

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	26APR2013 13:00:48
Data source version	GOMOS/6.01
Start time of products	30-09-2009 (30SEP2009 00:00:00)
Stop time of products	01-10-2009 (01OCT2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	181
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

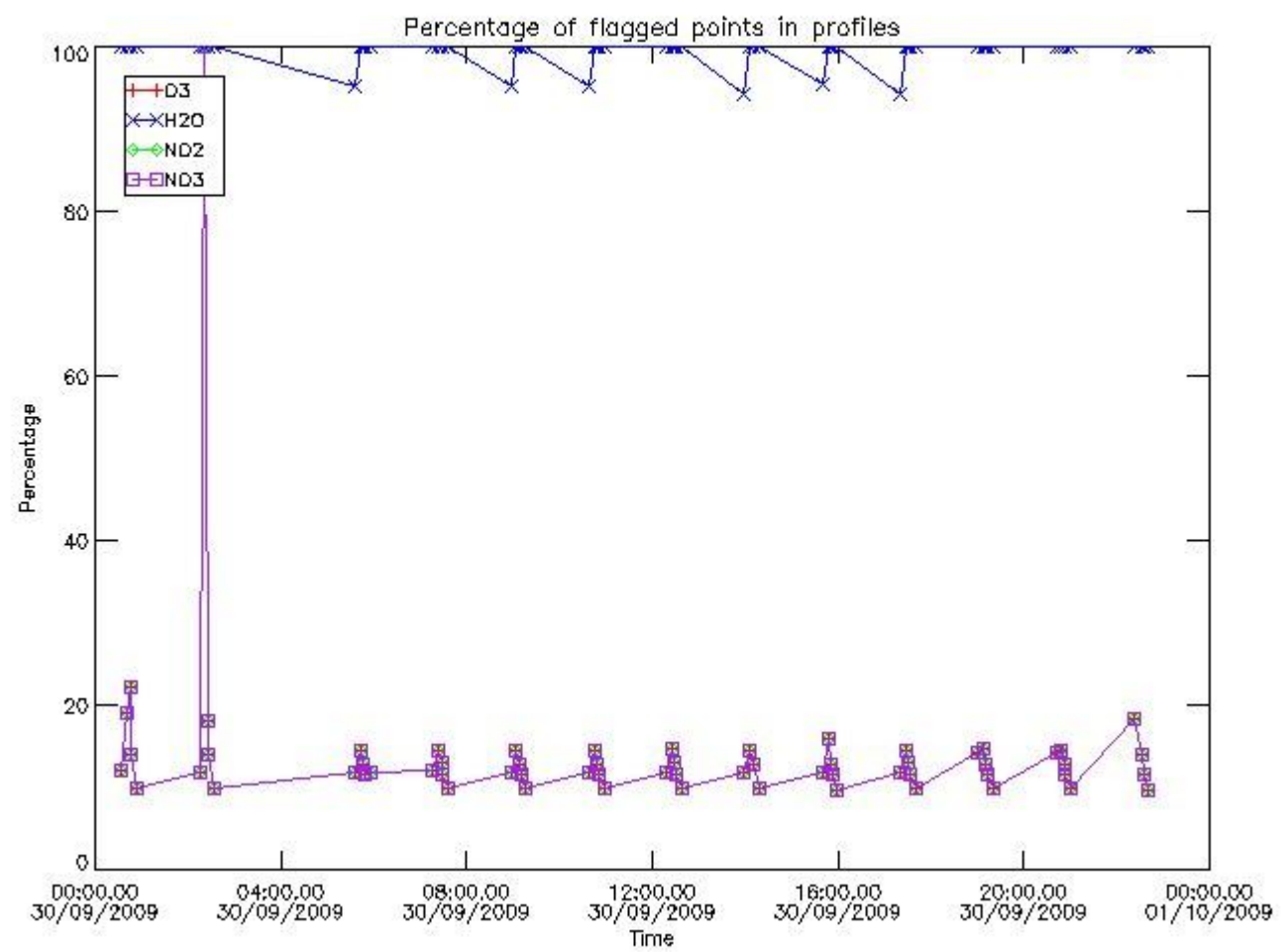
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20090930_002333_000000372083_00016_39649_0062.N1	30-SEP-2009 00:23:33	Twilight	36.500	24	66Alp Gem	1.5800	10200.	73	39649	No
2	GOM_NL__2PRFIN20090930_003413_000000422083_00016_39649_0063.N1	30-SEP-2009 00:34:13	Dark	42.000	8	10Alp CMi	0.40000	6500.0	84	39649	No
3	GOM_NL__2PRFIN20090930_004118_000000352083_00016_39649_0064.N1	30-SEP-2009 00:41:18	Dark	35.000	132	15Rho Pup	2.8030	6900.0	70	39649	No
4	GOM_NL__2PRFIN20090930_004452_000000392083_00016_39649_0065.N1	30-SEP-2009 00:44:52	Dark	39.000	88	31Eta CMa	2.4480	20000.	78	39649	No
5	GOM_NL__2PRFIN20090930_004633_000000442083_00016_39649_0066.N1	30-SEP-2009 00:46:33	Dark	43.500	23	21Eps CMa	1.5020	26000.	87	39649	No
6	GOM_NL__2PRFIN20090930_005343_000000522083_00017_39650_0063.N1	30-SEP-2009 00:53:43	Dark	51.500	108	Alp Col	2.6520	15200.	103	39650	No
7	GOM_NL__2PRFIN20090930_010403_000000412083_00017_39650_0064.N1	30-SEP-2009 01:04:03	Straylight	40.500	157	The1Eri	2.9060	9300.0	81	39650	No
8	GOM_NL__2PRFIN20090930_011454_000000352083_00017_39650_0065.N1	30-SEP-2009 01:14:54	Straylight	34.500	52	16Bet Cet	2.0370	4500.0	69	39650	No
9	GOM_NL__2PRFIN20090930_012527_000000362083_00017_39650_0066.N1	30-SEP-2009 01:25:27	Bright	35.500	140	88Gam Peg	2.8340	26000.	71	39650	No
10	GOM_NL__2PRFIN20090930_012937_000000352083_00017_39650_0067.N1	30-SEP-2009 01:29:37	Bright	35.000	58	21Alp And	2.0730	11000.	70	39650	No
11	GOM_NL__2PRFIN20090930_013329_000000422083_00017_39650_0068.N1	30-SEP-2009 01:33:29	Bright	42.000	53	43Bet And	2.0480	3300.0	84	39650	No
12	GOM_NL__2PRFIN20090930_013810_000000352083_00017_39650_0069.N1	30-SEP-2009 01:38:10	Bright	34.500	68	18Alp Cas	2.2250	4500.0	69	39650	No
13	GOM_NL__2PRFIN20090930_013936_000000342083_00017_39650_0070.N1	30-SEP-2009 01:39:36	Bright	34.000	76	27Gam Cas	2.3000	30000.	68	39650	No
14	GOM_NL__2PRFIN20090930_020409_000000362083_00017_39650_0071.N1	30-SEP-2009 02:04:09	Twilight	36.000	24	66Alp Gem	1.5800	10200.	72	39650	No
15	GOM_NL__2PRFIN20090930_021449_000000432083_00017_39650_0072.N1	30-SEP-2009 02:14:49	Dark	43.000	8	10Alp CMi	0.40000	6500.0	86	39650	No
16	GOM_NL__2PRFIN20090930_022154_000000352083_00017_39650_0073.N1	30-SEP-2009 02:21:54	Dark	35.000	132	15Rho Pup	2.8030	6900.0	70	39650	No
17	GOM_NL__2PRFIN20090930_022528_000000402083_00017_39650_0074.N1	30-SEP-2009 02:25:28	Dark	39.500	88	31Eta CMa	2.4480	20000.	79	39650	No
18	GOM_NL__2PRFIN20090930_022710_000000442083_00017_39650_0075.N1	30-SEP-2009 02:27:10	Dark	43.500	23	21Eps CMa	1.5020	26000.	87	39650	No
19	GOM_NL__2PRFIN20090930_023420_000000522083_00018_39651_0072.N1	30-SEP-2009 02:34:20	Dark	51.500	108	Alp Col	2.6520	15200.	103	39651	No
20	GOM_NL__2PRFIN20090930_024440_000000412083_00018_39651_0073.N1	30-SEP-2009 02:44:40	Straylight	40.500	157	The1Eri	2.9060	9300.0	81	39651	No
21	GOM_NL__2PRFIN20090930_025530_000000352083_00018_39651_0074.N1	30-SEP-2009 02:55:30	Straylight	34.500	52	16Bet Cet	2.0370	4500.0	69	39651	No
22	GOM_NL__2PRFIN20090930_030603_000000352083_00018_39651_0075.N1	30-SEP-2009 03:06:03	Bright	35.000	140	88Gam Peg	2.8340	26000.	70	39651	No
23	GOM_NL__2PRFIN20090930_031013_000000352083_00018_39651_0076.N1	30-SEP-2009 03:10:13	Bright	35.000	58	21Alp And	2.0730	11000.	70	39651	No
24	GOM_NL__2PRFIN20090930_031404_000000422083_00018_39651_0077.N1	30-SEP-2009 03:14:04	Bright	41.500	53	43Bet And	2.0480	3300.0	83	39651	No
25	GOM_NL__2PRFIN20090930_031845_000000352083_00018_39651_0078.N1	30-SEP-2009 03:18:45	Bright	34.500	68	18Alp Cas	2.2250	4500.0	69	39651	No
26	GOM_NL__2PRFIN20090930_032011_000000342083_00018_39651_0079.N1	30-SEP-2009 03:20:11	Bright	33.500	76	27Gam Cas	2.3000	30000.	67	39651	No
27	GOM_NL__2PRFIN20090930_052521_000000372083_00019_39652_0086.N1	30-SEP-2009 05:25:21	Twilight	36.500	24	66Alp Gem	1.5800	10200.	73	39652	No
28	GOM_NL__2PRFIN20090930_052649_000000362083_00019_39652_0087.N1	30-SEP-2009 05:26:49	Twilight	36.000	17	78Bet Gem	1.1610	4500.0	72	39652	No
29	GOM_NL__2PRFIN20090930_053603_000000432083_00019_39652_0088.N1	30-SEP-2009 05:36:03	Dark	43.000	8	10Alp CMi	0.40000	6500.0	86	39652	No
30	GOM_NL__2PRFIN20090930_054308_000000362083_00019_39652_0089.N1	30-SEP-2009 05:43:08	Dark	35.500	132	15Rho Pup	2.8030	6900.0	71	39652	No
31	GOM_NL__2PRFIN20090930_054642_000000402083_00019_39652_0090.N1	30-SEP-2009 05:46:42	Dark	40.000	88	31Eta CMa	2.4480	20000.	80	39652	No
32	GOM_NL__2PRFIN20090930_054824_000000442083_00019_39652_0091.N1	30-SEP-2009 05:48:24	Dark	44.000	23	21Eps CMa	1.5020	26000.	88	39652	No
33	GOM_NL__2PRFIN20090930_055535_000000522083_00020_39653_0095.N1	30-SEP-2009 05:55:35	Dark	52.000	108	Alp Col	2.6520	15200.	104	39653	No
34	GOM_NL__2PRFIN20090930_060553_000000412083_00020_39653_0096.N1	30-SEP-2009 06:05:53	Straylight	41.000	157	The1Eri	2.9060	9300.0	82	39653	No
35	GOM_NL__2PRFIN20090930_061642_000000352083_00020_39653_0097.N1	30-SEP-2009 06:16:42	Straylight	34.500	52	16Bet Cet	2.0370	4500.0	69	39653	No
36	GOM_NL__2PRFIN20090930_062714_000000362083_00020_39653_0098.N1	30-SEP-2009 06:27:14	Bright	35.500	140	88Gam Peg	2.8340	26000.	71	39653	No
37	GOM_NL__2PRFIN20090930_063124_000000362083_00020_39653_0099.N1	30-SEP-2009 06:31:24	Bright	35.500	58	21Alp And	2.0730	11000.	71	39653	No
38	GOM_NL__2PRFIN20090930_063514_000000422083_00020_39653_0100.N1	30-SEP-2009 06:35:14	Bright	42.000	53	43Bet And	2.0480	3300.0	84	39653	No
39	GOM_NL__2PRFIN20090930_063956_000000352083_00020_39653_0101.N1	30-SEP-2009 06:39:56	Bright	34.500	68	18Alp Cas	2.2250	4500.0	69	39653	No
40	GOM_NL__2PRFIN20090930_064122_000000342083_00020_39653_0102.N1	30-SEP-2009 06:41:22	Bright	34.000	76	27Gam Cas	2.3000	30000.	68	39653	No
41	GOM_NL__2PRFIN20090930_070558_000000372083_00020_39653_0103.N1	30-SEP-2009 07:05:58	Twilight	36.500	24	66Alp Gem	1.5800	10200.	73	39653	No
42	GOM_NL__2PRFIN20090930_070725_000000362083_00020_39653_0104.N1	30-SEP-2009 07:07:25	Twilight	36.000	17	78Bet Gem	1.1610	4500.0	72	39653	No

161	GOM_NL__2PRFIN20090930_212207_000000342083_00029_39662_0200.N1	30-SEP-2009 21:22:07	Straylight	34.000	52	16Bet Cet	2.0370	4500.0	68	39662	No
162	GOM_NL__2PRFIN20090930_213236_000000352083_00029_39662_0201.N1	30-SEP-2009 21:32:36	Bright	35.000	140	88Gam Peg	2.8340	26000.	70	39662	No
163	GOM_NL__2PRFIN20090930_213646_000000352083_00029_39662_0202.N1	30-SEP-2009 21:36:46	Bright	35.000	58	21Alp And	2.0730	11000.	70	39662	No
164	GOM_NL__2PRFIN20090930_214031_000000422083_00029_39662_0203.N1	30-SEP-2009 21:40:31	Bright	42.000	53	43Bet And	2.0480	3300.0	84	39662	No
165	GOM_NL__2PRFIN20090930_214517_000000352083_00029_39662_0204.N1	30-SEP-2009 21:45:17	Bright	35.000	68	18Alp Cas	2.2250	4500.0	70	39662	No
166	GOM_NL__2PRFIN20090930_214643_000000352083_00029_39662_0205.N1	30-SEP-2009 21:46:43	Bright	34.500	76	27Gam Cas	2.3000	30000.	69	39662	No
167	GOM_NL__2PRFIN20090930_221123_000000302083_00029_39662_0206.N1	30-SEP-2009 22:11:23	Tw_i_and_stray	30.000	24	66Alp Gem	1.5800	10200.	60	39662	No
168	GOM_NL__2PRFIN20090930_221251_000000372083_00029_39662_0207.N1	30-SEP-2009 22:12:51	Tw_i_and_stray	36.500	17	78Bet Gem	1.1610	4500.0	73	39662	No
169	GOM_NL__2PRFIN20090930_222213_000000282083_00029_39662_0208.N1	30-SEP-2009 22:22:13	Dark	27.500	8	10Alp CMi	0.40000	6500.0	55	39662	No
170	GOM_NL__2PRFIN20090930_223253_000000402083_00029_39662_0209.N1	30-SEP-2009 22:32:53	Dark	40.000	88	31Eta CMa	2.4480	20000.	80	39662	No
171	GOM_NL__2PRFIN20090930_223437_000000452083_00029_39662_0210.N1	30-SEP-2009 22:34:37	Dark	44.500	23	21Eps CMa	1.5020	26000.	89	39662	No
172	GOM_NL__2PRFIN20090930_224150_000000532083_00030_39663_0207.N1	30-SEP-2009 22:41:50	Dark	52.500	108	Alp Col	2.6520	15200.	105	39663	No
173	GOM_NL__2PRFIN20090930_225200_000000422083_00030_39663_0208.N1	30-SEP-2009 22:52:00	Straylight	41.500	157	The1Eri	2.9060	9300.0	83	39663	No
174	GOM_NL__2PRFIN20090930_230243_000000352083_00030_39663_0209.N1	30-SEP-2009 23:02:43	Straylight	35.000	52	16Bet Cet	2.0370	4500.0	70	39663	No
175	GOM_NL__2PRFIN20090930_231311_000000362083_00030_39663_0210.N1	30-SEP-2009 23:13:11	Bright	35.500	140	88Gam Peg	2.8340	26000.	71	39663	No
176	GOM_NL__2PRFIN20090930_231721_000000362083_00030_39663_0211.N1	30-SEP-2009 23:17:21	Bright	35.500	58	21Alp And	2.0730	11000.	71	39663	No
177	GOM_NL__2PRFIN20090930_232107_000000422083_00030_39663_0212.N1	30-SEP-2009 23:21:07	Bright	42.000	53	43Bet And	2.0480	3300.0	84	39663	No
178	GOM_NL__2PRFIN20090930_232552_000000352083_00030_39663_0213.N1	30-SEP-2009 23:25:52	Bright	35.000	68	18Alp Cas	2.2250	4500.0	70	39663	No
179	GOM_NL__2PRFIN20090930_232718_000000352083_00030_39663_0214.N1	30-SEP-2009 23:27:18	Bright	35.000	76	27Gam Cas	2.3000	30000.	70	39663	No
180	GOM_NL__2PRFIN20090930_235159_000000302083_00030_39663_0215.N1	30-SEP-2009 23:51:59	Tw_i_and_stray	30.000	24	66Alp Gem	1.5800	10200.	60	39663	No
181	GOM_NL__2PRFIN20090930_235327_000000372083_00030_39663_0216.N1	30-SEP-2009 23:53:27	Tw_i_and_stray	36.500	17	78Bet Gem	1.1610	4500.0	73	39663	No

3. Quality information per product

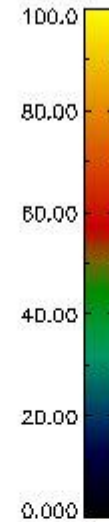
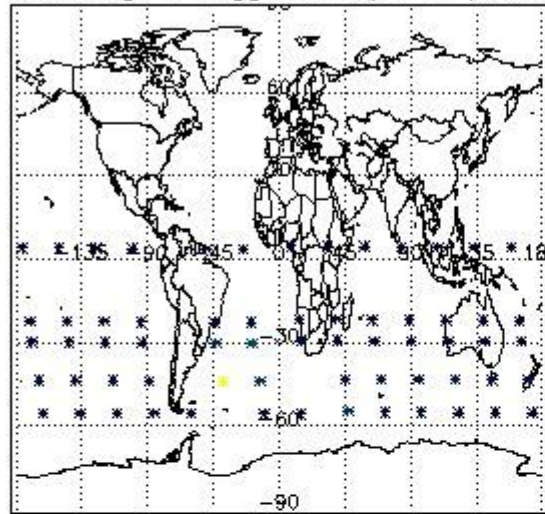
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

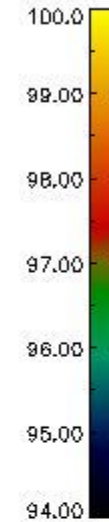
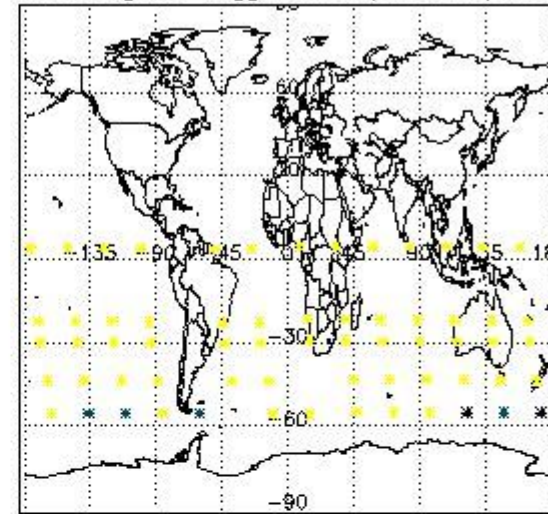


3.2 Plot quality information per product (world map)

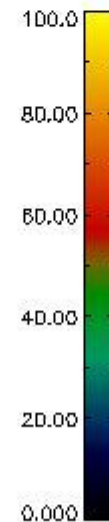
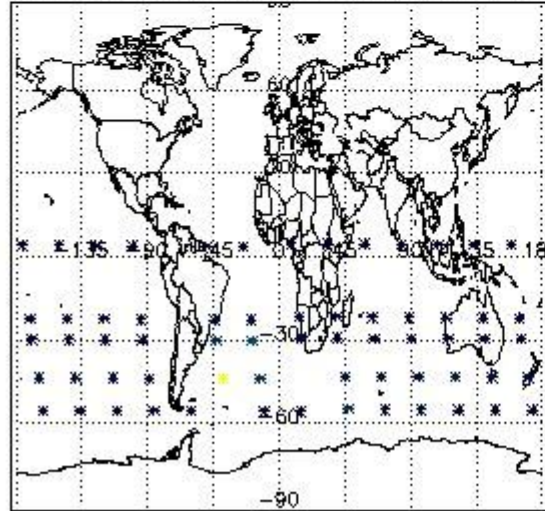
Percentage of flagged data per O3 profile



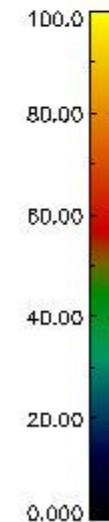
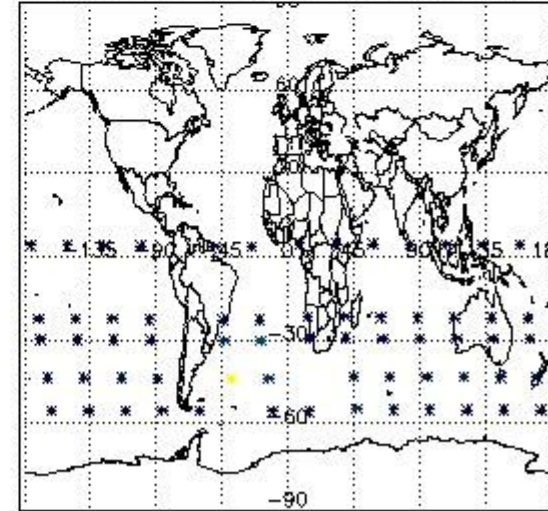
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

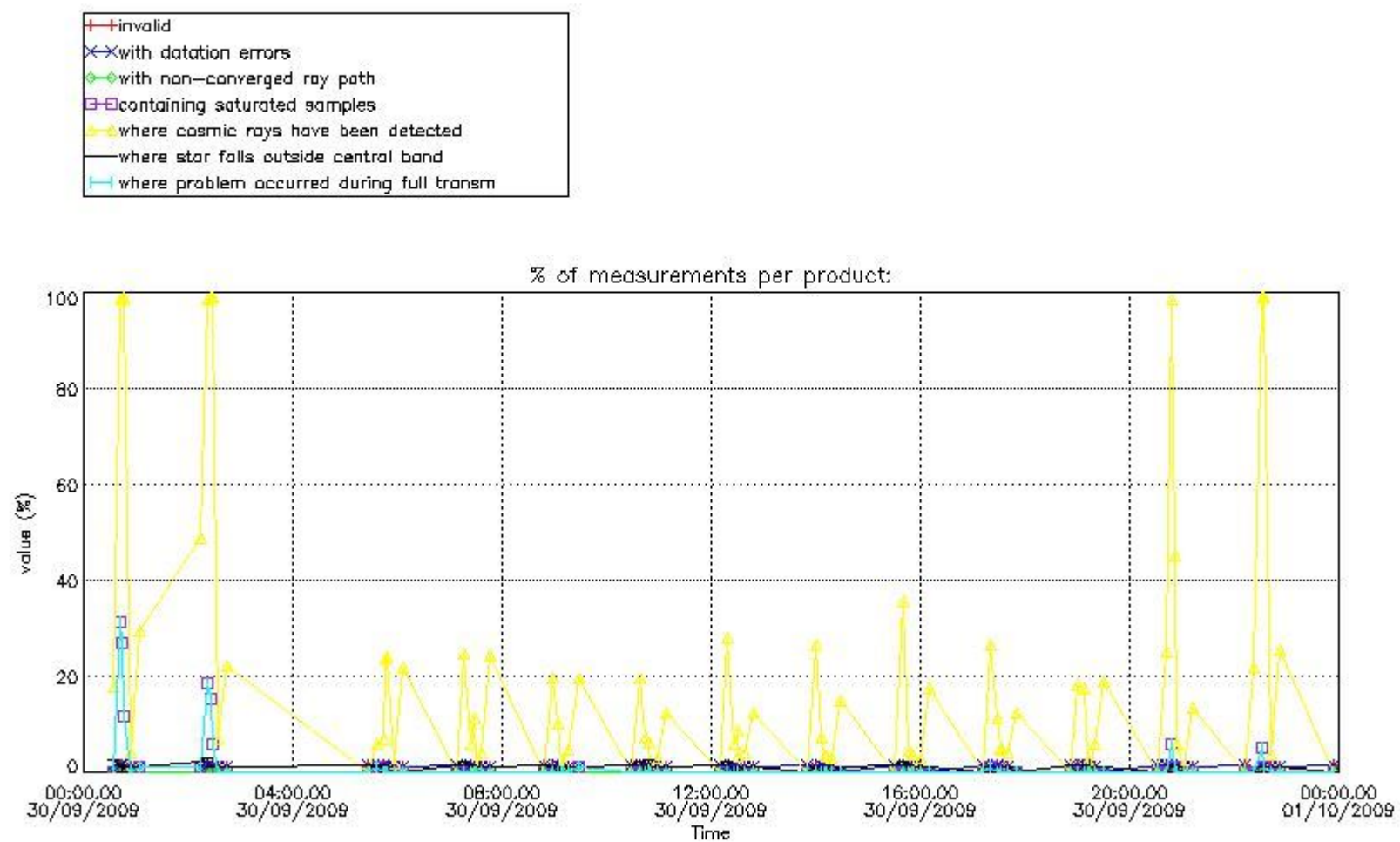


4. Level 1 quality information per product

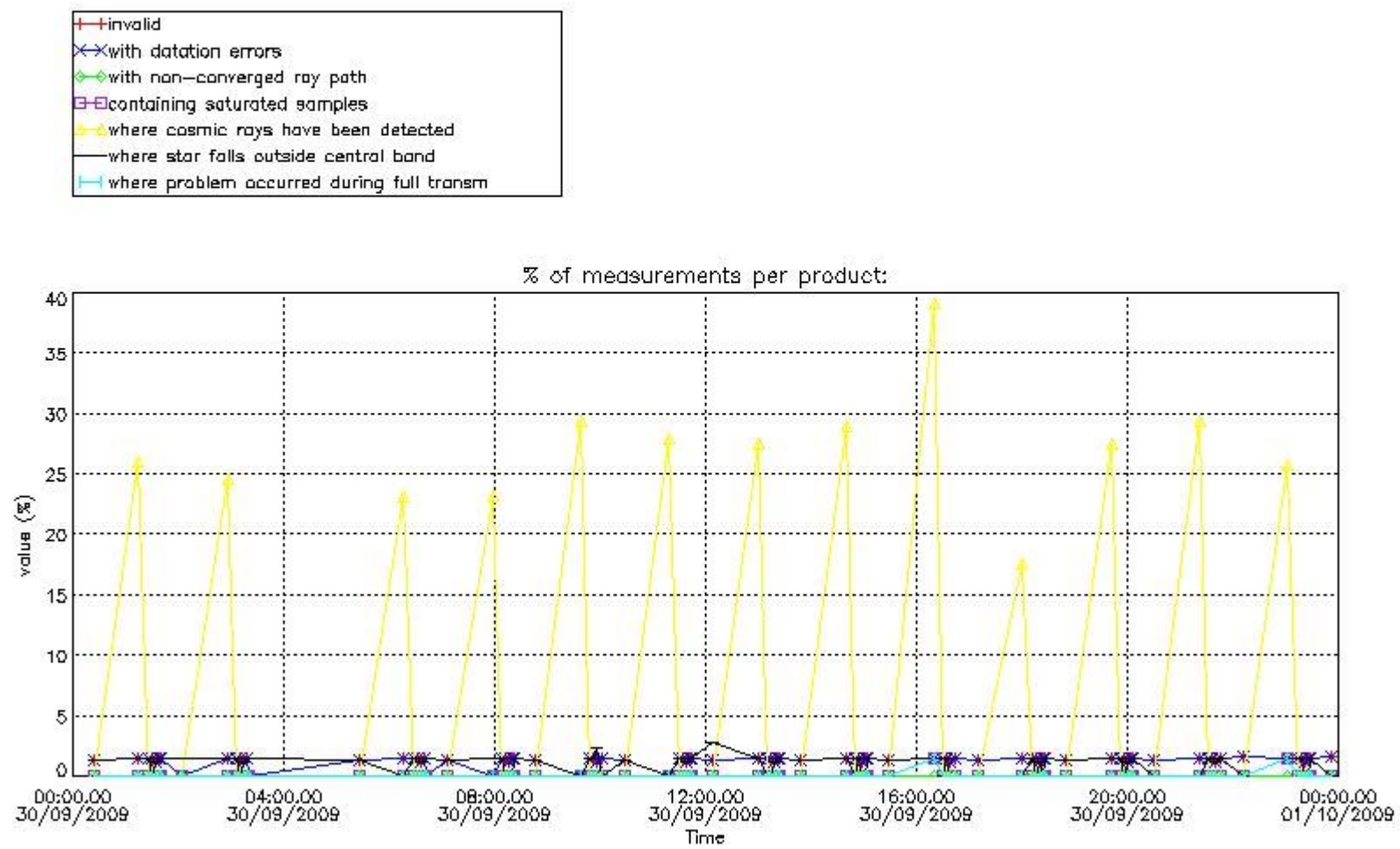
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes



