

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	25APR2013 11:22:13
Data source version	GOMOS/6.01
Start time of products	07-03-2008 (07MAR2008 00:00:00)
Stop time of products	08-03-2008 (08MAR2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	343
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

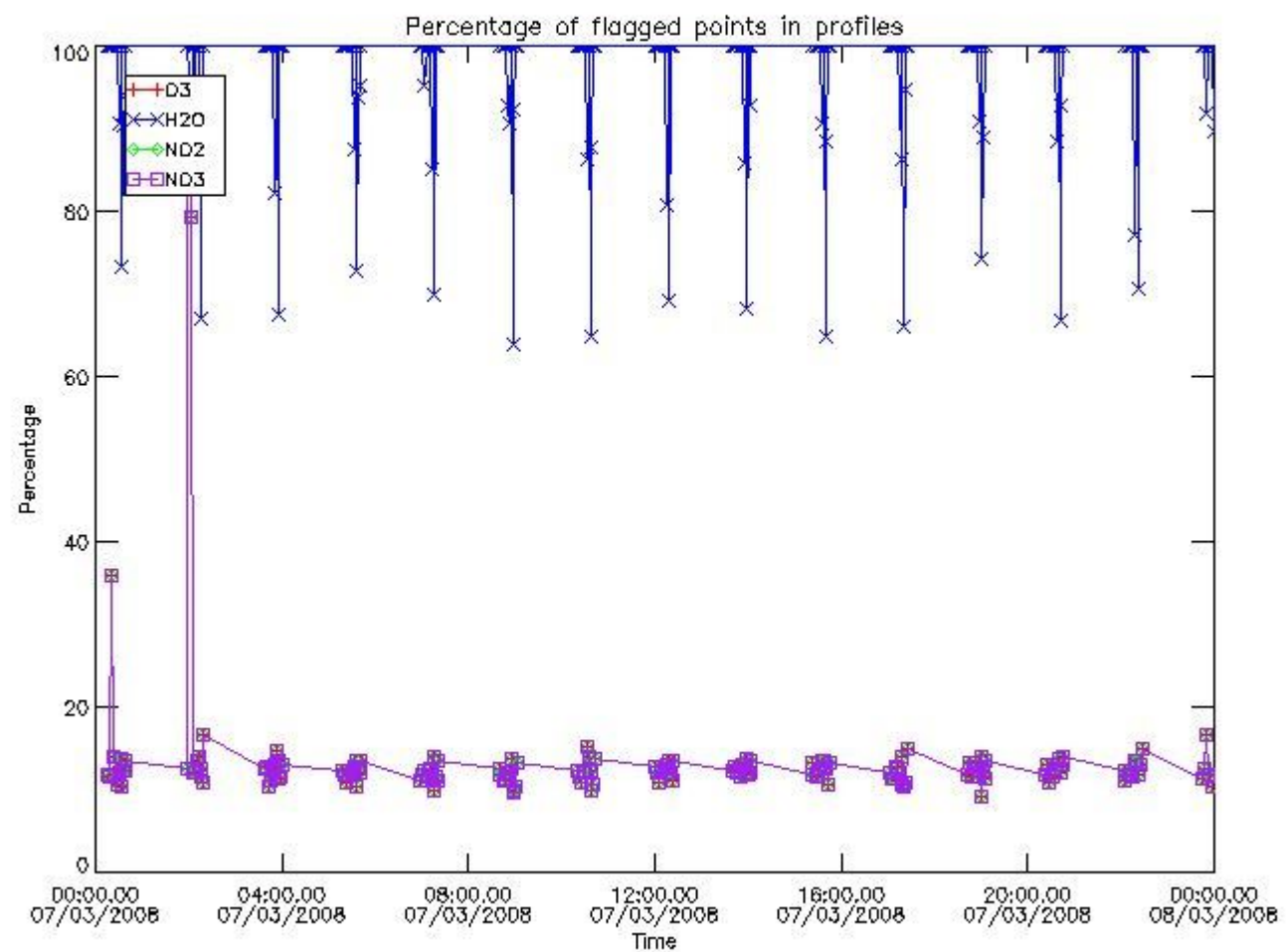
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080307_000600_000000462066_00345_31461_1139.N1	07-MAR-2008 00:06:00	Bright	46.000	168	17Zet Aql	2.9860	11000.	92	31461	No
2	GOM_NL__2PRFIN20080307_001602_000000442066_00345_31461_1140.N1	07-MAR-2008 00:16:02	Dark	43.500	155	41Pi Sgr	2.9000	6600.0	87	31461	No
3	GOM_NL__2PRFIN20080307_001756_000000442066_00345_31461_1141.N1	07-MAR-2008 00:17:56	Dark	44.000	57	34Sig Sgr	2.0660	26000.	88	31461	No
4	GOM_NL__2PRFIN20080307_002112_000000482066_00345_31461_1142.N1	07-MAR-2008 00:21:12	Dark	48.000	38	20Eps Sgr	1.8360	11000.	96	31461	No
5	GOM_NL__2PRFIN20080307_002413_000000442066_00345_31461_1143.N1	07-MAR-2008 00:24:13	Dark	44.000	85	Kap Sco	2.4070	28000.	88	31461	No
6	GOM_NL__2PRFIN20080307_002737_000000492066_00346_31462_1211.N1	07-MAR-2008 00:27:37	Dark	48.500	141	Bet Ara	2.8400	4600.0	97	31462	No
7	GOM_NL__2PRFIN20080307_003026_000000432066_00346_31462_1212.N1	07-MAR-2008 00:30:26	Dark	42.500	43	Alp TrA	1.9100	4250.0	85	31462	No
8	GOM_NL__2PRFIN20080307_003240_000000372066_00346_31462_1213.N1	07-MAR-2008 00:32:40	Dark	37.000	145	Gam TrA	2.8720	10600.	74	31462	No
9	GOM_NL__2PRFIN20080307_003413_000000492066_00346_31462_1214.N1	07-MAR-2008 00:34:13	Dark	49.000	4	Alp1Cen	-0.010000	5800.0	98	31462	No
10	GOM_NL__2PRFIN20080307_003530_000000422066_00346_31462_1215.N1	07-MAR-2008 00:35:30	Dark	41.500	10	Bet Cen	0.61000	28000.	83	31462	No
11	GOM_NL__2PRFIN20080307_003749_000000422066_00346_31462_1216.N1	07-MAR-2008 00:37:49	Dark	41.500	12	Alp1Cru	0.77500	30000.	83	31462	No
12	GOM_NL__2PRFIN20080307_003901_000000382066_00346_31462_1217.N1	07-MAR-2008 00:39:01	Dark	38.000	129	Del Cru	2.7930	26000.	76	31462	No
13	GOM_NL__2PRFIN20080307_004031_000000432066_00346_31462_1218.N1	07-MAR-2008 00:40:31	Straylight	43.000	64	Gam Cen	2.2000	10600.	86	31462	No
14	GOM_NL__2PRFIN20080307_004312_000000412066_00346_31462_1219.N1	07-MAR-2008 00:43:12	Straylight	40.500	113	Mu Vel	2.6920	5000.0	81	31462	No
15	GOM_NL__2PRFIN20080307_005530_000000452066_00346_31462_1220.N1	07-MAR-2008 00:55:30	Twilight_and_stray	45.000	48	30Alp Hya	1.9770	4100.0	90	31462	No
16	GOM_NL__2PRFIN20080307_010119_000000412066_00346_31462_1221.N1	07-MAR-2008 01:01:19	Bright	40.500	22	32Alp Leo	1.3600	15200.	81	31462	No
17	GOM_NL__2PRFIN20080307_010345_000000412066_00346_31462_1222.N1	07-MAR-2008 01:03:45	Bright	41.000	51	41Gam1Leo	2.0100	4500.0	82	31462	No
18	GOM_NL__2PRFIN20080307_011509_000000392066_00346_31462_1223.N1	07-MAR-2008 01:15:09	Bright	38.500	82	48Bet UMa	2.3650	10600.	77	31462	No
19	GOM_NL__2PRFIN20080307_011634_000000402066_00346_31462_1224.N1	07-MAR-2008 01:16:34	Bright	40.000	36	50Alp UMa	1.8000	6300.0	80	31462	No
20	GOM_NL__2PRFIN20080307_012320_000000332066_00346_31462_1225.N1	07-MAR-2008 01:23:20	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	31462	No
21	GOM_NL__2PRFIN20080307_013100_000000372066_00346_31462_1226.N1	07-MAR-2008 01:31:00	Bright	36.500	89	5Alp Cep	2.4510	8000.0	73	31462	No
22	GOM_NL__2PRFIN20080307_013606_000000362066_00346_31462_1227.N1	07-MAR-2008 01:36:06	Bright	36.000	19	50Alp Cyg	1.2460	10500.	72	31462	No
23	GOM_NL__2PRFIN20080307_013739_000000372066_00346_31462_1228.N1	07-MAR-2008 01:37:39	Bright	36.500	66	37Gam Cyg	2.2080	5900.0	73	31462	No
24	GOM_NL__2PRFIN20080307_013915_000000362066_00346_31462_1229.N1	07-MAR-2008 01:39:15	Bright	36.000	92	53Eps Cyg	2.5000	4500.0	72	31462	No
25	GOM_NL__2PRFIN20080307_014636_000000452066_00346_31462_1230.N1	07-MAR-2008 01:46:36	Bright	44.500	168	17Zet Aql	2.9860	11000.	89	31462	No
26	GOM_NL__2PRFIN20080307_015638_000000452066_00346_31462_1231.N1	07-MAR-2008 01:56:38	Dark	45.000	155	41Pi Sgr	2.9000	6600.0	90	31462	No
27	GOM_NL__2PRFIN20080307_015833_000000452066_00346_31462_1232.N1	07-MAR-2008 01:58:33	Dark	45.000	57	34Sig Sgr	2.0660	26000.	90	31462	No
28	GOM_NL__2PRFIN20080307_020149_000000422066_00346_31462_1233.N1	07-MAR-2008 02:01:49	Dark	41.500	38	20Eps Sgr	1.8360	11000.	83	31462	No
29	GOM_NL__2PRFIN20080307_020449_000000472066_00346_31462_1234.N1	07-MAR-2008 02:04:49	Dark	46.500	85	Kap Sco	2.4070	28000.	93	31462	No
30	GOM_NL__2PRFIN20080307_020814_000000432066_00347_31463_1219.N1	07-MAR-2008 02:08:14	Dark	42.500	141	Bet Ara	2.8400	4600.0	85	31463	No
31	GOM_NL__2PRFIN20080307_021102_000000382066_00347_31463_1220.N1	07-MAR-2008 02:11:02	Dark	37.500	43	Alp TrA	1.9100	4250.0	75	31463	No
32	GOM_NL__2PRFIN20080307_021316_000000372066_00347_31463_1221.N1	07-MAR-2008 02:13:16	Dark	36.500	145	Gam TrA	2.8720	10600.	73	31463	No
33	GOM_NL__2PRFIN20080307_021449_000000452066_00347_31463_1222.N1	07-MAR-2008 02:14:49	Dark	44.500	4	Alp1Cen	-0.010000	5800.0	89	31463	No
34	GOM_NL__2PRFIN20080307_021606_000000412066_00347_31463_1223.N1	07-MAR-2008 02:16:06	Dark	41.000	10	Bet Cen	0.61000	28000.	82	31463	No
35	GOM_NL__2PRFIN20080307_021825_000000472066_00347_31463_1224.N1	07-MAR-2008 02:18:25	Dark	47.000	12	Alp1Cru	0.77500	30000.	94	31463	No
36	GOM_NL__2PRFIN20080307_021937_000000372066_00347_31463_1225.N1	07-MAR-2008 02:19:37	Dark	37.000	129	Del Cru	2.7930	26000.	74	31463	No
37	GOM_NL__2PRFIN20080307_022108_000000452066_00347_31463_1226.N1	07-MAR-2008 02:21:08	Straylight	44.500	64	Gam Cen	2.2000	10600.	89	31463	No
38	GOM_NL__2PRFIN20080307_022348_000000402066_00347_31463_1227.N1	07-MAR-2008 02:23:48	Straylight	39.500	113	Mu Vel	2.6920	5000.0	79	31463	No
39	GOM_NL__2PRFIN20080307_023606_000000462066_00347_31463_1228.N1	07-MAR-2008 02:36:06	Twilight_and_stray	45.500	48	30Alp Hya	1.9770	4100.0	91	31463	No
40	GOM_NL__2PRFIN20080307_024155_000000402066_00347_31463_1229.N1	07-MAR-2008 02:41:55	Bright	40.000	22	32Alp Leo	1.3600	15200.	80	31463	No
41	GOM_NL__2PRFIN20080307_024421_000000412066_00347_31463_1230.N1	07-MAR-2008 02:44:21	Bright	41.000	51	41Gam1Leo	2.0100	4500.0	82	31463	No
42	GOM_NL__2PRFIN20080307_025545_000000402066_00347_31463_1231.N1	07-MAR-2008 02:55:45	Bright	39.500	82	48Bet UMa	2.3650	10600.	79	31463	No

338	GOM_NL__2PRFIN20080307_234433_000000452066_00359_31475_1465.N1	07-MAR-2008 23:44:33	Dark	45.000	155	41Pi Sgr	2.9000	6600.0	90	31475	No
339	GOM_NL__2PRFIN20080307_234628_000000412066_00359_31475_1466.N1	07-MAR-2008 23:46:28	Dark	41.000	57	34Sig Sgr	2.0660	26000.	82	31475	No
340	GOM_NL__2PRFIN20080307_234945_000000432066_00359_31475_1467.N1	07-MAR-2008 23:49:45	Dark	43.000	38	20Eps Sgr	1.8360	11000.	86	31475	No
341	GOM_NL__2PRFIN20080307_235248_000000432066_00359_31475_1468.N1	07-MAR-2008 23:52:48	Dark	43.000	85	Kap Sco	2.4070	28000.	86	31475	No
342	GOM_NL__2PRFIN20080307_235609_000000502066_00360_31476_1472.N1	07-MAR-2008 23:56:09	Dark	49.500	141	Bet Ara	2.8400	4600.0	99	31476	No
343	GOM_NL__2PRFIN20080307_235854_000000442066_00360_31476_1473.N1	07-MAR-2008 23:58:54	Dark	44.000	43	Alp TrA	1.9100	4250.0	88	31476	No

3. Quality information per product

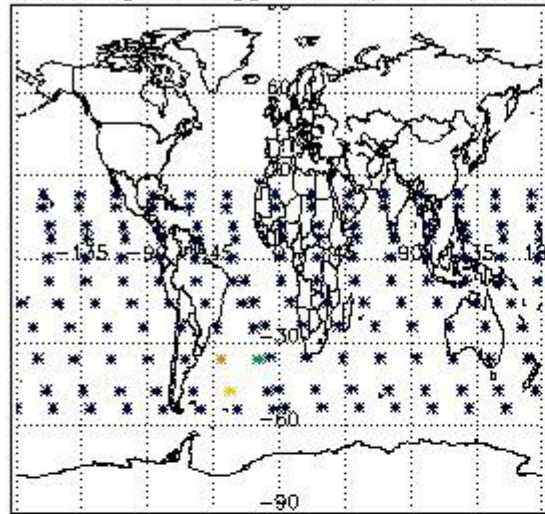
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

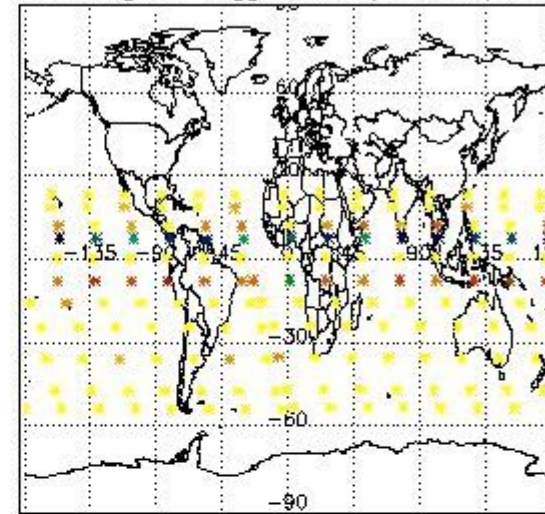


3.2 Plot quality information per product (world map)

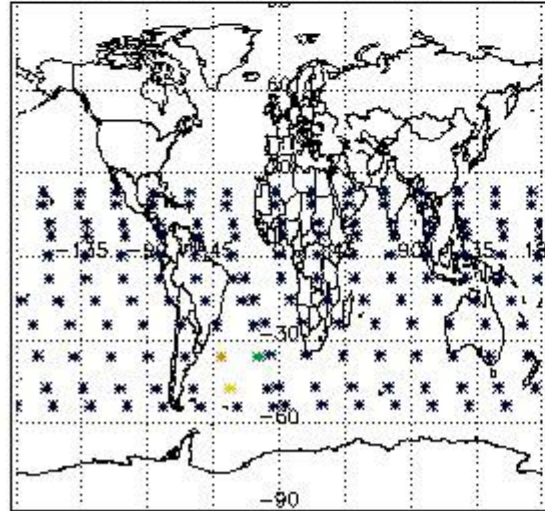
Percentage of flagged data per O3 profile



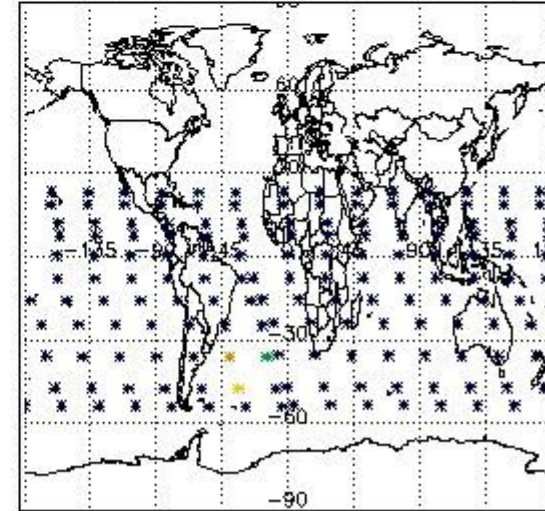
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

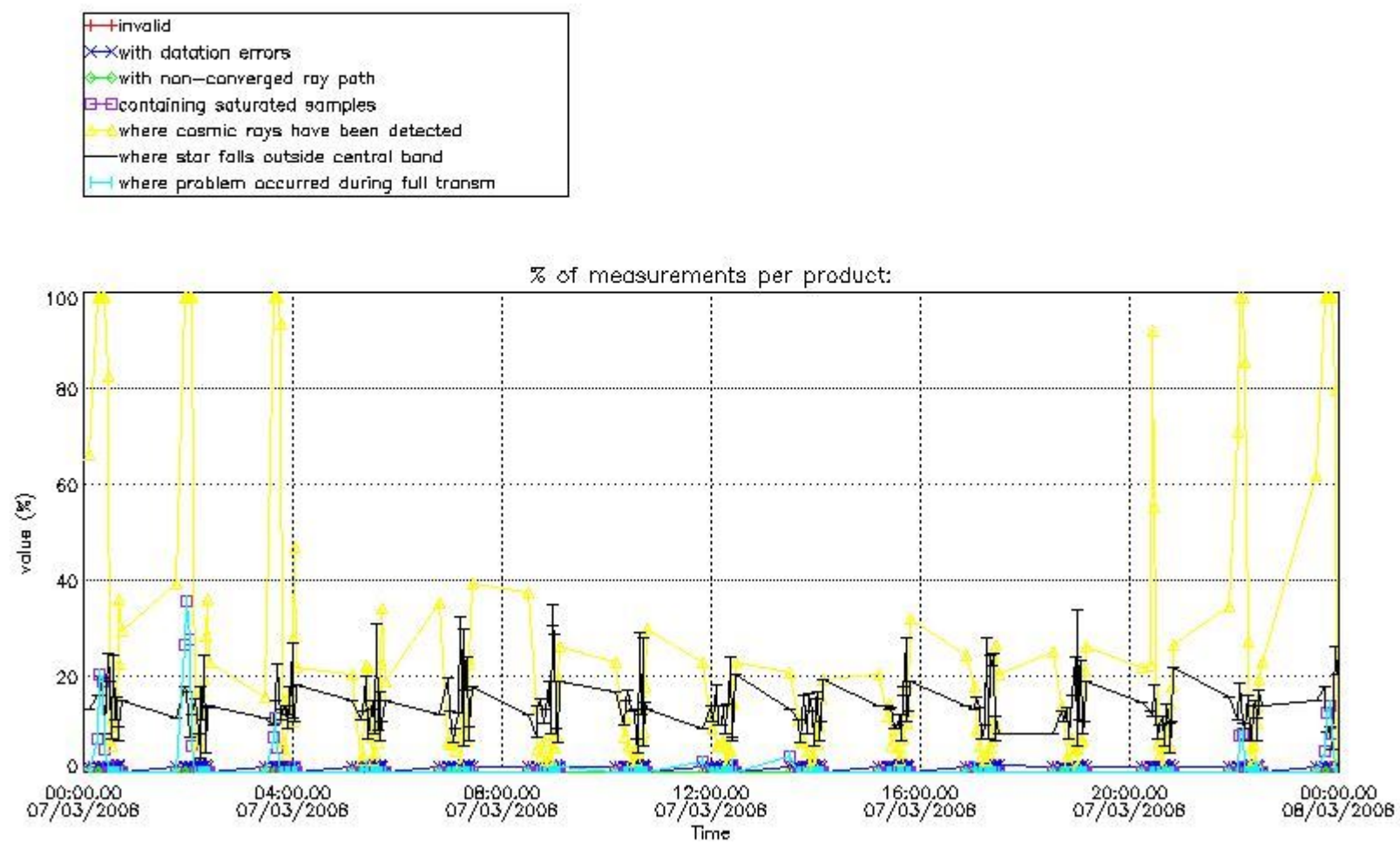


4. Level 1 quality information per product

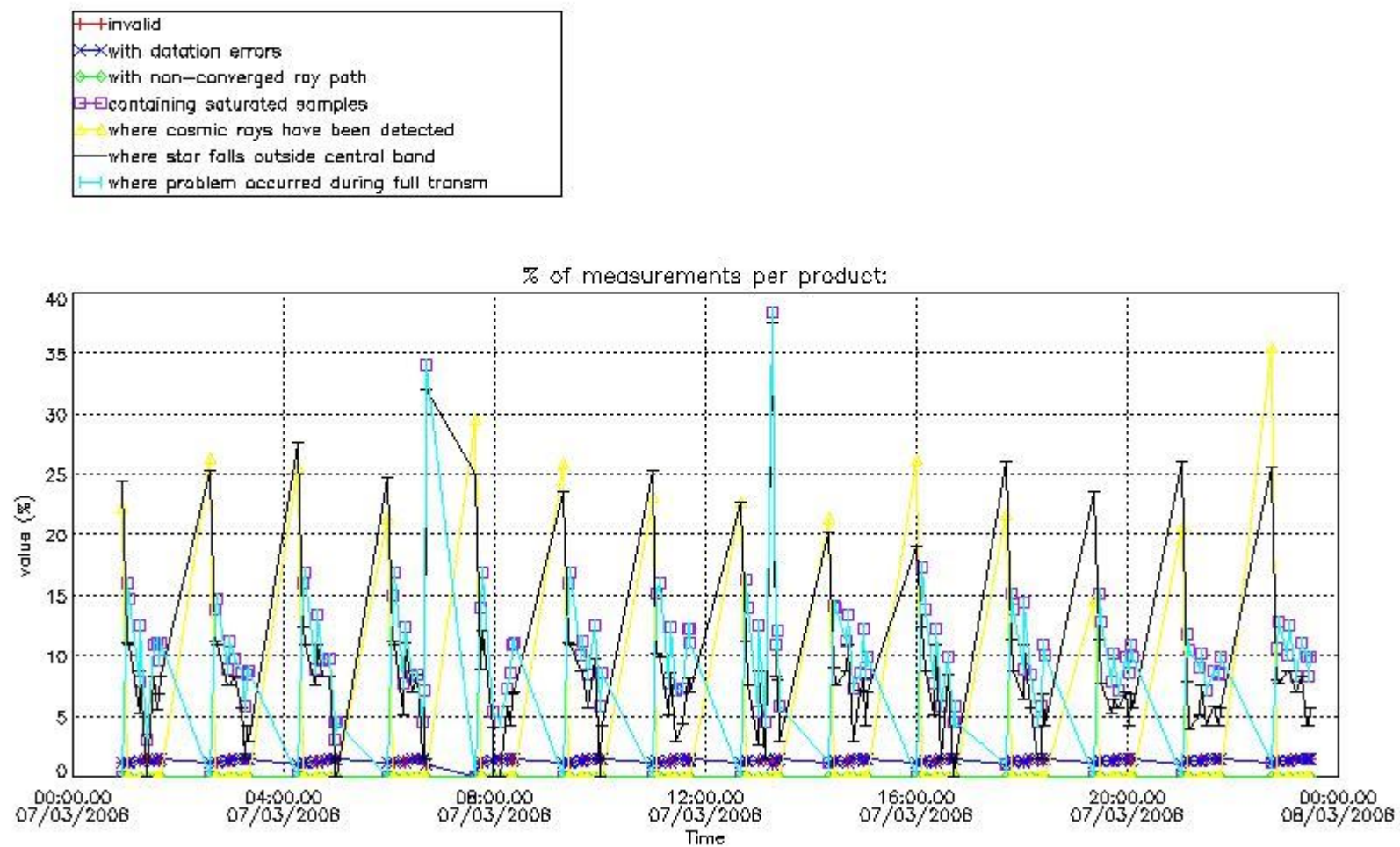
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

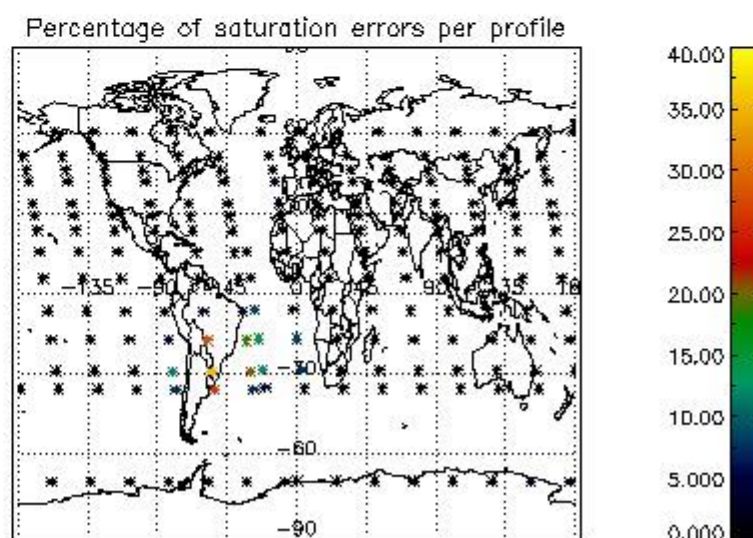
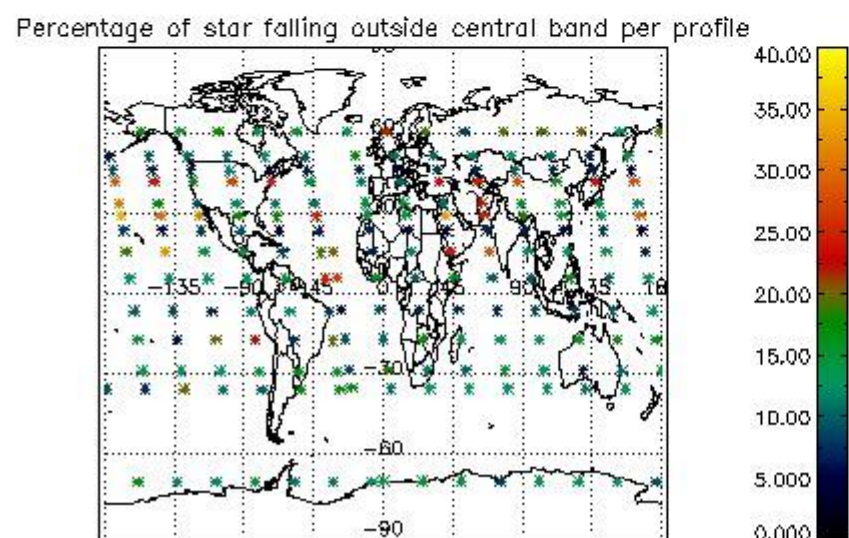
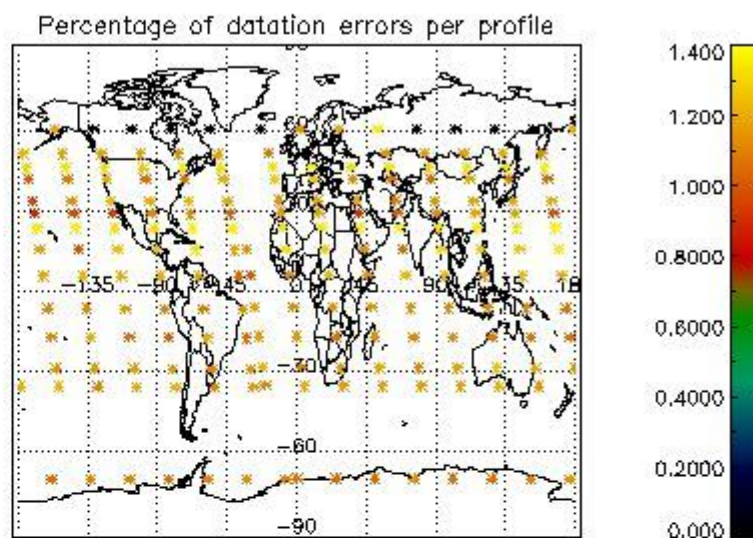
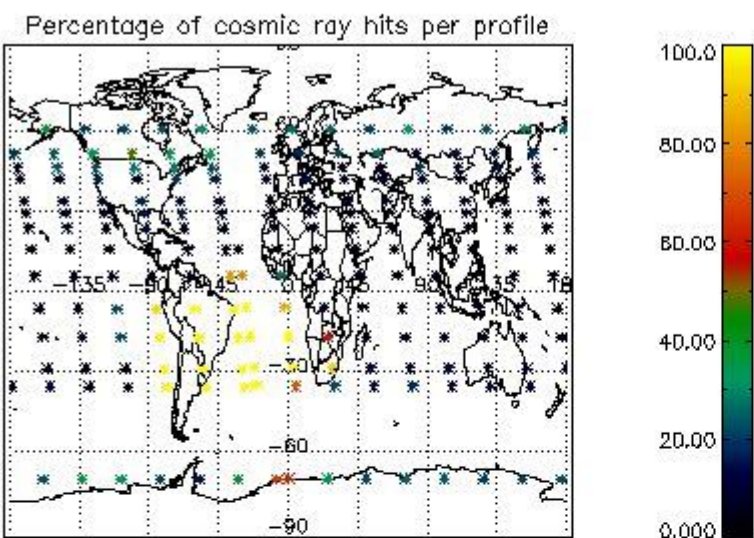


