

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

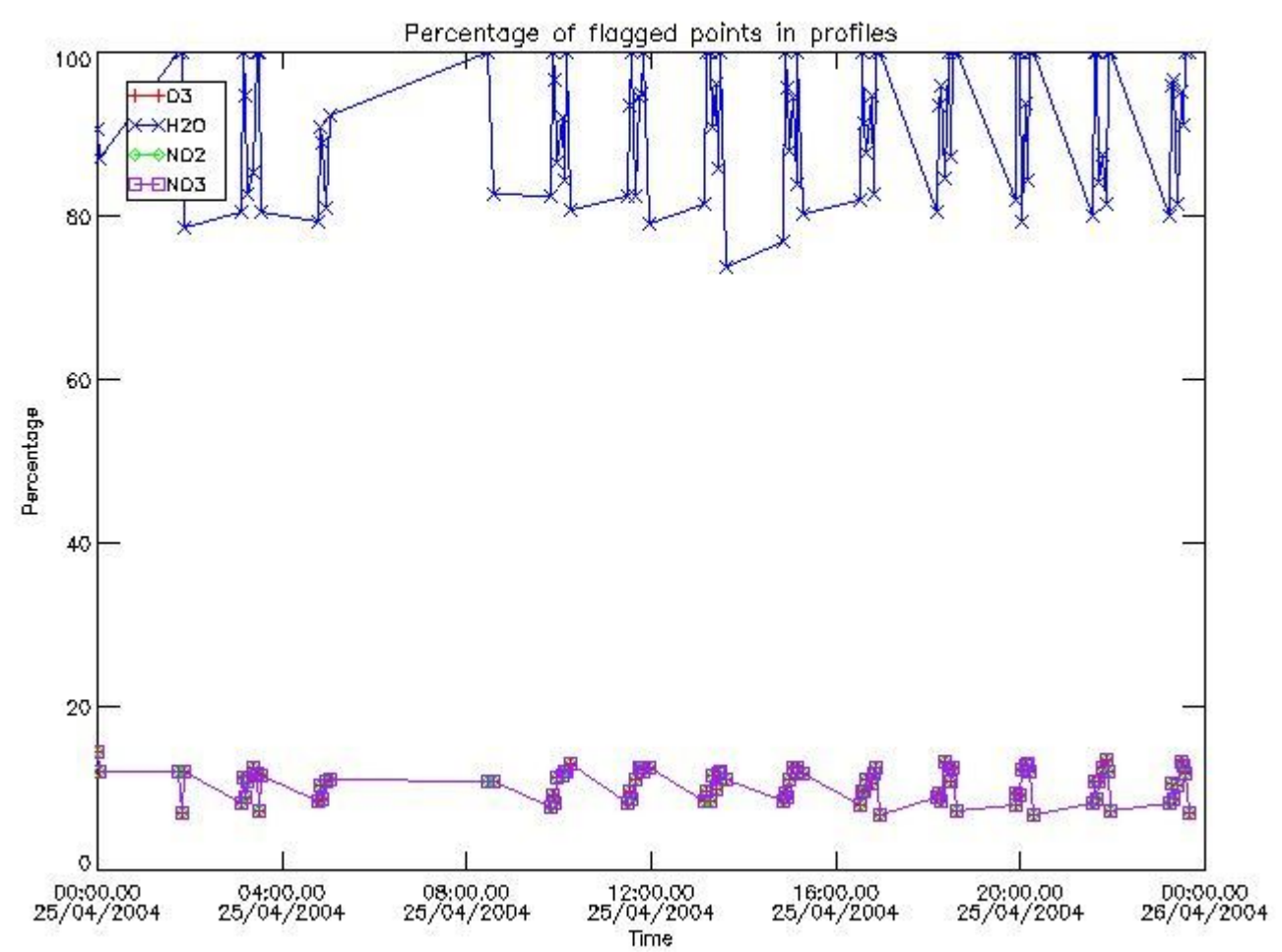
[6. Auxiliary Data Files used for the production reported in section 2](#)

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

Item	Value
Time of report generation	19APR2013 00:36:55
Data source version	GOMOS/6.01
Start time of products	25-04-2004 (25APR2004 00:00:00)
Stop time of products	26-04-2004 (26APR2004 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	386
Nb of prods with errors	0

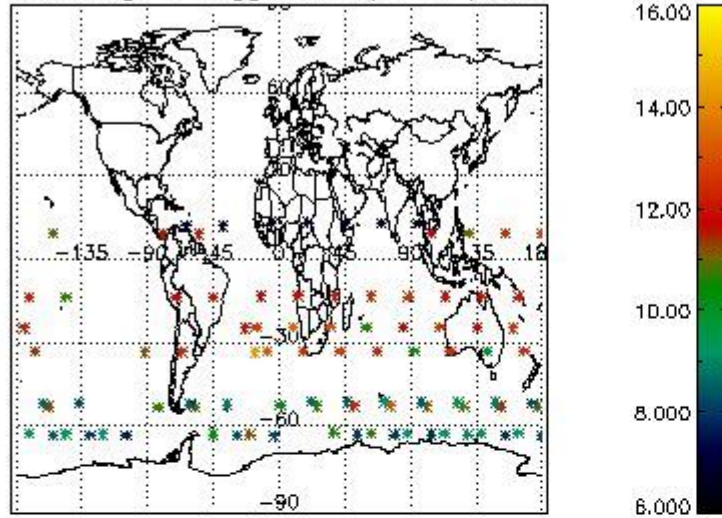
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20040425_000002_000000432026_00173_11249_1907.N1	25-APR-2004 00:00:02	Dark	42.500	31	Alp Gru	1.7340	15200.	85	11249	No
2	GOM_NL__2PRFIN20040425_000253_000000432026_00173_11249_1908.N1	25-APR-2004 00:02:53	Dark	42.500	148	Alp Tuc	2.8780	4100.0	85	11249	No
3	GOM_NL__2PRFIN20040425_014558_000000432026_00175_11251_1951.N1	25-APR-2004 01:45:58	Dark	42.500	45	Alp Pav	1.9400	26000.	85	11251	No
4	GOM_NL__2PRFIN20040425_015022_000000722026_00175_11251_1952.N1	25-APR-2004 01:50:22	Dark	72.000	103	38Zet Sgr	2.6000	9700.0	144	11251	No
5	GOM_NL__2PRFIN20040425_015254_000000432026_00175_11251_1953.N1	25-APR-2004 01:52:54	Dark	42.500	43	Alp TrA	1.9100	4250.0	85	11251	No
6	GOM_NL__2PRFIN20040425_015500_000000602026_00175_11251_1954.N1	25-APR-2004 01:55:00	Straylight	60.000	40	The Sco	1.8590	7100.0	120	11251	No
7	GOM_NL__2PRFIN20040425_015714_000000532026_00175_11251_1955.N1	25-APR-2004 01:57:14	Straylight	53.000	4	Alp1Cen	-0.010000	5800.0	106	11251	No
8	GOM_NL__2PRFIN20040425_015952_000000522026_00175_11251_1956.N1	25-APR-2004 01:59:52	Straylight	52.000	26	Gam Cru	1.6240	2900.0	104	11251	No
9	GOM_NL__2PRFIN20040425_020210_000000452026_00175_11251_1957.N1	25-APR-2004 02:02:10	Straylight	44.500	81	Eta Cen	2.3560	28000.	89	11251	No
10	GOM_NL__2PRFIN20040425_020408_000000882026_00175_11251_1958.N1	25-APR-2004 02:04:08	Twilight	87.500	16	21Alp Sco	1.0200	3000.0	175	11251	No
11	GOM_NL__2PRFIN20040425_020641_000000732026_00175_11251_1959.N1	25-APR-2004 02:06:41	Twilight	72.500	80	7Del Sco	2.3160	30000.	145	11251	No
12	GOM_NL__2PRFIN20040425_020846_000000442026_00175_11251_1960.N1	25-APR-2004 02:08:46	Twilight	44.000	169	46Gam Hya	2.9910	4700.0	88	11251	No
13	GOM_NL__2PRFIN20040425_021009_000000502026_00175_11251_1961.N1	25-APR-2004 02:10:09	Bright	49.500	122	9Alp2Lib	2.7470	9700.0	99	11251	No
14	GOM_NL__2PRFIN20040425_021243_000000552026_00175_11251_1962.N1	25-APR-2004 02:12:43	Bright	54.500	104	27Bet Lib	2.6140	13100.	109	11251	No
15	GOM_NL__2PRFIN20040425_021512_000000392026_00175_11251_1963.N1	25-APR-2004 02:15:12	Bright	39.000	121	29Gam Vir	2.7400	7200.0	78	11251	No
16	GOM_NL__2PRFIN20040425_021840_000000382026_00175_11251_1964.N1	25-APR-2004 02:18:40	Bright	38.000	138	47Eps Vir	2.8280	4700.0	76	11251	No
17	GOM_NL__2PRFIN20040425_022006_000000402026_00175_11251_1965.N1	25-APR-2004 02:20:06	Bright	40.000	62	94Bet Leo	2.1360	9700.0	80	11251	No
18	GOM_NL__2PRFIN20040425_022159_000000462026_00175_11251_1966.N1	25-APR-2004 02:21:59	Bright	46.000	3	16Alp Boo	-0.050000	4250.0	92	11251	No
19	GOM_NL__2PRFIN20040425_022631_000000392026_00175_11251_1967.N1	25-APR-2004 02:26:31	Bright	38.500	152	12Alp2CVn	2.8900	11000.	77	11251	No
20	GOM_NL__2PRFIN20040425_022849_000000382026_00175_11251_1968.N1	25-APR-2004 02:28:49	Bright	37.500	174	52Psi UMa	3.0040	4400.0	75	11251	No
21	GOM_NL__2PRFIN20040425_023020_000000382026_00175_11251_1969.N1	25-APR-2004 02:30:20	Bright	37.500	39	85Eta UMa	1.8540	24000.	75	11251	No
22	GOM_NL__2PRFIN20040425_023203_000000372026_00175_11251_1970.N1	25-APR-2004 02:32:03	Bright	37.000	82	48Bet UMa	2.3650	10600.	74	11251	No
23	GOM_NL__2PRFIN20040425_023325_000000362026_00175_11251_1971.N1	25-APR-2004 02:33:25	Bright	36.000	36	50Alp UMa	1.8000	6300.0	72	11251	No
24	GOM_NL__2PRFIN20040425_023744_000000392026_00175_11251_1972.N1	25-APR-2004 02:37:44	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	11251	No
25	GOM_NL__2PRFIN20040425_024110_000000382026_00175_11251_1973.N1	25-APR-2004 02:41:10	Bright	37.500	49	1Alp UMi	1.9900	6300.0	75	11251	No
26	GOM_NL__2PRFIN20040425_024331_000000642026_00175_11251_1974.N1	25-APR-2004 02:43:31	Bright	64.000	69	33Gam Dra	2.2310	3800.0	128	11251	No
27	GOM_NL__2PRFIN20040425_024757_000000432026_00175_11251_1975.N1	25-APR-2004 02:47:57	Bright	42.500	89	5Alp Cep	2.4510	8000.0	85	11251	No
28	GOM_NL__2PRFIN20040425_024945_000000372026_00175_11251_1976.N1	25-APR-2004 02:49:45	Bright	37.000	74	11Bet Cas	2.2680	6600.0	74	11251	No
29	GOM_NL__2PRFIN20040425_025209_000001482026_00175_11251_1977.N1	25-APR-2004 02:52:09	Bright	148.00	5	3Alp Lyr	0.033000	11000.	296	11251	No
30	GOM_NL__2PRFIN20040425_025815_000000692026_00175_11251_1978.N1	25-APR-2004 02:58:15	Twilight	68.500	92	53Eps Cyg	2.5000	4500.0	137	11251	No
31	GOM_NL__2PRFIN20040425_030258_000000452026_00175_11251_1979.N1	25-APR-2004 03:02:58	Twilight	44.500	90	54Alp Peg	2.4870	11000.	89	11251	No
32	GOM_NL__2PRFIN20040425_030640_000000622026_00175_11251_1980.N1	25-APR-2004 03:06:40	Dark	62.000	61	8Eps Peg	2.1000	3900.0	124	11251	No
33	GOM_NL__2PRFIN20040425_030908_000000542026_00175_11251_1981.N1	25-APR-2004 03:09:08	Dark	54.000	162	34Alp Aqr	2.9440	5350.0	108	11251	No
34	GOM_NL__2PRFIN20040425_031222_000000572026_00175_11251_1982.N1	25-APR-2004 03:12:22	Dark	57.000	154	22Bet Aqr	2.8990	5700.0	114	11251	No
35	GOM_NL__2PRFIN20040425_031533_000000472026_00175_11251_1983.N1	25-APR-2004 03:15:33	Dark	46.500	18	24Alp PsA	1.1660	9700.0	93	11251	No
36	GOM_NL__2PRFIN20040425_032115_000000412026_00175_11251_1984.N1	25-APR-2004 03:21:15	Dark	41.000	31	Alp Gru	1.7340	15200.	82	11251	No
37	GOM_NL__2PRFIN20040425_032634_000000432026_00176_11252_1952.N1	25-APR-2004 03:26:34	Dark	43.000	45	Alp Pav	1.9400	26000.	86	11252	No
38	GOM_NL__2PRFIN20040425_033100_000000712026_00176_11252_1953.N1	25-APR-2004 03:31:00	Dark	71.000	103	38Zet Sgr	2.6000	9700.0	142	11252	No
39	GOM_NL__2PRFIN20040425_033328_000000442026_00176_11252_1954.N1	25-APR-2004 03:33:28	Dark	44.000	43	Alp TrA	1.9100	4250.0	88	11252	No
40	GOM_NL__2PRFIN20040425_033536_000000582026_00176_11252_1955.N1	25-APR-2004 03:35:36	Straylight	58.000	40	The Sco	1.8590	7100.0	116	11252	No
41	GOM_NL__2PRFIN20040425_033753_000000482026_00176_11252_1956.N1	25-APR-2004 03:37:53	Straylight	47.500	4	Alp1Cen	-0.010000	5800.0	95	11252	No
42	GOM_NL__2PRFIN20040425_034029_000000472026_00176_11252_1957.N1	25-APR-2004 03:40:29	Straylight	47.000	26	Gam Cru	1.6240	2900.0	94	11252	No

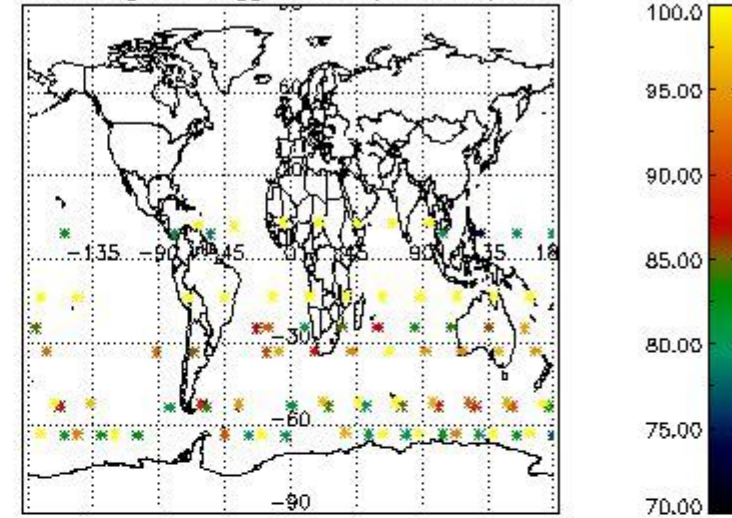


3.2 Plot quality information per product (world map)

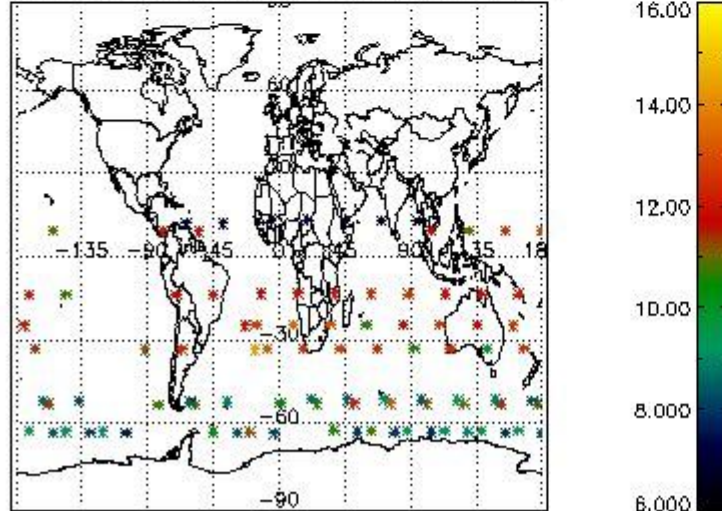
Percentage of flagged data per O3 profile



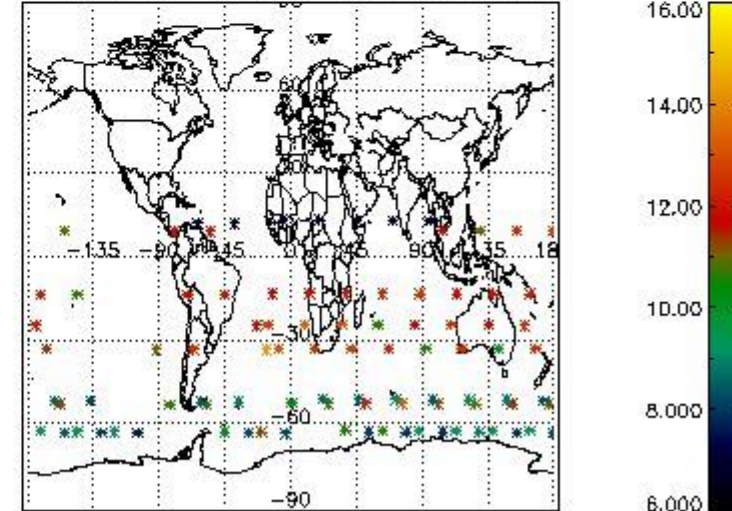
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

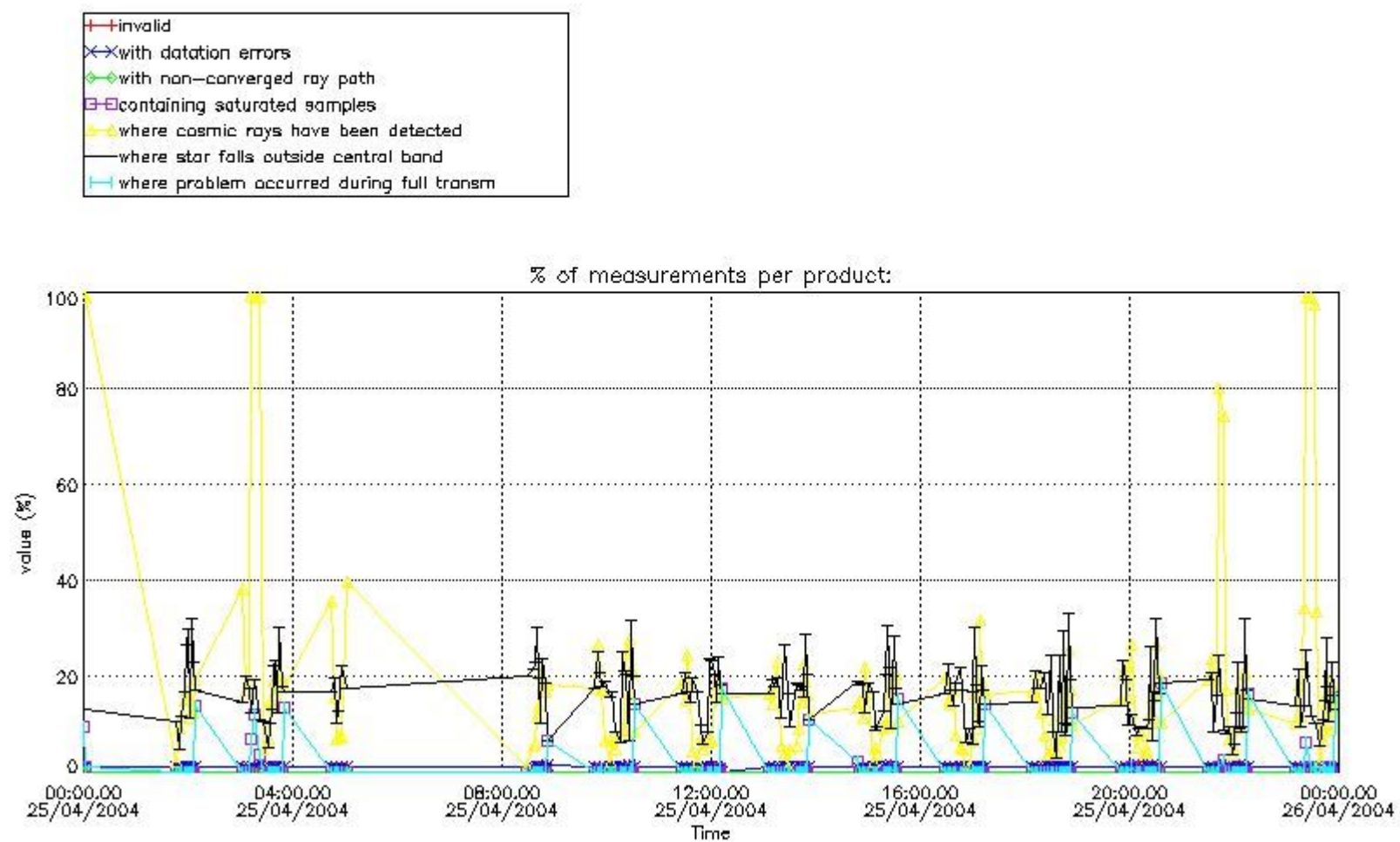


4. Level 1 quality information per product

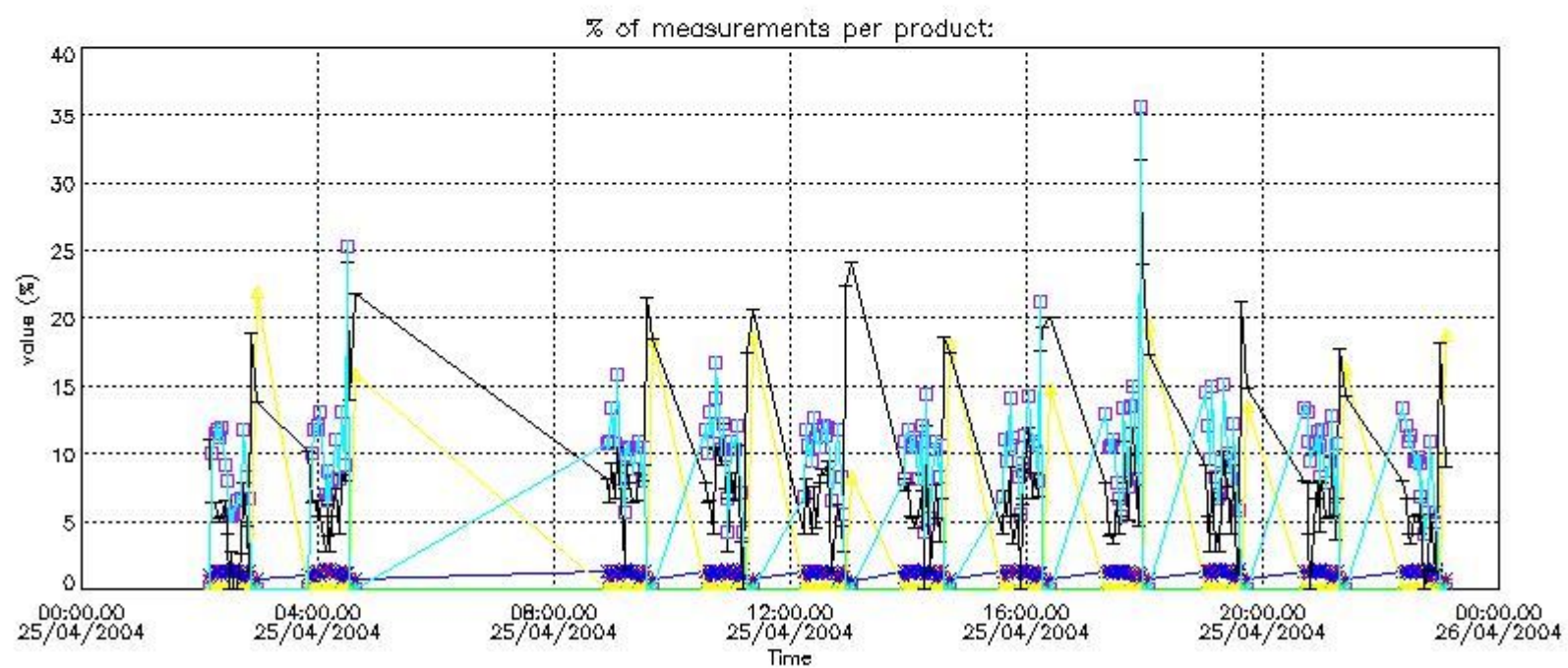
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



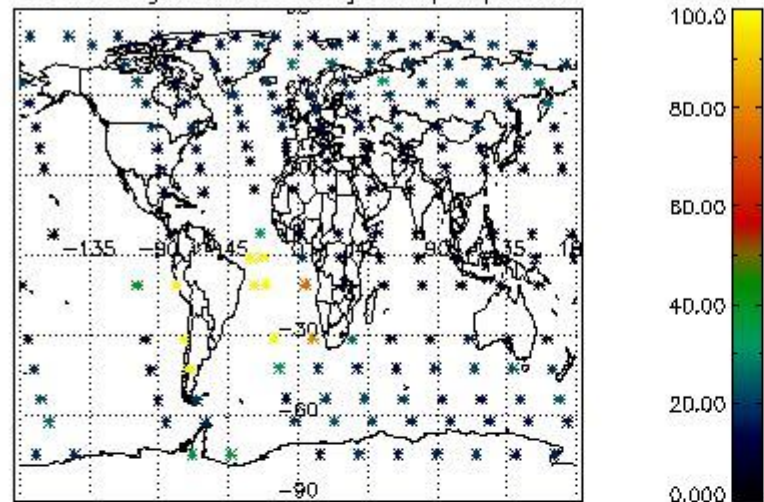
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



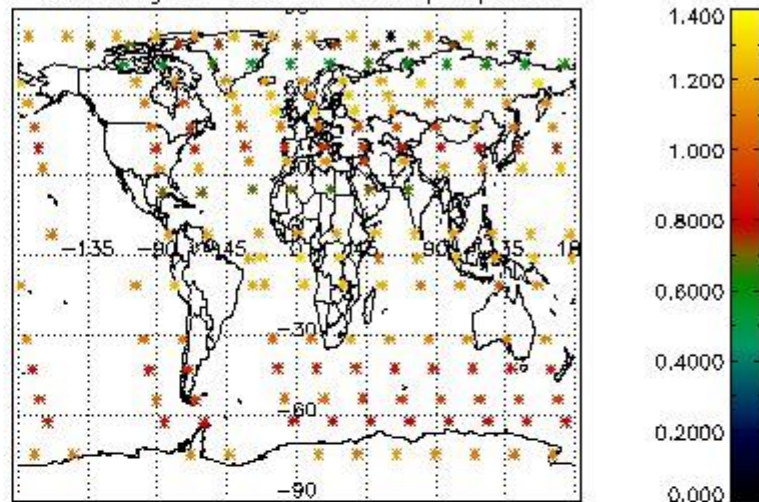
4.2 Plot quality information per product coming from level 1b processing (world map)

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

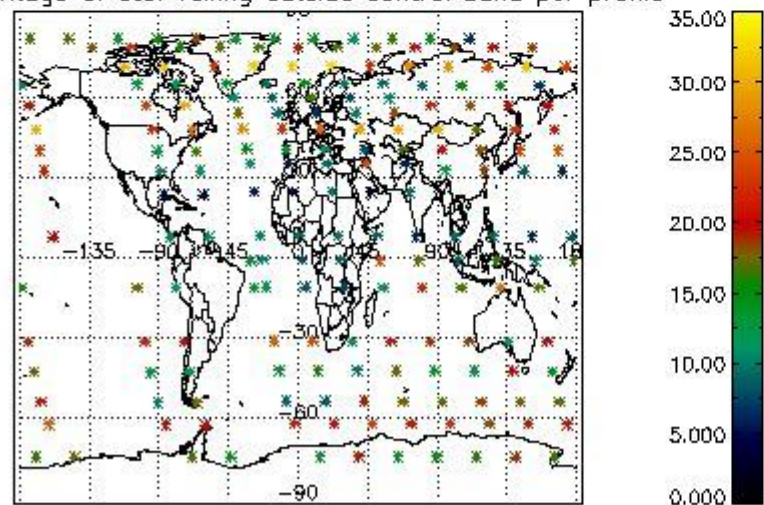
Percentage of cosmic ray hits per profile



