

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.

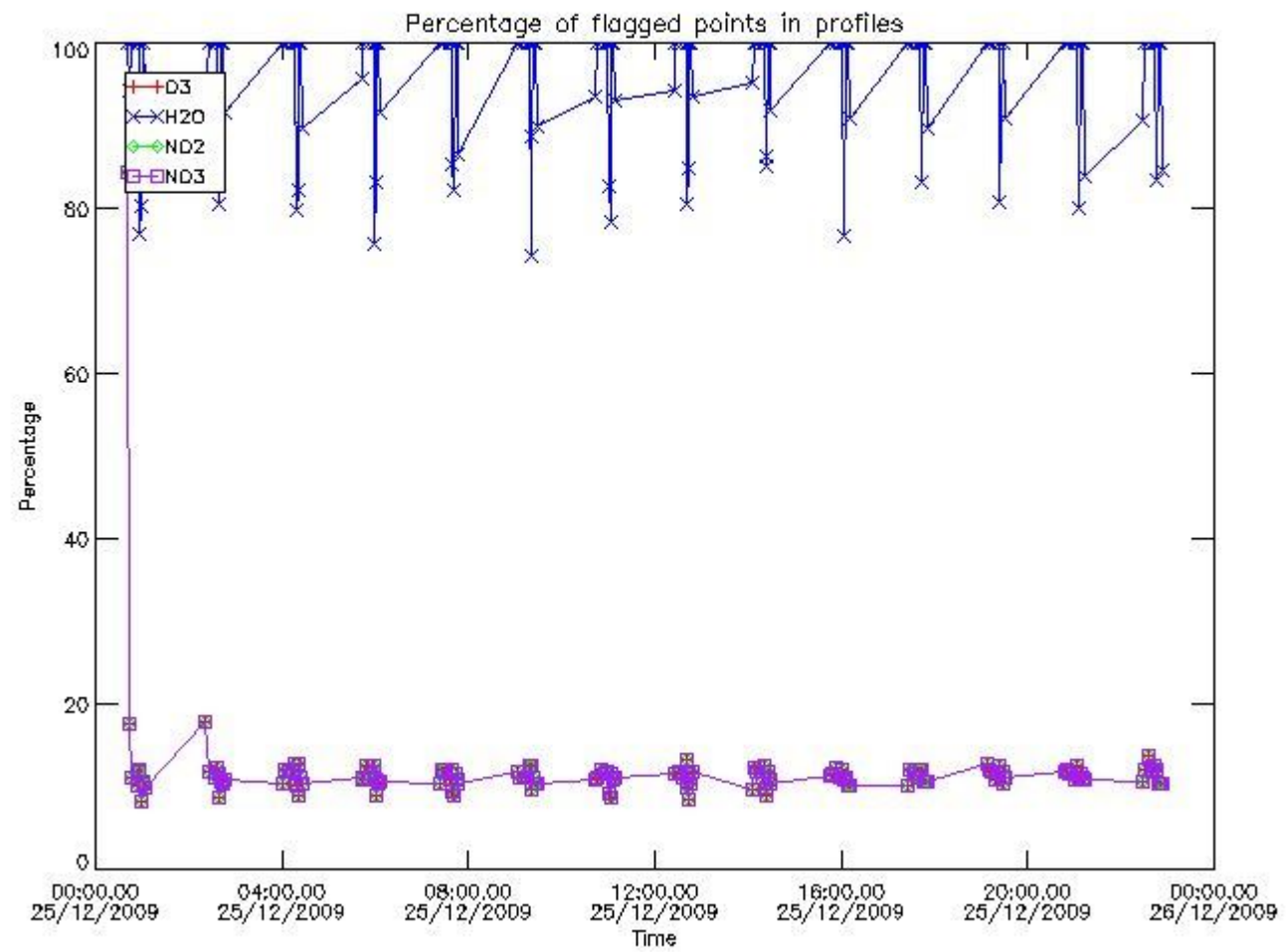
Item	Value
Time of report generation	30APR2013 10:17:56
Data source version	GOMOS/6.01
Start time of products	25-12-2009 (25DEC2009 00:00:00)
Stop time of products	26-12-2009 (26DEC2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	392
Nb of prods with errors	1

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__2PRFIN20091225_000708_000000362085_00245_40880_8517.N1	25-DEC-2009 00:07:08	Bright	36.000	60	7Bet UMi	2.0810	3950.0	72	40880	No
2	GOM_NL__2PRFIN20091225_001118_000000462085_00245_40880_8518.N1	25-DEC-2009 00:11:18	Bright	45.500	32	77Eps UMa	1.7630	11000.	91	40880	No
3	GOM_NL__2PRFIN20091225_001415_000000462085_00245_40880_8519.N1	25-DEC-2009 00:14:15	Bright	45.500	39	85Eta UMa	1.8540	24000.	91	40880	No
4	GOM_NL__2PRFIN20091225_001757_000000582085_00245_40880_8520.N1	25-DEC-2009 00:17:57	Bright	58.000	180	27Gam Boo	3.0400	8000.0	116	40880	No
5	GOM_NL__2PRFIN20091225_002124_000000402085_00245_40880_8521.N1	25-DEC-2009 00:21:24	Bright	39.500	83		2.3780	11000.	79	40880	No
6	GOM_NL__2PRFIN20091225_002507_000000682085_00245_40880_8522.N1	25-DEC-2009 00:25:07	Bright	68.000	111	8Eta Boo	2.6800	6000.0	136	40880	No
7	GOM_NL__2PRFIN20091225_003351_000000412085_00245_40880_8523.N1	25-DEC-2009 00:33:51	Bright	40.500	122	9Alp2Lib	2.7470	9700.0	81	40880	No
8	GOM_NL__2PRFIN20091225_003608_000000562085_00245_40880_8524.N1	25-DEC-2009 00:36:08	Straylight	56.000	15	67Alp Vir	0.97600	28000.	112	40880	No
9	GOM_NL__2PRFIN20091225_004031_000000452085_00245_40880_8525.N1	25-DEC-2009 00:40:31	Dark	45.000	54	5The Cen	2.0550	4500.0	90	40880	No
10	GOM_NL__2PRFIN20091225_004232_000000442085_00245_40880_8526.N1	25-DEC-2009 00:42:32	Dark	43.500	123	1ot Cen	2.7500	10200.	87	40880	No
11	GOM_NL__2PRFIN20091225_004634_000000462085_00246_40881_8509.N1	25-DEC-2009 00:46:34	Dark	46.000	64	Gam Cen	2.2000	10600.	92	40881	No
12	GOM_NL__2PRFIN20091225_005232_000000512085_00246_40881_8510.N1	25-DEC-2009 00:52:32	Dark	50.500	113	Mu Vel	2.6920	5000.0	101	40881	No
13	GOM_NL__2PRFIN20091225_005540_000000432085_00246_40881_8511.N1	25-DEC-2009 00:55:40	Dark	42.500	71	1ot Car	2.2460	7700.0	85	40881	No
14	GOM_NL__2PRFIN20091225_005724_000000442085_00246_40881_8512.N1	25-DEC-2009 00:57:24	Dark	43.500	41	Eps Car	1.8600	4100.0	87	40881	No
15	GOM_NL__2PRFIN20091225_005851_000000622085_00246_40881_8513.N1	25-DEC-2009 00:58:51	Dark	61.500	65	Lam Vel	2.2040	4400.0	123	40881	No
16	GOM_NL__2PRFIN20091225_010026_000000482085_00246_40881_8514.N1	25-DEC-2009 01:00:26	Dark	48.000	34	Gam2Vel	1.7930	23000.	96	40881	No
17	GOM_NL__2PRFIN20091225_010238_000000502085_00246_40881_8515.N1	25-DEC-2009 01:02:38	Dark	49.500	70	Zet Pup	2.2460	39000.	99	40881	No
18	GOM_NL__2PRFIN20091225_010457_000000512085_00246_40881_8516.N1	25-DEC-2009 01:04:57	Dark	51.000	117	Pi Pup	2.7060	3800.0	102	40881	No
19	GOM_NL__2PRFIN20091225_010756_000000502085_00246_40881_8517.N1	25-DEC-2009 01:07:56	Straylight	50.000	23	21Eps CMa	1.5020	26000.	100	40881	No
20	GOM_NL__2PRFIN20091225_010935_000000502085_00246_40881_8518.N1	25-DEC-2009 01:09:35	Straylight	49.500	179	24Omi2CMa	3.0320	24000.	99	40881	No
21	GOM_NL__2PRFIN20091225_011215_000000512085_00246_40881_8519.N1	25-DEC-2009 01:12:15	Straylight	51.000	1	9Alp CMa	-1.4400	11000.	102	40881	No
22	GOM_NL__2PRFIN20091225_011524_000000452085_00246_40881_8520.N1	25-DEC-2009 01:15:24	Straylight	44.500	7	19Bet Ori	0.10000	14000.	89	40881	No
23	GOM_NL__2PRFIN20091225_011724_000000442085_00246_40881_8521.N1	25-DEC-2009 01:17:24	Straylight	44.000	30	46Eps Ori	1.6940	30000.	88	40881	No
24	GOM_NL__2PRFIN20091225_012009_000000592085_00246_40881_8522.N1	25-DEC-2009 01:20:09	Tw_i_and_stray	59.000	14	58Alp Ori	0.87000	3000.0	118	40881	No
25	GOM_NL__2PRFIN20091225_012411_000000422085_00246_40881_8523.N1	25-DEC-2009 01:24:11	Bright	41.500	176	23Zet Tau	3.0200	22000.	83	40881	No
26	GOM_NL__2PRFIN20091225_012616_000000412085_00246_40881_8524.N1	25-DEC-2009 01:26:16	Bright	41.000	28	12Bet Tau	1.6500	15200.	82	40881	No
27	GOM_NL__2PRFIN20091225_012925_000000602085_00246_40881_8525.N1	25-DEC-2009 01:29:25	Bright	60.000	107	37The Aur	2.6490	11000.	120	40881	No
28	GOM_NL__2PRFIN20091225_013112_000000422085_00246_40881_8526.N1	25-DEC-2009 01:31:12	Bright	41.500	6	13Alp Aur	0.080000	3400.0	83	40881	No
29	GOM_NL__2PRFIN20091225_014745_000000382085_00246_40881_8527.N1	25-DEC-2009 01:47:45	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	40881	No
30	GOM_NL__2PRFIN20091225_015153_000000472085_00246_40881_8528.N1	25-DEC-2009 01:51:53	Bright	46.500	32	77Eps UMa	1.7630	11000.	93	40881	No
31	GOM_NL__2PRFIN20091225_015451_000000402085_00246_40881_8529.N1	25-DEC-2009 01:54:51	Bright	39.500	39	85Eta UMa	1.8540	24000.	79	40881	No
32	GOM_NL__2PRFIN20091225_015833_000000582085_00246_40881_8530.N1	25-DEC-2009 01:58:33	Bright	58.000	180	27Gam Boo	3.0400	8000.0	116	40881	No
33	GOM_NL__2PRFIN20091225_020200_000000392085_00246_40881_8531.N1	25-DEC-2009 02:02:00	Bright	39.000	83		2.3780	11000.	78	40881	No
34	GOM_NL__2PRFIN20091225_020543_000000682085_00246_40881_8532.N1	25-DEC-2009 02:05:43	Bright	67.500	111	8Eta Boo	2.6800	6000.0	135	40881	No
35	GOM_NL__2PRFIN20091225_021427_000000402085_00246_40881_8533.N1	25-DEC-2009 02:14:27	Bright	40.000	122	9Alp2Lib	2.7470	9700.0	80	40881	No
36	GOM_NL__2PRFIN20091225_021646_000000562085_00246_40881_8534.N1	25-DEC-2009 02:16:46	Straylight	55.500	15	67Alp Vir	0.97600	28000.	111	40881	No
37	GOM_NL__2PRFIN20091225_022107_000000462085_00246_40881_8535.N1	25-DEC-2009 02:21:07	Dark	45.500	54	5The Cen	2.0550	4500.0	91	40881	No
38	GOM_NL__2PRFIN20091225_022711_000000442085_00247_40882_8518.N1	25-DEC-2009 02:27:11	Dark	43.500	64	Gam Cen	2.2000	10600.	87	40882	No
39	GOM_NL__2PRFIN20091225_023308_000000462085_00247_40882_8519.N1	25-DEC-2009 02:33:08	Dark	45.500	113	Mu Vel	2.6920	5000.0	91	40882	No
40	GOM_NL__2PRFIN20091225_023616_000000462085_00247_40882_8520.N1	25-DEC-2009 02:36:16	Dark	45.500	71	1ot Car	2.2460	7700.0	91	40882	No
41	GOM_NL__2PRFIN20091225_023800_000000442085_00247_40882_8521.N1	25-DEC-2009 02:38:00	Dark	44.000	41	Eps Car	1.8600	4100.0	88	40882	No
42	GOM_NL__2PRFIN20091225_023928_000000592085_00247_40882_8522.N1	25-DEC-2009 02:39:28	Dark	58.500	65	Lam Vel	2.2040	4400.0	117	40882	No

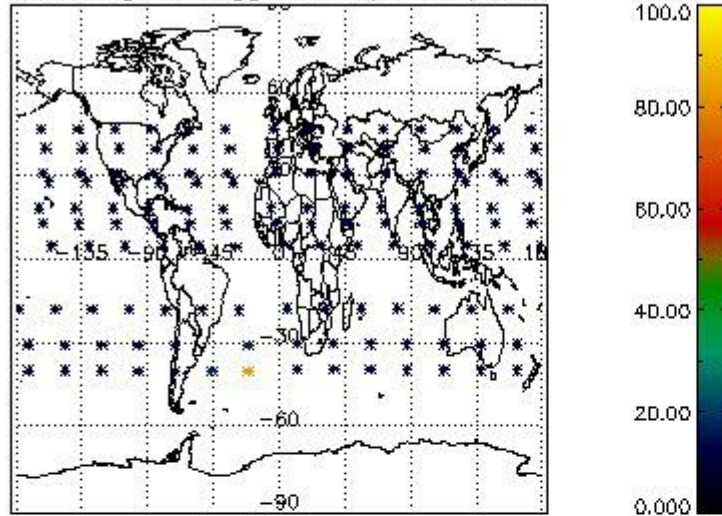
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

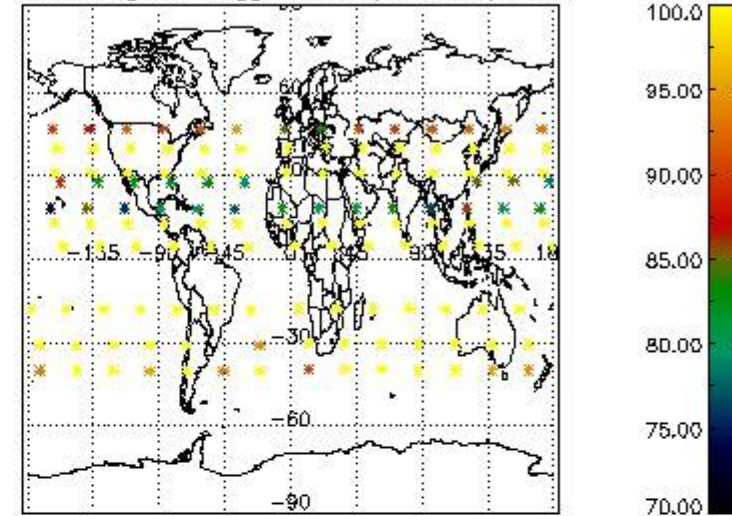


3.2 Plot quality information per product (world map)

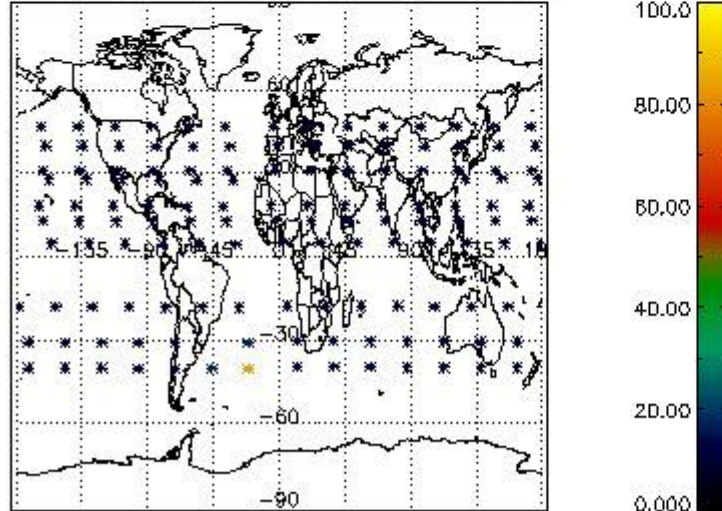
Percentage of flagged data per O3 profile



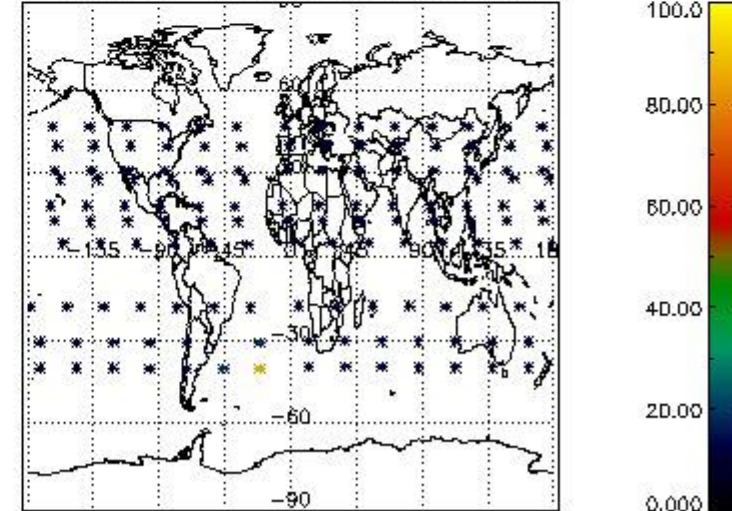
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

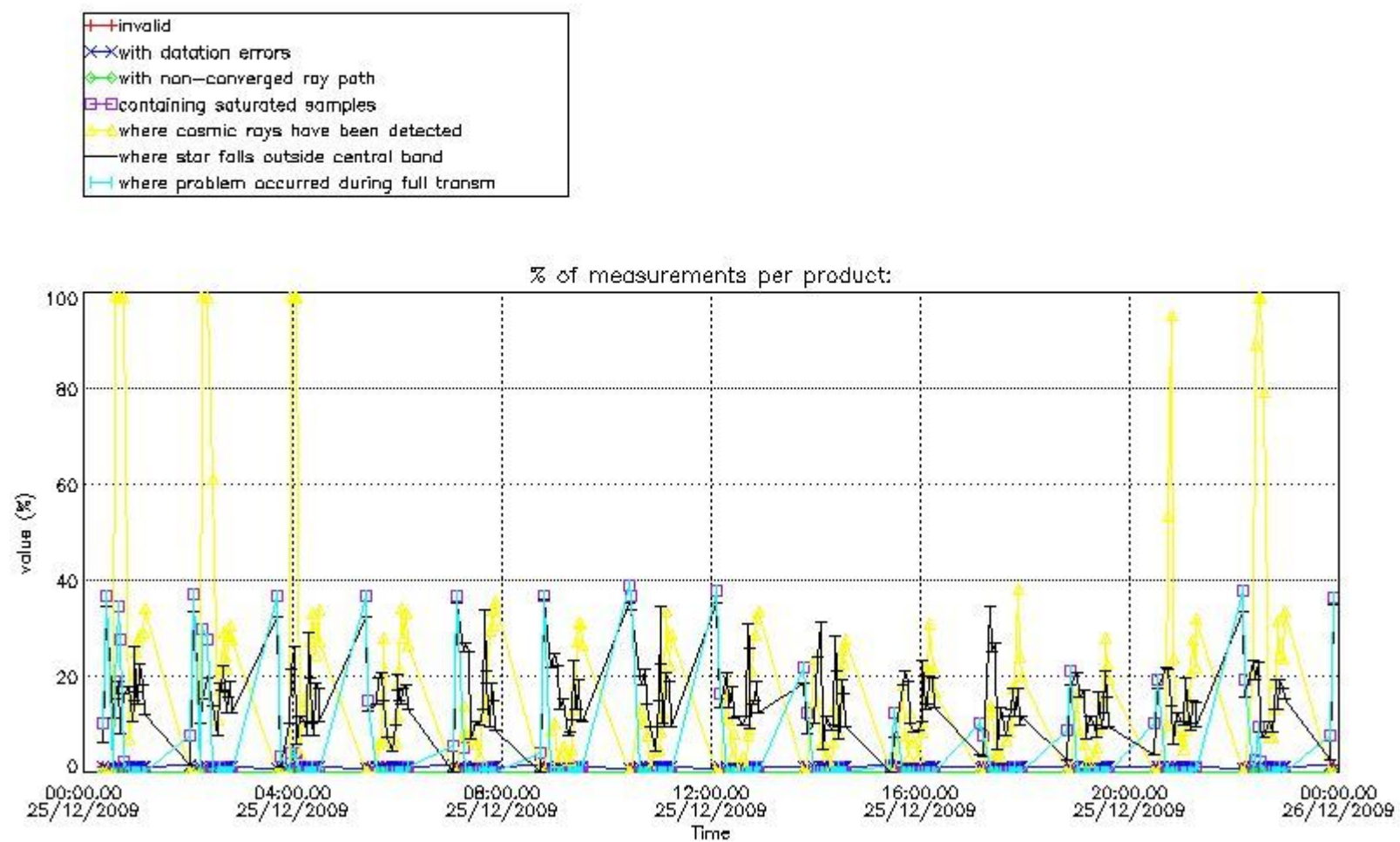


4. Level 1 quality information per product

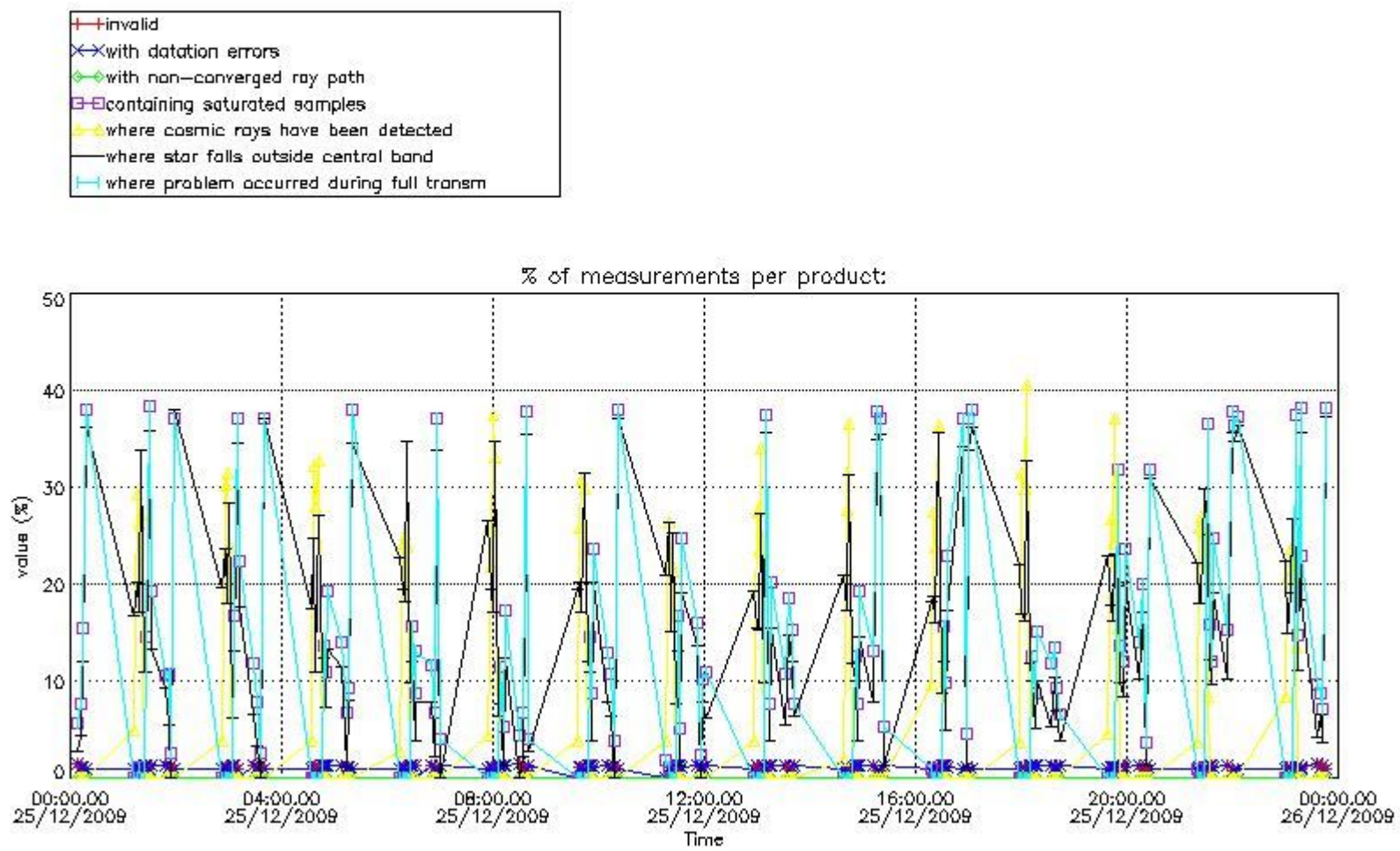
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

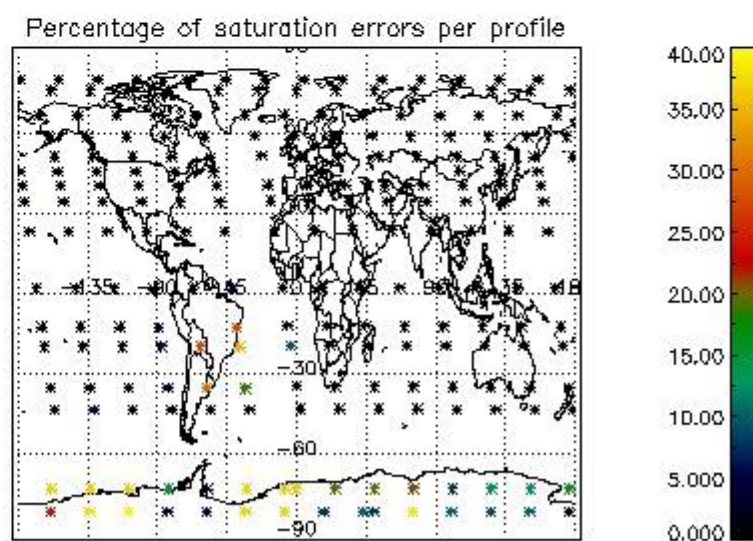
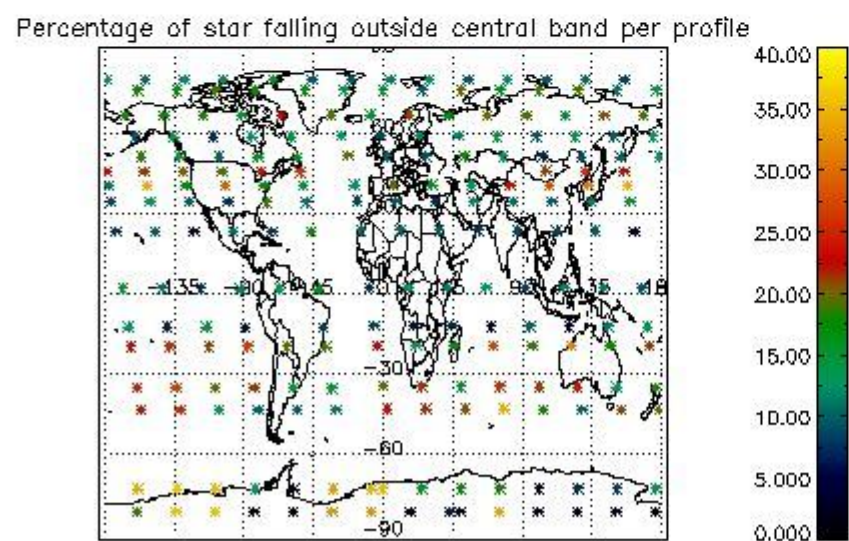
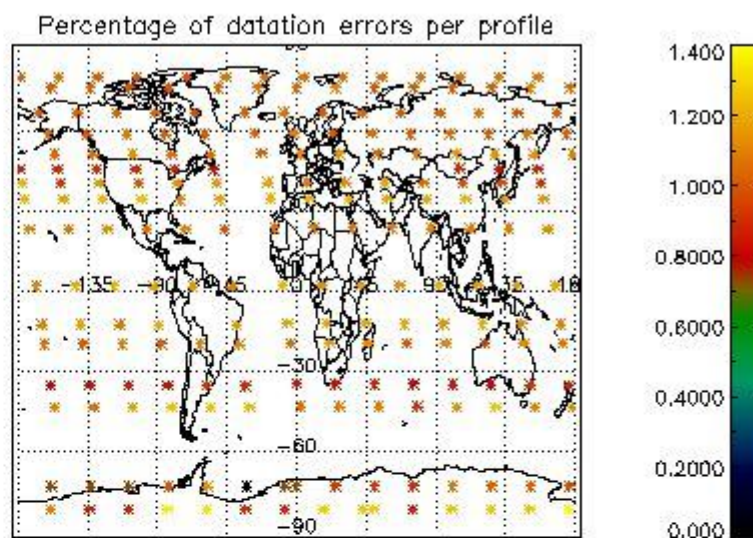
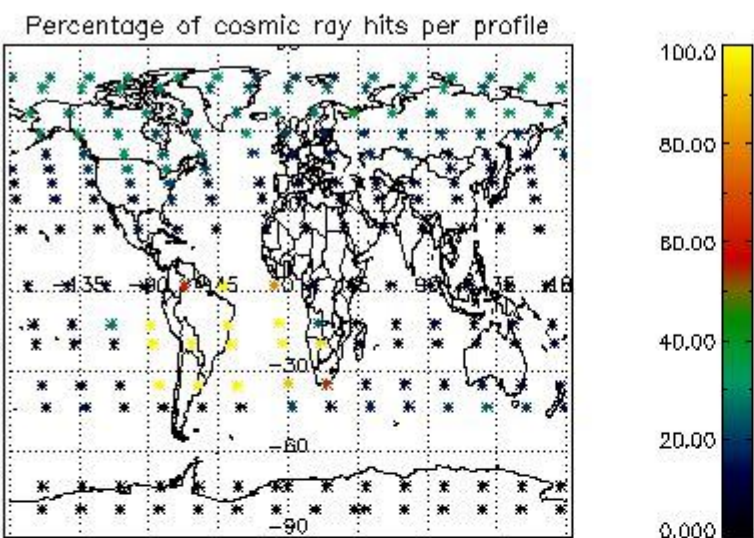


