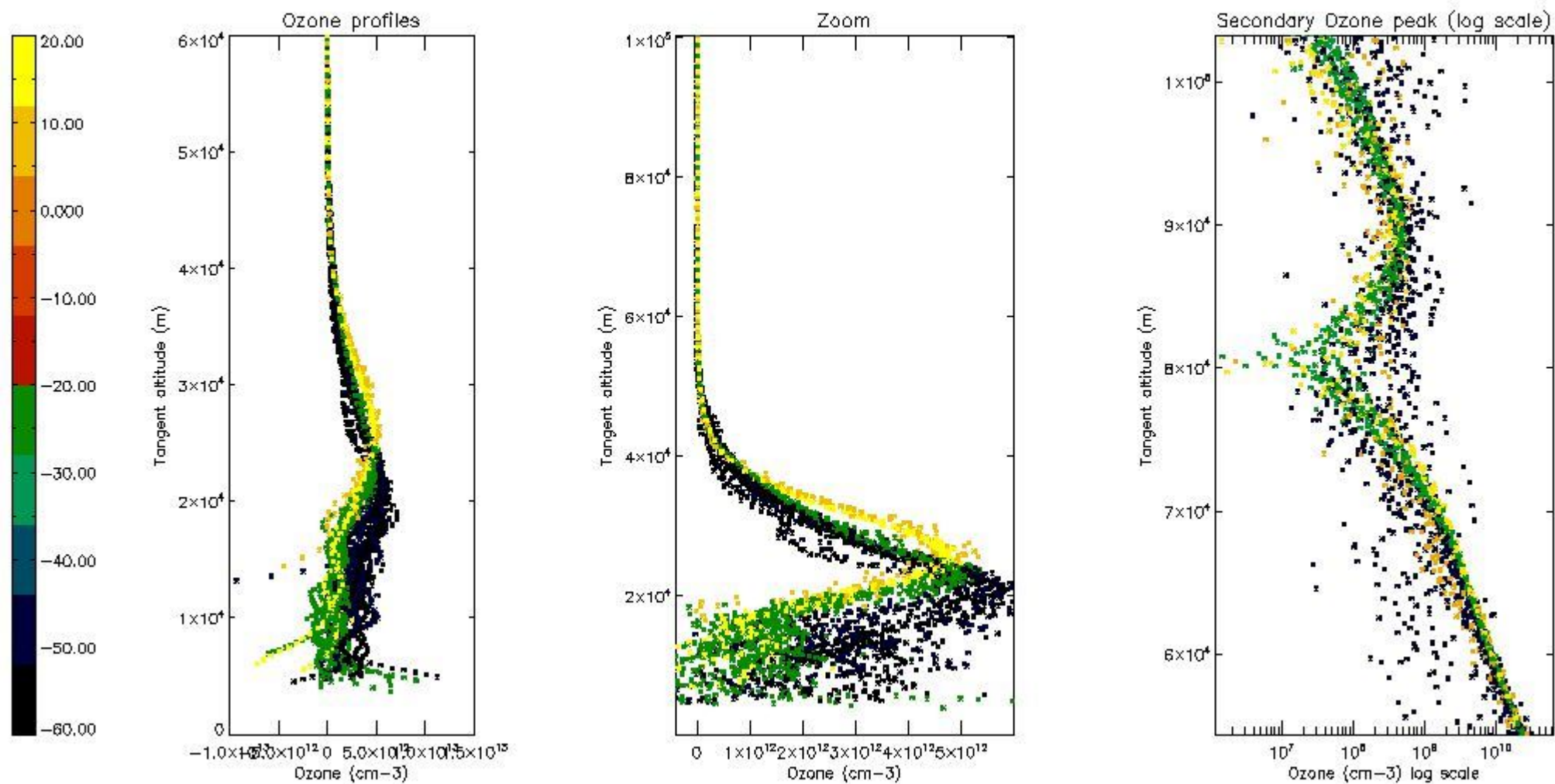
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	28
STD < 20	17

STD < 10	15
STD < 5	11

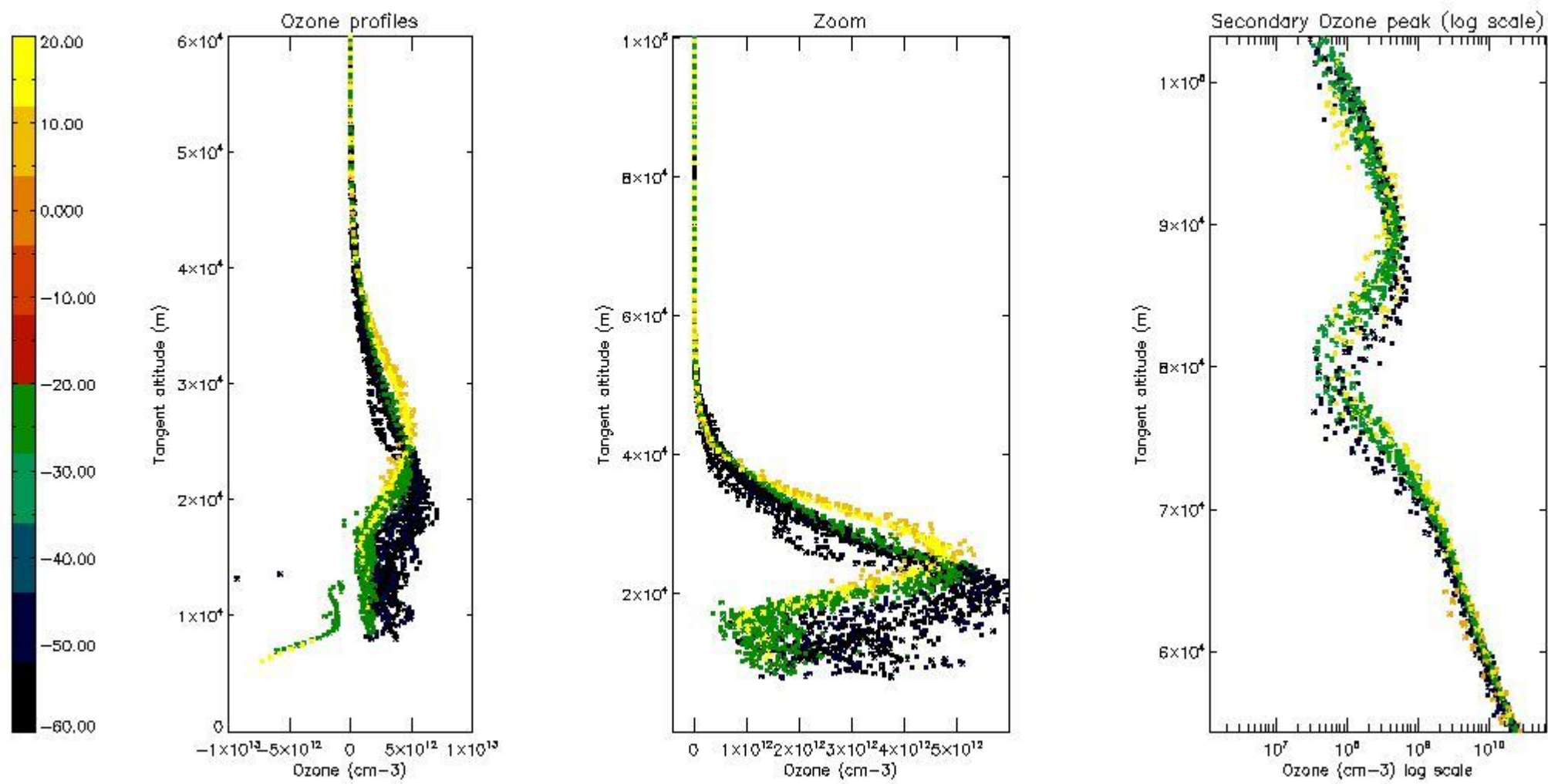
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



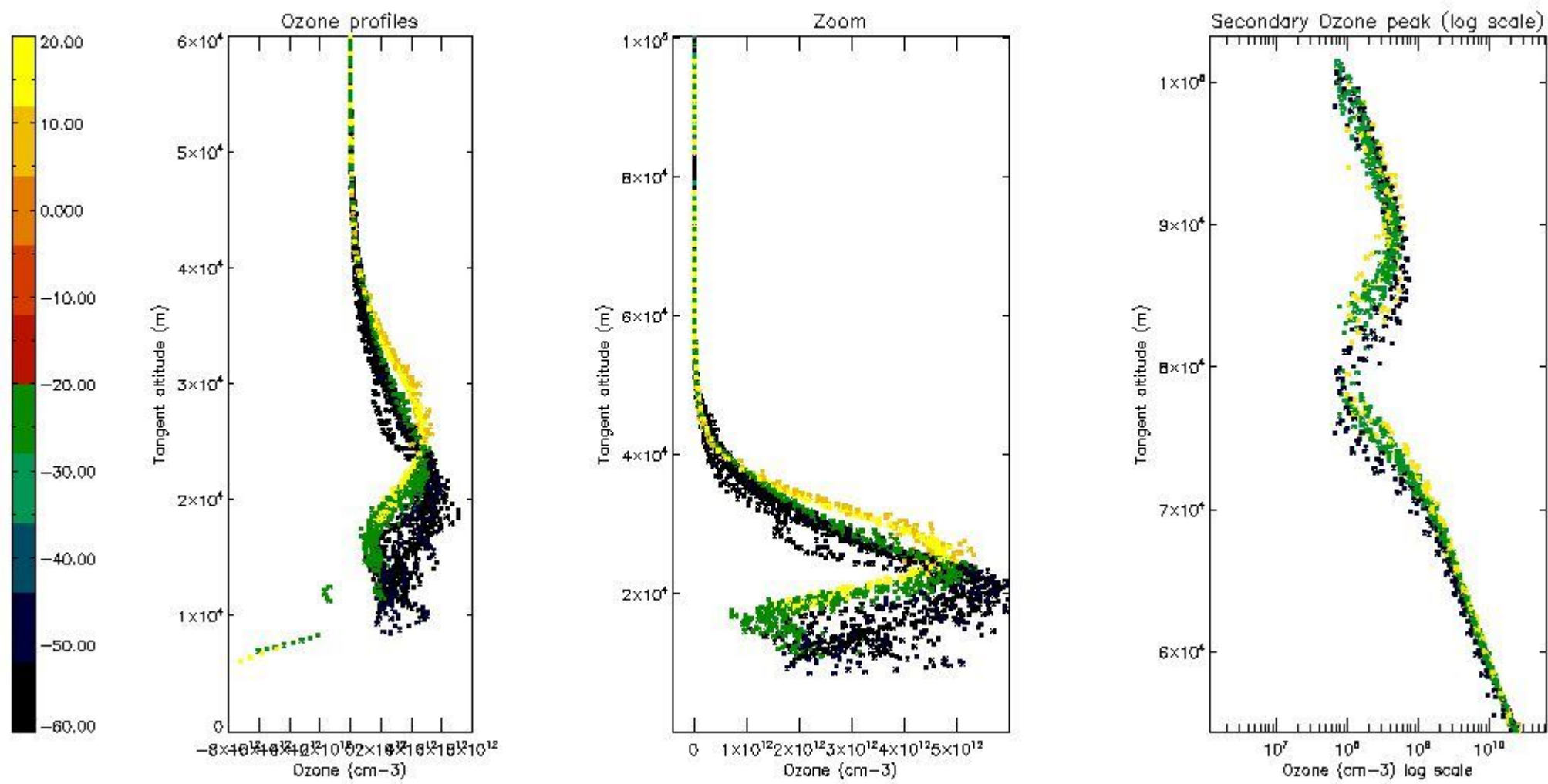
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



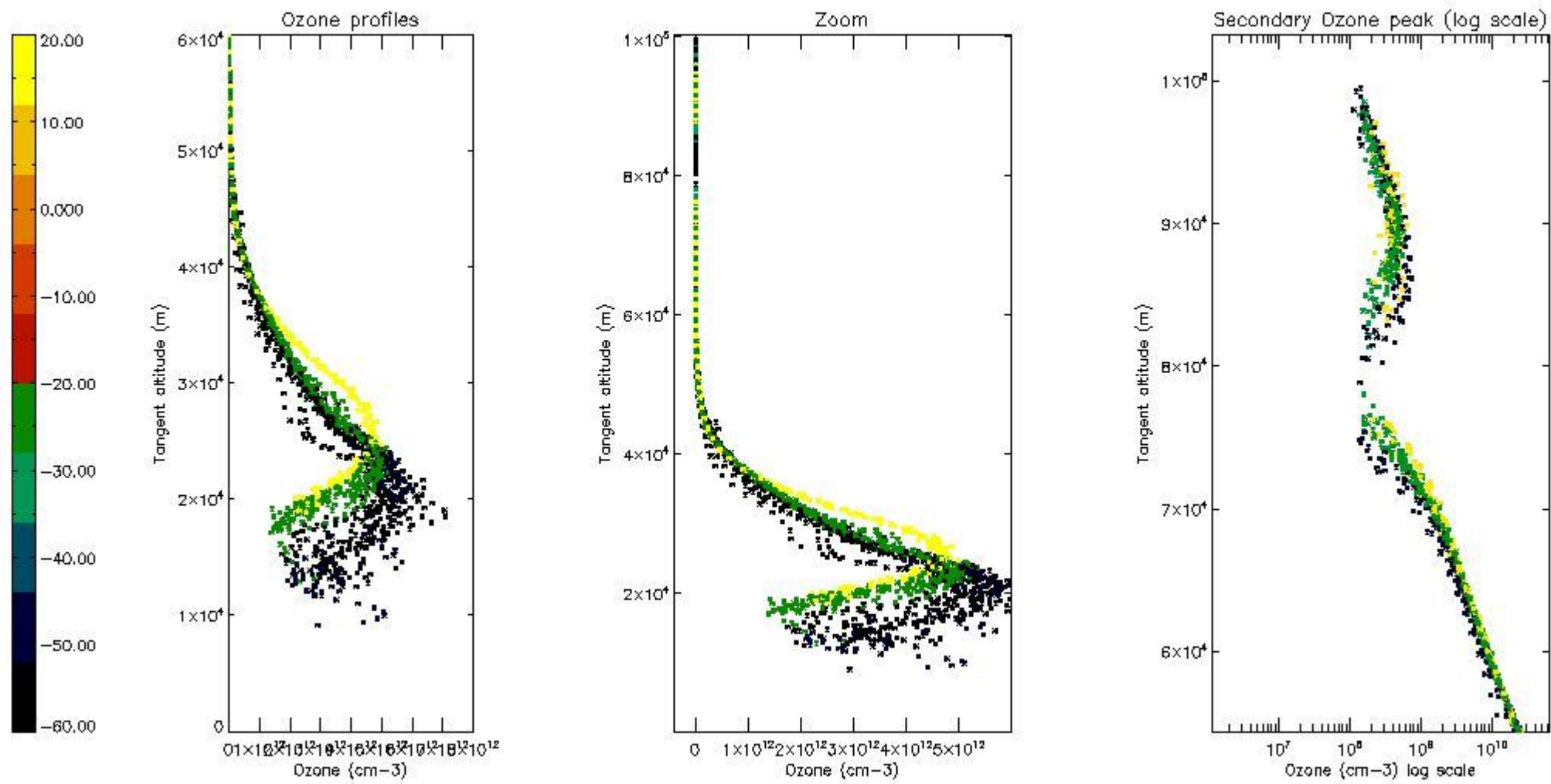
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



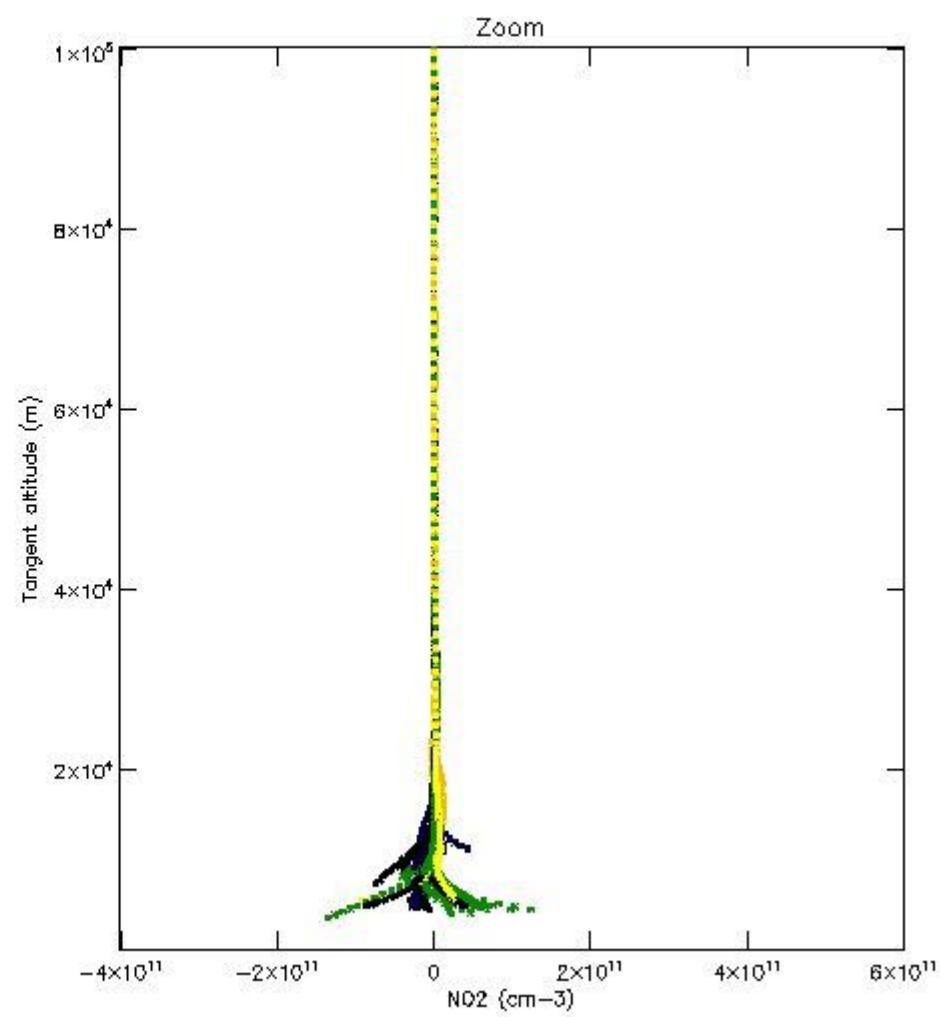
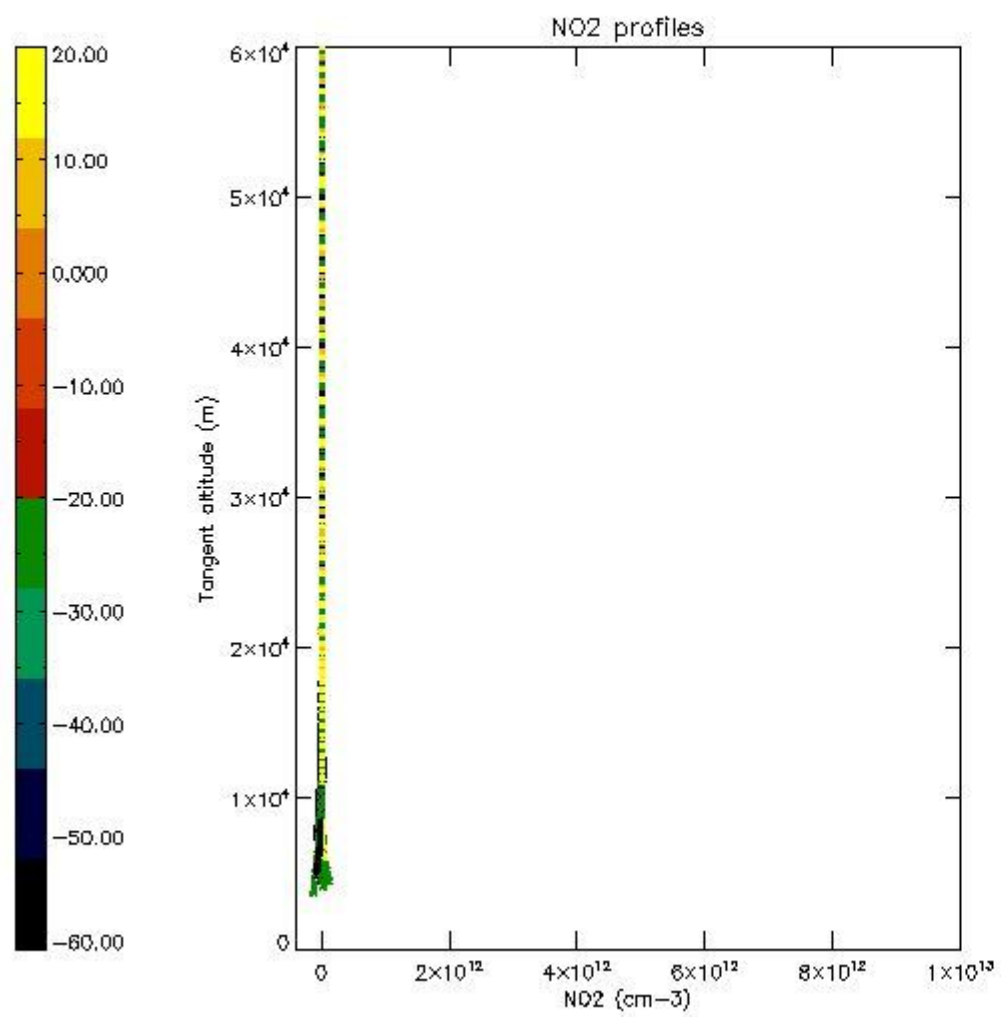
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



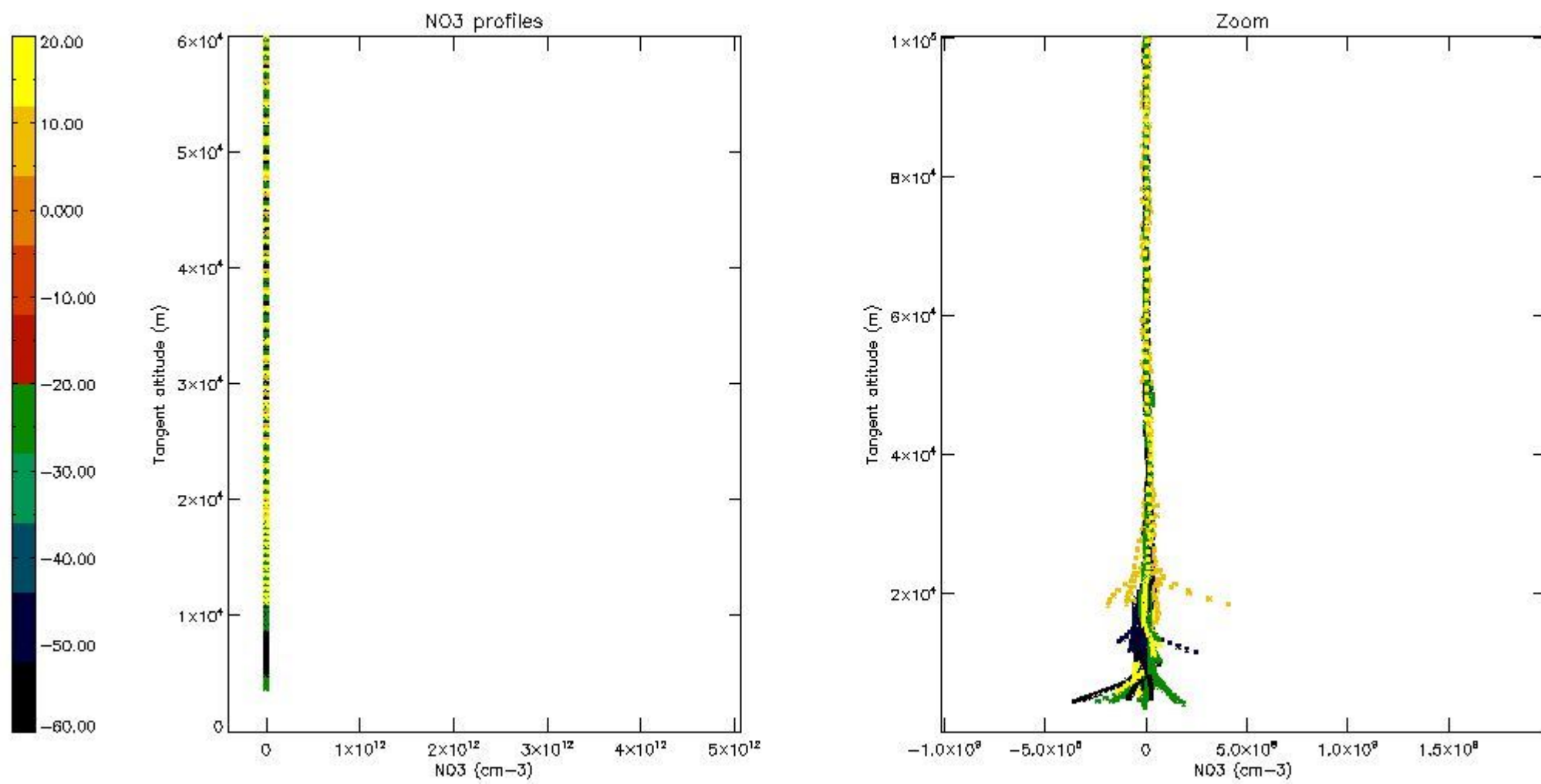
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