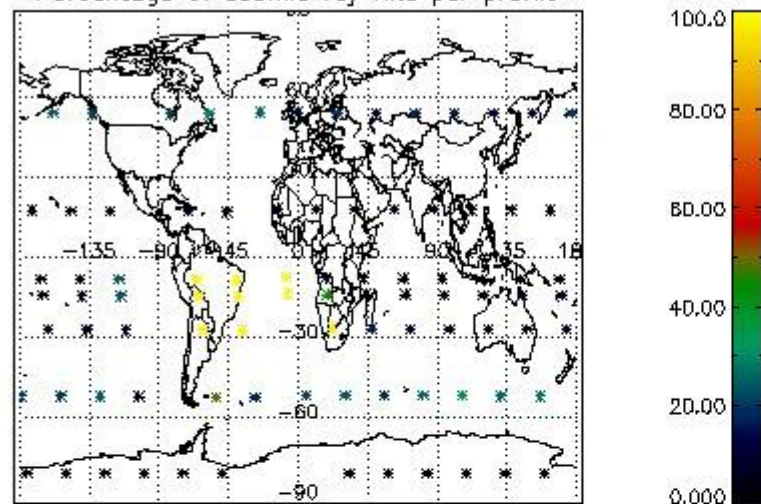
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



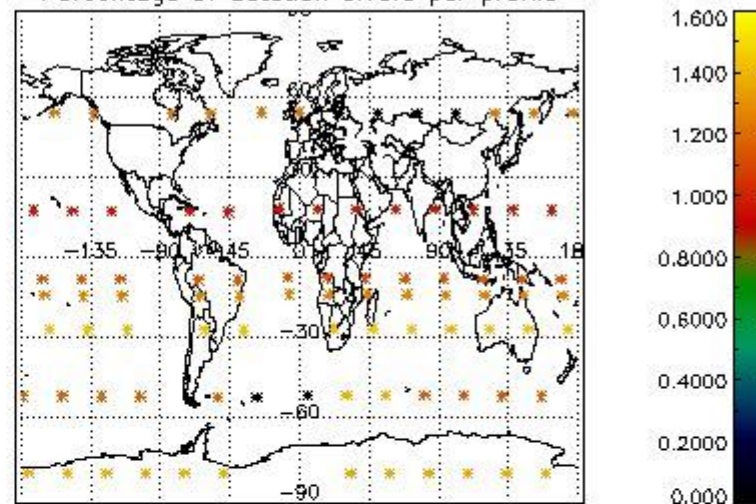
4.2 Plot quality information per product coming from level 1b processing (world map)

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

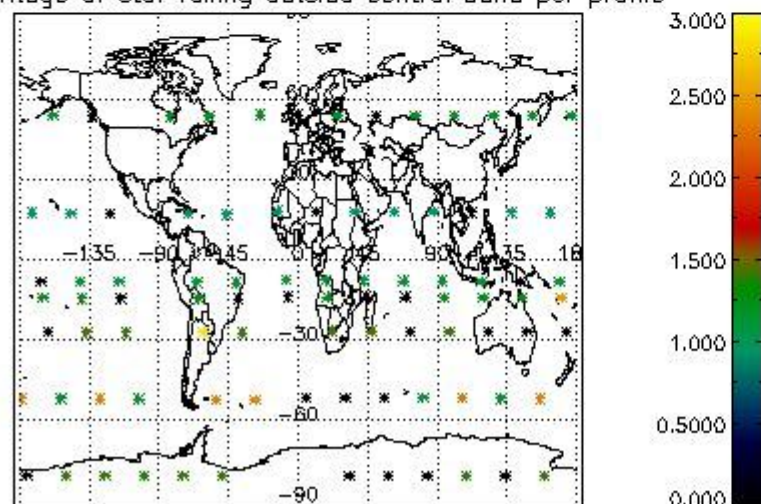
Percentage of cosmic ray hits per profile



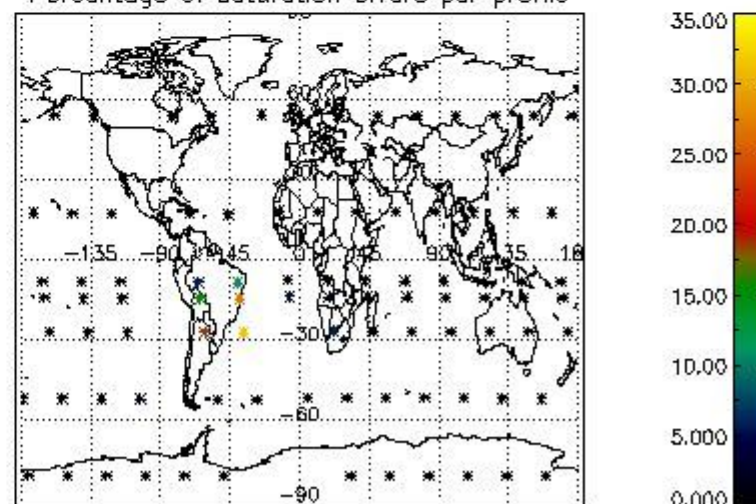
Percentage of datation errors per profile



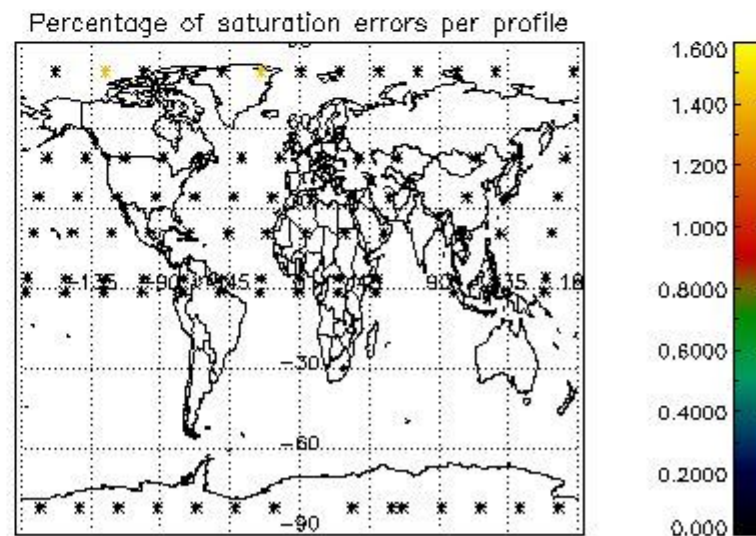
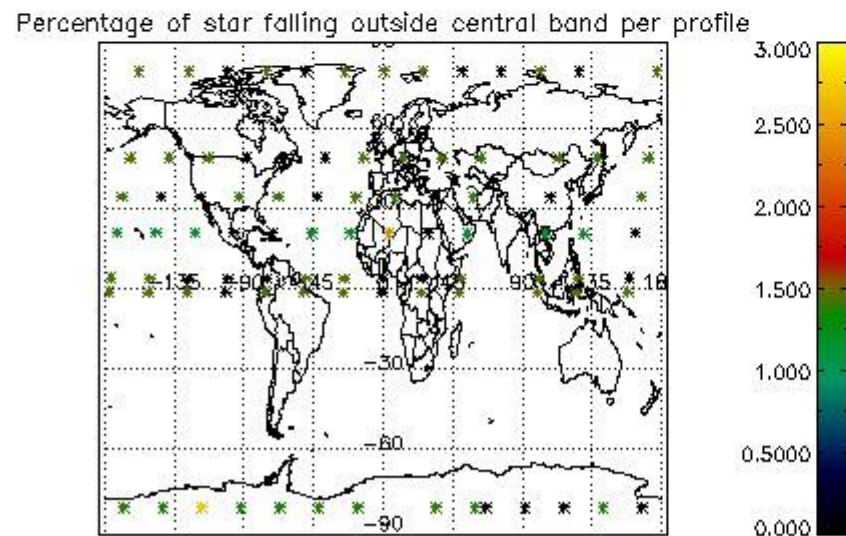
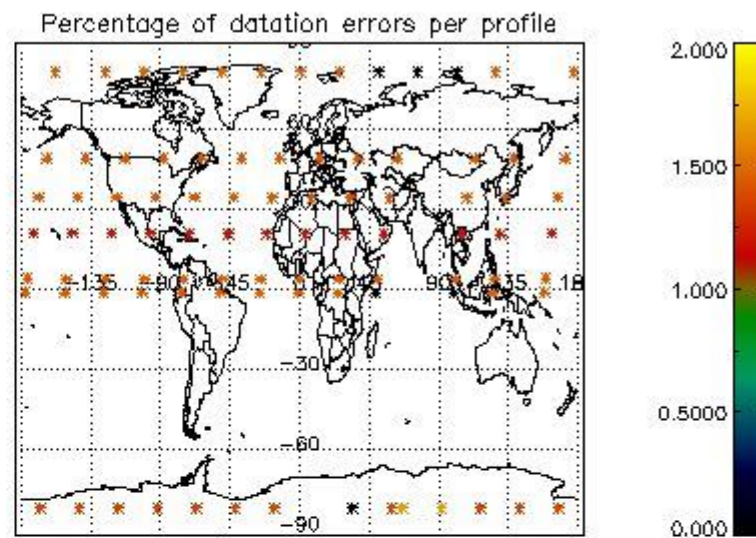
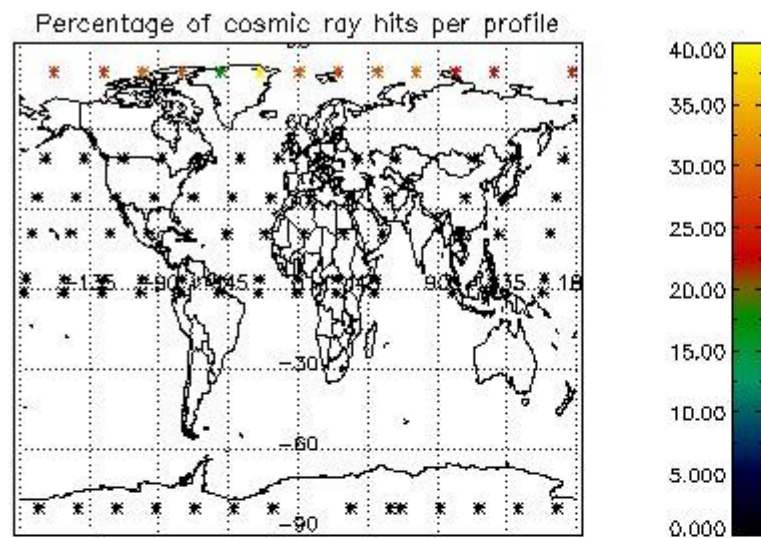
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

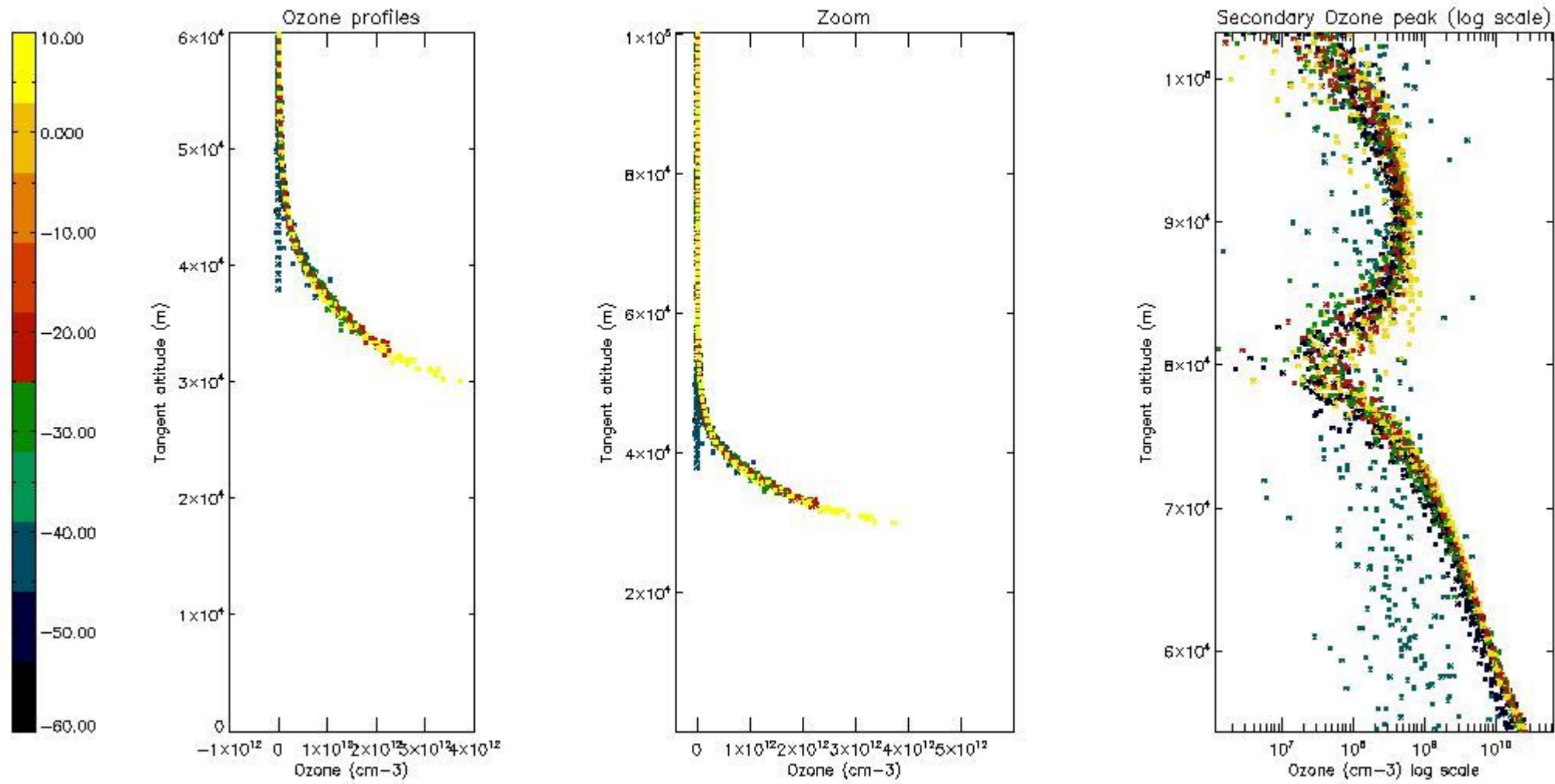
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	39
STD < 20	21

STD < 10	16
STD < 5	14

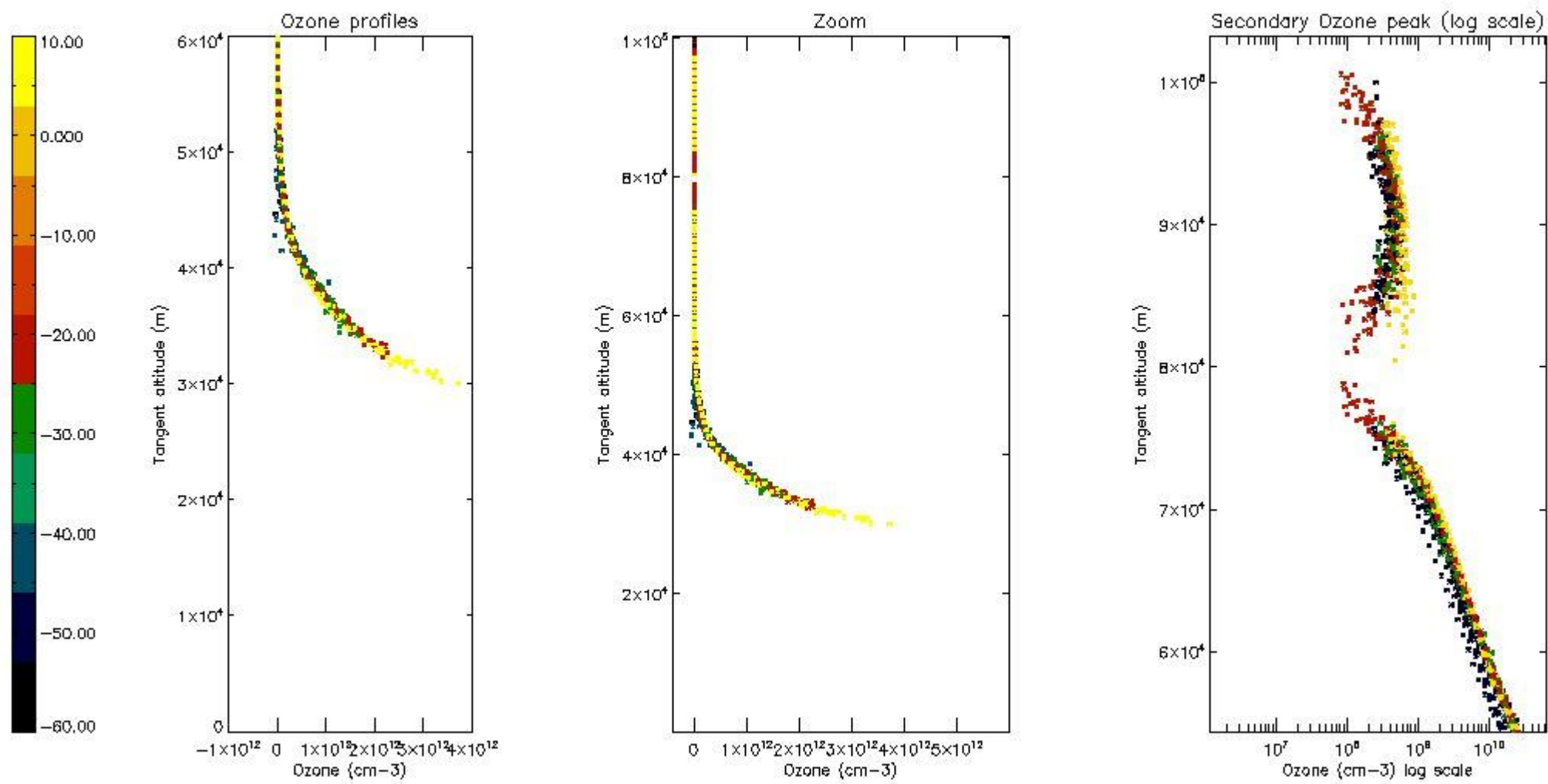
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



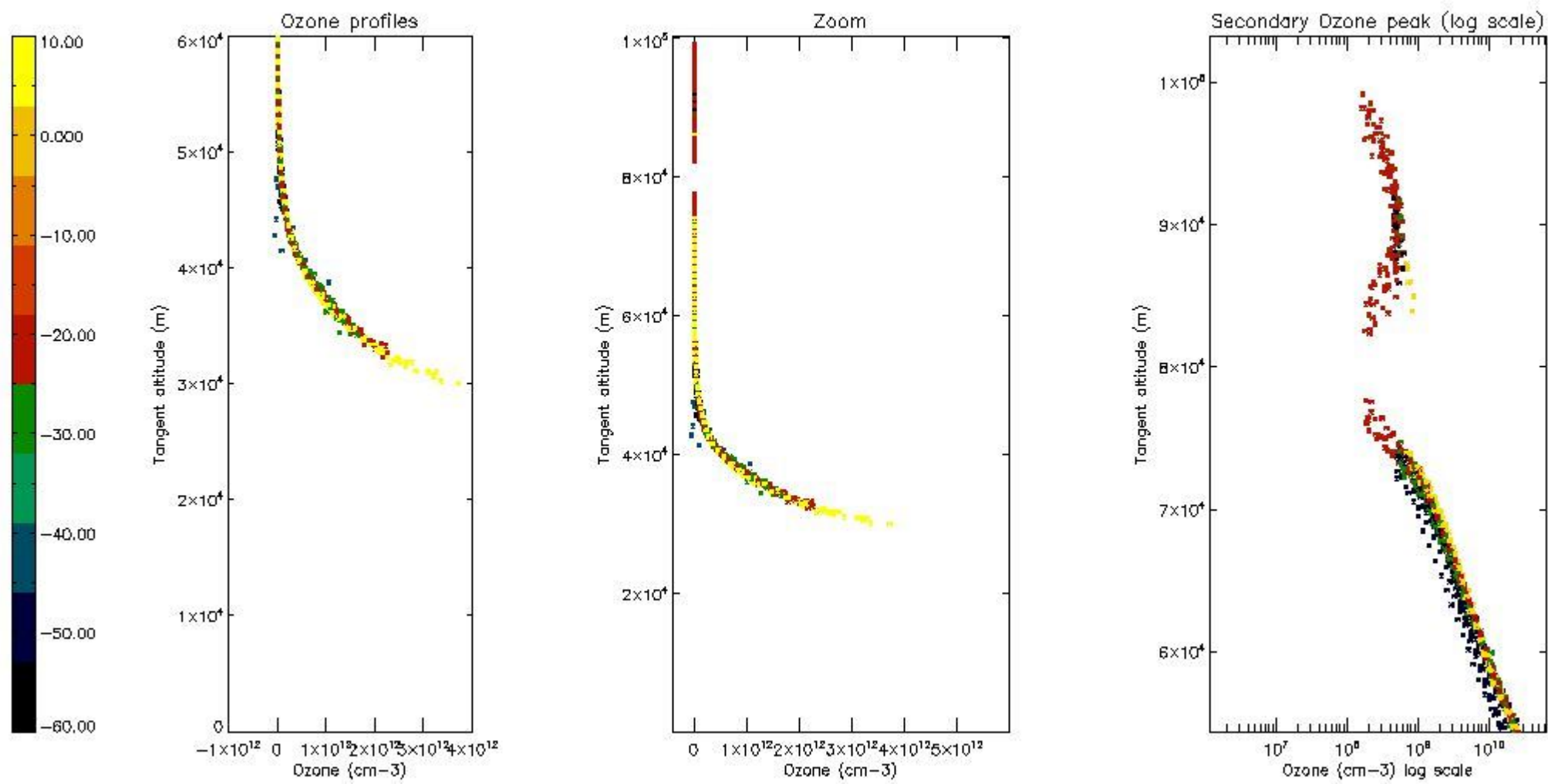
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



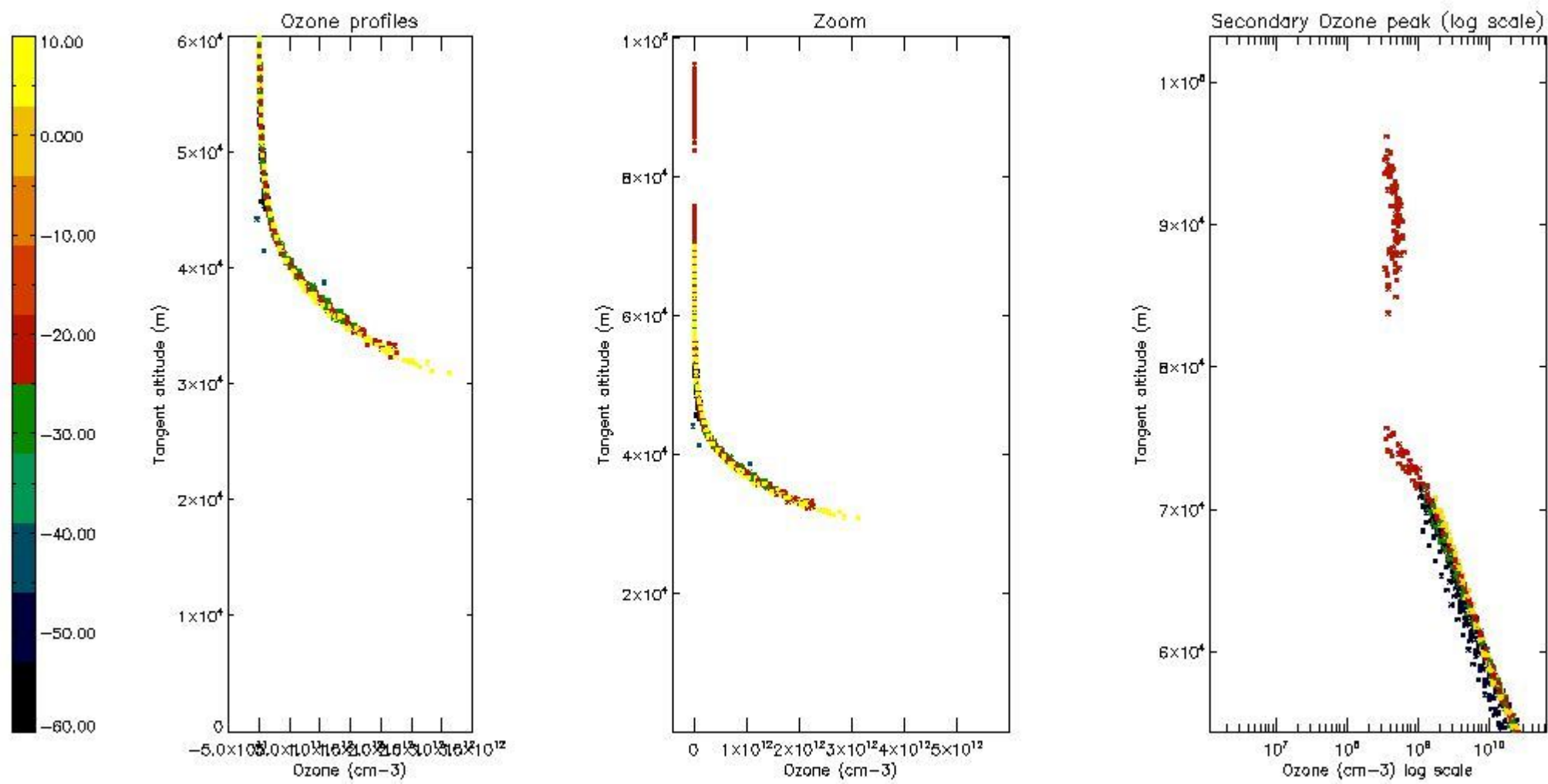
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