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

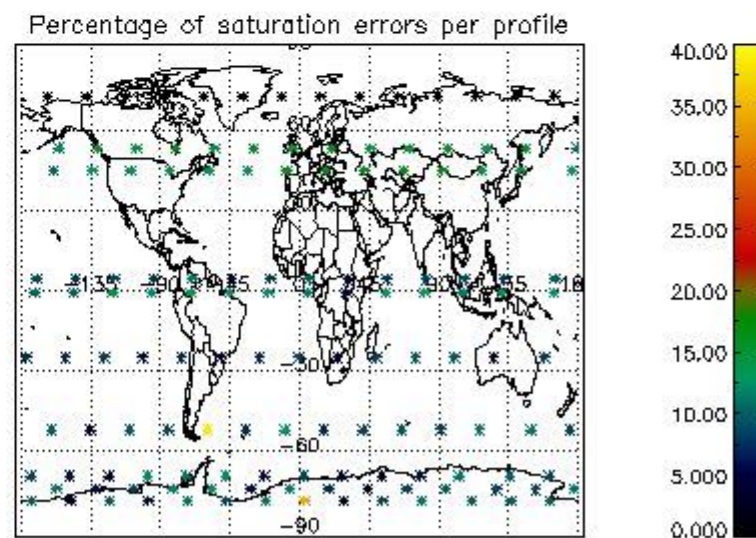
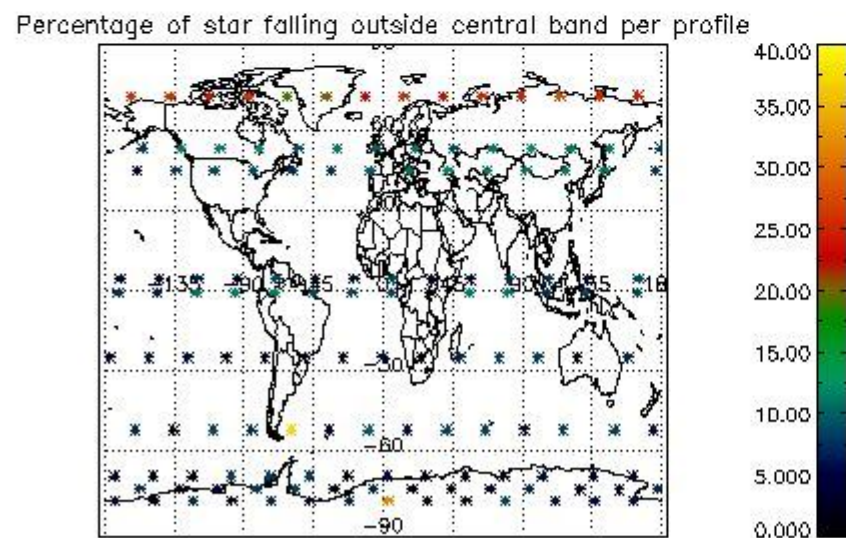
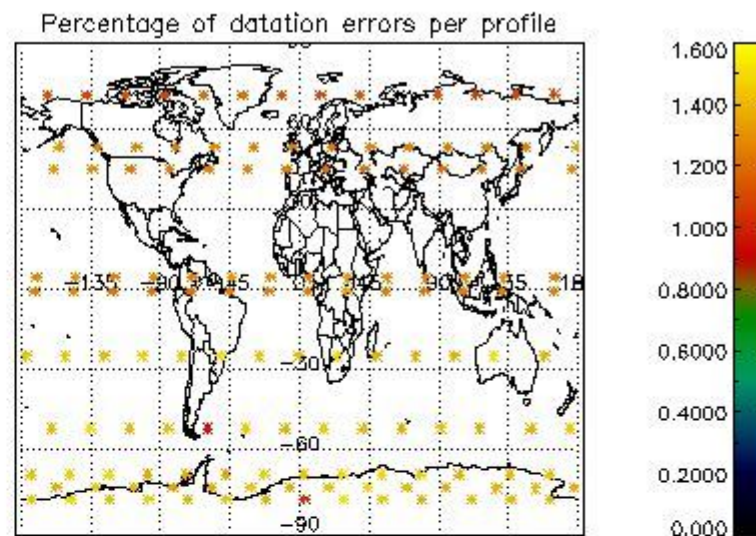
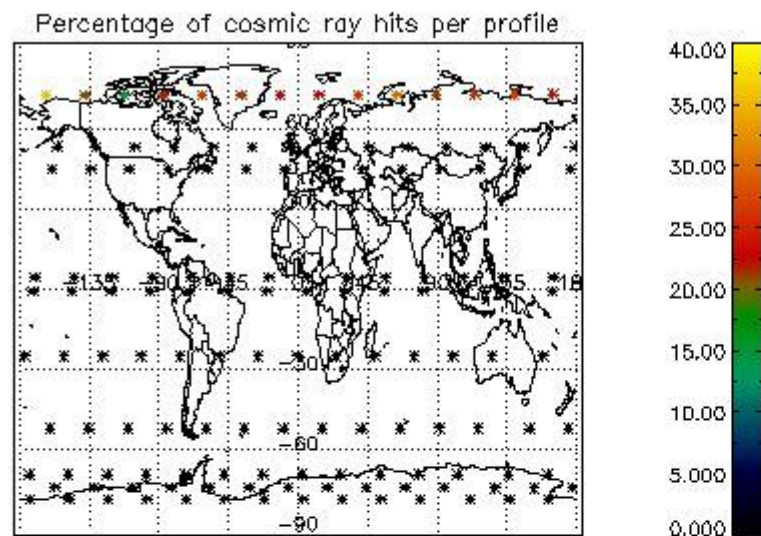


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

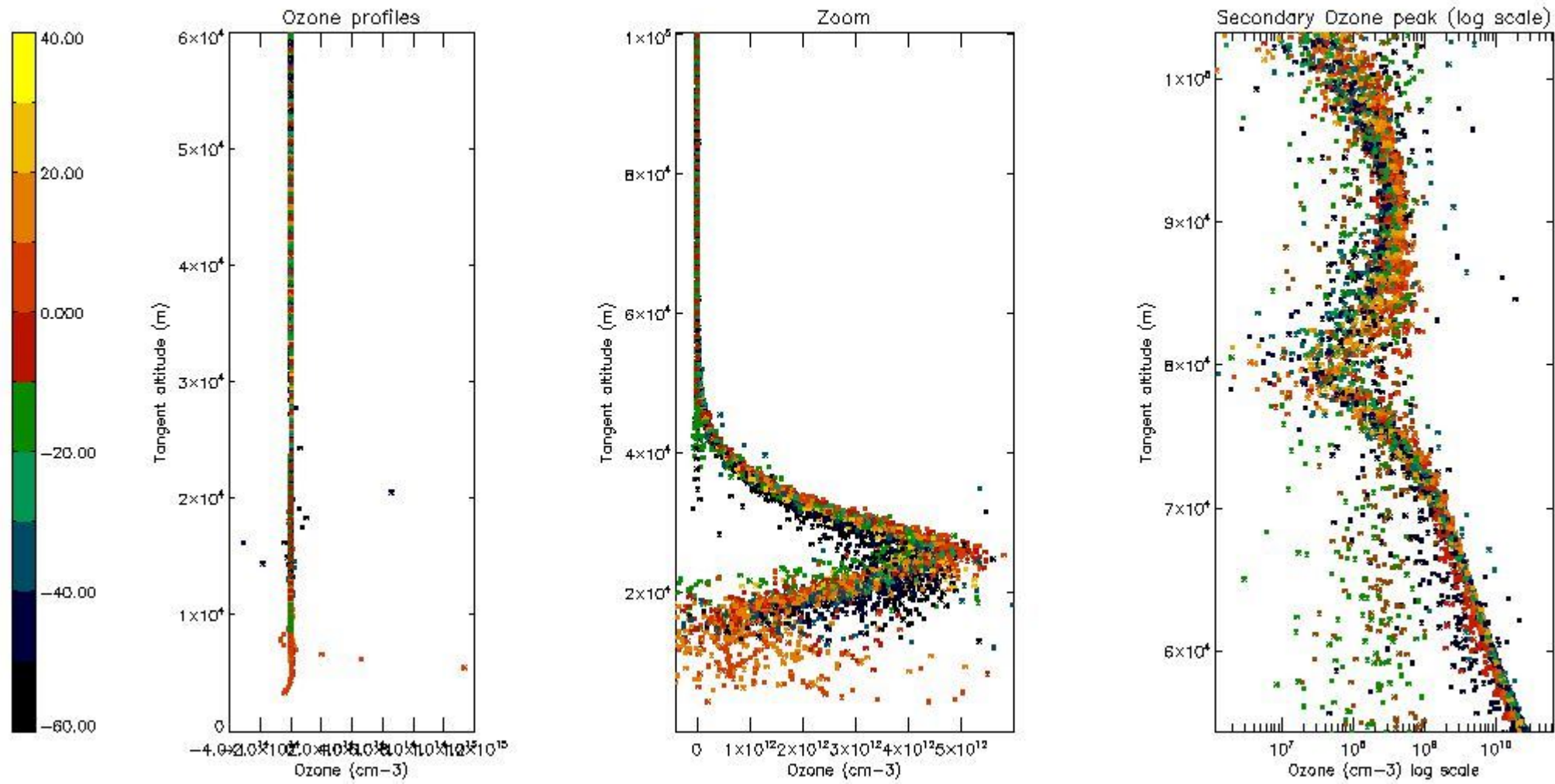
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	49
STD < 20	27

STD < 10	21
STD < 5	15

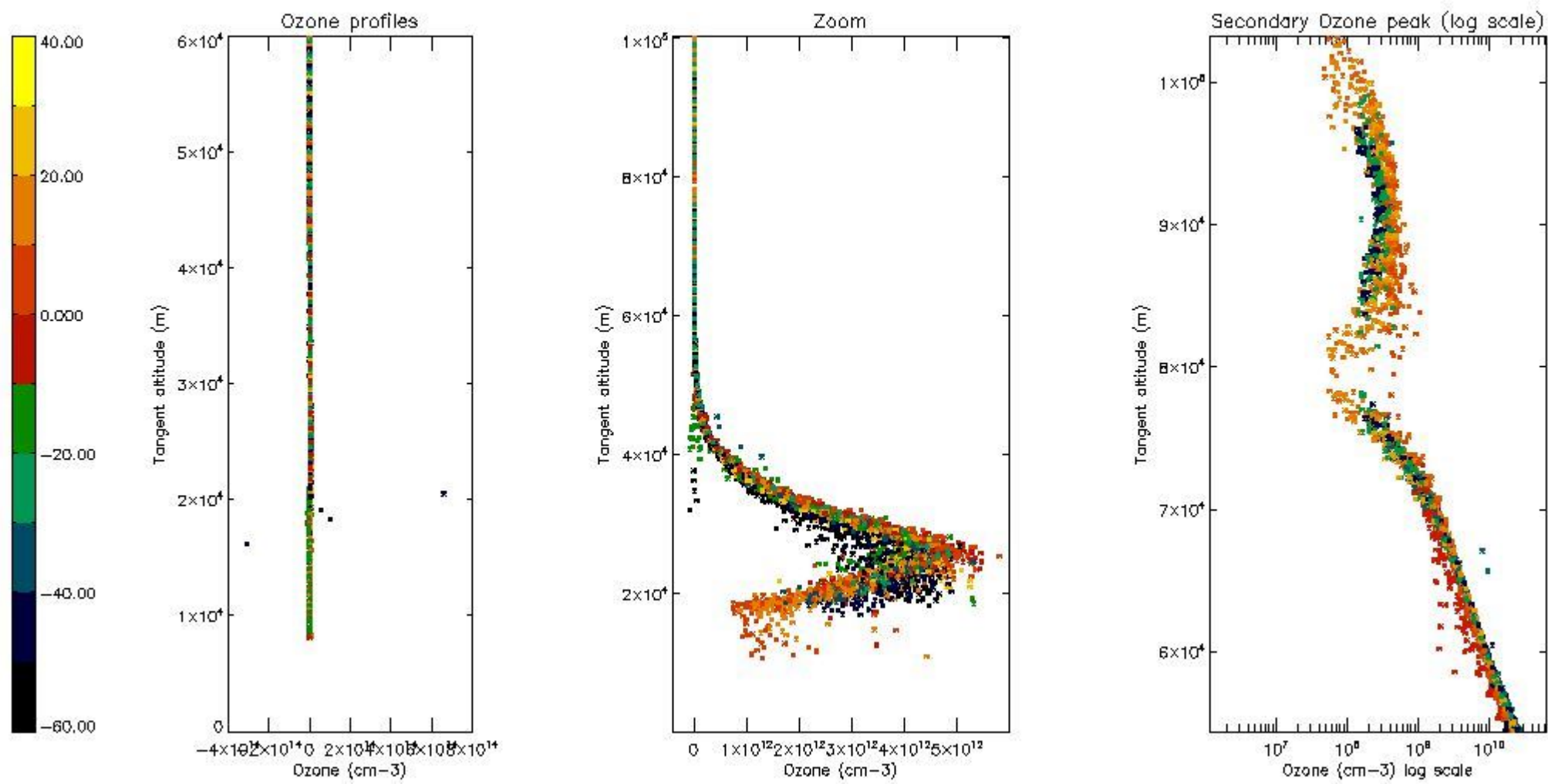
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



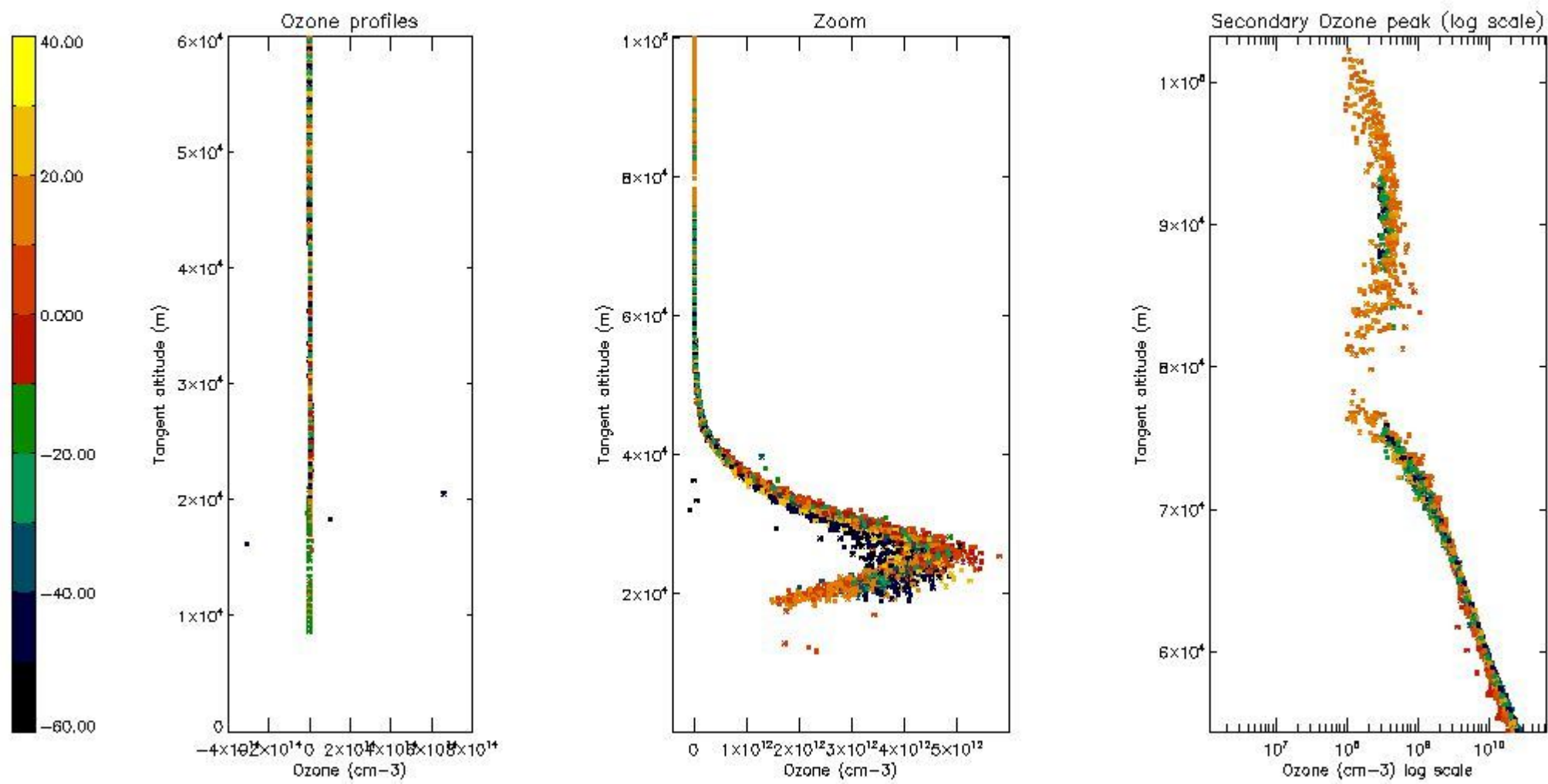
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



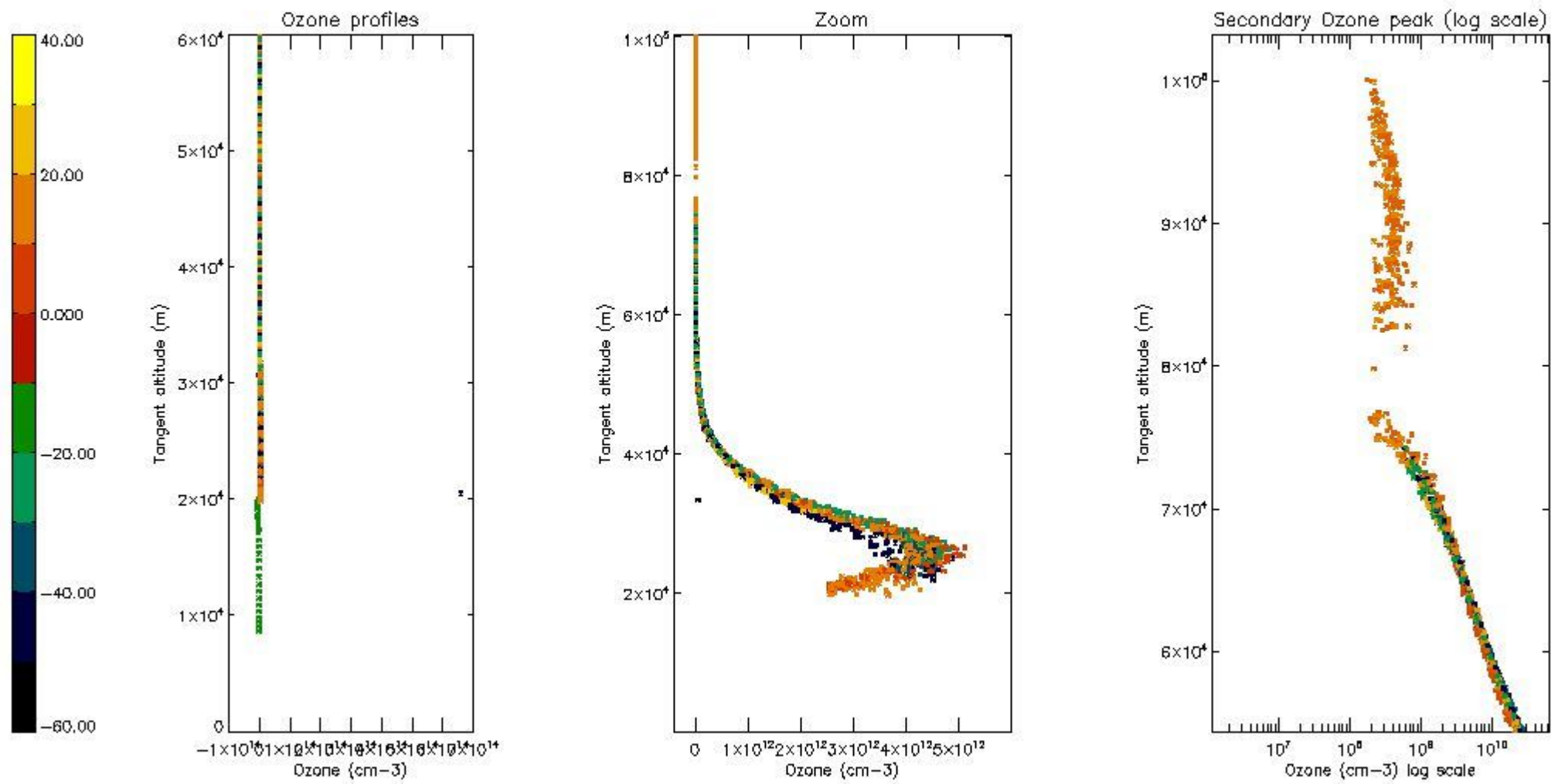
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



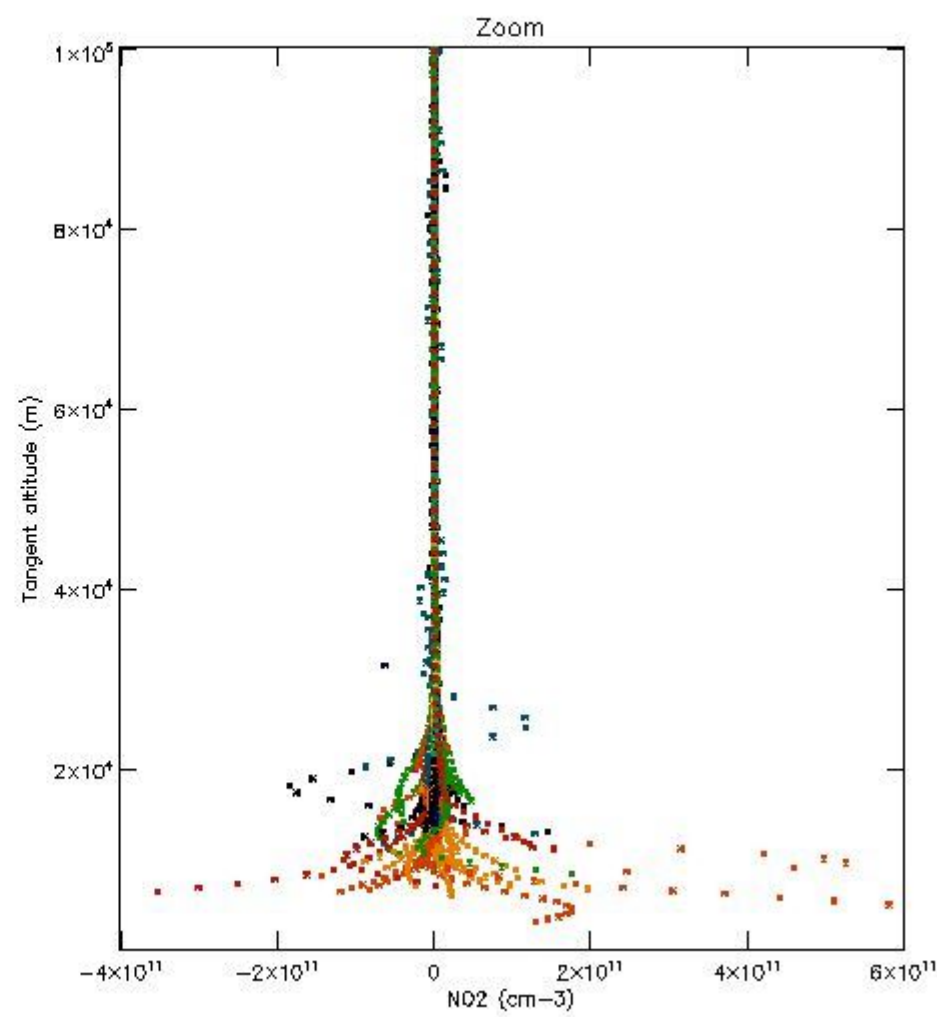
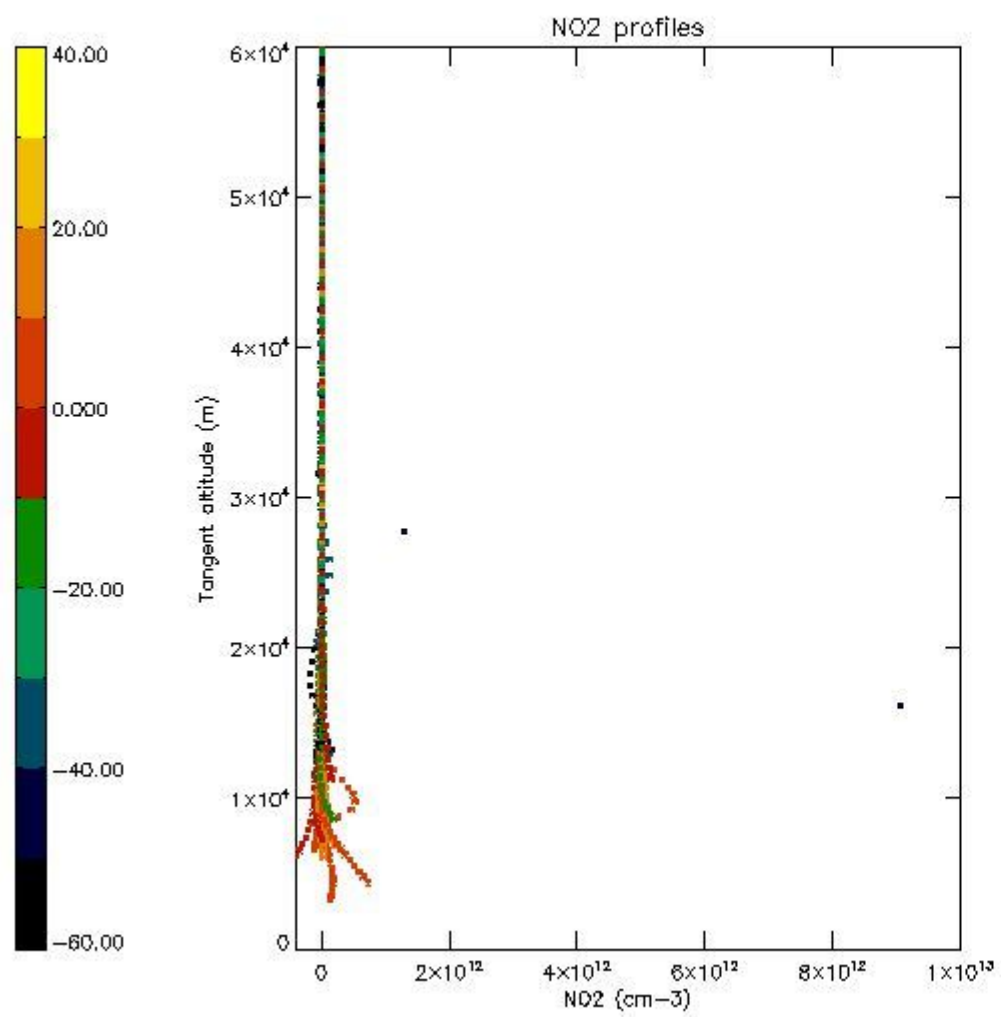
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



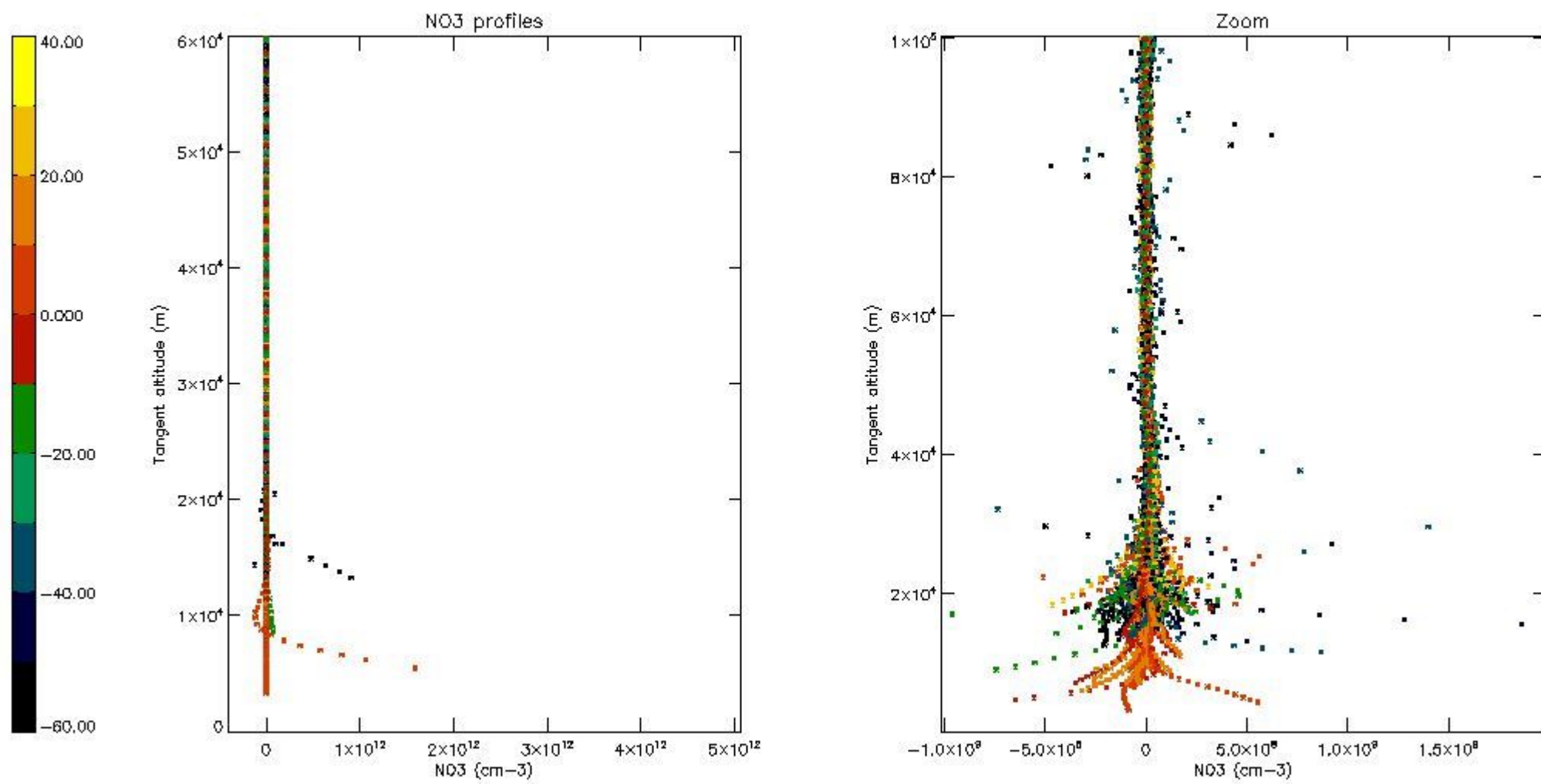
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



