

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	24APR2013 13:52:54
Data source version	GOMOS/6.01
Start time of products	21-05-2011 (21MAY2011 00:00:00)
Stop time of products	22-05-2011 (22MAY2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	295
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

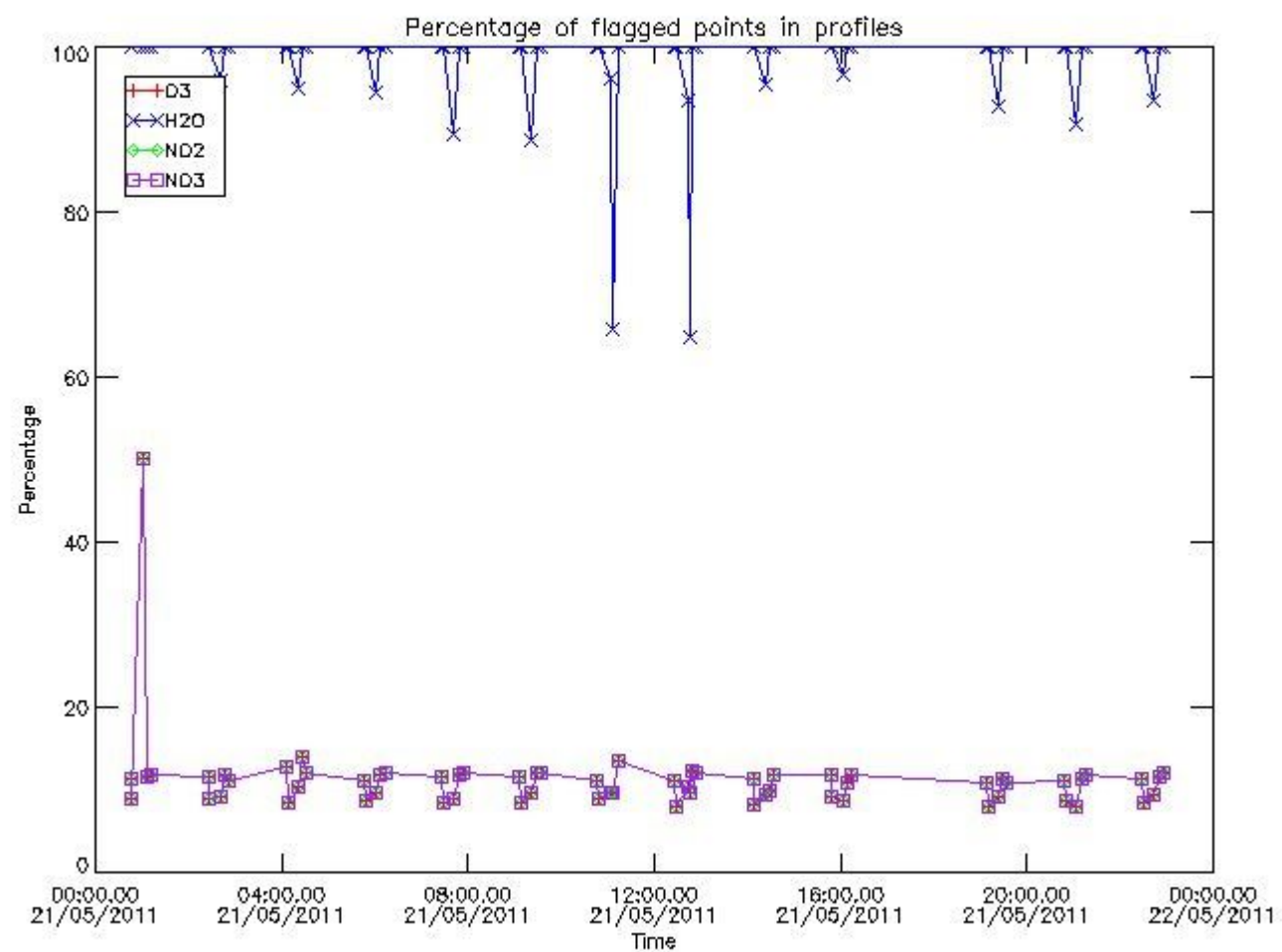
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110521_000521_000000423102_00361_48220_0457.N1	21-MAY-2011 00:05:21	Bright	41.500	67	5Alp CrB	2.2210	11000.	83	48220	No
2	GOM_NL__2PRFIN20110521_000904_000000493102_00361_48220_0458.N1	21-MAY-2011 00:09:04	Bright	49.000	133	40Zet Her	2.8070	6000.0	98	48220	No
3	GOM_NL__2PRFIN20110521_001614_000000423102_00361_48220_0459.N1	21-MAY-2011 00:16:14	Bright	41.500	119	14Eta Dra	2.7270	4700.0	83	48220	No
4	GOM_NL__2PRFIN20110521_001801_000000573102_00361_48220_0460.N1	21-MAY-2011 00:18:01	Bright	56.500	69	33Gam Dra	2.2310	3800.0	113	48220	No
5	GOM_NL__2PRFIN20110521_002704_000000453102_00361_48220_0461.N1	21-MAY-2011 00:27:04	Bright	45.000	89	5Alp Cep	2.4510	8000.0	90	48220	No
6	GOM_NL__2PRFIN20110521_003109_000000573102_00361_48220_0462.N1	21-MAY-2011 00:31:09	Bright	57.000	74	11Bet Cas	2.2680	6600.0	114	48220	No
7	GOM_NL__2PRFIN20110521_004040_000000483102_00361_48220_0463.N1	21-MAY-2011 00:40:40	Twilight	47.500	58	21Alp And	2.0730	11000.	95	48220	No
8	GOM_NL__2PRFIN20110521_004501_000000453102_00361_48220_0464.N1	21-MAY-2011 00:45:01	Dark	45.000	140	88Gam Peg	2.8340	26000.	90	48220	No
9	GOM_NL__2PRFIN20110521_004700_000000573102_00361_48220_0465.N1	21-MAY-2011 00:47:00	Dark	56.500	90	54Alp Peg	2.4870	11000.	113	48220	No
10	GOM_NL__2PRFIN20110521_010059_000000543102_00361_48220_0466.N1	21-MAY-2011 01:00:59	Dark	53.500	18	24Alp PsA	1.1660	9700.0	107	48220	No
11	GOM_NL__2PRFIN20110521_010641_000000453102_00362_48221_0492.N1	21-MAY-2011 01:06:41	Dark	44.500	31	Alp Gru	1.7340	15200.	89	48221	No
12	GOM_NL__2PRFIN20110521_011206_000000443102_00362_48221_0493.N1	21-MAY-2011 01:12:06	Dark	43.500	45	Alp Pav	1.9400	26000.	87	48221	No
13	GOM_NL__2PRFIN20110521_012005_000000453102_00362_48221_0494.N1	21-MAY-2011 01:20:05	Straylight	44.500	147	Alp Ara	2.8770	26000.	89	48221	No
14	GOM_NL__2PRFIN20110521_012141_000000513102_00362_48221_0495.N1	21-MAY-2011 01:21:41	Straylight	51.000	40	The Sco	1.8590	7100.0	102	48221	No
15	GOM_NL__2PRFIN20110521_012332_000000523102_00362_48221_0496.N1	21-MAY-2011 01:23:32	Straylight	51.500	25	35Lam Sco	1.6200	28000.	103	48221	No
16	GOM_NL__2PRFIN20110521_012538_000000553102_00362_48221_0497.N1	21-MAY-2011 01:25:38	Twilight	55.000	75	26Eps Sco	2.2910	4250.0	110	48221	No
17	GOM_NL__2PRFIN20110521_012832_000000593102_00362_48221_0498.N1	21-MAY-2011 01:28:32	Twilight	58.500	16	21Alp Sco	1.0200	3000.0	117	48221	No
18	GOM_NL__2PRFIN20110521_013008_000000453102_00362_48221_0499.N1	21-MAY-2011 01:30:08	Bright	45.000	80	7Del Sco	2.3160	30000.	90	48221	No
19	GOM_NL__2PRFIN20110521_013154_000000563102_00362_48221_0500.N1	21-MAY-2011 01:31:54	Bright	55.500	86	35Eta Oph	2.4300	10200.	111	48221	No
20	GOM_NL__2PRFIN20110521_013358_000000493102_00362_48221_0501.N1	21-MAY-2011 01:33:58	Bright	49.000	98	13Zet Oph	2.5710	30000.	98	48221	No
21	GOM_NL__2PRFIN20110521_013619_000000463102_00362_48221_0502.N1	21-MAY-2011 01:36:19	Bright	46.000	120	1Del Oph	2.7340	3200.0	92	48221	No
22	GOM_NL__2PRFIN20110521_013924_000000413102_00362_48221_0503.N1	21-MAY-2011 01:39:24	Bright	41.000	102	24Alp Ser	2.6000	4250.0	82	48221	No
23	GOM_NL__2PRFIN20110521_014535_000000413102_00362_48221_0504.N1	21-MAY-2011 01:45:35	Bright	41.000	67	5Alp CrB	2.2210	11000.	82	48221	No
24	GOM_NL__2PRFIN20110521_014917_000000513102_00362_48221_0505.N1	21-MAY-2011 01:49:17	Bright	51.000	133	40Zet Her	2.8070	6000.0	102	48221	No
25	GOM_NL__2PRFIN20110521_015627_000000373102_00362_48221_0506.N1	21-MAY-2011 01:56:27	Bright	37.000	119	14Eta Dra	2.7270	4700.0	74	48221	No
26	GOM_NL__2PRFIN20110521_015814_000000553102_00362_48221_0507.N1	21-MAY-2011 01:58:14	Bright	55.000	69	33Gam Dra	2.2310	3800.0	110	48221	No
27	GOM_NL__2PRFIN20110521_020718_000000453102_00362_48221_0508.N1	21-MAY-2011 02:07:18	Bright	44.500	89	5Alp Cep	2.4510	8000.0	89	48221	No
28	GOM_NL__2PRFIN20110521_021123_000000373102_00362_48221_0509.N1	21-MAY-2011 02:11:23	Bright	37.000	74	11Bet Cas	2.2680	6600.0	74	48221	No
29	GOM_NL__2PRFIN20110521_022054_000000483102_00362_48221_0510.N1	21-MAY-2011 02:20:54	Twilight	47.500	58	21Alp And	2.0730	11000.	95	48221	No
30	GOM_NL__2PRFIN20110521_022515_000000453102_00362_48221_0511.N1	21-MAY-2011 02:25:15	Dark	44.500	140	88Gam Peg	2.8340	26000.	89	48221	No
31	GOM_NL__2PRFIN20110521_022714_000000583102_00362_48221_0512.N1	21-MAY-2011 02:27:14	Dark	57.500	90	54Alp Peg	2.4870	11000.	115	48221	No
32	GOM_NL__2PRFIN20110521_024113_000000623102_00362_48221_0513.N1	21-MAY-2011 02:41:13	Dark	61.500	18	24Alp PsA	1.1660	9700.0	123	48221	No
33	GOM_NL__2PRFIN20110521_024656_000000443102_00363_48222_0524.N1	21-MAY-2011 02:46:56	Dark	43.500	31	Alp Gru	1.7340	15200.	87	48222	No
34	GOM_NL__2PRFIN20110521_025221_000000463102_00363_48222_0525.N1	21-MAY-2011 02:52:21	Dark	45.500	45	Alp Pav	1.9400	26000.	91	48222	No
35	GOM_NL__2PRFIN20110521_030020_000000423102_00363_48222_0526.N1	21-MAY-2011 03:00:20	Straylight	41.500	147	Alp Ara	2.8770	26000.	83	48222	No
36	GOM_NL__2PRFIN20110521_030156_000000503102_00363_48222_0527.N1	21-MAY-2011 03:01:56	Straylight	50.000	40	The Sco	1.8590	7100.0	100	48222	No
37	GOM_NL__2PRFIN20110521_030346_000000523102_00363_48222_0528.N1	21-MAY-2011 03:03:46	Straylight	51.500	25	35Lam Sco	1.6200	28000.	103	48222	No
38	GOM_NL__2PRFIN20110521_030552_000000553102_00363_48222_0529.N1	21-MAY-2011 03:05:52	Twilight	54.500	75	26Eps Sco	2.2910	4250.0	109	48222	No
39	GOM_NL__2PRFIN20110521_030846_000000583102_00363_48222_0530.N1	21-MAY-2011 03:08:46	Twilight	57.500	16	21Alp Sco	1.0200	3000.0	115	48222	No
40	GOM_NL__2PRFIN20110521_031023_000000483102_00363_48222_0531.N1	21-MAY-2011 03:10:23	Bright	47.500	80	7Del Sco	2.3160	30000.	95	48222	No
41	GOM_NL__2PRFIN20110521_031208_000000553102_00363_48222_0532.N1	21-MAY-2011 03:12:08	Bright	55.000	86	35Eta Oph	2.4300	10200.	110	48222	No
42	GOM_NL__2PRFIN20110521_031412_000000473102_00363_48222_0533.N1	21-MAY-2011 03:14:12	Bright	47.000	98	13Zet Oph	2.5710	30000.	94	48222	No

279	GOM_NL__2PRFIN20110521_225517_000000433102_00375_48234_1351.N1	21-MAY-2011 22:55:17	Dark	42.500	45	Alp Pav	1.9400	26000.	85	48234	No
280	GOM_NL__2PRFIN20110521_230314_000000423102_00375_48234_1352.N1	21-MAY-2011 23:03:14	Straylight	41.500	147	Alp Ara	2.8770	26000.	83	48234	No
281	GOM_NL__2PRFIN20110521_230450_000000493102_00375_48234_1353.N1	21-MAY-2011 23:04:50	Straylight	49.000	40	The Sco	1.8590	7100.0	98	48234	No
282	GOM_NL__2PRFIN20110521_230641_000000523102_00375_48234_1354.N1	21-MAY-2011 23:06:41	Straylight	51.500	25	35Lam Sco	1.6200	28000.	103	48234	No
283	GOM_NL__2PRFIN20110521_230845_000000513102_00375_48234_1355.N1	21-MAY-2011 23:08:45	Twilight_stray	50.500	75	26Eps Sco	2.2910	4250.0	101	48234	No
284	GOM_NL__2PRFIN20110521_231137_000000553102_00375_48234_1356.N1	21-MAY-2011 23:11:37	Twilight_stray	54.500	16	21Alp Sco	1.0200	3000.0	109	48234	No
285	GOM_NL__2PRFIN20110521_231313_000000443102_00375_48234_1357.N1	21-MAY-2011 23:13:13	Bright	44.000	80	7Del Sco	2.3160	30000.	88	48234	No
286	GOM_NL__2PRFIN20110521_231457_000000533102_00375_48234_1358.N1	21-MAY-2011 23:14:57	Bright	53.000	86	35Eta Oph	2.4300	10200.	106	48234	No
287	GOM_NL__2PRFIN20110521_231659_000000493102_00375_48234_1359.N1	21-MAY-2011 23:16:59	Bright	48.500	98	13Zet Oph	2.5710	30000.	97	48234	No
288	GOM_NL__2PRFIN20110521_231919_000000453102_00375_48234_1360.N1	21-MAY-2011 23:19:19	Bright	44.500	120	1Del Oph	2.7340	3200.0	89	48234	No
289	GOM_NL__2PRFIN20110521_232224_000000413102_00375_48234_1361.N1	21-MAY-2011 23:22:24	Bright	40.500	102	24Alp Ser	2.6000	4250.0	81	48234	No
290	GOM_NL__2PRFIN20110521_232832_000000403102_00375_48234_1362.N1	21-MAY-2011 23:28:32	Bright	40.000	67	5Alp CrB	2.2210	11000.	80	48234	No
291	GOM_NL__2PRFIN20110521_233208_000000533102_00375_48234_1363.N1	21-MAY-2011 23:32:08	Bright	52.500	133	40Zet Her	2.8070	6000.0	105	48234	No
292	GOM_NL__2PRFIN20110521_233924_000000423102_00375_48234_1364.N1	21-MAY-2011 23:39:24	Bright	41.500	119	14Eta Dra	2.7270	4700.0	83	48234	No
293	GOM_NL__2PRFIN20110521_234103_000000473102_00375_48234_1365.N1	21-MAY-2011 23:41:03	Bright	47.000	69	33Gam Dra	2.2310	3800.0	94	48234	No
294	GOM_NL__2PRFIN20110521_235013_000000473102_00375_48234_1366.N1	21-MAY-2011 23:50:13	Bright	46.500	89	5Alp Cep	2.4510	8000.0	93	48234	No
295	GOM_NL__2PRFIN20110521_235423_000000383102_00375_48234_1367.N1	21-MAY-2011 23:54:23	Bright	38.000	74	11Bet Cas	2.2680	6600.0	76	48234	No

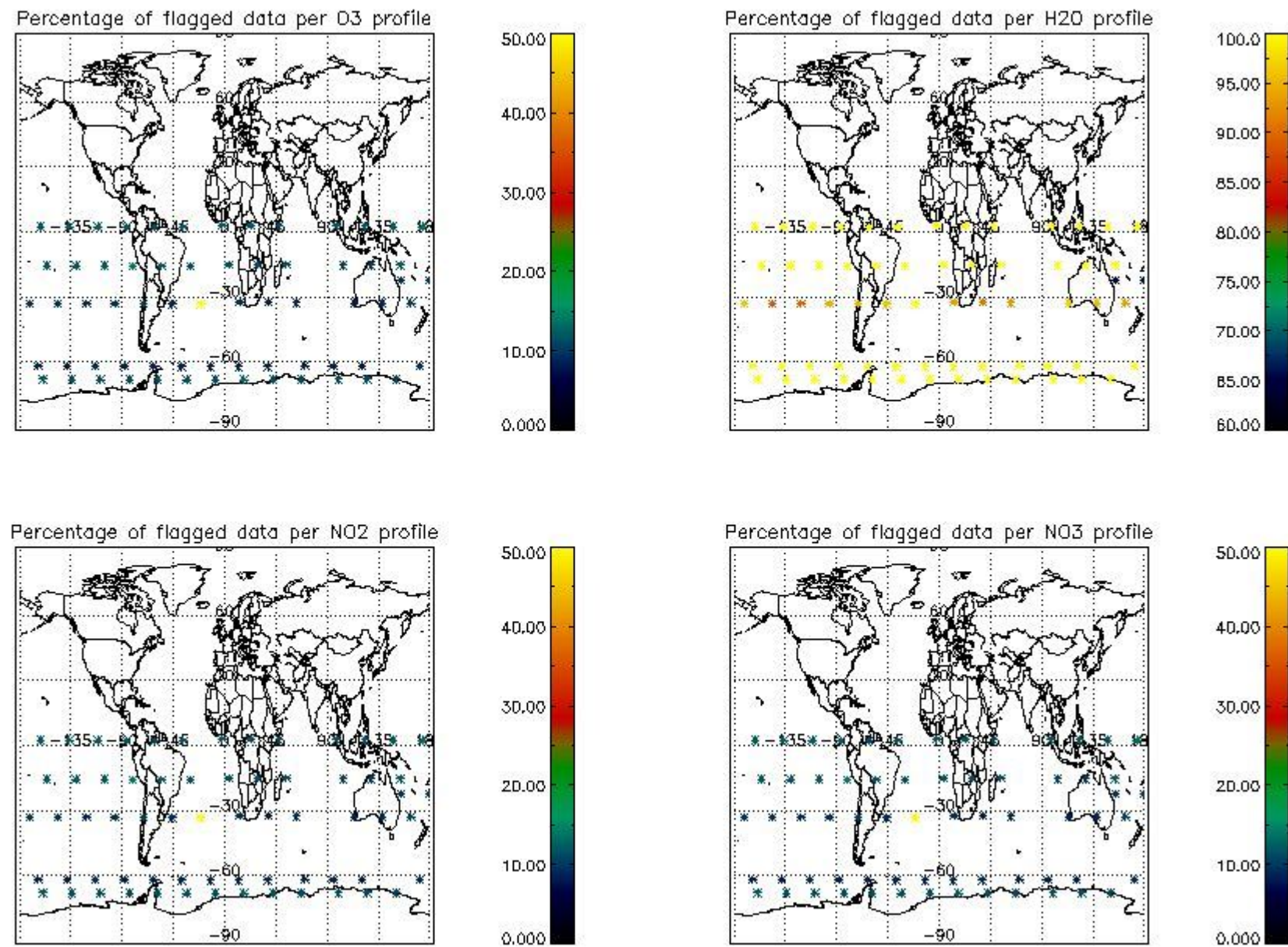
3. Quality information per product

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)

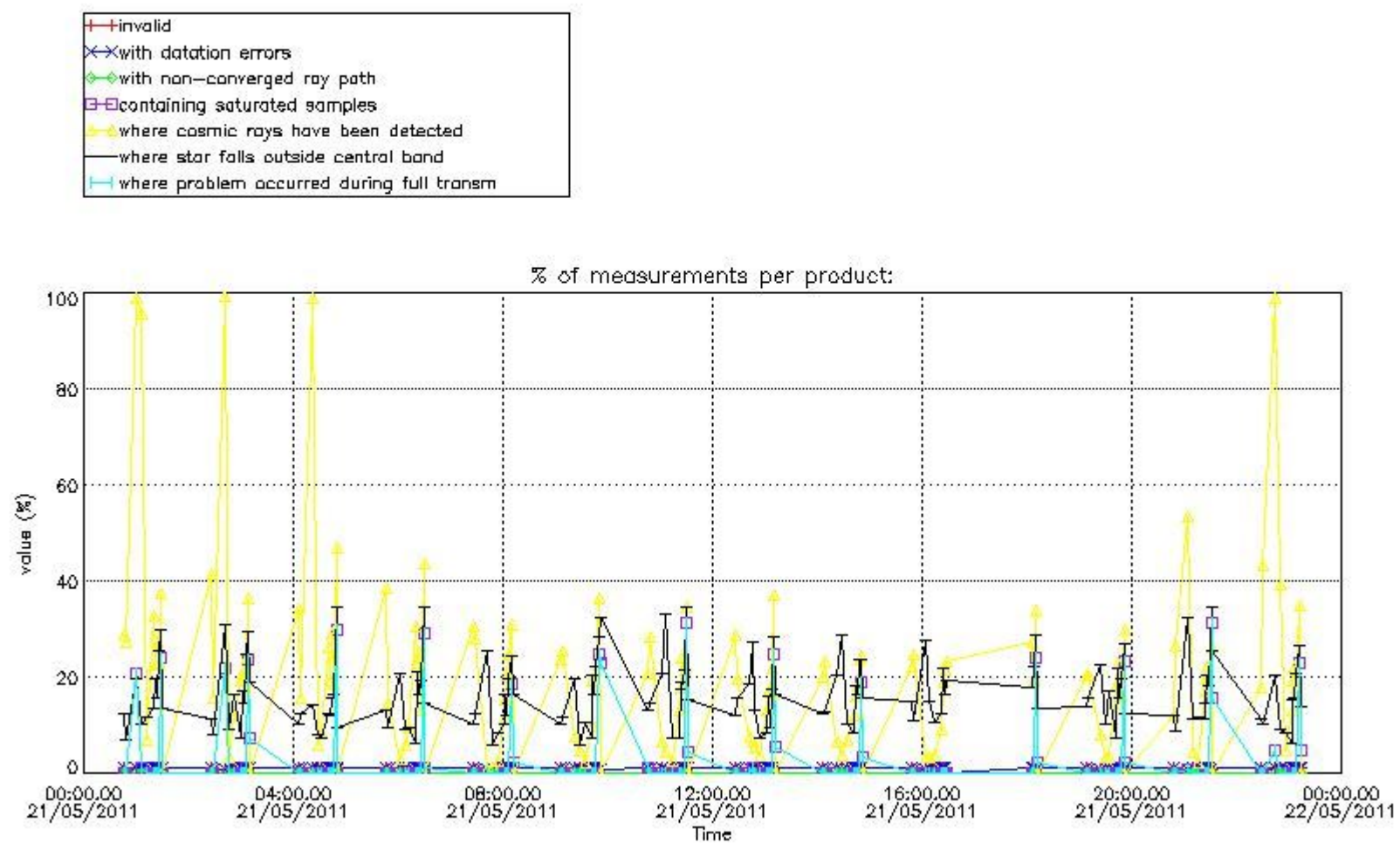


4. Level 1 quality information per product

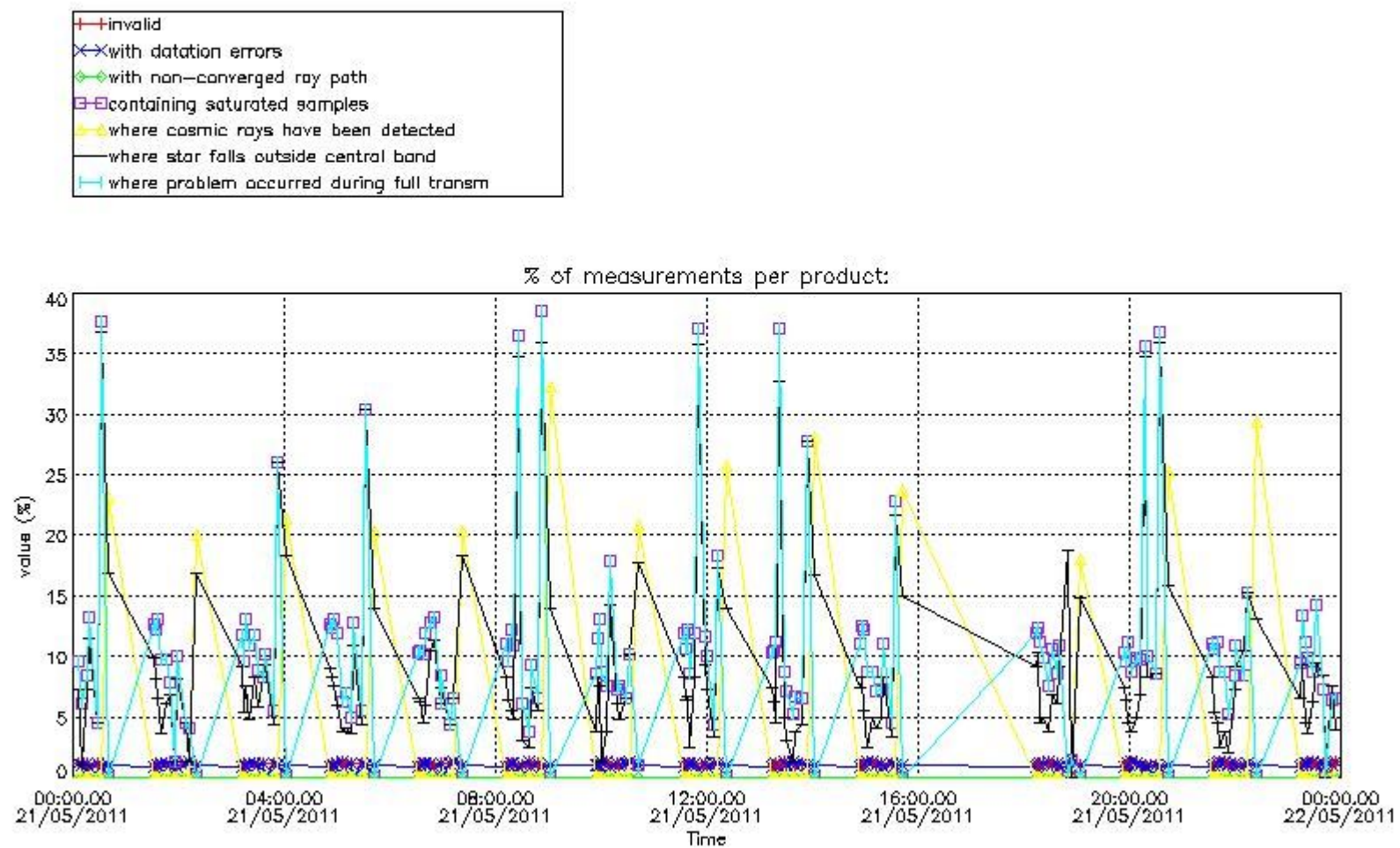
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