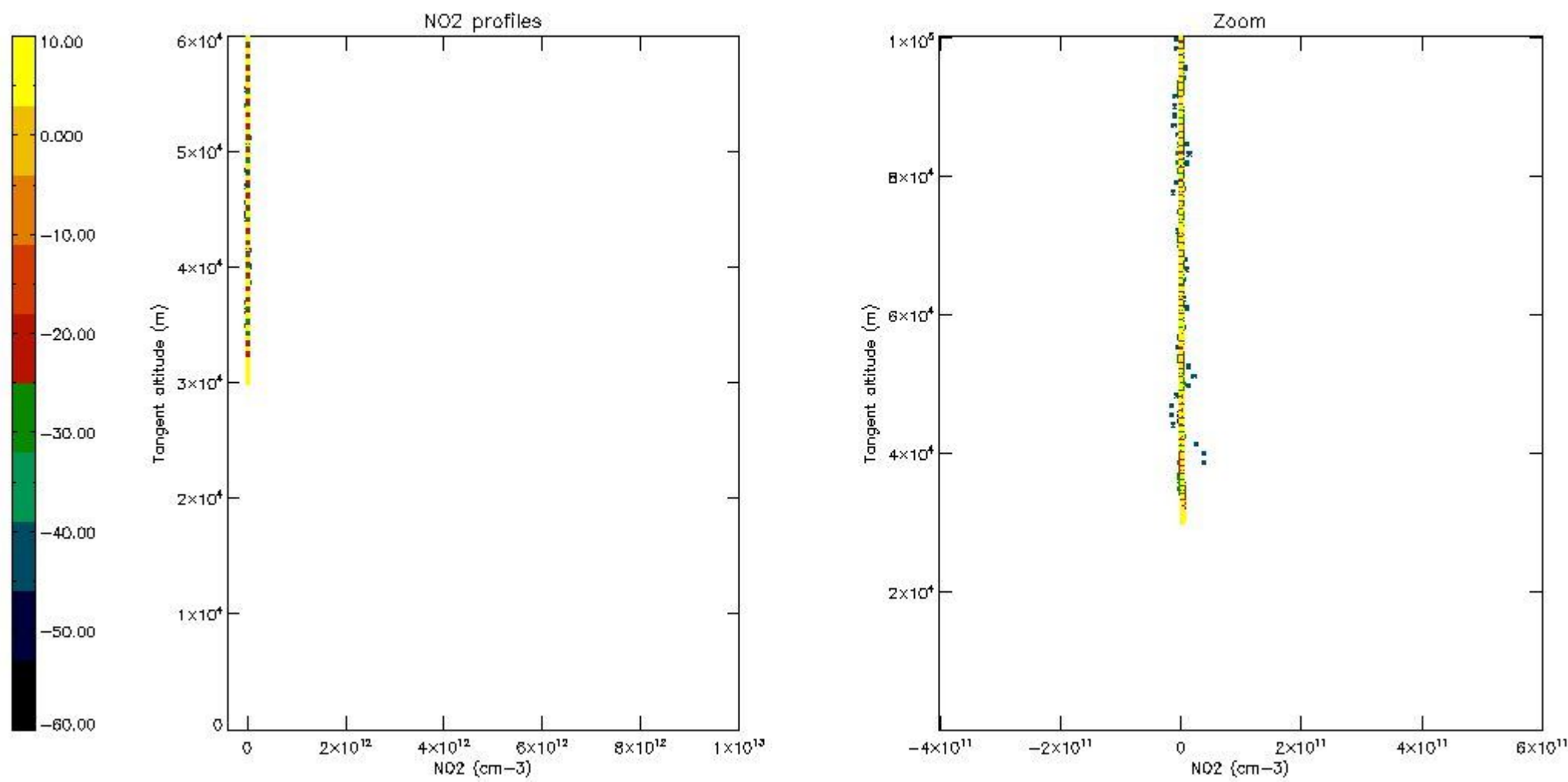
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



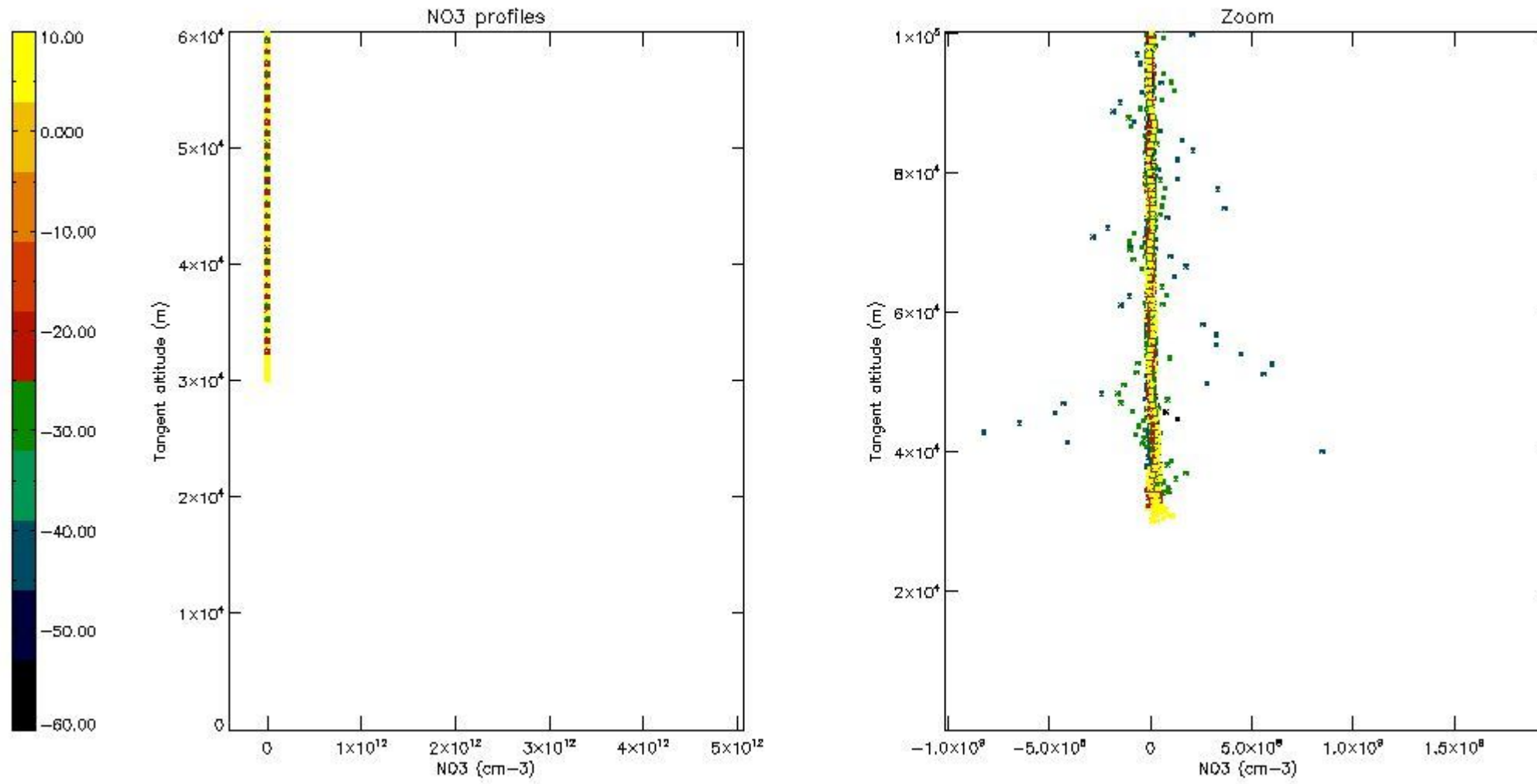
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

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

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	30-SEP-2009 00:23:33
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	30-SEP-2009 00:23:33
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	30-SEP-2009 00:23:33

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](#)

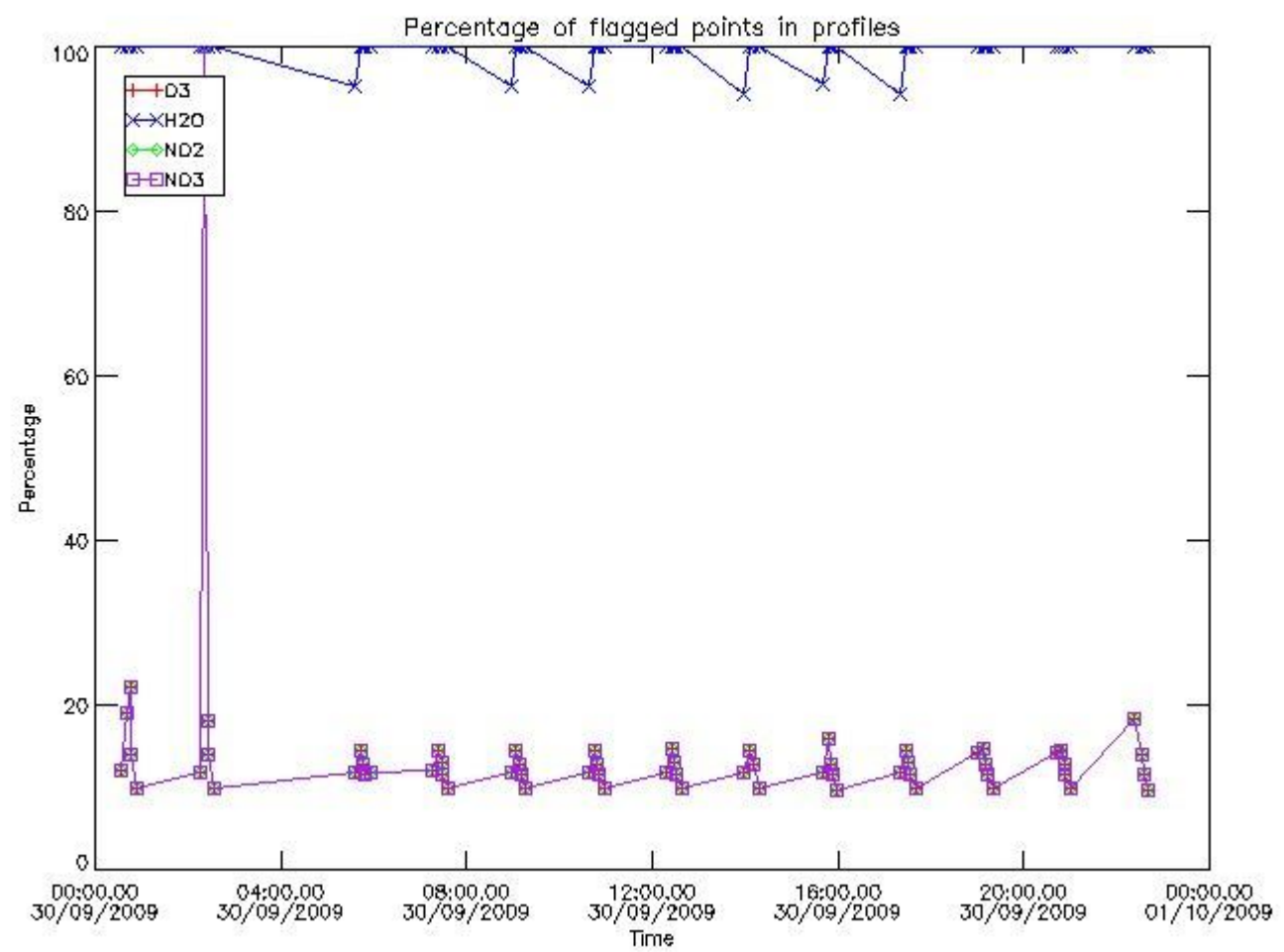
[6. Auxiliary Data Files used for the production reported in section 2](#)

161	GOM_NL__2PRFIN20090930_212207_000000342083_00029_39662_0200.N1	30-SEP-2009 21:22:07	Straylight	34.000	52	16Bet Cet	2.0370	4500.0	68	39662	No
162	GOM_NL__2PRFIN20090930_213236_000000352083_00029_39662_0201.N1	30-SEP-2009 21:32:36	Bright	35.000	140	88Gam Peg	2.8340	26000.	70	39662	No
163	GOM_NL__2PRFIN20090930_213646_000000352083_00029_39662_0202.N1	30-SEP-2009 21:36:46	Bright	35.000	58	21Alp And	2.0730	11000.	70	39662	No
164	GOM_NL__2PRFIN20090930_214031_000000422083_00029_39662_0203.N1	30-SEP-2009 21:40:31	Bright	42.000	53	43Bet And	2.0480	3300.0	84	39662	No
165	GOM_NL__2PRFIN20090930_214517_000000352083_00029_39662_0204.N1	30-SEP-2009 21:45:17	Bright	35.000	68	18Alp Cas	2.2250	4500.0	70	39662	No
166	GOM_NL__2PRFIN20090930_214643_000000352083_00029_39662_0205.N1	30-SEP-2009 21:46:43	Bright	34.500	76	27Gam Cas	2.3000	30000.	69	39662	No
167	GOM_NL__2PRFIN20090930_221123_000000302083_00029_39662_0206.N1	30-SEP-2009 22:11:23	Tw_i_and_stray	30.000	24	66Alp Gem	1.5800	10200.	60	39662	No
168	GOM_NL__2PRFIN20090930_221251_000000372083_00029_39662_0207.N1	30-SEP-2009 22:12:51	Tw_i_and_stray	36.500	17	78Bet Gem	1.1610	4500.0	73	39662	No
169	GOM_NL__2PRFIN20090930_222213_000000282083_00029_39662_0208.N1	30-SEP-2009 22:22:13	Dark	27.500	8	10Alp CMi	0.40000	6500.0	55	39662	No
170	GOM_NL__2PRFIN20090930_223253_000000402083_00029_39662_0209.N1	30-SEP-2009 22:32:53	Dark	40.000	88	31Eta CMa	2.4480	20000.	80	39662	No
171	GOM_NL__2PRFIN20090930_223437_000000452083_00029_39662_0210.N1	30-SEP-2009 22:34:37	Dark	44.500	23	21Eps CMa	1.5020	26000.	89	39662	No
172	GOM_NL__2PRFIN20090930_224150_000000532083_00030_39663_0207.N1	30-SEP-2009 22:41:50	Dark	52.500	108	Alp Col	2.6520	15200.	105	39663	No
173	GOM_NL__2PRFIN20090930_225200_000000422083_00030_39663_0208.N1	30-SEP-2009 22:52:00	Straylight	41.500	157	The1Eri	2.9060	9300.0	83	39663	No
174	GOM_NL__2PRFIN20090930_230243_000000352083_00030_39663_0209.N1	30-SEP-2009 23:02:43	Straylight	35.000	52	16Bet Cet	2.0370	4500.0	70	39663	No
175	GOM_NL__2PRFIN20090930_231311_000000362083_00030_39663_0210.N1	30-SEP-2009 23:13:11	Bright	35.500	140	88Gam Peg	2.8340	26000.	71	39663	No
176	GOM_NL__2PRFIN20090930_231721_000000362083_00030_39663_0211.N1	30-SEP-2009 23:17:21	Bright	35.500	58	21Alp And	2.0730	11000.	71	39663	No
177	GOM_NL__2PRFIN20090930_232107_000000422083_00030_39663_0212.N1	30-SEP-2009 23:21:07	Bright	42.000	53	43Bet And	2.0480	3300.0	84	39663	No
178	GOM_NL__2PRFIN20090930_232552_000000352083_00030_39663_0213.N1	30-SEP-2009 23:25:52	Bright	35.000	68	18Alp Cas	2.2250	4500.0	70	39663	No
179	GOM_NL__2PRFIN20090930_232718_000000352083_00030_39663_0214.N1	30-SEP-2009 23:27:18	Bright	35.000	76	27Gam Cas	2.3000	30000.	70	39663	No
180	GOM_NL__2PRFIN20090930_235159_000000302083_00030_39663_0215.N1	30-SEP-2009 23:51:59	Tw_i_and_stray	30.000	24	66Alp Gem	1.5800	10200.	60	39663	No
181	GOM_NL__2PRFIN20090930_235327_000000372083_00030_39663_0216.N1	30-SEP-2009 23:53:27	Tw_i_and_stray	36.500	17	78Bet Gem	1.1610	4500.0	73	39663	No

3. Quality information per product

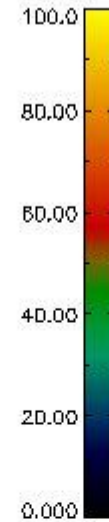
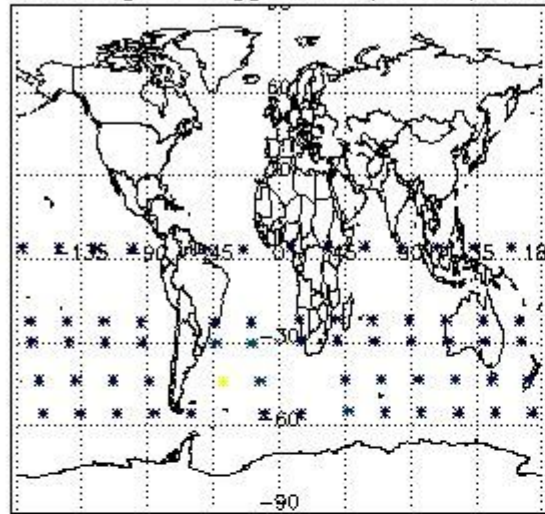
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

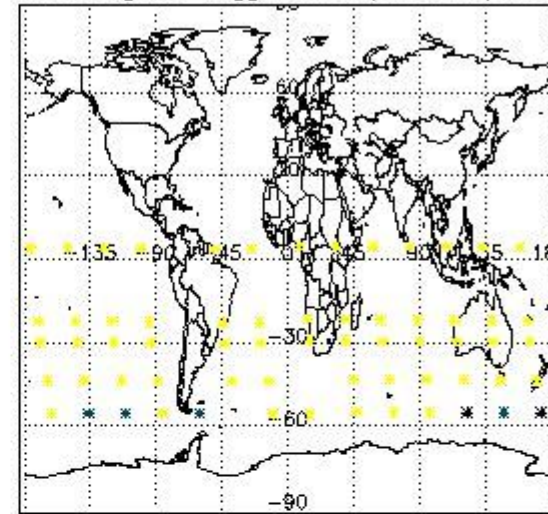


3.2 Plot quality information per product (world map)

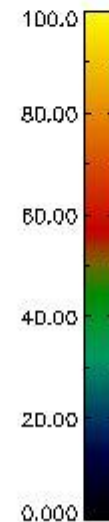
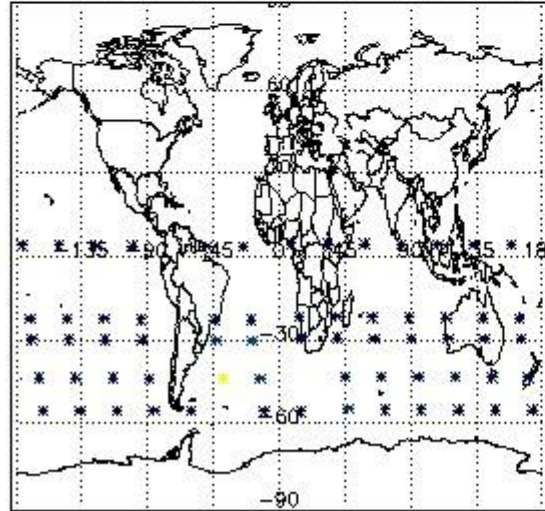
Percentage of flagged data per O3 profile



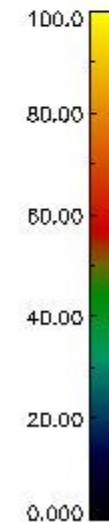
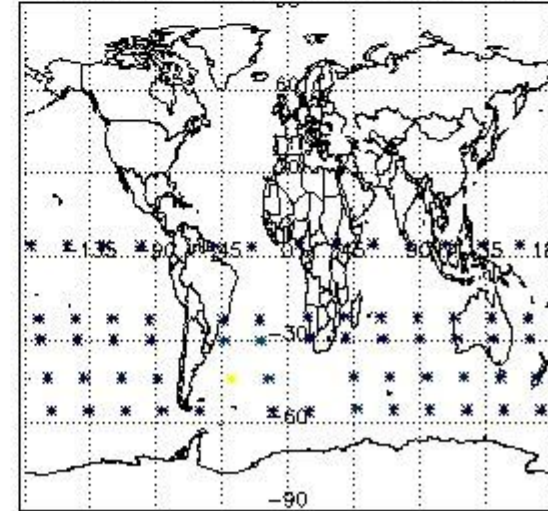
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

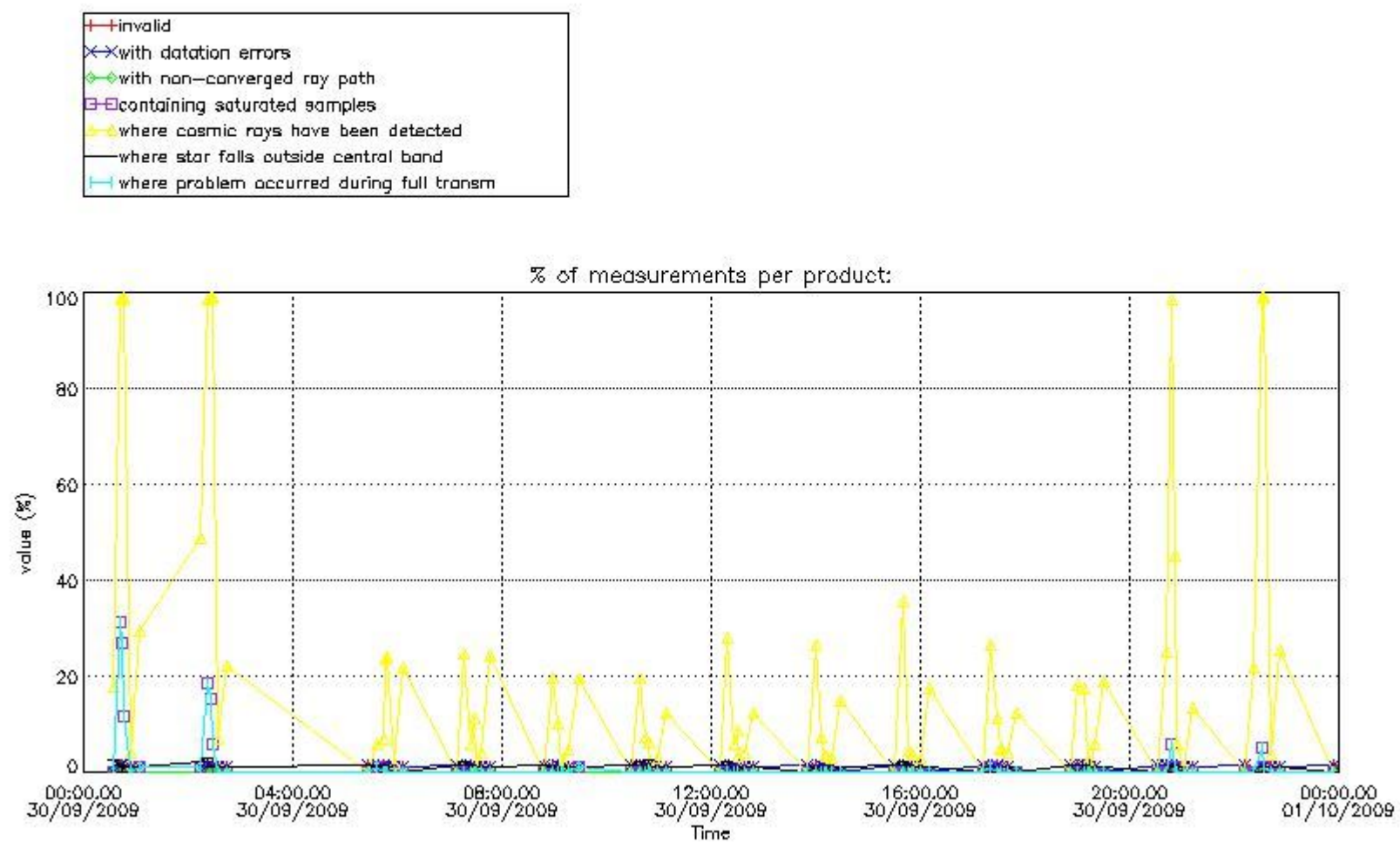


4. Level 1 quality information per product

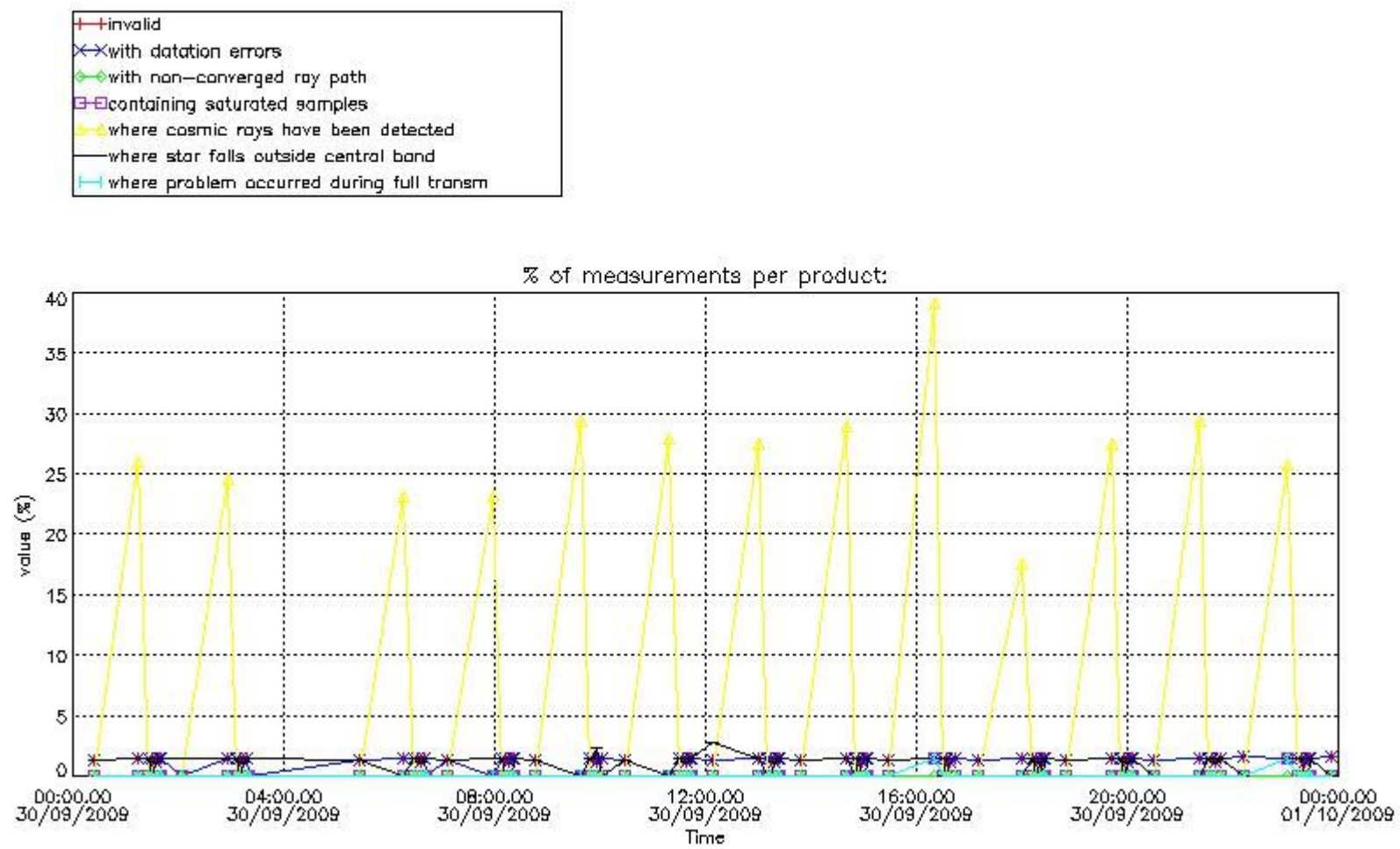
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes