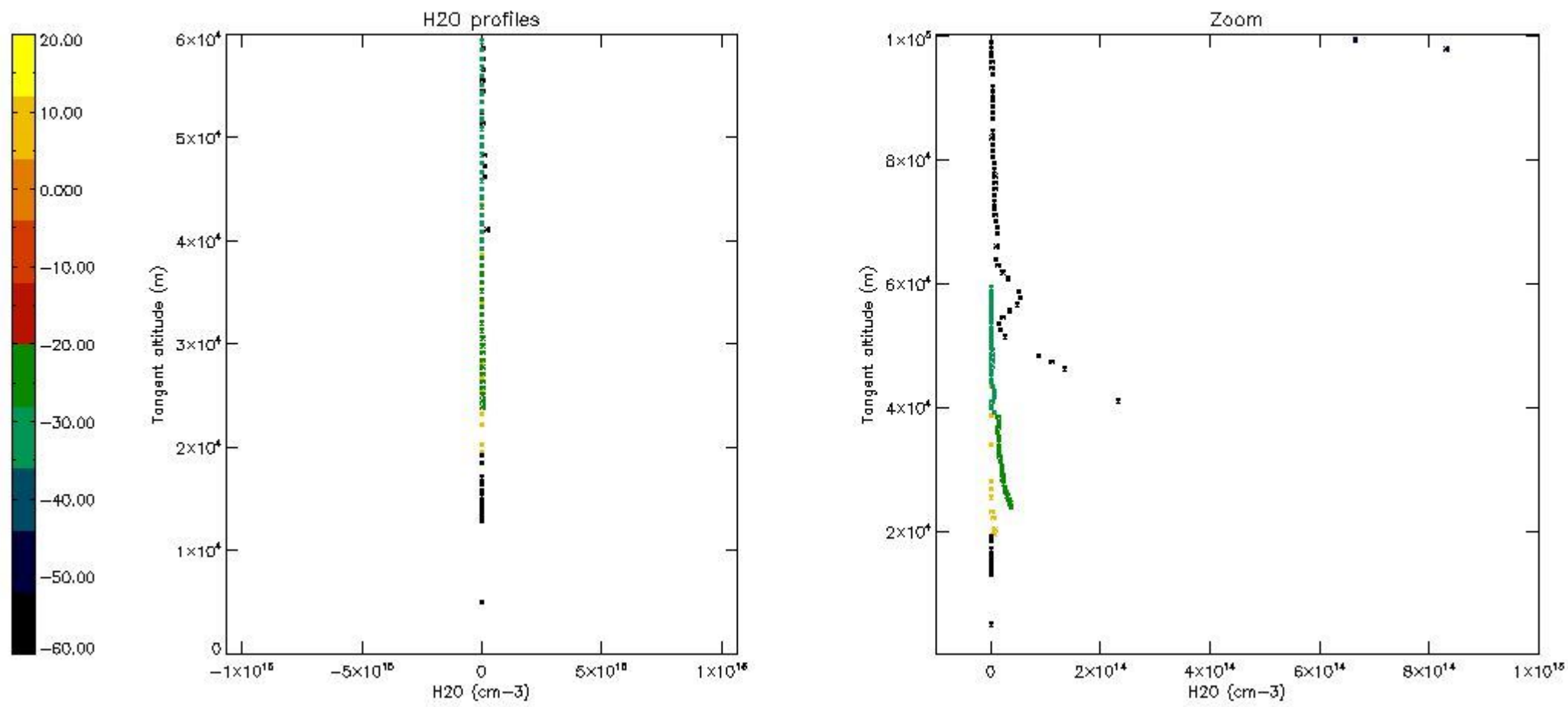
5.7 Plot NO3 profiles for all STD (dark without errors)

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-2004 08:18:00
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	03-SEP-2004 08:18:00
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	03-SEP-2004 08:18:00

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

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

[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

[3.2 Plot of level 2 quality information per product \(world map\)](#)

[4. Level 1 Quality information per product \(stored on level 2 products\)](#)

[4.1 Plot of level 1 quality information per product \(time dependant\)](#)

[4.1.1 Plot of level 1 quality information per product \(time dependant\): ASCENDING](#)

[4.1.2 Plot of level 1 quality information per product \(time dependant\): DESCENDING](#)

[4.2 Plot of level 1 quality information per product \(world map\)](#)

[4.2.1 Plot of level 1 quality information per product \(world map\): ASCENDING](#)

[4.2.2 Plot of level 1 quality information per product \(world map\): DESCENDING](#)

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

[5.1 Ozone statistics based on quality of products](#)

[5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

[5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

[5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

[6. Auxiliary Data Files used for the production reported in section 2](#)

This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also given.

Item	Value
Time of report generation	19APR2013 10:10:36
Data source version	GOMOS/6.01
Start time of products	03-09-2004 (03SEP2004 00:00:00)
Stop time of products	04-09-2004 (04SEP2004 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	292
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

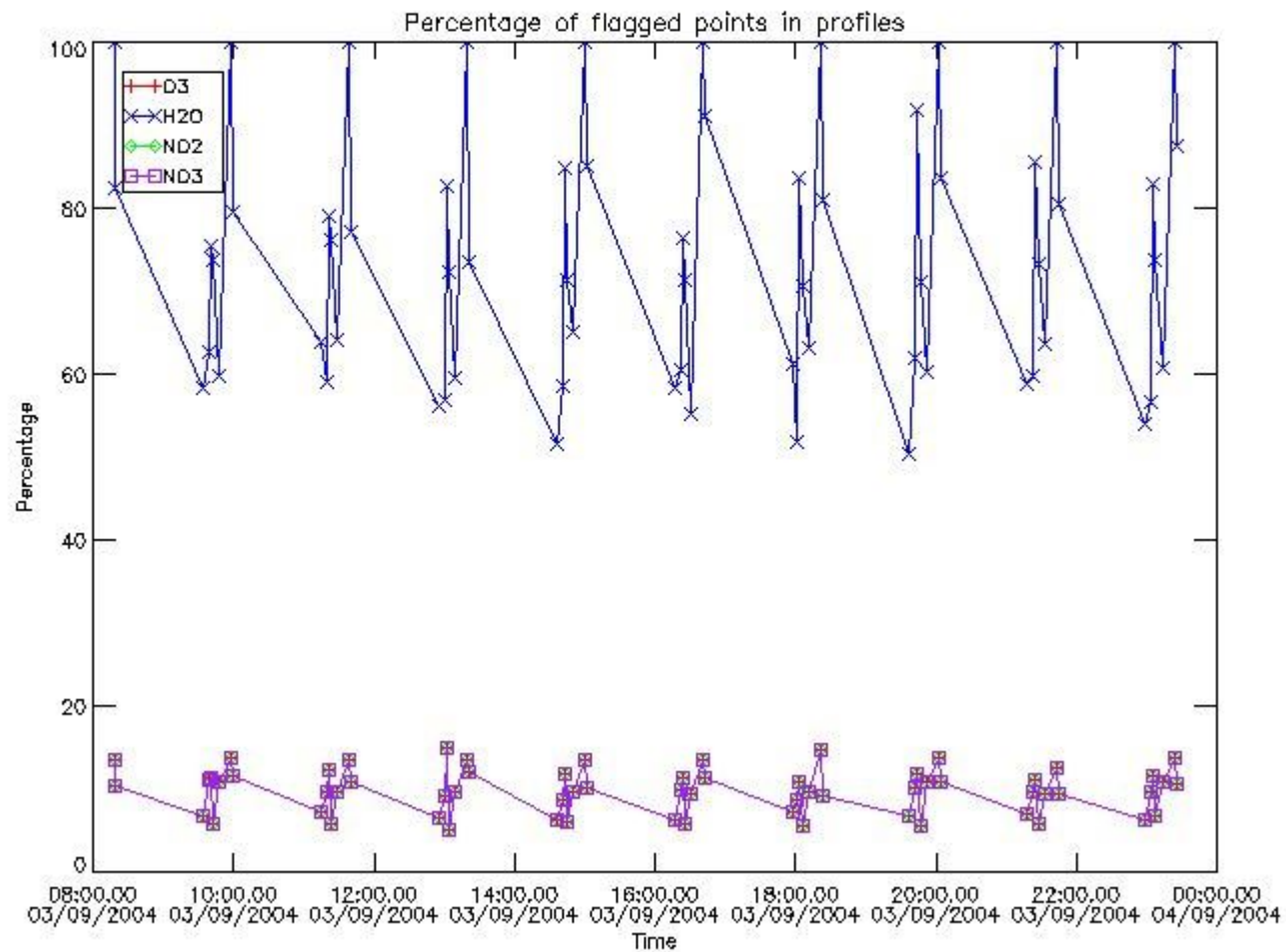
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20040903_081800_000000382030_00050_13130_3473.N1	03-SEP-2004 08:18:00	Dark	38.000	135	Bet Hyi	2.8200	5800.0	76	13130	No
2	GOM_NL__2PRFIN20040903_081928_000000492030_00050_13130_3474.N1	03-SEP-2004 08:19:28	Dark	49.000	9	Alp Eri	0.45300	24000.	98	13130	No
3	GOM_NL__2PRFIN20040903_082335_000000412030_00050_13130_3475.N1	03-SEP-2004 08:23:35	Straylight	40.500	148	Alp Tuc	2.8780	4100.0	81	13130	No
4	GOM_NL__2PRFIN20040903_082524_000000502030_00050_13130_3476.N1	03-SEP-2004 08:25:24	Straylight	50.000	84	Alp Phe	2.3970	4500.0	100	13130	No
5	GOM_NL__2PRFIN20040903_082715_000000412030_00050_13130_3477.N1	03-SEP-2004 08:27:15	Straylight	41.000	31	Alp Gru	1.7340	15200.	82	13130	No
6	GOM_NL__2PRFIN20040903_083121_000000492030_00050_13130_3478.N1	03-SEP-2004 08:31:21	Straylight	48.500	18	24Alp PsA	1.1660	9700.0	97	13130	No
7	GOM_NL__2PRFIN20040903_083401_000000792030_00050_13130_3479.N1	03-SEP-2004 08:34:01	Twilight	78.500	52	16Bet Cet	2.0370	4500.0	157	13130	No
8	GOM_NL__2PRFIN20040903_083912_000000392030_00050_13130_3480.N1	03-SEP-2004 08:39:12	Bright	39.000	154	22Bet Aqr	2.8990	5700.0	78	13130	No
9	GOM_NL__2PRFIN20040903_084036_000000412030_00050_13130_3481.N1	03-SEP-2004 08:40:36	Bright	40.500	162	34Alp Aqr	2.9440	5350.0	81	13130	No
10	GOM_NL__2PRFIN20040903_084335_000000402030_00050_13130_3482.N1	03-SEP-2004 08:43:35	Bright	40.000	61	8Eps Peg	2.1000	3900.0	80	13130	No
11	GOM_NL__2PRFIN20040903_084613_000000472030_00050_13130_3483.N1	03-SEP-2004 08:46:13	Bright	46.500	90	54Alp Peg	2.4870	11000.	93	13130	No
12	GOM_NL__2PRFIN20040903_085032_000000372030_00050_13130_3484.N1	03-SEP-2004 08:50:32	Bright	36.500	92	53Eps Cyg	2.5000	4500.0	73	13130	No
13	GOM_NL__2PRFIN20040903_085228_000000382030_00050_13130_3485.N1	03-SEP-2004 08:52:28	Bright	38.000	66	37Gam Cyg	2.2080	5900.0	76	13130	No
14	GOM_NL__2PRFIN20040903_085342_000000402030_00050_13130_3486.N1	03-SEP-2004 08:53:42	Bright	39.500	19	50Alp Cyg	1.2460	10500.	79	13130	No
15	GOM_NL__2PRFIN20040903_085834_000000372030_00050_13130_3487.N1	03-SEP-2004 08:58:34	Bright	37.000	89	5Alp Cep	2.4510	8000.0	74	13130	No
16	GOM_NL__2PRFIN20040903_090102_000000432030_00050_13130_3488.N1	03-SEP-2004 09:01:02	Bright	43.000	74	11Bet Cas	2.2680	6600.0	86	13130	No
17	GOM_NL__2PRFIN20040903_090307_000000442030_00050_13130_3489.N1	03-SEP-2004 09:03:07	Bright	44.000	76	27Gam Cas	2.3000	30000.	88	13130	No
18	GOM_NL__2PRFIN20040903_091251_000000372030_00050_13130_3490.N1	03-SEP-2004 09:12:51	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	13130	No
19	GOM_NL__2PRFIN20040903_091414_000000362030_00050_13130_3491.N1	03-SEP-2004 09:14:14	Bright	35.500	82	48Bet UMa	2.3650	10600.	71	13130	No
20	GOM_NL__2PRFIN20040903_091808_000000622030_00050_13130_3492.N1	03-SEP-2004 09:18:08	Bright	61.500	6	13Alp Aur	0.080000	3400.0	123	13130	No
21	GOM_NL__2PRFIN20040903_092201_000000502030_00050_13130_3493.N1	03-SEP-2004 09:22:01	Bright	49.500	107	37The Aur	2.6490	11000.	99	13130	No
22	GOM_NL__2PRFIN20040903_092423_000000412030_00050_13130_3494.N1	03-SEP-2004 09:24:23	Bright	40.500	17	78Bet Gem	1.1610	4500.0	81	13130	No
23	GOM_NL__2PRFIN20040903_092602_000000752030_00050_13130_3495.N1	03-SEP-2004 09:26:02	Twilight	74.500	28	12Bet Tau	1.6500	15200.	149	13130	No
24	GOM_NL__2PRFIN20040903_092910_000000532030_00050_13130_3496.N1	03-SEP-2004 09:29:10	Twilight	53.000	44	24Gam Gem	1.9280	11000.	106	13130	No
25	GOM_NL__2PRFIN20040903_093109_000000492030_00050_13130_3497.N1	03-SEP-2004 09:31:09	Twilight	49.000	8	10Alp CMi	0.40000	6500.0	98	13130	No
26	GOM_NL__2PRFIN20040903_093404_000000832030_00050_13130_3498.N1	03-SEP-2004 09:34:04	Dark	83.000	14	58Alp Ori	0.87000	3000.0	166	13130	No
27	GOM_NL__2PRFIN20040903_093900_000000502030_00050_13130_3499.N1	03-SEP-2004 09:39:00	Dark	50.000	1	9Alp CMa	-1.4400	11000.	100	13130	No
28	GOM_NL__2PRFIN20040903_094043_000000452030_00050_13130_3500.N1	03-SEP-2004 09:40:43	Dark	45.000	37	25Del CMa	1.8300	5900.0	90	13130	No
29	GOM_NL__2PRFIN20040903_094248_000000902030_00050_13130_3501.N1	03-SEP-2004 09:42:48	Dark	90.000	7	19Bet Ori	0.10000	14000.	180	13130	No
30	GOM_NL__2PRFIN20040903_094824_000000472030_00050_13130_3502.N1	03-SEP-2004 09:48:24	Dark	46.500	2	Alp Car	-0.73600	7000.0	93	13130	No
31	GOM_NL__2PRFIN20040903_095837_000000372030_00051_13131_3473.N1	03-SEP-2004 09:58:37	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	13131	No
32	GOM_NL__2PRFIN20040903_100005_000000452030_00051_13131_3474.N1	03-SEP-2004 10:00:05	Dark	44.500	9	Alp Eri	0.45300	24000.	89	13131	No
33	GOM_NL__2PRFIN20040903_100411_000000392030_00051_13131_3475.N1	03-SEP-2004 10:04:11	Straylight	39.000	148	Alp Tuc	2.8780	4100.0	78	13131	No
34	GOM_NL__2PRFIN20040903_100601_000000562030_00051_13131_3476.N1	03-SEP-2004 10:06:01	Straylight	55.500	84	Alp Phe	2.3970	4500.0	111	13131	No
35	GOM_NL__2PRFIN20040903_100752_000000402030_00051_13131_3477.N1	03-SEP-2004 10:07:52	Straylight	39.500	31	Alp Gru	1.7340	15200.	79	13131	No
36	GOM_NL__2PRFIN20040903_101157_000000472030_00051_13131_3478.N1	03-SEP-2004 10:11:57	Straylight	47.000	18	24Alp PsA	1.1660	9700.0	94	13131	No
37	GOM_NL__2PRFIN20040903_101437_000000802030_00051_13131_3479.N1	03-SEP-2004 10:14:37	Twilight	79.500	52	16Bet Cet	2.0370	4500.0	159	13131	No
38	GOM_NL__2PRFIN20040903_101949_000000392030_00051_13131_3480.N1	03-SEP-2004 10:19:49	Bright	38.500	154	22Bet Aqr	2.8990	5700.0	77	13131	No
39	GOM_NL__2PRFIN20040903_102113_000000402030_00051_13131_3481.N1	03-SEP-2004 10:21:13	Bright	40.000	162	34Alp Aqr	2.9440	5350.0	80	13131	No
40	GOM_NL__2PRFIN20040903_102412_000000392030_00051_13131_3482.N1	03-SEP-2004 10:24:12	Bright	39.000	61	8Eps Peg	2.1000	3900.0	78	13131	No
41	GOM_NL__2PRFIN20040903_102649_000000482030_00051_13131_3483.N1	03-SEP-2004 10:26:49	Bright	47.500	90	54Alp Peg	2.4870	11000.	95	13131	No
42	GOM_NL__2PRFIN20040903_103108_000000392030_00051_13131_3484.N1	03-SEP-2004 10:31:08	Bright	38.500	92	53Eps Cyg	2.5000	4500.0	77	13131	No

279	GOM_NL__2PRFIN20040903_232327_000000372030_00059_13139_3495.N1	03-SEP-2004 23:23:27	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	13139	No
280	GOM_NL__2PRFIN20040903_232458_000000482030_00059_13139_3496.N1	03-SEP-2004 23:24:58	Dark	48.000	9	Alp Eri	0.45300	24000.	96	13139	No
281	GOM_NL__2PRFIN20040903_232902_000000472030_00059_13139_3497.N1	03-SEP-2004 23:29:02	Straylight	46.500	148	Alp Tuc	2.8780	4100.0	93	13139	No
282	GOM_NL__2PRFIN20040903_233054_000000532030_00059_13139_3498.N1	03-SEP-2004 23:30:54	Straylight	52.500	84	Alp Phe	2.3970	4500.0	105	13139	No
283	GOM_NL__2PRFIN20040903_233242_000000452030_00059_13139_3499.N1	03-SEP-2004 23:32:42	Straylight	44.500	31	Alp Gru	1.7340	15200.	89	13139	No
284	GOM_NL__2PRFIN20040903_233648_000000452030_00059_13139_3500.N1	03-SEP-2004 23:36:48	Straylight	45.000	18	24Alp PsA	1.1660	9700.0	90	13139	No
285	GOM_NL__2PRFIN20040903_233926_000000762030_00059_13139_3501.N1	03-SEP-2004 23:39:26	Twilight_stray	76.000	52	16Bet Cet	2.0370	4500.0	152	13139	No
286	GOM_NL__2PRFIN20040903_234439_000000362030_00059_13139_3502.N1	03-SEP-2004 23:44:39	Bright	35.500	154	22Bet Aqr	2.8990	5700.0	71	13139	No
287	GOM_NL__2PRFIN20040903_234601_000000382030_00059_13139_3503.N1	03-SEP-2004 23:46:01	Bright	37.500	162	34Alp Aqr	2.9440	5350.0	75	13139	No
288	GOM_NL__2PRFIN20040903_234901_000000362030_00059_13139_3504.N1	03-SEP-2004 23:49:01	Bright	36.000	61	8Eps Peg	2.1000	3900.0	72	13139	No
289	GOM_NL__2PRFIN20040903_235134_000000452030_00059_13139_3505.N1	03-SEP-2004 23:51:34	Bright	45.000	90	54Alp Peg	2.4870	11000.	90	13139	No
290	GOM_NL__2PRFIN20040903_235558_000000372030_00059_13139_3506.N1	03-SEP-2004 23:55:58	Bright	36.500	92	53Eps Cyg	2.5000	4500.0	73	13139	No
291	GOM_NL__2PRFIN20040903_235754_000000362030_00059_13139_3507.N1	03-SEP-2004 23:57:54	Bright	36.000	66	37Gam Cyg	2.2080	5900.0	72	13139	No
292	GOM_NL__2PRFIN20040903_235907_000000372030_00059_13139_3508.N1	03-SEP-2004 23:59:07	Bright	36.500	19	50Alp Cyg	1.2460	10500.	73	13139	No

3. Quality information per product

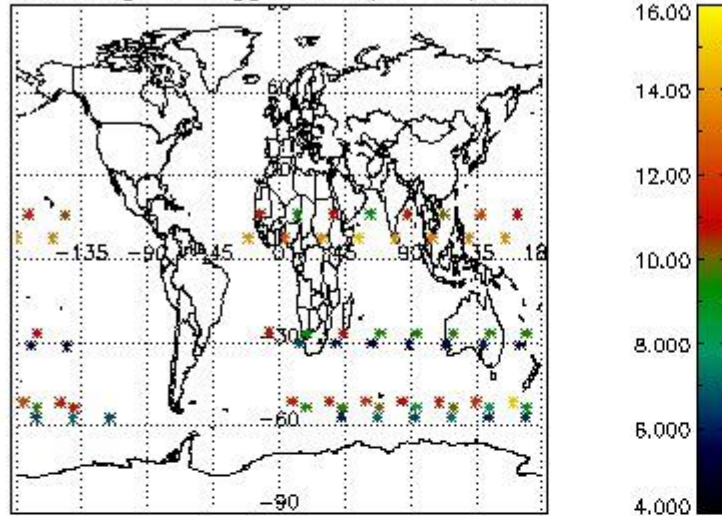
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

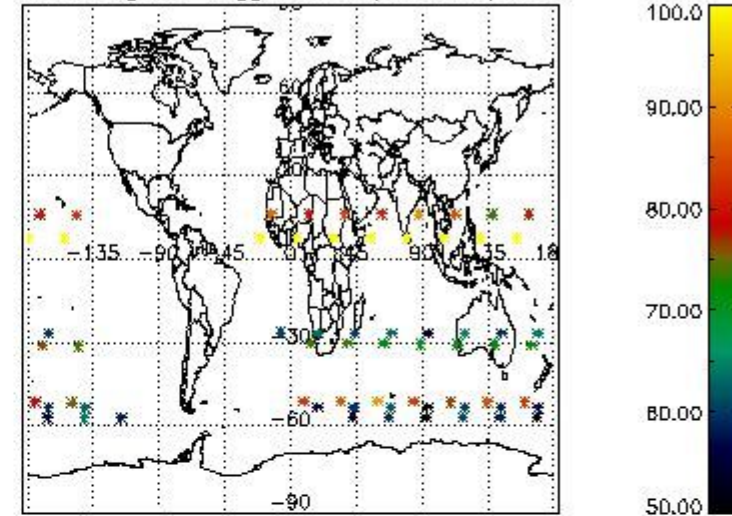


3.2 Plot quality information per product (world map)

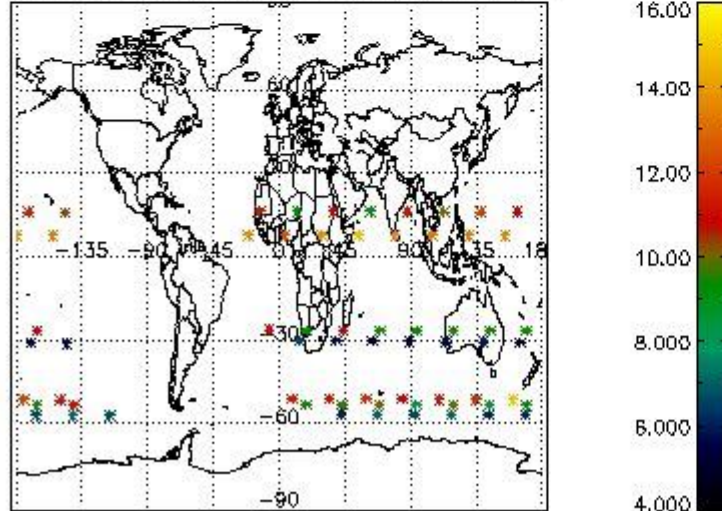
Percentage of flagged data per O3 profile



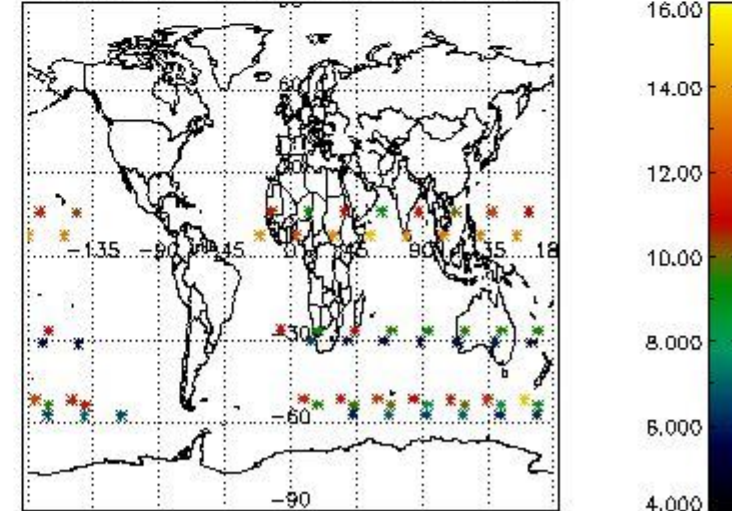
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

