

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	24APR2013 17:44:55
Data source version	GOMOS/6.01
Start time of products	17-09-2011 (17SEP2011 00:00:00)
Stop time of products	18-09-2011 (18SEP2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	162
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

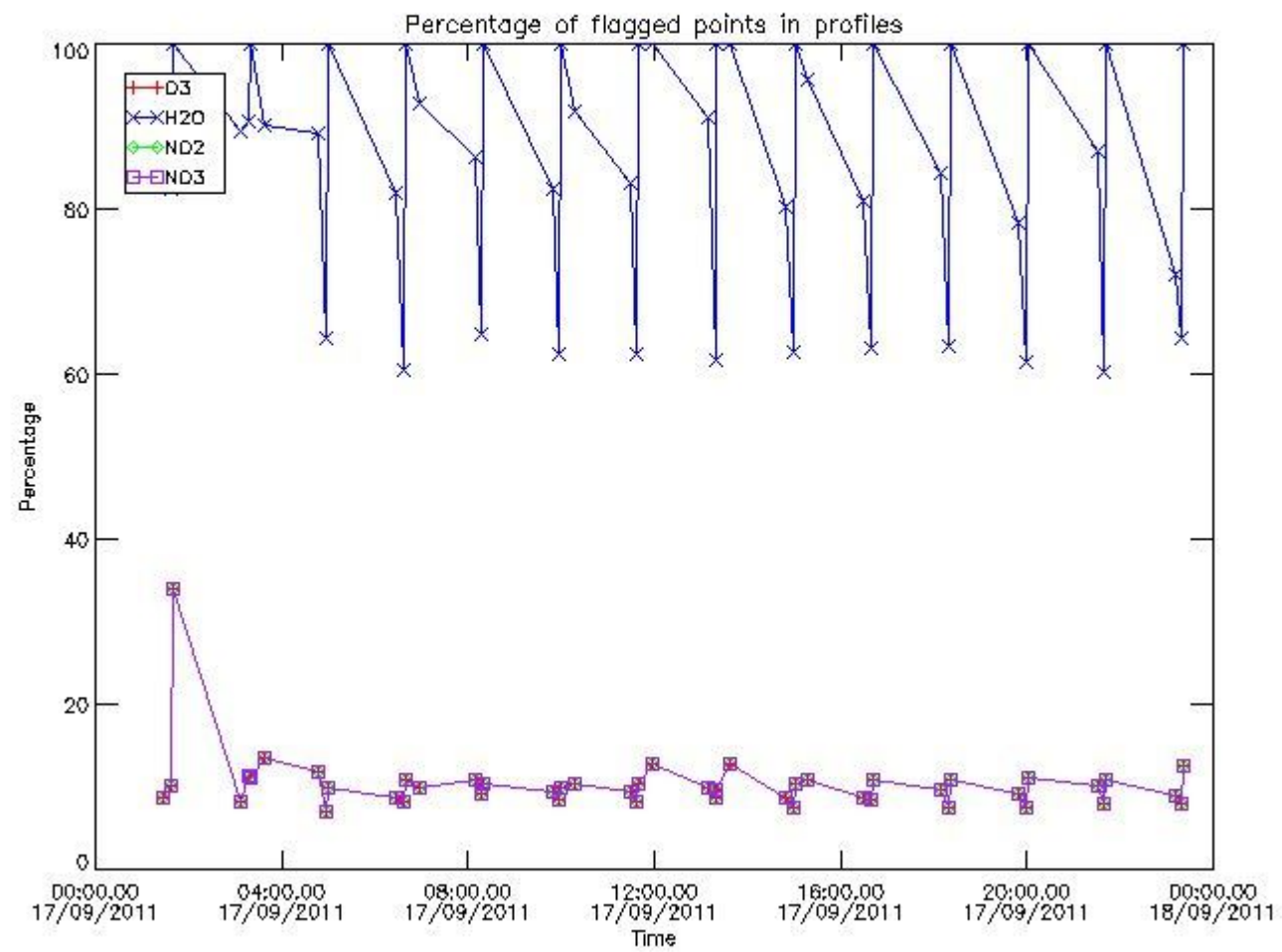
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110917_002148_000000443106_00347_49930_6173.N1	17-SEP-2011 00:21:48	Straylight	44.000	84	Alp Phe	2.3970	4500.0	88	49930	No
2	GOM_NL__2PRFIN20110917_002918_000000553106_00347_49930_6174.N1	17-SEP-2011 00:29:18	Twilight_stray	55.000	52	16Bet Cet	2.0370	4500.0	110	49930	No
3	GOM_NL__2PRFIN20110917_004000_000000403106_00347_49930_6175.N1	17-SEP-2011 00:40:00	Bright	40.000	90	54Alp Peg	2.4870	11000.	80	49930	No
4	GOM_NL__2PRFIN20110917_004348_000000393106_00347_49930_6176.N1	17-SEP-2011 00:43:48	Bright	39.000	93	53Bet Peg	2.5200	3100.0	78	49930	No
5	GOM_NL__2PRFIN20110917_004540_000000473106_00347_49930_6177.N1	17-SEP-2011 00:45:40	Bright	46.500	58	21Alp And	2.0730	11000.	93	49930	No
6	GOM_NL__2PRFIN20110917_005355_000000383106_00347_49930_6178.N1	17-SEP-2011 00:53:55	Bright	38.000	74	11Bet Cas	2.2680	6600.0	76	49930	No
7	GOM_NL__2PRFIN20110917_005539_000000433106_00347_49930_6179.N1	17-SEP-2011 00:55:39	Bright	42.500	76	27Gam Cas	2.3000	30000.	85	49930	No
8	GOM_NL__2PRFIN20110917_011820_000000493106_00347_49930_6180.N1	17-SEP-2011 01:18:20	Bright	48.500	24	66Alp Gem	1.5800	10200.	97	49930	No
9	GOM_NL__2PRFIN20110917_012713_000000653106_00347_49930_6181.N1	17-SEP-2011 01:27:13	Dark	64.500	8	10Alp CMi	0.40000	6500.0	129	49930	No
10	GOM_NL__2PRFIN20110917_013633_000000613106_00347_49930_6182.N1	17-SEP-2011 01:36:33	Dark	60.500	1	9Alp CMa	-1.4400	11000.	121	49930	No
11	GOM_NL__2PRFIN20110917_013840_000000513106_00347_49930_6183.N1	17-SEP-2011 01:38:40	Dark	50.500	23	21Eps CMa	1.5020	26000.	101	49930	No
12	GOM_NL__2PRFIN20110917_020202_000000503106_00348_49931_6195.N1	17-SEP-2011 02:02:02	Straylight	49.500	84	Alp Phe	2.3970	4500.0	99	49931	No
13	GOM_NL__2PRFIN20110917_020932_000000573106_00348_49931_6196.N1	17-SEP-2011 02:09:32	Twilight_stray	56.500	52	16Bet Cet	2.0370	4500.0	113	49931	No
14	GOM_NL__2PRFIN20110917_022013_000000393106_00348_49931_6197.N1	17-SEP-2011 02:20:13	Bright	38.500	90	54Alp Peg	2.4870	11000.	77	49931	No
15	GOM_NL__2PRFIN20110917_022402_000000393106_00348_49931_6198.N1	17-SEP-2011 02:24:02	Bright	39.000	93	53Bet Peg	2.5200	3100.0	78	49931	No
16	GOM_NL__2PRFIN20110917_022553_000000493106_00348_49931_6199.N1	17-SEP-2011 02:25:53	Bright	48.500	58	21Alp And	2.0730	11000.	97	49931	No
17	GOM_NL__2PRFIN20110917_023409_000000393106_00348_49931_6200.N1	17-SEP-2011 02:34:09	Bright	39.000	74	11Bet Cas	2.2680	6600.0	78	49931	No
18	GOM_NL__2PRFIN20110917_023552_000000433106_00348_49931_6201.N1	17-SEP-2011 02:35:52	Bright	42.500	76	27Gam Cas	2.3000	30000.	85	49931	No
19	GOM_NL__2PRFIN20110917_025834_000000653106_00348_49931_6202.N1	17-SEP-2011 02:58:34	Bright	65.000	24	66Alp Gem	1.5800	10200.	130	49931	No
20	GOM_NL__2PRFIN20110917_030727_000000623106_00348_49931_6203.N1	17-SEP-2011 03:07:27	Dark	61.500	8	10Alp CMi	0.40000	6500.0	123	49931	No
21	GOM_NL__2PRFIN20110917_031649_000000543106_00348_49931_6204.N1	17-SEP-2011 03:16:49	Dark	53.500	1	9Alp CMa	-1.4400	11000.	107	49931	No
22	GOM_NL__2PRFIN20110917_031855_000000513106_00348_49931_6205.N1	17-SEP-2011 03:18:55	Dark	50.500	23	21Eps CMa	1.5020	26000.	101	49931	No
23	GOM_NL__2PRFIN20110917_033637_000000463106_00349_49932_6198.N1	17-SEP-2011 03:36:37	Dark	45.500	9	Alp Eri	0.45300	24000.	91	49932	No
24	GOM_NL__2PRFIN20110917_034217_000000433106_00349_49932_6199.N1	17-SEP-2011 03:42:17	Straylight	42.500	84	Alp Phe	2.3970	4500.0	85	49932	No
25	GOM_NL__2PRFIN20110917_034946_000000543106_00349_49932_6200.N1	17-SEP-2011 03:49:46	Twilight_stray	54.000	52	16Bet Cet	2.0370	4500.0	108	49932	No
26	GOM_NL__2PRFIN20110917_040027_000000403106_00349_49932_6201.N1	17-SEP-2011 04:00:27	Bright	39.500	90	54Alp Peg	2.4870	11000.	79	49932	No
27	GOM_NL__2PRFIN20110917_040416_000000513106_00349_49932_6202.N1	17-SEP-2011 04:04:16	Bright	51.000	93	53Bet Peg	2.5200	3100.0	102	49932	No
28	GOM_NL__2PRFIN20110917_040606_000000473106_00349_49932_6203.N1	17-SEP-2011 04:06:06	Bright	47.000	58	21Alp And	2.0730	11000.	94	49932	No
29	GOM_NL__2PRFIN20110917_041422_000000413106_00349_49932_6204.N1	17-SEP-2011 04:14:22	Bright	40.500	74	11Bet Cas	2.2680	6600.0	81	49932	No
30	GOM_NL__2PRFIN20110917_041606_000000413106_00349_49932_6205.N1	17-SEP-2011 04:16:06	Bright	40.500	76	27Gam Cas	2.3000	30000.	81	49932	No
31	GOM_NL__2PRFIN20110917_043849_000000443106_00349_49932_6206.N1	17-SEP-2011 04:38:49	Bright	44.000	24	66Alp Gem	1.5800	10200.	88	49932	No
32	GOM_NL__2PRFIN20110917_044742_000000473106_00349_49932_6207.N1	17-SEP-2011 04:47:42	Dark	47.000	8	10Alp CMi	0.40000	6500.0	94	49932	No
33	GOM_NL__2PRFIN20110917_045704_000000743106_00349_49932_6208.N1	17-SEP-2011 04:57:04	Dark	73.500	1	9Alp CMa	-1.4400	11000.	147	49932	No
34	GOM_NL__2PRFIN20110917_045909_000000523106_00349_49932_6209.N1	17-SEP-2011 04:59:09	Dark	51.500	23	21Eps CMa	1.5020	26000.	103	49932	No
35	GOM_NL__2PRFIN20110917_052231_000000453106_00350_49933_6214.N1	17-SEP-2011 05:22:31	Straylight	45.000	84	Alp Phe	2.3970	4500.0	90	49933	No
36	GOM_NL__2PRFIN20110917_053000_000000563106_00350_49933_6215.N1	17-SEP-2011 05:30:00	Twilight_stray	56.000	52	16Bet Cet	2.0370	4500.0	112	49933	No
37	GOM_NL__2PRFIN20110917_054041_000000403106_00350_49933_6216.N1	17-SEP-2011 05:40:41	Bright	39.500	90	54Alp Peg	2.4870	11000.	79	49933	No
38	GOM_NL__2PRFIN20110917_054430_000000393106_00350_49933_6217.N1	17-SEP-2011 05:44:30	Bright	39.000	93	53Bet Peg	2.5200	3100.0	78	49933	No
39	GOM_NL__2PRFIN20110917_054620_000000453106_00350_49933_6218.N1	17-SEP-2011 05:46:20	Bright	44.500	58	21Alp And	2.0730	11000.	89	49933	No
40	GOM_NL__2PRFIN20110917_055436_000000413106_00350_49933_6219.N1	17-SEP-2011 05:54:36	Bright	41.000	74	11Bet Cas	2.2680	6600.0	82	49933	No
41	GOM_NL__2PRFIN20110917_055619_000000433106_00350_49933_6220.N1	17-SEP-2011 05:56:19	Bright	43.000	76	27Gam Cas	2.3000	30000.	86	49933	No
42	GOM_NL__2PRFIN20110917_061903_000000653106_00350_49933_6221.N1	17-SEP-2011 06:19:03	Bright	65.000	24	66Alp Gem	1.5800	10200.	130	49933	No

161	GOM_NL__2PRFIN20110917_234509_000000443106_00361_49944_6546.N1	17-SEP-2011 23:45:09	Straylight	43.500	84	Alp Phe	2.3970	4500.0	87	49944	No
162	GOM_NL__2PRFIN20110917_235236_000000573106_00361_49944_6547.N1	17-SEP-2011 23:52:36	Twl_and_stray	56.500	52	16Bet Cet	2.0370	4500.0	113	49944	No

3. Quality information per product

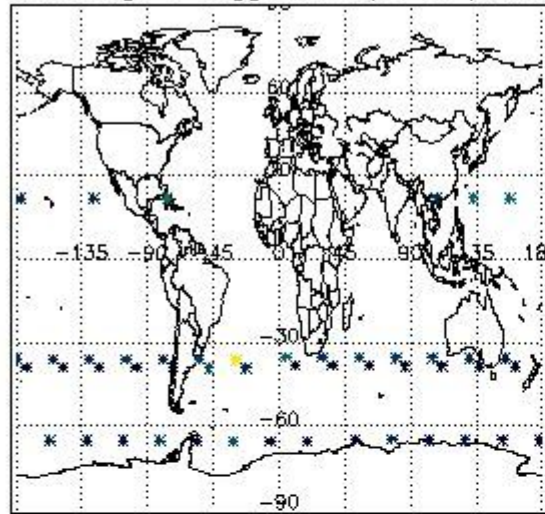
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

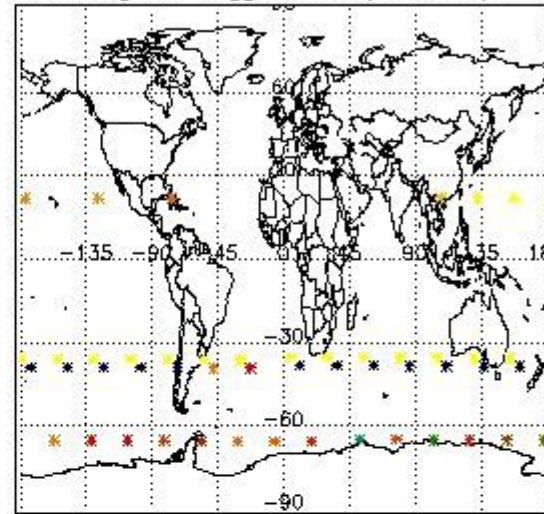


3.2 Plot quality information per product (world map)

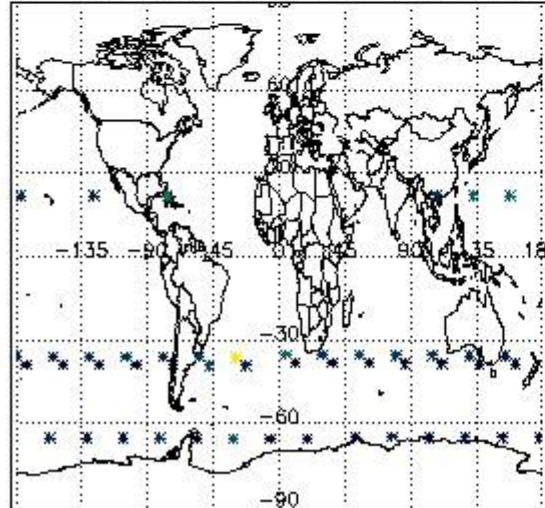
Percentage of flagged data per O3 profile



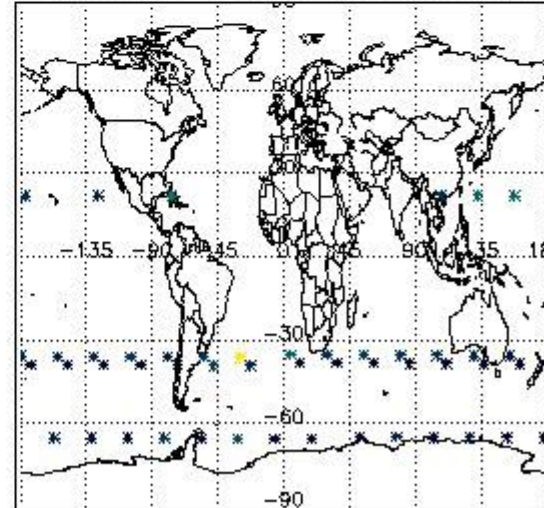
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

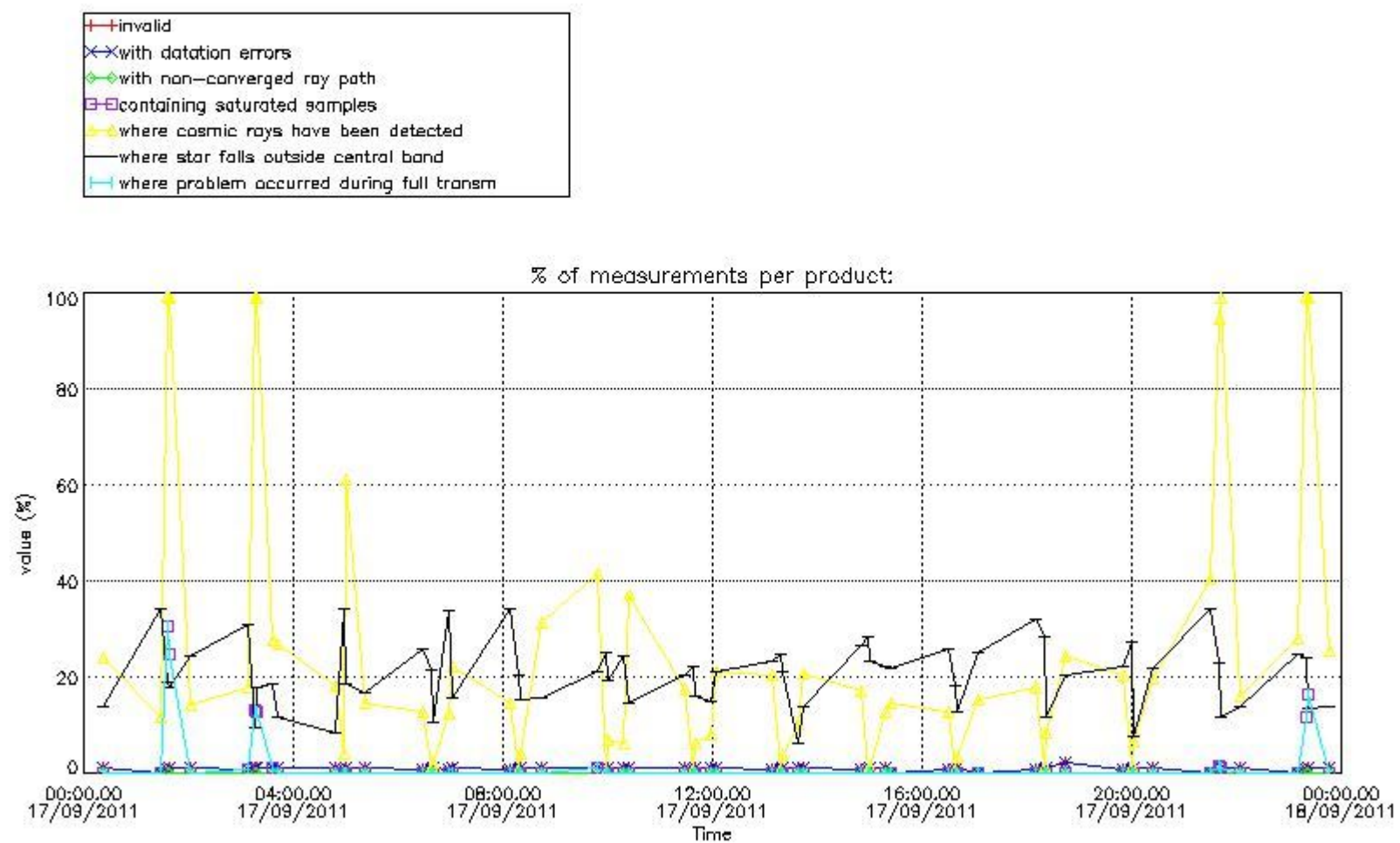


4. Level 1 quality information per product

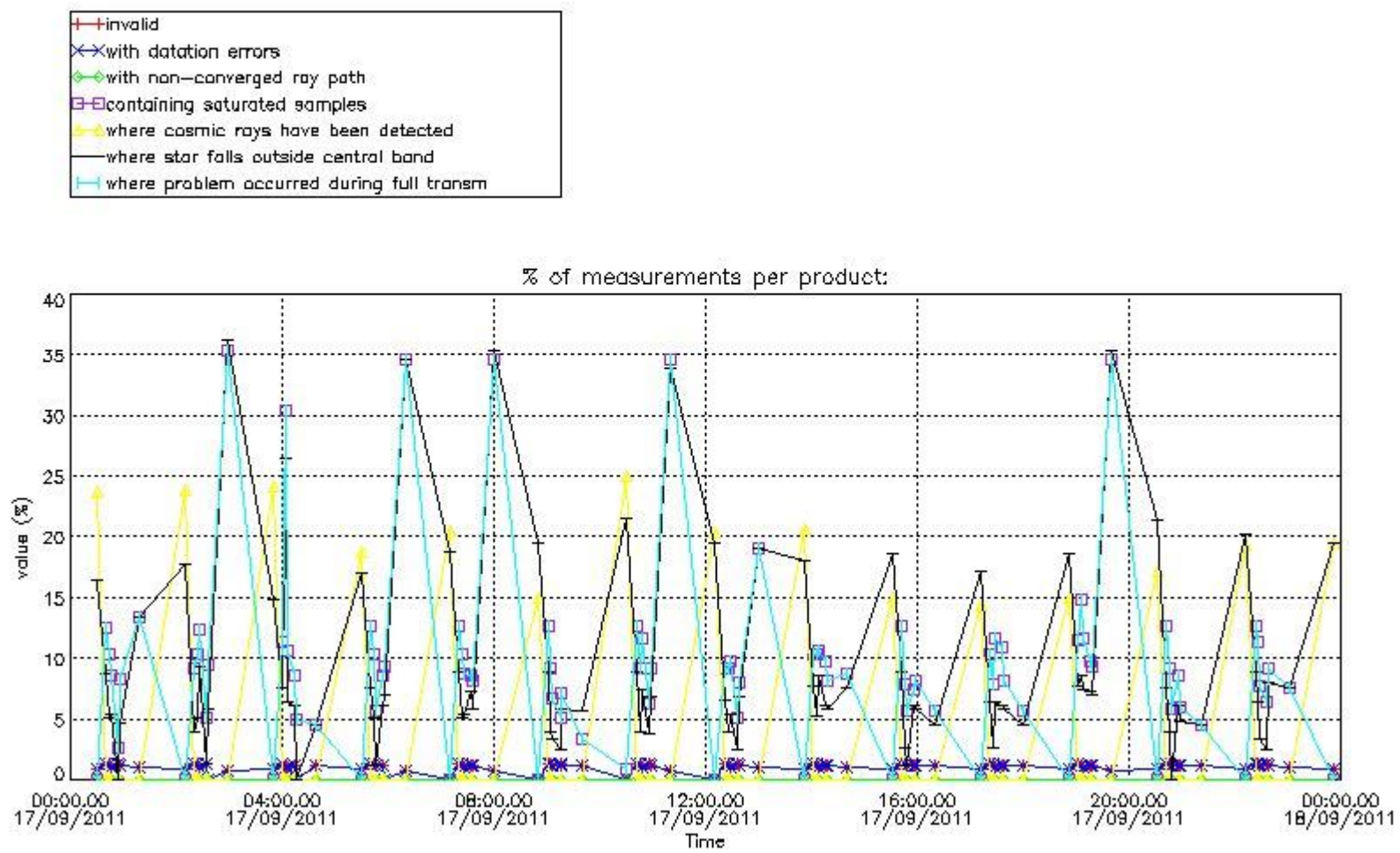
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



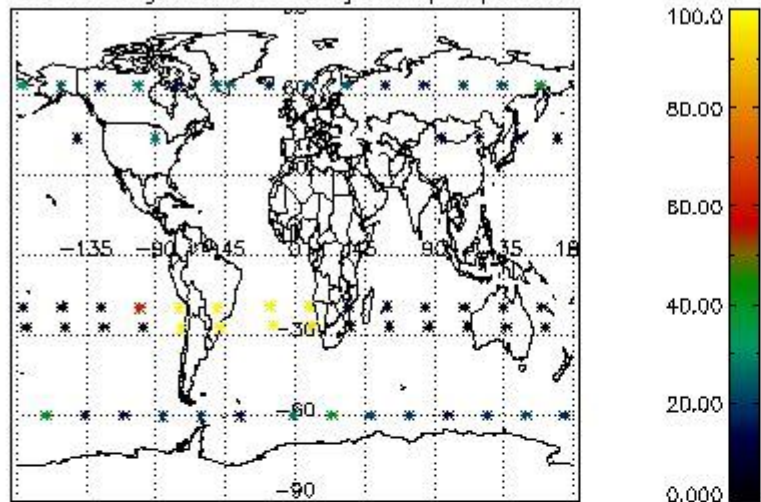
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



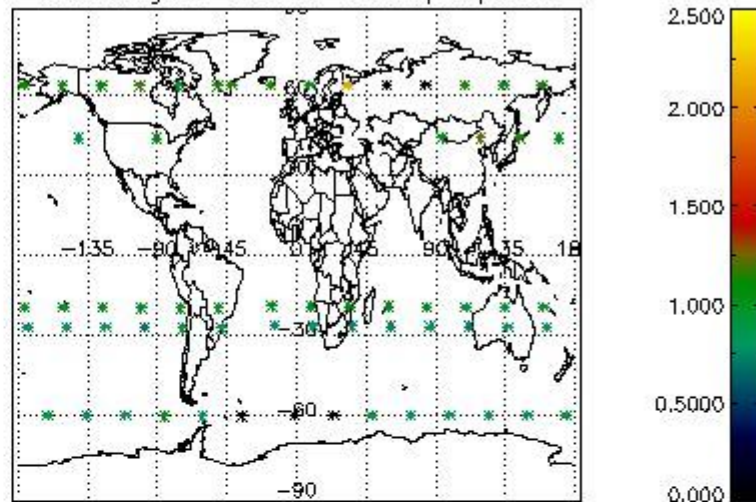
4.2 Plot quality information per product coming from level 1b processing (world map)

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

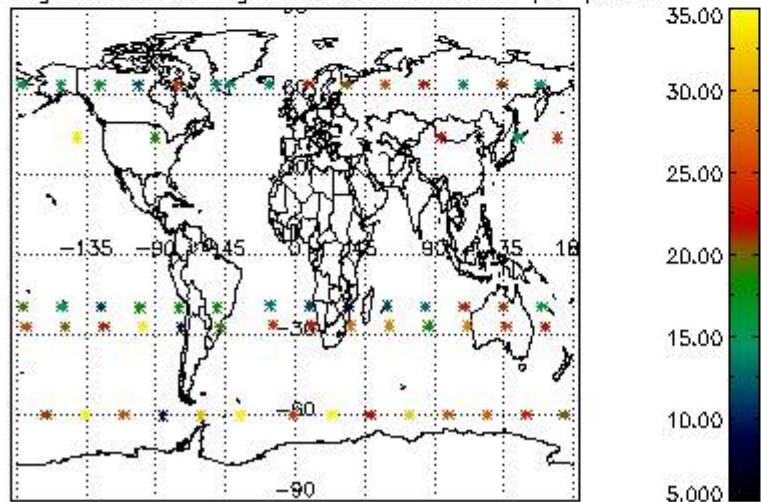
Percentage of cosmic ray hits per profile



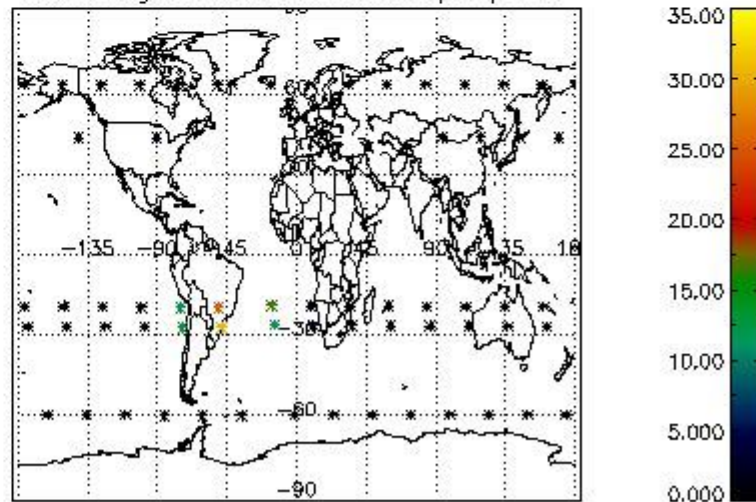
Percentage of datation errors per profile



