

GOMOS Level 2 Daily Report

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

Item	Value
Time of report generation	22APR2013 23:39:07
Data source version	GOMOS/6.01
Start time of products	10-08-2007 (10AUG2007 00:00:00)
Stop time of products	11-08-2007 (11AUG2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	233
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

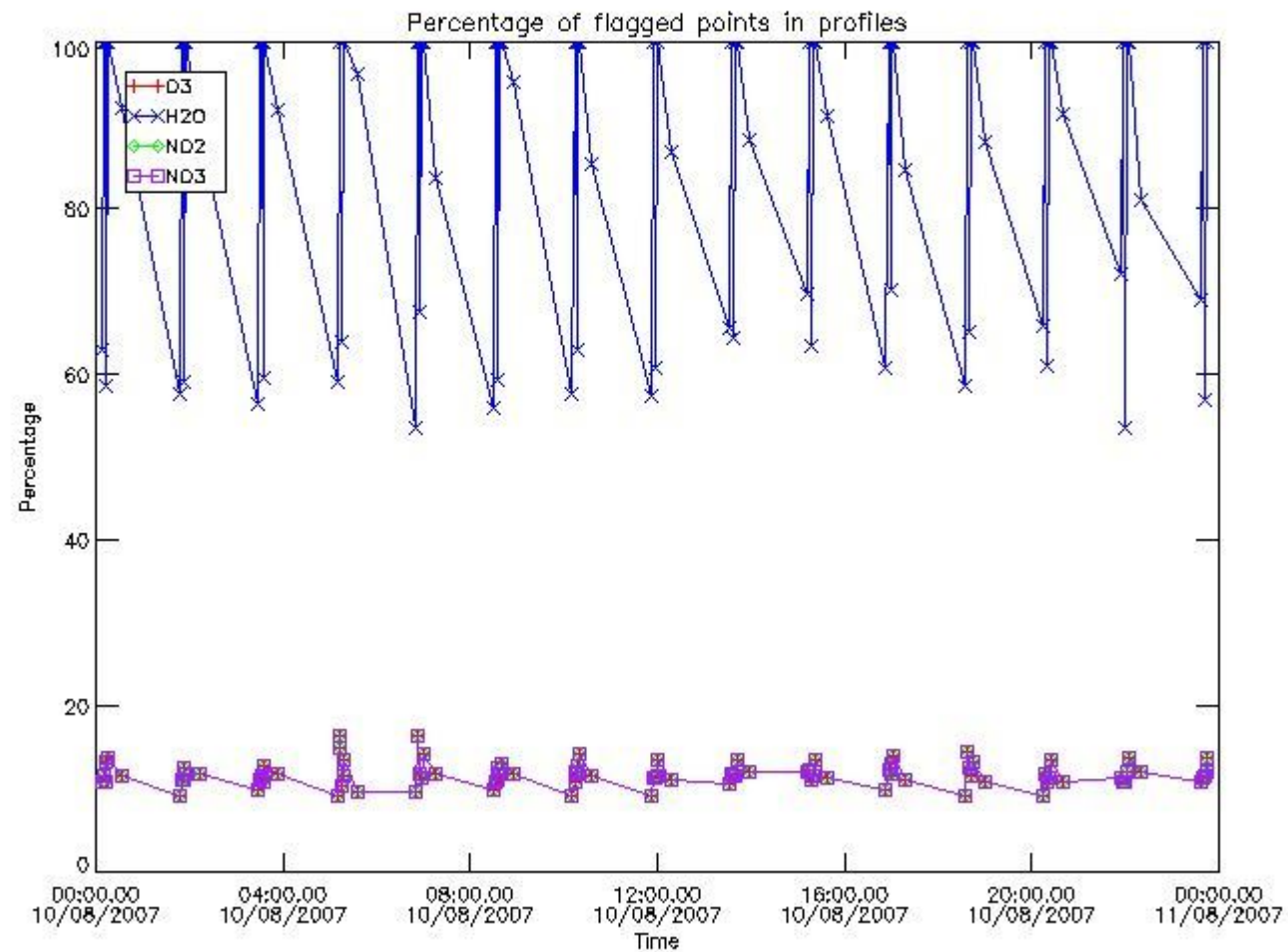
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070810_000223_000000382060_00345_28455_6590.N1	10-AUG-2007 00:02:23	Bright	38.000	151	13Mu Gem	2.8900	3000.0	76	28455	No
2	GOM_NL__2PRFIN20070810_000712_000000482060_00345_28455_6591.N1	10-AUG-2007 00:07:12	Dark	47.500	14	58Alp Ori	0.87000	3000.0	95	28455	No
3	GOM_NL__2PRFIN20070810_001010_000000452060_00345_28455_6592.N1	10-AUG-2007 00:10:10	Dark	44.500	30	46Eps Ori	1.6940	30000.	89	28455	No
4	GOM_NL__2PRFIN20070810_001132_000000432060_00345_28455_6593.N1	10-AUG-2007 00:11:32	Dark	42.500	125	44Iot Ori	2.7700	30000.	85	28455	No
5	GOM_NL__2PRFIN20070810_001300_000000482060_00345_28455_6594.N1	10-AUG-2007 00:13:00	Dark	47.500	1	9Alp CMa	-1.4400	11000.	95	28455	No
6	GOM_NL__2PRFIN20070810_001455_000000412060_00345_28455_6595.N1	10-AUG-2007 00:14:55	Dark	41.000	101	11Alp Lep	2.5820	7000.0	82	28455	No
7	GOM_NL__2PRFIN20070810_003244_000000442060_00346_28456_6618.N1	10-AUG-2007 00:32:44	Dark	44.000	9	Alp Eri	0.45300	24000.	88	28456	No
8	GOM_NL__2PRFIN20070810_003900_000000402060_00346_28456_6619.N1	10-AUG-2007 00:39:00	Straylight	40.000	148	Alp Tuc	2.8780	4100.0	80	28456	No
9	GOM_NL__2PRFIN20070810_004230_000000462060_00346_28456_6620.N1	10-AUG-2007 00:42:30	Straylight	45.500	31	Alp Gru	1.7340	15200.	91	28456	No
10	GOM_NL__2PRFIN20070810_010030_000000372060_00346_28456_6621.N1	10-AUG-2007 01:00:30	Bright	36.500	11	53Alp Aql	0.76500	8000.0	73	28456	No
11	GOM_NL__2PRFIN20070810_010210_000000332060_00346_28456_6622.N1	10-AUG-2007 01:02:10	Bright	33.000	168	17Zet Aql	2.9860	11000.	66	28456	No
12	GOM_NL__2PRFIN20070810_010918_000000342060_00346_28456_6623.N1	10-AUG-2007 01:09:18	Bright	33.500	5	3Alp Lyr	0.033000	11000.	67	28456	No
13	GOM_NL__2PRFIN20070810_011050_000000362060_00346_28456_6624.N1	10-AUG-2007 01:10:50	Bright	35.500	144	18Del Cyg	2.8600	11000.	71	28456	No
14	GOM_NL__2PRFIN20070810_012332_000000362060_00346_28456_6625.N1	10-AUG-2007 01:23:32	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	28456	No
15	GOM_NL__2PRFIN20070810_013632_000000362060_00346_28456_6626.N1	10-AUG-2007 01:36:32	Bright	36.000	42	34Bet Aur	1.9000	10200.	72	28456	No
16	GOM_NL__2PRFIN20070810_013852_000000382060_00346_28456_6627.N1	10-AUG-2007 01:38:52	Bright	38.000	107	37The Aur	2.6490	11000.	76	28456	No
17	GOM_NL__2PRFIN20070810_014259_000000432060_00346_28456_6628.N1	10-AUG-2007 01:42:59	Bright	43.000	151	13Mu Gem	2.8900	3000.0	86	28456	No
18	GOM_NL__2PRFIN20070810_014748_000000562060_00346_28456_6629.N1	10-AUG-2007 01:47:48	Dark	56.000	14	58Alp Ori	0.87000	3000.0	112	28456	No
19	GOM_NL__2PRFIN20070810_015046_000000462060_00346_28456_6630.N1	10-AUG-2007 01:50:46	Dark	46.000	30	46Eps Ori	1.6940	30000.	92	28456	No
20	GOM_NL__2PRFIN20070810_015209_000000412060_00346_28456_6631.N1	10-AUG-2007 01:52:09	Dark	40.500	125	44Iot Ori	2.7700	30000.	81	28456	No
21	GOM_NL__2PRFIN20070810_015336_000000462060_00346_28456_6632.N1	10-AUG-2007 01:53:36	Dark	45.500	1	9Alp CMa	-1.4400	11000.	91	28456	No
22	GOM_NL__2PRFIN20070810_015531_000000432060_00346_28456_6633.N1	10-AUG-2007 01:55:31	Dark	43.000	101	11Alp Lep	2.5820	7000.0	86	28456	No
23	GOM_NL__2PRFIN20070810_021320_000000432060_00347_28457_6632.N1	10-AUG-2007 02:13:20	Dark	43.000	9	Alp Eri	0.45300	24000.	86	28457	No
24	GOM_NL__2PRFIN20070810_021936_000000432060_00347_28457_6633.N1	10-AUG-2007 02:19:36	Straylight	42.500	148	Alp Tuc	2.8780	4100.0	85	28457	No
25	GOM_NL__2PRFIN20070810_022306_000000422060_00347_28457_6634.N1	10-AUG-2007 02:23:06	Straylight	41.500	31	Alp Gru	1.7340	15200.	83	28457	No
26	GOM_NL__2PRFIN20070810_024106_000000372060_00347_28457_6635.N1	10-AUG-2007 02:41:06	Bright	37.000	11	53Alp Aql	0.76500	8000.0	74	28457	No
27	GOM_NL__2PRFIN20070810_024246_000000352060_00347_28457_6636.N1	10-AUG-2007 02:42:46	Bright	35.000	168	17Zet Aql	2.9860	11000.	70	28457	No
28	GOM_NL__2PRFIN20070810_024954_000000362060_00347_28457_6637.N1	10-AUG-2007 02:49:54	Bright	36.000	5	3Alp Lyr	0.033000	11000.	72	28457	No
29	GOM_NL__2PRFIN20070810_025126_000000362060_00347_28457_6638.N1	10-AUG-2007 02:51:26	Bright	35.500	144	18Del Cyg	2.8600	11000.	71	28457	No
30	GOM_NL__2PRFIN20070810_030407_000000352060_00347_28457_6639.N1	10-AUG-2007 03:04:07	Bright	34.500	49	1Alp UMi	1.9900	6300.0	69	28457	No
31	GOM_NL__2PRFIN20070810_031708_000000362060_00347_28457_6640.N1	10-AUG-2007 03:17:08	Bright	35.500	42	34Bet Aur	1.9000	10200.	71	28457	No
32	GOM_NL__2PRFIN20070810_031928_000000492060_00347_28457_6641.N1	10-AUG-2007 03:19:28	Bright	49.000	107	37The Aur	2.6490	11000.	98	28457	No
33	GOM_NL__2PRFIN20070810_032335_000000442060_00347_28457_6642.N1	10-AUG-2007 03:23:35	Bright	43.500	151	13Mu Gem	2.8900	3000.0	87	28457	No
34	GOM_NL__2PRFIN20070810_032824_000000512060_00347_28457_6643.N1	10-AUG-2007 03:28:24	Dark	51.000	14	58Alp Ori	0.87000	3000.0	102	28457	No
35	GOM_NL__2PRFIN20070810_033122_000000462060_00347_28457_6644.N1	10-AUG-2007 03:31:22	Dark	46.000	30	46Eps Ori	1.6940	30000.	92	28457	No
36	GOM_NL__2PRFIN20070810_033245_000000442060_00347_28457_6645.N1	10-AUG-2007 03:32:45	Dark	44.000	125	44Iot Ori	2.7700	30000.	88	28457	No
37	GOM_NL__2PRFIN20070810_033412_000000482060_00347_28457_6646.N1	10-AUG-2007 03:34:12	Dark	47.500	1	9Alp CMa	-1.4400	11000.	95	28457	No
38	GOM_NL__2PRFIN20070810_033608_000000442060_00347_28457_6647.N1	10-AUG-2007 03:36:08	Dark	44.000	101	11Alp Lep	2.5820	7000.0	88	28457	No
39	GOM_NL__2PRFIN20070810_035357_000000442060_00348_28458_6641.N1	10-AUG-2007 03:53:57	Dark	43.500	9	Alp Eri	0.45300	24000.	87	28458	No
40	GOM_NL__2PRFIN20070810_040013_000000392060_00348_28458_6642.N1	10-AUG-2007 04:00:13	Straylight	39.000	148	Alp Tuc	2.8780	4100.0	78	28458	No
41	GOM_NL__2PRFIN20070810_040342_000000432060_00348_28458_6643.N1	10-AUG-2007 04:03:42	Straylight	42.500	31	Alp Gru	1.7340	15200.	85	28458	No
42	GOM_NL__2PRFIN20070810_042142_000000362060_00348_28458_6644.N1	10-AUG-2007 04:21:42	Bright	35.500	11	53Alp Aql	0.76500	8000.0	71	28458	No

220	GOM_NL__2PRFIN20070810_223022_000000472060_00359_28469_6824.N1	10-AUG-2007 22:30:22	Straylight	46.500	31	Alp Gru	1.7340	15200.	93	28469	No
221	GOM_NL__2PRFIN20070810_224818_000000352060_00359_28469_6825.N1	10-AUG-2007 22:48:18	Bright	35.000	11	53Alp Aql	0.76500	8000.0	70	28469	No
222	GOM_NL__2PRFIN20070810_225000_000000352060_00359_28469_6826.N1	10-AUG-2007 22:50:00	Bright	35.000	168	17Zet Aql	2.9860	11000.	70	28469	No
223	GOM_NL__2PRFIN20070810_225708_000000362060_00359_28469_6827.N1	10-AUG-2007 22:57:08	Bright	35.500	5	3Alp Lyr	0.033000	11000.	71	28469	No
224	GOM_NL__2PRFIN20070810_225836_000000342060_00359_28469_6828.N1	10-AUG-2007 22:58:36	Bright	34.000	144	18Del Cyg	2.8600	11000.	68	28469	No
225	GOM_NL__2PRFIN20070810_231119_000000332060_00359_28469_6829.N1	10-AUG-2007 23:11:19	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	28469	No
226	GOM_NL__2PRFIN20070810_232419_000000362060_00359_28469_6830.N1	10-AUG-2007 23:24:19	Bright	36.000	42	34Bet Aur	1.9000	10200.	72	28469	No
227	GOM_NL__2PRFIN20070810_232640_000000382060_00359_28469_6831.N1	10-AUG-2007 23:26:40	Bright	37.500	107	37The Aur	2.6490	11000.	75	28469	No
228	GOM_NL__2PRFIN20070810_233049_000000402060_00359_28469_6832.N1	10-AUG-2007 23:30:49	Bright	40.000	151	13Mu Gem	2.8900	3000.0	80	28469	No
229	GOM_NL__2PRFIN20070810_233540_000000472060_00359_28469_6833.N1	10-AUG-2007 23:35:40	Dark	47.000	14	58Alp Ori	0.87000	3000.0	94	28469	No
230	GOM_NL__2PRFIN20070810_233844_000000452060_00359_28469_6834.N1	10-AUG-2007 23:38:44	Dark	45.000	33	50Zet Ori	1.7660	30000.	90	28469	No
231	GOM_NL__2PRFIN20070810_234126_000000482060_00359_28469_6835.N1	10-AUG-2007 23:41:26	Dark	48.000	1	9Alp CMa	-1.4400	11000.	96	28469	No
232	GOM_NL__2PRFIN20070810_234325_000000432060_00359_28469_6836.N1	10-AUG-2007 23:43:25	Dark	42.500	101	11Alp Lep	2.5820	7000.0	85	28469	No
233	GOM_NL__2PRFIN20070810_234528_000000372060_00359_28469_6837.N1	10-AUG-2007 23:45:28	Dark	37.000	177	1Zet CMa	3.0220	26000.	74	28469	No

3. Quality information per product

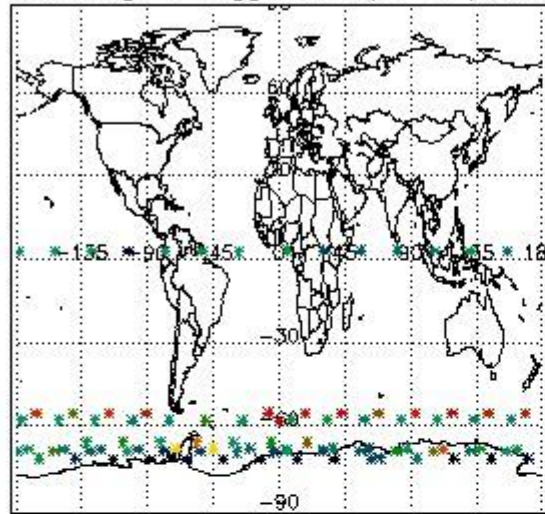
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

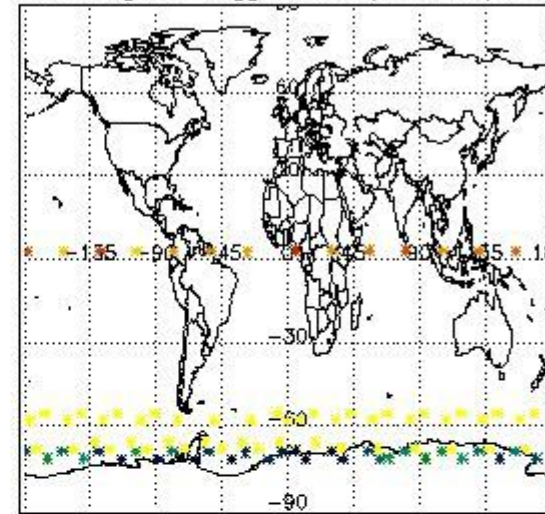


3.2 Plot quality information per product (world map)

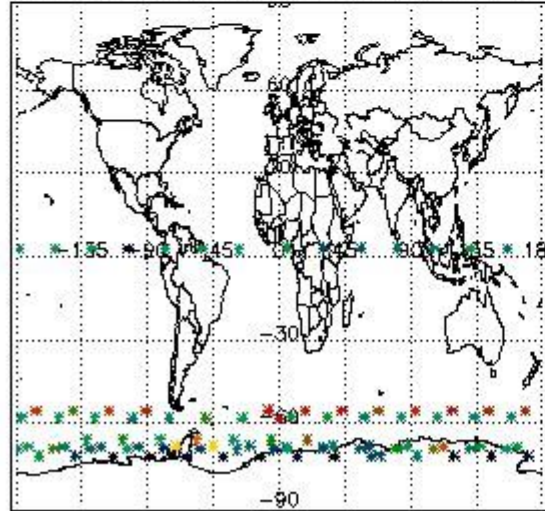
Percentage of flagged data per O3 profile



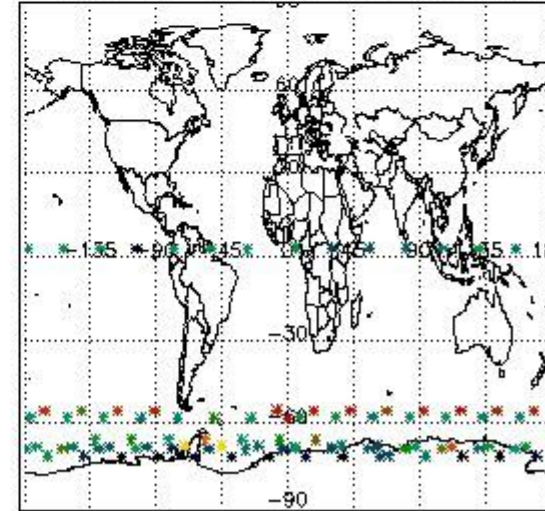
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

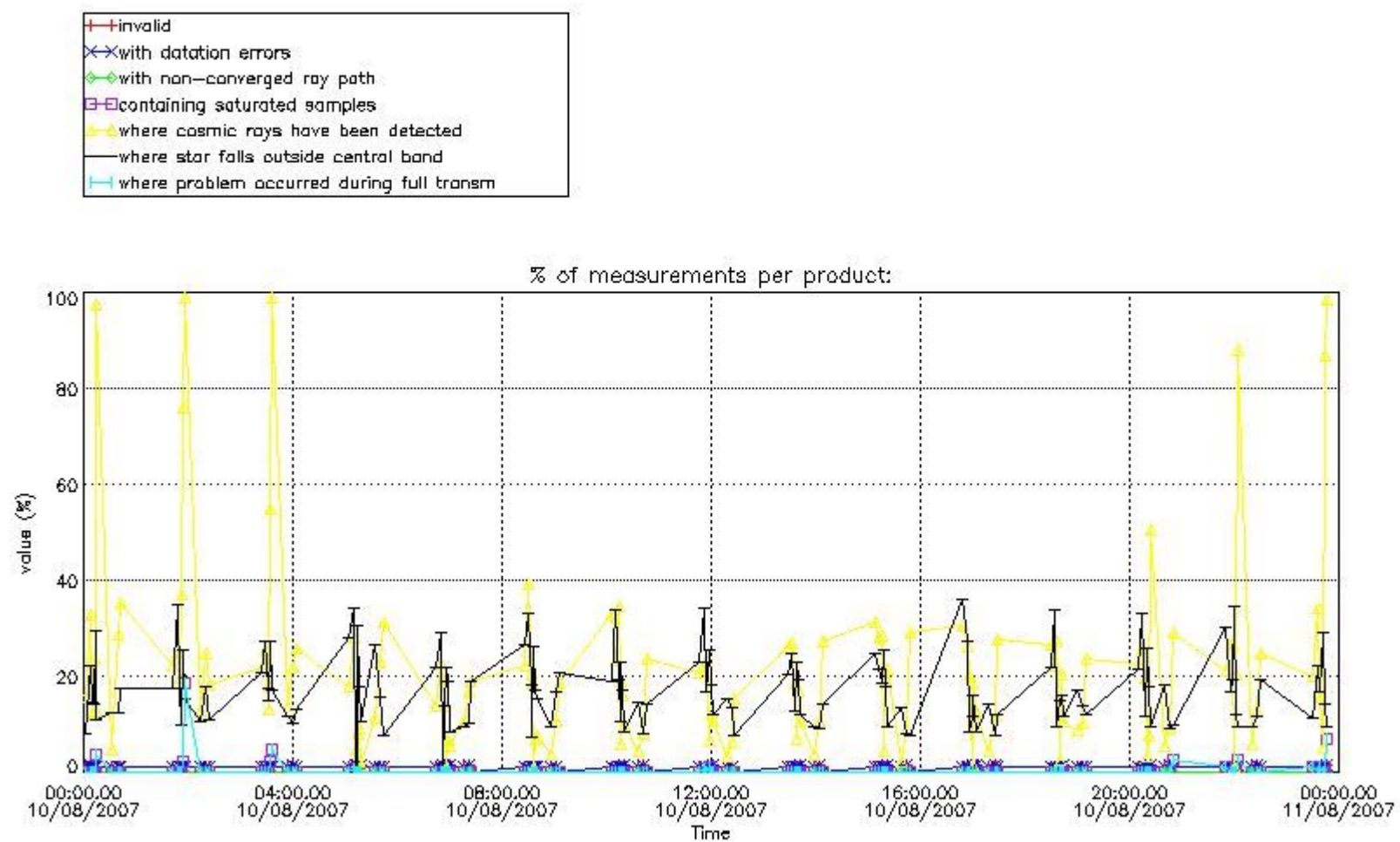


4. Level 1 quality information per product

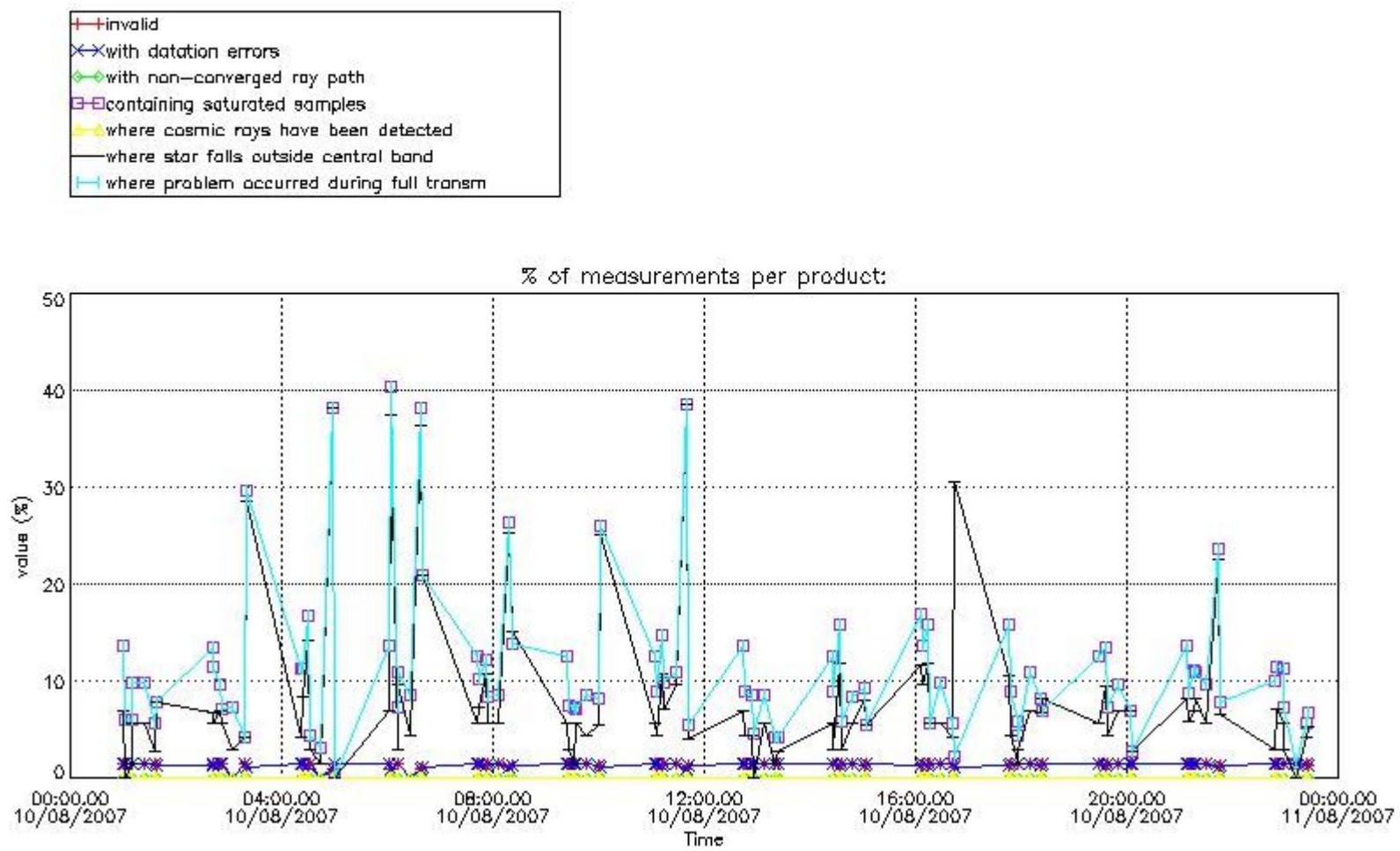
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



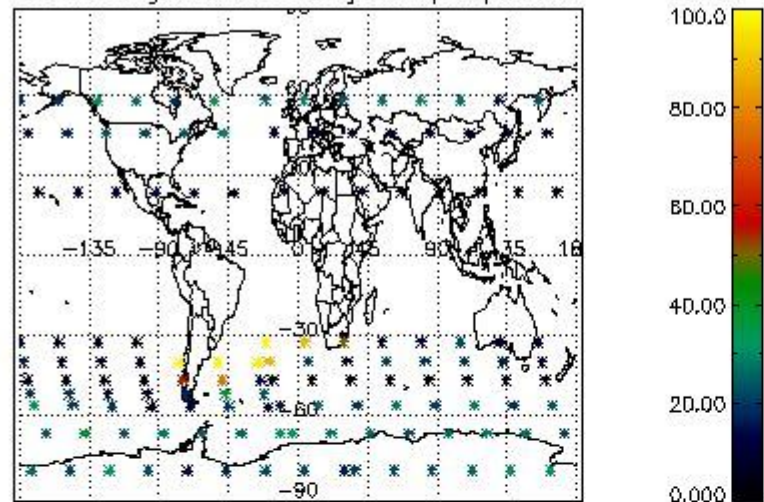
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



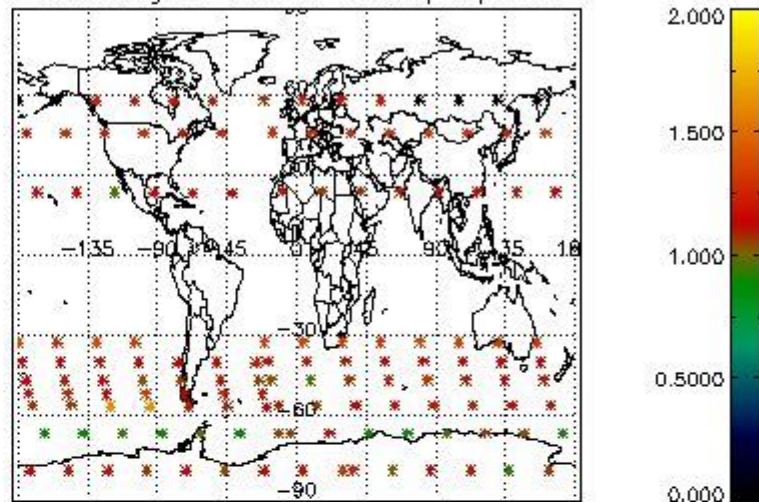
4.2 Plot quality information per product coming from level 1b processing (world map)

