

GOMOS Level 2 Daily Report

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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 10:31:04
Data source version	GOMOS/6.01
Start time of products	03-07-2009 (03JUL2009 00:00:00)
Stop time of products	04-07-2009 (04JUL2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	182
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

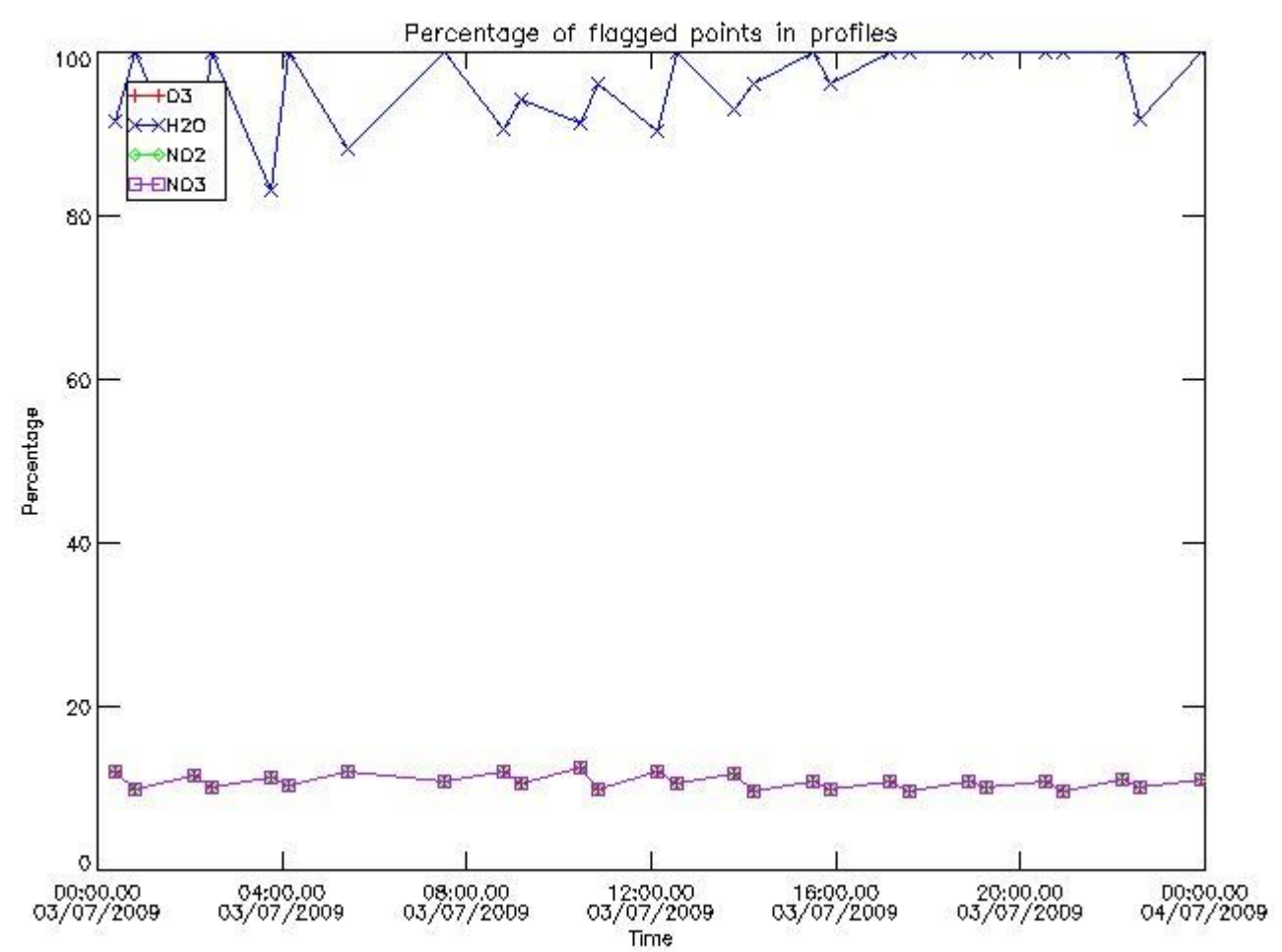
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20090703_000101_000000412080_00245_38375_7509.N1	03-JUL-2009 00:01:01	Bright	41.000	89	5Alp Cep	2.4510	8000.0	82	38375	No
2	GOM_NL__2PRFIN20090703_000826_000000432080_00245_38375_7510.N1	03-JUL-2009 00:08:26	Bright	42.500	74	11Bet Cas	2.2680	6600.0	85	38375	No
3	GOM_NL__2PRFIN20090703_001005_000000372080_00245_38375_7511.N1	03-JUL-2009 00:10:05	Bright	36.500	110	37Del Cas	2.6780	8900.0	73	38375	No
4	GOM_NL__2PRFIN20090703_001641_000000372080_00245_38375_7512.N1	03-JUL-2009 00:16:41	Bright	37.000	73	57Gam1And	2.2600	13100.	74	38375	No
5	GOM_NL__2PRFIN20090703_001923_000000382080_00245_38375_7513.N1	03-JUL-2009 00:19:23	Twilight	37.500	173	4Bet Tri	3.0040	8900.0	75	38375	No
6	GOM_NL__2PRFIN20090703_002346_000000422080_00245_38375_7514.N1	03-JUL-2009 00:23:46	Dark	41.500	50	13Alp Ari	2.0070	4250.0	83	38375	No
7	GOM_NL__2PRFIN20090703_004820_000000512080_00246_38376_7517.N1	03-JUL-2009 00:48:20	Dark	51.000	84	Alp Phe	2.3970	4500.0	102	38376	No
8	GOM_NL__2PRFIN20090703_005447_000000522080_00246_38376_7518.N1	03-JUL-2009 00:54:47	Straylight	51.500	63	Bet Gru	2.1500	2800.0	103	38376	No
9	GOM_NL__2PRFIN20090703_005641_000000492080_00246_38376_7519.N1	03-JUL-2009 00:56:41	Straylight	49.000	31	Alp Gru	1.7340	15200.	98	38376	No
10	GOM_NL__2PRFIN20090703_005939_000000572080_00246_38376_7520.N1	03-JUL-2009 00:59:39	Straylight	56.500	172	Gam Gru	3.0030	13100.	113	38376	No
11	GOM_NL__2PRFIN20090703_011058_000000482080_00246_38376_7521.N1	03-JUL-2009 01:10:58	Bright	48.000	155	41Pi Sgr	2.9000	6600.0	96	38376	No
12	GOM_NL__2PRFIN20090703_012309_000000462080_00246_38376_7522.N1	03-JUL-2009 01:23:09	Bright	45.500	168	17Zet Aql	2.9860	11000.	91	38376	No
13	GOM_NL__2PRFIN20090703_013010_000000472080_00246_38376_7523.N1	03-JUL-2009 01:30:10	Bright	47.000	5	3Alp Lyr	0.033000	11000.	94	38376	No
14	GOM_NL__2PRFIN20090703_013430_000000452080_00246_38376_7524.N1	03-JUL-2009 01:34:30	Bright	44.500	144	18Del Cyg	2.8600	11000.	89	38376	No
15	GOM_NL__2PRFIN20090703_014136_000000422080_00246_38376_7525.N1	03-JUL-2009 01:41:36	Bright	41.500	89	5Alp Cep	2.4510	8000.0	83	38376	No
16	GOM_NL__2PRFIN20090703_014901_000000442080_00246_38376_7526.N1	03-JUL-2009 01:49:01	Bright	44.000	74	11Bet Cas	2.2680	6600.0	88	38376	No
17	GOM_NL__2PRFIN20090703_015040_000000372080_00246_38376_7527.N1	03-JUL-2009 01:50:40	Bright	37.000	110	37Del Cas	2.6780	8900.0	74	38376	No
18	GOM_NL__2PRFIN20090703_015717_000000372080_00246_38376_7528.N1	03-JUL-2009 01:57:17	Bright	37.000	73	57Gam1And	2.2600	13100.	74	38376	No
19	GOM_NL__2PRFIN20090703_015959_000000382080_00246_38376_7529.N1	03-JUL-2009 01:59:59	Twilight	37.500	173	4Bet Tri	3.0040	8900.0	75	38376	No
20	GOM_NL__2PRFIN20090703_020422_000000442080_00246_38376_7530.N1	03-JUL-2009 02:04:22	Dark	43.500	50	13Alp Ari	2.0070	4250.0	87	38376	No
21	GOM_NL__2PRFIN20090703_022857_000000512080_00247_38377_7531.N1	03-JUL-2009 02:28:57	Dark	50.500	84	Alp Phe	2.3970	4500.0	101	38377	No
22	GOM_NL__2PRFIN20090703_023523_000000502080_00247_38377_7532.N1	03-JUL-2009 02:35:23	Straylight	50.000	63	Bet Gru	2.1500	2800.0	100	38377	No
23	GOM_NL__2PRFIN20090703_023718_000000602080_00247_38377_7533.N1	03-JUL-2009 02:37:18	Straylight	60.000	31	Alp Gru	1.7340	15200.	120	38377	No
24	GOM_NL__2PRFIN20090703_024016_000000582080_00247_38377_7534.N1	03-JUL-2009 02:40:16	Straylight	58.000	172	Gam Gru	3.0030	13100.	116	38377	No
25	GOM_NL__2PRFIN20090703_025134_000000432080_00247_38377_7535.N1	03-JUL-2009 02:51:34	Bright	43.000	155	41Pi Sgr	2.9000	6600.0	86	38377	No
26	GOM_NL__2PRFIN20090703_030344_000000472080_00247_38377_7536.N1	03-JUL-2009 03:03:44	Bright	46.500	168	17Zet Aql	2.9860	11000.	93	38377	No
27	GOM_NL__2PRFIN20090703_031045_000000462080_00247_38377_7537.N1	03-JUL-2009 03:10:45	Bright	46.000	5	3Alp Lyr	0.033000	11000.	92	38377	No
28	GOM_NL__2PRFIN20090703_031505_000000492080_00247_38377_7538.N1	03-JUL-2009 03:15:05	Bright	48.500	144	18Del Cyg	2.8600	11000.	97	38377	No
29	GOM_NL__2PRFIN20090703_032211_000000442080_00247_38377_7539.N1	03-JUL-2009 03:22:11	Bright	44.000	89	5Alp Cep	2.4510	8000.0	88	38377	No
30	GOM_NL__2PRFIN20090703_032937_000000432080_00247_38377_7540.N1	03-JUL-2009 03:29:37	Bright	43.000	74	11Bet Cas	2.2680	6600.0	86	38377	No
31	GOM_NL__2PRFIN20090703_033116_000000382080_00247_38377_7541.N1	03-JUL-2009 03:31:16	Bright	37.500	110	37Del Cas	2.6780	8900.0	75	38377	No
32	GOM_NL__2PRFIN20090703_033752_000000382080_00247_38377_7542.N1	03-JUL-2009 03:37:52	Bright	38.000	73	57Gam1And	2.2600	13100.	76	38377	No
33	GOM_NL__2PRFIN20090703_034035_000000392080_00247_38377_7543.N1	03-JUL-2009 03:40:35	Twilight	38.500	173	4Bet Tri	3.0040	8900.0	77	38377	No
34	GOM_NL__2PRFIN20090703_034458_000000452080_00247_38377_7544.N1	03-JUL-2009 03:44:58	Dark	45.000	50	13Alp Ari	2.0070	4250.0	90	38377	No
35	GOM_NL__2PRFIN20090703_040934_000000492080_00248_38378_7546.N1	03-JUL-2009 04:09:34	Dark	49.000	84	Alp Phe	2.3970	4500.0	98	38378	No
36	GOM_NL__2PRFIN20090703_041601_000000542080_00248_38378_7547.N1	03-JUL-2009 04:16:01	Straylight	53.500	63	Bet Gru	2.1500	2800.0	107	38378	No
37	GOM_NL__2PRFIN20090703_041755_000000522080_00248_38378_7548.N1	03-JUL-2009 04:17:55	Straylight	51.500	31	Alp Gru	1.7340	15200.	103	38378	No
38	GOM_NL__2PRFIN20090703_042053_000000582080_00248_38378_7549.N1	03-JUL-2009 04:20:53	Straylight	57.500	172	Gam Gru	3.0030	13100.	115	38378	No
39	GOM_NL__2PRFIN20090703_043211_000000452080_00248_38378_7550.N1	03-JUL-2009 04:32:11	Bright	45.000	155	41Pi Sgr	2.9000	6600.0	90	38378	No
40	GOM_NL__2PRFIN20090703_044420_000000482080_00248_38378_7551.N1	03-JUL-2009 04:44:20	Bright	47.500	168	17Zet Aql	2.9860	11000.	95	38378	No
41	GOM_NL__2PRFIN20090703_045121_000000402080_00248_38378_7552.N1	03-JUL-2009 04:51:21	Bright	40.000	5	3Alp Lyr	0.033000	11000.	80	38378	No
42	GOM_NL__2PRFIN20090703_045540_000000492080_00248_38378_7553.N1	03-JUL-2009 04:55:40	Bright	48.500	144	18Del Cyg	2.8600	11000.	97	38378	No

161	GOM_NL__2PRFIN20090703_211812_000000422080_00258_38388_7726.N1	03-JUL-2009 21:18:12	Bright	41.500	155	41Pi Sgr	2.9000	6600.0	83	38388	No
162	GOM_NL__2PRFIN20090703_213014_000000452080_00258_38388_7727.N1	03-JUL-2009 21:30:14	Bright	44.500	168	17Zet Aql	2.9860	11000.	89	38388	No
163	GOM_NL__2PRFIN20090703_213716_000000412080_00258_38388_7728.N1	03-JUL-2009 21:37:16	Bright	40.500	5	3Alp Lyr	0.033000	11000.	81	38388	No
164	GOM_NL__2PRFIN20090703_214131_000000522080_00258_38388_7729.N1	03-JUL-2009 21:41:31	Bright	51.500	144	18Del Cyg	2.8600	11000.	103	38388	No
165	GOM_NL__2PRFIN20090703_214839_000000432080_00258_38388_7730.N1	03-JUL-2009 21:48:39	Bright	42.500	89	5Alp Cep	2.4510	8000.0	85	38388	No
166	GOM_NL__2PRFIN20090703_215701_000000382080_00258_38388_7731.N1	03-JUL-2009 21:57:01	Bright	38.000	76	27Gam Cas	2.3000	30000.	76	38388	No
167	GOM_NL__2PRFIN20090703_220427_000000372080_00258_38388_7732.N1	03-JUL-2009 22:04:27	Bright	37.000	73	57Gam1And	2.2600	13100.	74	38388	No
168	GOM_NL__2PRFIN20090703_220711_000000382080_00258_38388_7733.N1	03-JUL-2009 22:07:11	Twilight	38.000	173	4Bet Tri	3.0040	8900.0	76	38388	No
169	GOM_NL__2PRFIN20090703_221301_000000452080_00258_38388_7734.N1	03-JUL-2009 22:13:01	Dark	45.000	105	6Bet Ari	2.6450	8900.0	90	38388	No
170	GOM_NL__2PRFIN20090703_223621_000000502080_00259_38389_7740.N1	03-JUL-2009 22:36:21	Dark	50.000	84	Alp Phe	2.3970	4500.0	100	38389	No
171	GOM_NL__2PRFIN20090703_224246_000000502080_00259_38389_7741.N1	03-JUL-2009 22:42:46	Straylight	50.000	63	Bet Gru	2.1500	2800.0	100	38389	No
172	GOM_NL__2PRFIN20090703_224439_000000472080_00259_38389_7742.N1	03-JUL-2009 22:44:39	Straylight	47.000	31	Alp Gru	1.7340	15200.	94	38389	No
173	GOM_NL__2PRFIN20090703_224739_000000562080_00259_38389_7743.N1	03-JUL-2009 22:47:39	Straylight	55.500	172	Gam Gru	3.0030	13100.	111	38389	No
174	GOM_NL__2PRFIN20090703_225848_000000422080_00259_38389_7744.N1	03-JUL-2009 22:58:48	Bright	42.000	155	41Pi Sgr	2.9000	6600.0	84	38389	No
175	GOM_NL__2PRFIN20090703_231050_000000452080_00259_38389_7745.N1	03-JUL-2009 23:10:50	Bright	45.000	168	17Zet Aql	2.9860	11000.	90	38389	No
176	GOM_NL__2PRFIN20090703_231752_000000422080_00259_38389_7746.N1	03-JUL-2009 23:17:52	Bright	42.000	5	3Alp Lyr	0.033000	11000.	84	38389	No
177	GOM_NL__2PRFIN20090703_232206_000000482080_00259_38389_7747.N1	03-JUL-2009 23:22:06	Bright	48.000	144	18Del Cyg	2.8600	11000.	96	38389	No
178	GOM_NL__2PRFIN20090703_232914_000000452080_00259_38389_7748.N1	03-JUL-2009 23:29:14	Bright	45.000	89	5Alp Cep	2.4510	8000.0	90	38389	No
179	GOM_NL__2PRFIN20090703_233737_000000392080_00259_38389_7749.N1	03-JUL-2009 23:37:37	Bright	39.000	76	27Gam Cas	2.3000	30000.	78	38389	No
180	GOM_NL__2PRFIN20090703_234502_000000382080_00259_38389_7750.N1	03-JUL-2009 23:45:02	Bright	37.500	73	57Gam1And	2.2600	13100.	75	38389	No
181	GOM_NL__2PRFIN20090703_234747_000000392080_00259_38389_7751.N1	03-JUL-2009 23:47:47	Twilight	38.500	173	4Bet Tri	3.0040	8900.0	77	38389	No
182	GOM_NL__2PRFIN20090703_235337_000000452080_00259_38389_7752.N1	03-JUL-2009 23:53:37	Dark	45.000	105	6Bet Ari	2.6450	8900.0	90	38389	No

3. Quality information per product

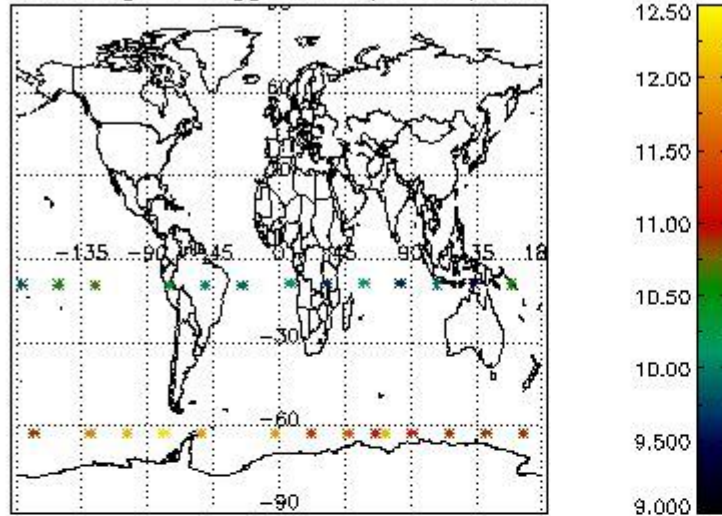
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

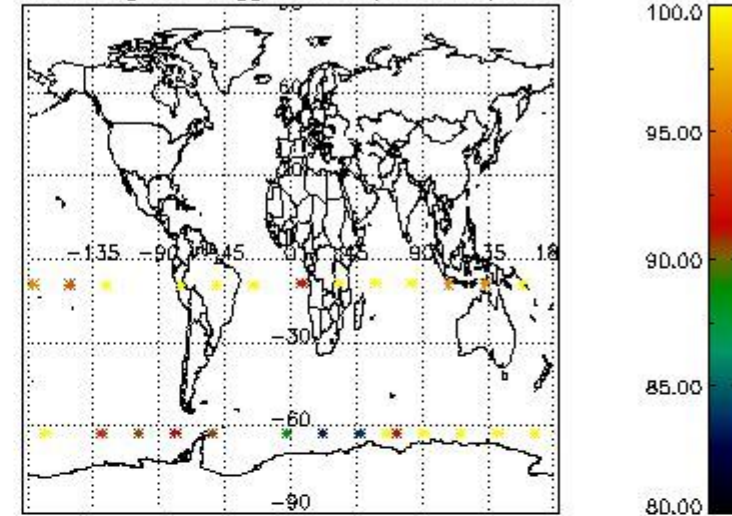


3.2 Plot quality information per product (world map)

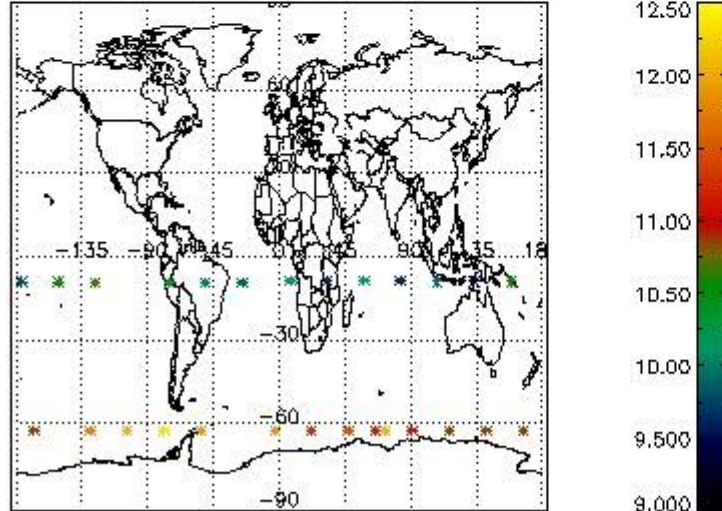
Percentage of flagged data per O3 profile



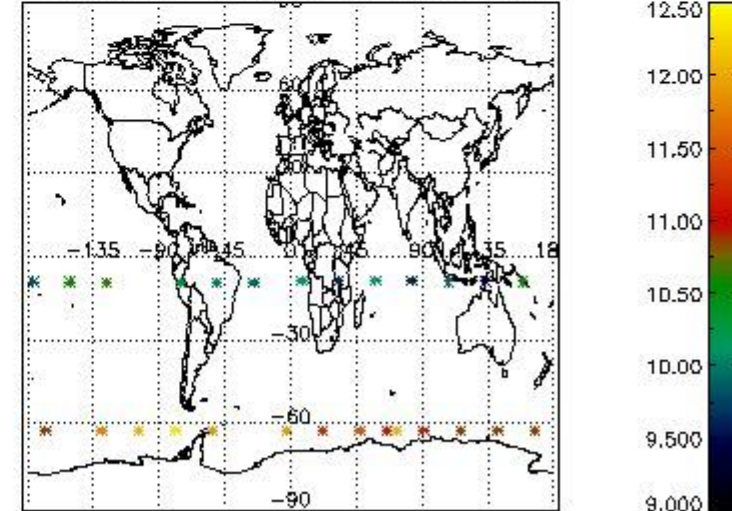
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

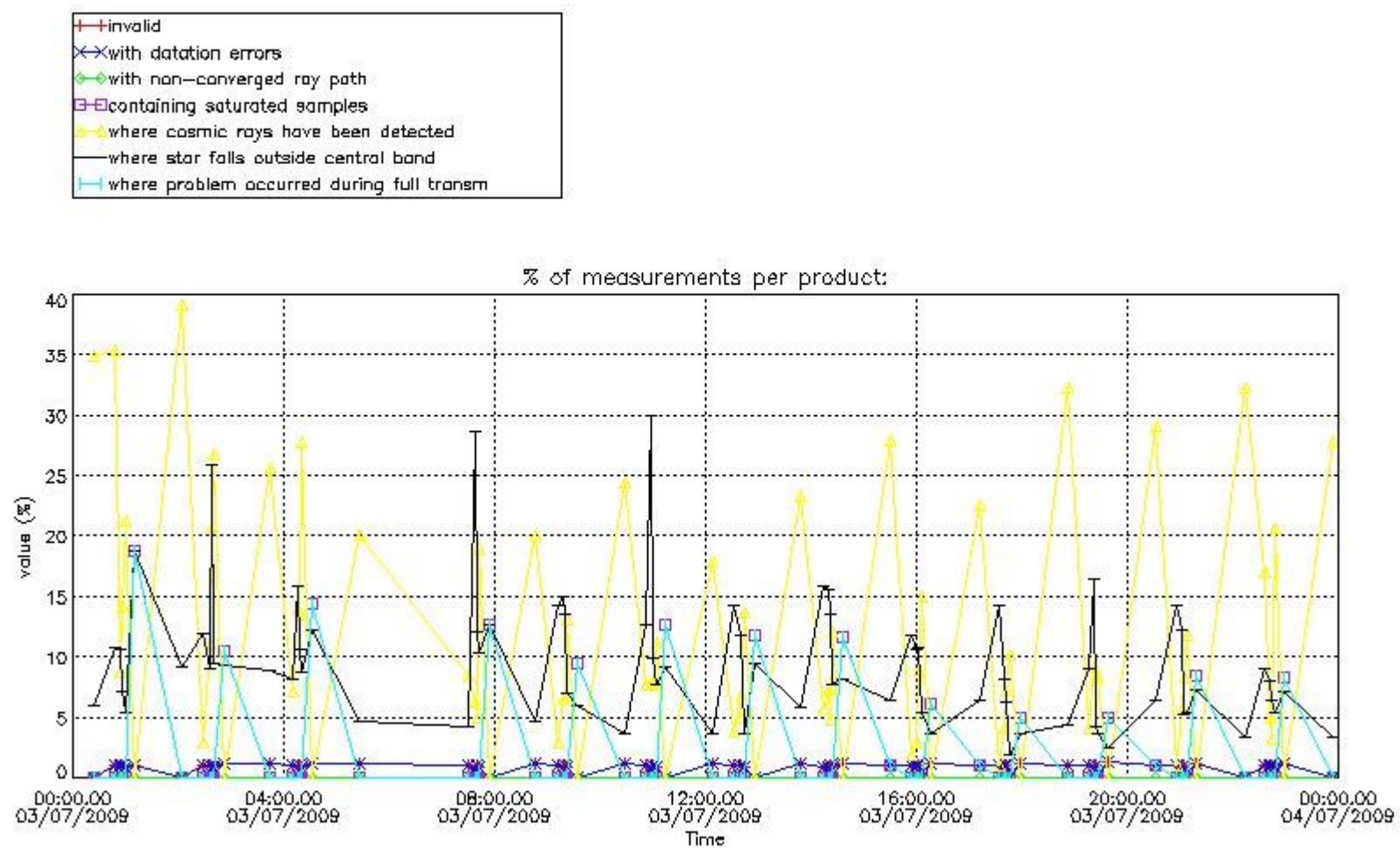


4. Level 1 quality information per product

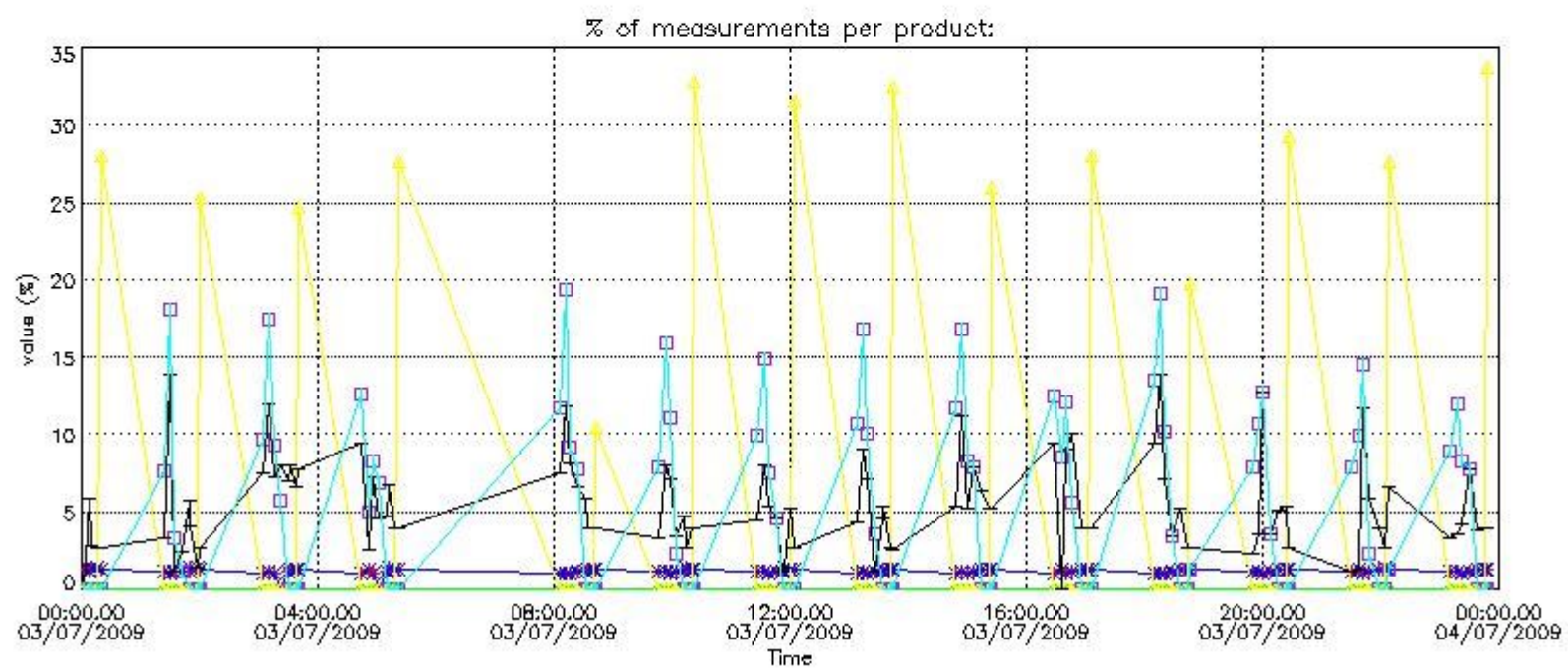
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