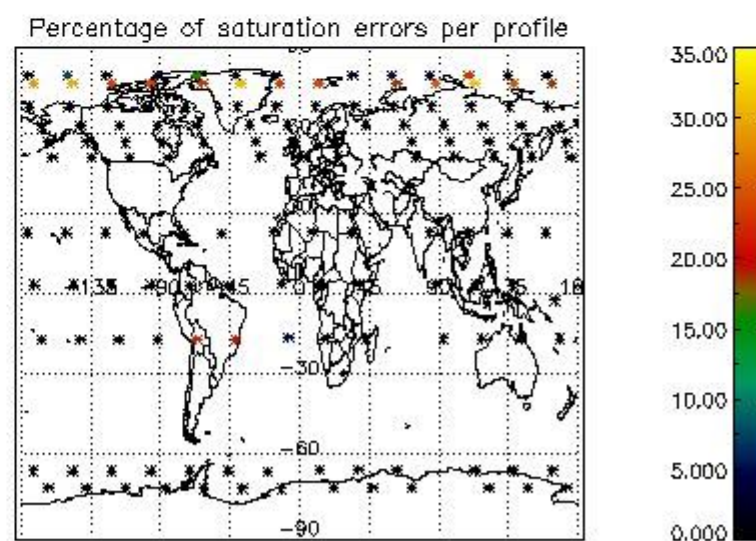
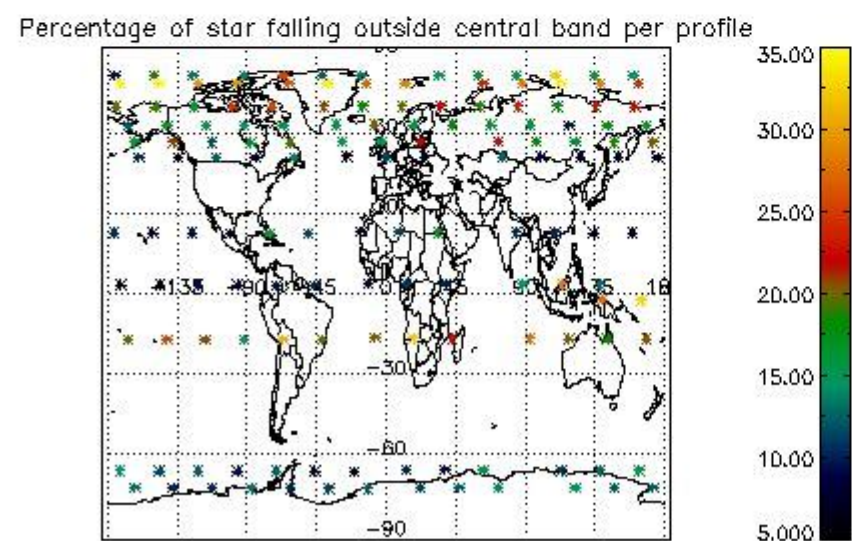
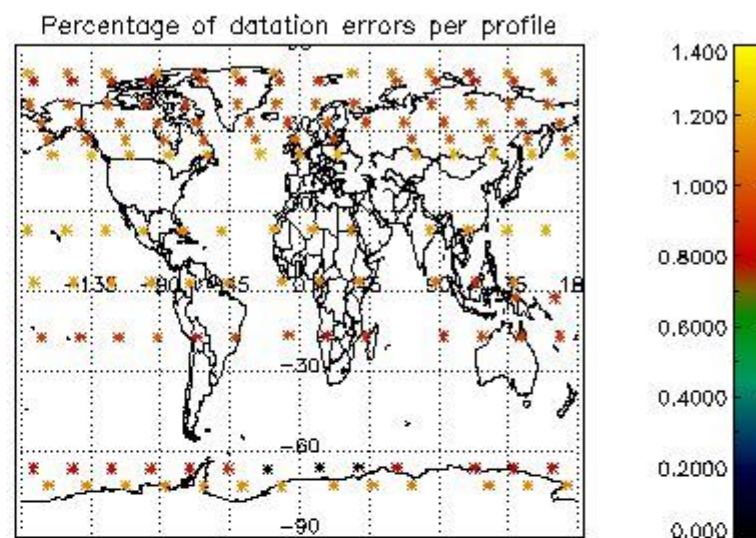
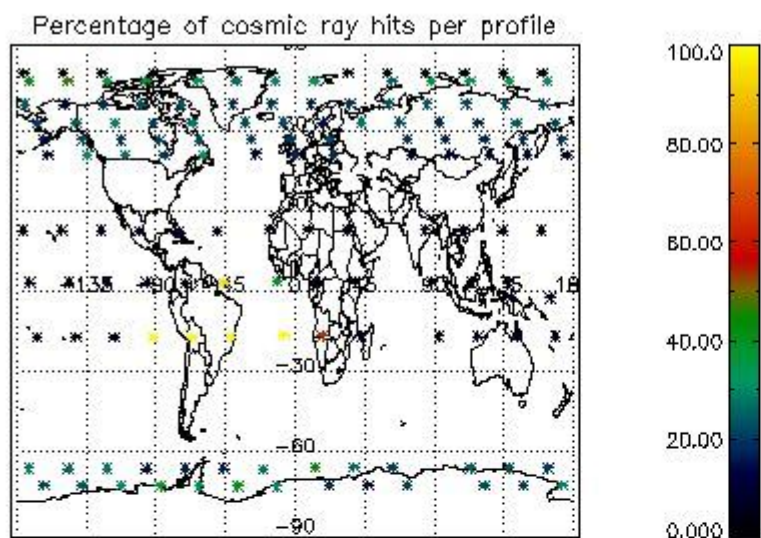


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

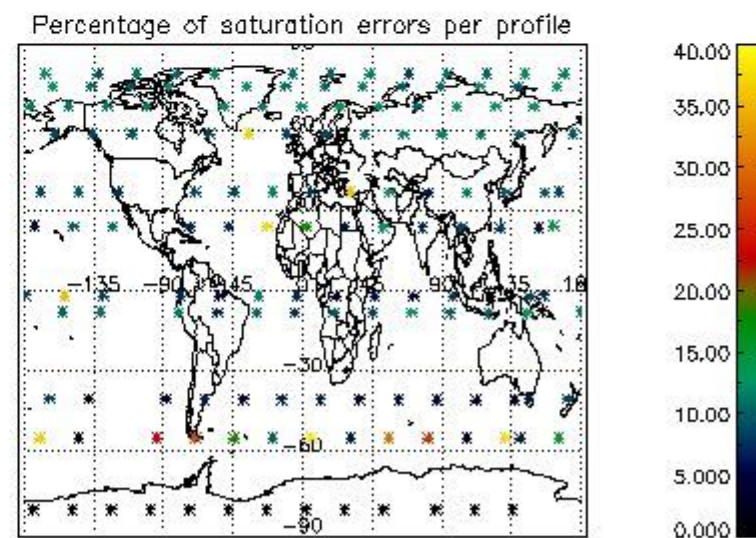
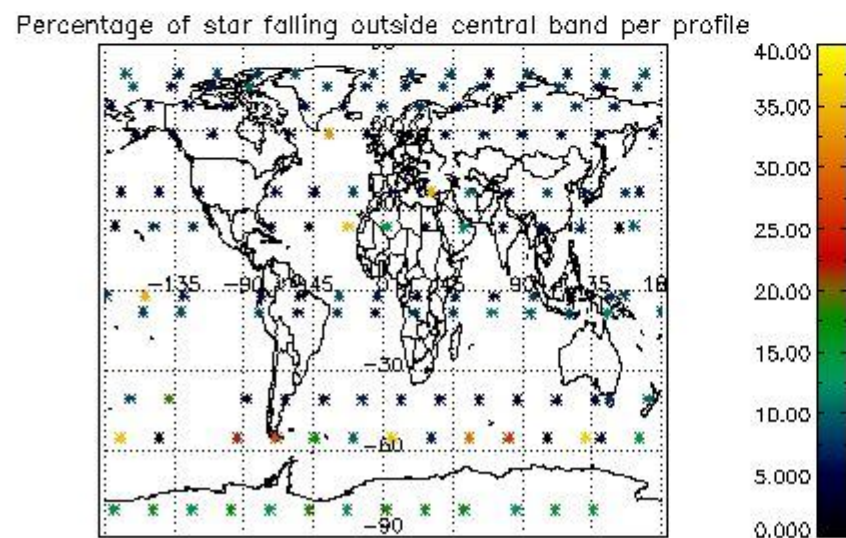
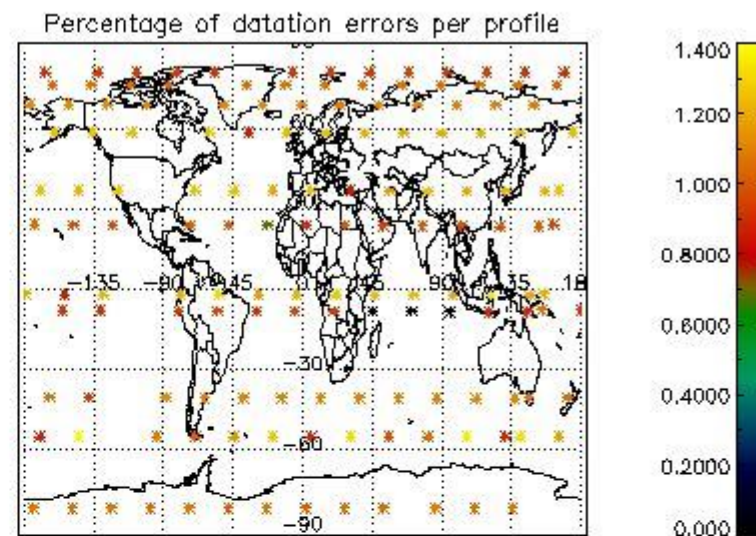
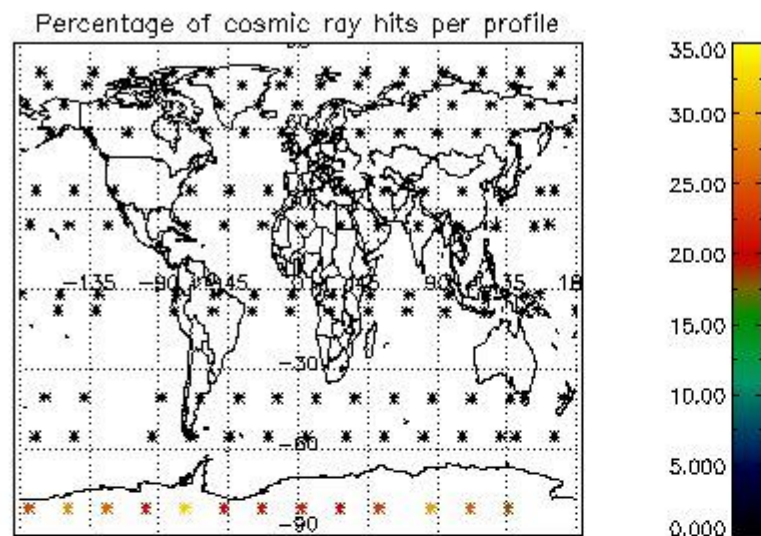


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

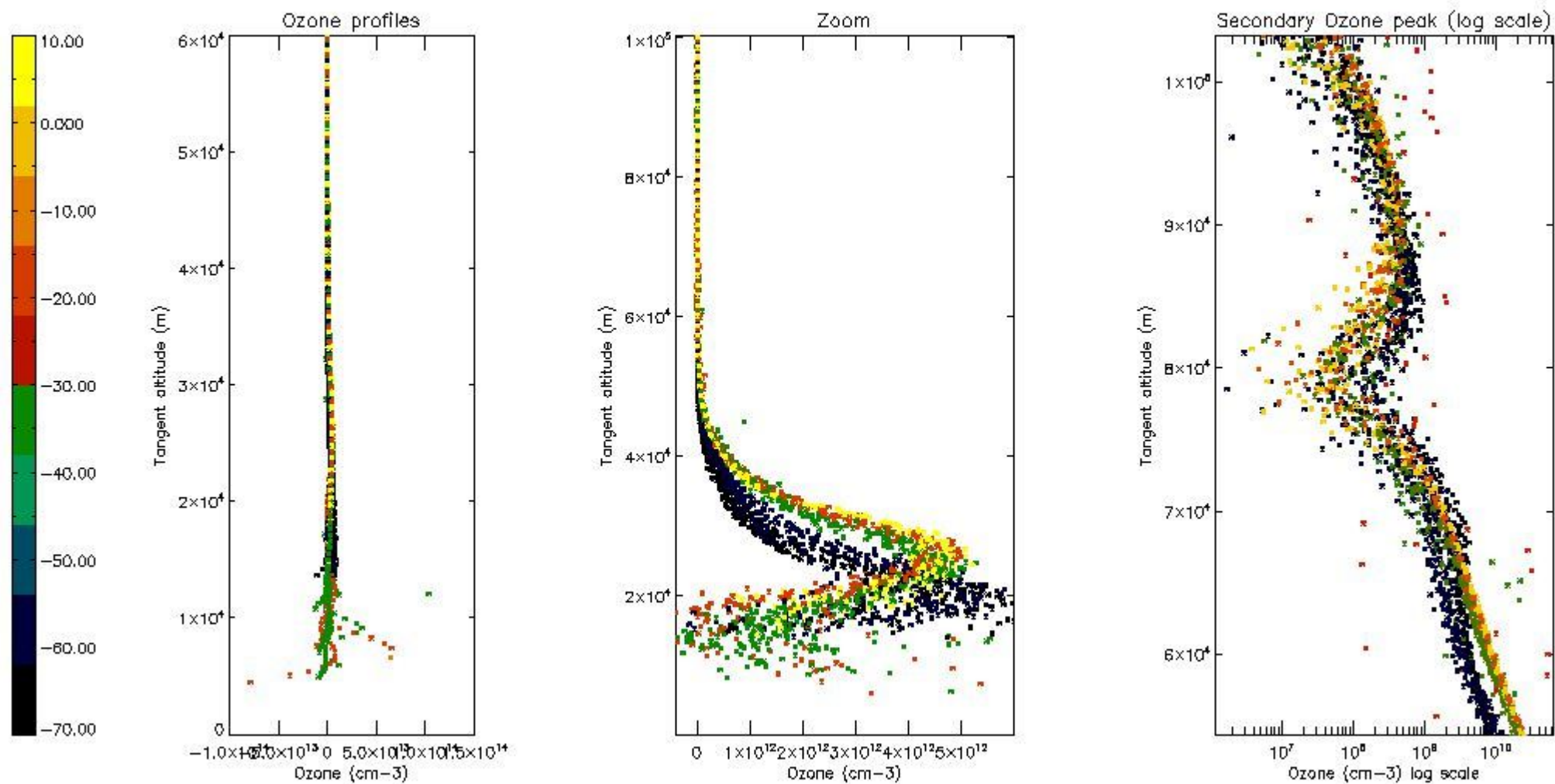
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	23
STD < 20	14

STD < 10	11
STD < 5	7

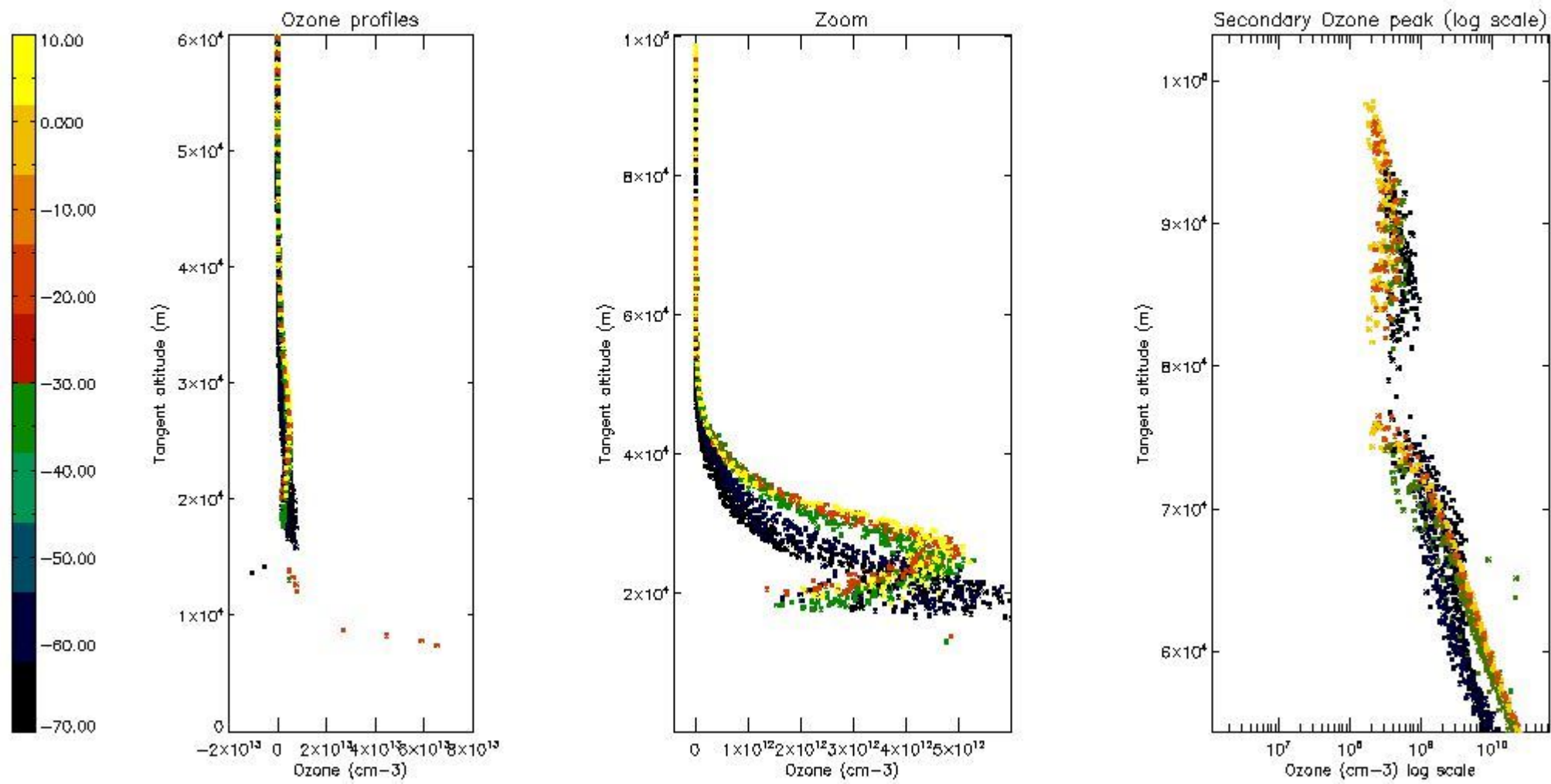
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



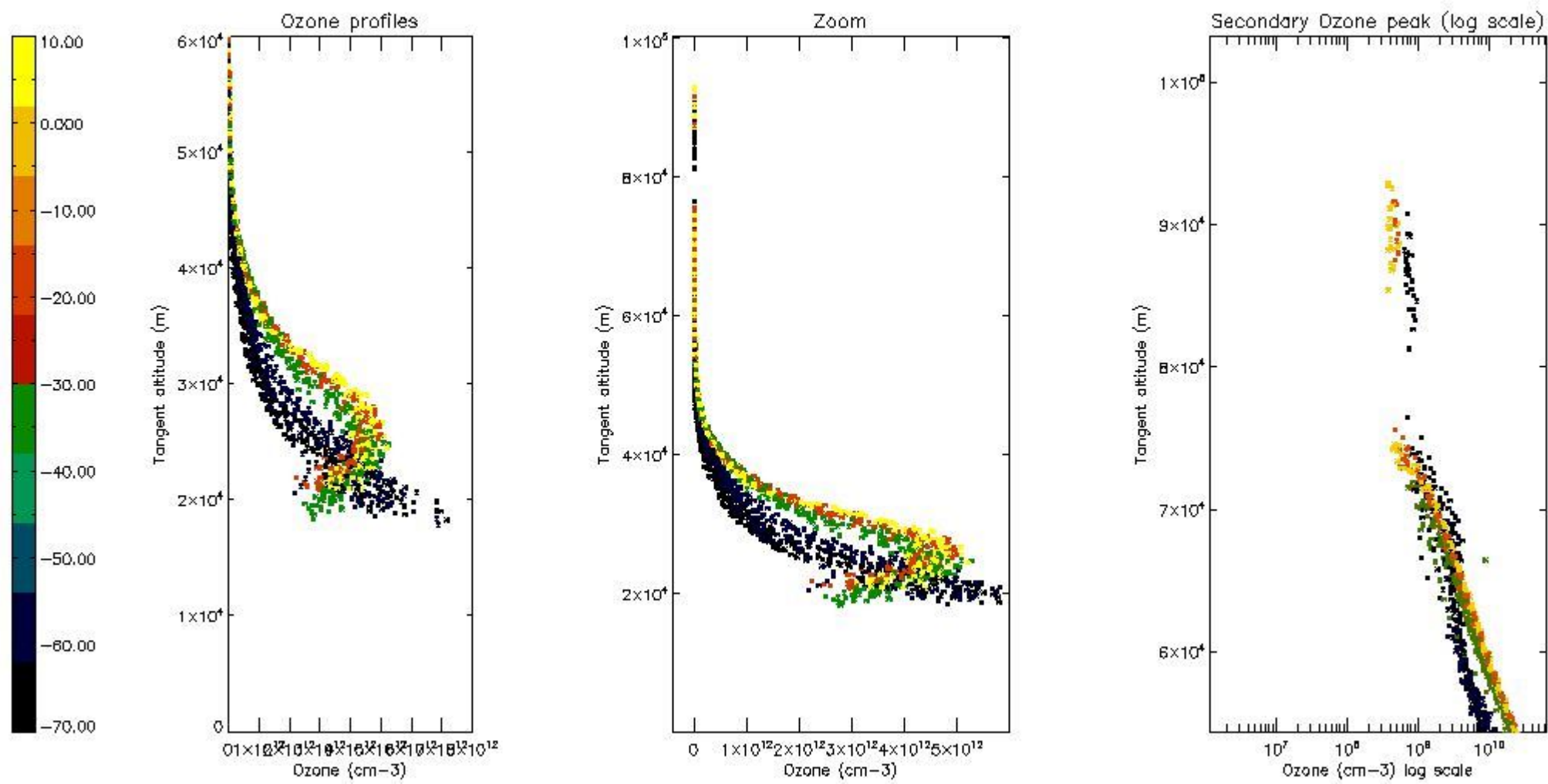
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



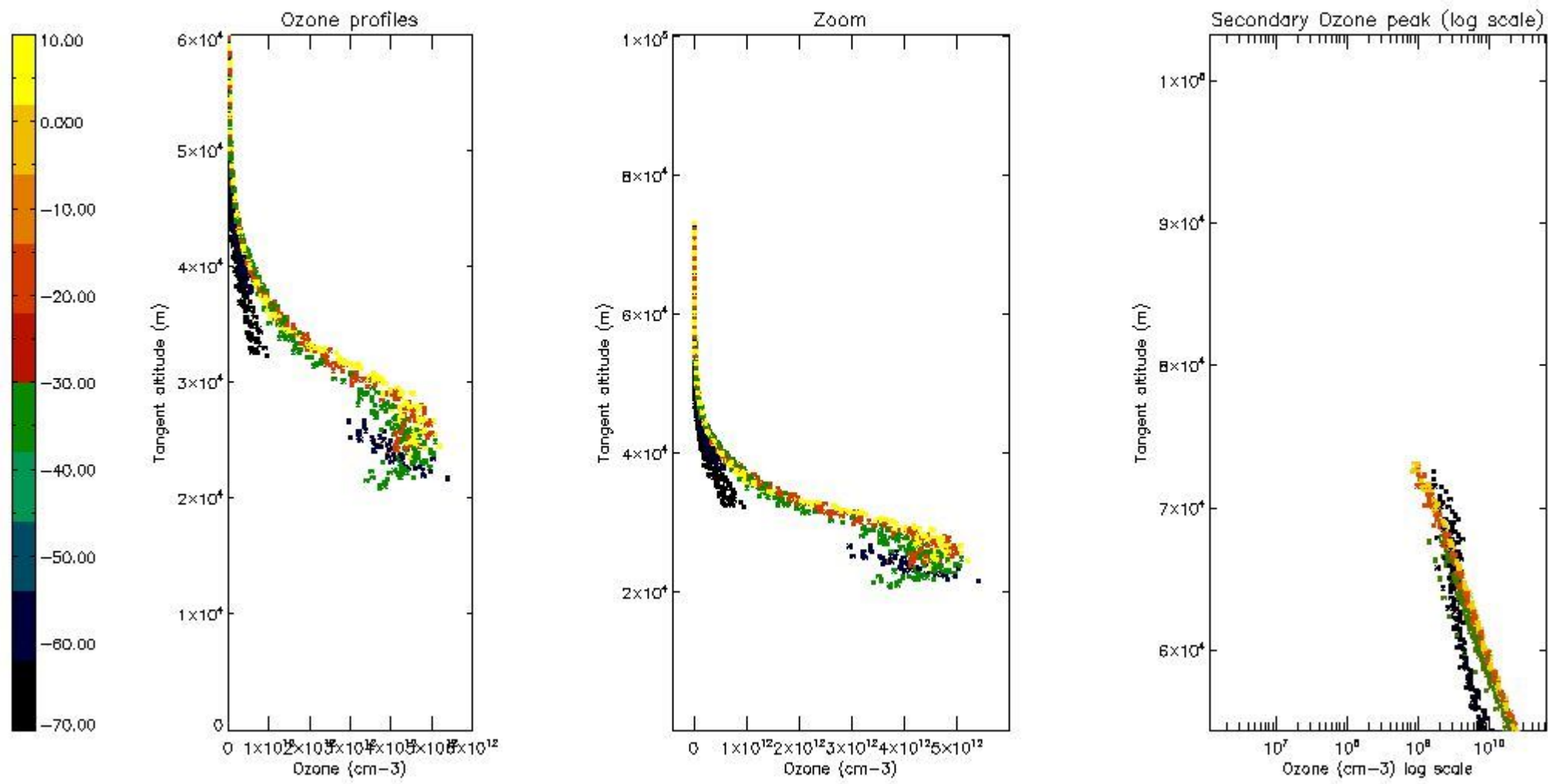
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



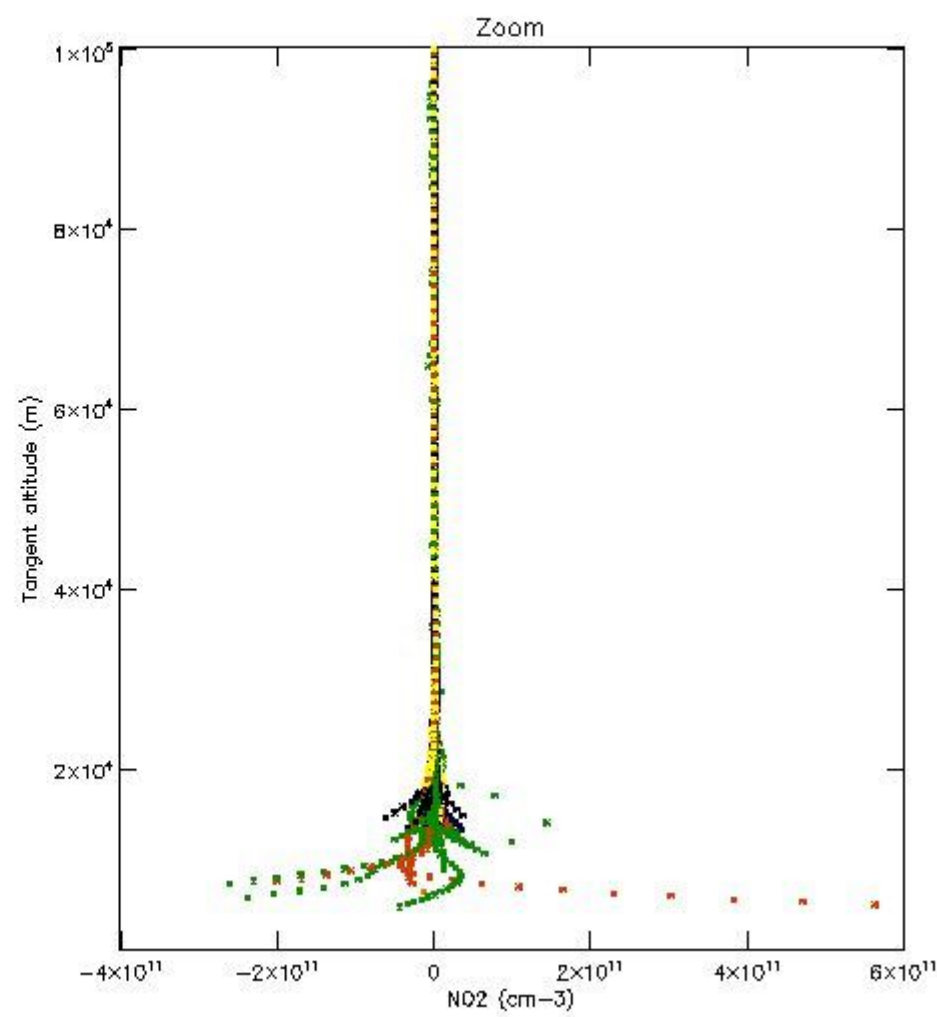
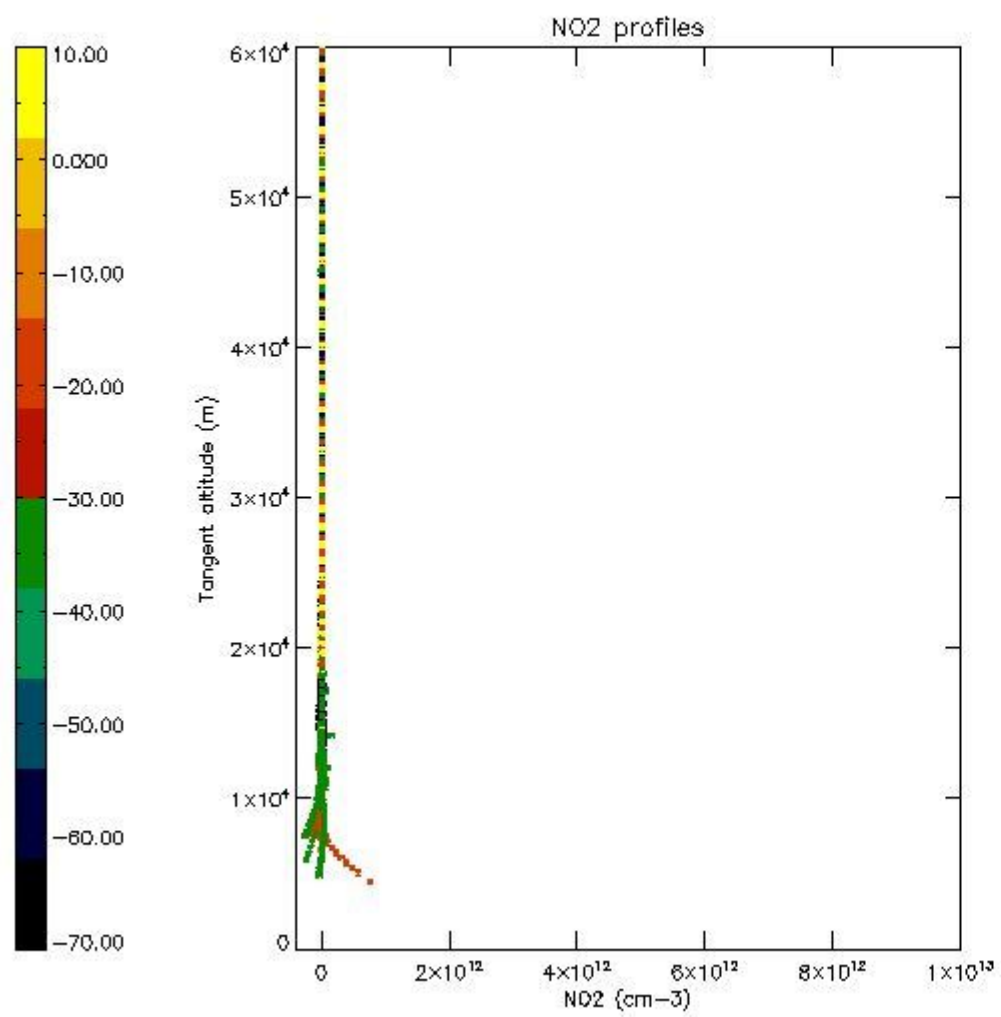
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



