

GOMOS Level 2 Daily Report

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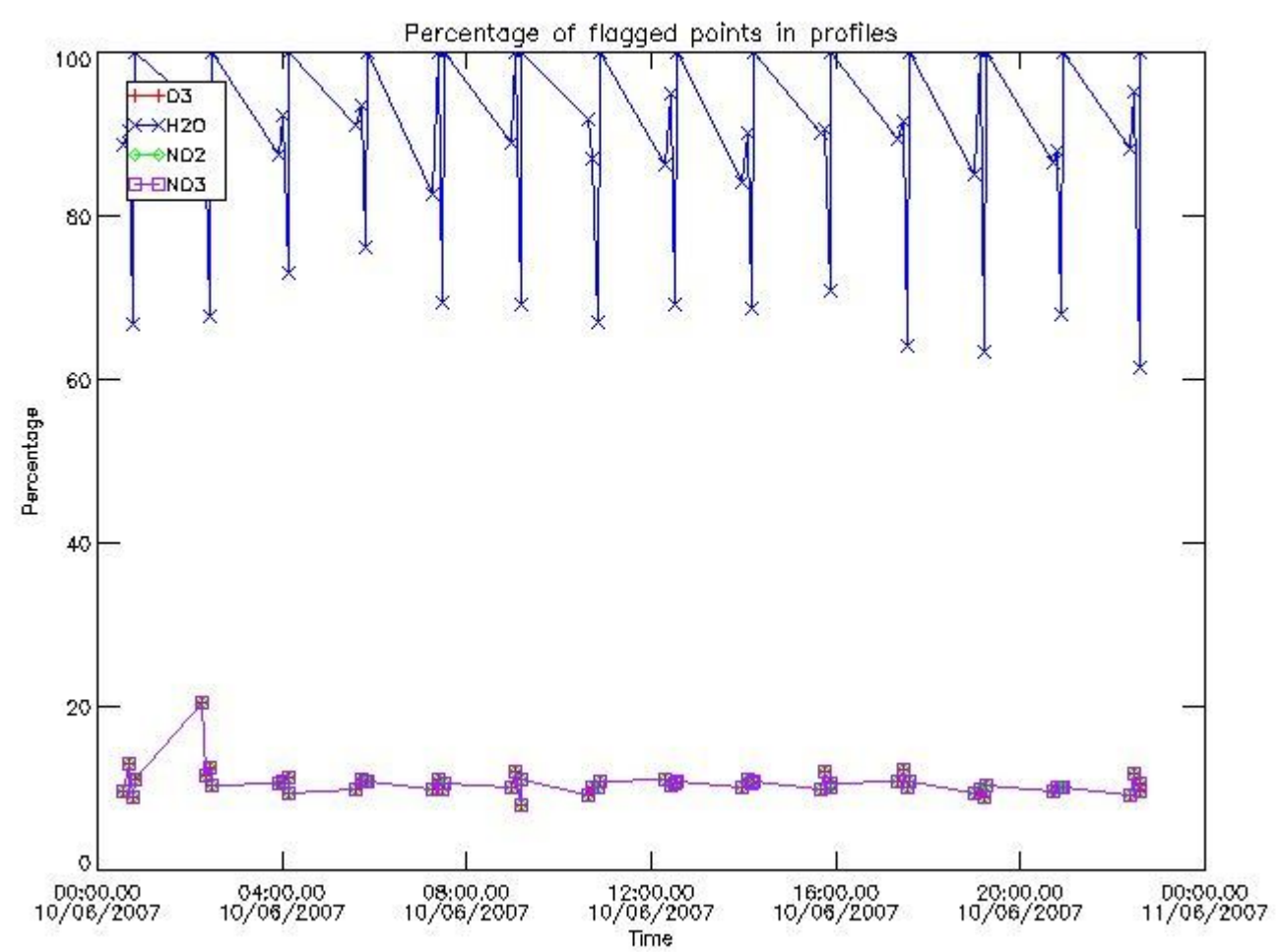
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220	GOM_NL_2PRFIN20070610_202645_000000462058_00486_27594_8571.N1	10-JUN-2007 20:26:45	Twilight	46.000	50	13Alp Ari	2.0070	4250.0	92	27594	No
221	GOM_NL_2PRFIN20070610_204131_000000532058_00486_27594_8572.N1	10-JUN-2007 20:41:31	Dark	52.500	52	16Bet Cet	2.0370	4500.0	105	27594	No
222	GOM_NL_2PRFIN20070610_204759_000000502058_00486_27594_8573.N1	10-JUN-2007 20:47:59	Dark	50.000	84	Alp Phe	2.3970	4500.0	100	27594	No
223	GOM_NL_2PRFIN20070610_205356_000000512058_00487_27595_8578.N1	10-JUN-2007 20:53:56	Dark	50.500	63	Bet Gru	2.1500	2800.0	101	27595	No
224	GOM_NL_2PRFIN20070610_205557_000000502058_00487_27595_8579.N1	10-JUN-2007 20:55:57	Dark	50.000	31	Alp Gru	1.7340	15200.	100	27595	No
225	GOM_NL_2PRFIN20070610_210015_000000422058_00487_27595_8580.N1	10-JUN-2007 21:00:15	Straylight	42.000	45	Alp Pav	1.9400	26000.	84	27595	No
226	GOM_NL_2PRFIN20070610_210847_000000442058_00487_27595_8581.N1	10-JUN-2007 21:08:47	Straylight	44.000	40	The Sco	1.8590	7100.0	88	27595	No
227	GOM_NL_2PRFIN20070610_211032_000000452058_00487_27595_8582.N1	10-JUN-2007 21:10:32	Twilight_and_stray	44.500	25	35Lam Sco	1.6200	28000.	89	27595	No
228	GOM_NL_2PRFIN20070610_211154_000000452058_00487_27595_8583.N1	10-JUN-2007 21:11:54	Twilight_and_stray	44.500	167	10Gam2Sgr	2.9840	4500.0	89	27595	No
229	GOM_NL_2PRFIN20070610_211722_000000402058_00487_27595_8584.N1	10-JUN-2007 21:17:22	Bright	40.000	86	35Eta Oph	2.4300	10200.	80	27595	No
230	GOM_NL_2PRFIN20070610_211908_000000382058_00487_27595_8585.N1	10-JUN-2007 21:19:08	Bright	38.000	98	13Zet Oph	2.5710	30000.	76	27595	No
231	GOM_NL_2PRFIN20070610_212115_000000372058_00487_27595_8586.N1	10-JUN-2007 21:21:15	Bright	36.500	120	1Del Oph	2.7340	3200.0	73	27595	No
232	GOM_NL_2PRFIN20070610_212844_000000392058_00487_27595_8587.N1	10-JUN-2007 21:28:44	Bright	38.500	127	27Bet Her	2.7810	4700.0	77	27595	No
233	GOM_NL_2PRFIN20070610_213154_000000402058_00487_27595_8588.N1	10-JUN-2007 21:31:54	Bright	40.000	133	40Zet Her	2.8070	6000.0	80	27595	No
234	GOM_NL_2PRFIN20070610_213859_000000412058_00487_27595_8589.N1	10-JUN-2007 21:38:59	Bright	41.000	130	23Bet Dra	2.7990	5800.0	82	27595	No
235	GOM_NL_2PRFIN20070610_215549_000000432058_00487_27595_8590.N1	10-JUN-2007 21:55:49	Bright	42.500	76	27Gam Cas	2.3000	30000.	85	27595	No
236	GOM_NL_2PRFIN20070610_220144_000000382058_00487_27595_8591.N1	10-JUN-2007 22:01:44	Bright	38.000	73	57Gam1And	2.2600	13100.	76	27595	No
237	GOM_NL_2PRFIN20070610_220404_000000512058_00487_27595_8592.N1	10-JUN-2007 22:04:04	Twilight_and_stray	50.500	53	43Bet And	2.0480	3300.0	101	27595	No
238	GOM_NL_2PRFIN20070610_220721_000000462058_00487_27595_8593.N1	10-JUN-2007 22:07:21	Twilight	45.500	50	13Alp Ari	2.0070	4250.0	91	27595	No
239	GOM_NL_2PRFIN20070610_222208_000000562058_00487_27595_8594.N1	10-JUN-2007 22:22:08	Dark	55.500	52	16Bet Cet	2.0370	4500.0	111	27595	No
240	GOM_NL_2PRFIN20070610_222836_000000432058_00487_27595_8595.N1	10-JUN-2007 22:28:36	Dark	43.000	84	Alp Phe	2.3970	4500.0	86	27595	No
241	GOM_NL_2PRFIN20070610_223433_000000542058_00488_27596_8593.N1	10-JUN-2007 22:34:33	Dark	53.500	63	Bet Gru	2.1500	2800.0	107	27596	No
242	GOM_NL_2PRFIN20070610_223634_000000482058_00488_27596_8594.N1	10-JUN-2007 22:36:34	Dark	48.000	31	Alp Gru	1.7340	15200.	96	27596	No
243	GOM_NL_2PRFIN20070610_224052_000000442058_00488_27596_8595.N1	10-JUN-2007 22:40:52	Straylight	44.000	45	Alp Pav	1.9400	26000.	88	27596	No
244	GOM_NL_2PRFIN20070610_224924_000000472058_00488_27596_8596.N1	10-JUN-2007 22:49:24	Straylight	47.000	40	The Sco	1.8590	7100.0	94	27596	No
245	GOM_NL_2PRFIN20070610_225108_000000422058_00488_27596_8597.N1	10-JUN-2007 22:51:08	Twilight_and_stray	42.000	25	35Lam Sco	1.6200	28000.	84	27596	No
246	GOM_NL_2PRFIN20070610_225230_000000492058_00488_27596_8598.N1	10-JUN-2007 22:52:30	Twilight_and_stray	49.000	167	10Gam2Sgr	2.9840	4500.0	98	27596	No
247	GOM_NL_2PRFIN20070610_225758_000000402058_00488_27596_8599.N1	10-JUN-2007 22:57:58	Bright	40.000	86	35Eta Oph	2.4300	10200.	80	27596	No
248	GOM_NL_2PRFIN20070610_225944_000000382058_00488_27596_8600.N1	10-JUN-2007 22:59:44	Bright	37.500	98	13Zet Oph	2.5710	30000.	75	27596	No
249	GOM_NL_2PRFIN20070610_230151_000000372058_00488_27596_8601.N1	10-JUN-2007 23:01:51	Bright	36.500	120	1Del Oph	2.7340	3200.0	73	27596	No
250	GOM_NL_2PRFIN20070610_230920_000000382058_00488_27596_8602.N1	10-JUN-2007 23:09:20	Bright	37.500	127	27Bet Her	2.7810	4700.0	75	27596	No
251	GOM_NL_2PRFIN20070610_231230_000000392058_00488_27596_8603.N1	10-JUN-2007 23:12:30	Bright	38.500	133	40Zet Her	2.8070	6000.0	77	27596	No
252	GOM_NL_2PRFIN20070610_231934_000000402058_00488_27596_8604.N1	10-JUN-2007 23:19:34	Bright	40.000	130	23Bet Dra	2.7990	5800.0	80	27596	No
253	GOM_NL_2PRFIN20070610_233624_000000402058_00488_27596_8605.N1	10-JUN-2007 23:36:24	Bright	39.500	76	27Gam Cas	2.3000	30000.	79	27596	No
254	GOM_NL_2PRFIN20070610_234220_000000392058_00488_27596_8606.N1	10-JUN-2007 23:42:20	Bright	38.500	73	57Gam1And	2.2600	13100.	77	27596	No
255	GOM_NL_2PRFIN20070610_234439_000000562058_00488_27596_8607.N1	10-JUN-2007 23:44:39	Twilight_and_stray	55.500	53	43Bet And	2.0480	3300.0	111	27596	No
256	GOM_NL_2PRFIN20070610_234758_000000462058_00488_27596_8608.N1	10-JUN-2007 23:47:58	Twilight	46.000	50	13Alp Ari	2.0070	4250.0	92	27596	No

3. Quality information per product

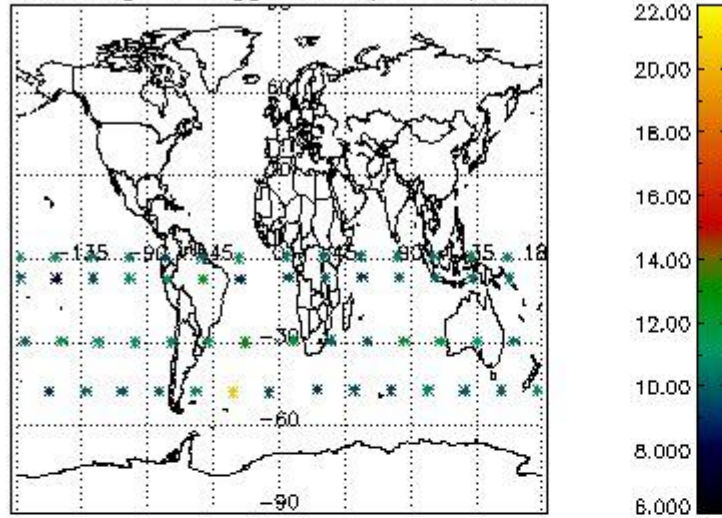
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

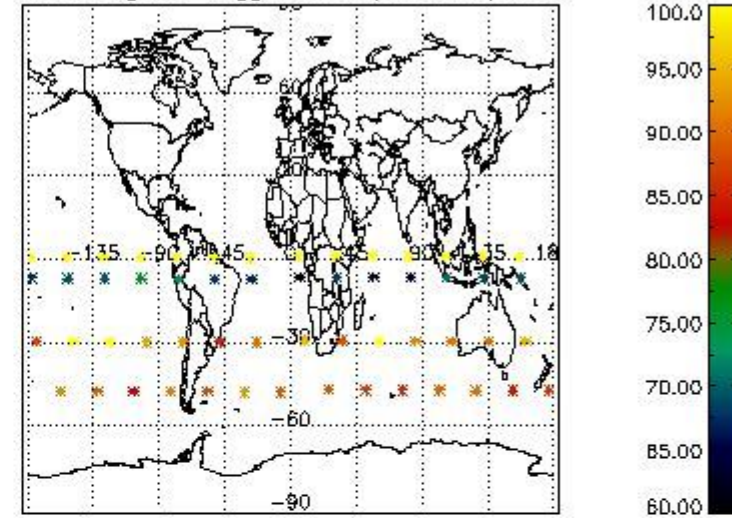


3.2 Plot quality information per product (world map)

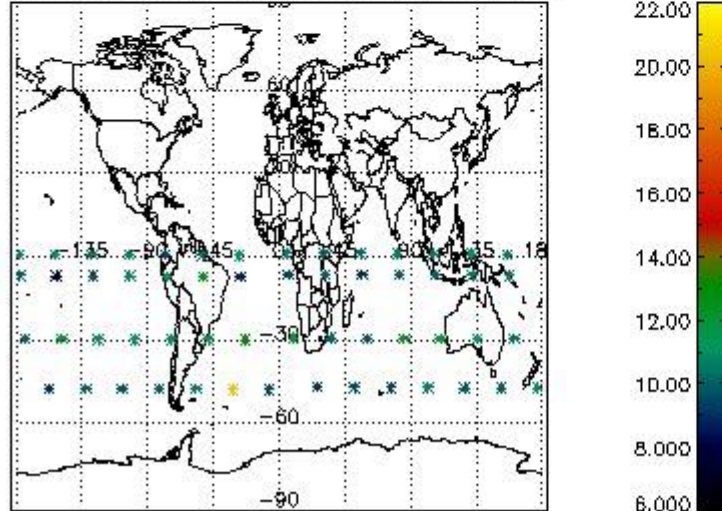
Percentage of flagged data per O3 profile



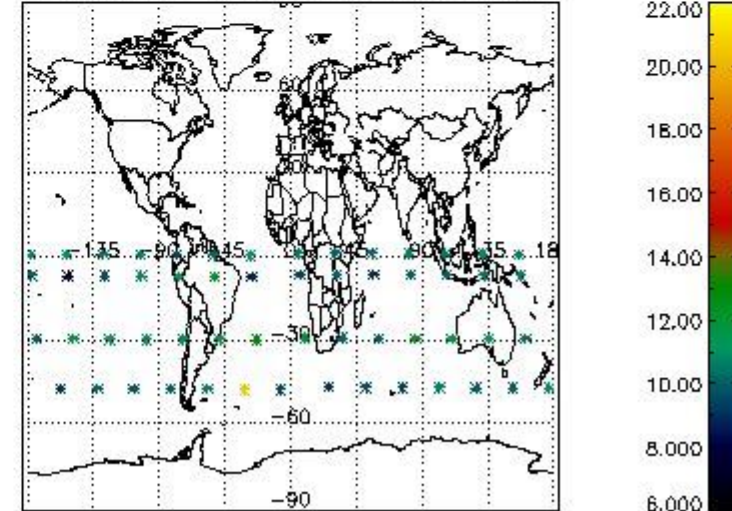
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

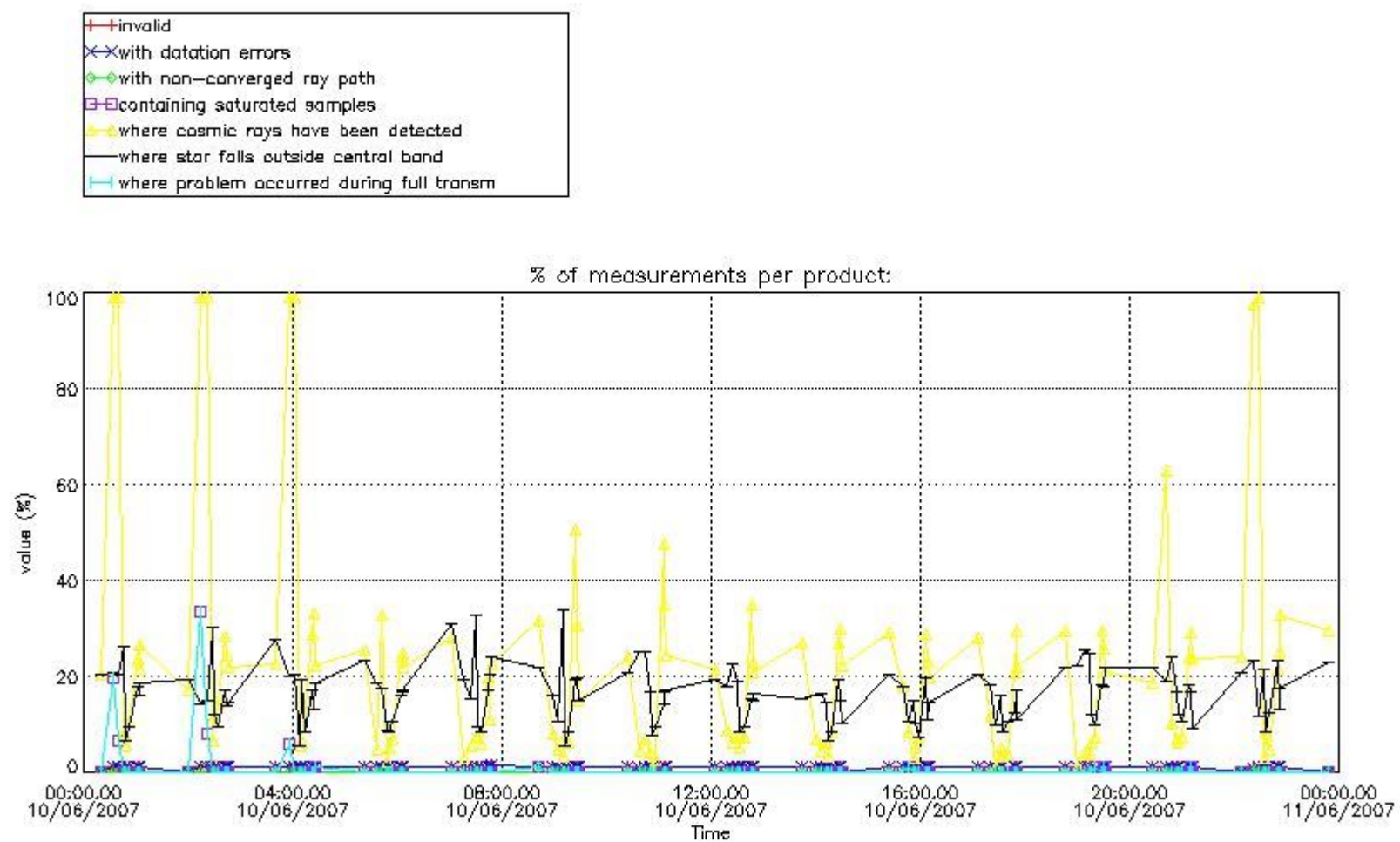


4. Level 1 quality information per product

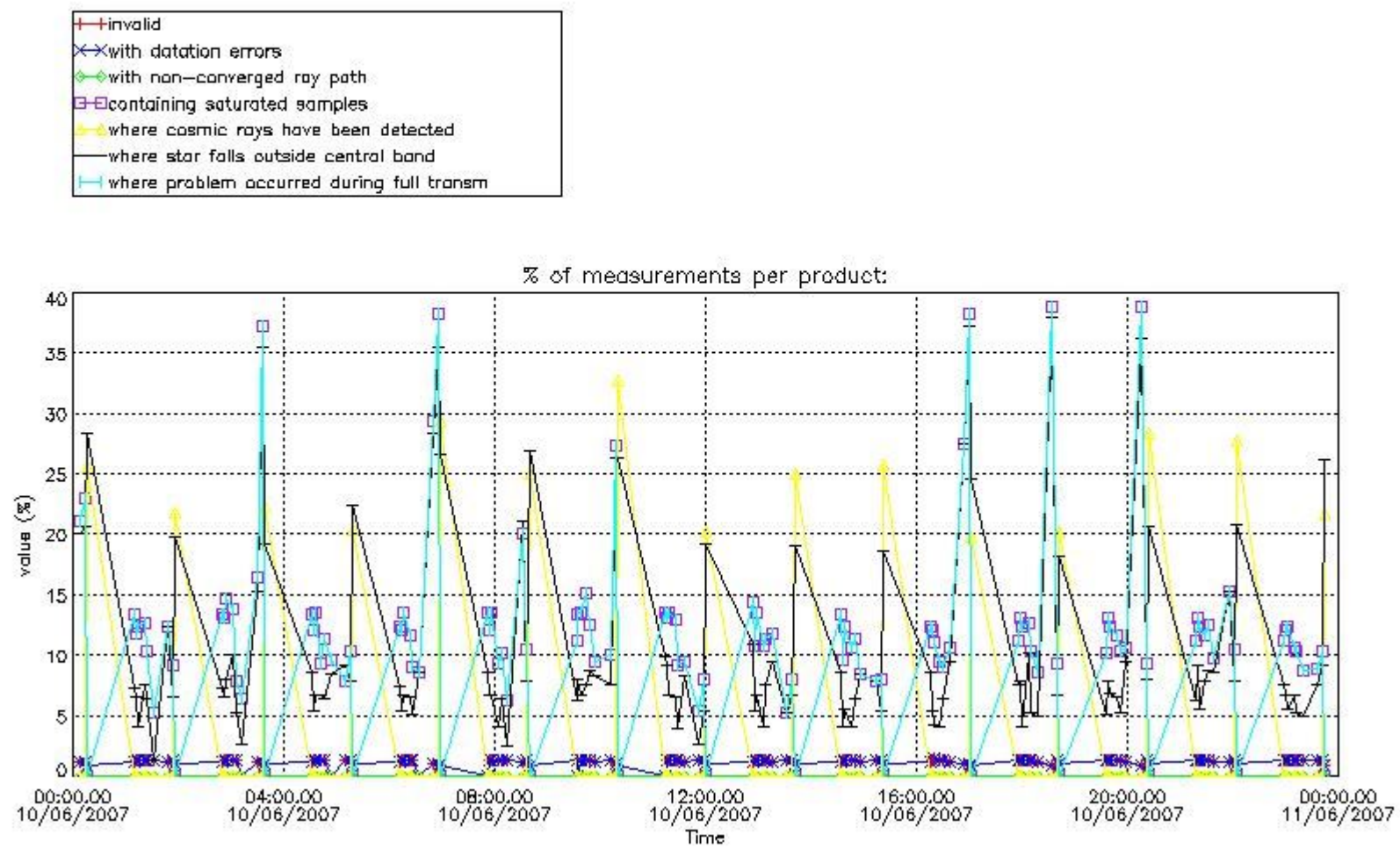
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

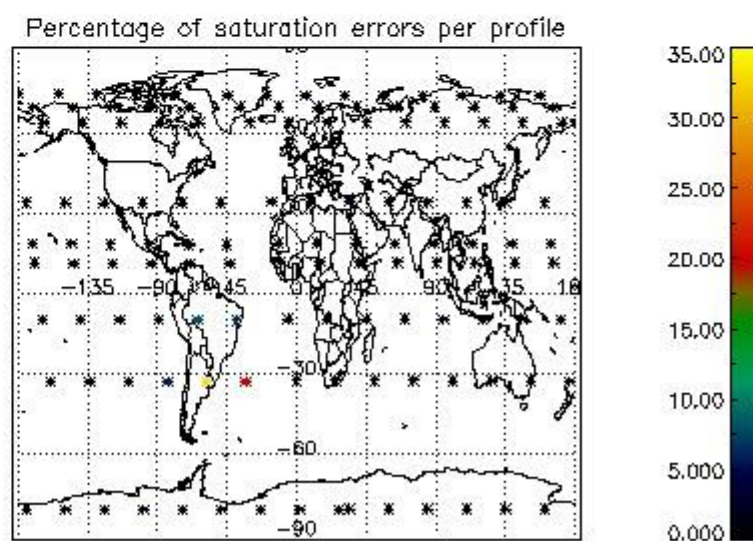
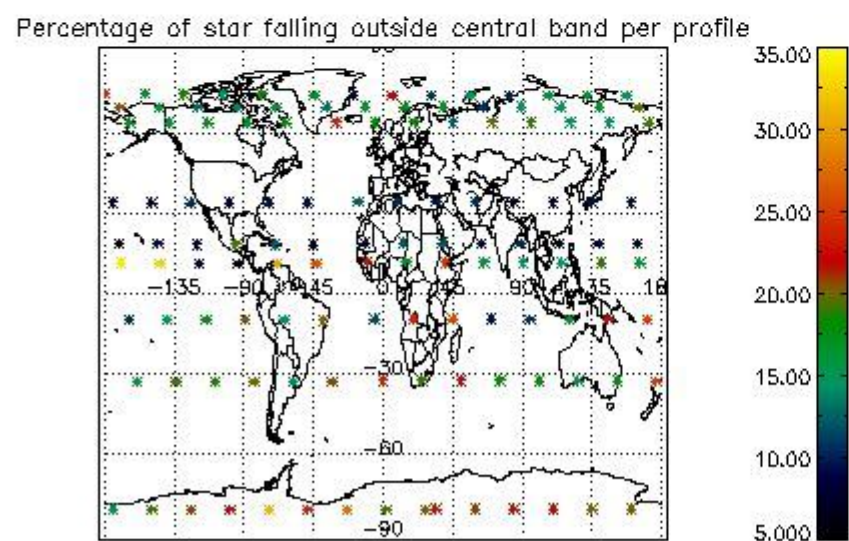
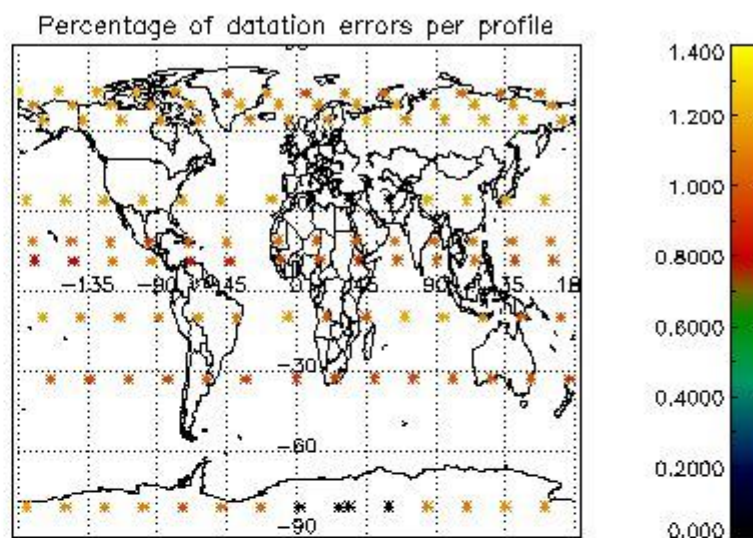
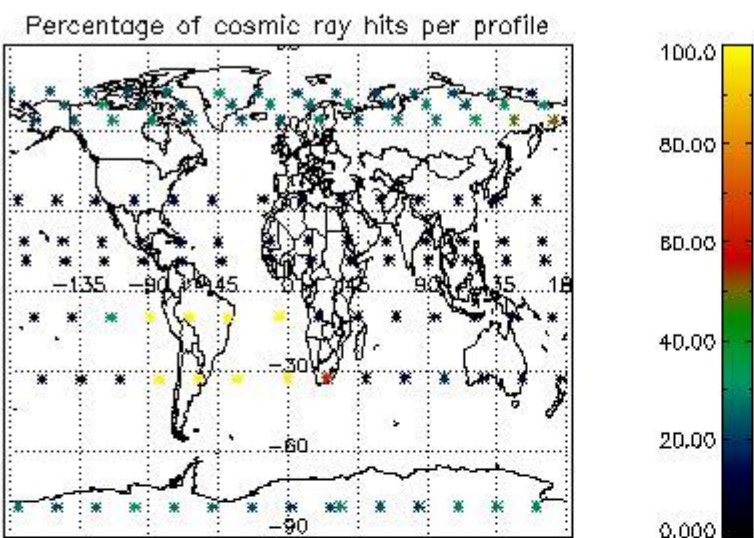