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

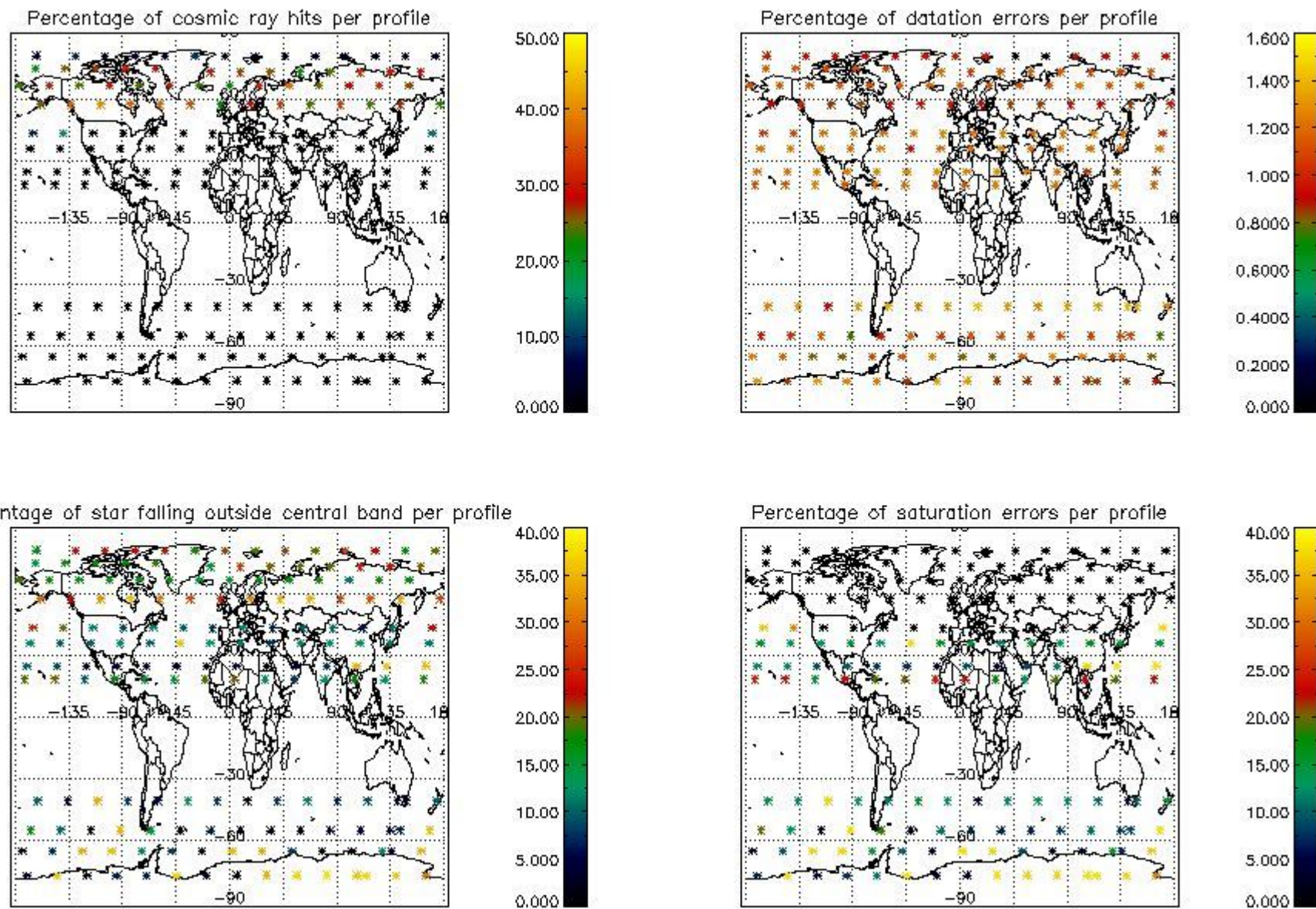


4.2 Plot quality information per product coming from level 1b processing (world map)

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

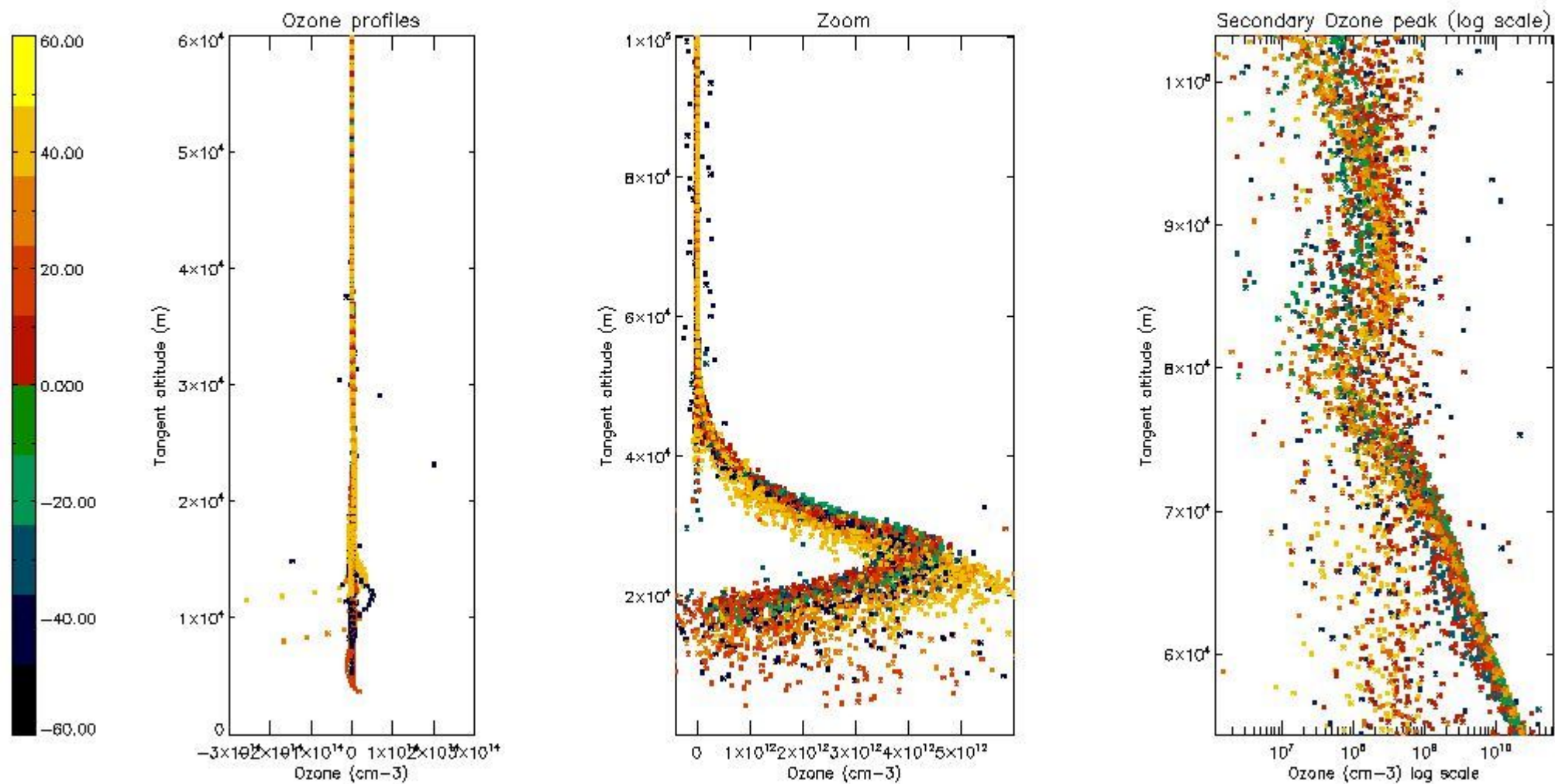
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	34
STD < 20	15

STD < 10	10
STD < 5	4

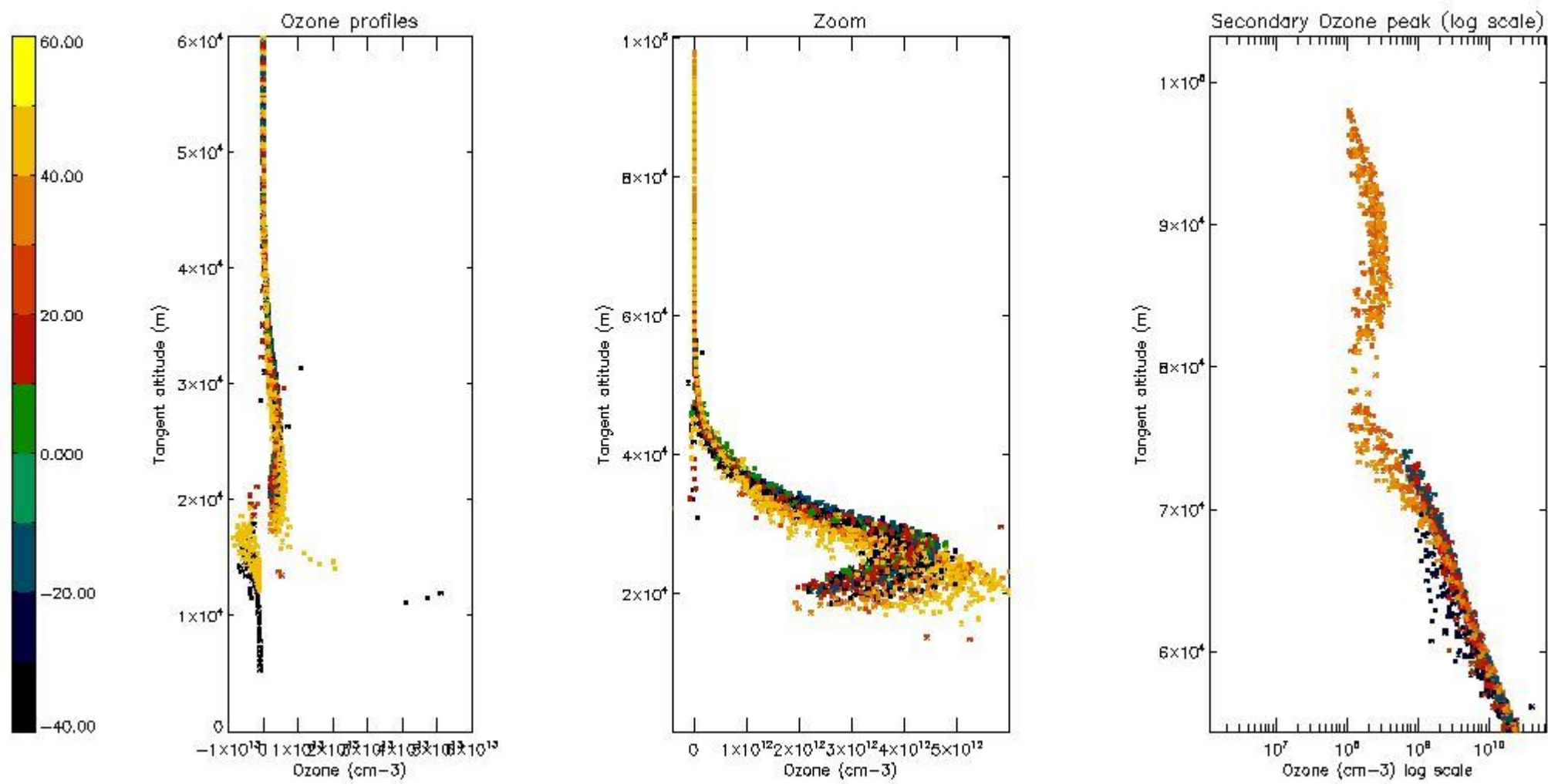
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



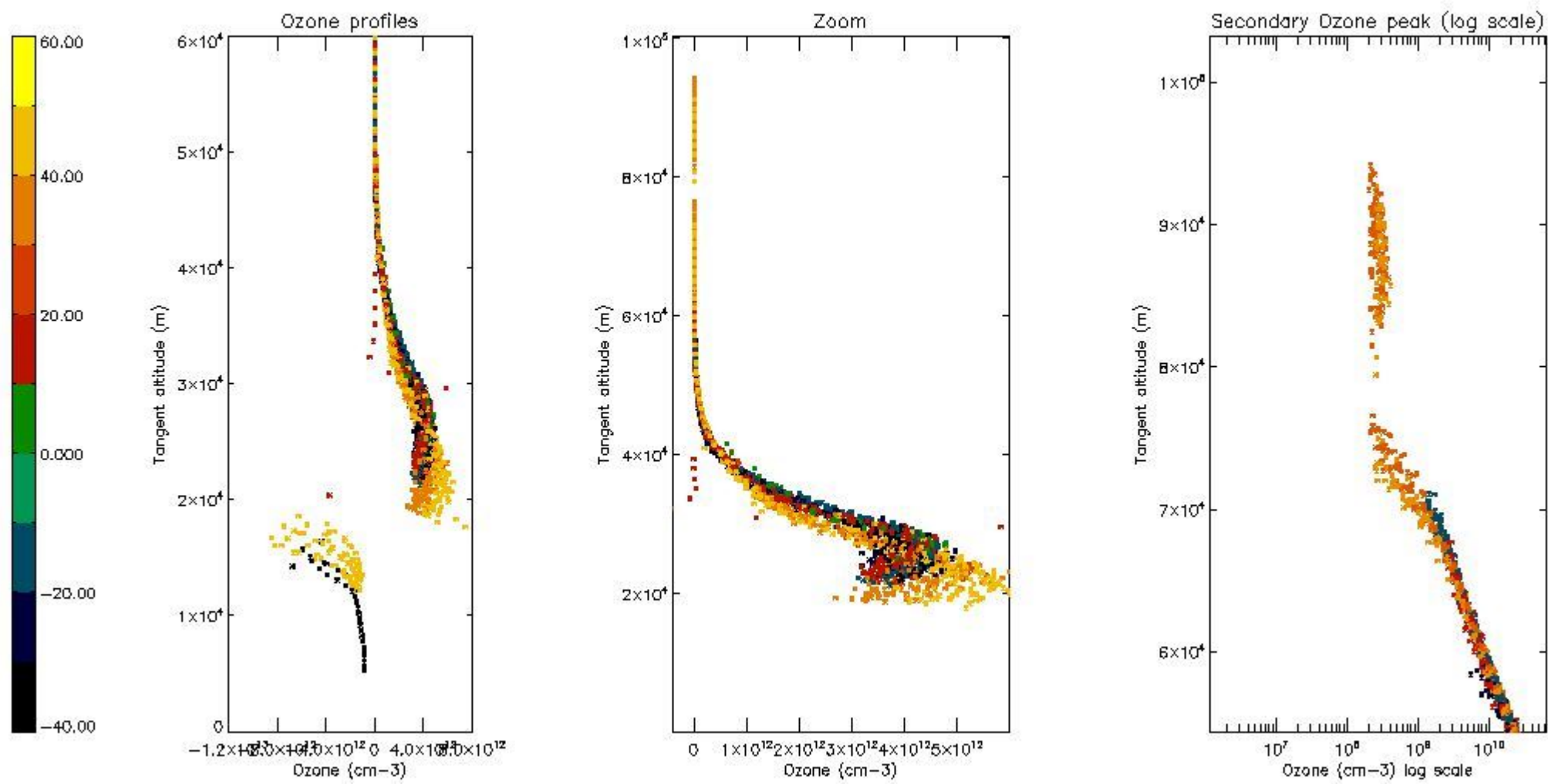
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



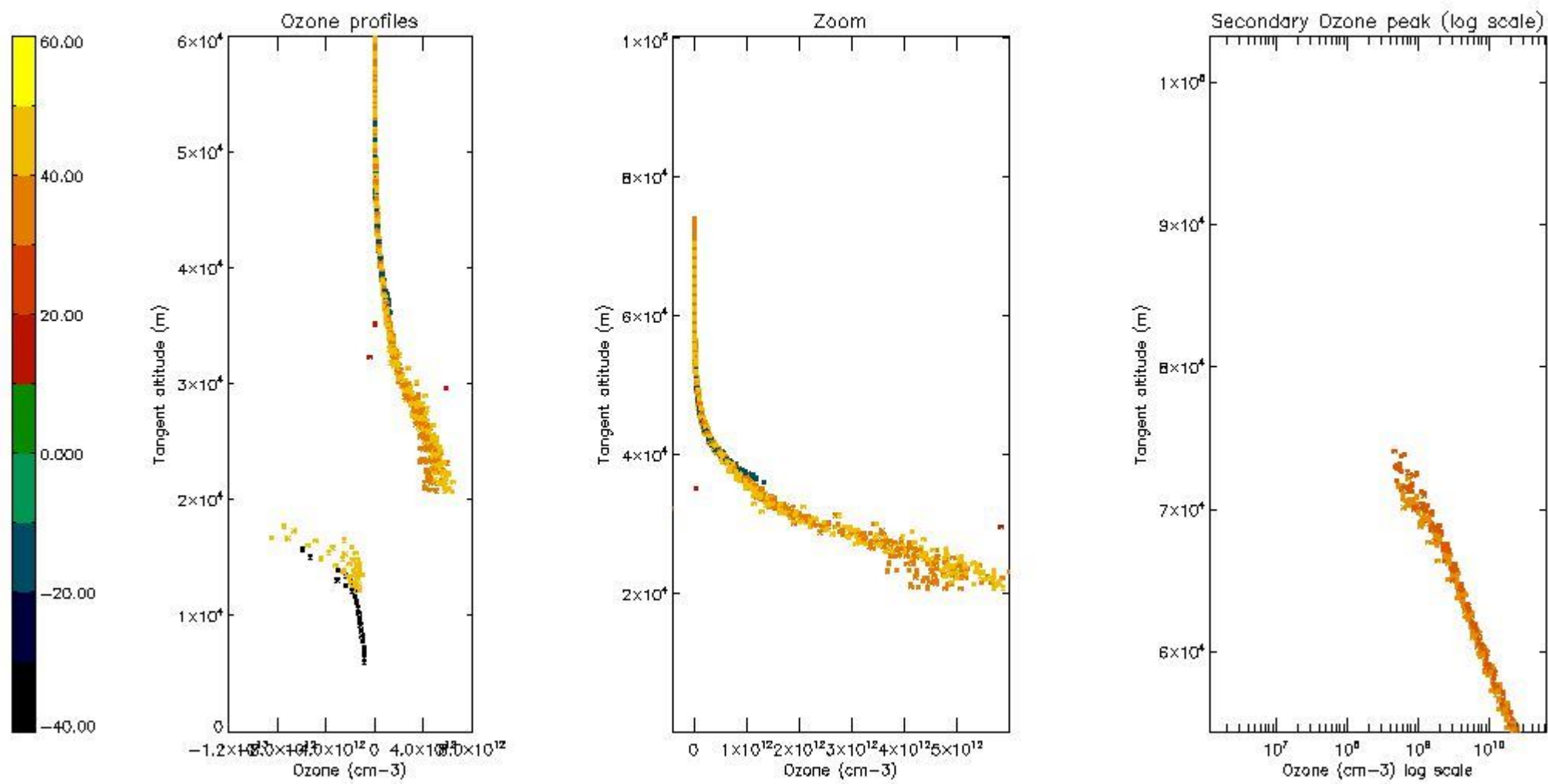
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



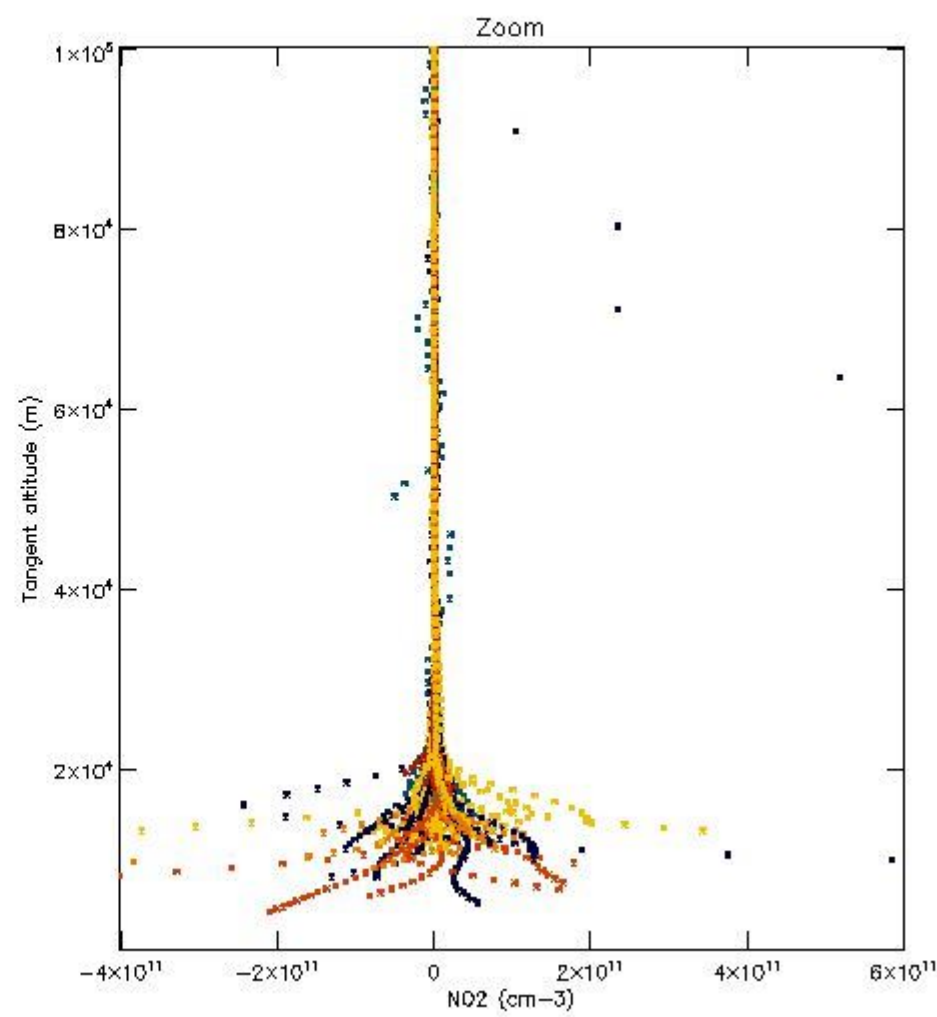
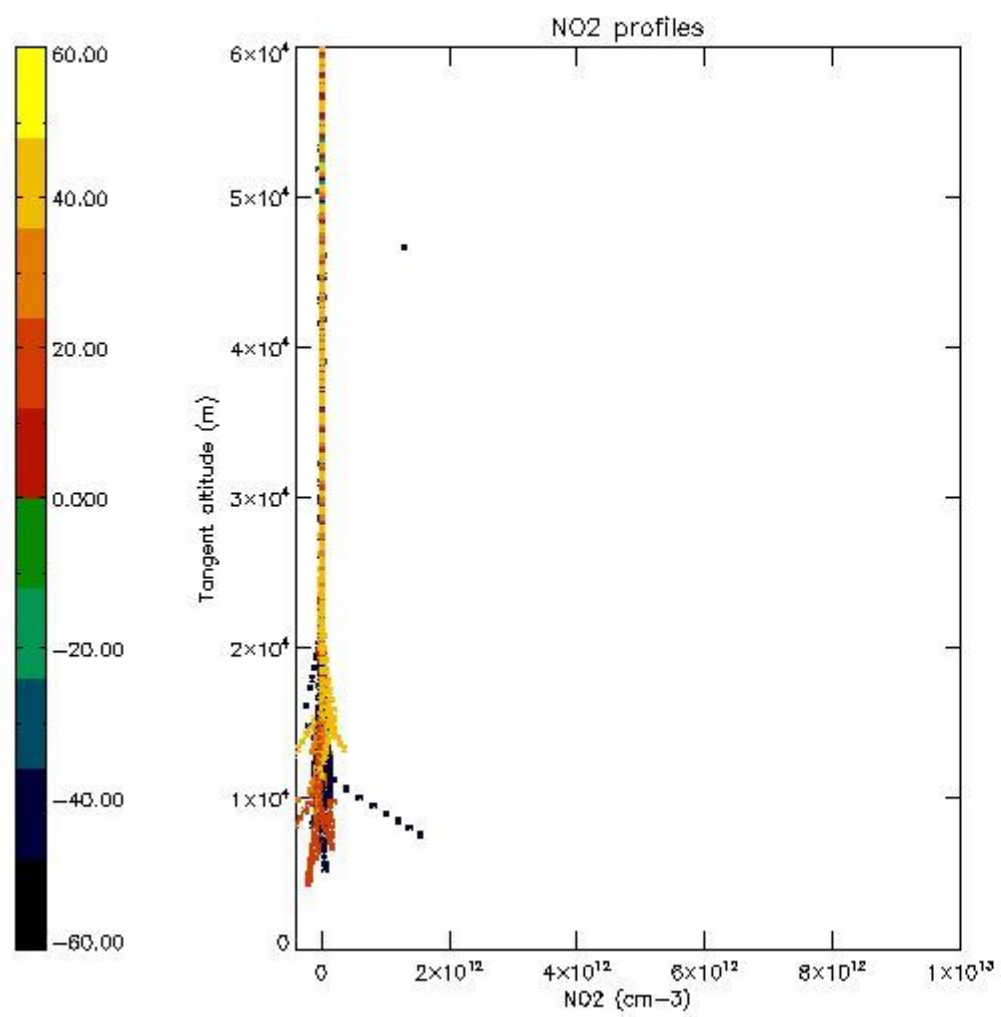
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