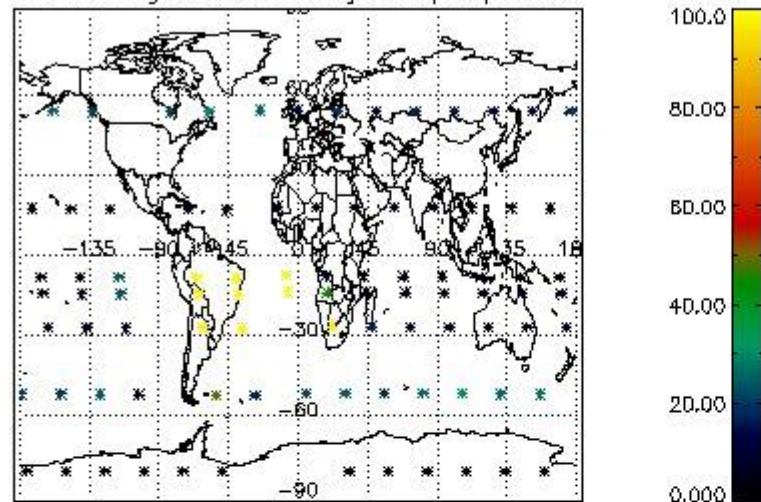
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



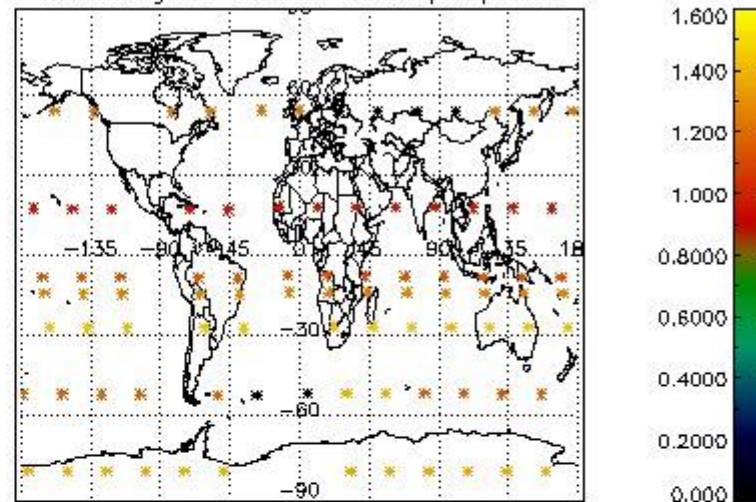
4.2 Plot quality information per product coming from level 1b processing (world map)

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

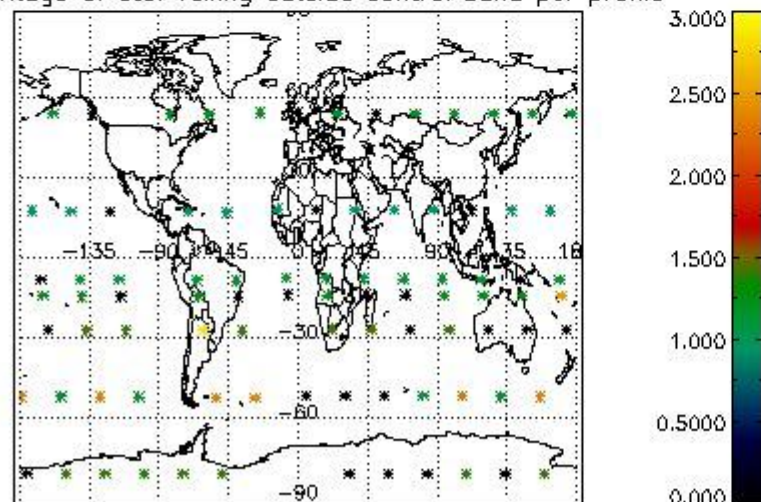
Percentage of cosmic ray hits per profile



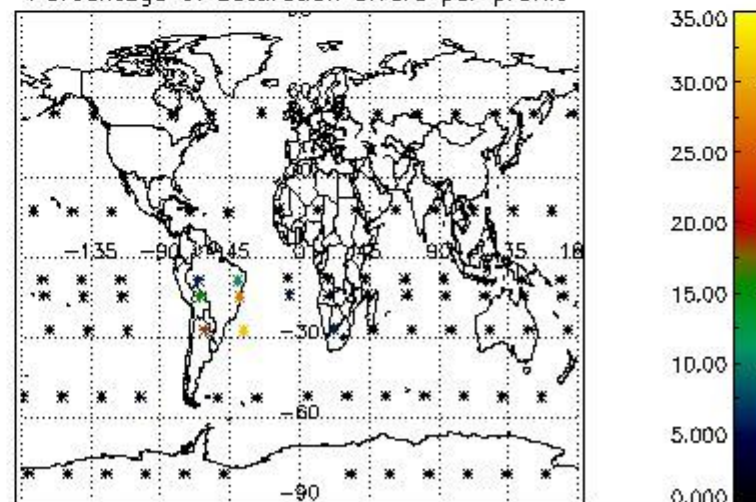
Percentage of datation errors per profile



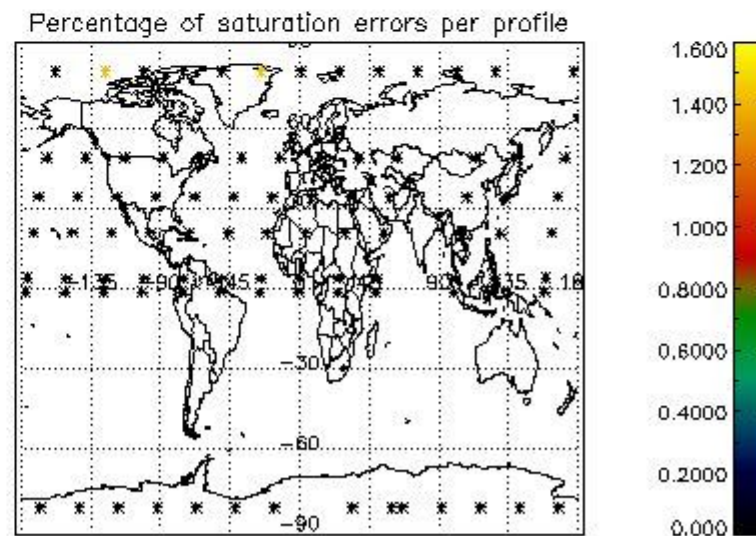
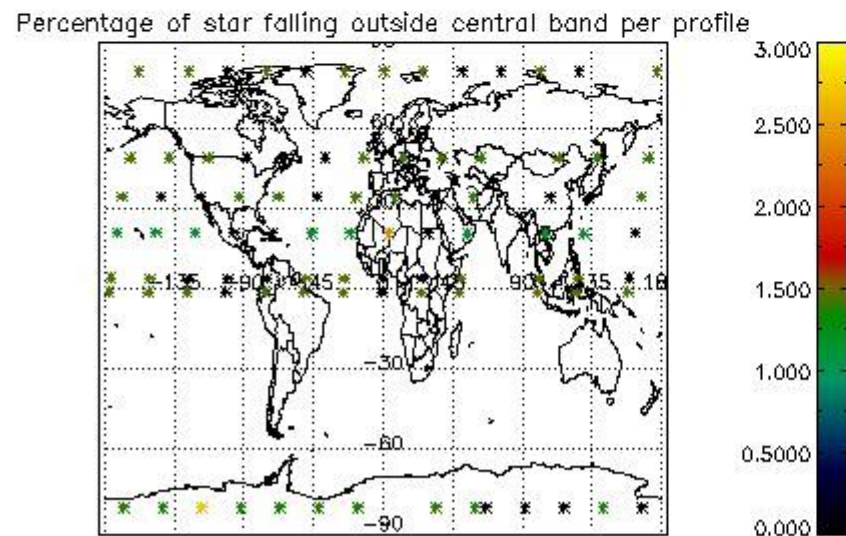
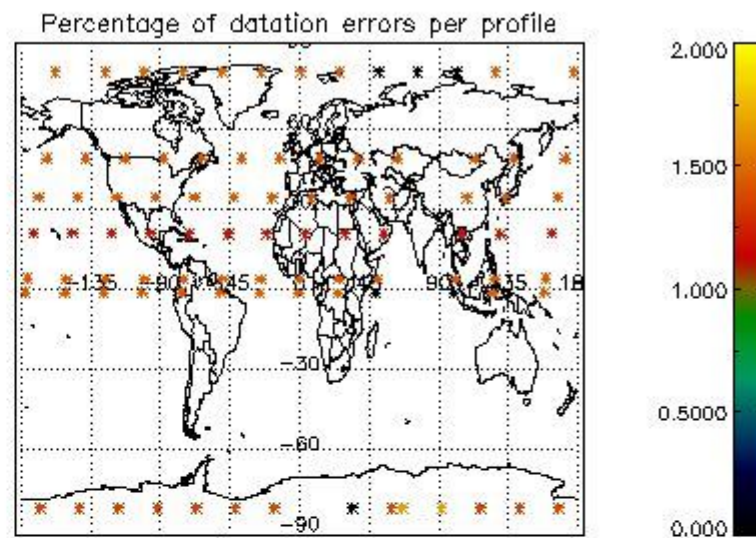
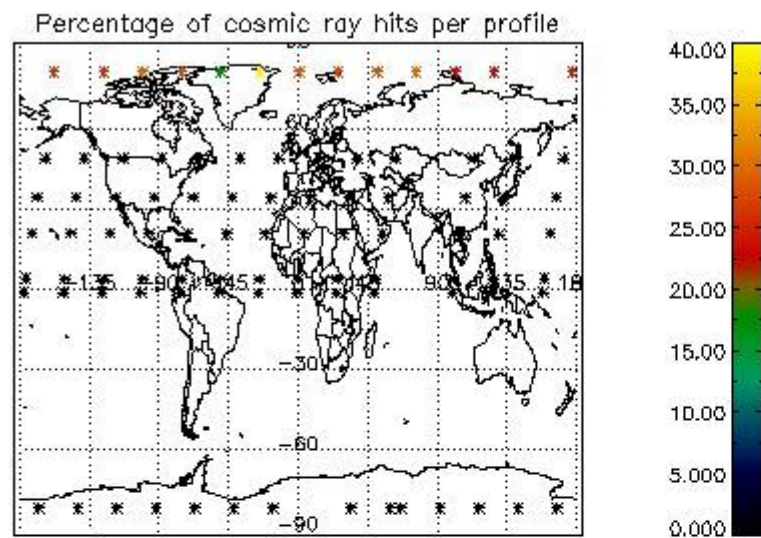
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

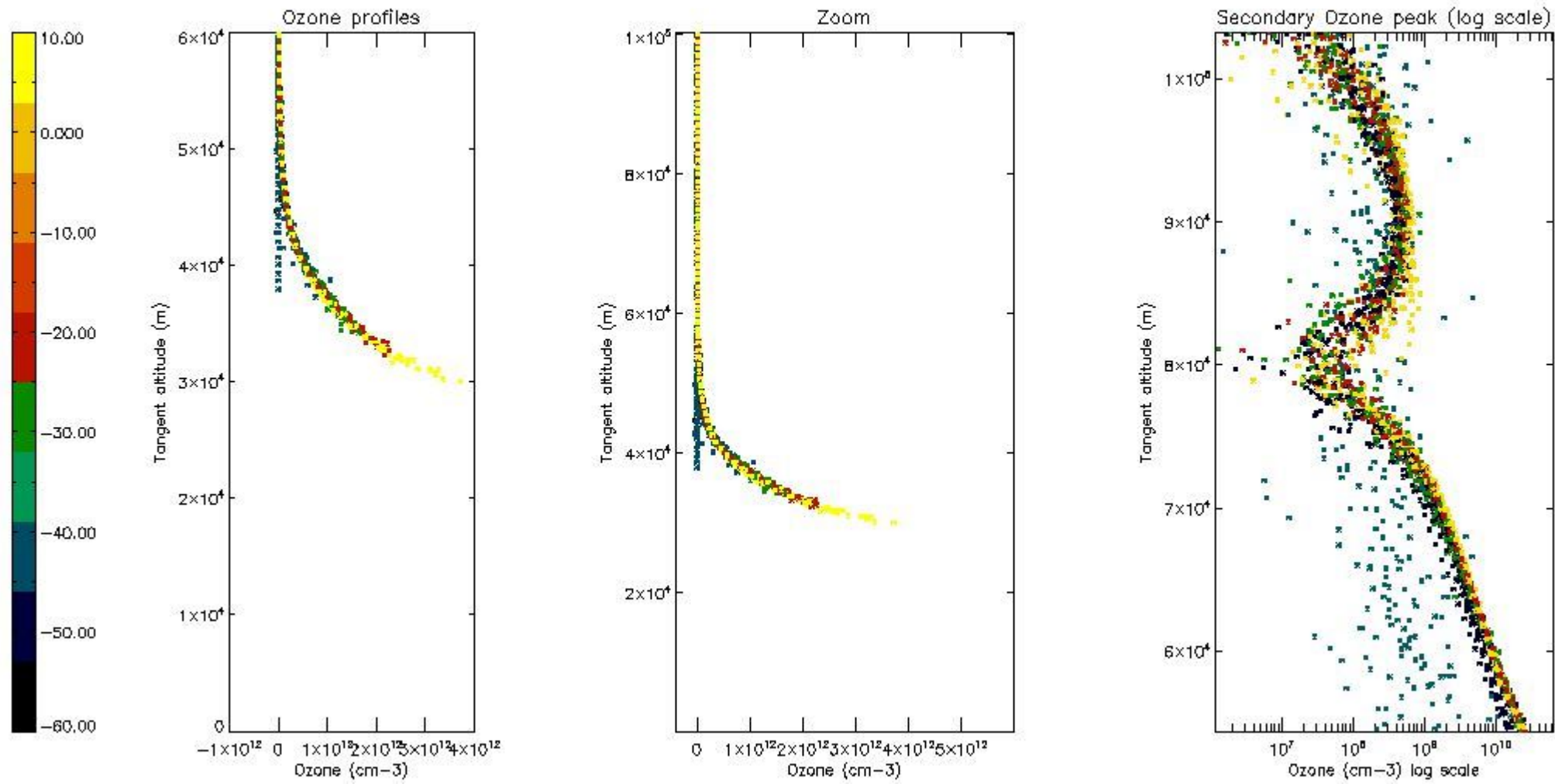
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	39
STD < 20	21

STD < 10	16
STD < 5	14

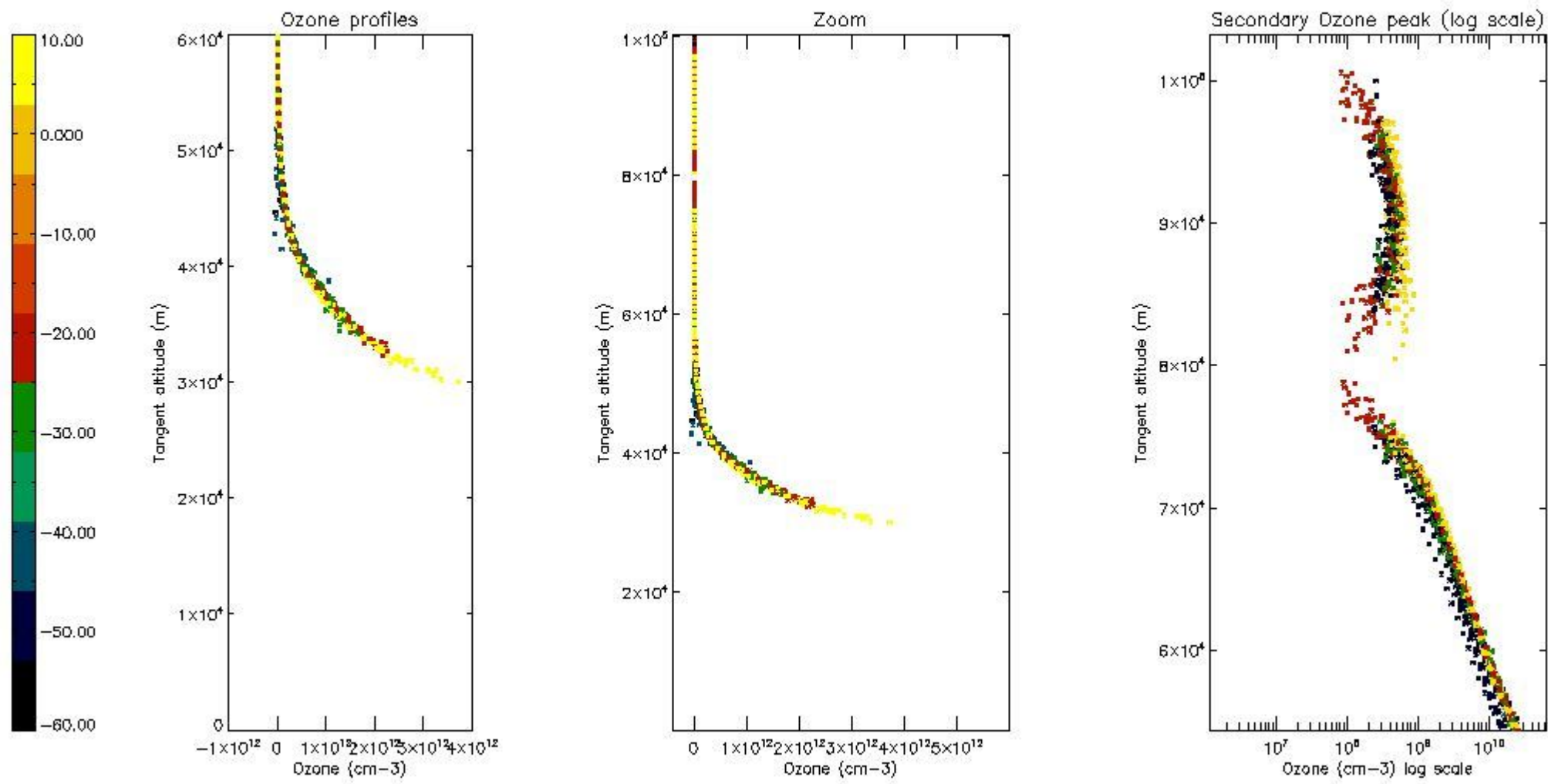
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



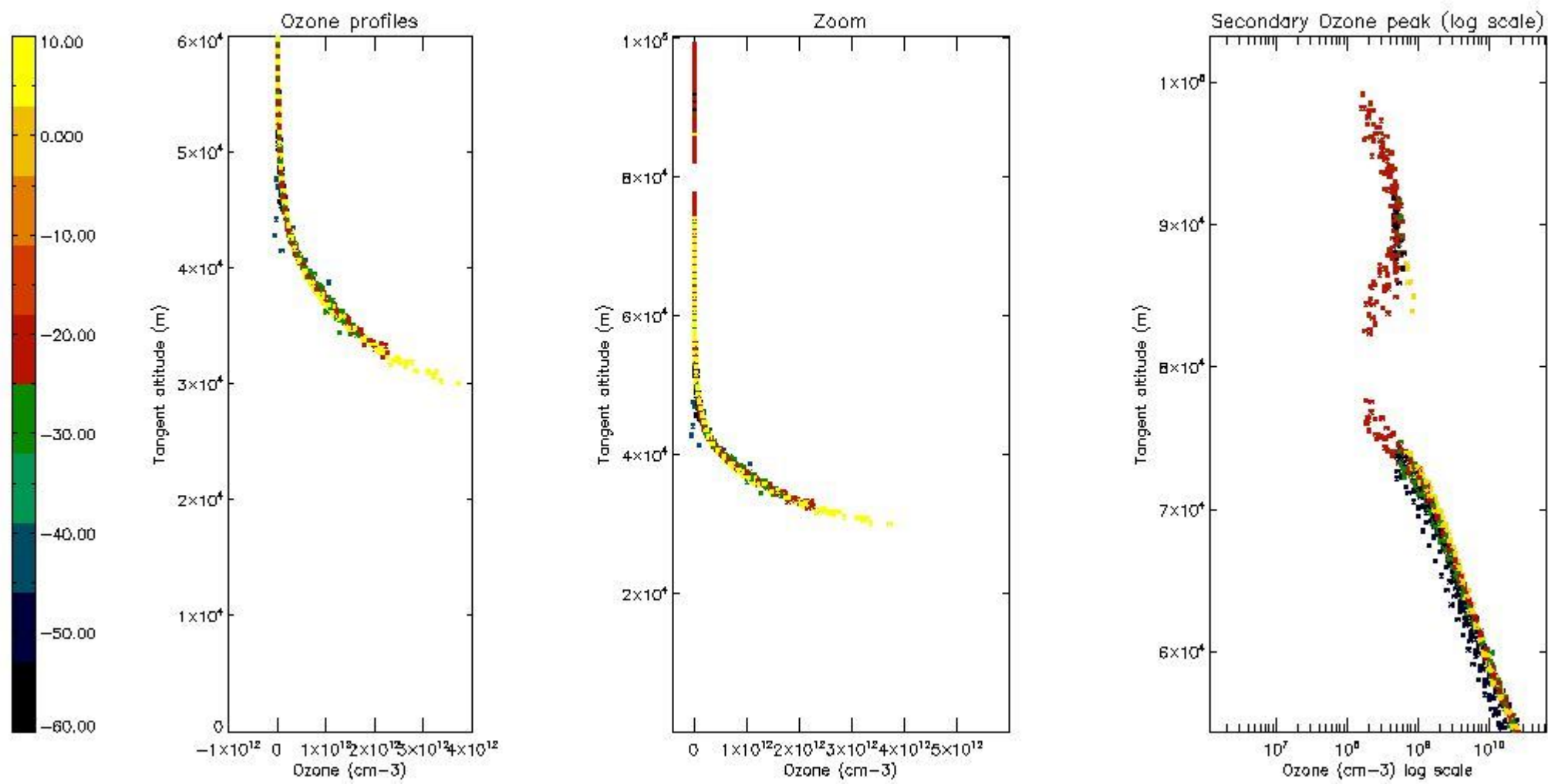
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



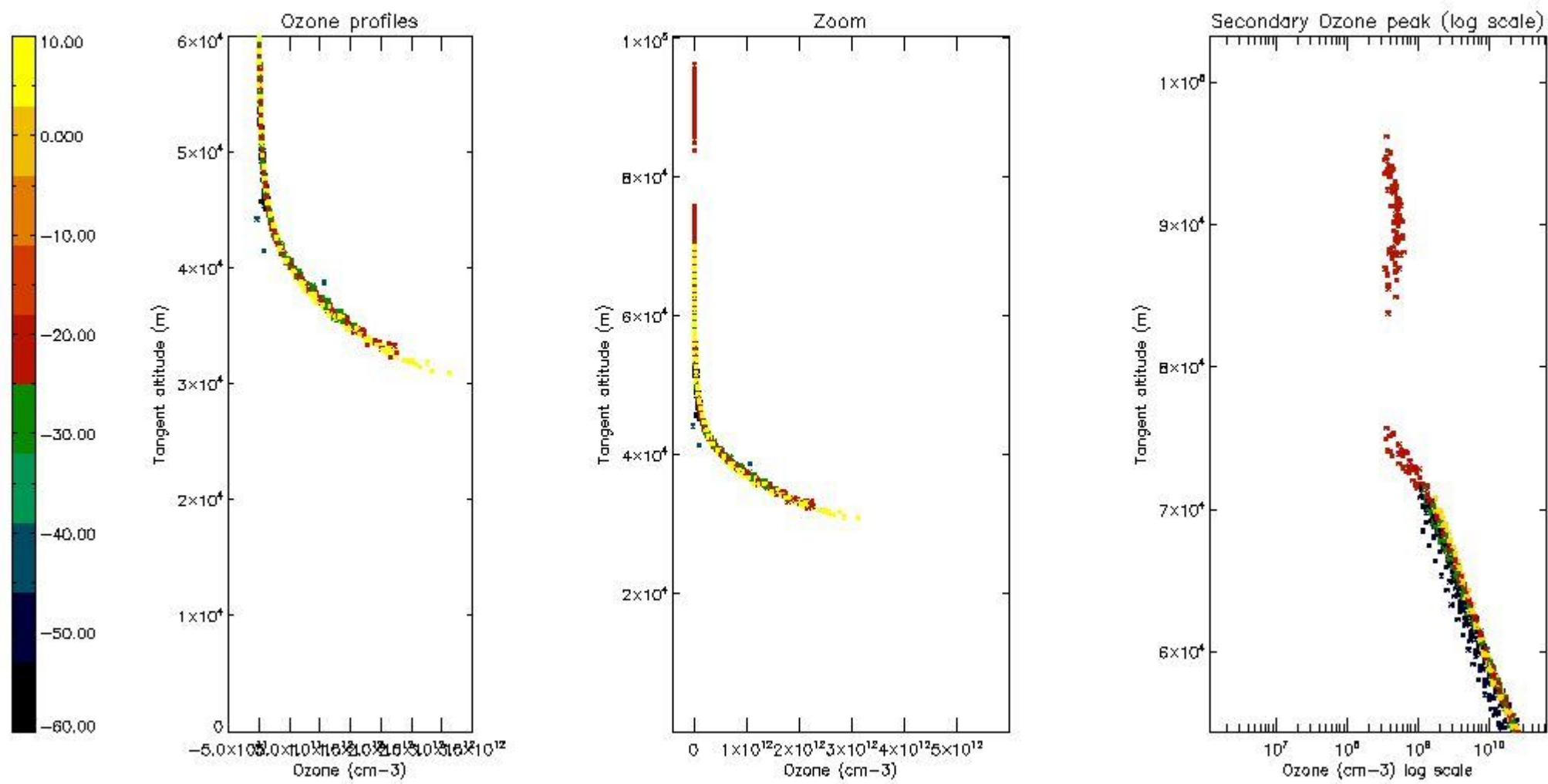
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