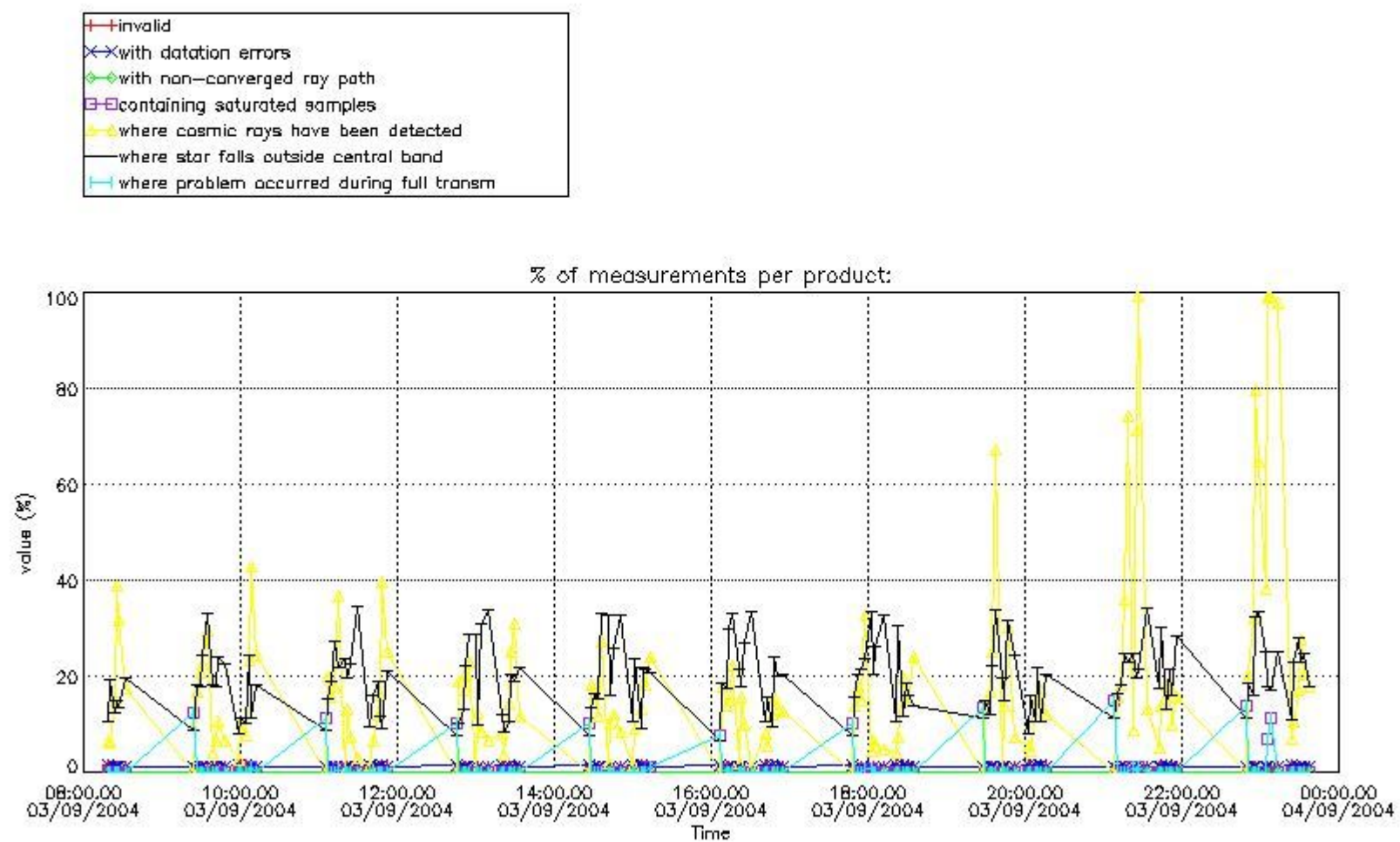


4. Level 1 quality information per product

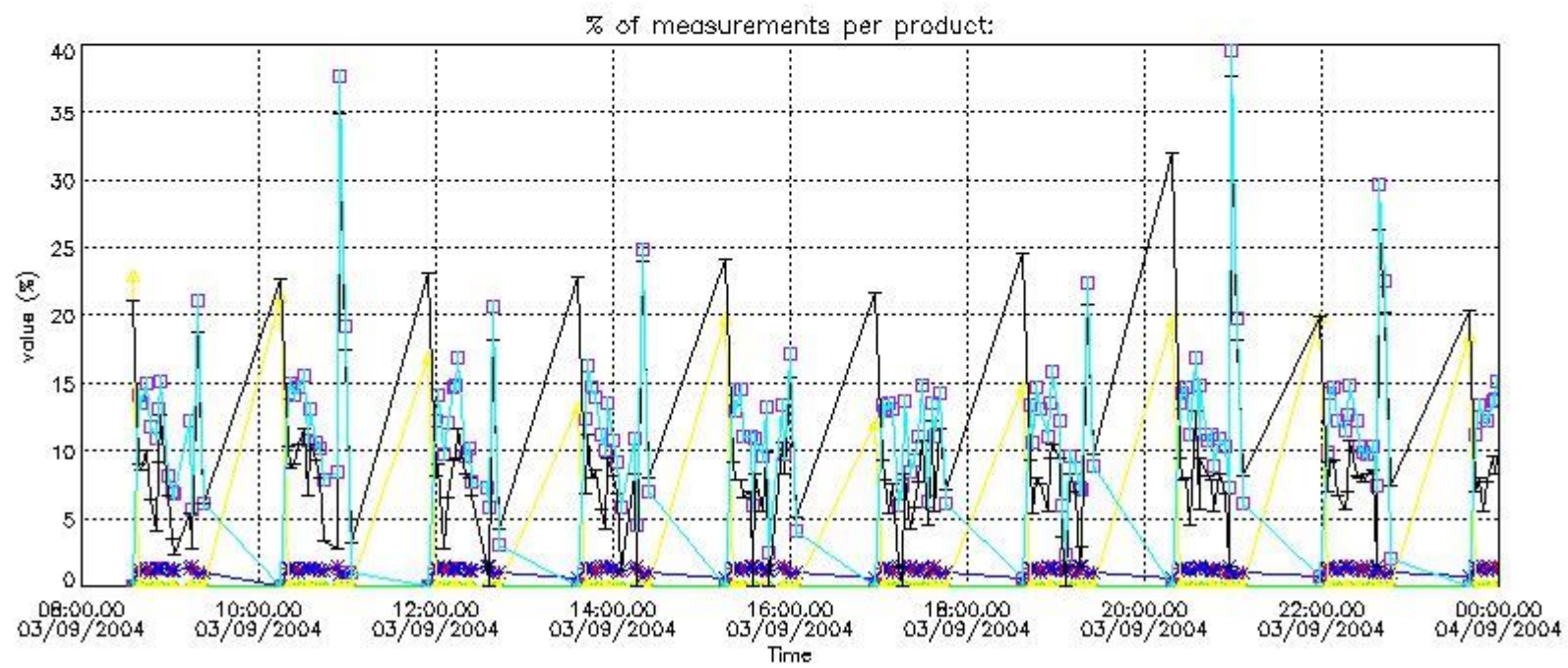
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

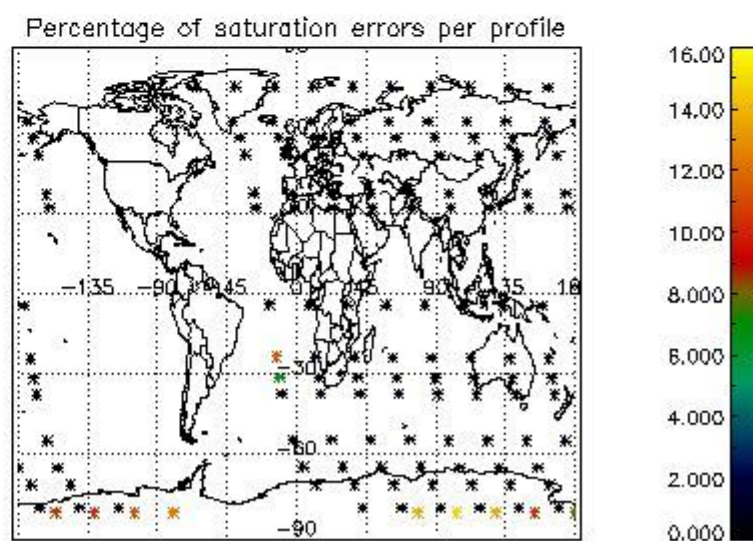
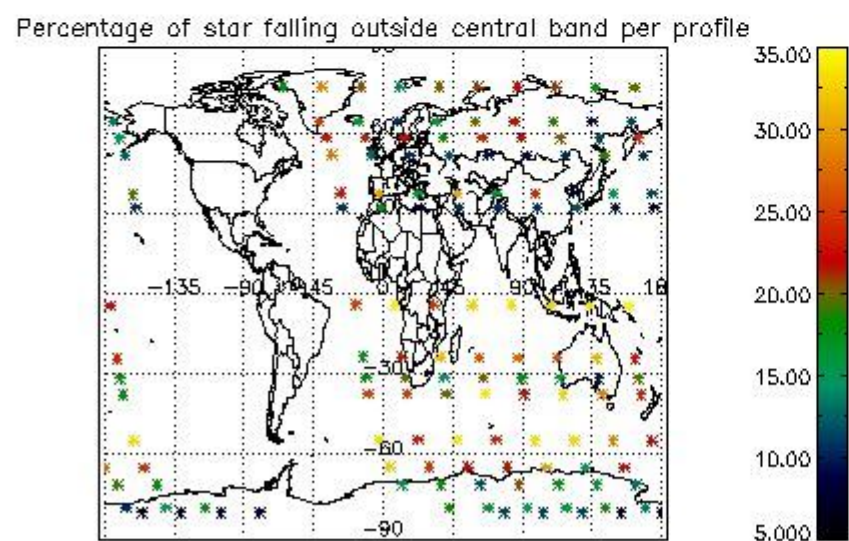
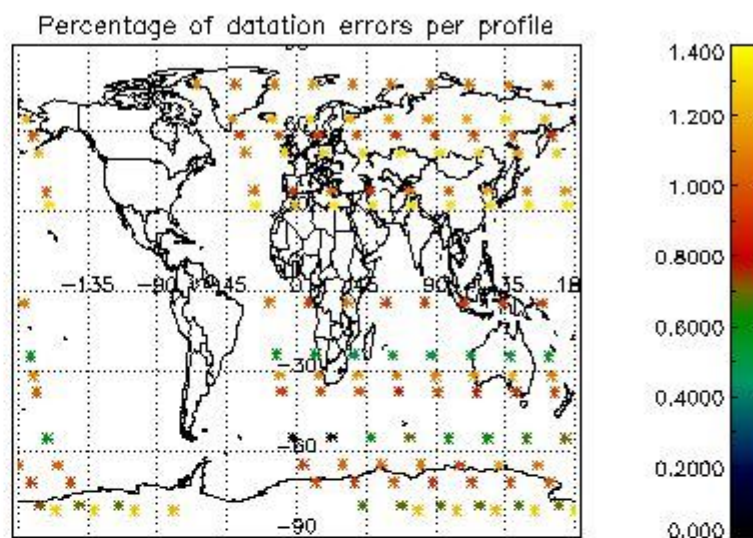
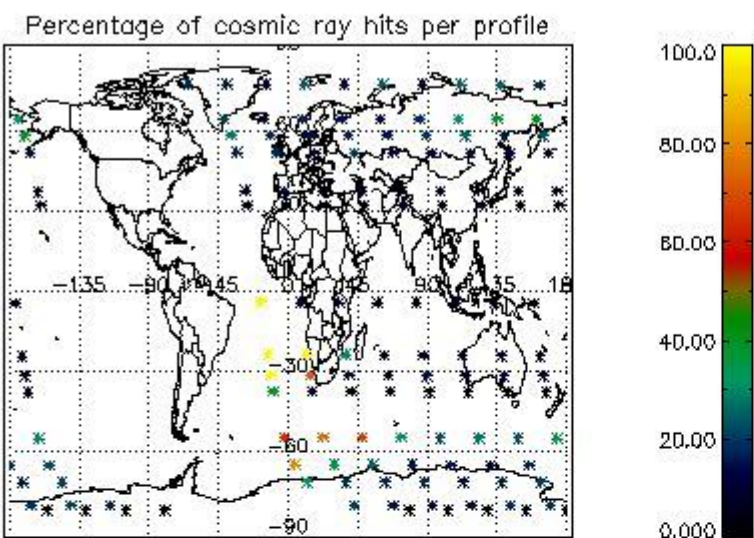


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

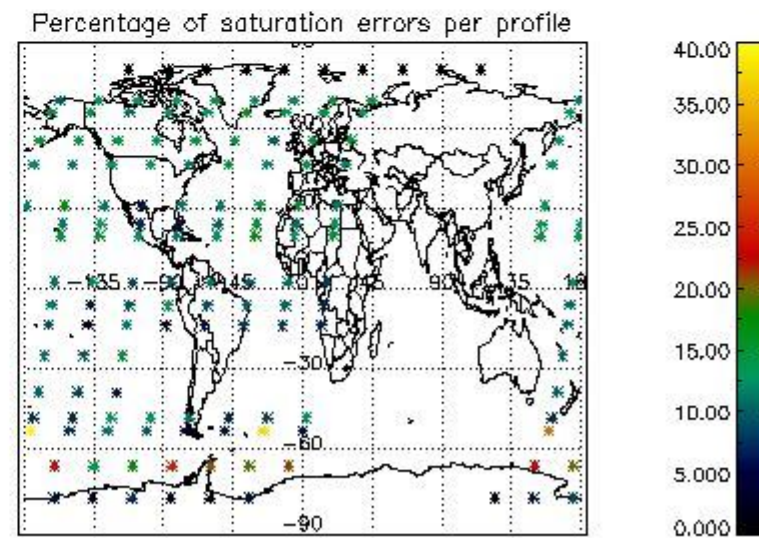
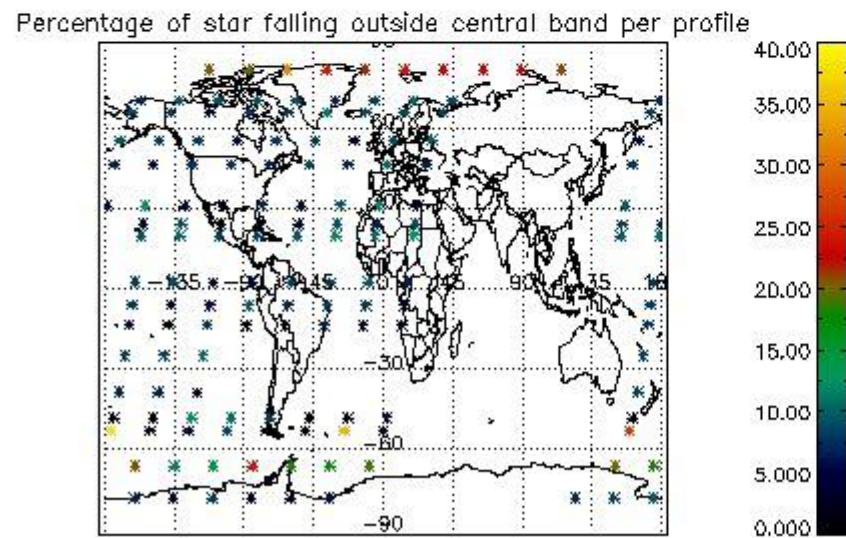
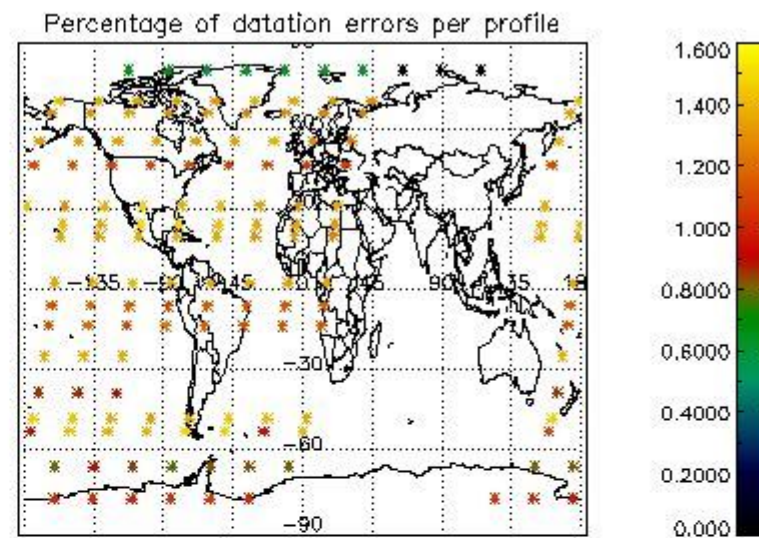
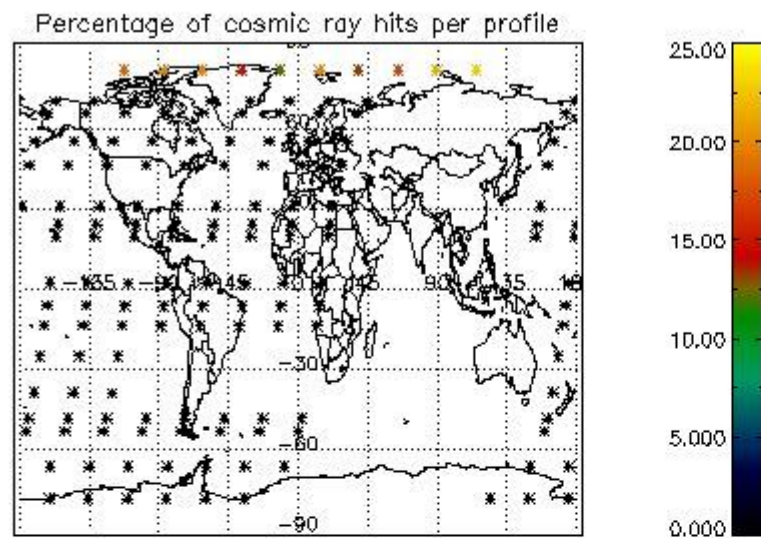


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

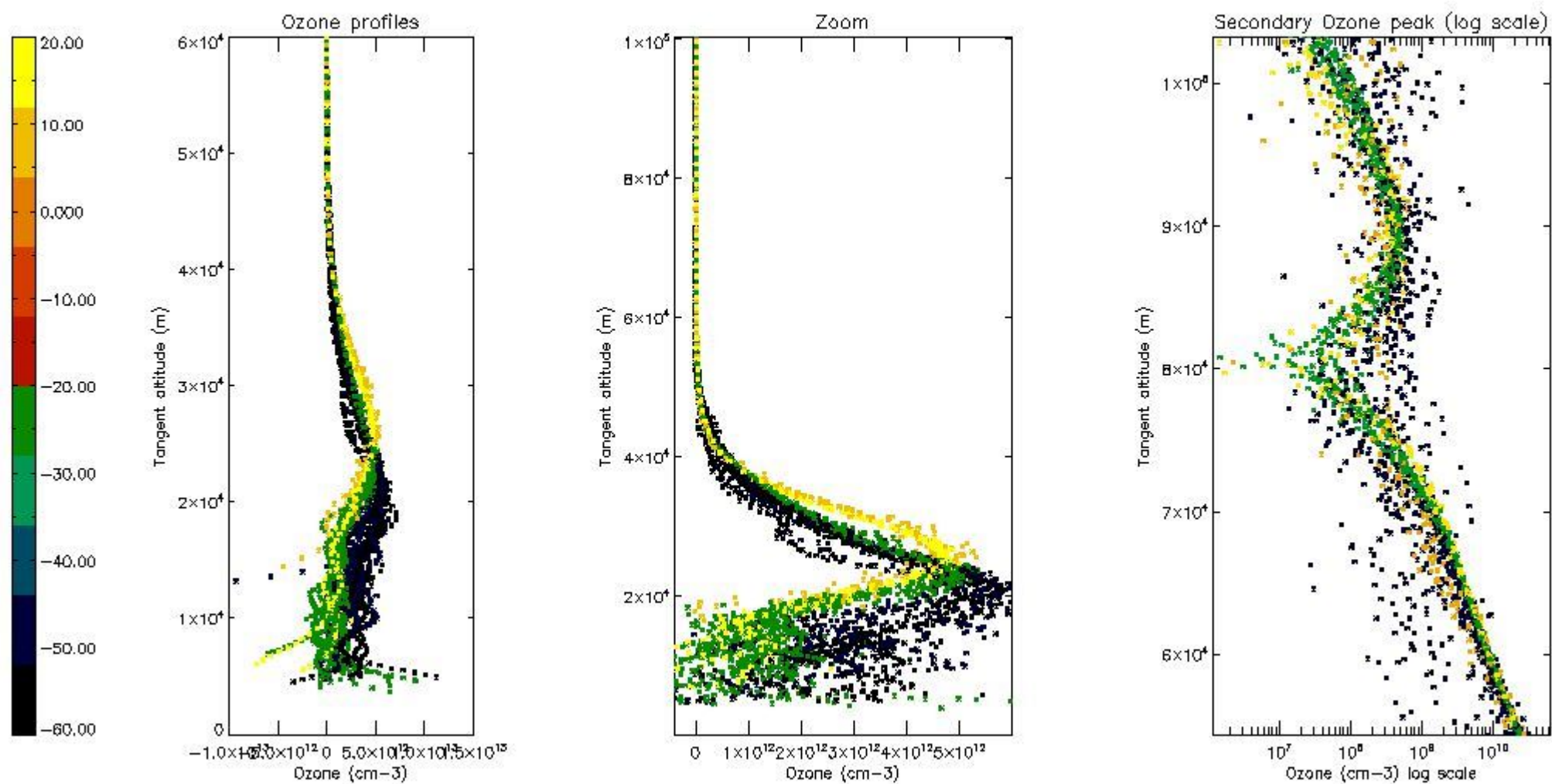
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	28
STD < 20	17

STD < 10	15
STD < 5	11

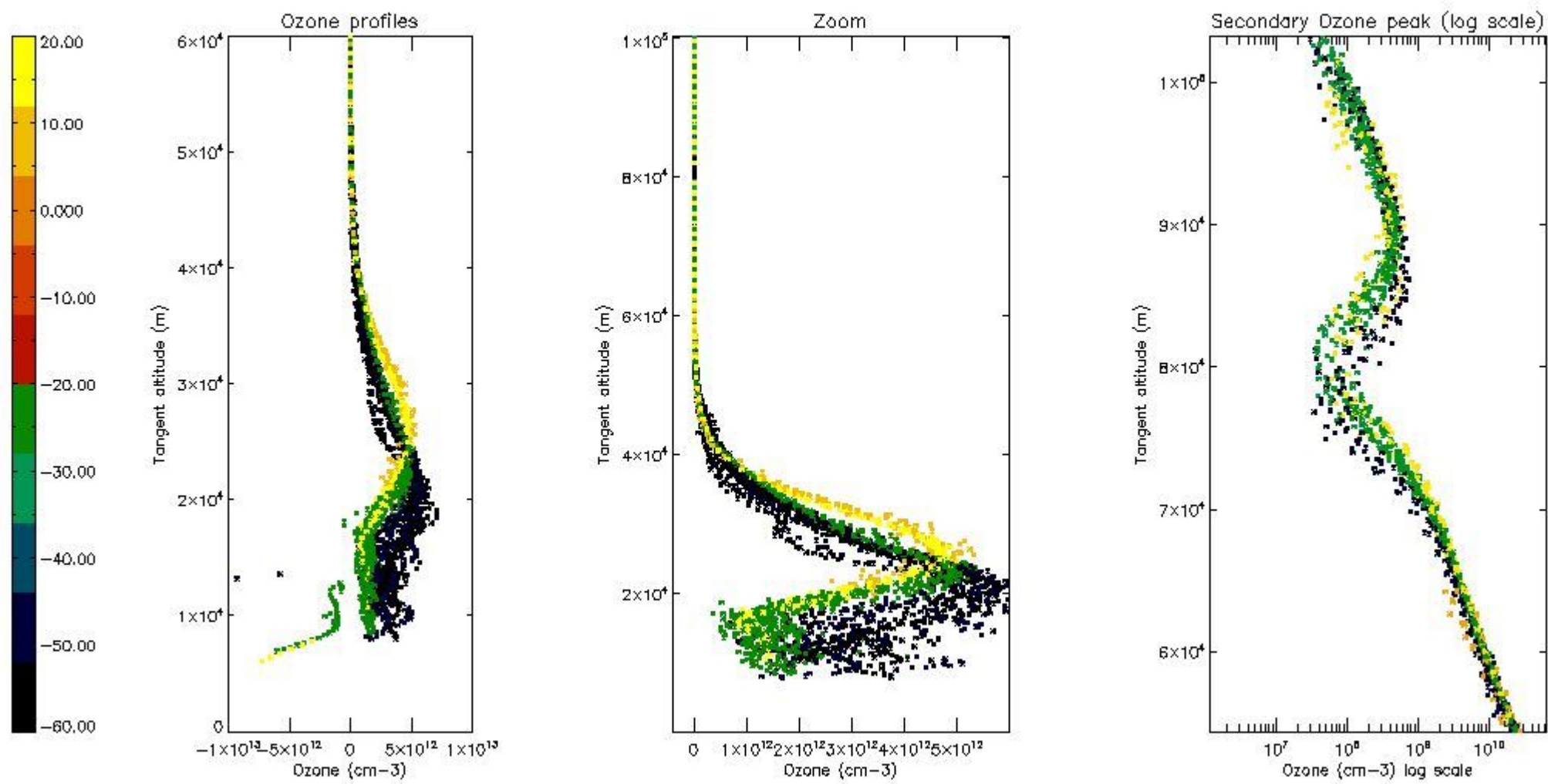
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



