

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 18:28:47
Data source version	GOMOS/6.01
Start time of products	17-04-2006 (17APR2006 00:00:00)
Stop time of products	18-04-2006 (18APR2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	248
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

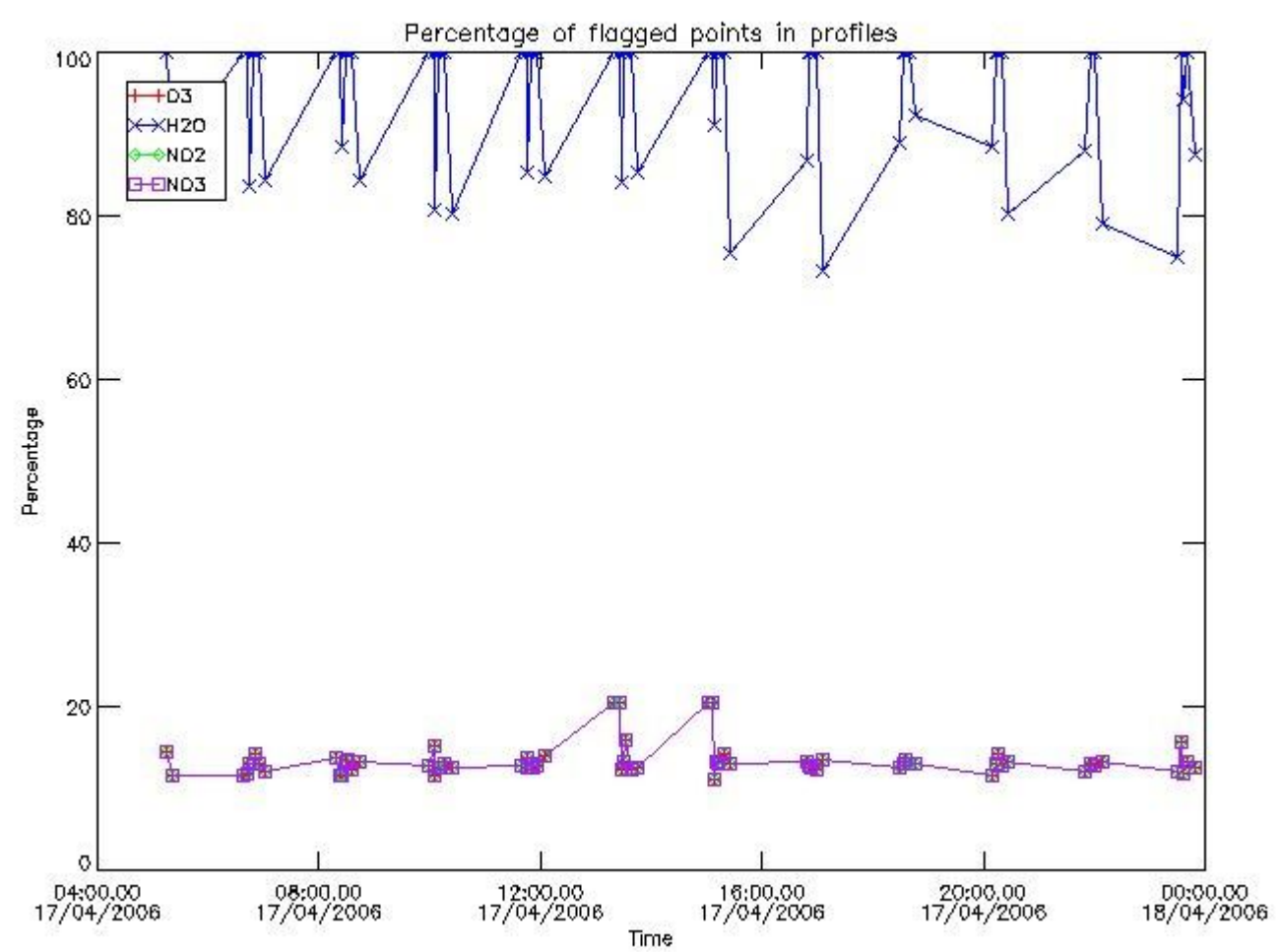
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20060417_051434_000000392046_00492_21588_9089.N1	17-APR-2006 05:14:34	Dark	39.000	45	Alp Pav	1.9400	26000.	78	21588	No
2	GOM_NL__2PRFIN20060417_052154_000000452046_00492_21588_9090.N1	17-APR-2006 05:21:54	Dark	44.500	43	Alp TrA	1.9100	4250.0	89	21588	No
3	GOM_NL__2PRFIN20060417_052400_000000402046_00492_21588_9091.N1	17-APR-2006 05:24:00	Straylight	40.000	134	Bet TrA	2.8100	6600.0	80	21588	No
4	GOM_NL__2PRFIN20060417_052622_000000482046_00492_21588_9092.N1	17-APR-2006 05:26:22	Straylight	47.500	4	Alp1Cen	-0.010000	5800.0	95	21588	No
5	GOM_NL__2PRFIN20060417_052935_000000402046_00492_21588_9093.N1	17-APR-2006 05:29:35	Straylight	39.500	78	Alp Lup	2.3040	28000.	79	21588	No
6	GOM_NL__2PRFIN20060417_053127_000000382046_00492_21588_9094.N1	17-APR-2006 05:31:27	Straylight	38.000	64	Gam Cen	2.2000	10600.	76	21588	No
7	GOM_NL__2PRFIN20060417_053330_000000382046_00492_21588_9095.N1	17-APR-2006 05:33:30	Straylight	38.000	54	5The Cen	2.0550	4500.0	76	21588	No
8	GOM_NL__2PRFIN20060417_053835_000000422046_00492_21588_9096.N1	17-APR-2006 05:38:35	Twilight_and_stray	41.500	106	9Bet Crv	2.6480	5600.0	83	21588	No
9	GOM_NL__2PRFIN20060417_054034_000000382046_00492_21588_9097.N1	17-APR-2006 05:40:34	Bright	37.500	163	7Del Crv	2.9450	11000.	75	21588	No
10	GOM_NL__2PRFIN20060417_054449_000000382046_00492_21588_9098.N1	17-APR-2006 05:44:49	Bright	37.500	121	29Gam Vir	2.7400	7200.0	75	21588	No
11	GOM_NL__2PRFIN20060417_054935_000000352046_00492_21588_9099.N1	17-APR-2006 05:49:35	Bright	35.000	62	94Bet Leo	2.1360	9700.0	70	21588	No
12	GOM_NL__2PRFIN20060417_055809_000000372046_00492_21588_9100.N1	17-APR-2006 05:58:09	Bright	36.500	174	52Psi UMa	3.0040	4400.0	73	21588	No
13	GOM_NL__2PRFIN20060417_060032_000000362046_00492_21588_9101.N1	17-APR-2006 06:00:32	Bright	35.500	87	64Gam UMa	2.4330	11000.	71	21588	No
14	GOM_NL__2PRFIN20060417_060255_000000372046_00492_21588_9102.N1	17-APR-2006 06:02:55	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	21588	No
15	GOM_NL__2PRFIN20060417_061055_000000372046_00492_21588_9103.N1	17-APR-2006 06:10:55	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	21588	No
16	GOM_NL__2PRFIN20060417_061826_000000472046_00492_21588_9104.N1	17-APR-2006 06:18:26	Bright	47.000	76	27Gam Cas	2.3000	30000.	94	21588	No
17	GOM_NL__2PRFIN20060417_061945_000000342046_00492_21588_9105.N1	17-APR-2006 06:19:45	Bright	33.500	68	18Alp Cas	2.2250	4500.0	67	21588	No
18	GOM_NL__2PRFIN20060417_062810_000000382046_00492_21588_9106.N1	17-APR-2006 06:28:10	Bright	38.000	164	44Eta Peg	2.9480	5400.0	76	21588	No
19	GOM_NL__2PRFIN20060417_063749_000000452046_00492_21588_9107.N1	17-APR-2006 06:37:49	Dark	44.500	162	34Alp Aqr	2.9440	5350.0	89	21588	No
20	GOM_NL__2PRFIN20060417_064254_000000472046_00492_21588_9108.N1	17-APR-2006 06:42:54	Dark	47.000	142	49Del Cap	2.8500	8900.0	94	21588	No
21	GOM_NL__2PRFIN20060417_064441_000000432046_00492_21588_9109.N1	17-APR-2006 06:44:41	Dark	43.000	18	24Alp PsA	1.1660	9700.0	86	21588	No
22	GOM_NL__2PRFIN20060417_064809_000000392046_00492_21588_9110.N1	17-APR-2006 06:48:09	Dark	39.000	172	Gam Gru	3.0030	13100.	78	21588	No
23	GOM_NL__2PRFIN20060417_065010_000000402046_00492_21588_9111.N1	17-APR-2006 06:50:10	Dark	39.500	31	Alp Gru	1.7340	15200.	79	21588	No
24	GOM_NL__2PRFIN20060417_065511_000000402046_00493_21589_9089.N1	17-APR-2006 06:55:11	Dark	39.500	45	Alp Pav	1.9400	26000.	79	21589	No
25	GOM_NL__2PRFIN20060417_070230_000000422046_00493_21589_9090.N1	17-APR-2006 07:02:30	Dark	42.000	43	Alp TrA	1.9100	4250.0	84	21589	No
26	GOM_NL__2PRFIN20060417_070437_000000392046_00493_21589_9091.N1	17-APR-2006 07:04:37	Straylight	38.500	134	Bet TrA	2.8100	6600.0	77	21589	No
27	GOM_NL__2PRFIN20060417_070659_000000522046_00493_21589_9092.N1	17-APR-2006 07:06:59	Straylight	52.000	4	Alp1Cen	-0.010000	5800.0	104	21589	No
28	GOM_NL__2PRFIN20060417_071011_000000402046_00493_21589_9093.N1	17-APR-2006 07:10:11	Straylight	40.000	78	Alp Lup	2.3040	28000.	80	21589	No
29	GOM_NL__2PRFIN20060417_071203_000000412046_00493_21589_9094.N1	17-APR-2006 07:12:03	Straylight	40.500	64	Gam Cen	2.2000	10600.	81	21589	No
30	GOM_NL__2PRFIN20060417_071407_000000382046_00493_21589_9095.N1	17-APR-2006 07:14:07	Straylight	38.000	54	5The Cen	2.0550	4500.0	76	21589	No
31	GOM_NL__2PRFIN20060417_071911_000000402046_00493_21589_9096.N1	17-APR-2006 07:19:11	Twilight_and_stray	39.500	106	9Bet Crv	2.6480	5600.0	79	21589	No
32	GOM_NL__2PRFIN20060417_072110_000000362046_00493_21589_9097.N1	17-APR-2006 07:21:10	Bright	36.000	163	7Del Crv	2.9450	11000.	72	21589	No
33	GOM_NL__2PRFIN20060417_072525_000000372046_00493_21589_9098.N1	17-APR-2006 07:25:25	Bright	36.500	121	29Gam Vir	2.7400	7200.0	73	21589	No
34	GOM_NL__2PRFIN20060417_073011_000000352046_00493_21589_9099.N1	17-APR-2006 07:30:11	Bright	35.000	62	94Bet Leo	2.1360	9700.0	70	21589	No
35	GOM_NL__2PRFIN20060417_073845_000000362046_00493_21589_9100.N1	17-APR-2006 07:38:45	Bright	35.500	174	52Psi UMa	3.0040	4400.0	71	21589	No
36	GOM_NL__2PRFIN20060417_074108_000000472046_00493_21589_9101.N1	17-APR-2006 07:41:08	Bright	46.500	87	64Gam UMa	2.4330	11000.	93	21589	No
37	GOM_NL__2PRFIN20060417_074331_000000372046_00493_21589_9102.N1	17-APR-2006 07:43:31	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	21589	No
38	GOM_NL__2PRFIN20060417_075131_000000352046_00493_21589_9103.N1	17-APR-2006 07:51:31	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	21589	No
39	GOM_NL__2PRFIN20060417_075902_000000332046_00493_21589_9104.N1	17-APR-2006 07:59:02	Bright	33.000	76	27Gam Cas	2.3000	30000.	66	21589	No
40	GOM_NL__2PRFIN20060417_080021_000000322046_00493_21589_9105.N1	17-APR-2006 08:00:21	Bright	32.000	68	18Alp Cas	2.2250	4500.0	64	21589	No
41	GOM_NL__2PRFIN20060417_080847_000000362046_00493_21589_9106.N1	17-APR-2006 08:08:47	Bright	36.000	164	44Eta Peg	2.9480	5400.0	72	21589	No
42	GOM_NL__2PRFIN20060417_081826_000000452046_00493_21589_9107.N1	17-APR-2006 08:18:26	Dark	44.500	162	34Alp Aqr	2.9440	5350.0	89	21589	No

220	GOM_NL__2PRFIN20060417_215007_000000422046_00501_21597_9127.N1	17-APR-2006 21:50:07	Dark	42.000	18	24Alp PsA	1.1660	9700.0	84	21597	No
221	GOM_NL__2PRFIN20060417_215537_000000392046_00501_21597_9128.N1	17-APR-2006 21:55:37	Dark	39.000	31	Alp Gru	1.7340	15200.	78	21597	No
222	GOM_NL__2PRFIN20060417_220039_000000402047_00001_21598_9109.N1	17-APR-2006 22:00:39	Dark	40.000	45	Alp Pav	1.9400	26000.	80	21598	No
223	GOM_NL__2PRFIN20060417_220757_000000392047_00001_21598_9110.N1	17-APR-2006 22:07:57	Dark	38.500	43	Alp TrA	1.9100	4250.0	77	21598	No
224	GOM_NL__2PRFIN20060417_221004_000000392047_00001_21598_9111.N1	17-APR-2006 22:10:04	Straylight	38.500	134	Bet TrA	2.8100	6600.0	77	21598	No
225	GOM_NL__2PRFIN20060417_221225_000000442047_00001_21598_9112.N1	17-APR-2006 22:12:25	Straylight	43.500	4	Alp1Cen	-0.010000	5800.0	87	21598	No
226	GOM_NL__2PRFIN20060417_221538_000000412047_00001_21598_9113.N1	17-APR-2006 22:15:38	Straylight	40.500	78	Alp Lup	2.3040	28000.	81	21598	No
227	GOM_NL__2PRFIN20060417_221728_000000402047_00001_21598_9114.N1	17-APR-2006 22:17:28	Straylight	40.000	64	Gam Cen	2.2000	10600.	80	21598	No
228	GOM_NL__2PRFIN20060417_221933_000000482047_00001_21598_9115.N1	17-APR-2006 22:19:33	Straylight	47.500	54	5The Cen	2.0550	4500.0	95	21598	No
229	GOM_NL__2PRFIN20060417_222436_000000412047_00001_21598_9116.N1	17-APR-2006 22:24:36	Twl_and_stray	41.000	106	9Bet Crv	2.6480	5600.0	82	21598	No
230	GOM_NL__2PRFIN20060417_222635_000000362047_00001_21598_9117.N1	17-APR-2006 22:26:35	Bright	36.000	163	7Del Crv	2.9450	11000.	72	21598	No
231	GOM_NL__2PRFIN20060417_223049_000000372047_00001_21598_9118.N1	17-APR-2006 22:30:49	Bright	37.000	121	29Gam Vir	2.7400	7200.0	74	21598	No
232	GOM_NL__2PRFIN20060417_223535_000000352047_00001_21598_9119.N1	17-APR-2006 22:35:35	Bright	35.000	62	94Bet Leo	2.1360	9700.0	70	21598	No
233	GOM_NL__2PRFIN20060417_224410_000000362047_00001_21598_9120.N1	17-APR-2006 22:44:10	Bright	36.000	174	52Psi UMa	3.0040	4400.0	72	21598	No
234	GOM_NL__2PRFIN20060417_224631_000000362047_00001_21598_9121.N1	17-APR-2006 22:46:31	Bright	35.500	87	64Gam UMa	2.4330	11000.	71	21598	No
235	GOM_NL__2PRFIN20060417_224855_000000372047_00001_21598_9122.N1	17-APR-2006 22:48:55	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	21598	No
236	GOM_NL__2PRFIN20060417_225655_000000352047_00001_21598_9123.N1	17-APR-2006 22:56:55	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	21598	No
237	GOM_NL__2PRFIN20060417_230428_000000352047_00001_21598_9124.N1	17-APR-2006 23:04:28	Bright	34.500	76	27Gam Cas	2.3000	30000.	69	21598	No
238	GOM_NL__2PRFIN20060417_230546_000000362047_00001_21598_9125.N1	17-APR-2006 23:05:46	Bright	35.500	68	18Alp Cas	2.2250	4500.0	71	21598	No
239	GOM_NL__2PRFIN20060417_231412_000000382047_00001_21598_9126.N1	17-APR-2006 23:14:12	Bright	37.500	164	44Eta Peg	2.9480	5400.0	75	21598	No
240	GOM_NL__2PRFIN20060417_233043_000000432047_00001_21598_9127.N1	17-APR-2006 23:30:43	Dark	42.500	18	24Alp PsA	1.1660	9700.0	85	21598	No
241	GOM_NL__2PRFIN20060417_233413_000000392047_00001_21598_9128.N1	17-APR-2006 23:34:13	Dark	39.000	172	Gam Gru	3.0030	13100.	78	21598	No
242	GOM_NL__2PRFIN20060417_233613_000000432047_00001_21598_9129.N1	17-APR-2006 23:36:13	Dark	43.000	31	Alp Gru	1.7340	15200.	86	21598	No
243	GOM_NL__2PRFIN20060417_234116_000000432047_00002_21599_9109.N1	17-APR-2006 23:41:16	Dark	42.500	45	Alp Pav	1.9400	26000.	85	21599	No
244	GOM_NL__2PRFIN20060417_234833_000000412047_00002_21599_9110.N1	17-APR-2006 23:48:33	Dark	40.500	43	Alp TrA	1.9100	4250.0	81	21599	No
245	GOM_NL__2PRFIN20060417_235040_000000402047_00002_21599_9111.N1	17-APR-2006 23:50:40	Straylight	40.000	134	Bet TrA	2.8100	6600.0	80	21599	No
246	GOM_NL__2PRFIN20060417_235302_000000482047_00002_21599_9112.N1	17-APR-2006 23:53:02	Straylight	47.500	4	Alp1Cen	-0.010000	5800.0	95	21599	No
247	GOM_NL__2PRFIN20060417_235614_000000432047_00002_21599_9113.N1	17-APR-2006 23:56:14	Straylight	42.500	78	Alp Lup	2.3040	28000.	85	21599	No
248	GOM_NL__2PRFIN20060417_235804_000000382047_00002_21599_9114.N1	17-APR-2006 23:58:04	Straylight	37.500	64	Gam Cen	2.2000	10600.	75	21599	No

3. Quality information per product

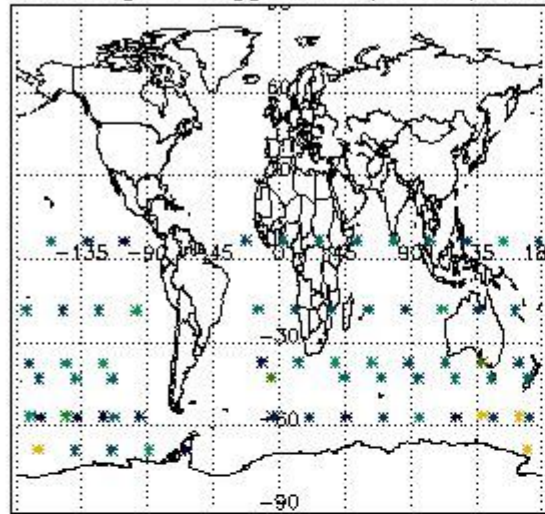
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

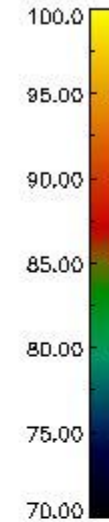
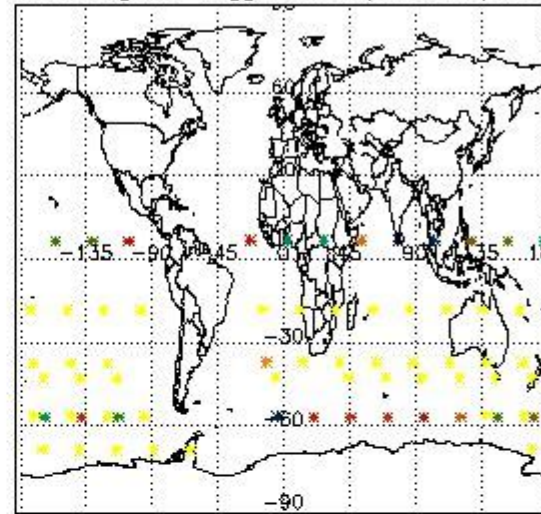


3.2 Plot quality information per product (world map)

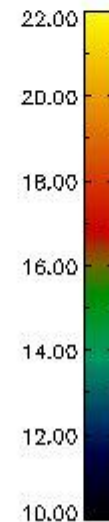
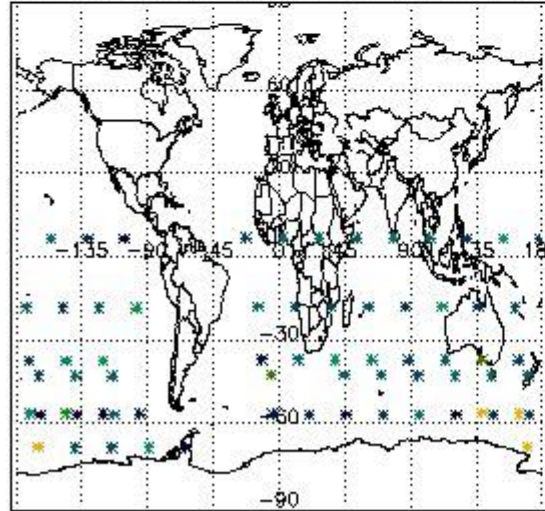
Percentage of flagged data per O3 profile



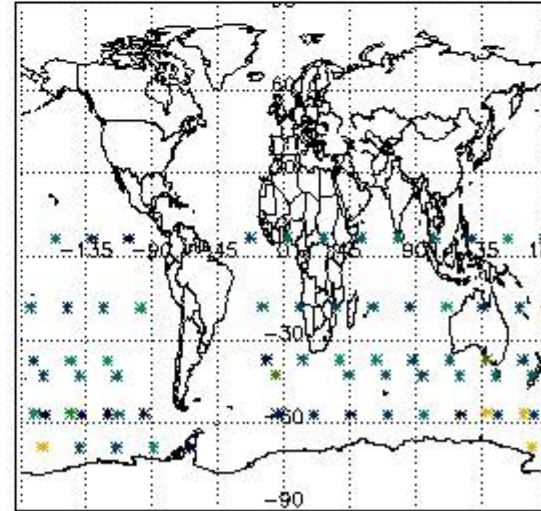
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