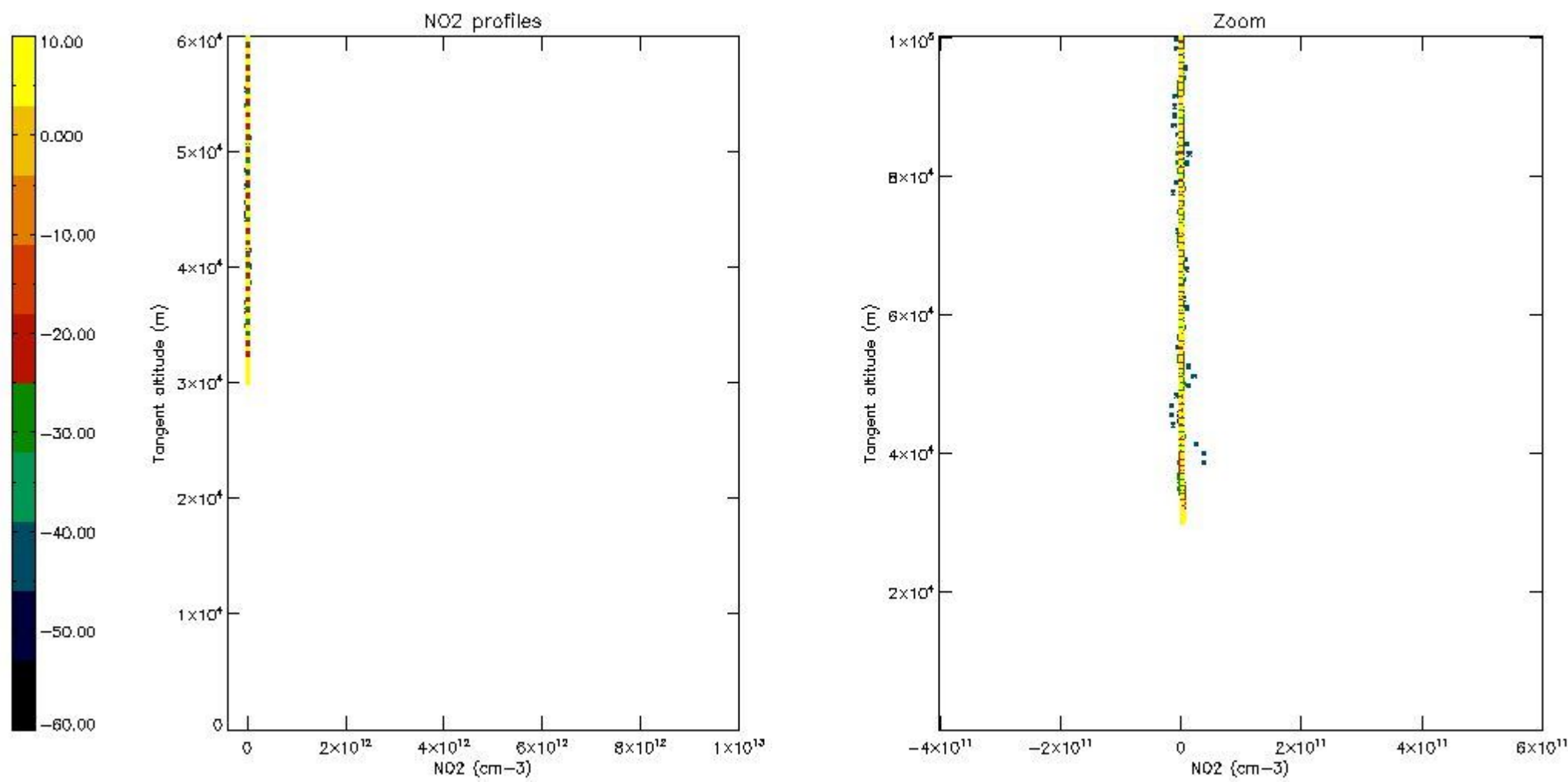
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



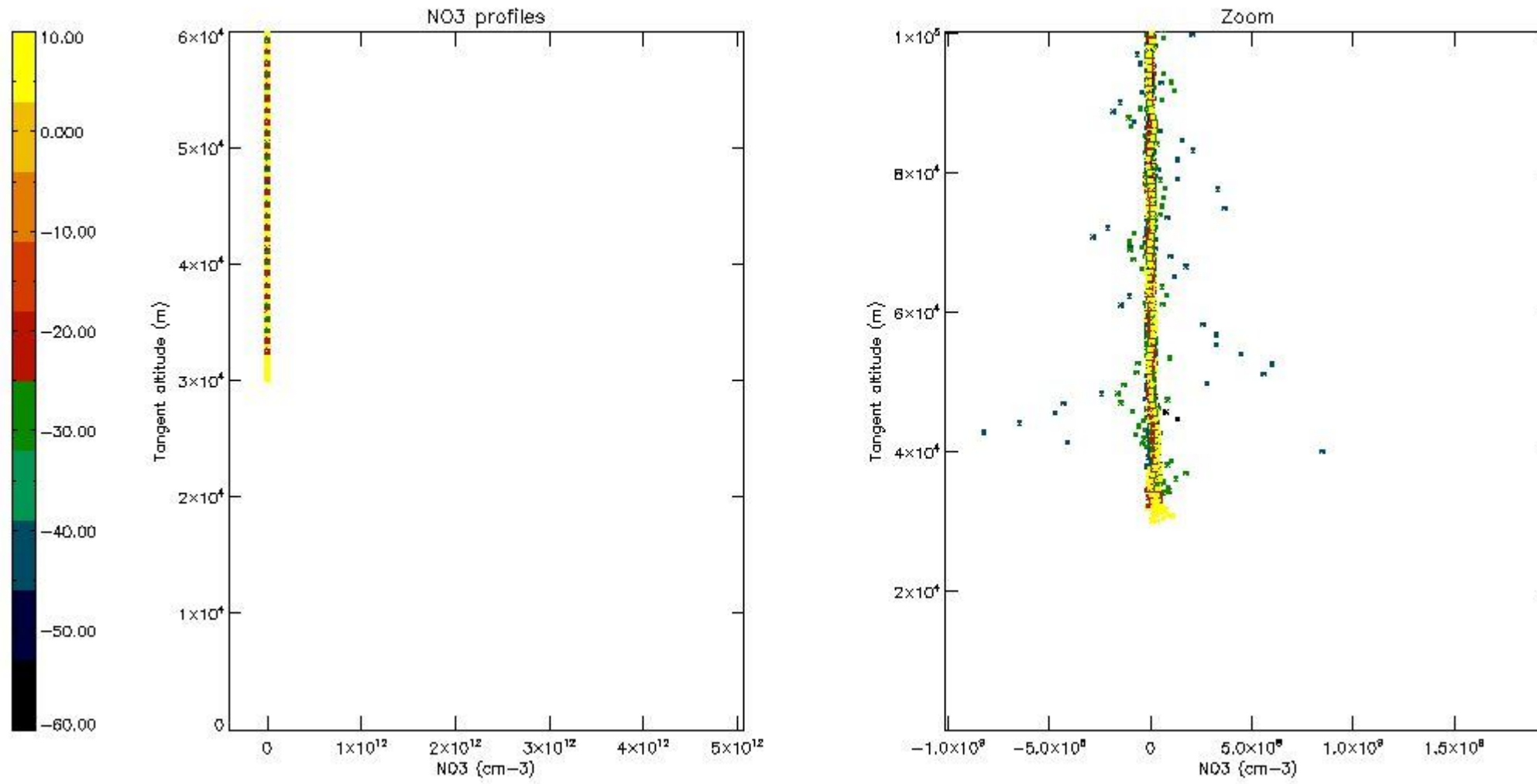
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

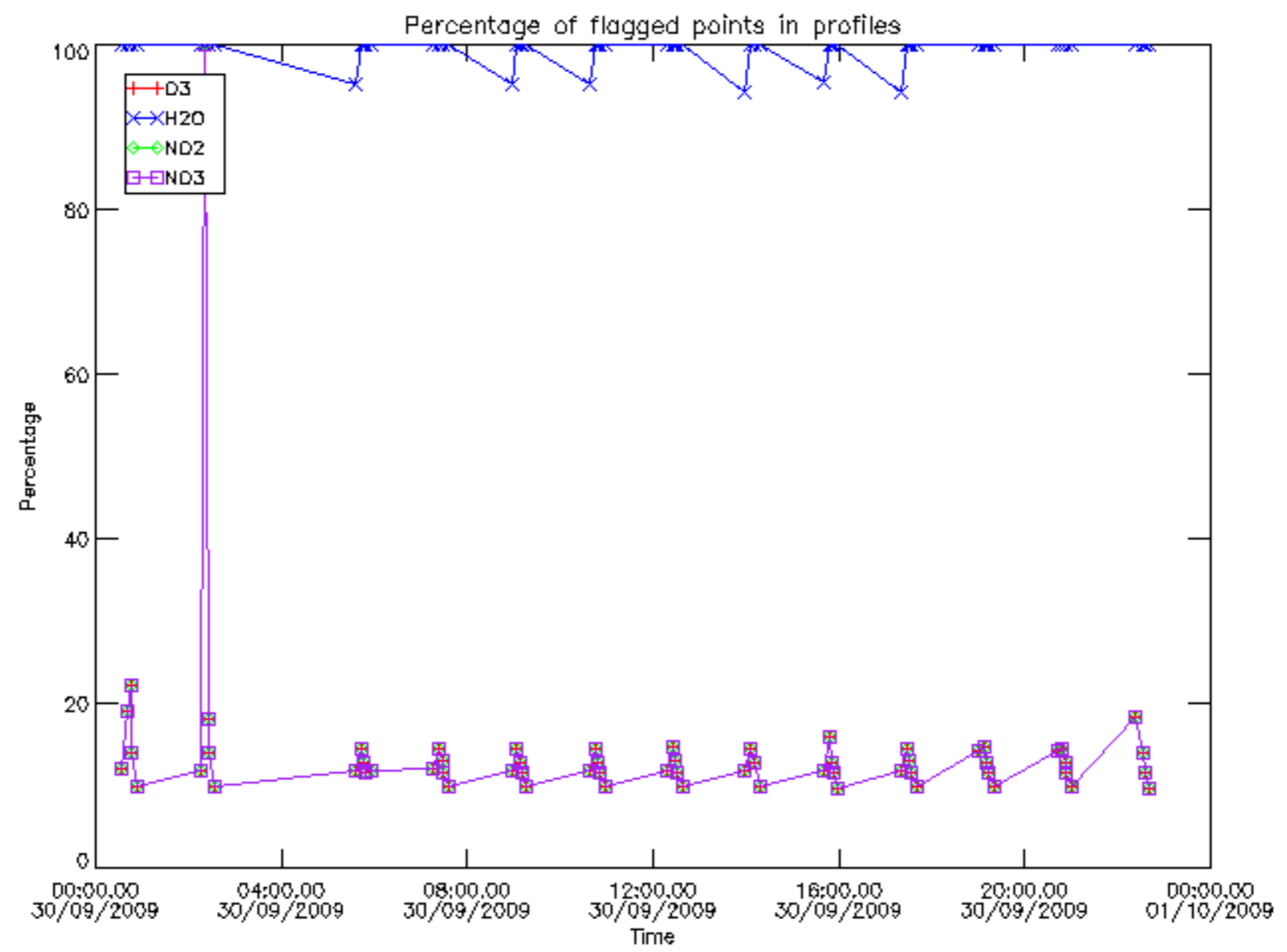
The colorbar represents the latitude.



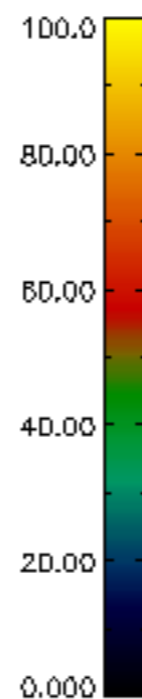
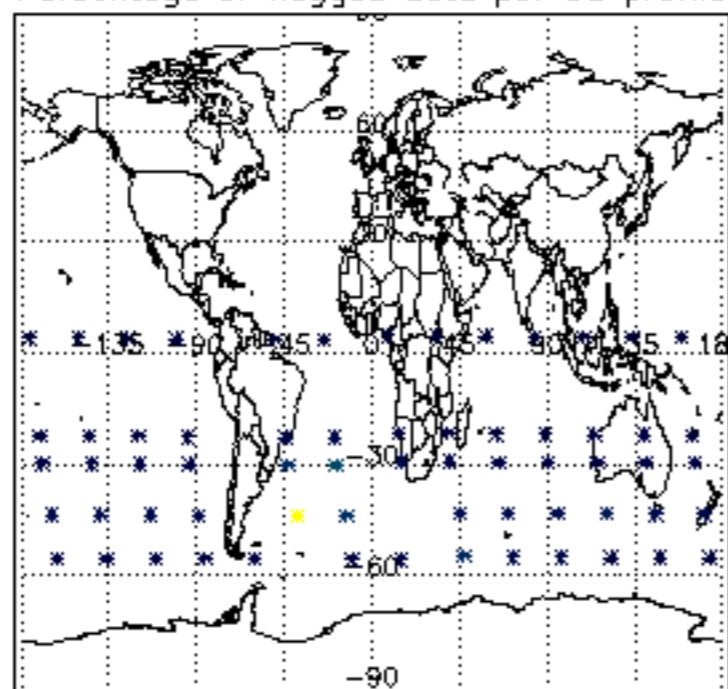
6. Auxiliary Data Files used for the production reported in section 2

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

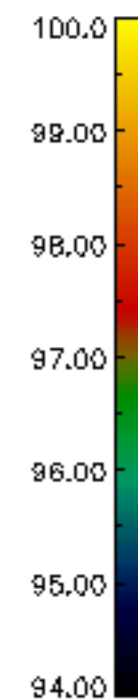
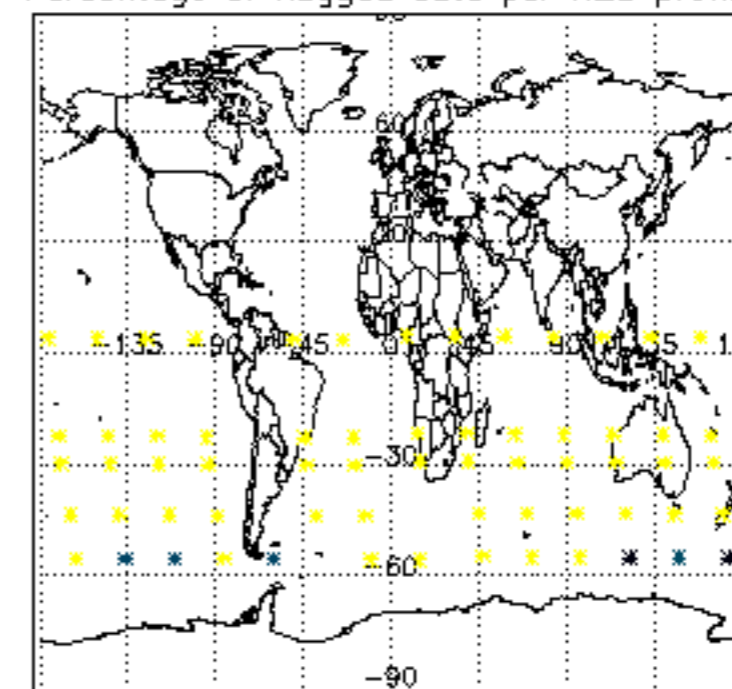
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	30-SEP-2009 00:23:33
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	30-SEP-2009 00:23:33
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	30-SEP-2009 00:23:33



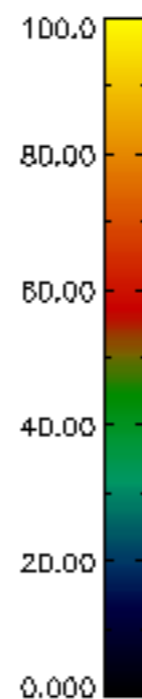
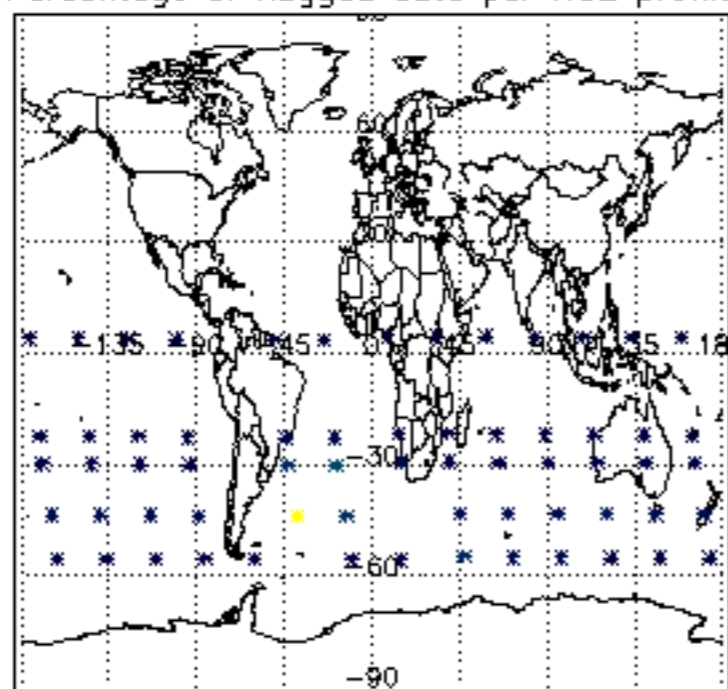
Percentage of flagged data per D3 profile



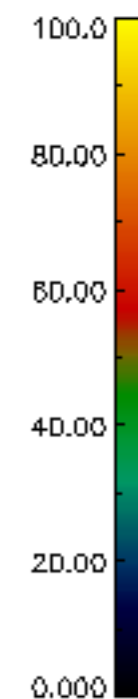
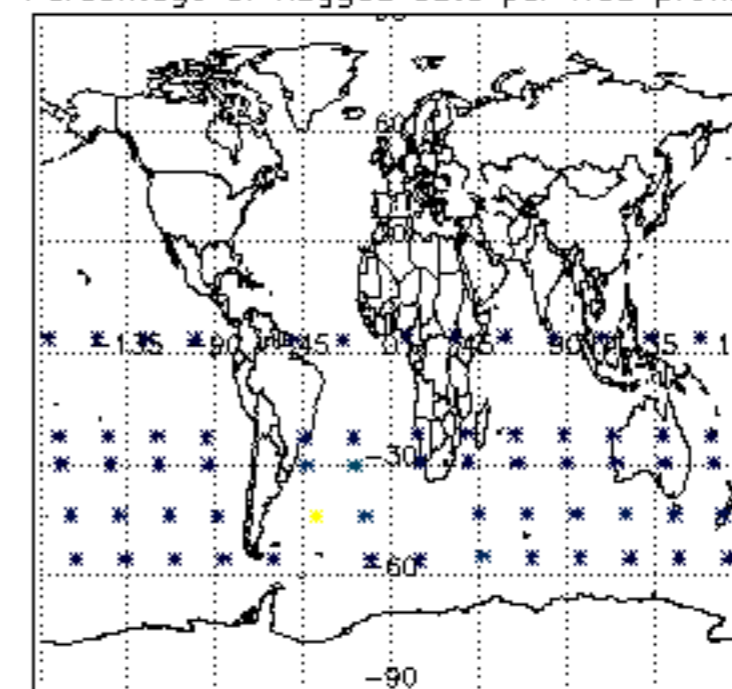
Percentage of flagged data per H2O profile

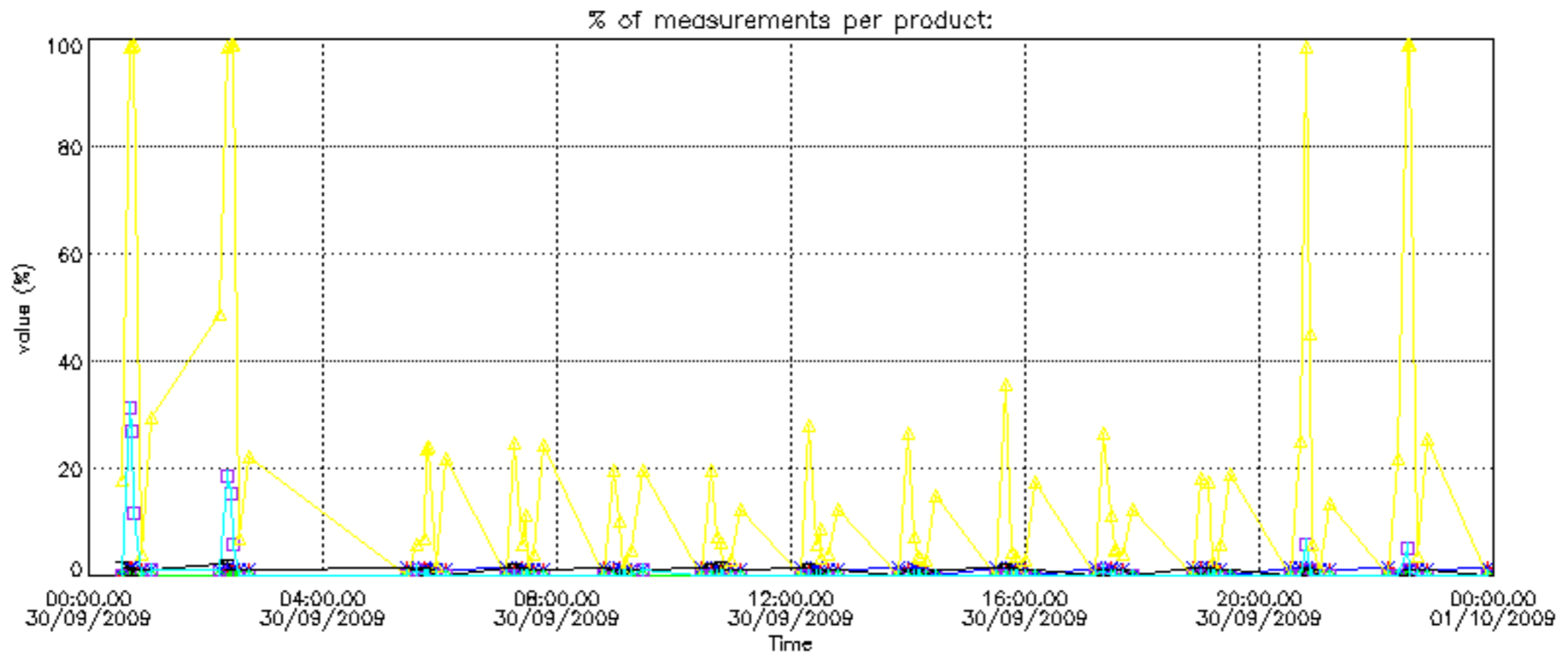


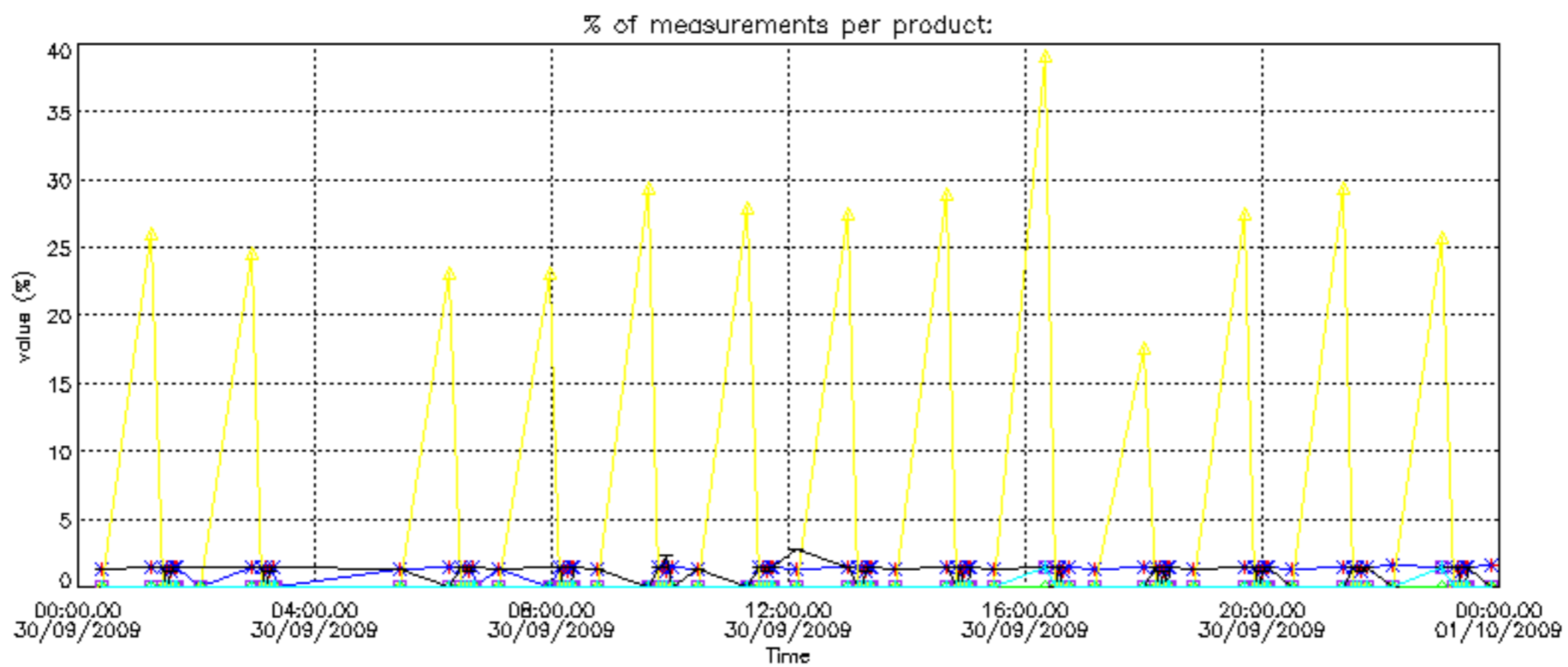
Percentage of flagged data per NO2 profile