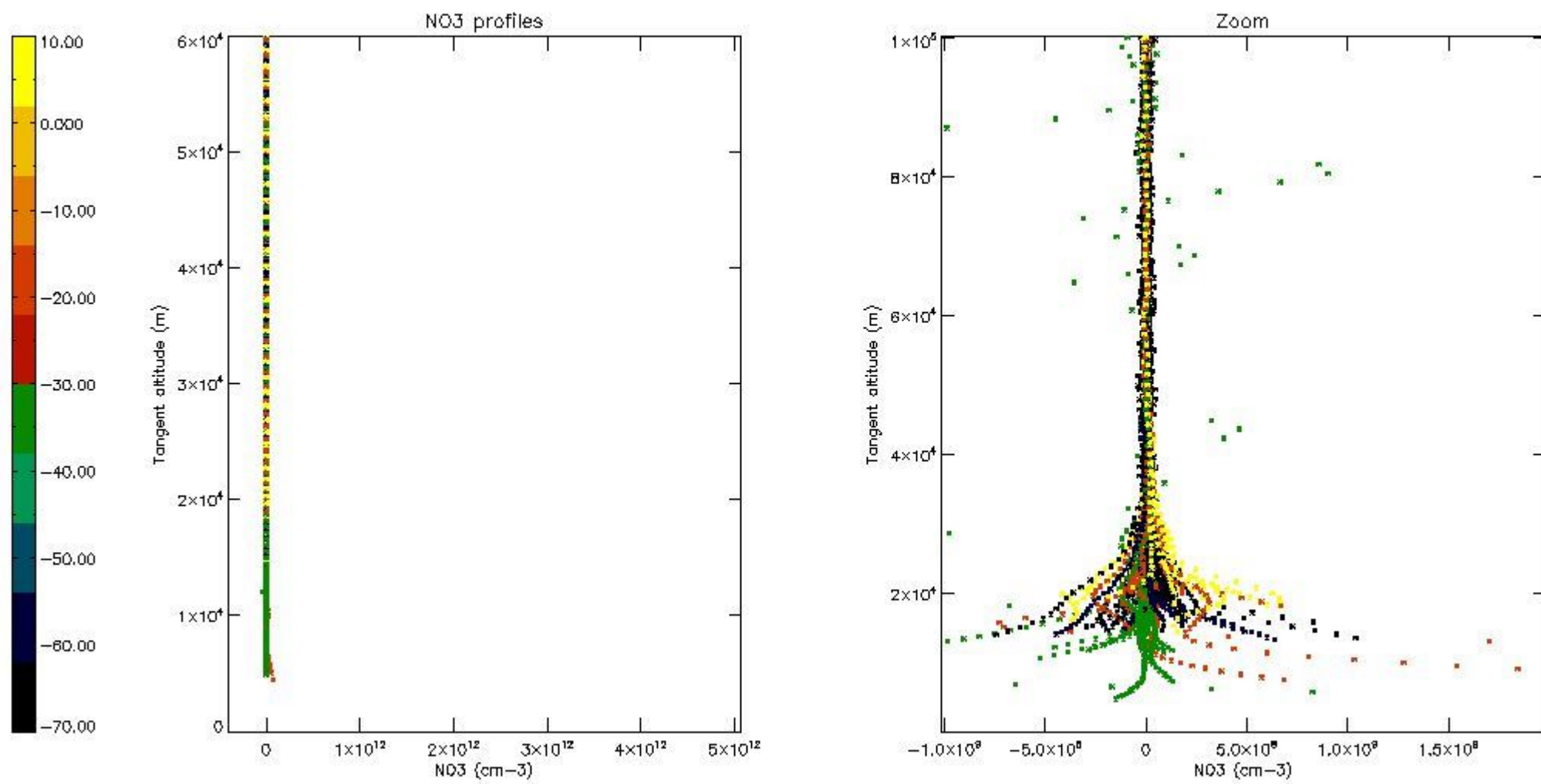
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



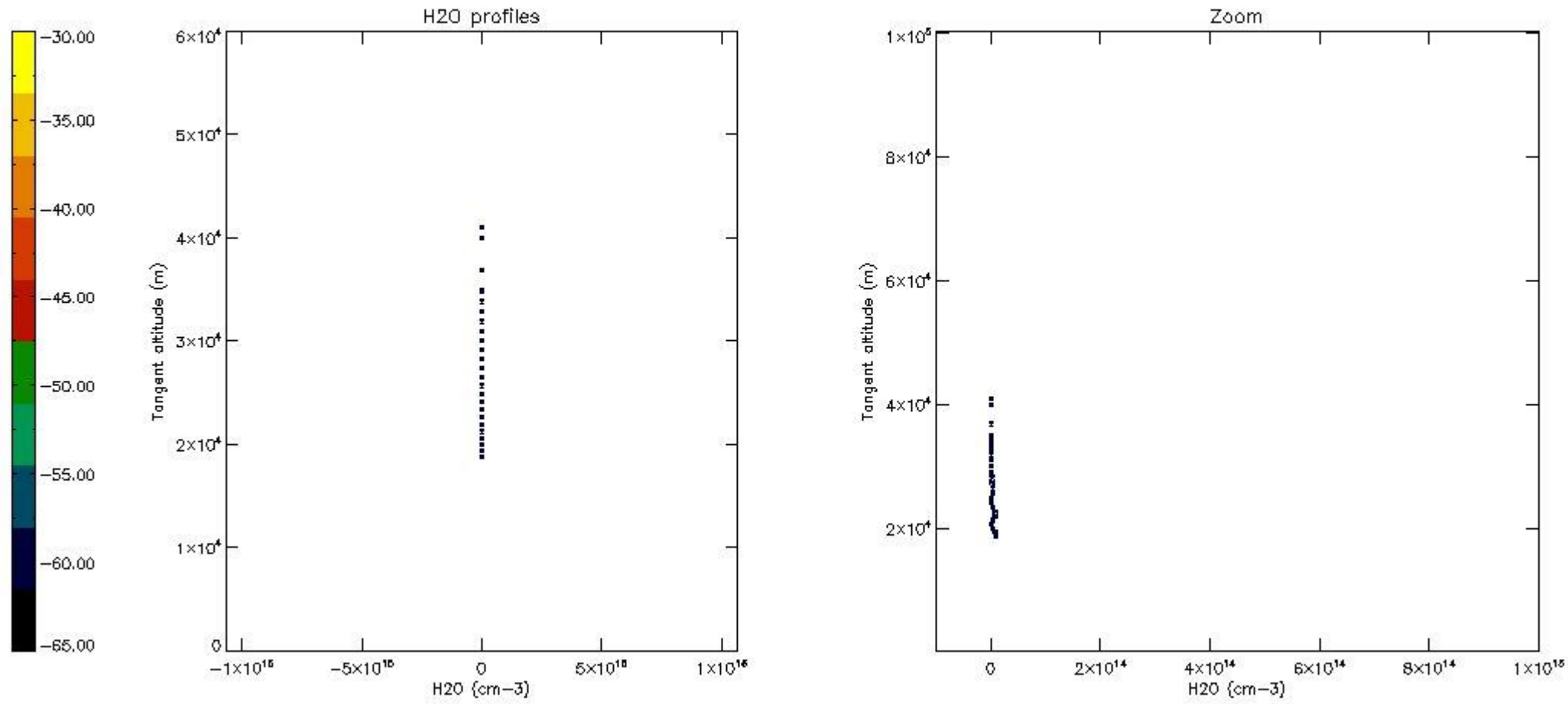
5.7 Plot NO3 profiles for all STD (dark without errors)

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	21-MAY-2011 00:05:21
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	21-MAY-2011 00:05:21
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	21-MAY-2011 00:05:21

GOMOS Level 2 Daily Report

SUMMARY

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[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

[3.2 Plot of level 2 quality information per product \(world map\)](#)

[4. Level 1 Quality information per product \(stored on level 2 products\)](#)

[4.1 Plot of level 1 quality information per product \(time dependant\)](#)

[4.1.1 Plot of level 1 quality information per product \(time dependant\): ASCENDING](#)

[4.1.2 Plot of level 1 quality information per product \(time dependant\): DESCENDING](#)

[4.2 Plot of level 1 quality information per product \(world map\)](#)

[4.2.1 Plot of level 1 quality information per product \(world map\): ASCENDING](#)

[4.2.2 Plot of level 1 quality information per product \(world map\): DESCENDING](#)

[5. Ozone profiles based on quality statistics and other trace gas profiles](#)

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

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

[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

[5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

[5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

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

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

This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also given.

Item	Value
Time of report generation	24APR2013 13:52:54
Data source version	GOMOS/6.01
Start time of products	21-05-2011 (21MAY2011 00:00:00)
Stop time of products	22-05-2011 (22MAY2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	295
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

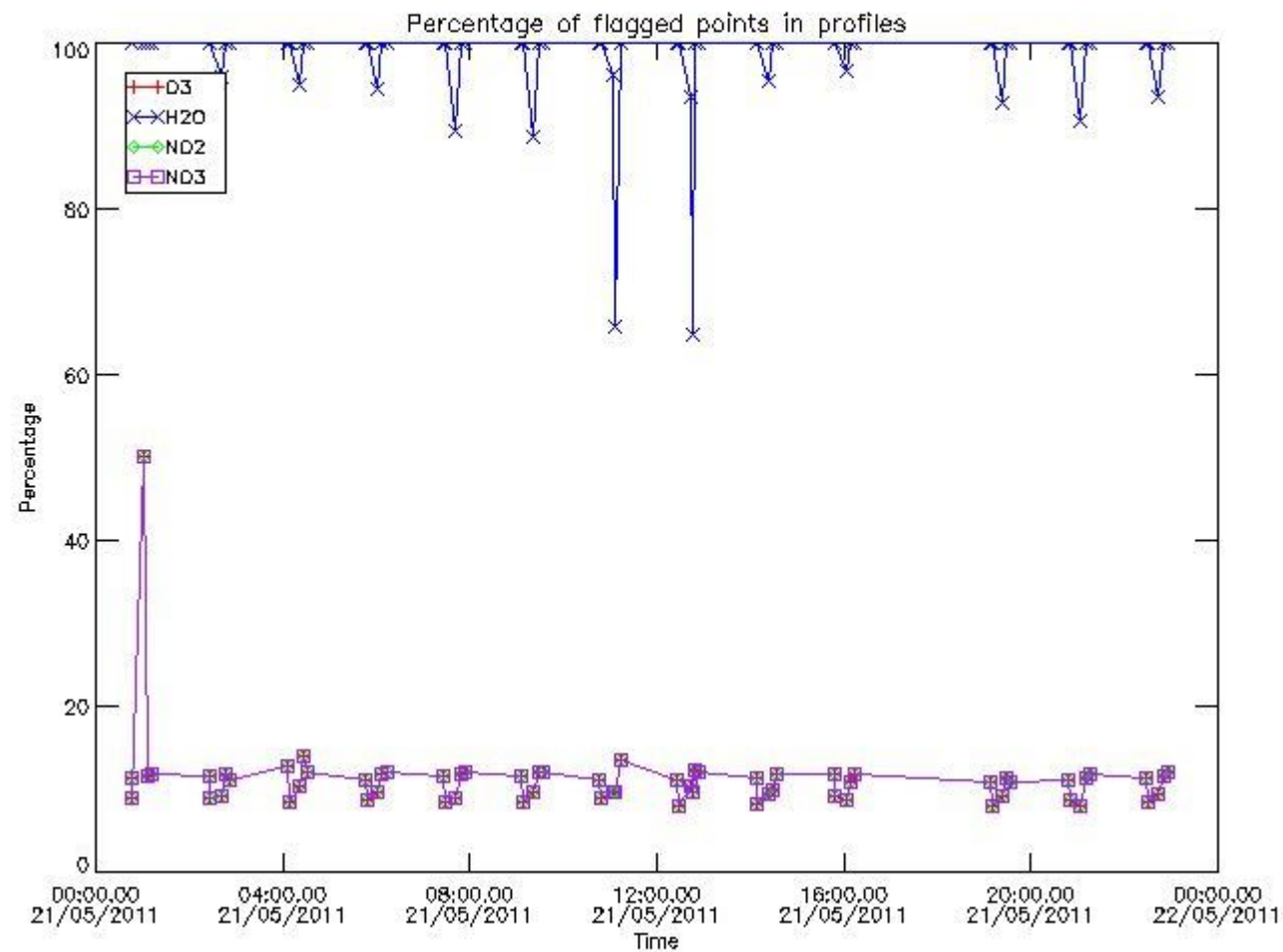
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110521_000521_000000423102_00361_48220_0457.N1	21-MAY-2011 00:05:21	Bright	41.500	67	5Alp CrB	2.2210	11000.	83	48220	No
2	GOM_NL__2PRFIN20110521_000904_000000493102_00361_48220_0458.N1	21-MAY-2011 00:09:04	Bright	49.000	133	40Zet Her	2.8070	6000.0	98	48220	No
3	GOM_NL__2PRFIN20110521_001614_000000423102_00361_48220_0459.N1	21-MAY-2011 00:16:14	Bright	41.500	119	14Eta Dra	2.7270	4700.0	83	48220	No
4	GOM_NL__2PRFIN20110521_001801_000000573102_00361_48220_0460.N1	21-MAY-2011 00:18:01	Bright	56.500	69	33Gam Dra	2.2310	3800.0	113	48220	No
5	GOM_NL__2PRFIN20110521_002704_000000453102_00361_48220_0461.N1	21-MAY-2011 00:27:04	Bright	45.000	89	5Alp Cep	2.4510	8000.0	90	48220	No
6	GOM_NL__2PRFIN20110521_003109_000000573102_00361_48220_0462.N1	21-MAY-2011 00:31:09	Bright	57.000	74	11Bet Cas	2.2680	6600.0	114	48220	No
7	GOM_NL__2PRFIN20110521_004040_000000483102_00361_48220_0463.N1	21-MAY-2011 00:40:40	Twilight	47.500	58	21Alp And	2.0730	11000.	95	48220	No
8	GOM_NL__2PRFIN20110521_004501_000000453102_00361_48220_0464.N1	21-MAY-2011 00:45:01	Dark	45.000	140	88Gam Peg	2.8340	26000.	90	48220	No
9	GOM_NL__2PRFIN20110521_004700_000000573102_00361_48220_0465.N1	21-MAY-2011 00:47:00	Dark	56.500	90	54Alp Peg	2.4870	11000.	113	48220	No
10	GOM_NL__2PRFIN20110521_010059_000000543102_00361_48220_0466.N1	21-MAY-2011 01:00:59	Dark	53.500	18	24Alp PsA	1.1660	9700.0	107	48220	No
11	GOM_NL__2PRFIN20110521_010641_000000453102_00362_48221_0492.N1	21-MAY-2011 01:06:41	Dark	44.500	31	Alp Gru	1.7340	15200.	89	48221	No
12	GOM_NL__2PRFIN20110521_011206_000000443102_00362_48221_0493.N1	21-MAY-2011 01:12:06	Dark	43.500	45	Alp Pav	1.9400	26000.	87	48221	No
13	GOM_NL__2PRFIN20110521_012005_000000453102_00362_48221_0494.N1	21-MAY-2011 01:20:05	Straylight	44.500	147	Alp Ara	2.8770	26000.	89	48221	No
14	GOM_NL__2PRFIN20110521_012141_000000513102_00362_48221_0495.N1	21-MAY-2011 01:21:41	Straylight	51.000	40	The Sco	1.8590	7100.0	102	48221	No
15	GOM_NL__2PRFIN20110521_012332_000000523102_00362_48221_0496.N1	21-MAY-2011 01:23:32	Straylight	51.500	25	35Lam Sco	1.6200	28000.	103	48221	No
16	GOM_NL__2PRFIN20110521_012538_000000553102_00362_48221_0497.N1	21-MAY-2011 01:25:38	Twilight	55.000	75	26Eps Sco	2.2910	4250.0	110	48221	No
17	GOM_NL__2PRFIN20110521_012832_000000593102_00362_48221_0498.N1	21-MAY-2011 01:28:32	Twilight	58.500	16	21Alp Sco	1.0200	3000.0	117	48221	No
18	GOM_NL__2PRFIN20110521_013008_000000453102_00362_48221_0499.N1	21-MAY-2011 01:30:08	Bright	45.000	80	7Del Sco	2.3160	30000.	90	48221	No
19	GOM_NL__2PRFIN20110521_013154_000000563102_00362_48221_0500.N1	21-MAY-2011 01:31:54	Bright	55.500	86	35Eta Oph	2.4300	10200.	111	48221	No
20	GOM_NL__2PRFIN20110521_013358_000000493102_00362_48221_0501.N1	21-MAY-2011 01:33:58	Bright	49.000	98	13Zet Oph	2.5710	30000.	98	48221	No
21	GOM_NL__2PRFIN20110521_013619_000000463102_00362_48221_0502.N1	21-MAY-2011 01:36:19	Bright	46.000	120	1Del Oph	2.7340	3200.0	92	48221	No
22	GOM_NL__2PRFIN20110521_013924_000000413102_00362_48221_0503.N1	21-MAY-2011 01:39:24	Bright	41.000	102	24Alp Ser	2.6000	4250.0	82	48221	No
23	GOM_NL__2PRFIN20110521_014535_000000413102_00362_48221_0504.N1	21-MAY-2011 01:45:35	Bright	41.000	67	5Alp CrB	2.2210	11000.	82	48221	No
24	GOM_NL__2PRFIN20110521_014917_000000513102_00362_48221_0505.N1	21-MAY-2011 01:49:17	Bright	51.000	133	40Zet Her	2.8070	6000.0	102	48221	No
25	GOM_NL__2PRFIN20110521_015627_000000373102_00362_48221_0506.N1	21-MAY-2011 01:56:27	Bright	37.000	119	14Eta Dra	2.7270	4700.0	74	48221	No
26	GOM_NL__2PRFIN20110521_015814_000000553102_00362_48221_0507.N1	21-MAY-2011 01:58:14	Bright	55.000	69	33Gam Dra	2.2310	3800.0	110	48221	No
27	GOM_NL__2PRFIN20110521_020718_000000453102_00362_48221_0508.N1	21-MAY-2011 02:07:18	Bright	44.500	89	5Alp Cep	2.4510	8000.0	89	48221	No
28	GOM_NL__2PRFIN20110521_021123_000000373102_00362_48221_0509.N1	21-MAY-2011 02:11:23	Bright	37.000	74	11Bet Cas	2.2680	6600.0	74	48221	No
29	GOM_NL__2PRFIN20110521_022054_000000483102_00362_48221_0510.N1	21-MAY-2011 02:20:54	Twilight	47.500	58	21Alp And	2.0730	11000.	95	48221	No
30	GOM_NL__2PRFIN20110521_022515_000000453102_00362_48221_0511.N1	21-MAY-2011 02:25:15	Dark	44.500	140	88Gam Peg	2.8340	26000.	89	48221	No
31	GOM_NL__2PRFIN20110521_022714_000000583102_00362_48221_0512.N1	21-MAY-2011 02:27:14	Dark	57.500	90	54Alp Peg	2.4870	11000.	115	48221	No
32	GOM_NL__2PRFIN20110521_024113_000000623102_00362_48221_0513.N1	21-MAY-2011 02:41:13	Dark	61.500	18	24Alp PsA	1.1660	9700.0	123	48221	No
33	GOM_NL__2PRFIN20110521_024656_000000443102_00363_48222_0524.N1	21-MAY-2011 02:46:56	Dark	43.500	31	Alp Gru	1.7340	15200.	87	48222	No
34	GOM_NL__2PRFIN20110521_025221_000000463102_00363_48222_0525.N1	21-MAY-2011 02:52:21	Dark	45.500	45	Alp Pav	1.9400	26000.	91	48222	No
35	GOM_NL__2PRFIN20110521_030020_000000423102_00363_48222_0526.N1	21-MAY-2011 03:00:20	Straylight	41.500	147	Alp Ara	2.8770	26000.	83	48222	No
36	GOM_NL__2PRFIN20110521_030156_000000503102_00363_48222_0527.N1	21-MAY-2011 03:01:56	Straylight	50.000	40	The Sco	1.8590	7100.0	100	48222	No
37	GOM_NL__2PRFIN20110521_030346_000000523102_00363_48222_0528.N1	21-MAY-2011 03:03:46	Straylight	51.500	25	35Lam Sco	1.6200	28000.	103	48222	No
38	GOM_NL__2PRFIN20110521_030552_000000553102_00363_48222_0529.N1	21-MAY-2011 03:05:52	Twilight	54.500	75	26Eps Sco	2.2910	4250.0	109	48222	No
39	GOM_NL__2PRFIN20110521_030846_000000583102_00363_48222_0530.N1	21-MAY-2011 03:08:46	Twilight	57.500	16	21Alp Sco	1.0200	3000.0	115	48222	No
40	GOM_NL__2PRFIN20110521_031023_000000483102_00363_48222_0531.N1	21-MAY-2011 03:10:23	Bright	47.500	80	7Del Sco	2.3160	30000.	95	48222	No
41	GOM_NL__2PRFIN20110521_031208_000000553102_00363_48222_0532.N1	21-MAY-2011 03:12:08	Bright	55.000	86	35Eta Oph	2.4300	10200.	110	48222	No
42	GOM_NL__2PRFIN20110521_031412_000000473102_00363_48222_0533.N1	21-MAY-2011 03:14:12	Bright	47.000	98	13Zet Oph	2.5710	30000.	94	48222	No

279	GOM_NL__2PRFIN20110521_225517_000000433102_00375_48234_1351.N1	21-MAY-2011 22:55:17	Dark	42.500	45	Alp Pav	1.9400	26000.	85	48234	No
280	GOM_NL__2PRFIN20110521_230314_000000423102_00375_48234_1352.N1	21-MAY-2011 23:03:14	Straylight	41.500	147	Alp Ara	2.8770	26000.	83	48234	No
281	GOM_NL__2PRFIN20110521_230450_000000493102_00375_48234_1353.N1	21-MAY-2011 23:04:50	Straylight	49.000	40	The Sco	1.8590	7100.0	98	48234	No
282	GOM_NL__2PRFIN20110521_230641_000000523102_00375_48234_1354.N1	21-MAY-2011 23:06:41	Straylight	51.500	25	35Lam Sco	1.6200	28000.	103	48234	No
283	GOM_NL__2PRFIN20110521_230845_000000513102_00375_48234_1355.N1	21-MAY-2011 23:08:45	Twilight_stray	50.500	75	26Eps Sco	2.2910	4250.0	101	48234	No
284	GOM_NL__2PRFIN20110521_231137_000000553102_00375_48234_1356.N1	21-MAY-2011 23:11:37	Twilight_stray	54.500	16	21Alp Sco	1.0200	3000.0	109	48234	No
285	GOM_NL__2PRFIN20110521_231313_000000443102_00375_48234_1357.N1	21-MAY-2011 23:13:13	Bright	44.000	80	7Del Sco	2.3160	30000.	88	48234	No
286	GOM_NL__2PRFIN20110521_231457_000000533102_00375_48234_1358.N1	21-MAY-2011 23:14:57	Bright	53.000	86	35Eta Oph	2.4300	10200.	106	48234	No
287	GOM_NL__2PRFIN20110521_231659_000000493102_00375_48234_1359.N1	21-MAY-2011 23:16:59	Bright	48.500	98	13Zet Oph	2.5710	30000.	97	48234	No
288	GOM_NL__2PRFIN20110521_231919_000000453102_00375_48234_1360.N1	21-MAY-2011 23:19:19	Bright	44.500	120	1Del Oph	2.7340	3200.0	89	48234	No
289	GOM_NL__2PRFIN20110521_232224_000000413102_00375_48234_1361.N1	21-MAY-2011 23:22:24	Bright	40.500	102	24Alp Ser	2.6000	4250.0	81	48234	No
290	GOM_NL__2PRFIN20110521_232832_000000403102_00375_48234_1362.N1	21-MAY-2011 23:28:32	Bright	40.000	67	5Alp CrB	2.2210	11000.	80	48234	No
291	GOM_NL__2PRFIN20110521_233208_000000533102_00375_48234_1363.N1	21-MAY-2011 23:32:08	Bright	52.500	133	40Zet Her	2.8070	6000.0	105	48234	No
292	GOM_NL__2PRFIN20110521_233924_000000423102_00375_48234_1364.N1	21-MAY-2011 23:39:24	Bright	41.500	119	14Eta Dra	2.7270	4700.0	83	48234	No
293	GOM_NL__2PRFIN20110521_234103_000000473102_00375_48234_1365.N1	21-MAY-2011 23:41:03	Bright	47.000	69	33Gam Dra	2.2310	3800.0	94	48234	No
294	GOM_NL__2PRFIN20110521_235013_000000473102_00375_48234_1366.N1	21-MAY-2011 23:50:13	Bright	46.500	89	5Alp Cep	2.4510	8000.0	93	48234	No
295	GOM_NL__2PRFIN20110521_235423_000000383102_00375_48234_1367.N1	21-MAY-2011 23:54:23	Bright	38.000	74	11Bet Cas	2.2680	6600.0	76	48234	No

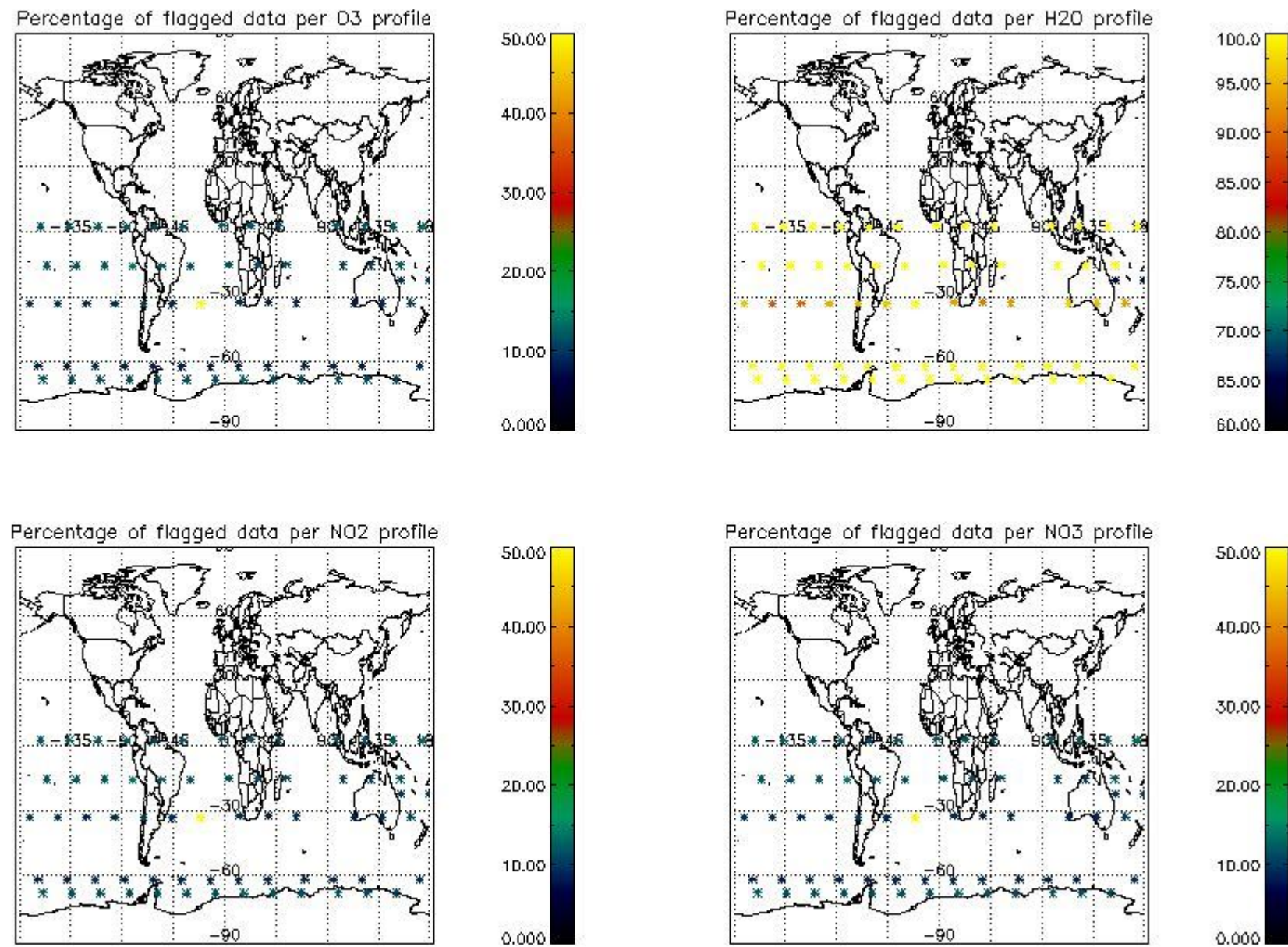
3. Quality information per product

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)