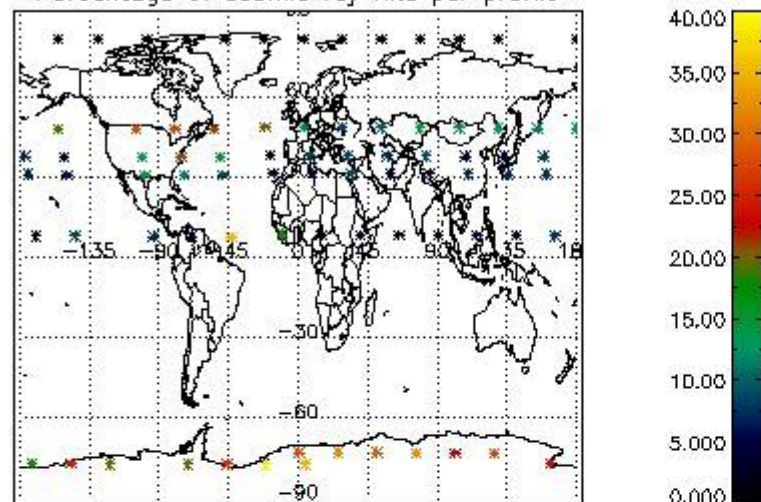
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



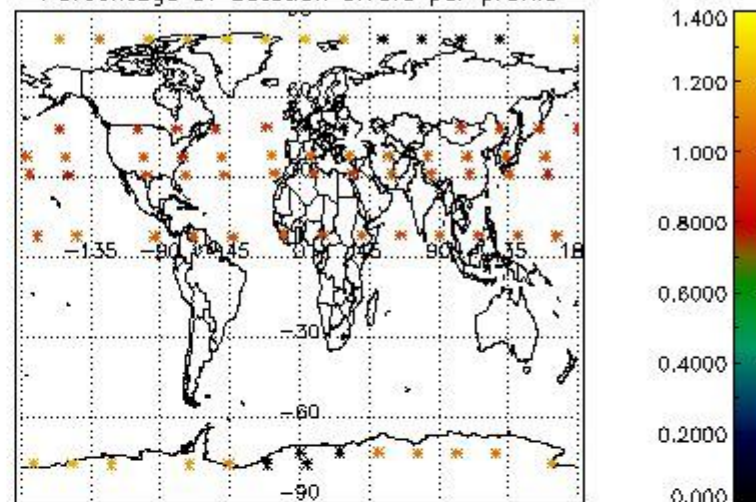
4.2 Plot quality information per product coming from level 1b processing (world map)

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

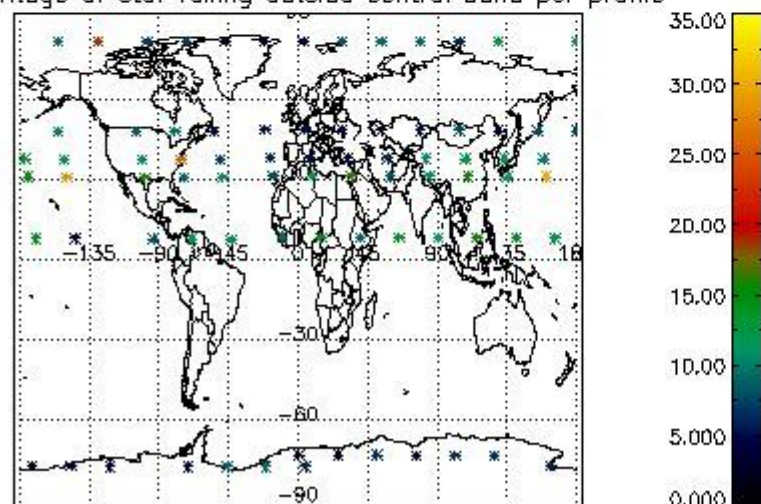
Percentage of cosmic ray hits per profile



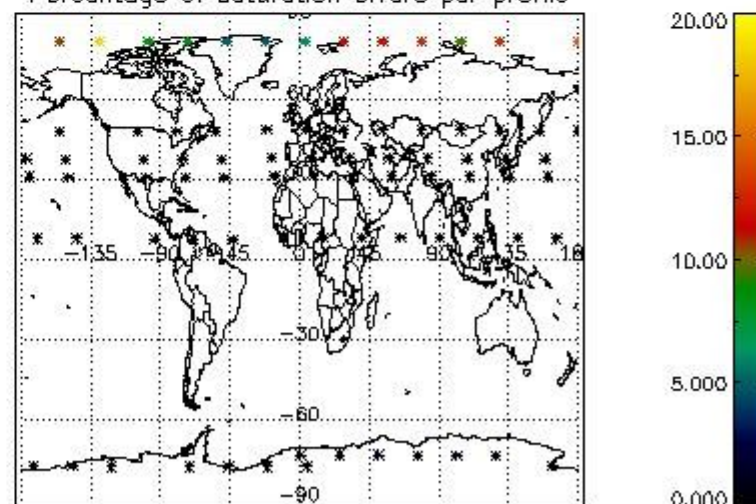
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

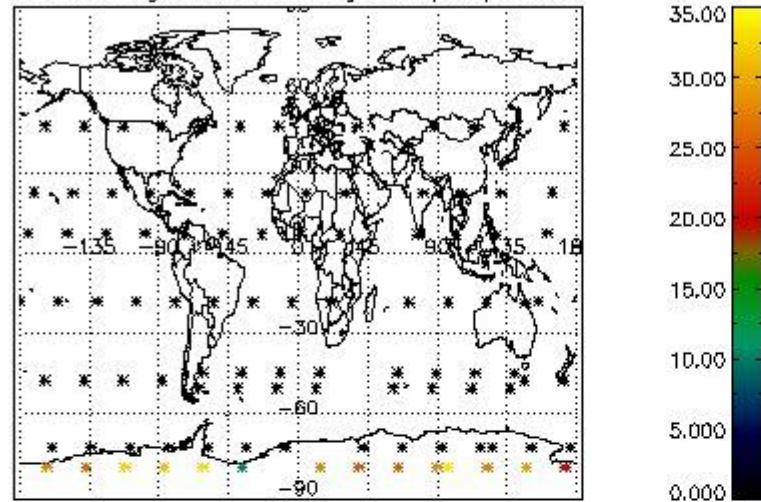


Percentage of saturation errors per profile

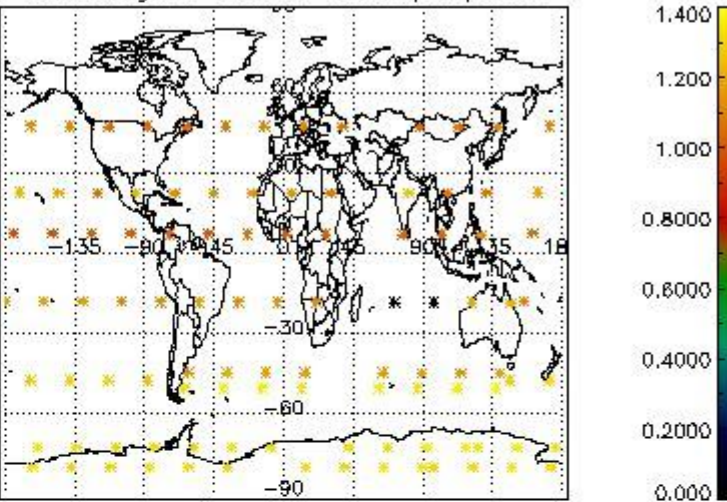


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

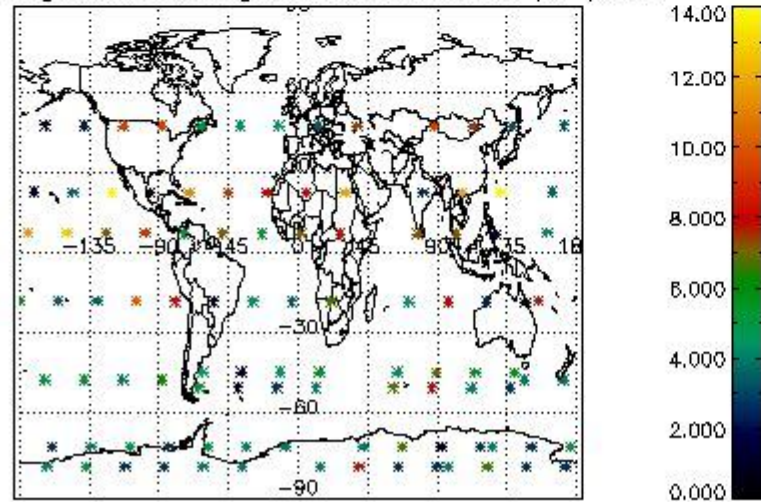
Percentage of cosmic ray hits per profile



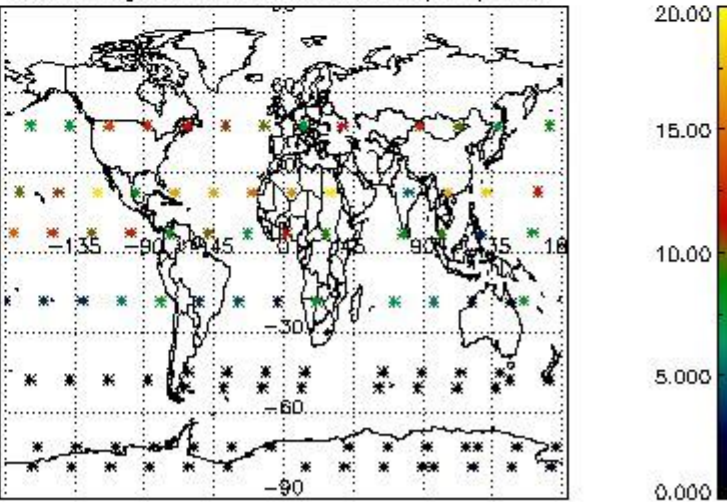
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

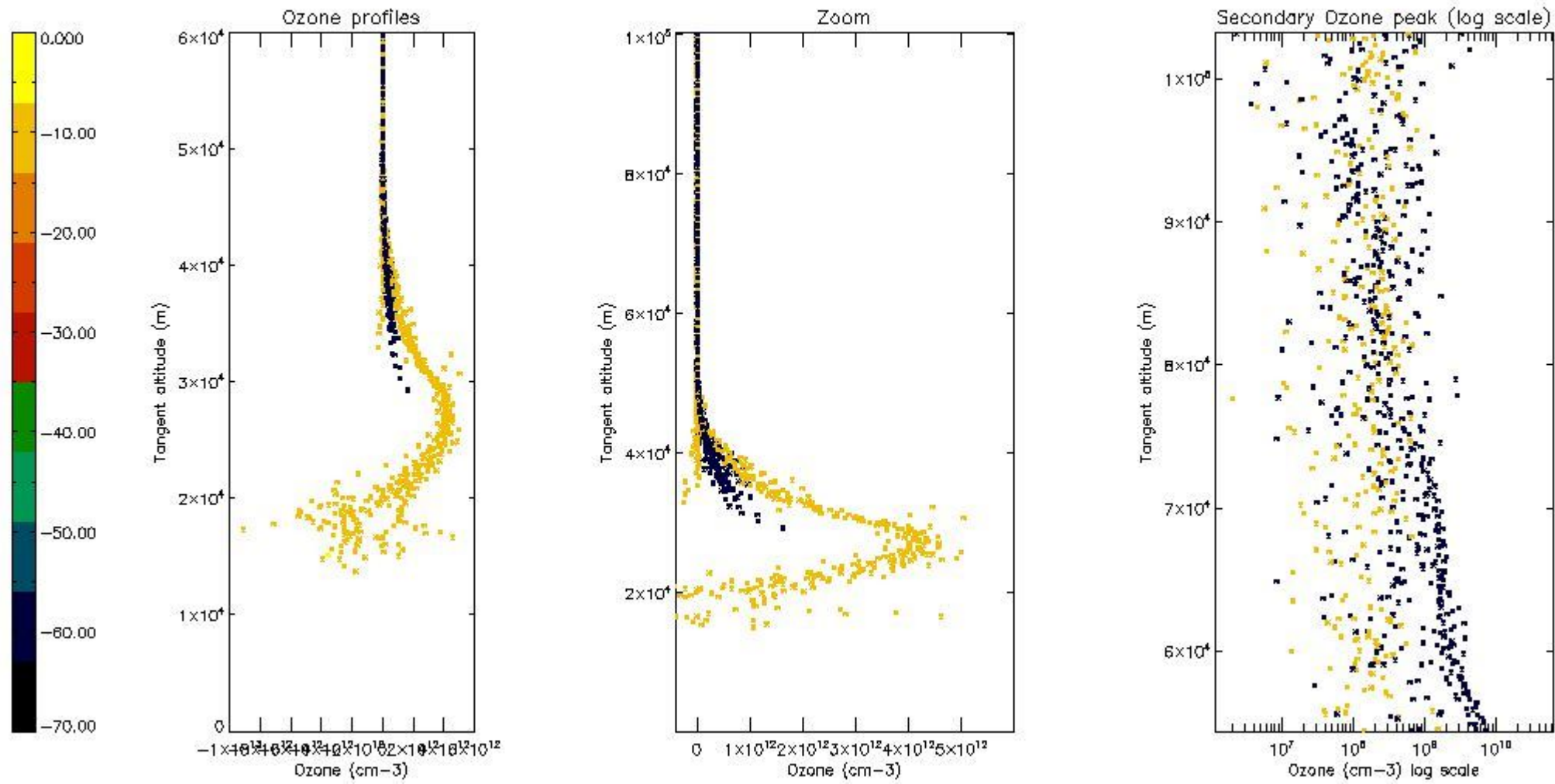
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	16
STD < 20	4

STD < 10	2
STD < 5	0

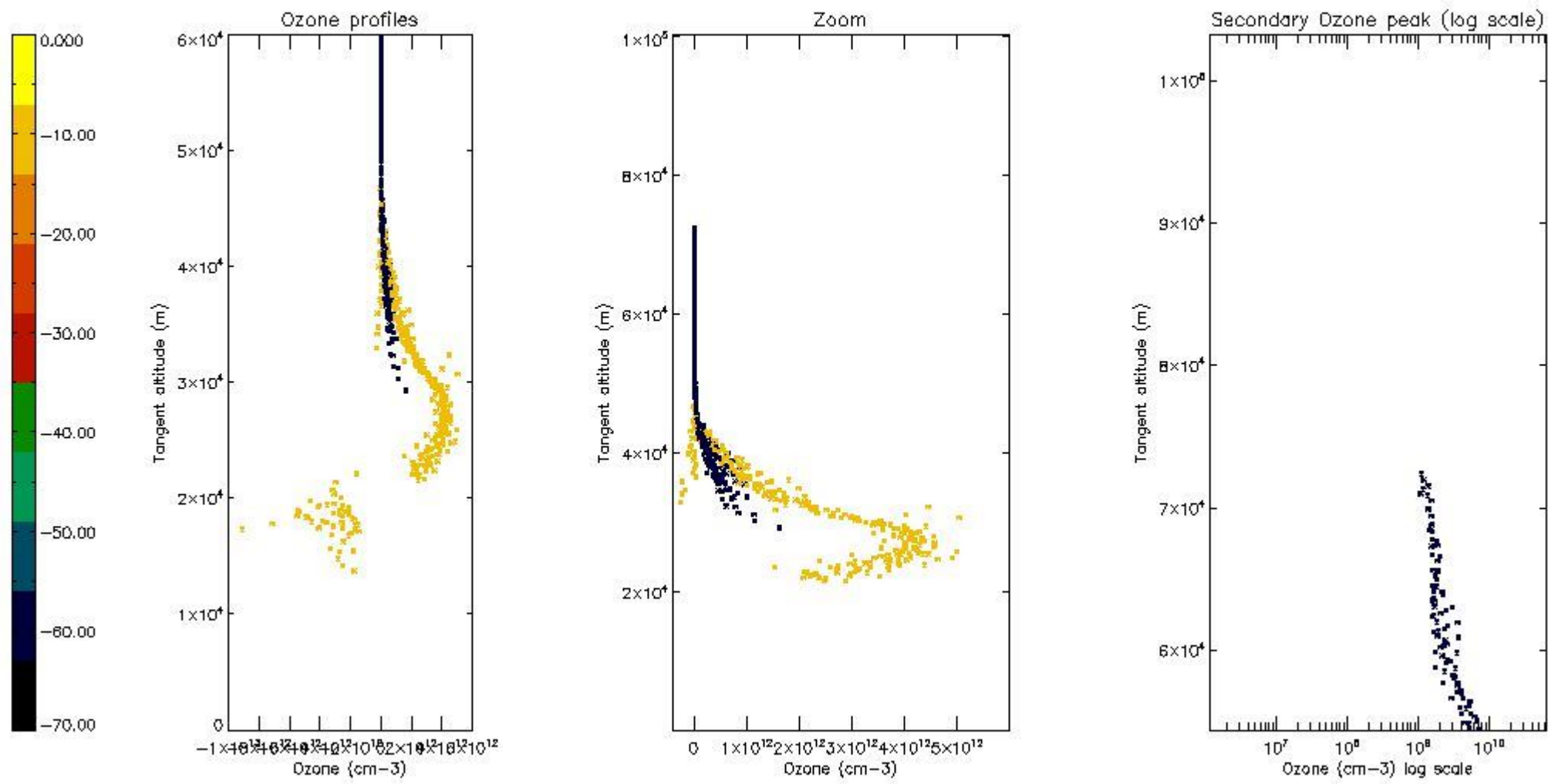
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



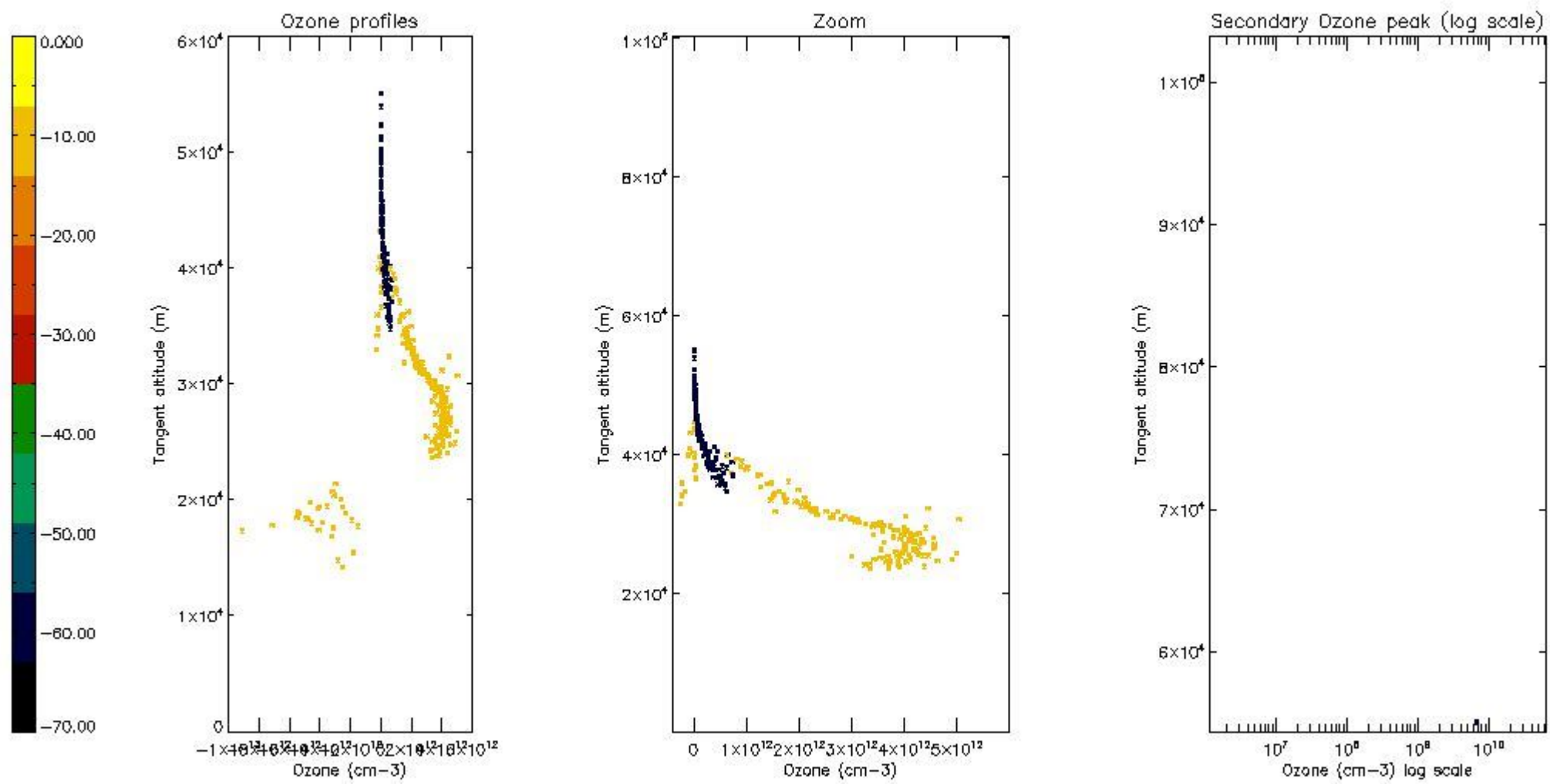
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



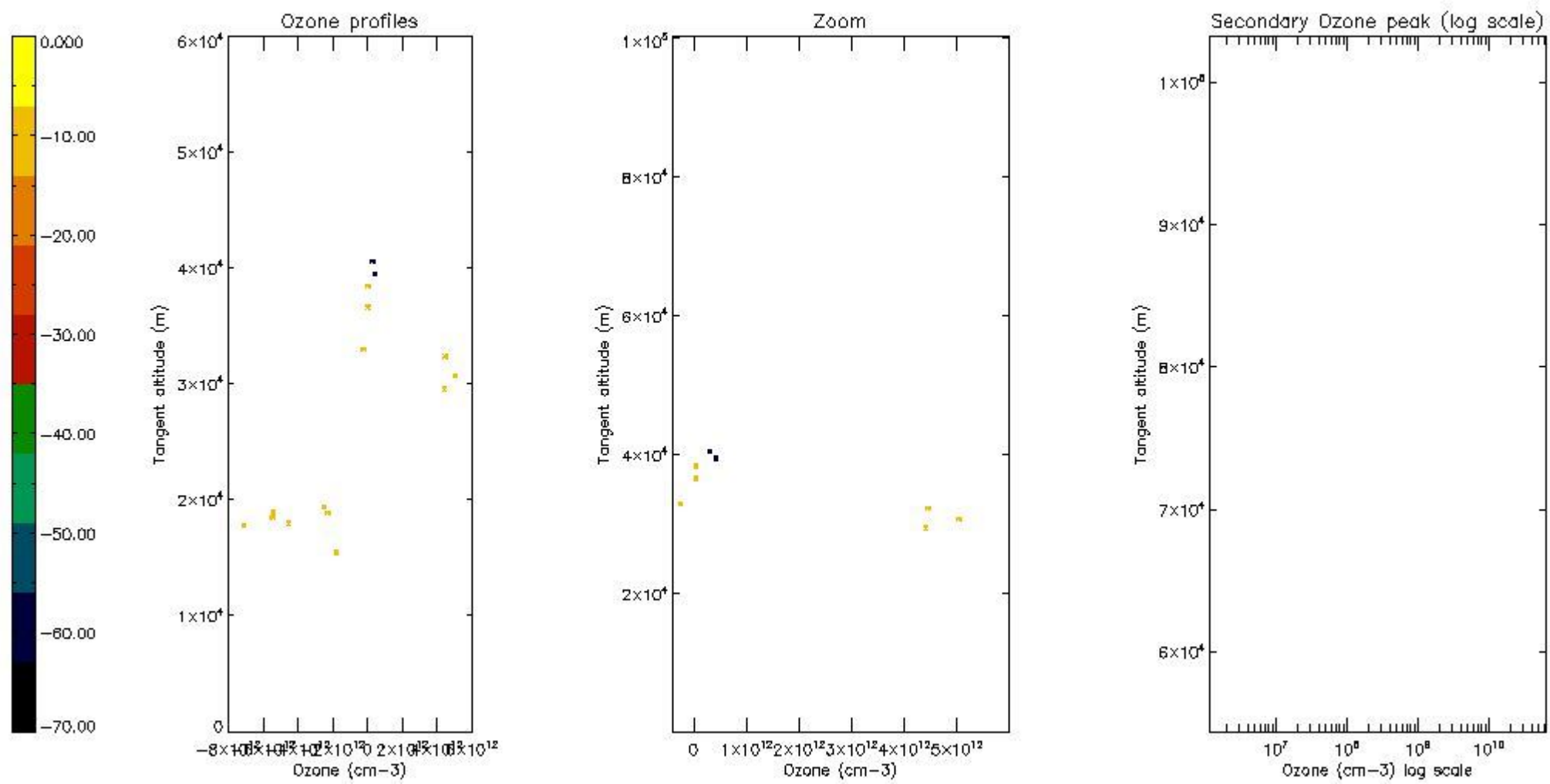
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