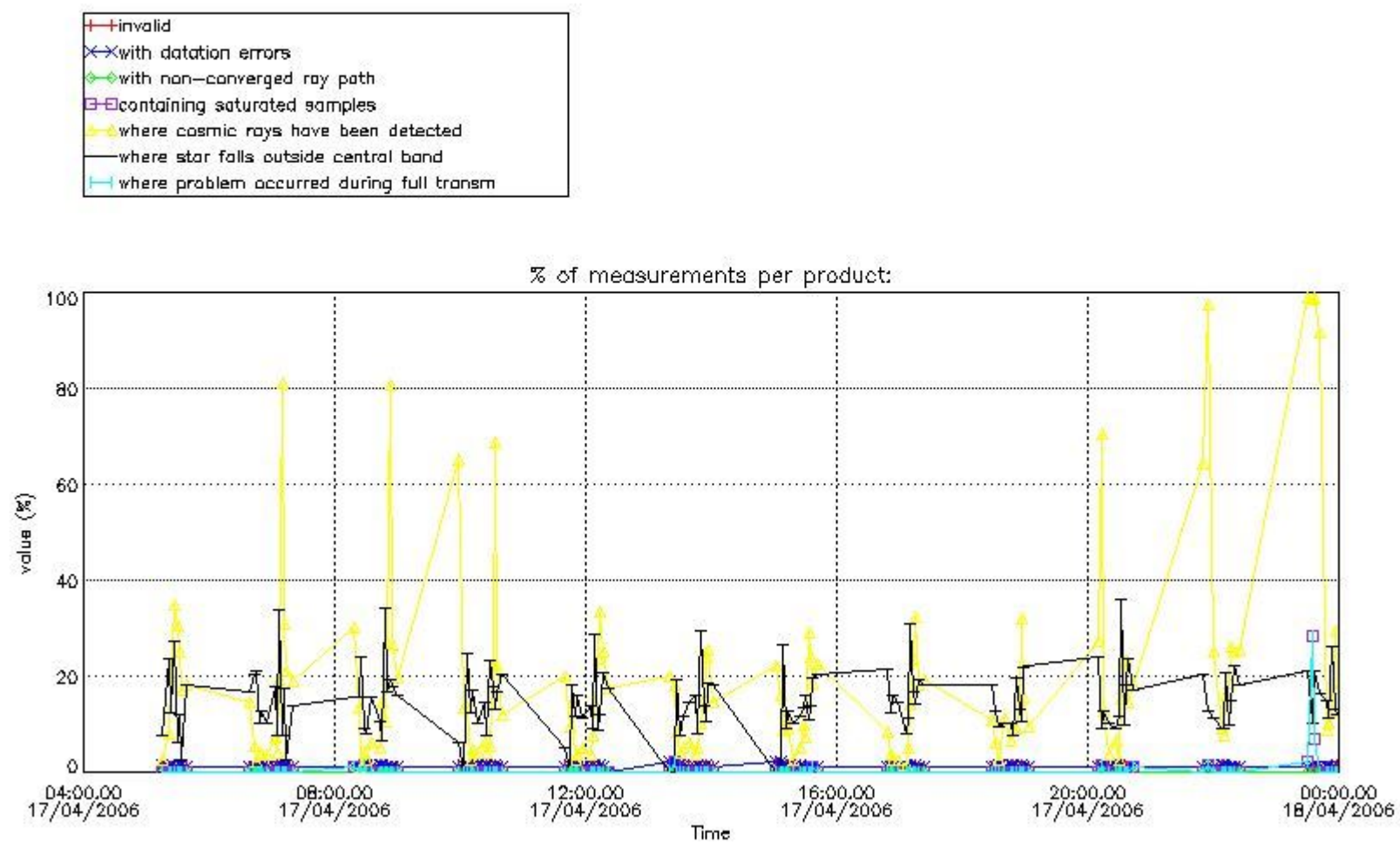


4. Level 1 quality information per product

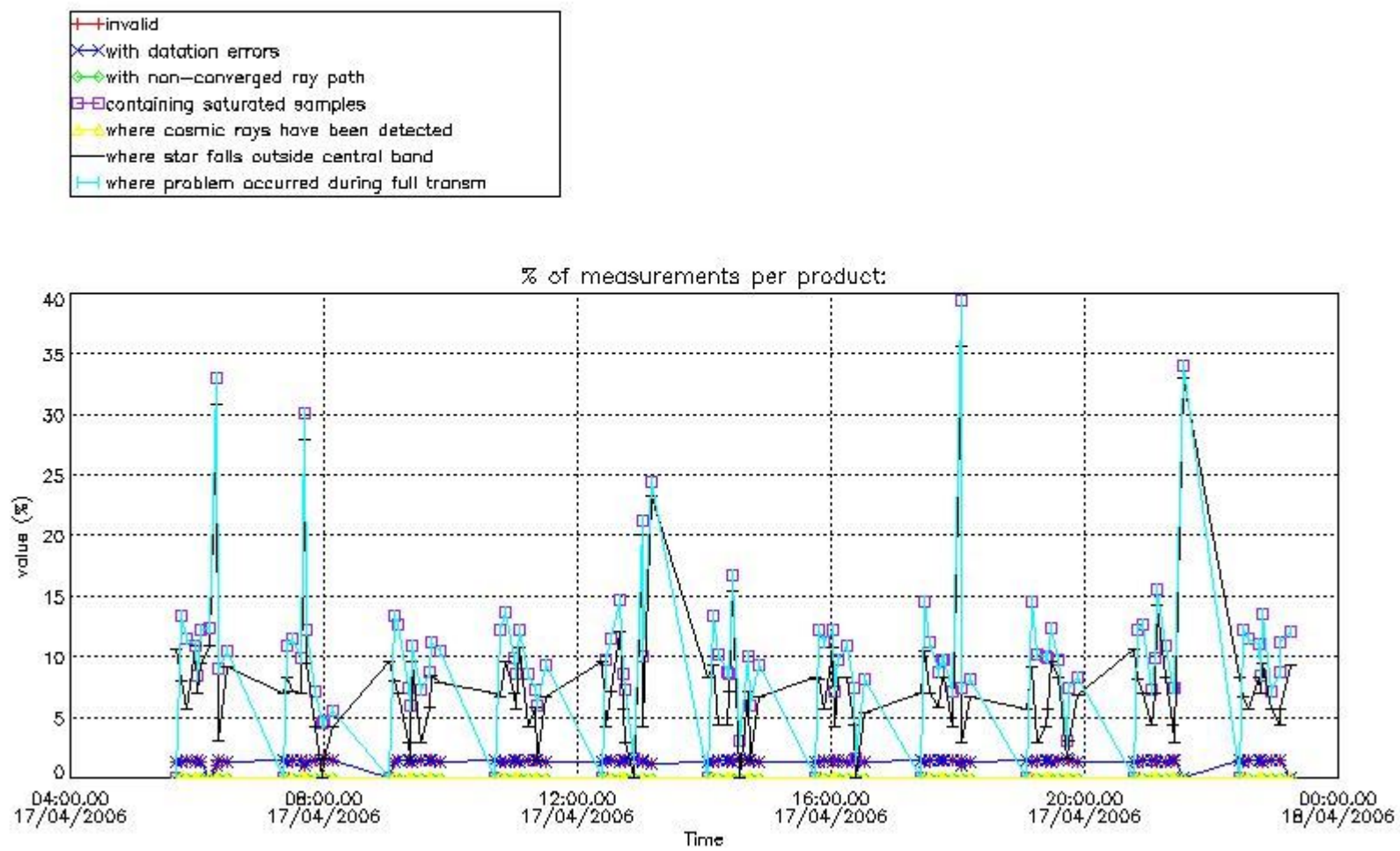
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



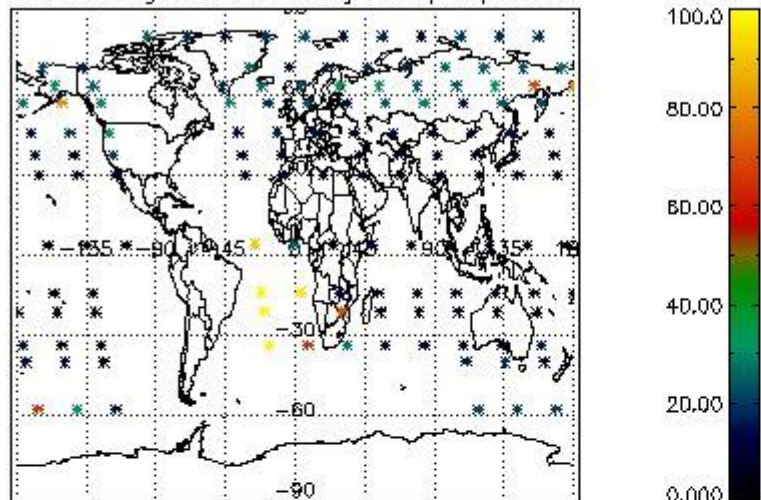
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



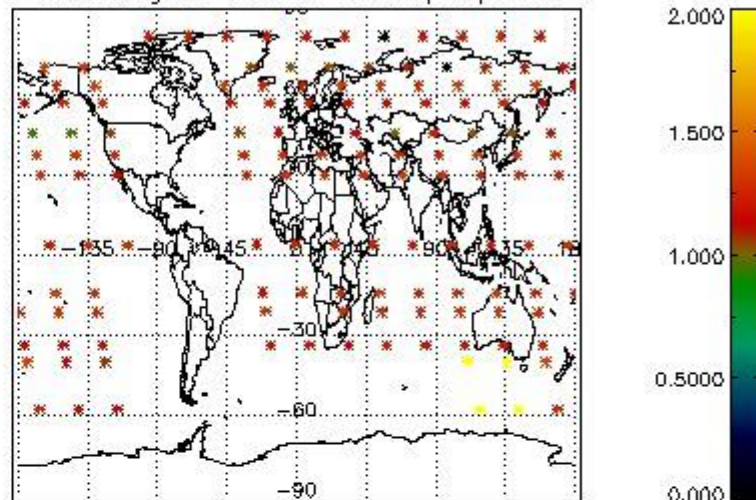
4.2 Plot quality information per product coming from level 1b processing (world map)

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

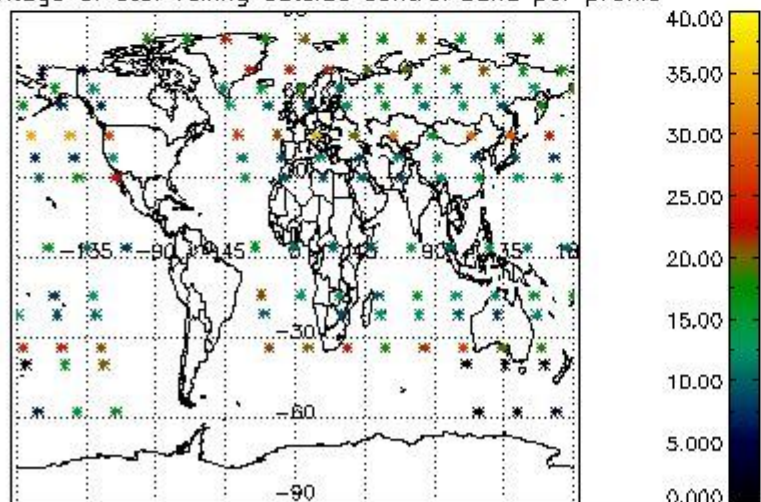
Percentage of cosmic ray hits per profile



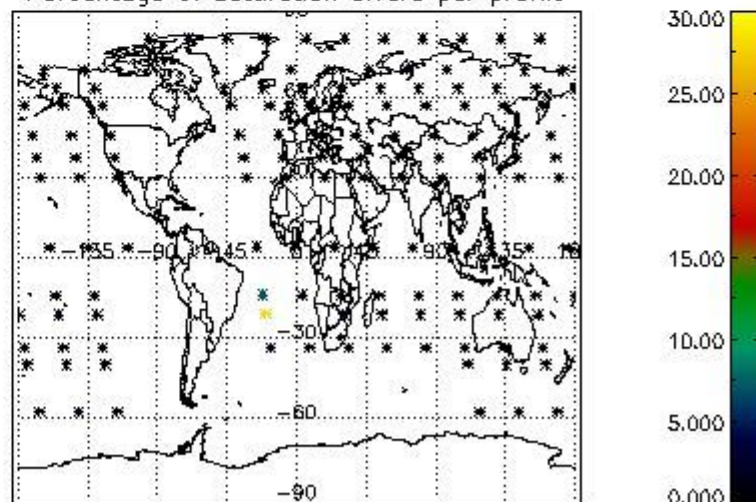
Percentage of datation errors per profile



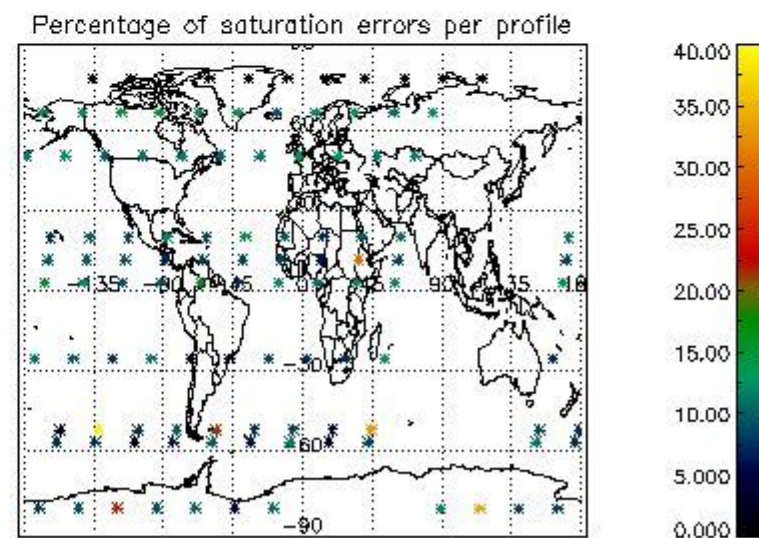
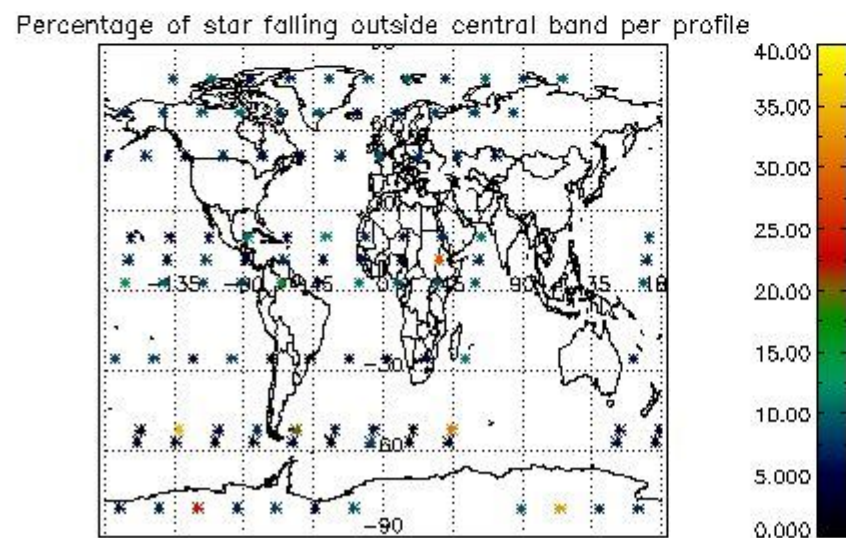
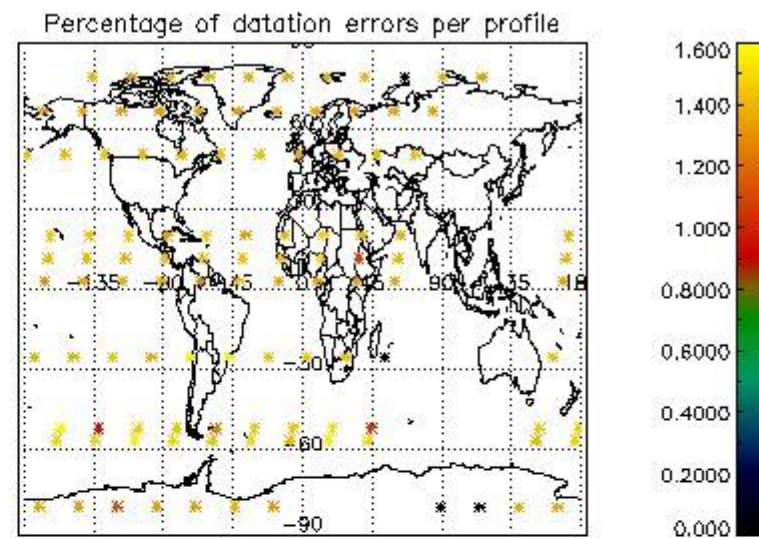
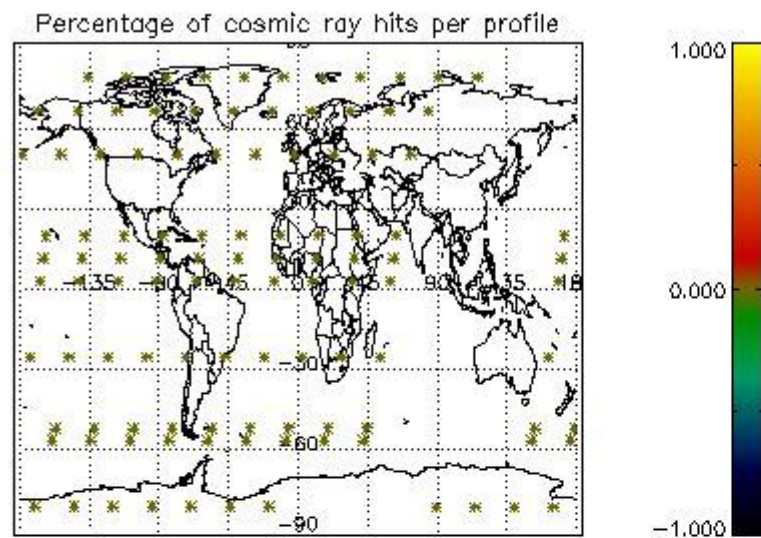
Percentage of star falling outside central band per profile



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

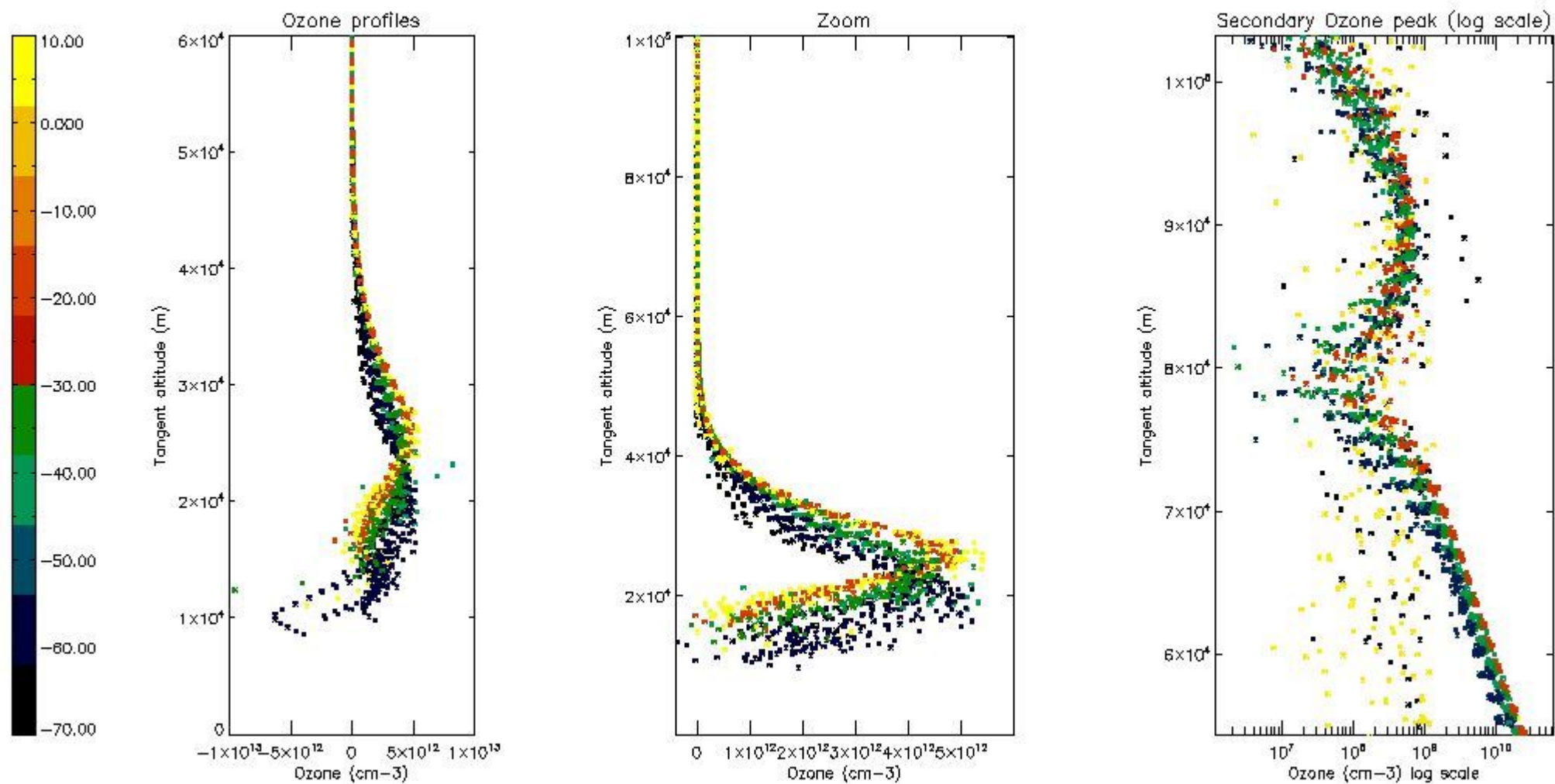
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	28
STD < 20	16