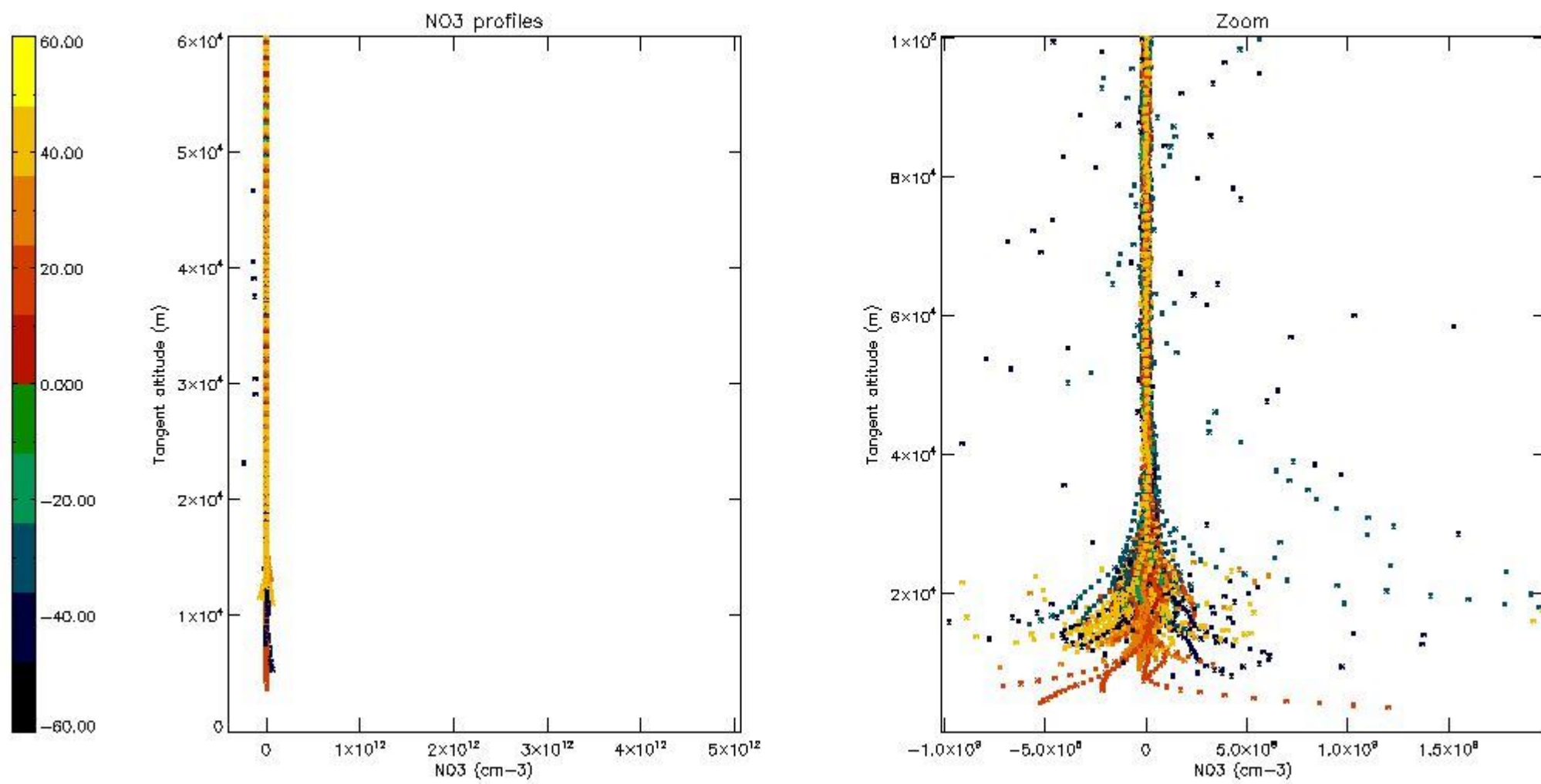
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



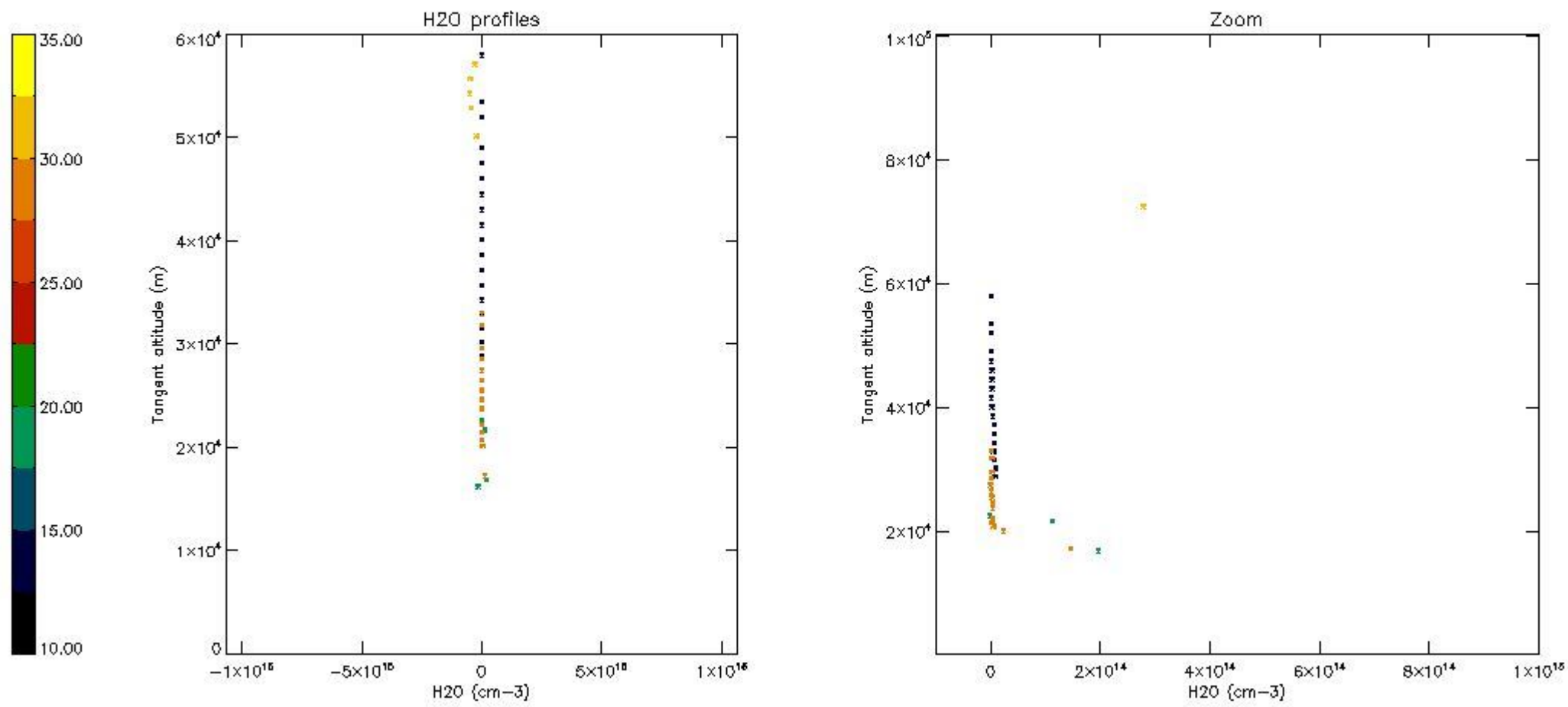
5.7 Plot NO3 profiles for all STD (dark without errors)

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	25-DEC-2009 00:07:08
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	25-DEC-2009 00:07:08
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	25-DEC-2009 00:07:08

GOMOS Level 2 Daily Report

SUMMARY

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[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 \(dark without errors\)](#)

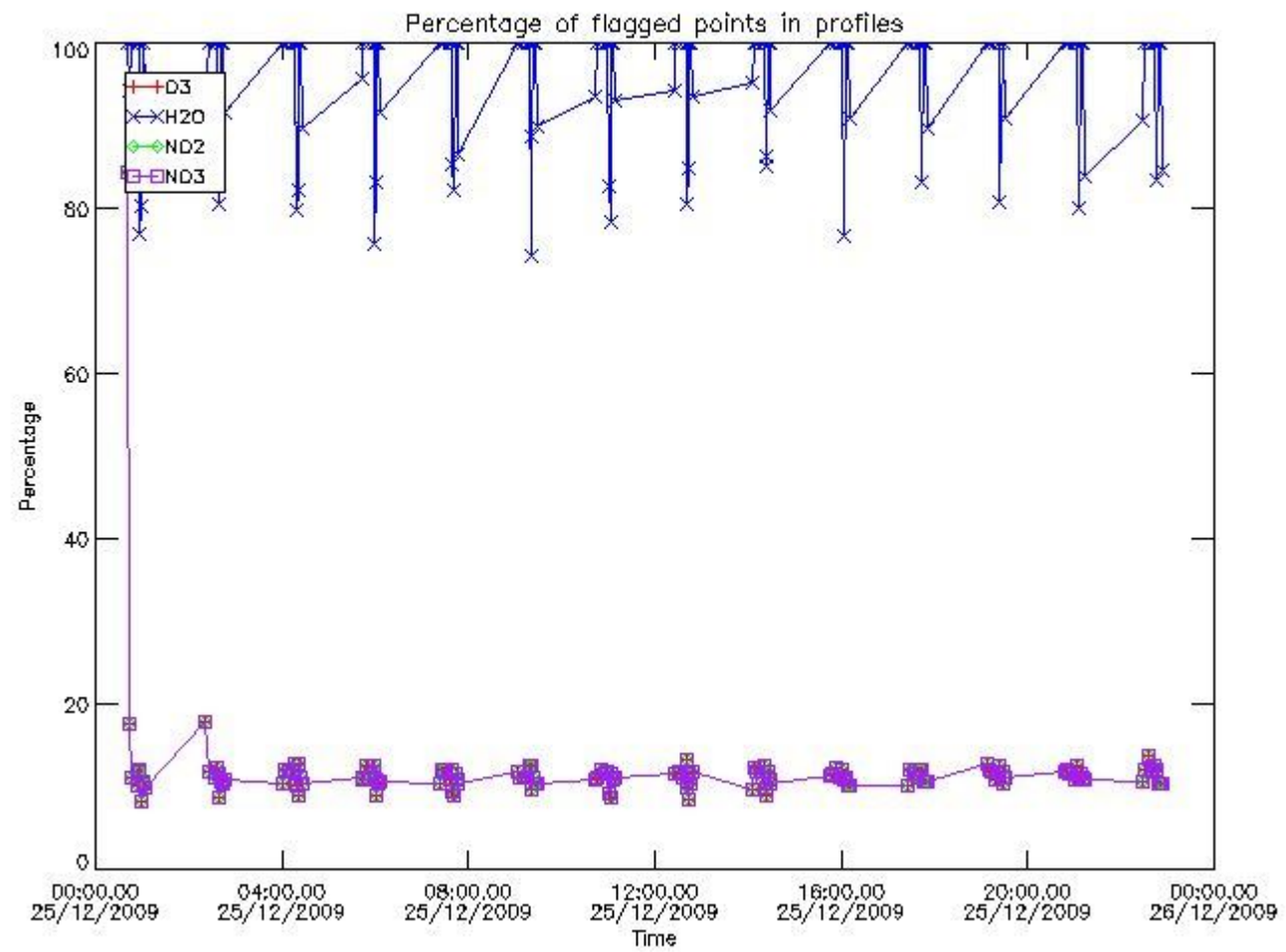
[5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

[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](#)

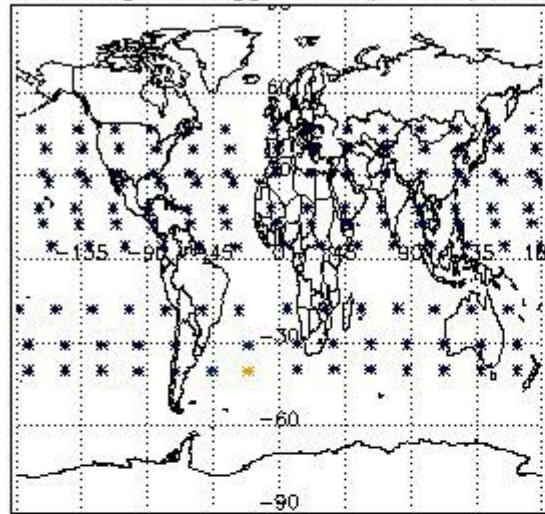
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

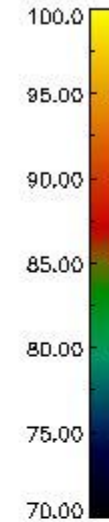
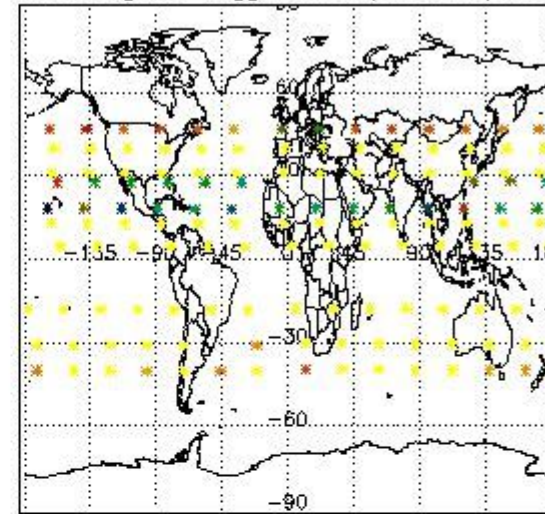


3.2 Plot quality information per product (world map)

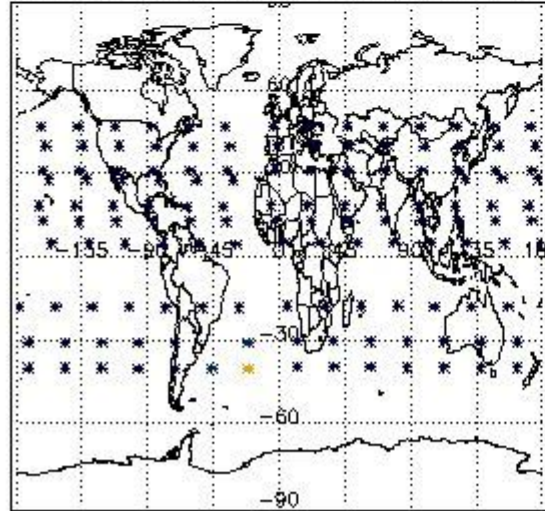
Percentage of flagged data per O3 profile



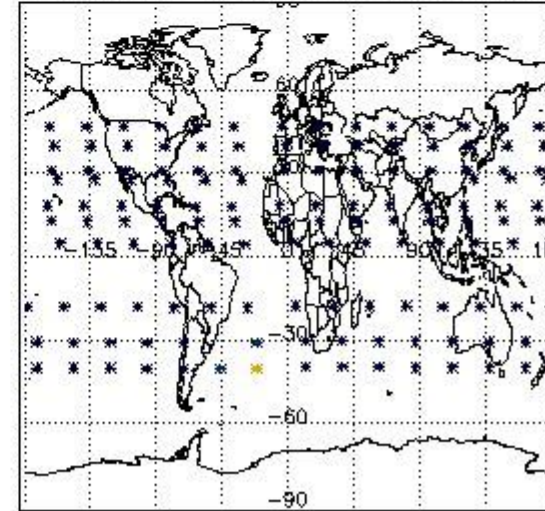
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

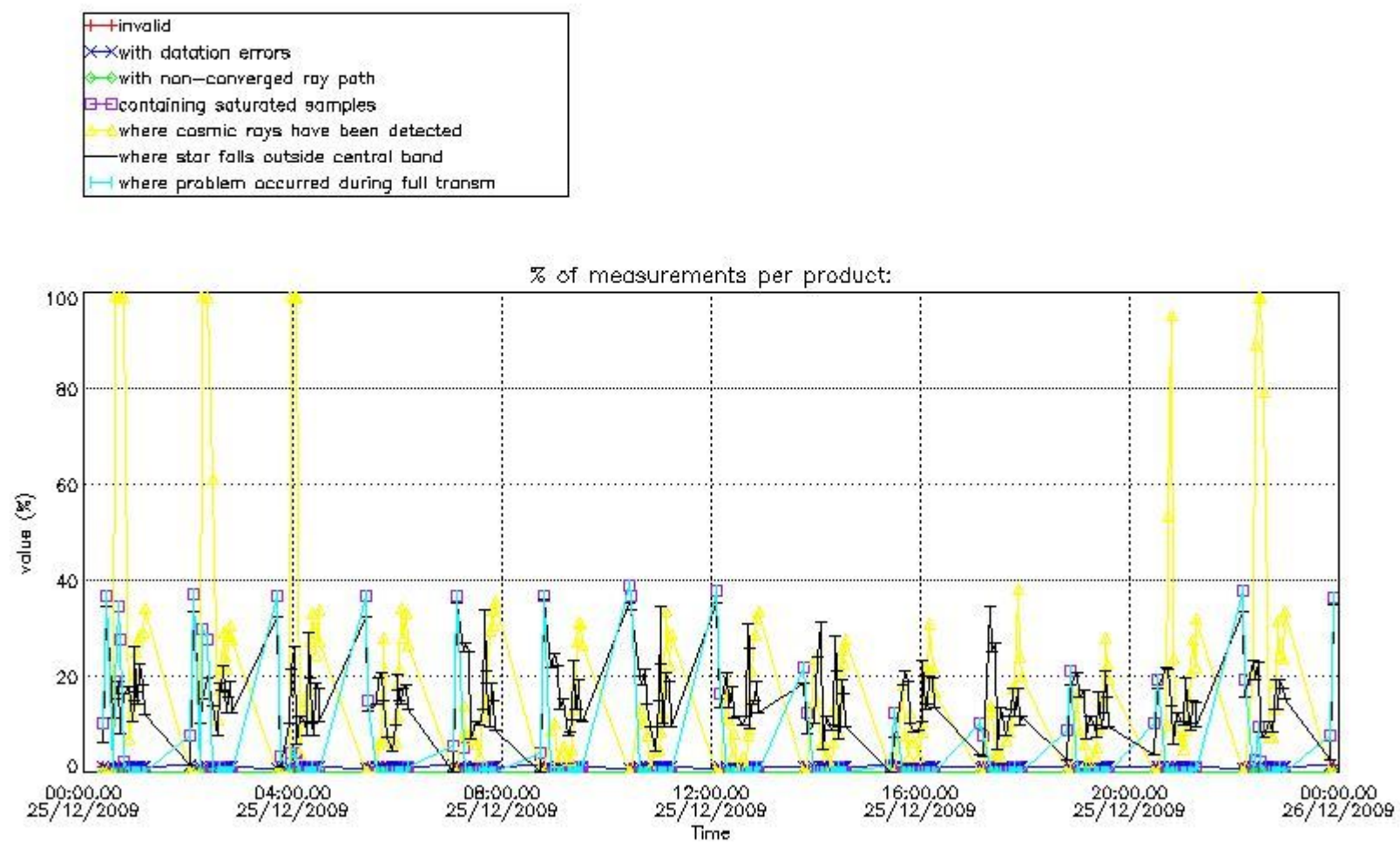


4. Level 1 quality information per product

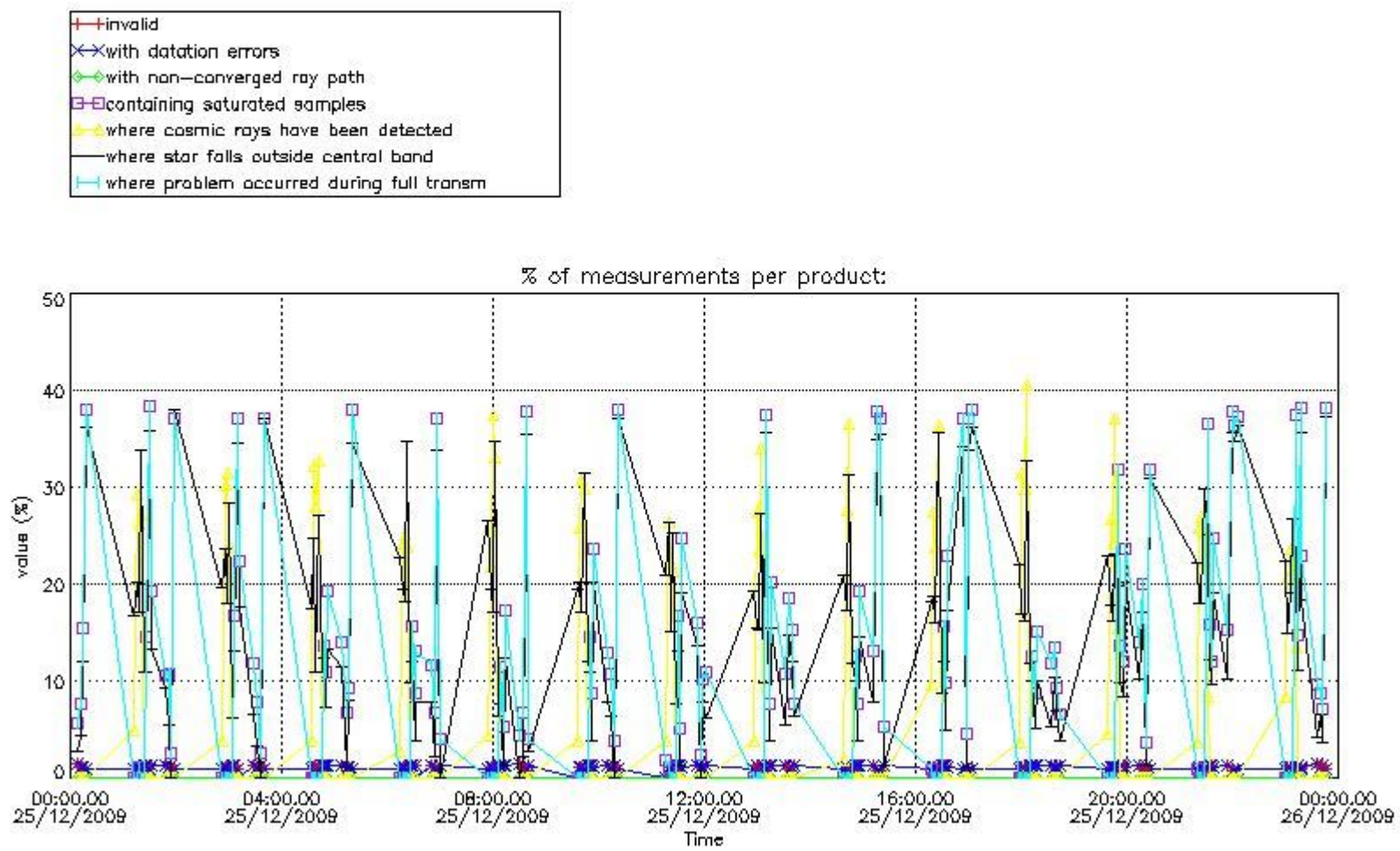
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

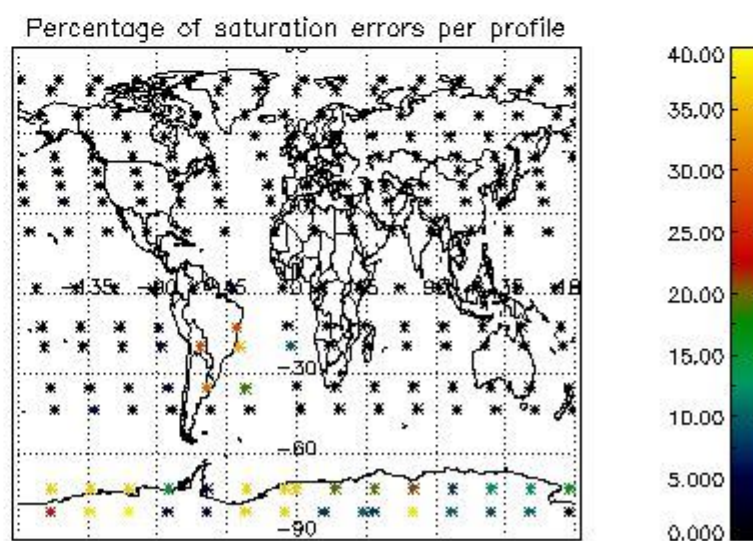
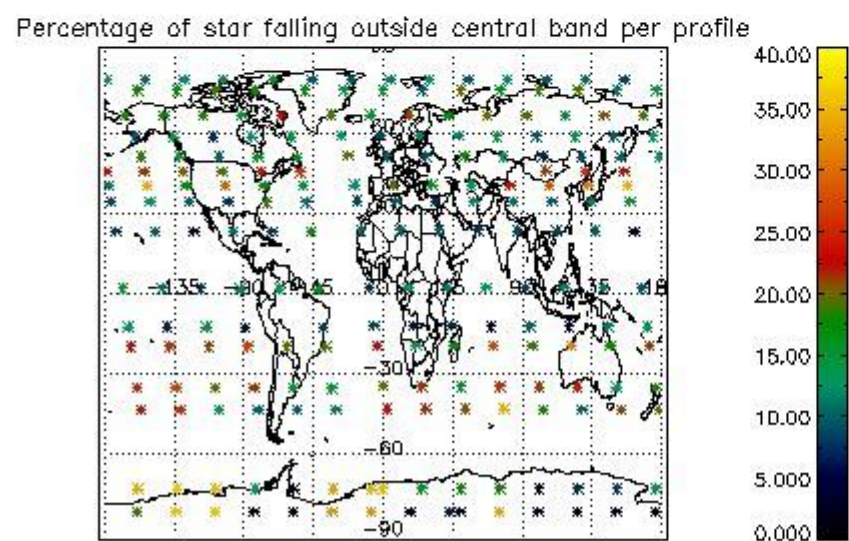
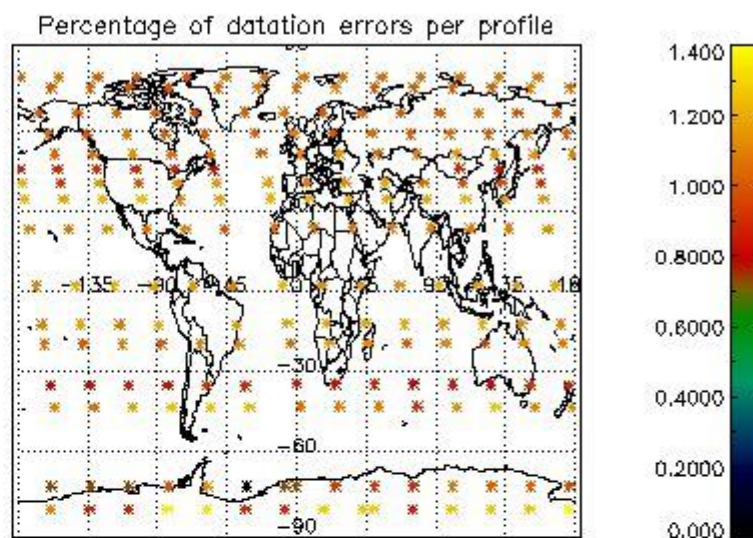
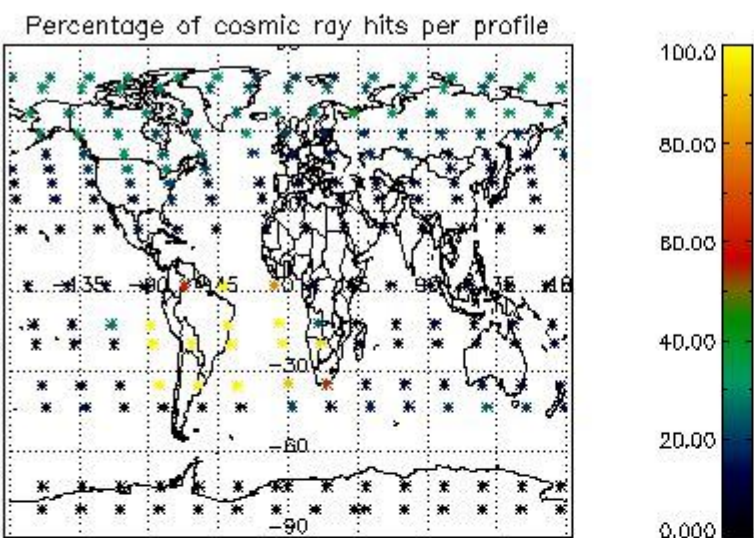


