

GOMOS Level 2 Daily Report

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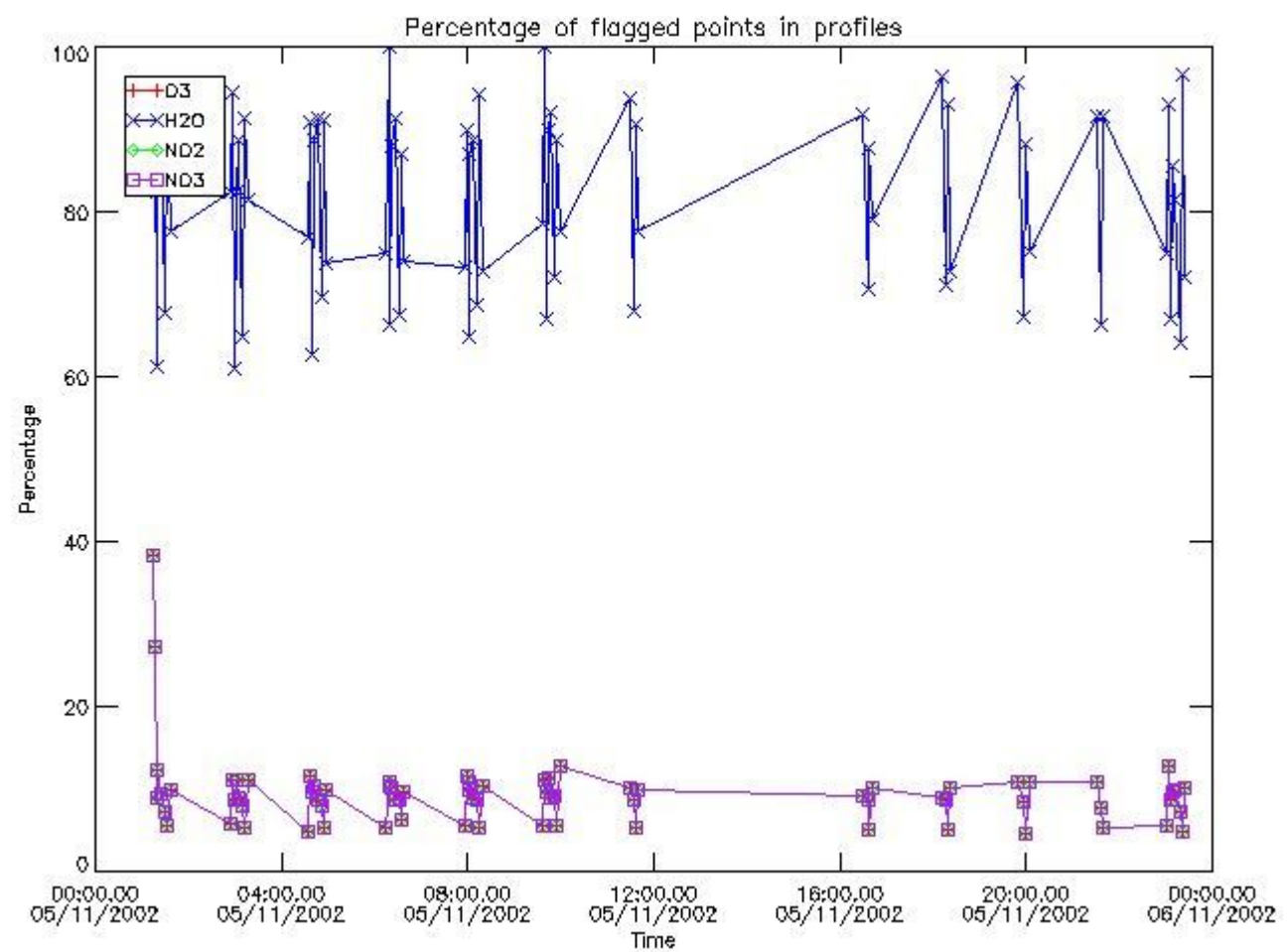
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3. Quality information per product

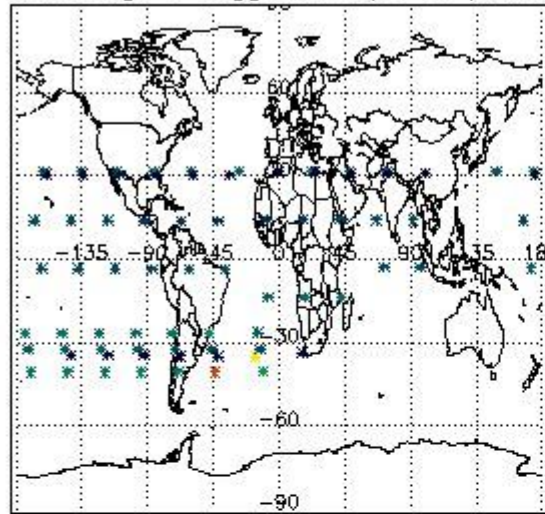
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

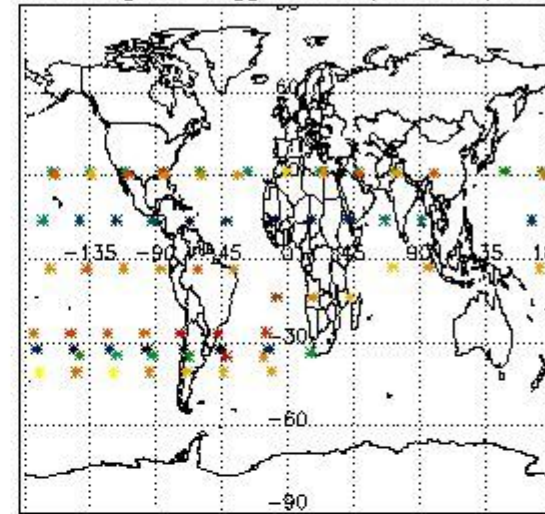


3.2 Plot quality information per product (world map)

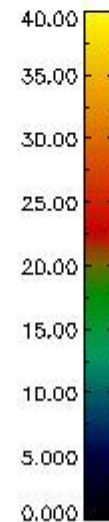
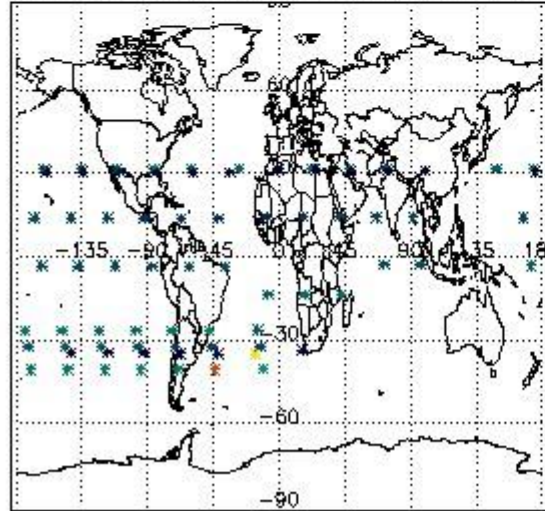
Percentage of flagged data per O3 profile



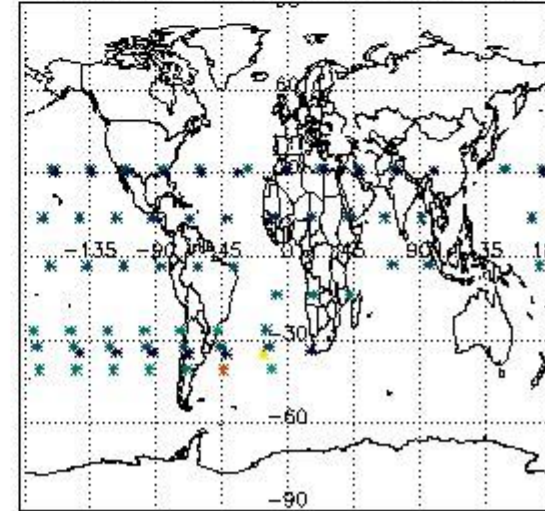
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

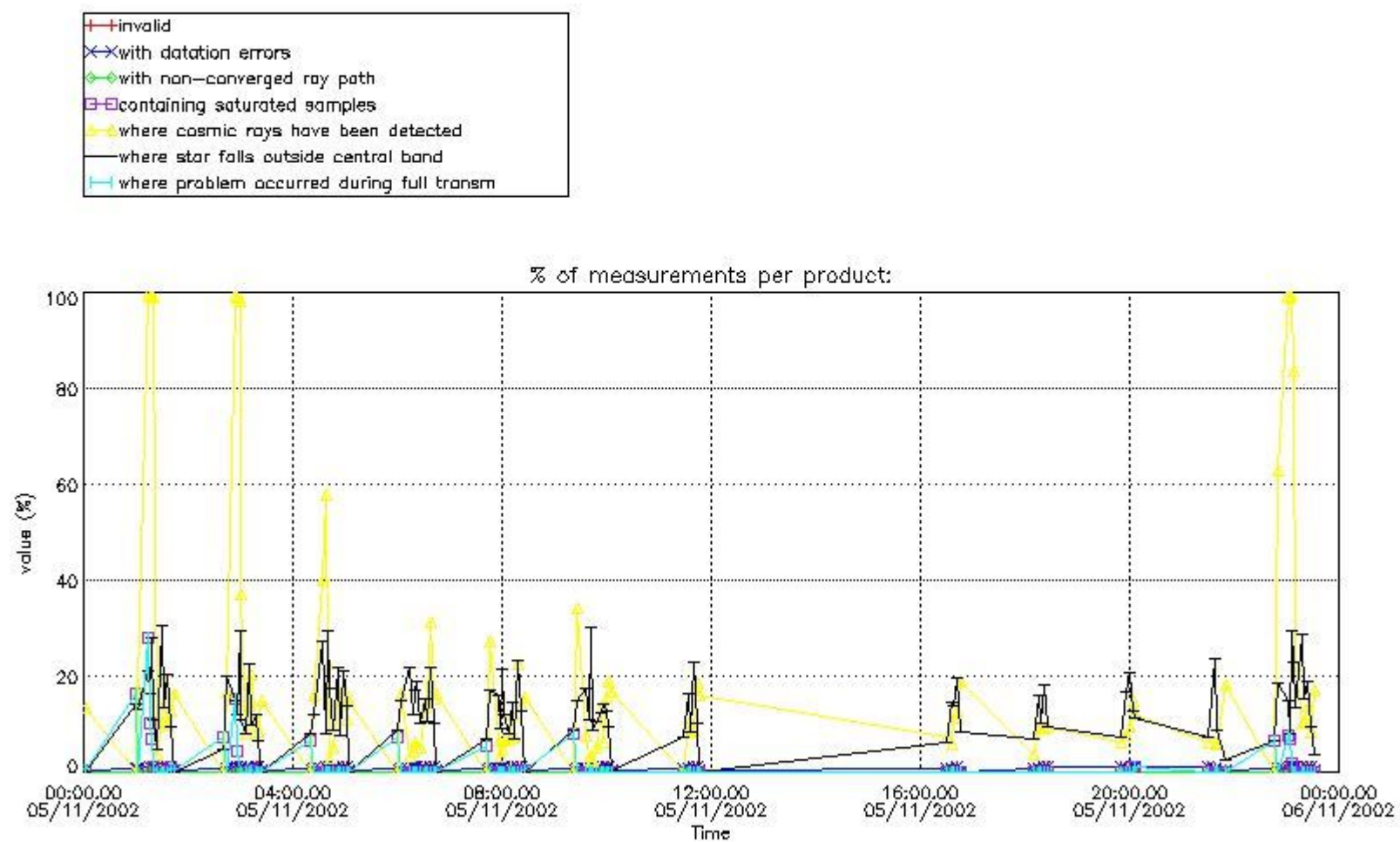


4. Level 1 quality information per product

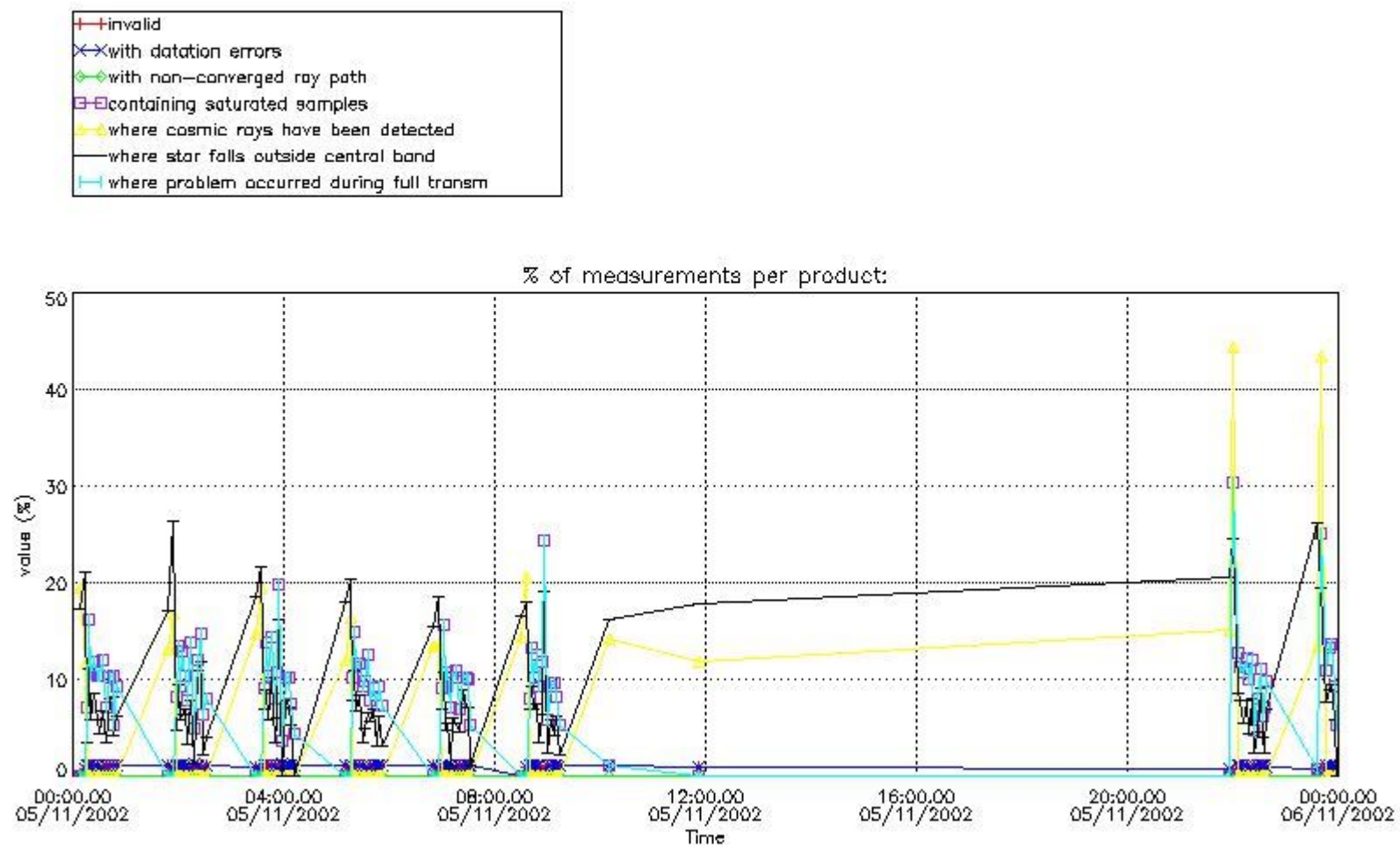
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



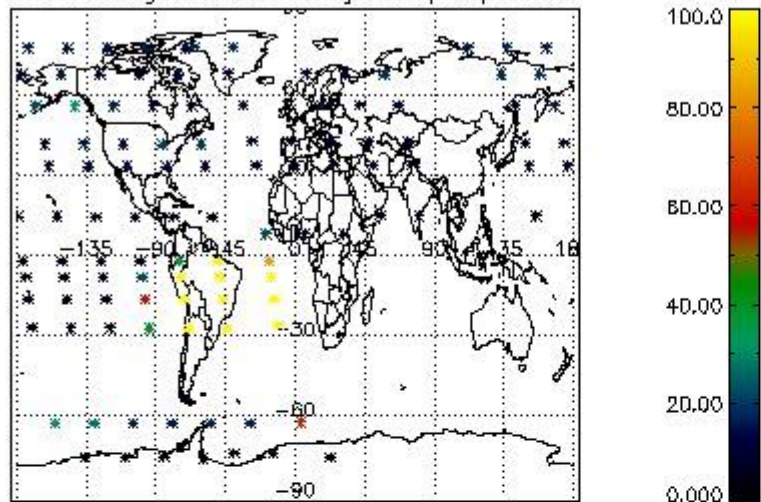
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



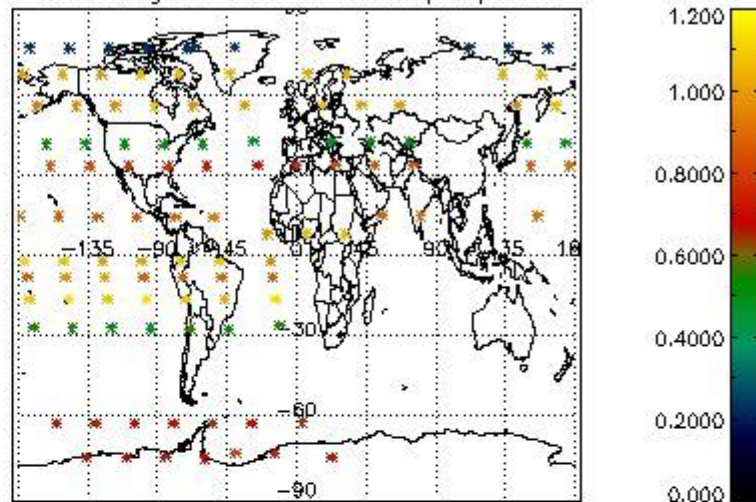
4.2 Plot quality information per product coming from level 1b processing (world map)

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

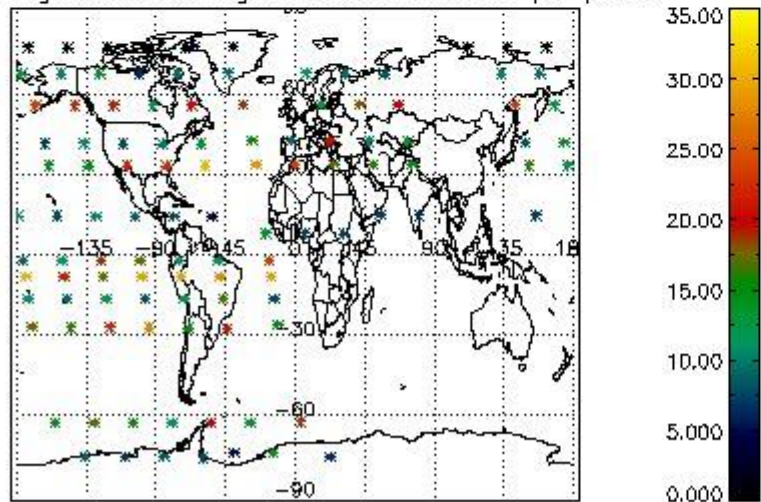
Percentage of cosmic ray hits per profile



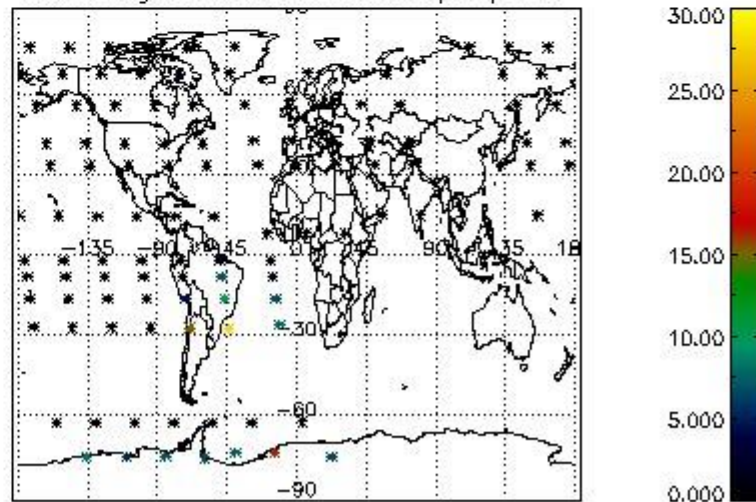
Percentage of datation errors per profile



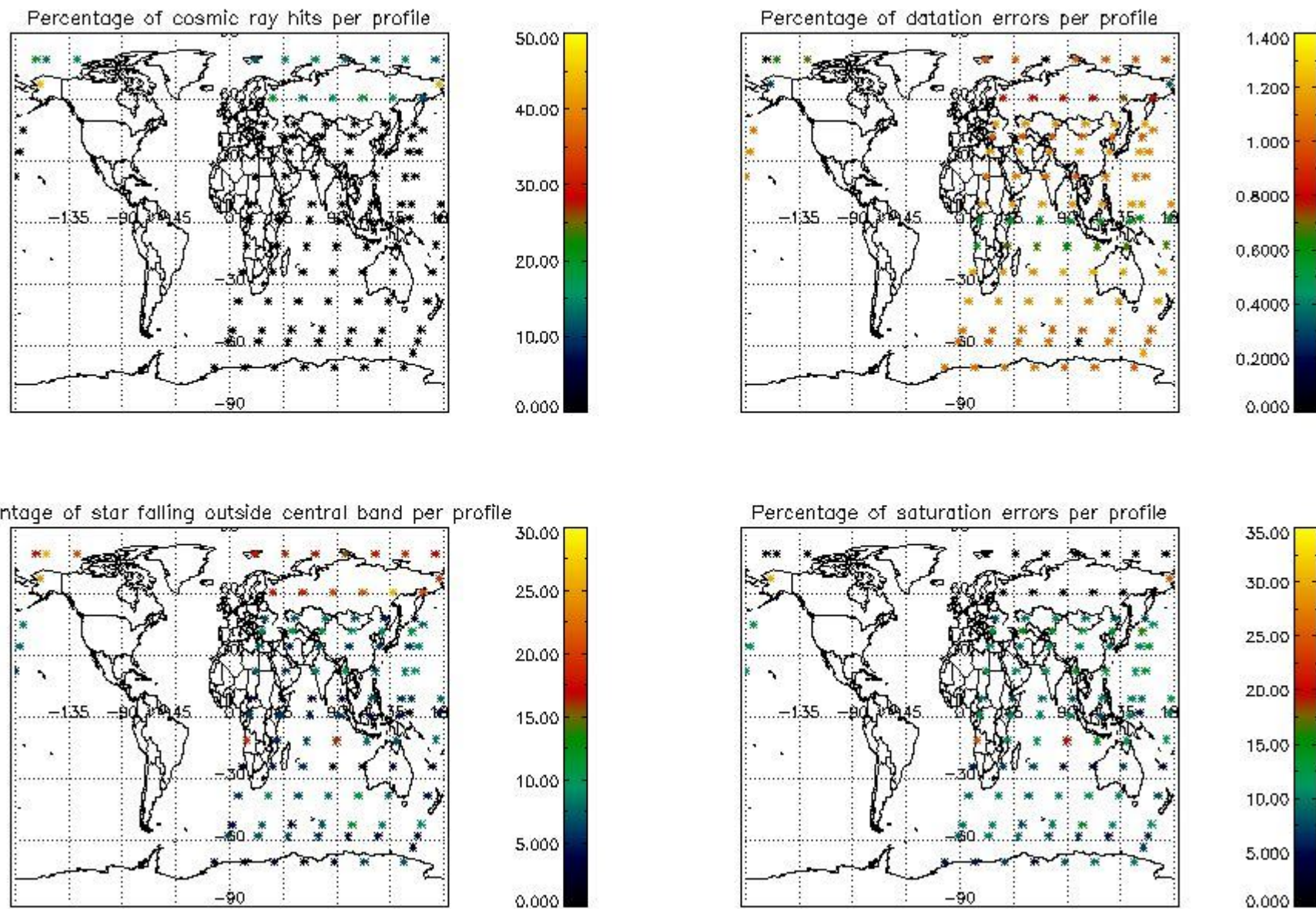
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

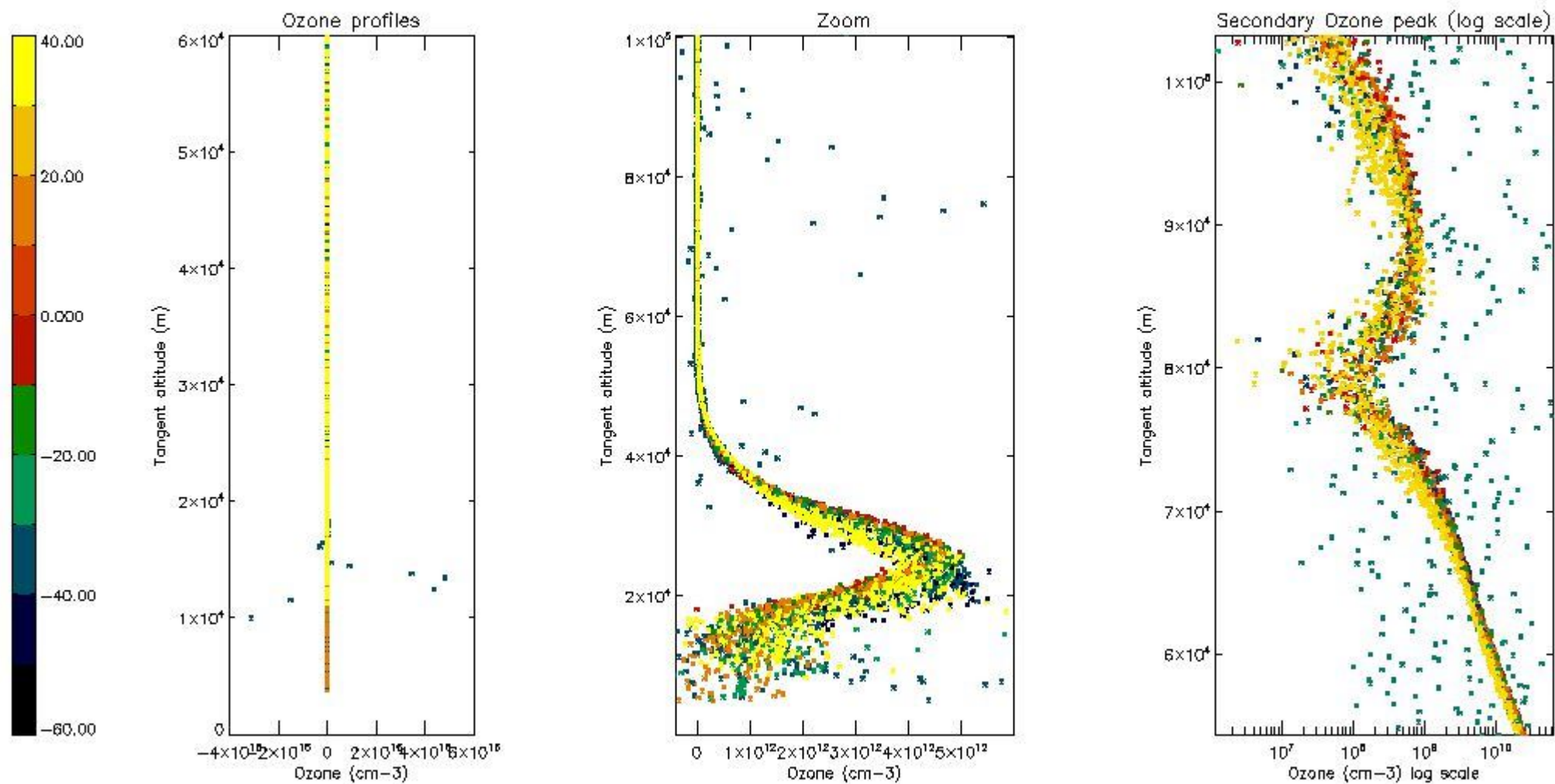
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	34
STD < 20	19

