

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	23APR2013 01:29:18
Data source version	GOMOS/6.01
Start time of products	22-08-2007 (22AUG2007 00:00:00)
Stop time of products	23-08-2007 (23AUG2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	237
Nb of prods with errors	1

2. Summary of processed GOM_NL__2P products.

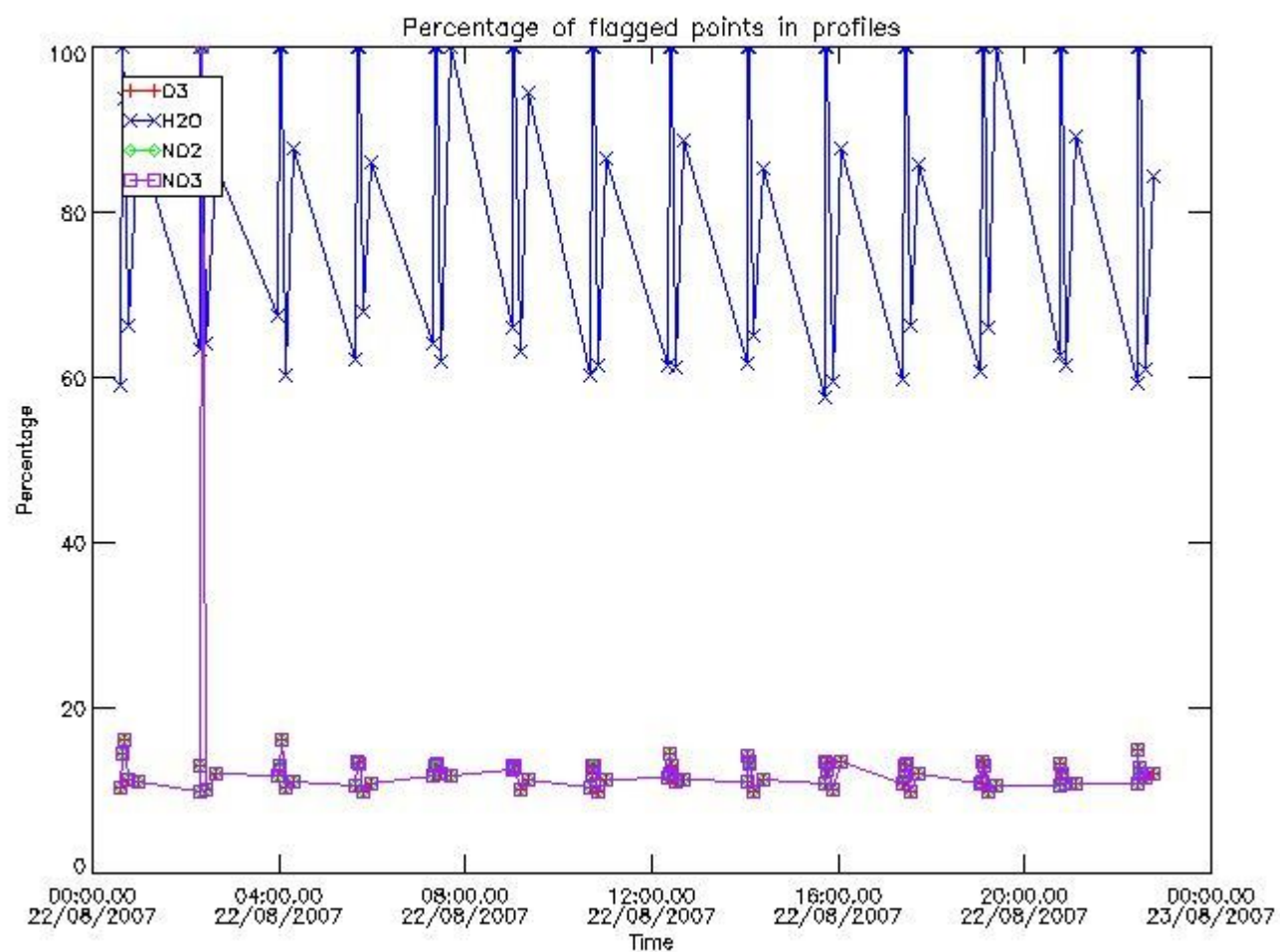
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070822_000553_000000332061_00016_28627_9563.N1	22-AUG-2007 00:05:53	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	28627	No
2	GOM_NL__2PRFIN20070822_002455_000000422061_00016_28627_9564.N1	22-AUG-2007 00:24:55	Bright	41.500	170	27Eps Gem	3.0000	9700.0	83	28627	No
3	GOM_NL__2PRFIN20070822_002738_000000462061_00016_28627_9565.N1	22-AUG-2007 00:27:38	Twilight	45.500	44	24Gam Gem	1.9280	11000.	91	28627	No
4	GOM_NL__2PRFIN20070822_003653_000000542061_00016_28627_9566.N1	22-AUG-2007 00:36:53	Dark	54.000	1	9Alp CMa	-1.4400	11000.	108	28627	No
5	GOM_NL__2PRFIN20070822_003825_000000392061_00016_28627_9567.N1	22-AUG-2007 00:38:25	Dark	39.000	179	24Omi2CMa	3.0320	24000.	78	28627	No
6	GOM_NL__2PRFIN20070822_003952_000000412061_00016_28627_9568.N1	22-AUG-2007 00:39:52	Dark	41.000	23	21Eps CMa	1.5020	26000.	82	28627	No
7	GOM_NL__2PRFIN20070822_004642_000000452061_00016_28627_9569.N1	22-AUG-2007 00:46:42	Dark	45.000	2	Alp Car	-0.73600	7000.0	90	28627	No
8	GOM_NL__2PRFIN20070822_005740_000000462061_00017_28628_9574.N1	22-AUG-2007 00:57:40	Dark	46.000	9	Alp Eri	0.45300	24000.	92	28628	No
9	GOM_NL__2PRFIN20070822_010257_000000382061_00017_28628_9575.N1	22-AUG-2007 01:02:57	Straylight	38.000	148	Alp Tuc	2.8780	4100.0	76	28628	No
10	GOM_NL__2PRFIN20070822_010633_000000402061_00017_28628_9576.N1	22-AUG-2007 01:06:33	Straylight	39.500	31	Alp Gru	1.7340	15200.	79	28628	No
11	GOM_NL__2PRFIN20070822_010928_000000402061_00017_28628_9577.N1	22-AUG-2007 01:09:28	Straylight	39.500	172	Gam Gru	3.0030	13100.	79	28628	No
12	GOM_NL__2PRFIN20070822_012348_000000372061_00017_28628_9578.N1	22-AUG-2007 01:23:48	Bright	36.500	11	53Alp Aql	0.76500	8000.0	73	28628	No
13	GOM_NL__2PRFIN20070822_013042_000000392061_00017_28628_9579.N1	22-AUG-2007 01:30:42	Bright	38.500	92	53Eps Cyg	2.5000	4500.0	77	28628	No
14	GOM_NL__2PRFIN20070822_013224_000000372061_00017_28628_9580.N1	22-AUG-2007 01:32:24	Bright	37.000	66	37Gam Cyg	2.2080	5900.0	74	28628	No
15	GOM_NL__2PRFIN20070822_013351_000000362061_00017_28628_9581.N1	22-AUG-2007 01:33:51	Bright	35.500	144	18Del Cyg	2.8600	11000.	71	28628	No
16	GOM_NL__2PRFIN20070822_013909_000000362061_00017_28628_9582.N1	22-AUG-2007 01:39:09	Bright	36.000	89	5Alp Cep	2.4510	8000.0	72	28628	No
17	GOM_NL__2PRFIN20070822_014628_000000332061_00017_28628_9583.N1	22-AUG-2007 01:46:28	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	28628	No
18	GOM_NL__2PRFIN20070822_020531_000000412061_00017_28628_9584.N1	22-AUG-2007 02:05:31	Bright	41.000	170	27Eps Gem	3.0000	9700.0	82	28628	No
19	GOM_NL__2PRFIN20070822_020814_000000432061_00017_28628_9585.N1	22-AUG-2007 02:08:14	Twilight	42.500	44	24Gam Gem	1.9280	11000.	85	28628	No
20	GOM_NL__2PRFIN20070822_021730_000000512061_00017_28628_9586.N1	22-AUG-2007 02:17:30	Dark	51.000	1	9Alp CMa	-1.4400	11000.	102	28628	No
21	GOM_NL__2PRFIN20070822_021901_000000392061_00017_28628_9587.N1	22-AUG-2007 02:19:01	Dark	39.000	179	24Omi2CMa	3.0320	24000.	78	28628	No
22	GOM_NL__2PRFIN20070822_022143_000000402061_00017_28628_9588.N1	22-AUG-2007 02:21:43	Dark	40.000	177	1Zet CMa	3.0220	26000.	80	28628	No
23	GOM_NL__2PRFIN20070822_022718_000000512061_00017_28628_9589.N1	22-AUG-2007 02:27:18	Dark	50.500	2	Alp Car	-0.73600	7000.0	101	28628	No
24	GOM_NL__2PRFIN20070822_023817_000000472061_00018_28629_9606.N1	22-AUG-2007 02:38:17	Dark	46.500	9	Alp Eri	0.45300	24000.	93	28629	No
25	GOM_NL__2PRFIN20070822_024333_000000402061_00018_28629_9607.N1	22-AUG-2007 02:43:33	Straylight	40.000	148	Alp Tuc	2.8780	4100.0	80	28629	No
26	GOM_NL__2PRFIN20070822_024710_000000412061_00018_28629_9608.N1	22-AUG-2007 02:47:10	Straylight	40.500	31	Alp Gru	1.7340	15200.	81	28629	No
27	GOM_NL__2PRFIN20070822_025005_000000382061_00018_28629_9609.N1	22-AUG-2007 02:50:05	Straylight	38.000	172	Gam Gru	3.0030	13100.	76	28629	No
28	GOM_NL__2PRFIN20070822_030424_000000372061_00018_28629_9610.N1	22-AUG-2007 03:04:24	Bright	37.000	11	53Alp Aql	0.76500	8000.0	74	28629	No
29	GOM_NL__2PRFIN20070822_031118_000000362061_00018_28629_9611.N1	22-AUG-2007 03:11:18	Bright	36.000	92	53Eps Cyg	2.5000	4500.0	72	28629	No
30	GOM_NL__2PRFIN20070822_031300_000000342061_00018_28629_9612.N1	22-AUG-2007 03:13:00	Bright	34.000	66	37Gam Cyg	2.2080	5900.0	68	28629	No
31	GOM_NL__2PRFIN20070822_031427_000000332061_00018_28629_9613.N1	22-AUG-2007 03:14:27	Bright	33.000	144	18Del Cyg	2.8600	11000.	66	28629	No
32	GOM_NL__2PRFIN20070822_031945_000000352061_00018_28629_9614.N1	22-AUG-2007 03:19:45	Bright	34.500	89	5Alp Cep	2.4510	8000.0	69	28629	No
33	GOM_NL__2PRFIN20070822_032704_000000352061_00018_28629_9615.N1	22-AUG-2007 03:27:04	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	28629	No
34	GOM_NL__2PRFIN20070822_034607_000000432061_00018_28629_9616.N1	22-AUG-2007 03:46:07	Bright	42.500	170	27Eps Gem	3.0000	9700.0	85	28629	No
35	GOM_NL__2PRFIN20070822_034850_000000432061_00018_28629_9617.N1	22-AUG-2007 03:48:50	Twilight	43.000	44	24Gam Gem	1.9280	11000.	86	28629	No
36	GOM_NL__2PRFIN20070822_035806_000000442061_00018_28629_9618.N1	22-AUG-2007 03:58:06	Dark	43.500	1	9Alp CMa	-1.4400	11000.	87	28629	No
37	GOM_NL__2PRFIN20070822_035937_000000392061_00018_28629_9619.N1	22-AUG-2007 03:59:37	Dark	39.000	179	24Omi2CMa	3.0320	24000.	78	28629	No
38	GOM_NL__2PRFIN20070822_040105_000000412061_00018_28629_9620.N1	22-AUG-2007 04:01:05	Dark	41.000	23	21Eps CMa	1.5020	26000.	82	28629	No
39	GOM_NL__2PRFIN20070822_040220_000000412061_00018_28629_9621.N1	22-AUG-2007 04:02:20	Dark	41.000	177	1Zet CMa	3.0220	26000.	82	28629	No
40	GOM_NL__2PRFIN20070822_040755_000000502061_00018_28629_9622.N1	22-AUG-2007 04:07:55	Dark	49.500	2	Alp Car	-0.73600	7000.0	99	28629	No
41	GOM_NL__2PRFIN20070822_041853_000000462061_00019_28630_9619.N1	22-AUG-2007 04:18:53	Dark	45.500	9	Alp Eri	0.45300	24000.	91	28630	No
42	GOM_NL__2PRFIN20070822_042410_000000392061_00019_28630_9620.N1	22-AUG-2007 04:24:10	Straylight	39.000	148	Alp Tuc	2.8780	4100.0	78	28630	No

220	GOM_NL__2PRFIN20070822_215339_000000362061_00029_28640_9793.N1	22-AUG-2007 21:53:39	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	28640	No
221	GOM_NL__2PRFIN20070822_221245_000000422061_00029_28640_9794.N1	22-AUG-2007 22:12:45	Bright	41.500	170	27Eps Gem	3.0000	9700.0	83	28640	No
222	GOM_NL__2PRFIN20070822_222446_000000472061_00029_28640_9795.N1	22-AUG-2007 22:24:46	Dark	47.000	1	9Alp CMa	-1.4400	11000.	94	28640	No
223	GOM_NL__2PRFIN20070822_222616_000000382061_00029_28640_9796.N1	22-AUG-2007 22:26:16	Dark	37.500	179	24Omi2CMa	3.0320	24000.	75	28640	No
224	GOM_NL__2PRFIN20070822_222744_000000422061_00029_28640_9797.N1	22-AUG-2007 22:27:44	Dark	42.000	23	21Eps CMa	1.5020	26000.	84	28640	No
225	GOM_NL__2PRFIN20070822_222900_000000402061_00029_28640_9798.N1	22-AUG-2007 22:29:00	Dark	40.000	177	1Zet CMa	3.0220	26000.	80	28640	No
226	GOM_NL__2PRFIN20070822_223433_000000442061_00029_28640_9799.N1	22-AUG-2007 22:34:33	Dark	44.000	2	Alp Car	-0.73600	7000.0	88	28640	No
227	GOM_NL__2PRFIN20070822_224536_000000422061_00030_28641_9794.N1	22-AUG-2007 22:45:36	Dark	42.000	9	Alp Eri	0.45300	24000.	84	28641	No
228	GOM_NL__2PRFIN20070822_225048_000000392061_00030_28641_9795.N1	22-AUG-2007 22:50:48	Straylight	38.500	148	Alp Tuc	2.8780	4100.0	77	28641	No
229	GOM_NL__2PRFIN20070822_225425_000000392061_00030_28641_9796.N1	22-AUG-2007 22:54:25	Straylight	39.000	31	Alp Gru	1.7340	15200.	78	28641	No
230	GOM_NL__2PRFIN20070822_225719_000000392061_00030_28641_9797.N1	22-AUG-2007 22:57:19	Straylight	38.500	172	Gam Gru	3.0030	13100.	77	28641	No
231	GOM_NL__2PRFIN20070822_231148_000000282061_00030_28641_9798.N1	22-AUG-2007 23:11:48	Dark	27.500	11	53Alp Aql	0.76500	8000.0	55	28641	Yes
232	GOM_NL__2PRFIN20070822_231828_000000352061_00030_28641_9799.N1	22-AUG-2007 23:18:28	Bright	35.000	92	53Eps Cyg	2.5000	4500.0	70	28641	No
233	GOM_NL__2PRFIN20070822_232011_000000332061_00030_28641_9800.N1	22-AUG-2007 23:20:11	Bright	33.000	66	37Gam Cyg	2.2080	5900.0	66	28641	No
234	GOM_NL__2PRFIN20070822_232139_000000352061_00030_28641_9801.N1	22-AUG-2007 23:21:39	Bright	34.500	144	18Del Cyg	2.8600	11000.	69	28641	No
235	GOM_NL__2PRFIN20070822_232654_000000392061_00030_28641_9802.N1	22-AUG-2007 23:26:54	Bright	38.500	89	5Alp Cep	2.4510	8000.0	77	28641	No
236	GOM_NL__2PRFIN20070822_233415_000000372061_00030_28641_9803.N1	22-AUG-2007 23:34:15	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	28641	No
237	GOM_NL__2PRFIN20070822_235321_000000422061_00030_28641_9804.N1	22-AUG-2007 23:53:21	Bright	42.000	170	27Eps Gem	3.0000	9700.0	84	28641	No

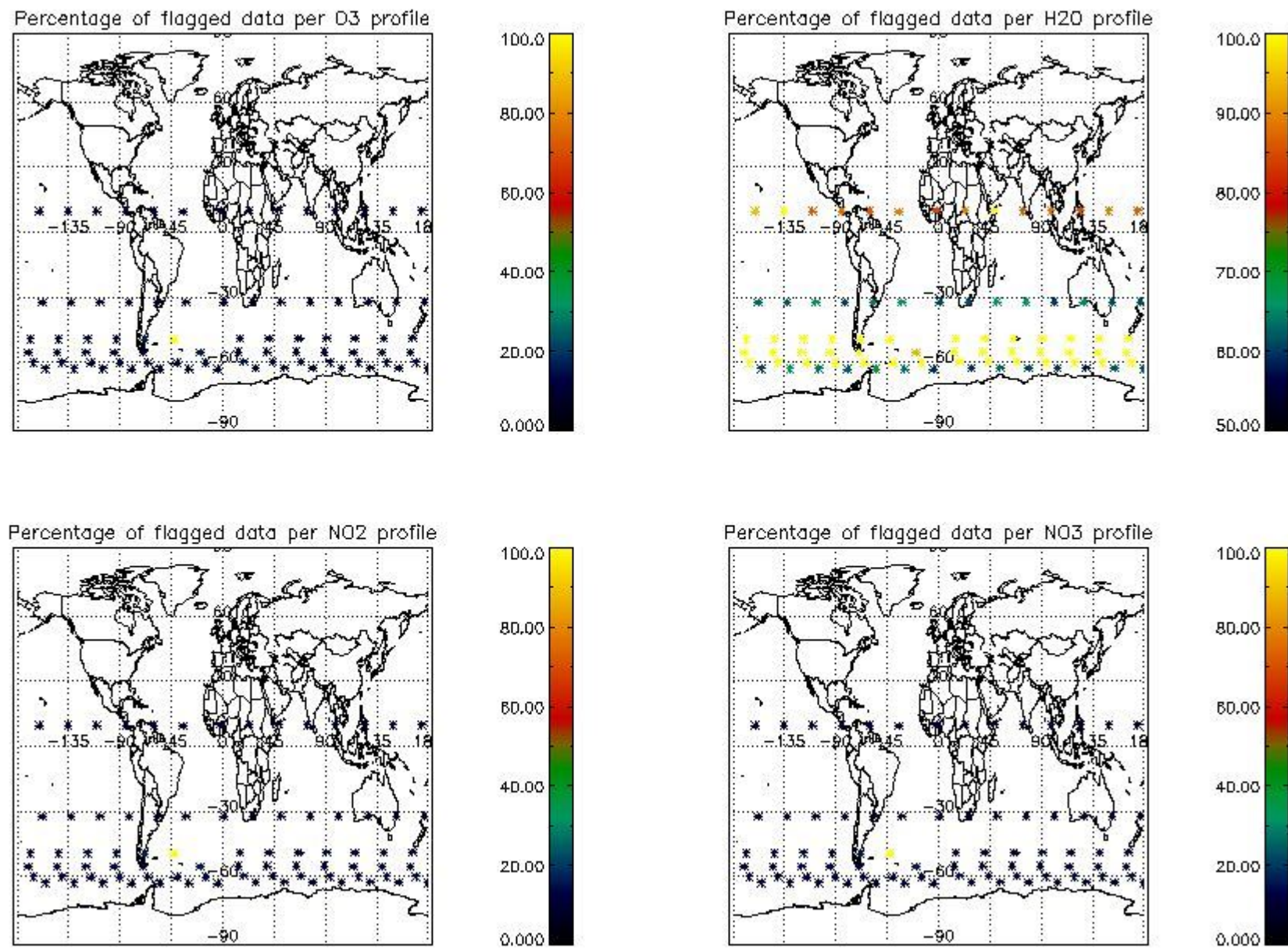
3. Quality information per product

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)

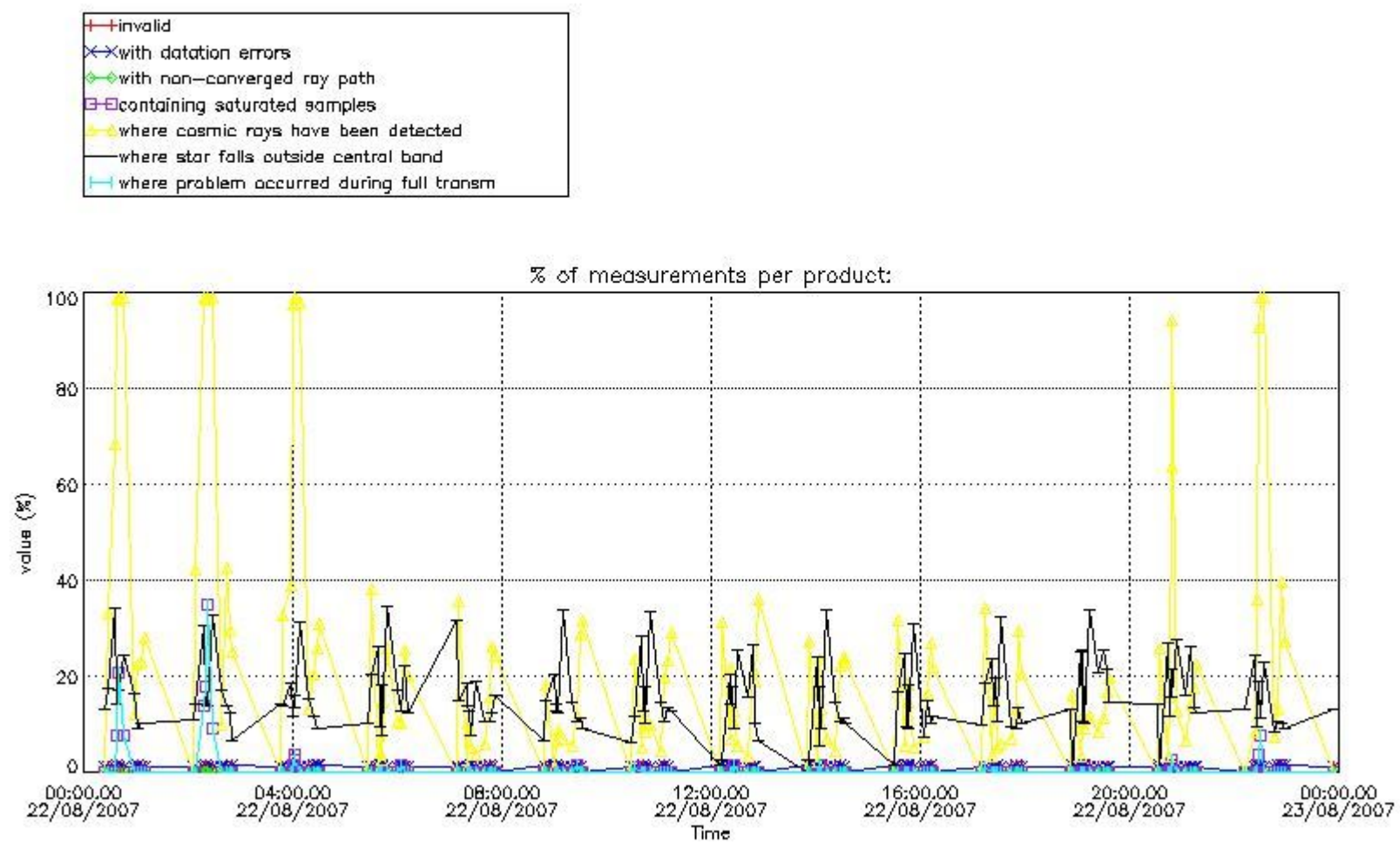


4. Level 1 quality information per product

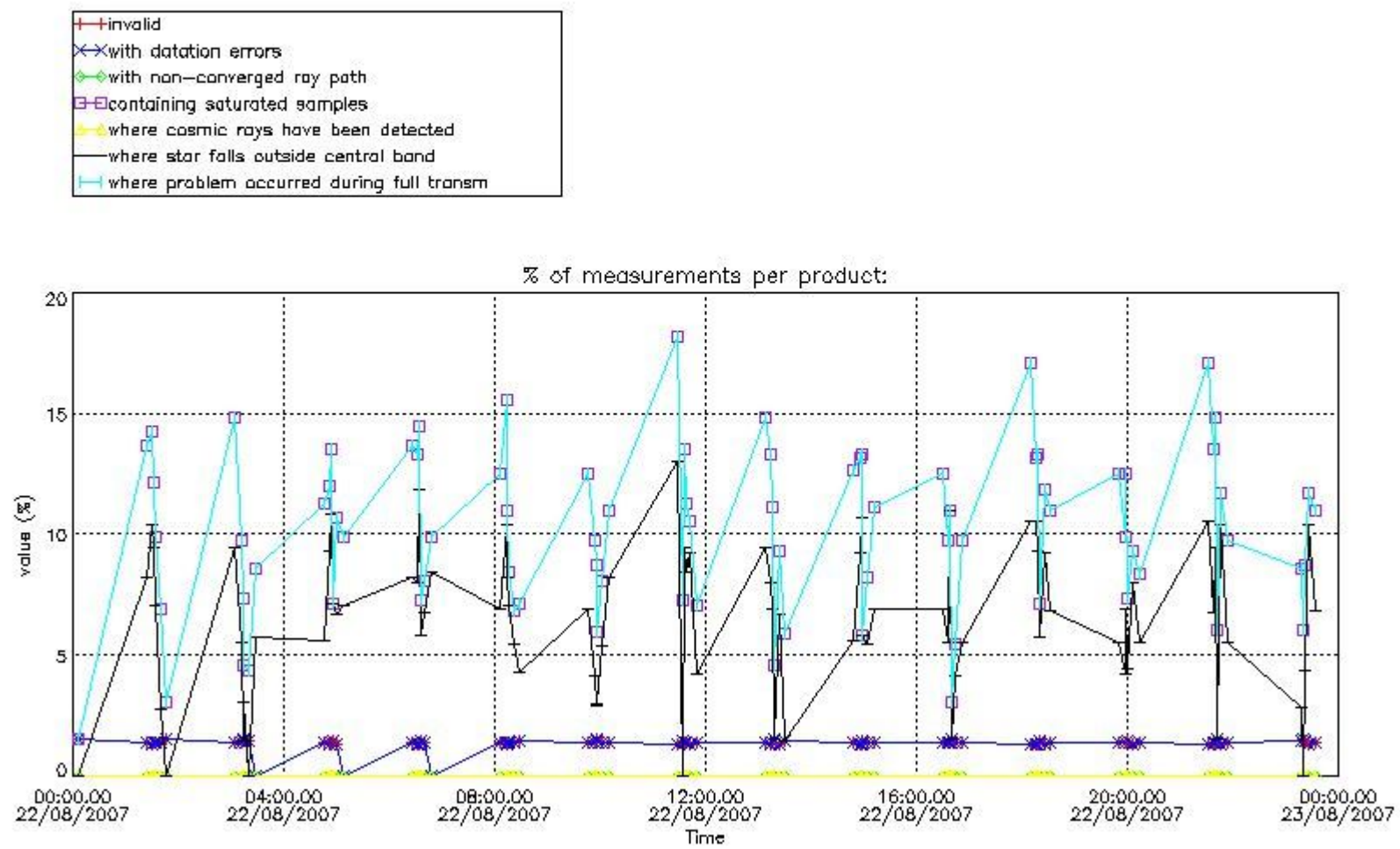
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



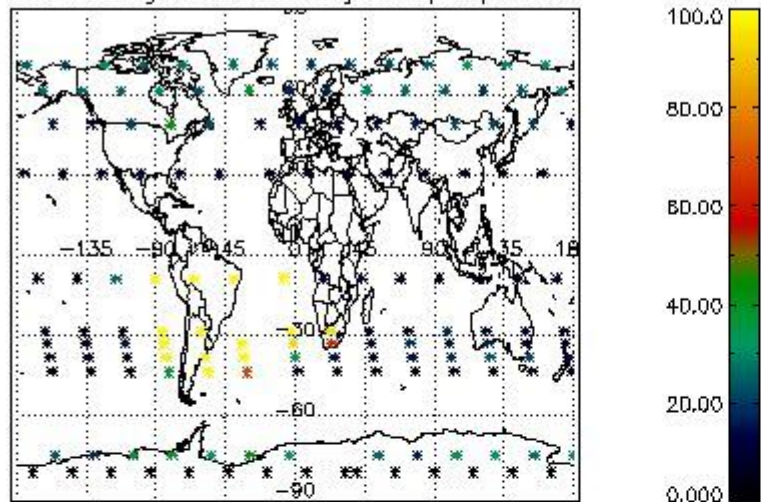
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



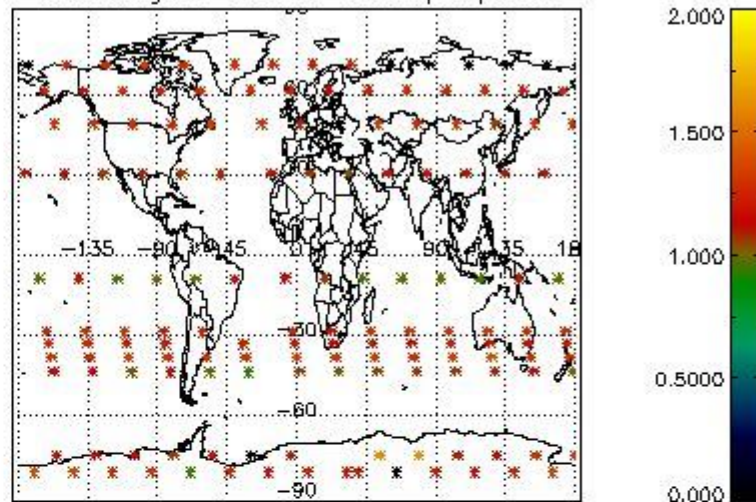
4.2 Plot quality information per product coming from level 1b processing (world map)