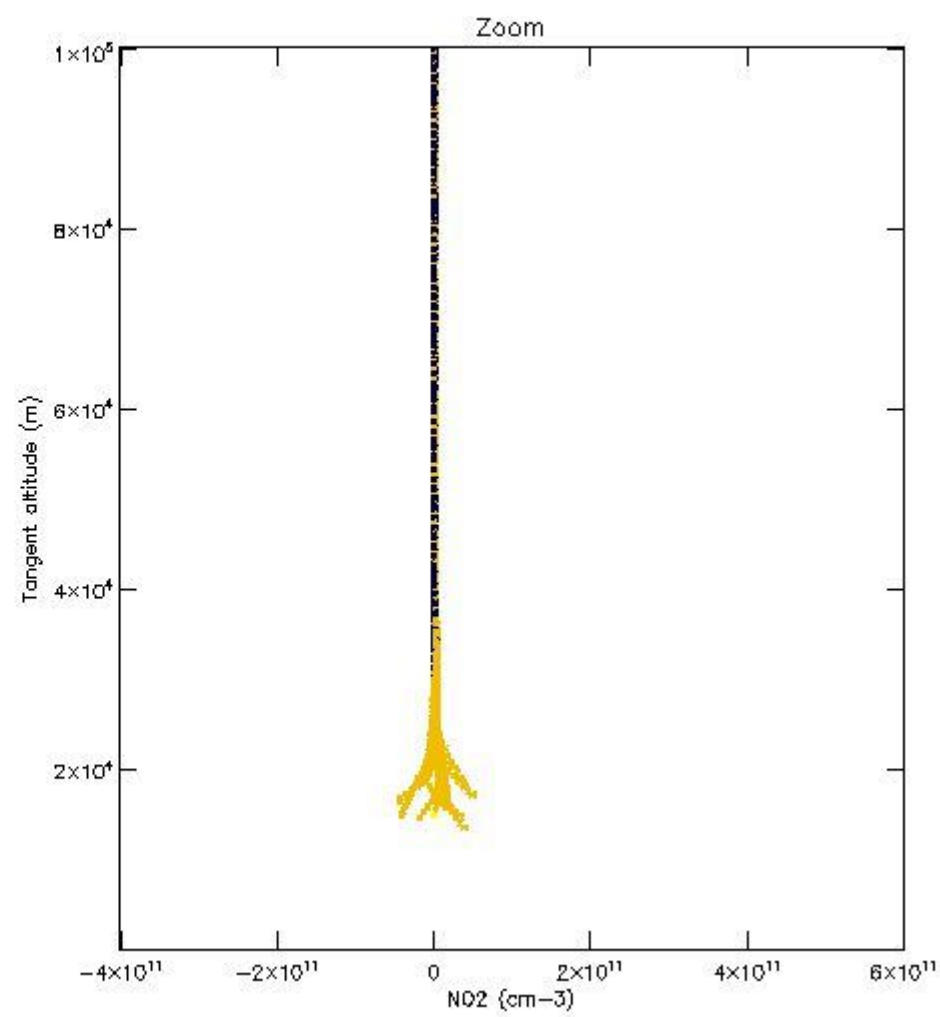
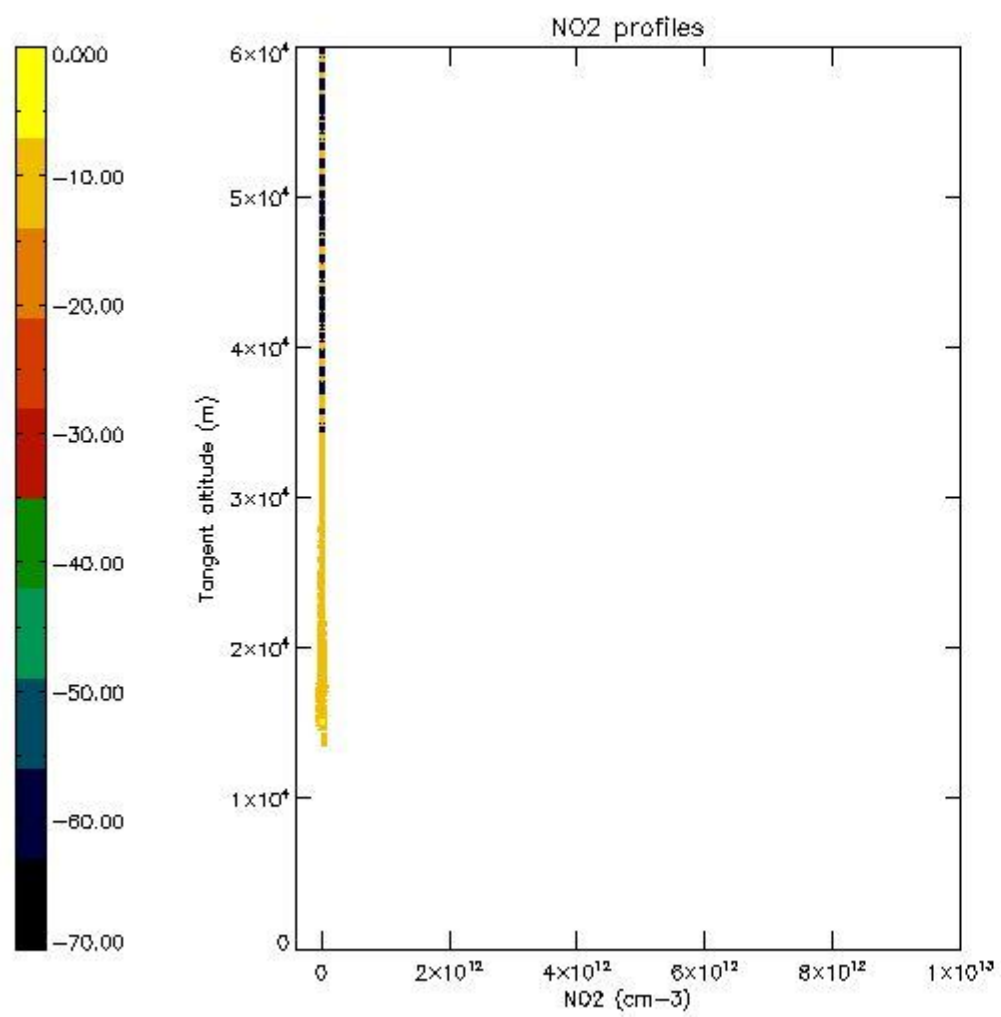
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



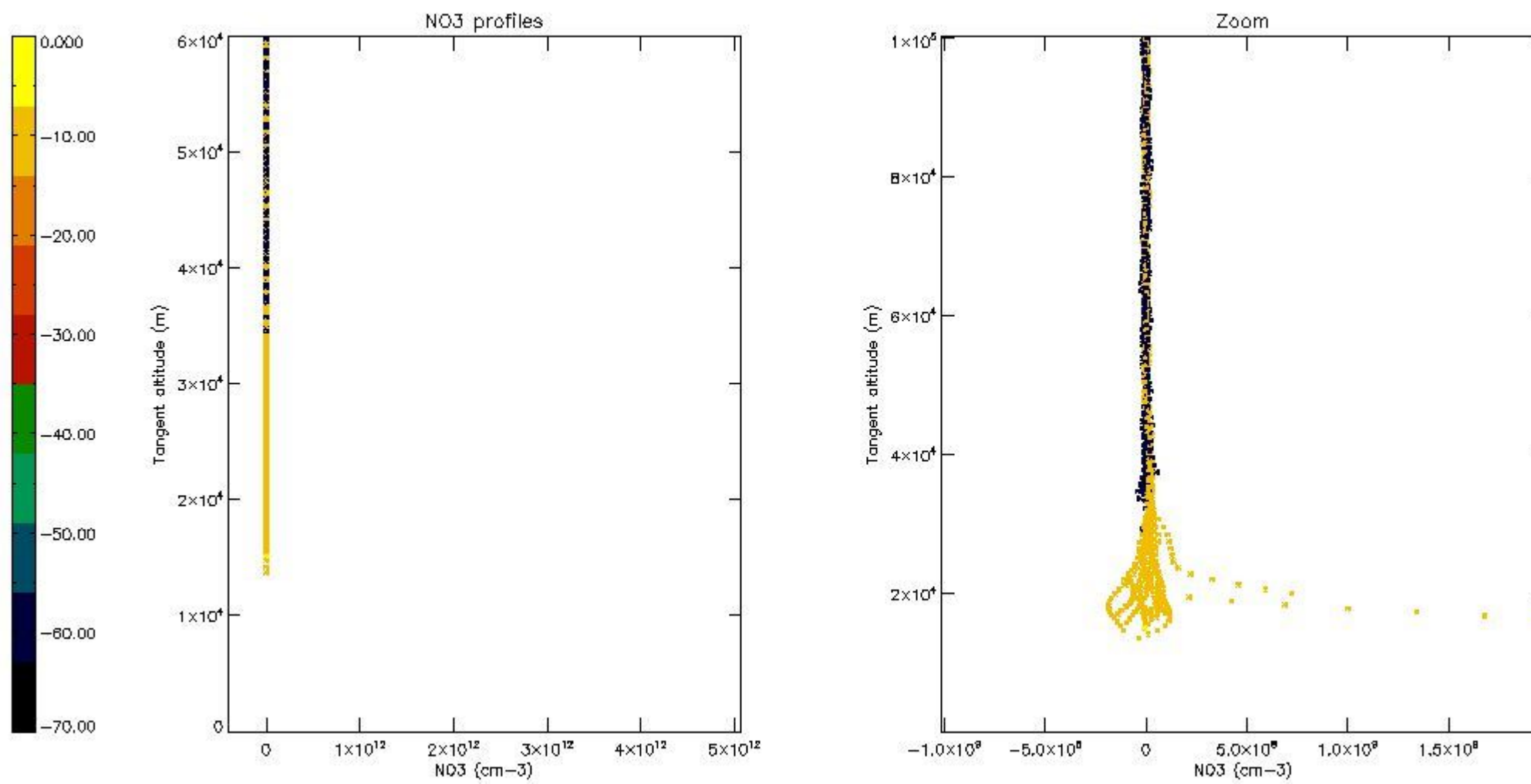
5.6 Plot NO₂ profiles for all STD (dark without errors)

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	03-JUL-2009 00:01:01
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	03-JUL-2009 00:01:01
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	03-JUL-2009 00:01:01

GOMOS Level 2 Daily Report

SUMMARY

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[5.1 Ozone statistics based on quality of products](#)

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[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 10:31:04
Data source version	GOMOS/6.01
Start time of products	03-07-2009 (03JUL2009 00:00:00)
Stop time of products	04-07-2009 (04JUL2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	182
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

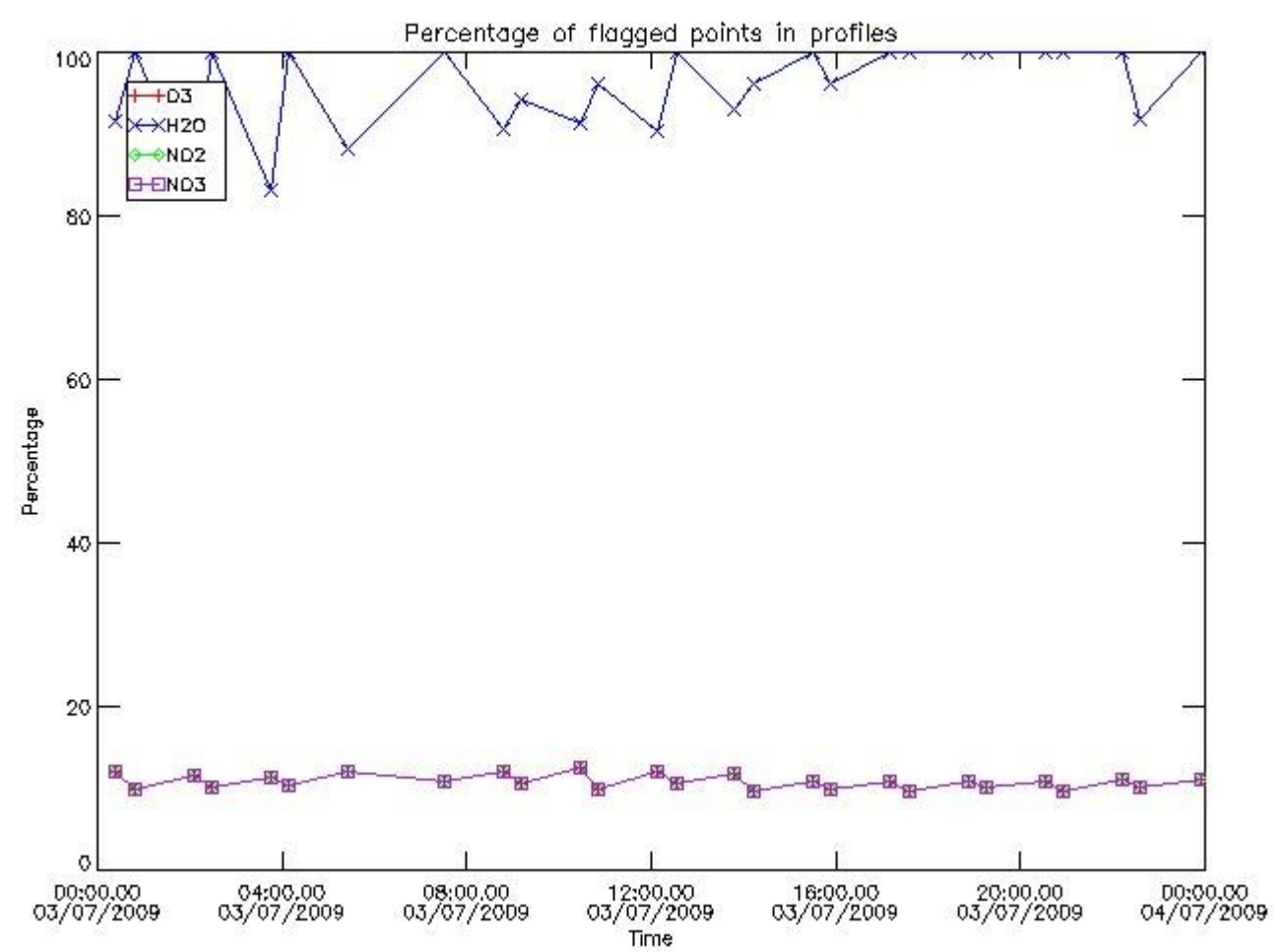
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20090703_000101_000000412080_00245_38375_7509.N1	03-JUL-2009 00:01:01	Bright	41.000	89	5Alp Cep	2.4510	8000.0	82	38375	No
2	GOM_NL__2PRFIN20090703_000826_000000432080_00245_38375_7510.N1	03-JUL-2009 00:08:26	Bright	42.500	74	11Bet Cas	2.2680	6600.0	85	38375	No
3	GOM_NL__2PRFIN20090703_001005_000000372080_00245_38375_7511.N1	03-JUL-2009 00:10:05	Bright	36.500	110	37Del Cas	2.6780	8900.0	73	38375	No
4	GOM_NL__2PRFIN20090703_001641_000000372080_00245_38375_7512.N1	03-JUL-2009 00:16:41	Bright	37.000	73	57Gam1And	2.2600	13100.	74	38375	No
5	GOM_NL__2PRFIN20090703_001923_000000382080_00245_38375_7513.N1	03-JUL-2009 00:19:23	Twilight	37.500	173	4Bet Tri	3.0040	8900.0	75	38375	No
6	GOM_NL__2PRFIN20090703_002346_000000422080_00245_38375_7514.N1	03-JUL-2009 00:23:46	Dark	41.500	50	13Alp Ari	2.0070	4250.0	83	38375	No
7	GOM_NL__2PRFIN20090703_004820_000000512080_00246_38376_7517.N1	03-JUL-2009 00:48:20	Dark	51.000	84	Alp Phe	2.3970	4500.0	102	38376	No
8	GOM_NL__2PRFIN20090703_005447_000000522080_00246_38376_7518.N1	03-JUL-2009 00:54:47	Straylight	51.500	63	Bet Gru	2.1500	2800.0	103	38376	No
9	GOM_NL__2PRFIN20090703_005641_000000492080_00246_38376_7519.N1	03-JUL-2009 00:56:41	Straylight	49.000	31	Alp Gru	1.7340	15200.	98	38376	No
10	GOM_NL__2PRFIN20090703_005939_000000572080_00246_38376_7520.N1	03-JUL-2009 00:59:39	Straylight	56.500	172	Gam Gru	3.0030	13100.	113	38376	No
11	GOM_NL__2PRFIN20090703_011058_000000482080_00246_38376_7521.N1	03-JUL-2009 01:10:58	Bright	48.000	155	41Pi Sgr	2.9000	6600.0	96	38376	No
12	GOM_NL__2PRFIN20090703_012309_000000462080_00246_38376_7522.N1	03-JUL-2009 01:23:09	Bright	45.500	168	17Zet Aql	2.9860	11000.	91	38376	No
13	GOM_NL__2PRFIN20090703_013010_000000472080_00246_38376_7523.N1	03-JUL-2009 01:30:10	Bright	47.000	5	3Alp Lyr	0.033000	11000.	94	38376	No
14	GOM_NL__2PRFIN20090703_013430_000000452080_00246_38376_7524.N1	03-JUL-2009 01:34:30	Bright	44.500	144	18Del Cyg	2.8600	11000.	89	38376	No
15	GOM_NL__2PRFIN20090703_014136_000000422080_00246_38376_7525.N1	03-JUL-2009 01:41:36	Bright	41.500	89	5Alp Cep	2.4510	8000.0	83	38376	No
16	GOM_NL__2PRFIN20090703_014901_000000442080_00246_38376_7526.N1	03-JUL-2009 01:49:01	Bright	44.000	74	11Bet Cas	2.2680	6600.0	88	38376	No
17	GOM_NL__2PRFIN20090703_015040_000000372080_00246_38376_7527.N1	03-JUL-2009 01:50:40	Bright	37.000	110	37Del Cas	2.6780	8900.0	74	38376	No
18	GOM_NL__2PRFIN20090703_015717_000000372080_00246_38376_7528.N1	03-JUL-2009 01:57:17	Bright	37.000	73	57Gam1And	2.2600	13100.	74	38376	No
19	GOM_NL__2PRFIN20090703_015959_000000382080_00246_38376_7529.N1	03-JUL-2009 01:59:59	Twilight	37.500	173	4Bet Tri	3.0040	8900.0	75	38376	No
20	GOM_NL__2PRFIN20090703_020422_000000442080_00246_38376_7530.N1	03-JUL-2009 02:04:22	Dark	43.500	50	13Alp Ari	2.0070	4250.0	87	38376	No
21	GOM_NL__2PRFIN20090703_022857_000000512080_00247_38377_7531.N1	03-JUL-2009 02:28:57	Dark	50.500	84	Alp Phe	2.3970	4500.0	101	38377	No
22	GOM_NL__2PRFIN20090703_023523_000000502080_00247_38377_7532.N1	03-JUL-2009 02:35:23	Straylight	50.000	63	Bet Gru	2.1500	2800.0	100	38377	No
23	GOM_NL__2PRFIN20090703_023718_000000602080_00247_38377_7533.N1	03-JUL-2009 02:37:18	Straylight	60.000	31	Alp Gru	1.7340	15200.	120	38377	No
24	GOM_NL__2PRFIN20090703_024016_000000582080_00247_38377_7534.N1	03-JUL-2009 02:40:16	Straylight	58.000	172	Gam Gru	3.0030	13100.	116	38377	No
25	GOM_NL__2PRFIN20090703_025134_000000432080_00247_38377_7535.N1	03-JUL-2009 02:51:34	Bright	43.000	155	41Pi Sgr	2.9000	6600.0	86	38377	No
26	GOM_NL__2PRFIN20090703_030344_000000472080_00247_38377_7536.N1	03-JUL-2009 03:03:44	Bright	46.500	168	17Zet Aql	2.9860	11000.	93	38377	No
27	GOM_NL__2PRFIN20090703_031045_000000462080_00247_38377_7537.N1	03-JUL-2009 03:10:45	Bright	46.000	5	3Alp Lyr	0.033000	11000.	92	38377	No
28	GOM_NL__2PRFIN20090703_031505_000000492080_00247_38377_7538.N1	03-JUL-2009 03:15:05	Bright	48.500	144	18Del Cyg	2.8600	11000.	97	38377	No
29	GOM_NL__2PRFIN20090703_032211_000000442080_00247_38377_7539.N1	03-JUL-2009 03:22:11	Bright	44.000	89	5Alp Cep	2.4510	8000.0	88	38377	No
30	GOM_NL__2PRFIN20090703_032937_000000432080_00247_38377_7540.N1	03-JUL-2009 03:29:37	Bright	43.000	74	11Bet Cas	2.2680	6600.0	86	38377	No
31	GOM_NL__2PRFIN20090703_033116_000000382080_00247_38377_7541.N1	03-JUL-2009 03:31:16	Bright	37.500	110	37Del Cas	2.6780	8900.0	75	38377	No
32	GOM_NL__2PRFIN20090703_033752_000000382080_00247_38377_7542.N1	03-JUL-2009 03:37:52	Bright	38.000	73	57Gam1And	2.2600	13100.	76	38377	No
33	GOM_NL__2PRFIN20090703_034035_000000392080_00247_38377_7543.N1	03-JUL-2009 03:40:35	Twilight	38.500	173	4Bet Tri	3.0040	8900.0	77	38377	No
34	GOM_NL__2PRFIN20090703_034458_000000452080_00247_38377_7544.N1	03-JUL-2009 03:44:58	Dark	45.000	50	13Alp Ari	2.0070	4250.0	90	38377	No
35	GOM_NL__2PRFIN20090703_040934_000000492080_00248_38378_7546.N1	03-JUL-2009 04:09:34	Dark	49.000	84	Alp Phe	2.3970	4500.0	98	38378	No
36	GOM_NL__2PRFIN20090703_041601_000000542080_00248_38378_7547.N1	03-JUL-2009 04:16:01	Straylight	53.500	63	Bet Gru	2.1500	2800.0	107	38378	No
37	GOM_NL__2PRFIN20090703_041755_000000522080_00248_38378_7548.N1	03-JUL-2009 04:17:55	Straylight	51.500	31	Alp Gru	1.7340	15200.	103	38378	No
38	GOM_NL__2PRFIN20090703_042053_000000582080_00248_38378_7549.N1	03-JUL-2009 04:20:53	Straylight	57.500	172	Gam Gru	3.0030	13100.	115	38378	No
39	GOM_NL__2PRFIN20090703_043211_000000452080_00248_38378_7550.N1	03-JUL-2009 04:32:11	Bright	45.000	155	41Pi Sgr	2.9000	6600.0	90	38378	No
40	GOM_NL__2PRFIN20090703_044420_000000482080_00248_38378_7551.N1	03-JUL-2009 04:44:20	Bright	47.500	168	17Zet Aql	2.9860	11000.	95	38378	No
41	GOM_NL__2PRFIN20090703_045121_000000402080_00248_38378_7552.N1	03-JUL-2009 04:51:21	Bright	40.000	5	3Alp Lyr	0.033000	11000.	80	38378	No
42	GOM_NL__2PRFIN20090703_045540_000000492080_00248_38378_7553.N1	03-JUL-2009 04:55:40	Bright	48.500	144	18Del Cyg	2.8600	11000.	97	38378	No

161	GOM_NL__2PRFIN20090703_211812_000000422080_00258_38388_7726.N1	03-JUL-2009 21:18:12	Bright	41.500	155	41Pi Sgr	2.9000	6600.0	83	38388	No
162	GOM_NL__2PRFIN20090703_213014_000000452080_00258_38388_7727.N1	03-JUL-2009 21:30:14	Bright	44.500	168	17Zet Aql	2.9860	11000.	89	38388	No
163	GOM_NL__2PRFIN20090703_213716_000000412080_00258_38388_7728.N1	03-JUL-2009 21:37:16	Bright	40.500	5	3Alp Lyr	0.033000	11000.	81	38388	No
164	GOM_NL__2PRFIN20090703_214131_000000522080_00258_38388_7729.N1	03-JUL-2009 21:41:31	Bright	51.500	144	18Del Cyg	2.8600	11000.	103	38388	No
165	GOM_NL__2PRFIN20090703_214839_000000432080_00258_38388_7730.N1	03-JUL-2009 21:48:39	Bright	42.500	89	5Alp Cep	2.4510	8000.0	85	38388	No
166	GOM_NL__2PRFIN20090703_215701_000000382080_00258_38388_7731.N1	03-JUL-2009 21:57:01	Bright	38.000	76	27Gam Cas	2.3000	30000.	76	38388	No
167	GOM_NL__2PRFIN20090703_220427_000000372080_00258_38388_7732.N1	03-JUL-2009 22:04:27	Bright	37.000	73	57Gam1And	2.2600	13100.	74	38388	No
168	GOM_NL__2PRFIN20090703_220711_000000382080_00258_38388_7733.N1	03-JUL-2009 22:07:11	Twilight	38.000	173	4Bet Tri	3.0040	8900.0	76	38388	No
169	GOM_NL__2PRFIN20090703_221301_000000452080_00258_38388_7734.N1	03-JUL-2009 22:13:01	Dark	45.000	105	6Bet Ari	2.6450	8900.0	90	38388	No
170	GOM_NL__2PRFIN20090703_223621_000000502080_00259_38389_7740.N1	03-JUL-2009 22:36:21	Dark	50.000	84	Alp Phe	2.3970	4500.0	100	38389	No
171	GOM_NL__2PRFIN20090703_224246_000000502080_00259_38389_7741.N1	03-JUL-2009 22:42:46	Straylight	50.000	63	Bet Gru	2.1500	2800.0	100	38389	No
172	GOM_NL__2PRFIN20090703_224439_000000472080_00259_38389_7742.N1	03-JUL-2009 22:44:39	Straylight	47.000	31	Alp Gru	1.7340	15200.	94	38389	No
173	GOM_NL__2PRFIN20090703_224739_000000562080_00259_38389_7743.N1	03-JUL-2009 22:47:39	Straylight	55.500	172	Gam Gru	3.0030	13100.	111	38389	No
174	GOM_NL__2PRFIN20090703_225848_000000422080_00259_38389_7744.N1	03-JUL-2009 22:58:48	Bright	42.000	155	41Pi Sgr	2.9000	6600.0	84	38389	No
175	GOM_NL__2PRFIN20090703_231050_000000452080_00259_38389_7745.N1	03-JUL-2009 23:10:50	Bright	45.000	168	17Zet Aql	2.9860	11000.	90	38389	No
176	GOM_NL__2PRFIN20090703_231752_000000422080_00259_38389_7746.N1	03-JUL-2009 23:17:52	Bright	42.000	5	3Alp Lyr	0.033000	11000.	84	38389	No
177	GOM_NL__2PRFIN20090703_232206_000000482080_00259_38389_7747.N1	03-JUL-2009 23:22:06	Bright	48.000	144	18Del Cyg	2.8600	11000.	96	38389	No
178	GOM_NL__2PRFIN20090703_232914_000000452080_00259_38389_7748.N1	03-JUL-2009 23:29:14	Bright	45.000	89	5Alp Cep	2.4510	8000.0	90	38389	No
179	GOM_NL__2PRFIN20090703_233737_000000392080_00259_38389_7749.N1	03-JUL-2009 23:37:37	Bright	39.000	76	27Gam Cas	2.3000	30000.	78	38389	No
180	GOM_NL__2PRFIN20090703_234502_000000382080_00259_38389_7750.N1	03-JUL-2009 23:45:02	Bright	37.500	73	57Gam1And	2.2600	13100.	75	38389	No
181	GOM_NL__2PRFIN20090703_234747_000000392080_00259_38389_7751.N1	03-JUL-2009 23:47:47	Twilight	38.500	173	4Bet Tri	3.0040	8900.0	77	38389	No
182	GOM_NL__2PRFIN20090703_235337_000000452080_00259_38389_7752.N1	03-JUL-2009 23:53:37	Dark	45.000	105	6Bet Ari	2.6450	8900.0	90	38389	No

3. Quality information per product

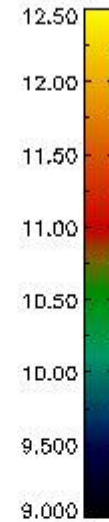
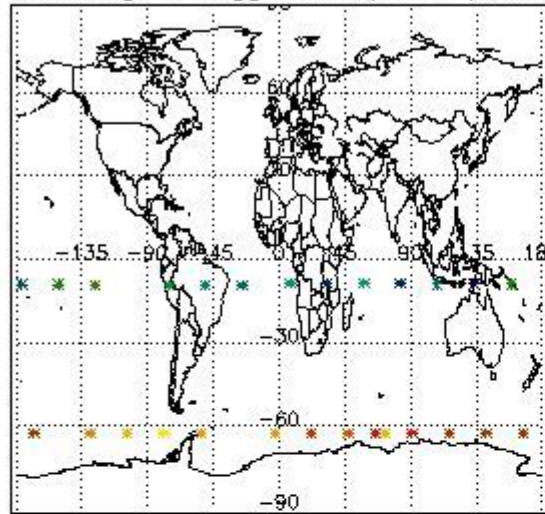
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

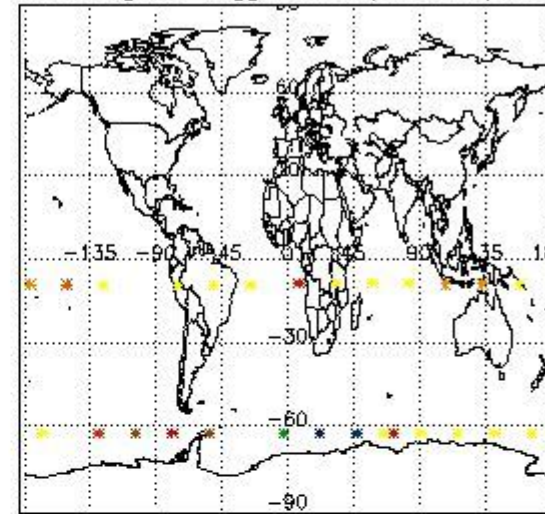


3.2 Plot quality information per product (world map)

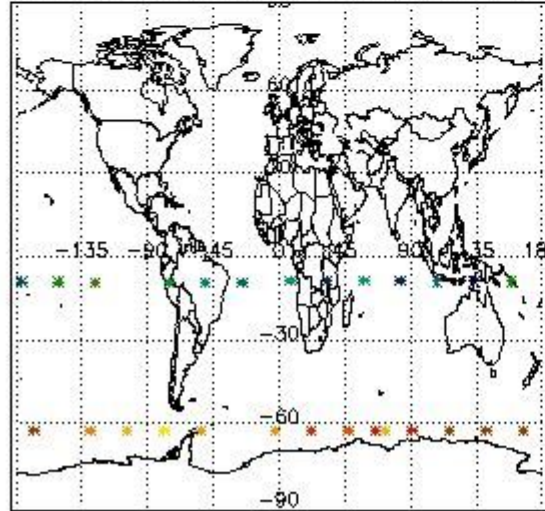
Percentage of flagged data per O3 profile