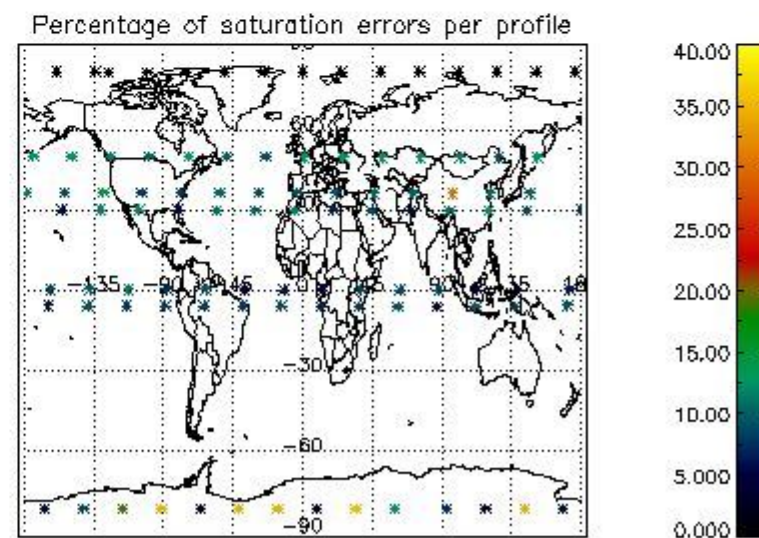
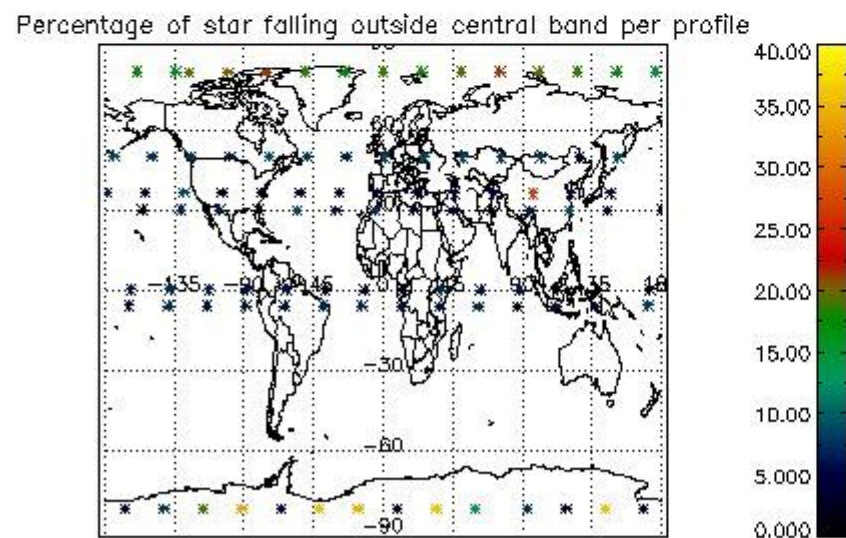
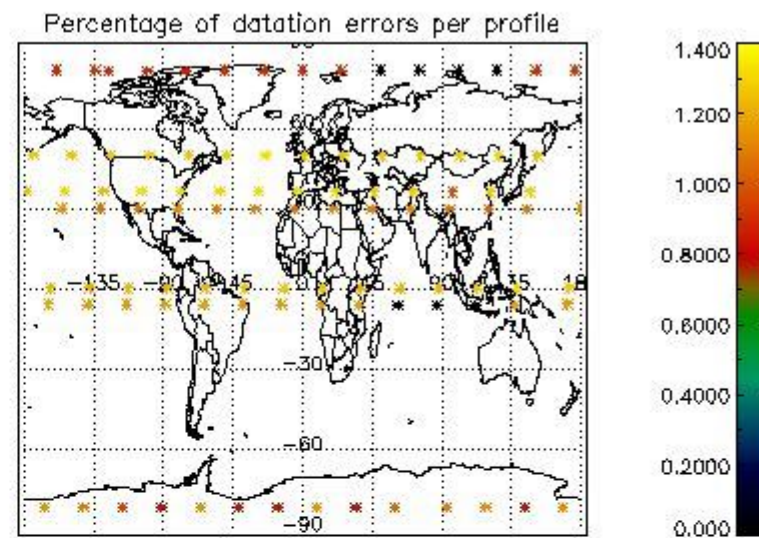
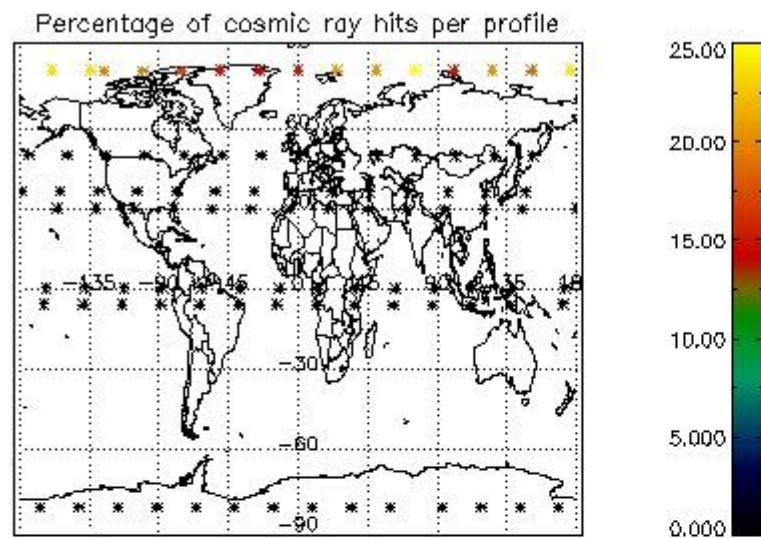
Percentage of star falling outside central band per profile



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

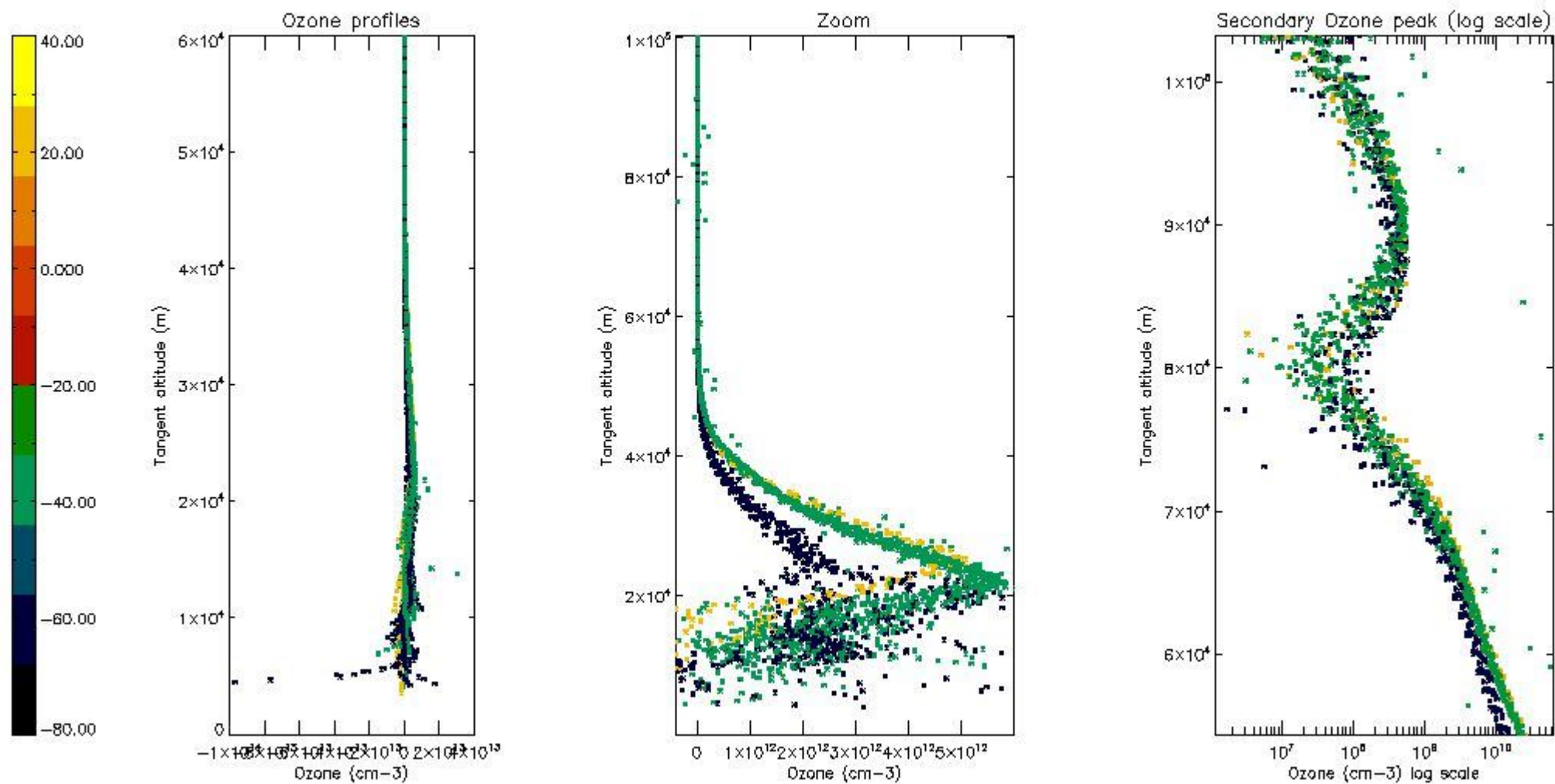
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	35
STD < 20	24

STD < 10	21
STD < 5	18

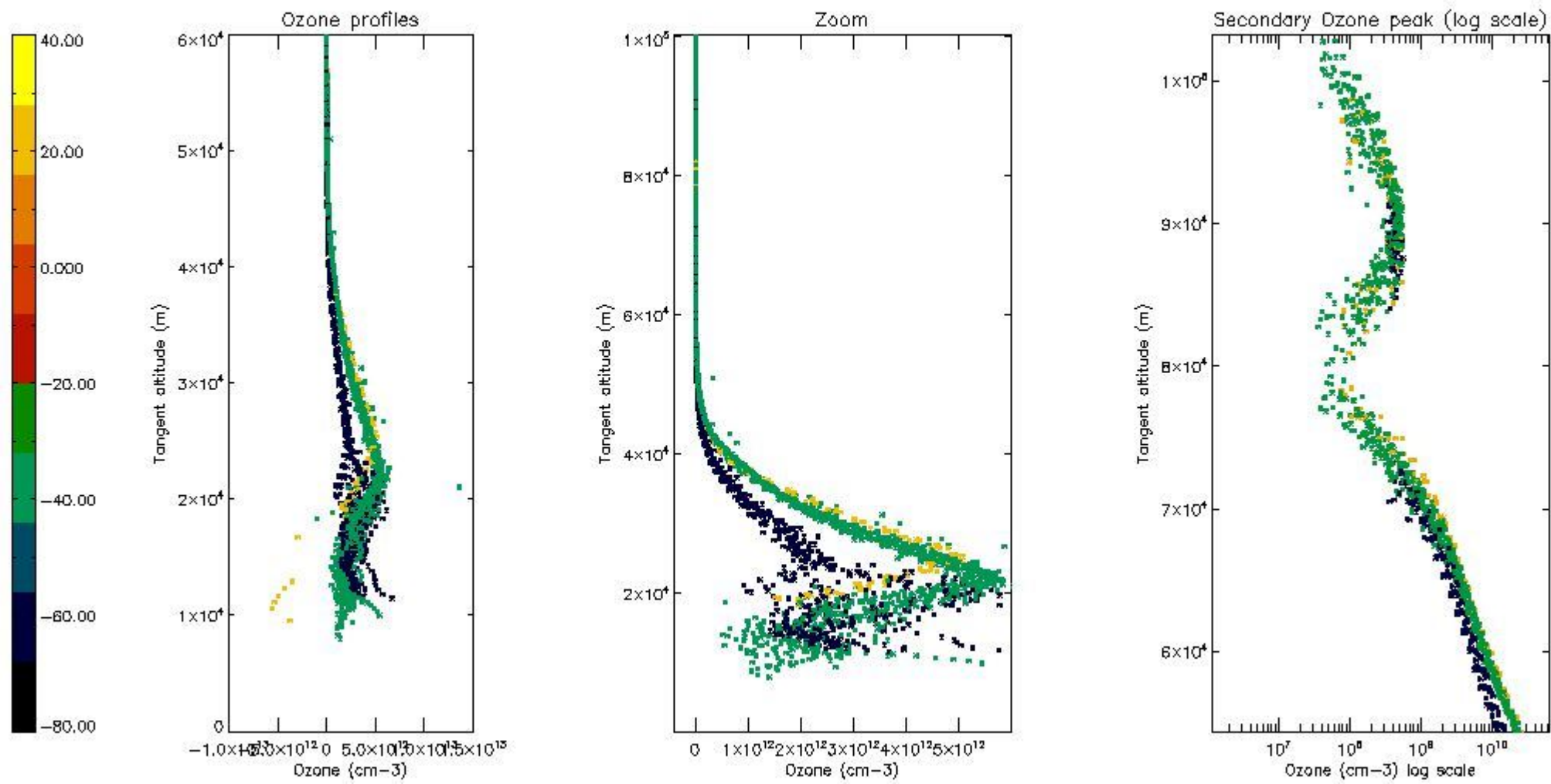
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



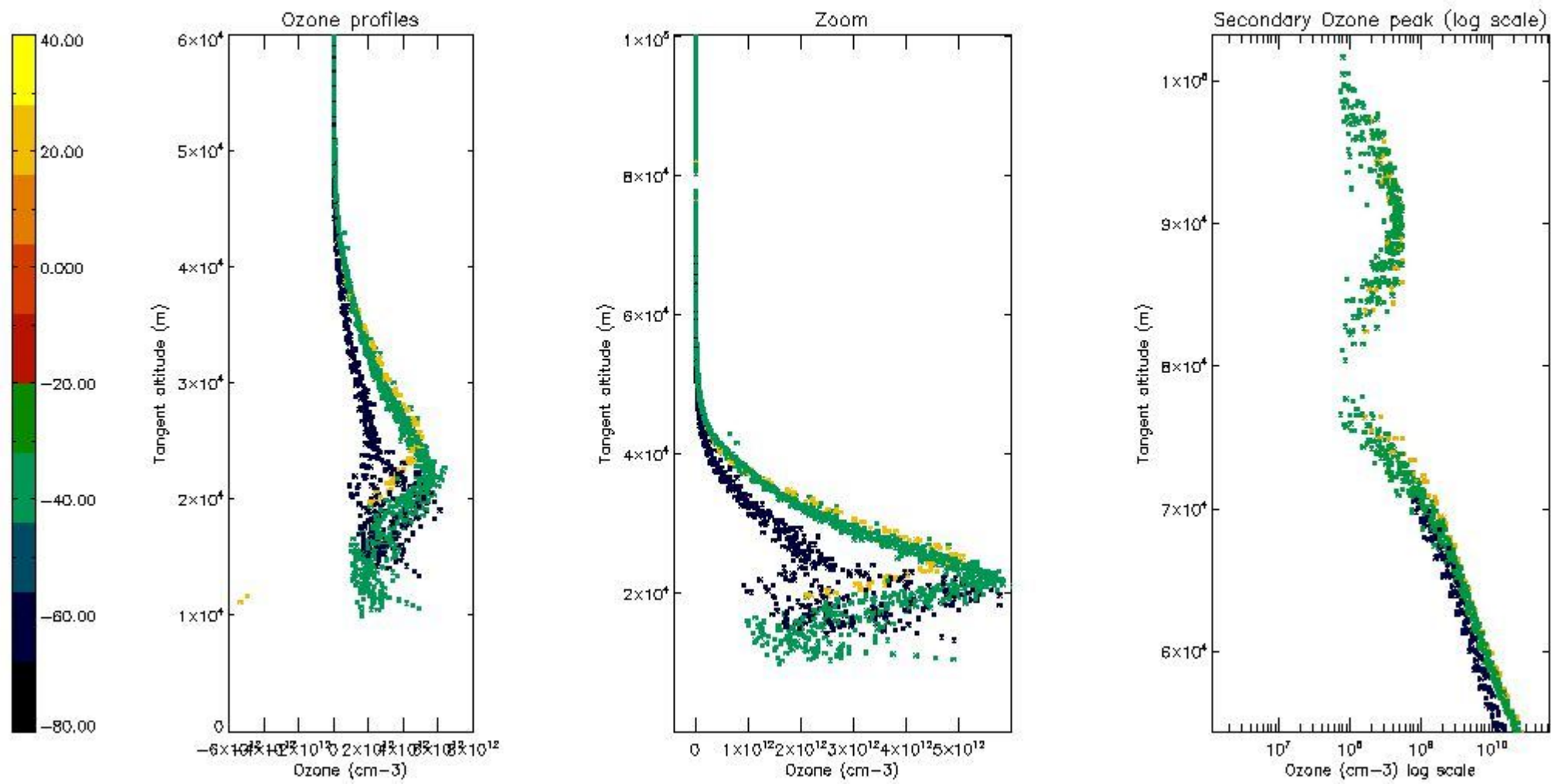
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



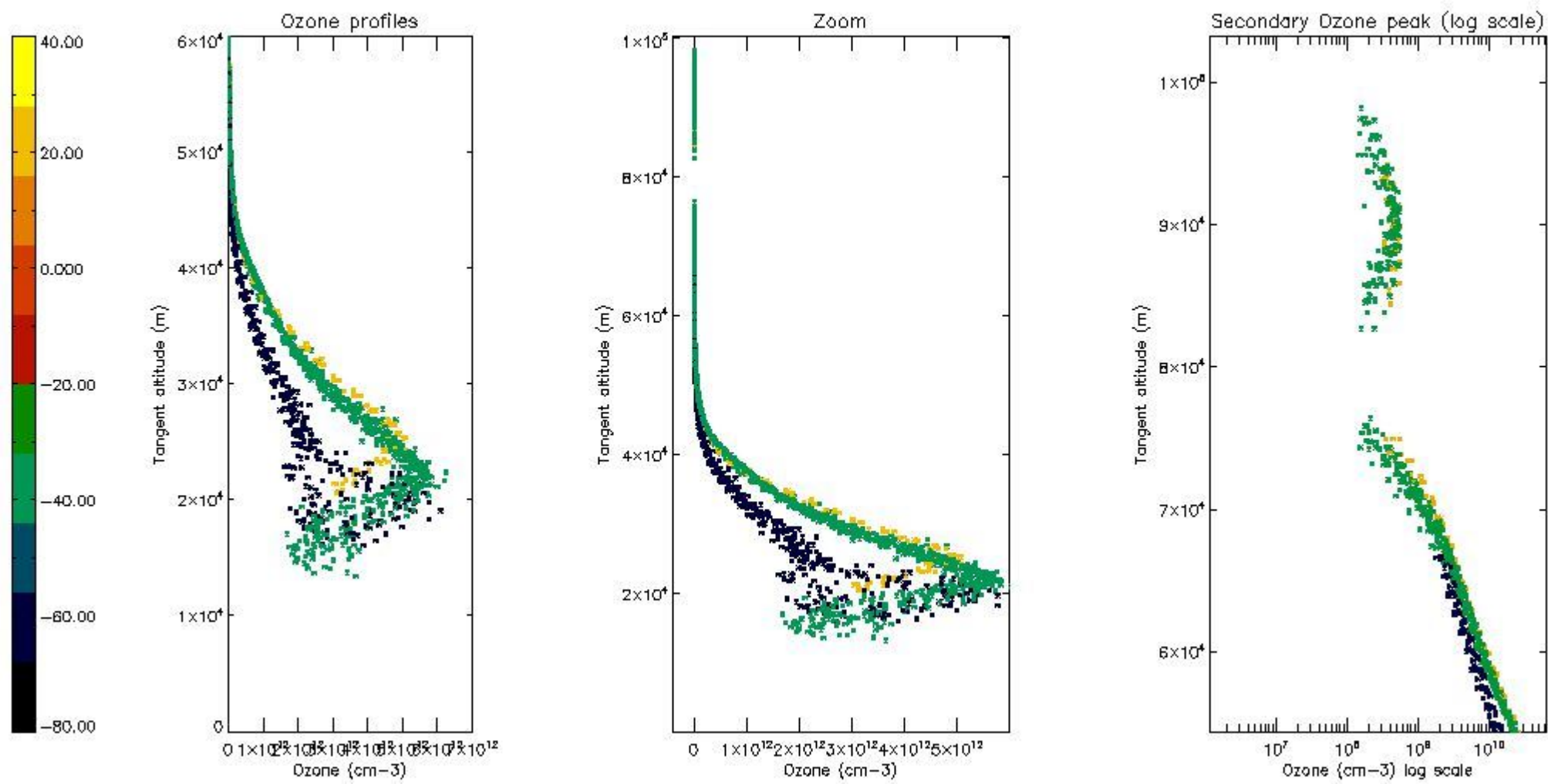
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



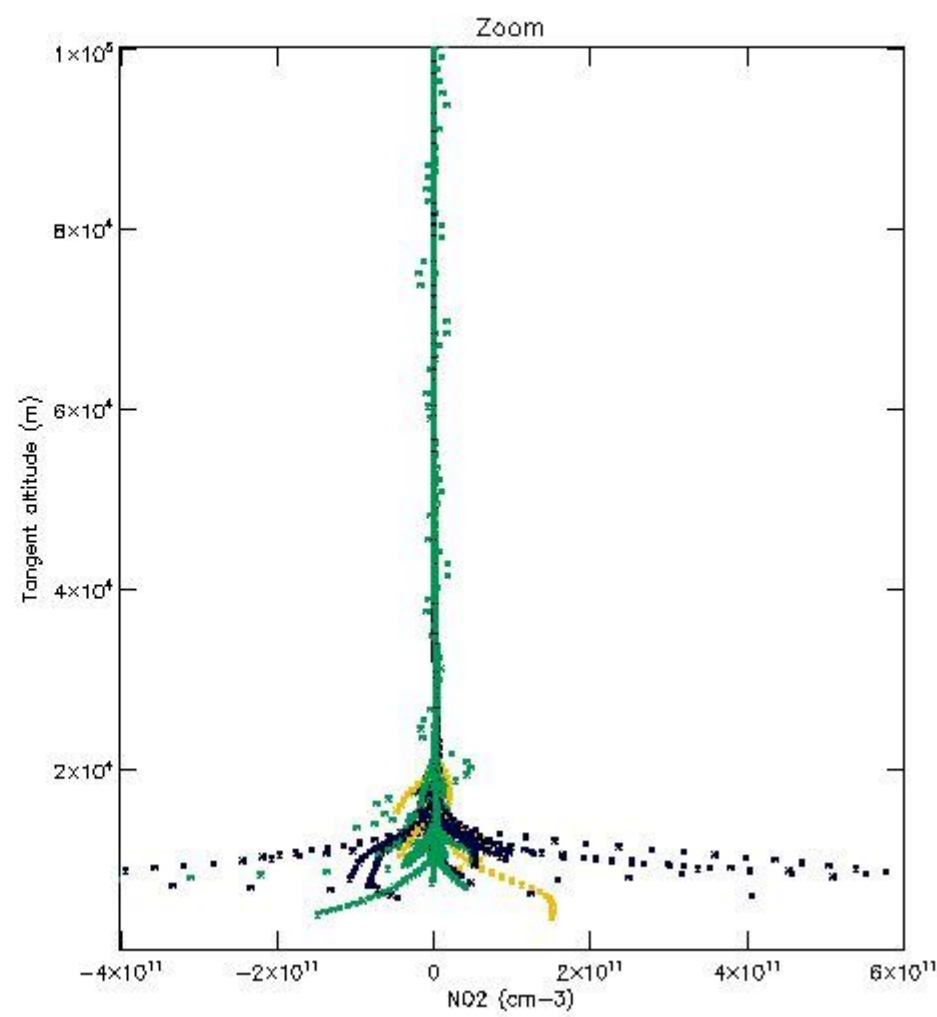
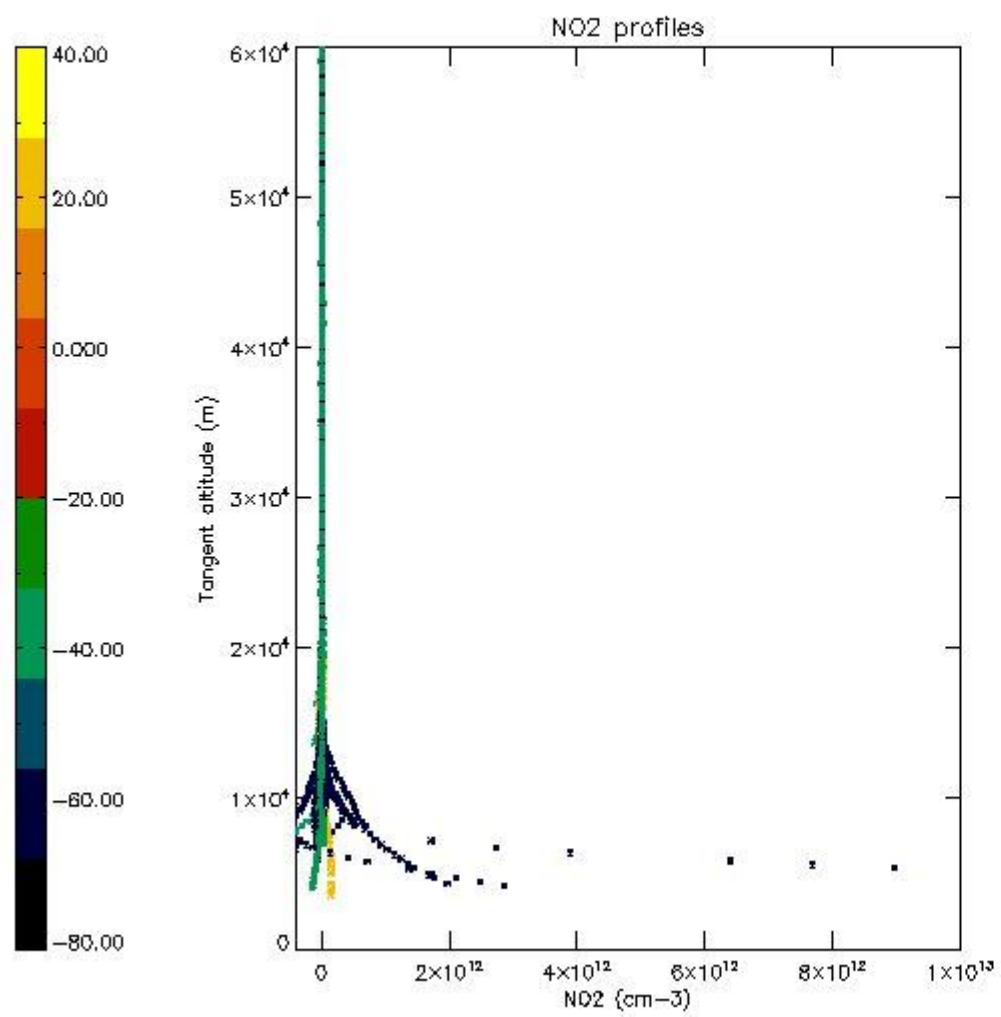
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



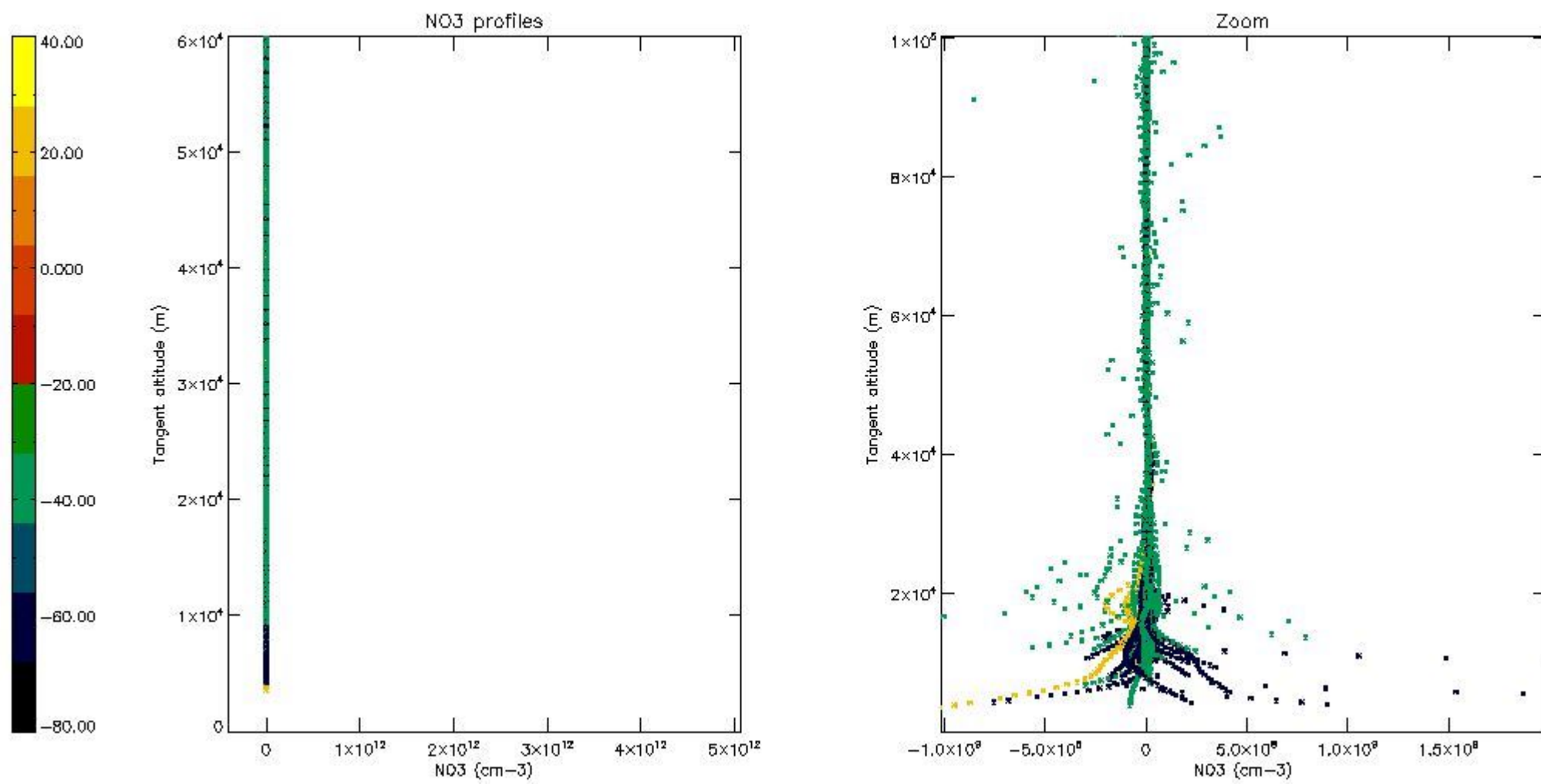
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



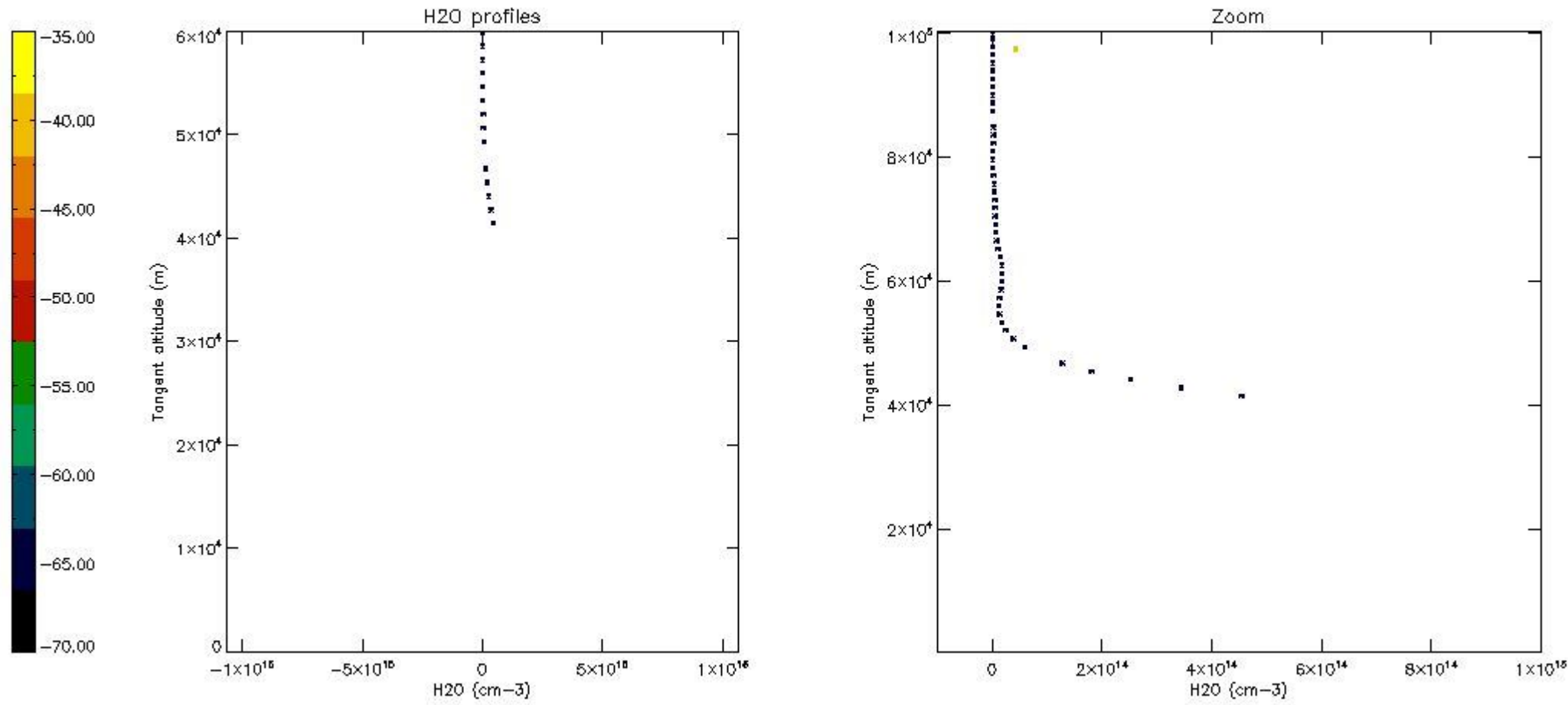
5.7 Plot NO₃ profiles for all STD (dark without errors)