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

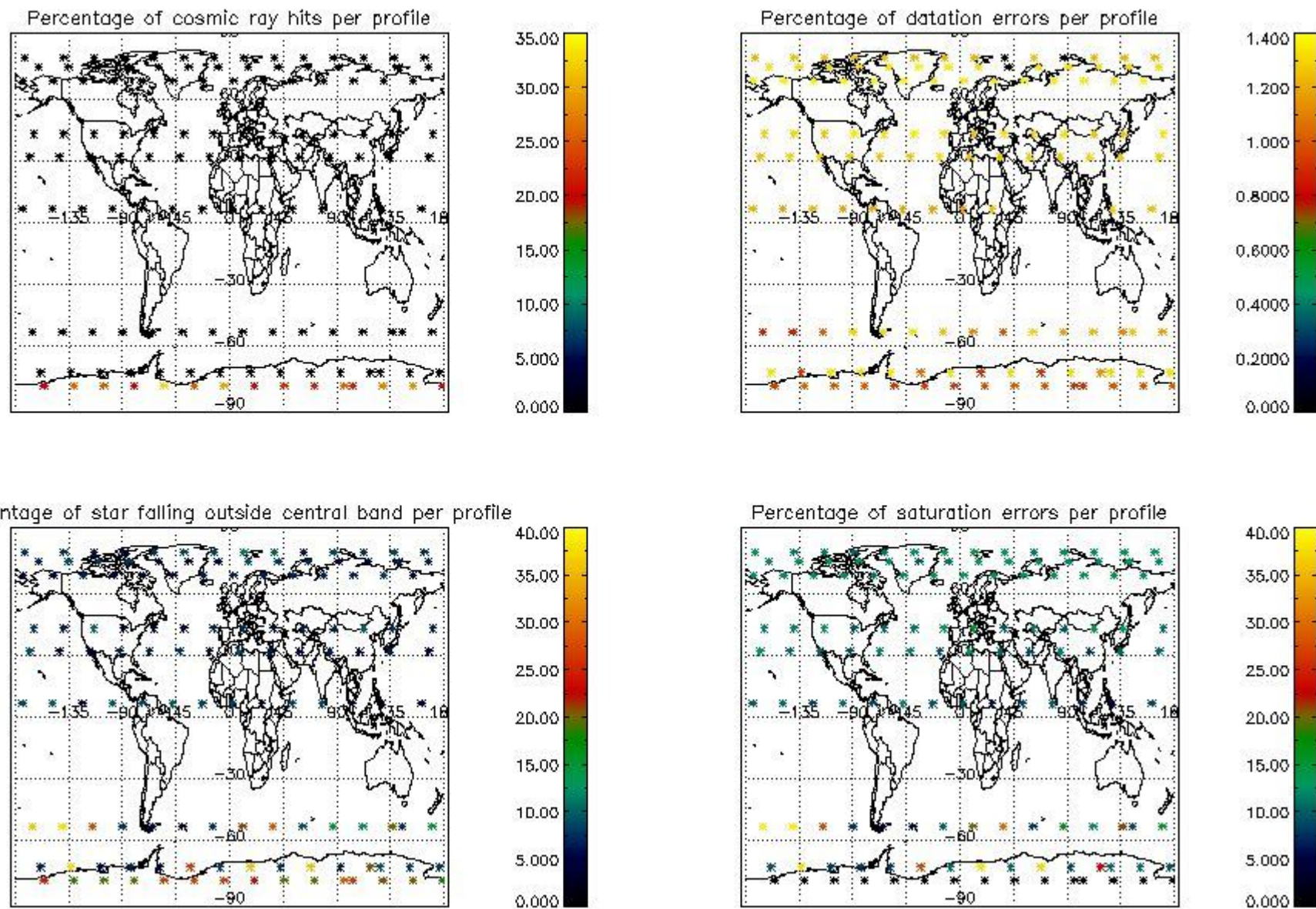


4.2 Plot quality information per product coming from level 1b processing (world map)

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

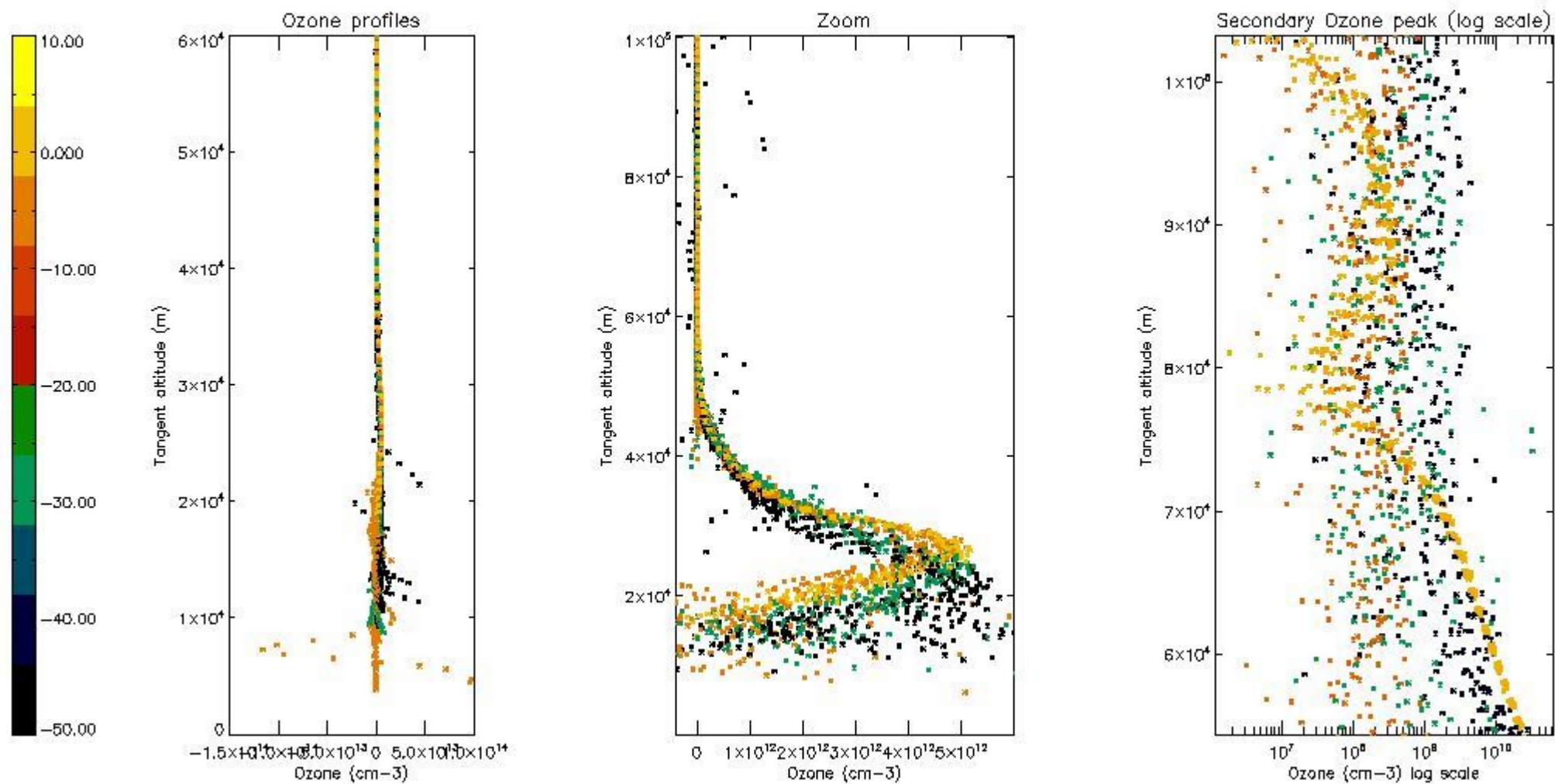
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	9

STD < 10	6
STD < 5	3

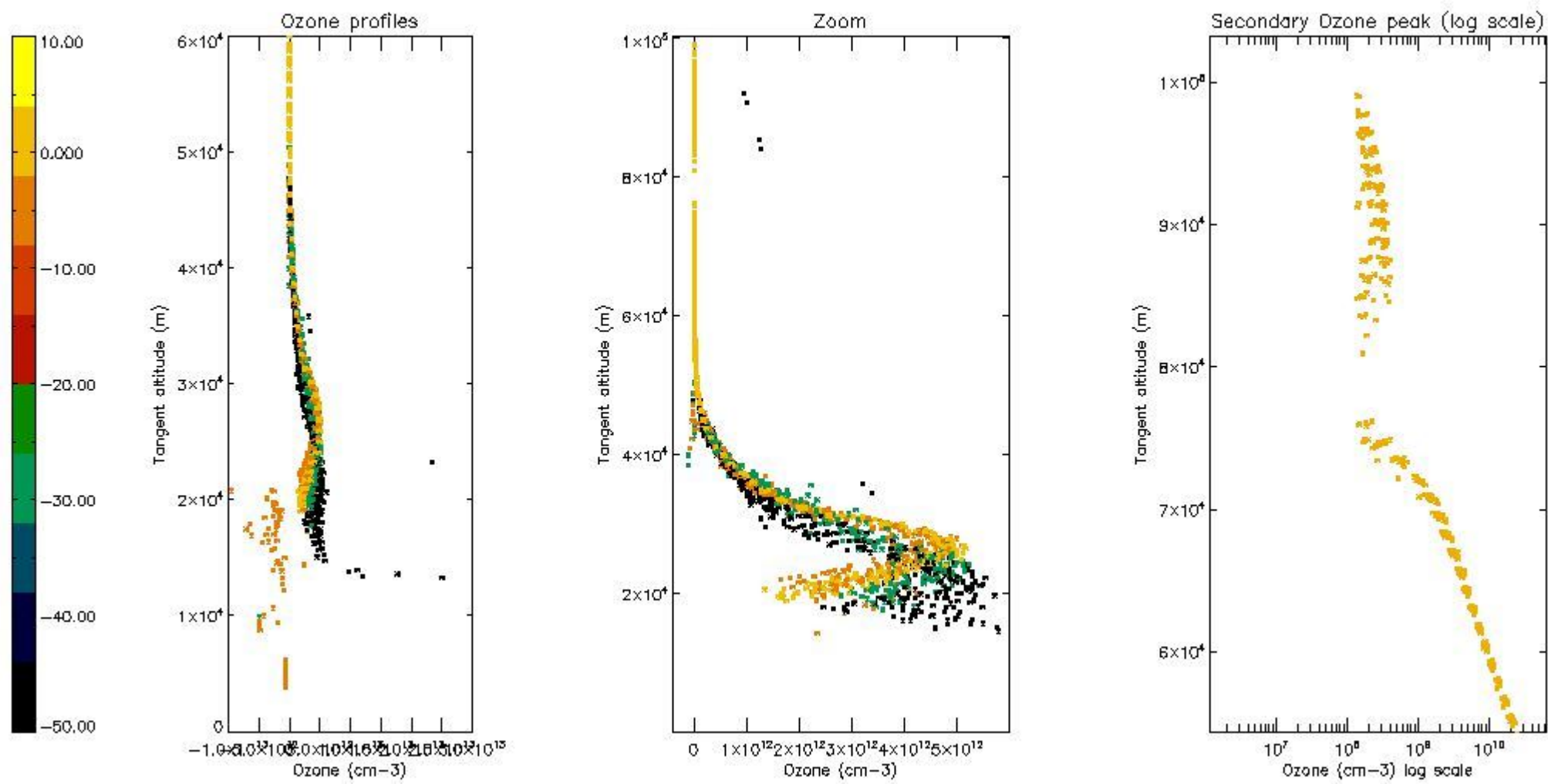
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



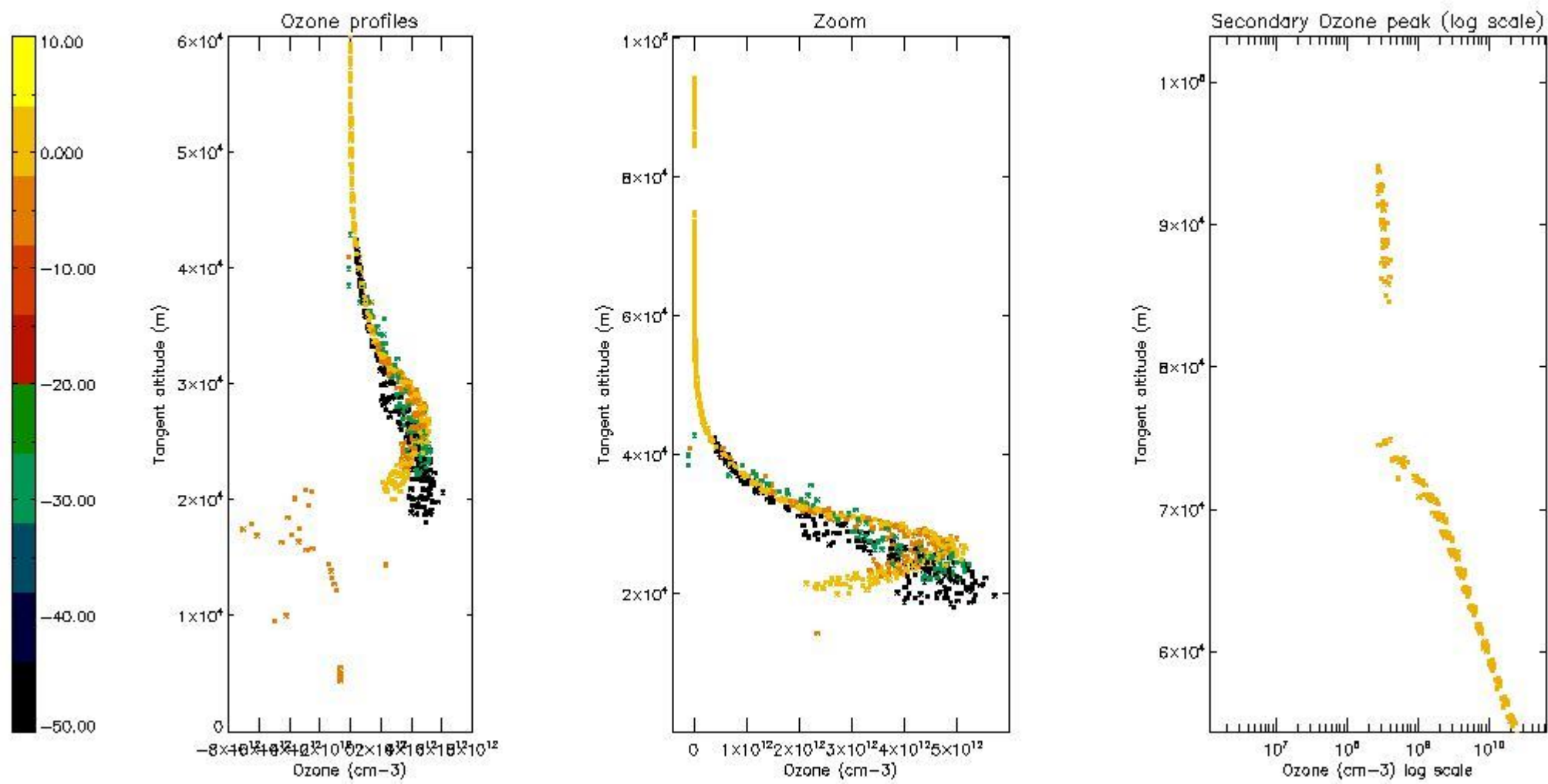
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



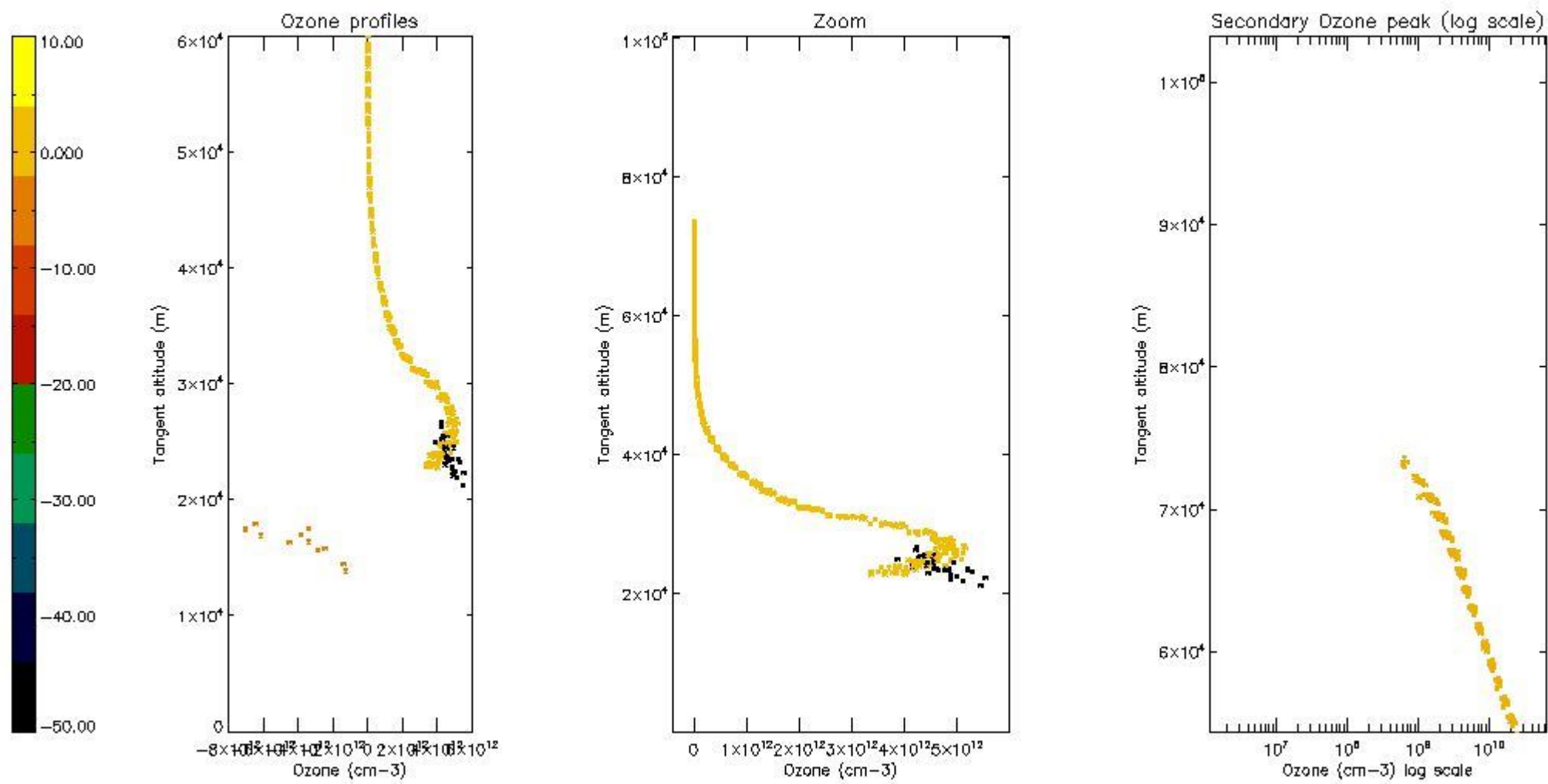
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



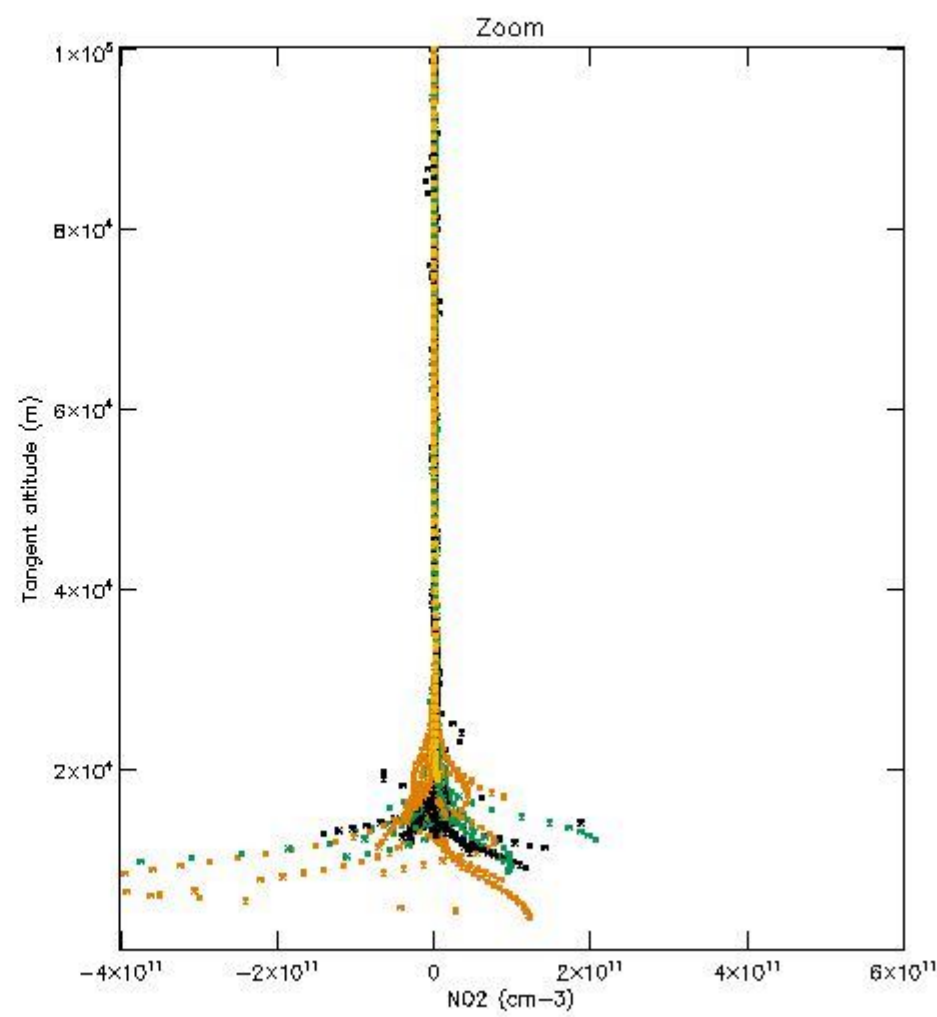
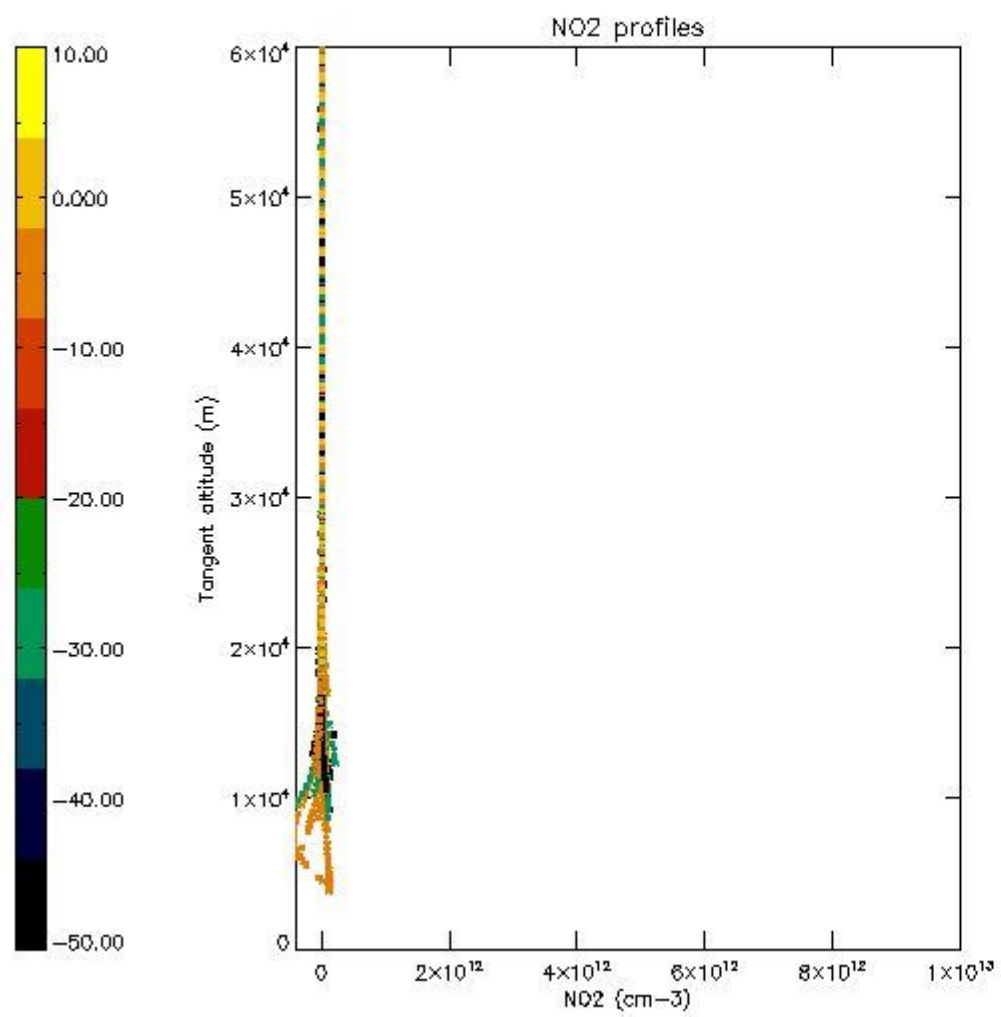
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



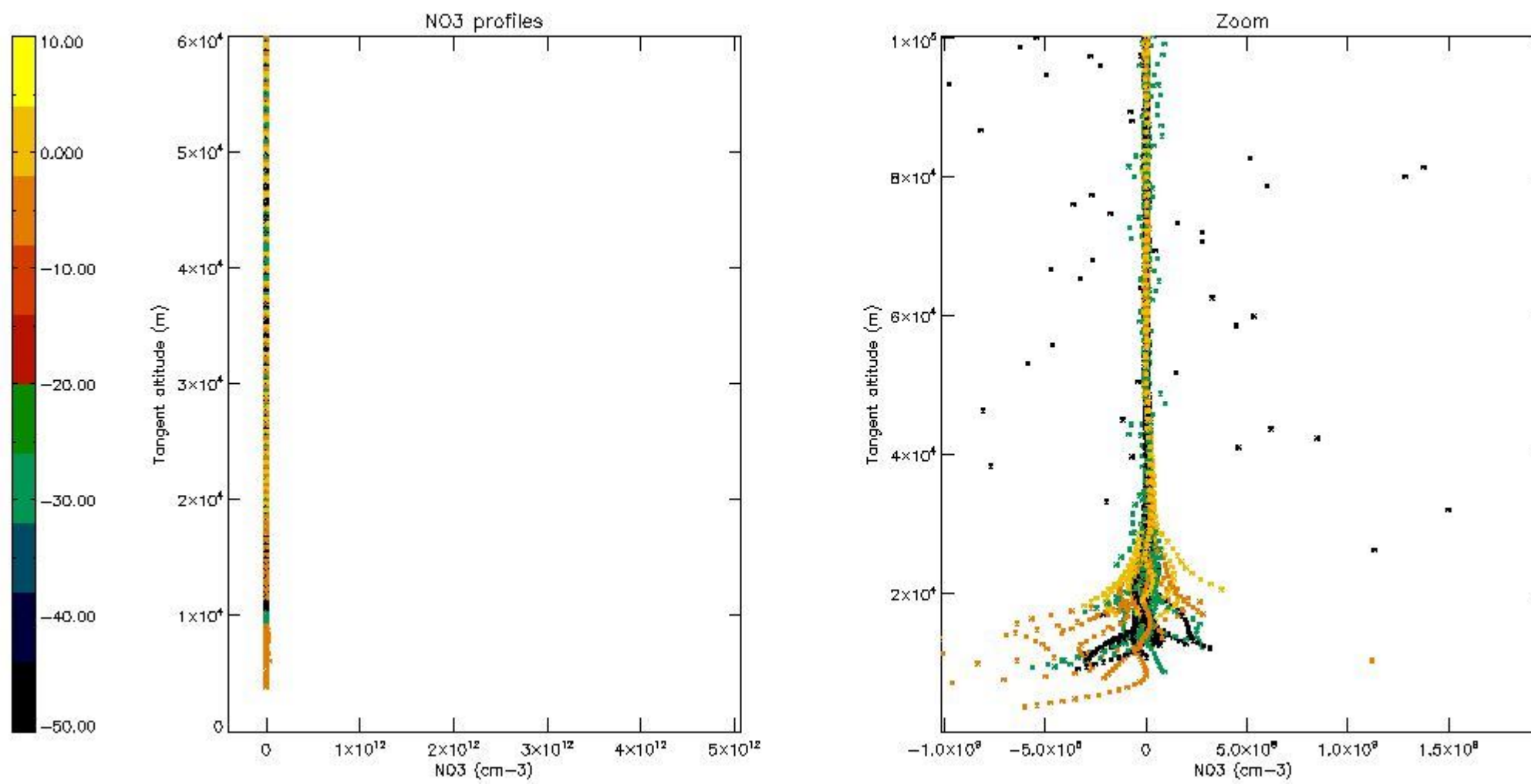
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