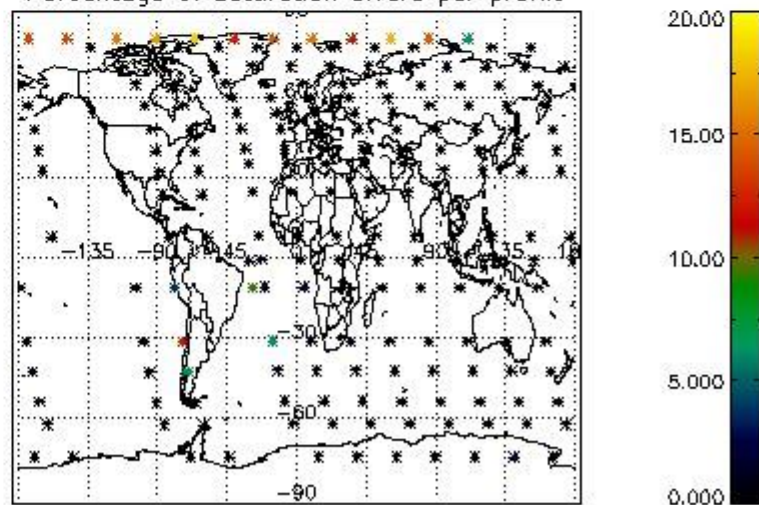
Percentage of datation errors per profile



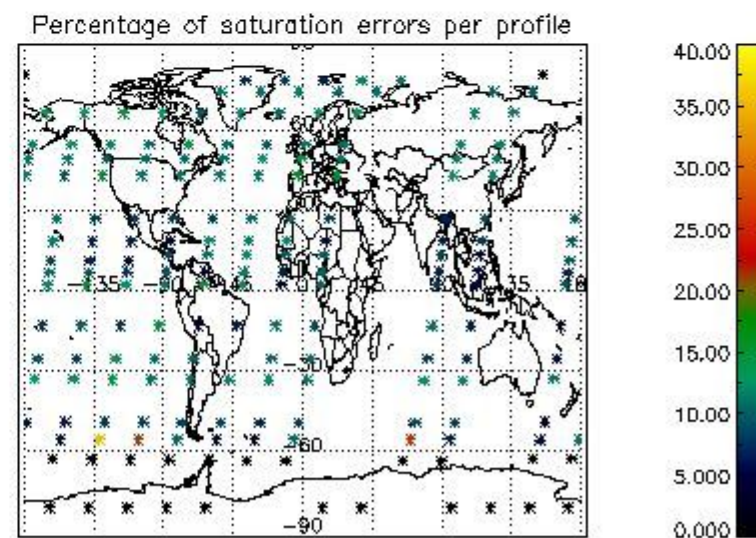
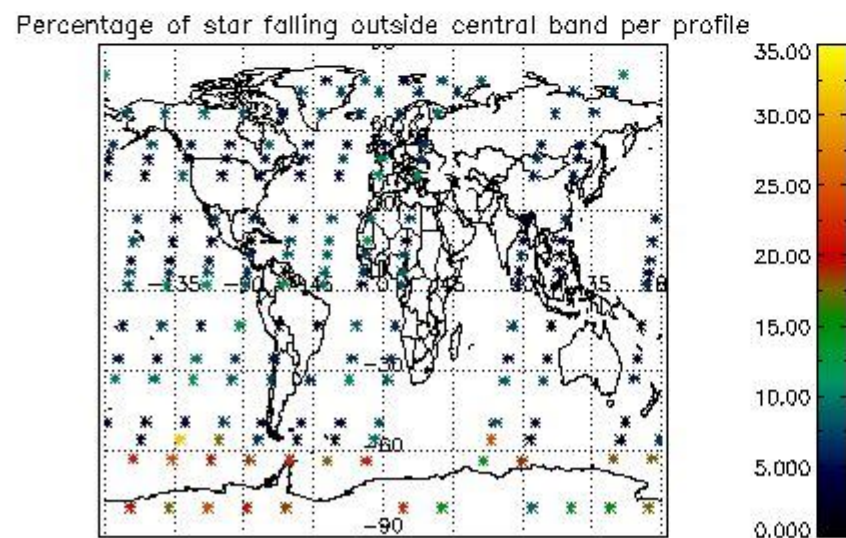
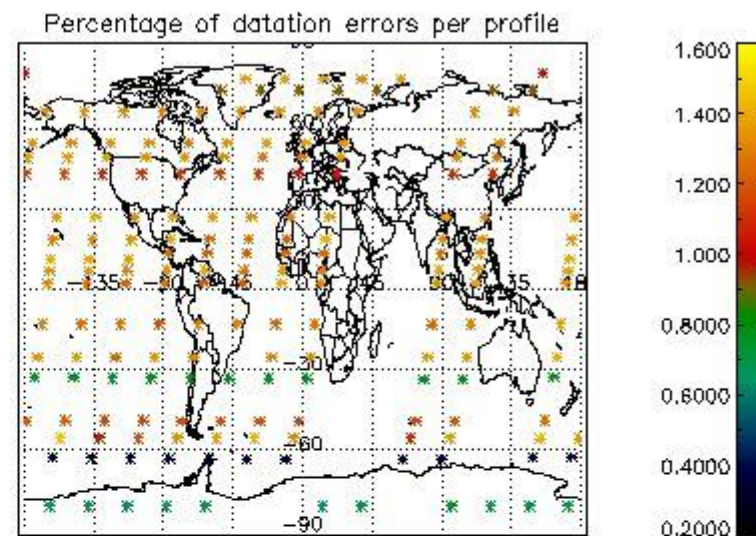
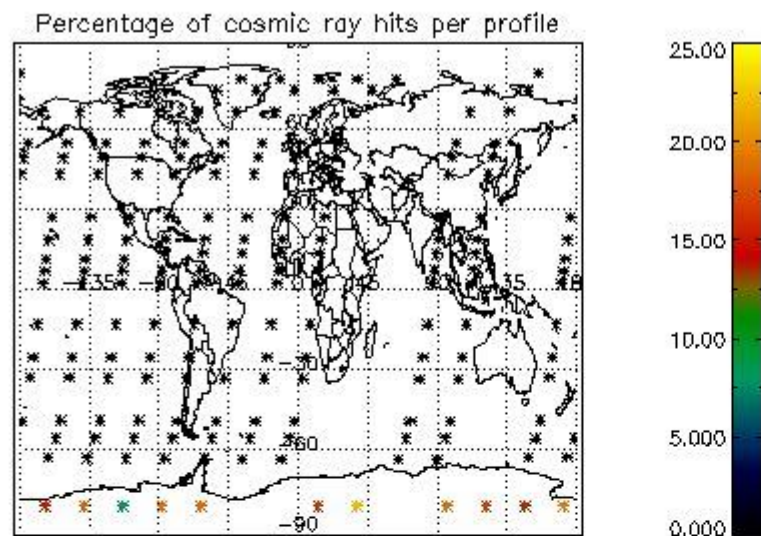
Percentage of star falling outside central band per profile



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

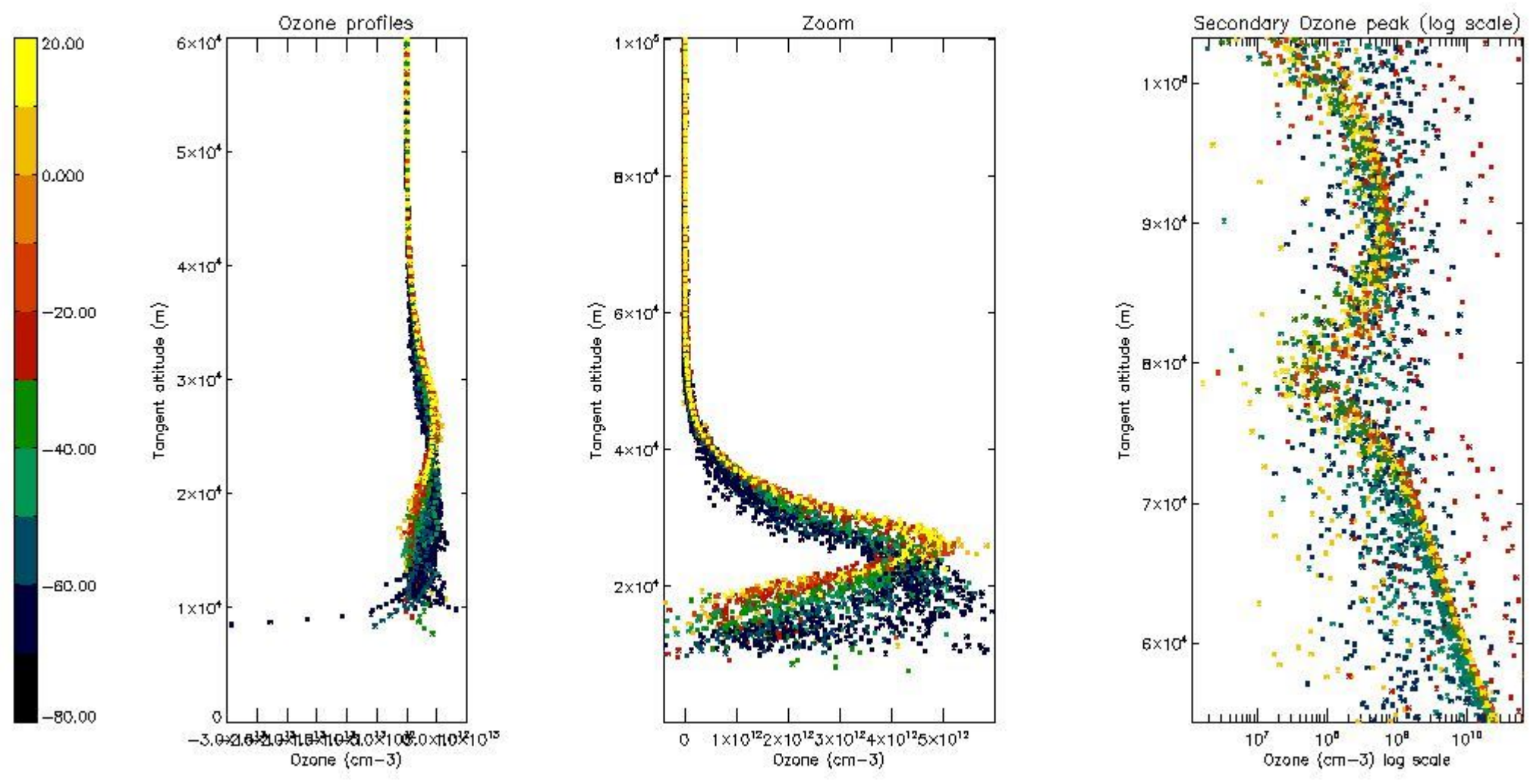
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	24
STD < 20	11

STD < 10	8
STD < 5	5

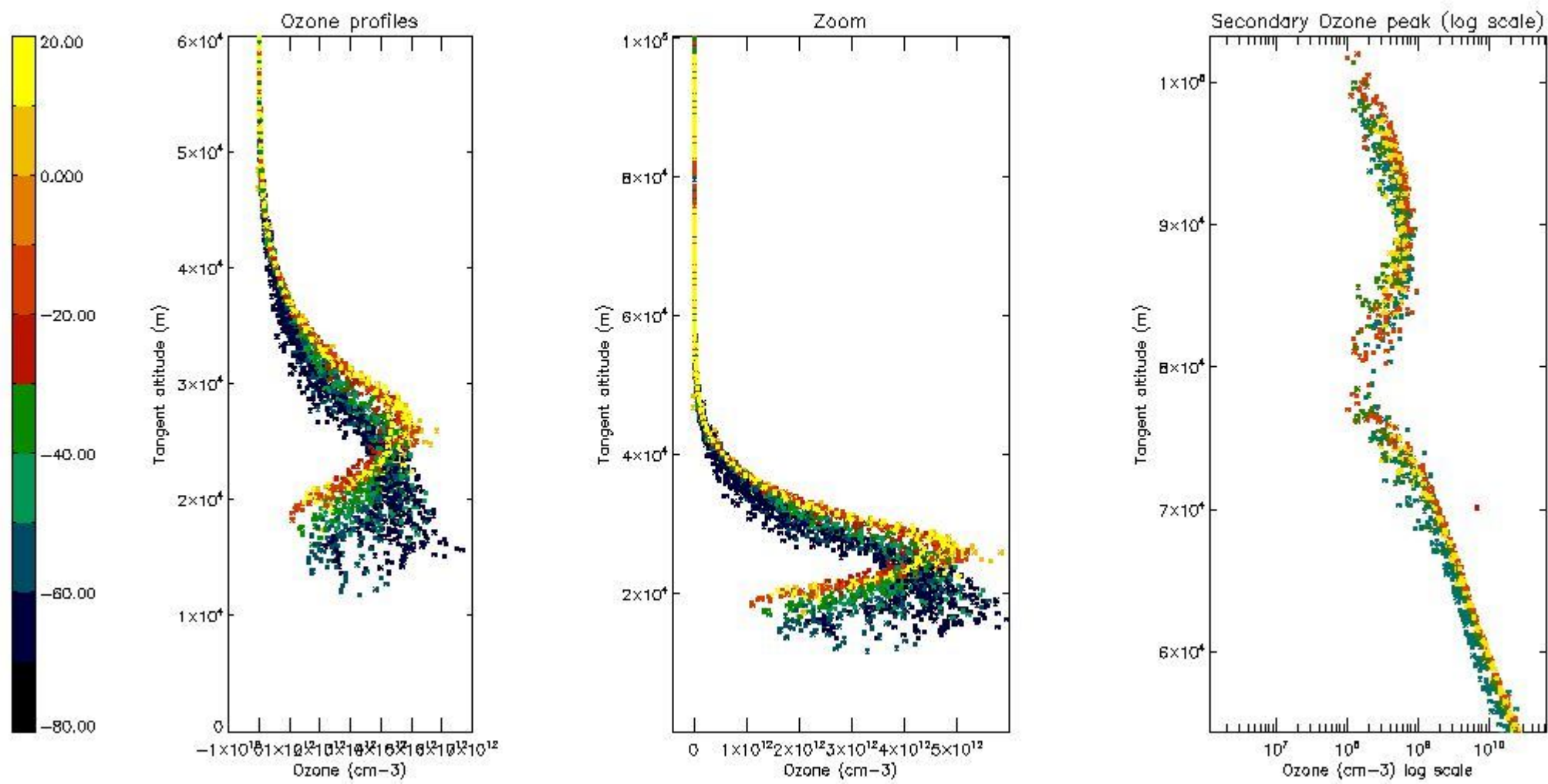
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



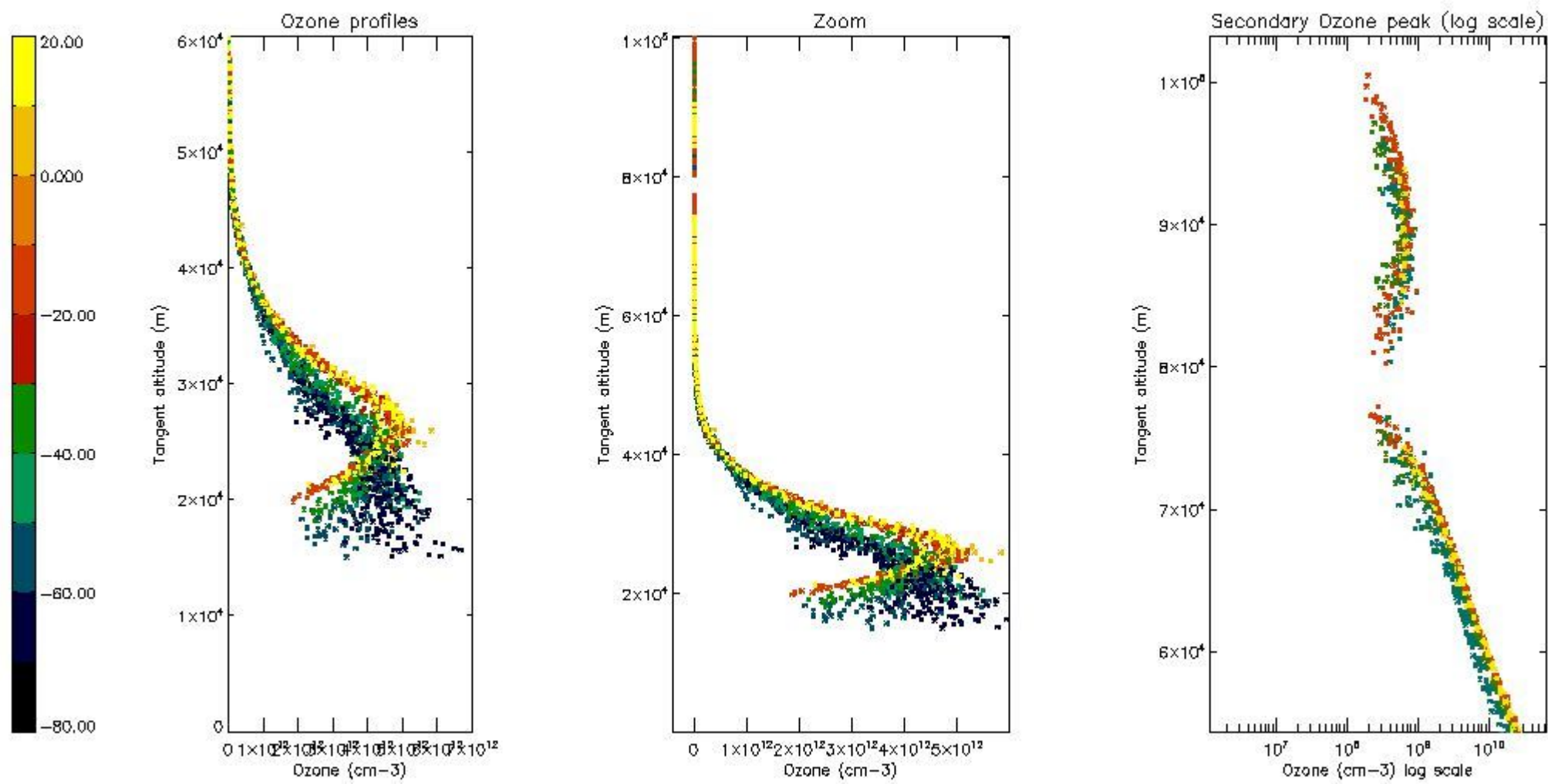
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



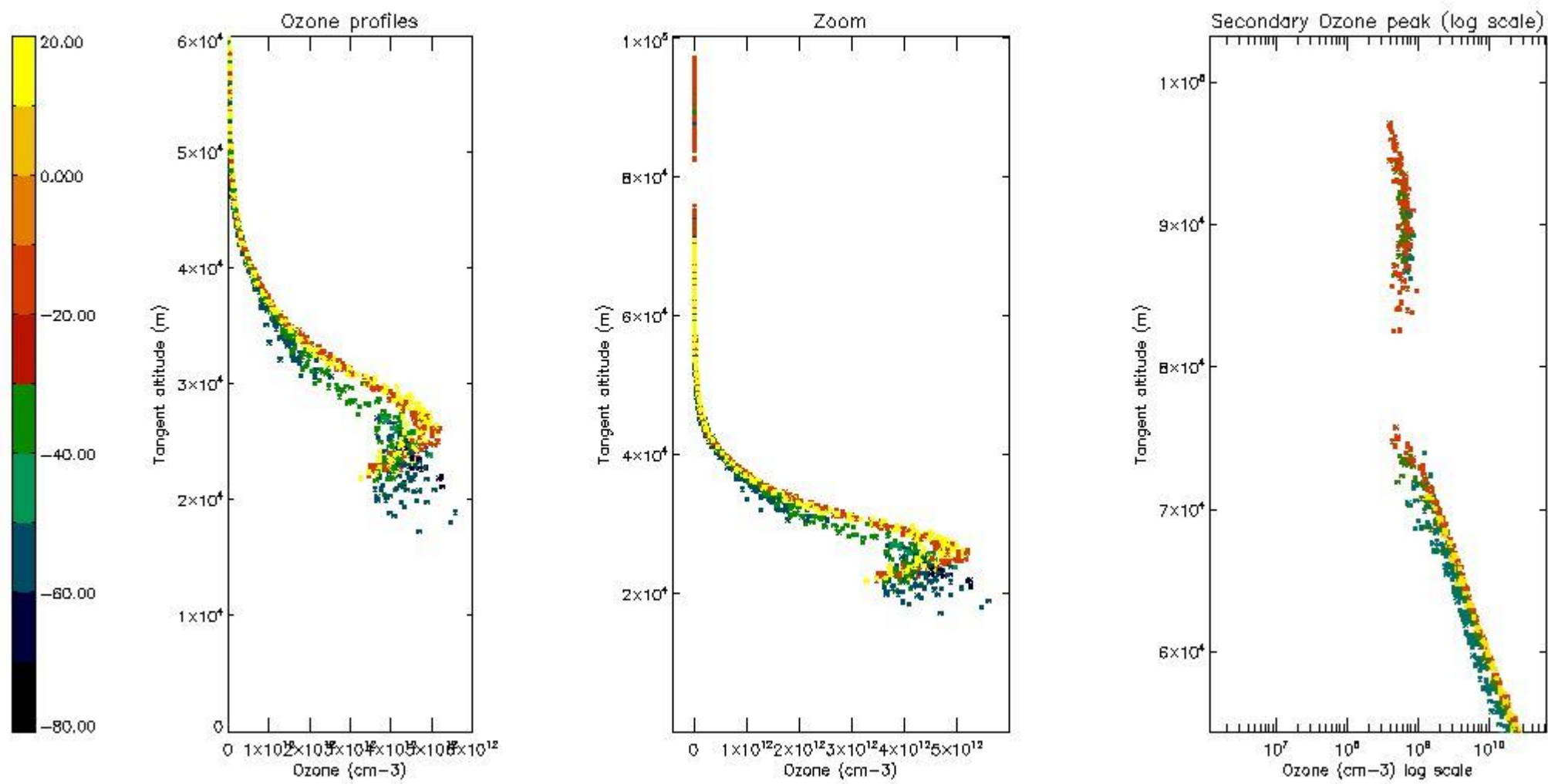
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



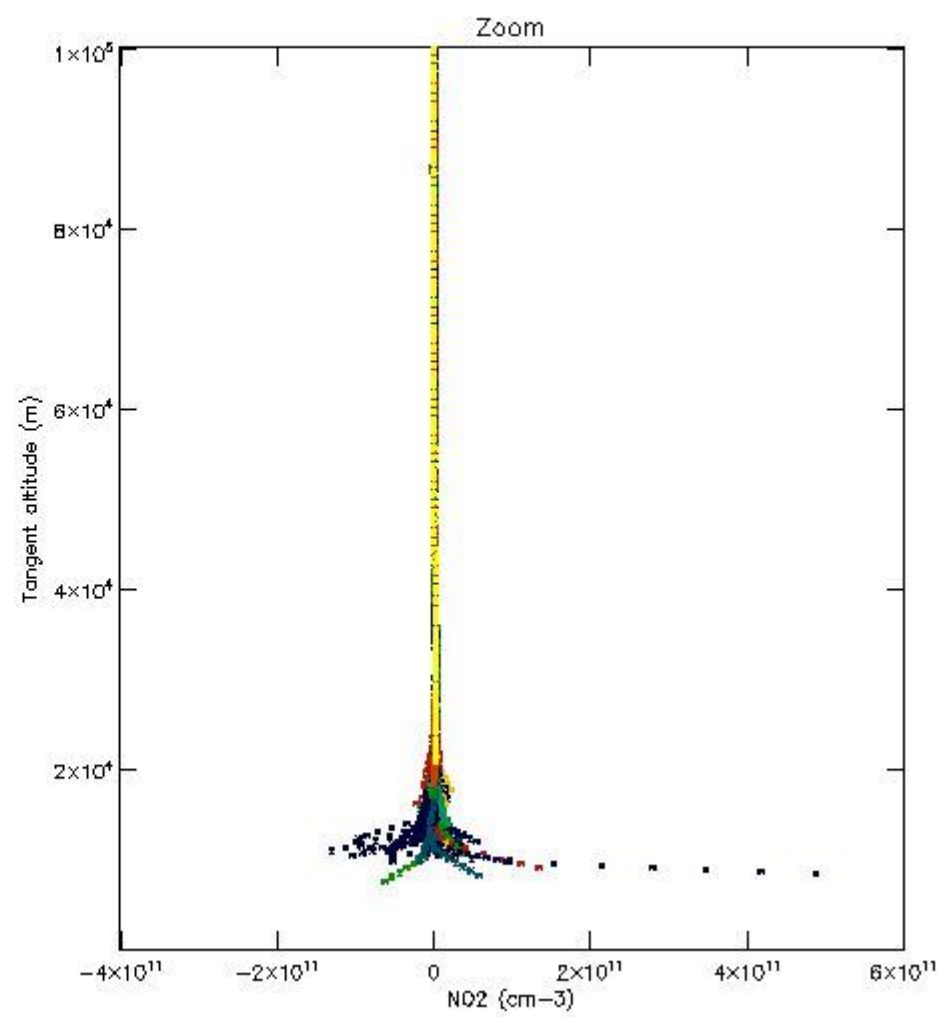
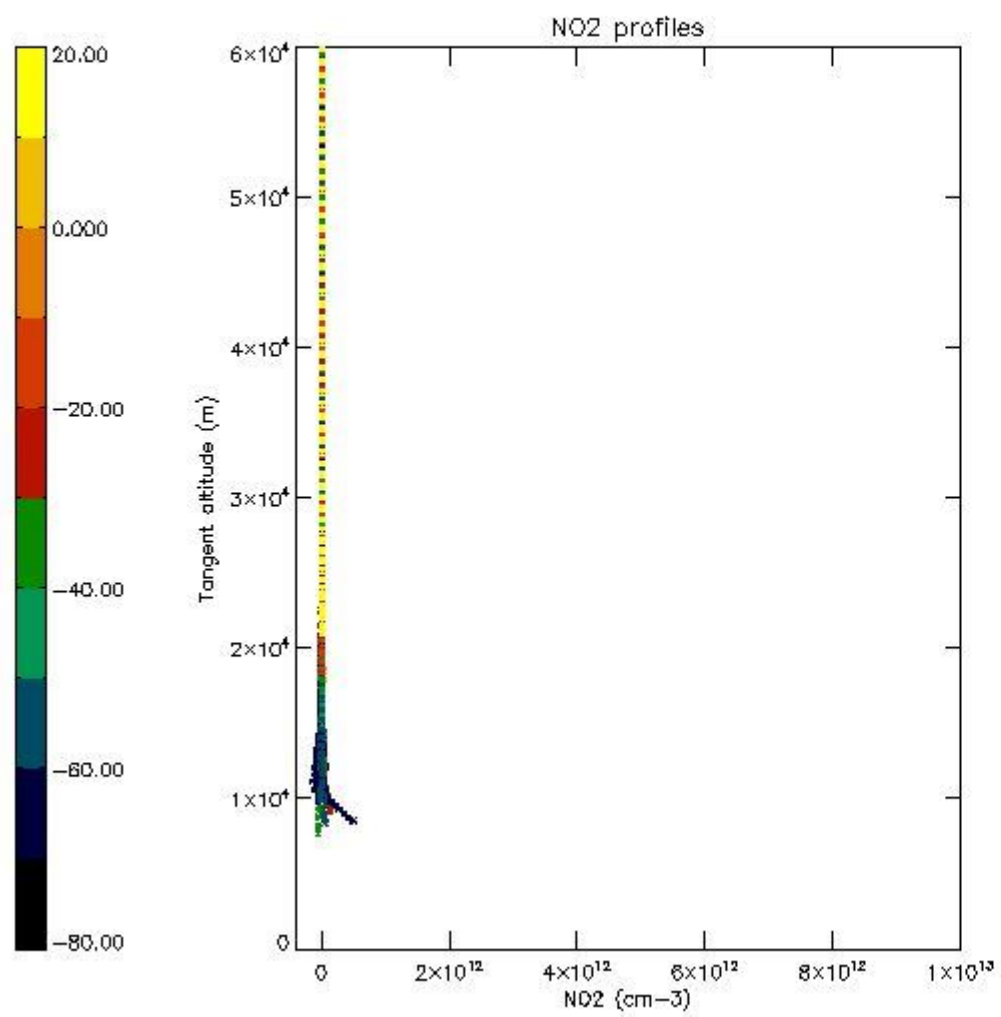
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



