

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 10:23:39
Data source version	GOMOS/6.01
Start time of products	26-06-2009 (26JUN2009 00:00:00)
Stop time of products	27-06-2009 (27JUN2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	62
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

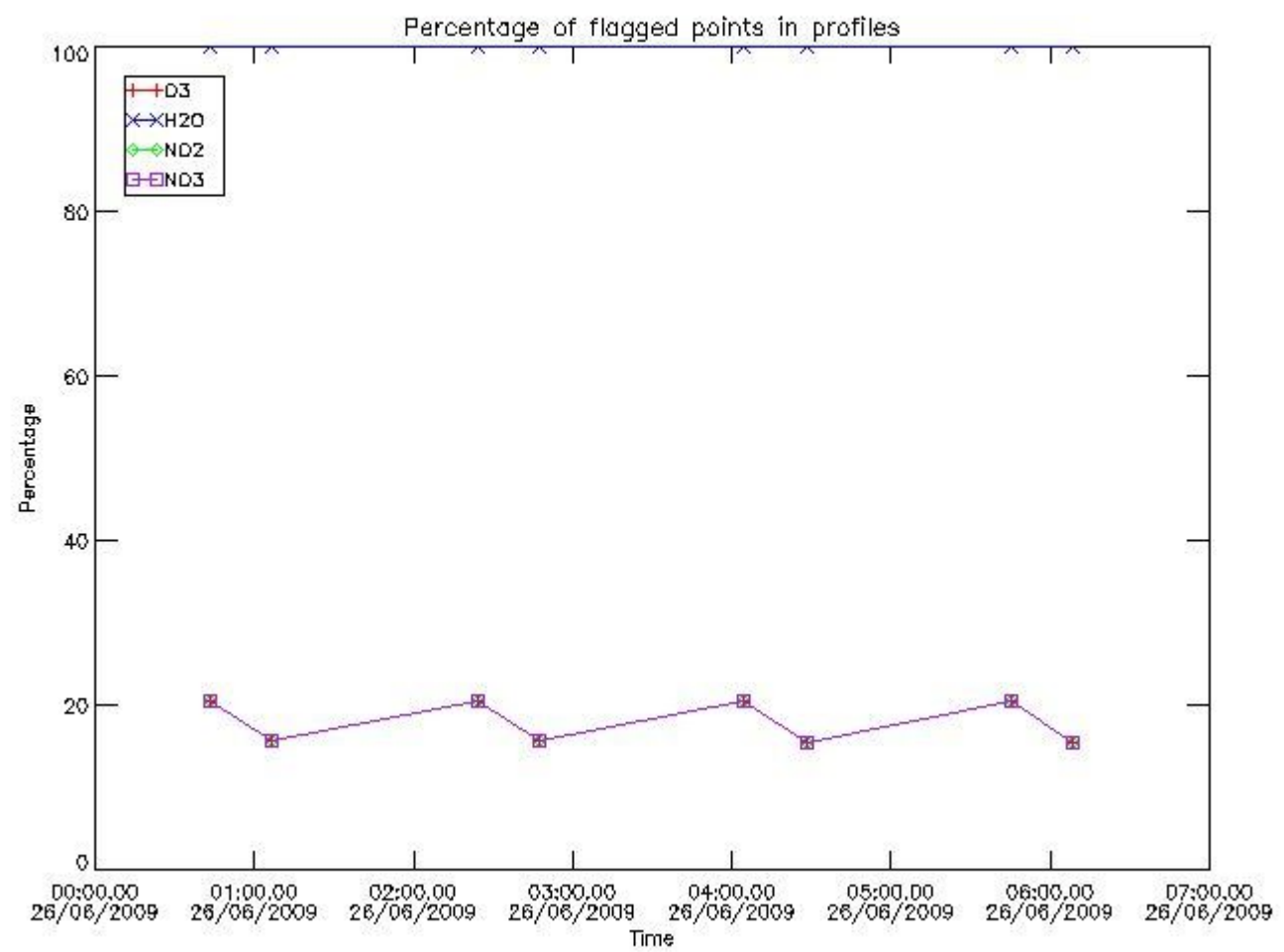
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20090626_000111_000000282080_00145_38275_5893.N1	26-JUN-2009 00:01:11	Bright	27.500	59	55Alp Oph	2.0800	8900.0	55	38275	No
2	GOM_NL__2PRFIN20090626_001035_000000332080_00145_38275_5894.N1	26-JUN-2009 00:10:35	Bright	32.500	5	3Alp Lyr	0.033000	11000.	65	38275	No
3	GOM_NL__2PRFIN20090626_001246_000000282080_00145_38275_5895.N1	26-JUN-2009 00:12:46	Bright	27.500	130	23Bet Dra	2.7990	5800.0	55	38275	No
4	GOM_NL__2PRFIN20090626_002216_000000322080_00145_38275_5896.N1	26-JUN-2009 00:22:16	Twilight	31.500	89	5Alp Cep	2.4510	8000.0	63	38275	No
5	GOM_NL__2PRFIN20090626_002924_000000282080_00145_38275_5897.N1	26-JUN-2009 00:29:24	Twilight	28.000	74	11Bet Cas	2.2680	6600.0	56	38275	No
6	GOM_NL__2PRFIN20090626_003059_000000272080_00145_38275_5898.N1	26-JUN-2009 00:30:59	Twilight	27.000	68	18Alp Cas	2.2250	4500.0	54	38275	No
7	GOM_NL__2PRFIN20090626_003328_000000222080_00145_38275_5899.N1	26-JUN-2009 00:33:28	Twilight	21.500	160	23Gam Per	2.9300	4700.0	43	38275	No
8	GOM_NL__2PRFIN20090626_003654_000000242080_00145_38275_5900.N1	26-JUN-2009 00:36:54	Twilight	23.500	73	57Gam1And	2.2600	13100.	47	38275	No
9	GOM_NL__2PRFIN20090626_003923_000000242080_00145_38275_5901.N1	26-JUN-2009 00:39:23	Twilight	23.500	173	4Bet Tri	3.0040	8900.0	47	38275	No
10	GOM_NL__2PRFIN20090626_004321_000000252080_00145_38275_5902.N1	26-JUN-2009 00:43:21	Dark	24.500	50	13Alp Ari	2.0070	4250.0	49	38275	No
11	GOM_NL__2PRFIN20090626_010647_000000332080_00146_38276_5896.N1	26-JUN-2009 01:06:47	Dark	32.500	84	Alp Phe	2.3970	4500.0	65	38276	No
12	GOM_NL__2PRFIN20090626_011317_000000352080_00146_38276_5897.N1	26-JUN-2009 01:13:17	Straylight	35.000	63	Bet Gru	2.1500	2800.0	70	38276	No
13	GOM_NL__2PRFIN20090626_011517_000000352080_00146_38276_5898.N1	26-JUN-2009 01:15:17	Straylight	34.500	31	Alp Gru	1.7340	15200.	69	38276	No
14	GOM_NL__2PRFIN20090626_012714_000000272080_00146_38276_5899.N1	26-JUN-2009 01:27:14	Twilight	26.500	38	20Eps Sgr	1.8360	11000.	53	38276	No
15	GOM_NL__2PRFIN20090626_012838_000000272080_00146_38276_5900.N1	26-JUN-2009 01:28:38	Twilight	27.000	116	19Del Sgr	2.7000	4100.0	54	38276	No
16	GOM_NL__2PRFIN20090626_013046_000000322080_00146_38276_5901.N1	26-JUN-2009 01:30:46	Twilight	32.000	155	41Pi Sgr	2.9000	6600.0	64	38276	No
17	GOM_NL__2PRFIN20090626_013925_000000272080_00146_38276_5902.N1	26-JUN-2009 01:39:25	Twilight	27.000	126	60Bet Oph	2.7700	4250.0	54	38276	No
18	GOM_NL__2PRFIN20090626_014148_000000272080_00146_38276_5903.N1	26-JUN-2009 01:41:48	Bright	27.000	59	55Alp Oph	2.0800	8900.0	54	38276	No
19	GOM_NL__2PRFIN20090626_015110_000000332080_00146_38276_5904.N1	26-JUN-2009 01:51:10	Bright	33.000	5	3Alp Lyr	0.033000	11000.	66	38276	No
20	GOM_NL__2PRFIN20090626_015322_000000282080_00146_38276_5905.N1	26-JUN-2009 01:53:22	Bright	27.500	130	23Bet Dra	2.7990	5800.0	55	38276	No
21	GOM_NL__2PRFIN20090626_020251_000000312080_00146_38276_5906.N1	26-JUN-2009 02:02:51	Twilight	31.000	89	5Alp Cep	2.4510	8000.0	62	38276	No
22	GOM_NL__2PRFIN20090626_020959_000000282080_00146_38276_5907.N1	26-JUN-2009 02:09:59	Twilight	28.000	74	11Bet Cas	2.2680	6600.0	56	38276	No
23	GOM_NL__2PRFIN20090626_021135_000000272080_00146_38276_5908.N1	26-JUN-2009 02:11:35	Twilight	27.000	68	18Alp Cas	2.2250	4500.0	54	38276	No
24	GOM_NL__2PRFIN20090626_021404_000000222080_00146_38276_5909.N1	26-JUN-2009 02:14:04	Twilight	21.500	160	23Gam Per	2.9300	4700.0	43	38276	No
25	GOM_NL__2PRFIN20090626_021729_000000242080_00146_38276_5910.N1	26-JUN-2009 02:17:29	Twilight	23.500	73	57Gam1And	2.2600	13100.	47	38276	No
26	GOM_NL__2PRFIN20090626_021959_000000242080_00146_38276_5911.N1	26-JUN-2009 02:19:59	Twilight	23.500	173	4Bet Tri	3.0040	8900.0	47	38276	No
27	GOM_NL__2PRFIN20090626_022357_000000252080_00146_38276_5912.N1	26-JUN-2009 02:23:57	Dark	25.000	50	13Alp Ari	2.0070	4250.0	50	38276	No
28	GOM_NL__2PRFIN20090626_024724_000000332080_00147_38277_5904.N1	26-JUN-2009 02:47:24	Dark	32.500	84	Alp Phe	2.3970	4500.0	65	38277	No
29	GOM_NL__2PRFIN20090626_025354_000000352080_00147_38277_5905.N1	26-JUN-2009 02:53:54	Straylight	35.000	63	Bet Gru	2.1500	2800.0	70	38277	No
30	GOM_NL__2PRFIN20090626_025554_000000352080_00147_38277_5906.N1	26-JUN-2009 02:55:54	Straylight	34.500	31	Alp Gru	1.7340	15200.	69	38277	No
31	GOM_NL__2PRFIN20090626_030750_000000272080_00147_38277_5907.N1	26-JUN-2009 03:07:50	Twilight	26.500	38	20Eps Sgr	1.8360	11000.	53	38277	No
32	GOM_NL__2PRFIN20090626_030914_000000272080_00147_38277_5908.N1	26-JUN-2009 03:09:14	Twilight	26.500	116	19Del Sgr	2.7000	4100.0	53	38277	No
33	GOM_NL__2PRFIN20090626_031122_000000322080_00147_38277_5909.N1	26-JUN-2009 03:11:22	Twilight	31.500	155	41Pi Sgr	2.9000	6600.0	63	38277	No
34	GOM_NL__2PRFIN20090626_032001_000000272080_00147_38277_5910.N1	26-JUN-2009 03:20:01	Twilight	27.000	126	60Bet Oph	2.7700	4250.0	54	38277	No
35	GOM_NL__2PRFIN20090626_032224_000000272080_00147_38277_5911.N1	26-JUN-2009 03:22:24	Twilight	26.500	59	55Alp Oph	2.0800	8900.0	53	38277	No
36	GOM_NL__2PRFIN20090626_033145_000000332080_00147_38277_5912.N1	26-JUN-2009 03:31:45	Bright	32.500	5	3Alp Lyr	0.033000	11000.	65	38277	No
37	GOM_NL__2PRFIN20090626_033358_000000282080_00147_38277_5913.N1	26-JUN-2009 03:33:58	Bright	27.500	130	23Bet Dra	2.7990	5800.0	55	38277	No
38	GOM_NL__2PRFIN20090626_034327_000000312080_00147_38277_5914.N1	26-JUN-2009 03:43:27	Twilight	30.500	89	5Alp Cep	2.4510	8000.0	61	38277	No
39	GOM_NL__2PRFIN20090626_035035_000000282080_00147_38277_5915.N1	26-JUN-2009 03:50:35	Twilight	28.000	74	11Bet Cas	2.2680	6600.0	56	38277	No
40	GOM_NL__2PRFIN20090626_035210_000000272080_00147_38277_5916.N1	26-JUN-2009 03:52:10	Twilight	27.000	68	18Alp Cas	2.2250	4500.0	54	38277	No
41	GOM_NL__2PRFIN20090626_035441_000000212080_00147_38277_5917.N1	26-JUN-2009 03:54:41	Twilight	21.000	160	23Gam Per	2.9300	4700.0	42	38277	No
42	GOM_NL__2PRFIN20090626_035805_000000242080_00147_38277_5918.N1	26-JUN-2009 03:58:05	Twilight	23.500	73	57Gam1And	2.2600	13100.	47	38277	No

43	GOM_NL__2PRFIN20090626_040035_000000242080_00147_38277_5919.N1	26-JUN-2009 04:00:35	Twilight	23.500	173	4Bet Tri	3.0040	8900.0	47	38277	No
44	GOM_NL__2PRFIN20090626_040434_000000252080_00147_38277_5920.N1	26-JUN-2009 04:04:34	Dark	25.000	50	13Alp Ari	2.0070	4250.0	50	38277	No
45	GOM_NL__2PRFIN20090626_042801_000000332080_00148_38278_5912.N1	26-JUN-2009 04:28:01	Dark	33.000	84	Alp Phe	2.3970	4500.0	66	38278	No
46	GOM_NL__2PRFIN20090626_043430_000000352080_00148_38278_5913.N1	26-JUN-2009 04:34:30	Straylight	35.000	63	Bet Gru	2.1500	2800.0	70	38278	No
47	GOM_NL__2PRFIN20090626_043631_000000352080_00148_38278_5914.N1	26-JUN-2009 04:36:31	Straylight	34.500	31	Alp Gru	1.7340	15200.	69	38278	No
48	GOM_NL__2PRFIN20090626_044826_000000272080_00148_38278_5915.N1	26-JUN-2009 04:48:26	Twilight	26.500	38	20Eps Sgr	1.8360	11000.	53	38278	No
49	GOM_NL__2PRFIN20090626_044950_000000272080_00148_38278_5916.N1	26-JUN-2009 04:49:50	Twilight	27.000	116	19Del Sgr	2.7000	4100.0	54	38278	No
50	GOM_NL__2PRFIN20090626_045159_000000322080_00148_38278_5917.N1	26-JUN-2009 04:51:59	Twilight	31.500	155	41Pi Sgr	2.9000	6600.0	63	38278	No
51	GOM_NL__2PRFIN20090626_050036_000000282080_00148_38278_5918.N1	26-JUN-2009 05:00:36	Twilight	27.500	126	60Bet Oph	2.7700	4250.0	55	38278	No
52	GOM_NL__2PRFIN20090626_050259_000000282080_00148_38278_5919.N1	26-JUN-2009 05:02:59	Bright	27.500	59	55Alp Oph	2.0800	8900.0	55	38278	No
53	GOM_NL__2PRFIN20090626_051220_000000332080_00148_38278_5920.N1	26-JUN-2009 05:12:20	Bright	32.500	5	3Alp Lyr	0.033000	11000.	65	38278	No
54	GOM_NL__2PRFIN20090626_051434_000000272080_00148_38278_5921.N1	26-JUN-2009 05:14:34	Bright	27.000	130	23Bet Dra	2.7990	5800.0	54	38278	No
55	GOM_NL__2PRFIN20090626_052402_000000312080_00148_38278_5922.N1	26-JUN-2009 05:24:02	Twilight	30.500	89	5Alp Cep	2.4510	8000.0	61	38278	No
56	GOM_NL__2PRFIN20090626_053110_000000292080_00148_38278_5923.N1	26-JUN-2009 05:31:10	Twilight	28.500	74	11Bet Cas	2.2680	6600.0	57	38278	No
57	GOM_NL__2PRFIN20090626_053246_000000272080_00148_38278_5924.N1	26-JUN-2009 05:32:46	Twilight	27.000	68	18Alp Cas	2.2250	4500.0	54	38278	No
58	GOM_NL__2PRFIN20090626_053516_000000212080_00148_38278_5925.N1	26-JUN-2009 05:35:16	Twilight	21.000	160	23Gam Per	2.9300	4700.0	42	38278	No
59	GOM_NL__2PRFIN20090626_053841_000000242080_00148_38278_5926.N1	26-JUN-2009 05:38:41	Twilight	24.000	73	57Gam1And	2.2600	13100.	48	38278	No
60	GOM_NL__2PRFIN20090626_054111_000000242080_00148_38278_5927.N1	26-JUN-2009 05:41:11	Twilight	24.000	173	4Bet Tri	3.0040	8900.0	48	38278	No
61	GOM_NL__2PRFIN20090626_054510_000000252080_00148_38278_5928.N1	26-JUN-2009 05:45:10	Dark	25.000	50	13Alp Ari	2.0070	4250.0	50	38278	No
62	GOM_NL__2PRFIN20090626_060838_000000332080_00149_38279_5920.N1	26-JUN-2009 06:08:38	Dark	32.500	84	Alp Phe	2.3970	4500.0	65	38279	No

3. Quality information per product

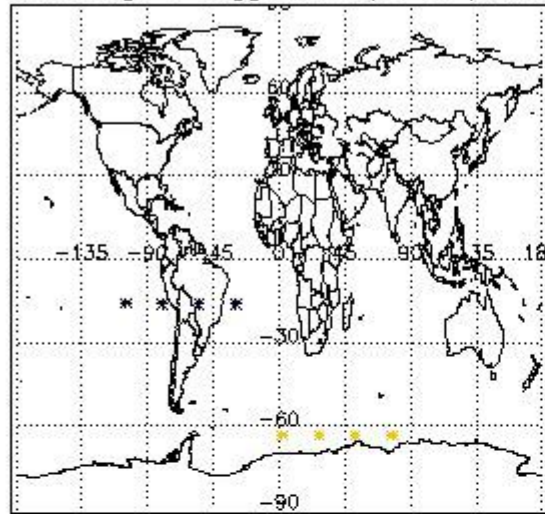
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

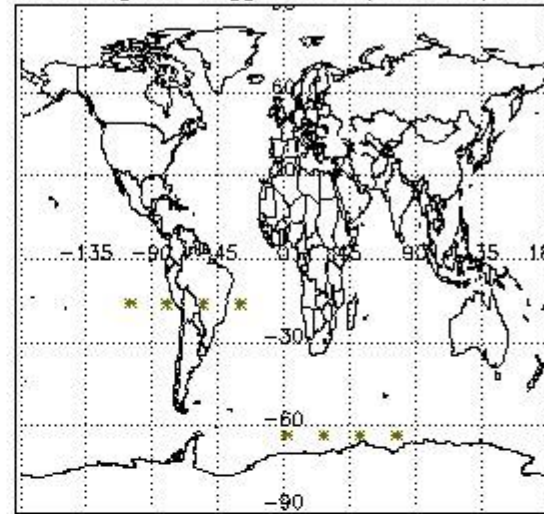


3.2 Plot quality information per product (world map)

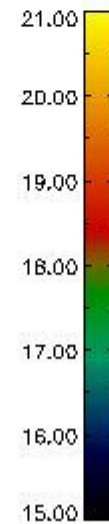
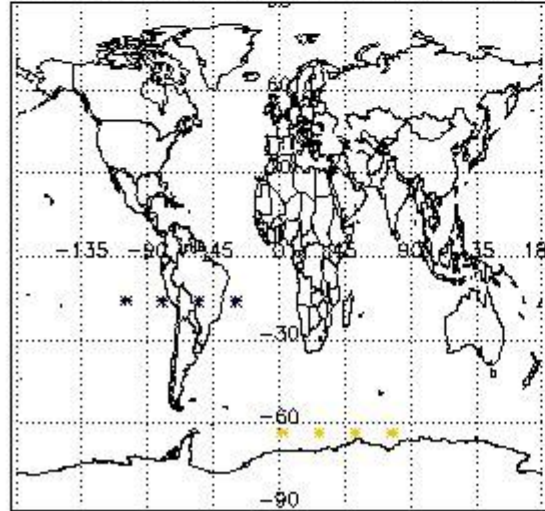
Percentage of flagged data per O3 profile



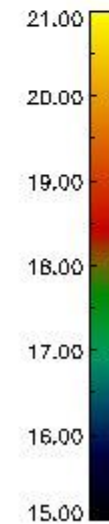
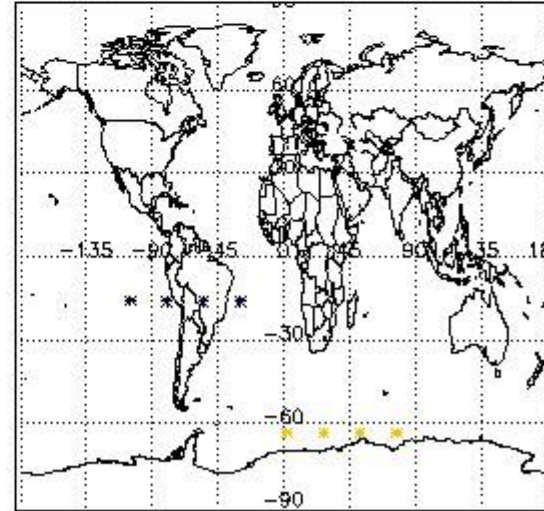
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