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	17-SEP-2011 00:21:48
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	17-SEP-2011 00:21:48
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	17-SEP-2011 00:21:48

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	24APR2013 17:44:55
Data source version	GOMOS/6.01
Start time of products	17-09-2011 (17SEP2011 00:00:00)
Stop time of products	18-09-2011 (18SEP2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	162
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__2PRFIN20110917_002148_000000443106_00347_49930_6173.N1	17-SEP-2011 00:21:48	Straylight	44.000	84	Alp Phe	2.3970	4500.0	88	49930	No
2	GOM_NL__2PRFIN20110917_002918_000000553106_00347_49930_6174.N1	17-SEP-2011 00:29:18	Twilight_stray	55.000	52	16Bet Cet	2.0370	4500.0	110	49930	No
3	GOM_NL__2PRFIN20110917_004000_000000403106_00347_49930_6175.N1	17-SEP-2011 00:40:00	Bright	40.000	90	54Alp Peg	2.4870	11000.	80	49930	No
4	GOM_NL__2PRFIN20110917_004348_000000393106_00347_49930_6176.N1	17-SEP-2011 00:43:48	Bright	39.000	93	53Bet Peg	2.5200	3100.0	78	49930	No
5	GOM_NL__2PRFIN20110917_004540_000000473106_00347_49930_6177.N1	17-SEP-2011 00:45:40	Bright	46.500	58	21Alp And	2.0730	11000.	93	49930	No
6	GOM_NL__2PRFIN20110917_005355_000000383106_00347_49930_6178.N1	17-SEP-2011 00:53:55	Bright	38.000	74	11Bet Cas	2.2680	6600.0	76	49930	No
7	GOM_NL__2PRFIN20110917_005539_000000433106_00347_49930_6179.N1	17-SEP-2011 00:55:39	Bright	42.500	76	27Gam Cas	2.3000	30000.	85	49930	No
8	GOM_NL__2PRFIN20110917_011820_000000493106_00347_49930_6180.N1	17-SEP-2011 01:18:20	Bright	48.500	24	66Alp Gem	1.5800	10200.	97	49930	No
9	GOM_NL__2PRFIN20110917_012713_000000653106_00347_49930_6181.N1	17-SEP-2011 01:27:13	Dark	64.500	8	10Alp CMi	0.40000	6500.0	129	49930	No
10	GOM_NL__2PRFIN20110917_013633_000000613106_00347_49930_6182.N1	17-SEP-2011 01:36:33	Dark	60.500	1	9Alp CMa	-1.4400	11000.	121	49930	No
11	GOM_NL__2PRFIN20110917_013840_000000513106_00347_49930_6183.N1	17-SEP-2011 01:38:40	Dark	50.500	23	21Eps CMa	1.5020	26000.	101	49930	No
12	GOM_NL__2PRFIN20110917_020202_000000503106_00348_49931_6195.N1	17-SEP-2011 02:02:02	Straylight	49.500	84	Alp Phe	2.3970	4500.0	99	49931	No
13	GOM_NL__2PRFIN20110917_020932_000000573106_00348_49931_6196.N1	17-SEP-2011 02:09:32	Twilight_stray	56.500	52	16Bet Cet	2.0370	4500.0	113	49931	No
14	GOM_NL__2PRFIN20110917_022013_000000393106_00348_49931_6197.N1	17-SEP-2011 02:20:13	Bright	38.500	90	54Alp Peg	2.4870	11000.	77	49931	No
15	GOM_NL__2PRFIN20110917_022402_000000393106_00348_49931_6198.N1	17-SEP-2011 02:24:02	Bright	39.000	93	53Bet Peg	2.5200	3100.0	78	49931	No
16	GOM_NL__2PRFIN20110917_022553_000000493106_00348_49931_6199.N1	17-SEP-2011 02:25:53	Bright	48.500	58	21Alp And	2.0730	11000.	97	49931	No
17	GOM_NL__2PRFIN20110917_023409_000000393106_00348_49931_6200.N1	17-SEP-2011 02:34:09	Bright	39.000	74	11Bet Cas	2.2680	6600.0	78	49931	No
18	GOM_NL__2PRFIN20110917_023552_000000433106_00348_49931_6201.N1	17-SEP-2011 02:35:52	Bright	42.500	76	27Gam Cas	2.3000	30000.	85	49931	No
19	GOM_NL__2PRFIN20110917_025834_000000653106_00348_49931_6202.N1	17-SEP-2011 02:58:34	Bright	65.000	24	66Alp Gem	1.5800	10200.	130	49931	No
20	GOM_NL__2PRFIN20110917_030727_000000623106_00348_49931_6203.N1	17-SEP-2011 03:07:27	Dark	61.500	8	10Alp CMi	0.40000	6500.0	123	49931	No
21	GOM_NL__2PRFIN20110917_031649_000000543106_00348_49931_6204.N1	17-SEP-2011 03:16:49	Dark	53.500	1	9Alp CMa	-1.4400	11000.	107	49931	No
22	GOM_NL__2PRFIN20110917_031855_000000513106_00348_49931_6205.N1	17-SEP-2011 03:18:55	Dark	50.500	23	21Eps CMa	1.5020	26000.	101	49931	No
23	GOM_NL__2PRFIN20110917_033637_000000463106_00349_49932_6198.N1	17-SEP-2011 03:36:37	Dark	45.500	9	Alp Eri	0.45300	24000.	91	49932	No
24	GOM_NL__2PRFIN20110917_034217_000000433106_00349_49932_6199.N1	17-SEP-2011 03:42:17	Straylight	42.500	84	Alp Phe	2.3970	4500.0	85	49932	No
25	GOM_NL__2PRFIN20110917_034946_000000543106_00349_49932_6200.N1	17-SEP-2011 03:49:46	Twilight_stray	54.000	52	16Bet Cet	2.0370	4500.0	108	49932	No
26	GOM_NL__2PRFIN20110917_040027_000000403106_00349_49932_6201.N1	17-SEP-2011 04:00:27	Bright	39.500	90	54Alp Peg	2.4870	11000.	79	49932	No
27	GOM_NL__2PRFIN20110917_040416_000000513106_00349_49932_6202.N1	17-SEP-2011 04:04:16	Bright	51.000	93	53Bet Peg	2.5200	3100.0	102	49932	No
28	GOM_NL__2PRFIN20110917_040606_000000473106_00349_49932_6203.N1	17-SEP-2011 04:06:06	Bright	47.000	58	21Alp And	2.0730	11000.	94	49932	No
29	GOM_NL__2PRFIN20110917_041422_000000413106_00349_49932_6204.N1	17-SEP-2011 04:14:22	Bright	40.500	74	11Bet Cas	2.2680	6600.0	81	49932	No
30	GOM_NL__2PRFIN20110917_041606_000000413106_00349_49932_6205.N1	17-SEP-2011 04:16:06	Bright	40.500	76	27Gam Cas	2.3000	30000.	81	49932	No
31	GOM_NL__2PRFIN20110917_043849_000000443106_00349_49932_6206.N1	17-SEP-2011 04:38:49	Bright	44.000	24	66Alp Gem	1.5800	10200.	88	49932	No
32	GOM_NL__2PRFIN20110917_044742_000000473106_00349_49932_6207.N1	17-SEP-2011 04:47:42	Dark	47.000	8	10Alp CMi	0.40000	6500.0	94	49932	No
33	GOM_NL__2PRFIN20110917_045704_000000743106_00349_49932_6208.N1	17-SEP-2011 04:57:04	Dark	73.500	1	9Alp CMa	-1.4400	11000.	147	49932	No
34	GOM_NL__2PRFIN20110917_045909_000000523106_00349_49932_6209.N1	17-SEP-2011 04:59:09	Dark	51.500	23	21Eps CMa	1.5020	26000.	103	49932	No
35	GOM_NL__2PRFIN20110917_052231_000000453106_00350_49933_6214.N1	17-SEP-2011 05:22:31	Straylight	45.000	84	Alp Phe	2.3970	4500.0	90	49933	No
36	GOM_NL__2PRFIN20110917_053000_000000563106_00350_49933_6215.N1	17-SEP-2011 05:30:00	Twilight_stray	56.000	52	16Bet Cet	2.0370	4500.0	112	49933	No
37	GOM_NL__2PRFIN20110917_054041_000000403106_00350_49933_6216.N1	17-SEP-2011 05:40:41	Bright	39.500	90	54Alp Peg	2.4870	11000.	79	49933	No
38	GOM_NL__2PRFIN20110917_054430_000000393106_00350_49933_6217.N1	17-SEP-2011 05:44:30	Bright	39.000	93	53Bet Peg	2.5200	3100.0	78	49933	No
39	GOM_NL__2PRFIN20110917_054620_000000453106_00350_49933_6218.N1	17-SEP-2011 05:46:20	Bright	44.500	58	21Alp And	2.0730	11000.	89	49933	No
40	GOM_NL__2PRFIN20110917_055436_000000413106_00350_49933_6219.N1	17-SEP-2011 05:54:36	Bright	41.000	74	11Bet Cas	2.2680	6600.0	82	49933	No
41	GOM_NL__2PRFIN20110917_055619_000000433106_00350_49933_6220.N1	17-SEP-2011 05:56:19	Bright	43.000	76	27Gam Cas	2.3000	30000.	86	49933	No
42	GOM_NL__2PRFIN20110917_061903_000000653106_00350_49933_6221.N1	17-SEP-2011 06:19:03	Bright	65.000	24	66Alp Gem	1.5800	10200.	130	49933	No

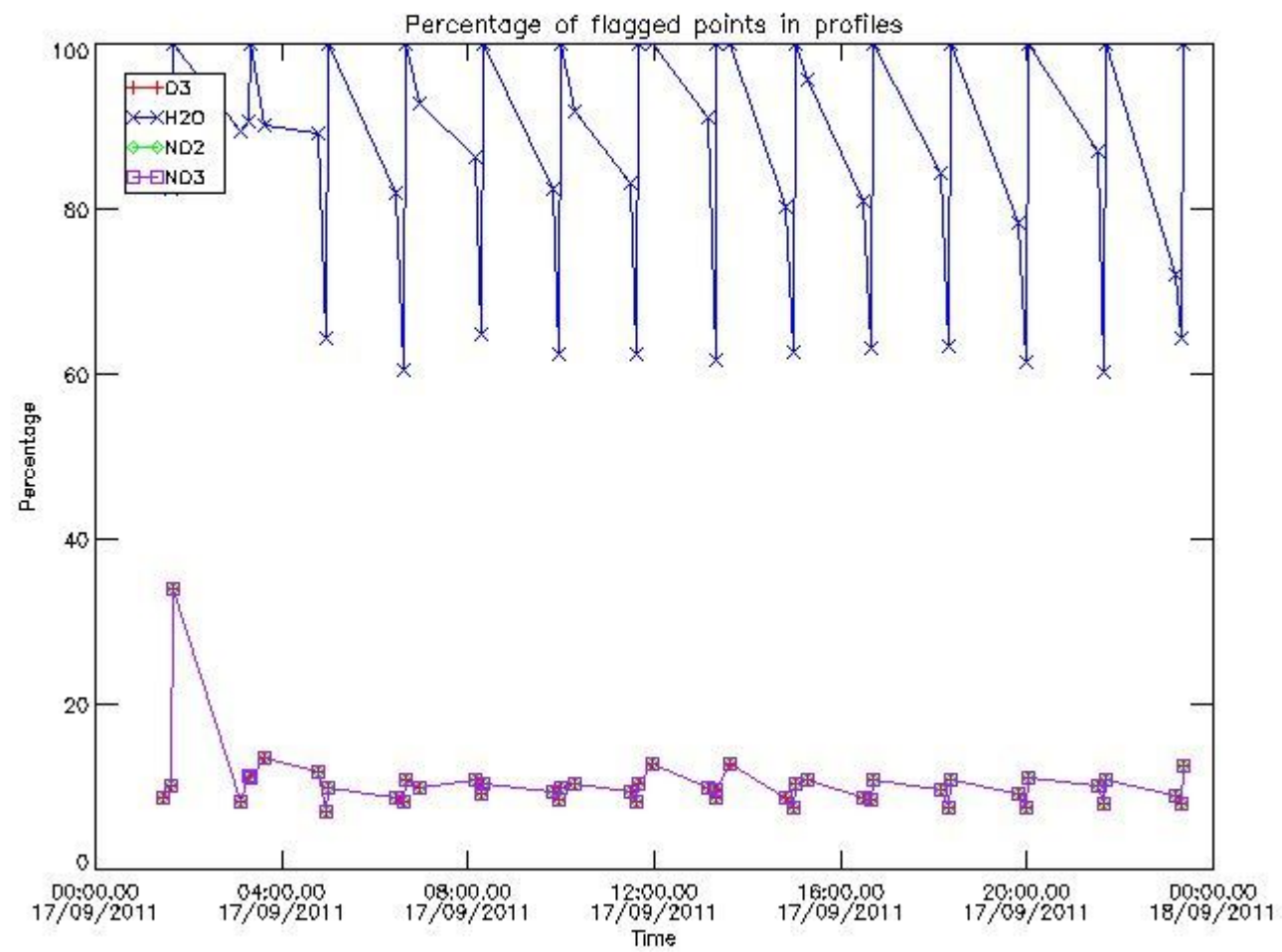
43	GOM_NL__2PRFIN20110917_062756_000000593106_00350_49933_6222.N1	17-SEP-2011 06:27:56	Dark	58.500	8	10Alp CMI	0.40000	6500.0	117	49933	No
44	GOM_NL__2PRFIN20110917_063719_000000633106_00350_49933_6223.N1	17-SEP-2011 06:37:19	Dark	62.500	1	9Alp CMA	-1.4400	11000.	125	49933	No
45	GOM_NL__2PRFIN20110917_063924_000000473106_00350_49933_6224.N1	17-SEP-2011 06:39:24	Dark	47.000	23	21Eps CMA	1.5020	26000.	94	49933	No
46	GOM_NL__2PRFIN20110917_065706_000000563106_00351_49934_6225.N1	17-SEP-2011 06:57:06	Dark	56.000	9	Alp Eri	0.45300	24000.	112	49934	No
47	GOM_NL__2PRFIN20110917_070246_000000453106_00351_49934_6226.N1	17-SEP-2011 07:02:46	Straylight	45.000	84	Alp Phe	2.3970	4500.0	90	49934	No
48	GOM_NL__2PRFIN20110917_071015_000000563106_00351_49934_6227.N1	17-SEP-2011 07:10:15	Tw_i_and_stray	56.000	52	16Bet Cet	2.0370	4500.0	112	49934	No
49	GOM_NL__2PRFIN20110917_072055_000000403106_00351_49934_6228.N1	17-SEP-2011 07:20:55	Bright	39.500	90	54Alp Peg	2.4870	11000.	79	49934	No
50	GOM_NL__2PRFIN20110917_072444_000000393106_00351_49934_6229.N1	17-SEP-2011 07:24:44	Bright	39.000	93	53Bet Peg	2.5200	3100.0	78	49934	No
51	GOM_NL__2PRFIN20110917_072633_000000463106_00351_49934_6230.N1	17-SEP-2011 07:26:33	Bright	46.000	58	21Alp And	2.0730	11000.	92	49934	No
52	GOM_NL__2PRFIN20110917_073450_000000413106_00351_49934_6231.N1	17-SEP-2011 07:34:50	Bright	41.000	74	11Bet Cas	2.2680	6600.0	82	49934	No
53	GOM_NL__2PRFIN20110917_073633_000000433106_00351_49934_6232.N1	17-SEP-2011 07:36:33	Bright	43.000	76	27Gam Cas	2.3000	30000.	86	49934	No
54	GOM_NL__2PRFIN20110917_075917_000000653106_00351_49934_6233.N1	17-SEP-2011 07:59:17	Bright	65.000	24	66Alp Gem	1.5800	10200.	130	49934	No
55	GOM_NL__2PRFIN20110917_080811_000000663106_00351_49934_6234.N1	17-SEP-2011 08:08:11	Dark	66.000	8	10Alp CMI	0.40000	6500.0	132	49934	No
56	GOM_NL__2PRFIN20110917_081734_000000623106_00351_49934_6235.N1	17-SEP-2011 08:17:34	Dark	61.500	1	9Alp CMA	-1.4400	11000.	123	49934	No
57	GOM_NL__2PRFIN20110917_081939_000000503106_00351_49934_6236.N1	17-SEP-2011 08:19:39	Dark	49.500	23	21Eps CMA	1.5020	26000.	99	49934	No
58	GOM_NL__2PRFIN20110917_084300_000000453106_00352_49935_6276.N1	17-SEP-2011 08:43:00	Straylight	45.000	84	Alp Phe	2.3970	4500.0	90	49935	No
59	GOM_NL__2PRFIN20110917_085029_000000573106_00352_49935_6277.N1	17-SEP-2011 08:50:29	Tw_i_and_stray	56.500	52	16Bet Cet	2.0370	4500.0	113	49935	No
60	GOM_NL__2PRFIN20110917_090109_000000403106_00352_49935_6278.N1	17-SEP-2011 09:01:09	Bright	39.500	90	54Alp Peg	2.4870	11000.	79	49935	No
61	GOM_NL__2PRFIN20110917_090457_000000393106_00352_49935_6279.N1	17-SEP-2011 09:04:57	Bright	38.500	93	53Bet Peg	2.5200	3100.0	77	49935	No
62	GOM_NL__2PRFIN20110917_090647_000000453106_00352_49935_6280.N1	17-SEP-2011 09:06:47	Bright	44.500	58	21Alp And	2.0730	11000.	89	49935	No
63	GOM_NL__2PRFIN20110917_091503_000000403106_00352_49935_6281.N1	17-SEP-2011 09:15:03	Bright	39.500	74	11Bet Cas	2.2680	6600.0	79	49935	No
64	GOM_NL__2PRFIN20110917_091646_000000433106_00352_49935_6282.N1	17-SEP-2011 09:16:46	Bright	42.500	76	27Gam Cas	2.3000	30000.	85	49935	No
65	GOM_NL__2PRFIN20110917_093931_000000443106_00352_49935_6283.N1	17-SEP-2011 09:39:31	Bright	44.000	24	66Alp Gem	1.5800	10200.	88	49935	No
66	GOM_NL__2PRFIN20110917_094825_000000553106_00352_49935_6284.N1	17-SEP-2011 09:48:25	Dark	54.500	8	10Alp CMI	0.40000	6500.0	109	49935	No
67	GOM_NL__2PRFIN20110917_095749_000000663106_00352_49935_6285.N1	17-SEP-2011 09:57:49	Dark	65.500	1	9Alp CMA	-1.4400	11000.	131	49935	No
68	GOM_NL__2PRFIN20110917_095954_000000523106_00352_49935_6286.N1	17-SEP-2011 09:59:54	Dark	52.000	23	21Eps CMA	1.5020	26000.	104	49935	No
69	GOM_NL__2PRFIN20110917_101735_000000493106_00353_49936_6307.N1	17-SEP-2011 10:17:35	Dark	49.000	9	Alp Eri	0.45300	24000.	98	49936	No
70	GOM_NL__2PRFIN20110917_102314_000000453106_00353_49936_6308.N1	17-SEP-2011 10:23:14	Straylight	44.500	84	Alp Phe	2.3970	4500.0	89	49936	No
71	GOM_NL__2PRFIN20110917_103043_000000583106_00353_49936_6309.N1	17-SEP-2011 10:30:43	Tw_i_and_stray	58.000	52	16Bet Cet	2.0370	4500.0	116	49936	No
72	GOM_NL__2PRFIN20110917_104123_000000403106_00353_49936_6310.N1	17-SEP-2011 10:41:23	Bright	39.500	90	54Alp Peg	2.4870	11000.	79	49936	No
73	GOM_NL__2PRFIN20110917_104511_000000383106_00353_49936_6311.N1	17-SEP-2011 10:45:11	Bright	38.000	93	53Bet Peg	2.5200	3100.0	76	49936	No
74	GOM_NL__2PRFIN20110917_104700_000000473106_00353_49936_6312.N1	17-SEP-2011 10:47:00	Bright	47.000	58	21Alp And	2.0730	11000.	94	49936	No
75	GOM_NL__2PRFIN20110917_105517_000000403106_00353_49936_6313.N1	17-SEP-2011 10:55:17	Bright	40.000	74	11Bet Cas	2.2680	6600.0	80	49936	No
76	GOM_NL__2PRFIN20110917_105700_000000443106_00353_49936_6314.N1	17-SEP-2011 10:57:00	Bright	43.500	76	27Gam Cas	2.3000	30000.	87	49936	No
77	GOM_NL__2PRFIN20110917_111945_000000653106_00353_49936_6315.N1	17-SEP-2011 11:19:45	Bright	65.000	24	66Alp Gem	1.5800	10200.	130	49936	No
78	GOM_NL__2PRFIN20110917_112840_000000543106_00353_49936_6316.N1	17-SEP-2011 11:28:40	Dark	54.000	8	10Alp CMI	0.40000	6500.0	108	49936	No
79	GOM_NL__2PRFIN20110917_113804_000000633106_00353_49936_6317.N1	17-SEP-2011 11:38:04	Dark	63.000	1	9Alp CMA	-1.4400	11000.	126	49936	No
80	GOM_NL__2PRFIN20110917_114009_000000503106_00353_49936_6318.N1	17-SEP-2011 11:40:09	Dark	49.500	23	21Eps CMA	1.5020	26000.	99	49936	No
81	GOM_NL__2PRFIN20110917_115750_000000443106_00354_49937_6358.N1	17-SEP-2011 11:57:50	Dark	43.500	9	Alp Eri	0.45300	24000.	87	49937	No
82	GOM_NL__2PRFIN20110917_120329_000000483106_00354_49937_6359.N1	17-SEP-2011 12:03:29	Straylight	47.500	84	Alp Phe	2.3970	4500.0	95	49937	No
83	GOM_NL__2PRFIN20110917_121057_000000573106_00354_49937_6360.N1	17-SEP-2011 12:10:57	Tw_i_and_stray	56.500	52	16Bet Cet	2.0370	4500.0	113	49937	No
84	GOM_NL__2PRFIN20110917_122137_000000383106_00354_49937_6361.N1	17-SEP-2011 12:21:37	Bright	38.000	90	54Alp Peg	2.4870	11000.	76	49937	No
85	GOM_NL__2PRFIN20110917_122525_000000383106_00354_49937_6362.N1	17-SEP-2011 12:25:25	Bright	38.000	93	53Bet Peg	2.5200	3100.0	76	49937	No
86	GOM_NL__2PRFIN20110917_122713_000000463106_00354_49937_6363.N1	17-SEP-2011 12:27:13	Bright	46.000	58	21Alp And	2.0730	11000.	92	49937	No
87	GOM_NL__2PRFIN20110917_123530_000000403106_00354_49937_6364.N1	17-SEP-2011 12:35:30	Bright	39.500	74	11Bet Cas	2.2680	6600.0	79	49937	No
88	GOM_NL__2PRFIN20110917_123713_000000443106_00354_49937_6365.N1	17-SEP-2011 12:37:13	Bright	43.500	76	27Gam Cas	2.3000	30000.	87	49937	No
89	GOM_NL__2PRFIN20110917_125959_000000533106_00354_49937_6366.N1	17-SEP-2011 12:59:59	Bright	52.500	24	66Alp Gem	1.5800	10200.	105	49937	No
90	GOM_NL__2PRFIN20110917_130854_000000563106_00354_49937_6367.N1	17-SEP-2011 13:08:54	Dark	56.000	8	10Alp CMI	0.40000	6500.0	112	49937	No
91	GOM_NL__2PRFIN20110917_131819_000000653106_00354_49937_6368.N1	17-SEP-2011 13:18:19	Dark	64.500	1	9Alp CMA	-1.4400	11000.	129	49937	No
92	GOM_NL__2PRFIN20110917_132024_000000533106_00354_49937_6369.N1	17-SEP-2011 13:20:24	Dark	52.500	23	21Eps CMA	1.5020	26000.	105	49937	No
93	GOM_NL__2PRFIN20110917_133804_000000403106_00355_49938_6397.N1	17-SEP-2011 13:38:04	Dark	40.000	9	Alp Eri	0.45300	24000.	80	49938	No
94	GOM_NL__2PRFIN20110917_134343_000000443106_00355_49938_6398.N1	17-SEP-2011 13:43:43	Straylight	43.500	84	Alp Phe	2.3970	4500.0	87	49938	No
95	GOM_NL__2PRFIN20110917_135111_000000563106_00355_49938_6399.N1	17-SEP-2011 13:51:11	Tw_i_and_stray	55.500	52	16Bet Cet	2.0370	4500.0	111	49938	No
96	GOM_NL__2PRFIN20110917_140150_000000393106_00355_49938_6400.N1	17-SEP-2011 14:01:50	Bright	39.000	90	54Alp Peg	2.4870	11000.	78	49938	No
97	GOM_NL__2PRFIN20110917_140539_000000393106_00355_49938_6401.N1	17-SEP-2011 14:05:39	Bright	38.500	93	53Bet Peg	2.5200	3100.0	77	49938	No
98	GOM_NL__2PRFIN20110917_140727_000000473106_00355_49938_6402.N1	17-SEP-2011 14:07:27	Bright	47.000	58	21Alp And	2.0730	11000.	94	49938	No
99	GOM_NL__2PRFIN20110917_141544_000000413106_00355_49938_6403.N1	17-SEP-2011 14:15:44	Bright	41.000	74	11Bet Cas	2.2680	6600.0	82	49938	No
100	GOM_NL__2PRFIN20110917_141726_000000433106_00355_49938_6404.N1	17-SEP-2011 14:17:26	Bright	43.000	76	27Gam Cas	2.3000	30000.	86	49938	No
101	GOM_NL__2PRFIN20110917_144013_000000463106_00355_49938_6405.N1	17-SEP-2011 14:40:13	Bright	46.000	24	66Alp Gem	1.5800	10200.	92	49938	No

161	GOM_NL__2PRFIN20110917_234509_00000443106_00361_49944_6546.N1	17-SEP-2011 23:45:09	Straylight	43.500	84	Alp Phe	2.3970	4500.0	87	49944	No
162	GOM_NL__2PRFIN20110917_235236_00000573106_00361_49944_6547.N1	17-SEP-2011 23:52:36	Twl_and_stray	56.500	52	16Bet Cet	2.0370	4500.0	113	49944	No

3. Quality information per product

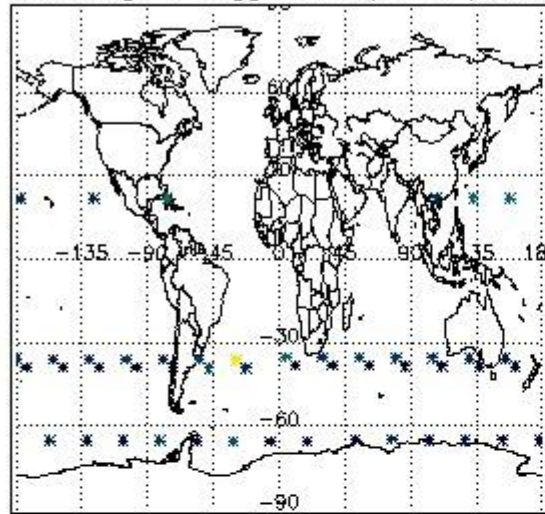
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

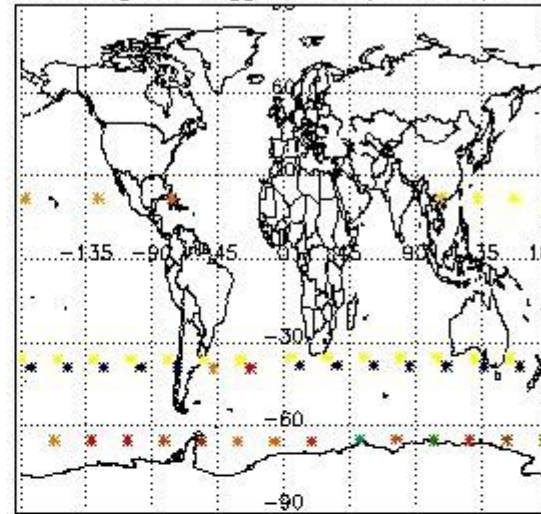


3.2 Plot quality information per product (world map)

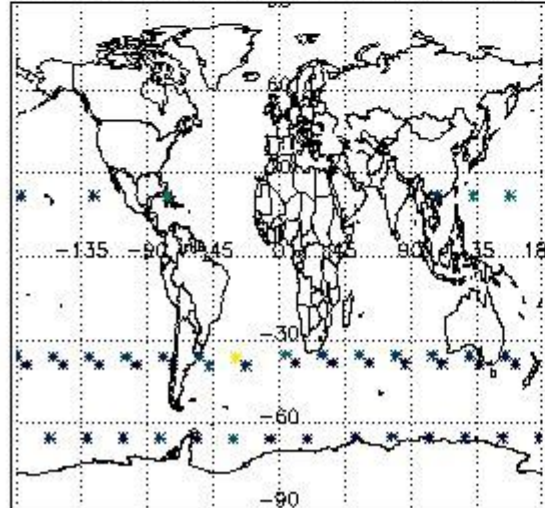
Percentage of flagged data per O3 profile