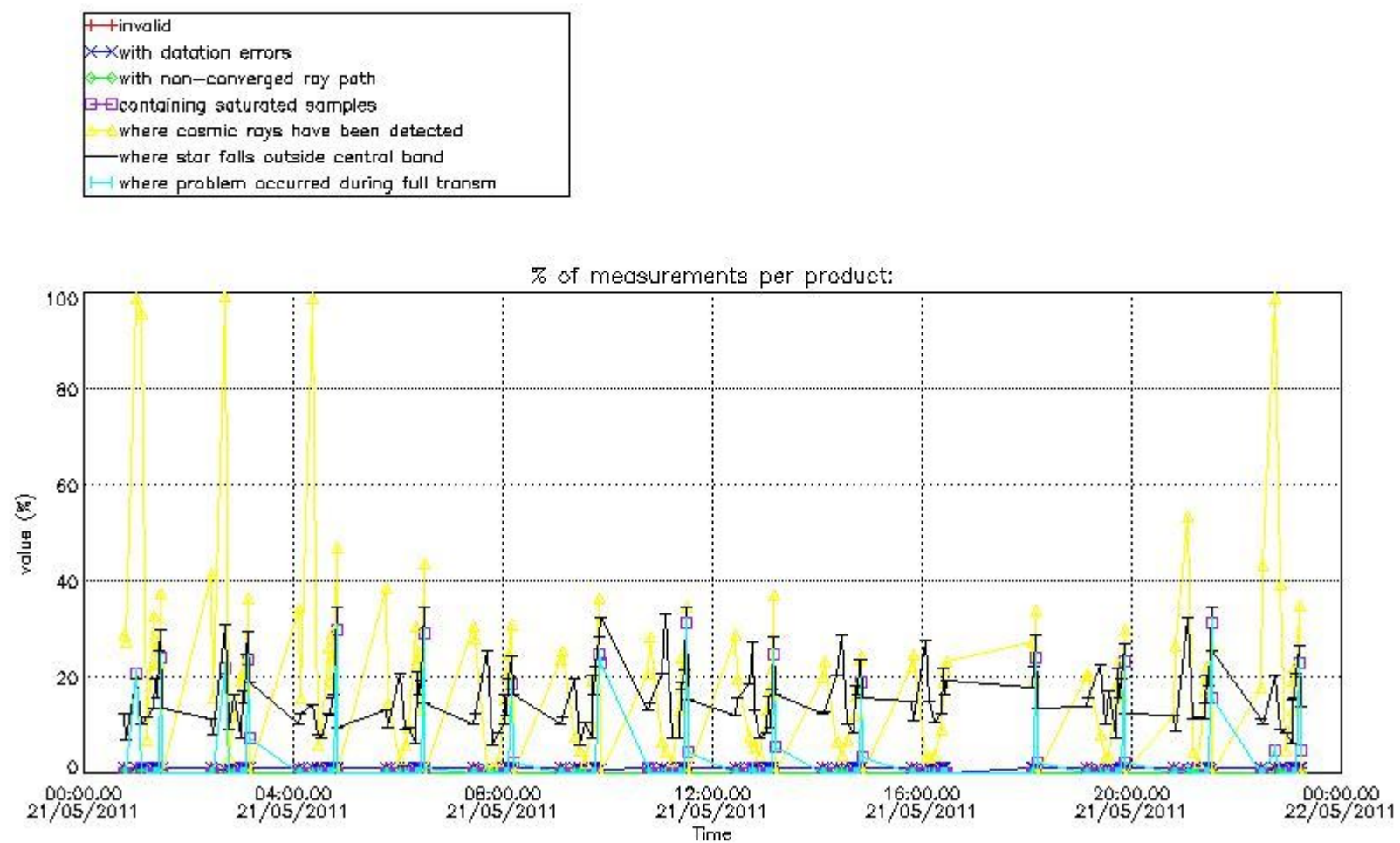


4. Level 1 quality information per product

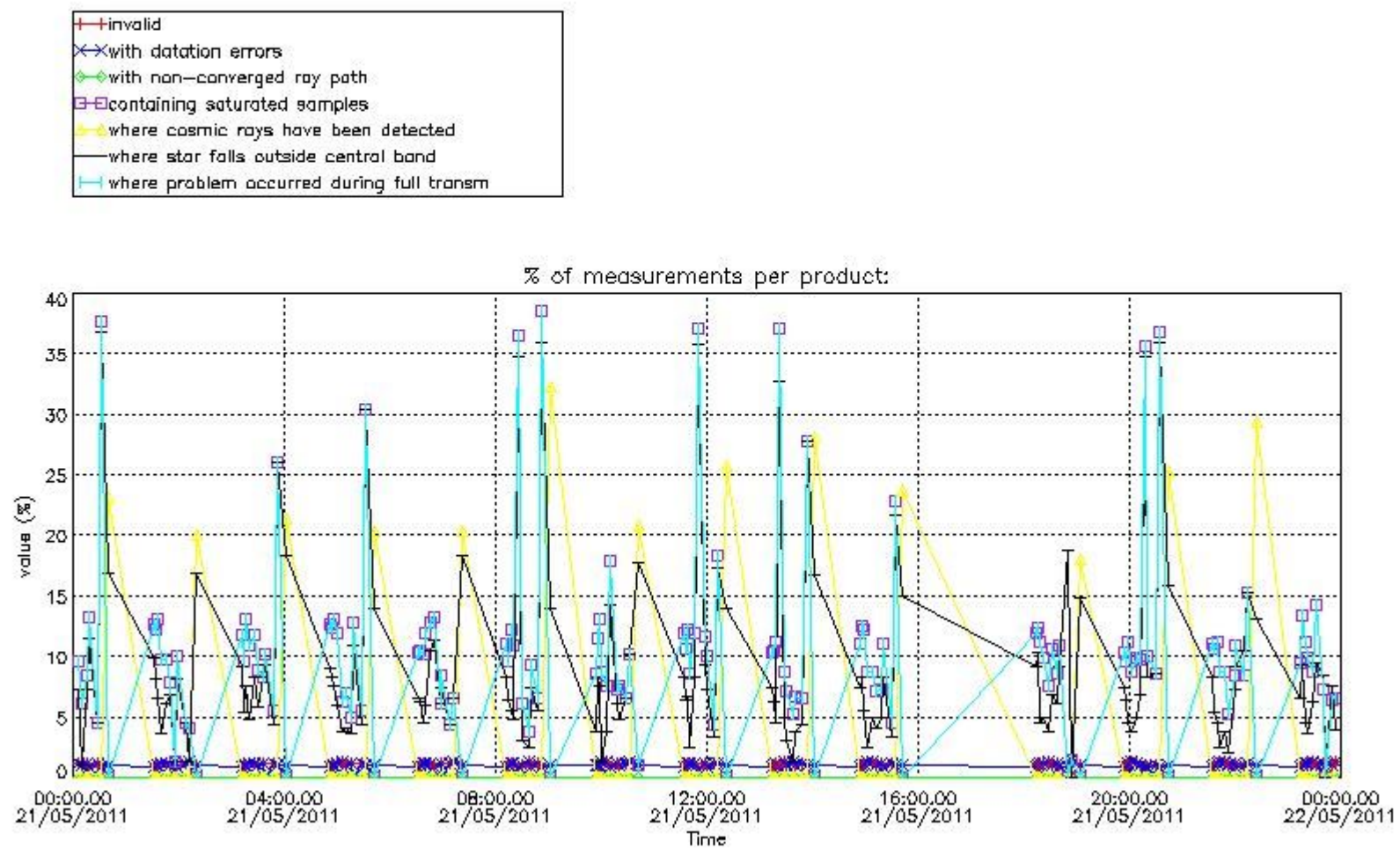
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

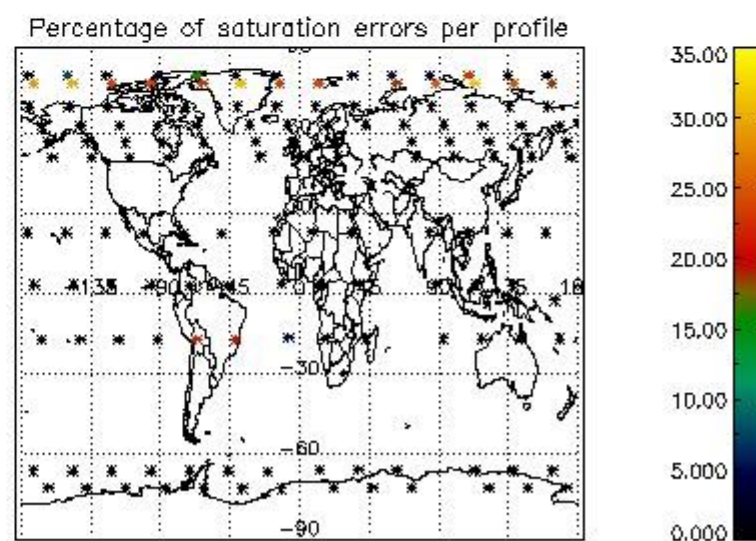
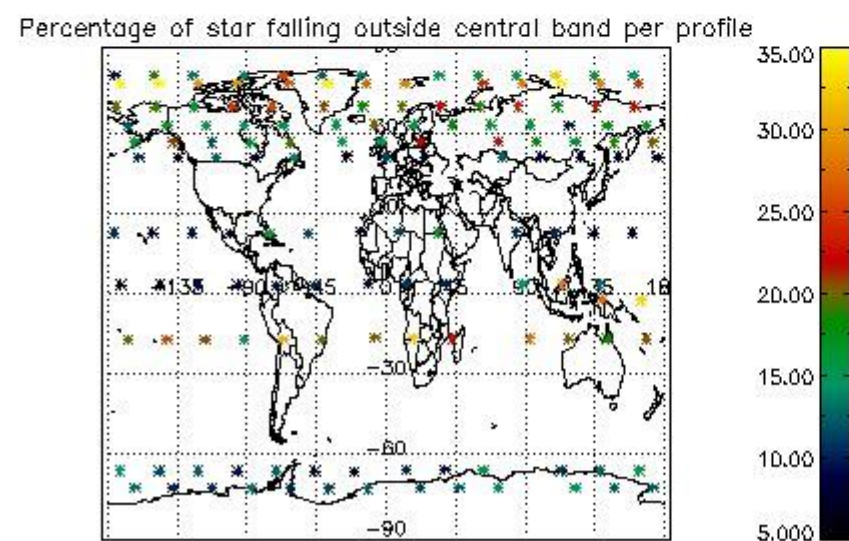
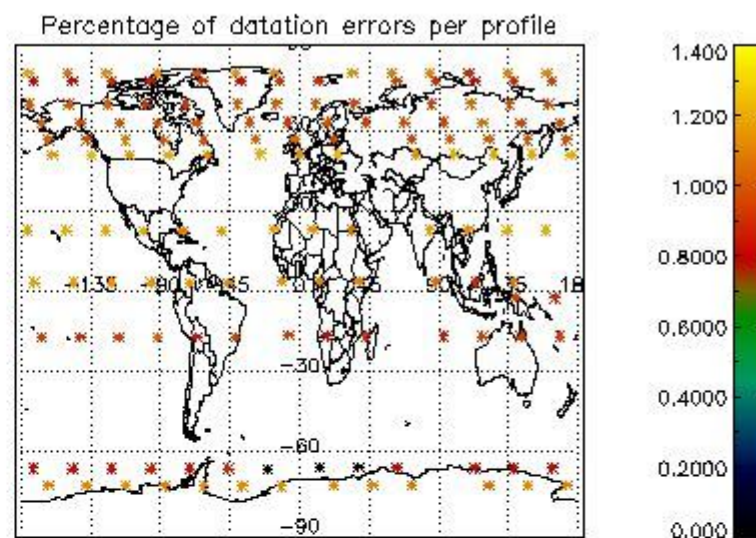
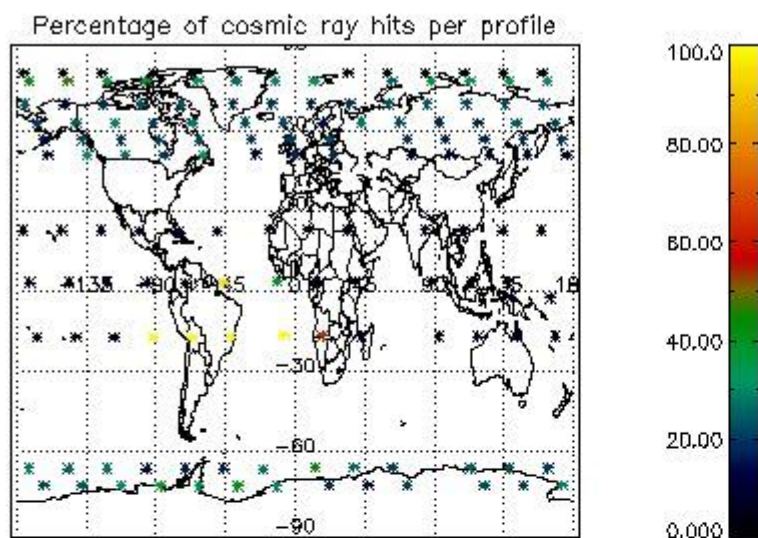


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

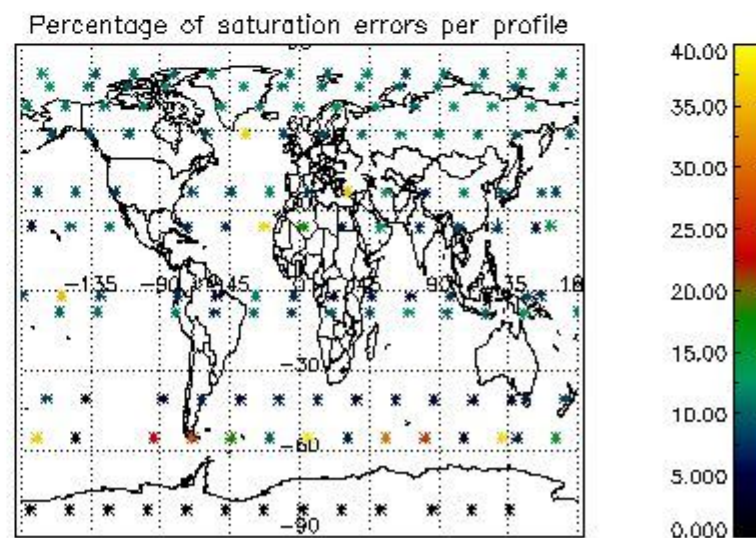
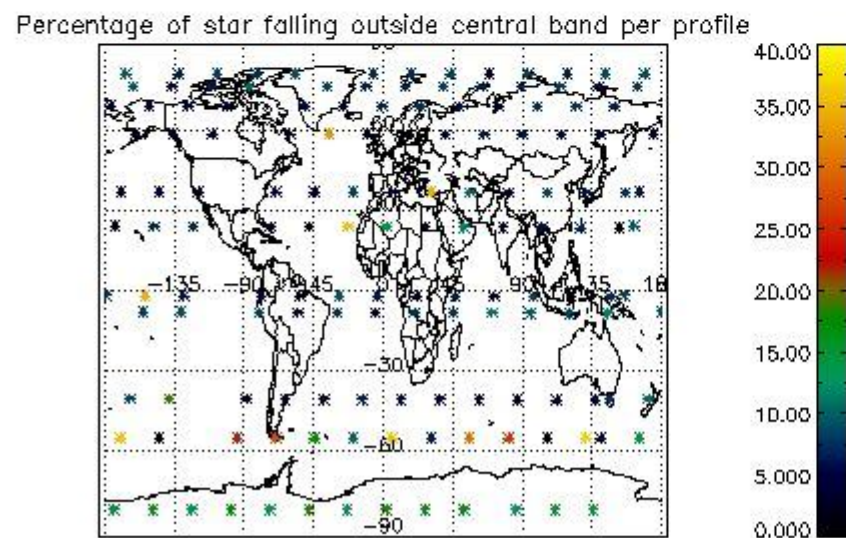
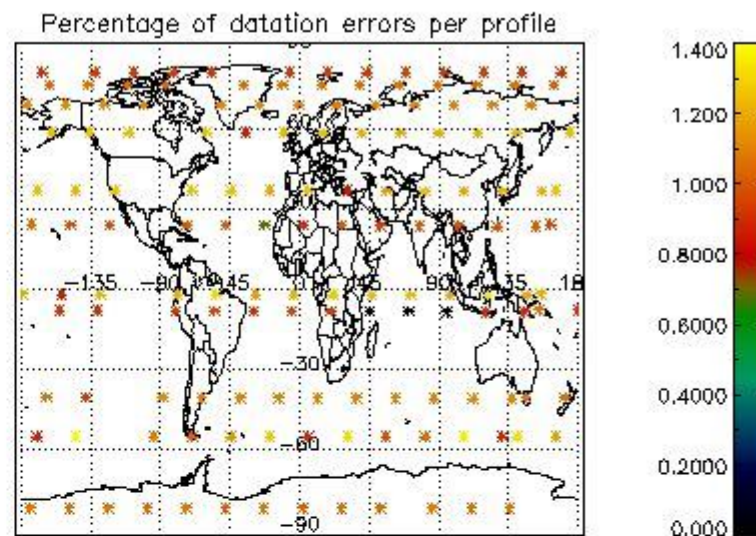
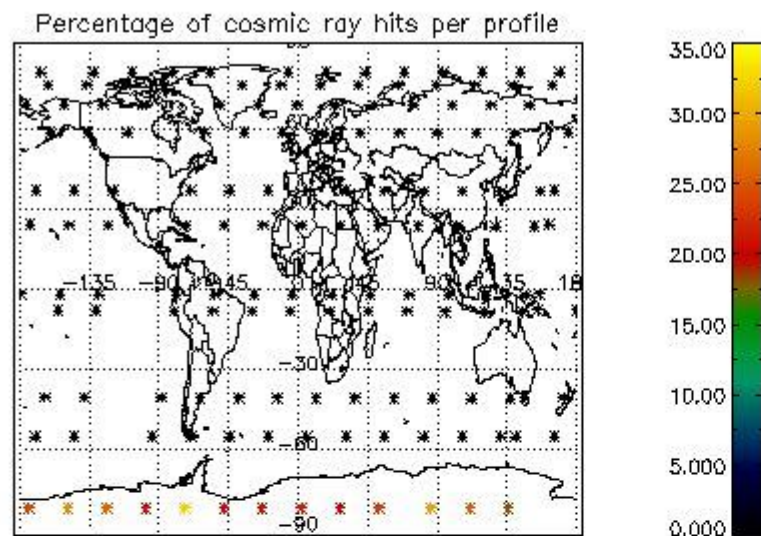


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

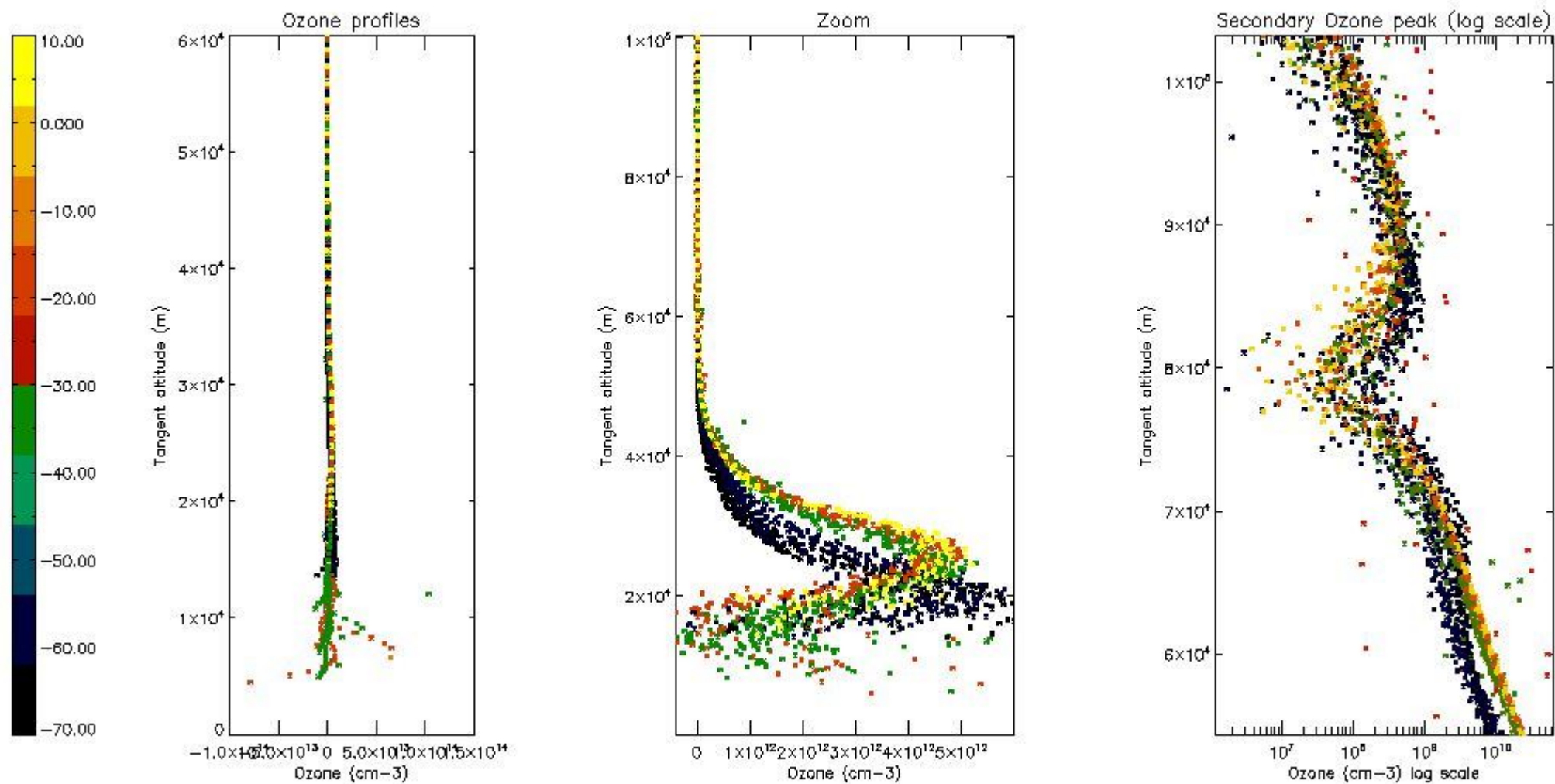
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	23
STD < 20	14

STD < 10	11
STD < 5	7

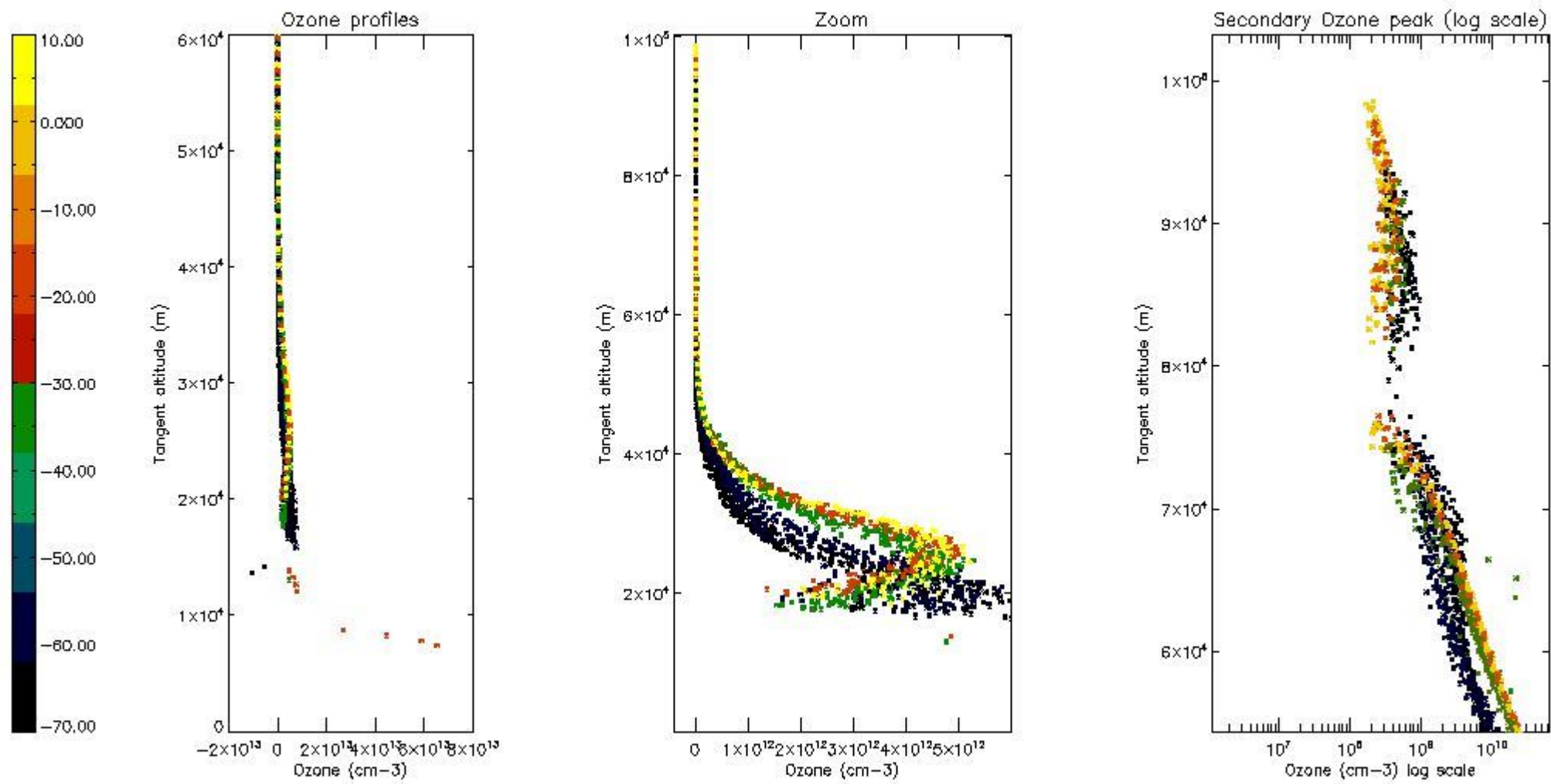
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



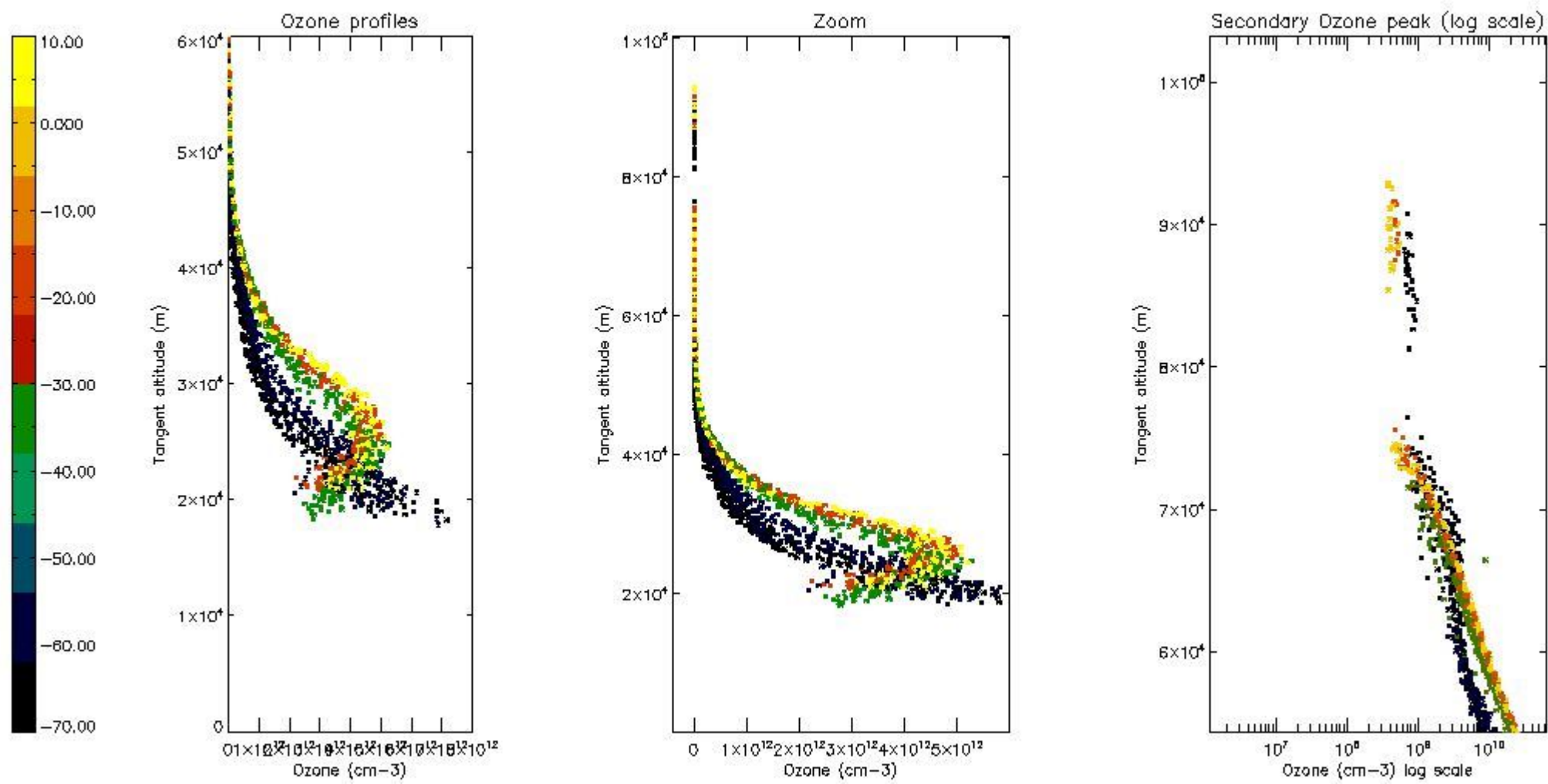
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



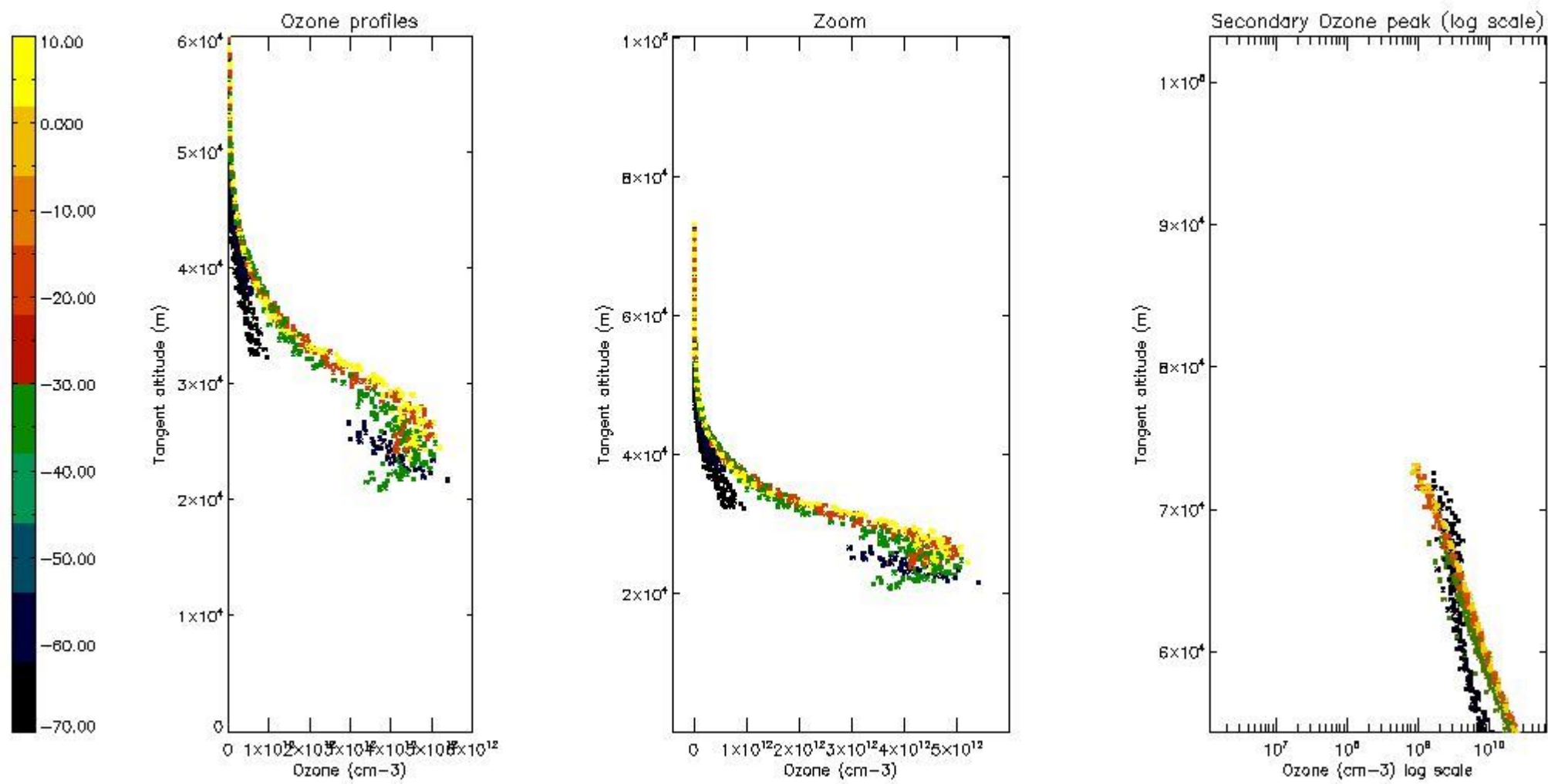
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