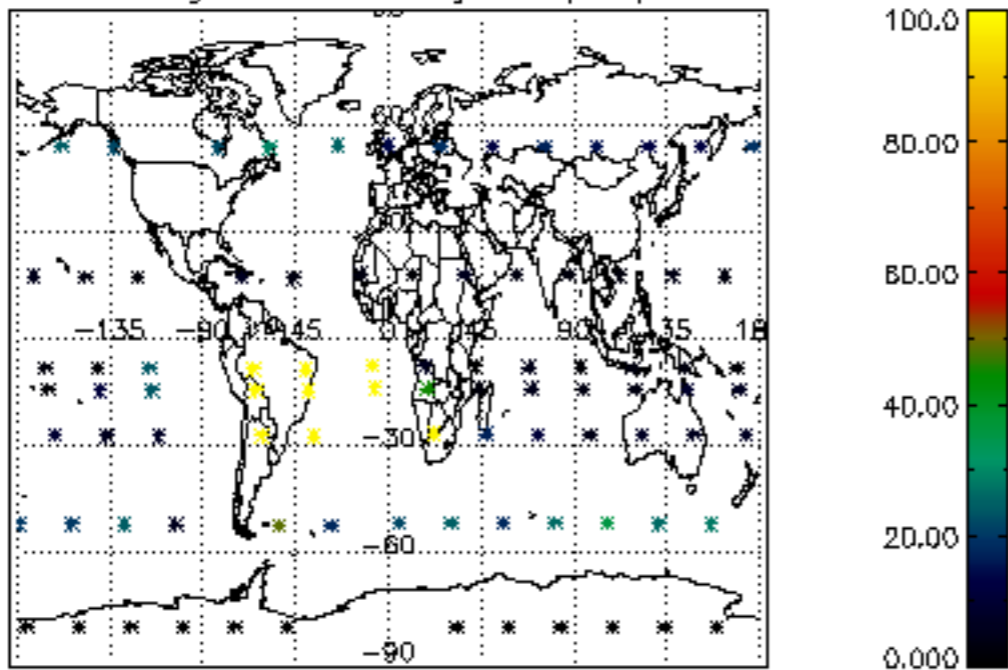
Percentage of flagged data per NO3 profile



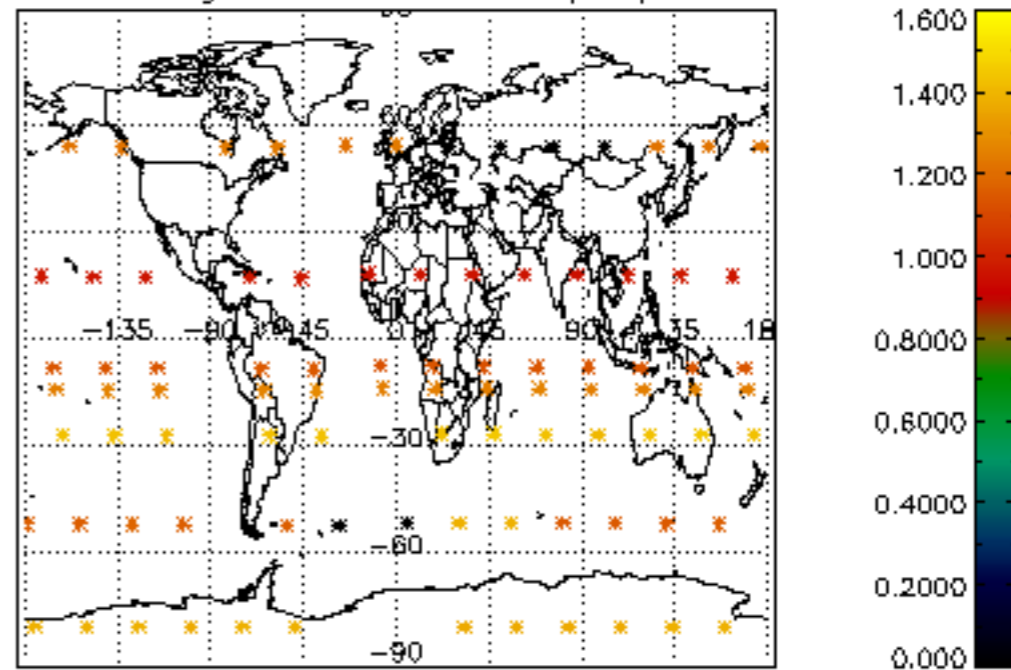




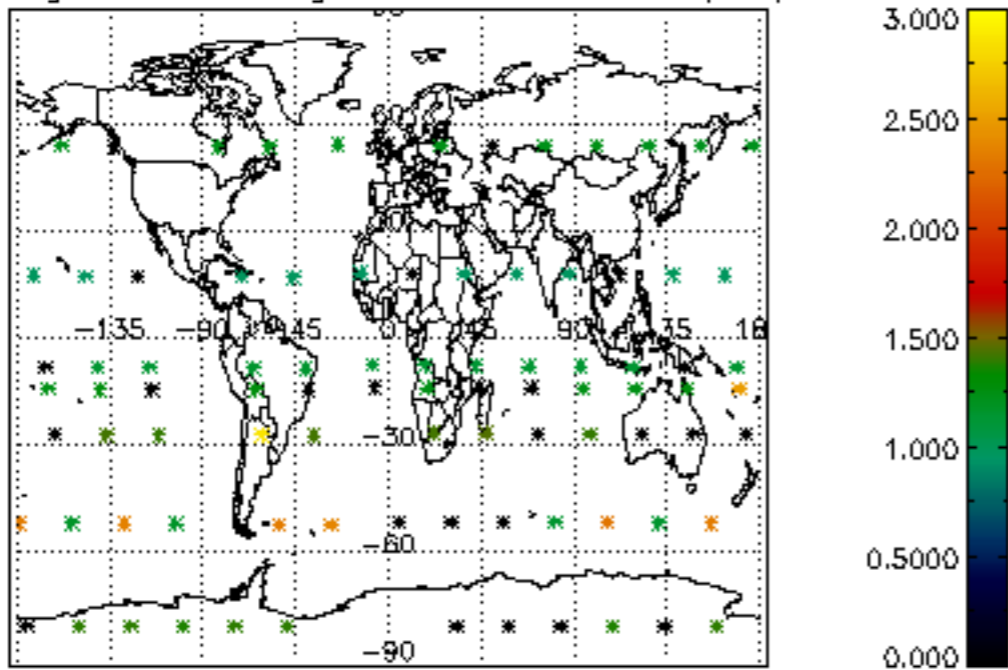
Percentage of cosmic ray hits per profile



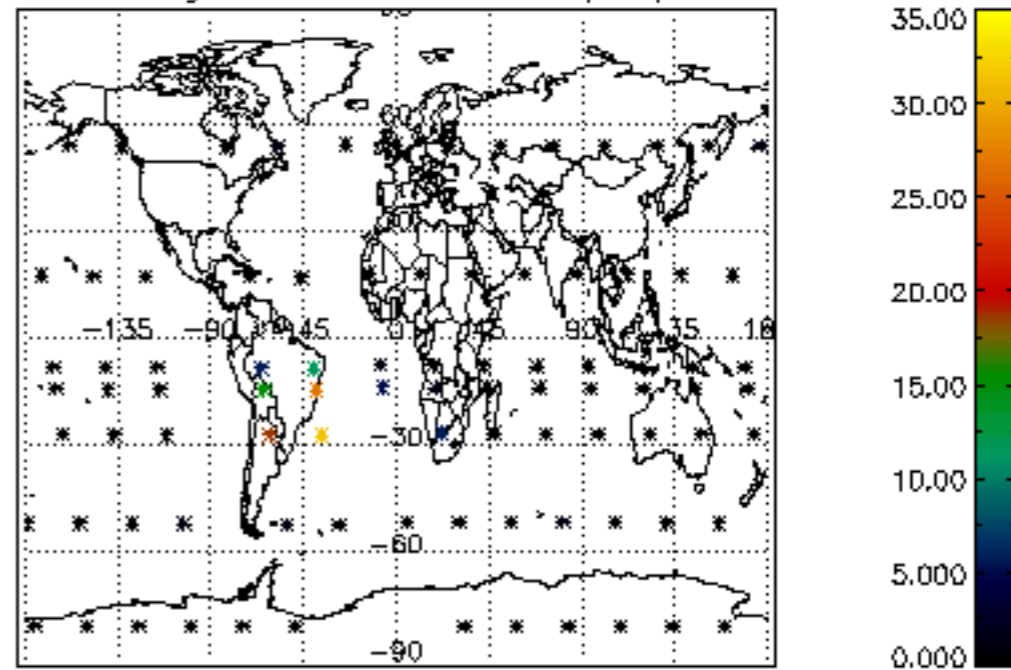
Percentage of datation errors per profile



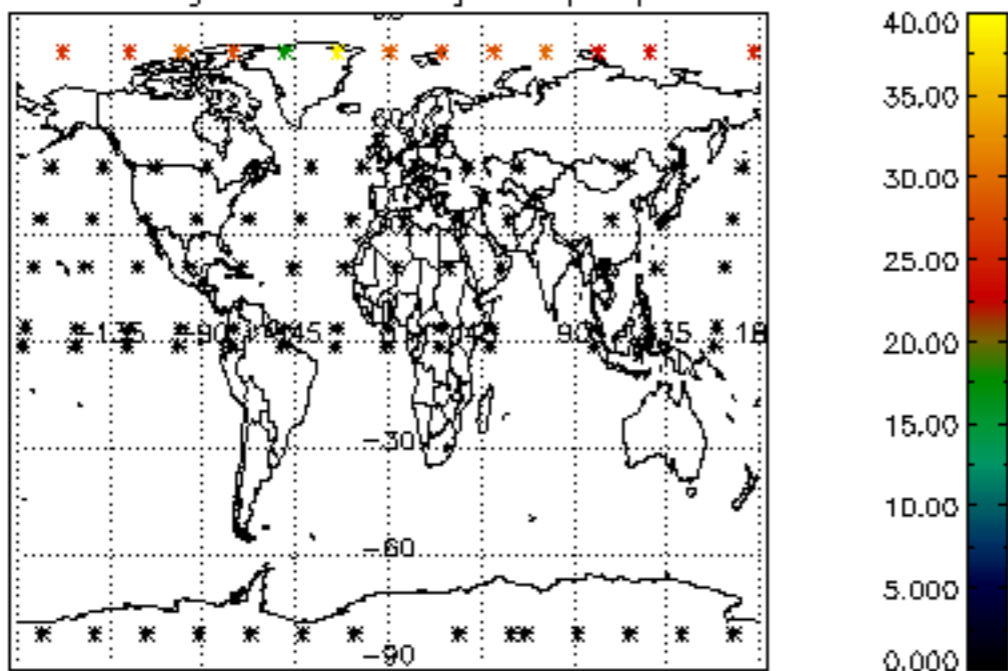
Percentage of star falling outside central band per profile



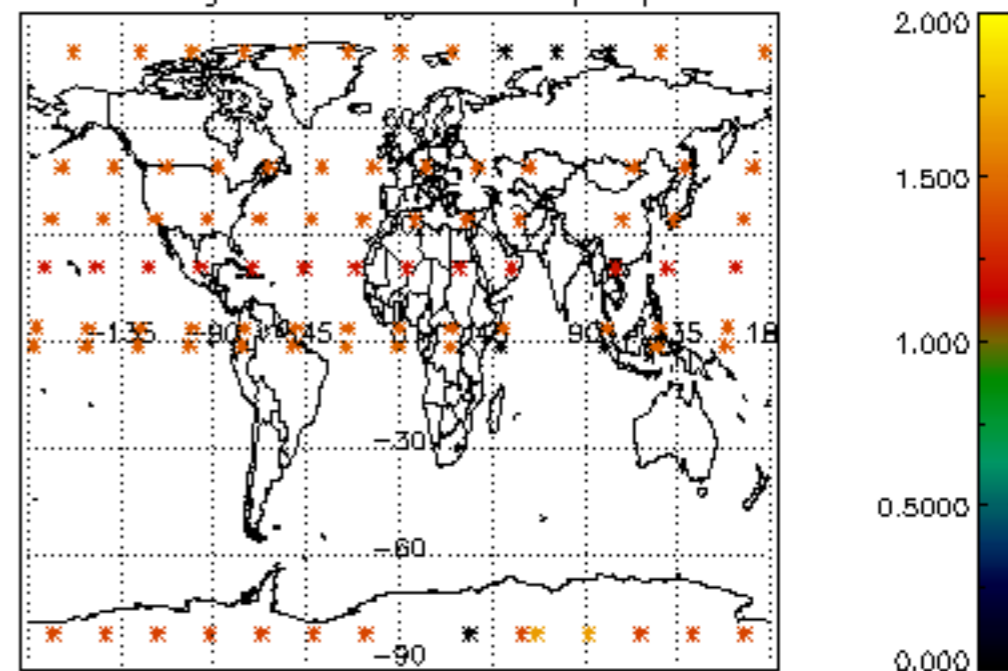
Percentage of saturation errors per profile



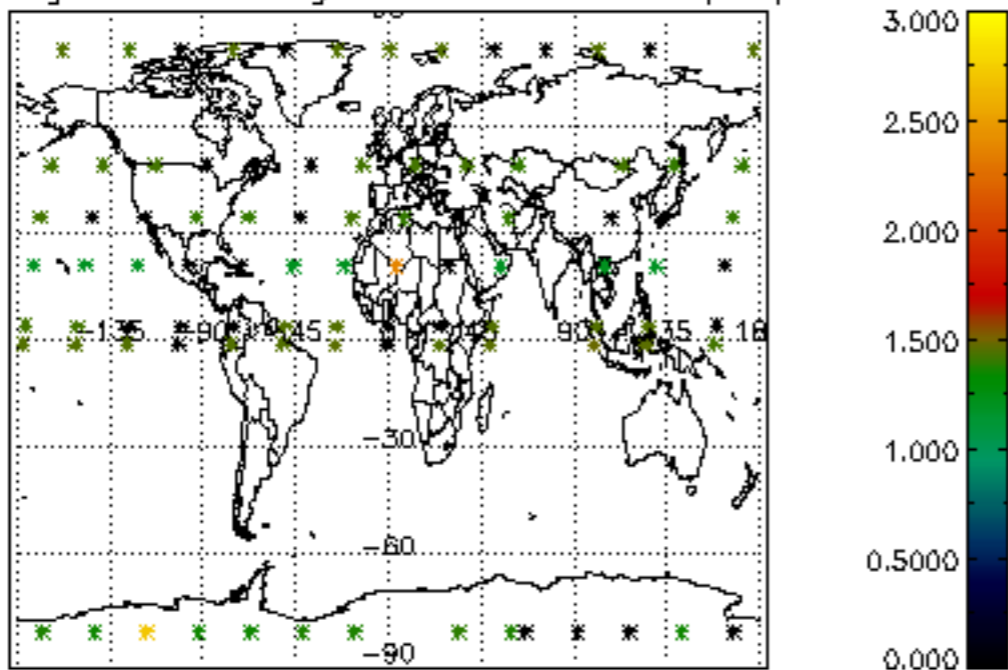
Percentage of cosmic ray hits per profile



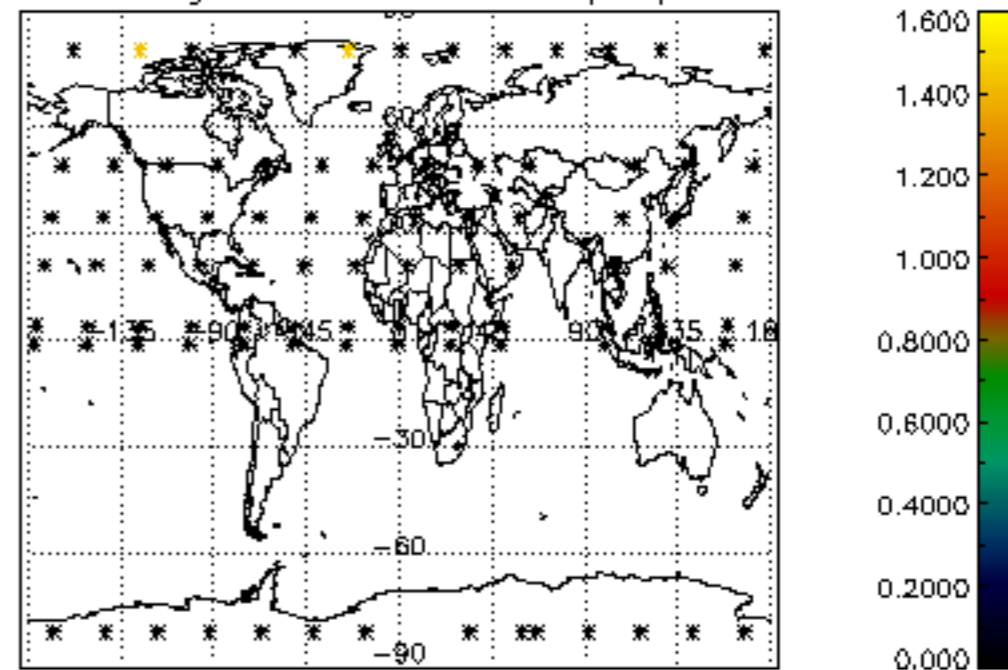
Percentage of datation errors per profile

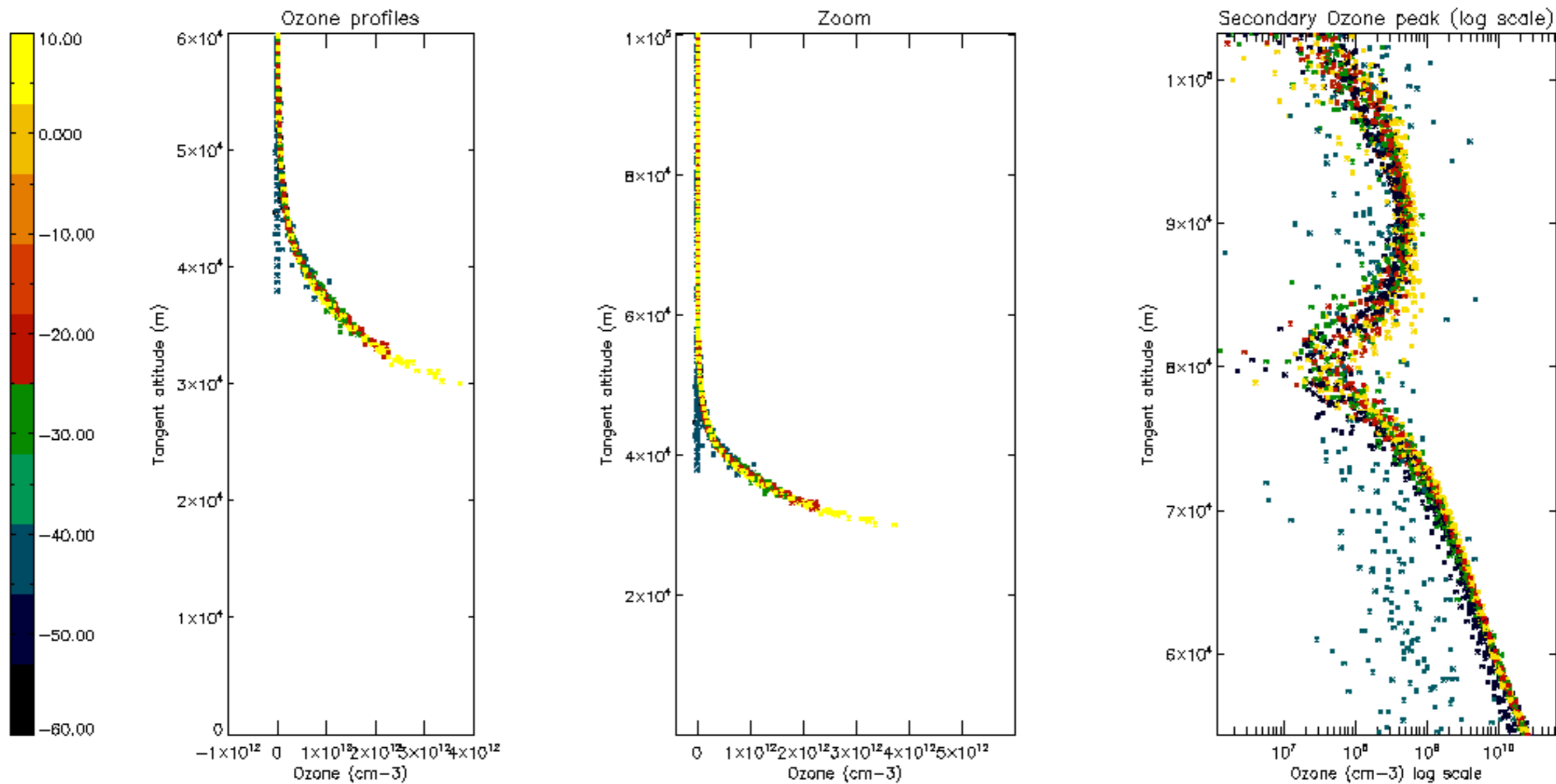


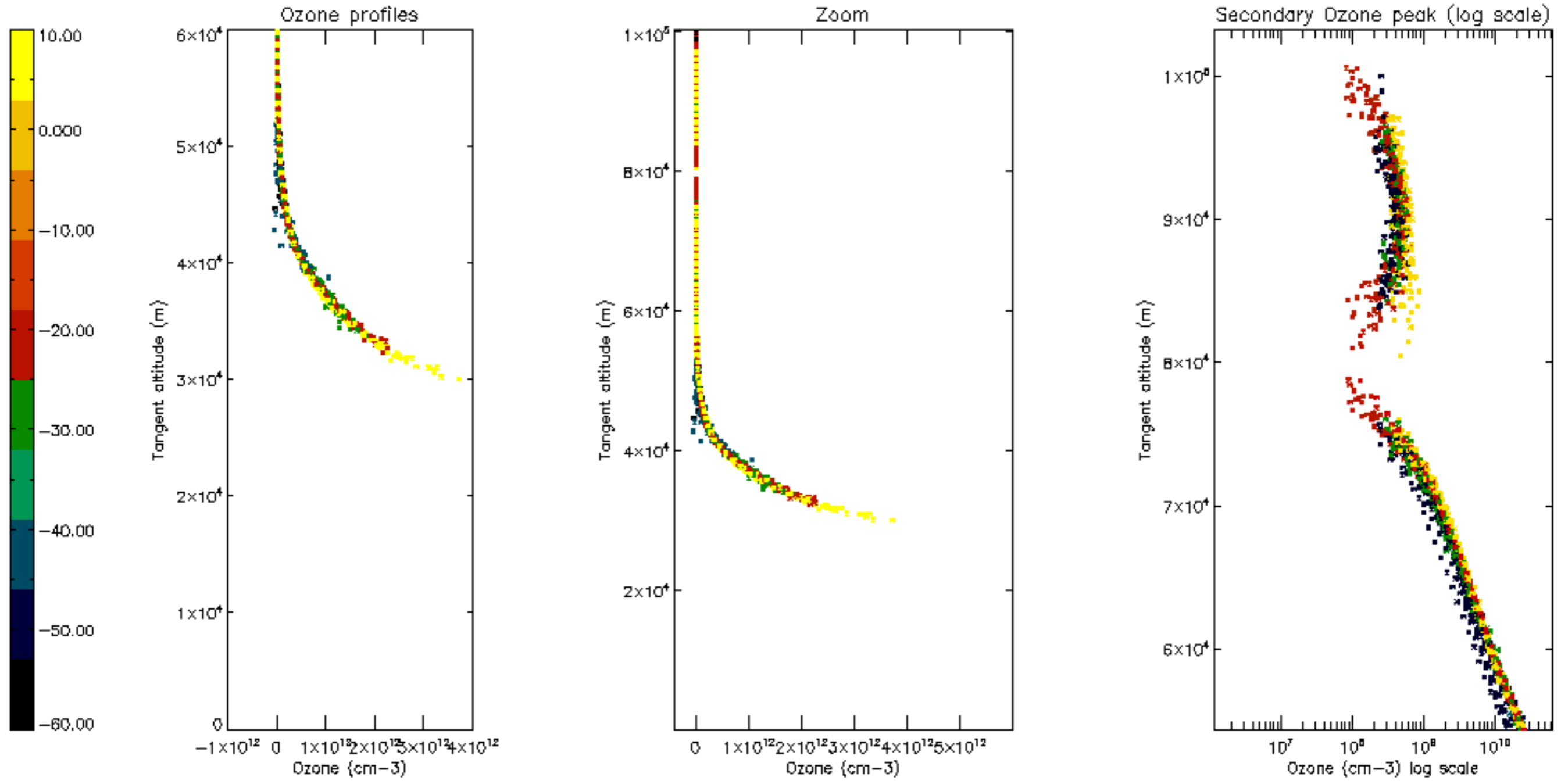
Percentage of star falling outside central band per profile