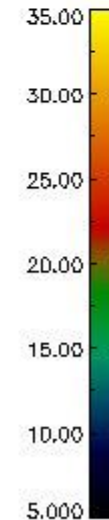
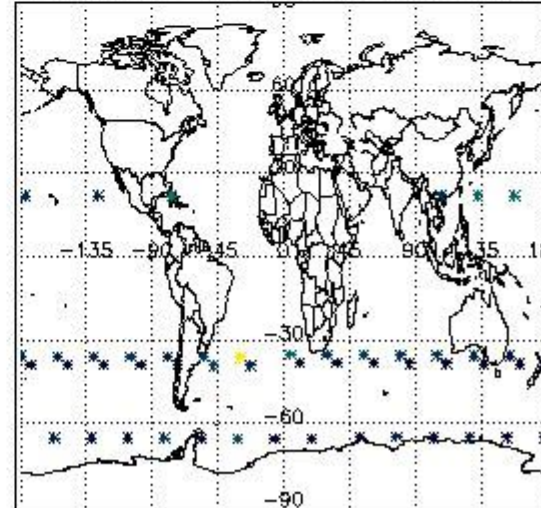
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

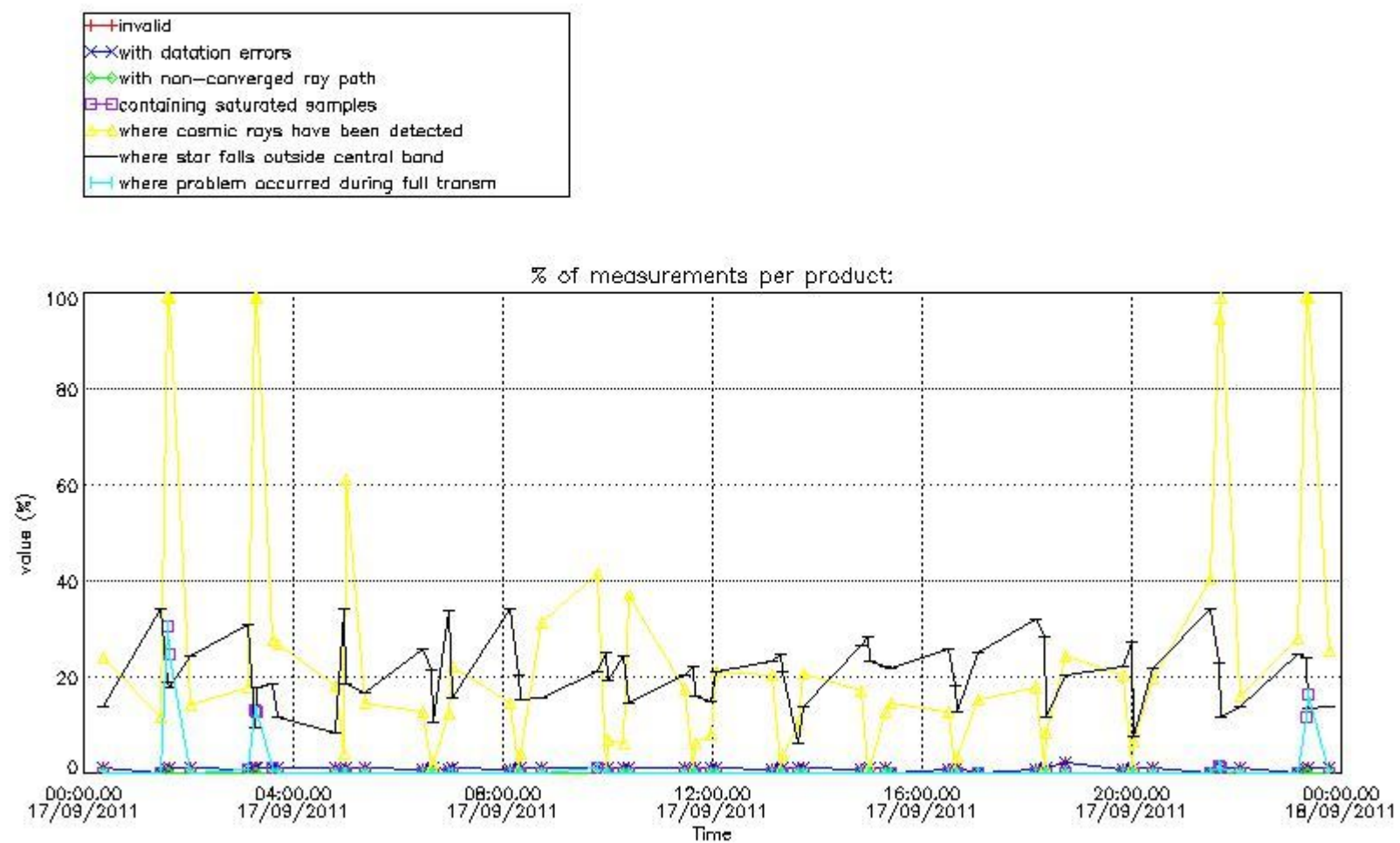


4. Level 1 quality information per product

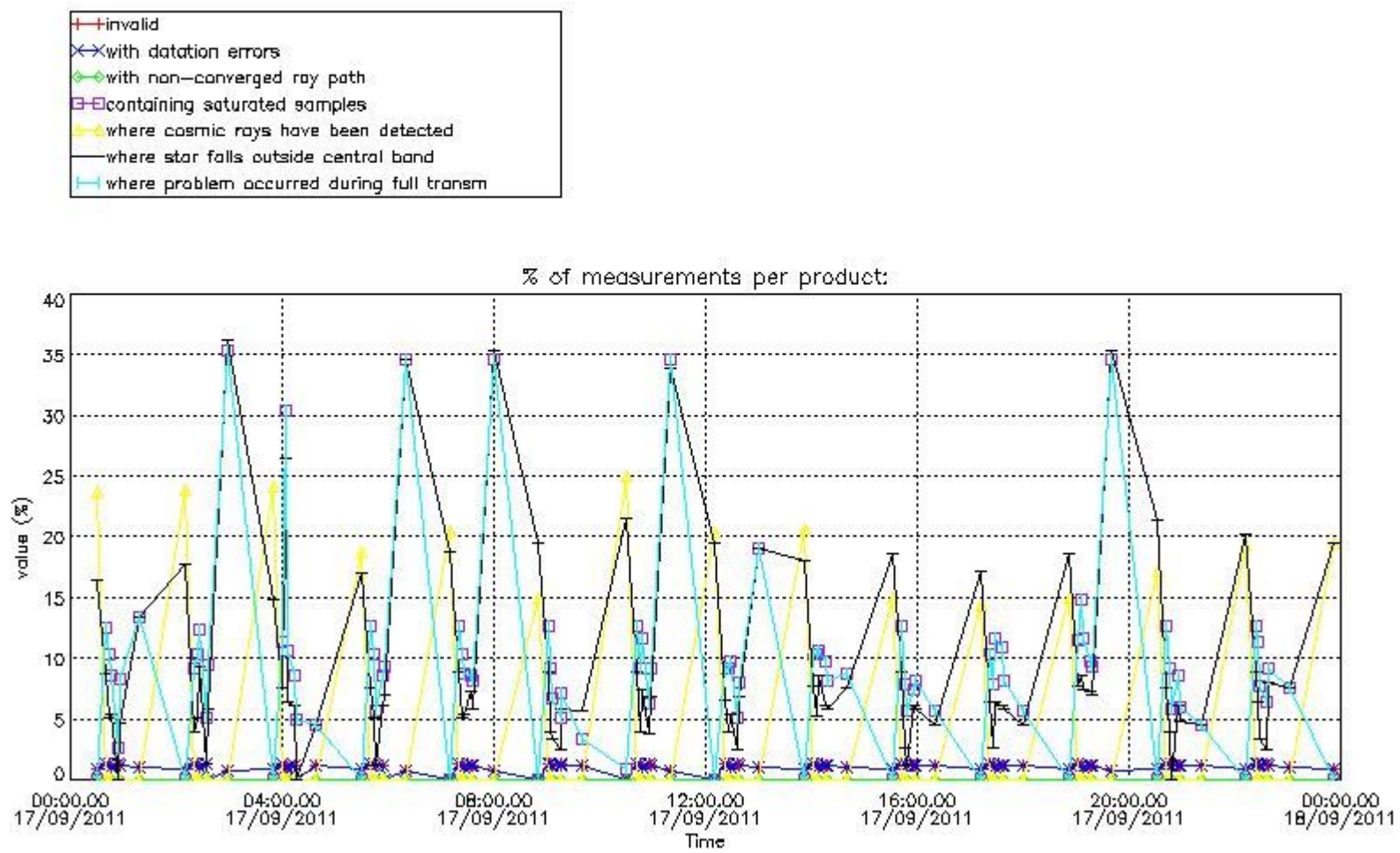
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



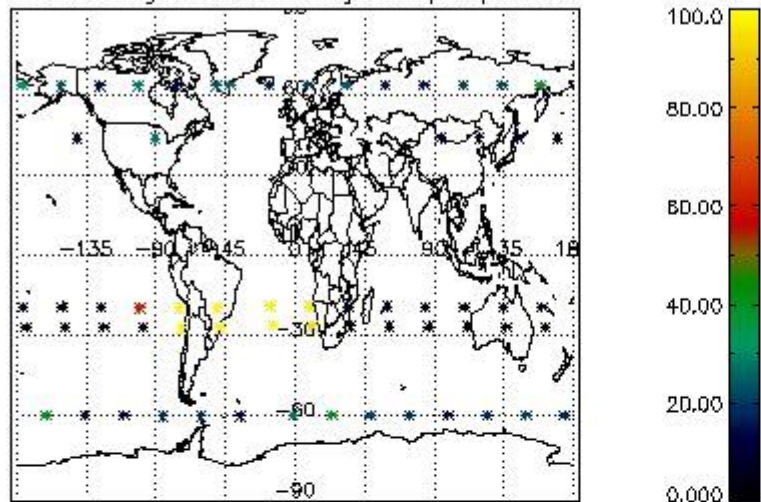
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



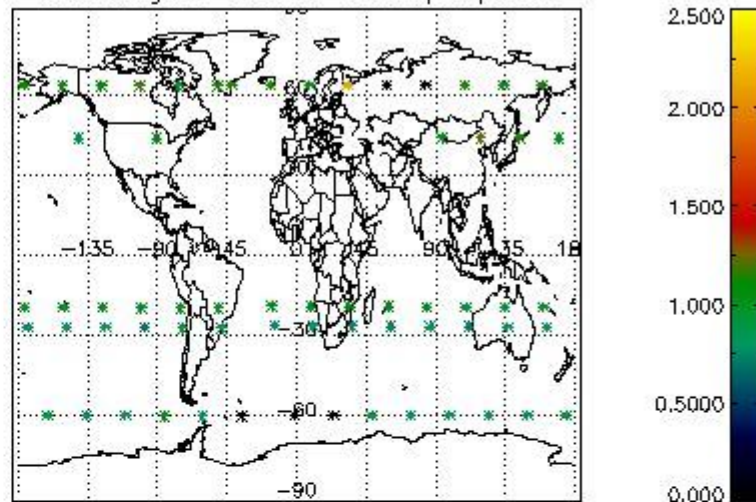
4.2 Plot quality information per product coming from level 1b processing (world map)

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

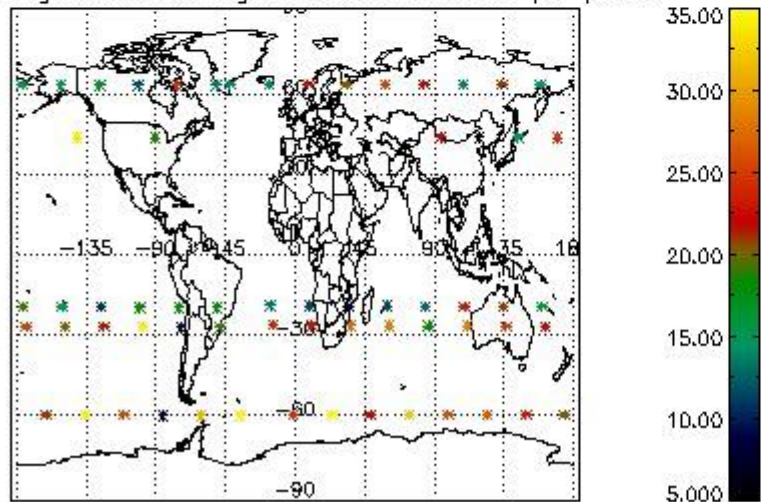
Percentage of cosmic ray hits per profile



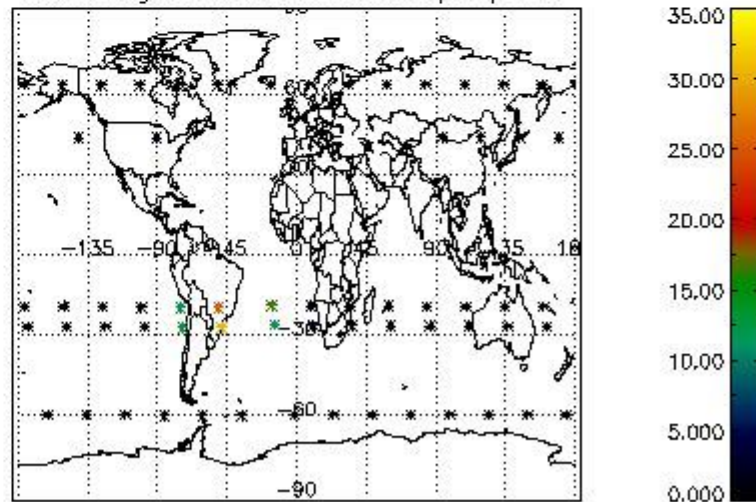
Percentage of datation errors per profile



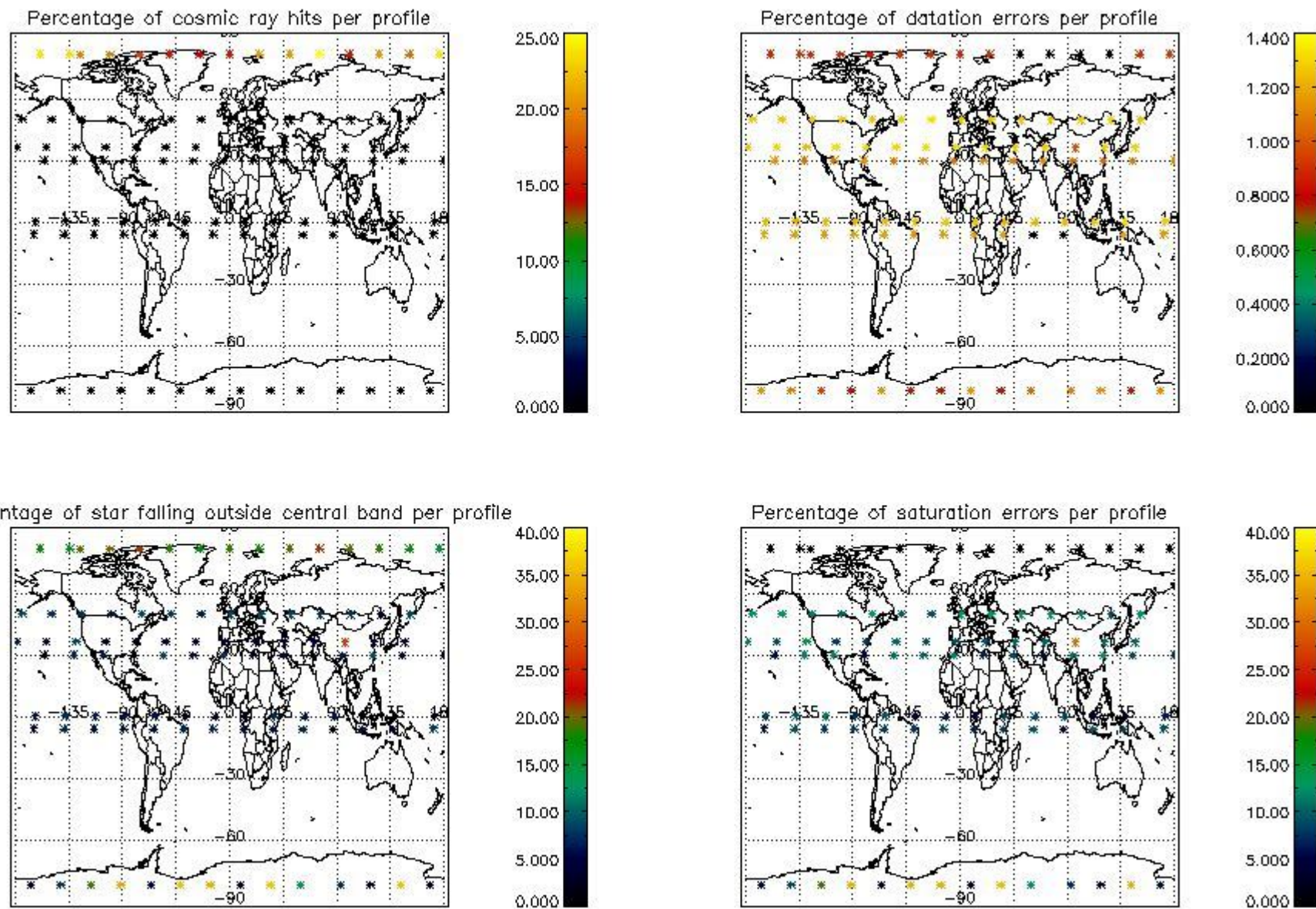
Percentage of star falling outside central band per profile



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

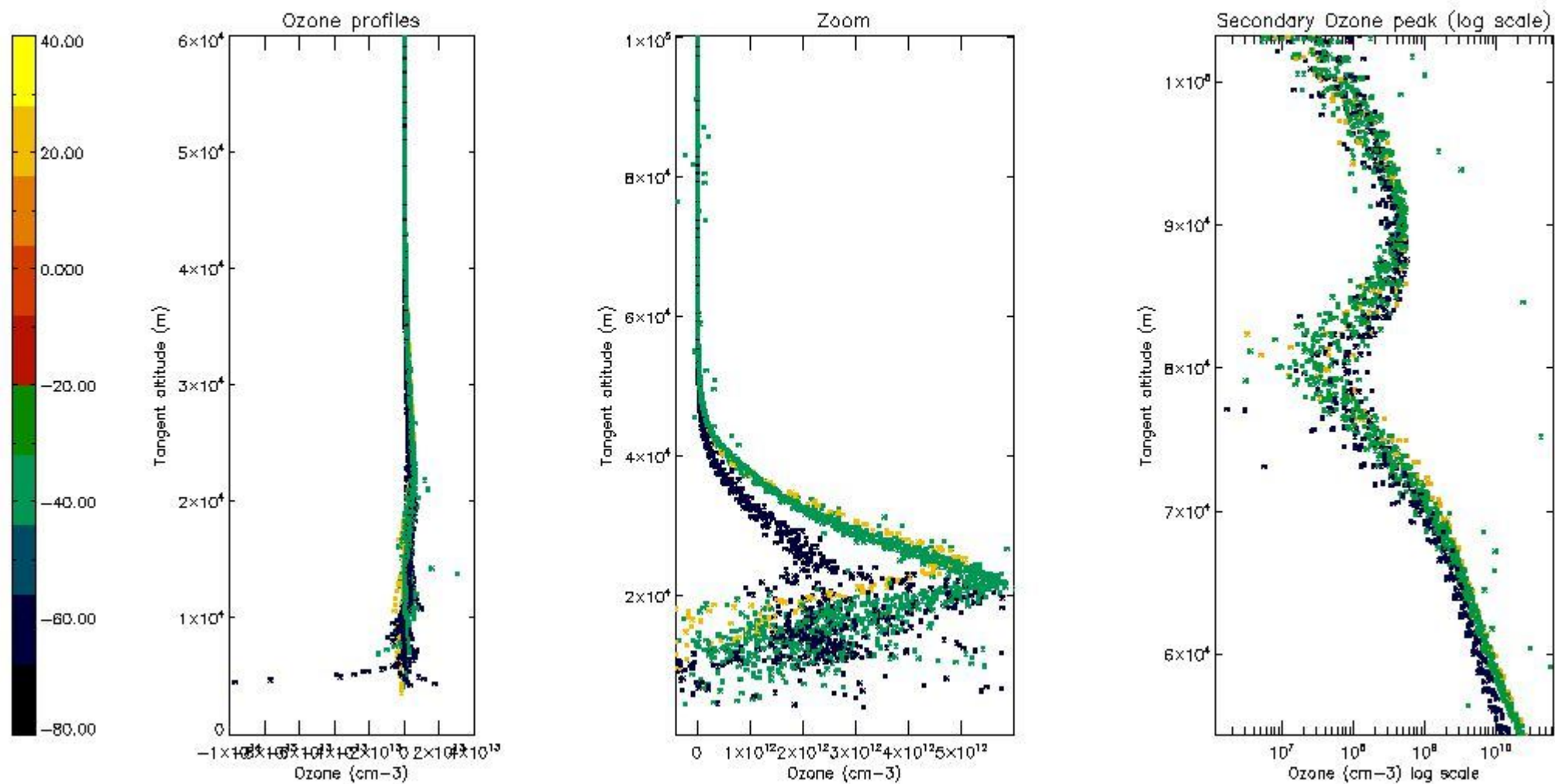
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	35
STD < 20	24

STD < 10	21
STD < 5	18

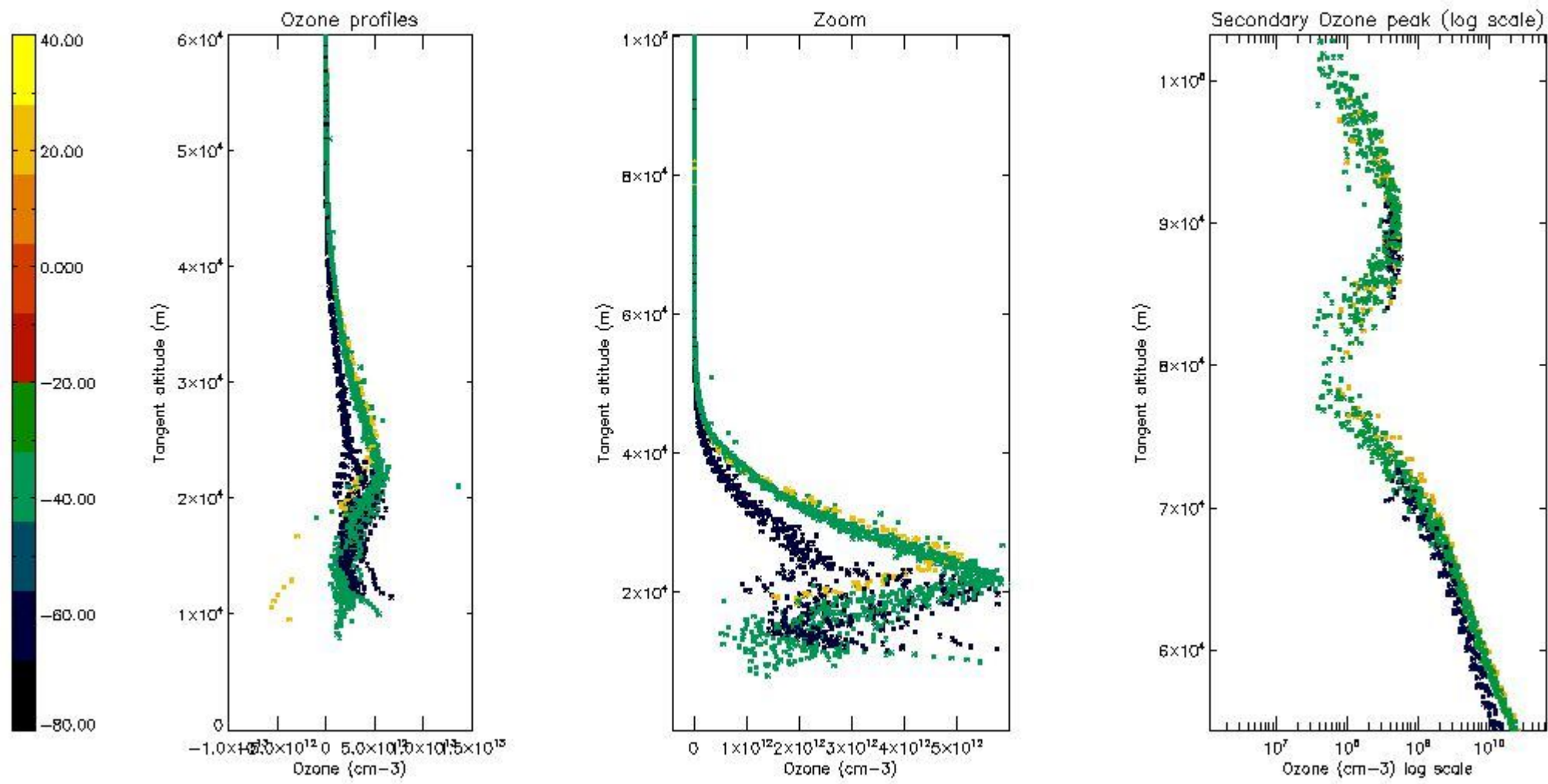
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



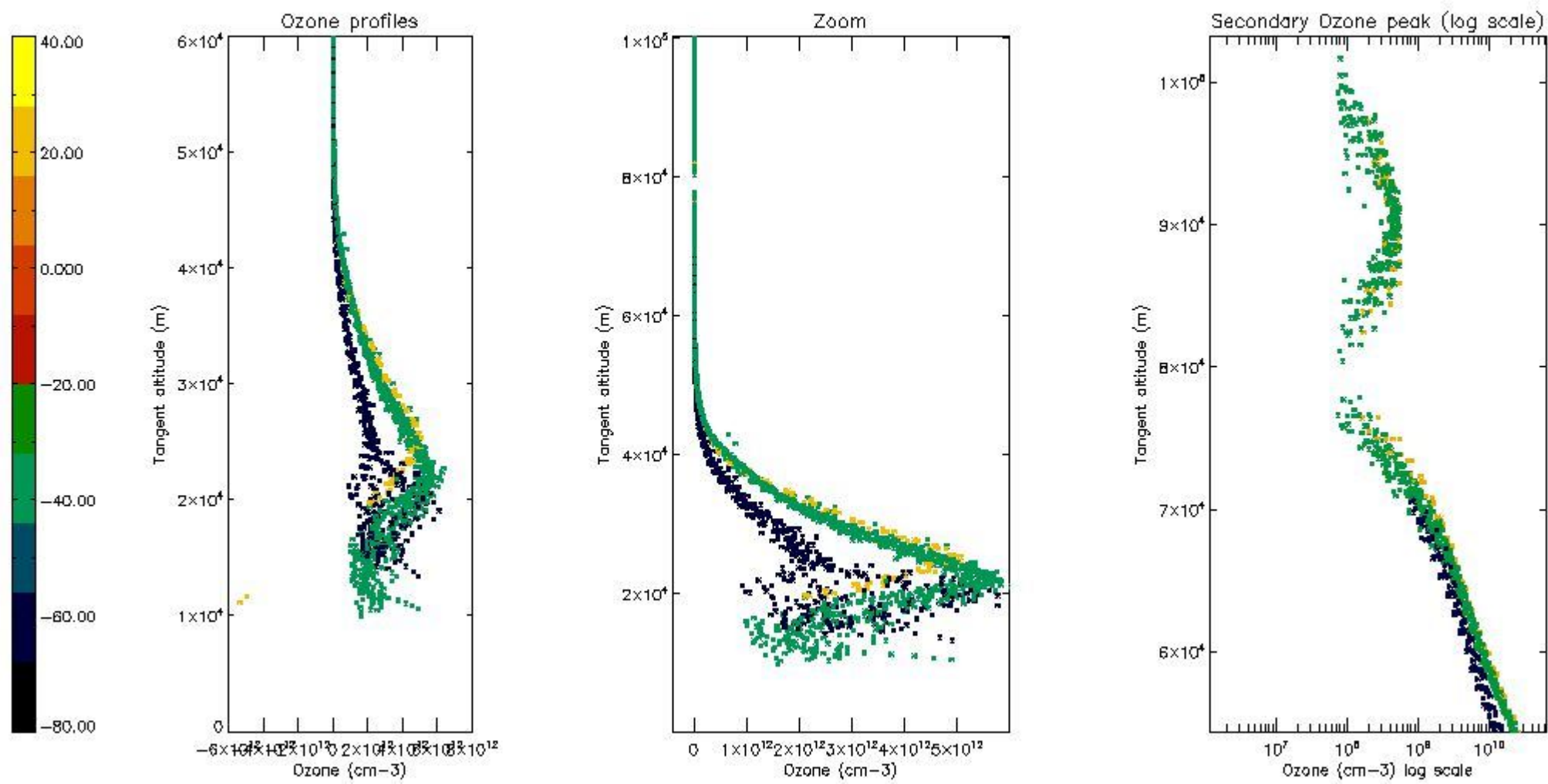
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



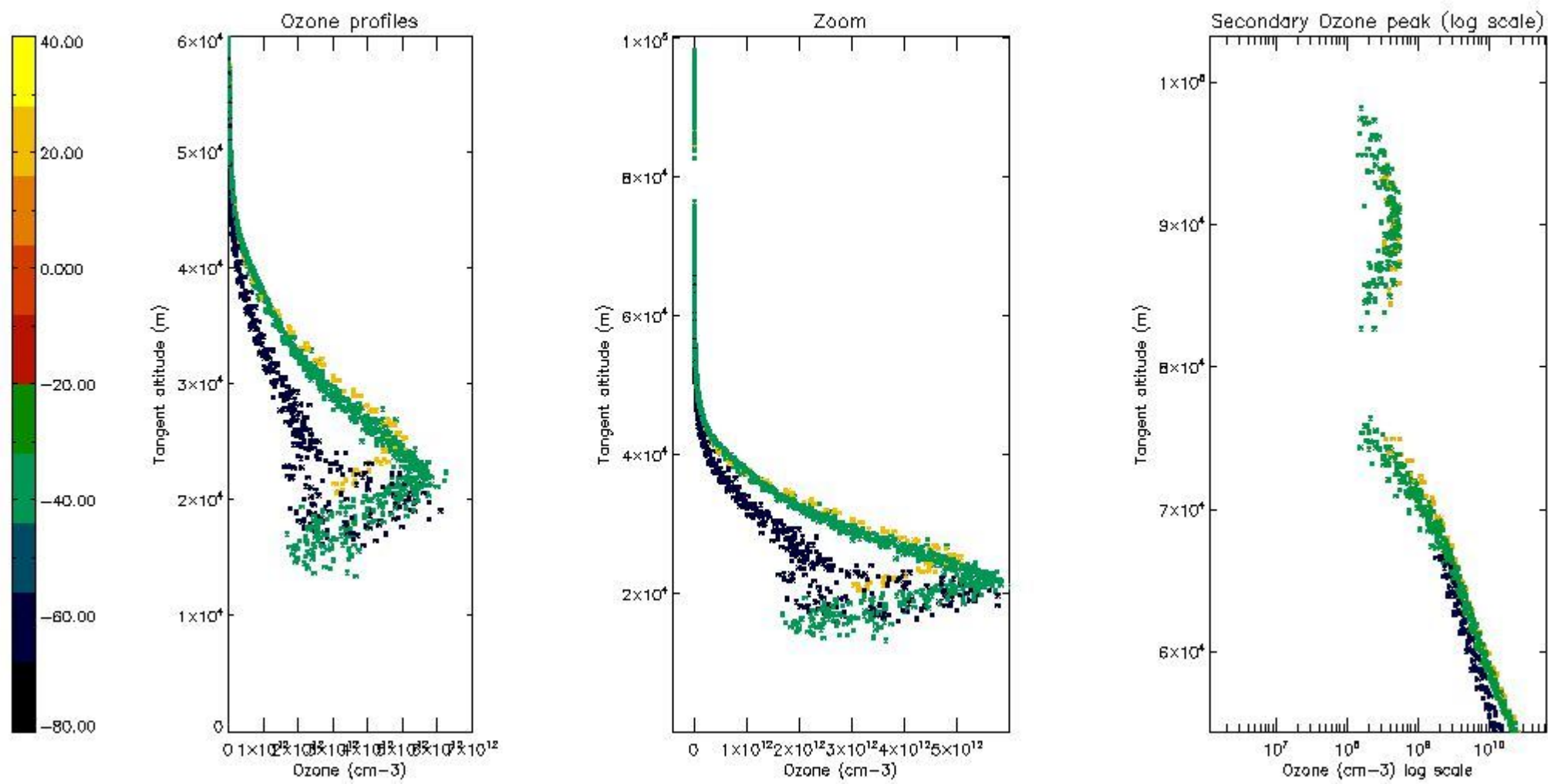
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