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

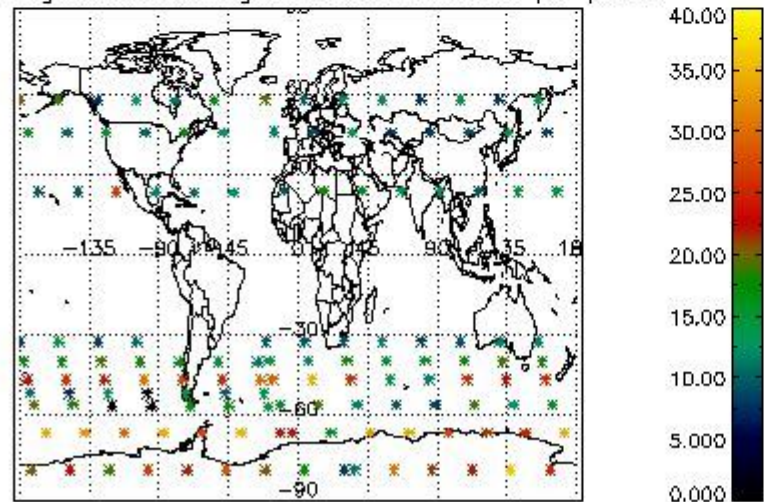
Percentage of cosmic ray hits per profile



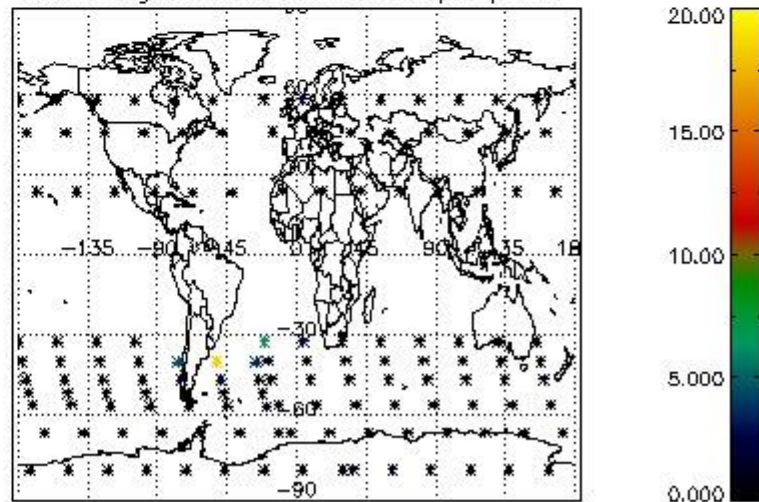
Percentage of datation errors per profile



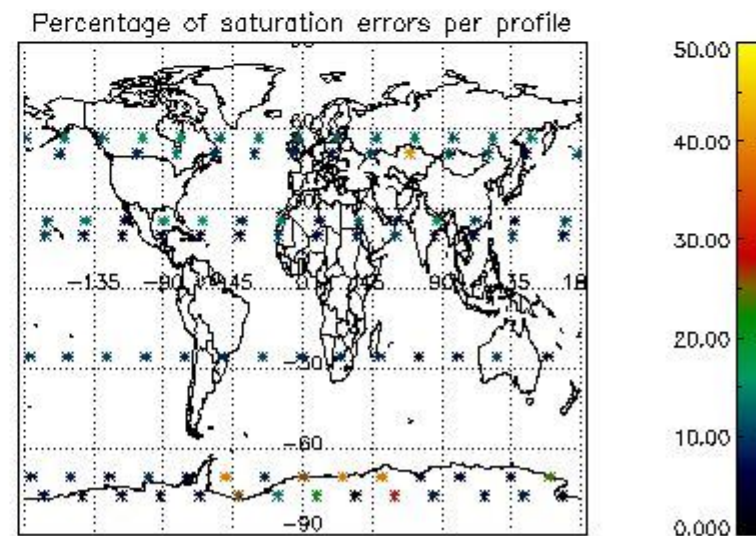
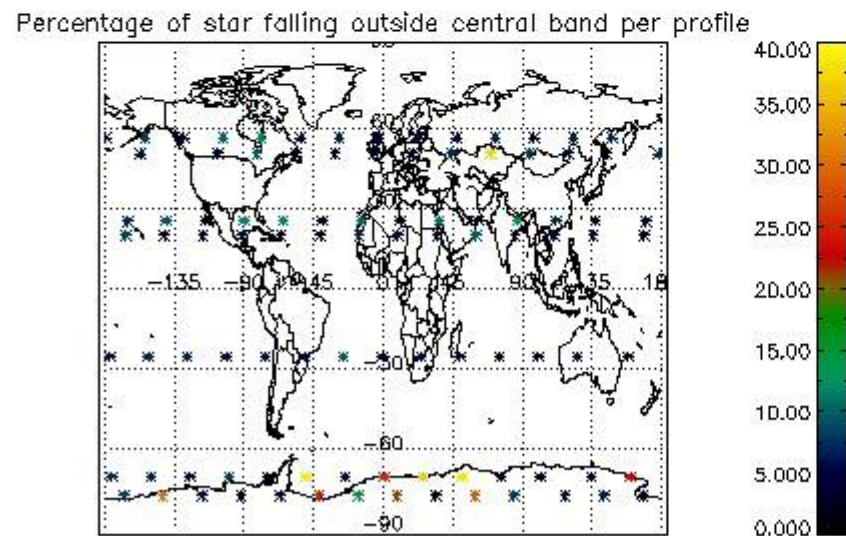
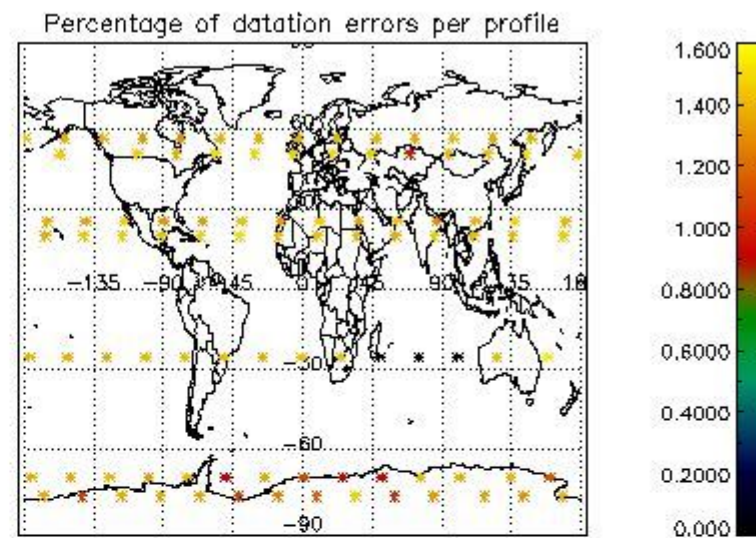
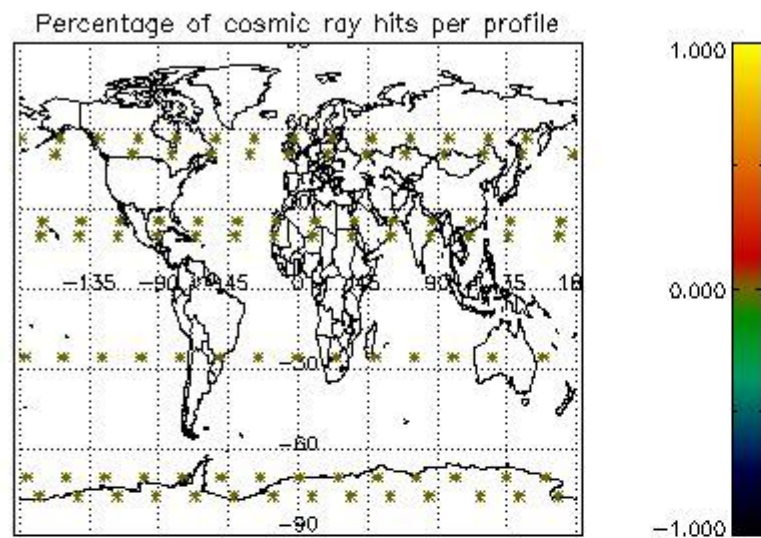
Percentage of star falling outside central band per profile



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

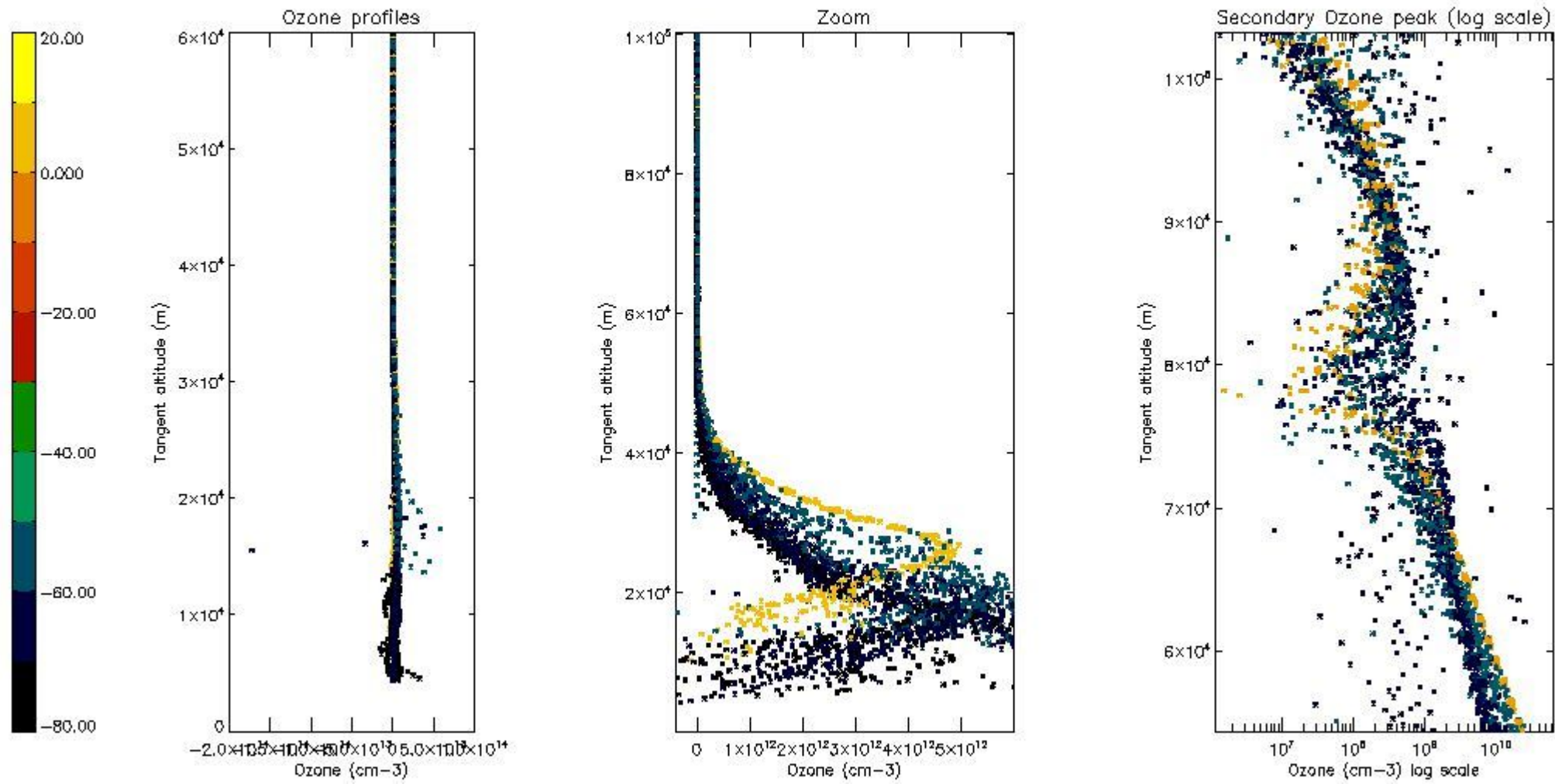
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	44
STD < 20	27

STD < 10	21
STD < 5	16

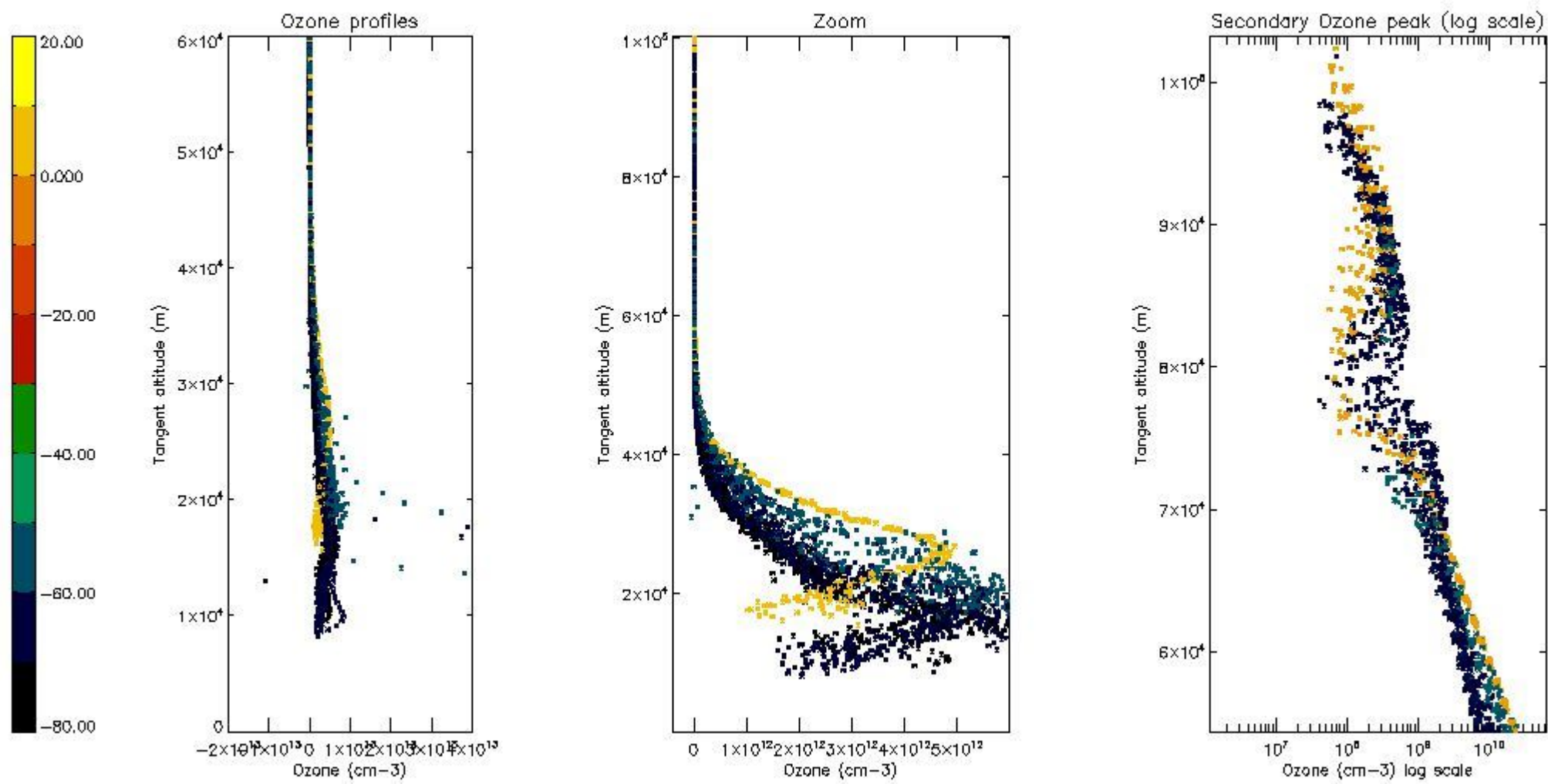
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



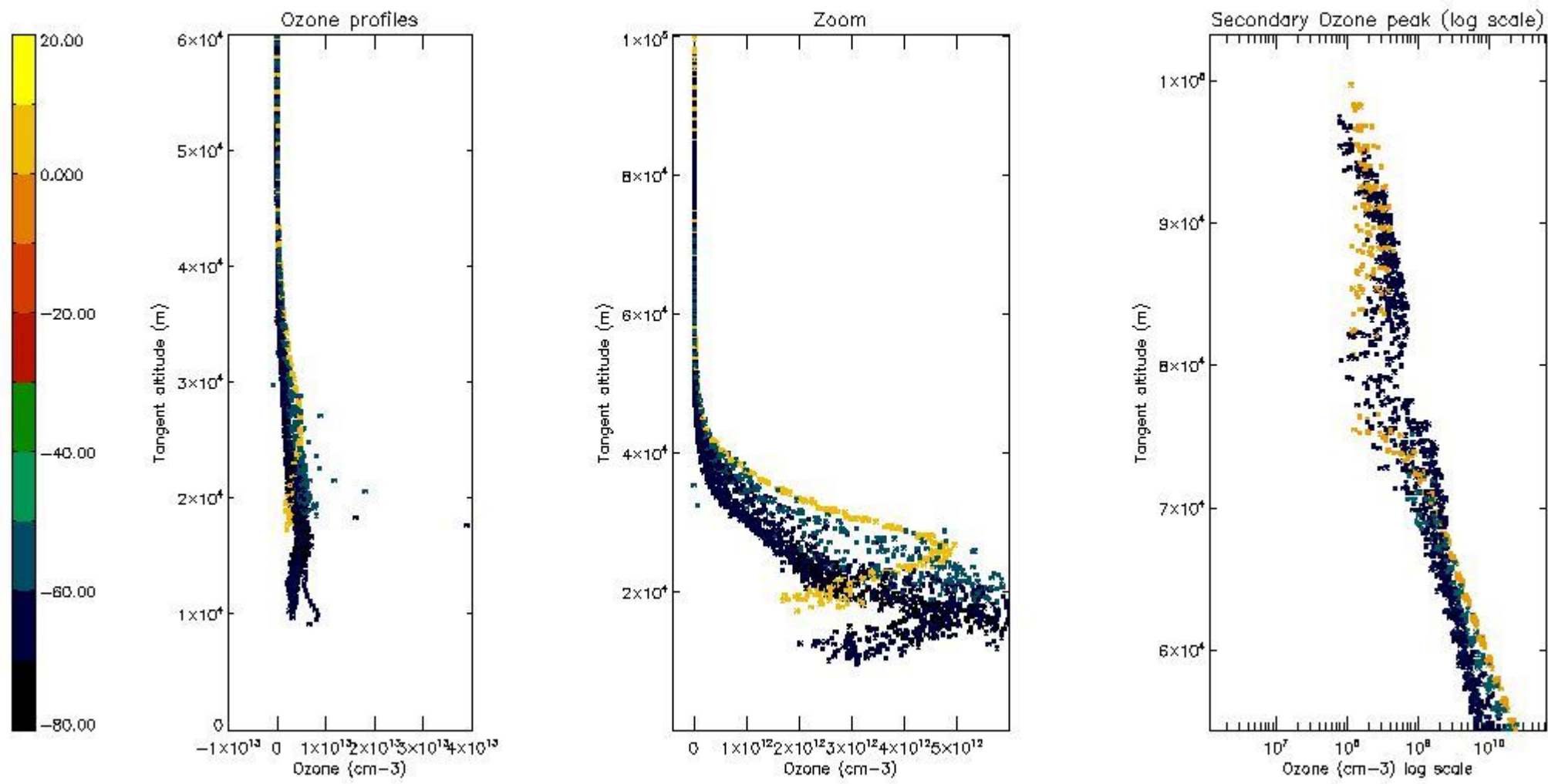
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



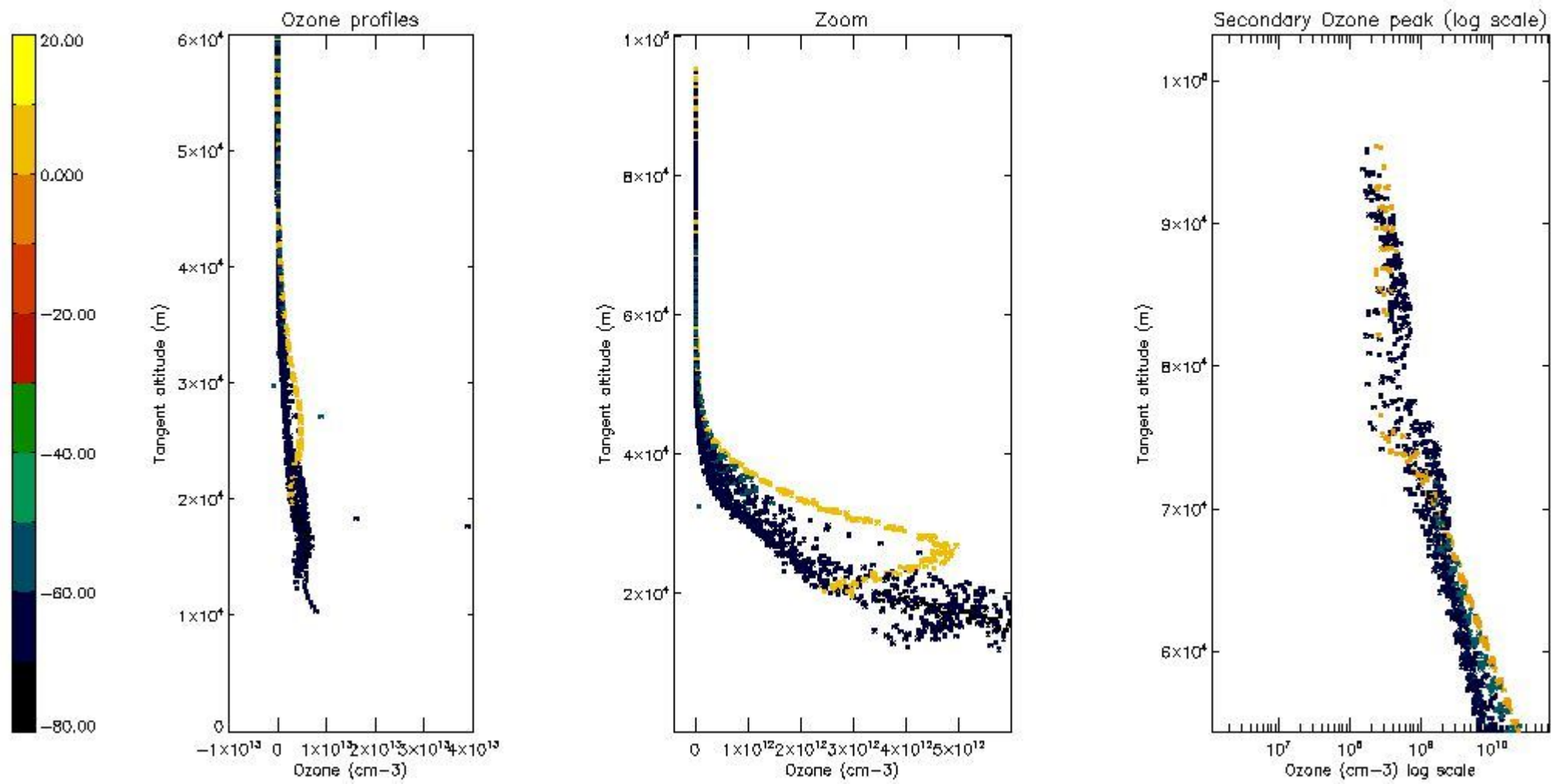
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



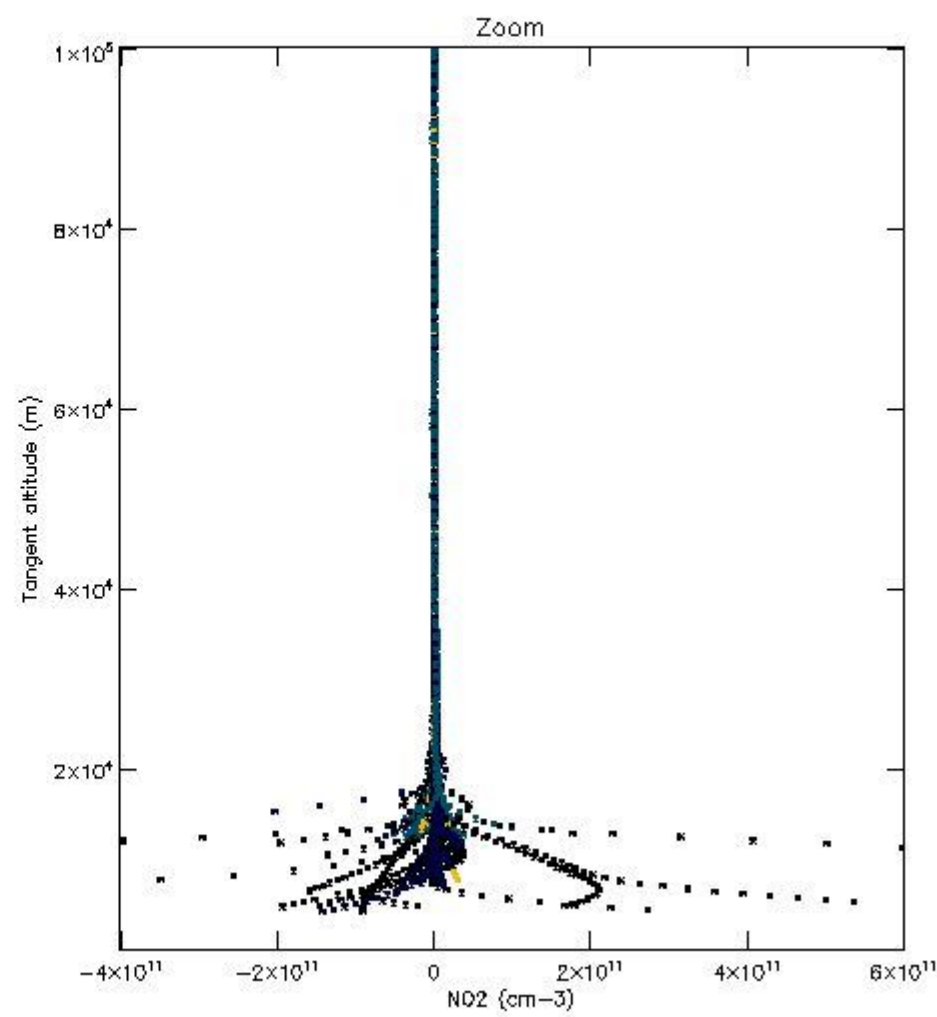
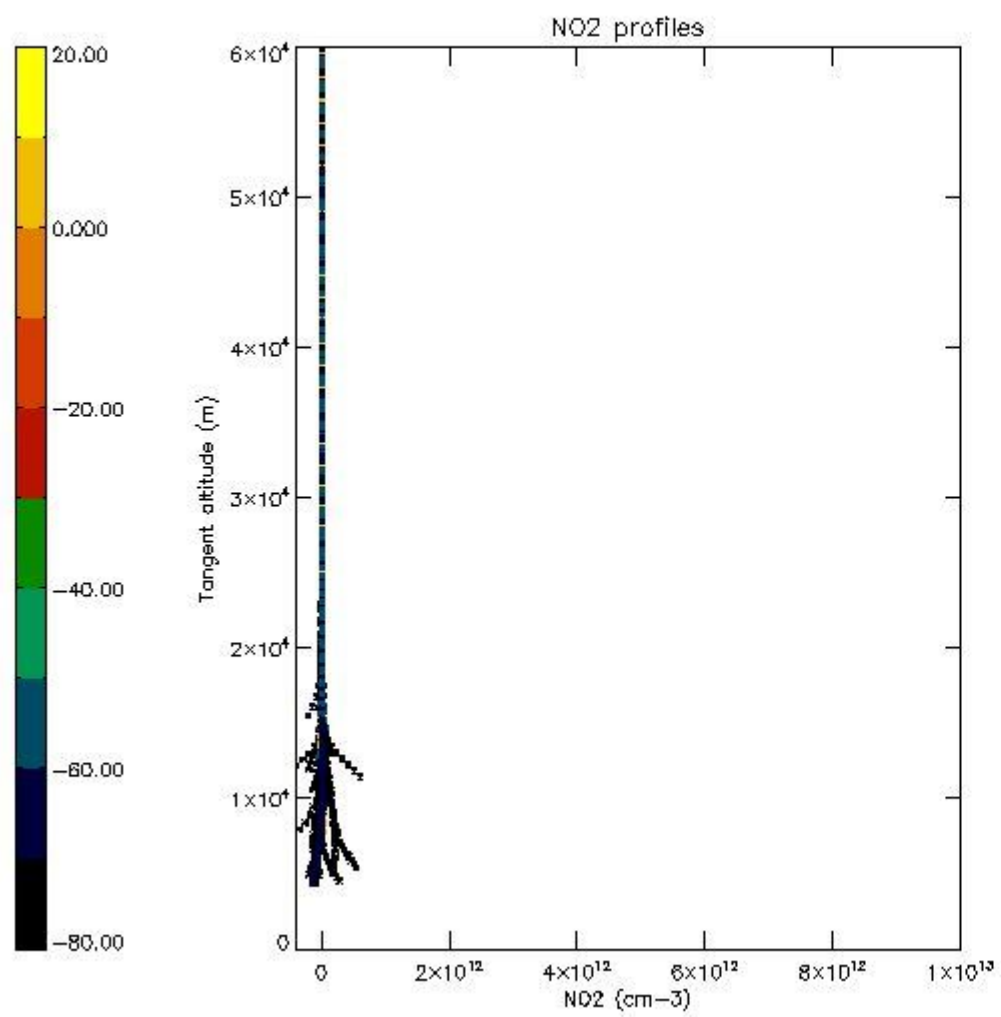
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