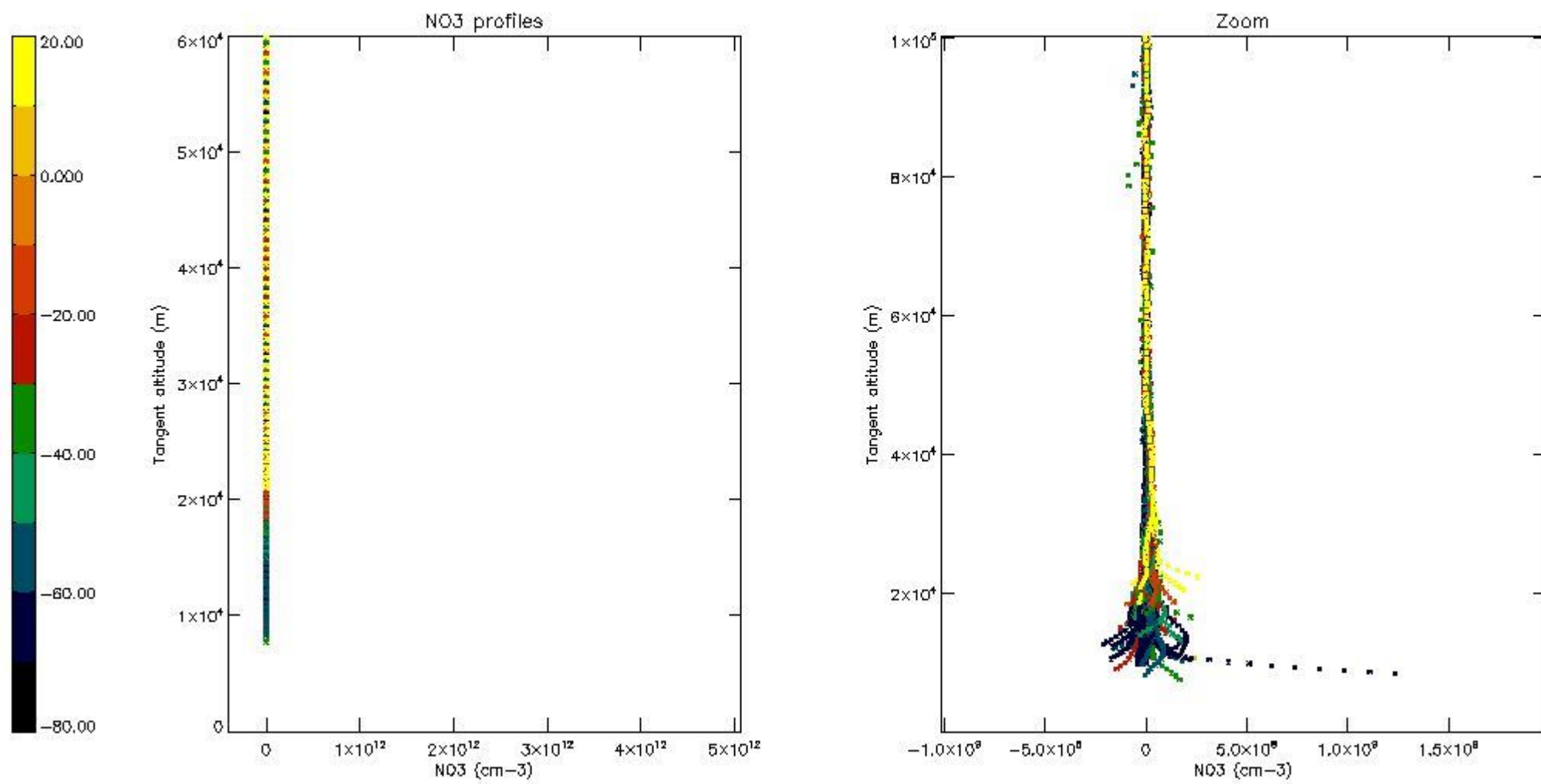
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



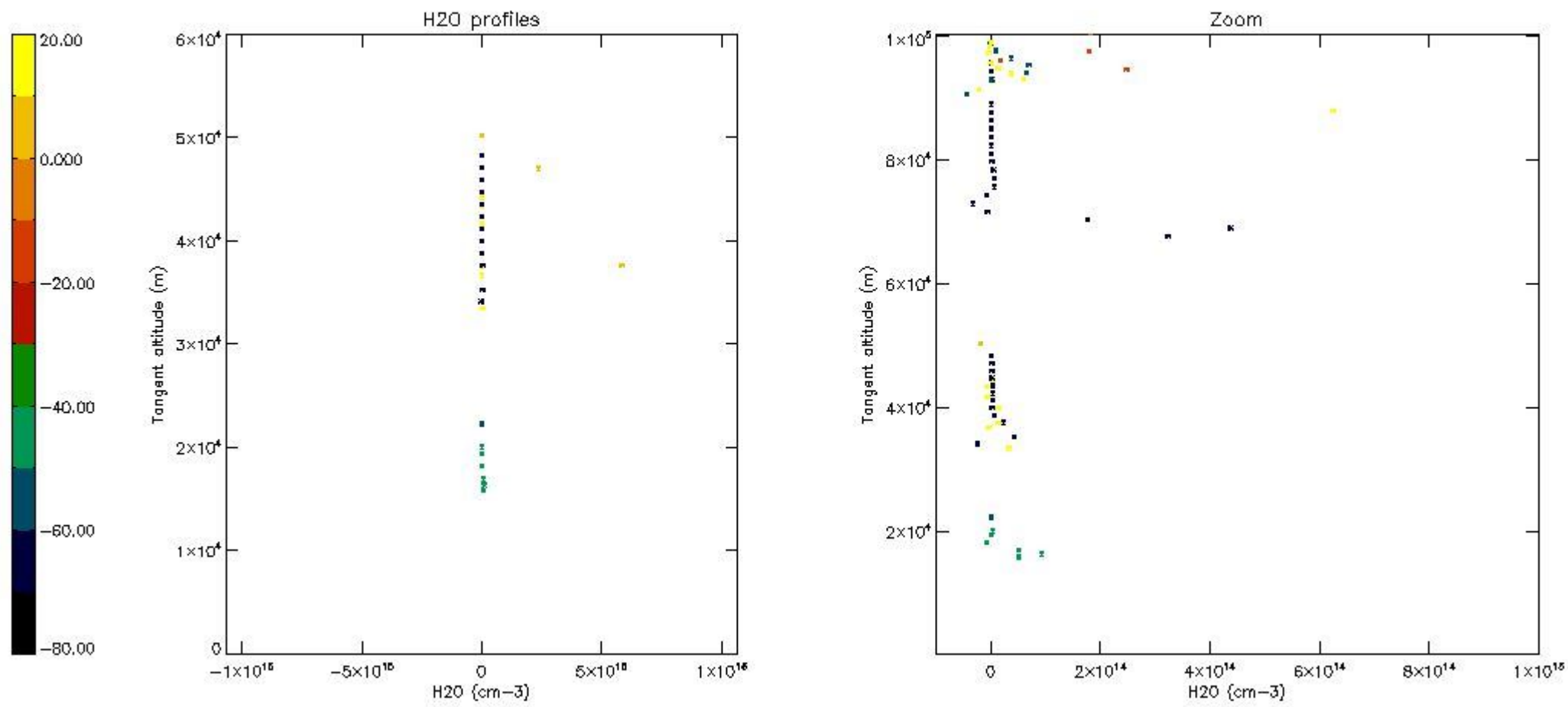
5.7 Plot NO3 profiles for all STD (dark without errors)

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-APR-2004 00:00:02
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	25-APR-2004 00:00:02
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	25-APR-2004 00:00:02

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

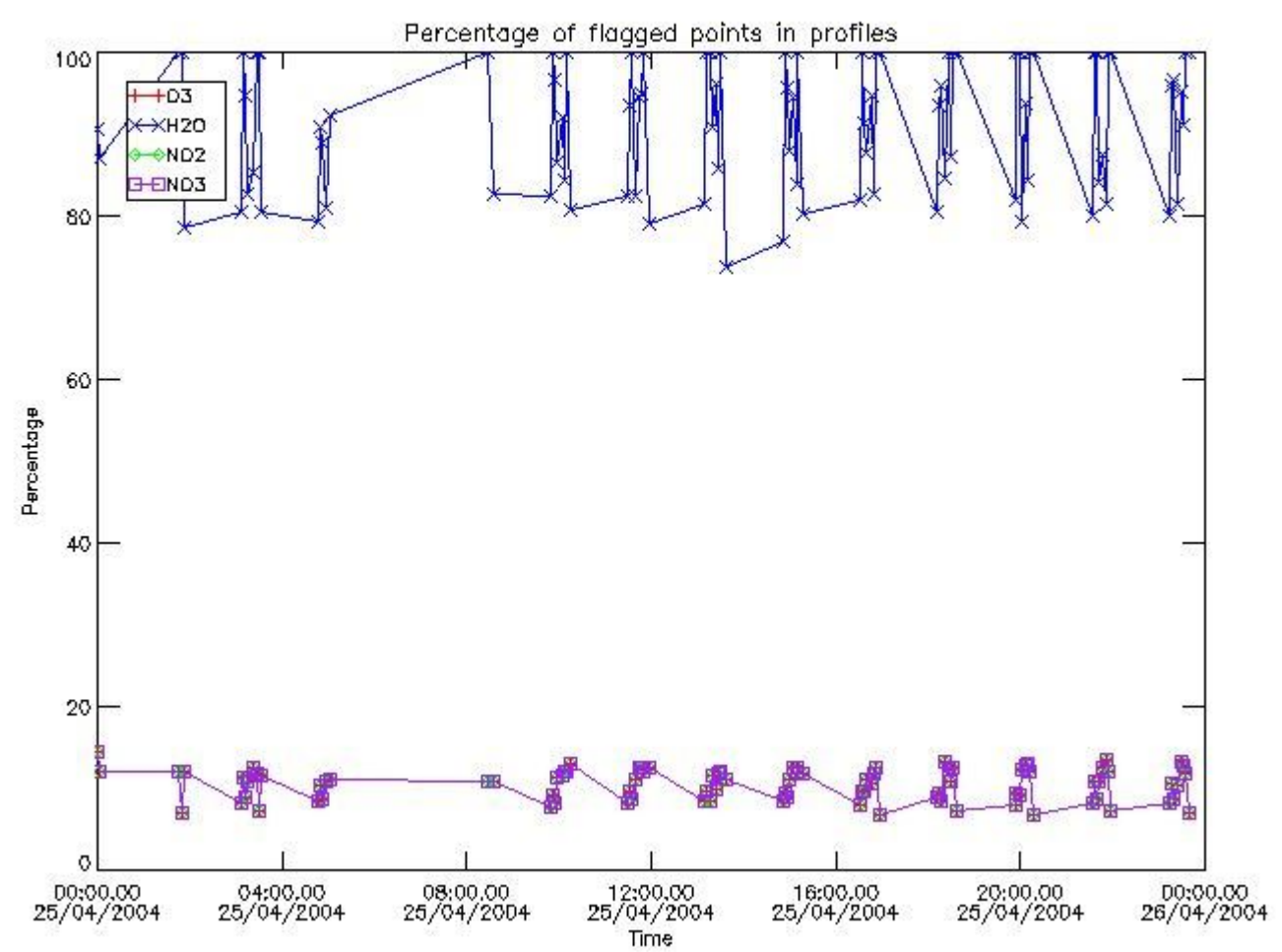
[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

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

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

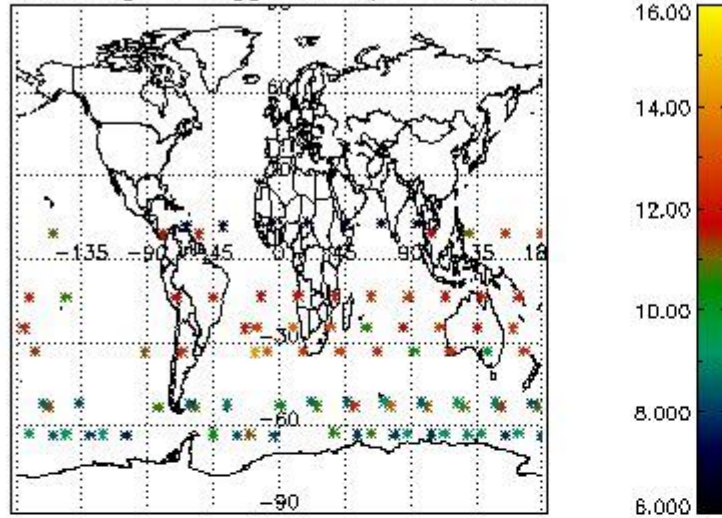
[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

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

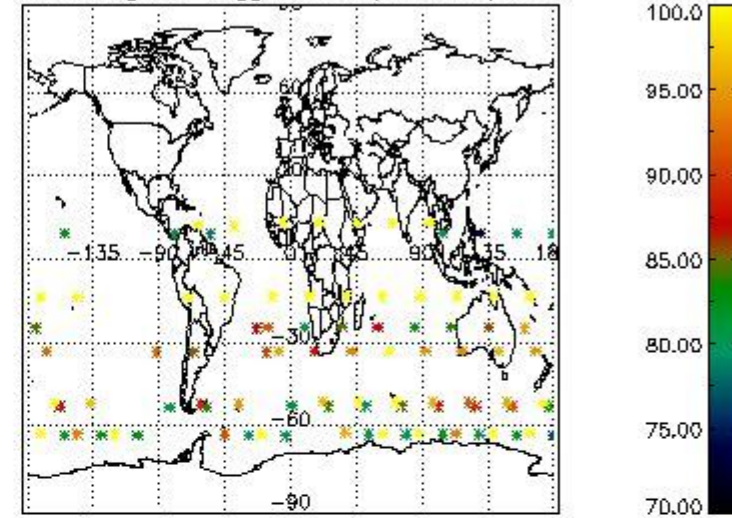


3.2 Plot quality information per product (world map)

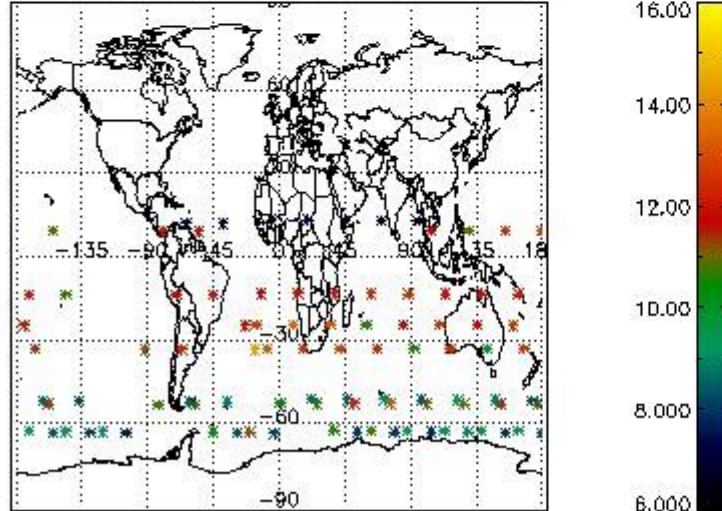
Percentage of flagged data per O3 profile



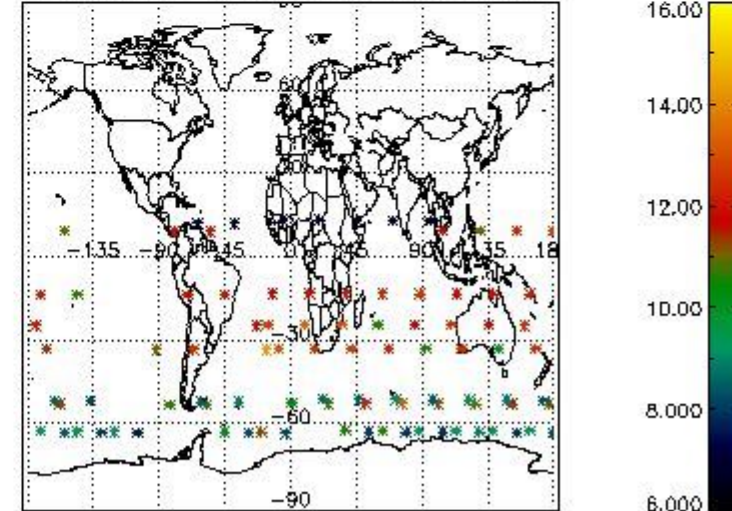
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

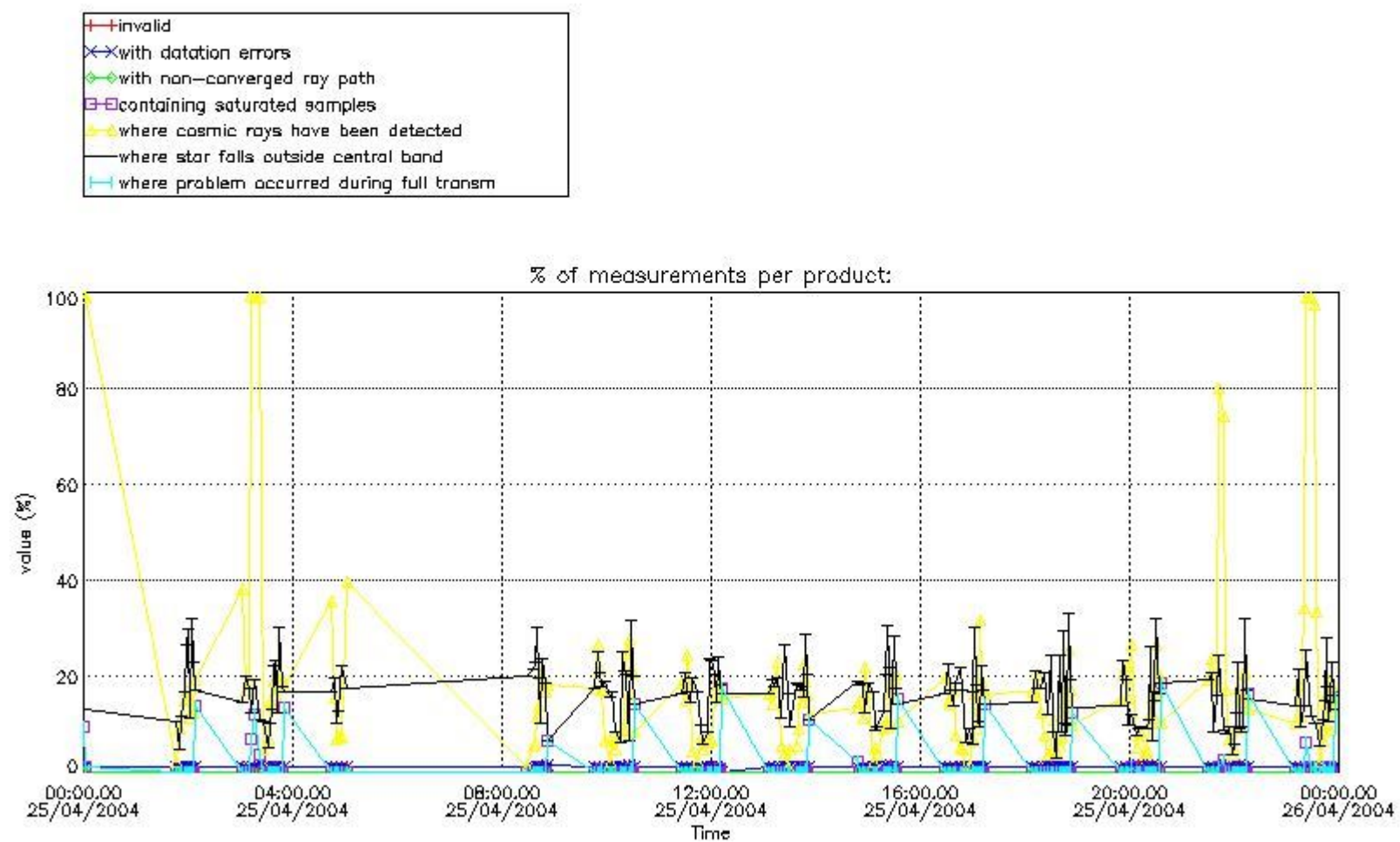


4. Level 1 quality information per product

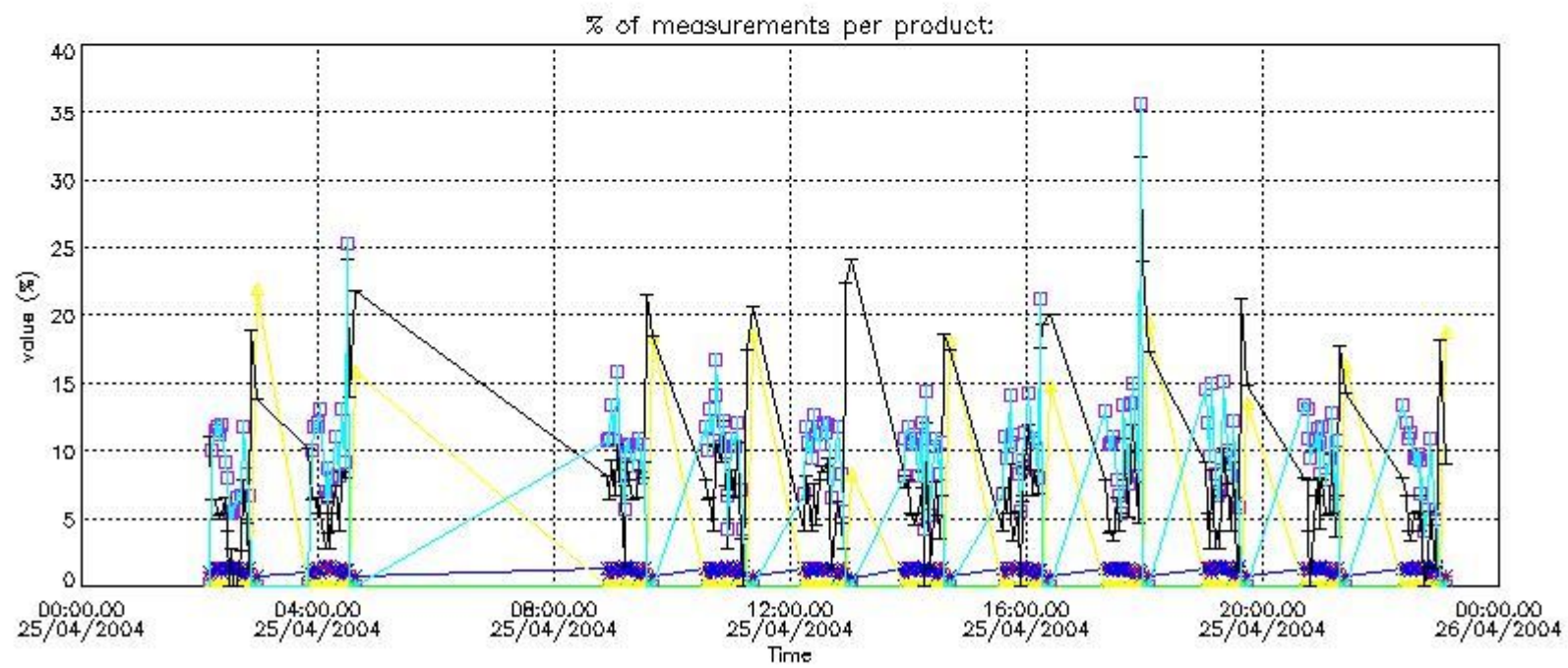
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



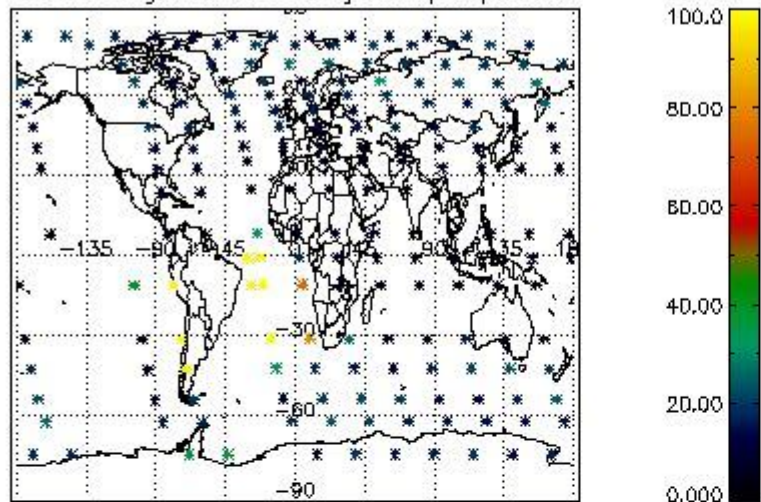
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



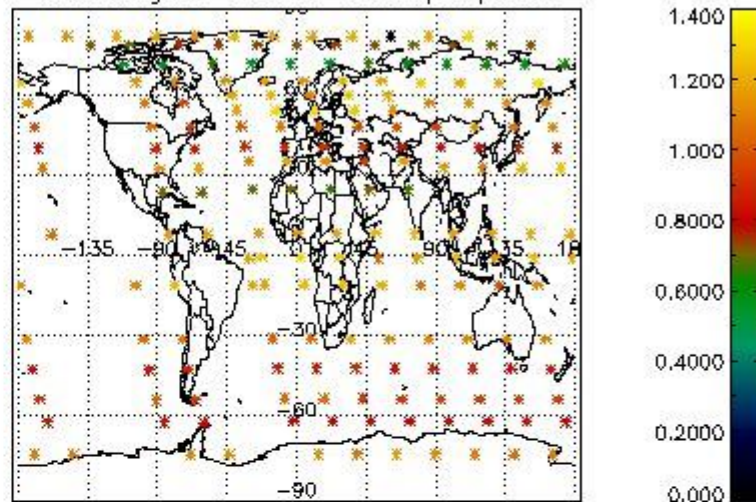
4.2 Plot quality information per product coming from level 1b processing (world map)

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

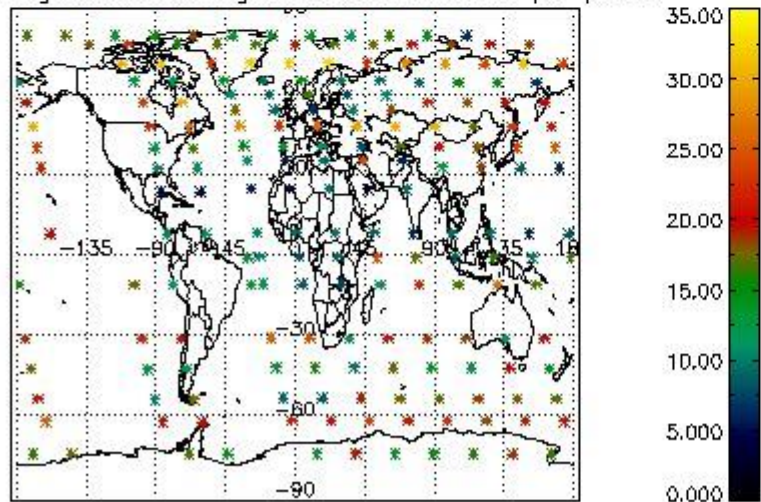
Percentage of cosmic ray hits per profile



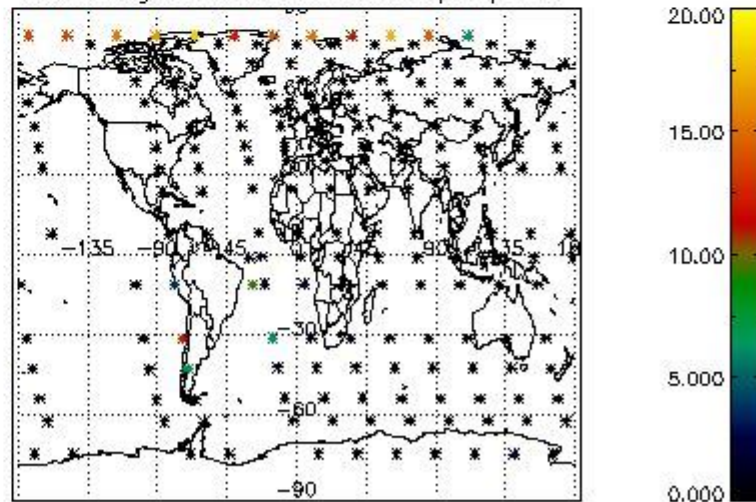
Percentage of datation errors per profile



