

GOMOS Level 2 Daily Report

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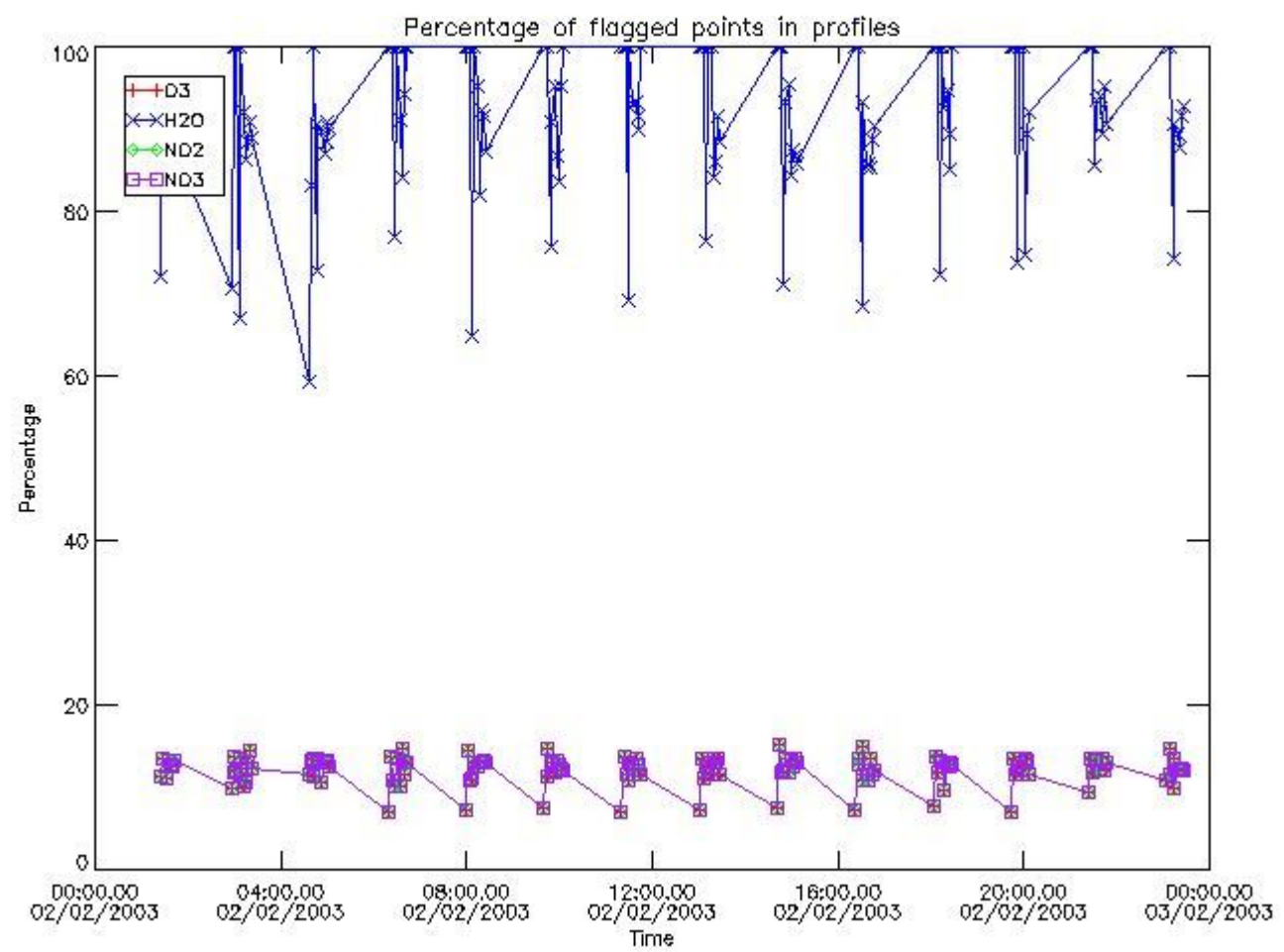
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This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that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

Item	Value
Time of report generation	19APR2013 08:40:44
Data source version	GOMOS/6.01
Start time of products	02-02-2003 (02FEB2003 00:00:00)
Stop time of products	03-02-2003 (03FEB2003 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	434
Nb of prods with errors	40

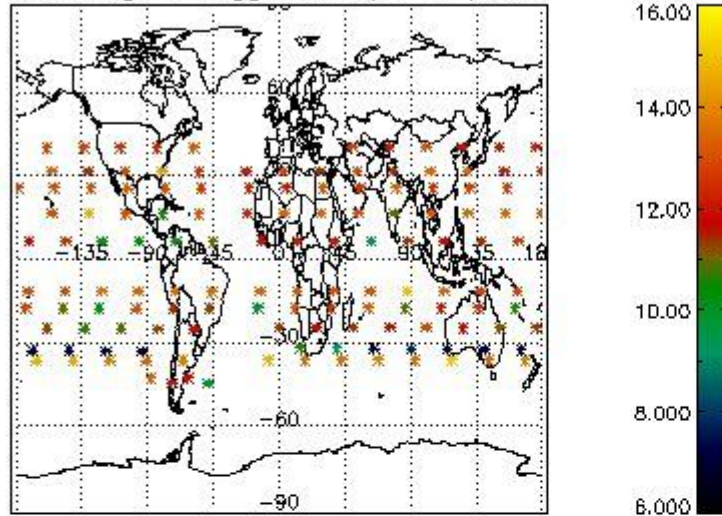
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20030202_012526_000000452013_00275_04838_5303.N1	02-FEB-2003 01:25:26	Dark	45.000	43	Alp TrA	1.9100	4250.0	90	4838	No
2	GOM_NL__2PRFIN20030202_012654_000000382013_00275_04838_5304.N1	02-FEB-2003 01:26:54	Dark	37.500	145	Gam TrA	2.8720	10600.	75	4838	No
3	GOM_NL__2PRFIN20030202_013131_000000462013_00275_04838_5305.N1	02-FEB-2003 01:31:31	Dark	46.000	12	Alp1Cru	0.77500	30000.	92	4838	No
4	GOM_NL__2PRFIN20030202_013500_000000392013_00275_04838_5306.N1	02-FEB-2003 01:35:00	Dark	38.500	29	Bet Car	1.6720	10200.	77	4838	No
5	GOM_NL__2PRFIN20030202_013722_000000402013_00275_04838_5307.N1	02-FEB-2003 01:37:22	Dark	40.000	71	lot Car	2.2460	7700.0	80	4838	No
6	GOM_NL__2PRFIN20030202_013906_000000412013_00275_04838_5308.N1	02-FEB-2003 01:39:06	Dark	40.500	46	Del Vel	1.9540	10600.	81	4838	No
7	GOM_NL__2PRFIN20030202_014137_000000422013_00275_04838_5309.N1	02-FEB-2003 01:41:37	Dark	42.000	34	Gam2Vel	1.7930	23000.	84	4838	No
8	GOM_NL__2PRFIN20030202_014342_000000432013_00275_04838_5310.N1	02-FEB-2003 01:43:42	Straylight	42.500	70	Zet Pup	2.2460	39000.	85	4838	No
9	GOM_NL__2PRFIN20030202_014650_000002132013_00275_04838_5311.N1	02-FEB-2003 01:46:50	Straylight	213.00	100	4Gam Crv	2.5800	13100.	426	4838	No
10	GOM_NL__2PRFIN20030202_015237_000000642013_00275_04838_5312.N1	02-FEB-2003 01:52:37	Straylight	64.000	48	30Alp Hya	1.9770	4100.0	128	4838	No
11	GOM_NL__2PRFIN20030202_015647_000000482013_00275_04838_5313.N1	02-FEB-2003 01:56:47	Twl_and_stray	47.500	8	10Alp CMi	0.40000	6500.0	95	4838	No
12	GOM_NL__2PRFIN20030202_020141_000000552013_00275_04838_5314.N1	02-FEB-2003 02:01:41	Dark	55.000	1015	Jupiter	0.0000	0.0000	110	4838	Yes
13	GOM_NL__2PRFIN20030202_020326_000000432013_00275_04838_5315.N1	02-FEB-2003 02:03:26	Bright	43.000	17	78Bet Gem	1.1610	4500.0	86	4838	No
14	GOM_NL__2PRFIN20030202_020625_000000372013_00275_04838_5316.N1	02-FEB-2003 02:06:25	Bright	37.000	107	37The Aur	2.6490	11000.	74	4838	No
15	GOM_NL__2PRFIN20030202_020830_000000392013_00275_04838_5317.N1	02-FEB-2003 02:08:30	Bright	39.000	42	34Bet Aur	1.9000	10200.	78	4838	No
16	GOM_NL__2PRFIN20030202_021740_000000482013_00275_04838_5318.N1	02-FEB-2003 02:17:40	Bright	47.500	82	48Bet UMa	2.3650	10600.	95	4838	No
17	GOM_NL__2PRFIN20030202_022043_000000352013_00275_04838_5319.N1	02-FEB-2003 02:20:43	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	4838	No
18	GOM_NL__2PRFIN20030202_022345_000000392013_00275_04838_5320.N1	02-FEB-2003 02:23:45	Bright	39.000	60	7Bet UMi	2.0810	3950.0	78	4838	No
19	GOM_NL__2PRFIN20030202_022537_000000572013_00275_04838_5321.N1	02-FEB-2003 02:25:37	Bright	57.000	55	79Zet UMa	2.0600	10200.	114	4838	No
20	GOM_NL__2PRFIN20030202_022829_000000412013_00275_04838_5322.N1	02-FEB-2003 02:28:29	Bright	40.500	119	14Eta Dra	2.7270	4700.0	81	4838	No
21	GOM_NL__2PRFIN20030202_023142_000000402013_00275_04838_5323.N1	02-FEB-2003 02:31:42	Bright	40.000	130	23Bet Dra	2.7990	5800.0	80	4838	No
22	GOM_NL__2PRFIN20030202_023522_000000372013_00275_04838_5324.N1	02-FEB-2003 02:35:22	Bright	37.000	5	3Alp Lyr	0.033000	11000.	74	4838	No
23	GOM_NL__2PRFIN20030202_023824_000000452013_00275_04838_5325.N1	02-FEB-2003 02:38:24	Bright	44.500	133	40Zet Her	2.8070	6000.0	89	4838	No
24	GOM_NL__2PRFIN20030202_024237_000001172013_00275_04838_5326.N1	02-FEB-2003 02:42:37	Twl_and_stray	116.50	83		2.3780	11000.	233	4838	No
25	GOM_NL__2PRFIN20030202_024925_000000742013_00275_04838_5327.N1	02-FEB-2003 02:49:25	Twl_and_stray	74.000	102	24Alp Ser	2.6000	4250.0	148	4838	No
26	GOM_NL__2PRFIN20030202_025238_00000012013_00275_04838_5328.N1	02-FEB-2003 02:52:38	Dark	0.50000	1012	Venus	0.0000	0.0000	1	4838	Yes
27	GOM_NL__2PRFIN20030202_025510_000000512013_00275_04838_5329.N1	02-FEB-2003 02:55:10	Dark	50.500	1014	Mars	0.0000	0.0000	101	4838	Yes
28	GOM_NL__2PRFIN20030202_025636_000000522013_00275_04838_5330.N1	02-FEB-2003 02:56:36	Dark	51.500	16	21Alp Sco	1.0200	3000.0	103	4838	No
29	GOM_NL__2PRFIN20030202_025844_000000432013_00275_04838_5331.N1	02-FEB-2003 02:58:44	Dark	43.000	40	The Sco	1.8590	7100.0	86	4838	No
30	GOM_NL__2PRFIN20030202_030037_000000372013_00275_04838_5332.N1	02-FEB-2003 03:00:37	Dark	37.000	147	Alp Ara	2.8770	26000.	74	4838	No
31	GOM_NL__2PRFIN20030202_030225_000000432013_00275_04838_5333.N1	02-FEB-2003 03:02:25	Dark	42.500	131	Gam Lup	2.8000	26000.	85	4838	No
32	GOM_NL__2PRFIN20030202_030602_000000452013_00276_04839_5303.N1	02-FEB-2003 03:06:02	Dark	44.500	43	Alp TrA	1.9100	4250.0	89	4839	No
33	GOM_NL__2PRFIN20030202_030731_000000382013_00276_04839_5304.N1	02-FEB-2003 03:07:31	Dark	37.500	145	Gam TrA	2.8720	10600.	75	4839	No
34	GOM_NL__2PRFIN20030202_031208_000000512013_00276_04839_5305.N1	02-FEB-2003 03:12:08	Dark	50.500	12	Alp1Cru	0.77500	30000.	101	4839	No
35	GOM_NL__2PRFIN20030202_031536_000000482013_00276_04839_5306.N1	02-FEB-2003 03:15:36	Dark	48.000	29	Bet Car	1.6720	10200.	96	4839	No
36	GOM_NL__2PRFIN20030202_031759_000000392013_00276_04839_5307.N1	02-FEB-2003 03:17:59	Dark	39.000	71	lot Car	2.2460	7700.0	78	4839	No
37	GOM_NL__2PRFIN20030202_031943_000000392013_00276_04839_5308.N1	02-FEB-2003 03:19:43	Dark	39.000	46	Del Vel	1.9540	10600.	78	4839	No
38	GOM_NL__2PRFIN20030202_032214_000000422013_00276_04839_5309.N1	02-FEB-2003 03:22:14	Dark	41.500	34	Gam2Vel	1.7930	23000.	83	4839	No
39	GOM_NL__2PRFIN20030202_032419_000000422013_00276_04839_5310.N1	02-FEB-2003 03:24:19	Straylight	41.500	70	Zet Pup	2.2460	39000.	83	4839	No
40	GOM_NL__2PRFIN20030202_032727_000002132013_00276_04839_5311.N1	02-FEB-2003 03:27:27	Straylight	213.00	100	4Gam Crv	2.5800	13100.	426	4839	No
41	GOM_NL__2PRFIN20030202_033314_000000662013_00276_04839_5312.N1	02-FEB-2003 03:33:14	Straylight	65.500	48	30Alp Hya	1.9770	4100.0	131	4839	No
42	GOM_NL__2PRFIN20030202_033724_000000532013_00276_04839_5313.N1	02-FEB-2003 03:37:24	Twl_and_stray	53.000	8	10Alp CMi	0.40000	6500.0	106	4839	No

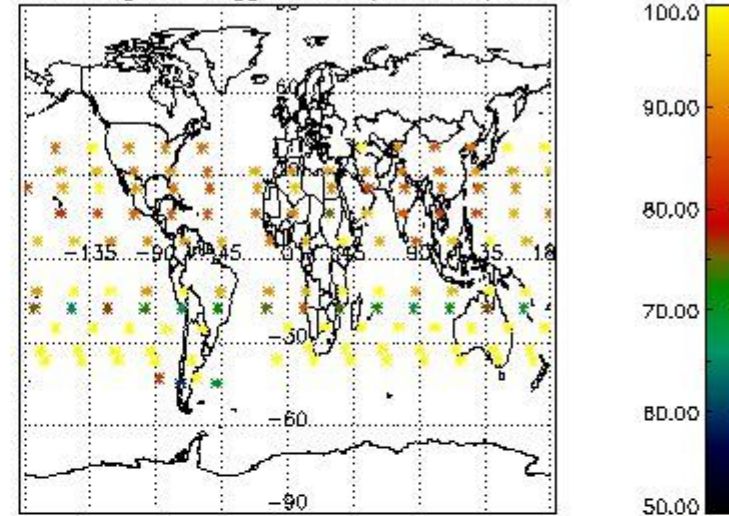


3.2 Plot quality information per product (world map)

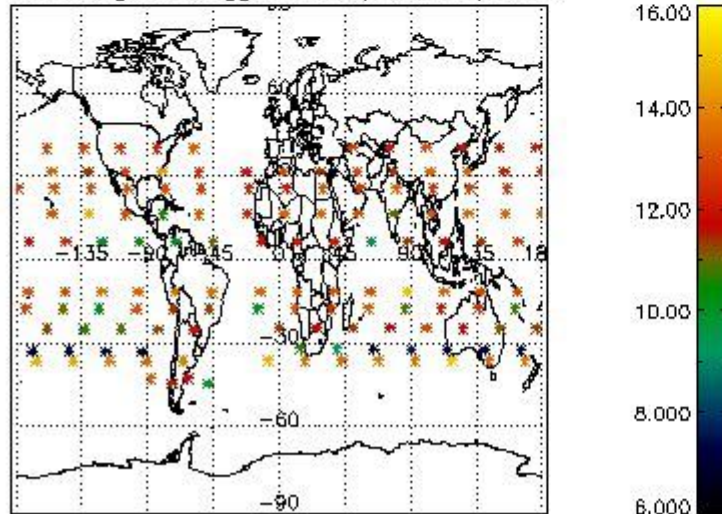
Percentage of flagged data per O3 profile



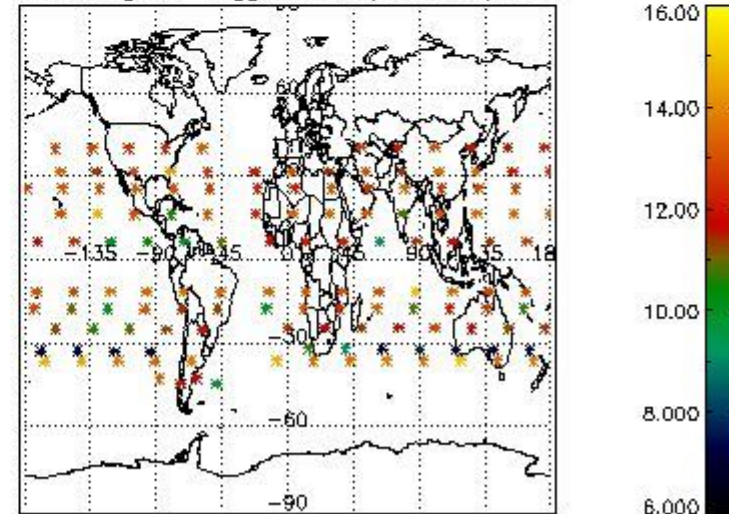
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

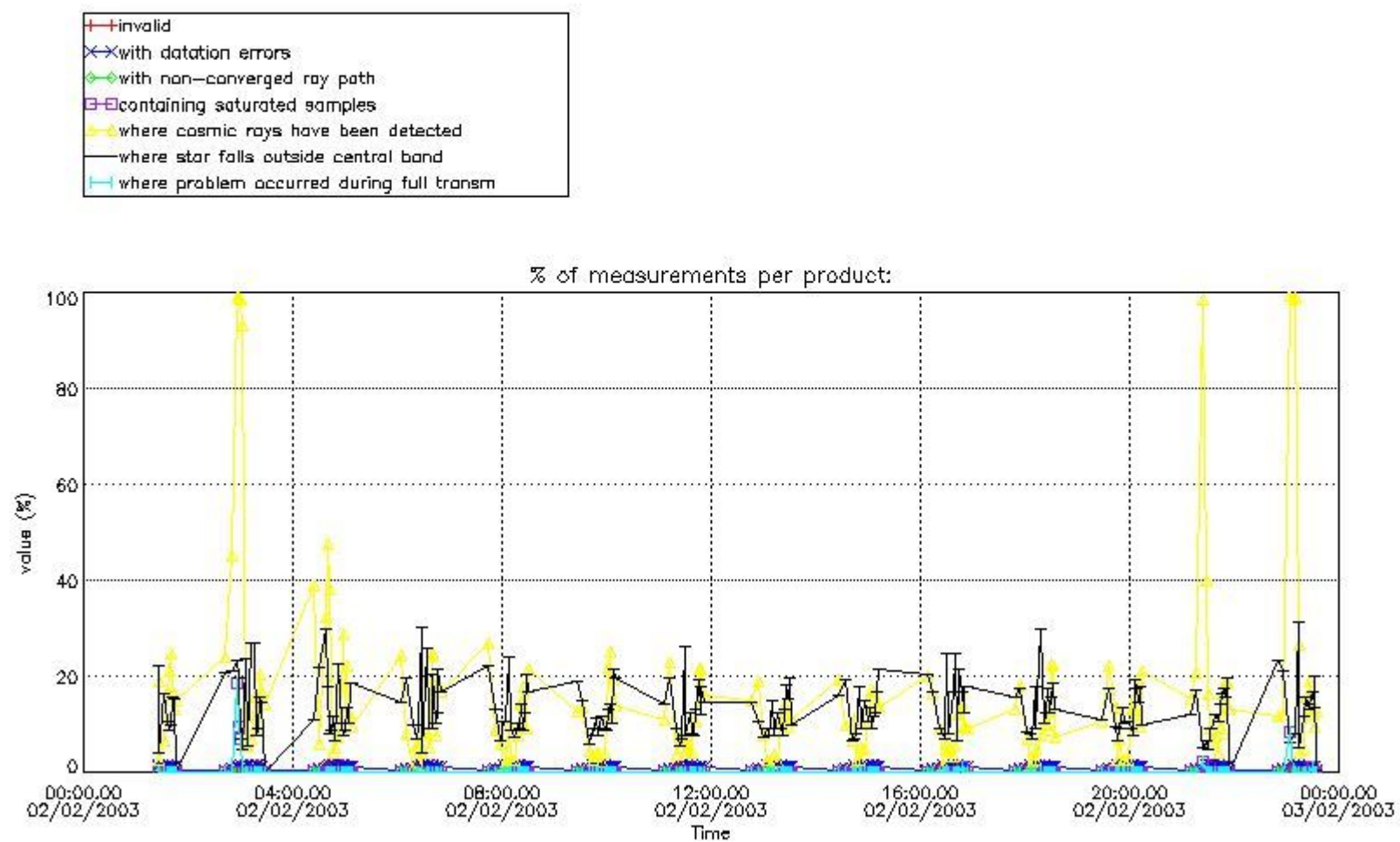


4. Level 1 quality information per product

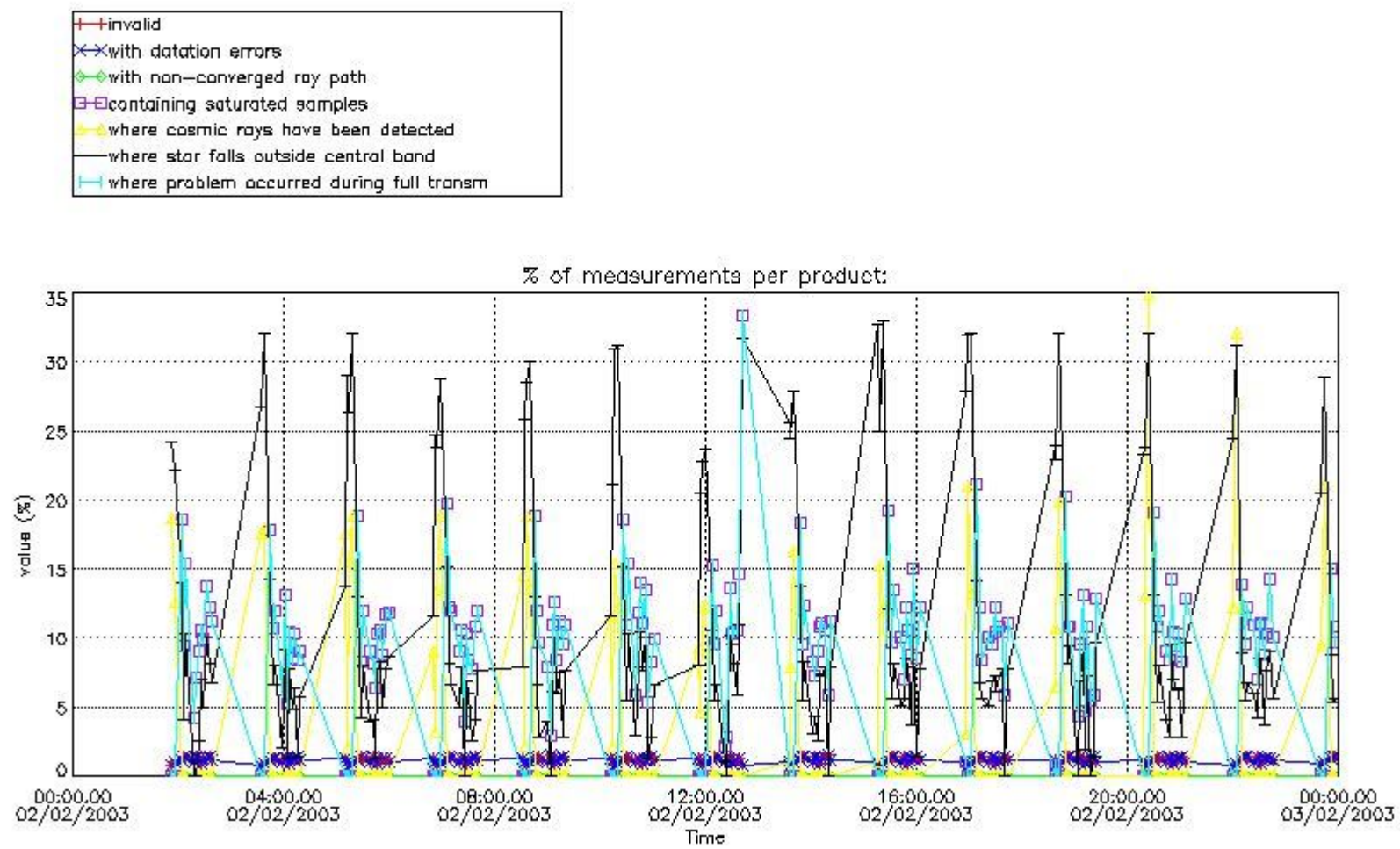
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



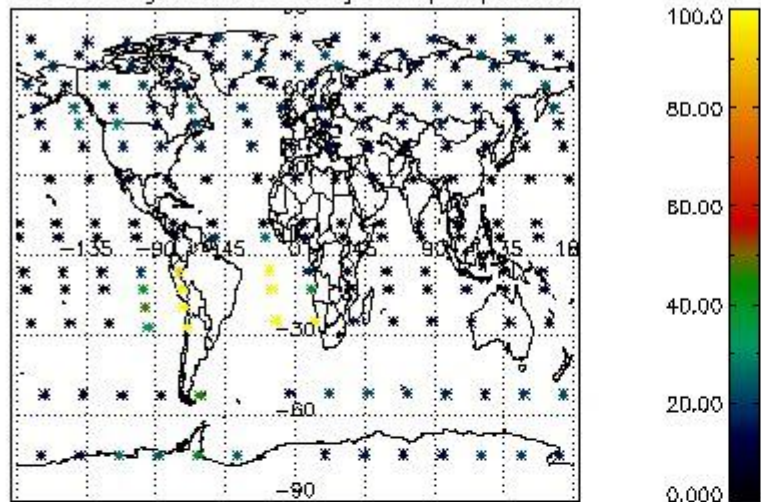
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



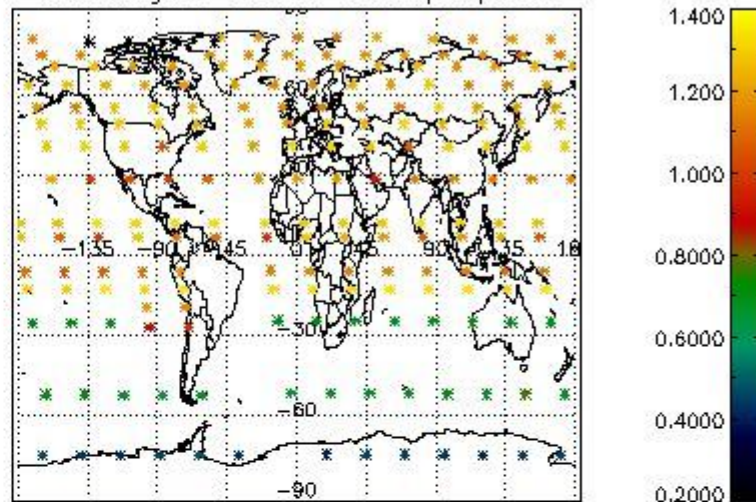
4.2 Plot quality information per product coming from level 1b processing (world map)