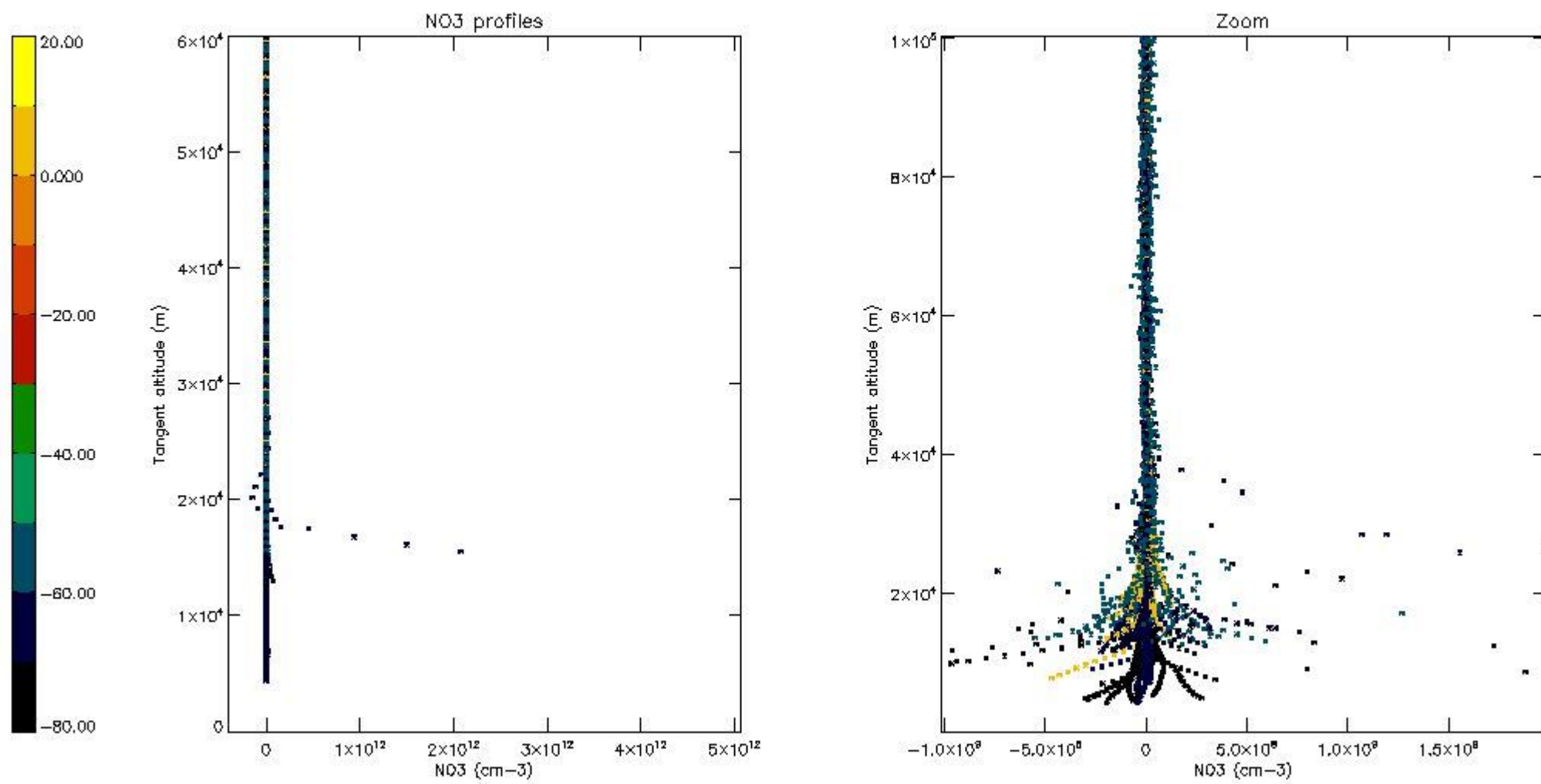
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



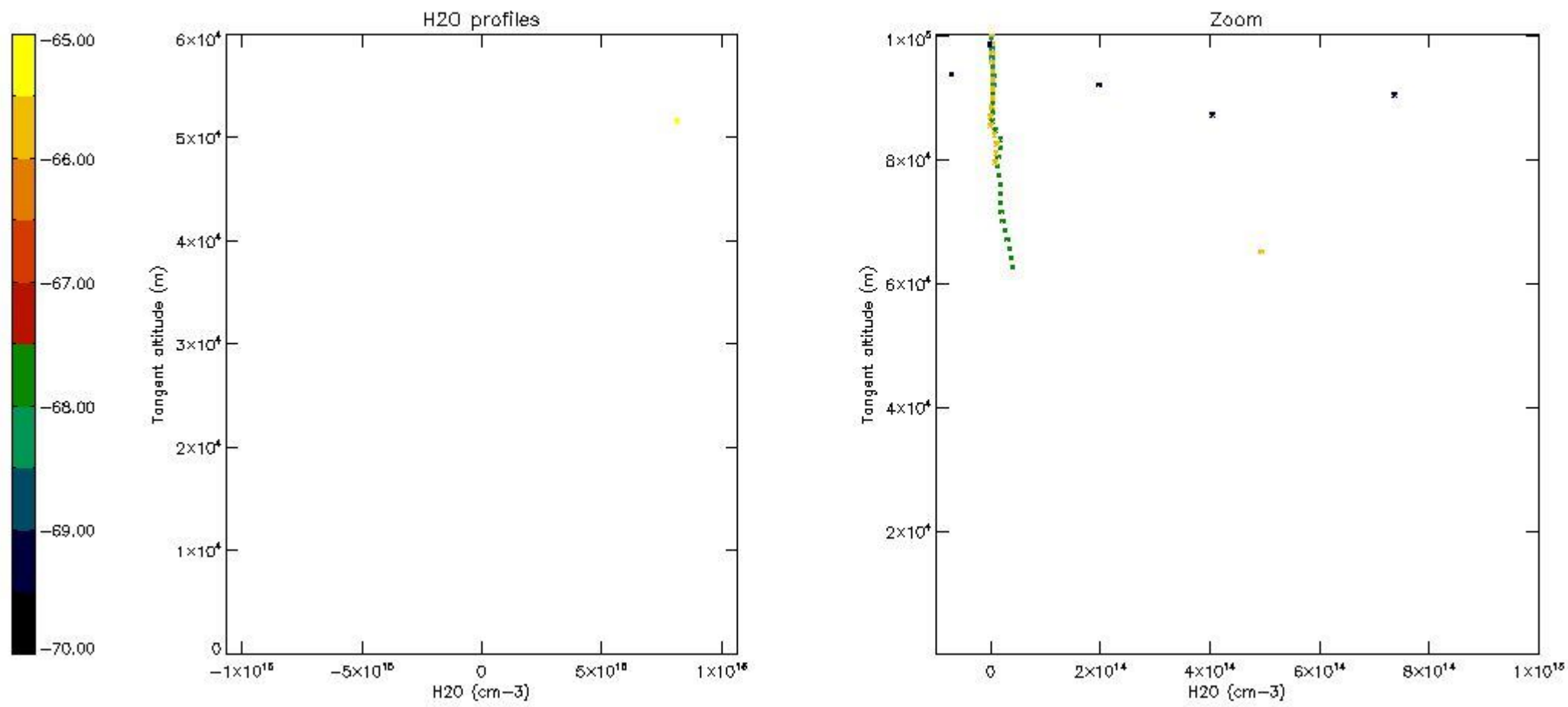
5.7 Plot NO3 profiles for all STD (dark without errors)

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	10-AUG-2007 00:02:23
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	10-AUG-2007 00:02:23
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	10-AUG-2007 00:02:23

GOMOS Level 2 Daily Report

SUMMARY

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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	22APR2013 23:39:07
Data source version	GOMOS/6.01
Start time of products	10-08-2007 (10AUG2007 00:00:00)
Stop time of products	11-08-2007 (11AUG2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	233
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

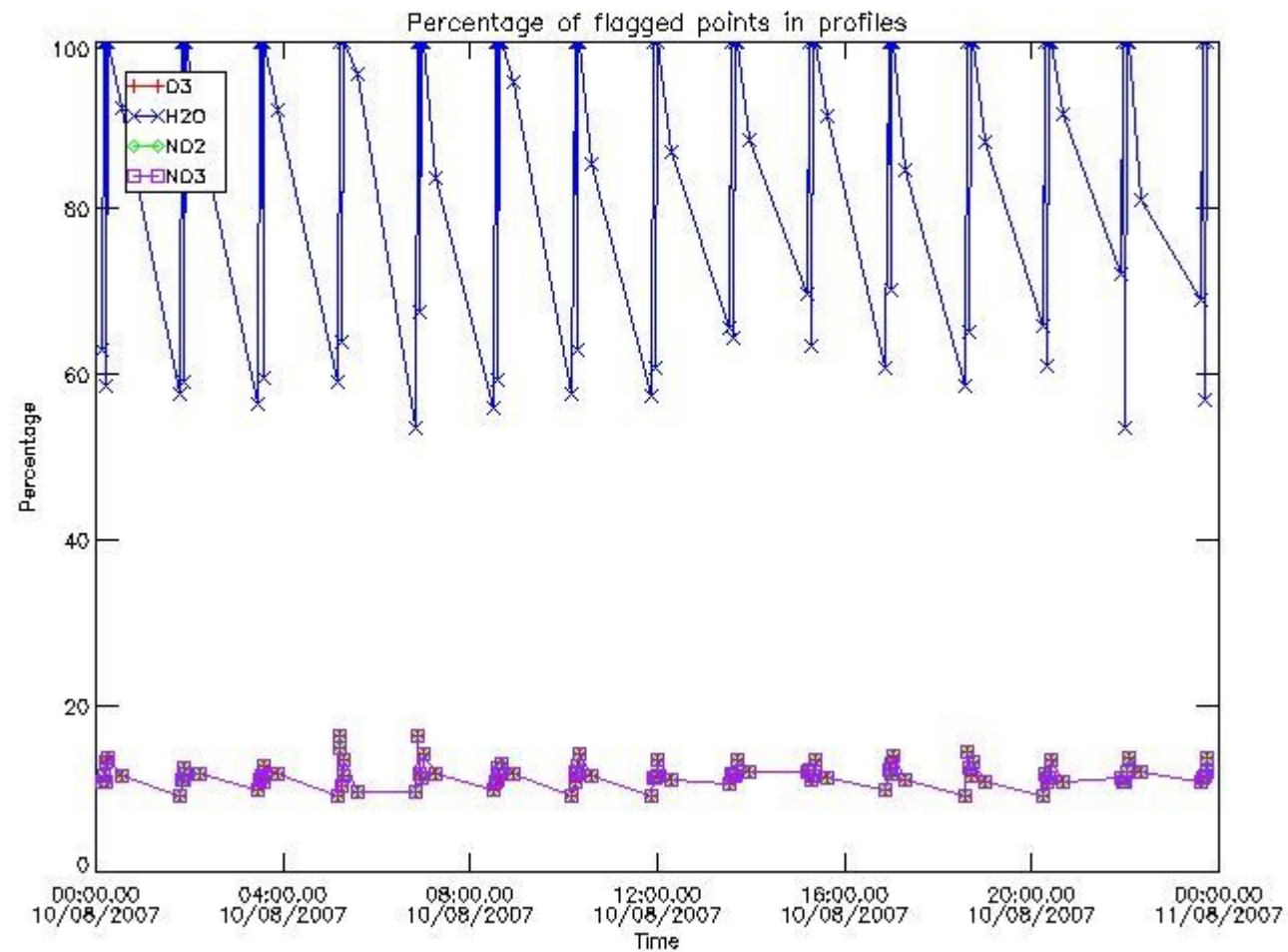
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070810_000223_000000382060_00345_28455_6590.N1	10-AUG-2007 00:02:23	Bright	38.000	151	13Mu Gem	2.8900	3000.0	76	28455	No
2	GOM_NL__2PRFIN20070810_000712_000000482060_00345_28455_6591.N1	10-AUG-2007 00:07:12	Dark	47.500	14	58Alp Ori	0.87000	3000.0	95	28455	No
3	GOM_NL__2PRFIN20070810_001010_000000452060_00345_28455_6592.N1	10-AUG-2007 00:10:10	Dark	44.500	30	46Eps Ori	1.6940	30000.	89	28455	No
4	GOM_NL__2PRFIN20070810_001132_000000432060_00345_28455_6593.N1	10-AUG-2007 00:11:32	Dark	42.500	125	44Iot Ori	2.7700	30000.	85	28455	No
5	GOM_NL__2PRFIN20070810_001300_000000482060_00345_28455_6594.N1	10-AUG-2007 00:13:00	Dark	47.500	1	9Alp CMa	-1.4400	11000.	95	28455	No
6	GOM_NL__2PRFIN20070810_001455_000000412060_00345_28455_6595.N1	10-AUG-2007 00:14:55	Dark	41.000	101	11Alp Lep	2.5820	7000.0	82	28455	No
7	GOM_NL__2PRFIN20070810_003244_000000442060_00346_28456_6618.N1	10-AUG-2007 00:32:44	Dark	44.000	9	Alp Eri	0.45300	24000.	88	28456	No
8	GOM_NL__2PRFIN20070810_003900_000000402060_00346_28456_6619.N1	10-AUG-2007 00:39:00	Straylight	40.000	148	Alp Tuc	2.8780	4100.0	80	28456	No
9	GOM_NL__2PRFIN20070810_004230_000000462060_00346_28456_6620.N1	10-AUG-2007 00:42:30	Straylight	45.500	31	Alp Gru	1.7340	15200.	91	28456	No
10	GOM_NL__2PRFIN20070810_010030_000000372060_00346_28456_6621.N1	10-AUG-2007 01:00:30	Bright	36.500	11	53Alp Aql	0.76500	8000.0	73	28456	No
11	GOM_NL__2PRFIN20070810_010210_000000332060_00346_28456_6622.N1	10-AUG-2007 01:02:10	Bright	33.000	168	17Zet Aql	2.9860	11000.	66	28456	No
12	GOM_NL__2PRFIN20070810_010918_000000342060_00346_28456_6623.N1	10-AUG-2007 01:09:18	Bright	33.500	5	3Alp Lyr	0.033000	11000.	67	28456	No
13	GOM_NL__2PRFIN20070810_011050_000000362060_00346_28456_6624.N1	10-AUG-2007 01:10:50	Bright	35.500	144	18Del Cyg	2.8600	11000.	71	28456	No
14	GOM_NL__2PRFIN20070810_012332_000000362060_00346_28456_6625.N1	10-AUG-2007 01:23:32	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	28456	No
15	GOM_NL__2PRFIN20070810_013632_000000362060_00346_28456_6626.N1	10-AUG-2007 01:36:32	Bright	36.000	42	34Bet Aur	1.9000	10200.	72	28456	No
16	GOM_NL__2PRFIN20070810_013852_000000382060_00346_28456_6627.N1	10-AUG-2007 01:38:52	Bright	38.000	107	37The Aur	2.6490	11000.	76	28456	No
17	GOM_NL__2PRFIN20070810_014259_000000432060_00346_28456_6628.N1	10-AUG-2007 01:42:59	Bright	43.000	151	13Mu Gem	2.8900	3000.0	86	28456	No
18	GOM_NL__2PRFIN20070810_014748_000000562060_00346_28456_6629.N1	10-AUG-2007 01:47:48	Dark	56.000	14	58Alp Ori	0.87000	3000.0	112	28456	No
19	GOM_NL__2PRFIN20070810_015046_000000462060_00346_28456_6630.N1	10-AUG-2007 01:50:46	Dark	46.000	30	46Eps Ori	1.6940	30000.	92	28456	No
20	GOM_NL__2PRFIN20070810_015209_000000412060_00346_28456_6631.N1	10-AUG-2007 01:52:09	Dark	40.500	125	44Iot Ori	2.7700	30000.	81	28456	No
21	GOM_NL__2PRFIN20070810_015336_000000462060_00346_28456_6632.N1	10-AUG-2007 01:53:36	Dark	45.500	1	9Alp CMa	-1.4400	11000.	91	28456	No
22	GOM_NL__2PRFIN20070810_015531_000000432060_00346_28456_6633.N1	10-AUG-2007 01:55:31	Dark	43.000	101	11Alp Lep	2.5820	7000.0	86	28456	No
23	GOM_NL__2PRFIN20070810_021320_000000432060_00347_28457_6632.N1	10-AUG-2007 02:13:20	Dark	43.000	9	Alp Eri	0.45300	24000.	86	28457	No
24	GOM_NL__2PRFIN20070810_021936_000000432060_00347_28457_6633.N1	10-AUG-2007 02:19:36	Straylight	42.500	148	Alp Tuc	2.8780	4100.0	85	28457	No
25	GOM_NL__2PRFIN20070810_022306_000000422060_00347_28457_6634.N1	10-AUG-2007 02:23:06	Straylight	41.500	31	Alp Gru	1.7340	15200.	83	28457	No
26	GOM_NL__2PRFIN20070810_024106_000000372060_00347_28457_6635.N1	10-AUG-2007 02:41:06	Bright	37.000	11	53Alp Aql	0.76500	8000.0	74	28457	No
27	GOM_NL__2PRFIN20070810_024246_000000352060_00347_28457_6636.N1	10-AUG-2007 02:42:46	Bright	35.000	168	17Zet Aql	2.9860	11000.	70	28457	No
28	GOM_NL__2PRFIN20070810_024954_000000362060_00347_28457_6637.N1	10-AUG-2007 02:49:54	Bright	36.000	5	3Alp Lyr	0.033000	11000.	72	28457	No
29	GOM_NL__2PRFIN20070810_025126_000000362060_00347_28457_6638.N1	10-AUG-2007 02:51:26	Bright	35.500	144	18Del Cyg	2.8600	11000.	71	28457	No
30	GOM_NL__2PRFIN20070810_030407_000000352060_00347_28457_6639.N1	10-AUG-2007 03:04:07	Bright	34.500	49	1Alp UMi	1.9900	6300.0	69	28457	No
31	GOM_NL__2PRFIN20070810_031708_000000362060_00347_28457_6640.N1	10-AUG-2007 03:17:08	Bright	35.500	42	34Bet Aur	1.9000	10200.	71	28457	No
32	GOM_NL__2PRFIN20070810_031928_000000492060_00347_28457_6641.N1	10-AUG-2007 03:19:28	Bright	49.000	107	37The Aur	2.6490	11000.	98	28457	No
33	GOM_NL__2PRFIN20070810_032335_000000442060_00347_28457_6642.N1	10-AUG-2007 03:23:35	Bright	43.500	151	13Mu Gem	2.8900	3000.0	87	28457	No
34	GOM_NL__2PRFIN20070810_032824_000000512060_00347_28457_6643.N1	10-AUG-2007 03:28:24	Dark	51.000	14	58Alp Ori	0.87000	3000.0	102	28457	No
35	GOM_NL__2PRFIN20070810_033122_000000462060_00347_28457_6644.N1	10-AUG-2007 03:31:22	Dark	46.000	30	46Eps Ori	1.6940	30000.	92	28457	No
36	GOM_NL__2PRFIN20070810_033245_000000442060_00347_28457_6645.N1	10-AUG-2007 03:32:45	Dark	44.000	125	44Iot Ori	2.7700	30000.	88	28457	No
37	GOM_NL__2PRFIN20070810_033412_000000482060_00347_28457_6646.N1	10-AUG-2007 03:34:12	Dark	47.500	1	9Alp CMa	-1.4400	11000.	95	28457	No
38	GOM_NL__2PRFIN20070810_033608_000000442060_00347_28457_6647.N1	10-AUG-2007 03:36:08	Dark	44.000	101	11Alp Lep	2.5820	7000.0	88	28457	No
39	GOM_NL__2PRFIN20070810_035357_000000442060_00348_28458_6641.N1	10-AUG-2007 03:53:57	Dark	43.500	9	Alp Eri	0.45300	24000.	87	28458	No
40	GOM_NL__2PRFIN20070810_040013_000000392060_00348_28458_6642.N1	10-AUG-2007 04:00:13	Straylight	39.000	148	Alp Tuc	2.8780	4100.0	78	28458	No
41	GOM_NL__2PRFIN20070810_040342_000000432060_00348_28458_6643.N1	10-AUG-2007 04:03:42	Straylight	42.500	31	Alp Gru	1.7340	15200.	85	28458	No
42	GOM_NL__2PRFIN20070810_042142_000000362060_00348_28458_6644.N1	10-AUG-2007 04:21:42	Bright	35.500	11	53Alp Aql	0.76500	8000.0	71	28458	No

220	GOM_NL__2PRFIN20070810_223022_000000472060_00359_28469_6824.N1	10-AUG-2007 22:30:22	Straylight	46.500	31	Alp Gru	1.7340	15200.	93	28469	No
221	GOM_NL__2PRFIN20070810_224818_000000352060_00359_28469_6825.N1	10-AUG-2007 22:48:18	Bright	35.000	11	53Alp Aql	0.76500	8000.0	70	28469	No
222	GOM_NL__2PRFIN20070810_225000_000000352060_00359_28469_6826.N1	10-AUG-2007 22:50:00	Bright	35.000	168	17Zet Aql	2.9860	11000.	70	28469	No
223	GOM_NL__2PRFIN20070810_225708_000000362060_00359_28469_6827.N1	10-AUG-2007 22:57:08	Bright	35.500	5	3Alp Lyr	0.033000	11000.	71	28469	No
224	GOM_NL__2PRFIN20070810_225836_000000342060_00359_28469_6828.N1	10-AUG-2007 22:58:36	Bright	34.000	144	18Del Cyg	2.8600	11000.	68	28469	No
225	GOM_NL__2PRFIN20070810_231119_000000332060_00359_28469_6829.N1	10-AUG-2007 23:11:19	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	28469	No
226	GOM_NL__2PRFIN20070810_232419_000000362060_00359_28469_6830.N1	10-AUG-2007 23:24:19	Bright	36.000	42	34Bet Aur	1.9000	10200.	72	28469	No
227	GOM_NL__2PRFIN20070810_232640_000000382060_00359_28469_6831.N1	10-AUG-2007 23:26:40	Bright	37.500	107	37The Aur	2.6490	11000.	75	28469	No
228	GOM_NL__2PRFIN20070810_233049_000000402060_00359_28469_6832.N1	10-AUG-2007 23:30:49	Bright	40.000	151	13Mu Gem	2.8900	3000.0	80	28469	No
229	GOM_NL__2PRFIN20070810_233540_000000472060_00359_28469_6833.N1	10-AUG-2007 23:35:40	Dark	47.000	14	58Alp Ori	0.87000	3000.0	94	28469	No
230	GOM_NL__2PRFIN20070810_233844_000000452060_00359_28469_6834.N1	10-AUG-2007 23:38:44	Dark	45.000	33	50Zet Ori	1.7660	30000.	90	28469	No
231	GOM_NL__2PRFIN20070810_234126_000000482060_00359_28469_6835.N1	10-AUG-2007 23:41:26	Dark	48.000	1	9Alp CMa	-1.4400	11000.	96	28469	No
232	GOM_NL__2PRFIN20070810_234325_000000432060_00359_28469_6836.N1	10-AUG-2007 23:43:25	Dark	42.500	101	11Alp Lep	2.5820	7000.0	85	28469	No
233	GOM_NL__2PRFIN20070810_234528_000000372060_00359_28469_6837.N1	10-AUG-2007 23:45:28	Dark	37.000	177	1Zet CMa	3.0220	26000.	74	28469	No

3. Quality information per product

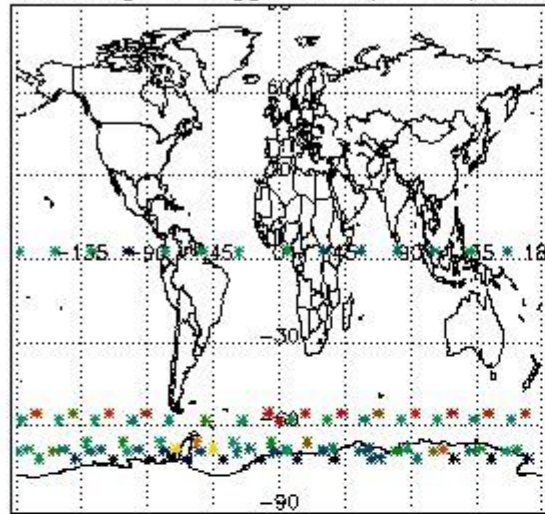
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

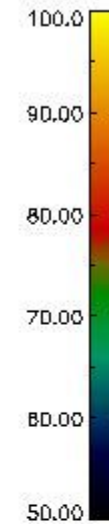
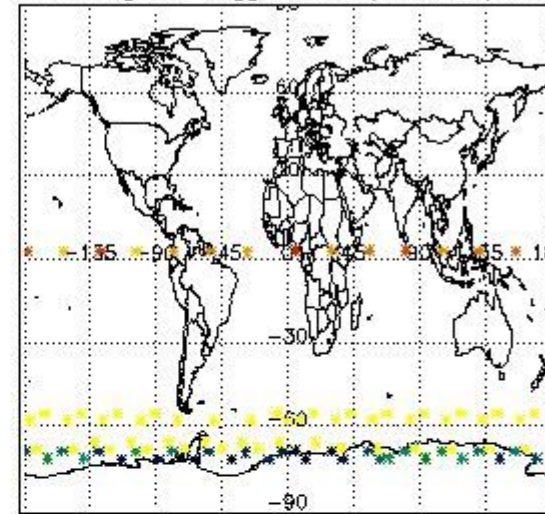


3.2 Plot quality information per product (world map)

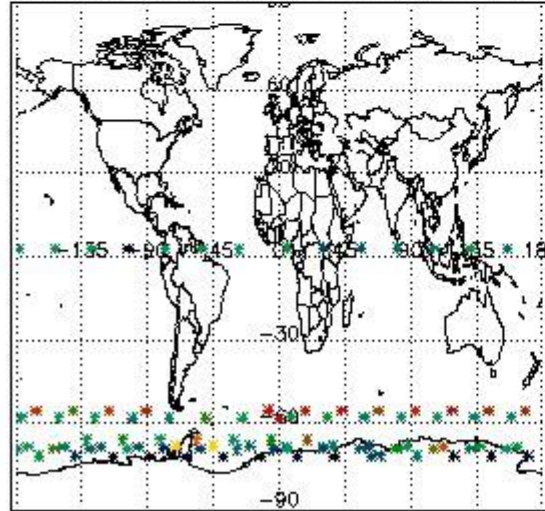
Percentage of flagged data per O3 profile



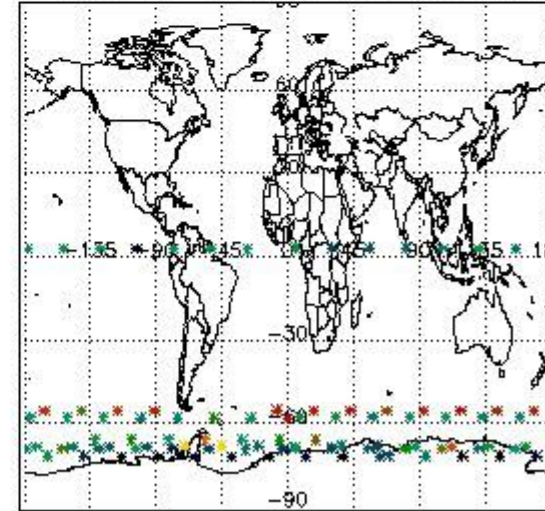
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

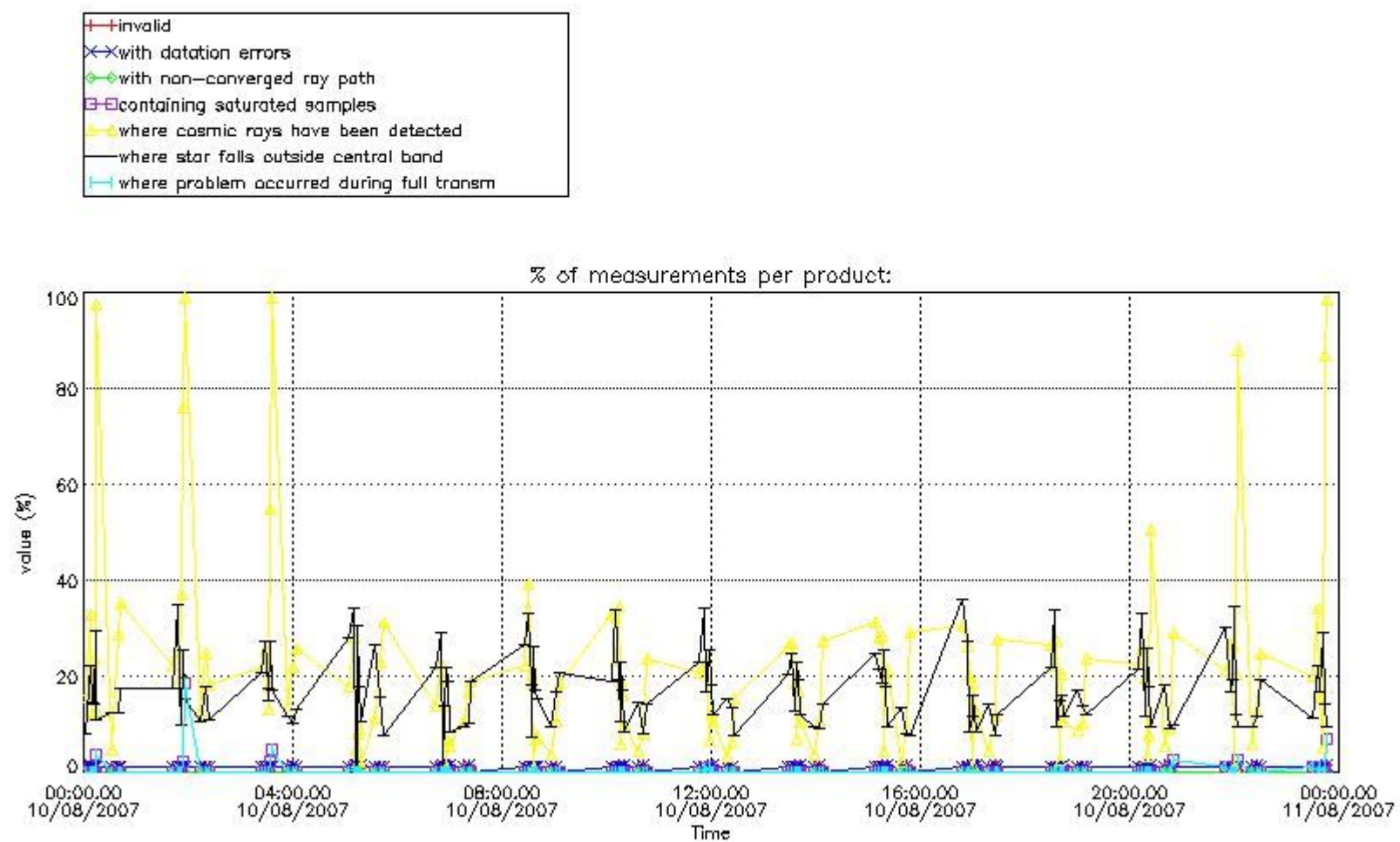


4. Level 1 quality information per product

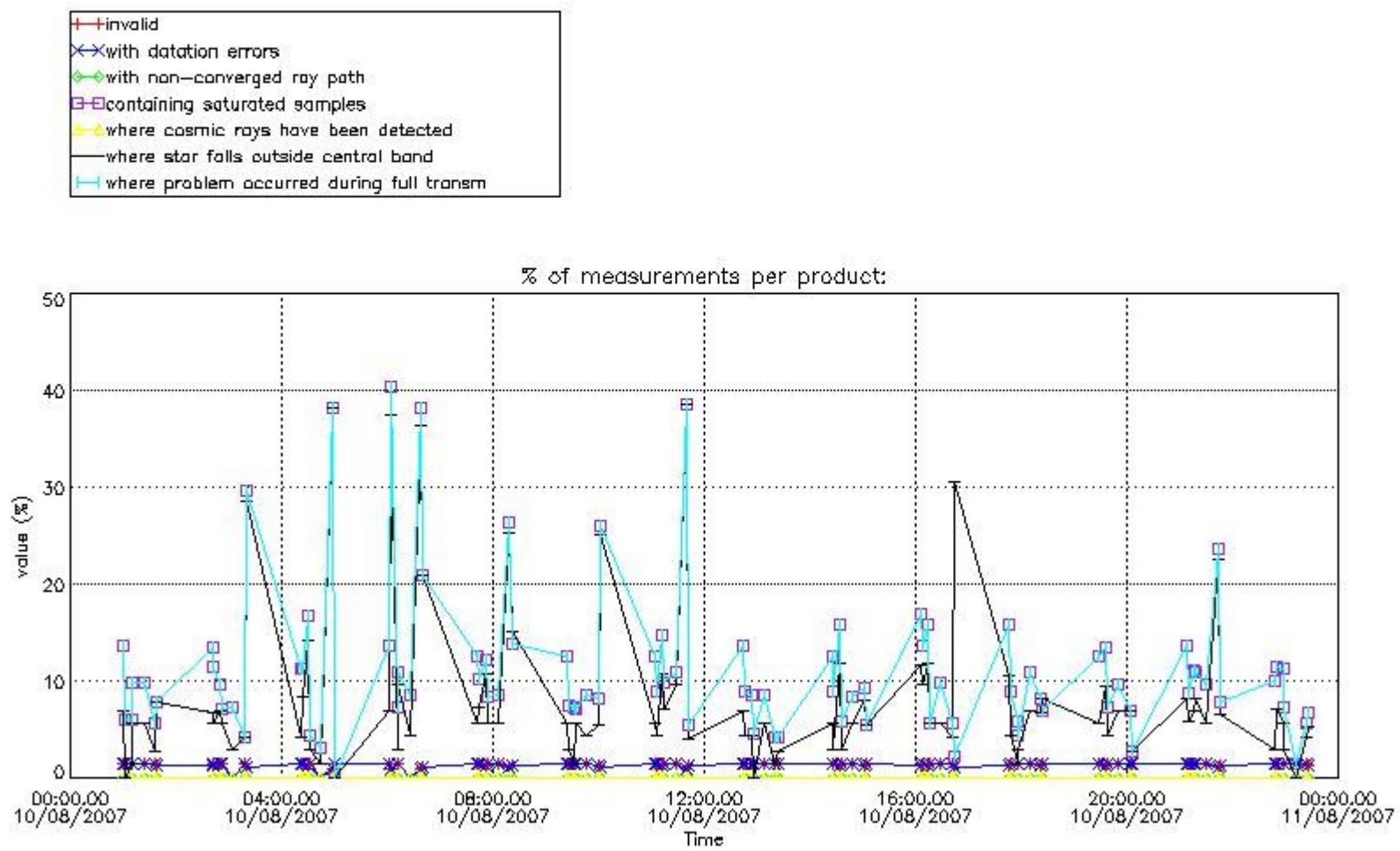
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