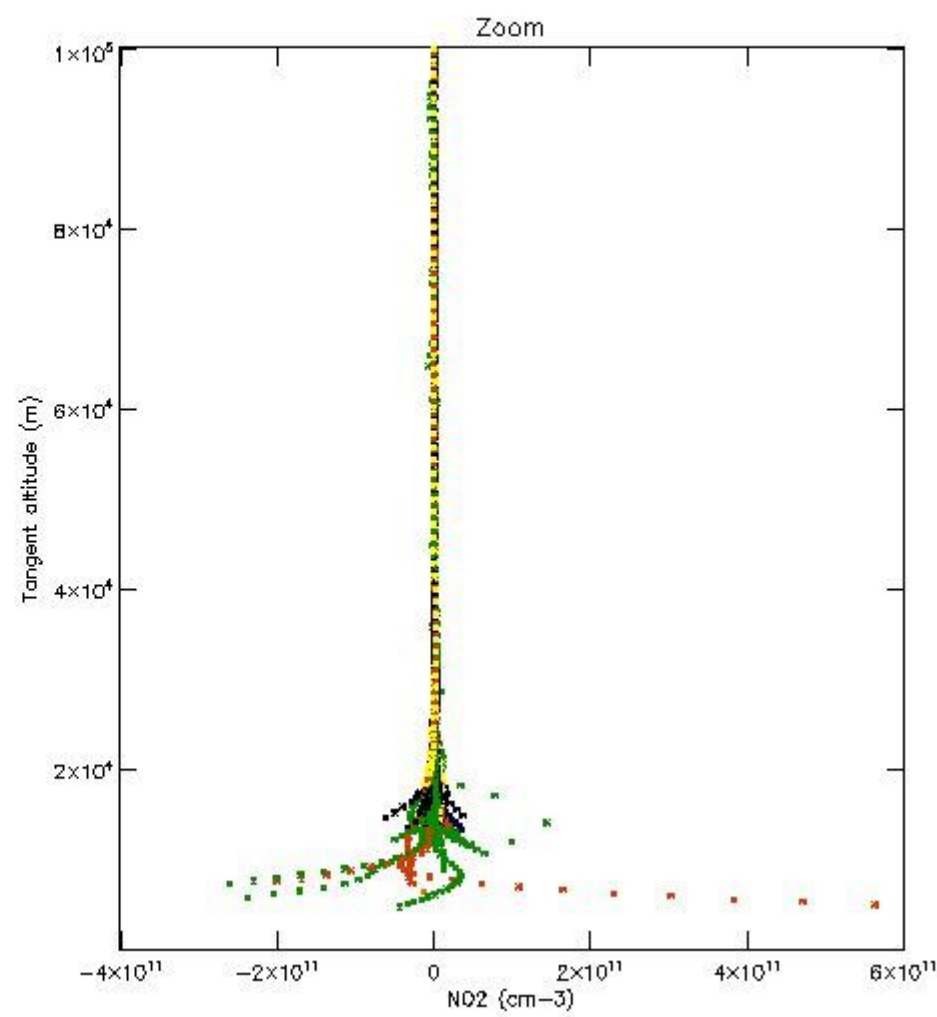
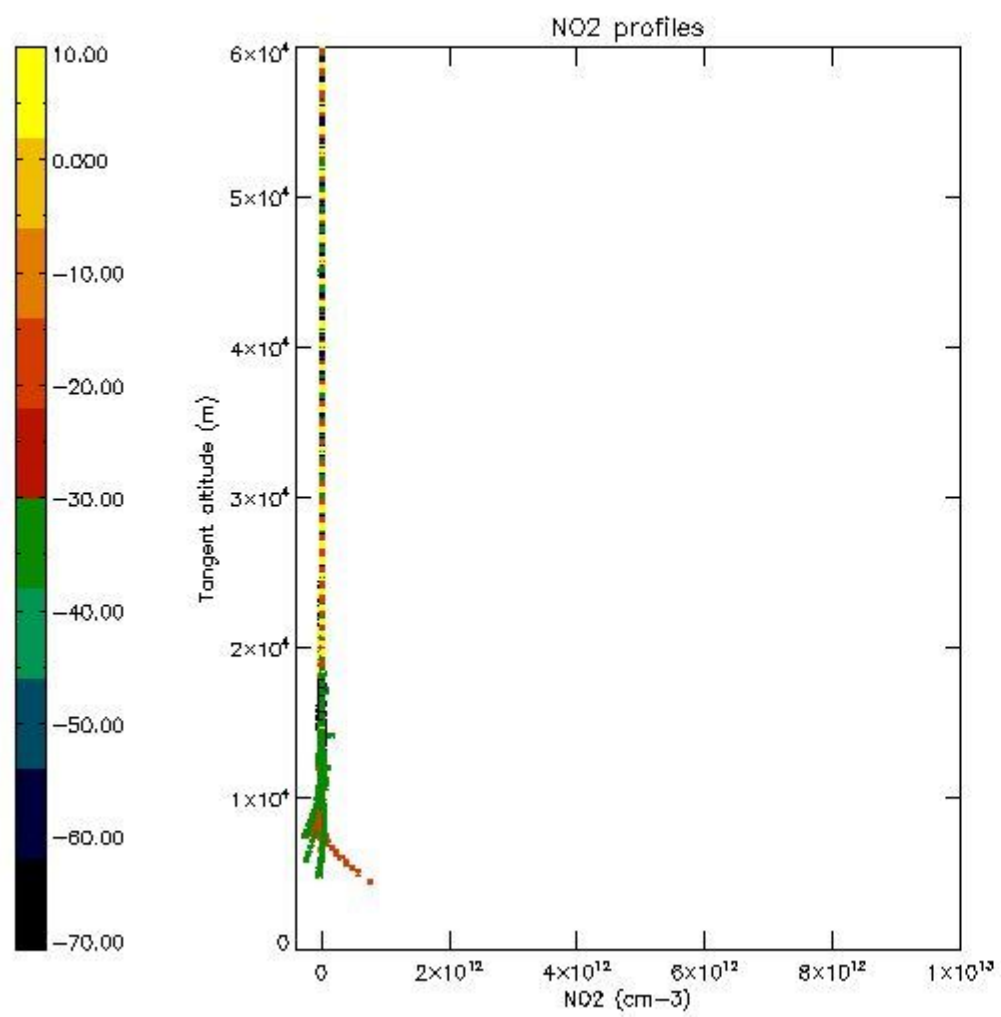
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



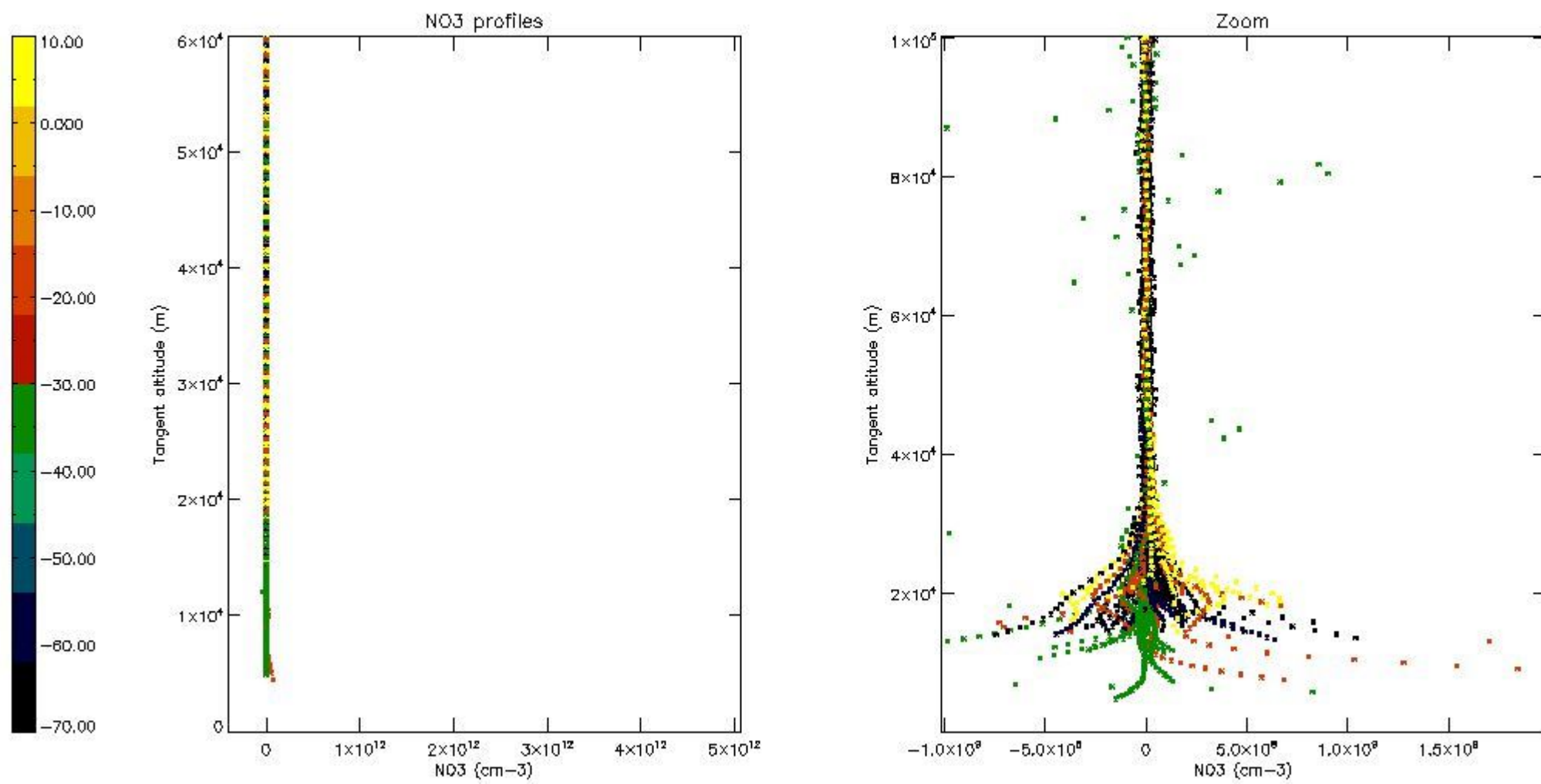
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



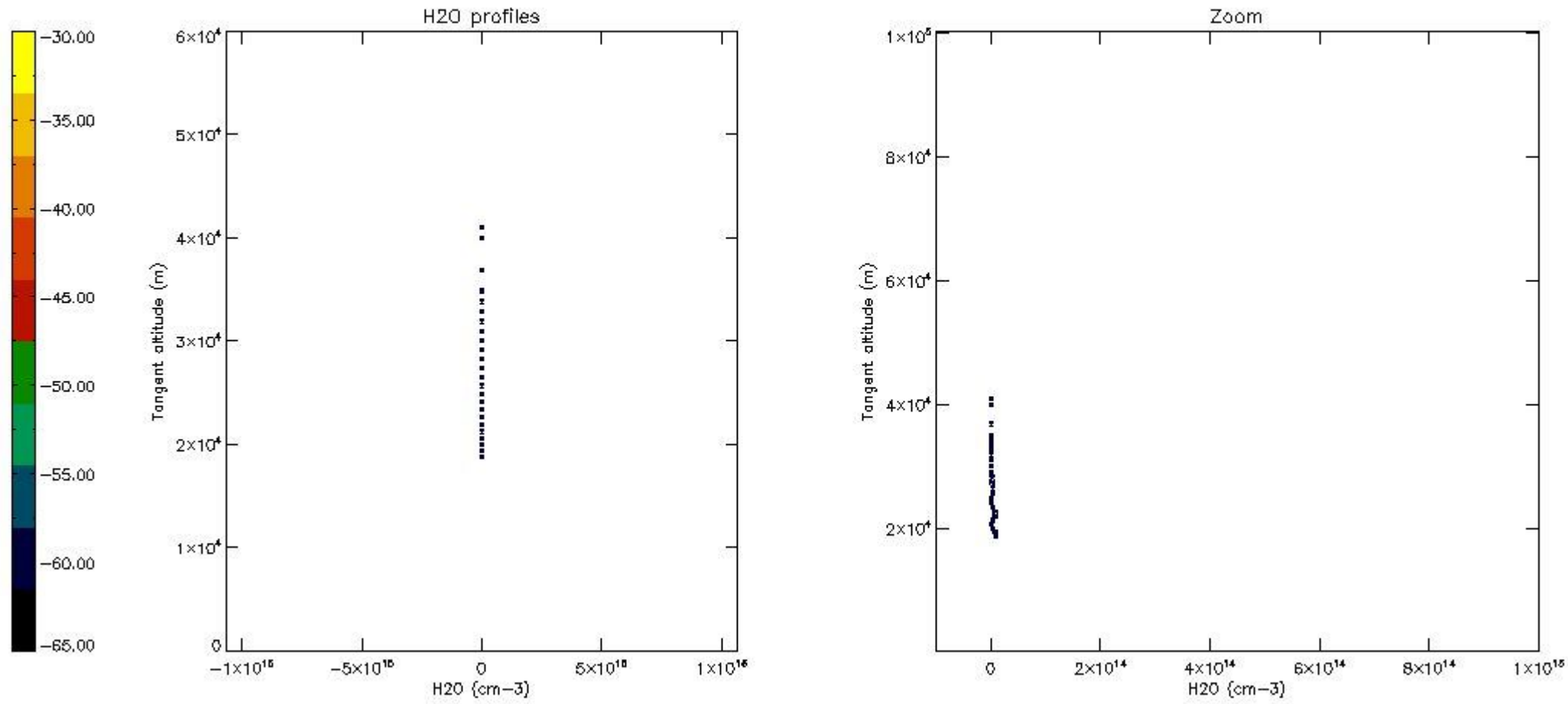
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

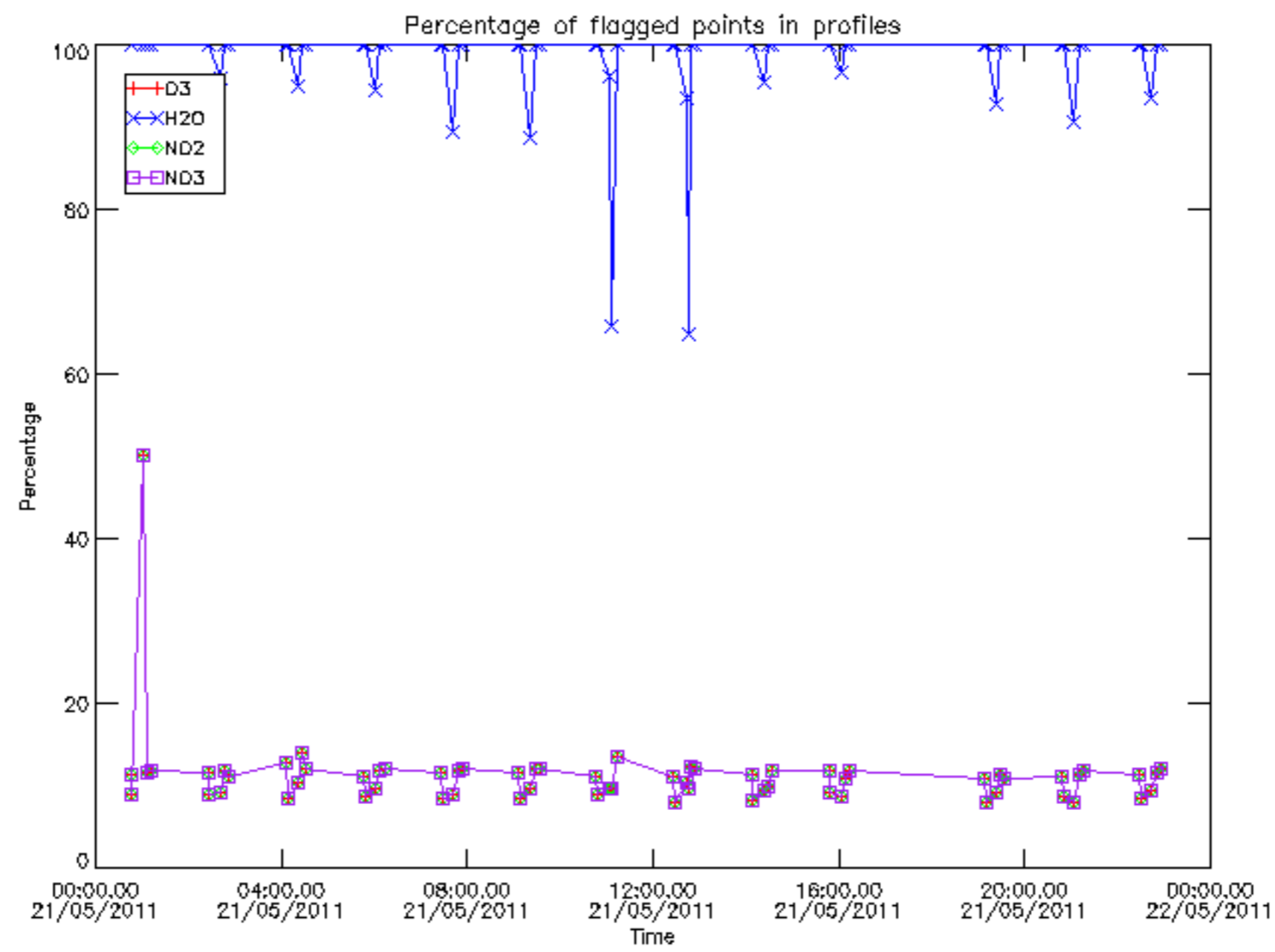
The colorbar represents the latitude.



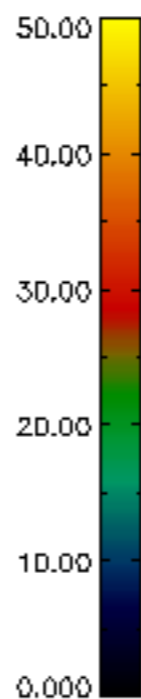
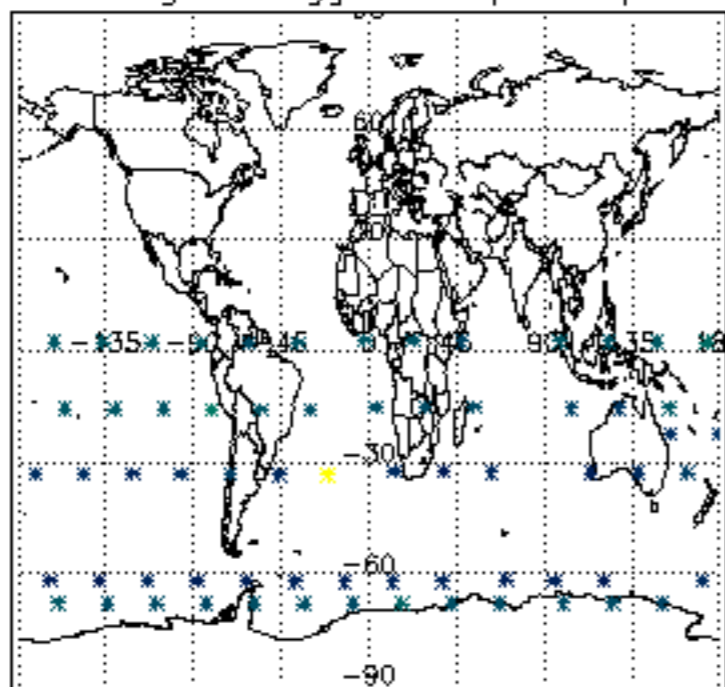
6. Auxiliary Data Files used for the production reported in section 2

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.

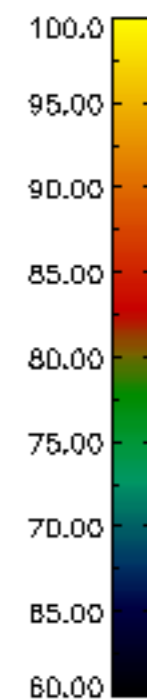
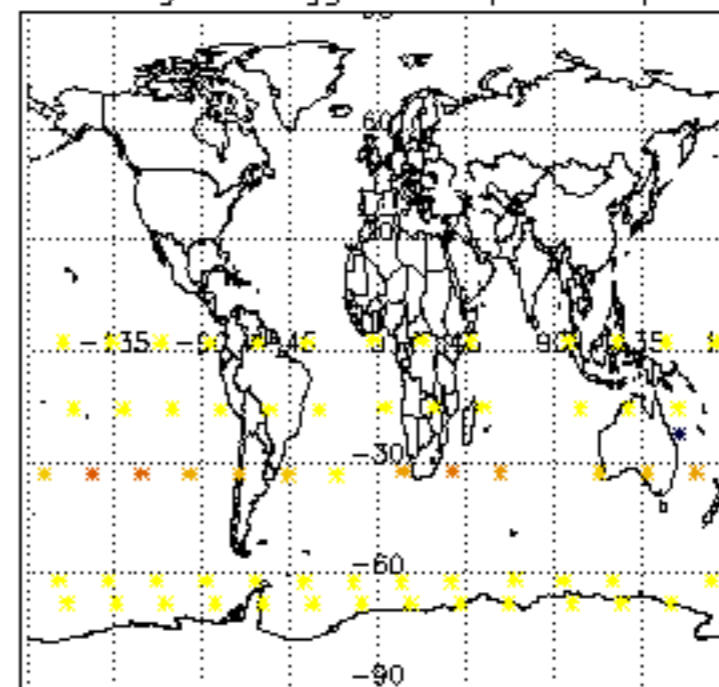
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	21-MAY-2011 00:05:21
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	21-MAY-2011 00:05:21
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	21-MAY-2011 00:05:21



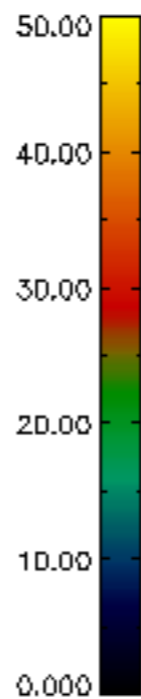
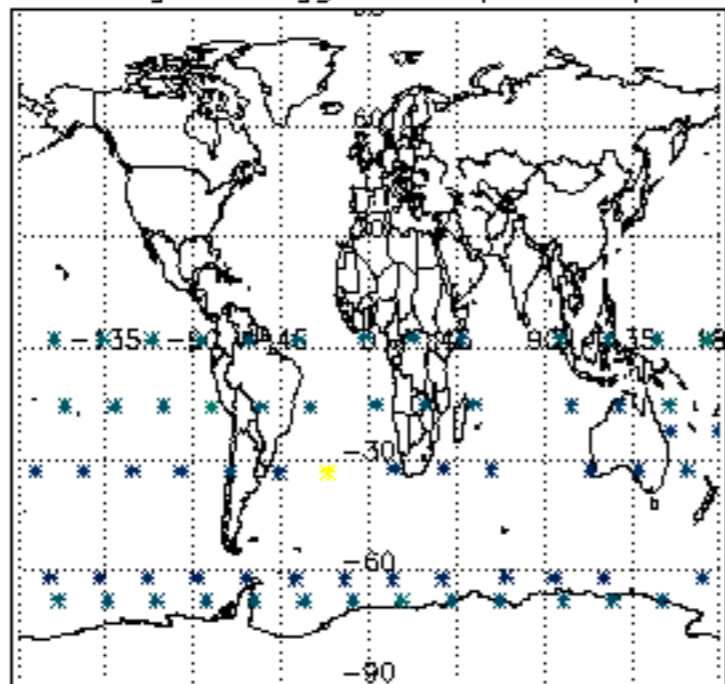
Percentage of flagged data per D3 profile



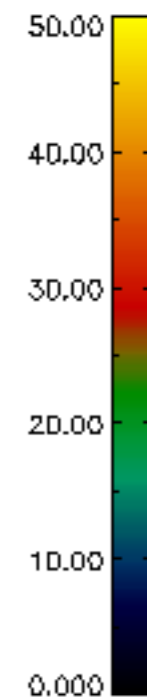
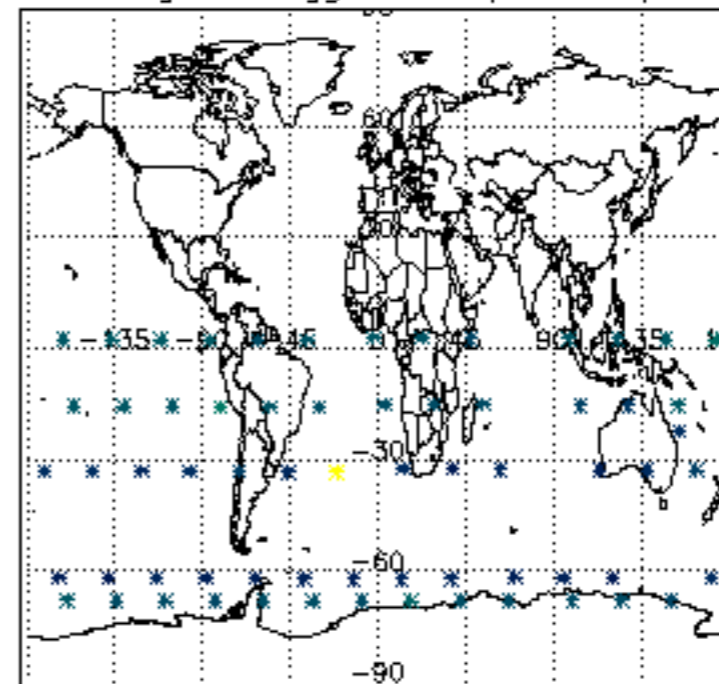
Percentage of flagged data per H2O profile

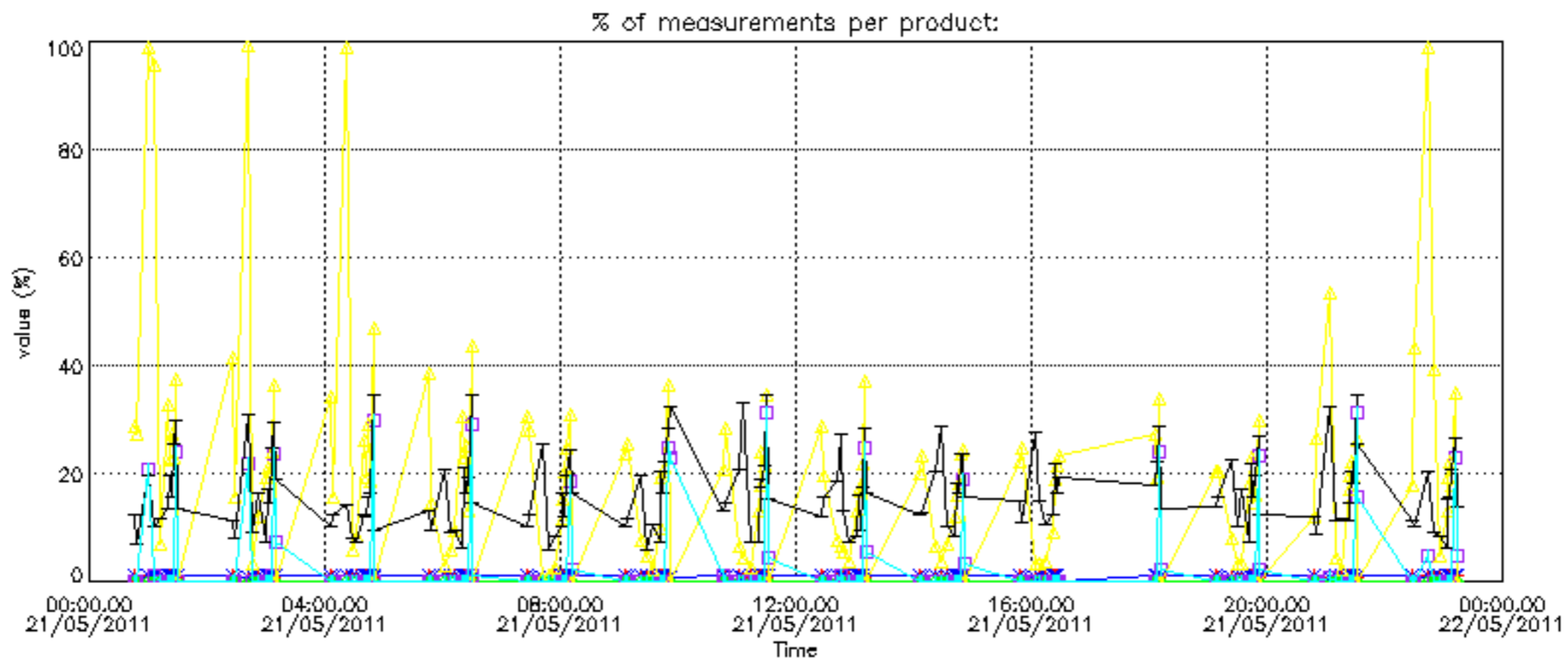


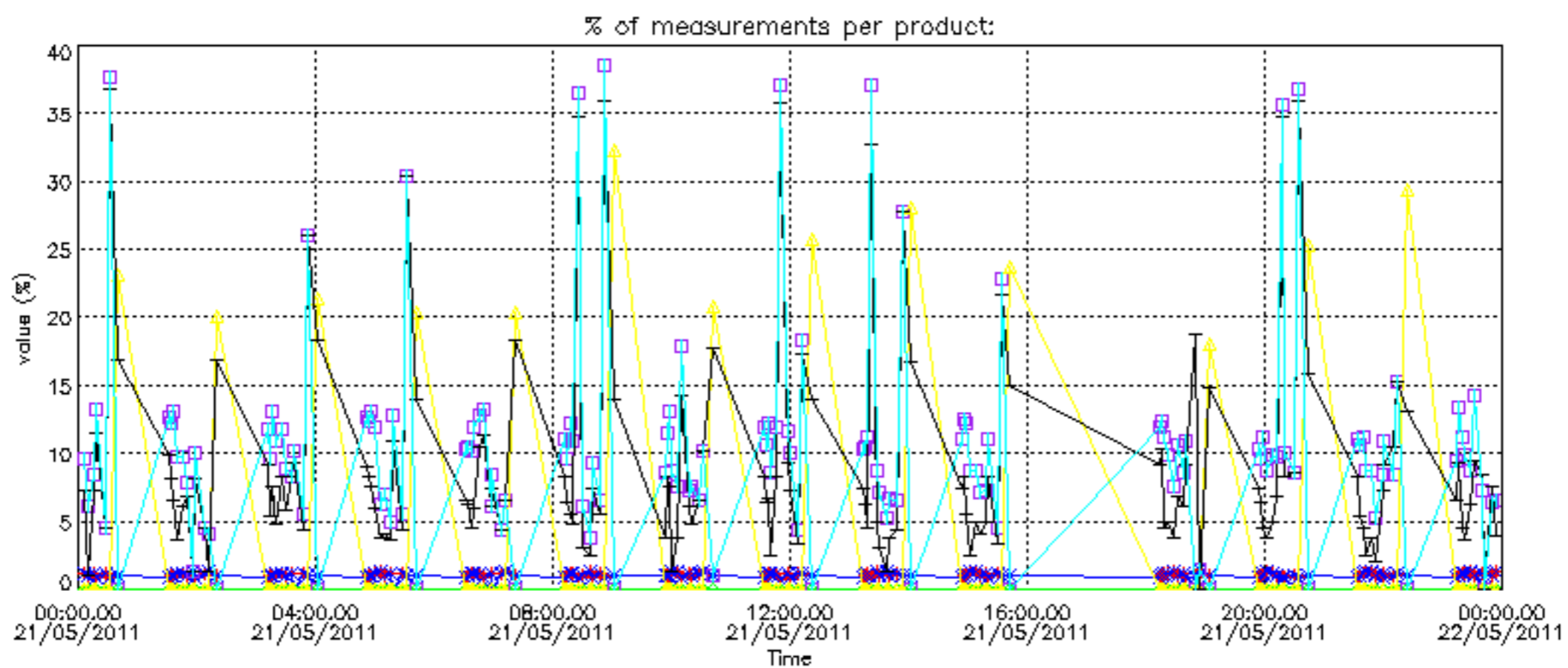
Percentage of flagged data per NO2 profile