STD < 10	17
STD < 5	14

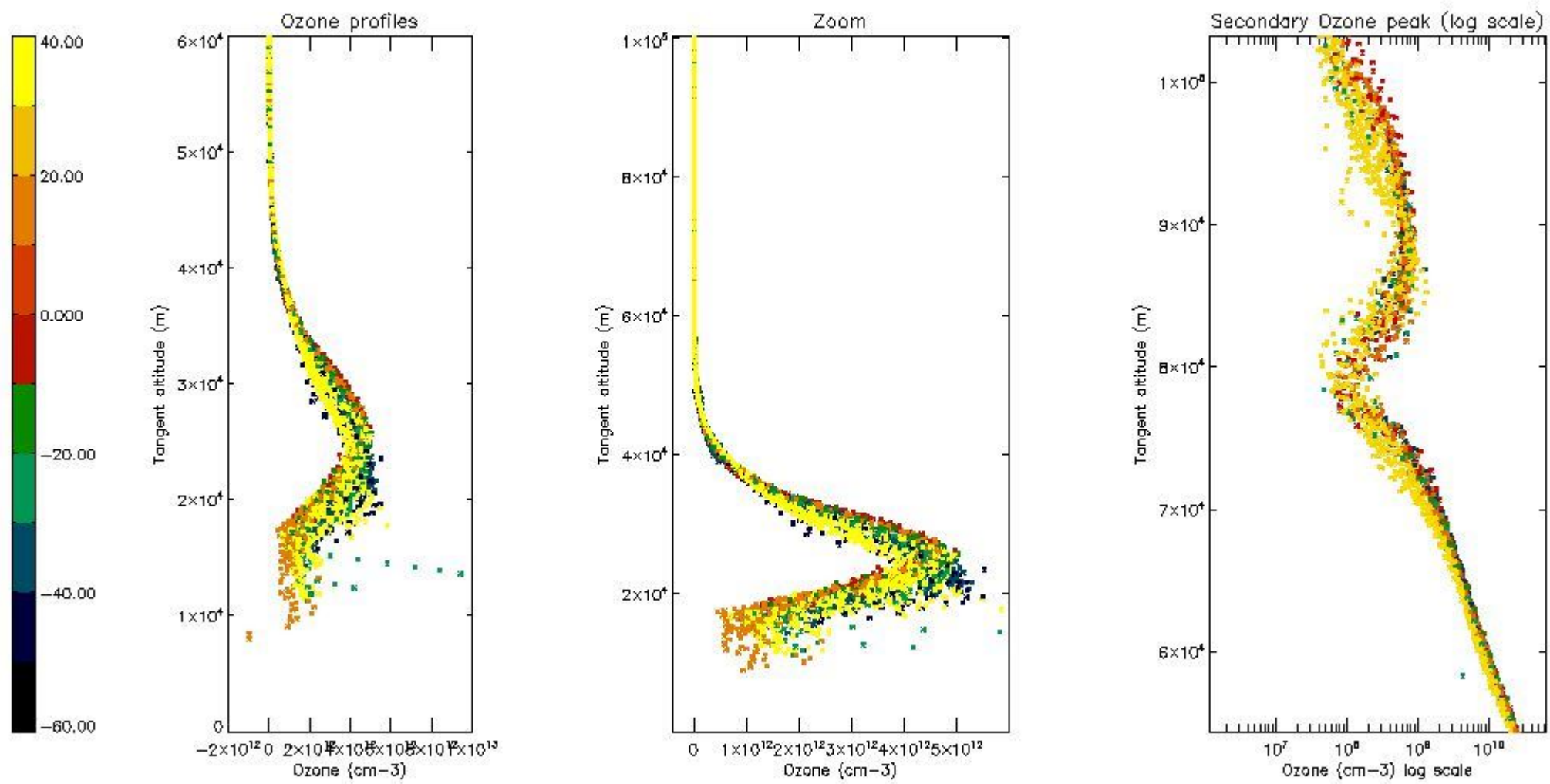
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



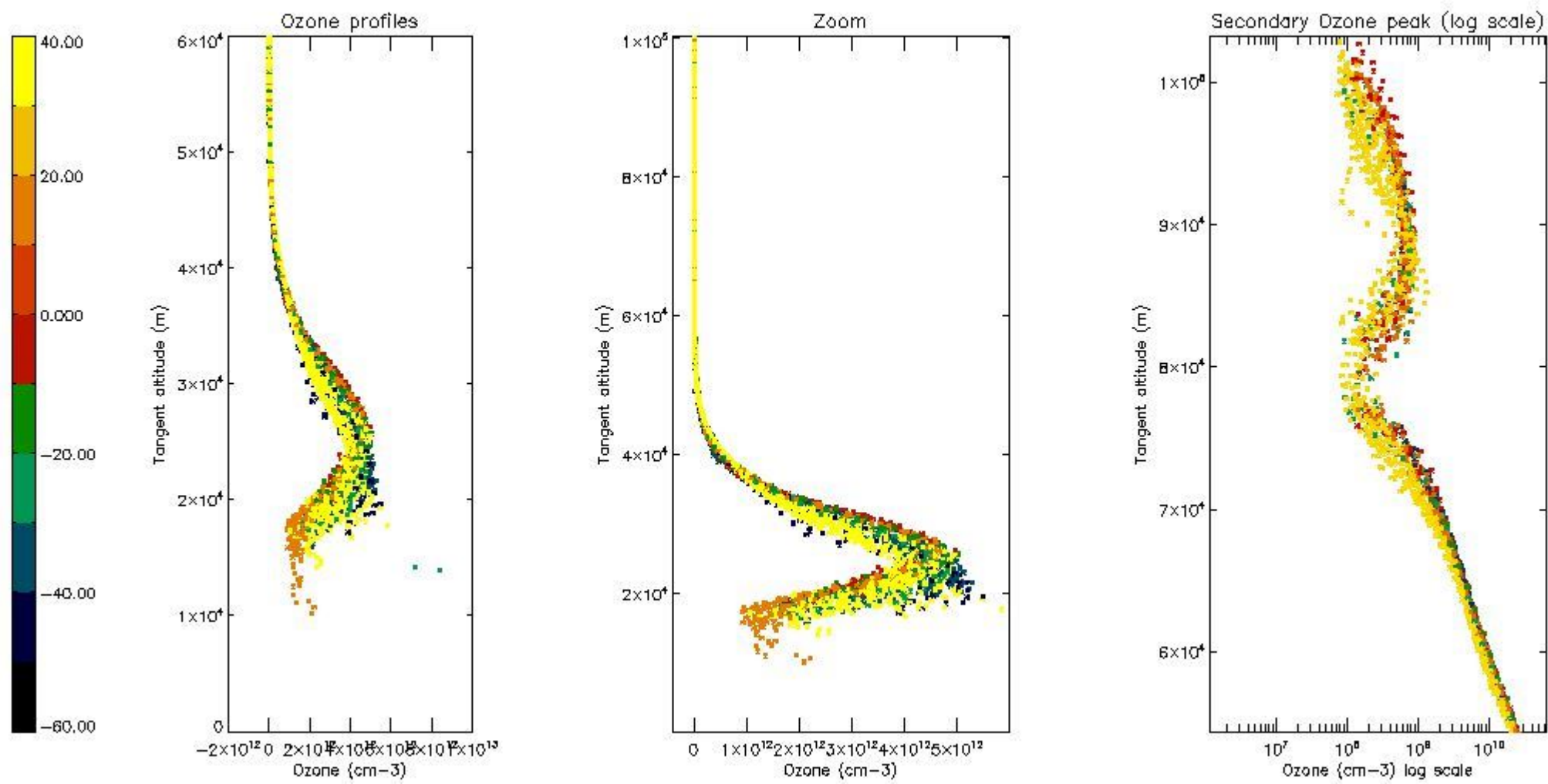
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



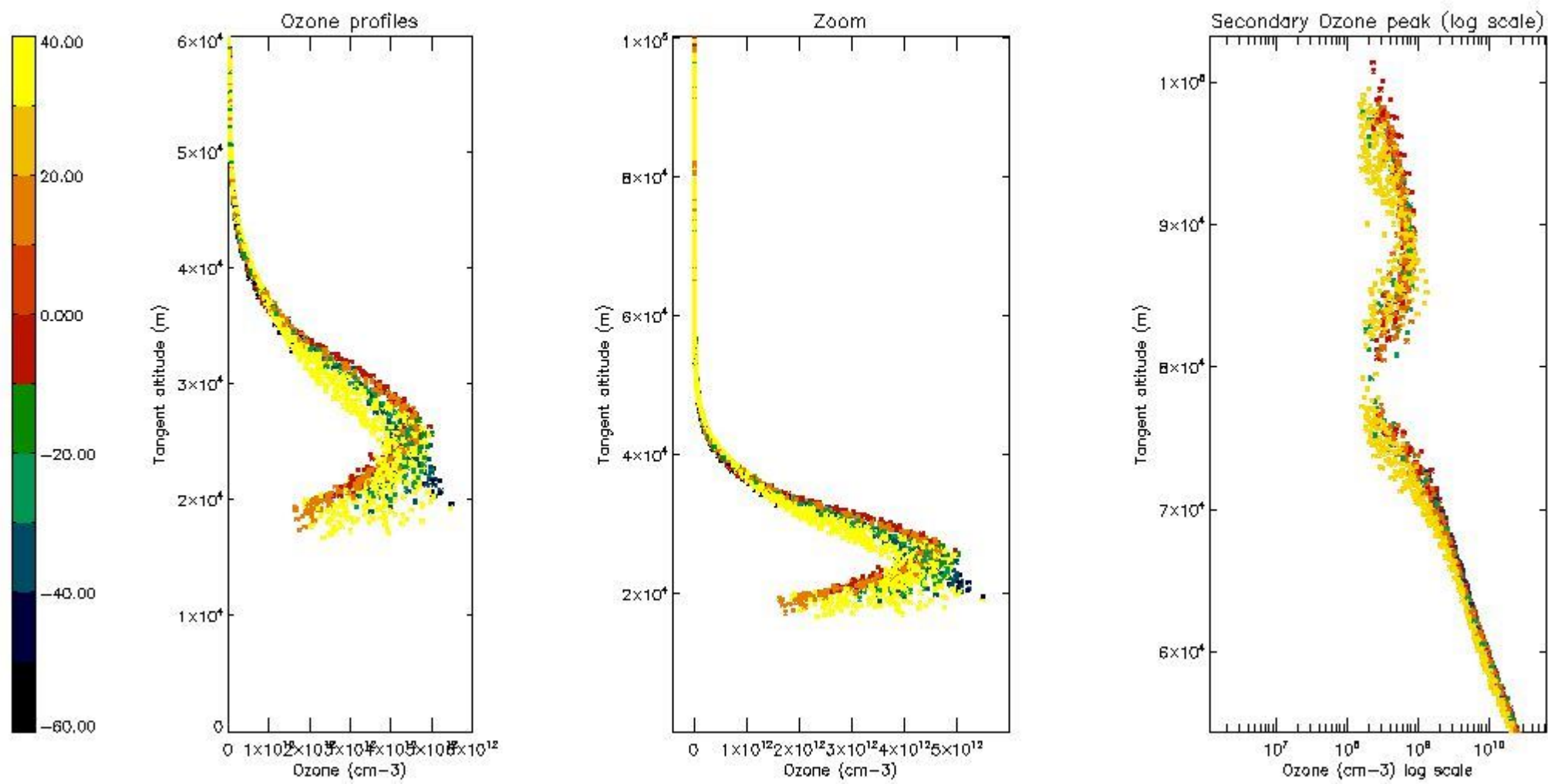
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



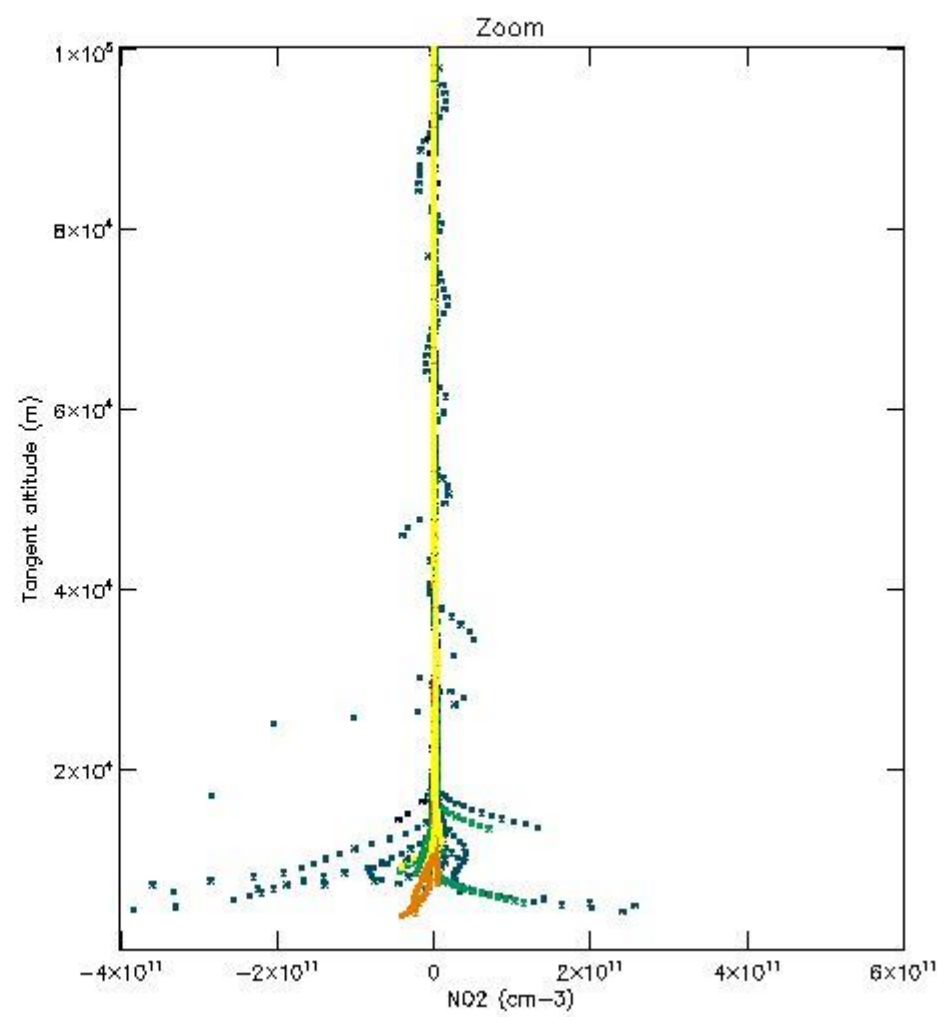
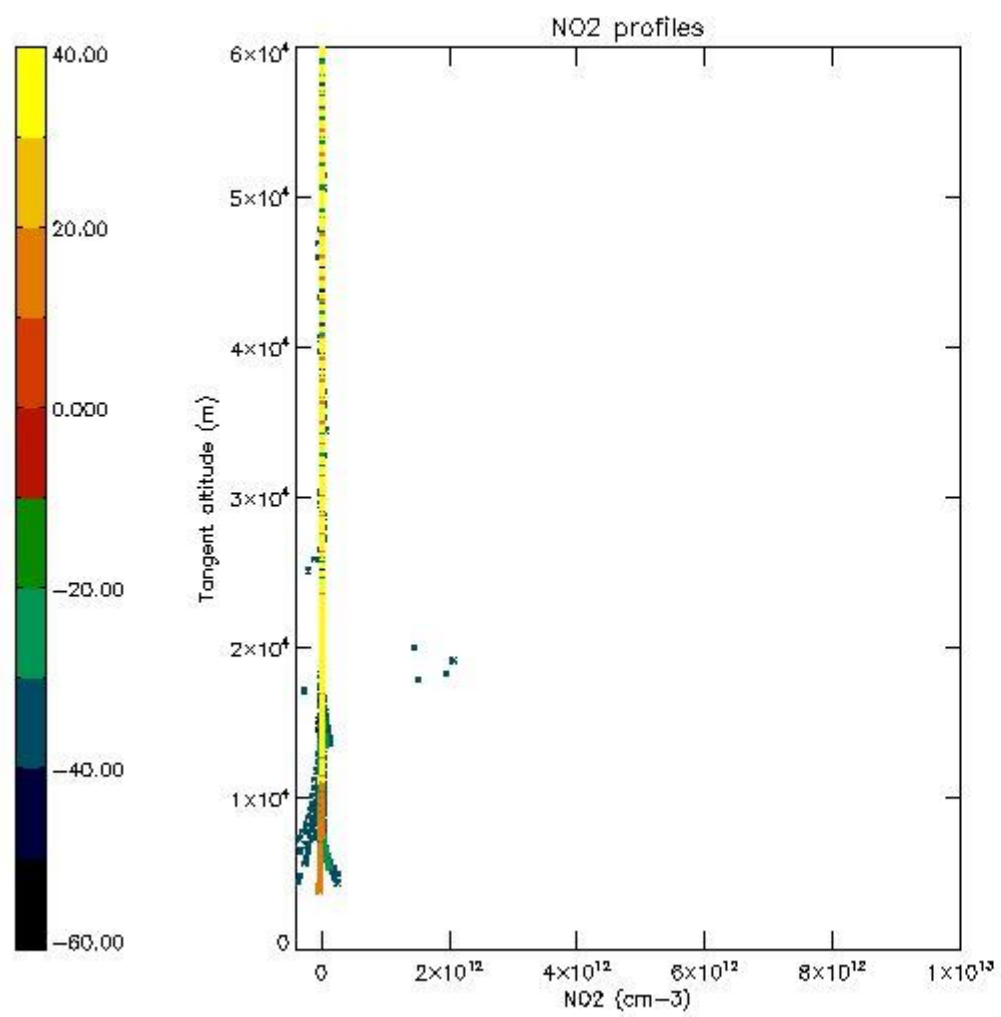
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



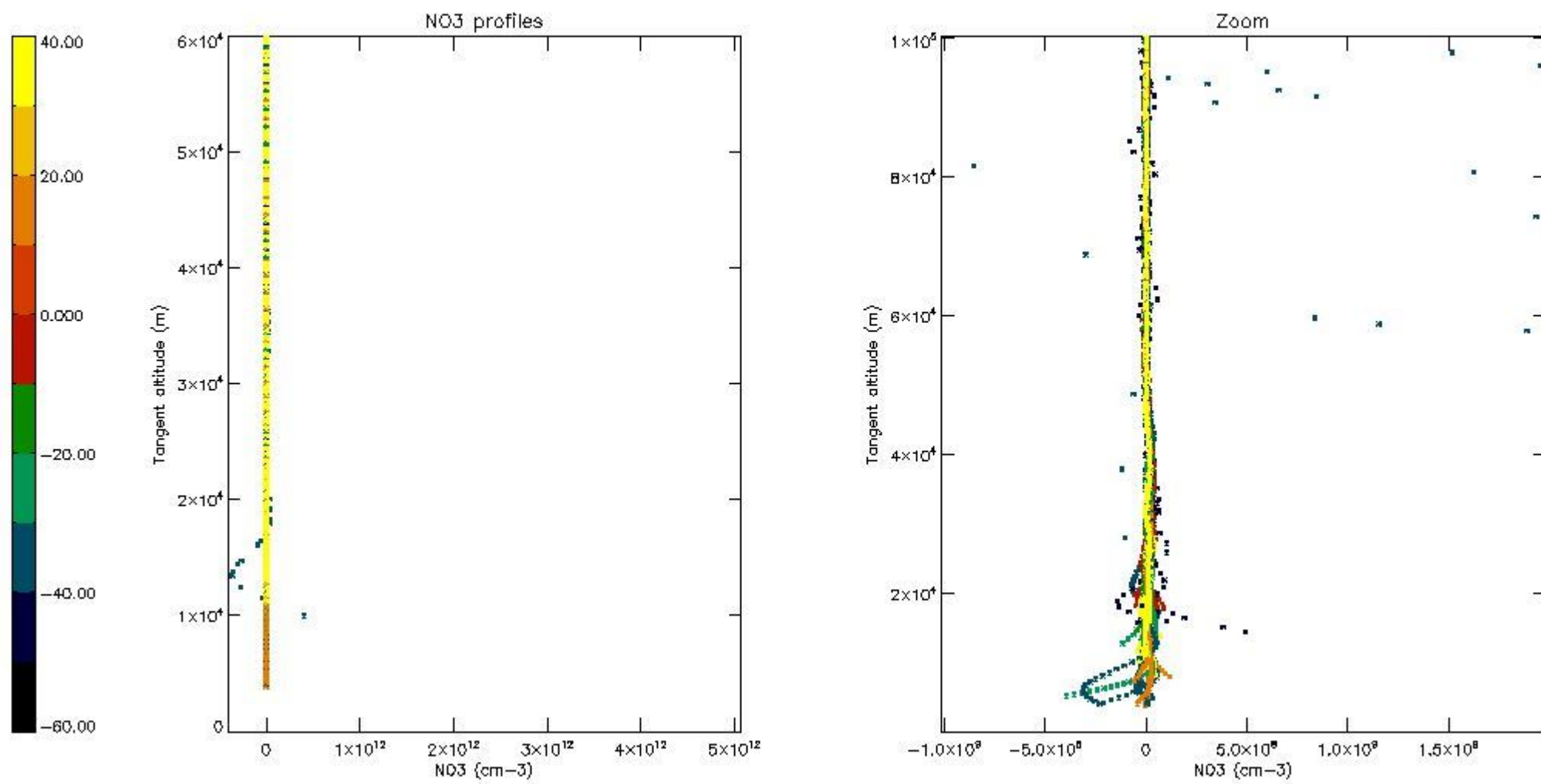
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



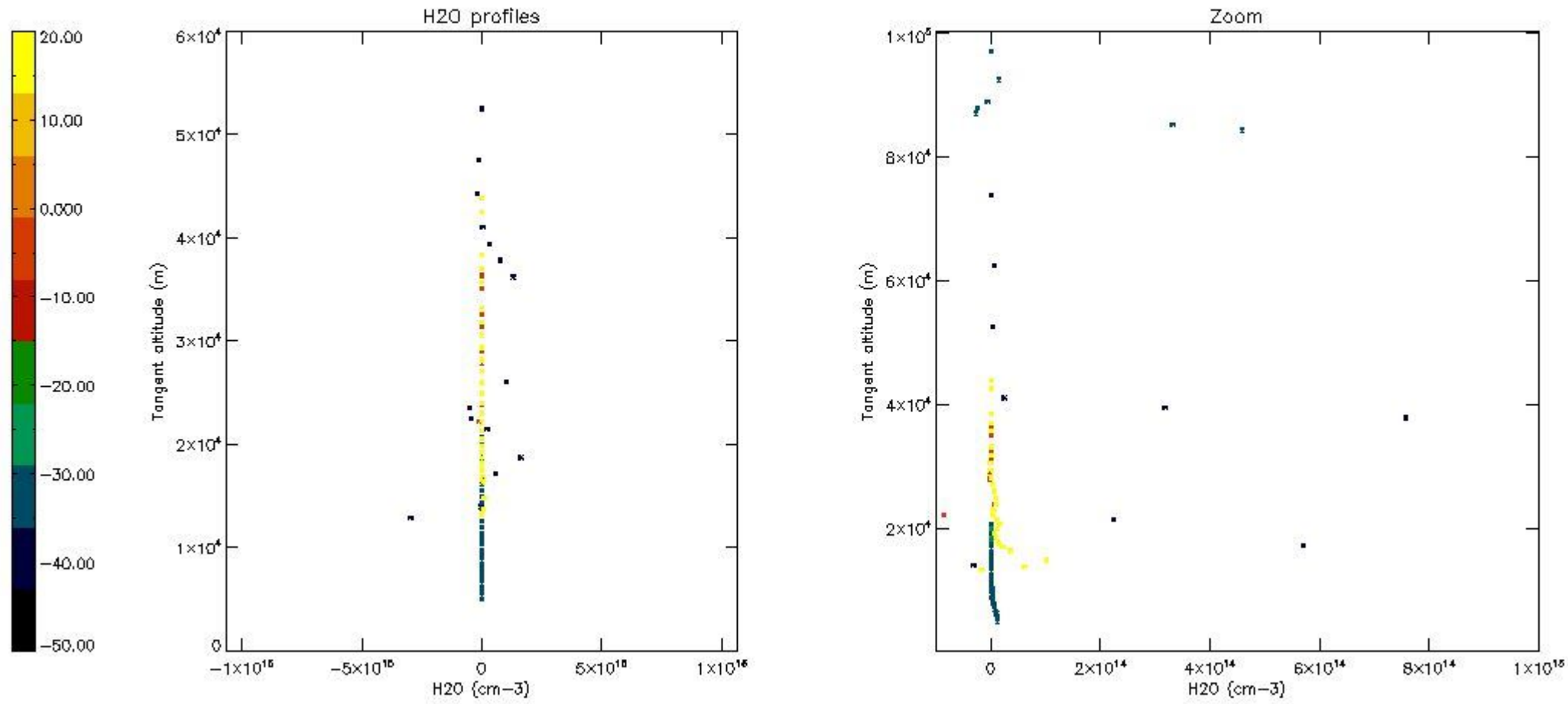
5.7 Plot NO3 profiles for all STD (dark without errors)

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_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	05-NOV-2002 00:02:31
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	05-NOV-2002 00:02:31
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	05-NOV-2002 00:02:31

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

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[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	17APR2013 19:58:26
Data source version	GOMOS/6.01
Start time of products	05-11-2002 (05NOV2002 00:00:00)
Stop time of products	06-11-2002 (06NOV2002 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	218
Nb of prods with errors	1