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

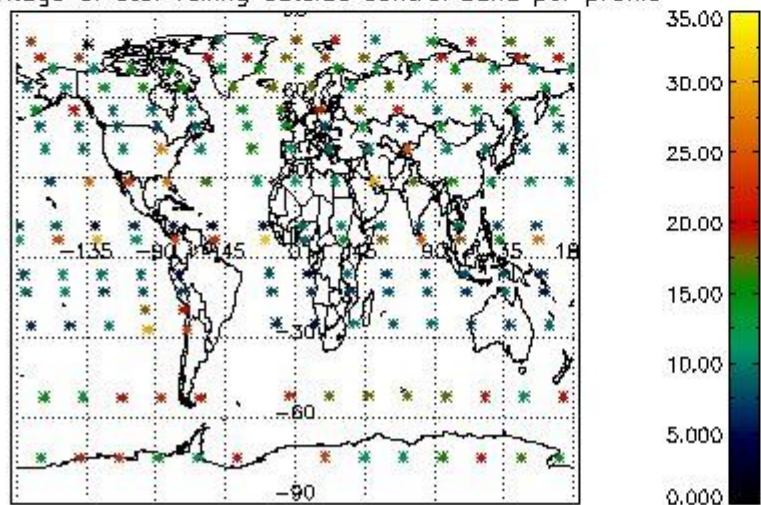
Percentage of cosmic ray hits per profile



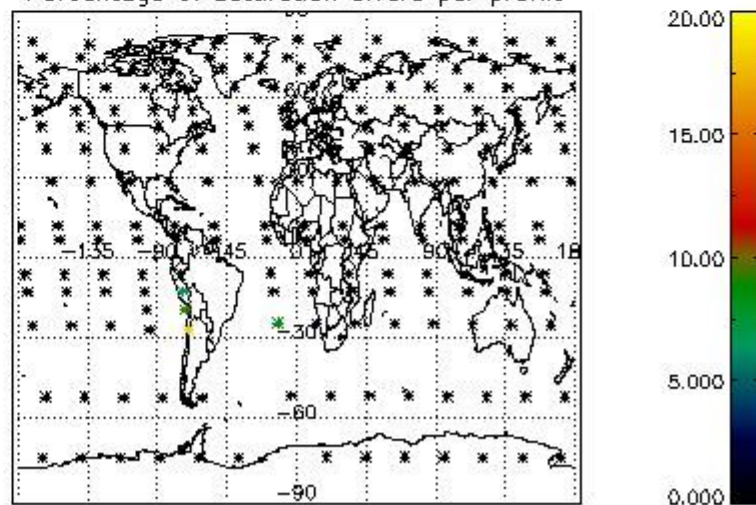
Percentage of datation errors per profile



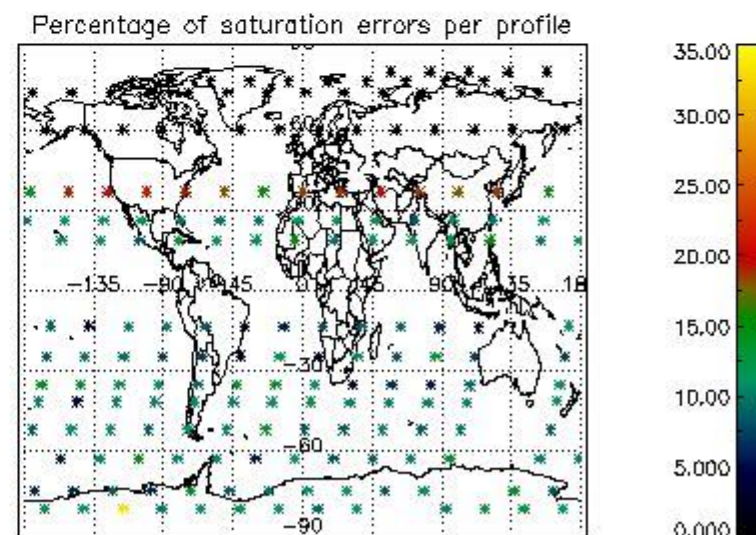
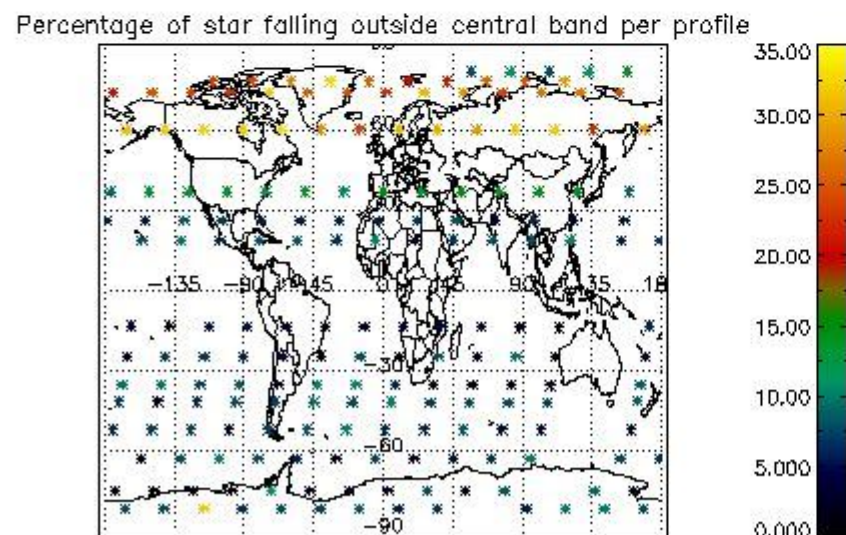
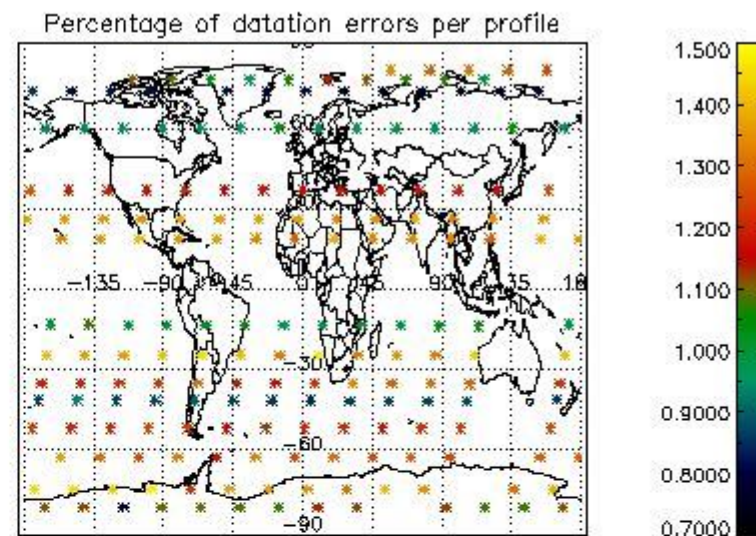
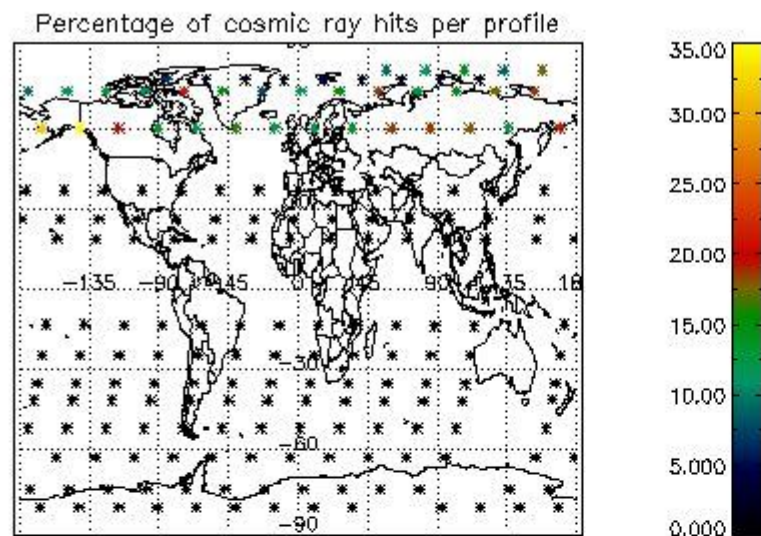
Percentage of star falling outside central band per profile



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

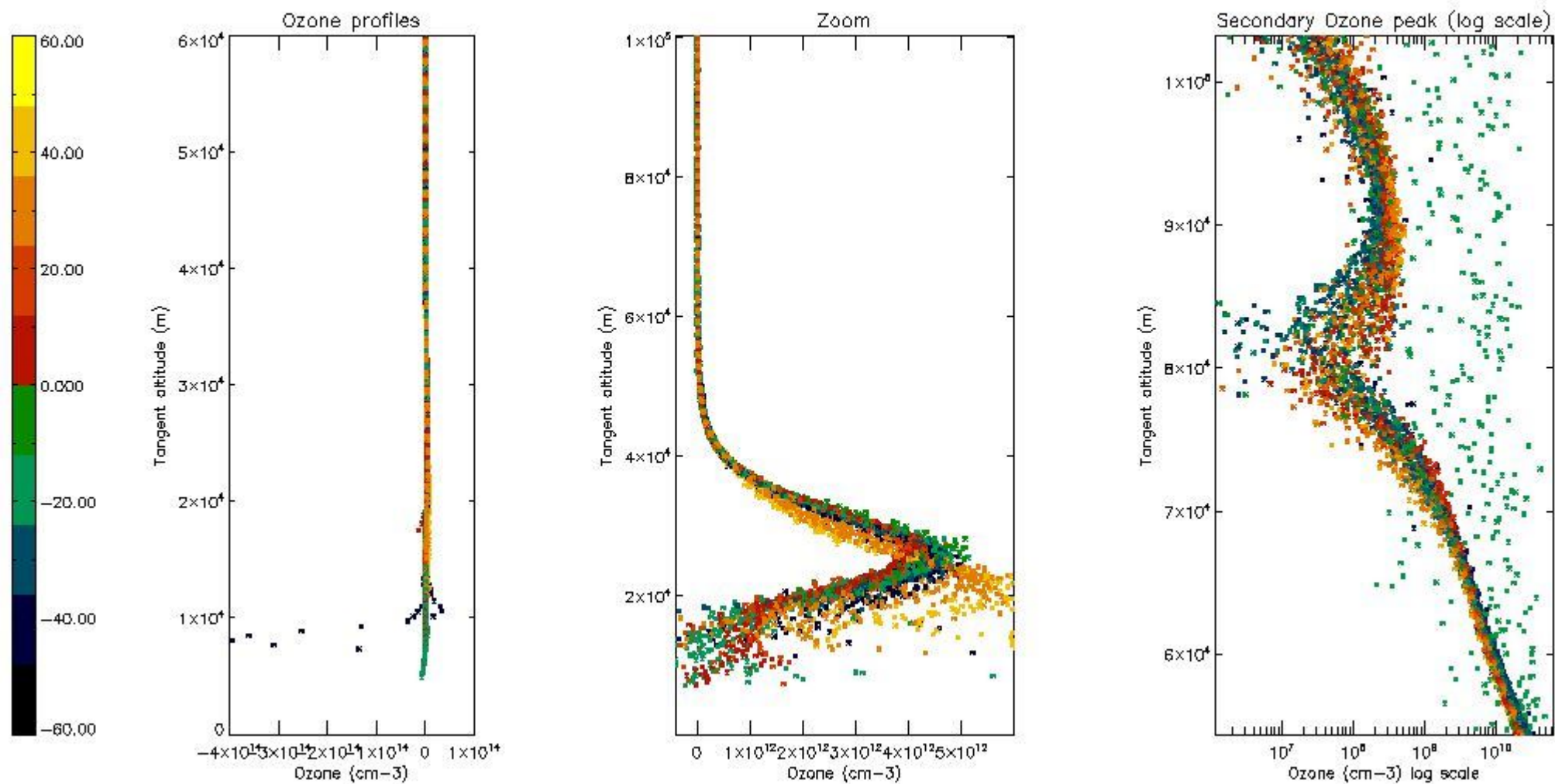
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	31
STD < 20	19

STD < 10	16
STD < 5	12

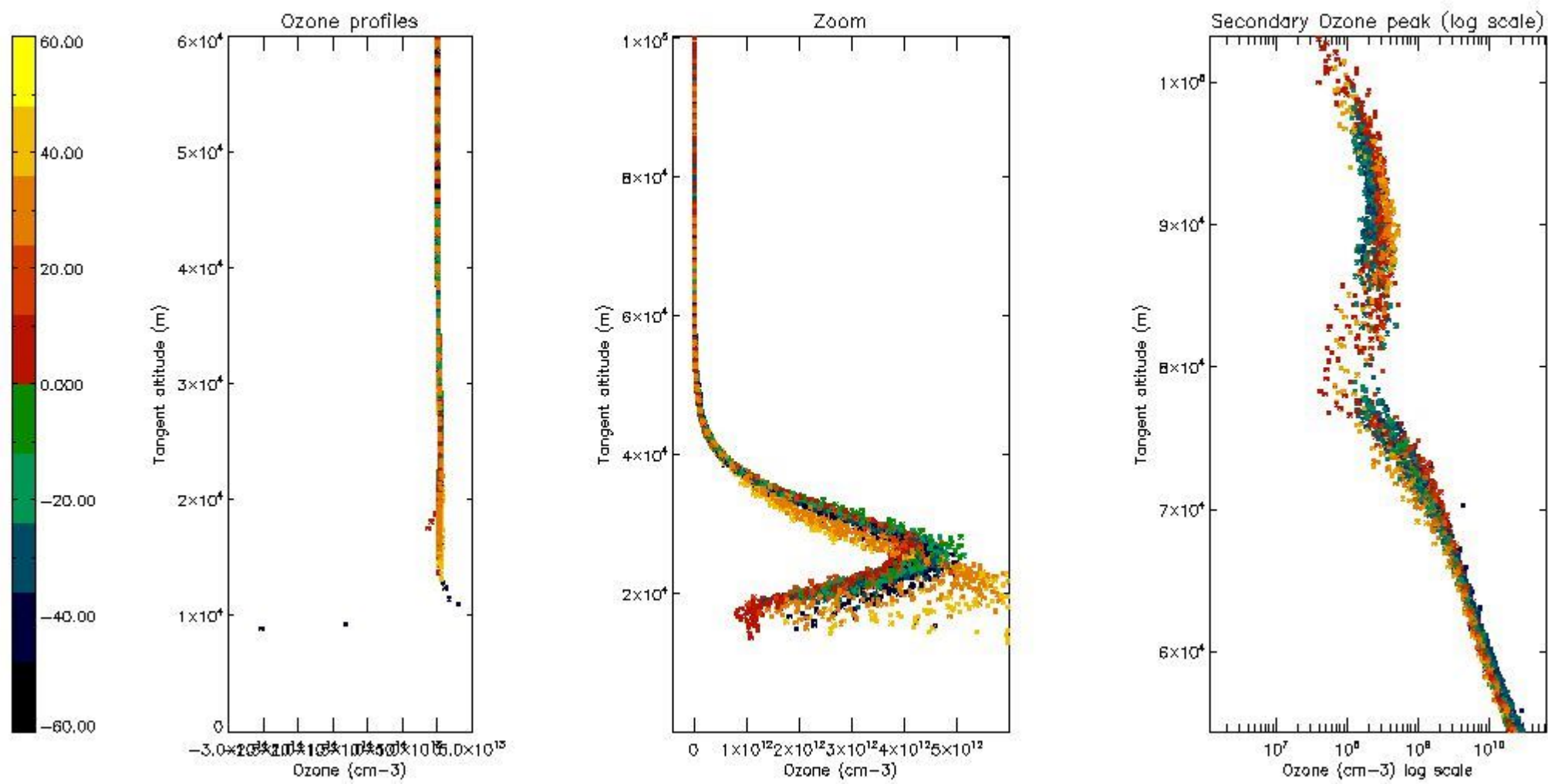
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



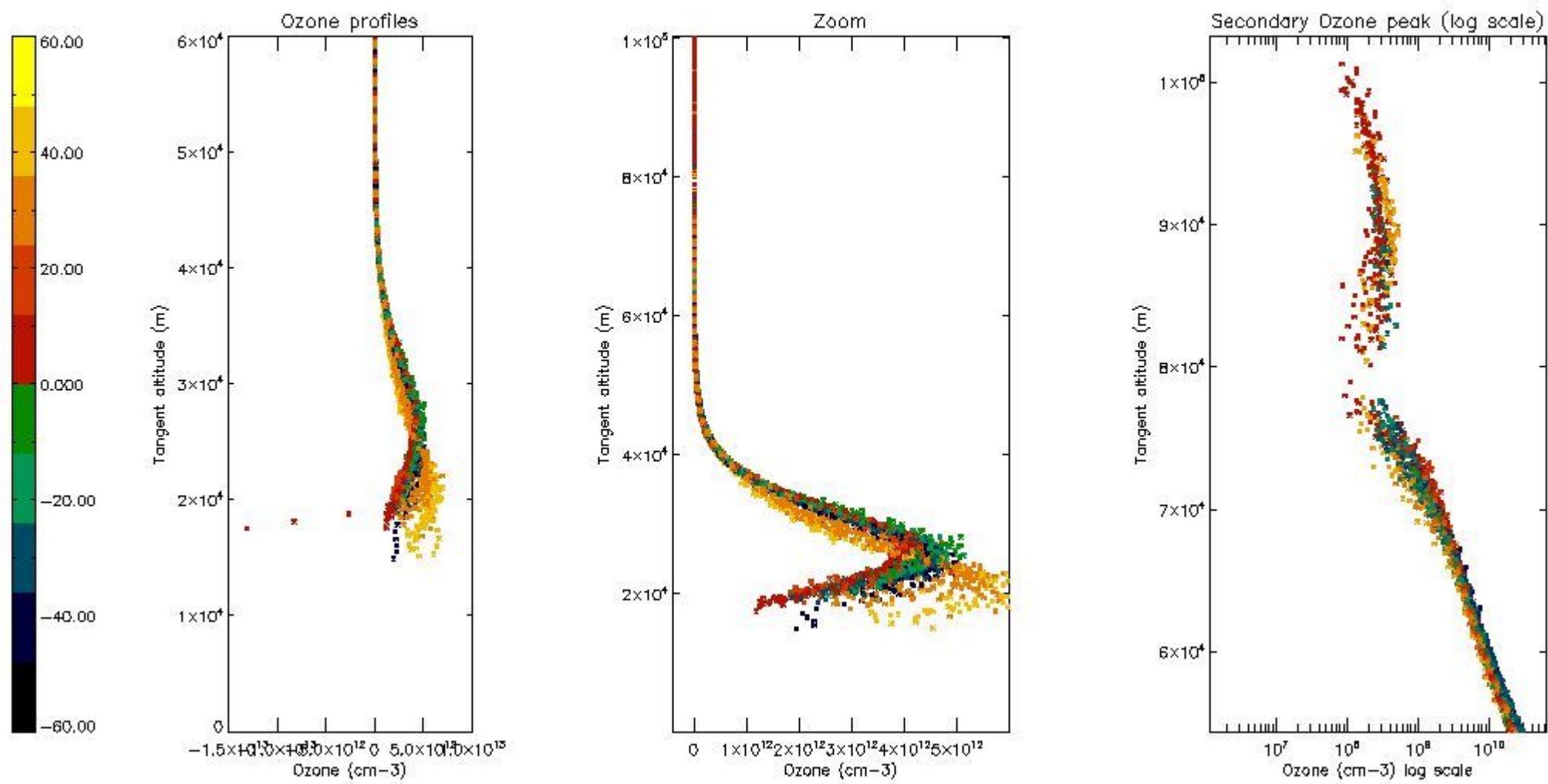
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



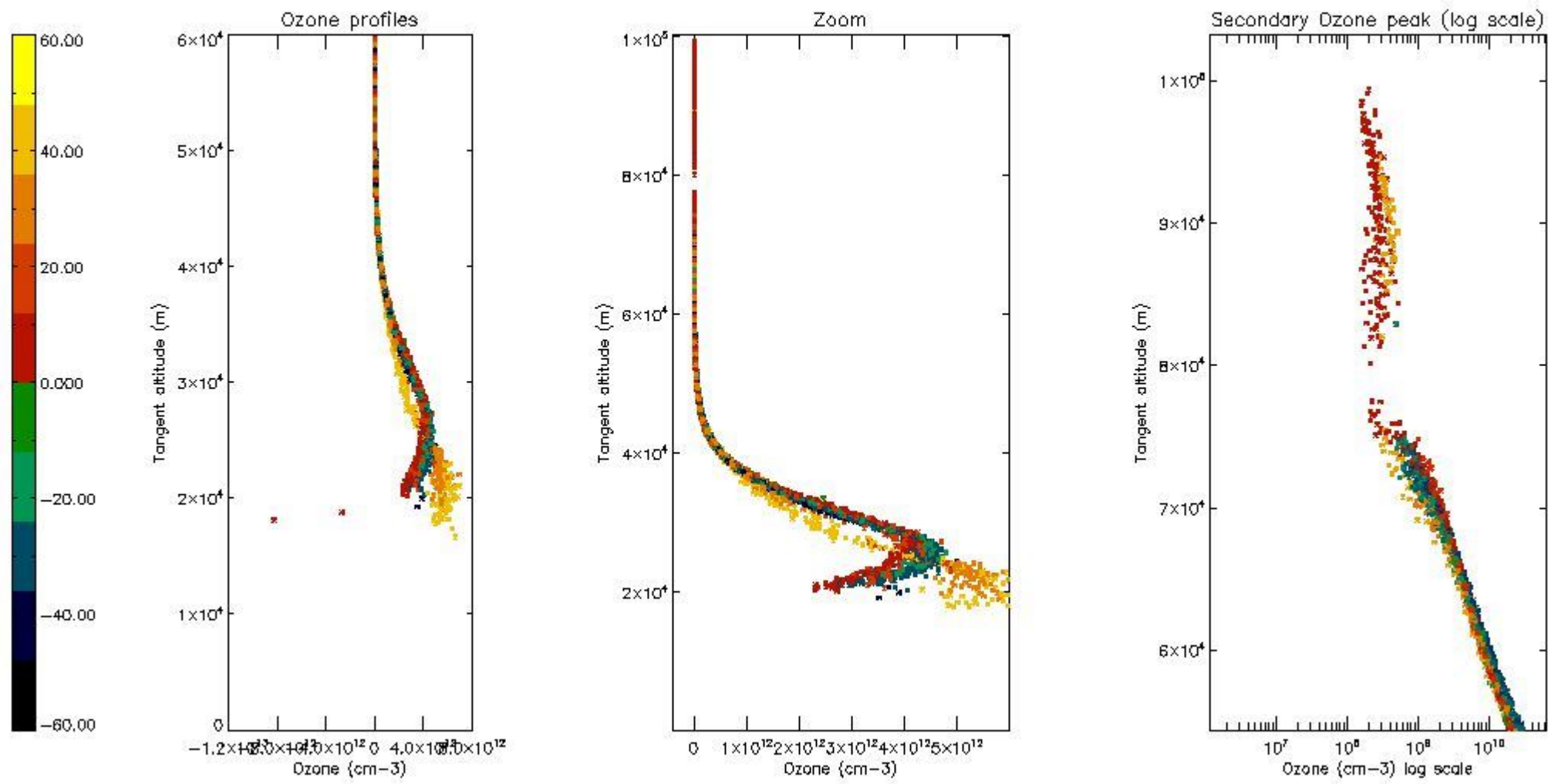
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



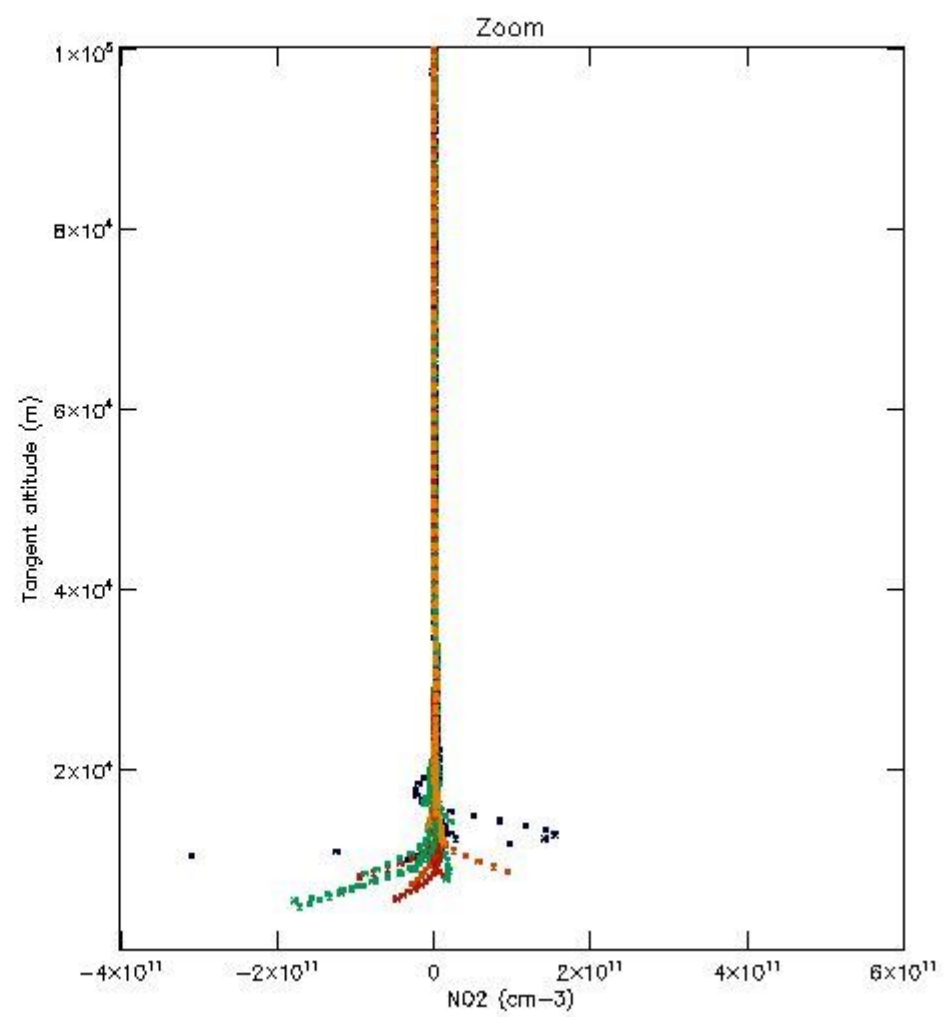
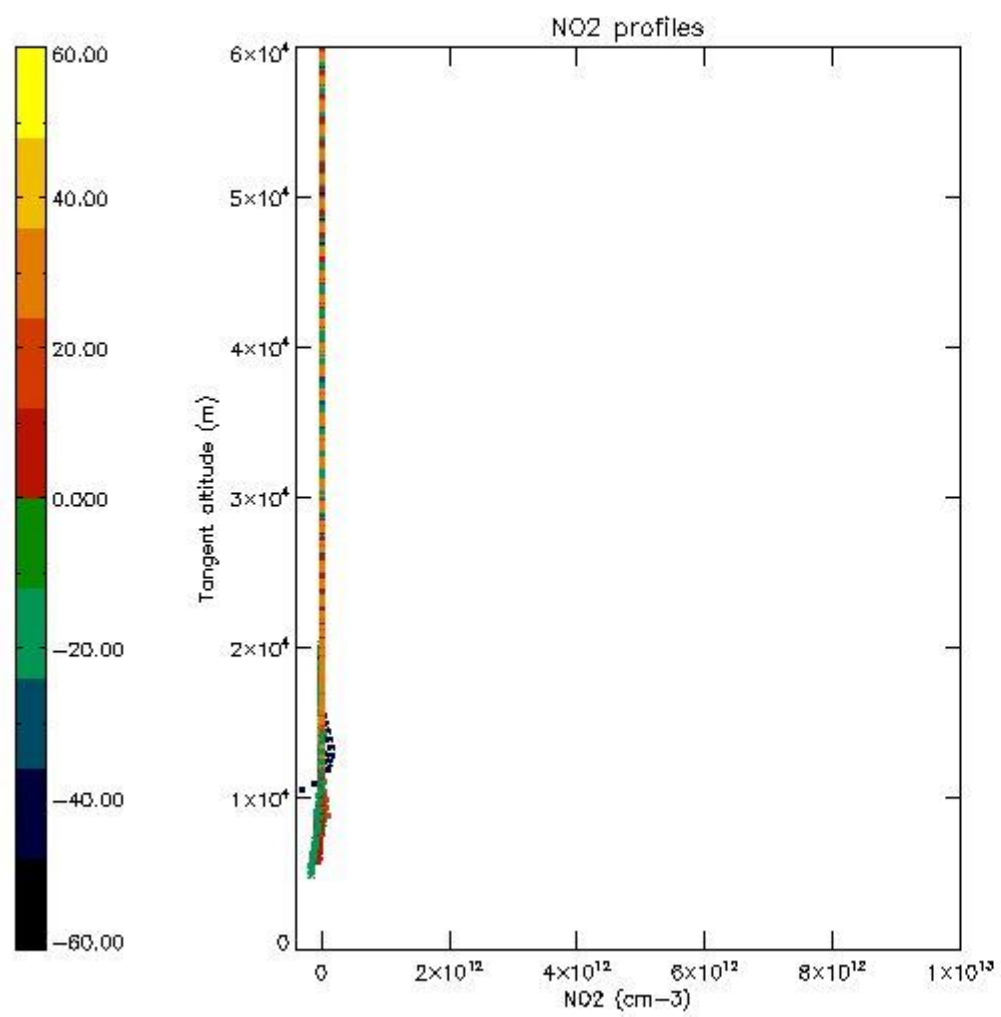
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