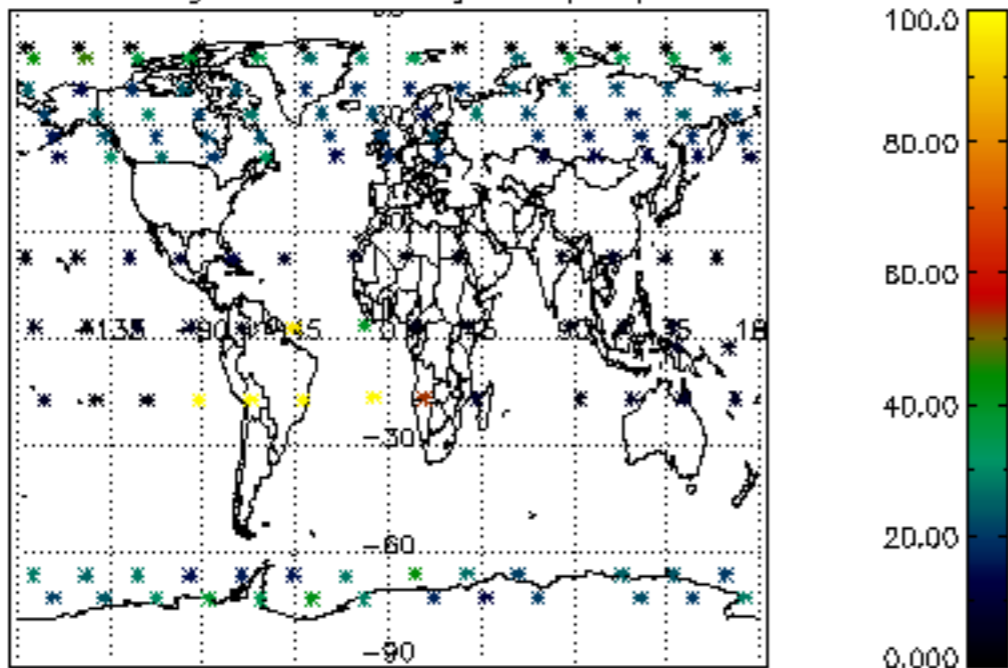
Percentage of flagged data per NO3 profile



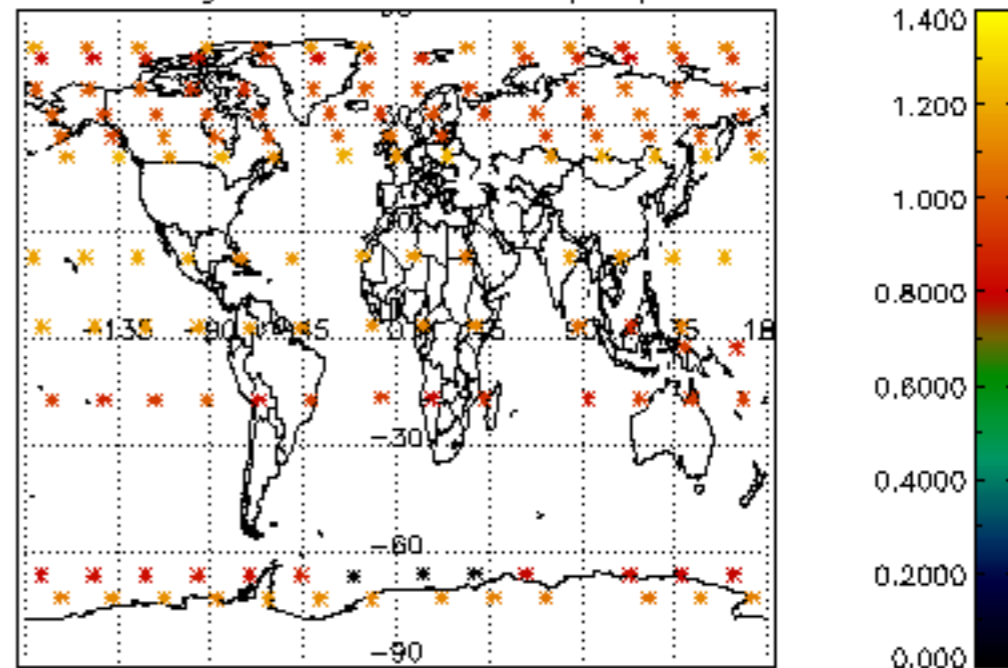




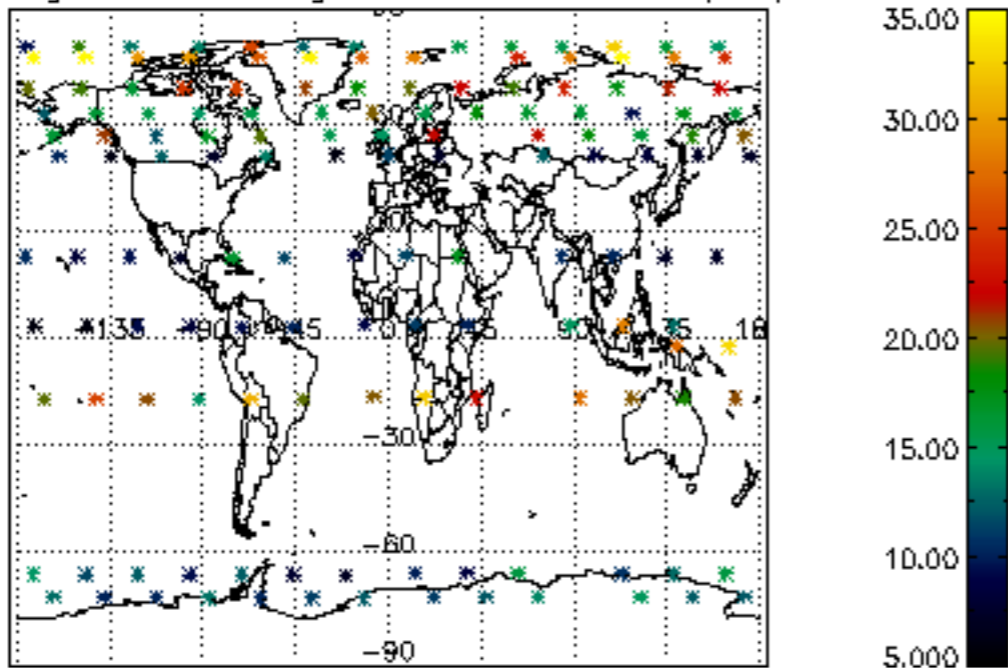
Percentage of cosmic ray hits per profile



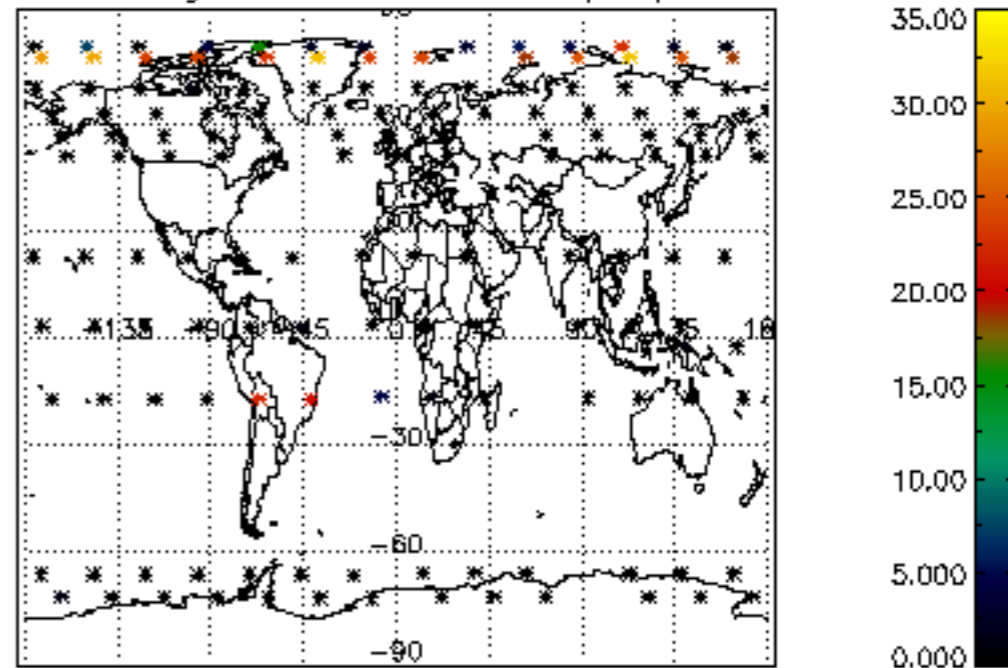
Percentage of datation errors per profile



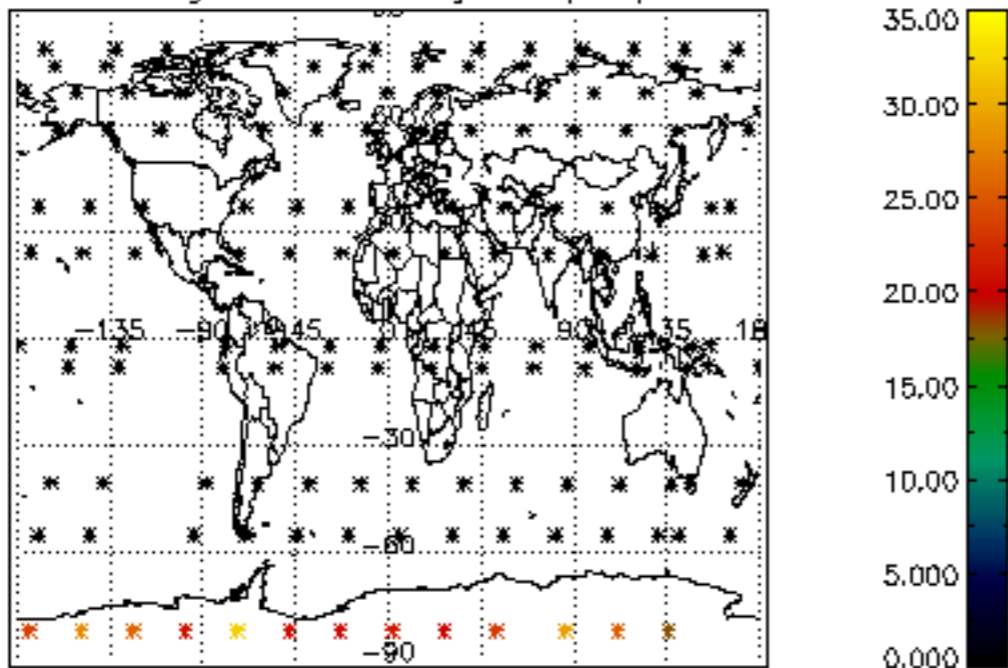
Percentage of star falling outside central band per profile



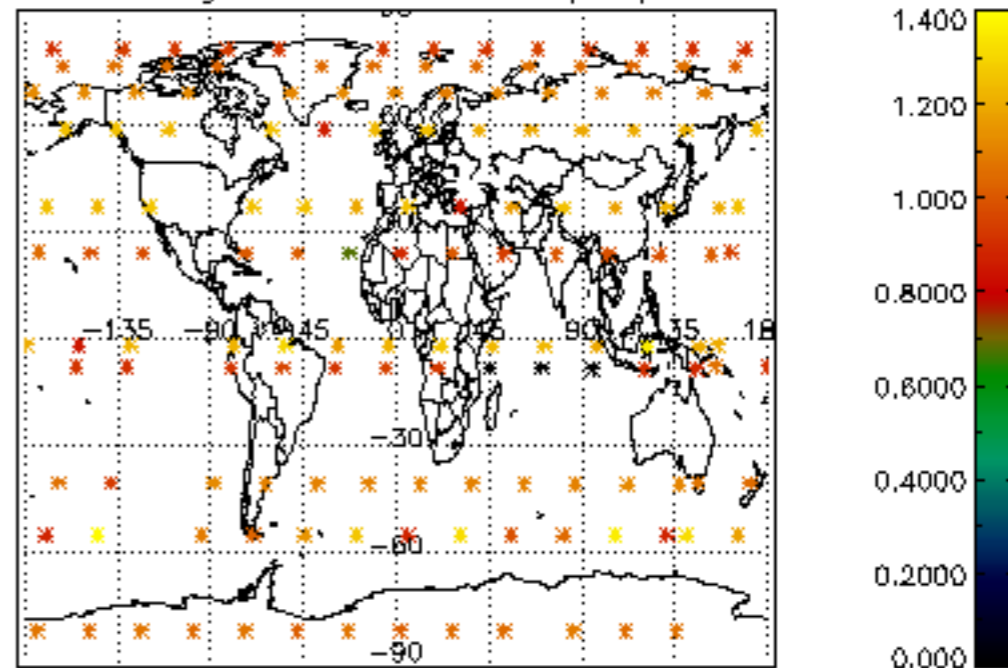
Percentage of saturation errors per profile



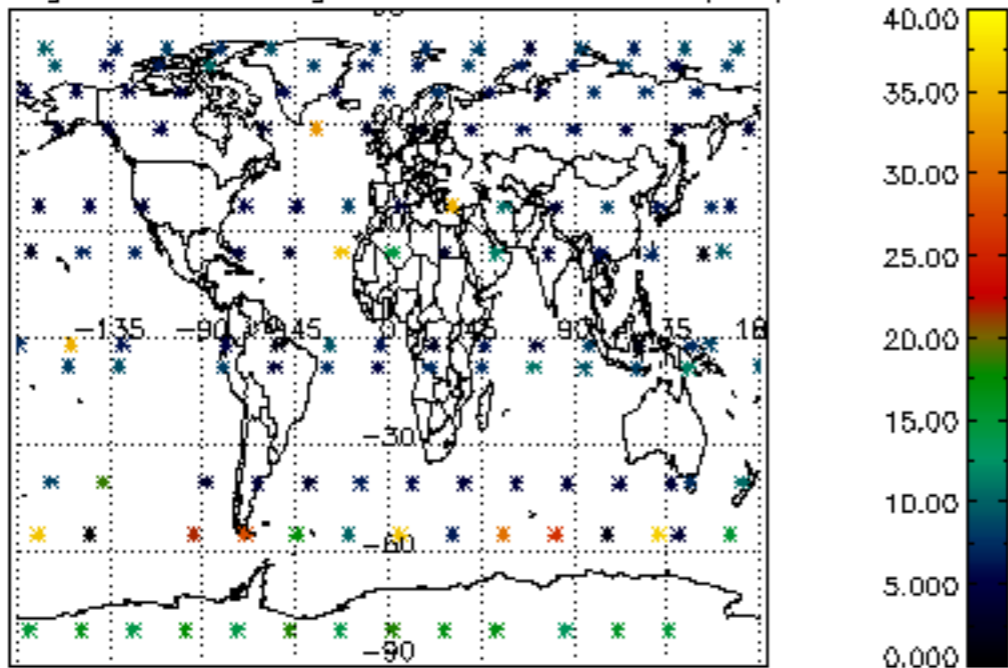
Percentage of cosmic ray hits per profile



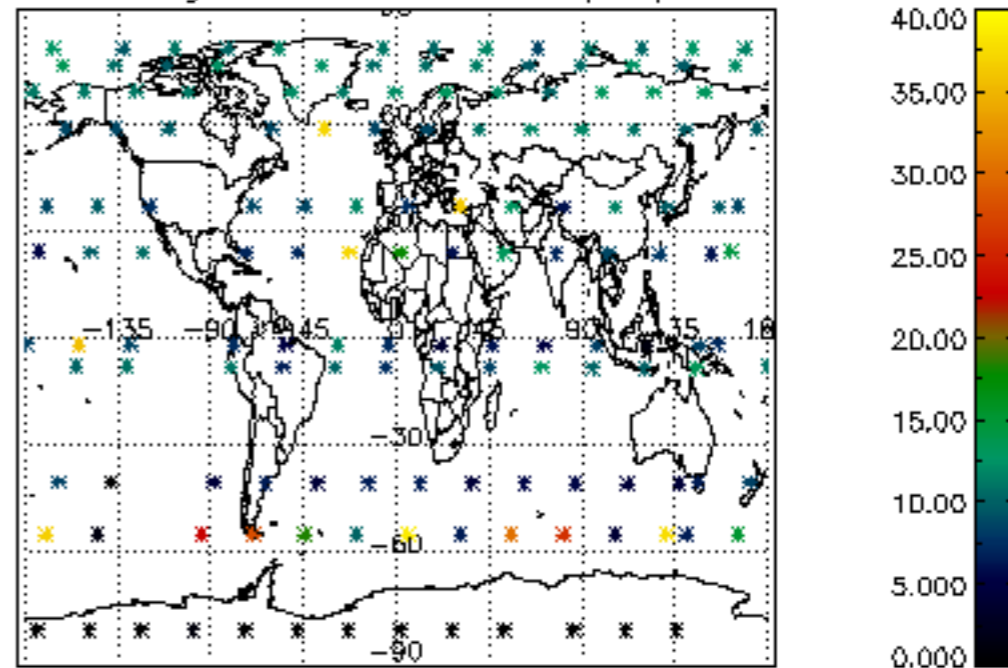
Percentage of datation errors per profile

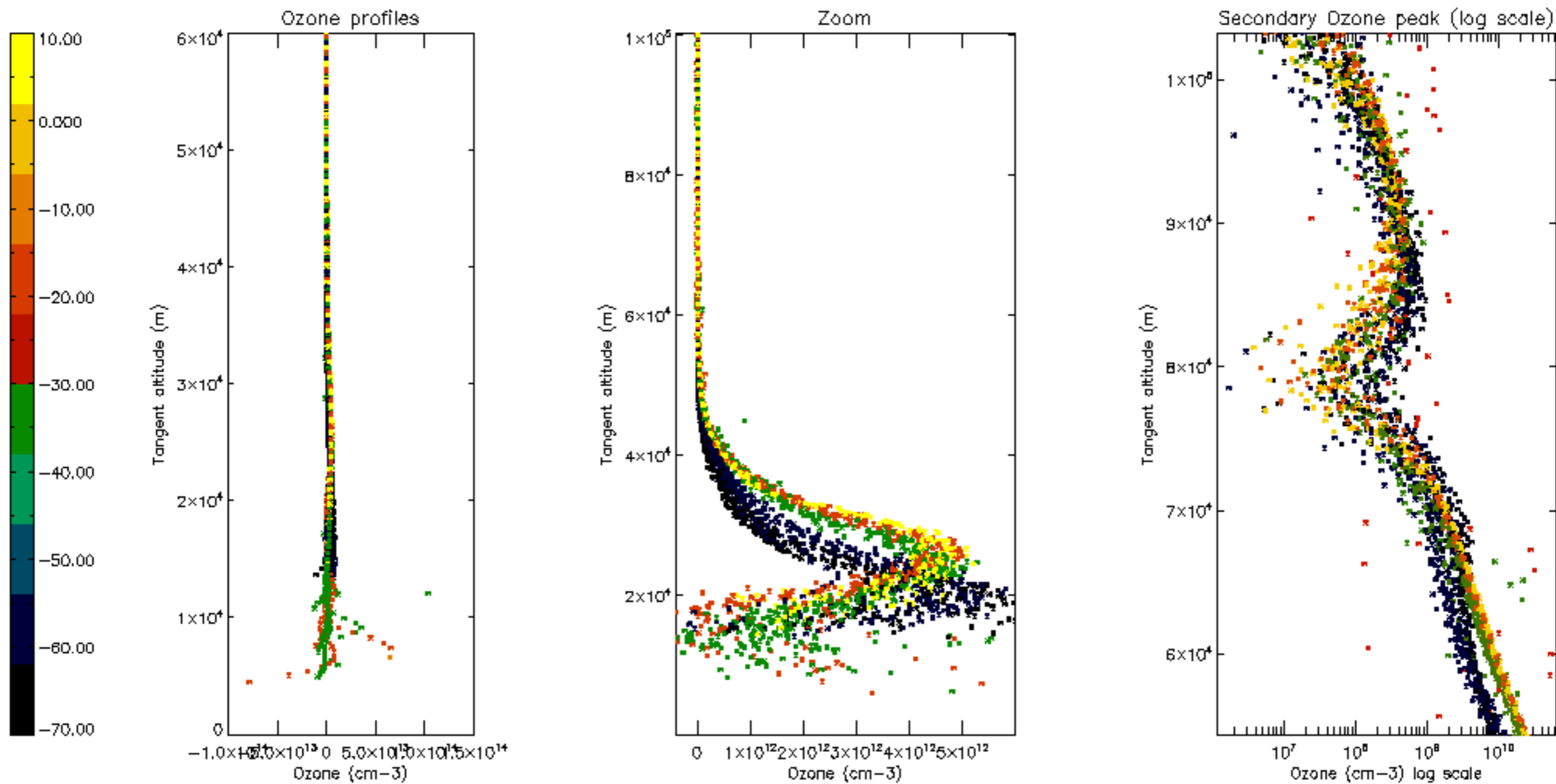


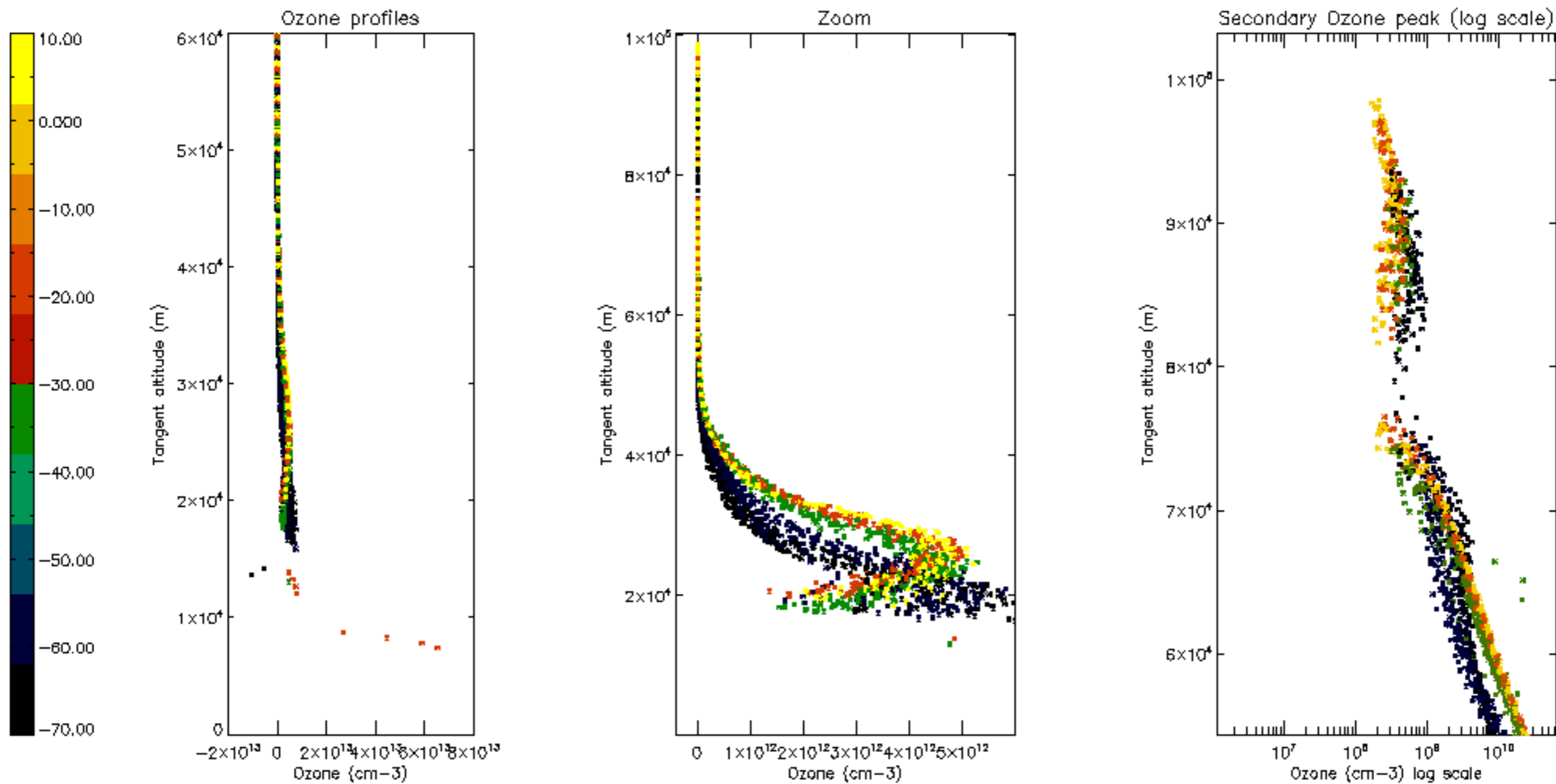
Percentage of star falling outside central band per profile