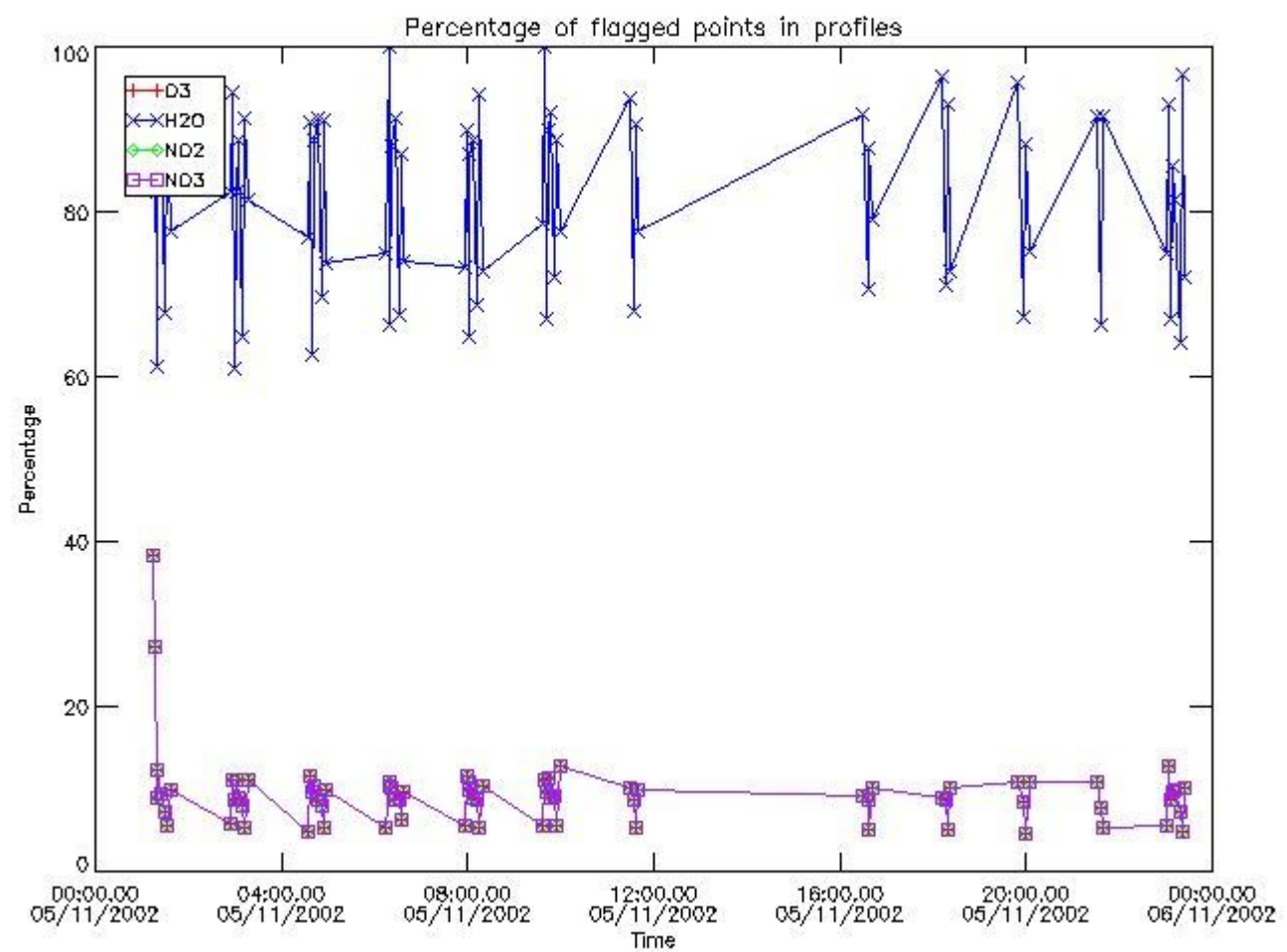
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20021105_000231_000002162011_00002_03563_1653.N1	05-NOV-2002 00:02:31	Straylight	216.00	47	2Bet CMa	1.9760	28000.	432	3563	No
2	GOM_NL__2PRFIN20021105_000717_000000492011_00002_03563_1654.N1	05-NOV-2002 00:07:17	Straylight	49.000	52	16Bet Cet	2.0370	4500.0	98	3563	No
3	GOM_NL__2PRFIN20021105_001318_000000642011_00002_03563_1655.N1	05-NOV-2002 00:13:18	Twilight_stray	64.000	94	92Alp Cet	2.5260	3100.0	128	3563	No
4	GOM_NL__2PRFIN20021105_001652_000000432011_00002_03563_1656.N1	05-NOV-2002 00:16:52	Bright	42.500	140	88Gam Peg	2.8340	26000.	85	3563	No
5	GOM_NL__2PRFIN20021105_001841_000000502011_00002_03563_1657.N1	05-NOV-2002 00:18:41	Bright	49.500	50	13Alp Ari	2.0070	4250.0	99	3563	No
6	GOM_NL__2PRFIN20021105_002043_000000432011_00002_03563_1658.N1	05-NOV-2002 00:20:43	Bright	43.000	58	21Alp And	2.0730	11000.	86	3563	No
7	GOM_NL__2PRFIN20021105_002410_000000472011_00002_03563_1659.N1	05-NOV-2002 00:24:10	Bright	46.500	73	57Gam1And	2.2600	13100.	93	3563	No
8	GOM_NL__2PRFIN20021105_002752_000000442011_00002_03563_1660.N1	05-NOV-2002 00:27:52	Bright	43.500	68	18Alp Cas	2.2250	4500.0	87	3563	No
9	GOM_NL__2PRFIN20021105_003013_000000922011_00002_03563_1661.N1	05-NOV-2002 00:30:13	Bright	92.000	114	31ot Aur	2.6930	4600.0	184	3563	No
10	GOM_NL__2PRFIN20021105_003340_000000752011_00002_03563_1662.N1	05-NOV-2002 00:33:40	Bright	75.000	6	13Alp Aur	0.080000	3400.0	150	3563	No
11	GOM_NL__2PRFIN20021105_003706_000000432011_00002_03563_1663.N1	05-NOV-2002 00:37:06	Bright	42.500	49	1Alp UMi	1.9900	6300.0	85	3563	No
12	GOM_NL__2PRFIN20021105_004105_000000442011_00002_03563_1664.N1	05-NOV-2002 00:41:05	Bright	44.000	60	7Bet UMi	2.0810	3950.0	88	3563	No
13	GOM_NL__2PRFIN20021105_004508_000000492011_00002_03563_1665.N1	05-NOV-2002 00:45:08	Bright	48.500	36	50Alp UMa	1.8000	6300.0	97	3563	No
14	GOM_NL__2PRFIN20021105_004645_000000472011_00002_03563_1666.N1	05-NOV-2002 00:46:45	Bright	47.000	82	48Bet UMa	2.3650	10600.	94	3563	No
15	GOM_NL__2PRFIN20021105_005031_000000492011_00002_03563_1667.N1	05-NOV-2002 00:50:31	Bright	49.000	174	52Psi UMa	3.0040	4400.0	98	3563	No
16	GOM_NL__2PRFIN20021105_005931_000000682011_00002_03563_1668.N1	05-NOV-2002 00:59:31	Bright	67.500	51	41Gam1Leo	2.0100	4500.0	135	3563	No
17	GOM_NL__2PRFIN20021105_010254_000000722011_00002_03563_1669.N1	05-NOV-2002 01:02:54	Twilight_stray	72.000	22	32Alp Leo	1.3600	15200.	144	3563	No
18	GOM_NL__2PRFIN20021105_011301_000000952011_00002_03563_1670.N1	05-NOV-2002 01:13:01	Dark	94.500	48	30Alp Hya	1.9770	4100.0	189	3563	No
19	GOM_NL__2PRFIN20021105_011610_000000492011_00002_03563_1671.N1	05-NOV-2002 01:16:10	Dark	48.500	64	Gam Cen	2.2000	10600.	97	3563	No
20	GOM_NL__2PRFIN20021105_011828_000000572011_00002_03563_1672.N1	05-NOV-2002 01:18:28	Dark	57.000	26	Gam Cru	1.6240	2900.0	114	3563	No
21	GOM_NL__2PRFIN20021105_012008_000000462011_00002_03563_1673.N1	05-NOV-2002 01:20:08	Dark	46.000	12	Alp1Cru	0.77500	30000.	92	3563	No
22	GOM_NL__2PRFIN20021105_012446_000000542011_00003_03564_1302.N1	05-NOV-2002 01:24:46	Dark	54.000	34	Gam2Vel	1.7930	23000.	108	3564	No
23	GOM_NL__2PRFIN20021105_013004_000000702011_00003_03564_1303.N1	05-NOV-2002 01:30:04	Dark	70.000	2	Alp Car	-0.73600	7000.0	140	3564	No
24	GOM_NL__2PRFIN20021105_013222_000001012011_00003_03564_1304.N1	05-NOV-2002 01:32:22	Dark	101.00	23	21Eps CMa	1.5020	26000.	202	3564	No
25	GOM_NL__2PRFIN20021105_013631_000000522011_00003_03564_1305.N1	05-NOV-2002 01:36:31	Dark	51.500	9	Alp Eri	0.45300	24000.	103	3564	No
26	GOM_NL__2PRFIN20021105_013957_000000482011_00003_03564_1306.N1	05-NOV-2002 01:39:57	Straylight	47.500	157	The1Eri	2.9060	9300.0	95	3564	No
27	GOM_NL__2PRFIN20021105_014308_000002162011_00003_03564_1307.N1	05-NOV-2002 01:43:08	Straylight	216.00	47	2Bet CMa	1.9760	28000.	432	3564	No
28	GOM_NL__2PRFIN20021105_014753_000000502011_00003_03564_1308.N1	05-NOV-2002 01:47:53	Straylight	49.500	52	16Bet Cet	2.0370	4500.0	99	3564	No
29	GOM_NL__2PRFIN20021105_015353_000000692011_00003_03564_1309.N1	05-NOV-2002 01:53:53	Twilight_stray	68.500	94	92Alp Cet	2.5260	3100.0	137	3564	No
30	GOM_NL__2PRFIN20021105_015728_000000432011_00003_03564_1310.N1	05-NOV-2002 01:57:28	Bright	42.500	140	88Gam Peg	2.8340	26000.	85	3564	No
31	GOM_NL__2PRFIN20021105_015917_000000482011_00003_03564_1311.N1	05-NOV-2002 01:59:17	Bright	48.000	50	13Alp Ari	2.0070	4250.0	96	3564	No
32	GOM_NL__2PRFIN20021105_020119_000000432011_00003_03564_1312.N1	05-NOV-2002 02:01:19	Bright	43.000	58	21Alp And	2.0730	11000.	86	3564	No
33	GOM_NL__2PRFIN20021105_020446_000000472011_00003_03564_1313.N1	05-NOV-2002 02:04:46	Bright	46.500	73	57Gam1And	2.2600	13100.	93	3564	No
34	GOM_NL__2PRFIN20021105_020828_000000442011_00003_03564_1314.N1	05-NOV-2002 02:08:28	Bright	43.500	68	18Alp Cas	2.2250	4500.0	87	3564	No
35	GOM_NL__2PRFIN20021105_021047_000000902011_00003_03564_1315.N1	05-NOV-2002 02:10:47	Bright	89.500	114	31ot Aur	2.6930	4600.0	179	3564	No
36	GOM_NL__2PRFIN20021105_021414_000000762011_00003_03564_1316.N1	05-NOV-2002 02:14:14	Bright	76.000	6	13Alp Aur	0.080000	3400.0	152	3564	No
37	GOM_NL__2PRFIN20021105_021742_000000422011_00003_03564_1317.N1	05-NOV-2002 02:17:42	Bright	41.500	49	1Alp UMi	1.9900	6300.0	83	3564	No
38	GOM_NL__2PRFIN20021105_022141_000000462011_00003_03564_1318.N1	05-NOV-2002 02:21:41	Bright	45.500	60	7Bet UMi	2.0810	3950.0	91	3564	No
39	GOM_NL__2PRFIN20021105_022543_000000512011_00003_03564_1319.N1	05-NOV-2002 02:25:43	Bright	51.000	36	50Alp UMa	1.8000	6300.0	102	3564	No
40	GOM_NL__2PRFIN20021105_022721_000000472011_00003_03564_1320.N1	05-NOV-2002 02:27:21	Bright	46.500	82	48Bet UMa	2.3650	10600.	93	3564	No
41	GOM_NL__2PRFIN20021105_023105_000000502011_00003_03564_1321.N1	05-NOV-2002 02:31:05	Bright	49.500	174	52Psi UMa	3.0040	4400.0	99	3564	No
42	GOM_NL__2PRFIN20021105_024007_000000622011_00003_03564_1322.N1	05-NOV-2002 02:40:07	Bright	61.500	51	41Gam1Leo	2.0100	4500.0	123	3564	No

3. Quality information per product

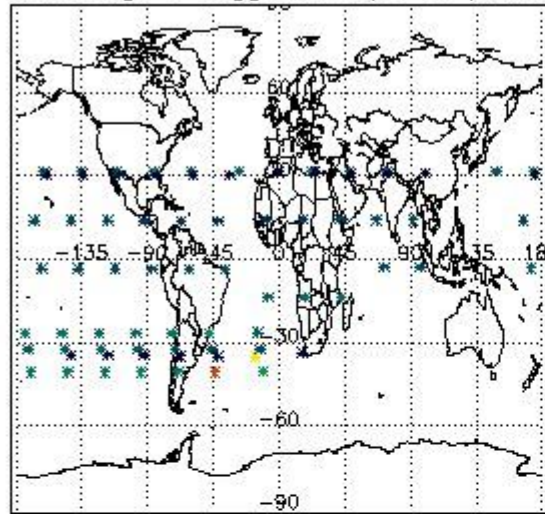
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

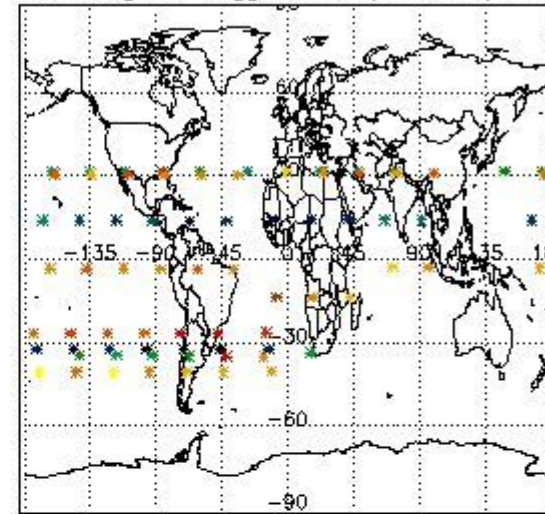


3.2 Plot quality information per product (world map)

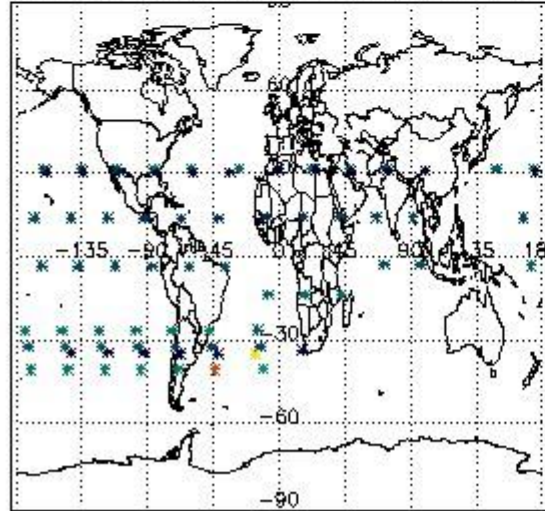
Percentage of flagged data per O3 profile



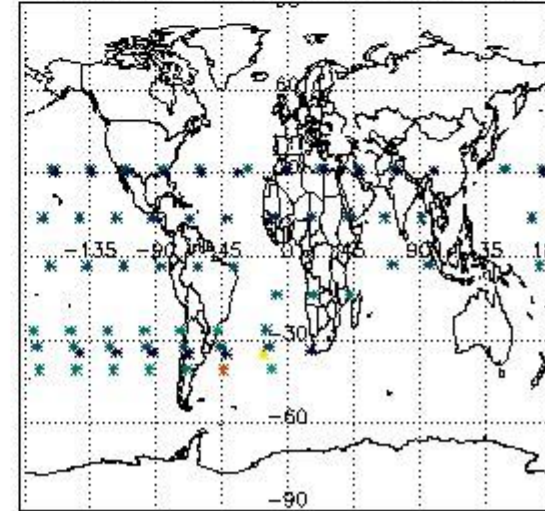
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

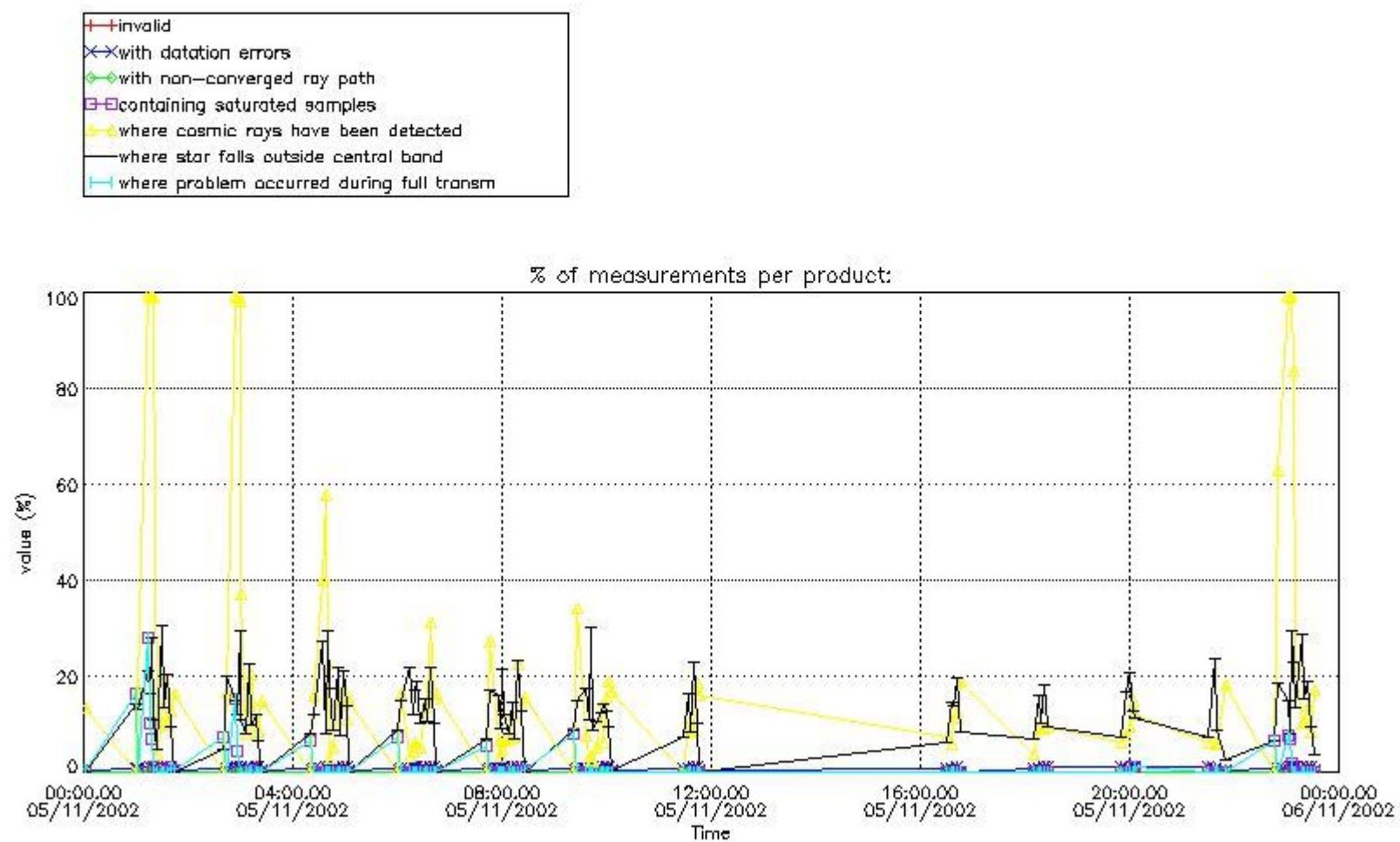


4. Level 1 quality information per product

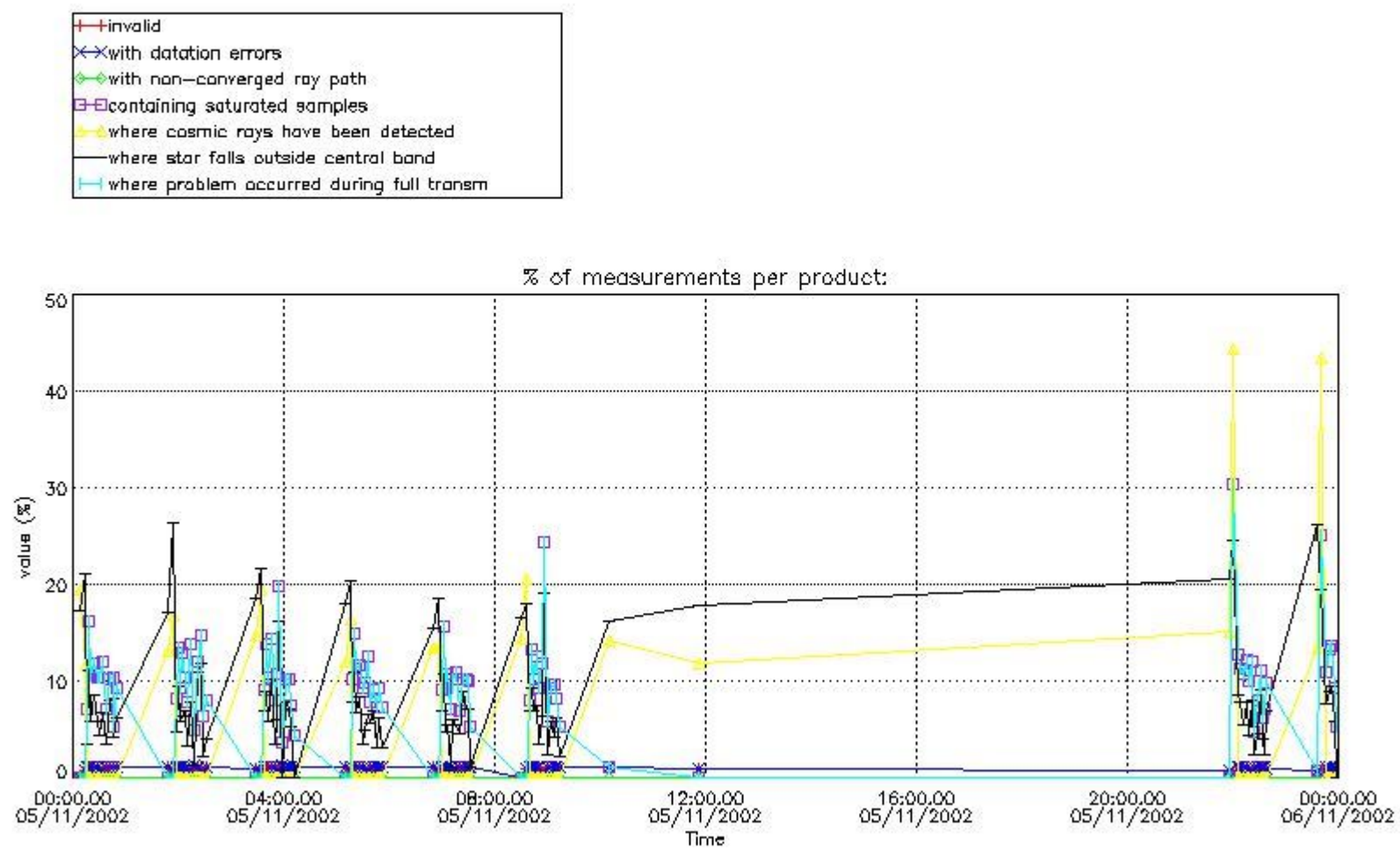
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



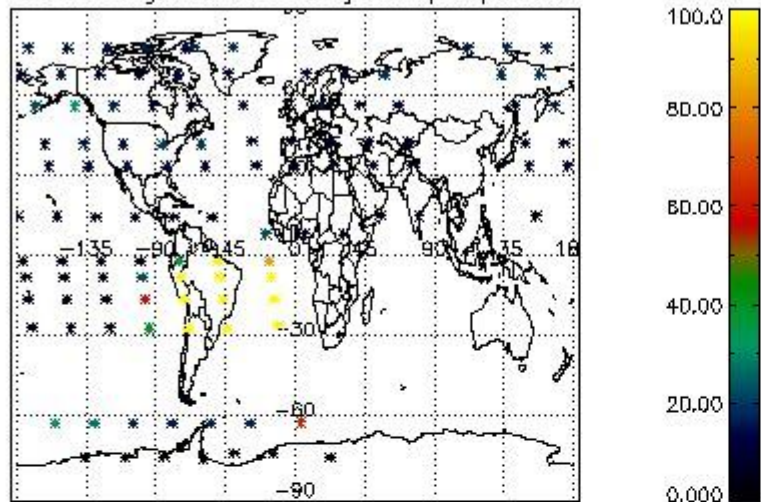
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



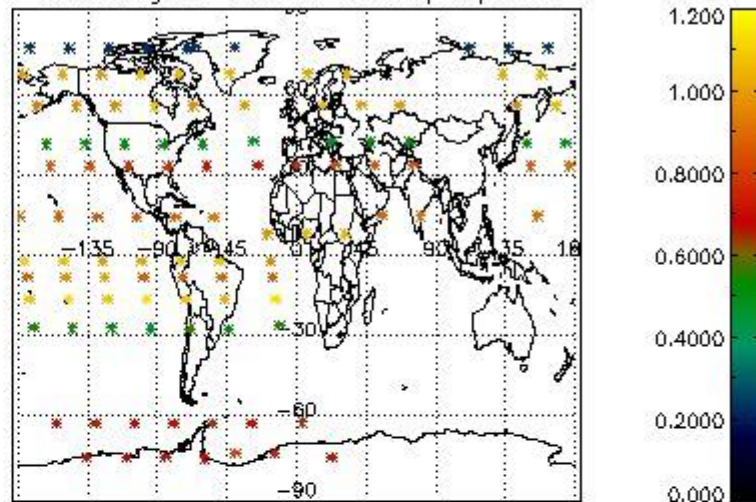
4.2 Plot quality information per product coming from level 1b processing (world map)

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

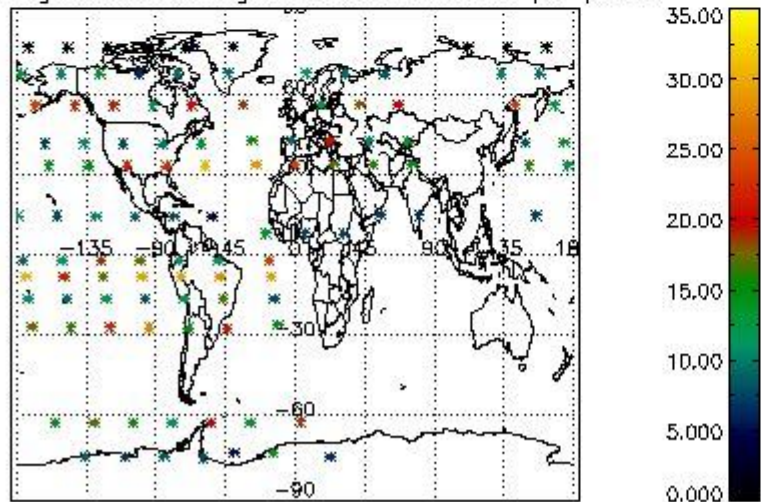
Percentage of cosmic ray hits per profile



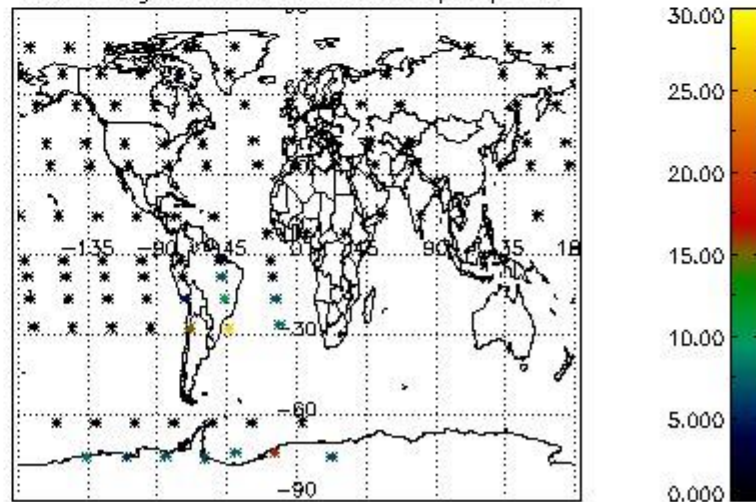
Percentage of datation errors per profile



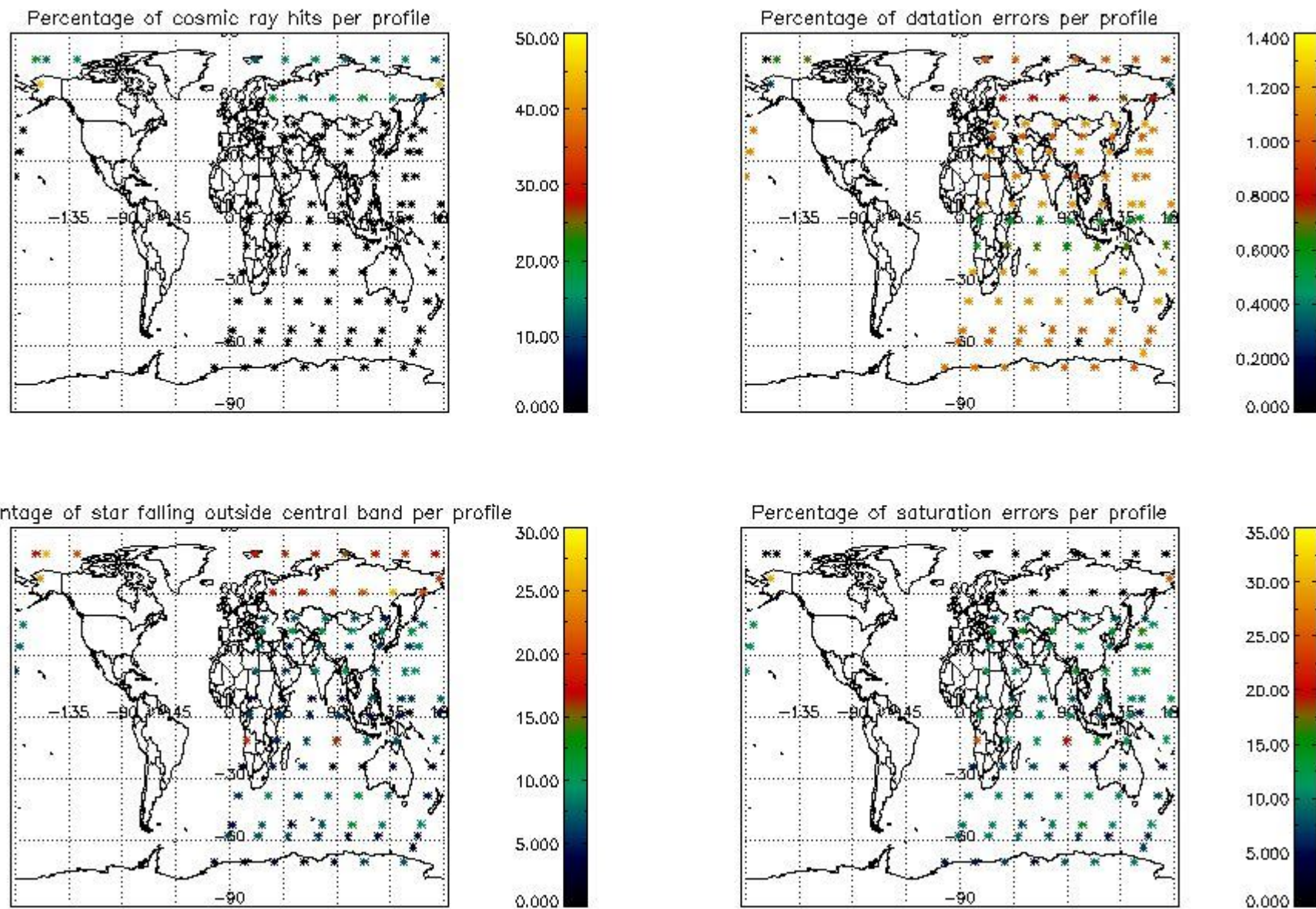
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