STD < 10	12
STD < 5	7

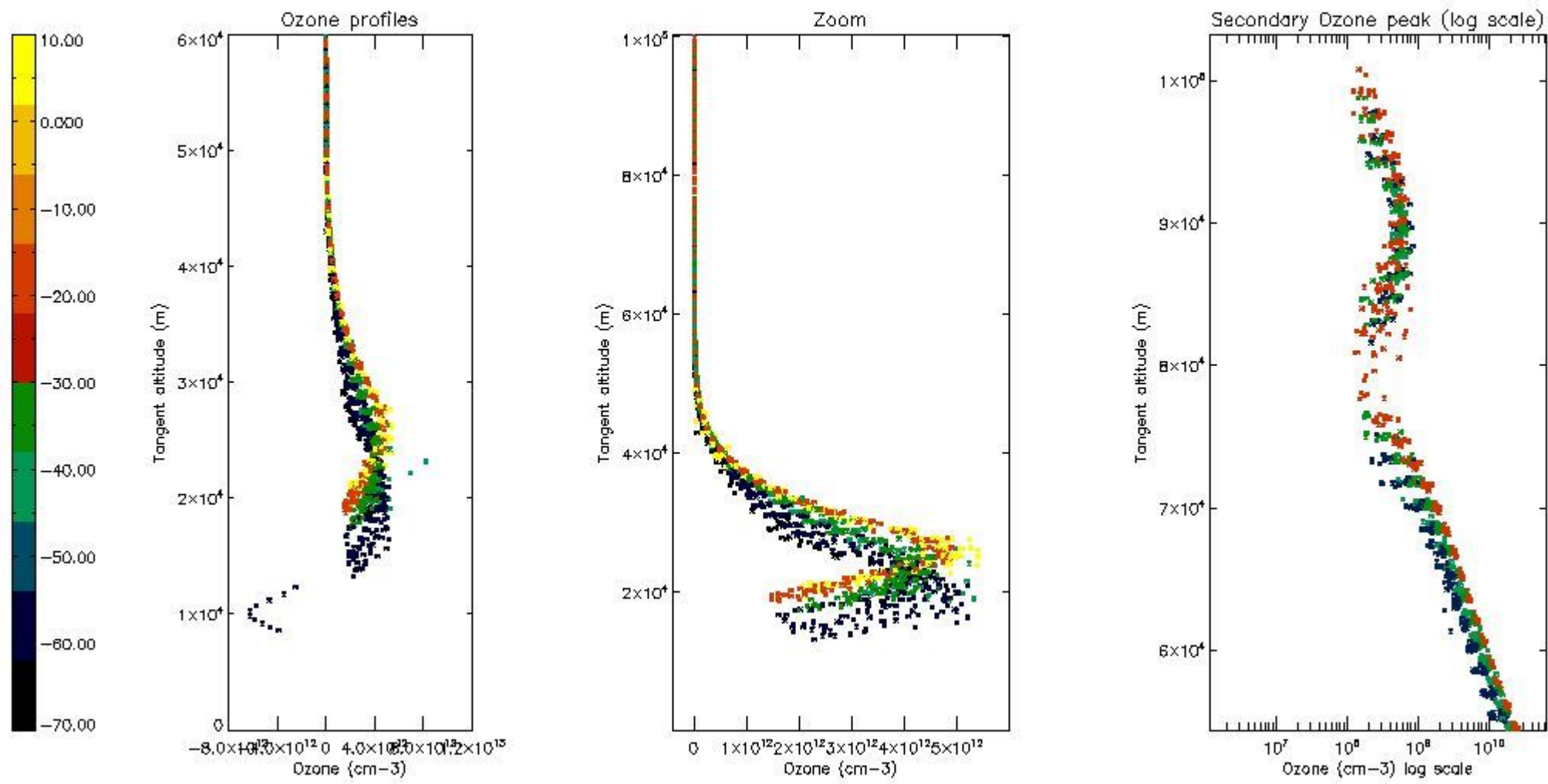
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



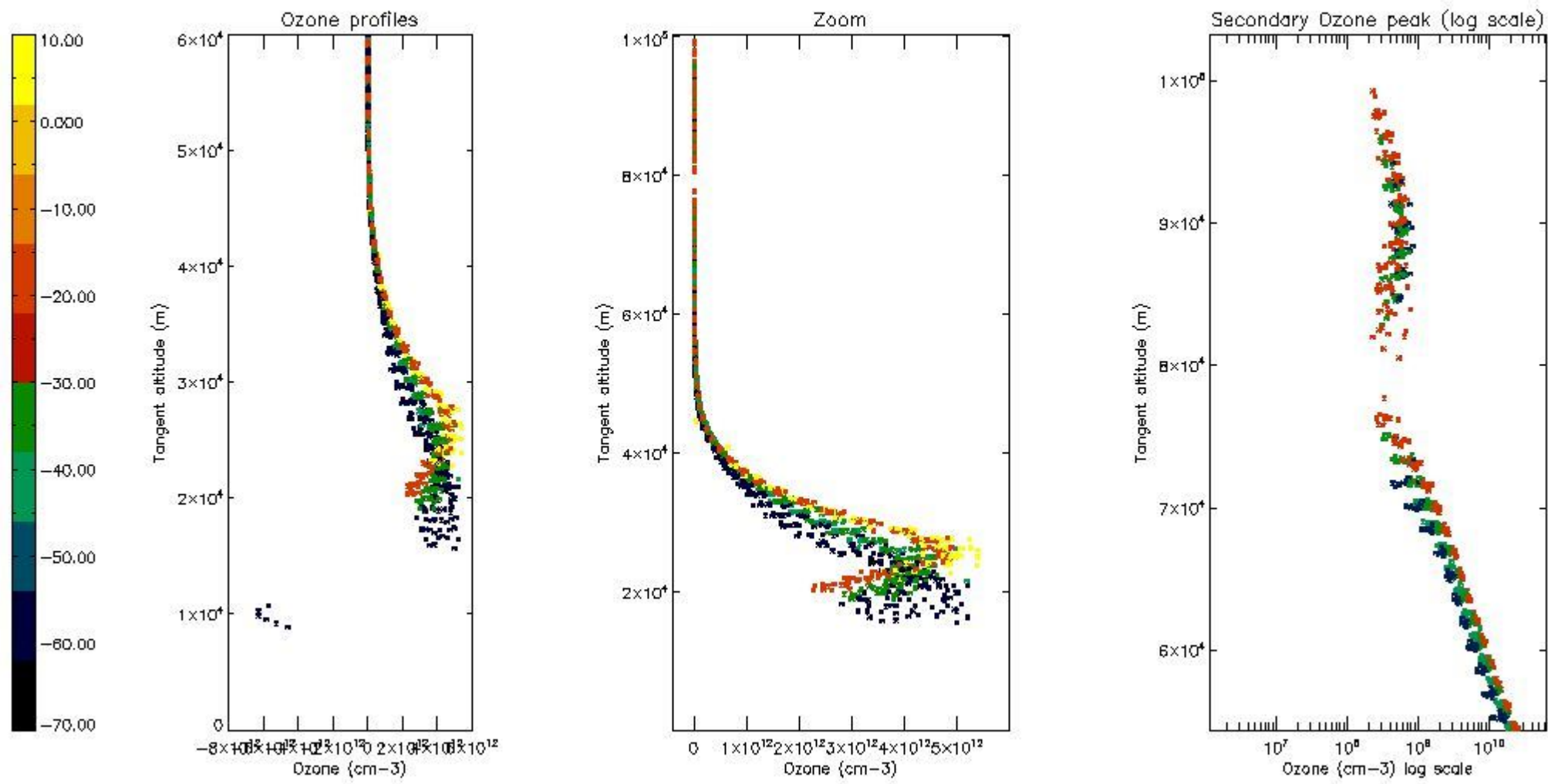
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



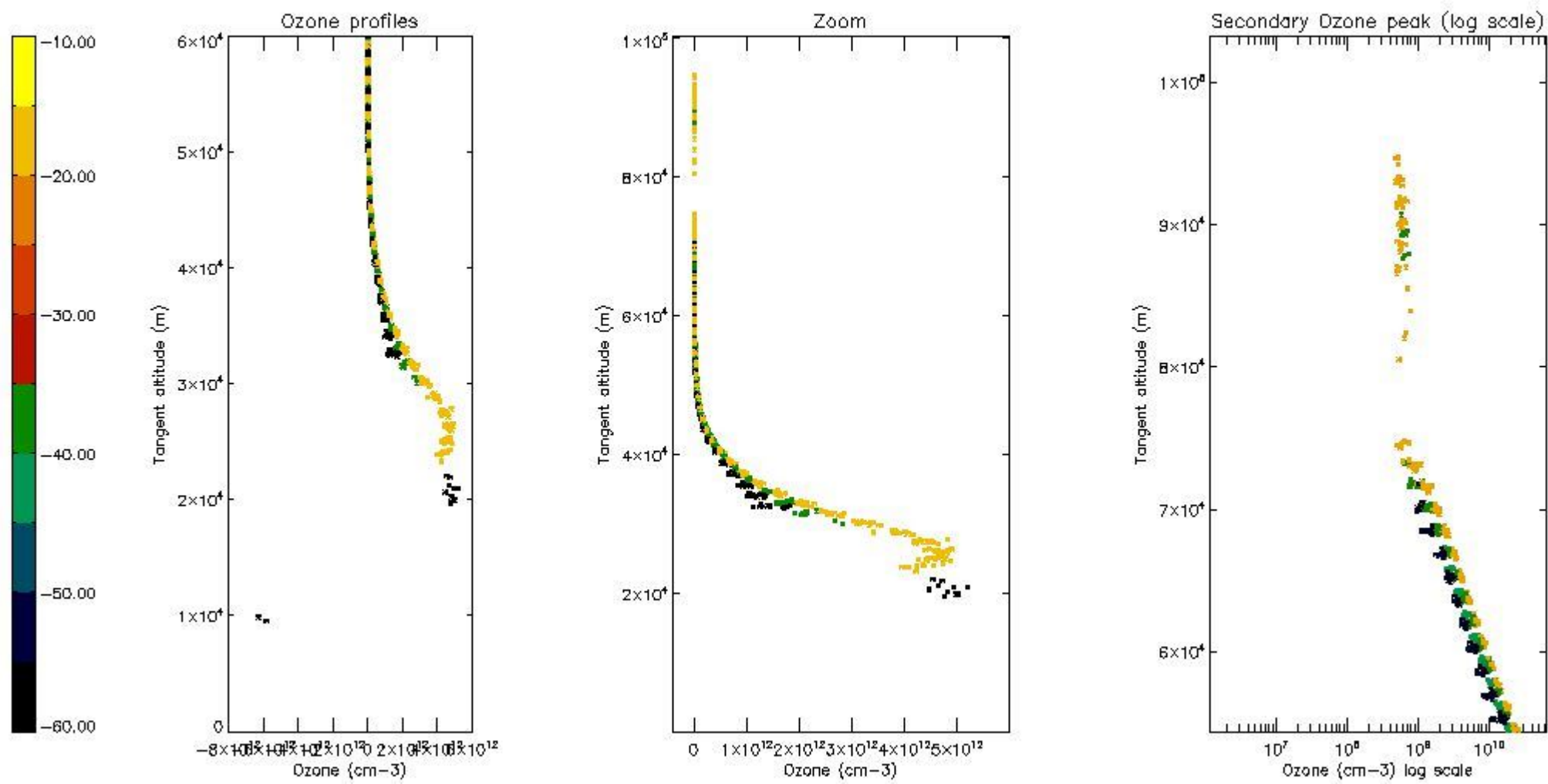
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



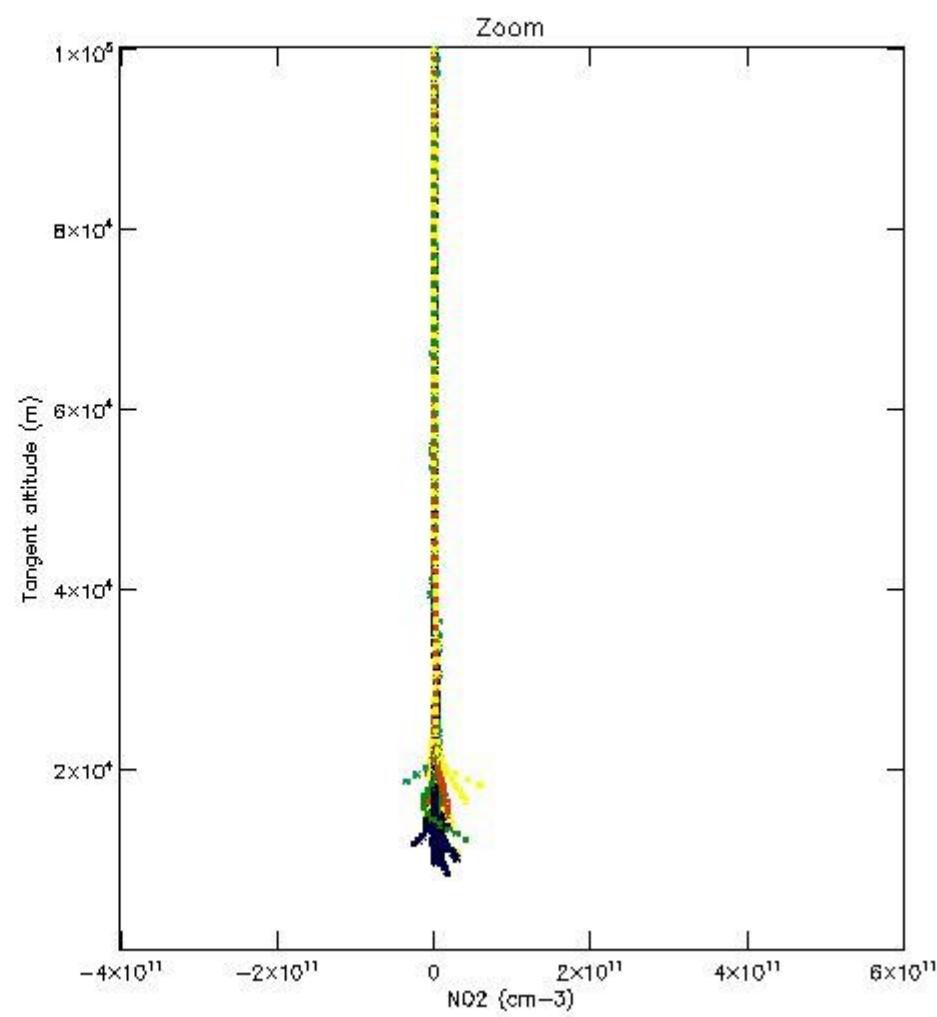
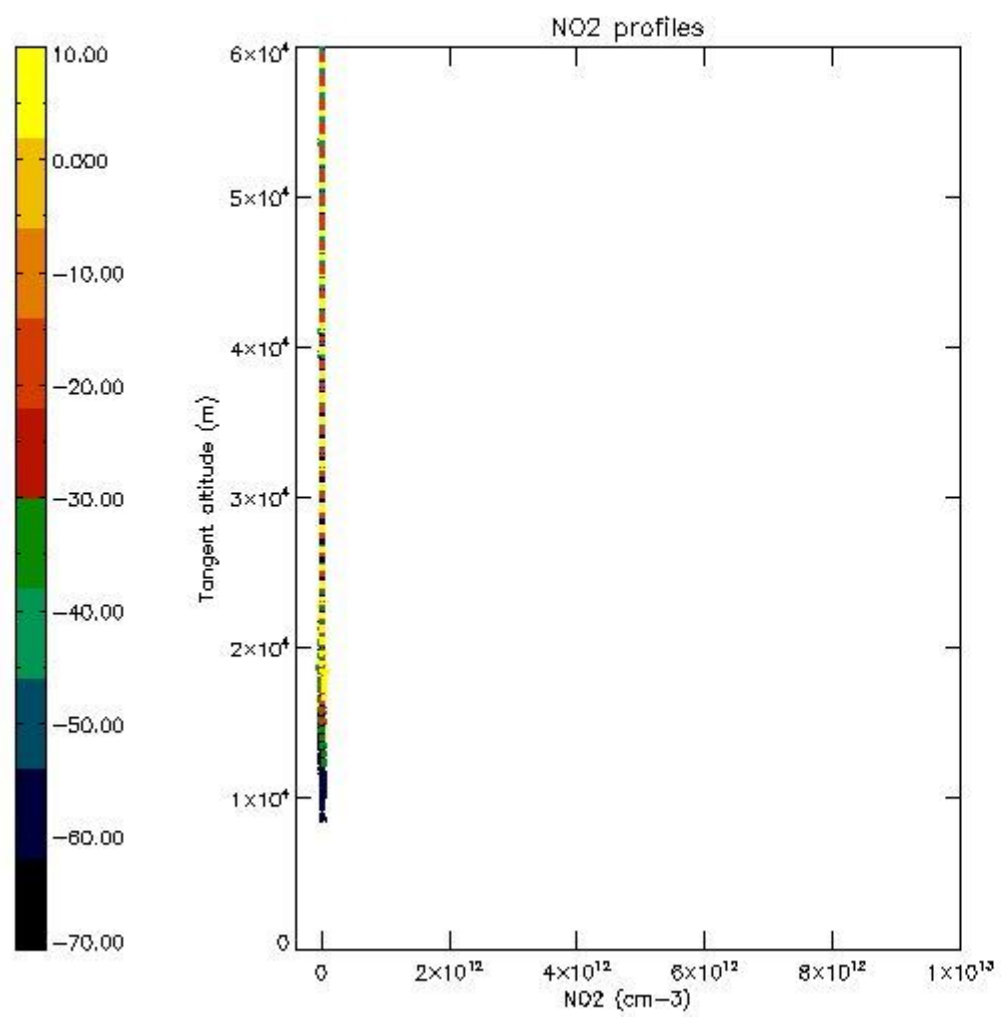
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



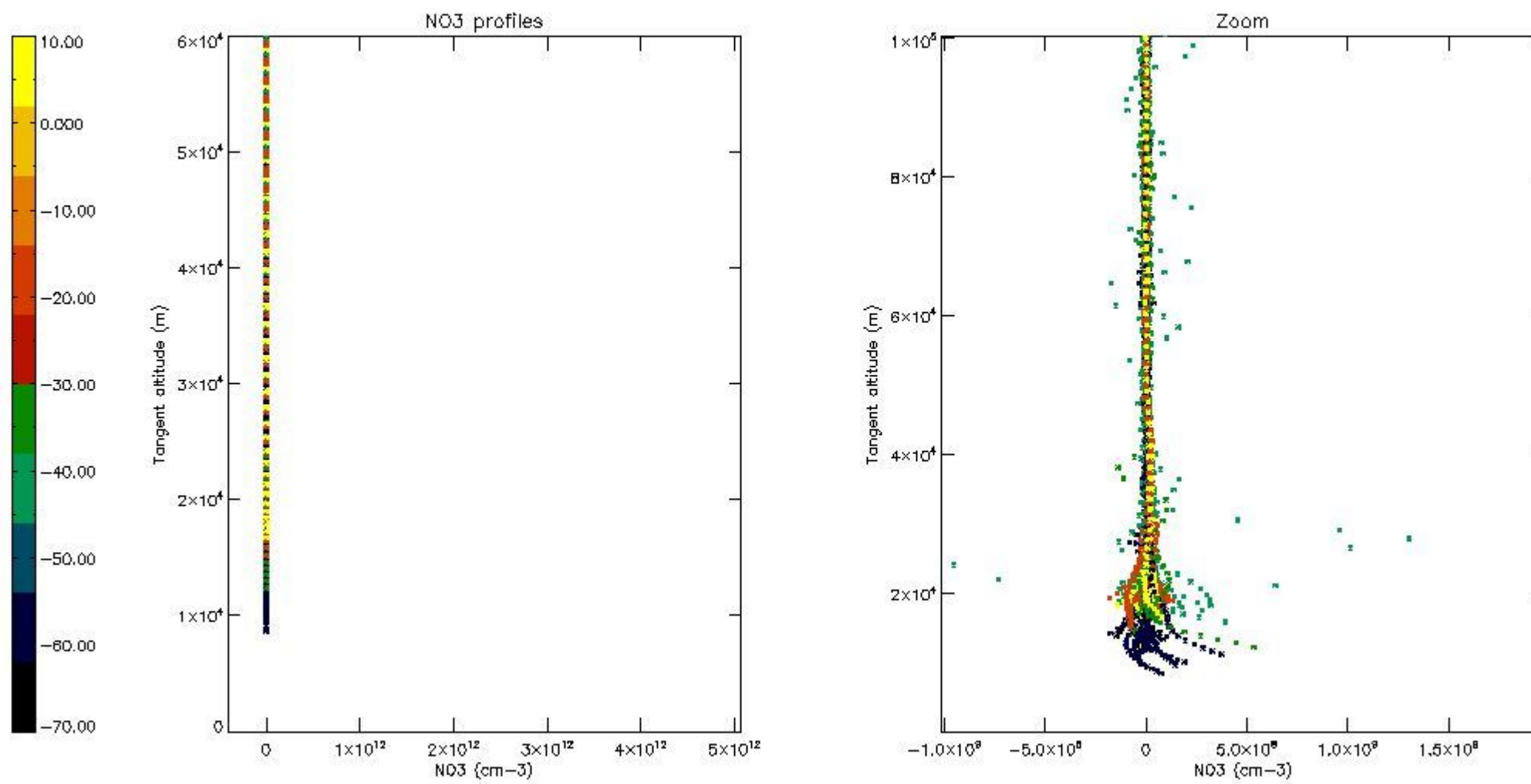
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



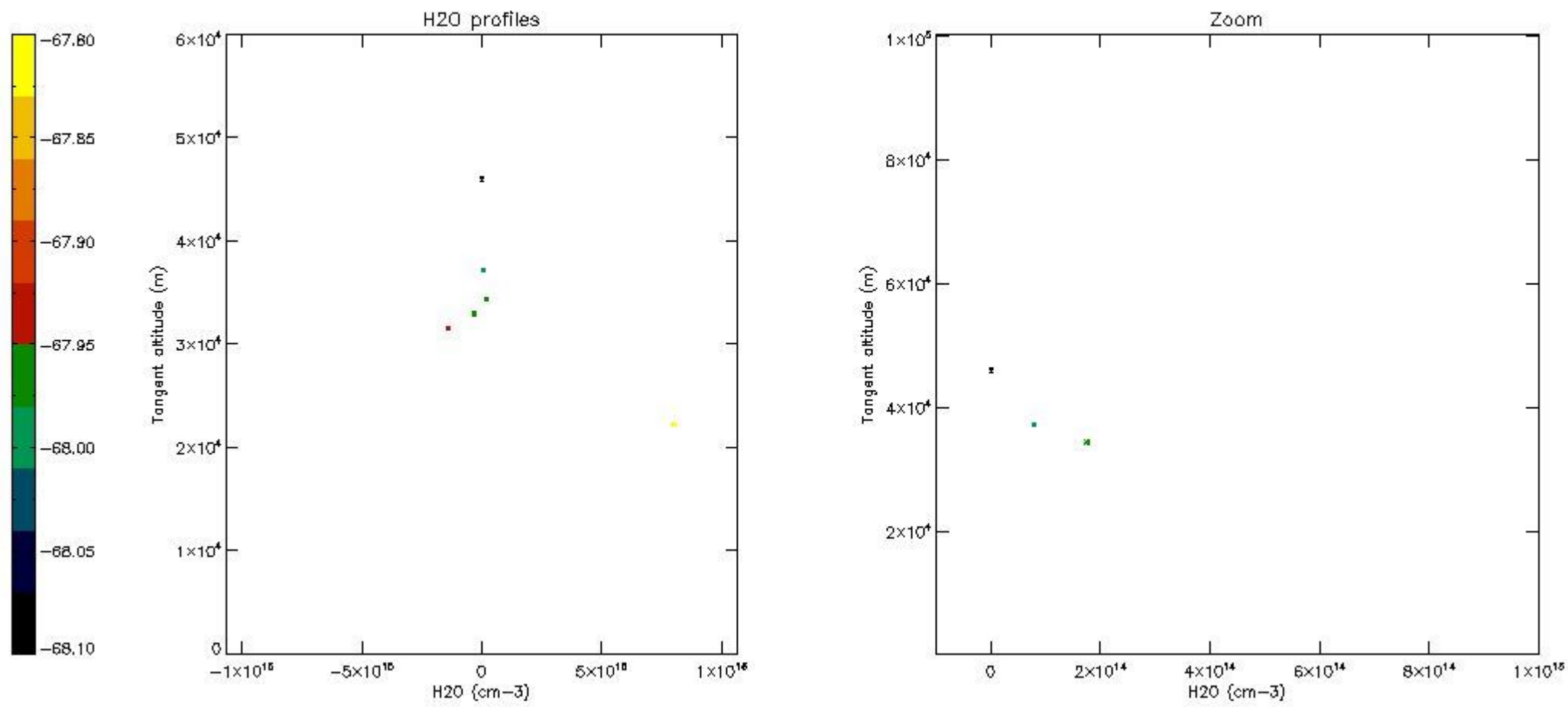
5.7 Plot NO3 profiles for all STD (dark without errors)