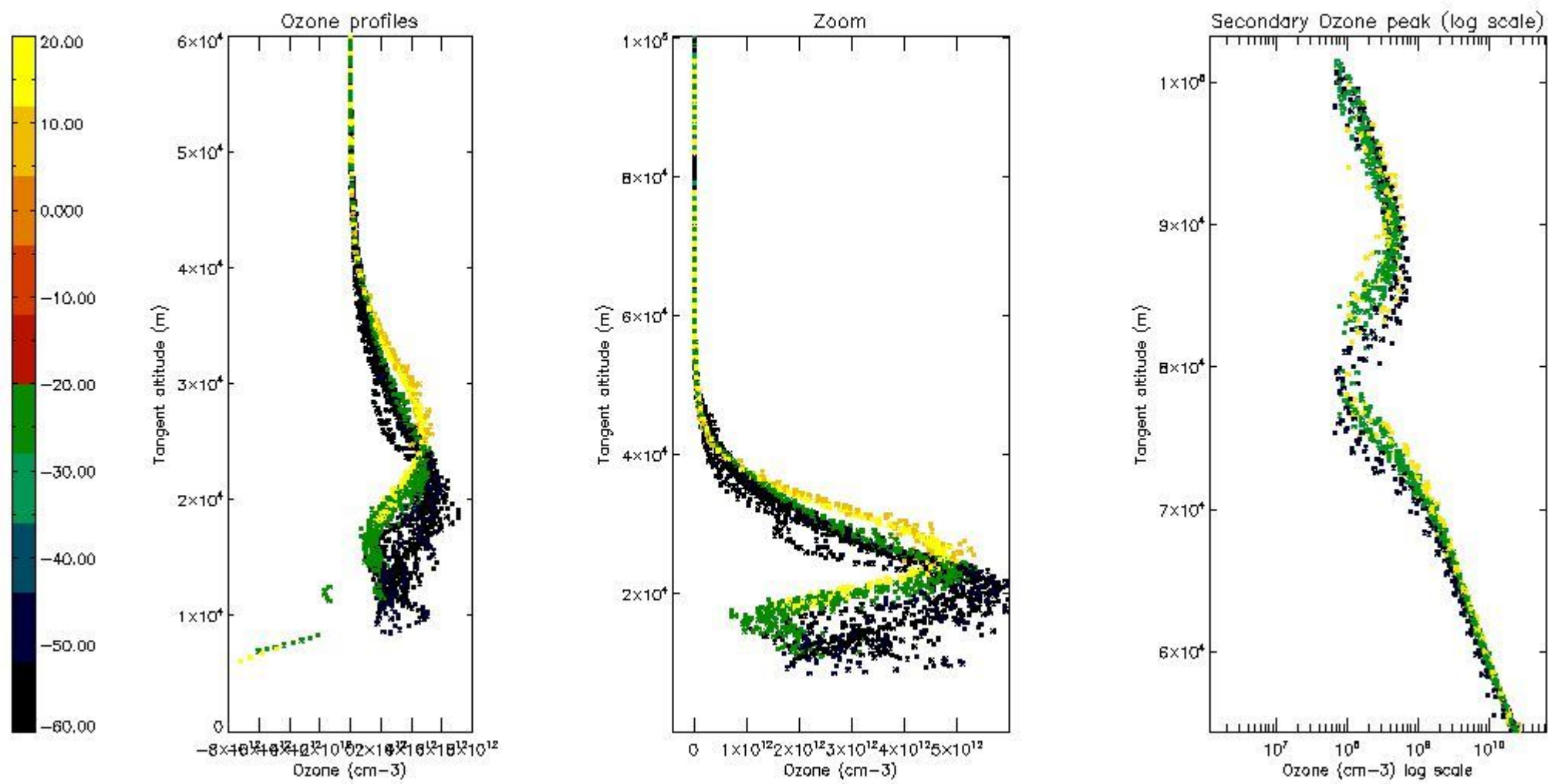
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



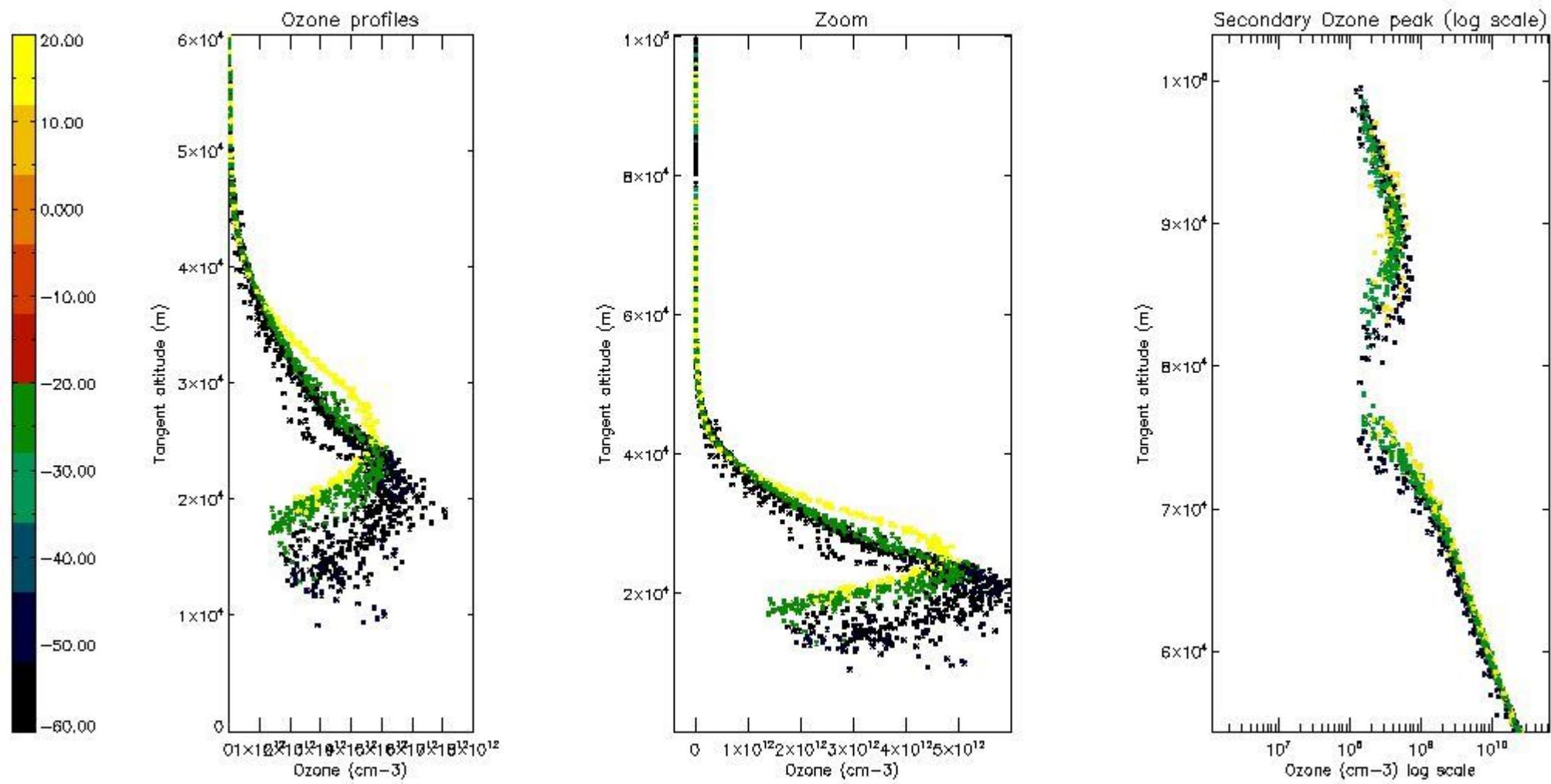
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



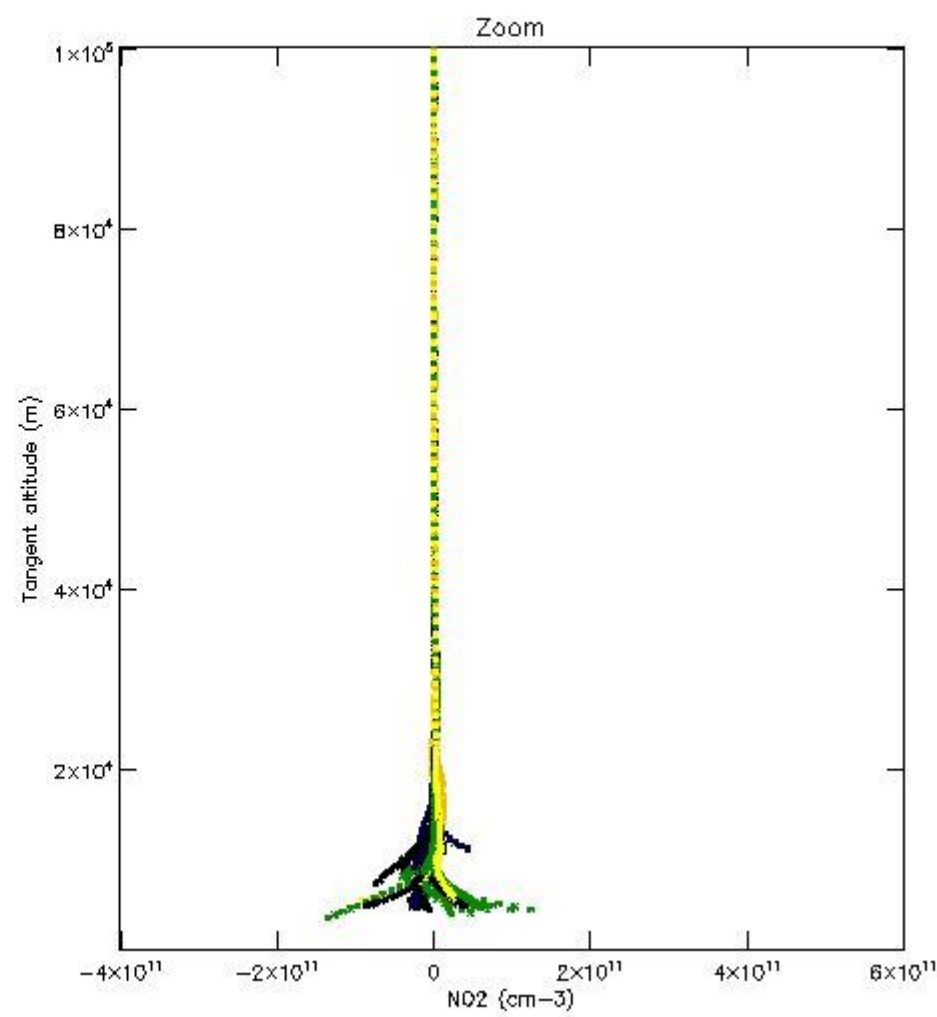
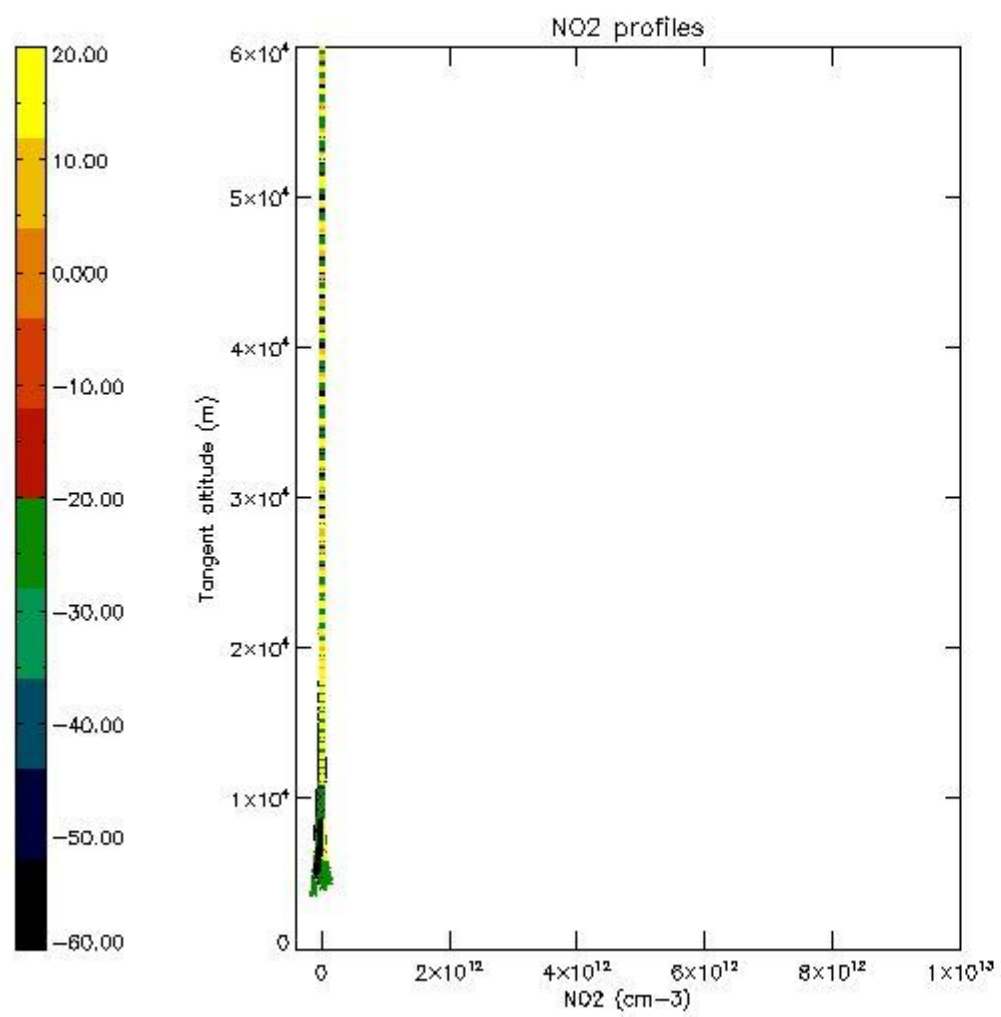
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



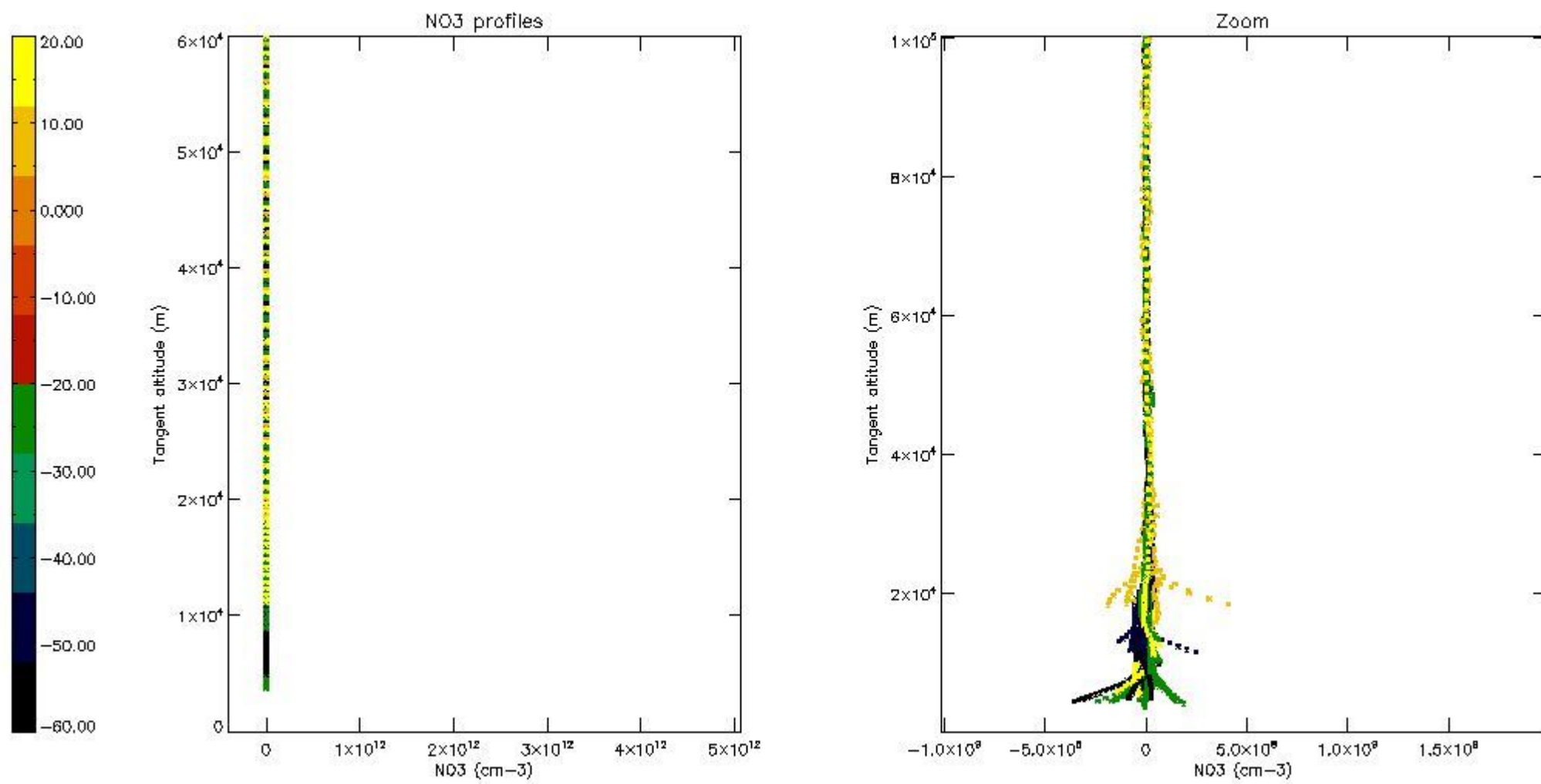
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



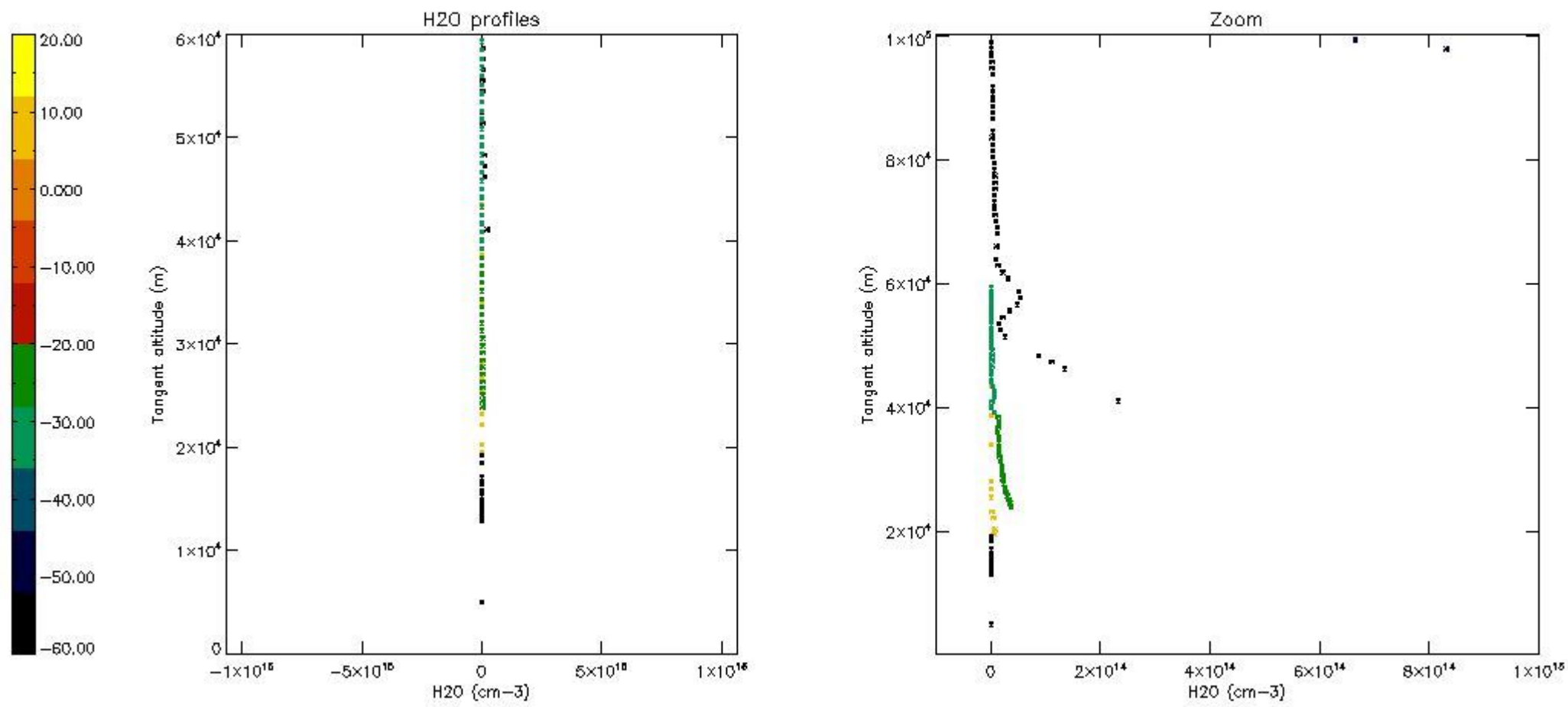
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

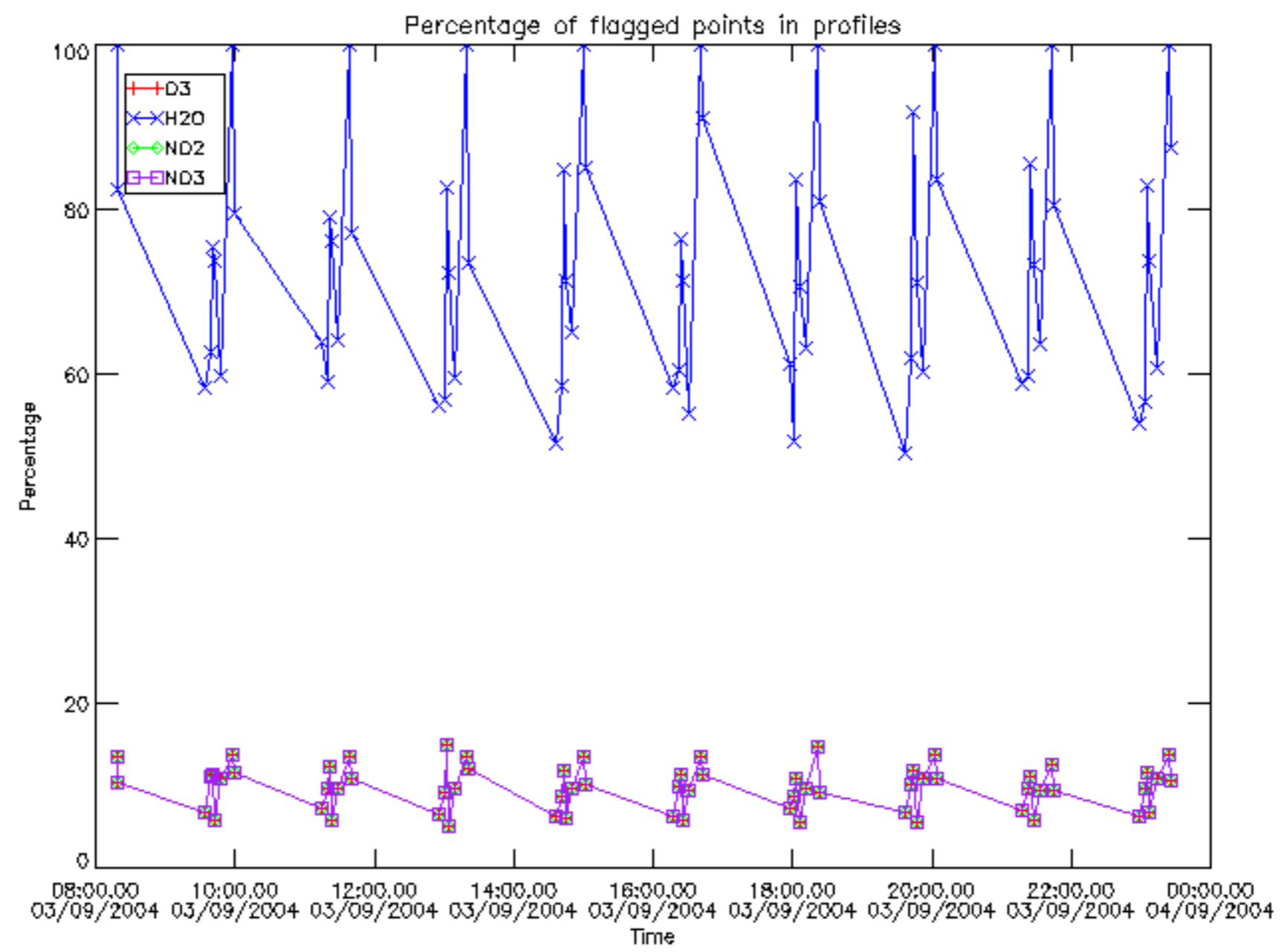
The colorbar represents the latitude.