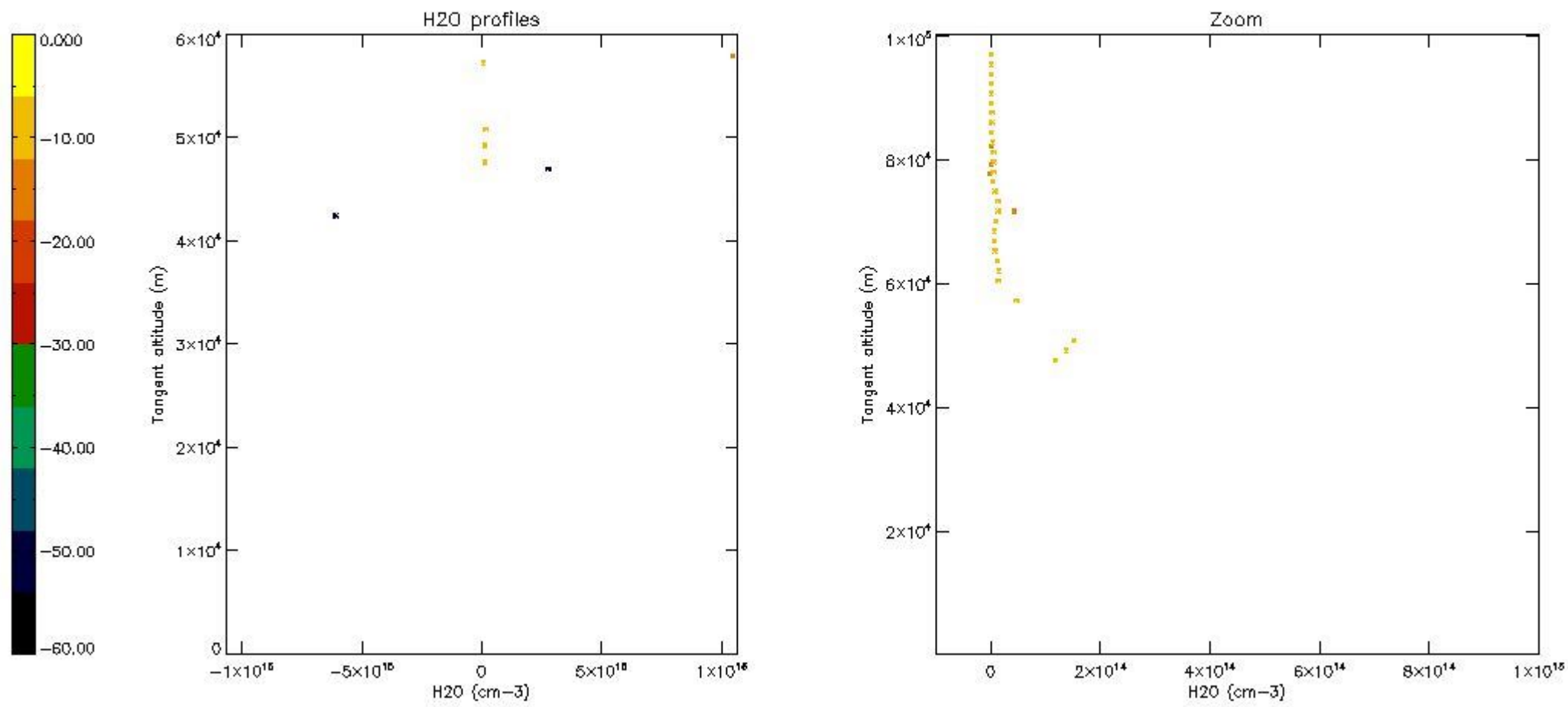
5.7 Plot NO3 profiles for all STD (dark without errors)

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	07-MAR-2008 00:06:00
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	07-MAR-2008 00:06:00
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	07-MAR-2008 00:06:00

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	25APR2013 11:22:13
Data source version	GOMOS/6.01
Start time of products	07-03-2008 (07MAR2008 00:00:00)
Stop time of products	08-03-2008 (08MAR2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	343
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

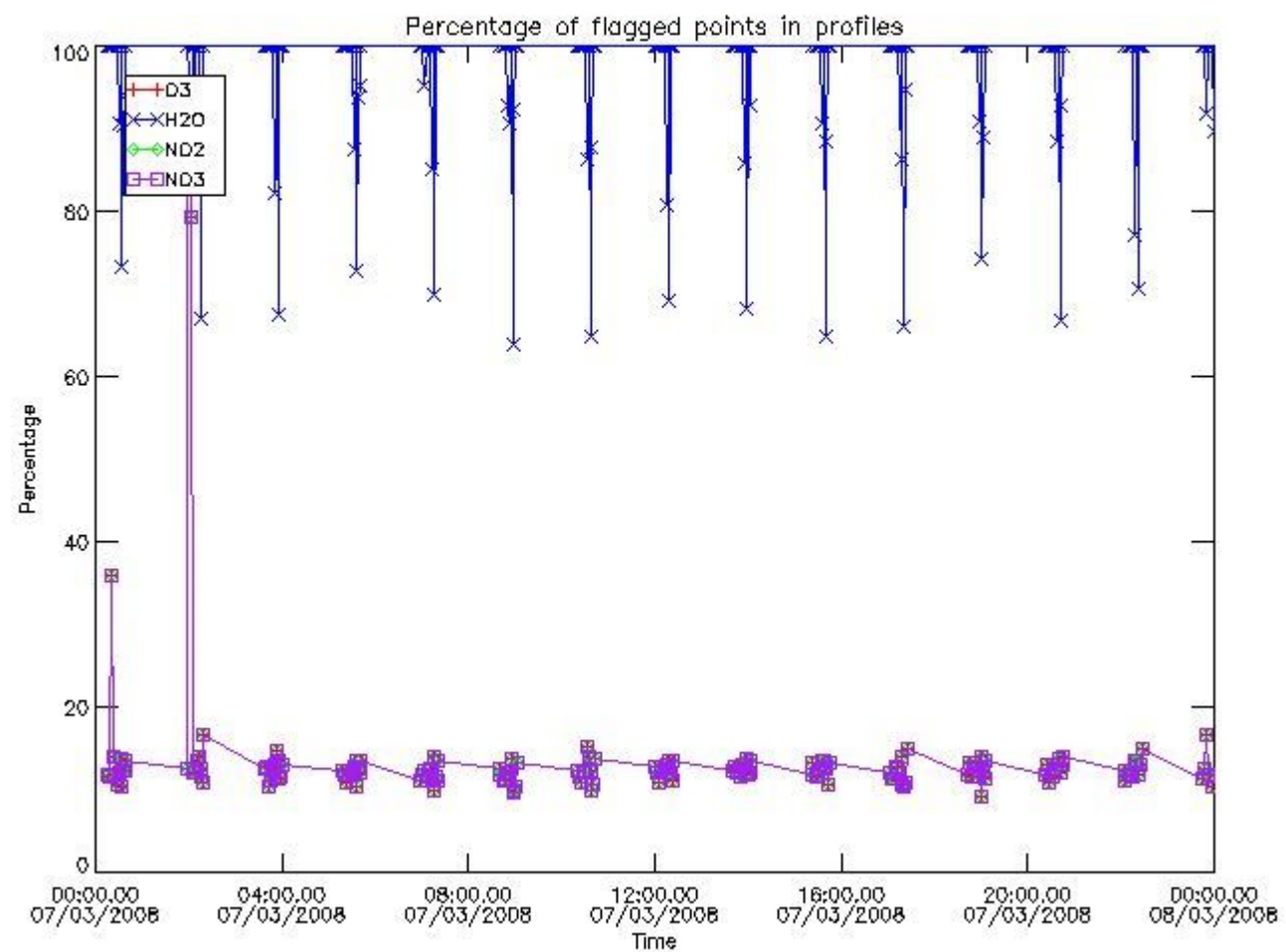
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080307_000600_000000462066_00345_31461_1139.N1	07-MAR-2008 00:06:00	Bright	46.000	168	17Zet Aql	2.9860	11000.	92	31461	No
2	GOM_NL__2PRFIN20080307_001602_000000442066_00345_31461_1140.N1	07-MAR-2008 00:16:02	Dark	43.500	155	41Pi Sgr	2.9000	6600.0	87	31461	No
3	GOM_NL__2PRFIN20080307_001756_000000442066_00345_31461_1141.N1	07-MAR-2008 00:17:56	Dark	44.000	57	34Sig Sgr	2.0660	26000.	88	31461	No
4	GOM_NL__2PRFIN20080307_002112_000000482066_00345_31461_1142.N1	07-MAR-2008 00:21:12	Dark	48.000	38	20Eps Sgr	1.8360	11000.	96	31461	No
5	GOM_NL__2PRFIN20080307_002413_000000442066_00345_31461_1143.N1	07-MAR-2008 00:24:13	Dark	44.000	85	Kap Sco	2.4070	28000.	88	31461	No
6	GOM_NL__2PRFIN20080307_002737_000000492066_00346_31462_1211.N1	07-MAR-2008 00:27:37	Dark	48.500	141	Bet Ara	2.8400	4600.0	97	31462	No
7	GOM_NL__2PRFIN20080307_003026_000000432066_00346_31462_1212.N1	07-MAR-2008 00:30:26	Dark	42.500	43	Alp TrA	1.9100	4250.0	85	31462	No
8	GOM_NL__2PRFIN20080307_003240_000000372066_00346_31462_1213.N1	07-MAR-2008 00:32:40	Dark	37.000	145	Gam TrA	2.8720	10600.	74	31462	No
9	GOM_NL__2PRFIN20080307_003413_000000492066_00346_31462_1214.N1	07-MAR-2008 00:34:13	Dark	49.000	4	Alp1Cen	-0.010000	5800.0	98	31462	No
10	GOM_NL__2PRFIN20080307_003530_000000422066_00346_31462_1215.N1	07-MAR-2008 00:35:30	Dark	41.500	10	Bet Cen	0.61000	28000.	83	31462	No
11	GOM_NL__2PRFIN20080307_003749_000000422066_00346_31462_1216.N1	07-MAR-2008 00:37:49	Dark	41.500	12	Alp1Cru	0.77500	30000.	83	31462	No
12	GOM_NL__2PRFIN20080307_003901_000000382066_00346_31462_1217.N1	07-MAR-2008 00:39:01	Dark	38.000	129	Del Cru	2.7930	26000.	76	31462	No
13	GOM_NL__2PRFIN20080307_004031_000000432066_00346_31462_1218.N1	07-MAR-2008 00:40:31	Straylight	43.000	64	Gam Cen	2.2000	10600.	86	31462	No
14	GOM_NL__2PRFIN20080307_004312_000000412066_00346_31462_1219.N1	07-MAR-2008 00:43:12	Straylight	40.500	113	Mu Vel	2.6920	5000.0	81	31462	No
15	GOM_NL__2PRFIN20080307_005530_000000452066_00346_31462_1220.N1	07-MAR-2008 00:55:30	Tw_i_and_stray	45.000	48	30Alp Hya	1.9770	4100.0	90	31462	No
16	GOM_NL__2PRFIN20080307_010119_000000412066_00346_31462_1221.N1	07-MAR-2008 01:01:19	Bright	40.500	22	32Alp Leo	1.3600	15200.	81	31462	No
17	GOM_NL__2PRFIN20080307_010345_000000412066_00346_31462_1222.N1	07-MAR-2008 01:03:45	Bright	41.000	51	41Gam1Leo	2.0100	4500.0	82	31462	No
18	GOM_NL__2PRFIN20080307_011509_000000392066_00346_31462_1223.N1	07-MAR-2008 01:15:09	Bright	38.500	82	48Bet UMa	2.3650	10600.	77	31462	No
19	GOM_NL__2PRFIN20080307_011634_000000402066_00346_31462_1224.N1	07-MAR-2008 01:16:34	Bright	40.000	36	50Alp UMa	1.8000	6300.0	80	31462	No
20	GOM_NL__2PRFIN20080307_012320_000000332066_00346_31462_1225.N1	07-MAR-2008 01:23:20	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	31462	No
21	GOM_NL__2PRFIN20080307_013100_000000372066_00346_31462_1226.N1	07-MAR-2008 01:31:00	Bright	36.500	89	5Alp Cep	2.4510	8000.0	73	31462	No
22	GOM_NL__2PRFIN20080307_013606_000000362066_00346_31462_1227.N1	07-MAR-2008 01:36:06	Bright	36.000	19	50Alp Cyg	1.2460	10500.	72	31462	No
23	GOM_NL__2PRFIN20080307_013739_000000372066_00346_31462_1228.N1	07-MAR-2008 01:37:39	Bright	36.500	66	37Gam Cyg	2.2080	5900.0	73	31462	No
24	GOM_NL__2PRFIN20080307_013915_000000362066_00346_31462_1229.N1	07-MAR-2008 01:39:15	Bright	36.000	92	53Eps Cyg	2.5000	4500.0	72	31462	No
25	GOM_NL__2PRFIN20080307_014636_000000452066_00346_31462_1230.N1	07-MAR-2008 01:46:36	Bright	44.500	168	17Zet Aql	2.9860	11000.	89	31462	No
26	GOM_NL__2PRFIN20080307_015638_000000452066_00346_31462_1231.N1	07-MAR-2008 01:56:38	Dark	45.000	155	41Pi Sgr	2.9000	6600.0	90	31462	No
27	GOM_NL__2PRFIN20080307_015833_000000452066_00346_31462_1232.N1	07-MAR-2008 01:58:33	Dark	45.000	57	34Sig Sgr	2.0660	26000.	90	31462	No
28	GOM_NL__2PRFIN20080307_020149_000000422066_00346_31462_1233.N1	07-MAR-2008 02:01:49	Dark	41.500	38	20Eps Sgr	1.8360	11000.	83	31462	No
29	GOM_NL__2PRFIN20080307_020449_000000472066_00346_31462_1234.N1	07-MAR-2008 02:04:49	Dark	46.500	85	Kap Sco	2.4070	28000.	93	31462	No
30	GOM_NL__2PRFIN20080307_020814_000000432066_00347_31463_1219.N1	07-MAR-2008 02:08:14	Dark	42.500	141	Bet Ara	2.8400	4600.0	85	31463	No
31	GOM_NL__2PRFIN20080307_021102_000000382066_00347_31463_1220.N1	07-MAR-2008 02:11:02	Dark	37.500	43	Alp TrA	1.9100	4250.0	75	31463	No
32	GOM_NL__2PRFIN20080307_021316_000000372066_00347_31463_1221.N1	07-MAR-2008 02:13:16	Dark	36.500	145	Gam TrA	2.8720	10600.	73	31463	No
33	GOM_NL__2PRFIN20080307_021449_000000452066_00347_31463_1222.N1	07-MAR-2008 02:14:49	Dark	44.500	4	Alp1Cen	-0.010000	5800.0	89	31463	No
34	GOM_NL__2PRFIN20080307_021606_000000412066_00347_31463_1223.N1	07-MAR-2008 02:16:06	Dark	41.000	10	Bet Cen	0.61000	28000.	82	31463	No
35	GOM_NL__2PRFIN20080307_021825_000000472066_00347_31463_1224.N1	07-MAR-2008 02:18:25	Dark	47.000	12	Alp1Cru	0.77500	30000.	94	31463	No
36	GOM_NL__2PRFIN20080307_021937_000000372066_00347_31463_1225.N1	07-MAR-2008 02:19:37	Dark	37.000	129	Del Cru	2.7930	26000.	74	31463	No
37	GOM_NL__2PRFIN20080307_022108_000000452066_00347_31463_1226.N1	07-MAR-2008 02:21:08	Straylight	44.500	64	Gam Cen	2.2000	10600.	89	31463	No
38	GOM_NL__2PRFIN20080307_022348_000000402066_00347_31463_1227.N1	07-MAR-2008 02:23:48	Straylight	39.500	113	Mu Vel	2.6920	5000.0	79	31463	No
39	GOM_NL__2PRFIN20080307_023606_000000462066_00347_31463_1228.N1	07-MAR-2008 02:36:06	Tw_i_and_stray	45.500	48	30Alp Hya	1.9770	4100.0	91	31463	No
40	GOM_NL__2PRFIN20080307_024155_000000402066_00347_31463_1229.N1	07-MAR-2008 02:41:55	Bright	40.000	22	32Alp Leo	1.3600	15200.	80	31463	No
41	GOM_NL__2PRFIN20080307_024421_000000412066_00347_31463_1230.N1	07-MAR-2008 02:44:21	Bright	41.000	51	41Gam1Leo	2.0100	4500.0	82	31463	No
42	GOM_NL__2PRFIN20080307_025545_000000402066_00347_31463_1231.N1	07-MAR-2008 02:55:45	Bright	39.500	82	48Bet UMa	2.3650	10600.	79	31463	No

338	GOM_NL__2PRFIN20080307_234433_000000452066_00359_31475_1465.N1	07-MAR-2008 23:44:33	Dark	45.000	155	41Pi Sgr	2.9000	6600.0	90	31475	No
339	GOM_NL__2PRFIN20080307_234628_000000412066_00359_31475_1466.N1	07-MAR-2008 23:46:28	Dark	41.000	57	34Sig Sgr	2.0660	26000.	82	31475	No
340	GOM_NL__2PRFIN20080307_234945_000000432066_00359_31475_1467.N1	07-MAR-2008 23:49:45	Dark	43.000	38	20Eps Sgr	1.8360	11000.	86	31475	No
341	GOM_NL__2PRFIN20080307_235248_000000432066_00359_31475_1468.N1	07-MAR-2008 23:52:48	Dark	43.000	85	Kap Sco	2.4070	28000.	86	31475	No
342	GOM_NL__2PRFIN20080307_235609_000000502066_00360_31476_1472.N1	07-MAR-2008 23:56:09	Dark	49.500	141	Bet Ara	2.8400	4600.0	99	31476	No
343	GOM_NL__2PRFIN20080307_235854_000000442066_00360_31476_1473.N1	07-MAR-2008 23:58:54	Dark	44.000	43	Alp TrA	1.9100	4250.0	88	31476	No

3. Quality information per product

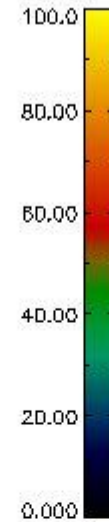
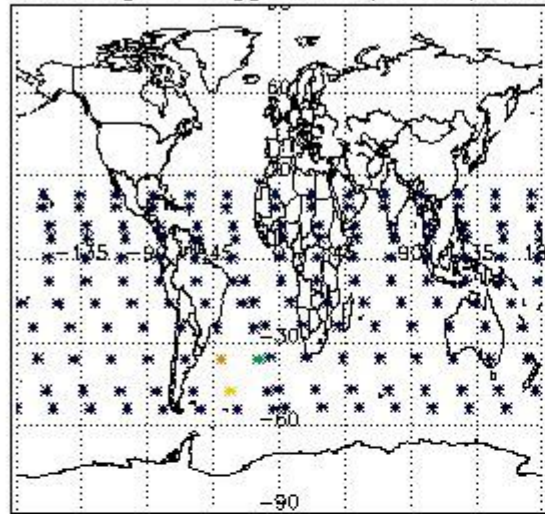
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

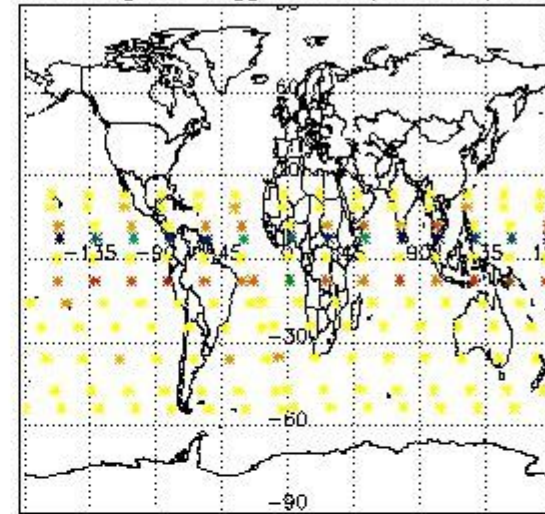


3.2 Plot quality information per product (world map)

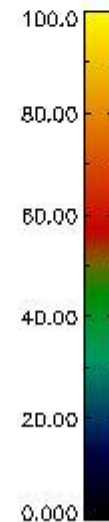
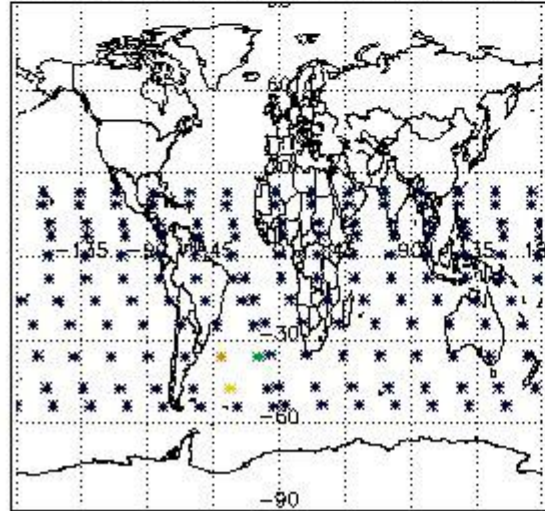
Percentage of flagged data per O3 profile



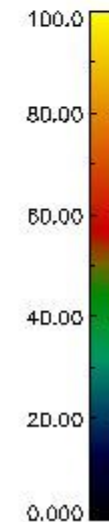
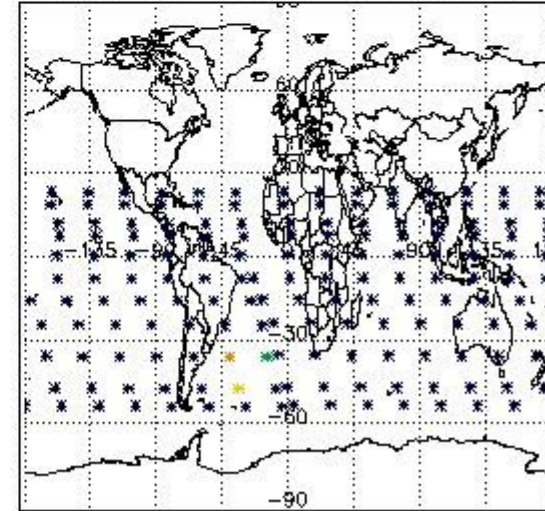
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

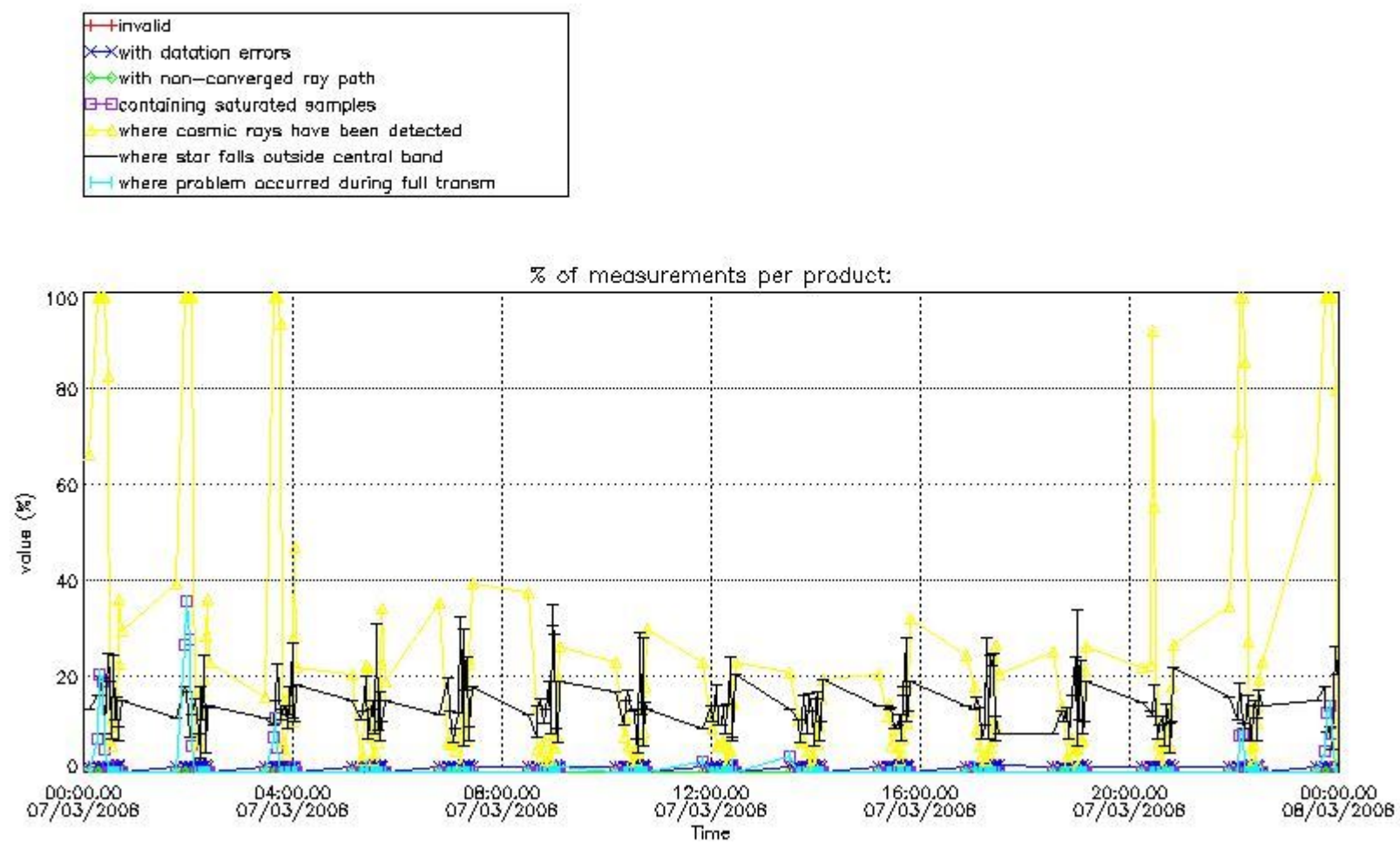


4. Level 1 quality information per product

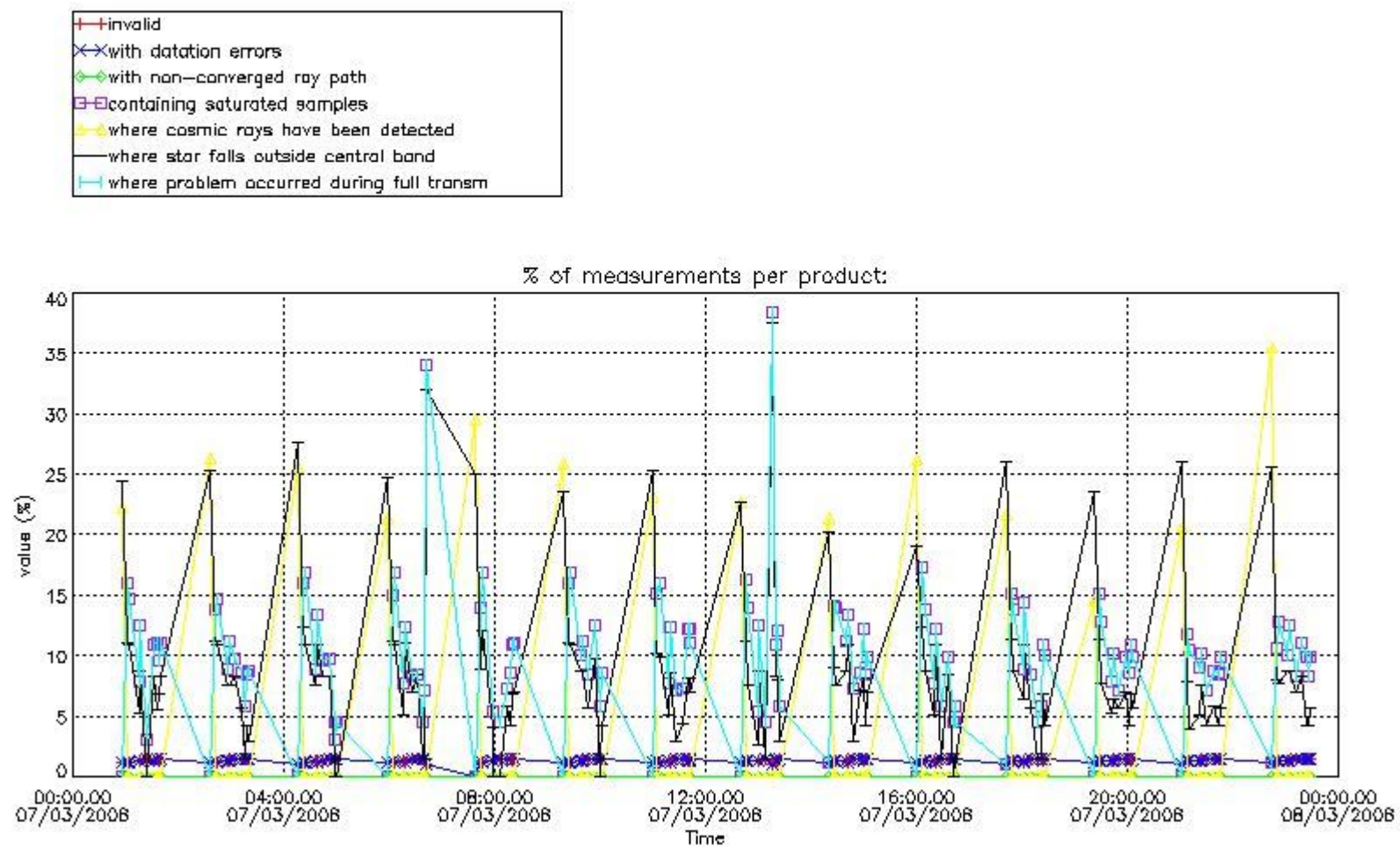
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