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	17-APR-2006 05:14:34
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	17-APR-2006 05:14:34
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	17-APR-2006 05:14:34

GOMOS Level 2 Daily Report

SUMMARY

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[2. Summary of processed GOM_NL_2P products](#)

[3. Level 2 Quality information per product](#)

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[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	23APR2013 18:28:47
Data source version	GOMOS/6.01
Start time of products	17-04-2006 (17APR2006 00:00:00)
Stop time of products	18-04-2006 (18APR2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	248
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

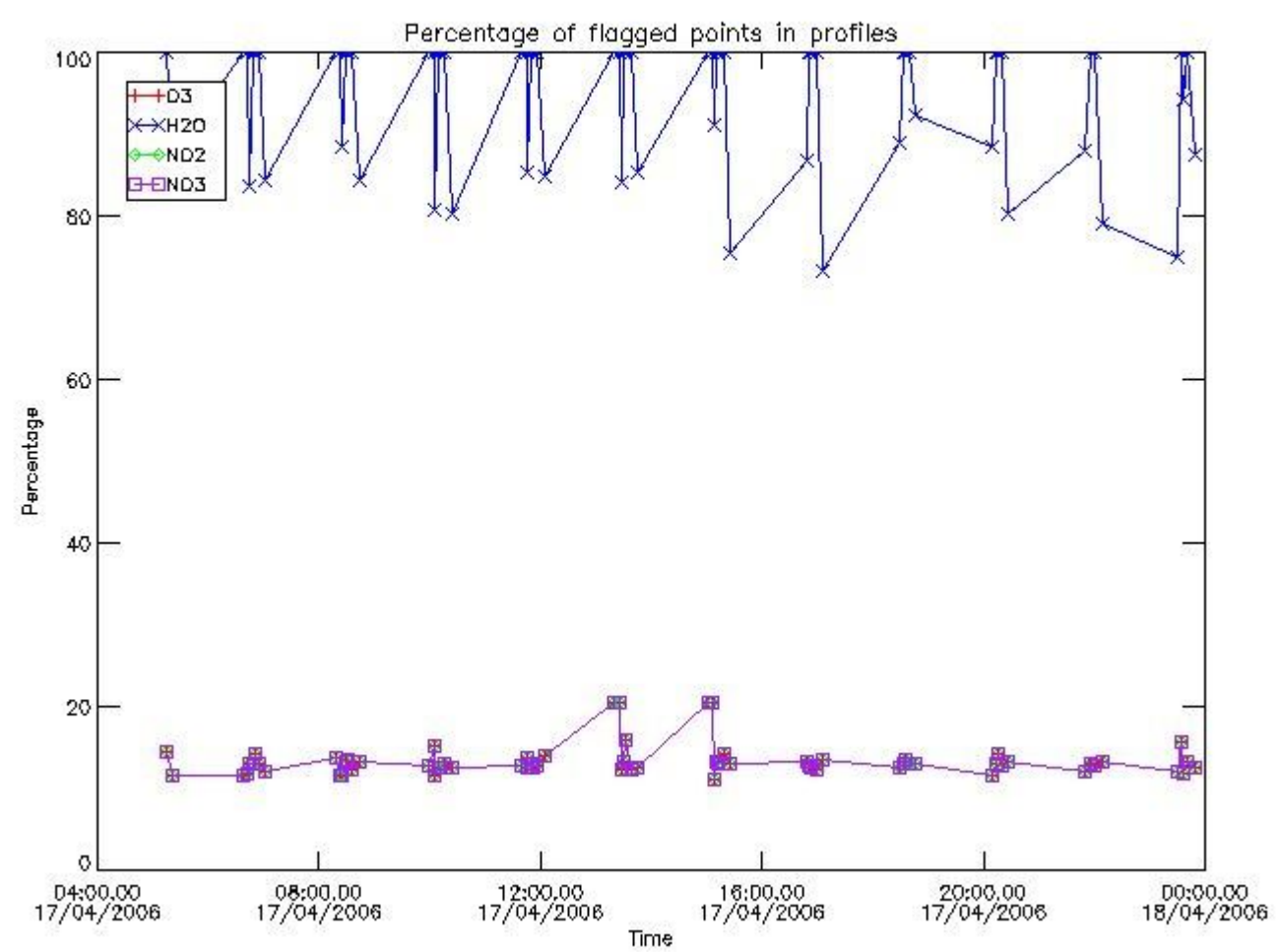
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20060417_051434_000000392046_00492_21588_9089.N1	17-APR-2006 05:14:34	Dark	39.000	45	Alp Pav	1.9400	26000.	78	21588	No
2	GOM_NL__2PRFIN20060417_052154_000000452046_00492_21588_9090.N1	17-APR-2006 05:21:54	Dark	44.500	43	Alp TrA	1.9100	4250.0	89	21588	No
3	GOM_NL__2PRFIN20060417_052400_000000402046_00492_21588_9091.N1	17-APR-2006 05:24:00	Straylight	40.000	134	Bet TrA	2.8100	6600.0	80	21588	No
4	GOM_NL__2PRFIN20060417_052622_000000482046_00492_21588_9092.N1	17-APR-2006 05:26:22	Straylight	47.500	4	Alp1Cen	-0.010000	5800.0	95	21588	No
5	GOM_NL__2PRFIN20060417_052935_000000402046_00492_21588_9093.N1	17-APR-2006 05:29:35	Straylight	39.500	78	Alp Lup	2.3040	28000.	79	21588	No
6	GOM_NL__2PRFIN20060417_053127_000000382046_00492_21588_9094.N1	17-APR-2006 05:31:27	Straylight	38.000	64	Gam Cen	2.2000	10600.	76	21588	No
7	GOM_NL__2PRFIN20060417_053330_000000382046_00492_21588_9095.N1	17-APR-2006 05:33:30	Straylight	38.000	54	5The Cen	2.0550	4500.0	76	21588	No
8	GOM_NL__2PRFIN20060417_053835_000000422046_00492_21588_9096.N1	17-APR-2006 05:38:35	Twilight_and_stray	41.500	106	9Bet Crv	2.6480	5600.0	83	21588	No
9	GOM_NL__2PRFIN20060417_054034_000000382046_00492_21588_9097.N1	17-APR-2006 05:40:34	Bright	37.500	163	7Del Crv	2.9450	11000.	75	21588	No
10	GOM_NL__2PRFIN20060417_054449_000000382046_00492_21588_9098.N1	17-APR-2006 05:44:49	Bright	37.500	121	29Gam Vir	2.7400	7200.0	75	21588	No
11	GOM_NL__2PRFIN20060417_054935_000000352046_00492_21588_9099.N1	17-APR-2006 05:49:35	Bright	35.000	62	94Bet Leo	2.1360	9700.0	70	21588	No
12	GOM_NL__2PRFIN20060417_055809_000000372046_00492_21588_9100.N1	17-APR-2006 05:58:09	Bright	36.500	174	52Psi UMa	3.0040	4400.0	73	21588	No
13	GOM_NL__2PRFIN20060417_060032_000000362046_00492_21588_9101.N1	17-APR-2006 06:00:32	Bright	35.500	87	64Gam UMa	2.4330	11000.	71	21588	No
14	GOM_NL__2PRFIN20060417_060255_000000372046_00492_21588_9102.N1	17-APR-2006 06:02:55	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	21588	No
15	GOM_NL__2PRFIN20060417_061055_000000372046_00492_21588_9103.N1	17-APR-2006 06:10:55	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	21588	No
16	GOM_NL__2PRFIN20060417_061826_000000472046_00492_21588_9104.N1	17-APR-2006 06:18:26	Bright	47.000	76	27Gam Cas	2.3000	30000.	94	21588	No
17	GOM_NL__2PRFIN20060417_061945_000000342046_00492_21588_9105.N1	17-APR-2006 06:19:45	Bright	33.500	68	18Alp Cas	2.2250	4500.0	67	21588	No
18	GOM_NL__2PRFIN20060417_062810_000000382046_00492_21588_9106.N1	17-APR-2006 06:28:10	Bright	38.000	164	44Eta Peg	2.9480	5400.0	76	21588	No
19	GOM_NL__2PRFIN20060417_063749_000000452046_00492_21588_9107.N1	17-APR-2006 06:37:49	Dark	44.500	162	34Alp Aqr	2.9440	5350.0	89	21588	No
20	GOM_NL__2PRFIN20060417_064254_000000472046_00492_21588_9108.N1	17-APR-2006 06:42:54	Dark	47.000	142	49Del Cap	2.8500	8900.0	94	21588	No
21	GOM_NL__2PRFIN20060417_064441_000000432046_00492_21588_9109.N1	17-APR-2006 06:44:41	Dark	43.000	18	24Alp PsA	1.1660	9700.0	86	21588	No
22	GOM_NL__2PRFIN20060417_064809_000000392046_00492_21588_9110.N1	17-APR-2006 06:48:09	Dark	39.000	172	Gam Gru	3.0030	13100.	78	21588	No
23	GOM_NL__2PRFIN20060417_065010_000000402046_00492_21588_9111.N1	17-APR-2006 06:50:10	Dark	39.500	31	Alp Gru	1.7340	15200.	79	21588	No
24	GOM_NL__2PRFIN20060417_065511_000000402046_00493_21589_9089.N1	17-APR-2006 06:55:11	Dark	39.500	45	Alp Pav	1.9400	26000.	79	21589	No
25	GOM_NL__2PRFIN20060417_070230_000000422046_00493_21589_9090.N1	17-APR-2006 07:02:30	Dark	42.000	43	Alp TrA	1.9100	4250.0	84	21589	No
26	GOM_NL__2PRFIN20060417_070437_000000392046_00493_21589_9091.N1	17-APR-2006 07:04:37	Straylight	38.500	134	Bet TrA	2.8100	6600.0	77	21589	No
27	GOM_NL__2PRFIN20060417_070659_000000522046_00493_21589_9092.N1	17-APR-2006 07:06:59	Straylight	52.000	4	Alp1Cen	-0.010000	5800.0	104	21589	No
28	GOM_NL__2PRFIN20060417_071011_000000402046_00493_21589_9093.N1	17-APR-2006 07:10:11	Straylight	40.000	78	Alp Lup	2.3040	28000.	80	21589	No
29	GOM_NL__2PRFIN20060417_071203_000000412046_00493_21589_9094.N1	17-APR-2006 07:12:03	Straylight	40.500	64	Gam Cen	2.2000	10600.	81	21589	No
30	GOM_NL__2PRFIN20060417_071407_000000382046_00493_21589_9095.N1	17-APR-2006 07:14:07	Straylight	38.000	54	5The Cen	2.0550	4500.0	76	21589	No
31	GOM_NL__2PRFIN20060417_071911_000000402046_00493_21589_9096.N1	17-APR-2006 07:19:11	Twilight_and_stray	39.500	106	9Bet Crv	2.6480	5600.0	79	21589	No
32	GOM_NL__2PRFIN20060417_072110_000000362046_00493_21589_9097.N1	17-APR-2006 07:21:10	Bright	36.000	163	7Del Crv	2.9450	11000.	72	21589	No
33	GOM_NL__2PRFIN20060417_072525_000000372046_00493_21589_9098.N1	17-APR-2006 07:25:25	Bright	36.500	121	29Gam Vir	2.7400	7200.0	73	21589	No
34	GOM_NL__2PRFIN20060417_073011_000000352046_00493_21589_9099.N1	17-APR-2006 07:30:11	Bright	35.000	62	94Bet Leo	2.1360	9700.0	70	21589	No
35	GOM_NL__2PRFIN20060417_073845_000000362046_00493_21589_9100.N1	17-APR-2006 07:38:45	Bright	35.500	174	52Psi UMa	3.0040	4400.0	71	21589	No
36	GOM_NL__2PRFIN20060417_074108_000000472046_00493_21589_9101.N1	17-APR-2006 07:41:08	Bright	46.500	87	64Gam UMa	2.4330	11000.	93	21589	No
37	GOM_NL__2PRFIN20060417_074331_000000372046_00493_21589_9102.N1	17-APR-2006 07:43:31	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	21589	No
38	GOM_NL__2PRFIN20060417_075131_000000352046_00493_21589_9103.N1	17-APR-2006 07:51:31	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	21589	No
39	GOM_NL__2PRFIN20060417_075902_000000332046_00493_21589_9104.N1	17-APR-2006 07:59:02	Bright	33.000	76	27Gam Cas	2.3000	30000.	66	21589	No
40	GOM_NL__2PRFIN20060417_080021_000000322046_00493_21589_9105.N1	17-APR-2006 08:00:21	Bright	32.000	68	18Alp Cas	2.2250	4500.0	64	21589	No
41	GOM_NL__2PRFIN20060417_080847_000000362046_00493_21589_9106.N1	17-APR-2006 08:08:47	Bright	36.000	164	44Eta Peg	2.9480	5400.0	72	21589	No
42	GOM_NL__2PRFIN20060417_081826_000000452046_00493_21589_9107.N1	17-APR-2006 08:18:26	Dark	44.500	162	34Alp Aqr	2.9440	5350.0	89	21589	No

220	GOM_NL__2PRFIN20060417_215007_000000422046_00501_21597_9127.N1	17-APR-2006 21:50:07	Dark	42.000	18	24Alp PsA	1.1660	9700.0	84	21597	No
221	GOM_NL__2PRFIN20060417_215537_000000392046_00501_21597_9128.N1	17-APR-2006 21:55:37	Dark	39.000	31	Alp Gru	1.7340	15200.	78	21597	No
222	GOM_NL__2PRFIN20060417_220039_000000402047_00001_21598_9109.N1	17-APR-2006 22:00:39	Dark	40.000	45	Alp Pav	1.9400	26000.	80	21598	No
223	GOM_NL__2PRFIN20060417_220757_000000392047_00001_21598_9110.N1	17-APR-2006 22:07:57	Dark	38.500	43	Alp TrA	1.9100	4250.0	77	21598	No
224	GOM_NL__2PRFIN20060417_221004_000000392047_00001_21598_9111.N1	17-APR-2006 22:10:04	Straylight	38.500	134	Bet TrA	2.8100	6600.0	77	21598	No
225	GOM_NL__2PRFIN20060417_221225_000000442047_00001_21598_9112.N1	17-APR-2006 22:12:25	Straylight	43.500	4	Alp1Cen	-0.010000	5800.0	87	21598	No
226	GOM_NL__2PRFIN20060417_221538_000000412047_00001_21598_9113.N1	17-APR-2006 22:15:38	Straylight	40.500	78	Alp Lup	2.3040	28000.	81	21598	No
227	GOM_NL__2PRFIN20060417_221728_000000402047_00001_21598_9114.N1	17-APR-2006 22:17:28	Straylight	40.000	64	Gam Cen	2.2000	10600.	80	21598	No
228	GOM_NL__2PRFIN20060417_221933_000000482047_00001_21598_9115.N1	17-APR-2006 22:19:33	Straylight	47.500	54	5The Cen	2.0550	4500.0	95	21598	No
229	GOM_NL__2PRFIN20060417_222436_000000412047_00001_21598_9116.N1	17-APR-2006 22:24:36	Twl_and_stray	41.000	106	9Bet Crv	2.6480	5600.0	82	21598	No
230	GOM_NL__2PRFIN20060417_222635_000000362047_00001_21598_9117.N1	17-APR-2006 22:26:35	Bright	36.000	163	7Del Crv	2.9450	11000.	72	21598	No
231	GOM_NL__2PRFIN20060417_223049_000000372047_00001_21598_9118.N1	17-APR-2006 22:30:49	Bright	37.000	121	29Gam Vir	2.7400	7200.0	74	21598	No
232	GOM_NL__2PRFIN20060417_223535_000000352047_00001_21598_9119.N1	17-APR-2006 22:35:35	Bright	35.000	62	94Bet Leo	2.1360	9700.0	70	21598	No
233	GOM_NL__2PRFIN20060417_224410_000000362047_00001_21598_9120.N1	17-APR-2006 22:44:10	Bright	36.000	174	52Psi UMa	3.0040	4400.0	72	21598	No
234	GOM_NL__2PRFIN20060417_224631_000000362047_00001_21598_9121.N1	17-APR-2006 22:46:31	Bright	35.500	87	64Gam UMa	2.4330	11000.	71	21598	No
235	GOM_NL__2PRFIN20060417_224855_000000372047_00001_21598_9122.N1	17-APR-2006 22:48:55	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	21598	No
236	GOM_NL__2PRFIN20060417_225655_000000352047_00001_21598_9123.N1	17-APR-2006 22:56:55	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	21598	No
237	GOM_NL__2PRFIN20060417_230428_000000352047_00001_21598_9124.N1	17-APR-2006 23:04:28	Bright	34.500	76	27Gam Cas	2.3000	30000.	69	21598	No
238	GOM_NL__2PRFIN20060417_230546_000000362047_00001_21598_9125.N1	17-APR-2006 23:05:46	Bright	35.500	68	18Alp Cas	2.2250	4500.0	71	21598	No
239	GOM_NL__2PRFIN20060417_231412_000000382047_00001_21598_9126.N1	17-APR-2006 23:14:12	Bright	37.500	164	44Eta Peg	2.9480	5400.0	75	21598	No
240	GOM_NL__2PRFIN20060417_233043_000000432047_00001_21598_9127.N1	17-APR-2006 23:30:43	Dark	42.500	18	24Alp PsA	1.1660	9700.0	85	21598	No
241	GOM_NL__2PRFIN20060417_233413_000000392047_00001_21598_9128.N1	17-APR-2006 23:34:13	Dark	39.000	172	Gam Gru	3.0030	13100.	78	21598	No
242	GOM_NL__2PRFIN20060417_233613_000000432047_00001_21598_9129.N1	17-APR-2006 23:36:13	Dark	43.000	31	Alp Gru	1.7340	15200.	86	21598	No
243	GOM_NL__2PRFIN20060417_234116_000000432047_00002_21599_9109.N1	17-APR-2006 23:41:16	Dark	42.500	45	Alp Pav	1.9400	26000.	85	21599	No
244	GOM_NL__2PRFIN20060417_234833_000000412047_00002_21599_9110.N1	17-APR-2006 23:48:33	Dark	40.500	43	Alp TrA	1.9100	4250.0	81	21599	No
245	GOM_NL__2PRFIN20060417_235040_000000402047_00002_21599_9111.N1	17-APR-2006 23:50:40	Straylight	40.000	134	Bet TrA	2.8100	6600.0	80	21599	No
246	GOM_NL__2PRFIN20060417_235302_000000482047_00002_21599_9112.N1	17-APR-2006 23:53:02	Straylight	47.500	4	Alp1Cen	-0.010000	5800.0	95	21599	No
247	GOM_NL__2PRFIN20060417_235614_000000432047_00002_21599_9113.N1	17-APR-2006 23:56:14	Straylight	42.500	78	Alp Lup	2.3040	28000.	85	21599	No
248	GOM_NL__2PRFIN20060417_235804_000000382047_00002_21599_9114.N1	17-APR-2006 23:58:04	Straylight	37.500	64	Gam Cen	2.2000	10600.	75	21599	No

3. Quality information per product

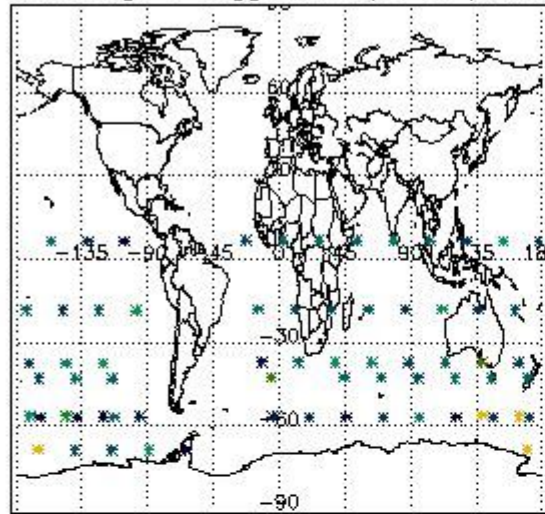
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

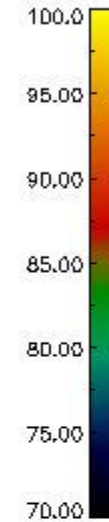
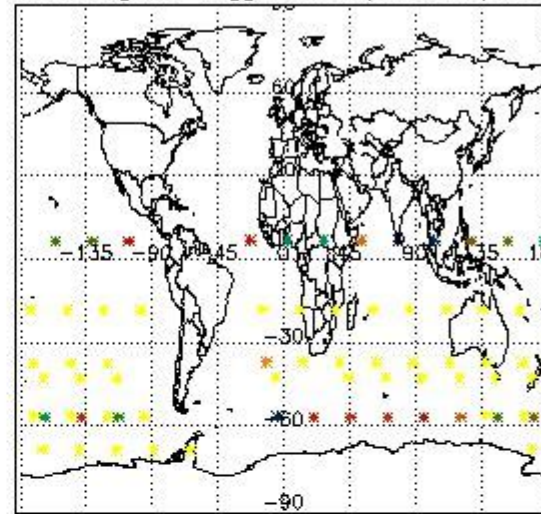