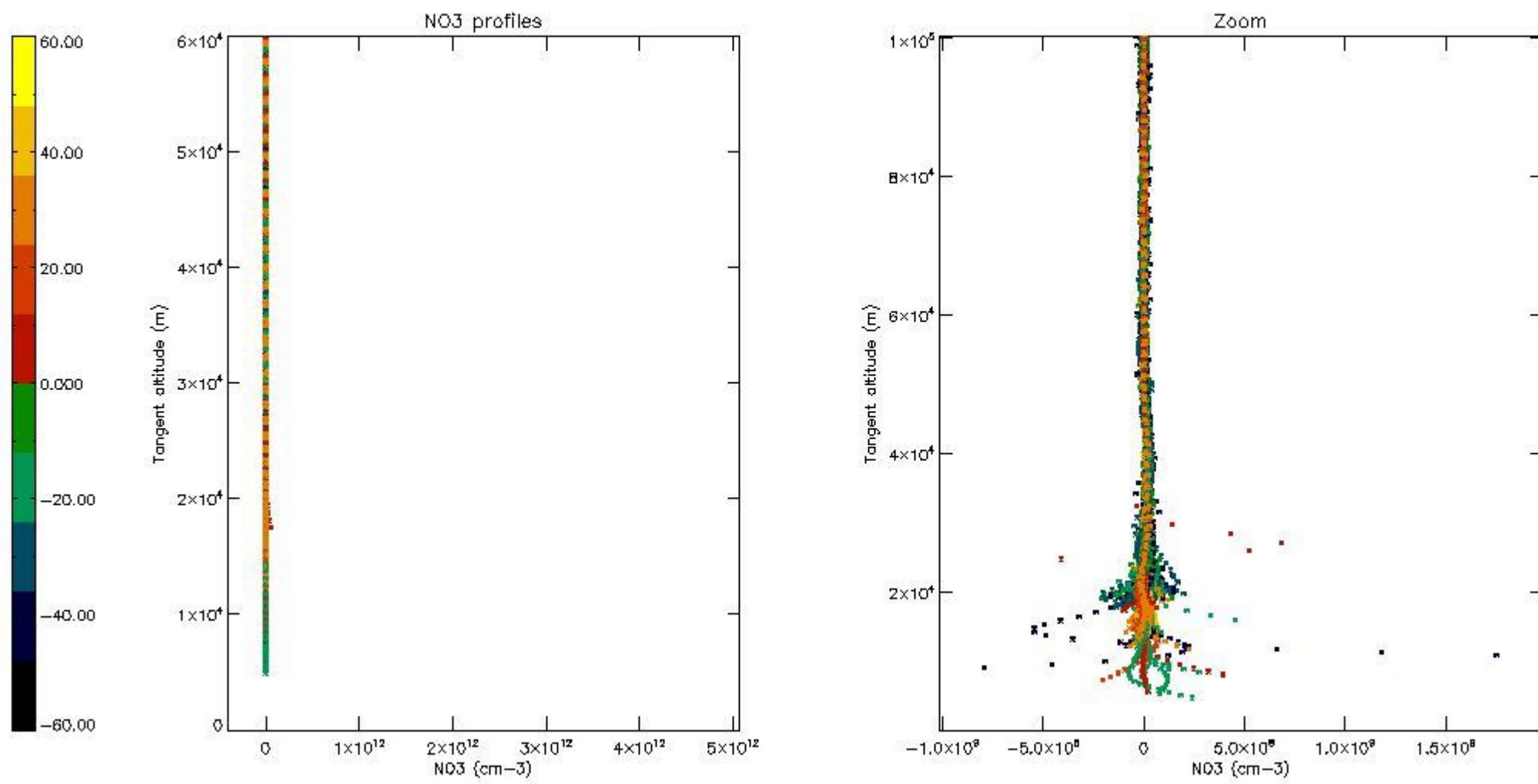
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



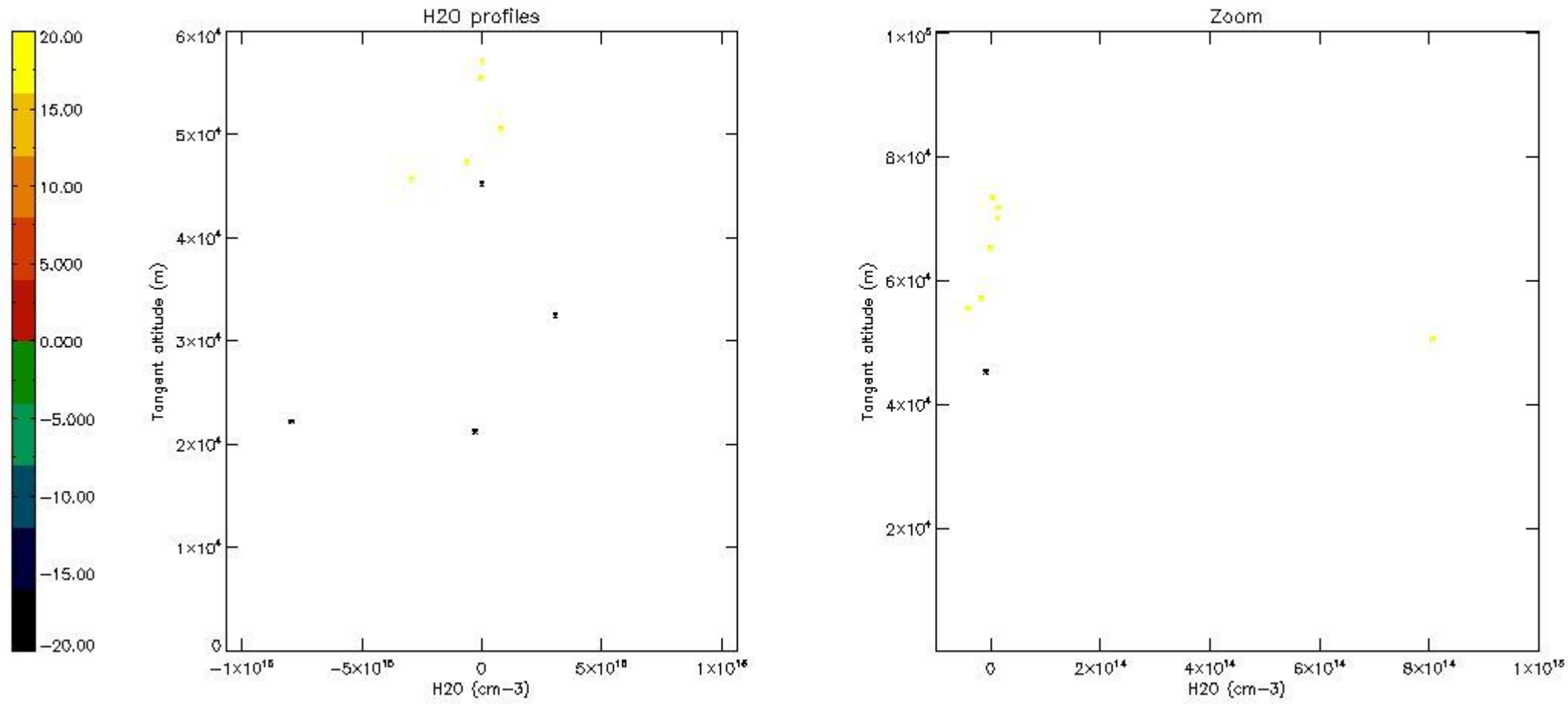
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	02-FEB-2003 01:25:26
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	02-FEB-2003 01:25:26
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	02-FEB-2003 01:25:26

GOMOS Level 2 Daily Report

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

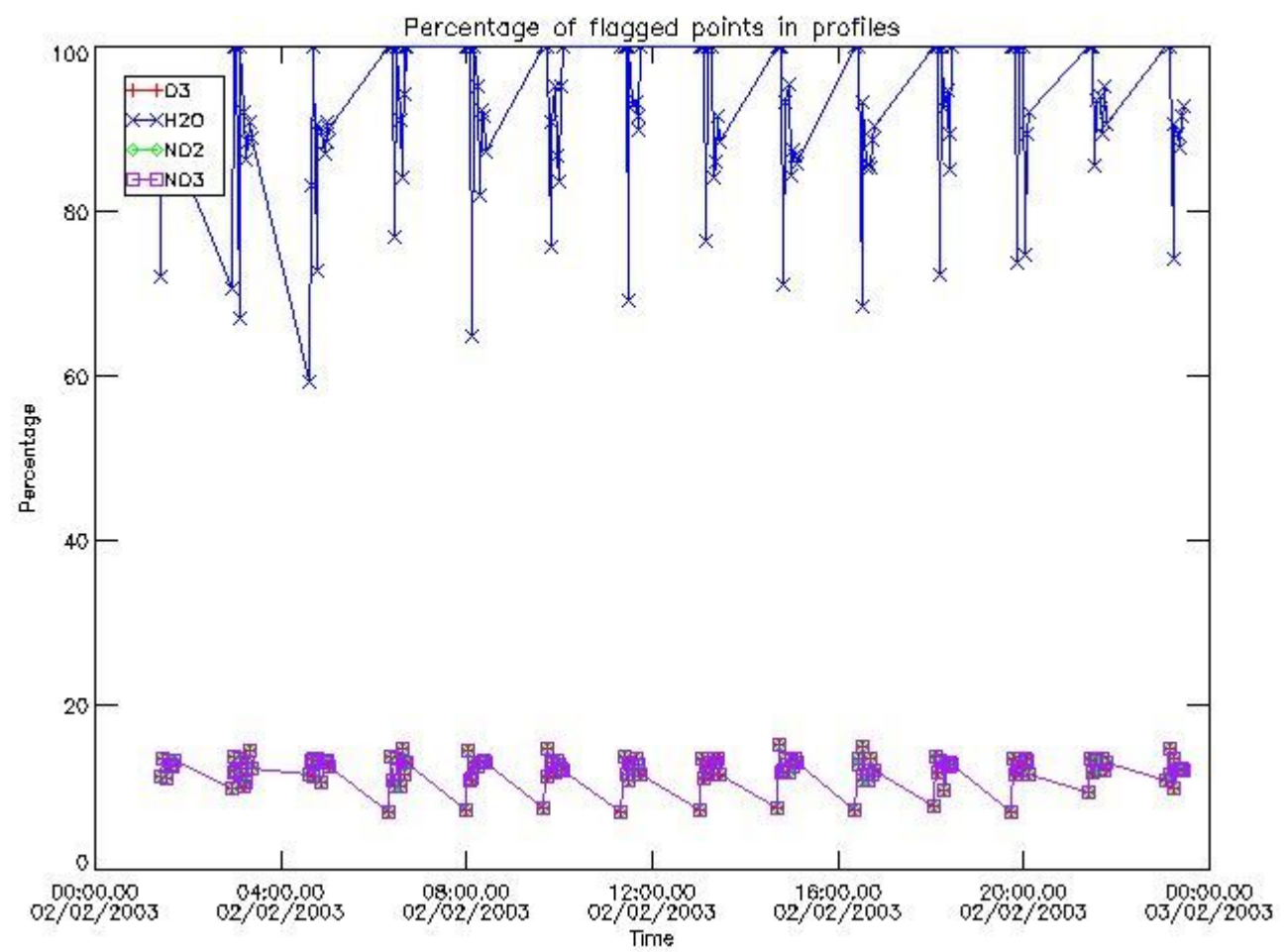
[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

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

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

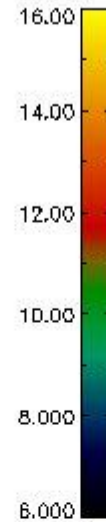
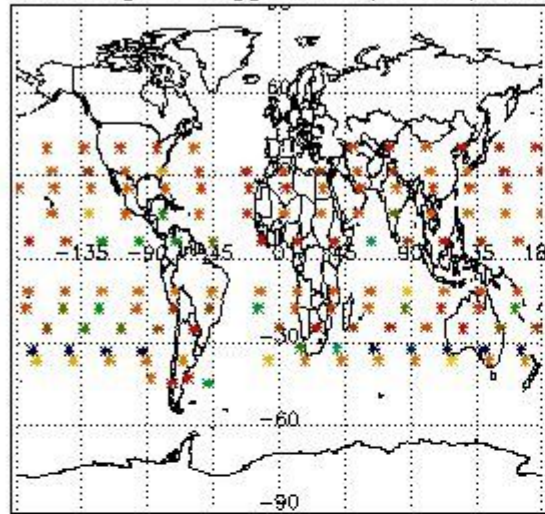
[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

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

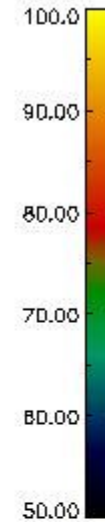
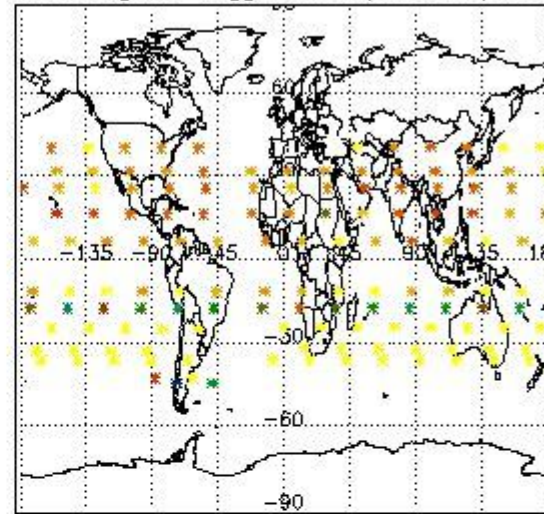


3.2 Plot quality information per product (world map)

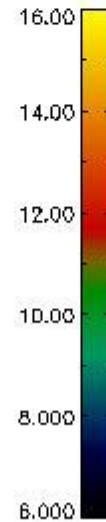
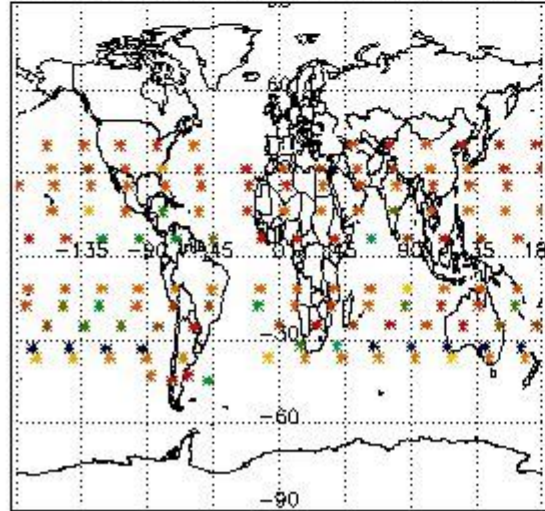
Percentage of flagged data per O3 profile



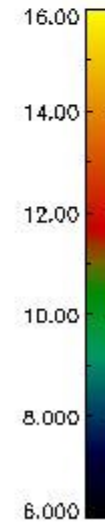
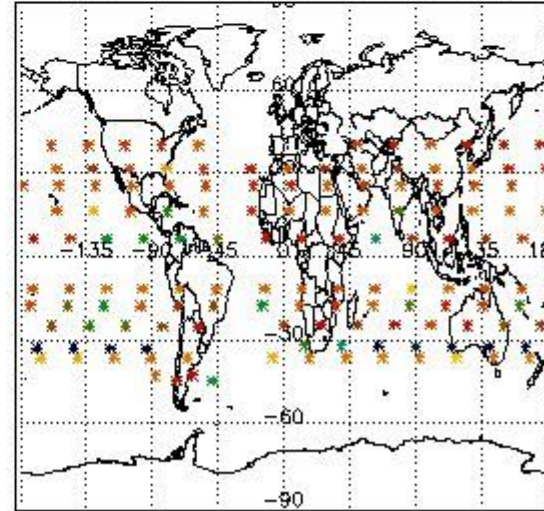
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

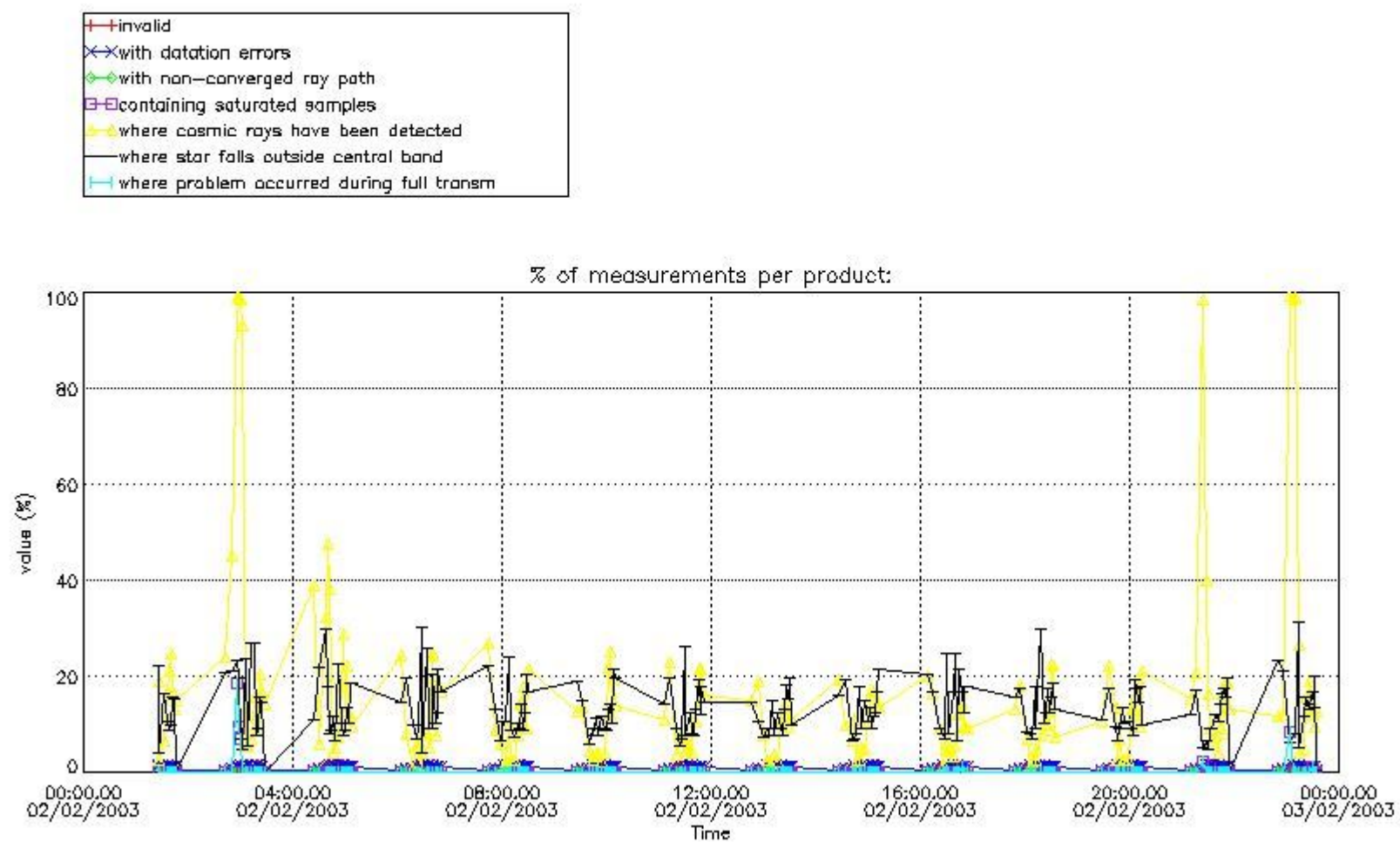


4. Level 1 quality information per product

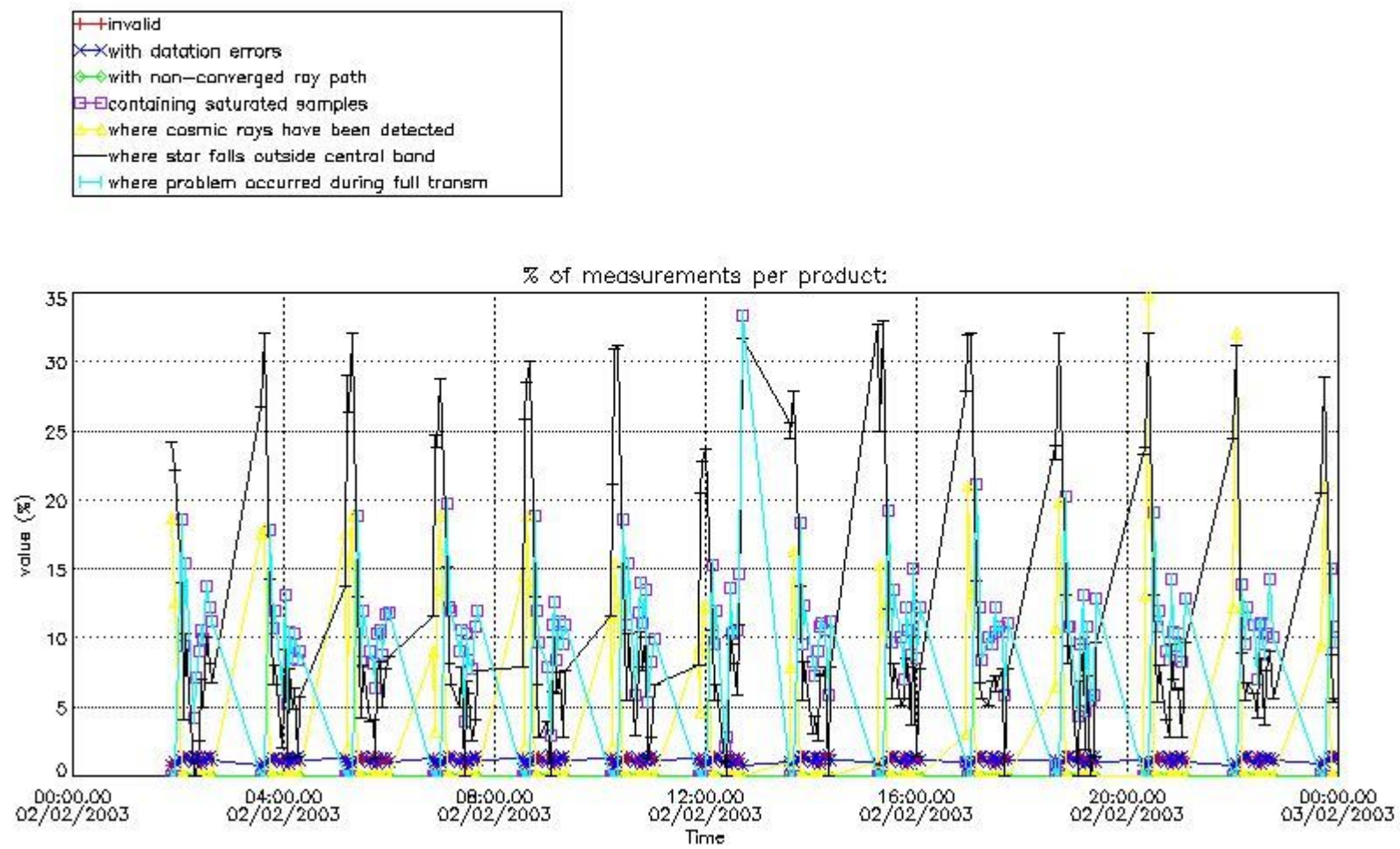
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

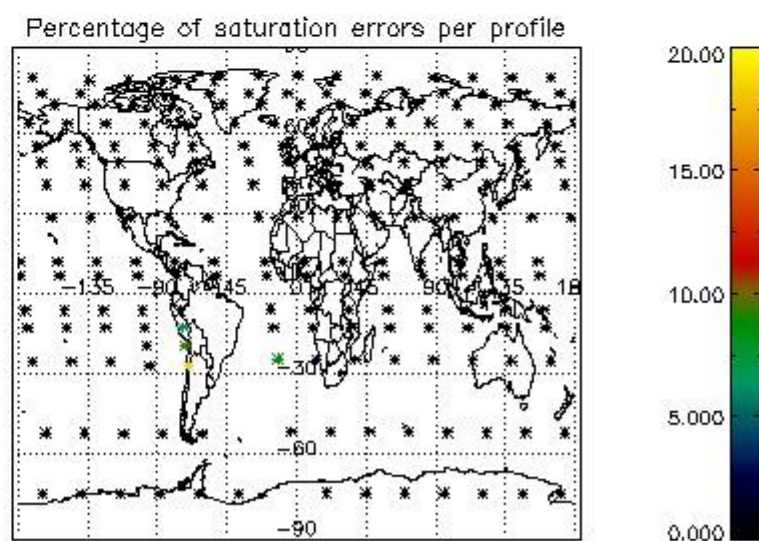
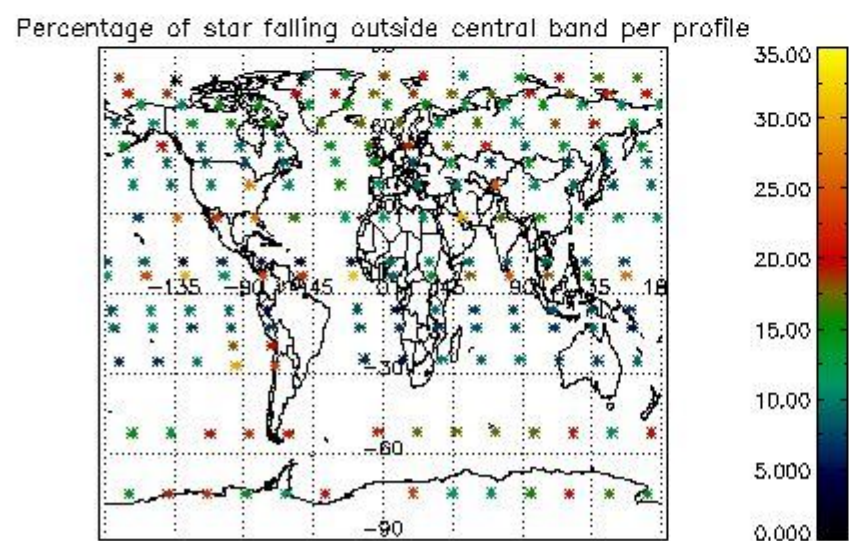
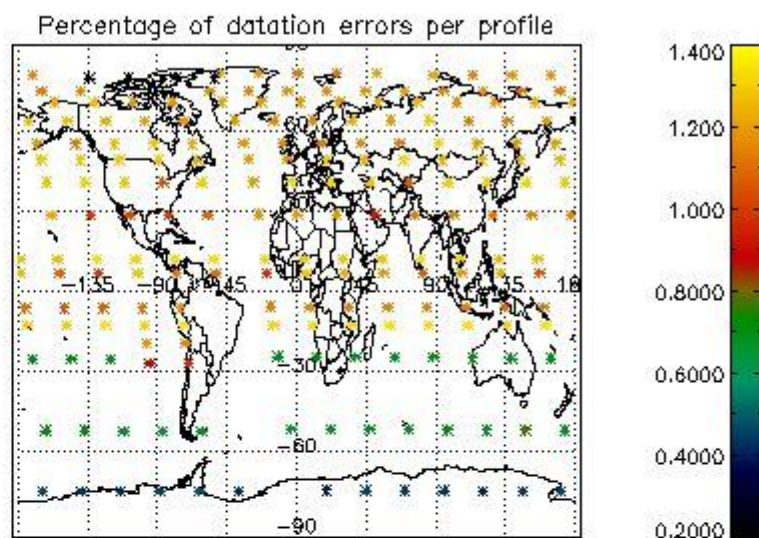
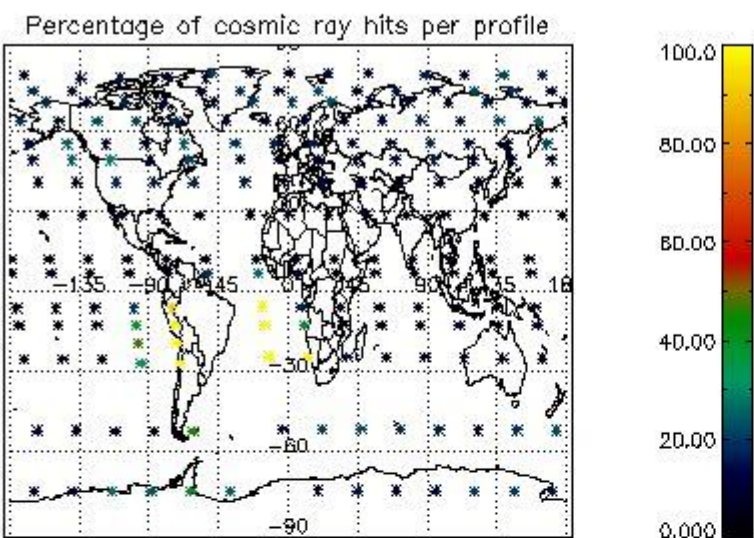


