

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	18APR2013 10:45:53
Data source version	GOMOS/6.01
Start time of products	05-09-2005 (05SEP2005 00:00:00)
Stop time of products	06-09-2005 (06SEP2005 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	174
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

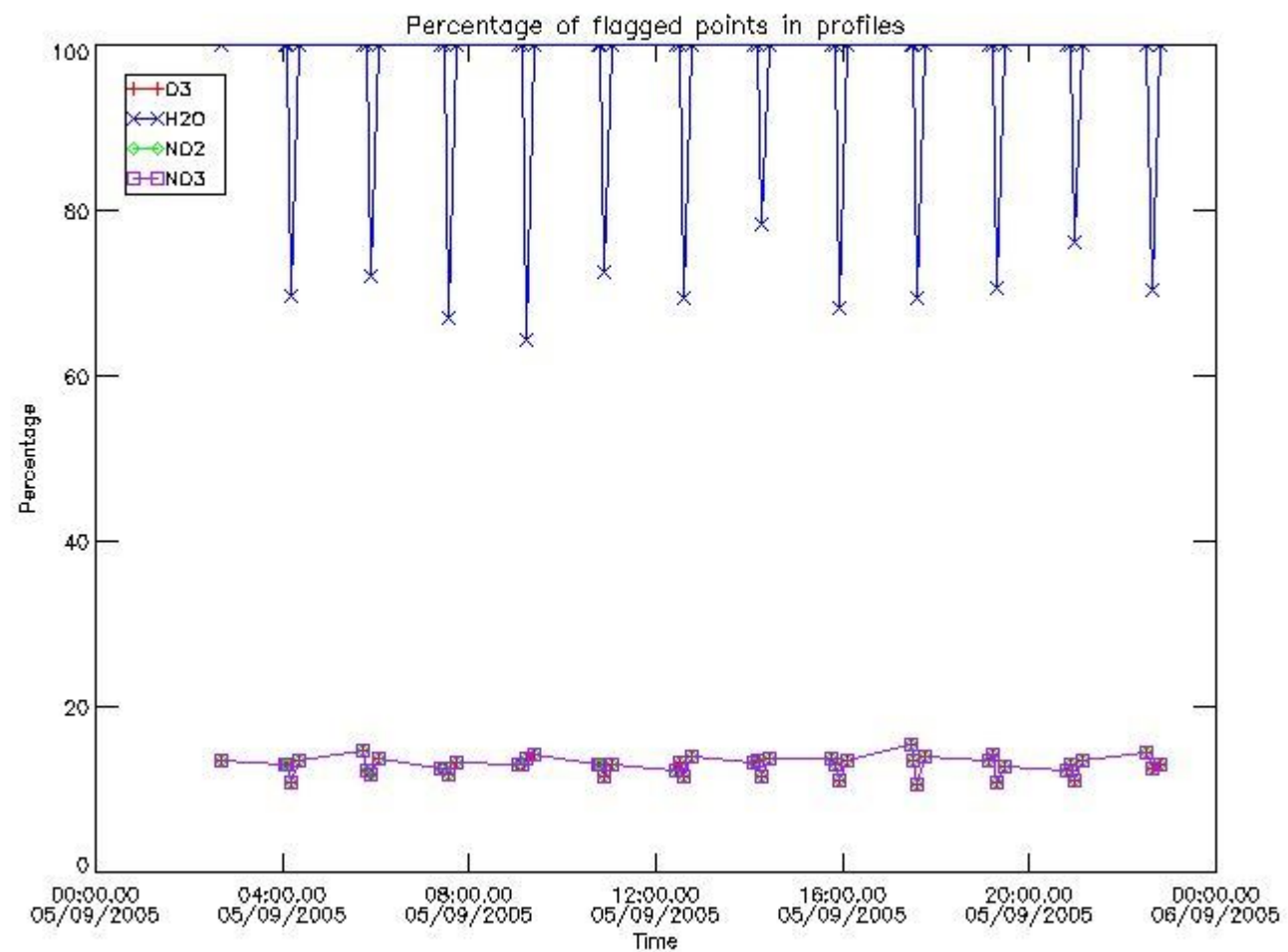
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20050905_024146_000000382040_00290_18380_6470.N1	05-SEP-2005 02:41:46	Dark	38.000	135	Bet Hyi	2.8200	5800.0	76	18380	No
2	GOM_NL__2PRFIN20050905_024720_000000402040_00290_18380_6471.N1	05-SEP-2005 02:47:20	Straylight	39.500	148	Alp Tuc	2.8780	4100.0	79	18380	No
3	GOM_NL__2PRFIN20050905_025101_000000432040_00290_18380_6472.N1	05-SEP-2005 02:51:01	Straylight	42.500	31	Alp Gru	1.7340	15200.	85	18380	No
4	GOM_NL__2PRFIN20050905_025350_000000372040_00290_18380_6473.N1	05-SEP-2005 02:53:50	Straylight	37.000	172	Gam Gru	3.0030	13100.	74	18380	No
5	GOM_NL__2PRFIN20050905_031415_000000352040_00290_18380_6474.N1	05-SEP-2005 03:14:15	Bright	34.500	92	53Eps Cyg	2.5000	4500.0	69	18380	No
6	GOM_NL__2PRFIN20050905_031612_000000372040_00290_18380_6475.N1	05-SEP-2005 03:16:12	Bright	37.000	66	37Gam Cyg	2.2080	5900.0	74	18380	No
7	GOM_NL__2PRFIN20050905_031725_000000382040_00290_18380_6476.N1	05-SEP-2005 03:17:25	Bright	37.500	19	50Alp Cyg	1.2460	10500.	75	18380	No
8	GOM_NL__2PRFIN20050905_033002_000000362040_00290_18380_6477.N1	05-SEP-2005 03:30:02	Bright	35.500	60	7Bet UMi	2.0810	3950.0	71	18380	No
9	GOM_NL__2PRFIN20050905_033638_000000352040_00290_18380_6478.N1	05-SEP-2005 03:36:38	Bright	35.000	36	50Alp UMa	1.8000	6300.0	70	18380	No
10	GOM_NL__2PRFIN20050905_033801_000000442040_00290_18380_6479.N1	05-SEP-2005 03:38:01	Bright	43.500	82	48Bet UMa	2.3650	10600.	87	18380	No
11	GOM_NL__2PRFIN20050905_040231_000000402040_00290_18380_6480.N1	05-SEP-2005 04:02:31	Dark	39.500	132	15Rho Pup	2.8030	6900.0	79	18380	No
12	GOM_NL__2PRFIN20050905_040648_000000402040_00290_18380_6481.N1	05-SEP-2005 04:06:48	Dark	39.500	70	Zet Pup	2.2460	39000.	79	18380	No
13	GOM_NL__2PRFIN20050905_041150_000000472040_00290_18380_6482.N1	05-SEP-2005 04:11:50	Dark	46.500	41	Eps Car	1.8600	4100.0	93	18380	No
14	GOM_NL__2PRFIN20050905_042222_000000382040_00291_18381_6470.N1	05-SEP-2005 04:22:22	Dark	37.500	135	Bet Hyi	2.8200	5800.0	75	18381	No
15	GOM_NL__2PRFIN20050905_042757_000000392040_00291_18381_6471.N1	05-SEP-2005 04:27:57	Straylight	38.500	148	Alp Tuc	2.8780	4100.0	77	18381	No
16	GOM_NL__2PRFIN20050905_043137_000000392040_00291_18381_6472.N1	05-SEP-2005 04:31:37	Straylight	38.500	31	Alp Gru	1.7340	15200.	77	18381	No
17	GOM_NL__2PRFIN20050905_043426_000000372040_00291_18381_6473.N1	05-SEP-2005 04:34:26	Straylight	37.000	172	Gam Gru	3.0030	13100.	74	18381	No
18	GOM_NL__2PRFIN20050905_045452_000000342040_00291_18381_6474.N1	05-SEP-2005 04:54:52	Bright	34.000	92	53Eps Cyg	2.5000	4500.0	68	18381	No
19	GOM_NL__2PRFIN20050905_045649_000000372040_00291_18381_6475.N1	05-SEP-2005 04:56:49	Bright	37.000	66	37Gam Cyg	2.2080	5900.0	74	18381	No
20	GOM_NL__2PRFIN20050905_045801_000000372040_00291_18381_6476.N1	05-SEP-2005 04:58:01	Bright	37.000	19	50Alp Cyg	1.2460	10500.	74	18381	No
21	GOM_NL__2PRFIN20050905_051039_000000332040_00291_18381_6477.N1	05-SEP-2005 05:10:39	Bright	32.500	60	7Bet UMi	2.0810	3950.0	65	18381	No
22	GOM_NL__2PRFIN20050905_051714_000000352040_00291_18381_6478.N1	05-SEP-2005 05:17:14	Bright	34.500	36	50Alp UMa	1.8000	6300.0	69	18381	No
23	GOM_NL__2PRFIN20050905_051837_000000362040_00291_18381_6479.N1	05-SEP-2005 05:18:37	Bright	35.500	82	48Bet UMa	2.3650	10600.	71	18381	No
24	GOM_NL__2PRFIN20050905_054308_000000382040_00291_18381_6480.N1	05-SEP-2005 05:43:08	Dark	38.000	132	15Rho Pup	2.8030	6900.0	76	18381	No
25	GOM_NL__2PRFIN20050905_054724_000000422040_00291_18381_6481.N1	05-SEP-2005 05:47:24	Dark	41.500	70	Zet Pup	2.2460	39000.	83	18381	No
26	GOM_NL__2PRFIN20050905_055226_000000442040_00291_18381_6482.N1	05-SEP-2005 05:52:26	Dark	43.500	41	Eps Car	1.8600	4100.0	87	18381	No
27	GOM_NL__2PRFIN20050905_060258_000000372040_00292_18382_6470.N1	05-SEP-2005 06:02:58	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	18382	No
28	GOM_NL__2PRFIN20050905_060833_000000382040_00292_18382_6471.N1	05-SEP-2005 06:08:33	Straylight	37.500	148	Alp Tuc	2.8780	4100.0	75	18382	No
29	GOM_NL__2PRFIN20050905_061214_000000462040_00292_18382_6472.N1	05-SEP-2005 06:12:14	Straylight	46.000	31	Alp Gru	1.7340	15200.	92	18382	No
30	GOM_NL__2PRFIN20050905_061502_000000382040_00292_18382_6473.N1	05-SEP-2005 06:15:02	Straylight	37.500	172	Gam Gru	3.0030	13100.	75	18382	No
31	GOM_NL__2PRFIN20050905_063528_000000362040_00292_18382_6474.N1	05-SEP-2005 06:35:28	Bright	35.500	92	53Eps Cyg	2.5000	4500.0	71	18382	No
32	GOM_NL__2PRFIN20050905_063725_000000362040_00292_18382_6475.N1	05-SEP-2005 06:37:25	Bright	36.000	66	37Gam Cyg	2.2080	5900.0	72	18382	No
33	GOM_NL__2PRFIN20050905_063837_000000362040_00292_18382_6476.N1	05-SEP-2005 06:38:37	Bright	36.000	19	50Alp Cyg	1.2460	10500.	72	18382	No
34	GOM_NL__2PRFIN20050905_065115_000000372040_00292_18382_6477.N1	05-SEP-2005 06:51:15	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	18382	No
35	GOM_NL__2PRFIN20050905_065750_000000372040_00292_18382_6478.N1	05-SEP-2005 06:57:50	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	18382	No
36	GOM_NL__2PRFIN20050905_065913_000000352040_00292_18382_6479.N1	05-SEP-2005 06:59:13	Bright	35.000	82	48Bet UMa	2.3650	10600.	70	18382	No
37	GOM_NL__2PRFIN20050905_072344_000000412040_00292_18382_6480.N1	05-SEP-2005 07:23:44	Dark	40.500	132	15Rho Pup	2.8030	6900.0	81	18382	No
38	GOM_NL__2PRFIN20050905_072800_000000412040_00292_18382_6481.N1	05-SEP-2005 07:28:00	Dark	40.500	70	Zet Pup	2.2460	39000.	81	18382	No
39	GOM_NL__2PRFIN20050905_073302_000000432040_00292_18382_6482.N1	05-SEP-2005 07:33:02	Dark	43.000	41	Eps Car	1.8600	4100.0	86	18382	No
40	GOM_NL__2PRFIN20050905_074334_000000392040_00293_18383_6470.N1	05-SEP-2005 07:43:34	Dark	38.500	135	Bet Hyi	2.8200	5800.0	77	18383	No
41	GOM_NL__2PRFIN20050905_074909_000000392040_00293_18383_6471.N1	05-SEP-2005 07:49:09	Straylight	38.500	148	Alp Tuc	2.8780	4100.0	77	18383	No
42	GOM_NL__2PRFIN20050905_075250_000000412040_00293_18383_6472.N1	05-SEP-2005 07:52:50	Straylight	40.500	31	Alp Gru	1.7340	15200.	81	18383	No

161	GOM_NL__2PRFIN20050905_220439_000000352040_00301_18391_6504.N1	05-SEP-2005 22:04:39	Bright	34.500	82	48Bet UMa	2.3650	10600.	69	18391	No
162	GOM_NL__2PRFIN20050905_222910_000000392040_00301_18391_6505.N1	05-SEP-2005 22:29:10	Dark	38.500	132	15Rho Pup	2.8030	6900.0	77	18391	No
163	GOM_NL__2PRFIN20050905_223826_000000412040_00301_18391_6506.N1	05-SEP-2005 22:38:26	Dark	41.000	41	Eps Car	1.8600	4100.0	82	18391	No
164	GOM_NL__2PRFIN20050905_224859_000000402040_00302_18392_6494.N1	05-SEP-2005 22:48:59	Dark	39.500	135	Bet Hyi	2.8200	5800.0	79	18392	No
165	GOM_NL__2PRFIN20050905_225434_000000372040_00302_18392_6495.N1	05-SEP-2005 22:54:34	Straylight	37.000	148	Alp Tuc	2.8780	4100.0	74	18392	No
166	GOM_NL__2PRFIN20050905_225815_000000432040_00302_18392_6496.N1	05-SEP-2005 22:58:15	Straylight	42.500	31	Alp Gru	1.7340	15200.	85	18392	No
167	GOM_NL__2PRFIN20050905_230103_000000382040_00302_18392_6497.N1	05-SEP-2005 23:01:03	Straylight	38.000	172	Gam Gru	3.0030	13100.	76	18392	No
168	GOM_NL__2PRFIN20050905_231009_000000382040_00302_18392_6498.N1	05-SEP-2005 23:10:09	Bright	37.500	154	22Bet Aqr	2.8990	5700.0	75	18392	No
169	GOM_NL__2PRFIN20050905_232128_000000372040_00302_18392_6499.N1	05-SEP-2005 23:21:28	Bright	36.500	92	53Eps Cyg	2.5000	4500.0	73	18392	No
170	GOM_NL__2PRFIN20050905_232326_000000352040_00302_18392_6500.N1	05-SEP-2005 23:23:26	Bright	34.500	66	37Gam Cyg	2.2080	5900.0	69	18392	No
171	GOM_NL__2PRFIN20050905_232437_000000332040_00302_18392_6501.N1	05-SEP-2005 23:24:37	Bright	33.000	19	50Alp Cyg	1.2460	10500.	66	18392	No
172	GOM_NL__2PRFIN20050905_233717_000000352040_00302_18392_6502.N1	05-SEP-2005 23:37:17	Bright	34.500	60	7Bet UMi	2.0810	3950.0	69	18392	No
173	GOM_NL__2PRFIN20050905_234352_000000342040_00302_18392_6503.N1	05-SEP-2005 23:43:52	Bright	34.000	36	50Alp UMa	1.8000	6300.0	68	18392	No
174	GOM_NL__2PRFIN20050905_234515_000000492040_00302_18392_6504.N1	05-SEP-2005 23:45:15	Bright	49.000	82	48Bet UMa	2.3650	10600.	98	18392	No

3. Quality information per product

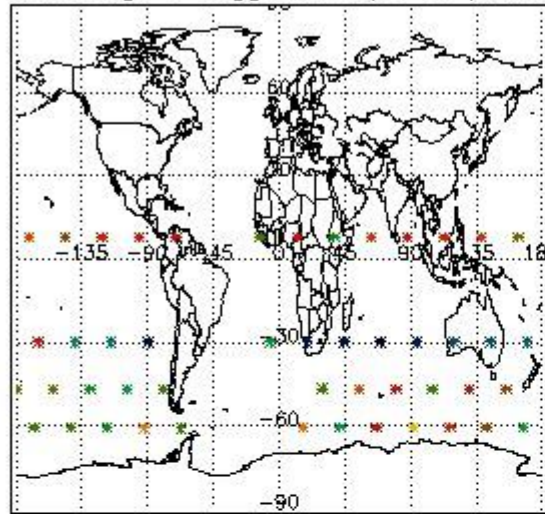
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

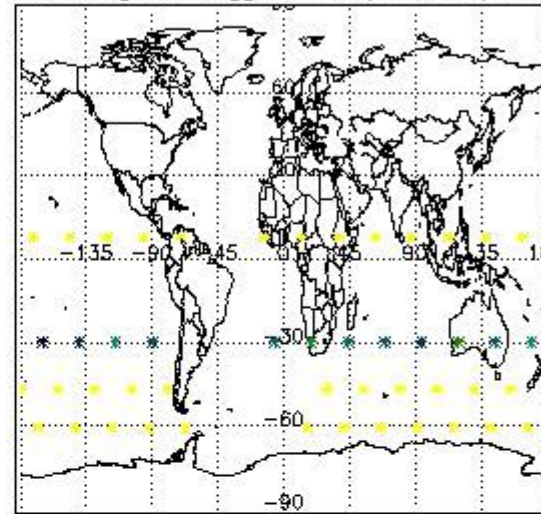


3.2 Plot quality information per product (world map)

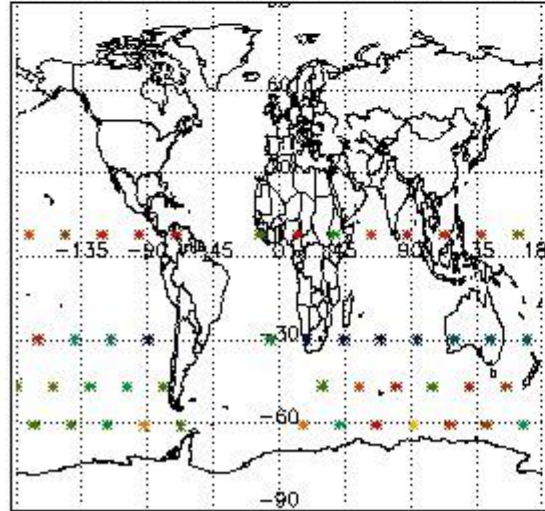
Percentage of flagged data per O3 profile



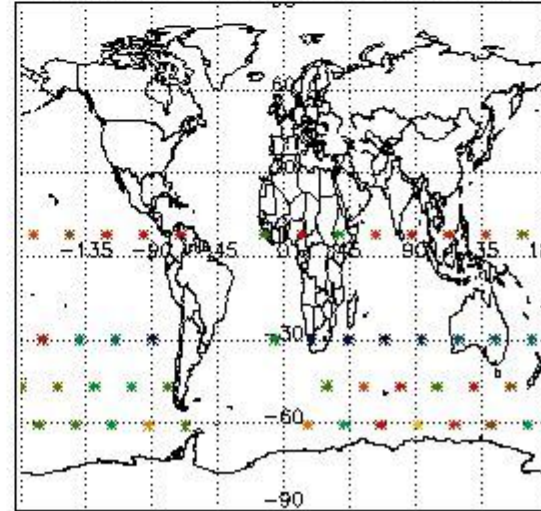
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

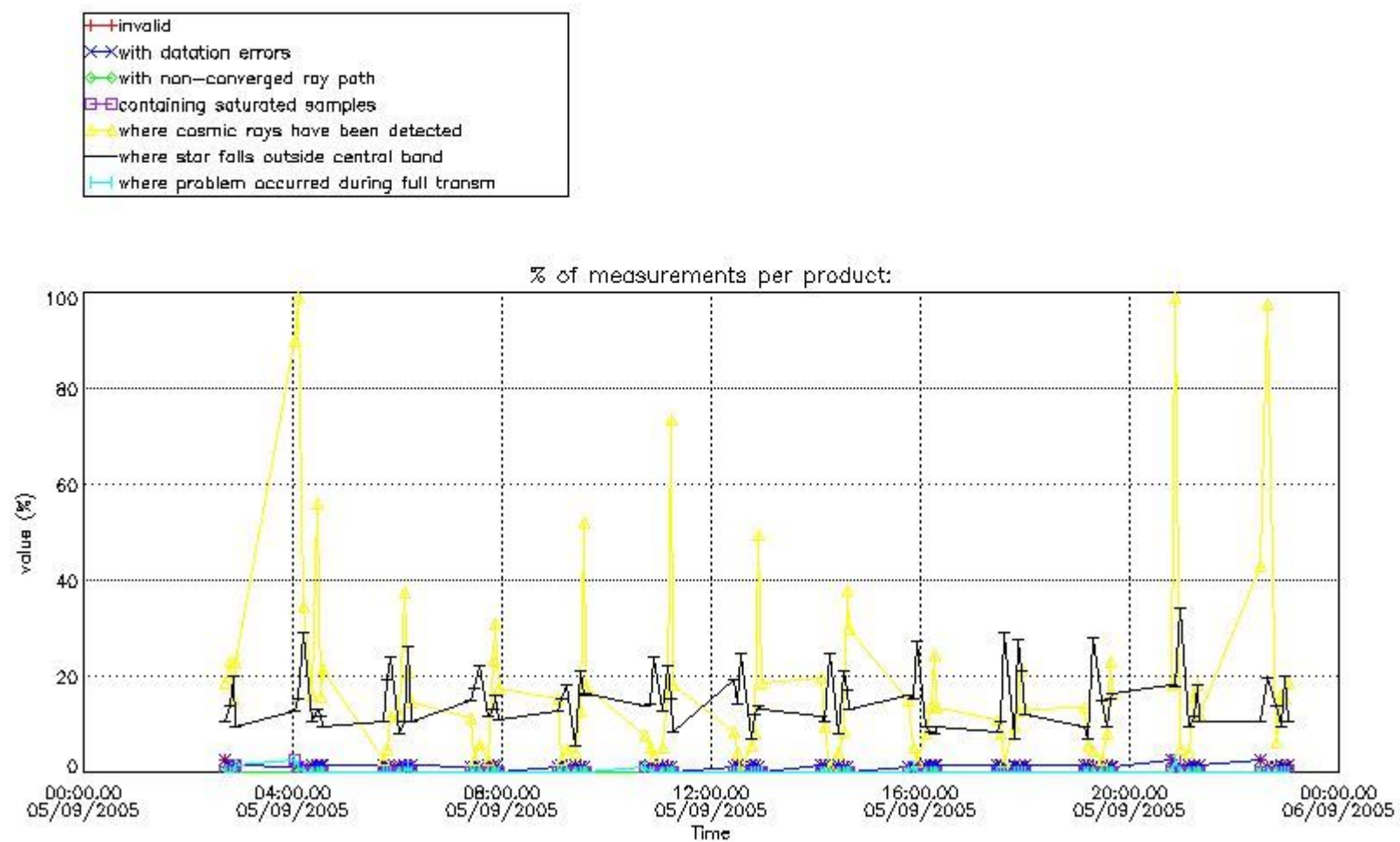


4. Level 1 quality information per product

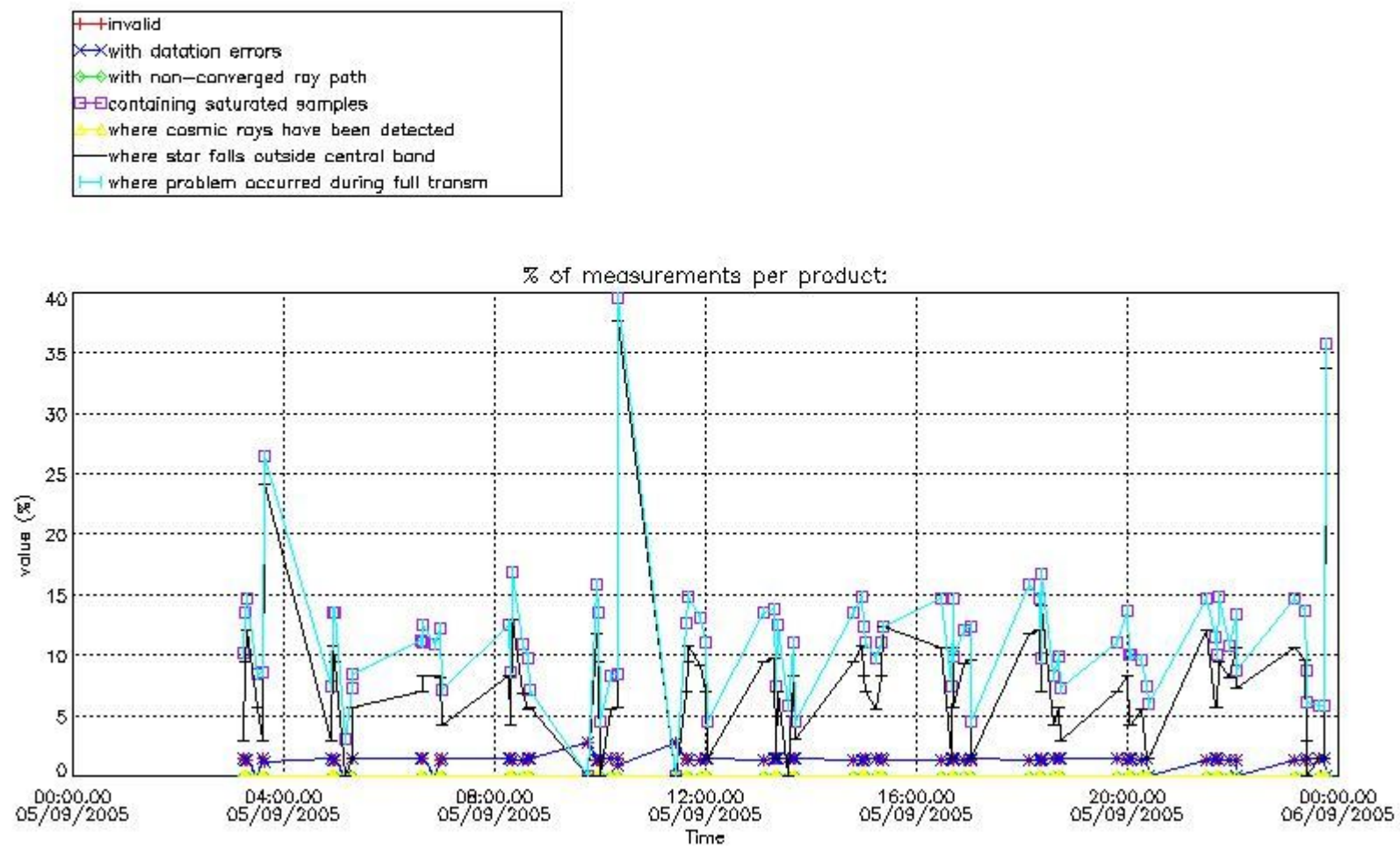
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