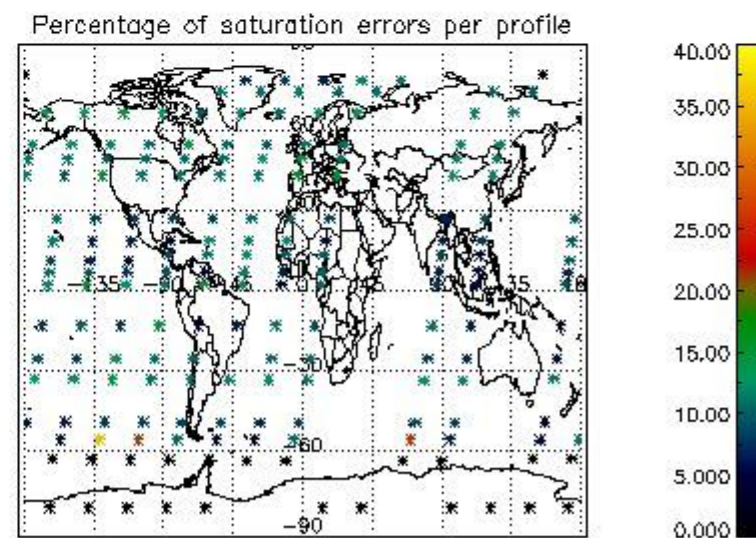
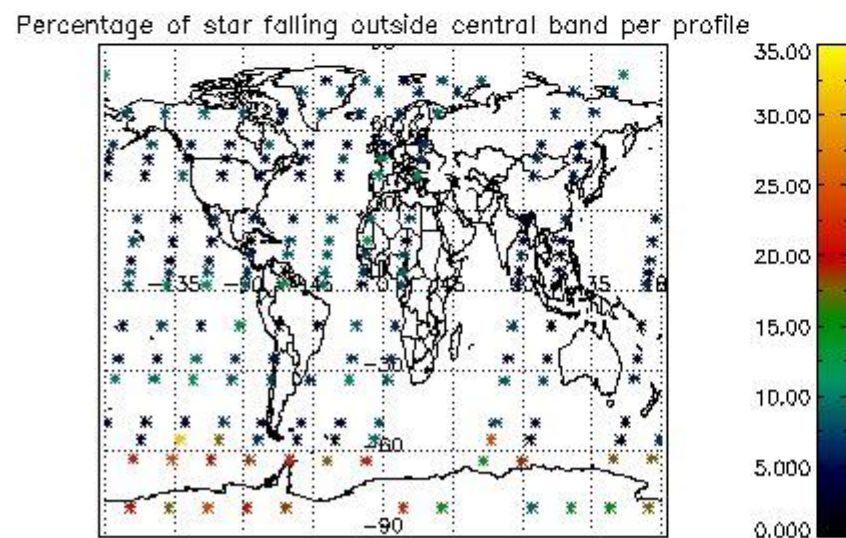
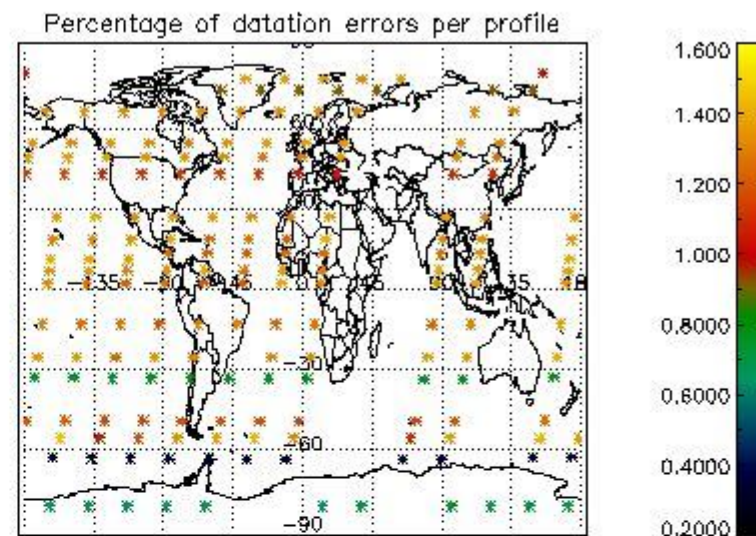
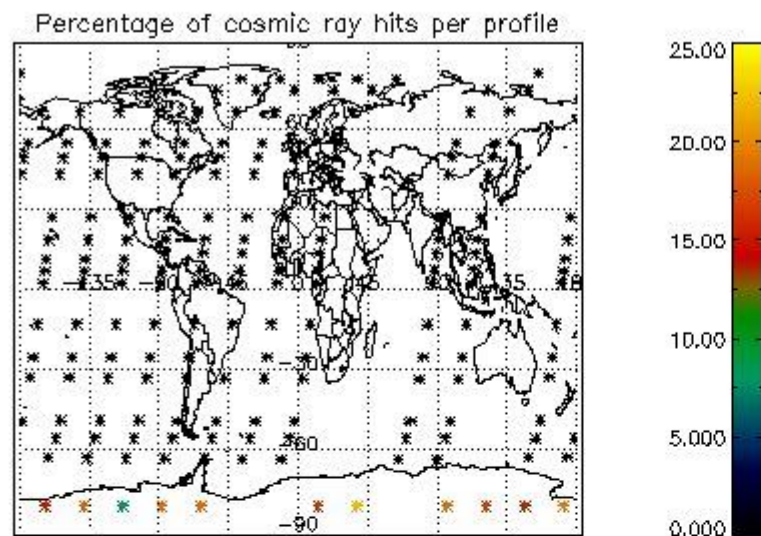
Percentage of star falling outside central band per profile



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

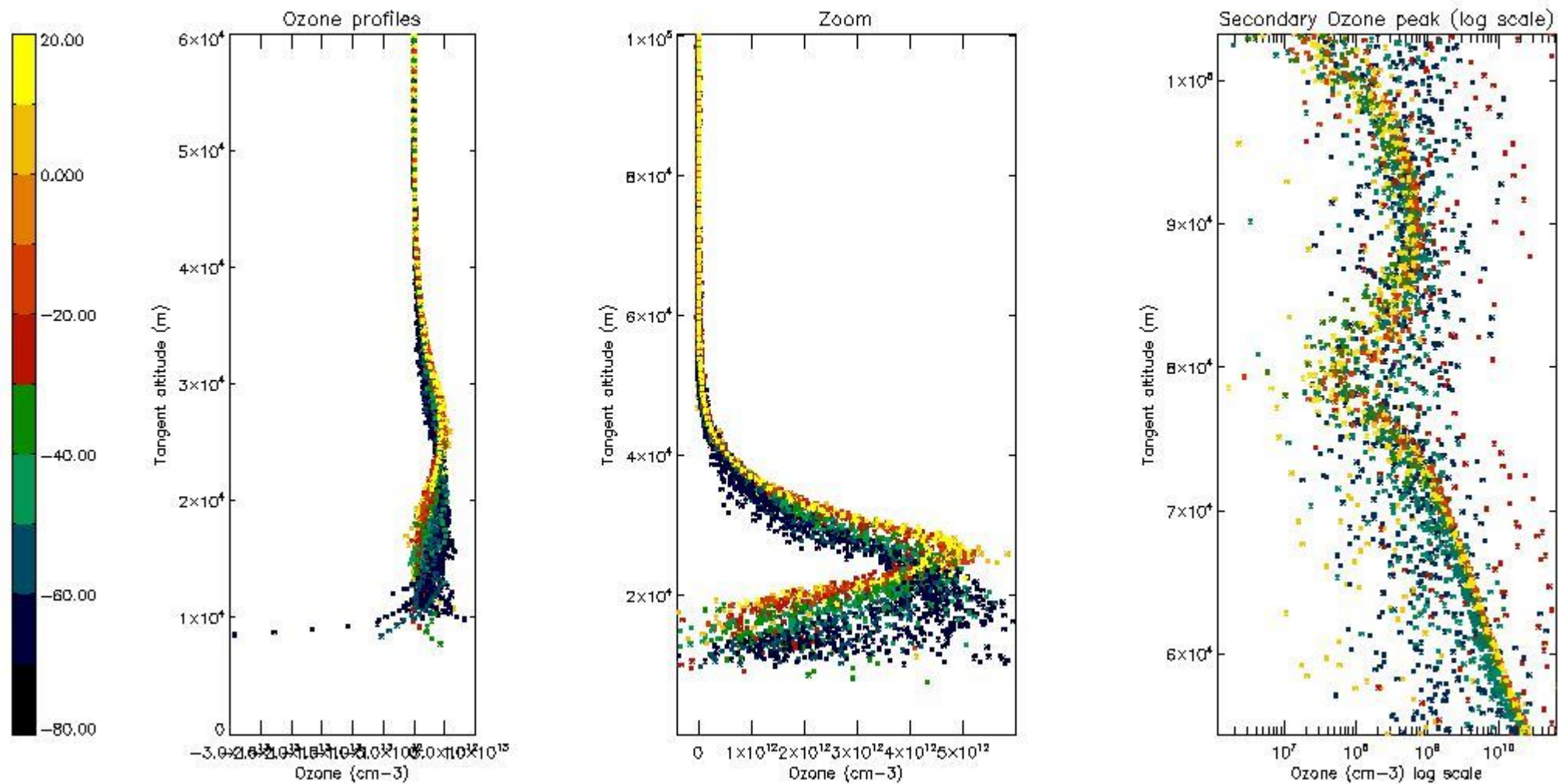
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	24
STD < 20	11

STD < 10	8
STD < 5	5

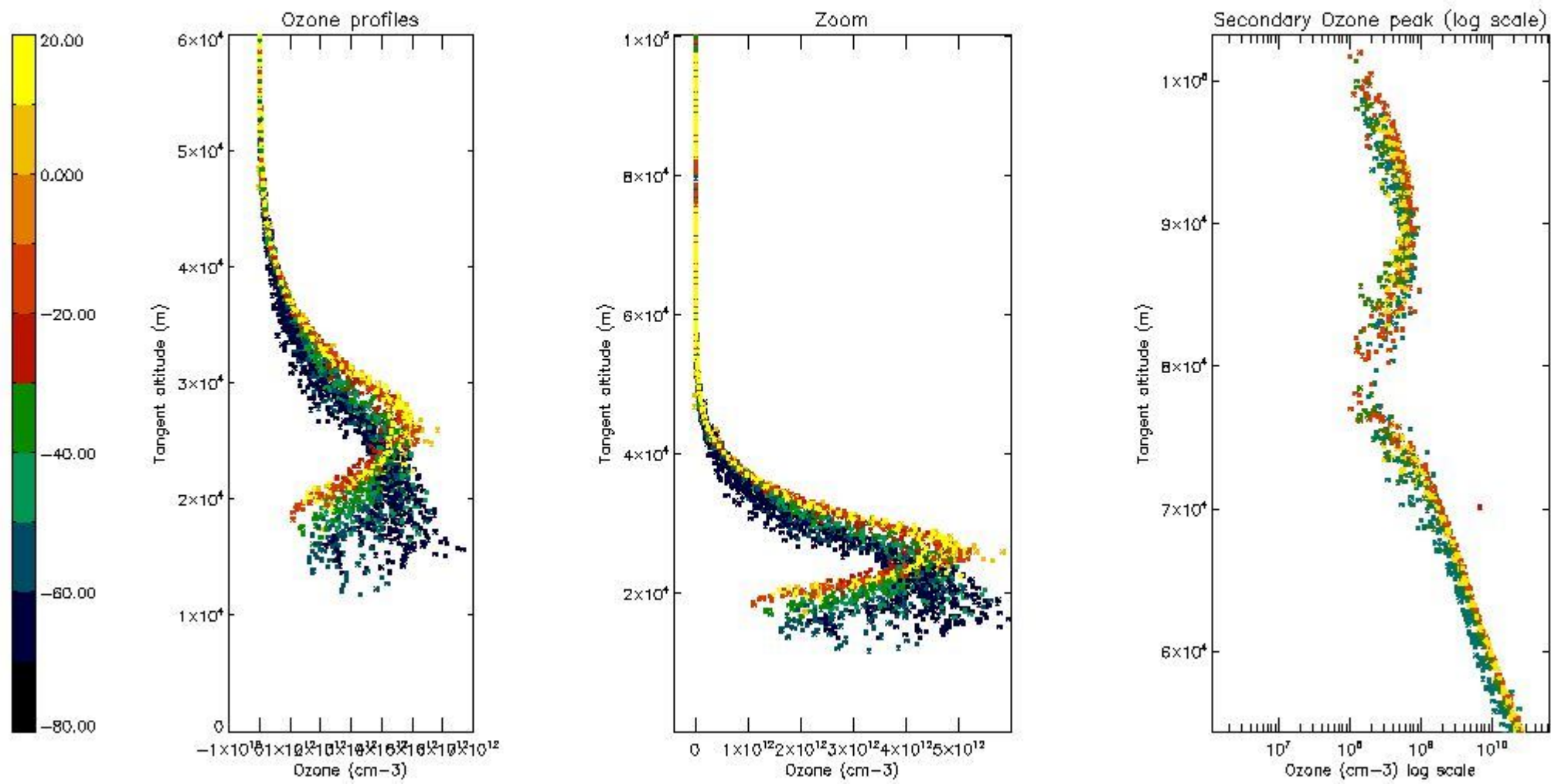
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



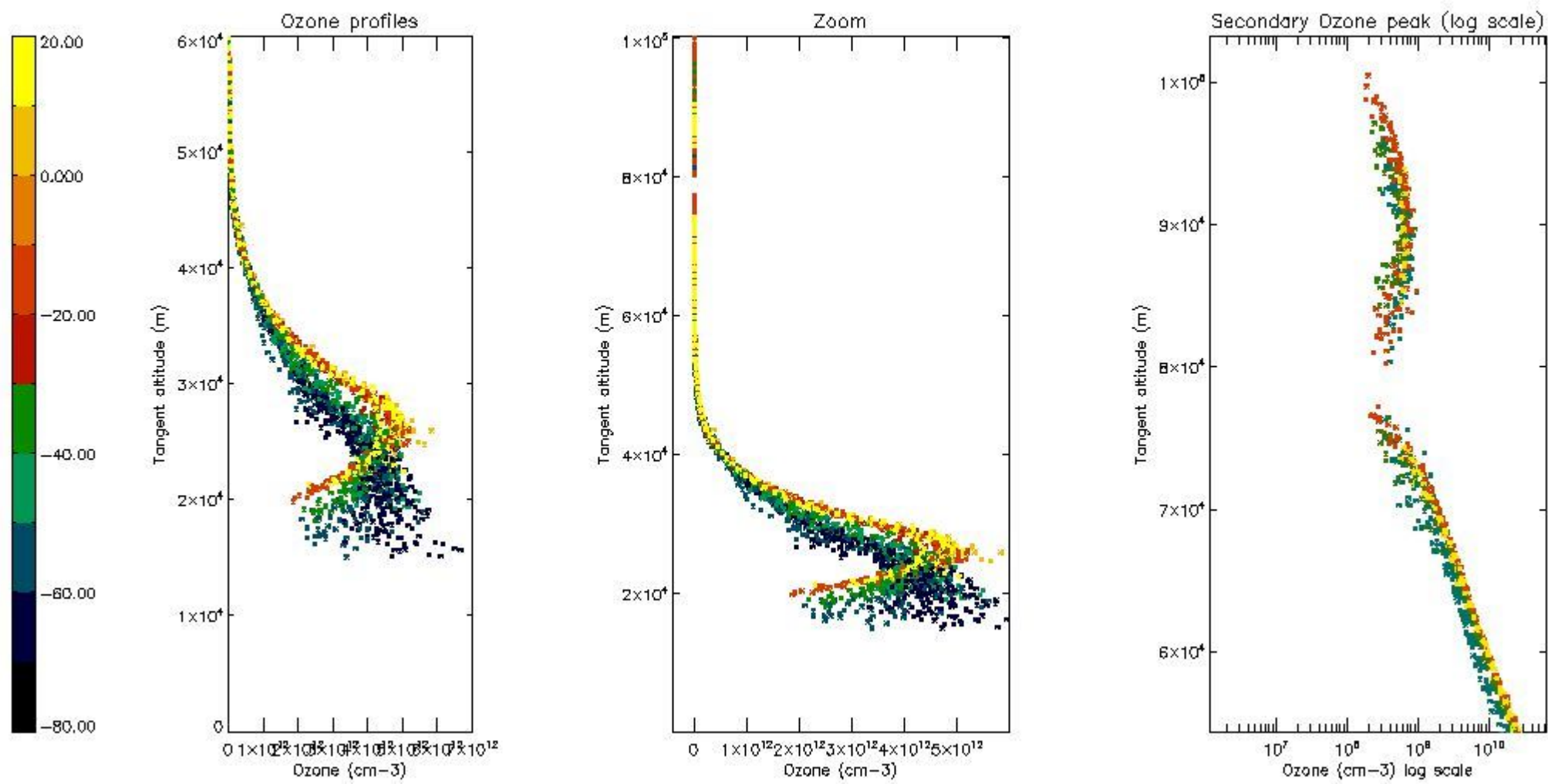
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



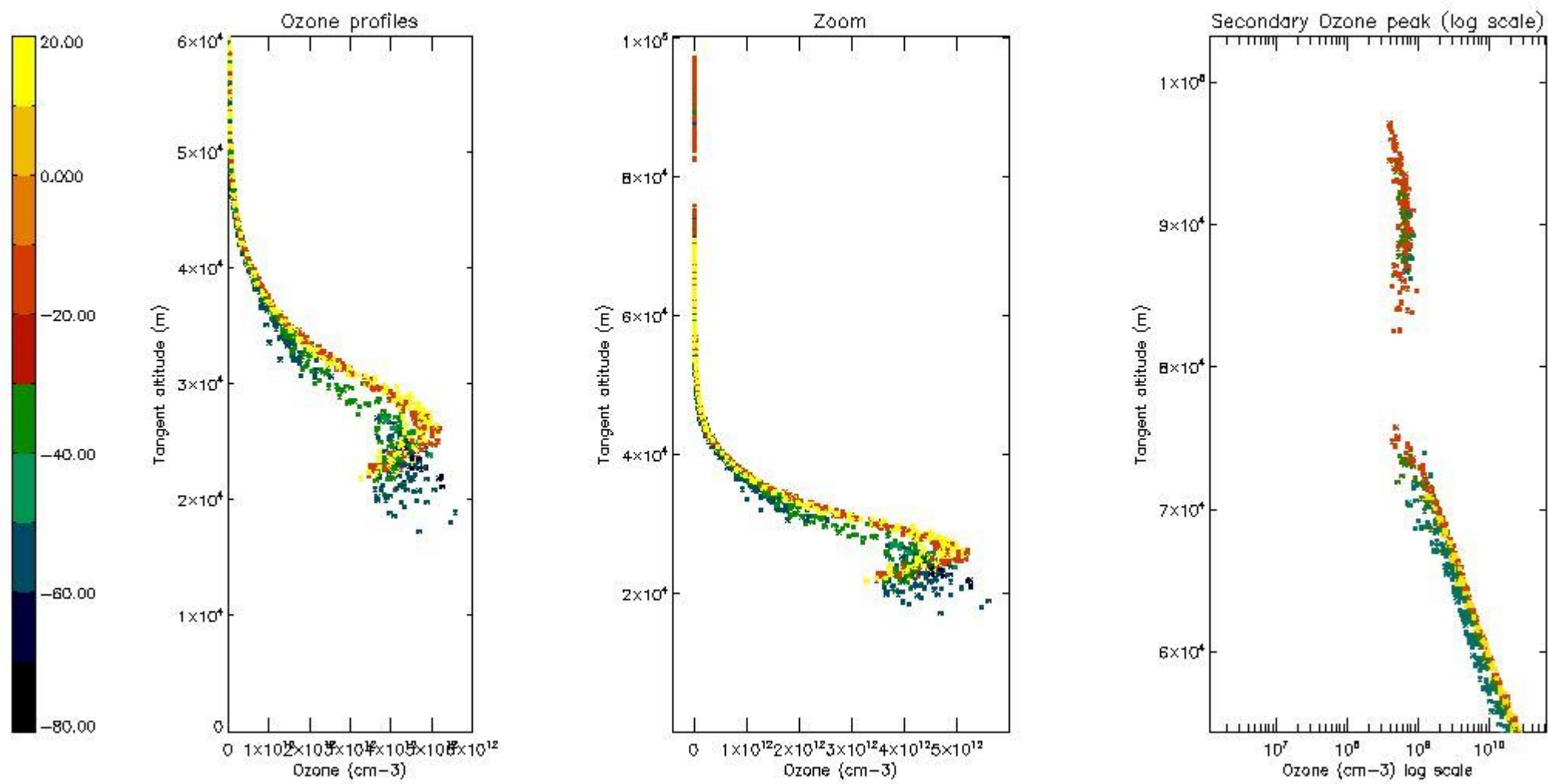
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



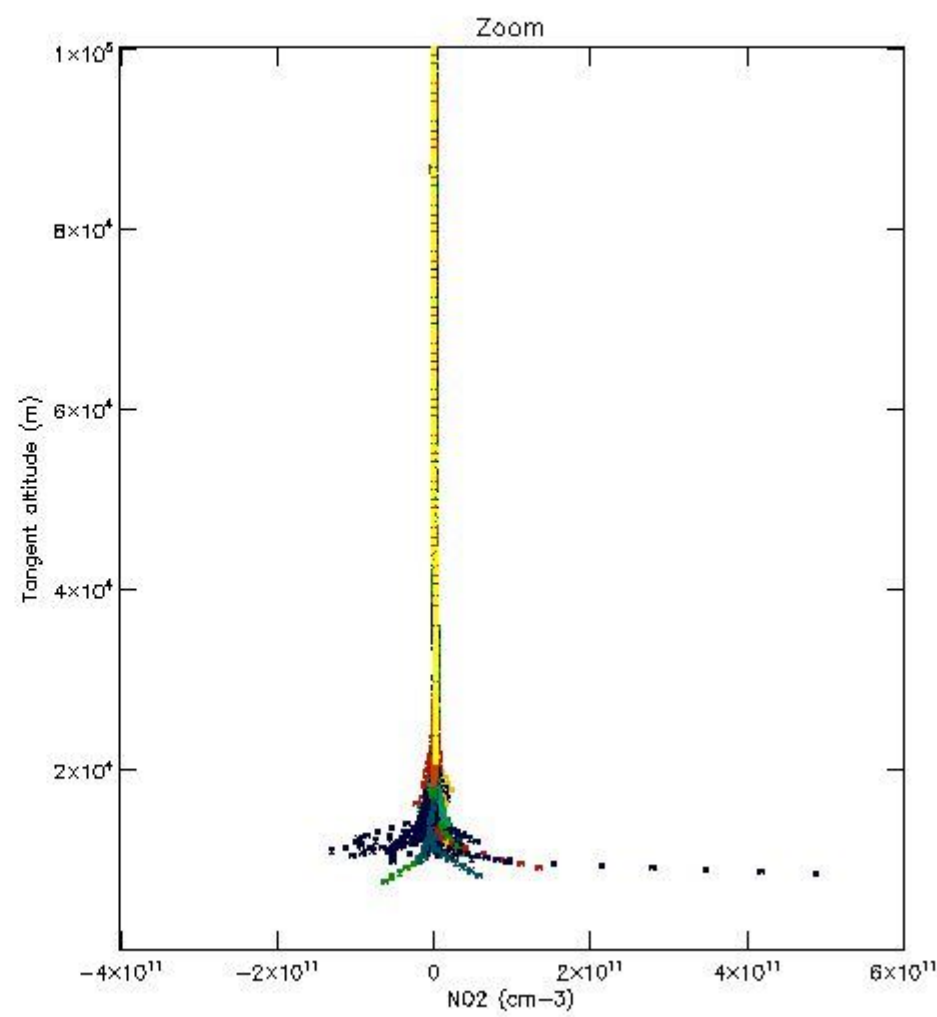
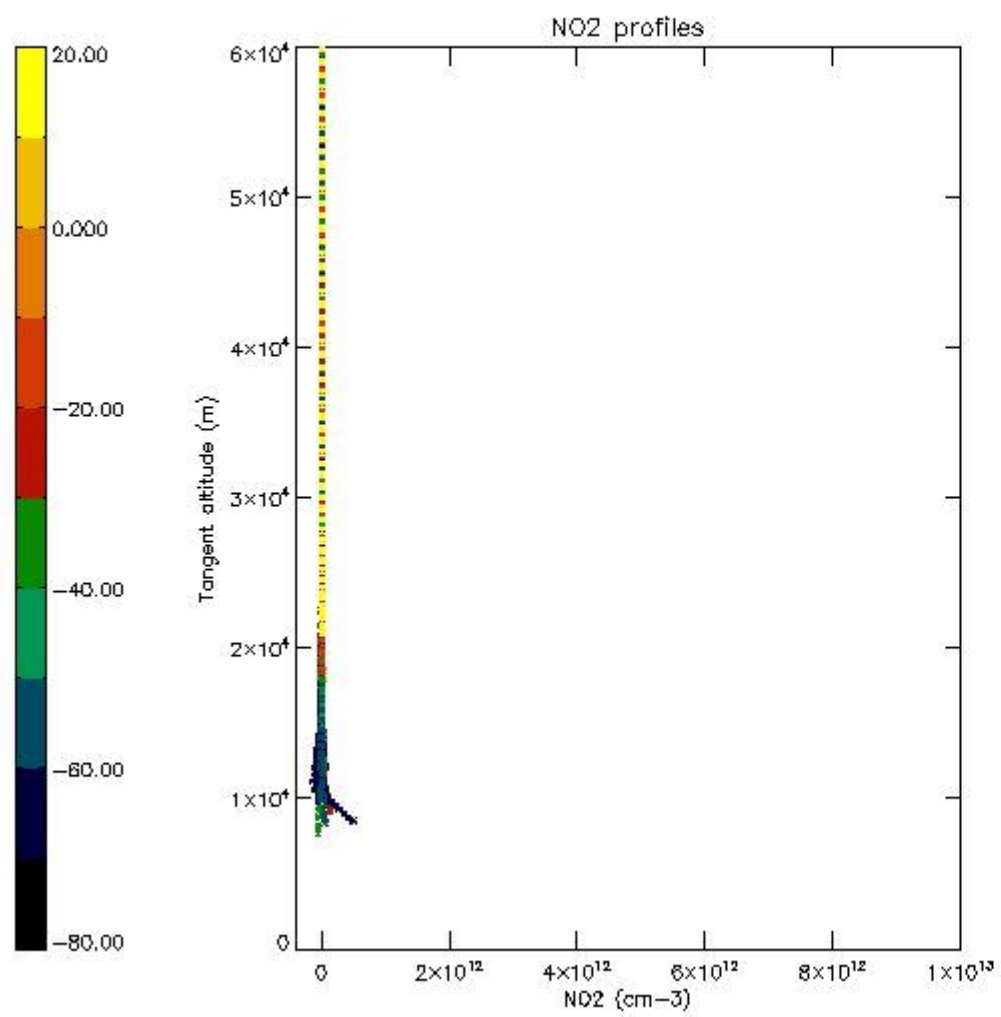
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