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

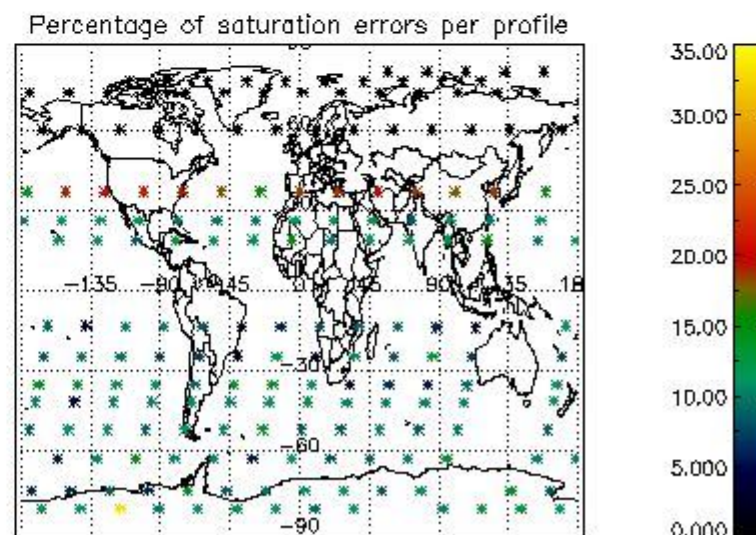
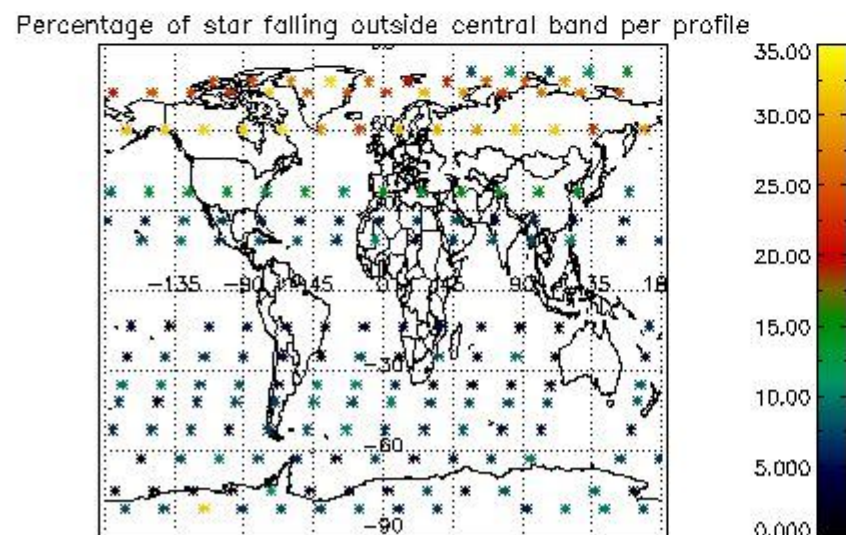
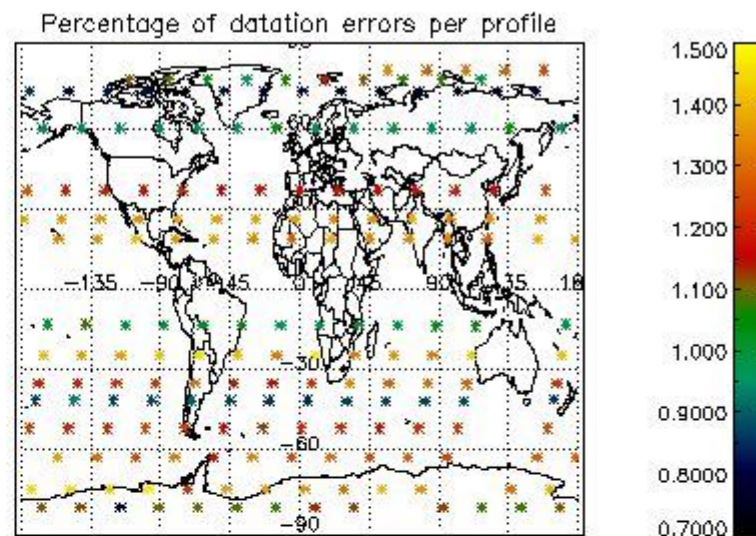
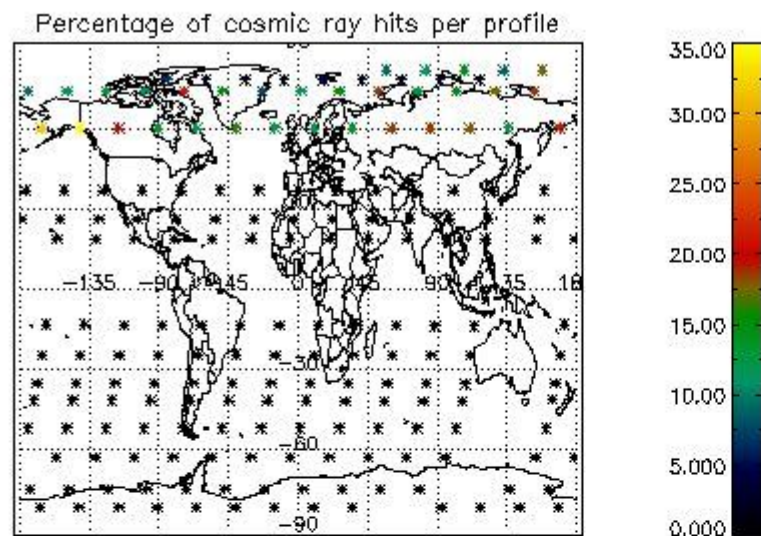


4.2 Plot quality information per product coming from level 1b processing (world map)

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

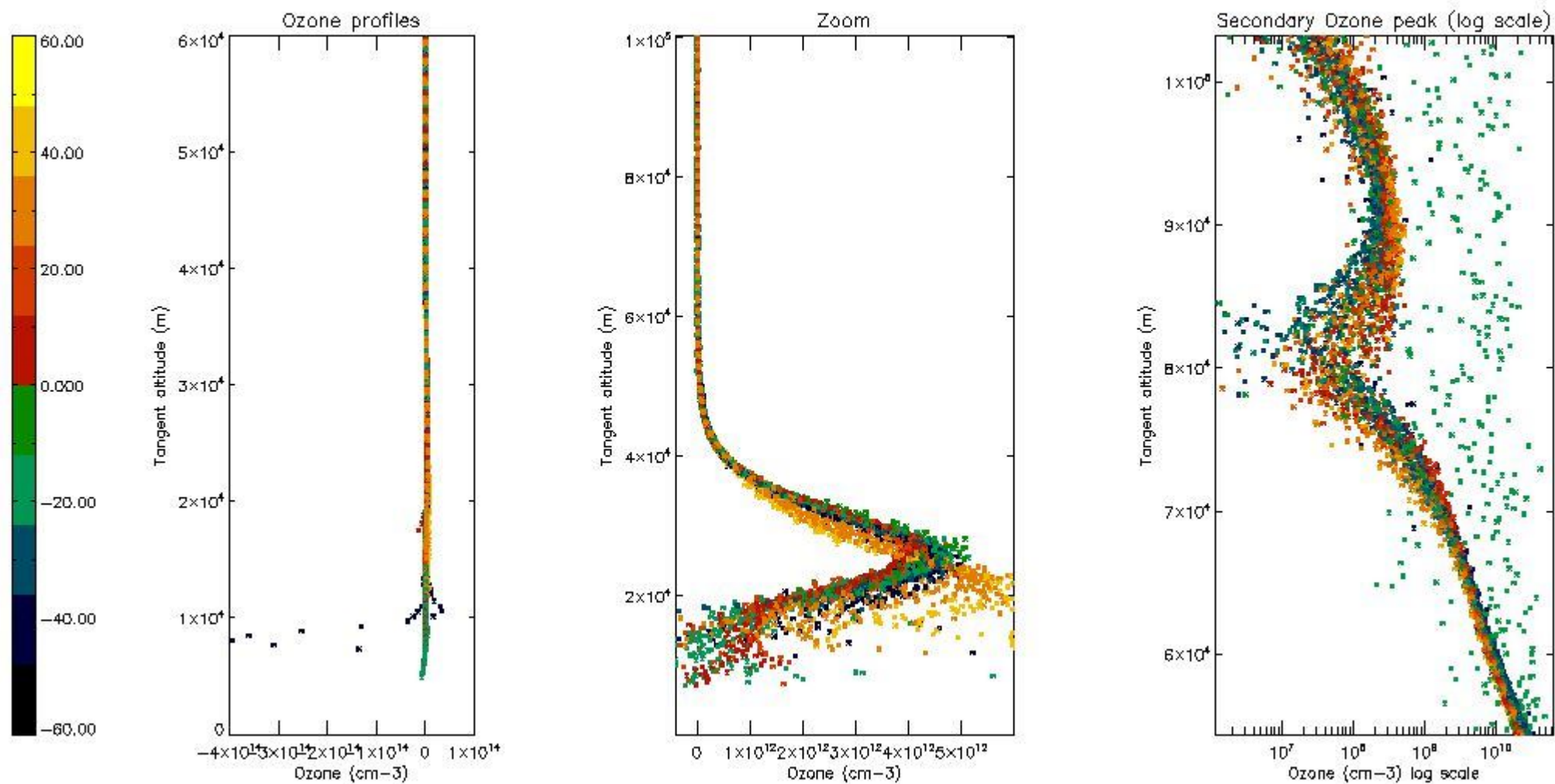
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	31
STD < 20	19

STD < 10	16
STD < 5	12

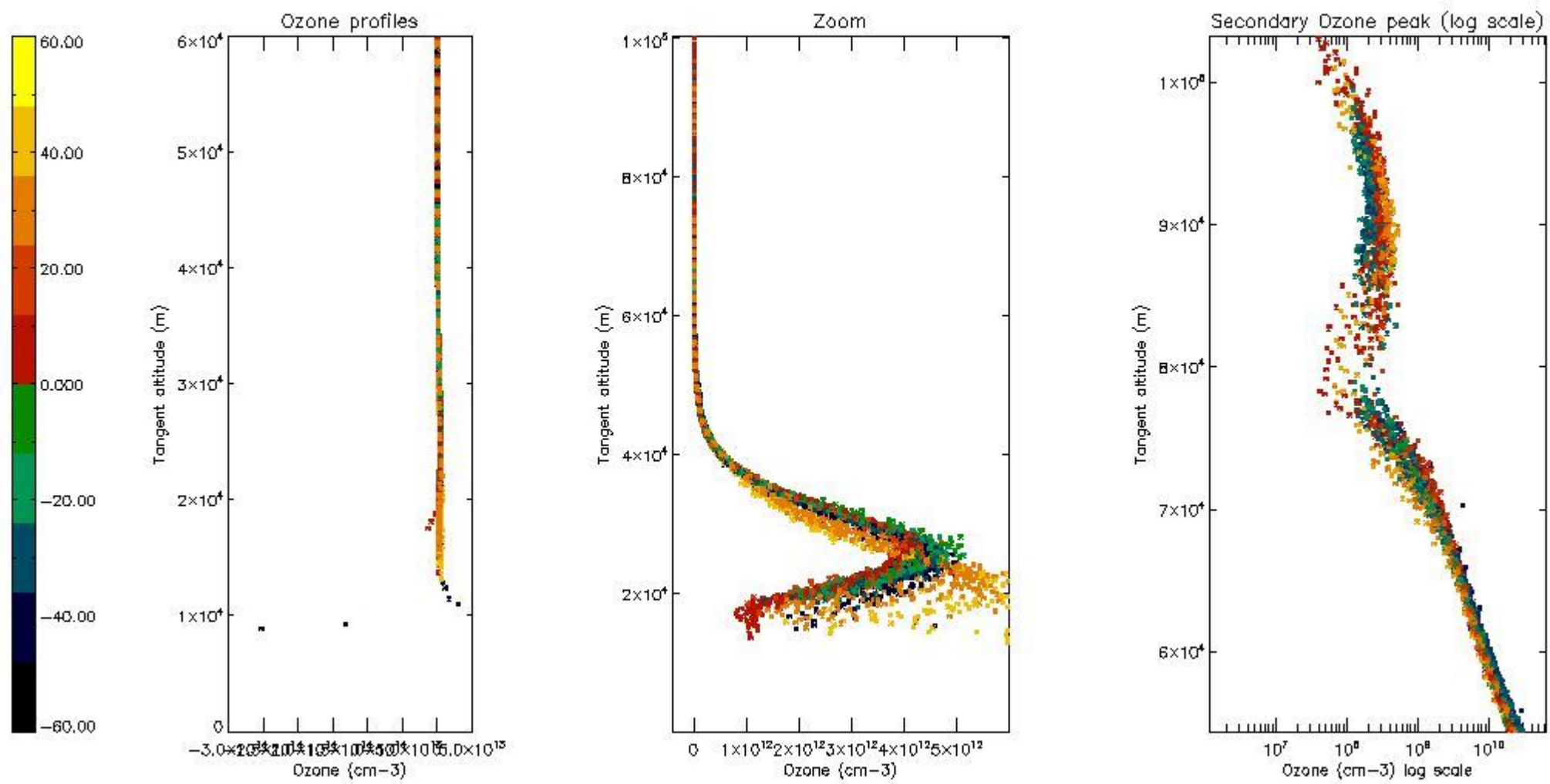
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



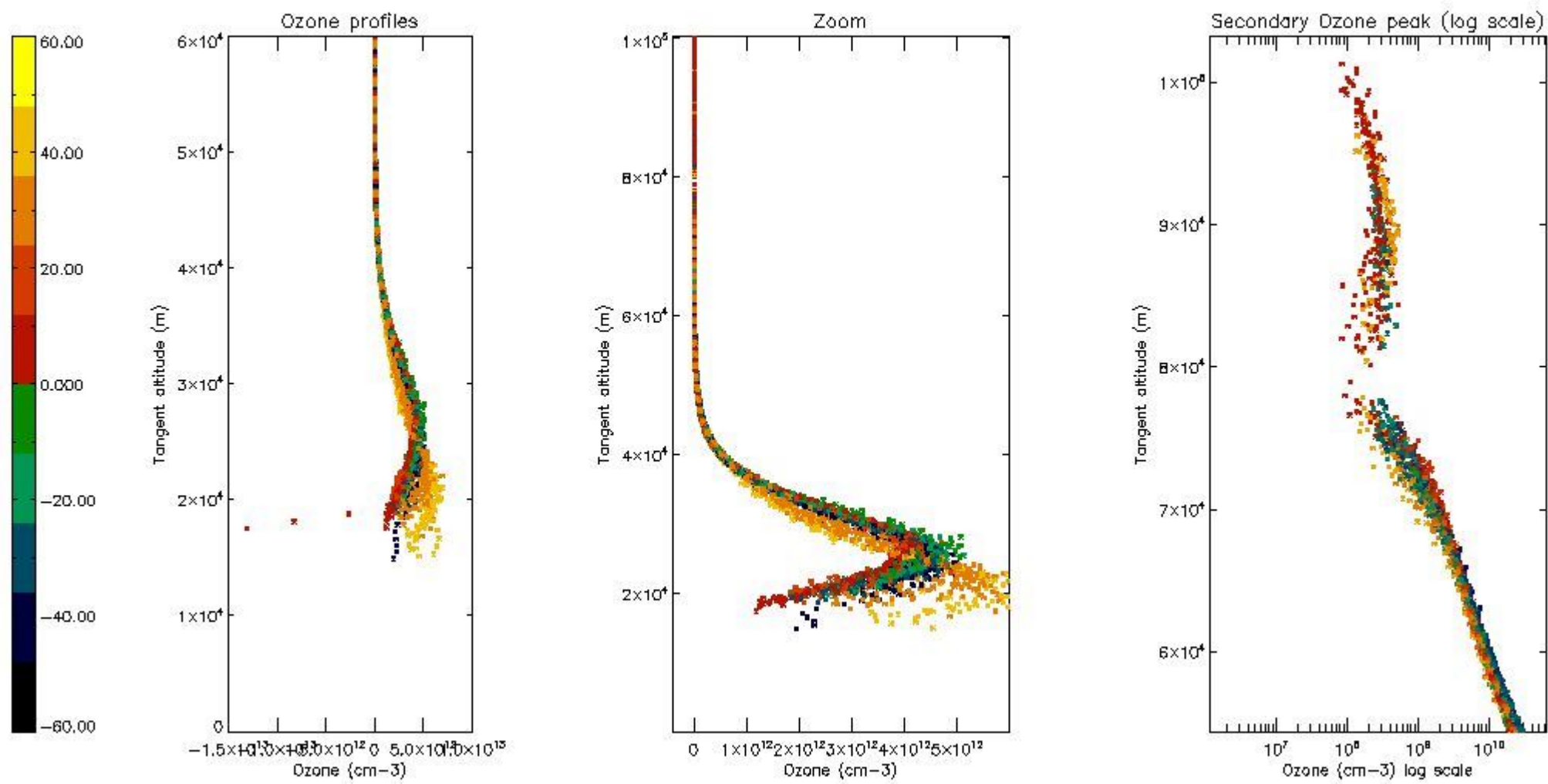
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



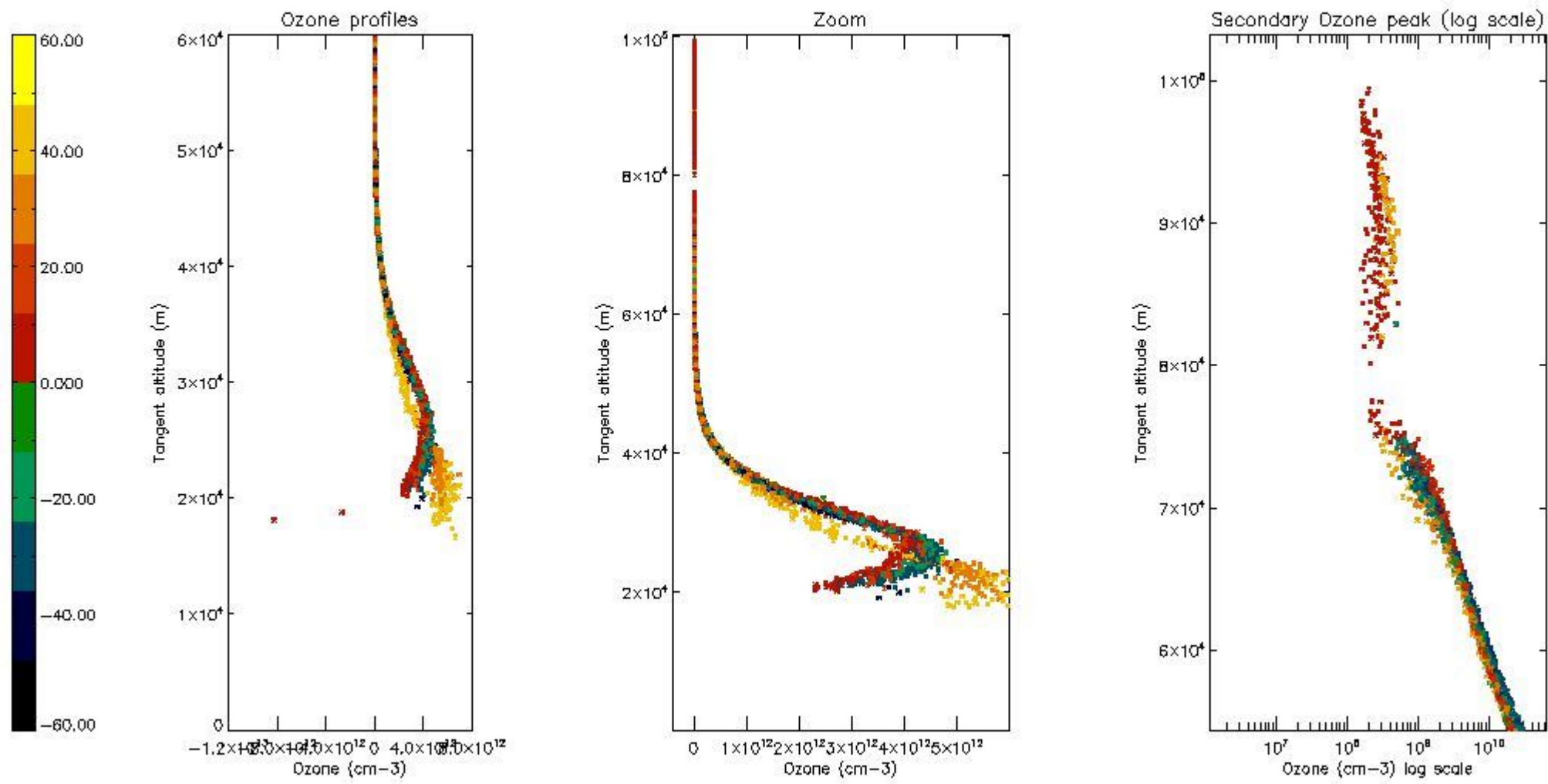
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



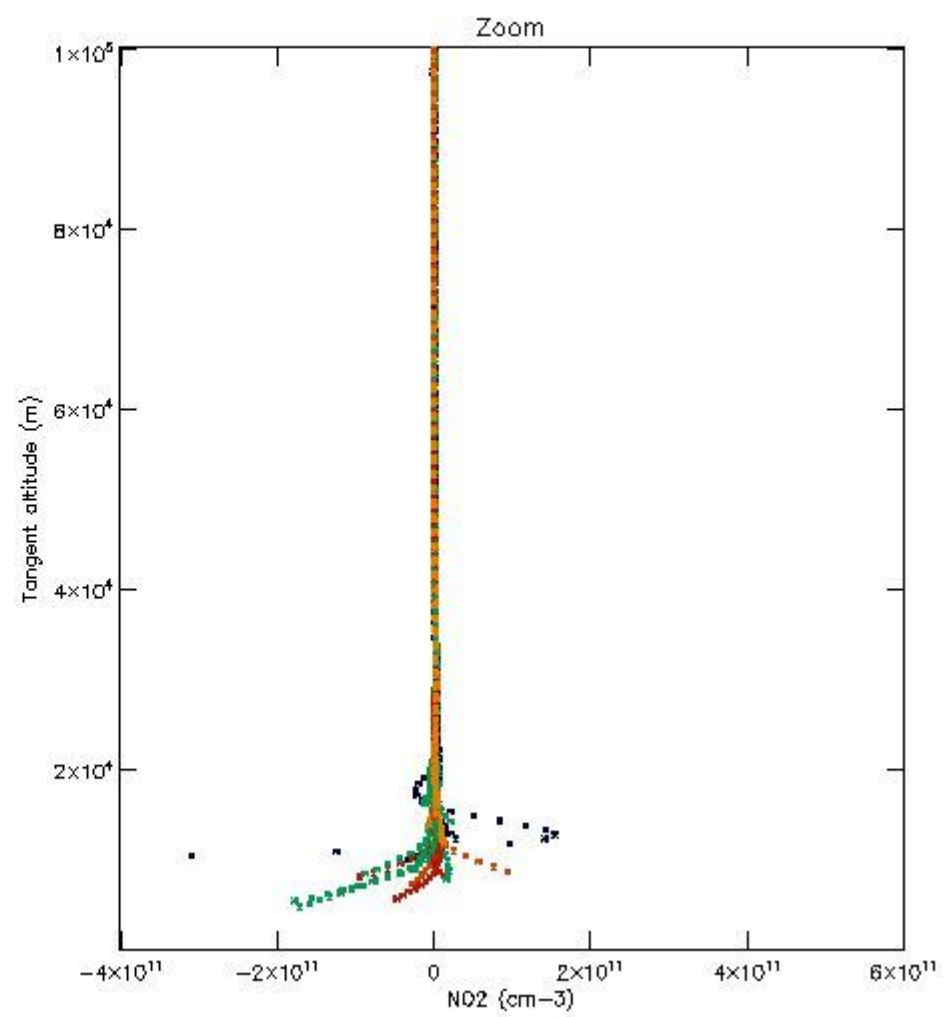
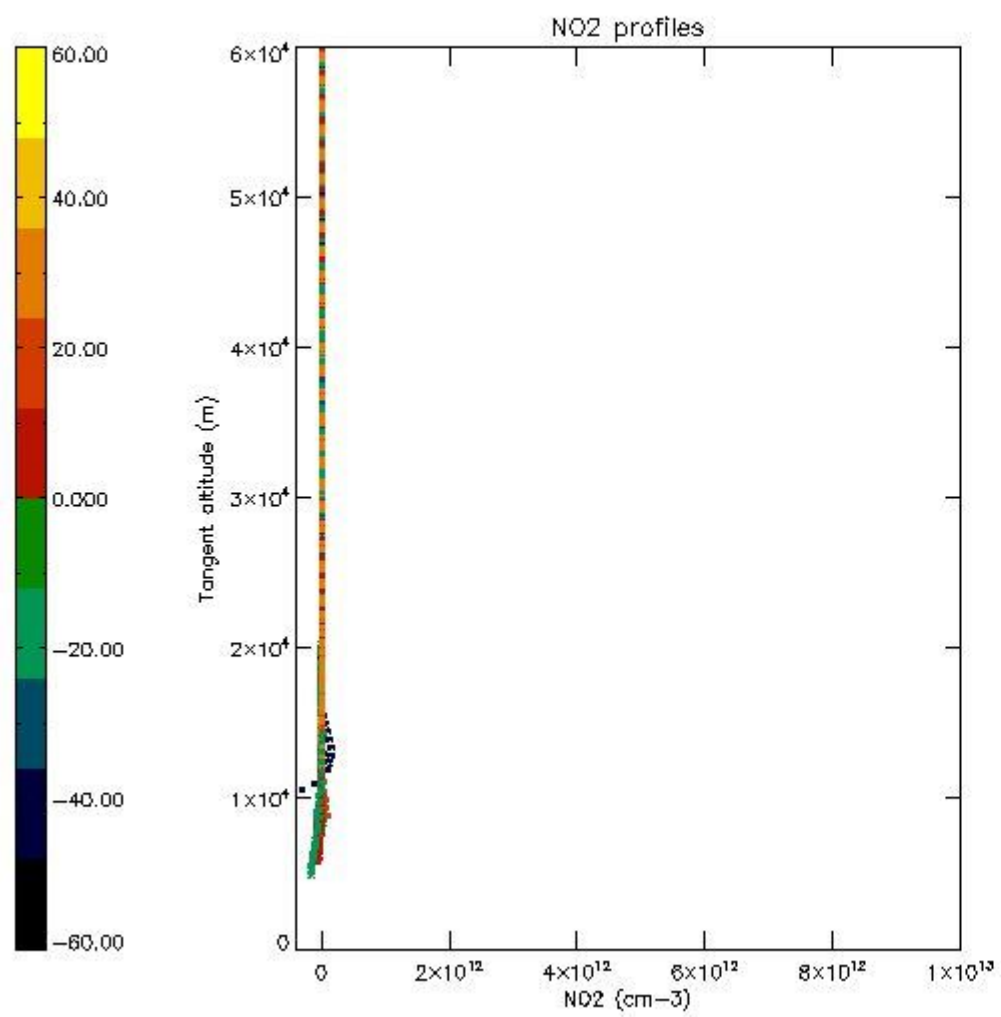
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