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

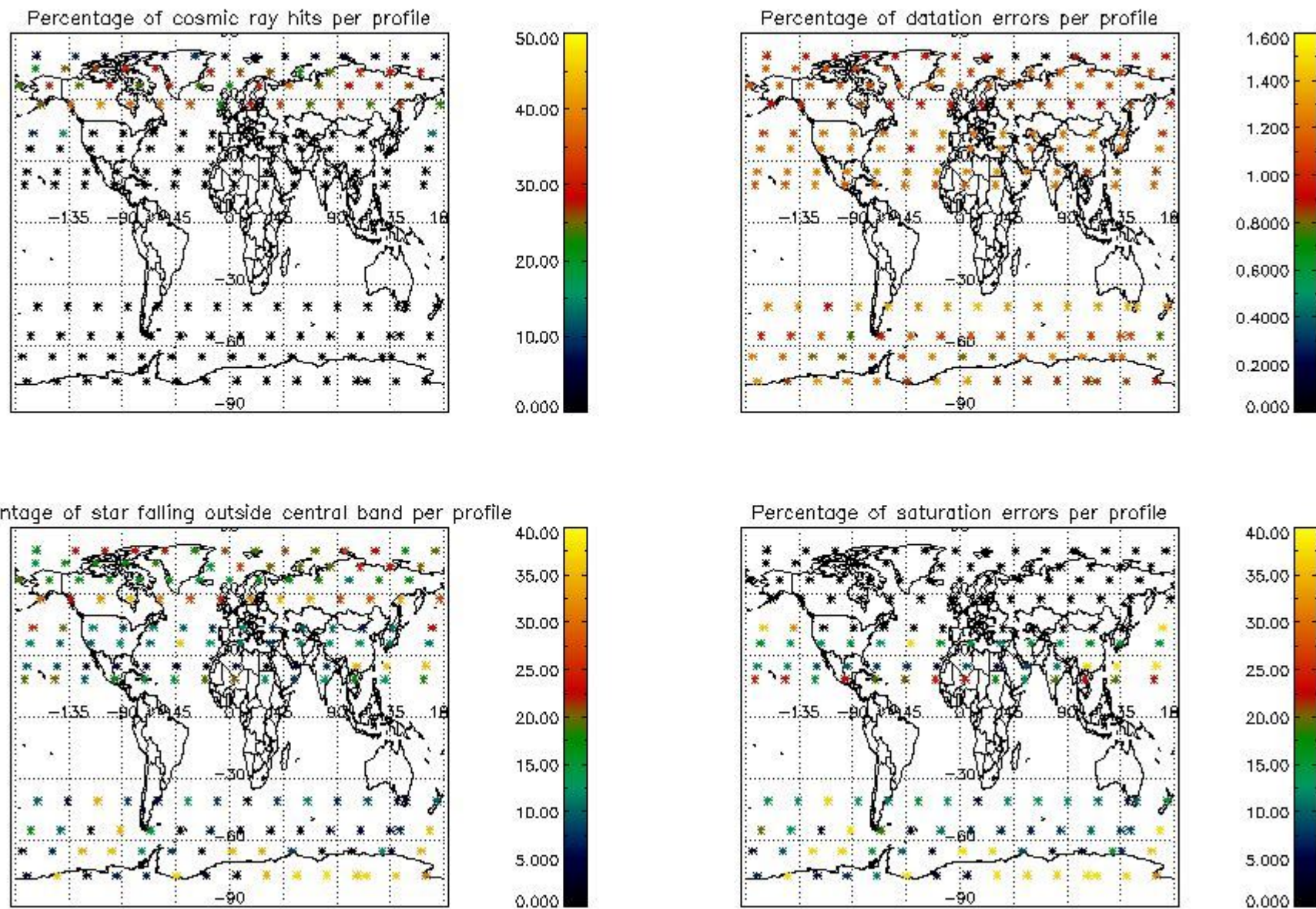


4.2 Plot quality information per product coming from level 1b processing (world map)

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

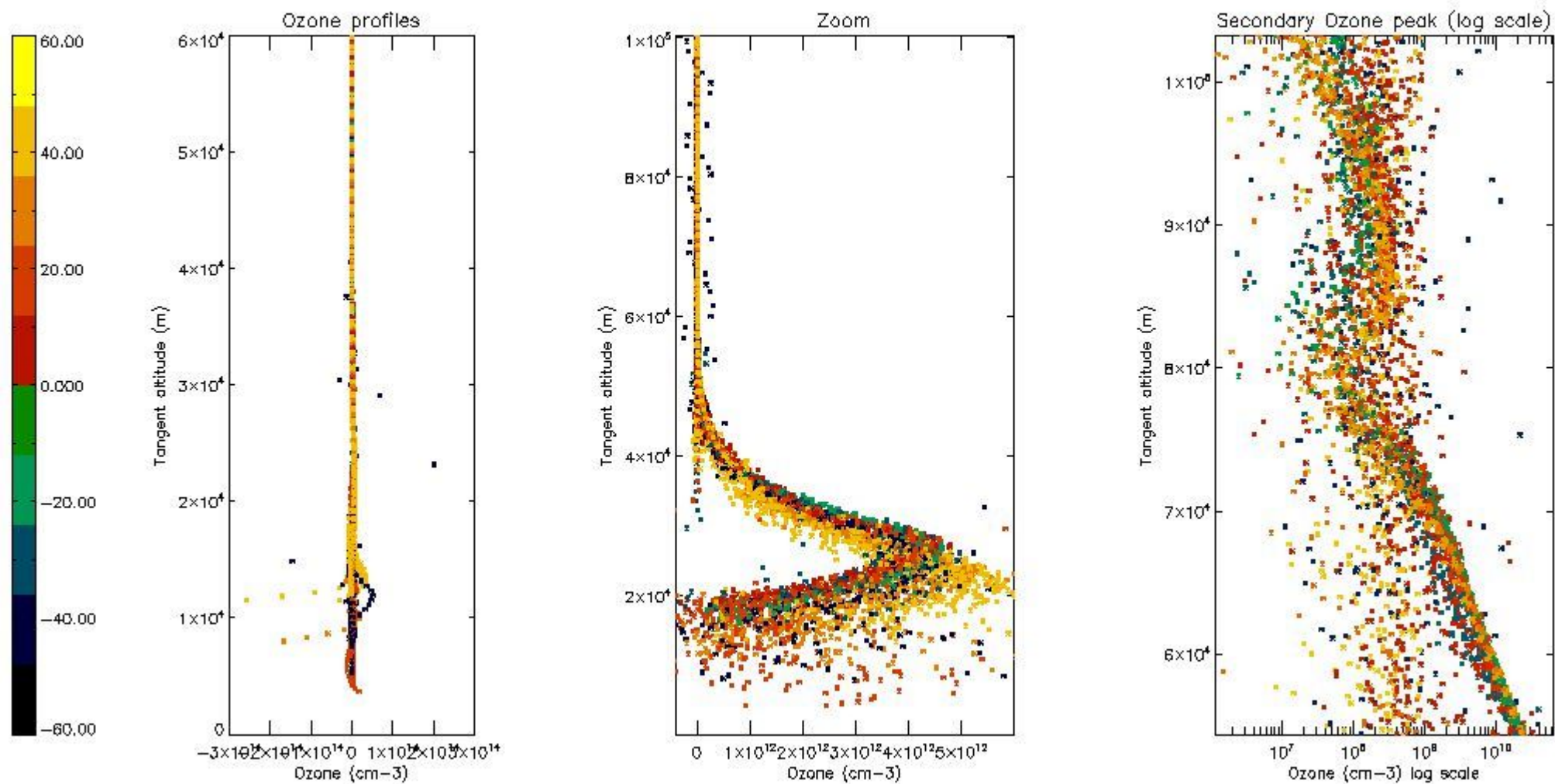
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	34
STD < 20	15

STD < 10	10
STD < 5	4

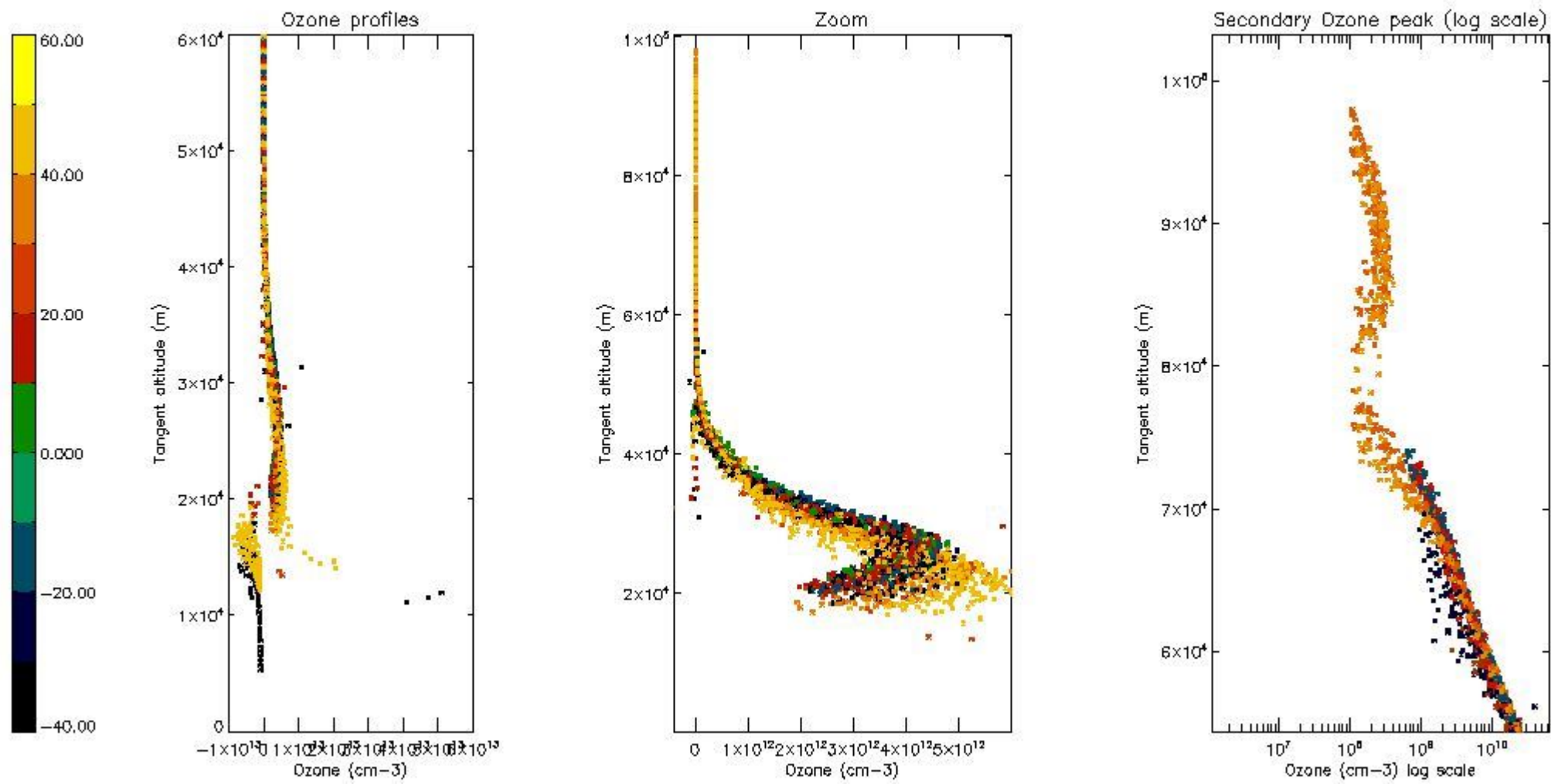
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



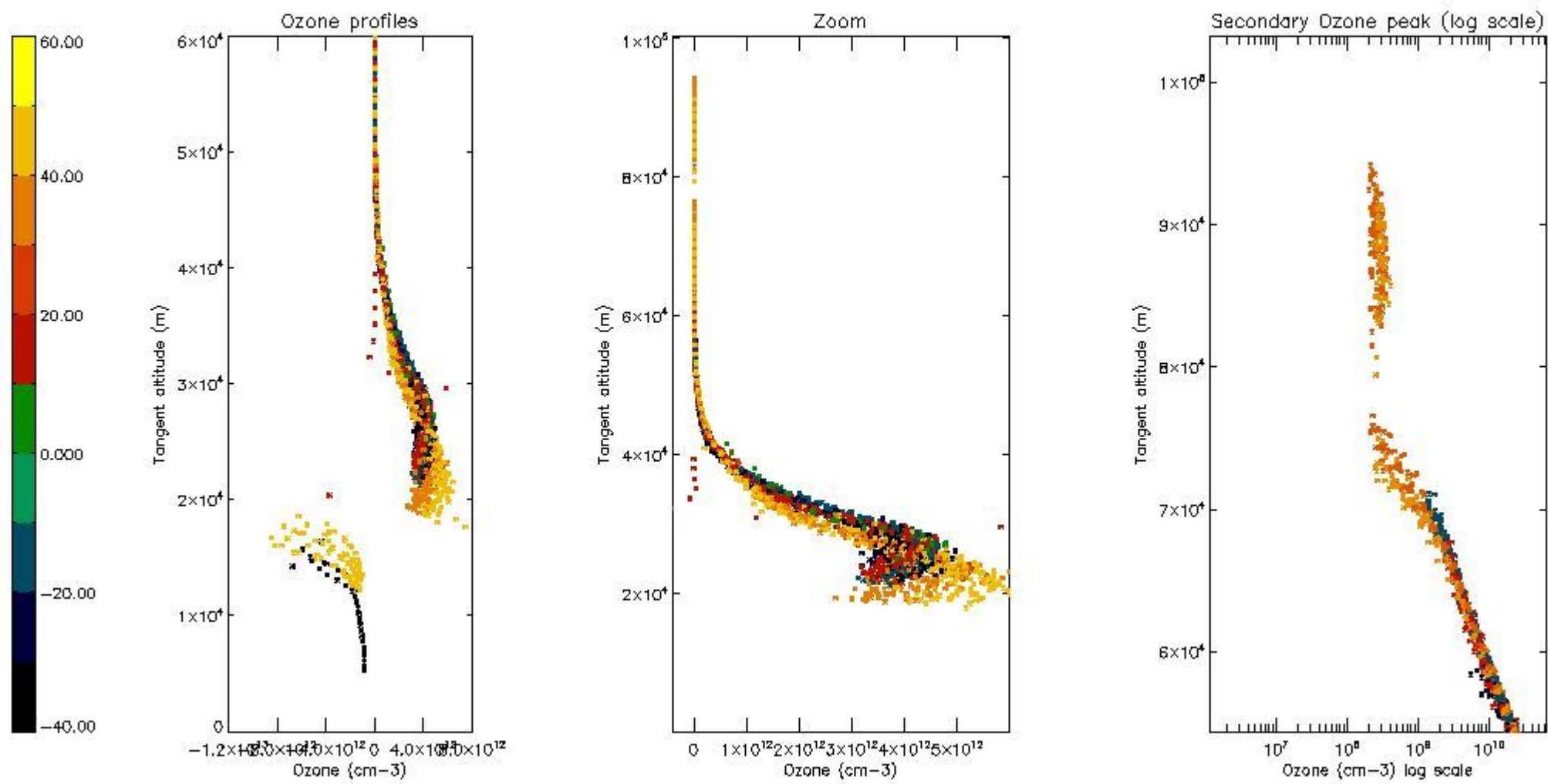
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



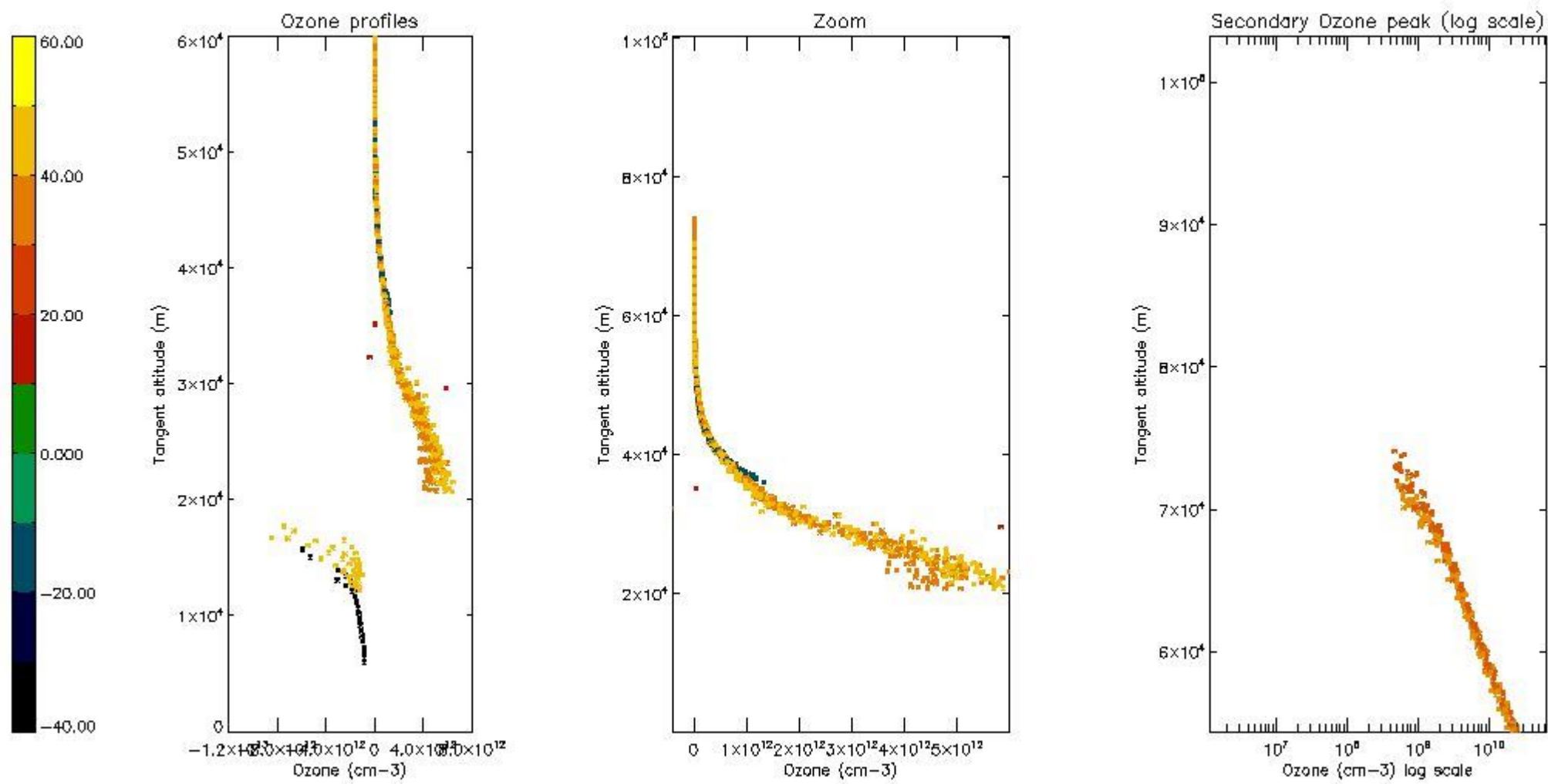
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



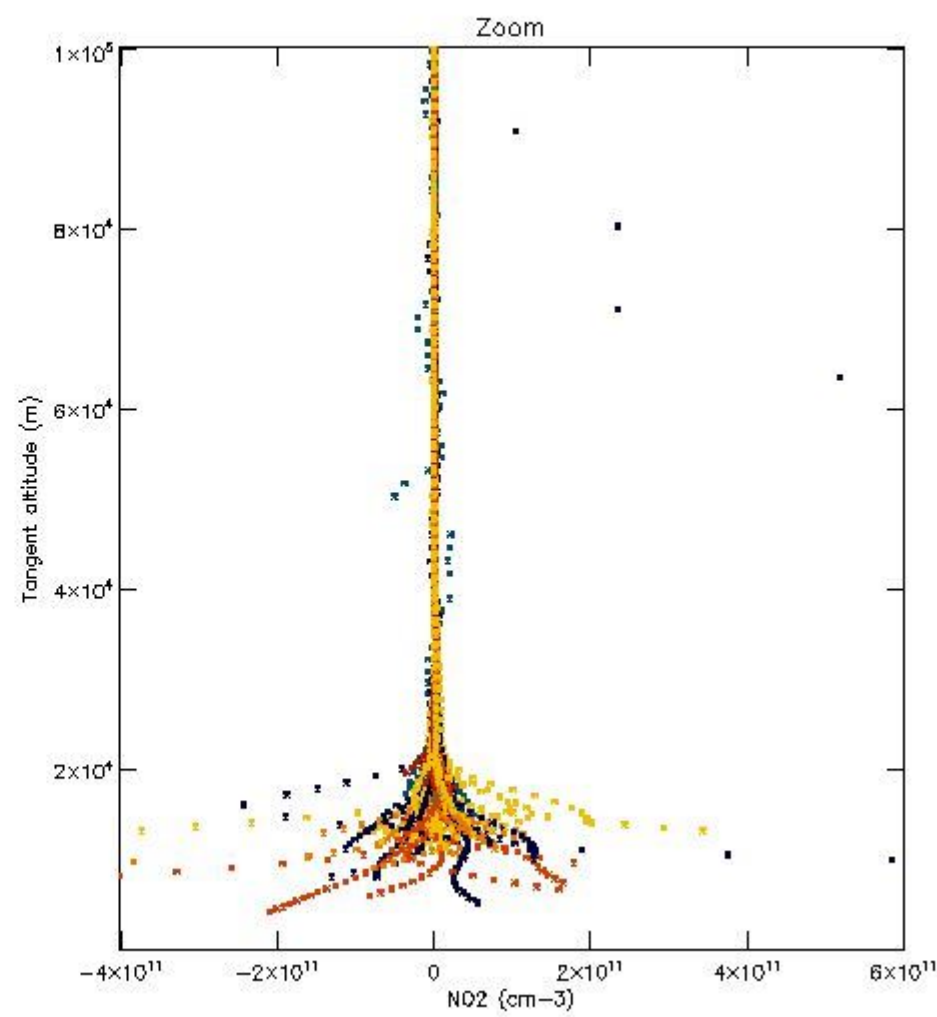
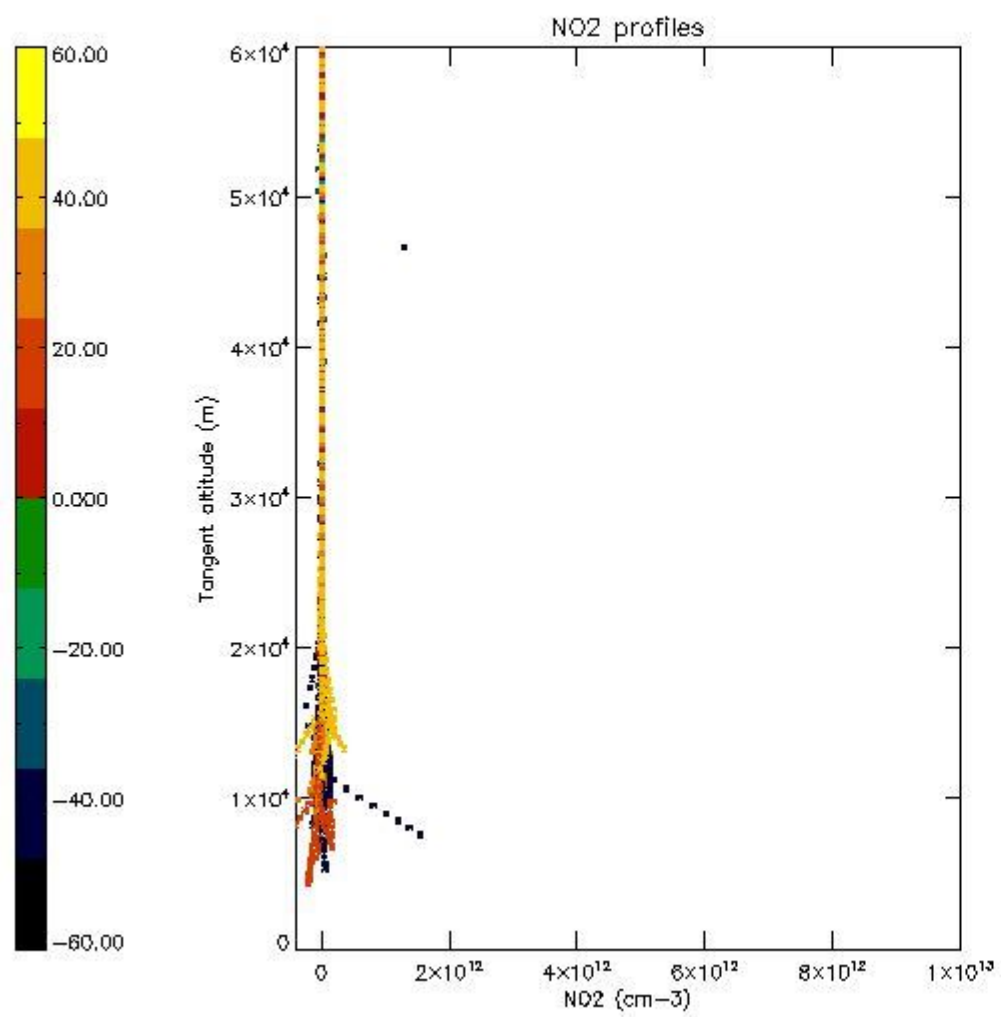
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



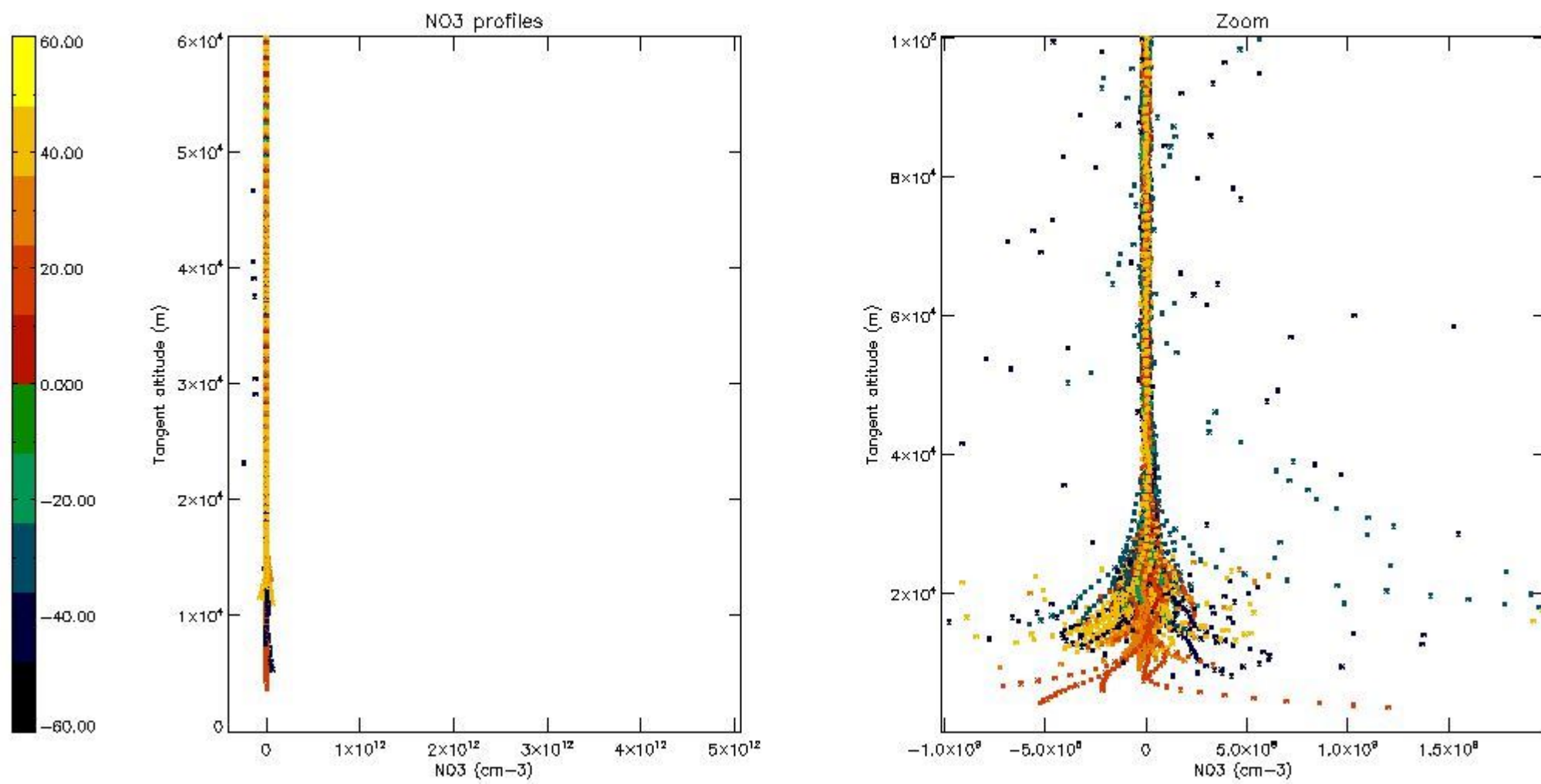
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