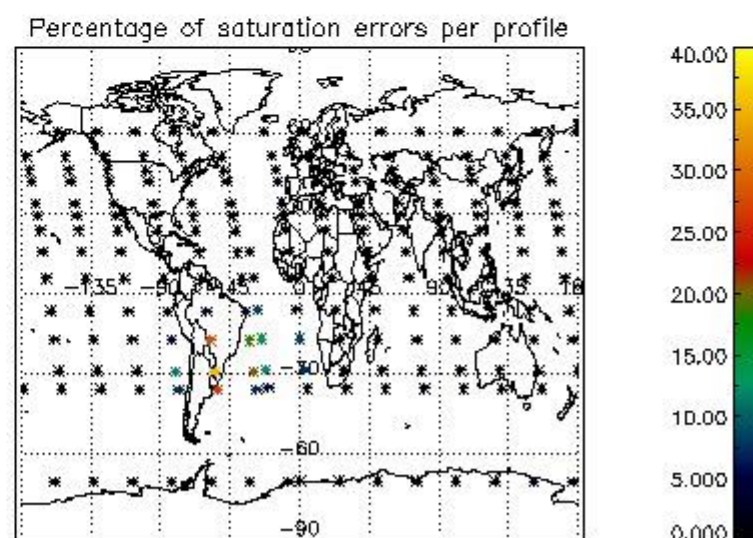
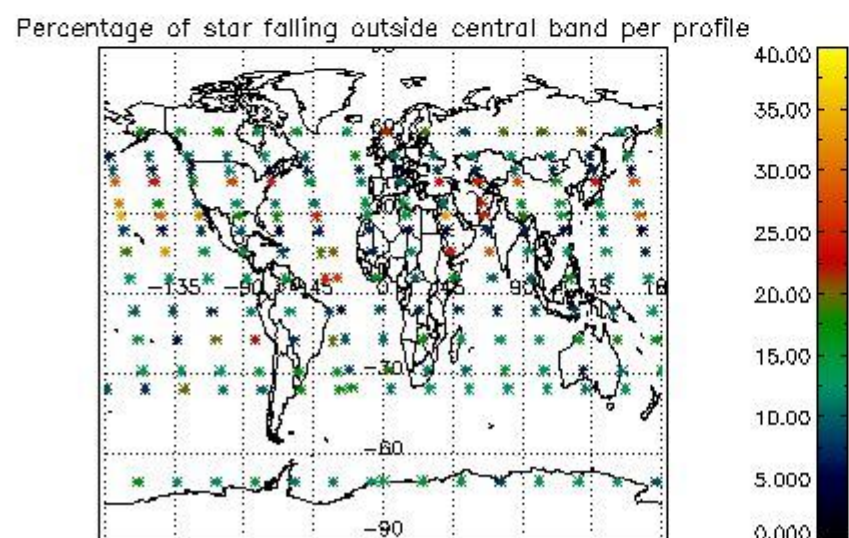
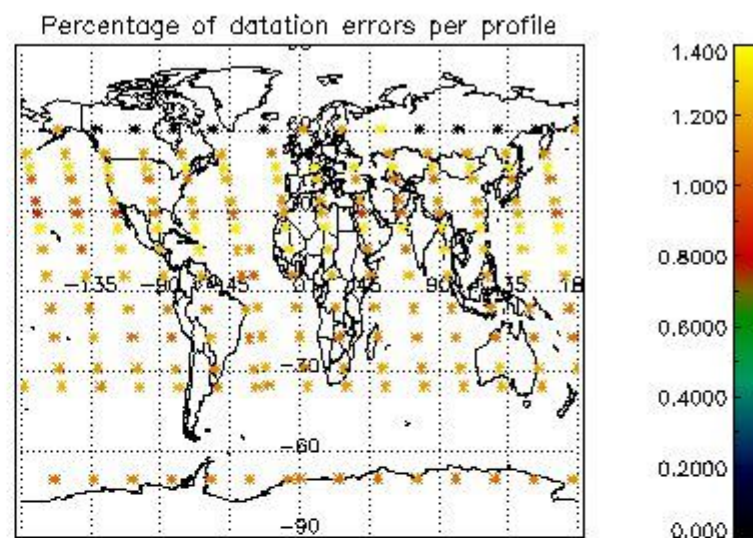
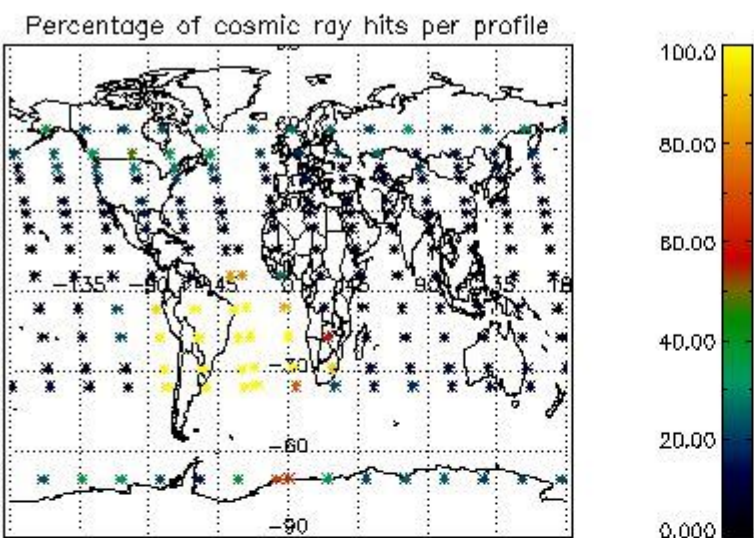


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



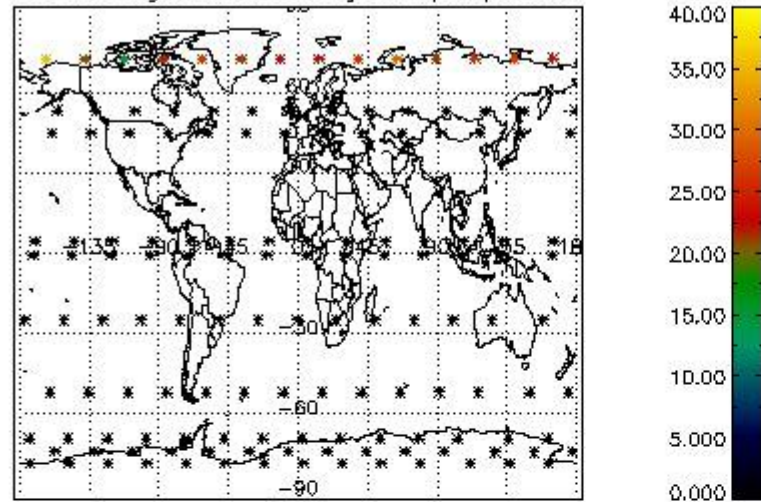
4.2 Plot quality information per product coming from level 1b processing (world map)

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

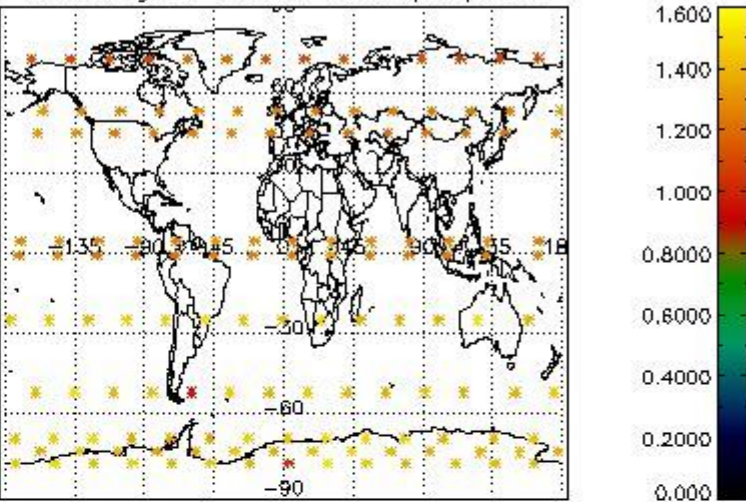


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

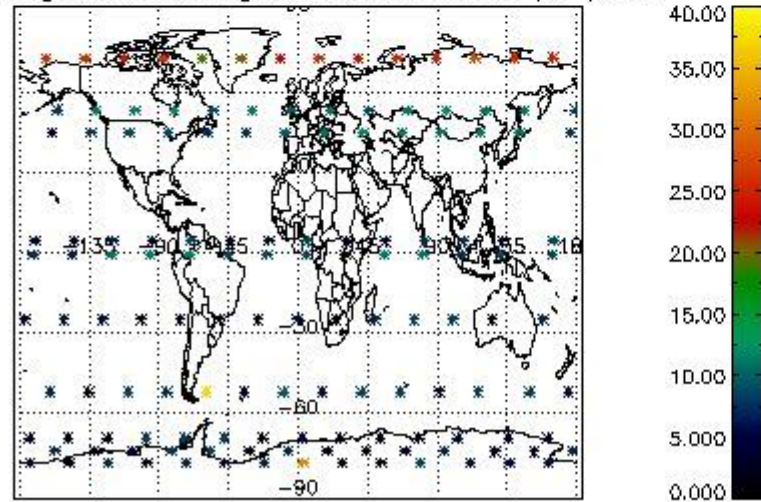
Percentage of cosmic ray hits per profile



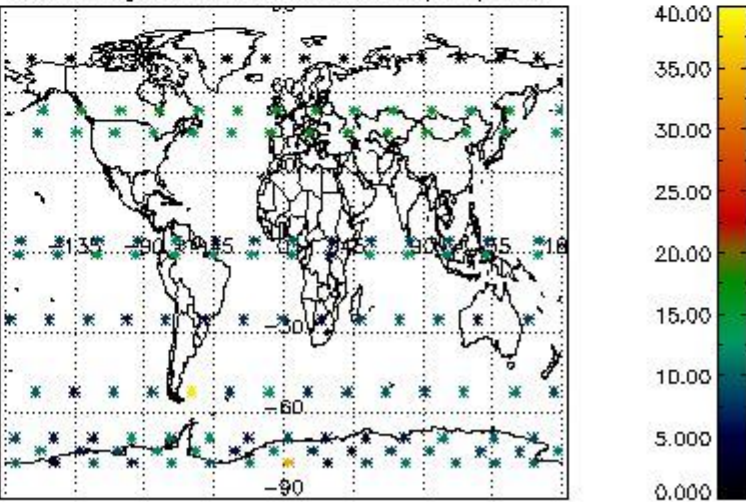
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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

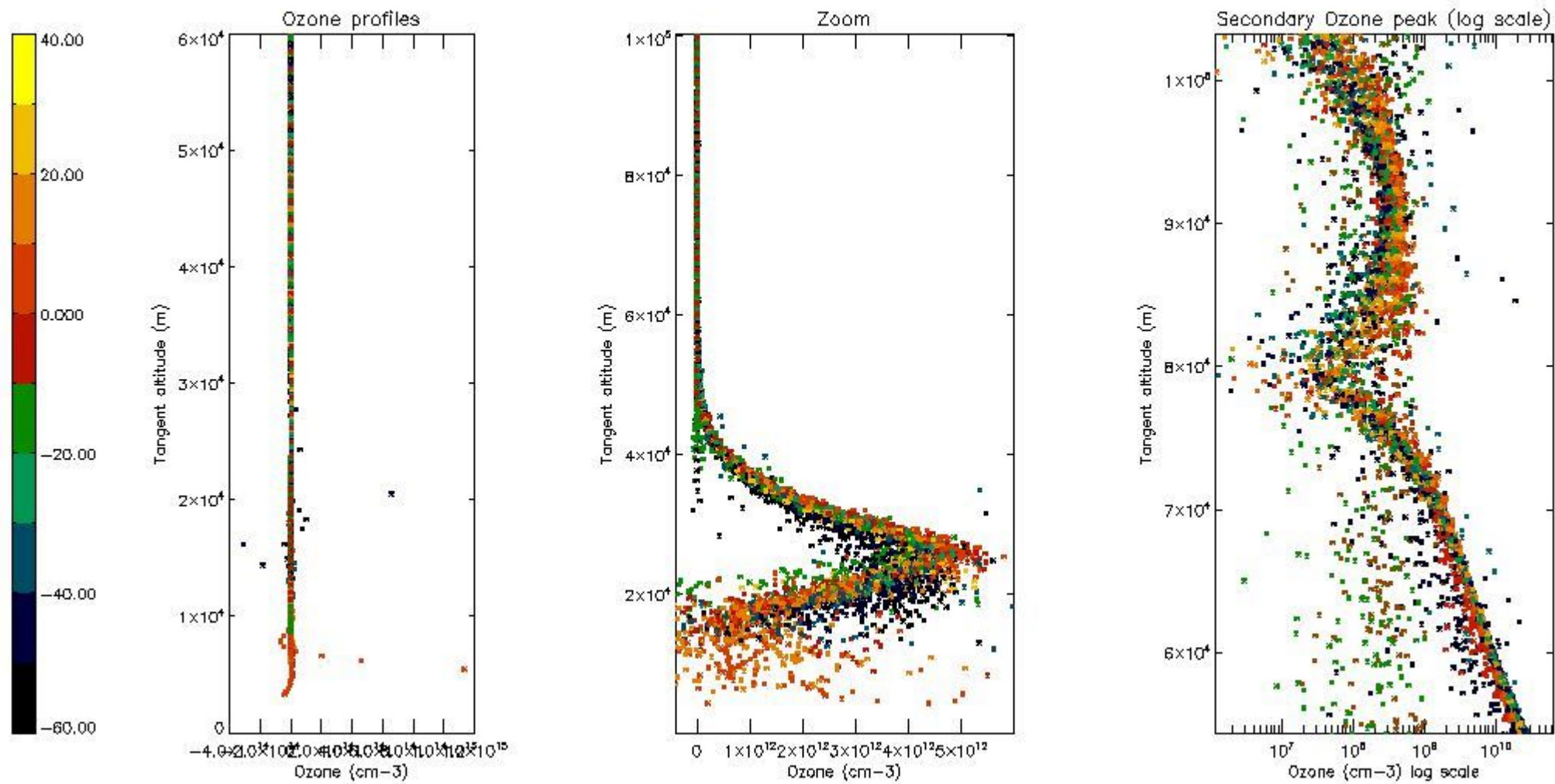
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	49
STD < 20	27

STD < 10	21
STD < 5	15

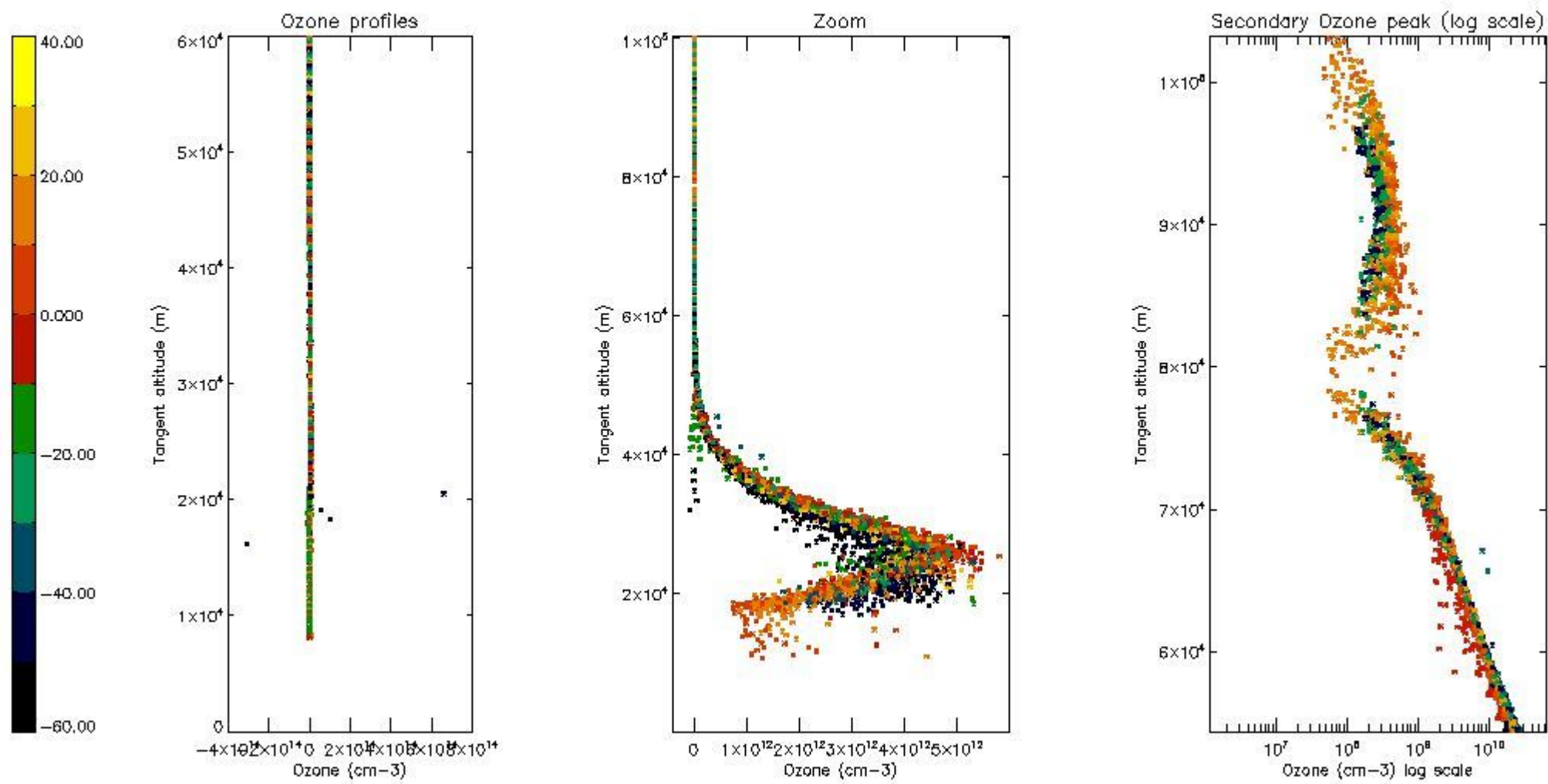
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



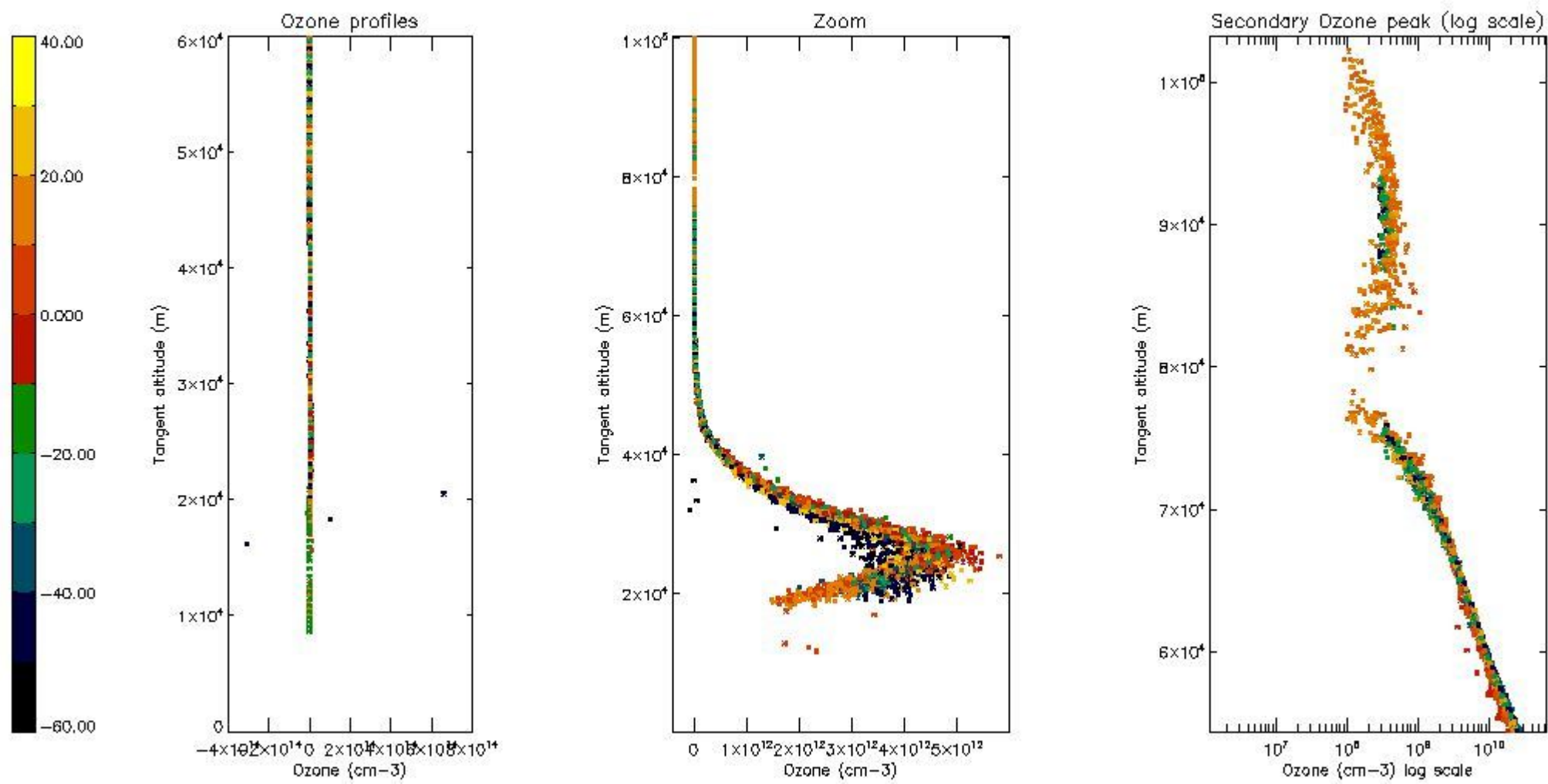
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



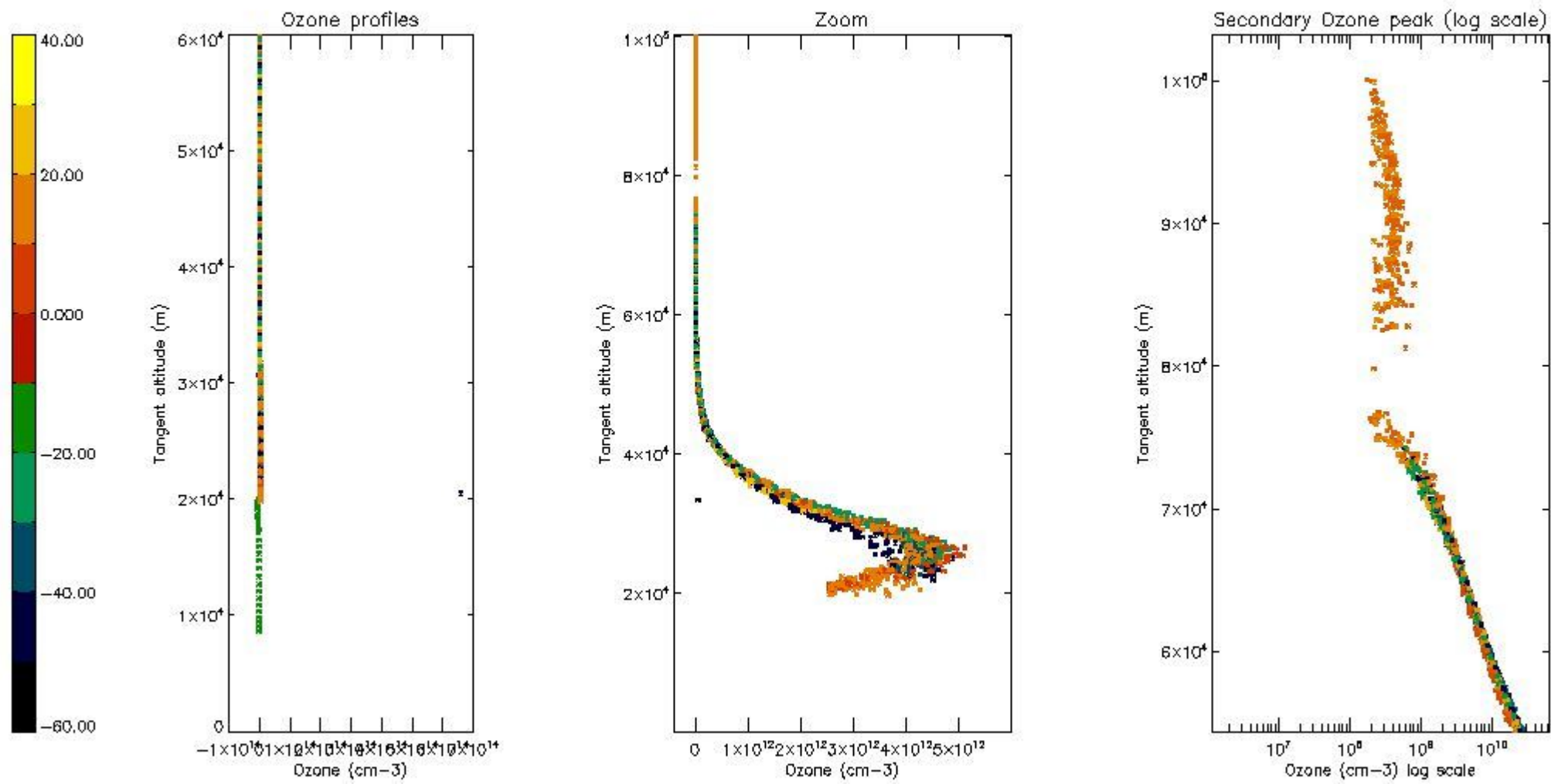
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



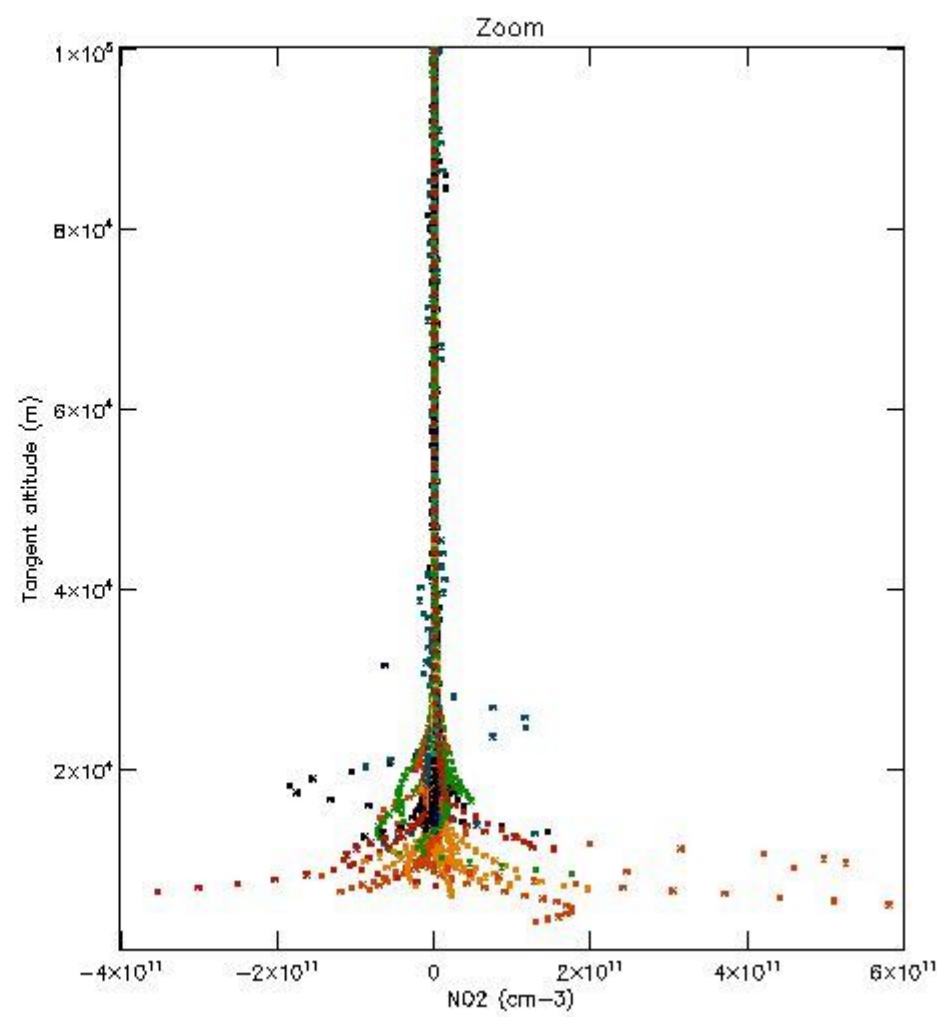
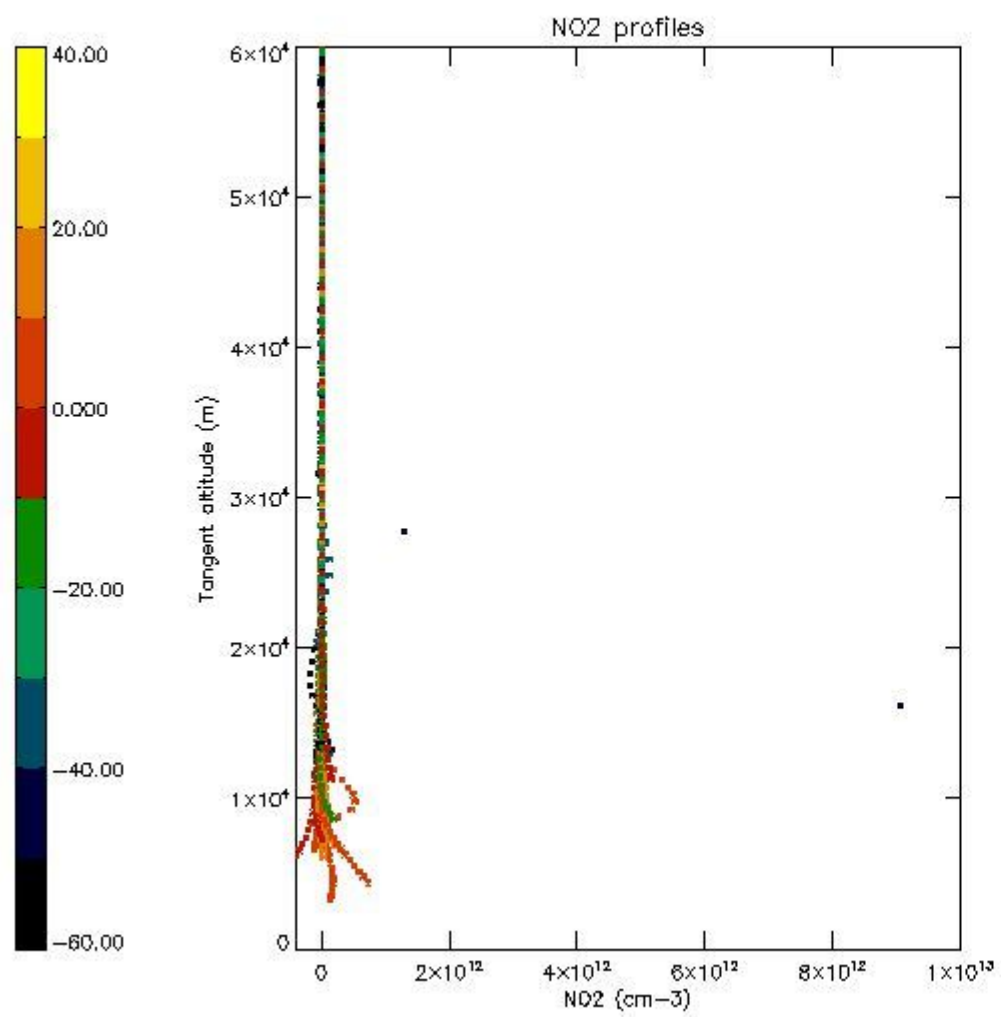
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