3.2 Plot quality information per product (world map)

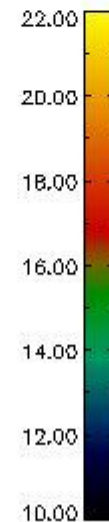
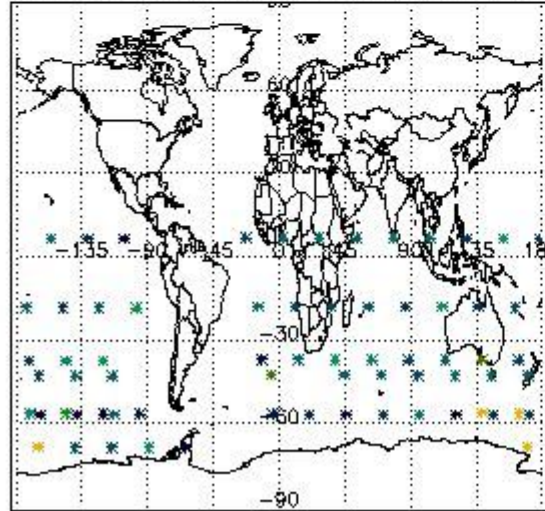
Percentage of flagged data per O3 profile



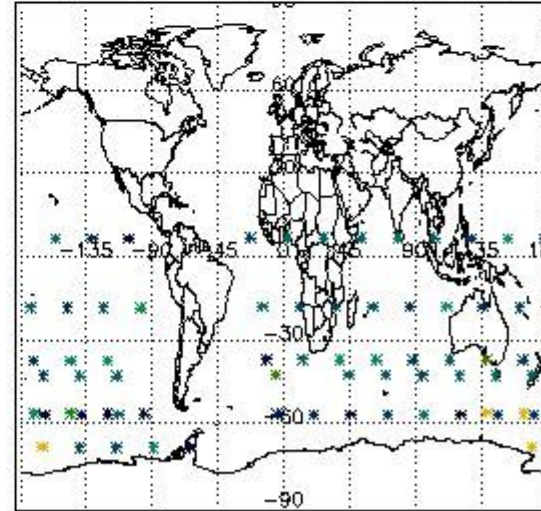
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

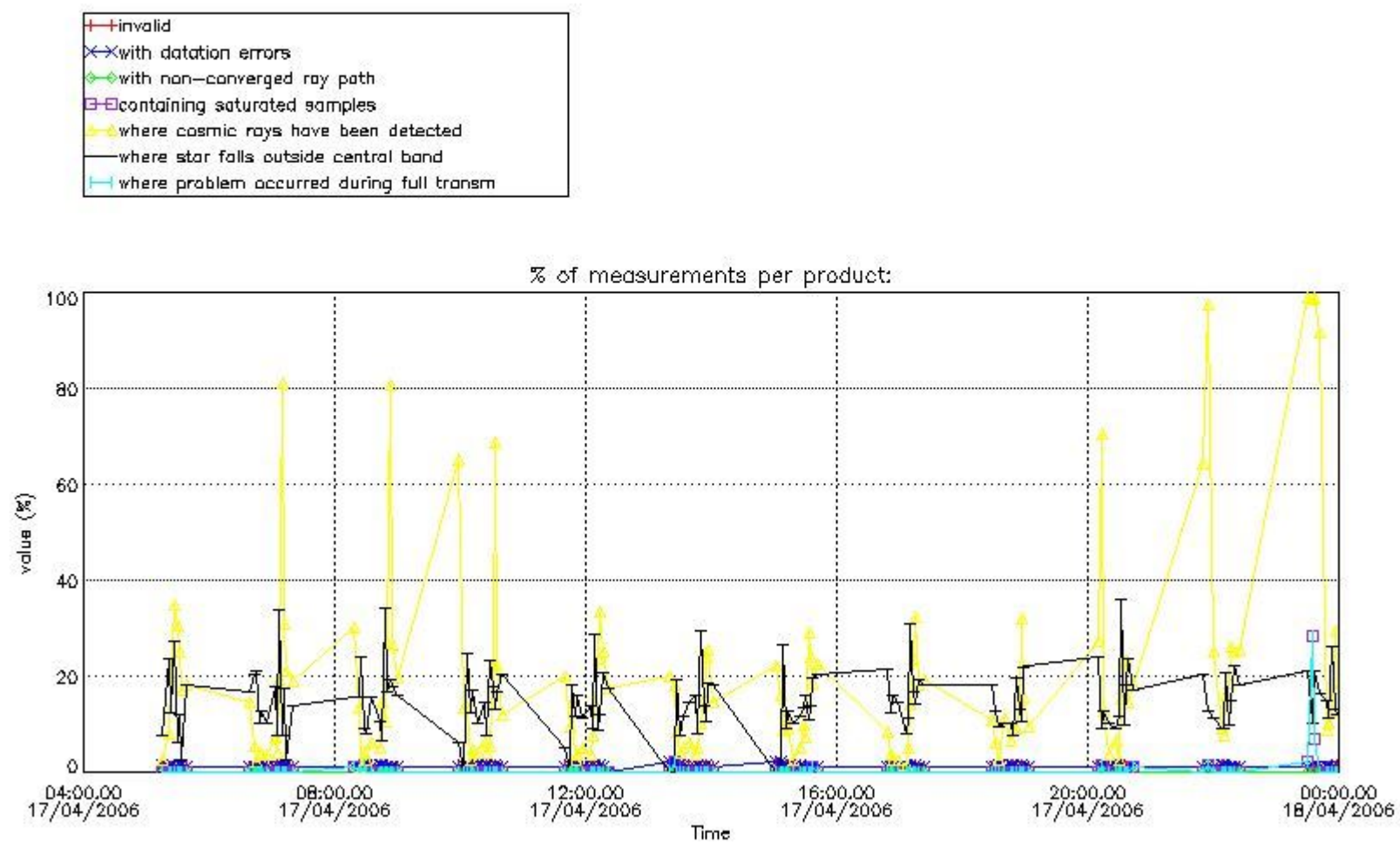


4. Level 1 quality information per product

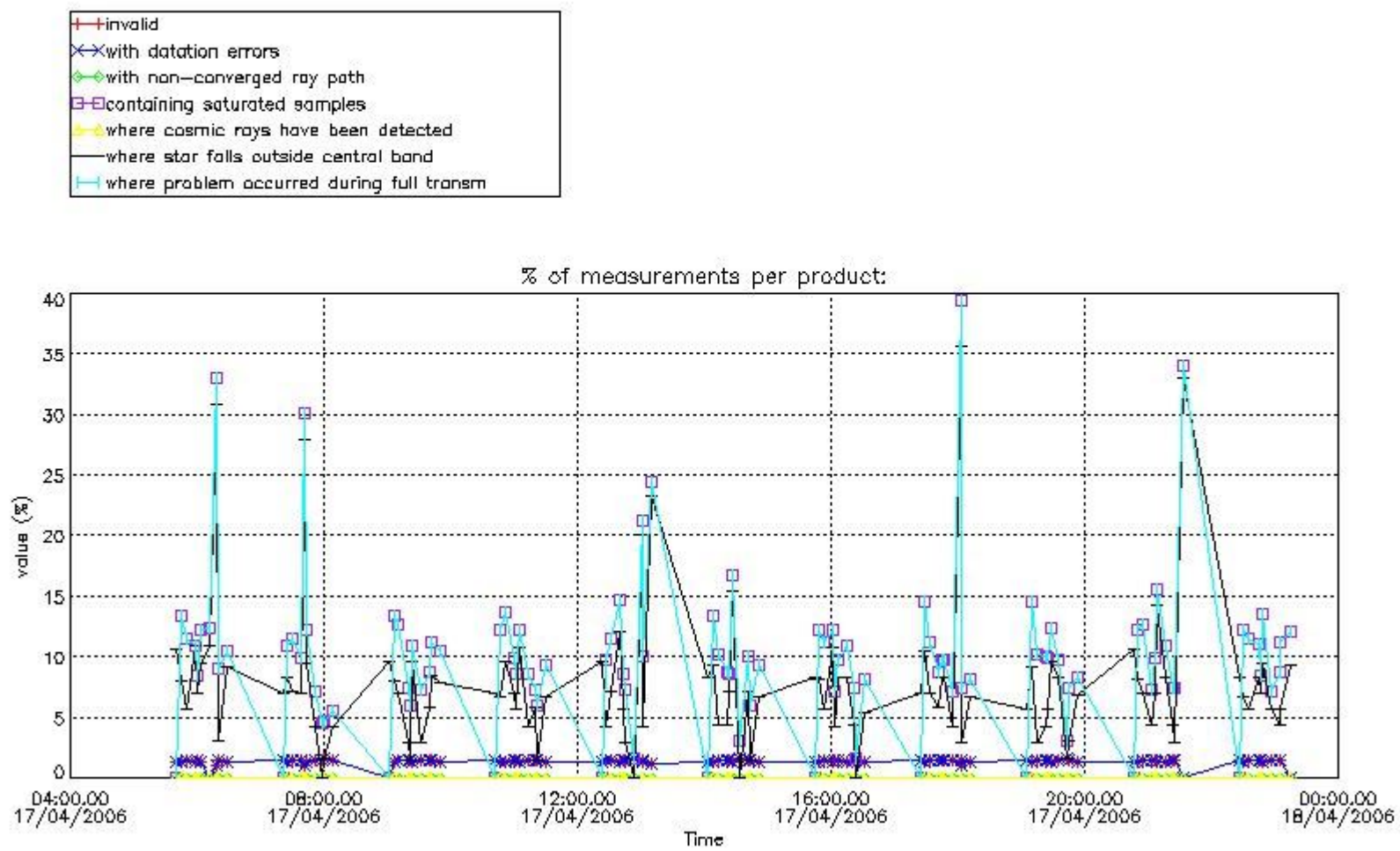
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



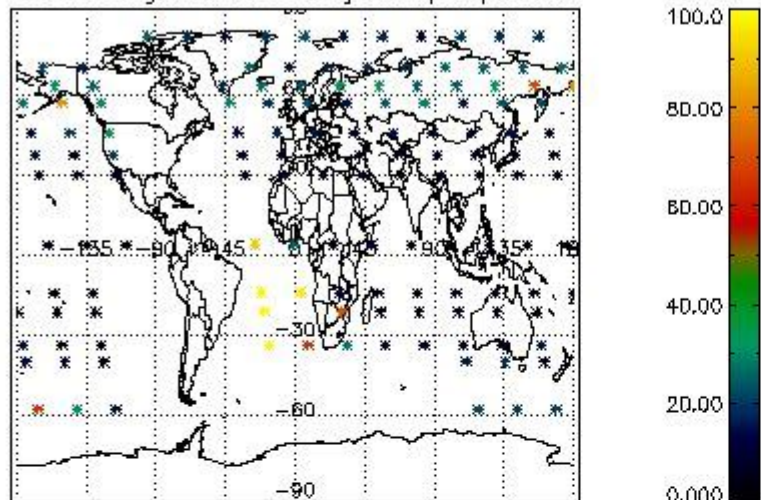
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



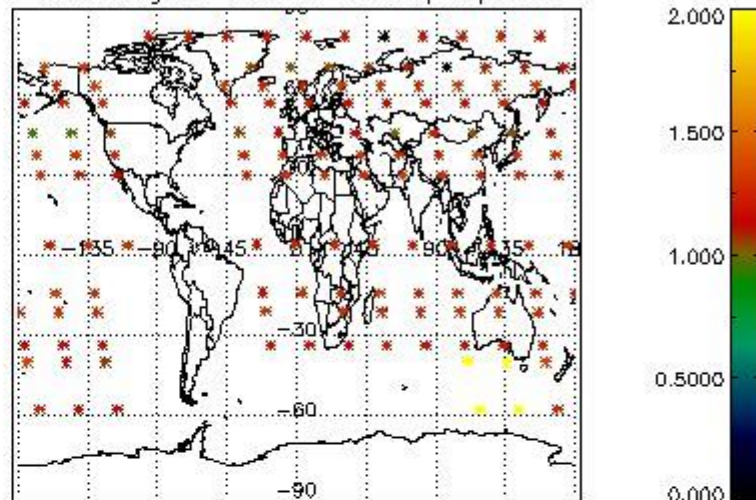
4.2 Plot quality information per product coming from level 1b processing (world map)

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

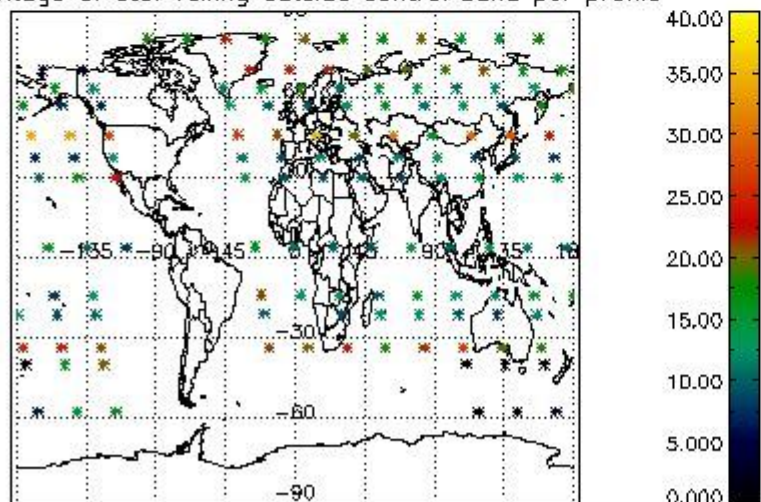
Percentage of cosmic ray hits per profile



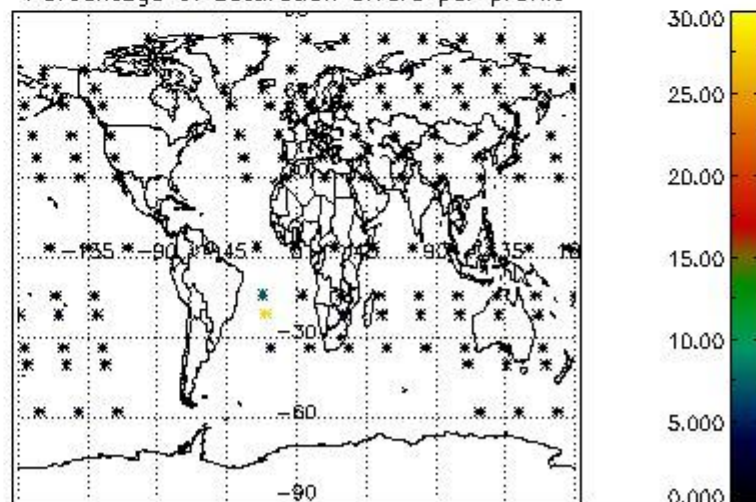
Percentage of datation errors per profile



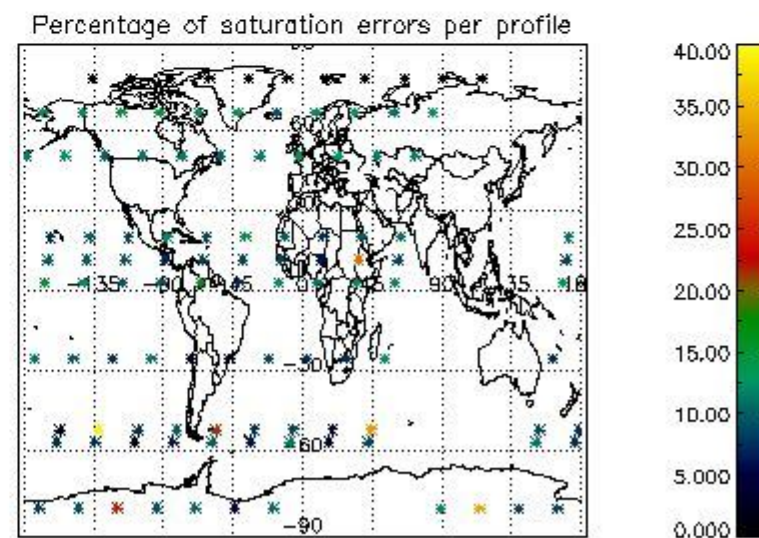
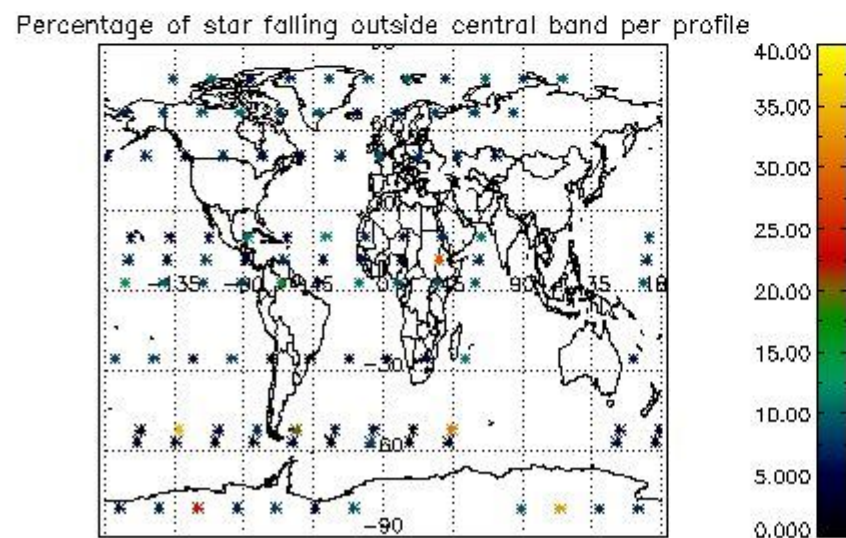
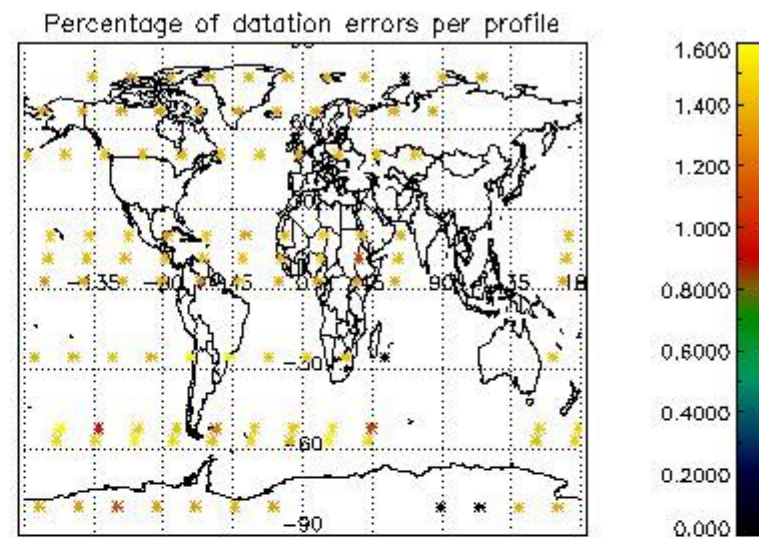
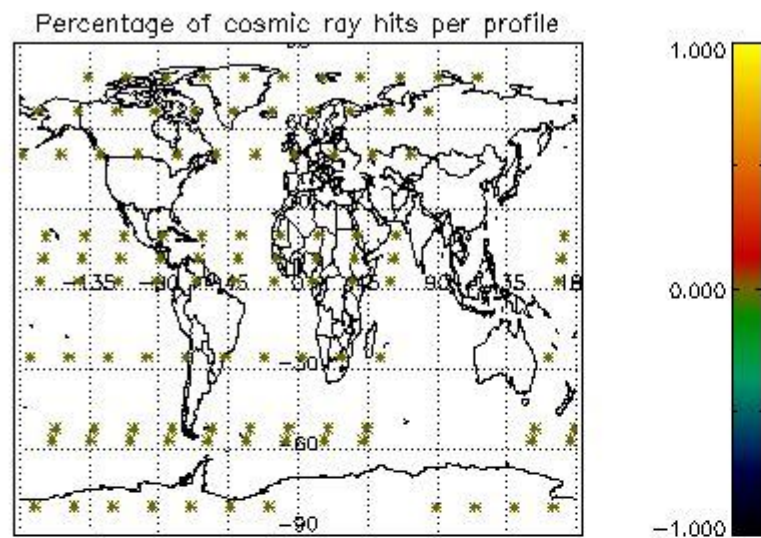
Percentage of star falling outside central band per profile



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

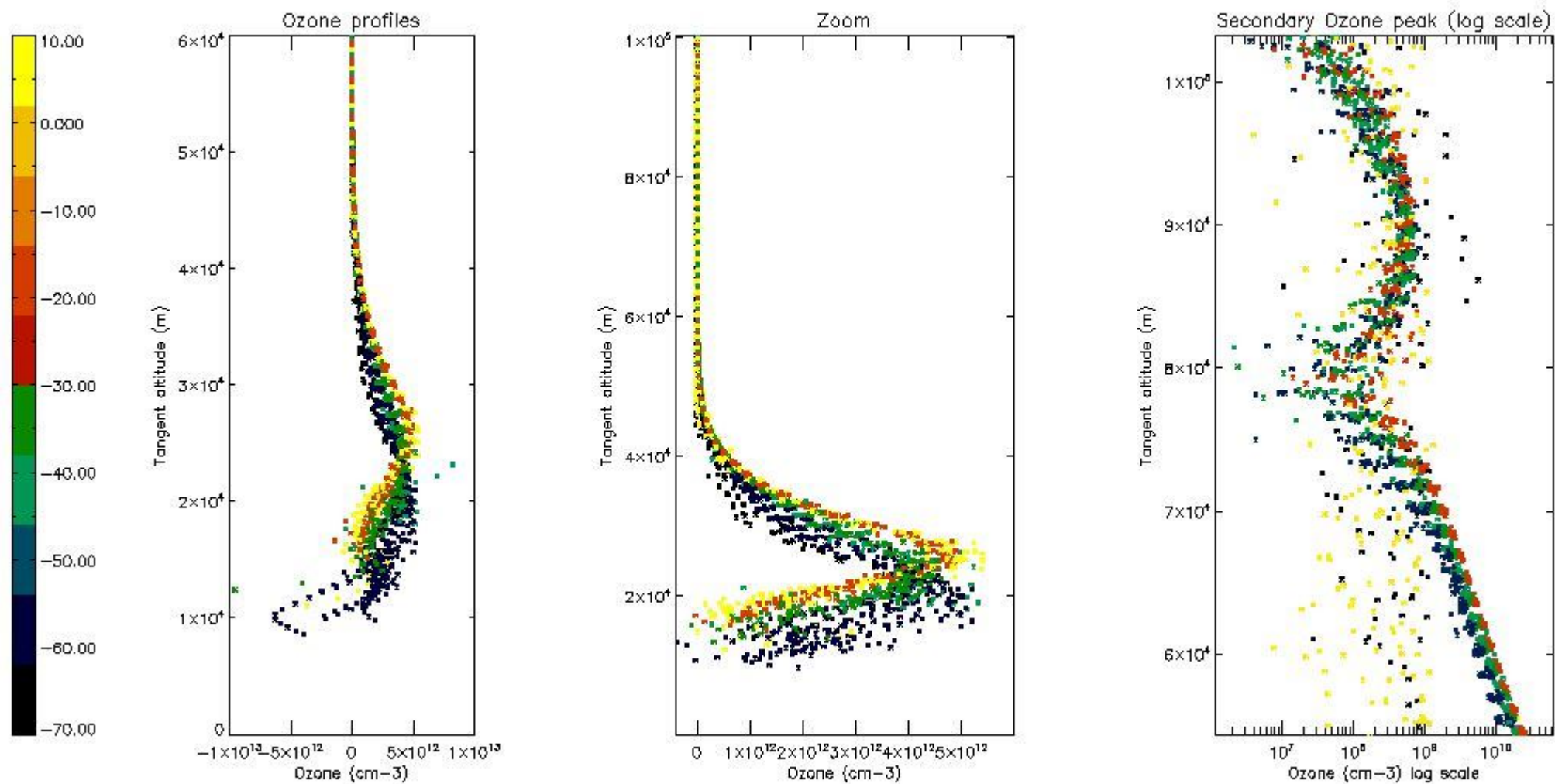
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	28
STD < 20	16