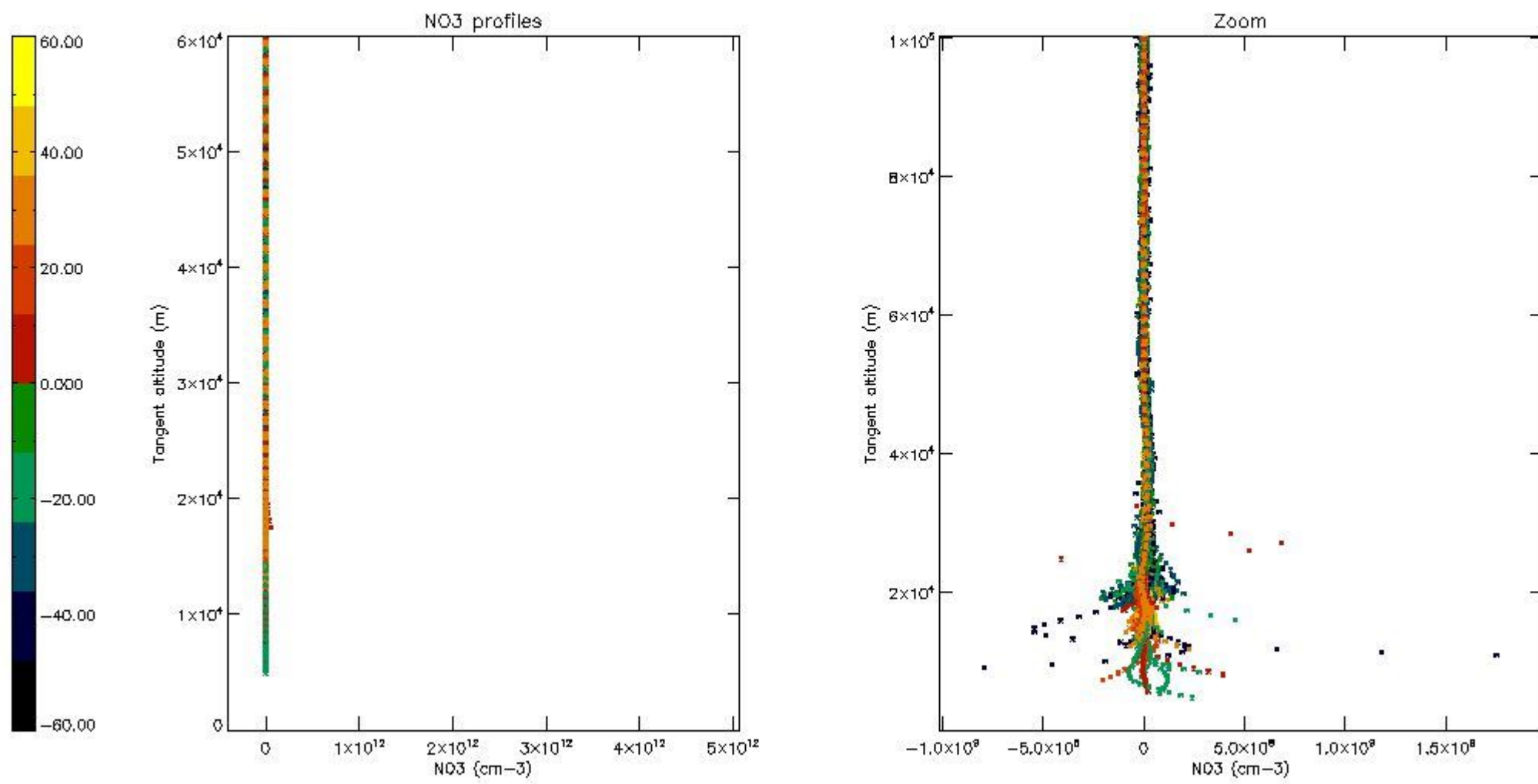
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



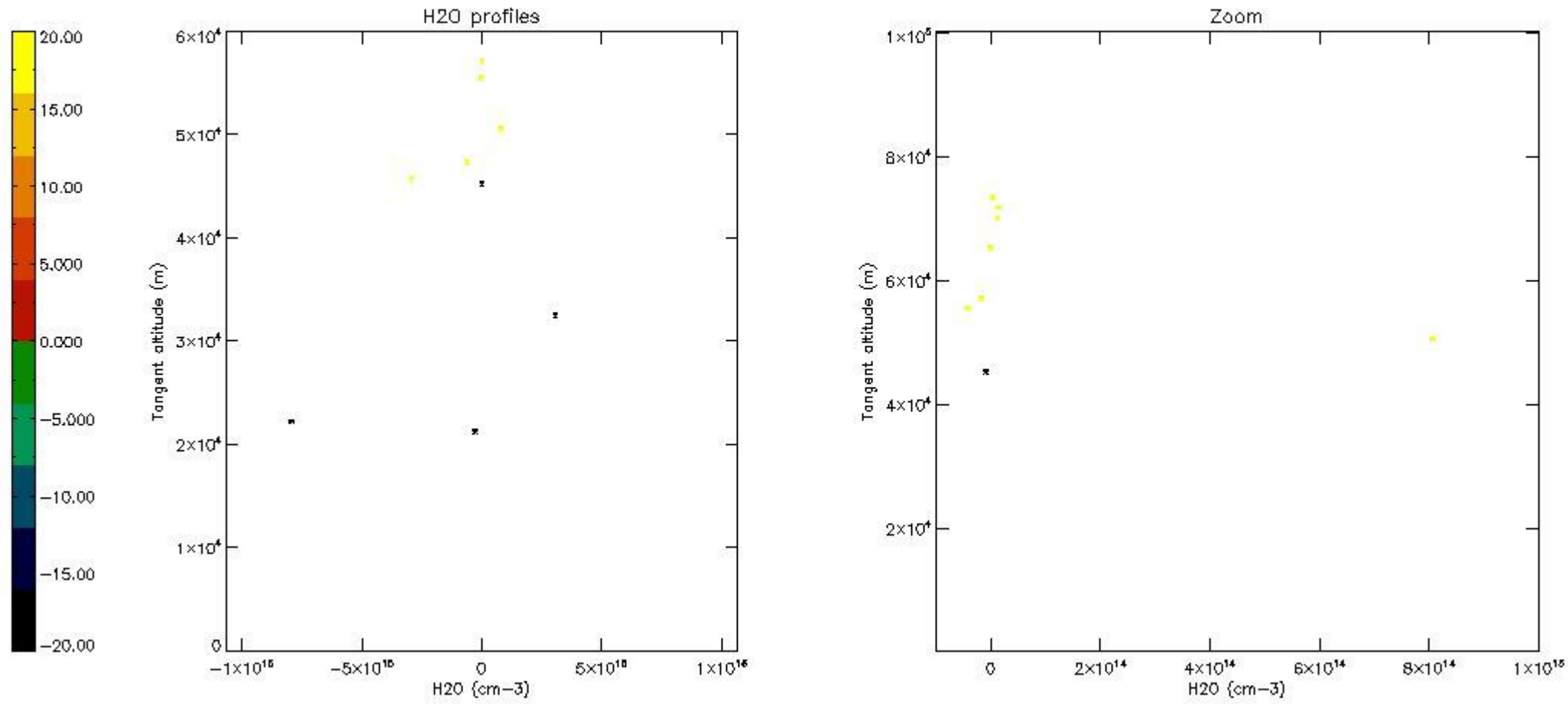
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

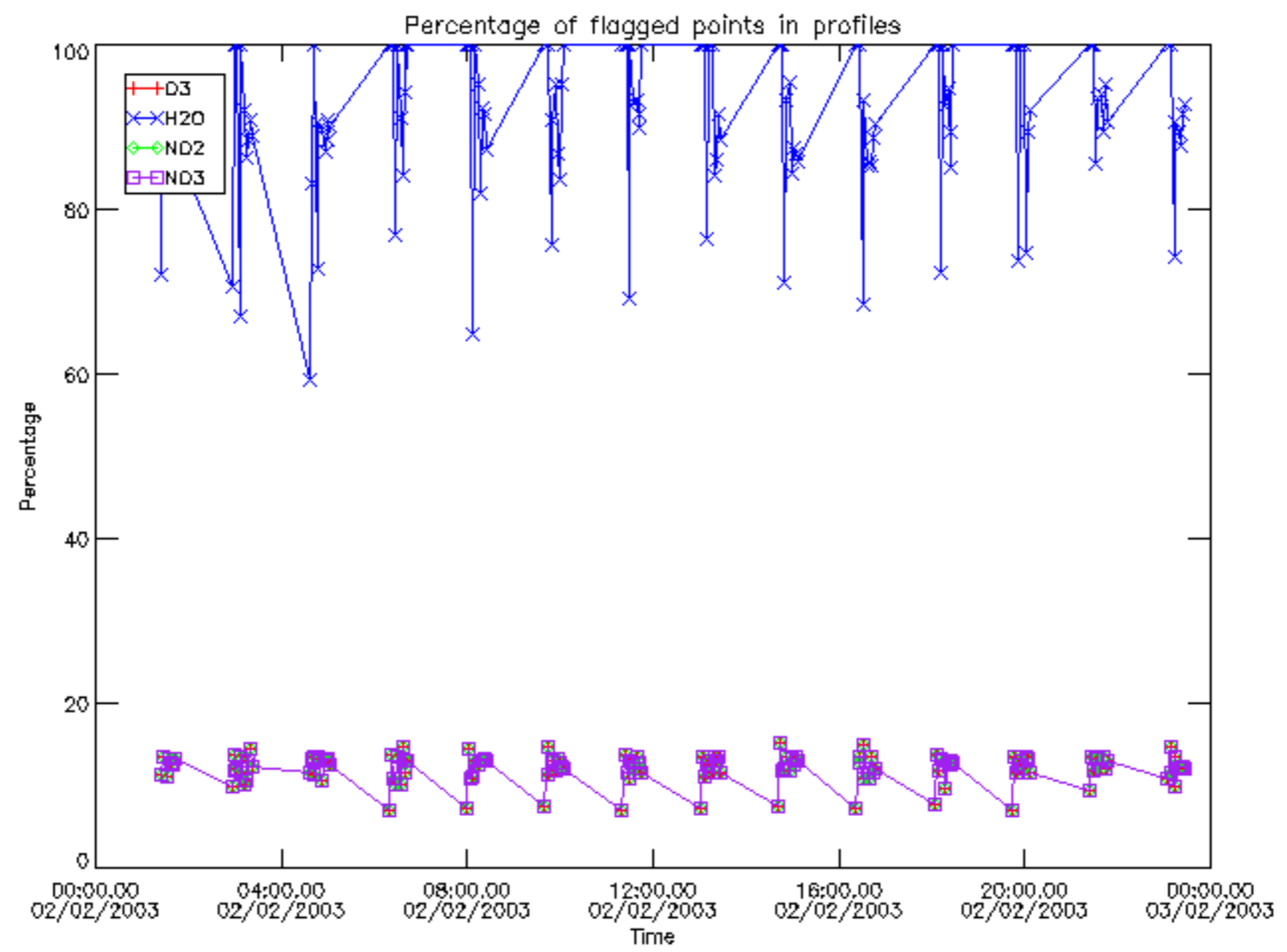
The colorbar represents the latitude.



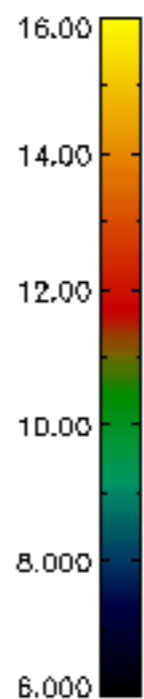
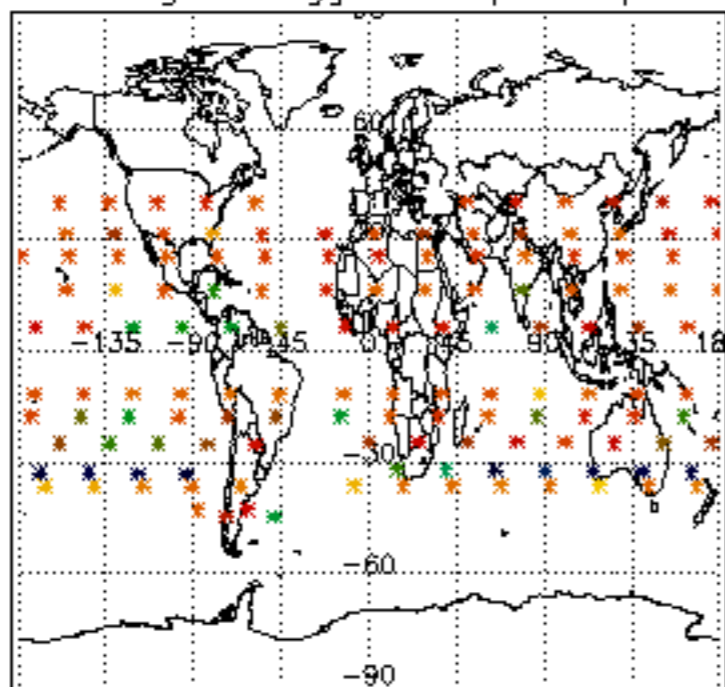
6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

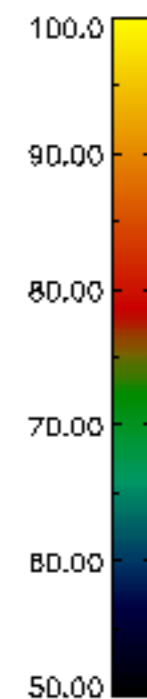
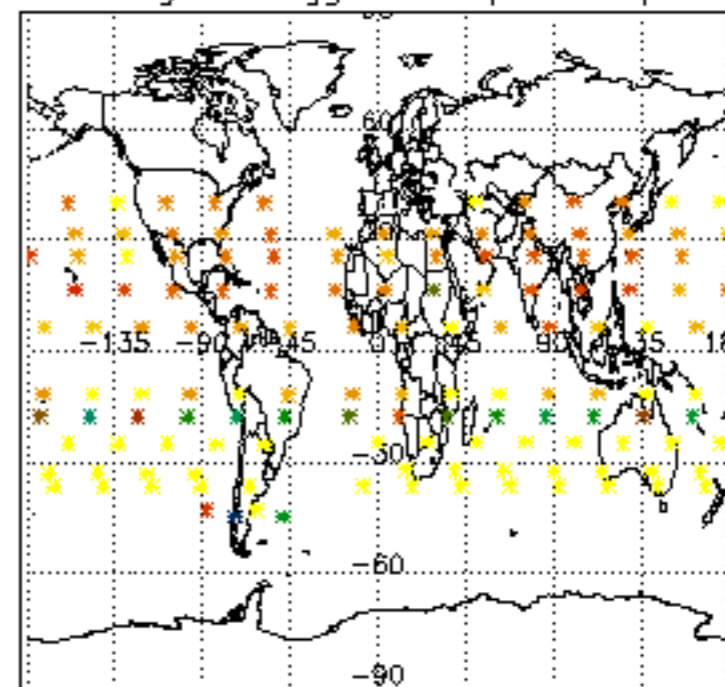
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	02-FEB-2003 01:25:26
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	02-FEB-2003 01:25:26
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	02-FEB-2003 01:25:26



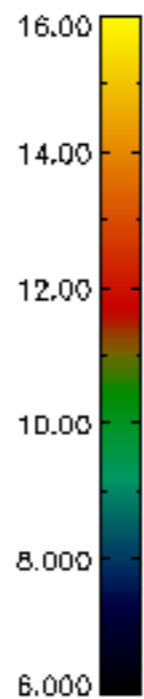
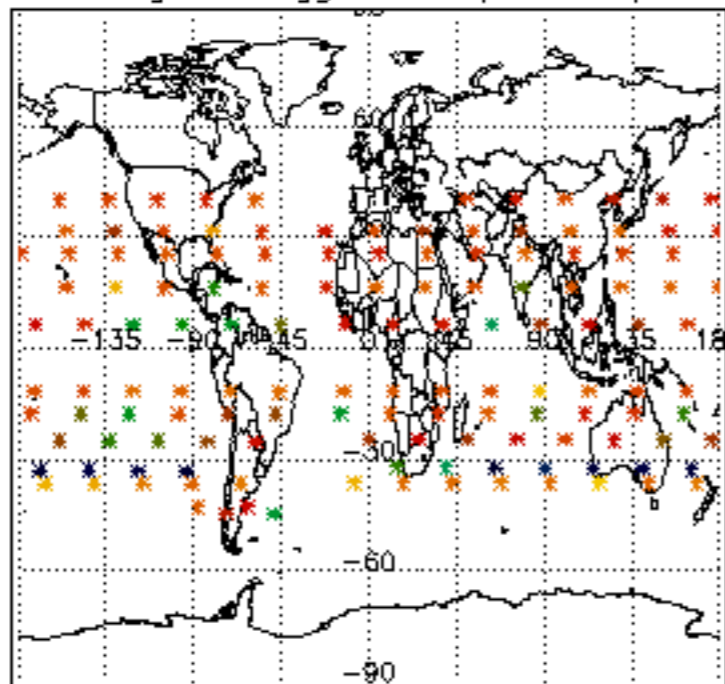
Percentage of flagged data per D3 profile



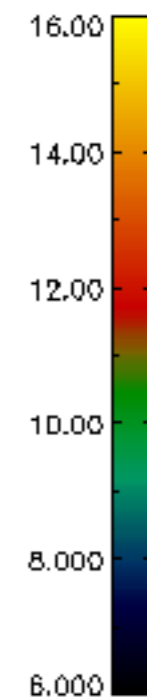
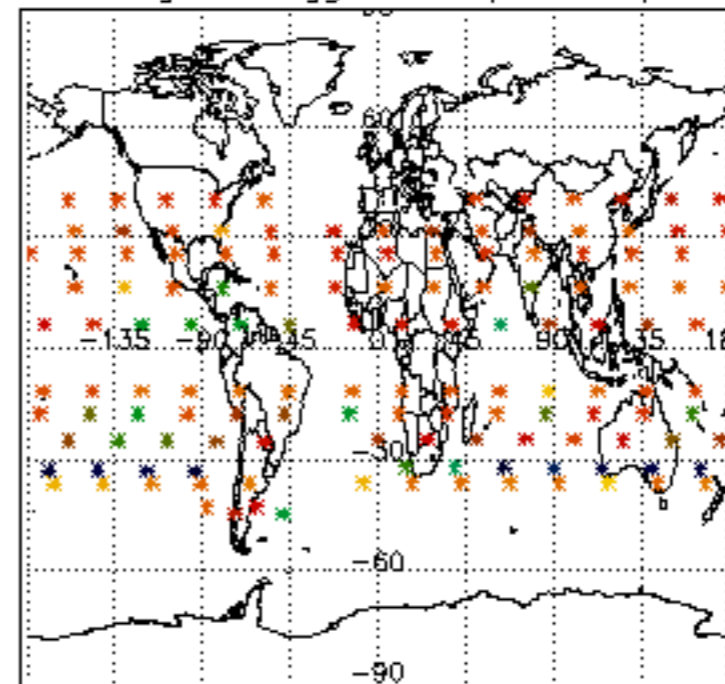
Percentage of flagged data per H2O profile

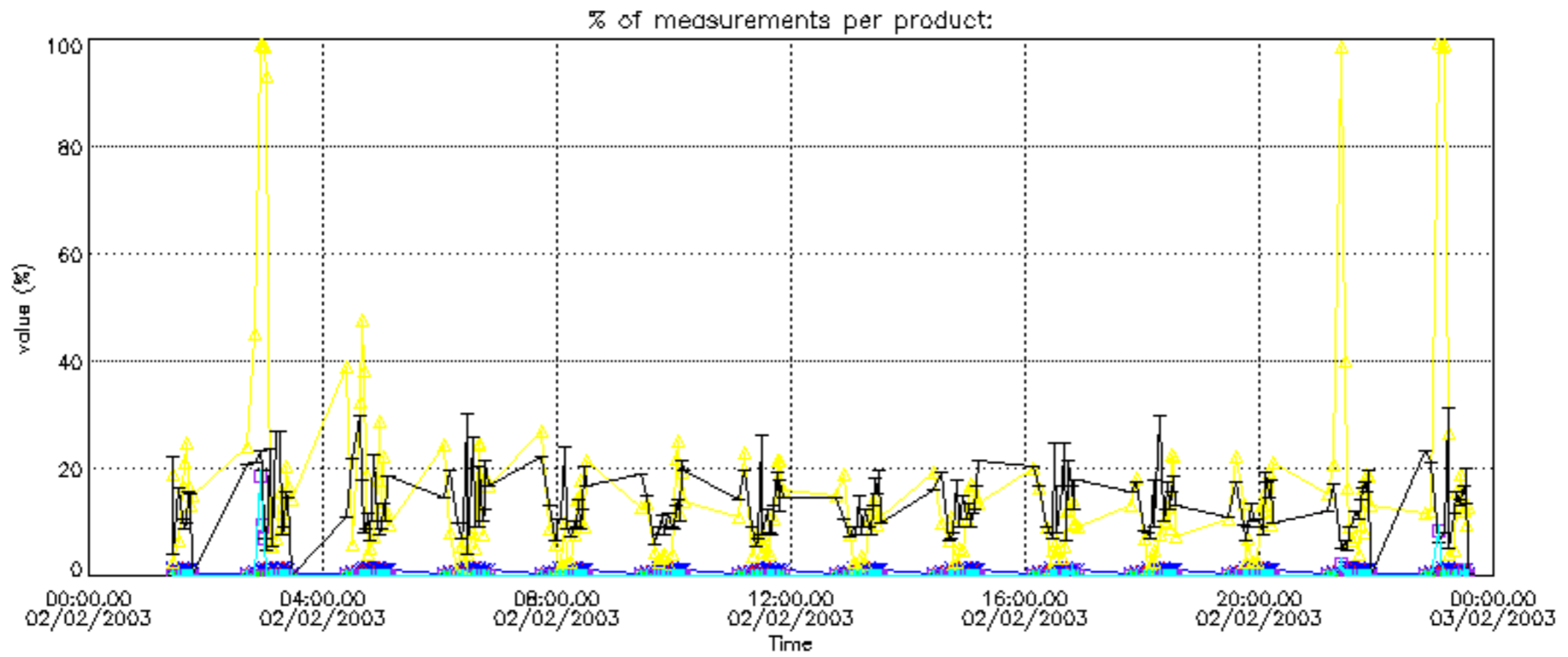


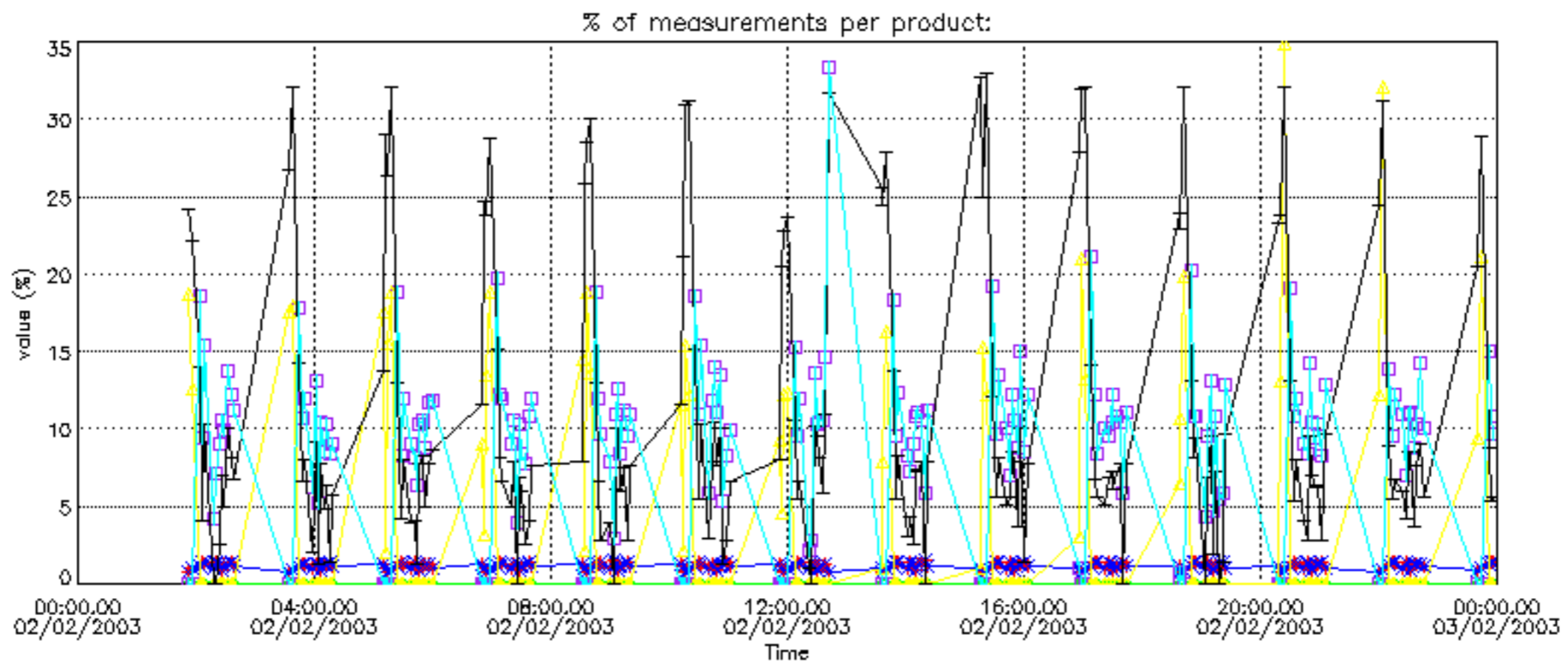
Percentage of flagged data per NO2 profile



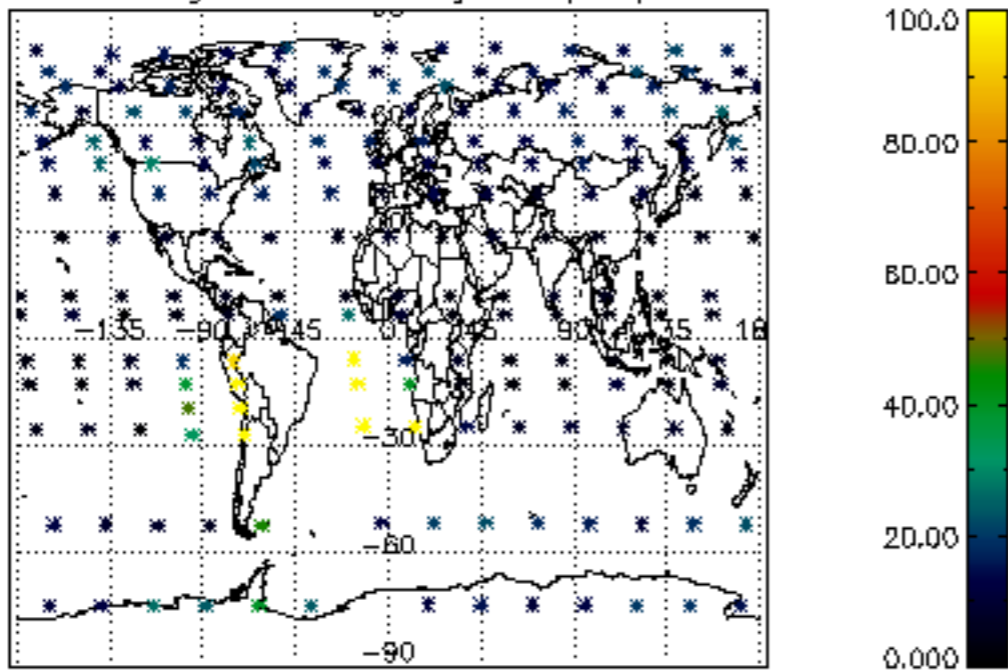
Percentage of flagged data per NO3 profile