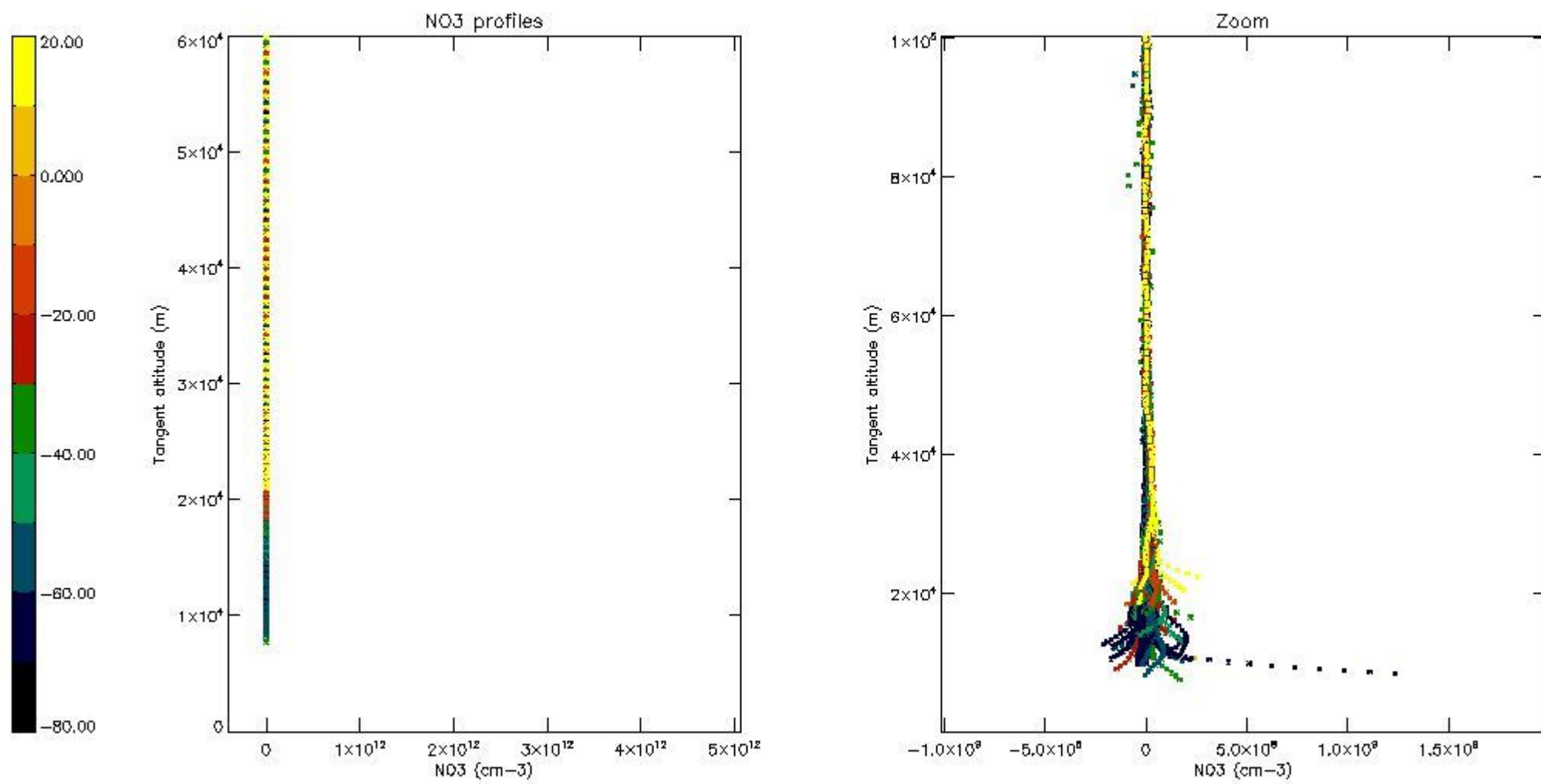
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



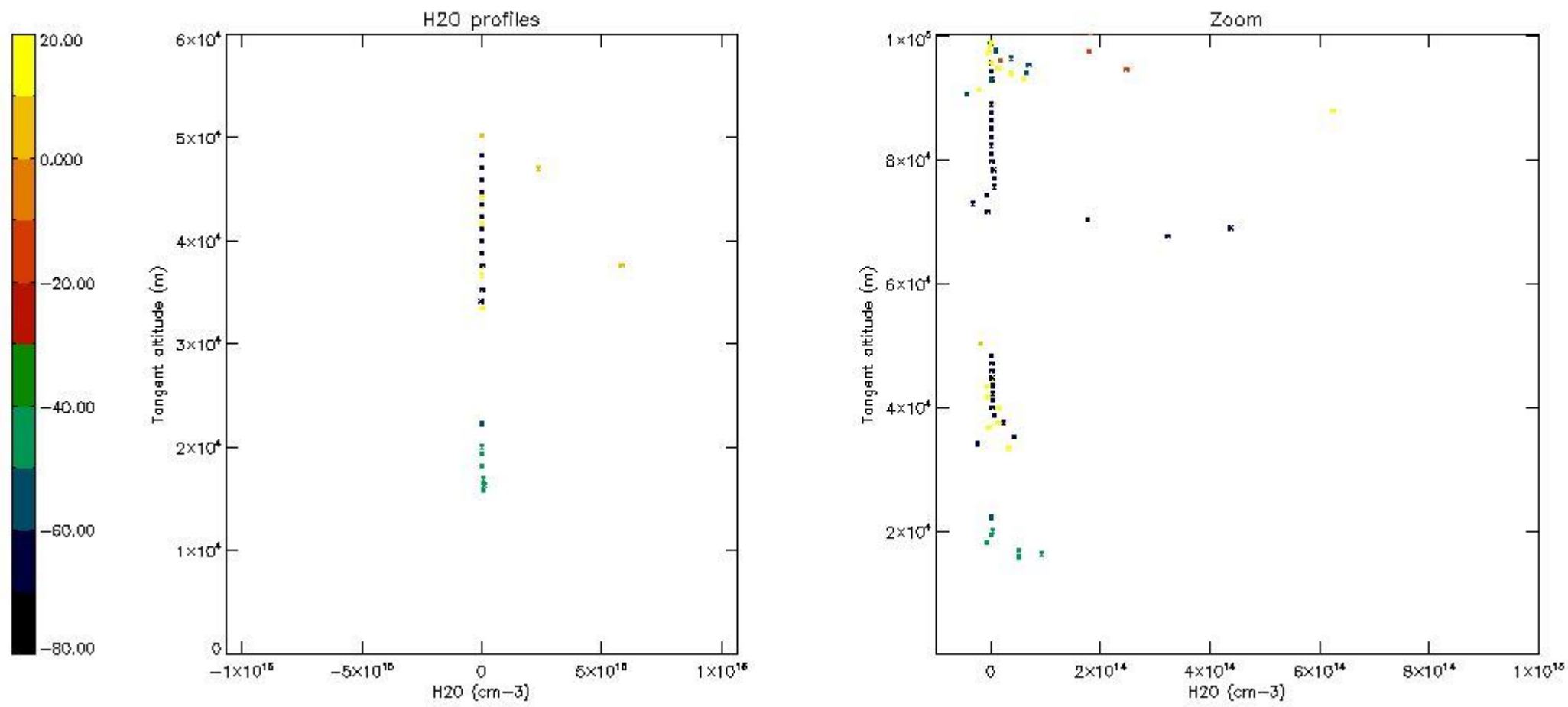
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

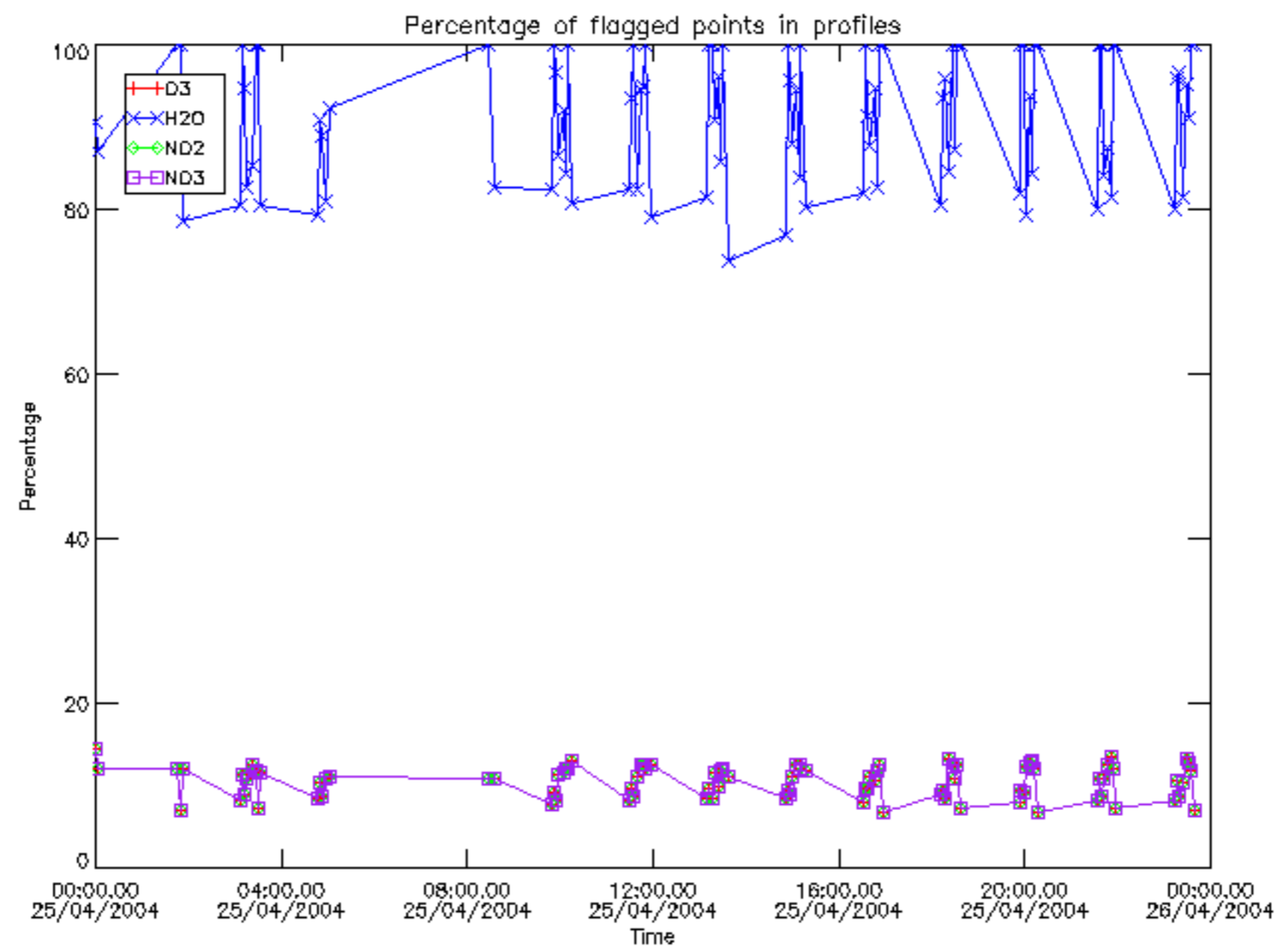
The colorbar represents the latitude.



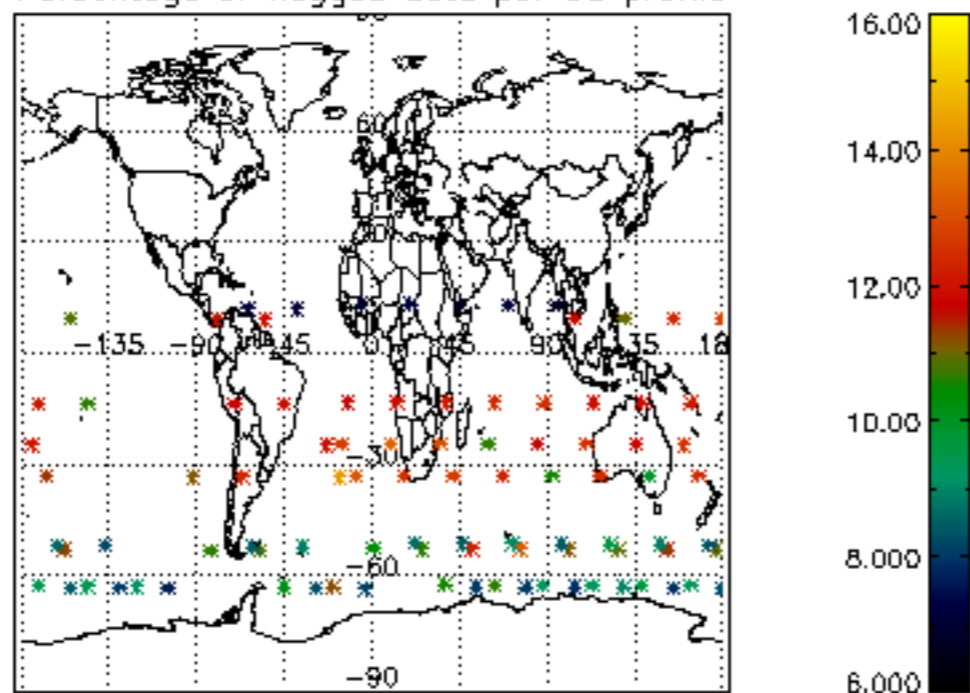
6. Auxiliary Data Files used for the production reported in section 2

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.

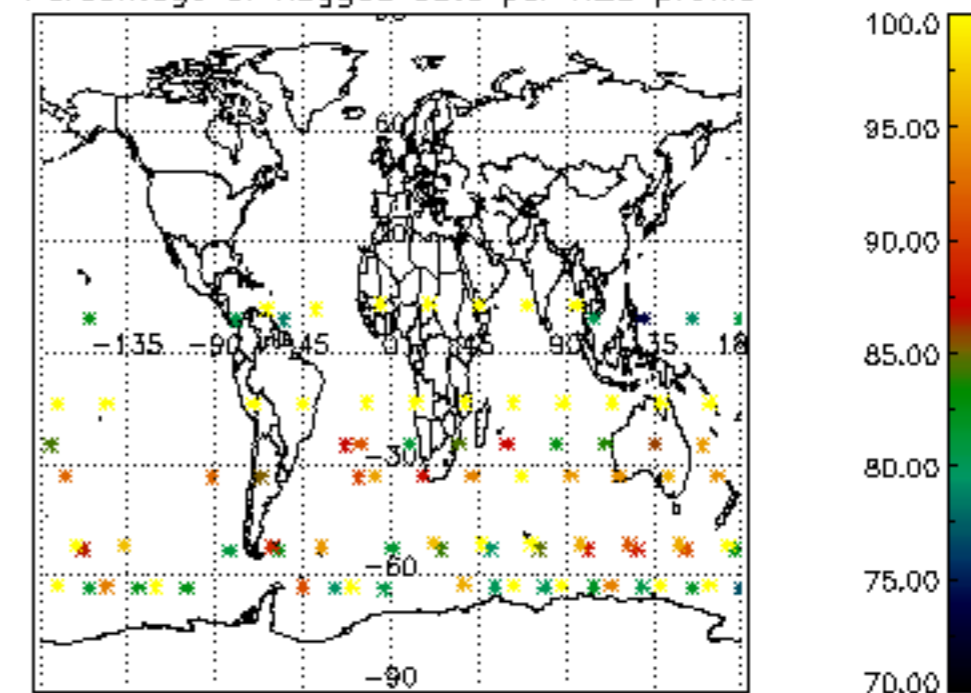
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	25-APR-2004 00:00:02
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	25-APR-2004 00:00:02
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	25-APR-2004 00:00:02



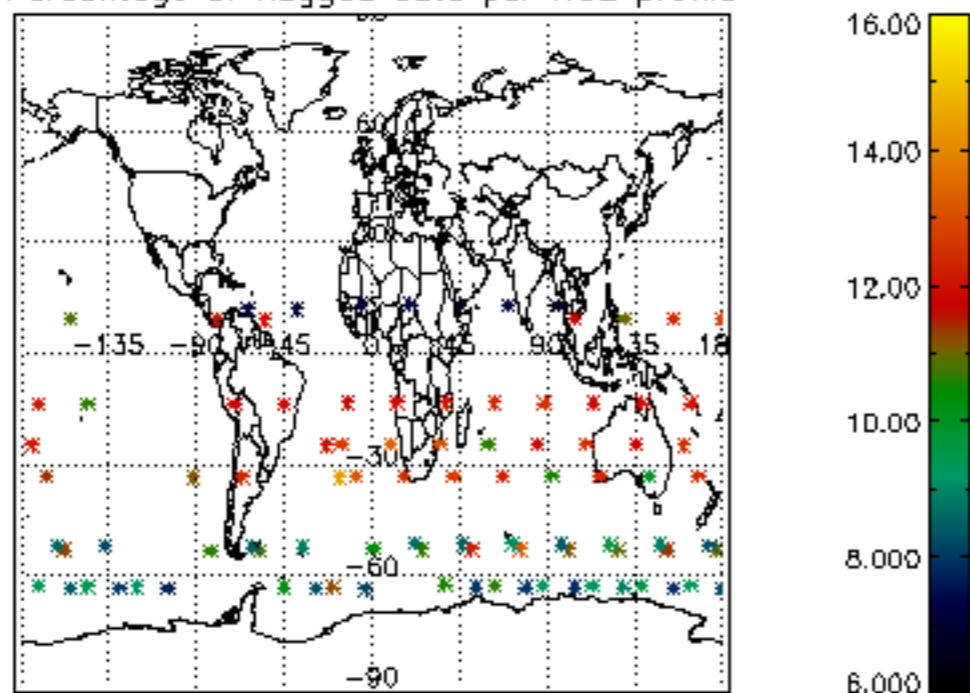
Percentage of flagged data per D3 profile



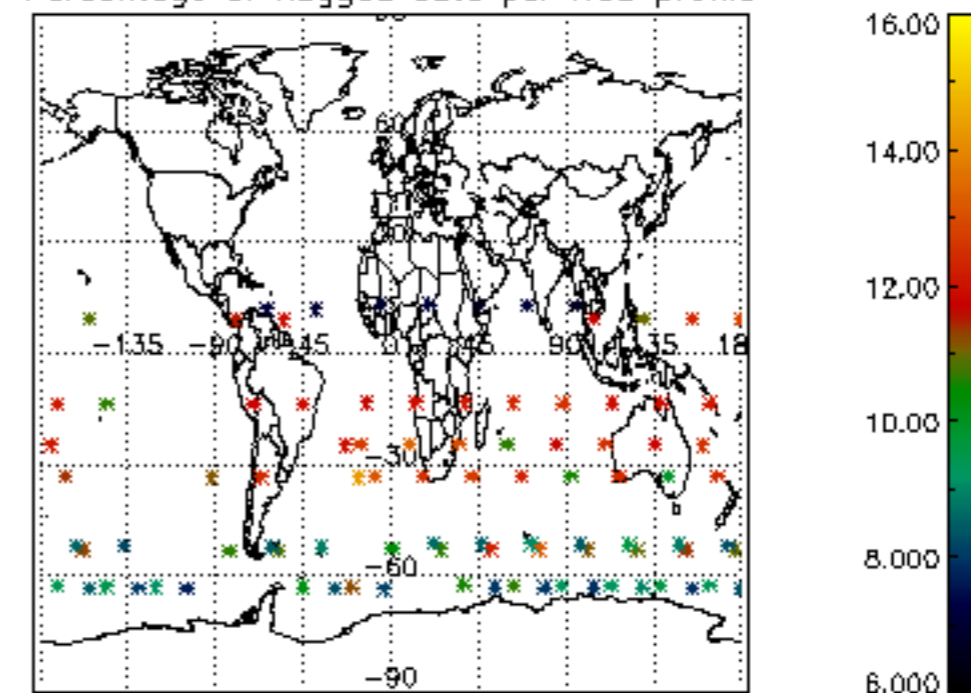
Percentage of flagged data per H2O profile

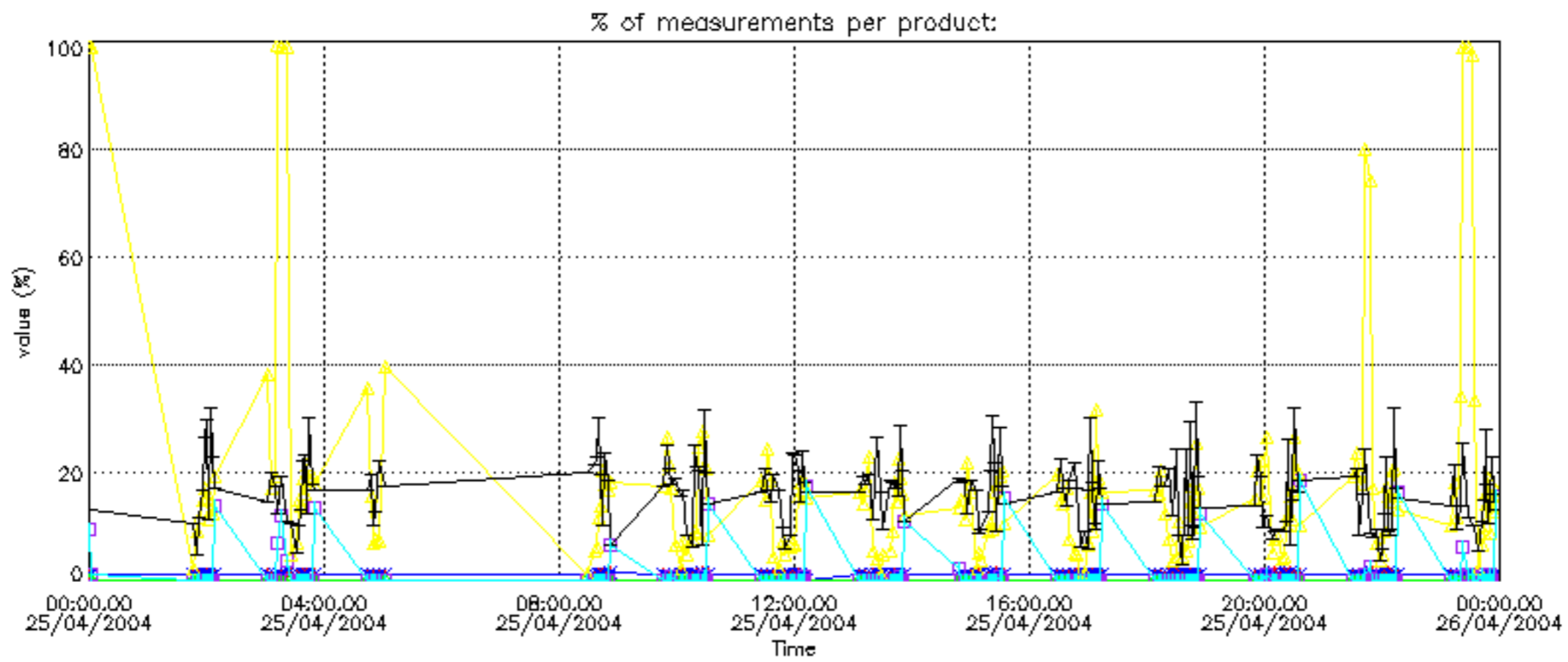
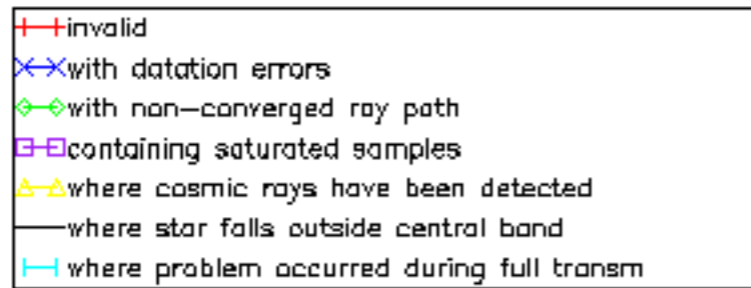


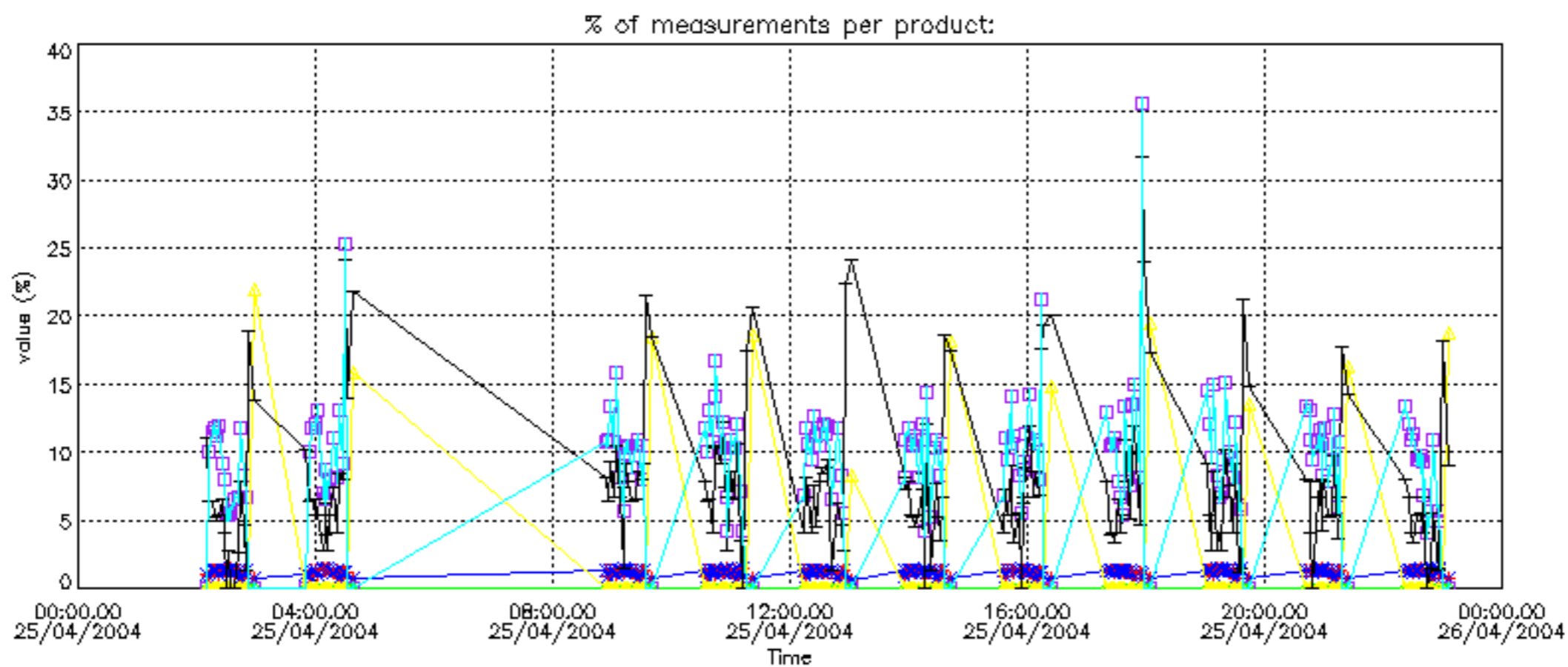
Percentage of flagged data per NO2 profile



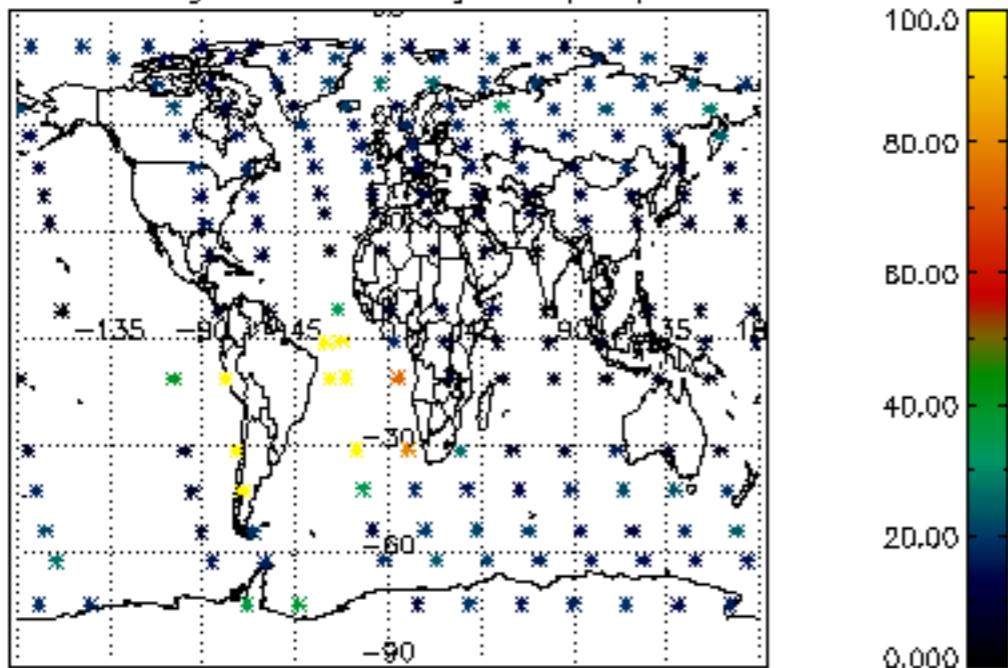
Percentage of flagged data per NO3 profile