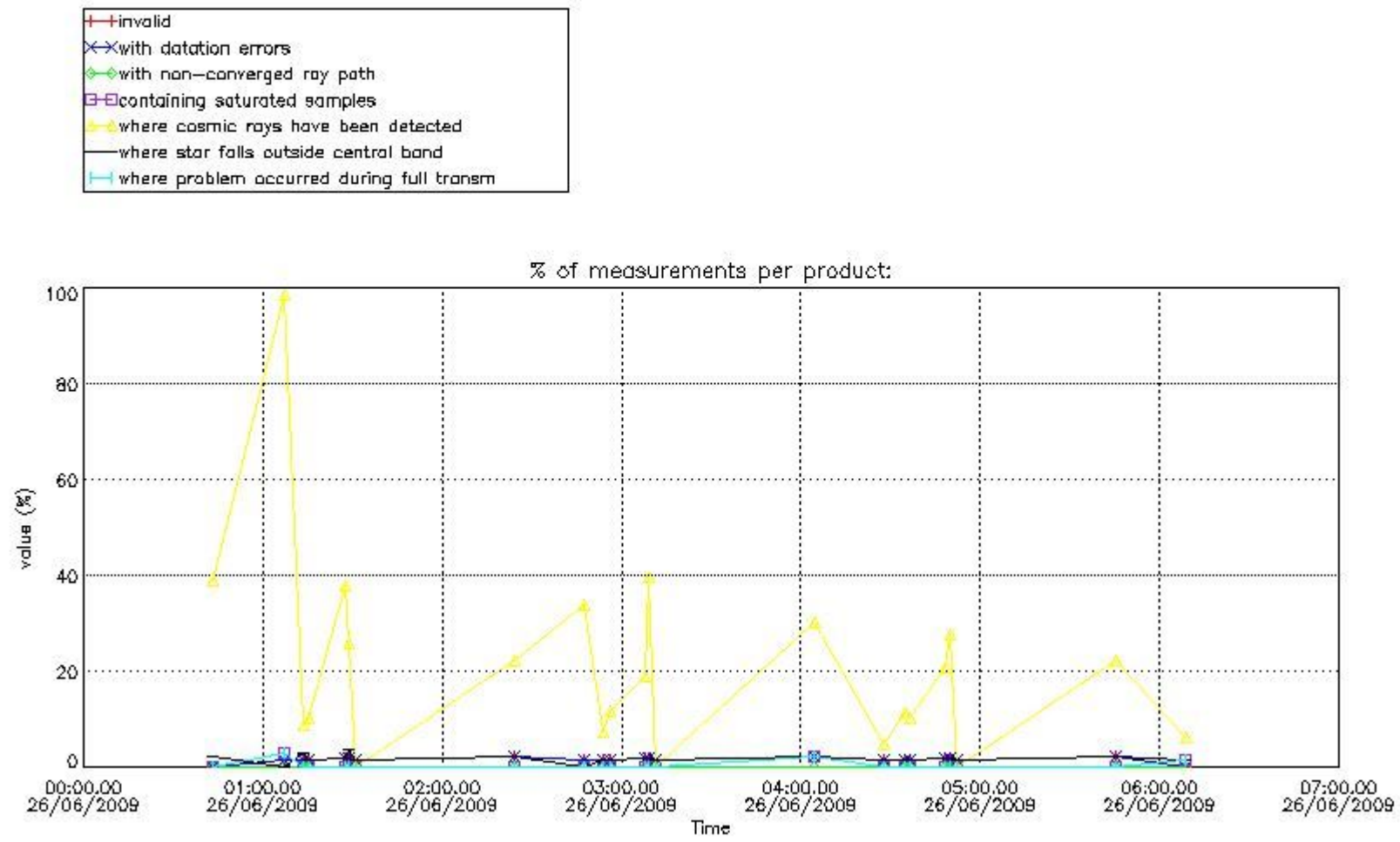


4. Level 1 quality information per product

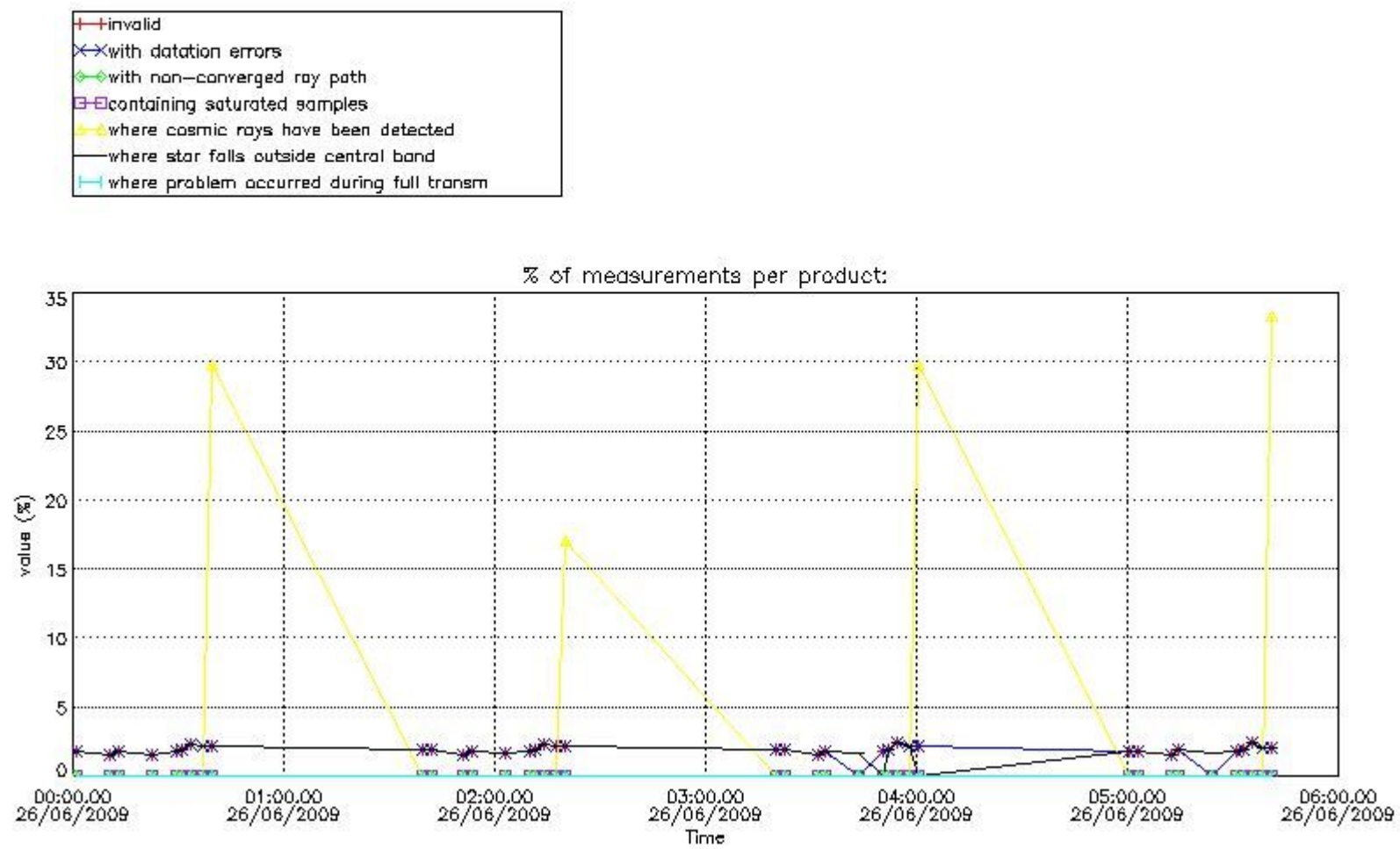
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



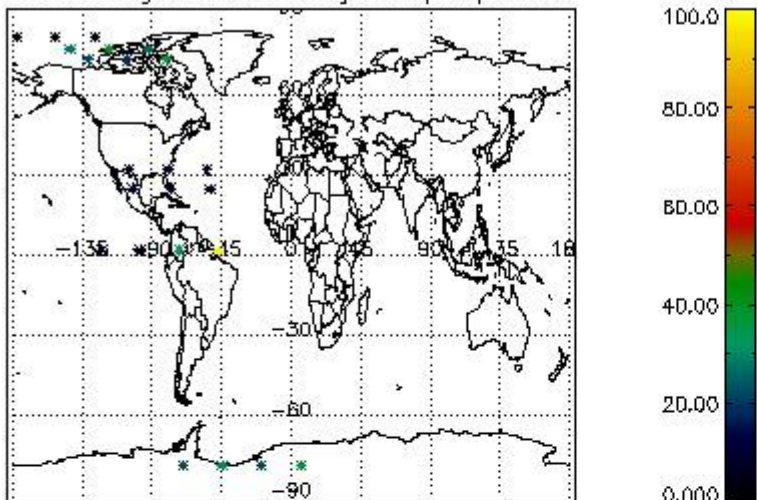
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



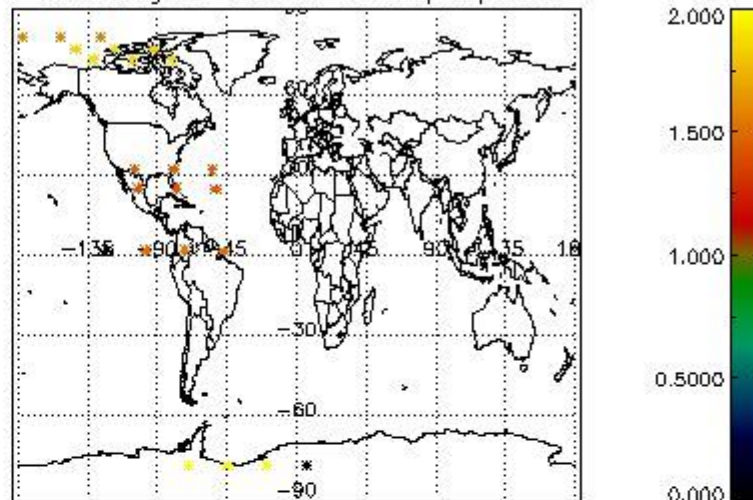
4.2 Plot quality information per product coming from level 1b processing (world map)

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

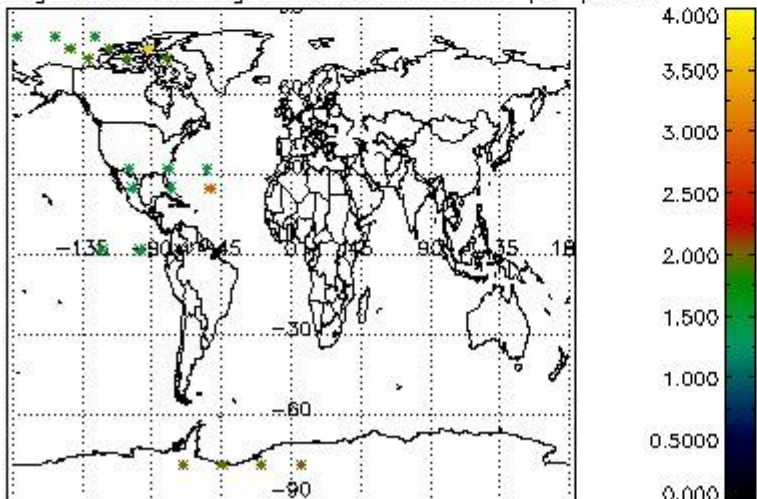
Percentage of cosmic ray hits per profile



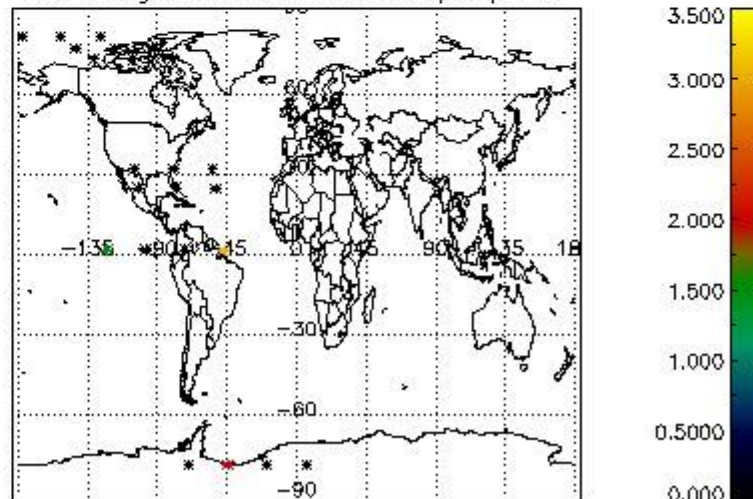
Percentage of datation errors per profile



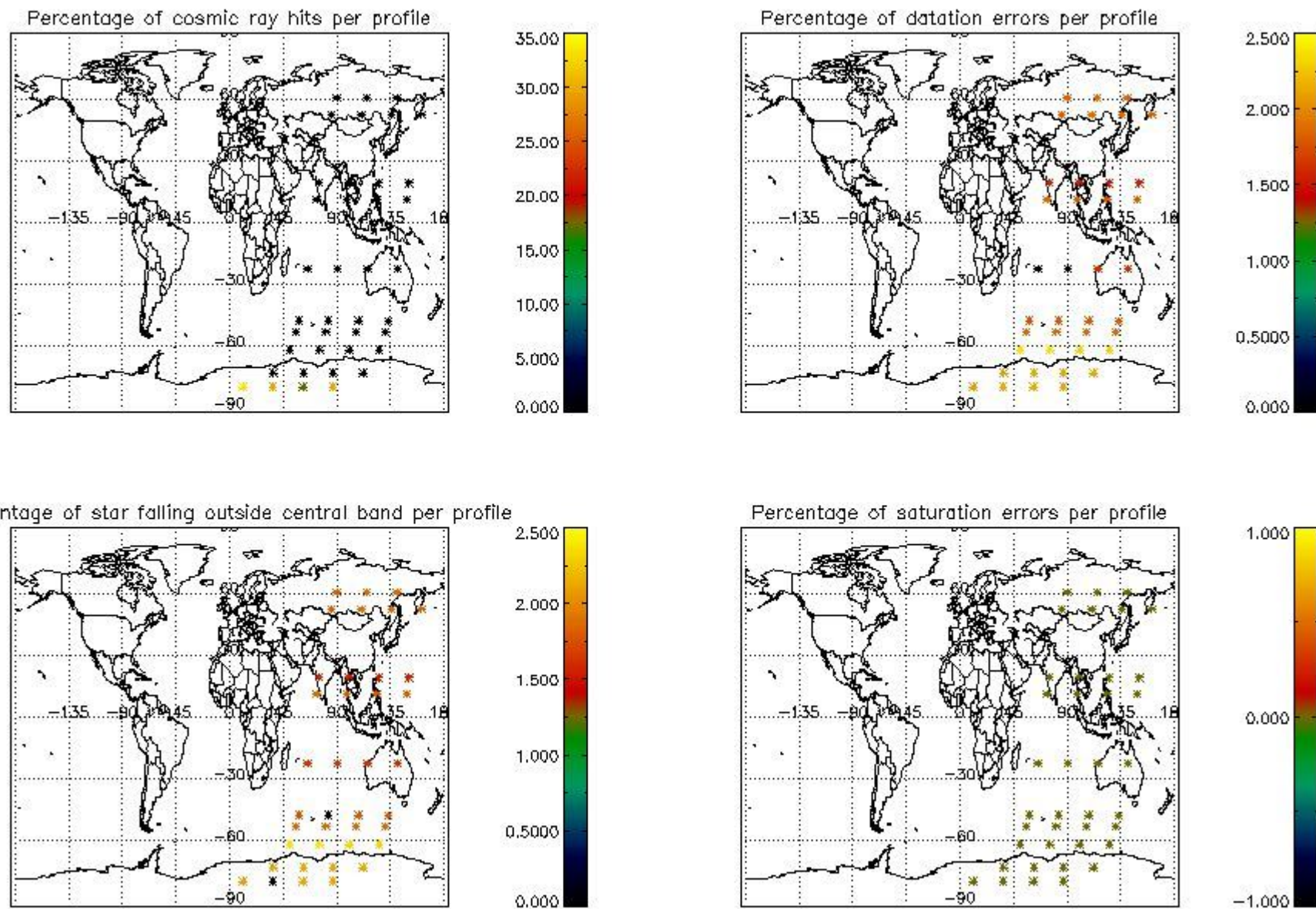
Percentage of star falling outside central band per profile



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

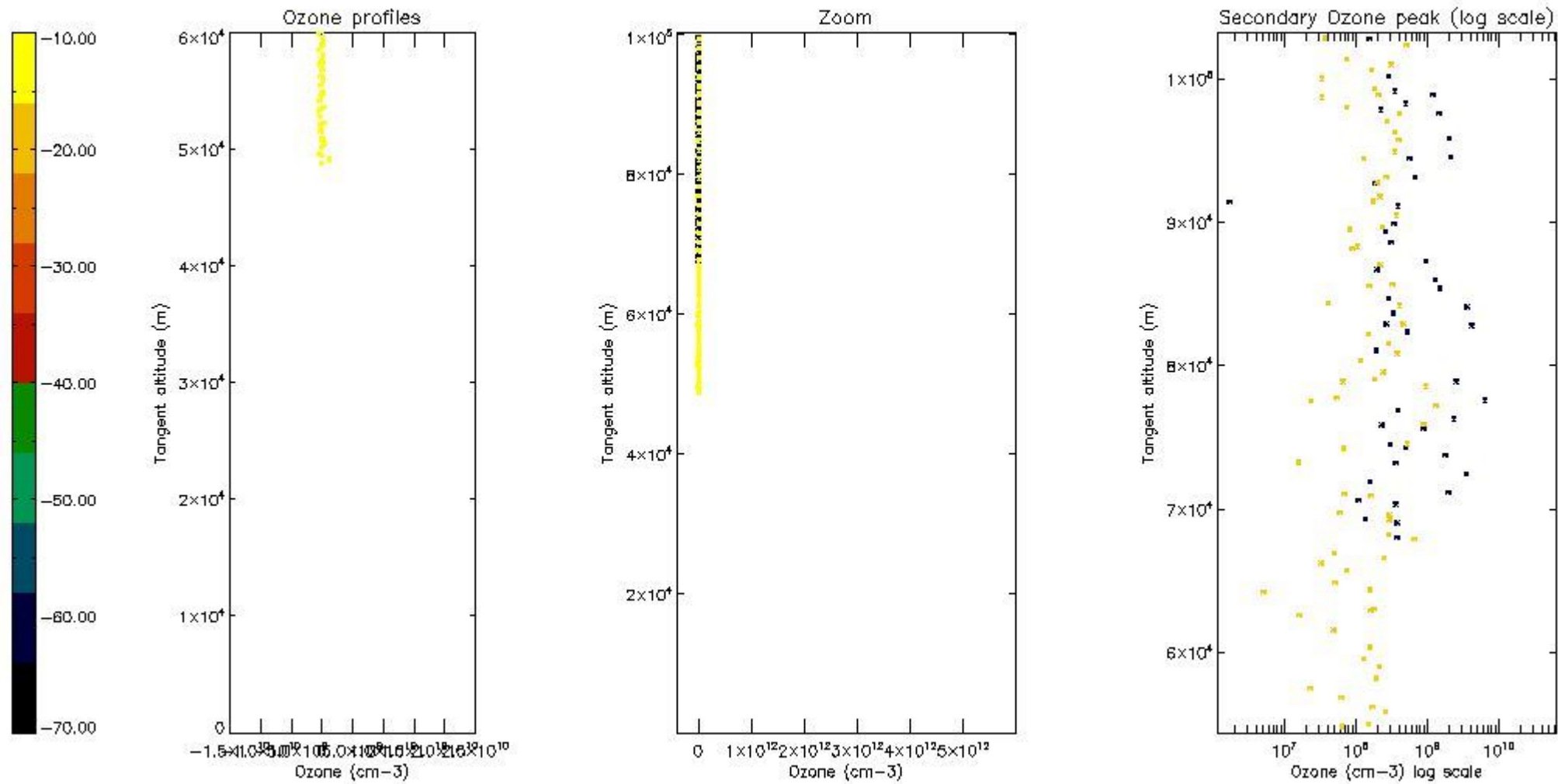
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	13.000
STD < 20	NaN

STD < 10	NaN
STD < 5	NaN

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)

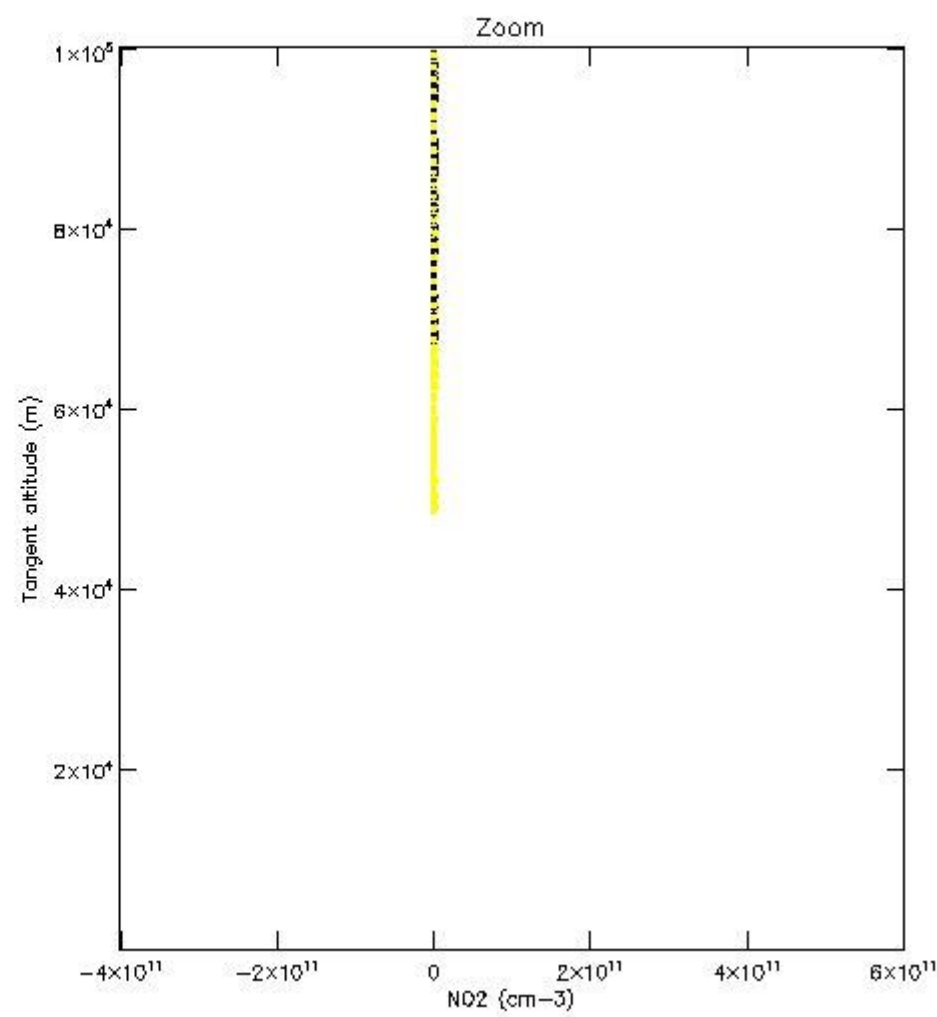
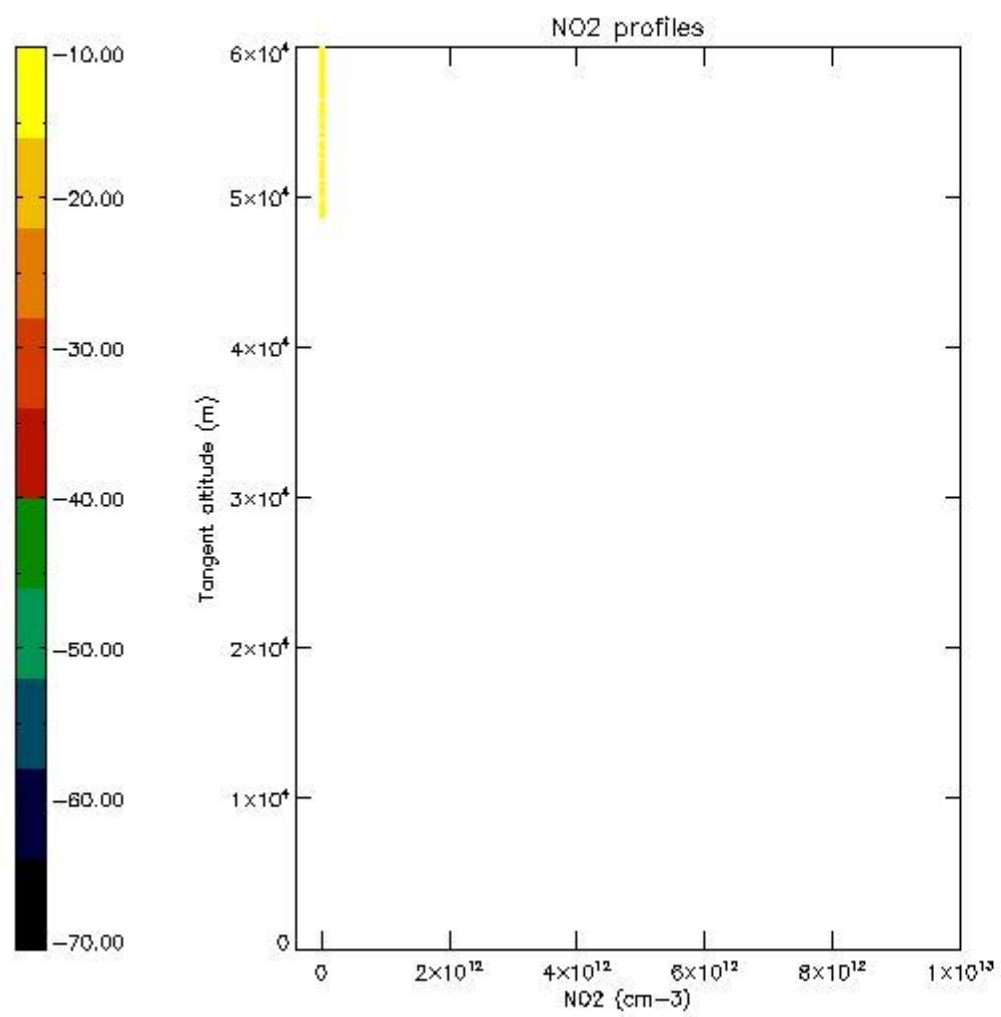
The colorbar represents the latitude.

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

The colorbar represents the latitude.