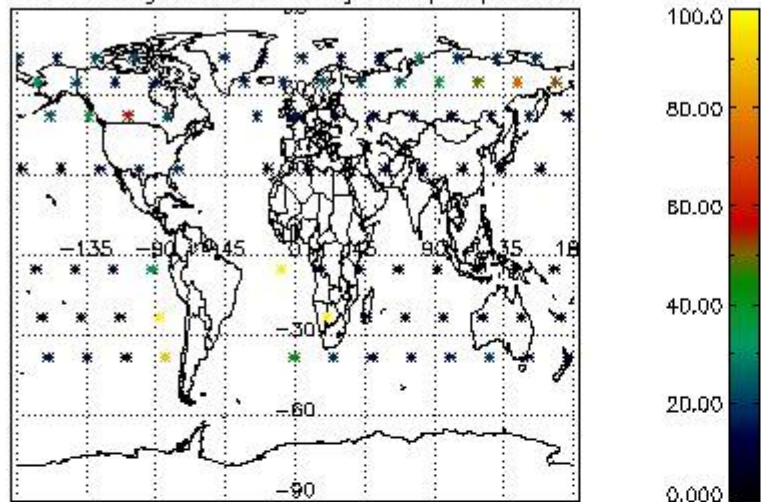
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



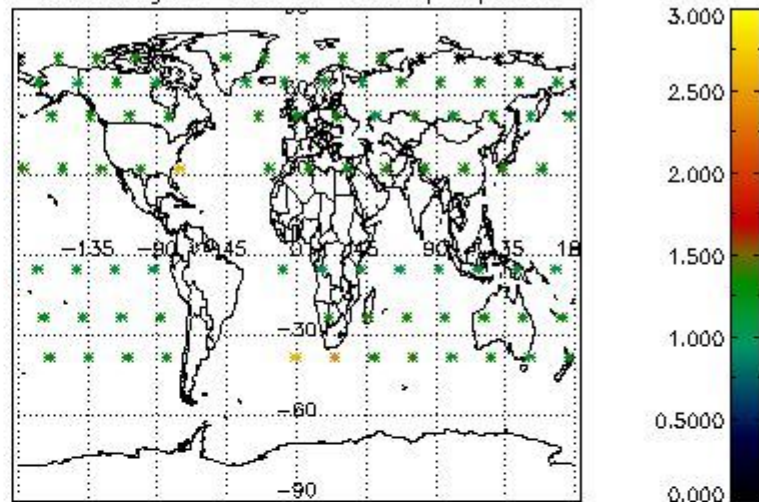
4.2 Plot quality information per product coming from level 1b processing (world map)

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

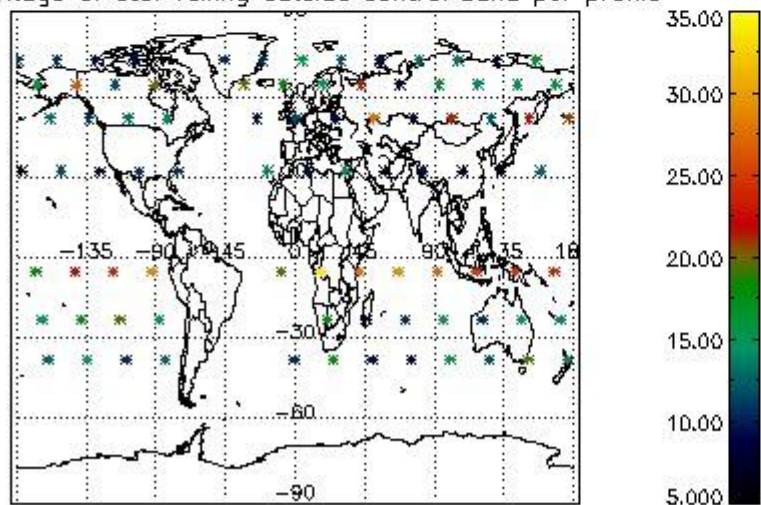
Percentage of cosmic ray hits per profile



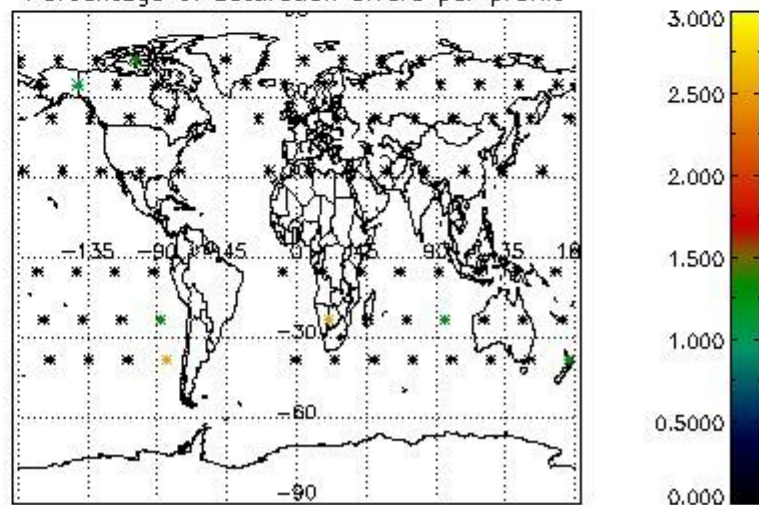
Percentage of datation errors per profile



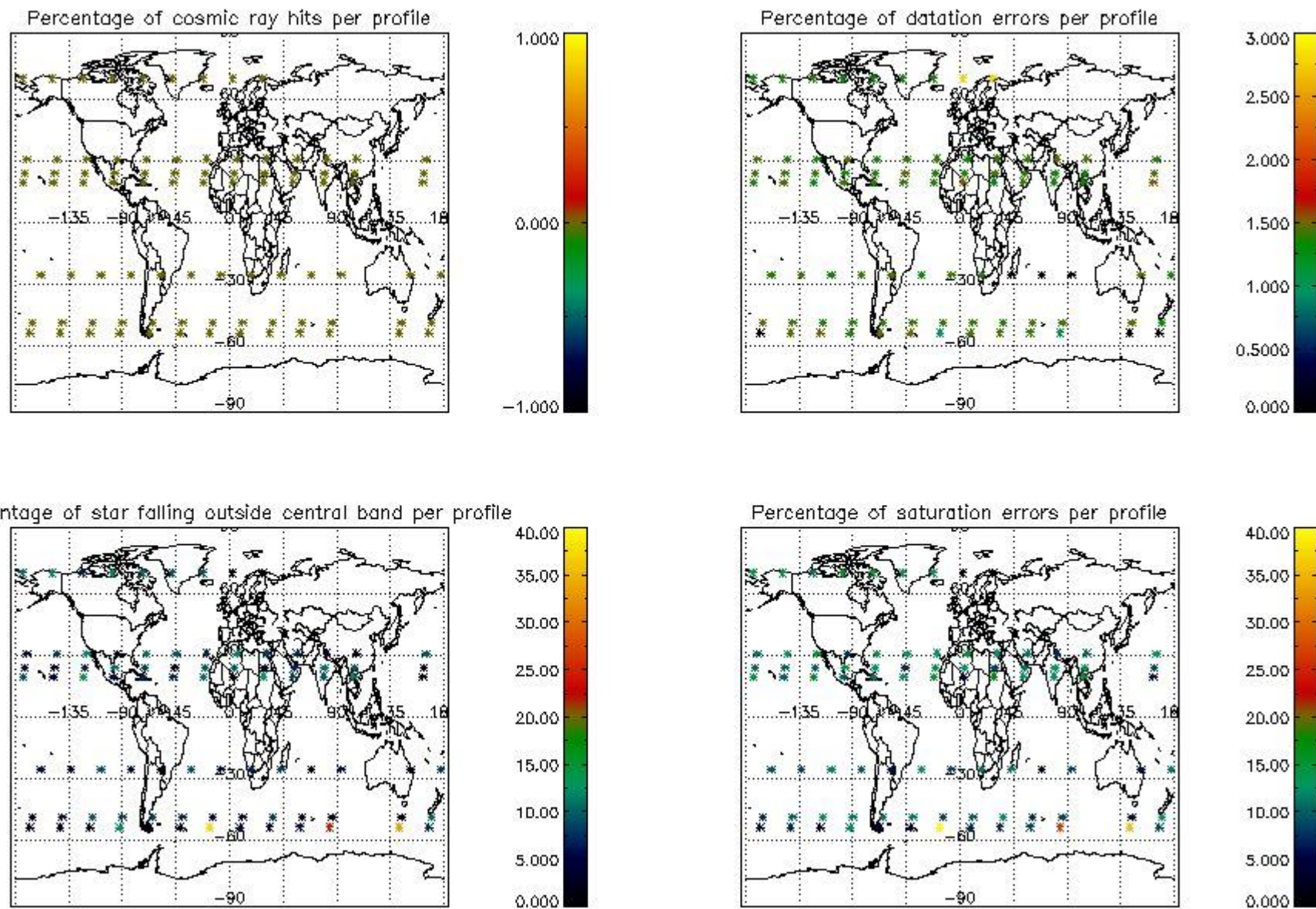
Percentage of star falling outside central band per profile



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

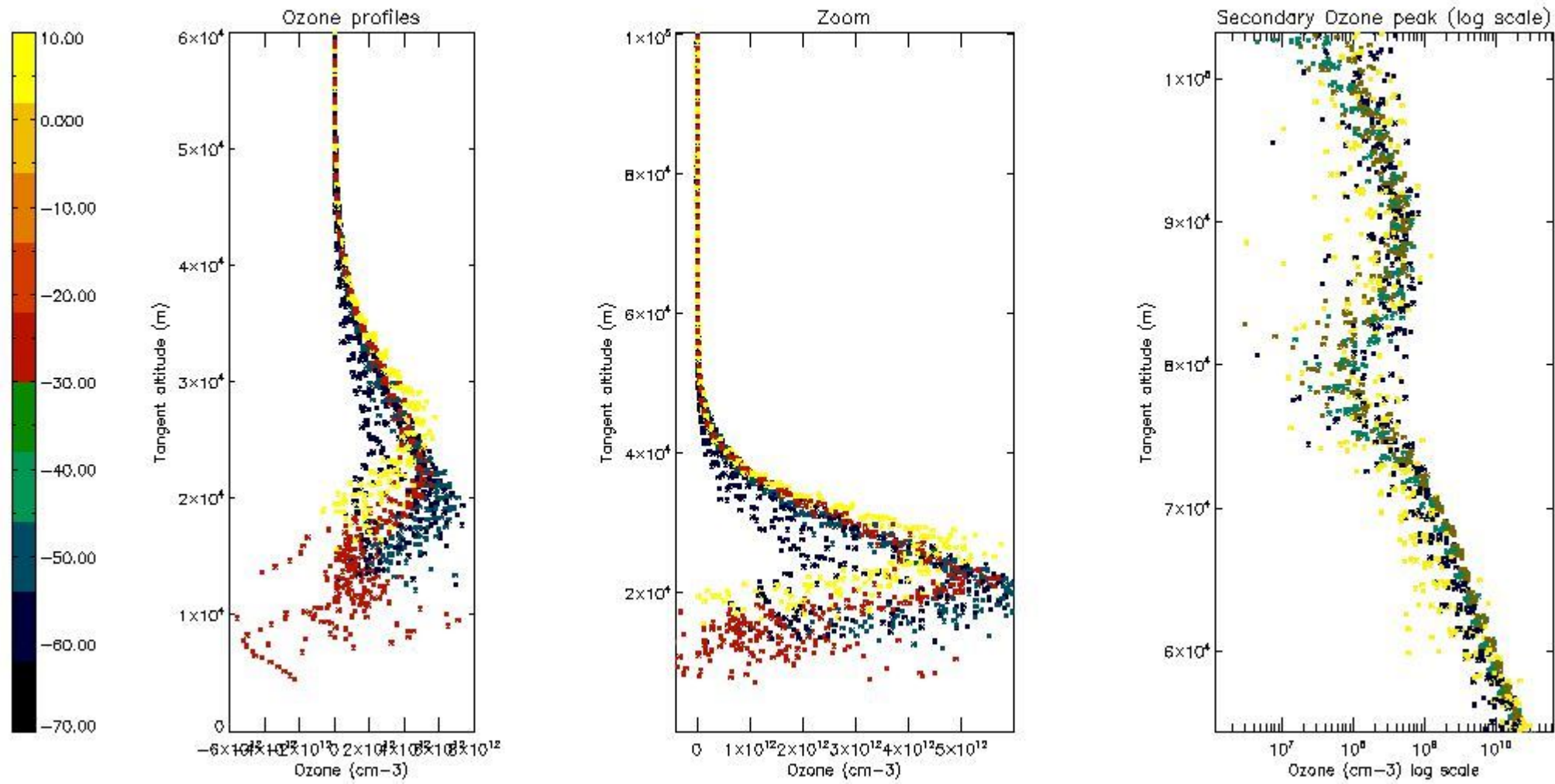
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	30
STD < 20	16

STD < 10	11
STD < 5	4

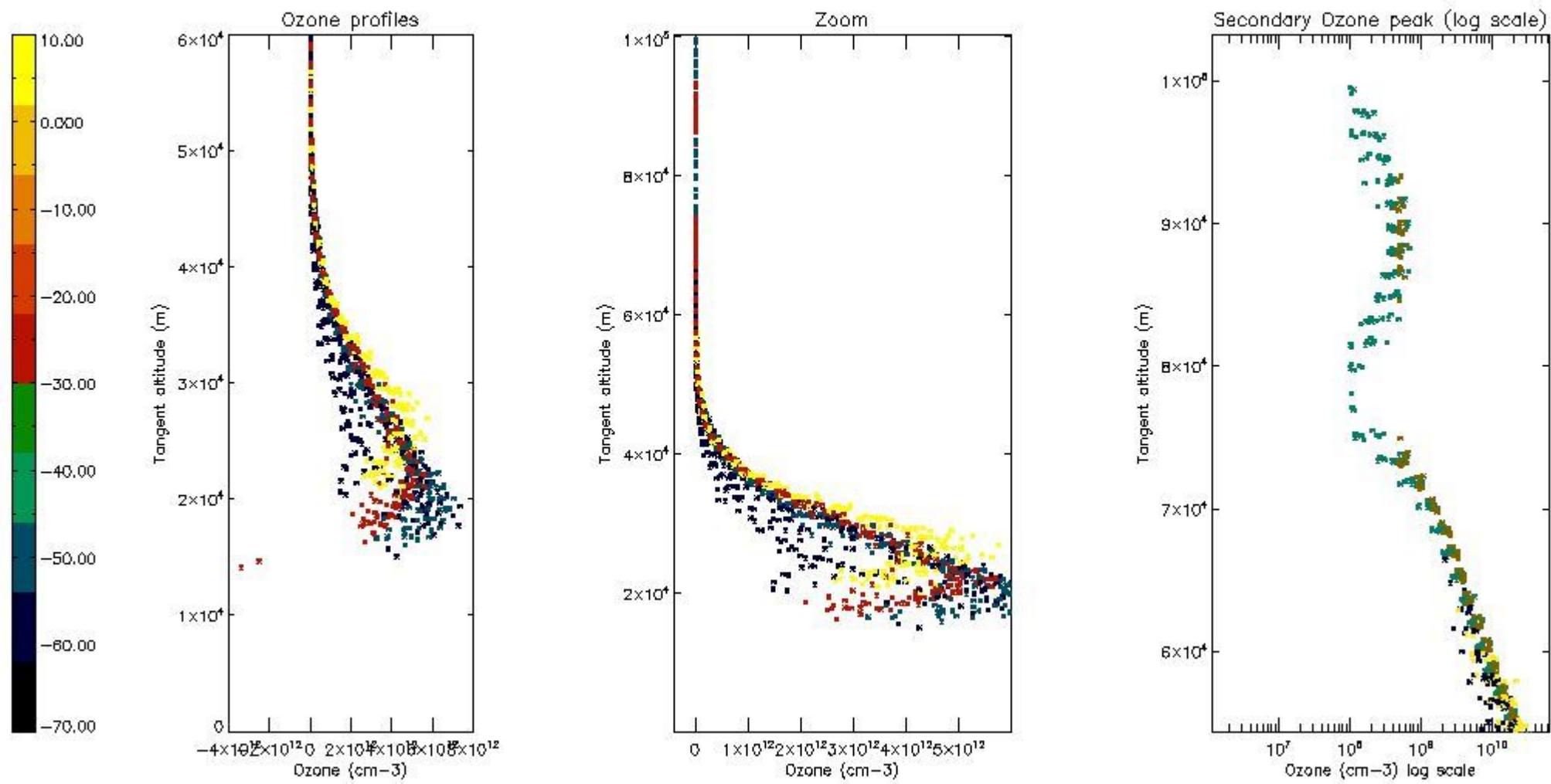
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



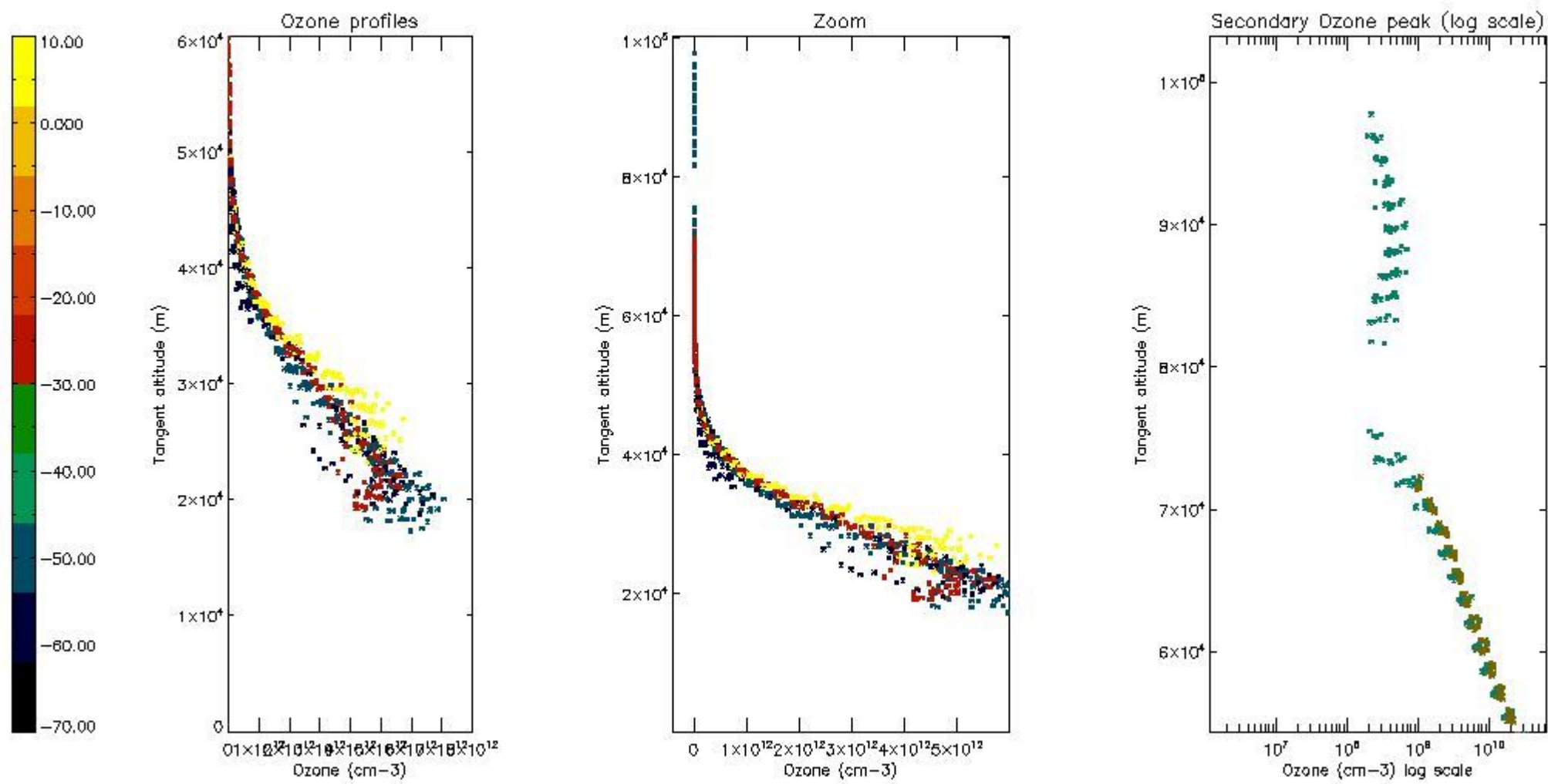
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



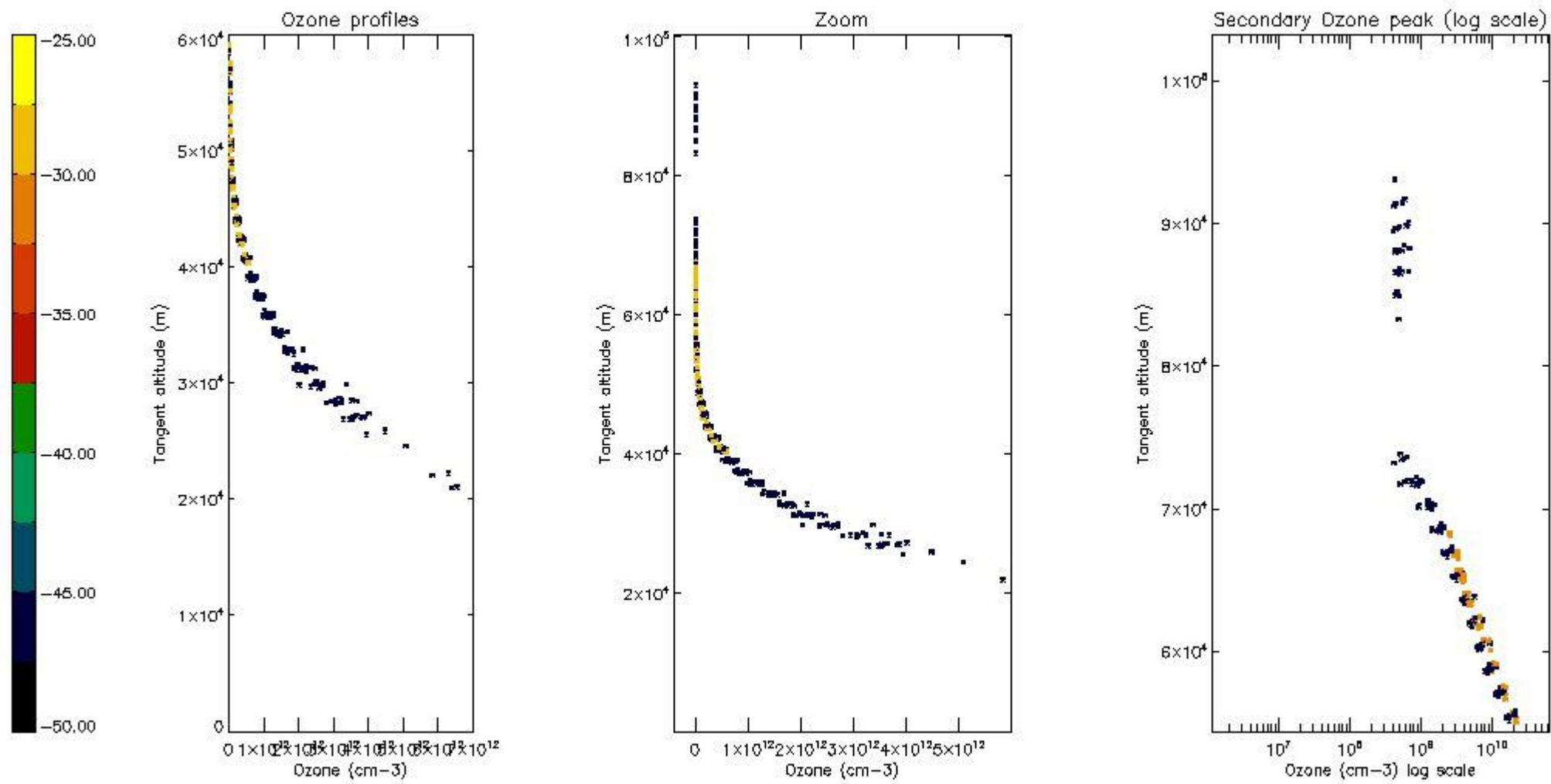
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



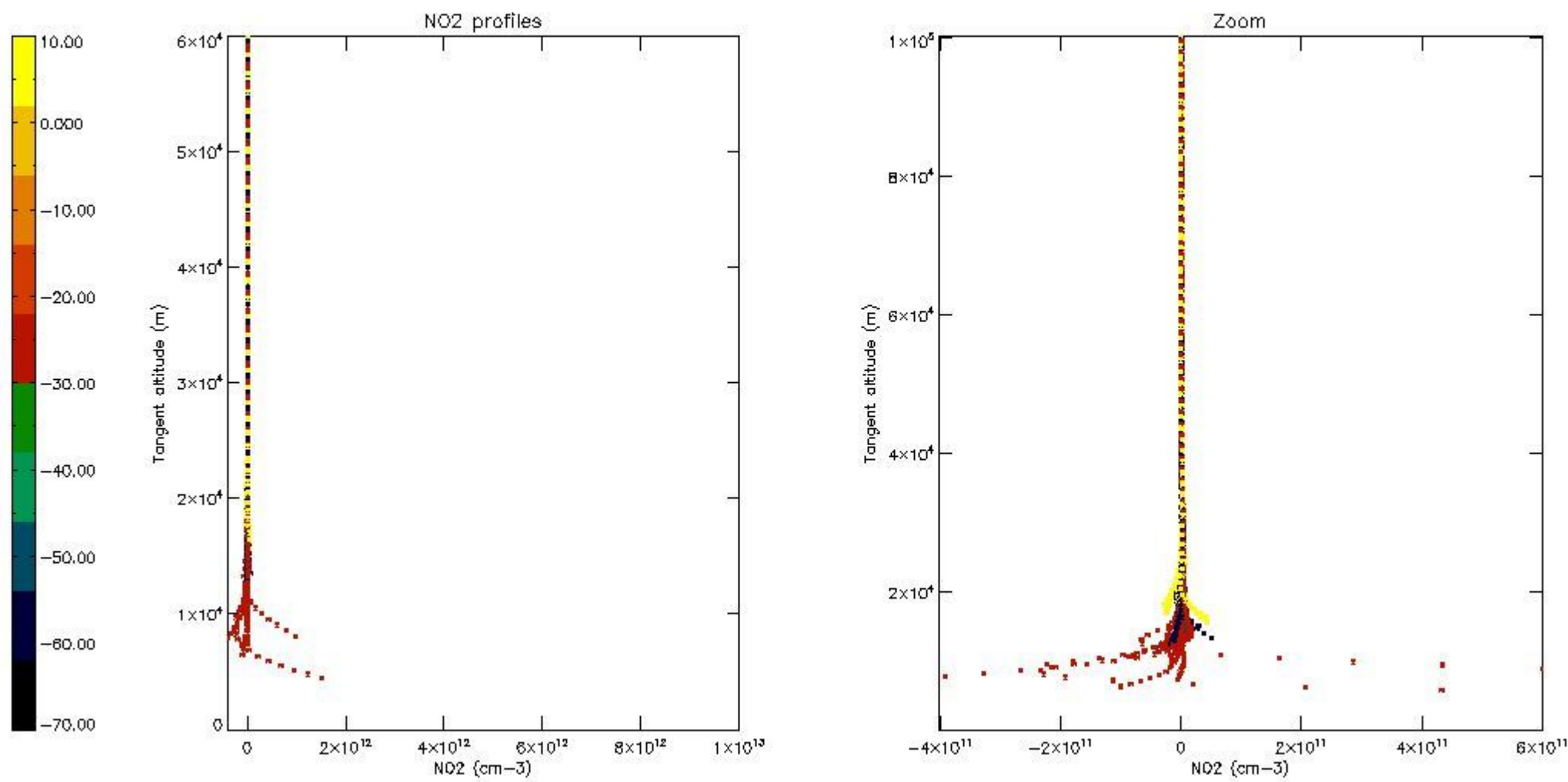
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