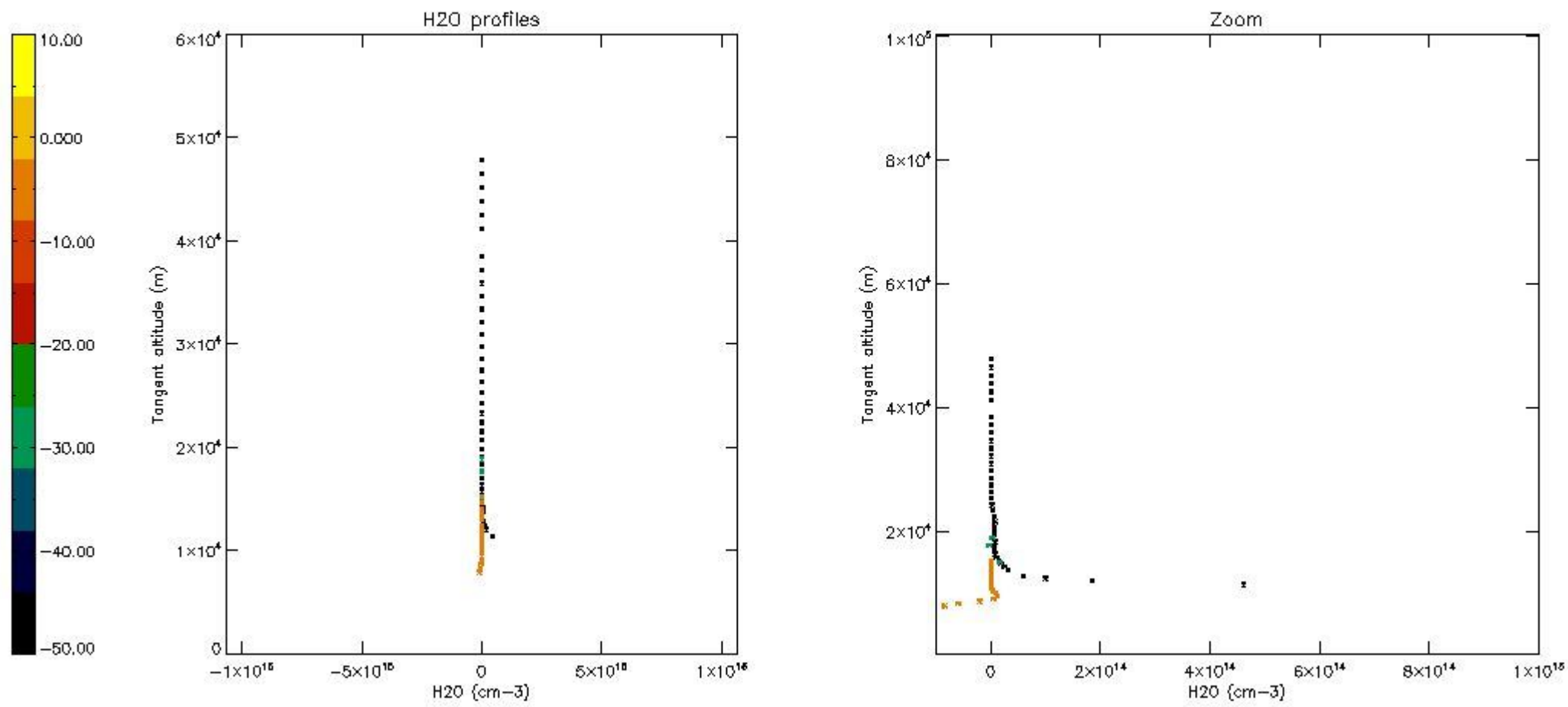
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	10-JUN-2007 00:08:04
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	10-JUN-2007 00:08:04
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	10-JUN-2007 00:08:04

GOMOS Level 2 Daily Report

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[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](#)

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

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[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	22APR2013 20:36:01
Data source version	GOMOS/6.01
Start time of products	10-06-2007 (10JUN2007 00:00:00)
Stop time of products	11-06-2007 (11JUN2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	256
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

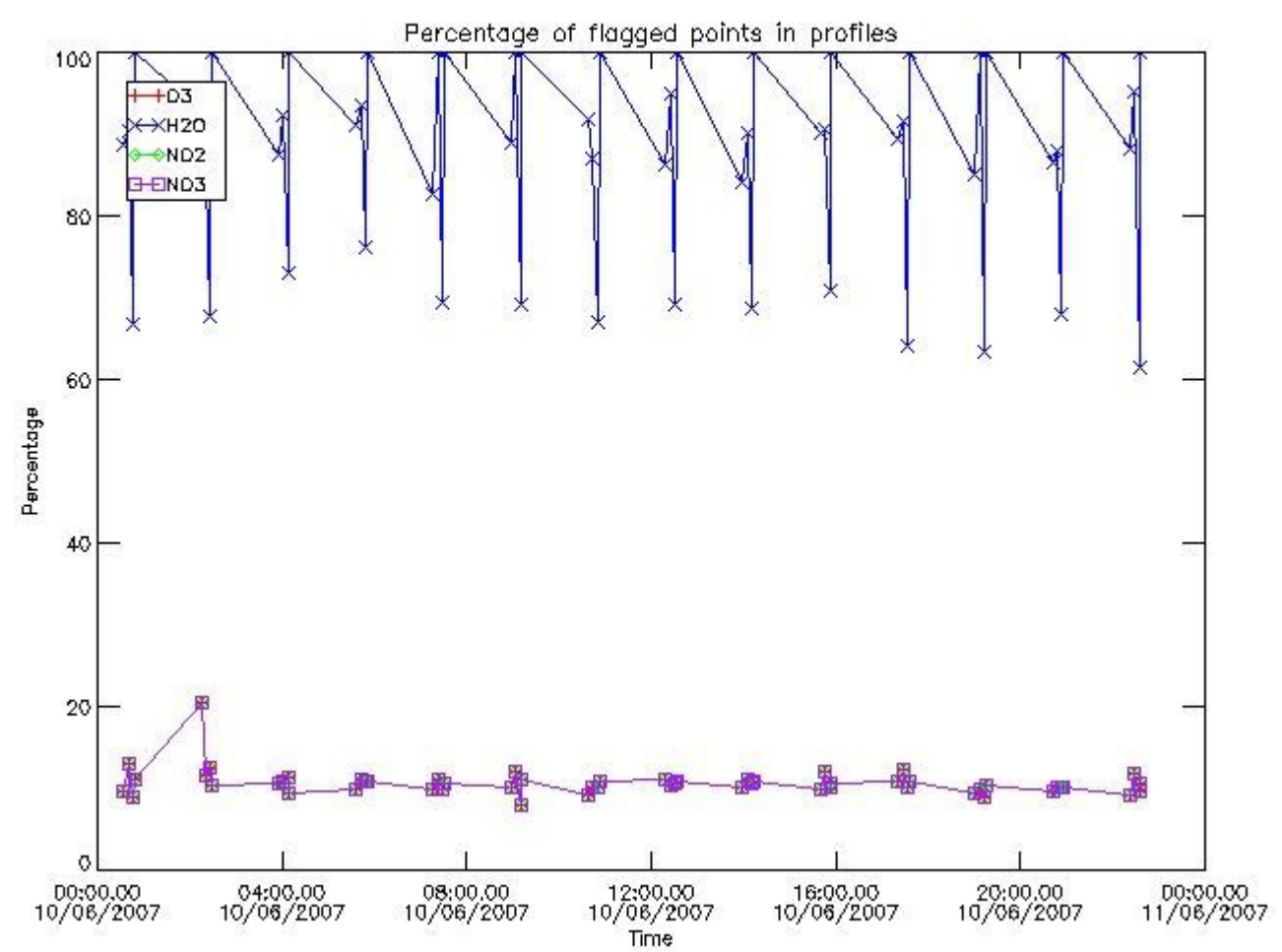
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070610_000804_000000452058_00474_27582_8374.N1	10-JUN-2007 00:08:04	Bright	45.000	76	27Gam Cas	2.3000	30000.	90	27582	No
2	GOM_NL__2PRFIN20070610_001356_000000442058_00474_27582_8375.N1	10-JUN-2007 00:13:56	Bright	43.500	73	57Gam1And	2.2600	13100.	87	27582	No
3	GOM_NL__2PRFIN20070610_001615_000000572058_00474_27582_8376.N1	10-JUN-2007 00:16:15	Bright	56.500	53	43Bet And	2.0480	3300.0	113	27582	No
4	GOM_NL__2PRFIN20070610_001932_000000452058_00474_27582_8377.N1	10-JUN-2007 00:19:32	Twilight	44.500	50	13Alp Ari	2.0070	4250.0	89	27582	No
5	GOM_NL__2PRFIN20070610_003410_000000532058_00474_27582_8378.N1	10-JUN-2007 00:34:10	Dark	53.000	52	16Bet Cet	2.0370	4500.0	106	27582	No
6	GOM_NL__2PRFIN20070610_004040_000000472058_00474_27582_8379.N1	10-JUN-2007 00:40:40	Dark	47.000	84	Alp Phe	2.3970	4500.0	94	27582	No
7	GOM_NL__2PRFIN20070610_004633_000000582058_00475_27583_8378.N1	10-JUN-2007 00:46:33	Dark	57.500	63	Bet Gru	2.1500	2800.0	115	27583	No
8	GOM_NL__2PRFIN20070610_004834_000000462058_00475_27583_8379.N1	10-JUN-2007 00:48:34	Dark	46.000	31	Alp Gru	1.7340	15200.	92	27583	No
9	GOM_NL__2PRFIN20070610_005256_000000432058_00475_27583_8380.N1	10-JUN-2007 00:52:56	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	27583	No
10	GOM_NL__2PRFIN20070610_010132_000000452058_00475_27583_8381.N1	10-JUN-2007 01:01:32	Straylight	44.500	40	The Sco	1.8590	7100.0	89	27583	No
11	GOM_NL__2PRFIN20070610_010316_000000442058_00475_27583_8382.N1	10-JUN-2007 01:03:16	Twilight_and_stray	44.000	25	35Lam Sco	1.6200	28000.	88	27583	No
12	GOM_NL__2PRFIN20070610_010451_000000442058_00475_27583_8383.N1	10-JUN-2007 01:04:51	Twilight_and_stray	43.500	75	26Eps Sco	2.2910	4250.0	87	27583	No
13	GOM_NL__2PRFIN20070610_011010_000000412058_00475_27583_8384.N1	10-JUN-2007 01:10:10	Bright	41.000	86	35Eta Oph	2.4300	10200.	82	27583	No
14	GOM_NL__2PRFIN20070610_011156_000000382058_00475_27583_8385.N1	10-JUN-2007 01:11:56	Bright	38.000	98	13Zet Oph	2.5710	30000.	76	27583	No
15	GOM_NL__2PRFIN20070610_011403_000000372058_00475_27583_8386.N1	10-JUN-2007 01:14:03	Bright	36.500	120	1Del Oph	2.7340	3200.0	73	27583	No
16	GOM_NL__2PRFIN20070610_012135_000000402058_00475_27583_8387.N1	10-JUN-2007 01:21:35	Bright	39.500	127	27Bet Her	2.7810	4700.0	79	27583	No
17	GOM_NL__2PRFIN20070610_012446_000000392058_00475_27583_8388.N1	10-JUN-2007 01:24:46	Bright	39.000	133	40Zet Her	2.8070	6000.0	78	27583	No
18	GOM_NL__2PRFIN20070610_013153_000000392058_00475_27583_8389.N1	10-JUN-2007 01:31:53	Bright	38.500	130	23Bet Dra	2.7990	5800.0	77	27583	No
19	GOM_NL__2PRFIN20070610_014840_000000412058_00475_27583_8390.N1	10-JUN-2007 01:48:40	Bright	40.500	76	27Gam Cas	2.3000	30000.	81	27583	No
20	GOM_NL__2PRFIN20070610_015432_000000382058_00475_27583_8391.N1	10-JUN-2007 01:54:32	Bright	38.000	73	57Gam1And	2.2600	13100.	76	27583	No
21	GOM_NL__2PRFIN20070610_015651_000000512058_00475_27583_8392.N1	10-JUN-2007 01:56:51	Bright	50.500	53	43Bet And	2.0480	3300.0	101	27583	No
22	GOM_NL__2PRFIN20070610_020008_000000442058_00475_27583_8393.N1	10-JUN-2007 02:00:08	Twilight	44.000	50	13Alp Ari	2.0070	4250.0	88	27583	No
23	GOM_NL__2PRFIN20070610_021446_000000502058_00475_27583_8394.N1	10-JUN-2007 02:14:46	Dark	49.500	52	16Bet Cet	2.0370	4500.0	99	27583	No
24	GOM_NL__2PRFIN20070610_022116_000000442058_00475_27583_8395.N1	10-JUN-2007 02:21:16	Dark	44.000	84	Alp Phe	2.3970	4500.0	88	27583	No
25	GOM_NL__2PRFIN20070610_022710_000000612058_00476_27584_8390.N1	10-JUN-2007 02:27:10	Dark	61.000	63	Bet Gru	2.1500	2800.0	122	27584	No
26	GOM_NL__2PRFIN20070610_022911_000000502058_00476_27584_8391.N1	10-JUN-2007 02:29:11	Dark	49.500	31	Alp Gru	1.7340	15200.	99	27584	No
27	GOM_NL__2PRFIN20070610_023333_000000422058_00476_27584_8392.N1	10-JUN-2007 02:33:33	Straylight	42.000	45	Alp Pav	1.9400	26000.	84	27584	No
28	GOM_NL__2PRFIN20070610_024208_000000442058_00476_27584_8393.N1	10-JUN-2007 02:42:08	Straylight	44.000	40	The Sco	1.8590	7100.0	88	27584	No
29	GOM_NL__2PRFIN20070610_024353_000000432058_00476_27584_8394.N1	10-JUN-2007 02:43:53	Twilight_and_stray	43.000	25	35Lam Sco	1.6200	28000.	86	27584	No
30	GOM_NL__2PRFIN20070610_024527_000000412058_00476_27584_8395.N1	10-JUN-2007 02:45:27	Twilight_and_stray	41.000	75	26Eps Sco	2.2910	4250.0	82	27584	No
31	GOM_NL__2PRFIN20070610_025046_000000412058_00476_27584_8396.N1	10-JUN-2007 02:50:46	Bright	41.000	86	35Eta Oph	2.4300	10200.	82	27584	No
32	GOM_NL__2PRFIN20070610_025232_000000382058_00476_27584_8397.N1	10-JUN-2007 02:52:32	Bright	38.000	98	13Zet Oph	2.5710	30000.	76	27584	No
33	GOM_NL__2PRFIN20070610_025439_000000382058_00476_27584_8398.N1	10-JUN-2007 02:54:39	Bright	37.500	120	1Del Oph	2.7340	3200.0	75	27584	No
34	GOM_NL__2PRFIN20070610_030211_000000402058_00476_27584_8399.N1	10-JUN-2007 03:02:11	Bright	40.000	127	27Bet Her	2.7810	4700.0	80	27584	No
35	GOM_NL__2PRFIN20070610_030522_000000392058_00476_27584_8400.N1	10-JUN-2007 03:05:22	Bright	38.500	133	40Zet Her	2.8070	6000.0	77	27584	No
36	GOM_NL__2PRFIN20070610_031229_000000392058_00476_27584_8401.N1	10-JUN-2007 03:12:29	Bright	39.000	130	23Bet Dra	2.7990	5800.0	78	27584	No
37	GOM_NL__2PRFIN20070610_032915_000000432058_00476_27584_8402.N1	10-JUN-2007 03:29:15	Bright	42.500	76	27Gam Cas	2.3000	30000.	85	27584	No
38	GOM_NL__2PRFIN20070610_033508_000000552058_00476_27584_8403.N1	10-JUN-2007 03:35:08	Bright	55.000	73	57Gam1And	2.2600	13100.	110	27584	No
39	GOM_NL__2PRFIN20070610_033727_000000502058_00476_27584_8404.N1	10-JUN-2007 03:37:27	Bright	49.500	53	43Bet And	2.0480	3300.0	99	27584	No
40	GOM_NL__2PRFIN20070610_034044_000000492058_00476_27584_8405.N1	10-JUN-2007 03:40:44	Twilight	49.000	50	13Alp Ari	2.0070	4250.0	98	27584	No
41	GOM_NL__2PRFIN20070610_035523_000000532058_00476_27584_8406.N1	10-JUN-2007 03:55:23	Dark	52.500	52	16Bet Cet	2.0370	4500.0	105	27584	No
42	GOM_NL__2PRFIN20070610_040153_000000472058_00476_27584_8407.N1	10-JUN-2007 04:01:53	Dark	46.500	84	Alp Phe	2.3970	4500.0	93	27584	No

220	GOM_NL__2PRFIN20070610_202645_000000462058_00486_27594_8571.N1	10-JUN-2007 20:26:45	Twilight	46.000	50	13Alp Ari	2.0070	4250.0	92	27594	No
221	GOM_NL__2PRFIN20070610_204131_000000532058_00486_27594_8572.N1	10-JUN-2007 20:41:31	Dark	52.500	52	16Bet Cet	2.0370	4500.0	105	27594	No
222	GOM_NL__2PRFIN20070610_204759_000000502058_00486_27594_8573.N1	10-JUN-2007 20:47:59	Dark	50.000	84	Alp Phe	2.3970	4500.0	100	27594	No
223	GOM_NL__2PRFIN20070610_205356_000000512058_00487_27595_8578.N1	10-JUN-2007 20:53:56	Dark	50.500	63	Bet Gru	2.1500	2800.0	101	27595	No
224	GOM_NL__2PRFIN20070610_205557_000000502058_00487_27595_8579.N1	10-JUN-2007 20:55:57	Dark	50.000	31	Alp Gru	1.7340	15200.	100	27595	No
225	GOM_NL__2PRFIN20070610_210015_000000422058_00487_27595_8580.N1	10-JUN-2007 21:00:15	Straylight	42.000	45	Alp Pav	1.9400	26000.	84	27595	No
226	GOM_NL__2PRFIN20070610_210847_000000442058_00487_27595_8581.N1	10-JUN-2007 21:08:47	Straylight	44.000	40	The Sco	1.8590	7100.0	88	27595	No
227	GOM_NL__2PRFIN20070610_211032_000000452058_00487_27595_8582.N1	10-JUN-2007 21:10:32	Tw_i_and_stray	44.500	25	35Lam Sco	1.6200	28000.	89	27595	No
228	GOM_NL__2PRFIN20070610_211154_000000452058_00487_27595_8583.N1	10-JUN-2007 21:11:54	Tw_i_and_stray	44.500	167	10Gam2Sgr	2.9840	4500.0	89	27595	No
229	GOM_NL__2PRFIN20070610_211722_000000402058_00487_27595_8584.N1	10-JUN-2007 21:17:22	Bright	40.000	86	35Eta Oph	2.4300	10200.	80	27595	No
230	GOM_NL__2PRFIN20070610_211908_000000382058_00487_27595_8585.N1	10-JUN-2007 21:19:08	Bright	38.000	98	13Zet Oph	2.5710	30000.	76	27595	No
231	GOM_NL__2PRFIN20070610_212115_000000372058_00487_27595_8586.N1	10-JUN-2007 21:21:15	Bright	36.500	120	1Del Oph	2.7340	3200.0	73	27595	No
232	GOM_NL__2PRFIN20070610_212844_000000392058_00487_27595_8587.N1	10-JUN-2007 21:28:44	Bright	38.500	127	27Bet Her	2.7810	4700.0	77	27595	No
233	GOM_NL__2PRFIN20070610_213154_000000402058_00487_27595_8588.N1	10-JUN-2007 21:31:54	Bright	40.000	133	40Zet Her	2.8070	6000.0	80	27595	No
234	GOM_NL__2PRFIN20070610_213859_000000412058_00487_27595_8589.N1	10-JUN-2007 21:38:59	Bright	41.000	130	23Bet Dra	2.7990	5800.0	82	27595	No
235	GOM_NL__2PRFIN20070610_215549_000000432058_00487_27595_8590.N1	10-JUN-2007 21:55:49	Bright	42.500	76	27Gam Cas	2.3000	30000.	85	27595	No
236	GOM_NL__2PRFIN20070610_220144_000000382058_00487_27595_8591.N1	10-JUN-2007 22:01:44	Bright	38.000	73	57Gam1And	2.2600	13100.	76	27595	No
237	GOM_NL__2PRFIN20070610_220404_000000512058_00487_27595_8592.N1	10-JUN-2007 22:04:04	Tw_i_and_stray	50.500	53	43Bet And	2.0480	3300.0	101	27595	No
238	GOM_NL__2PRFIN20070610_220721_000000462058_00487_27595_8593.N1	10-JUN-2007 22:07:21	Twilight	45.500	50	13Alp Ari	2.0070	4250.0	91	27595	No
239	GOM_NL__2PRFIN20070610_222208_000000562058_00487_27595_8594.N1	10-JUN-2007 22:22:08	Dark	55.500	52	16Bet Cet	2.0370	4500.0	111	27595	No
240	GOM_NL__2PRFIN20070610_222836_000000432058_00487_27595_8595.N1	10-JUN-2007 22:28:36	Dark	43.000	84	Alp Phe	2.3970	4500.0	86	27595	No
241	GOM_NL__2PRFIN20070610_223433_000000542058_00488_27596_8593.N1	10-JUN-2007 22:34:33	Dark	53.500	63	Bet Gru	2.1500	2800.0	107	27596	No
242	GOM_NL__2PRFIN20070610_223634_000000482058_00488_27596_8594.N1	10-JUN-2007 22:36:34	Dark	48.000	31	Alp Gru	1.7340	15200.	96	27596	No
243	GOM_NL__2PRFIN20070610_224052_000000442058_00488_27596_8595.N1	10-JUN-2007 22:40:52	Straylight	44.000	45	Alp Pav	1.9400	26000.	88	27596	No
244	GOM_NL__2PRFIN20070610_224924_000000472058_00488_27596_8596.N1	10-JUN-2007 22:49:24	Straylight	47.000	40	The Sco	1.8590	7100.0	94	27596	No
245	GOM_NL__2PRFIN20070610_225108_000000422058_00488_27596_8597.N1	10-JUN-2007 22:51:08	Tw_i_and_stray	42.000	25	35Lam Sco	1.6200	28000.	84	27596	No
246	GOM_NL__2PRFIN20070610_225230_000000492058_00488_27596_8598.N1	10-JUN-2007 22:52:30	Tw_i_and_stray	49.000	167	10Gam2Sgr	2.9840	4500.0	98	27596	No
247	GOM_NL__2PRFIN20070610_225758_000000402058_00488_27596_8599.N1	10-JUN-2007 22:57:58	Bright	40.000	86	35Eta Oph	2.4300	10200.	80	27596	No
248	GOM_NL__2PRFIN20070610_225944_000000382058_00488_27596_8600.N1	10-JUN-2007 22:59:44	Bright	37.500	98	13Zet Oph	2.5710	30000.	75	27596	No
249	GOM_NL__2PRFIN20070610_230151_000000372058_00488_27596_8601.N1	10-JUN-2007 23:01:51	Bright	36.500	120	1Del Oph	2.7340	3200.0	73	27596	No
250	GOM_NL__2PRFIN20070610_230920_000000382058_00488_27596_8602.N1	10-JUN-2007 23:09:20	Bright	37.500	127	27Bet Her	2.7810	4700.0	75	27596	No
251	GOM_NL__2PRFIN20070610_231230_000000392058_00488_27596_8603.N1	10-JUN-2007 23:12:30	Bright	38.500	133	40Zet Her	2.8070	6000.0	77	27596	No
252	GOM_NL__2PRFIN20070610_231934_000000402058_00488_27596_8604.N1	10-JUN-2007 23:19:34	Bright	40.000	130	23Bet Dra	2.7990	5800.0	80	27596	No
253	GOM_NL__2PRFIN20070610_233624_000000402058_00488_27596_8605.N1	10-JUN-2007 23:36:24	Bright	39.500	76	27Gam Cas	2.3000	30000.	79	27596	No
254	GOM_NL__2PRFIN20070610_234220_000000392058_00488_27596_8606.N1	10-JUN-2007 23:42:20	Bright	38.500	73	57Gam1And	2.2600	13100.	77	27596	No
255	GOM_NL__2PRFIN20070610_234439_000000562058_00488_27596_8607.N1	10-JUN-2007 23:44:39	Tw_i_and_stray	55.500	53	43Bet And	2.0480	3300.0	111	27596	No
256	GOM_NL__2PRFIN20070610_234758_000000462058_00488_27596_8608.N1	10-JUN-2007 23:47:58	Twilight	46.000	50	13Alp Ari	2.0070	4250.0	92	27596	No

3. Quality information per product

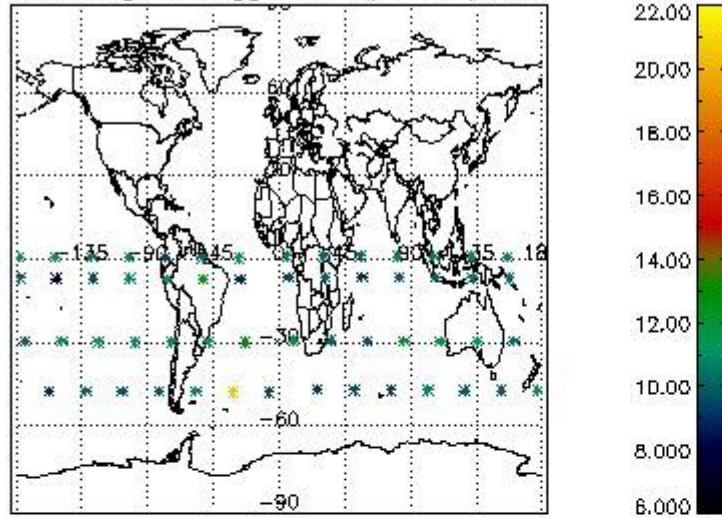
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

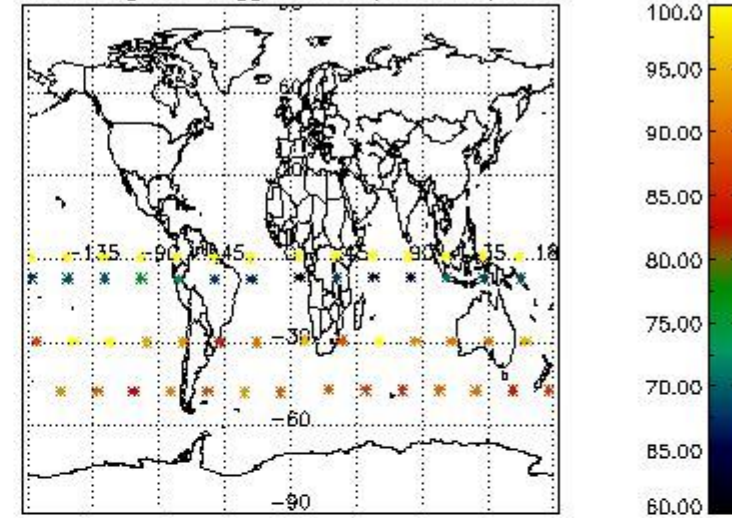


3.2 Plot quality information per product (world map)

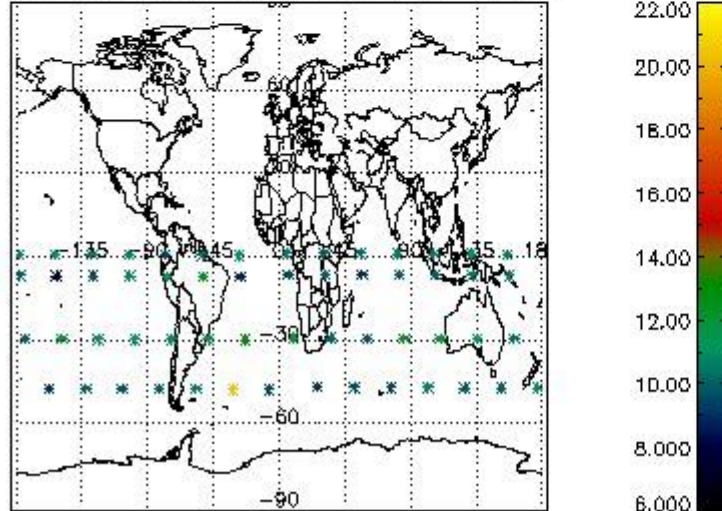
Percentage of flagged data per O3 profile



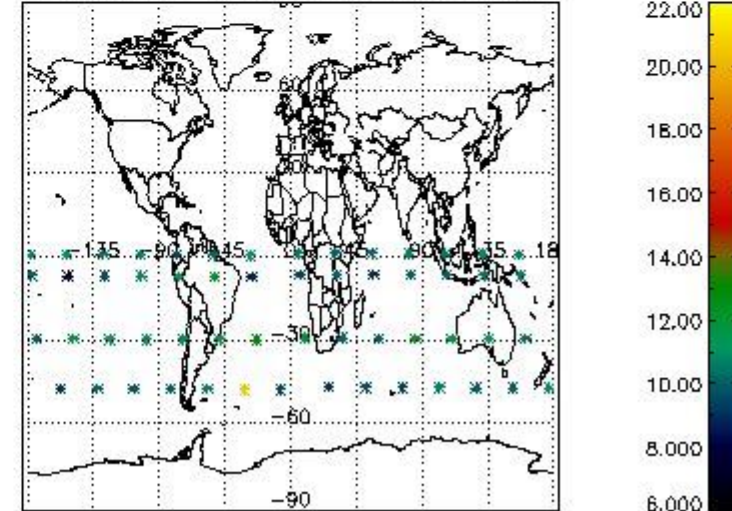
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