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

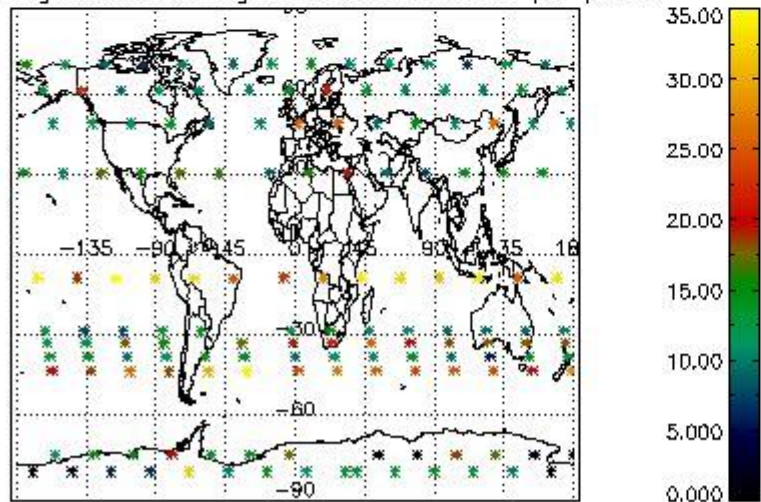
Percentage of cosmic ray hits per profile



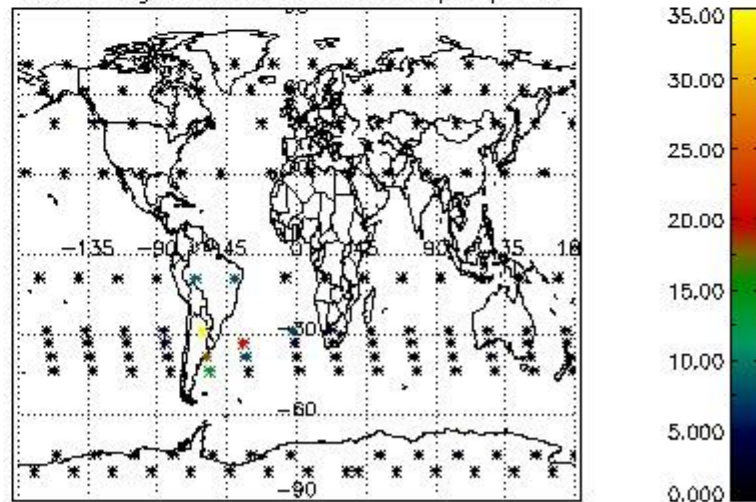
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

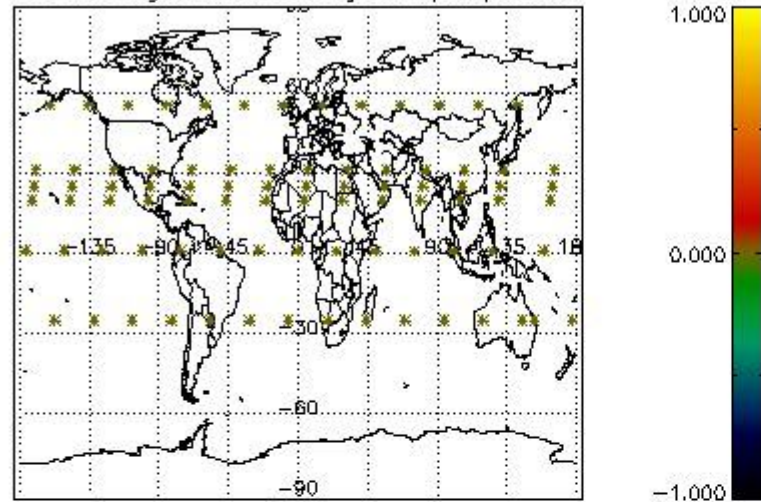


Percentage of saturation errors per profile

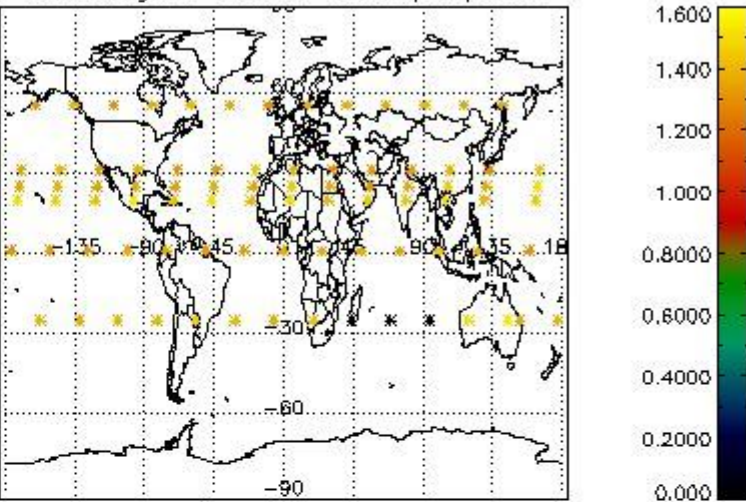


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

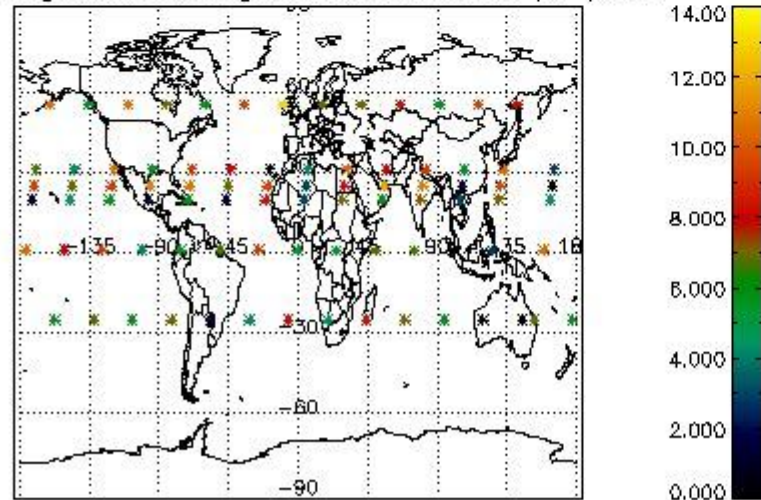
Percentage of cosmic ray hits per profile



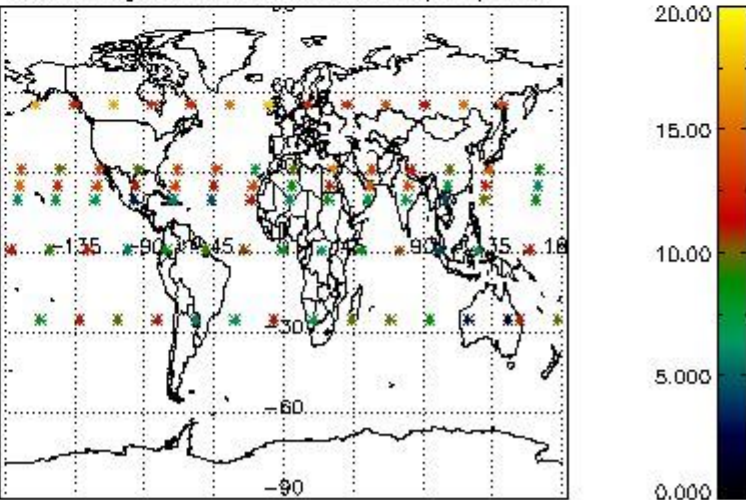
Percentage of datation errors per profile



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

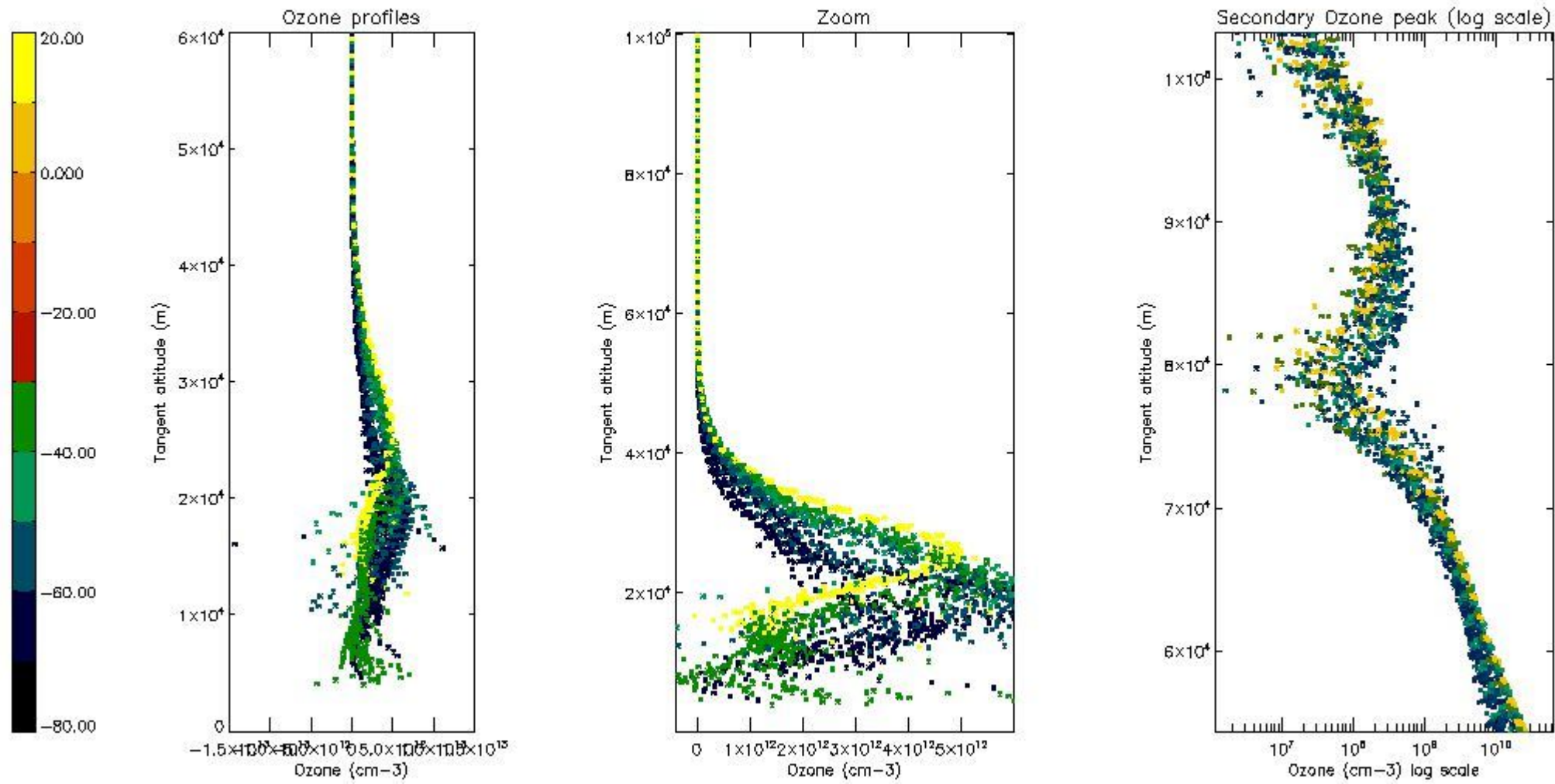
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	38
STD < 20	27

STD < 10	23
STD < 5	19

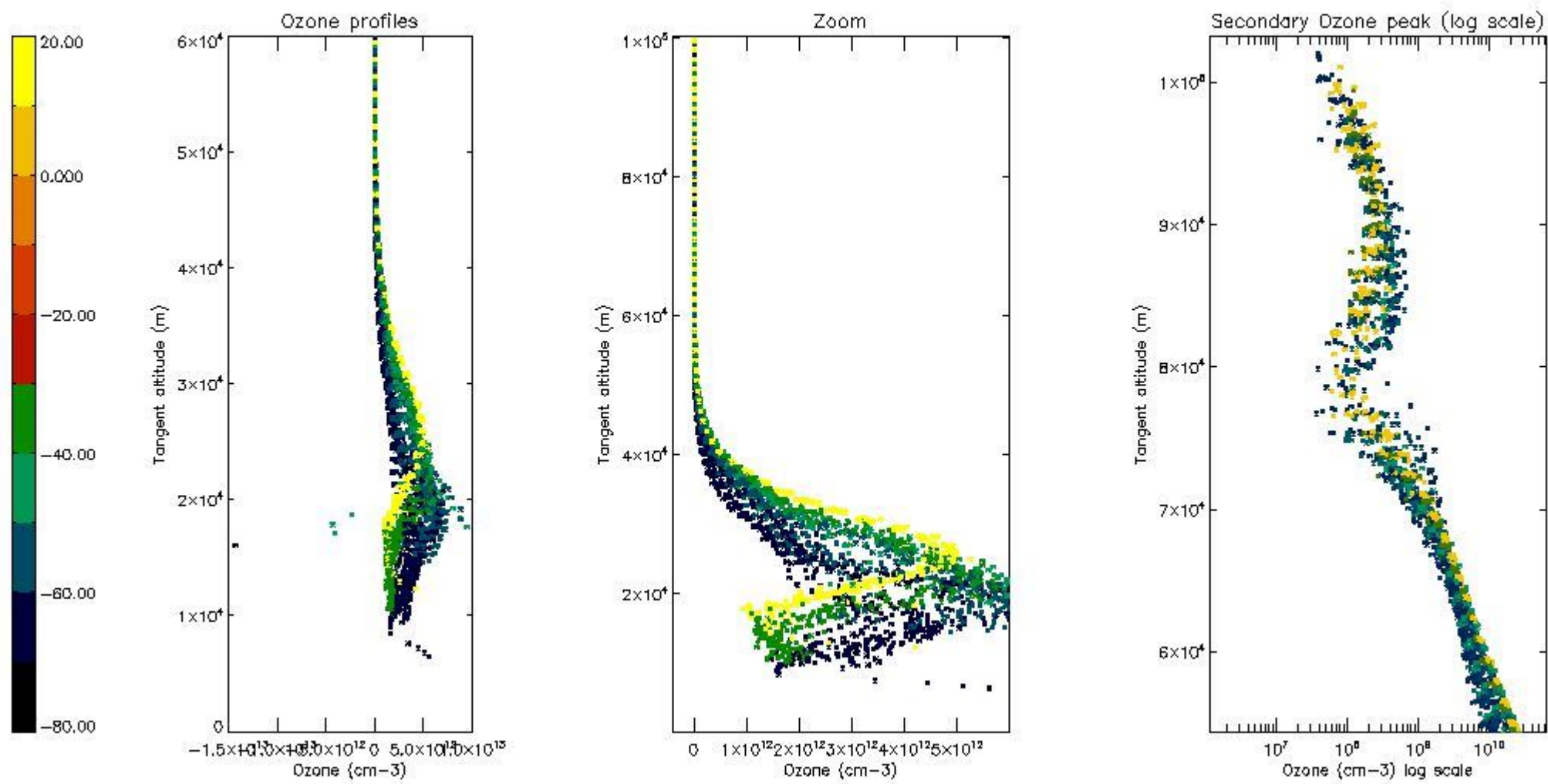
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



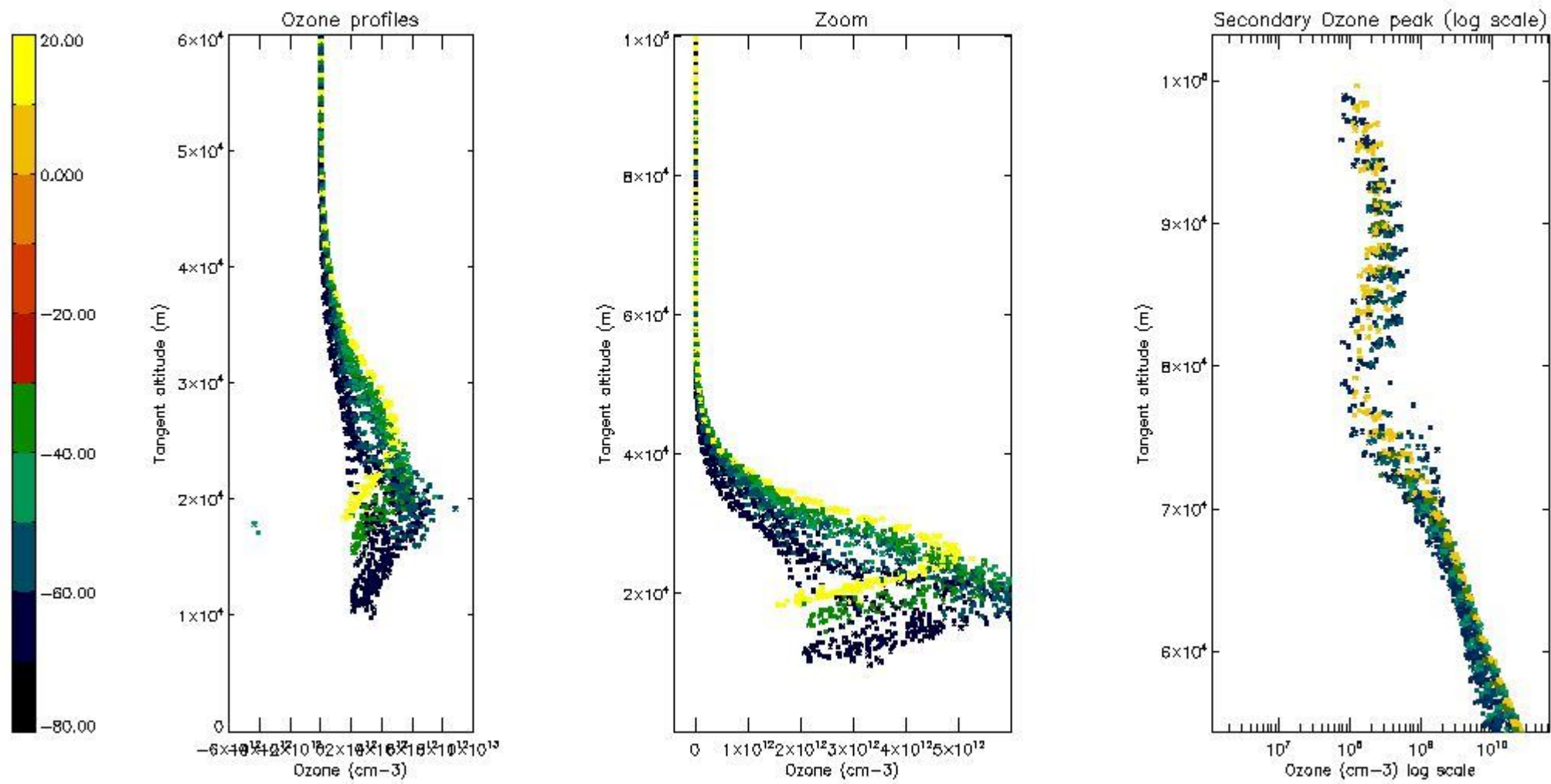
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



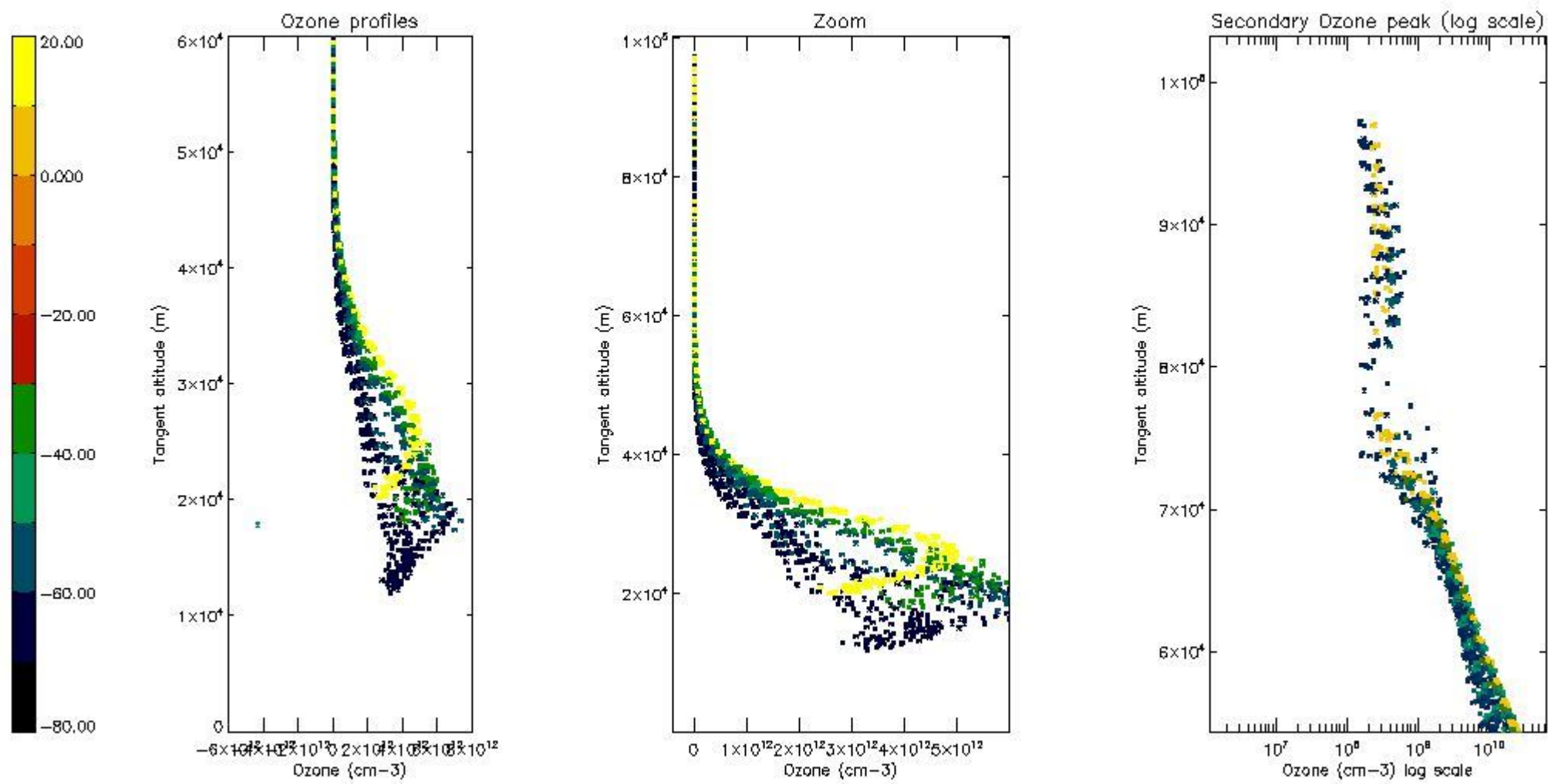
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



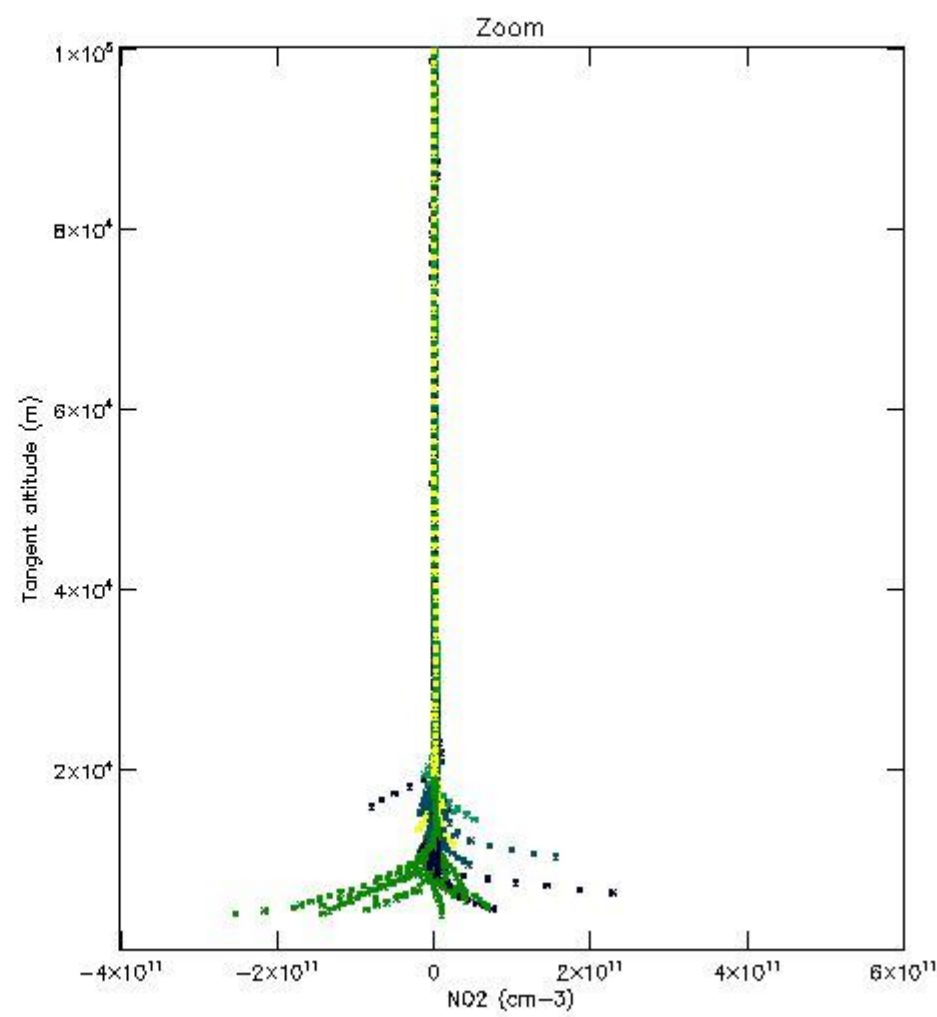
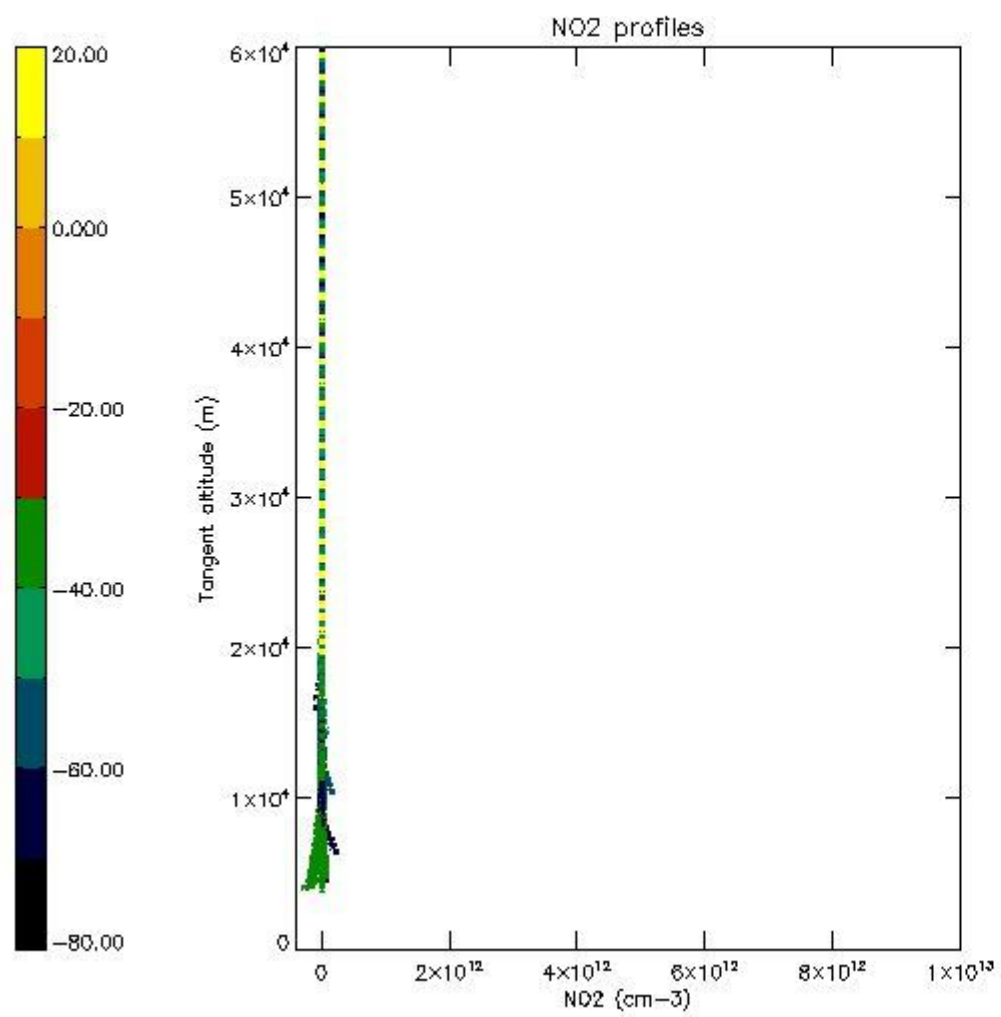
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