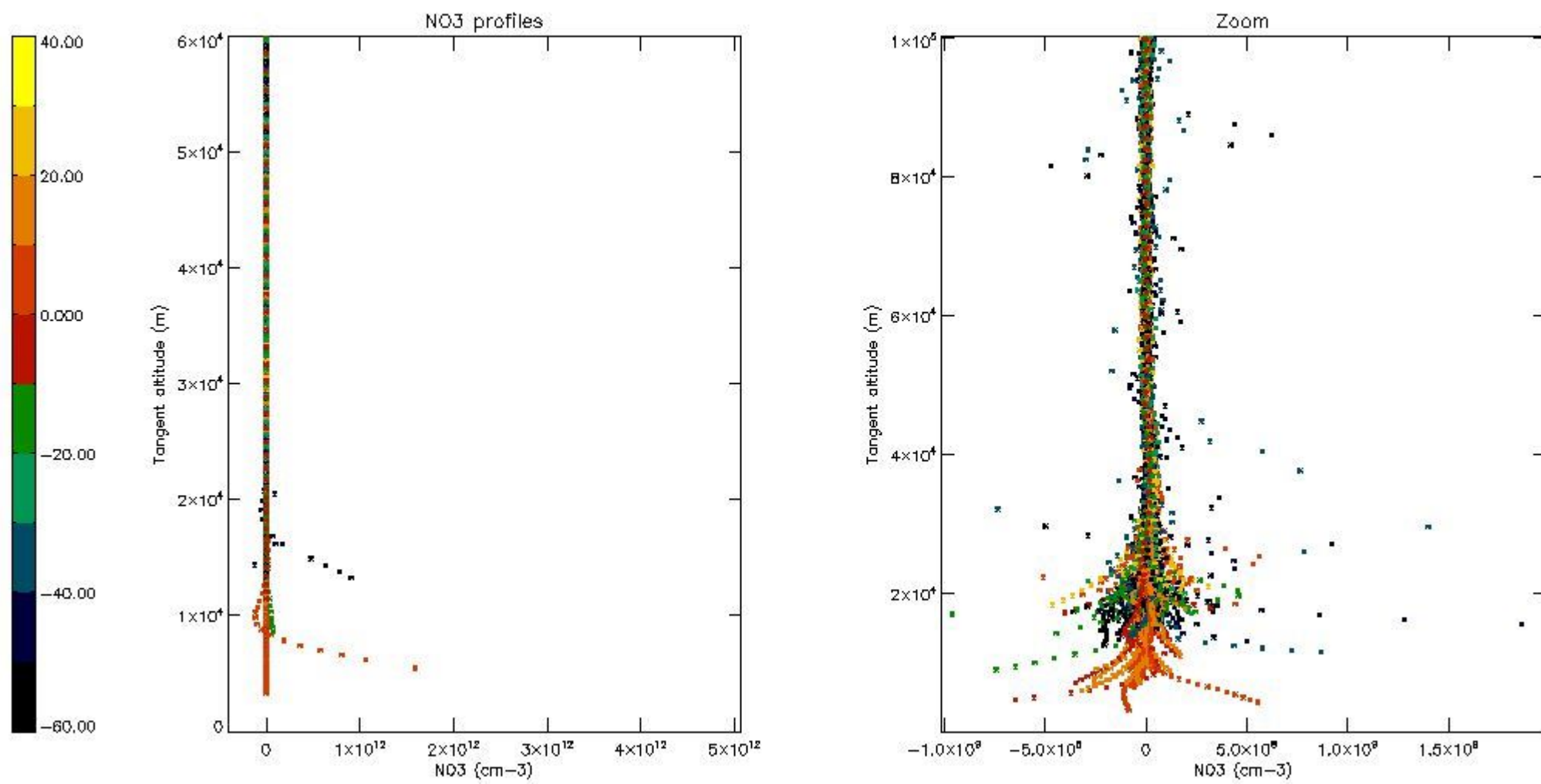
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



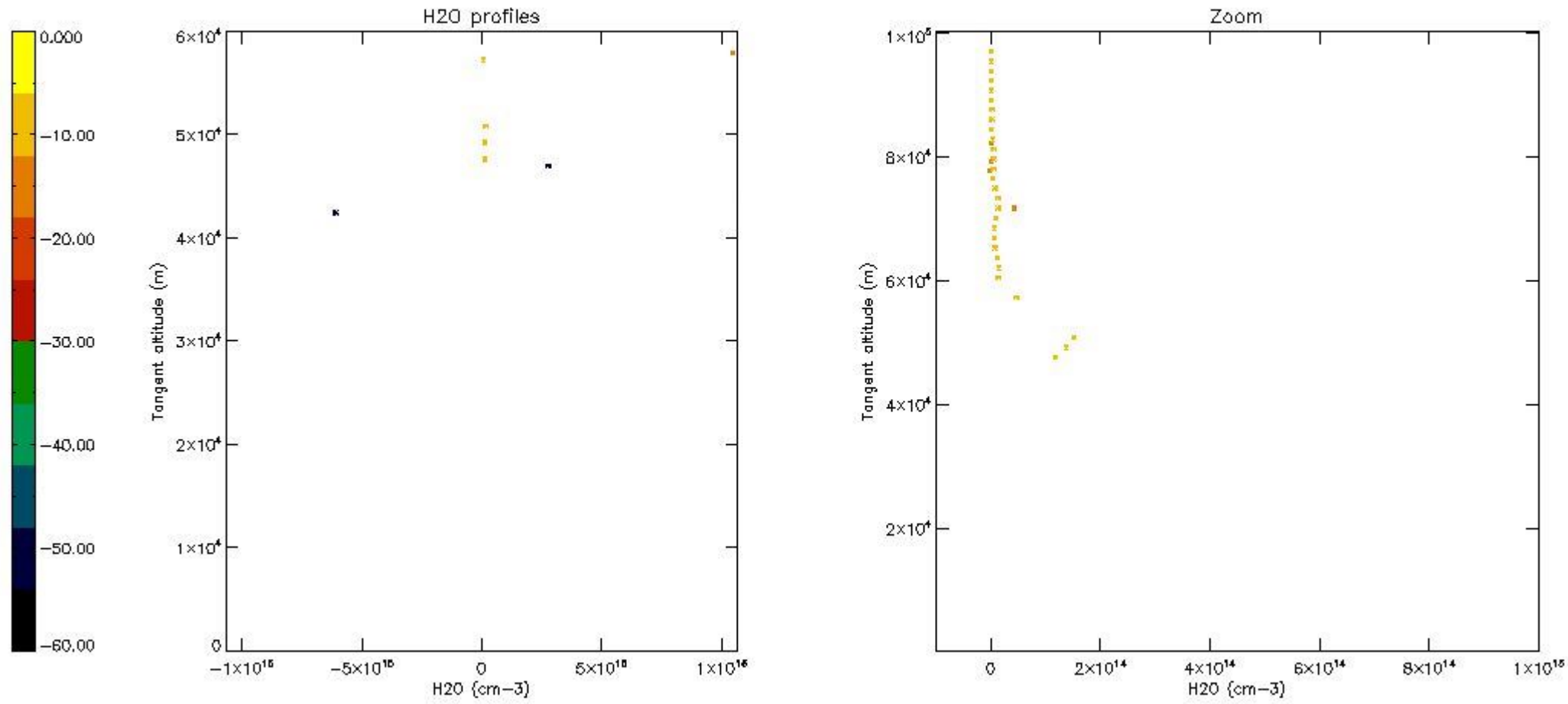
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

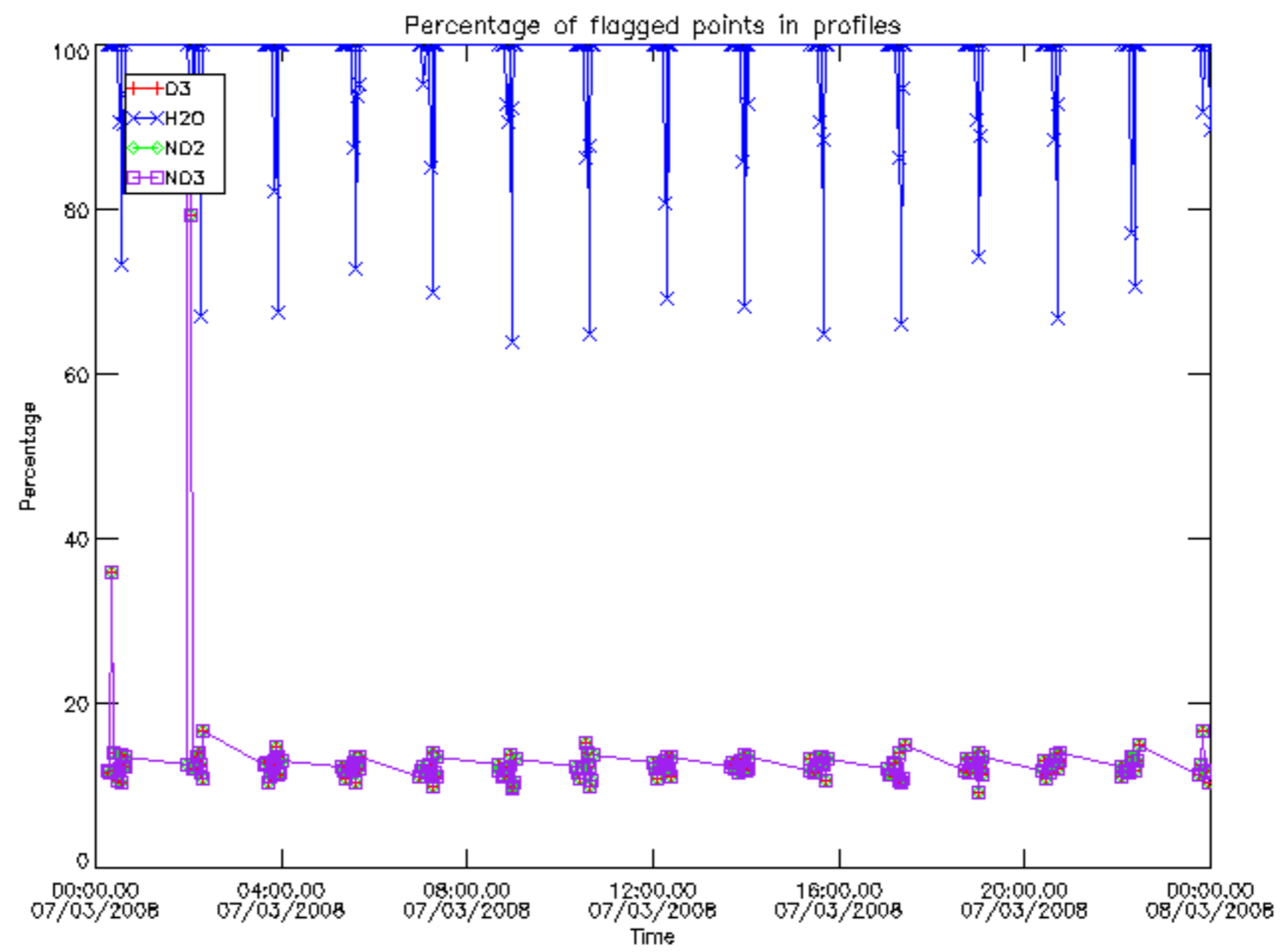
The colorbar represents the latitude.



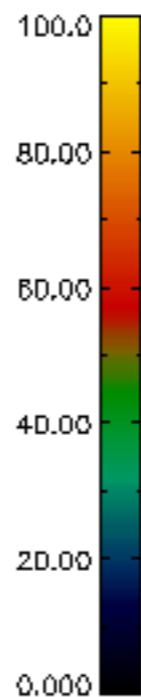
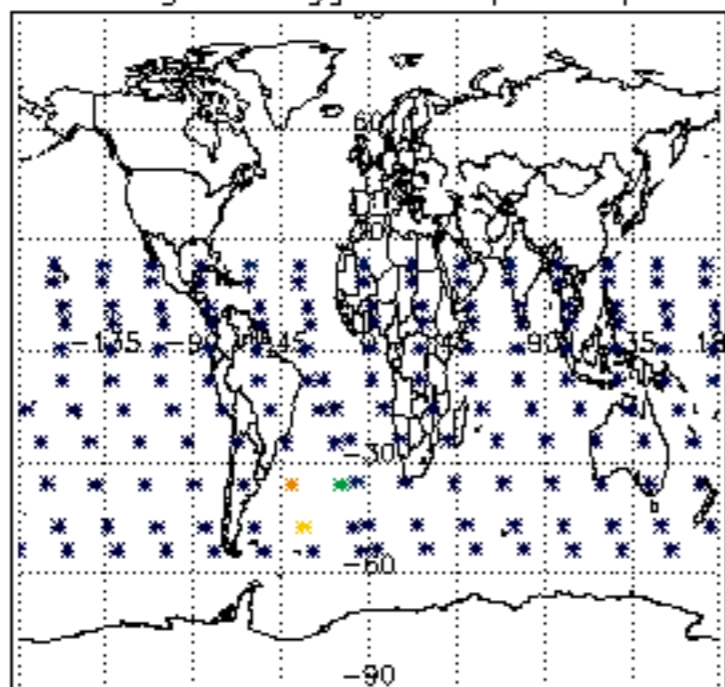
6. Auxiliary Data Files used for the production reported in section 2

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.

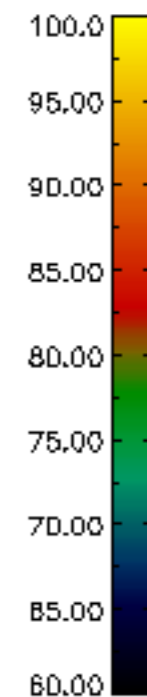
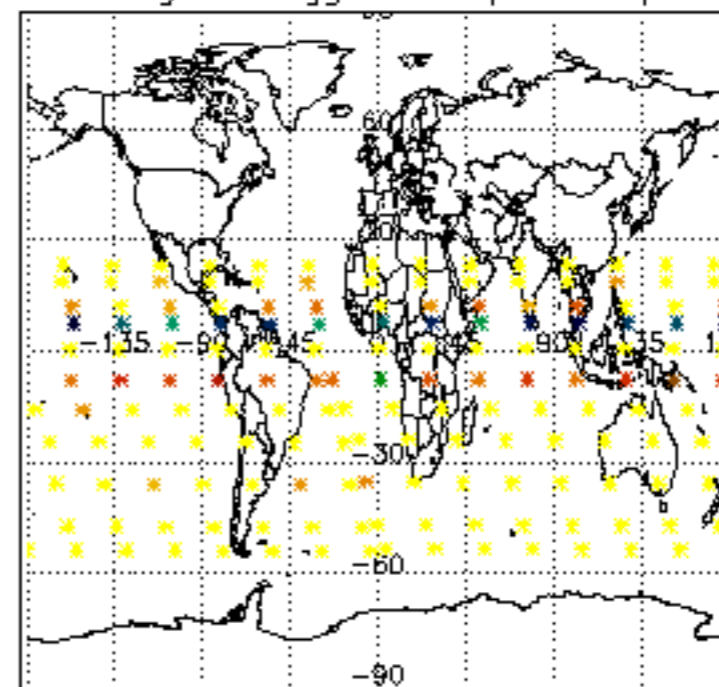
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	07-MAR-2008 00:06:00
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	07-MAR-2008 00:06:00
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	07-MAR-2008 00:06:00



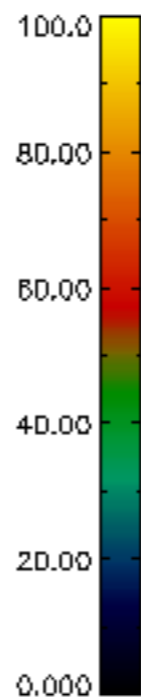
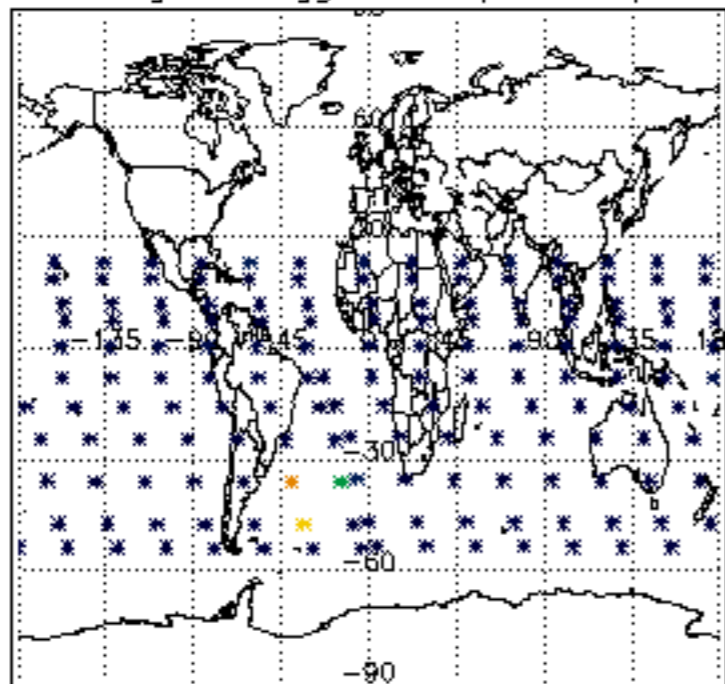
Percentage of flagged data per D3 profile



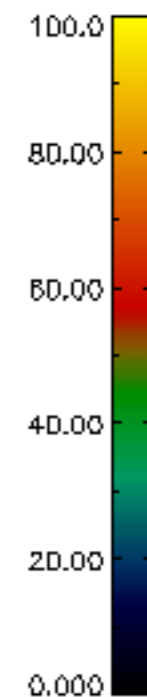
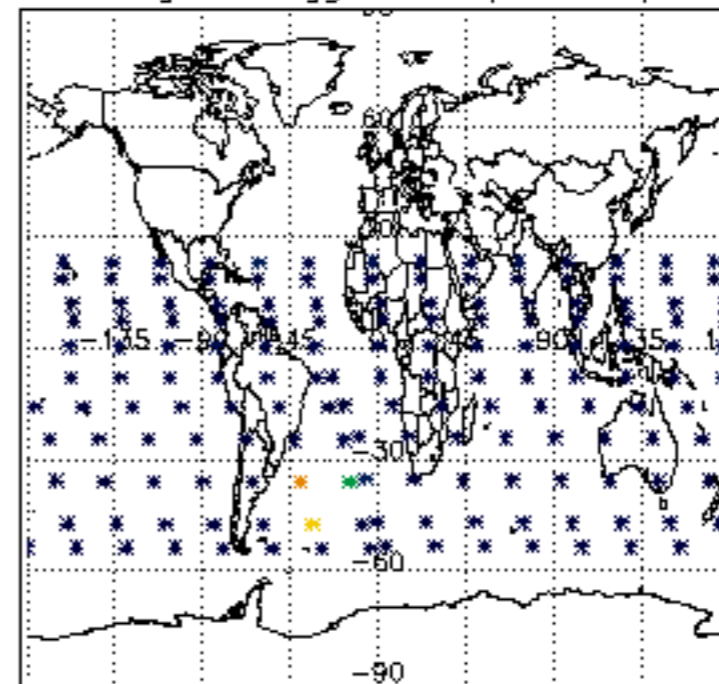
Percentage of flagged data per H2O profile

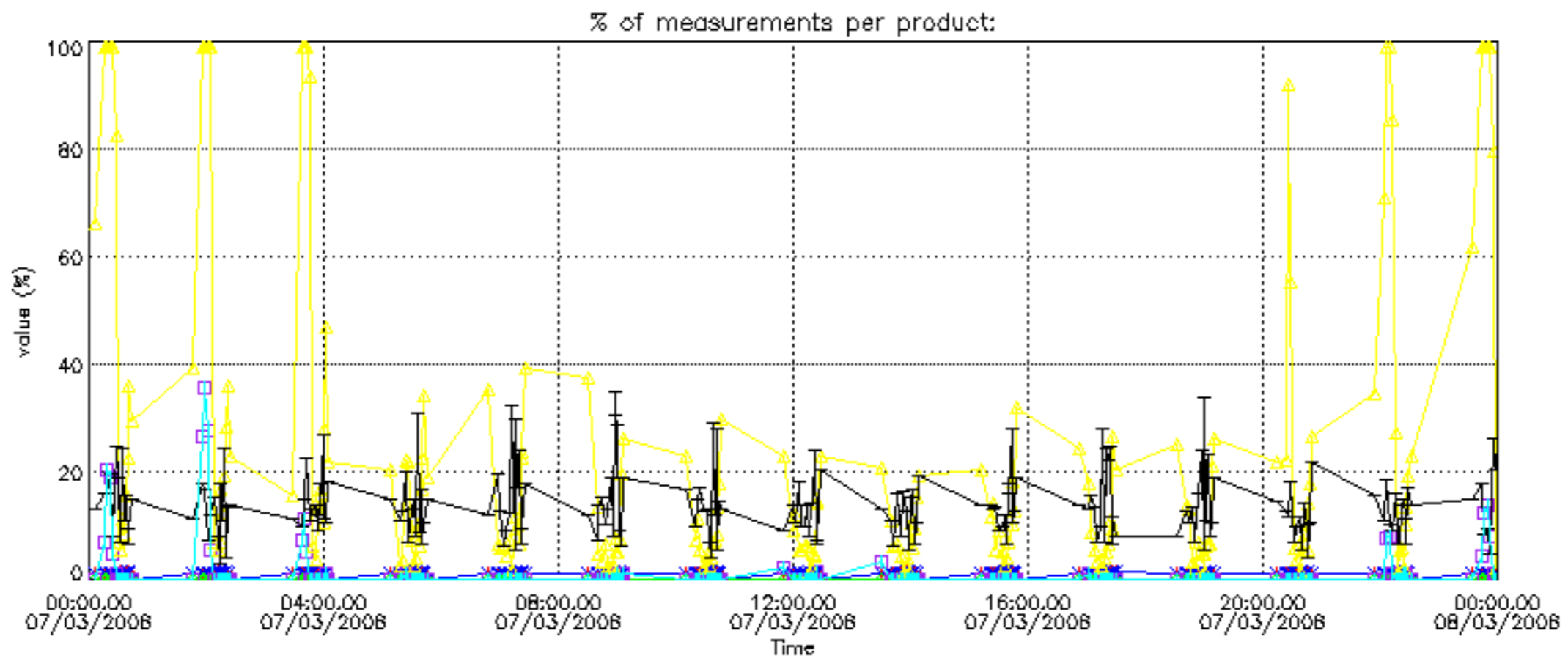


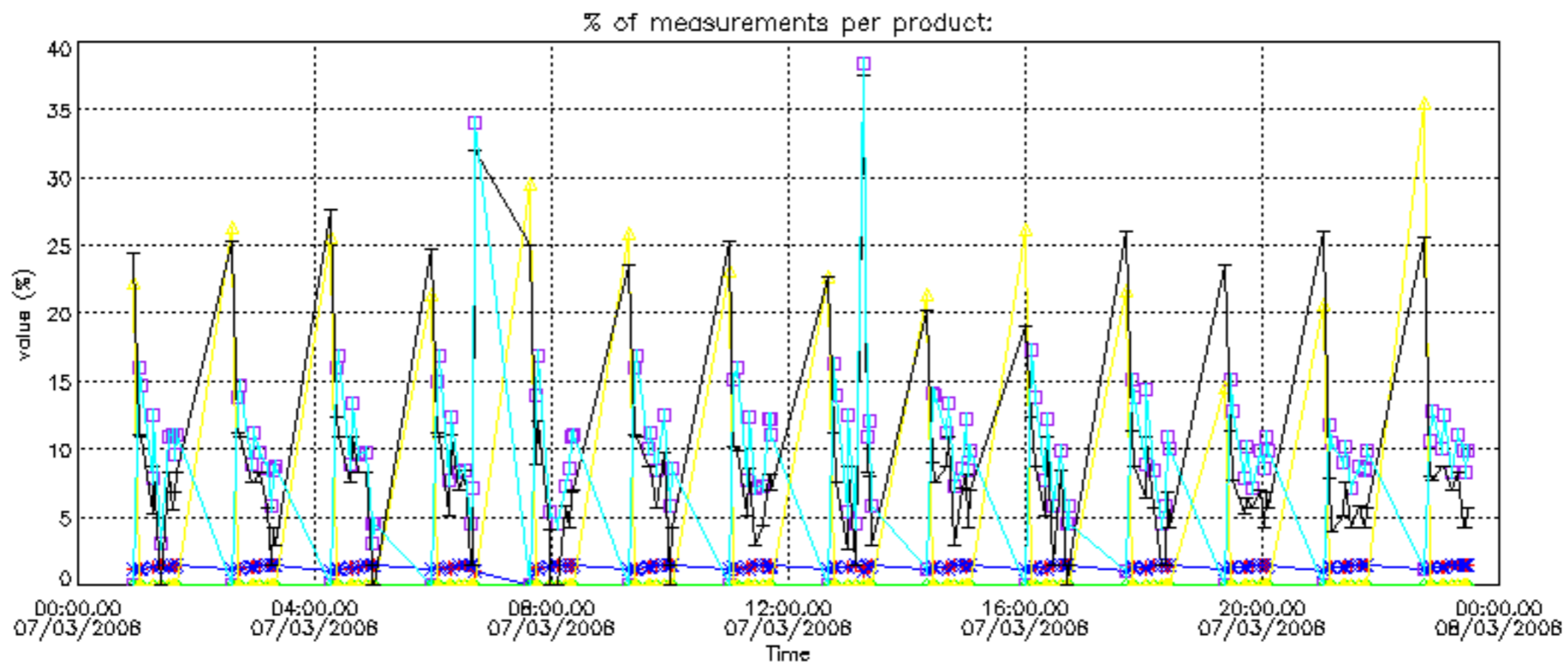
Percentage of flagged data per NO2 profile



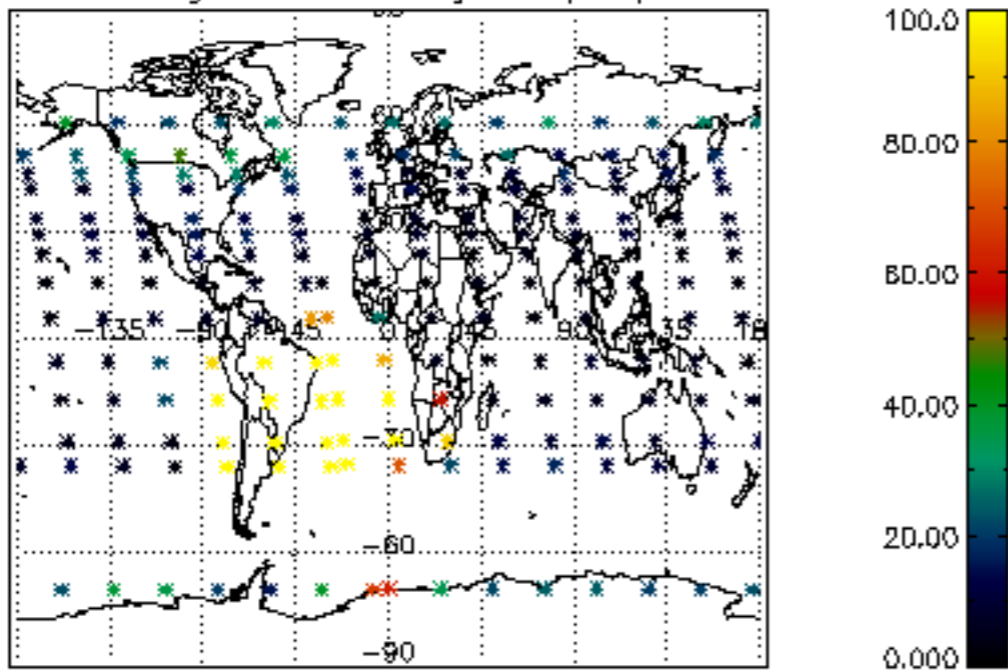
Percentage of flagged data per NO3 profile