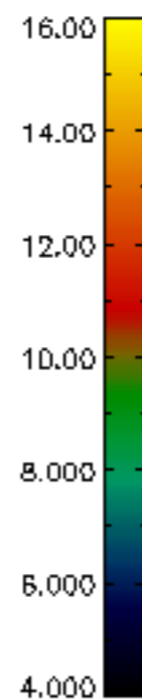
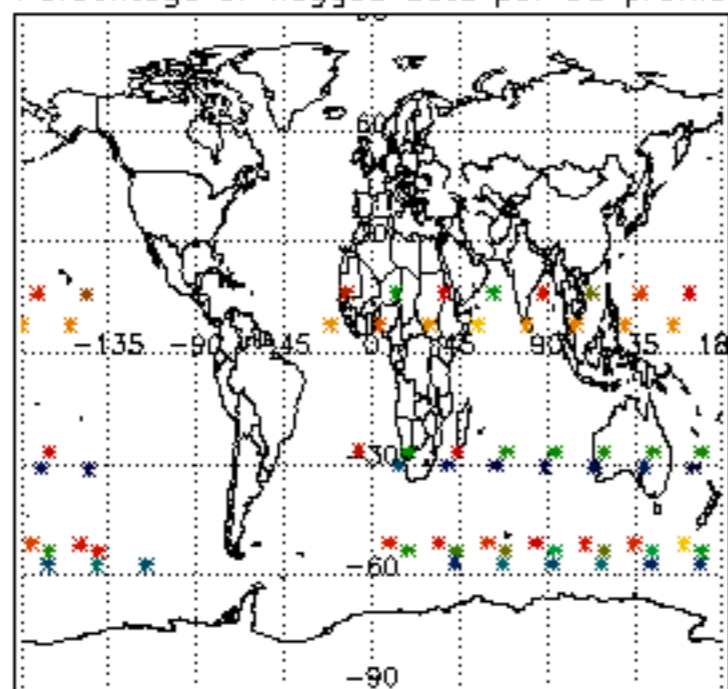
6. Auxiliary Data Files used for the production reported in section 2

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.

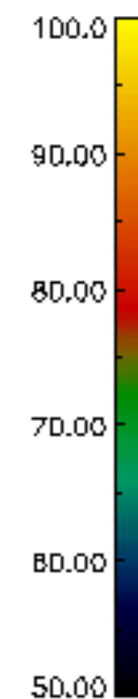
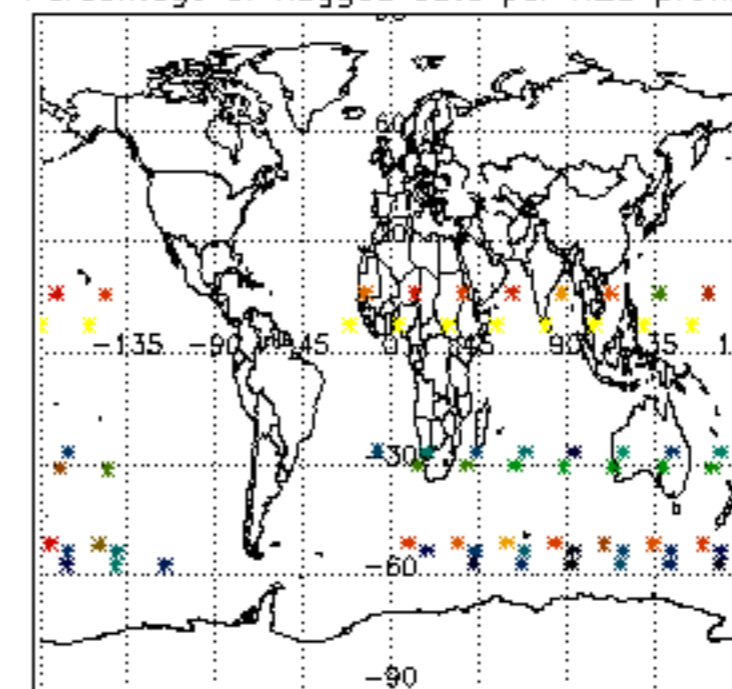
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	03-SEP-2004 08:18:00
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	03-SEP-2004 08:18:00
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	03-SEP-2004 08:18:00



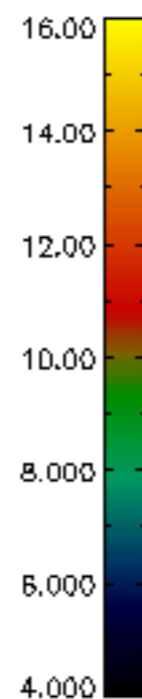
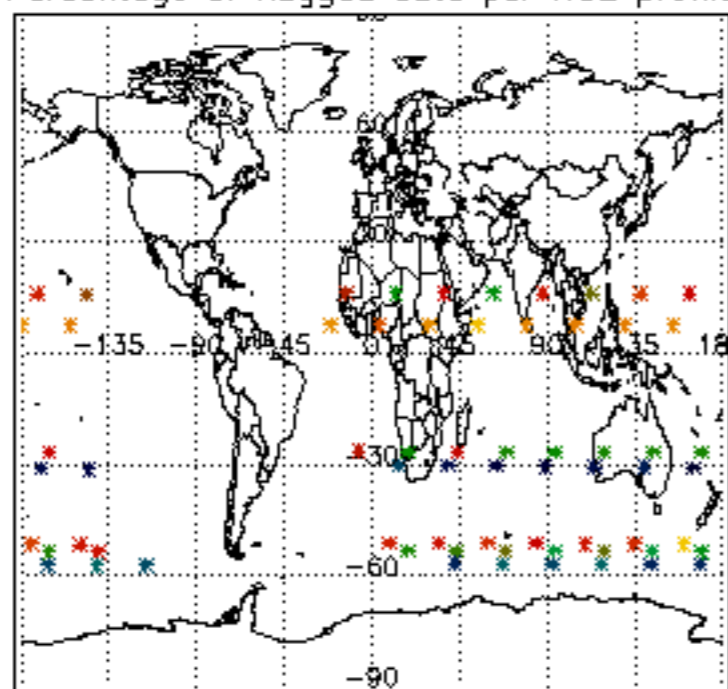
Percentage of flagged data per D3 profile



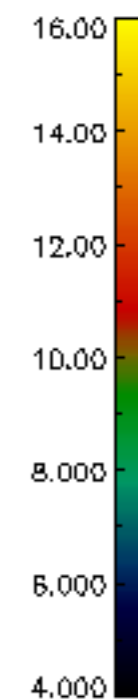
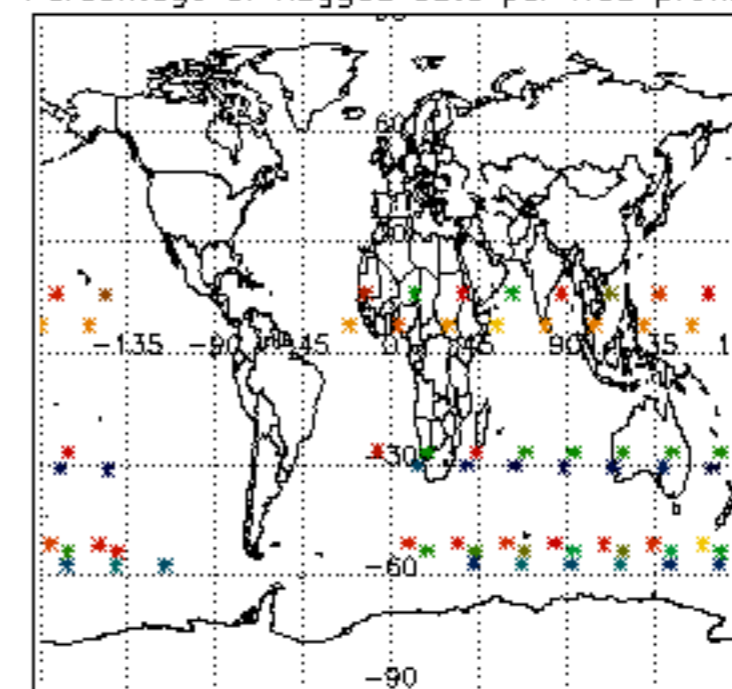
Percentage of flagged data per H2O profile

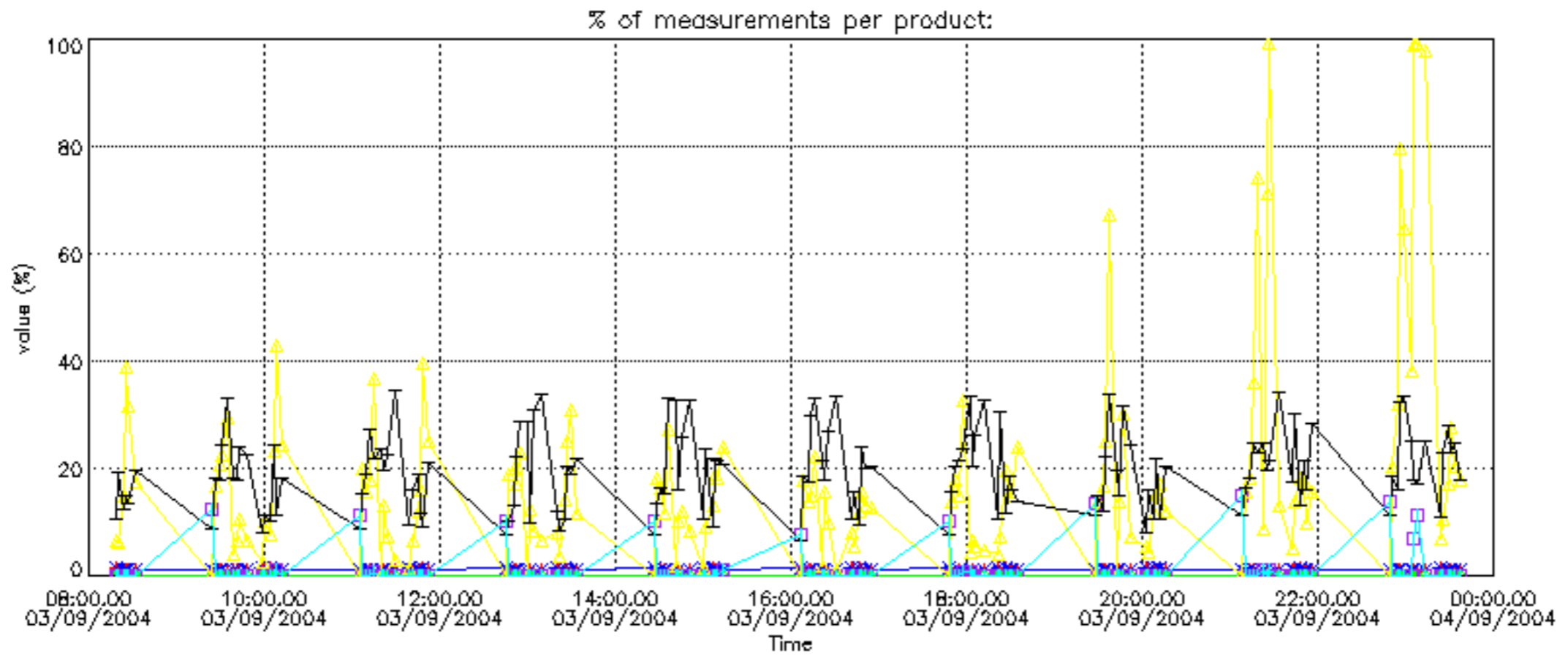


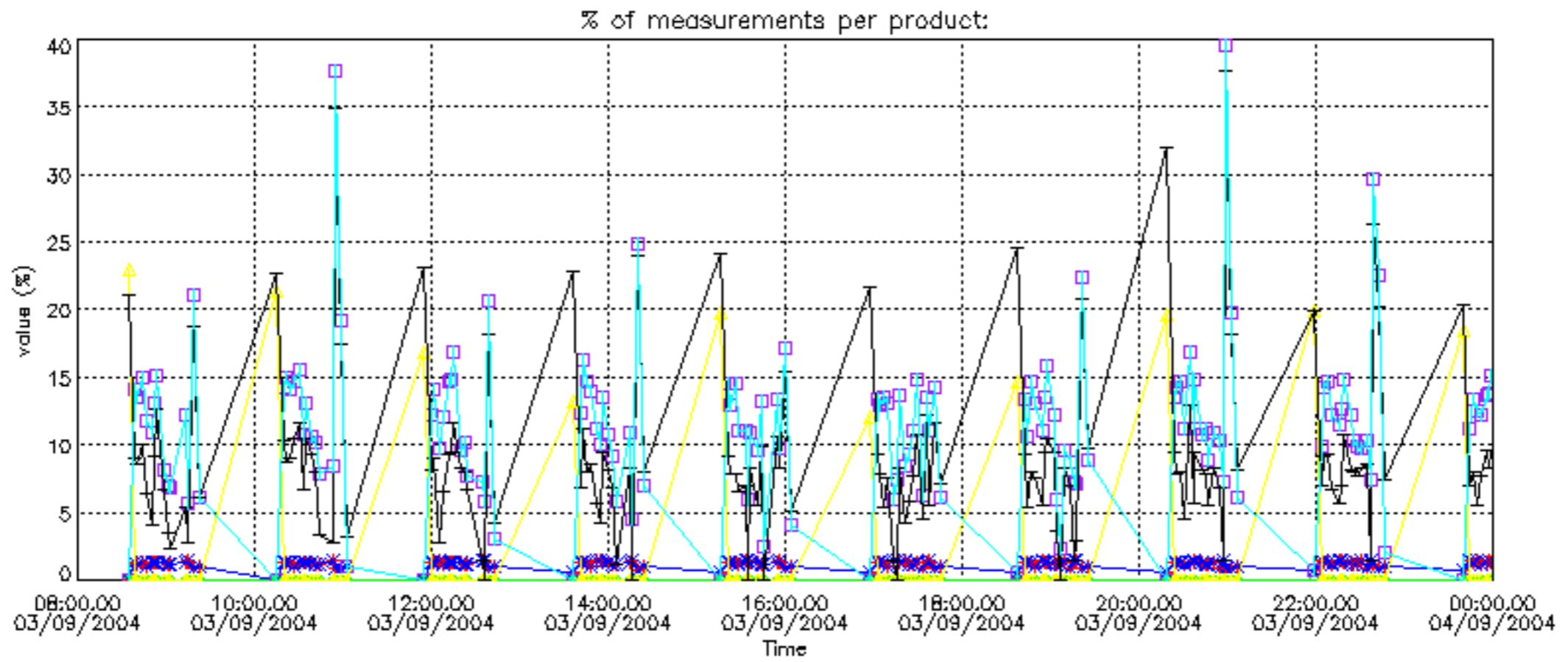
Percentage of flagged data per NO2 profile



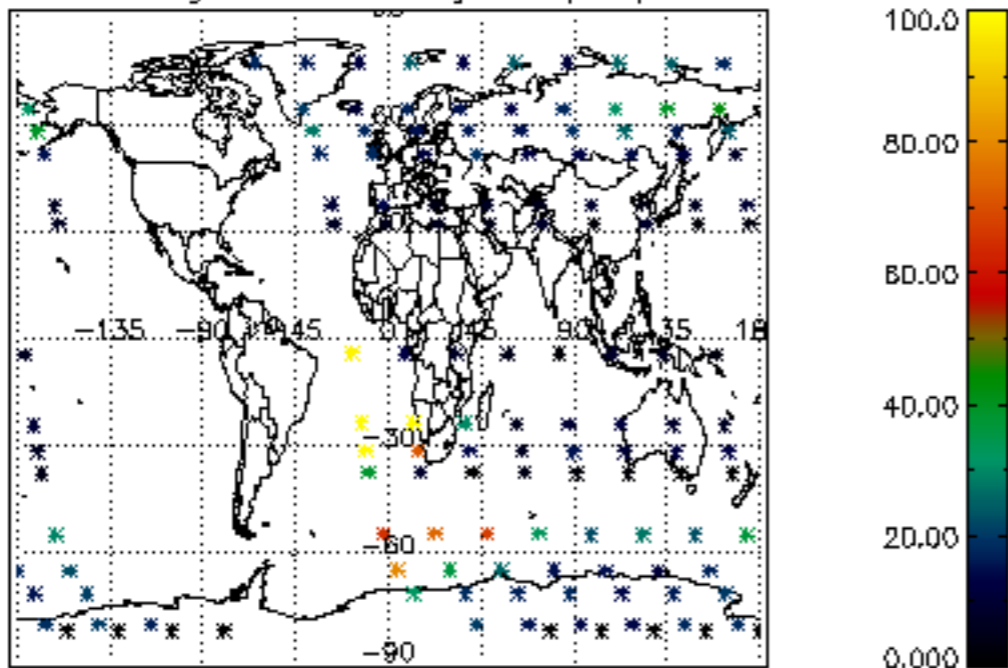
Percentage of flagged data per NO3 profile



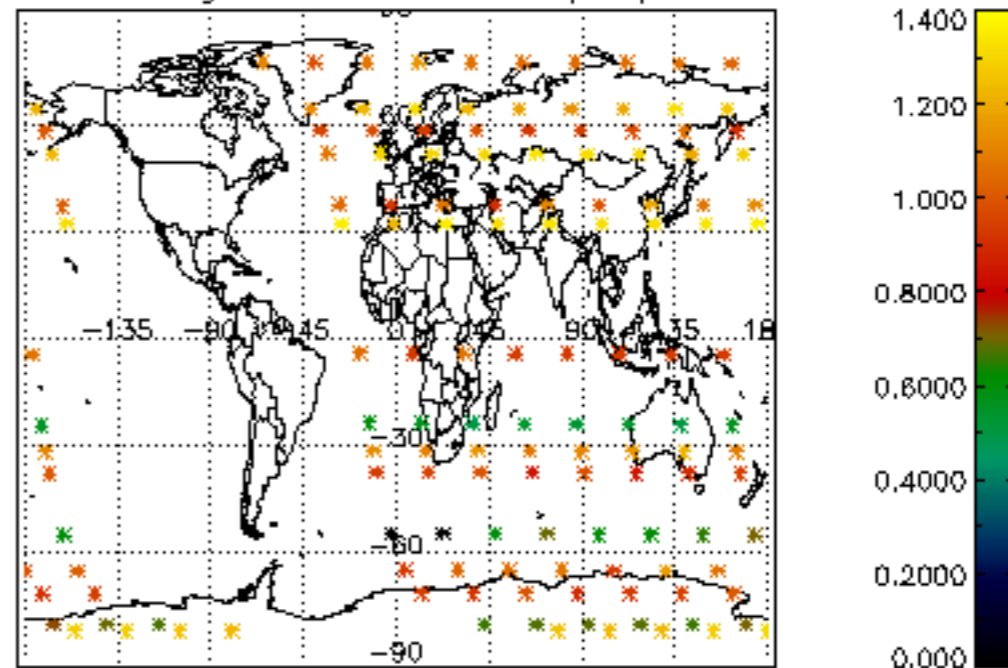




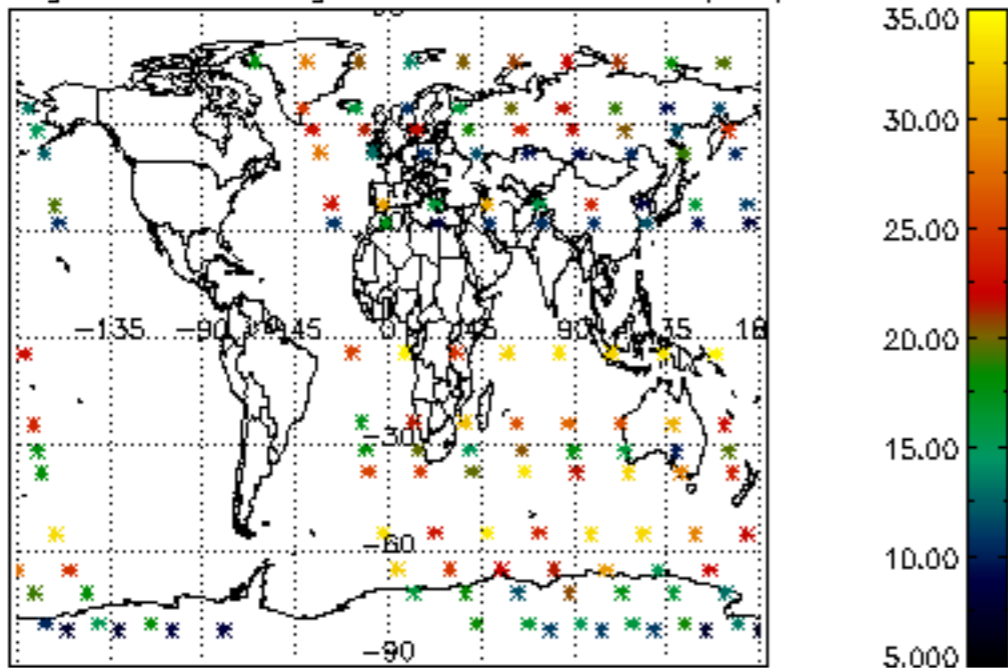
Percentage of cosmic ray hits per profile



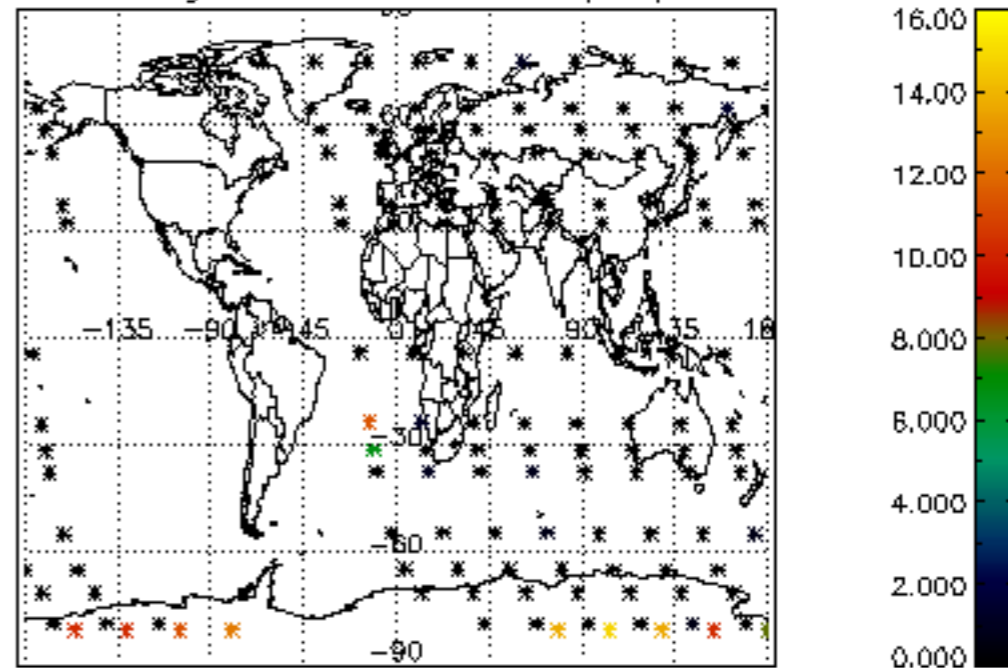
Percentage of datation errors per profile



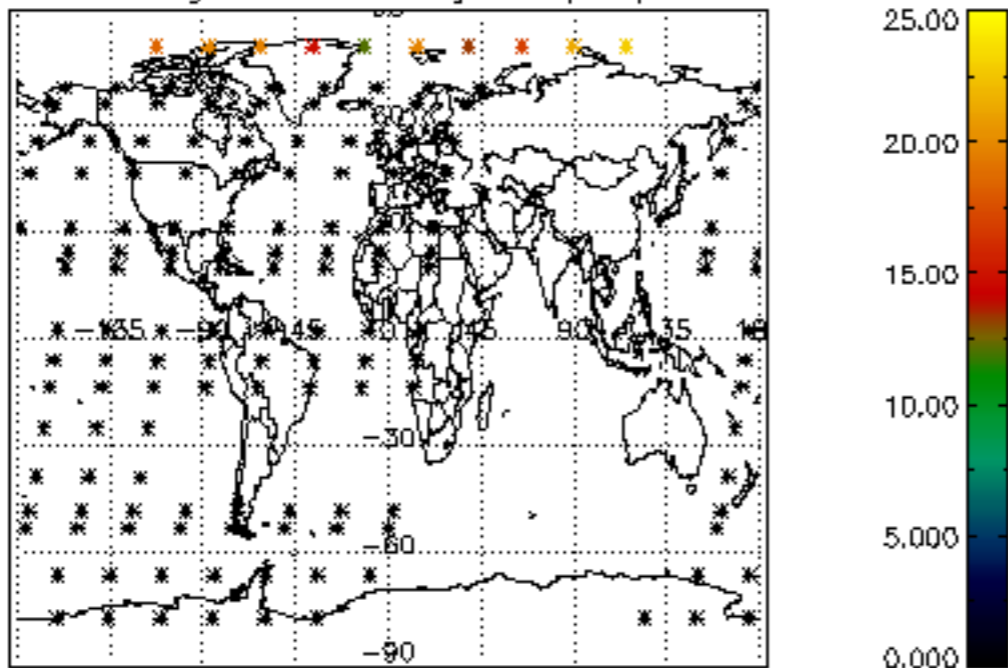
Percentage of star falling outside central band per profile



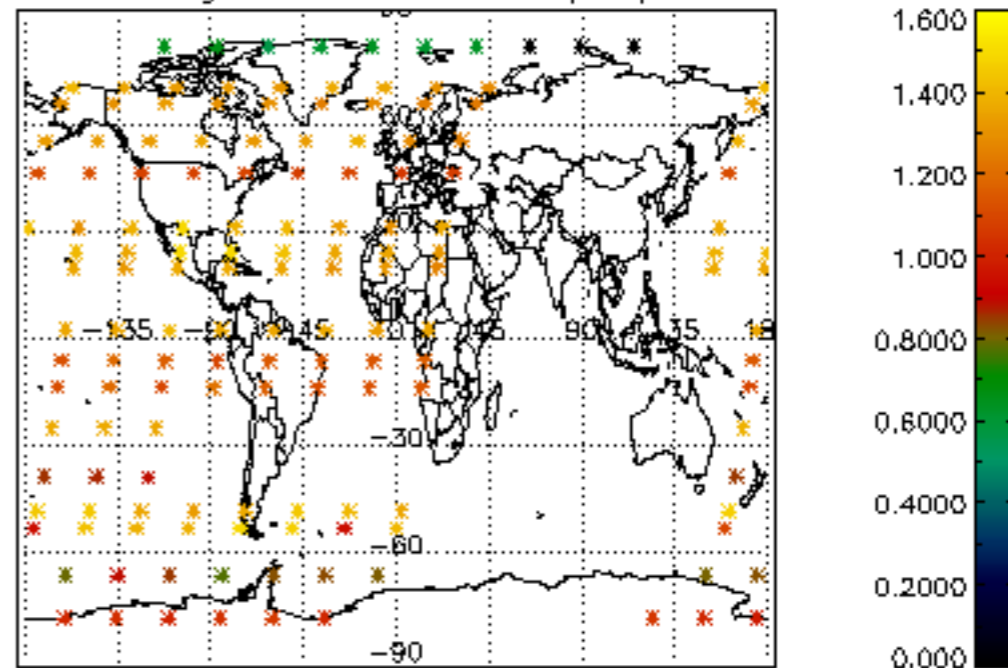
Percentage of saturation errors per profile