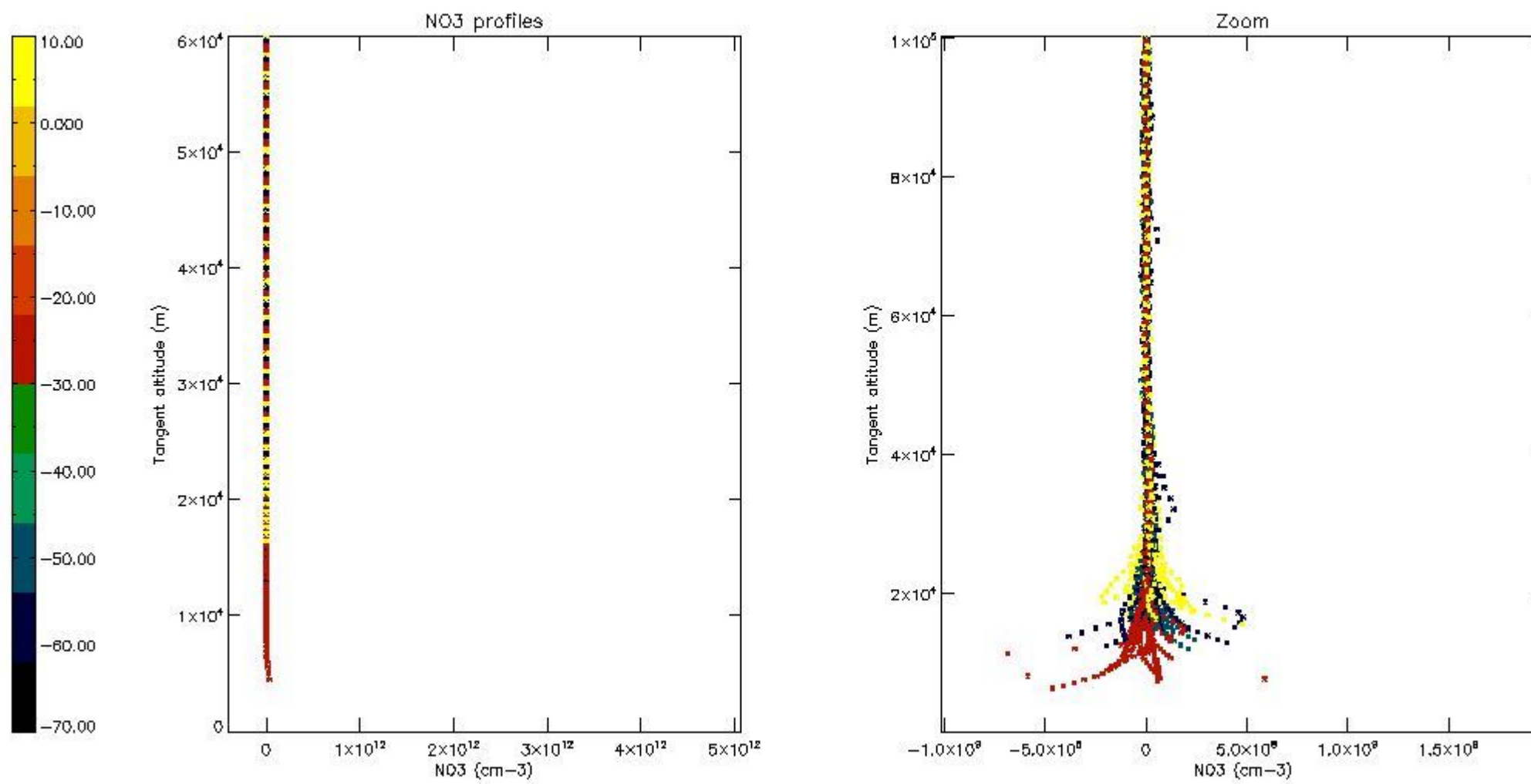
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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	05-SEP-2005 02:41:46
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	05-SEP-2005 02:41:46
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	05-SEP-2005 02:41:46

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	18APR2013 10:45:53
Data source version	GOMOS/6.01
Start time of products	05-09-2005 (05SEP2005 00:00:00)
Stop time of products	06-09-2005 (06SEP2005 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	174
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

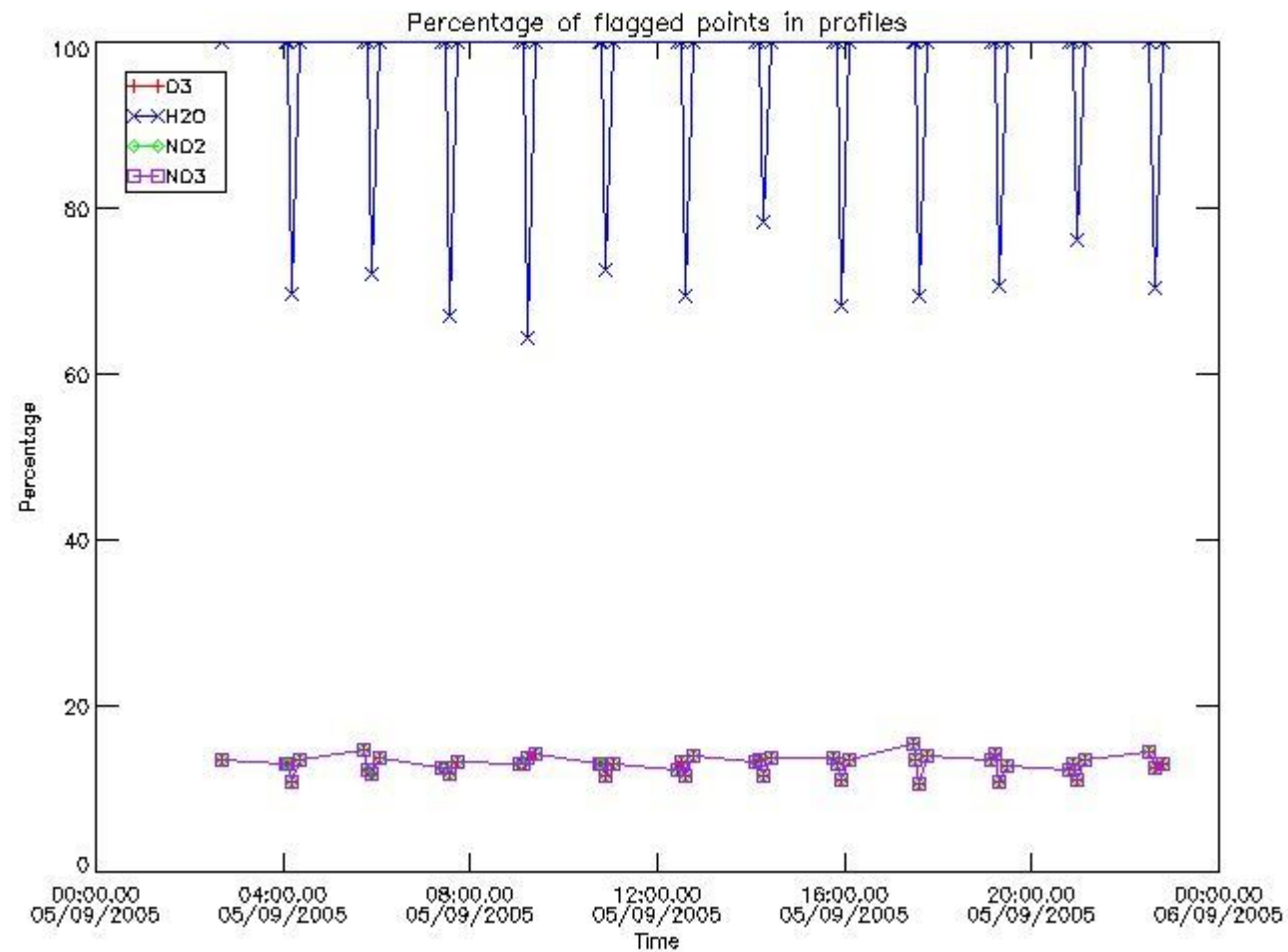
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20050905_024146_000000382040_00290_18380_6470.N1	05-SEP-2005 02:41:46	Dark	38.000	135	Bet Hyi	2.8200	5800.0	76	18380	No
2	GOM_NL__2PRFIN20050905_024720_000000402040_00290_18380_6471.N1	05-SEP-2005 02:47:20	Straylight	39.500	148	Alp Tuc	2.8780	4100.0	79	18380	No
3	GOM_NL__2PRFIN20050905_025101_000000432040_00290_18380_6472.N1	05-SEP-2005 02:51:01	Straylight	42.500	31	Alp Gru	1.7340	15200.	85	18380	No
4	GOM_NL__2PRFIN20050905_025350_000000372040_00290_18380_6473.N1	05-SEP-2005 02:53:50	Straylight	37.000	172	Gam Gru	3.0030	13100.	74	18380	No
5	GOM_NL__2PRFIN20050905_031415_000000352040_00290_18380_6474.N1	05-SEP-2005 03:14:15	Bright	34.500	92	53Eps Cyg	2.5000	4500.0	69	18380	No
6	GOM_NL__2PRFIN20050905_031612_000000372040_00290_18380_6475.N1	05-SEP-2005 03:16:12	Bright	37.000	66	37Gam Cyg	2.2080	5900.0	74	18380	No
7	GOM_NL__2PRFIN20050905_031725_000000382040_00290_18380_6476.N1	05-SEP-2005 03:17:25	Bright	37.500	19	50Alp Cyg	1.2460	10500.	75	18380	No
8	GOM_NL__2PRFIN20050905_033002_000000362040_00290_18380_6477.N1	05-SEP-2005 03:30:02	Bright	35.500	60	7Bet UMi	2.0810	3950.0	71	18380	No
9	GOM_NL__2PRFIN20050905_033638_000000352040_00290_18380_6478.N1	05-SEP-2005 03:36:38	Bright	35.000	36	50Alp UMa	1.8000	6300.0	70	18380	No
10	GOM_NL__2PRFIN20050905_033801_000000442040_00290_18380_6479.N1	05-SEP-2005 03:38:01	Bright	43.500	82	48Bet UMa	2.3650	10600.	87	18380	No
11	GOM_NL__2PRFIN20050905_040231_000000402040_00290_18380_6480.N1	05-SEP-2005 04:02:31	Dark	39.500	132	15Rho Pup	2.8030	6900.0	79	18380	No
12	GOM_NL__2PRFIN20050905_040648_000000402040_00290_18380_6481.N1	05-SEP-2005 04:06:48	Dark	39.500	70	Zet Pup	2.2460	39000.	79	18380	No
13	GOM_NL__2PRFIN20050905_041150_000000472040_00290_18380_6482.N1	05-SEP-2005 04:11:50	Dark	46.500	41	Eps Car	1.8600	4100.0	93	18380	No
14	GOM_NL__2PRFIN20050905_042222_000000382040_00291_18381_6470.N1	05-SEP-2005 04:22:22	Dark	37.500	135	Bet Hyi	2.8200	5800.0	75	18381	No
15	GOM_NL__2PRFIN20050905_042757_000000392040_00291_18381_6471.N1	05-SEP-2005 04:27:57	Straylight	38.500	148	Alp Tuc	2.8780	4100.0	77	18381	No
16	GOM_NL__2PRFIN20050905_043137_000000392040_00291_18381_6472.N1	05-SEP-2005 04:31:37	Straylight	38.500	31	Alp Gru	1.7340	15200.	77	18381	No
17	GOM_NL__2PRFIN20050905_043426_000000372040_00291_18381_6473.N1	05-SEP-2005 04:34:26	Straylight	37.000	172	Gam Gru	3.0030	13100.	74	18381	No
18	GOM_NL__2PRFIN20050905_045452_000000342040_00291_18381_6474.N1	05-SEP-2005 04:54:52	Bright	34.000	92	53Eps Cyg	2.5000	4500.0	68	18381	No
19	GOM_NL__2PRFIN20050905_045649_000000372040_00291_18381_6475.N1	05-SEP-2005 04:56:49	Bright	37.000	66	37Gam Cyg	2.2080	5900.0	74	18381	No
20	GOM_NL__2PRFIN20050905_045801_000000372040_00291_18381_6476.N1	05-SEP-2005 04:58:01	Bright	37.000	19	50Alp Cyg	1.2460	10500.	74	18381	No
21	GOM_NL__2PRFIN20050905_051039_000000332040_00291_18381_6477.N1	05-SEP-2005 05:10:39	Bright	32.500	60	7Bet UMi	2.0810	3950.0	65	18381	No
22	GOM_NL__2PRFIN20050905_051714_000000352040_00291_18381_6478.N1	05-SEP-2005 05:17:14	Bright	34.500	36	50Alp UMa	1.8000	6300.0	69	18381	No
23	GOM_NL__2PRFIN20050905_051837_000000362040_00291_18381_6479.N1	05-SEP-2005 05:18:37	Bright	35.500	82	48Bet UMa	2.3650	10600.	71	18381	No
24	GOM_NL__2PRFIN20050905_054308_000000382040_00291_18381_6480.N1	05-SEP-2005 05:43:08	Dark	38.000	132	15Rho Pup	2.8030	6900.0	76	18381	No
25	GOM_NL__2PRFIN20050905_054724_000000422040_00291_18381_6481.N1	05-SEP-2005 05:47:24	Dark	41.500	70	Zet Pup	2.2460	39000.	83	18381	No
26	GOM_NL__2PRFIN20050905_055226_000000442040_00291_18381_6482.N1	05-SEP-2005 05:52:26	Dark	43.500	41	Eps Car	1.8600	4100.0	87	18381	No
27	GOM_NL__2PRFIN20050905_060258_000000372040_00292_18382_6470.N1	05-SEP-2005 06:02:58	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	18382	No
28	GOM_NL__2PRFIN20050905_060833_000000382040_00292_18382_6471.N1	05-SEP-2005 06:08:33	Straylight	37.500	148	Alp Tuc	2.8780	4100.0	75	18382	No
29	GOM_NL__2PRFIN20050905_061214_000000462040_00292_18382_6472.N1	05-SEP-2005 06:12:14	Straylight	46.000	31	Alp Gru	1.7340	15200.	92	18382	No
30	GOM_NL__2PRFIN20050905_061502_000000382040_00292_18382_6473.N1	05-SEP-2005 06:15:02	Straylight	37.500	172	Gam Gru	3.0030	13100.	75	18382	No
31	GOM_NL__2PRFIN20050905_063528_000000362040_00292_18382_6474.N1	05-SEP-2005 06:35:28	Bright	35.500	92	53Eps Cyg	2.5000	4500.0	71	18382	No
32	GOM_NL__2PRFIN20050905_063725_000000362040_00292_18382_6475.N1	05-SEP-2005 06:37:25	Bright	36.000	66	37Gam Cyg	2.2080	5900.0	72	18382	No
33	GOM_NL__2PRFIN20050905_063837_000000362040_00292_18382_6476.N1	05-SEP-2005 06:38:37	Bright	36.000	19	50Alp Cyg	1.2460	10500.	72	18382	No
34	GOM_NL__2PRFIN20050905_065115_000000372040_00292_18382_6477.N1	05-SEP-2005 06:51:15	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	18382	No
35	GOM_NL__2PRFIN20050905_065750_000000372040_00292_18382_6478.N1	05-SEP-2005 06:57:50	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	18382	No
36	GOM_NL__2PRFIN20050905_065913_000000352040_00292_18382_6479.N1	05-SEP-2005 06:59:13	Bright	35.000	82	48Bet UMa	2.3650	10600.	70	18382	No
37	GOM_NL__2PRFIN20050905_072344_000000412040_00292_18382_6480.N1	05-SEP-2005 07:23:44	Dark	40.500	132	15Rho Pup	2.8030	6900.0	81	18382	No
38	GOM_NL__2PRFIN20050905_072800_000000412040_00292_18382_6481.N1	05-SEP-2005 07:28:00	Dark	40.500	70	Zet Pup	2.2460	39000.	81	18382	No
39	GOM_NL__2PRFIN20050905_073302_000000432040_00292_18382_6482.N1	05-SEP-2005 07:33:02	Dark	43.000	41	Eps Car	1.8600	4100.0	86	18382	No
40	GOM_NL__2PRFIN20050905_074334_000000392040_00293_18383_6470.N1	05-SEP-2005 07:43:34	Dark	38.500	135	Bet Hyi	2.8200	5800.0	77	18383	No
41	GOM_NL__2PRFIN20050905_074909_000000392040_00293_18383_6471.N1	05-SEP-2005 07:49:09	Straylight	38.500	148	Alp Tuc	2.8780	4100.0	77	18383	No
42	GOM_NL__2PRFIN20050905_075250_000000412040_00293_18383_6472.N1	05-SEP-2005 07:52:50	Straylight	40.500	31	Alp Gru	1.7340	15200.	81	18383	No

161	GOM_NL__2PRFIN20050905_220439_000000352040_00301_18391_6504.N1	05-SEP-2005 22:04:39	Bright	34.500	82	48Bet UMa	2.3650	10600.	69	18391	No
162	GOM_NL__2PRFIN20050905_222910_000000392040_00301_18391_6505.N1	05-SEP-2005 22:29:10	Dark	38.500	132	15Rho Pup	2.8030	6900.0	77	18391	No
163	GOM_NL__2PRFIN20050905_223826_000000412040_00301_18391_6506.N1	05-SEP-2005 22:38:26	Dark	41.000	41	Eps Car	1.8600	4100.0	82	18391	No
164	GOM_NL__2PRFIN20050905_224859_000000402040_00302_18392_6494.N1	05-SEP-2005 22:48:59	Dark	39.500	135	Bet Hyi	2.8200	5800.0	79	18392	No
165	GOM_NL__2PRFIN20050905_225434_000000372040_00302_18392_6495.N1	05-SEP-2005 22:54:34	Straylight	37.000	148	Alp Tuc	2.8780	4100.0	74	18392	No
166	GOM_NL__2PRFIN20050905_225815_000000432040_00302_18392_6496.N1	05-SEP-2005 22:58:15	Straylight	42.500	31	Alp Gru	1.7340	15200.	85	18392	No
167	GOM_NL__2PRFIN20050905_230103_000000382040_00302_18392_6497.N1	05-SEP-2005 23:01:03	Straylight	38.000	172	Gam Gru	3.0030	13100.	76	18392	No
168	GOM_NL__2PRFIN20050905_231009_000000382040_00302_18392_6498.N1	05-SEP-2005 23:10:09	Bright	37.500	154	22Bet Aqr	2.8990	5700.0	75	18392	No
169	GOM_NL__2PRFIN20050905_232128_000000372040_00302_18392_6499.N1	05-SEP-2005 23:21:28	Bright	36.500	92	53Eps Cyg	2.5000	4500.0	73	18392	No
170	GOM_NL__2PRFIN20050905_232326_000000352040_00302_18392_6500.N1	05-SEP-2005 23:23:26	Bright	34.500	66	37Gam Cyg	2.2080	5900.0	69	18392	No
171	GOM_NL__2PRFIN20050905_232437_000000332040_00302_18392_6501.N1	05-SEP-2005 23:24:37	Bright	33.000	19	50Alp Cyg	1.2460	10500.	66	18392	No
172	GOM_NL__2PRFIN20050905_233717_000000352040_00302_18392_6502.N1	05-SEP-2005 23:37:17	Bright	34.500	60	7Bet UMi	2.0810	3950.0	69	18392	No
173	GOM_NL__2PRFIN20050905_234352_000000342040_00302_18392_6503.N1	05-SEP-2005 23:43:52	Bright	34.000	36	50Alp UMa	1.8000	6300.0	68	18392	No
174	GOM_NL__2PRFIN20050905_234515_000000492040_00302_18392_6504.N1	05-SEP-2005 23:45:15	Bright	49.000	82	48Bet UMa	2.3650	10600.	98	18392	No

3. Quality information per product

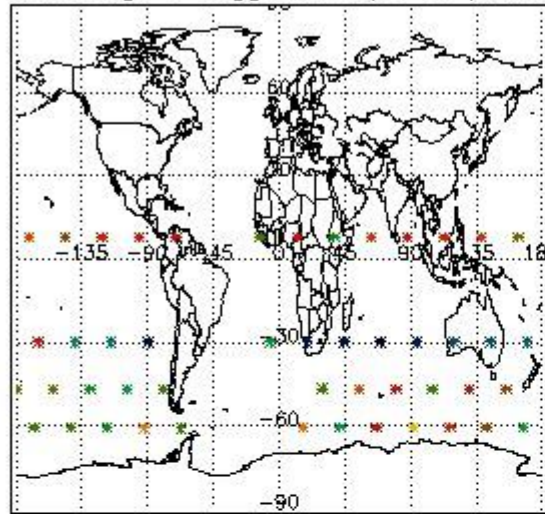
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

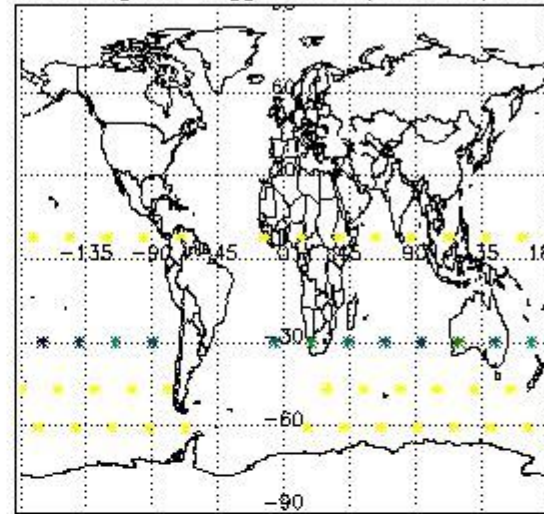


3.2 Plot quality information per product (world map)

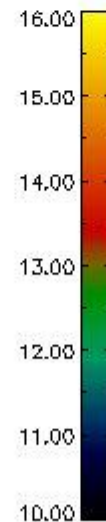
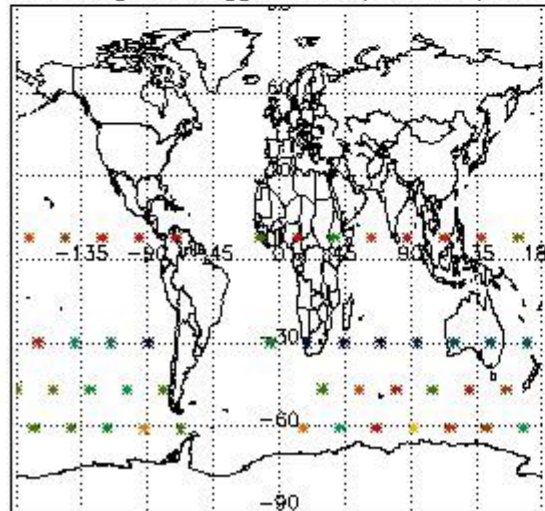
Percentage of flagged data per O3 profile



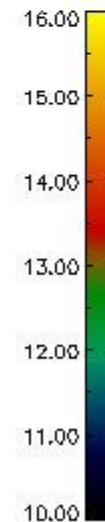
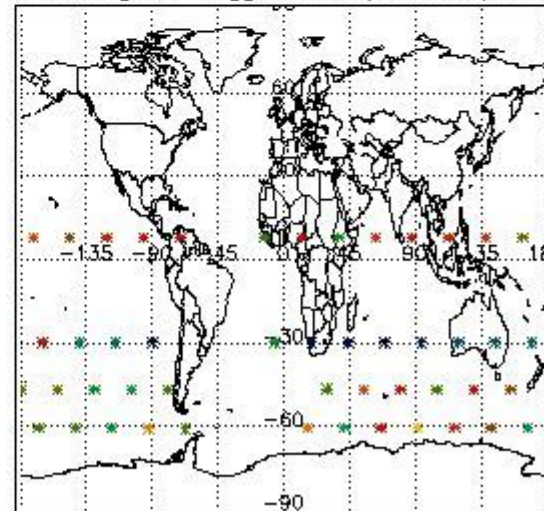
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