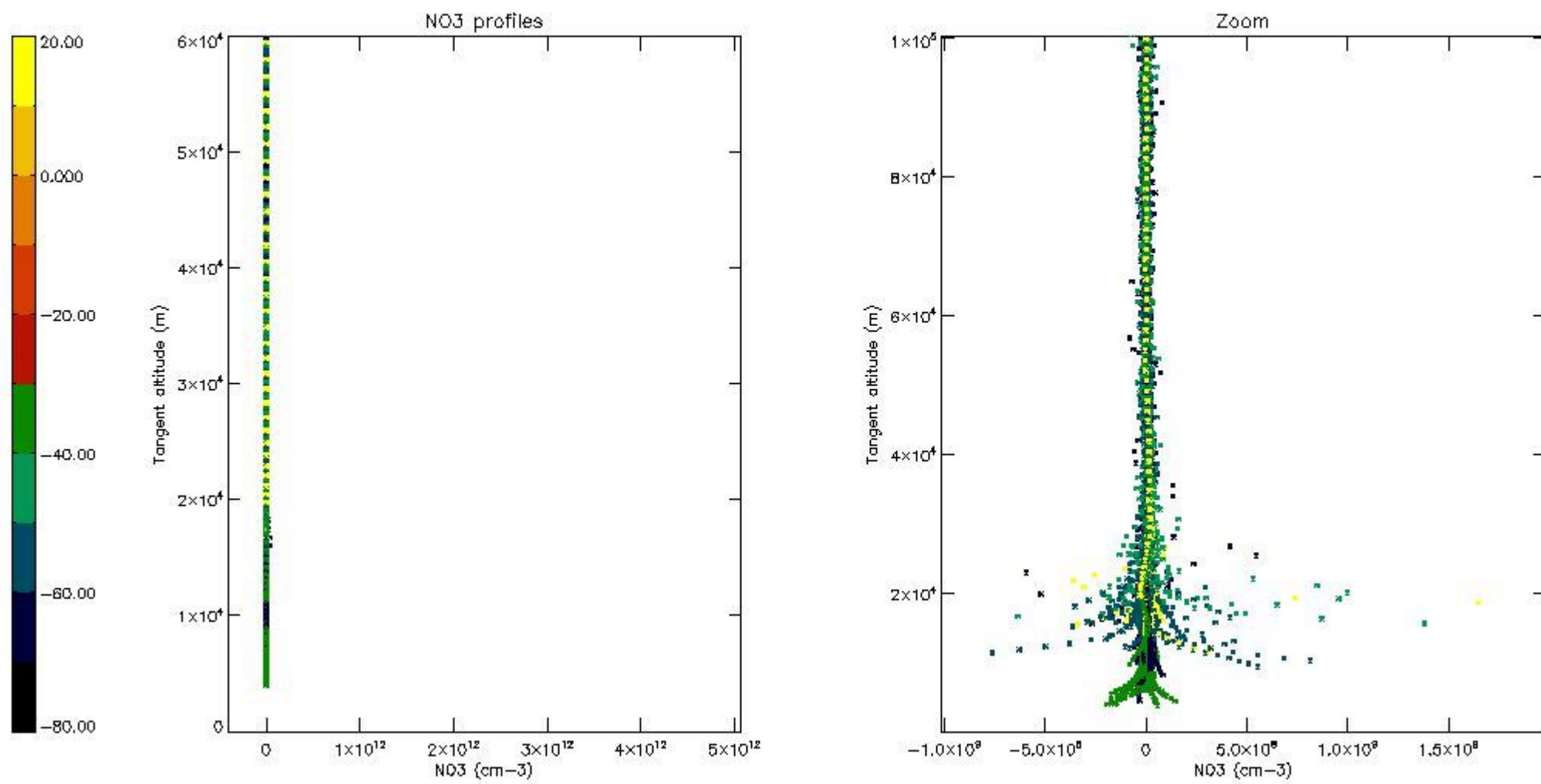
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



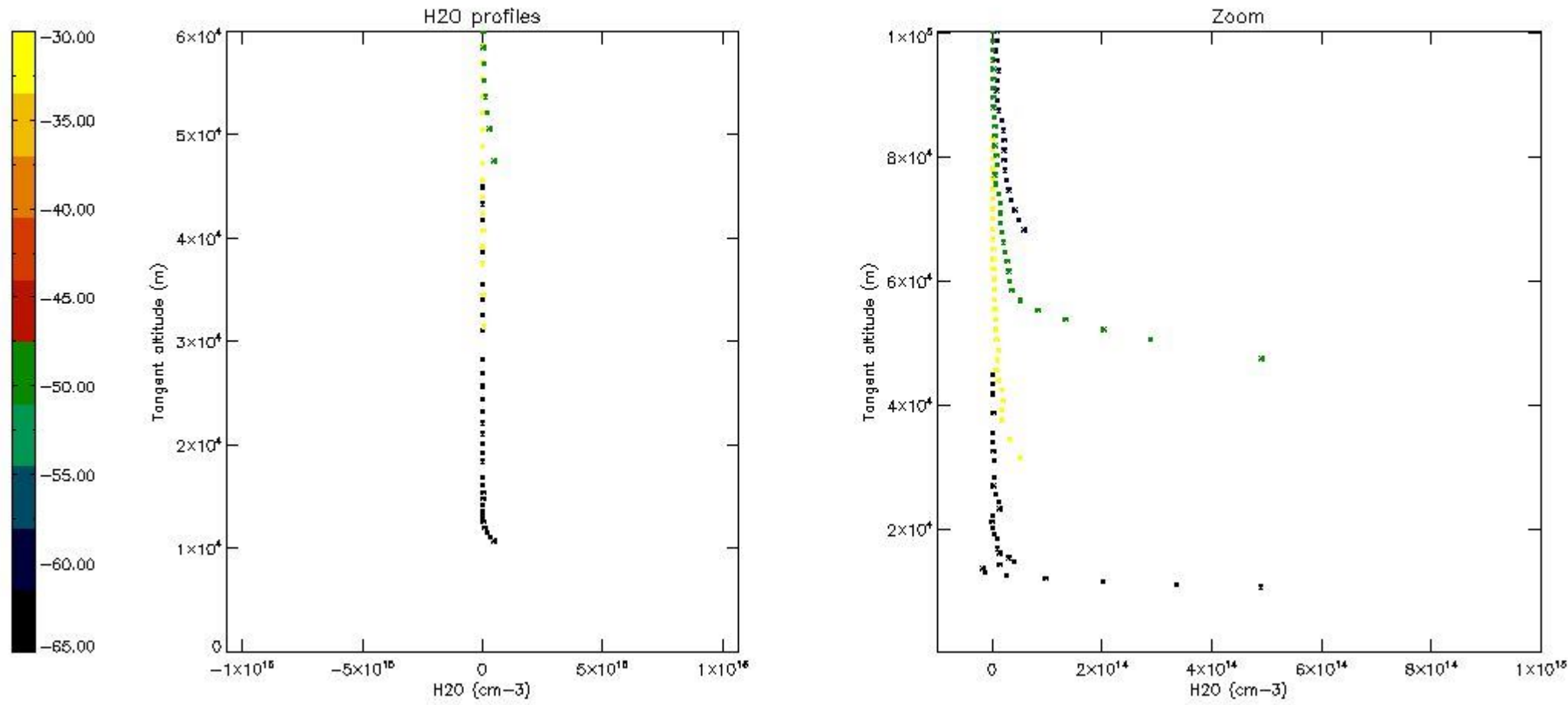
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

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

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	22-AUG-2007 00:05:53
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	22-AUG-2007 00:05:53
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	22-AUG-2007 00:05:53

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	23APR2013 01:29:18
Data source version	GOMOS/6.01
Start time of products	22-08-2007 (22AUG2007 00:00:00)
Stop time of products	23-08-2007 (23AUG2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	237
Nb of prods with errors	1

2. Summary of processed GOM_NL__2P products.

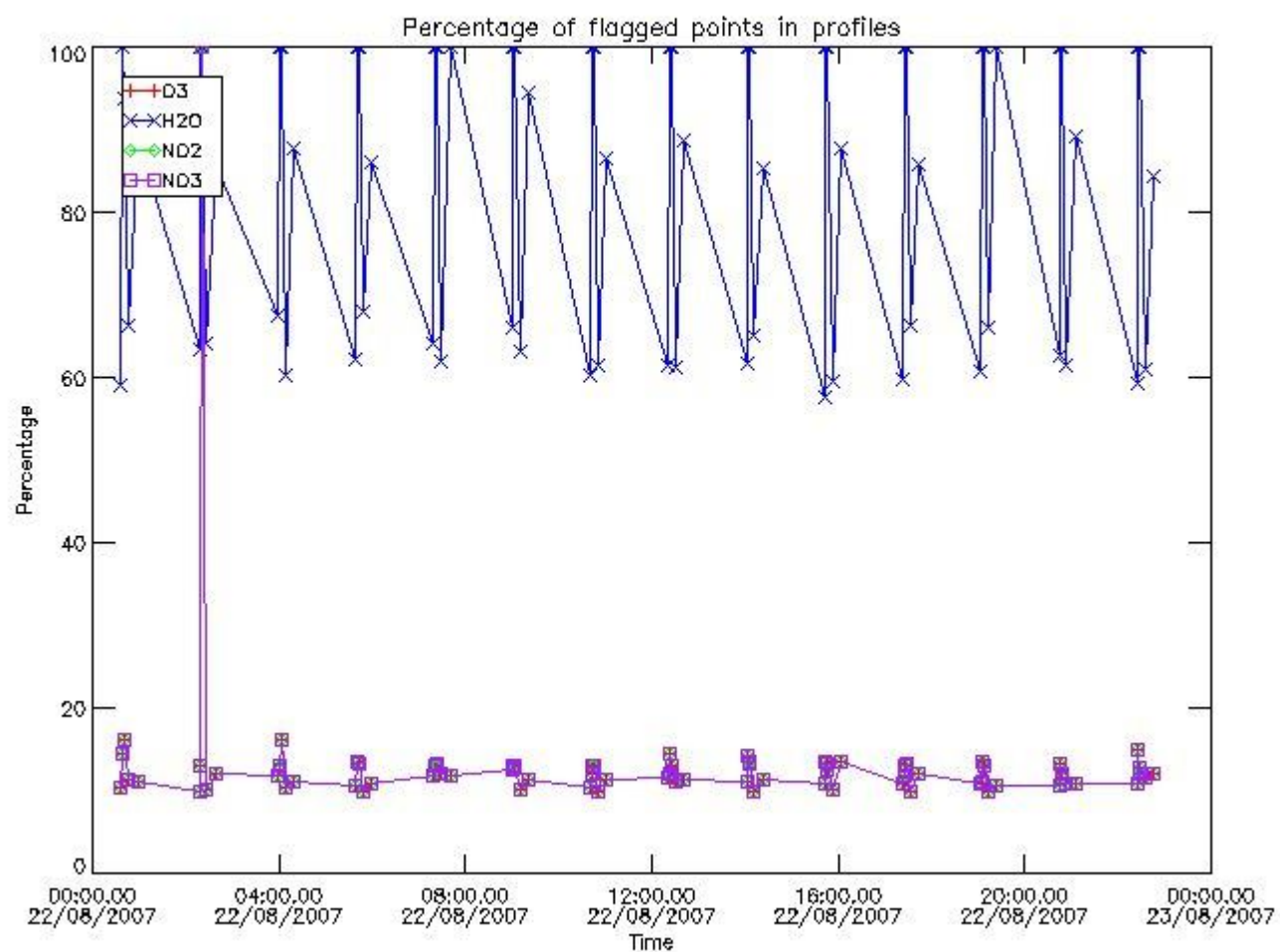
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070822_000553_000000332061_00016_28627_9563.N1	22-AUG-2007 00:05:53	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	28627	No
2	GOM_NL__2PRFIN20070822_002455_000000422061_00016_28627_9564.N1	22-AUG-2007 00:24:55	Bright	41.500	170	27Eps Gem	3.0000	9700.0	83	28627	No
3	GOM_NL__2PRFIN20070822_002738_000000462061_00016_28627_9565.N1	22-AUG-2007 00:27:38	Twilight	45.500	44	24Gam Gem	1.9280	11000.	91	28627	No
4	GOM_NL__2PRFIN20070822_003653_000000542061_00016_28627_9566.N1	22-AUG-2007 00:36:53	Dark	54.000	1	9Alp CMa	-1.4400	11000.	108	28627	No
5	GOM_NL__2PRFIN20070822_003825_000000392061_00016_28627_9567.N1	22-AUG-2007 00:38:25	Dark	39.000	179	24Omi2CMa	3.0320	24000.	78	28627	No
6	GOM_NL__2PRFIN20070822_003952_000000412061_00016_28627_9568.N1	22-AUG-2007 00:39:52	Dark	41.000	23	21Eps CMa	1.5020	26000.	82	28627	No
7	GOM_NL__2PRFIN20070822_004642_000000452061_00016_28627_9569.N1	22-AUG-2007 00:46:42	Dark	45.000	2	Alp Car	-0.73600	7000.0	90	28627	No
8	GOM_NL__2PRFIN20070822_005740_000000462061_00017_28628_9574.N1	22-AUG-2007 00:57:40	Dark	46.000	9	Alp Eri	0.45300	24000.	92	28628	No
9	GOM_NL__2PRFIN20070822_010257_000000382061_00017_28628_9575.N1	22-AUG-2007 01:02:57	Straylight	38.000	148	Alp Tuc	2.8780	4100.0	76	28628	No
10	GOM_NL__2PRFIN20070822_010633_000000402061_00017_28628_9576.N1	22-AUG-2007 01:06:33	Straylight	39.500	31	Alp Gru	1.7340	15200.	79	28628	No
11	GOM_NL__2PRFIN20070822_010928_000000402061_00017_28628_9577.N1	22-AUG-2007 01:09:28	Straylight	39.500	172	Gam Gru	3.0030	13100.	79	28628	No
12	GOM_NL__2PRFIN20070822_012348_000000372061_00017_28628_9578.N1	22-AUG-2007 01:23:48	Bright	36.500	11	53Alp Aql	0.76500	8000.0	73	28628	No
13	GOM_NL__2PRFIN20070822_013042_000000392061_00017_28628_9579.N1	22-AUG-2007 01:30:42	Bright	38.500	92	53Eps Cyg	2.5000	4500.0	77	28628	No
14	GOM_NL__2PRFIN20070822_013224_000000372061_00017_28628_9580.N1	22-AUG-2007 01:32:24	Bright	37.000	66	37Gam Cyg	2.2080	5900.0	74	28628	No
15	GOM_NL__2PRFIN20070822_013351_000000362061_00017_28628_9581.N1	22-AUG-2007 01:33:51	Bright	35.500	144	18Del Cyg	2.8600	11000.	71	28628	No
16	GOM_NL__2PRFIN20070822_013909_000000362061_00017_28628_9582.N1	22-AUG-2007 01:39:09	Bright	36.000	89	5Alp Cep	2.4510	8000.0	72	28628	No
17	GOM_NL__2PRFIN20070822_014628_000000332061_00017_28628_9583.N1	22-AUG-2007 01:46:28	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	28628	No
18	GOM_NL__2PRFIN20070822_020531_000000412061_00017_28628_9584.N1	22-AUG-2007 02:05:31	Bright	41.000	170	27Eps Gem	3.0000	9700.0	82	28628	No
19	GOM_NL__2PRFIN20070822_020814_000000432061_00017_28628_9585.N1	22-AUG-2007 02:08:14	Twilight	42.500	44	24Gam Gem	1.9280	11000.	85	28628	No
20	GOM_NL__2PRFIN20070822_021730_000000512061_00017_28628_9586.N1	22-AUG-2007 02:17:30	Dark	51.000	1	9Alp CMa	-1.4400	11000.	102	28628	No
21	GOM_NL__2PRFIN20070822_021901_000000392061_00017_28628_9587.N1	22-AUG-2007 02:19:01	Dark	39.000	179	24Omi2CMa	3.0320	24000.	78	28628	No
22	GOM_NL__2PRFIN20070822_022143_000000402061_00017_28628_9588.N1	22-AUG-2007 02:21:43	Dark	40.000	177	1Zet CMa	3.0220	26000.	80	28628	No
23	GOM_NL__2PRFIN20070822_022718_000000512061_00017_28628_9589.N1	22-AUG-2007 02:27:18	Dark	50.500	2	Alp Car	-0.73600	7000.0	101	28628	No
24	GOM_NL__2PRFIN20070822_023817_000000472061_00018_28629_9606.N1	22-AUG-2007 02:38:17	Dark	46.500	9	Alp Eri	0.45300	24000.	93	28629	No
25	GOM_NL__2PRFIN20070822_024333_000000402061_00018_28629_9607.N1	22-AUG-2007 02:43:33	Straylight	40.000	148	Alp Tuc	2.8780	4100.0	80	28629	No
26	GOM_NL__2PRFIN20070822_024710_000000412061_00018_28629_9608.N1	22-AUG-2007 02:47:10	Straylight	40.500	31	Alp Gru	1.7340	15200.	81	28629	No
27	GOM_NL__2PRFIN20070822_025005_000000382061_00018_28629_9609.N1	22-AUG-2007 02:50:05	Straylight	38.000	172	Gam Gru	3.0030	13100.	76	28629	No
28	GOM_NL__2PRFIN20070822_030424_000000372061_00018_28629_9610.N1	22-AUG-2007 03:04:24	Bright	37.000	11	53Alp Aql	0.76500	8000.0	74	28629	No
29	GOM_NL__2PRFIN20070822_031118_000000362061_00018_28629_9611.N1	22-AUG-2007 03:11:18	Bright	36.000	92	53Eps Cyg	2.5000	4500.0	72	28629	No
30	GOM_NL__2PRFIN20070822_031300_000000342061_00018_28629_9612.N1	22-AUG-2007 03:13:00	Bright	34.000	66	37Gam Cyg	2.2080	5900.0	68	28629	No
31	GOM_NL__2PRFIN20070822_031427_000000332061_00018_28629_9613.N1	22-AUG-2007 03:14:27	Bright	33.000	144	18Del Cyg	2.8600	11000.	66	28629	No
32	GOM_NL__2PRFIN20070822_031945_000000352061_00018_28629_9614.N1	22-AUG-2007 03:19:45	Bright	34.500	89	5Alp Cep	2.4510	8000.0	69	28629	No
33	GOM_NL__2PRFIN20070822_032704_000000352061_00018_28629_9615.N1	22-AUG-2007 03:27:04	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	28629	No
34	GOM_NL__2PRFIN20070822_034607_000000432061_00018_28629_9616.N1	22-AUG-2007 03:46:07	Bright	42.500	170	27Eps Gem	3.0000	9700.0	85	28629	No
35	GOM_NL__2PRFIN20070822_034850_000000432061_00018_28629_9617.N1	22-AUG-2007 03:48:50	Twilight	43.000	44	24Gam Gem	1.9280	11000.	86	28629	No
36	GOM_NL__2PRFIN20070822_035806_000000442061_00018_28629_9618.N1	22-AUG-2007 03:58:06	Dark	43.500	1	9Alp CMa	-1.4400	11000.	87	28629	No
37	GOM_NL__2PRFIN20070822_035937_000000392061_00018_28629_9619.N1	22-AUG-2007 03:59:37	Dark	39.000	179	24Omi2CMa	3.0320	24000.	78	28629	No
38	GOM_NL__2PRFIN20070822_040105_000000412061_00018_28629_9620.N1	22-AUG-2007 04:01:05	Dark	41.000	23	21Eps CMa	1.5020	26000.	82	28629	No
39	GOM_NL__2PRFIN20070822_040220_000000412061_00018_28629_9621.N1	22-AUG-2007 04:02:20	Dark	41.000	177	1Zet CMa	3.0220	26000.	82	28629	No
40	GOM_NL__2PRFIN20070822_040755_000000502061_00018_28629_9622.N1	22-AUG-2007 04:07:55	Dark	49.500	2	Alp Car	-0.73600	7000.0	99	28629	No
41	GOM_NL__2PRFIN20070822_041853_000000462061_00019_28630_9619.N1	22-AUG-2007 04:18:53	Dark	45.500	9	Alp Eri	0.45300	24000.	91	28630	No
42	GOM_NL__2PRFIN20070822_042410_000000392061_00019_28630_9620.N1	22-AUG-2007 04:24:10	Straylight	39.000	148	Alp Tuc	2.8780	4100.0	78	28630	No

220	GOM_NL__2PRFIN20070822_215339_000000362061_00029_28640_9793.N1	22-AUG-2007 21:53:39	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	28640	No
221	GOM_NL__2PRFIN20070822_221245_000000422061_00029_28640_9794.N1	22-AUG-2007 22:12:45	Bright	41.500	170	27Eps Gem	3.0000	9700.0	83	28640	No
222	GOM_NL__2PRFIN20070822_222446_000000472061_00029_28640_9795.N1	22-AUG-2007 22:24:46	Dark	47.000	1	9Alp CMa	-1.4400	11000.	94	28640	No
223	GOM_NL__2PRFIN20070822_222616_000000382061_00029_28640_9796.N1	22-AUG-2007 22:26:16	Dark	37.500	179	24Omi2CMa	3.0320	24000.	75	28640	No
224	GOM_NL__2PRFIN20070822_222744_000000422061_00029_28640_9797.N1	22-AUG-2007 22:27:44	Dark	42.000	23	21Eps CMa	1.5020	26000.	84	28640	No
225	GOM_NL__2PRFIN20070822_222900_000000402061_00029_28640_9798.N1	22-AUG-2007 22:29:00	Dark	40.000	177	1Zet CMa	3.0220	26000.	80	28640	No
226	GOM_NL__2PRFIN20070822_223433_000000442061_00029_28640_9799.N1	22-AUG-2007 22:34:33	Dark	44.000	2	Alp Car	-0.73600	7000.0	88	28640	No
227	GOM_NL__2PRFIN20070822_224536_000000422061_00030_28641_9794.N1	22-AUG-2007 22:45:36	Dark	42.000	9	Alp Eri	0.45300	24000.	84	28641	No
228	GOM_NL__2PRFIN20070822_225048_000000392061_00030_28641_9795.N1	22-AUG-2007 22:50:48	Straylight	38.500	148	Alp Tuc	2.8780	4100.0	77	28641	No
229	GOM_NL__2PRFIN20070822_225425_000000392061_00030_28641_9796.N1	22-AUG-2007 22:54:25	Straylight	39.000	31	Alp Gru	1.7340	15200.	78	28641	No
230	GOM_NL__2PRFIN20070822_225719_000000392061_00030_28641_9797.N1	22-AUG-2007 22:57:19	Straylight	38.500	172	Gam Gru	3.0030	13100.	77	28641	No
231	GOM_NL__2PRFIN20070822_231148_000000282061_00030_28641_9798.N1	22-AUG-2007 23:11:48	Dark	27.500	11	53Alp Aql	0.76500	8000.0	55	28641	Yes
232	GOM_NL__2PRFIN20070822_231828_000000352061_00030_28641_9799.N1	22-AUG-2007 23:18:28	Bright	35.000	92	53Eps Cyg	2.5000	4500.0	70	28641	No
233	GOM_NL__2PRFIN20070822_232011_000000332061_00030_28641_9800.N1	22-AUG-2007 23:20:11	Bright	33.000	66	37Gam Cyg	2.2080	5900.0	66	28641	No
234	GOM_NL__2PRFIN20070822_232139_000000352061_00030_28641_9801.N1	22-AUG-2007 23:21:39	Bright	34.500	144	18Del Cyg	2.8600	11000.	69	28641	No
235	GOM_NL__2PRFIN20070822_232654_000000392061_00030_28641_9802.N1	22-AUG-2007 23:26:54	Bright	38.500	89	5Alp Cep	2.4510	8000.0	77	28641	No
236	GOM_NL__2PRFIN20070822_233415_000000372061_00030_28641_9803.N1	22-AUG-2007 23:34:15	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	28641	No
237	GOM_NL__2PRFIN20070822_235321_000000422061_00030_28641_9804.N1	22-AUG-2007 23:53:21	Bright	42.000	170	27Eps Gem	3.0000	9700.0	84	28641	No

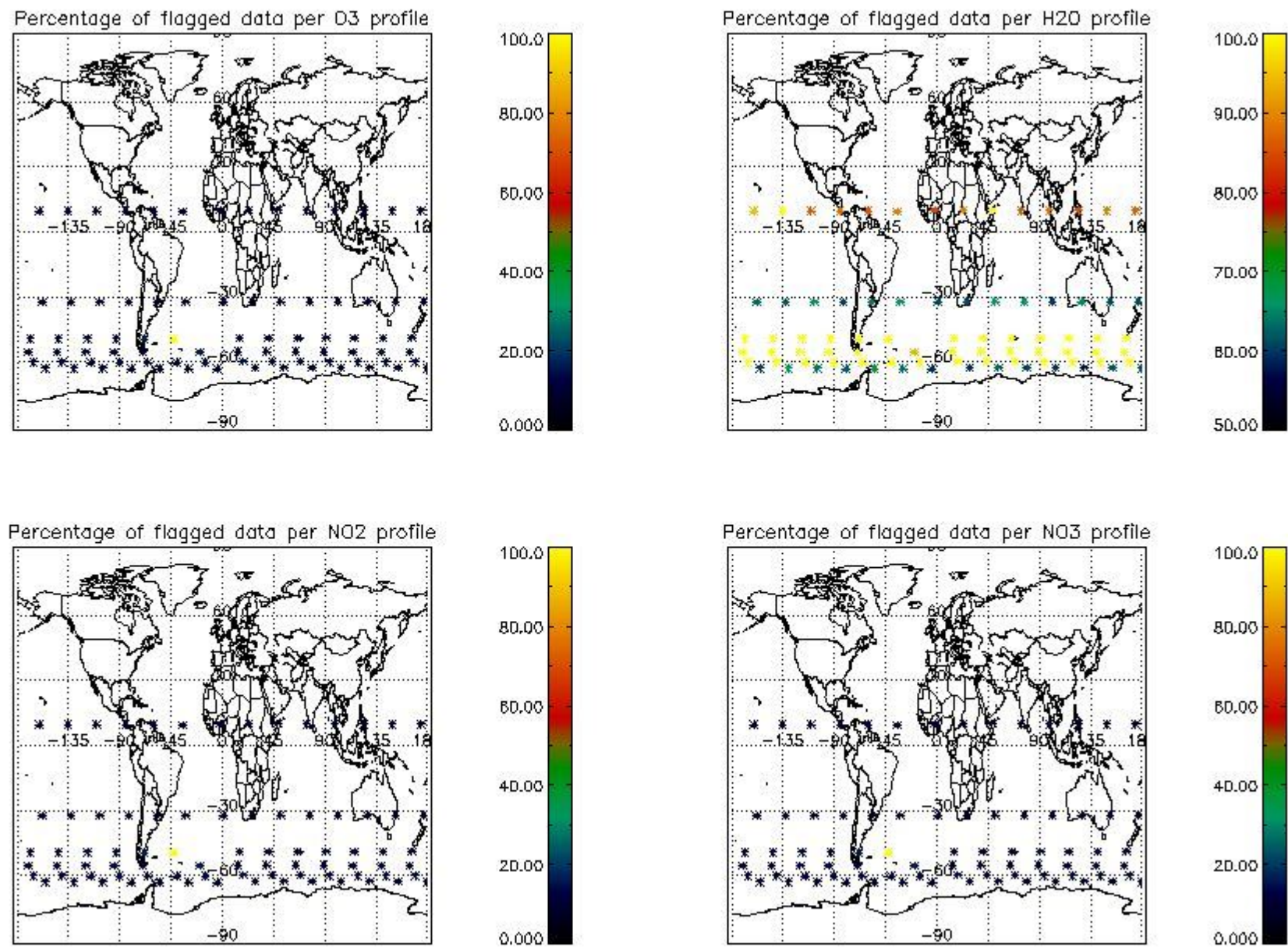
3. Quality information per product

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)