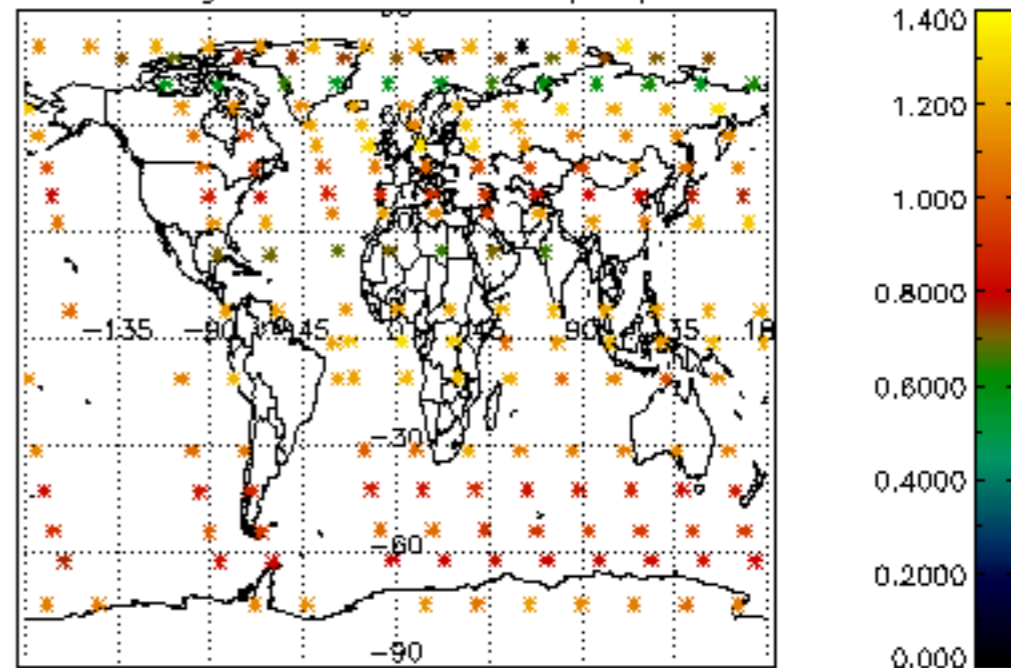




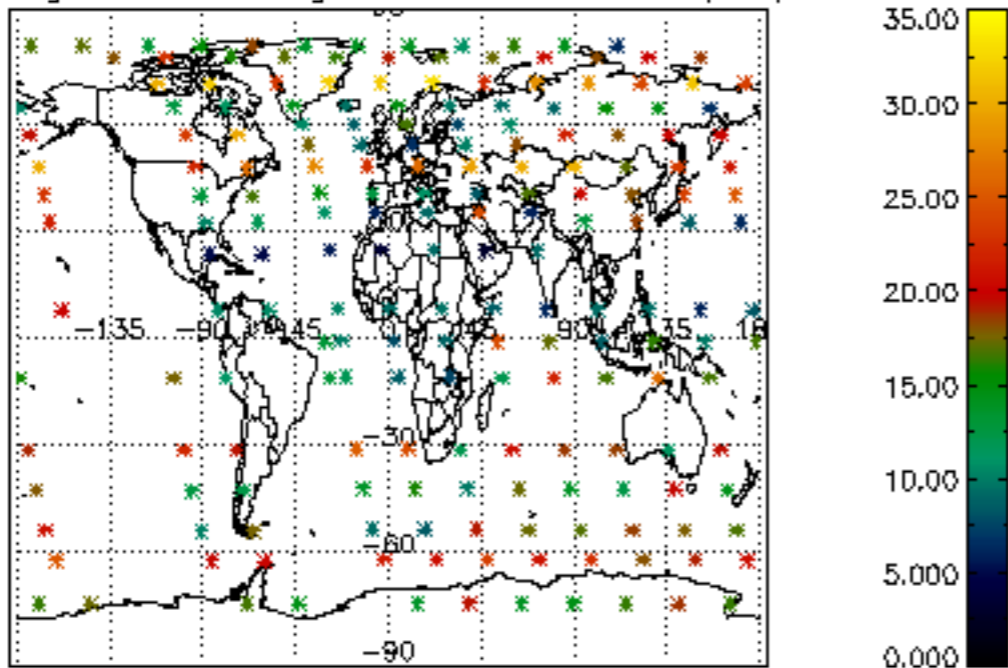
Percentage of cosmic ray hits per profile



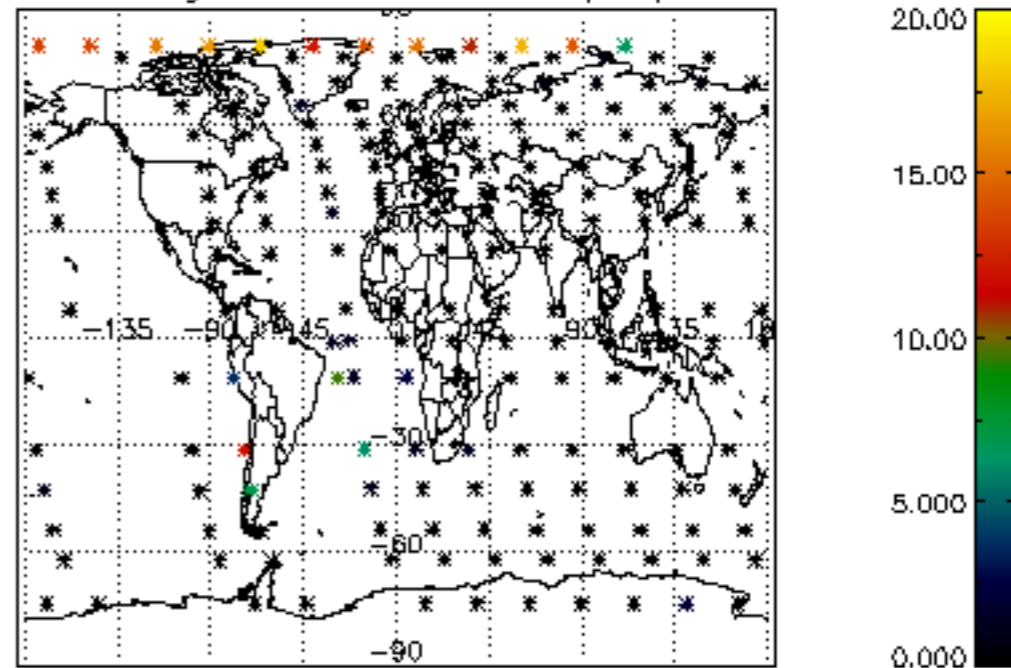
Percentage of datation errors per profile



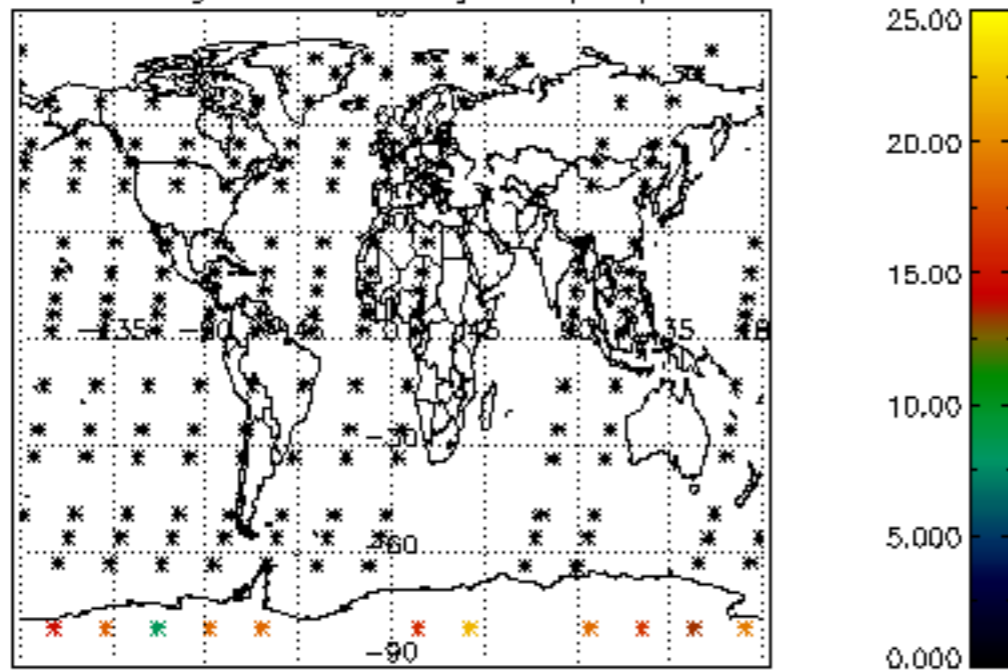
Percentage of star falling outside central band per profile



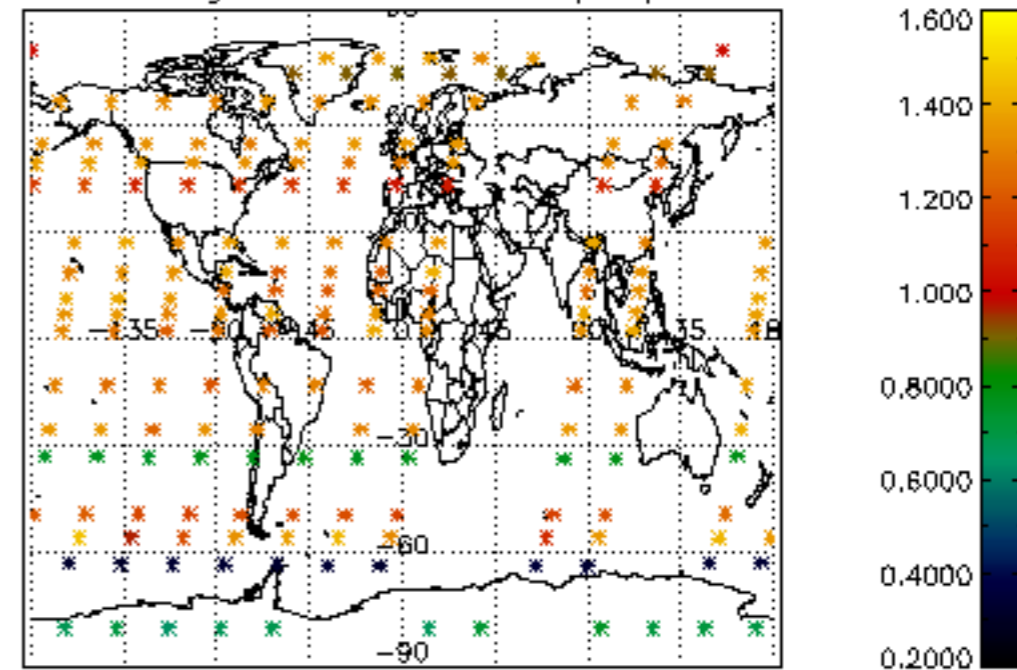
Percentage of saturation errors per profile



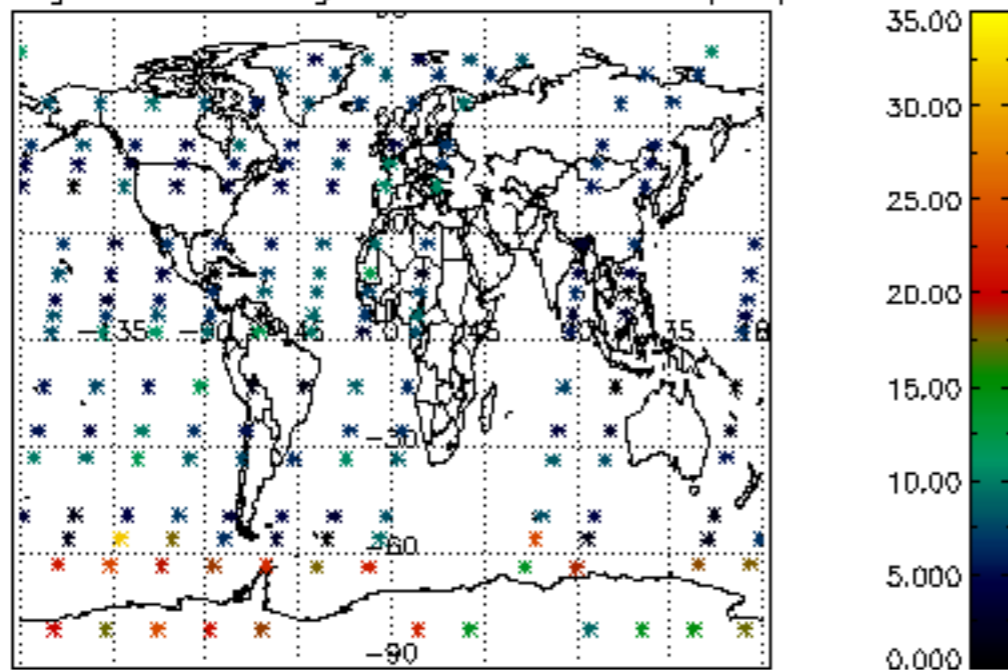
Percentage of cosmic ray hits per profile



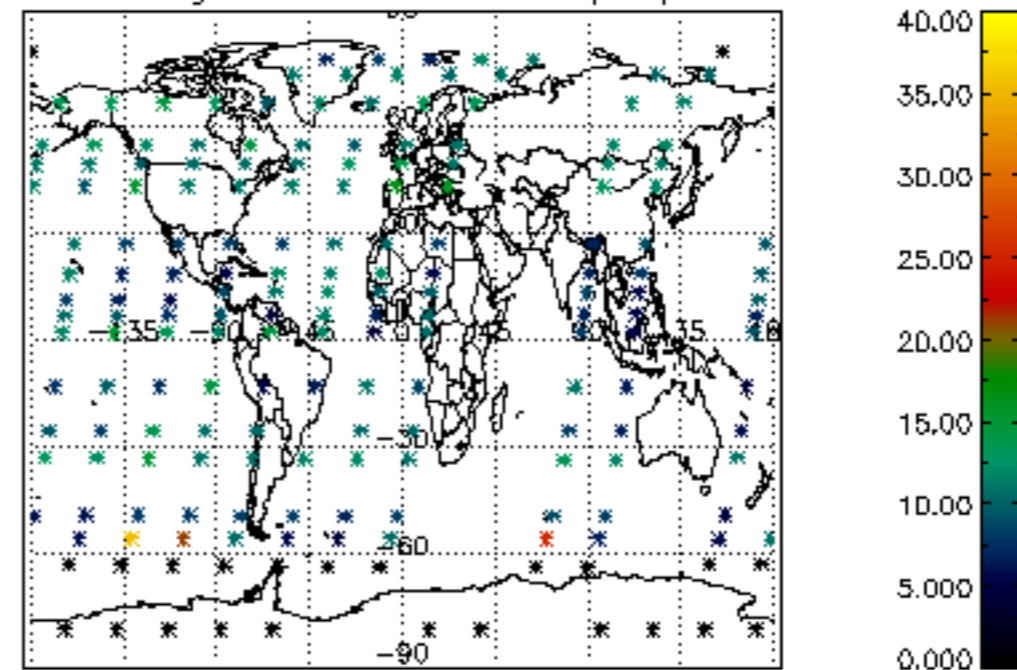
Percentage of datation errors per profile

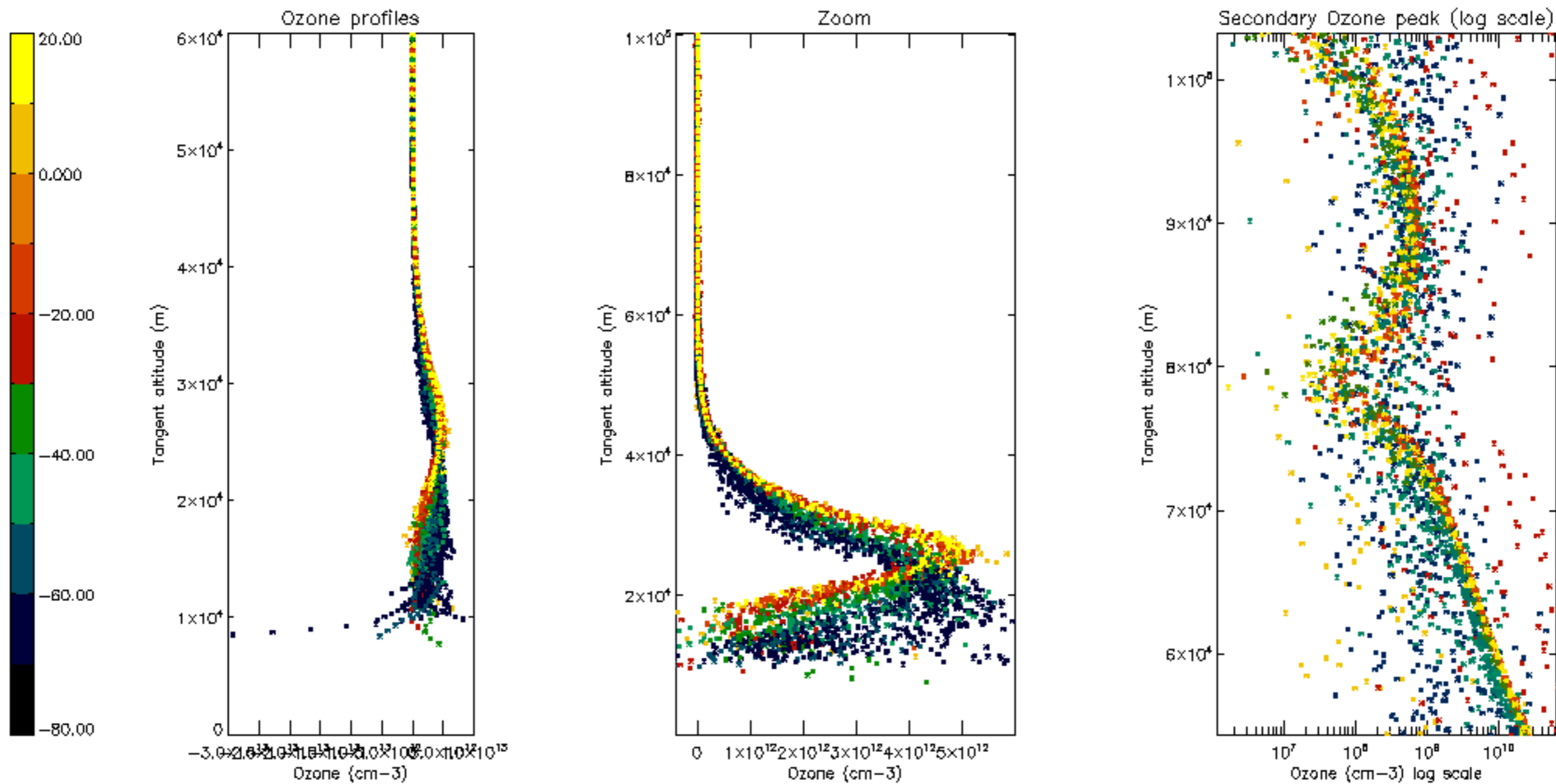


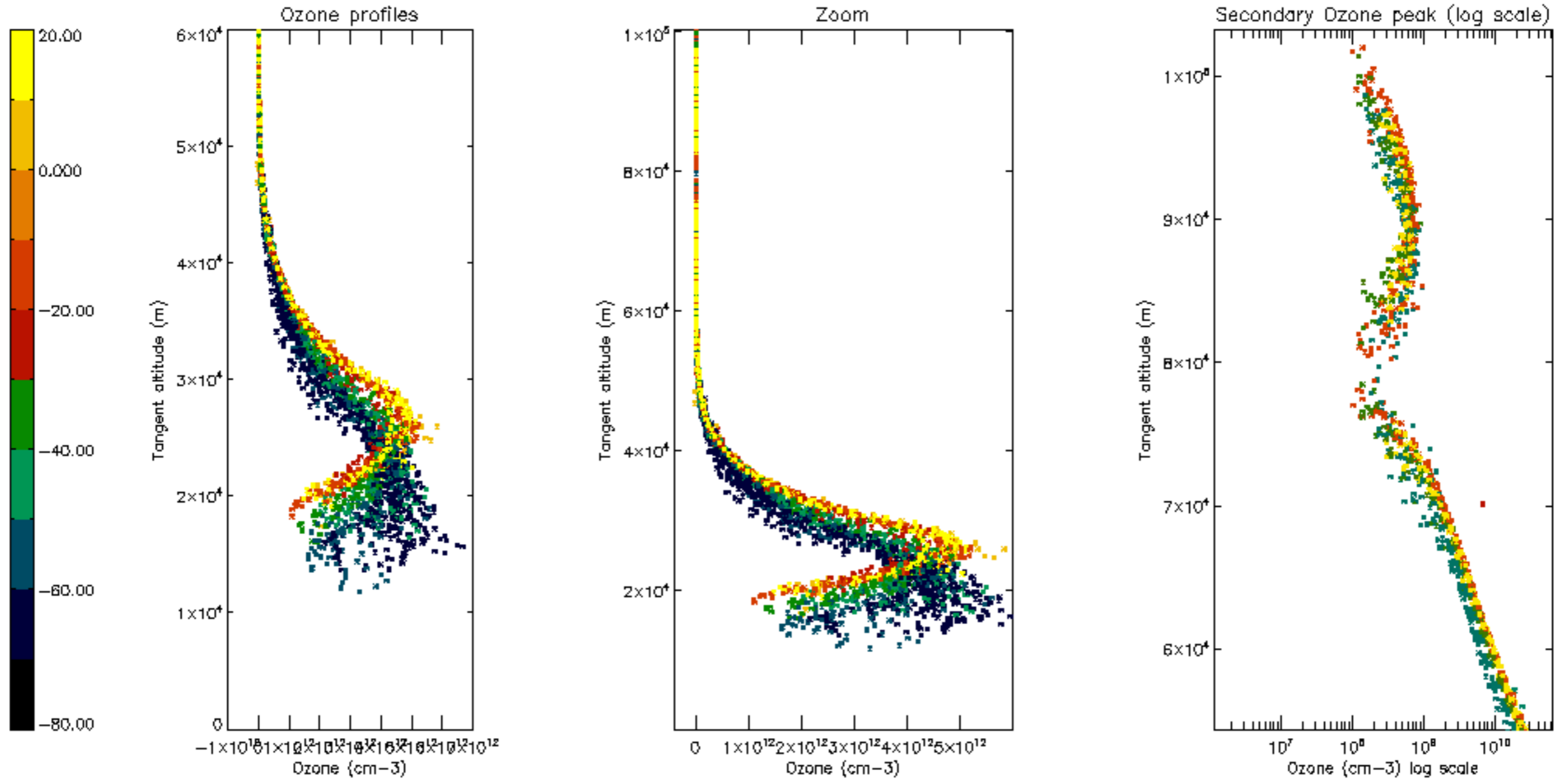
Percentage of star falling outside central band per profile

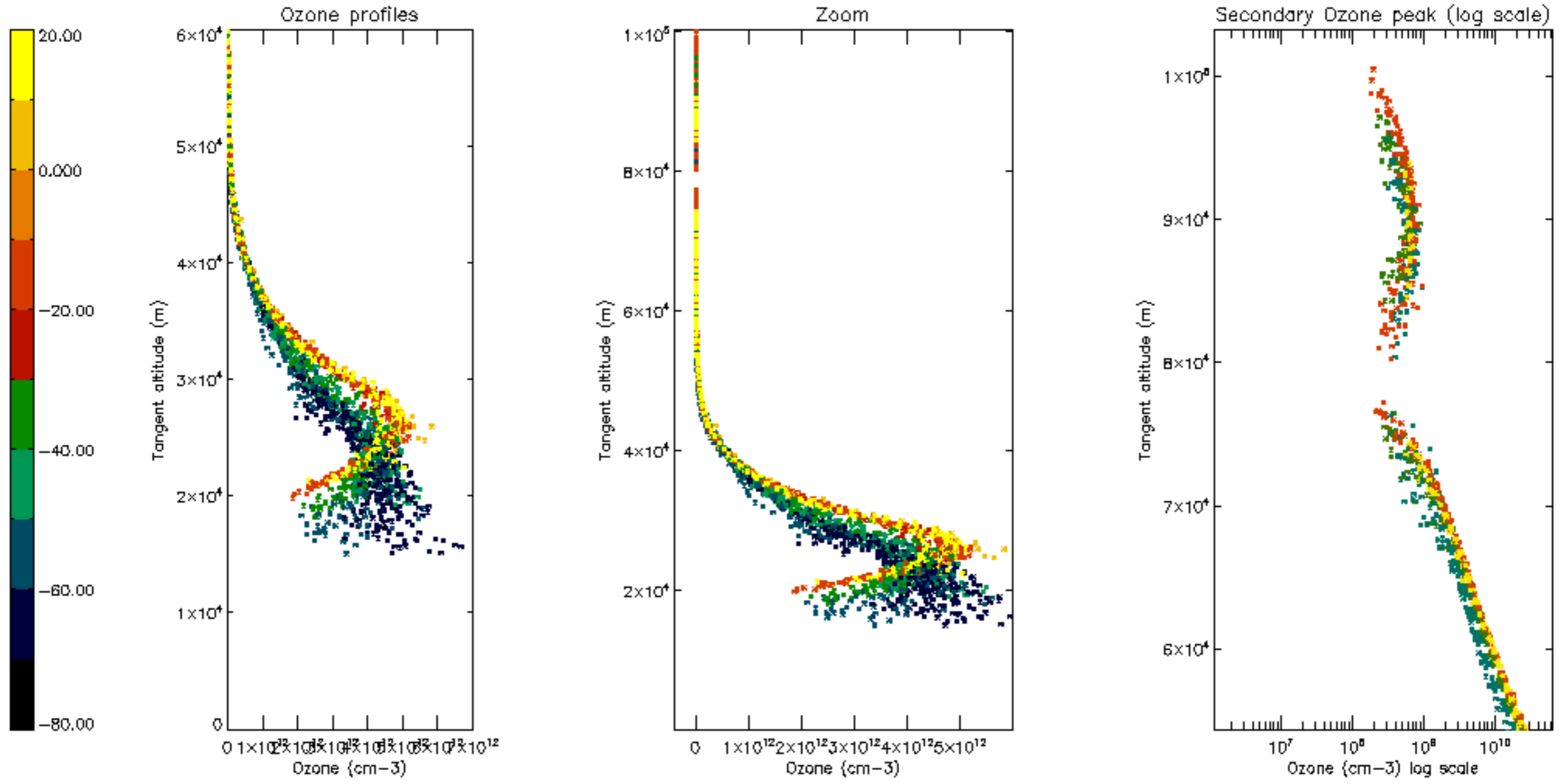


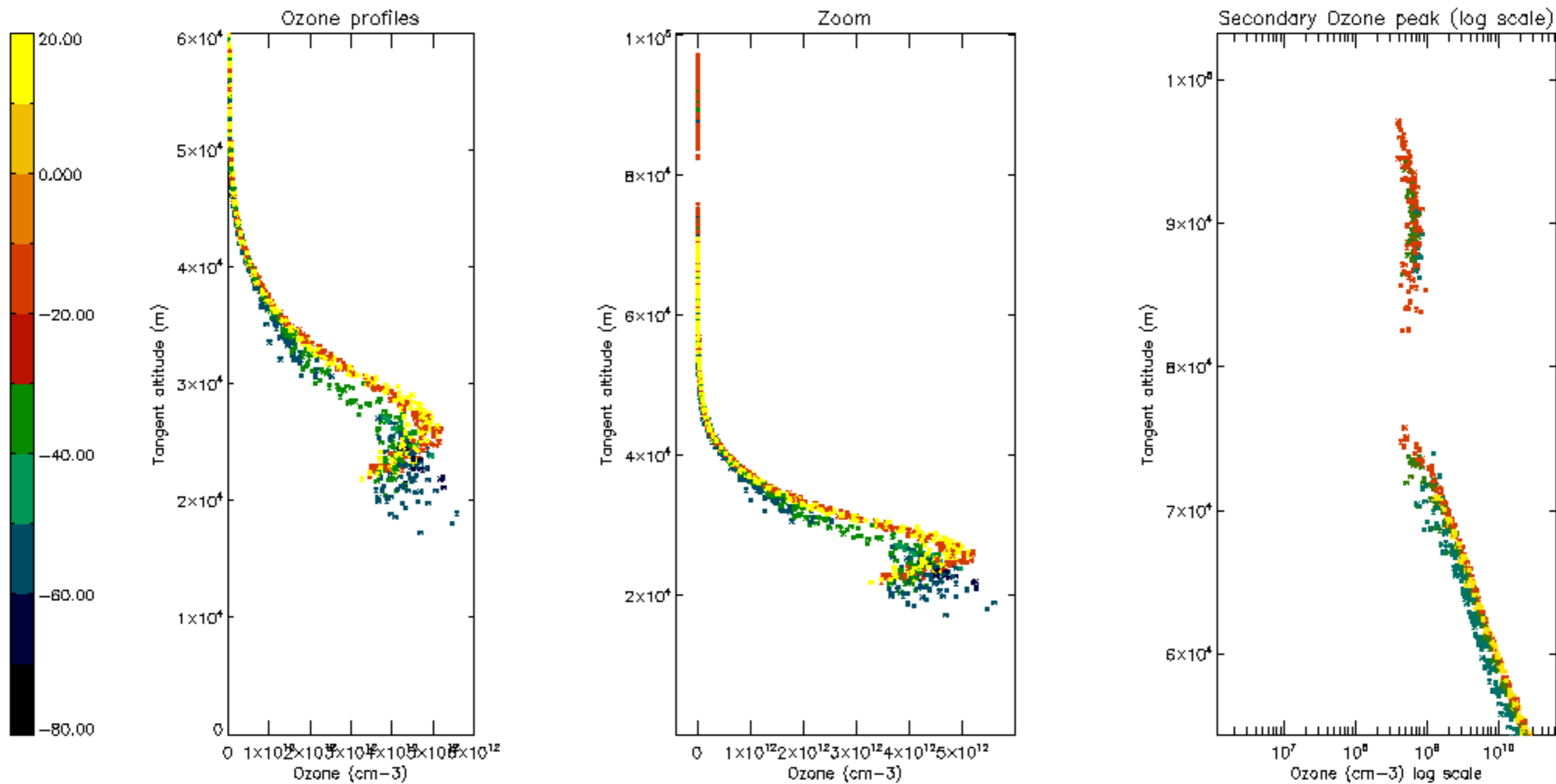
Percentage of saturation errors per profile