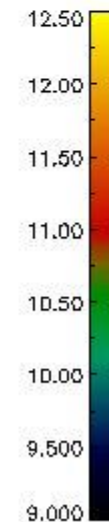
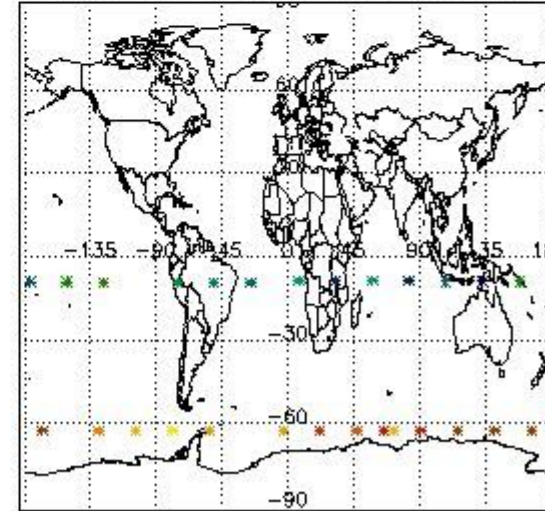
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

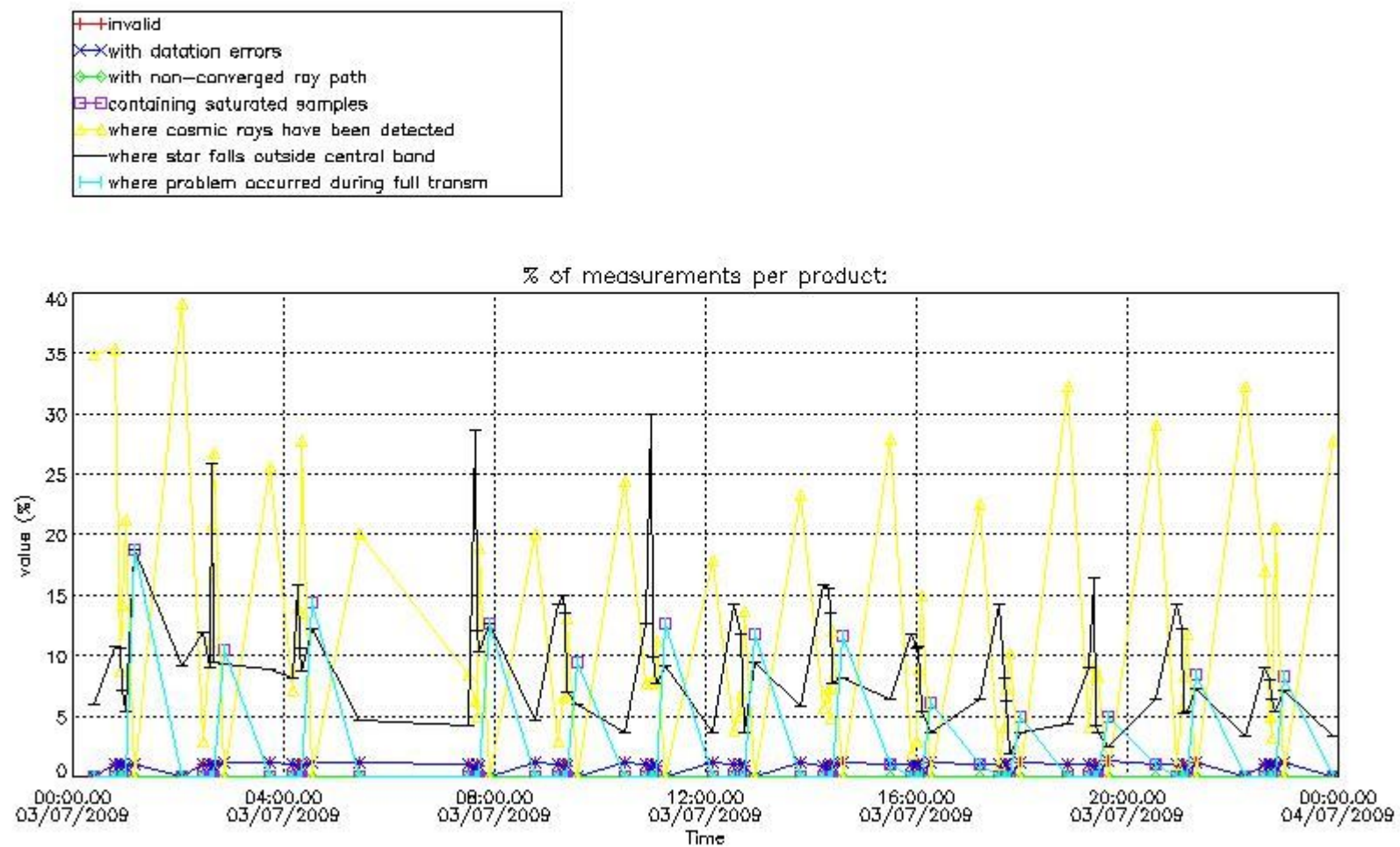


4. Level 1 quality information per product

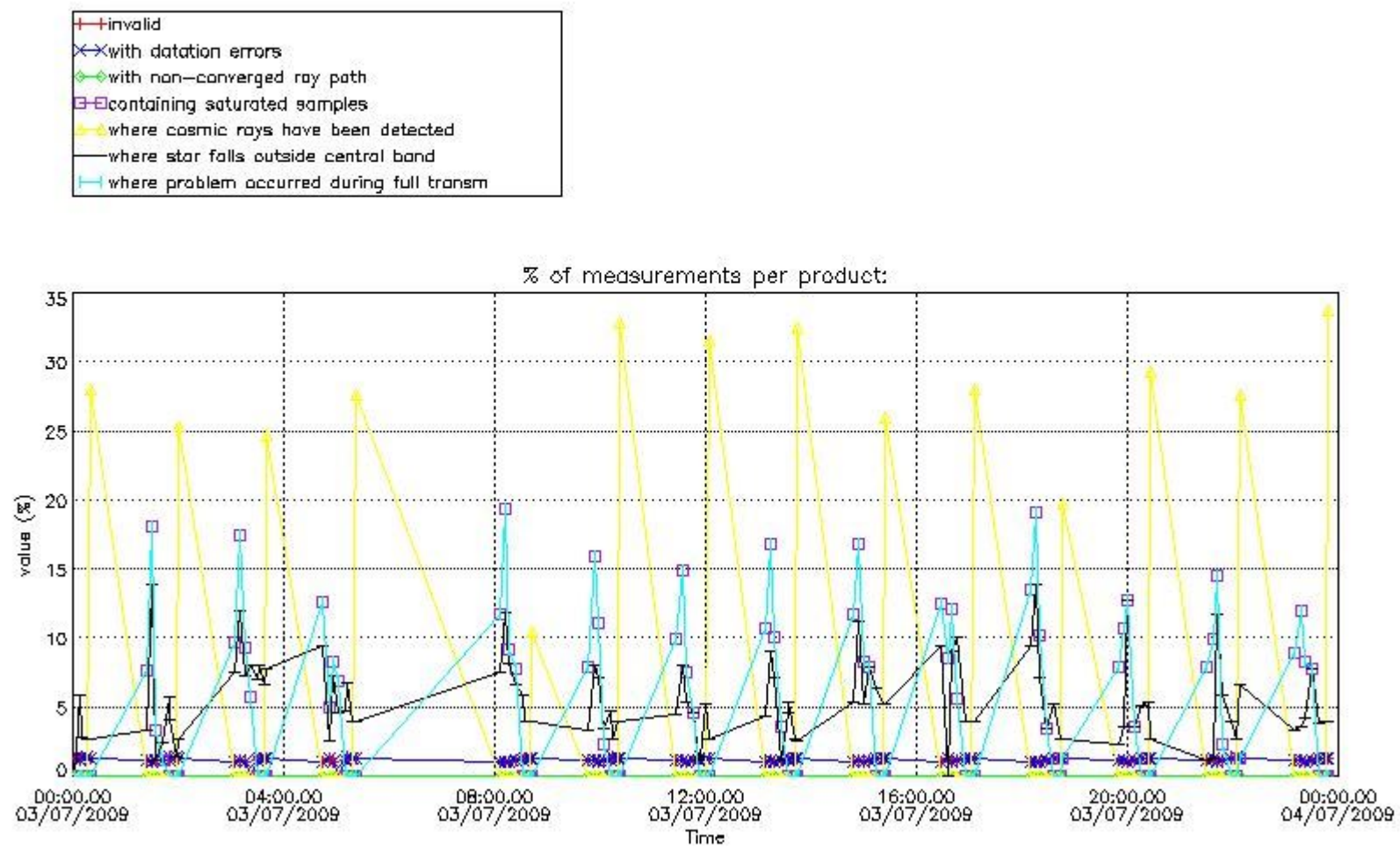
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



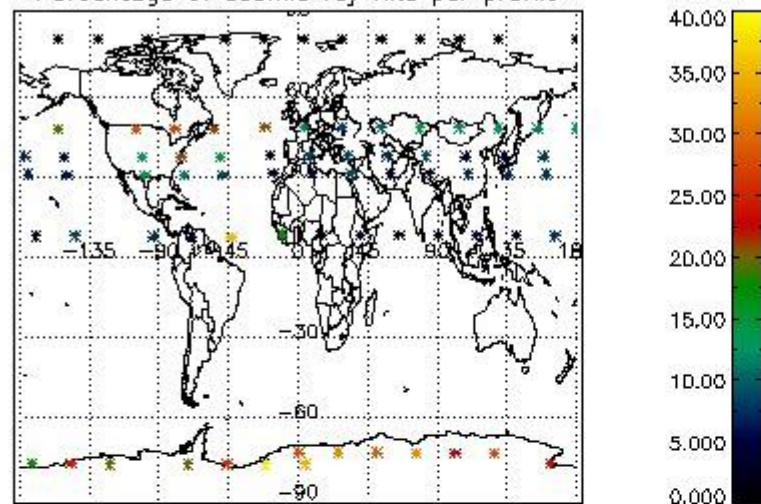
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



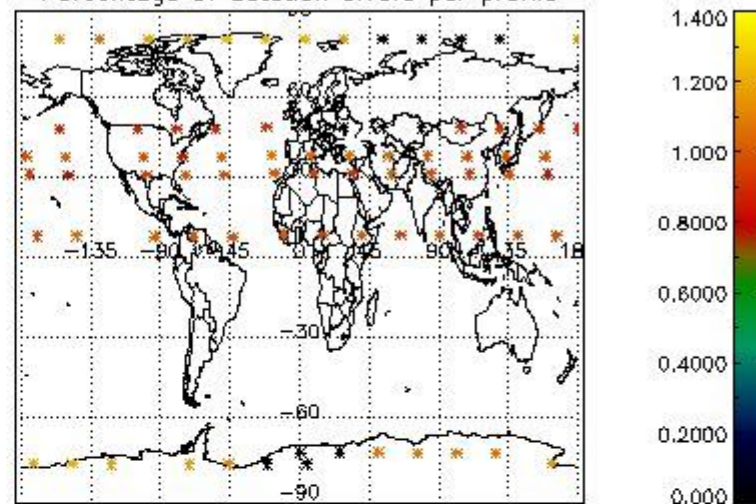
4.2 Plot quality information per product coming from level 1b processing (world map)

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

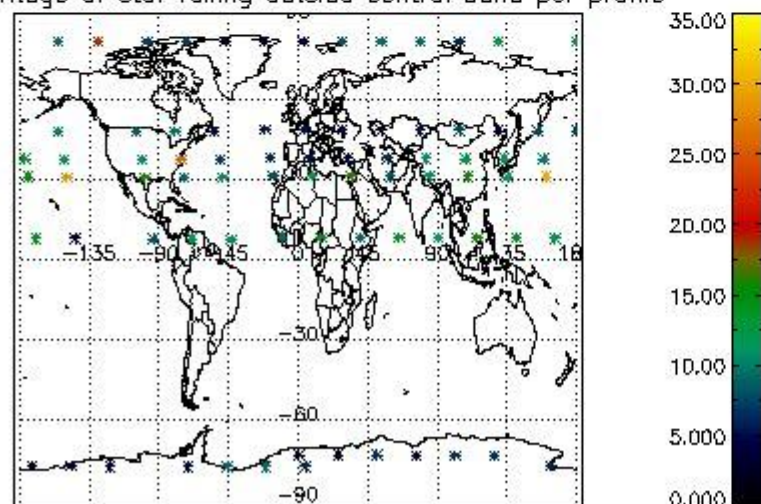
Percentage of cosmic ray hits per profile



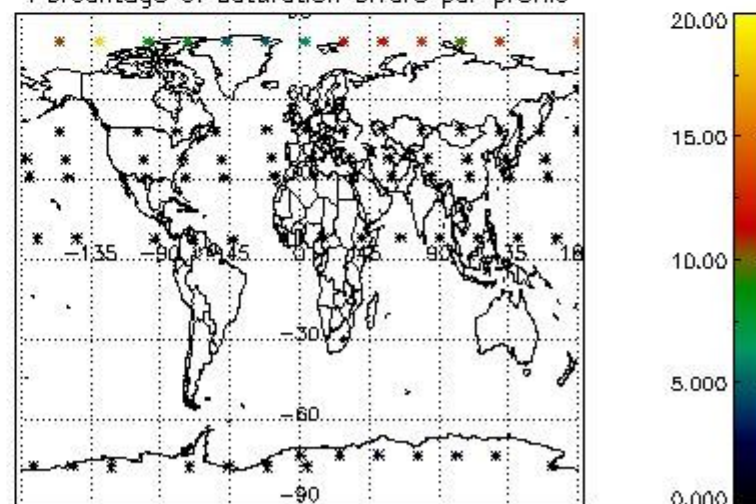
Percentage of datation errors per profile



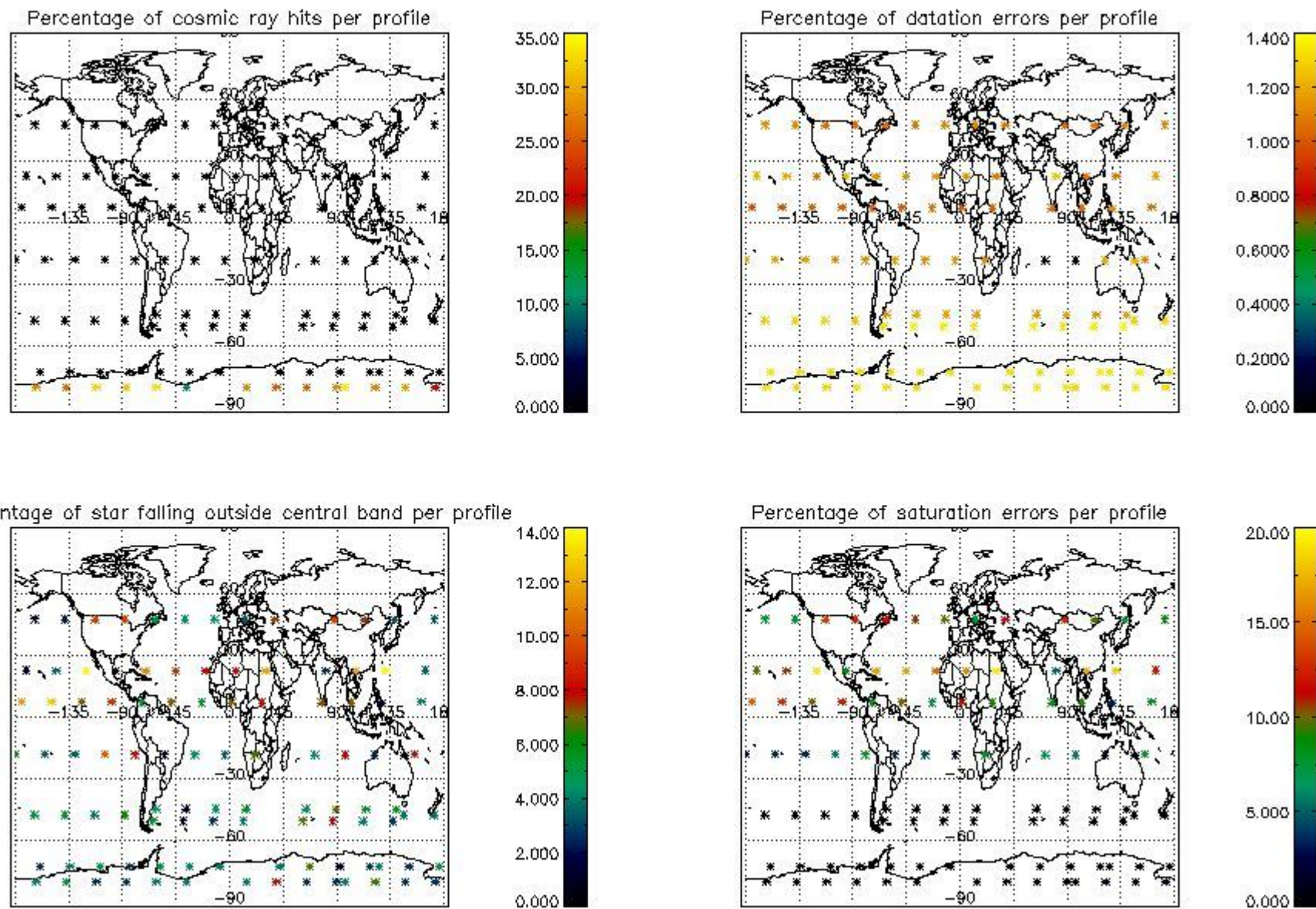
Percentage of star falling outside central band per profile



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

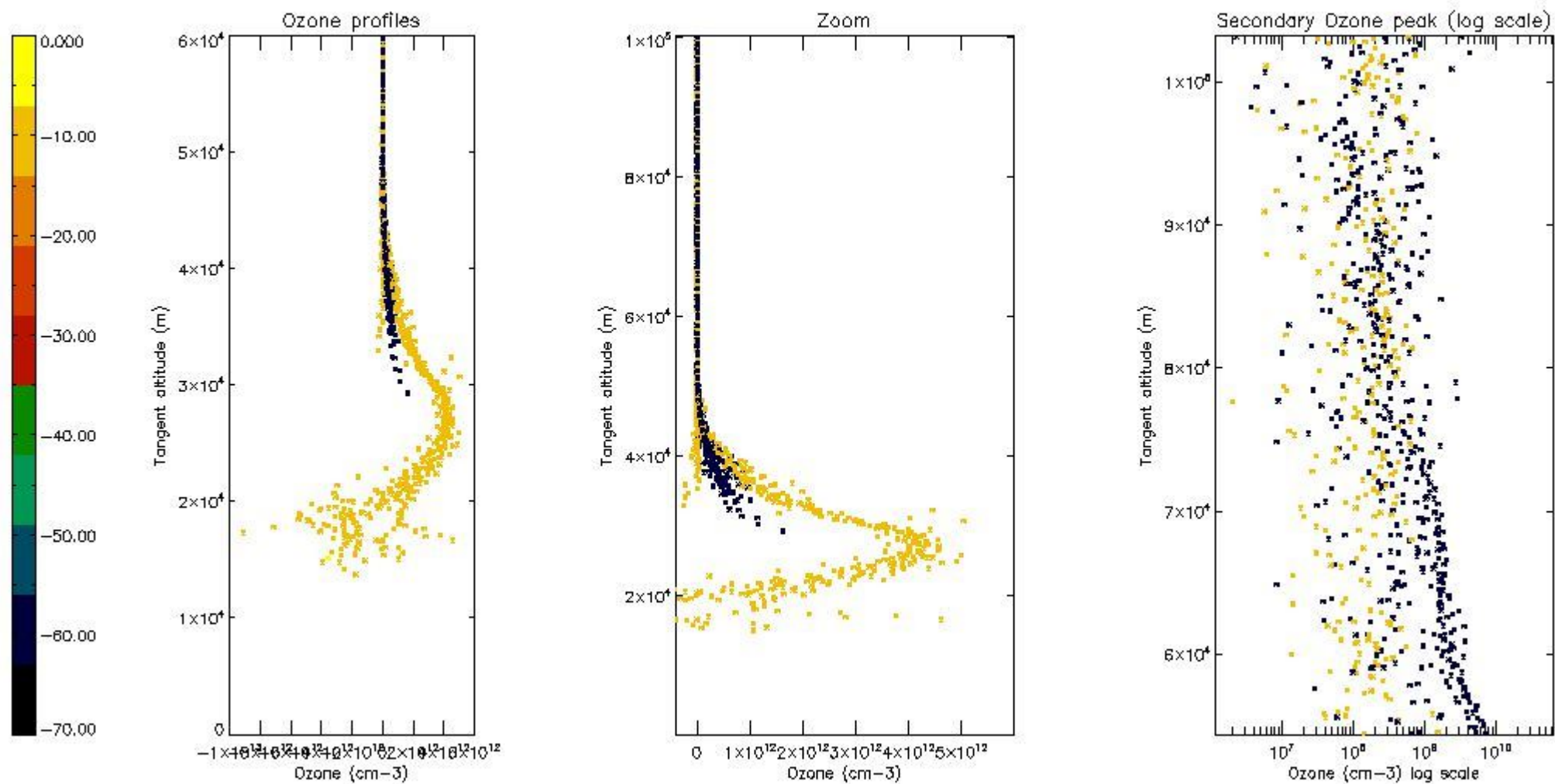
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	16
STD < 20	4

STD < 10	2
STD < 5	0

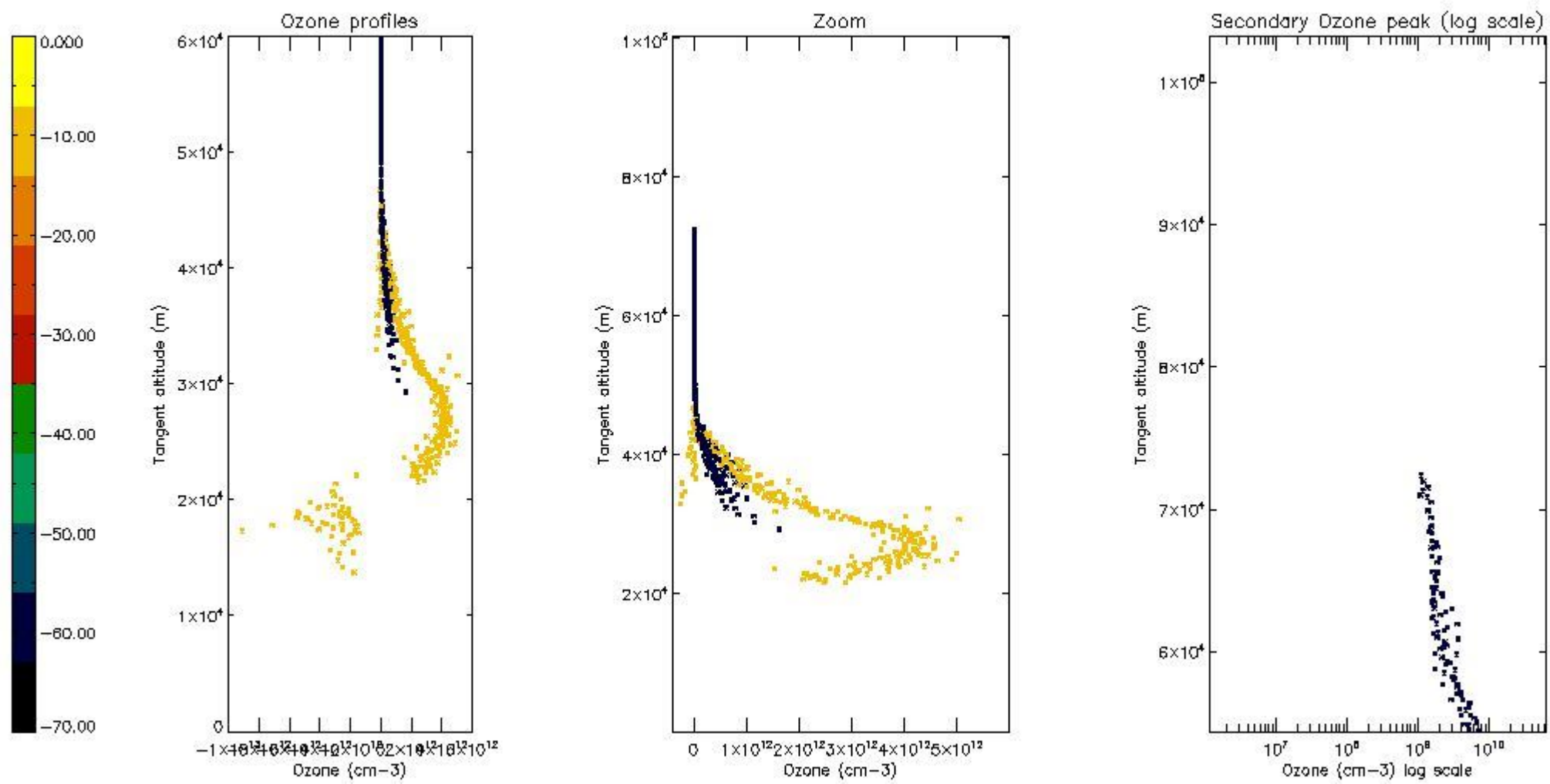
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



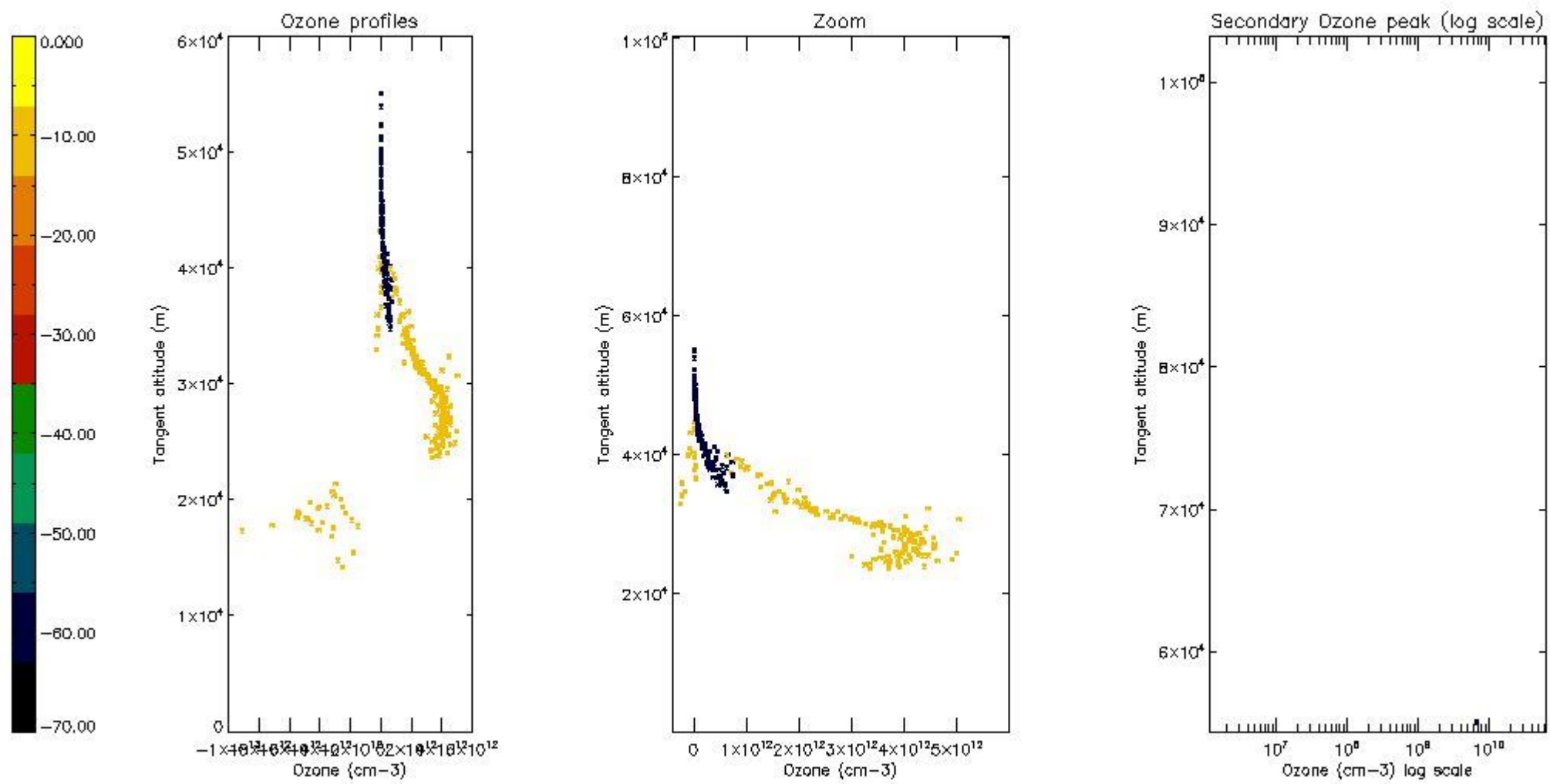
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