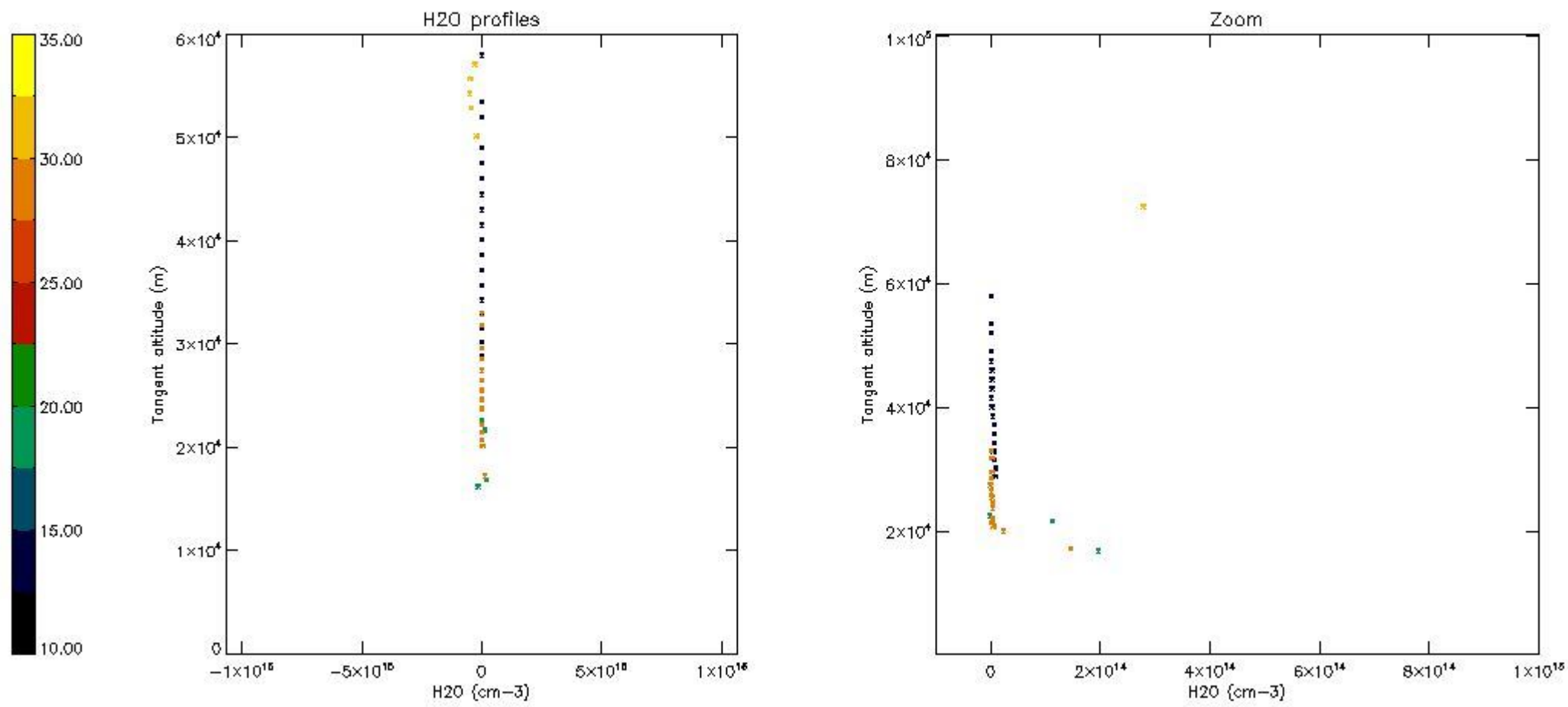
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

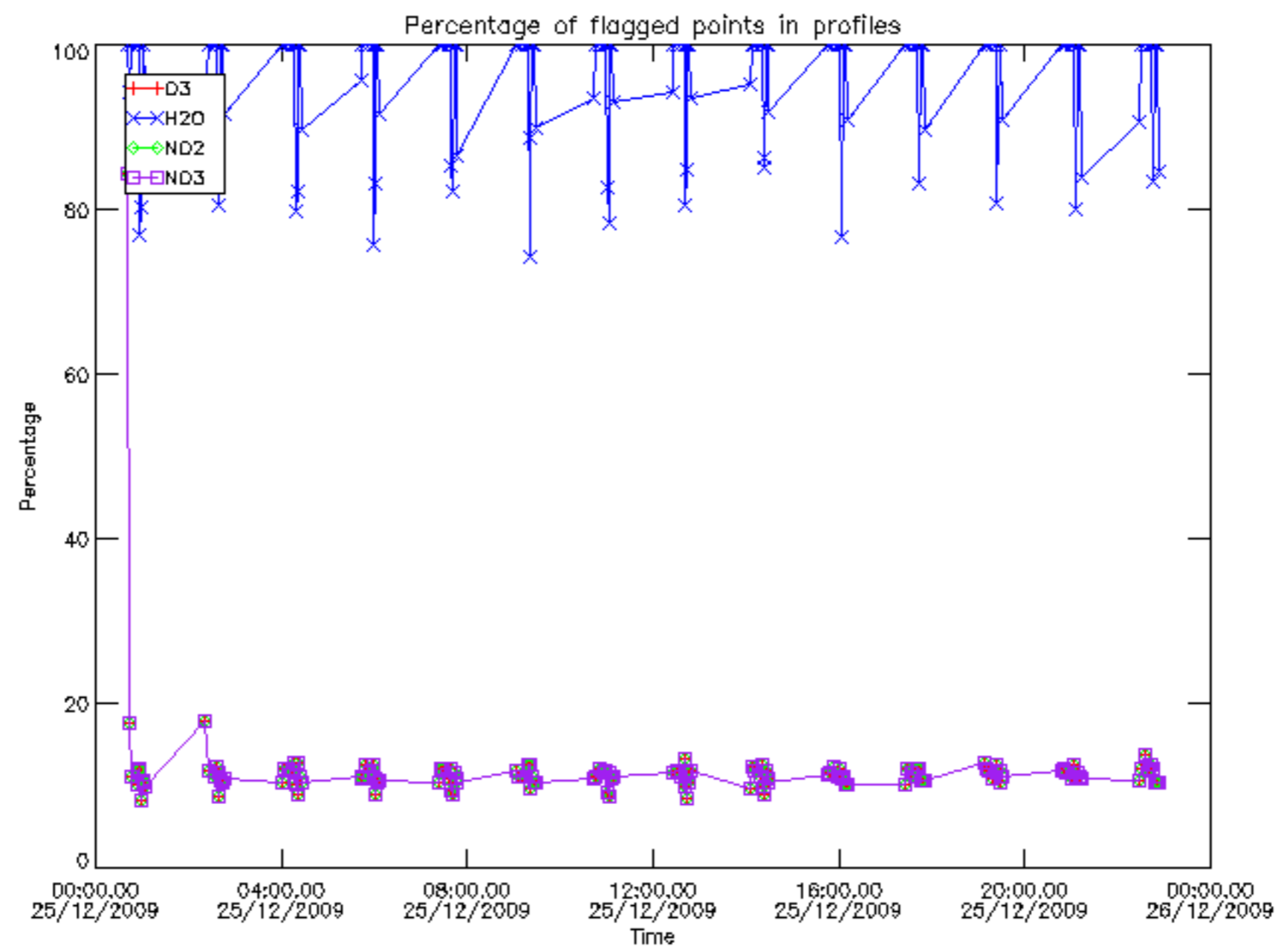
The colorbar represents the latitude.



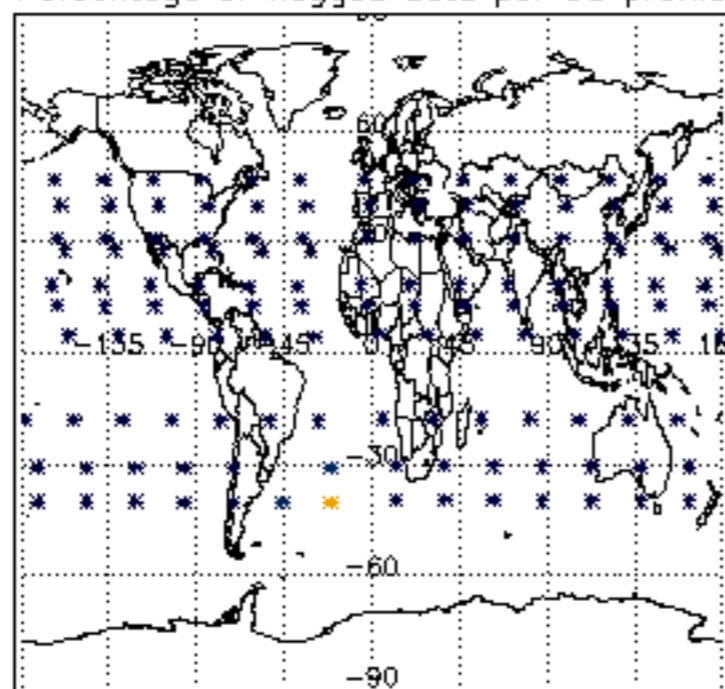
6. Auxiliary Data Files used for the production reported in section 2

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.

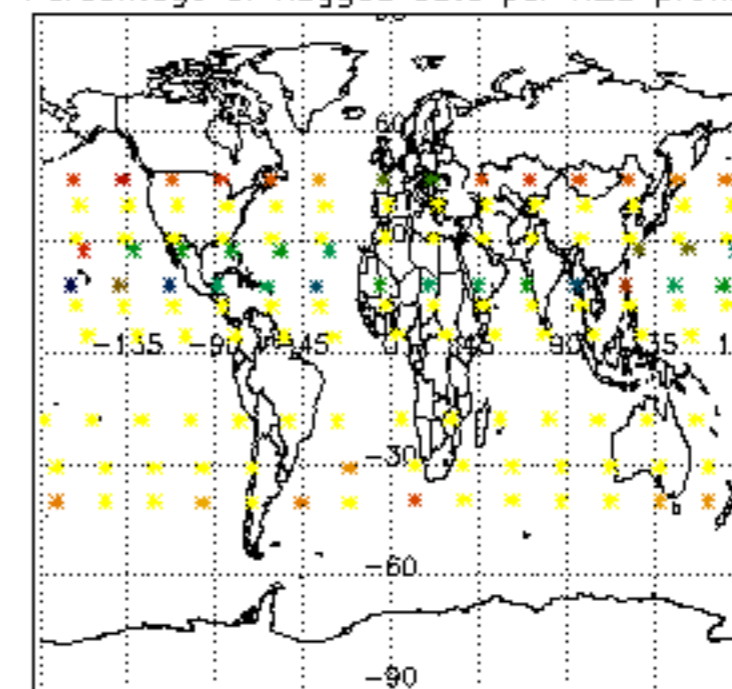
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	25-DEC-2009 00:07:08
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	25-DEC-2009 00:07:08
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	25-DEC-2009 00:07:08



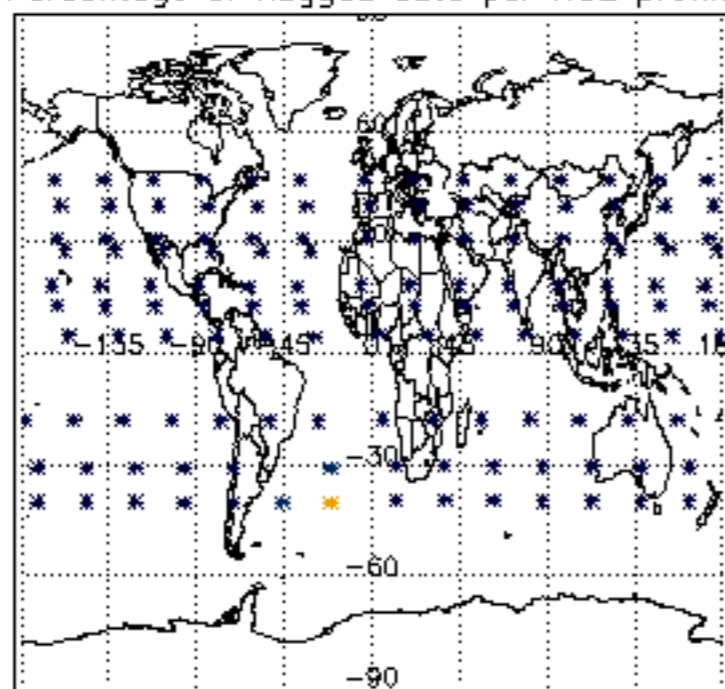
Percentage of flagged data per D3 profile



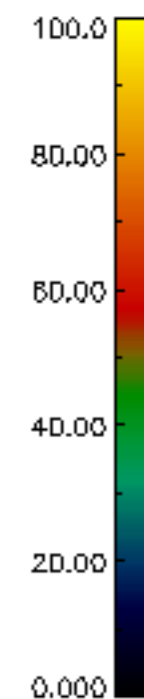
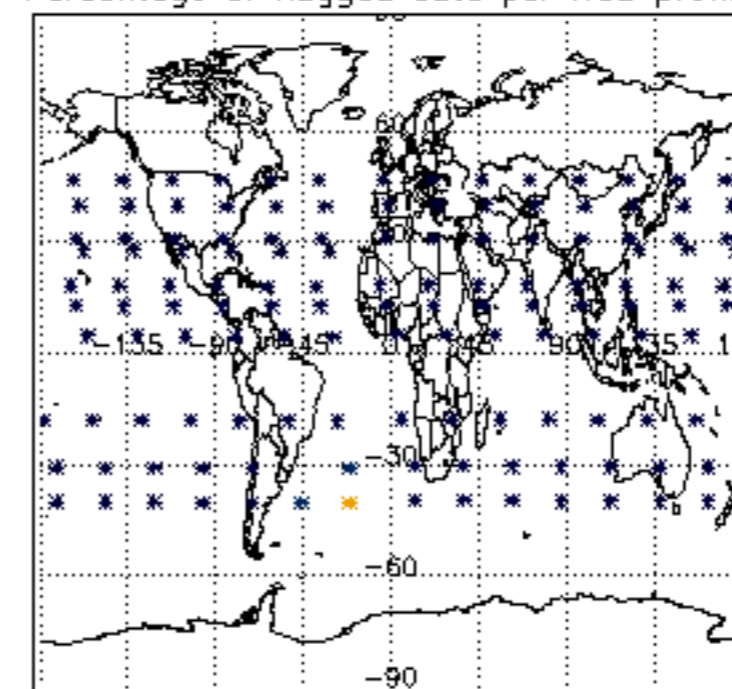
Percentage of flagged data per H2O profile

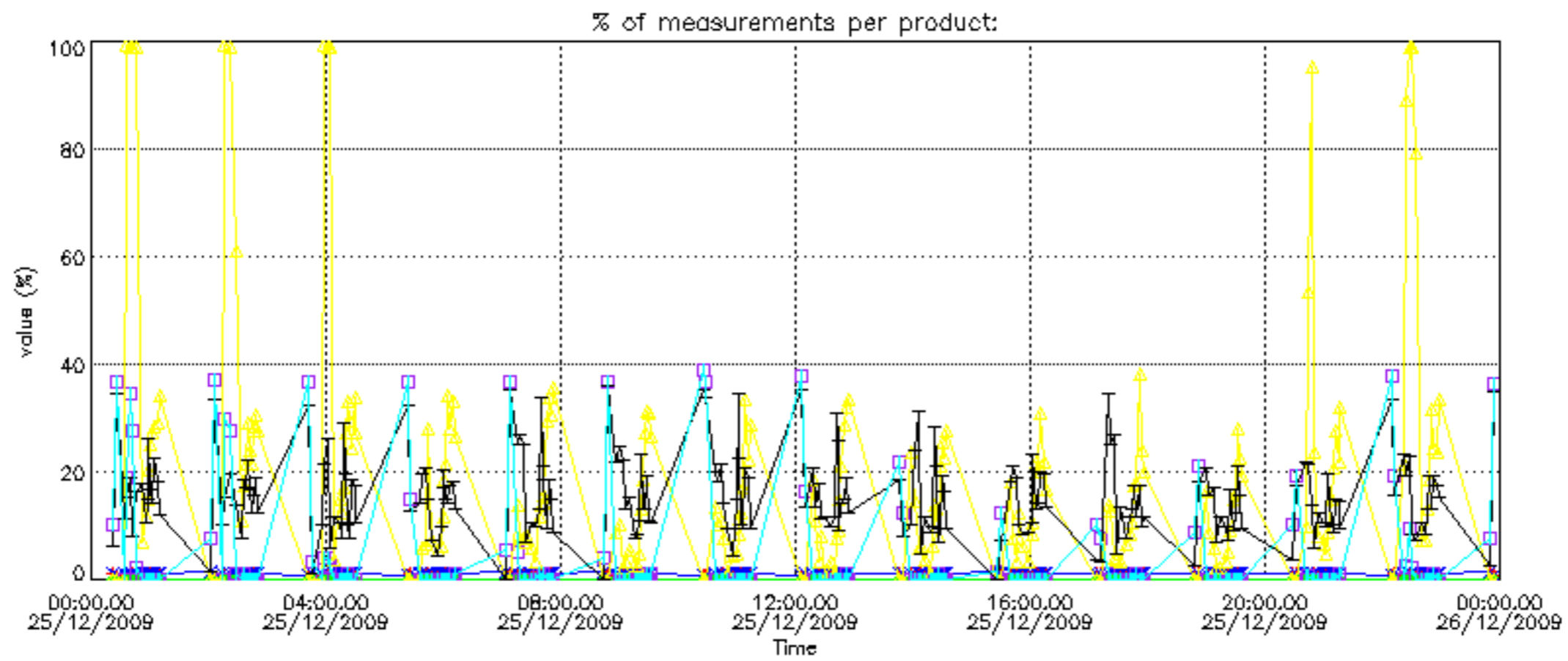
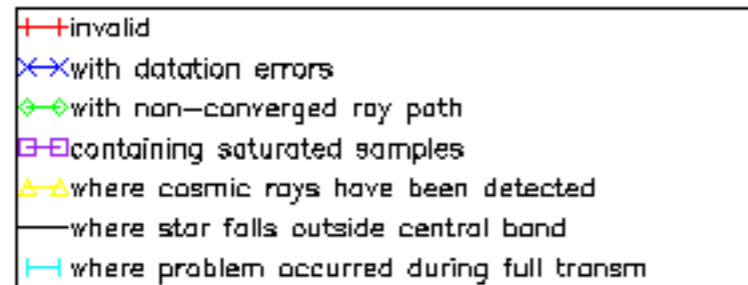


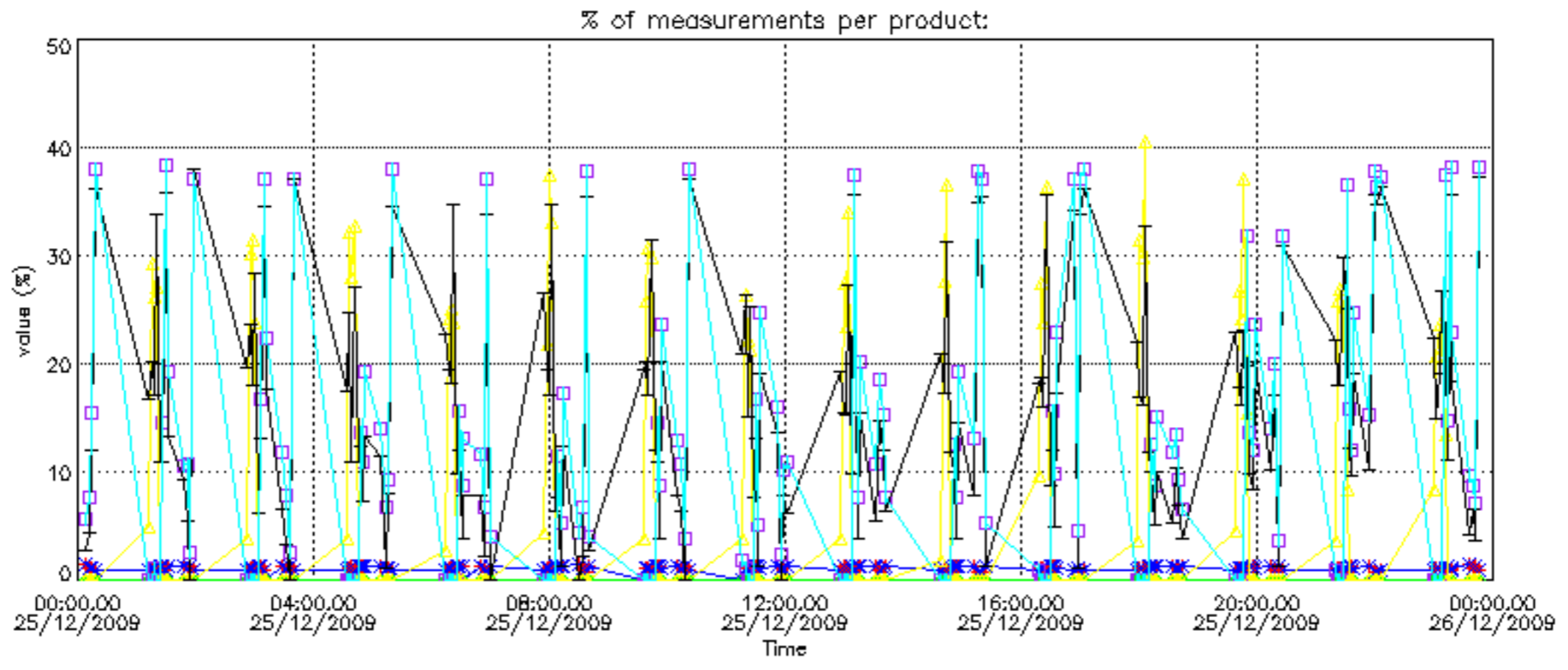
Percentage of flagged data per NO2 profile



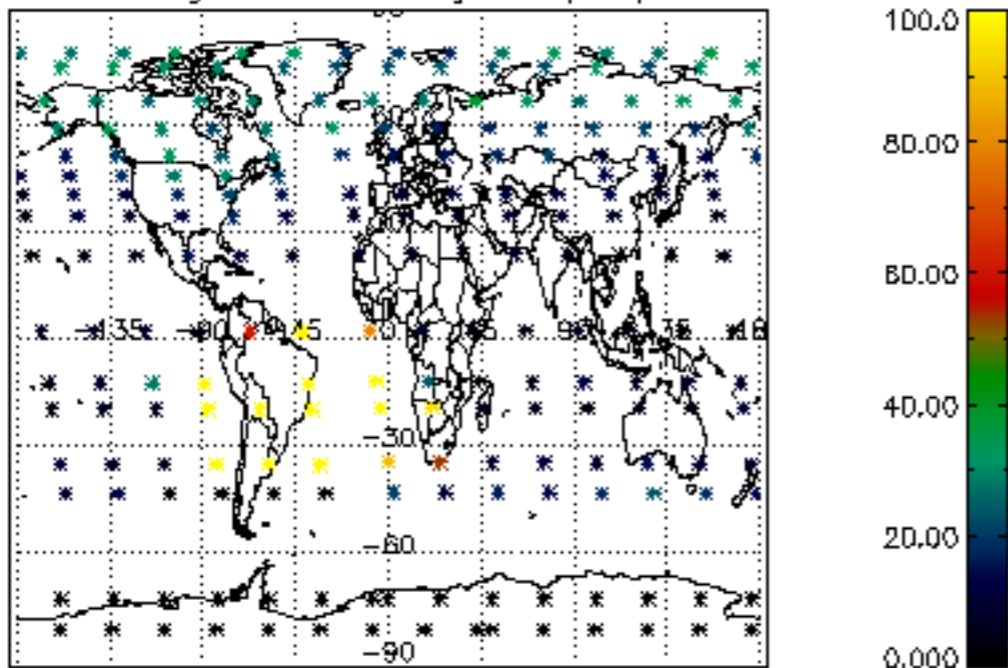
Percentage of flagged data per NO3 profile



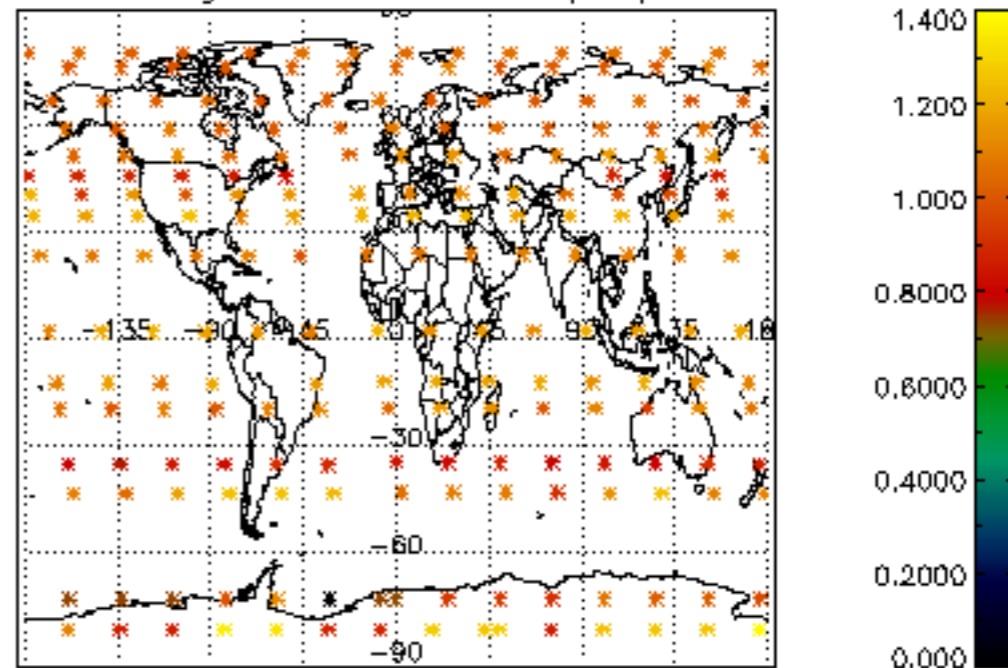




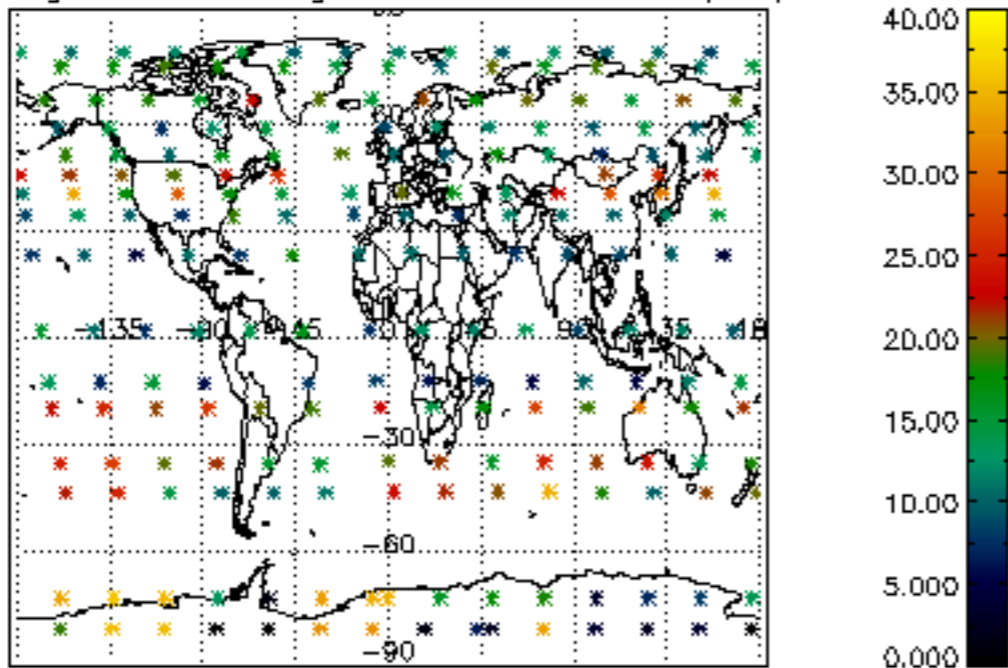
Percentage of cosmic ray hits per profile



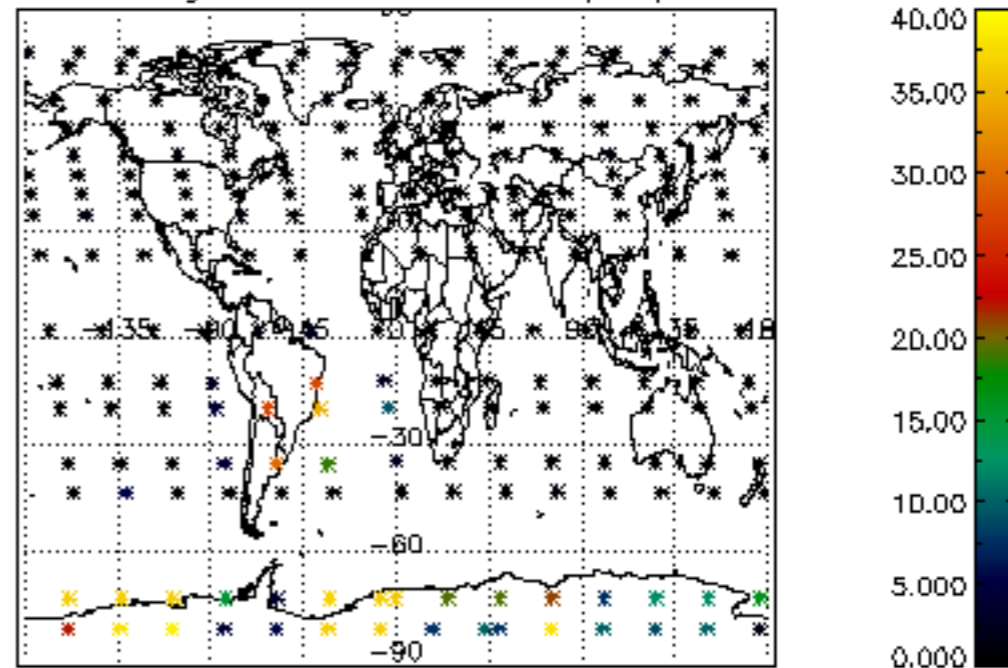
Percentage of datation errors per profile