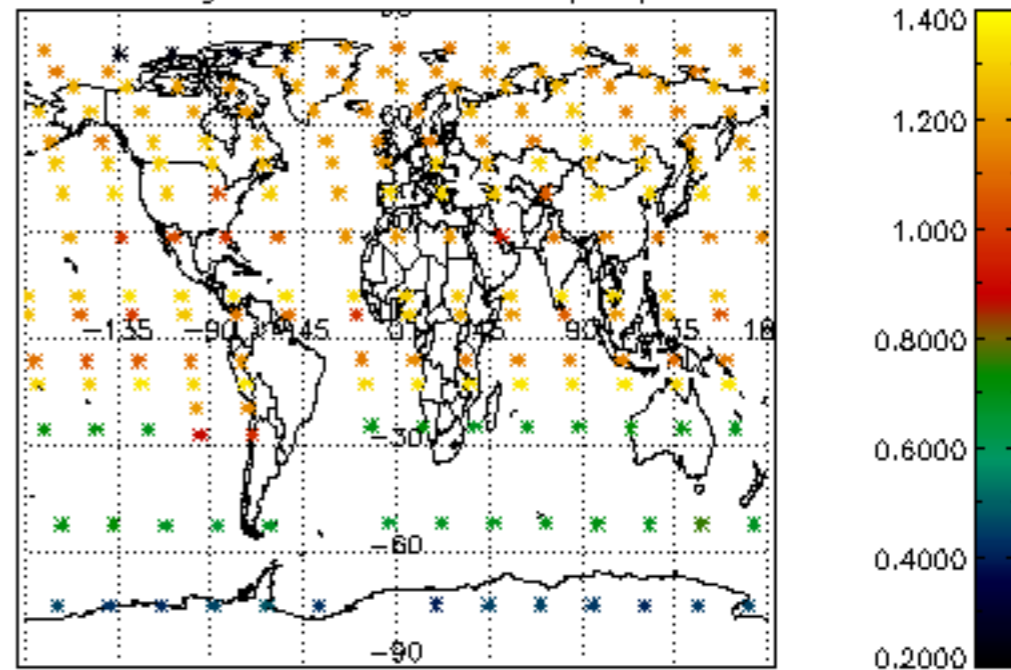




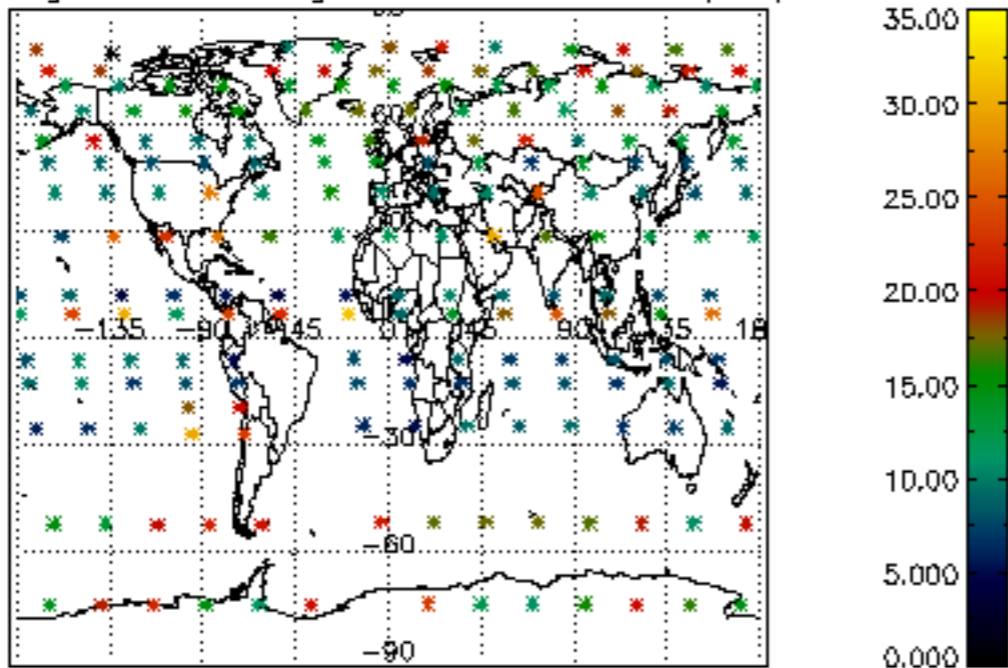
Percentage of cosmic ray hits per profile



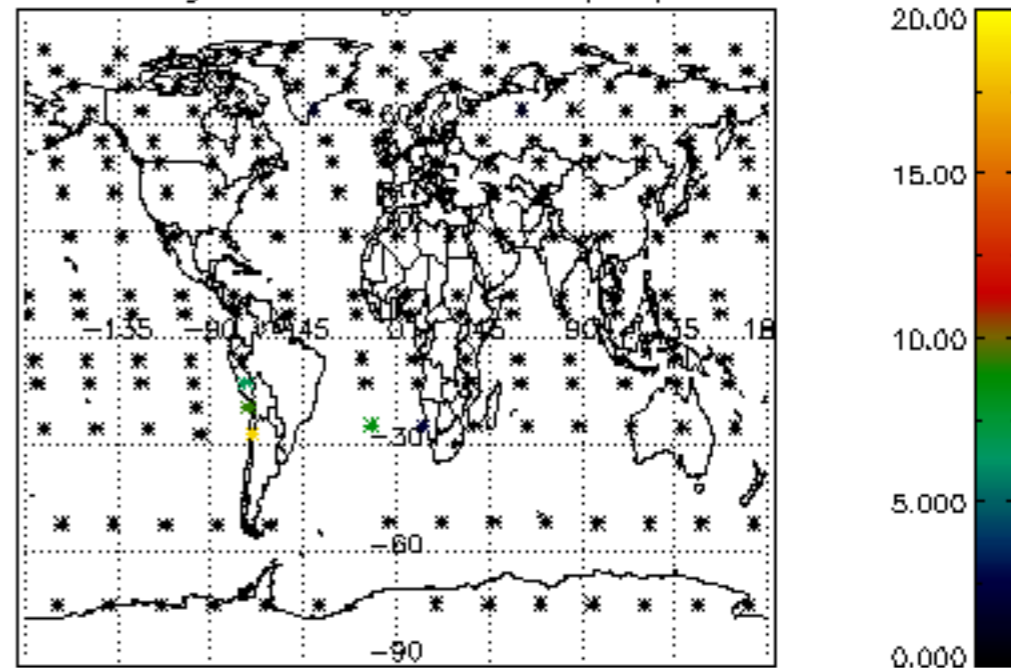
Percentage of datation errors per profile



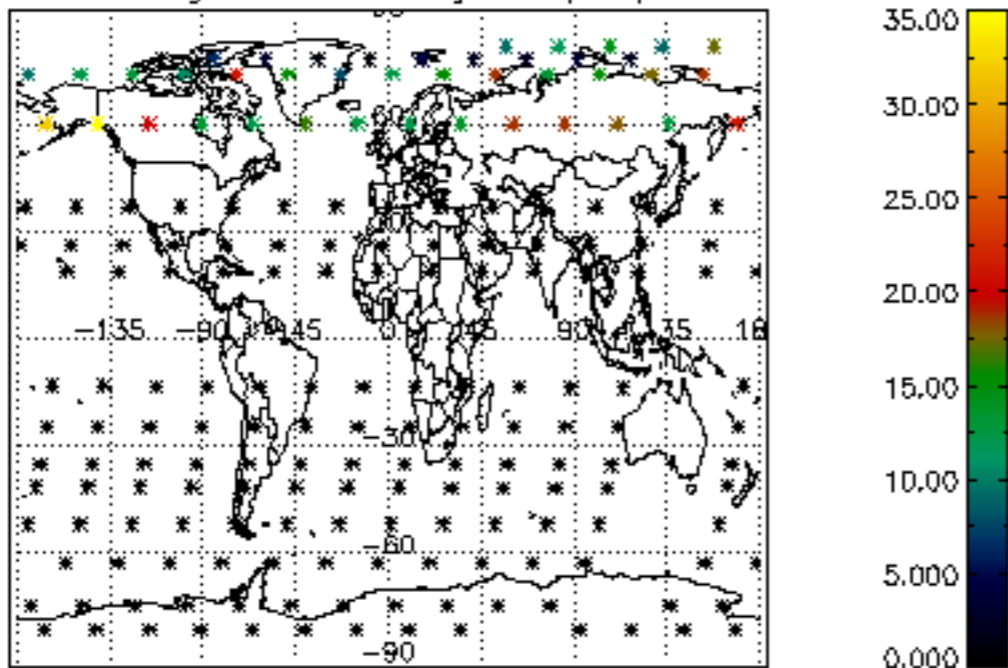
Percentage of star falling outside central band per profile



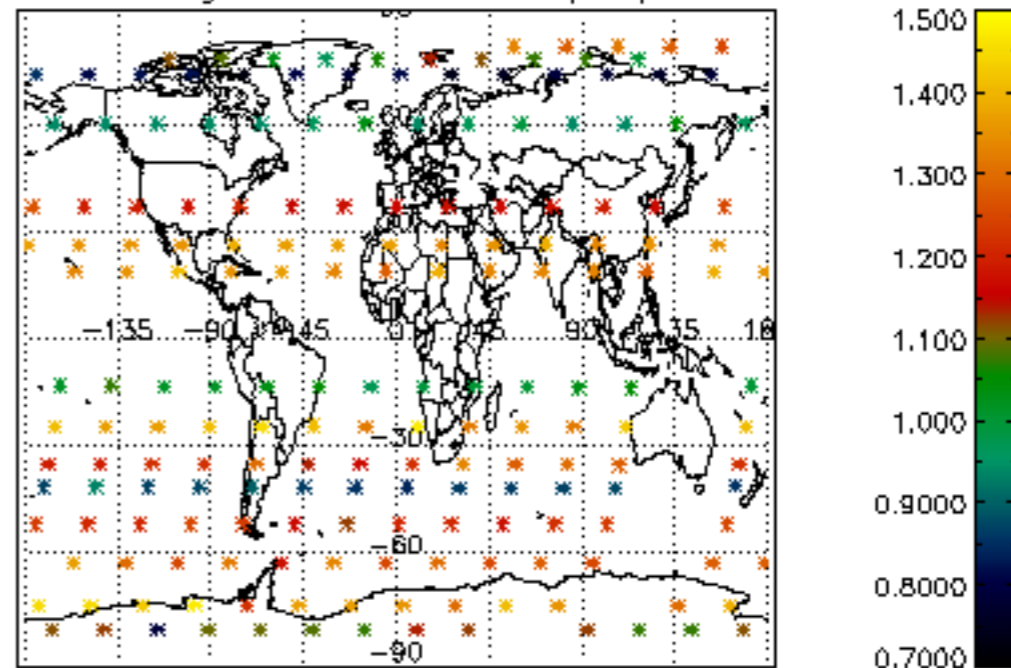
Percentage of saturation errors per profile



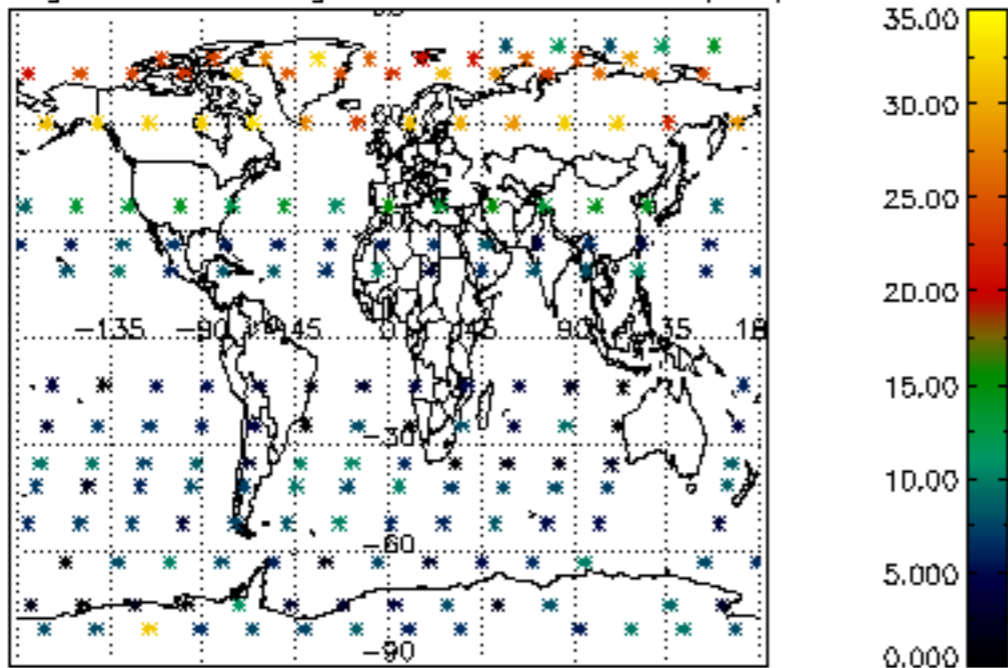
Percentage of cosmic ray hits per profile



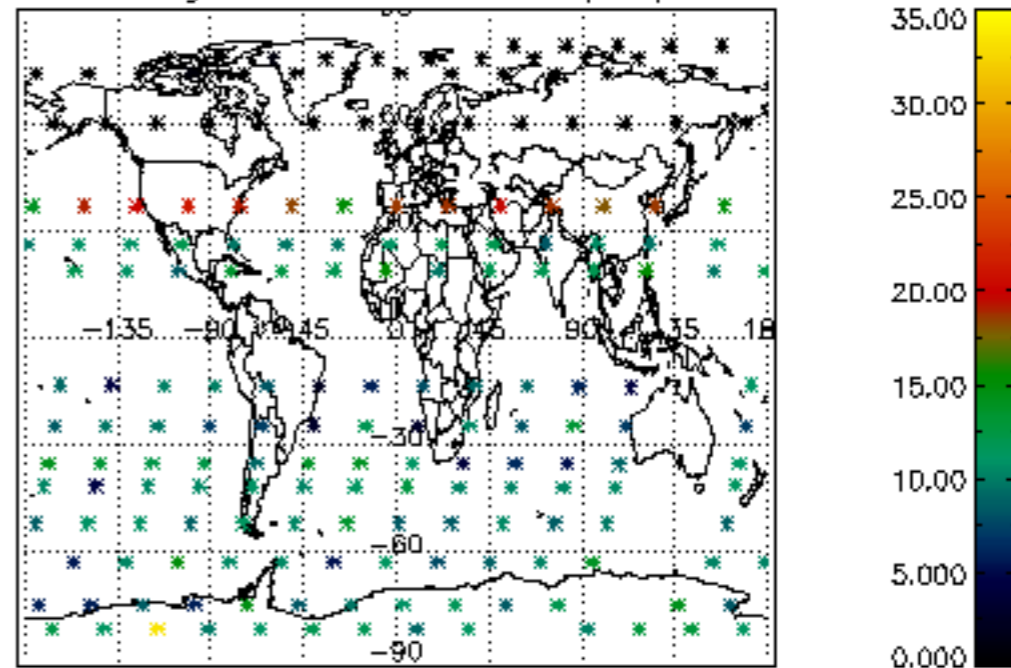
Percentage of datation errors per profile

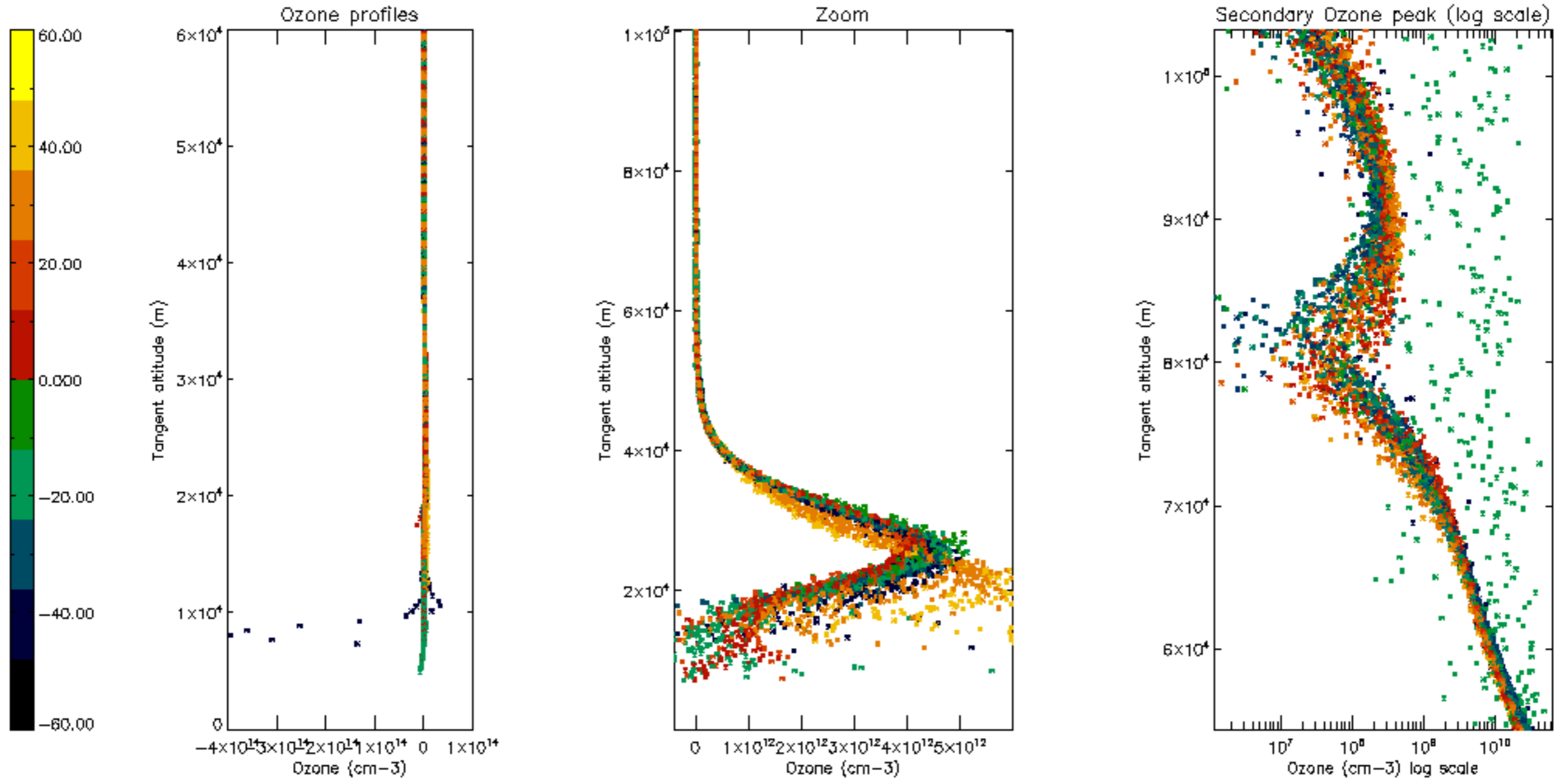


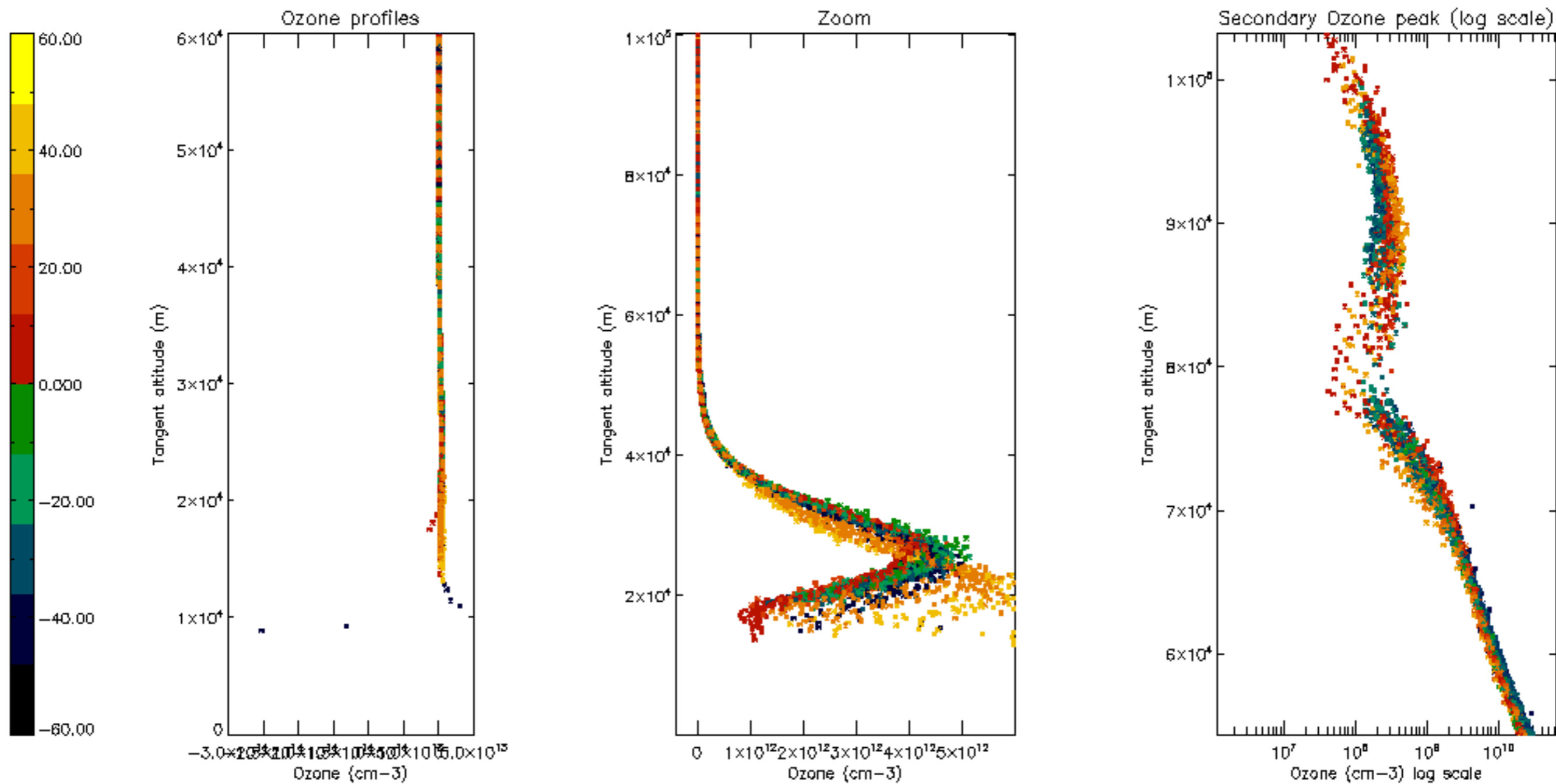
Percentage of star falling outside central band per profile

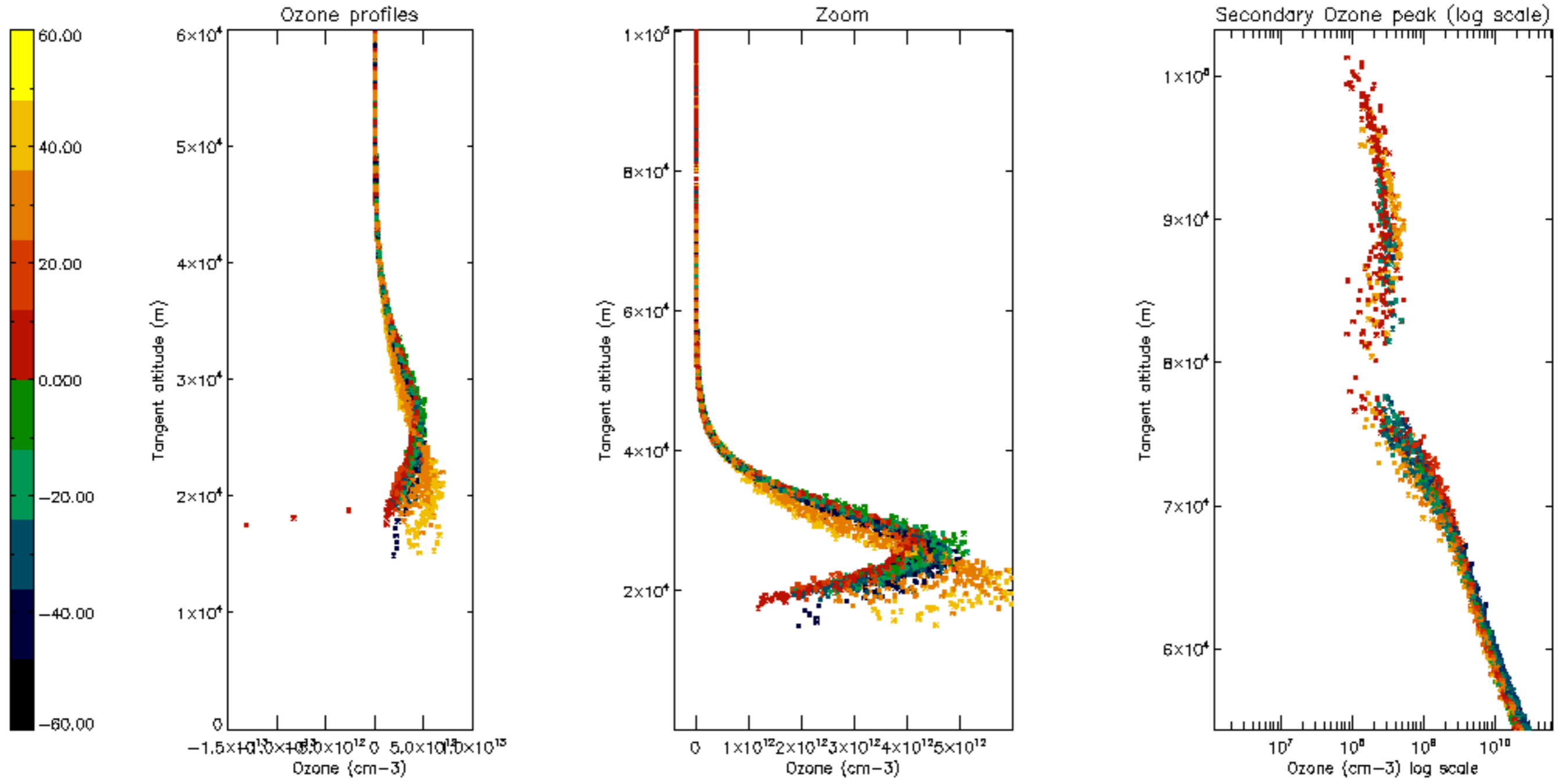


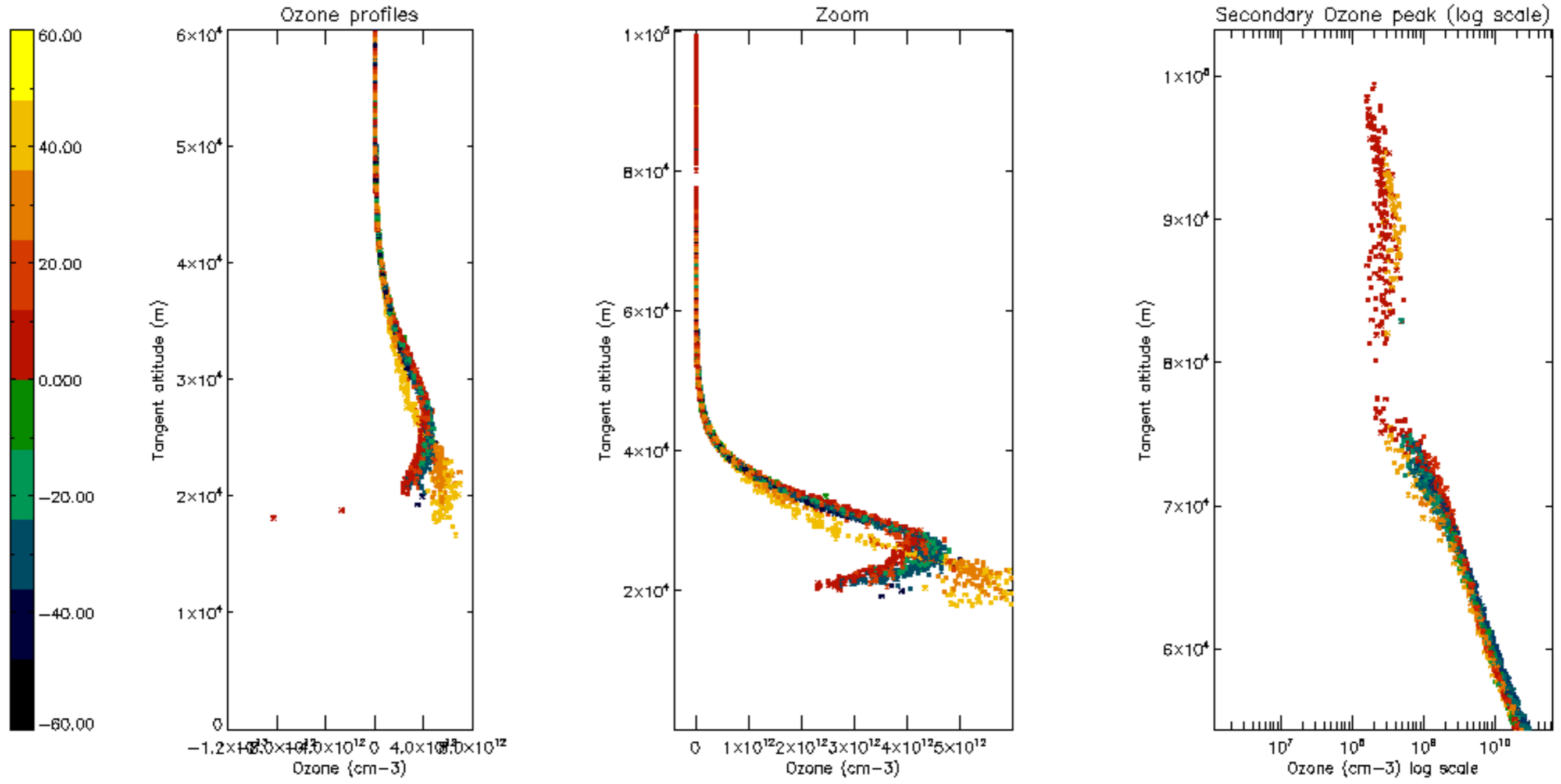
Percentage of saturation errors per profile