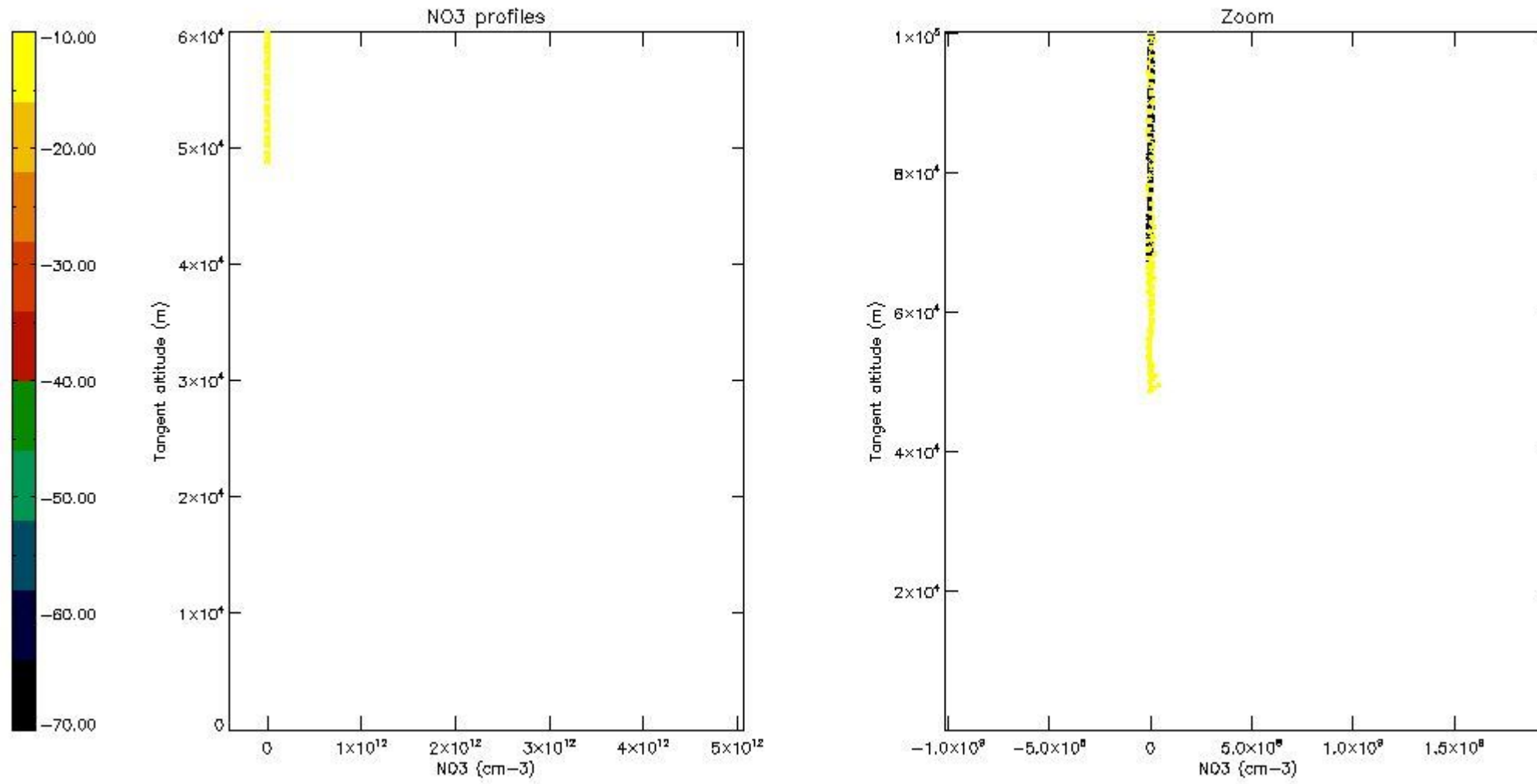
5.6 Plot NO2 profiles for all STD (dark without errors)

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	26-JUN-2009 00:01:11
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	26-JUN-2009 00:01:11
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	26-JUN-2009 00:01:11

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 10:23:39
Data source version	GOMOS/6.01
Start time of products	26-06-2009 (26JUN2009 00:00:00)
Stop time of products	27-06-2009 (27JUN2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	62
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

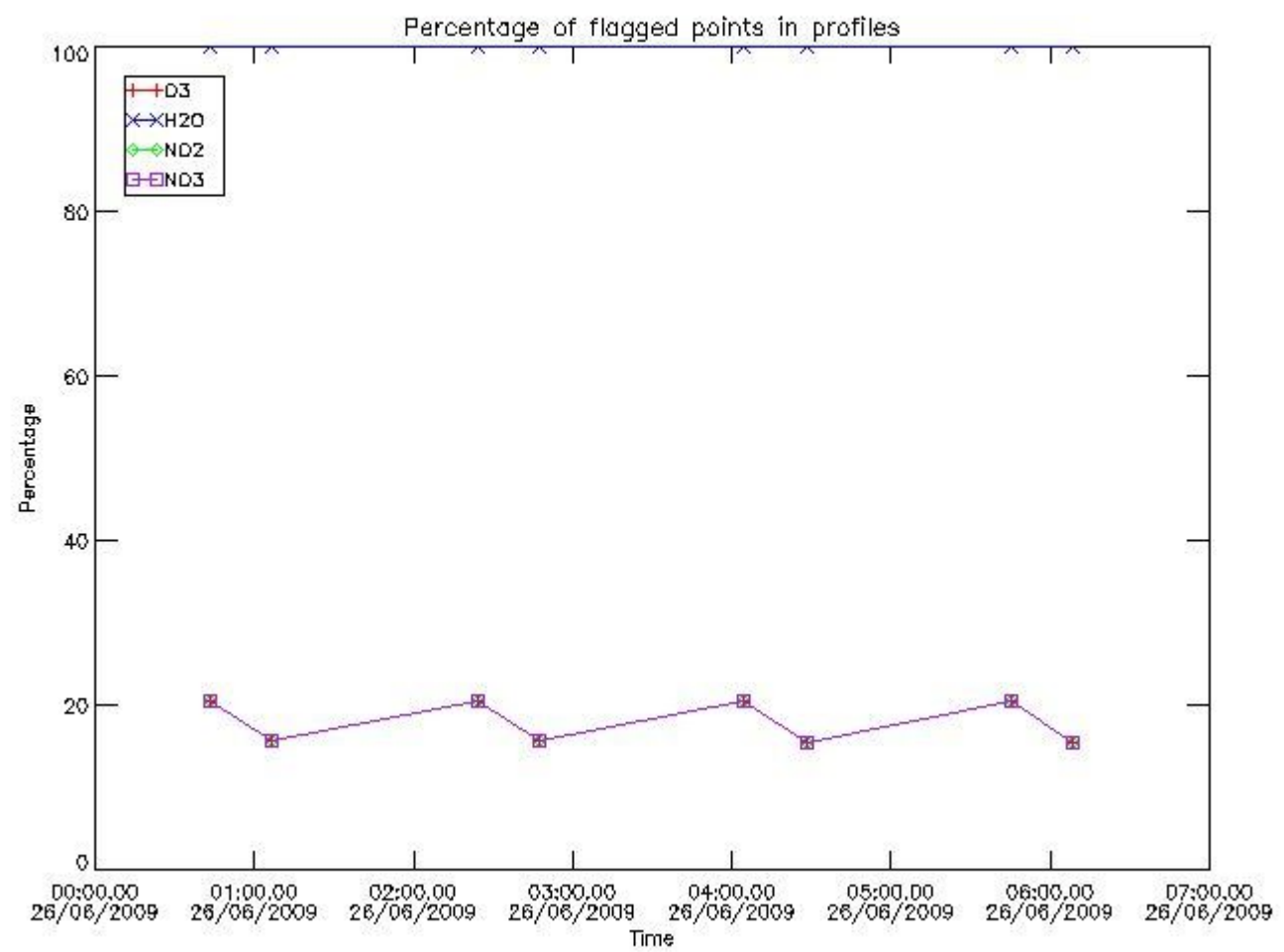
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20090626_000111_000000282080_00145_38275_5893.N1	26-JUN-2009 00:01:11	Bright	27.500	59	55Alp Oph	2.0800	8900.0	55	38275	No
2	GOM_NL__2PRFIN20090626_001035_000000332080_00145_38275_5894.N1	26-JUN-2009 00:10:35	Bright	32.500	5	3Alp Lyr	0.033000	11000.	65	38275	No
3	GOM_NL__2PRFIN20090626_001246_000000282080_00145_38275_5895.N1	26-JUN-2009 00:12:46	Bright	27.500	130	23Bet Dra	2.7990	5800.0	55	38275	No
4	GOM_NL__2PRFIN20090626_002216_000000322080_00145_38275_5896.N1	26-JUN-2009 00:22:16	Twilight	31.500	89	5Alp Cep	2.4510	8000.0	63	38275	No
5	GOM_NL__2PRFIN20090626_002924_000000282080_00145_38275_5897.N1	26-JUN-2009 00:29:24	Twilight	28.000	74	11Bet Cas	2.2680	6600.0	56	38275	No
6	GOM_NL__2PRFIN20090626_003059_000000272080_00145_38275_5898.N1	26-JUN-2009 00:30:59	Twilight	27.000	68	18Alp Cas	2.2250	4500.0	54	38275	No
7	GOM_NL__2PRFIN20090626_003328_000000222080_00145_38275_5899.N1	26-JUN-2009 00:33:28	Twilight	21.500	160	23Gam Per	2.9300	4700.0	43	38275	No
8	GOM_NL__2PRFIN20090626_003654_000000242080_00145_38275_5900.N1	26-JUN-2009 00:36:54	Twilight	23.500	73	57Gam1And	2.2600	13100.	47	38275	No
9	GOM_NL__2PRFIN20090626_003923_000000242080_00145_38275_5901.N1	26-JUN-2009 00:39:23	Twilight	23.500	173	4Bet Tri	3.0040	8900.0	47	38275	No
10	GOM_NL__2PRFIN20090626_004321_000000252080_00145_38275_5902.N1	26-JUN-2009 00:43:21	Dark	24.500	50	13Alp Ari	2.0070	4250.0	49	38275	No
11	GOM_NL__2PRFIN20090626_010647_000000332080_00146_38276_5896.N1	26-JUN-2009 01:06:47	Dark	32.500	84	Alp Phe	2.3970	4500.0	65	38276	No
12	GOM_NL__2PRFIN20090626_011317_000000352080_00146_38276_5897.N1	26-JUN-2009 01:13:17	Straylight	35.000	63	Bet Gru	2.1500	2800.0	70	38276	No
13	GOM_NL__2PRFIN20090626_011517_000000352080_00146_38276_5898.N1	26-JUN-2009 01:15:17	Straylight	34.500	31	Alp Gru	1.7340	15200.	69	38276	No
14	GOM_NL__2PRFIN20090626_012714_000000272080_00146_38276_5899.N1	26-JUN-2009 01:27:14	Twilight	26.500	38	20Eps Sgr	1.8360	11000.	53	38276	No
15	GOM_NL__2PRFIN20090626_012838_000000272080_00146_38276_5900.N1	26-JUN-2009 01:28:38	Twilight	27.000	116	19Del Sgr	2.7000	4100.0	54	38276	No
16	GOM_NL__2PRFIN20090626_013046_000000322080_00146_38276_5901.N1	26-JUN-2009 01:30:46	Twilight	32.000	155	41Pi Sgr	2.9000	6600.0	64	38276	No
17	GOM_NL__2PRFIN20090626_013925_000000272080_00146_38276_5902.N1	26-JUN-2009 01:39:25	Twilight	27.000	126	60Bet Oph	2.7700	4250.0	54	38276	No
18	GOM_NL__2PRFIN20090626_014148_000000272080_00146_38276_5903.N1	26-JUN-2009 01:41:48	Bright	27.000	59	55Alp Oph	2.0800	8900.0	54	38276	No
19	GOM_NL__2PRFIN20090626_015110_000000332080_00146_38276_5904.N1	26-JUN-2009 01:51:10	Bright	33.000	5	3Alp Lyr	0.033000	11000.	66	38276	No
20	GOM_NL__2PRFIN20090626_015322_000000282080_00146_38276_5905.N1	26-JUN-2009 01:53:22	Bright	27.500	130	23Bet Dra	2.7990	5800.0	55	38276	No
21	GOM_NL__2PRFIN20090626_020251_000000312080_00146_38276_5906.N1	26-JUN-2009 02:02:51	Twilight	31.000	89	5Alp Cep	2.4510	8000.0	62	38276	No
22	GOM_NL__2PRFIN20090626_020959_000000282080_00146_38276_5907.N1	26-JUN-2009 02:09:59	Twilight	28.000	74	11Bet Cas	2.2680	6600.0	56	38276	No
23	GOM_NL__2PRFIN20090626_021135_000000272080_00146_38276_5908.N1	26-JUN-2009 02:11:35	Twilight	27.000	68	18Alp Cas	2.2250	4500.0	54	38276	No
24	GOM_NL__2PRFIN20090626_021404_000000222080_00146_38276_5909.N1	26-JUN-2009 02:14:04	Twilight	21.500	160	23Gam Per	2.9300	4700.0	43	38276	No
25	GOM_NL__2PRFIN20090626_021729_000000242080_00146_38276_5910.N1	26-JUN-2009 02:17:29	Twilight	23.500	73	57Gam1And	2.2600	13100.	47	38276	No
26	GOM_NL__2PRFIN20090626_021959_000000242080_00146_38276_5911.N1	26-JUN-2009 02:19:59	Twilight	23.500	173	4Bet Tri	3.0040	8900.0	47	38276	No
27	GOM_NL__2PRFIN20090626_022357_000000252080_00146_38276_5912.N1	26-JUN-2009 02:23:57	Dark	25.000	50	13Alp Ari	2.0070	4250.0	50	38276	No
28	GOM_NL__2PRFIN20090626_024724_000000332080_00147_38277_5904.N1	26-JUN-2009 02:47:24	Dark	32.500	84	Alp Phe	2.3970	4500.0	65	38277	No
29	GOM_NL__2PRFIN20090626_025354_000000352080_00147_38277_5905.N1	26-JUN-2009 02:53:54	Straylight	35.000	63	Bet Gru	2.1500	2800.0	70	38277	No
30	GOM_NL__2PRFIN20090626_025554_000000352080_00147_38277_5906.N1	26-JUN-2009 02:55:54	Straylight	34.500	31	Alp Gru	1.7340	15200.	69	38277	No
31	GOM_NL__2PRFIN20090626_030750_000000272080_00147_38277_5907.N1	26-JUN-2009 03:07:50	Twilight	26.500	38	20Eps Sgr	1.8360	11000.	53	38277	No
32	GOM_NL__2PRFIN20090626_030914_000000272080_00147_38277_5908.N1	26-JUN-2009 03:09:14	Twilight	26.500	116	19Del Sgr	2.7000	4100.0	53	38277	No
33	GOM_NL__2PRFIN20090626_031122_000000322080_00147_38277_5909.N1	26-JUN-2009 03:11:22	Twilight	31.500	155	41Pi Sgr	2.9000	6600.0	63	38277	No
34	GOM_NL__2PRFIN20090626_032001_000000272080_00147_38277_5910.N1	26-JUN-2009 03:20:01	Twilight	27.000	126	60Bet Oph	2.7700	4250.0	54	38277	No
35	GOM_NL__2PRFIN20090626_032224_000000272080_00147_38277_5911.N1	26-JUN-2009 03:22:24	Twilight	26.500	59	55Alp Oph	2.0800	8900.0	53	38277	No
36	GOM_NL__2PRFIN20090626_033145_000000332080_00147_38277_5912.N1	26-JUN-2009 03:31:45	Bright	32.500	5	3Alp Lyr	0.033000	11000.	65	38277	No
37	GOM_NL__2PRFIN20090626_033358_000000282080_00147_38277_5913.N1	26-JUN-2009 03:33:58	Bright	27.500	130	23Bet Dra	2.7990	5800.0	55	38277	No
38	GOM_NL__2PRFIN20090626_034327_000000312080_00147_38277_5914.N1	26-JUN-2009 03:43:27	Twilight	30.500	89	5Alp Cep	2.4510	8000.0	61	38277	No
39	GOM_NL__2PRFIN20090626_035035_000000282080_00147_38277_5915.N1	26-JUN-2009 03:50:35	Twilight	28.000	74	11Bet Cas	2.2680	6600.0	56	38277	No
40	GOM_NL__2PRFIN20090626_035210_000000272080_00147_38277_5916.N1	26-JUN-2009 03:52:10	Twilight	27.000	68	18Alp Cas	2.2250	4500.0	54	38277	No
41	GOM_NL__2PRFIN20090626_035441_000000212080_00147_38277_5917.N1	26-JUN-2009 03:54:41	Twilight	21.000	160	23Gam Per	2.9300	4700.0	42	38277	No
42	GOM_NL__2PRFIN20090626_035805_000000242080_00147_38277_5918.N1	26-JUN-2009 03:58:05	Twilight	23.500	73	57Gam1And	2.2600	13100.	47	38277	No

43	GOM_NL__2PRFIN20090626_040035_000000242080_00147_38277_5919.N1	26-JUN-2009 04:00:35	Twilight	23.500	173	4Bet Tri	3.0040	8900.0	47	38277	No
44	GOM_NL__2PRFIN20090626_040434_000000252080_00147_38277_5920.N1	26-JUN-2009 04:04:34	Dark	25.000	50	13Alp Ari	2.0070	4250.0	50	38277	No
45	GOM_NL__2PRFIN20090626_042801_000000332080_00148_38278_5912.N1	26-JUN-2009 04:28:01	Dark	33.000	84	Alp Phe	2.3970	4500.0	66	38278	No
46	GOM_NL__2PRFIN20090626_043430_000000352080_00148_38278_5913.N1	26-JUN-2009 04:34:30	Straylight	35.000	63	Bet Gru	2.1500	2800.0	70	38278	No
47	GOM_NL__2PRFIN20090626_043631_000000352080_00148_38278_5914.N1	26-JUN-2009 04:36:31	Straylight	34.500	31	Alp Gru	1.7340	15200.	69	38278	No
48	GOM_NL__2PRFIN20090626_044826_000000272080_00148_38278_5915.N1	26-JUN-2009 04:48:26	Twilight	26.500	38	20Eps Sgr	1.8360	11000.	53	38278	No
49	GOM_NL__2PRFIN20090626_044950_000000272080_00148_38278_5916.N1	26-JUN-2009 04:49:50	Twilight	27.000	116	19Del Sgr	2.7000	4100.0	54	38278	No
50	GOM_NL__2PRFIN20090626_045159_000000322080_00148_38278_5917.N1	26-JUN-2009 04:51:59	Twilight	31.500	155	41Pi Sgr	2.9000	6600.0	63	38278	No
51	GOM_NL__2PRFIN20090626_050036_000000282080_00148_38278_5918.N1	26-JUN-2009 05:00:36	Twilight	27.500	126	60Bet Oph	2.7700	4250.0	55	38278	No
52	GOM_NL__2PRFIN20090626_050259_000000282080_00148_38278_5919.N1	26-JUN-2009 05:02:59	Bright	27.500	59	55Alp Oph	2.0800	8900.0	55	38278	No
53	GOM_NL__2PRFIN20090626_051220_000000332080_00148_38278_5920.N1	26-JUN-2009 05:12:20	Bright	32.500	5	3Alp Lyr	0.033000	11000.	65	38278	No
54	GOM_NL__2PRFIN20090626_051434_000000272080_00148_38278_5921.N1	26-JUN-2009 05:14:34	Bright	27.000	130	23Bet Dra	2.7990	5800.0	54	38278	No
55	GOM_NL__2PRFIN20090626_052402_000000312080_00148_38278_5922.N1	26-JUN-2009 05:24:02	Twilight	30.500	89	5Alp Cep	2.4510	8000.0	61	38278	No
56	GOM_NL__2PRFIN20090626_053110_000000292080_00148_38278_5923.N1	26-JUN-2009 05:31:10	Twilight	28.500	74	11Bet Cas	2.2680	6600.0	57	38278	No
57	GOM_NL__2PRFIN20090626_053246_000000272080_00148_38278_5924.N1	26-JUN-2009 05:32:46	Twilight	27.000	68	18Alp Cas	2.2250	4500.0	54	38278	No
58	GOM_NL__2PRFIN20090626_053516_000000212080_00148_38278_5925.N1	26-JUN-2009 05:35:16	Twilight	21.000	160	23Gam Per	2.9300	4700.0	42	38278	No
59	GOM_NL__2PRFIN20090626_053841_000000242080_00148_38278_5926.N1	26-JUN-2009 05:38:41	Twilight	24.000	73	57Gam1And	2.2600	13100.	48	38278	No
60	GOM_NL__2PRFIN20090626_054111_000000242080_00148_38278_5927.N1	26-JUN-2009 05:41:11	Twilight	24.000	173	4Bet Tri	3.0040	8900.0	48	38278	No
61	GOM_NL__2PRFIN20090626_054510_000000252080_00148_38278_5928.N1	26-JUN-2009 05:45:10	Dark	25.000	50	13Alp Ari	2.0070	4250.0	50	38278	No
62	GOM_NL__2PRFIN20090626_060838_000000332080_00149_38279_5920.N1	26-JUN-2009 06:08:38	Dark	32.500	84	Alp Phe	2.3970	4500.0	65	38279	No

3. Quality information per product

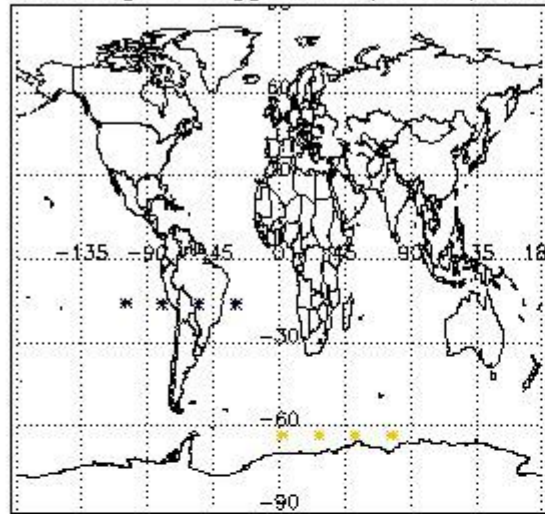
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

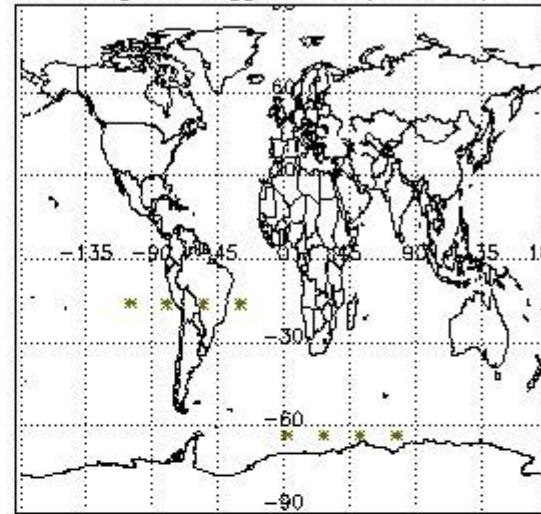


3.2 Plot quality information per product (world map)

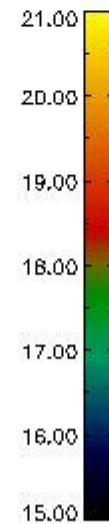
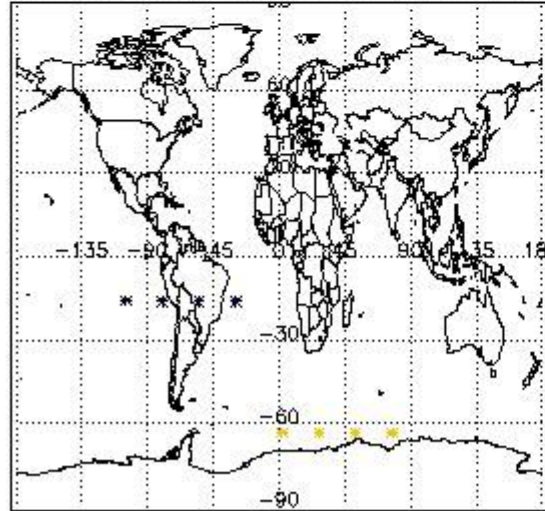
Percentage of flagged data per O3 profile



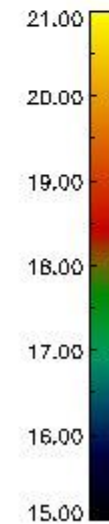
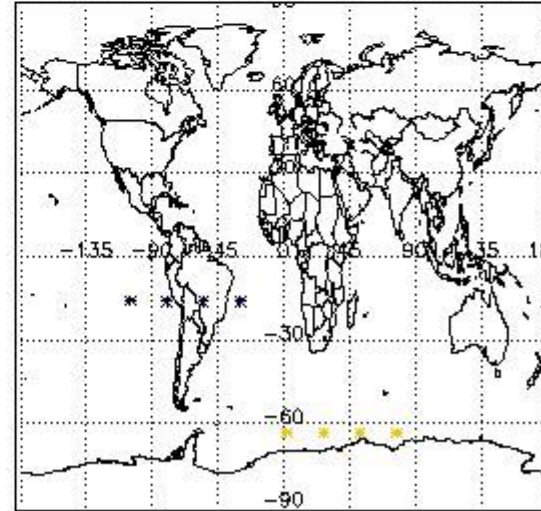
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