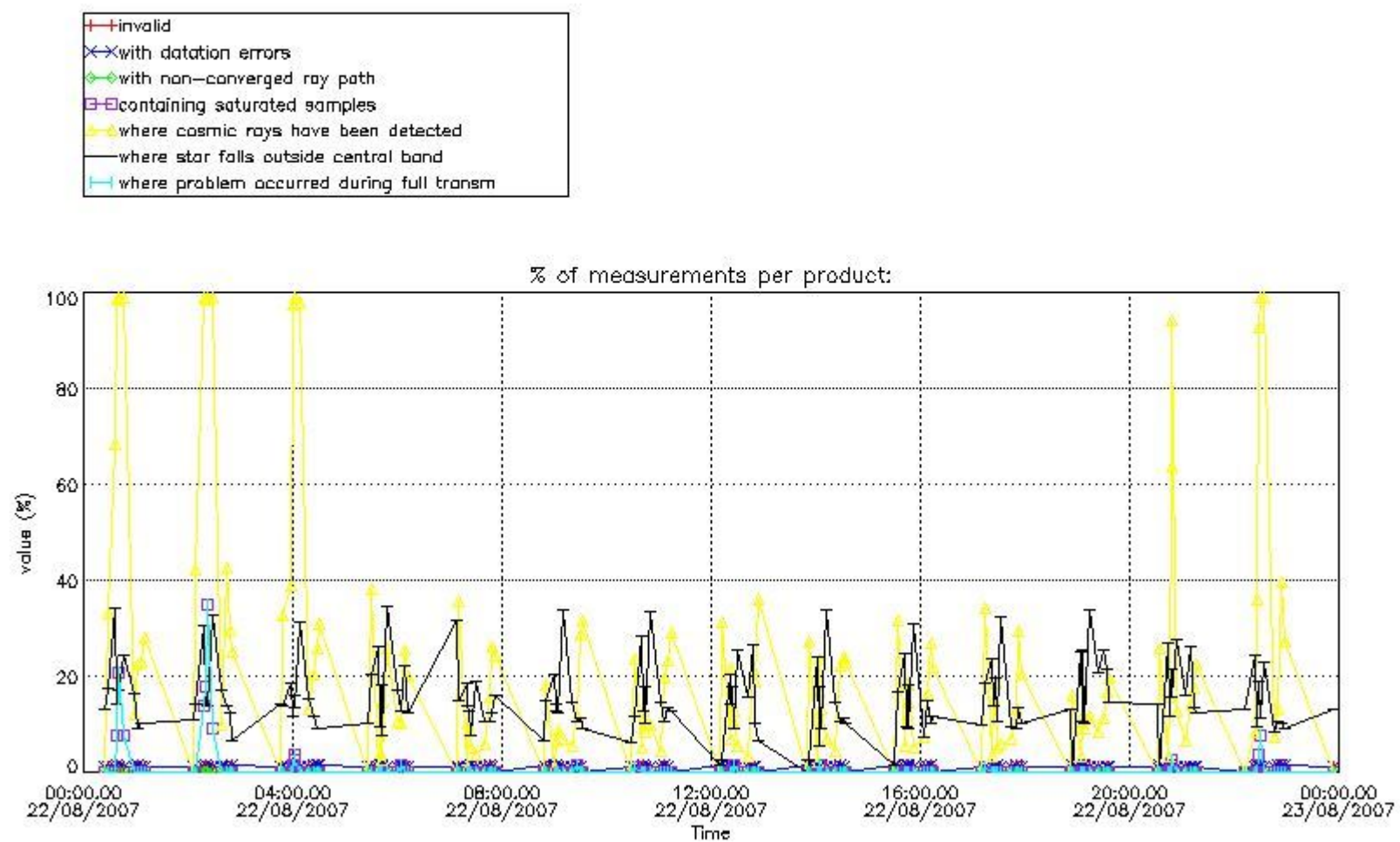


4. Level 1 quality information per product

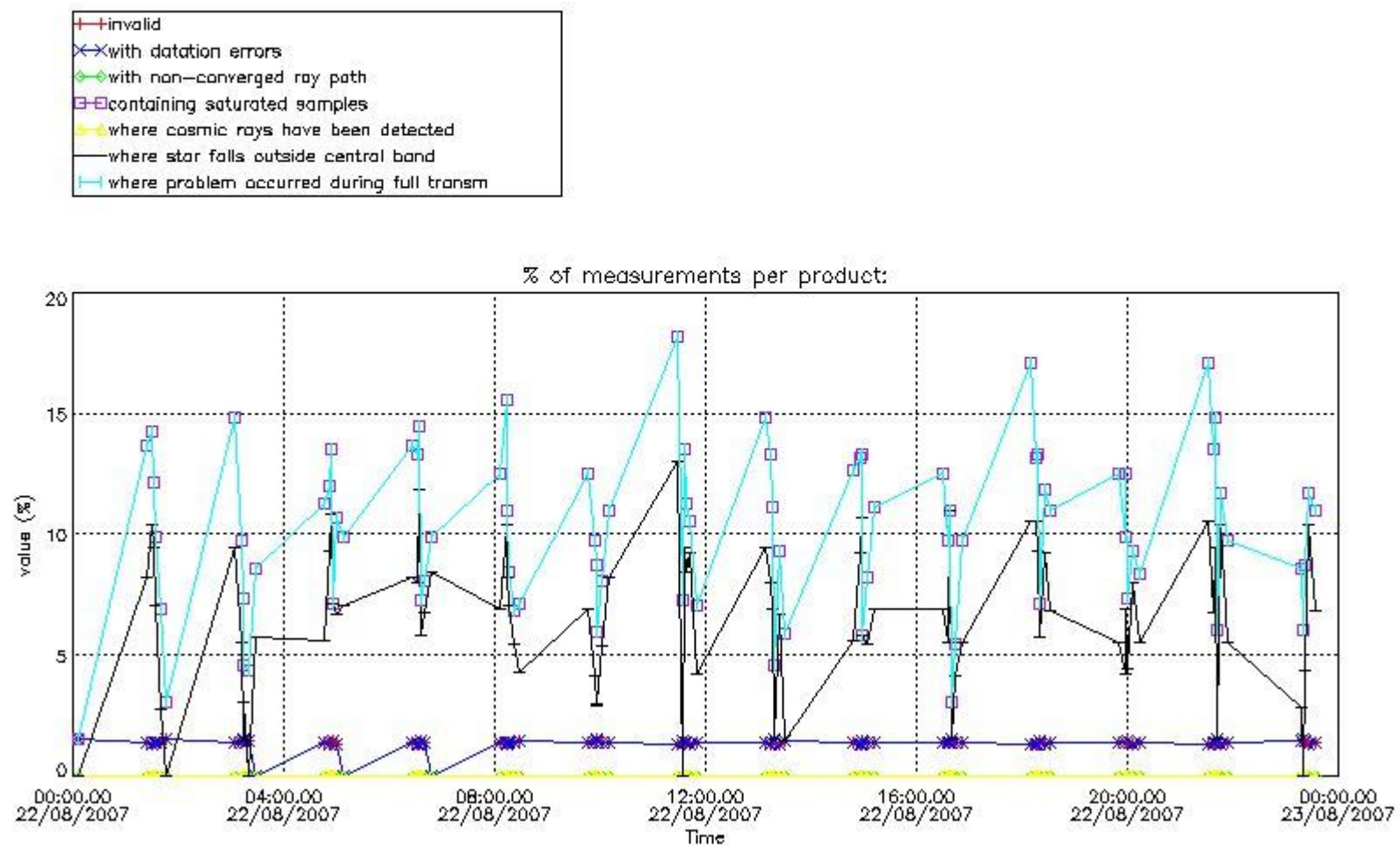
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



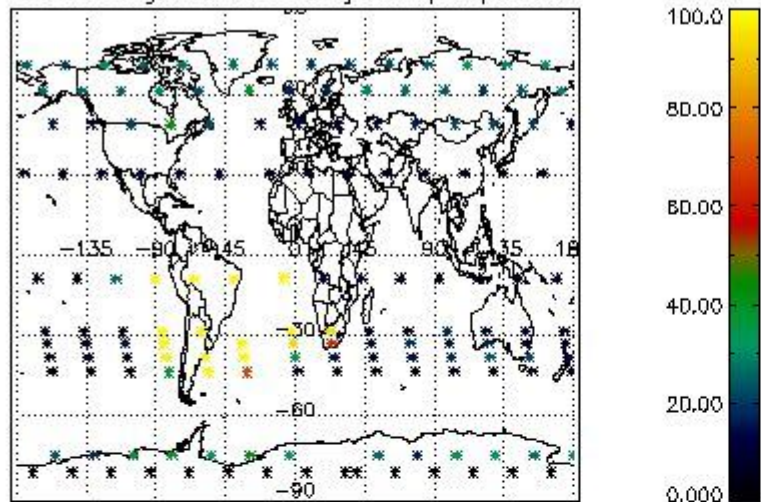
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



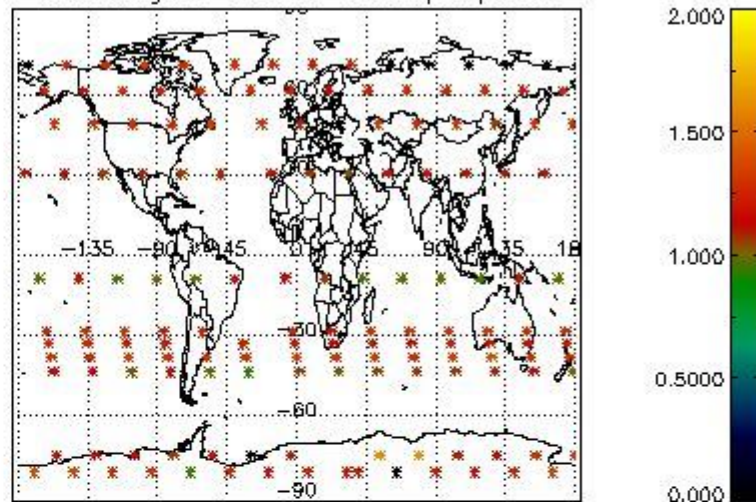
4.2 Plot quality information per product coming from level 1b processing (world map)

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

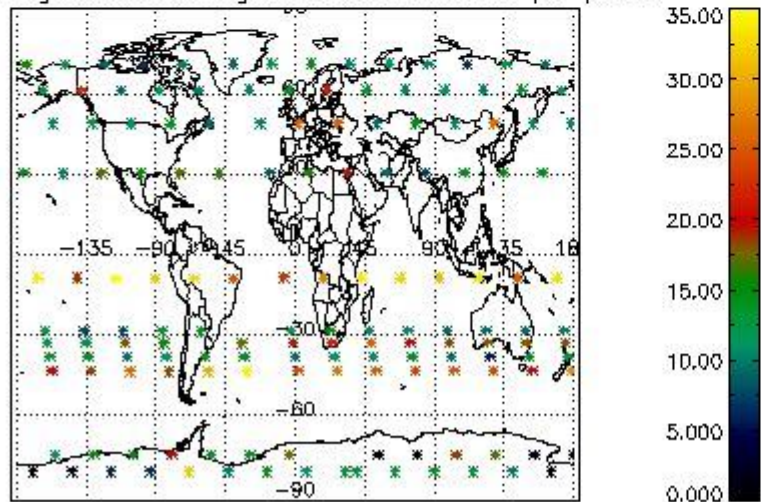
Percentage of cosmic ray hits per profile



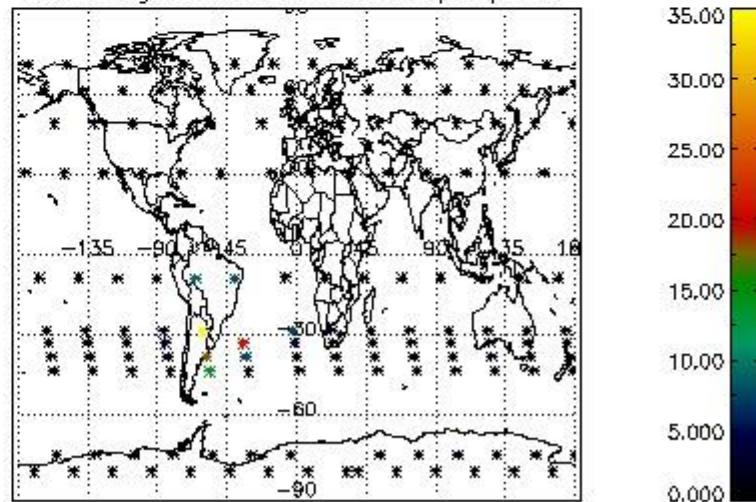
Percentage of datation errors per profile



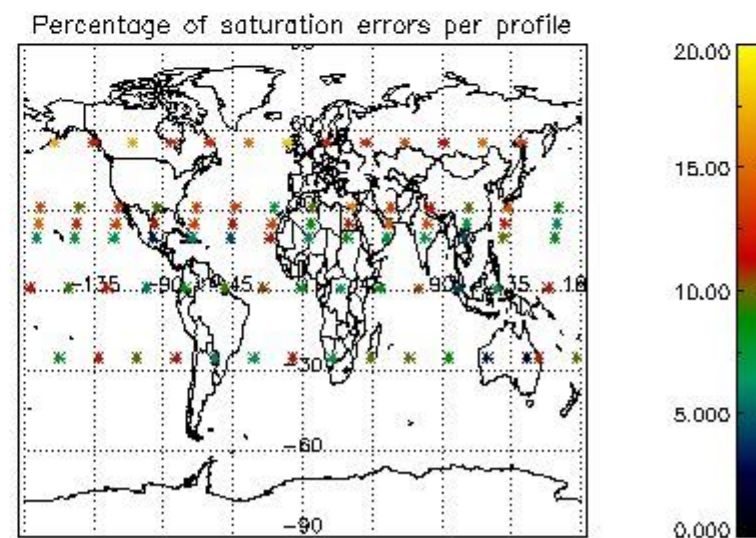
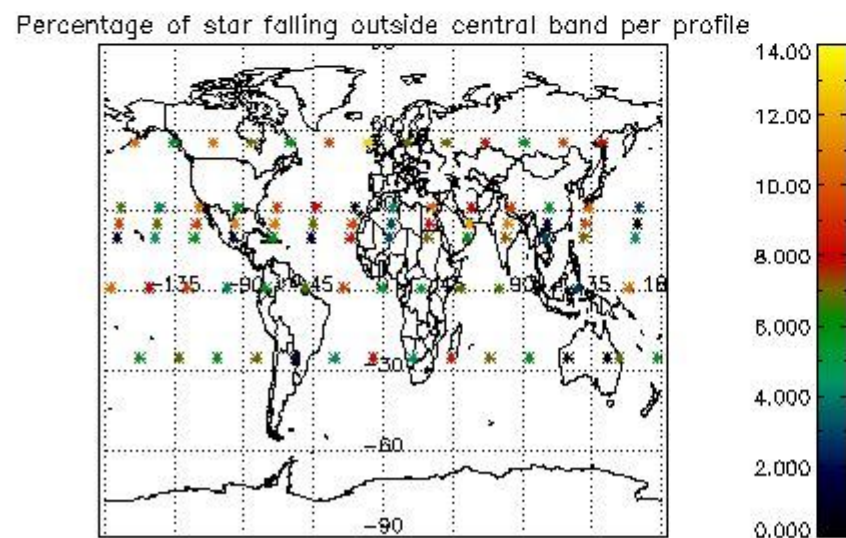
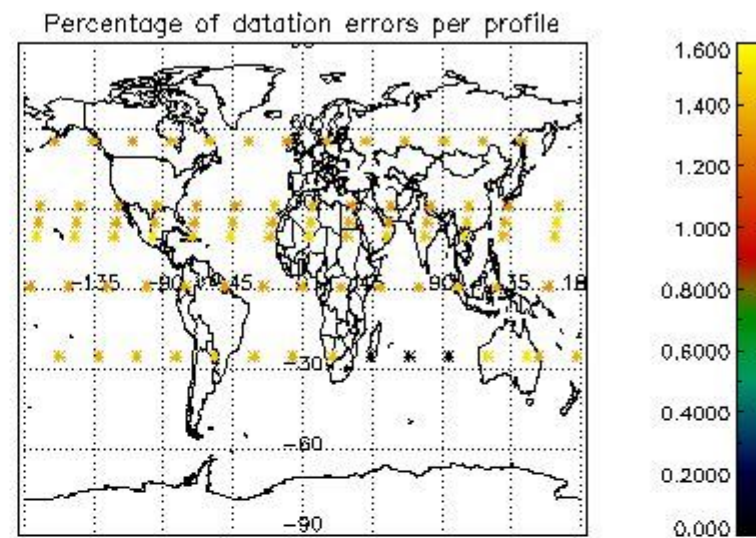
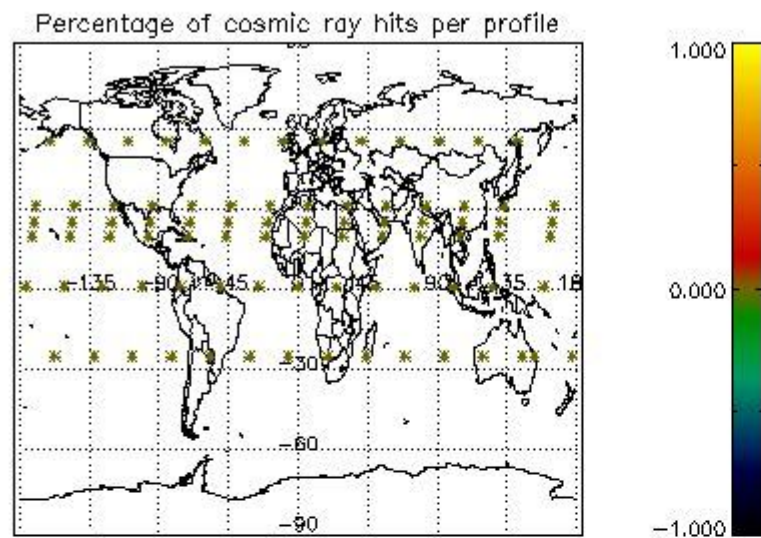
Percentage of star falling outside central band per profile



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

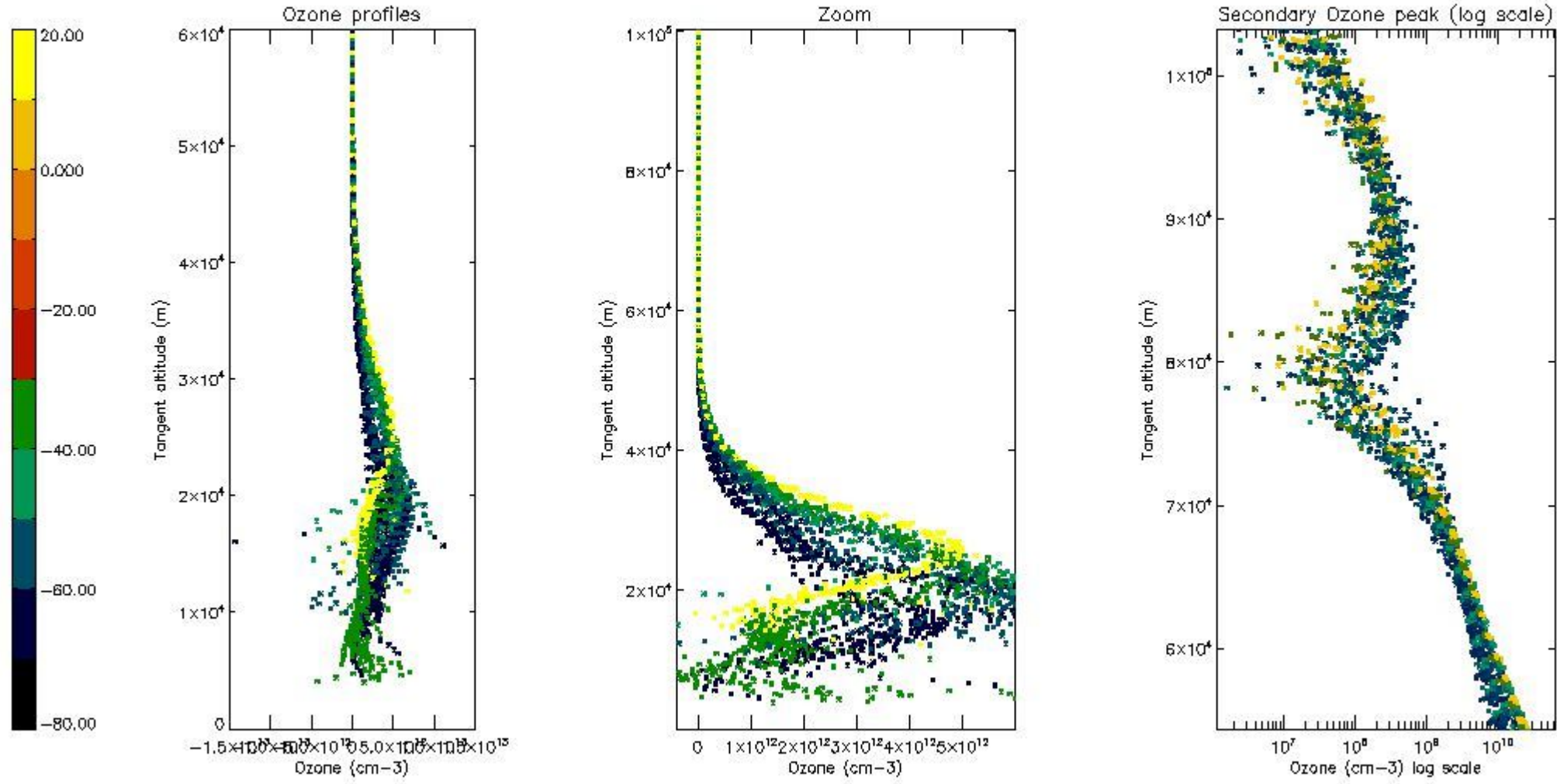
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	38
STD < 20	27

STD < 10	23
STD < 5	19

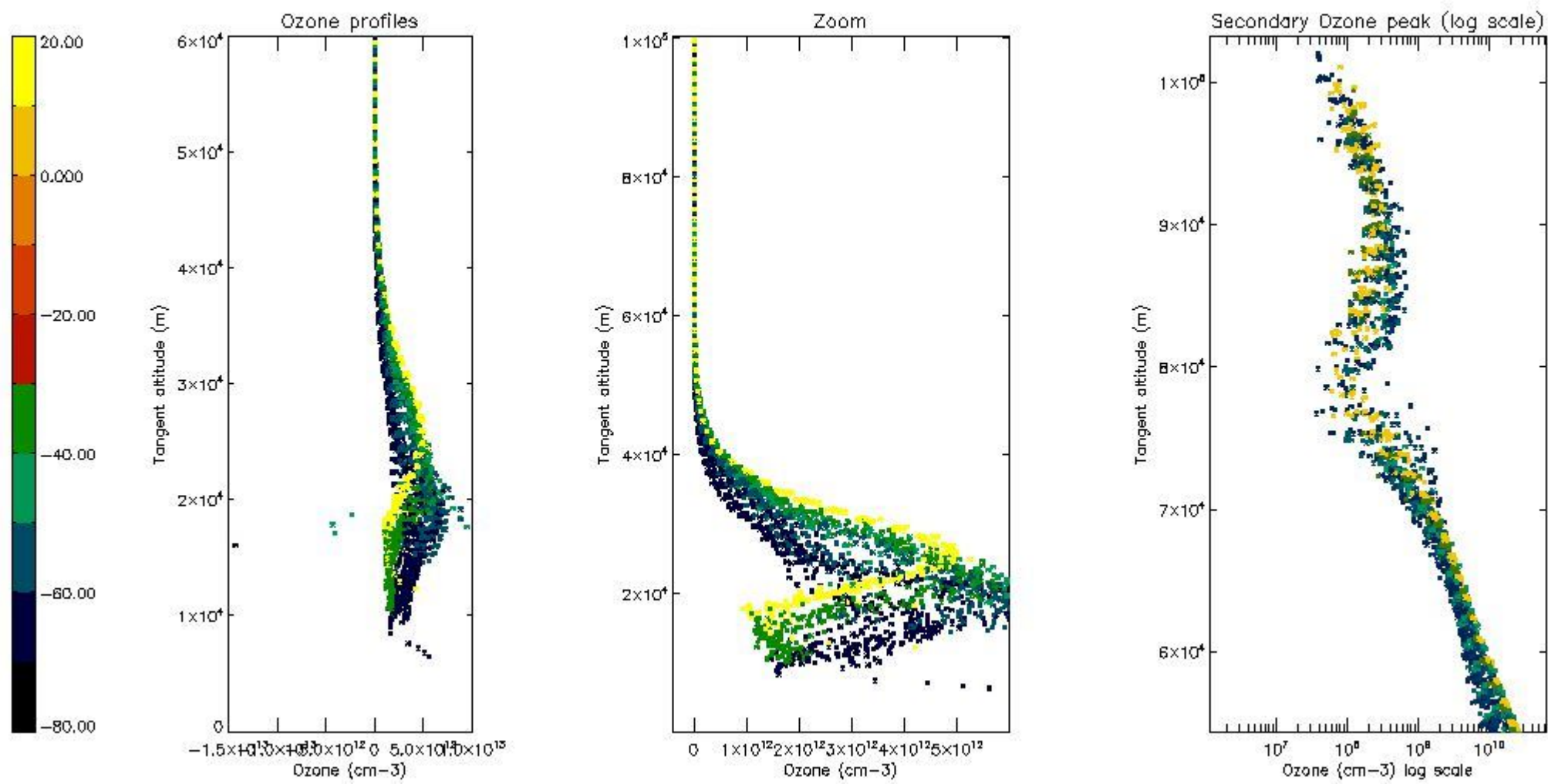
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



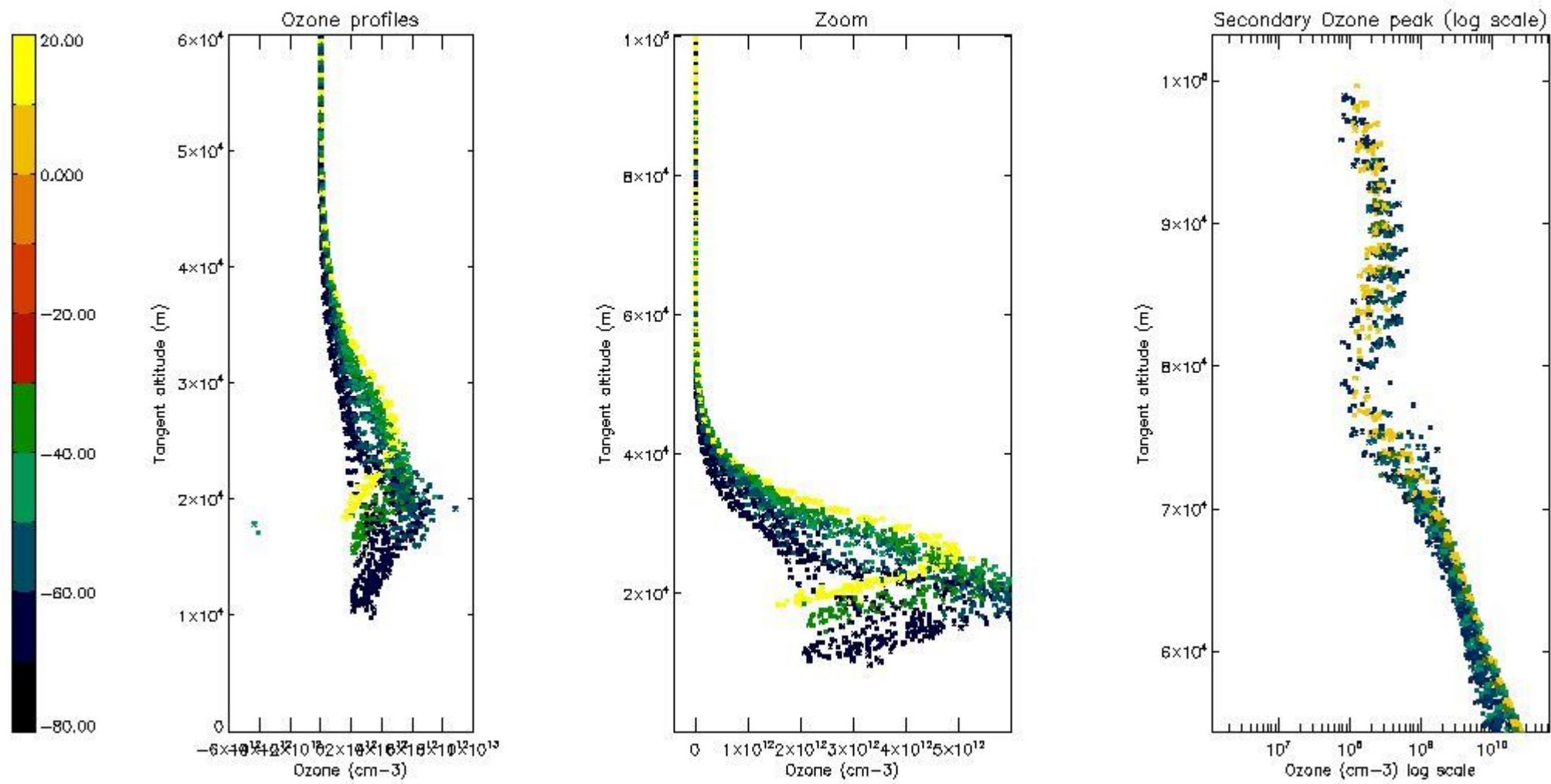
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



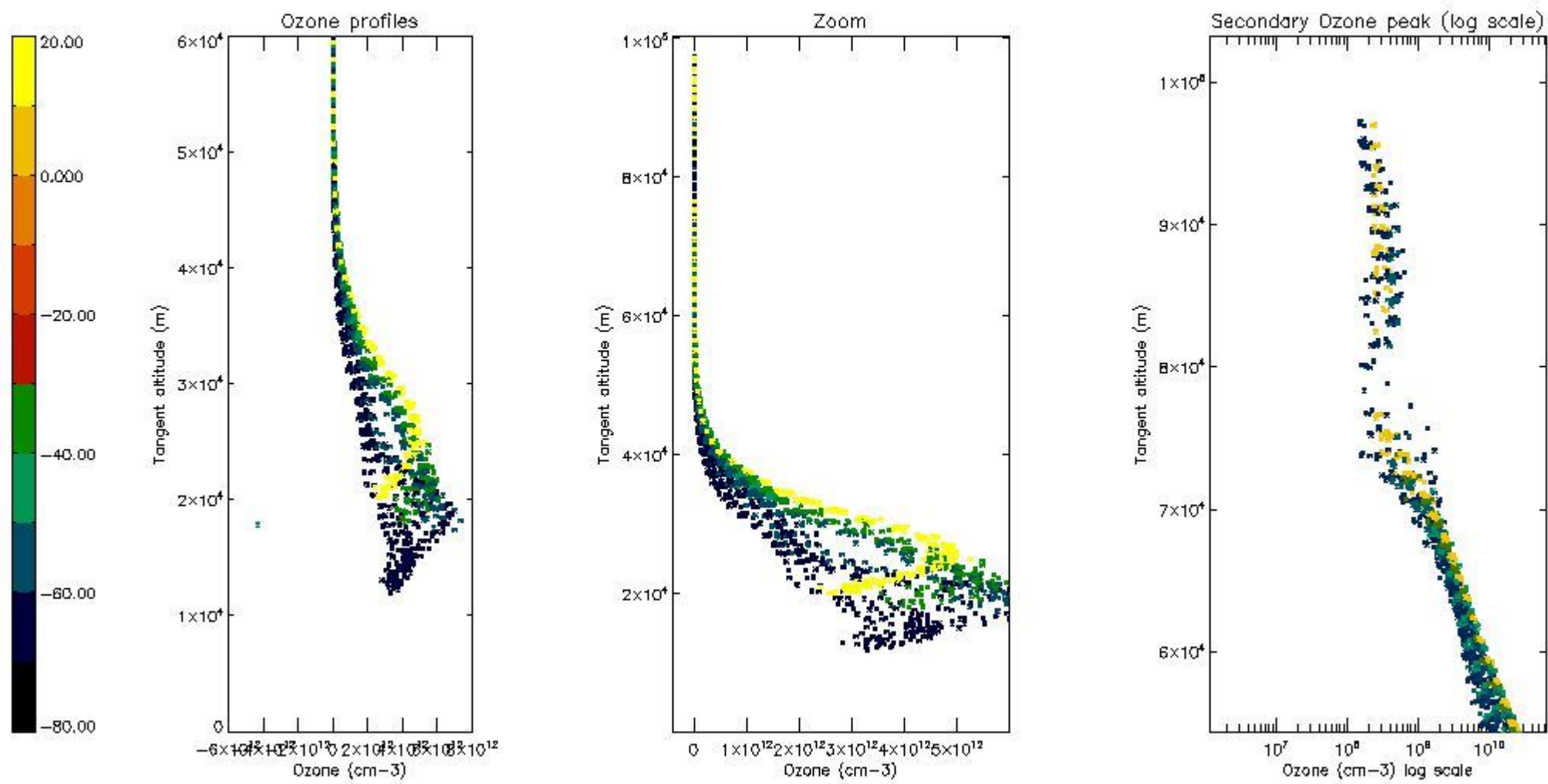
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