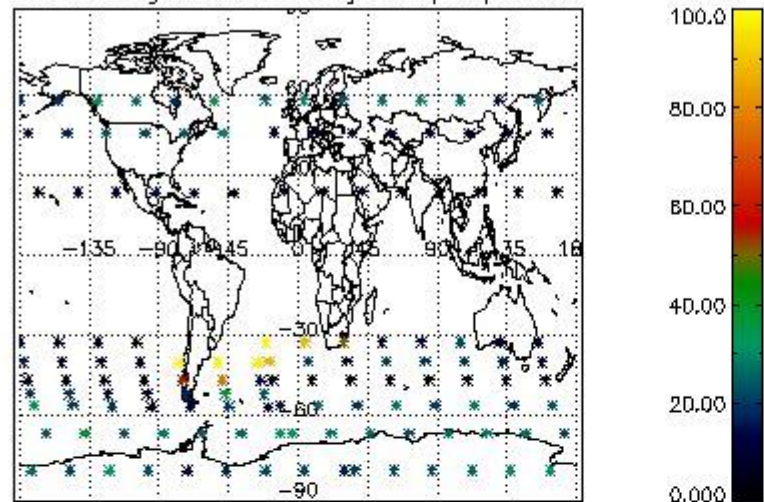
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



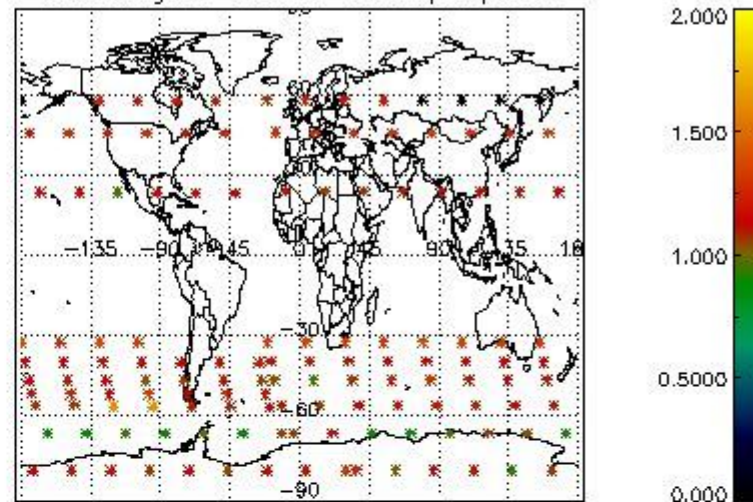
4.2 Plot quality information per product coming from level 1b processing (world map)

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

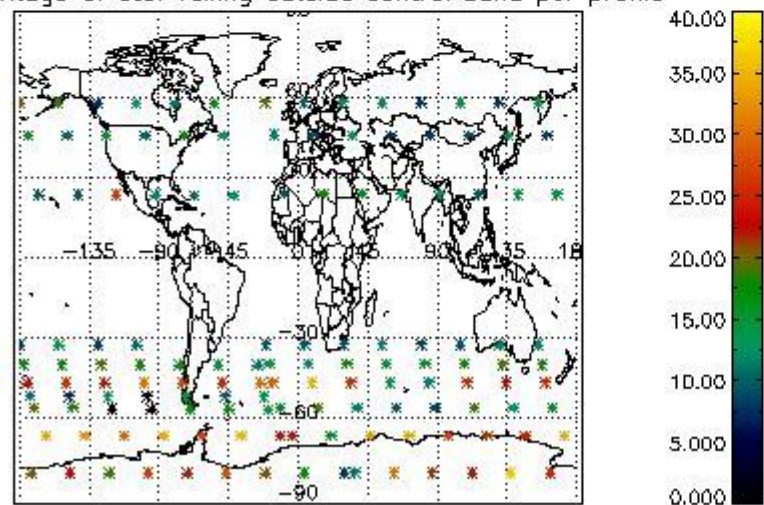
Percentage of cosmic ray hits per profile



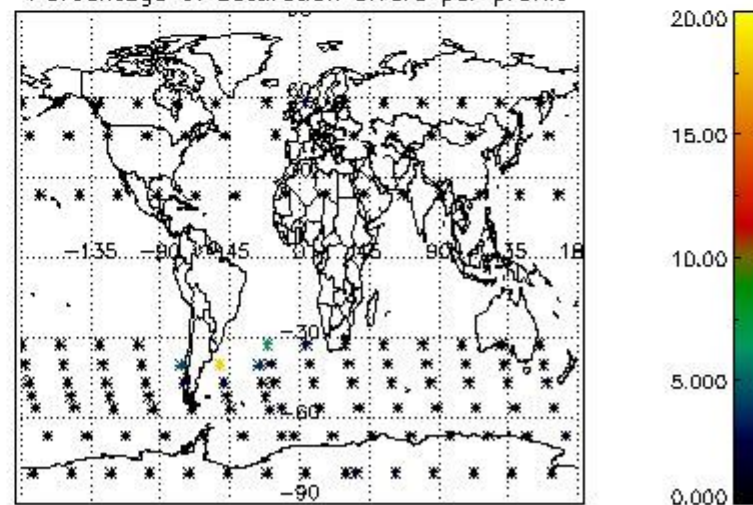
Percentage of datation errors per profile



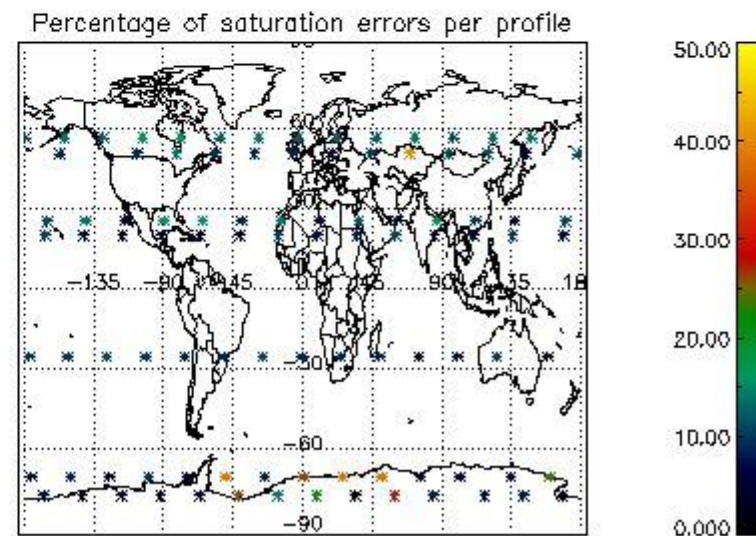
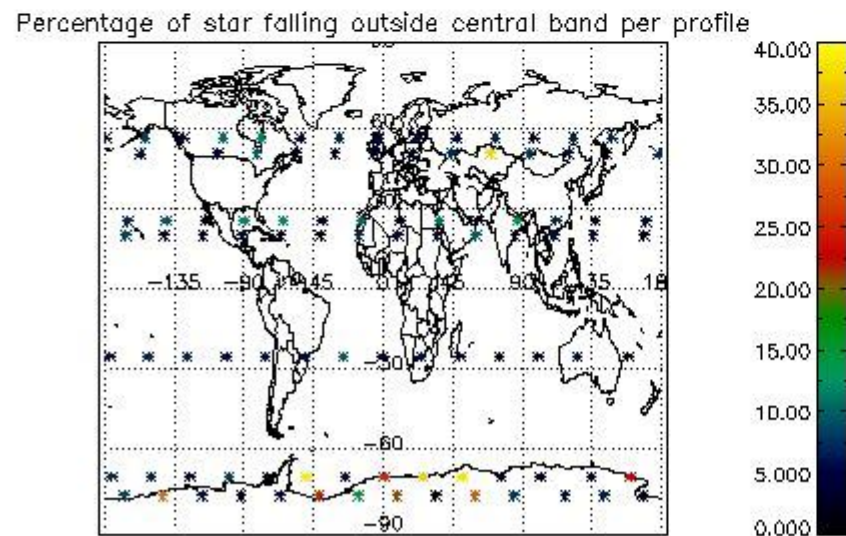
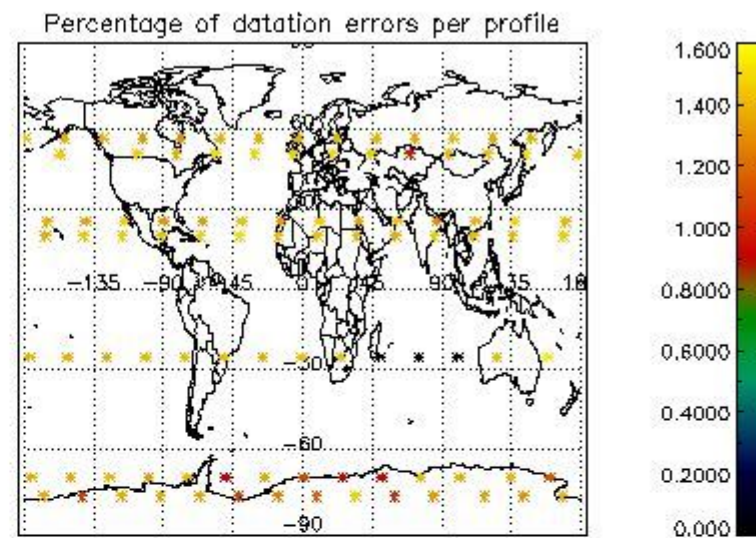
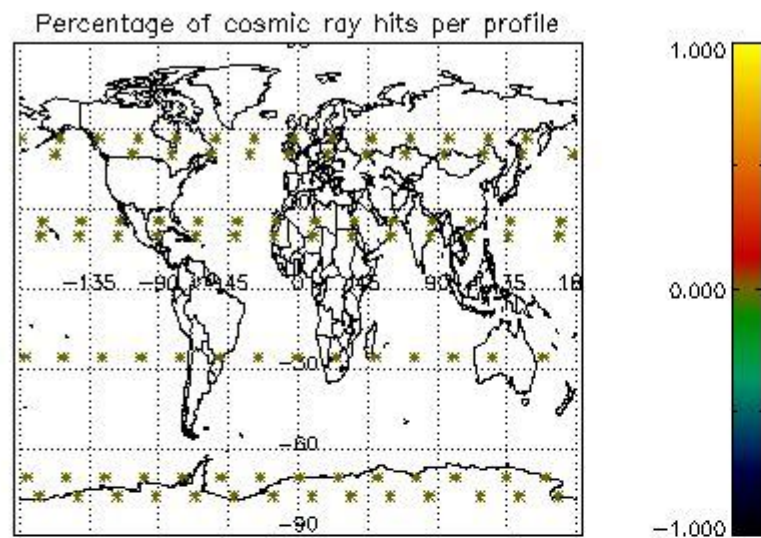
Percentage of star falling outside central band per profile



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

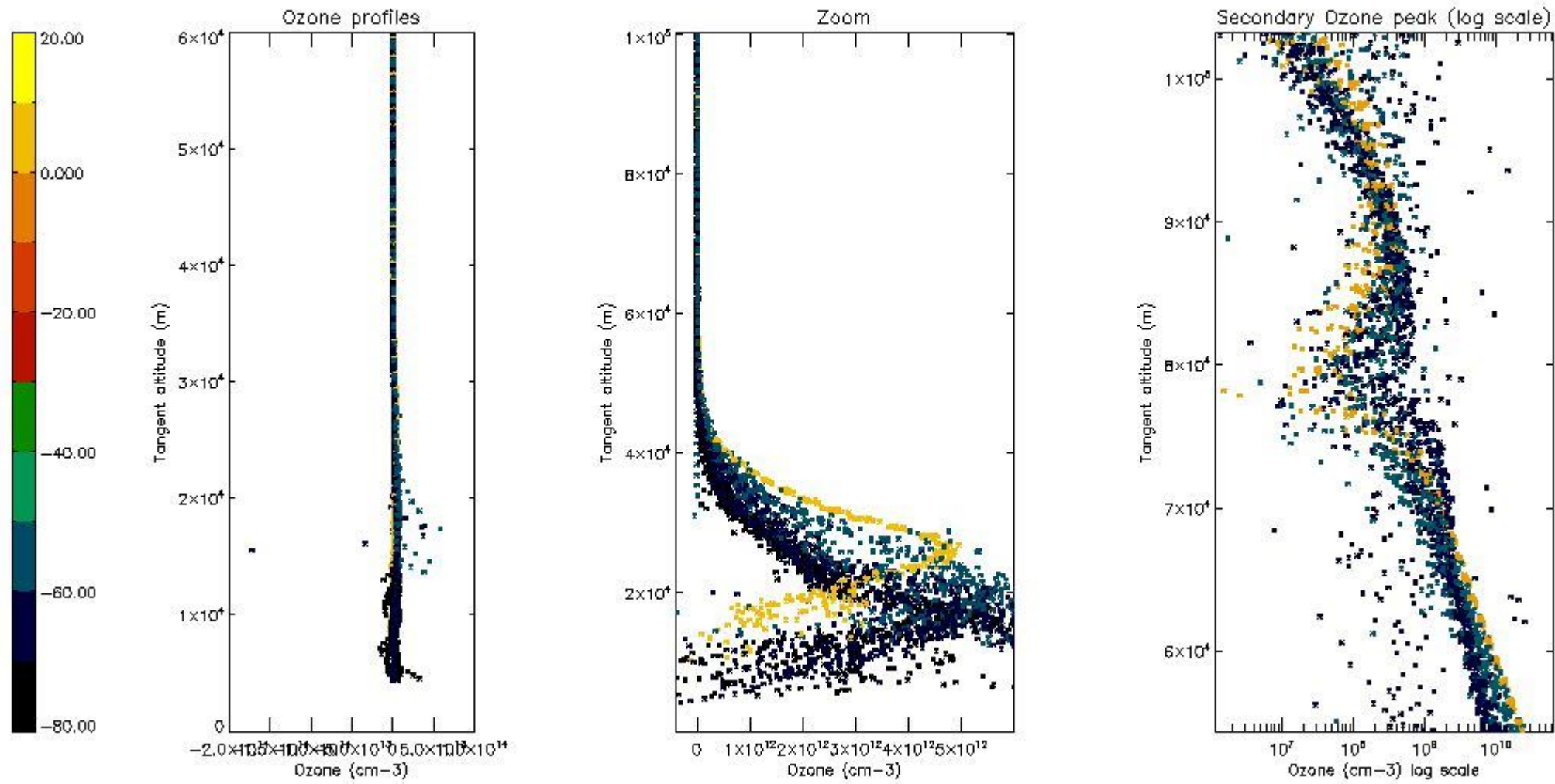
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	44
STD < 20	27

STD < 10	21
STD < 5	16

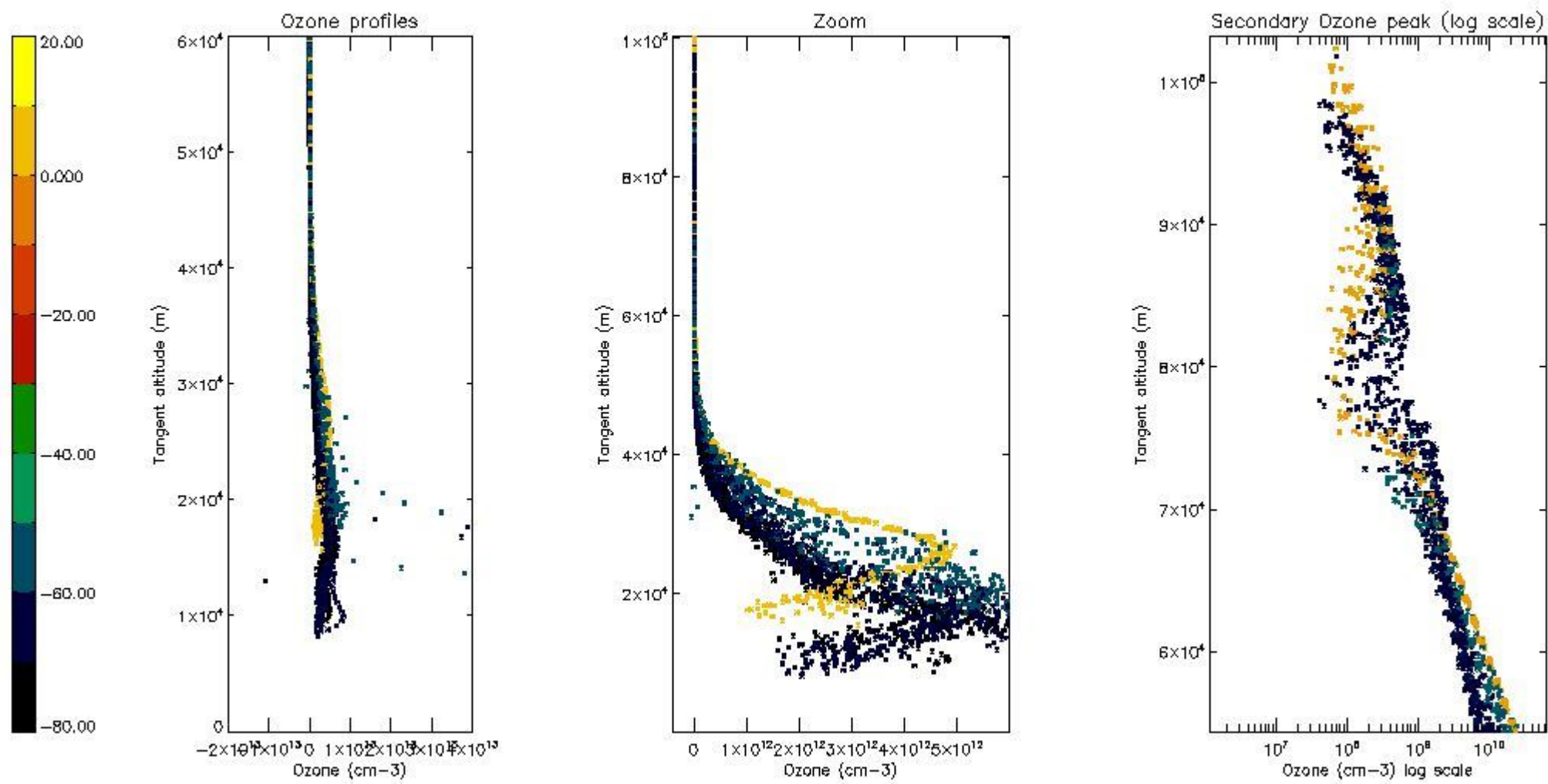
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



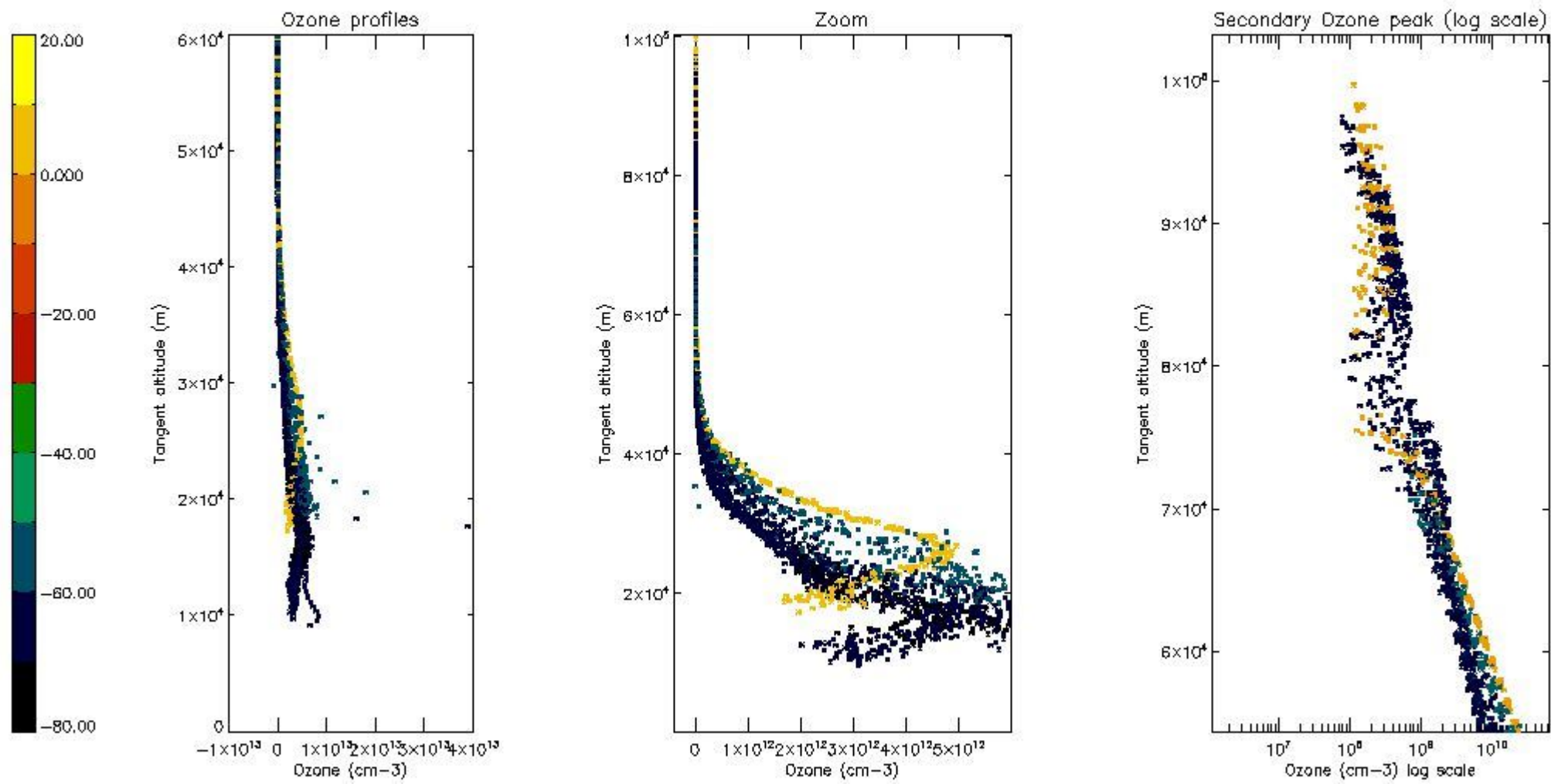
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



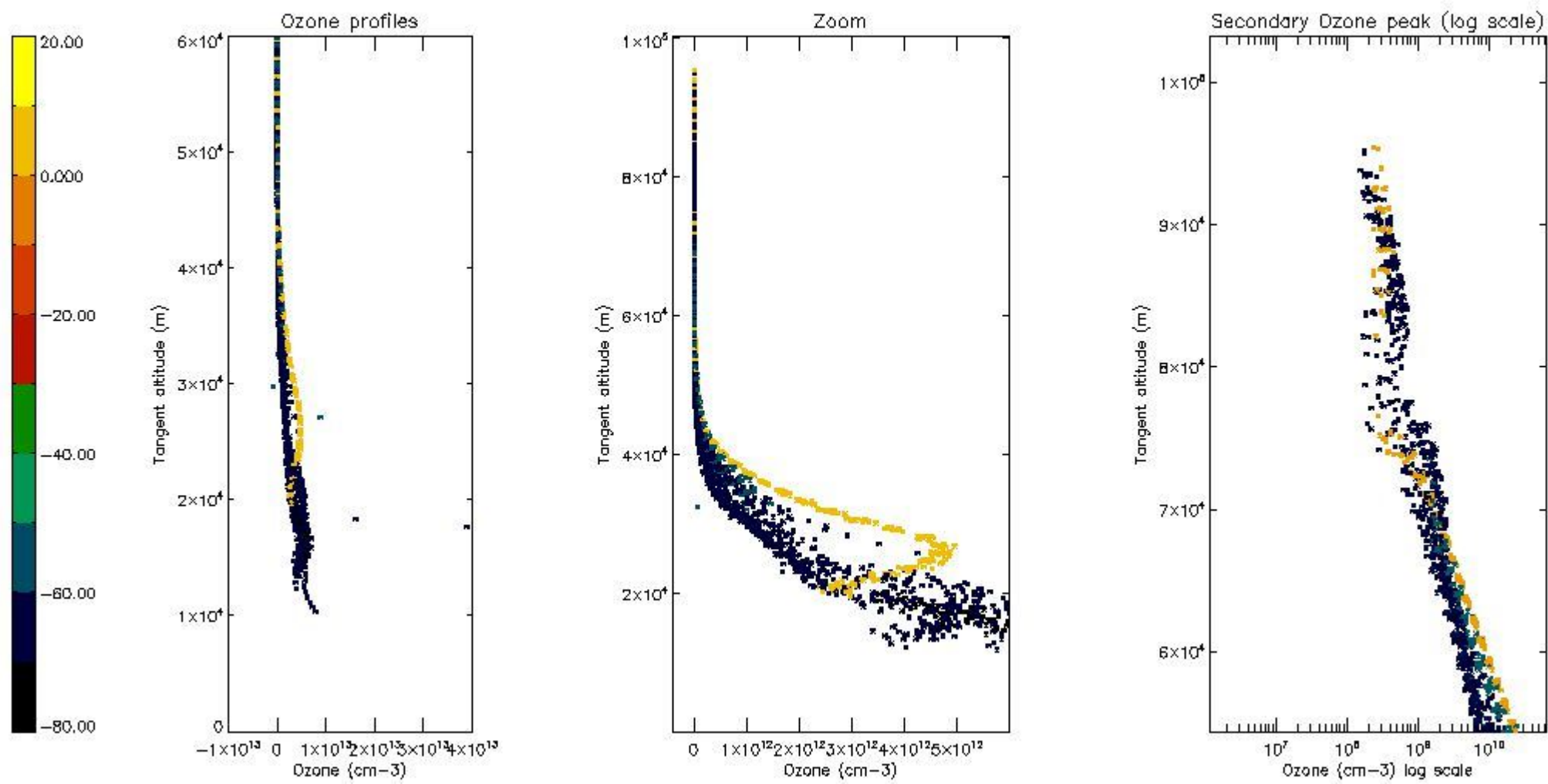
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