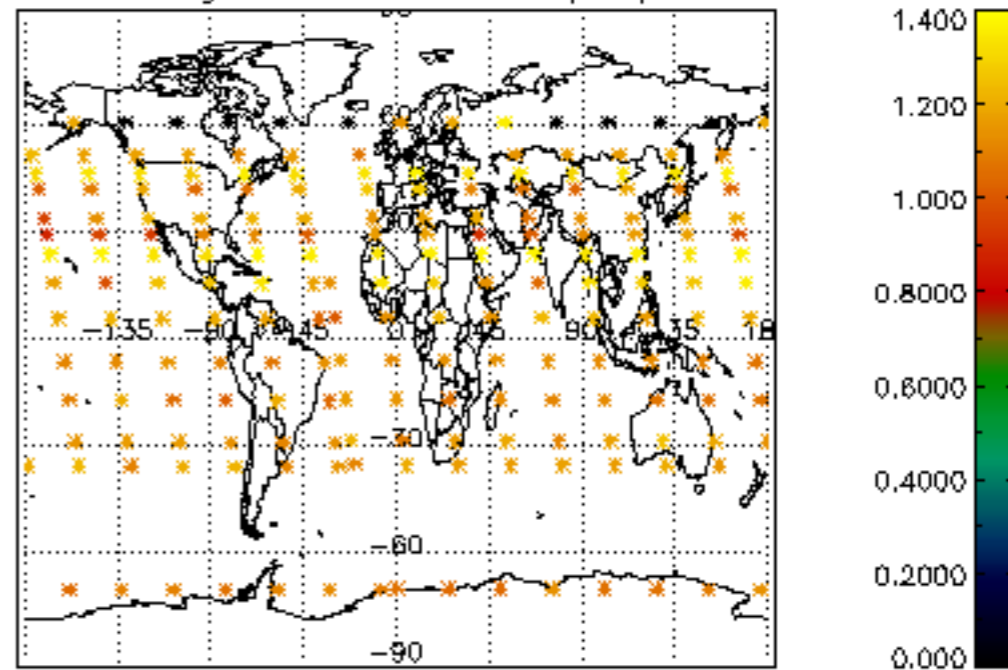




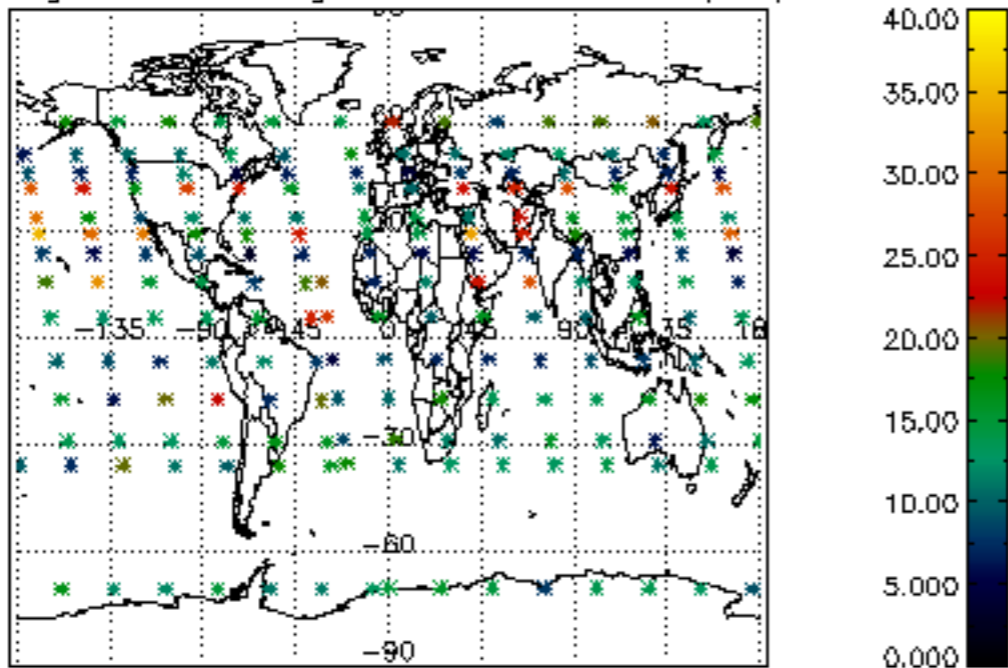
Percentage of cosmic ray hits per profile



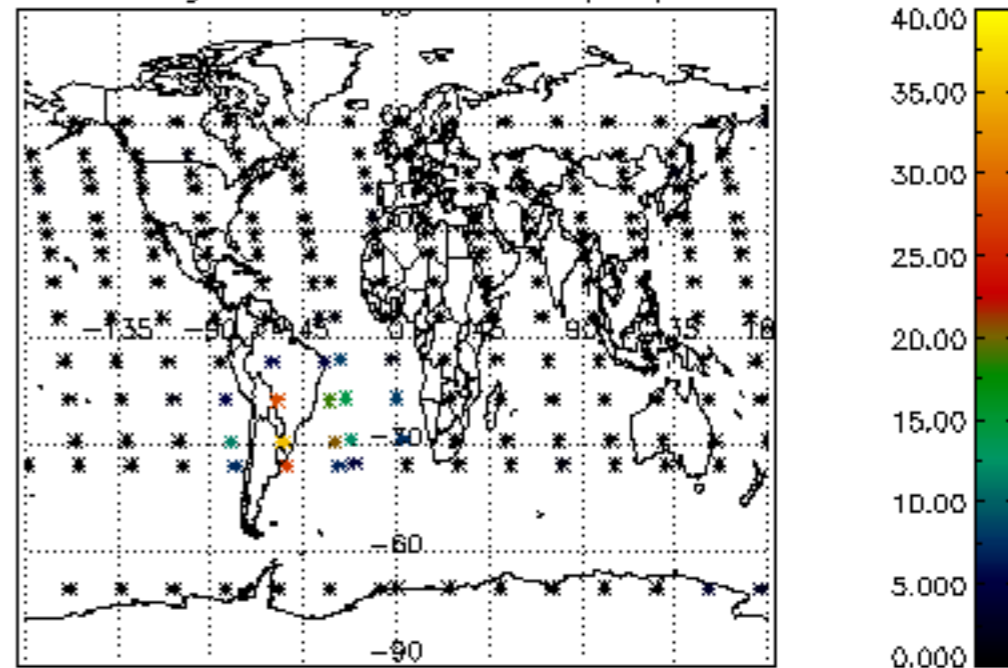
Percentage of datation errors per profile



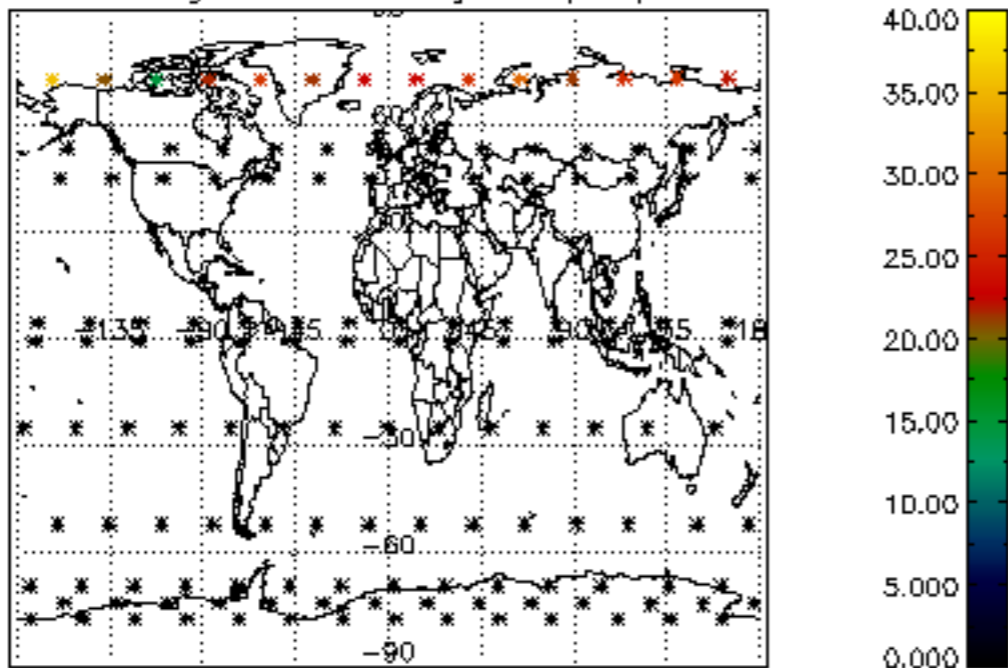
Percentage of star falling outside central band per profile



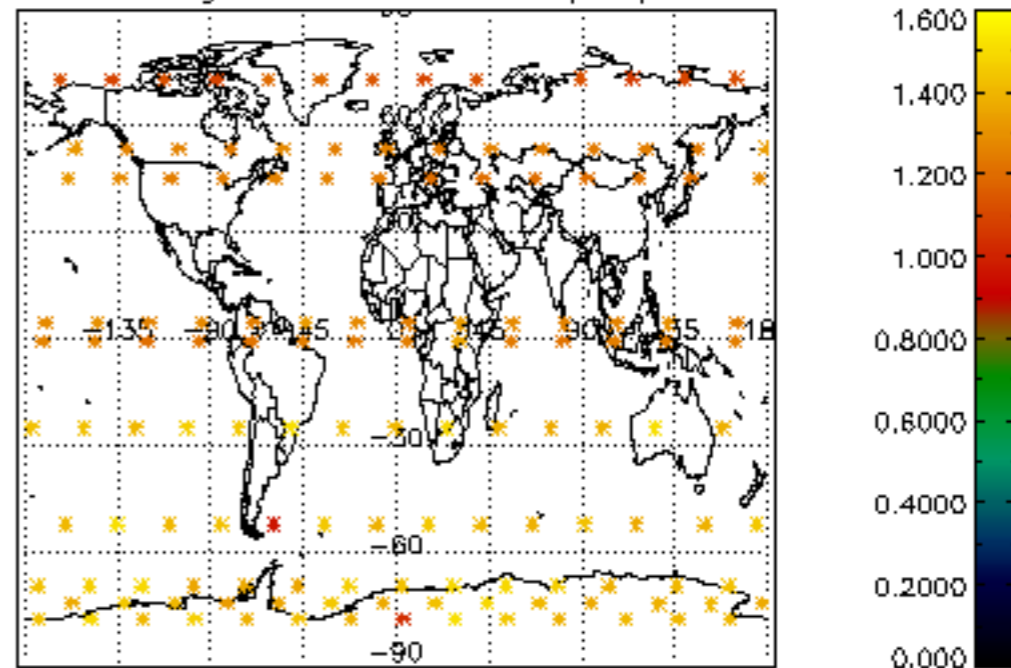
Percentage of saturation errors per profile



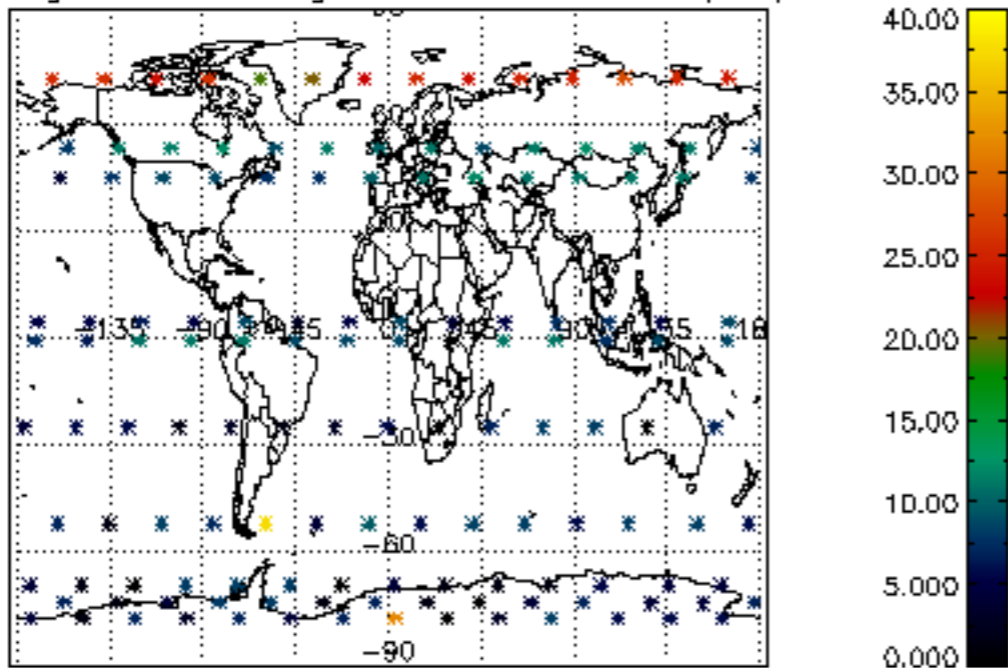
Percentage of cosmic ray hits per profile



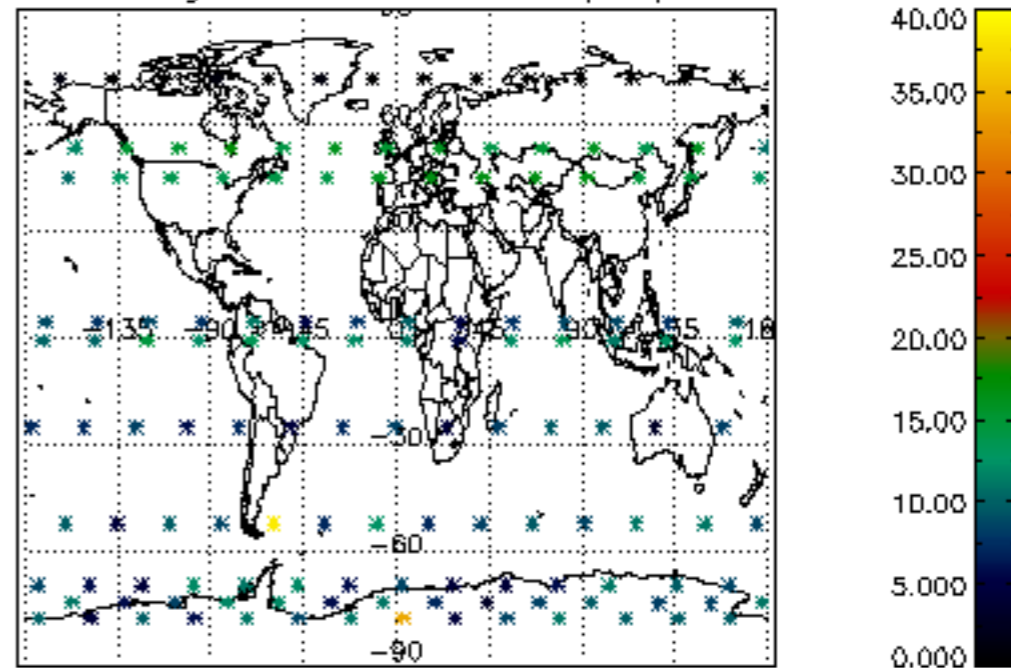
Percentage of datation errors per profile

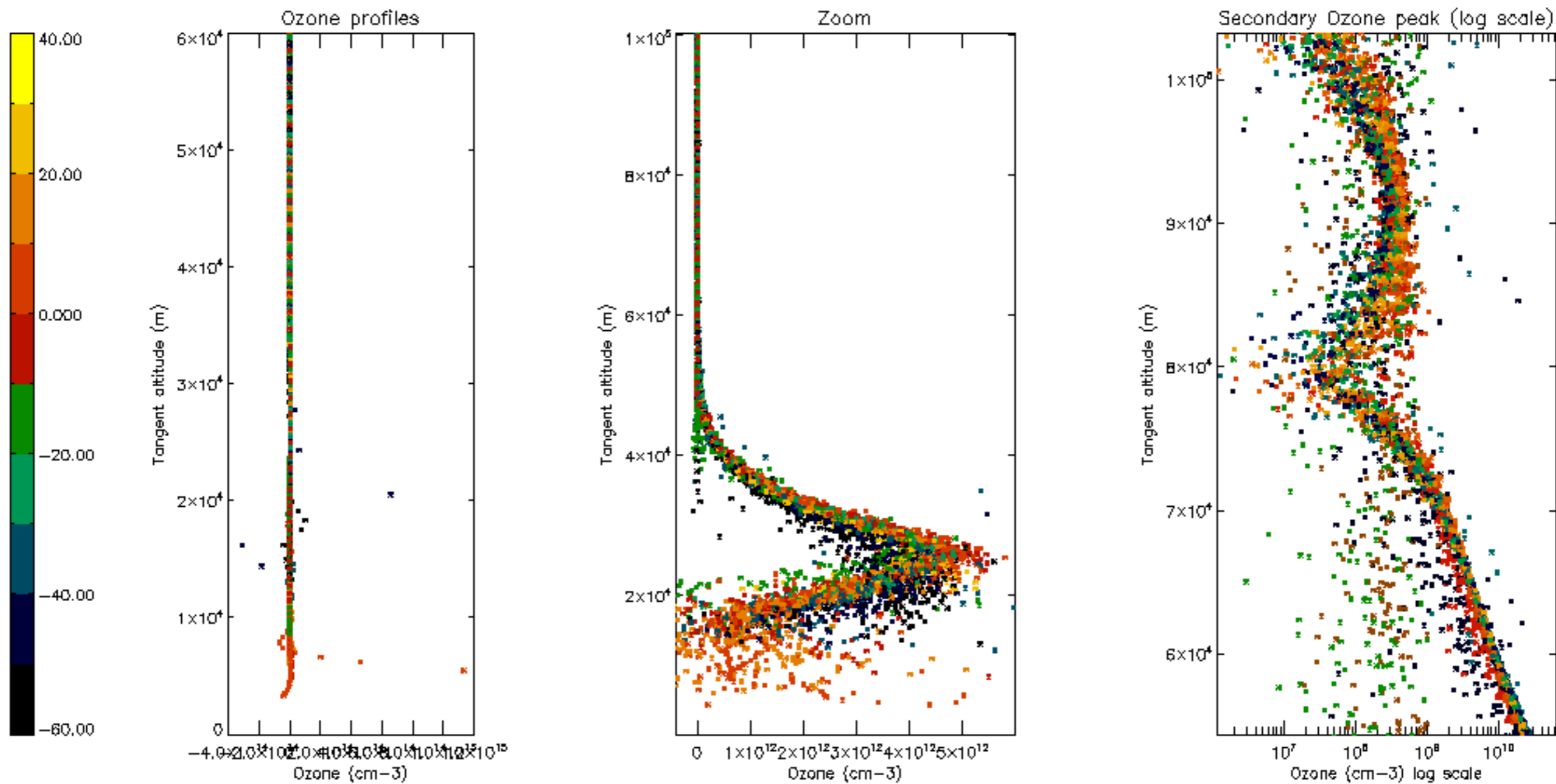


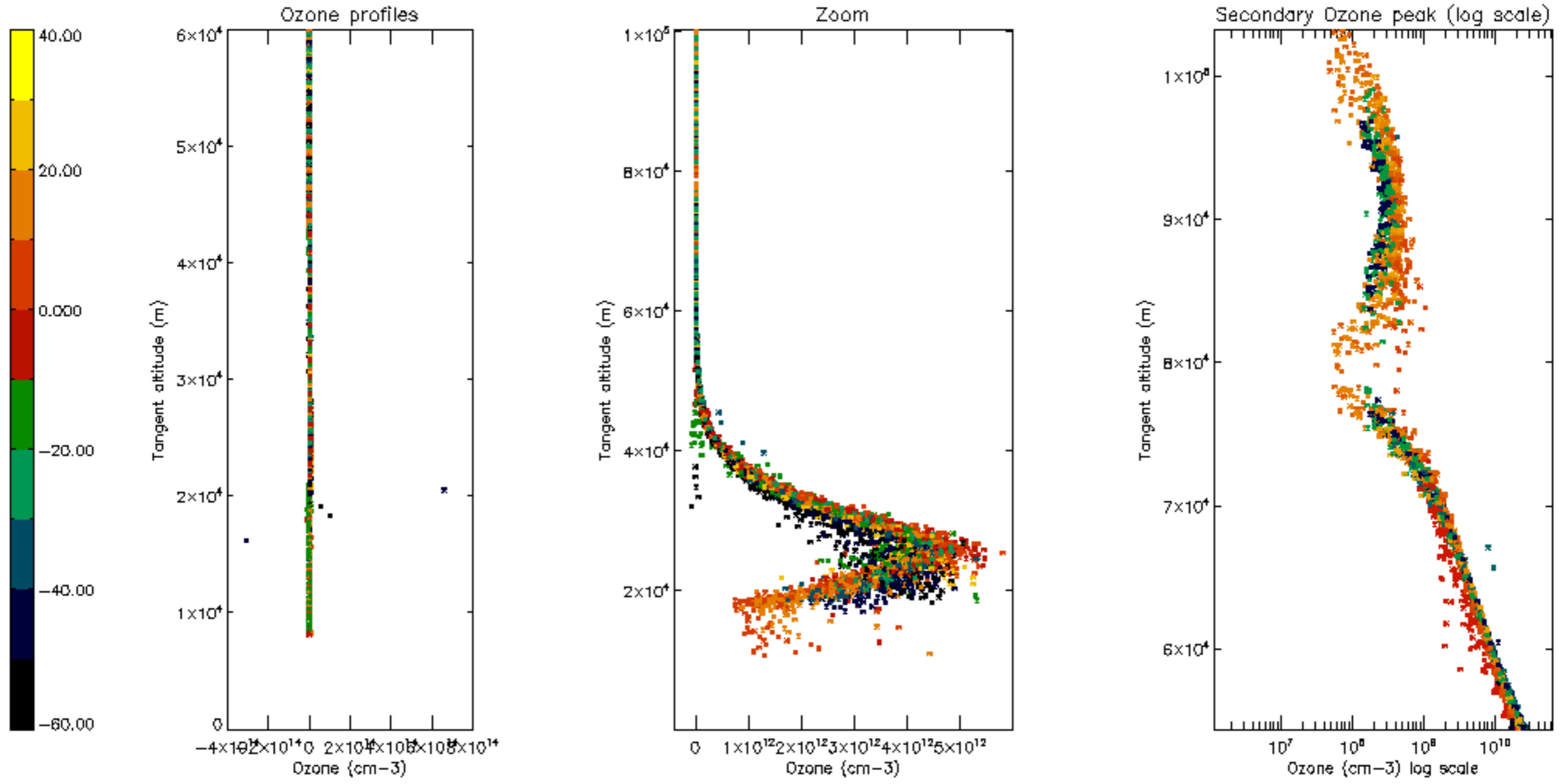
Percentage of star falling outside central band per profile