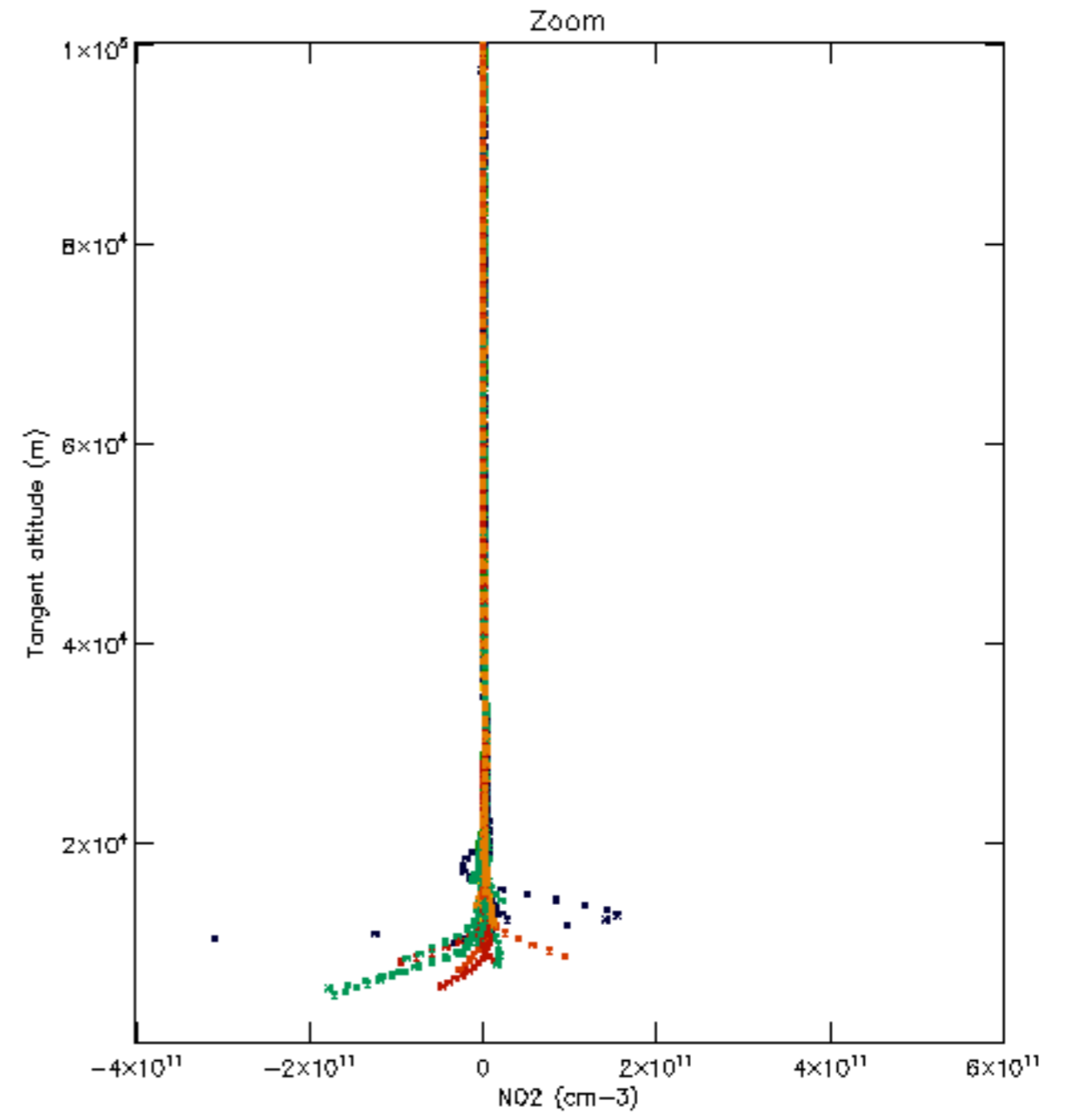
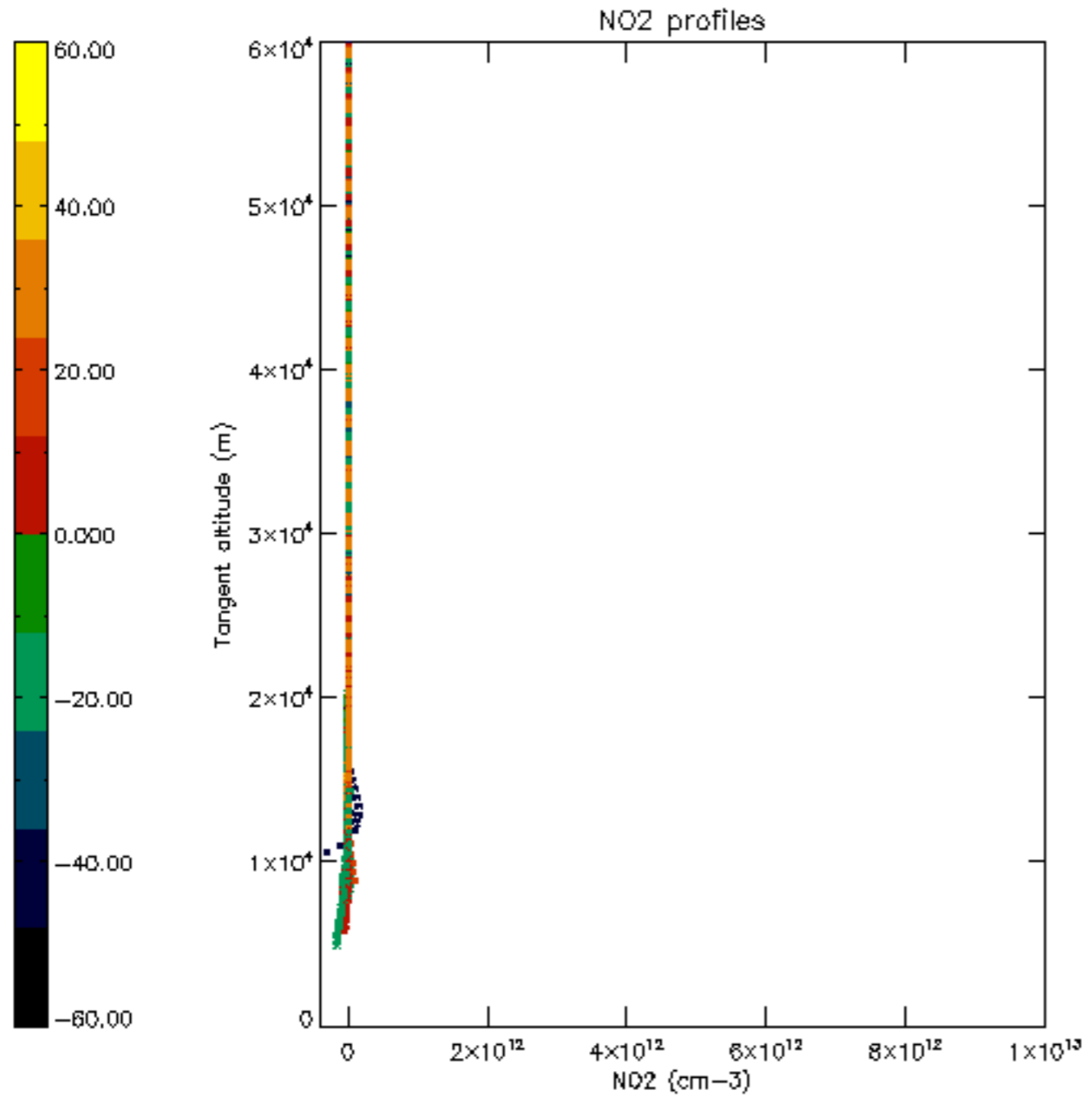


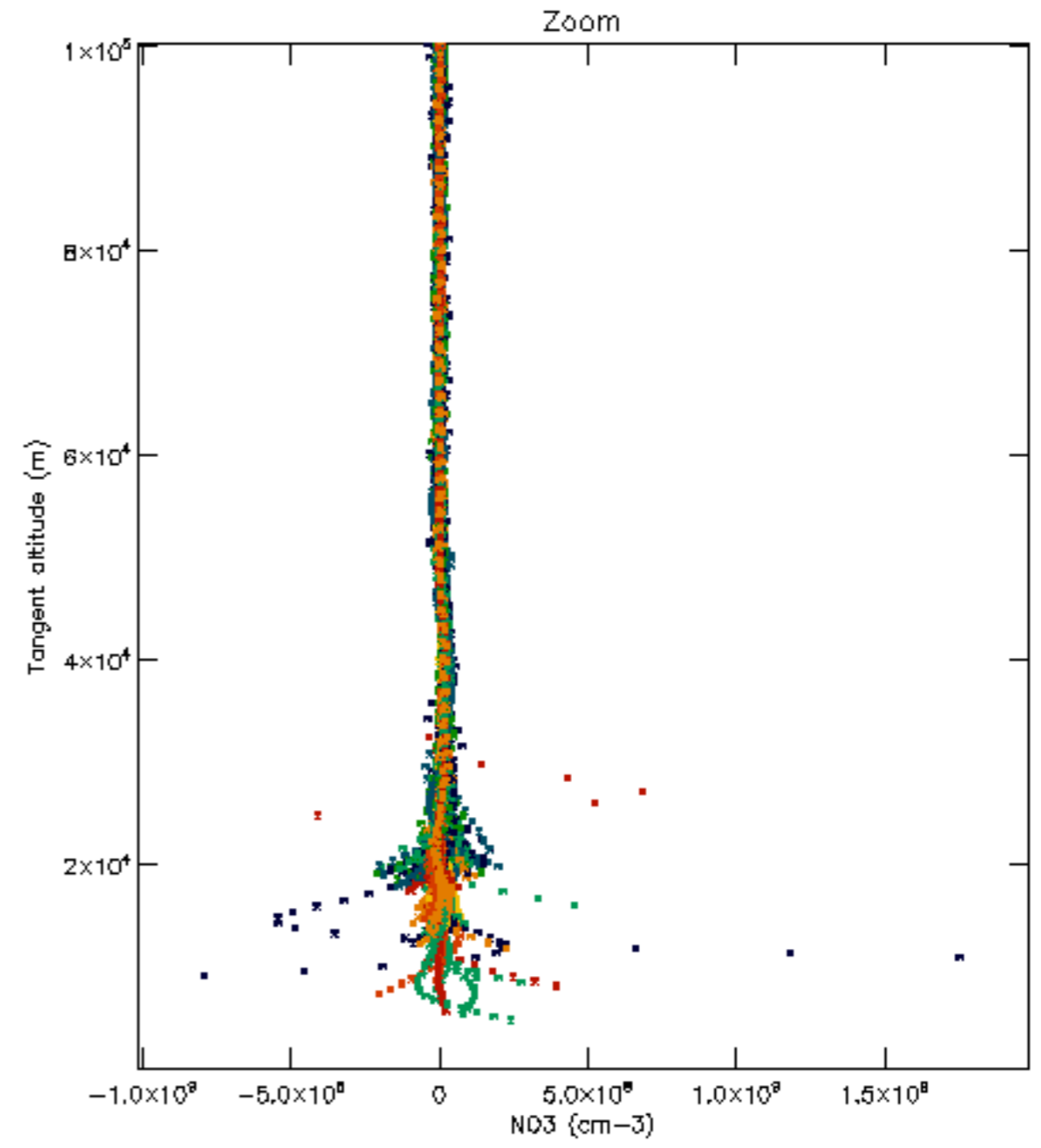
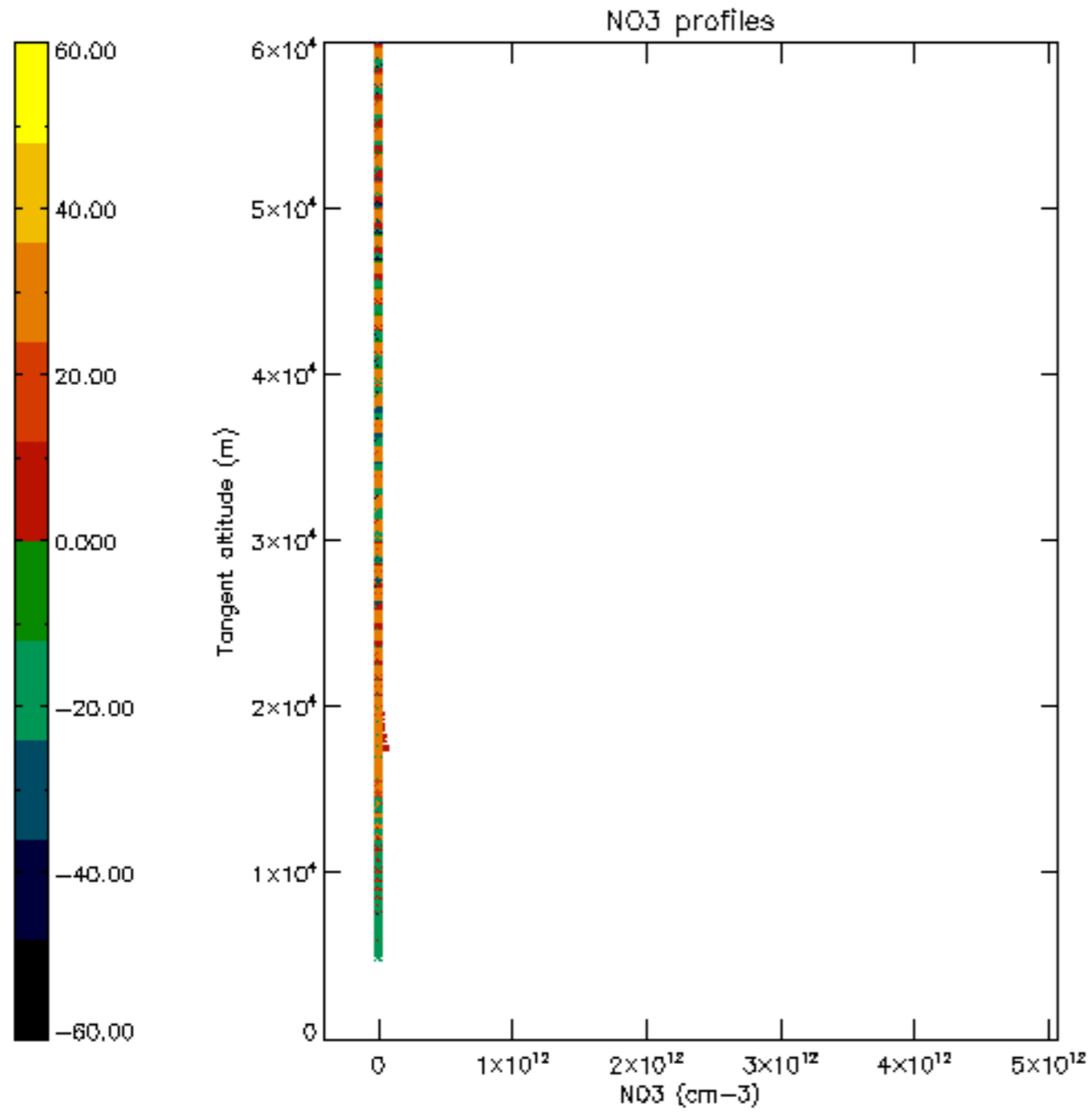


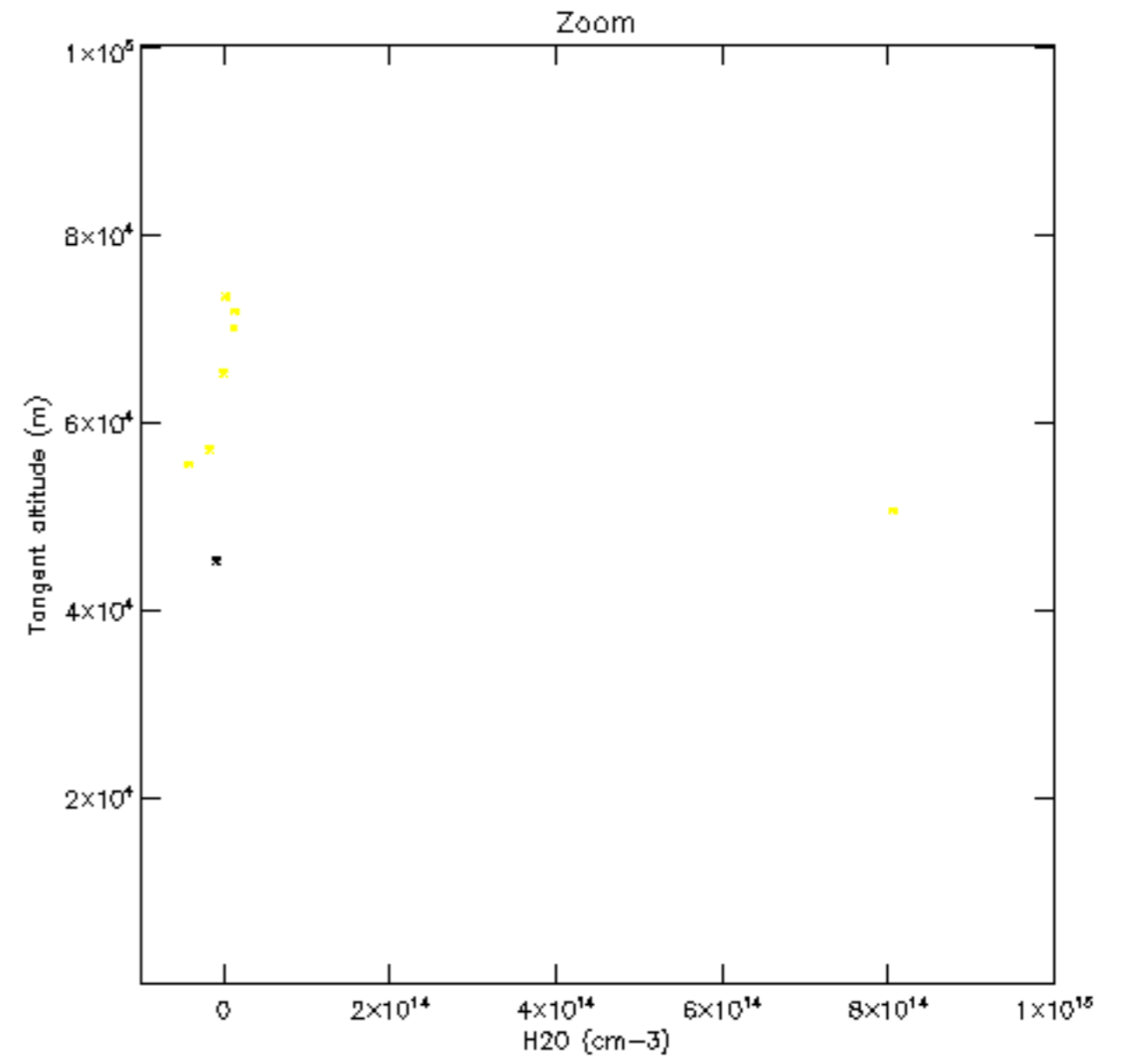
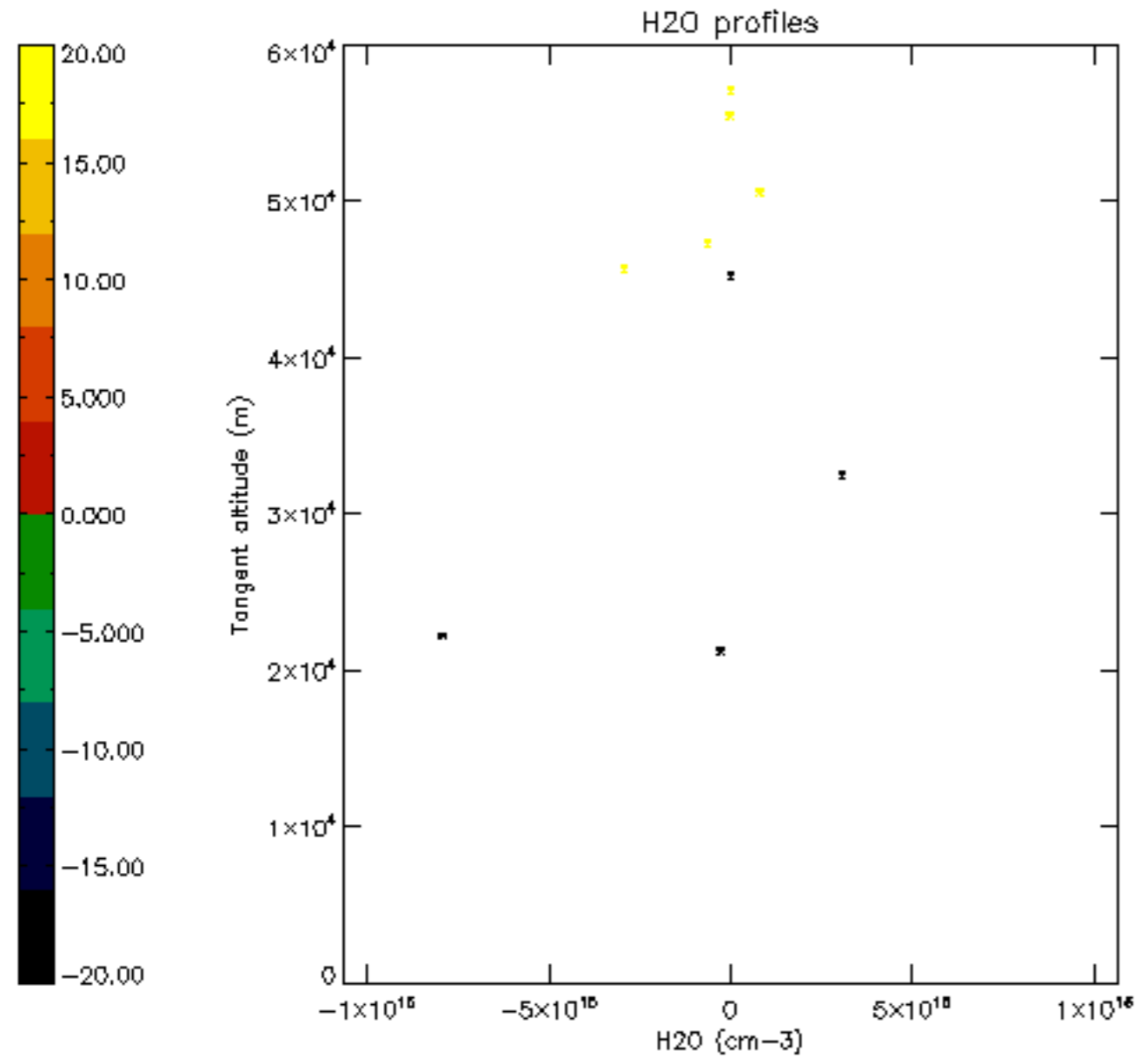


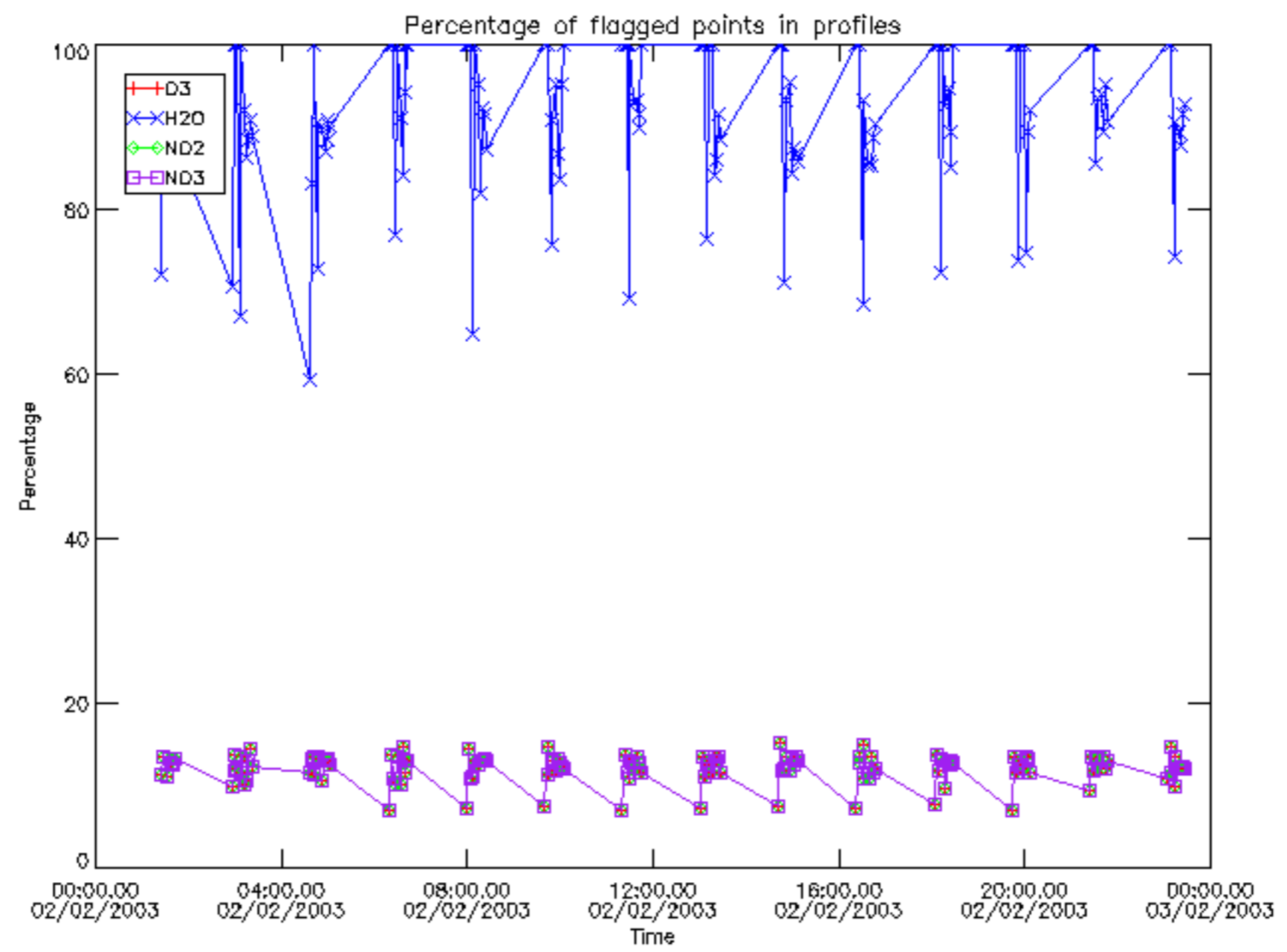




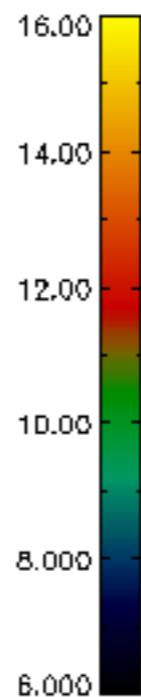
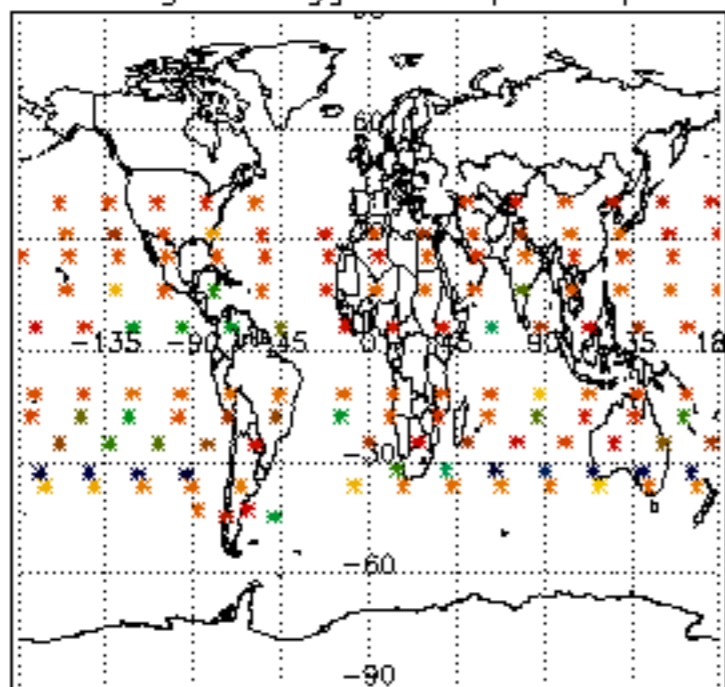