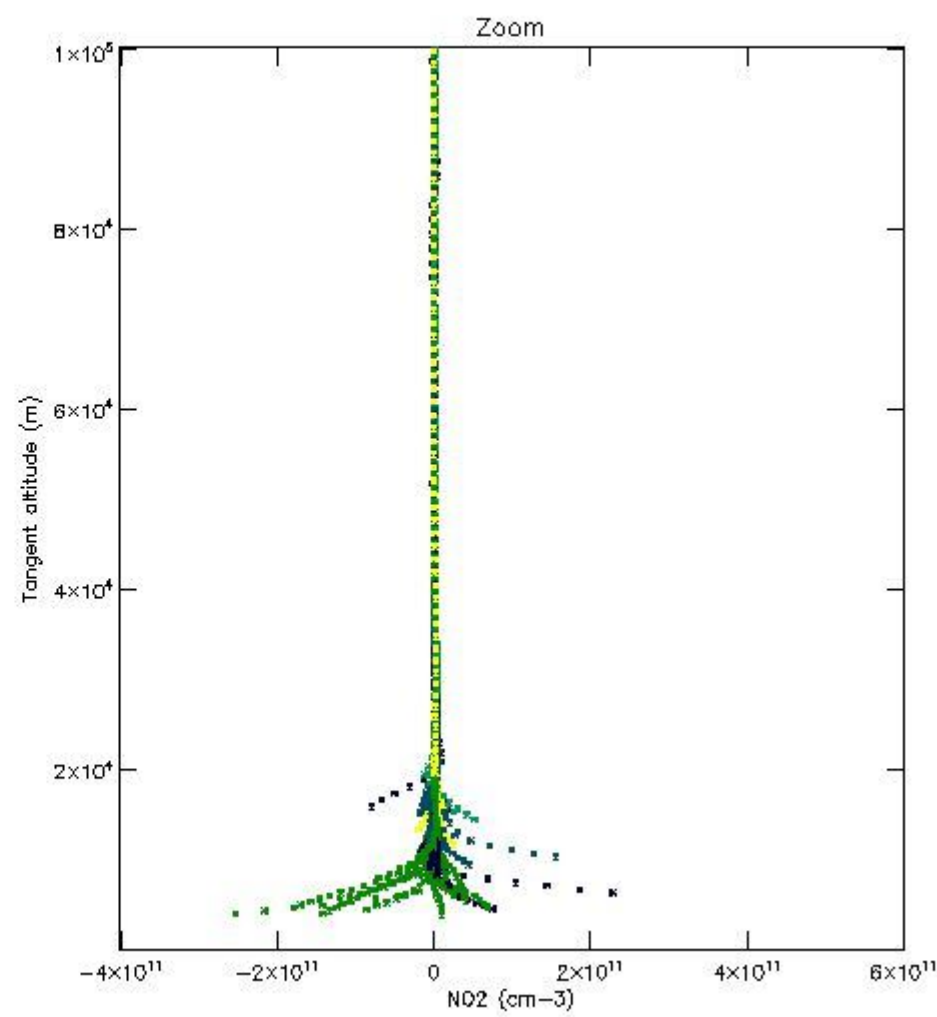
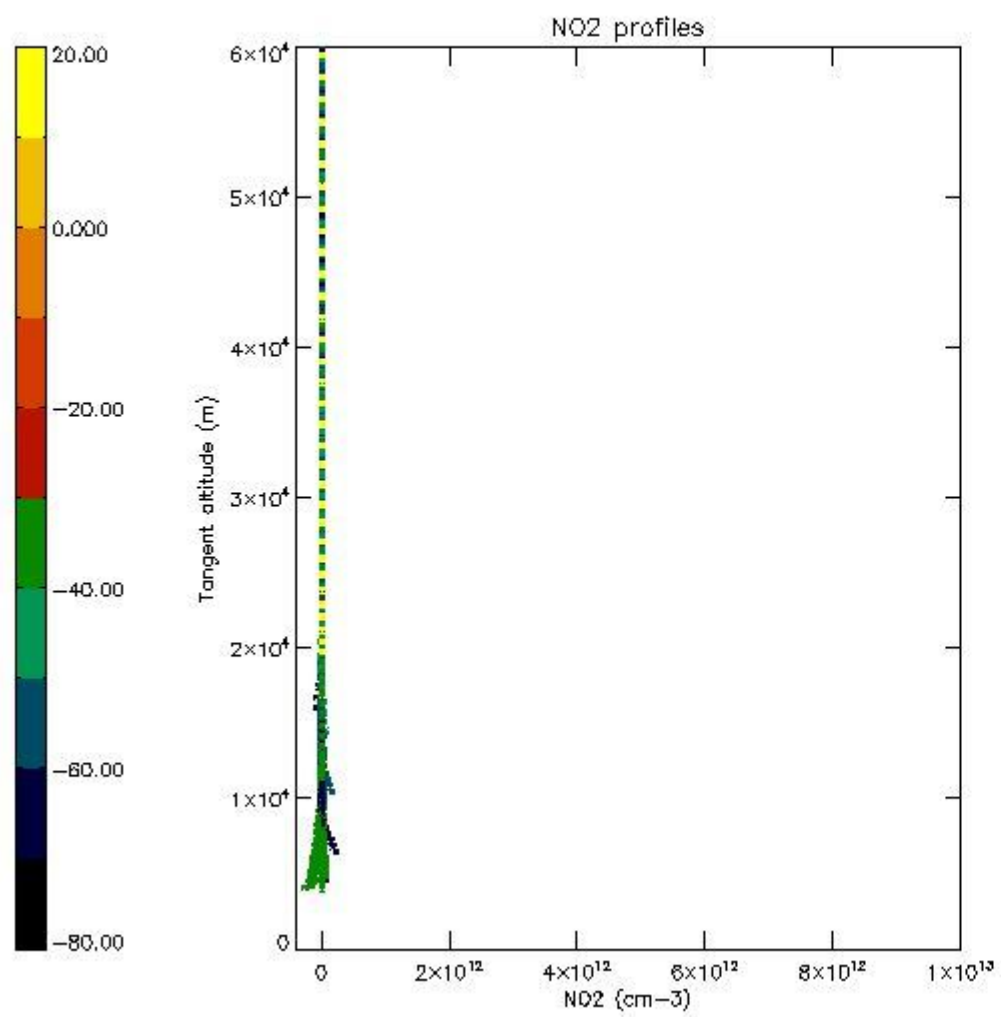
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



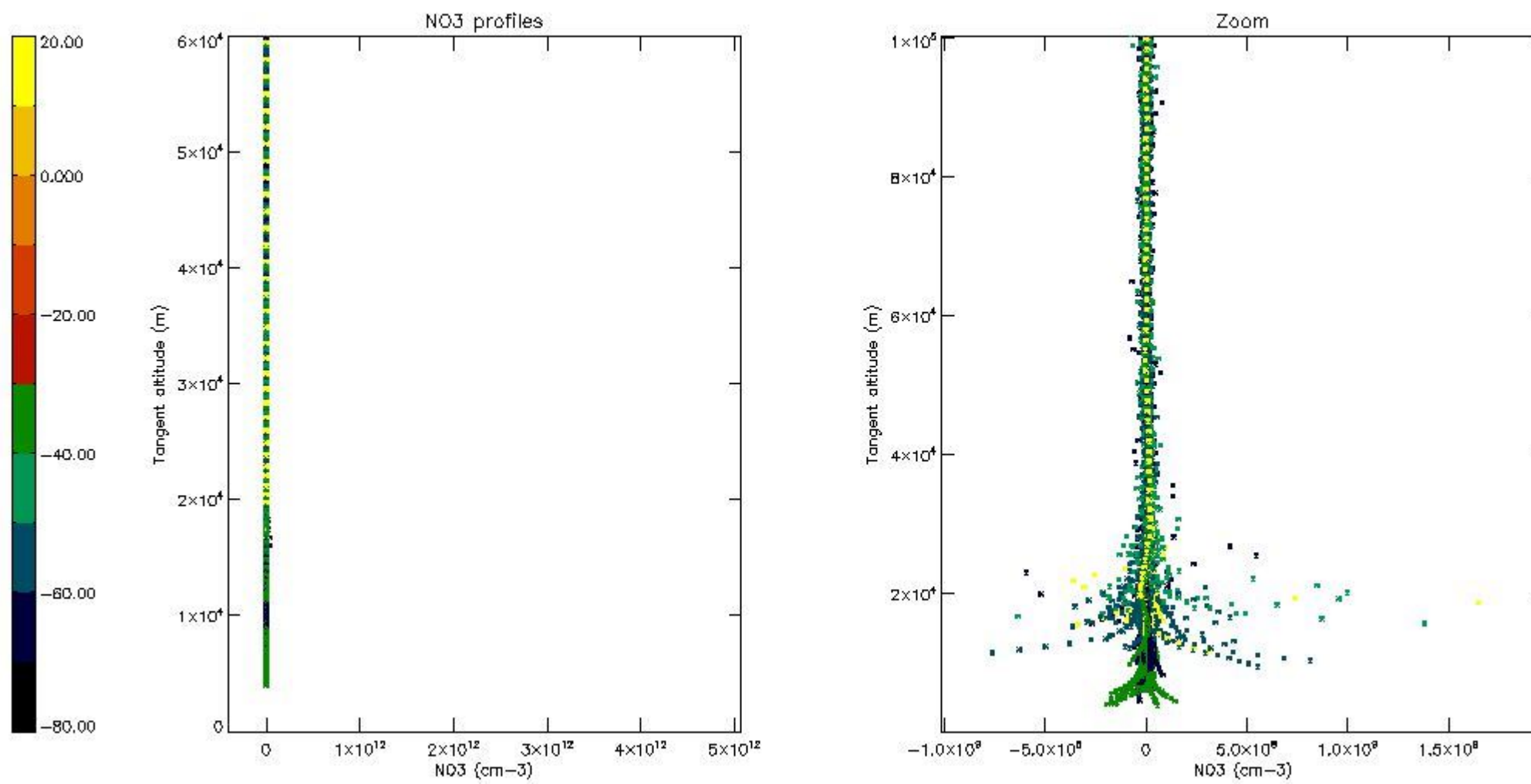
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



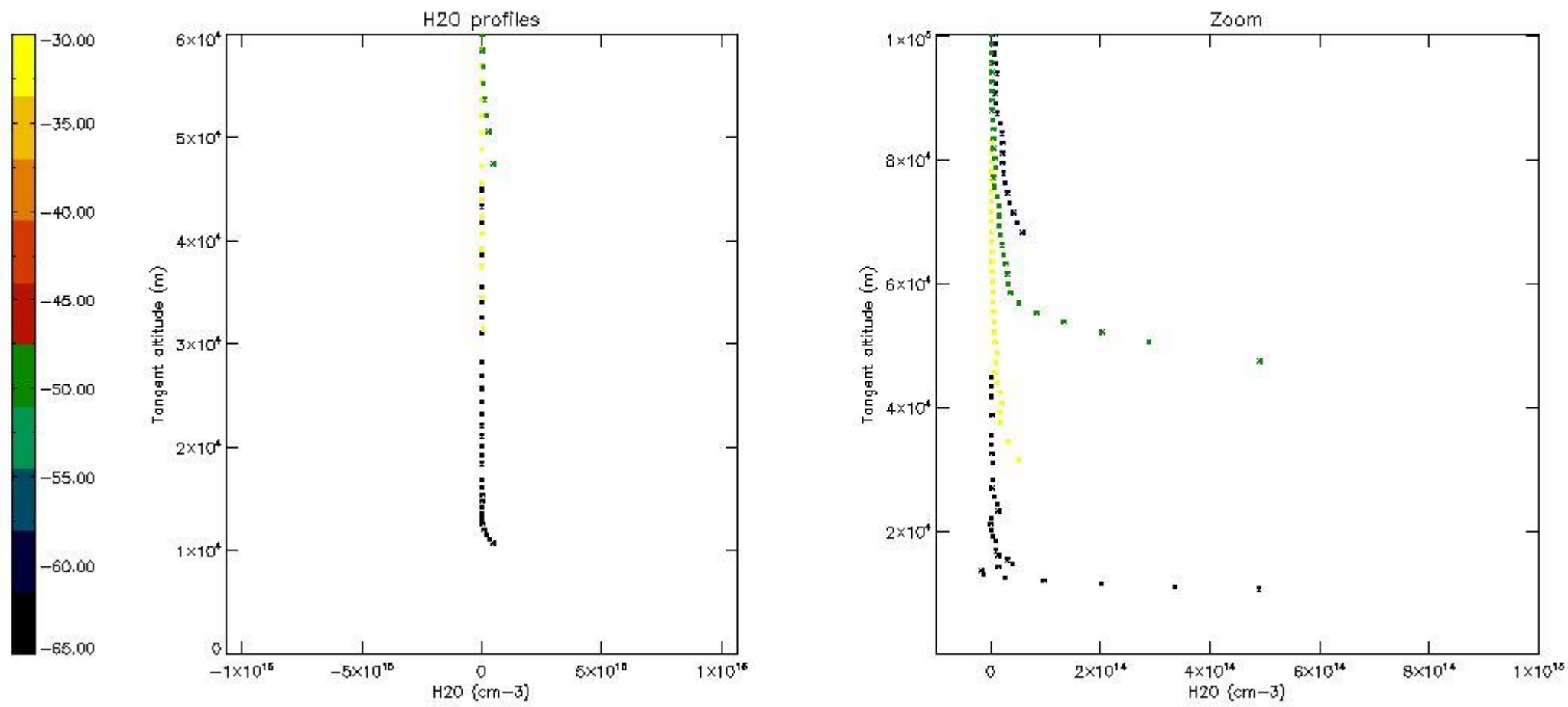
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

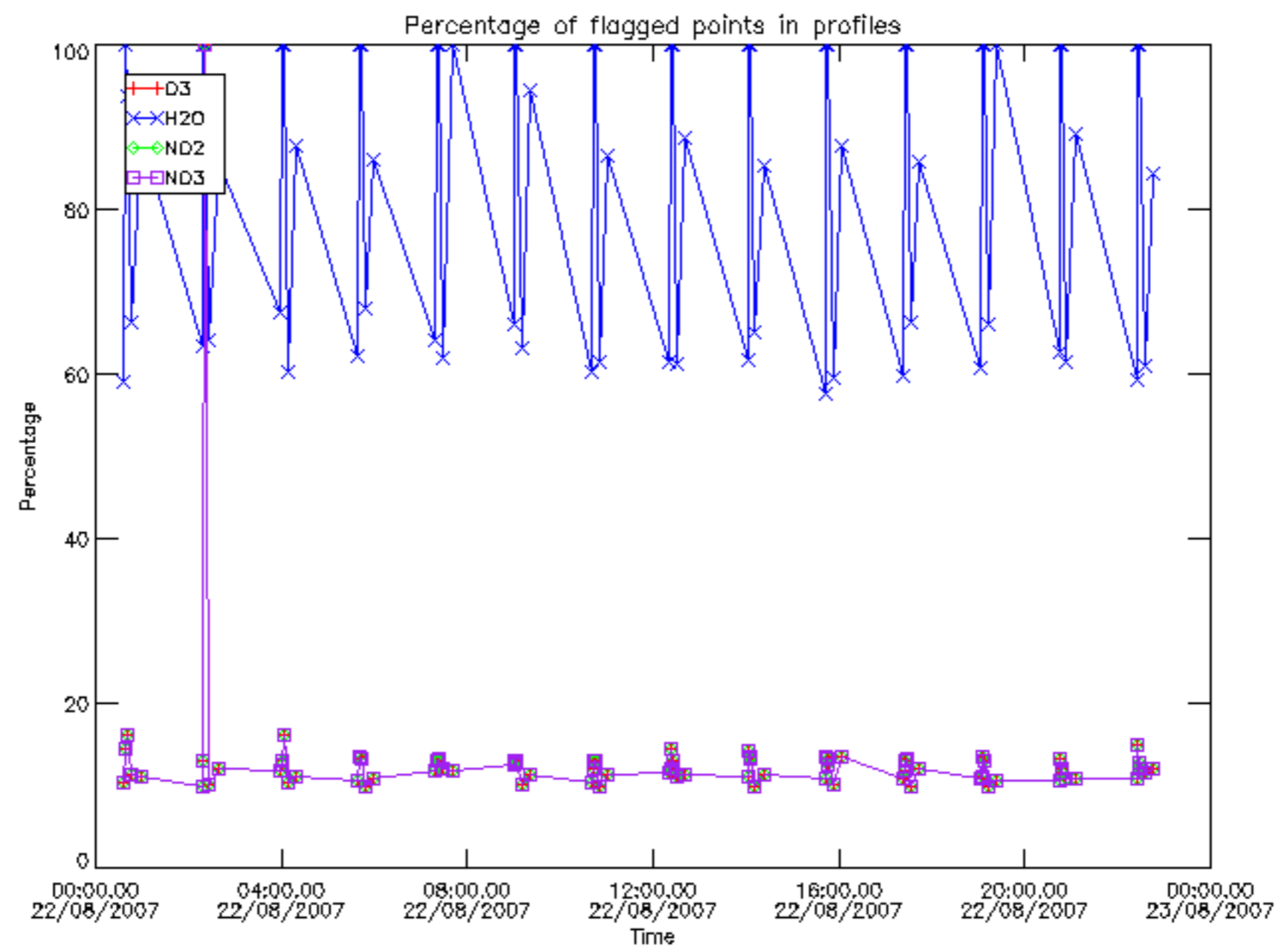
The colorbar represents the latitude.



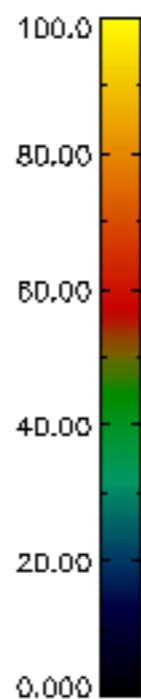
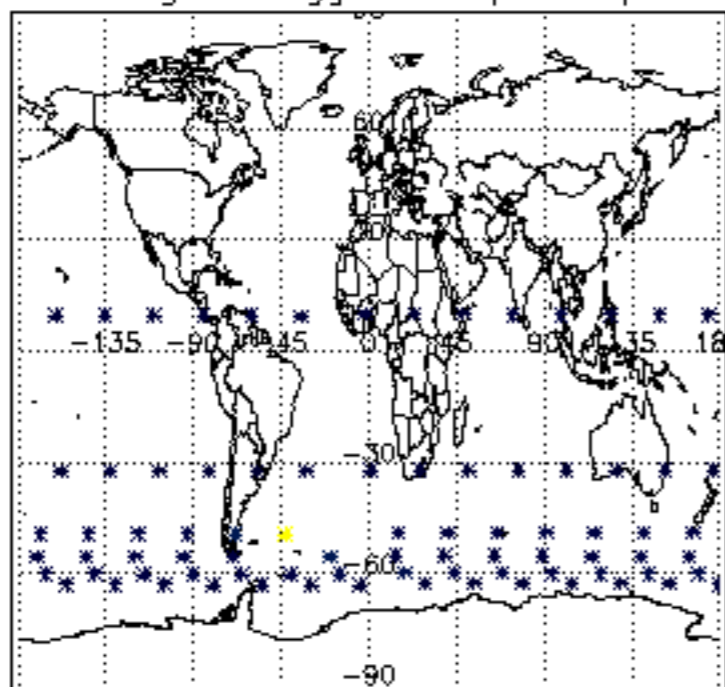
6. Auxiliary Data Files used for the production reported in section 2

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

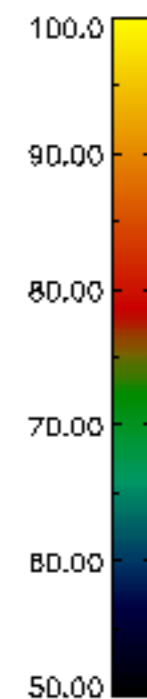
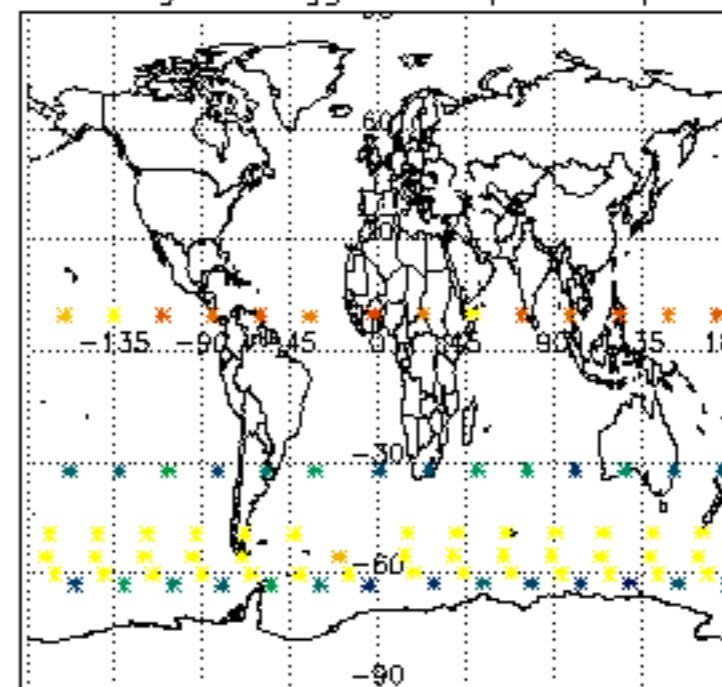
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	22-AUG-2007 00:05:53
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	22-AUG-2007 00:05:53
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	22-AUG-2007 00:05:53



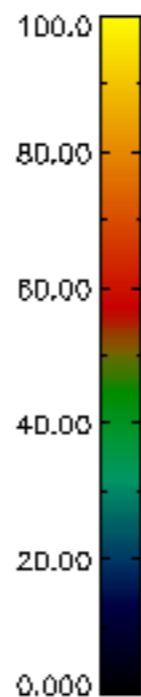
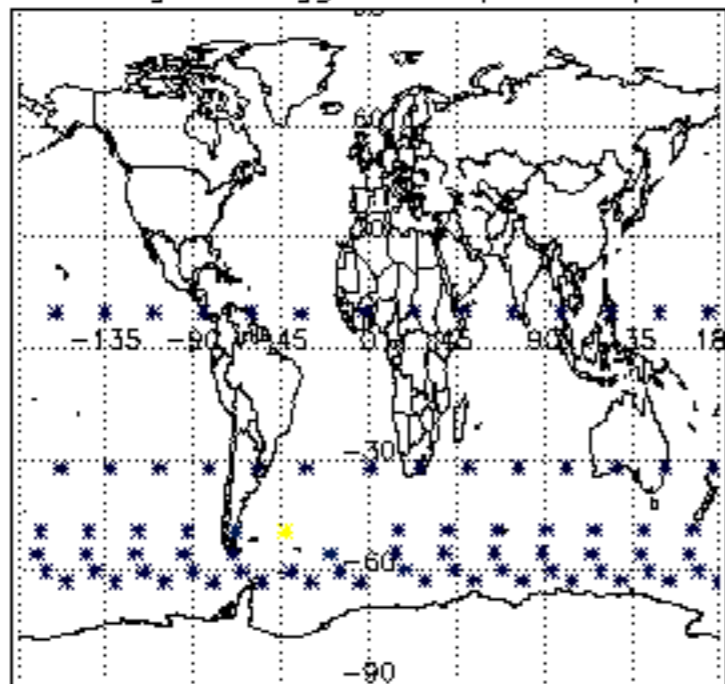
Percentage of flagged data per D3 profile



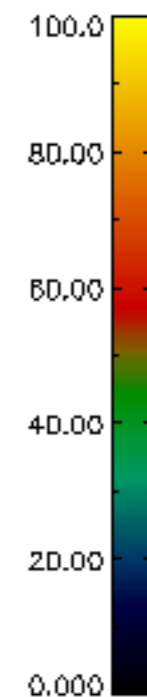
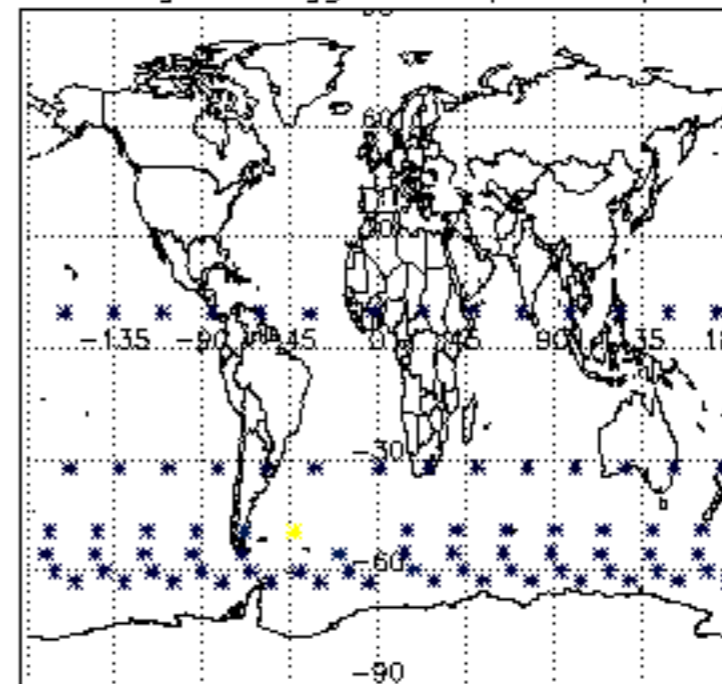
Percentage of flagged data per H2O profile

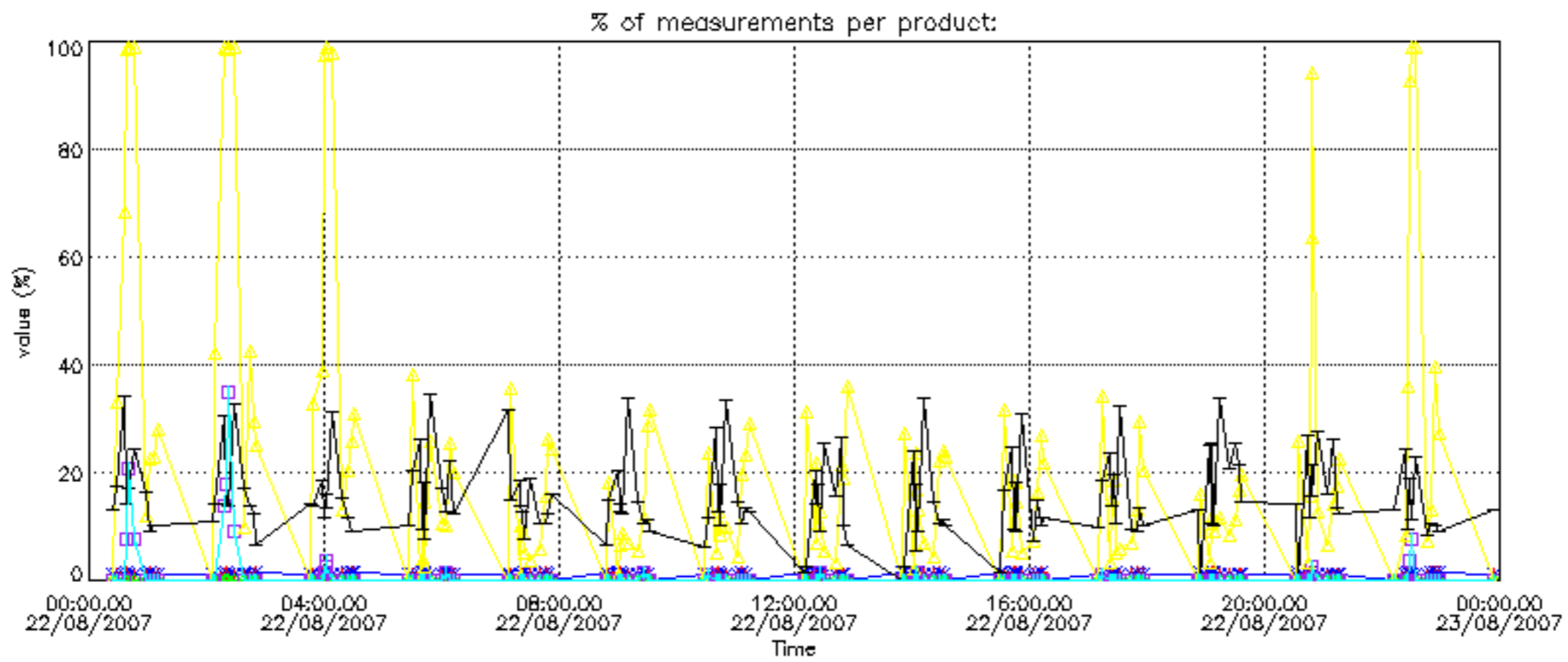


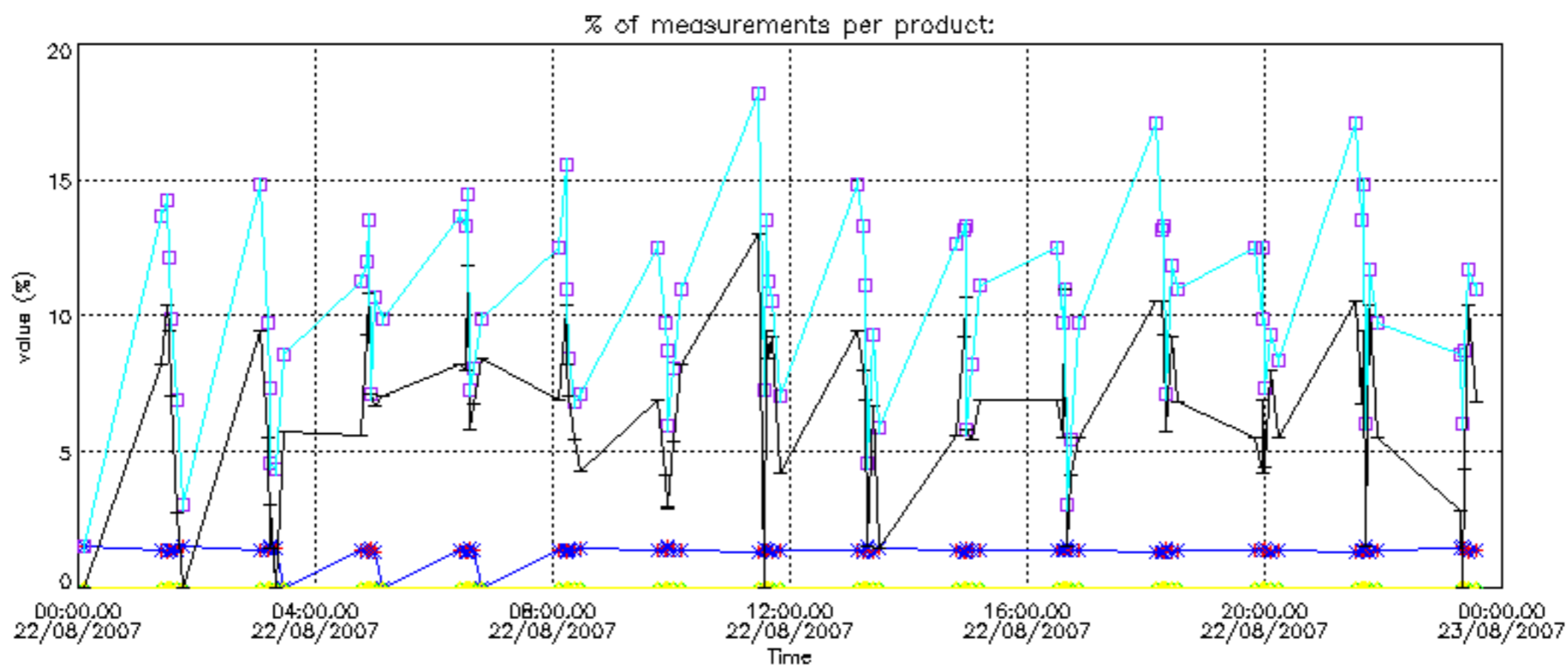
Percentage of flagged data per NO2 profile