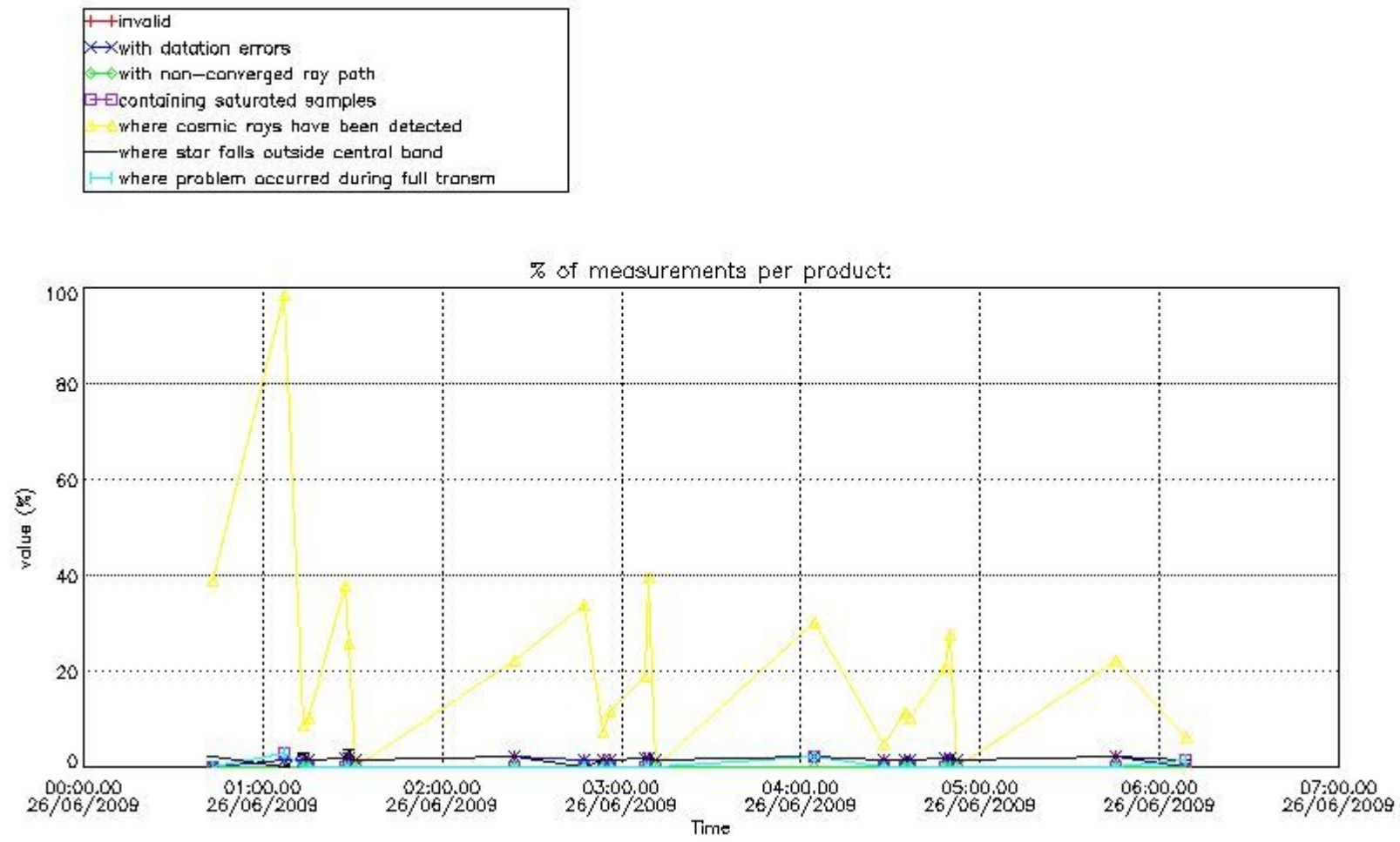


4. Level 1 quality information per product

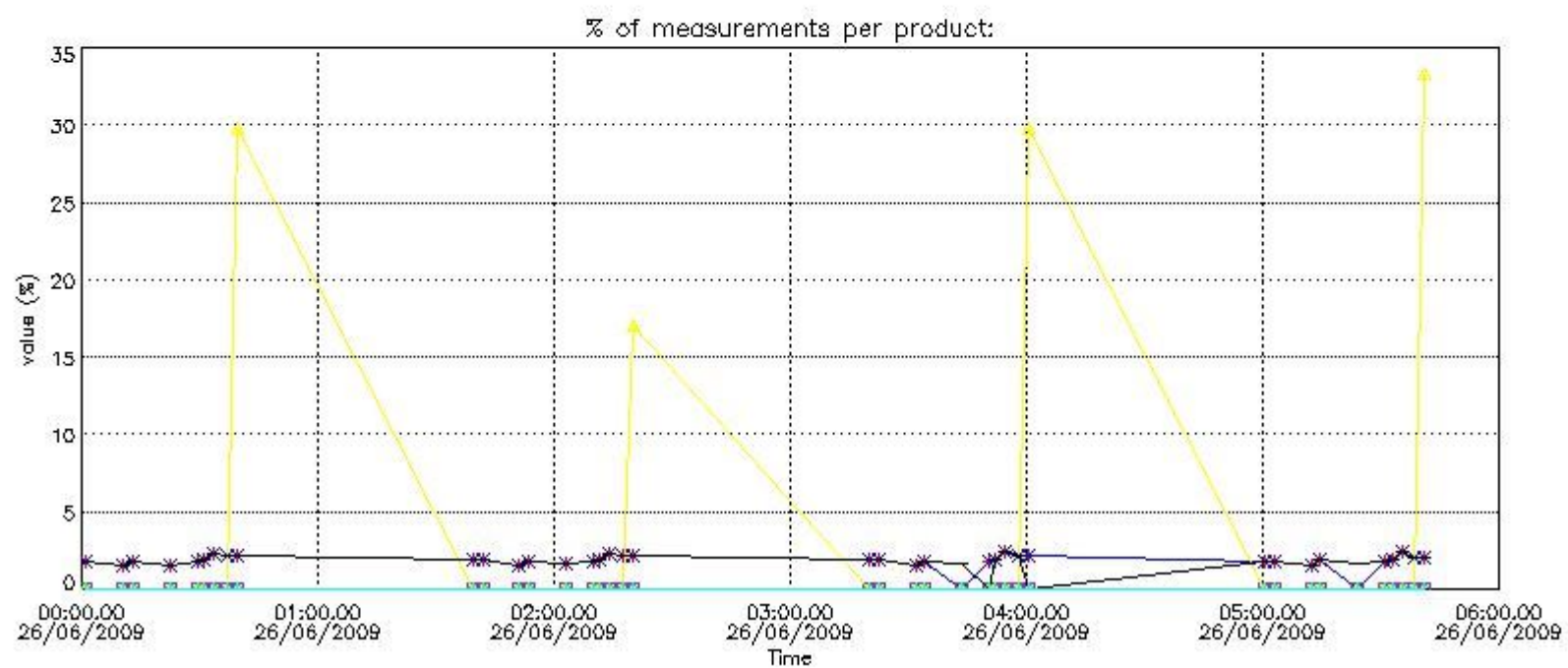
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



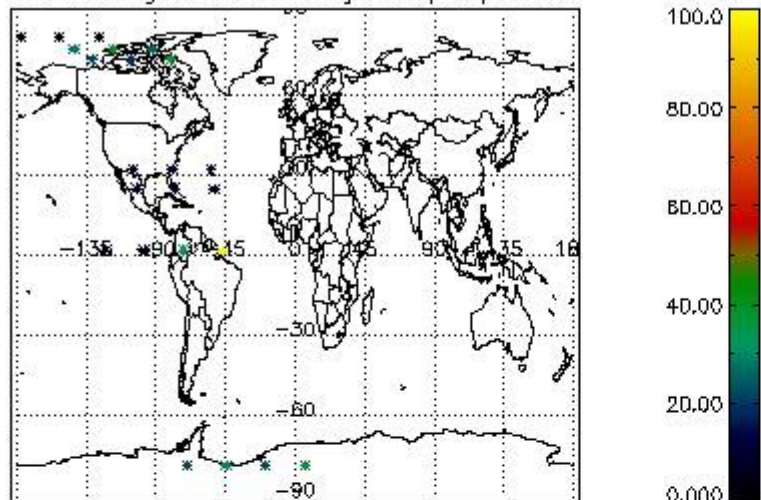
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



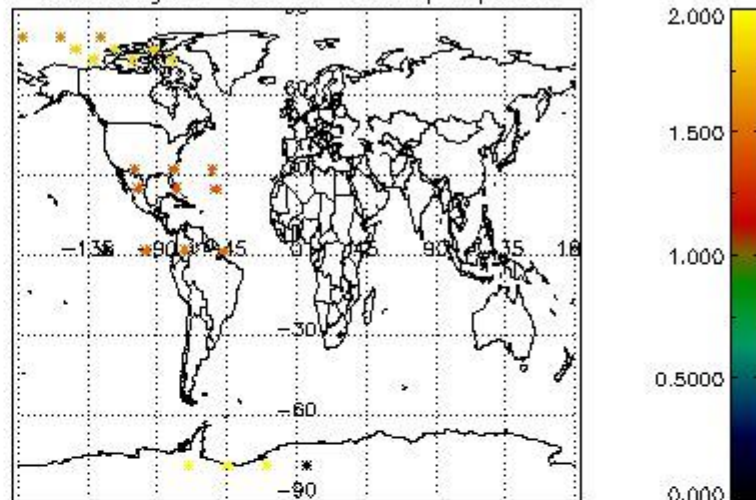
4.2 Plot quality information per product coming from level 1b processing (world map)

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

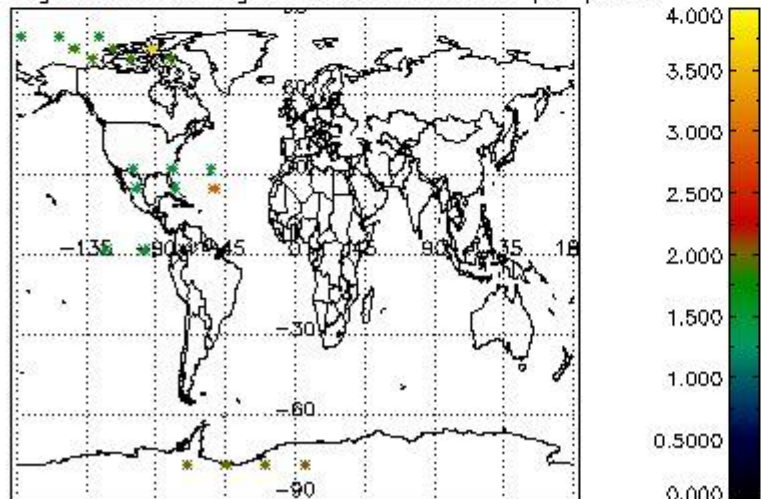
Percentage of cosmic ray hits per profile



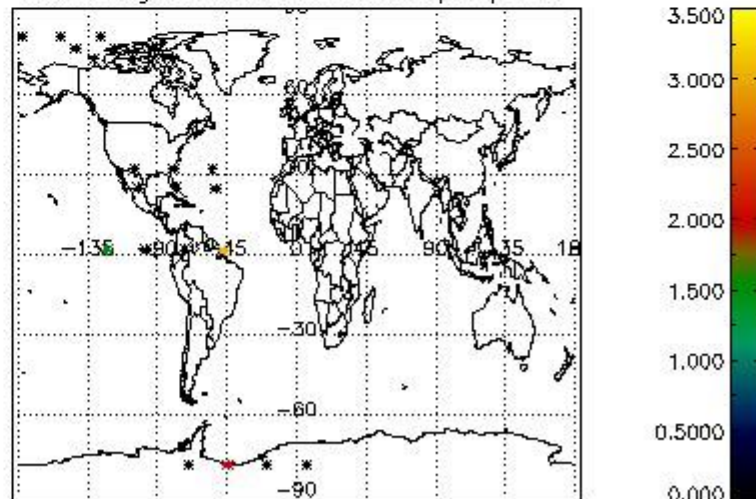
Percentage of datation errors per profile



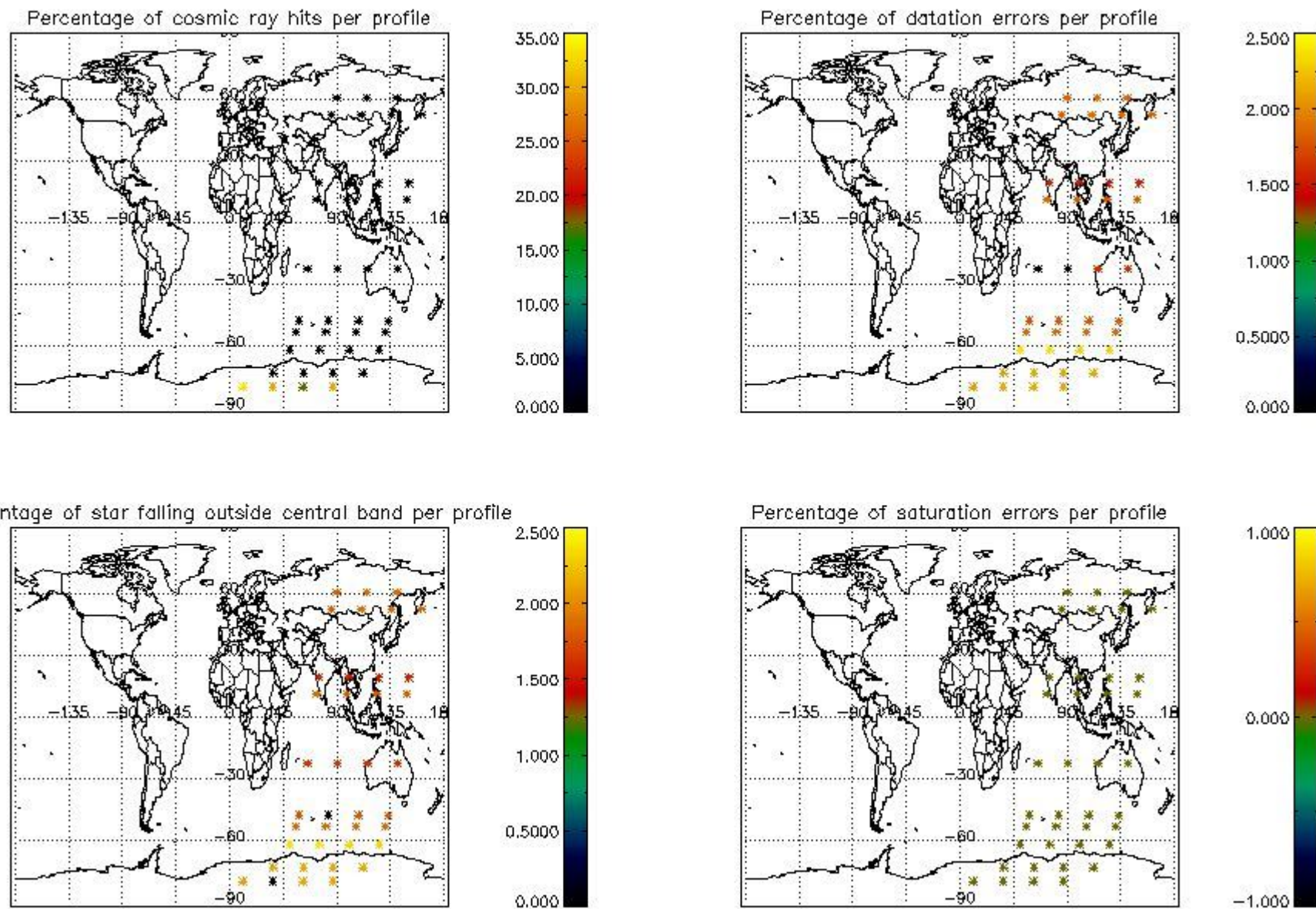
Percentage of star falling outside central band per profile



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

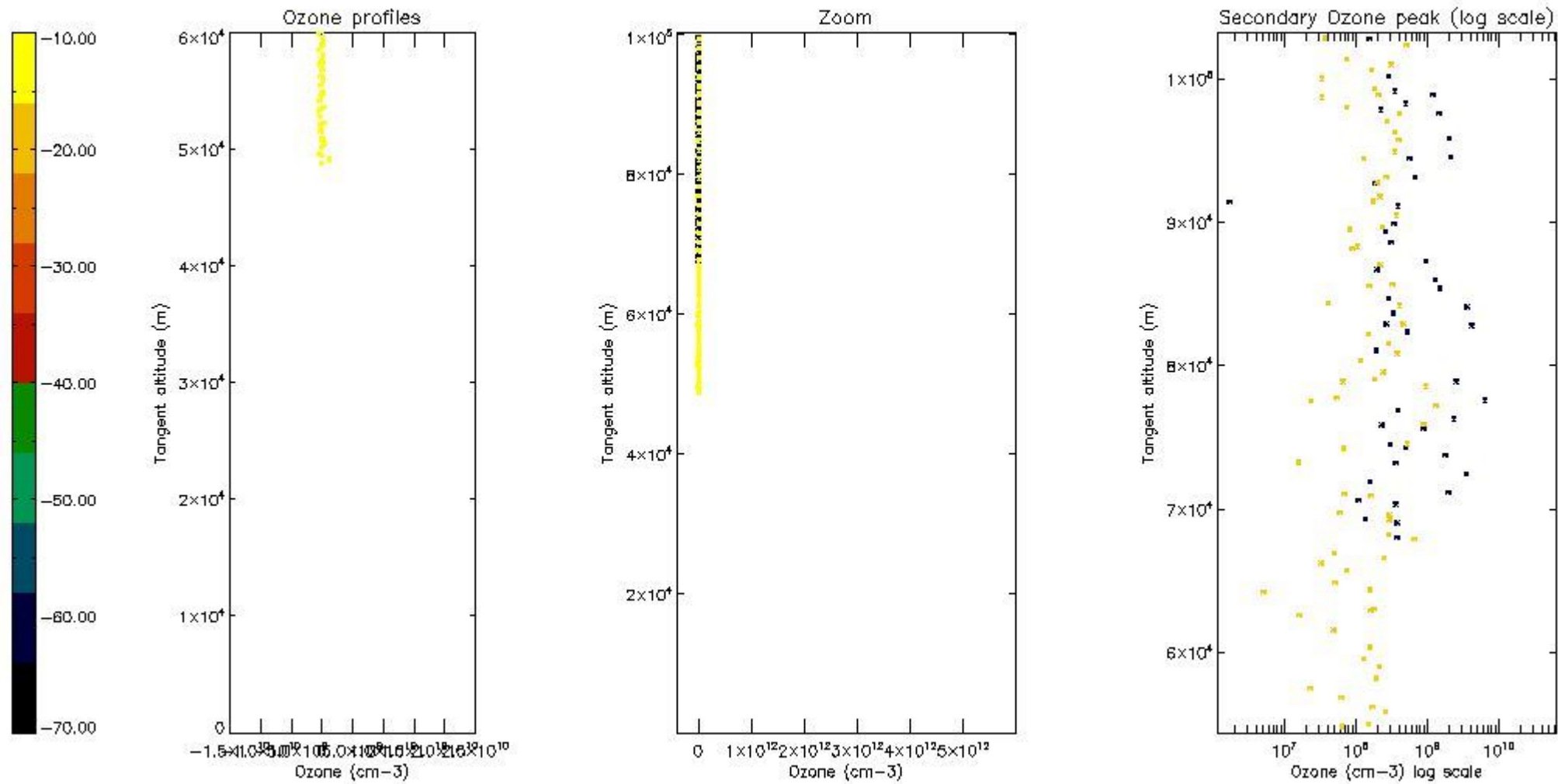
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	13.000
STD < 20	NaN

STD < 10	NaN
STD < 5	NaN

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)

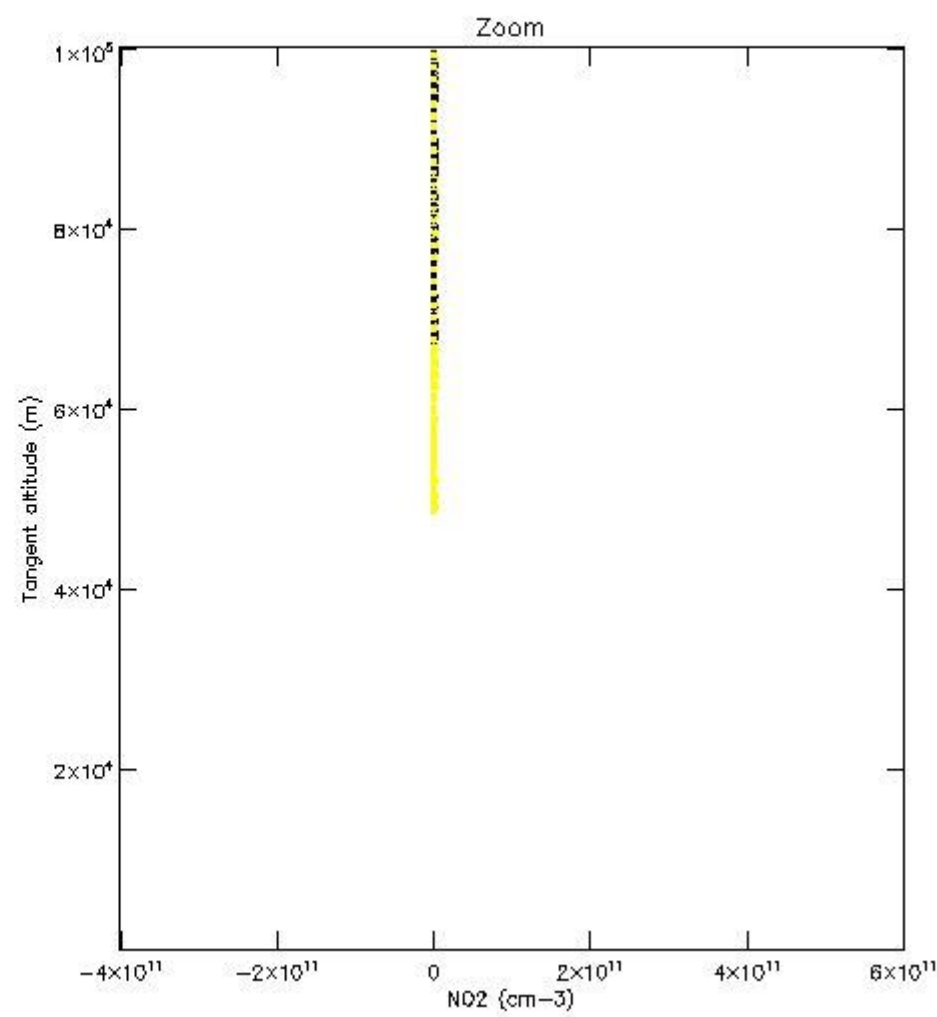
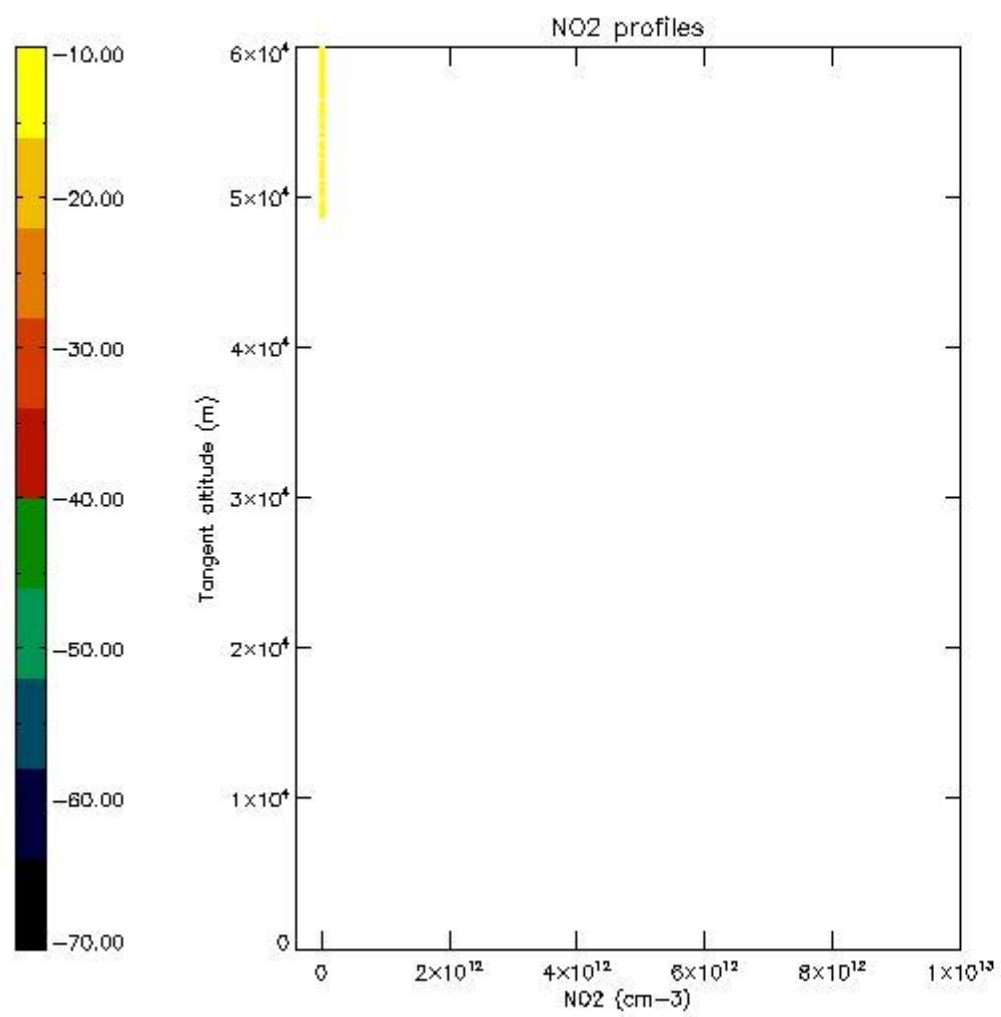
The colorbar represents the latitude.