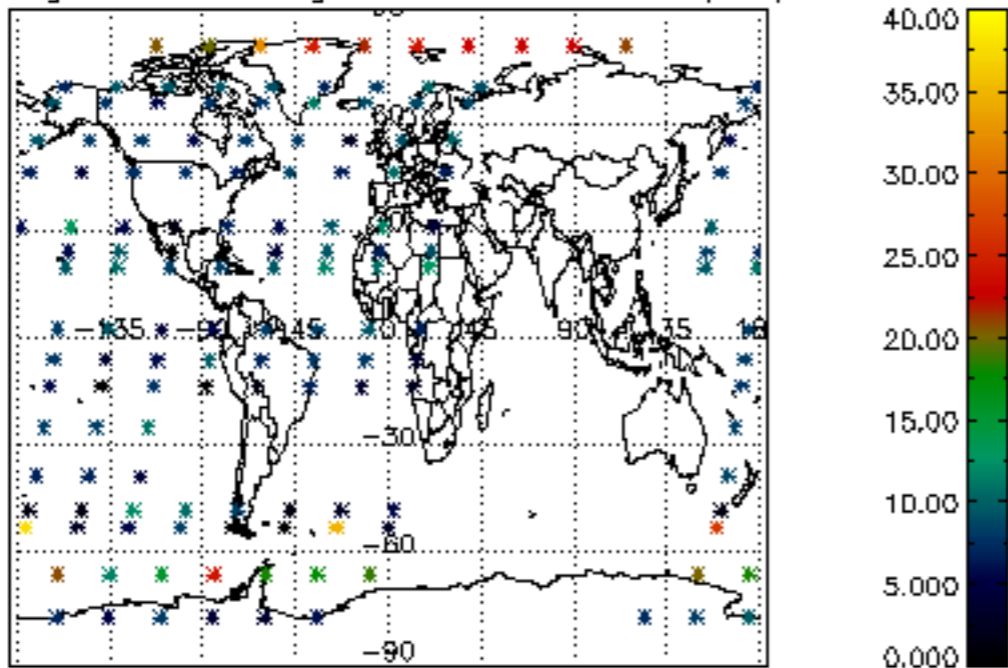
Percentage of cosmic ray hits per profile



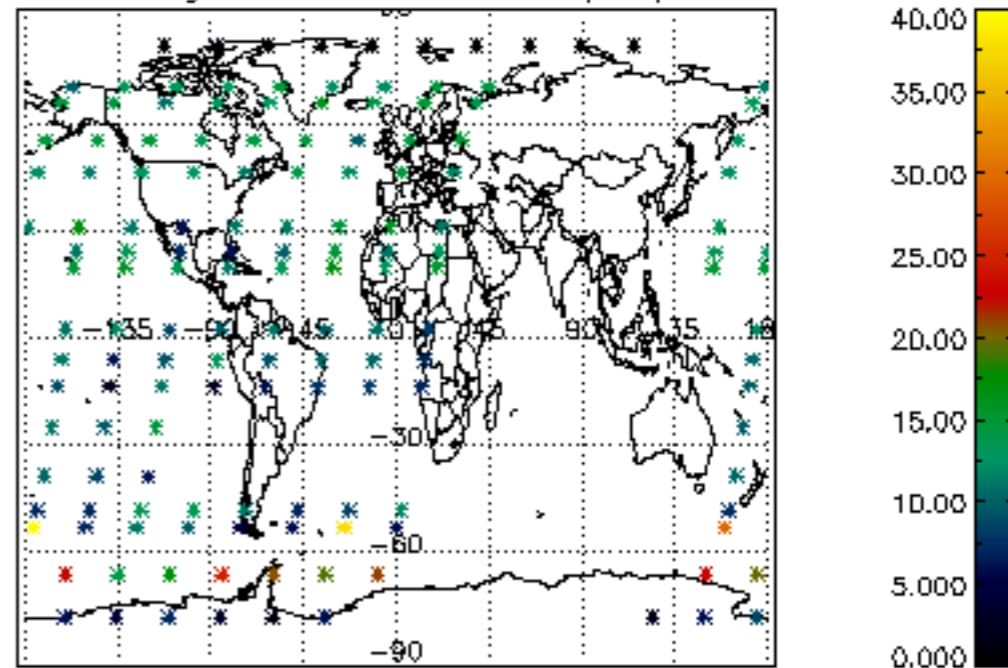
Percentage of datation errors per profile

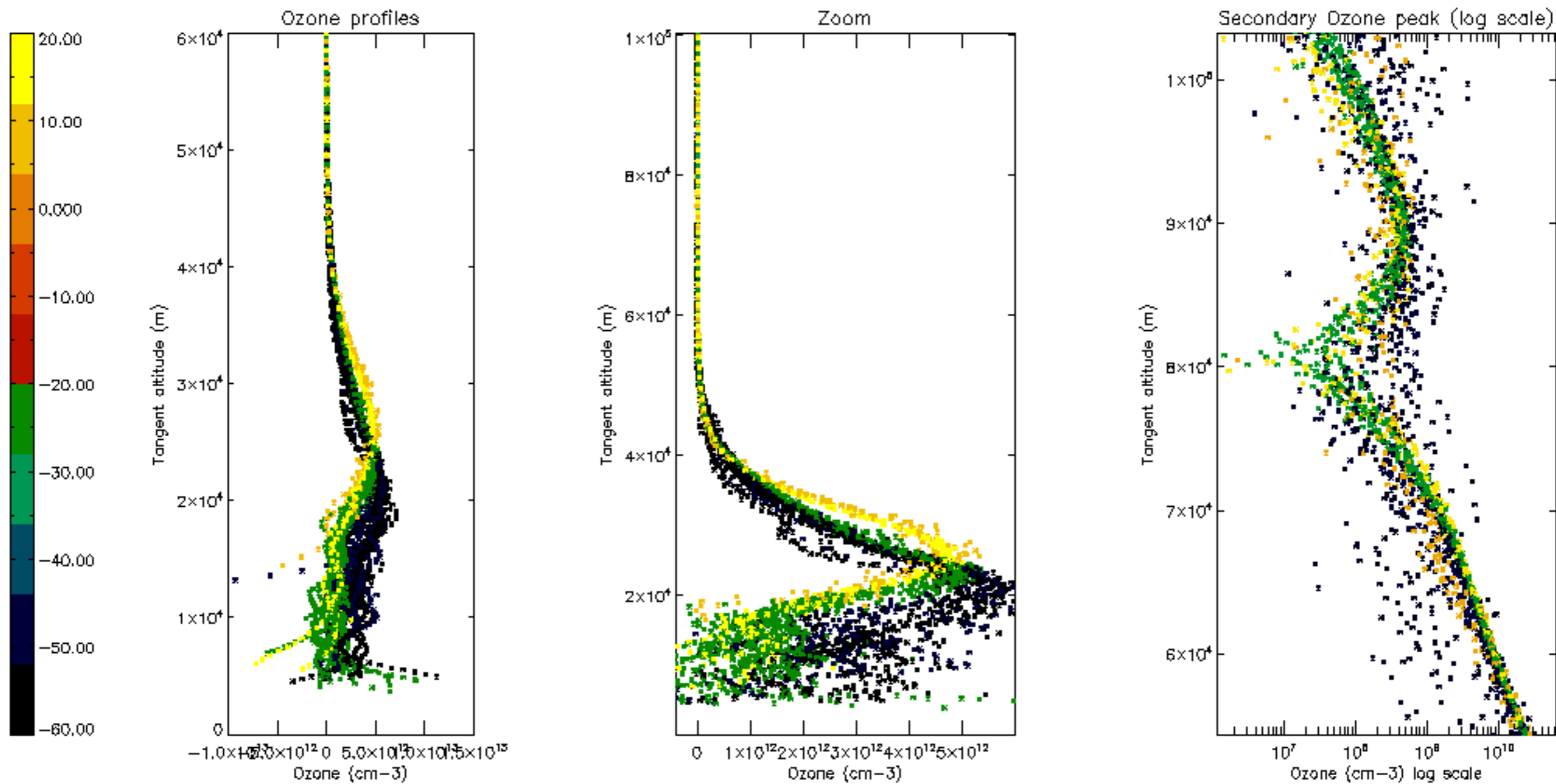


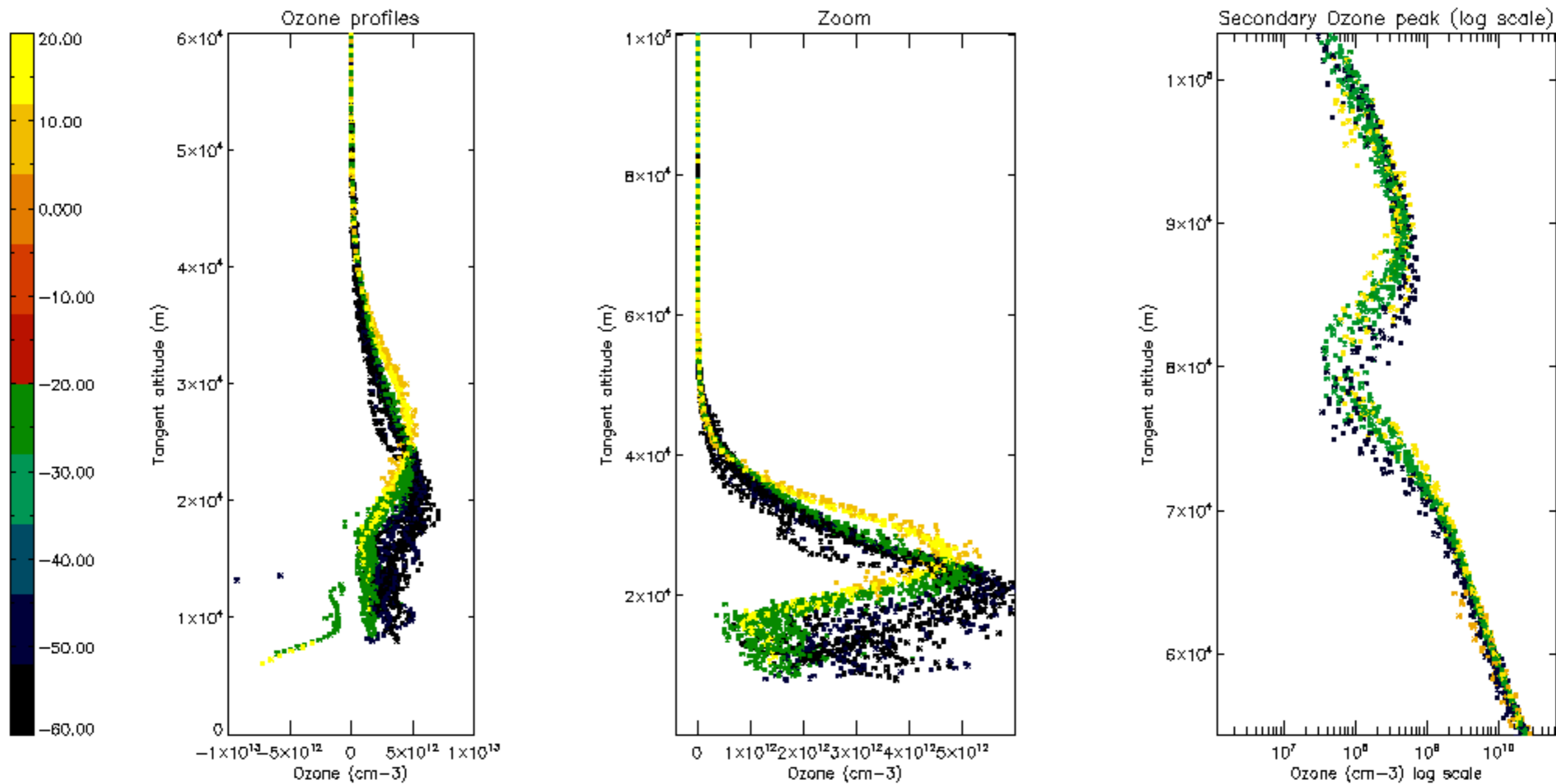
Percentage of star falling outside central band per profile

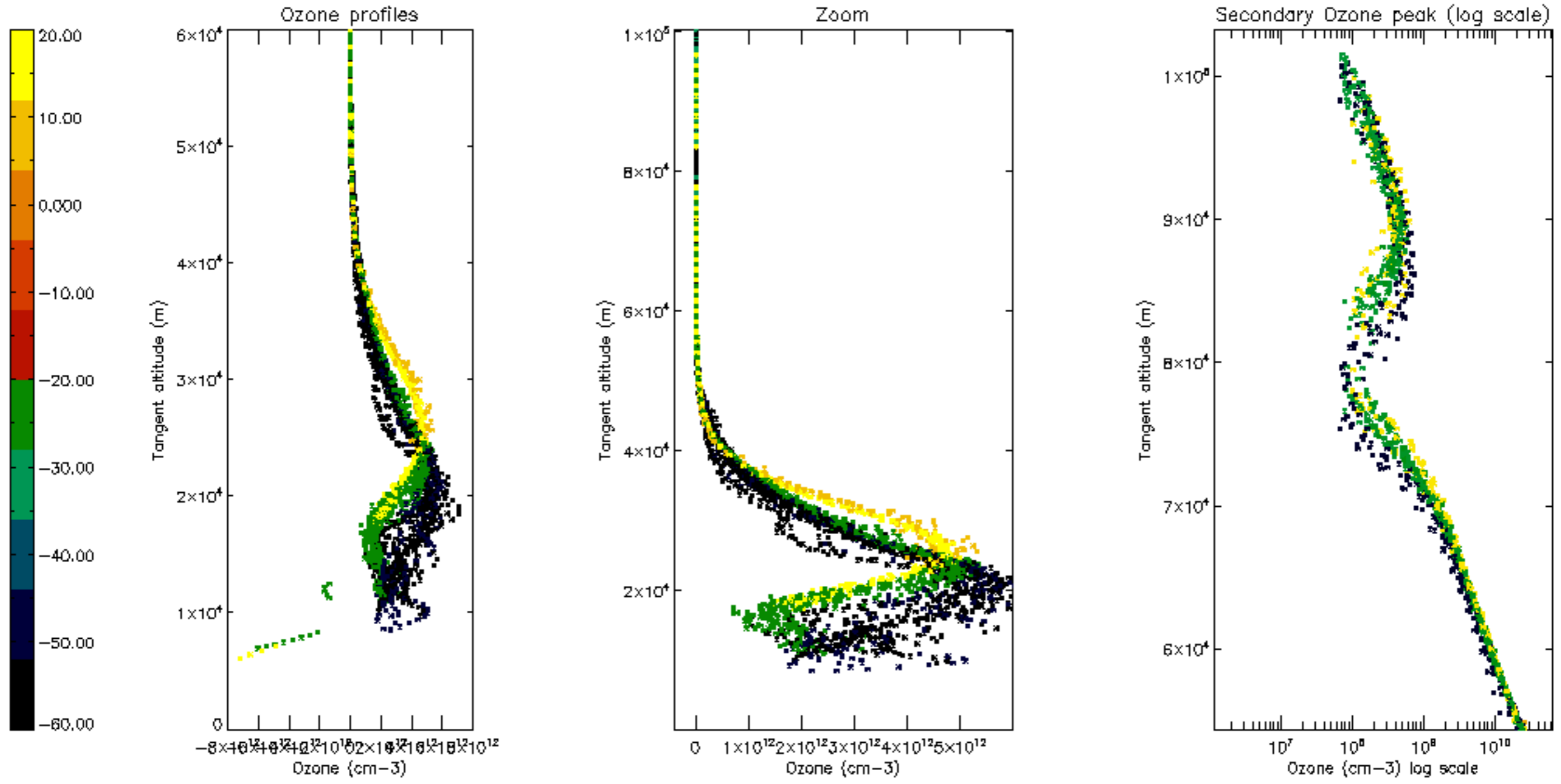


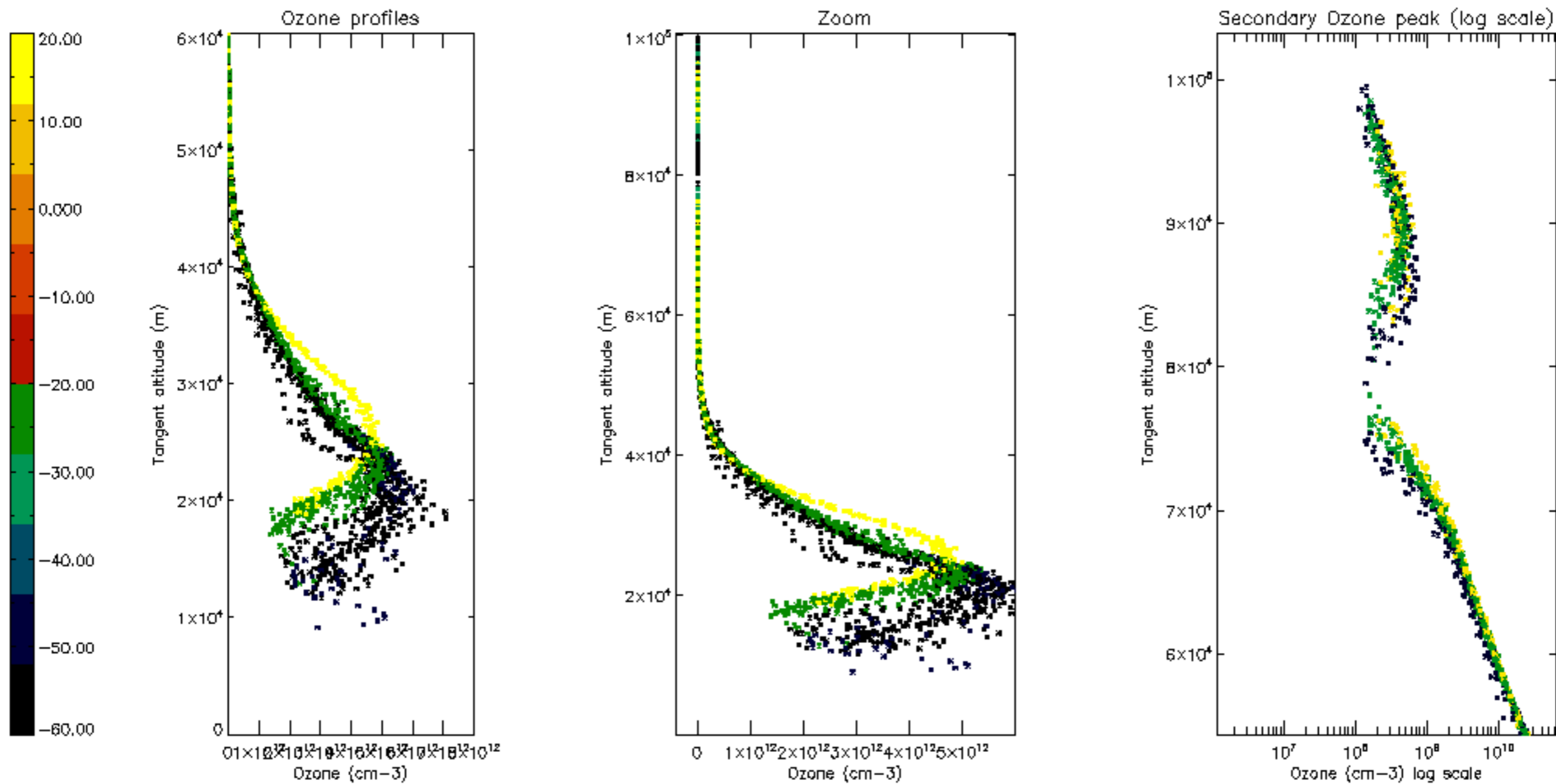
Percentage of saturation errors per profile

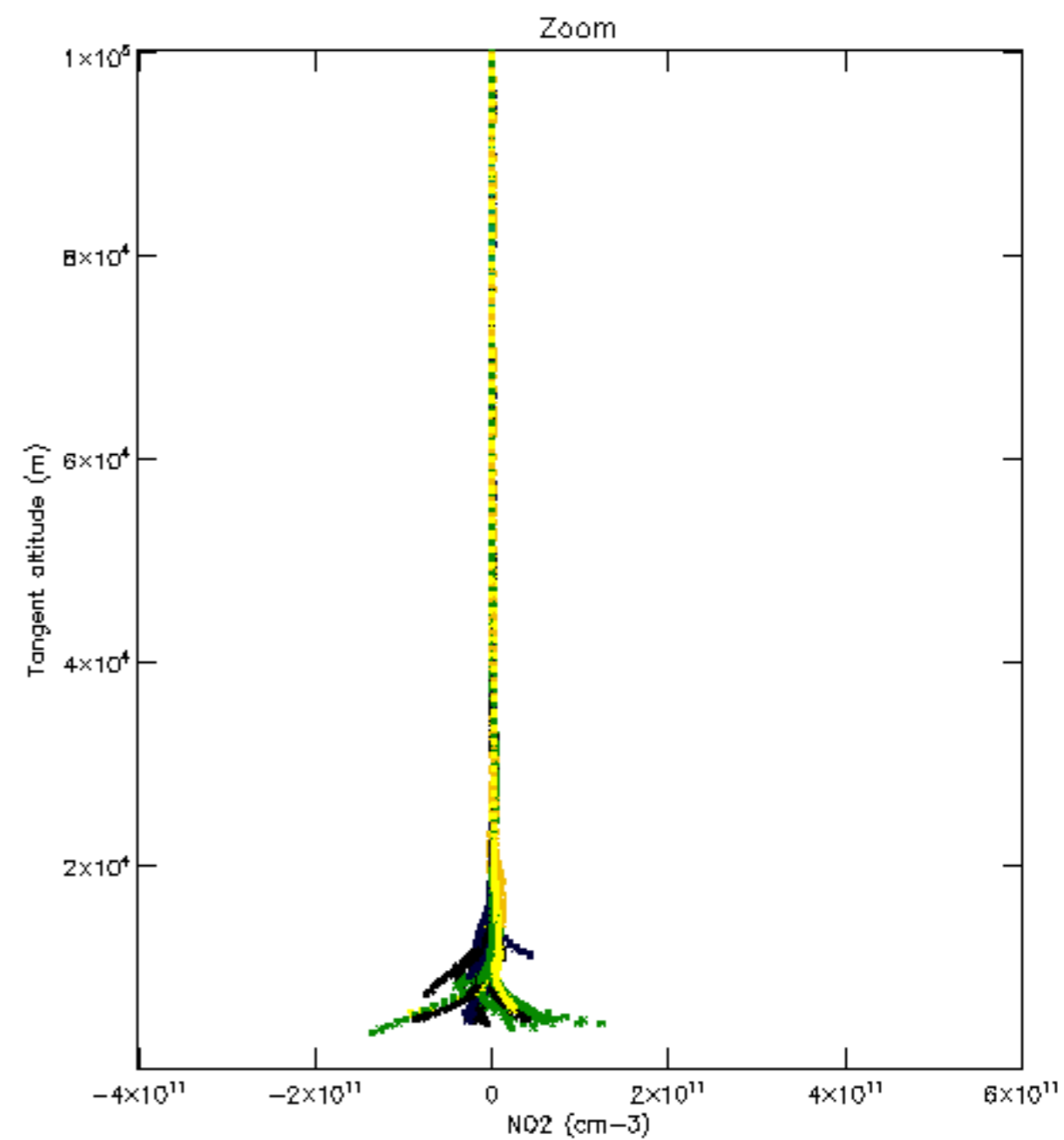
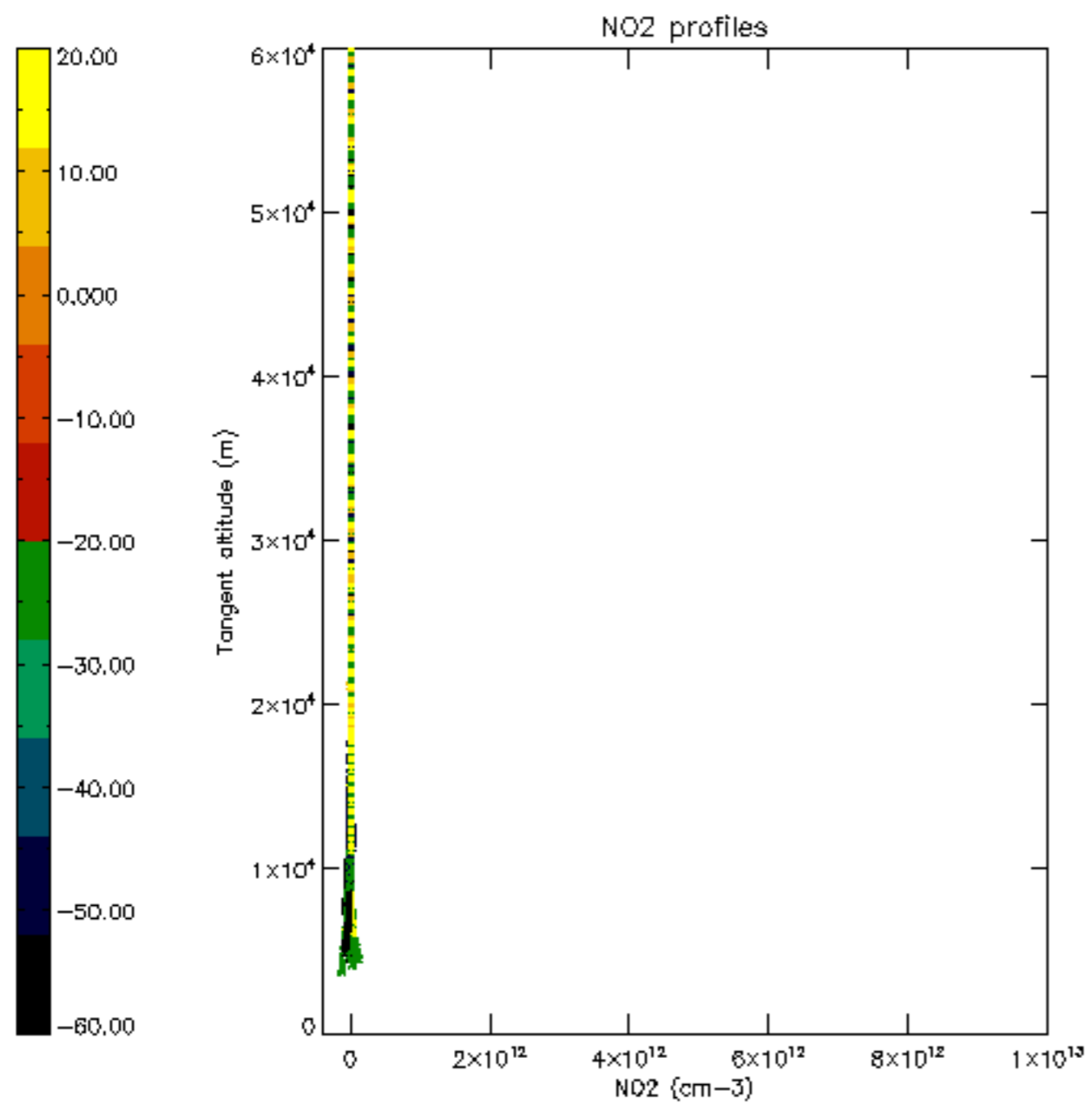