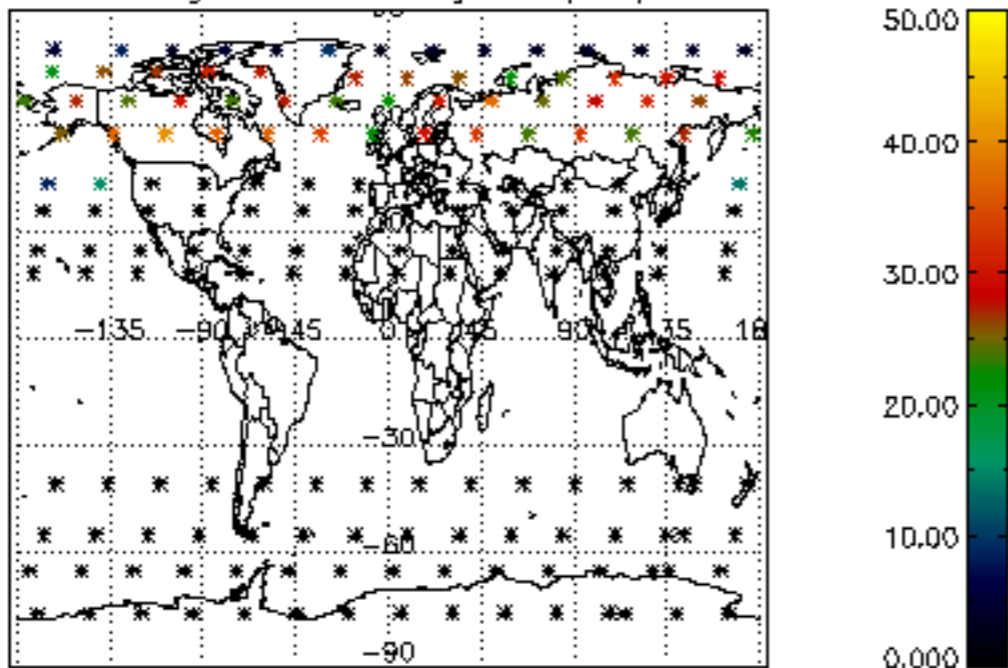
Percentage of star falling outside central band per profile



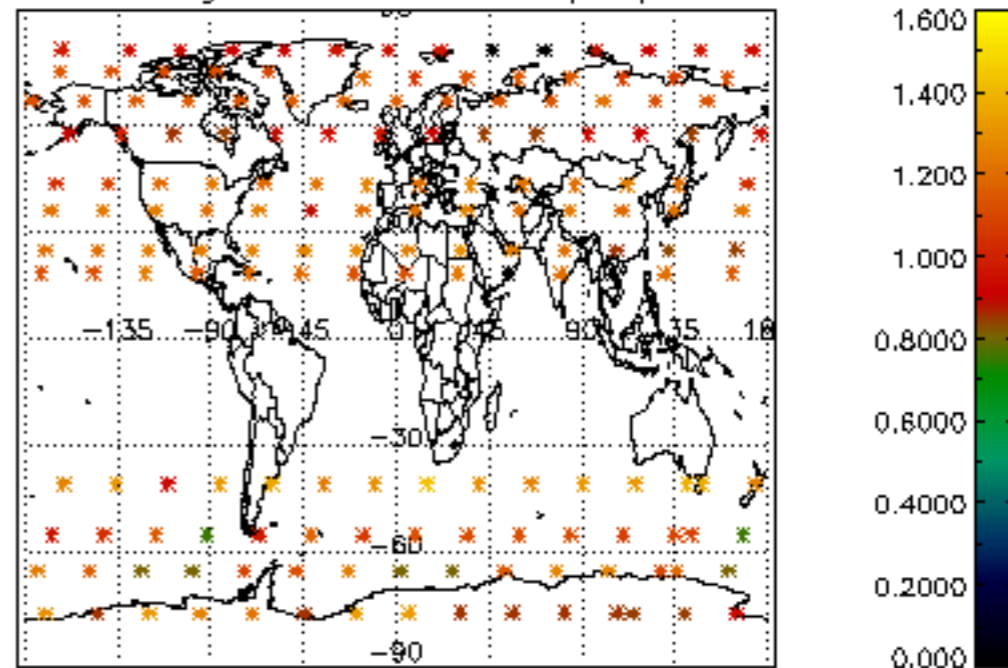
Percentage of saturation errors per profile



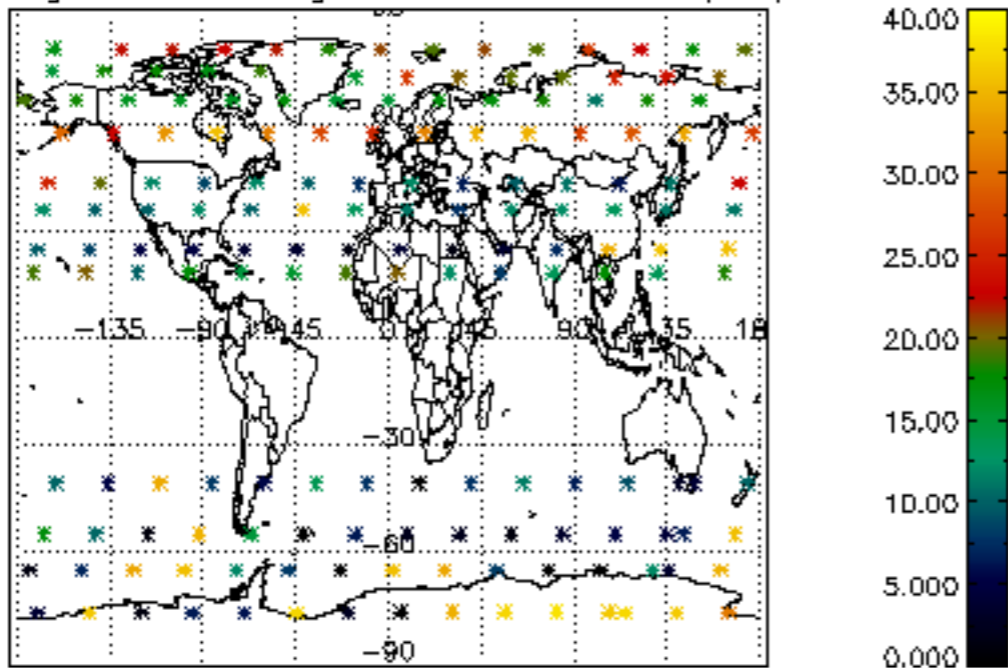
Percentage of cosmic ray hits per profile



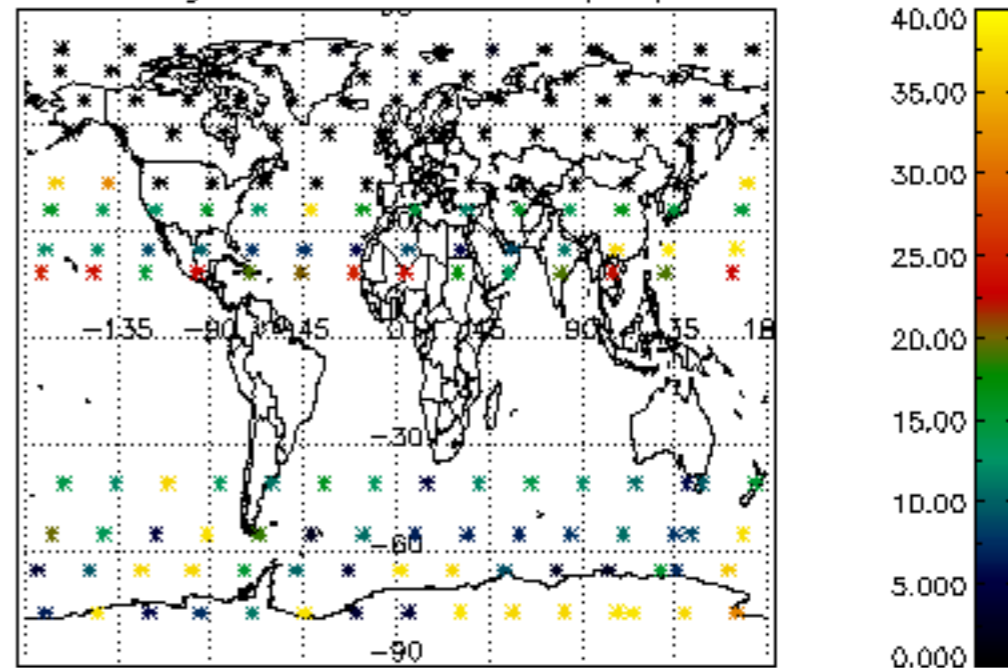
Percentage of datation errors per profile

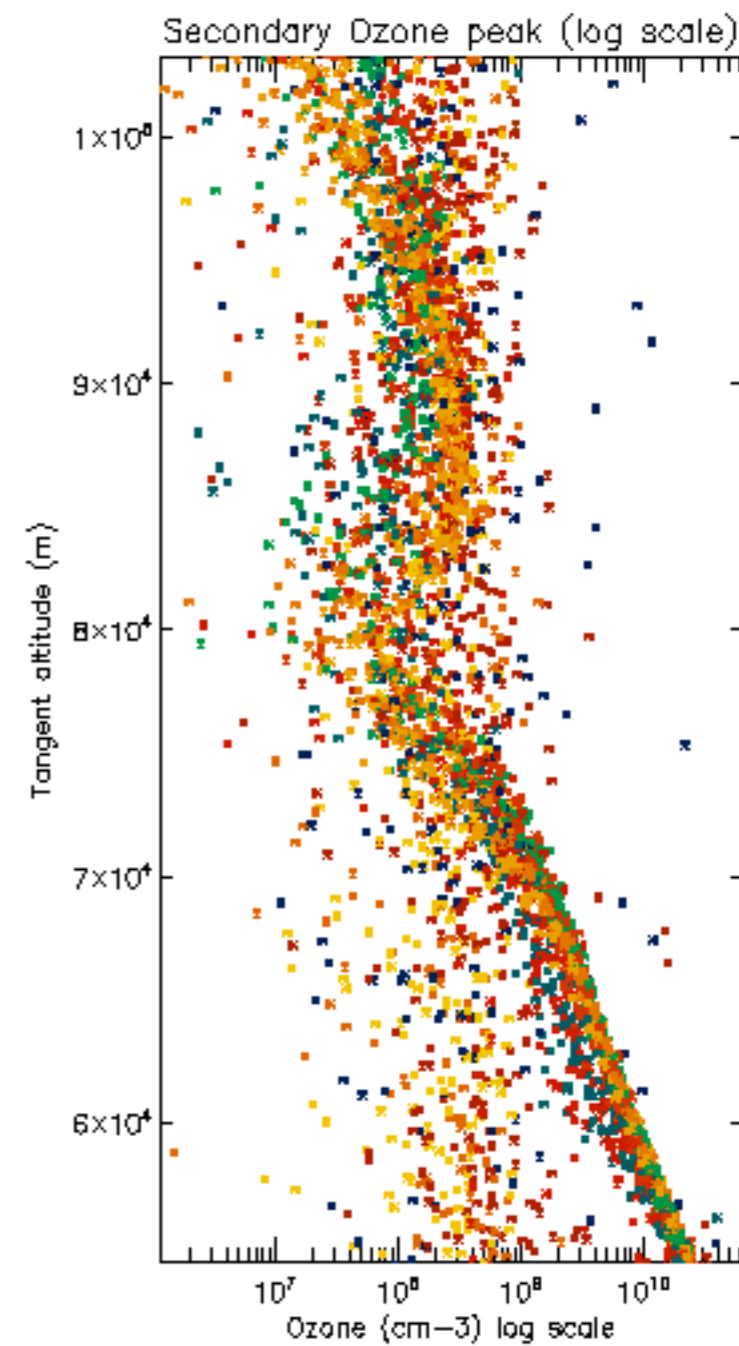
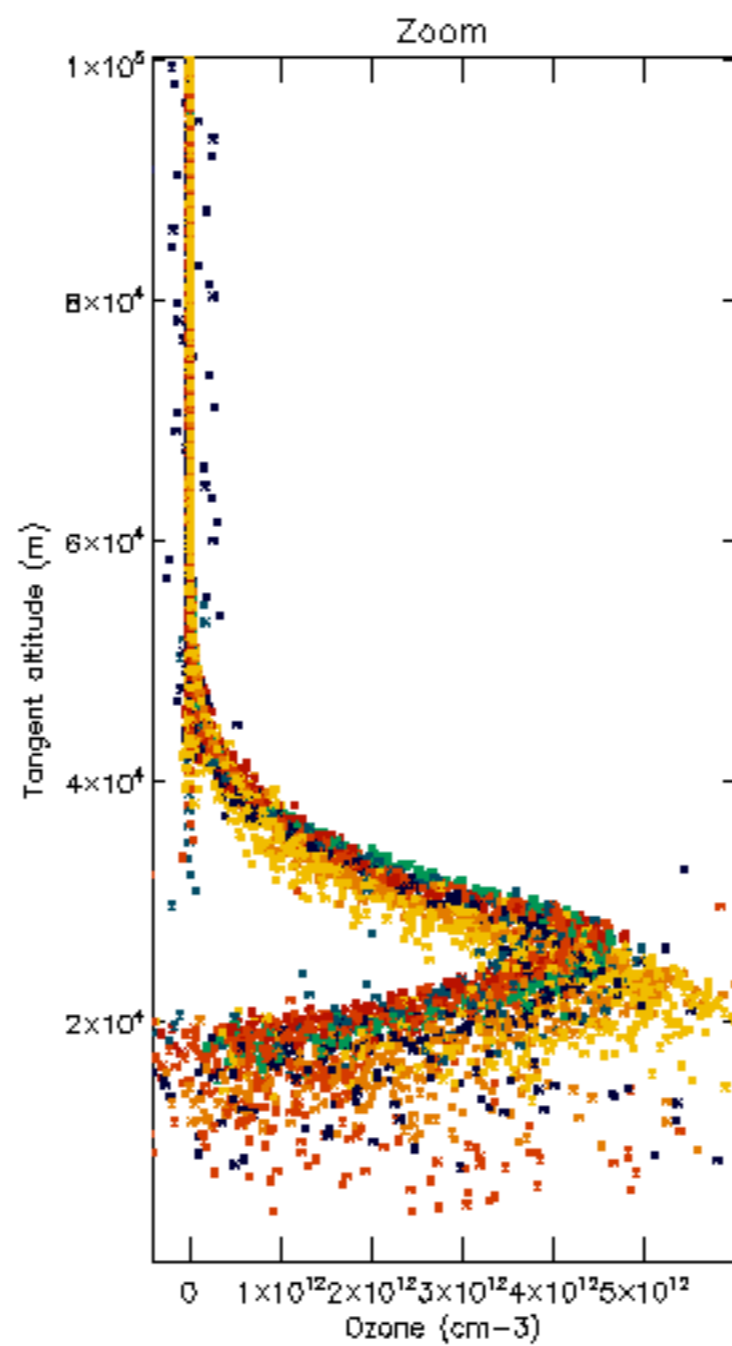
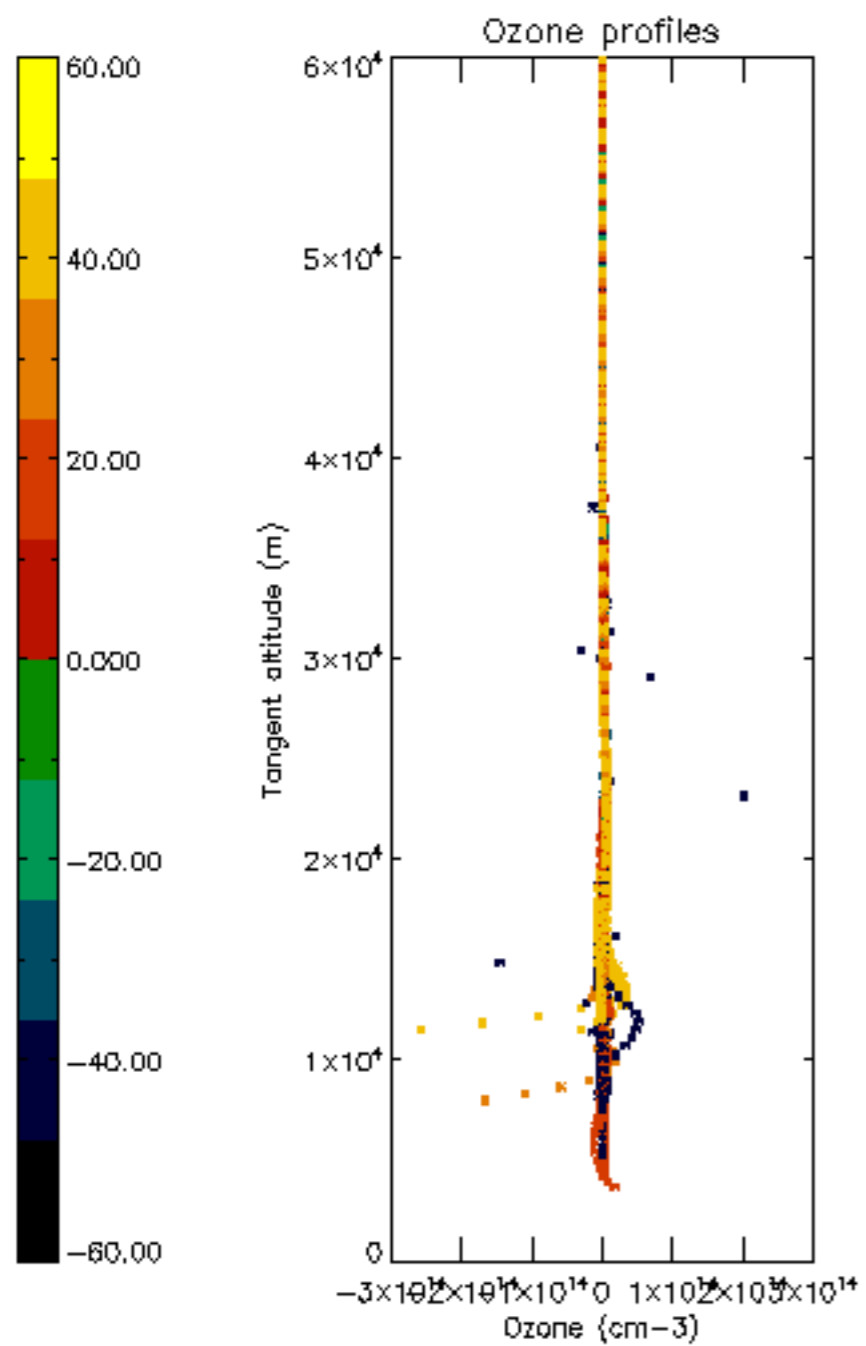


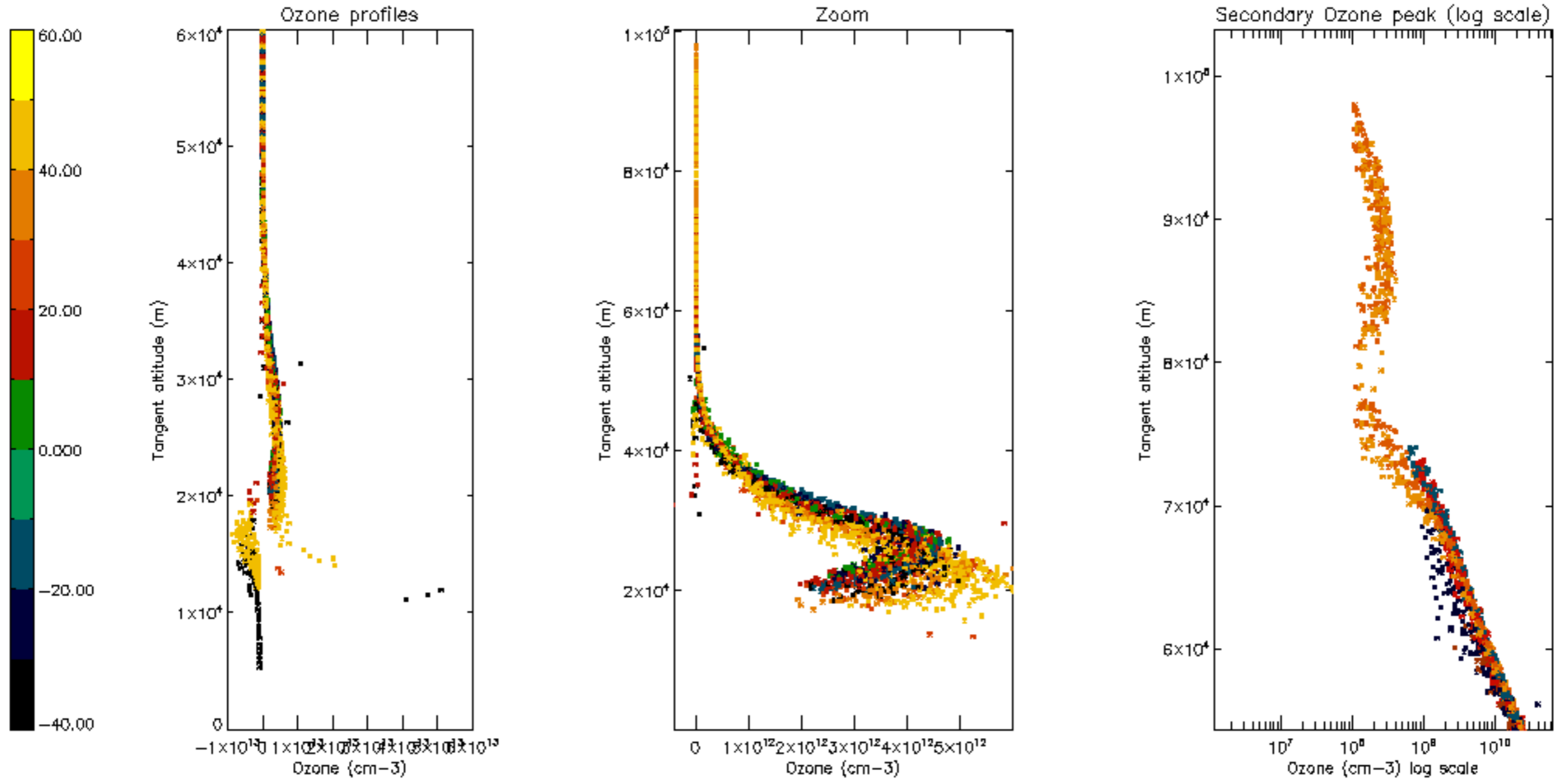
Percentage of star falling outside central band per profile

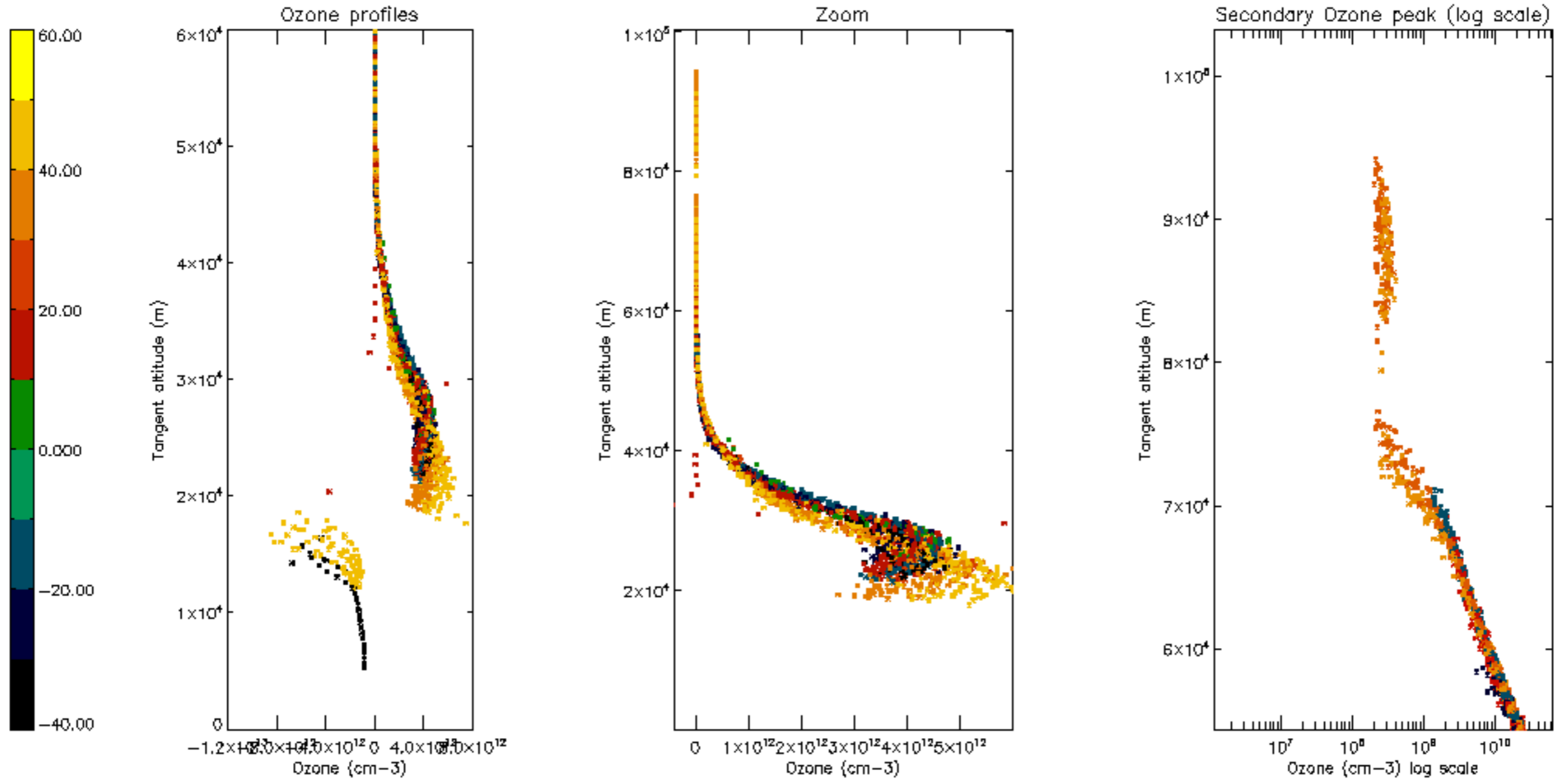


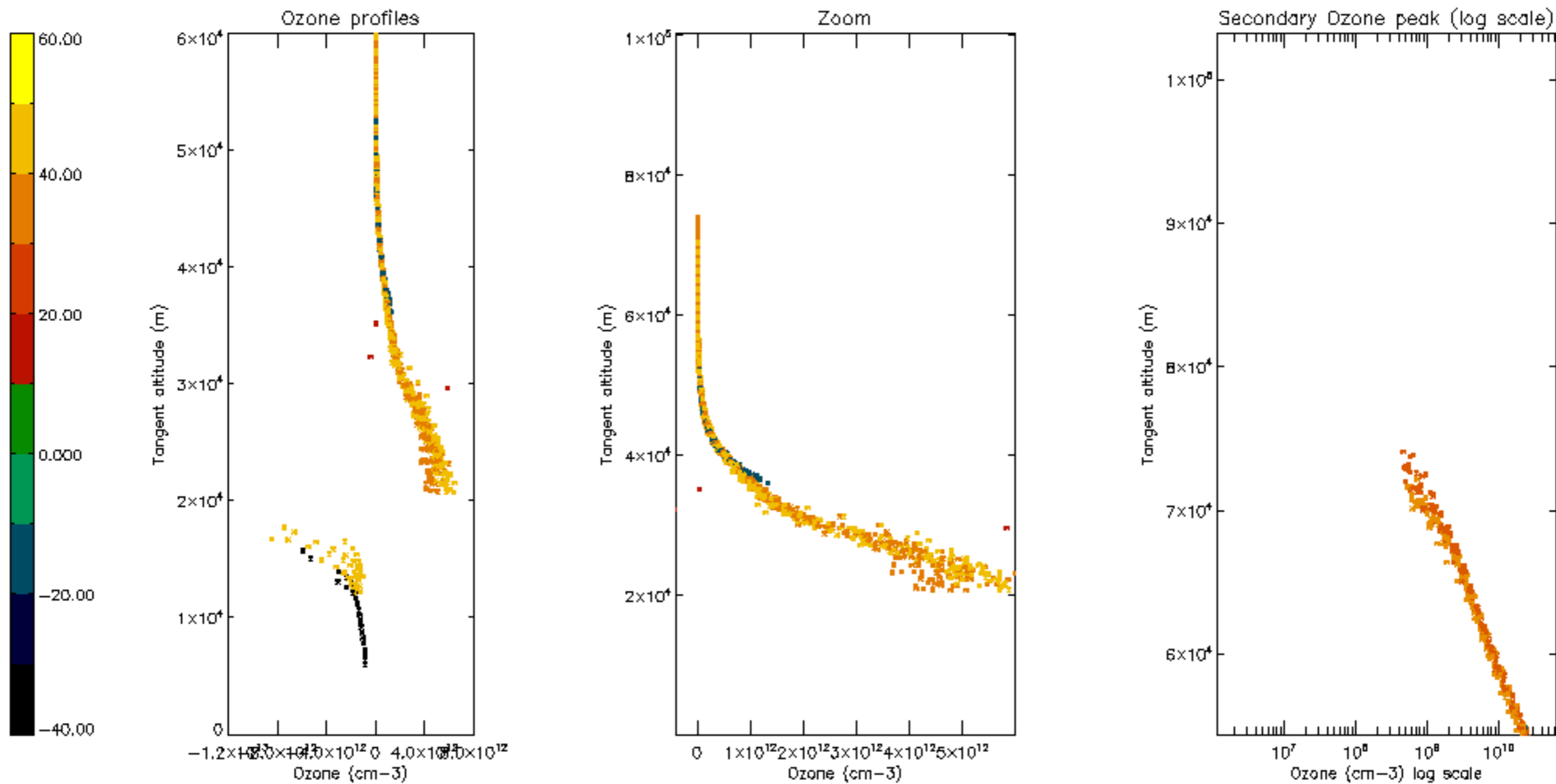
Percentage of saturation errors per profile