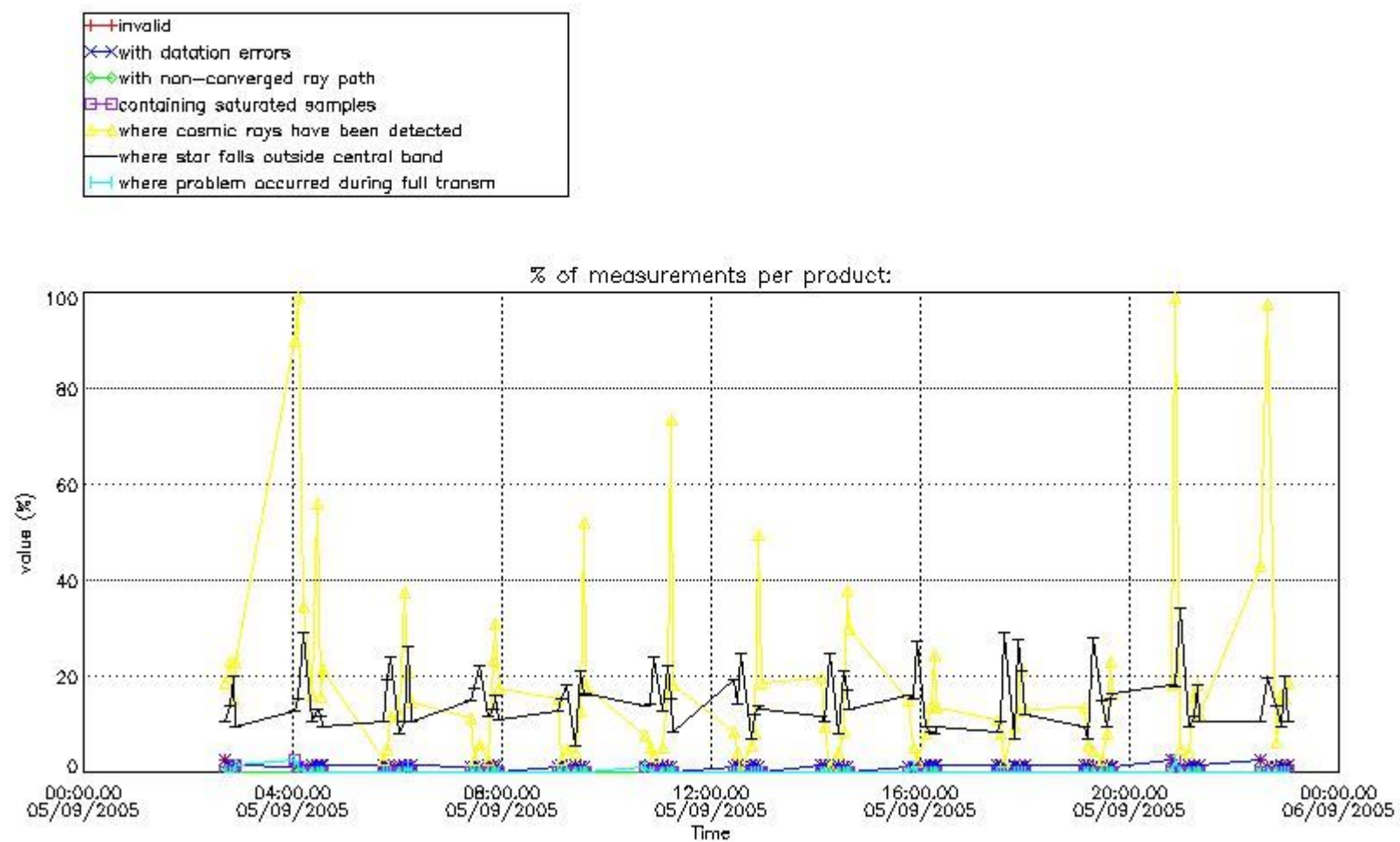


4. Level 1 quality information per product

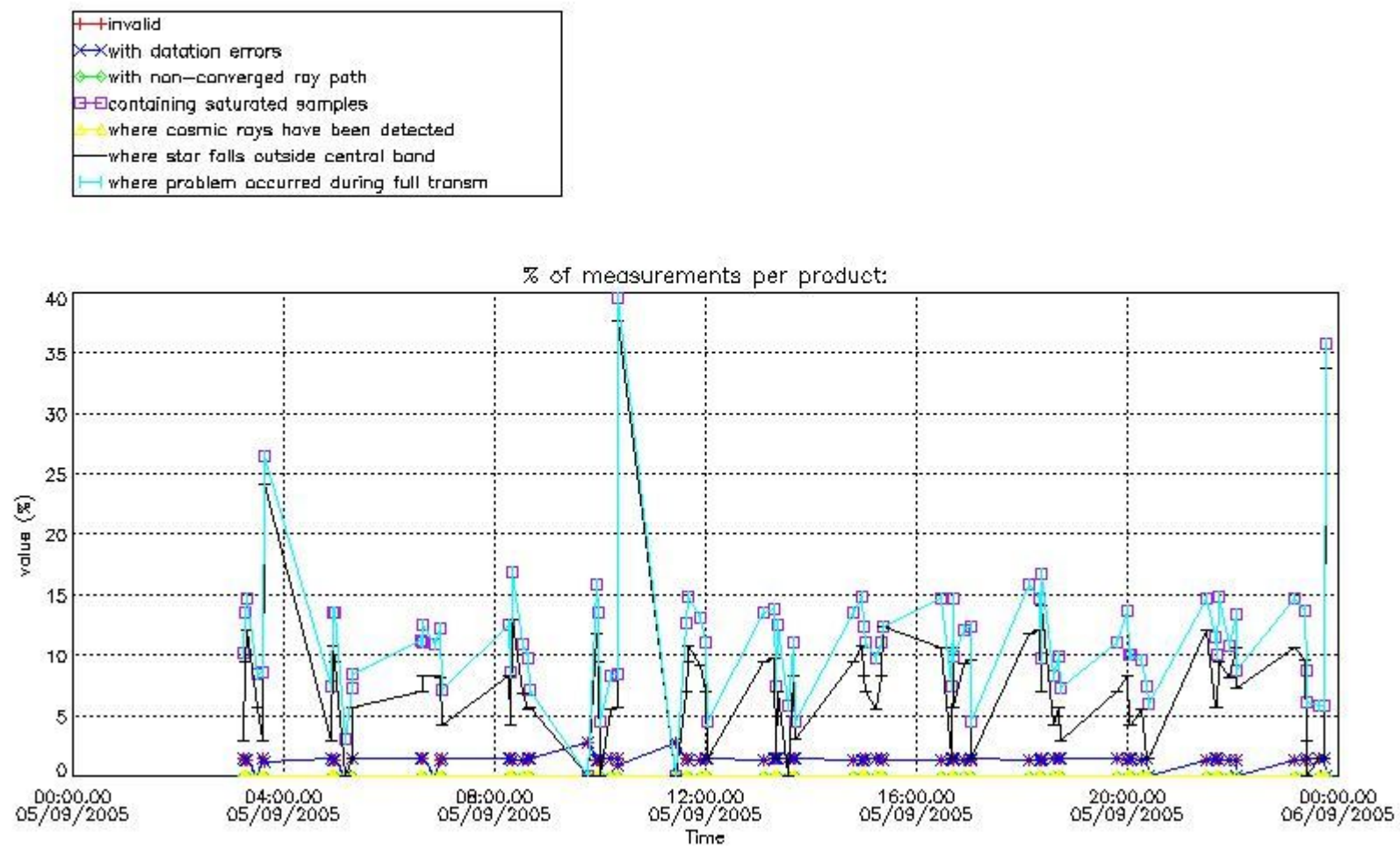
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



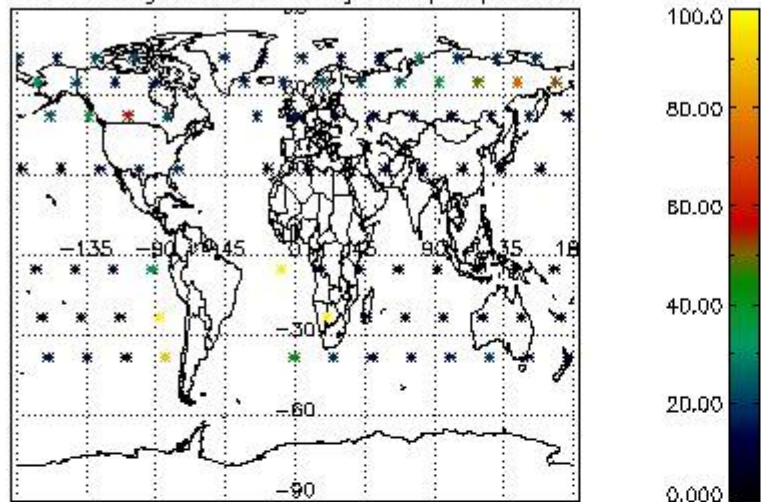
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



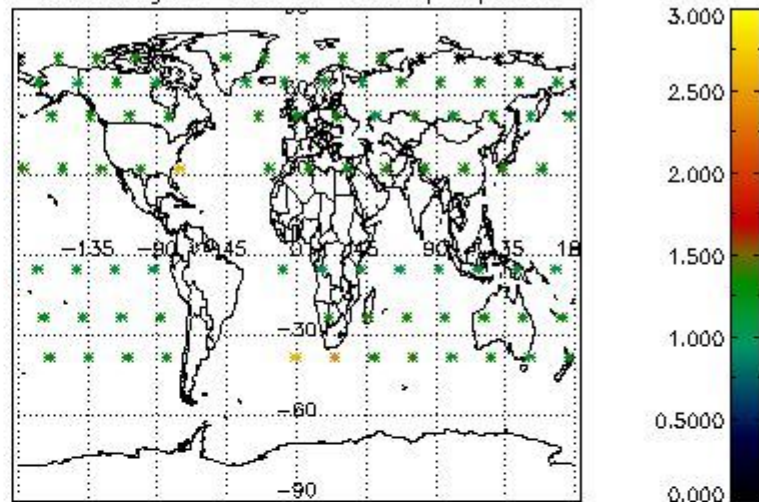
4.2 Plot quality information per product coming from level 1b processing (world map)

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

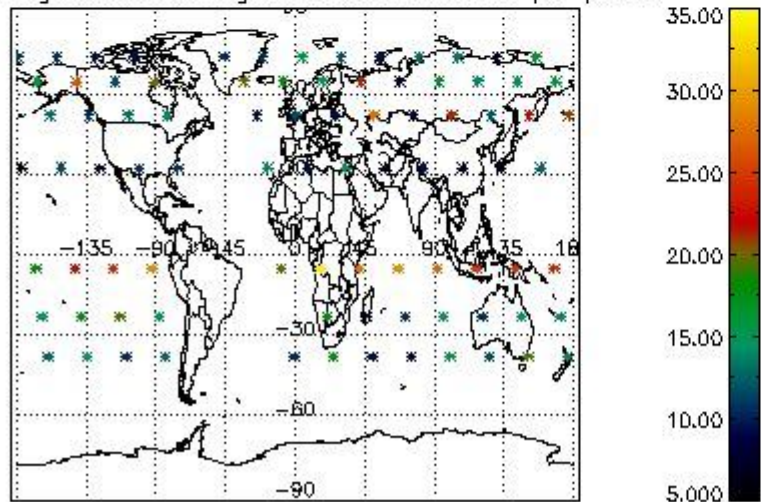
Percentage of cosmic ray hits per profile



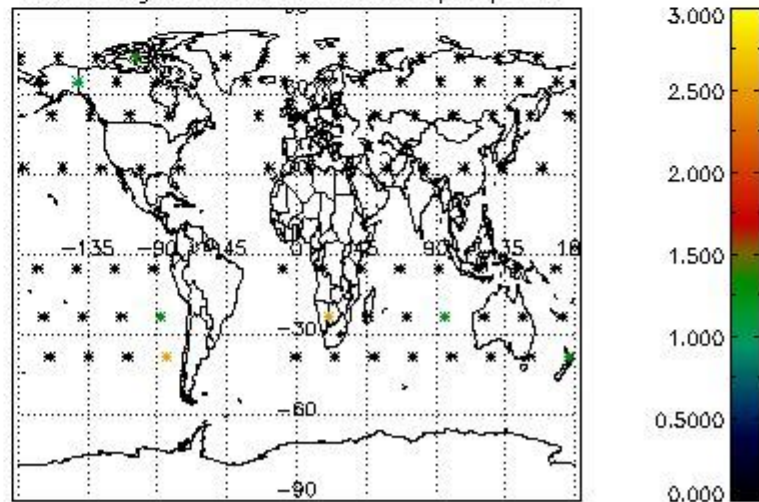
Percentage of datation errors per profile



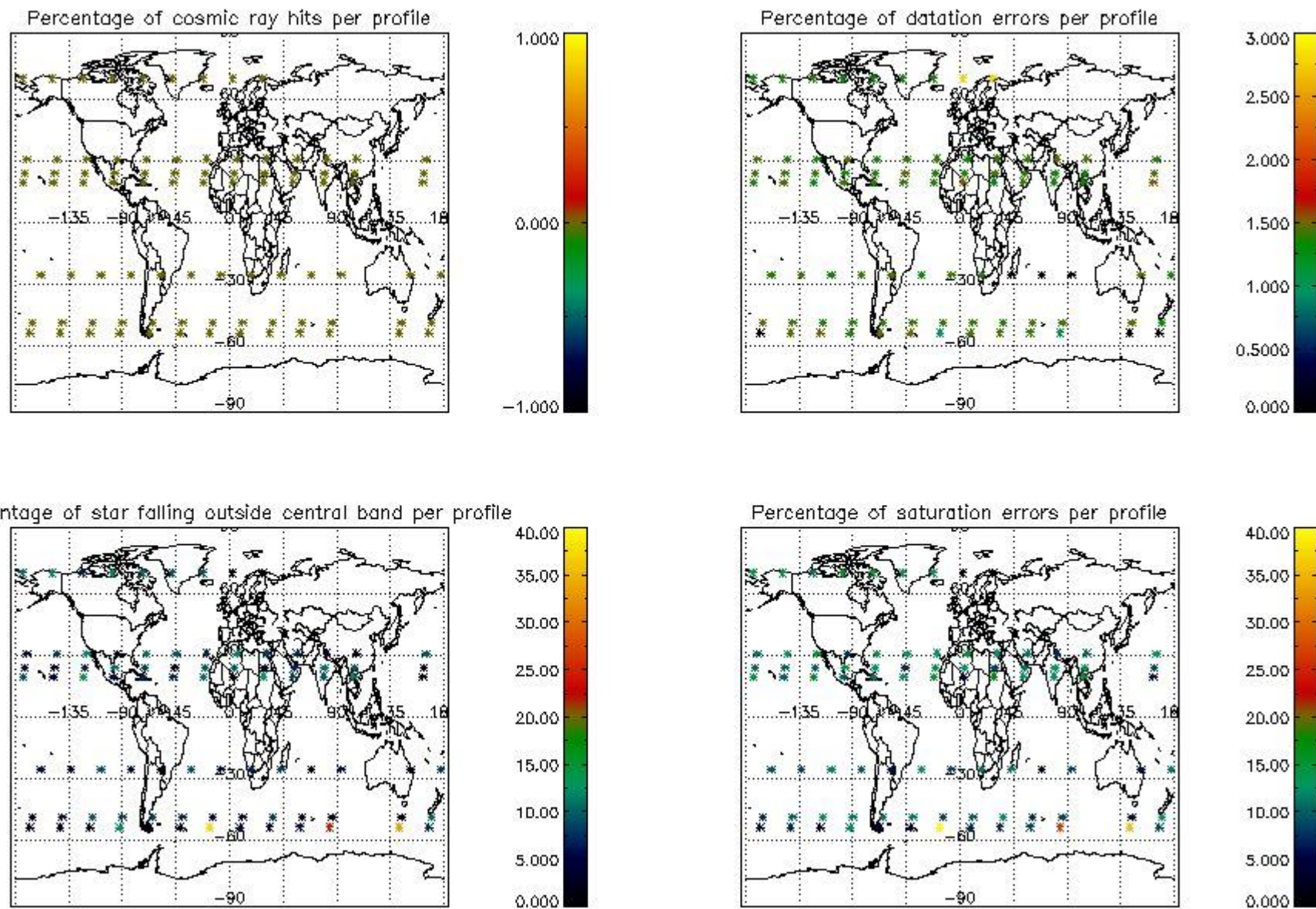
Percentage of star falling outside central band per profile



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

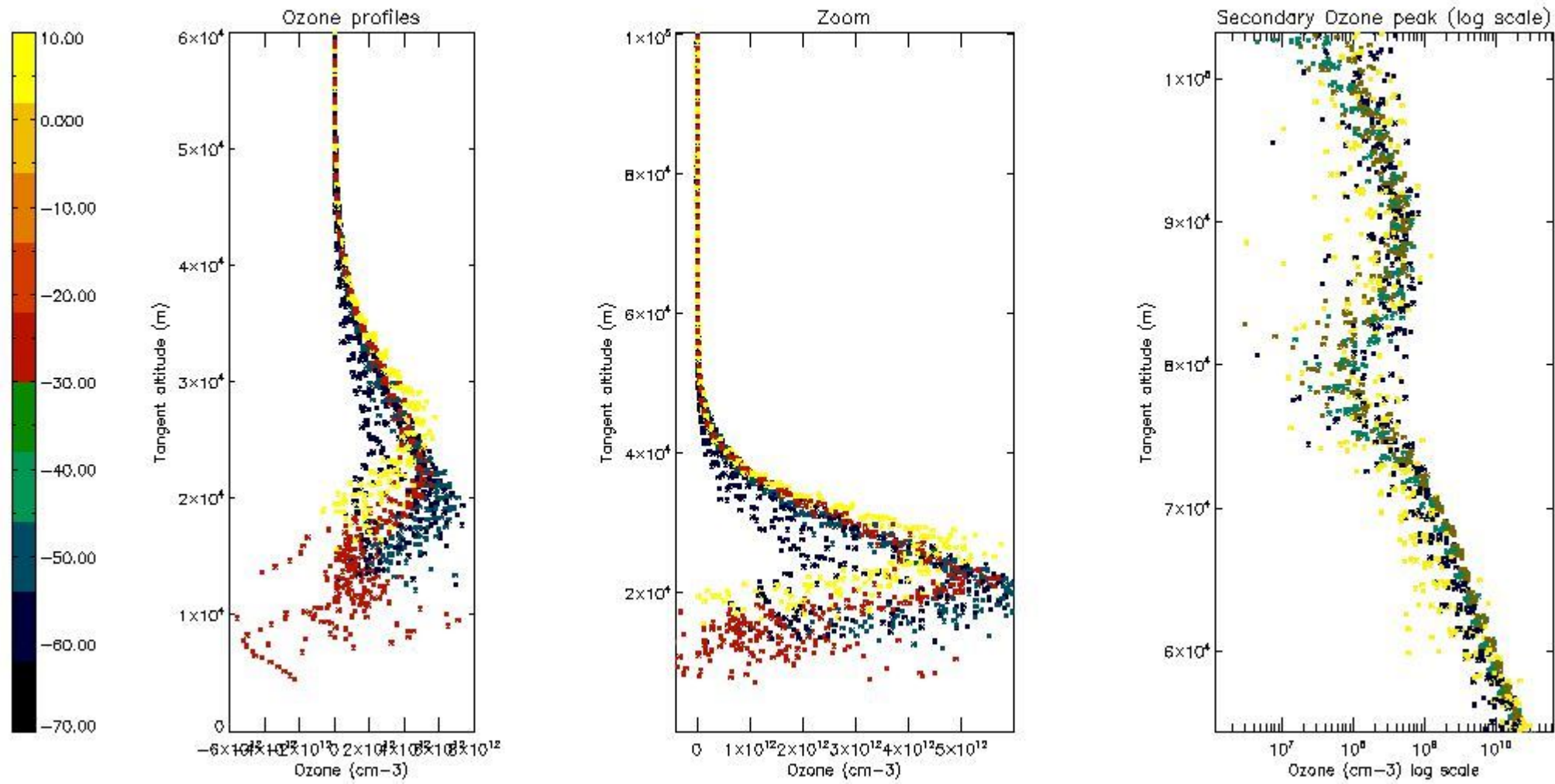
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	30
STD < 20	16

STD < 10	11
STD < 5	4

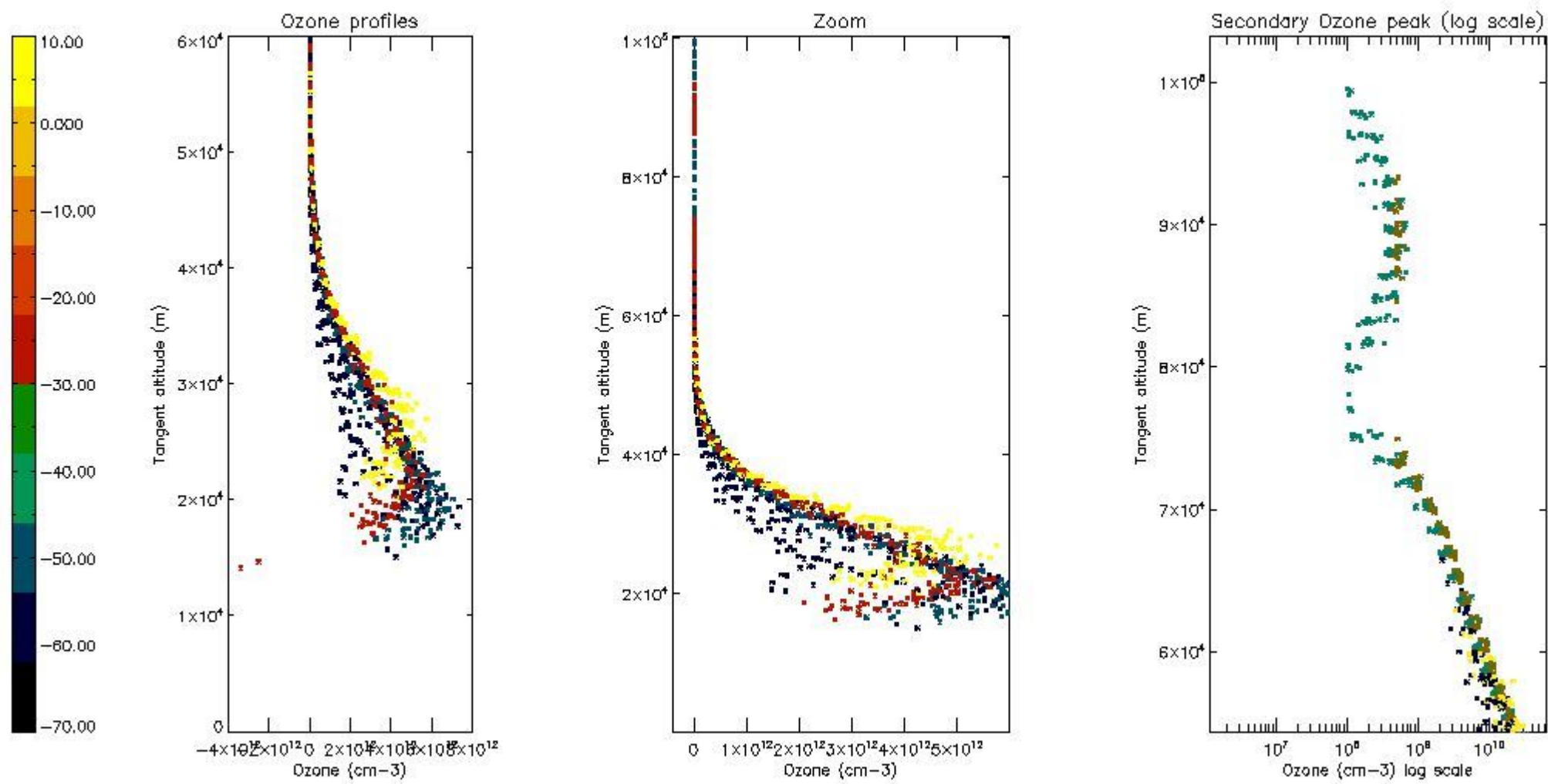
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



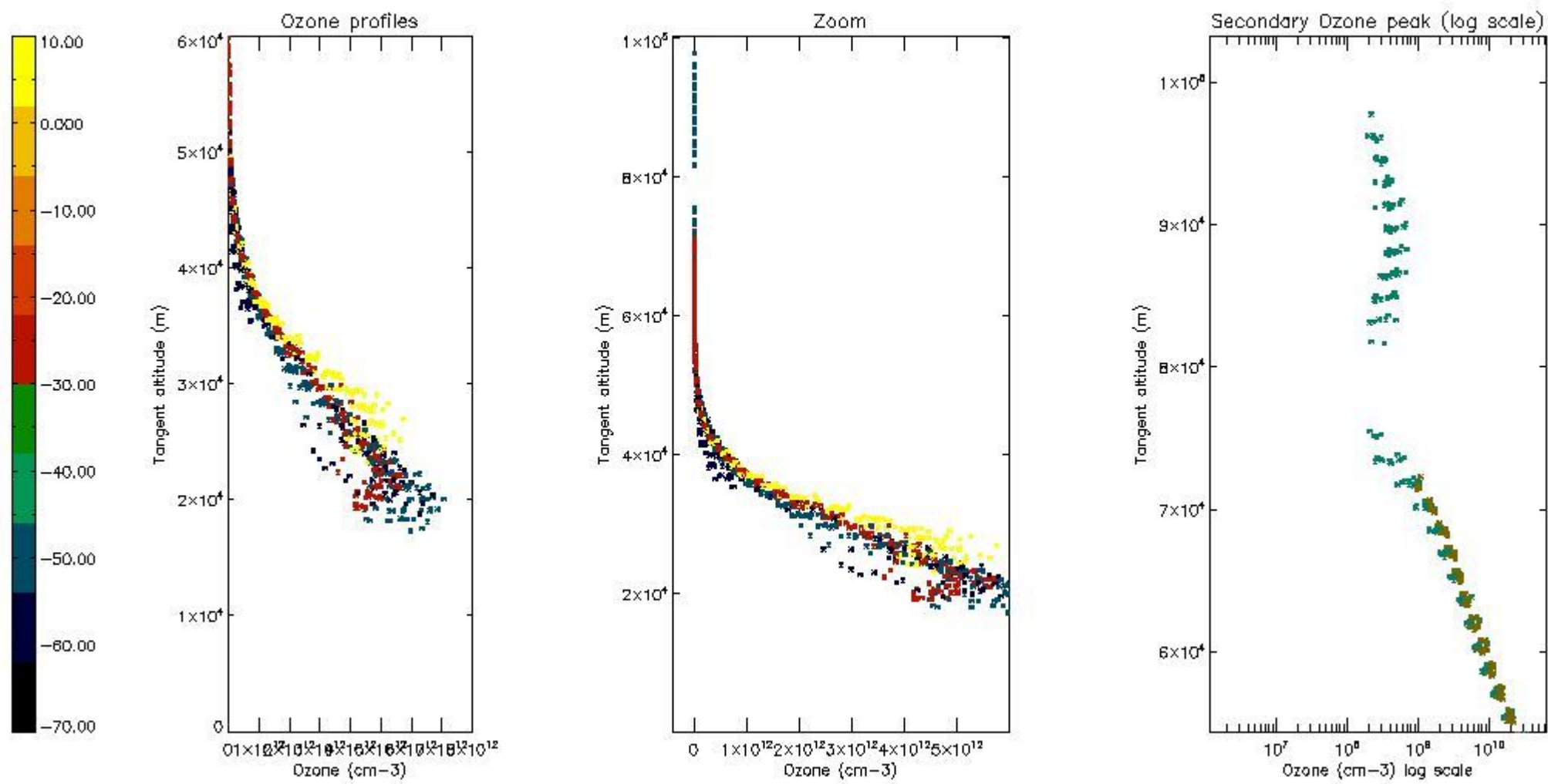
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



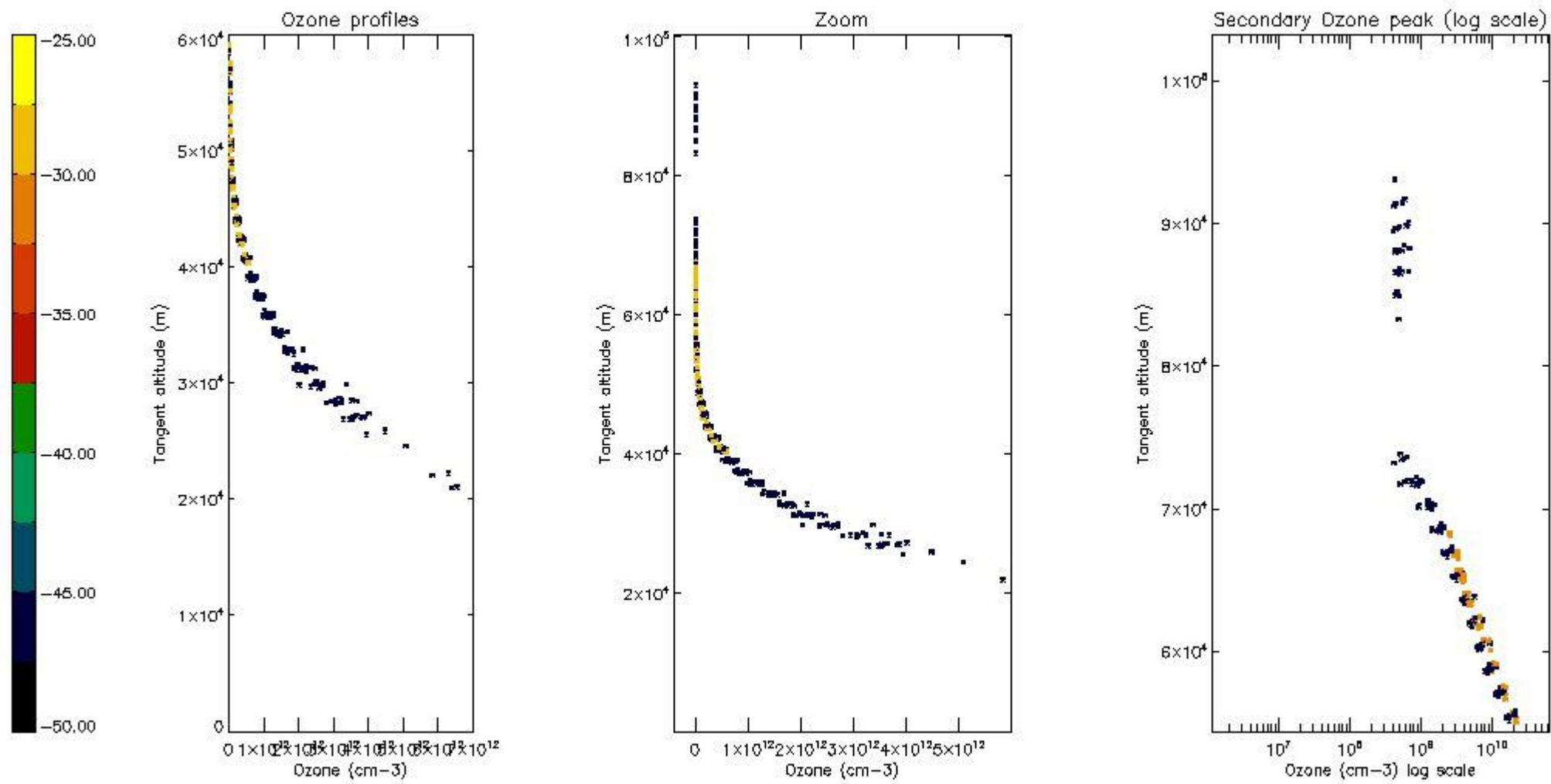
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