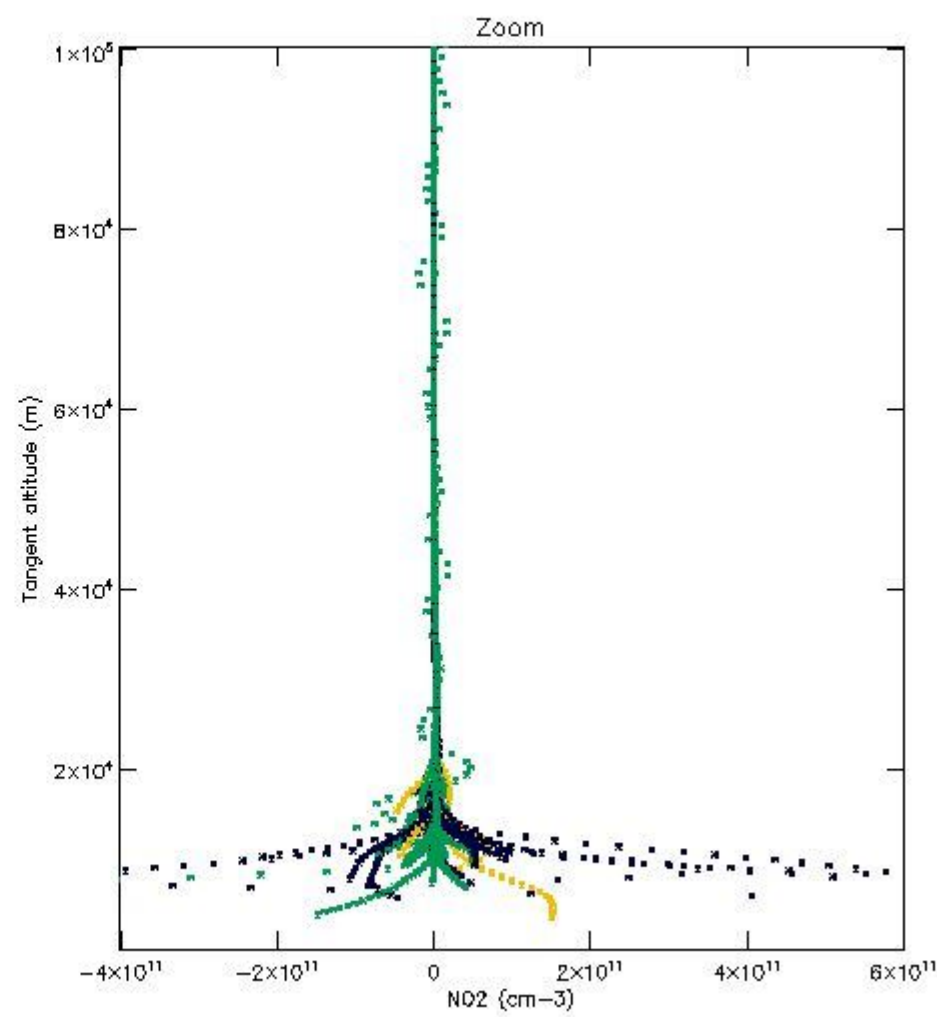
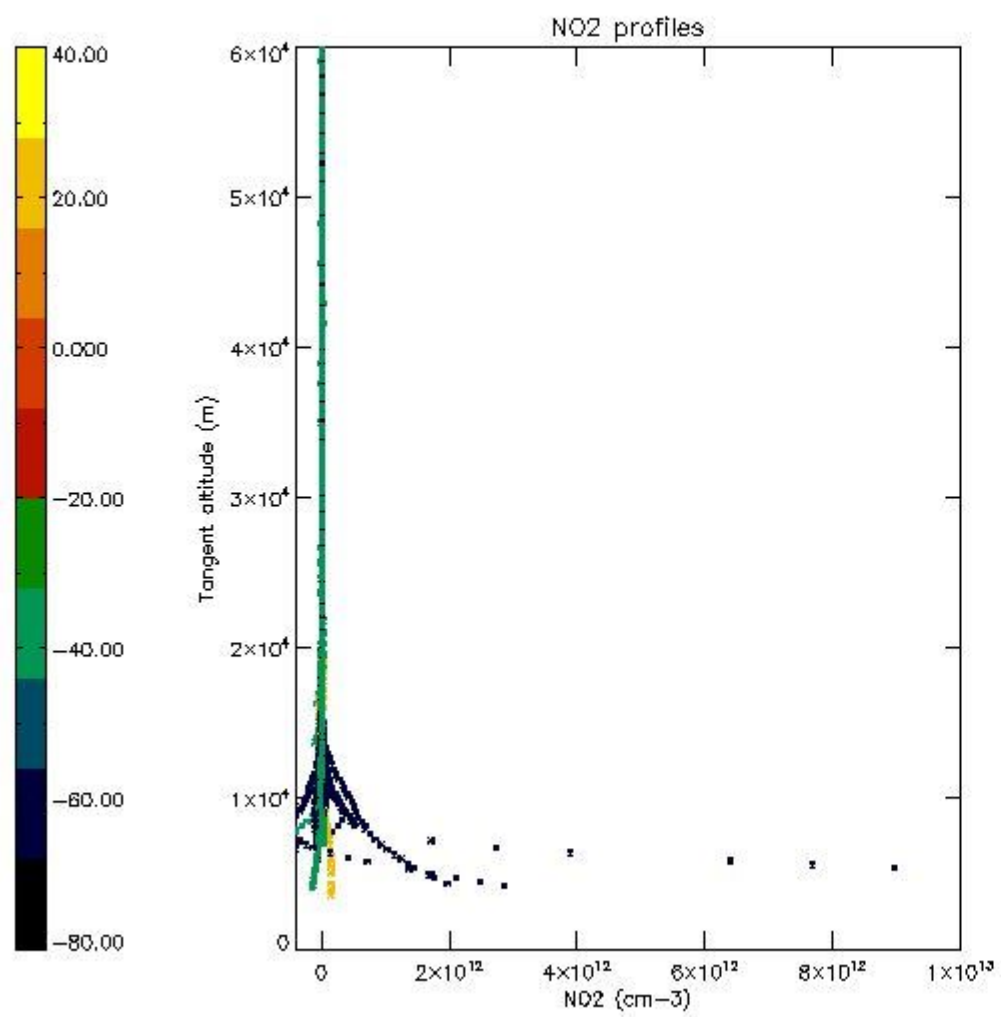
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



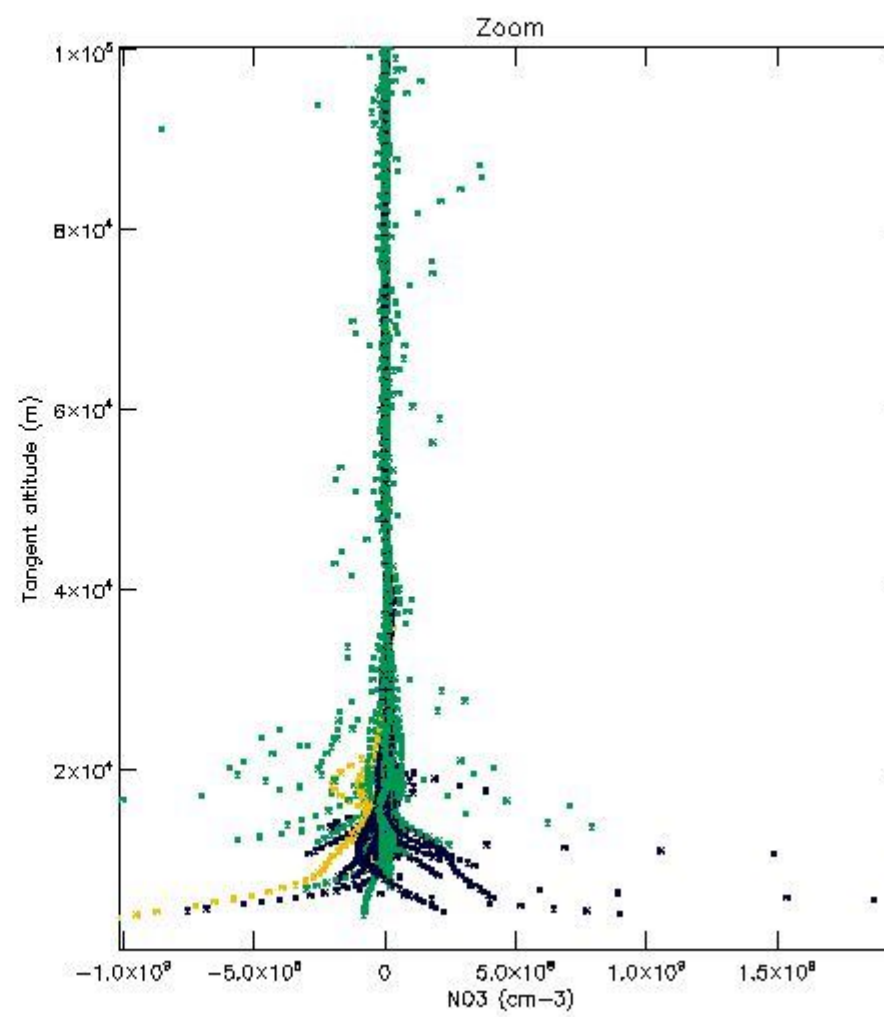
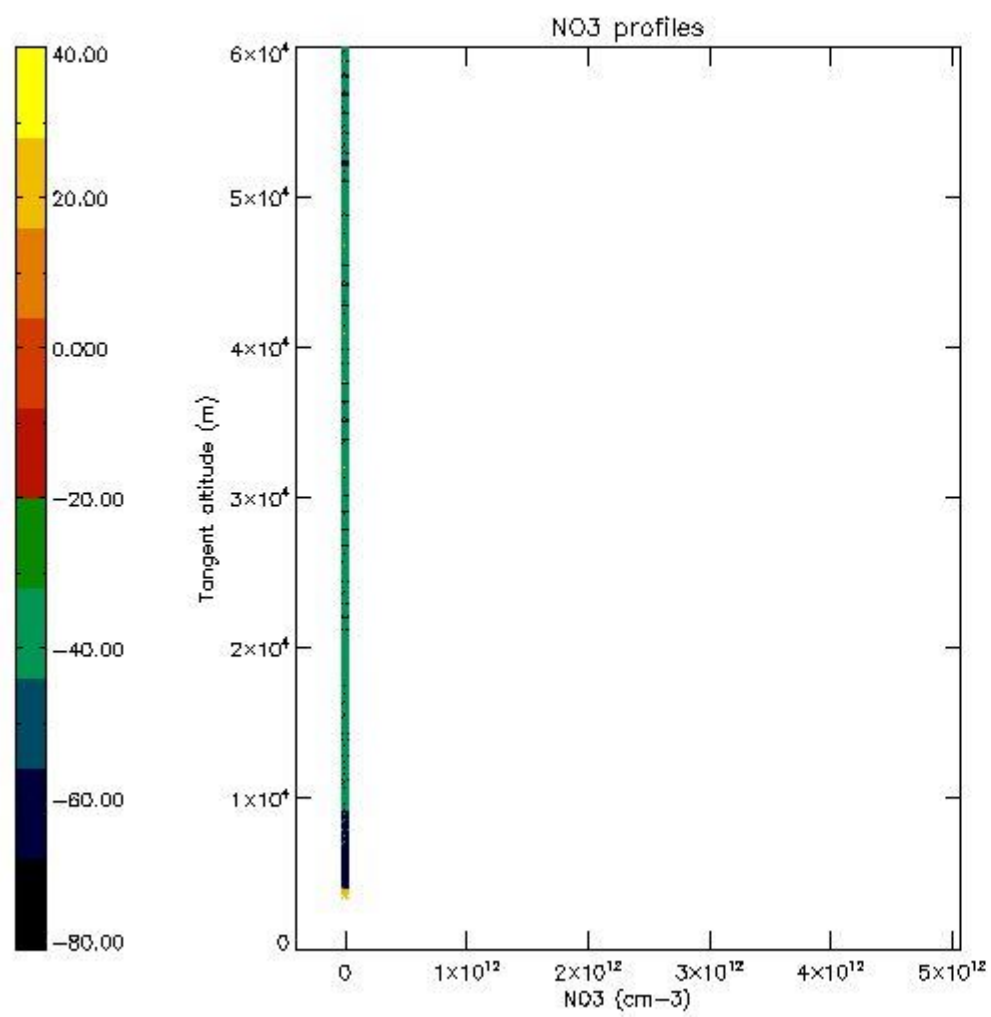
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



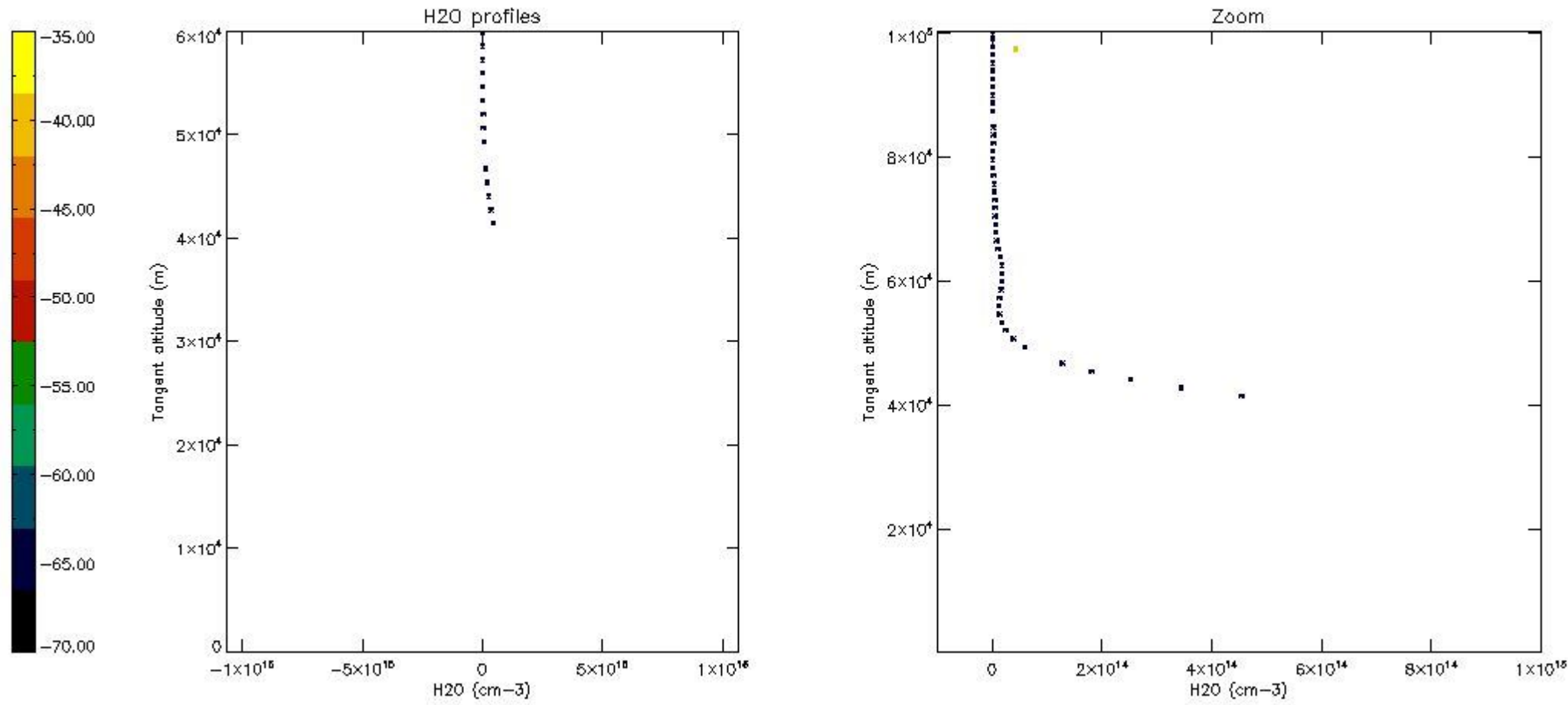
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

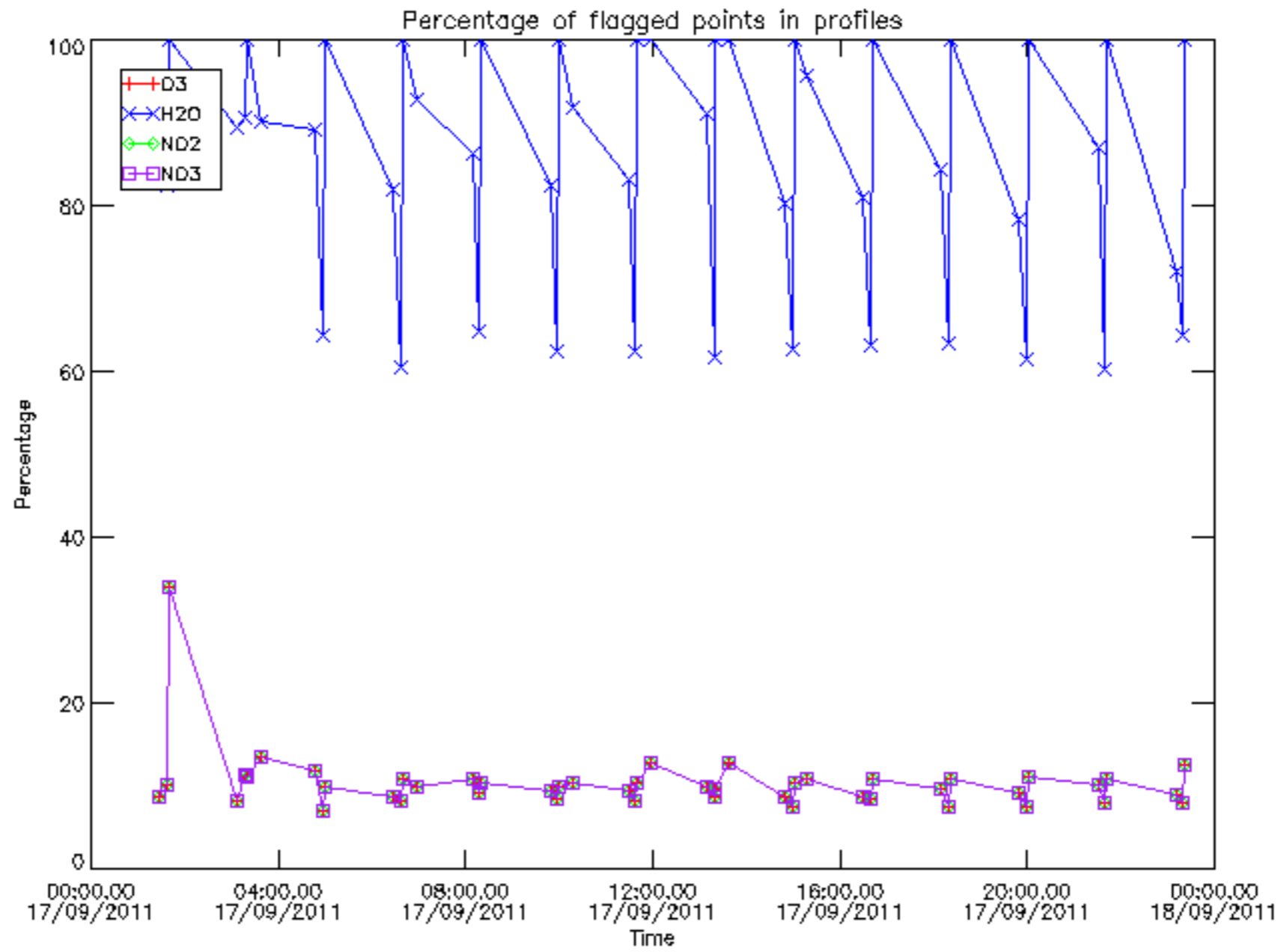
The colorbar represents the latitude.



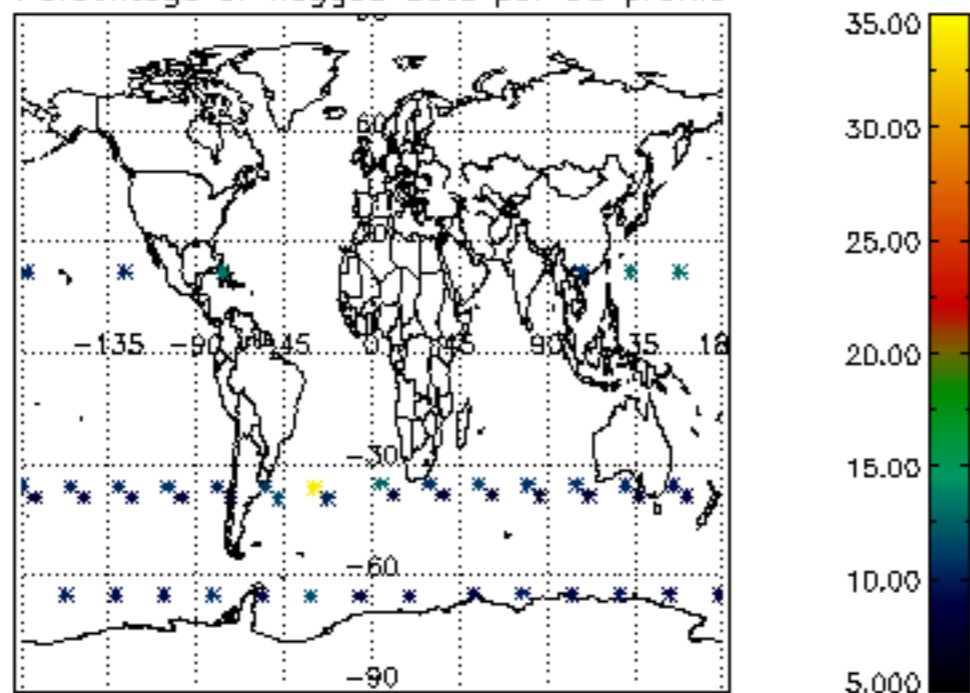
6. Auxiliary Data Files used for the production reported in section 2

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.

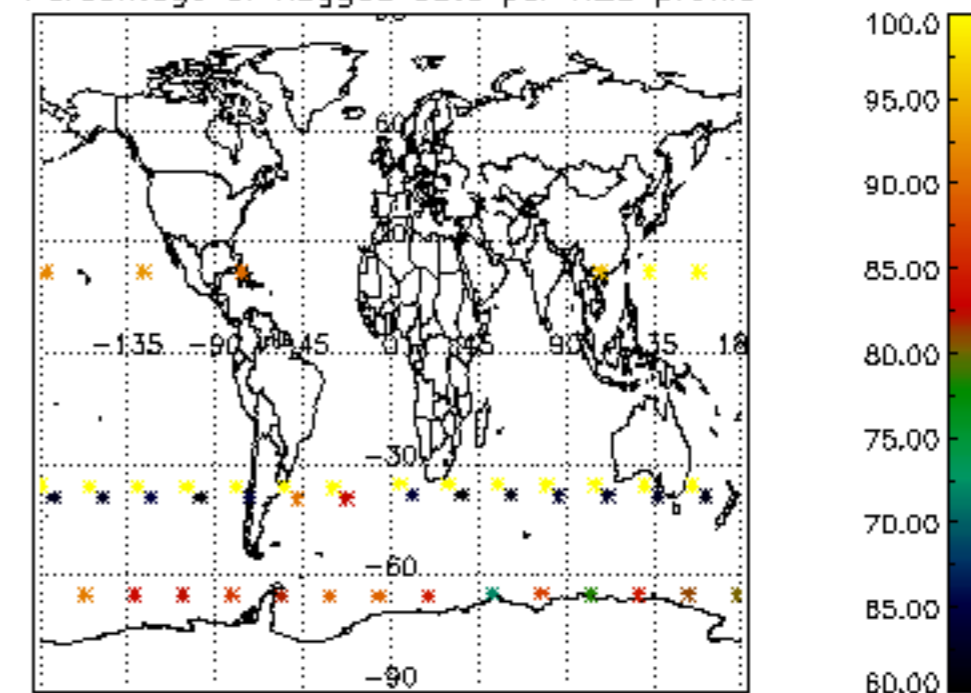
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	17-SEP-2011 00:21:48
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	17-SEP-2011 00:21:48
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	17-SEP-2011 00:21:48



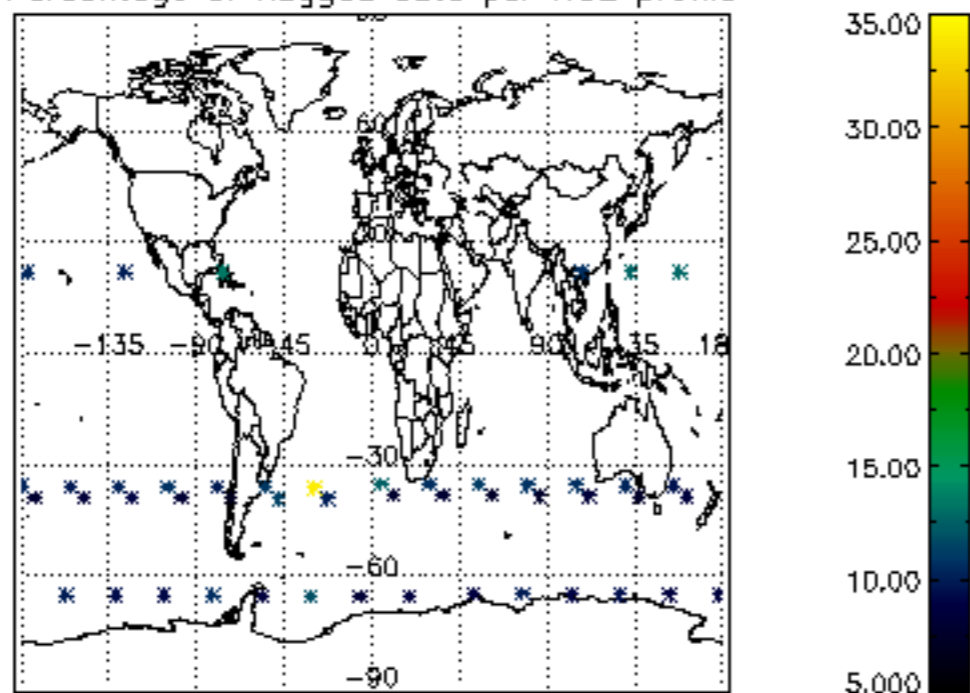
Percentage of flagged data per D3 profile



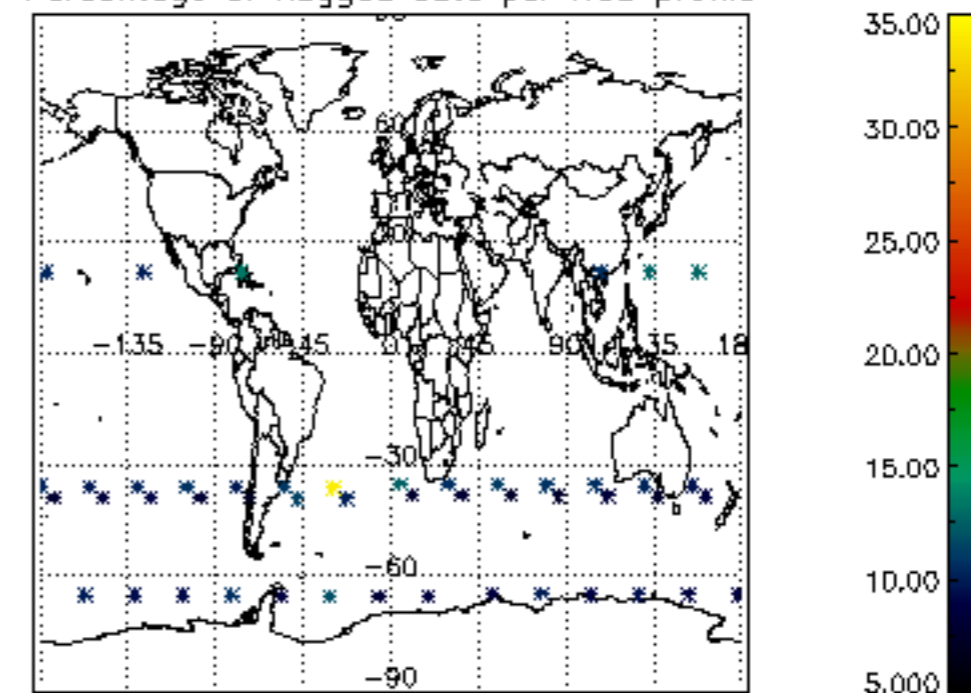
Percentage of flagged data per H2O profile