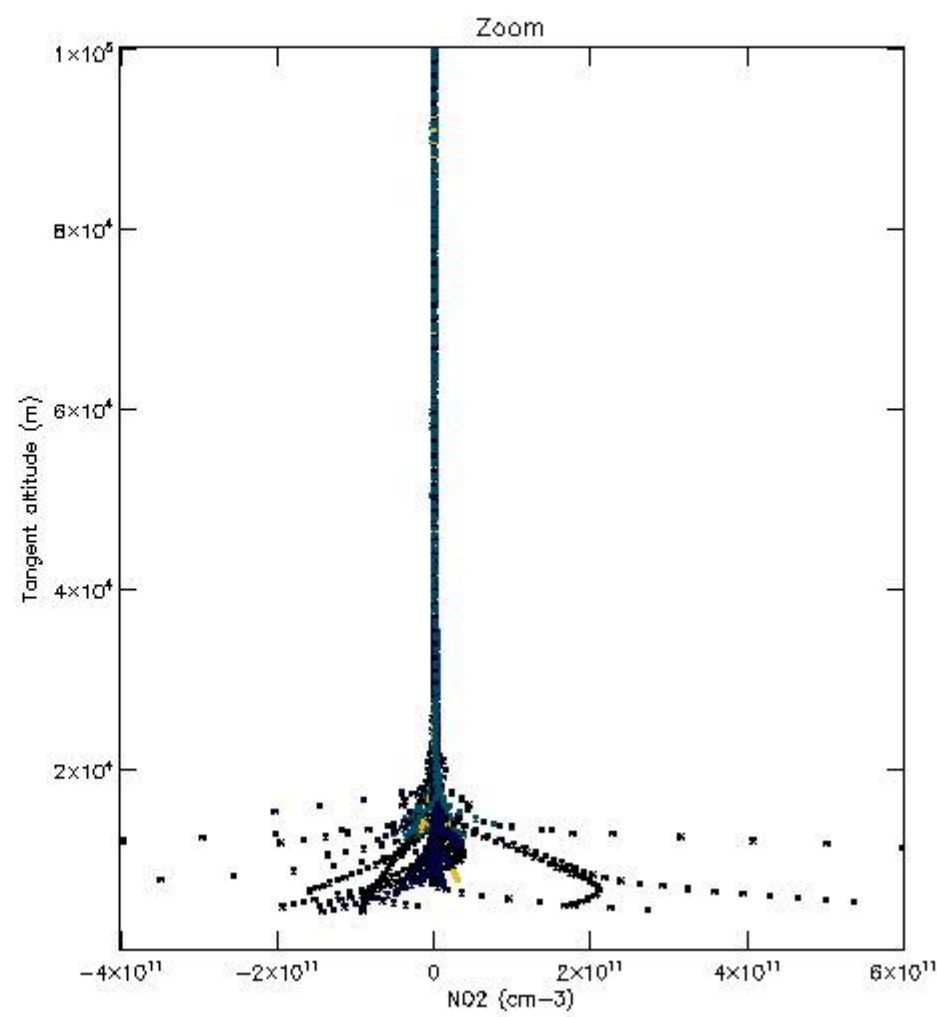
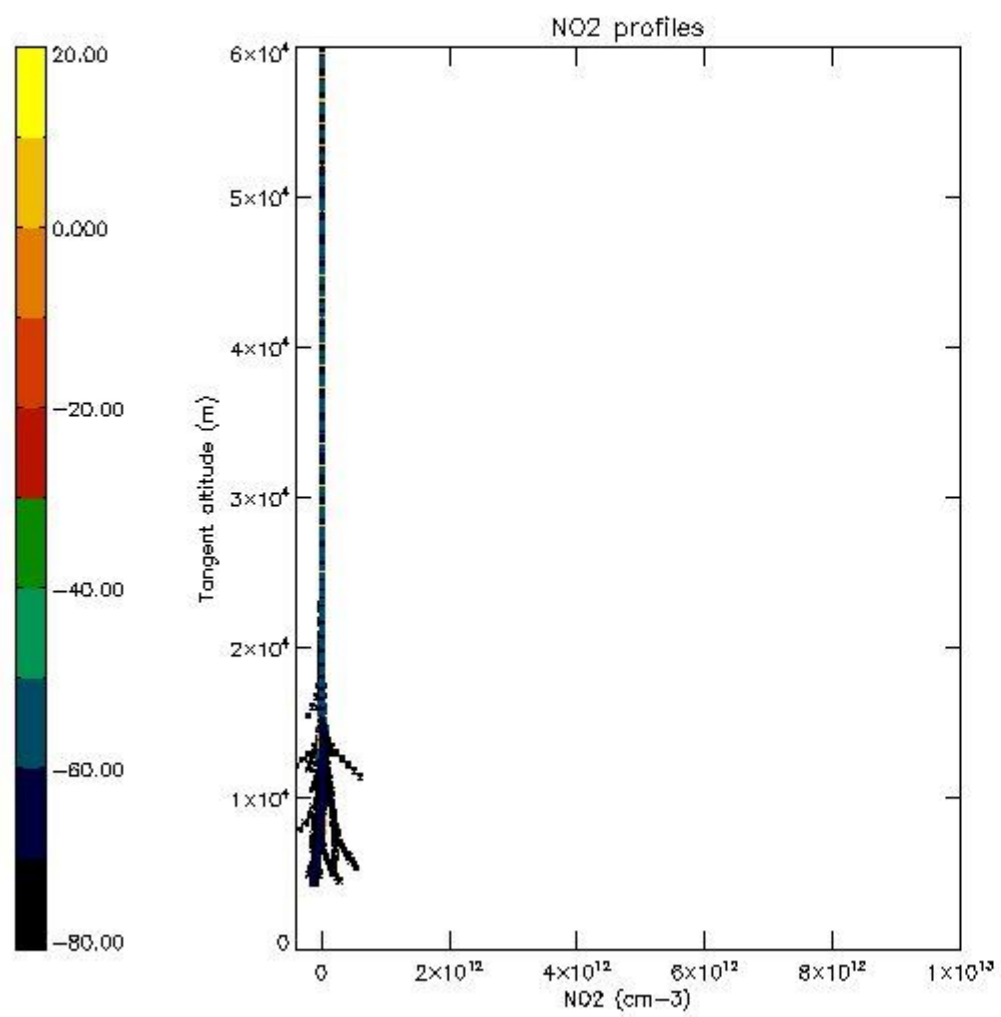
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



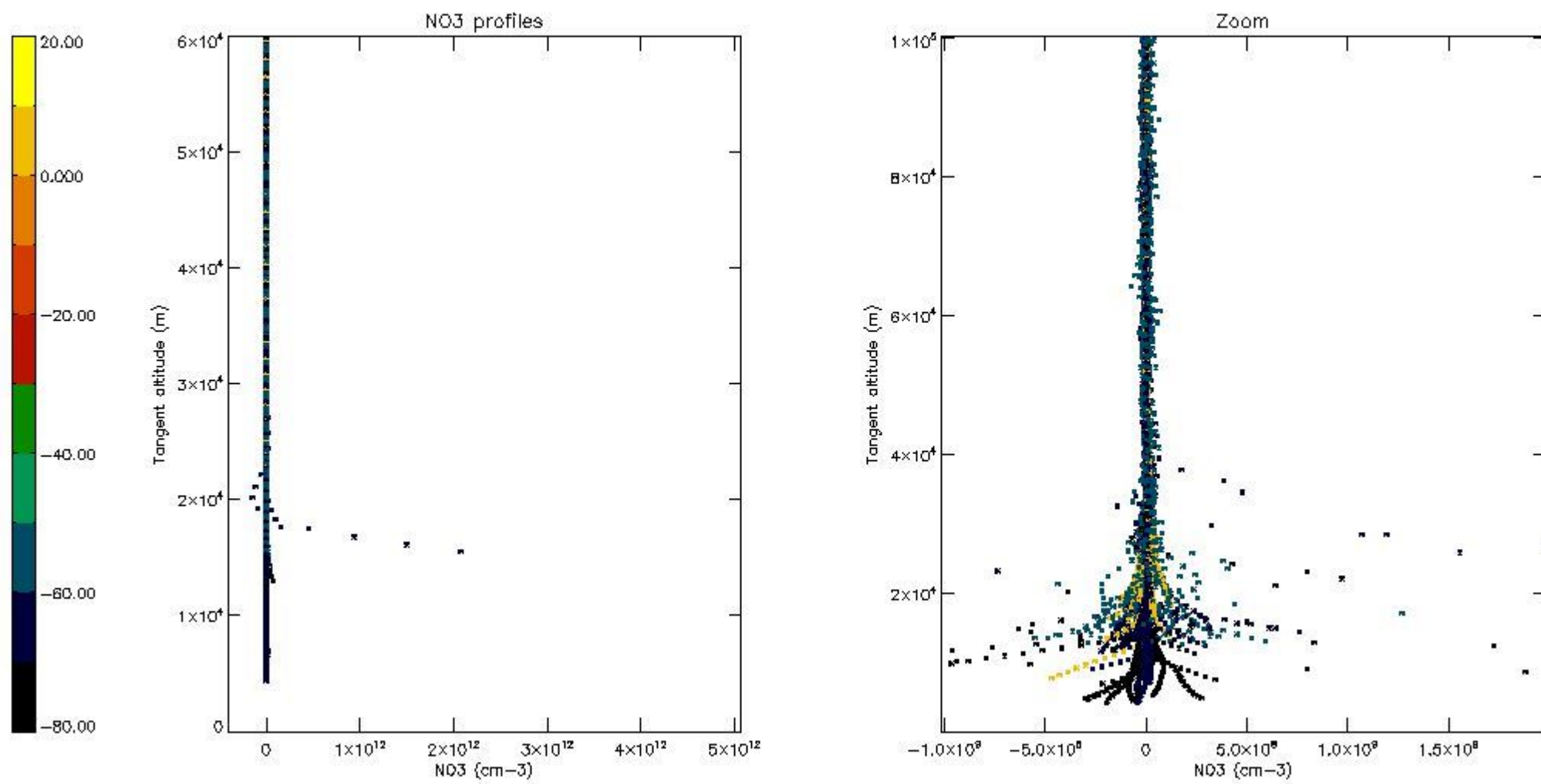
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



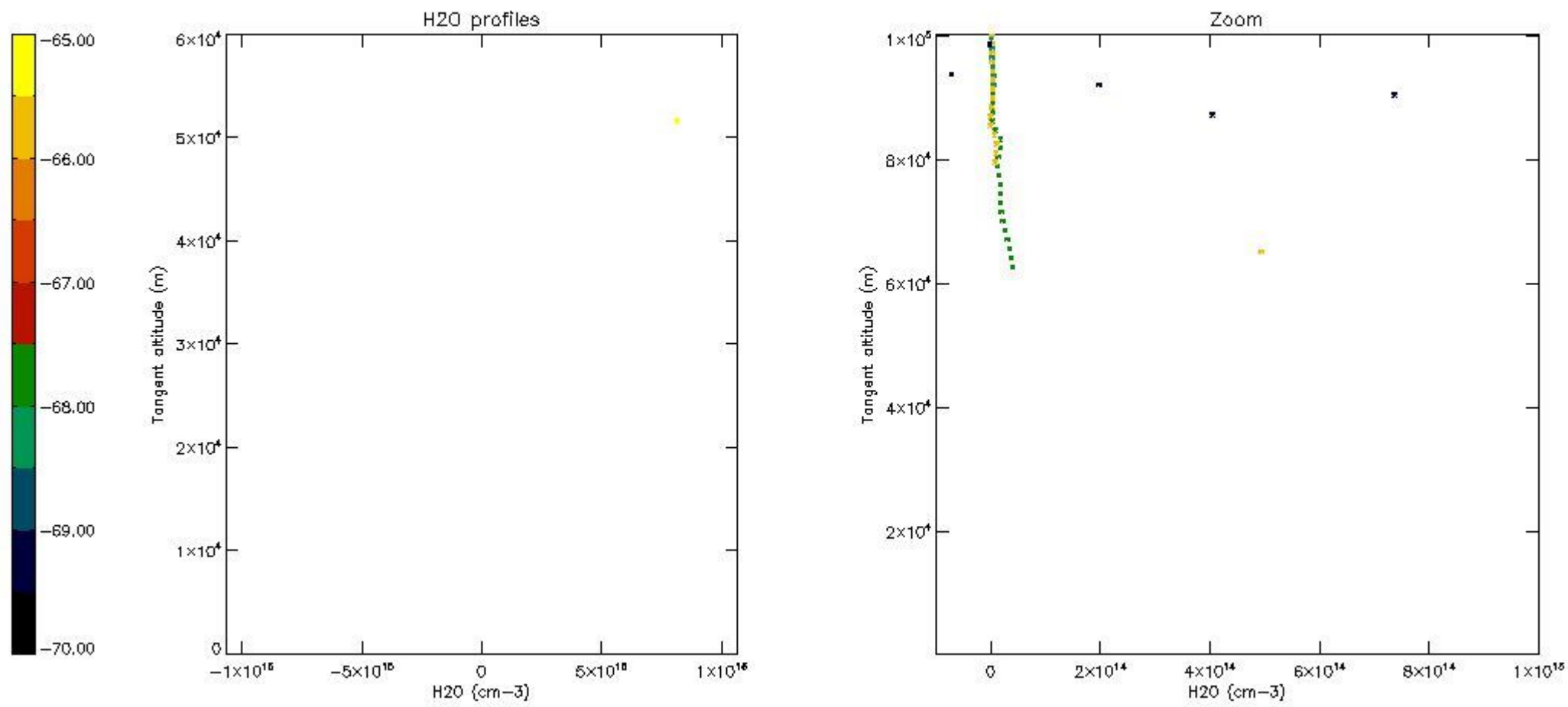
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

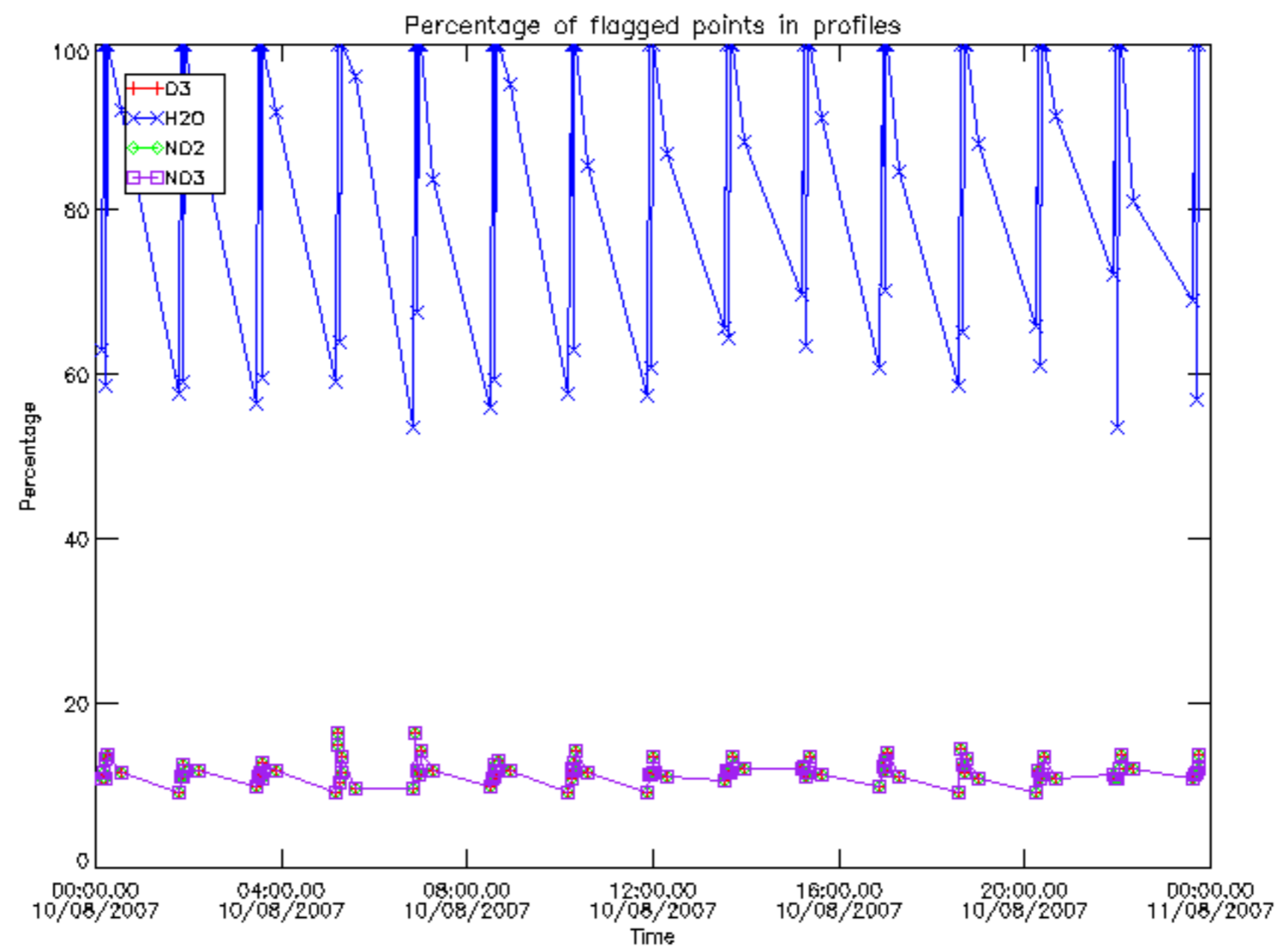
The colorbar represents the latitude.



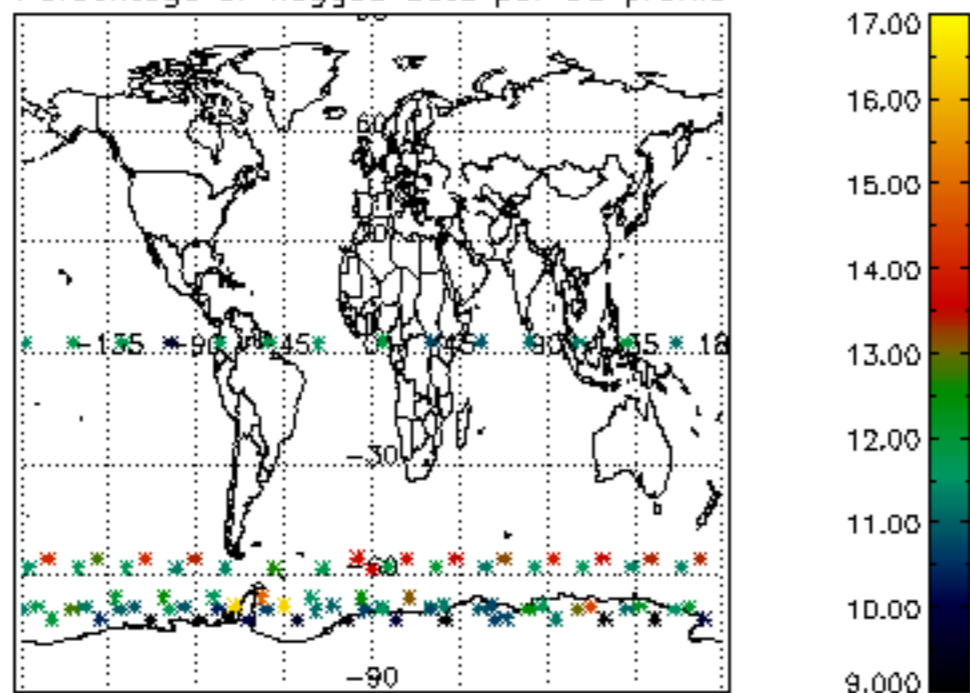
6. Auxiliary Data Files used for the production reported in section 2

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.

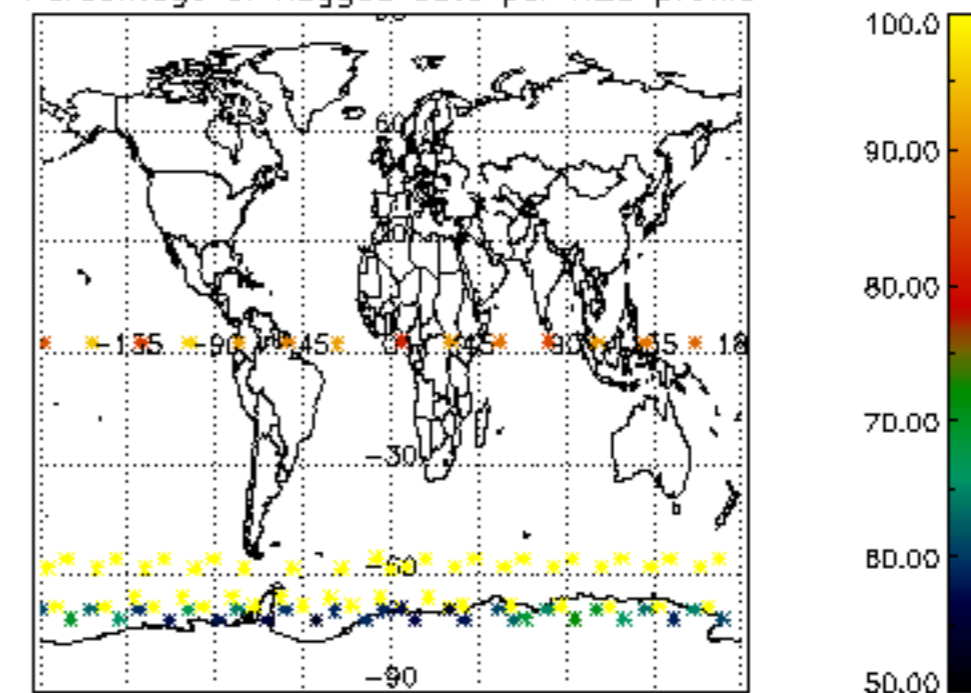
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	10-AUG-2007 00:02:23
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	10-AUG-2007 00:02:23
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	10-AUG-2007 00:02:23



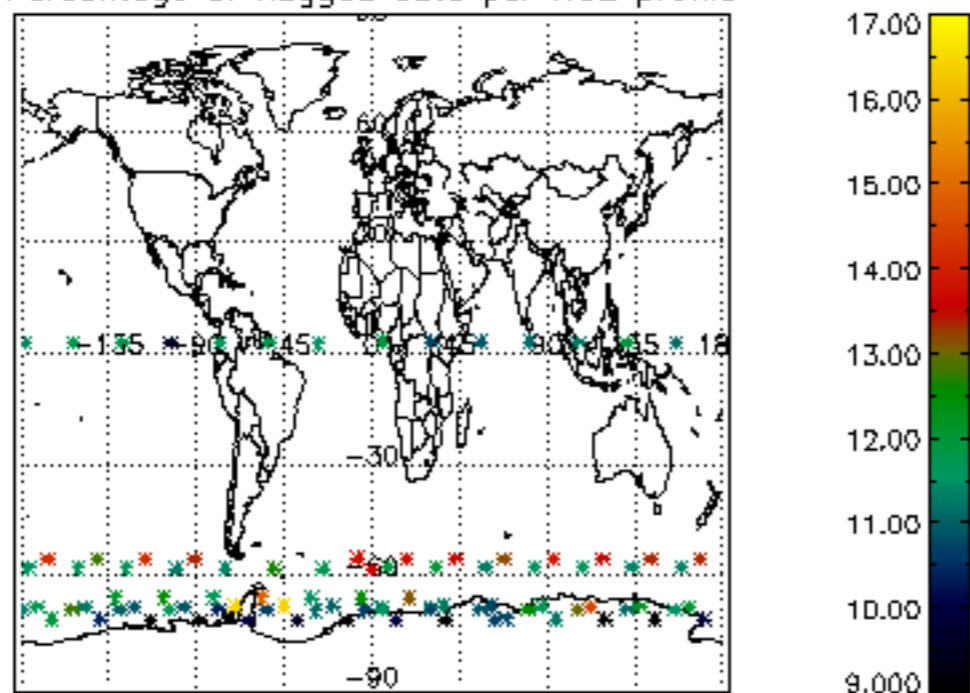
Percentage of flagged data per D3 profile



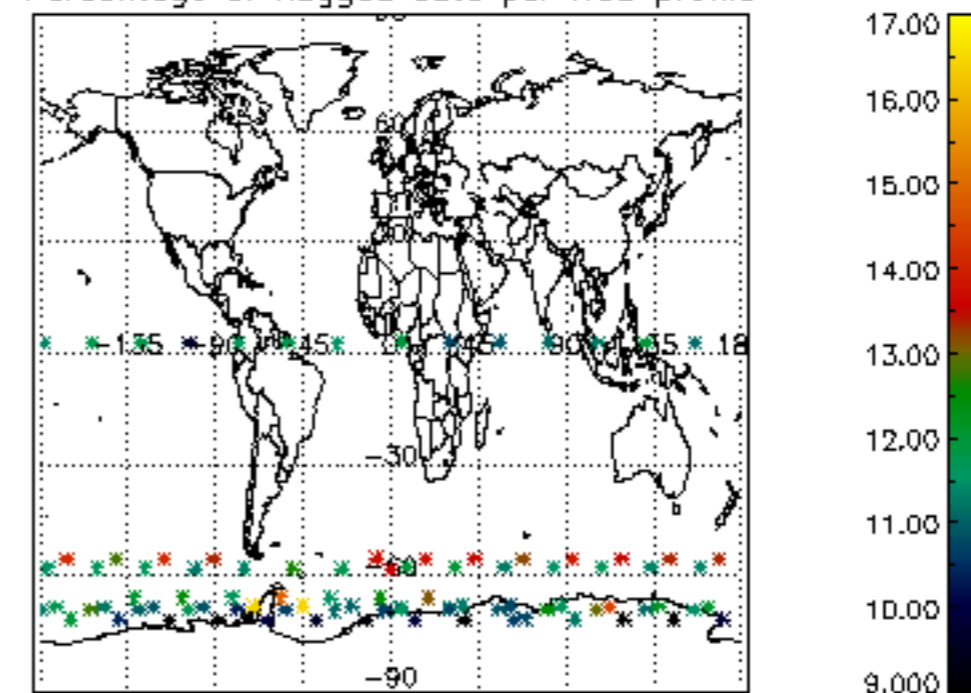
Percentage of flagged data per H2O profile

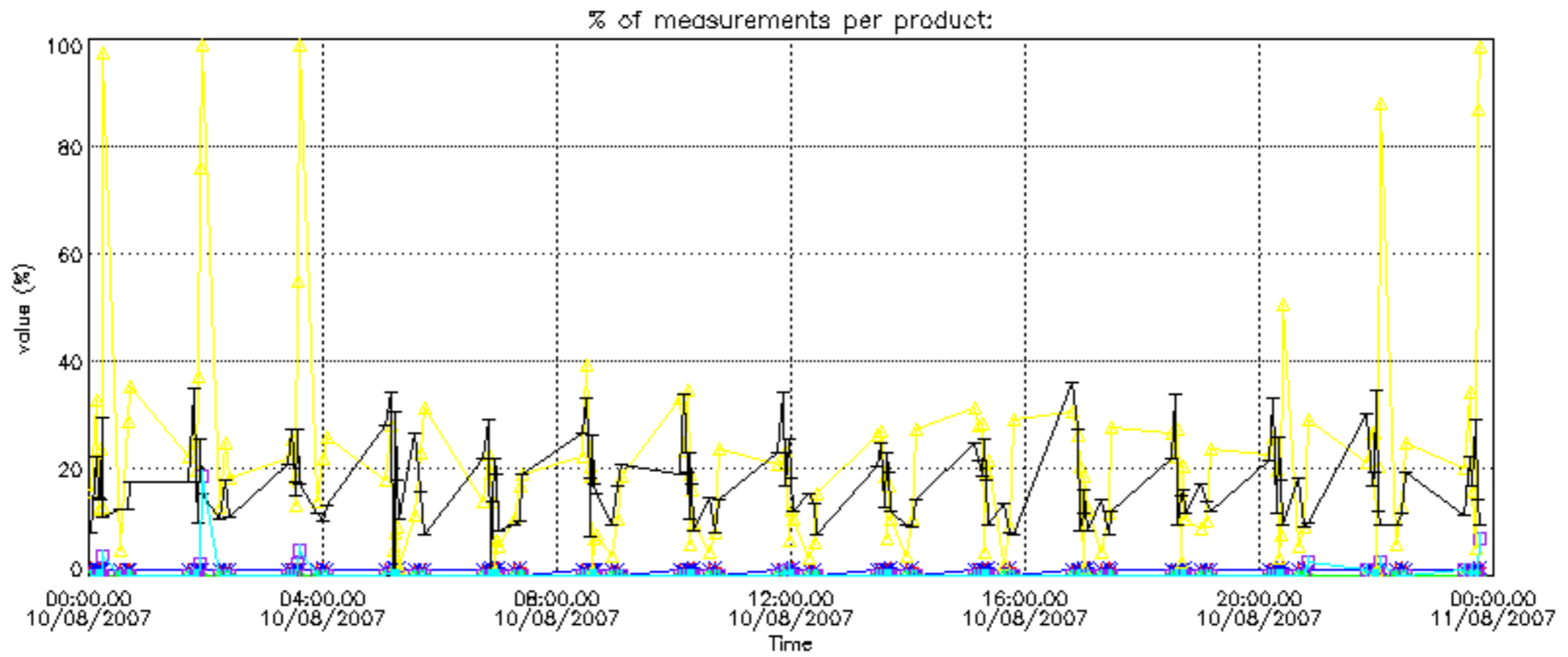


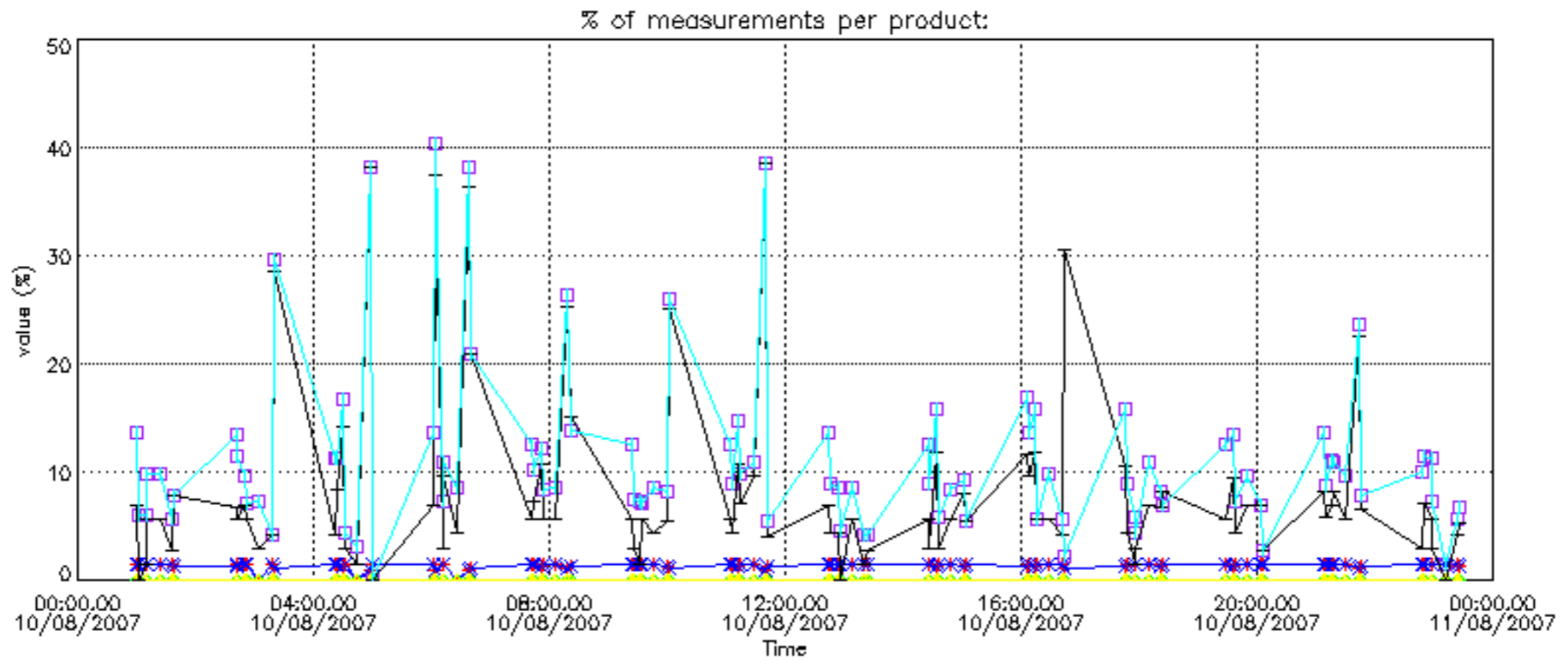
Percentage of flagged data per NO2 profile