STD < 10	12
STD < 5	7

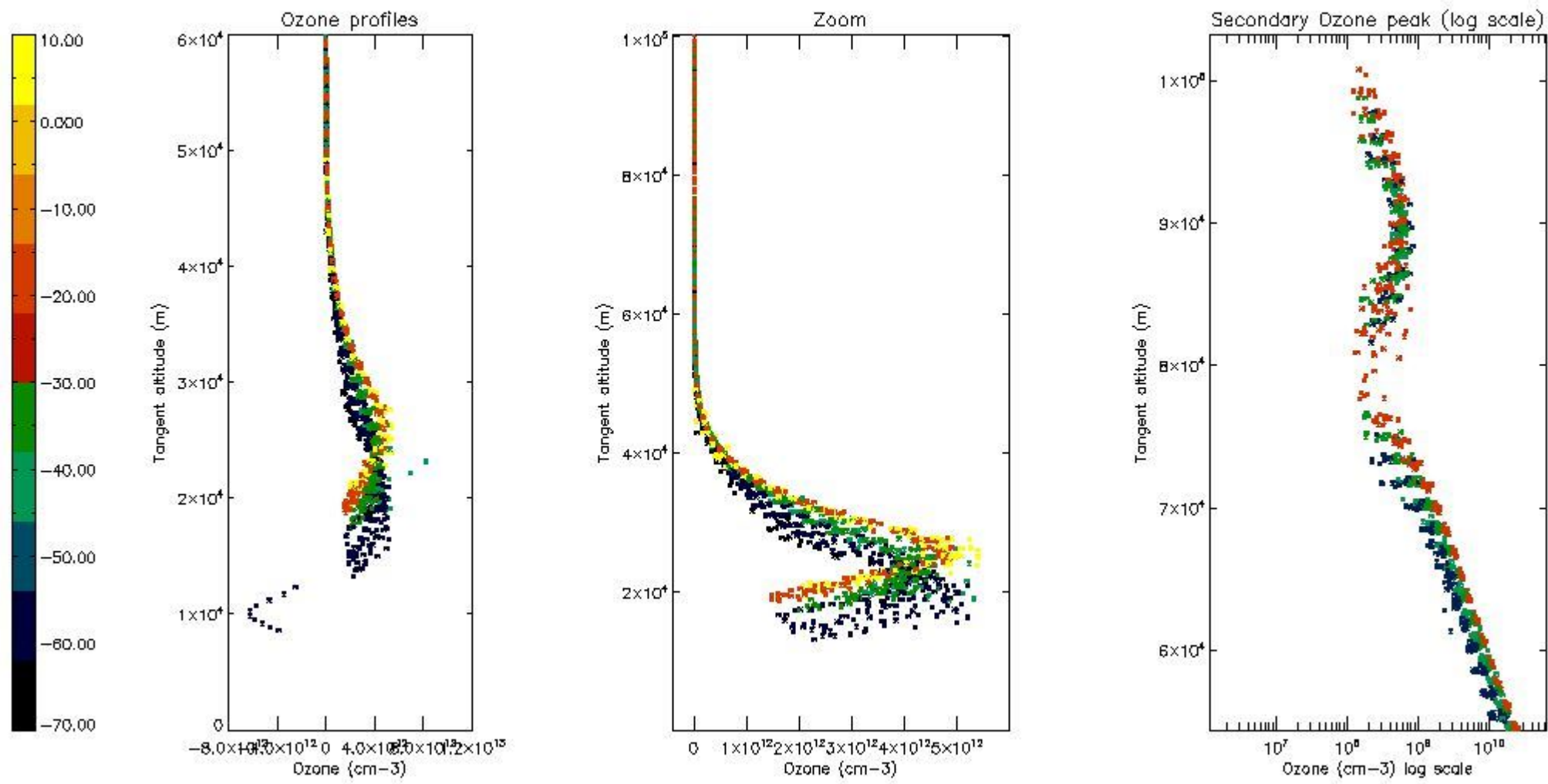
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



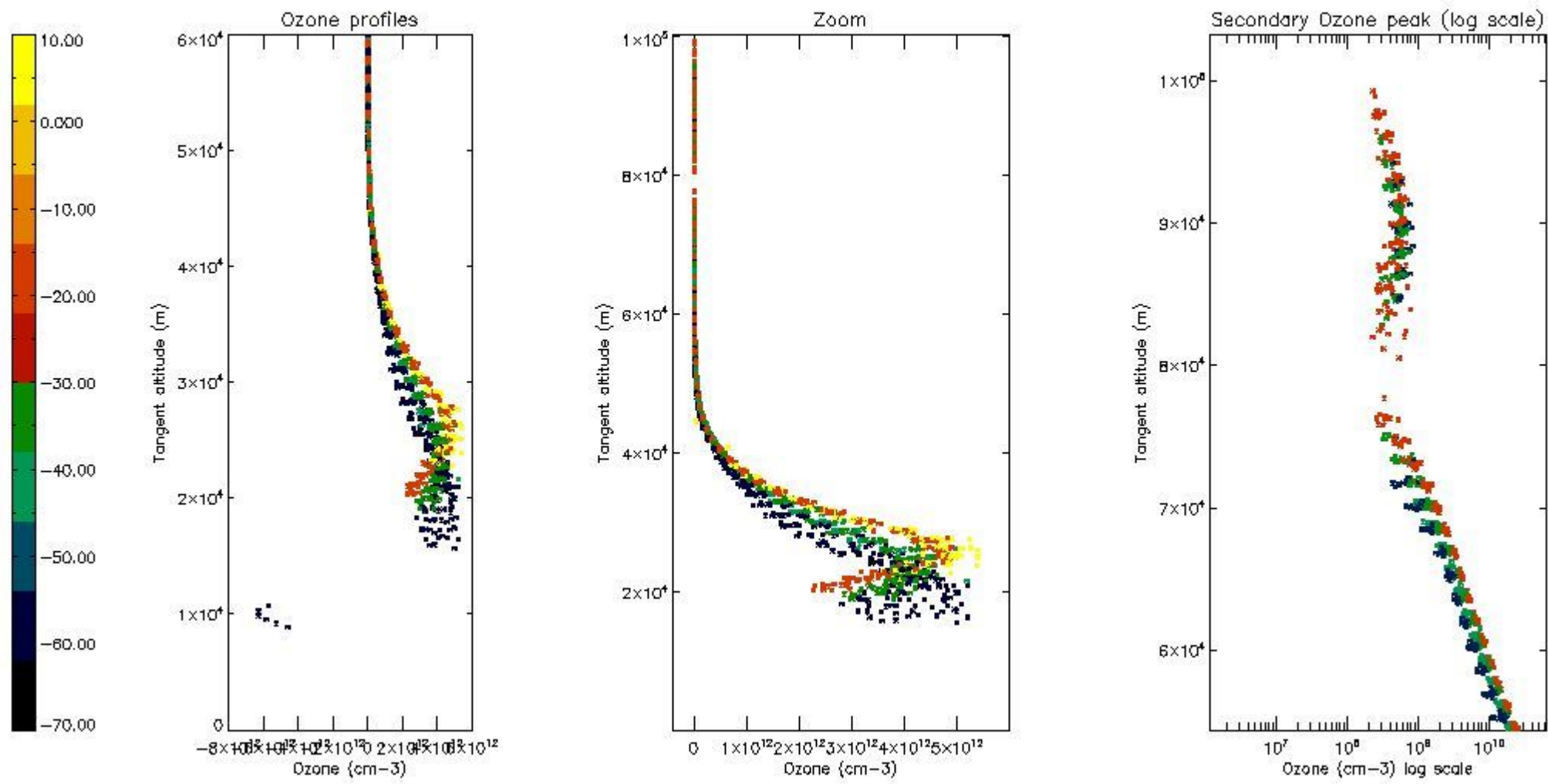
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



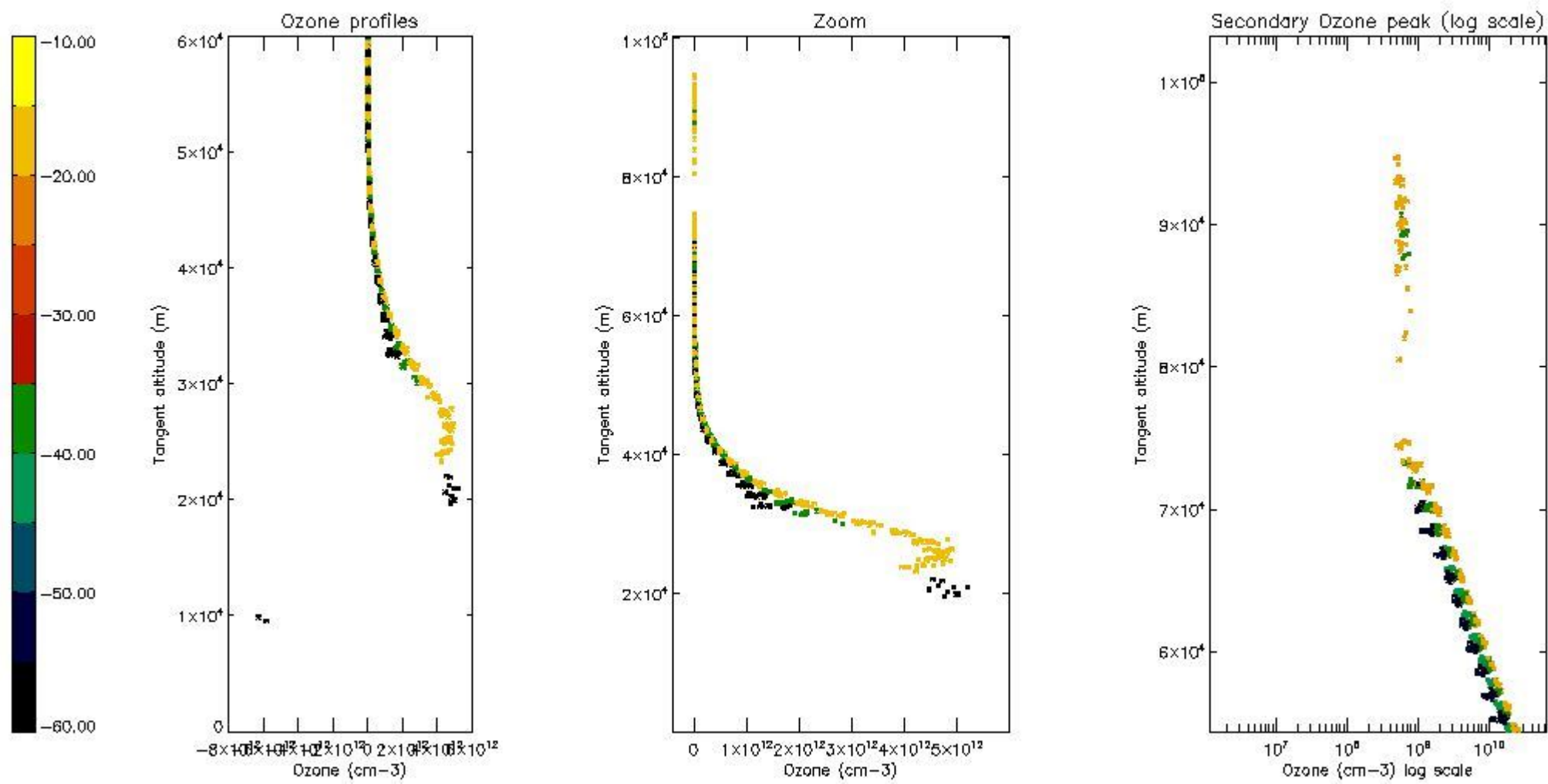
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



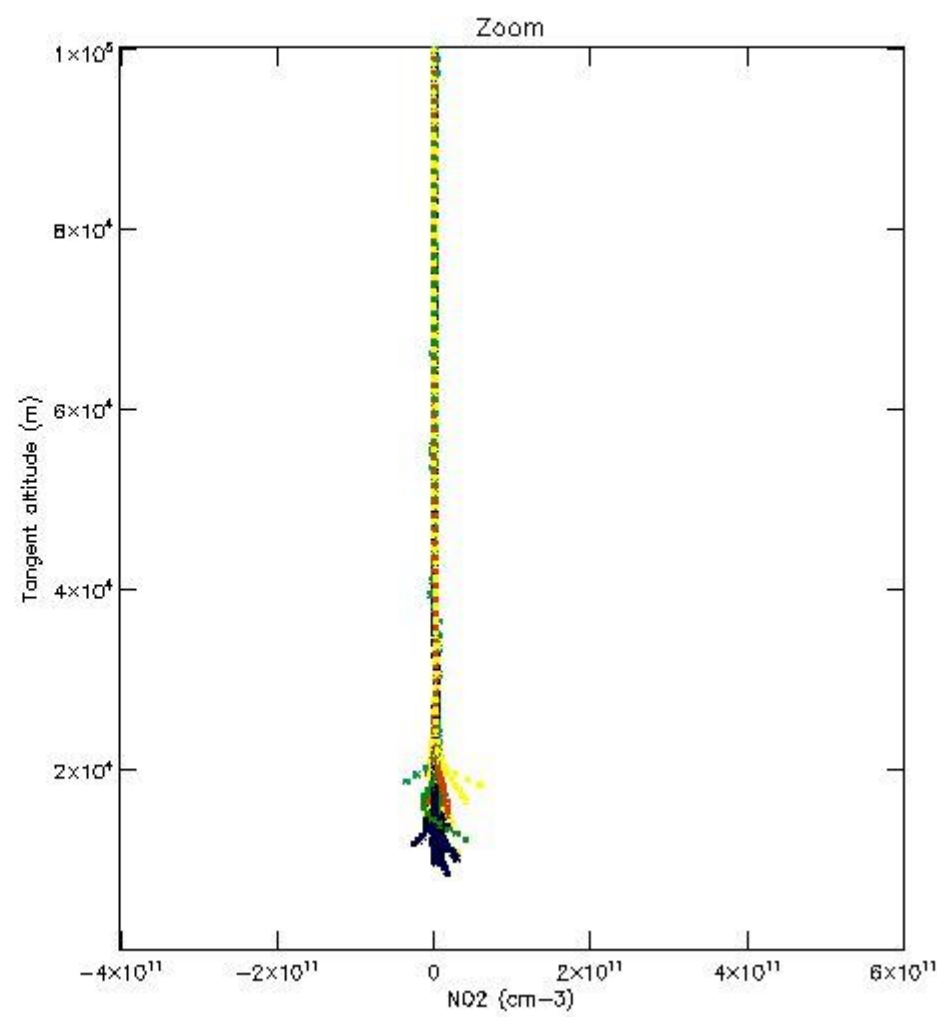
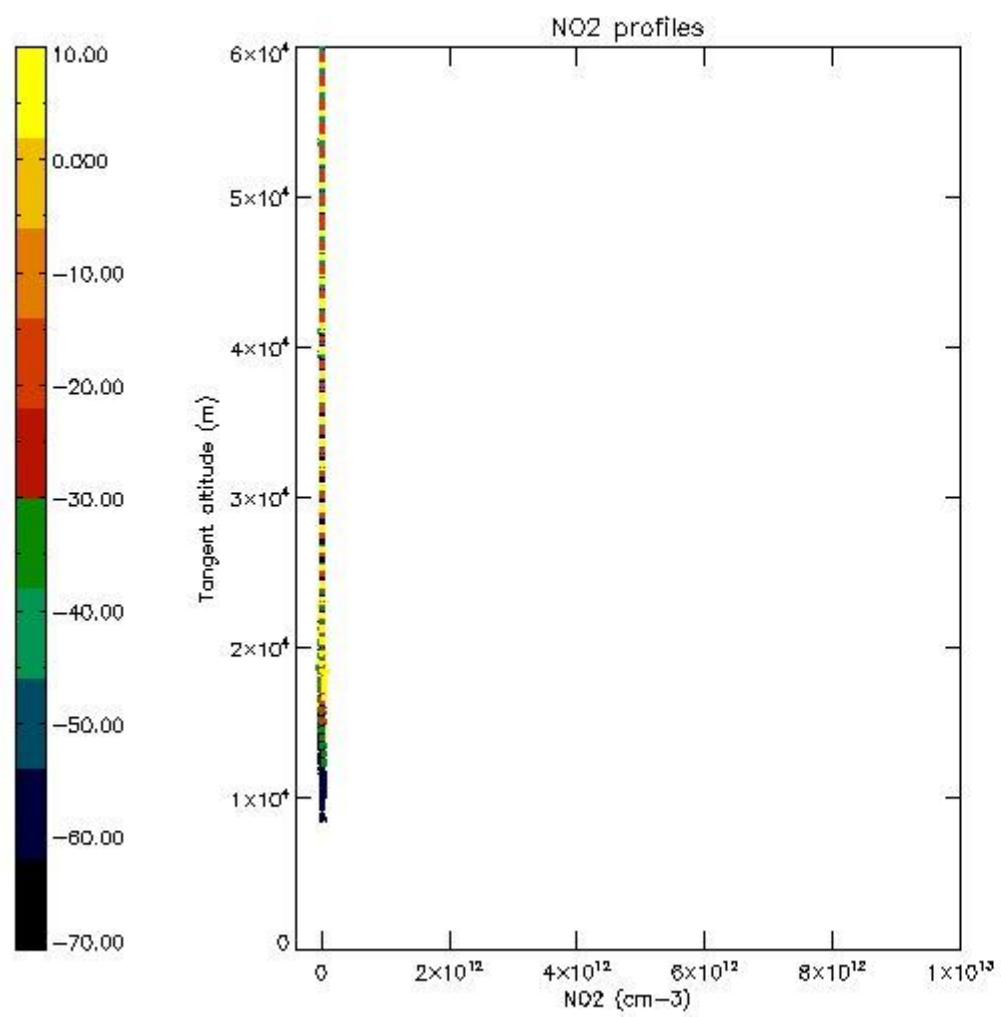
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



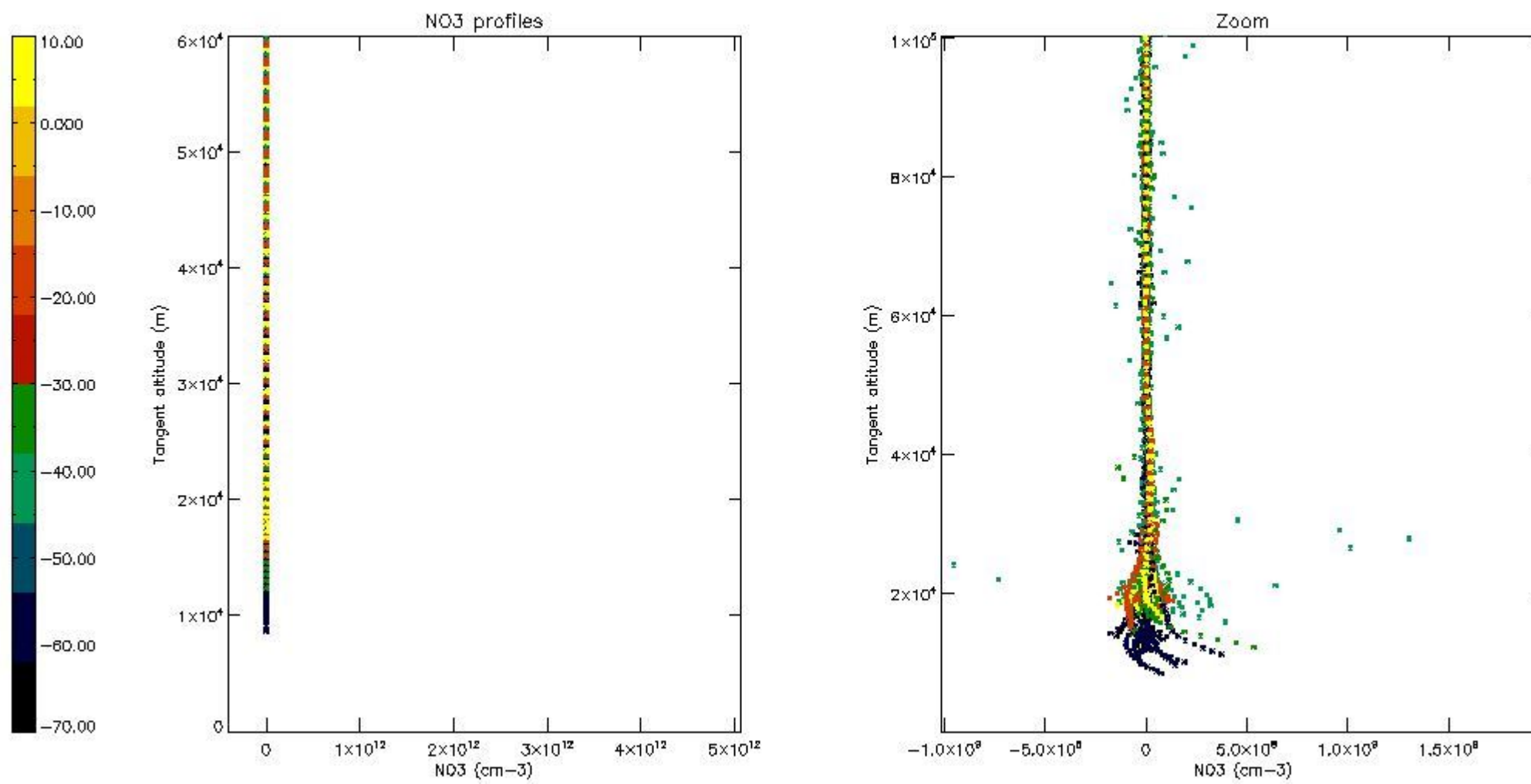
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