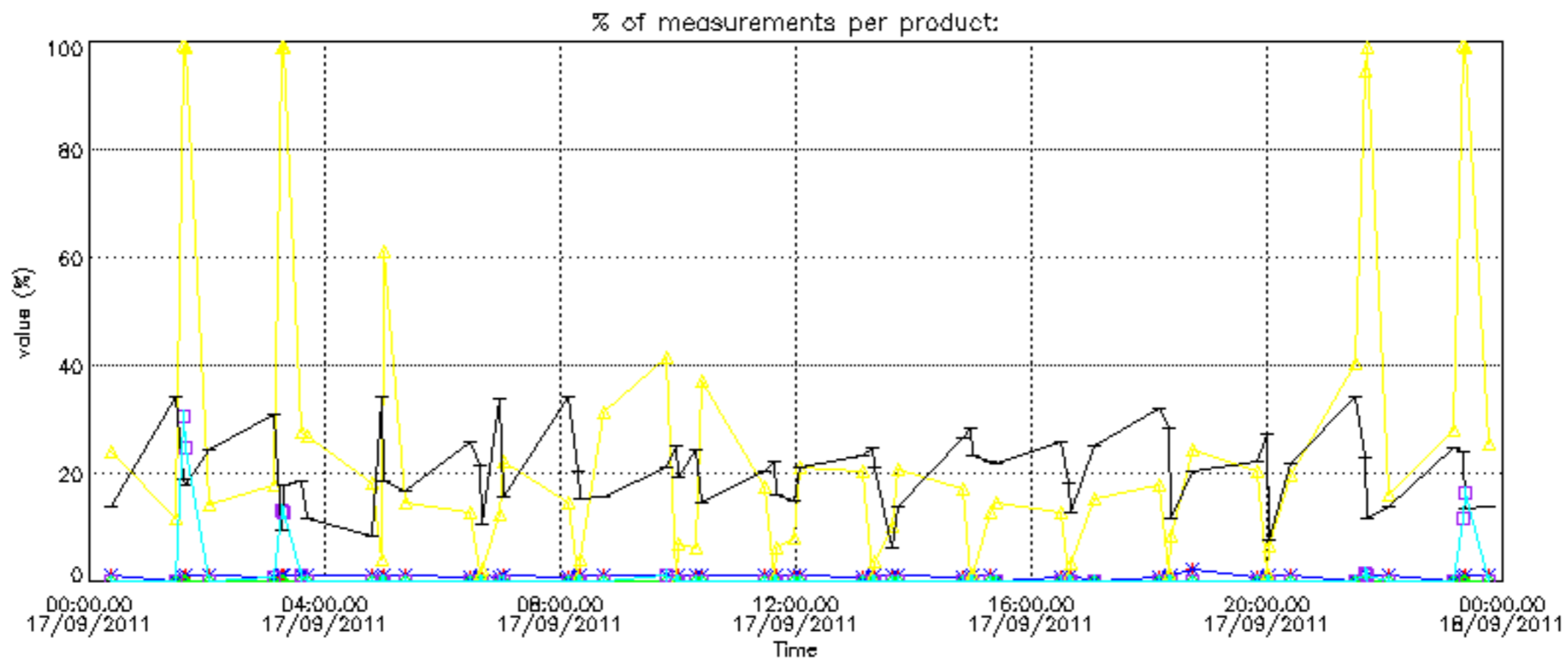


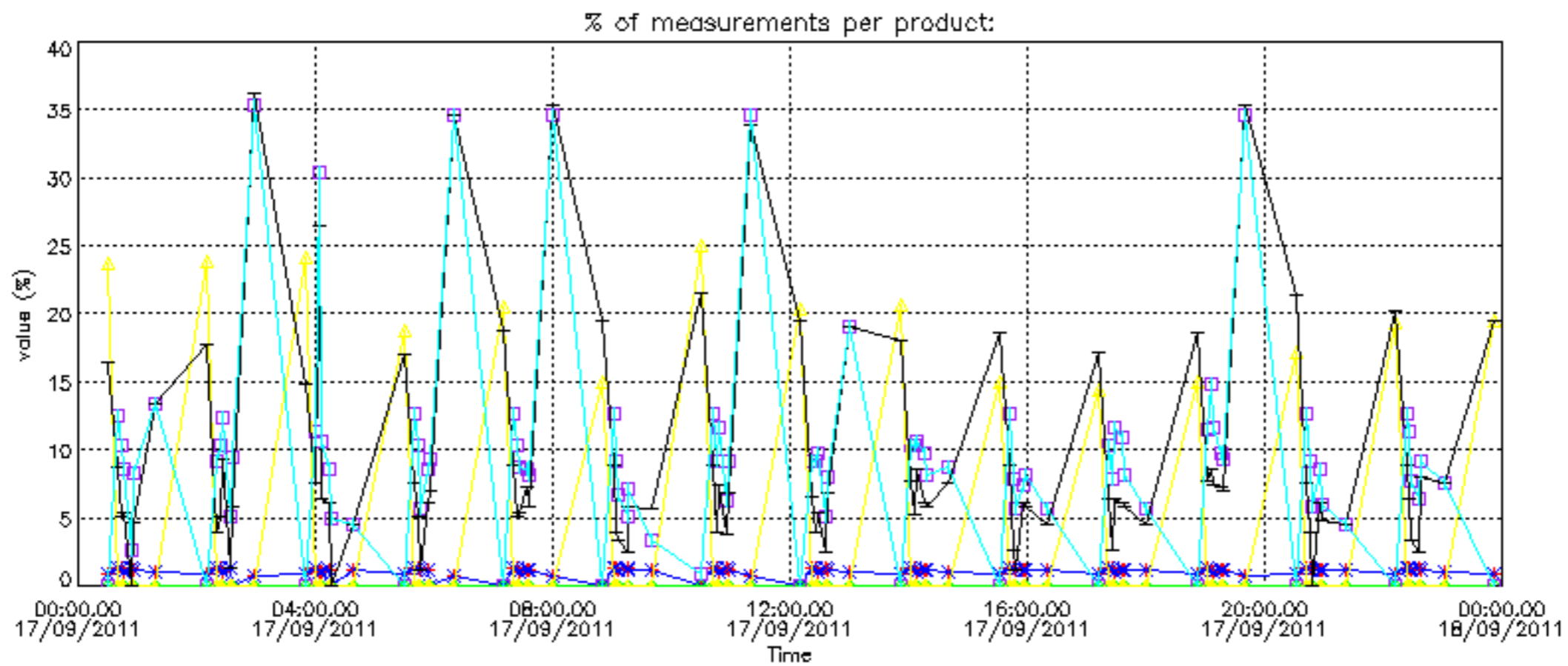
Percentage of flagged data per NO2 profile



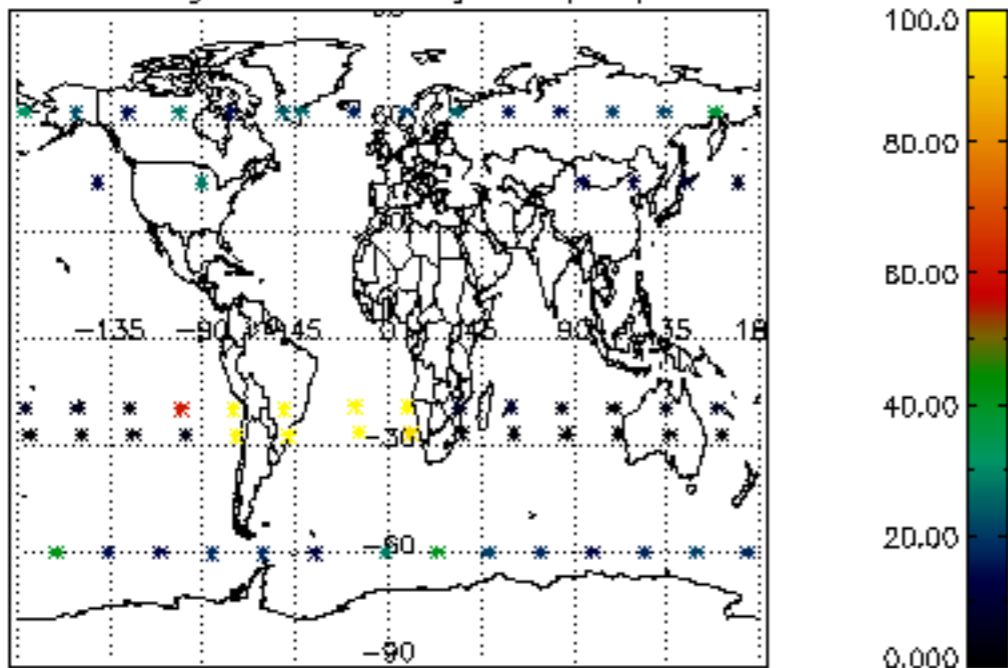
Percentage of flagged data per NO3 profile



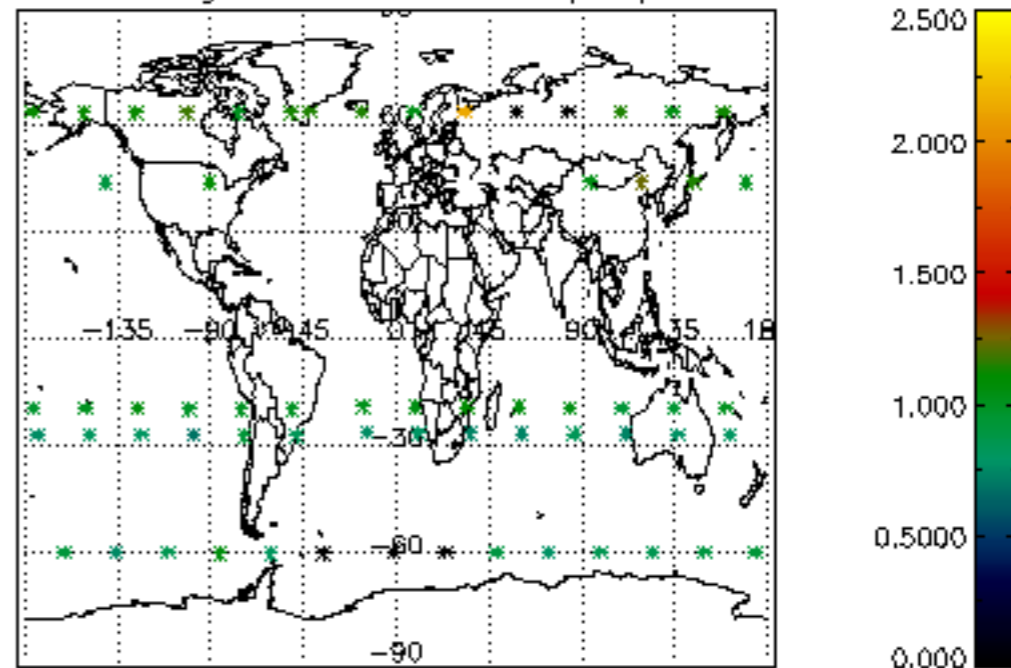




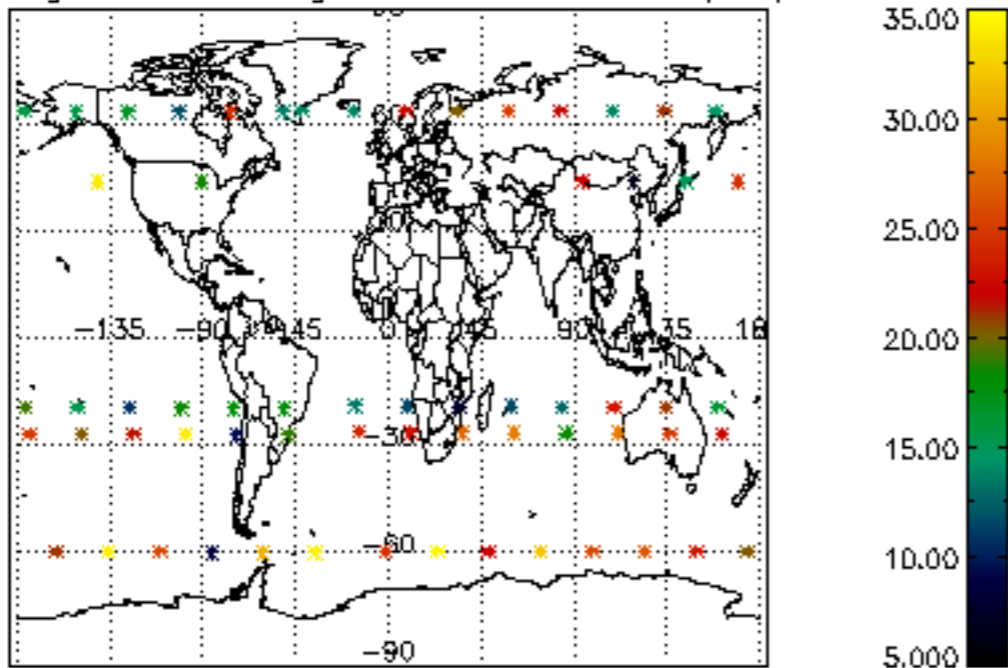
Percentage of cosmic ray hits per profile



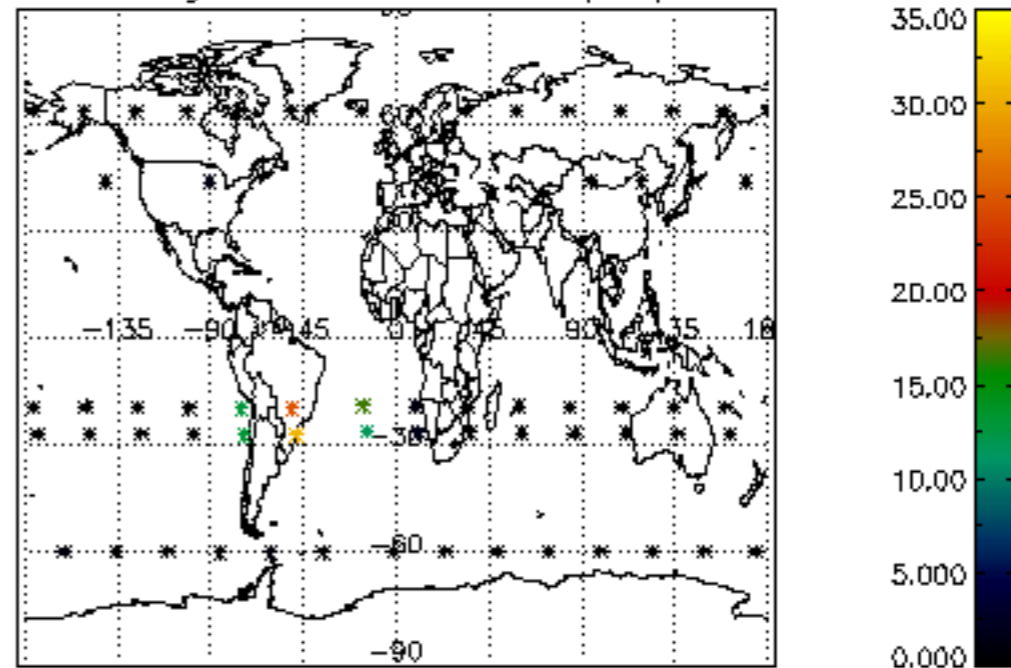
Percentage of datation errors per profile



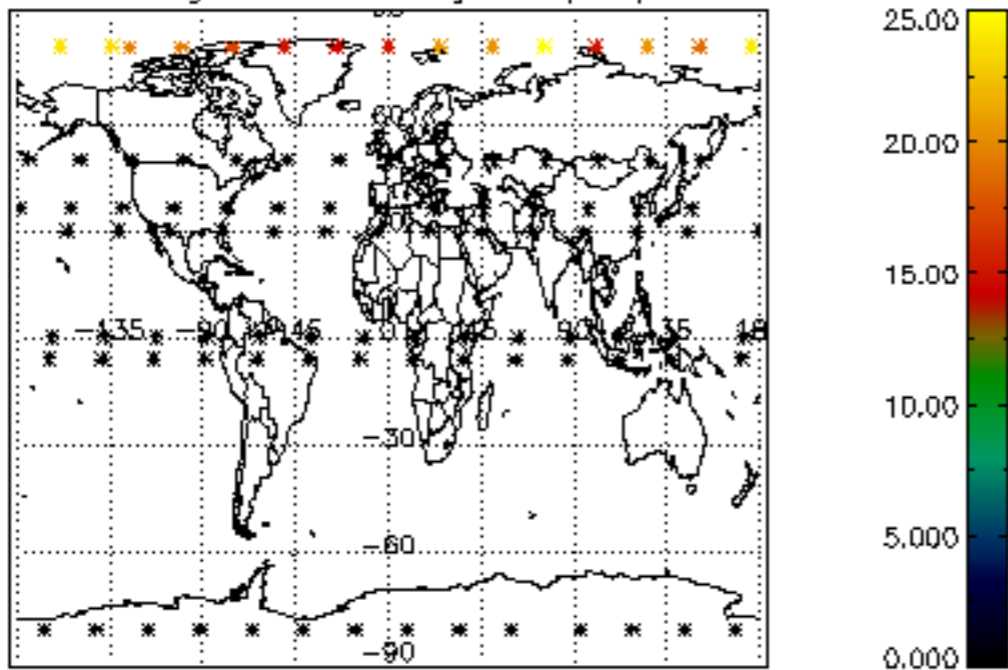
Percentage of star falling outside central band per profile



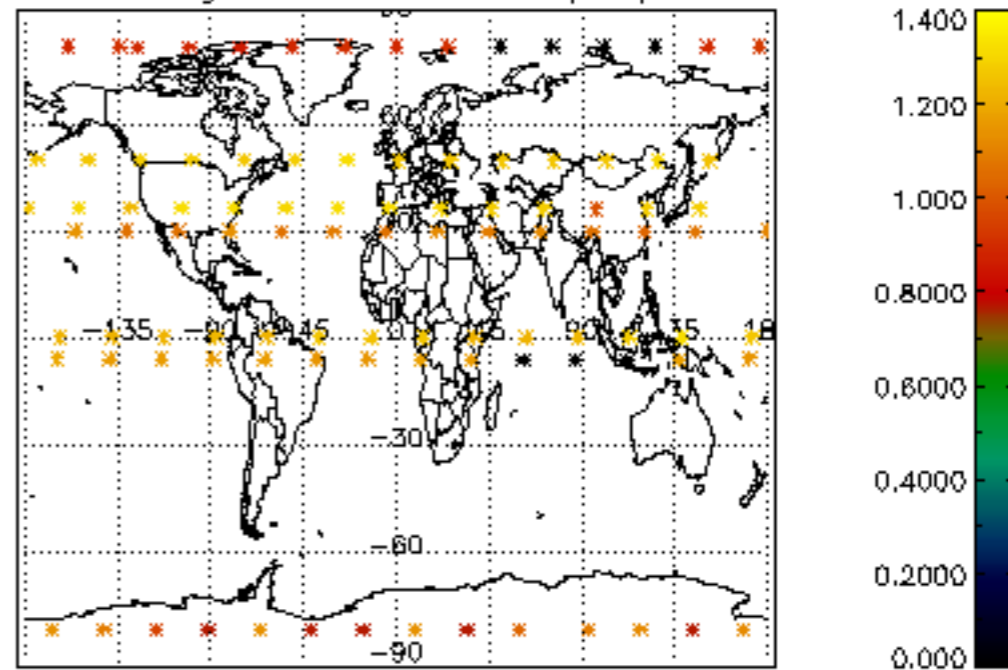
Percentage of saturation errors per profile



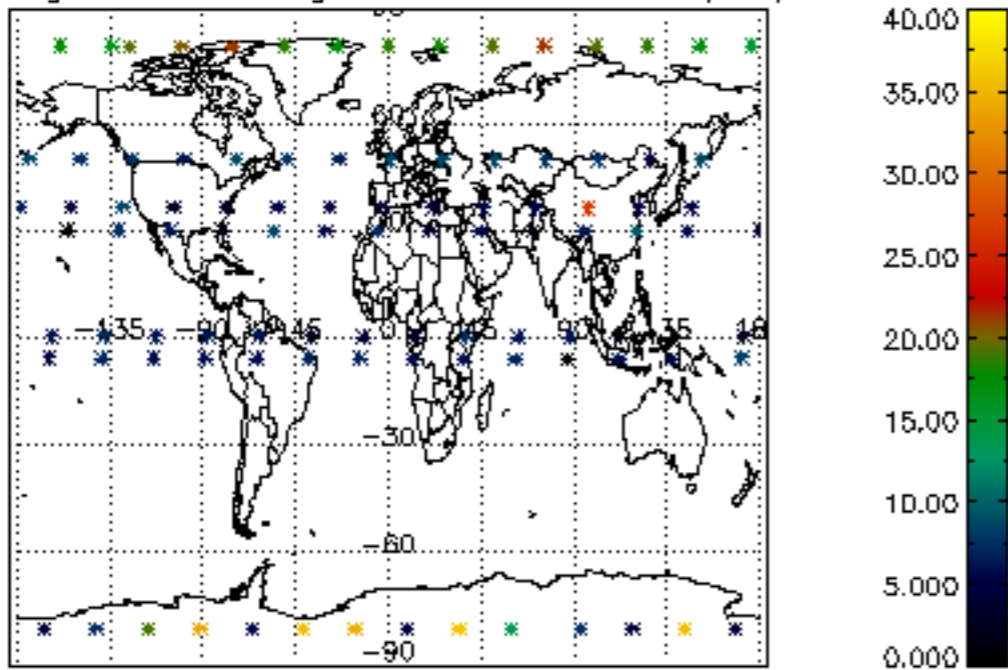
Percentage of cosmic ray hits per profile



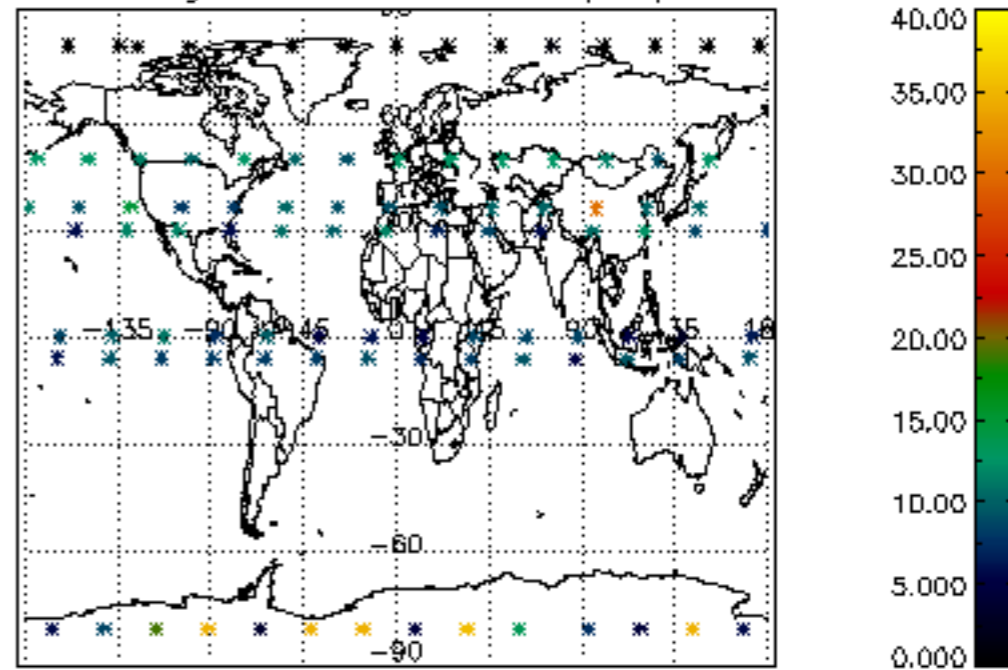
Percentage of datation errors per profile

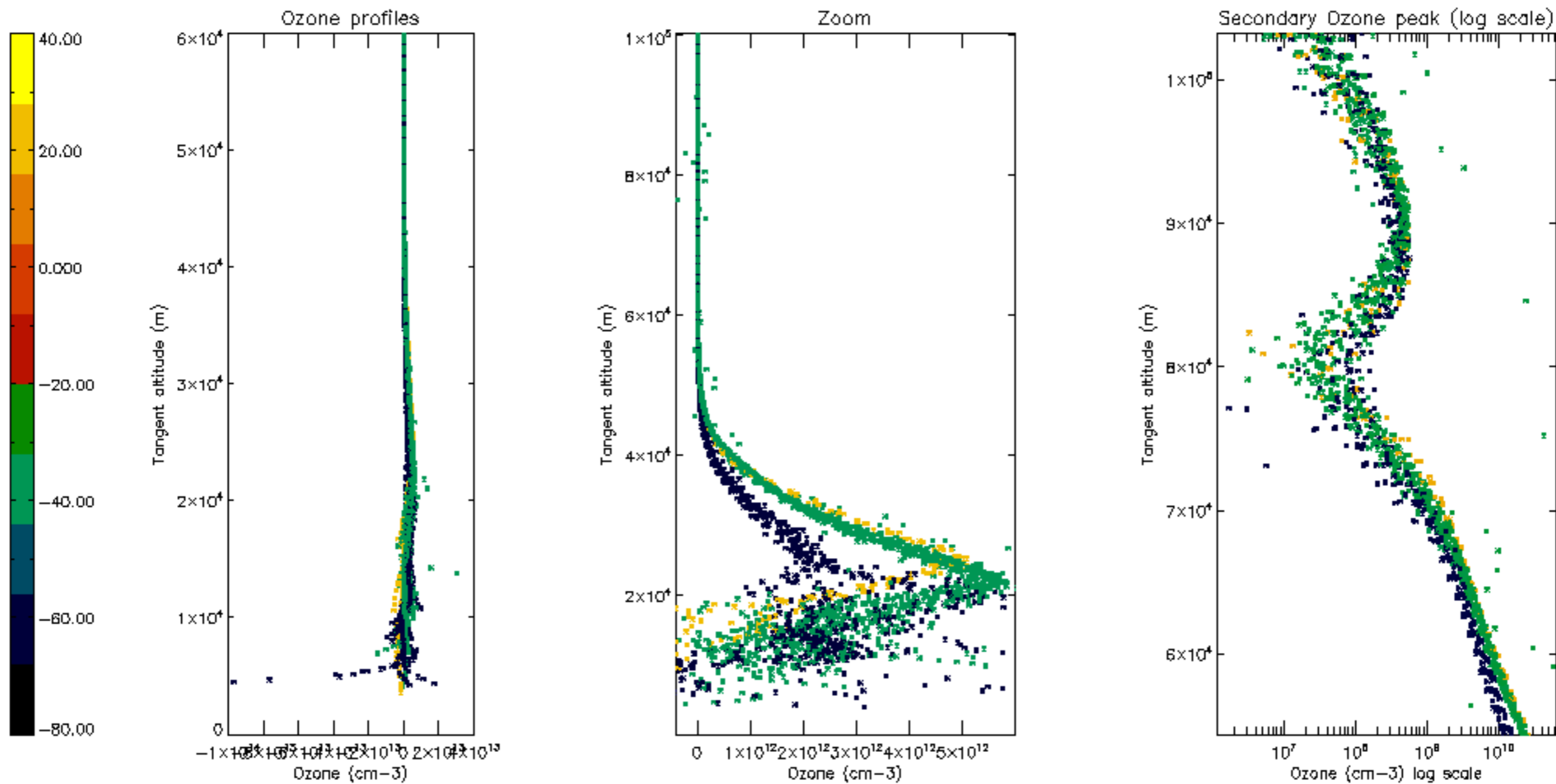


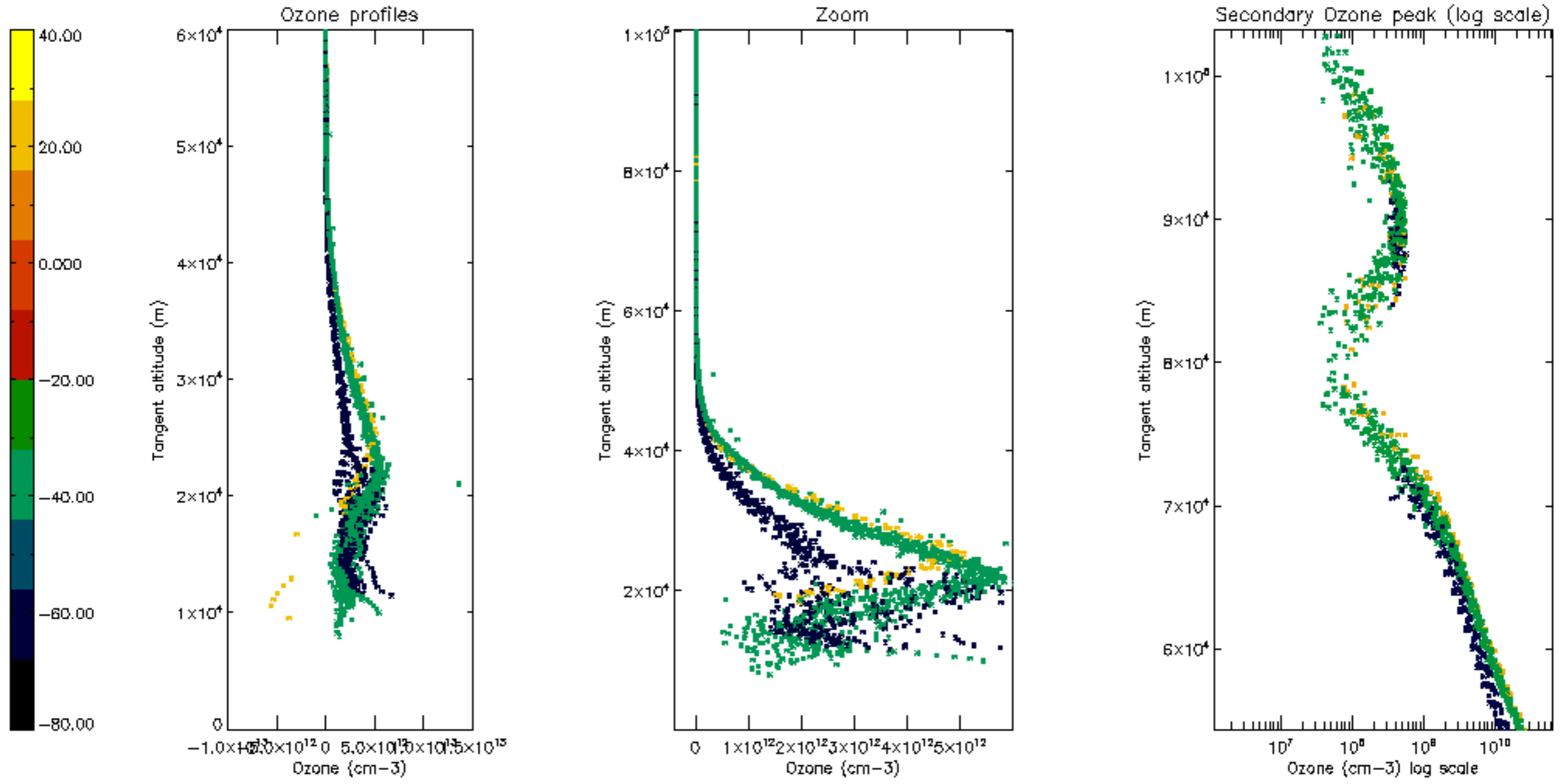
Percentage of star falling outside central band per profile