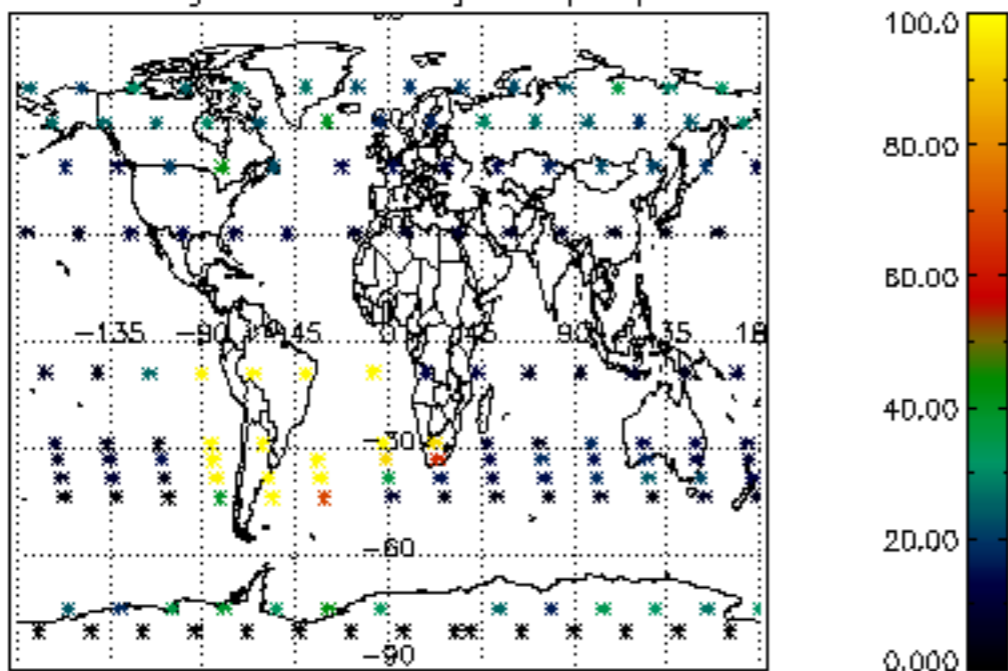
Percentage of flagged data per NO3 profile



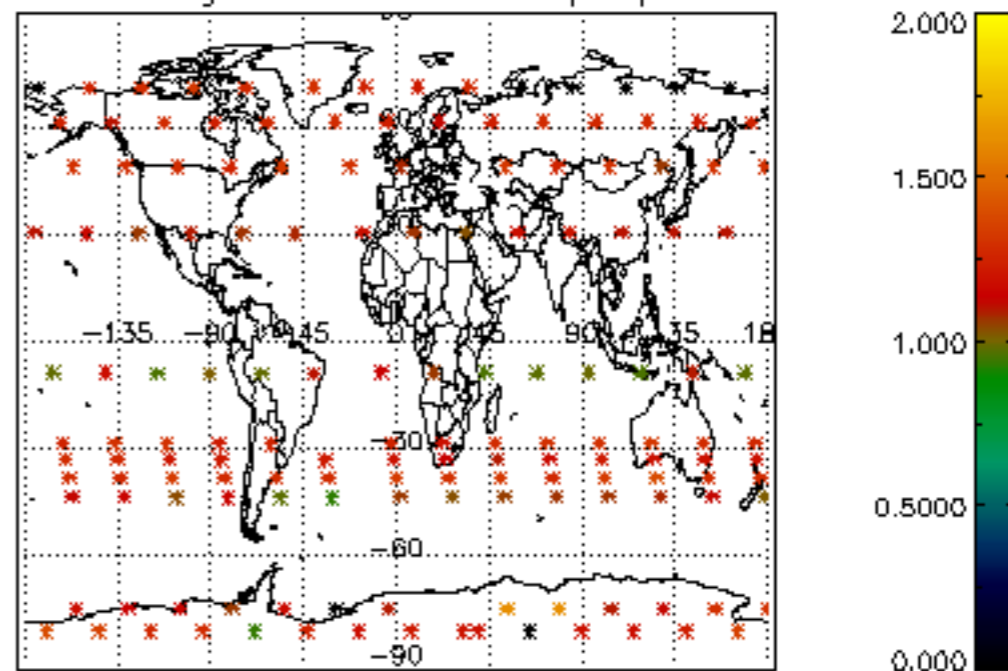




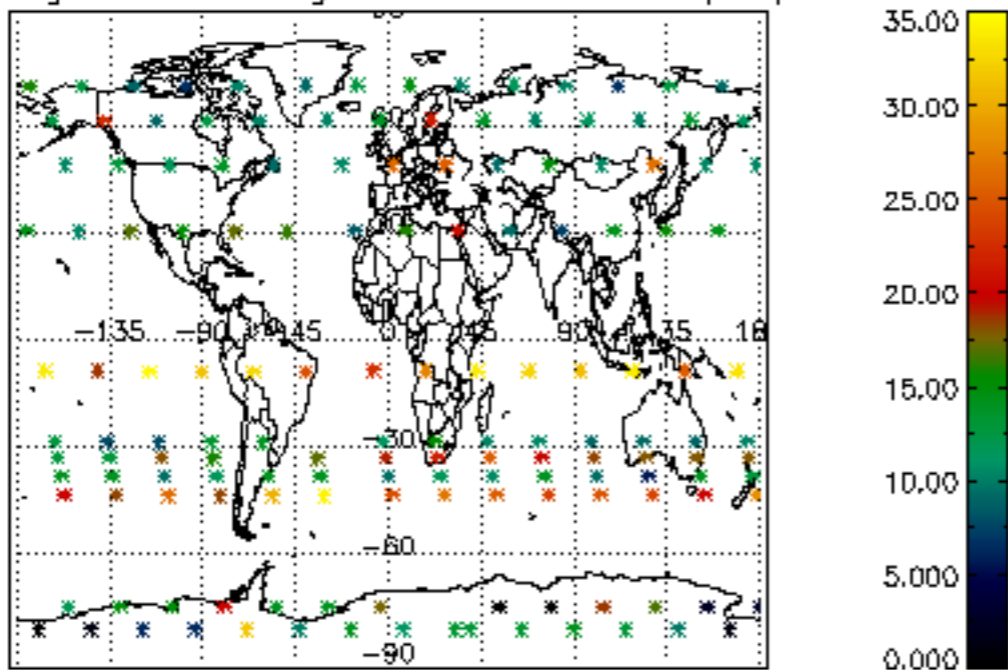
Percentage of cosmic ray hits per profile



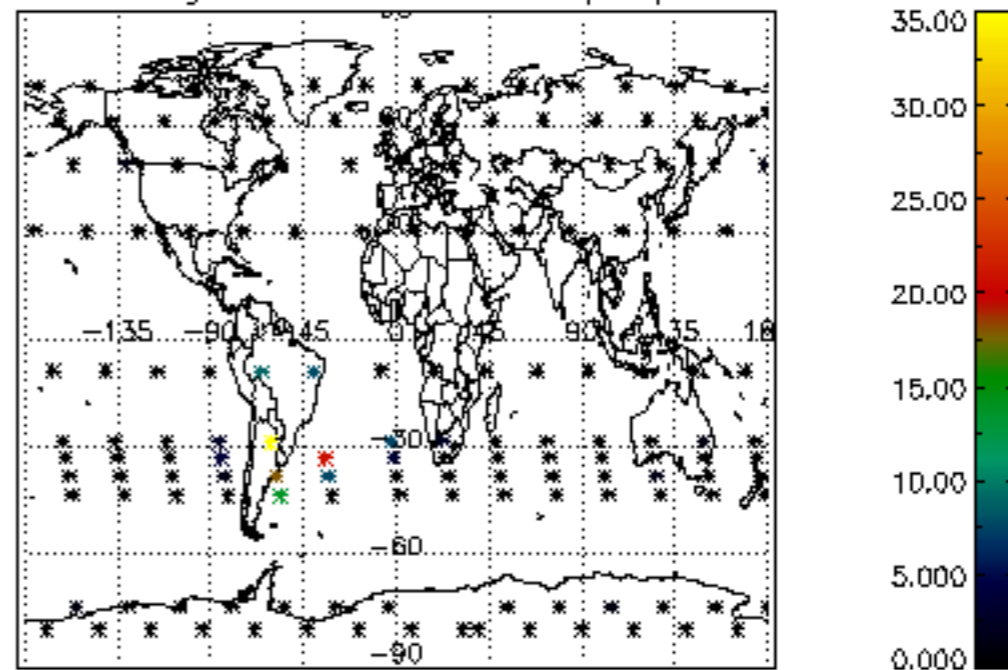
Percentage of datation errors per profile



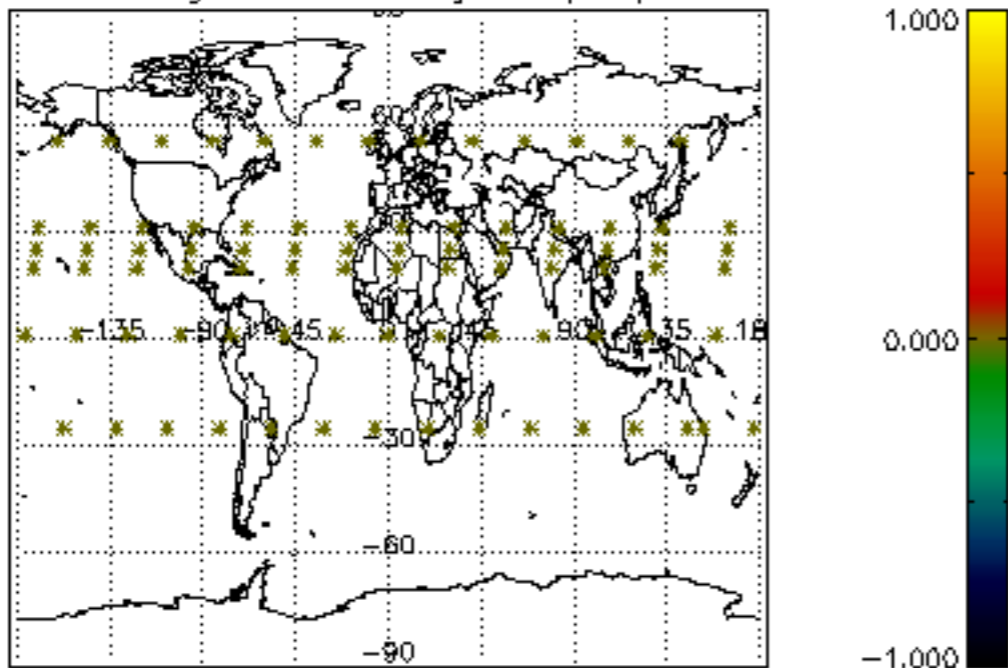
Percentage of star falling outside central band per profile



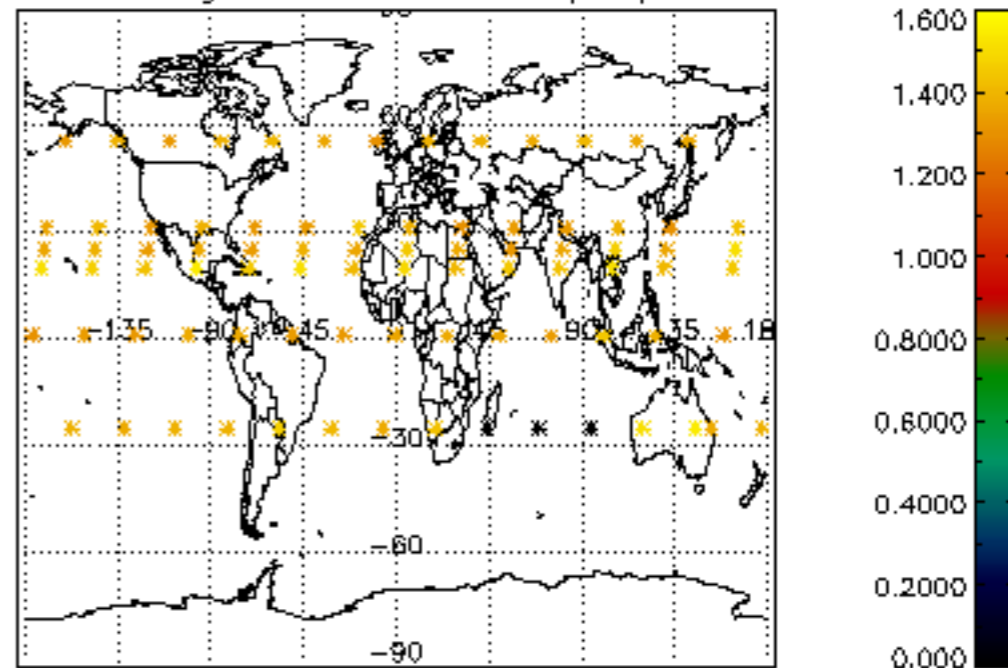
Percentage of saturation errors per profile



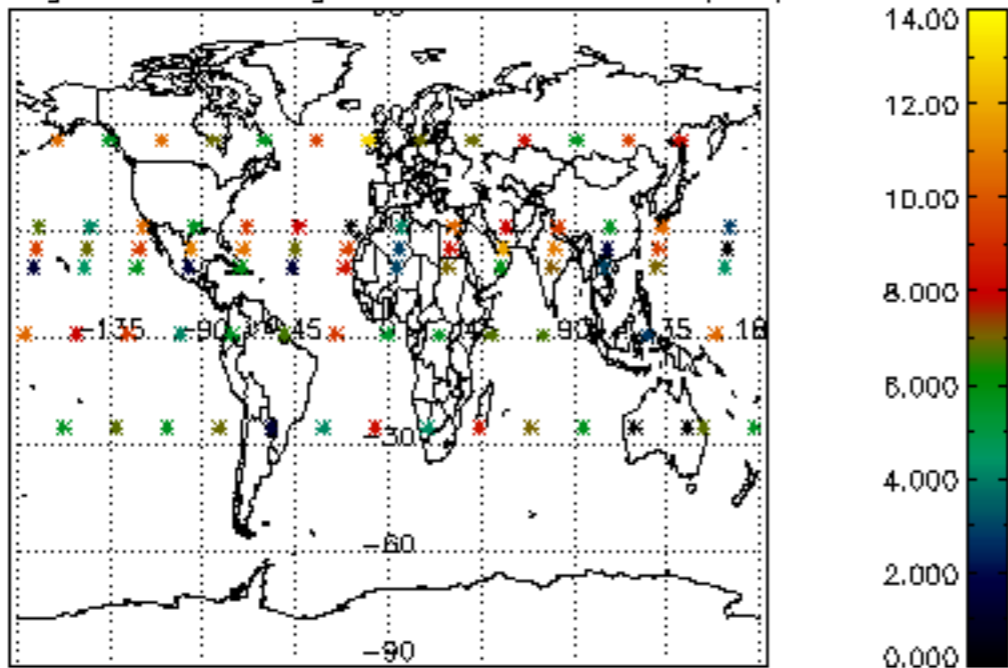
Percentage of cosmic ray hits per profile



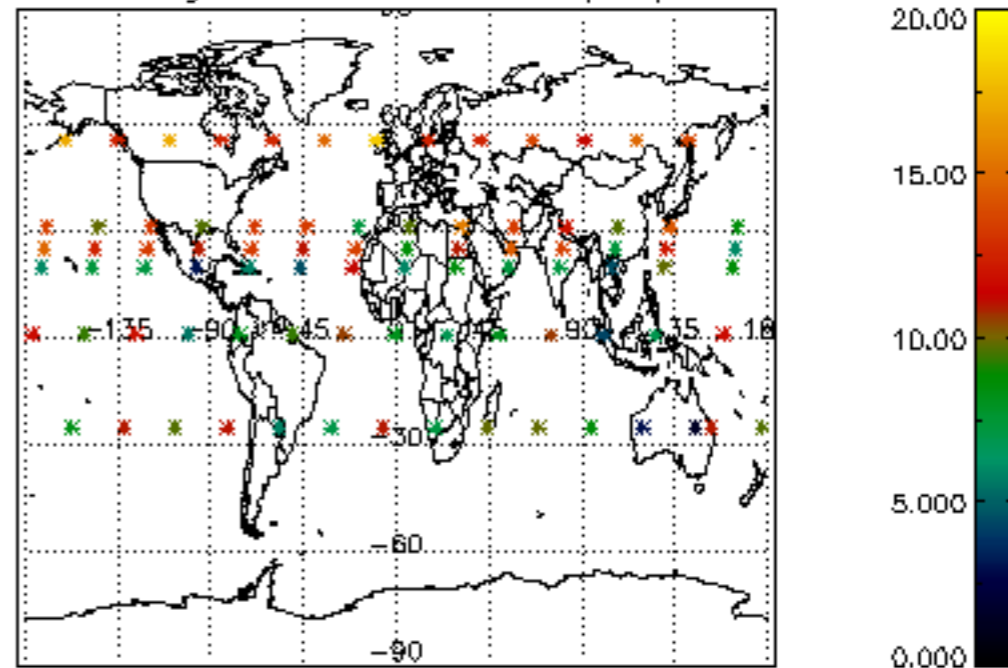
Percentage of datation errors per profile

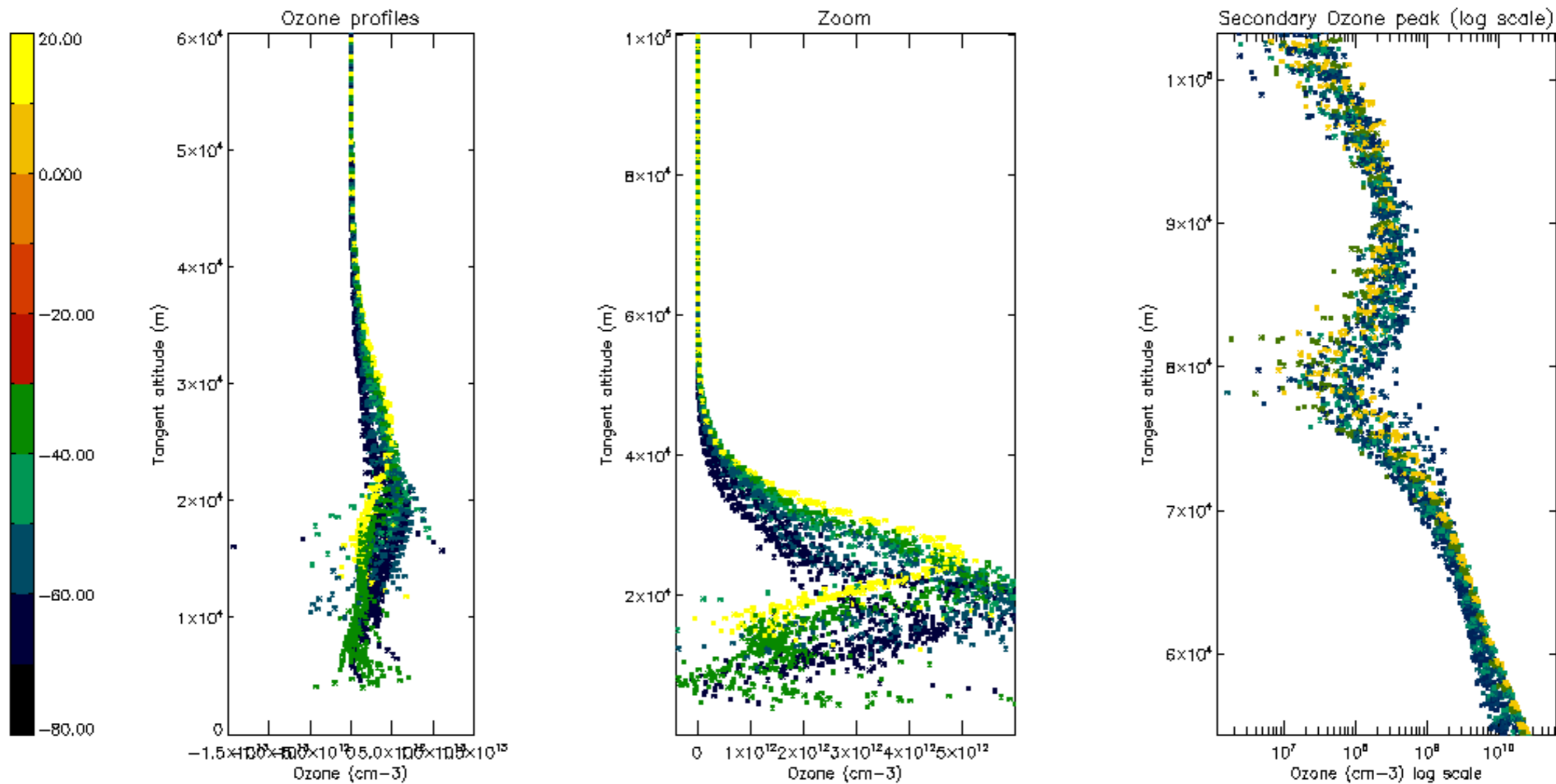


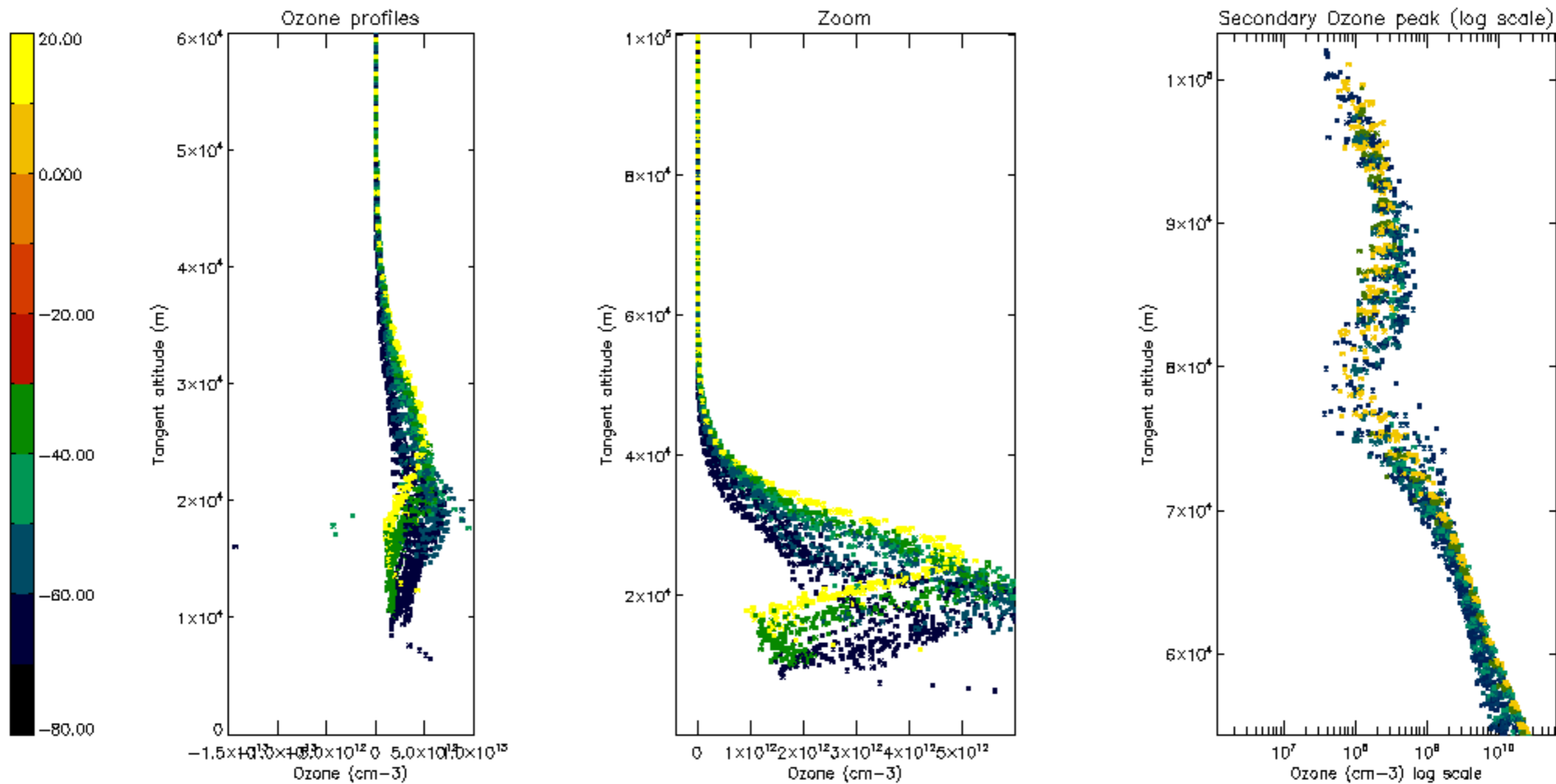
Percentage of star falling outside central band per profile