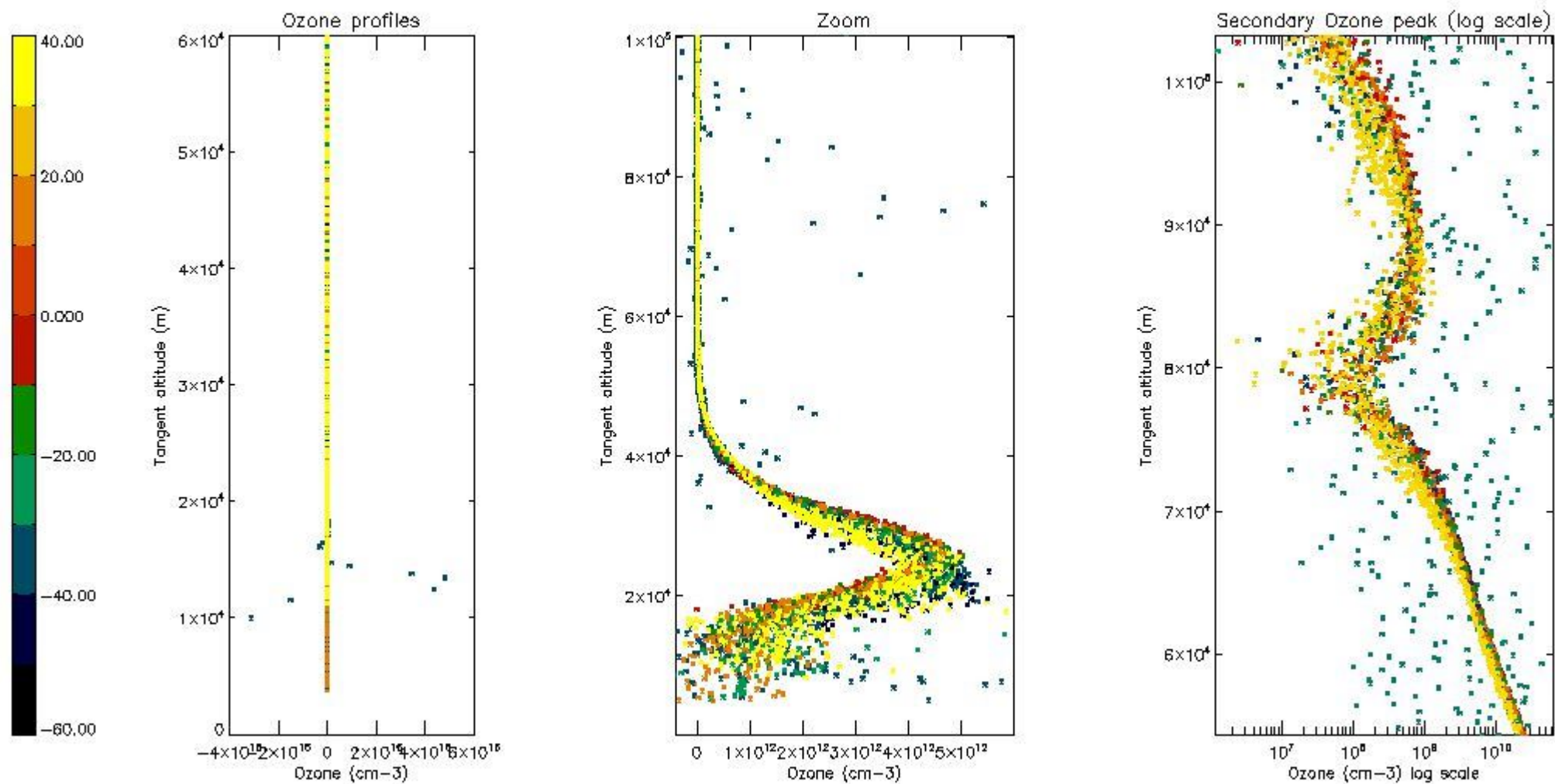
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	34
STD < 20	19

STD < 10	17
STD < 5	14

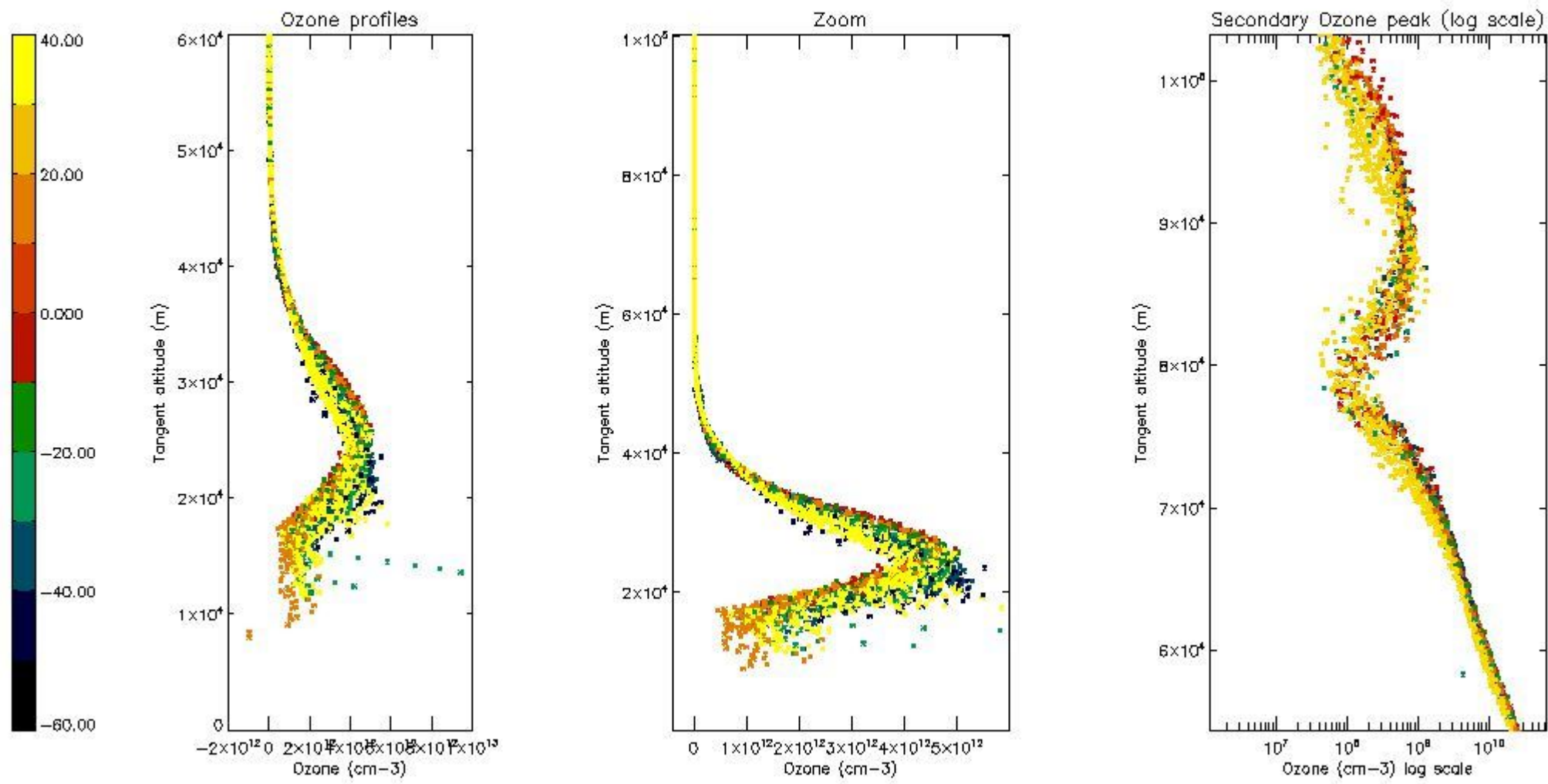
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



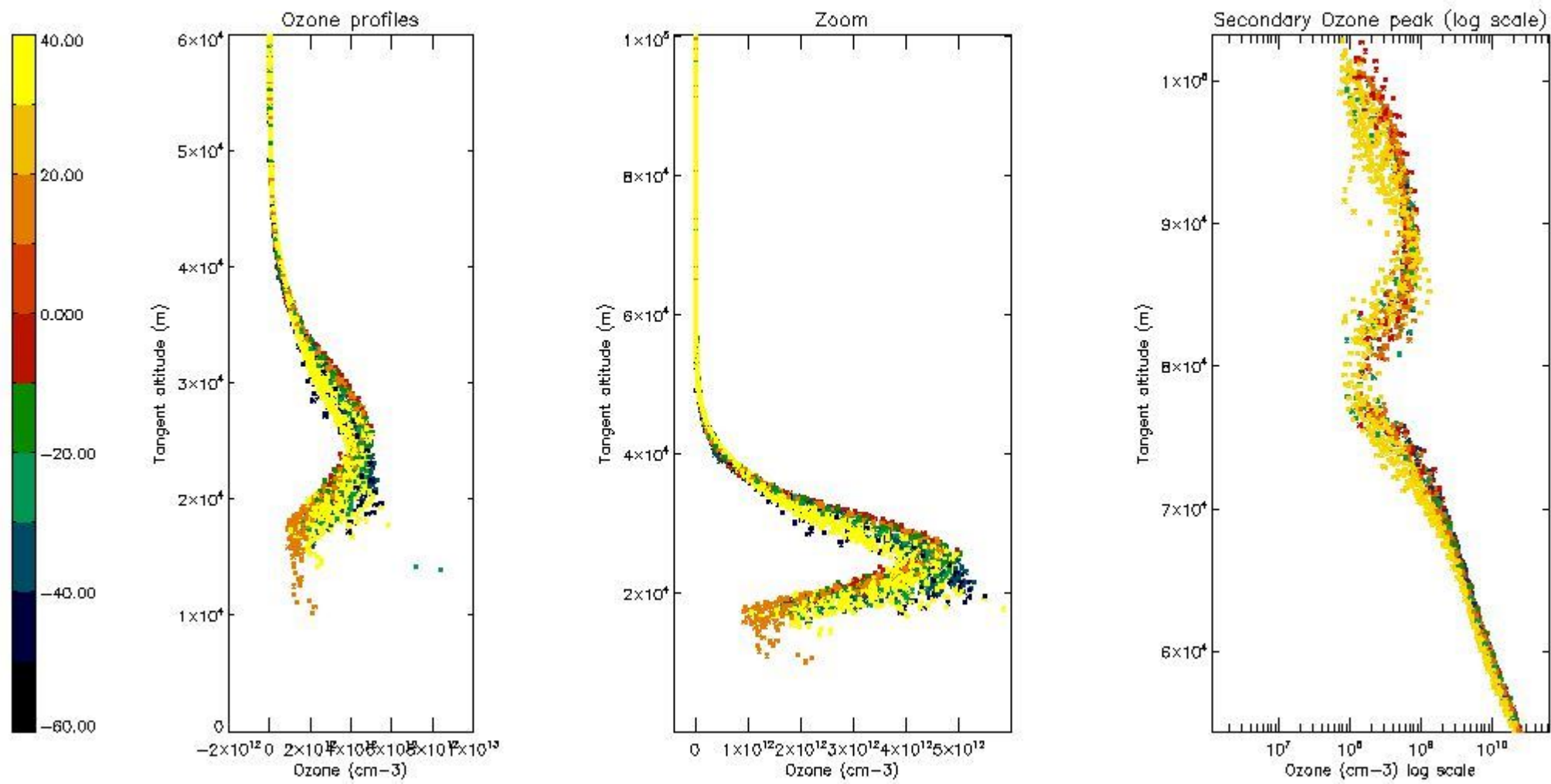
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



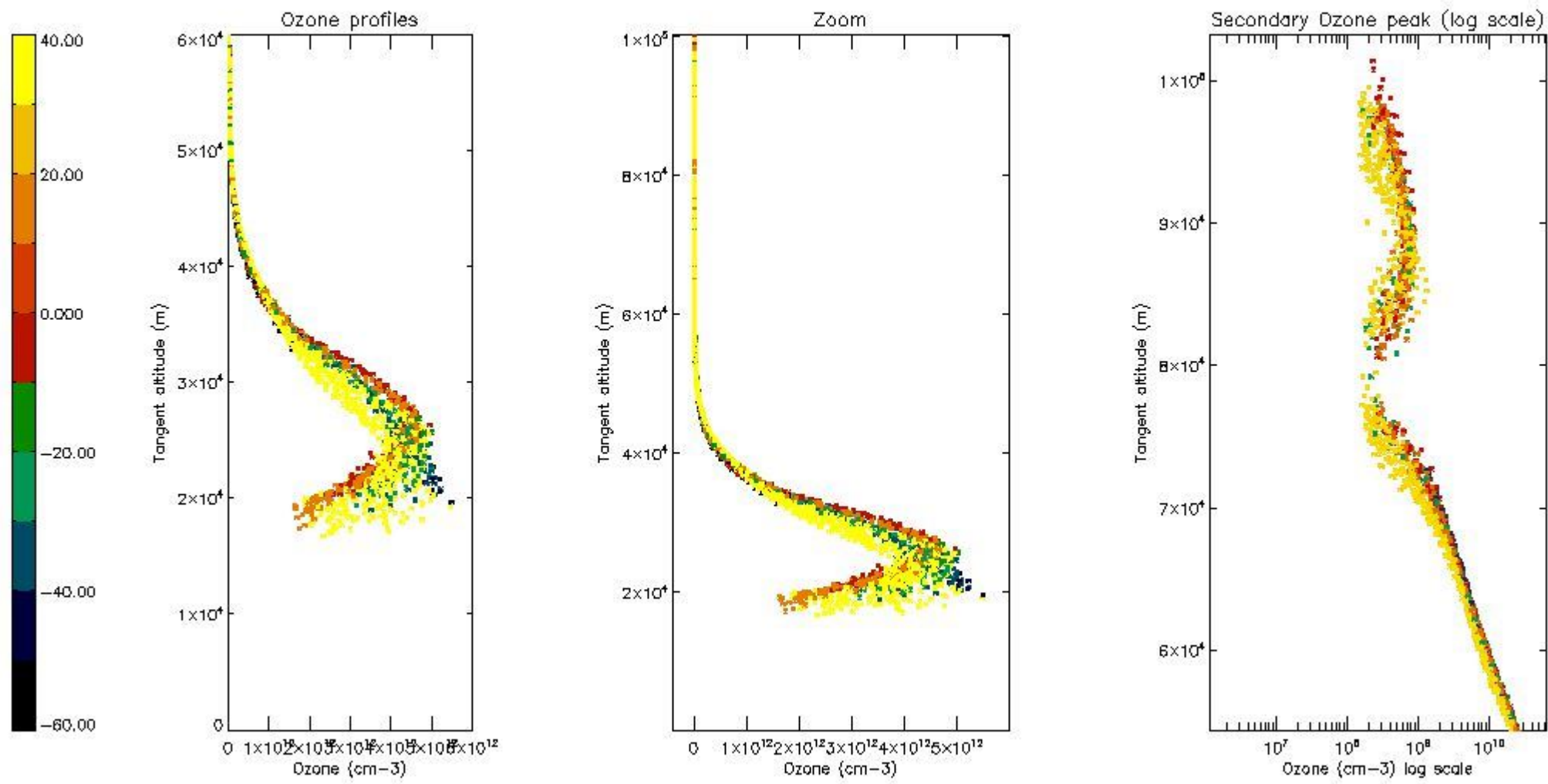
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



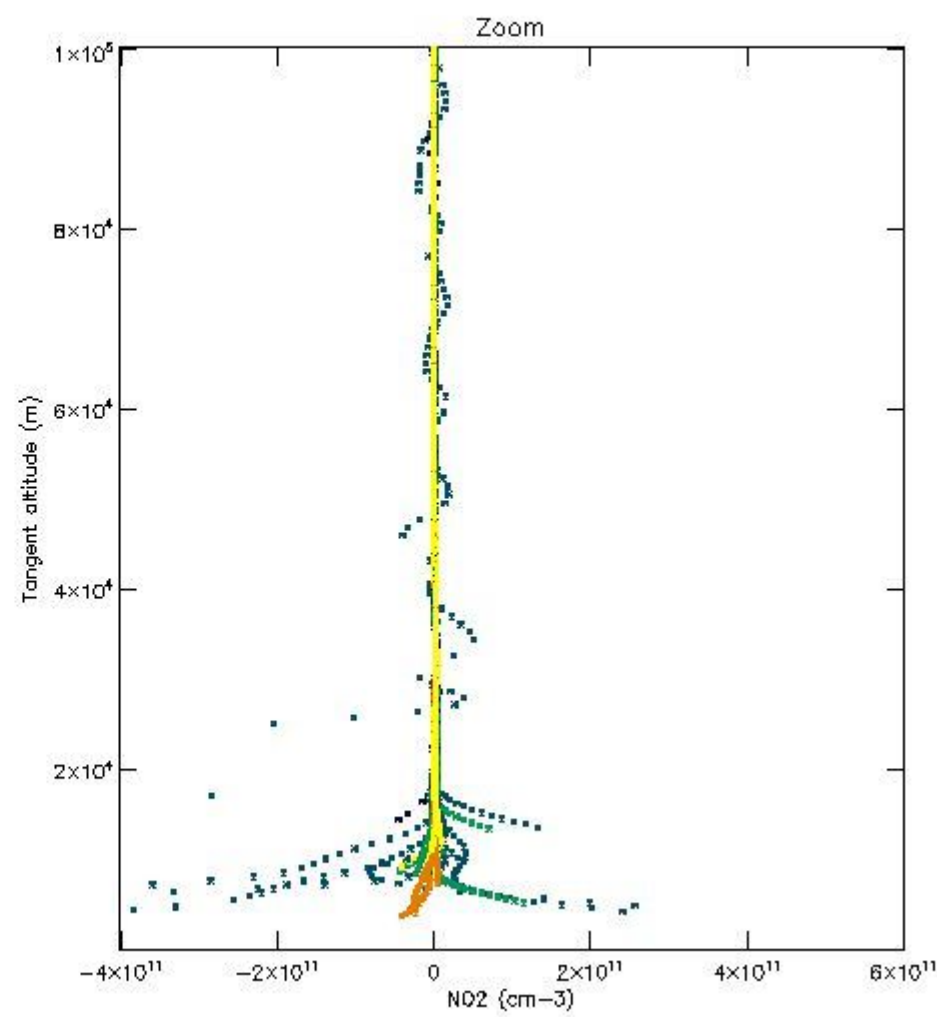
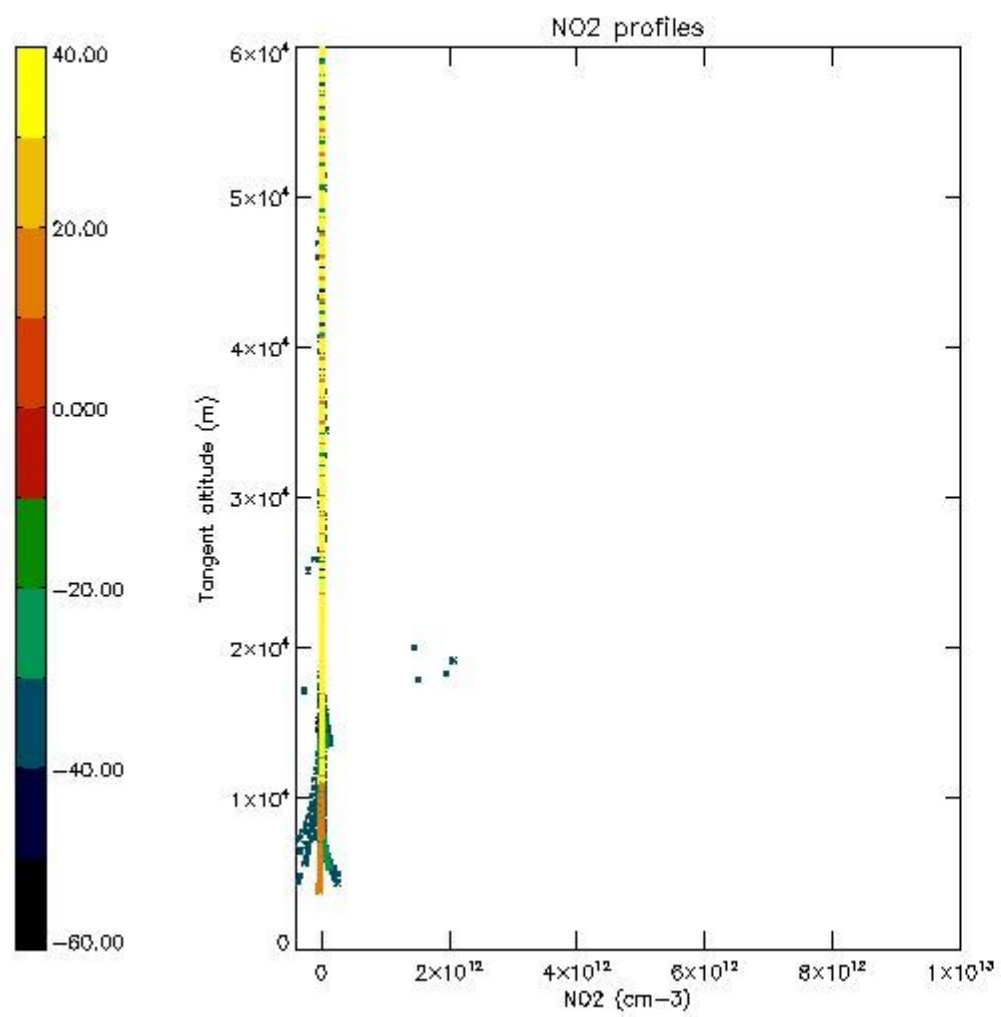
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



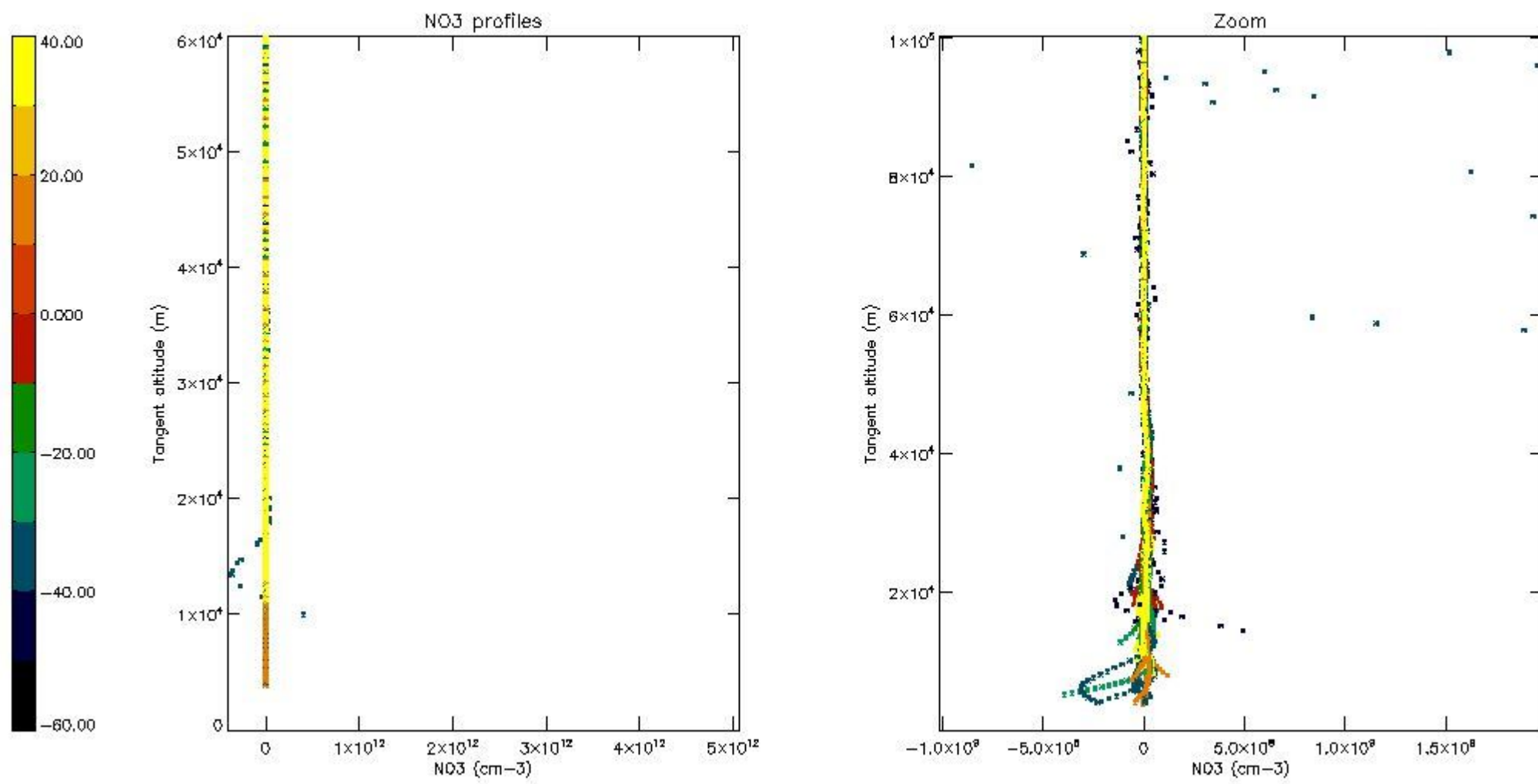
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



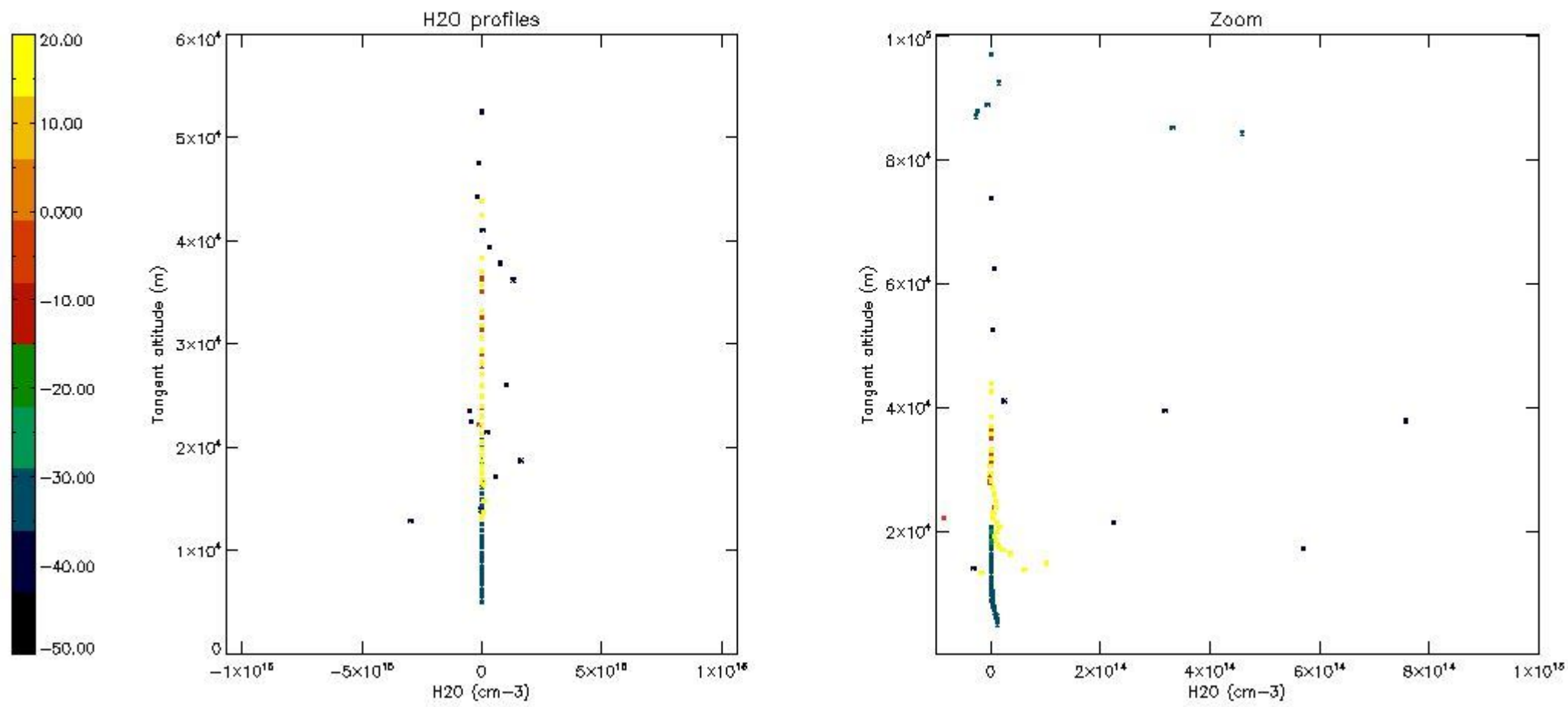
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

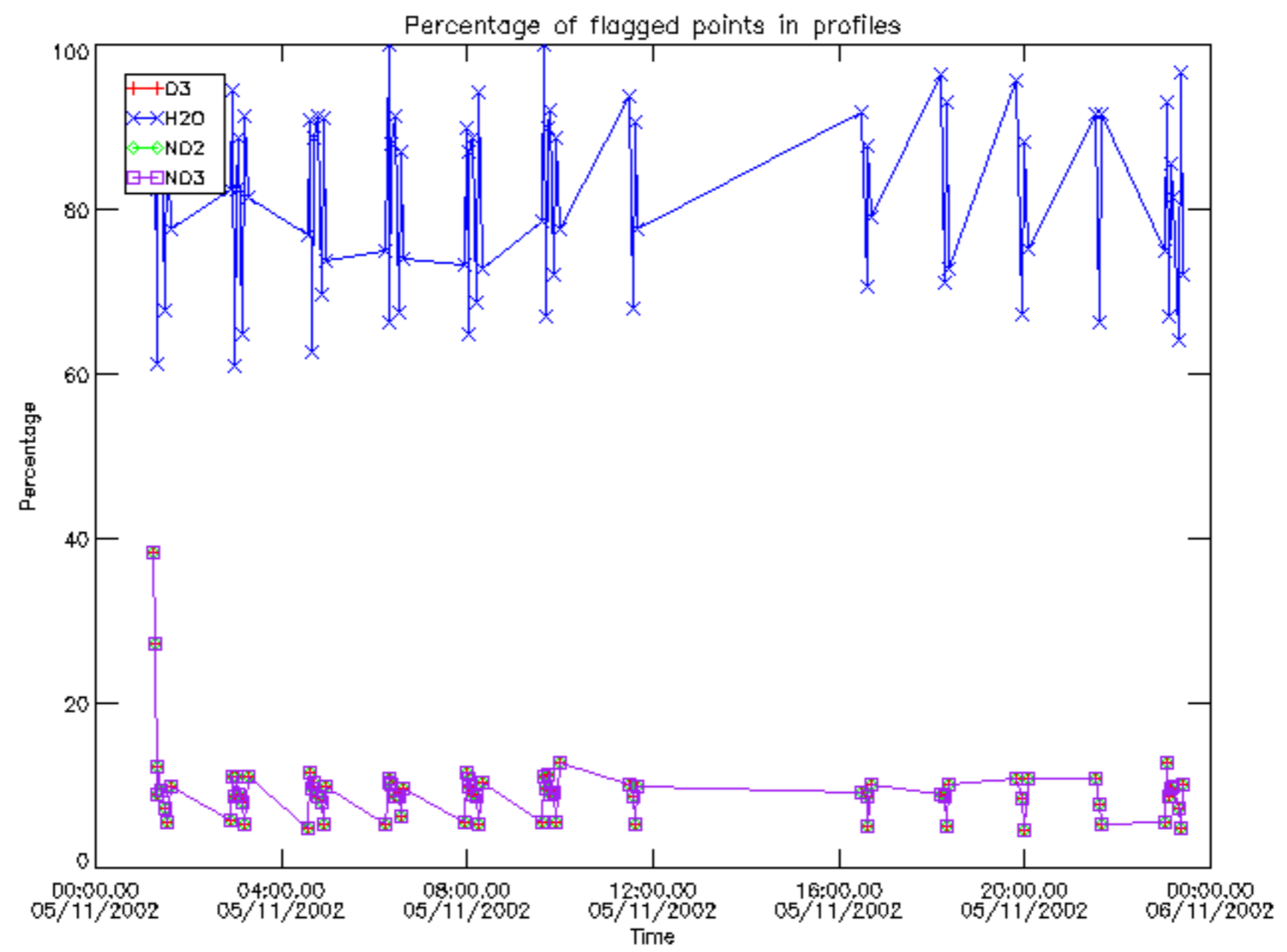
The colorbar represents the latitude.