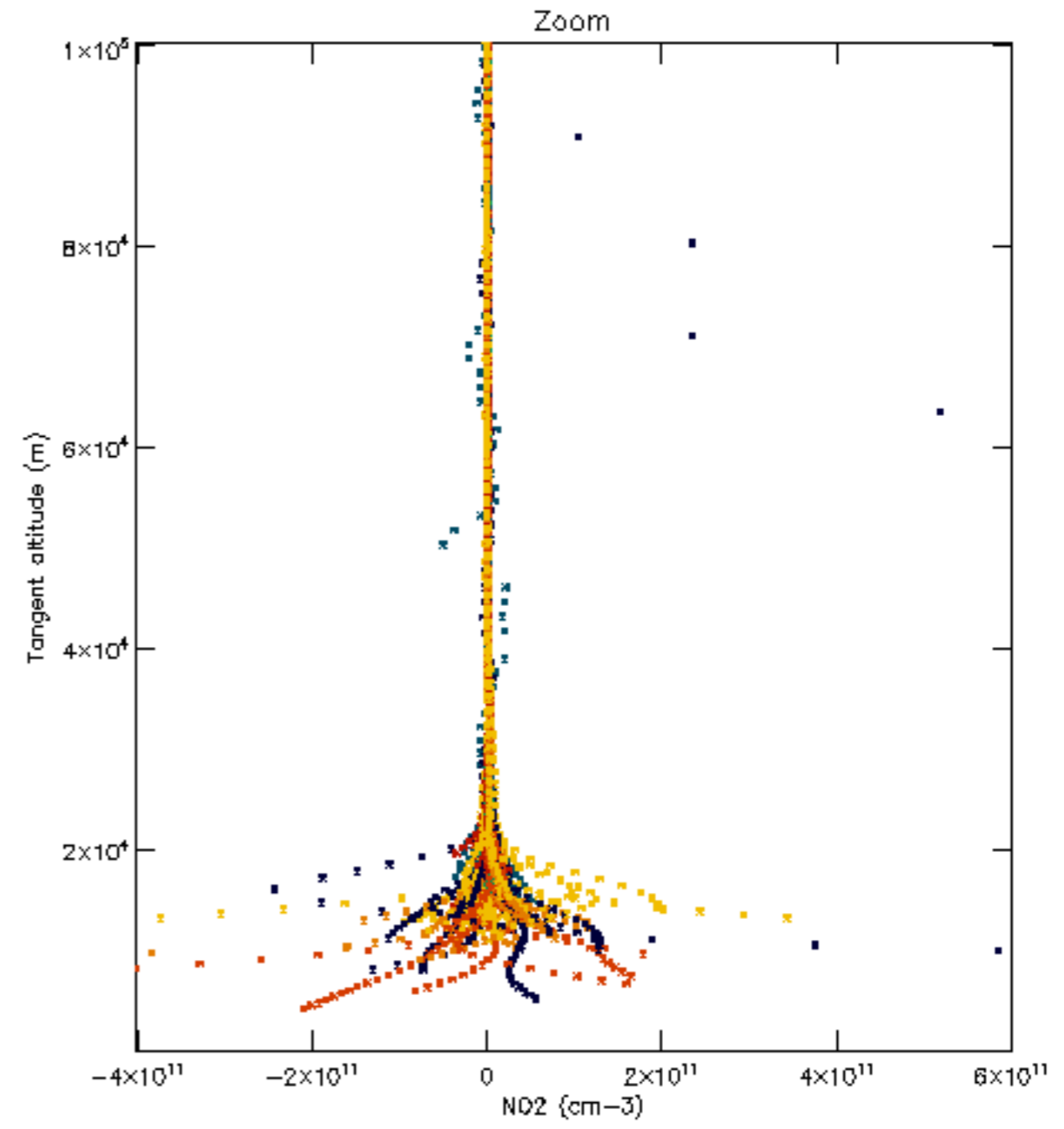
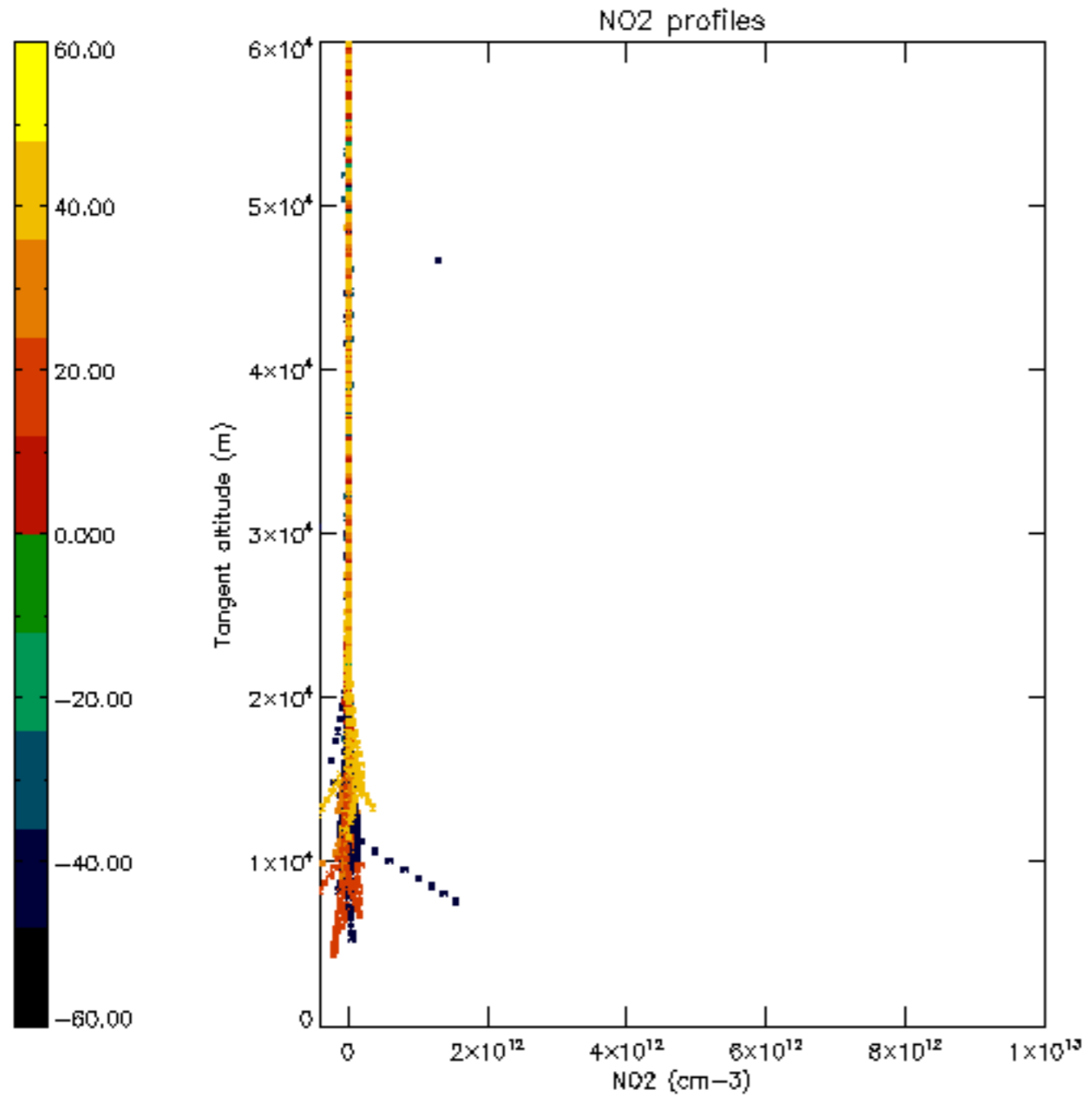


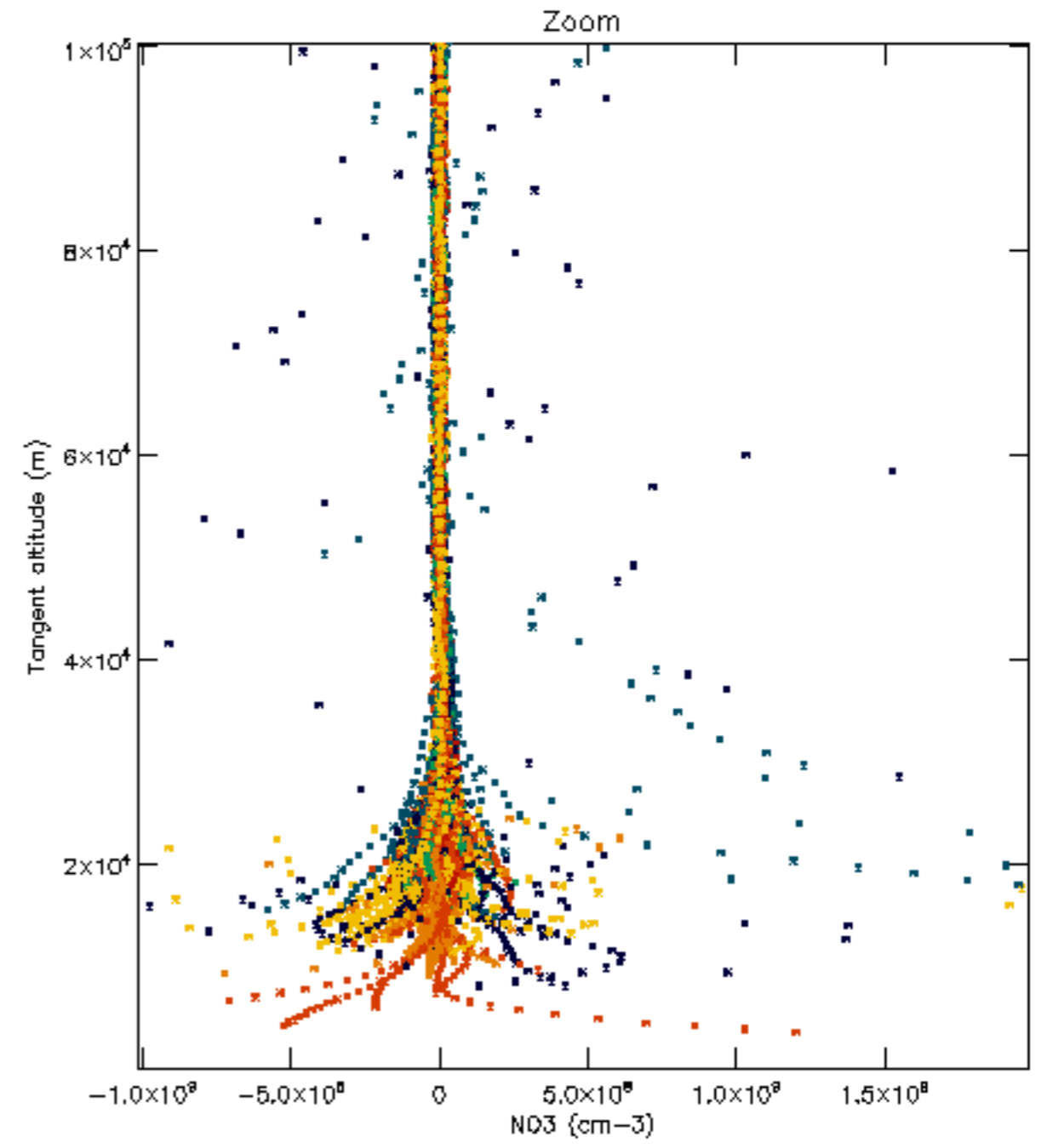
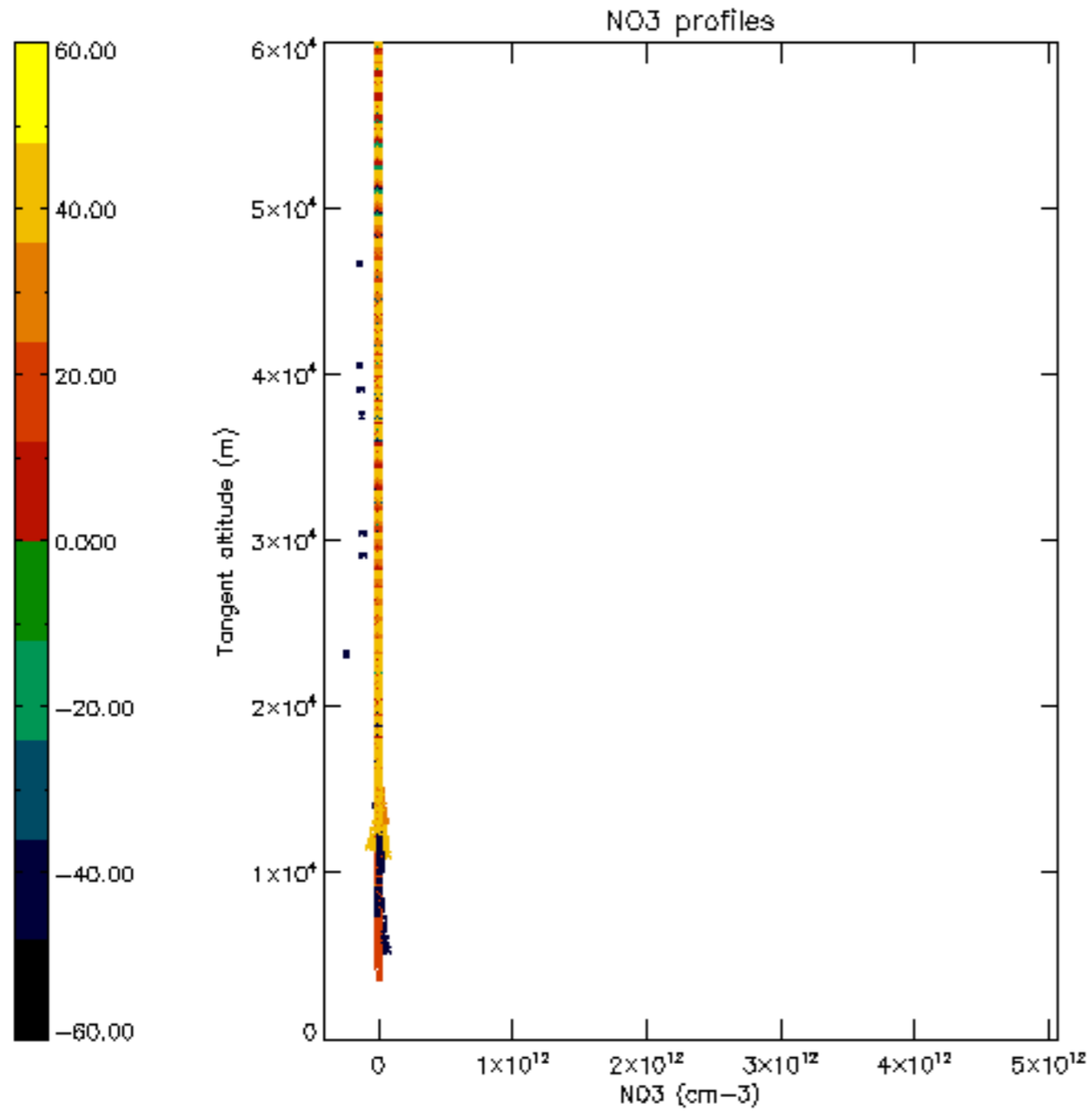


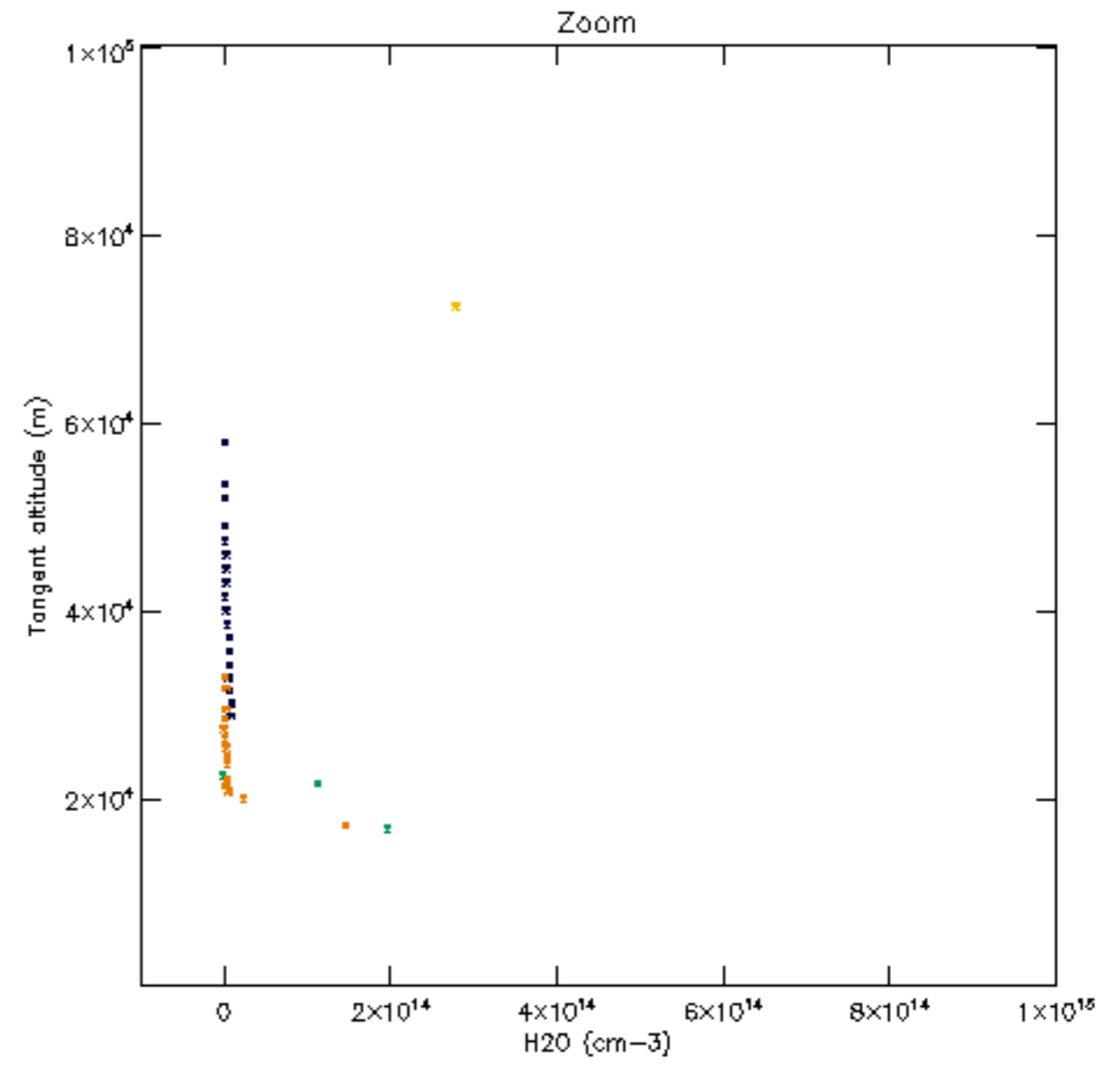
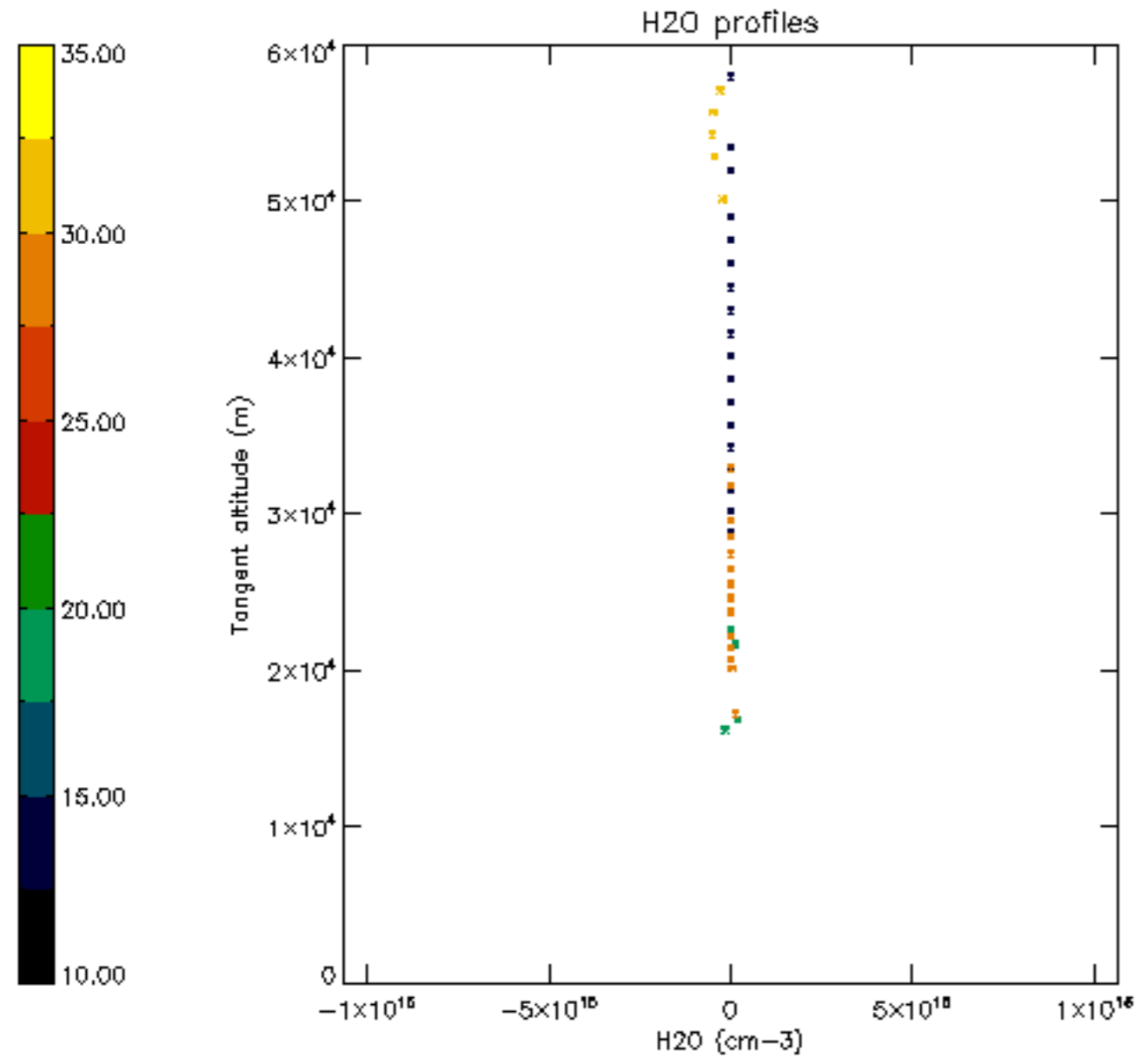


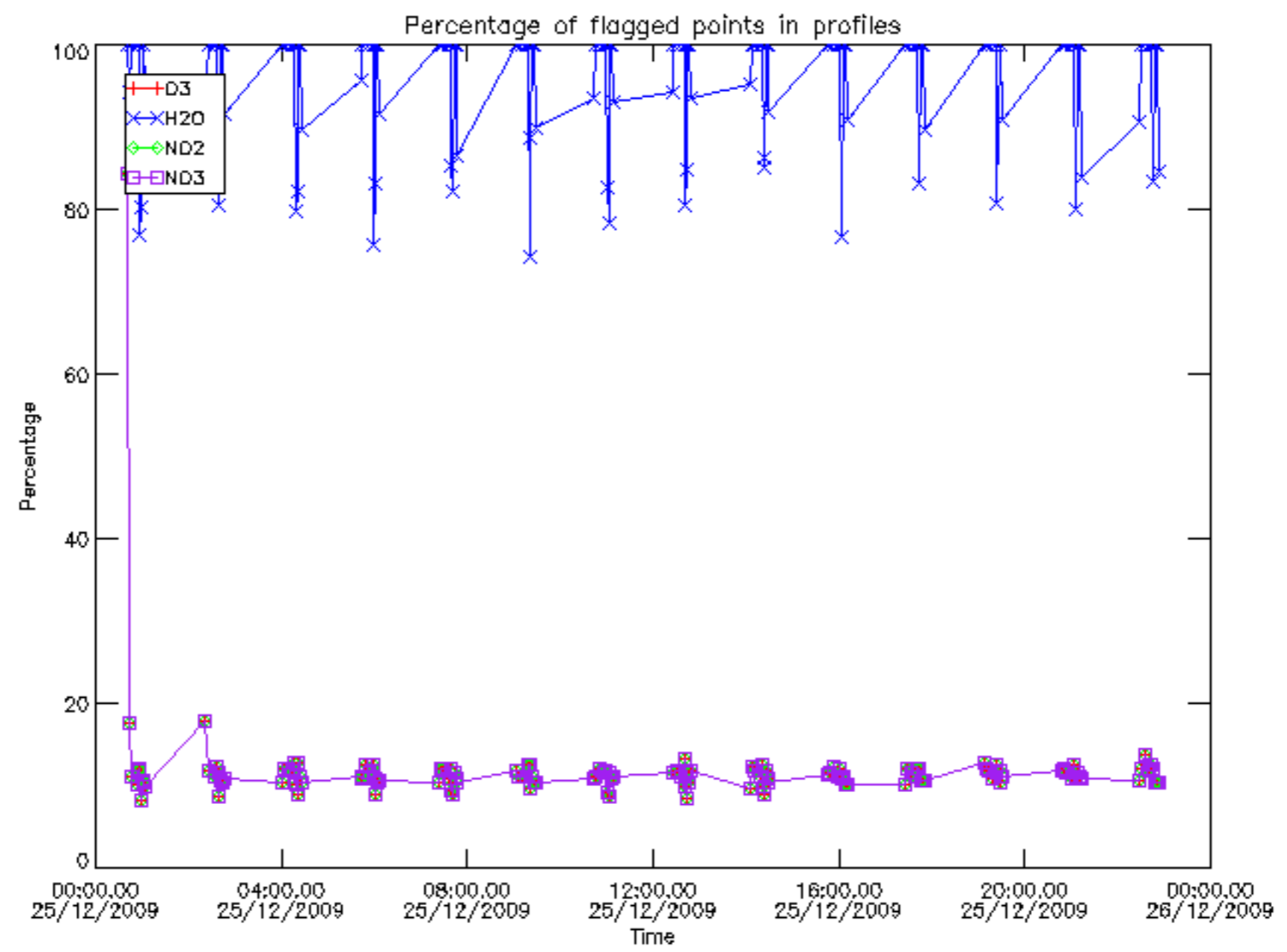




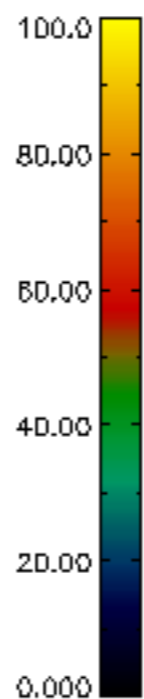
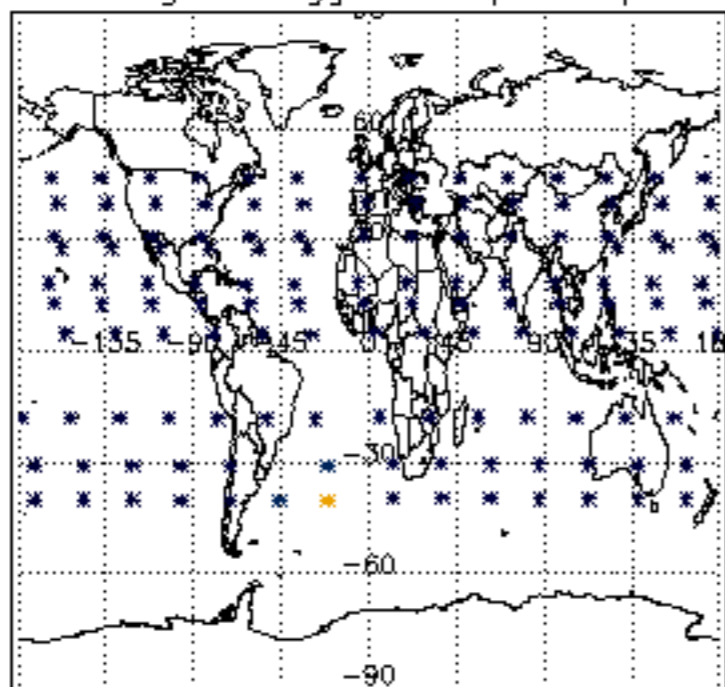