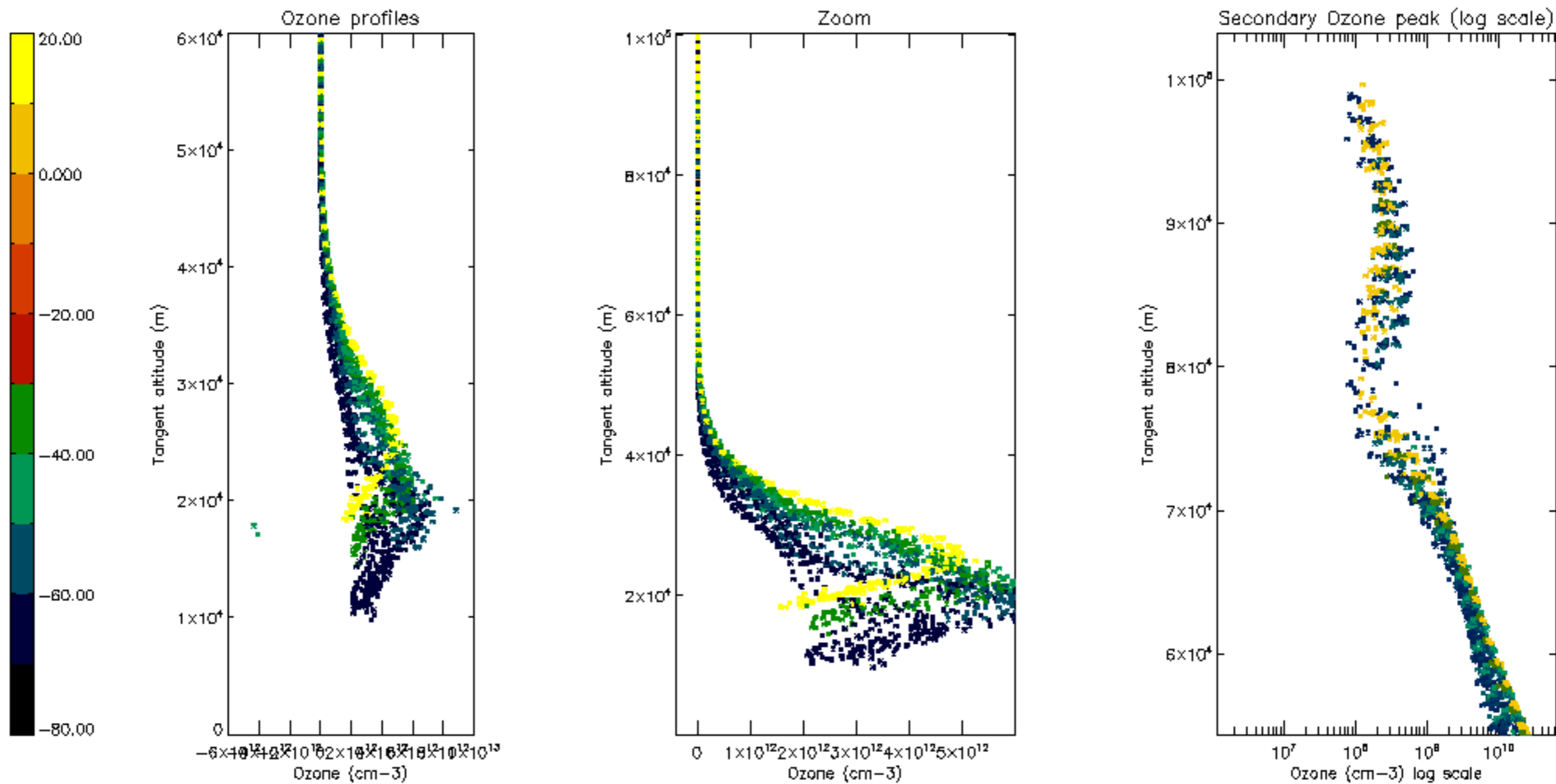


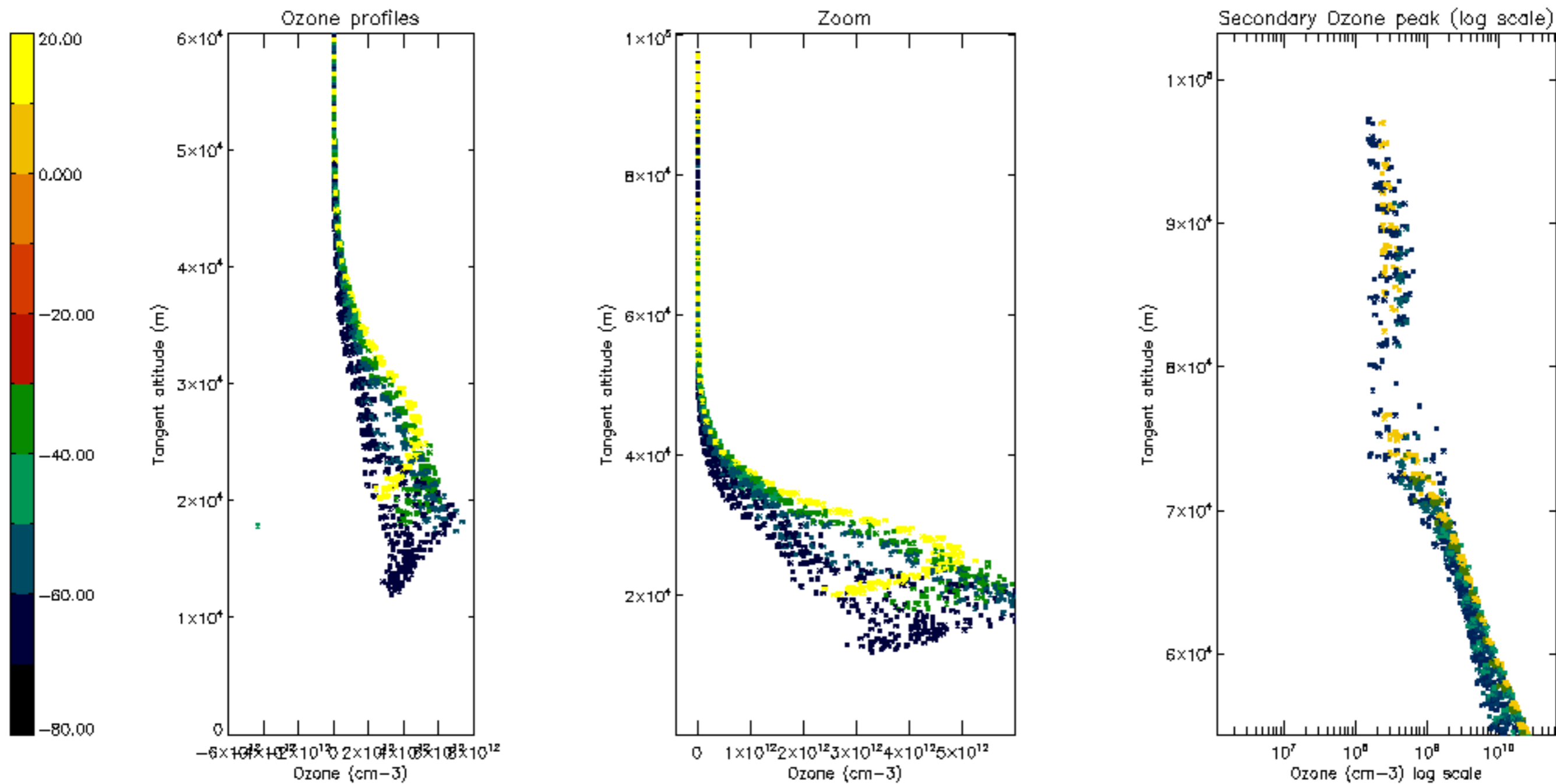
Percentage of saturation errors per profile

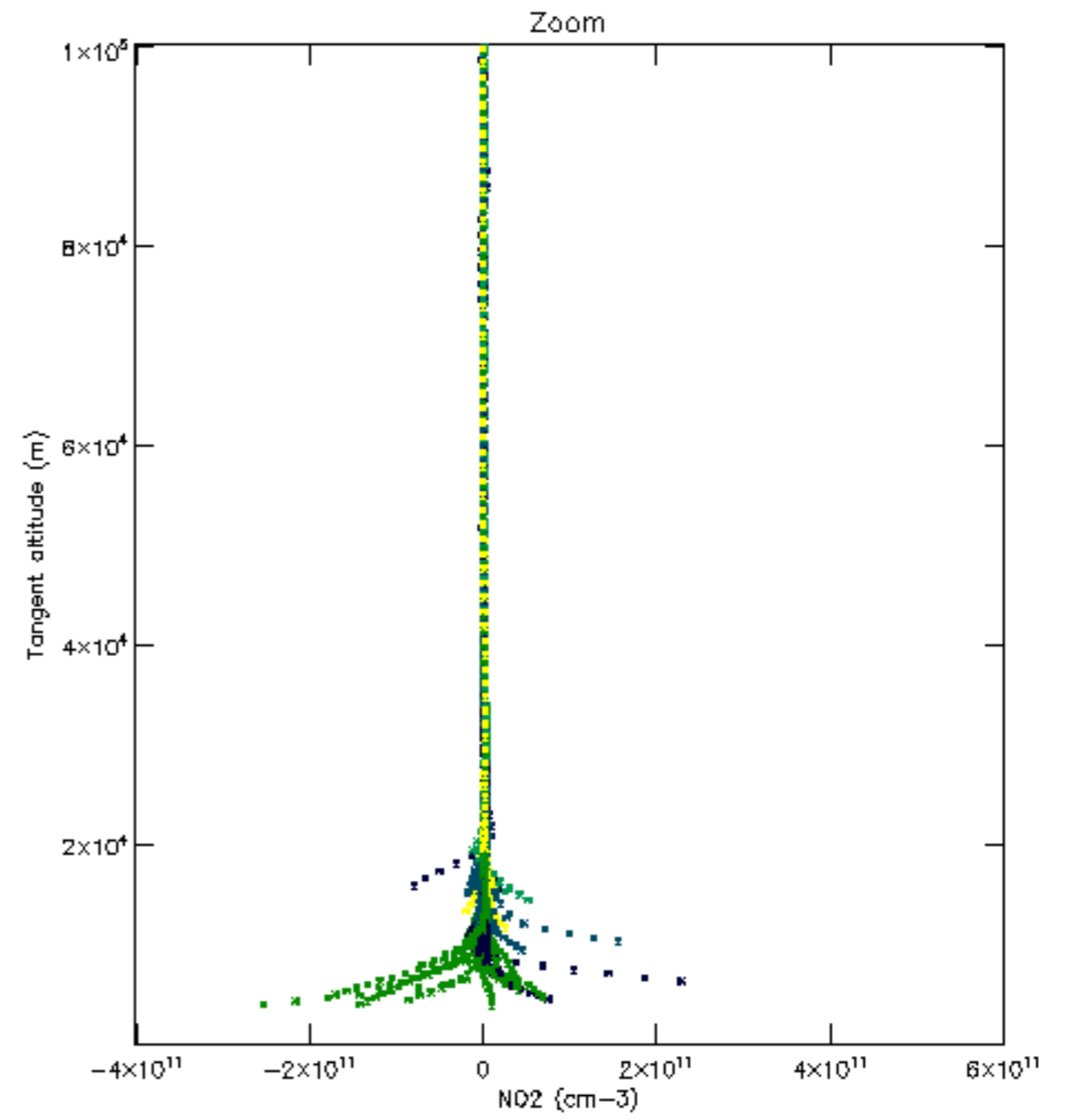
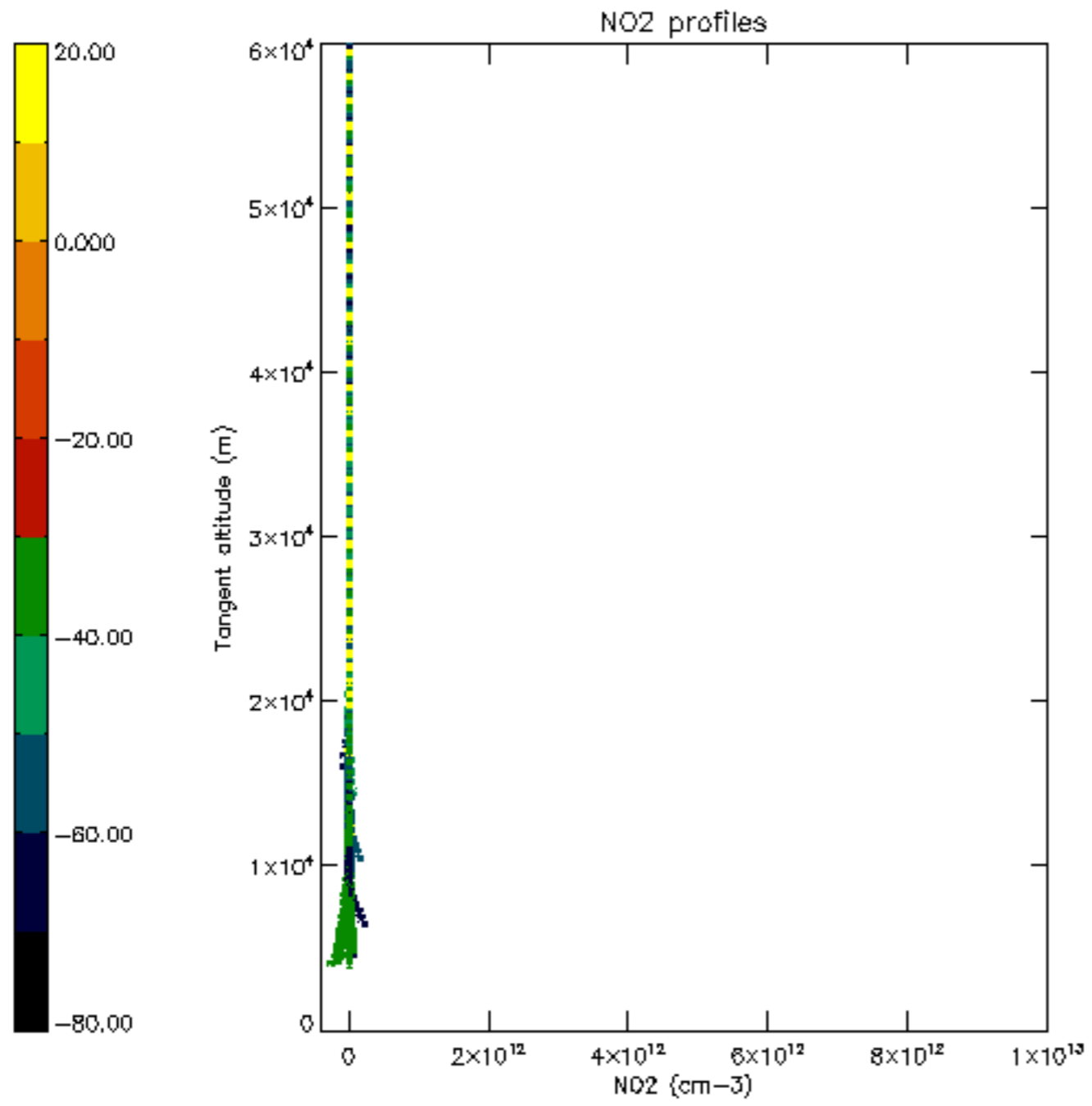


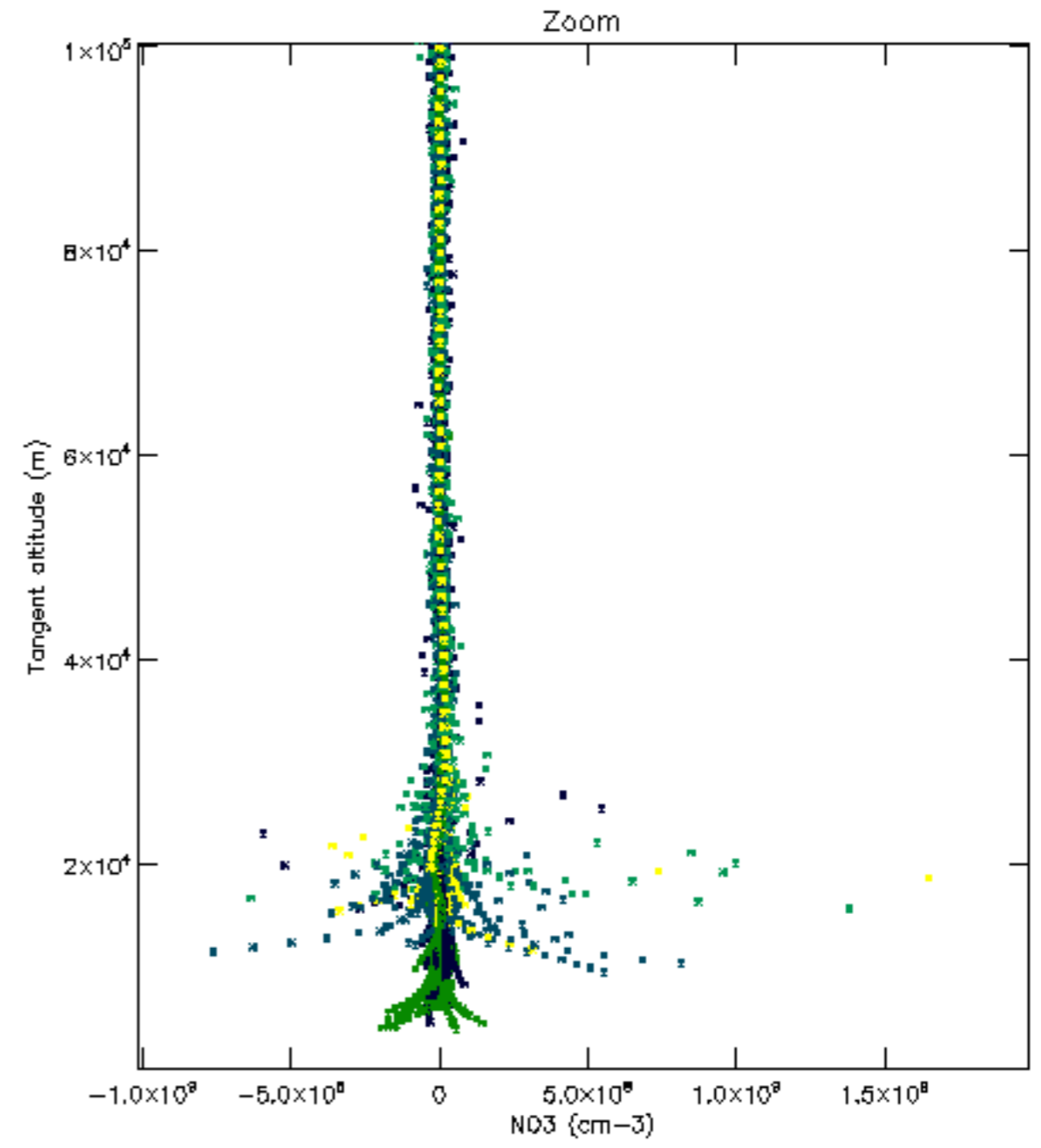
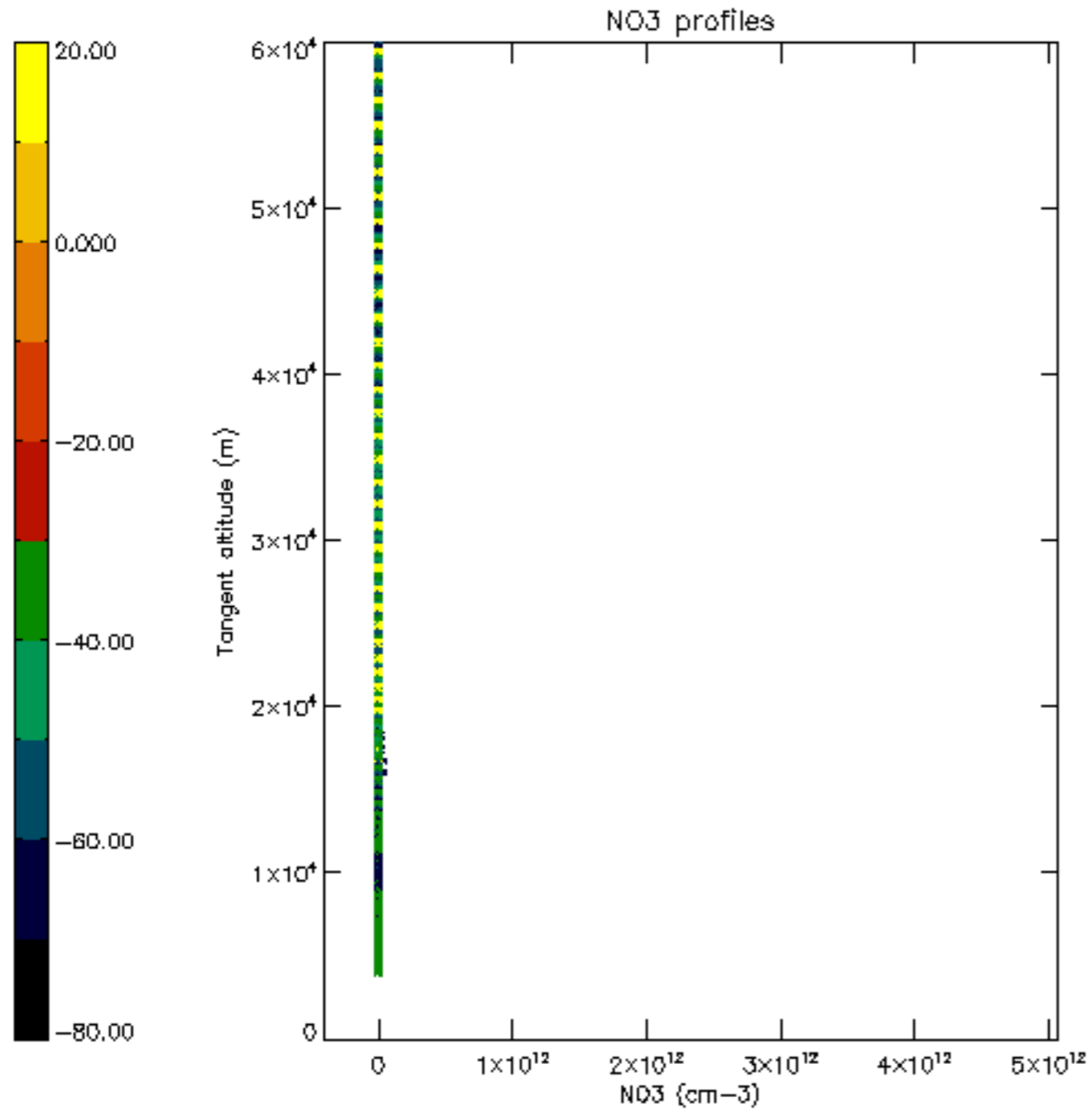


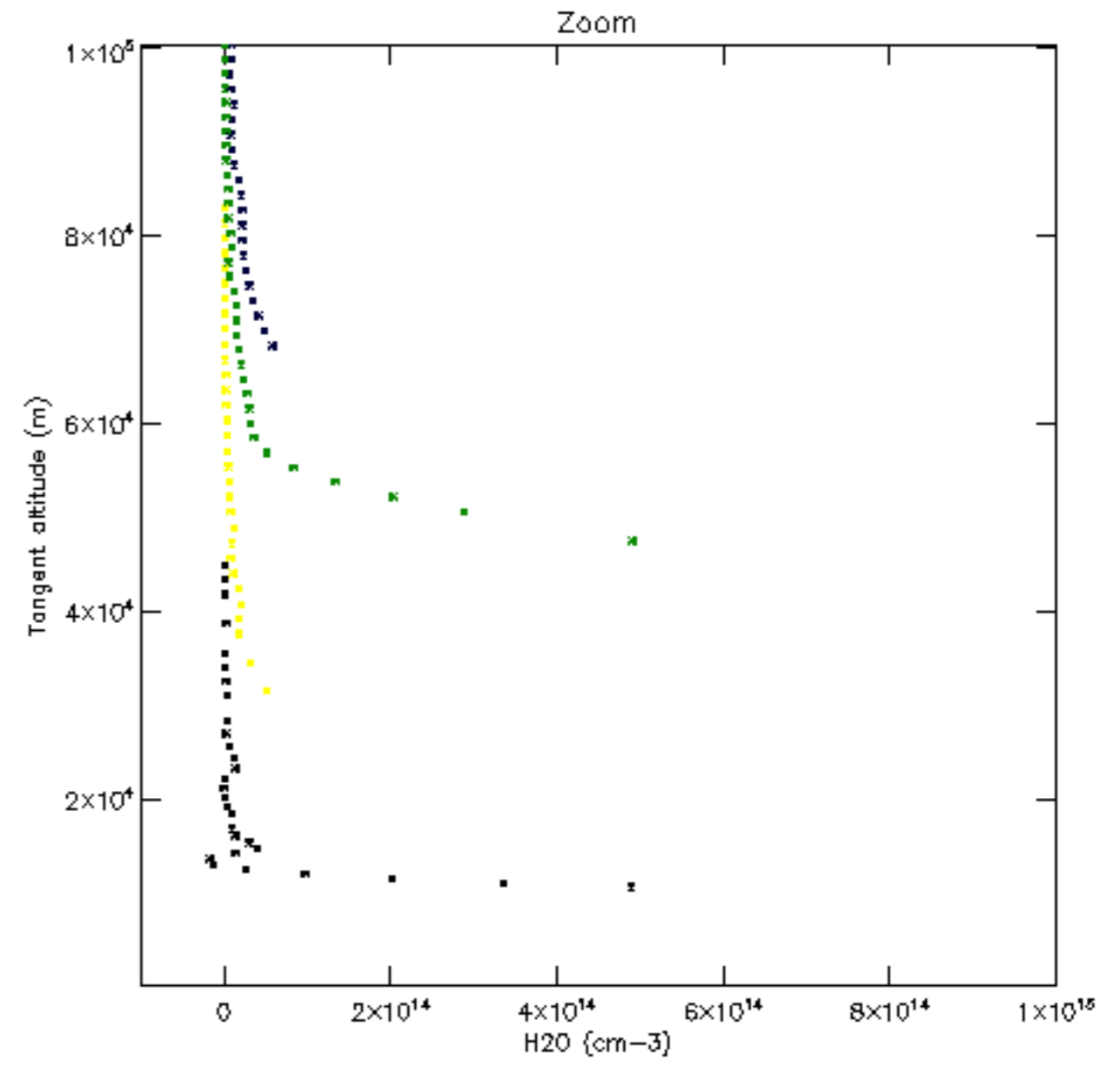
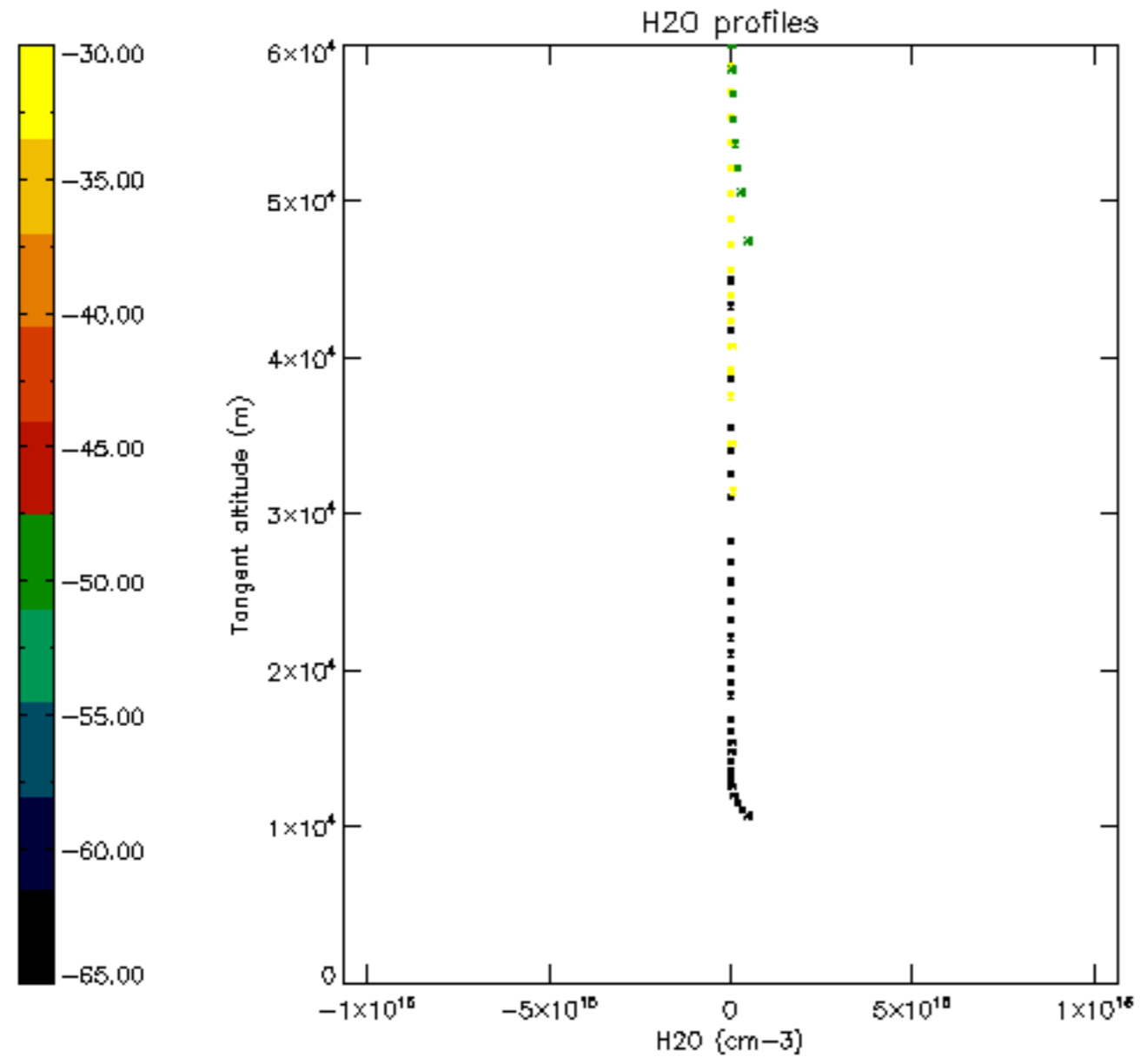


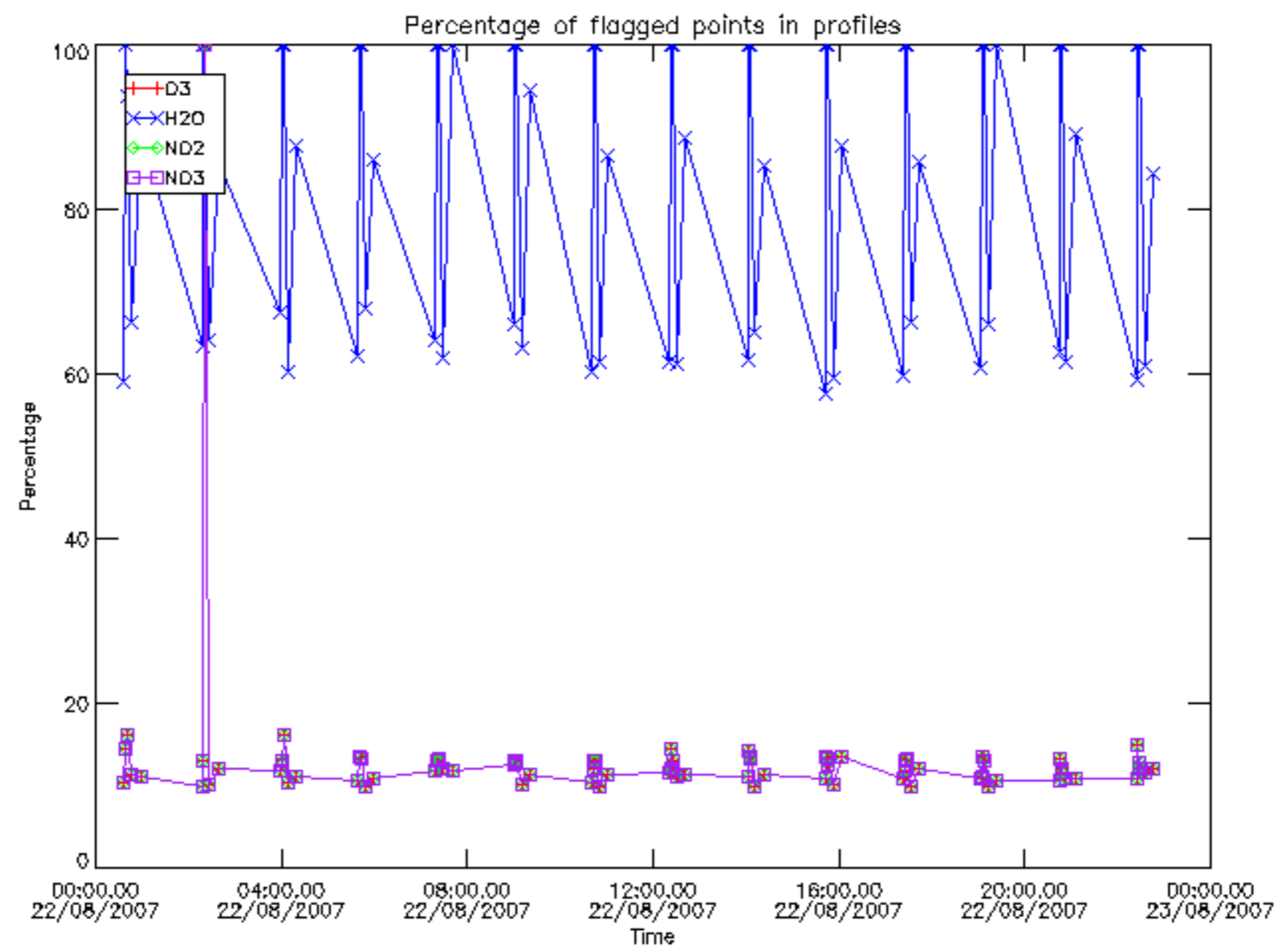




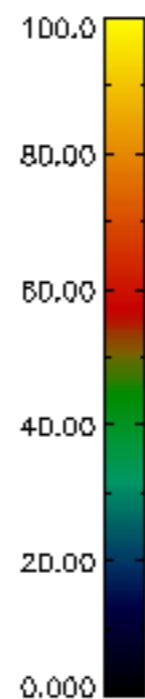
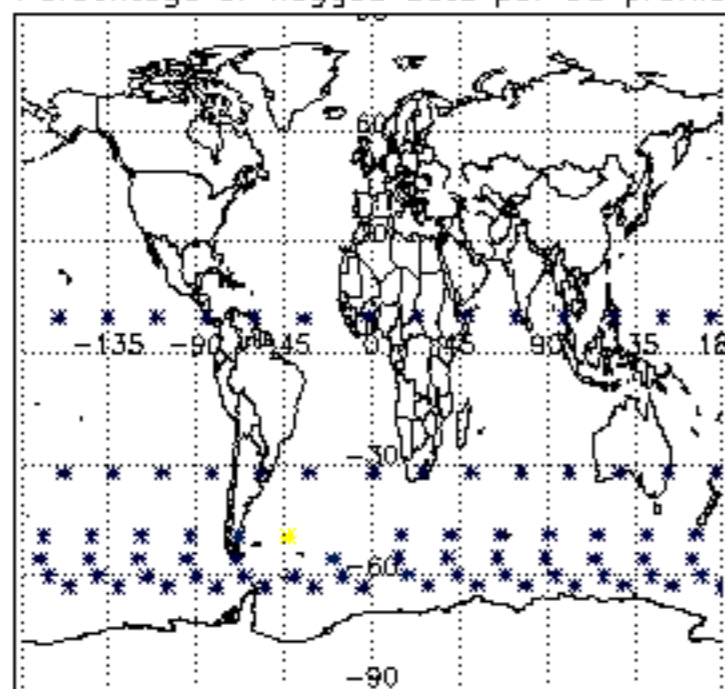