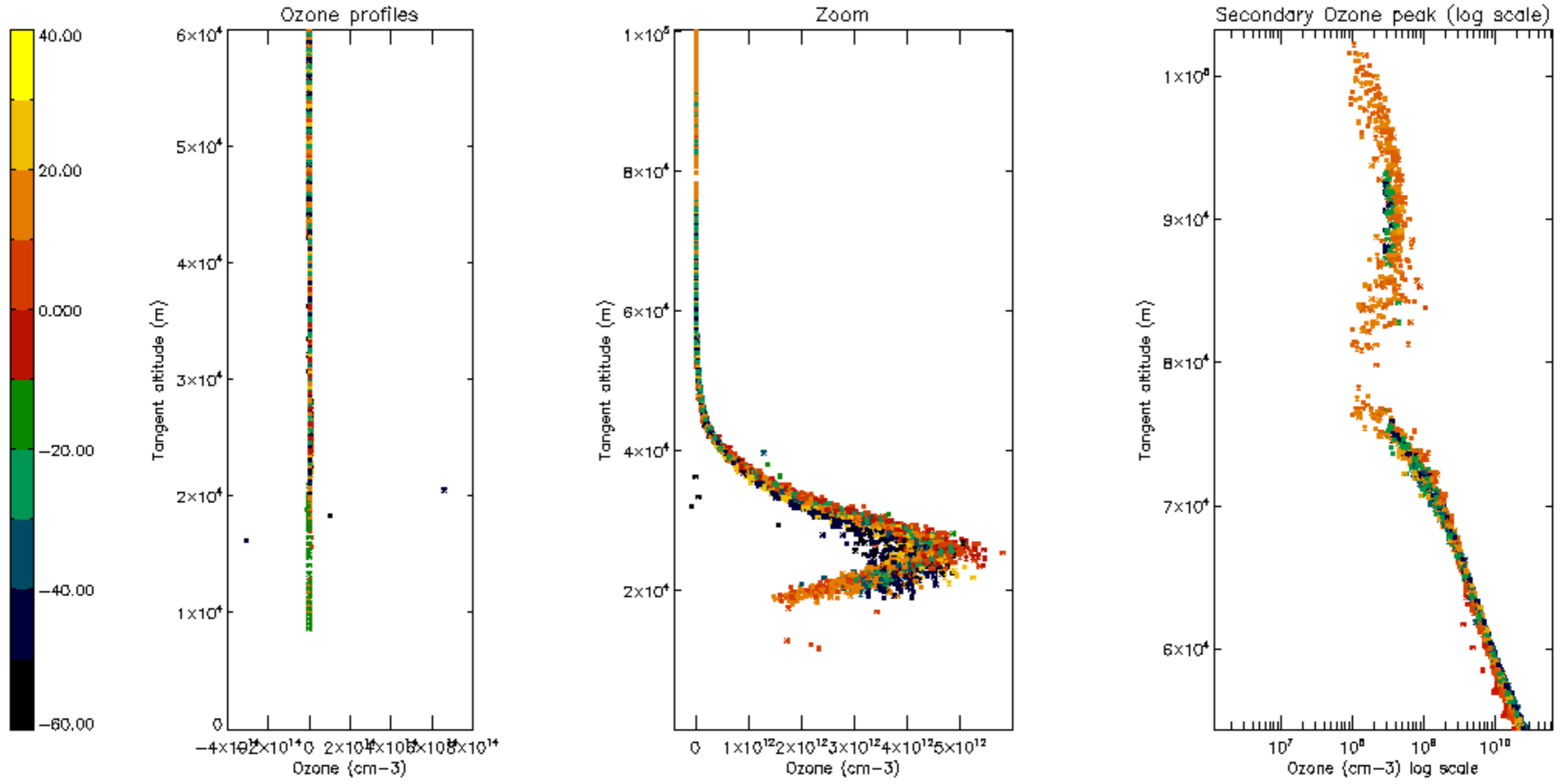


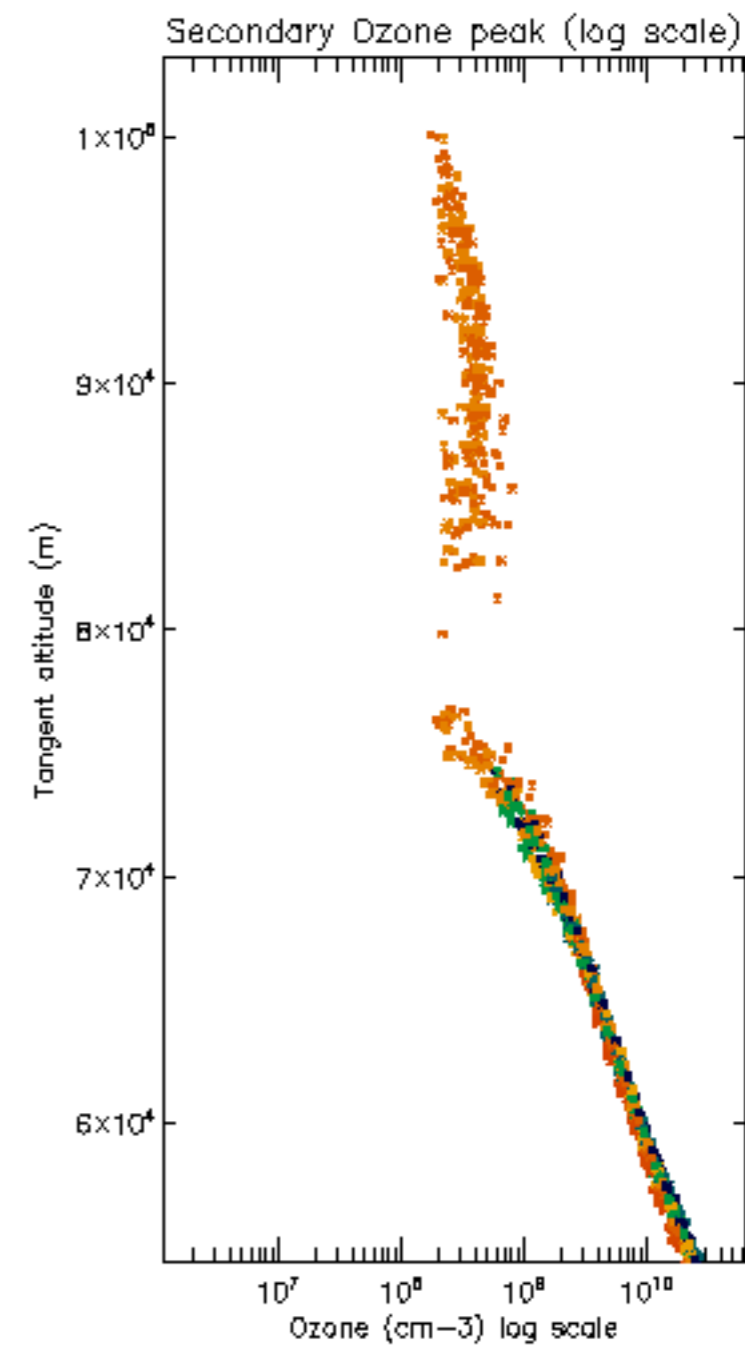
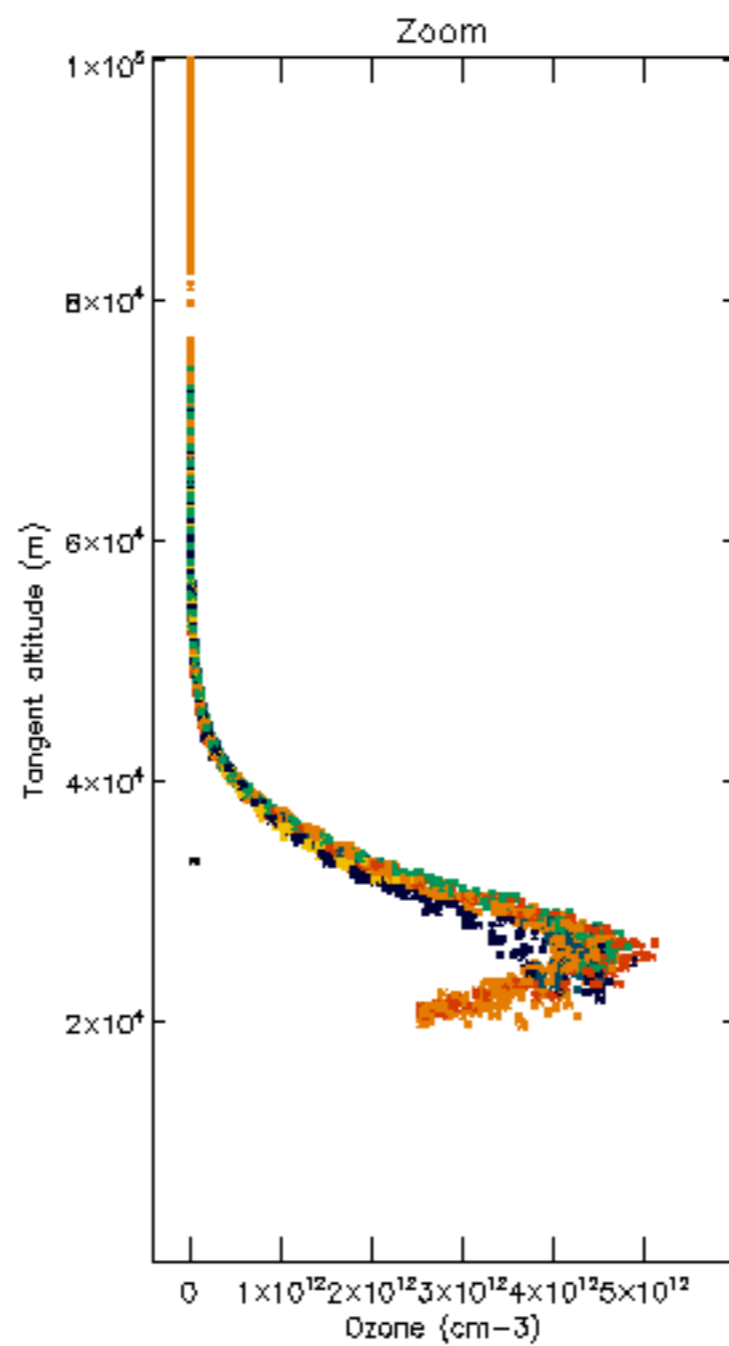
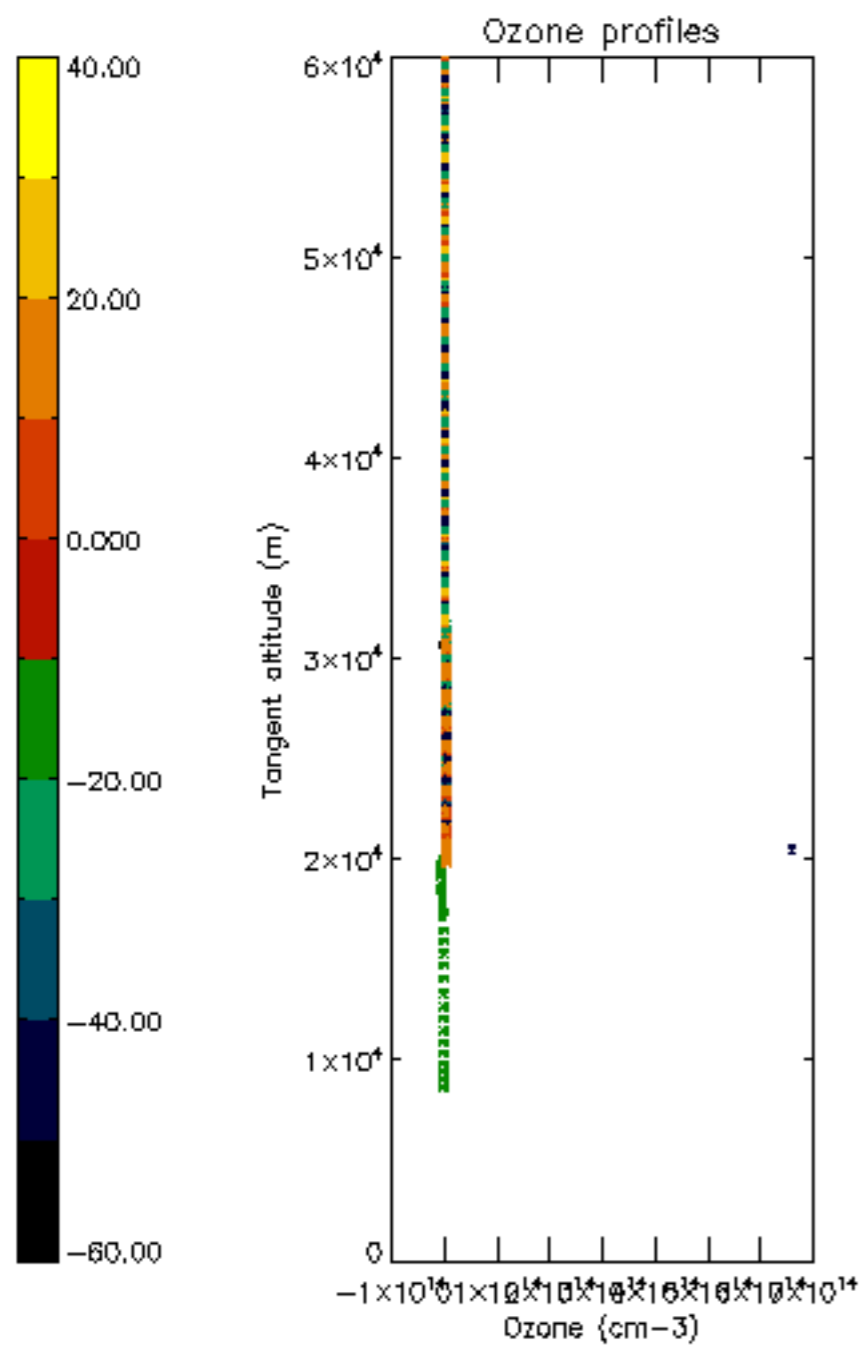
Percentage of saturation errors per profile

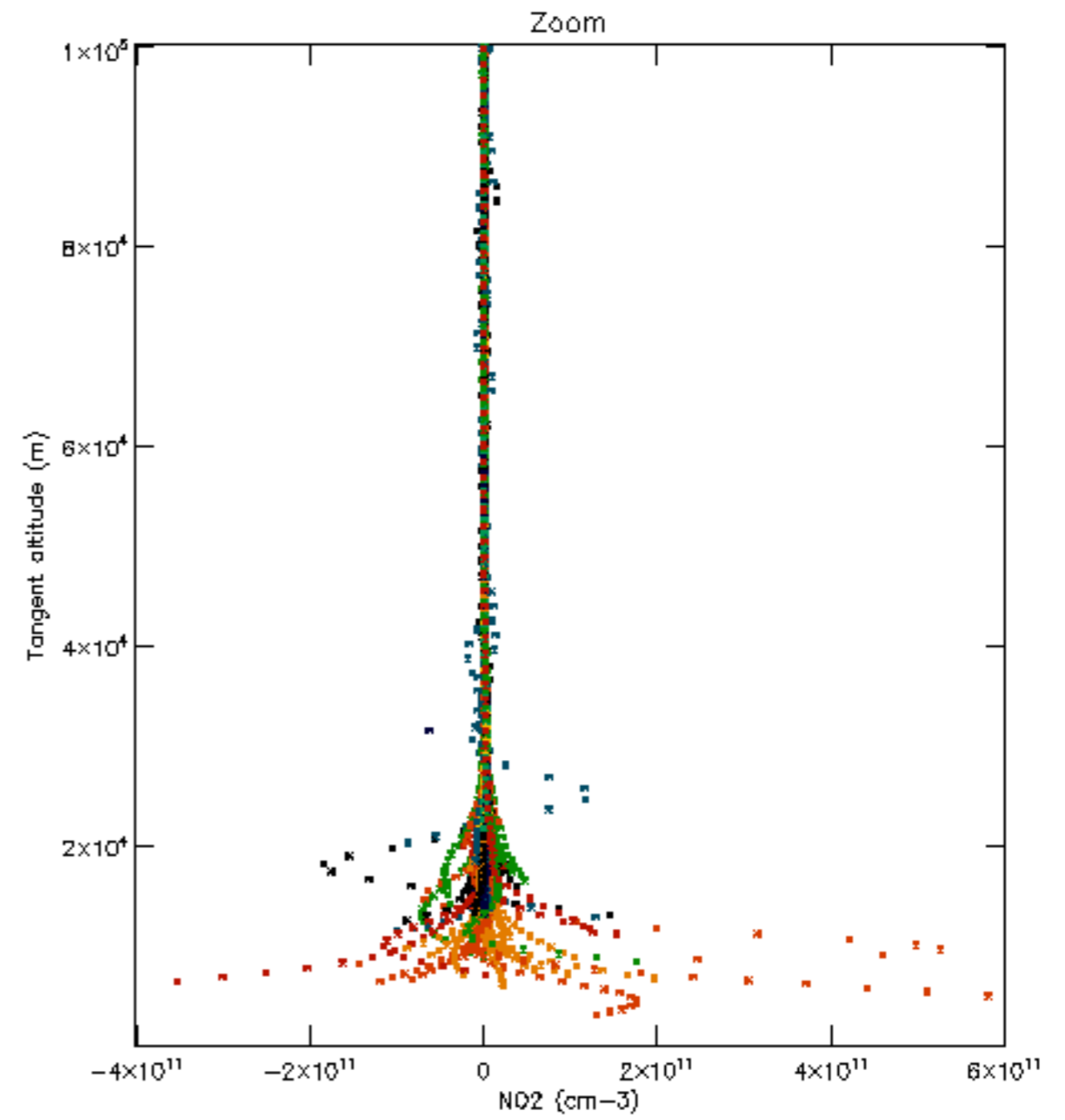
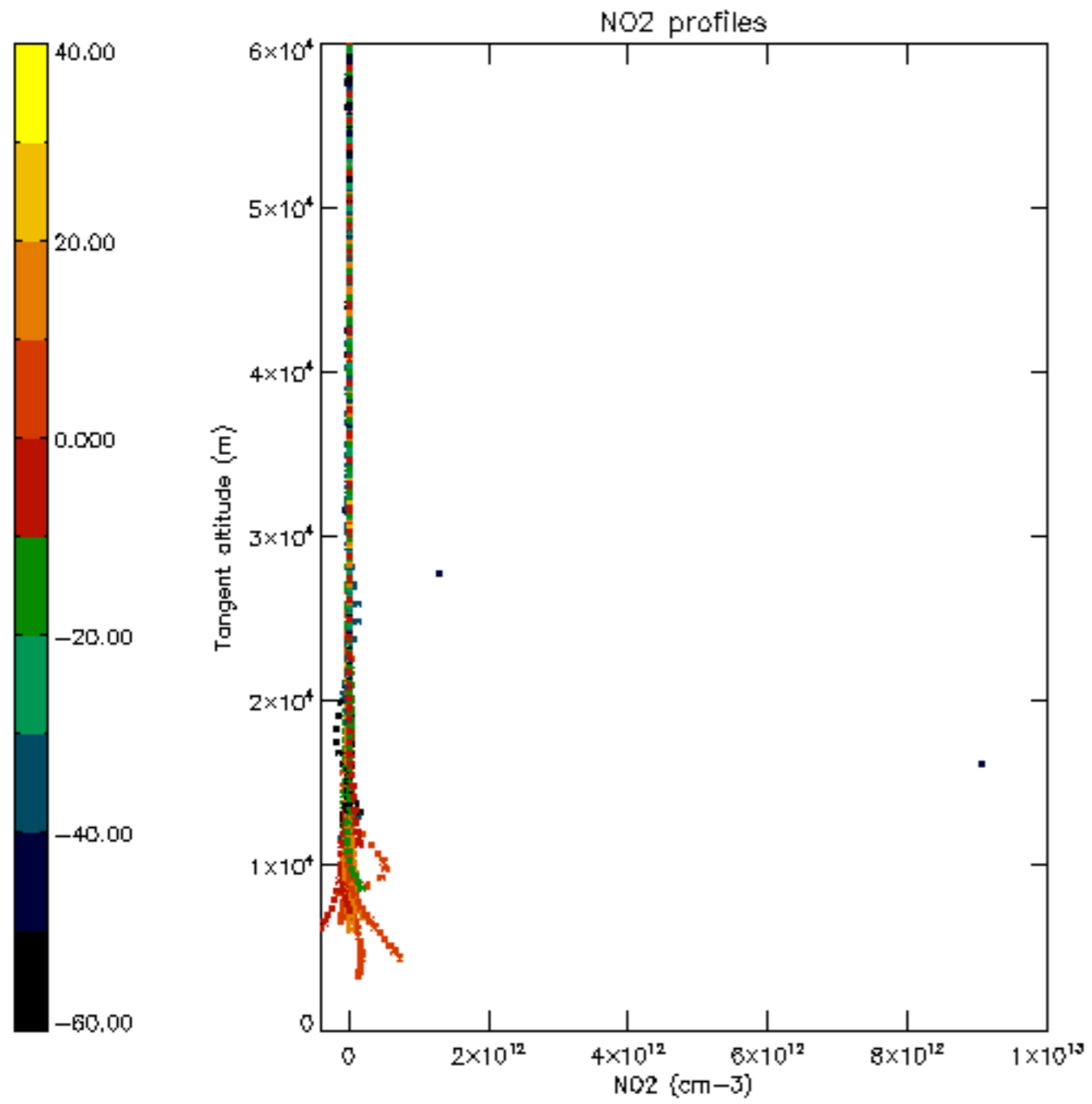


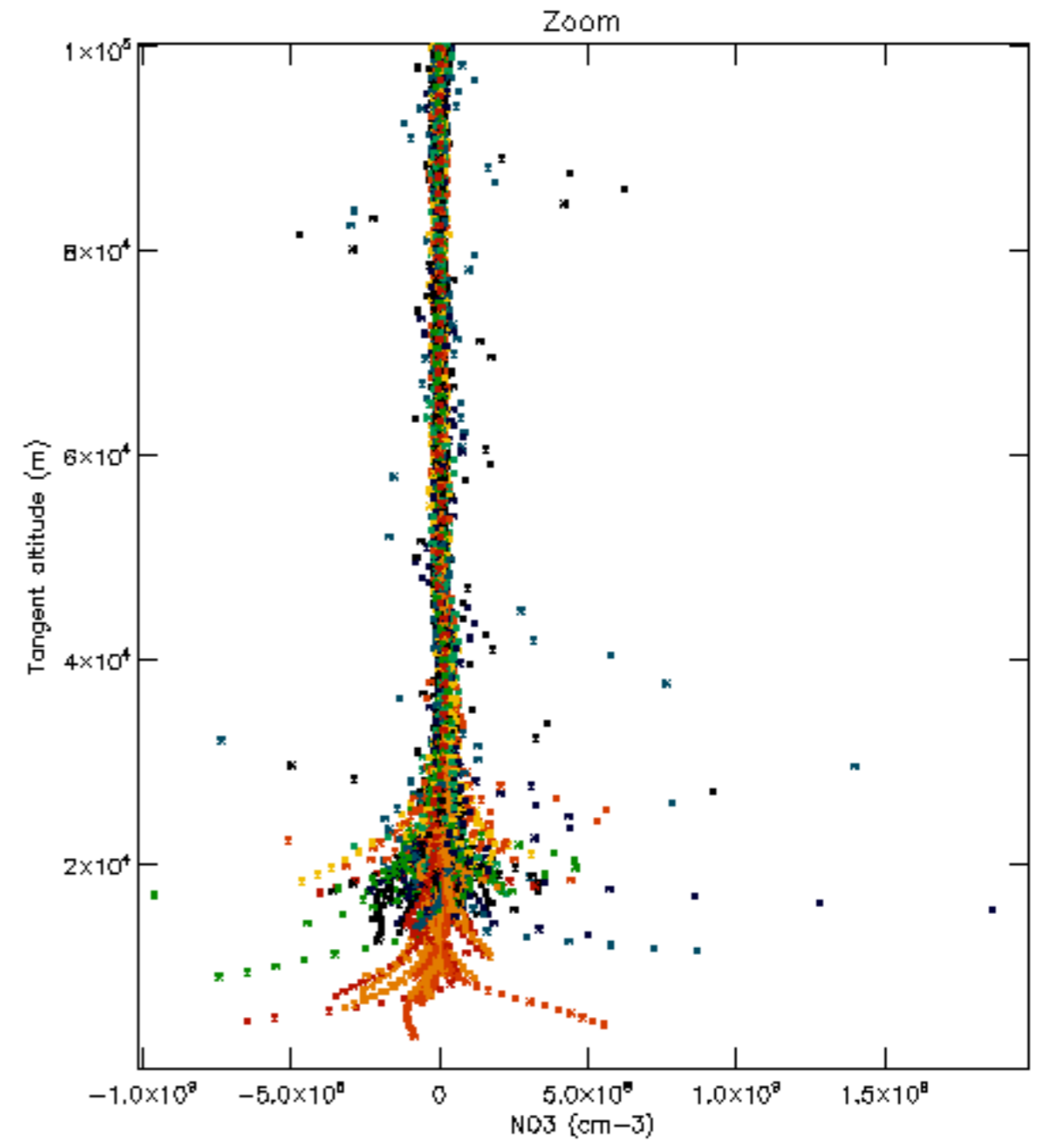
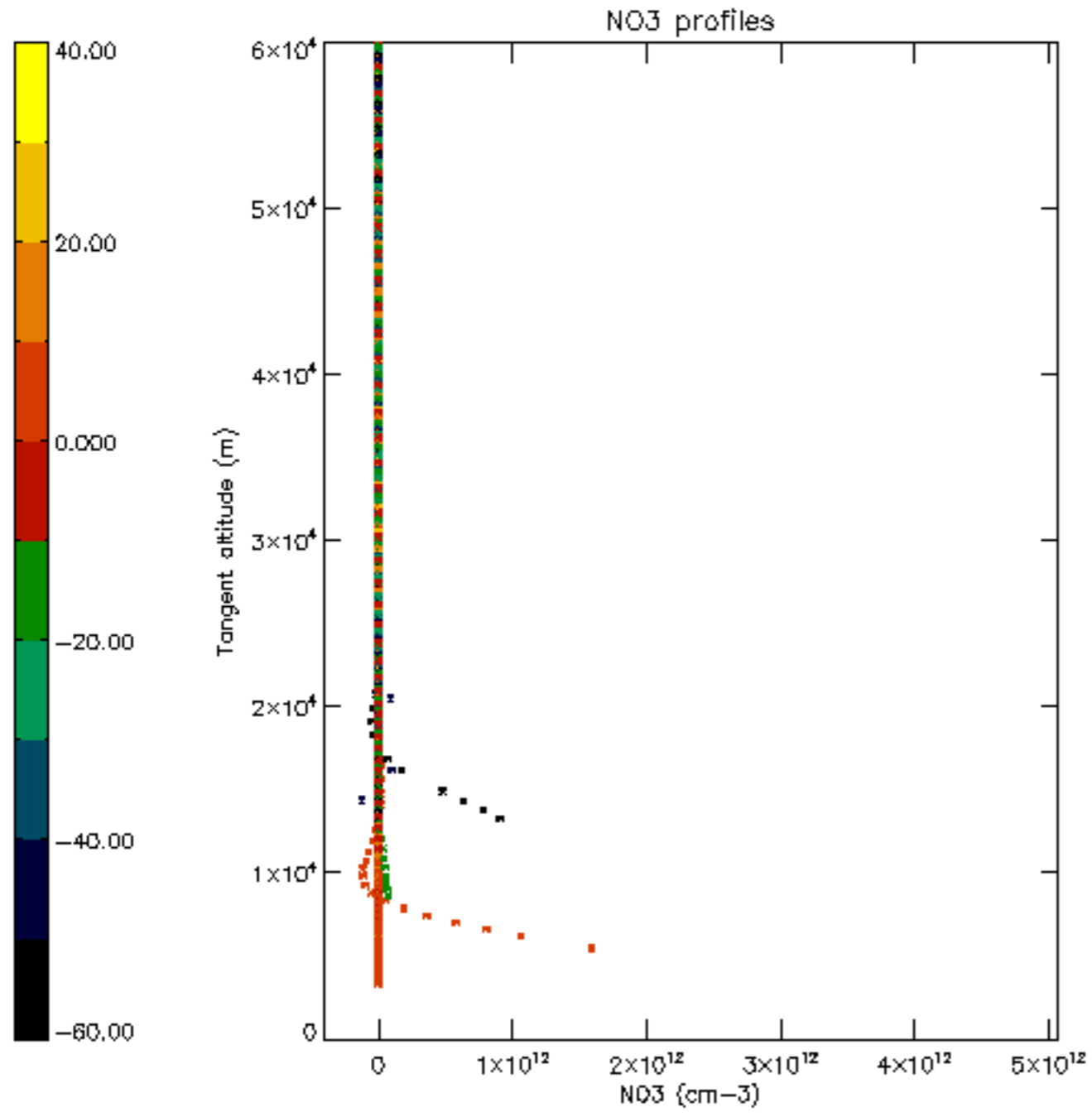


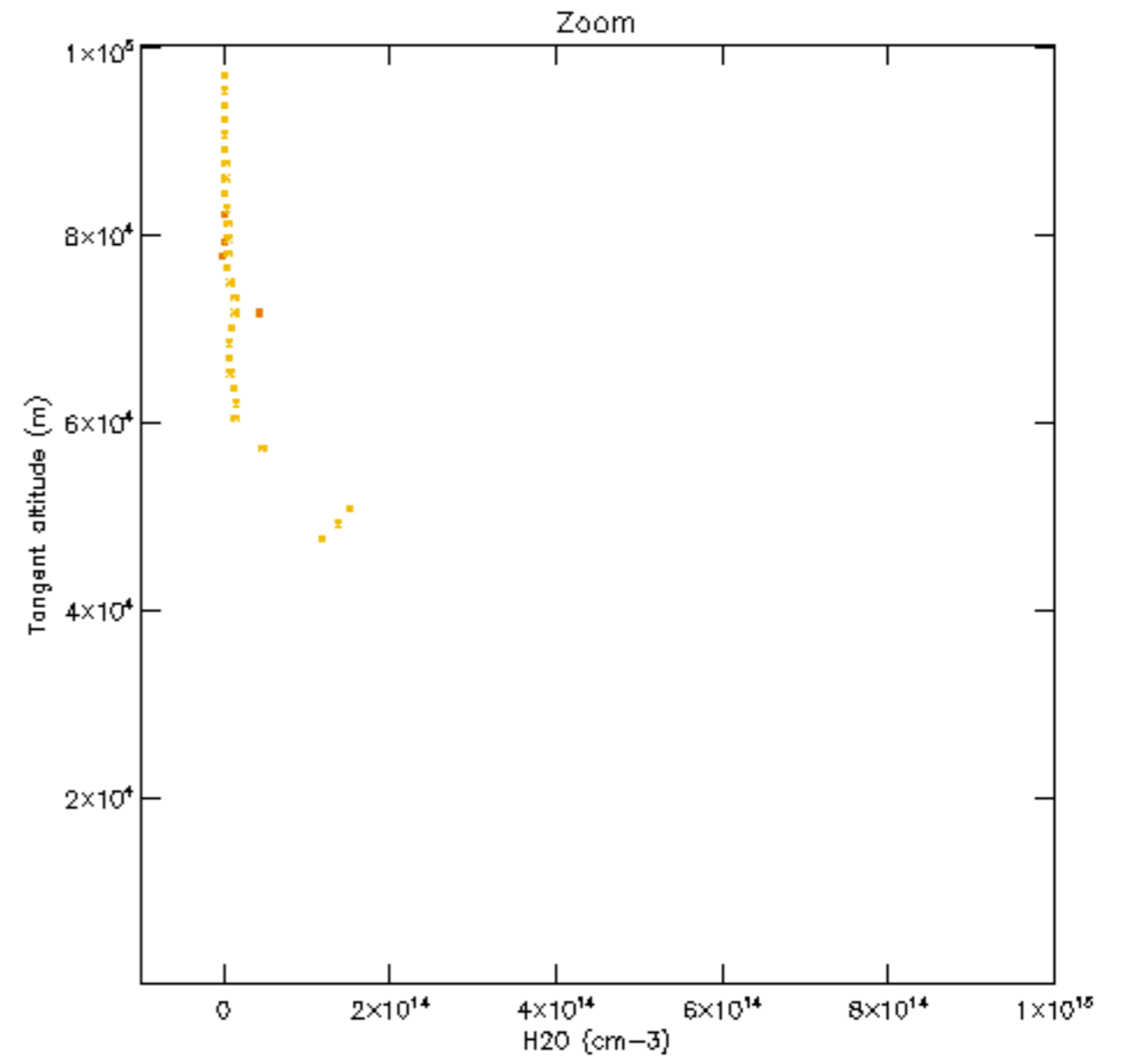
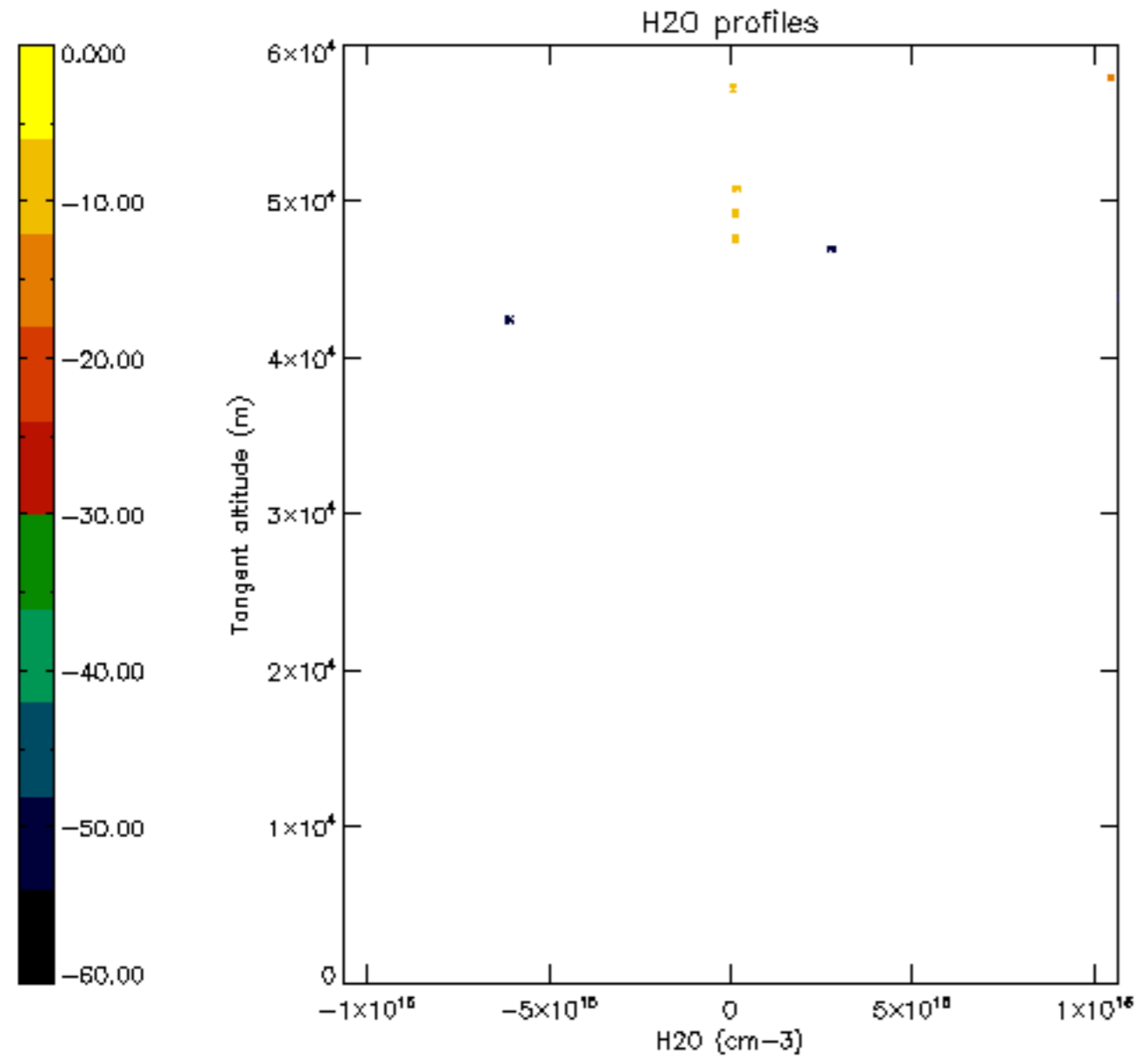