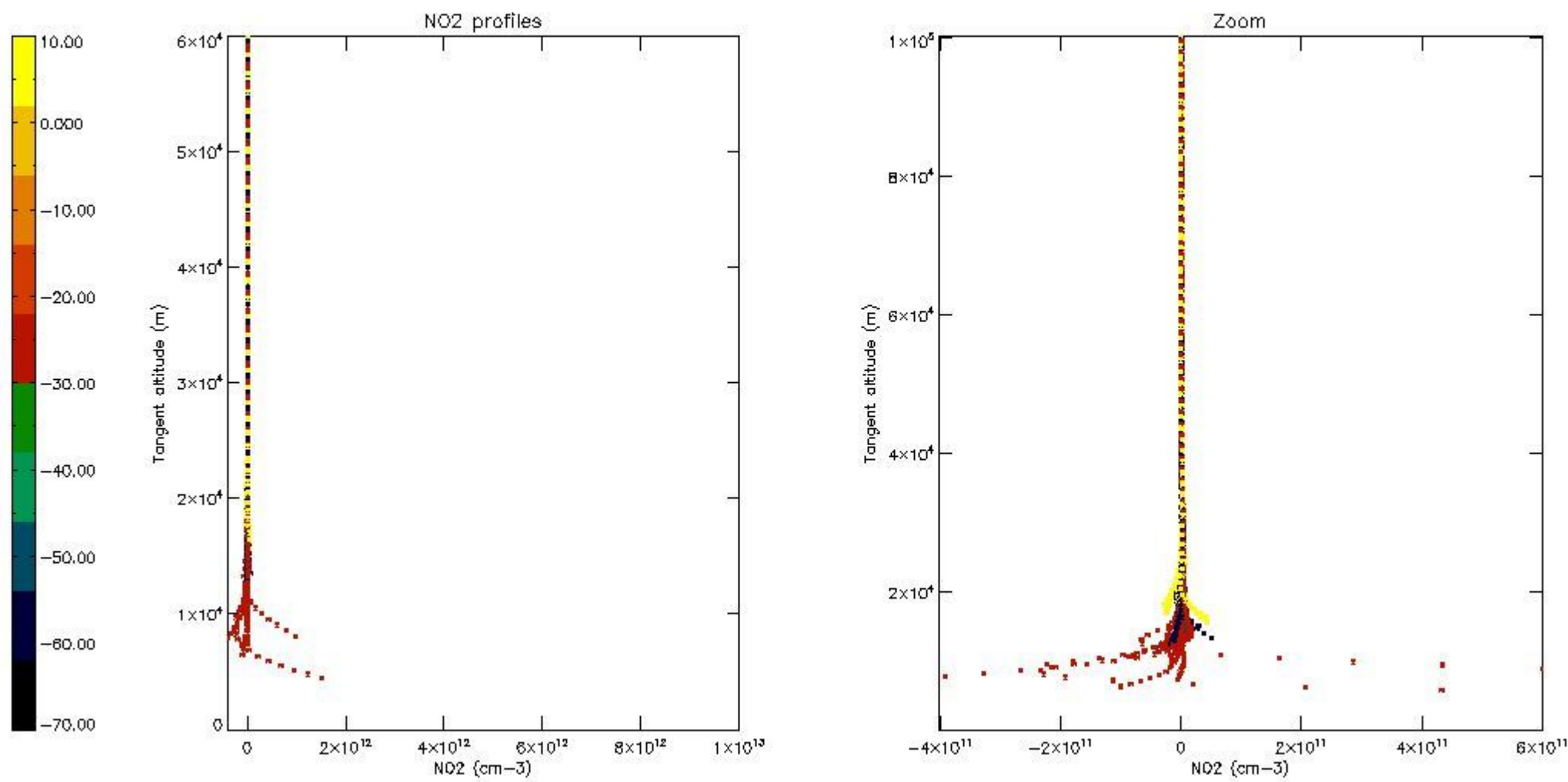
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



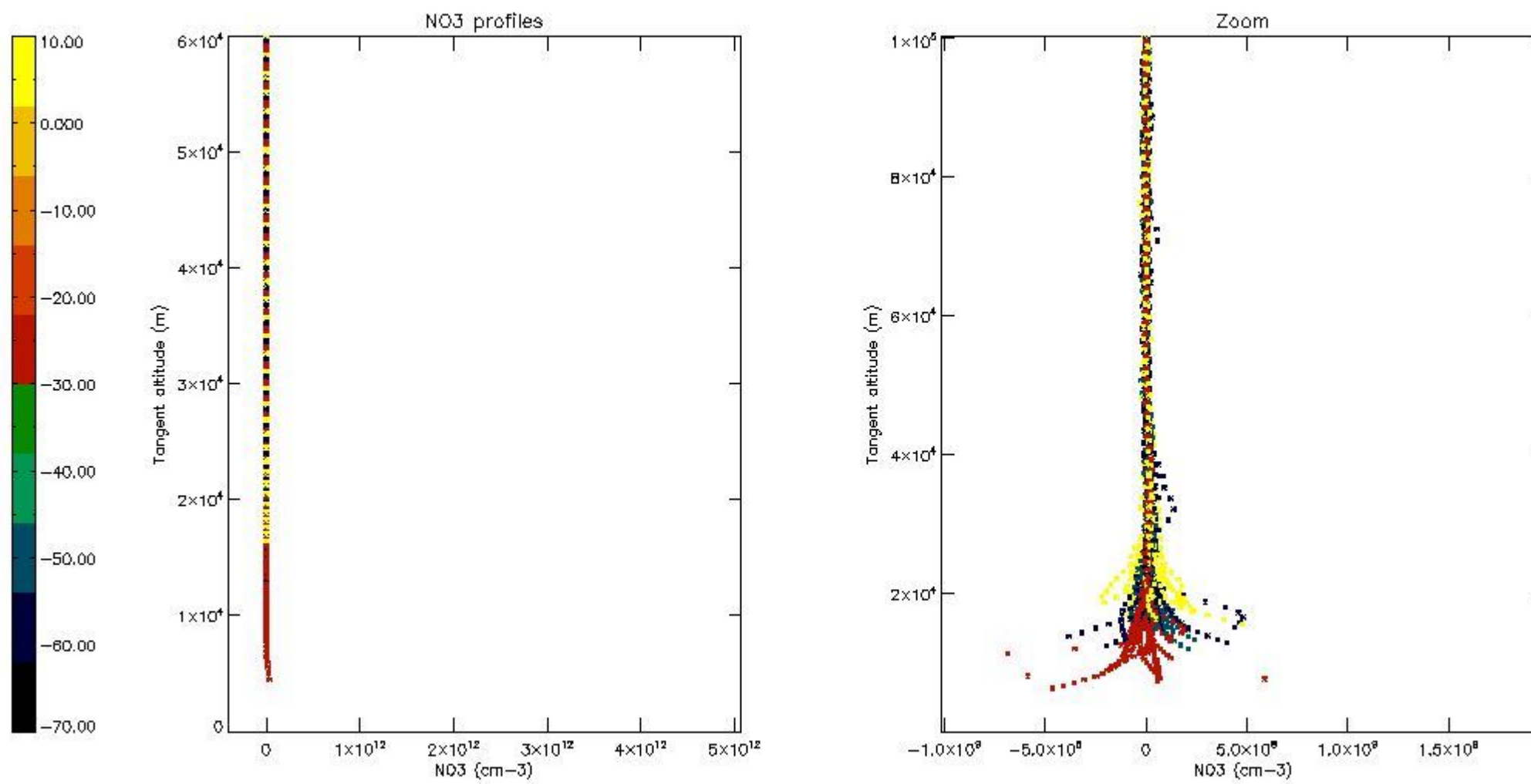
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

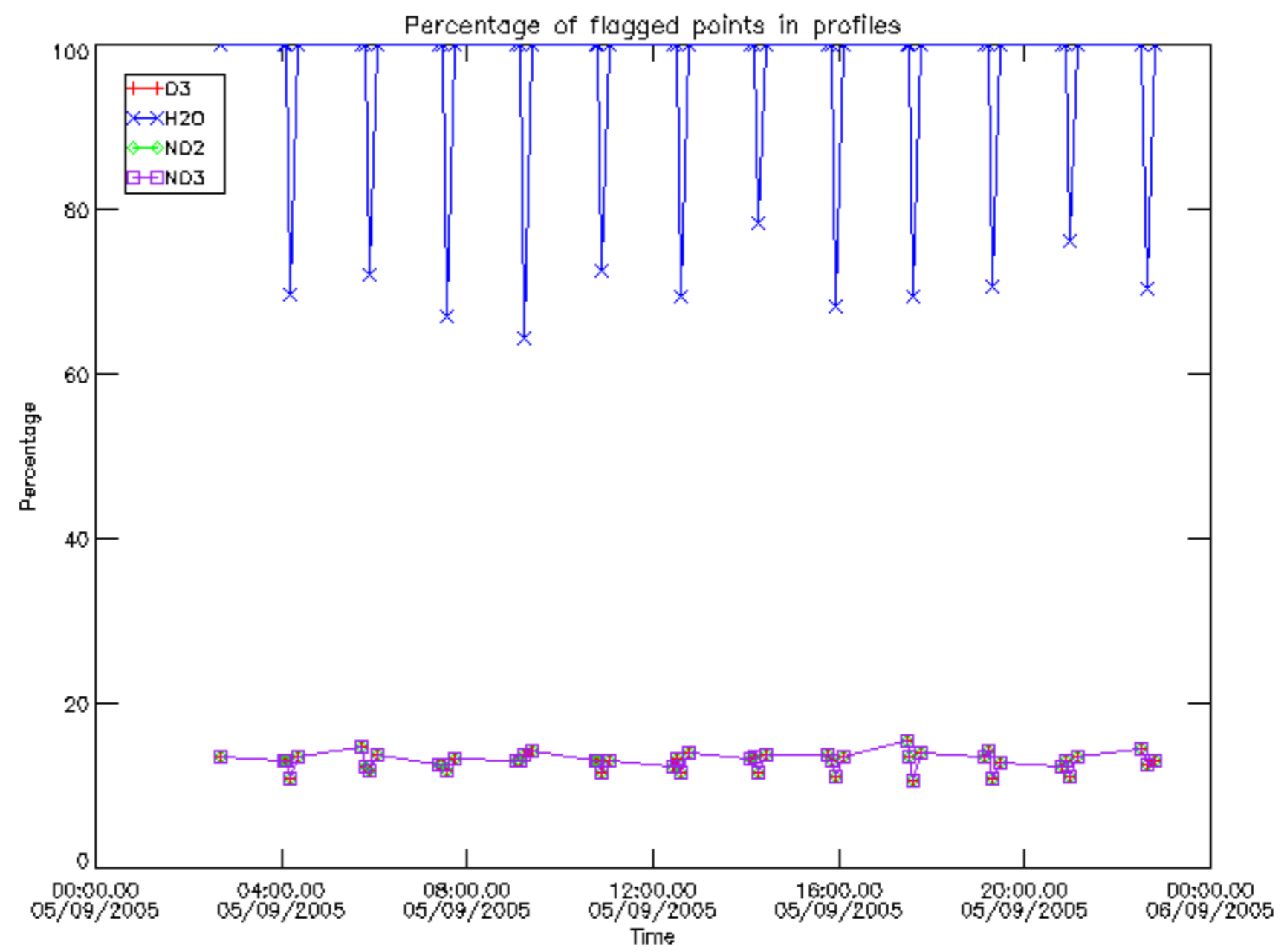
The colorbar represents the latitude.



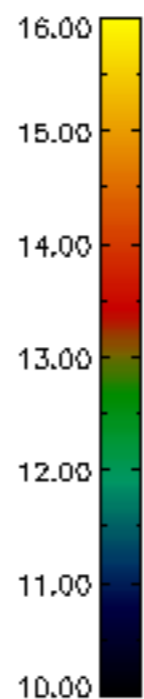
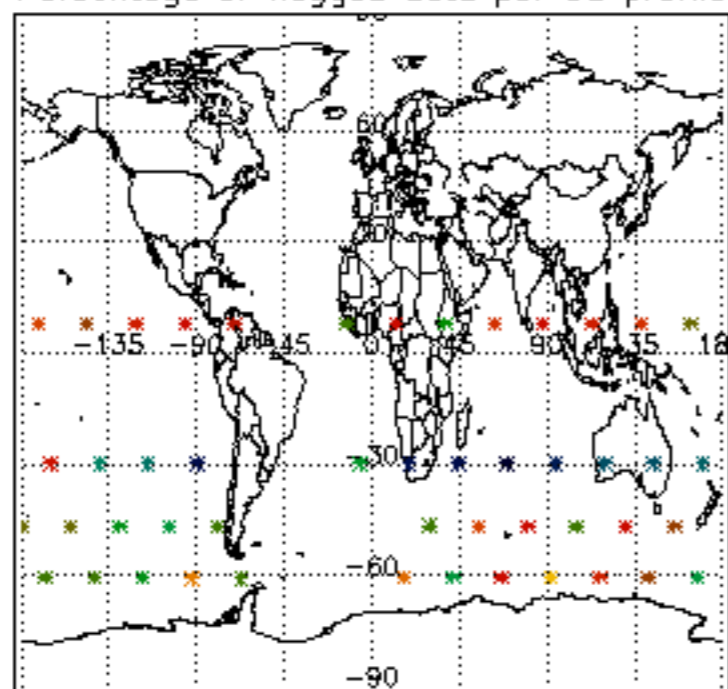
6. Auxiliary Data Files used for the production reported in section 2

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.

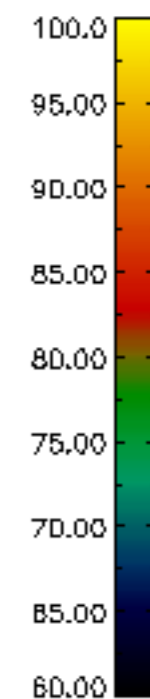
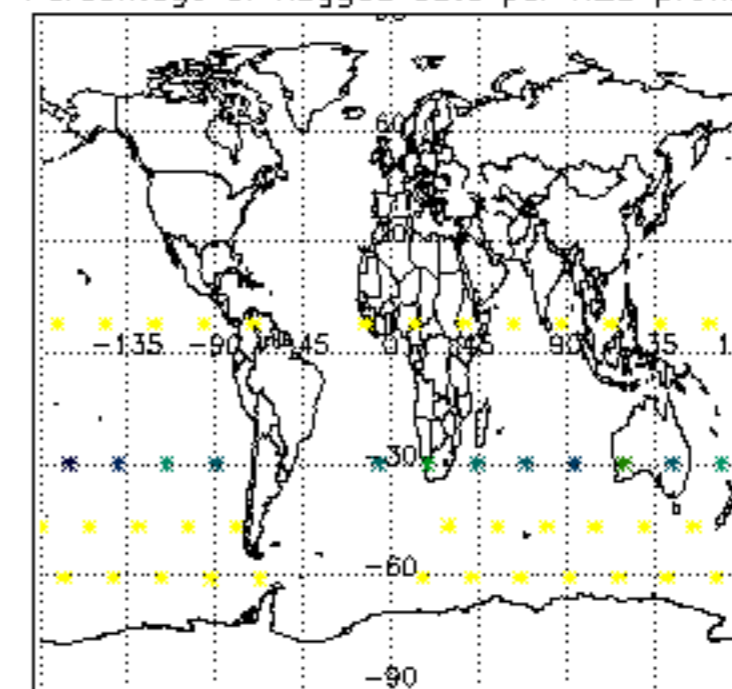
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	05-SEP-2005 02:41:46
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	05-SEP-2005 02:41:46
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	05-SEP-2005 02:41:46



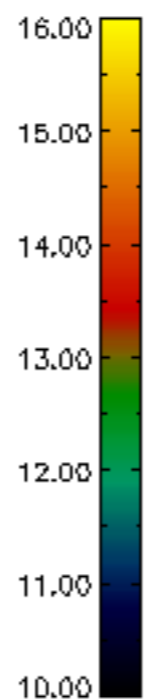
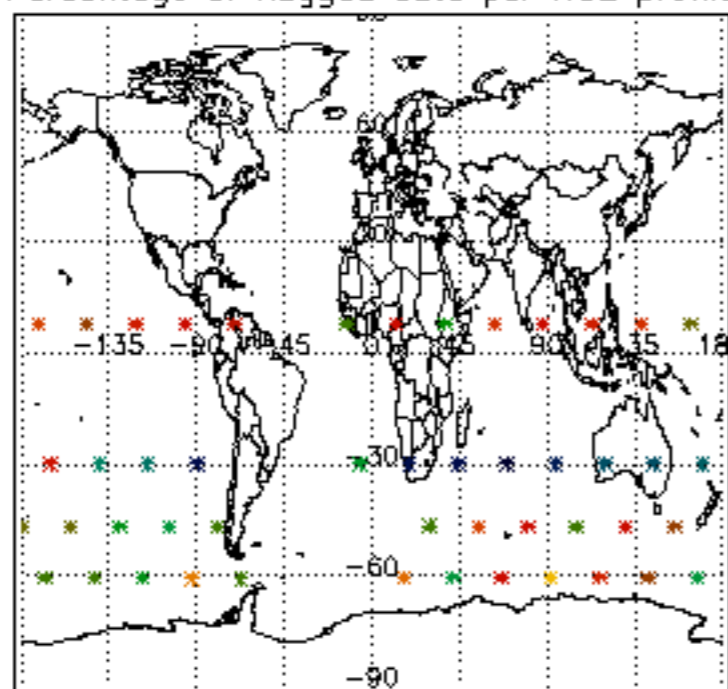
Percentage of flagged data per D3 profile



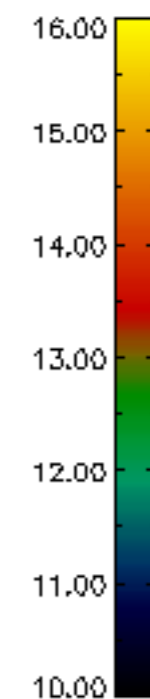
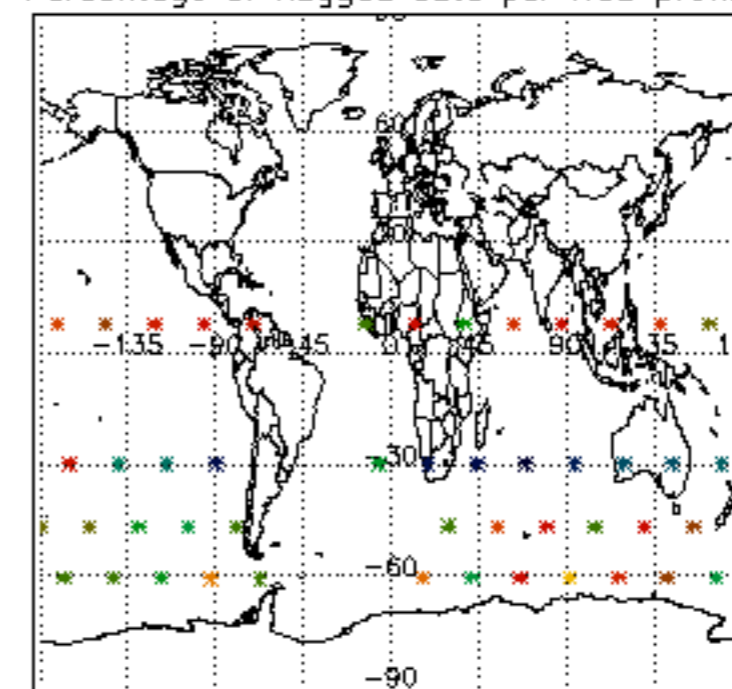
Percentage of flagged data per H2O profile

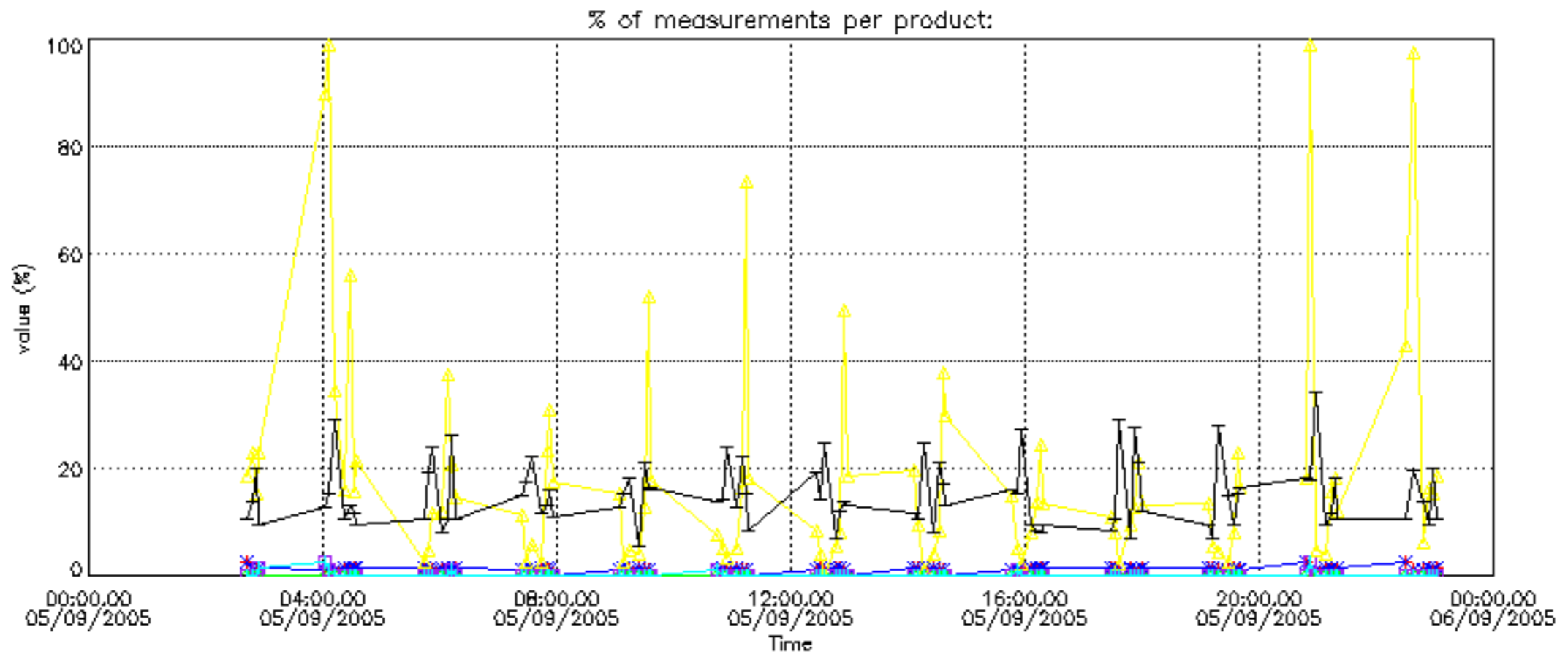


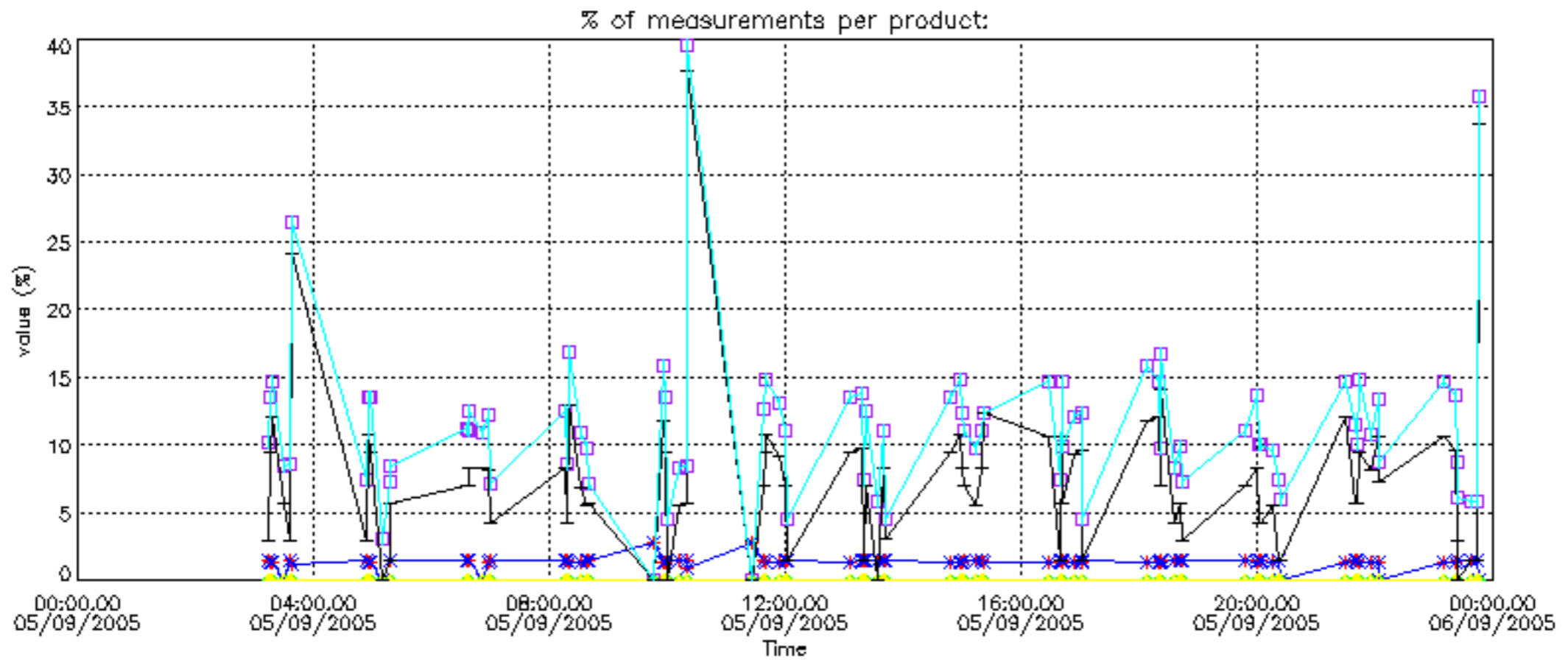
Percentage of flagged data per NO2 profile