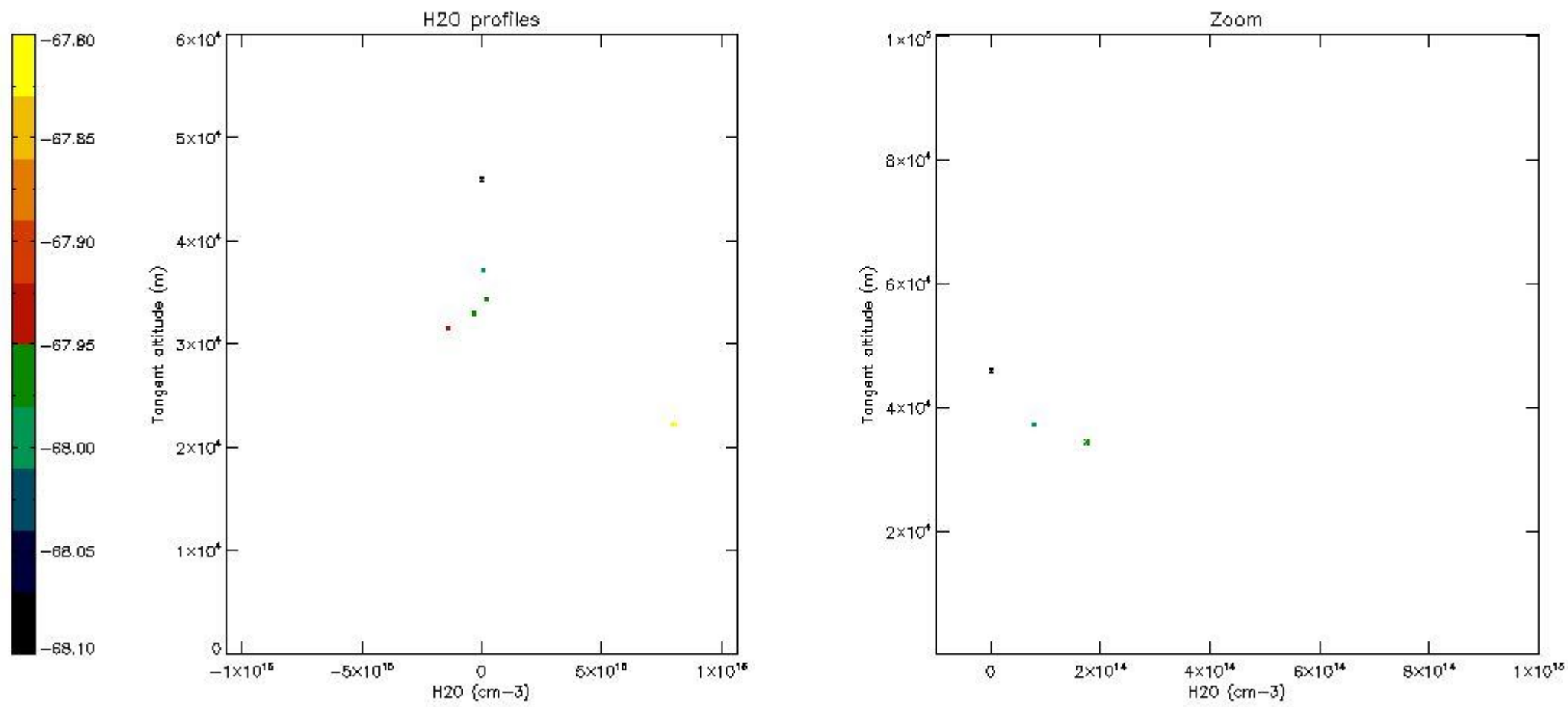
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

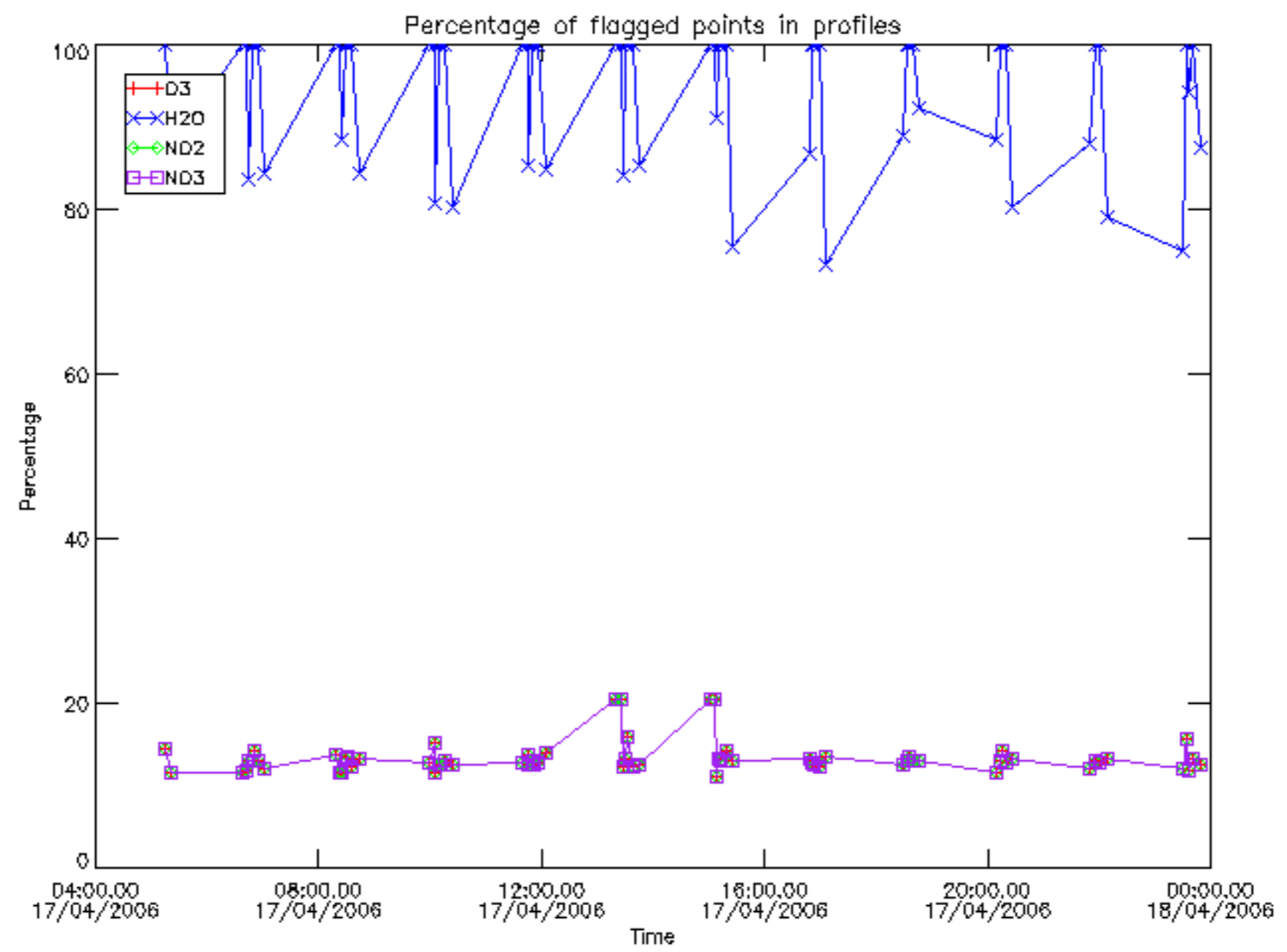
The colorbar represents the latitude.



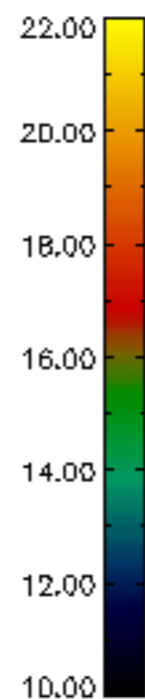
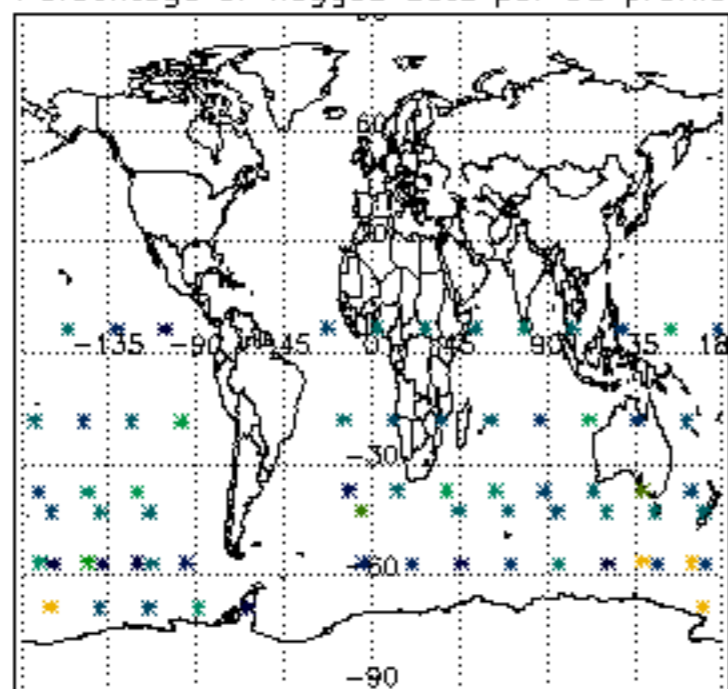
6. Auxiliary Data Files used for the production reported in section 2

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.

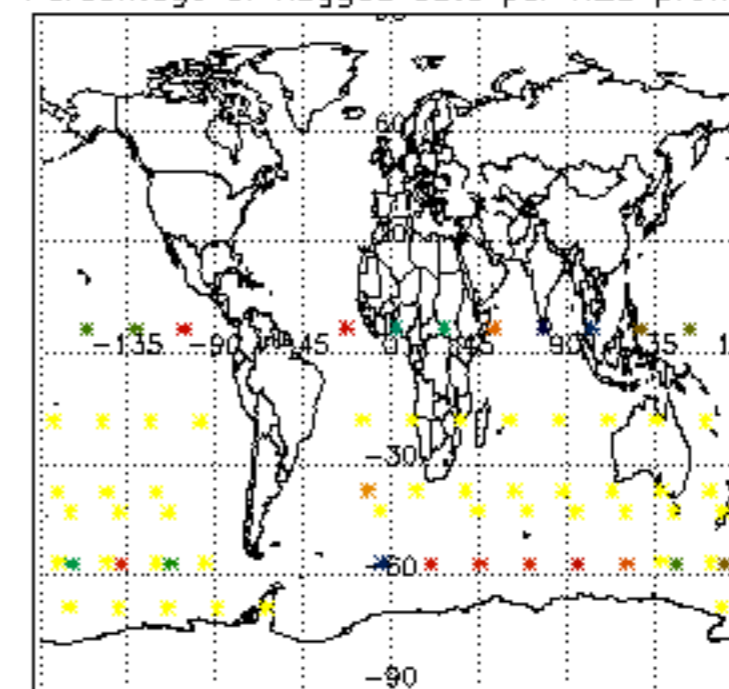
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	17-APR-2006 05:14:34
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	17-APR-2006 05:14:34
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	17-APR-2006 05:14:34



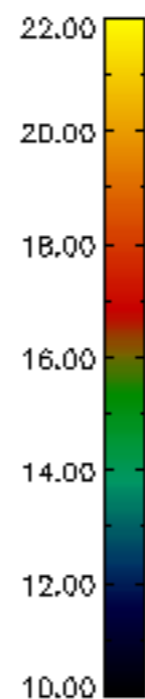
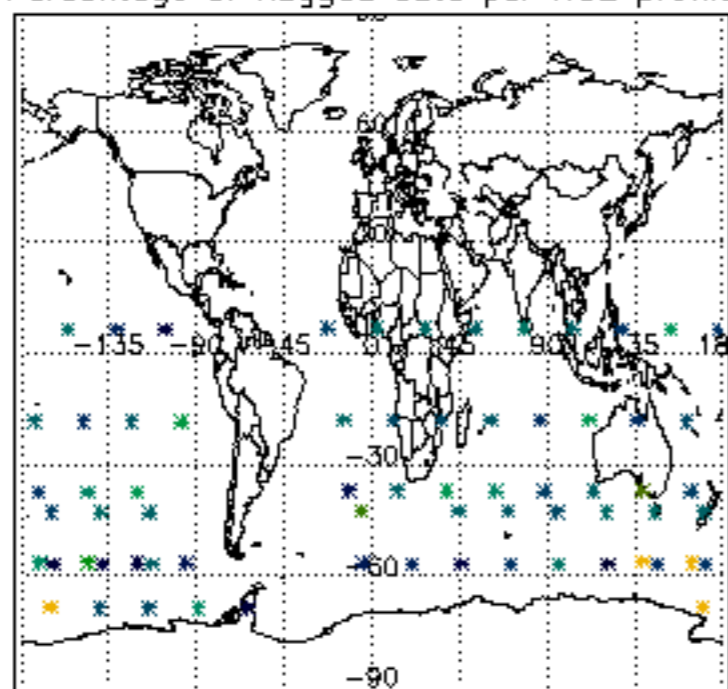
Percentage of flagged data per D3 profile



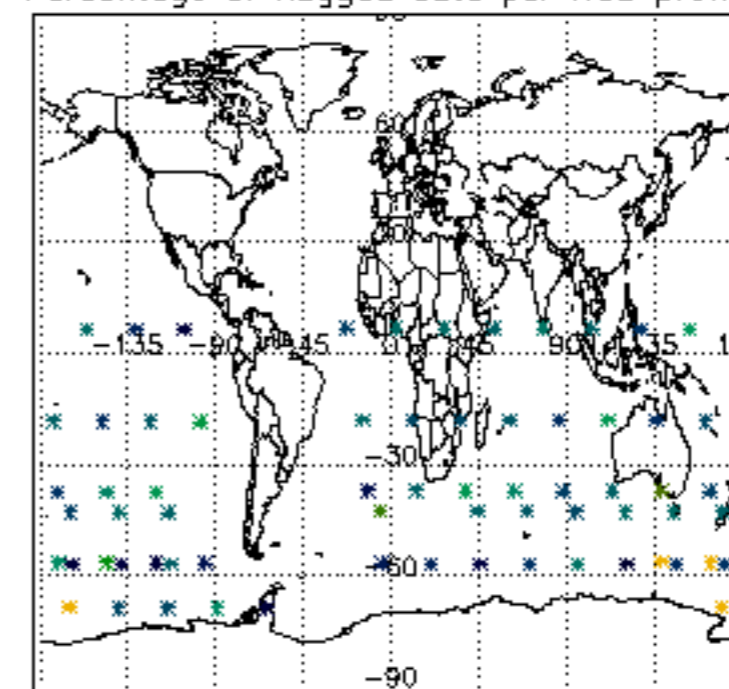
Percentage of flagged data per H2O profile

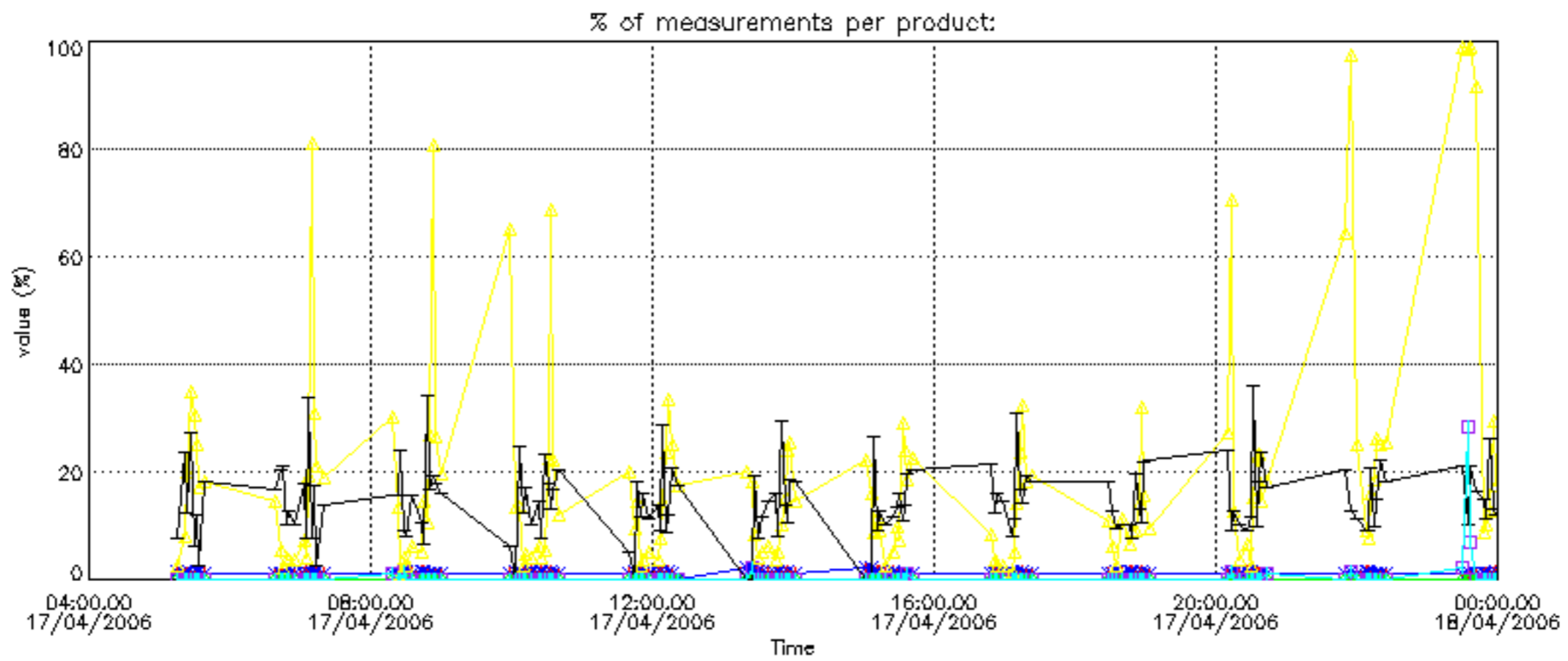


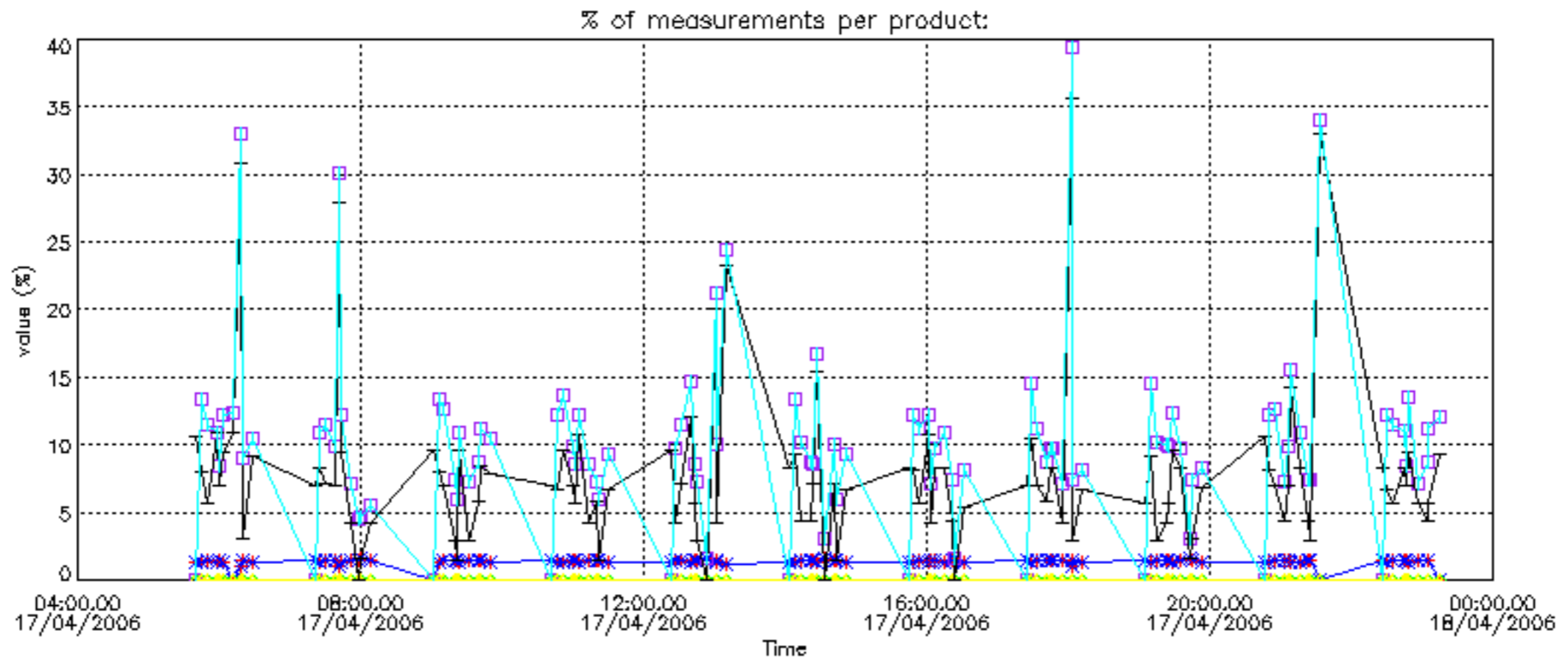
Percentage of flagged data per NO2 profile



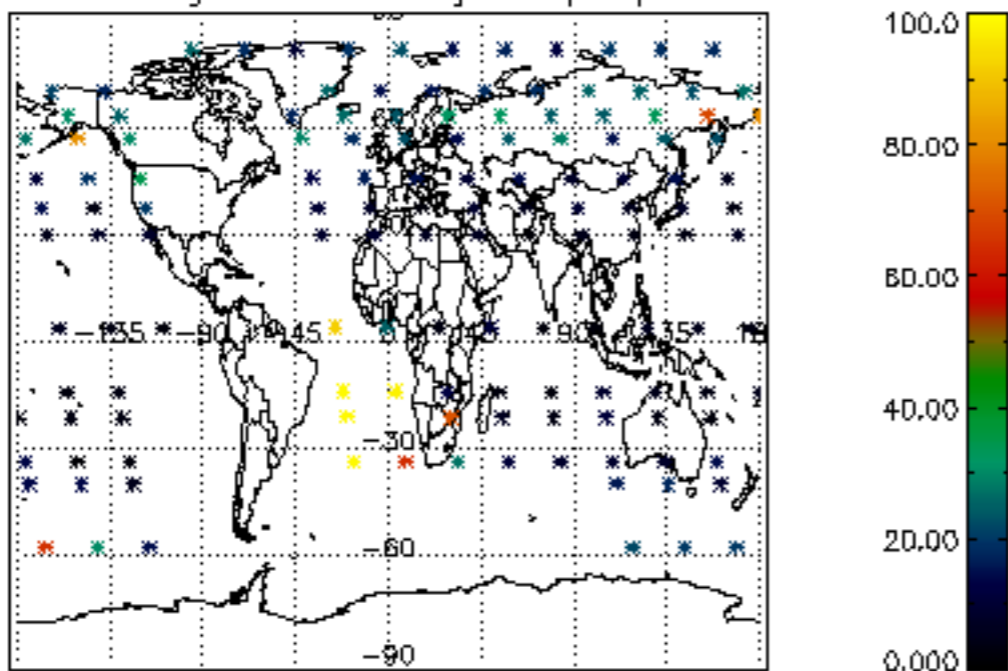
Percentage of flagged data per NO3 profile