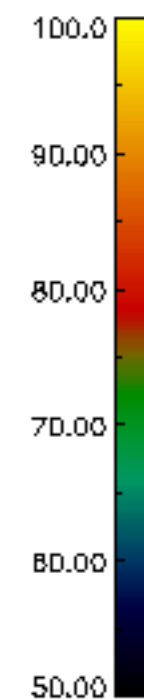
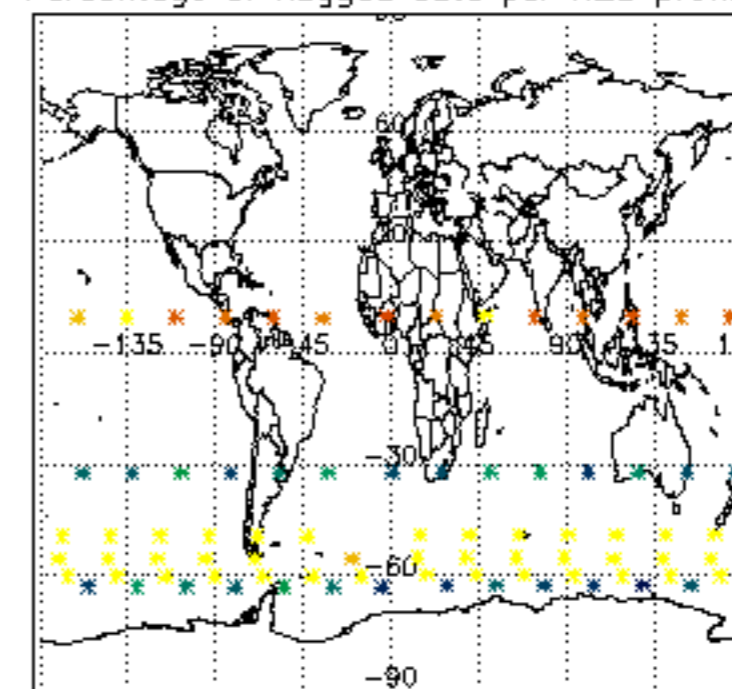




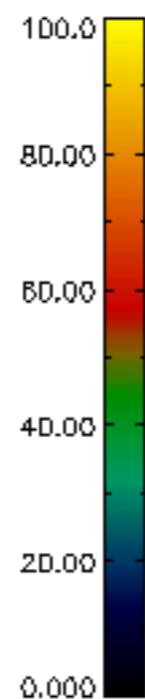
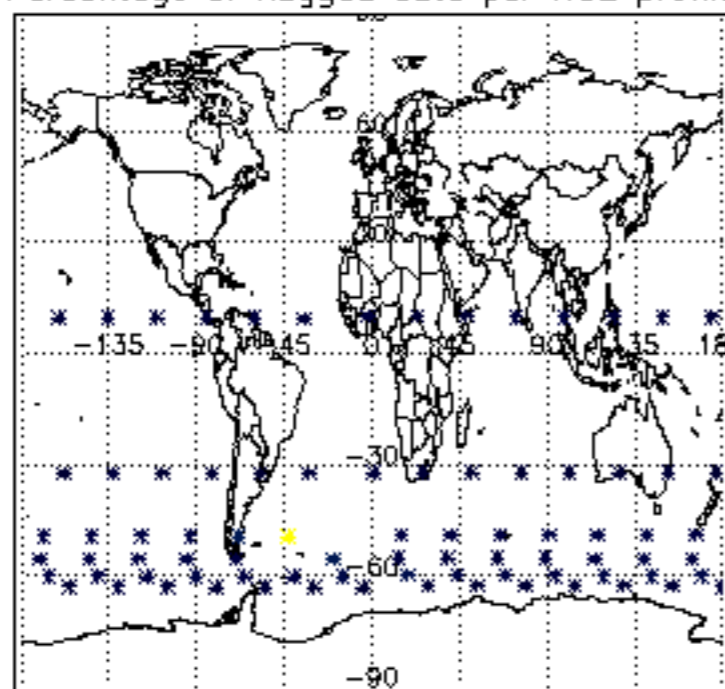
Percentage of flagged data per D3 profile



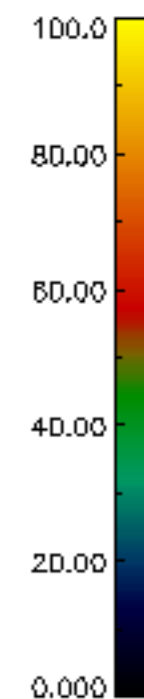
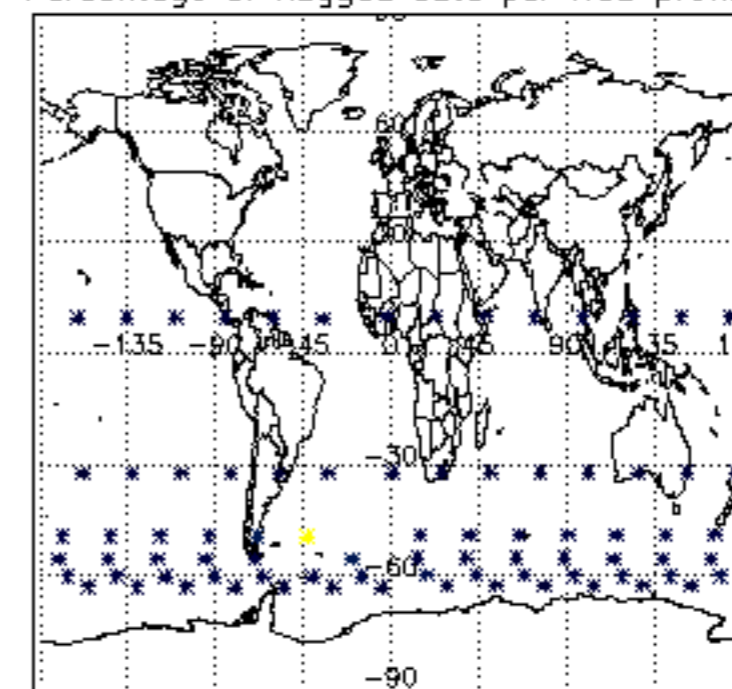
Percentage of flagged data per H2O profile

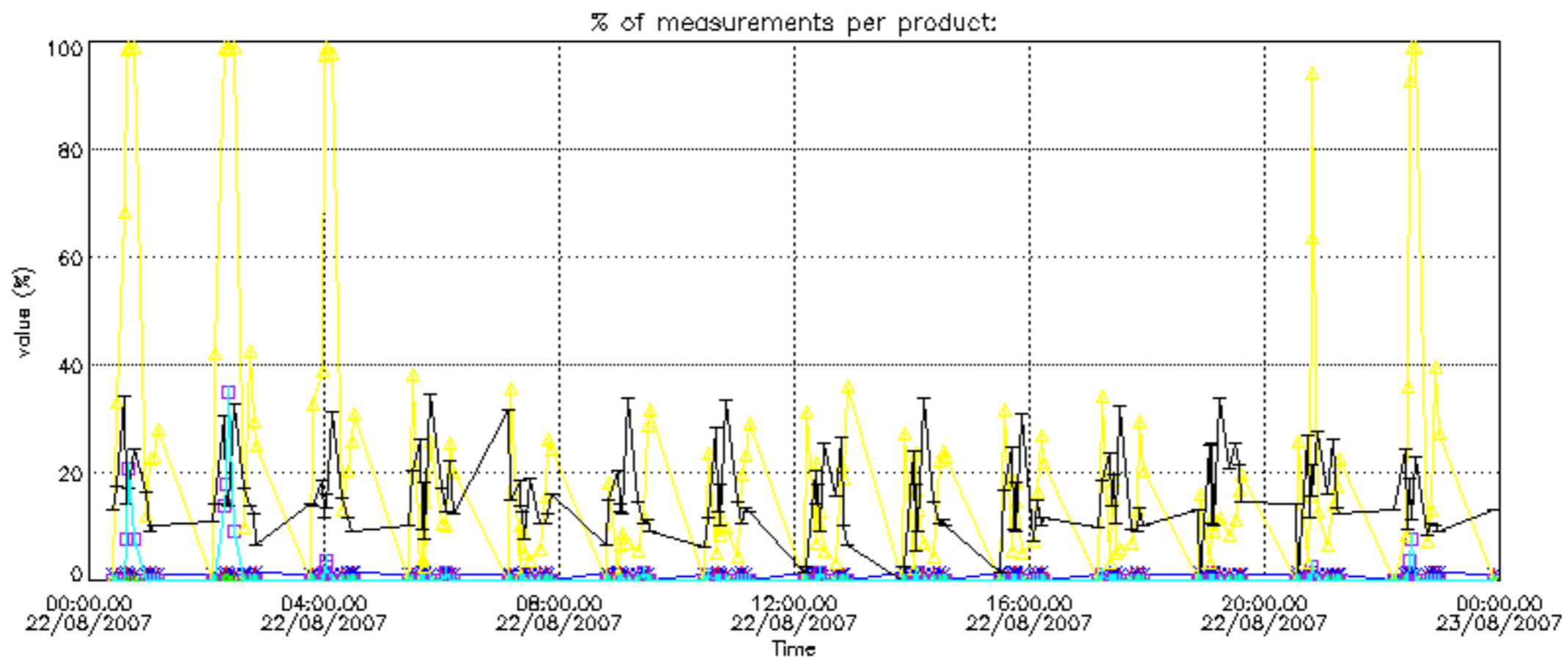


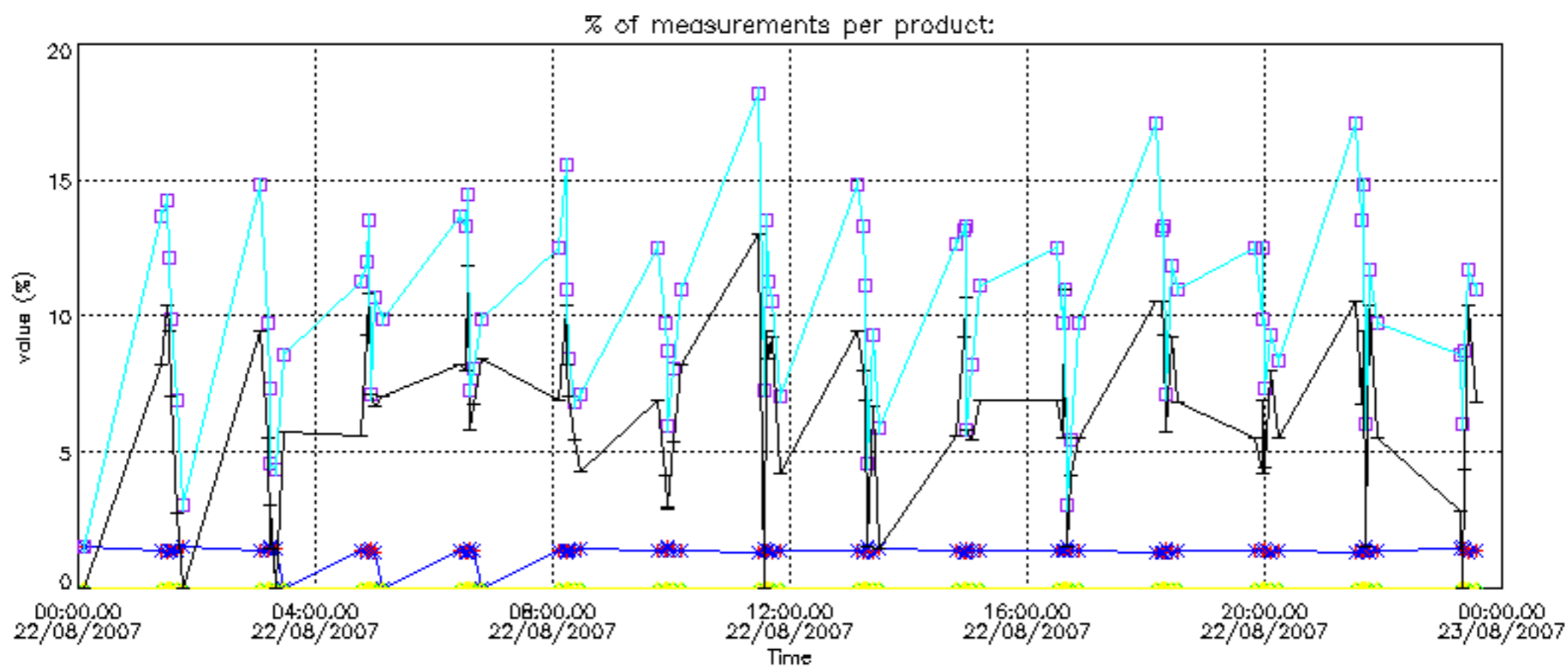
Percentage of flagged data per NO2 profile



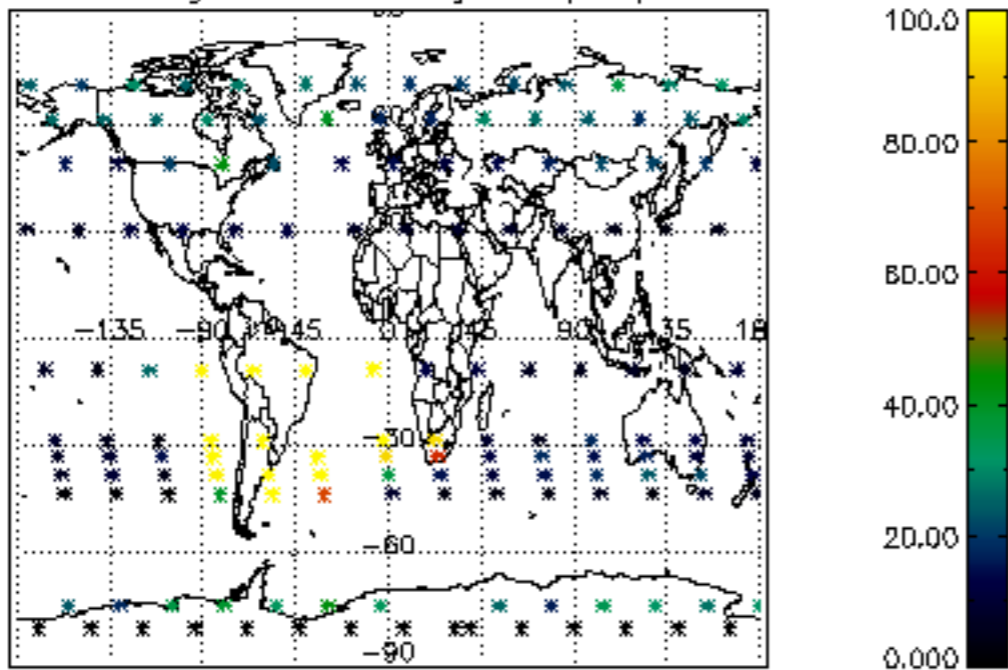
Percentage of flagged data per NO3 profile



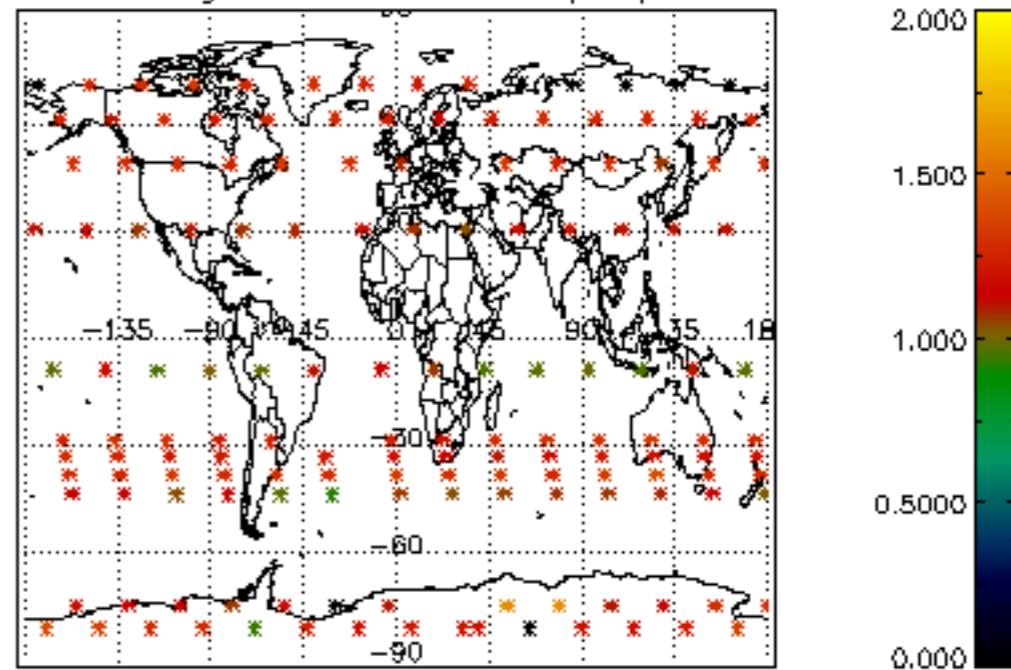




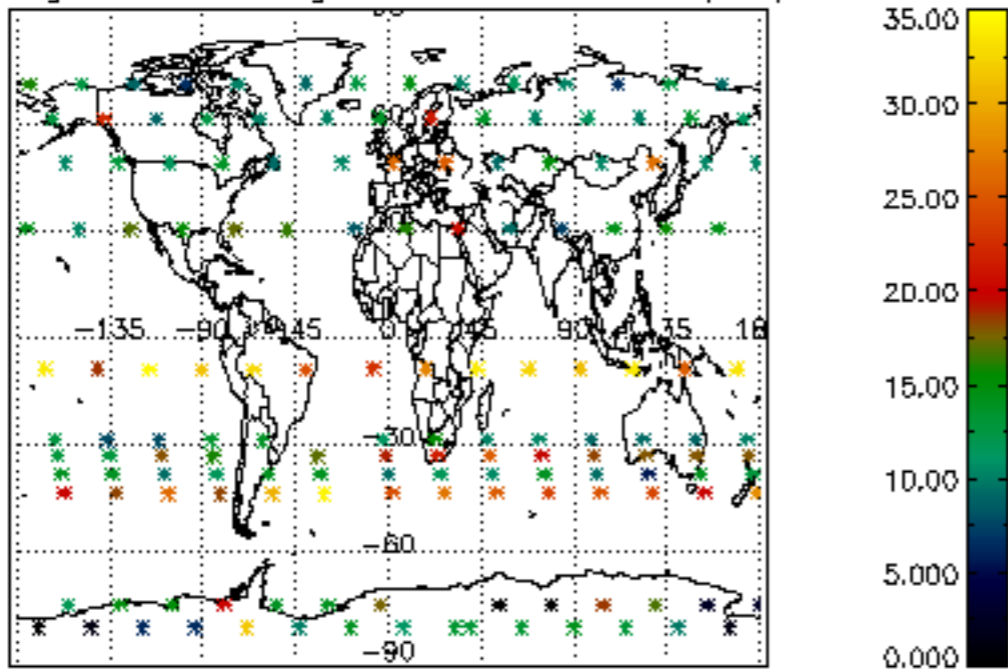
Percentage of cosmic ray hits per profile



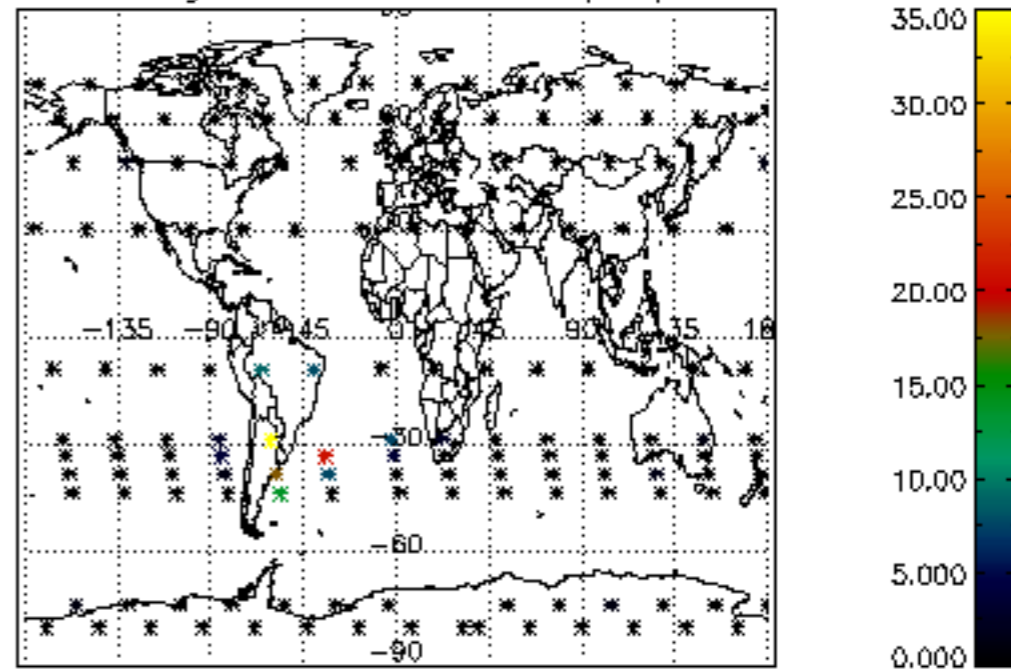
Percentage of datation errors per profile



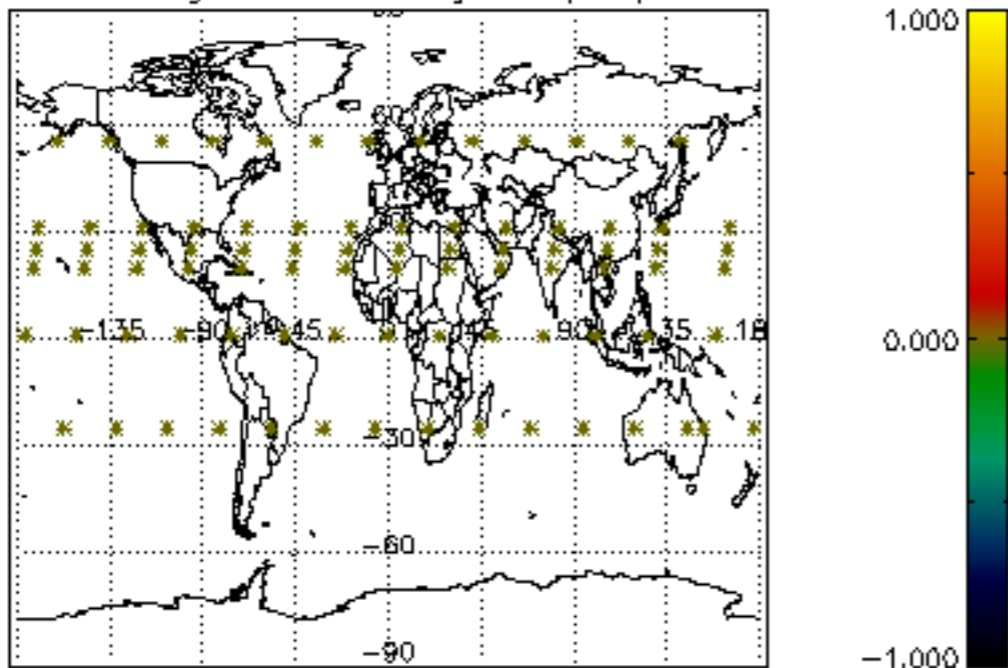
Percentage of star falling outside central band per profile



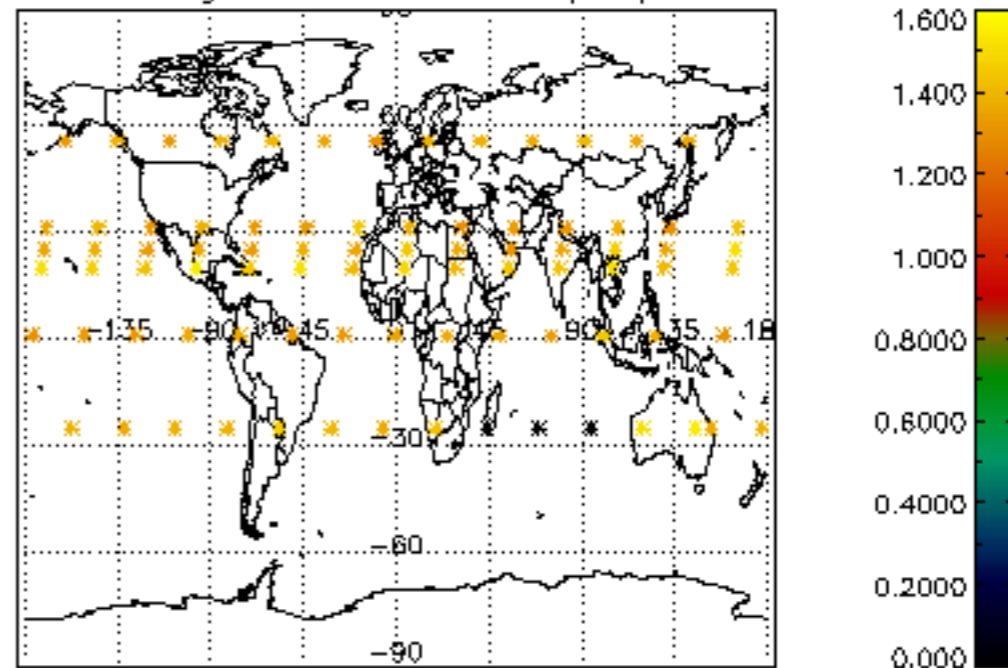
Percentage of saturation errors per profile



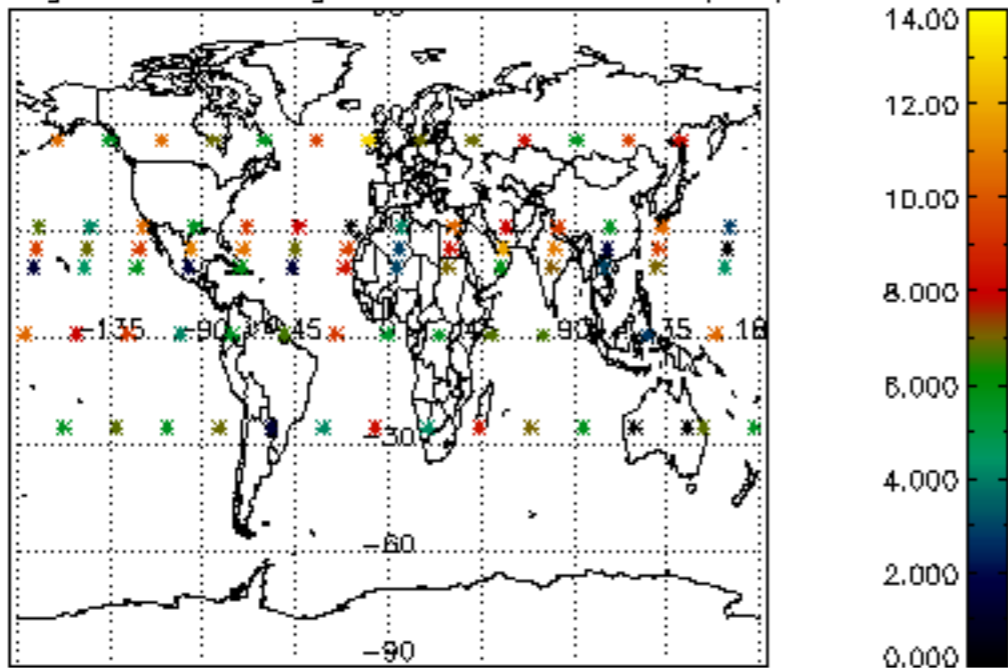
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