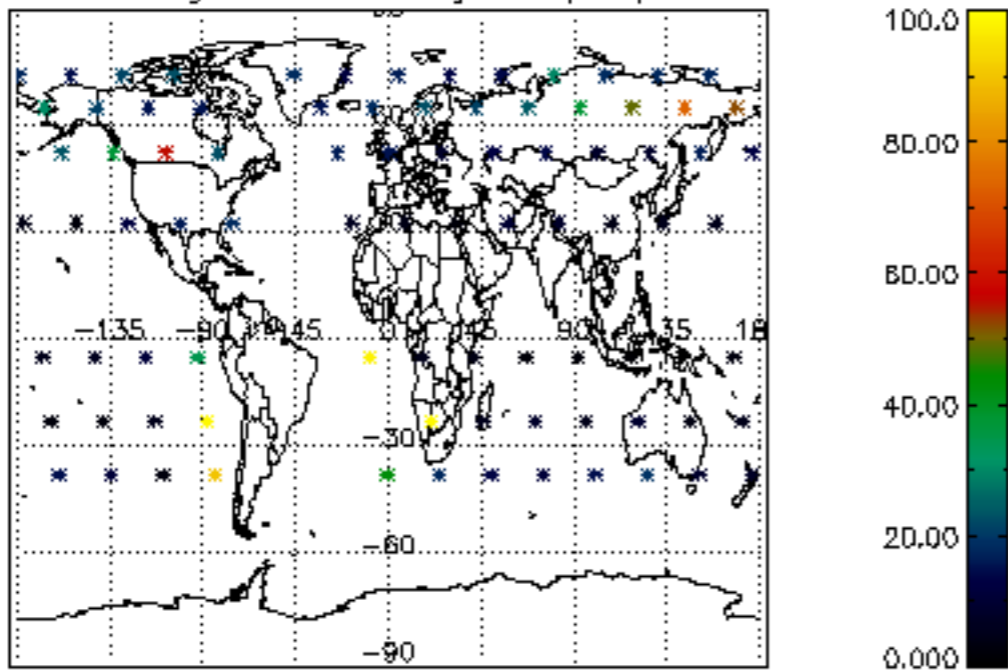
Percentage of flagged data per NO3 profile



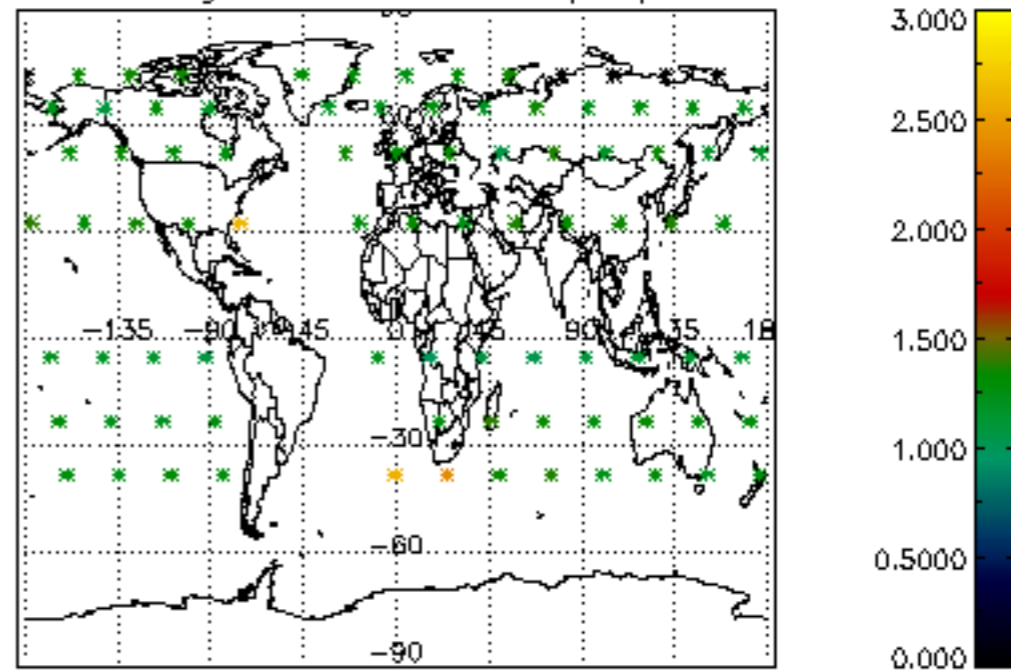




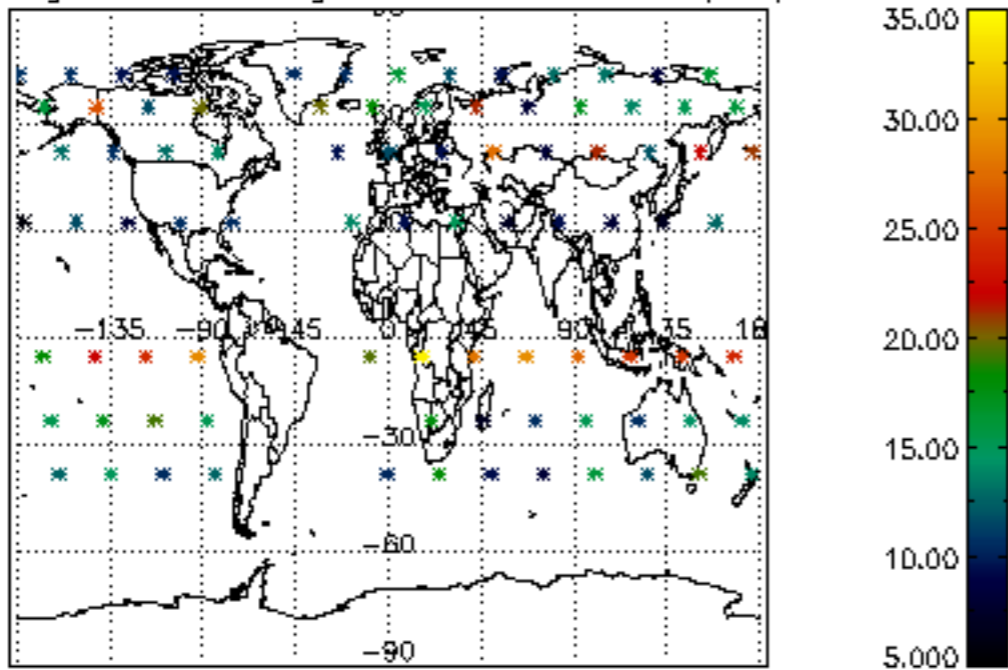
Percentage of cosmic ray hits per profile



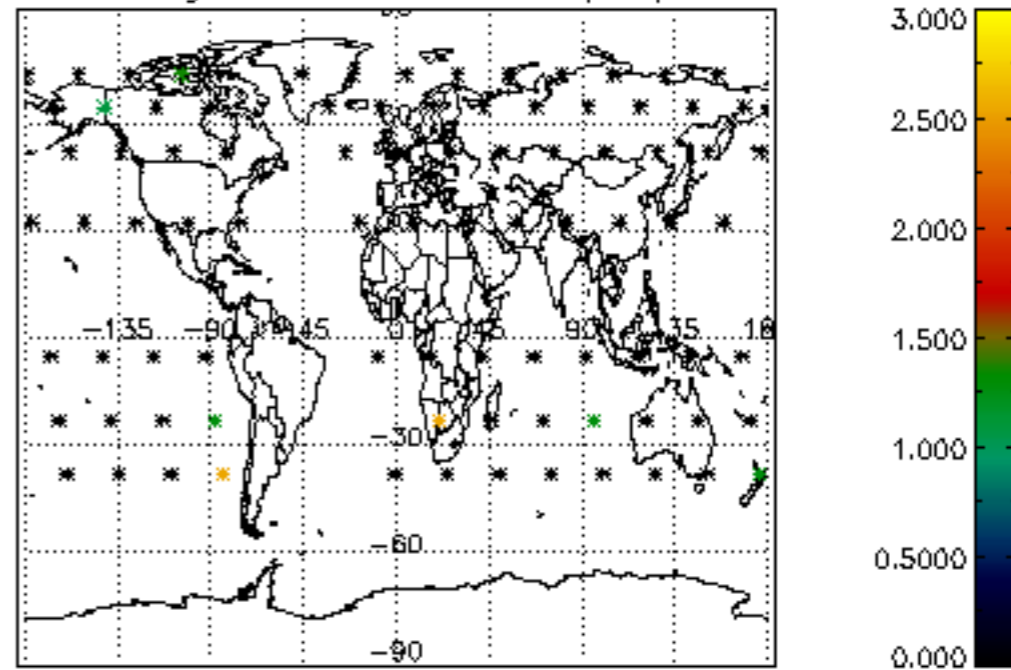
Percentage of datation errors per profile



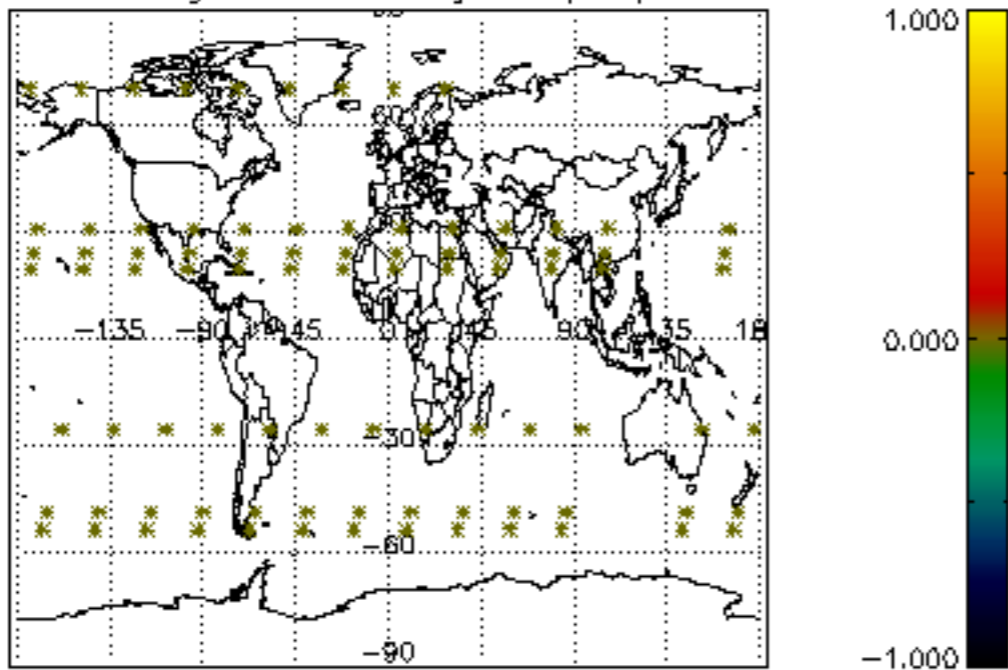
Percentage of star falling outside central band per profile



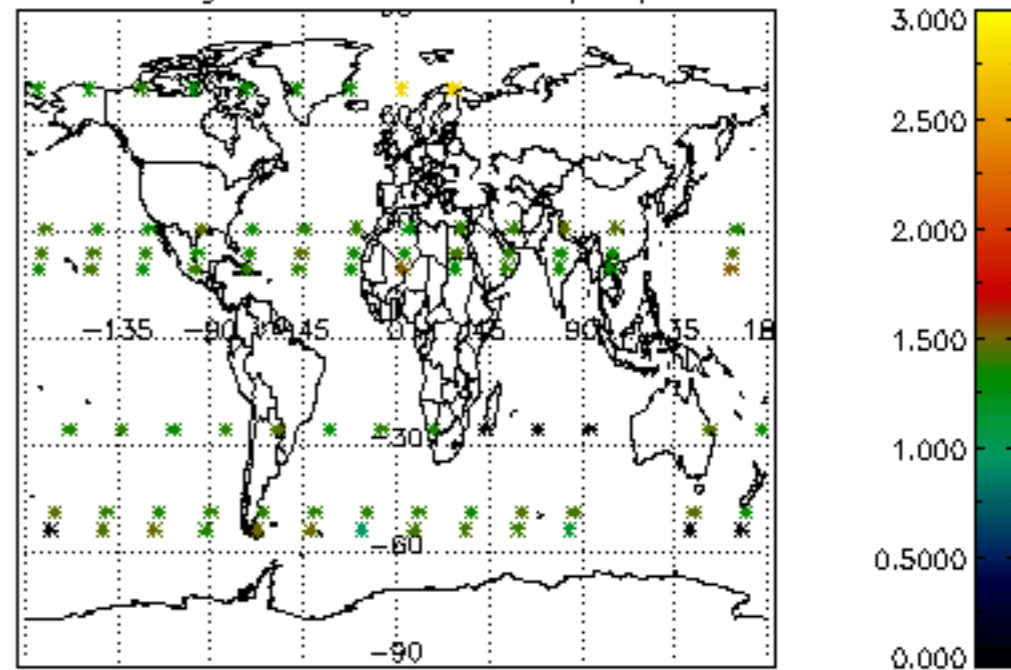
Percentage of saturation errors per profile



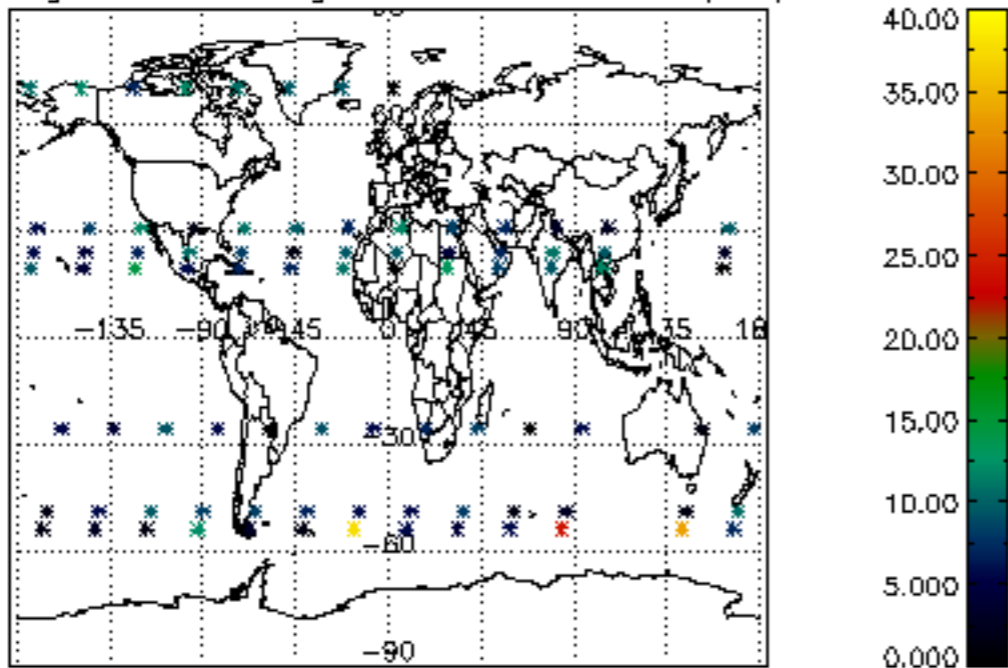
Percentage of cosmic ray hits per profile



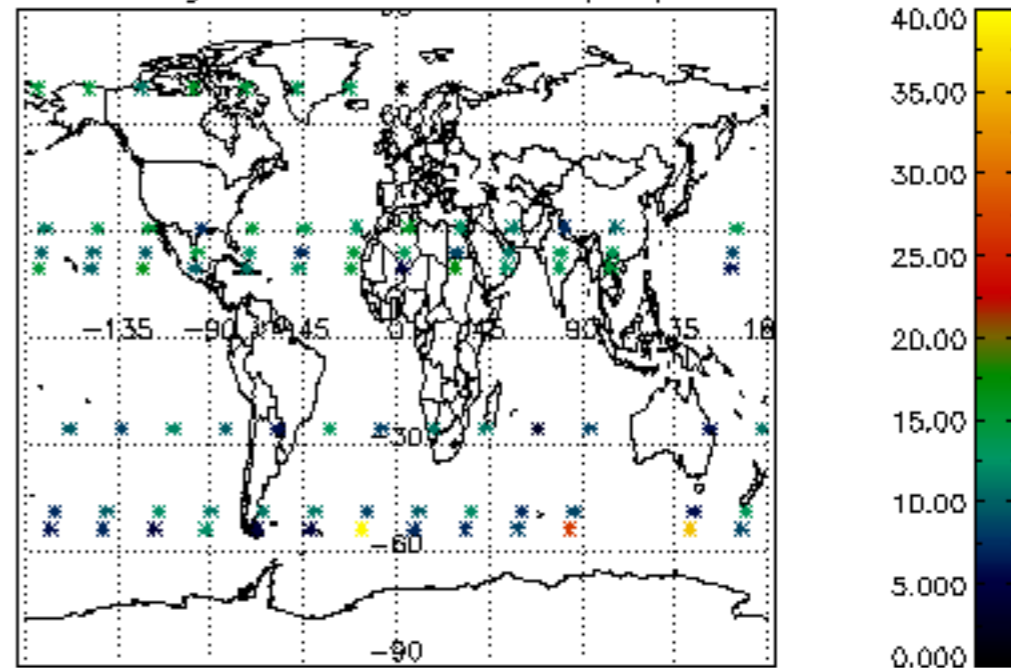
Percentage of datation errors per profile

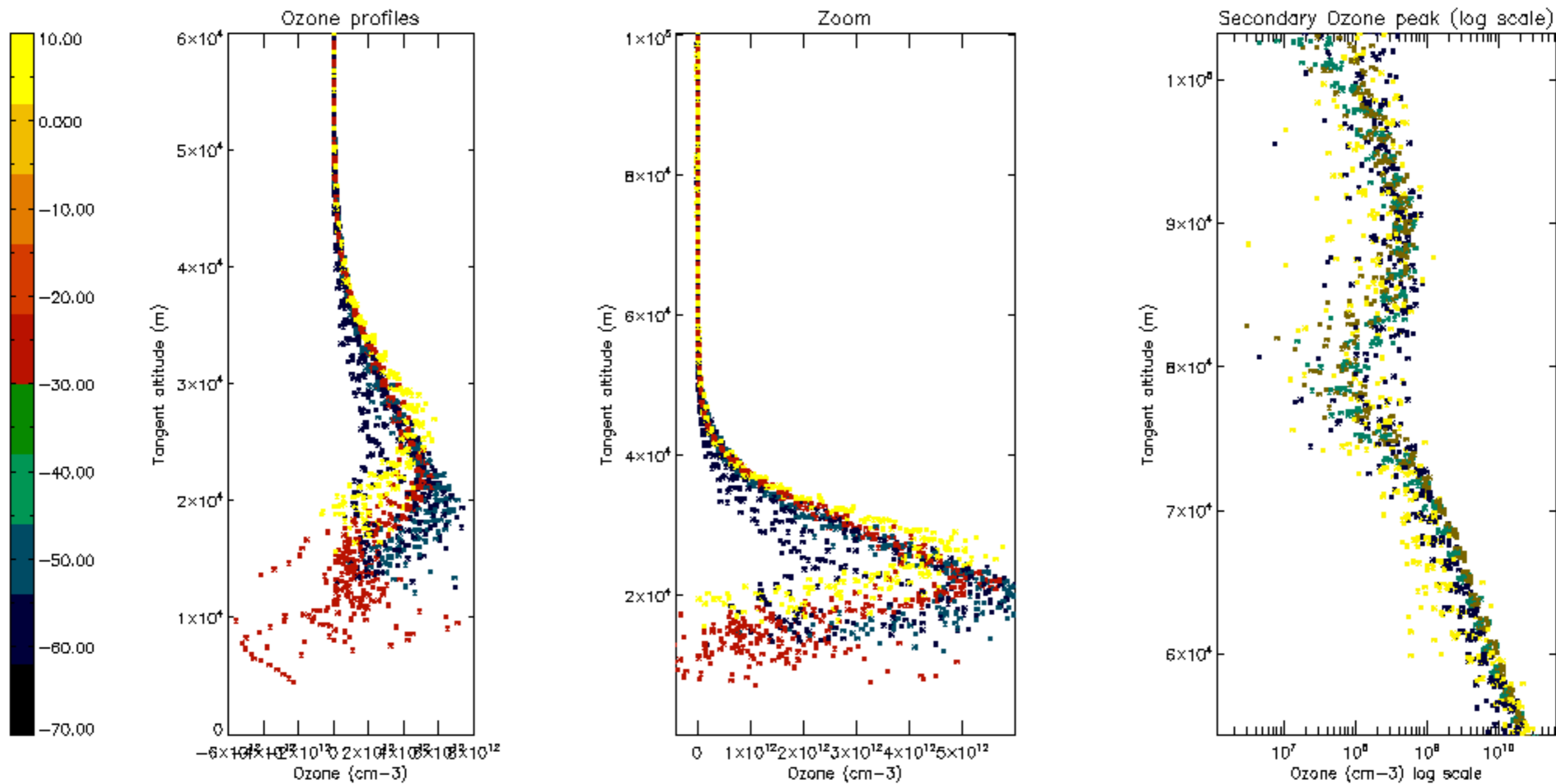


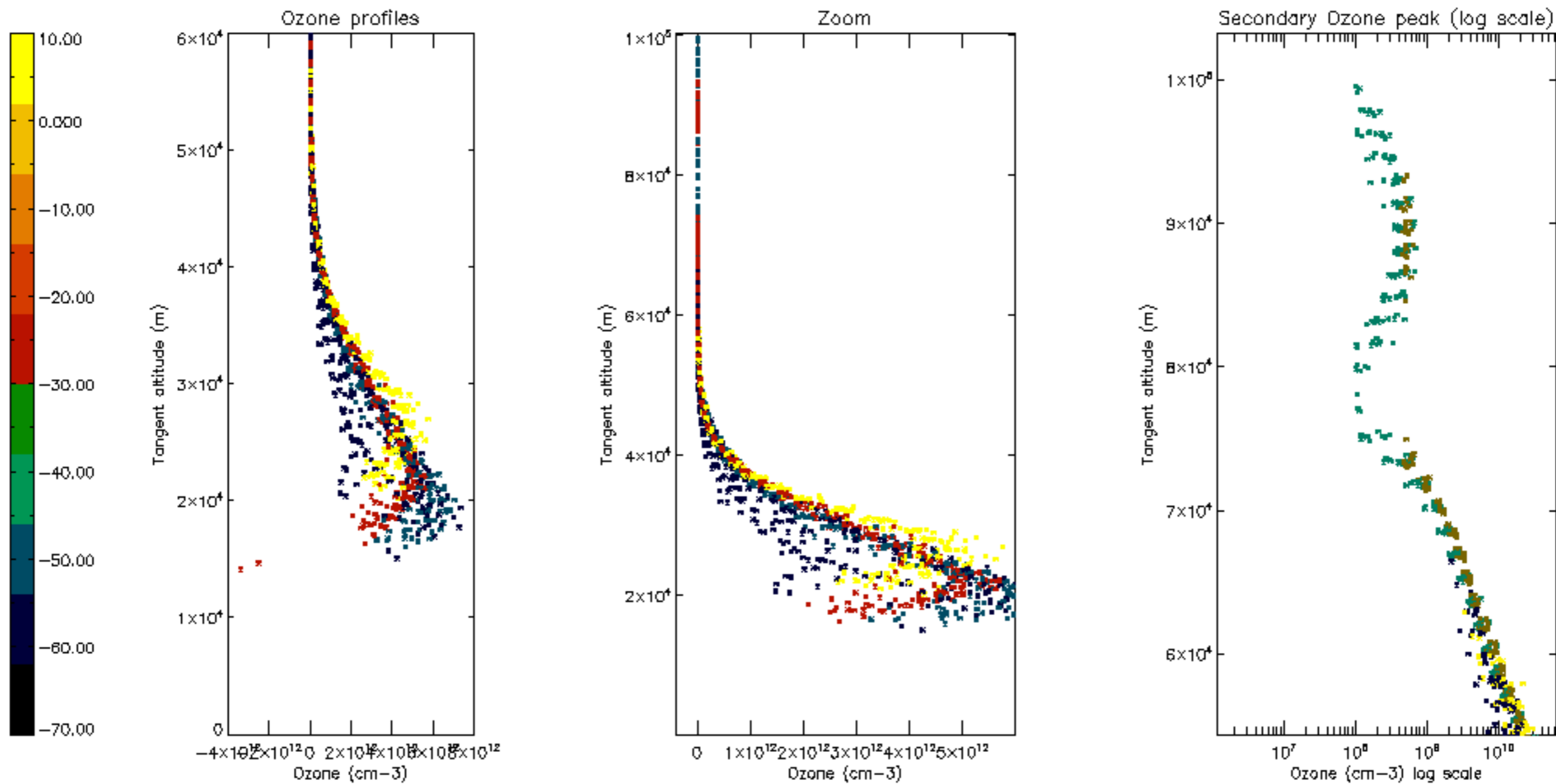
Percentage of star falling outside central band per profile