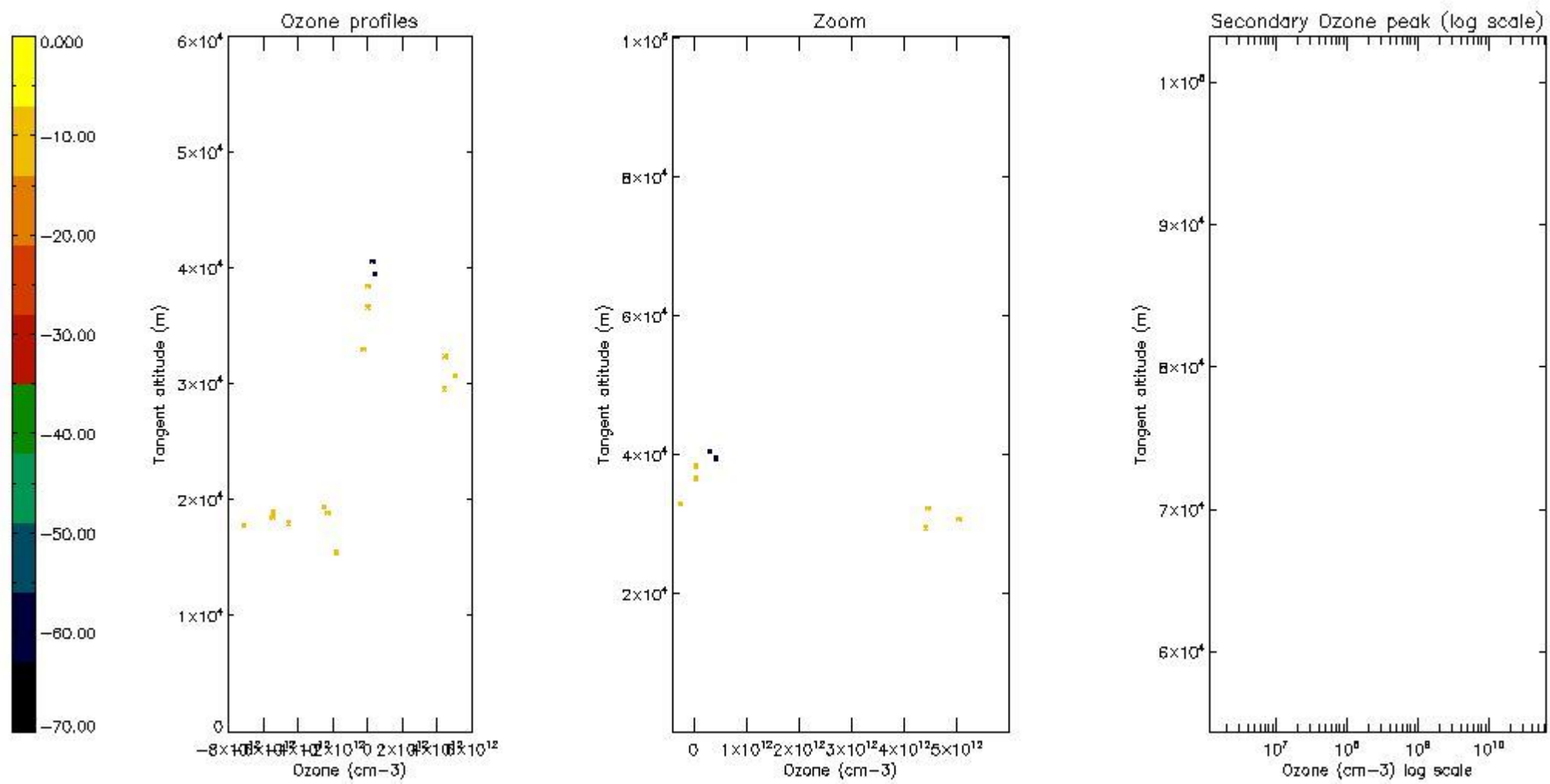
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



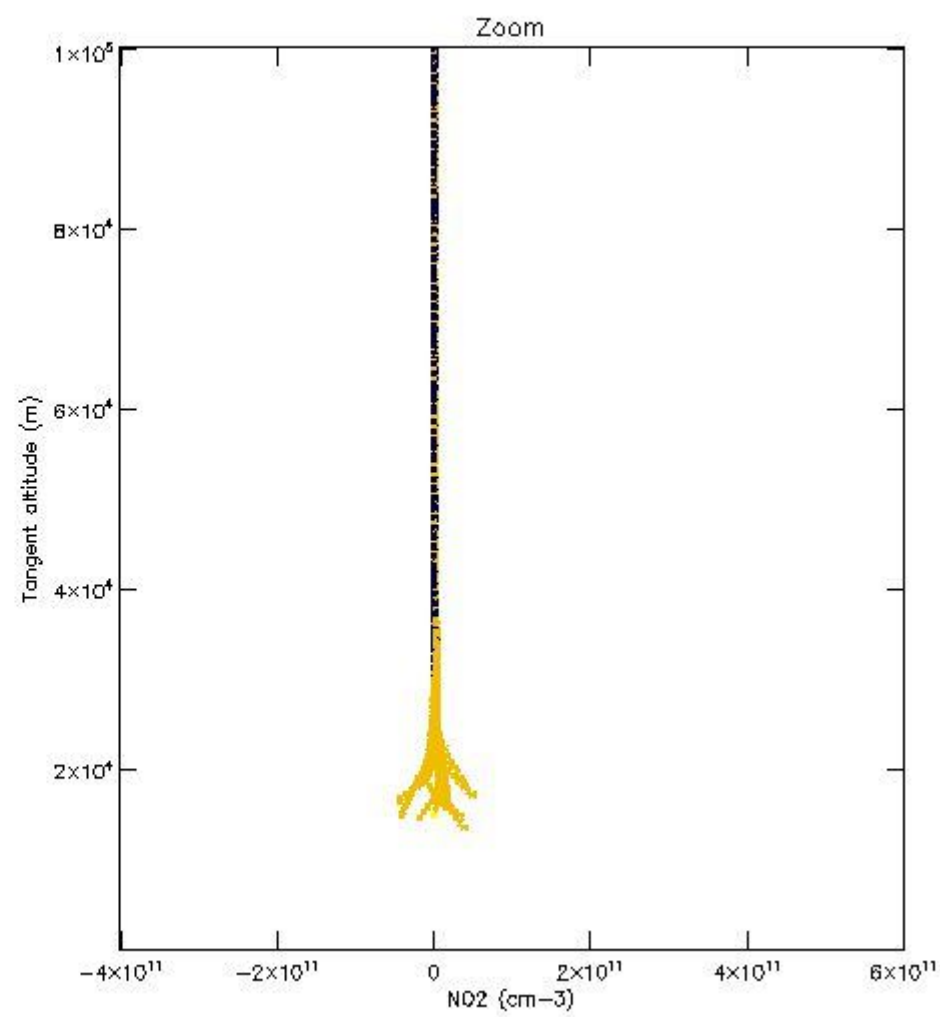
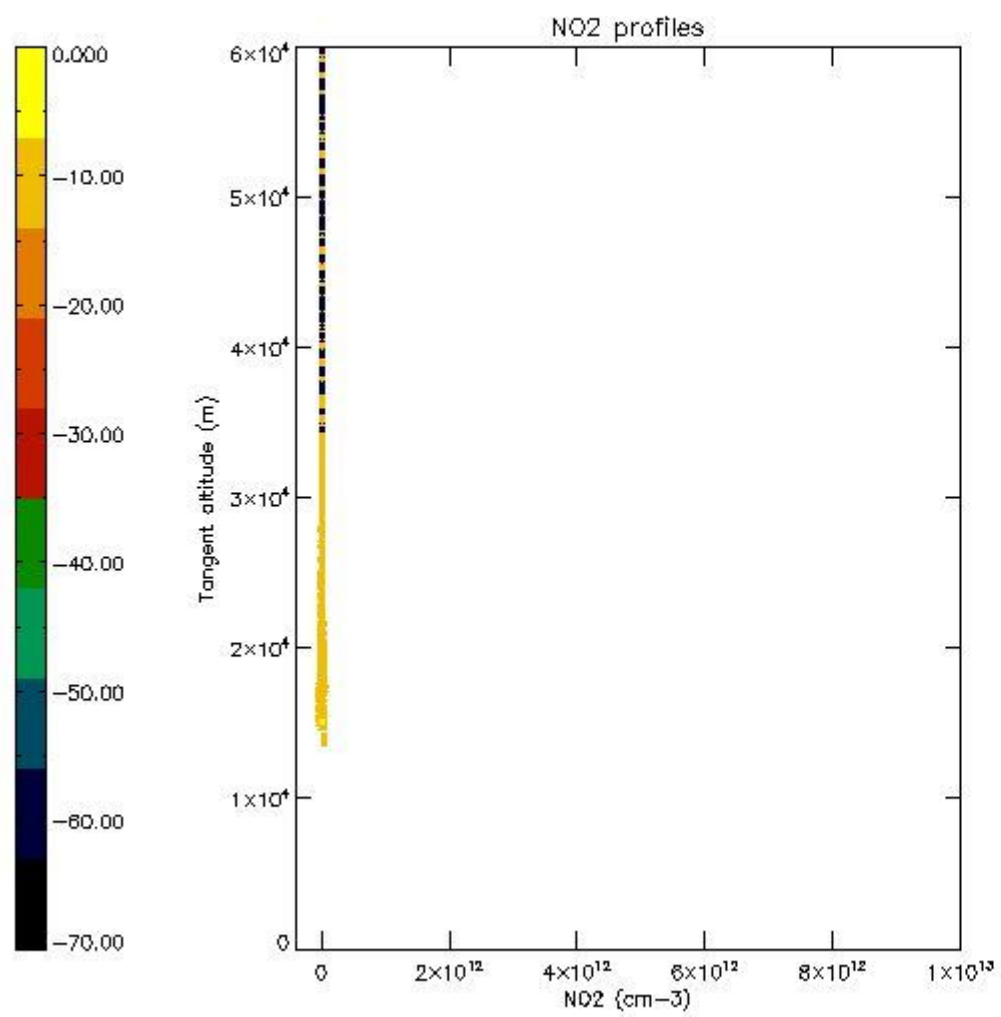
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



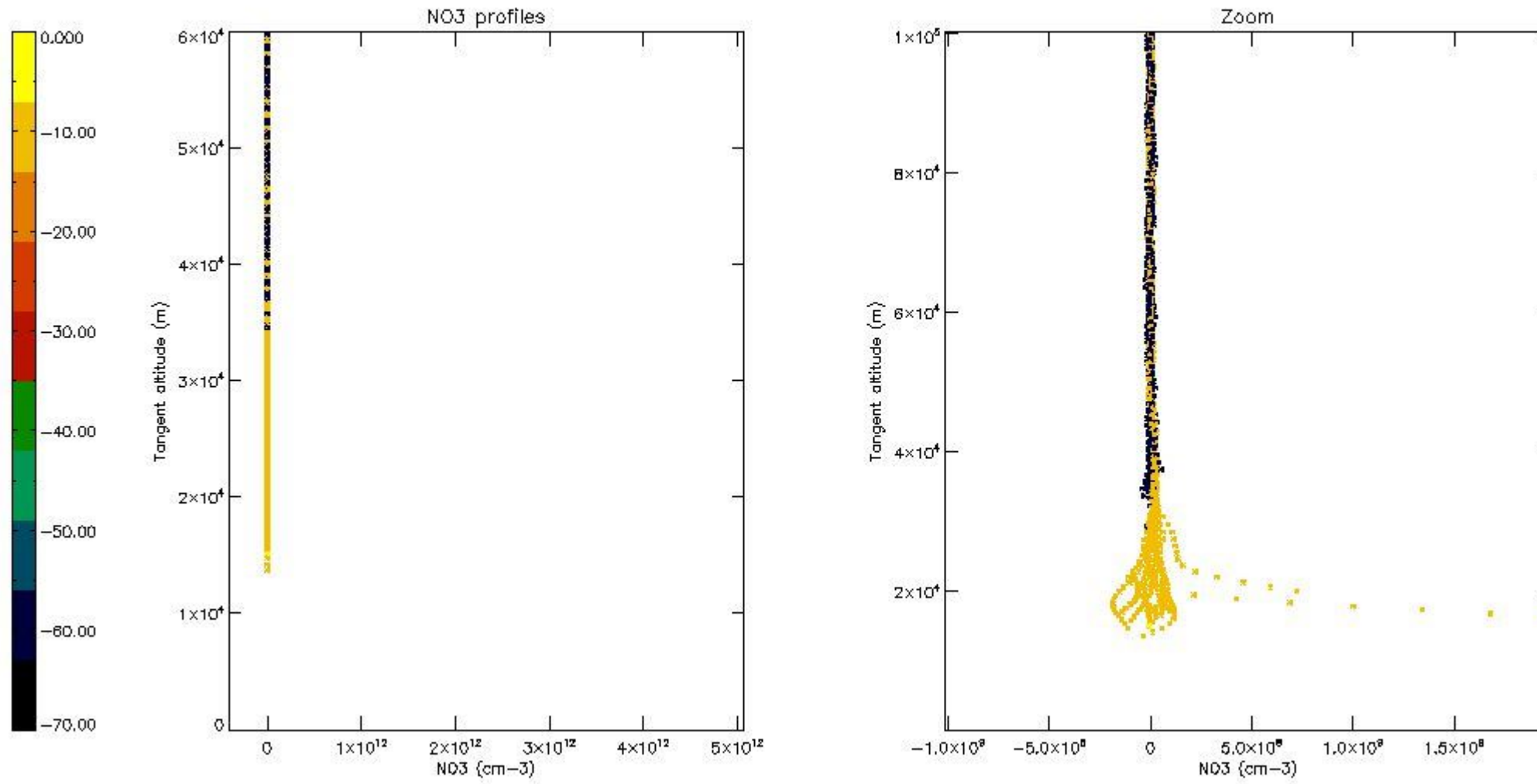
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

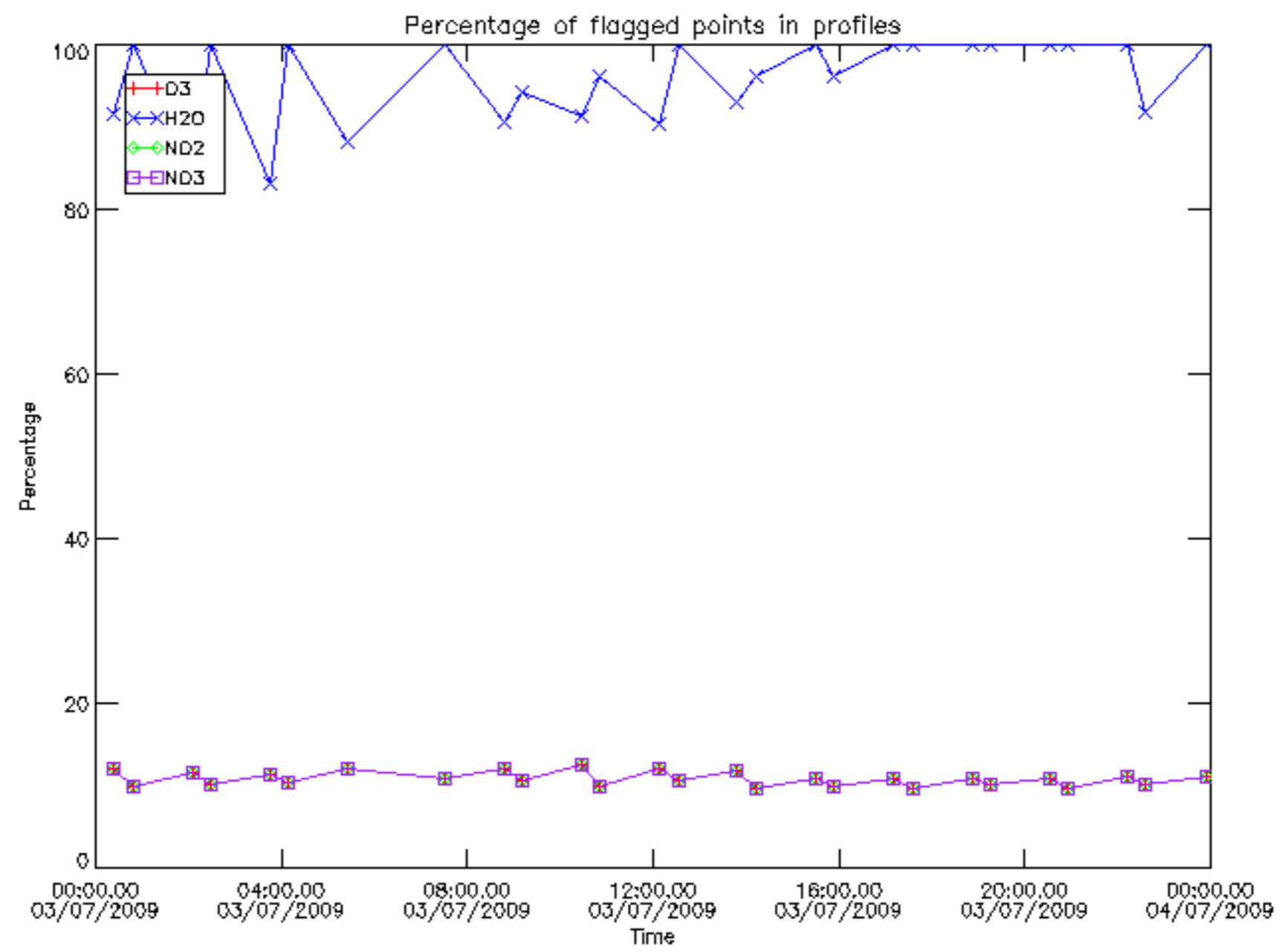
The colorbar represents the latitude.



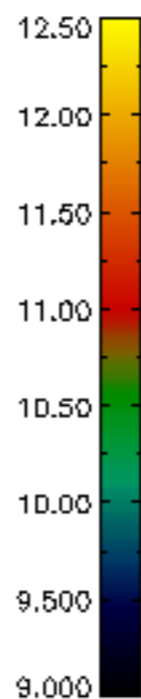
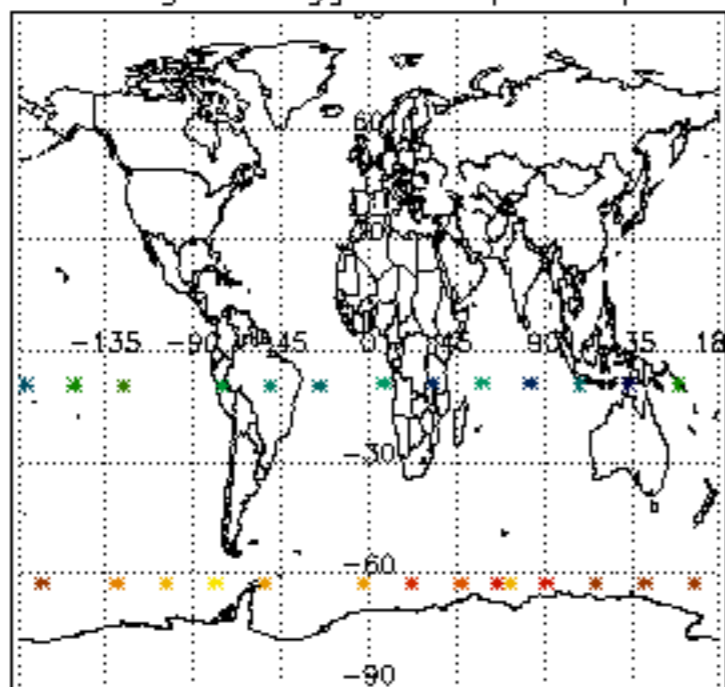
6. Auxiliary Data Files used for the production reported in section 2

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.

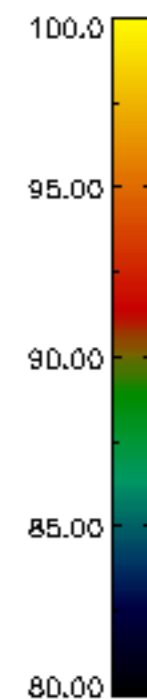
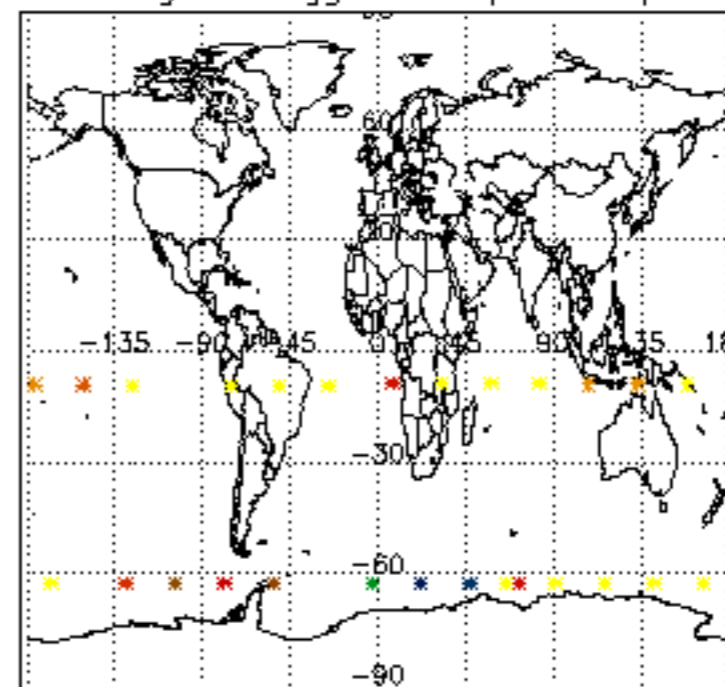
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	03-JUL-2009 00:01:01
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	03-JUL-2009 00:01:01
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	03-JUL-2009 00:01:01



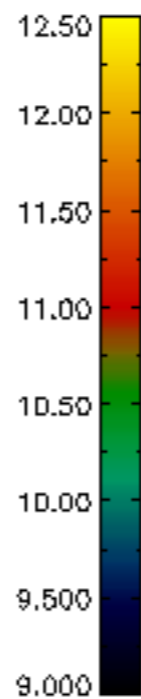
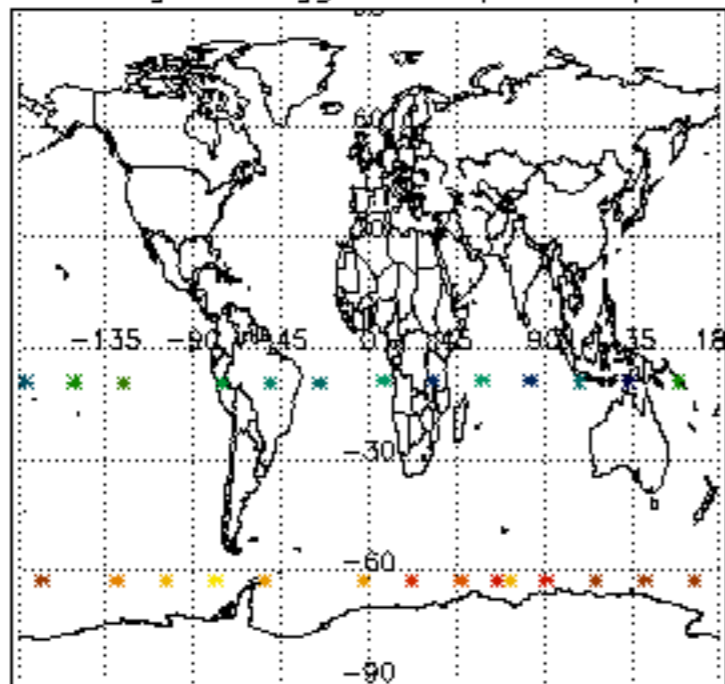
Percentage of flagged data per D3 profile



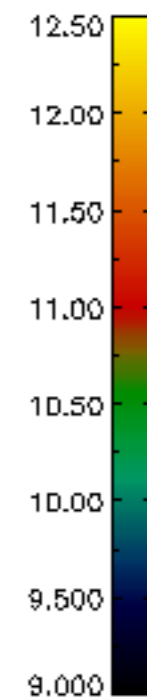
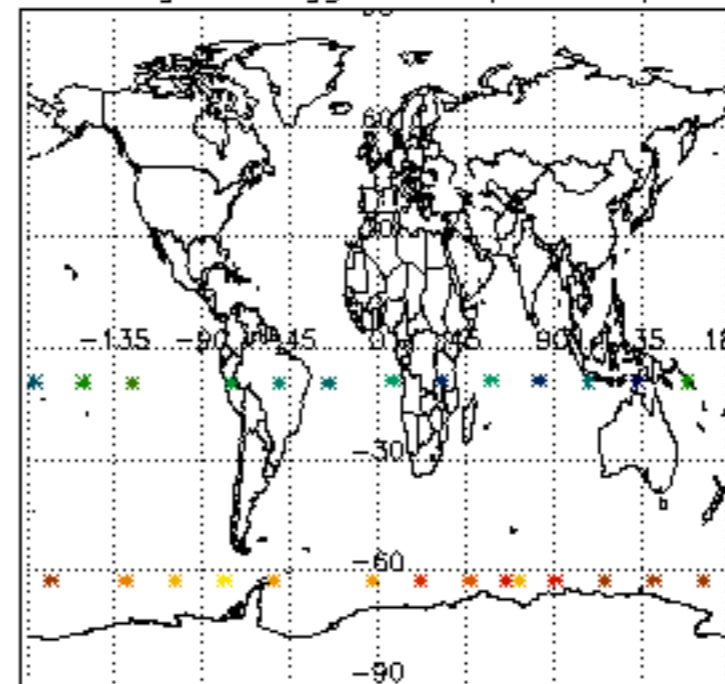
Percentage of flagged data per H2O profile