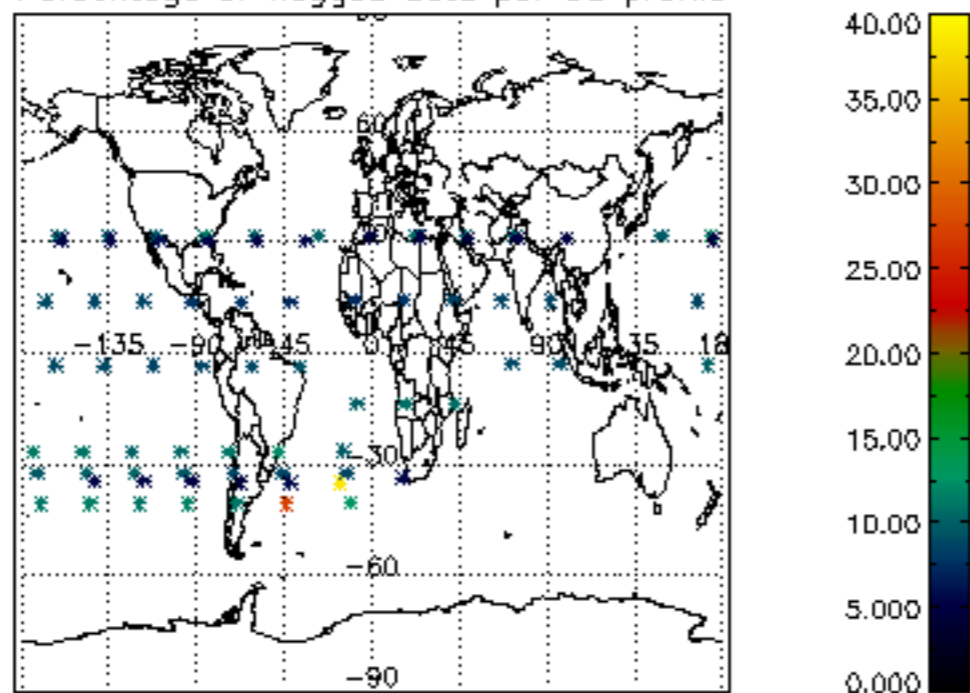
6. Auxiliary Data Files used for the production reported in section 2

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.

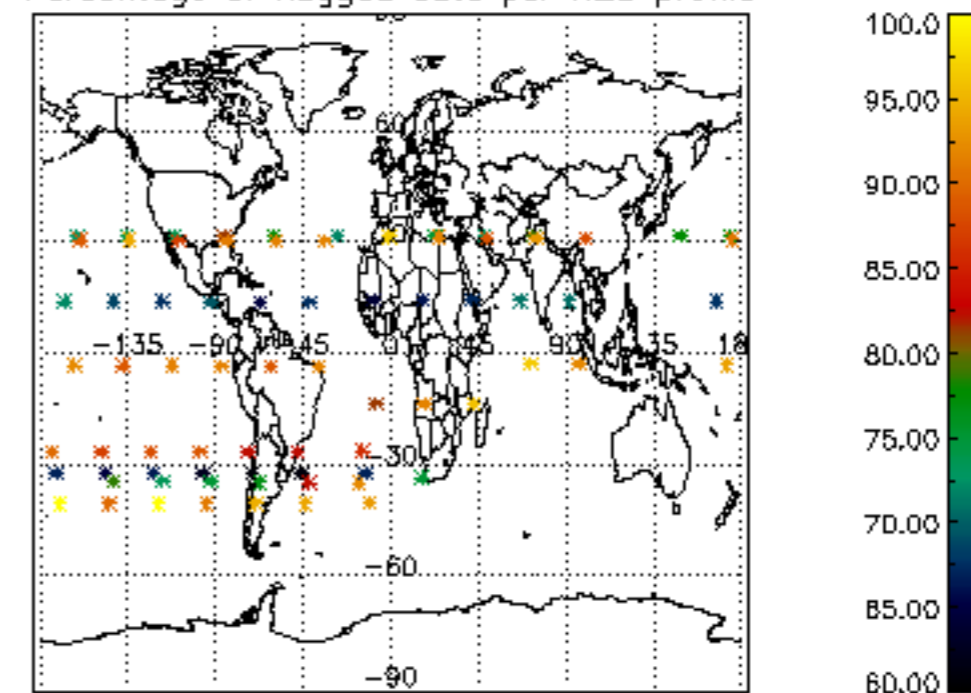
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	05-NOV-2002 00:02:31
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	05-NOV-2002 00:02:31
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	05-NOV-2002 00:02:31



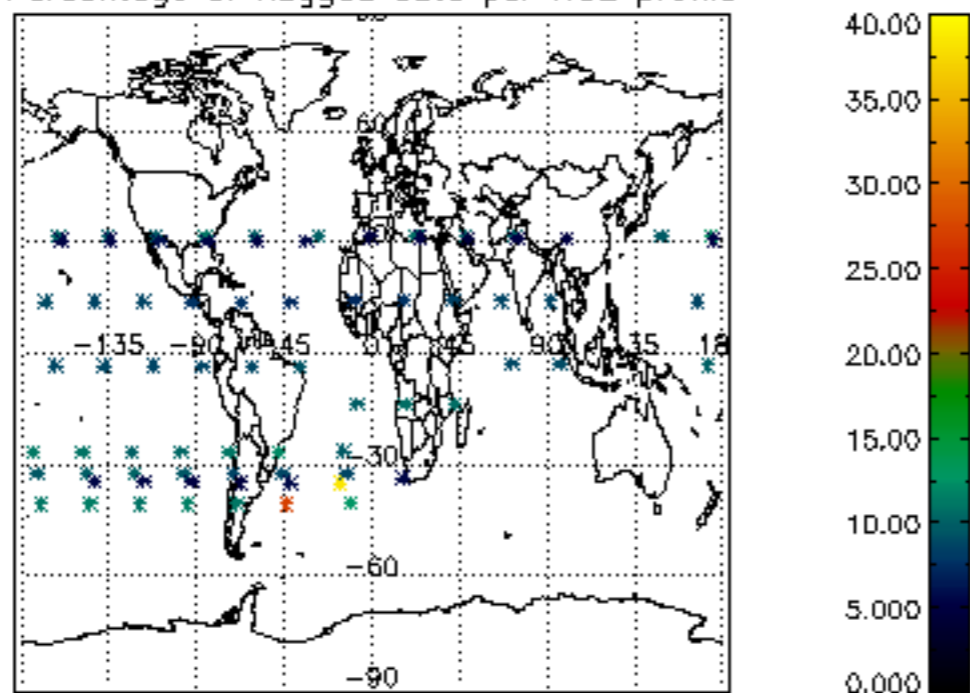
Percentage of flagged data per D3 profile



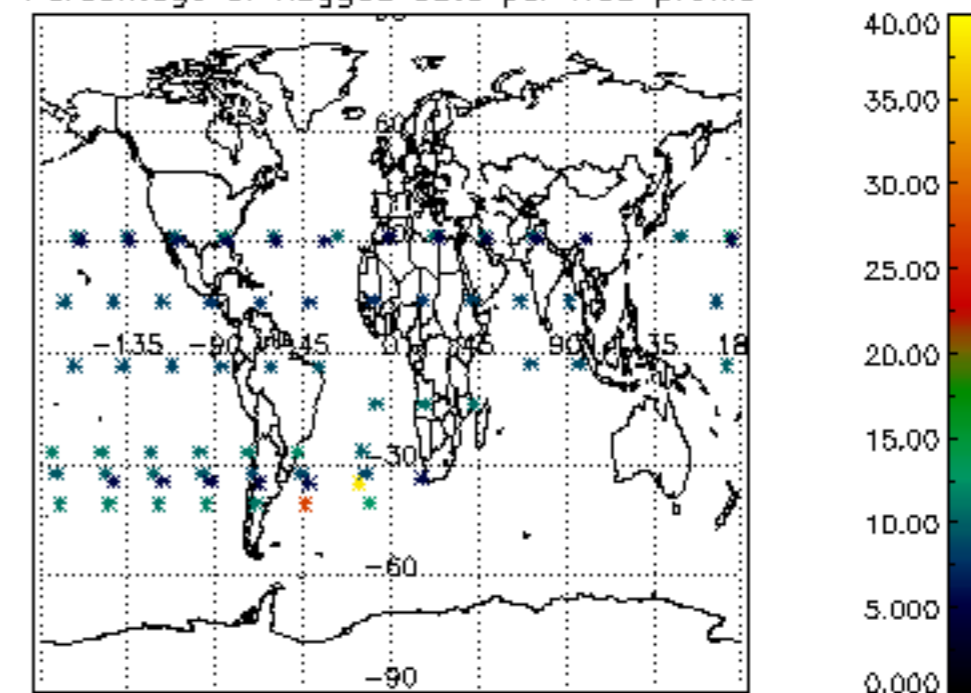
Percentage of flagged data per H2O profile

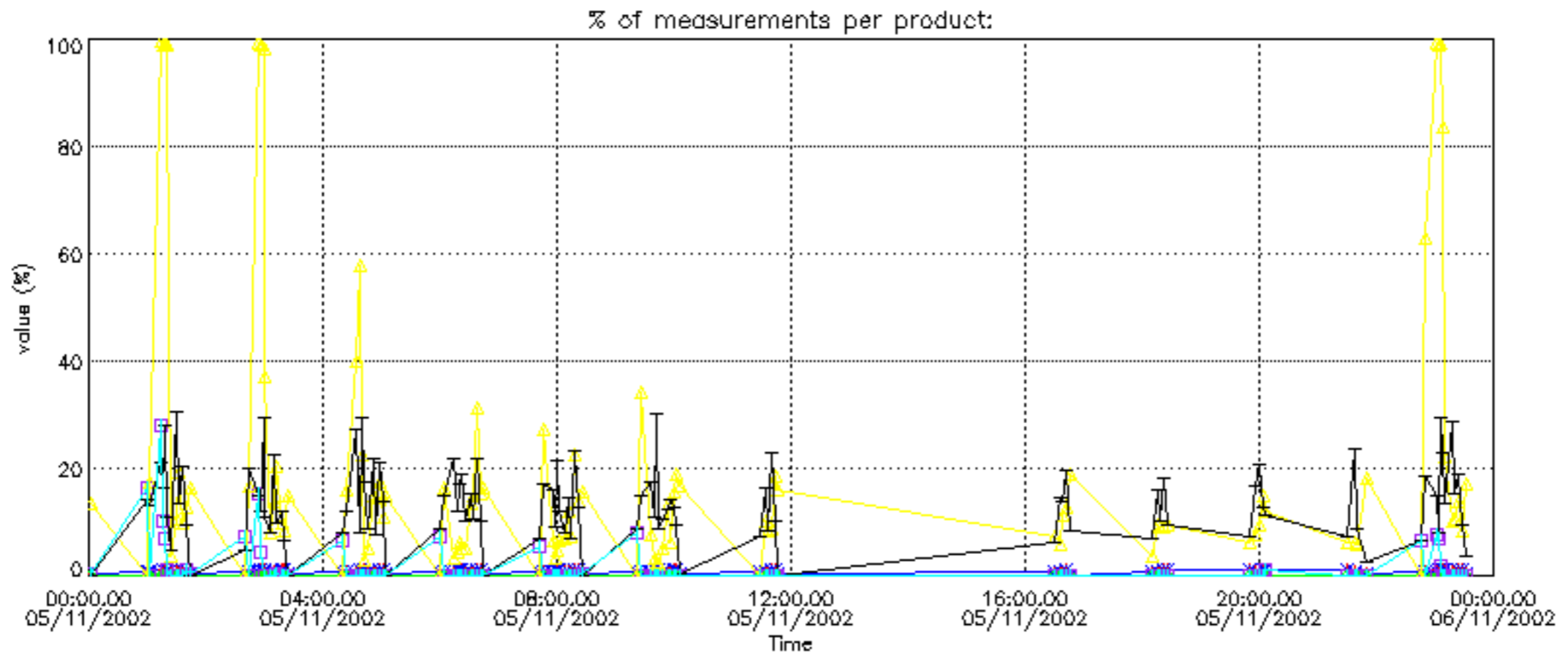


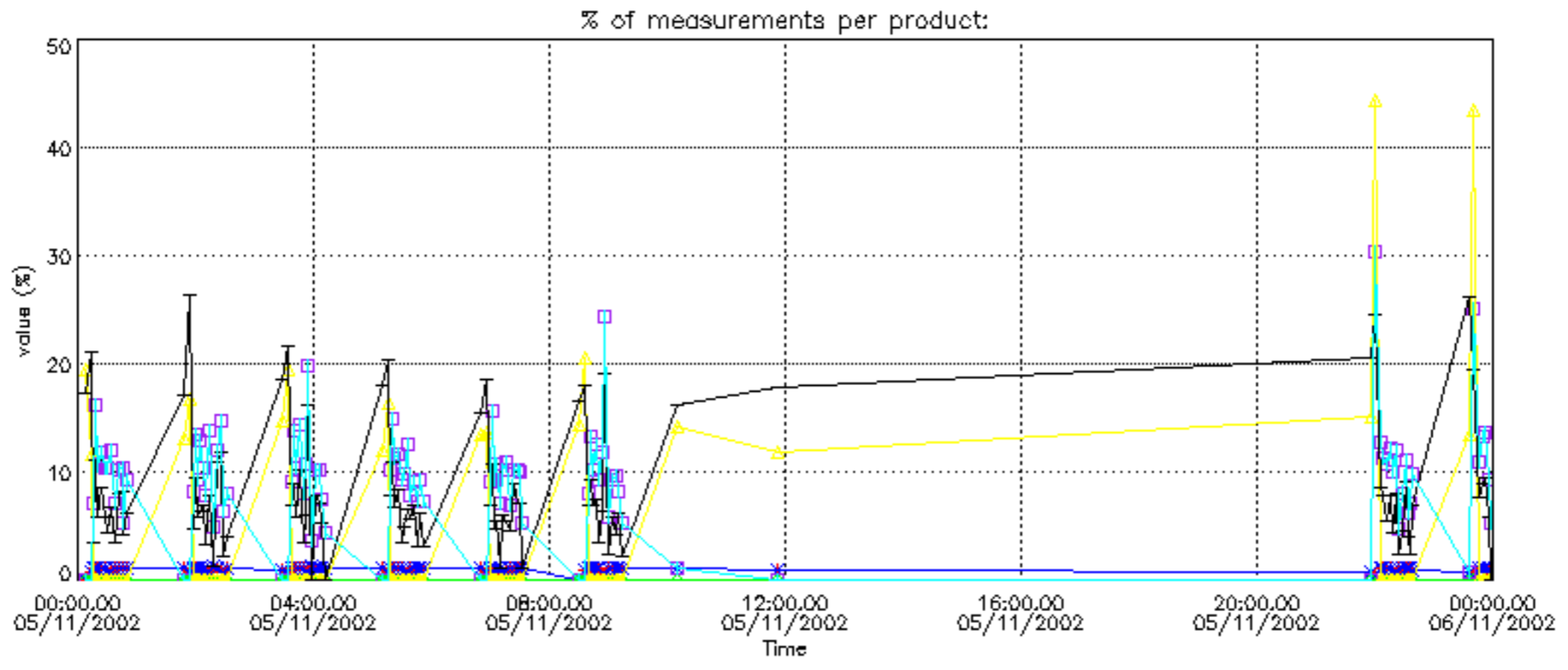
Percentage of flagged data per NO2 profile



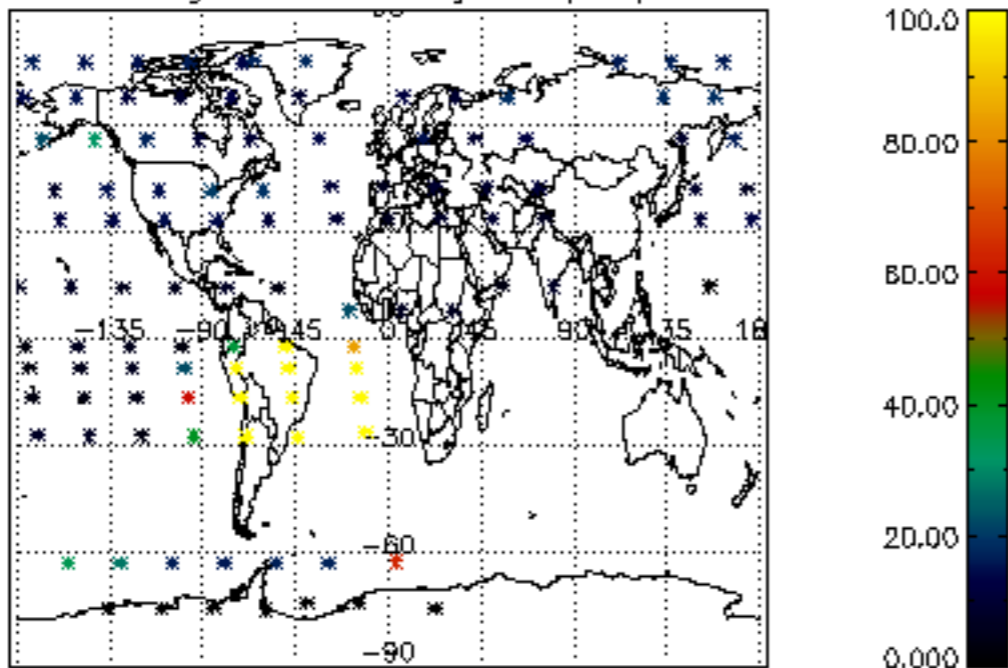
Percentage of flagged data per NO3 profile



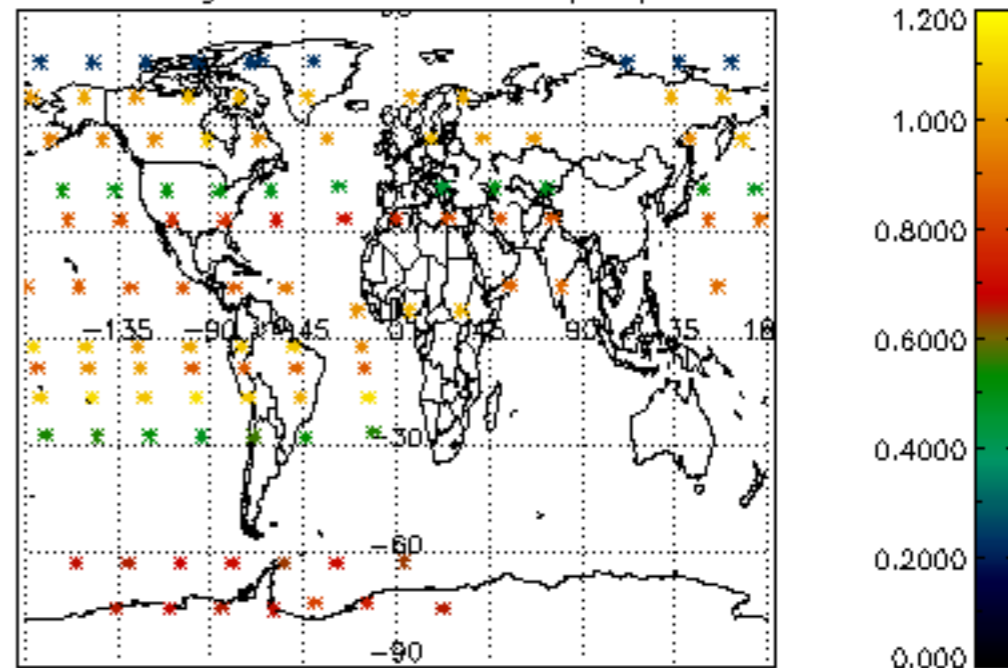




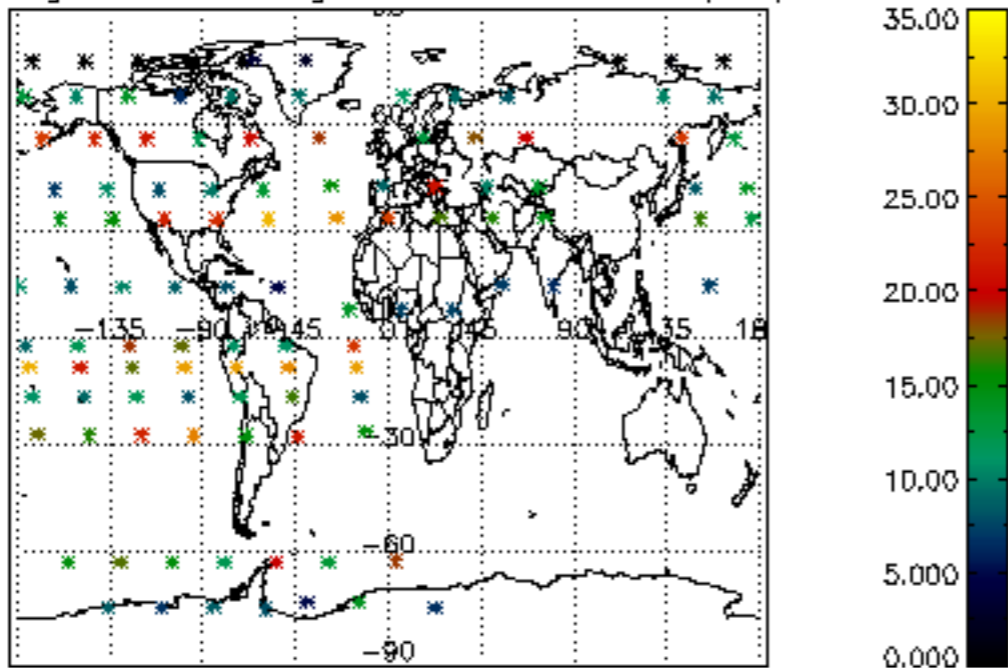
Percentage of cosmic ray hits per profile



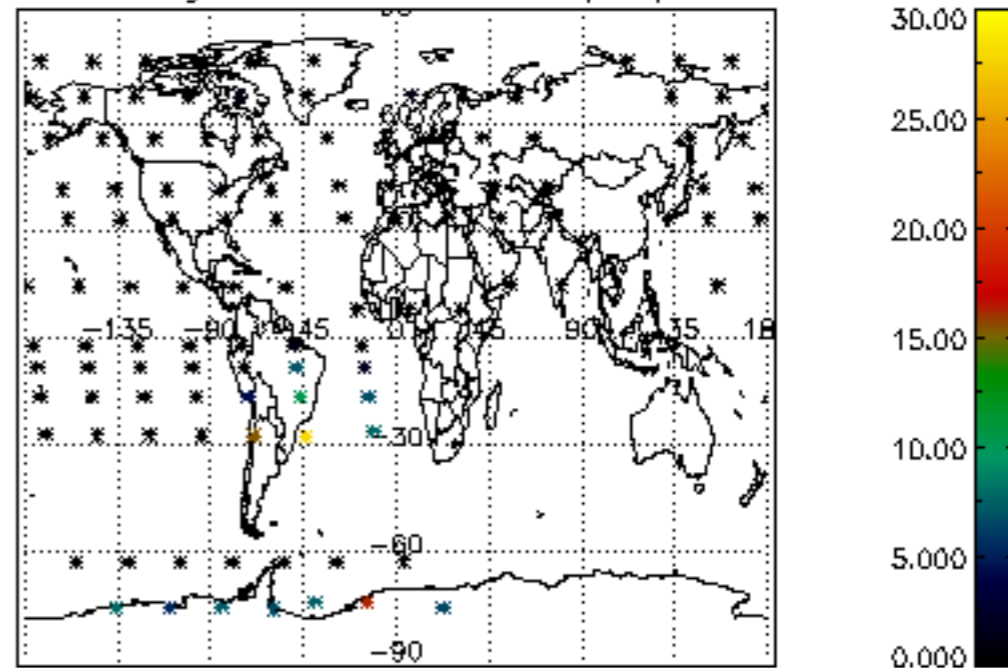
Percentage of datation errors per profile