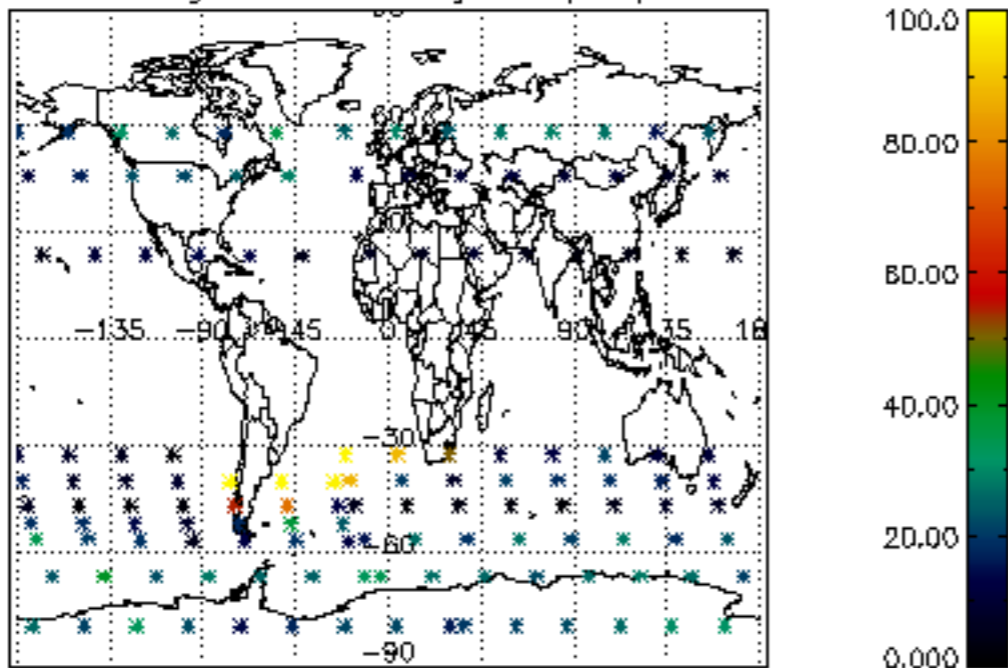
Percentage of flagged data per NO3 profile



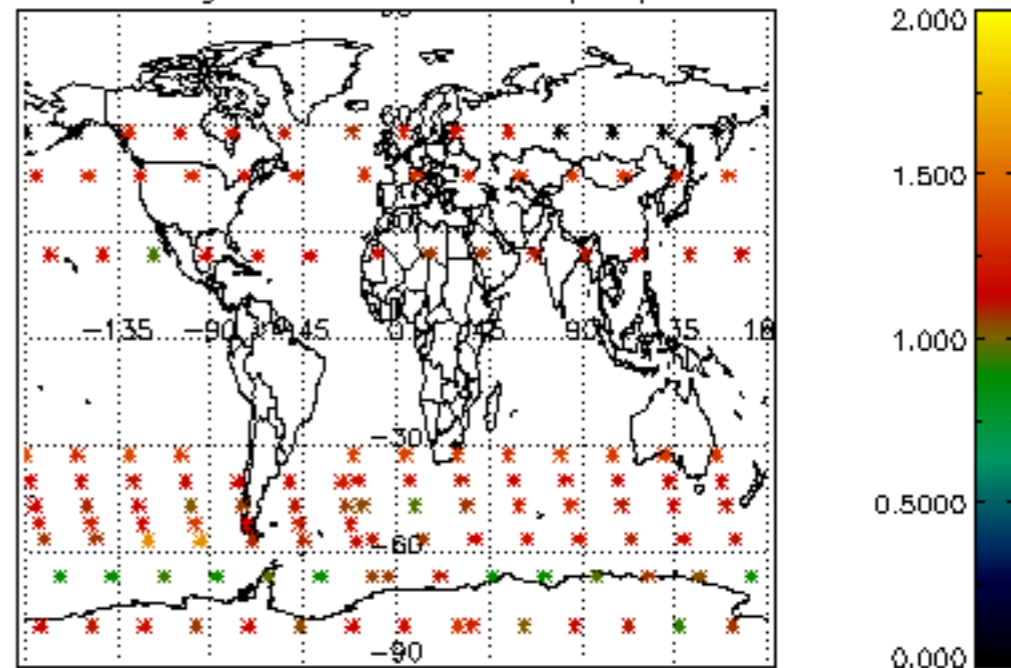




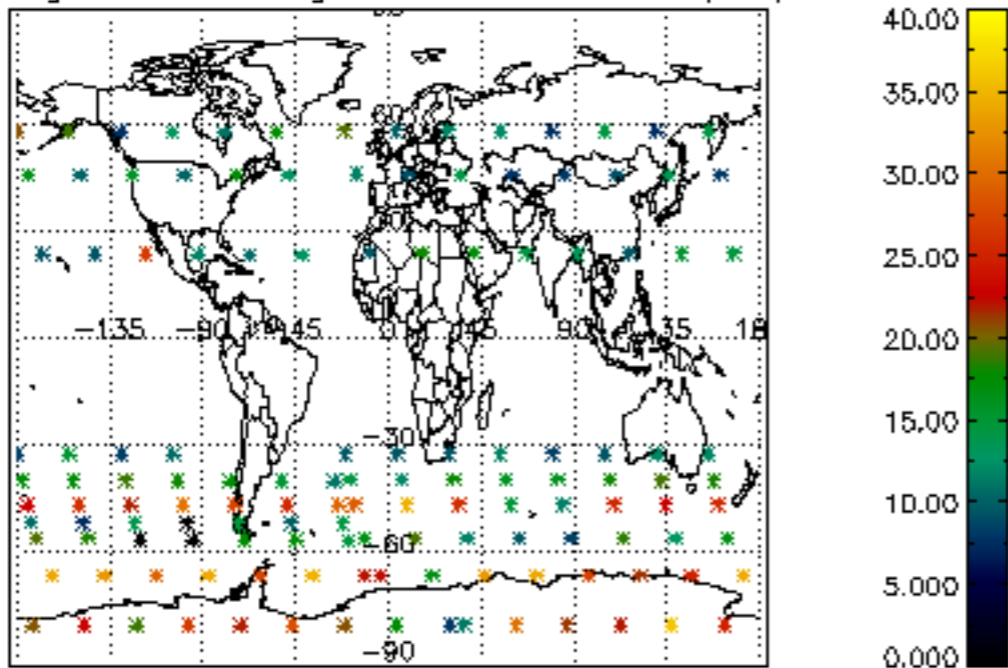
Percentage of cosmic ray hits per profile



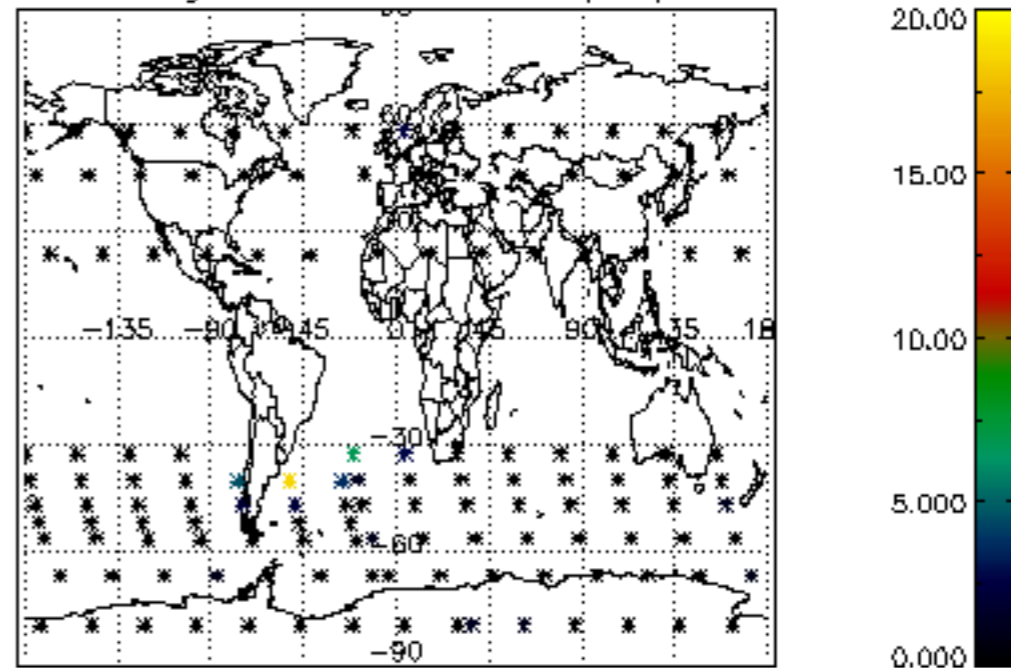
Percentage of datation errors per profile



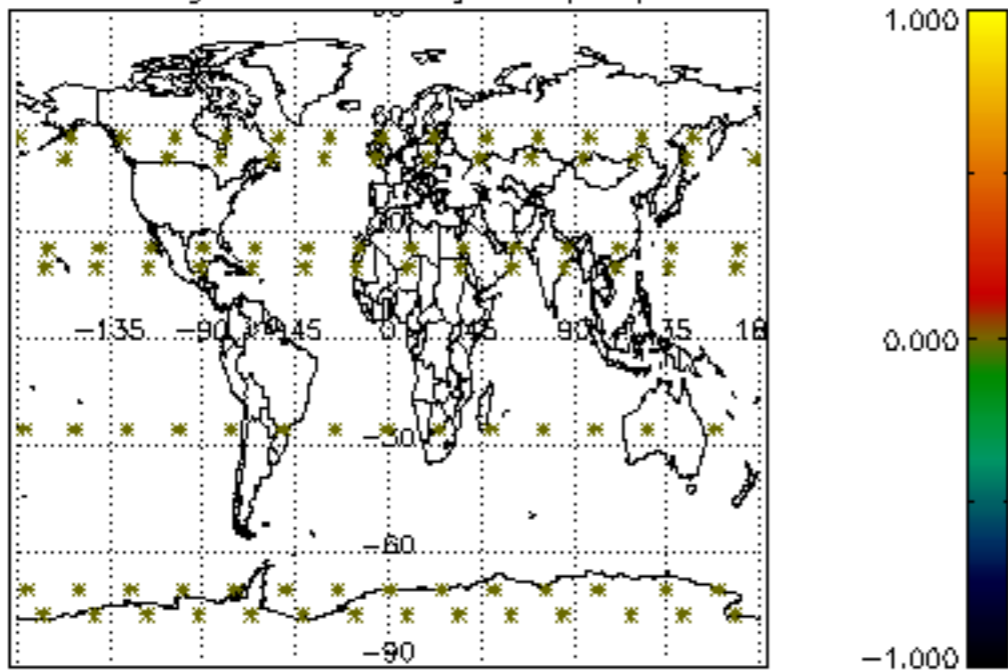
Percentage of star falling outside central band per profile



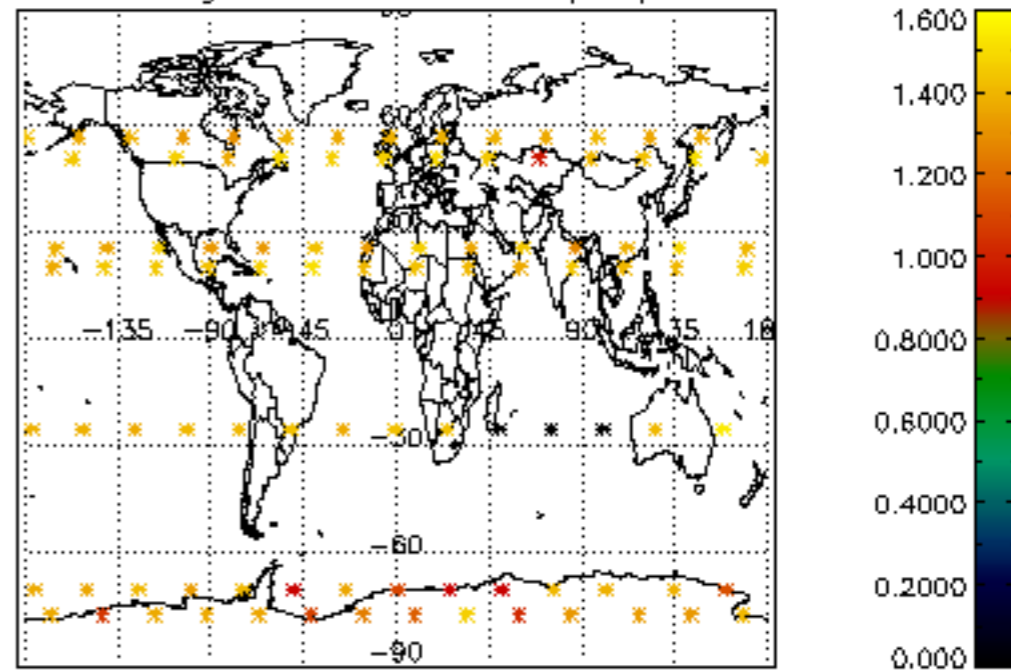
Percentage of saturation errors per profile



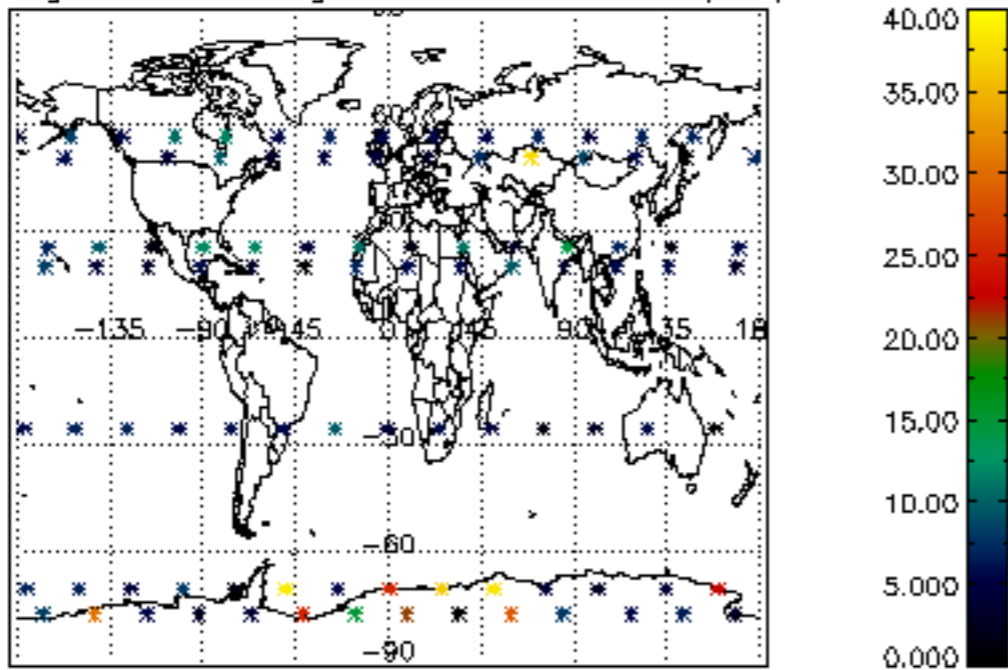
Percentage of cosmic ray hits per profile



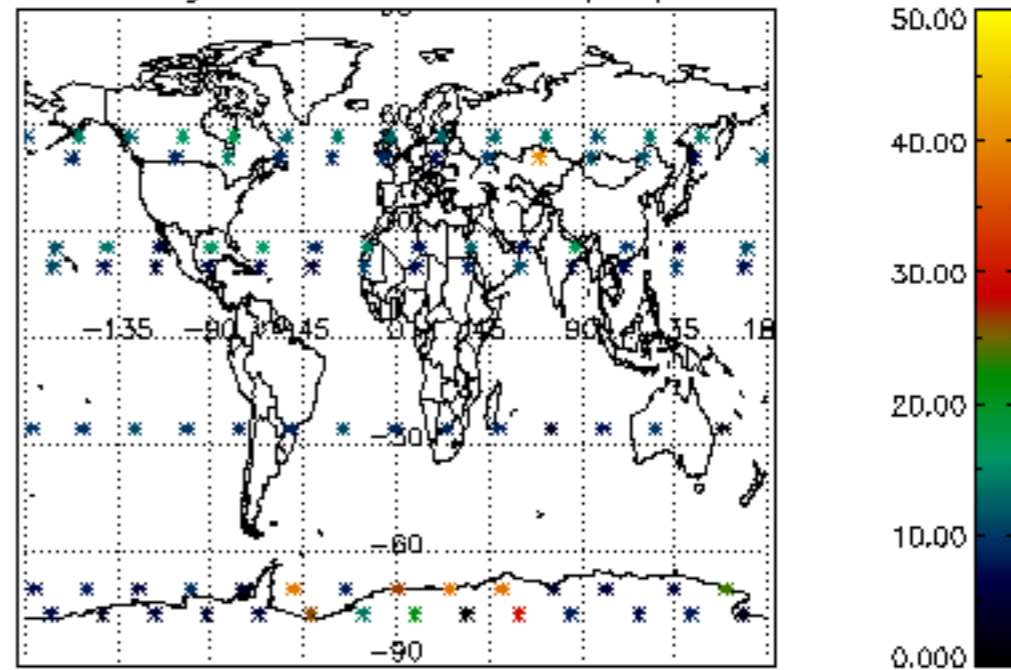
Percentage of datation errors per profile

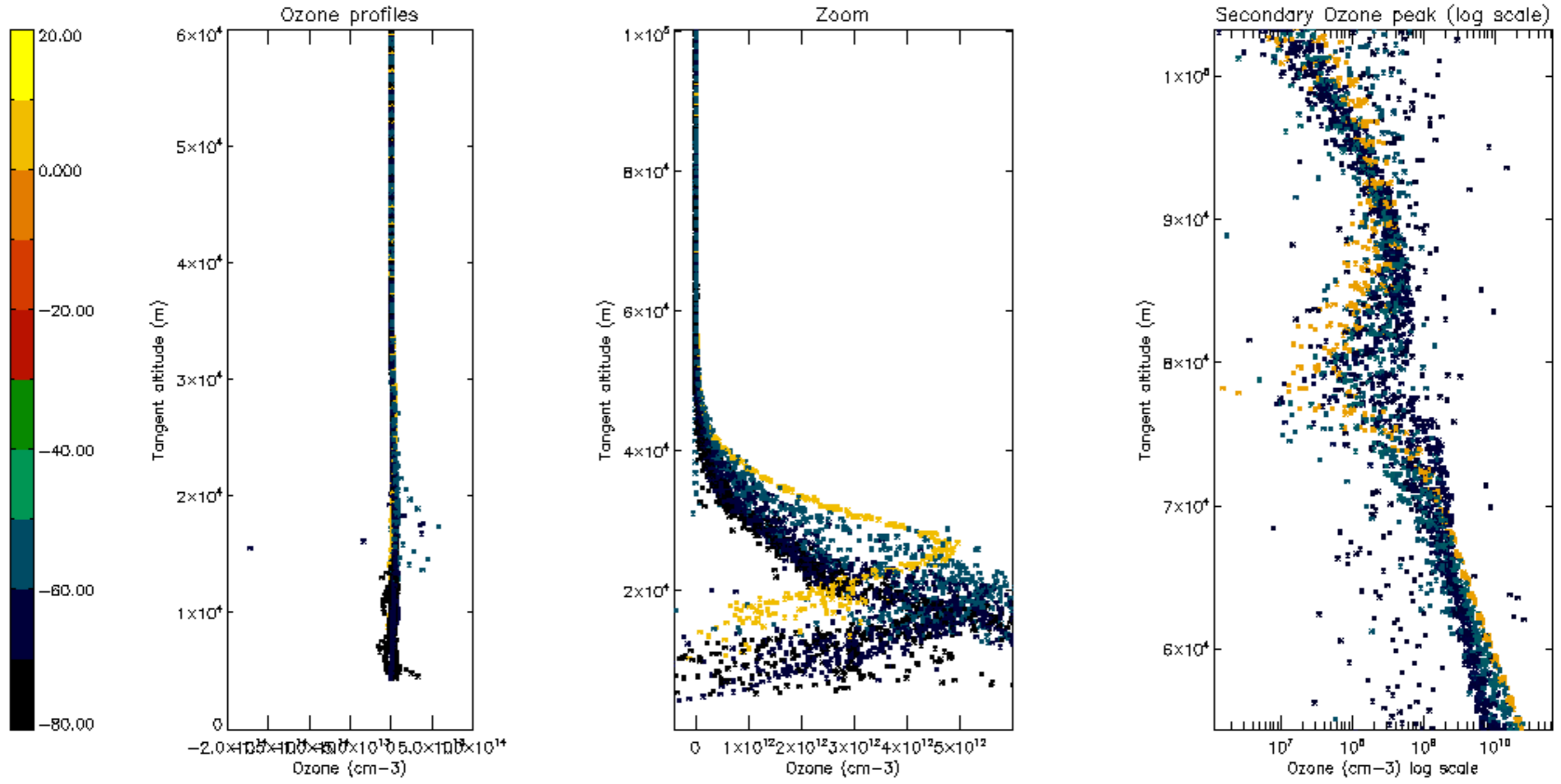


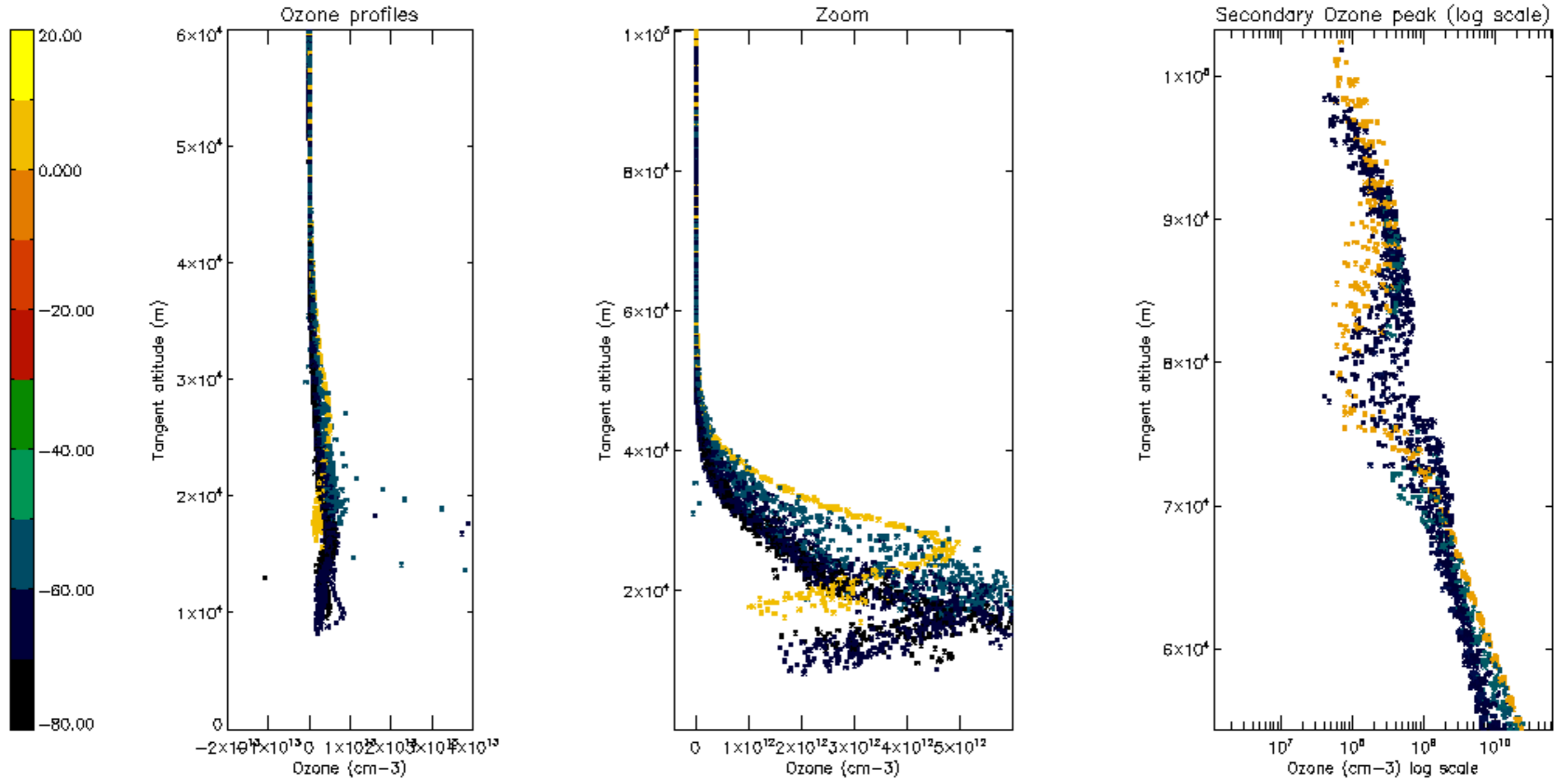
Percentage of star falling outside central band per profile