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

The colorbar represents the latitude.

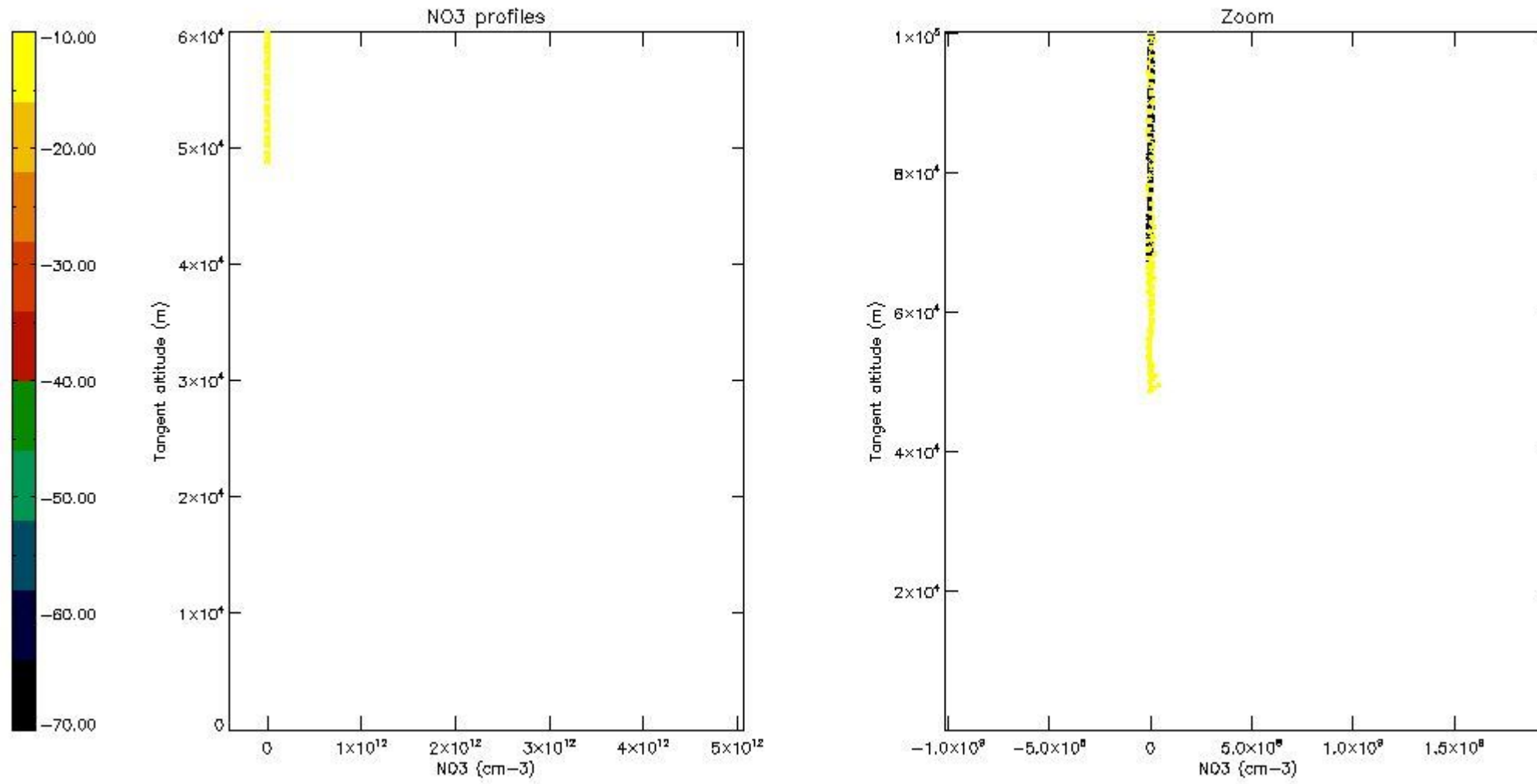
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

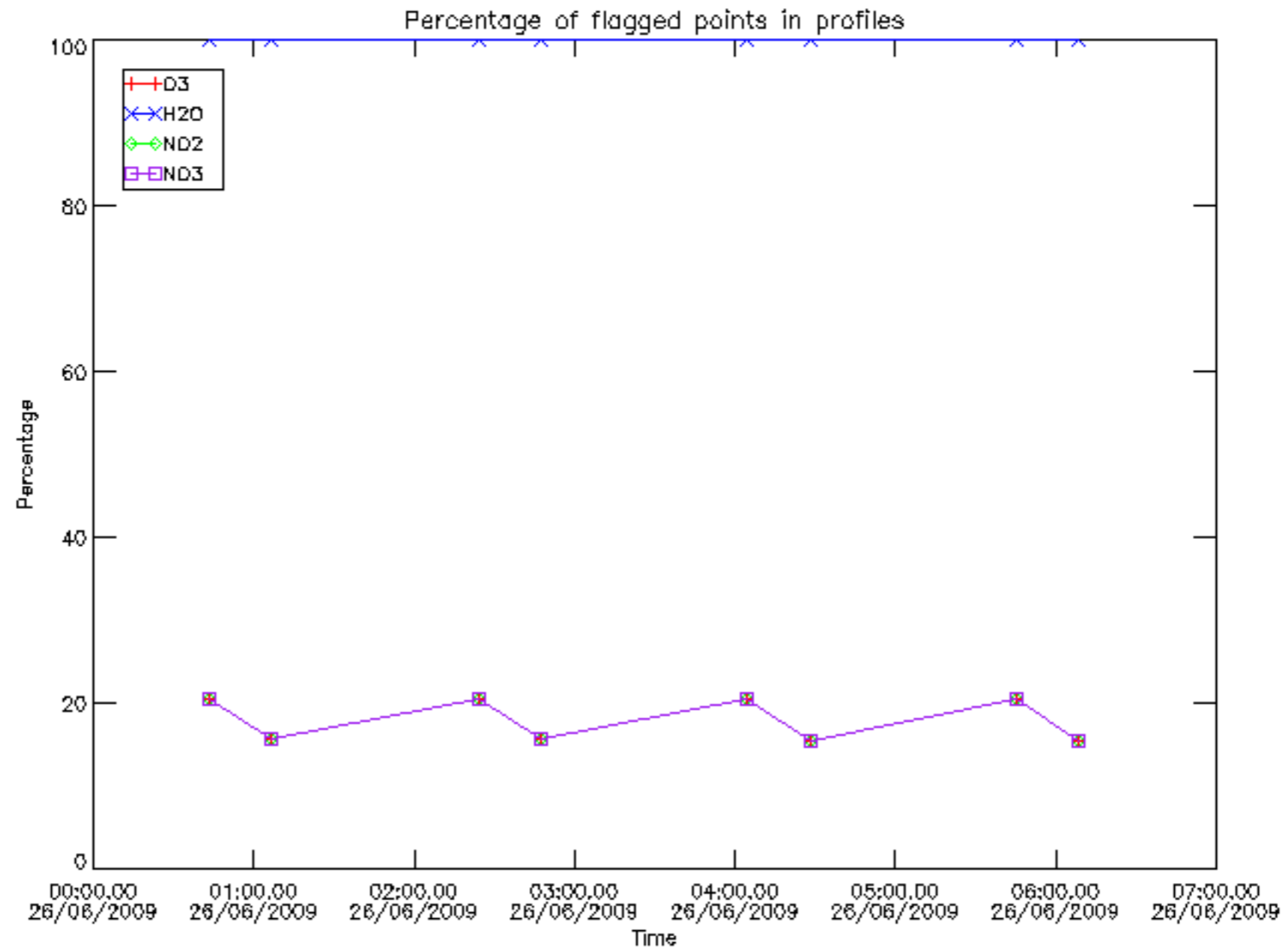
The colorbar represents the latitude.



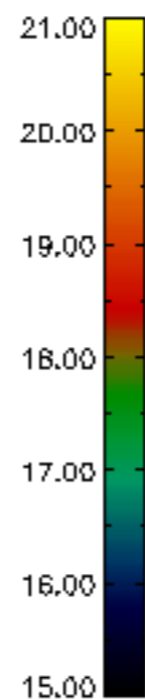
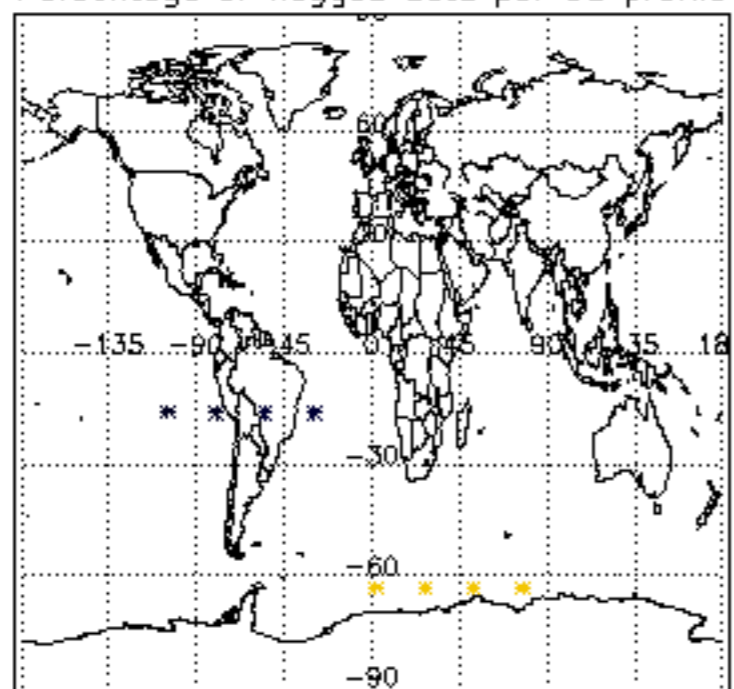
6. Auxiliary Data Files used for the production reported in section 2

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.

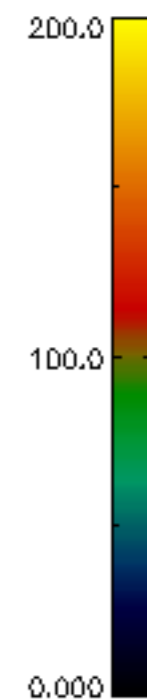
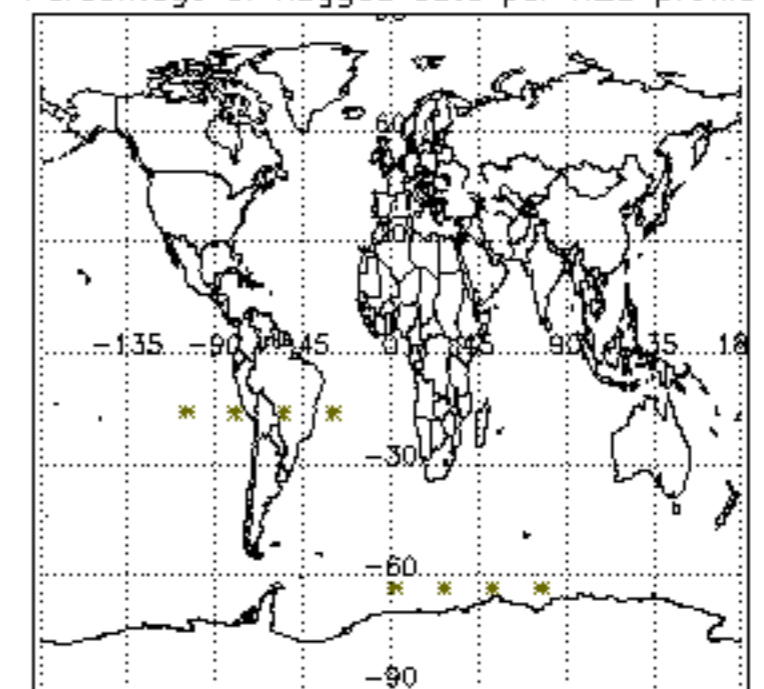
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	26-JUN-2009 00:01:11
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	26-JUN-2009 00:01:11
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	26-JUN-2009 00:01:11



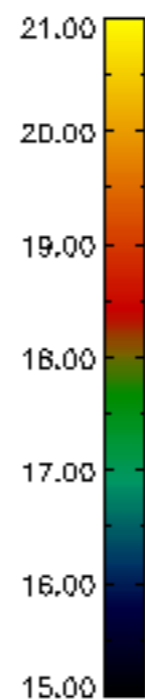
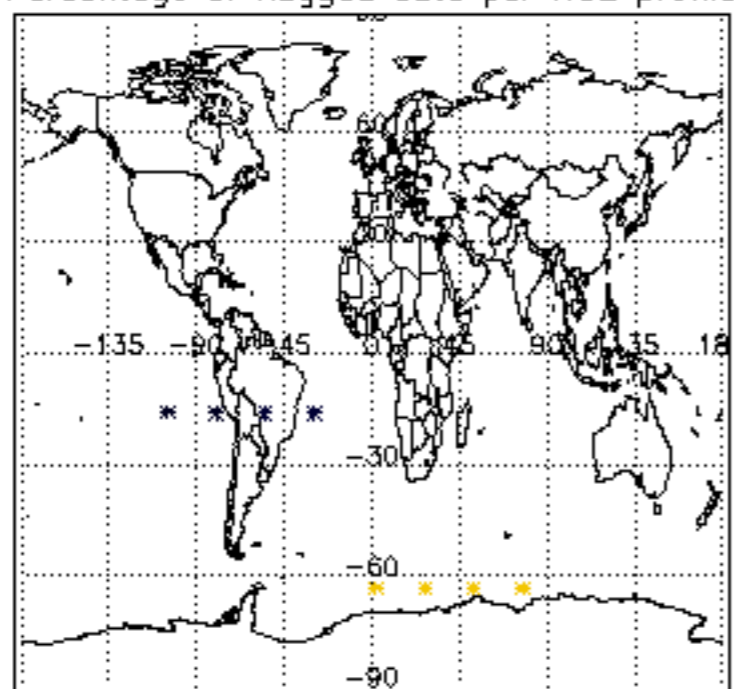
Percentage of flagged data per D3 profile



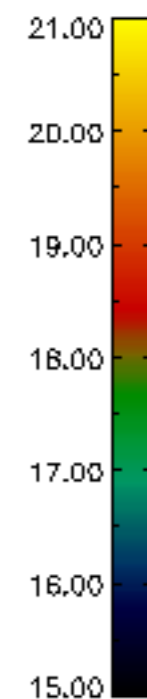
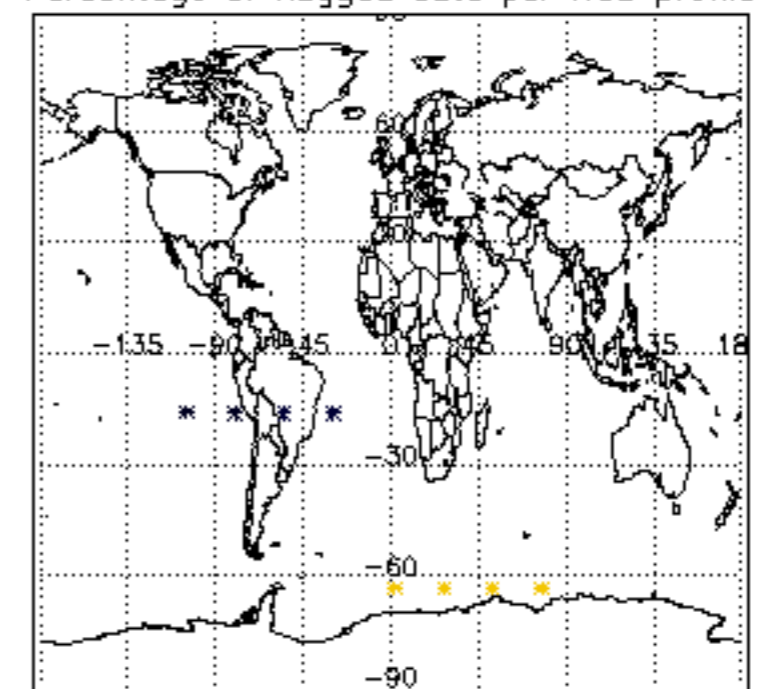
Percentage of flagged data per H2O profile

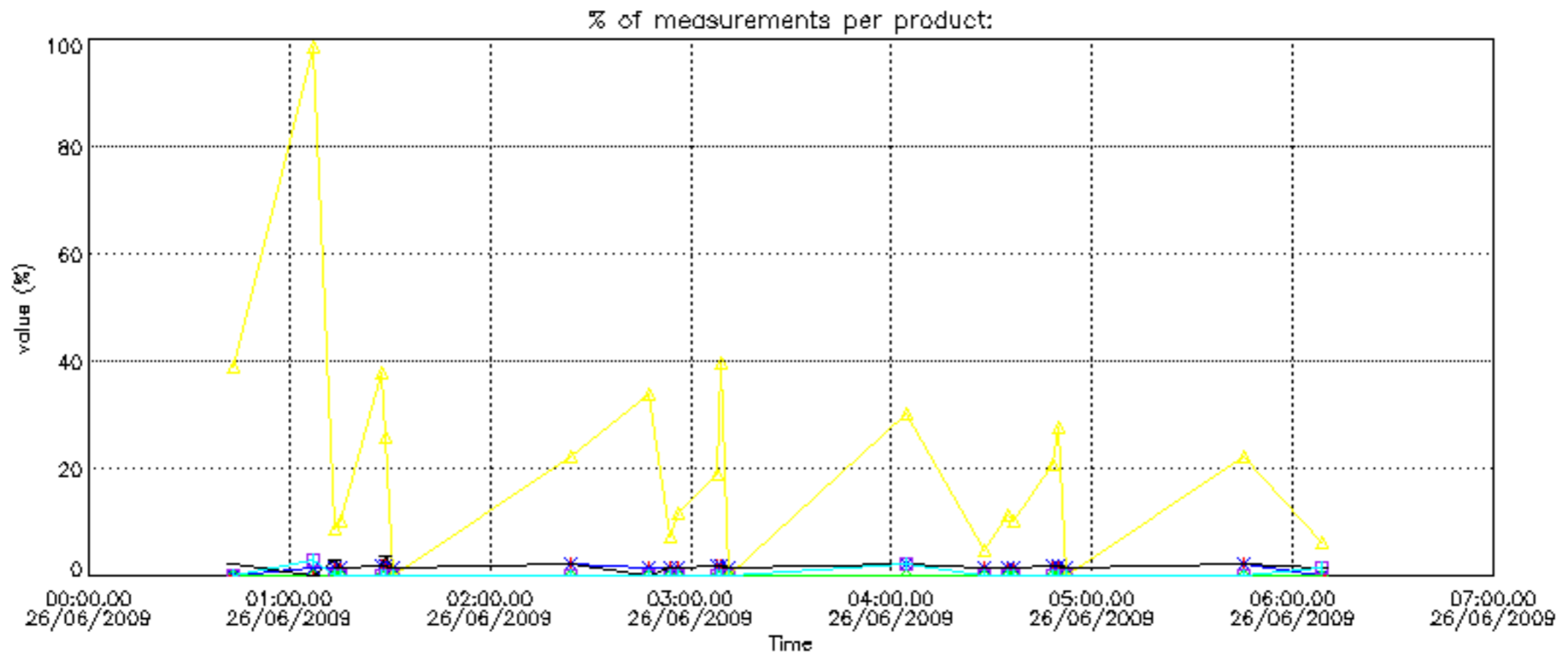


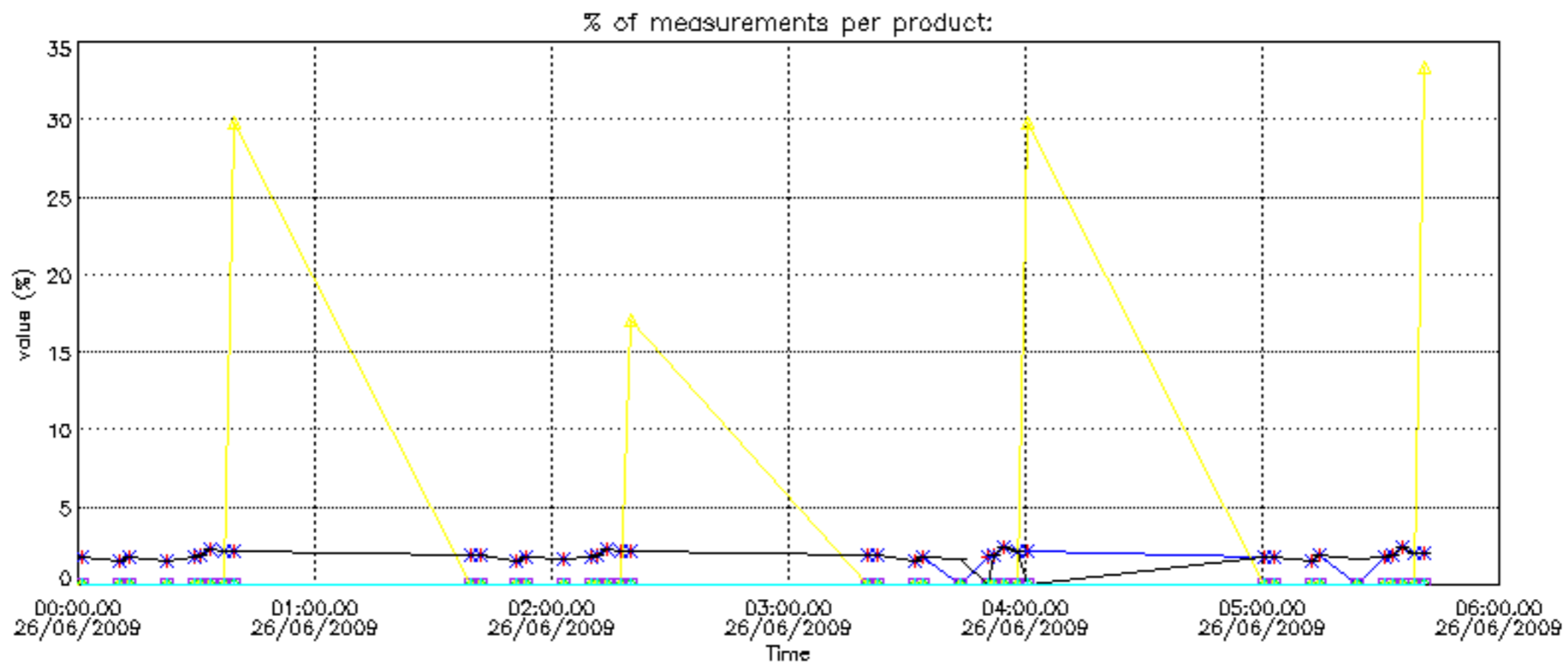
Percentage of flagged data per NO2 profile



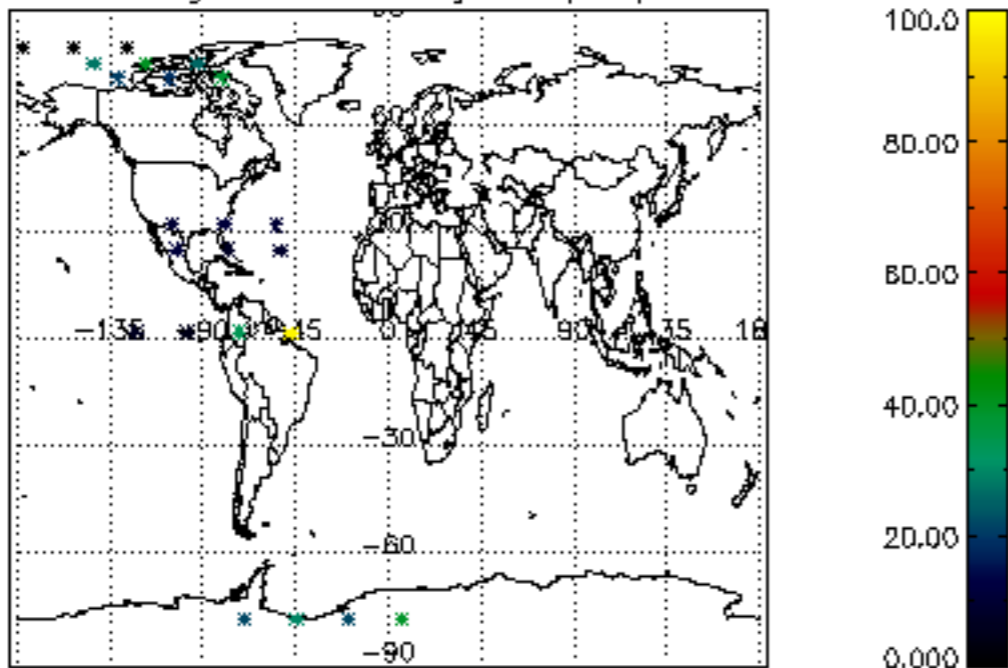
Percentage of flagged data per NO3 profile