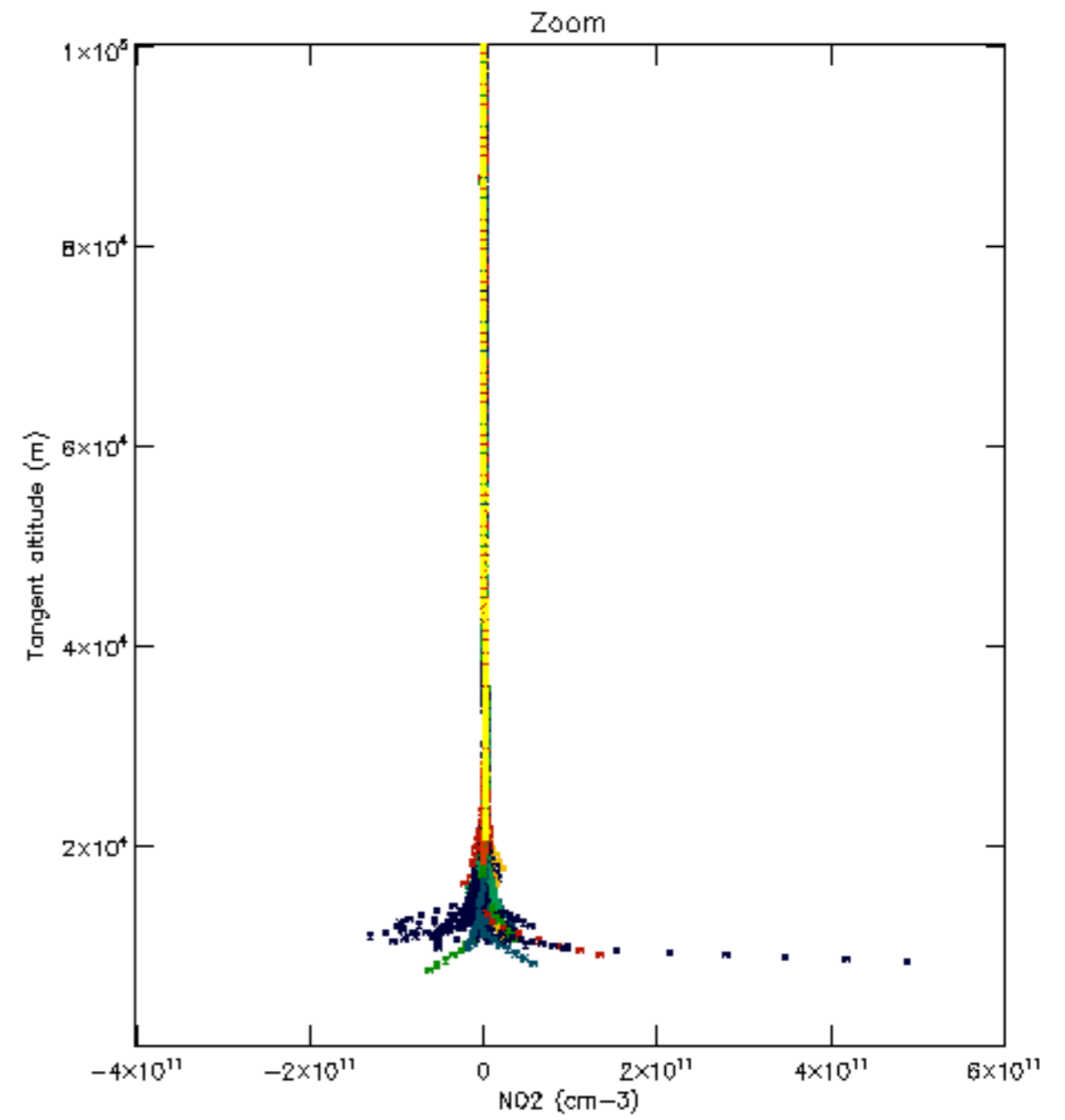
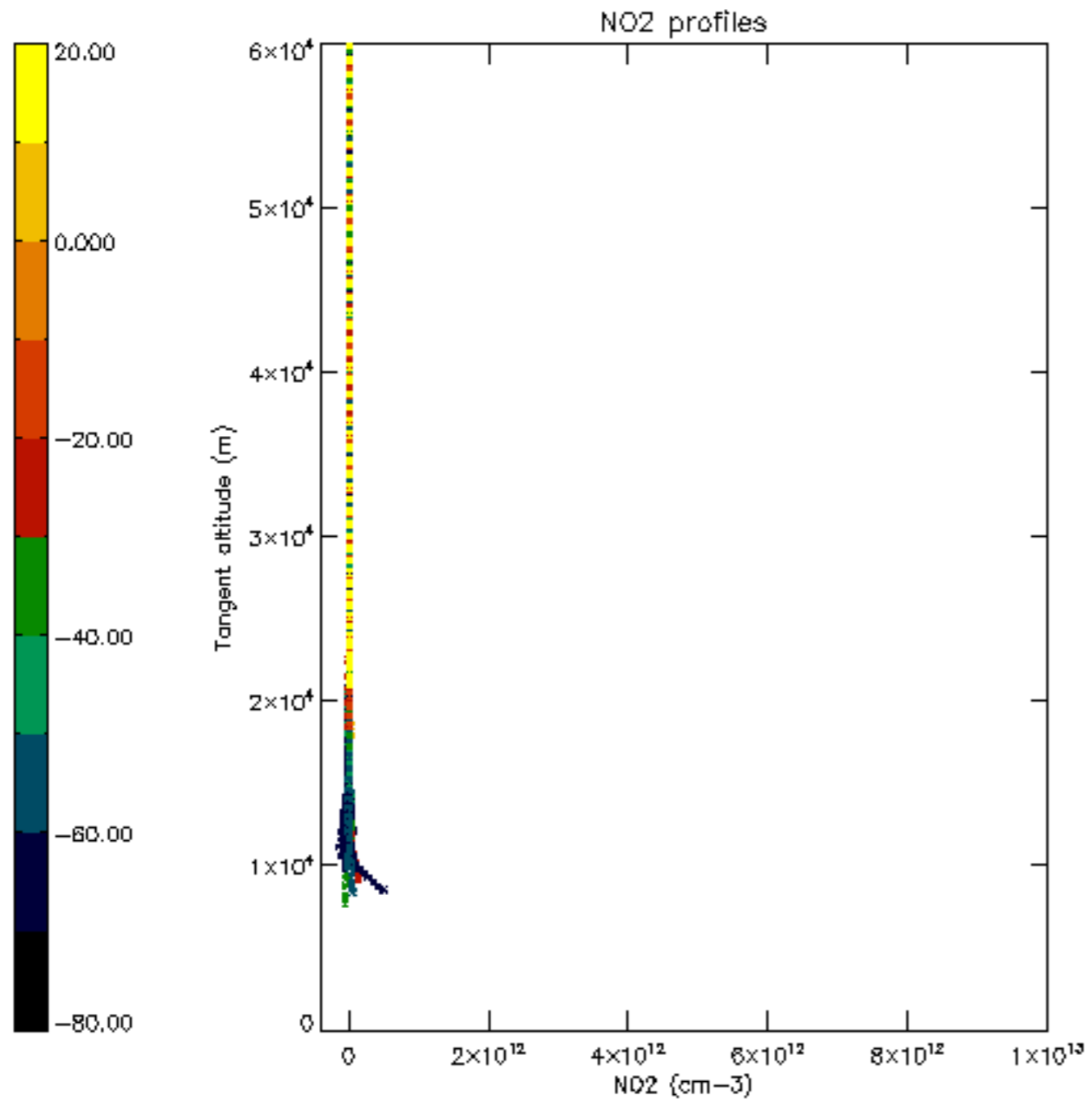


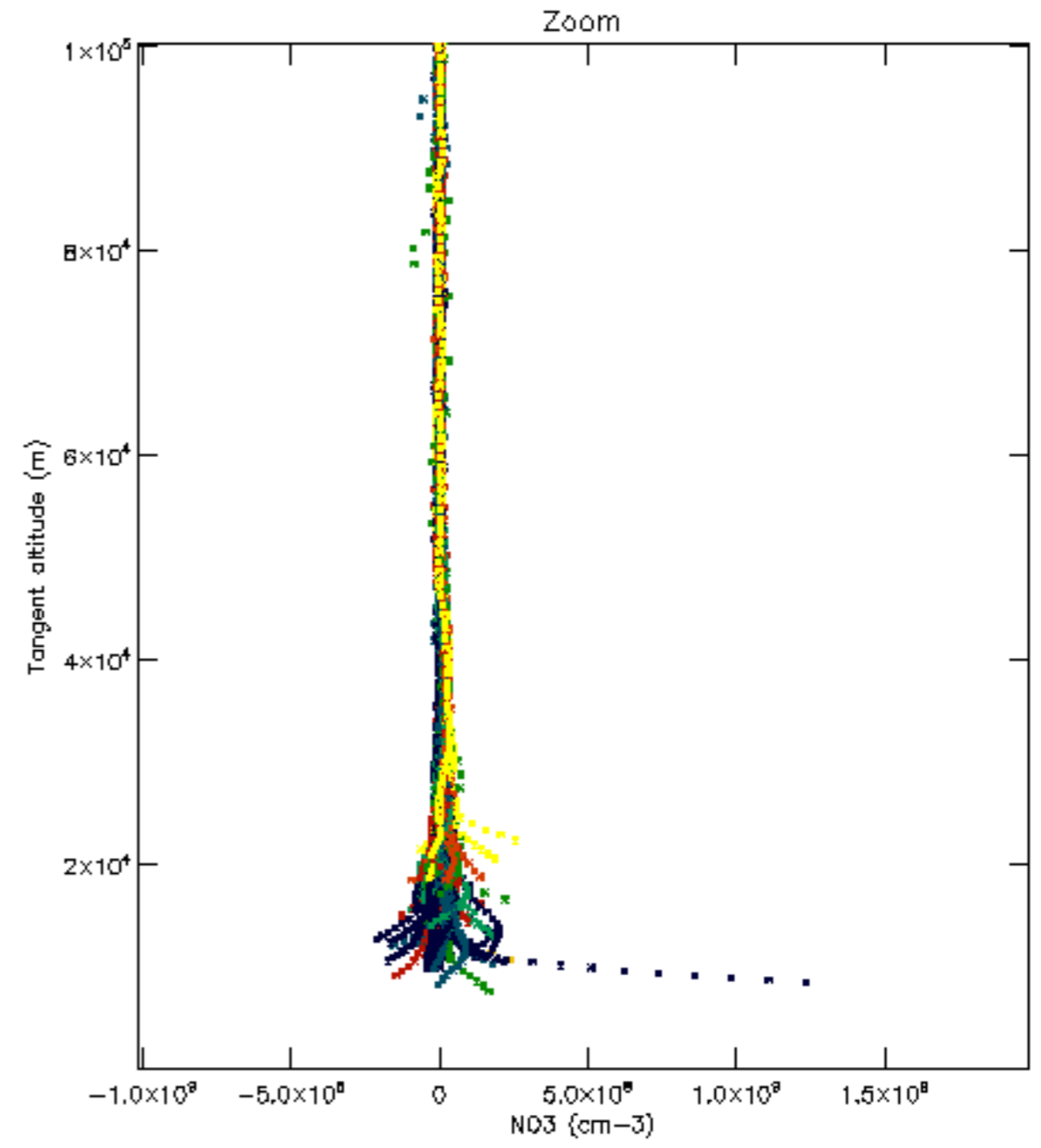
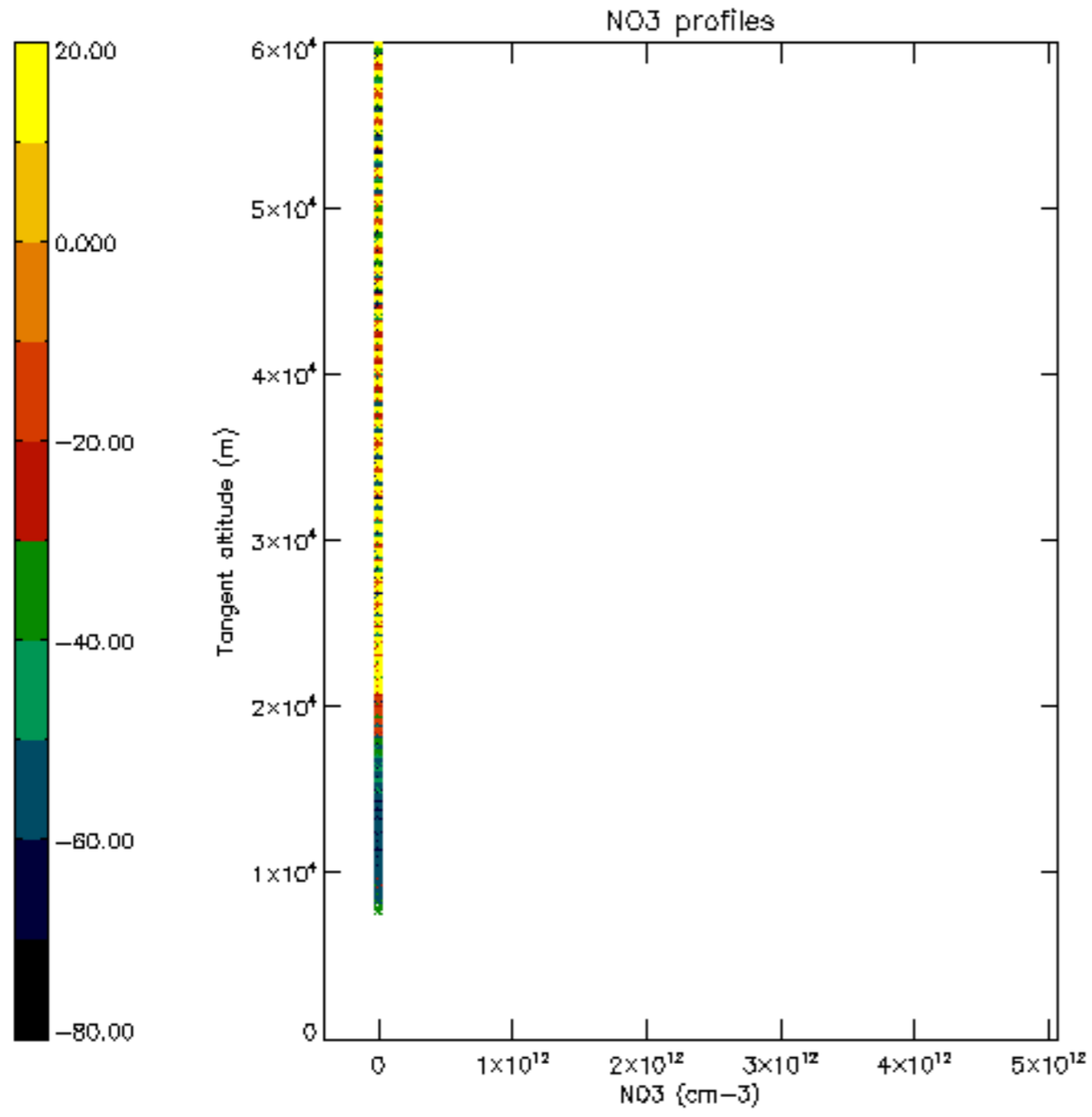


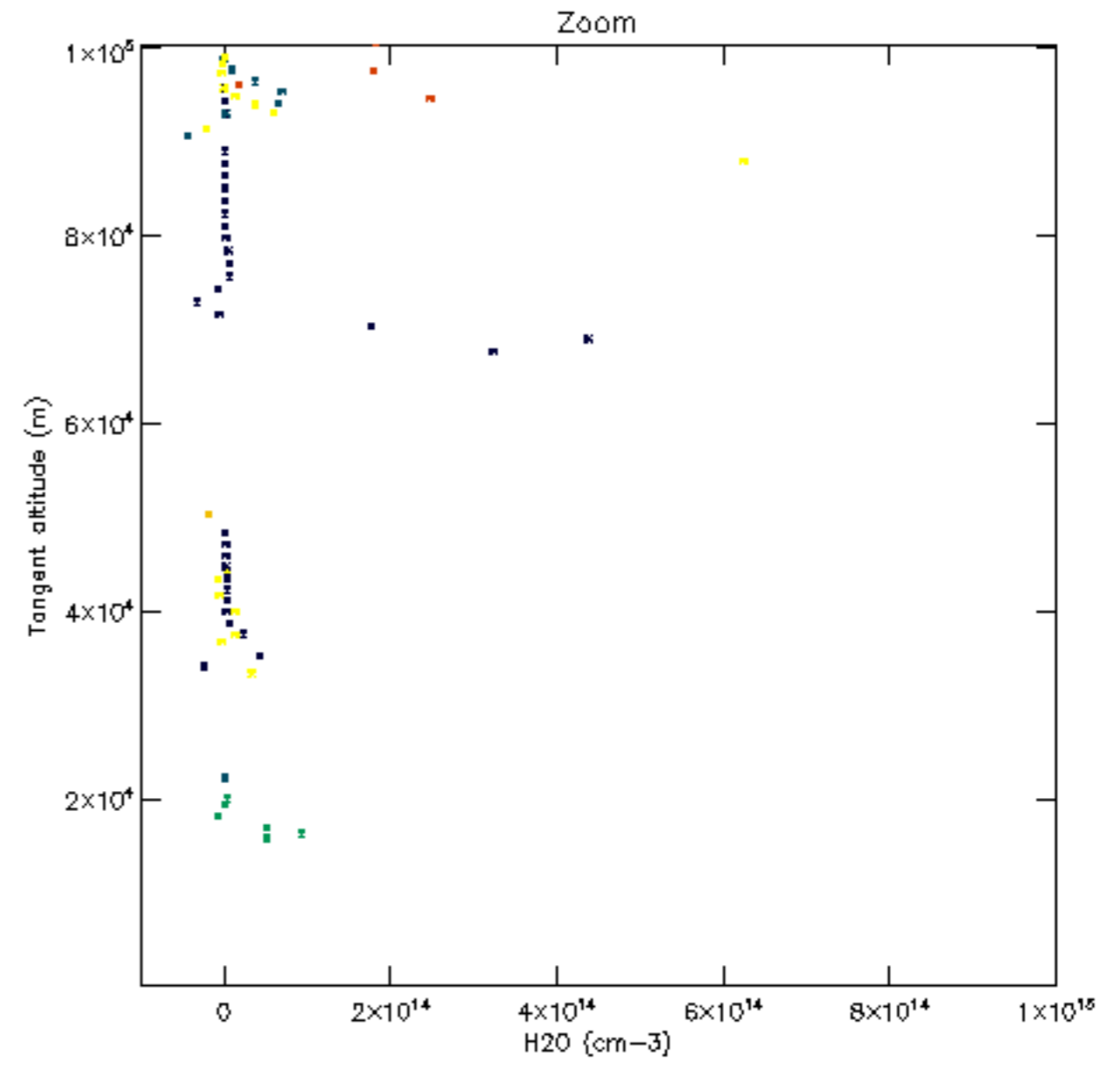
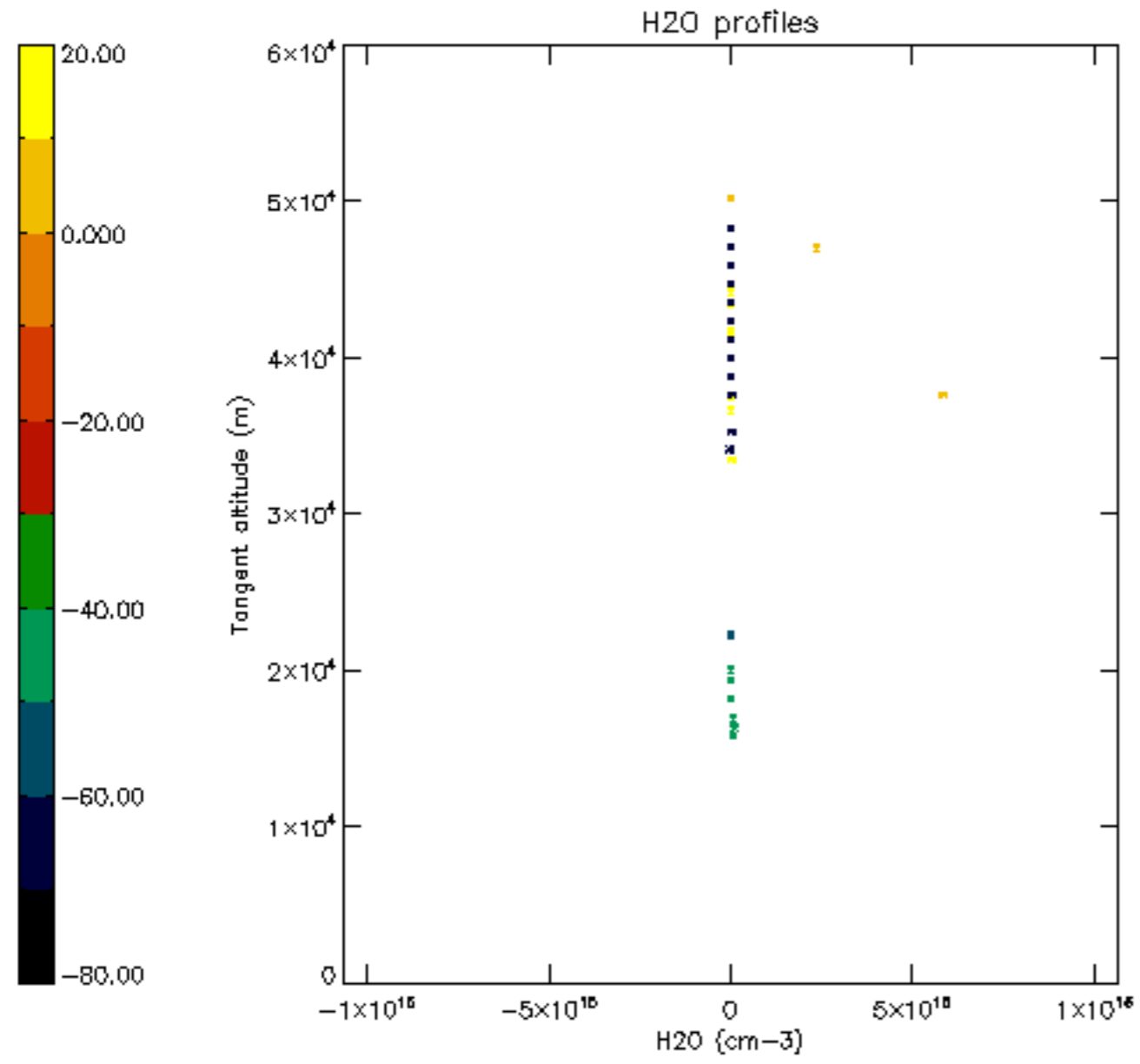


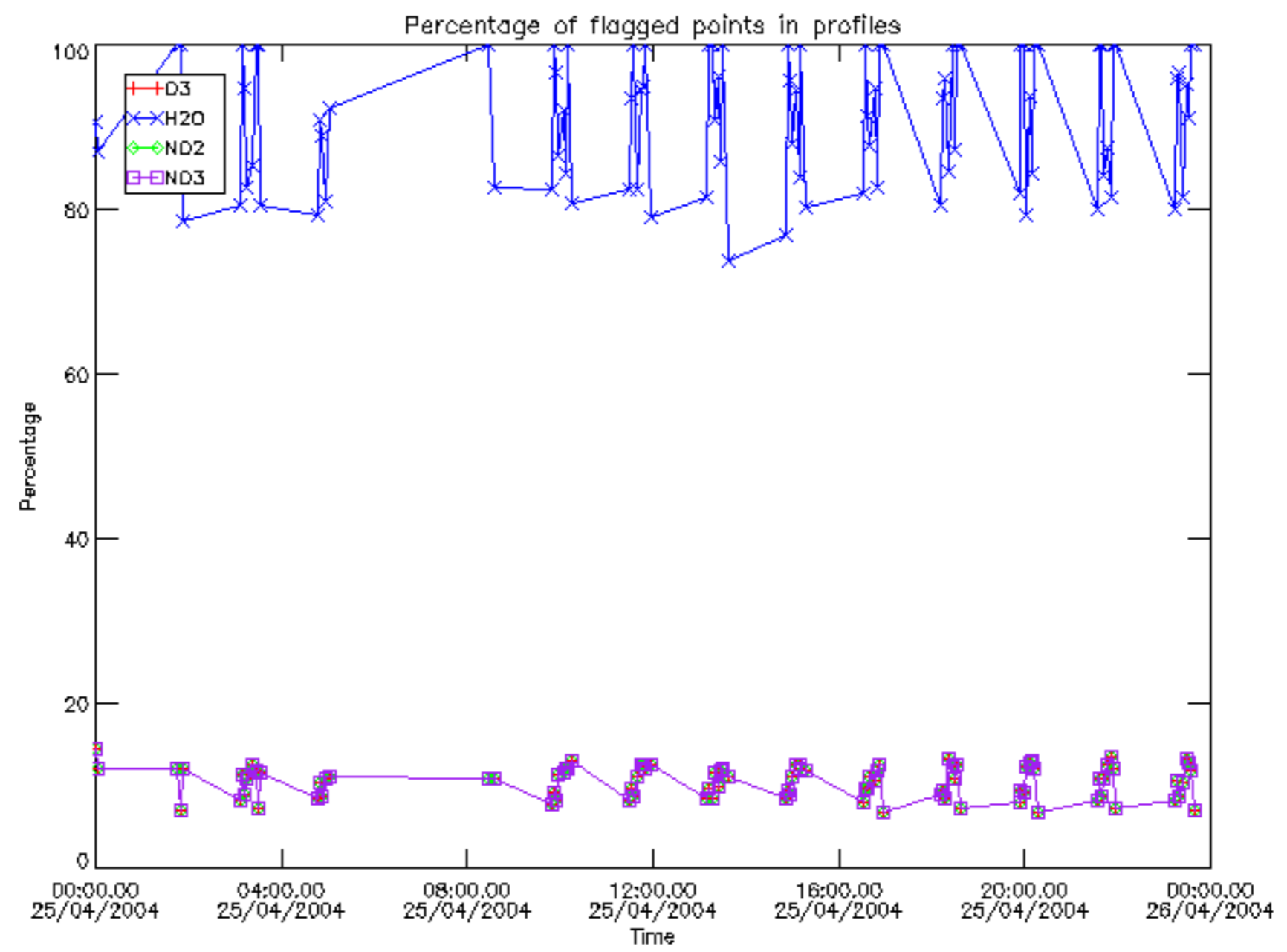




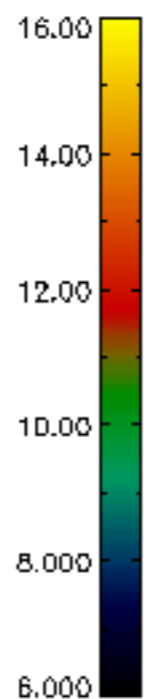
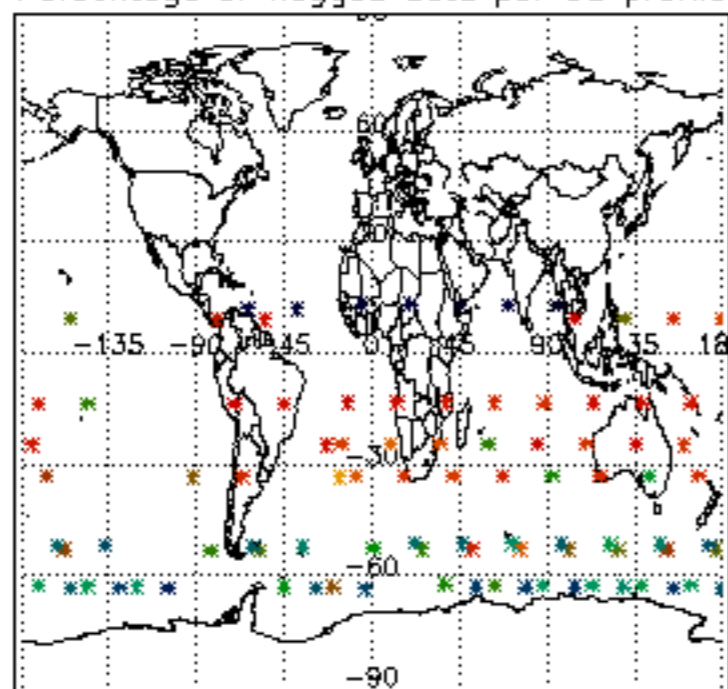