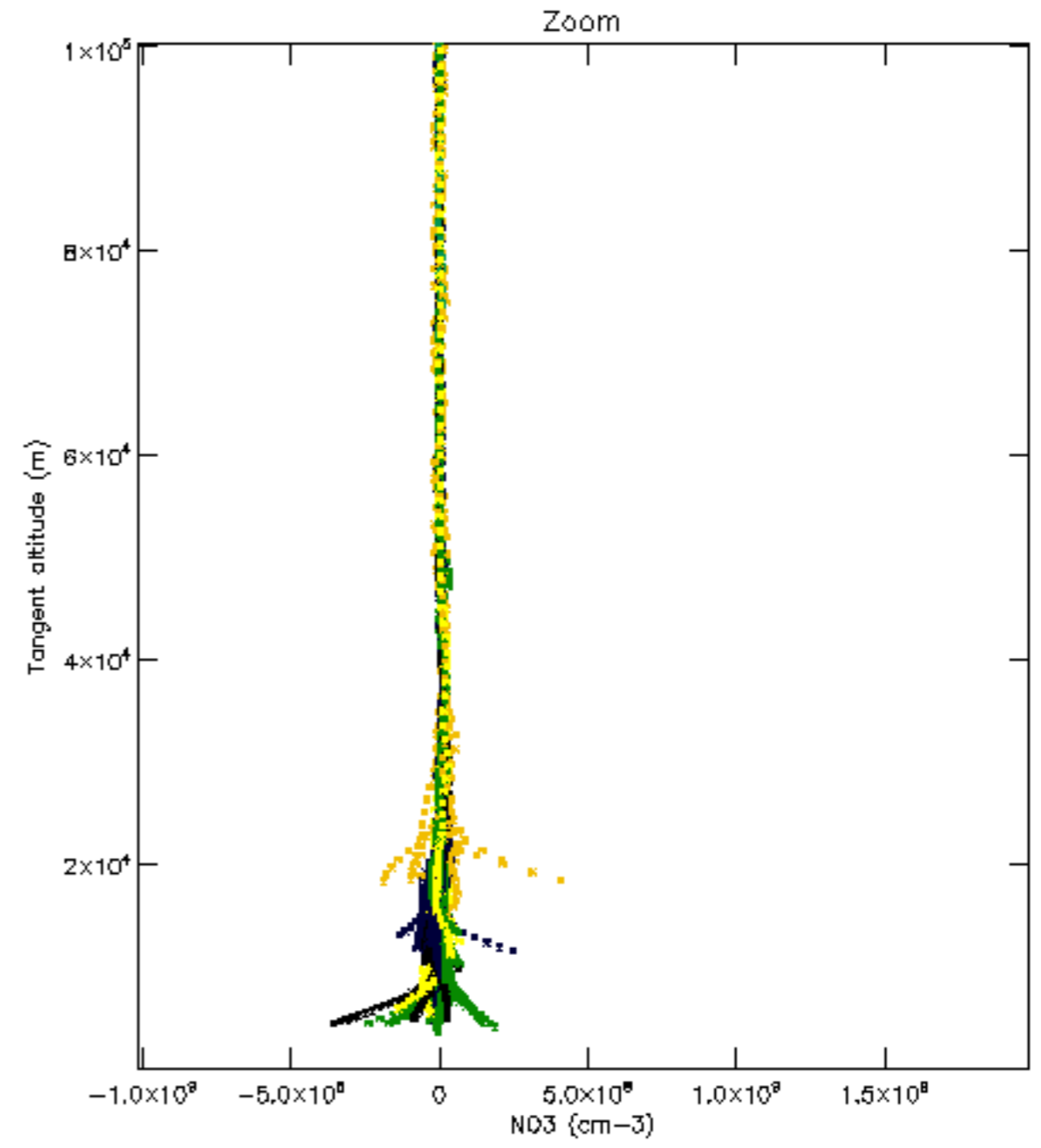
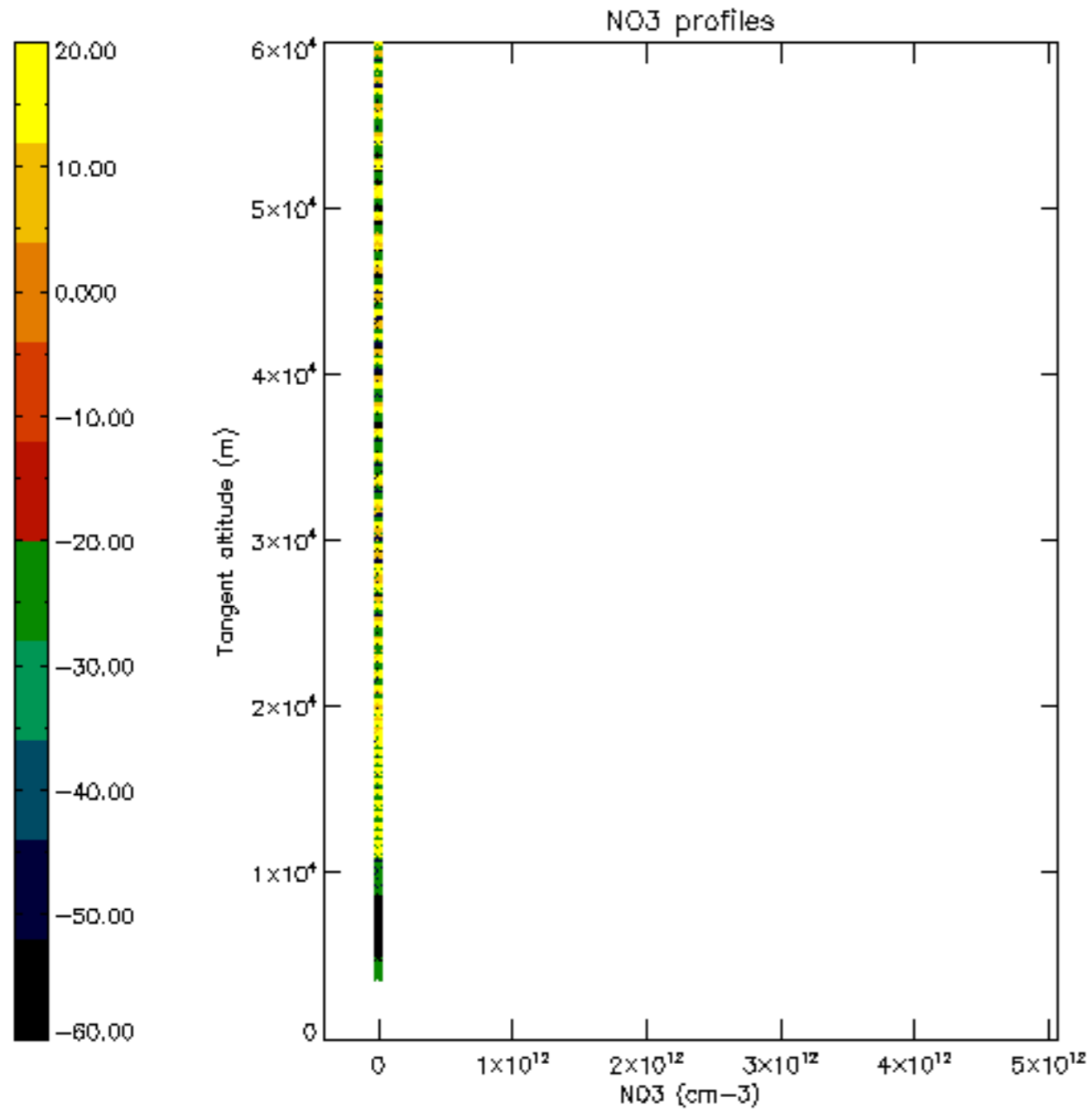


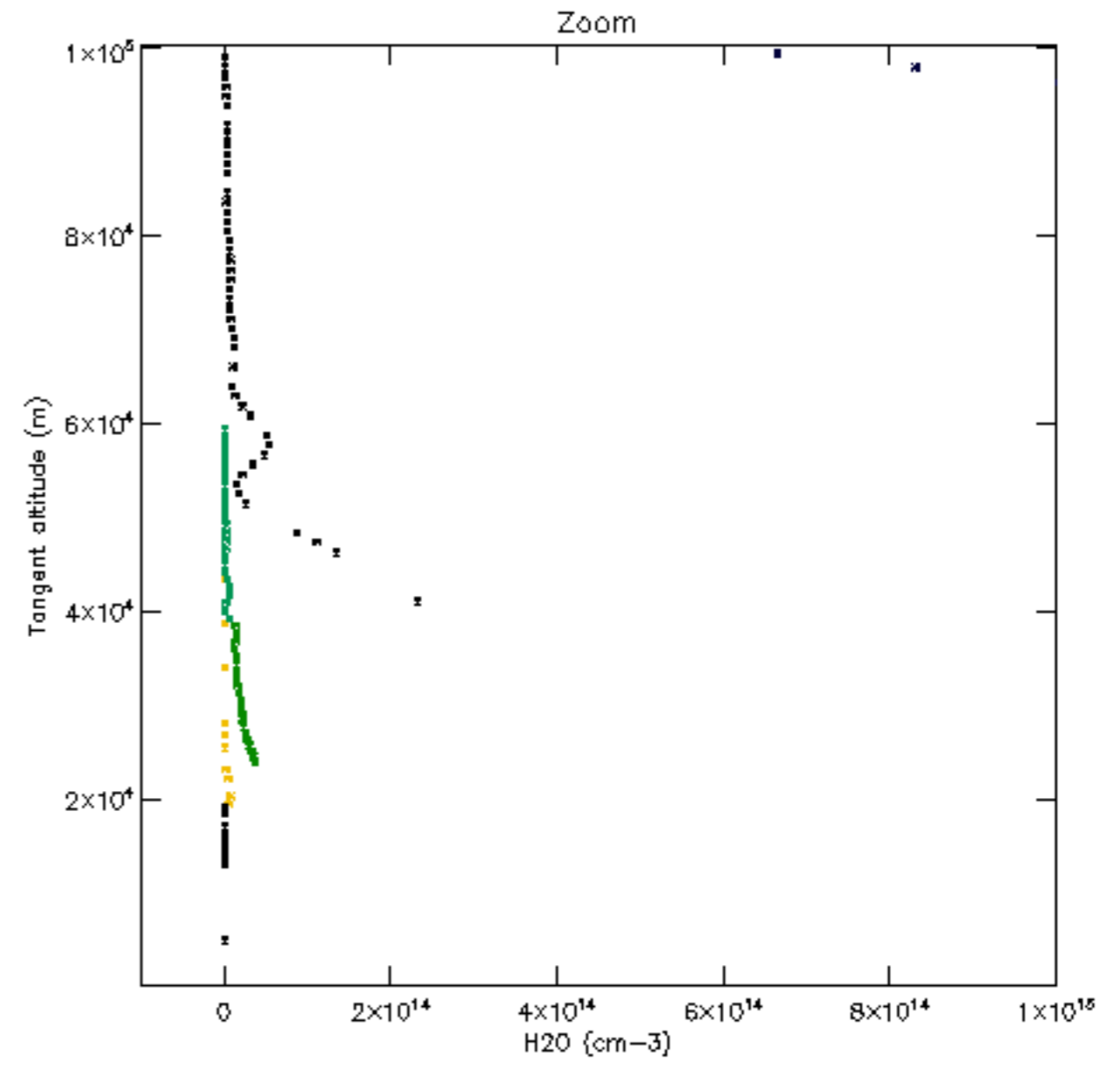
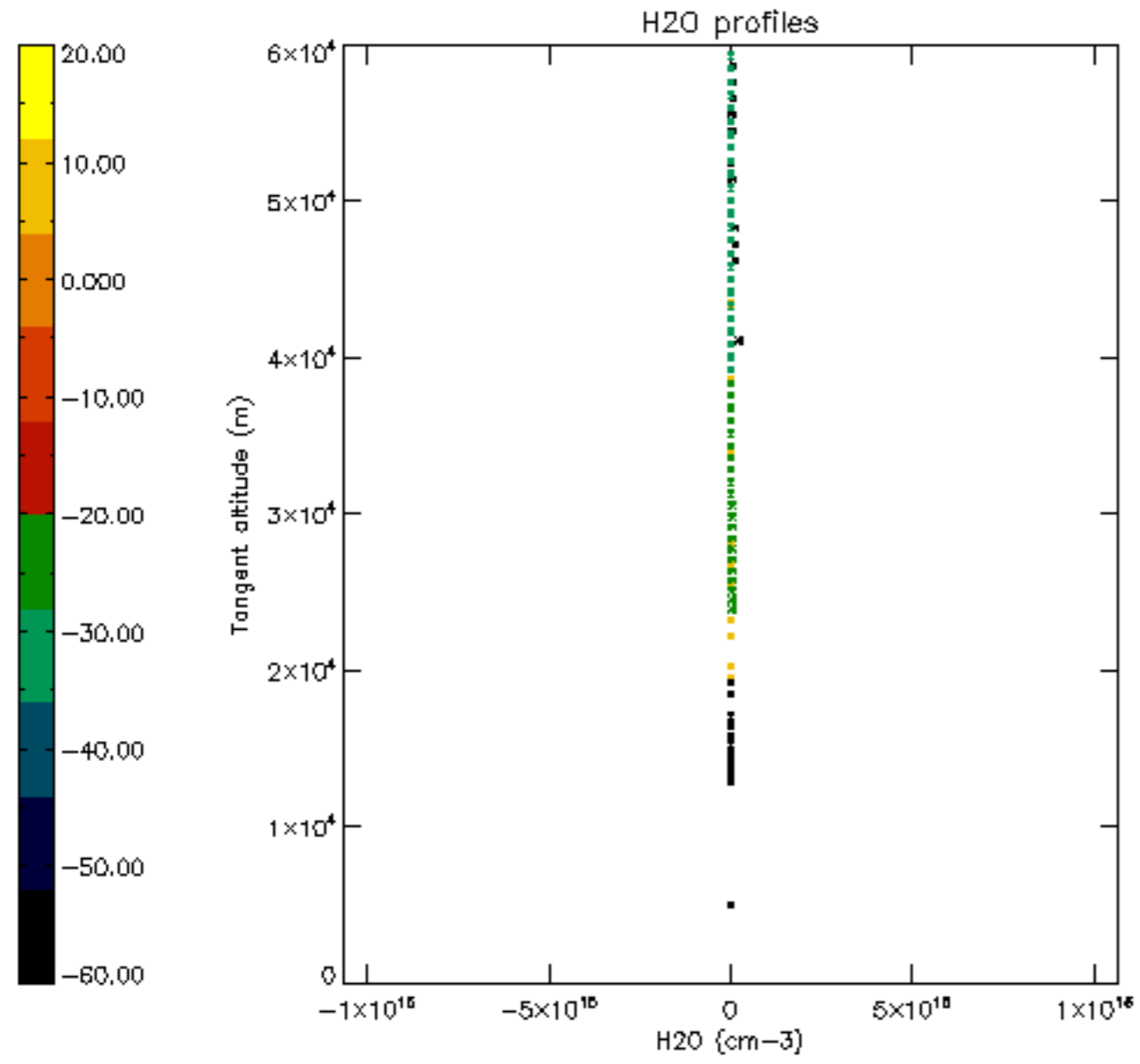


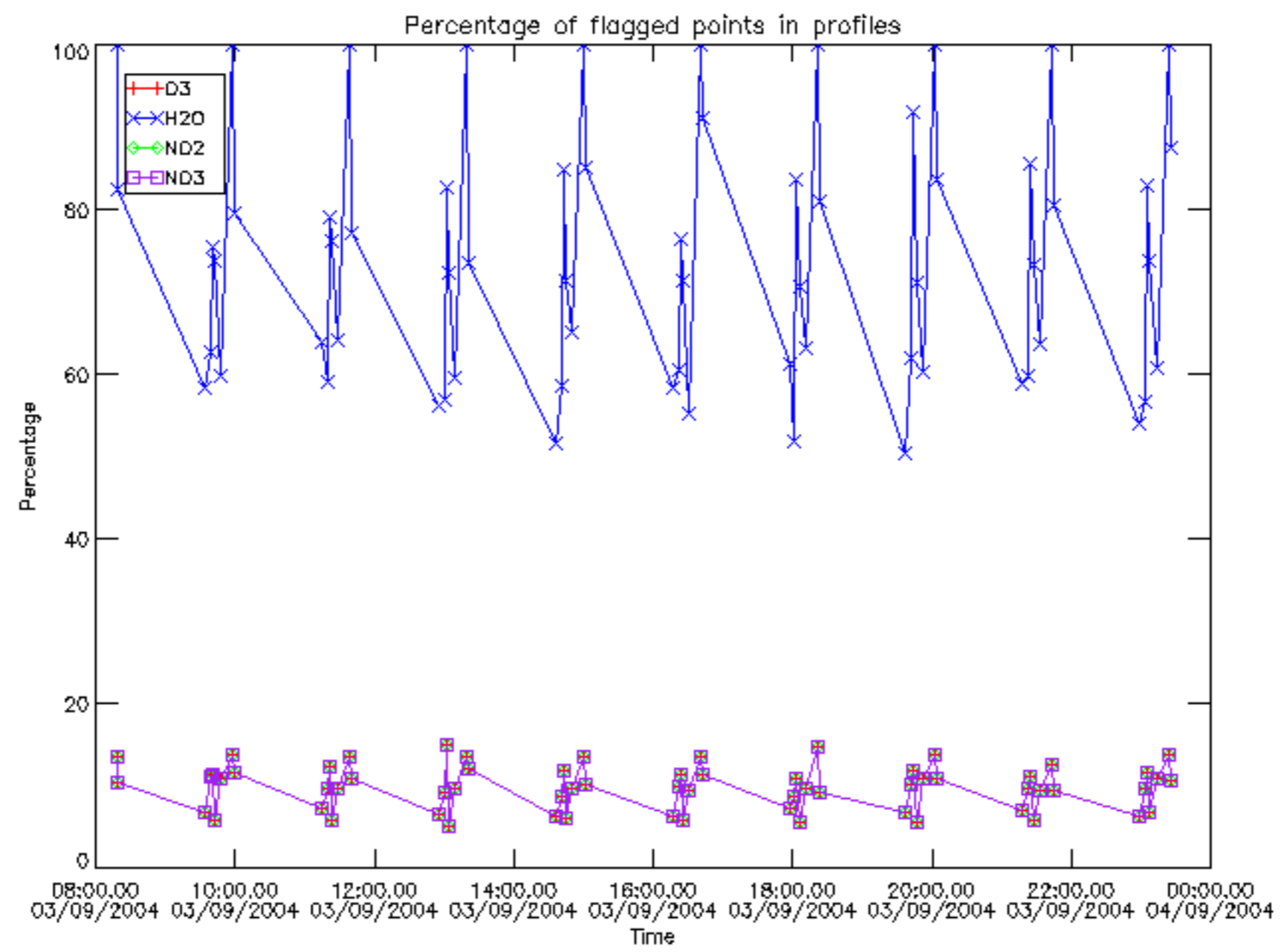




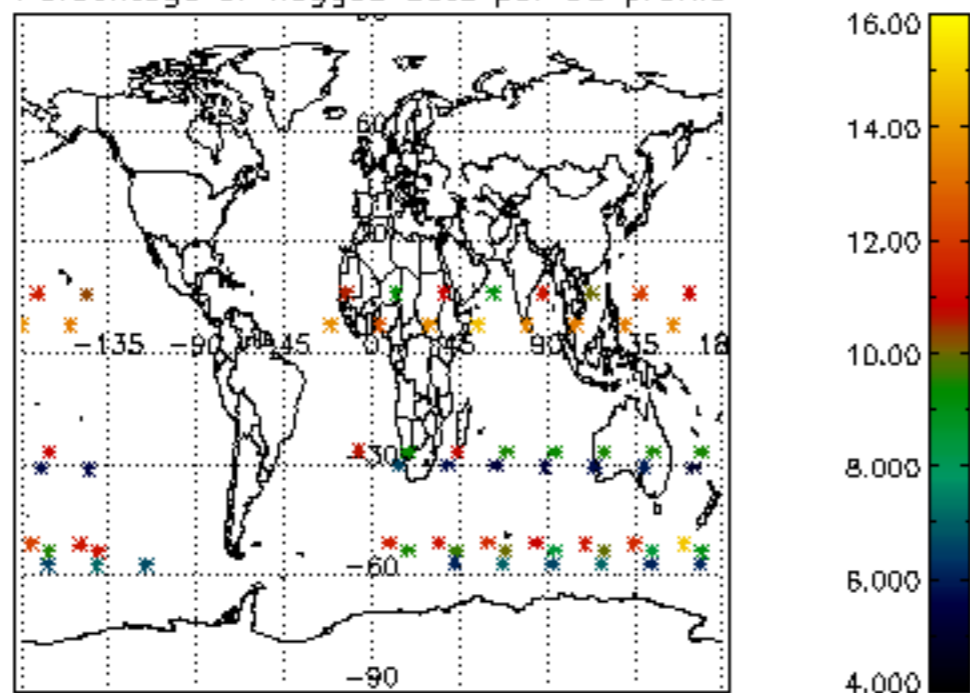




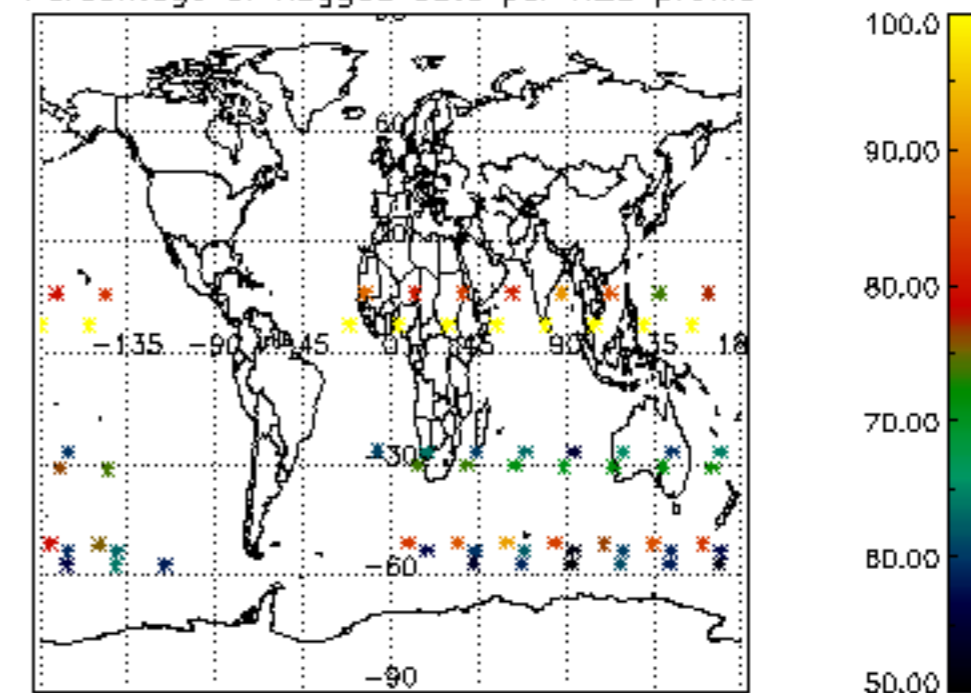




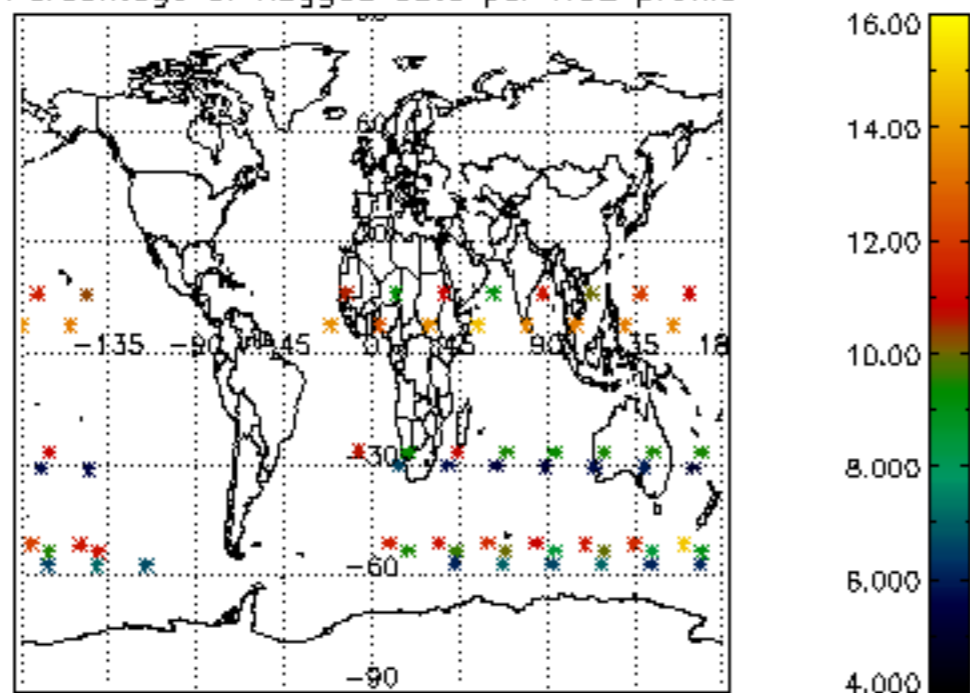
Percentage of flagged data per D3 profile