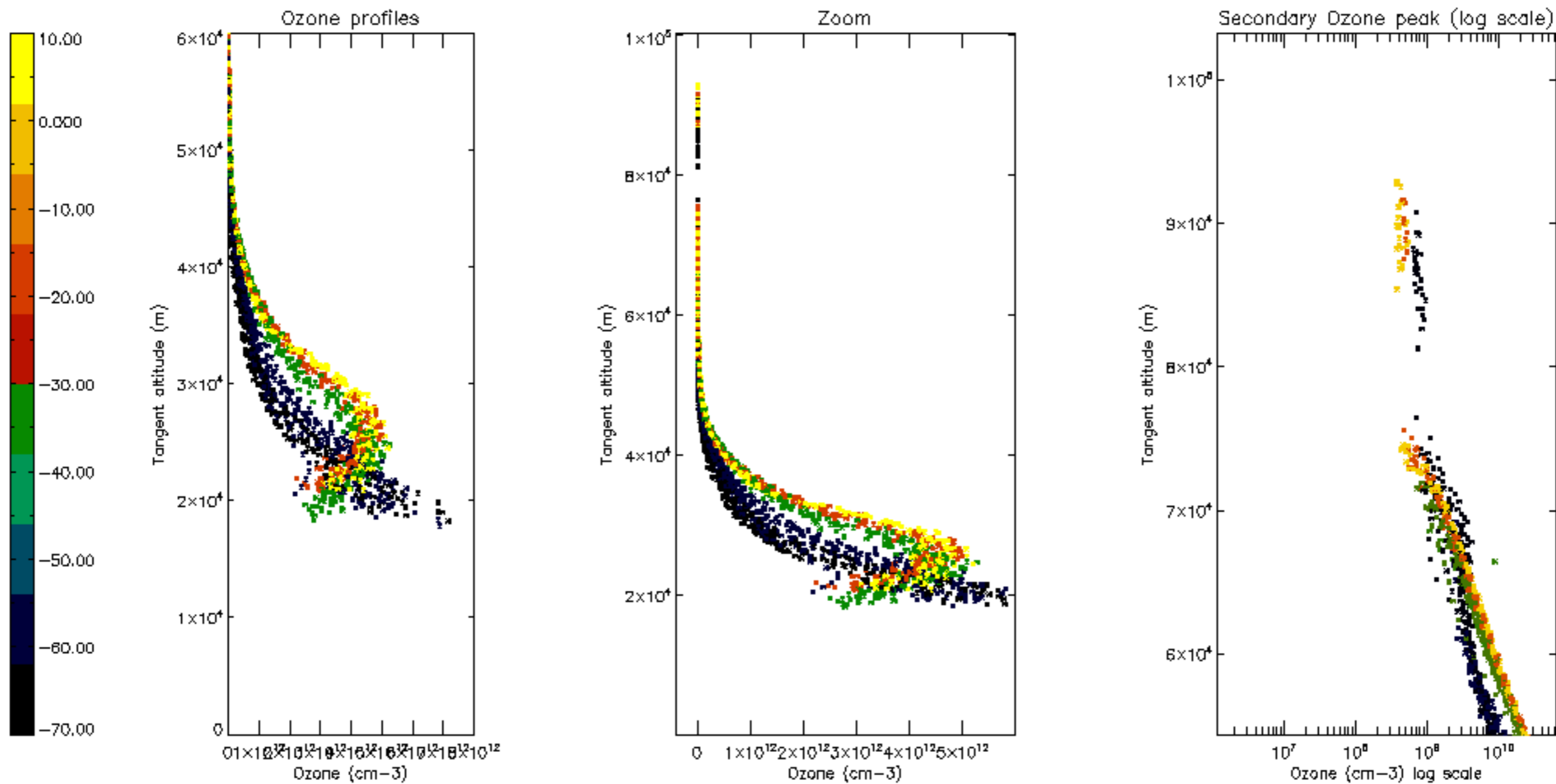


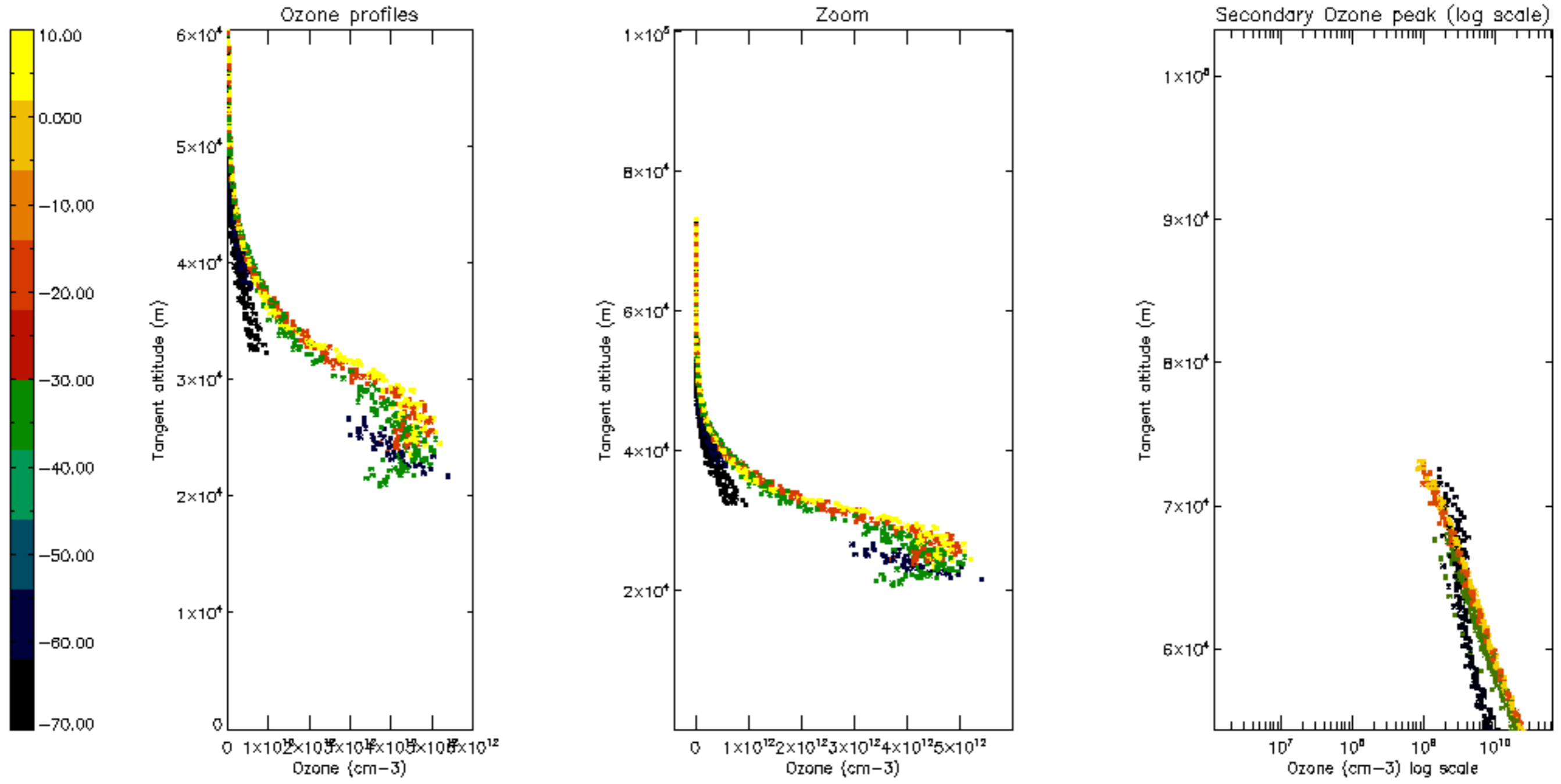
Percentage of saturation errors per profile

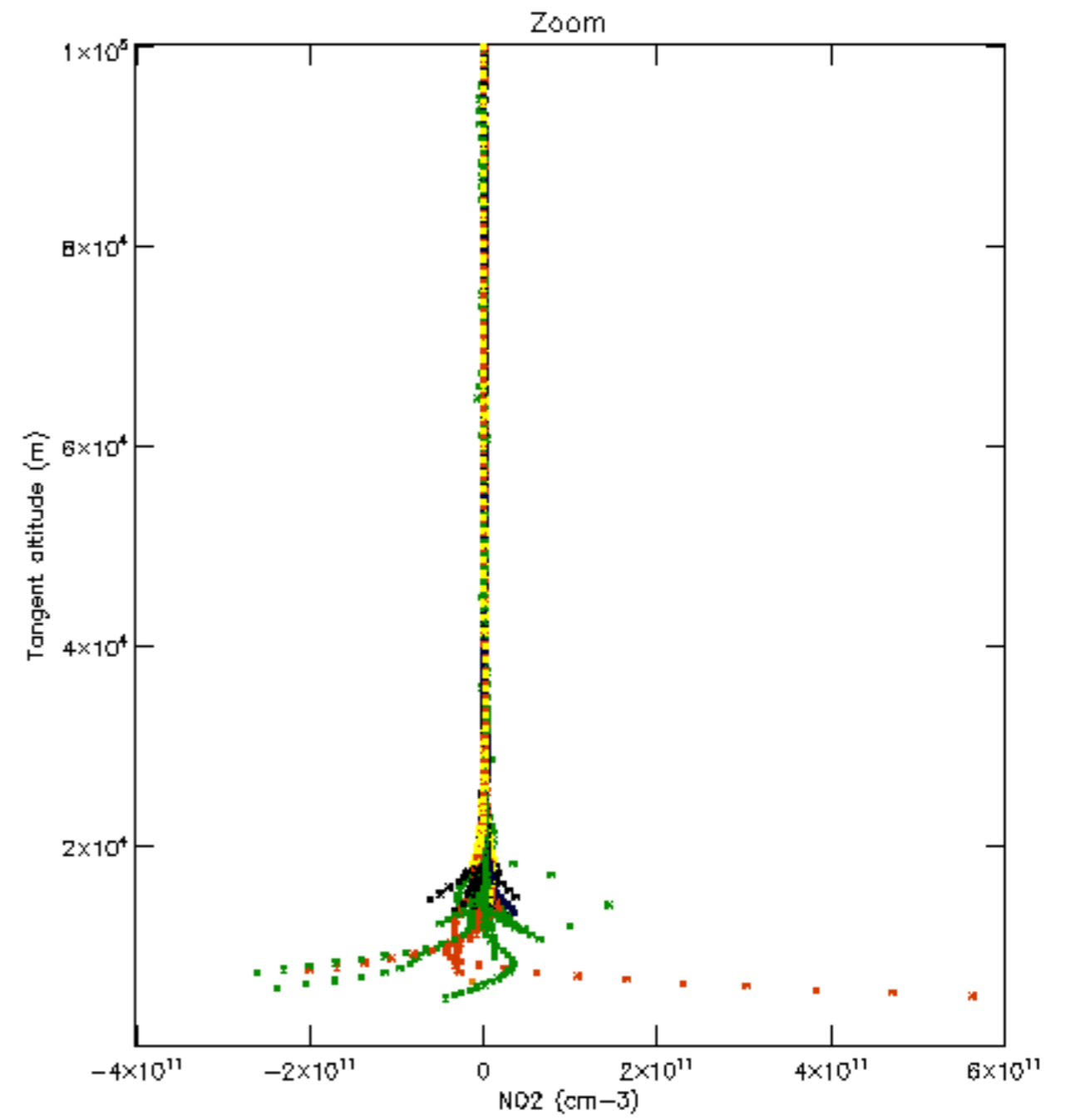
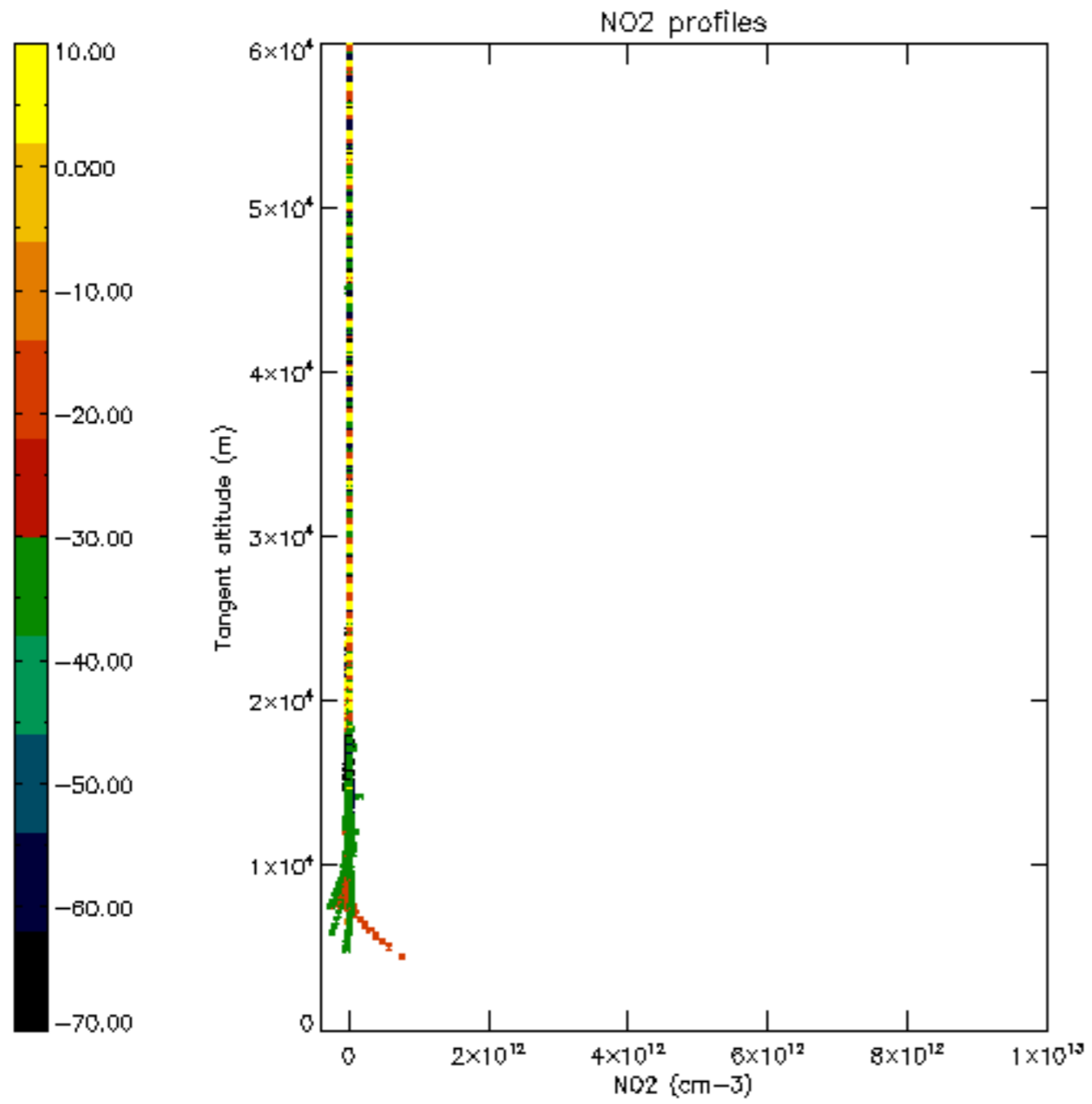


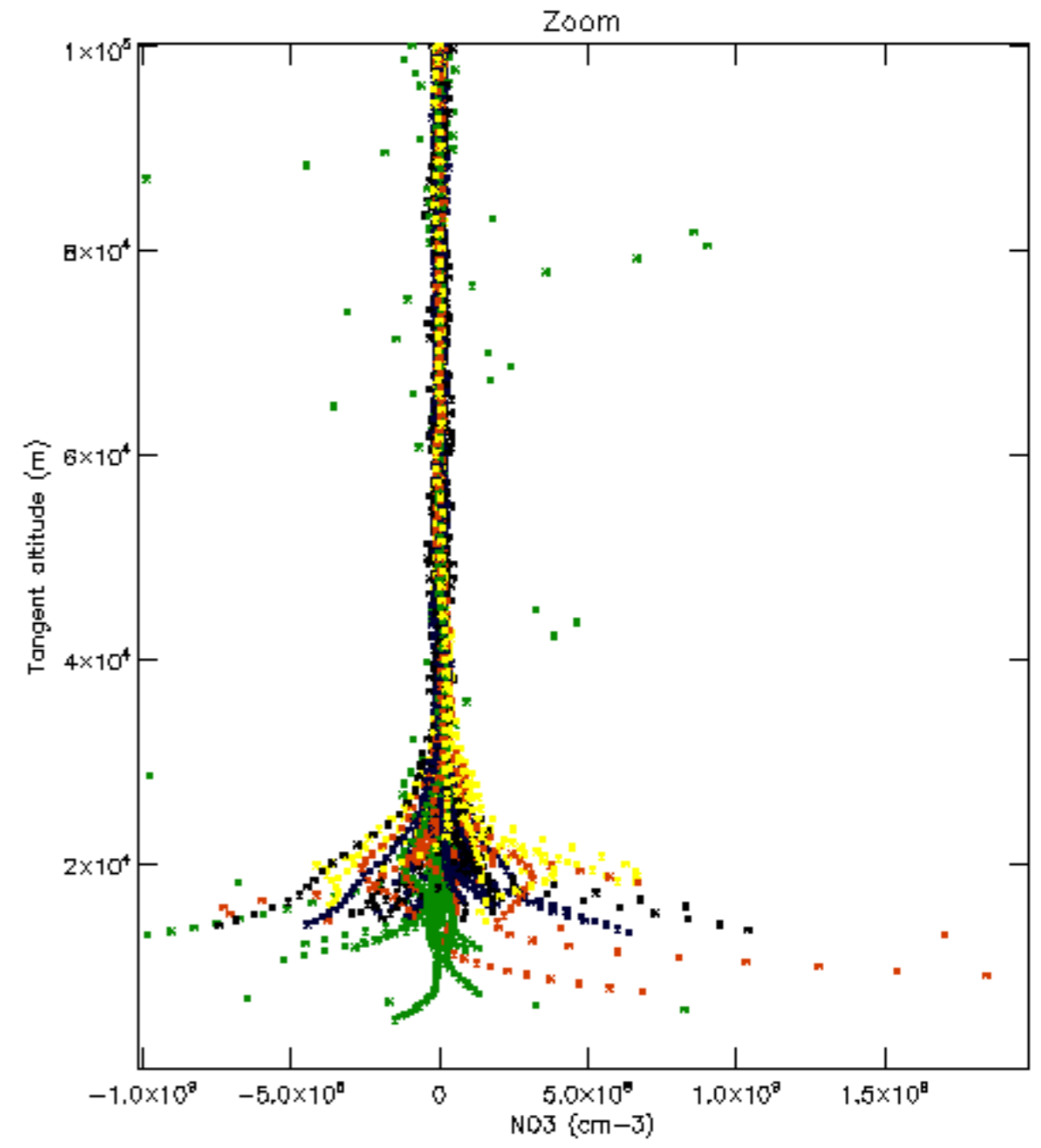
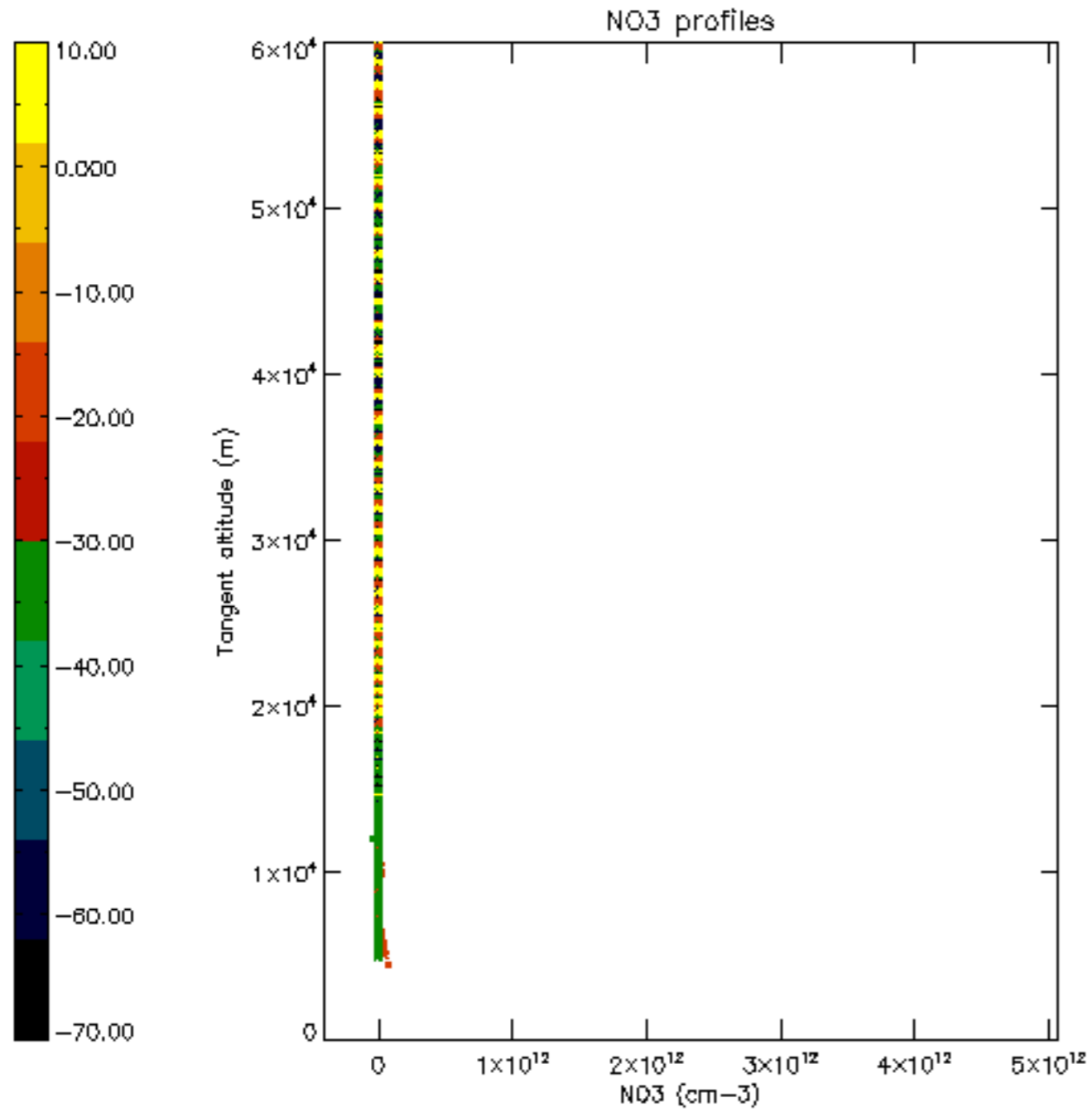


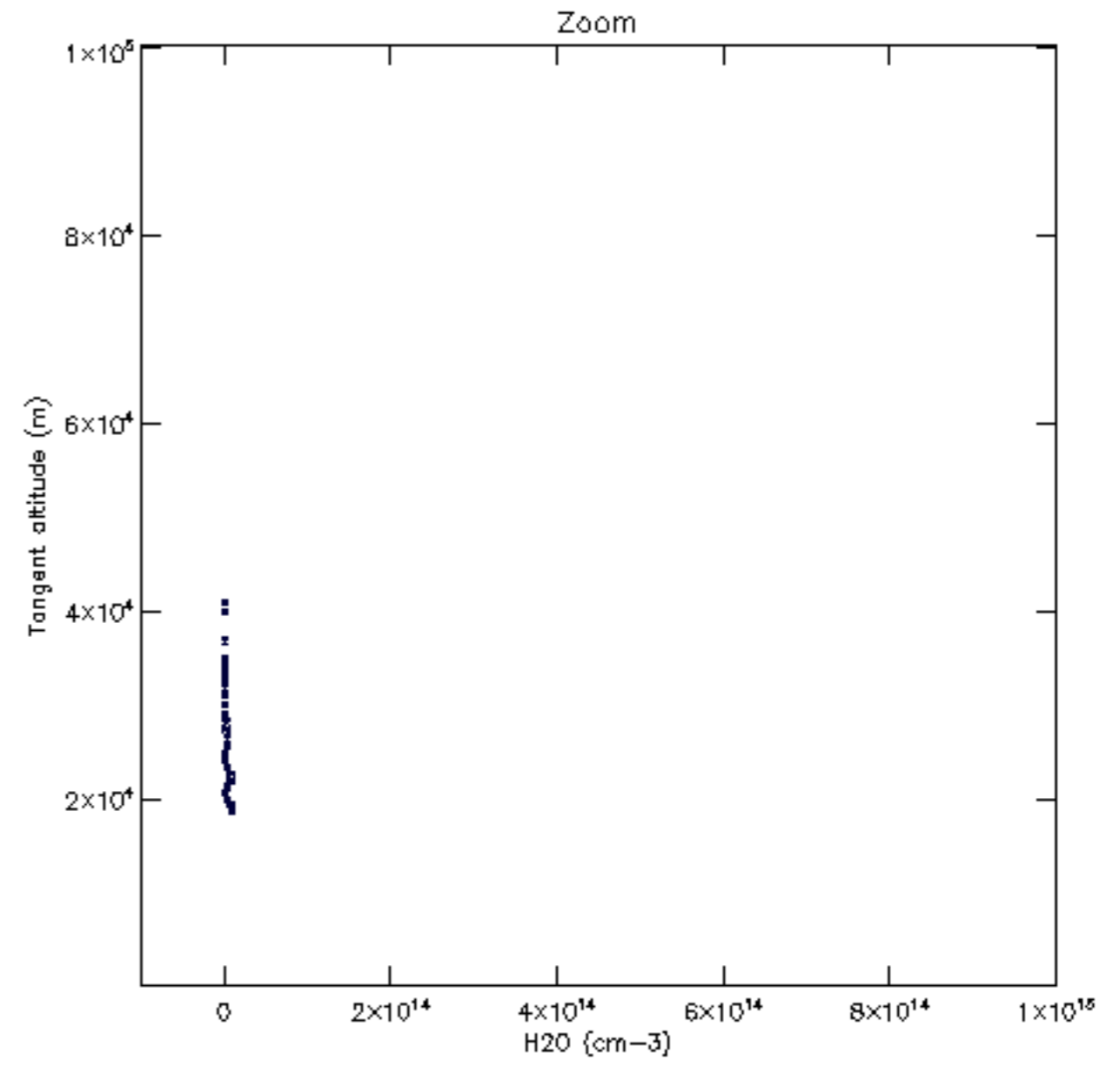
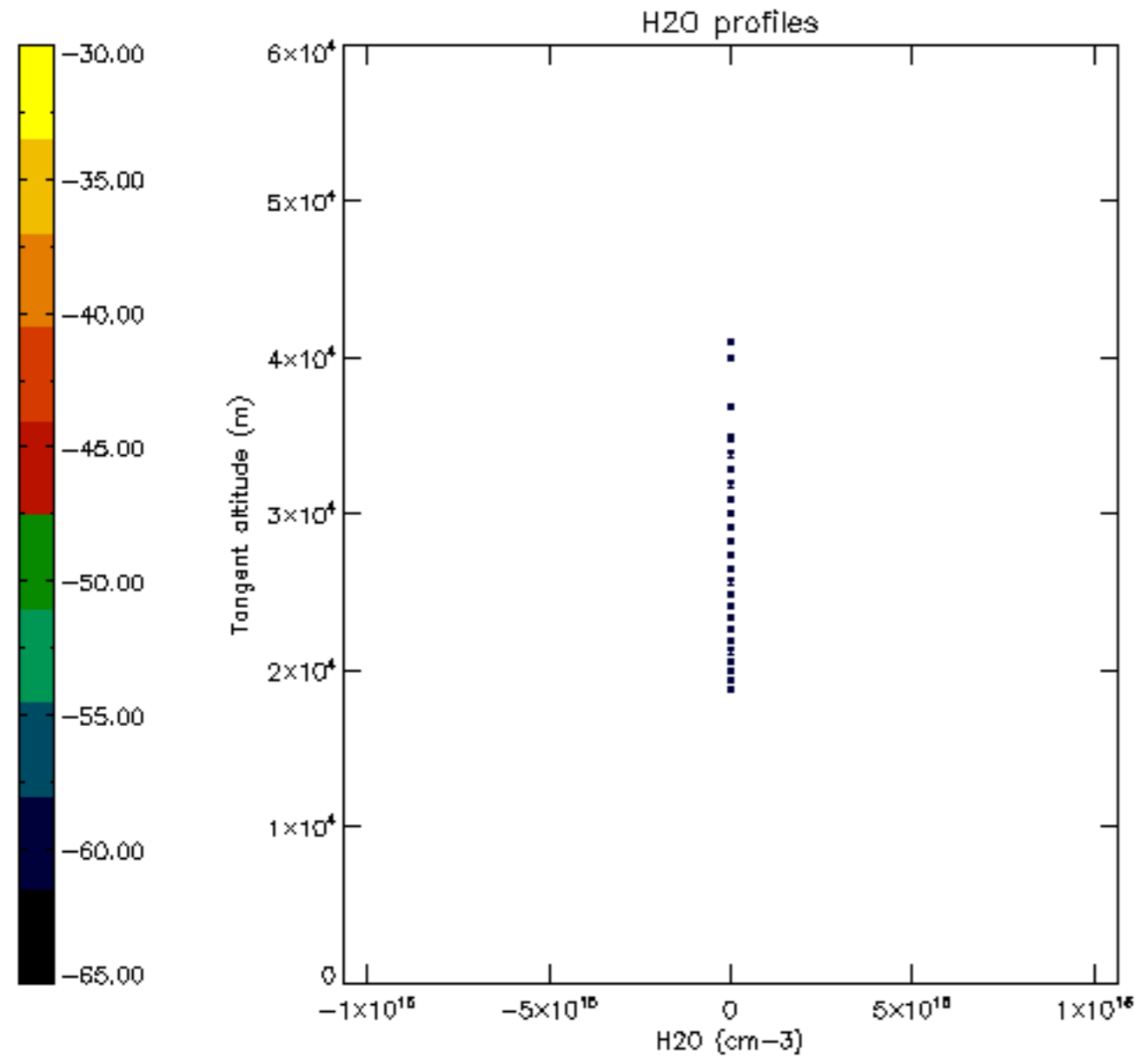