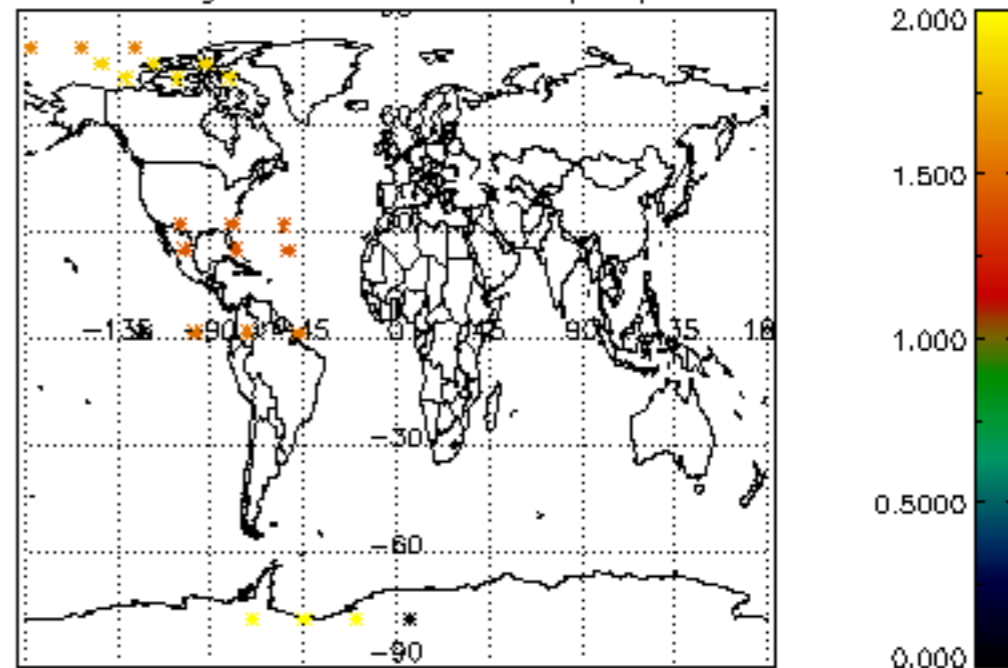




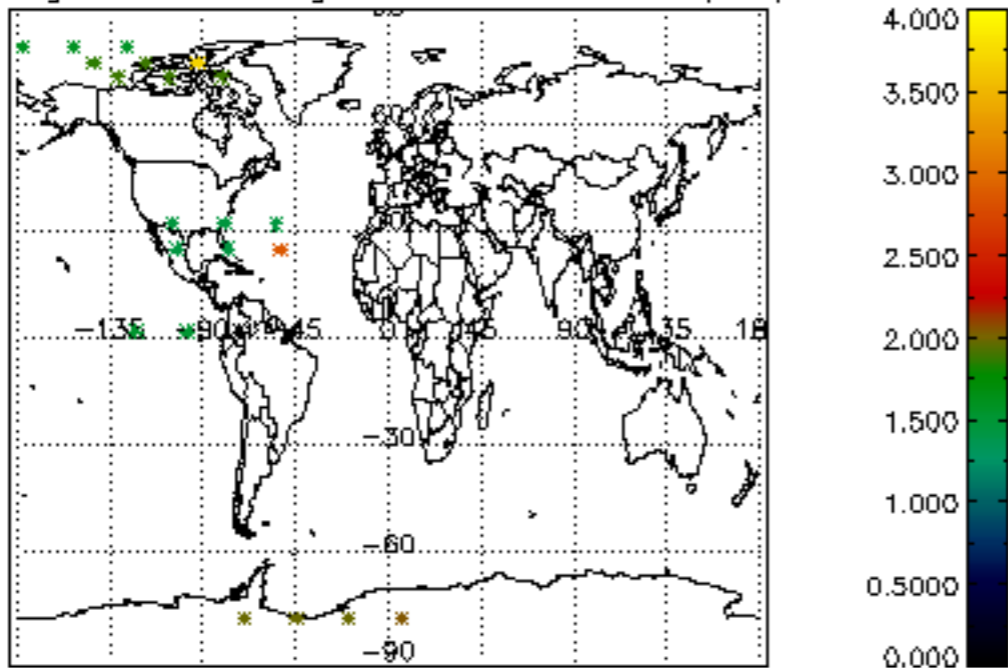
Percentage of cosmic ray hits per profile



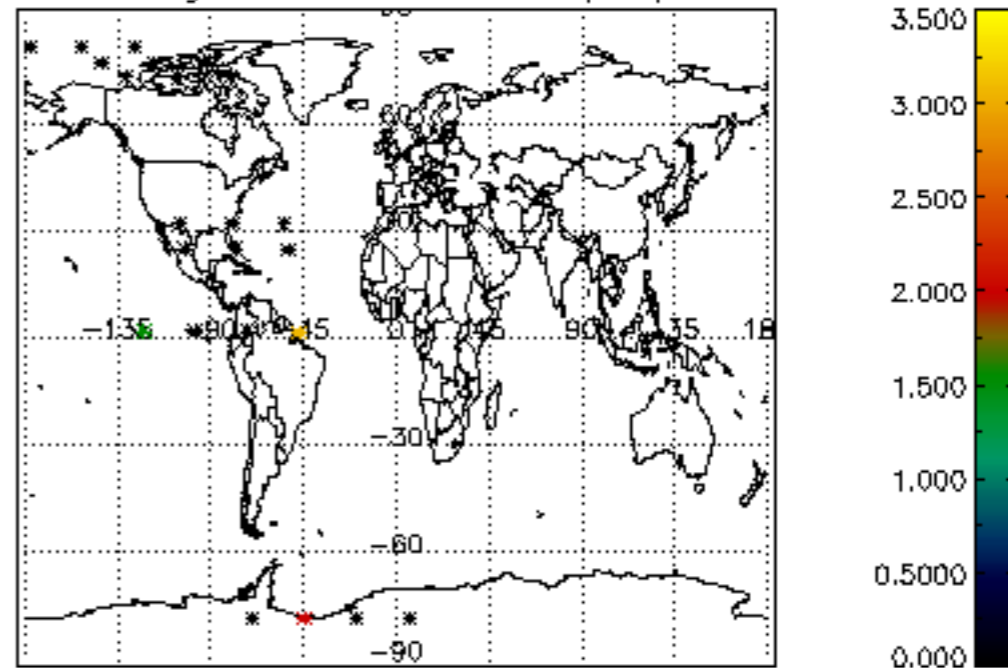
Percentage of datation errors per profile



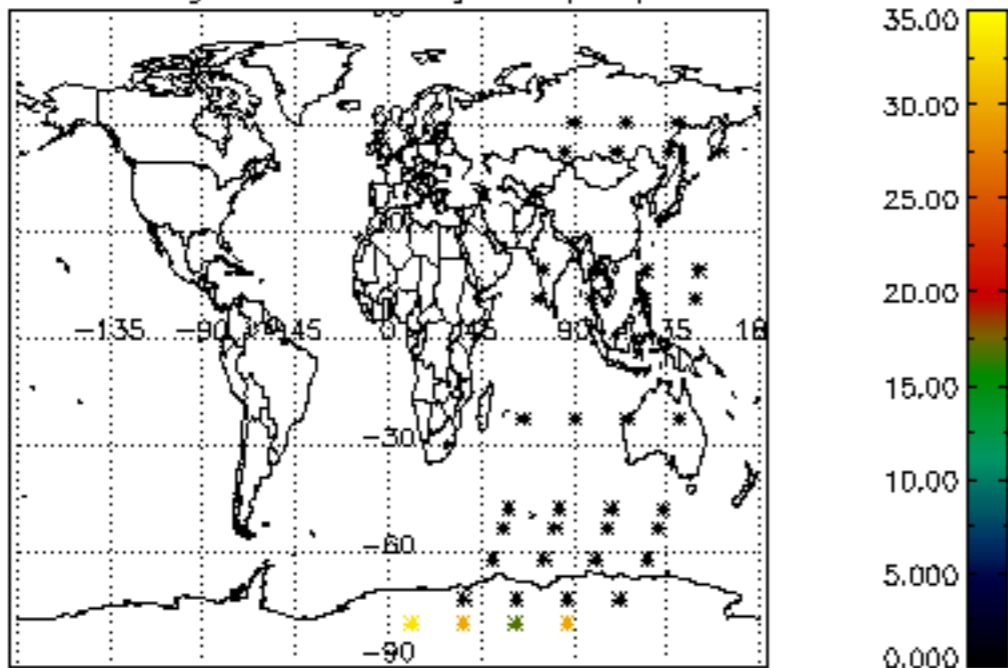
Percentage of star falling outside central band per profile



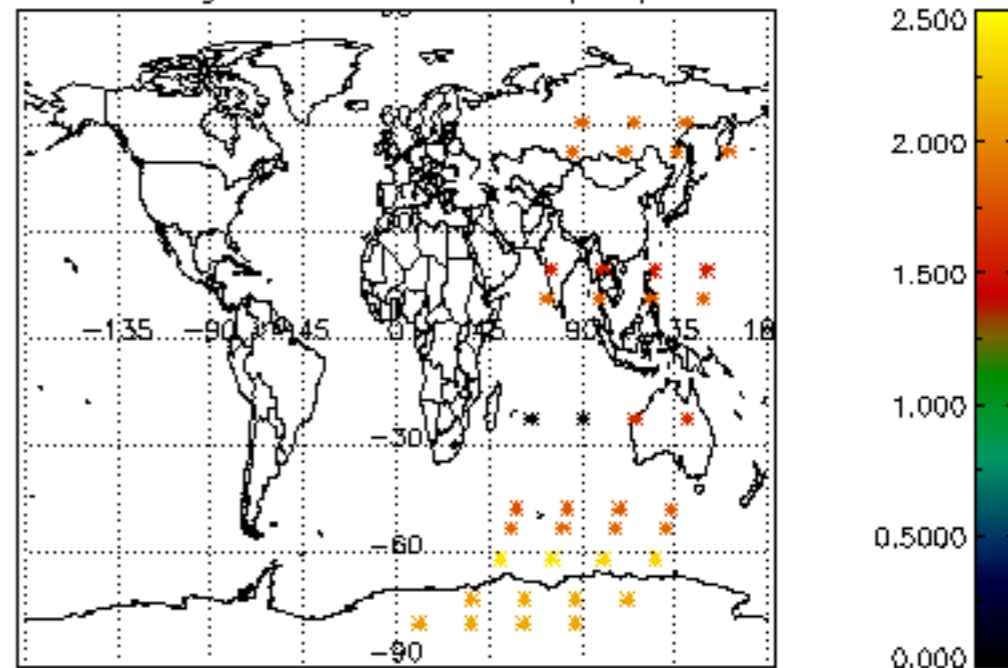
Percentage of saturation errors per profile



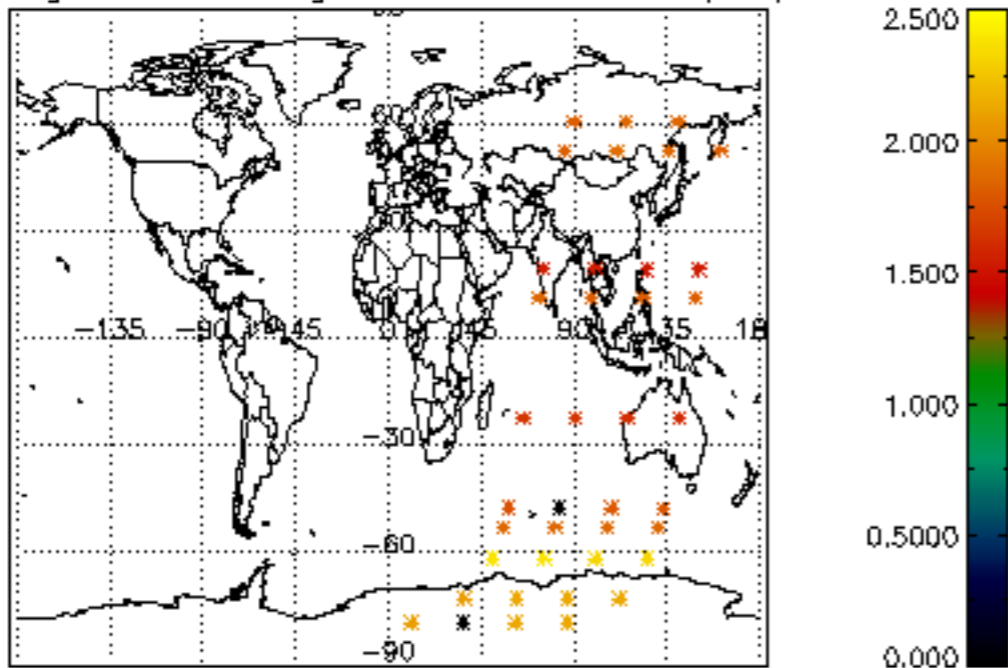
Percentage of cosmic ray hits per profile



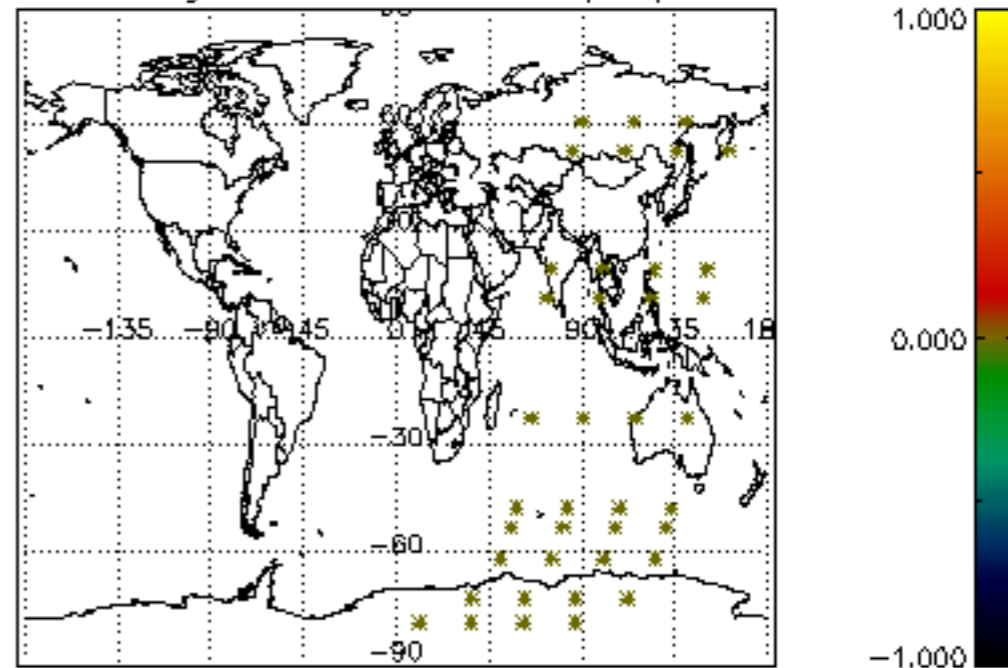
Percentage of datation errors per profile

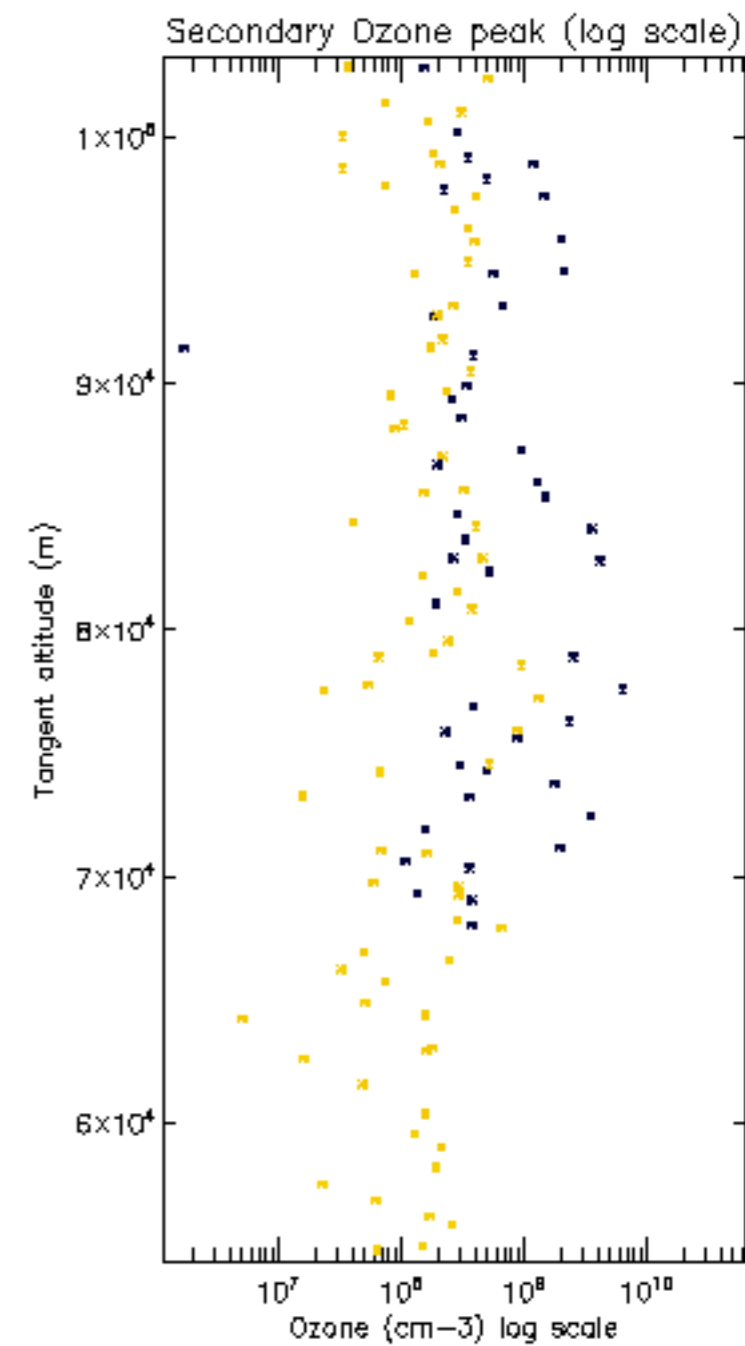
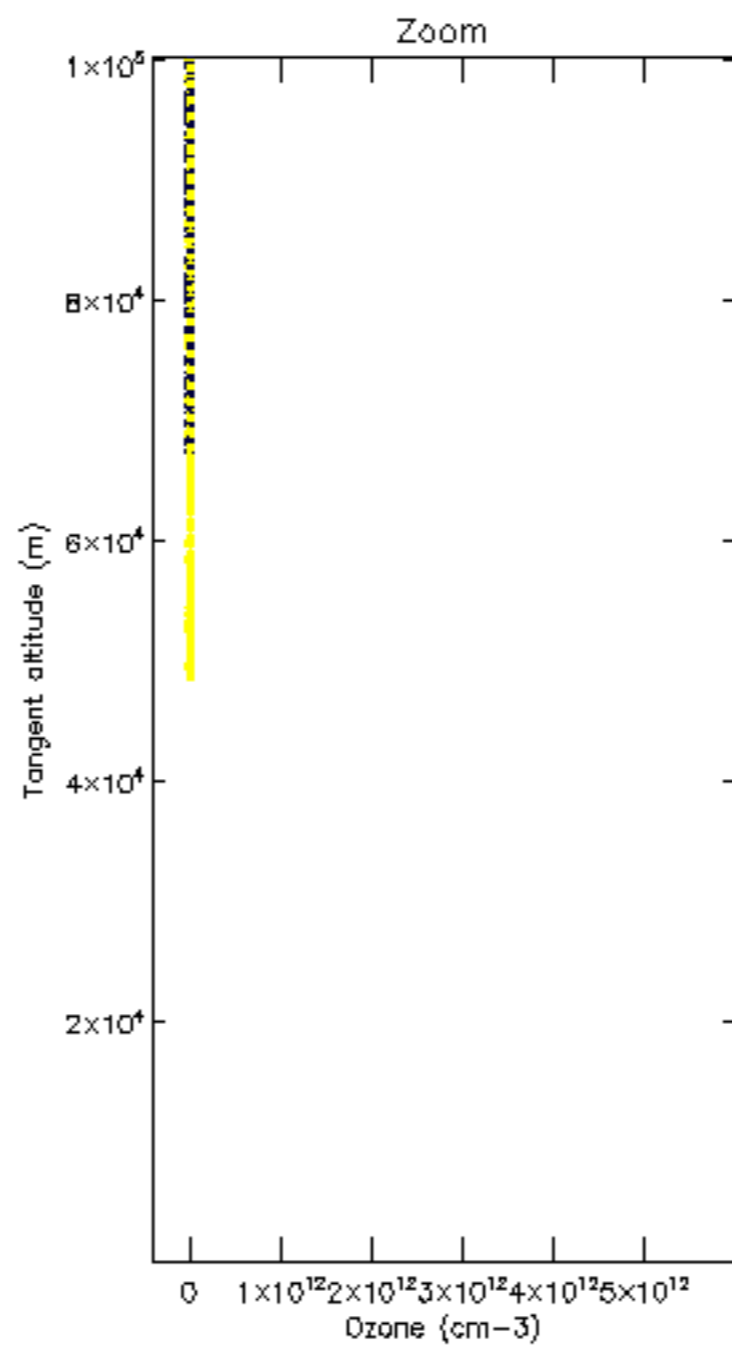
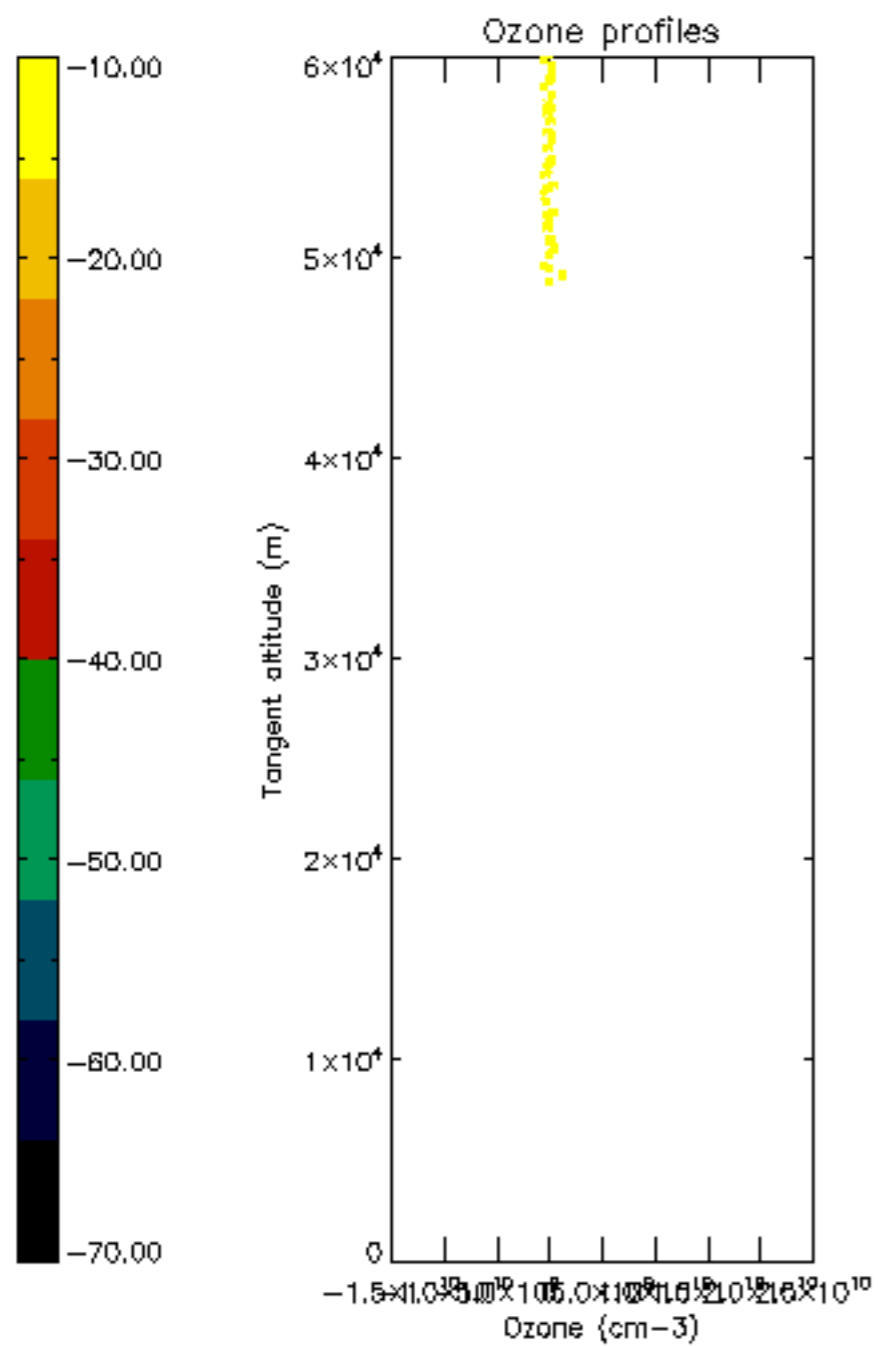