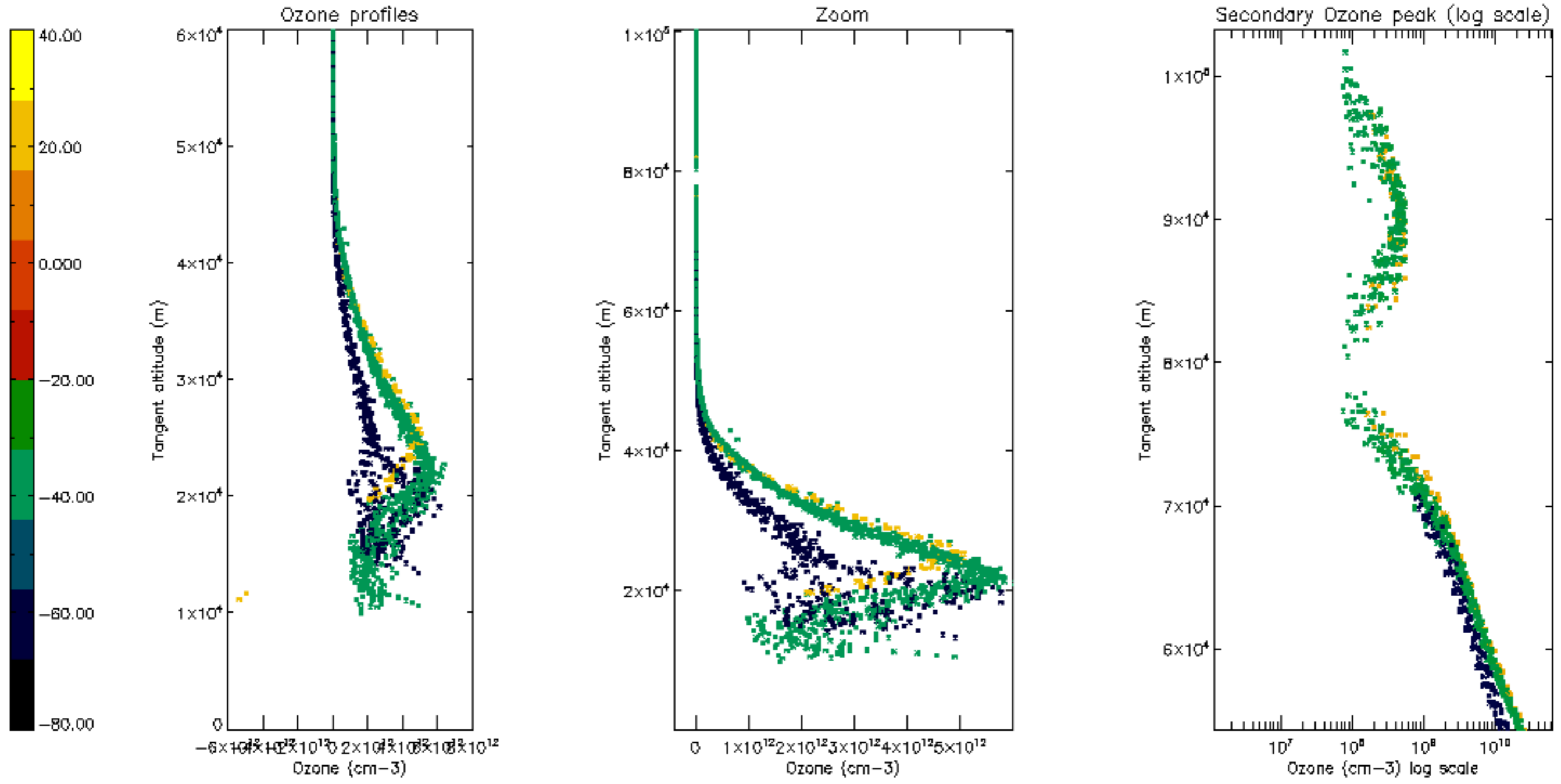


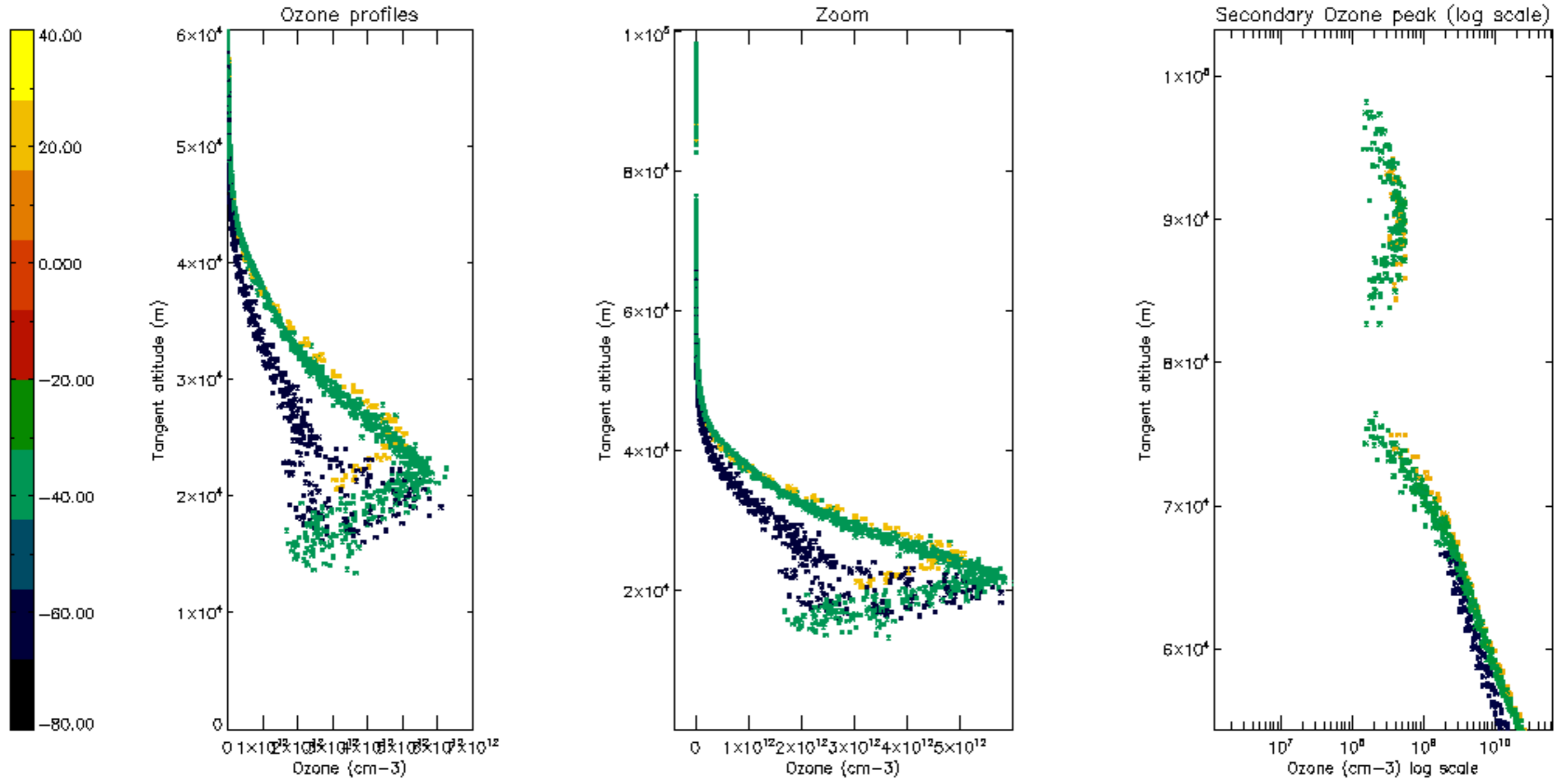
Percentage of saturation errors per profile

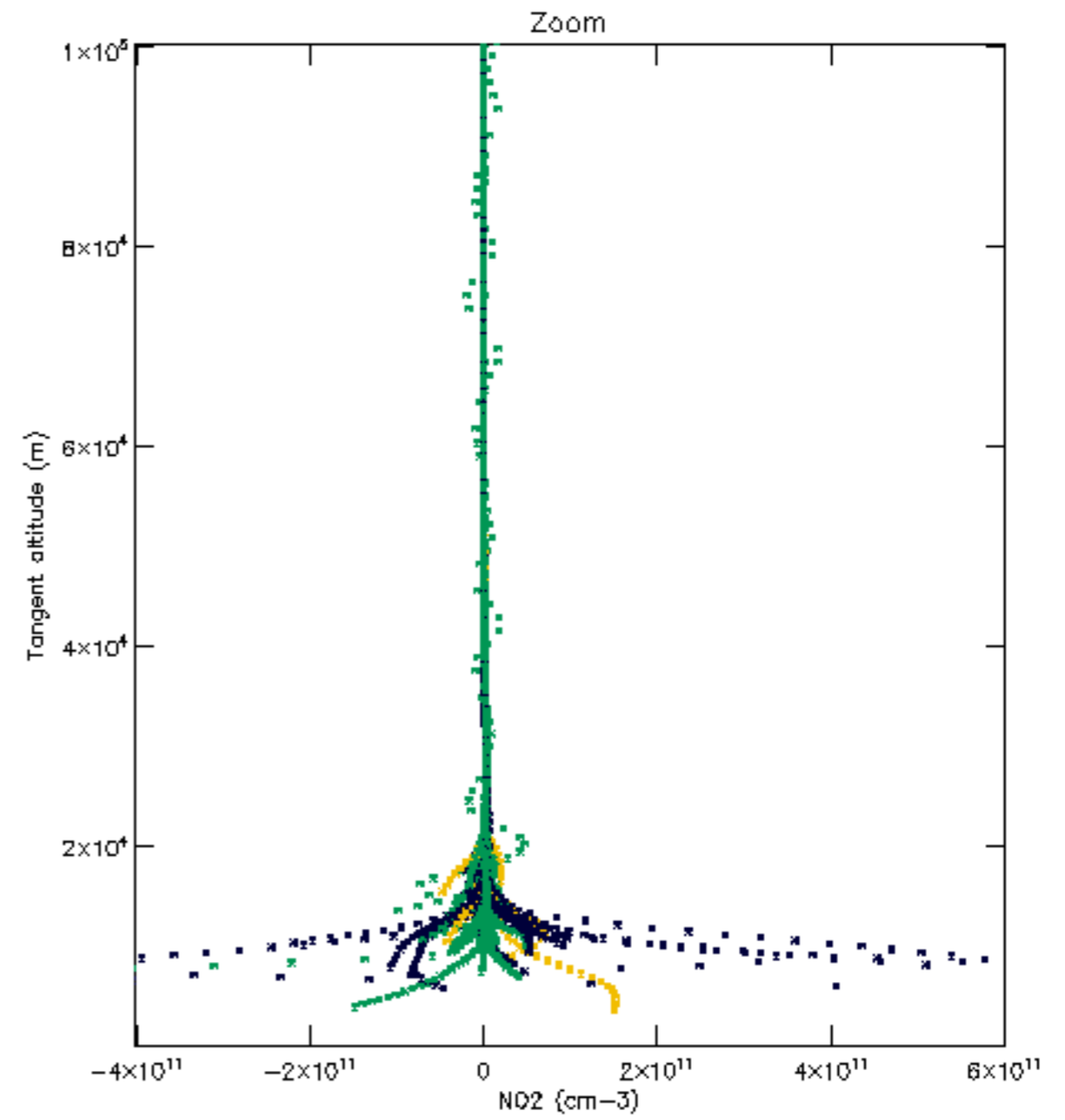
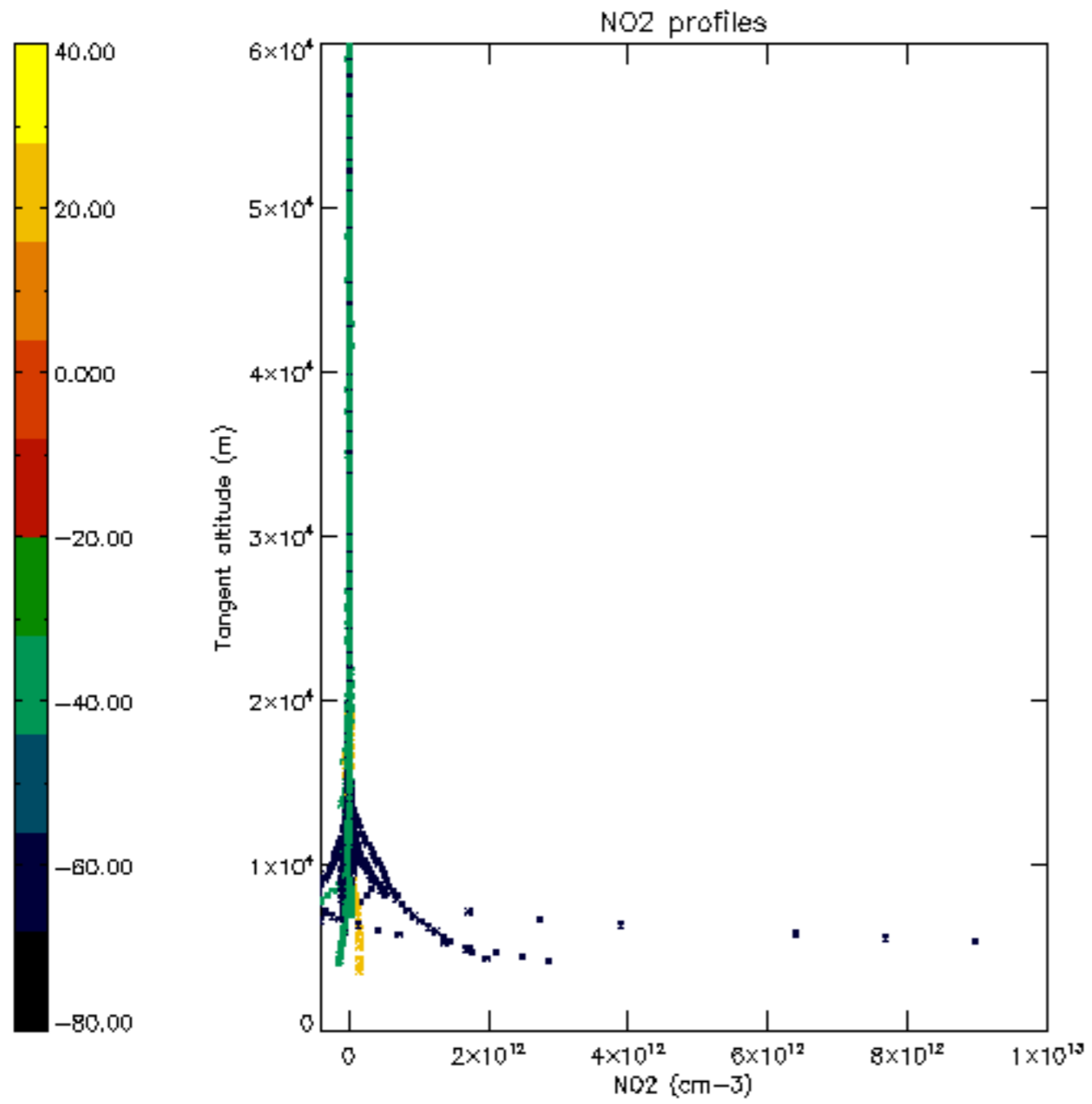


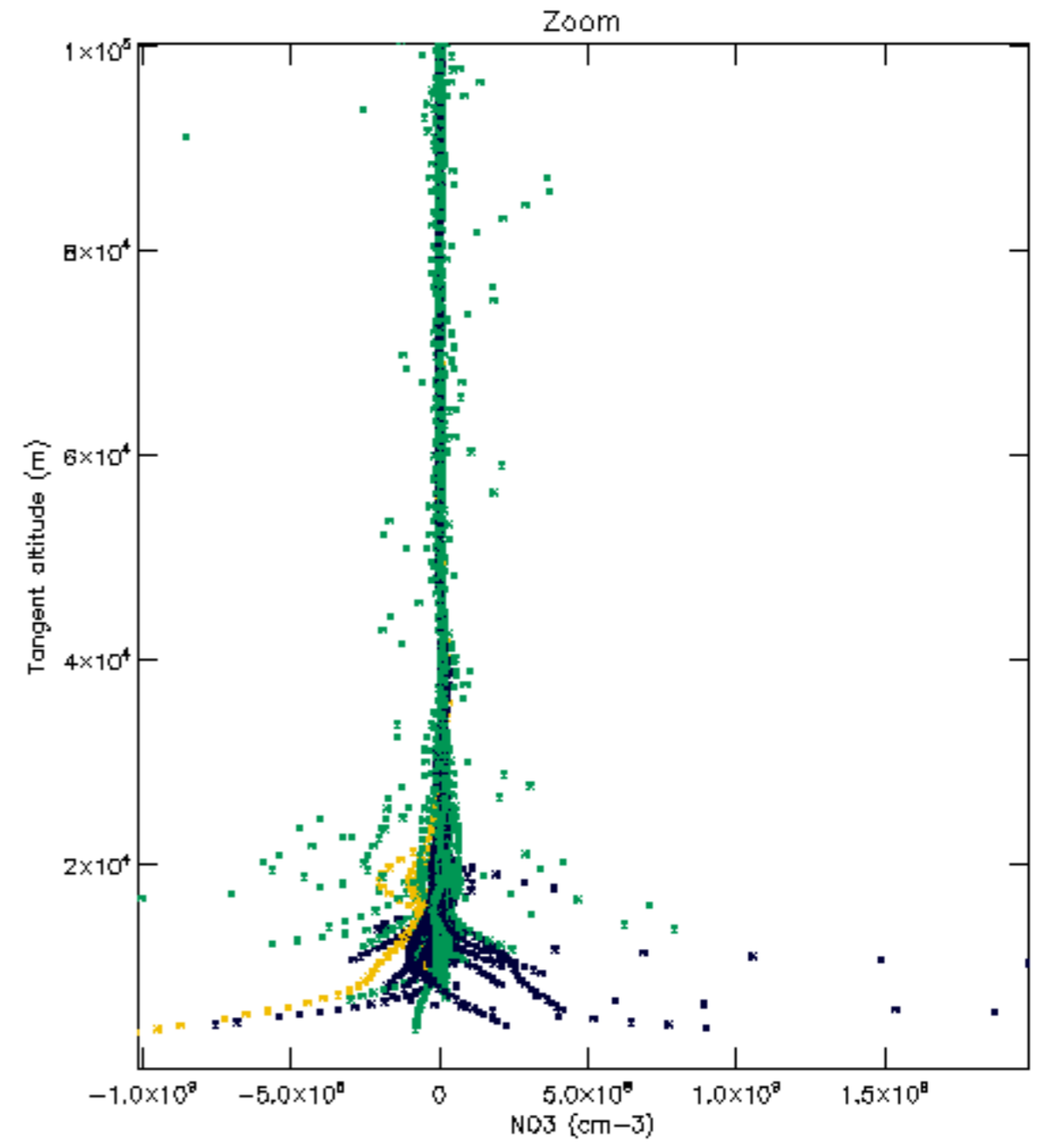
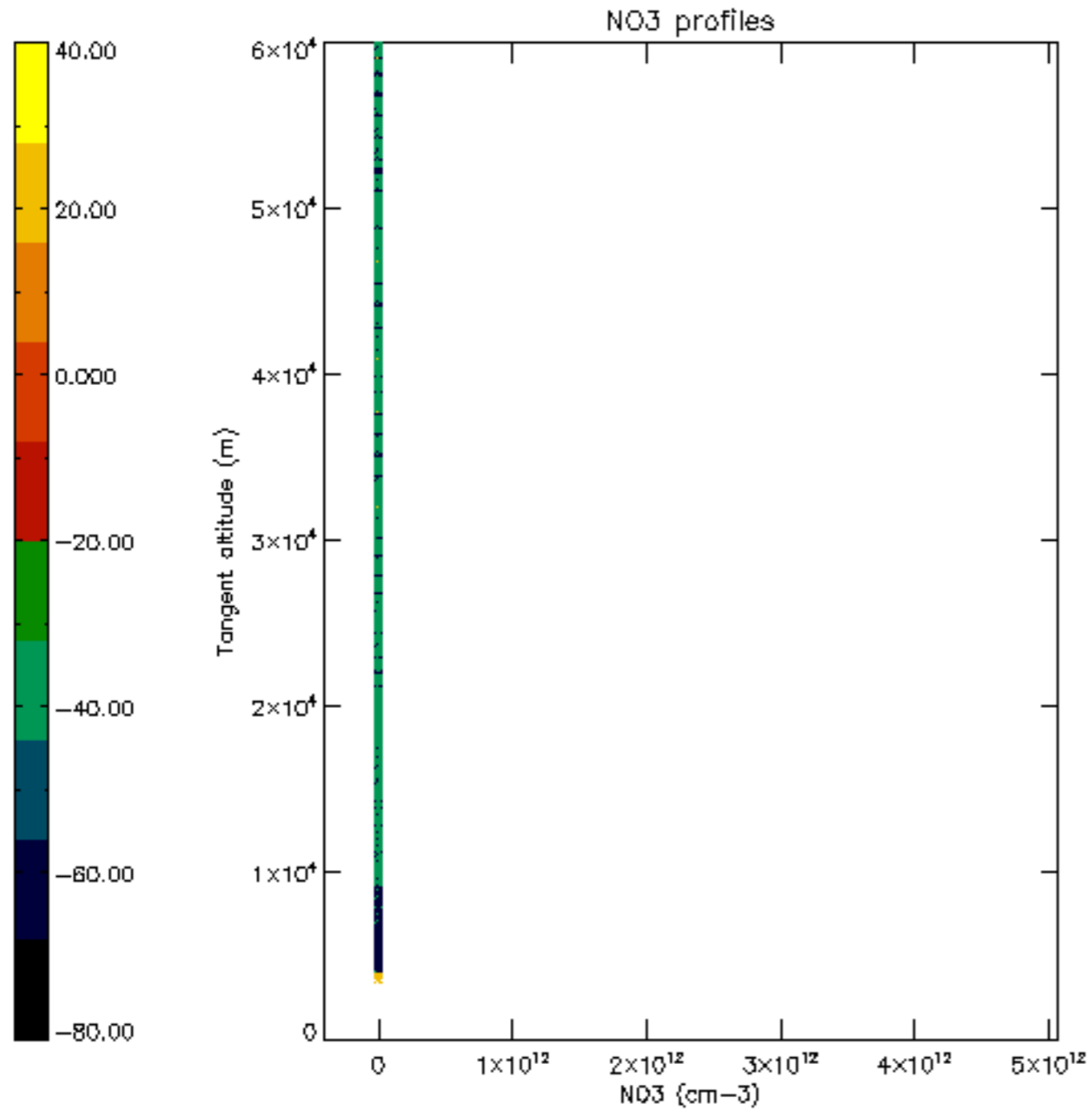


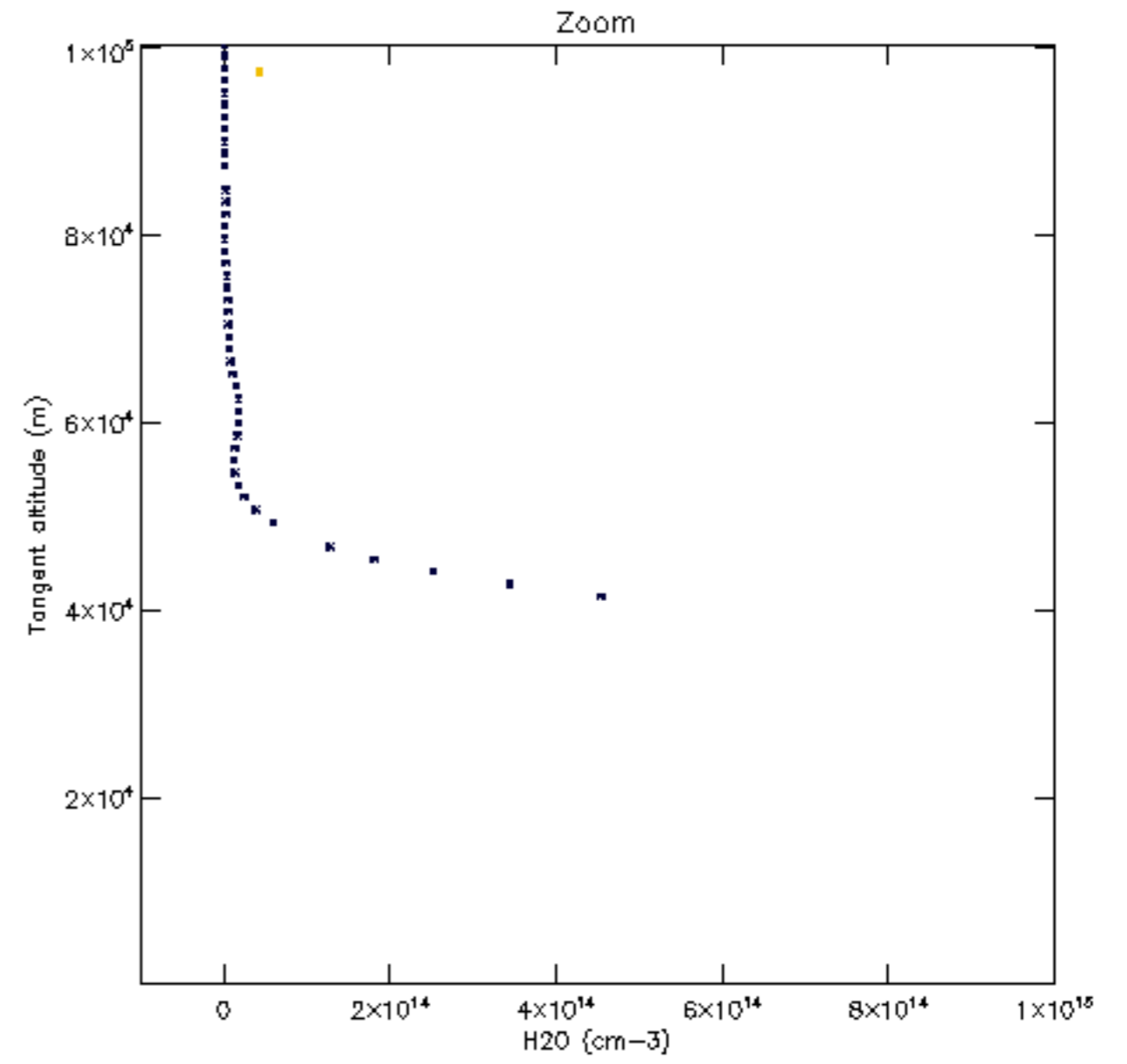
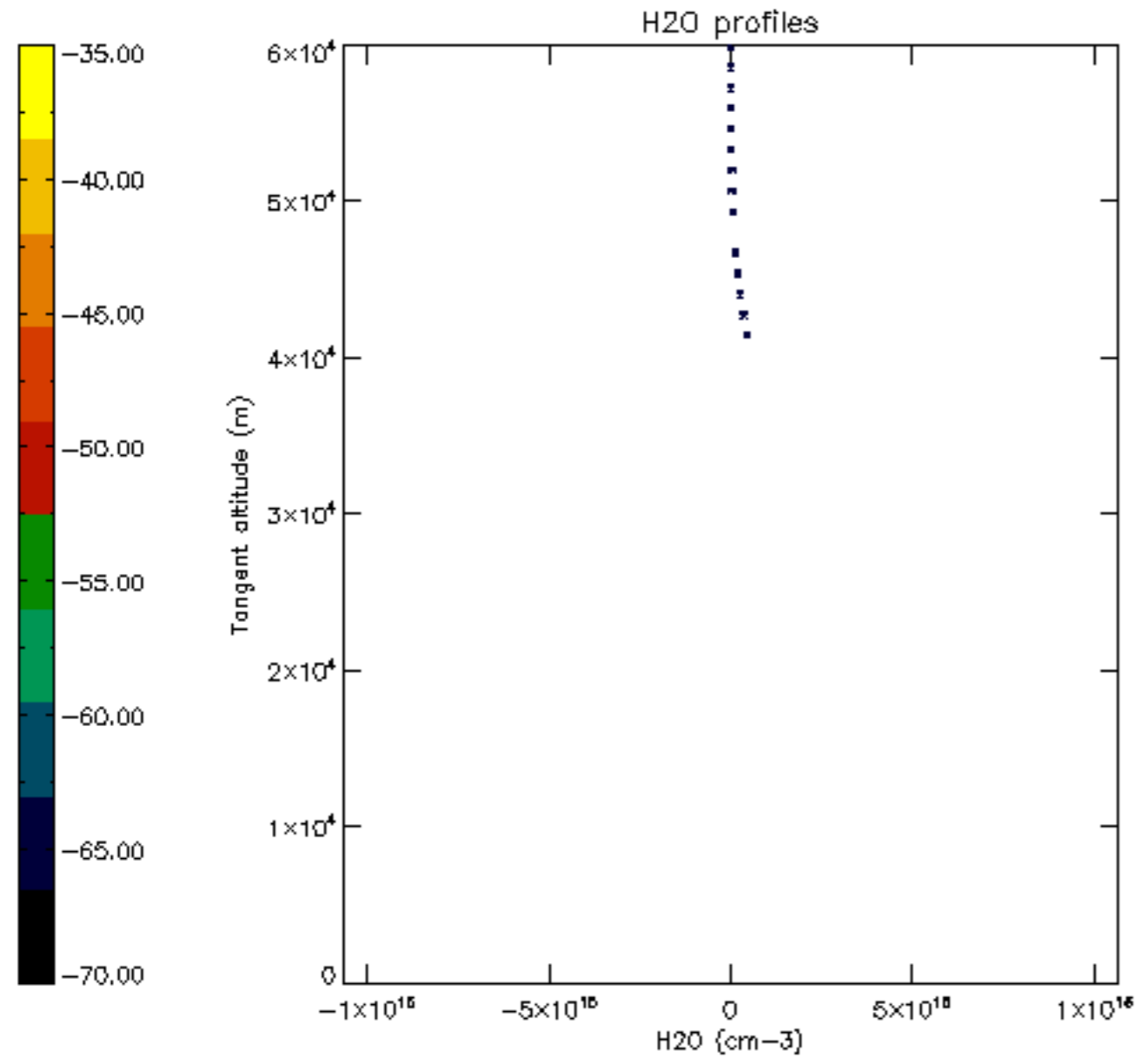