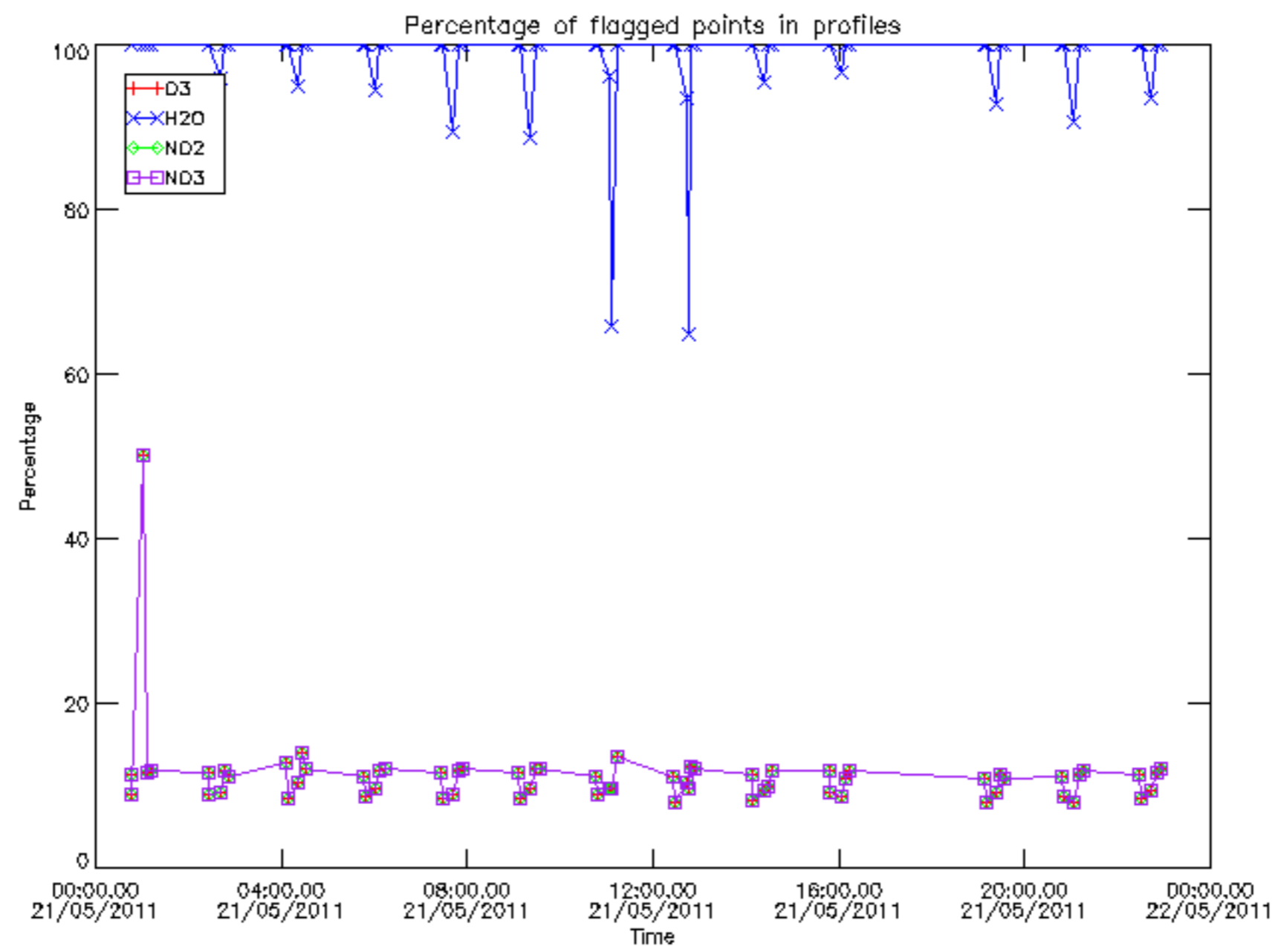




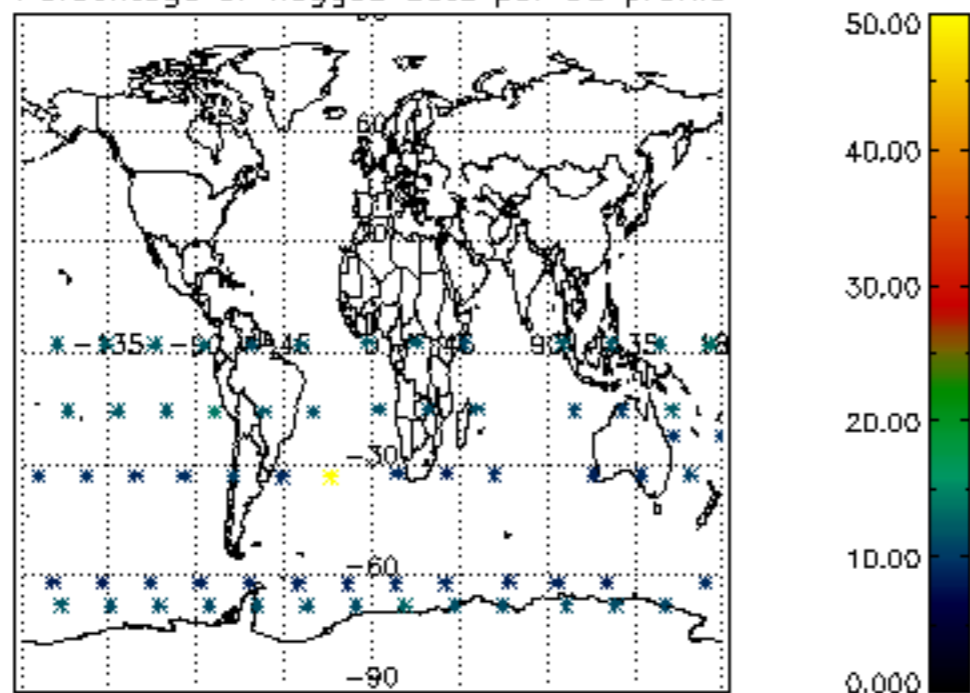




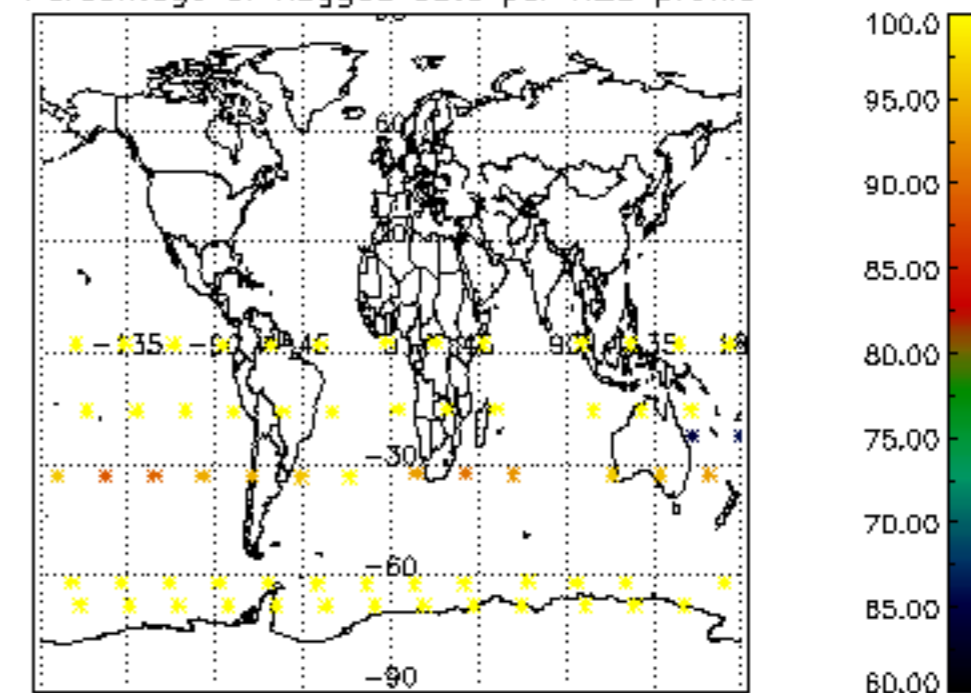




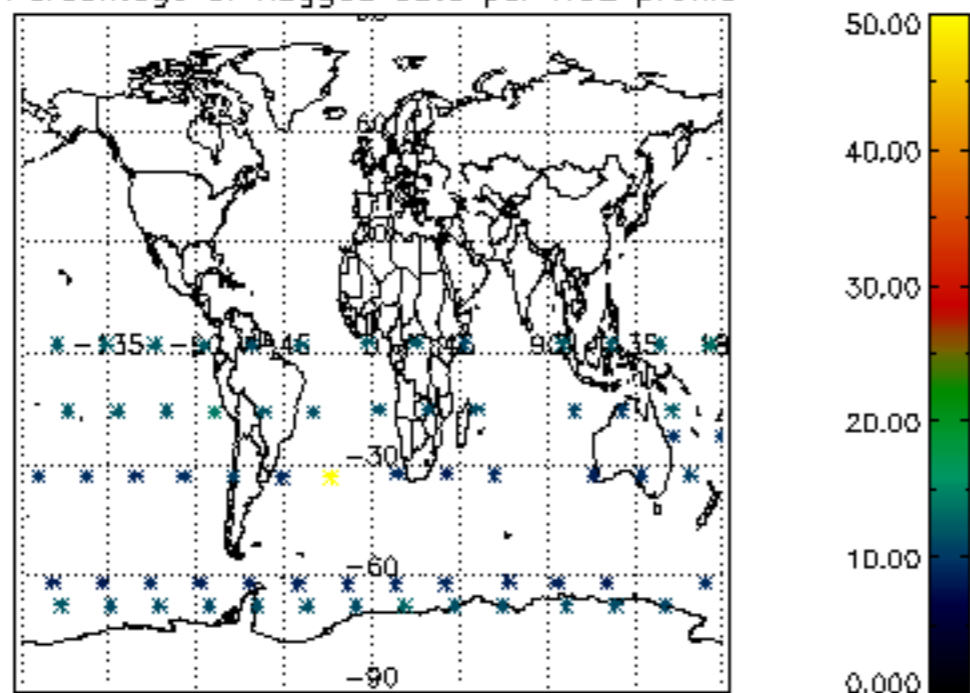
Percentage of flagged data per D3 profile



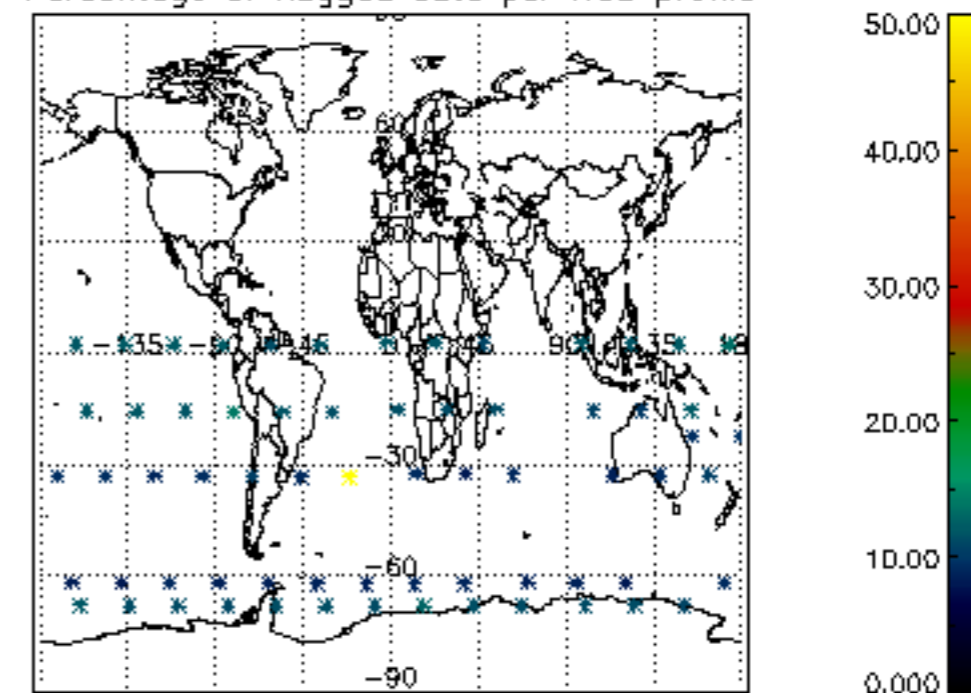
Percentage of flagged data per H2O profile

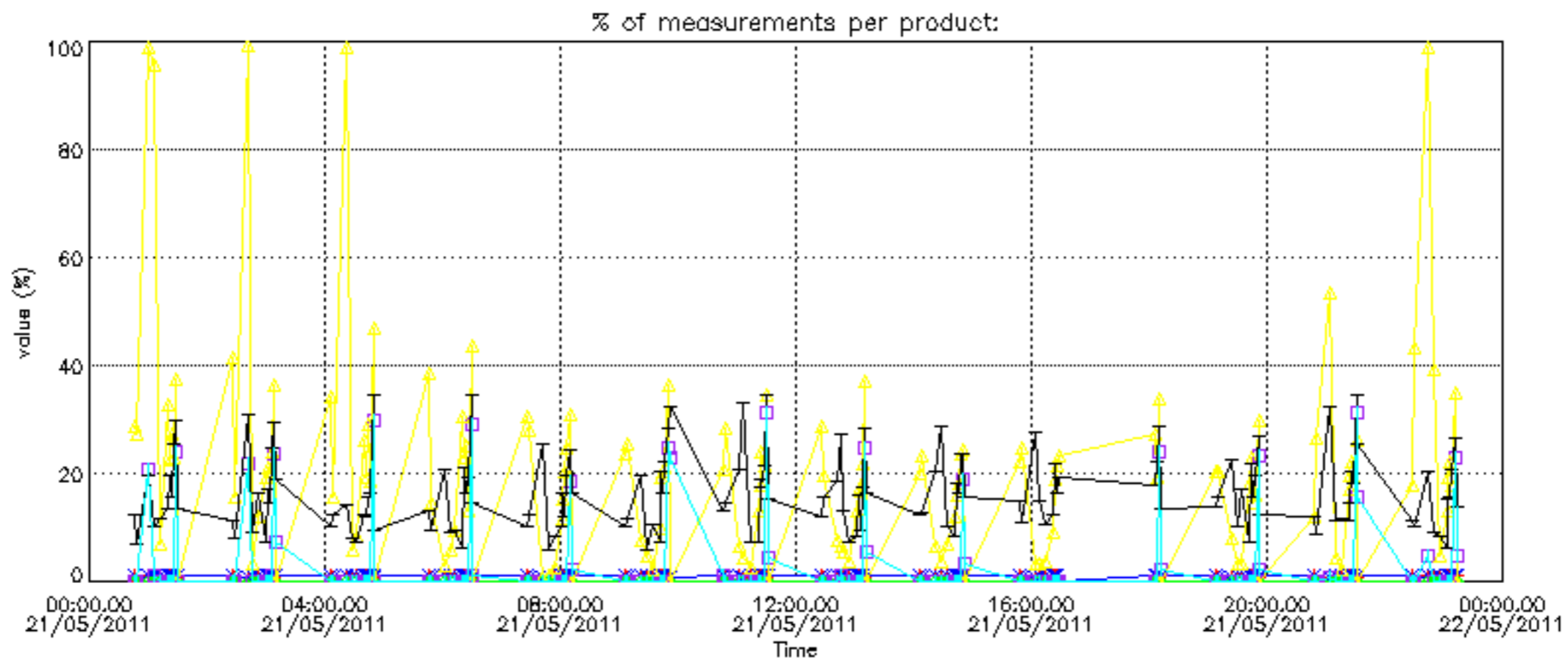


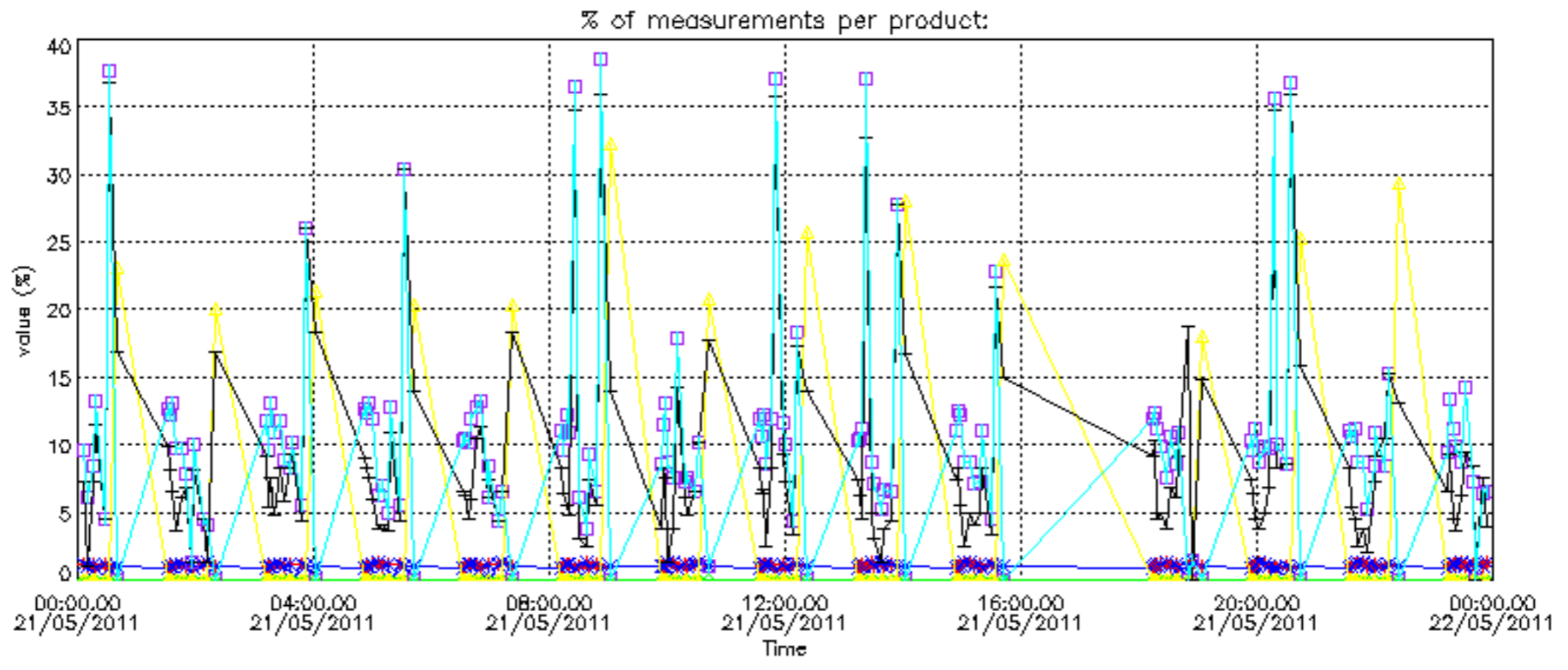
Percentage of flagged data per NO2 profile



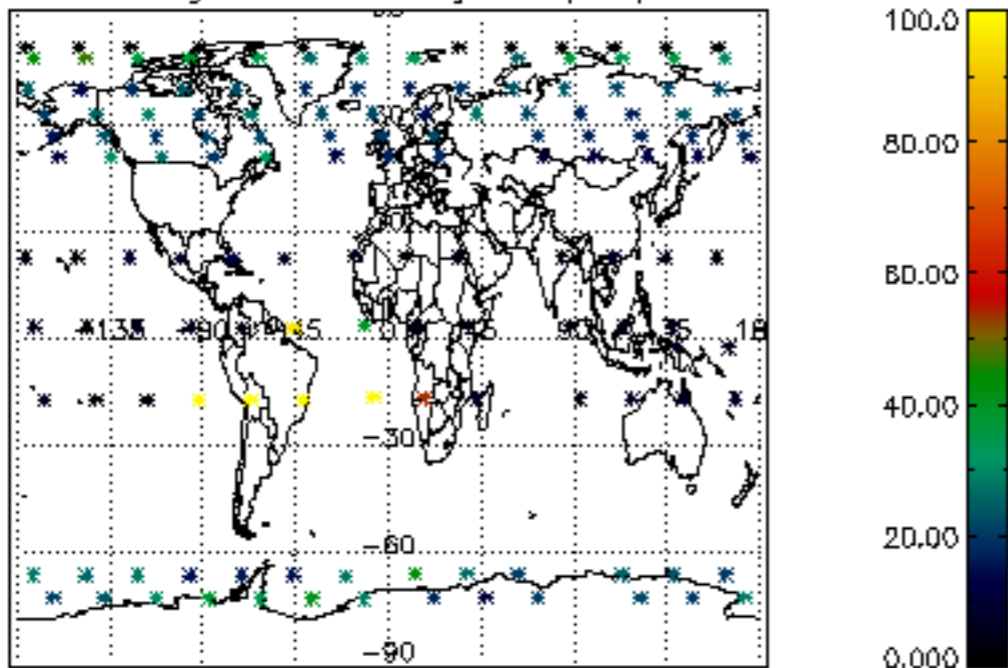
Percentage of flagged data per NO3 profile



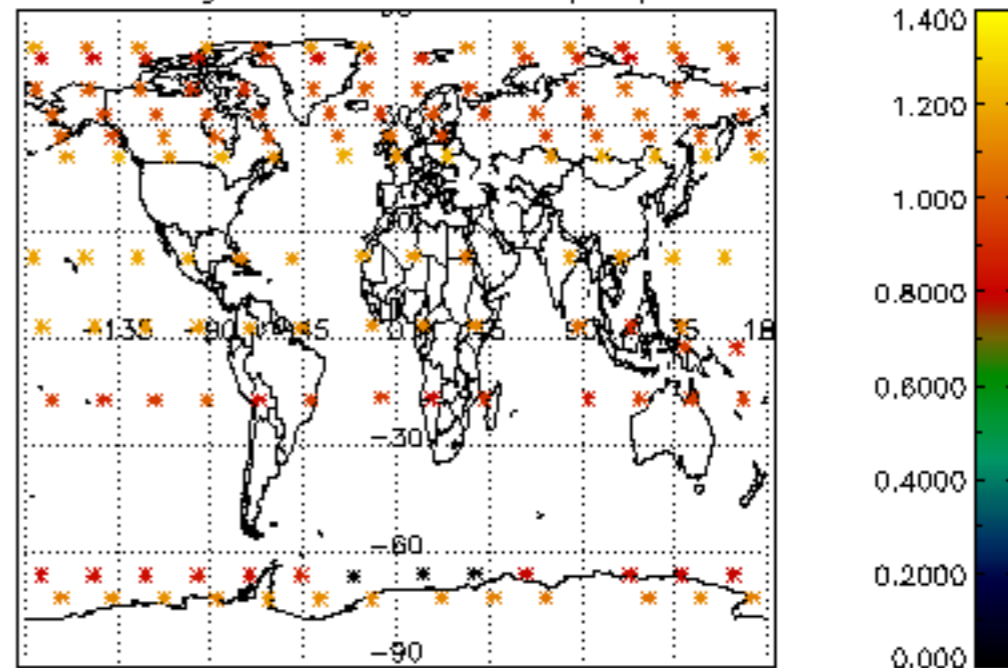




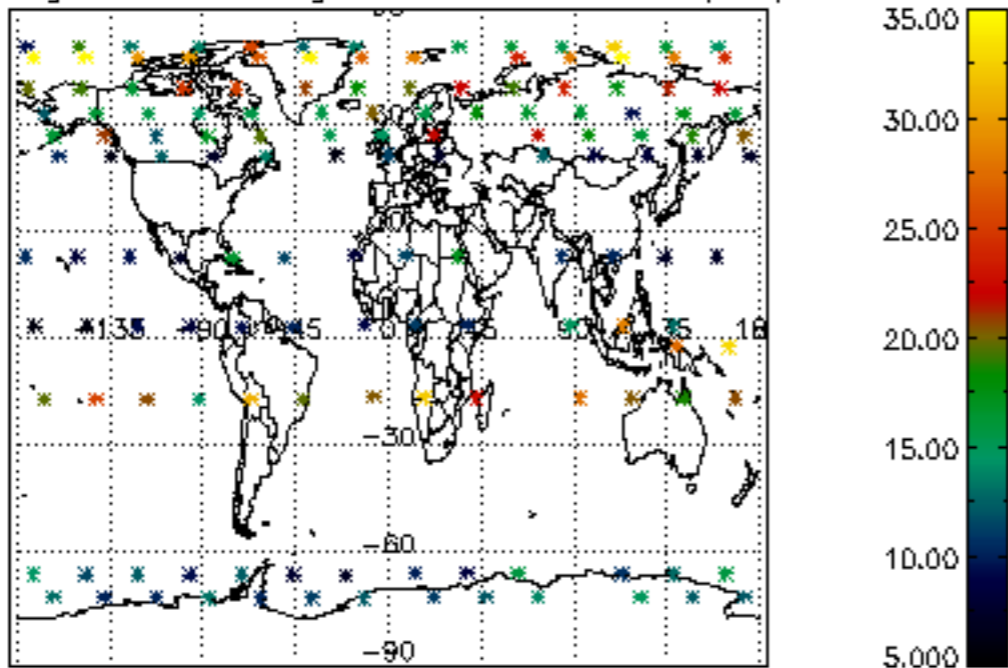
Percentage of cosmic ray hits per profile



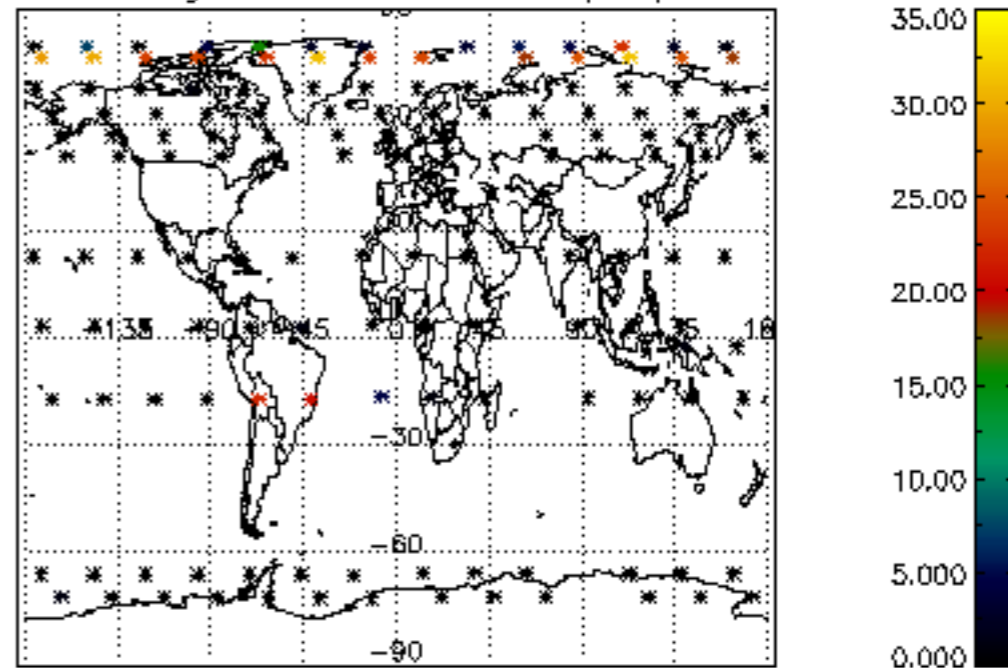
Percentage of datation errors per profile



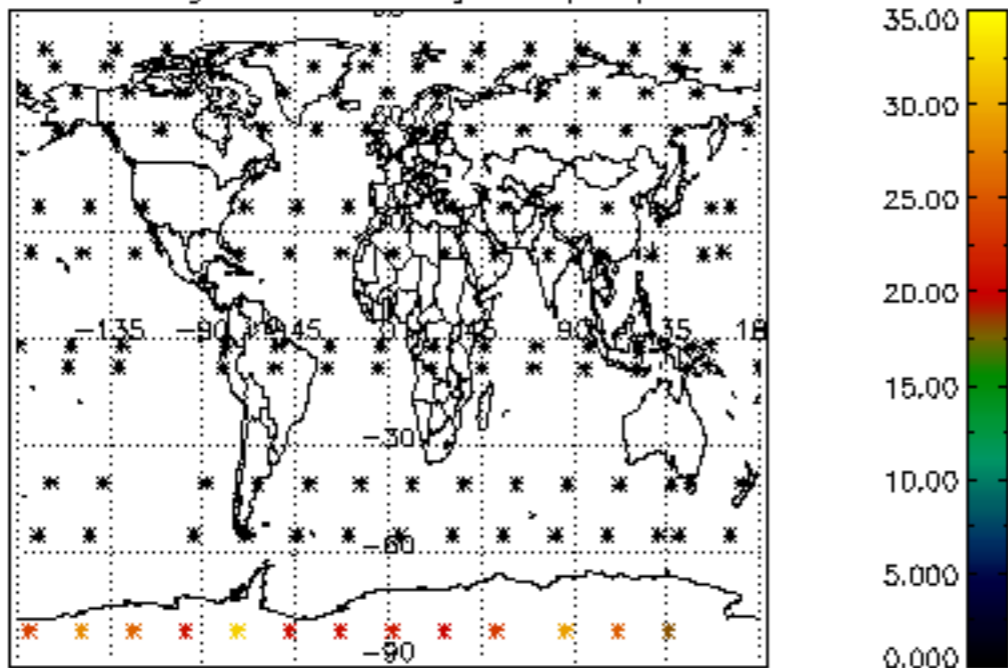
Percentage of star falling outside central band per profile



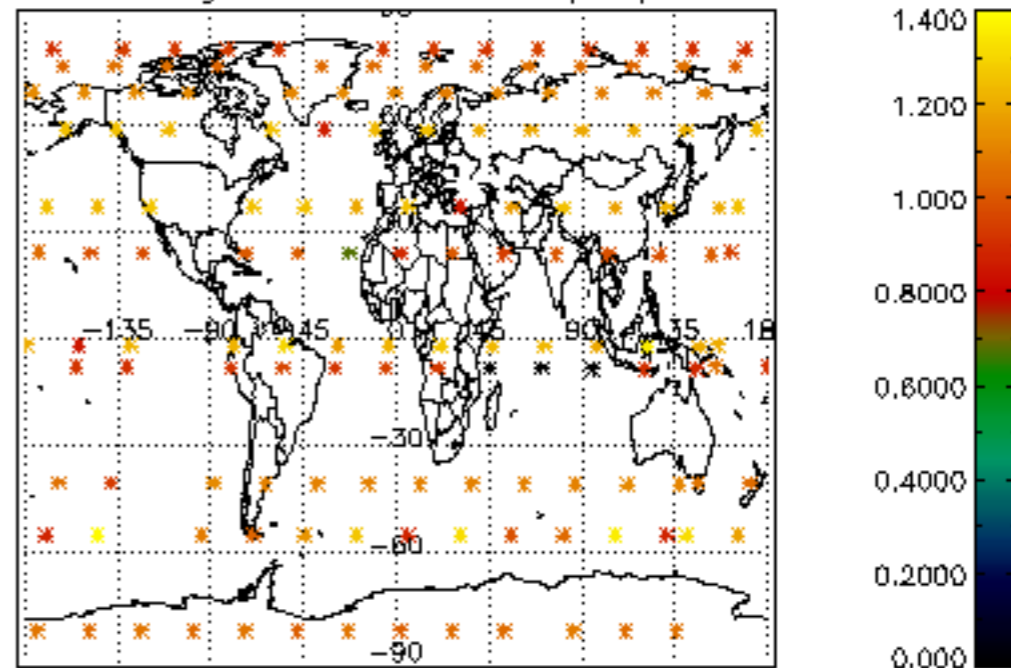
Percentage of saturation errors per profile



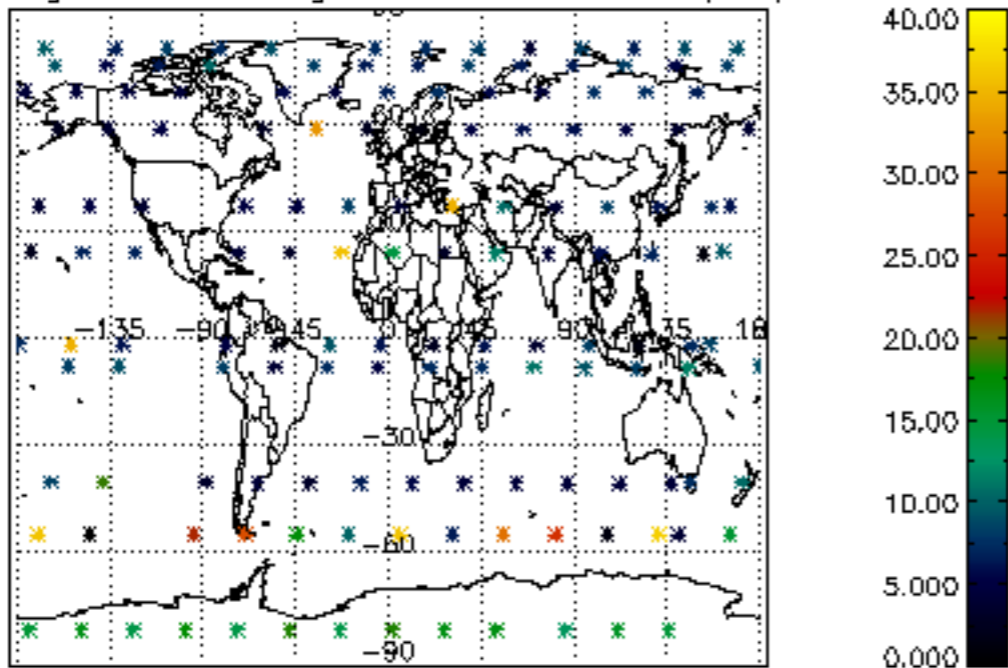
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