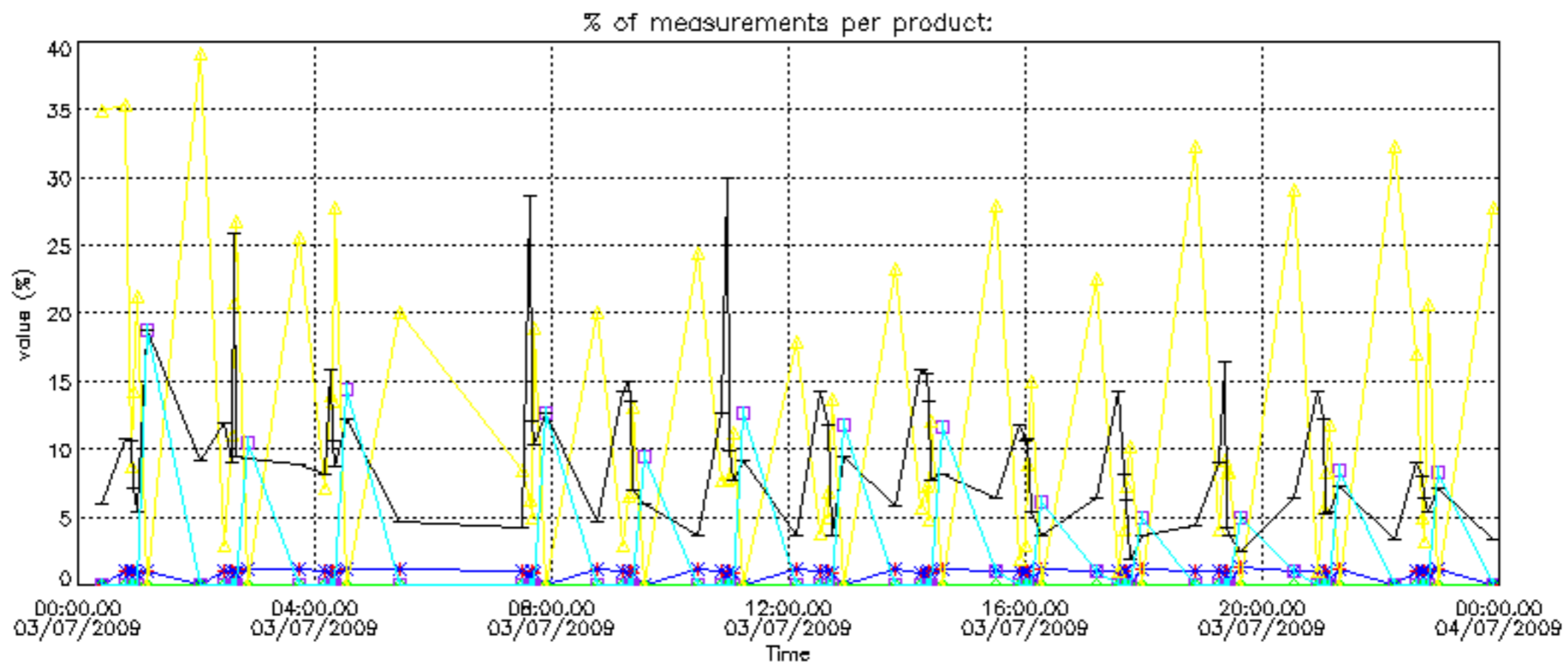


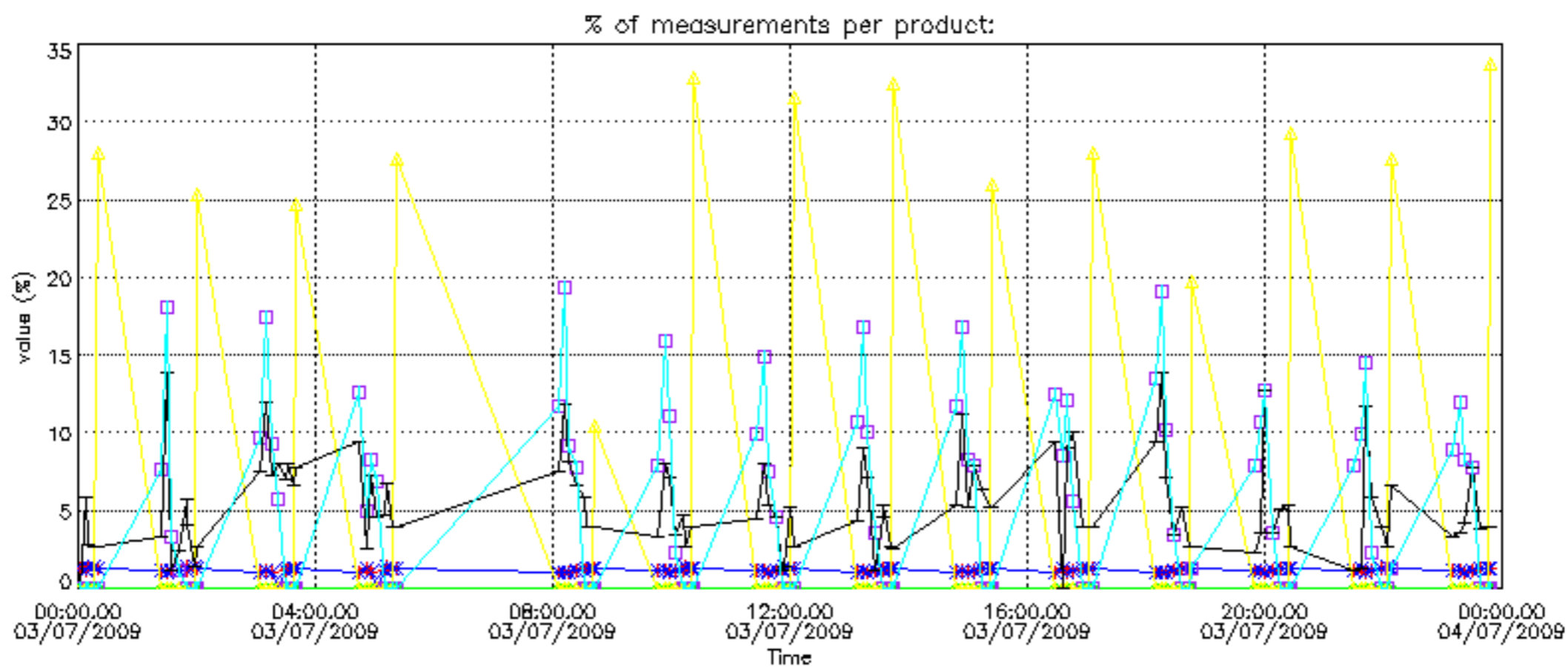
Percentage of flagged data per NO2 profile



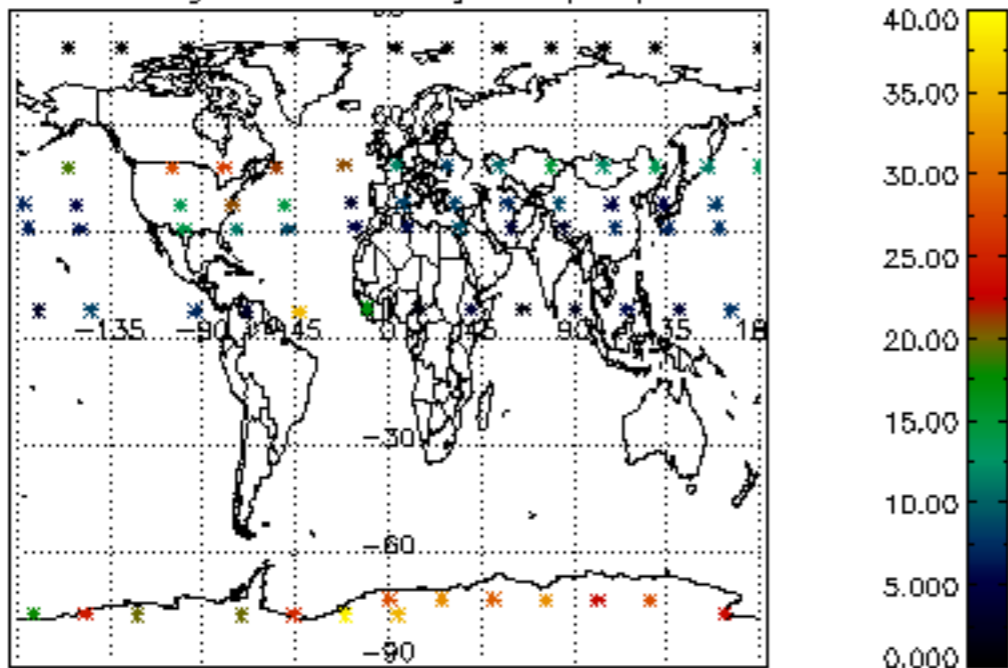
Percentage of flagged data per NO3 profile



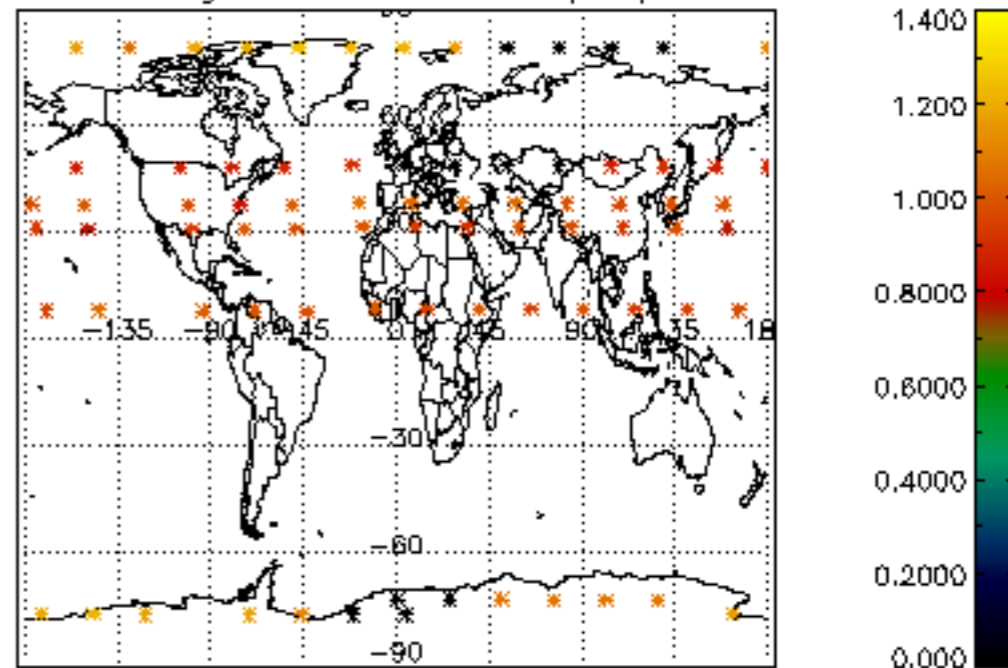




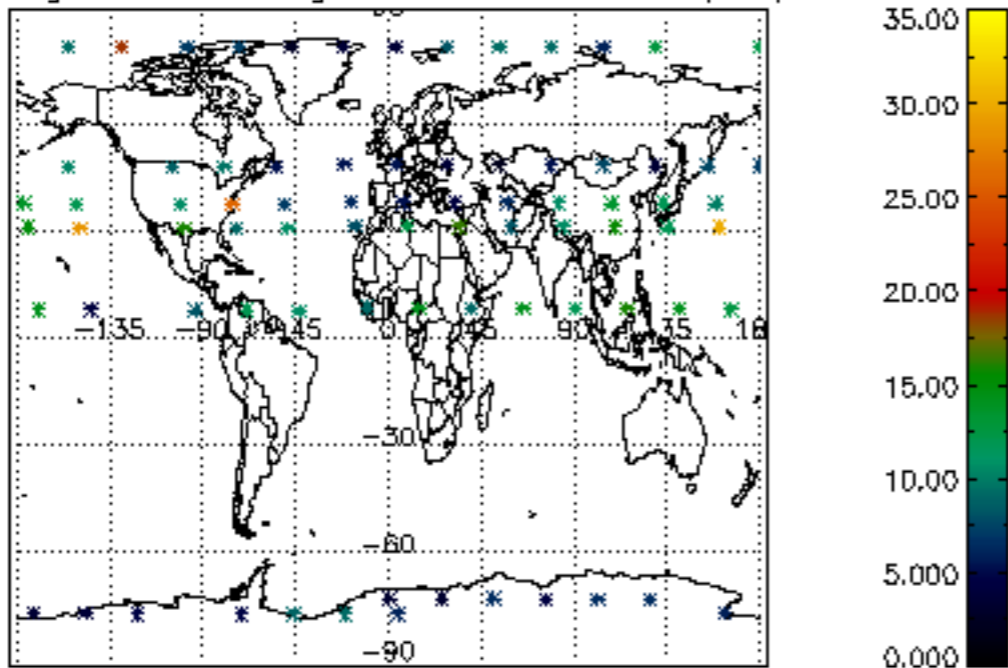
Percentage of cosmic ray hits per profile



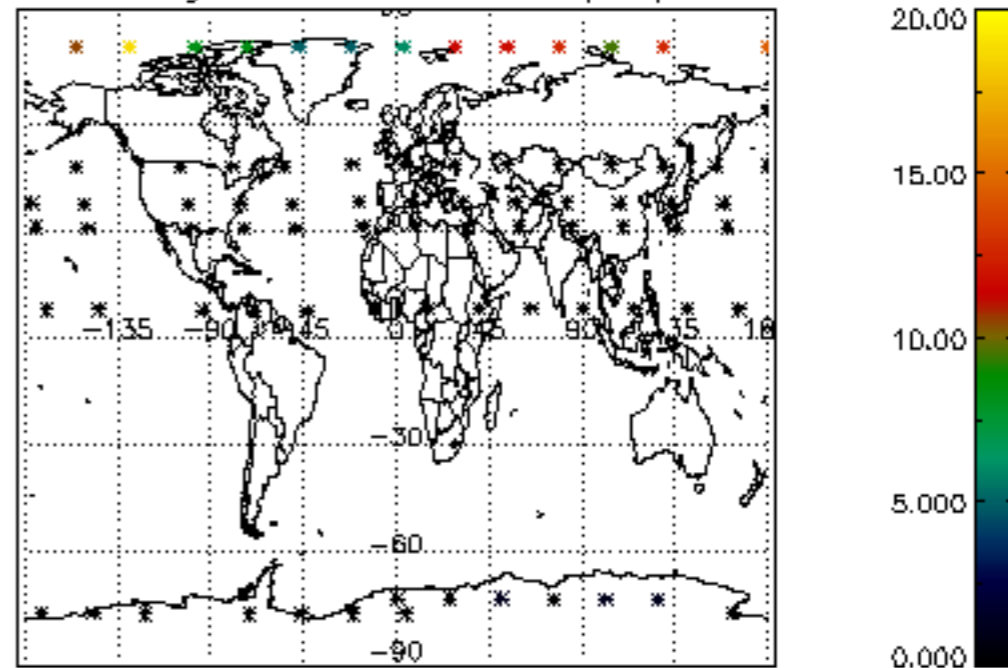
Percentage of datation errors per profile



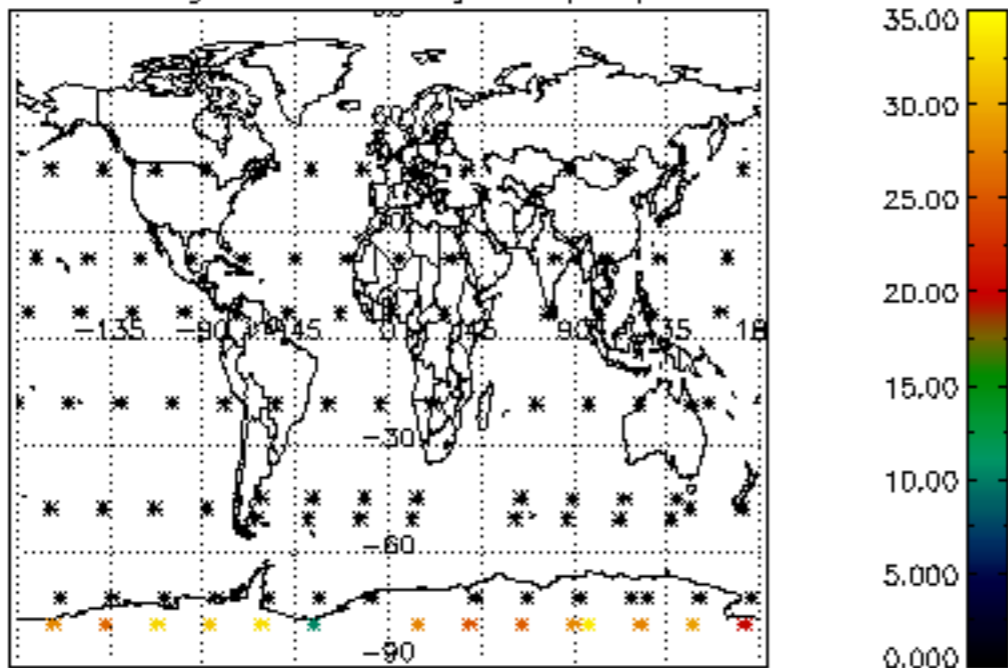
Percentage of star falling outside central band per profile



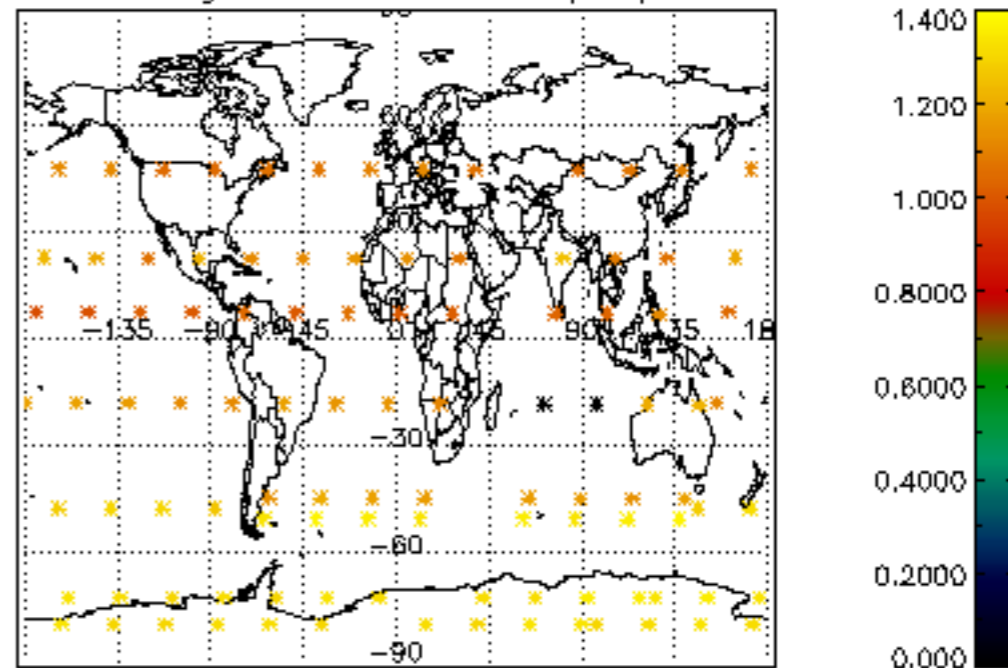
Percentage of saturation errors per profile



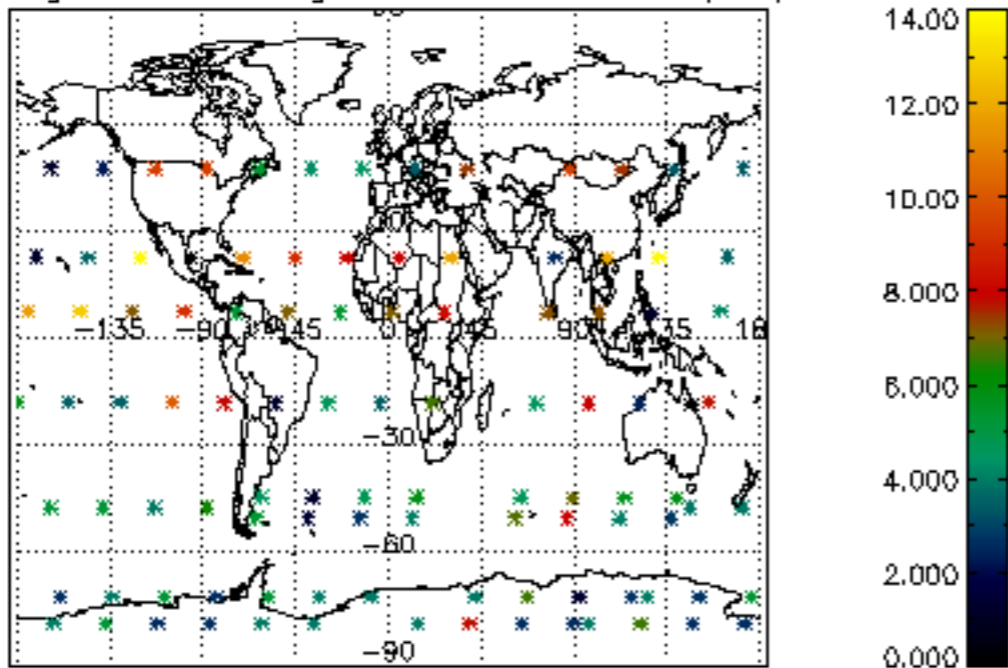
Percentage of cosmic ray hits per profile



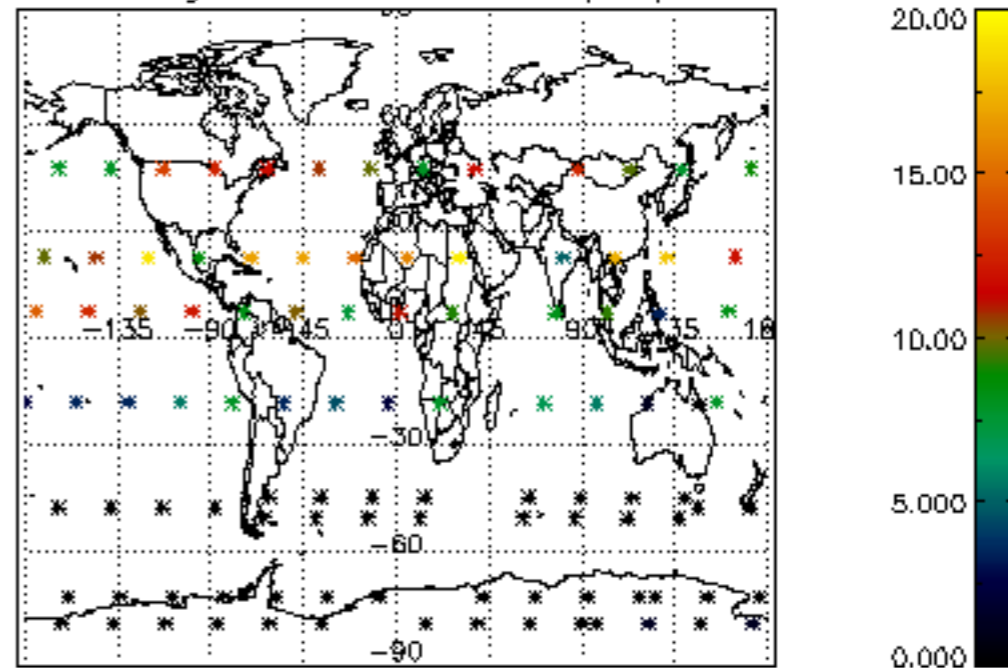
Percentage of datation errors per profile

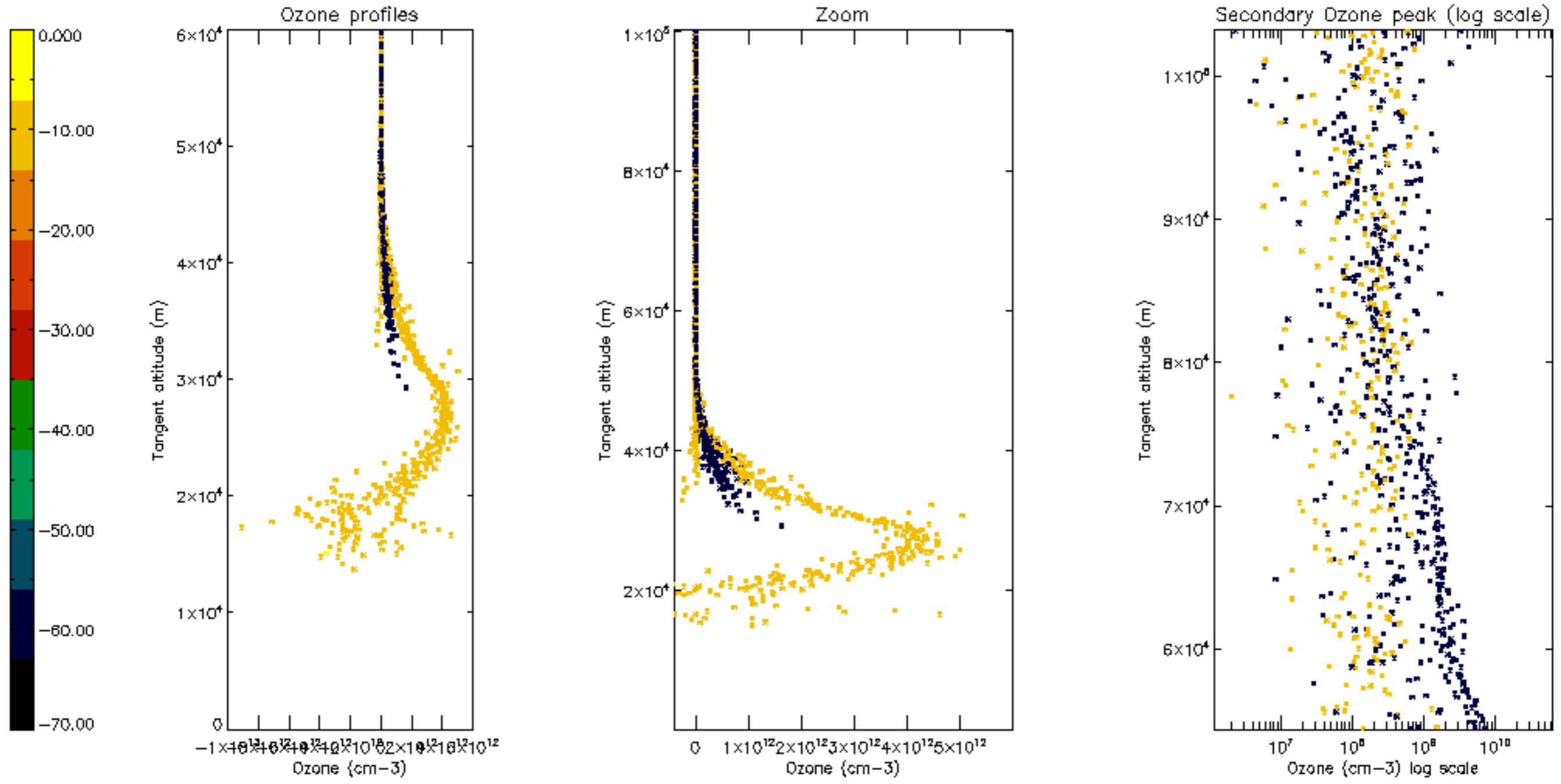


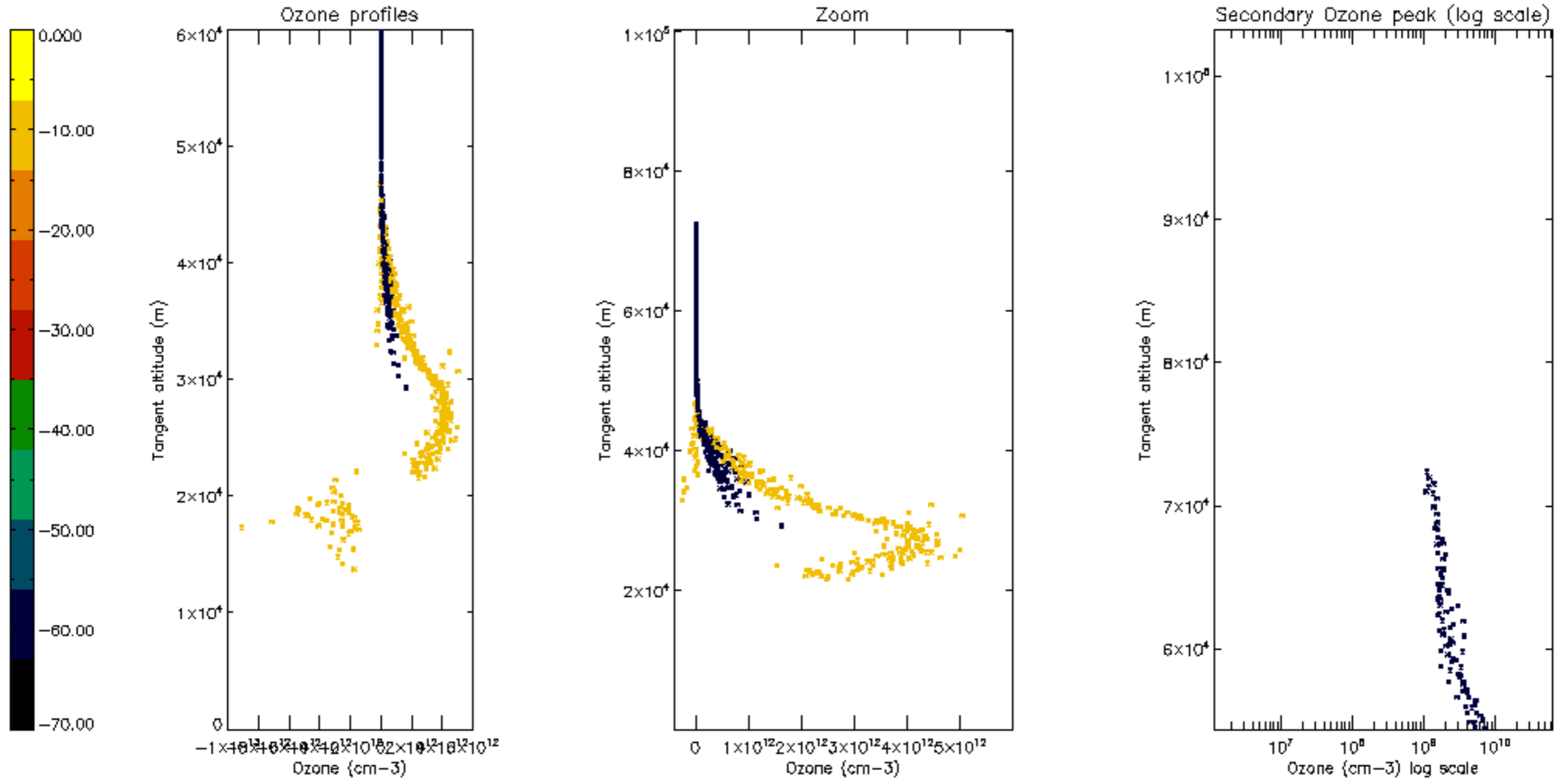
Percentage of star falling outside central band per profile