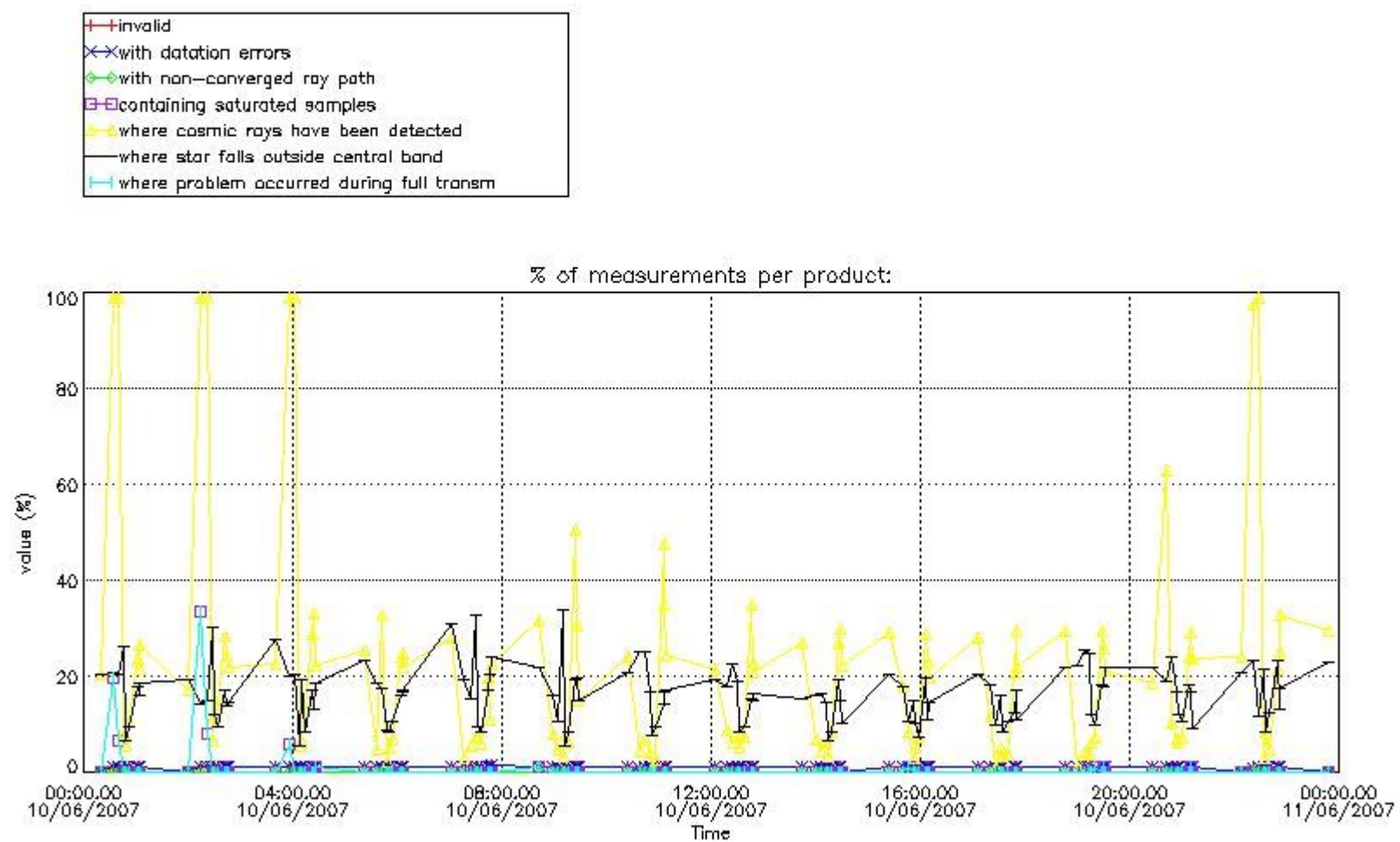


4. Level 1 quality information per product

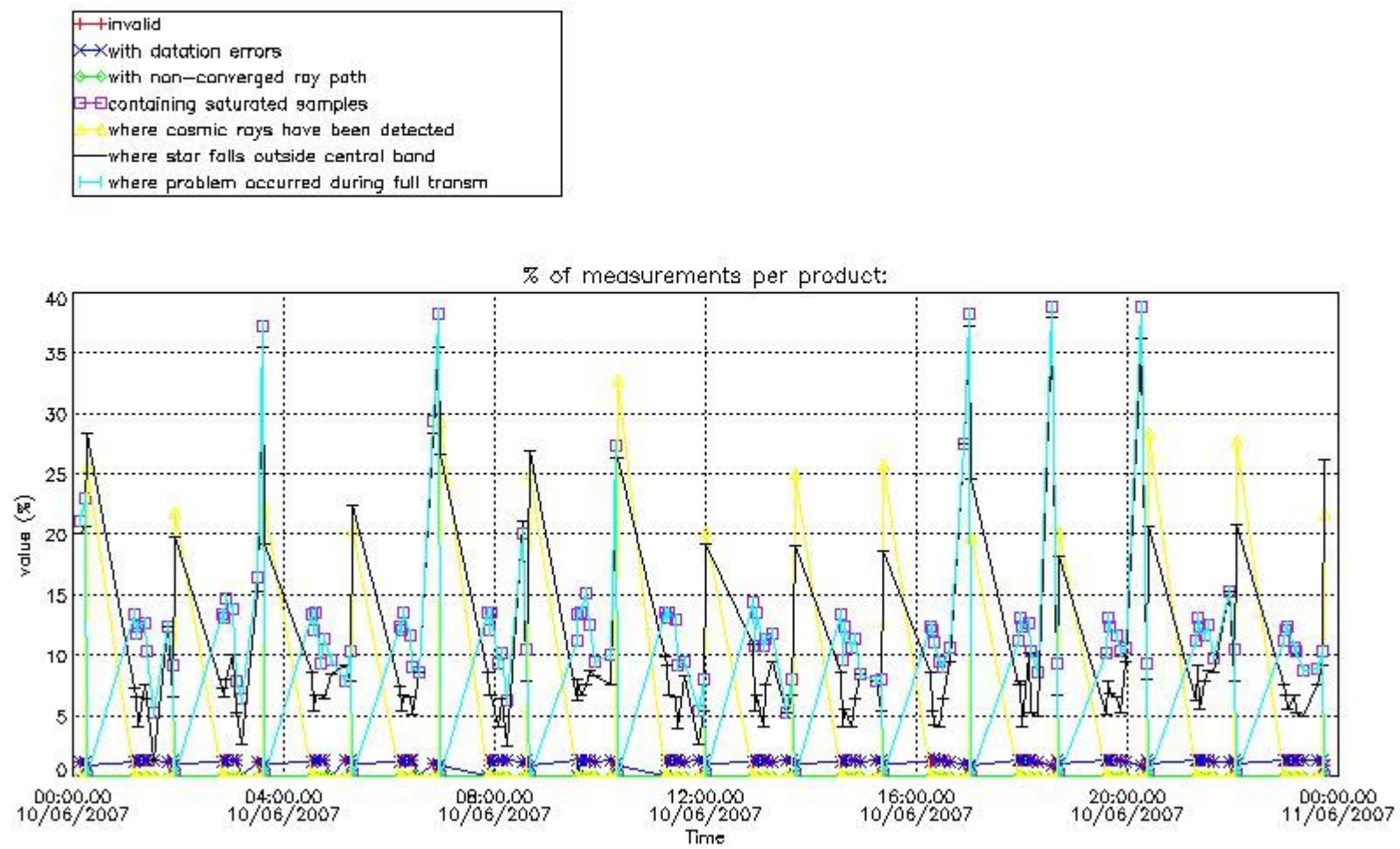
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

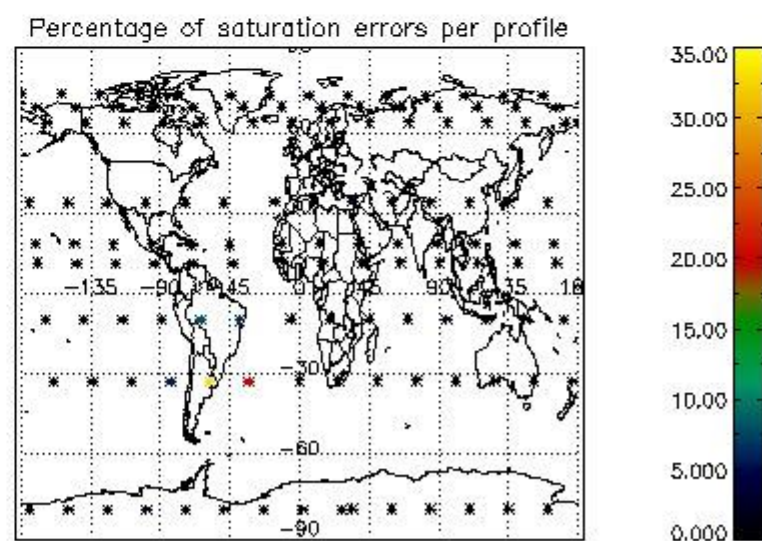
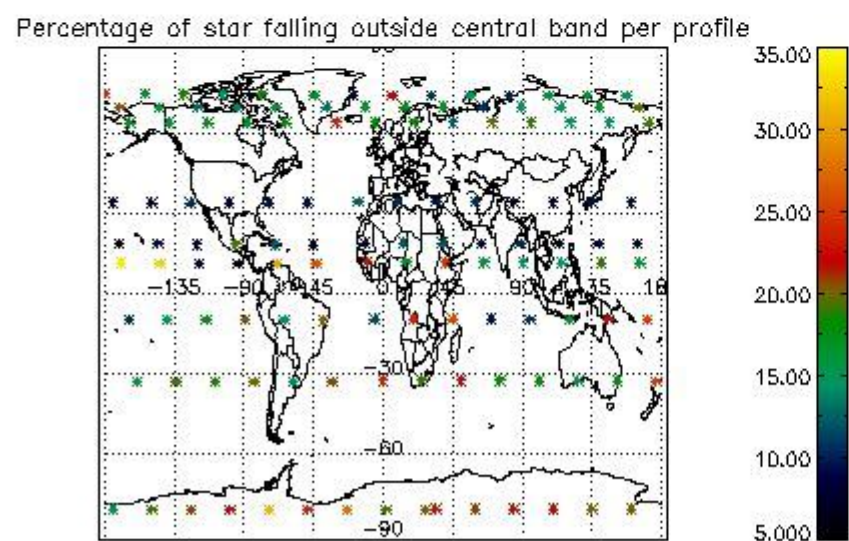
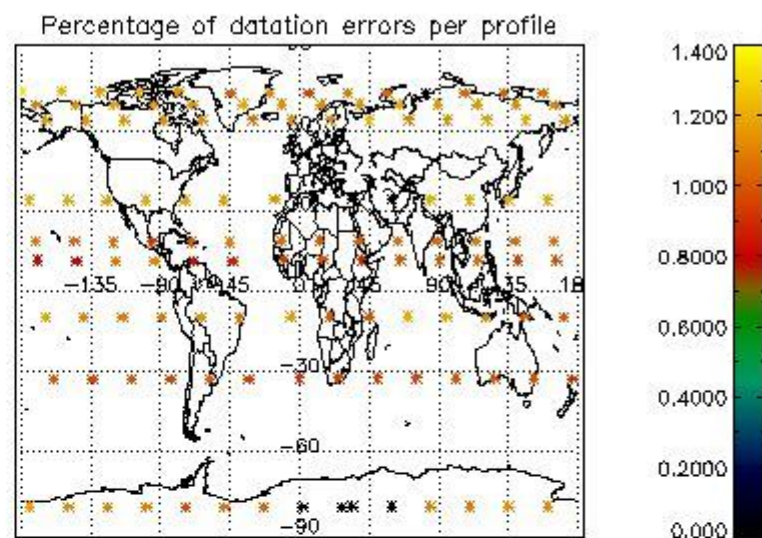
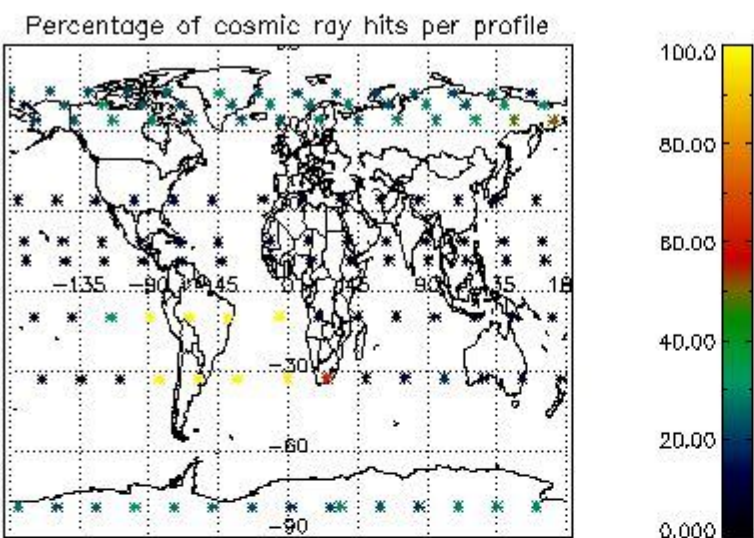


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

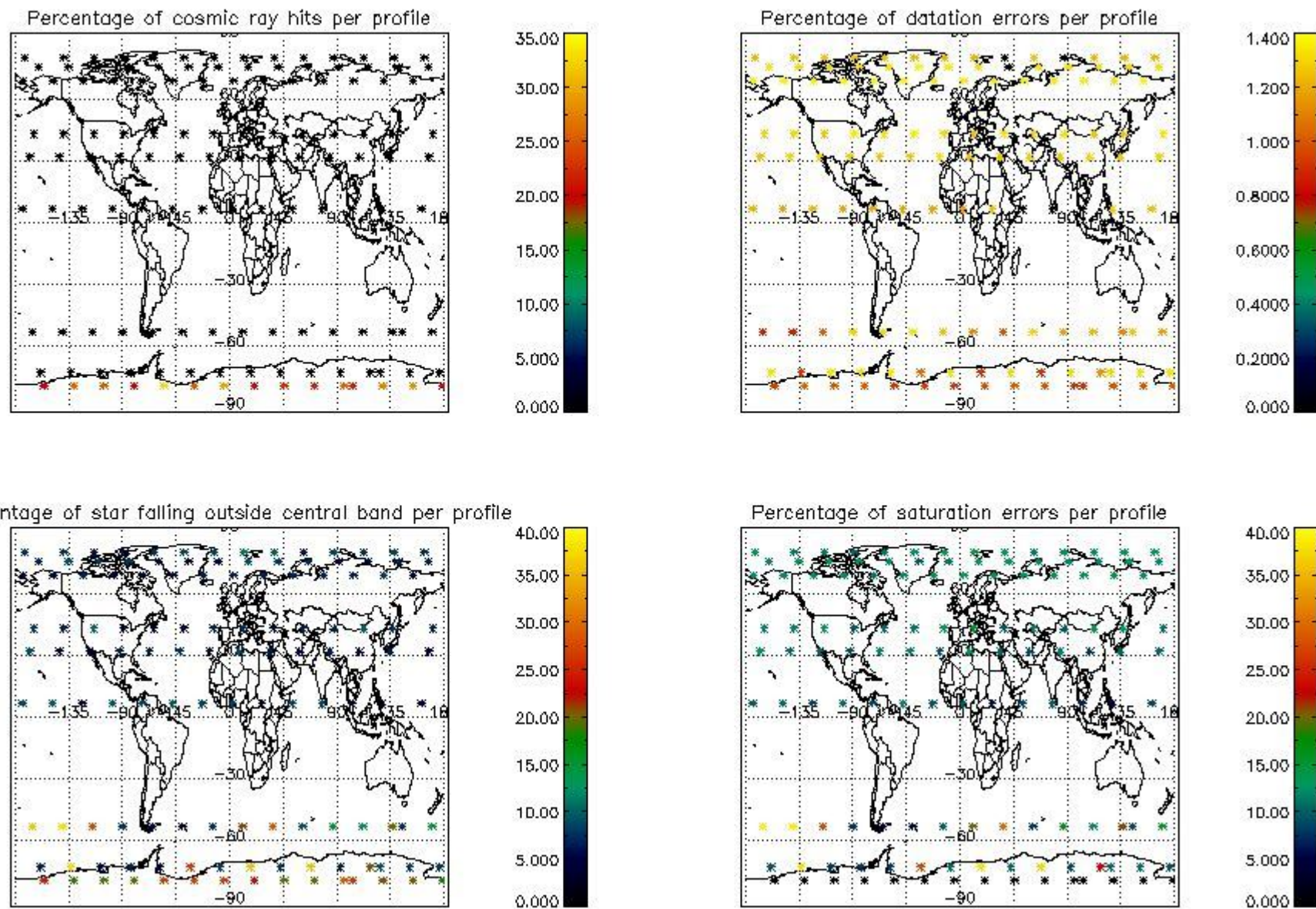


4.2 Plot quality information per product coming from level 1b processing (world map)

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

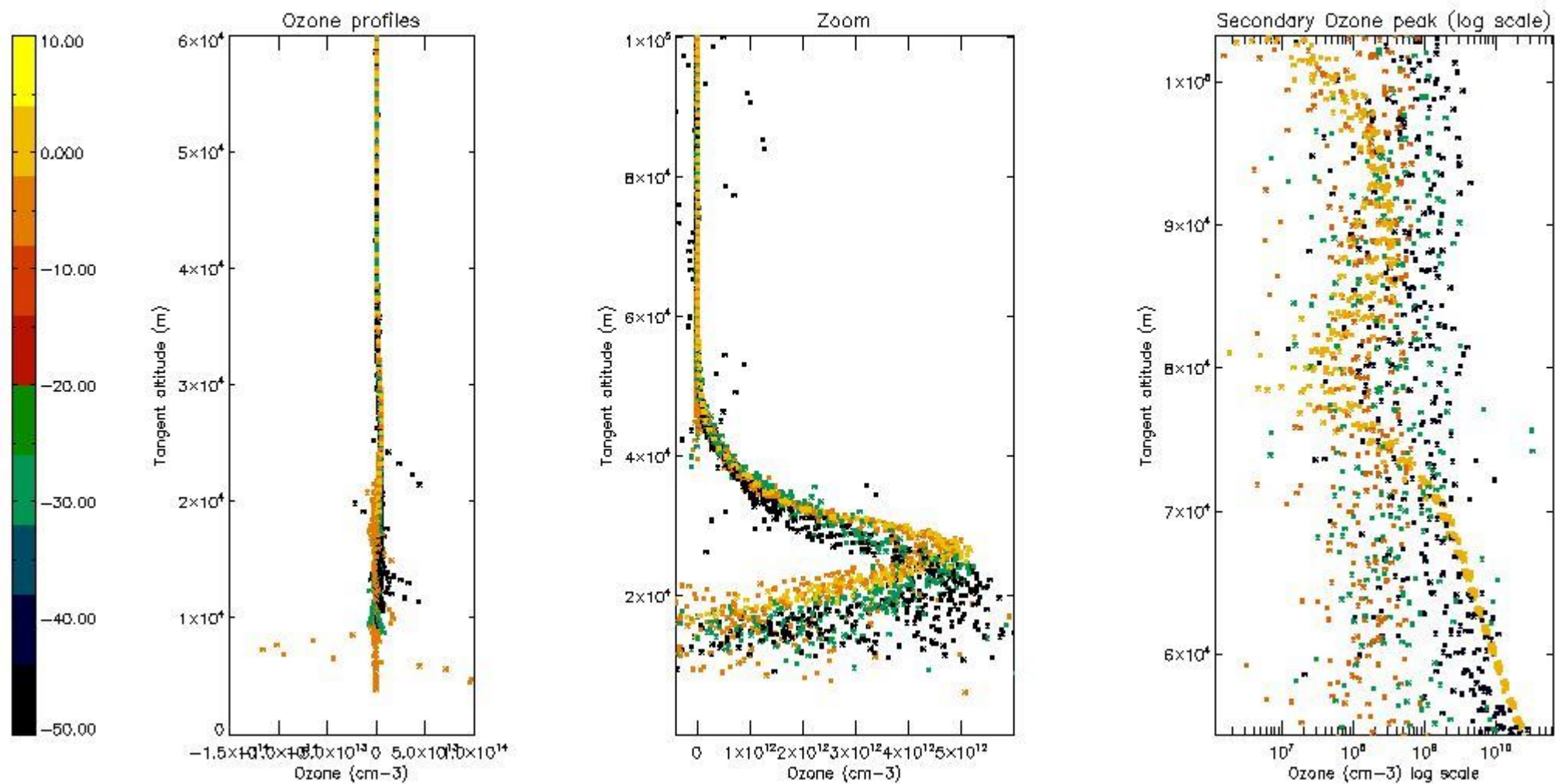
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	9

STD < 10	6
STD < 5	3

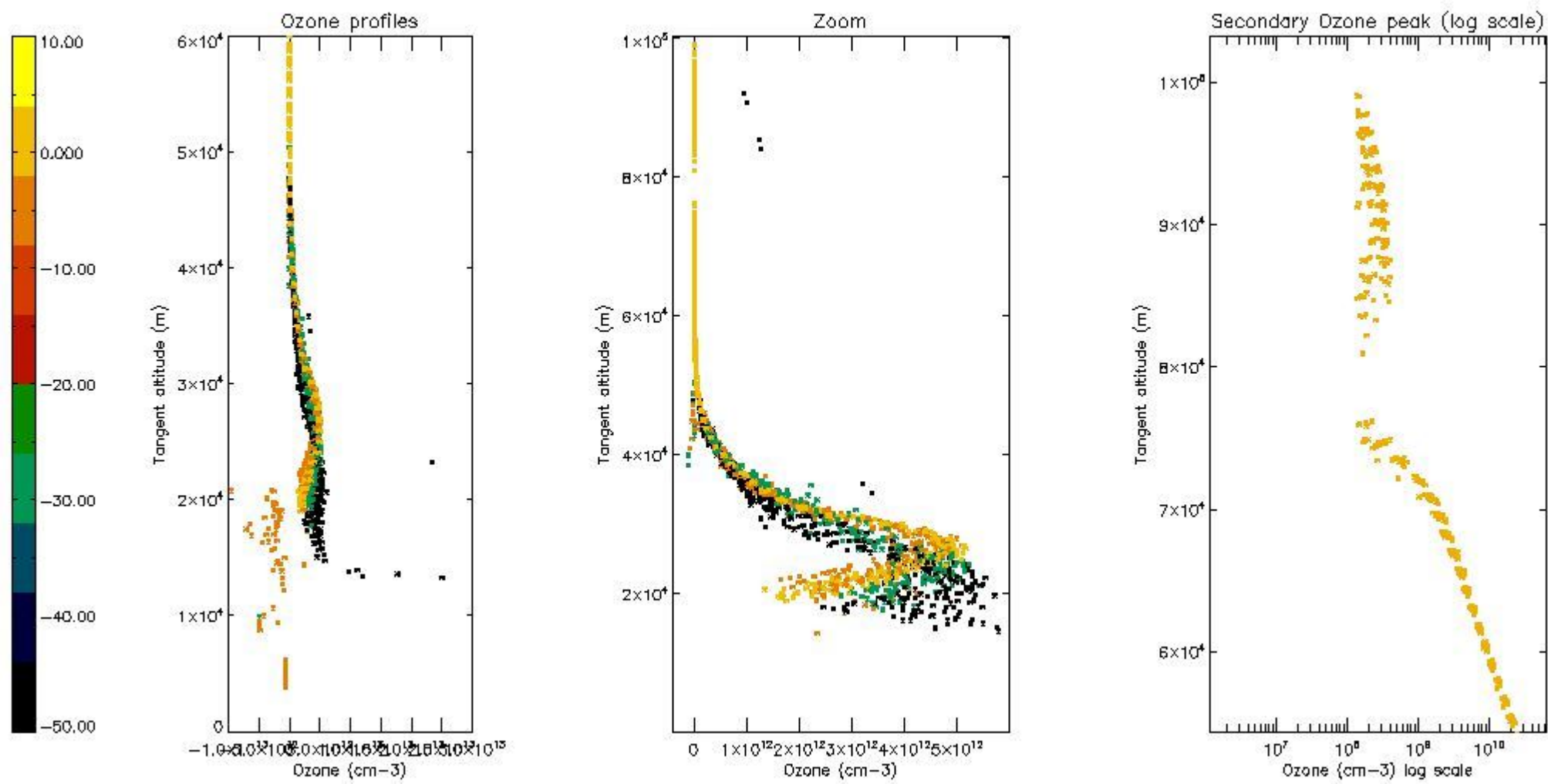
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



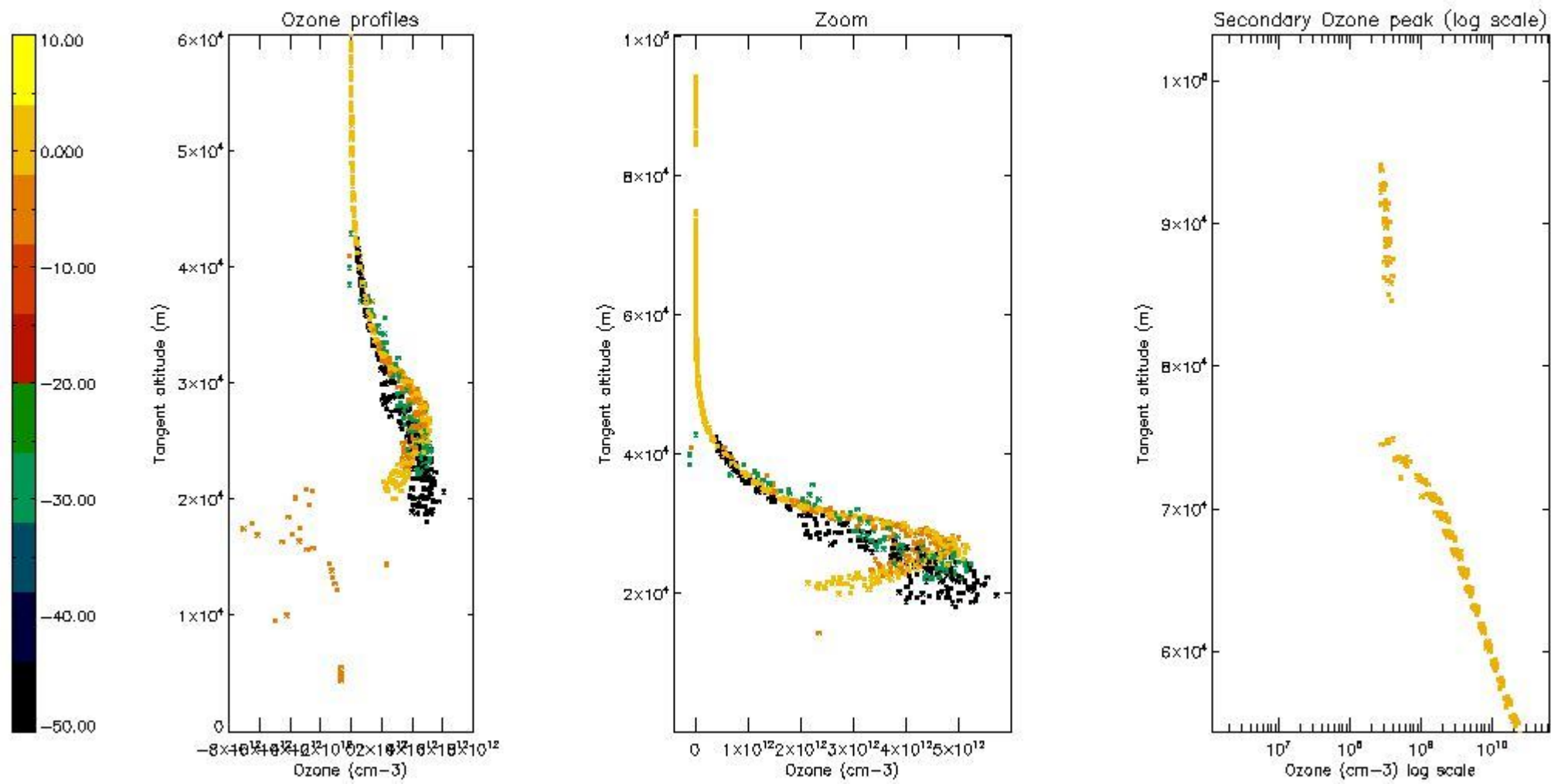
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



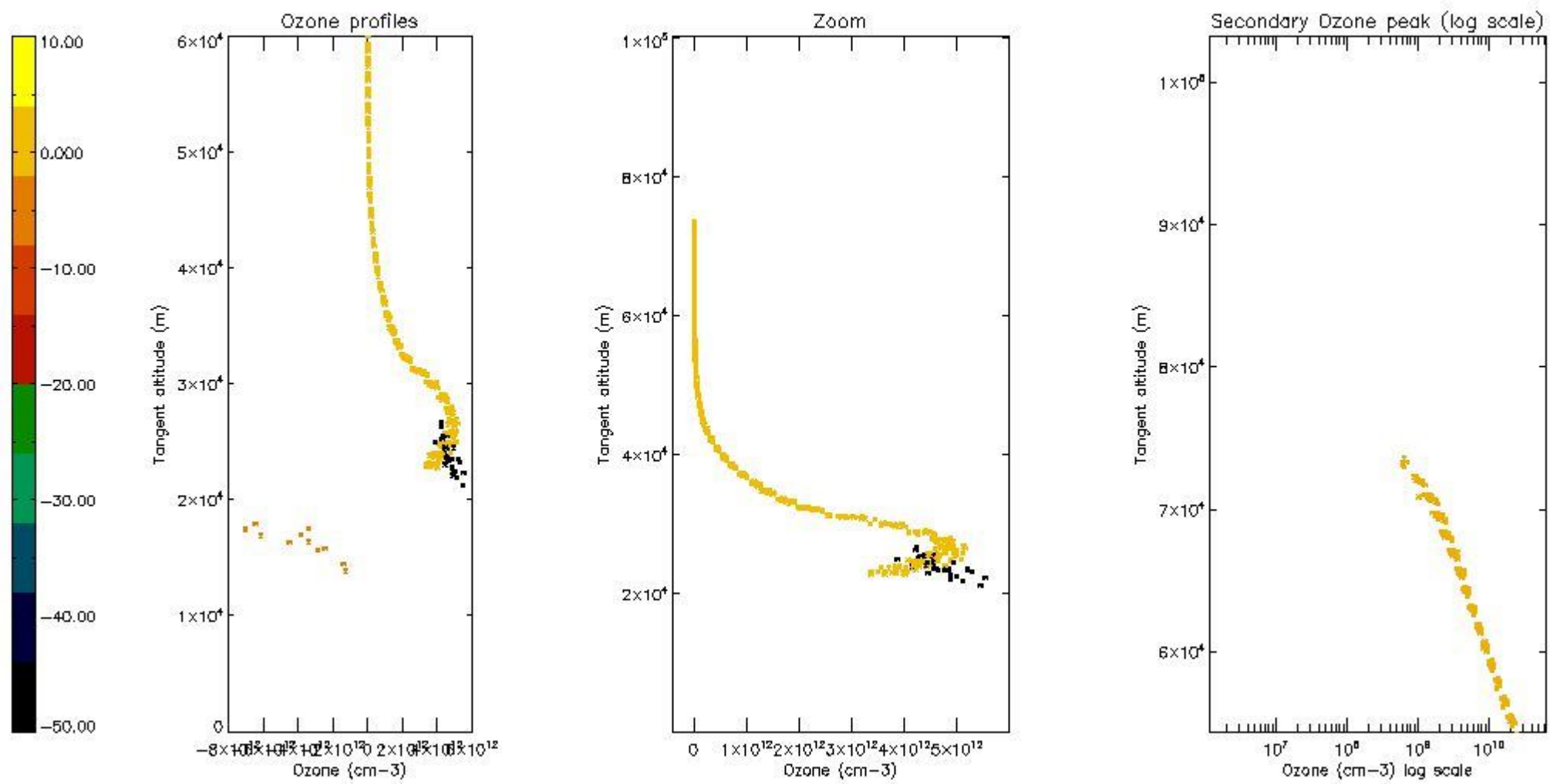
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