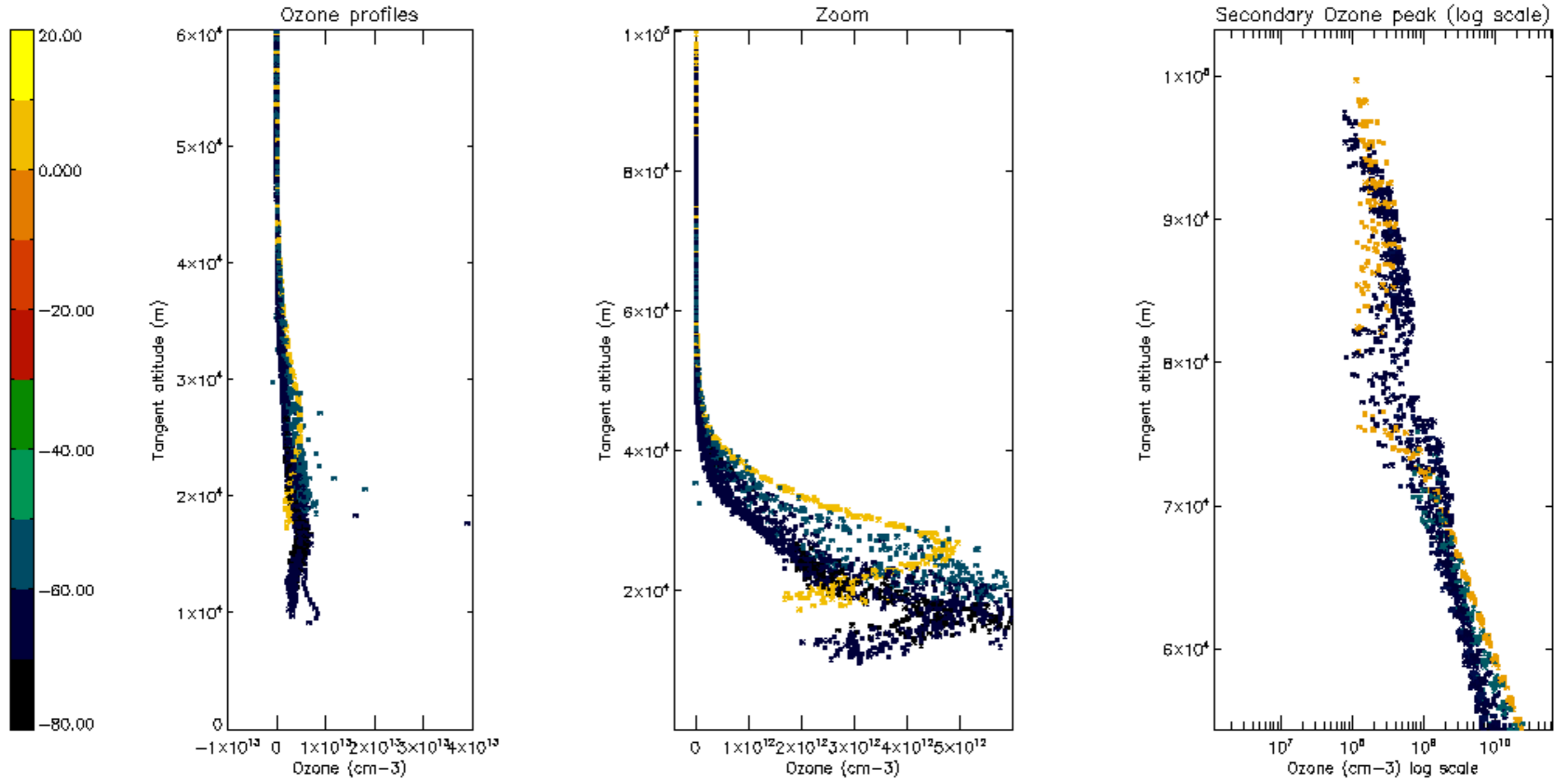


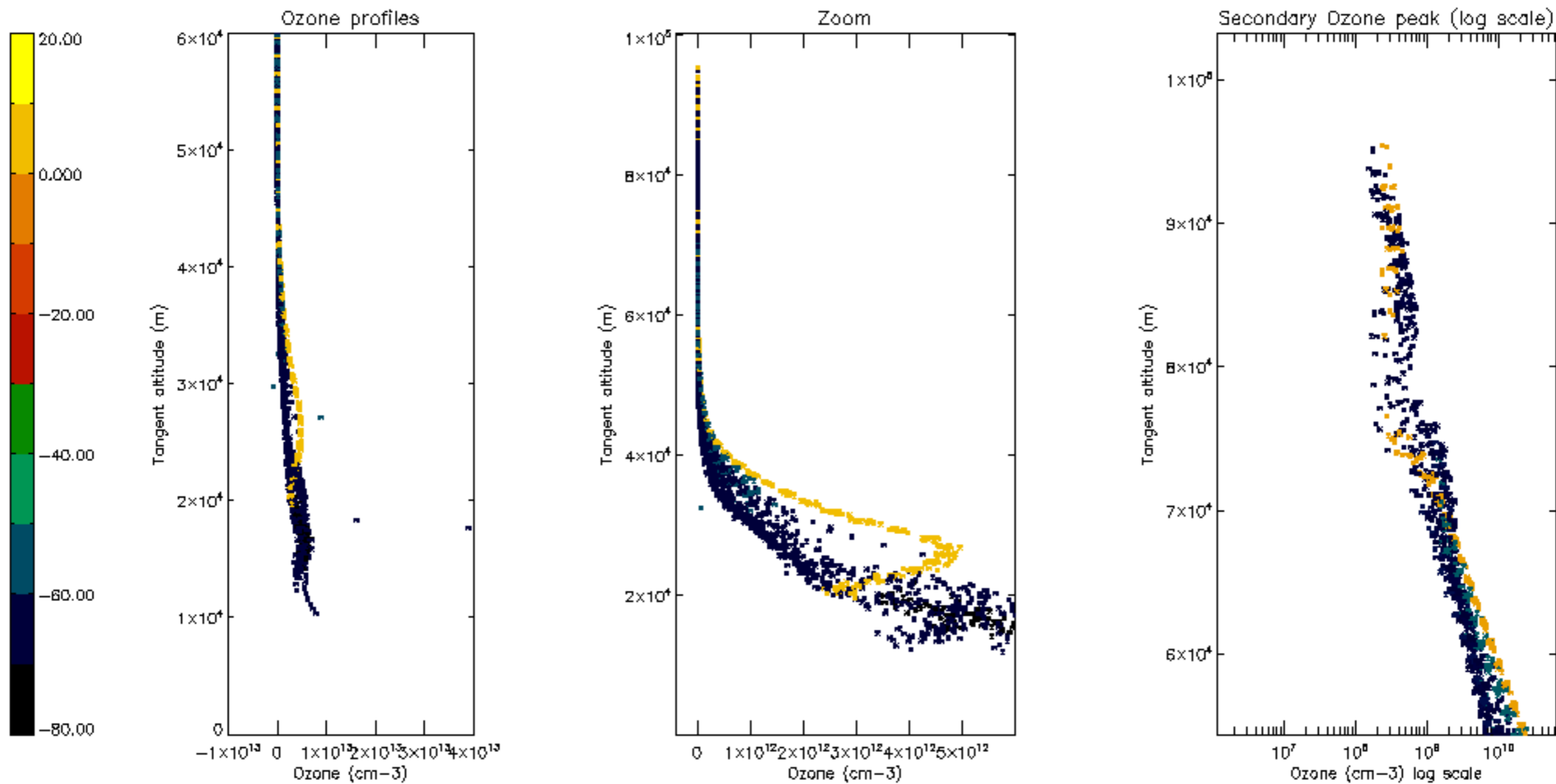
Percentage of saturation errors per profile

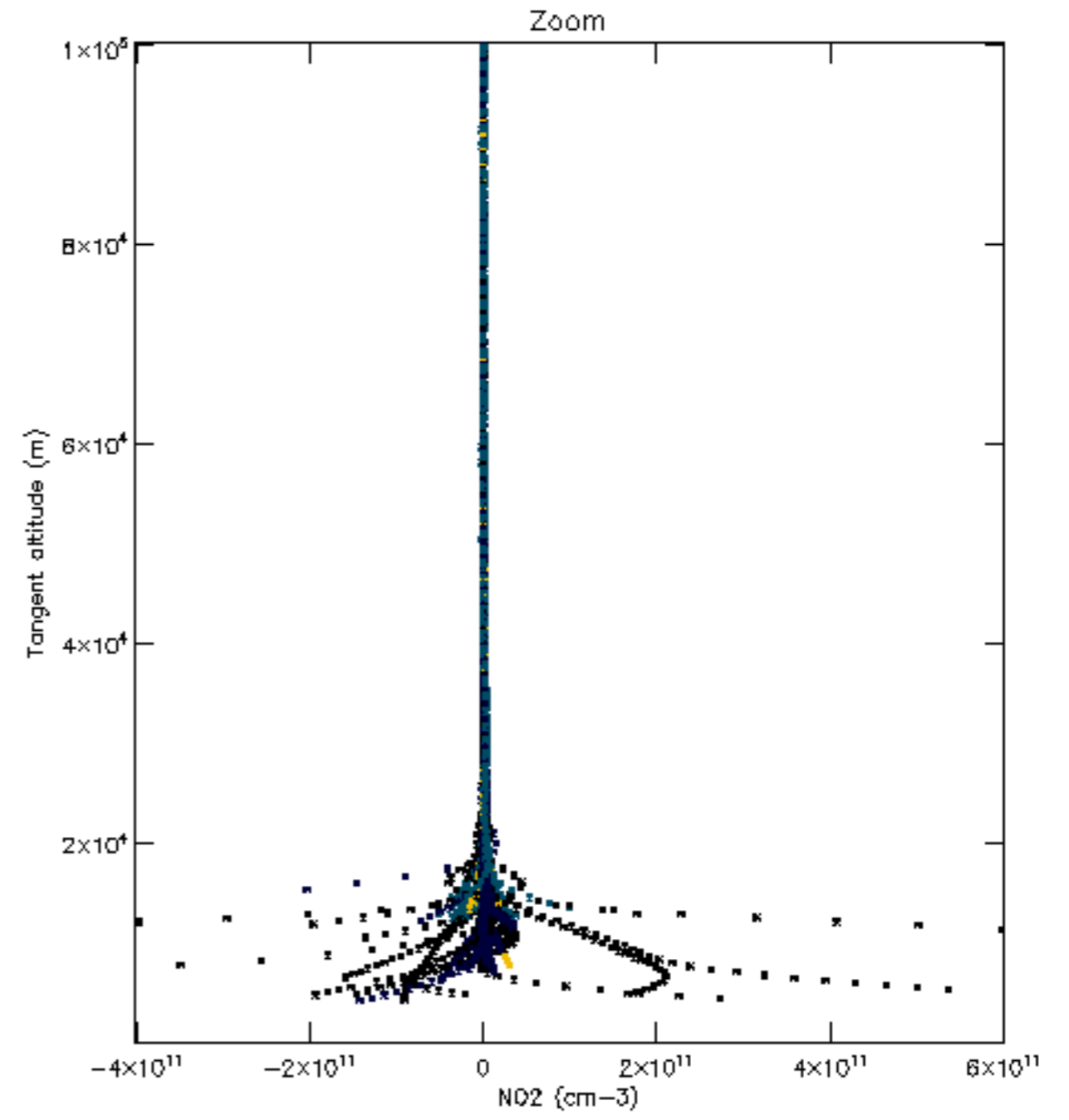
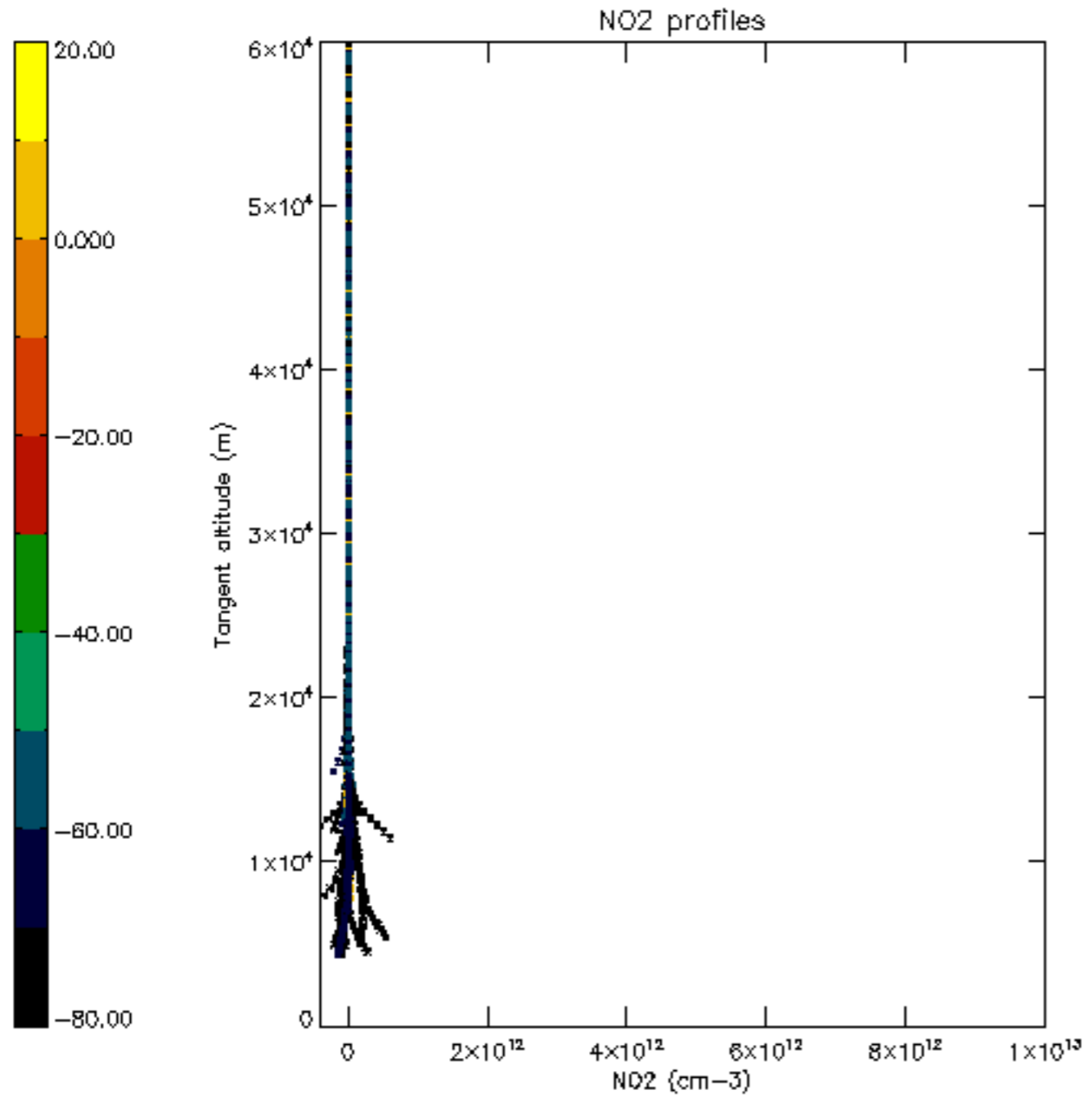


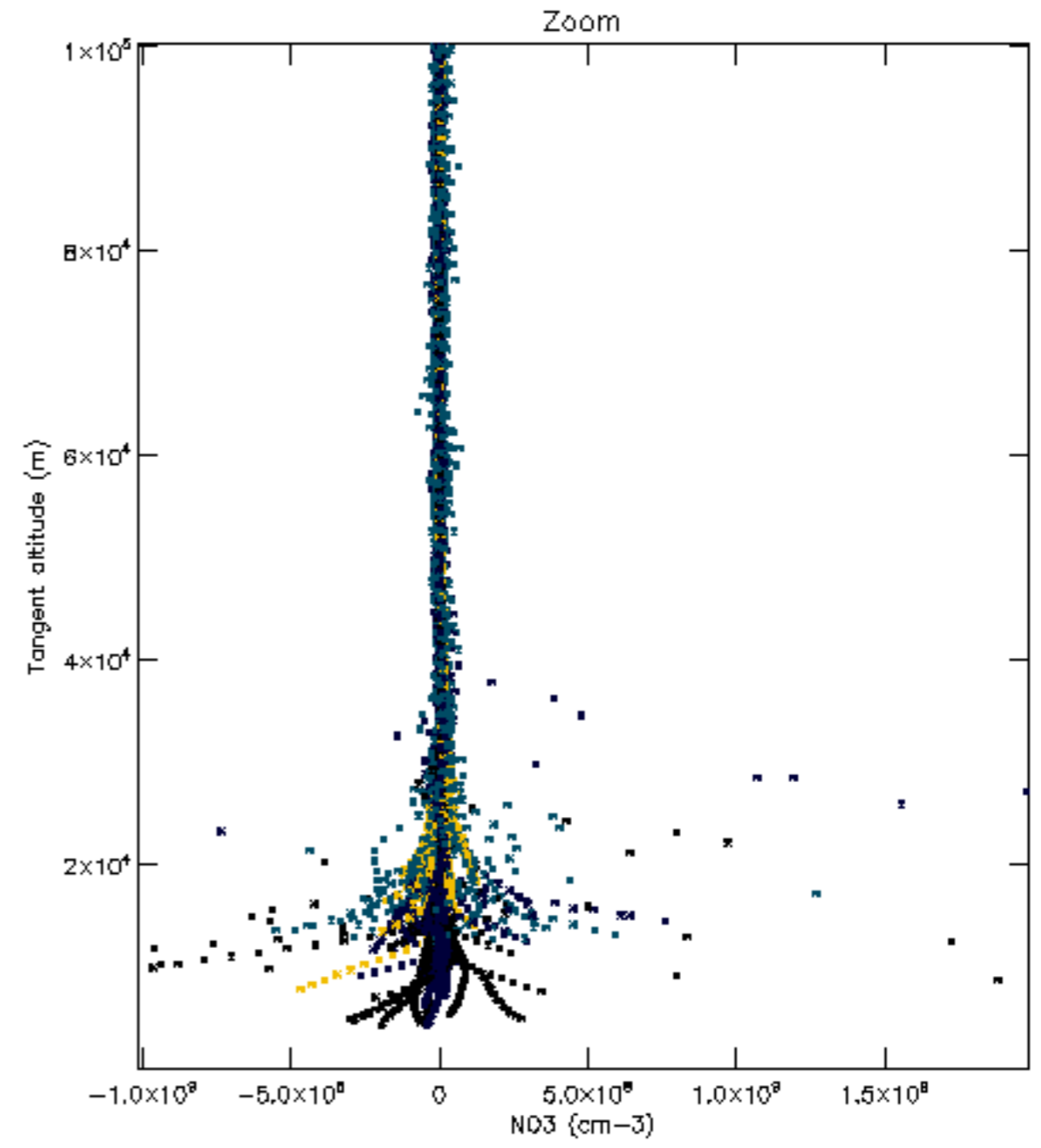
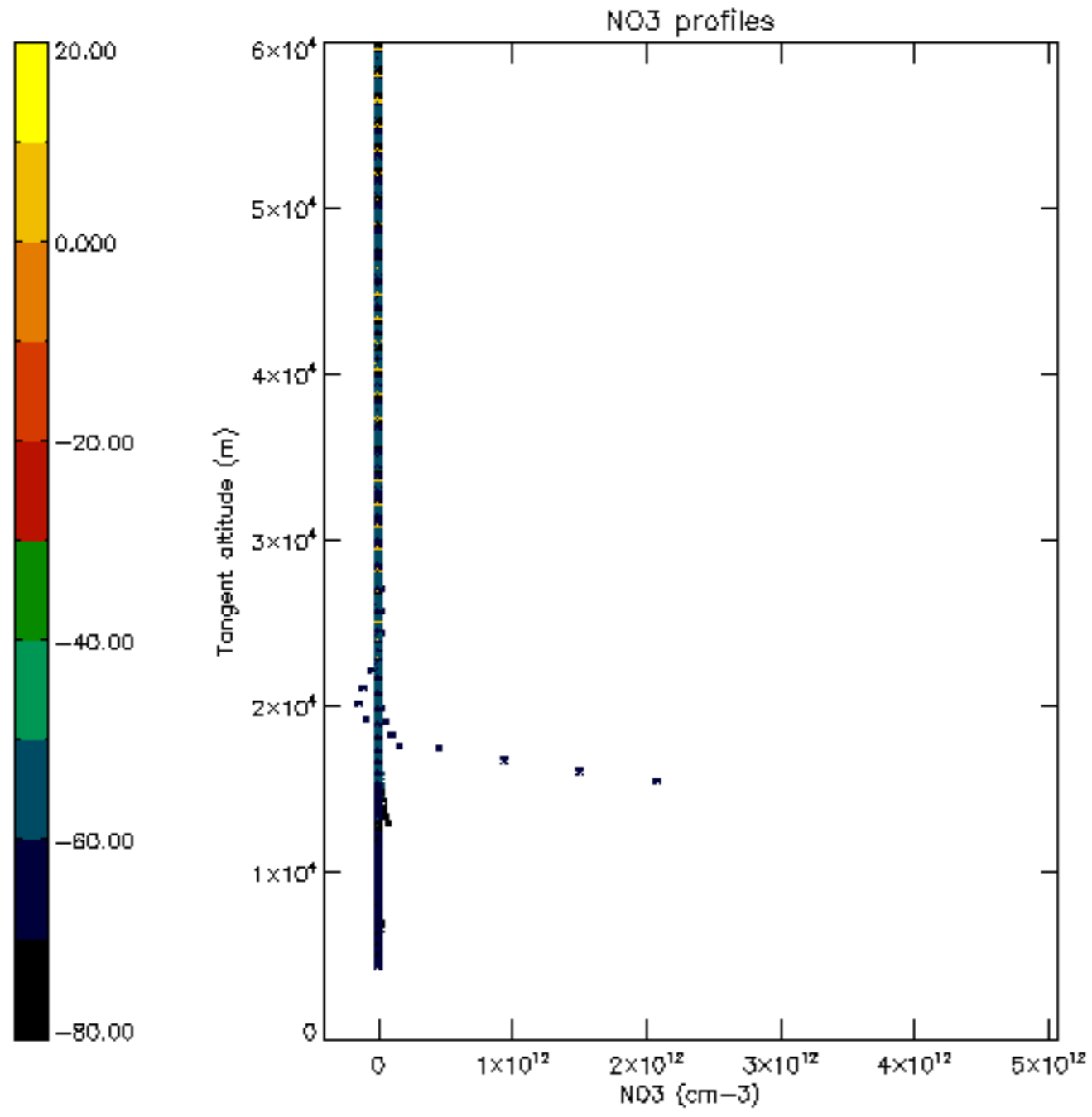


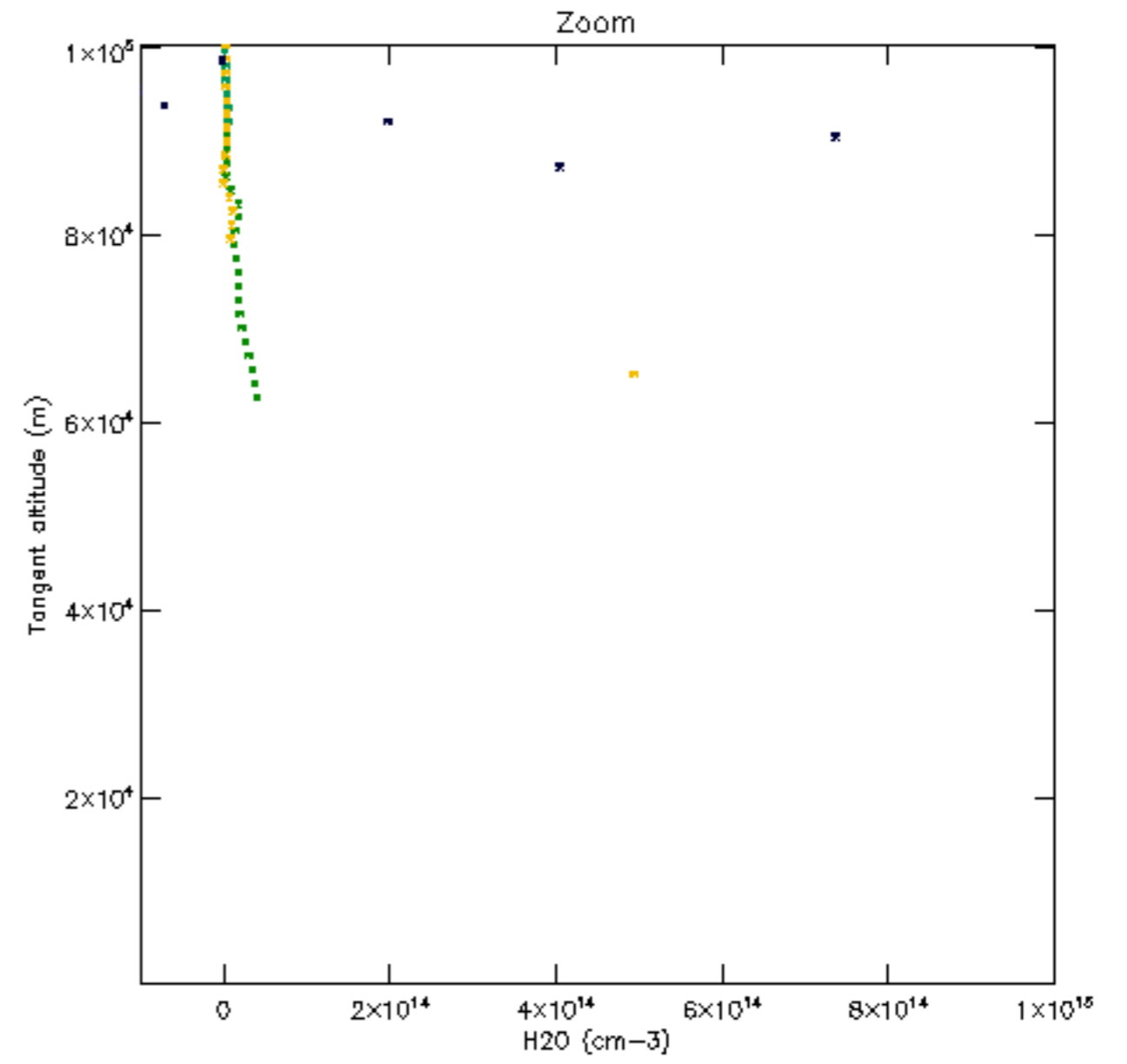
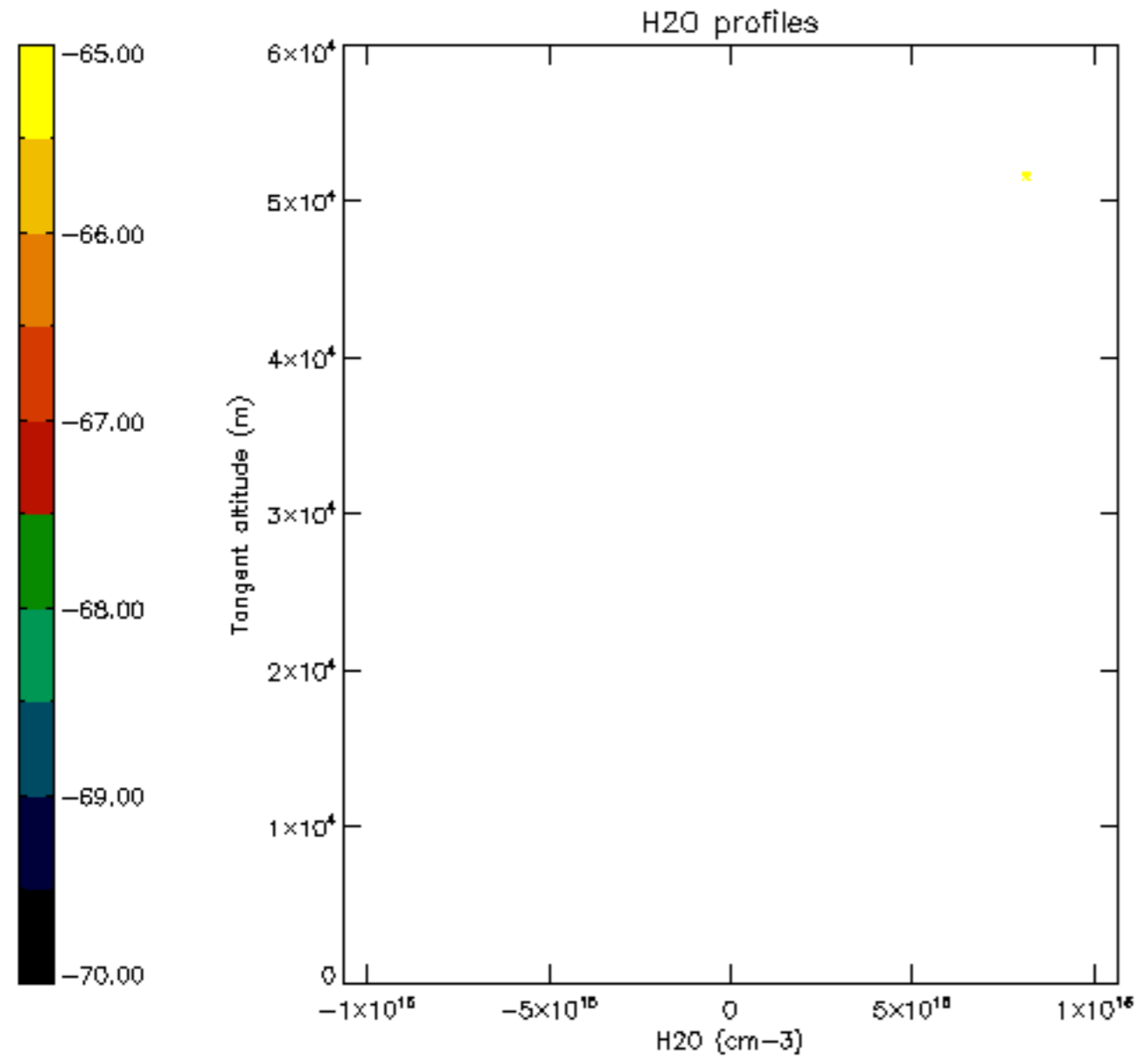