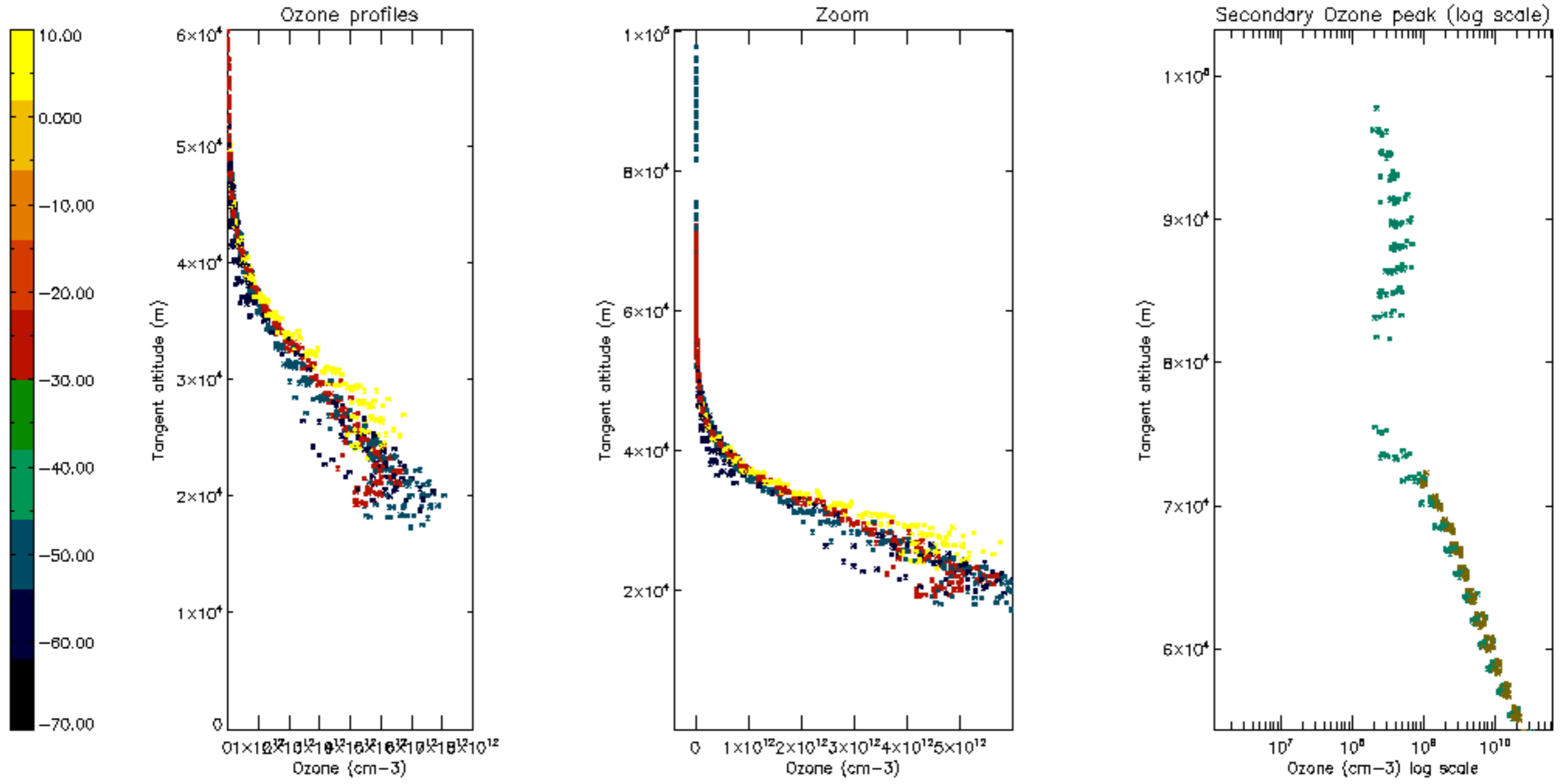


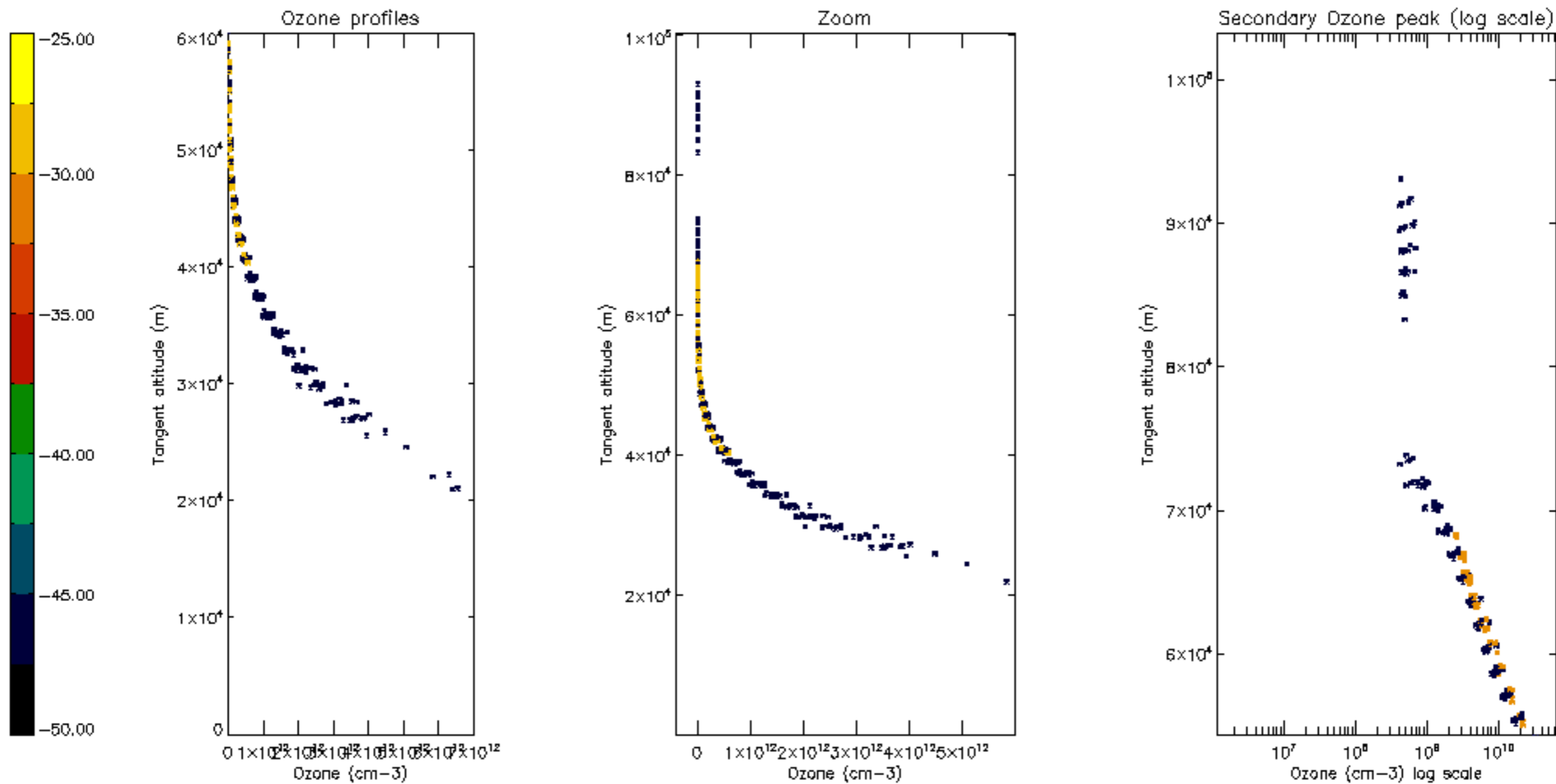
Percentage of saturation errors per profile

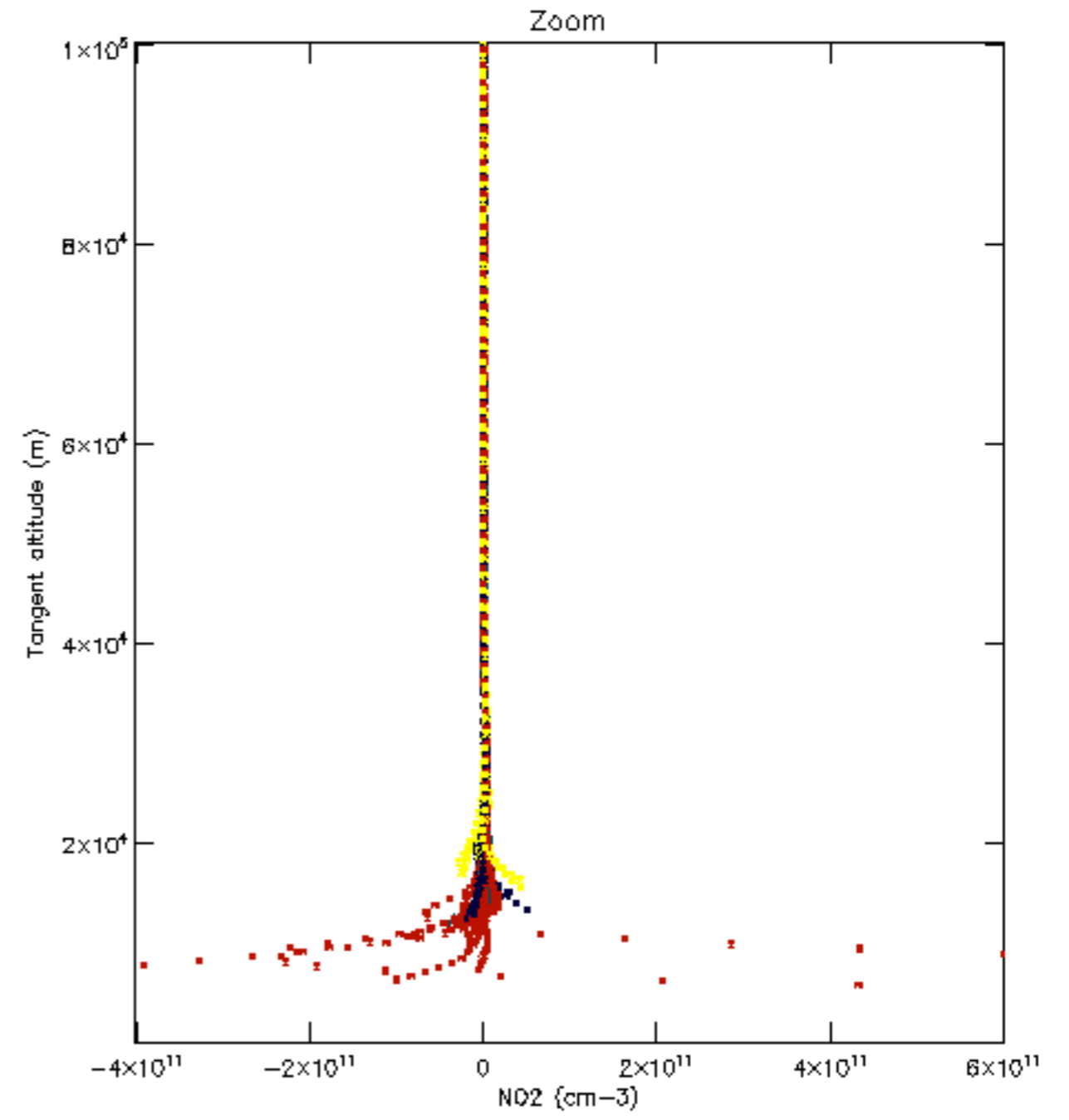
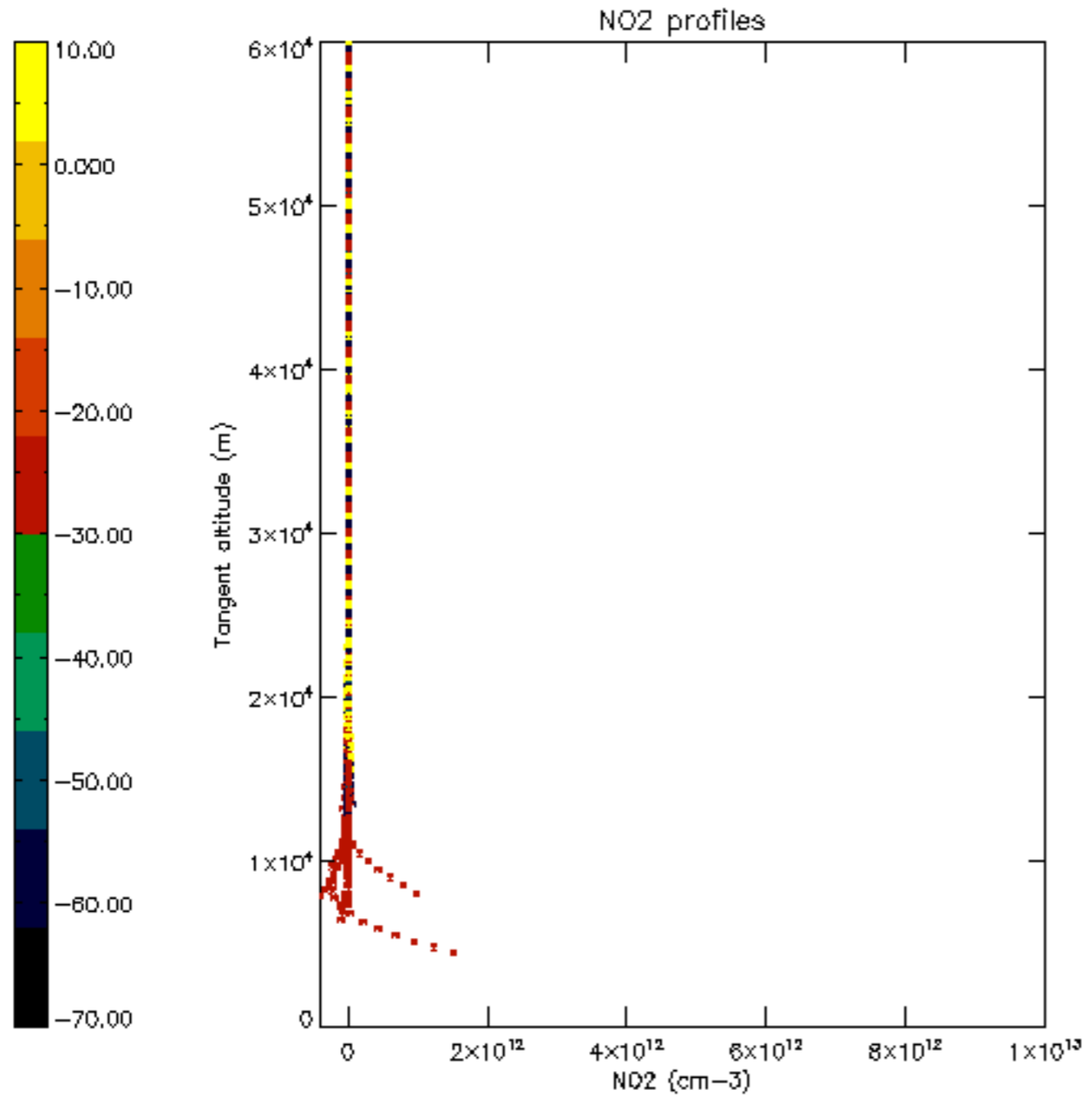


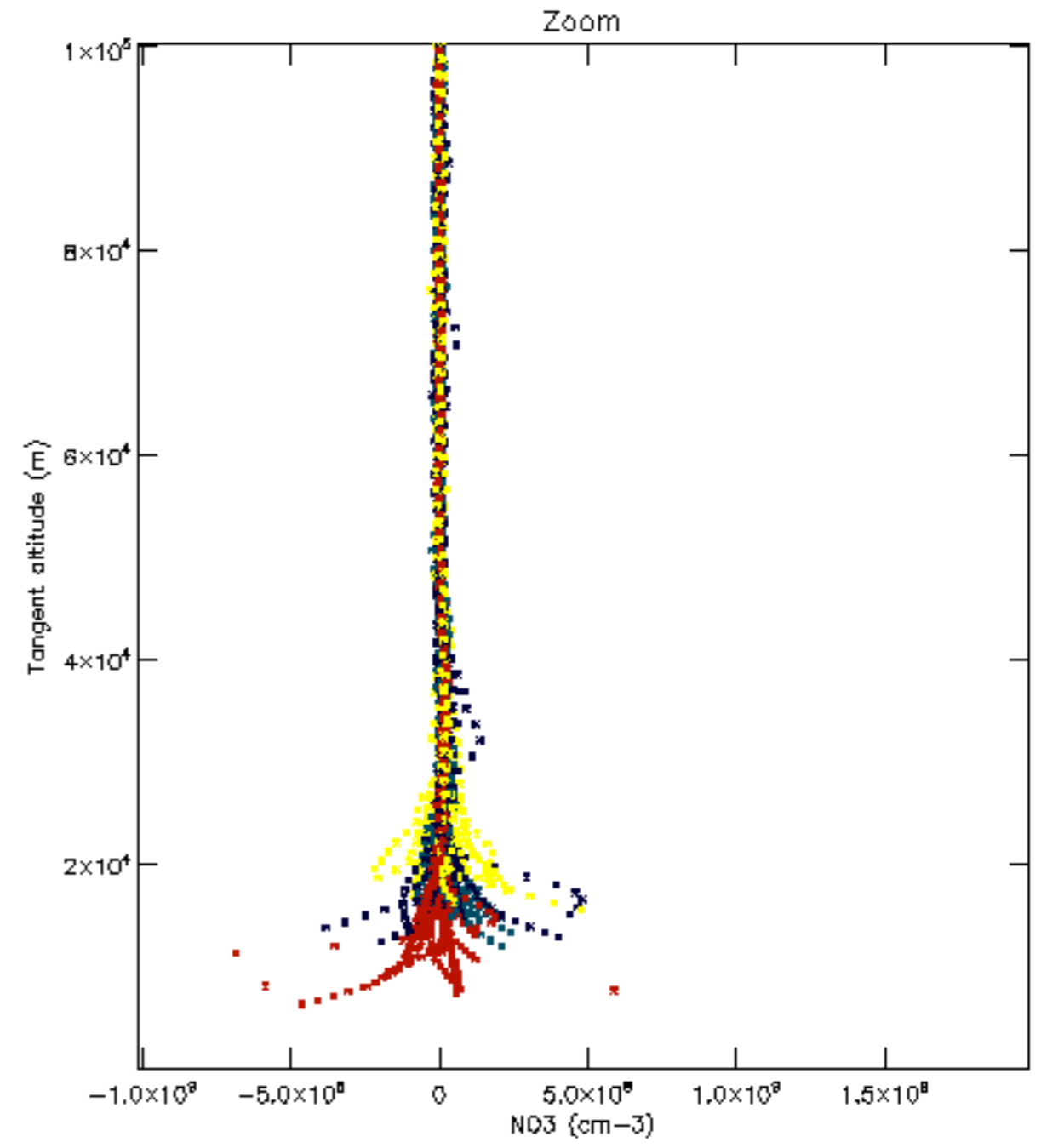
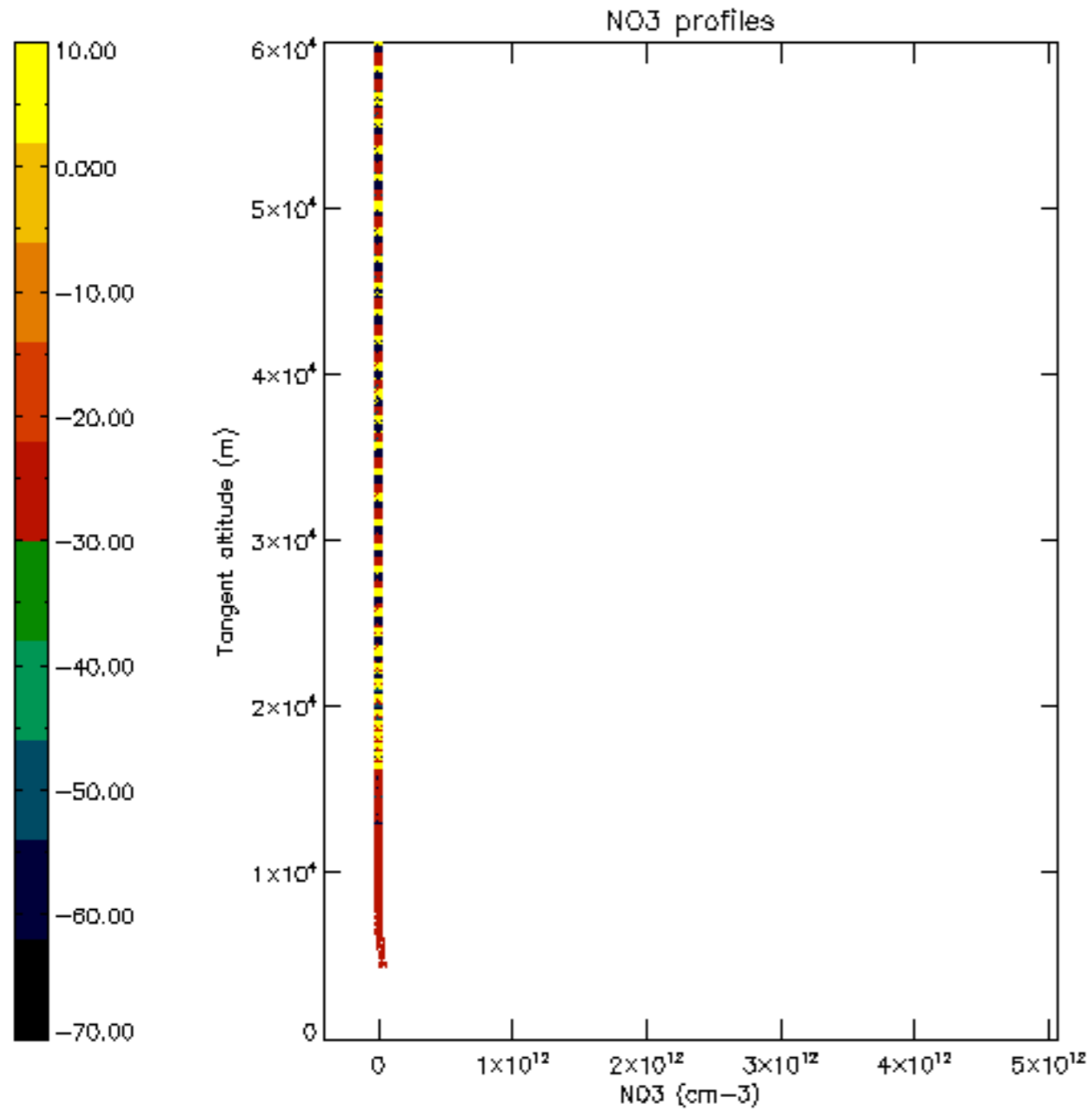


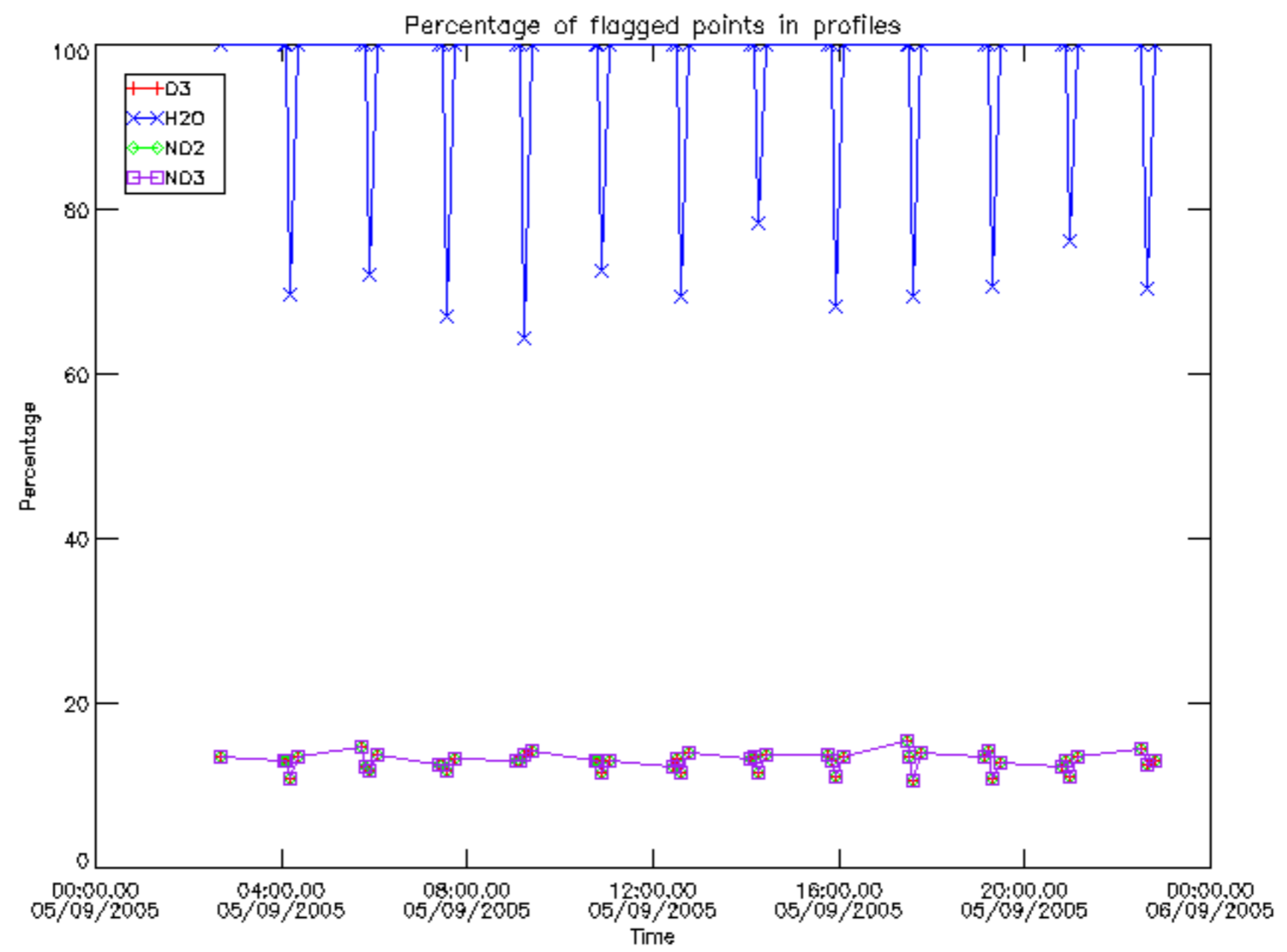




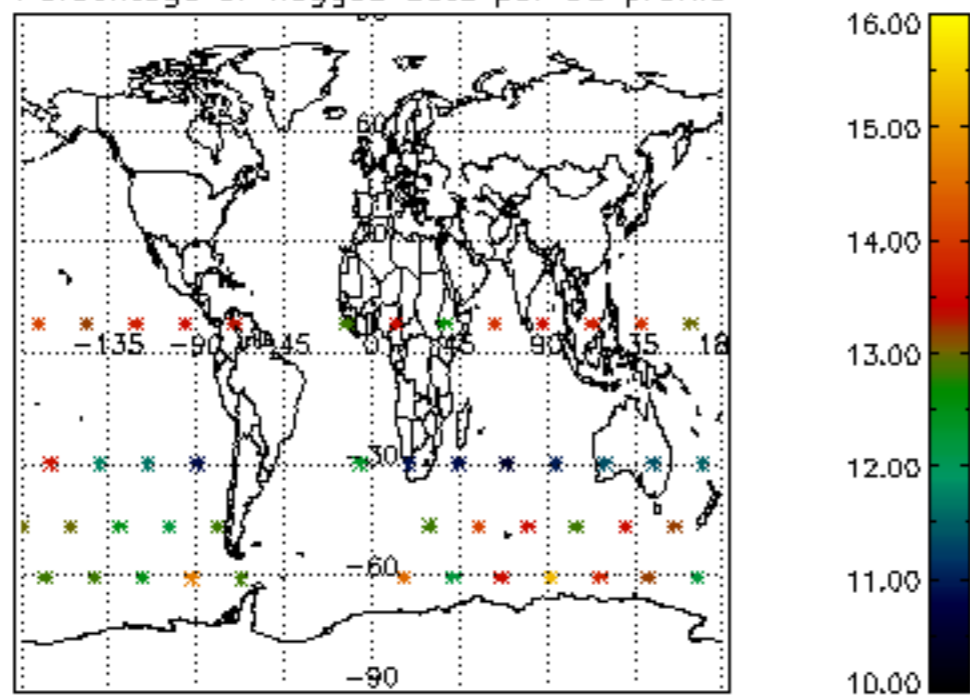




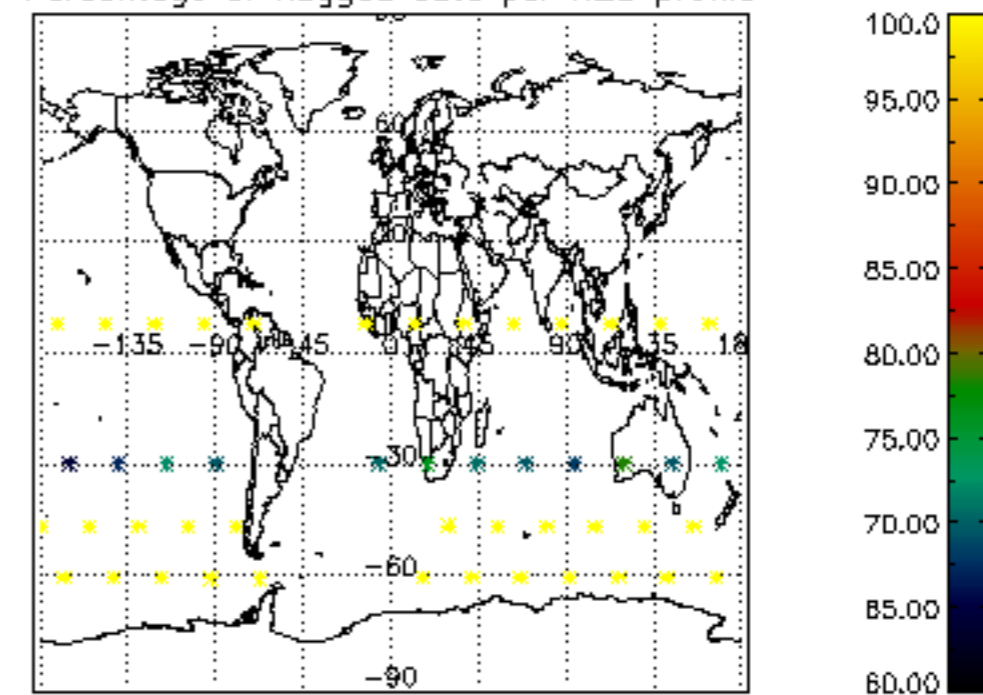




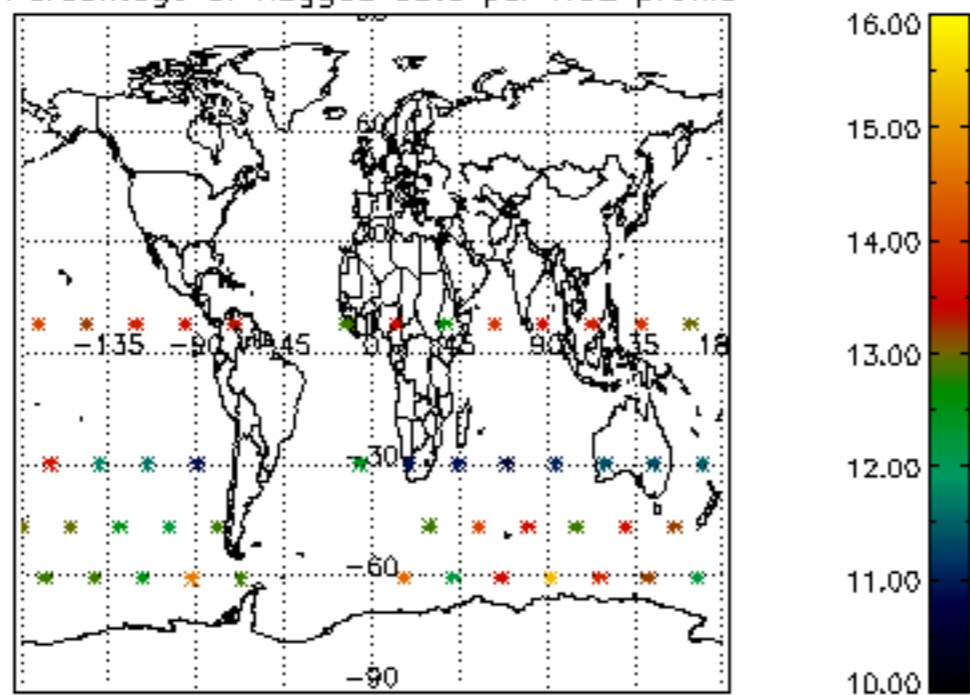
Percentage of flagged data per D3 profile