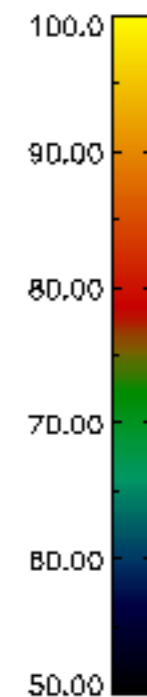
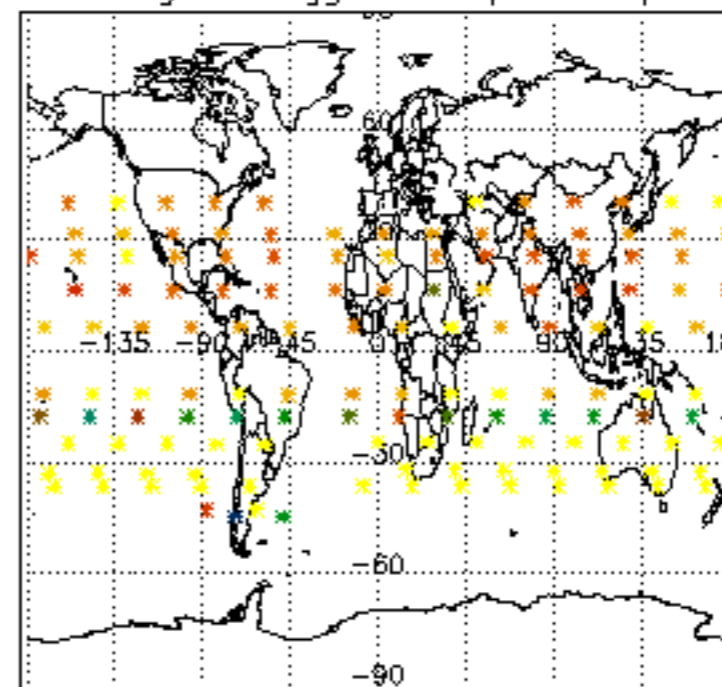




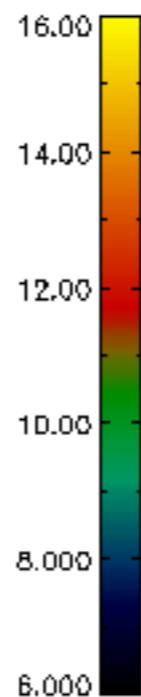
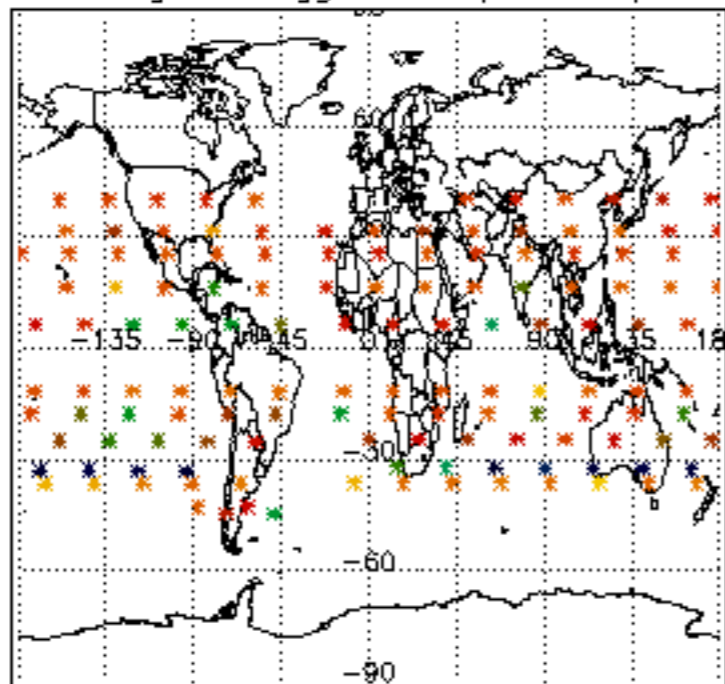
Percentage of flagged data per D3 profile



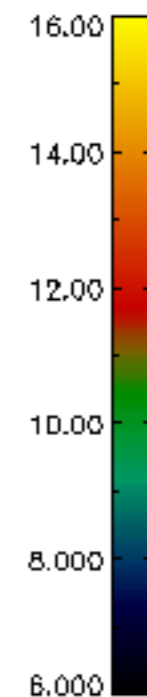
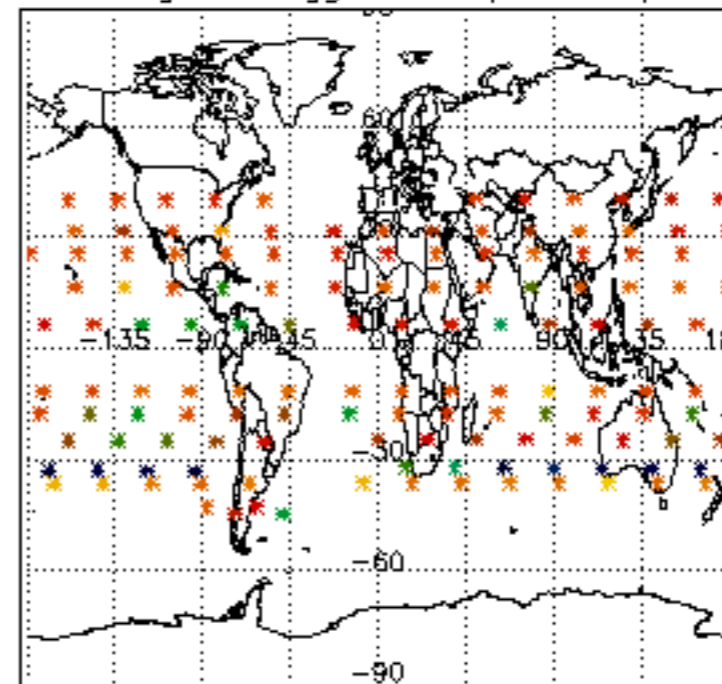
Percentage of flagged data per H2O profile

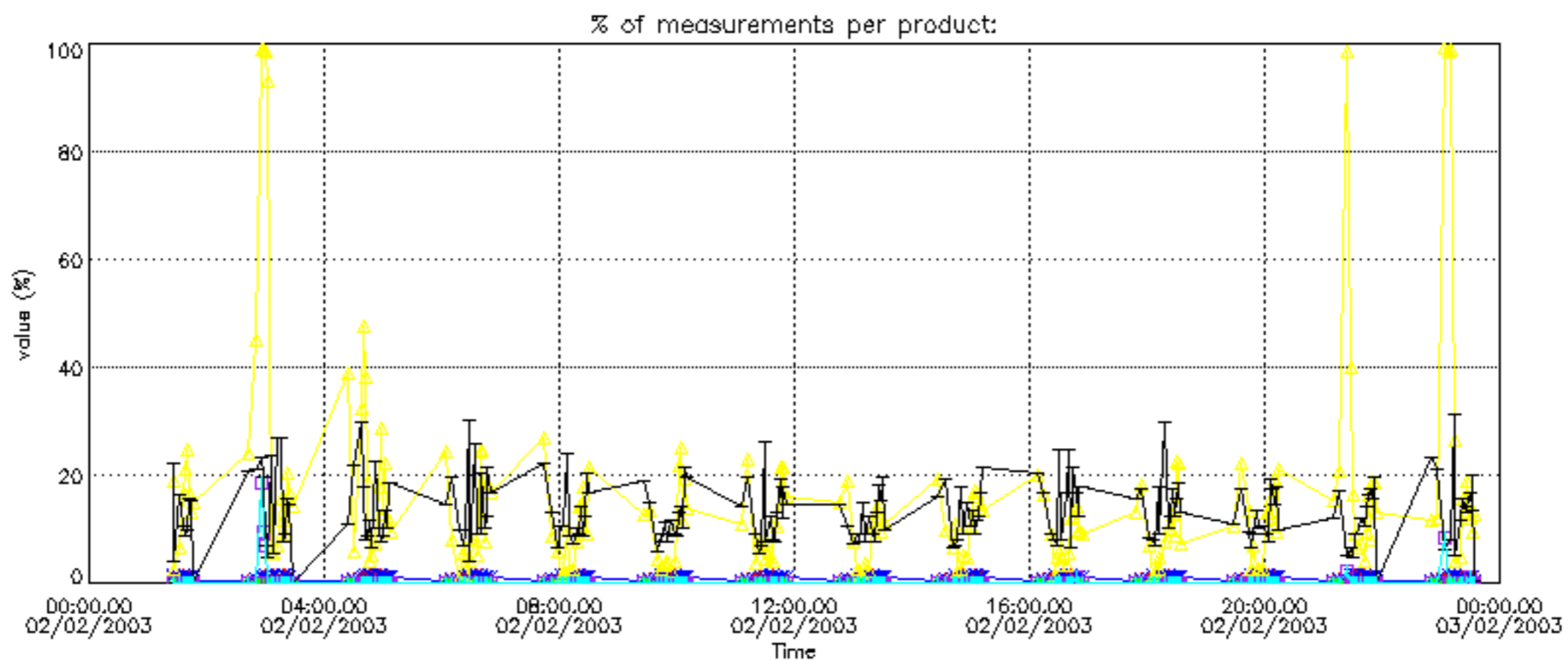


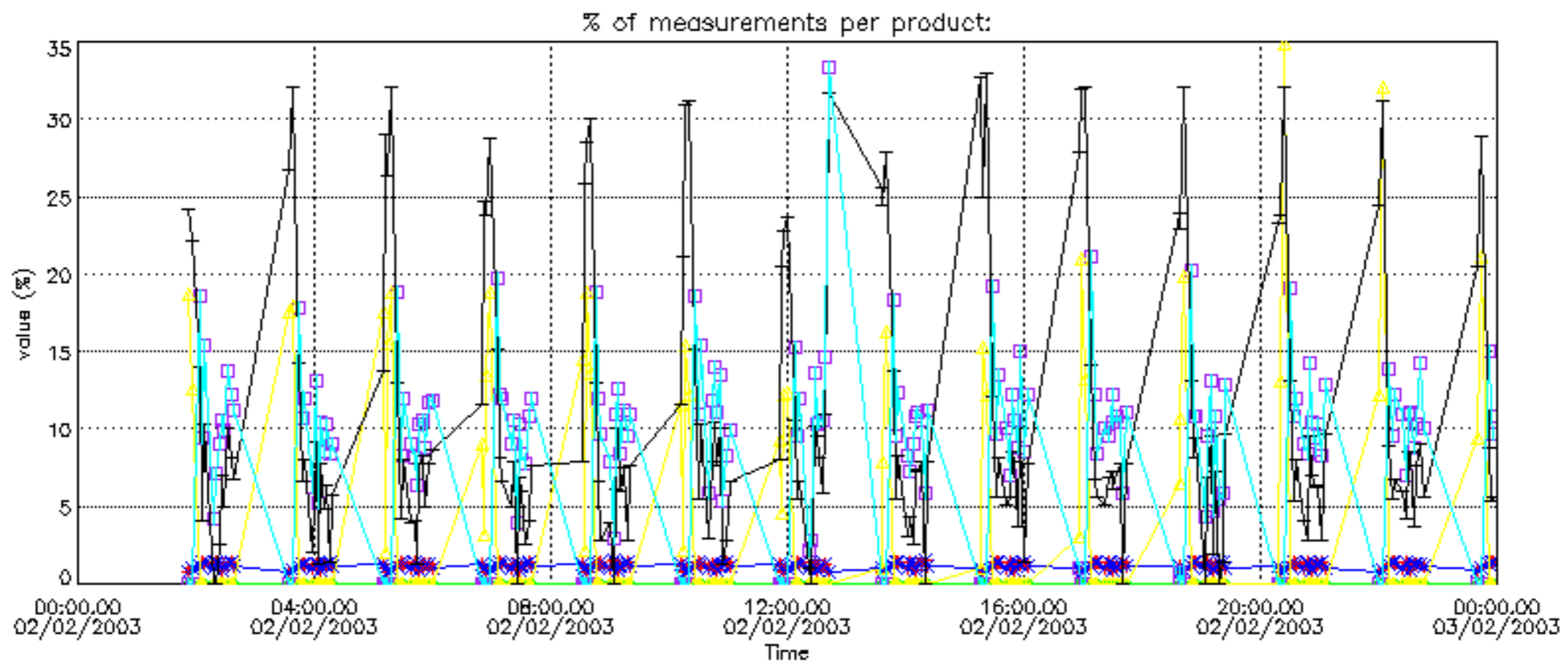
Percentage of flagged data per NO2 profile



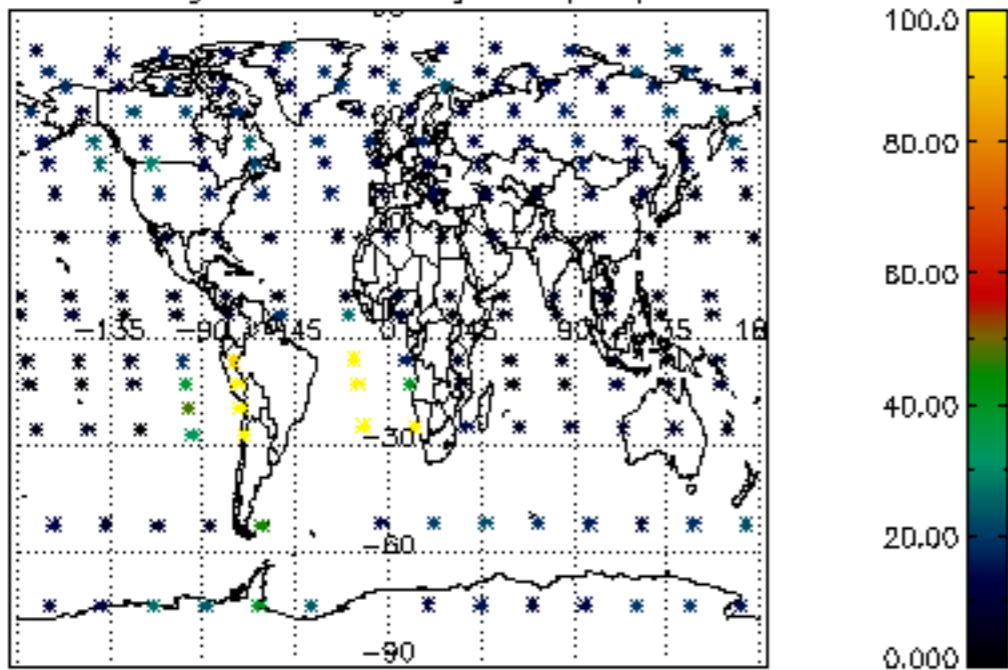
Percentage of flagged data per NO3 profile



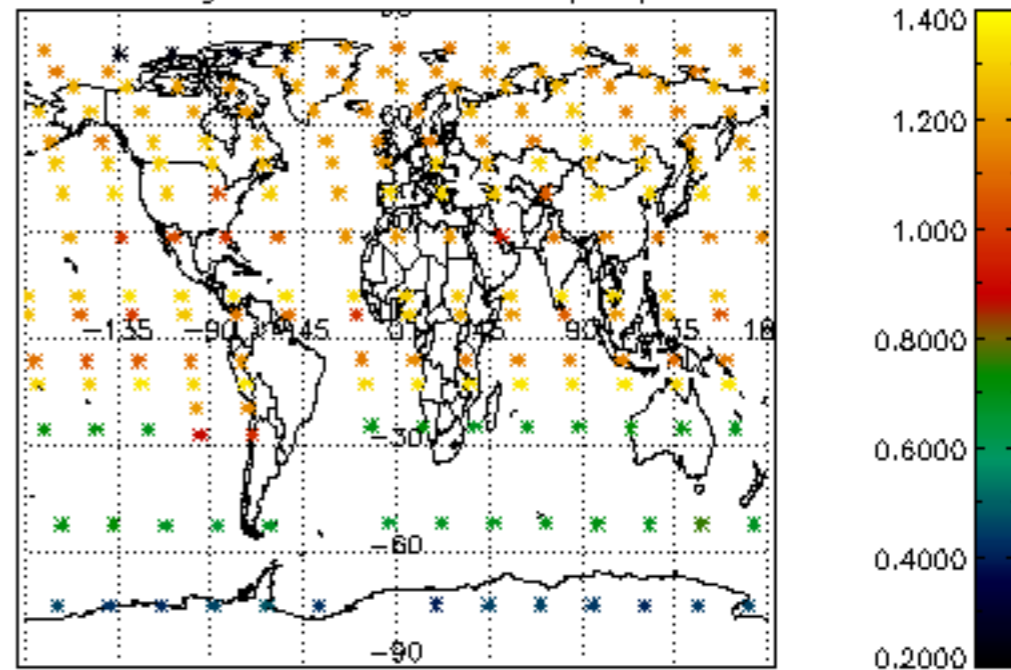




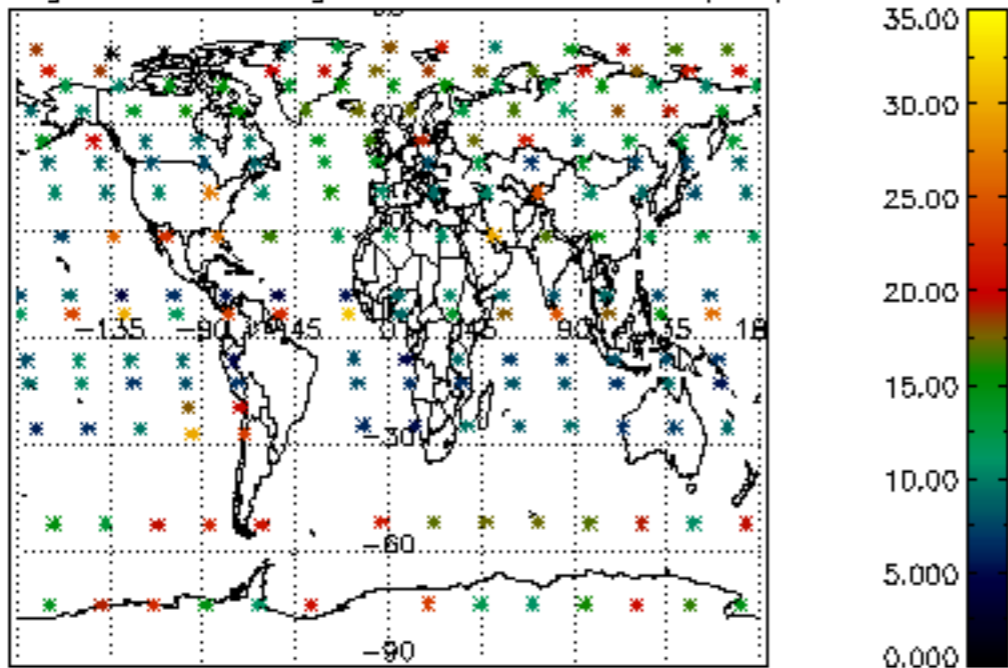
Percentage of cosmic ray hits per profile



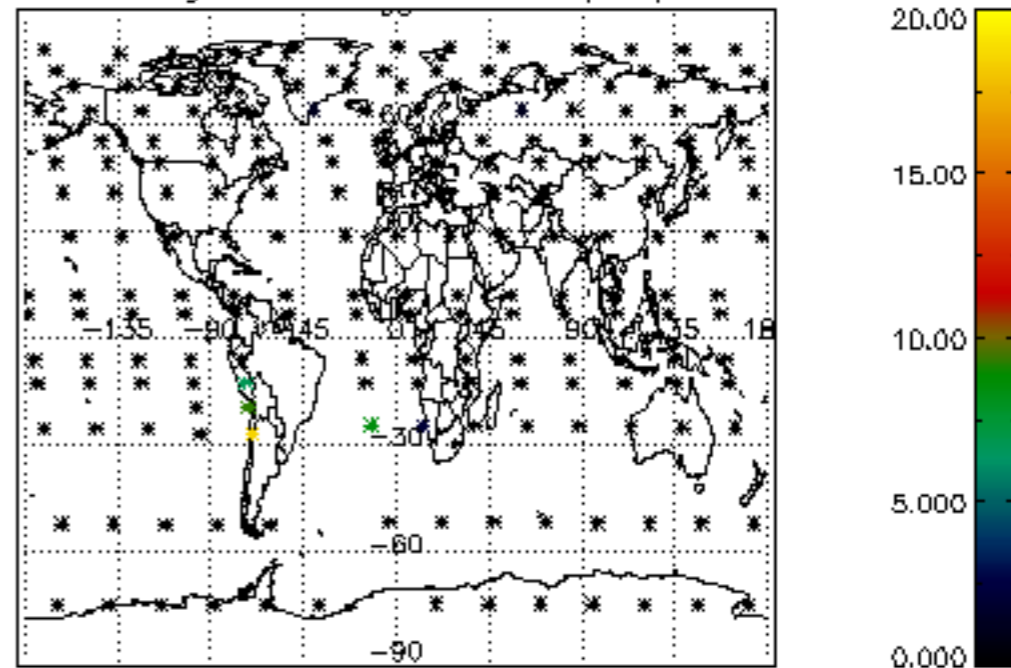
Percentage of datation errors per profile



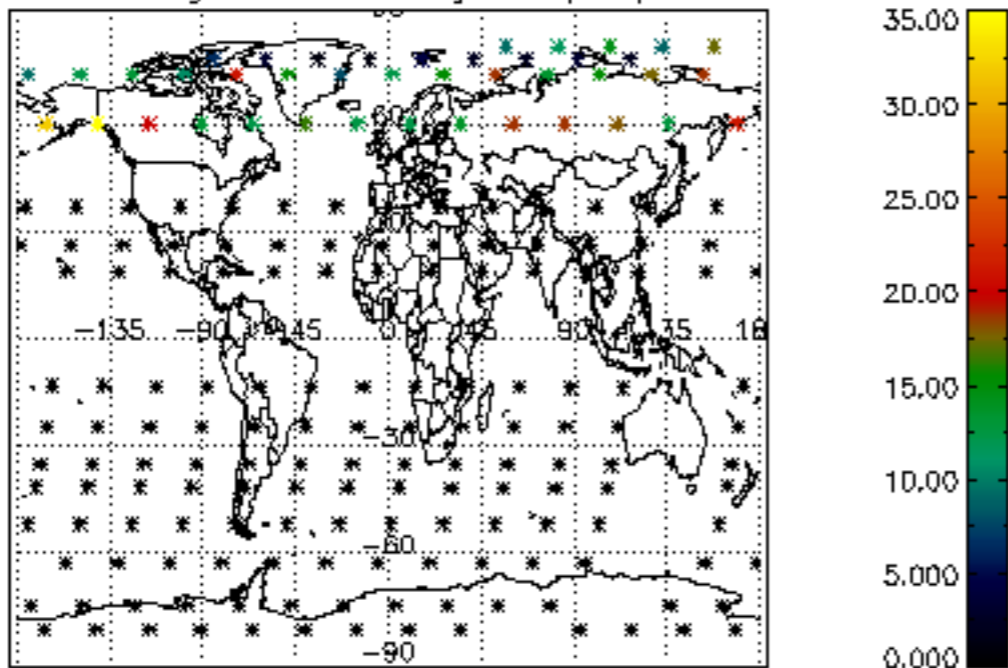
Percentage of star falling outside central band per profile



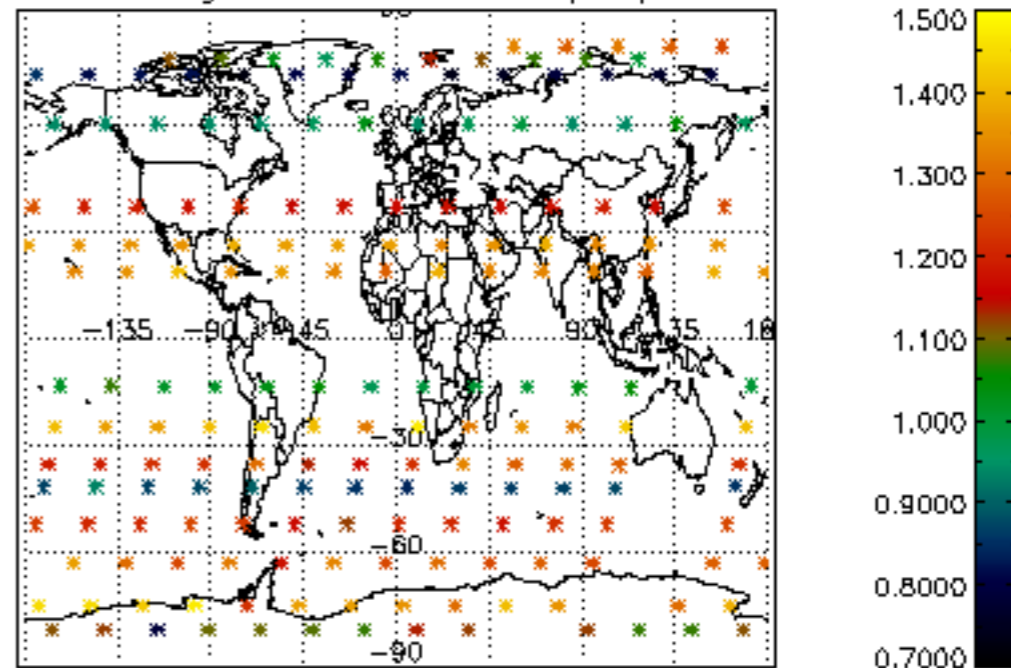
Percentage of saturation errors per profile



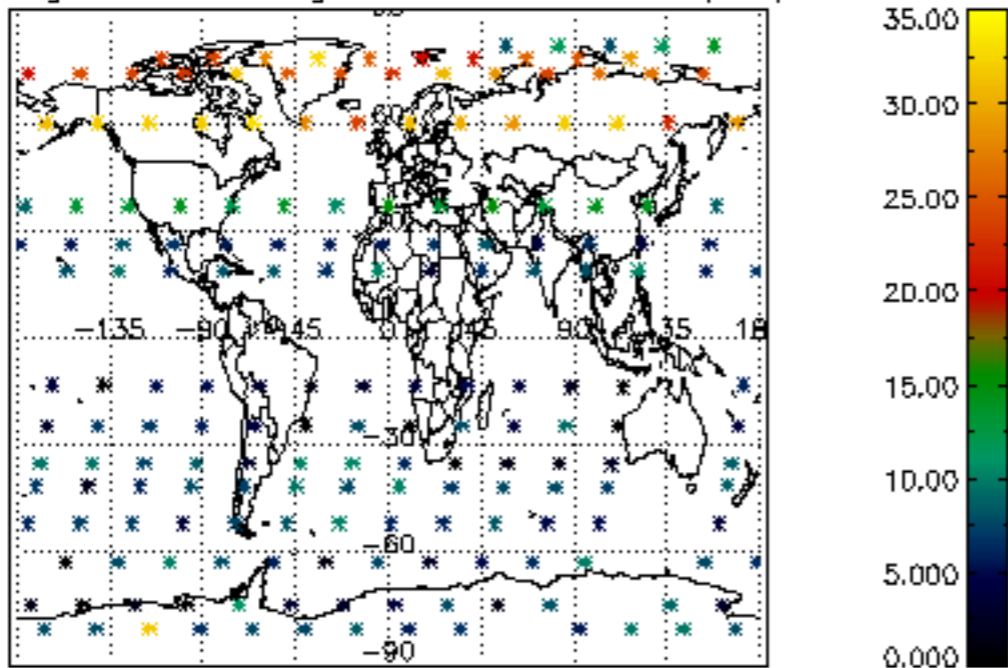
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