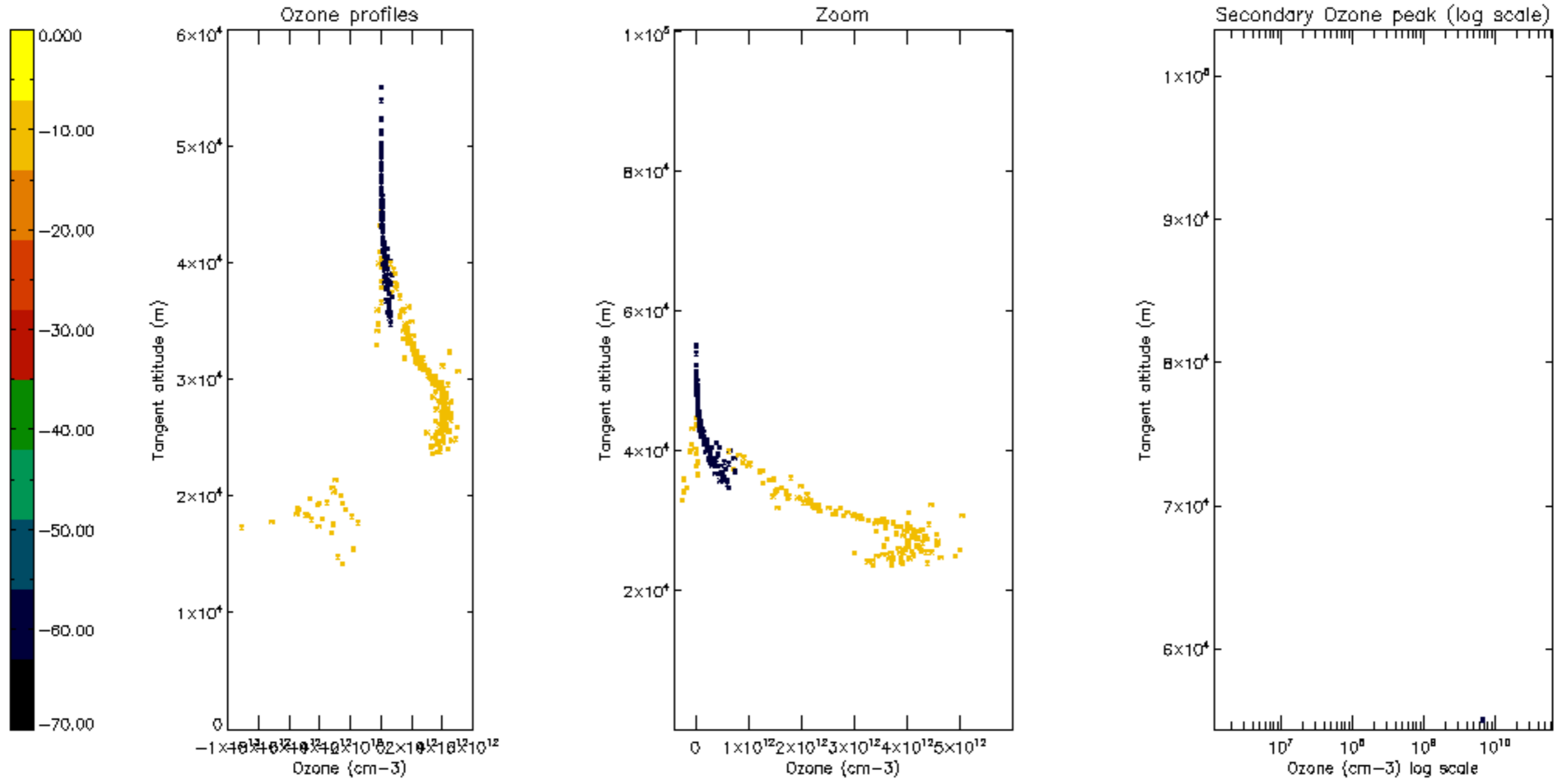


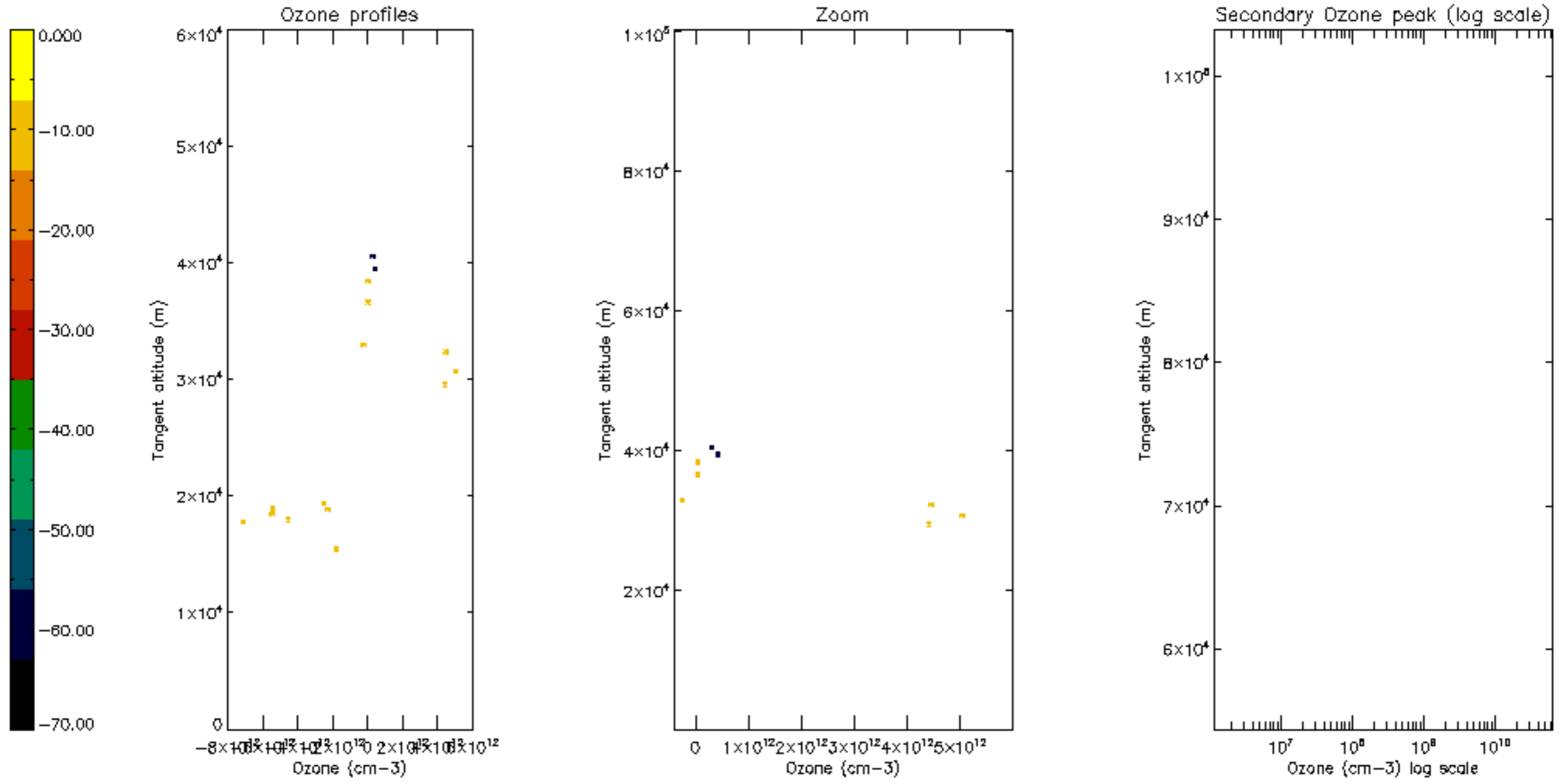
Percentage of saturation errors per profile

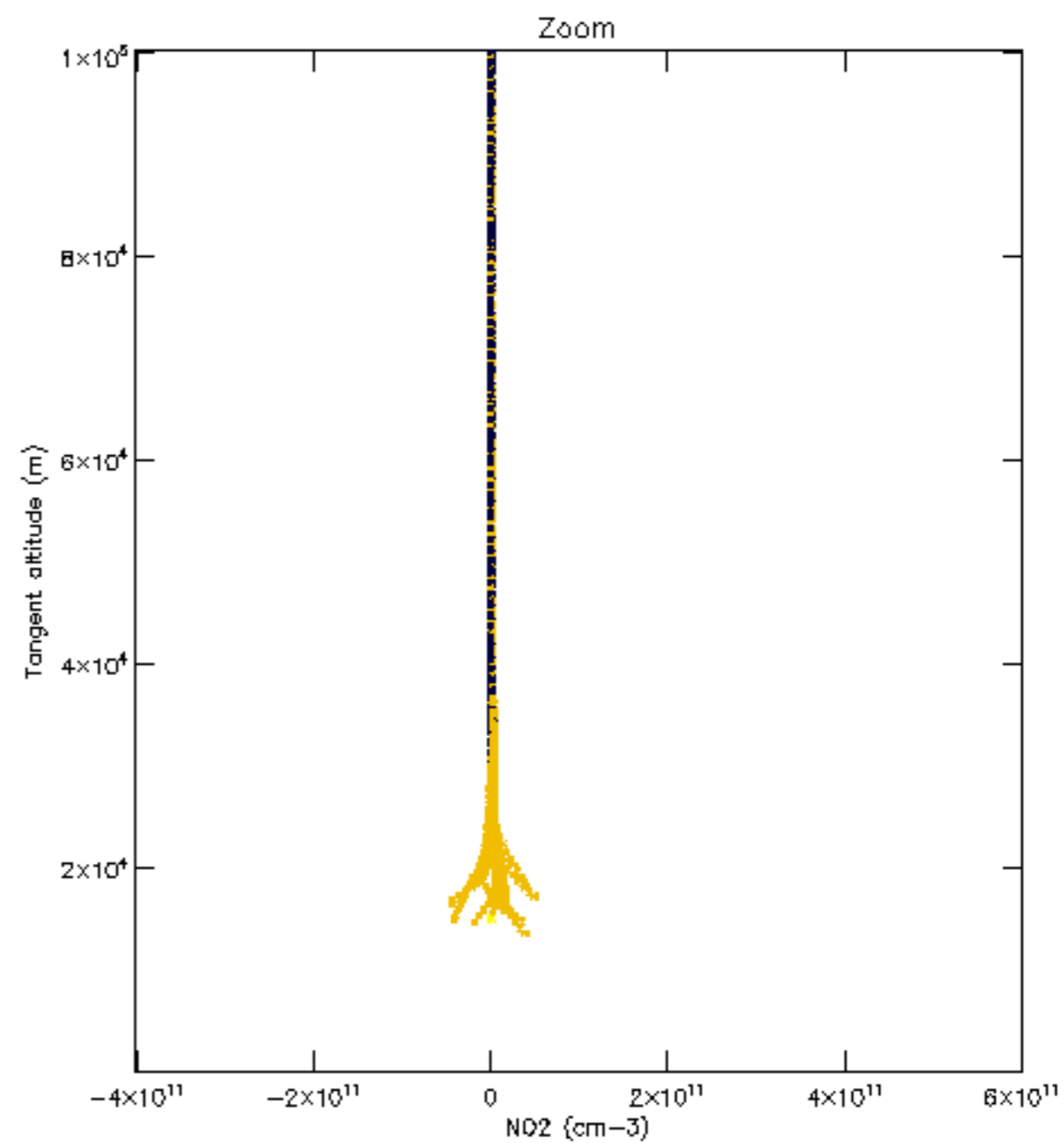
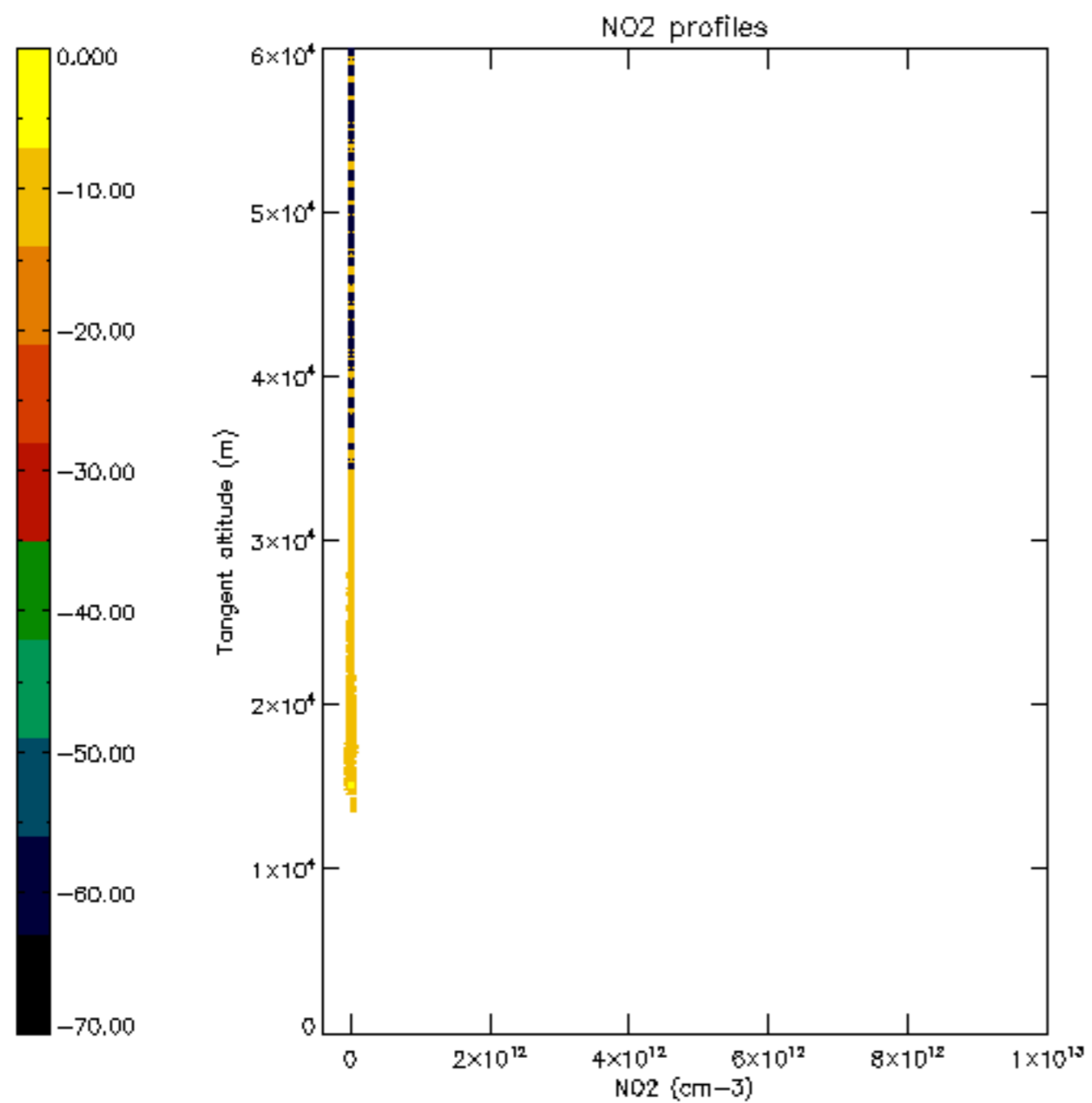


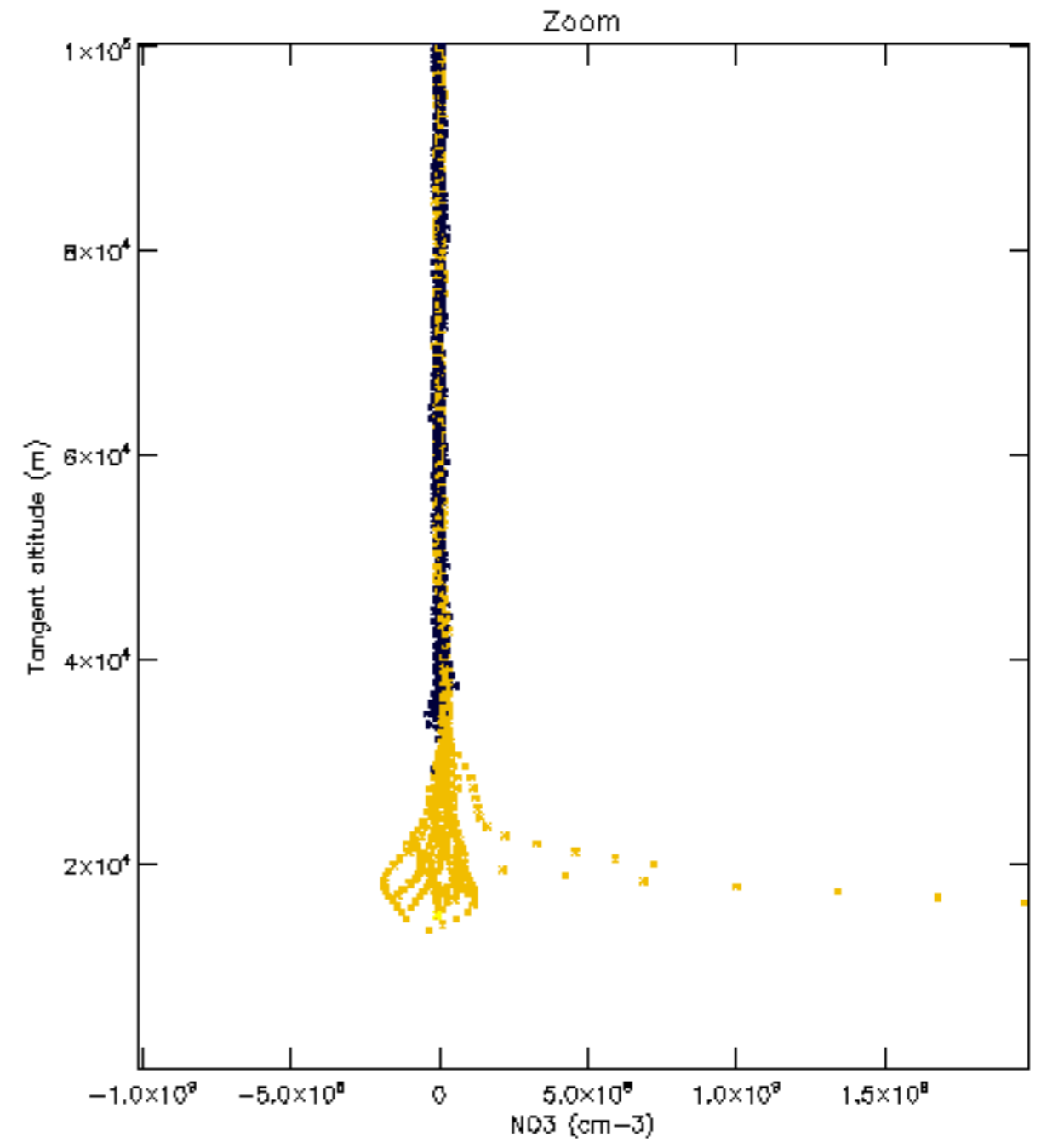
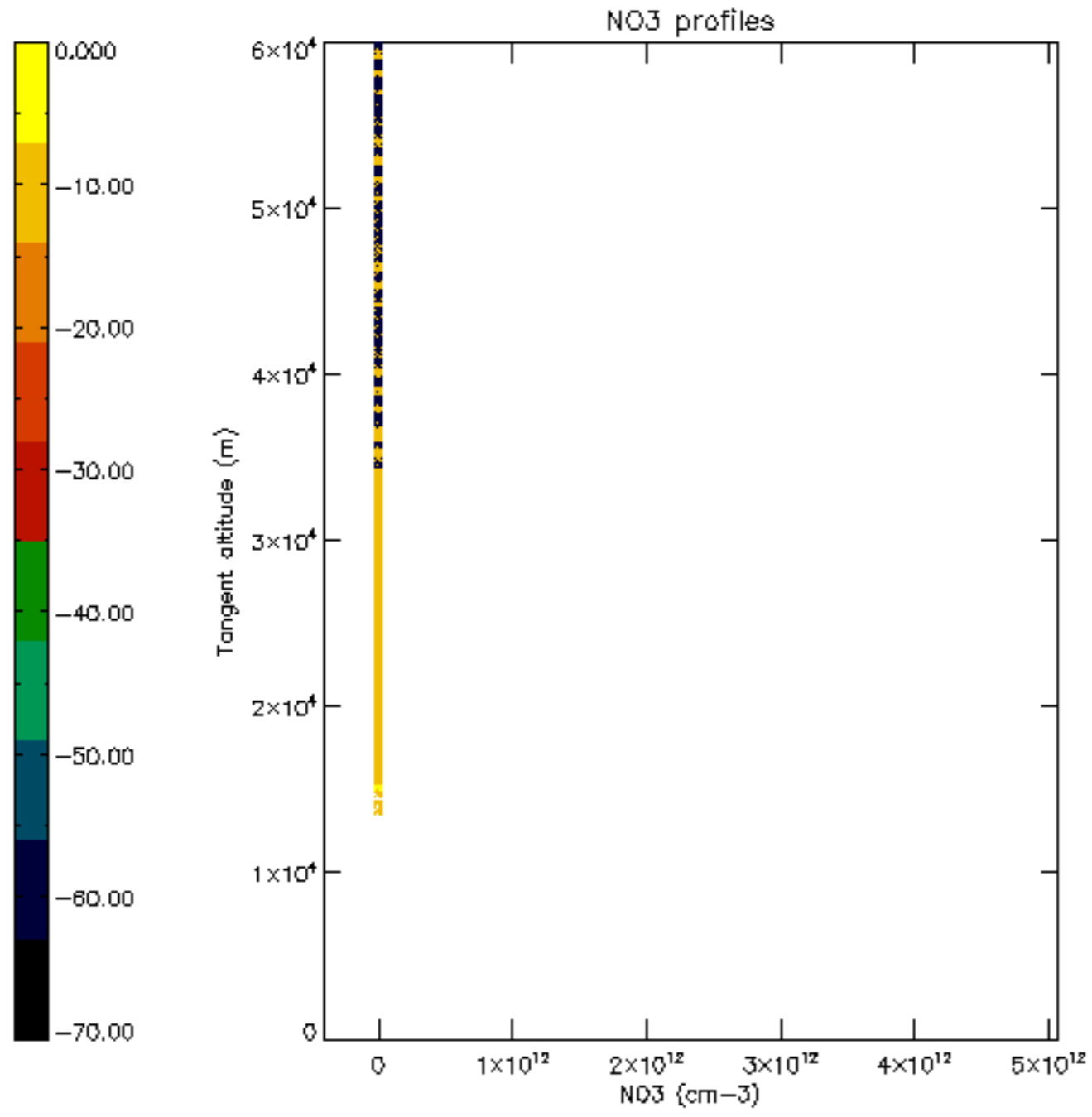