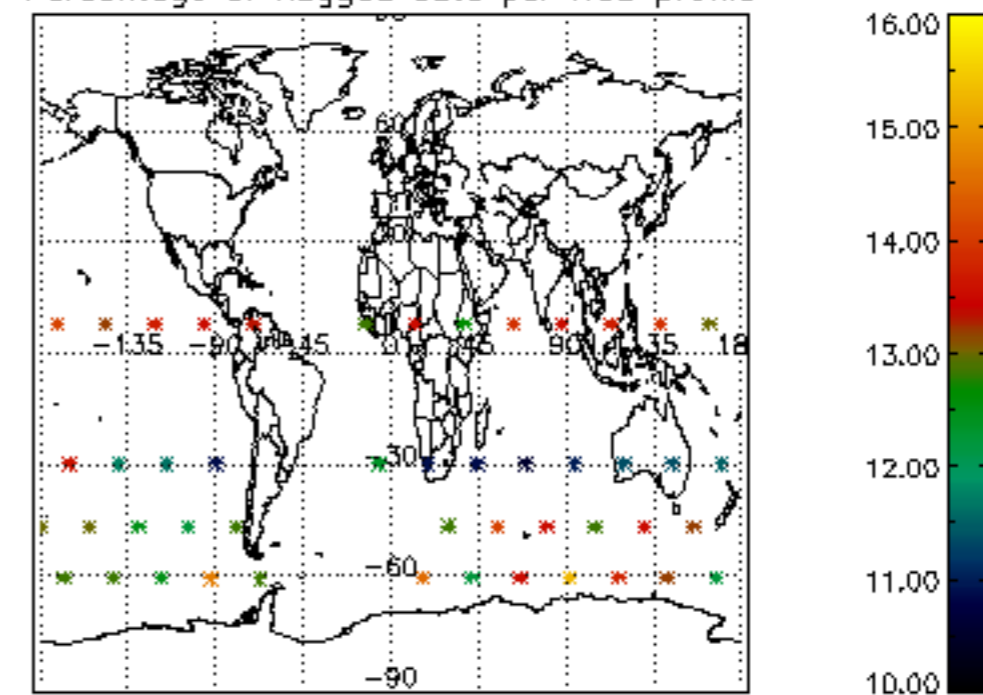
Percentage of flagged data per H2O profile

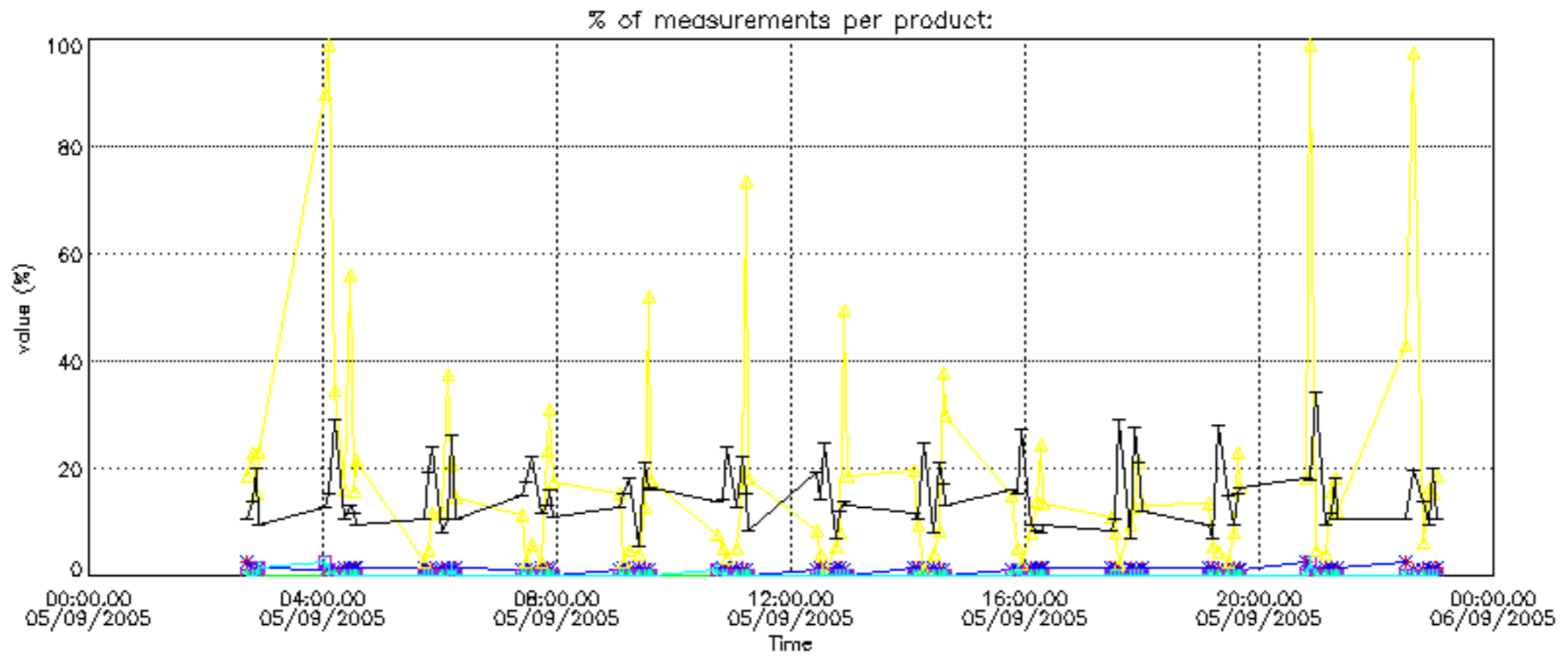


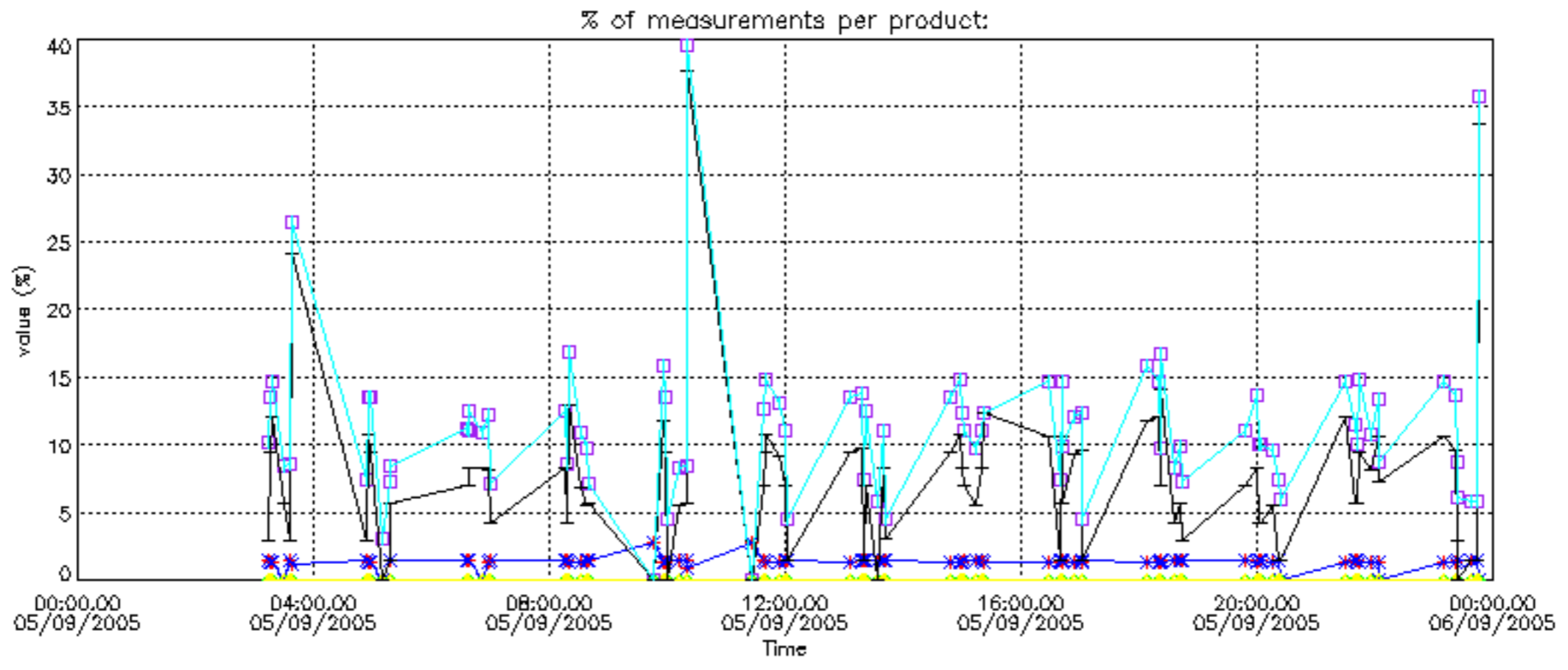
Percentage of flagged data per NO2 profile



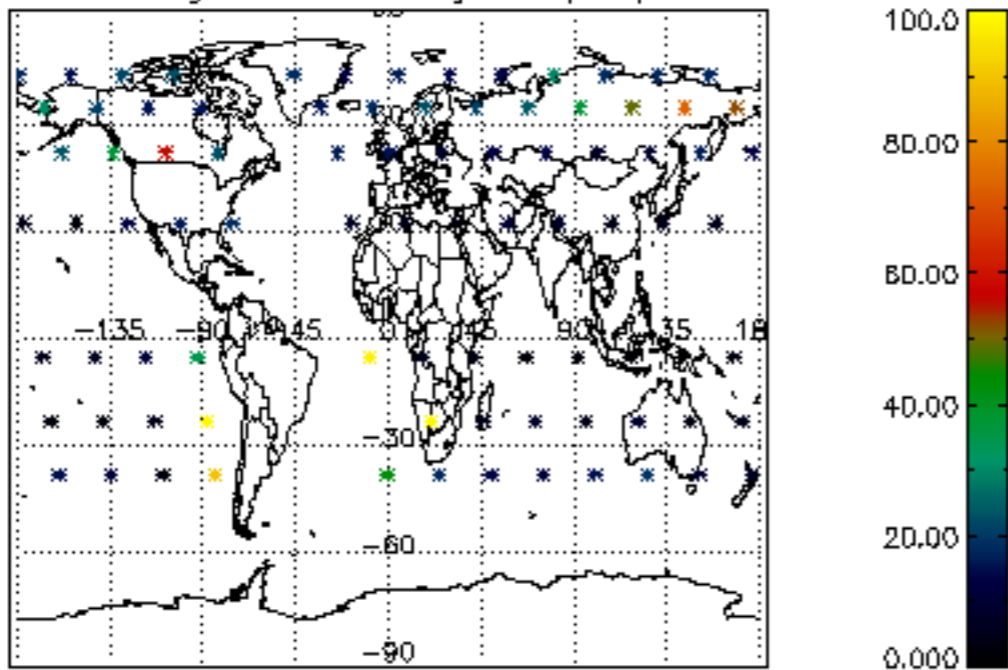
Percentage of flagged data per NO3 profile



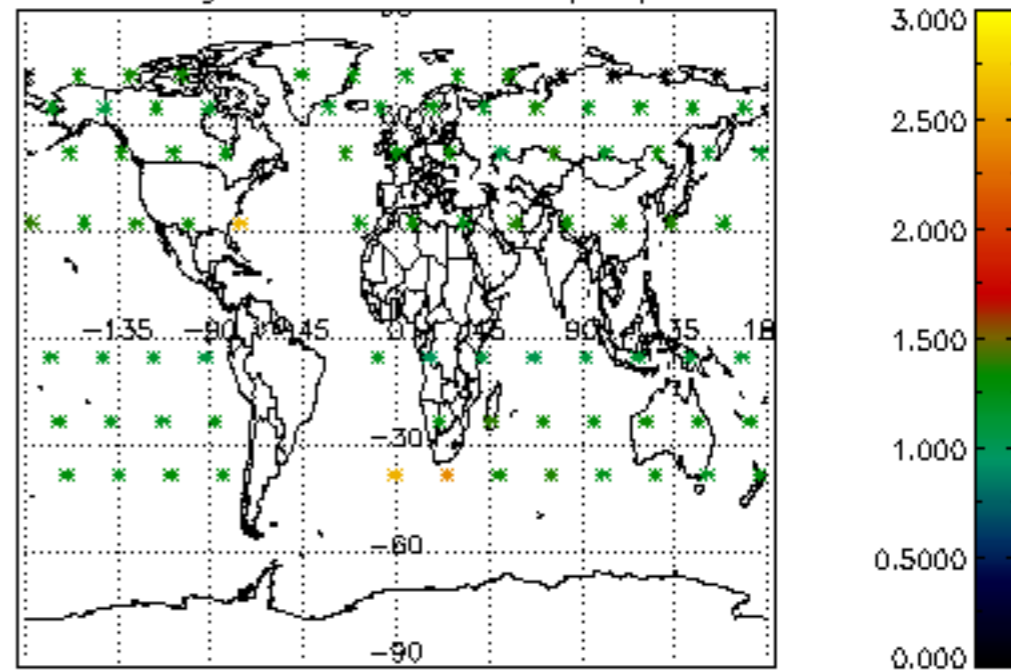




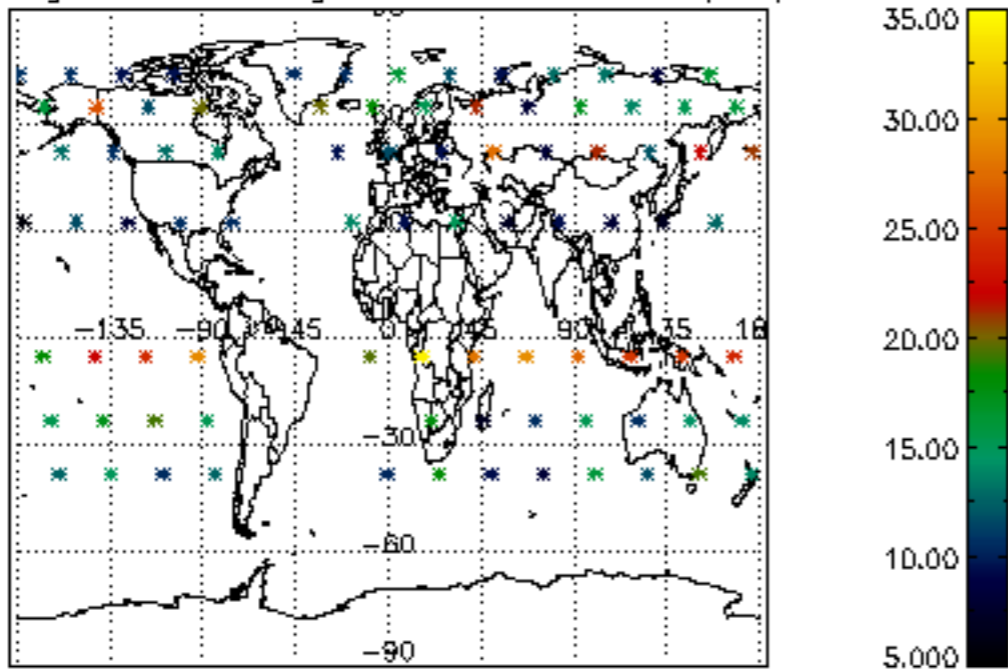
Percentage of cosmic ray hits per profile



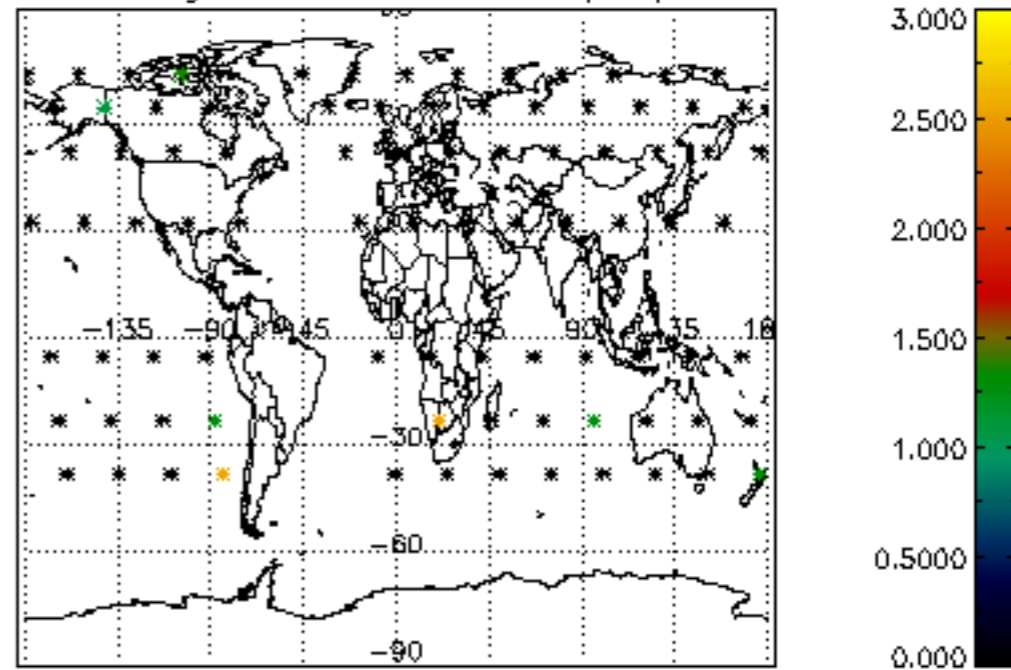
Percentage of datation errors per profile



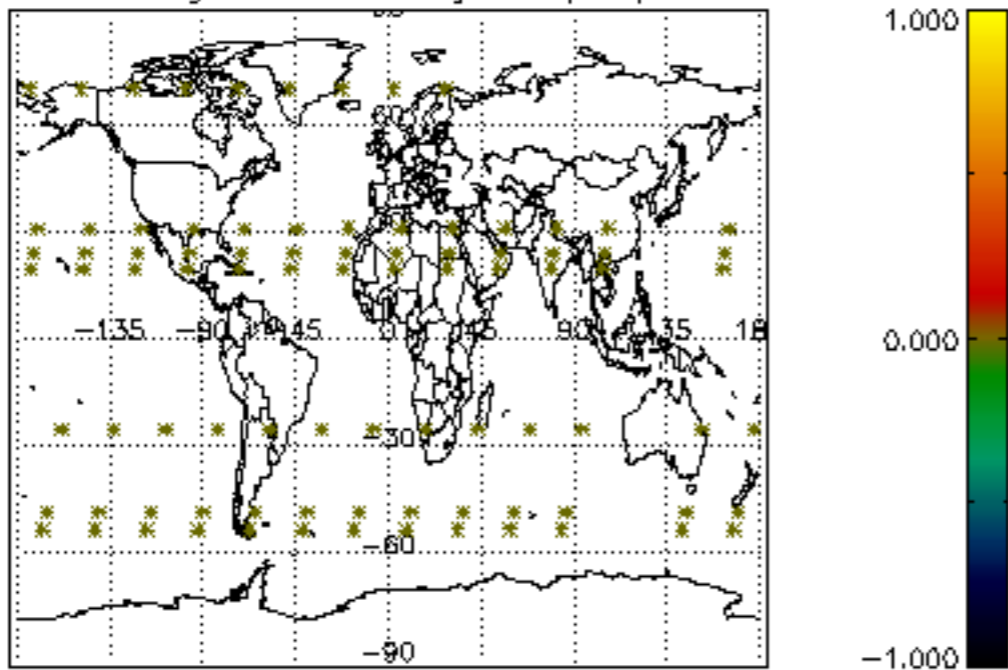
Percentage of star falling outside central band per profile



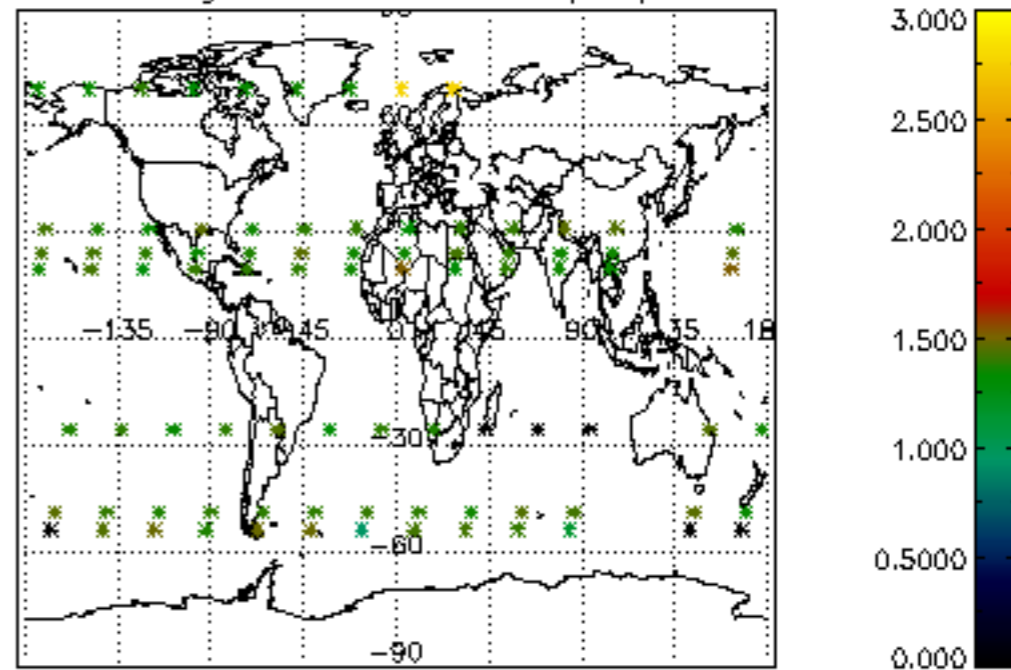
Percentage of saturation errors per profile



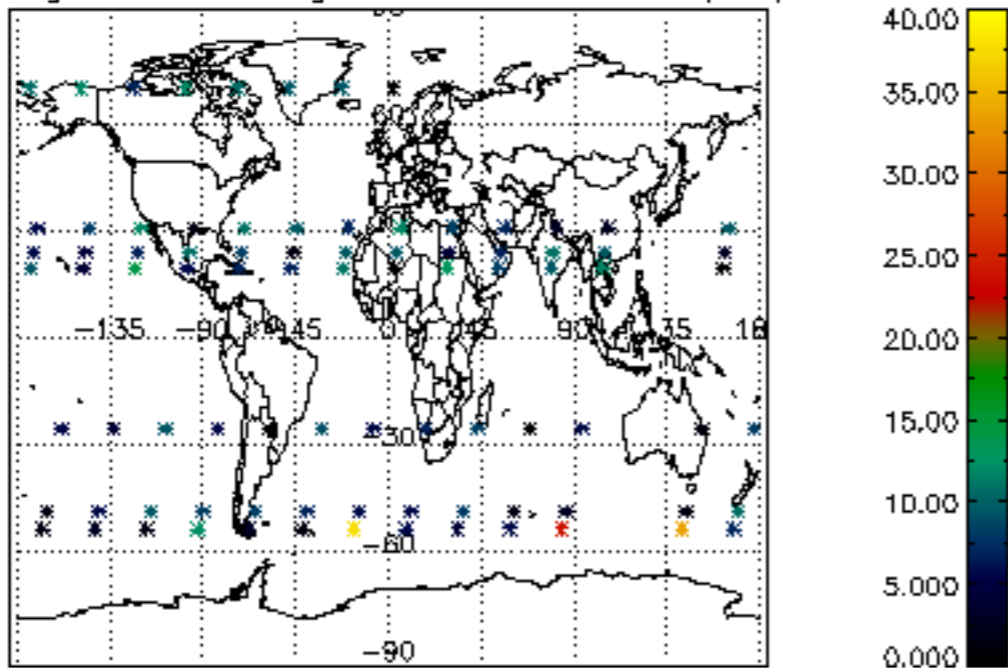
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