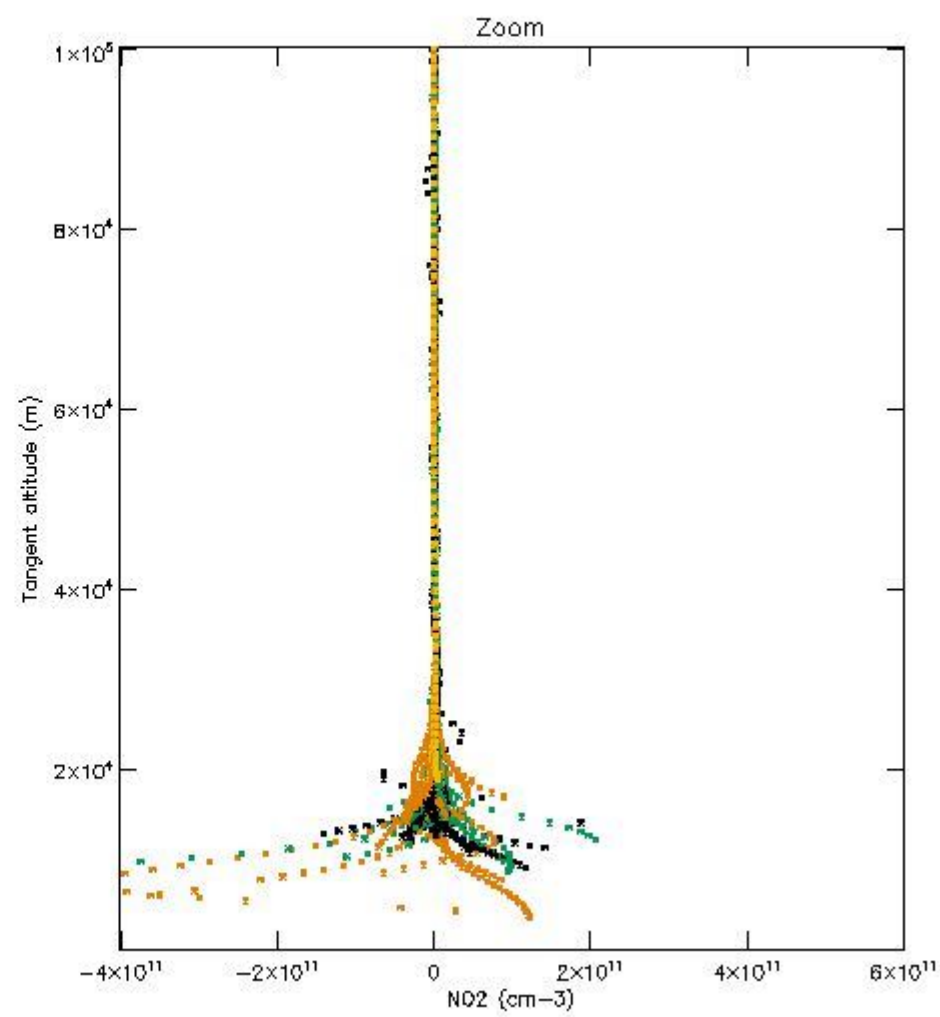
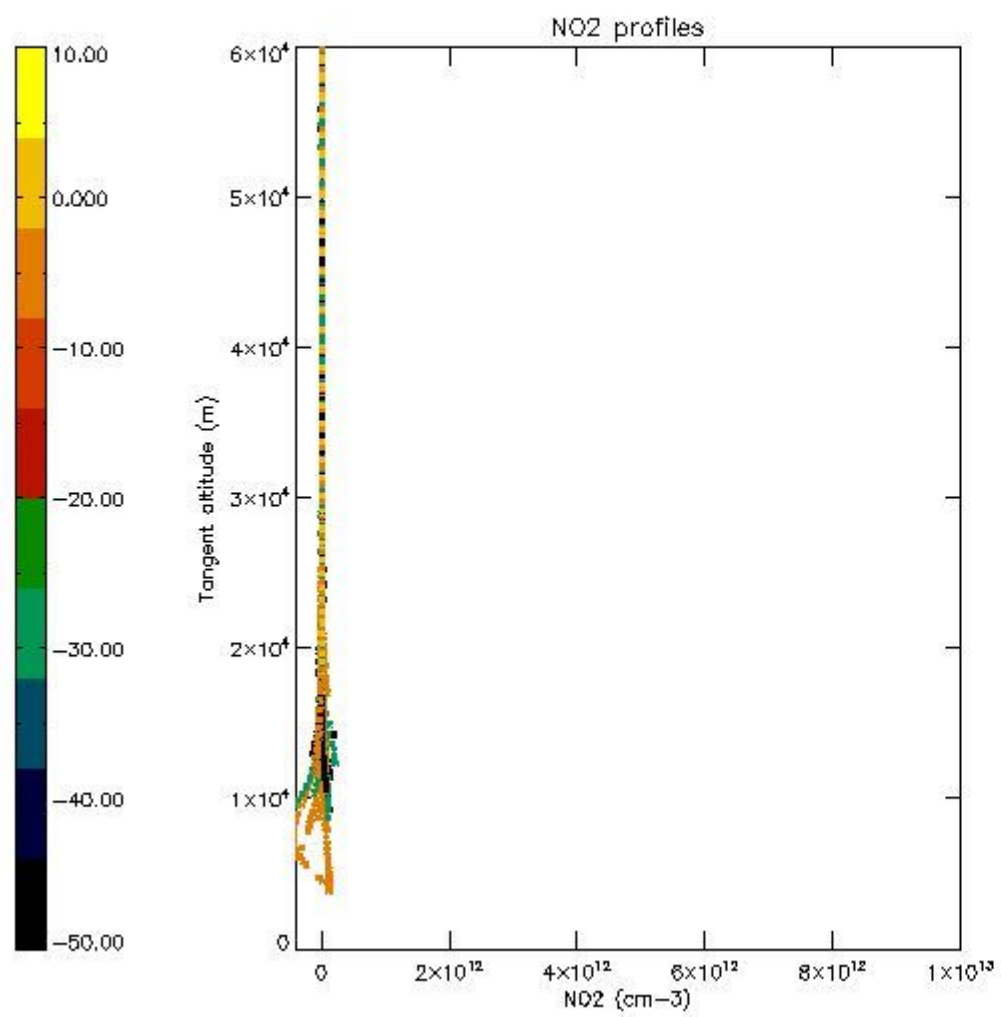
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



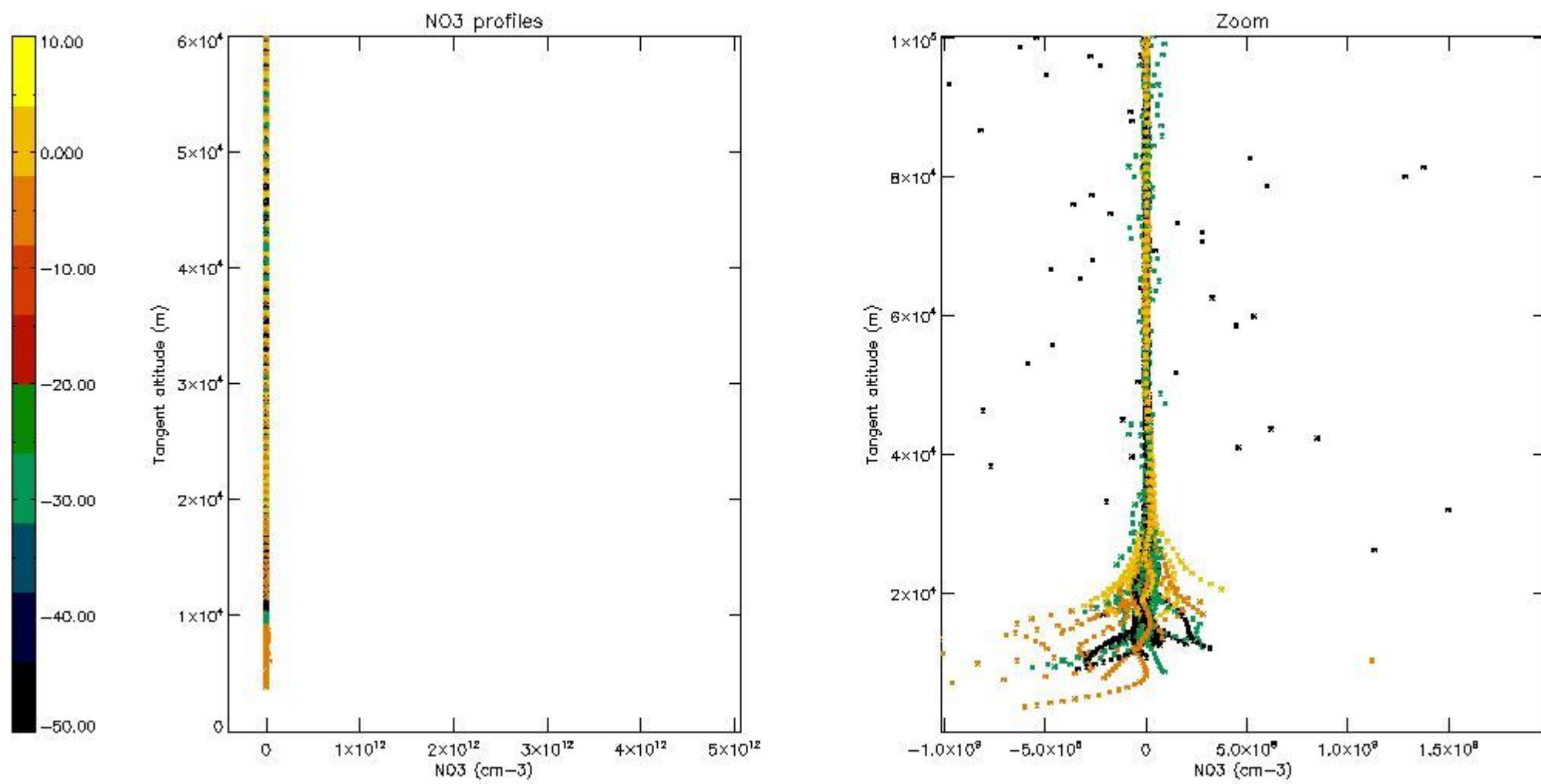
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



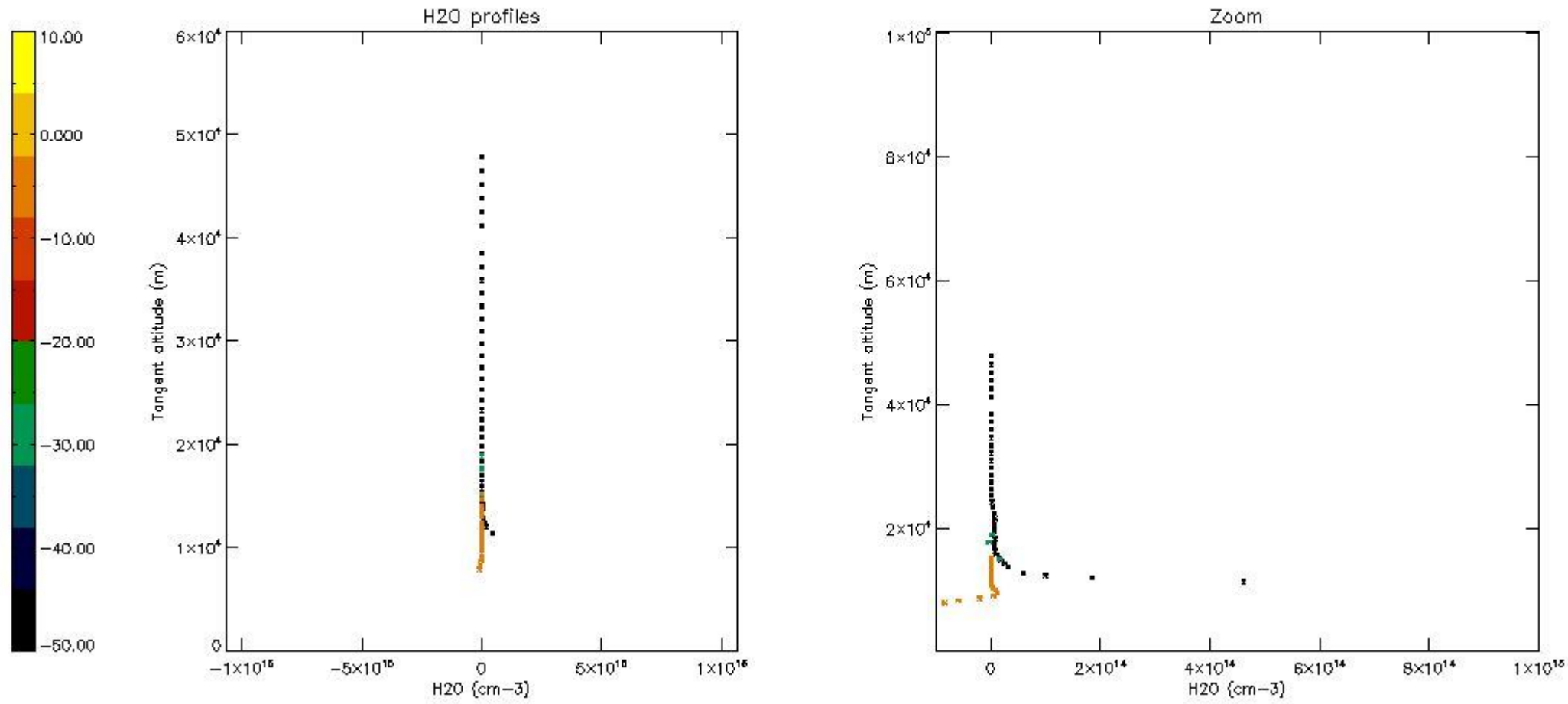
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

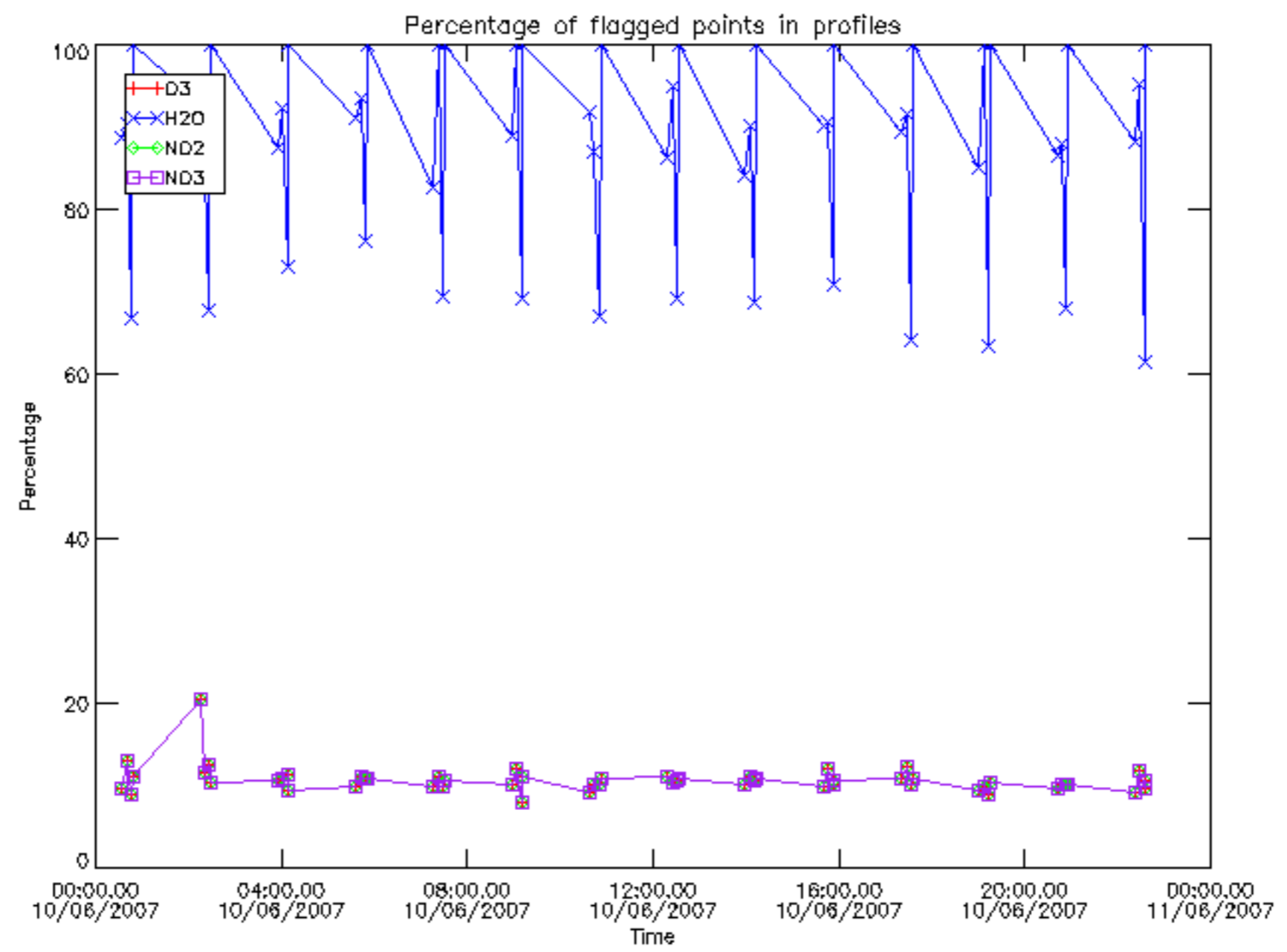
The colorbar represents the latitude.



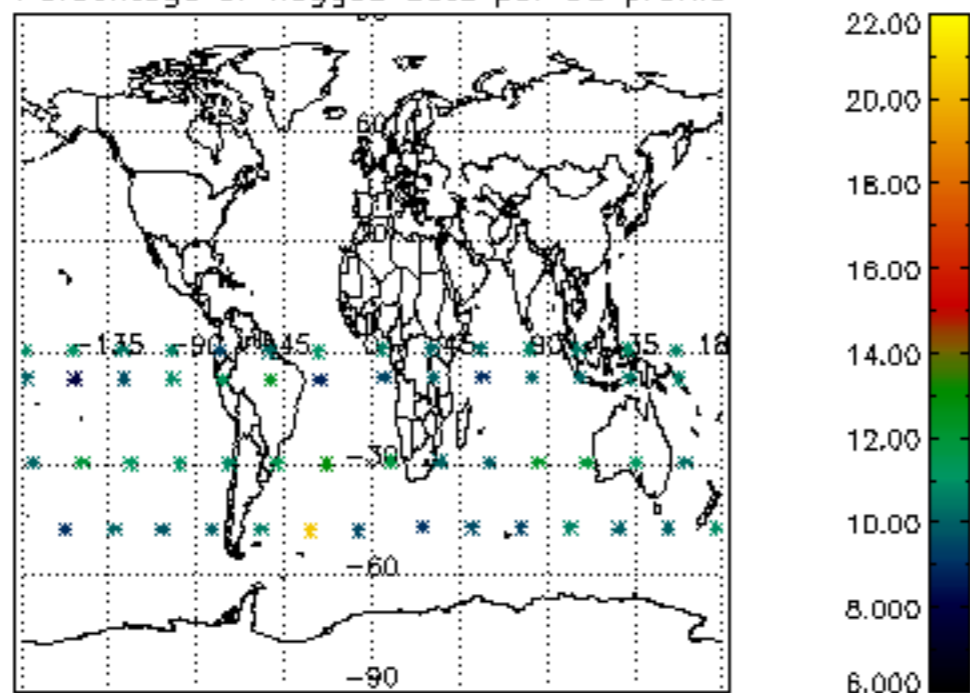
6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

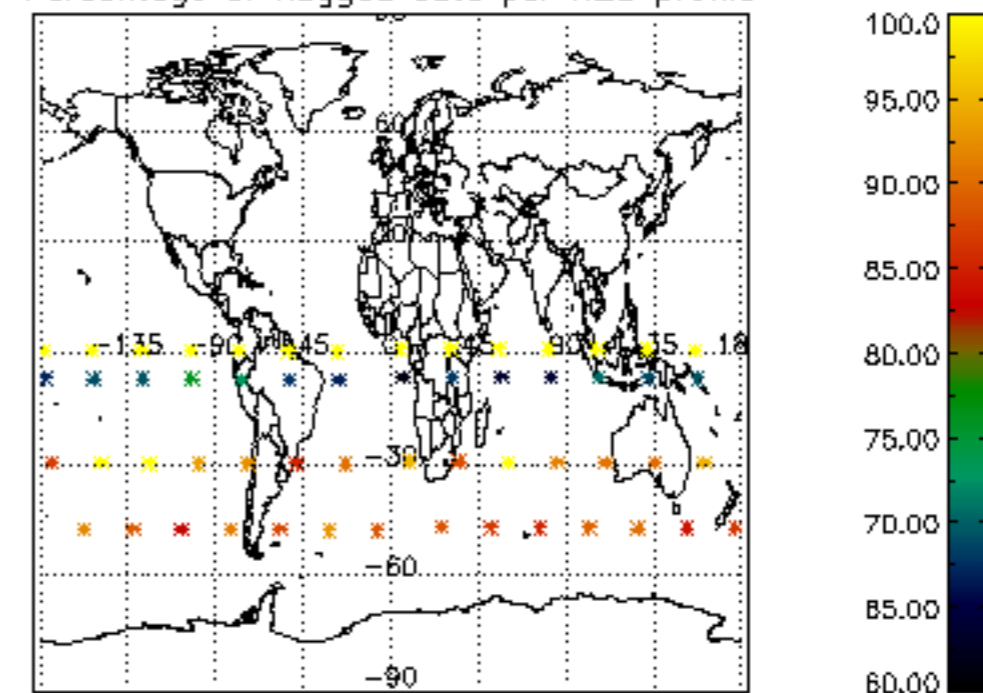
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	10-JUN-2007 00:08:04
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	10-JUN-2007 00:08:04
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	10-JUN-2007 00:08:04



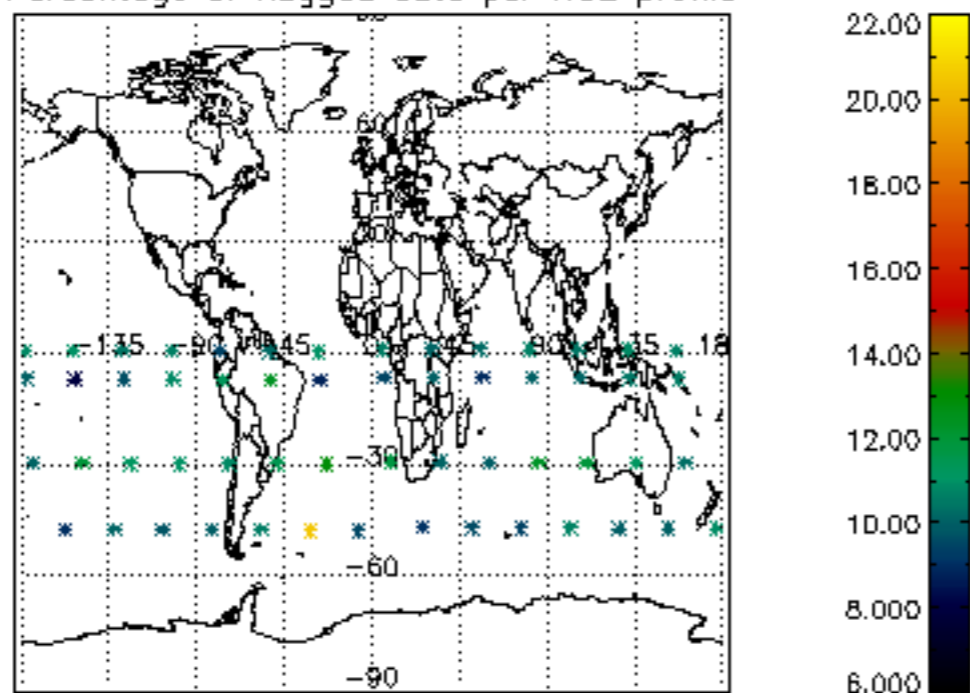
Percentage of flagged data per D3 profile



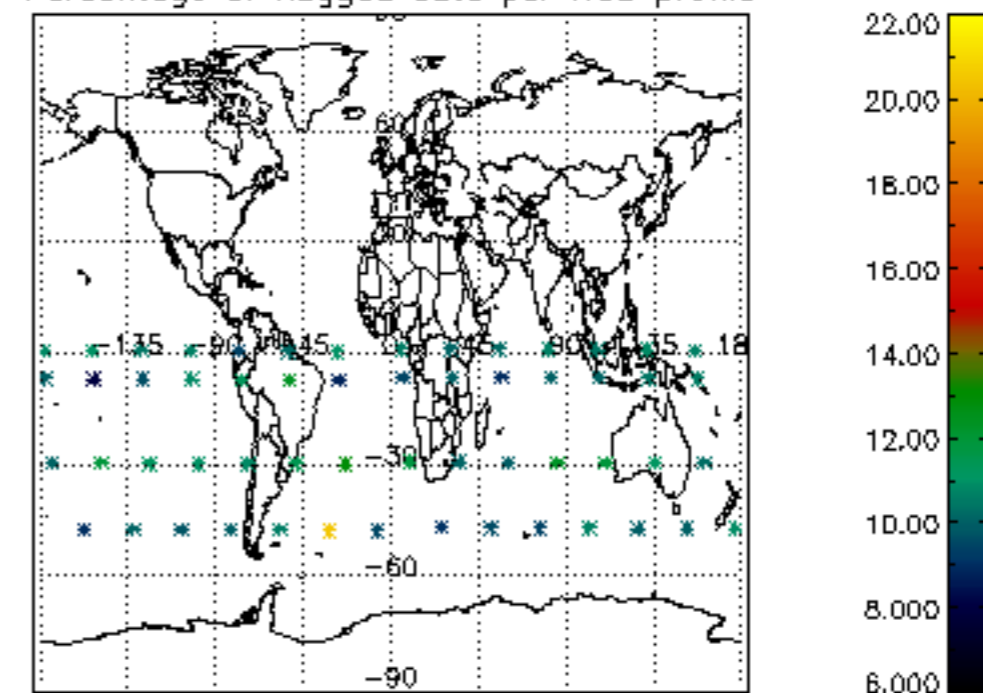
Percentage of flagged data per H2O profile

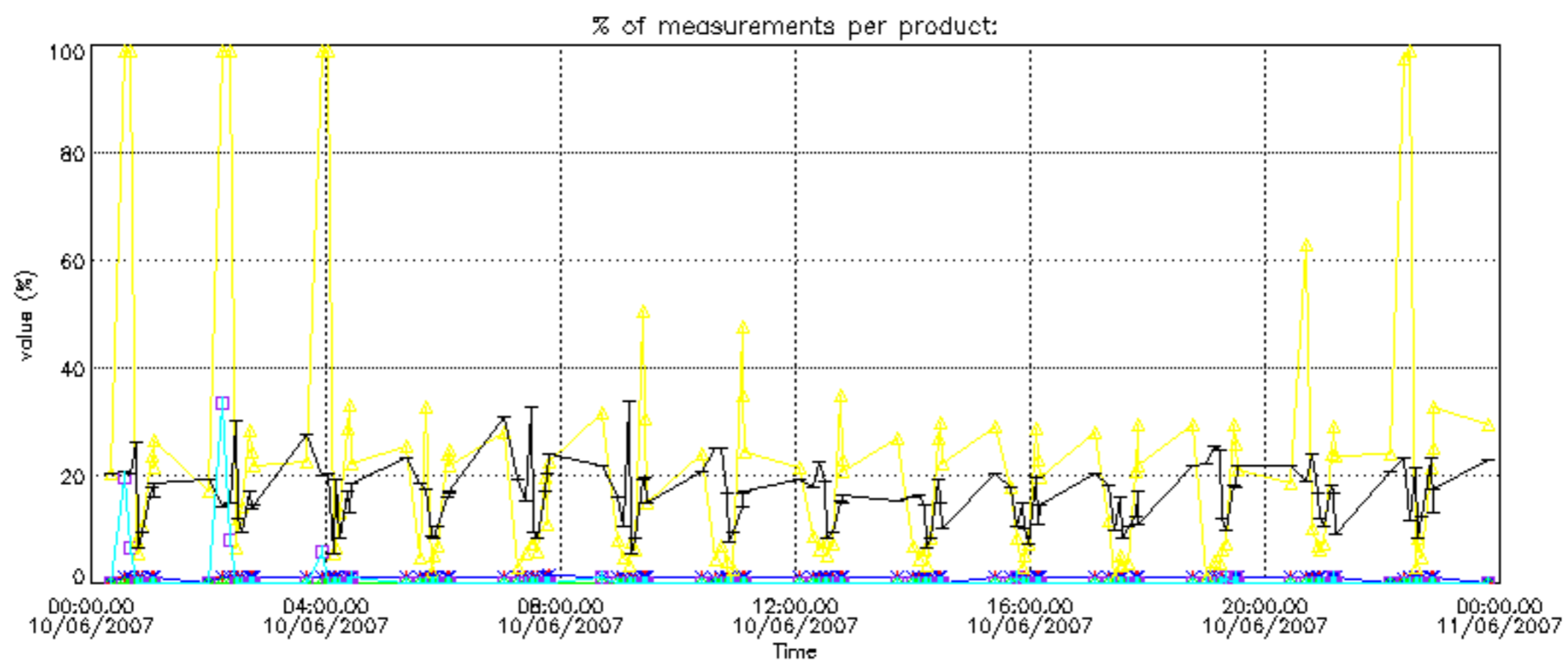


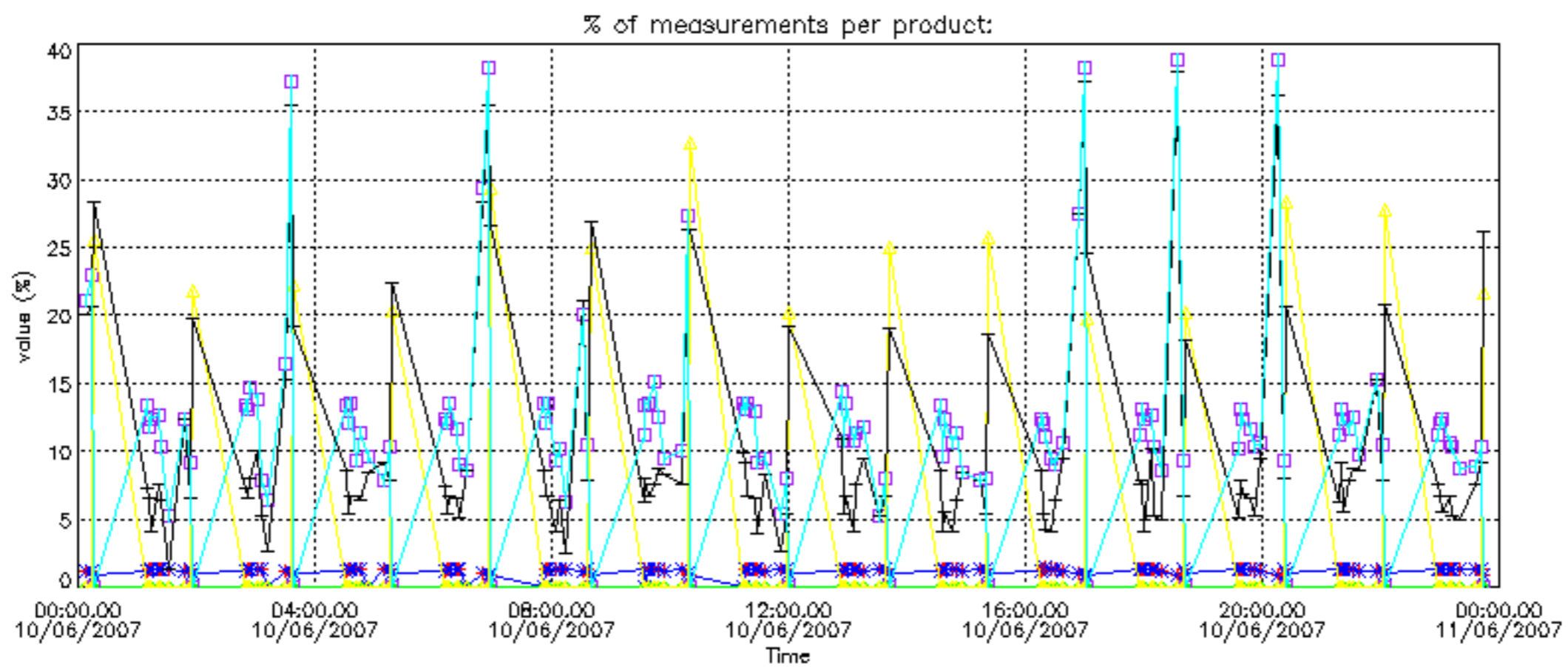
Percentage of flagged data per NO2 profile