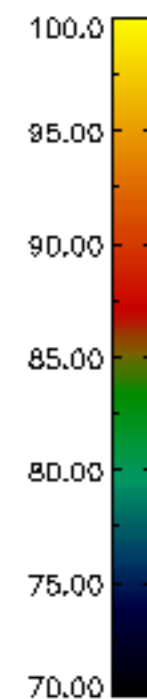
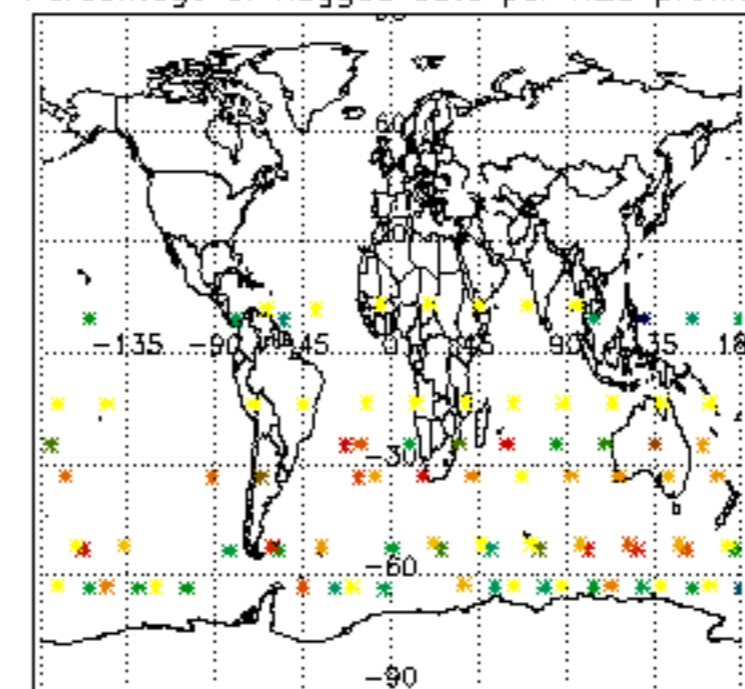




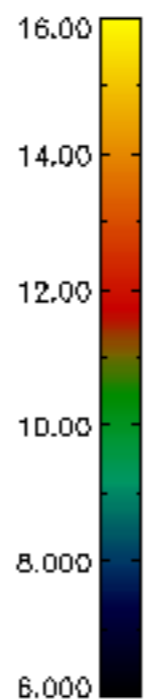
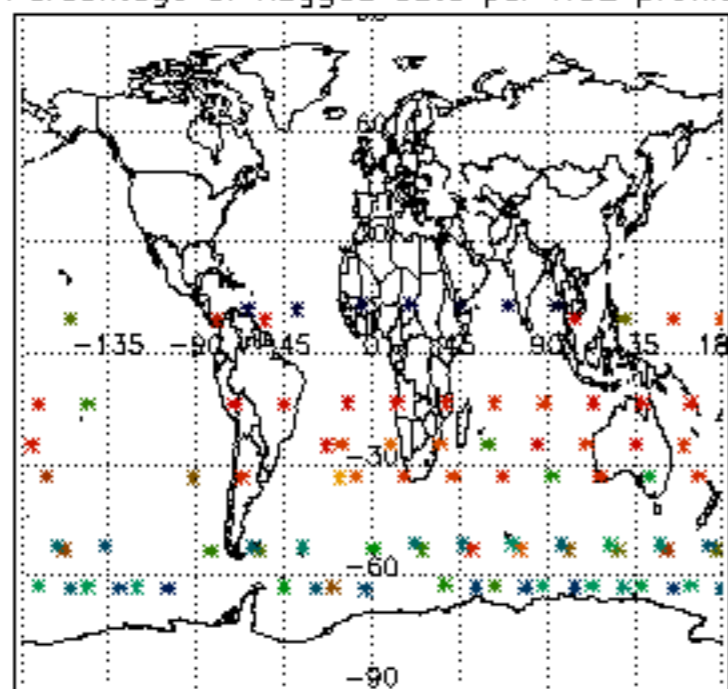
Percentage of flagged data per D3 profile



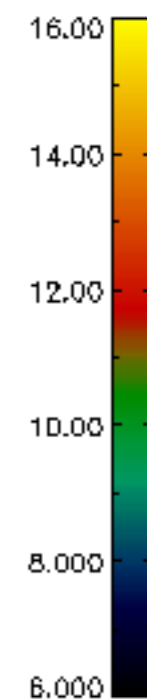
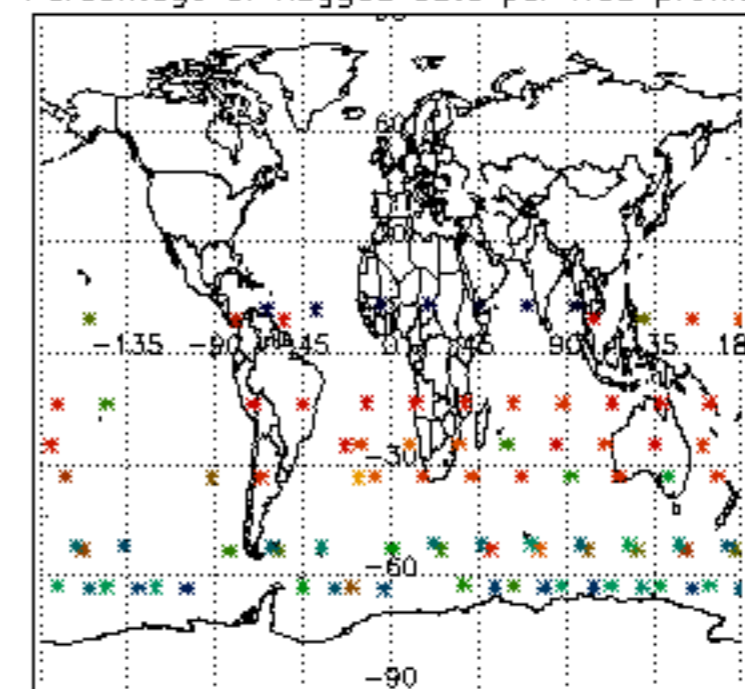
Percentage of flagged data per H2O profile

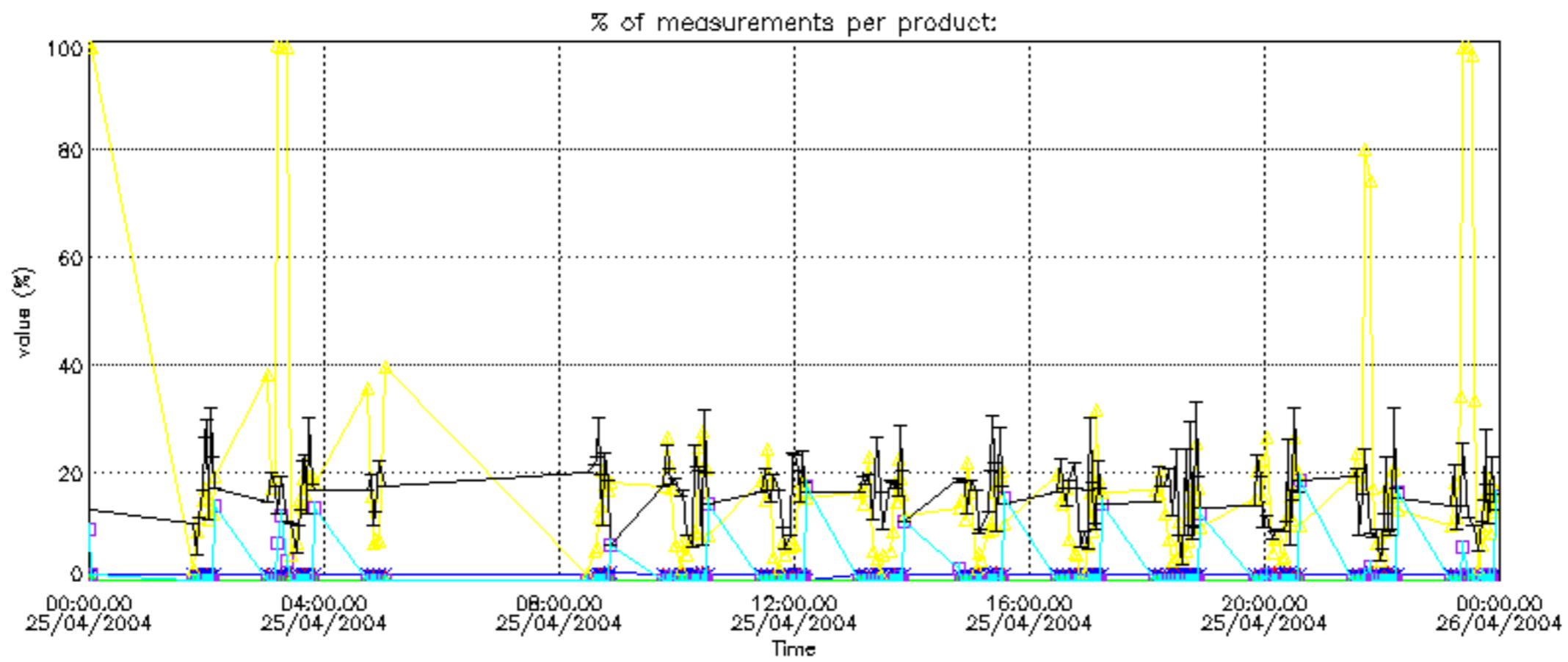
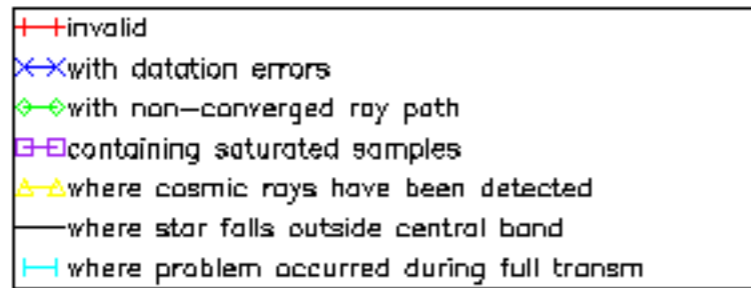


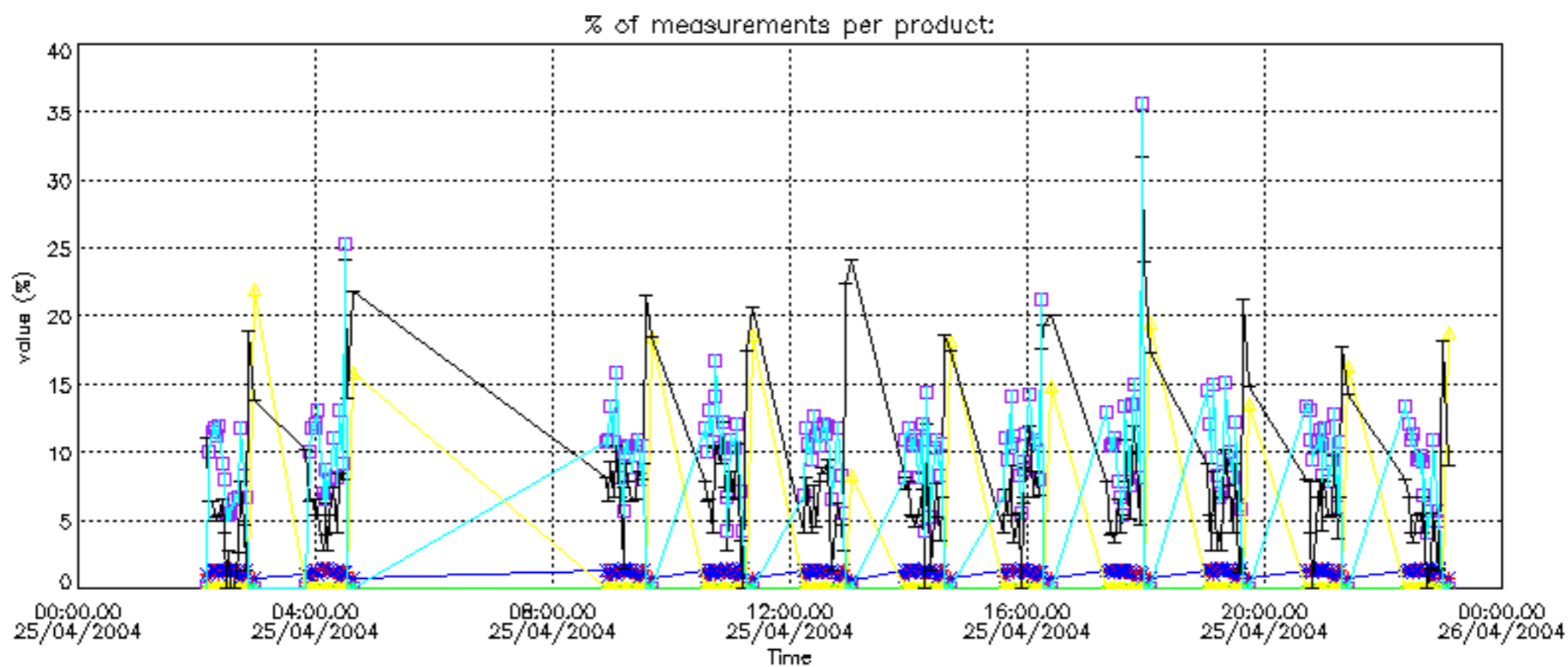
Percentage of flagged data per NO2 profile



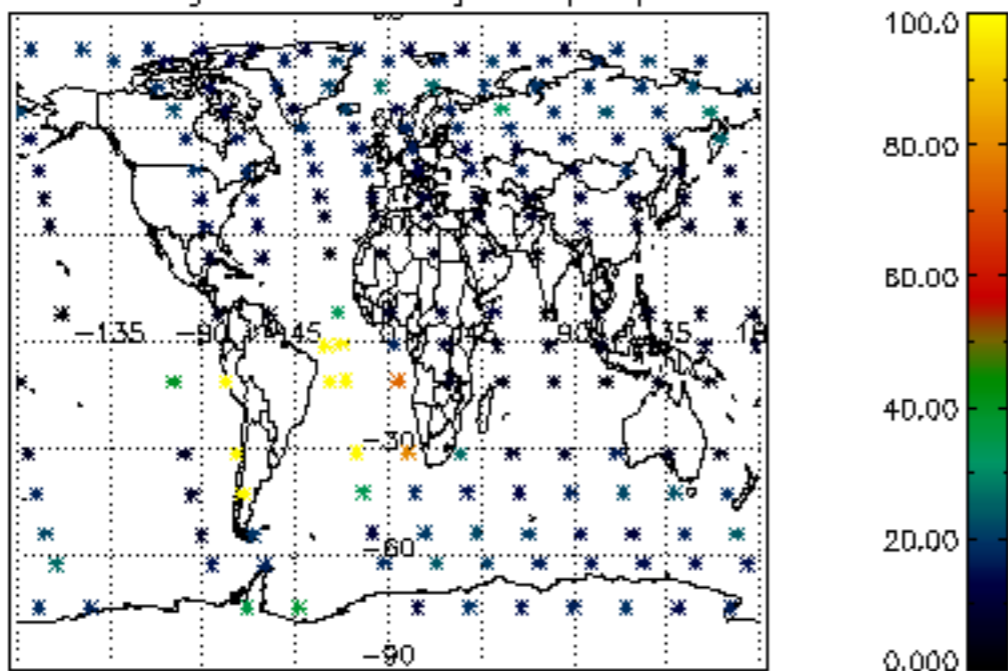
Percentage of flagged data per NO3 profile



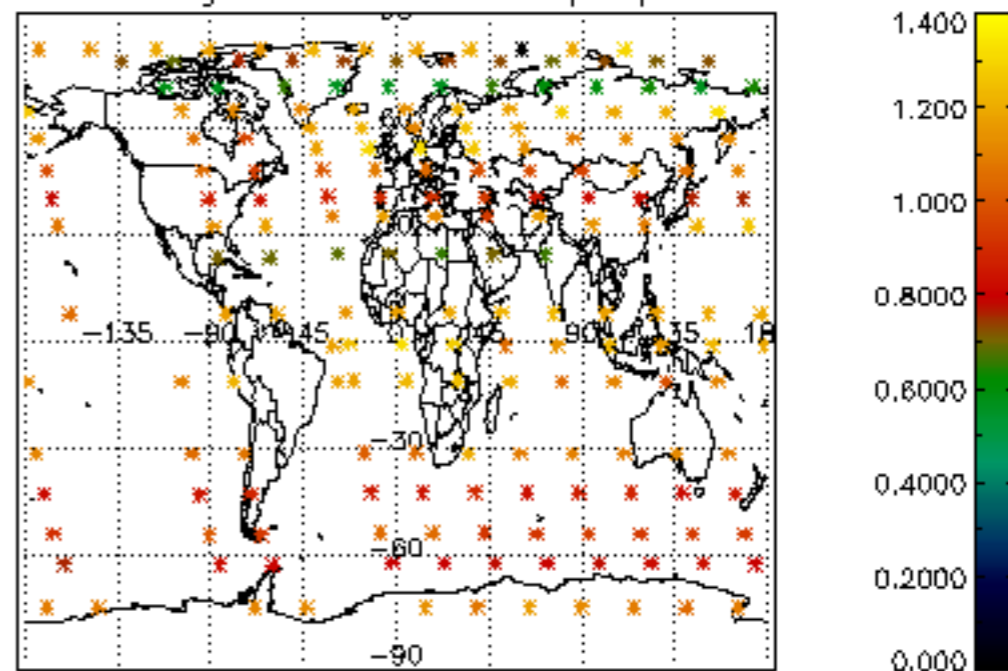




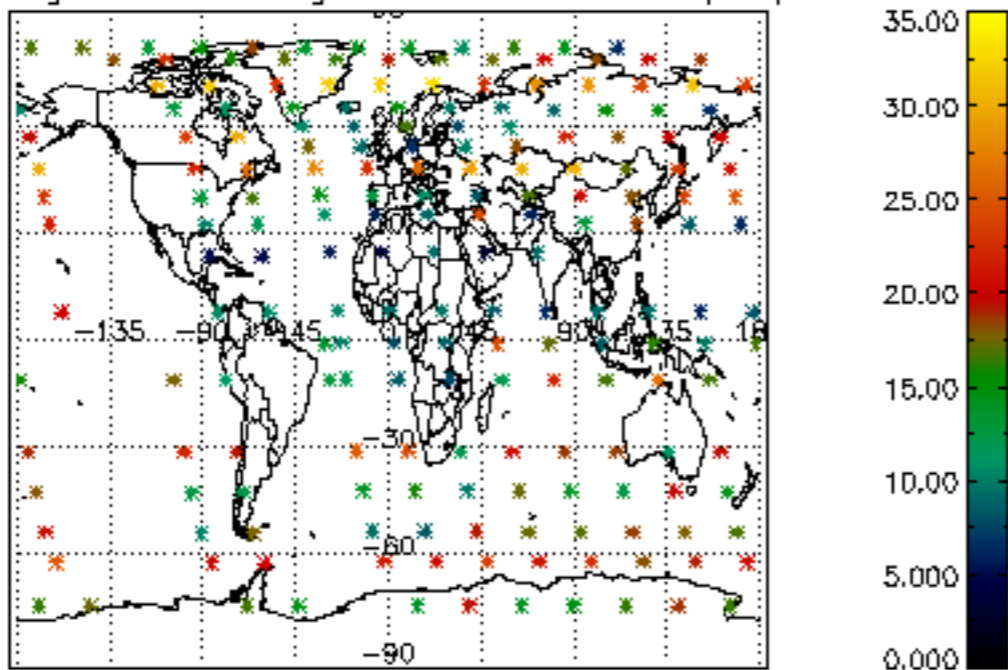
Percentage of cosmic ray hits per profile



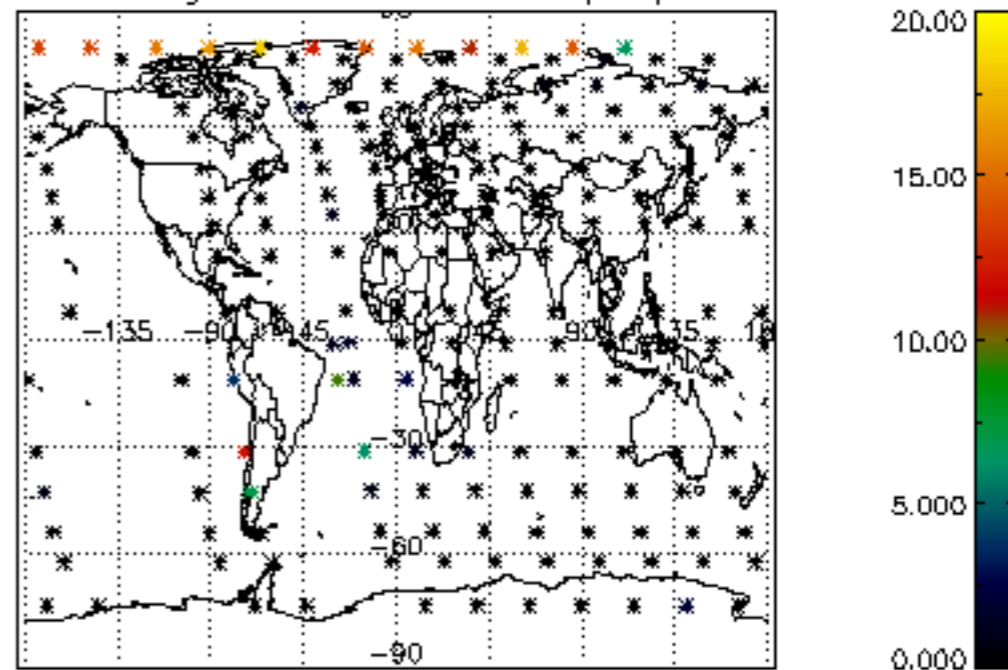
Percentage of datation errors per profile



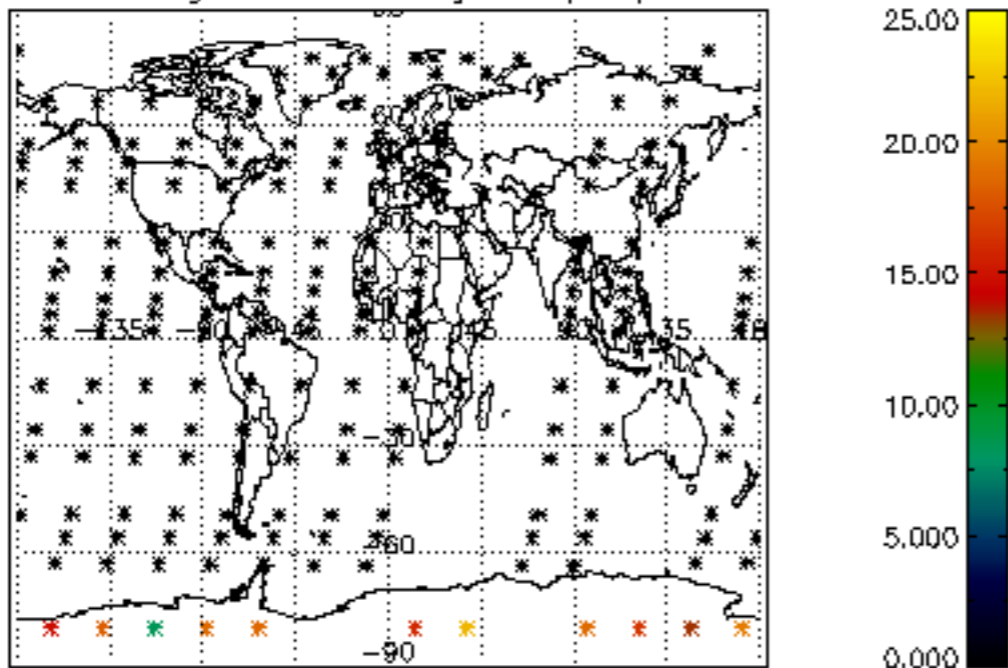
Percentage of star falling outside central band per profile



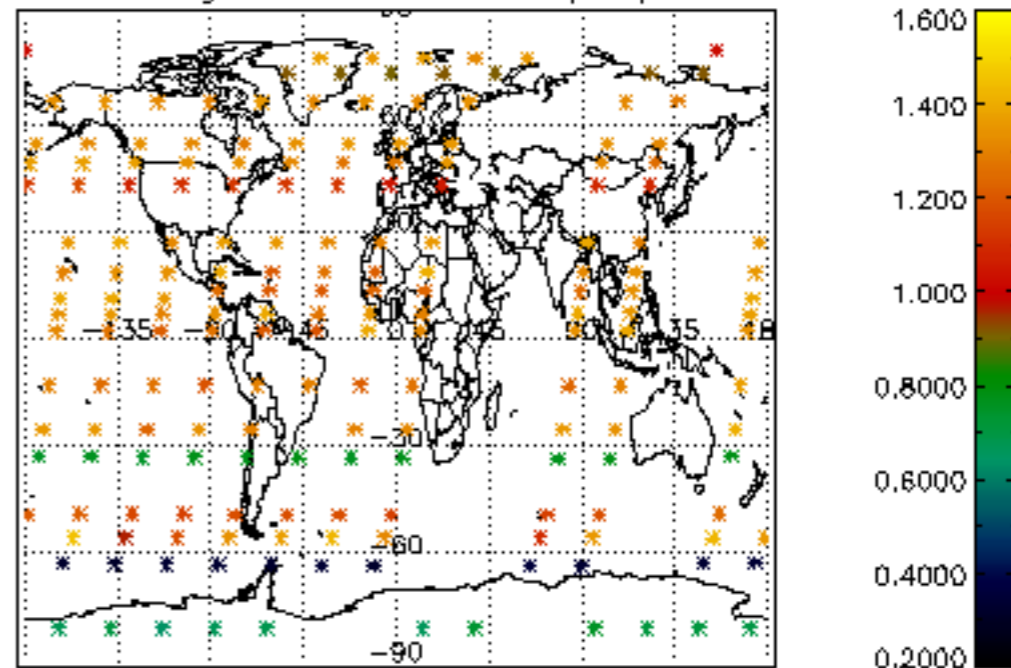
Percentage of saturation errors per profile



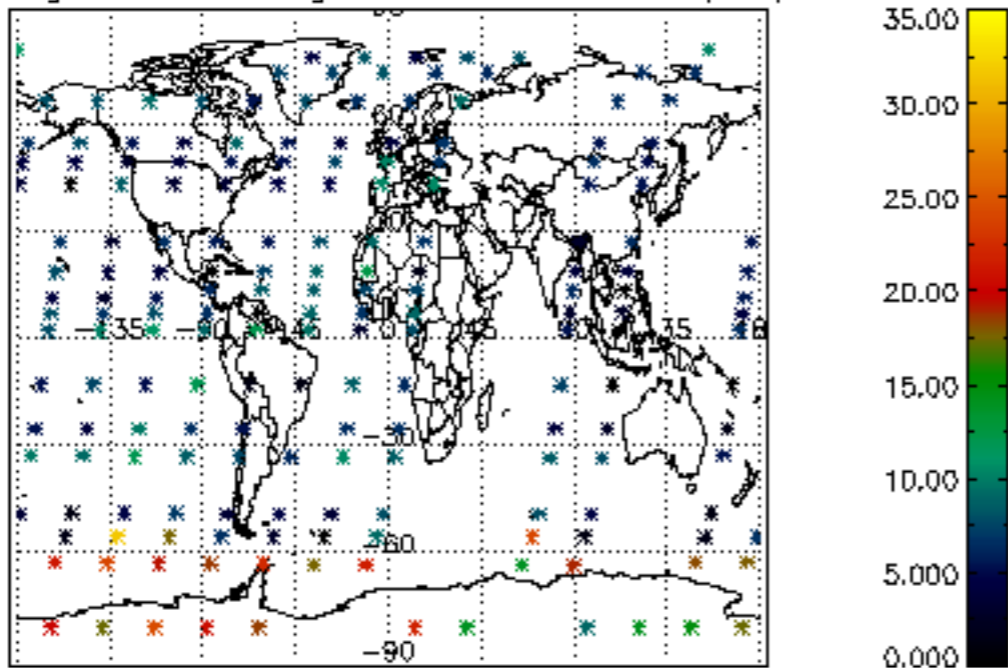
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