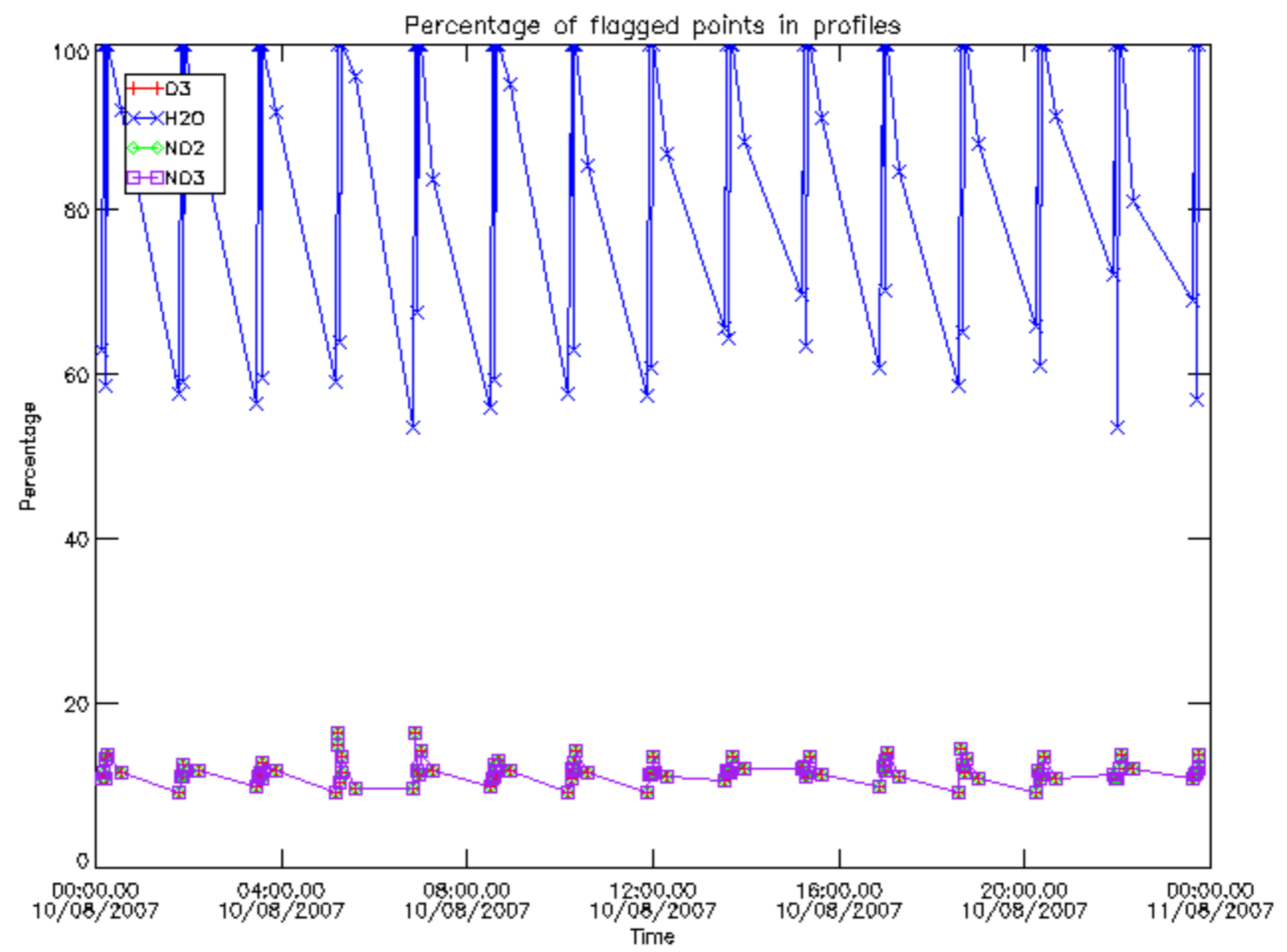




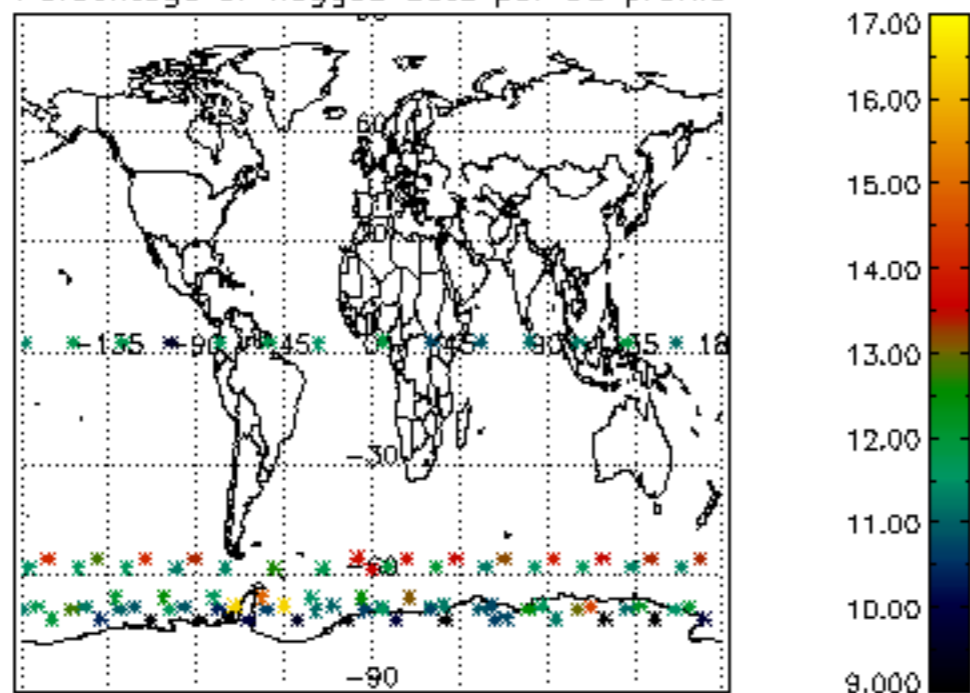




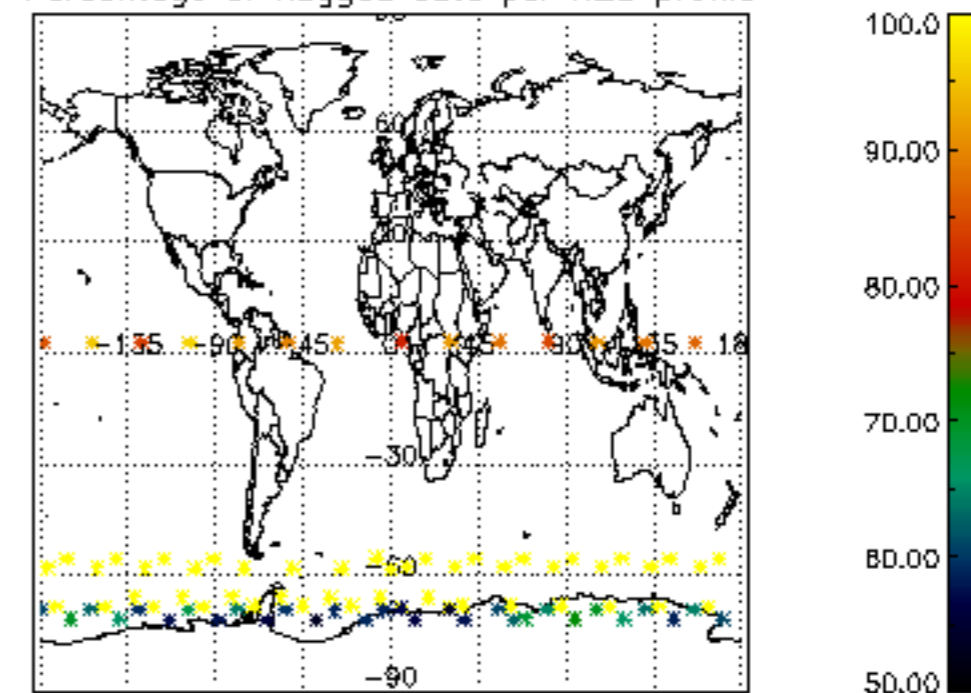




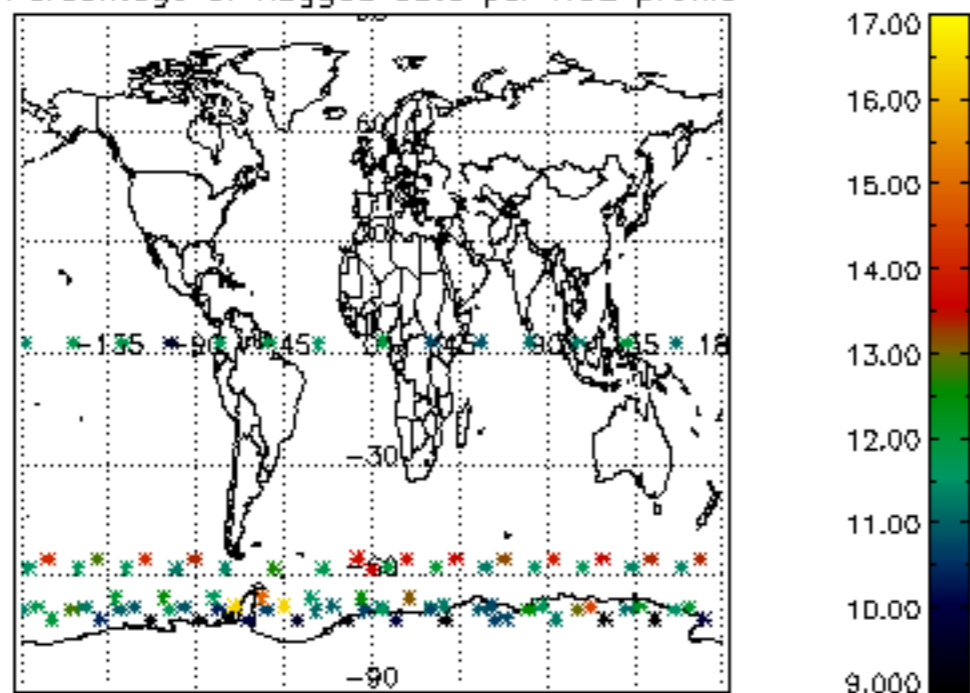
Percentage of flagged data per D3 profile



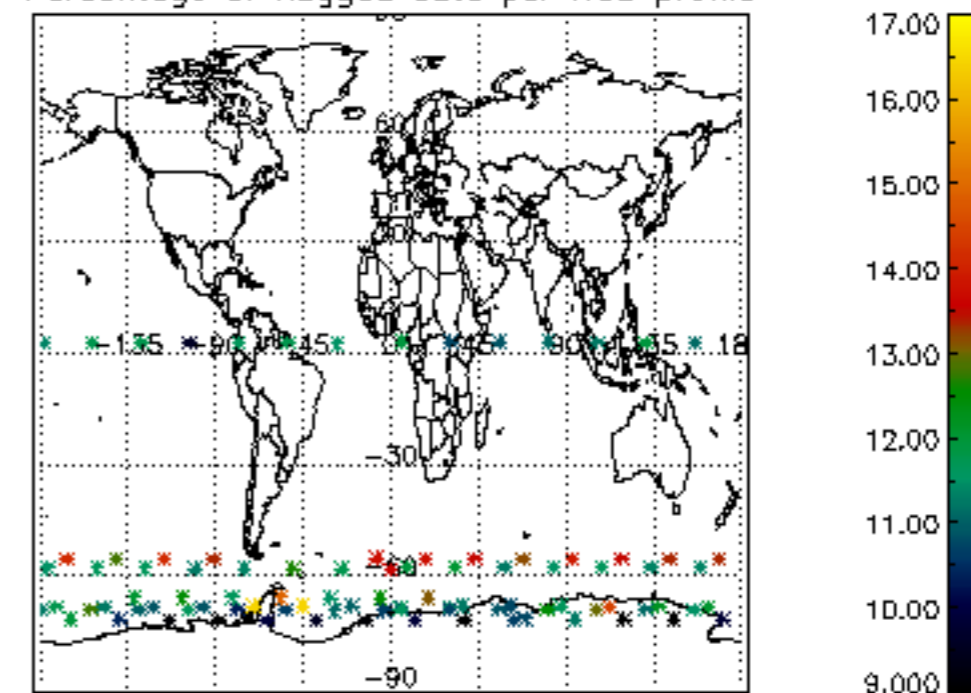
Percentage of flagged data per H2O profile

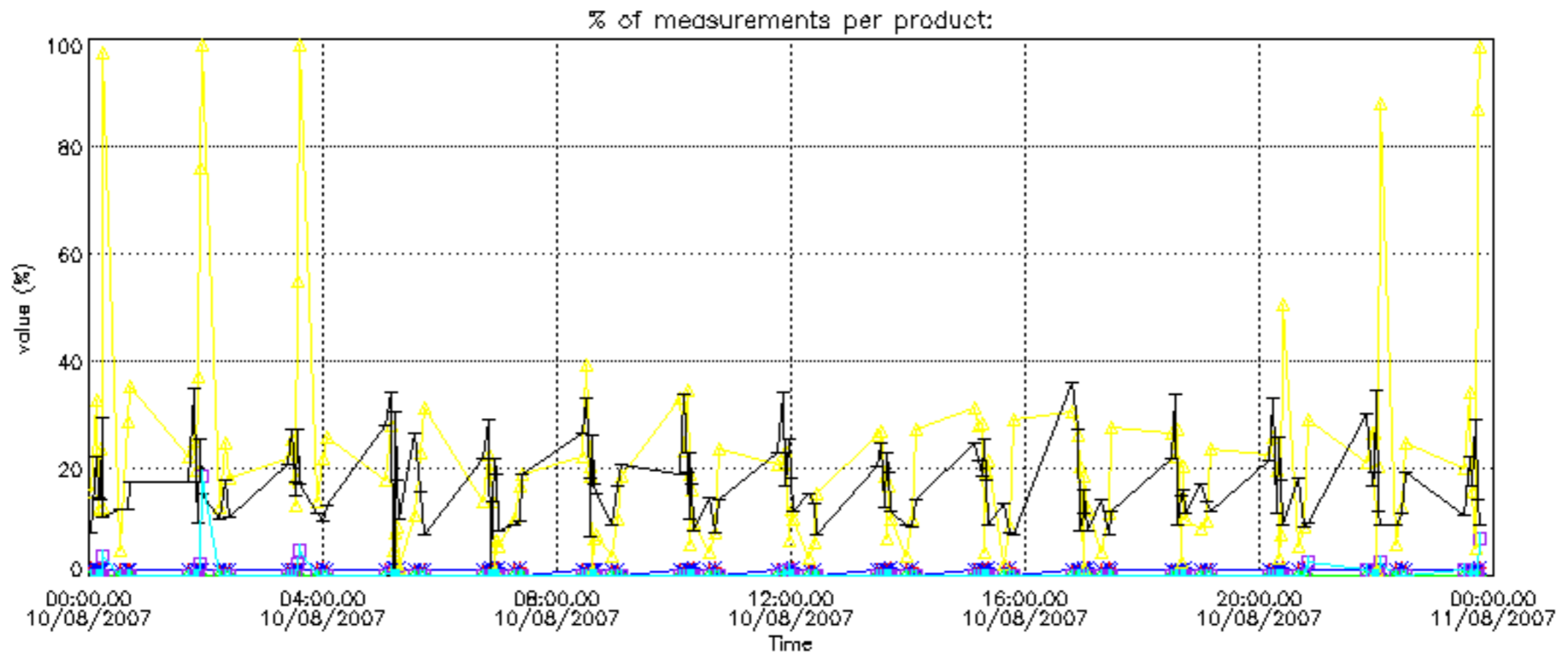


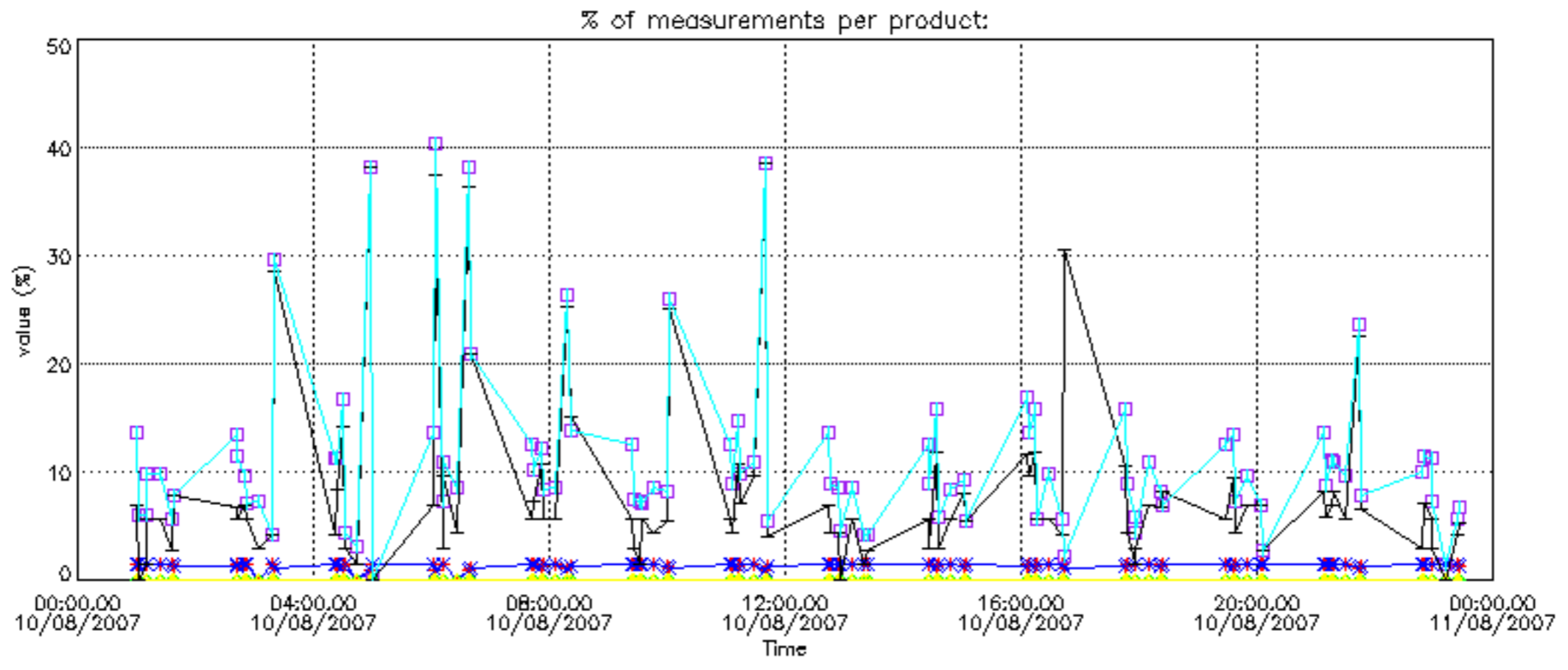
Percentage of flagged data per NO2 profile



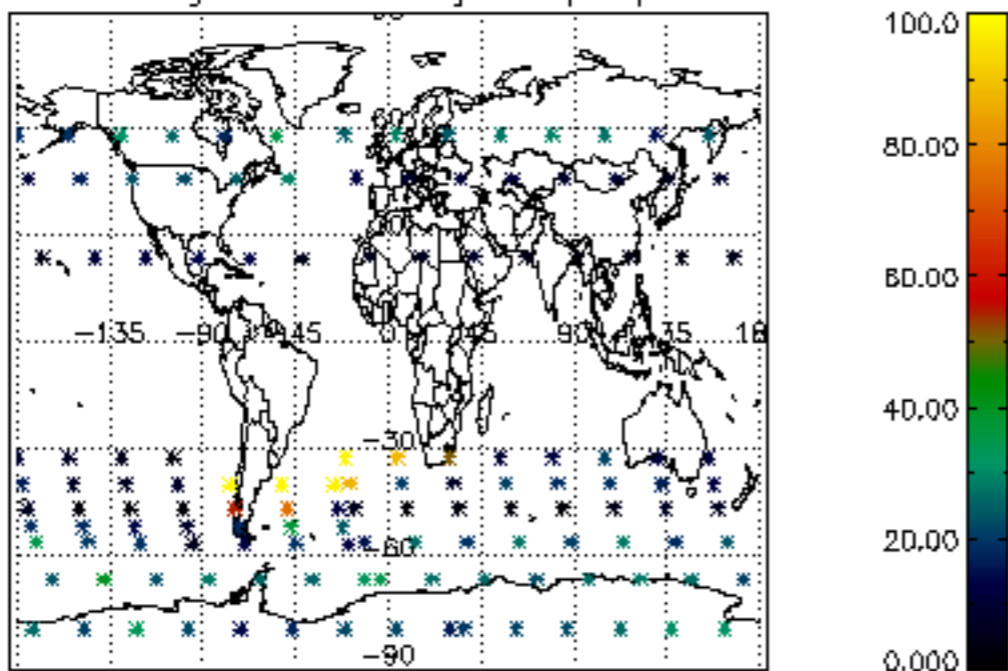
Percentage of flagged data per NO3 profile



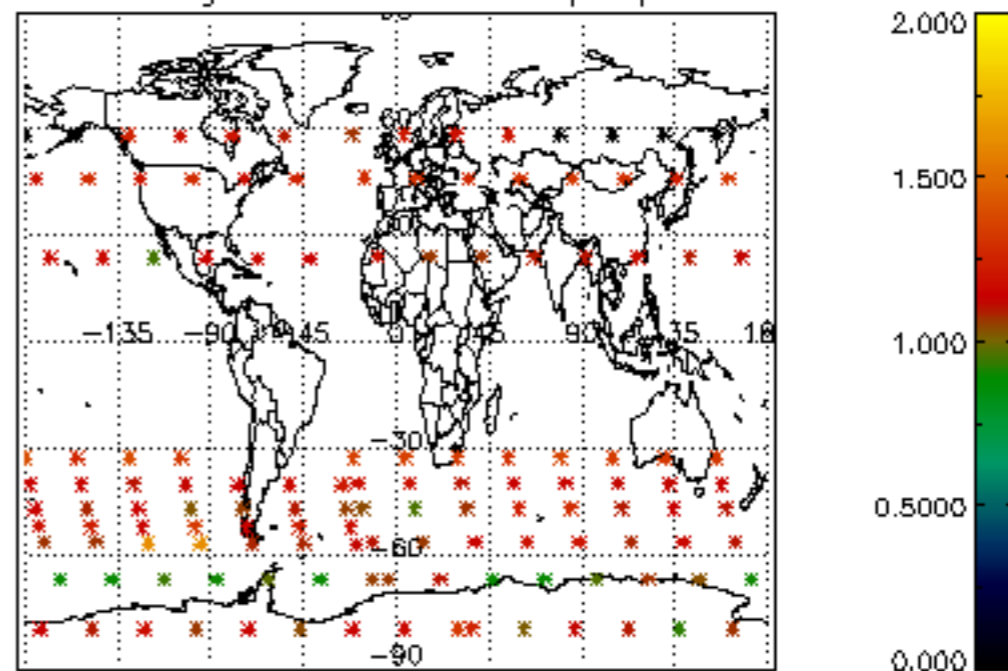




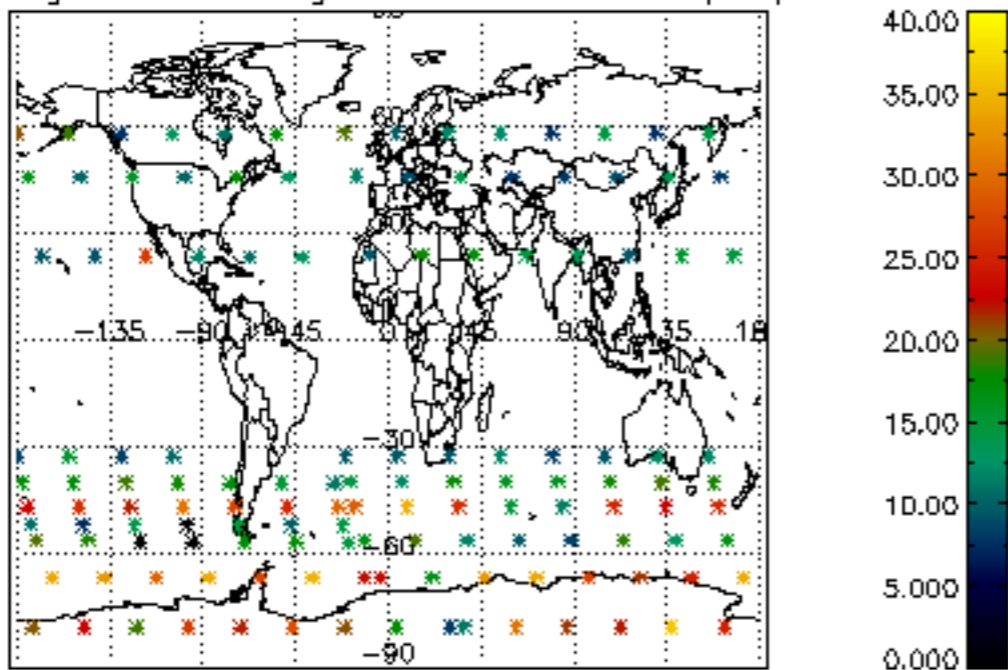
Percentage of cosmic ray hits per profile



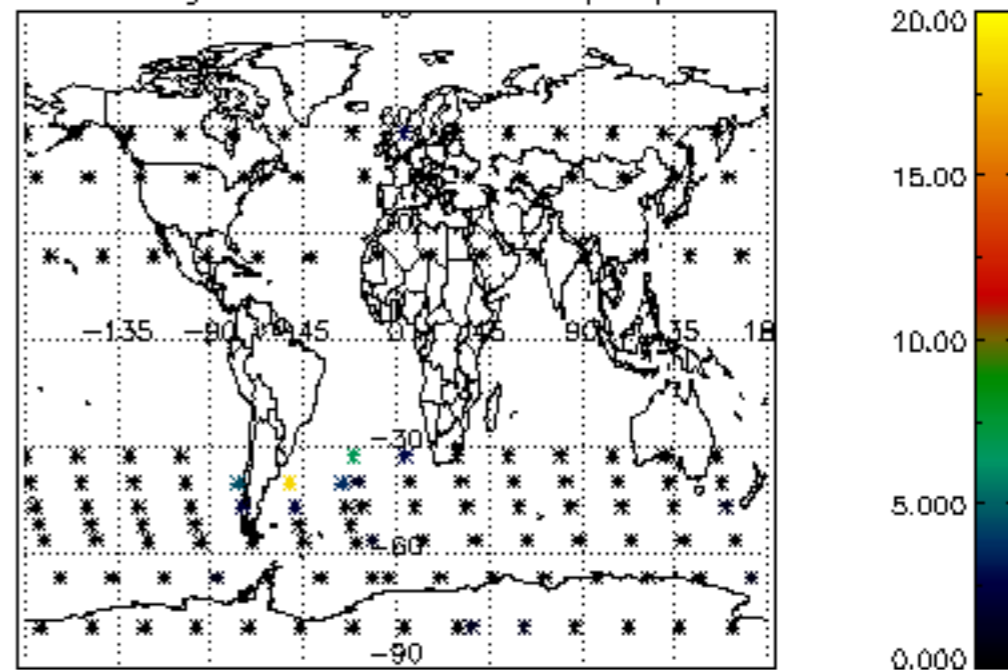
Percentage of datation errors per profile



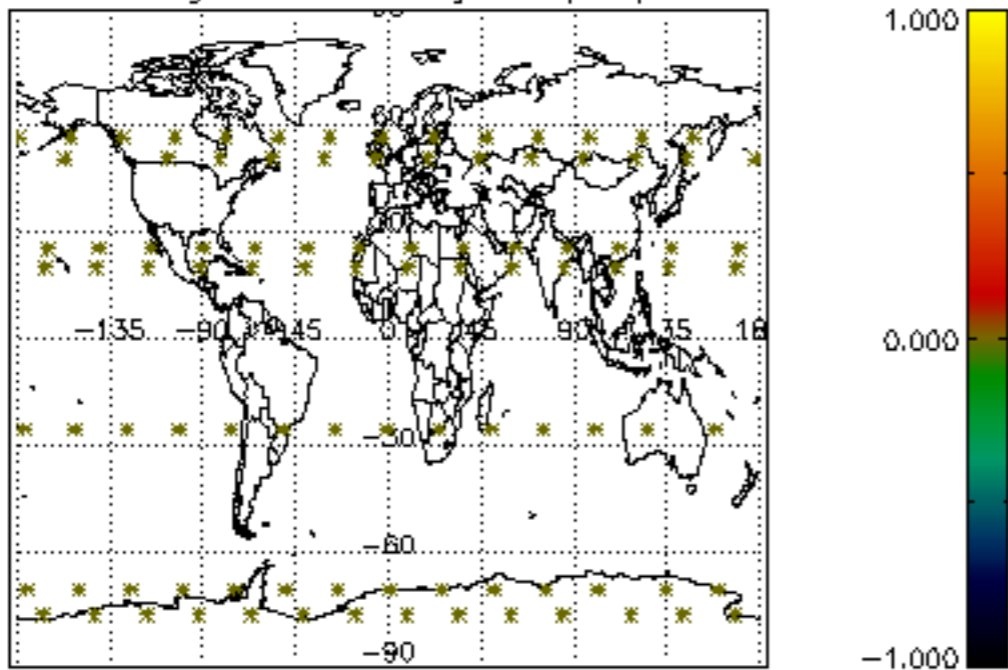
Percentage of star falling outside central band per profile



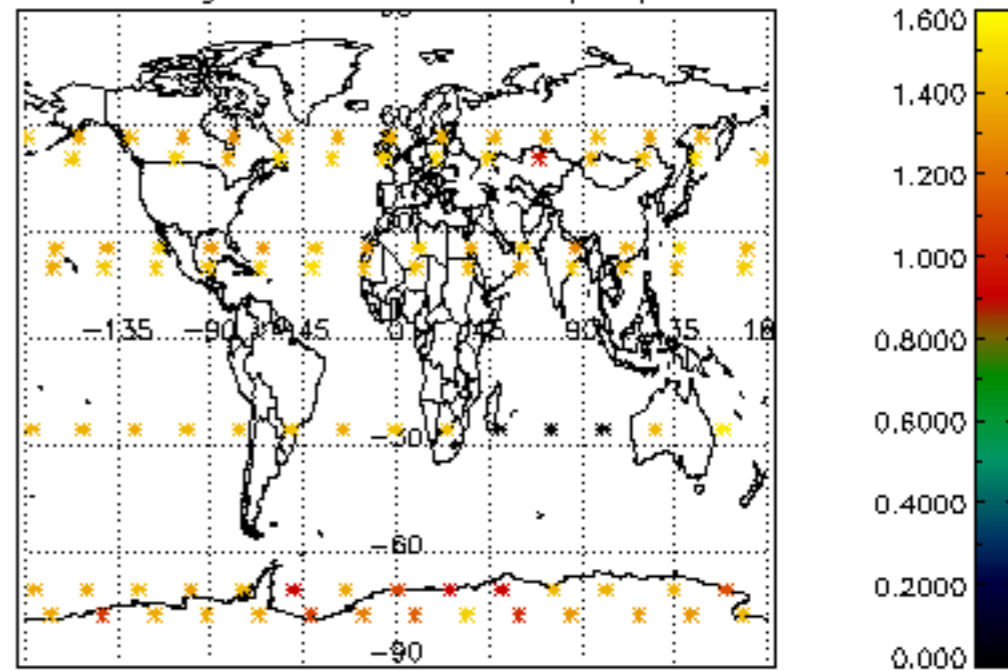
Percentage of saturation errors per profile



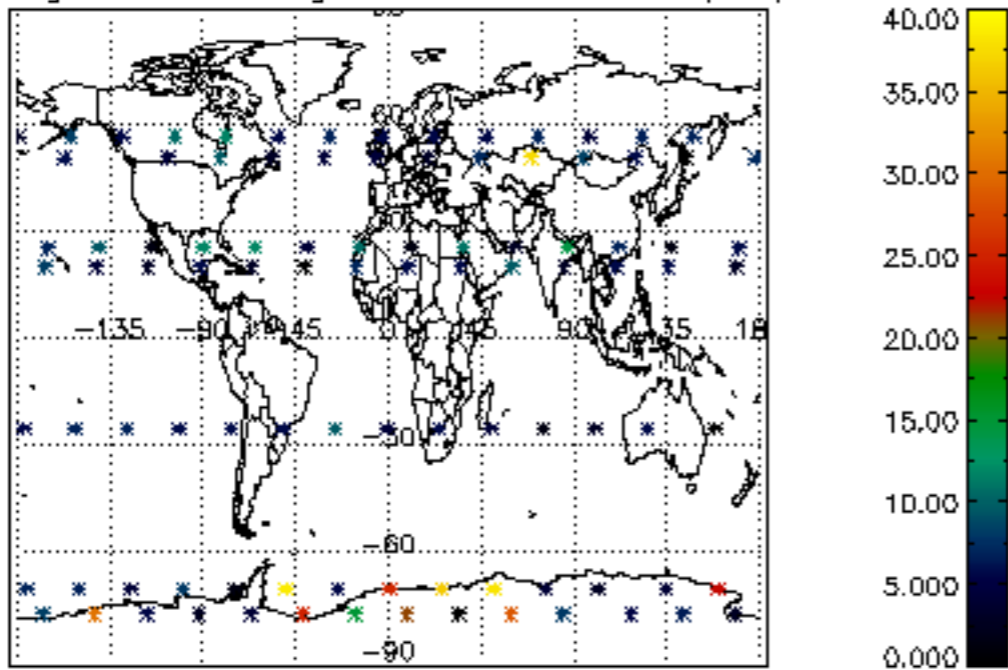
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