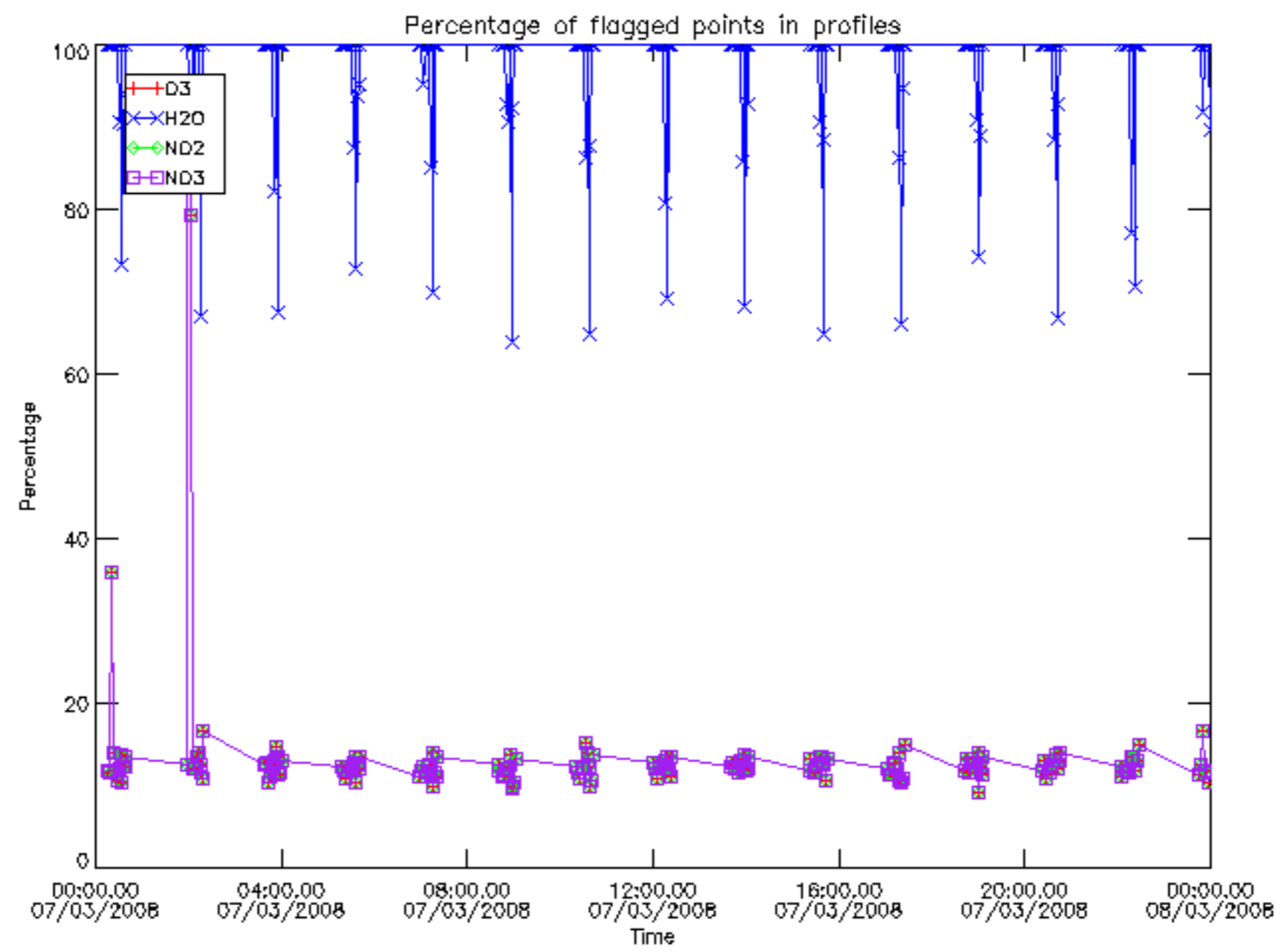




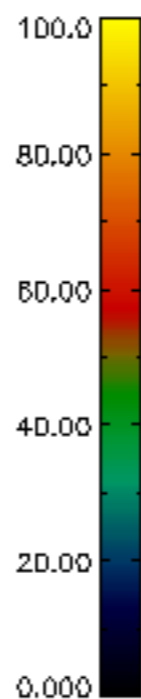
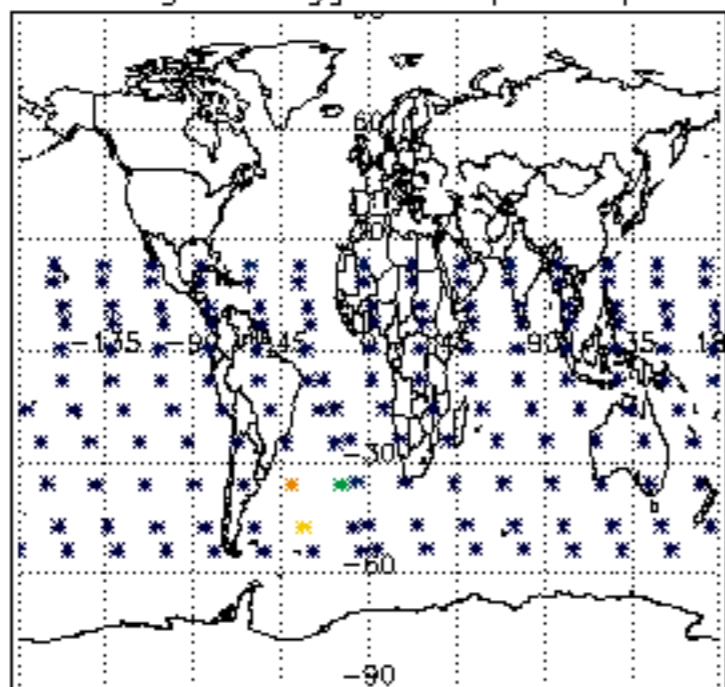




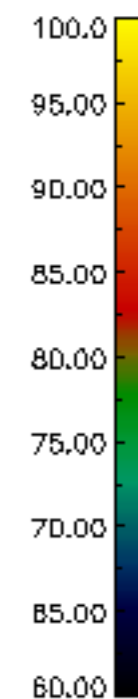
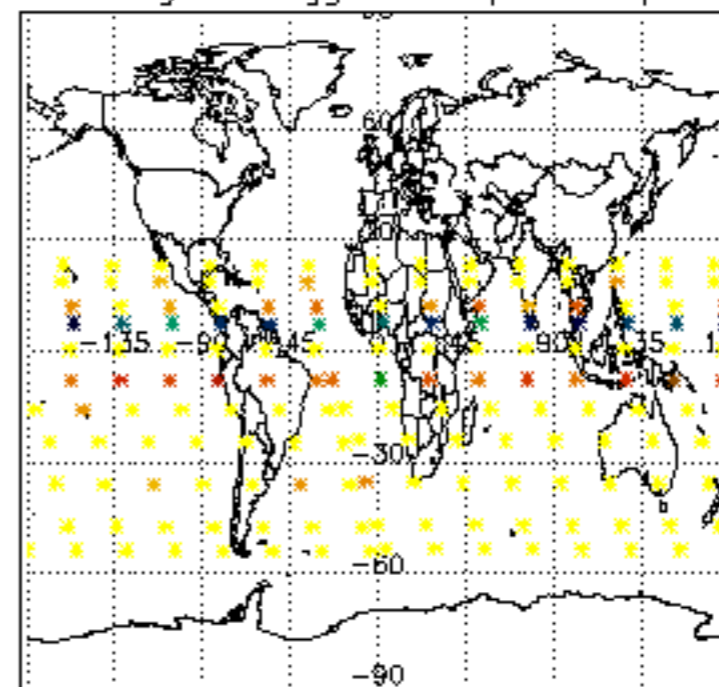




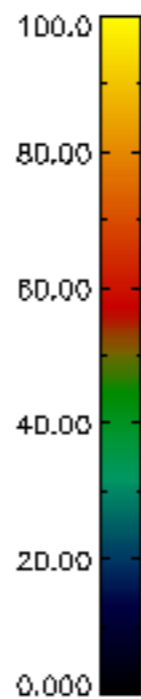
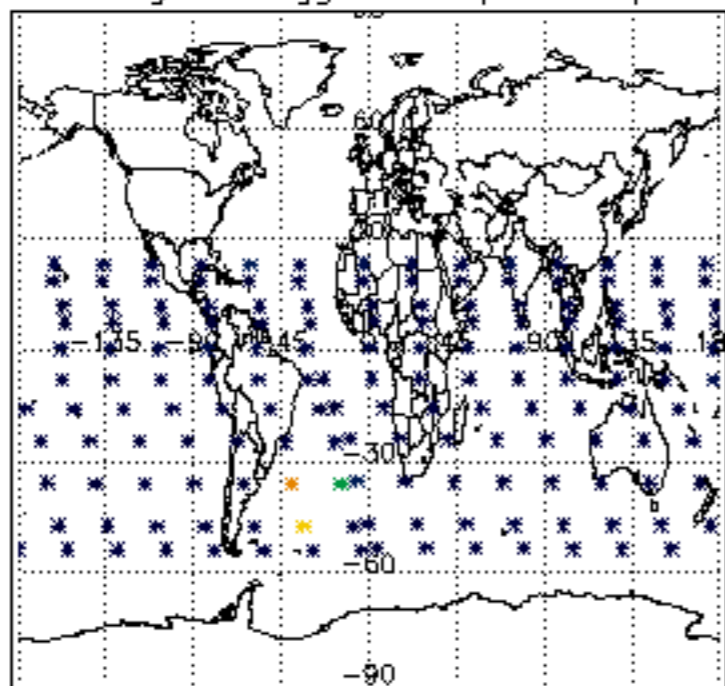
Percentage of flagged data per D3 profile



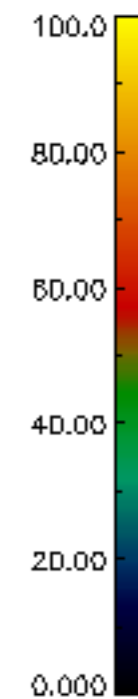
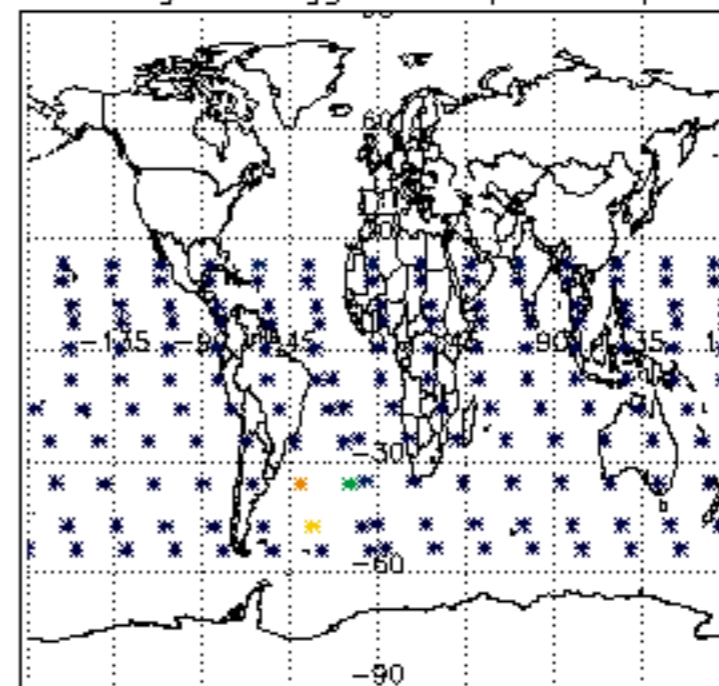
Percentage of flagged data per H2O profile

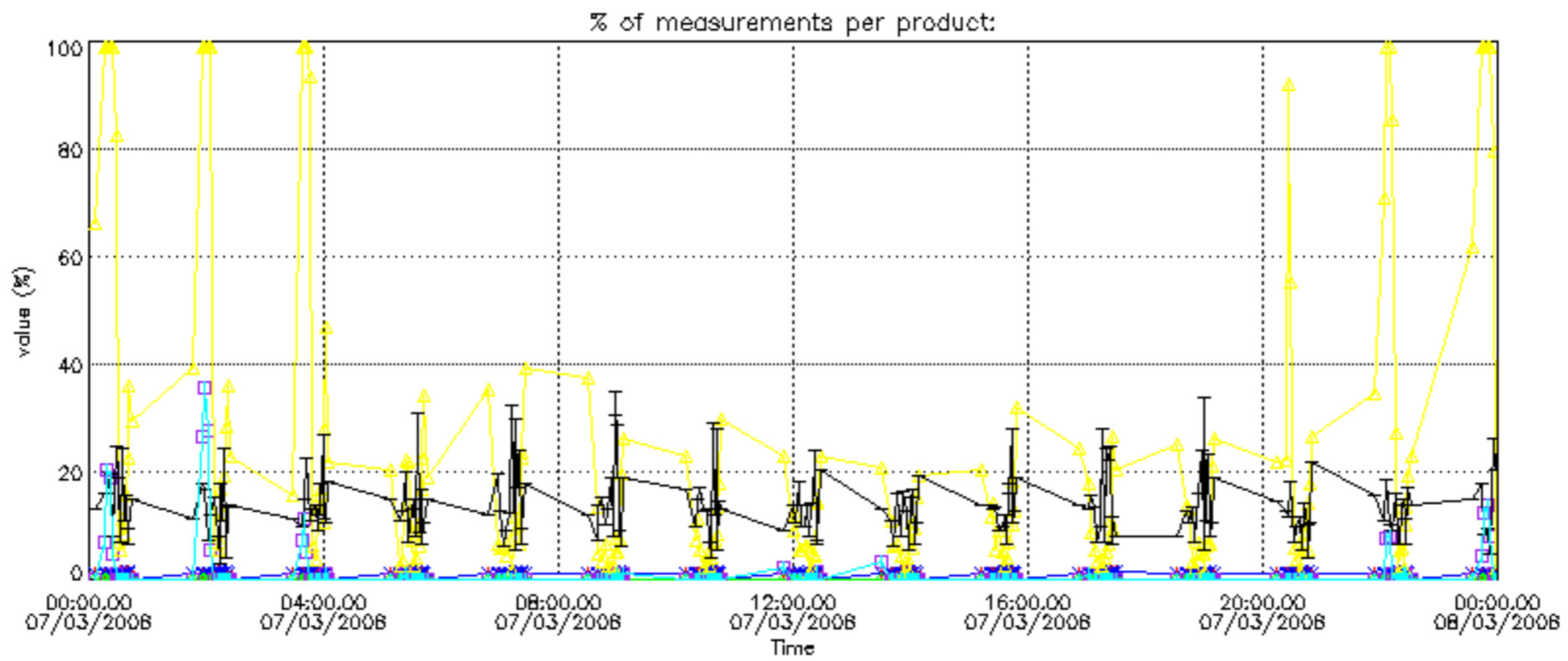


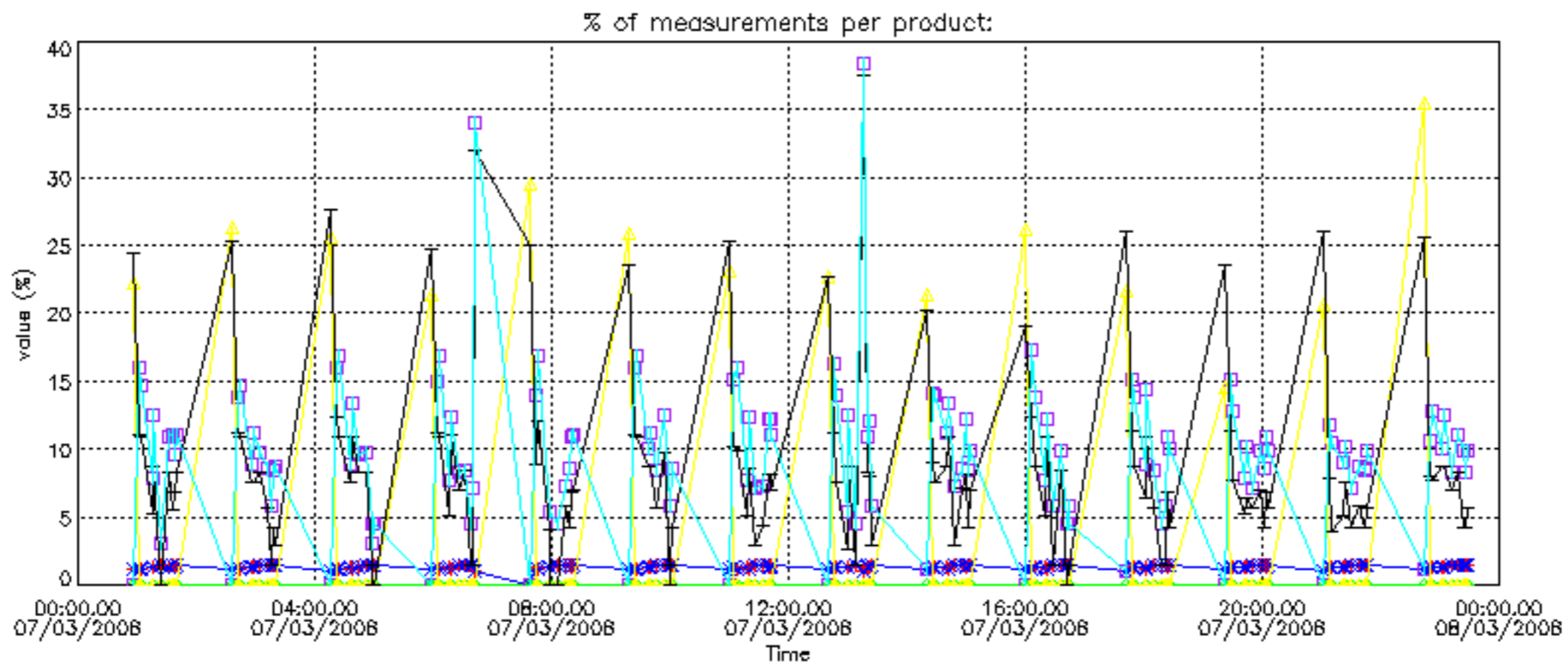
Percentage of flagged data per NO2 profile



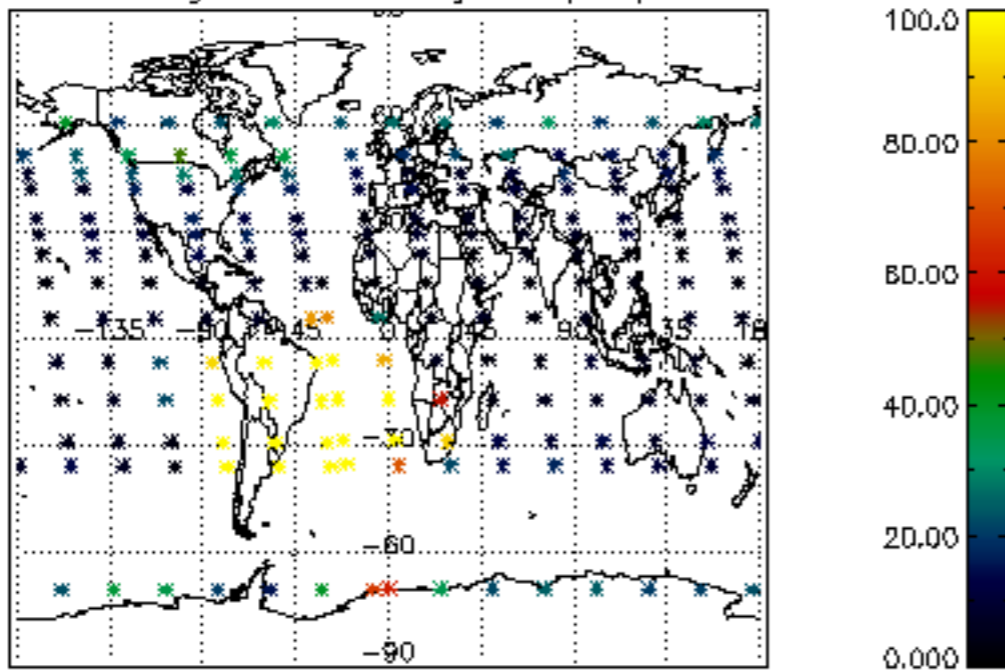
Percentage of flagged data per NO3 profile



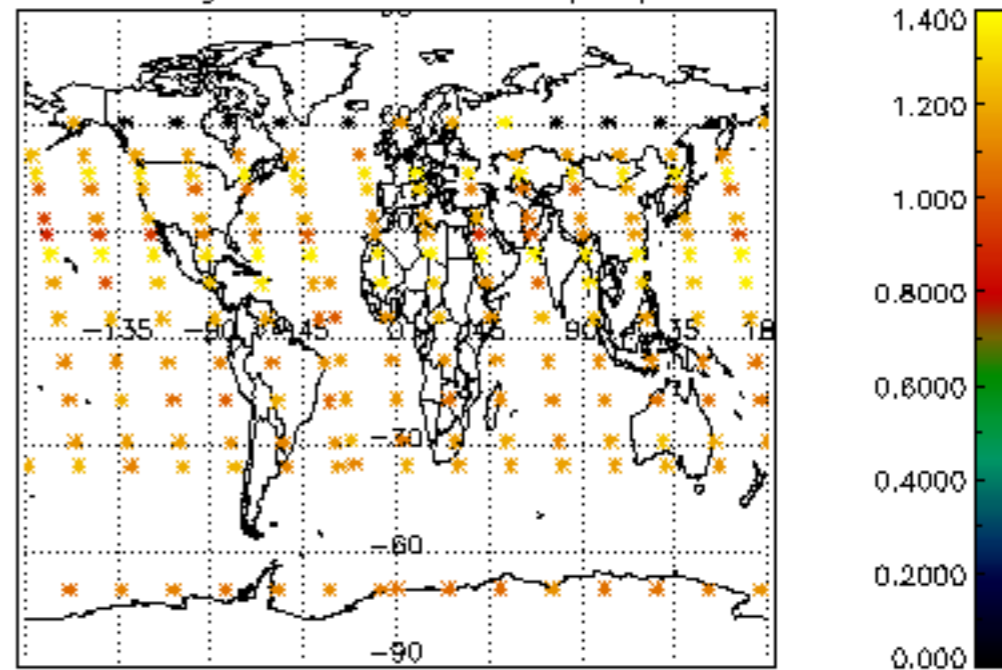




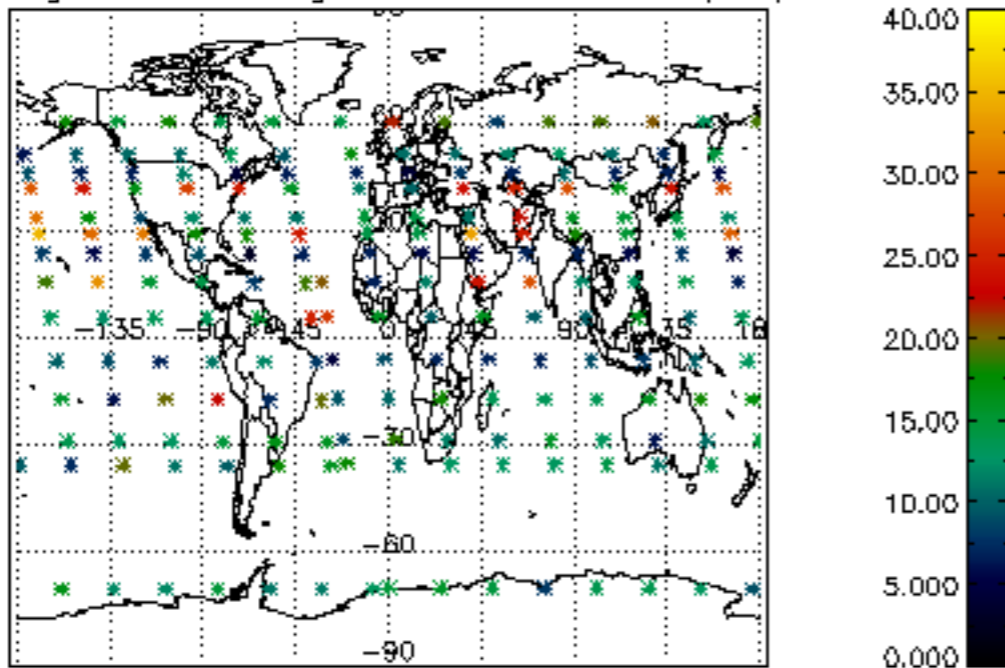
Percentage of cosmic ray hits per profile



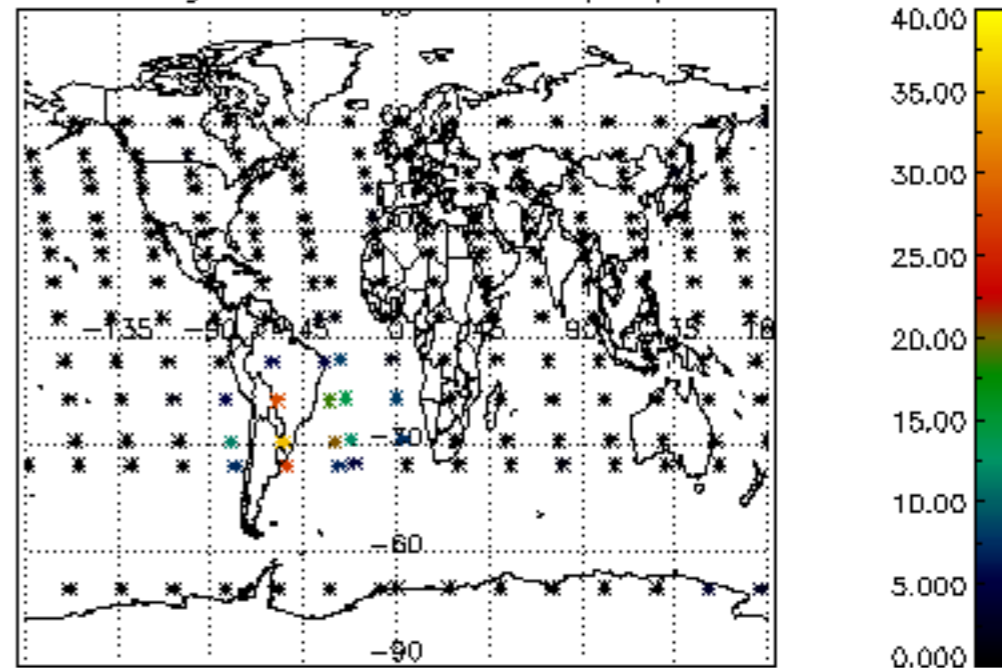
Percentage of datation errors per profile



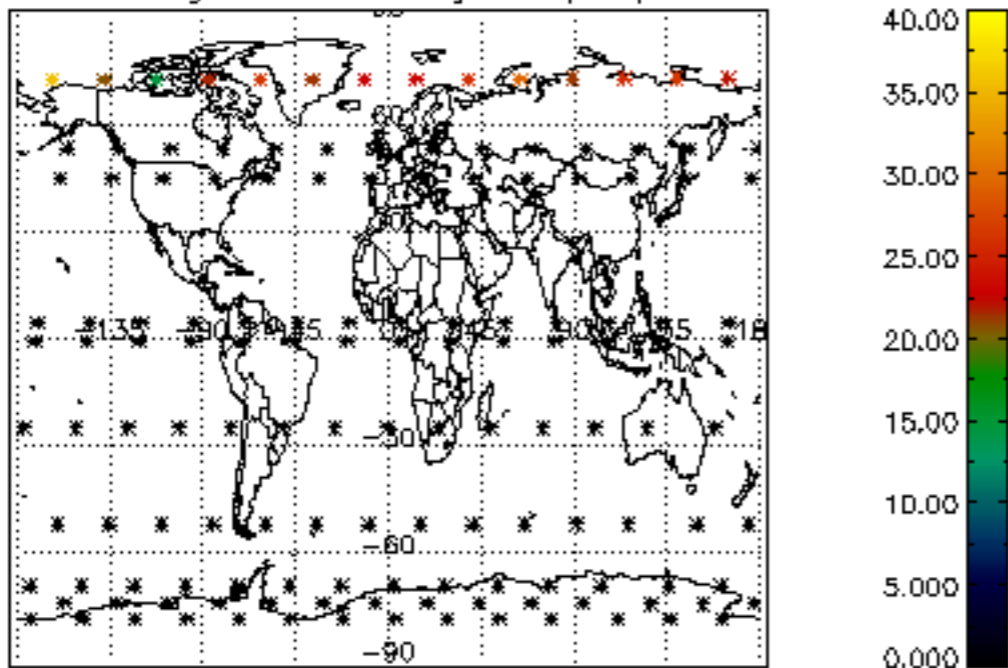
Percentage of star falling outside central band per profile



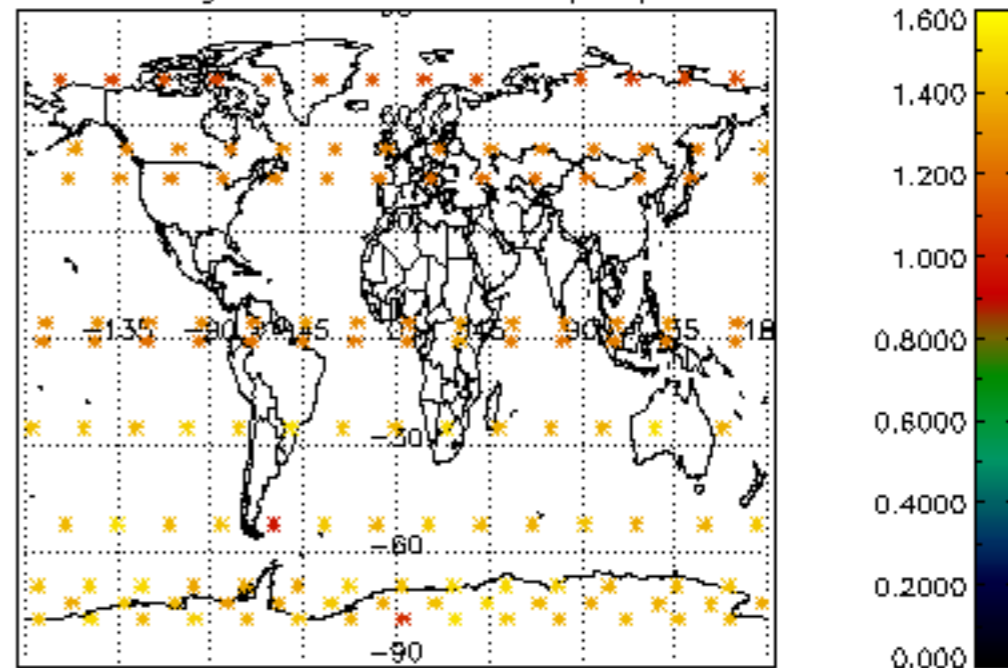
Percentage of saturation errors per profile



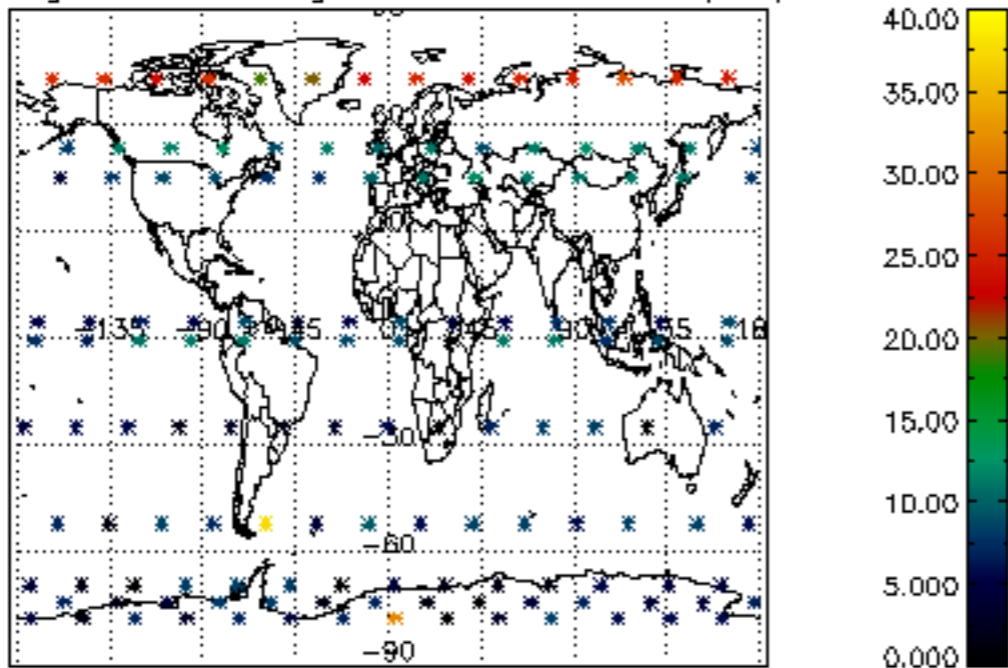
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