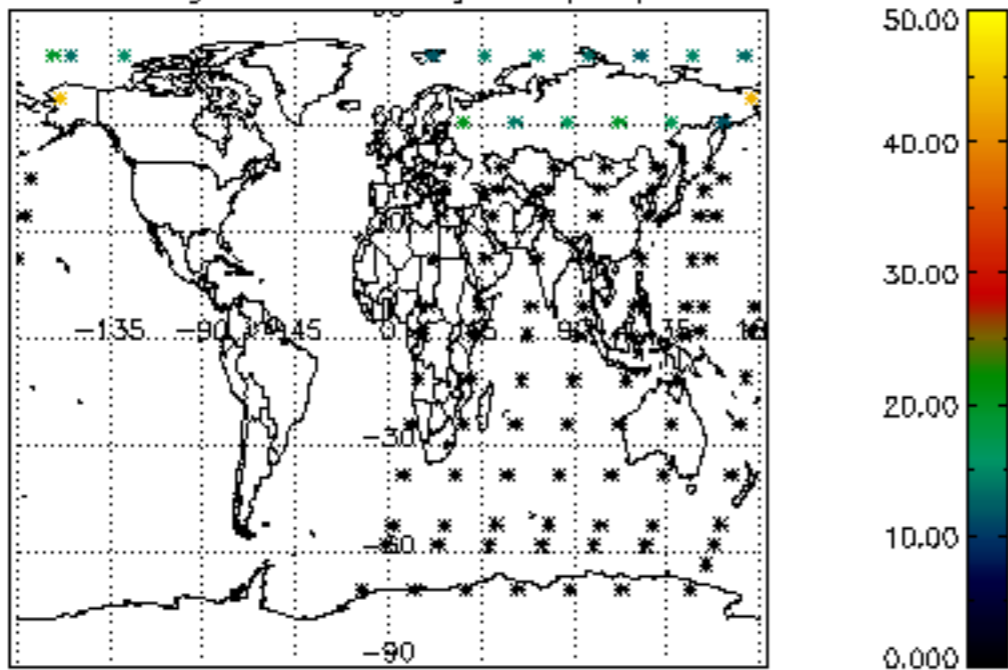
Percentage of star falling outside central band per profile



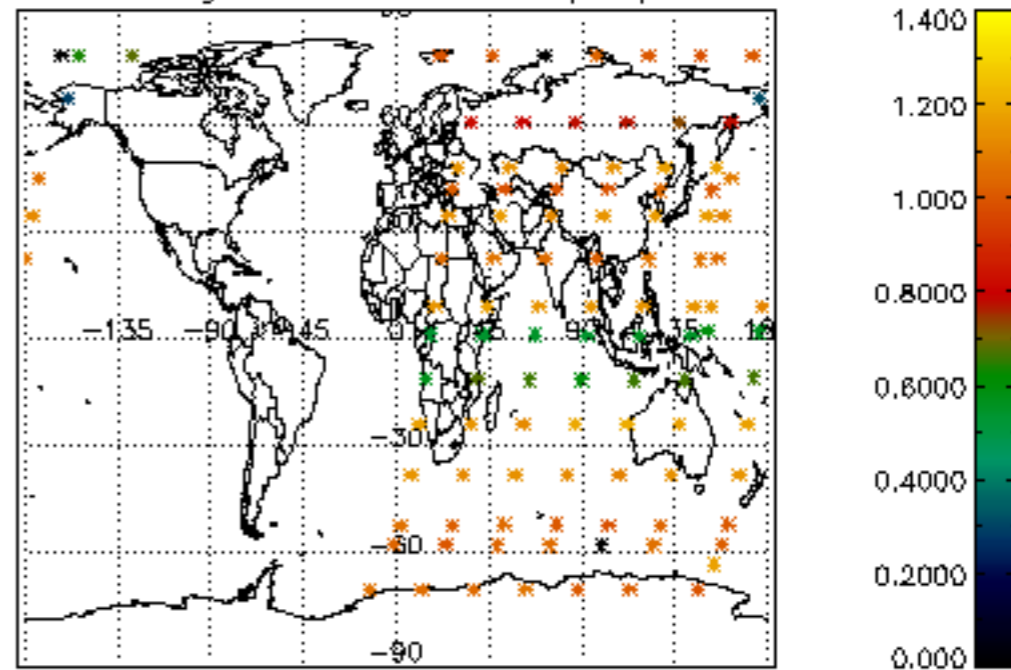
Percentage of saturation errors per profile



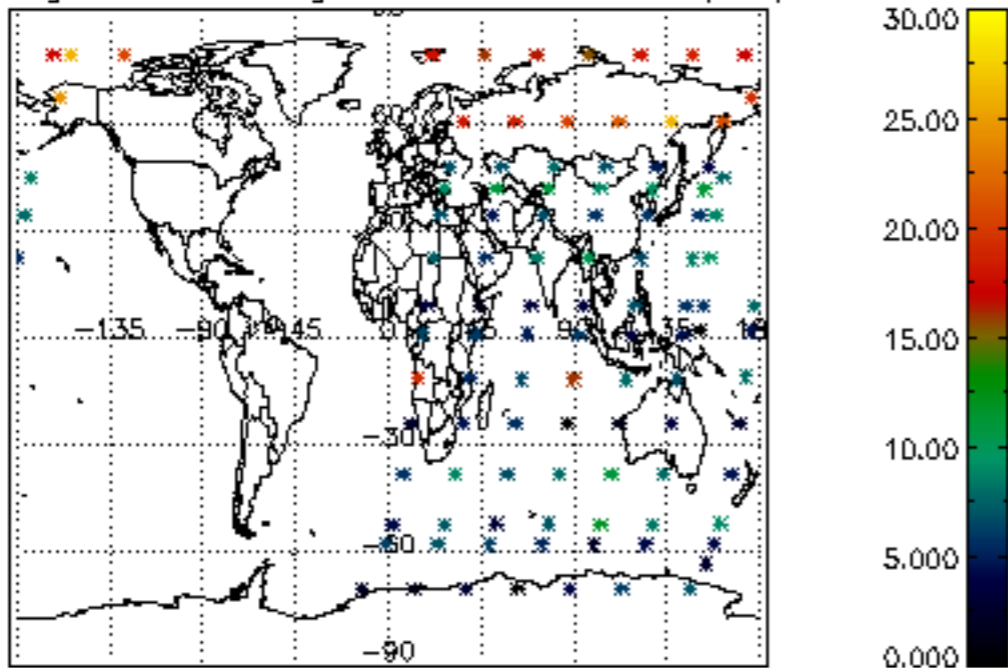
Percentage of cosmic ray hits per profile



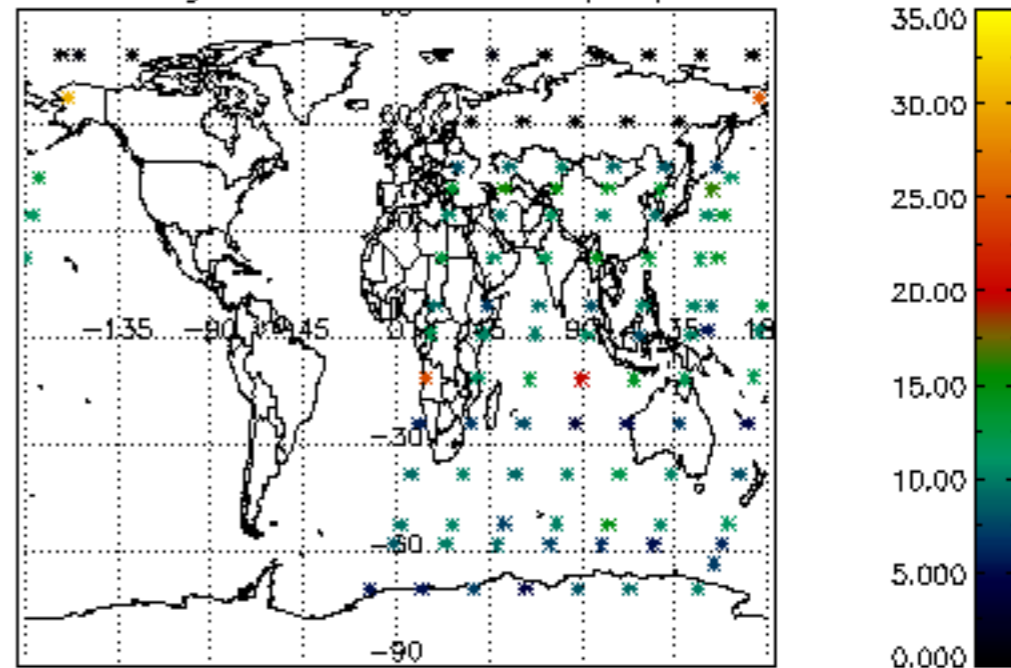
Percentage of datation errors per profile

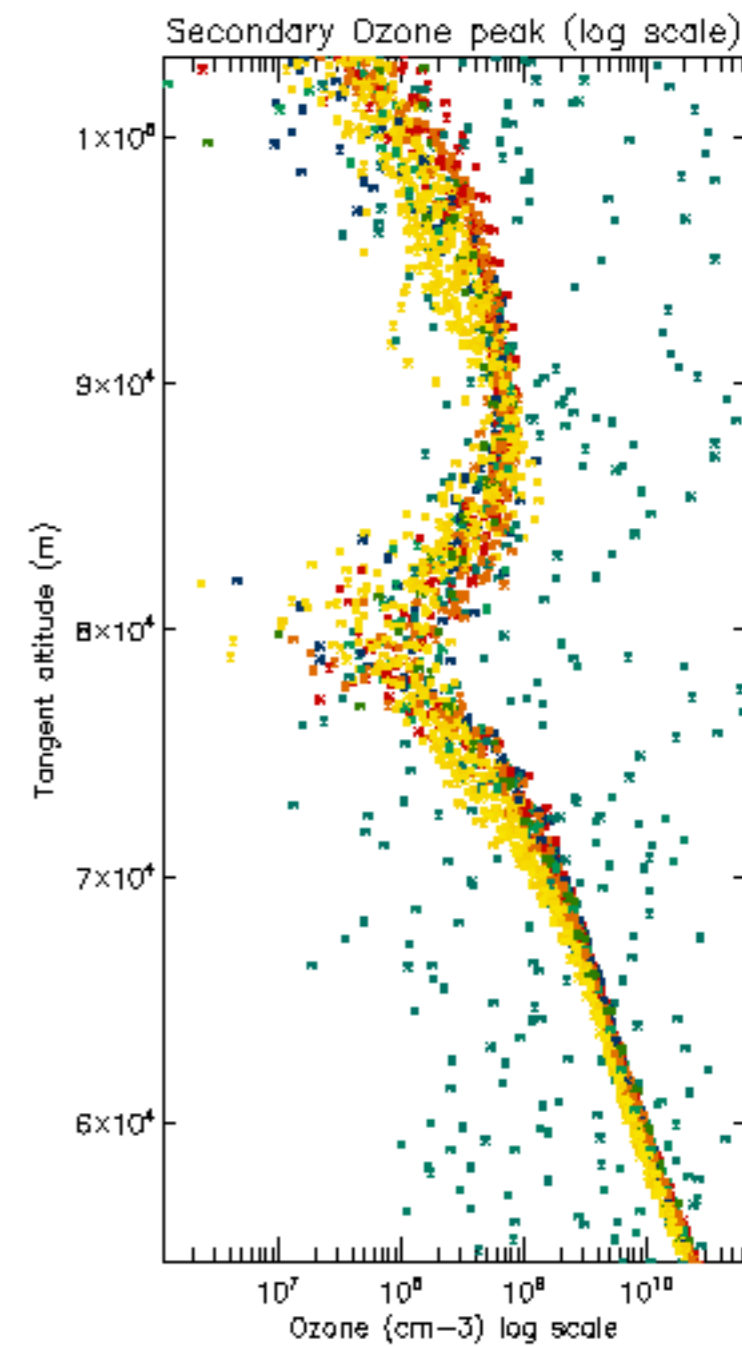
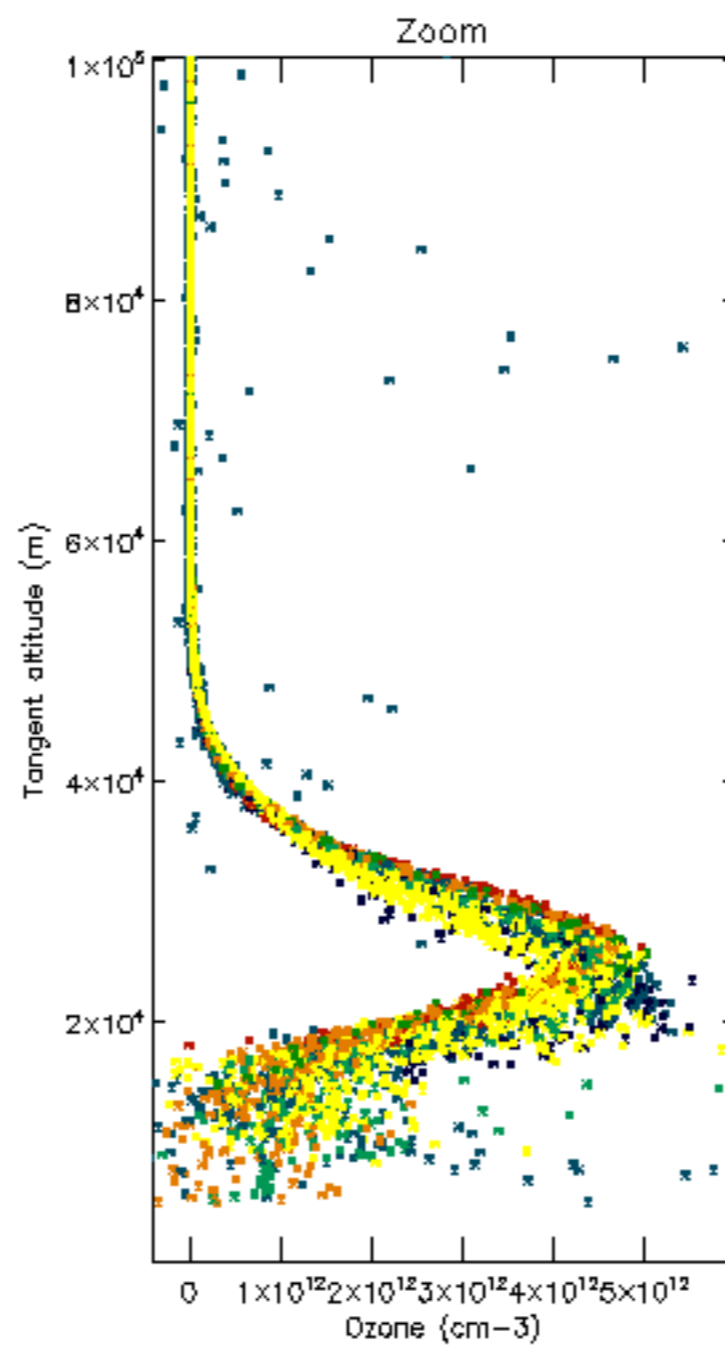
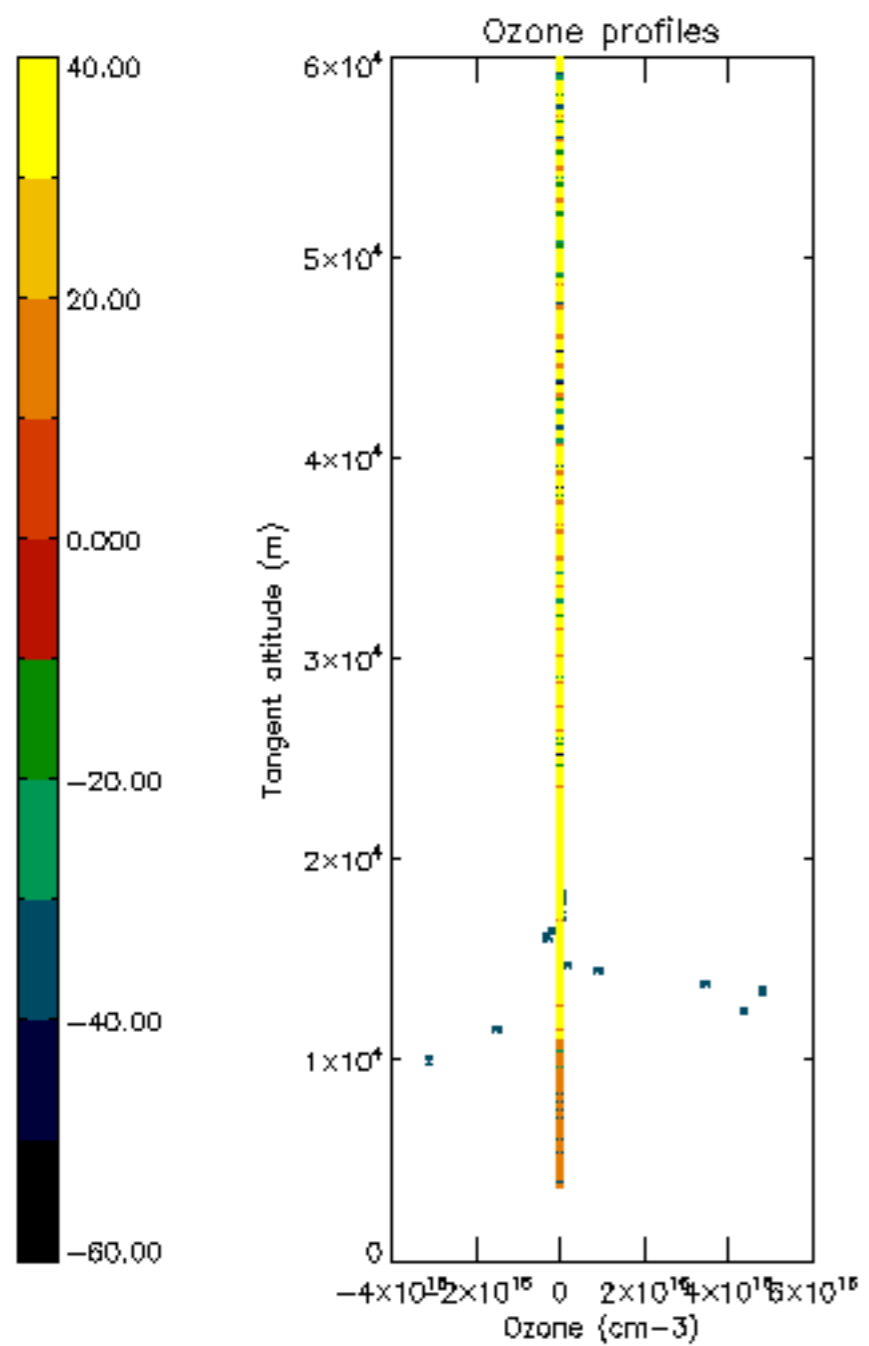


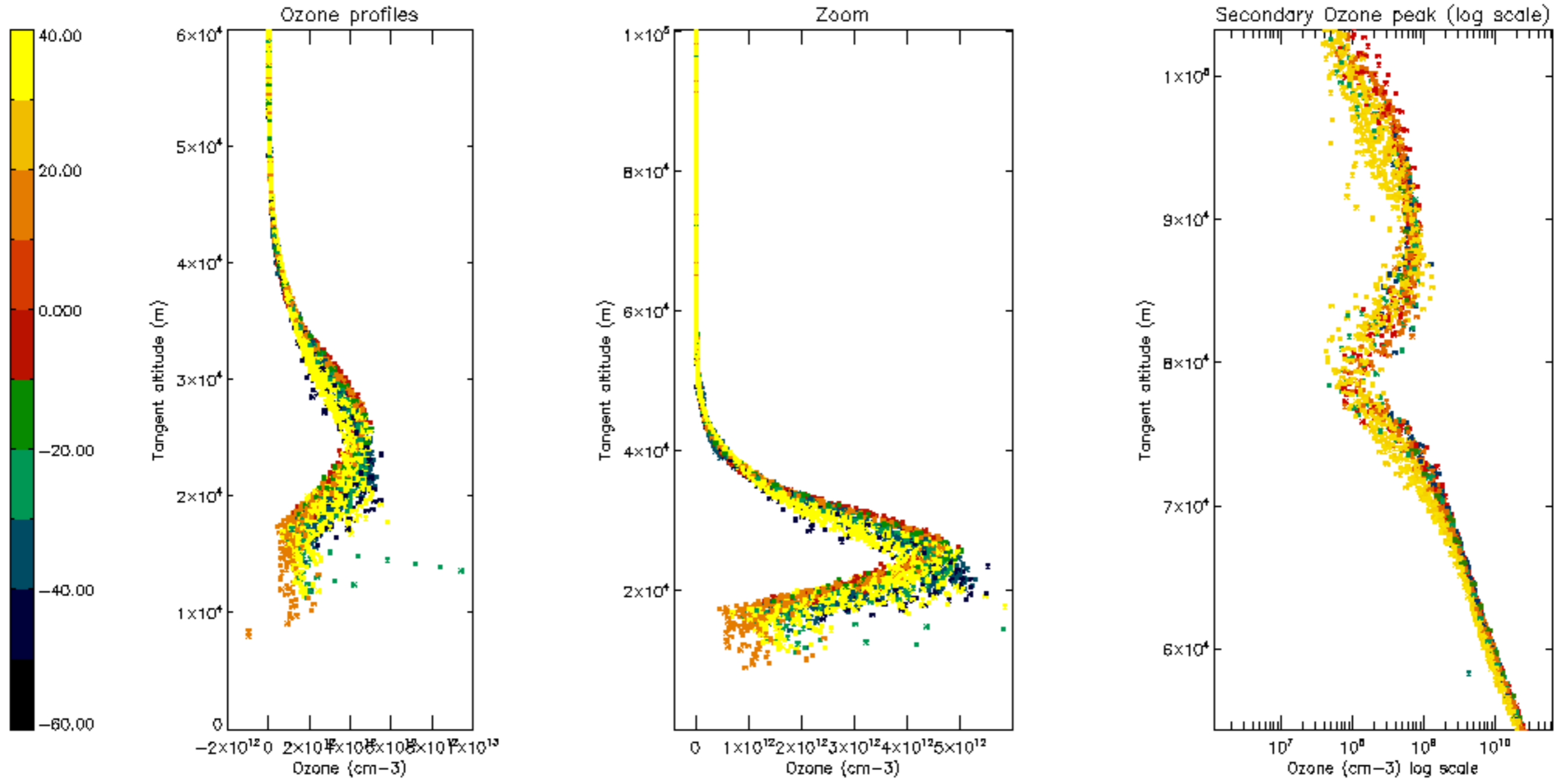
Percentage of star falling outside central band per profile

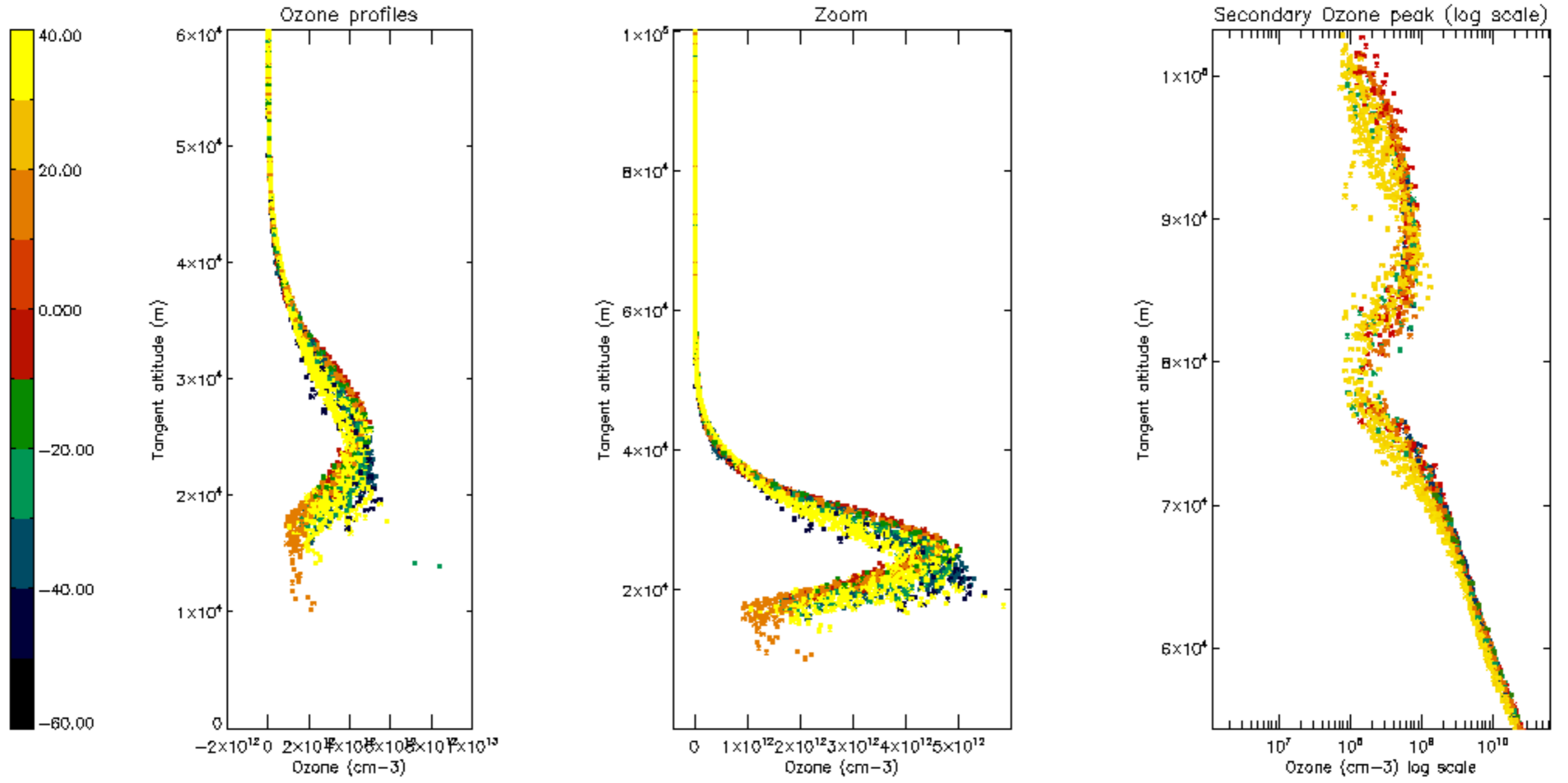


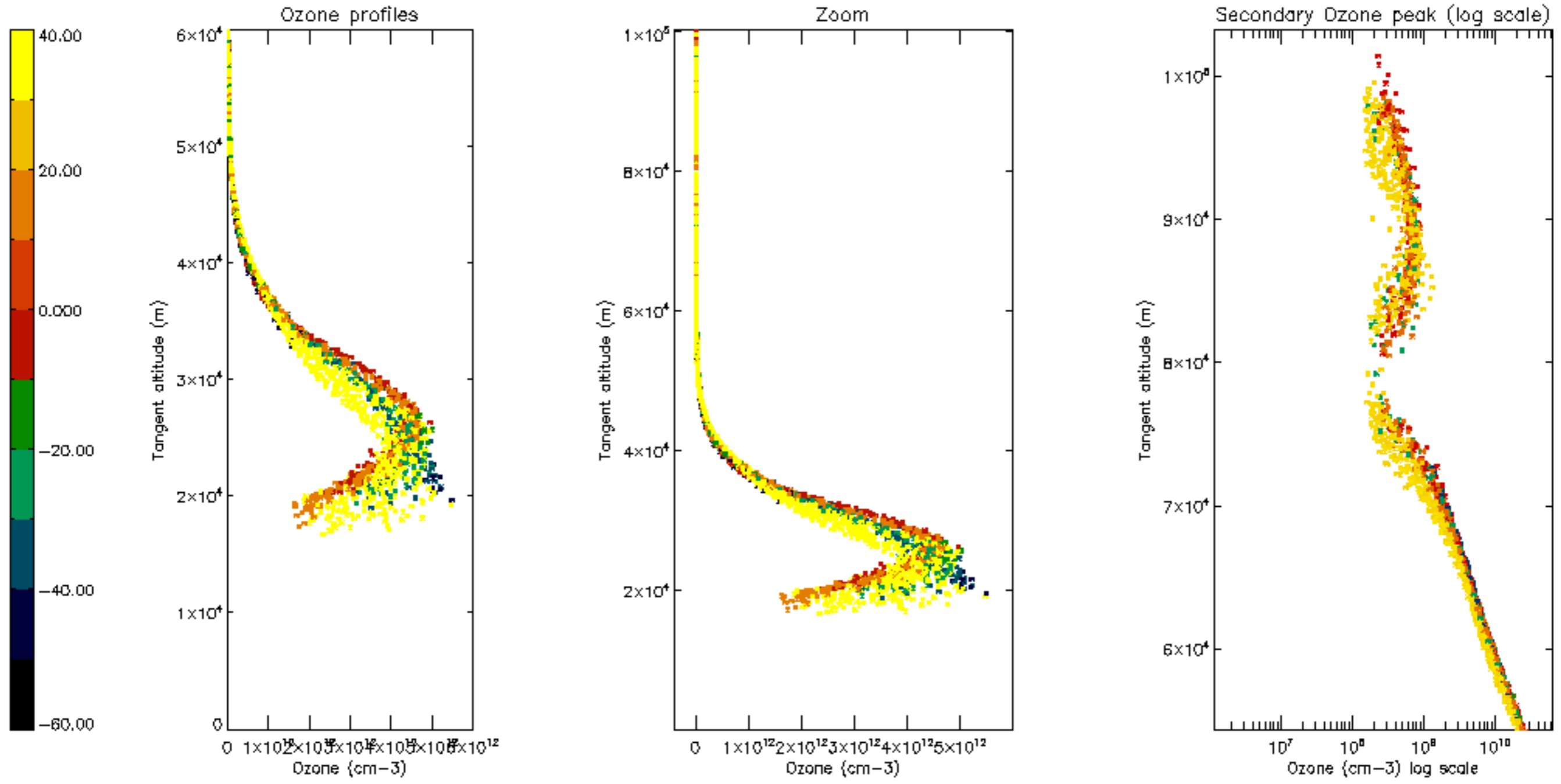
Percentage of saturation errors per profile