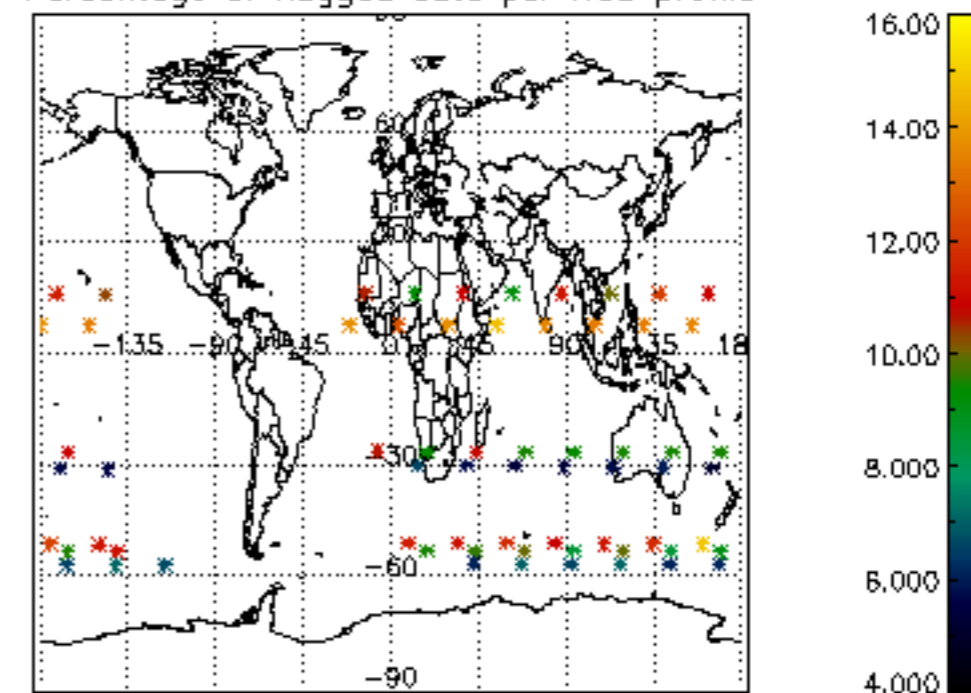
Percentage of flagged data per H2O profile

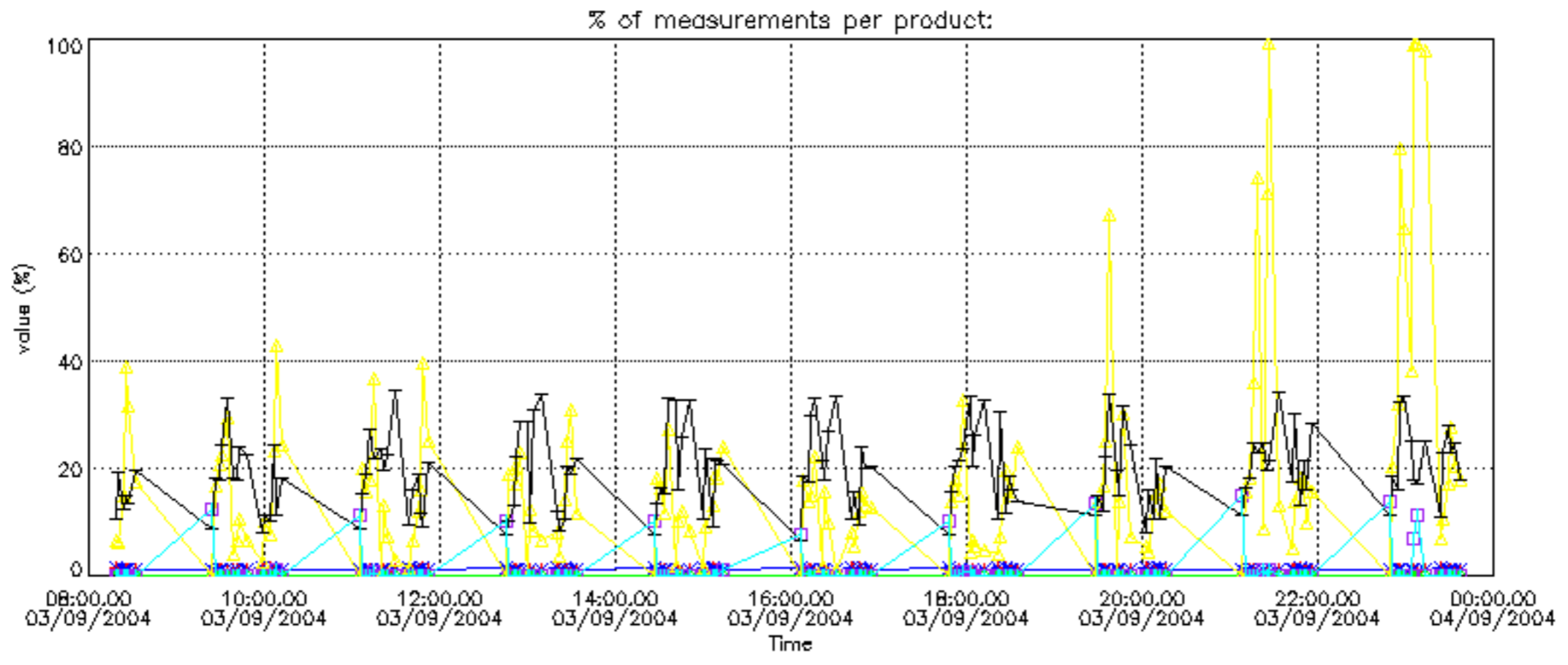


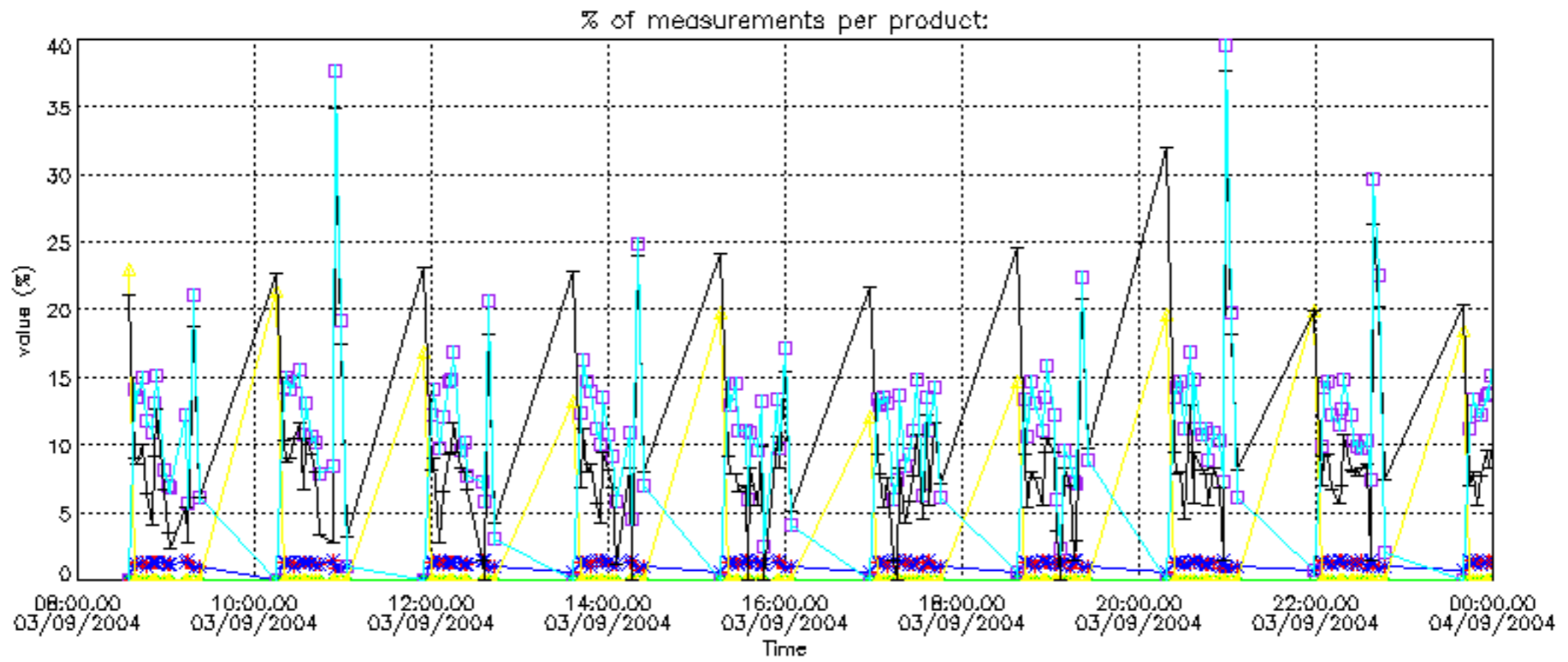
Percentage of flagged data per NO2 profile



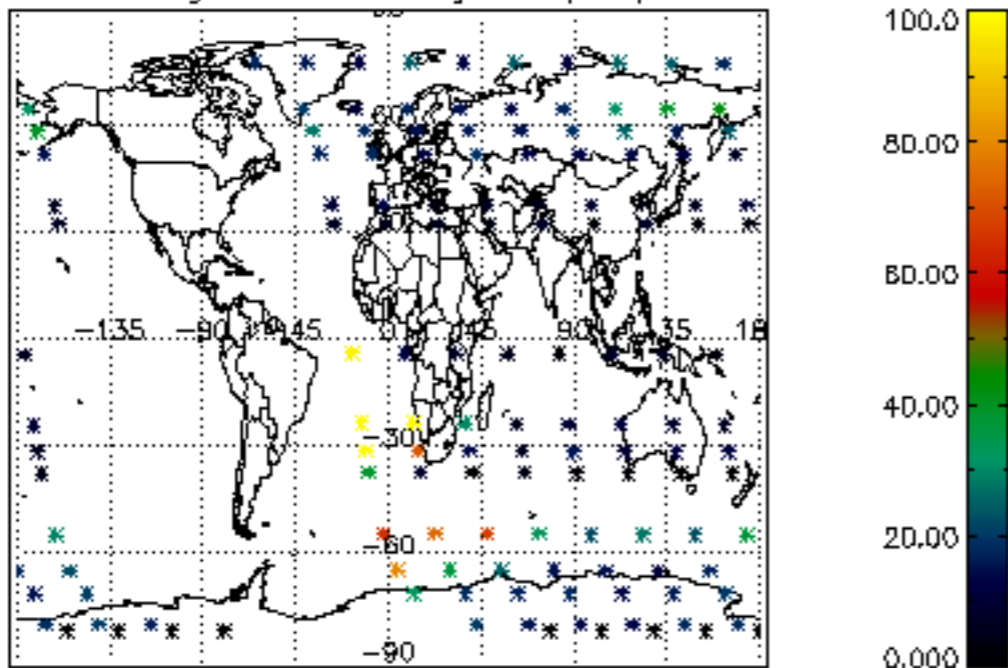
Percentage of flagged data per NO3 profile



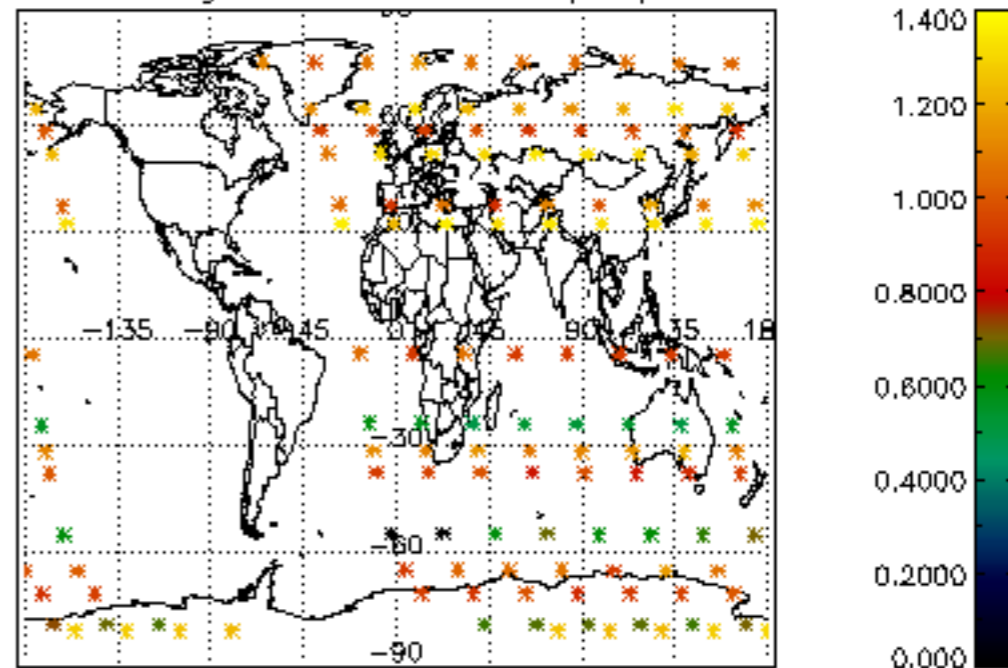




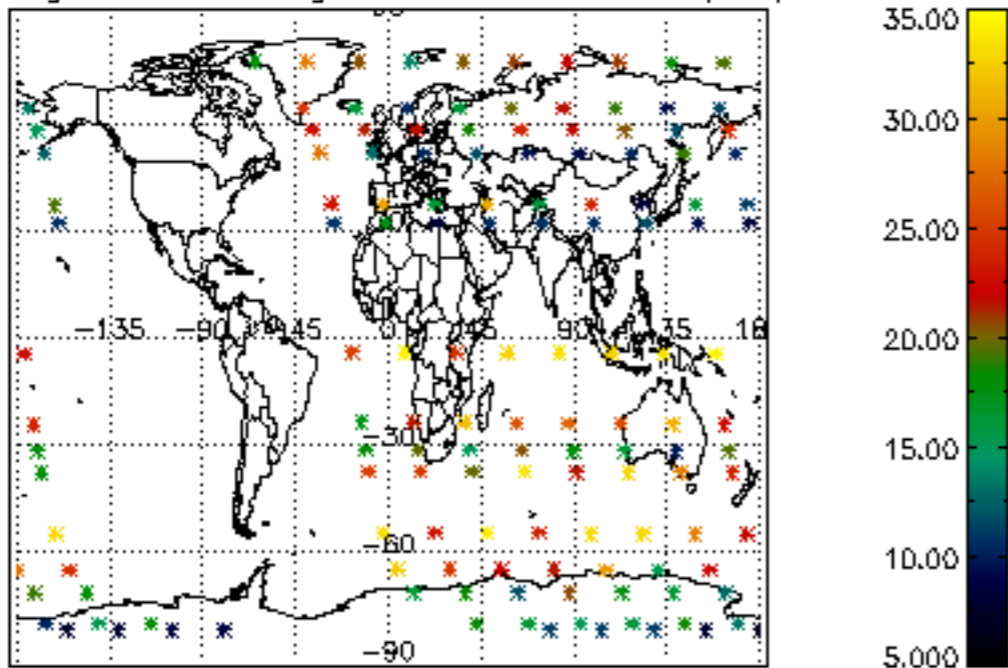
Percentage of cosmic ray hits per profile



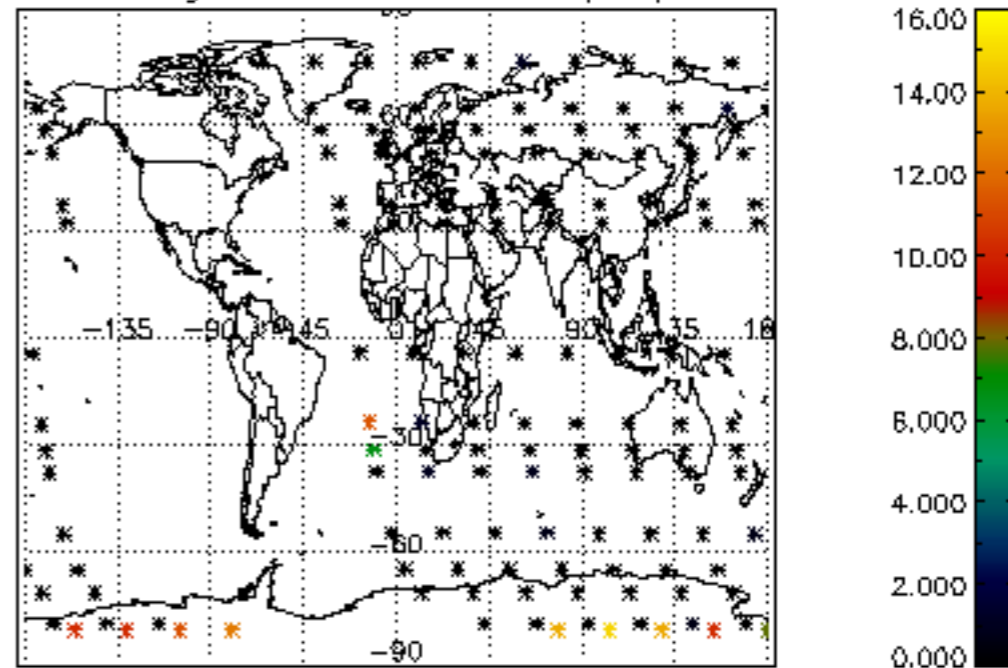
Percentage of datation errors per profile



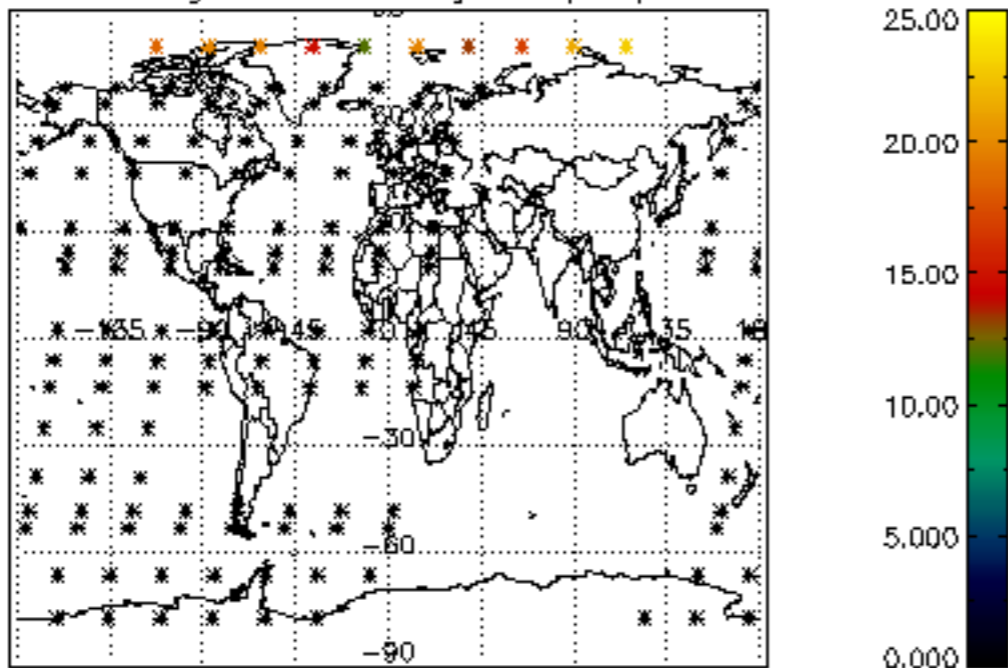
Percentage of star falling outside central band per profile



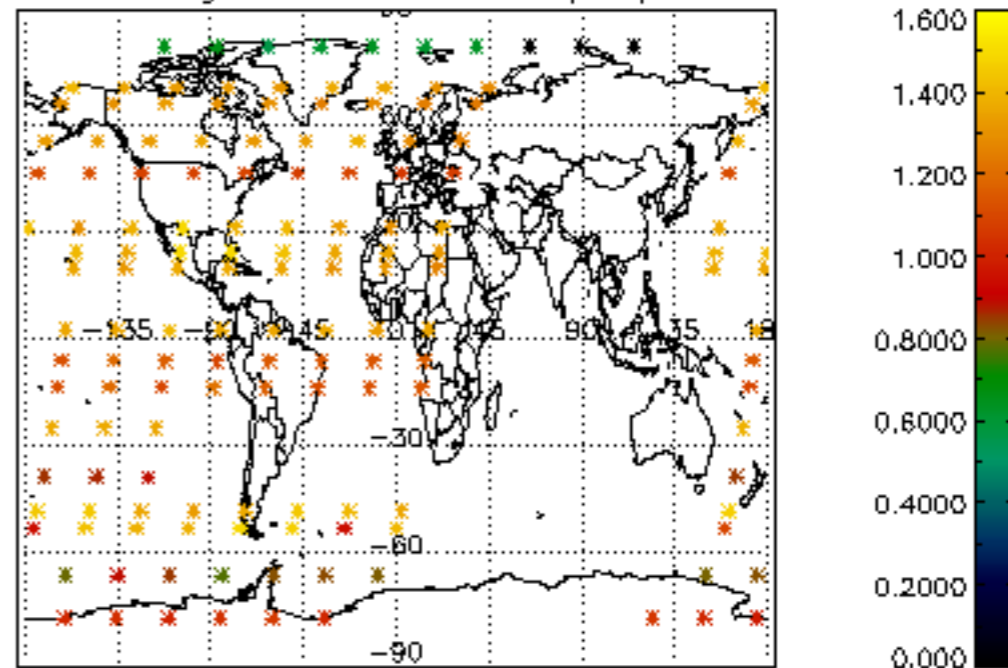
Percentage of saturation errors per profile



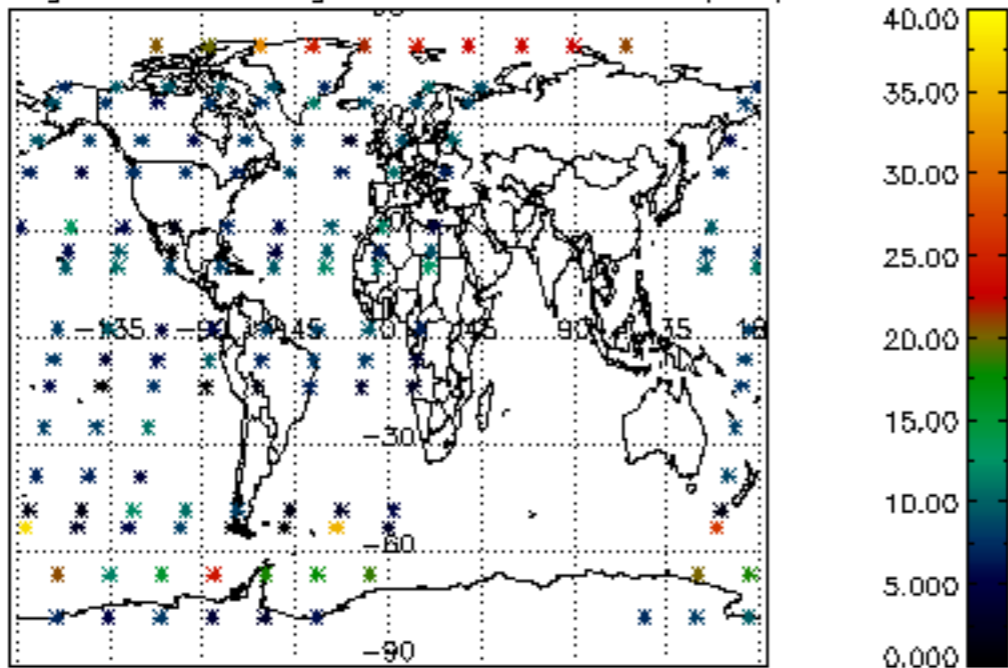
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