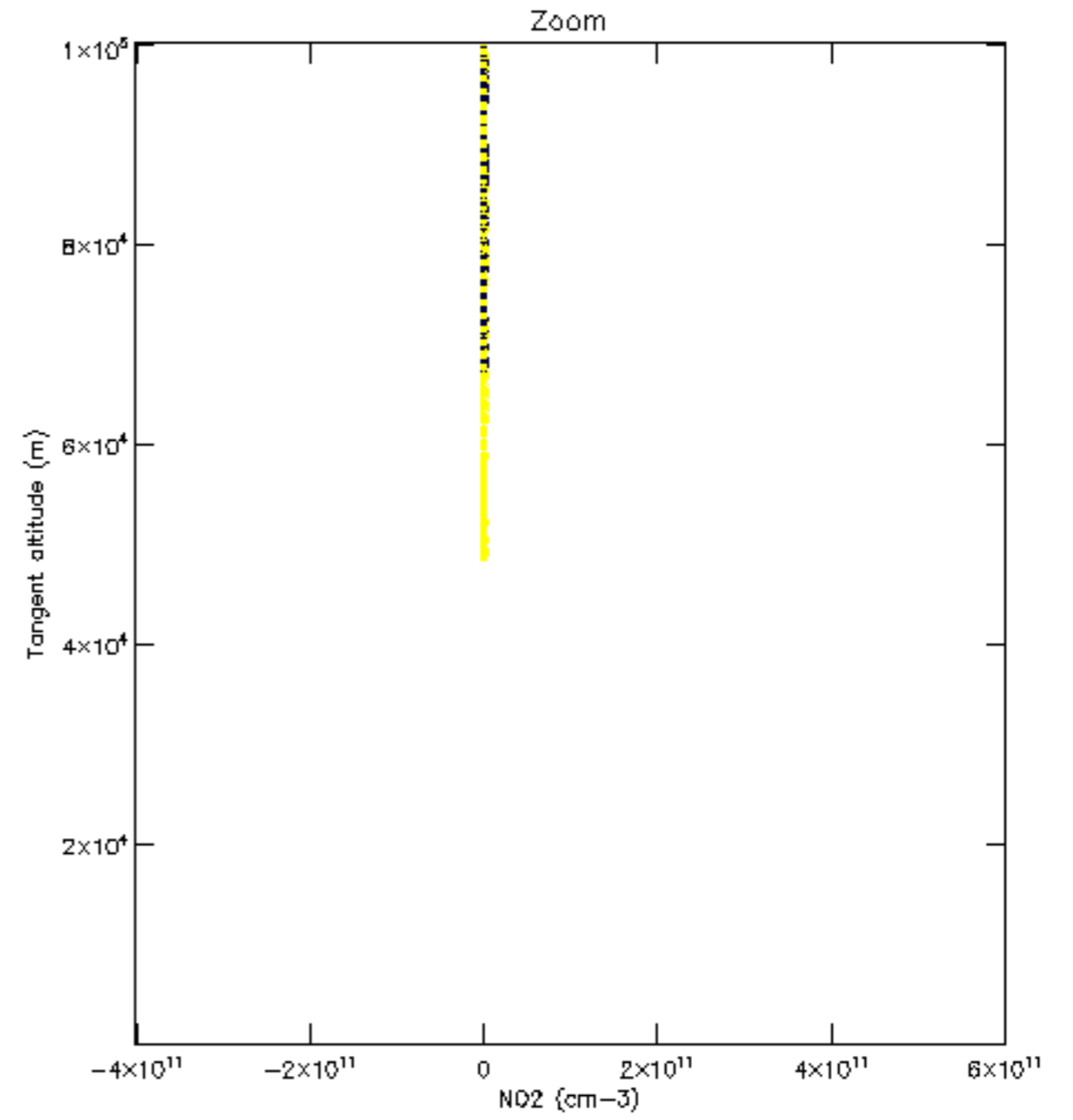
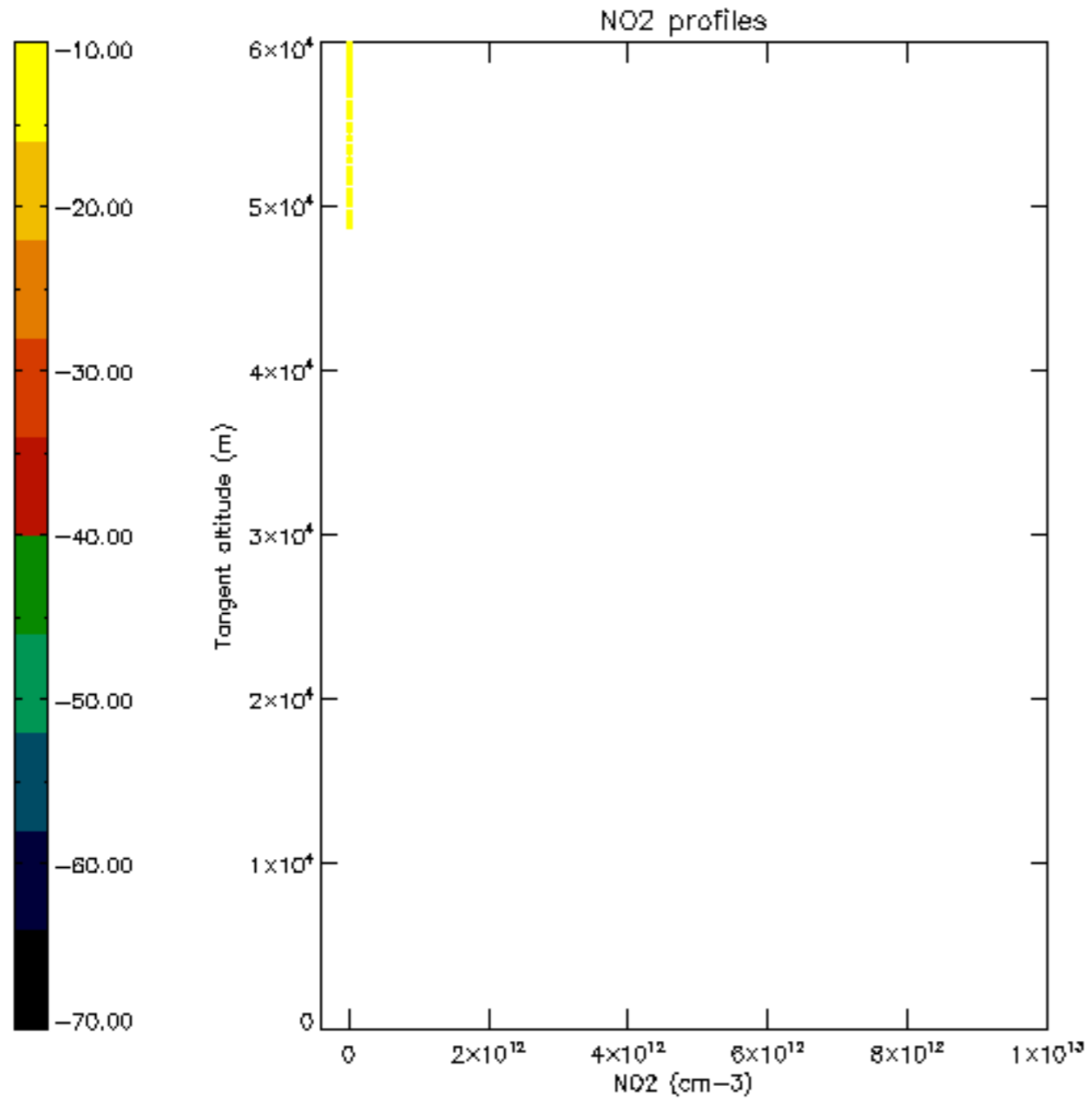
Percentage of star falling outside central band per profile

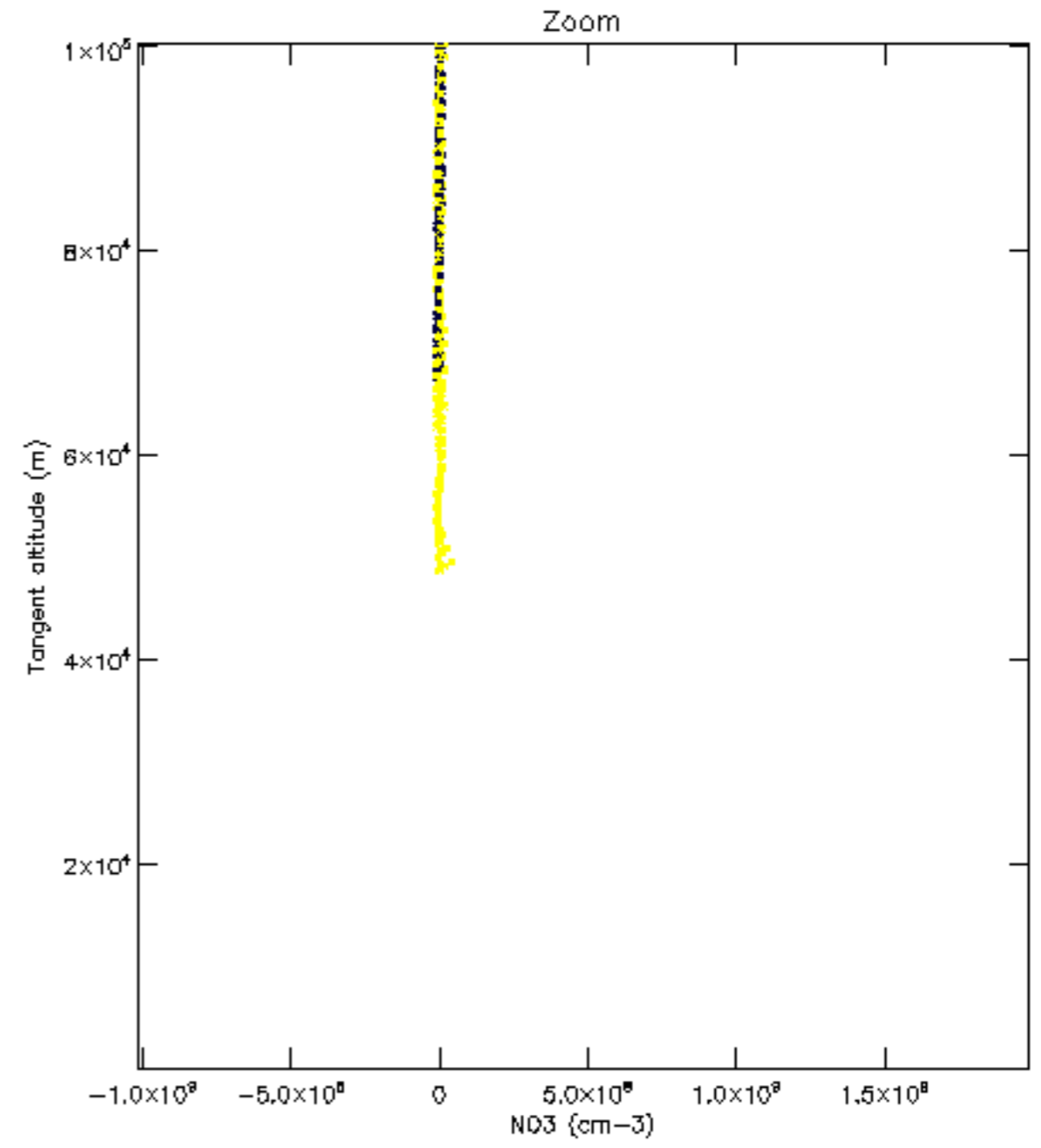
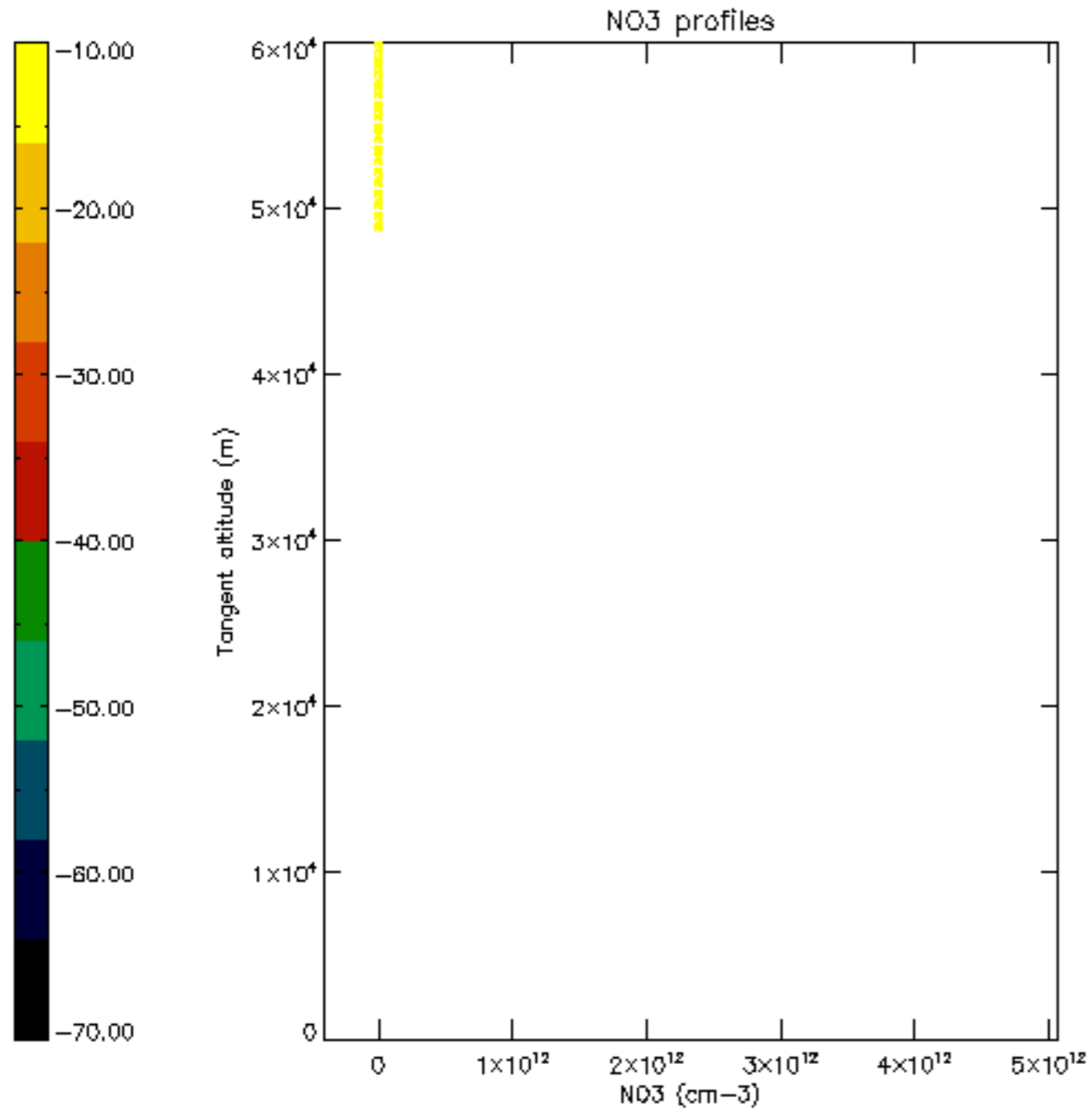


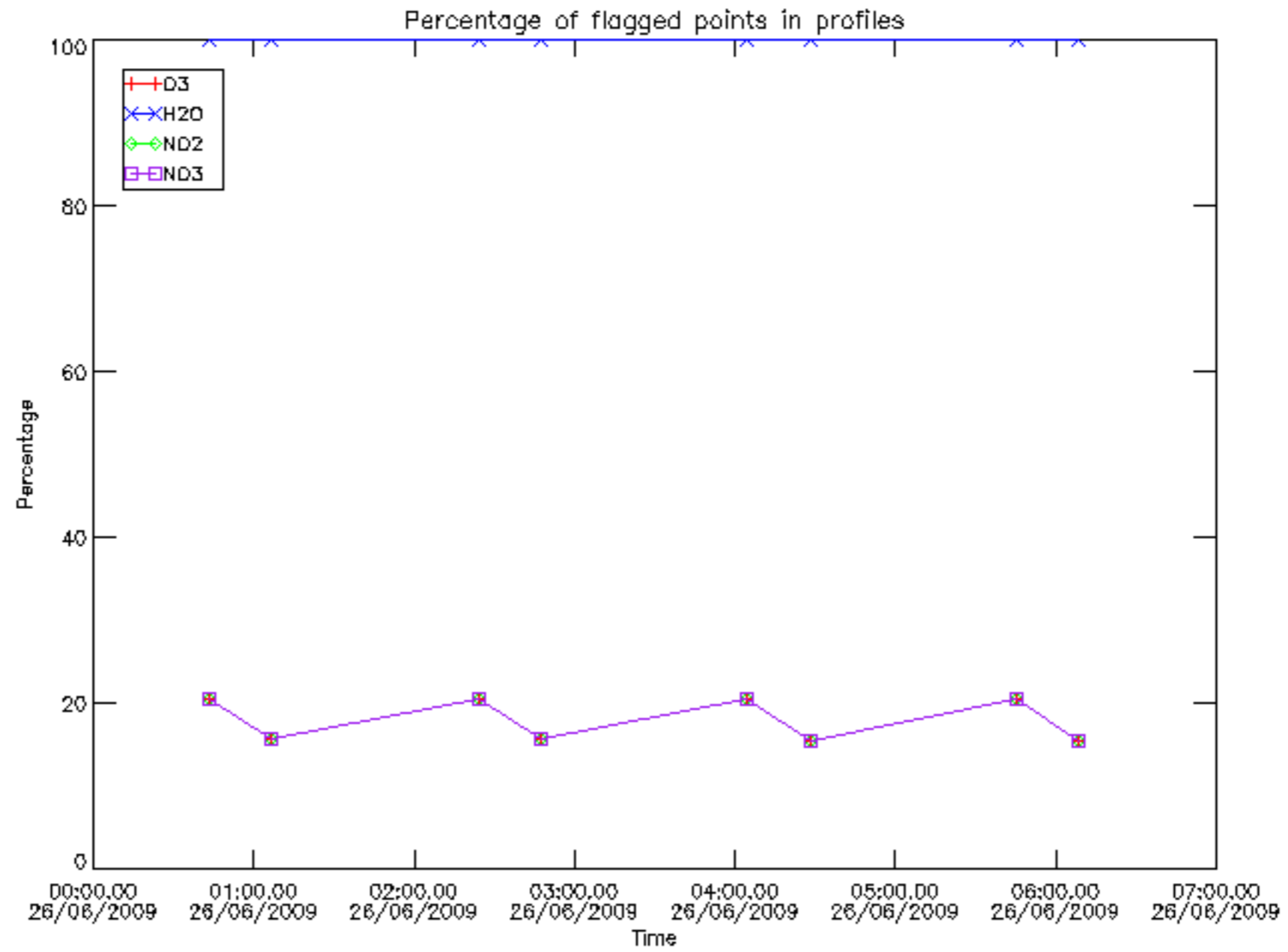
Percentage of saturation errors per profile



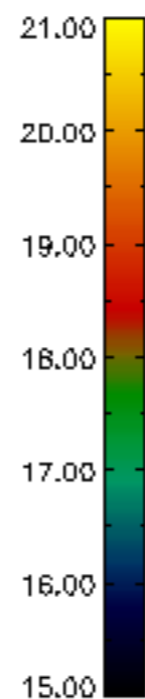
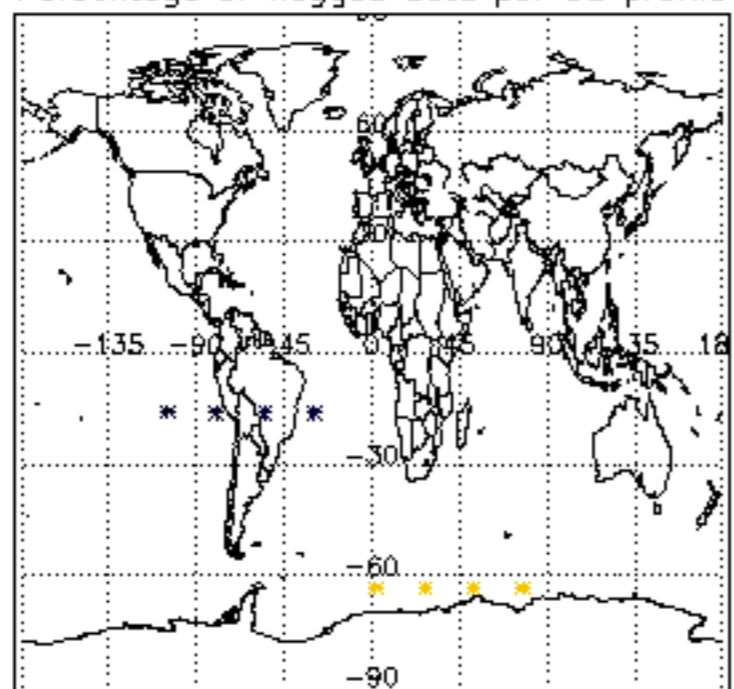




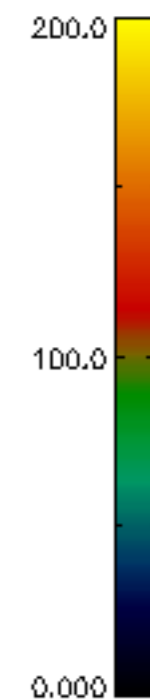
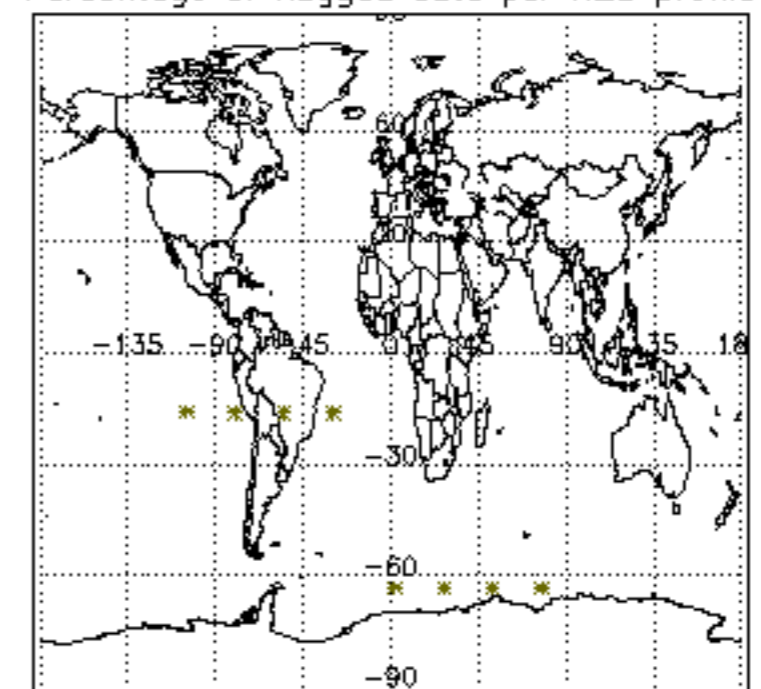