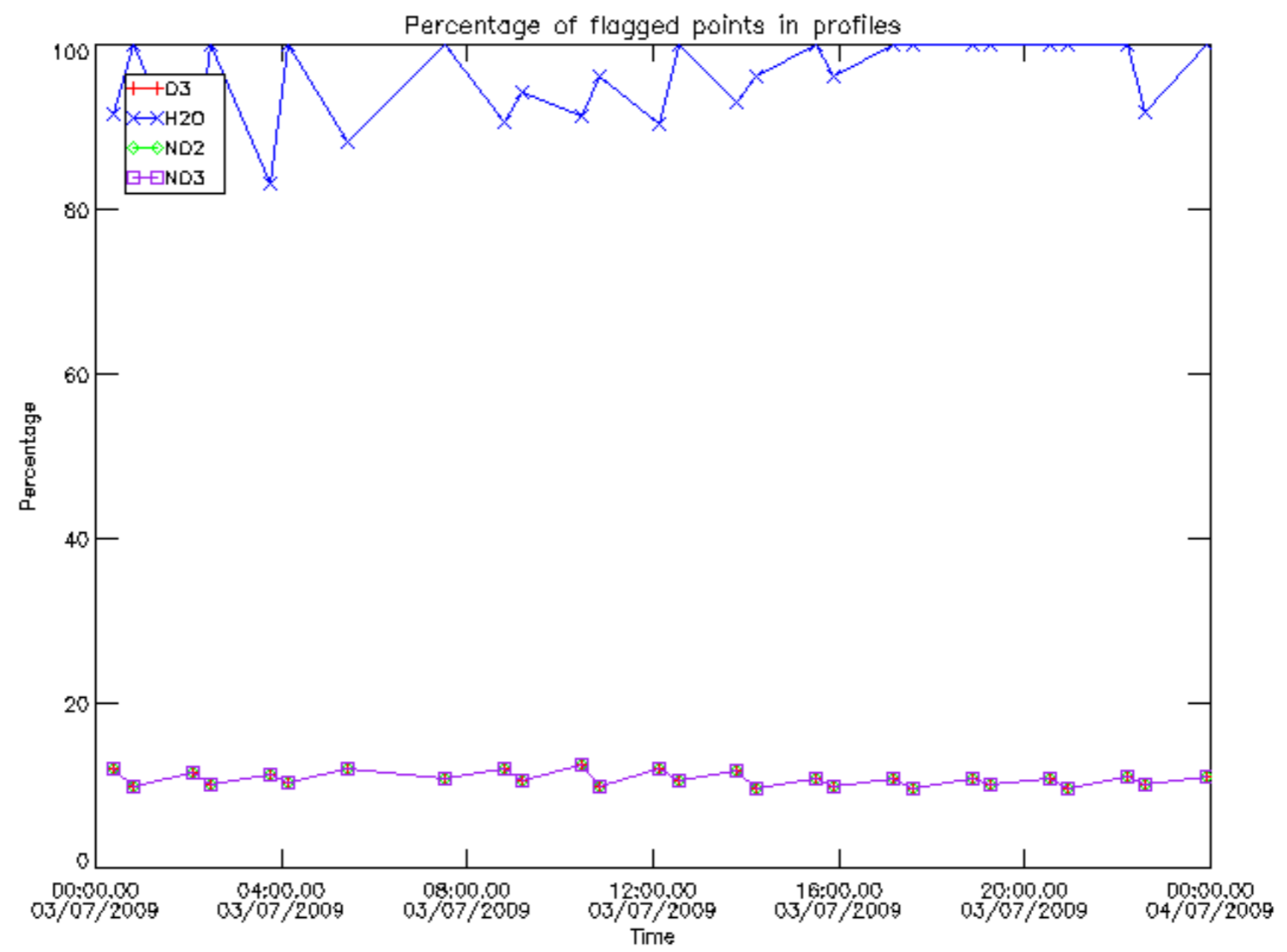




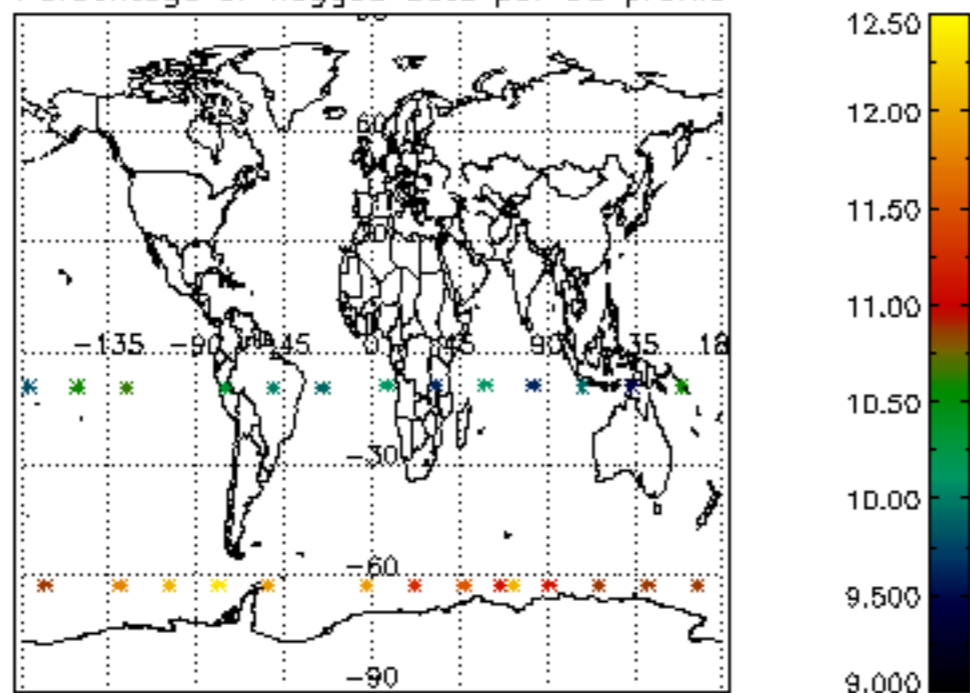




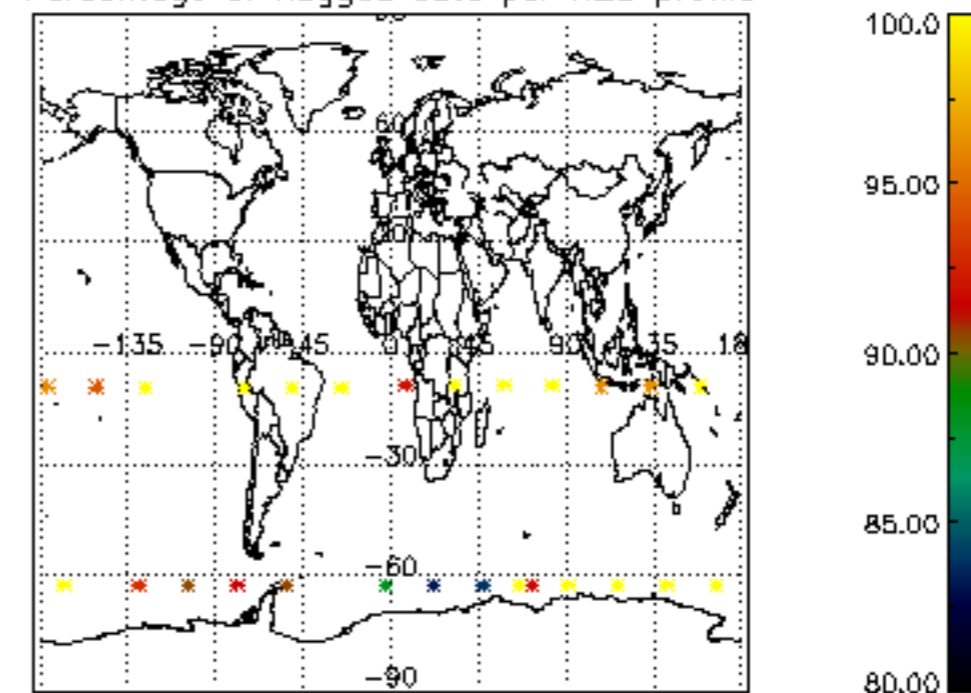




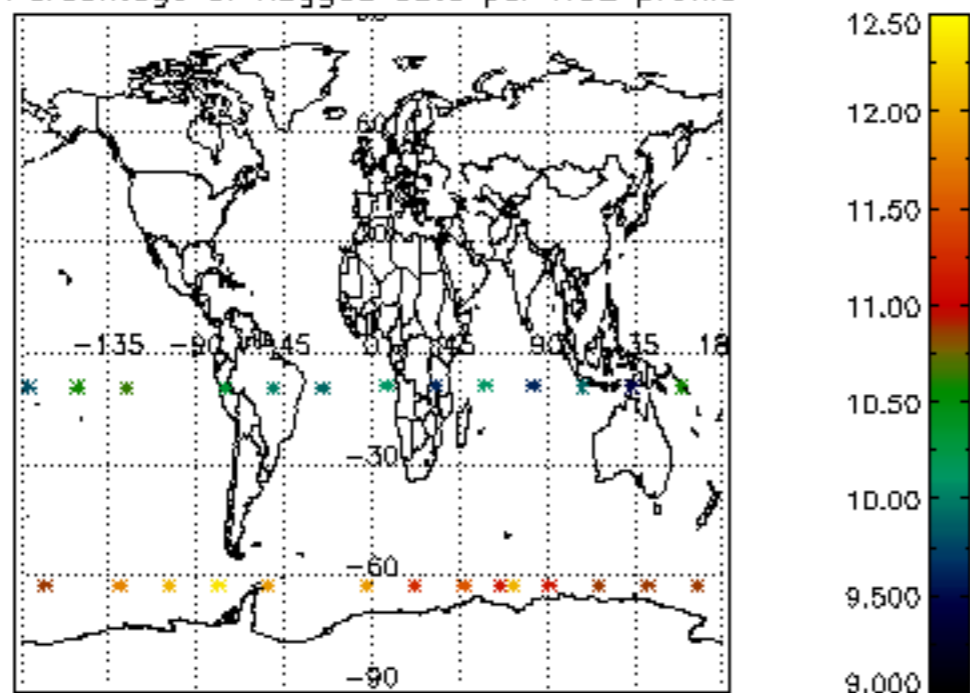
Percentage of flagged data per D3 profile



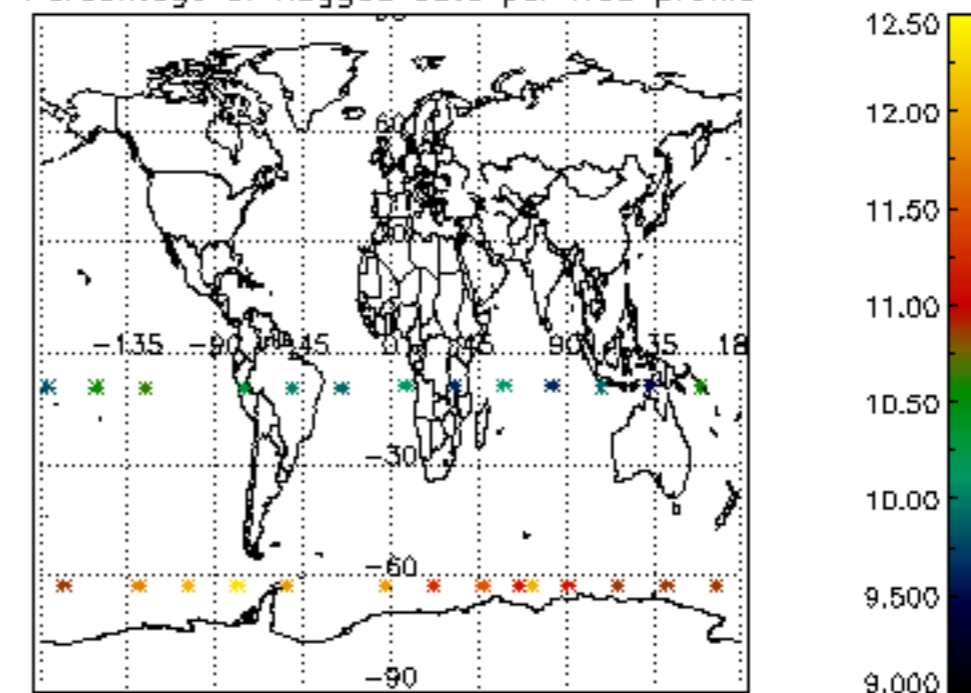
Percentage of flagged data per H2O profile

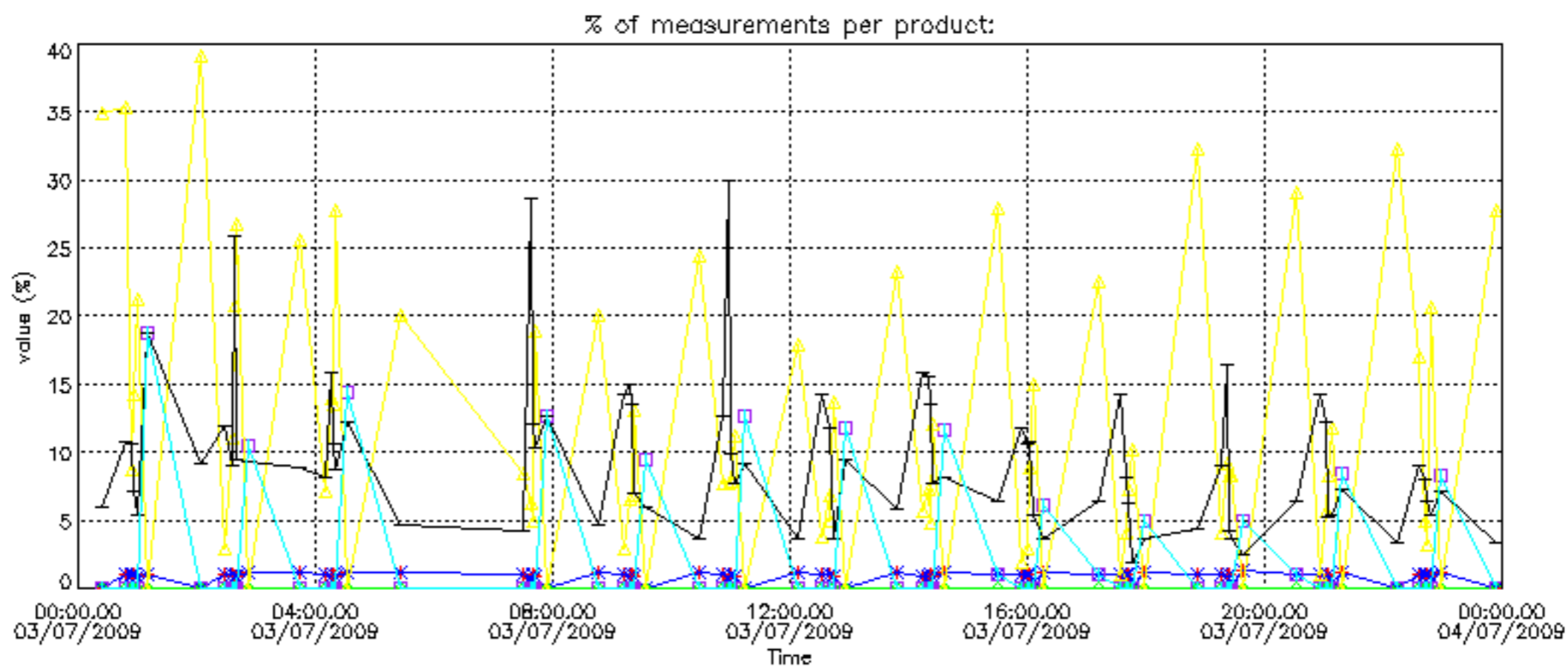


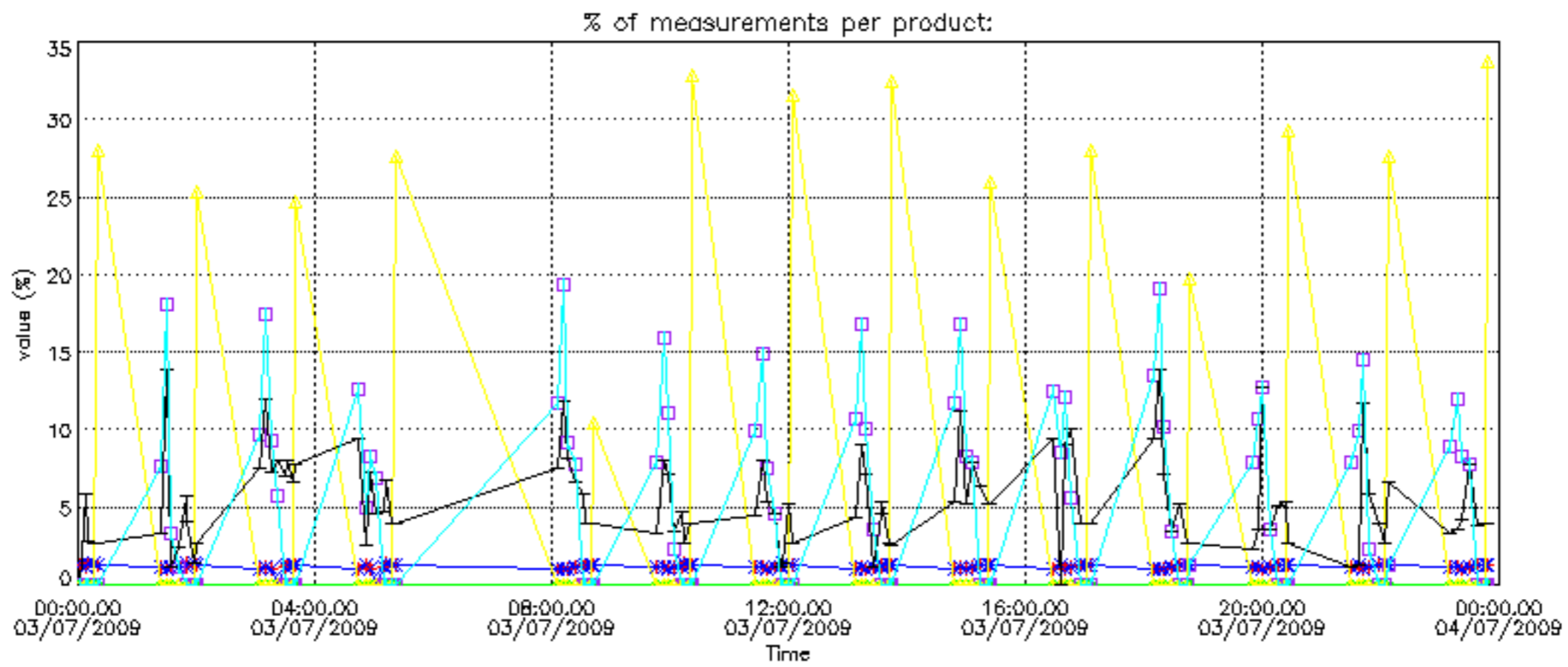
Percentage of flagged data per NO2 profile



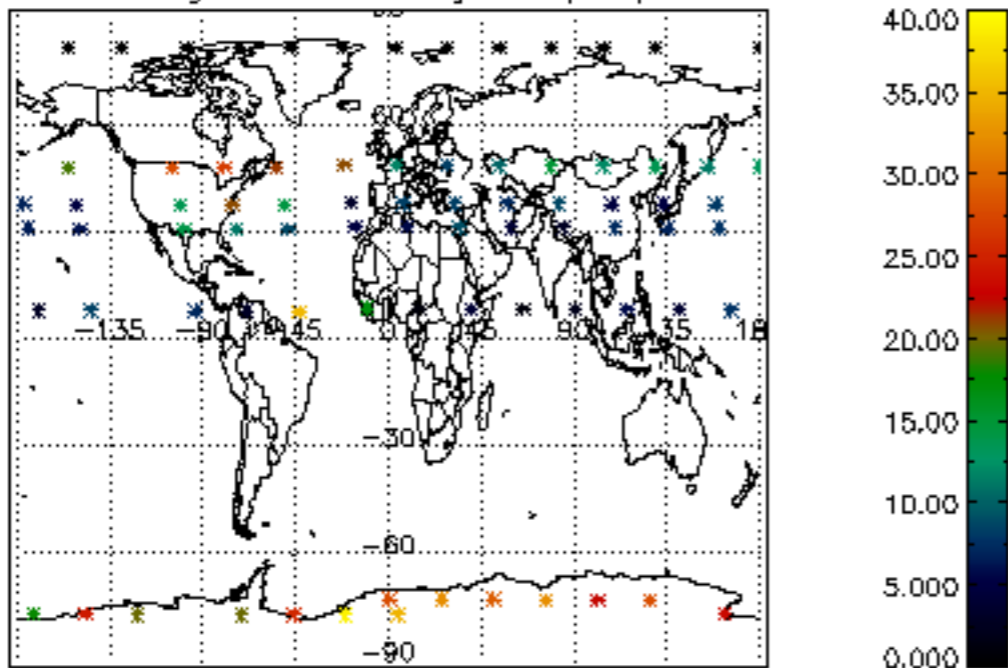
Percentage of flagged data per NO3 profile



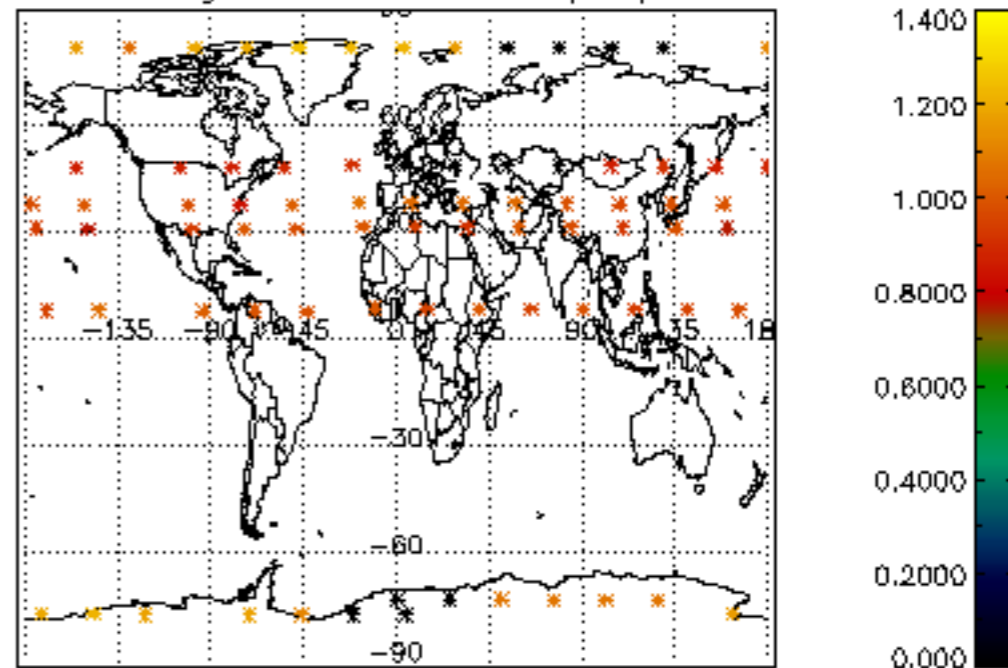




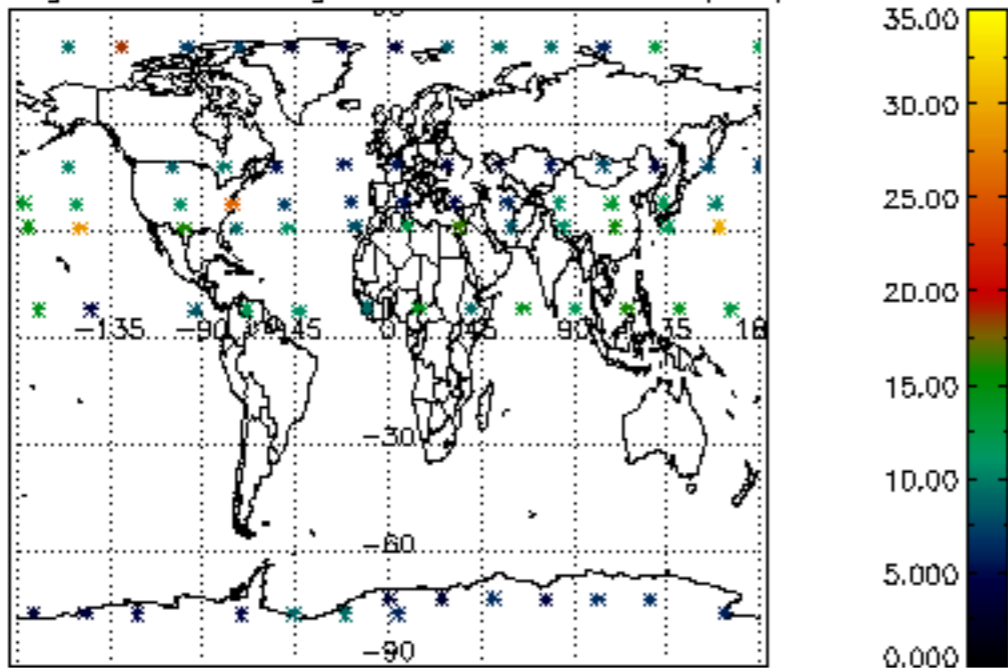
Percentage of cosmic ray hits per profile



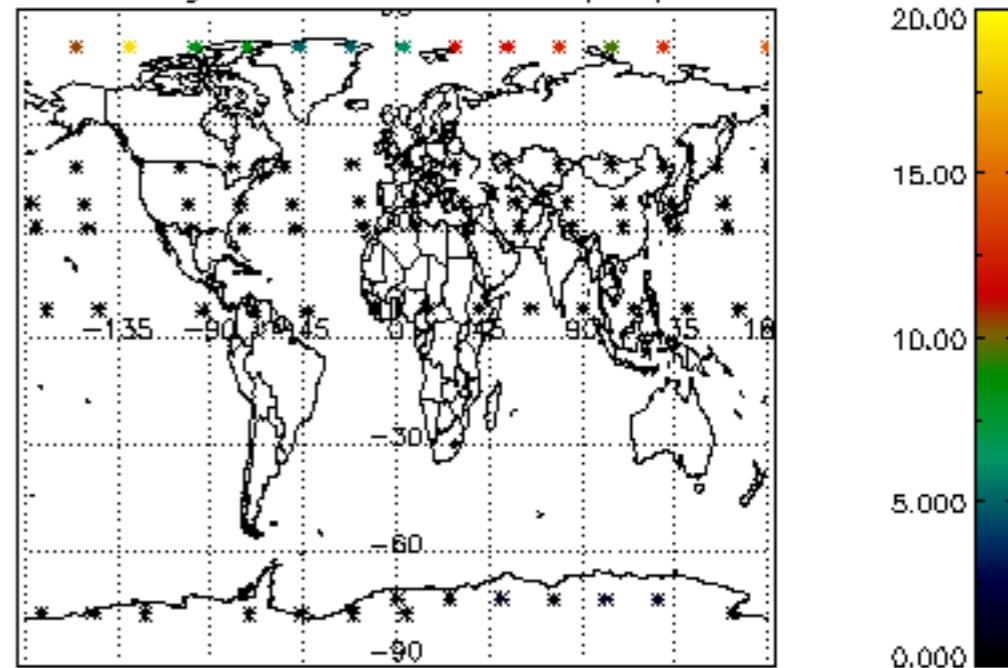
Percentage of datation errors per profile



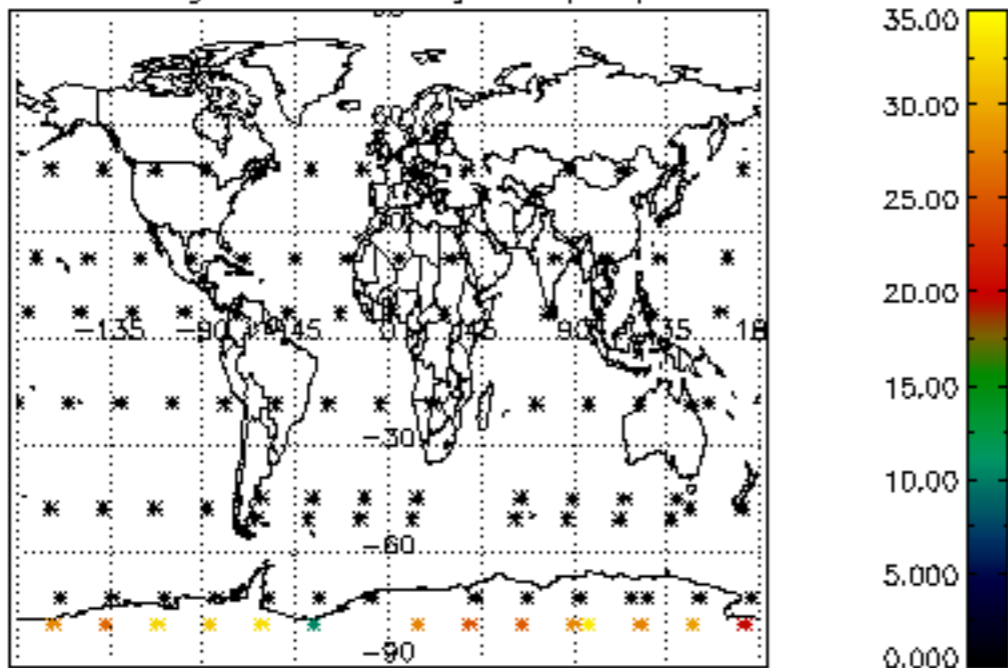
Percentage of star falling outside central band per profile



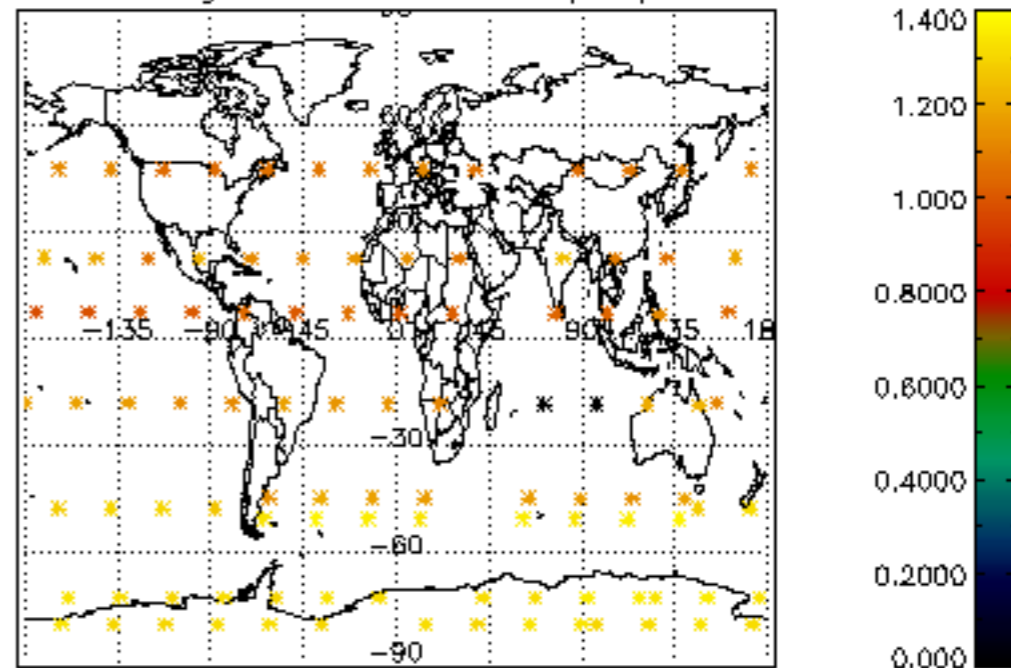
Percentage of saturation errors per profile



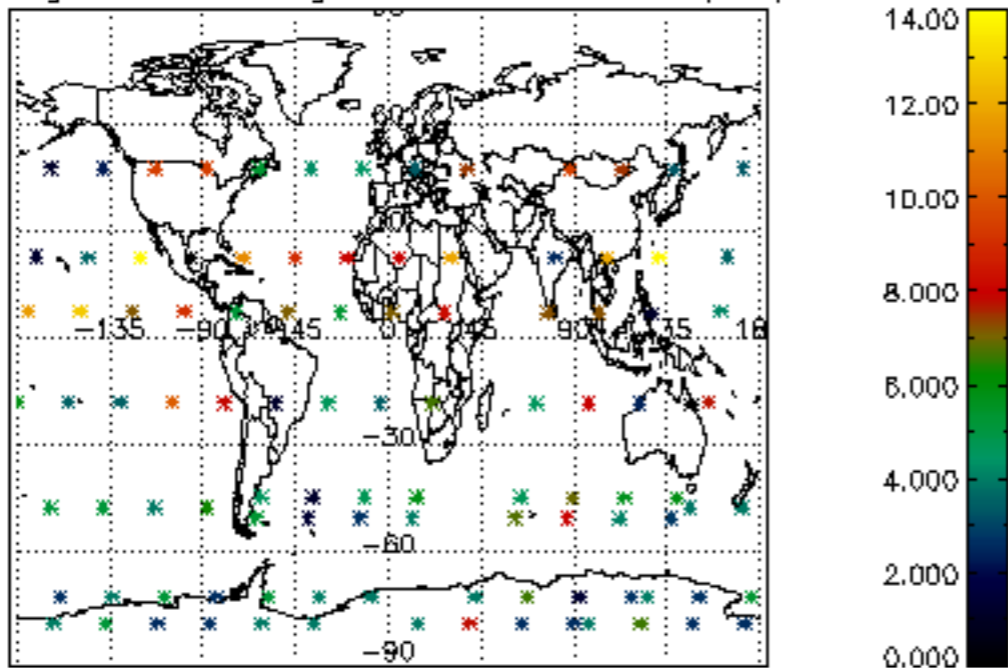
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