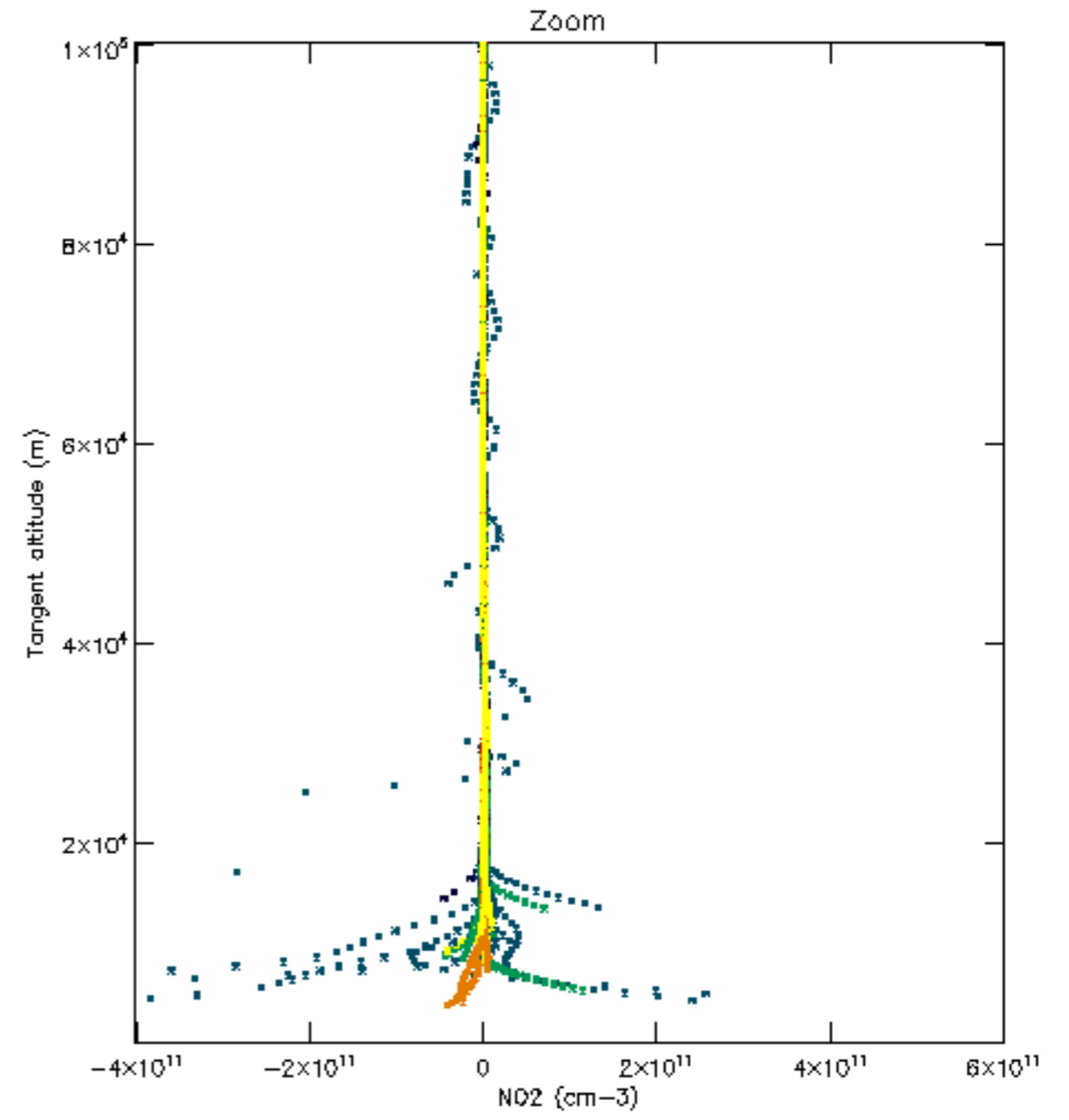
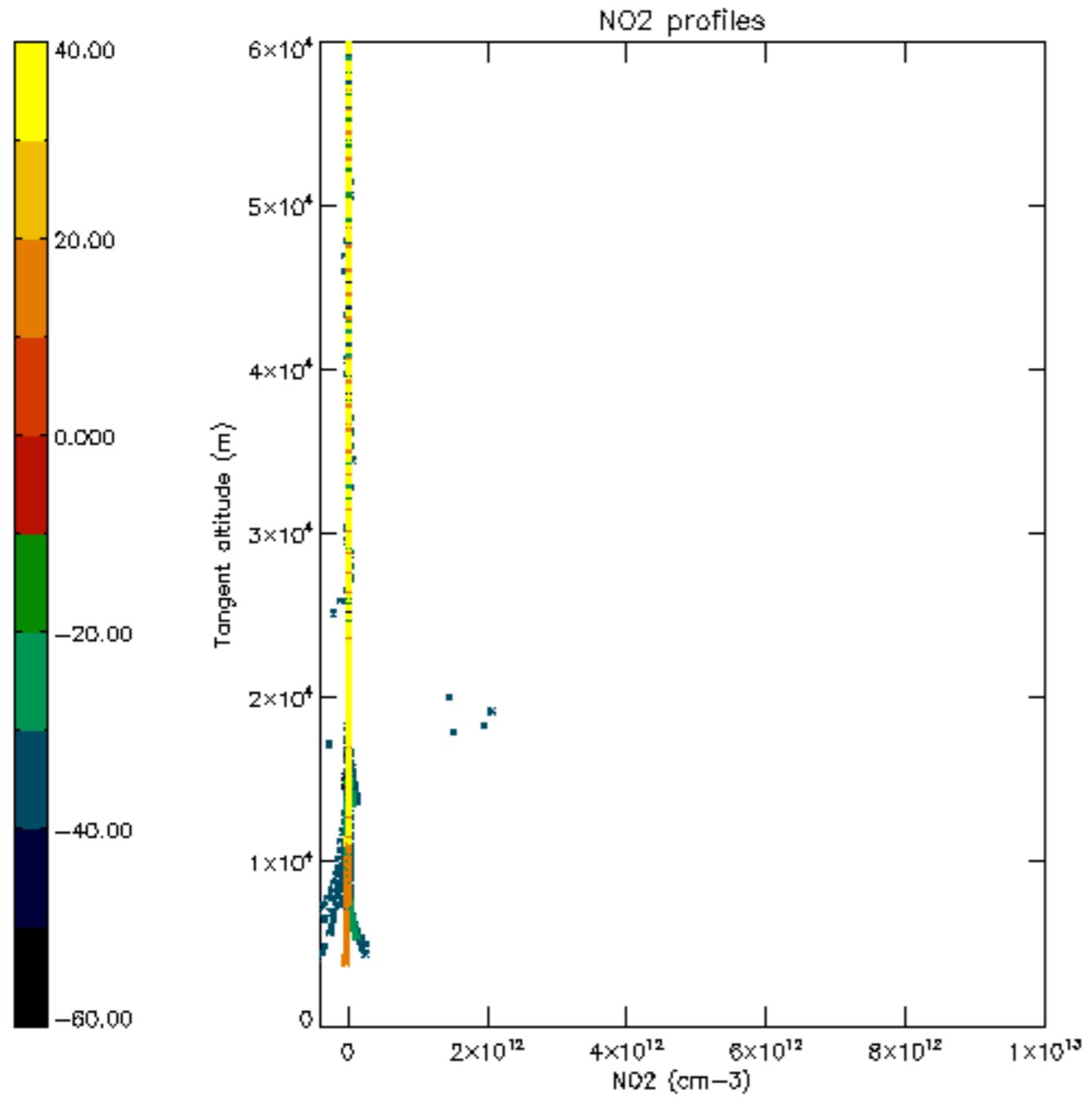


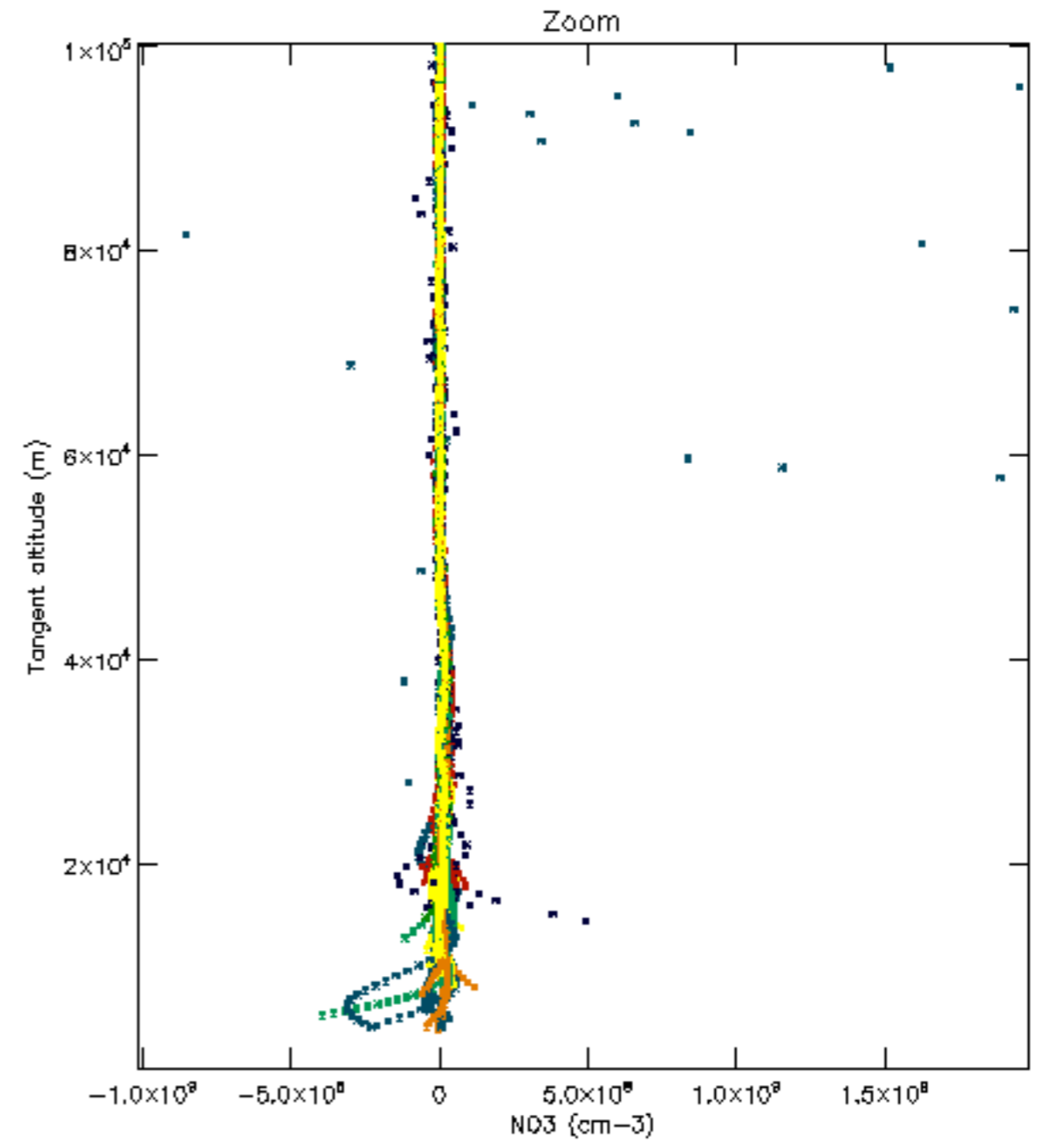
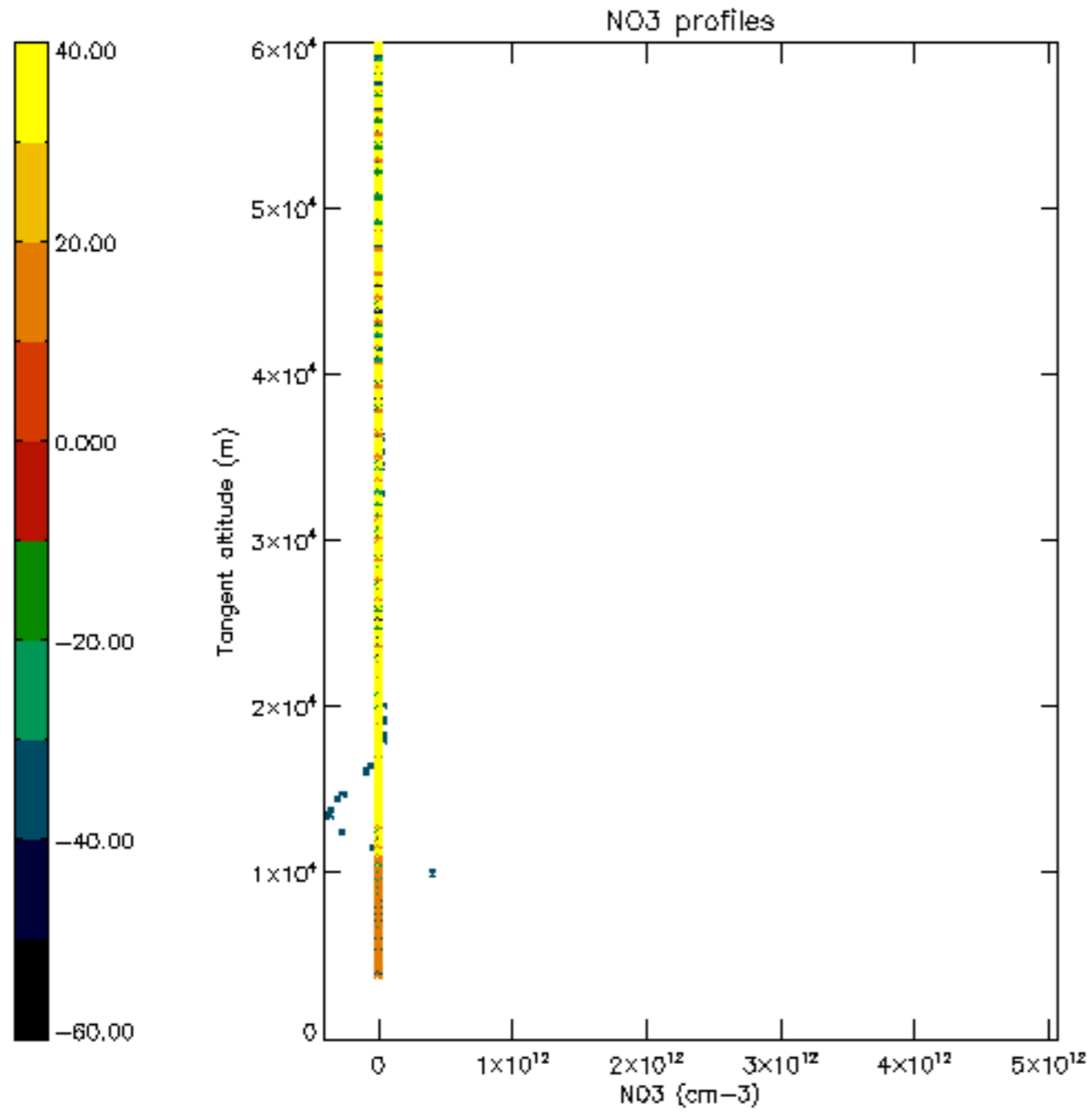


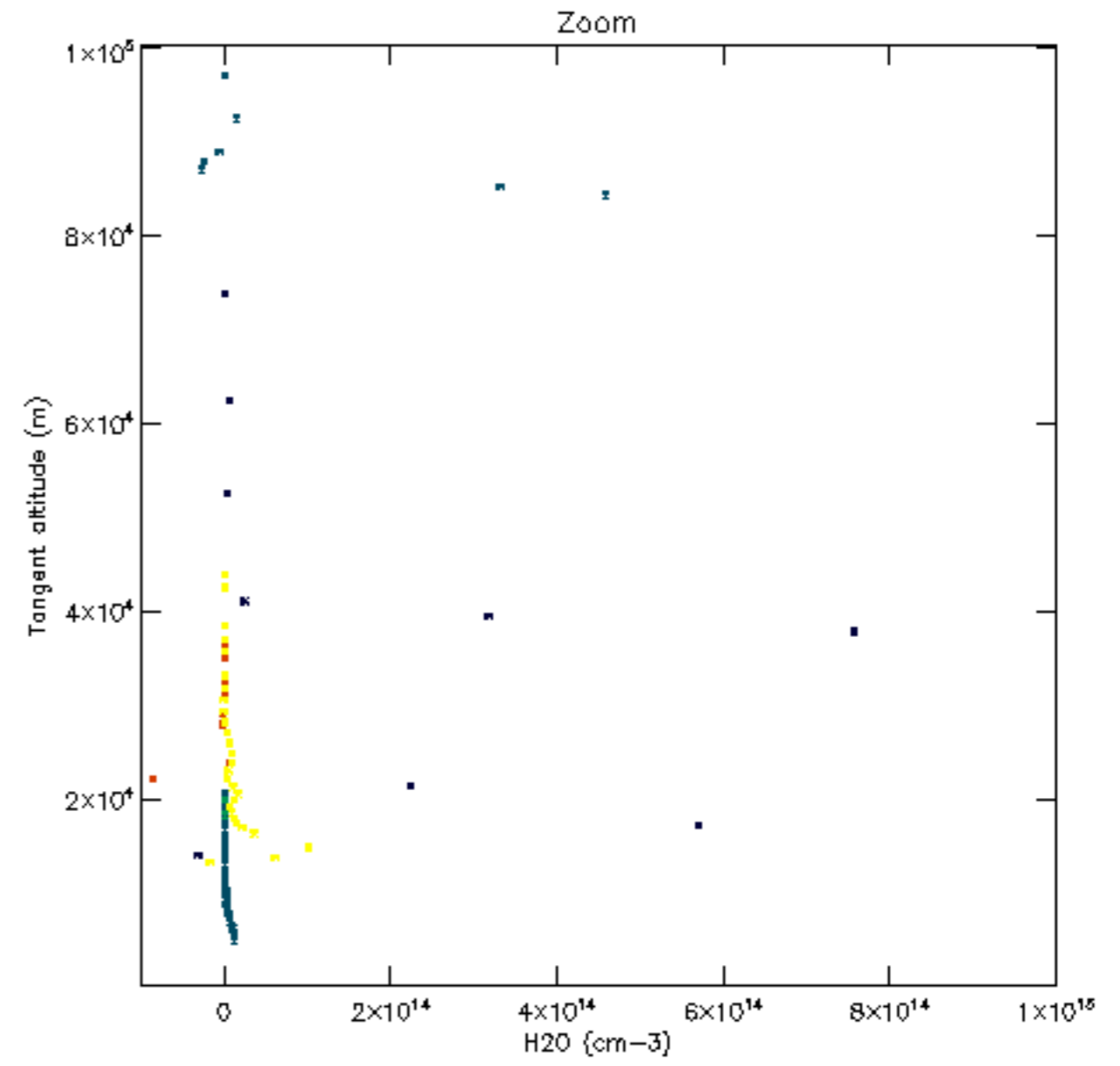
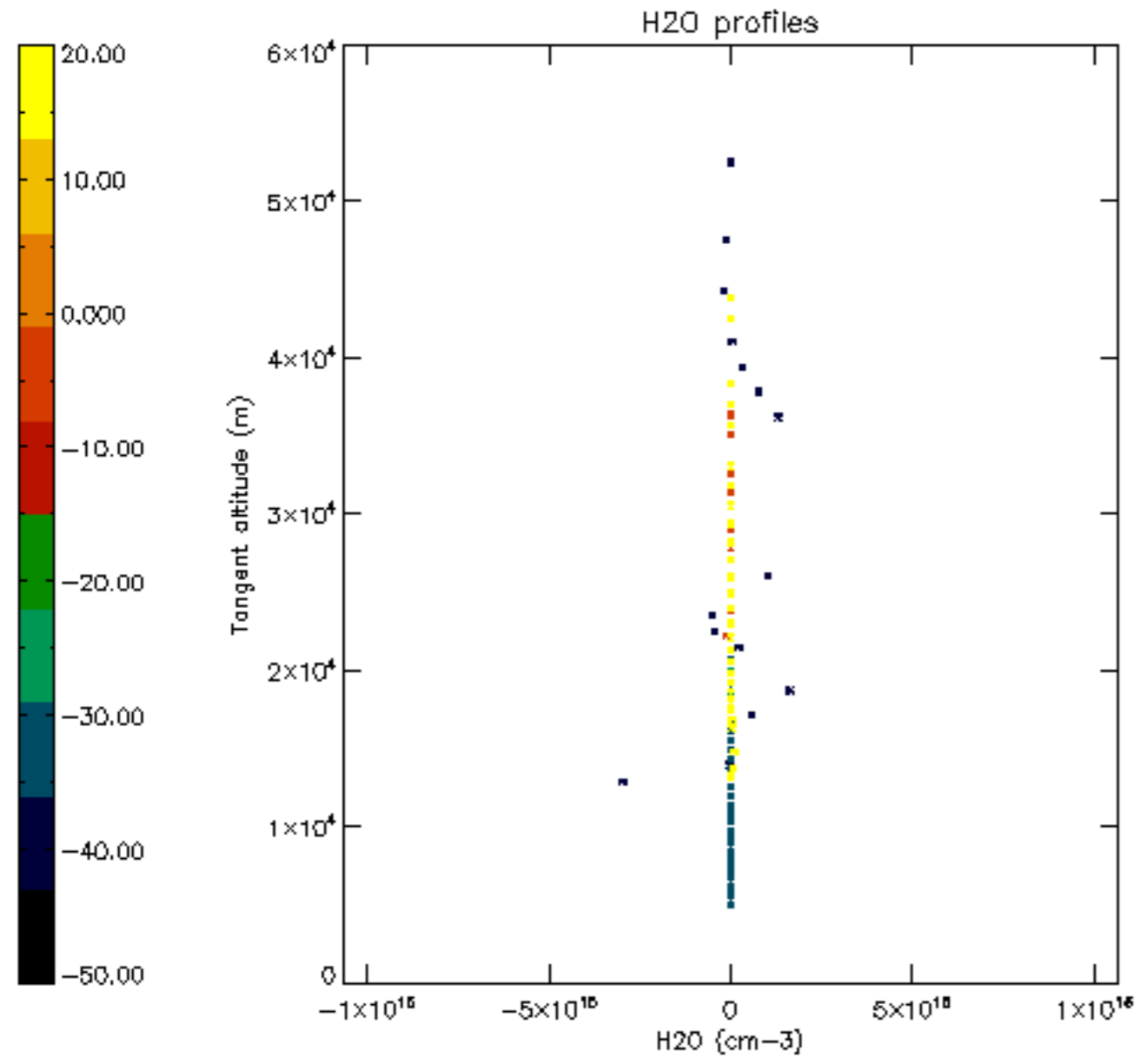