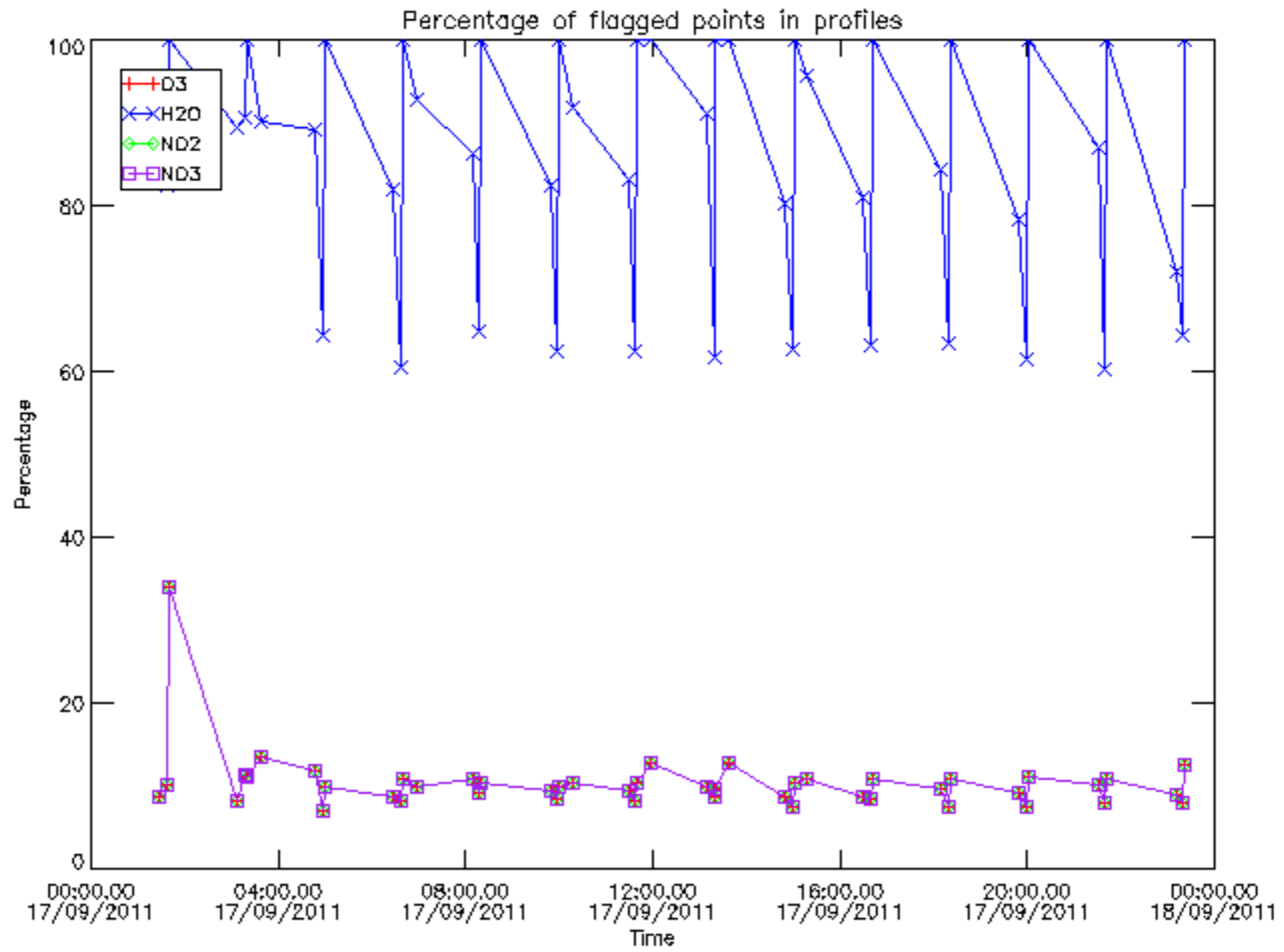




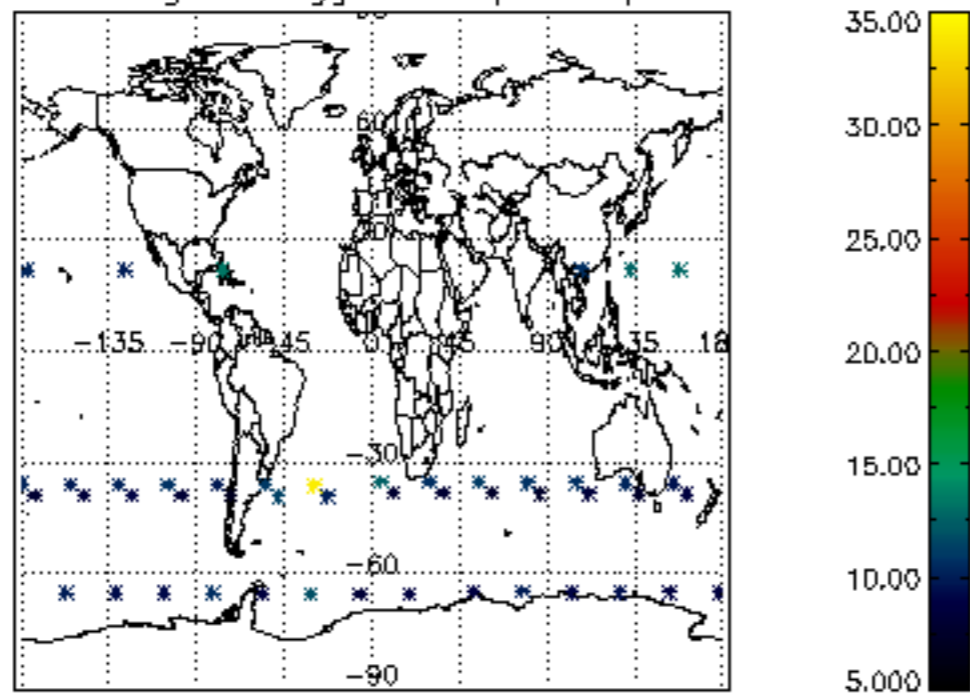




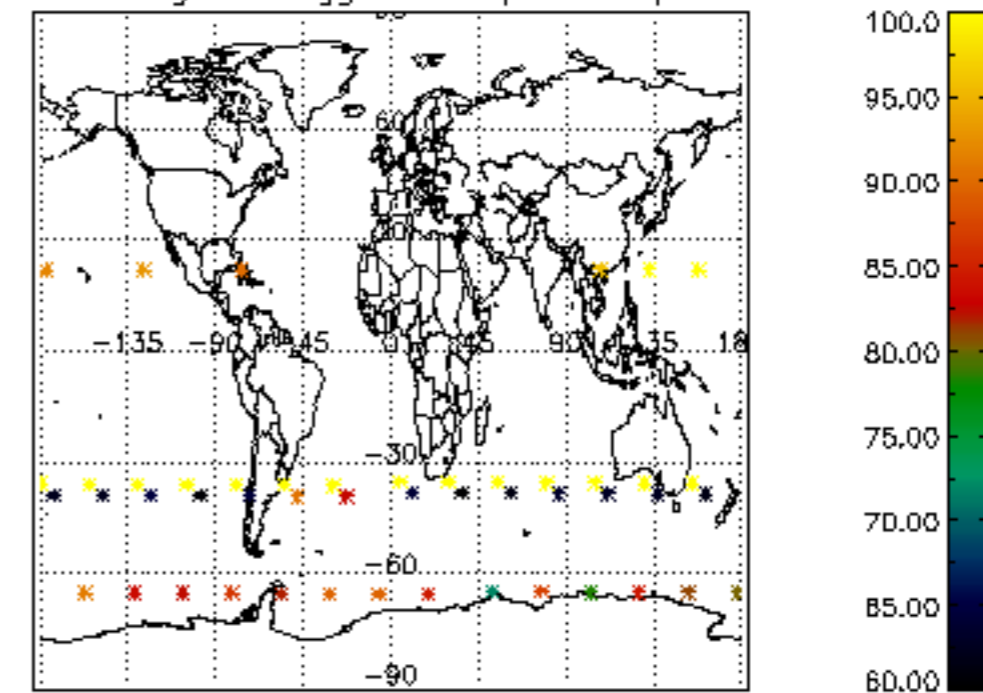




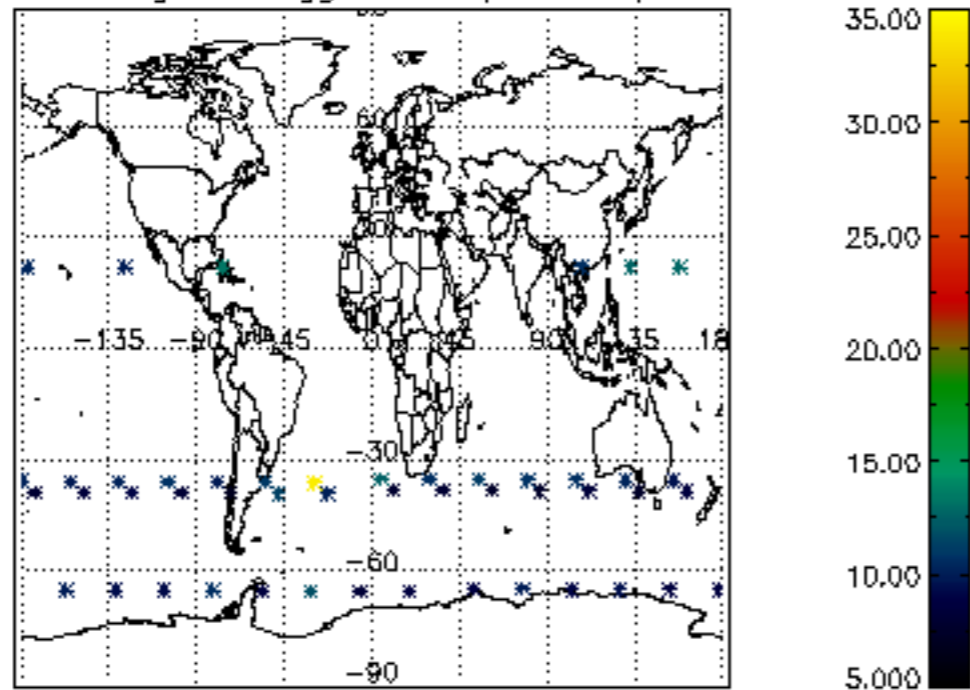
Percentage of flagged data per D3 profile



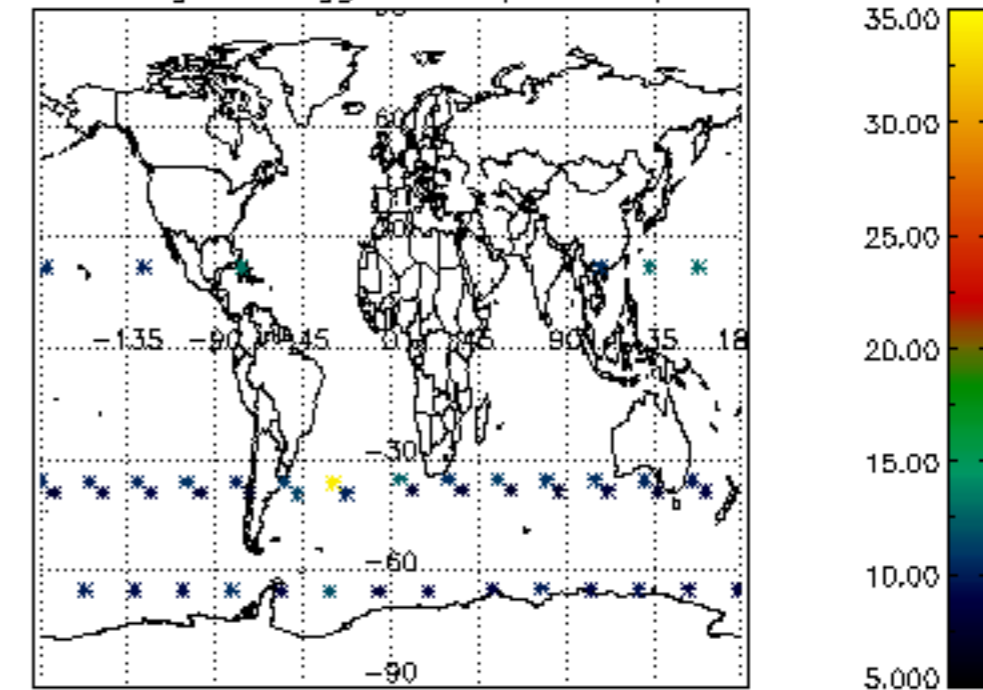
Percentage of flagged data per H2O profile

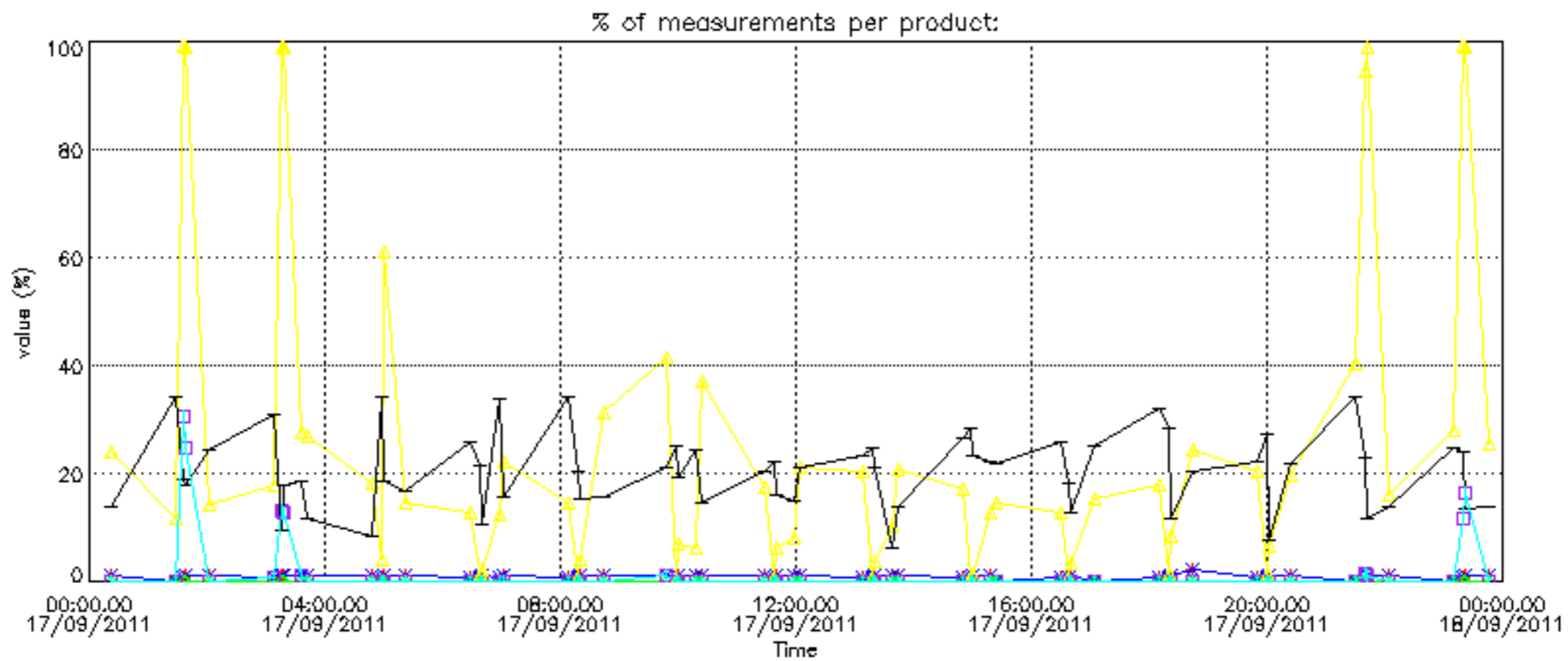


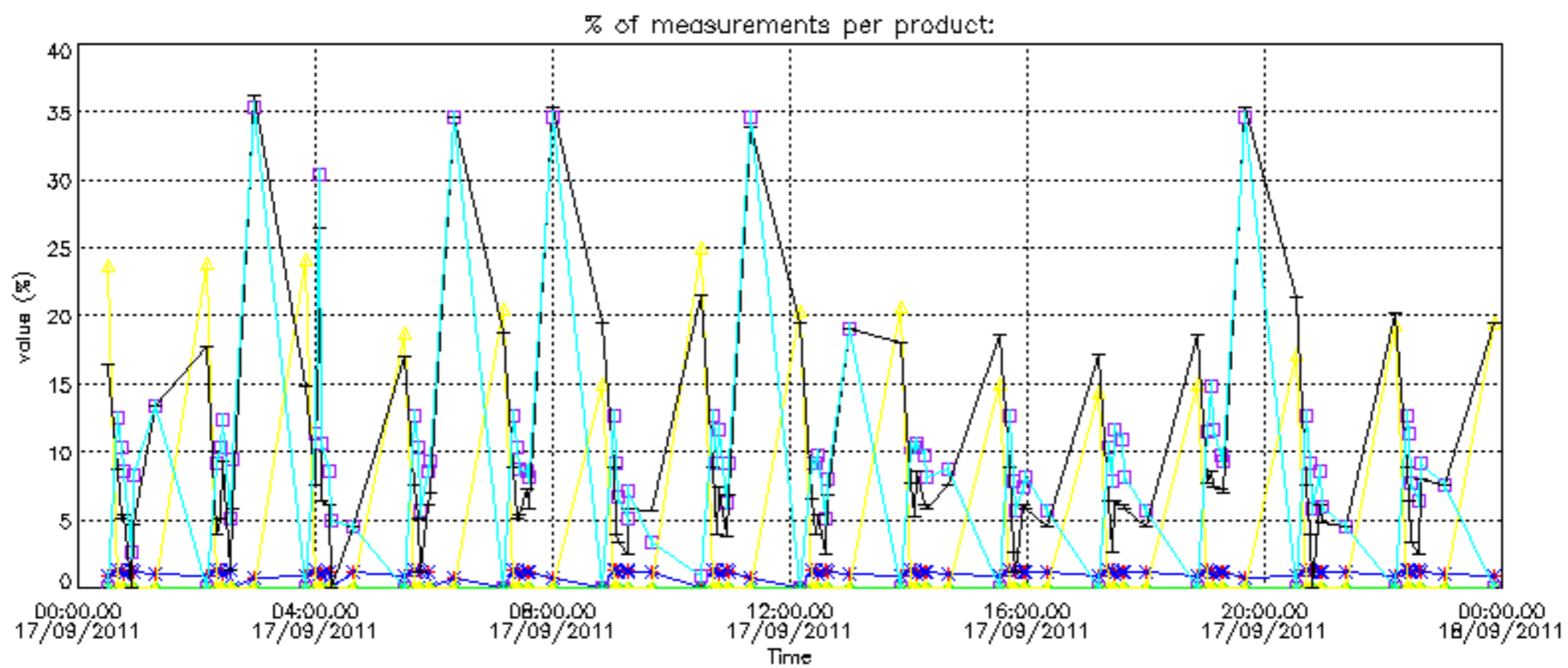
Percentage of flagged data per NO2 profile



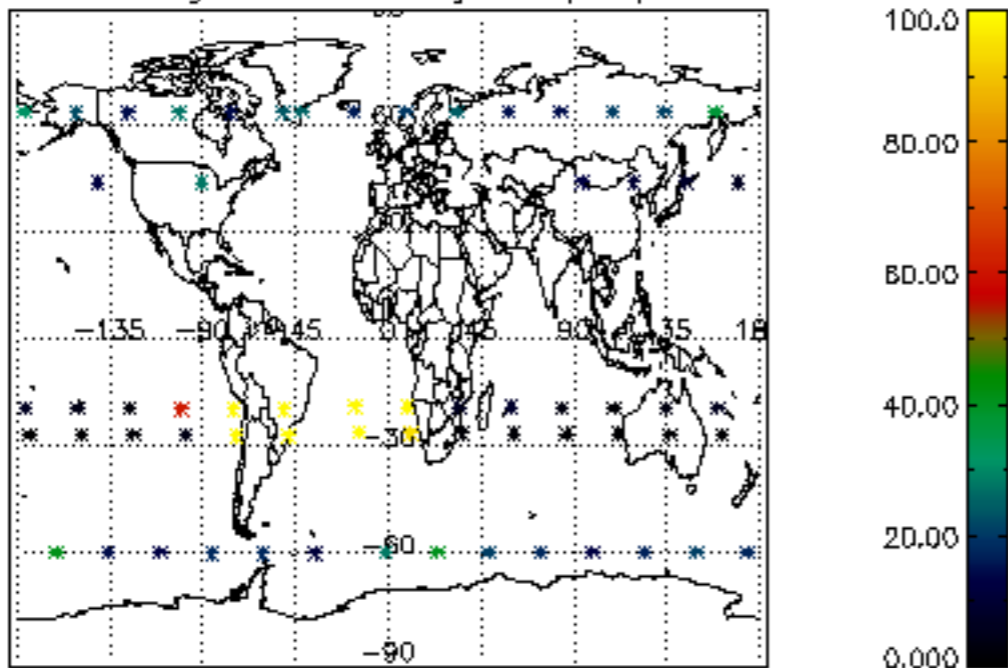
Percentage of flagged data per NO3 profile



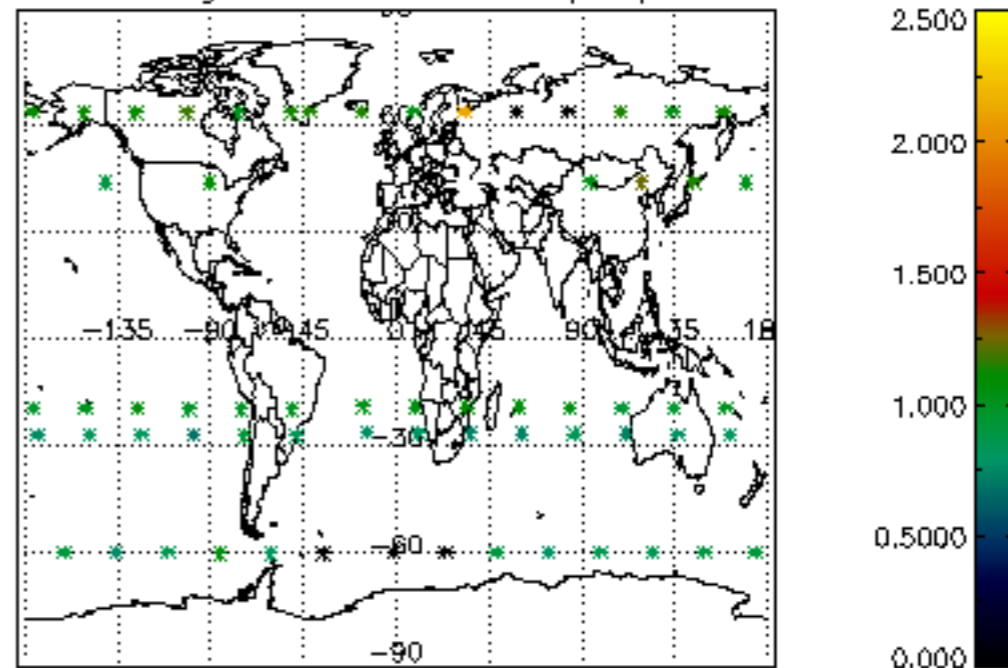




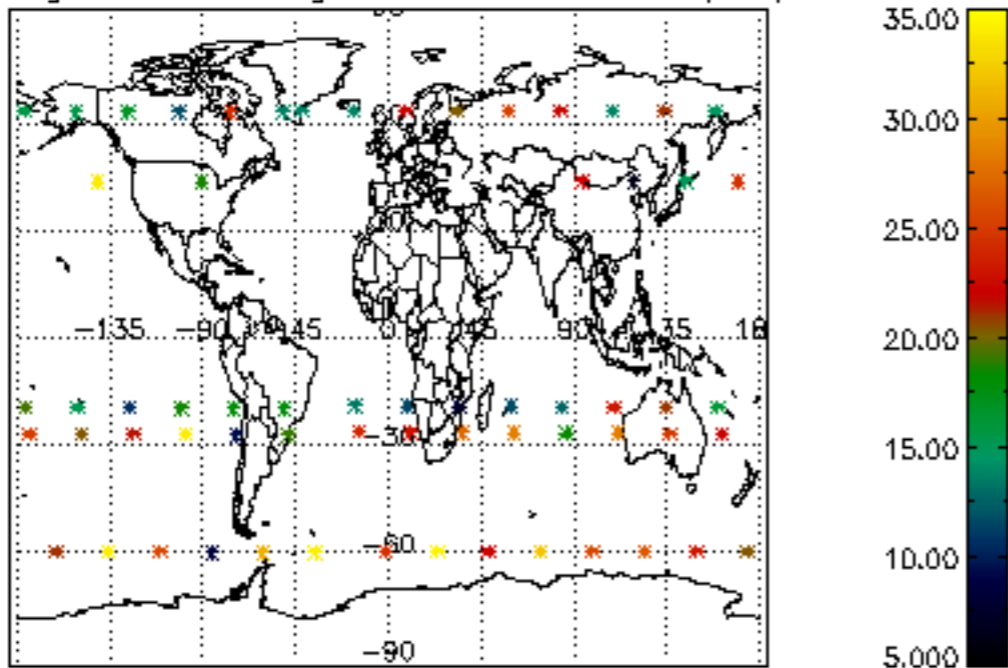
Percentage of cosmic ray hits per profile



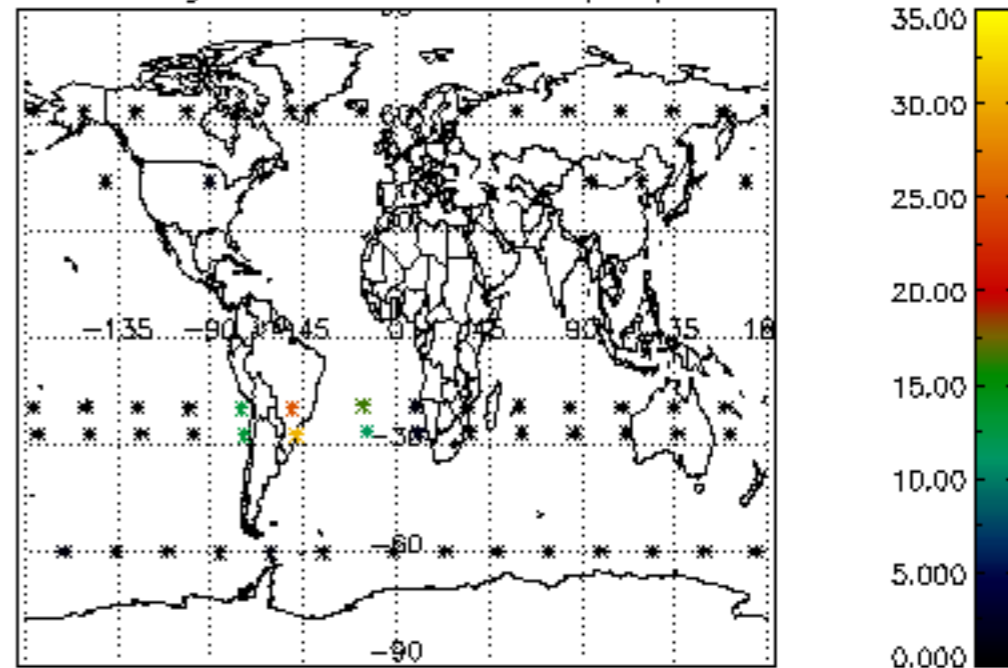
Percentage of datation errors per profile



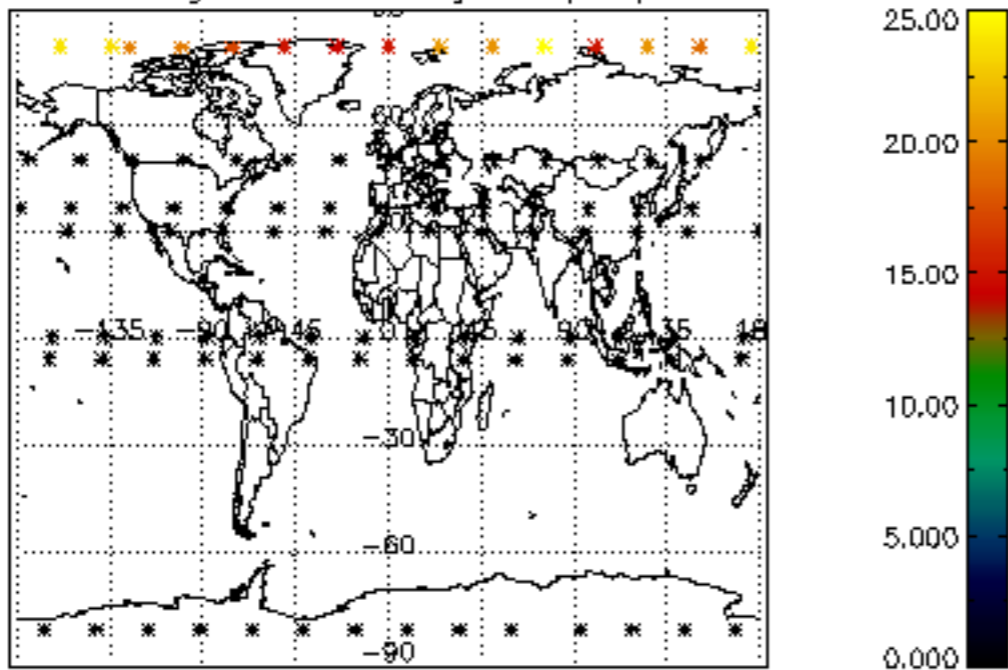
Percentage of star falling outside central band per profile



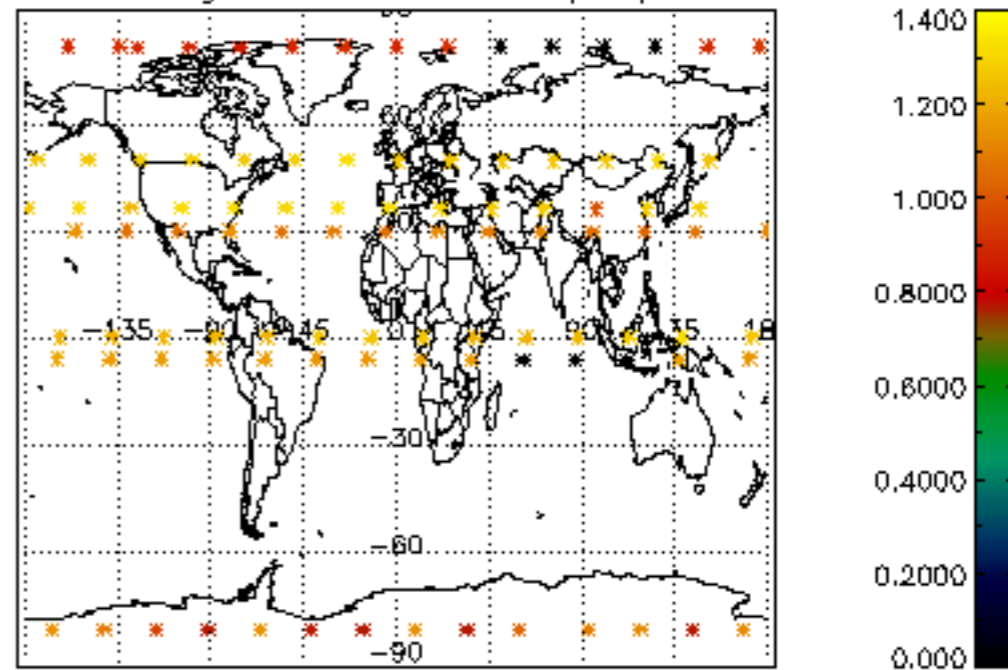
Percentage of saturation errors per profile



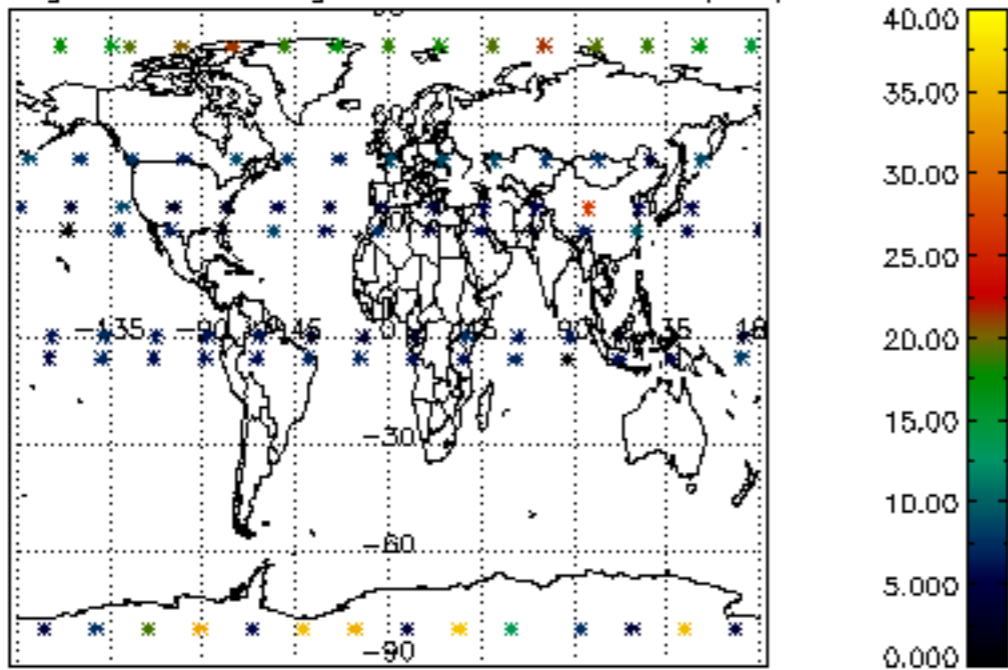
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