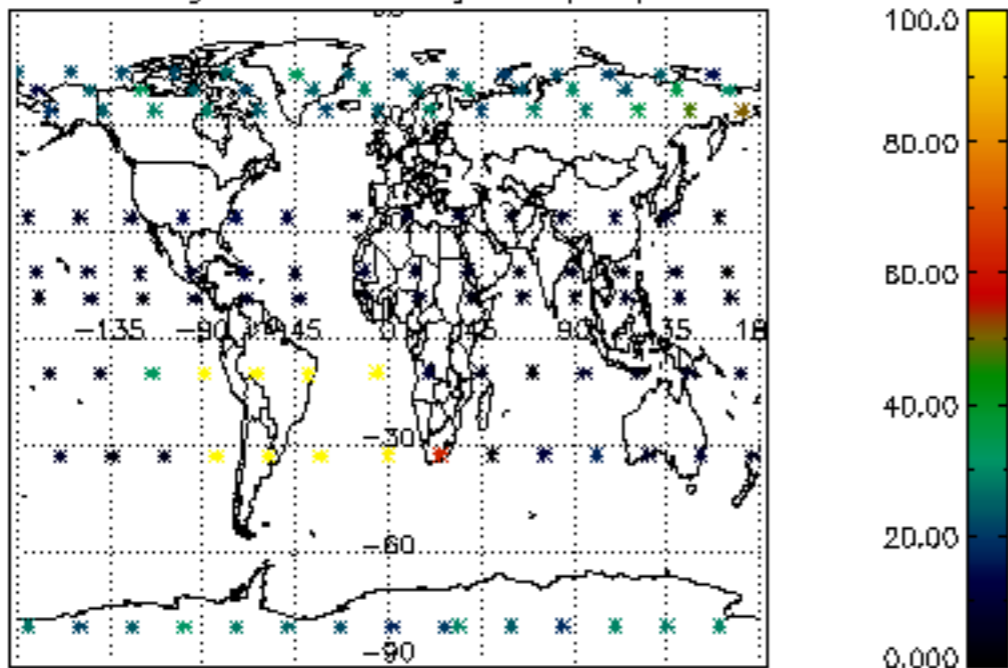
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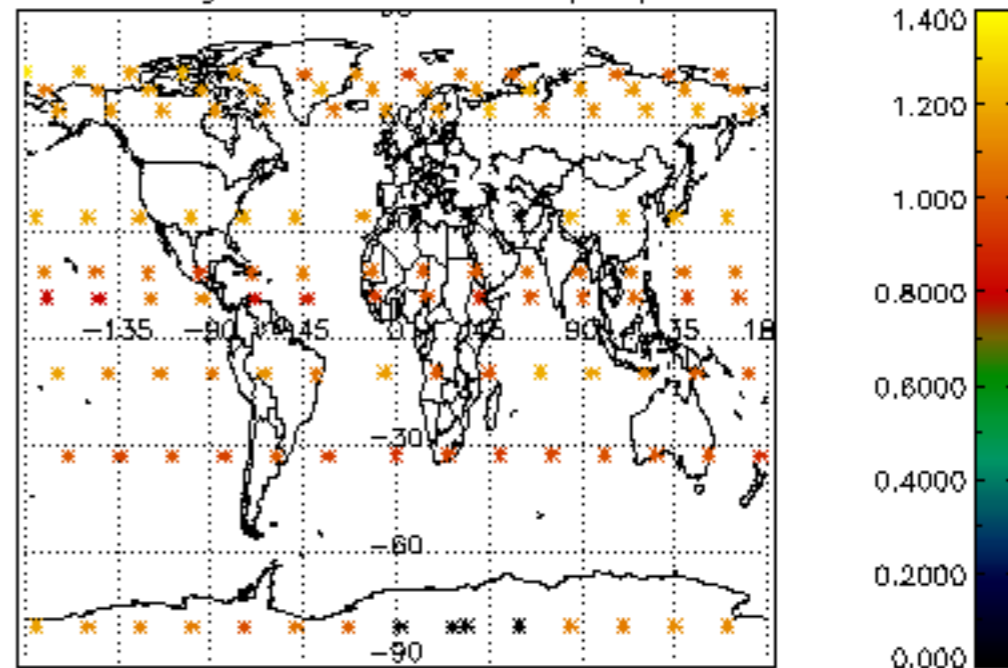




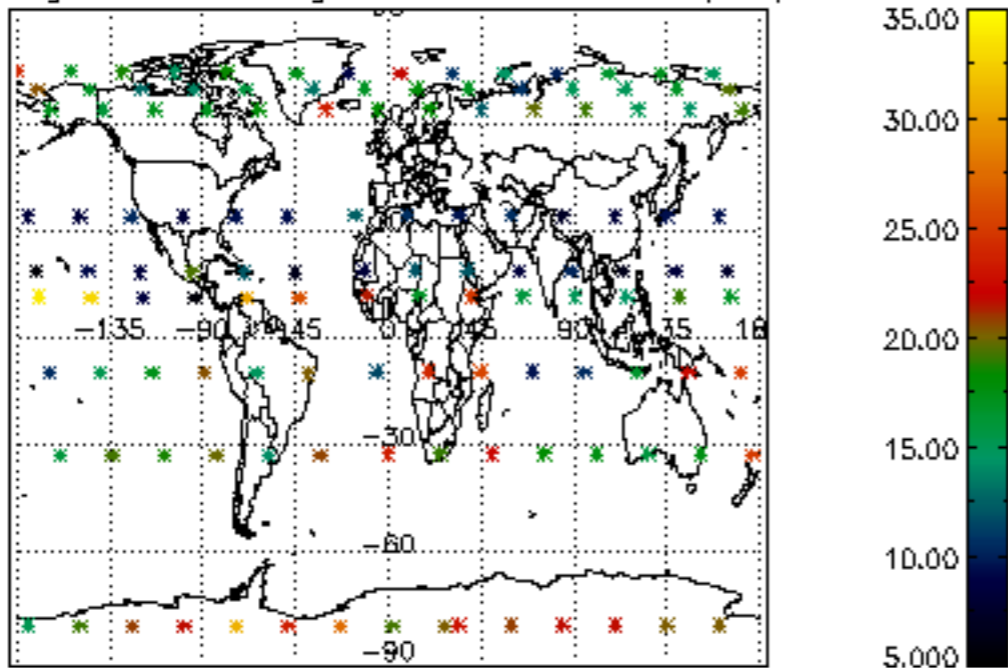
Percentage of cosmic ray hits per profile



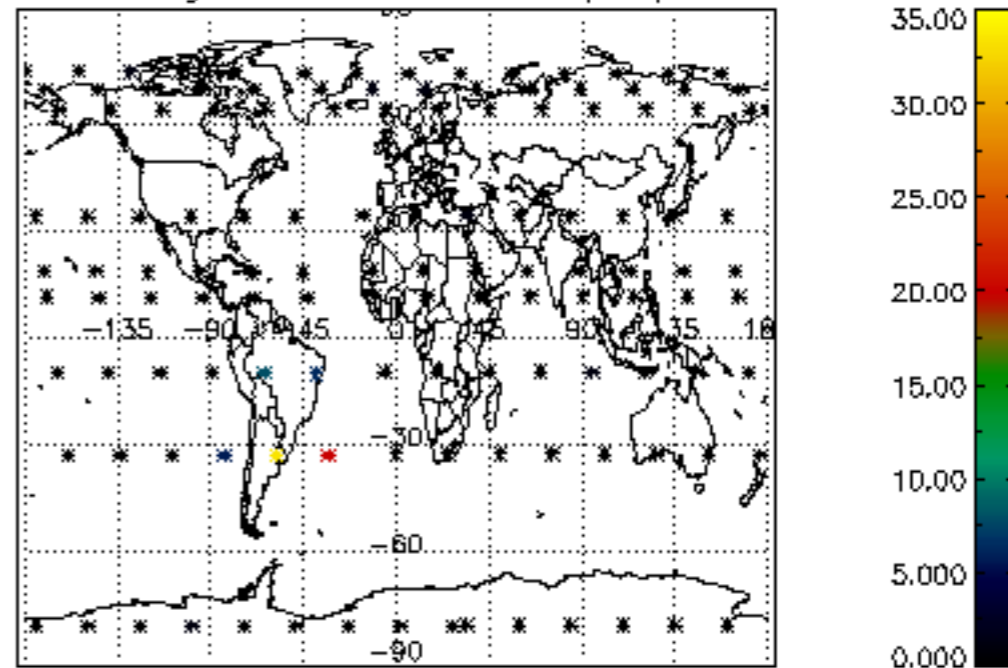
Percentage of datation errors per profile



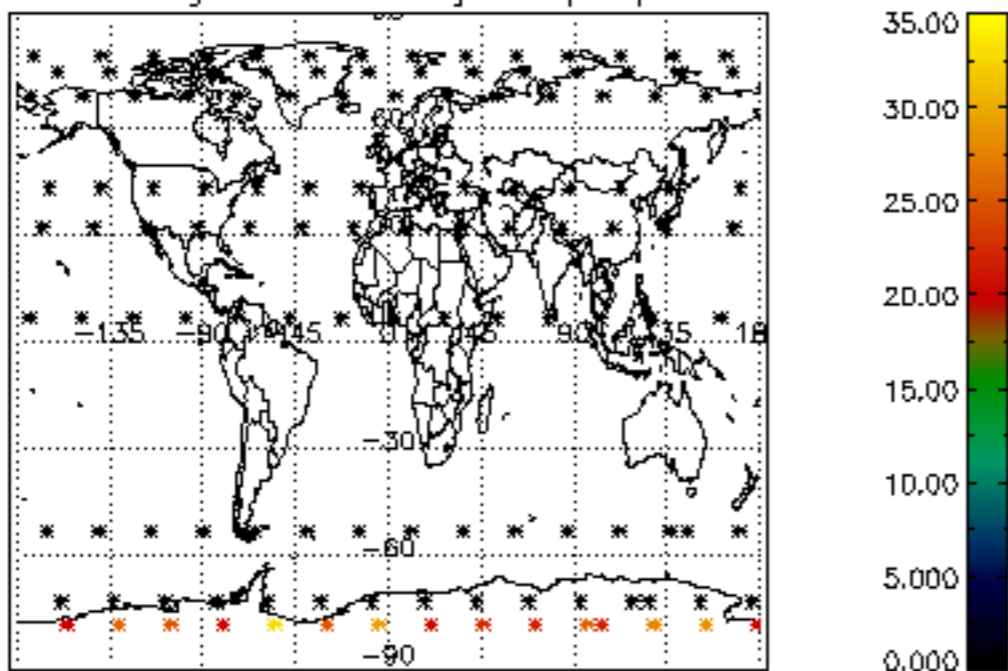
Percentage of star falling outside central band per profile



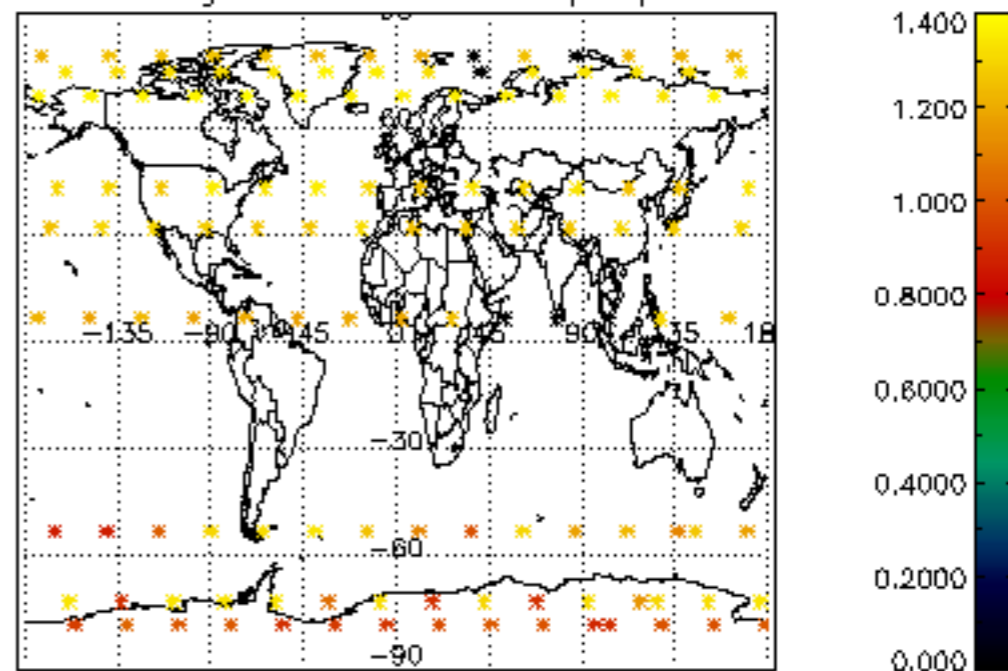
Percentage of saturation errors per profile



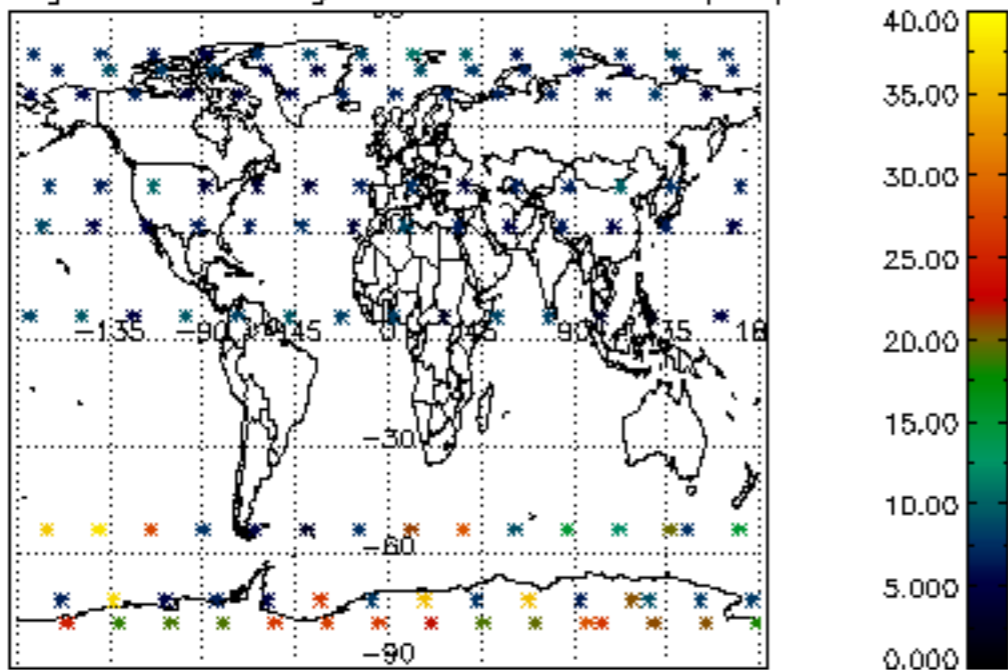
Percentage of cosmic ray hits per profile



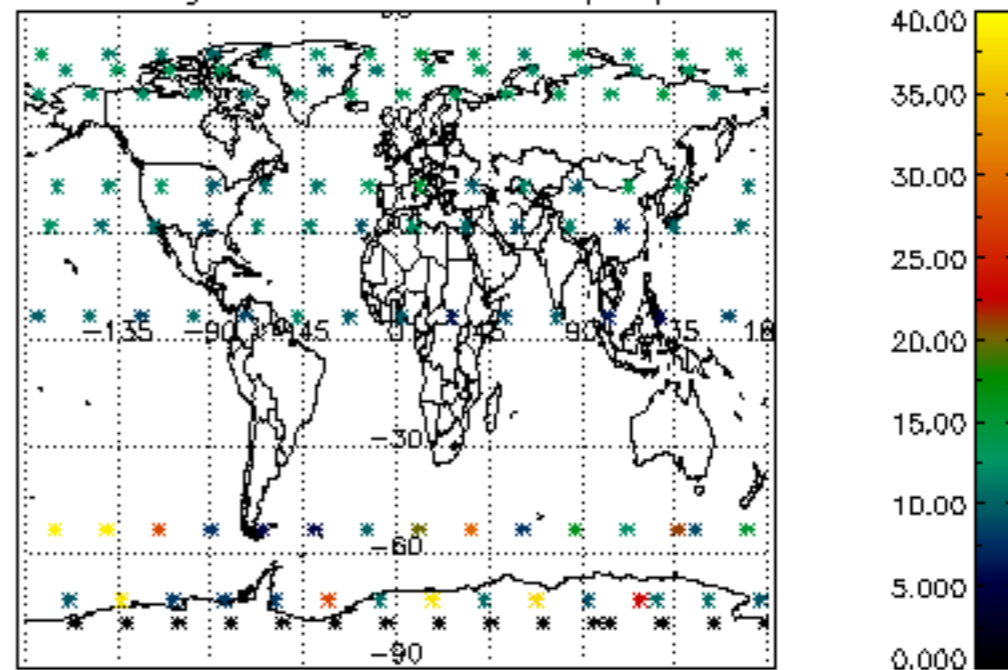
Percentage of datation errors per profile

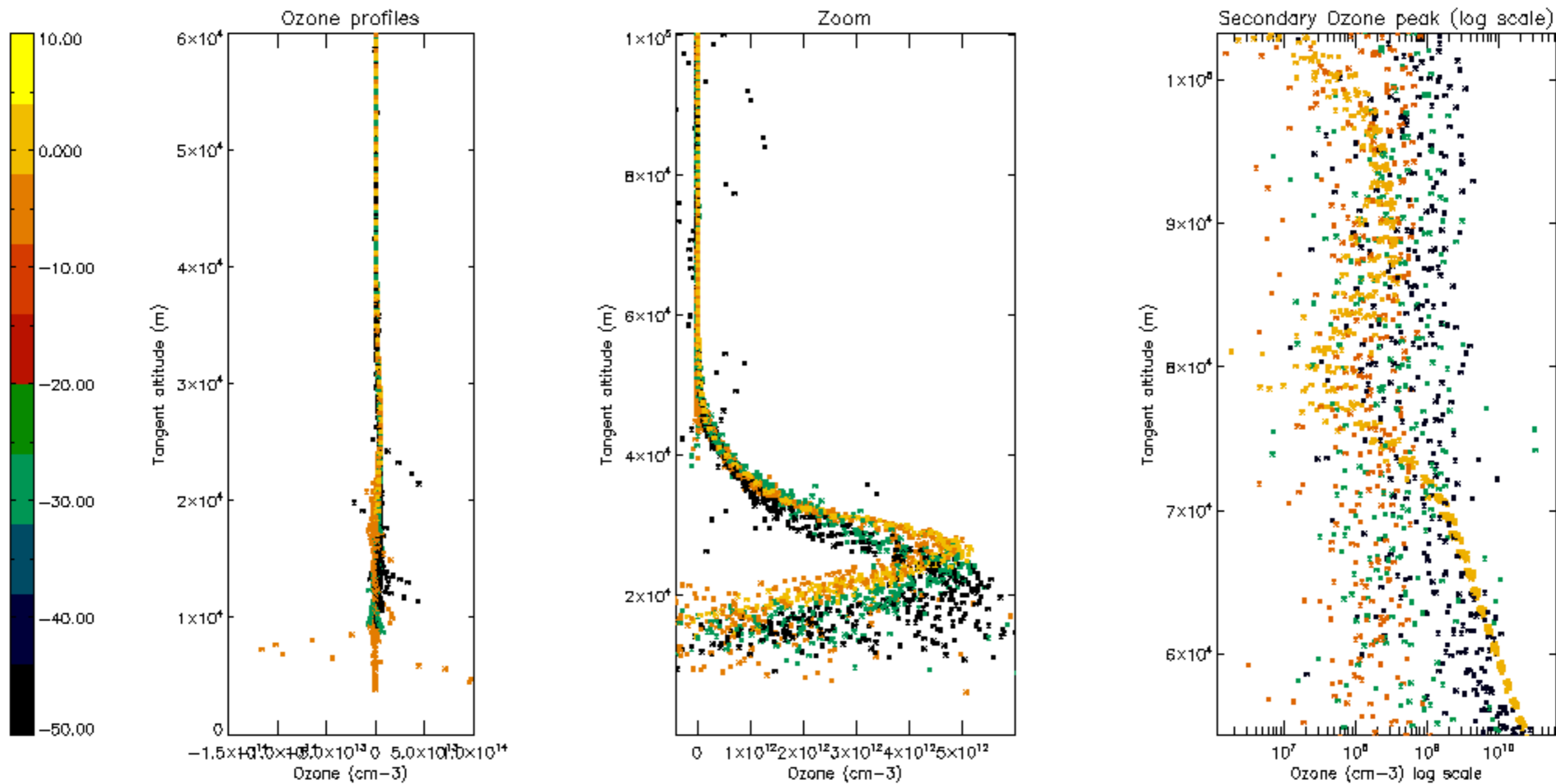


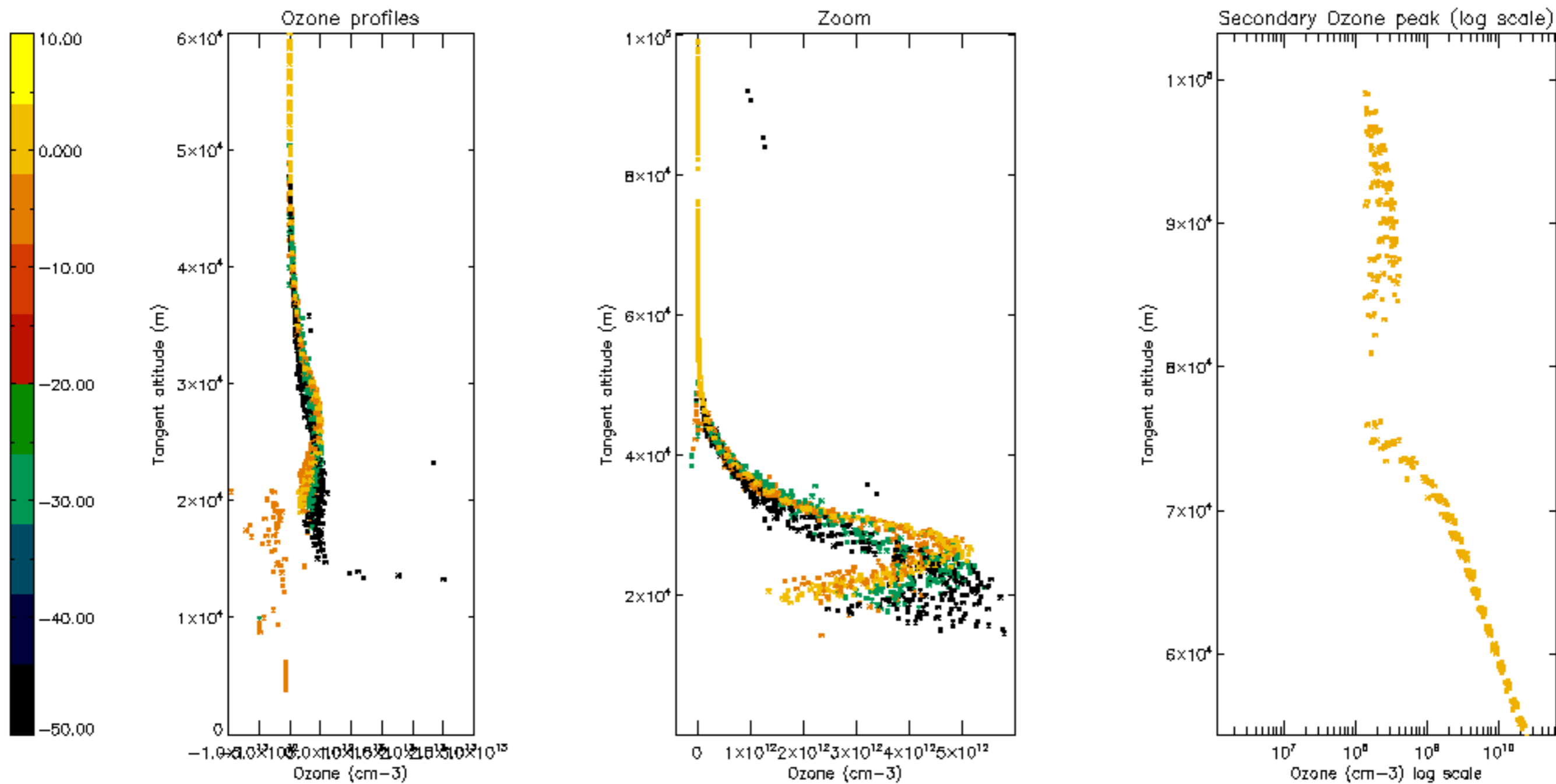
Percentage of star falling outside central band per profile

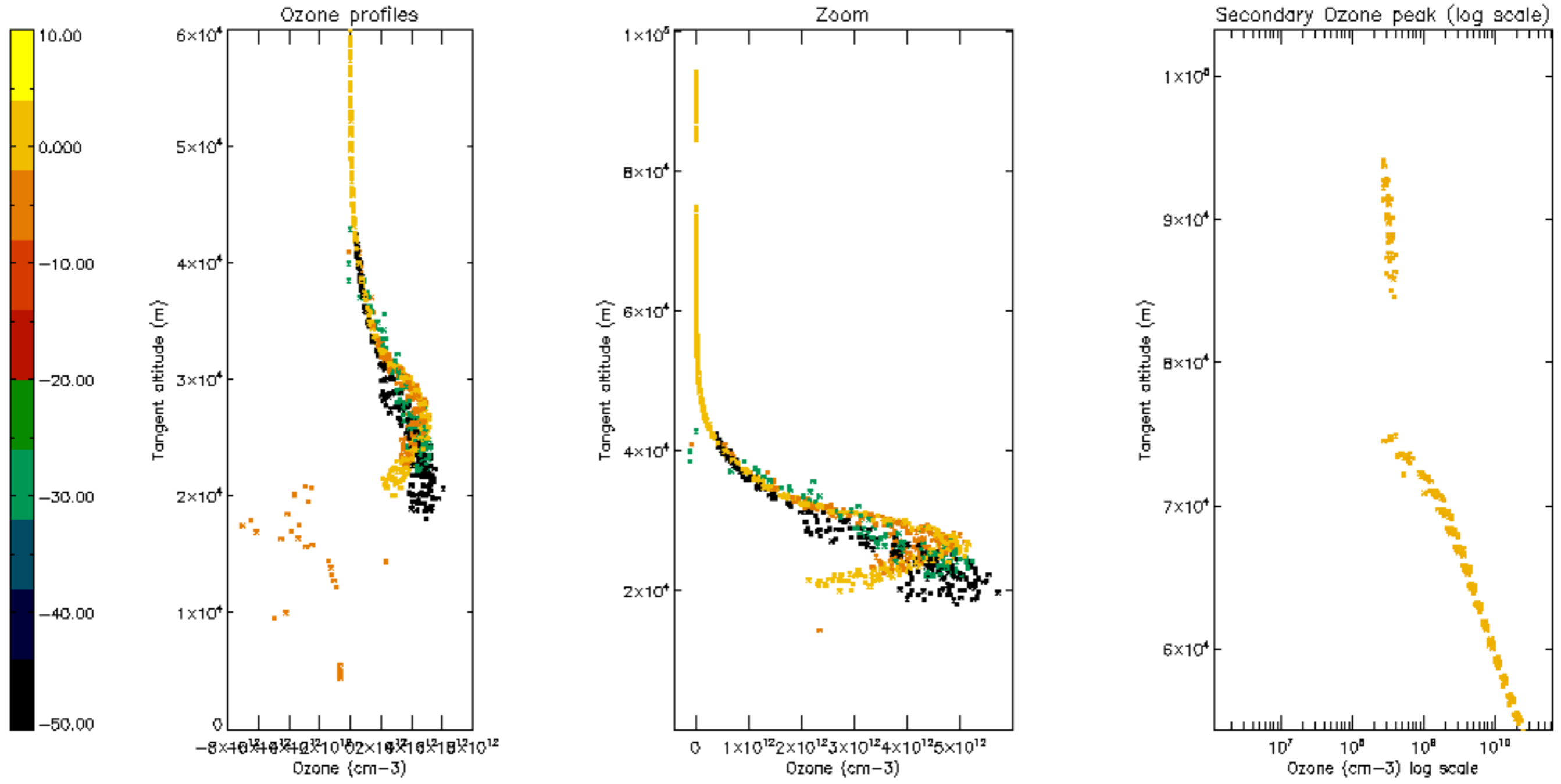


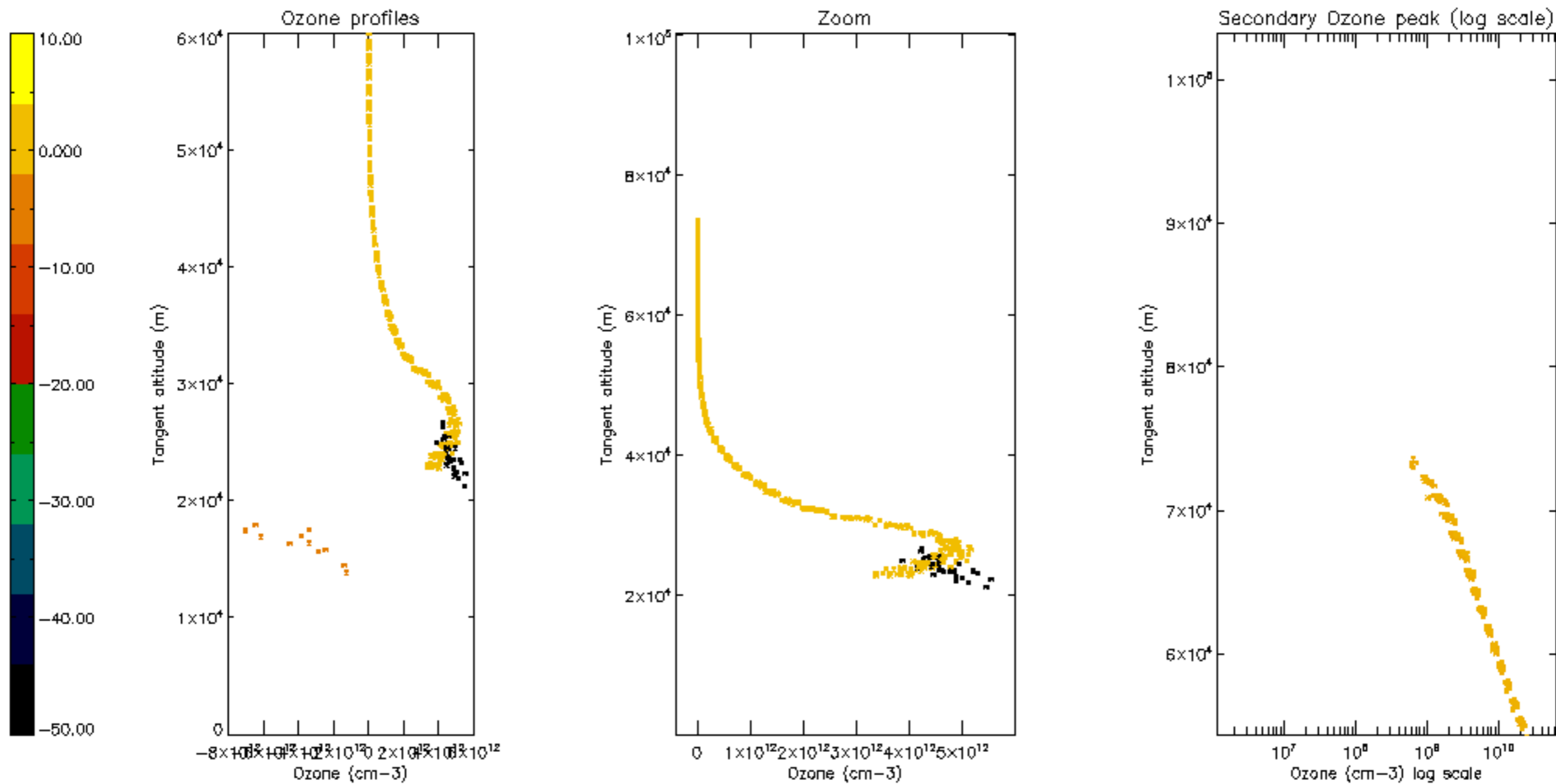
Percentage of saturation errors per profile