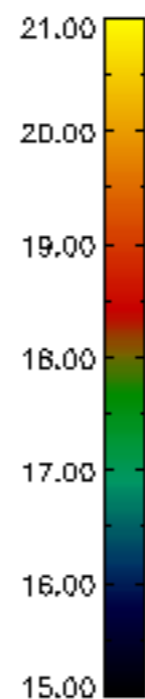
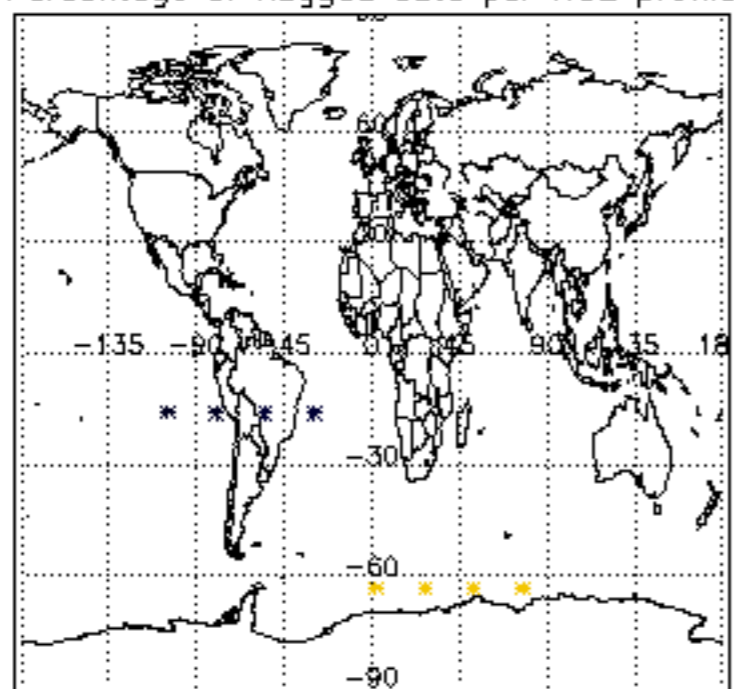
Percentage of flagged data per D3 profile



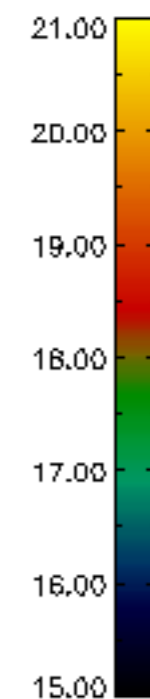
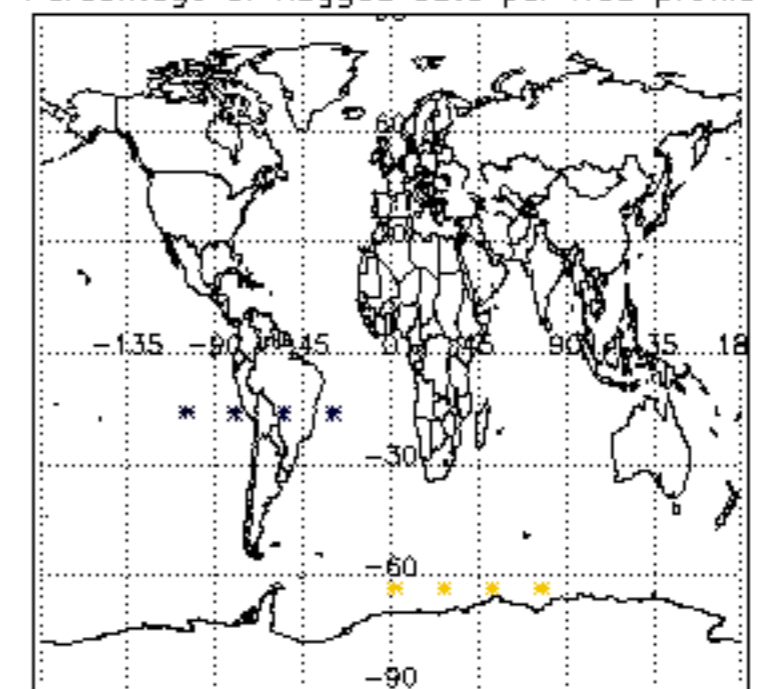
Percentage of flagged data per H2O profile

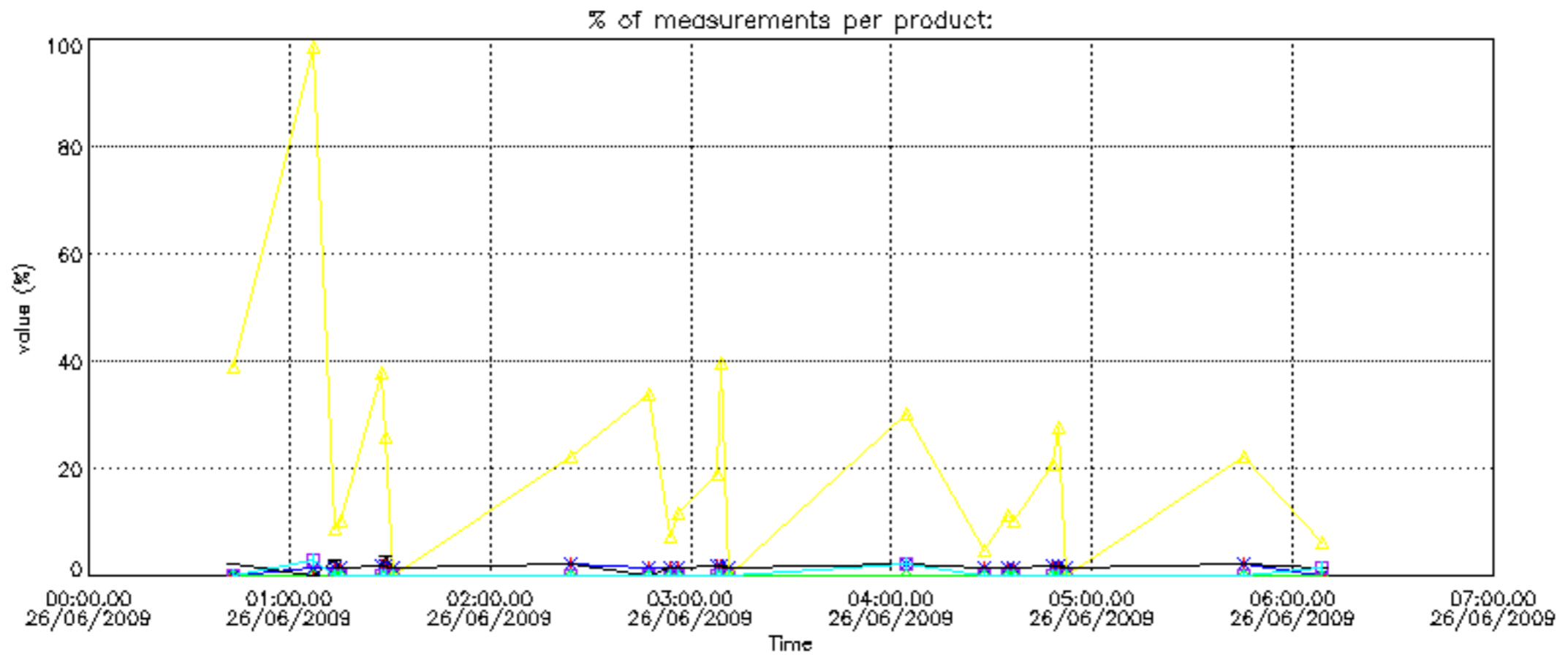


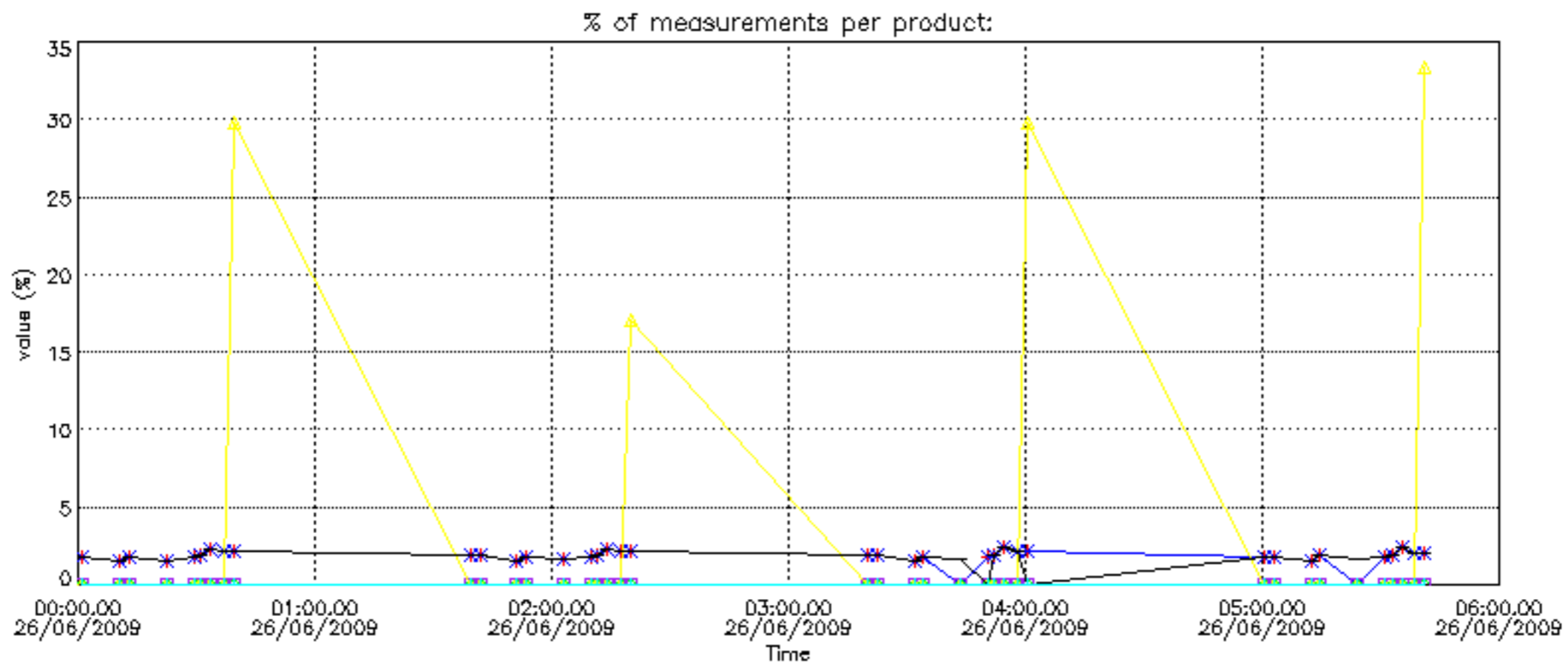
Percentage of flagged data per NO2 profile



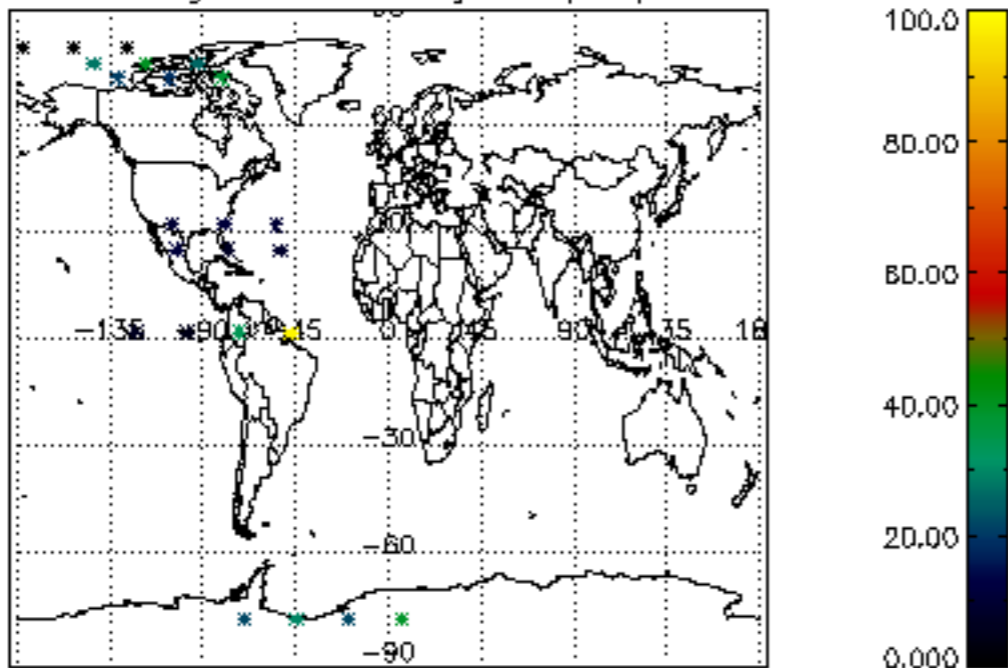
Percentage of flagged data per NO3 profile



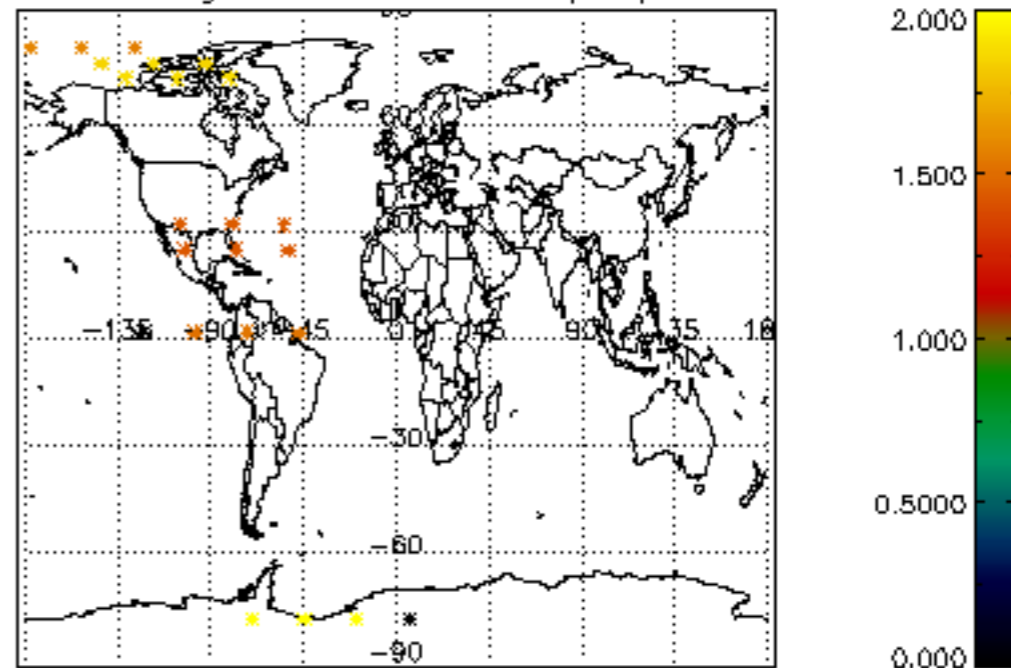




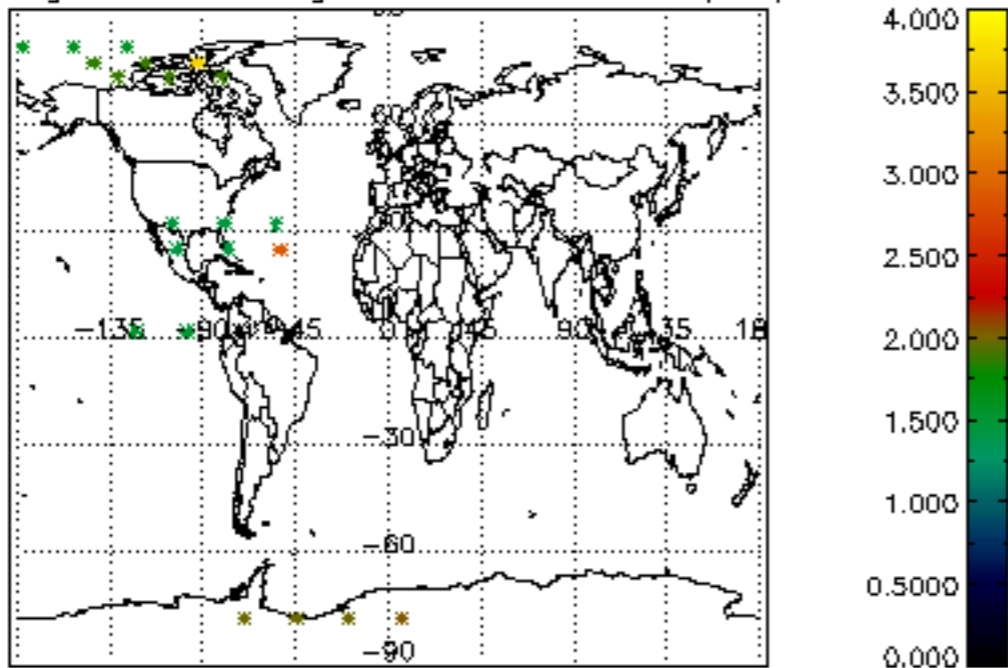
Percentage of cosmic ray hits per profile



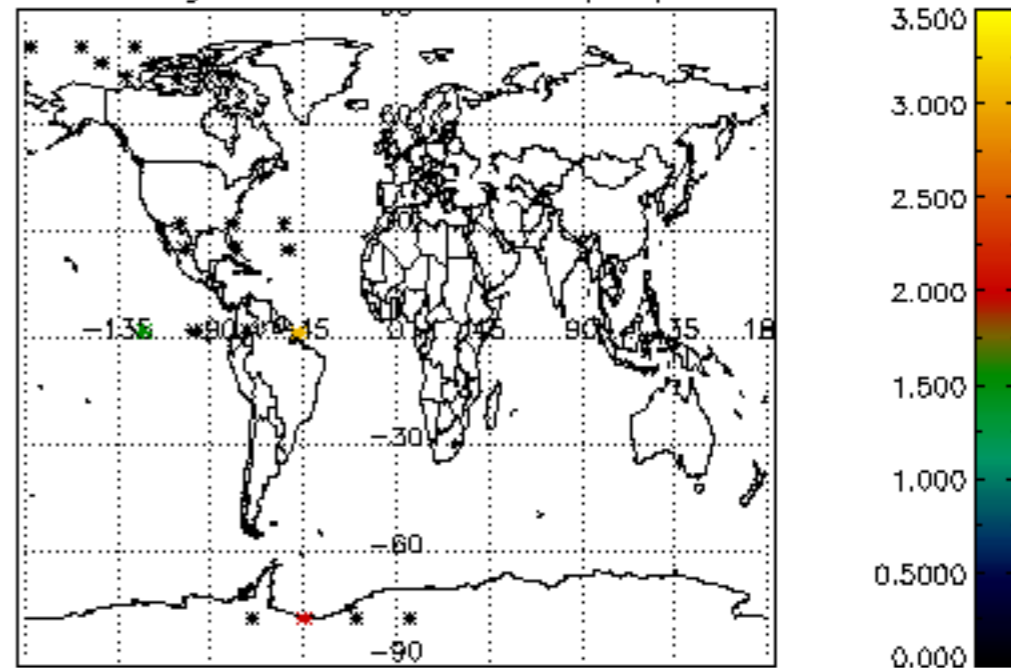
Percentage of datation errors per profile



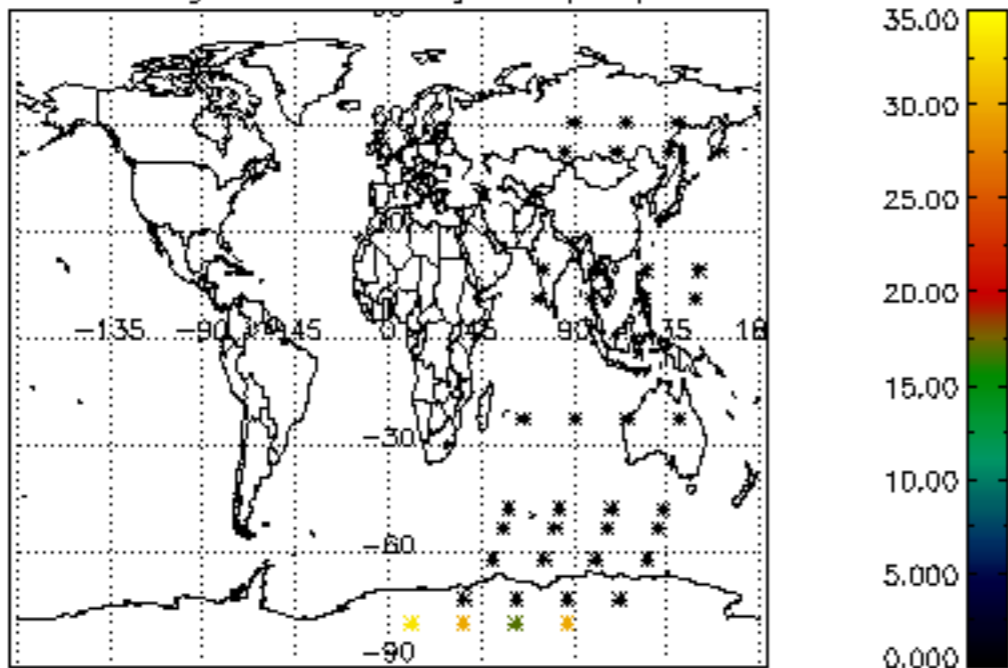
Percentage of star falling outside central band per profile



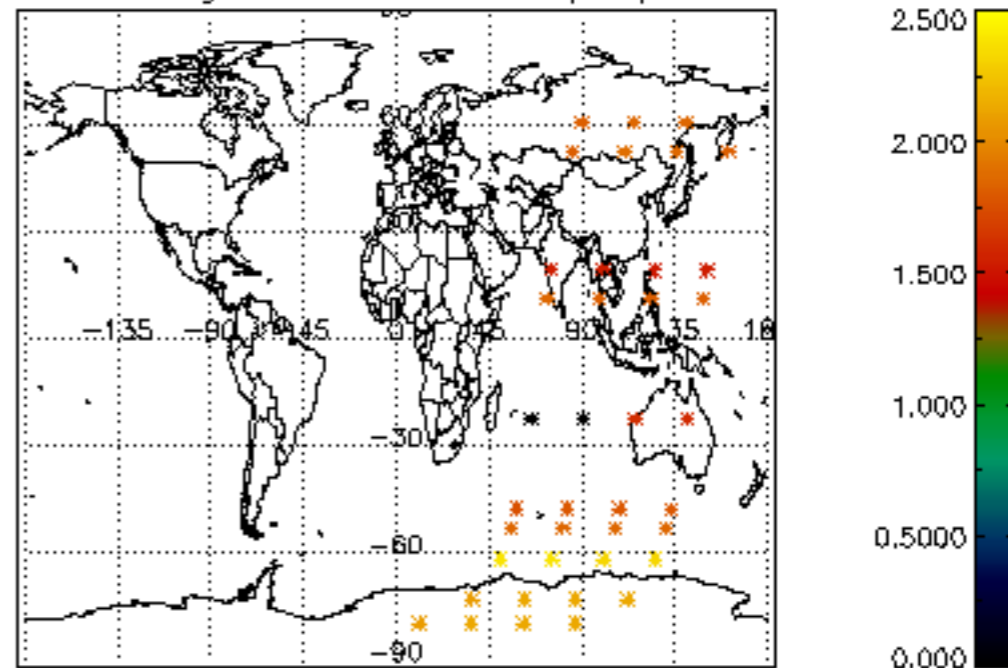
Percentage of saturation errors per profile



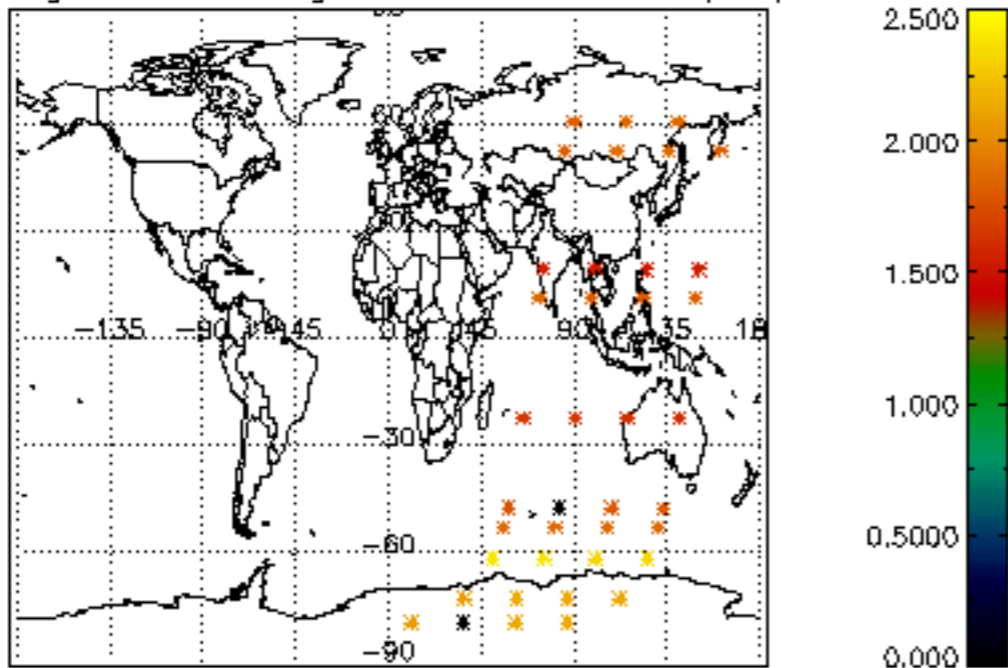
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