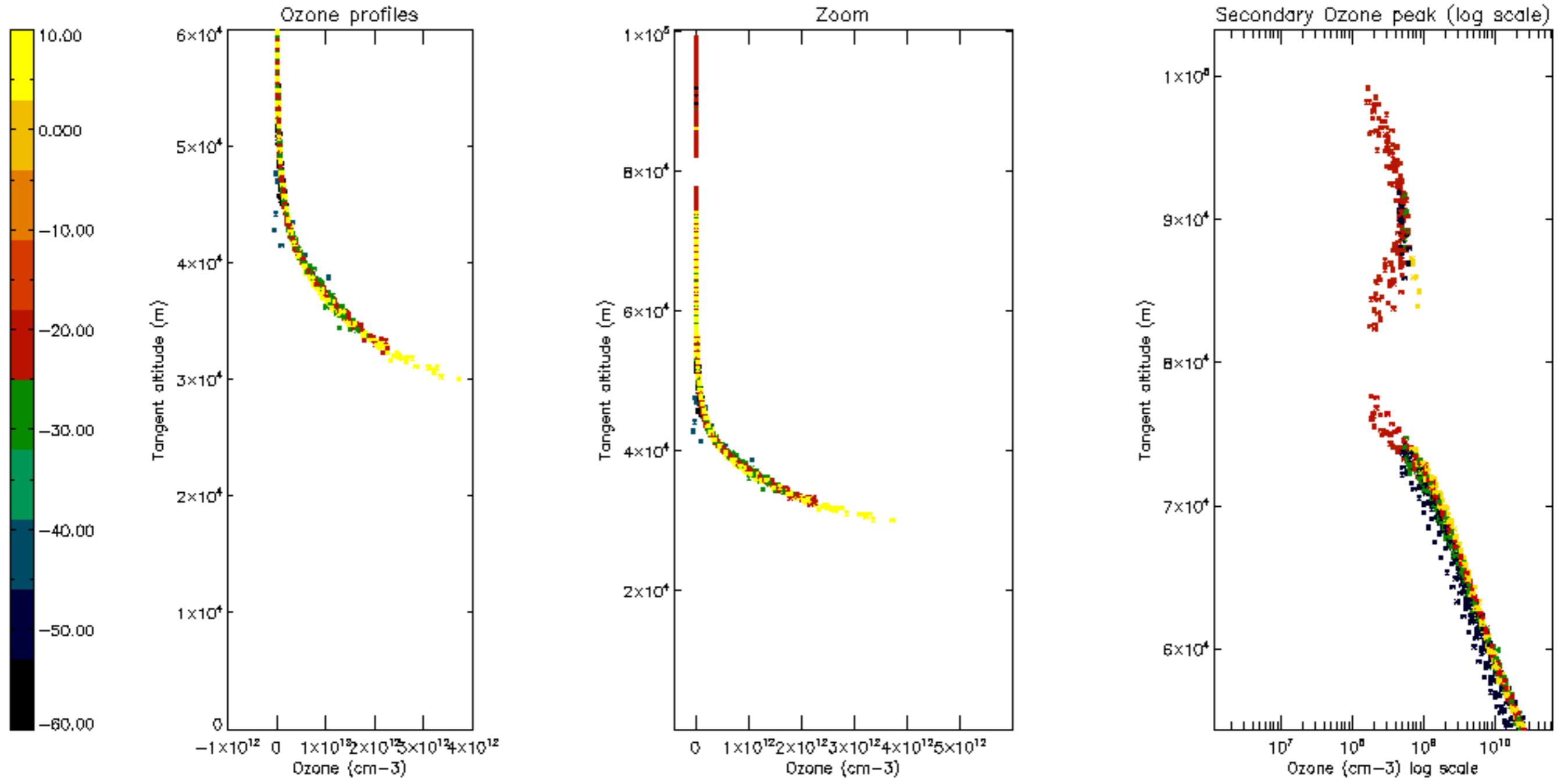


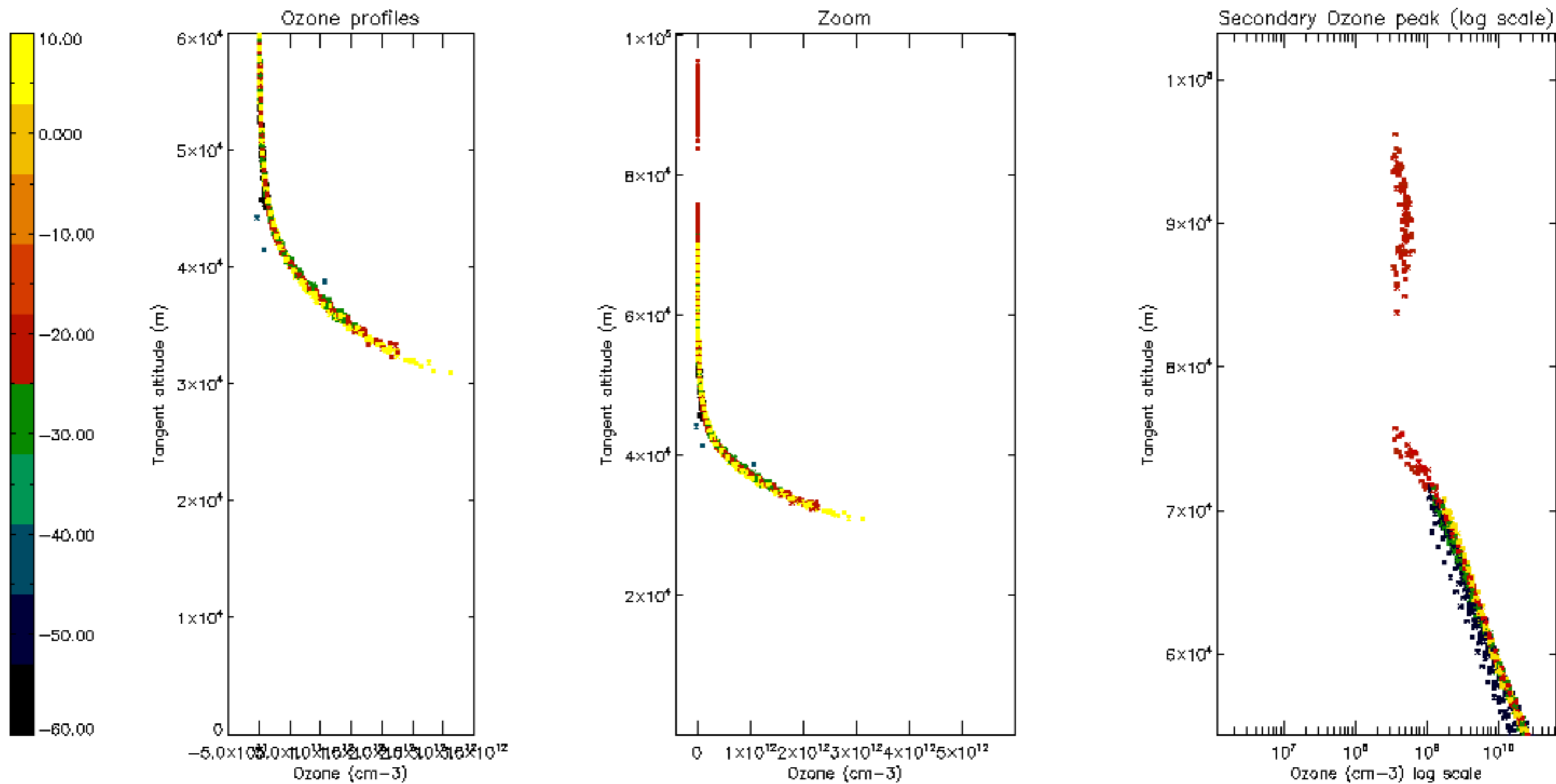
Percentage of saturation errors per profile

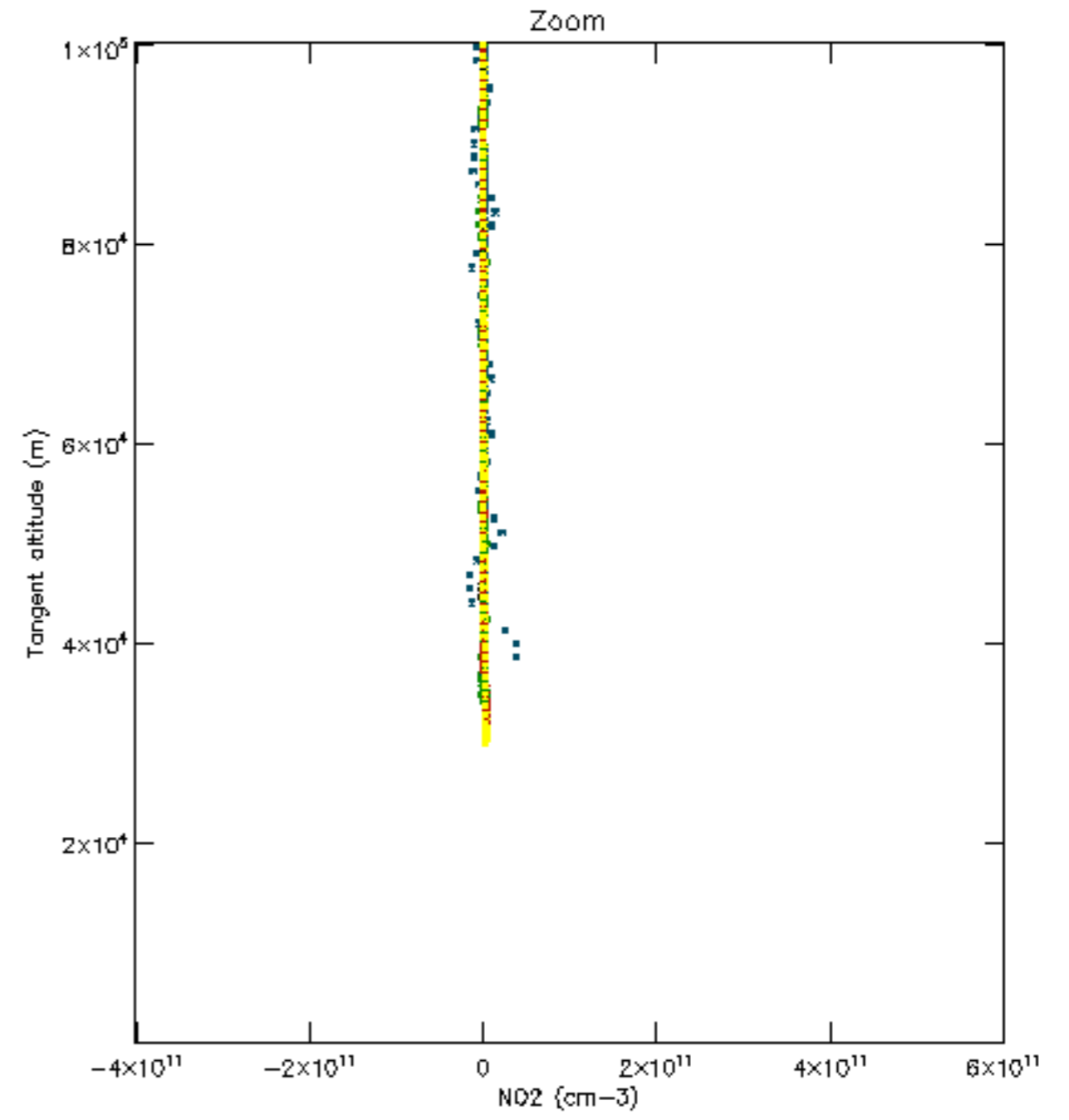
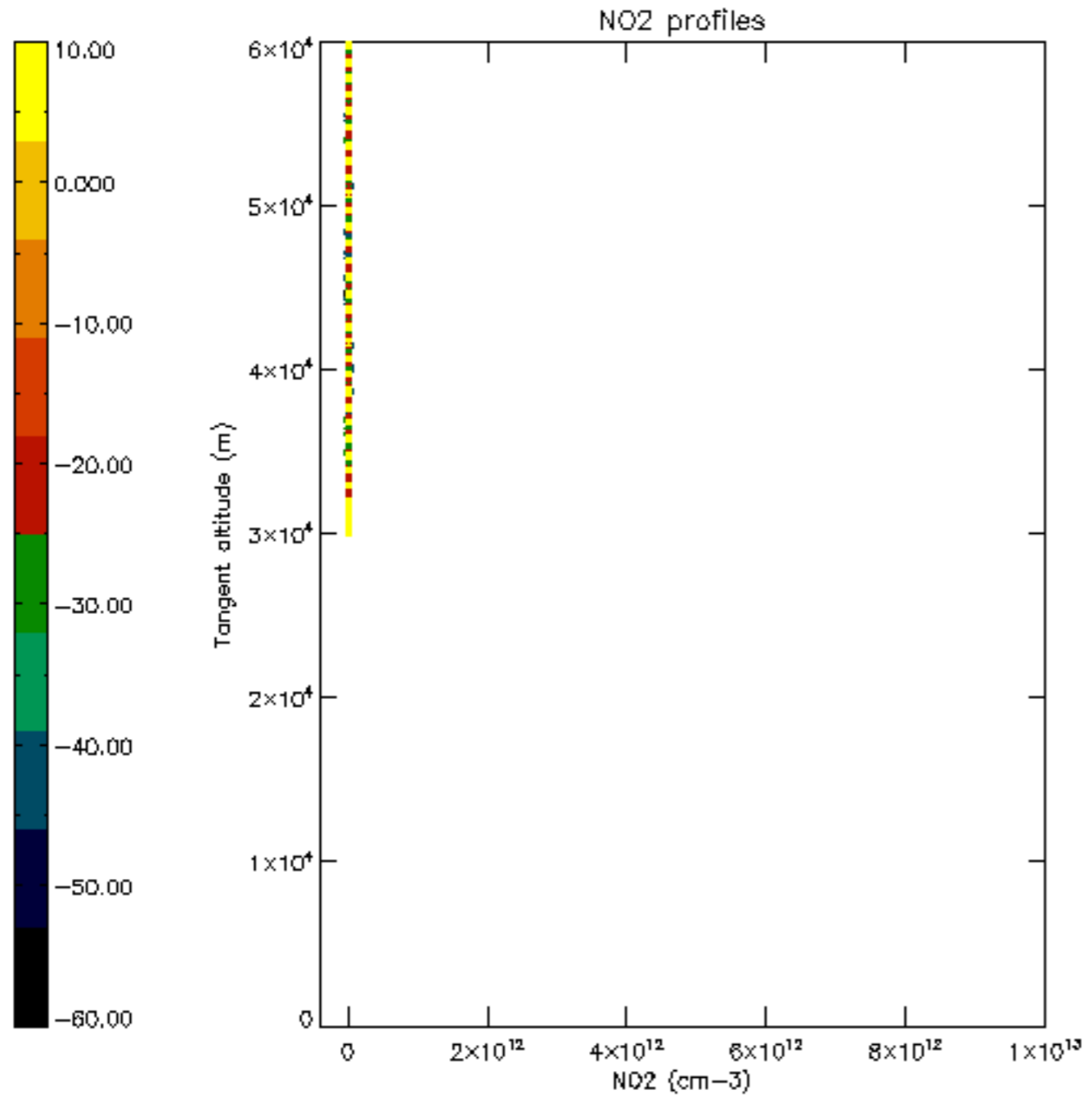


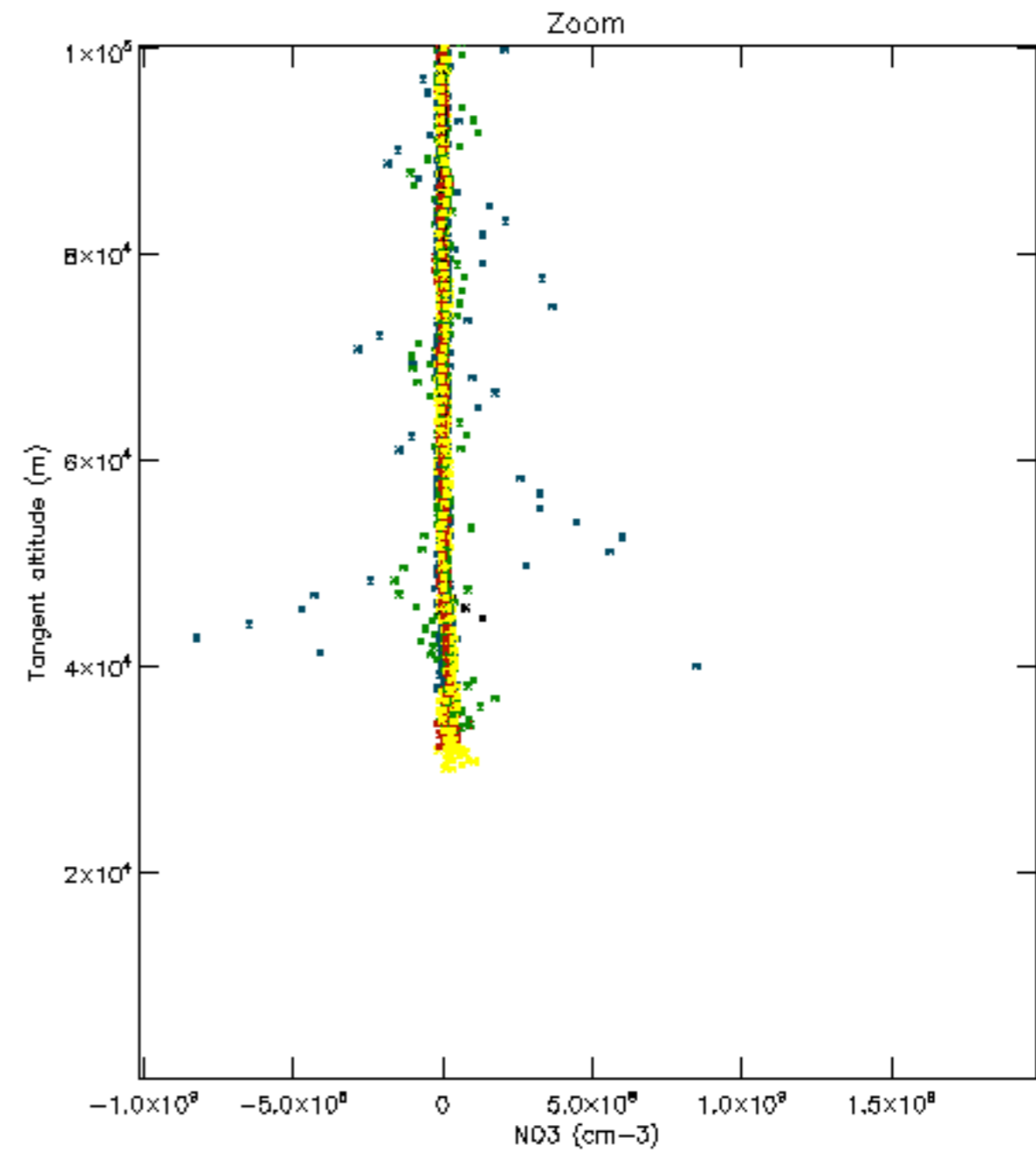
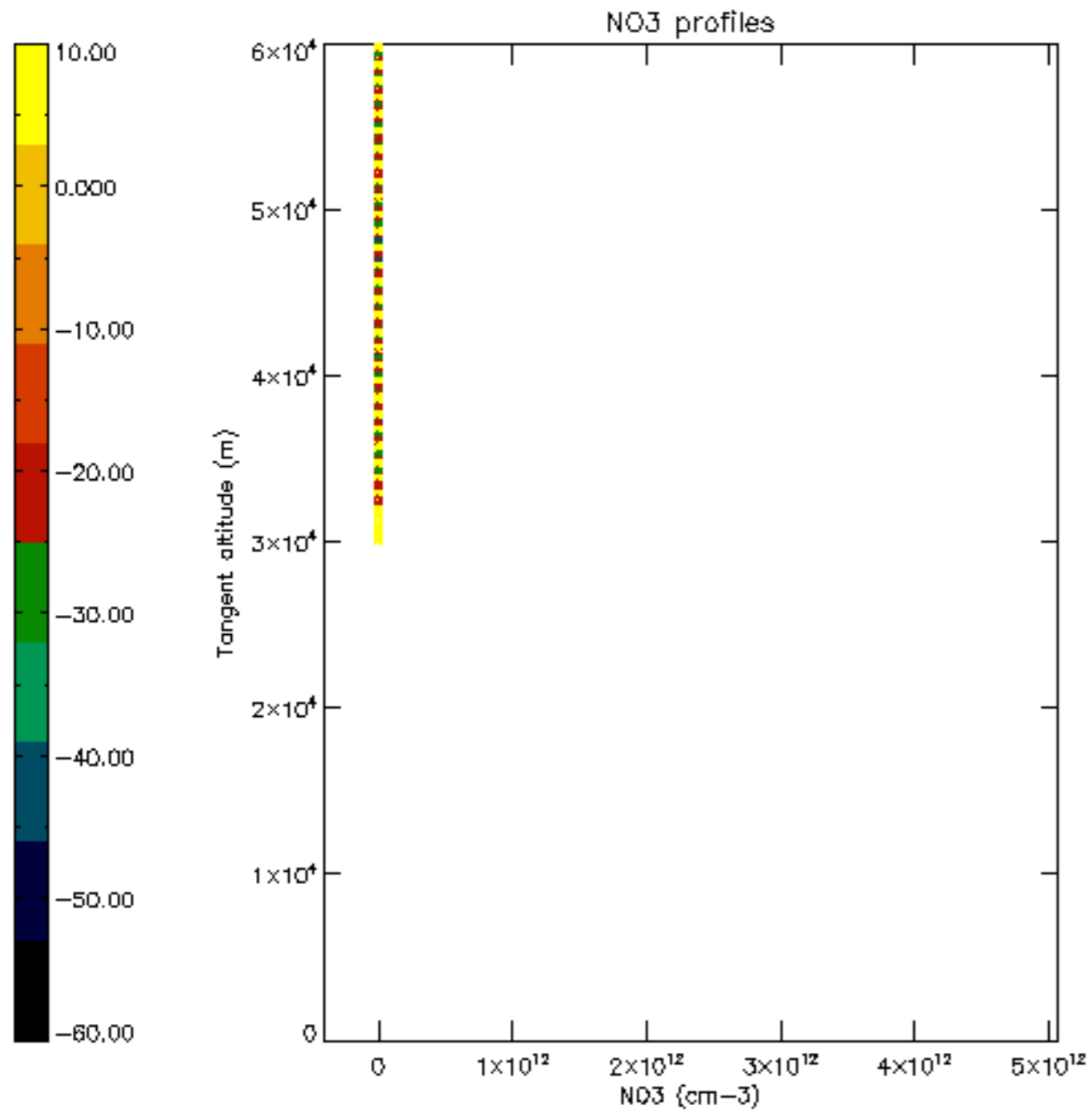


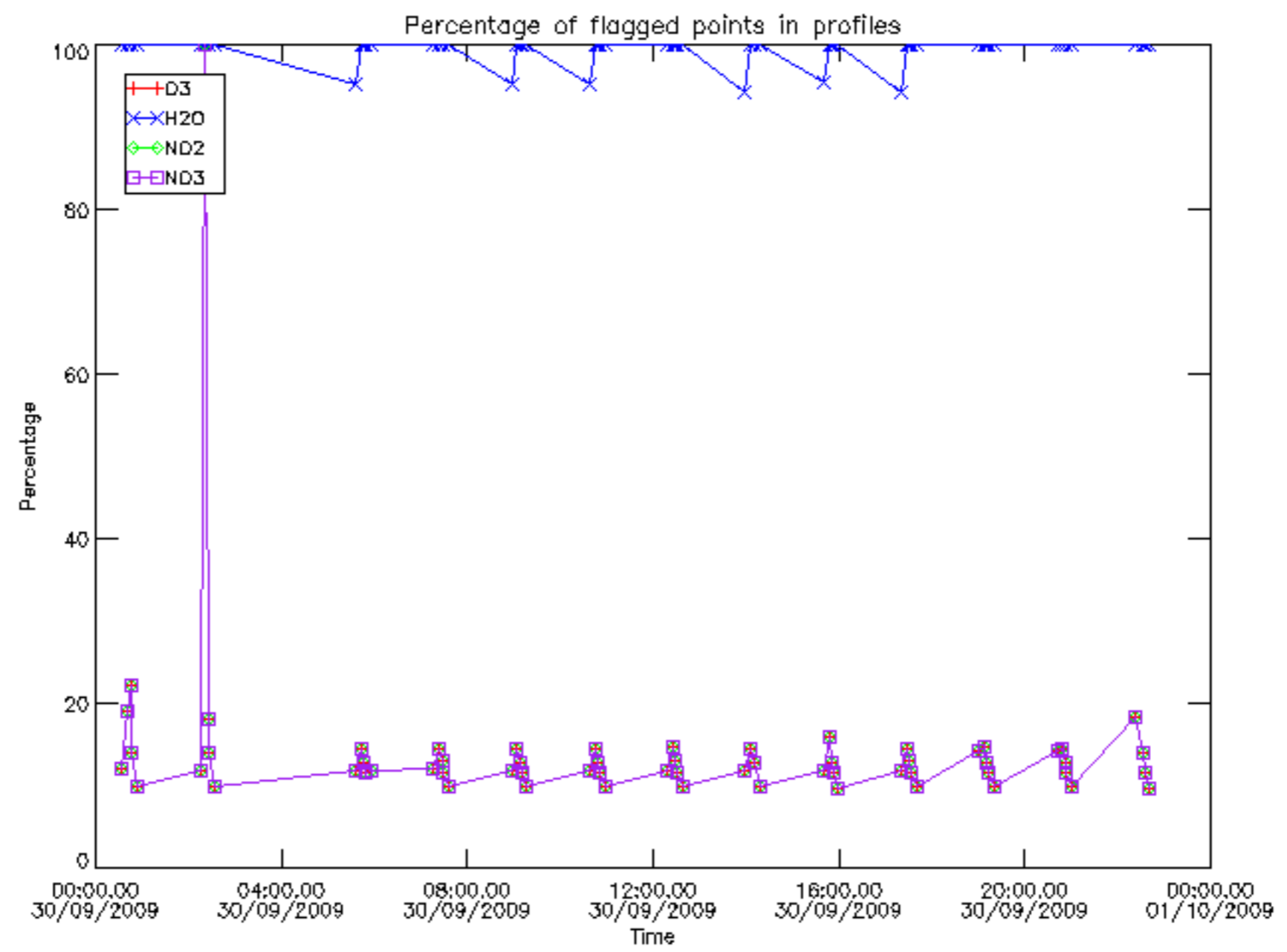




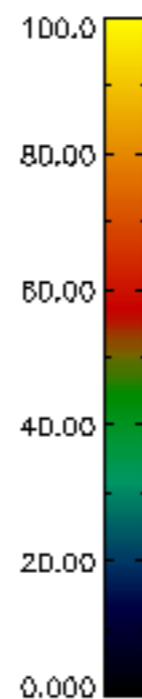
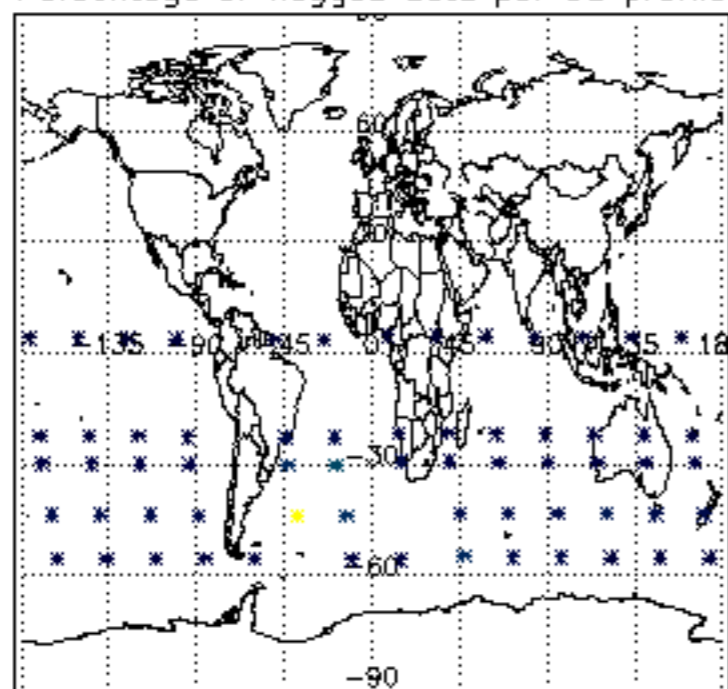




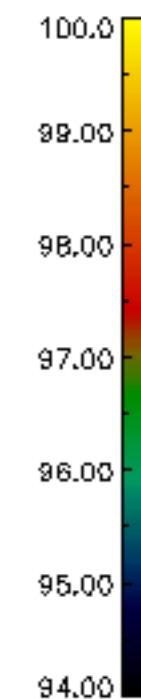
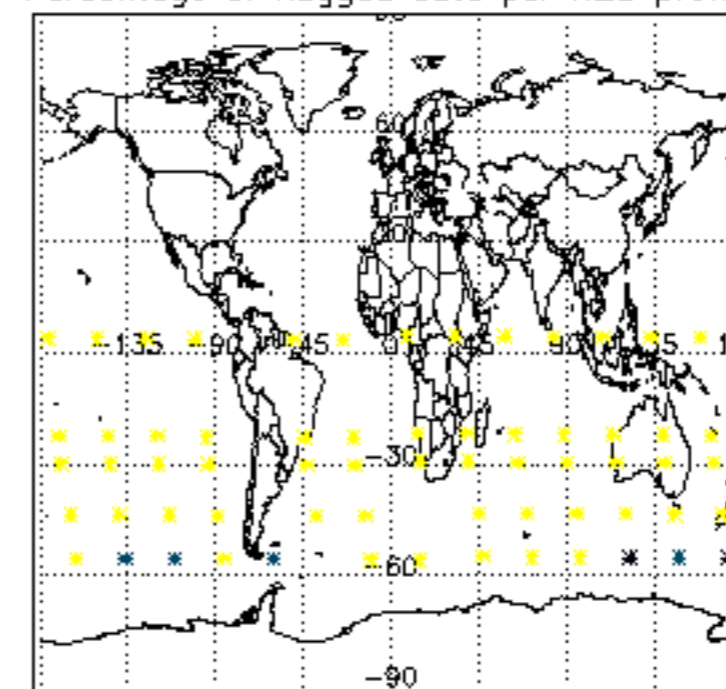