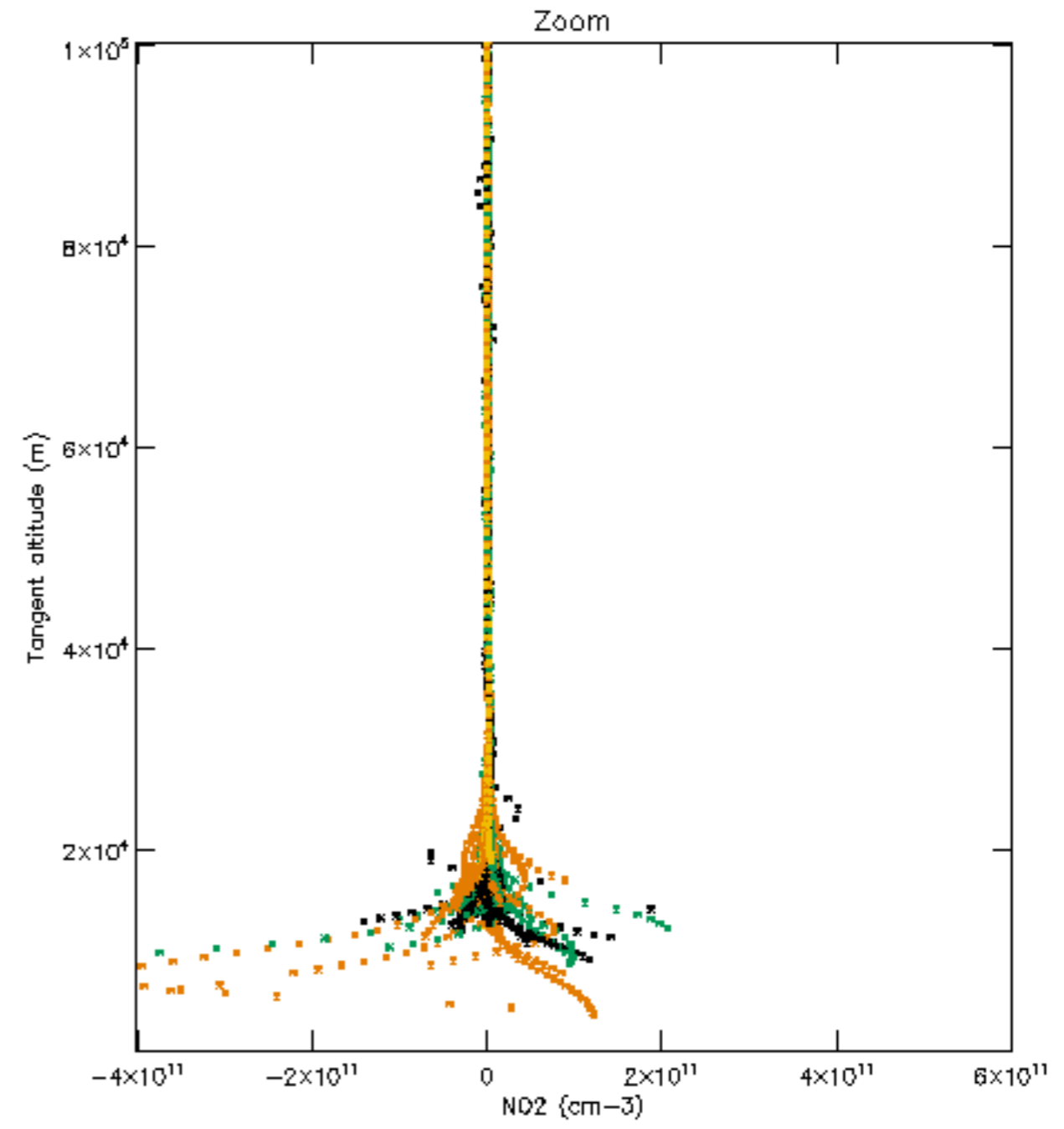
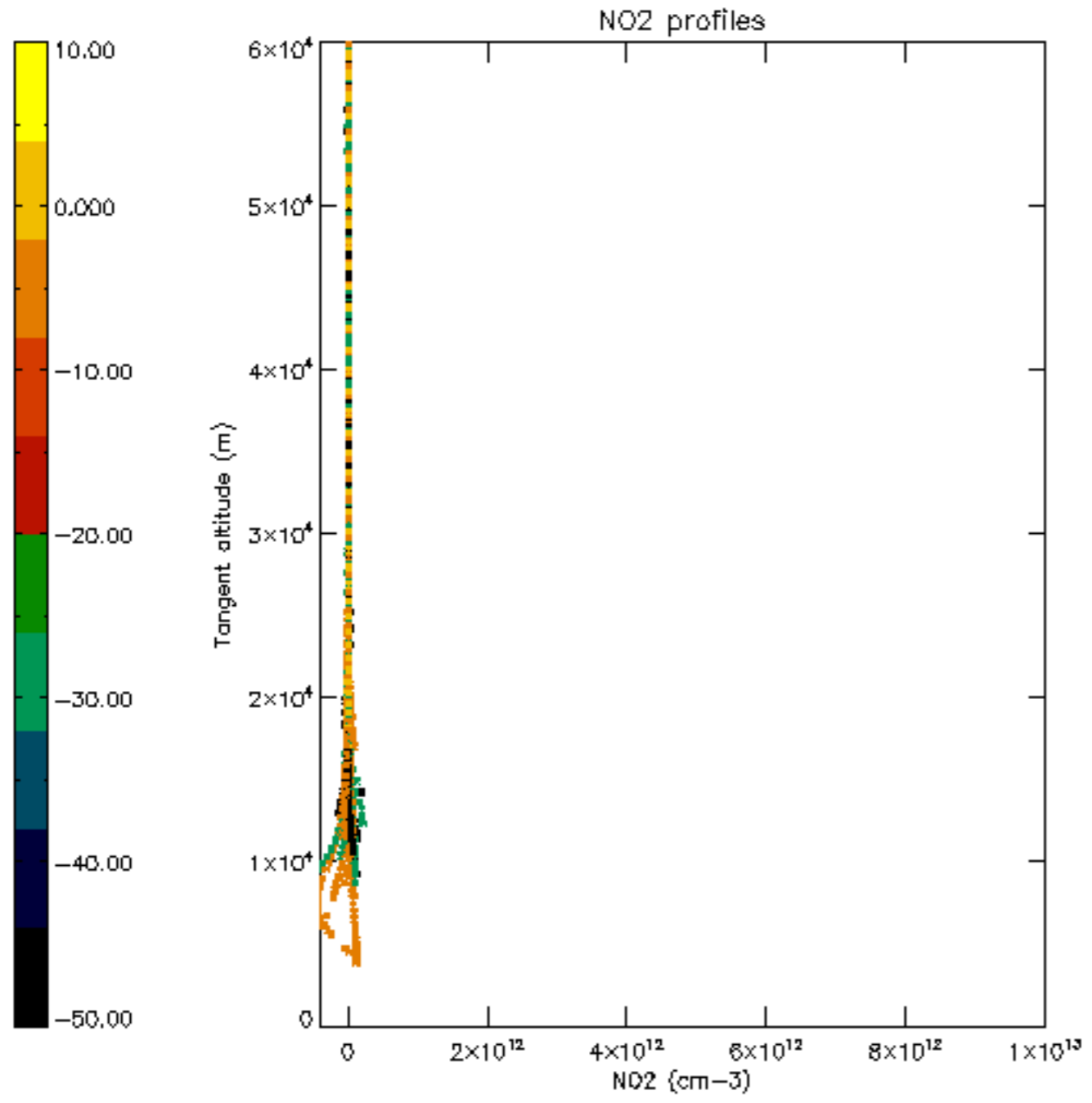


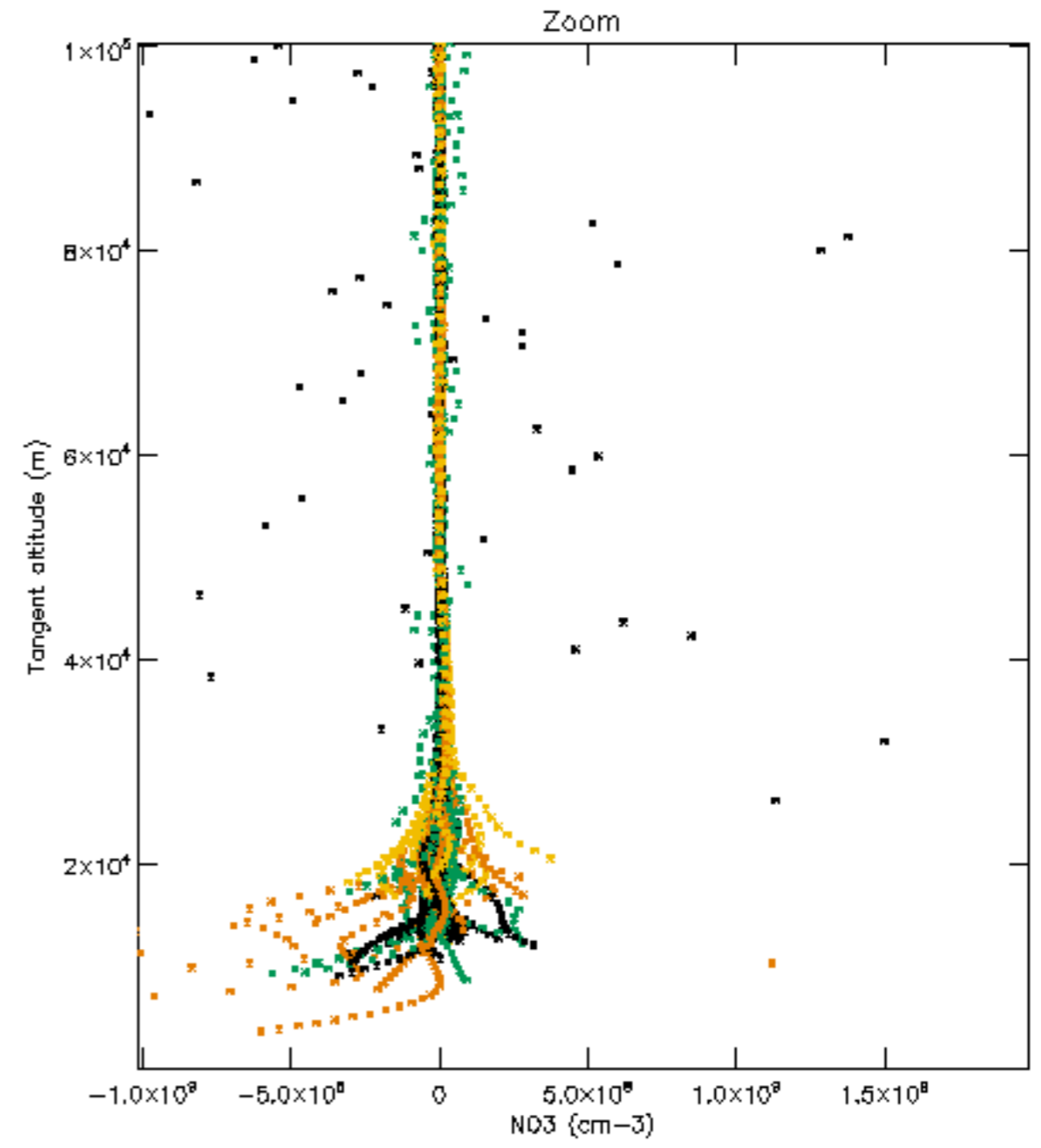
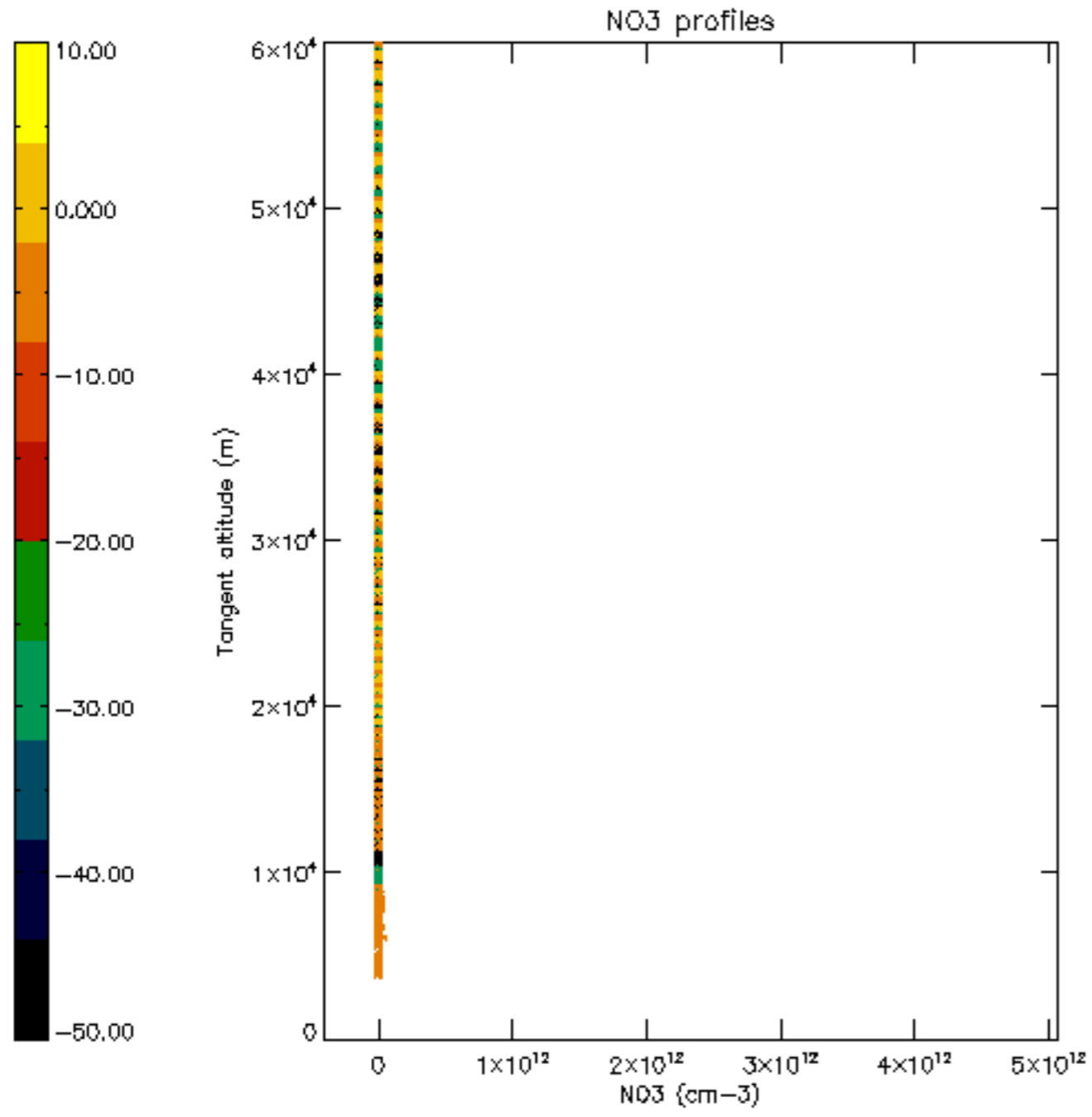


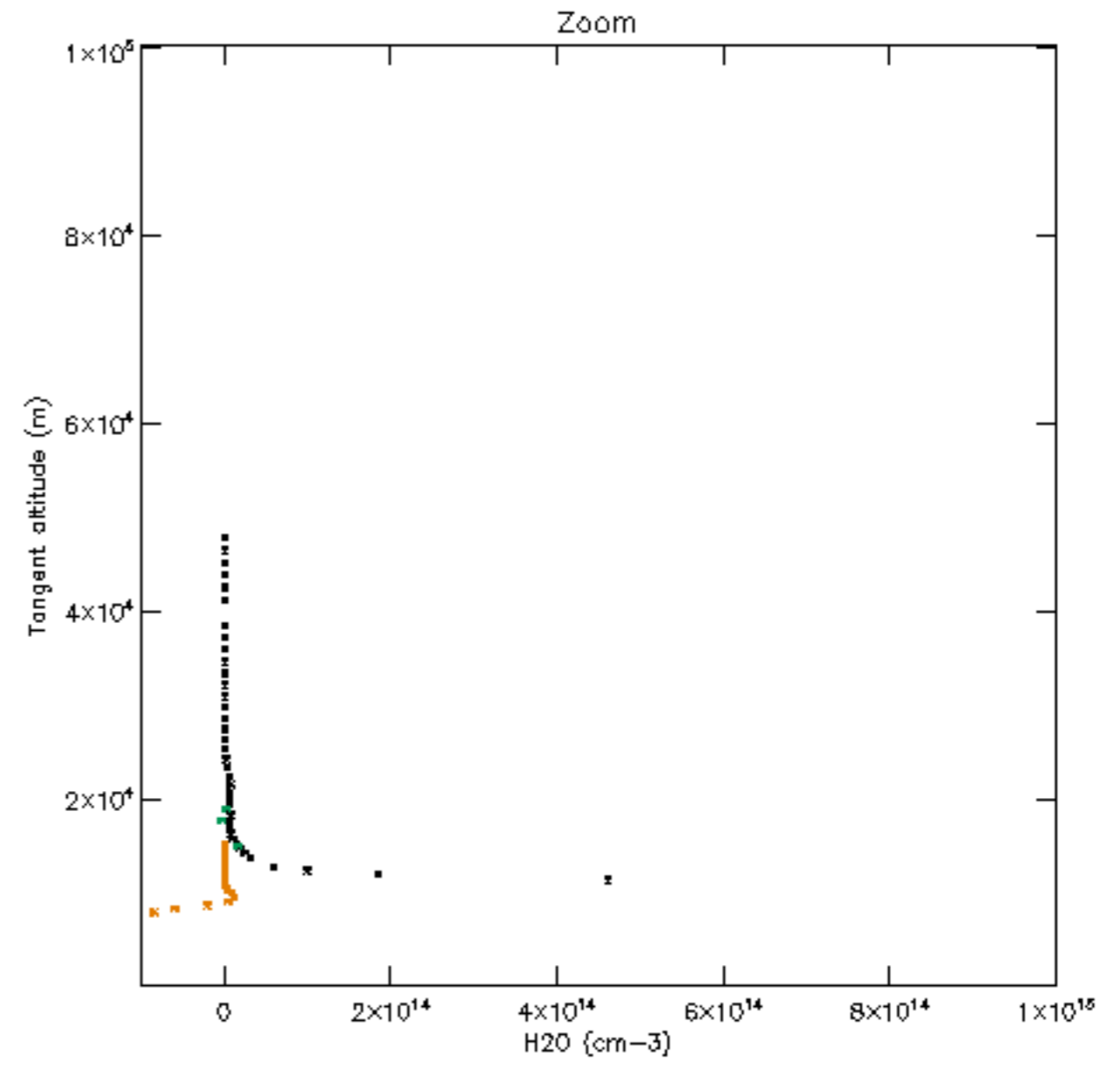
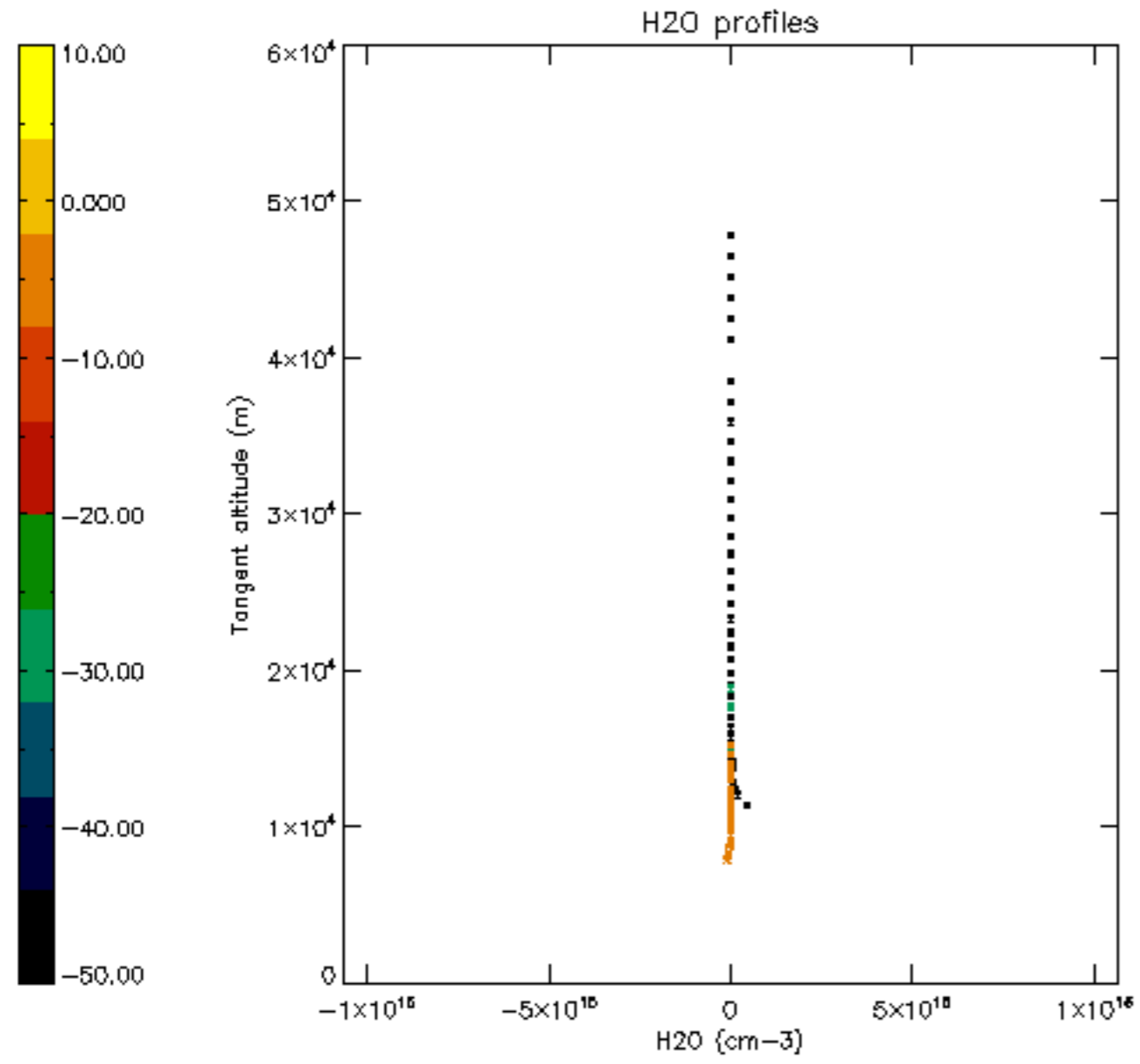