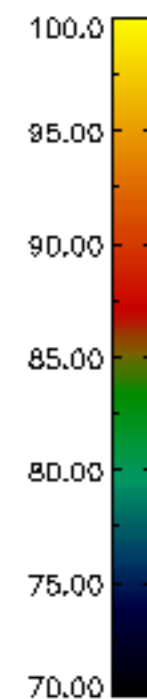
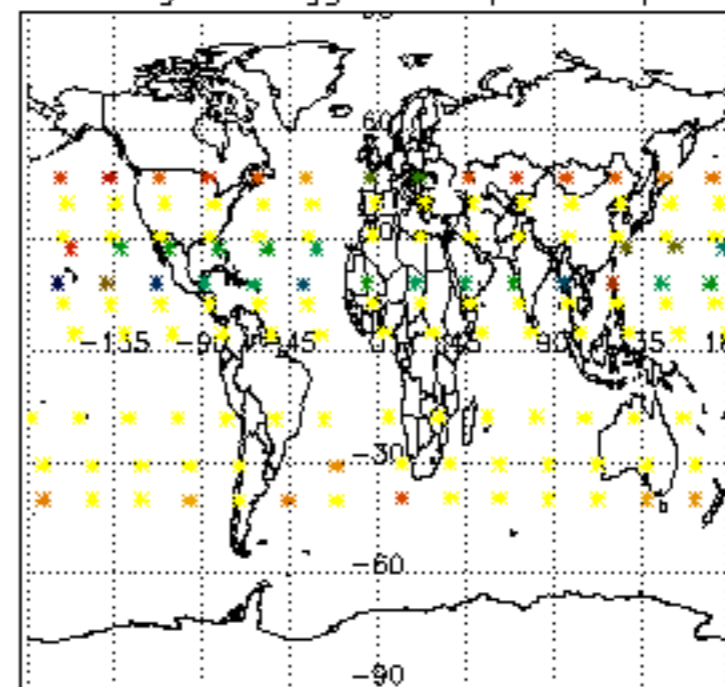




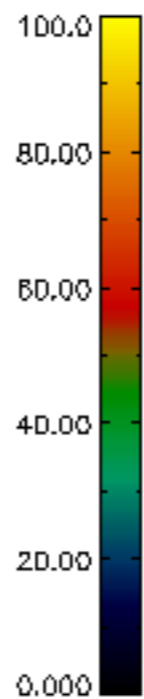
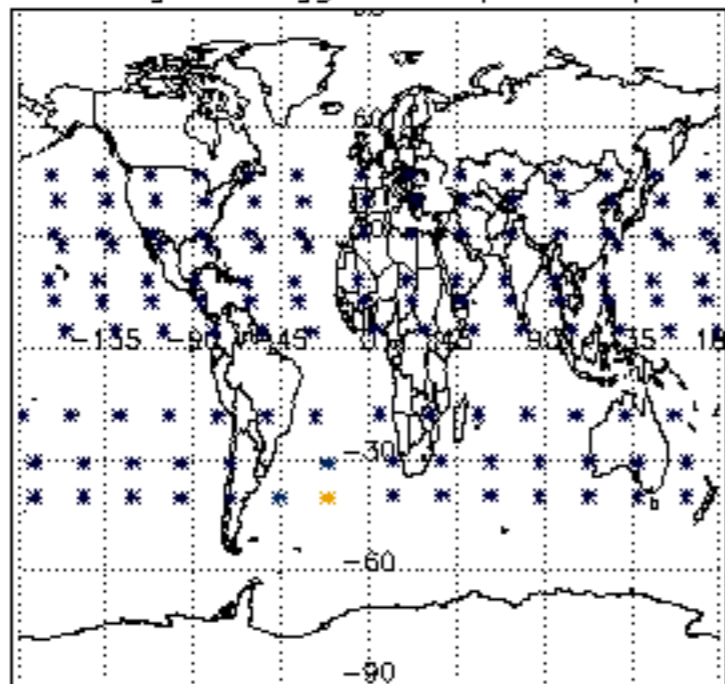
Percentage of flagged data per D3 profile



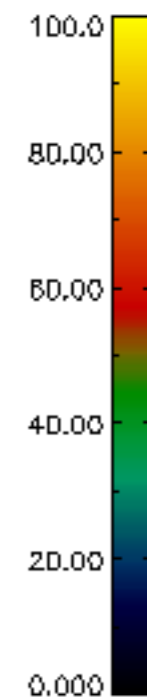
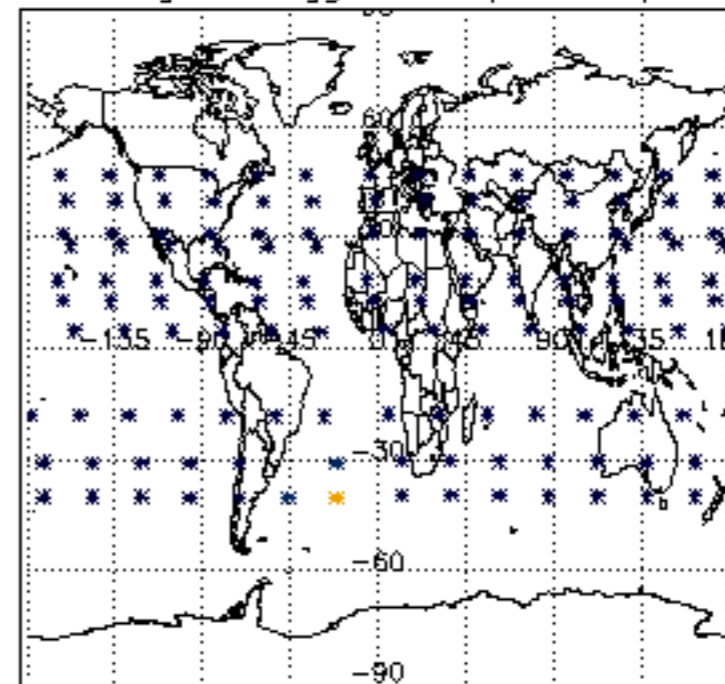
Percentage of flagged data per H2O profile

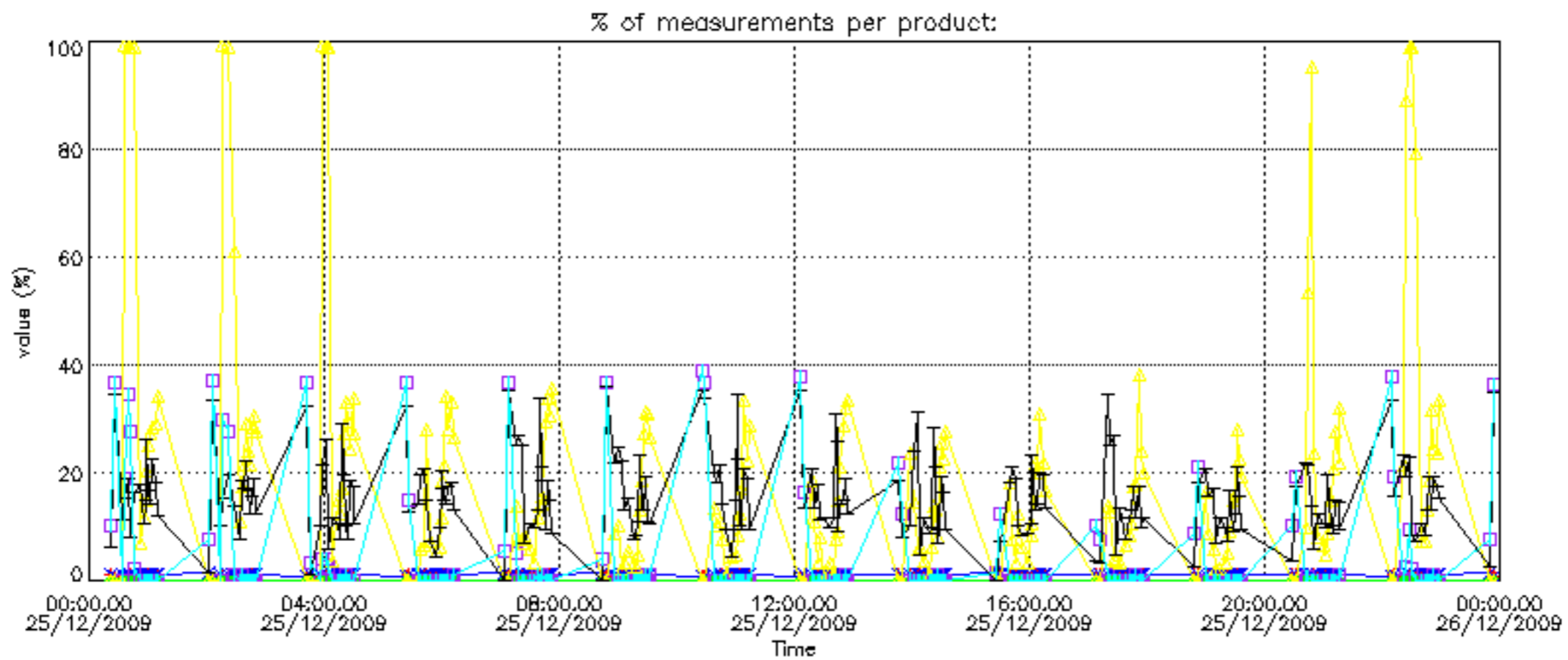


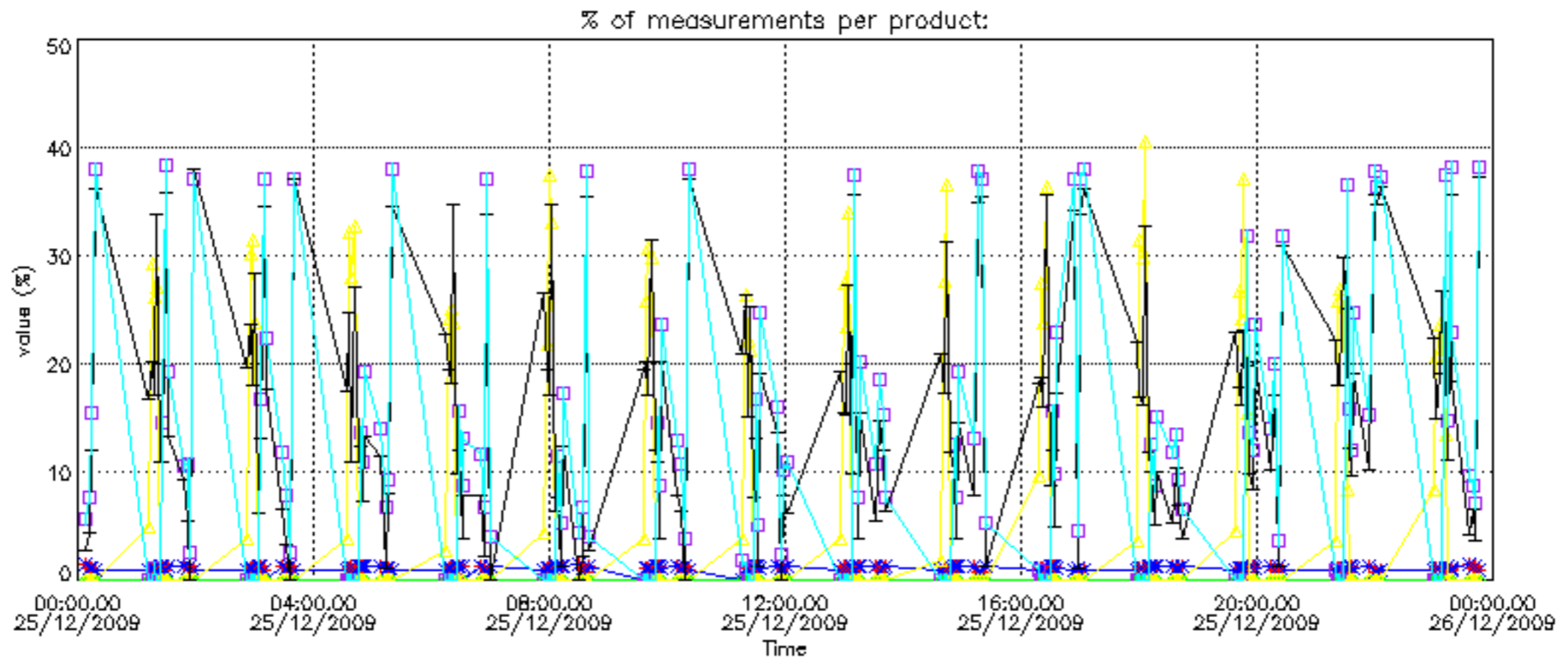
Percentage of flagged data per NO2 profile



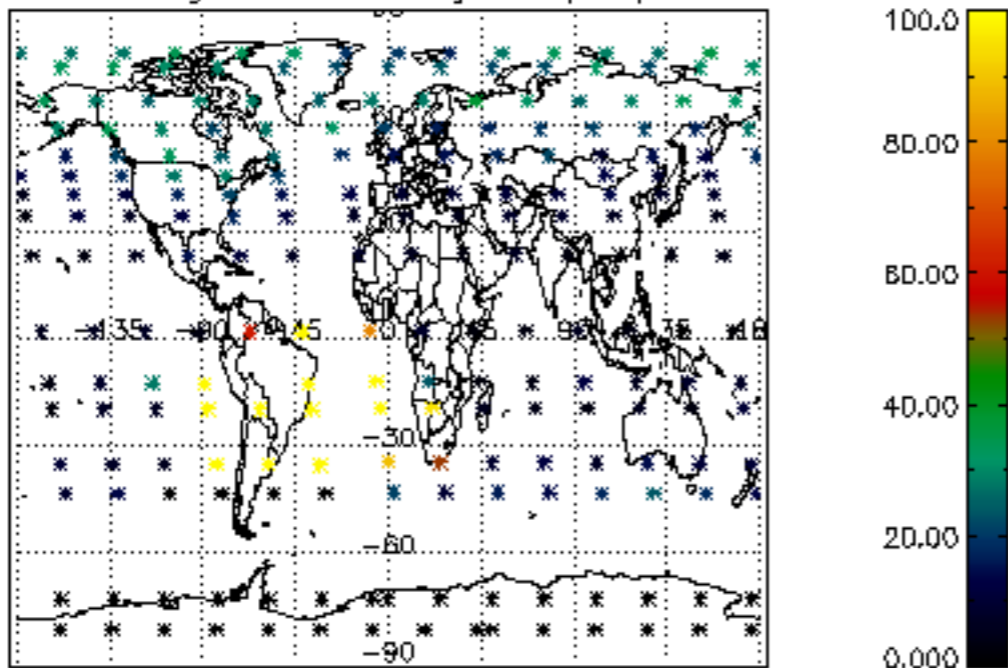
Percentage of flagged data per NO3 profile



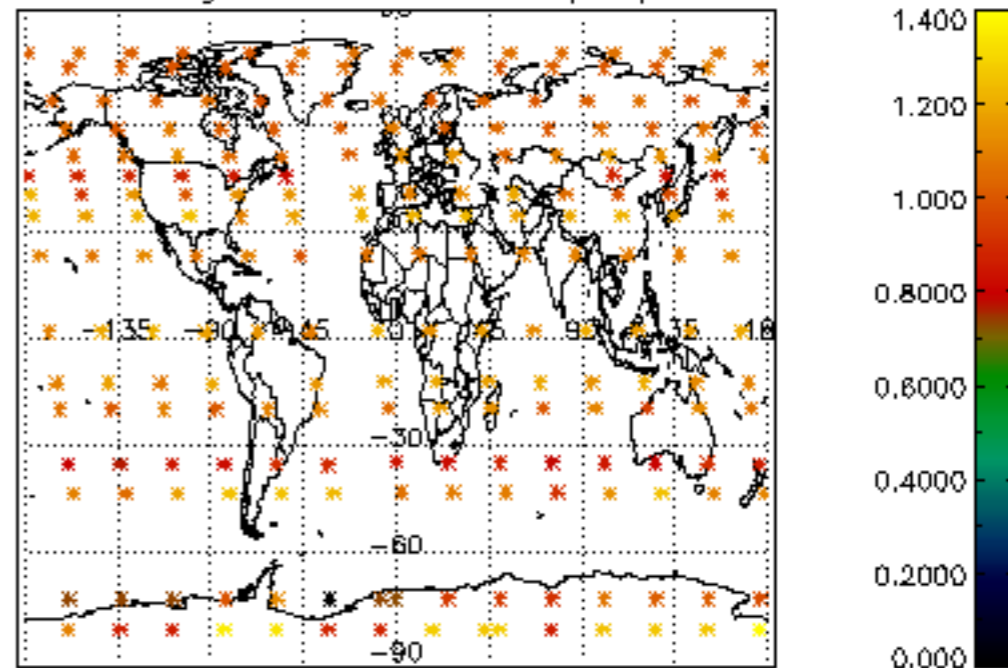




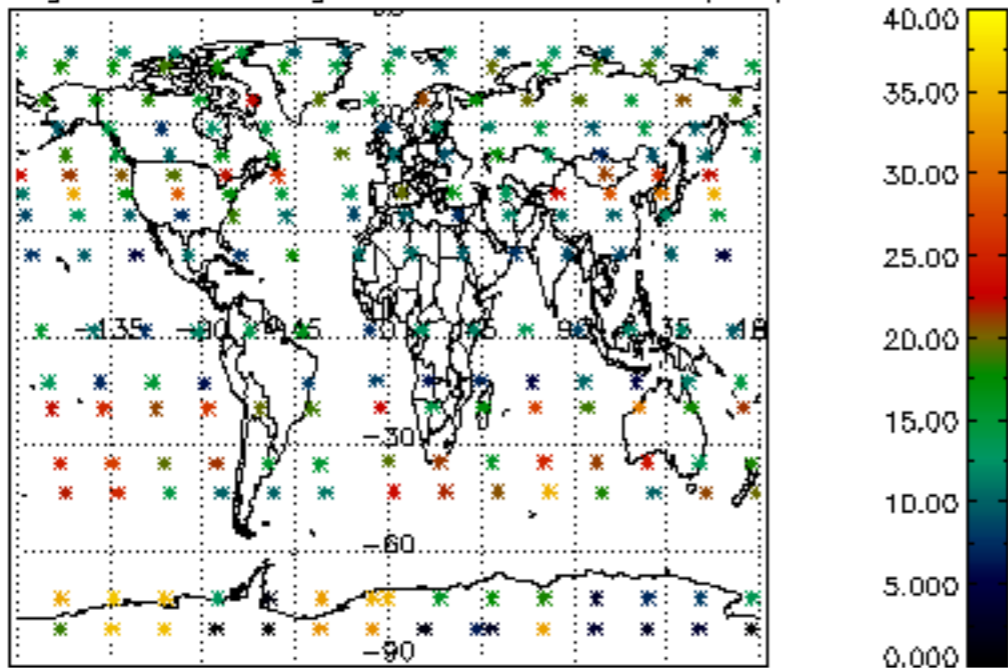
Percentage of cosmic ray hits per profile



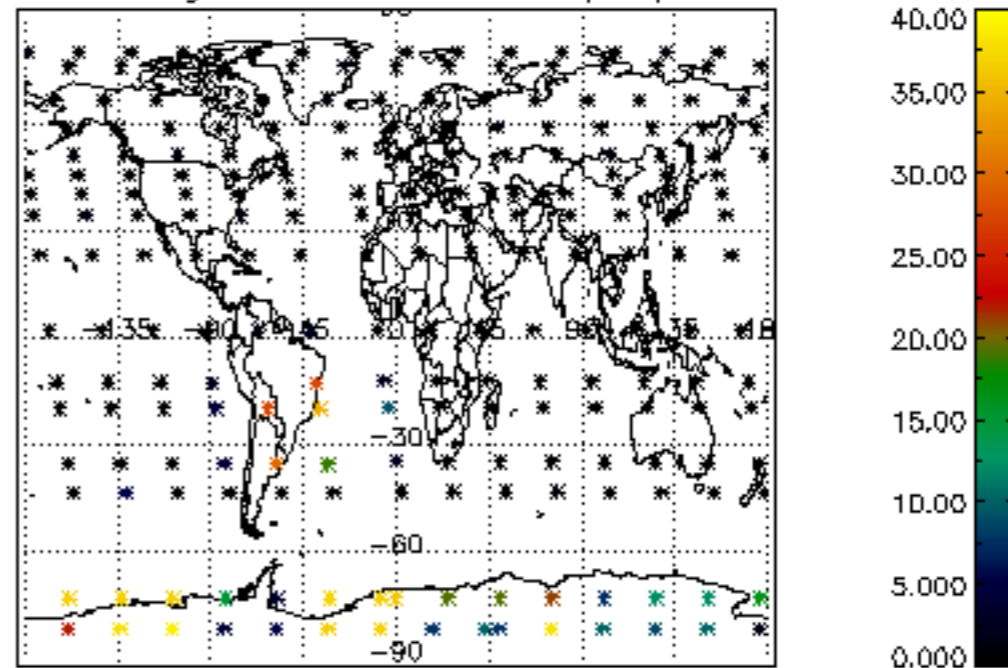
Percentage of datation errors per profile



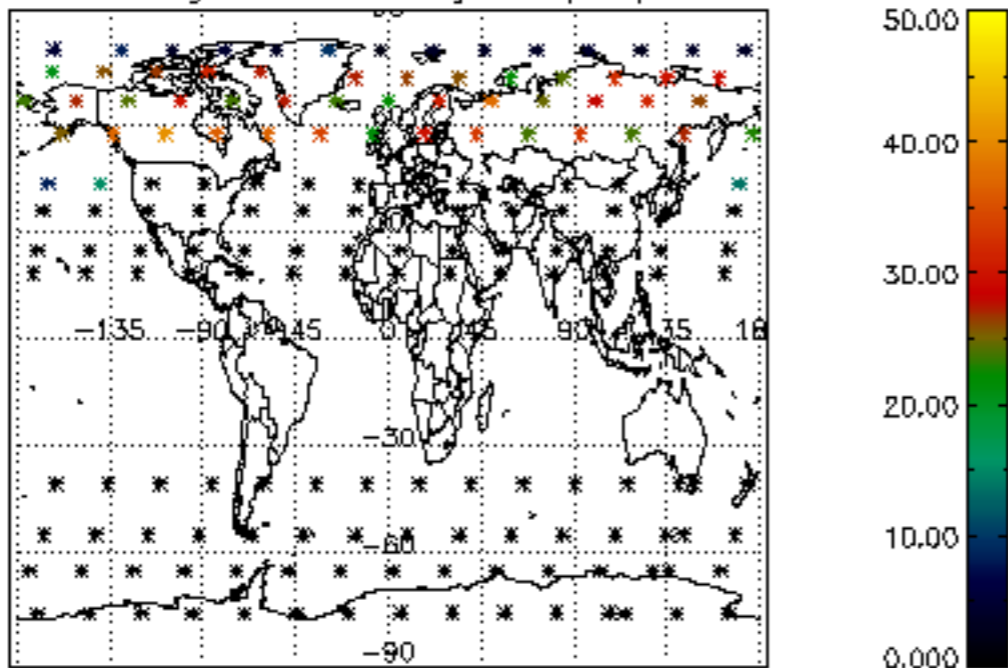
Percentage of star falling outside central band per profile



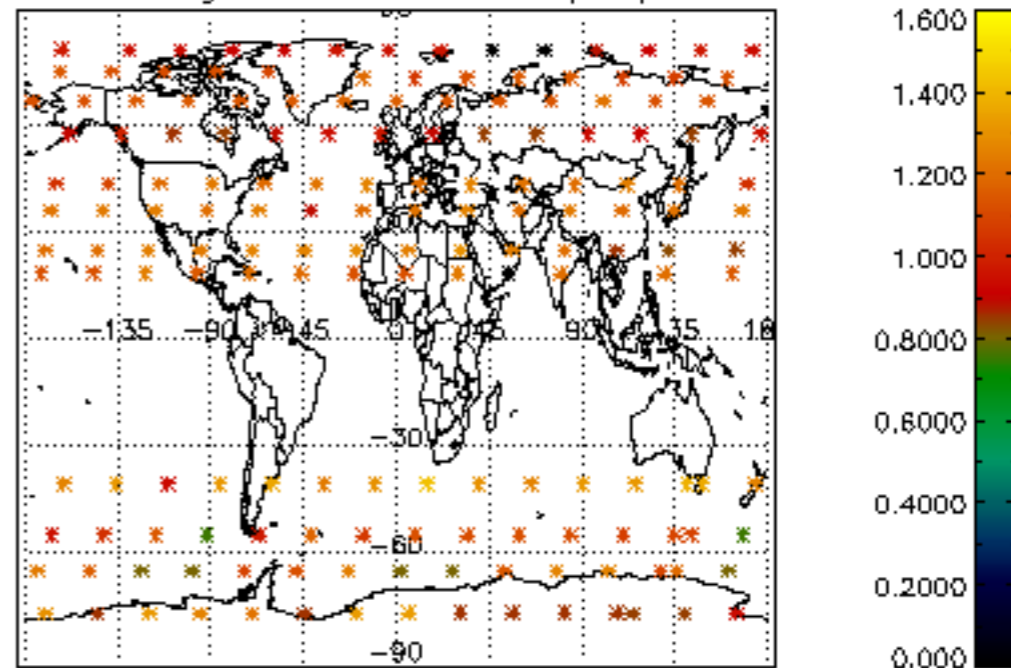
Percentage of saturation errors per profile



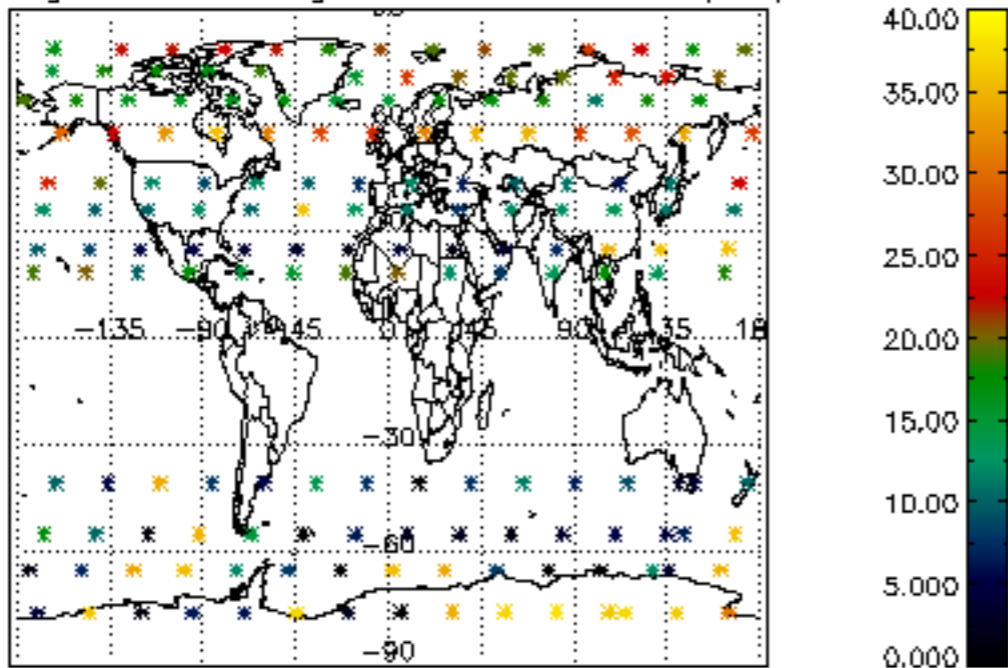
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