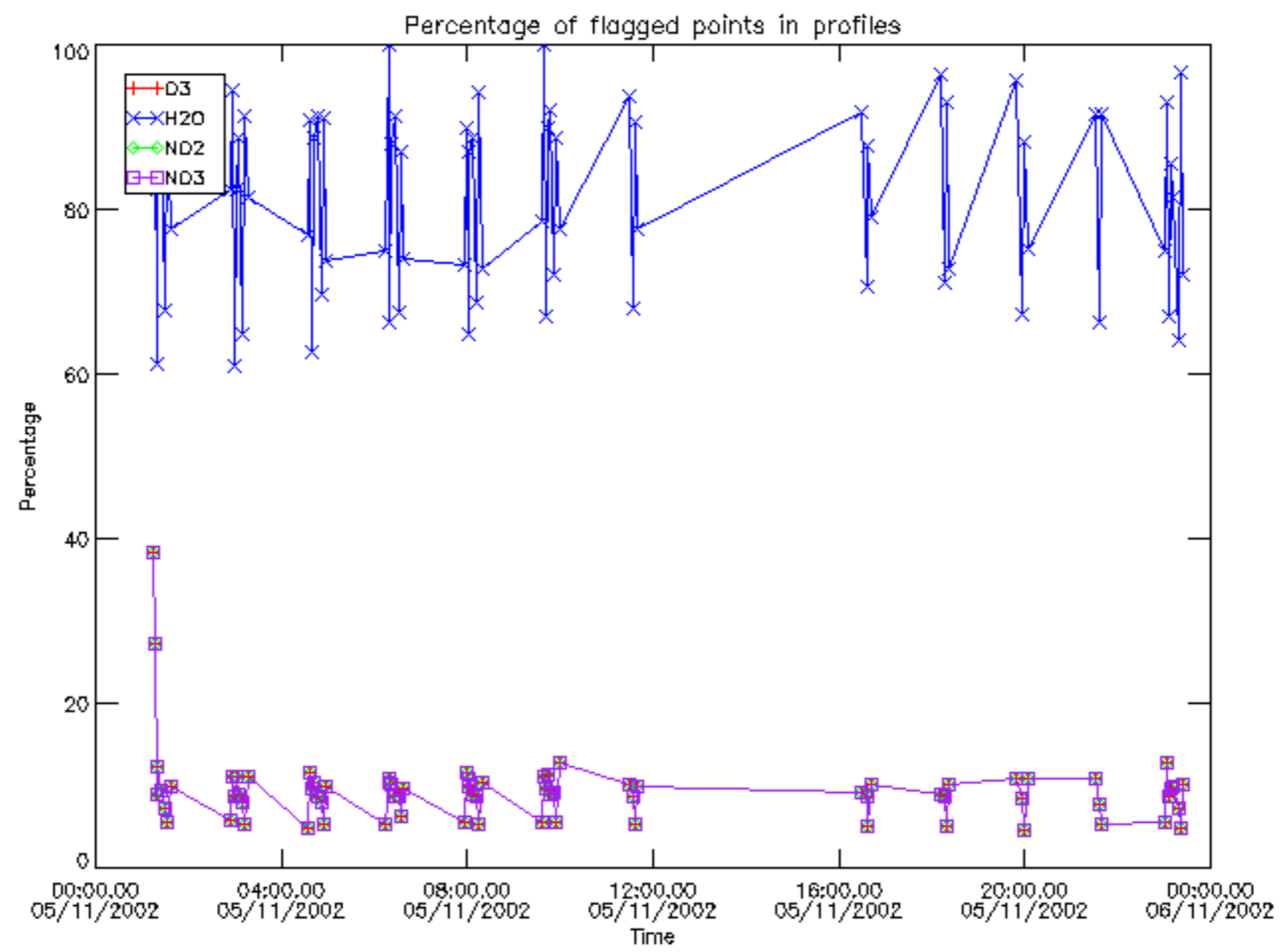




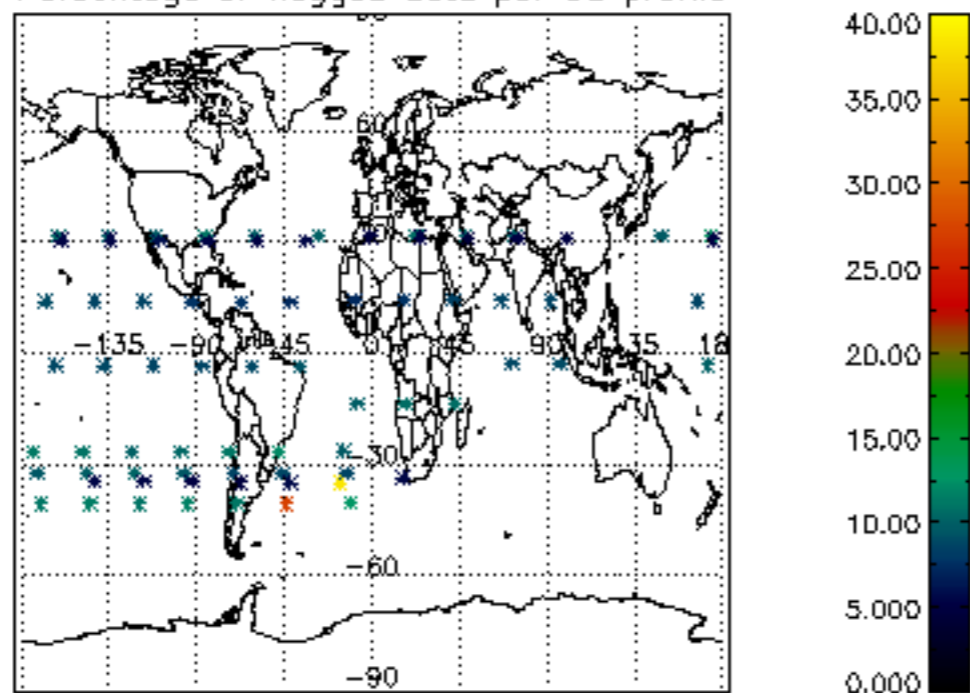




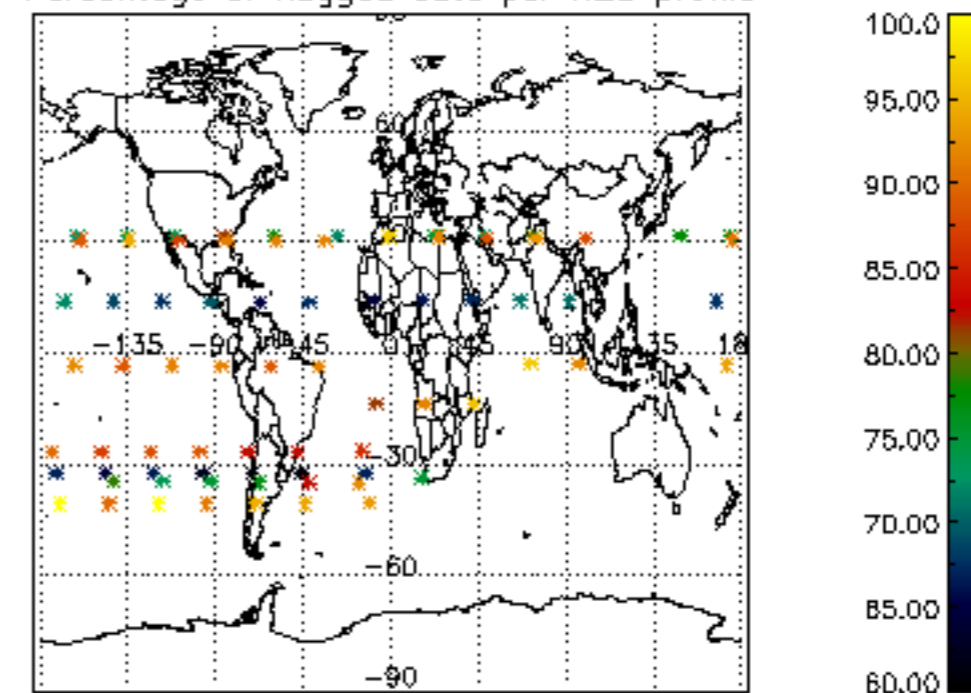




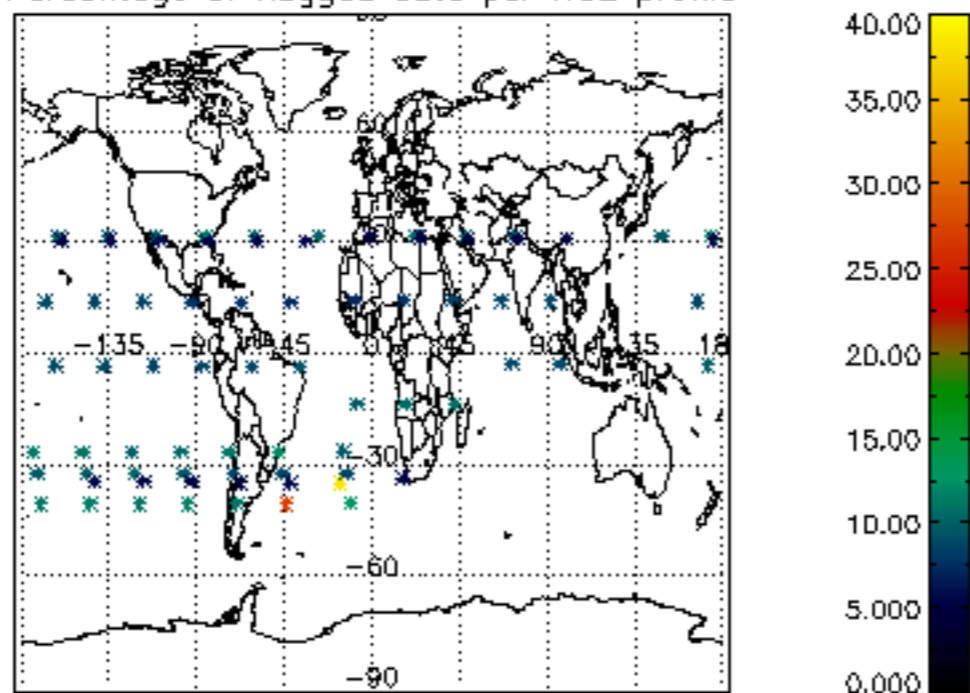
Percentage of flagged data per D3 profile



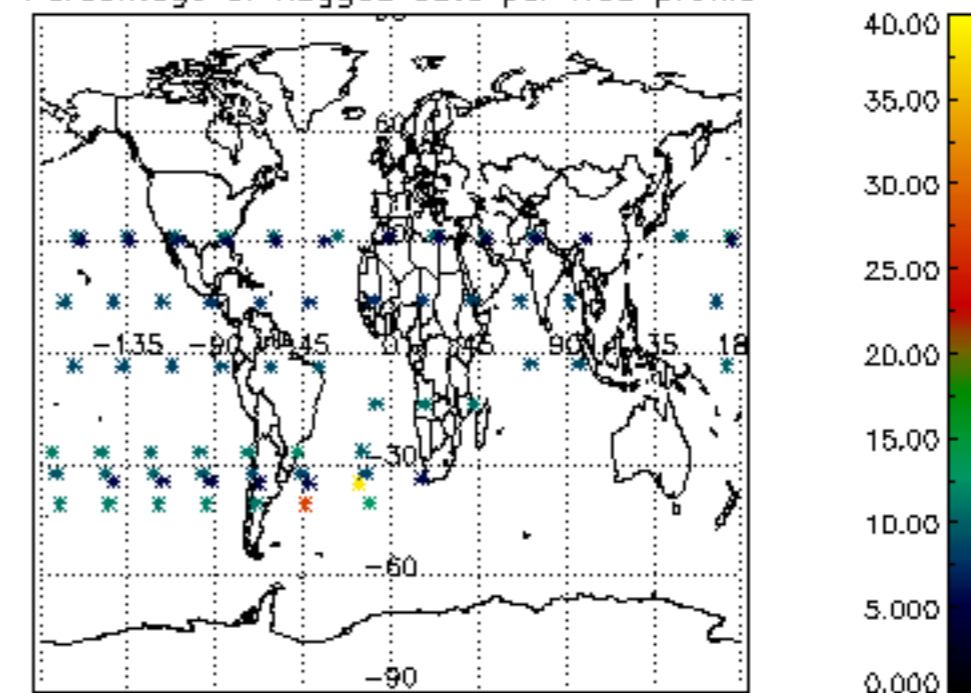
Percentage of flagged data per H2O profile

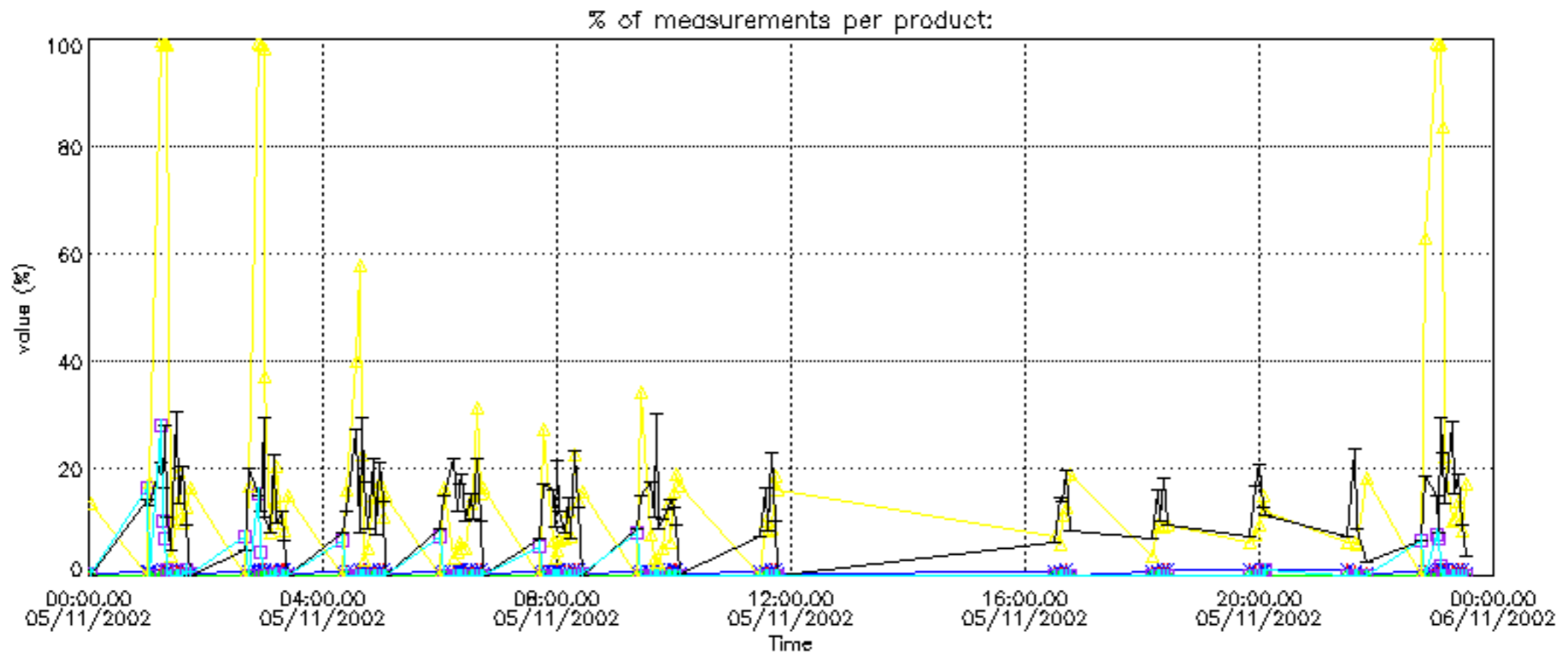


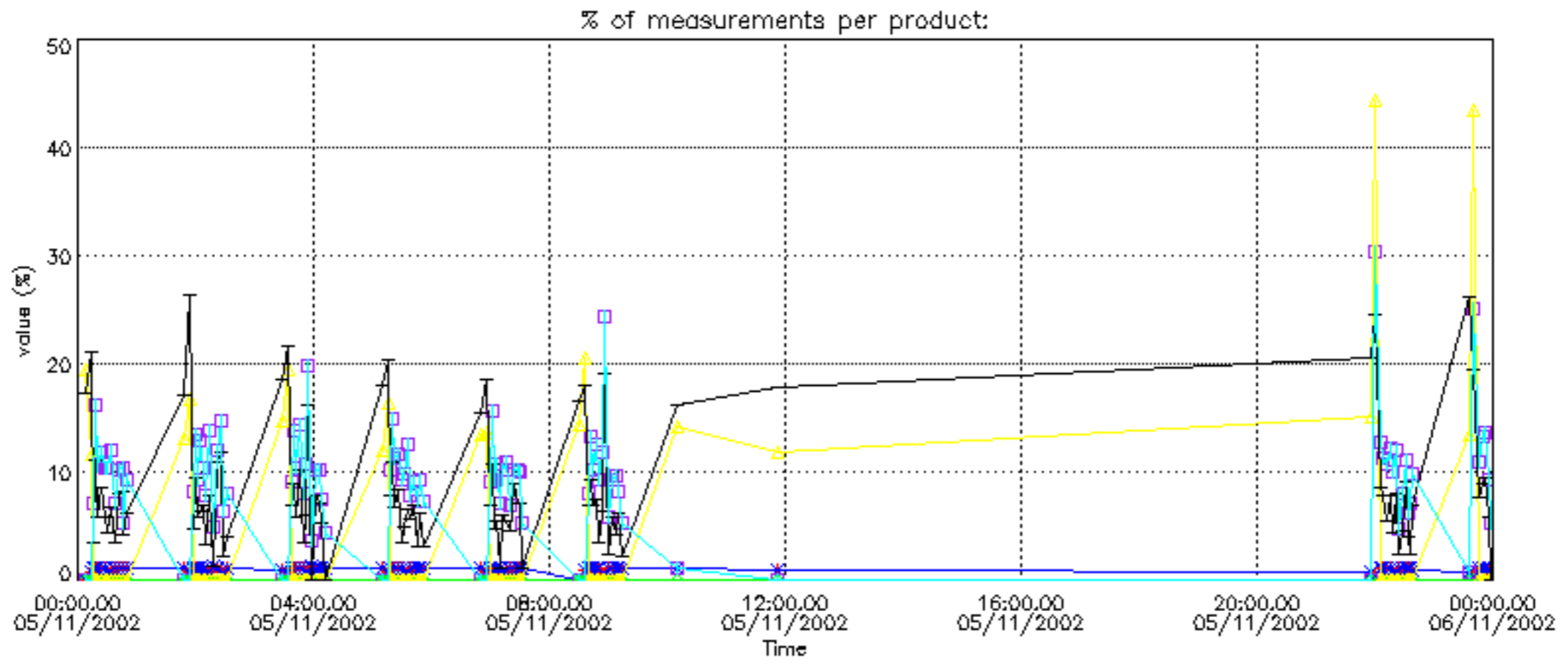
Percentage of flagged data per NO2 profile



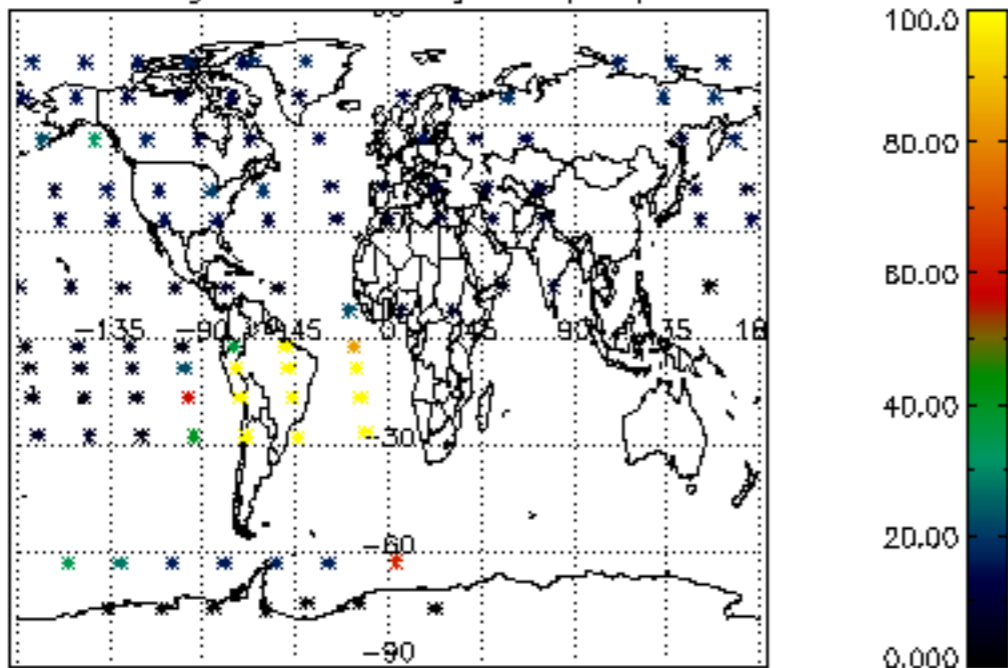
Percentage of flagged data per NO3 profile



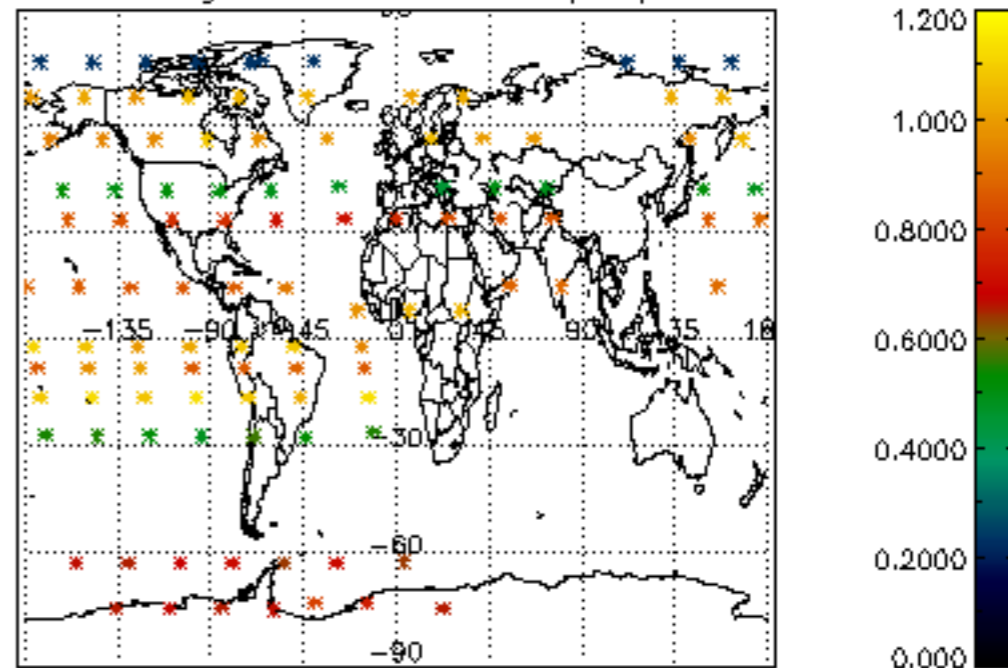




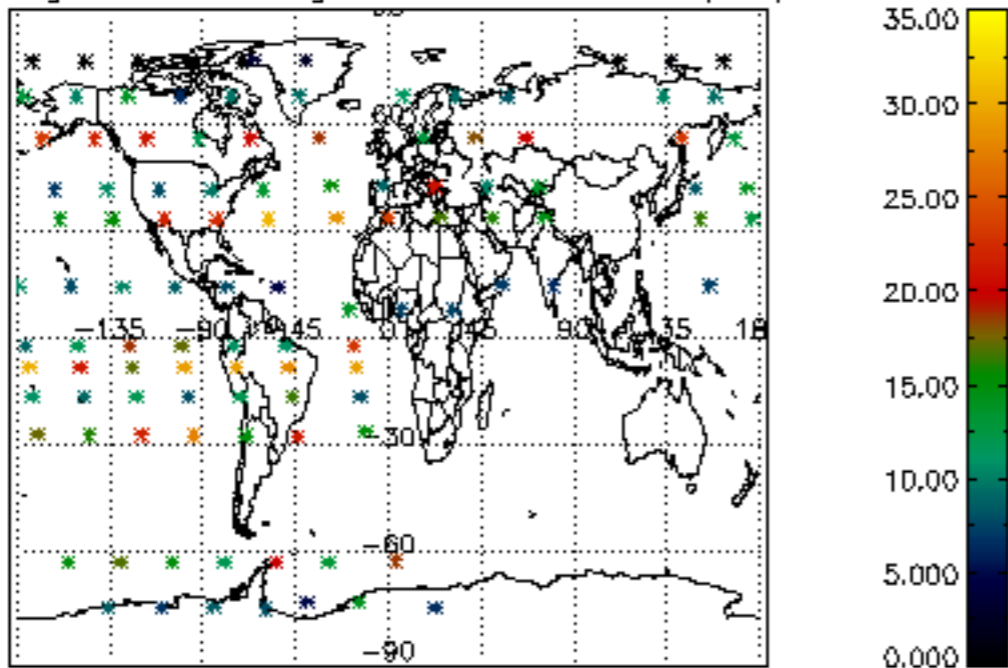
Percentage of cosmic ray hits per profile



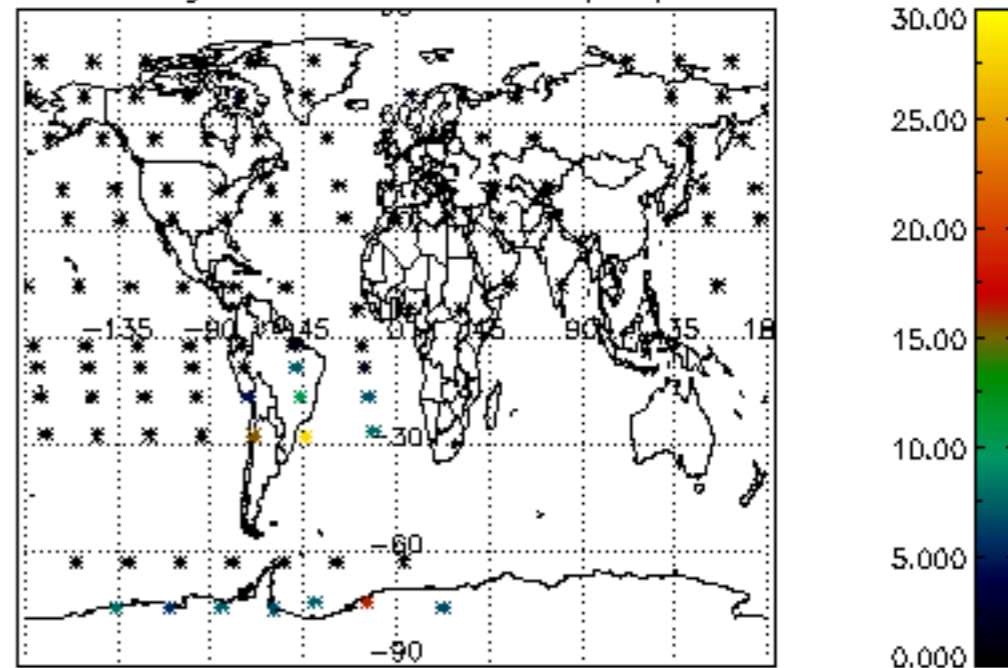
Percentage of datation errors per profile



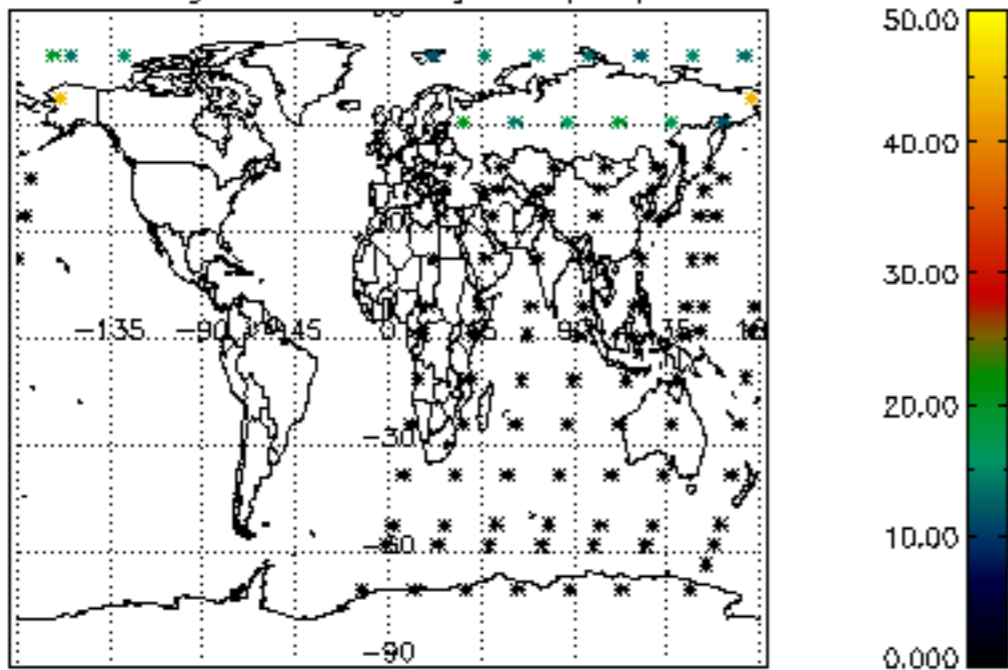
Percentage of star falling outside central band per profile



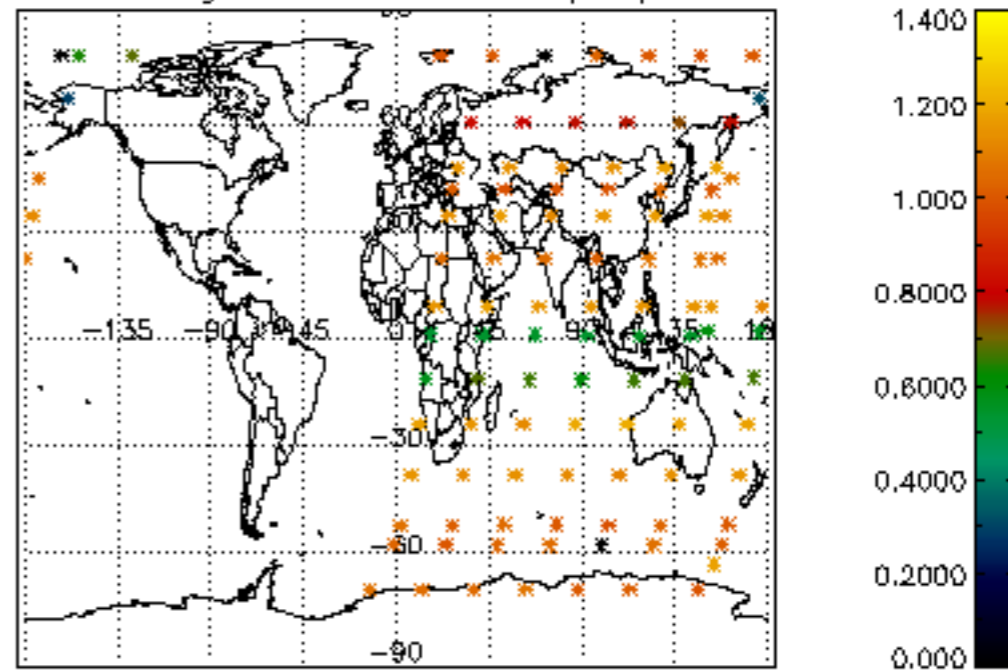
Percentage of saturation errors per profile



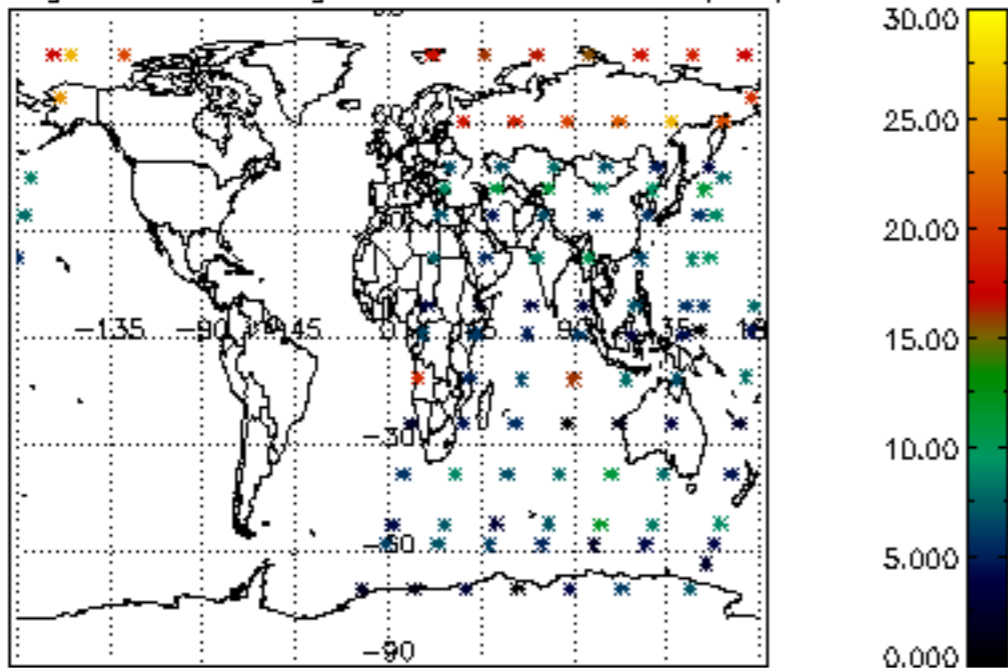
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