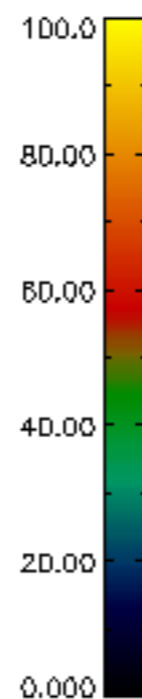
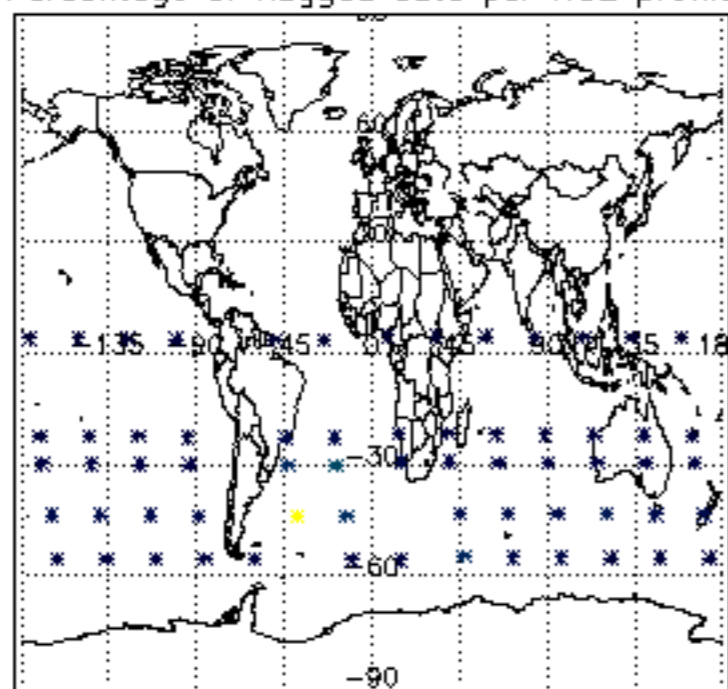
Percentage of flagged data per D3 profile



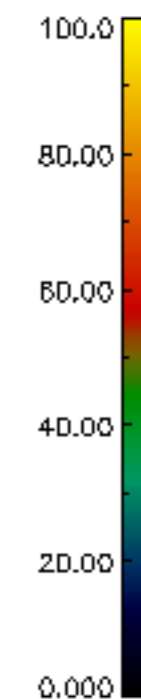
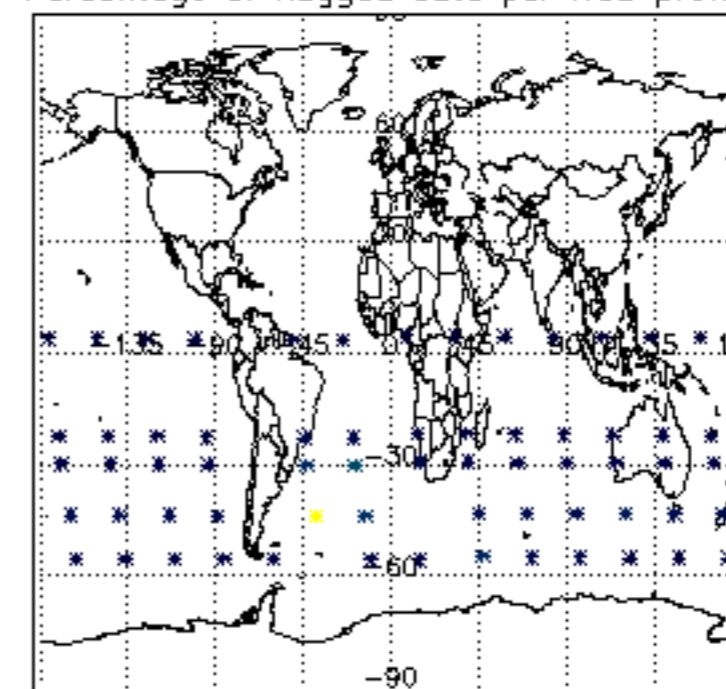
Percentage of flagged data per H2O profile

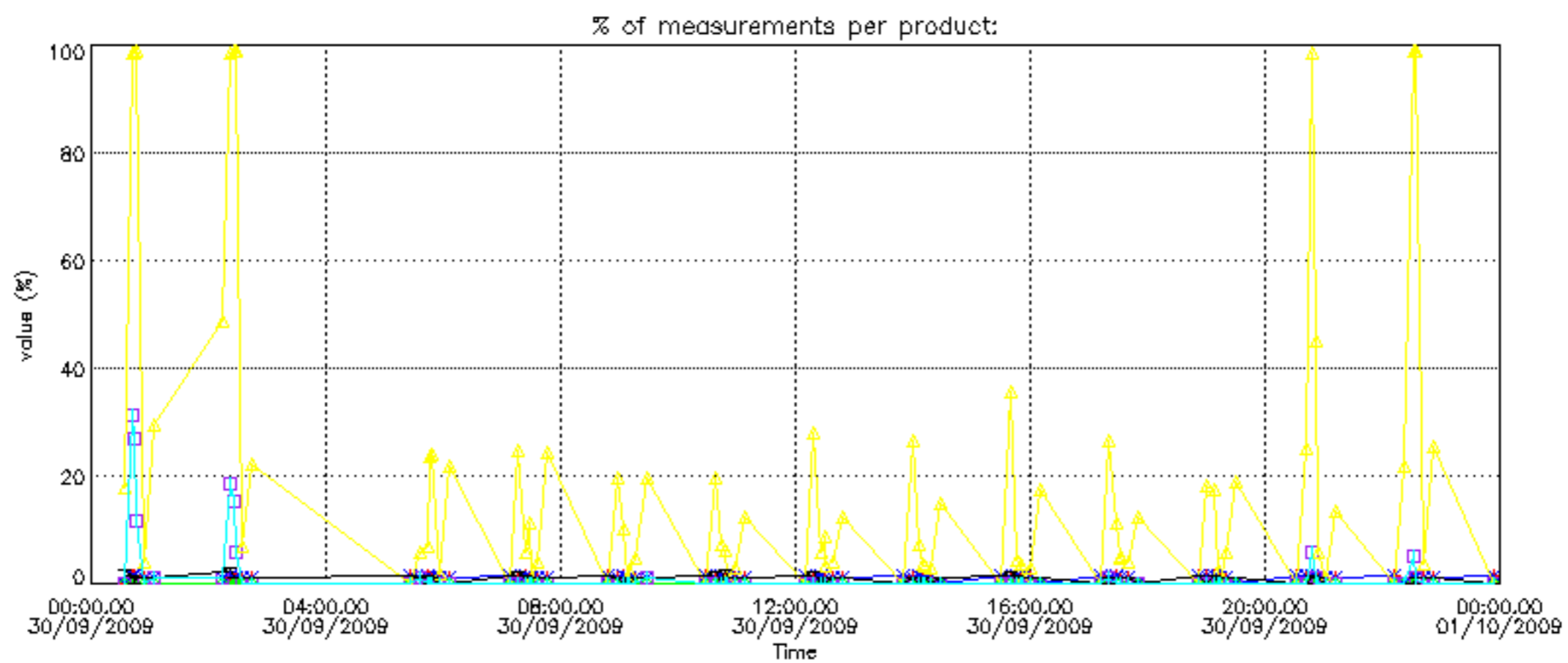
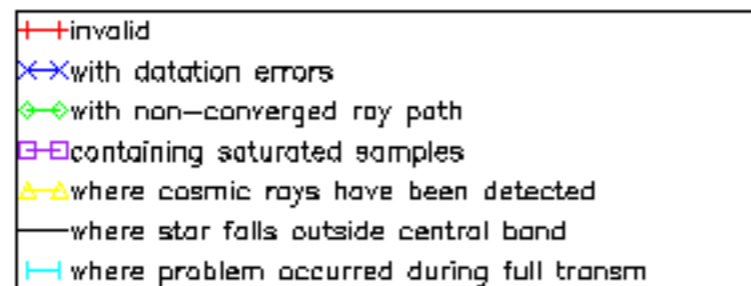


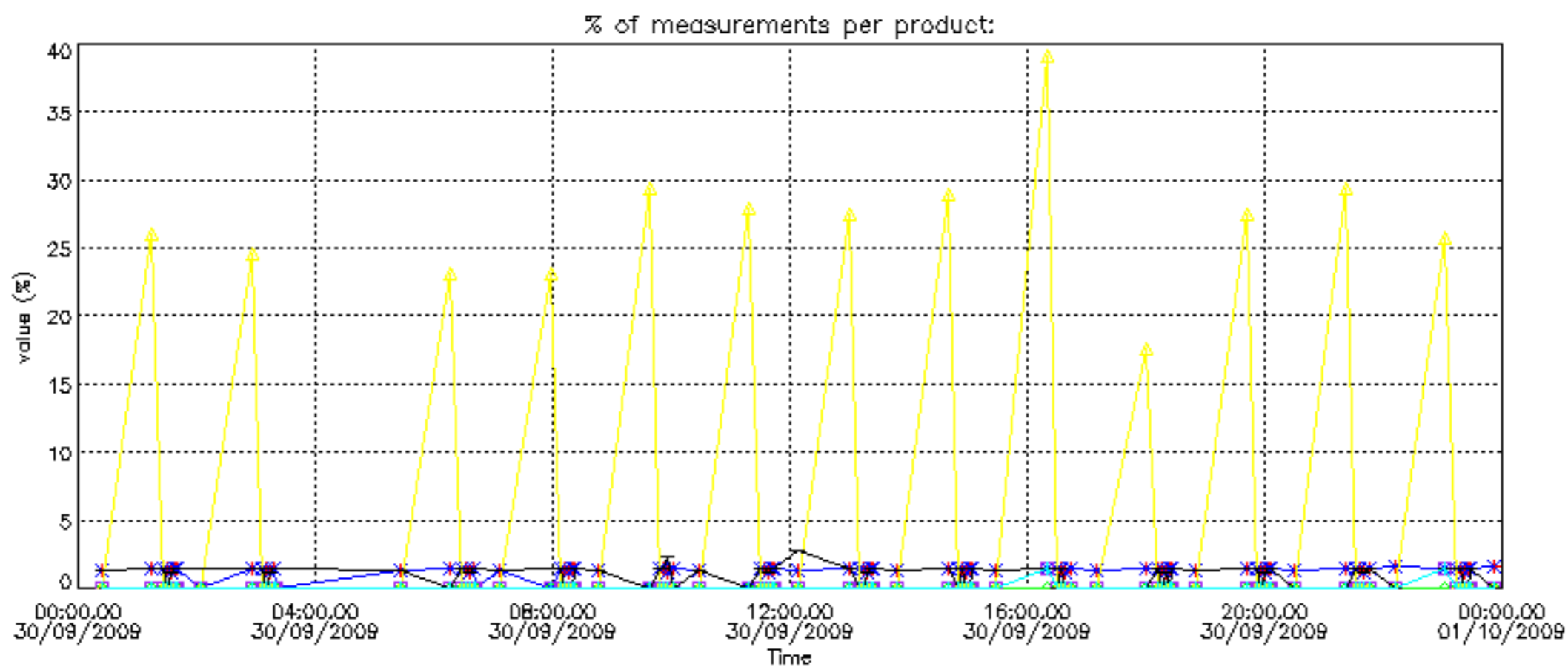
Percentage of flagged data per NO2 profile



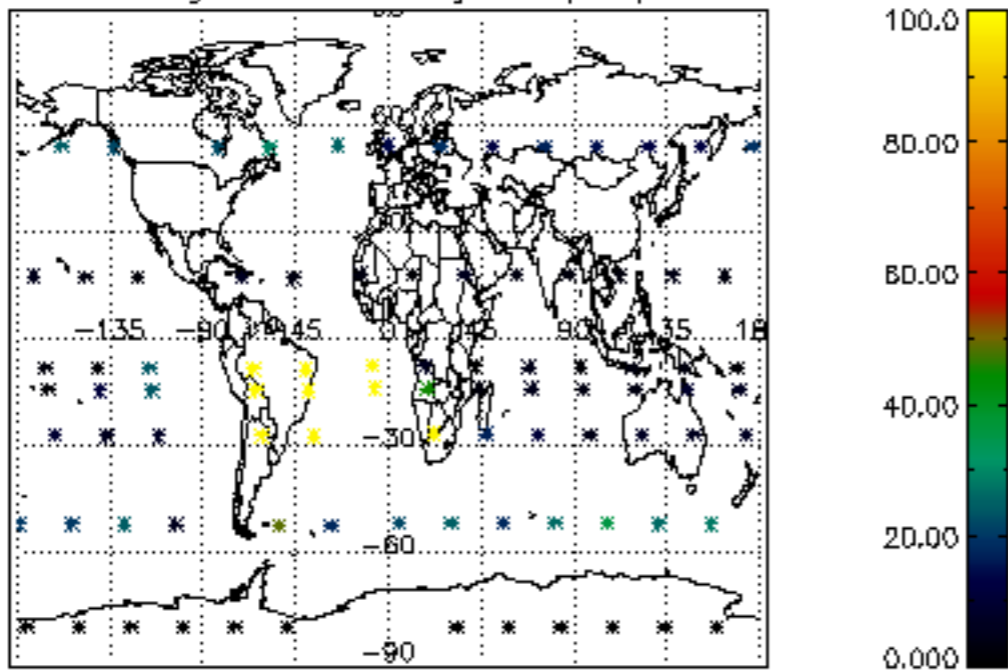
Percentage of flagged data per NO3 profile



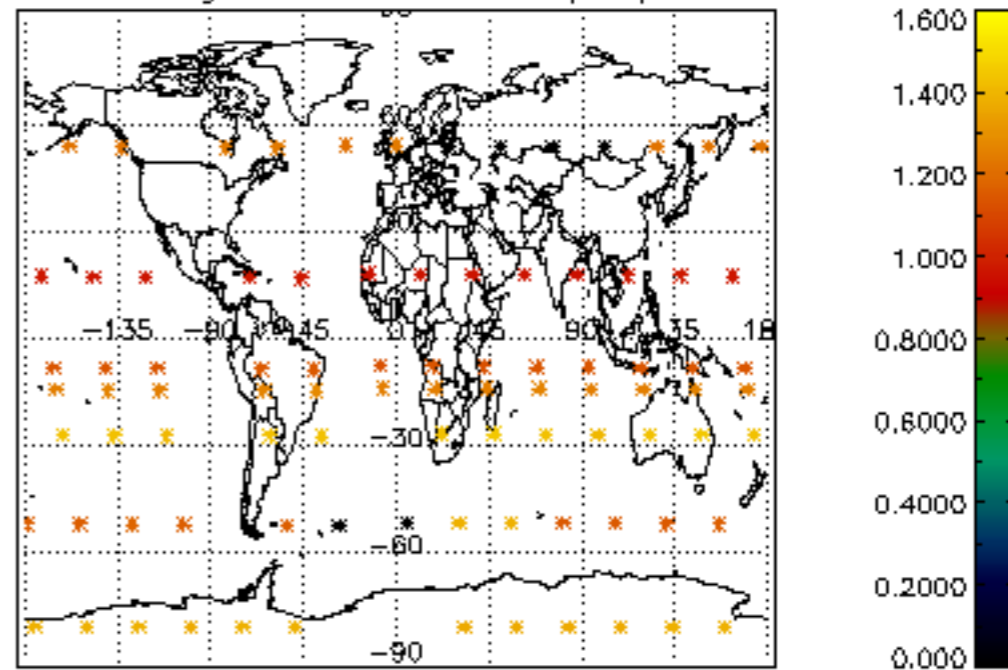




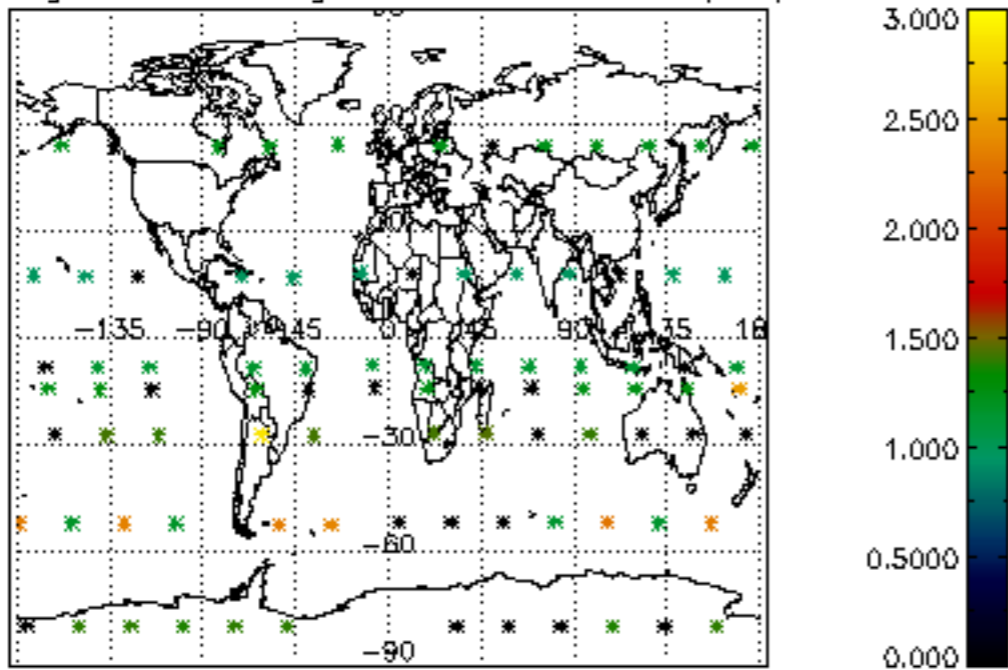
Percentage of cosmic ray hits per profile



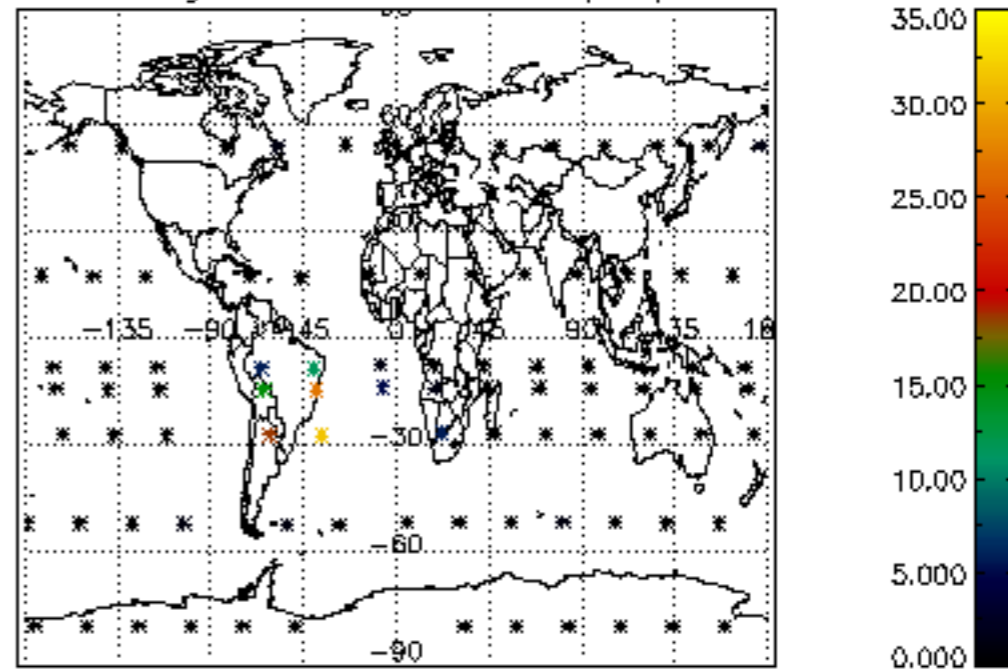
Percentage of datation errors per profile



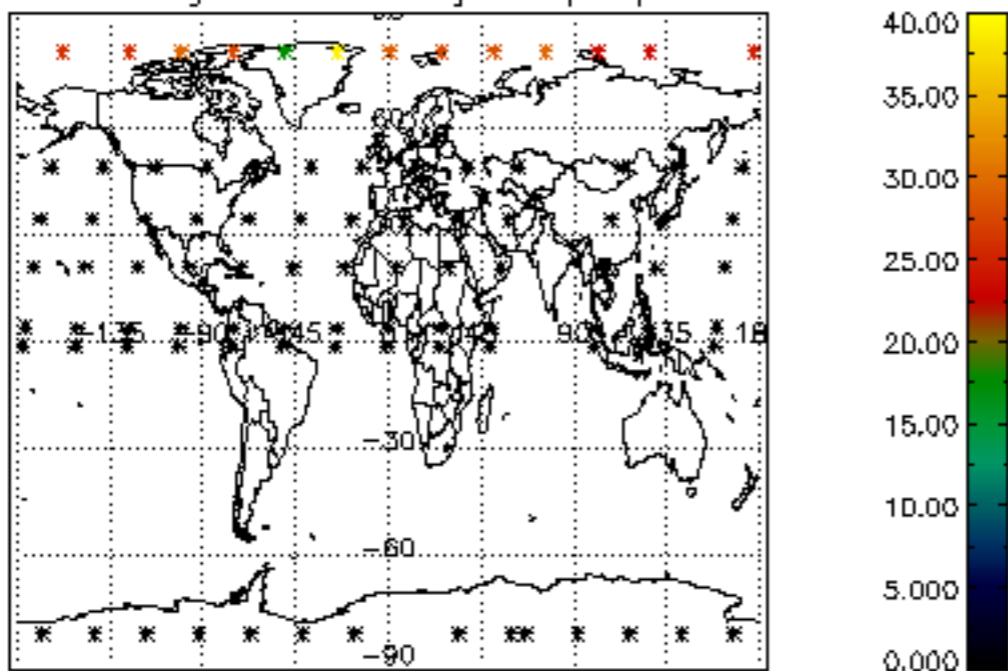
Percentage of star falling outside central band per profile



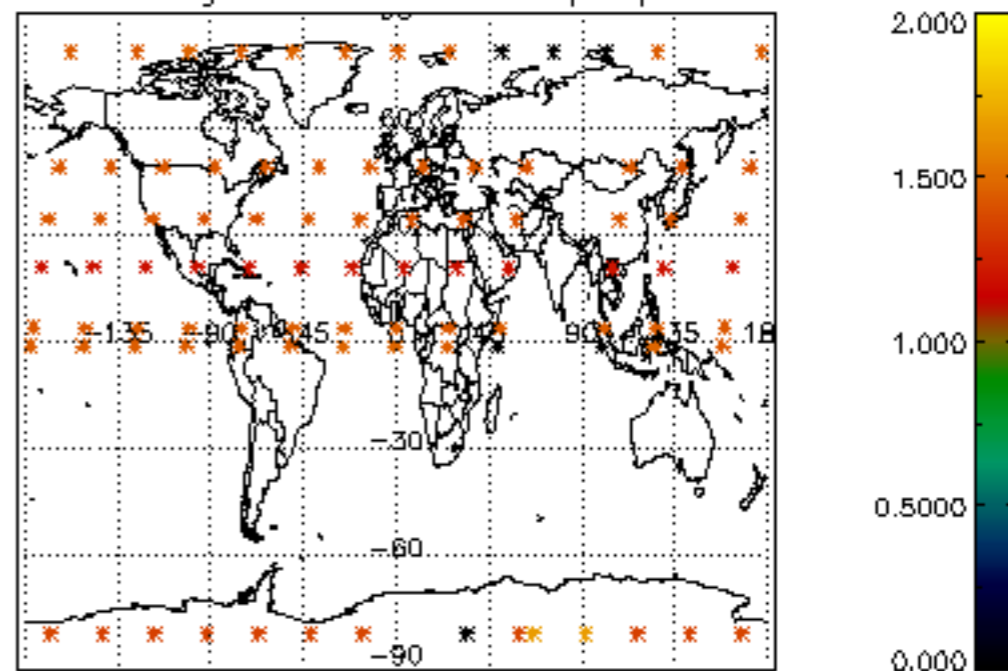
Percentage of saturation errors per profile



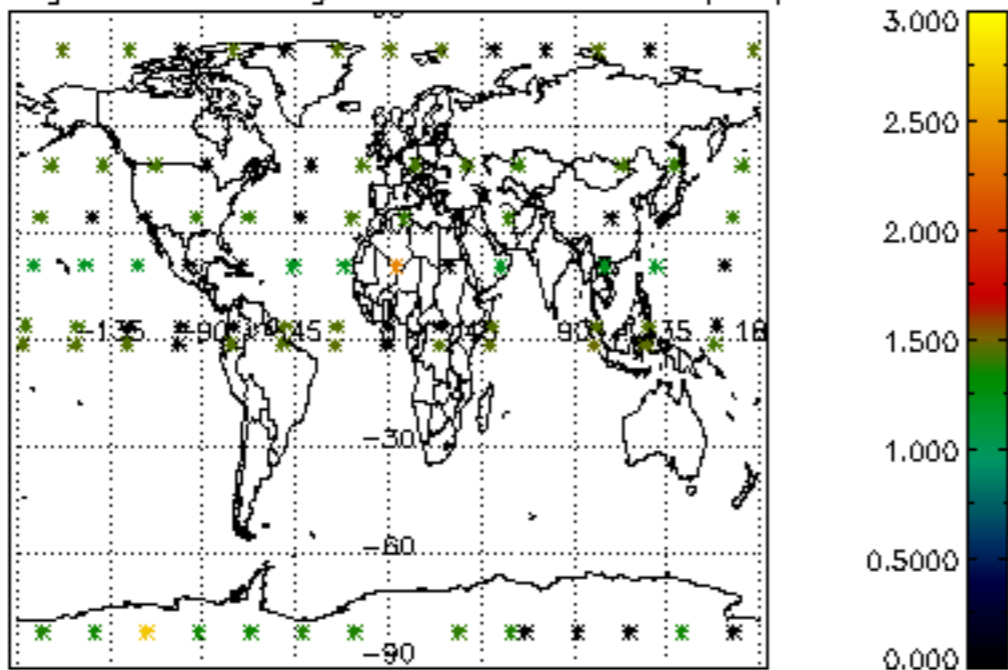
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