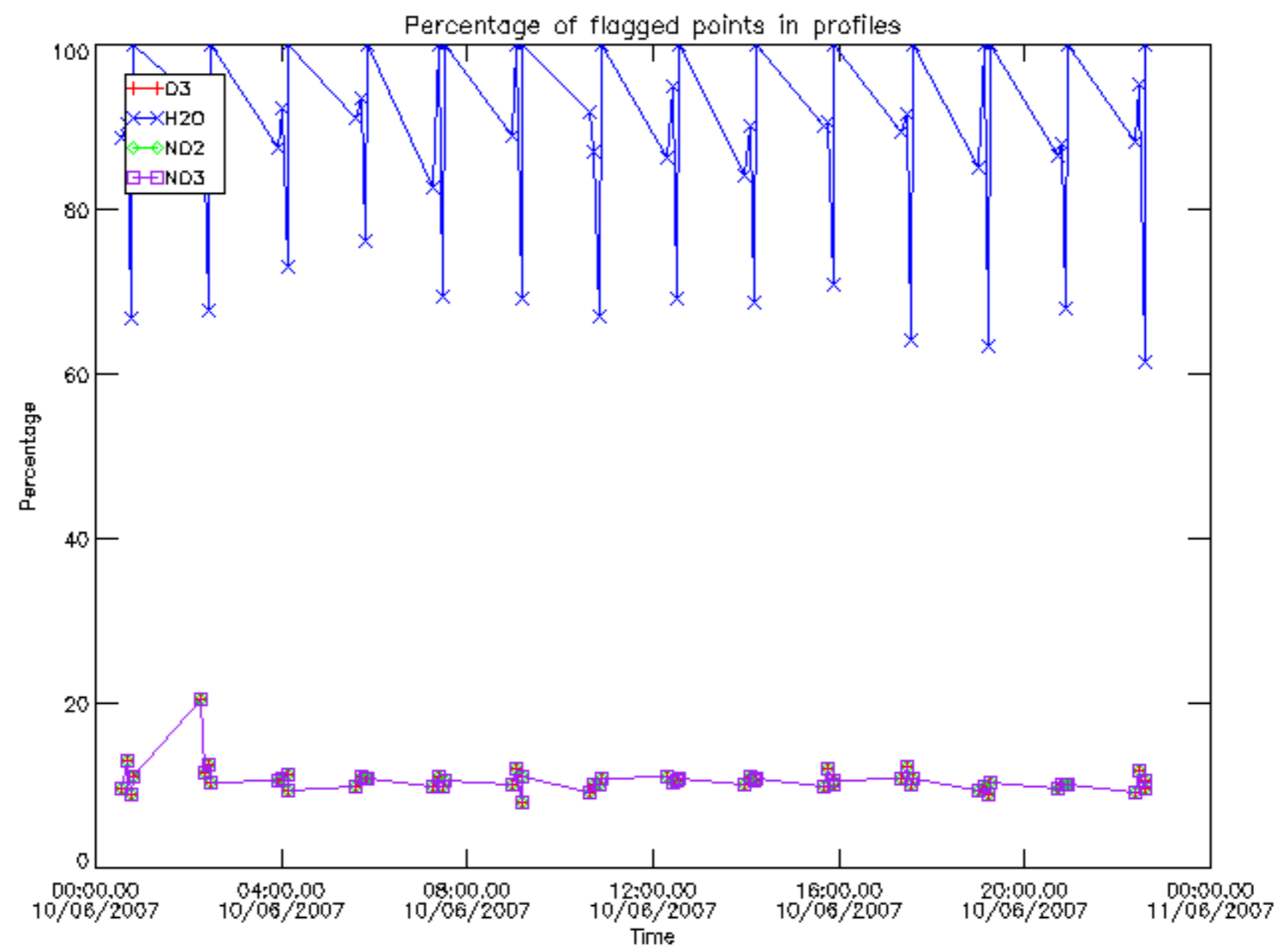




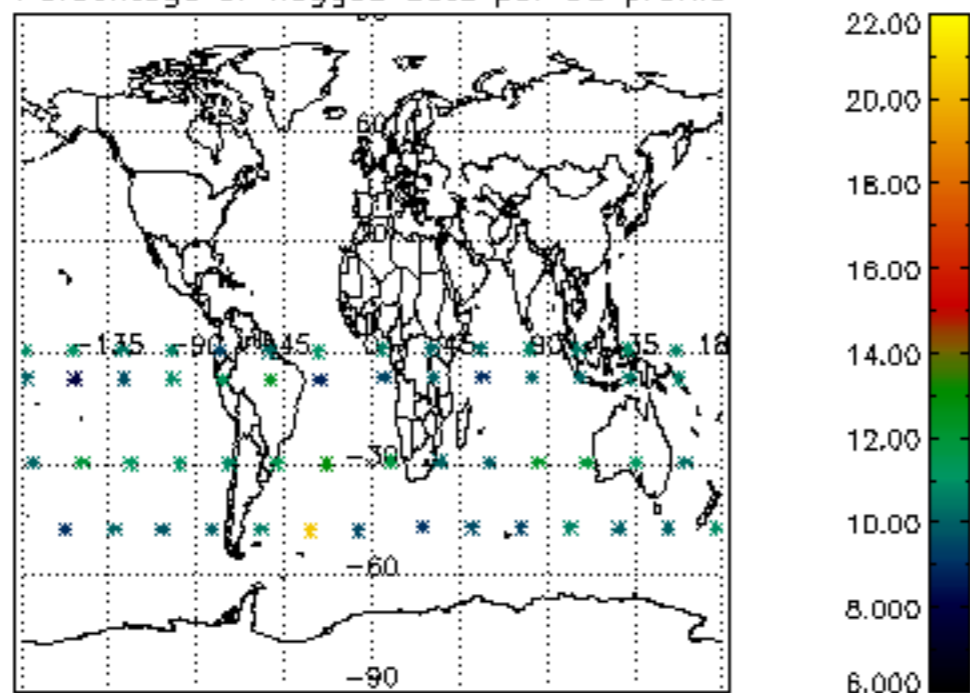




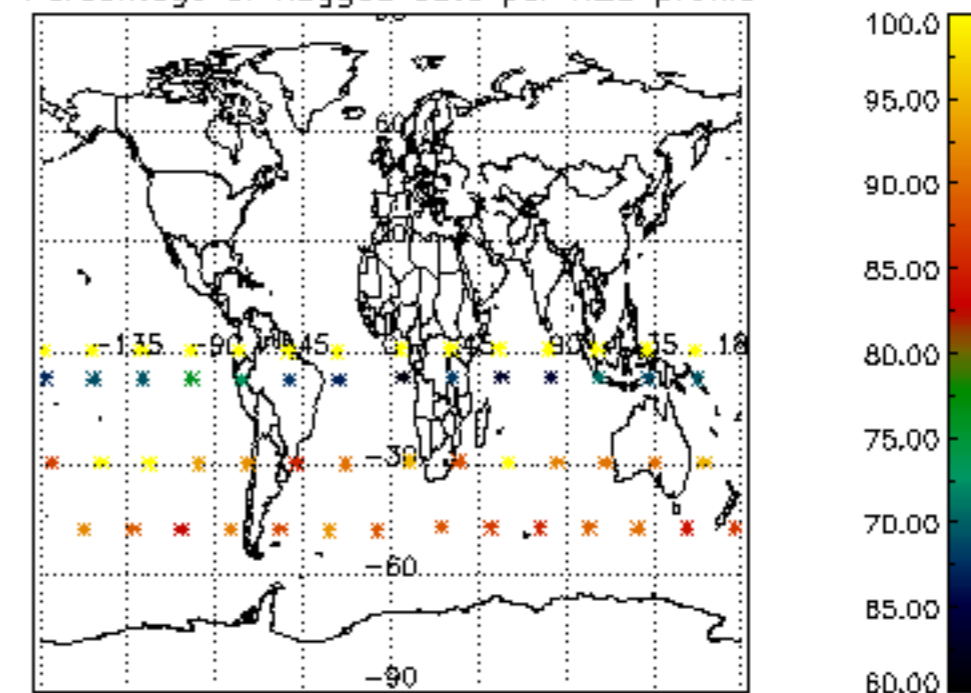




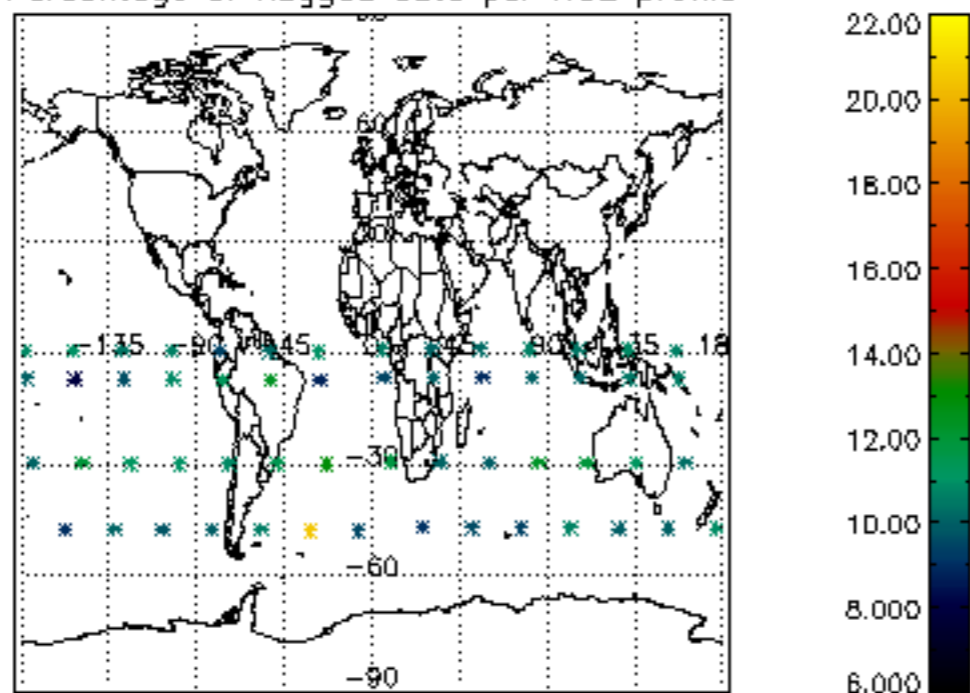
Percentage of flagged data per D3 profile



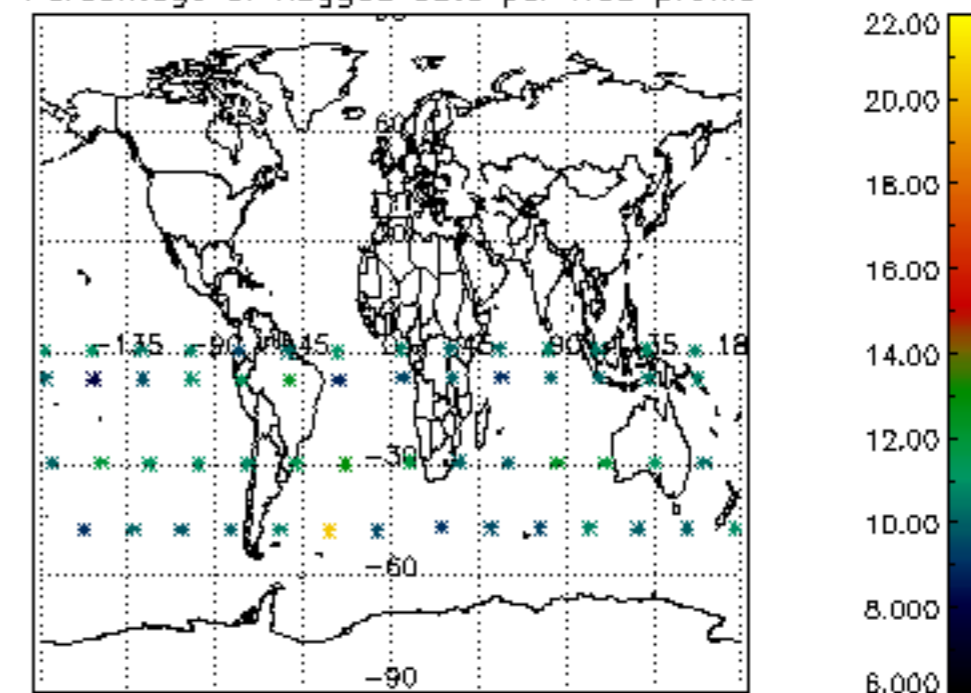
Percentage of flagged data per H2O profile

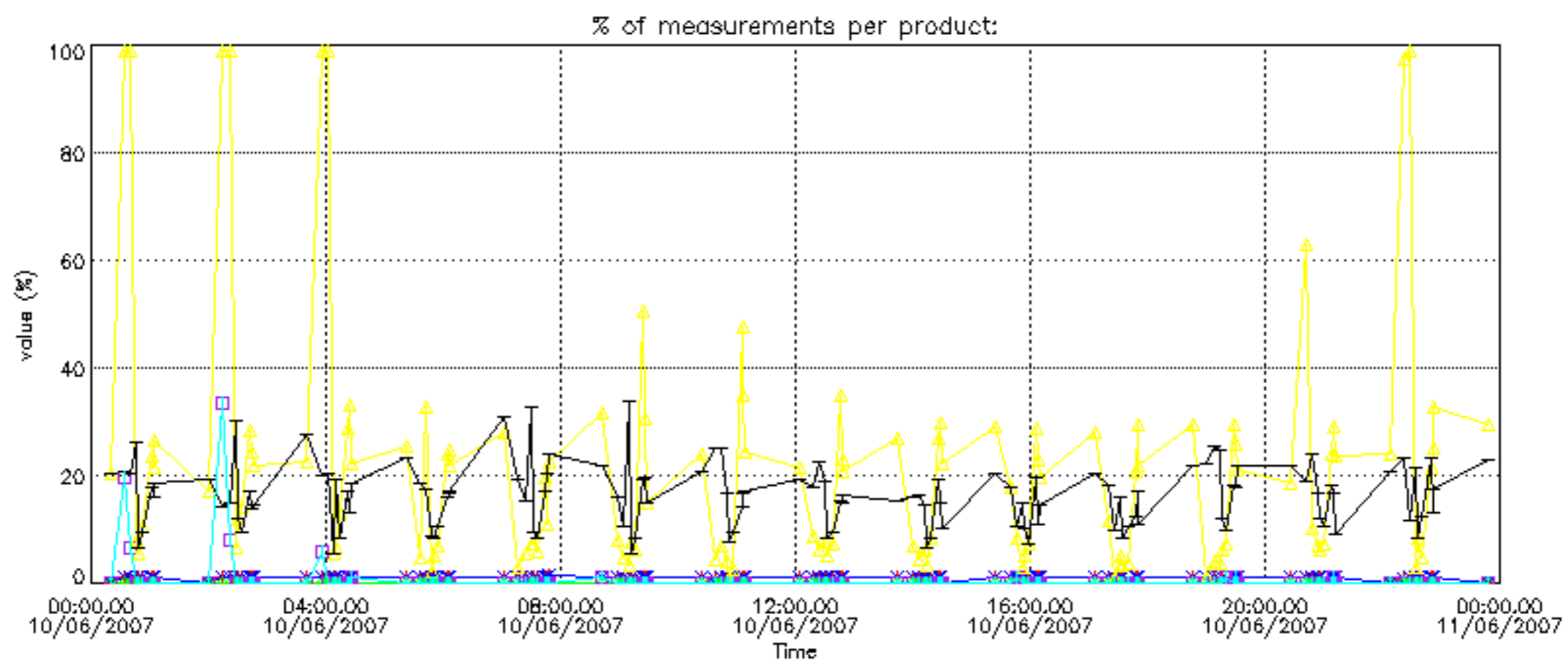
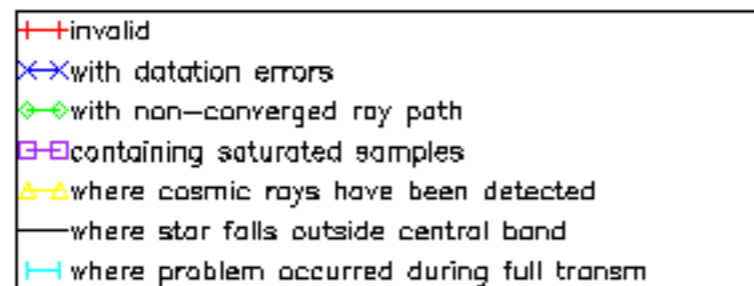


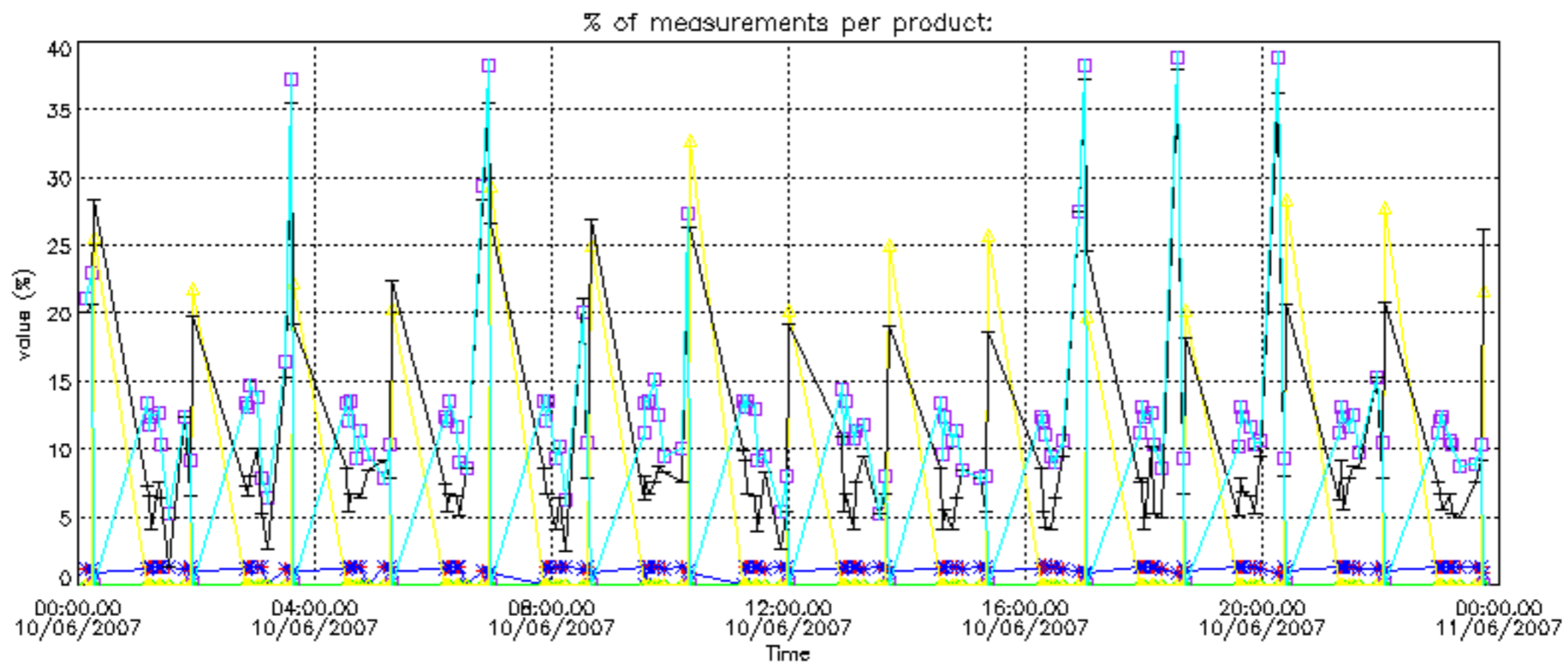
Percentage of flagged data per NO2 profile



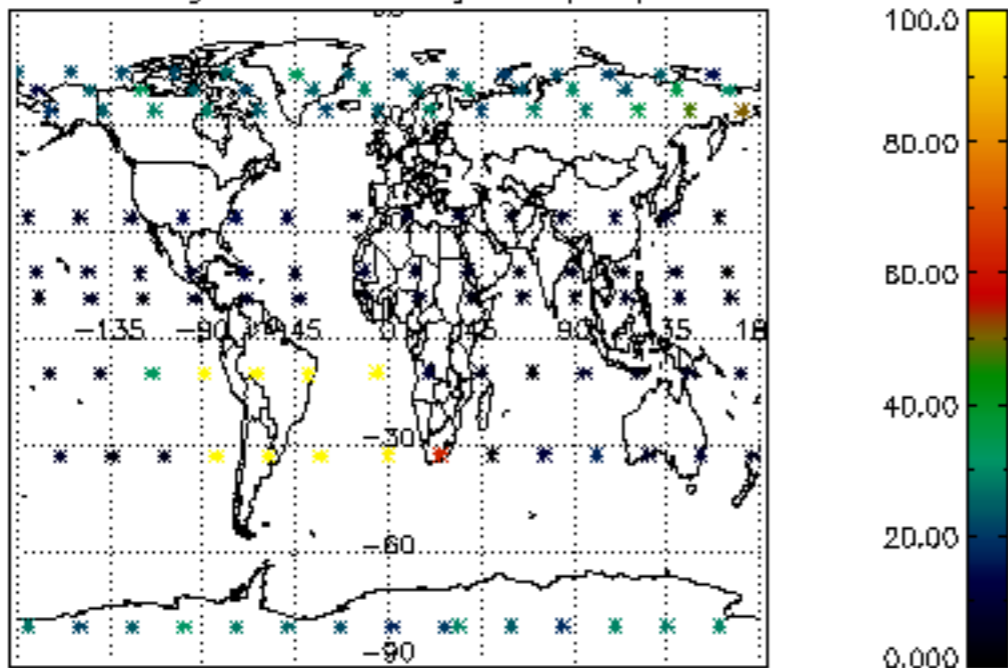
Percentage of flagged data per NO3 profile



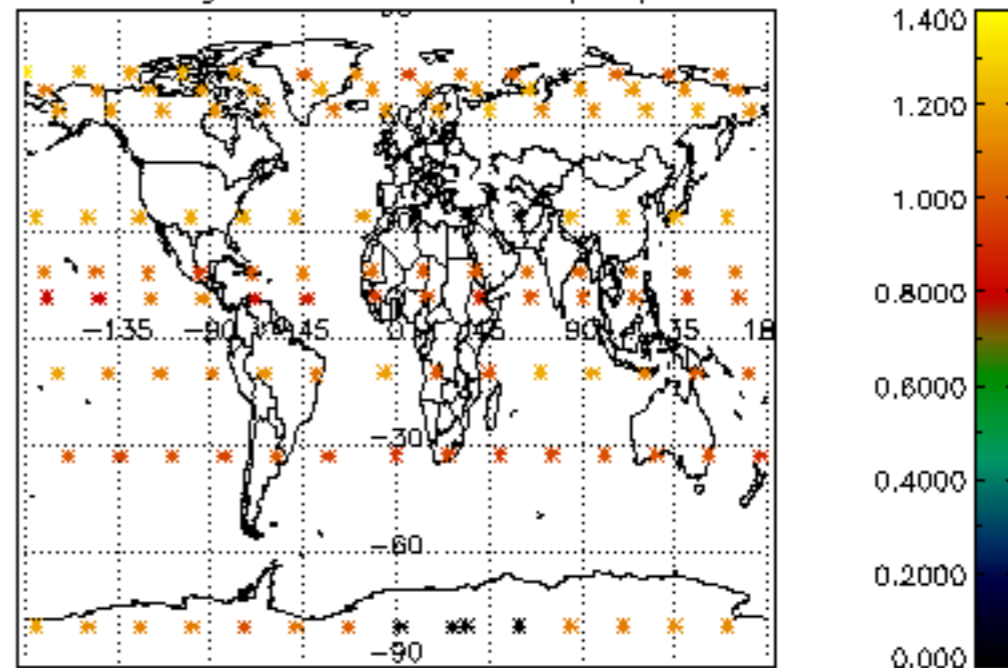




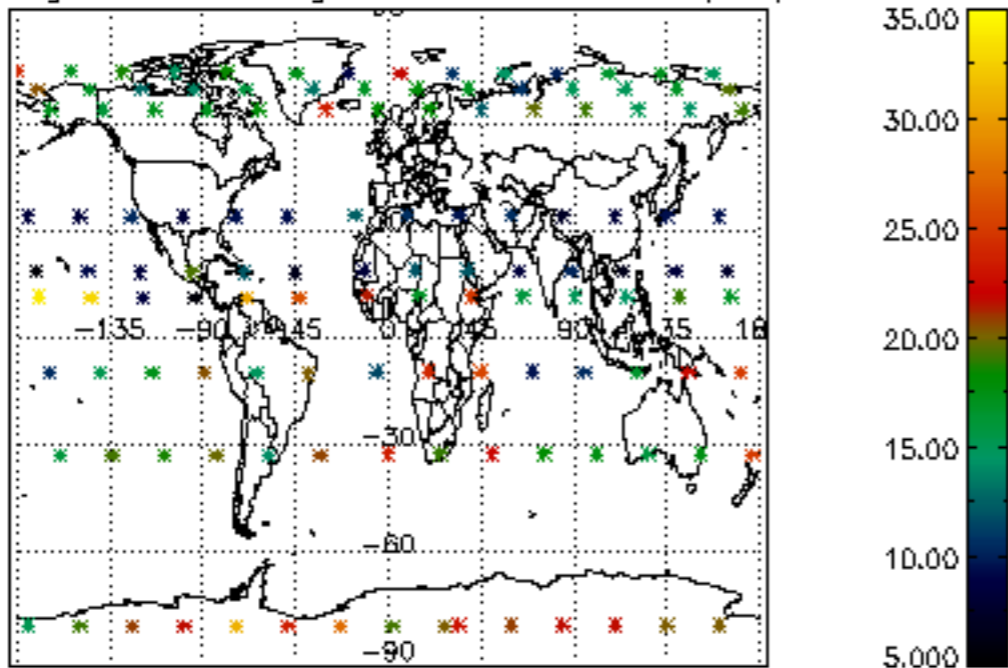
Percentage of cosmic ray hits per profile



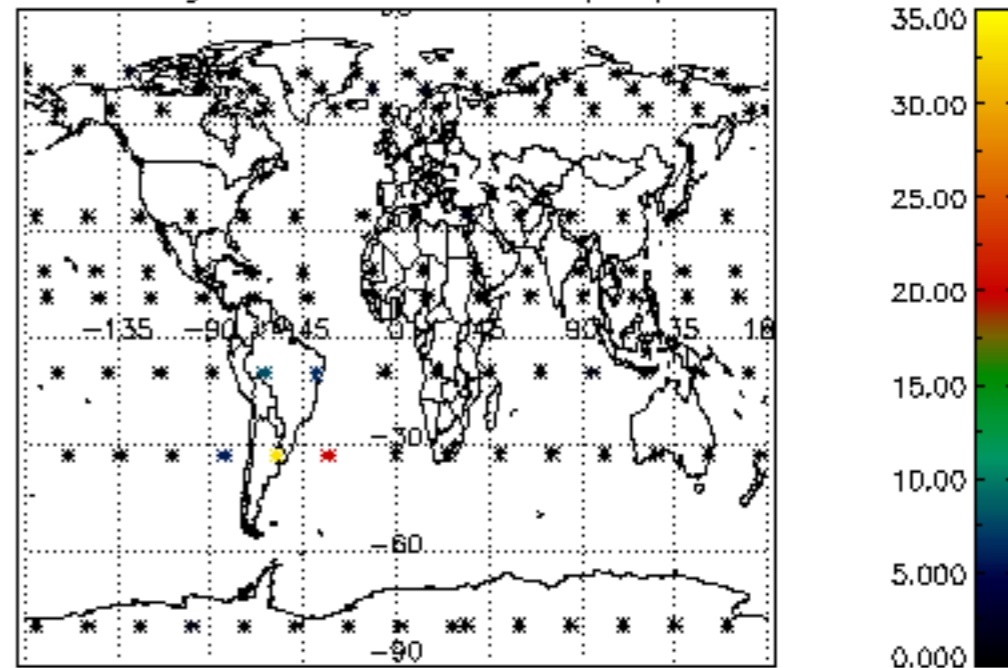
Percentage of datation errors per profile



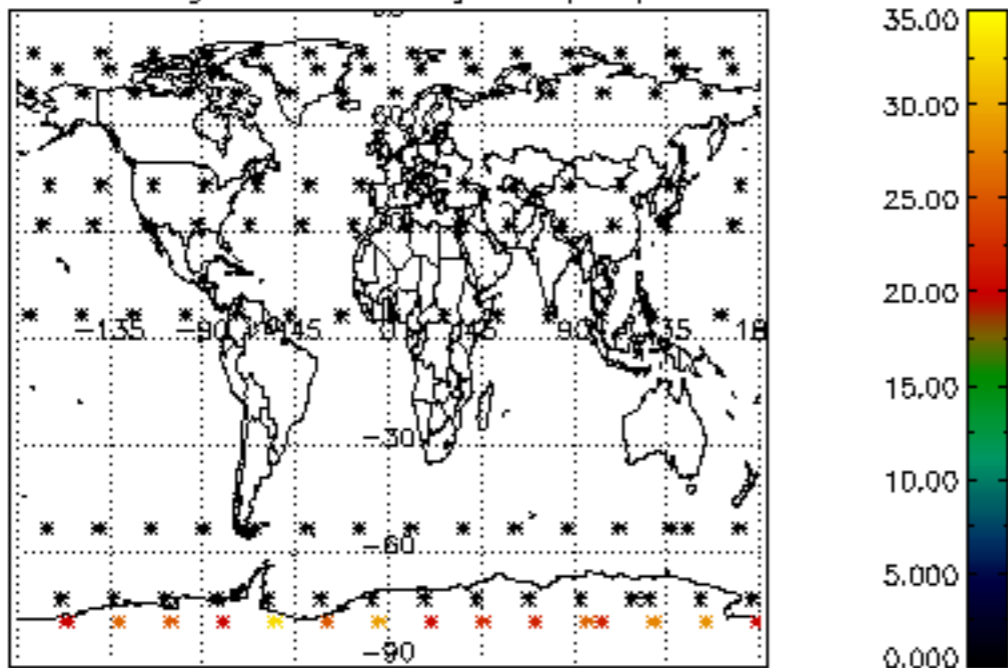
Percentage of star falling outside central band per profile



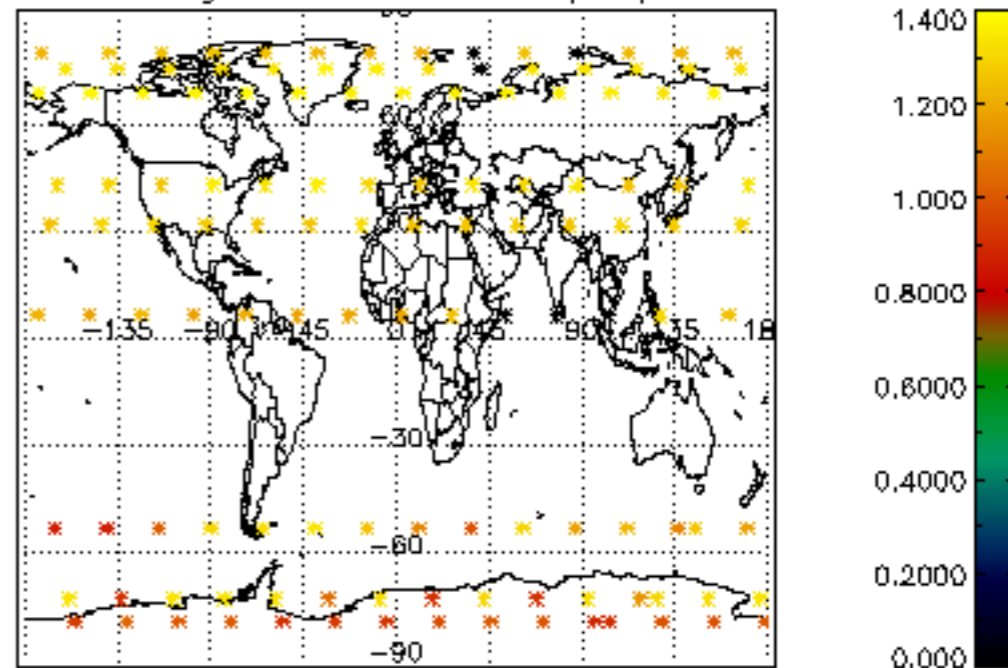
Percentage of saturation errors per profile



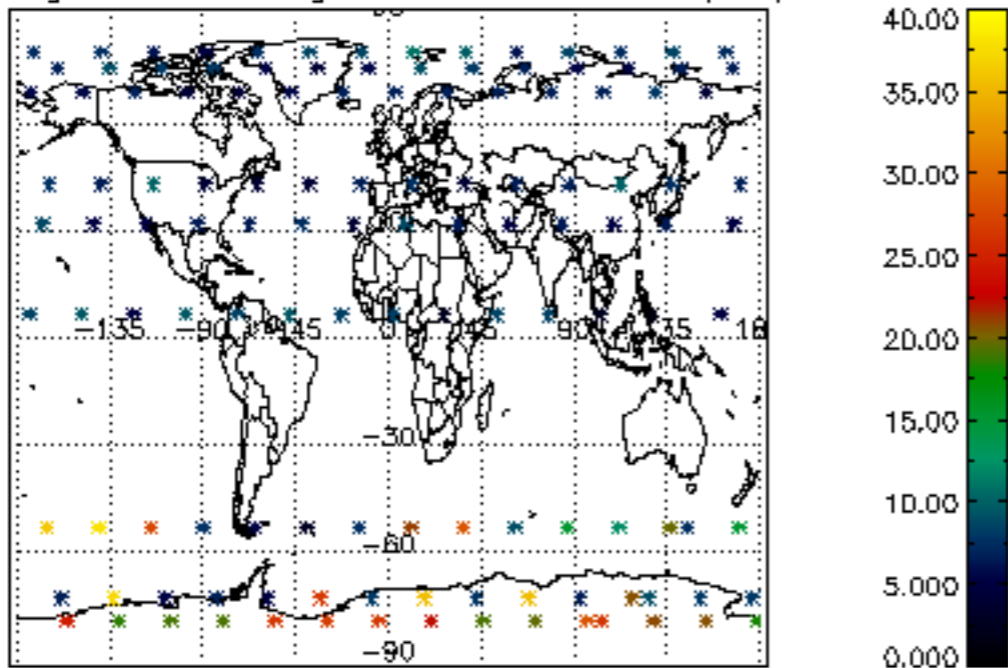
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