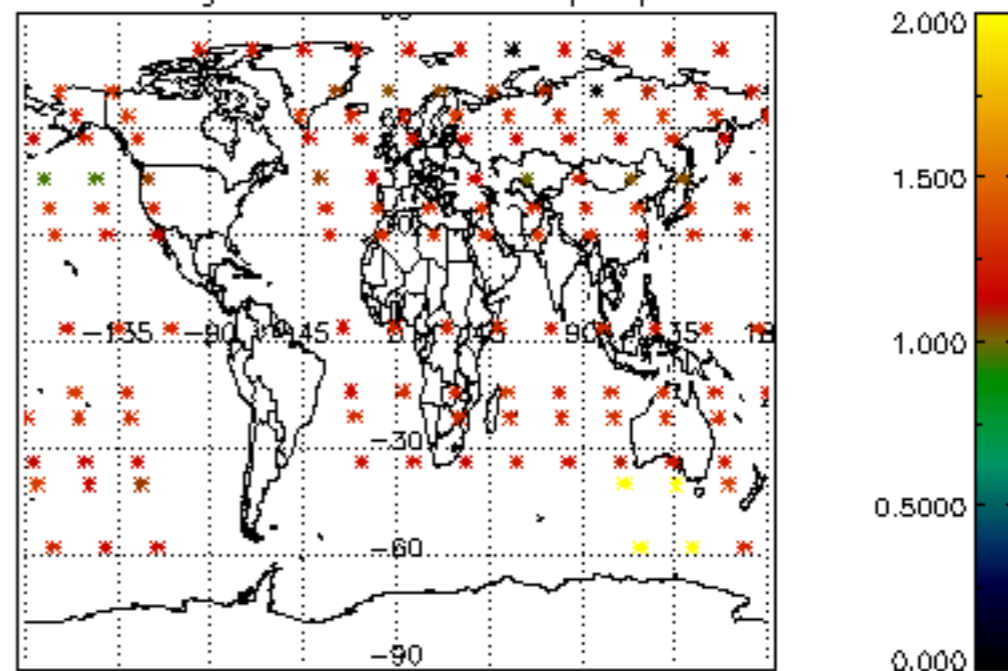




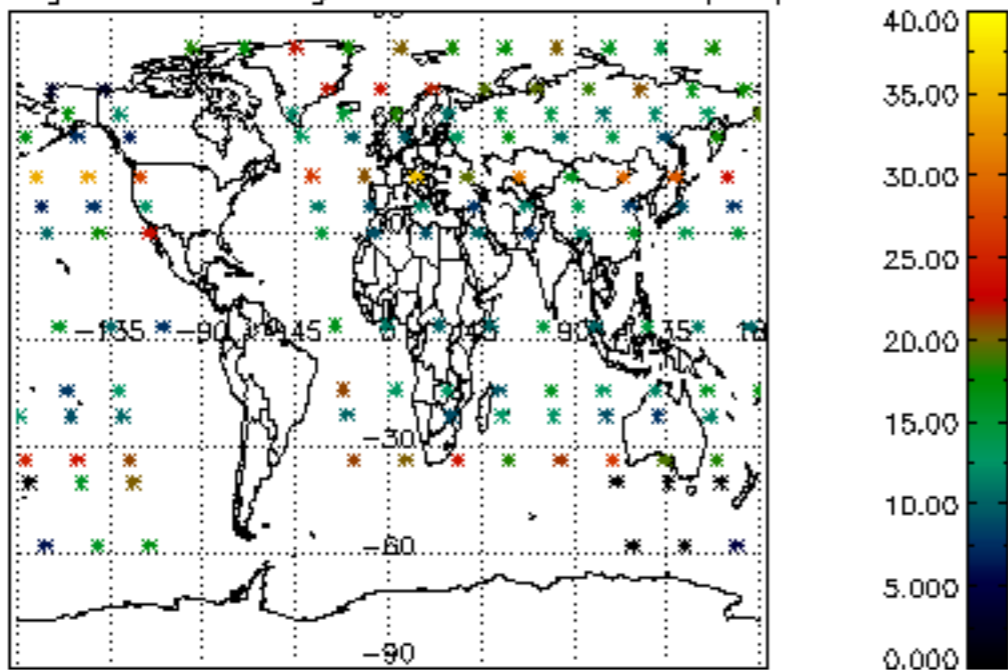
Percentage of cosmic ray hits per profile



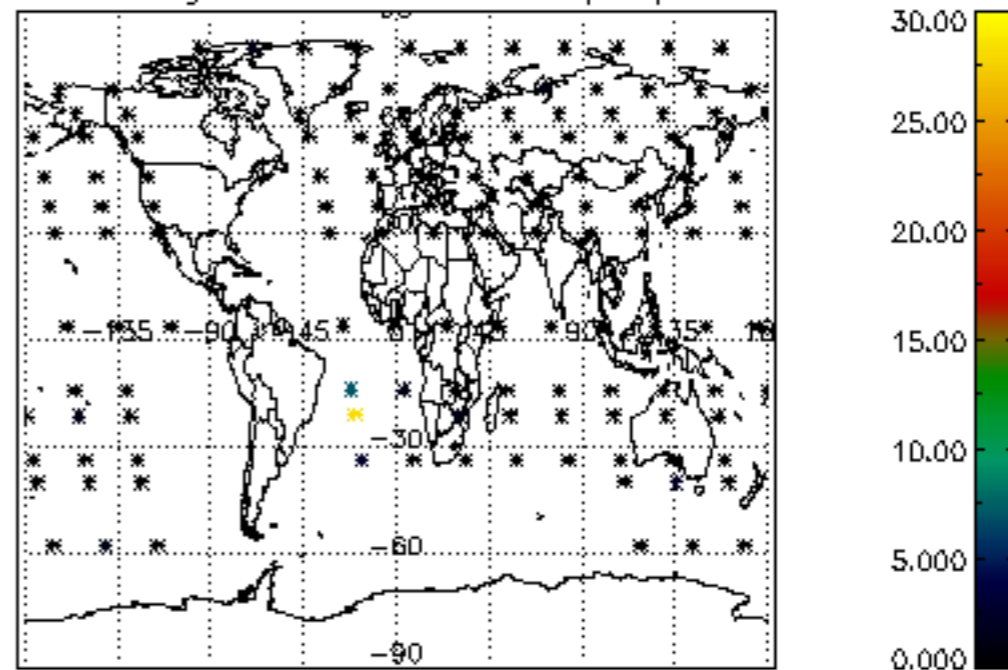
Percentage of datation errors per profile



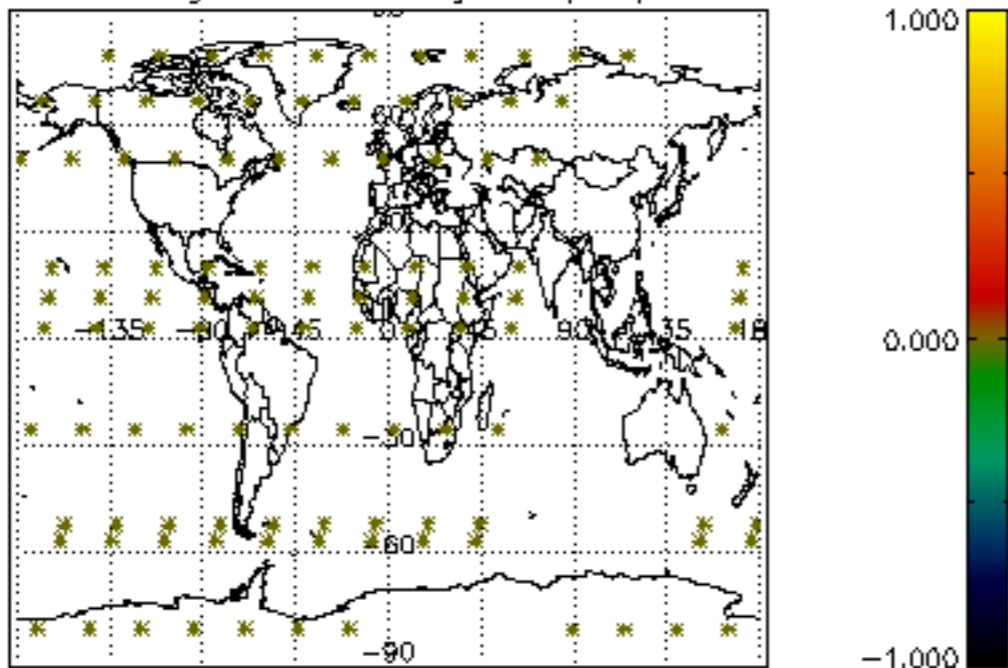
Percentage of star falling outside central band per profile



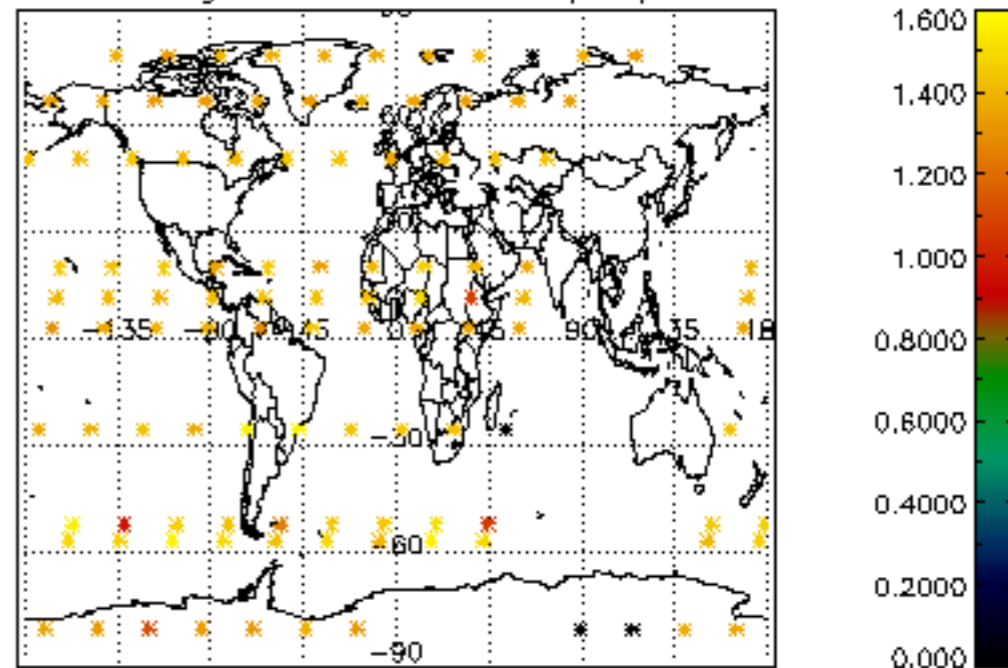
Percentage of saturation errors per profile



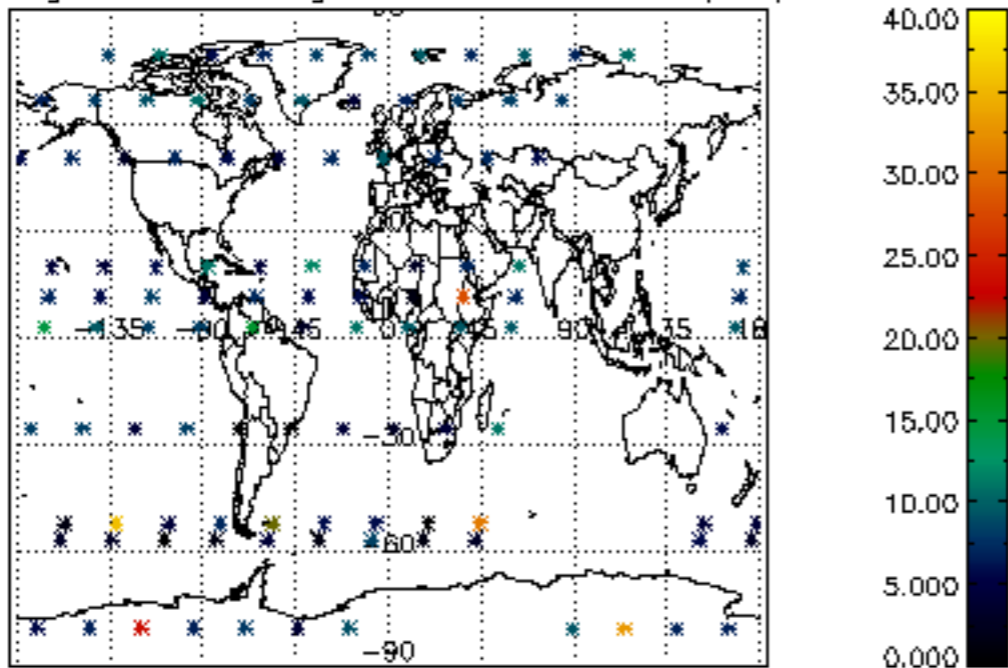
Percentage of cosmic ray hits per profile



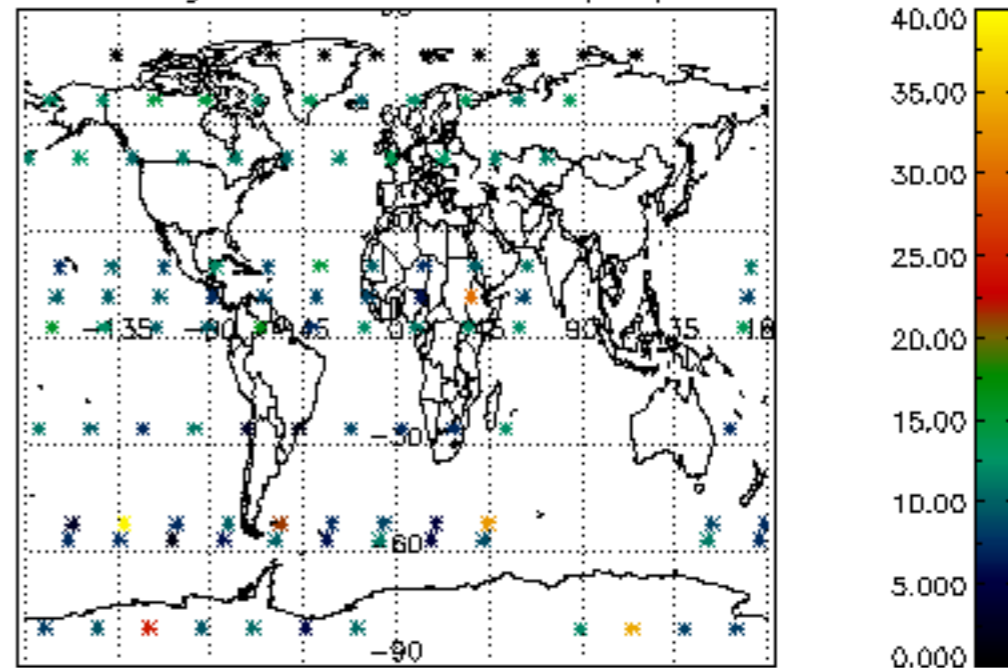
Percentage of datation errors per profile

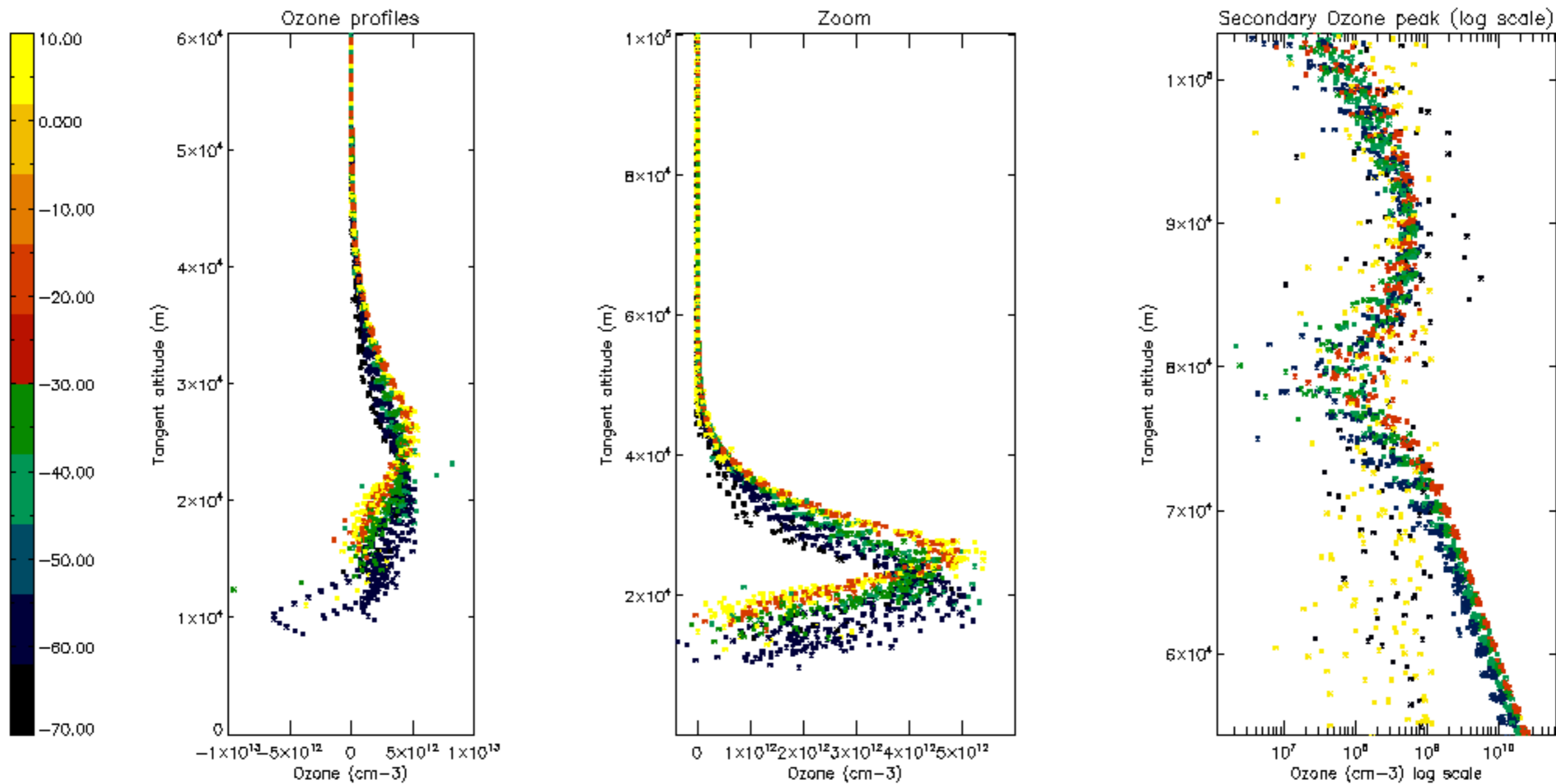


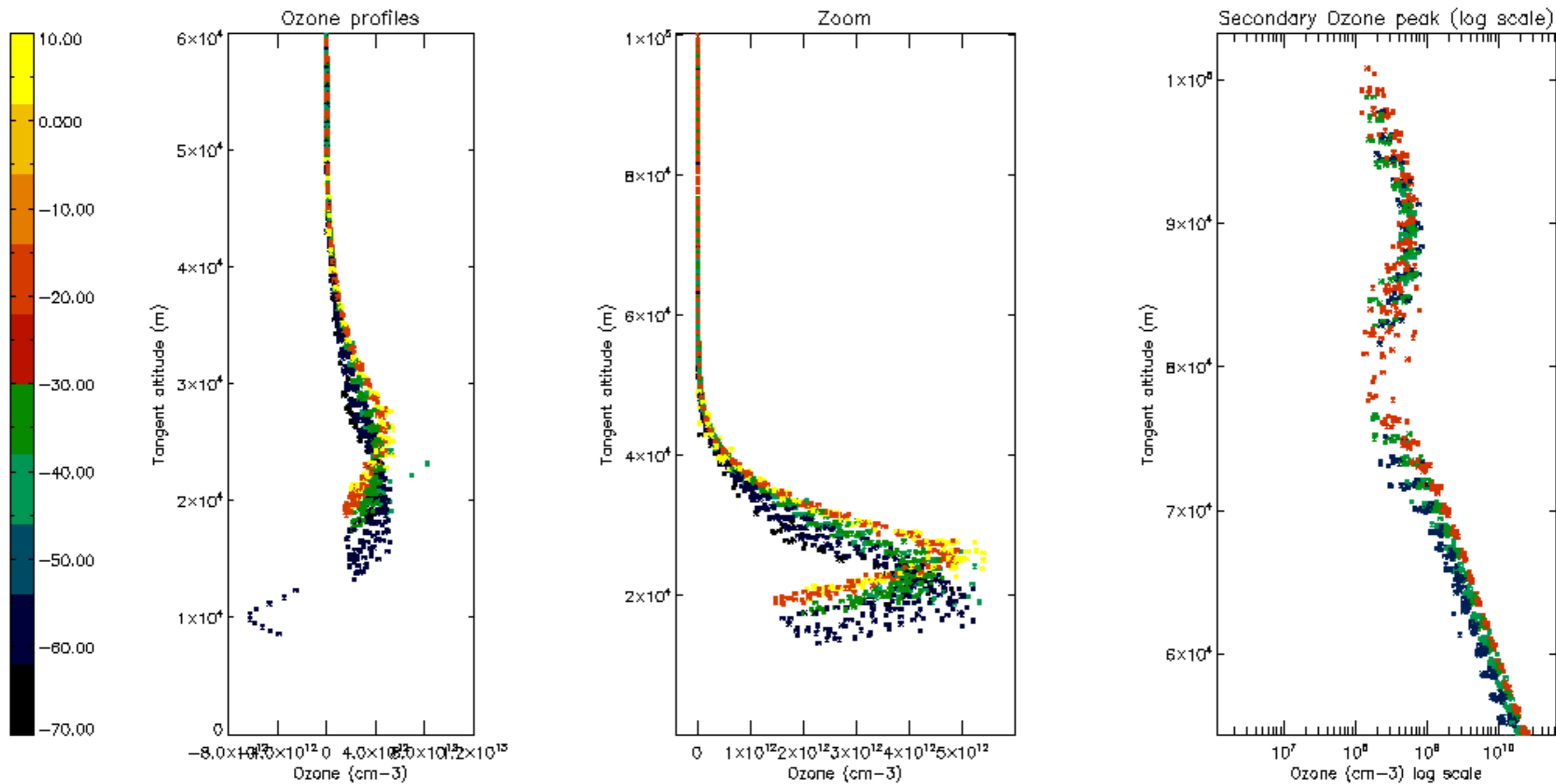
Percentage of star falling outside central band per profile

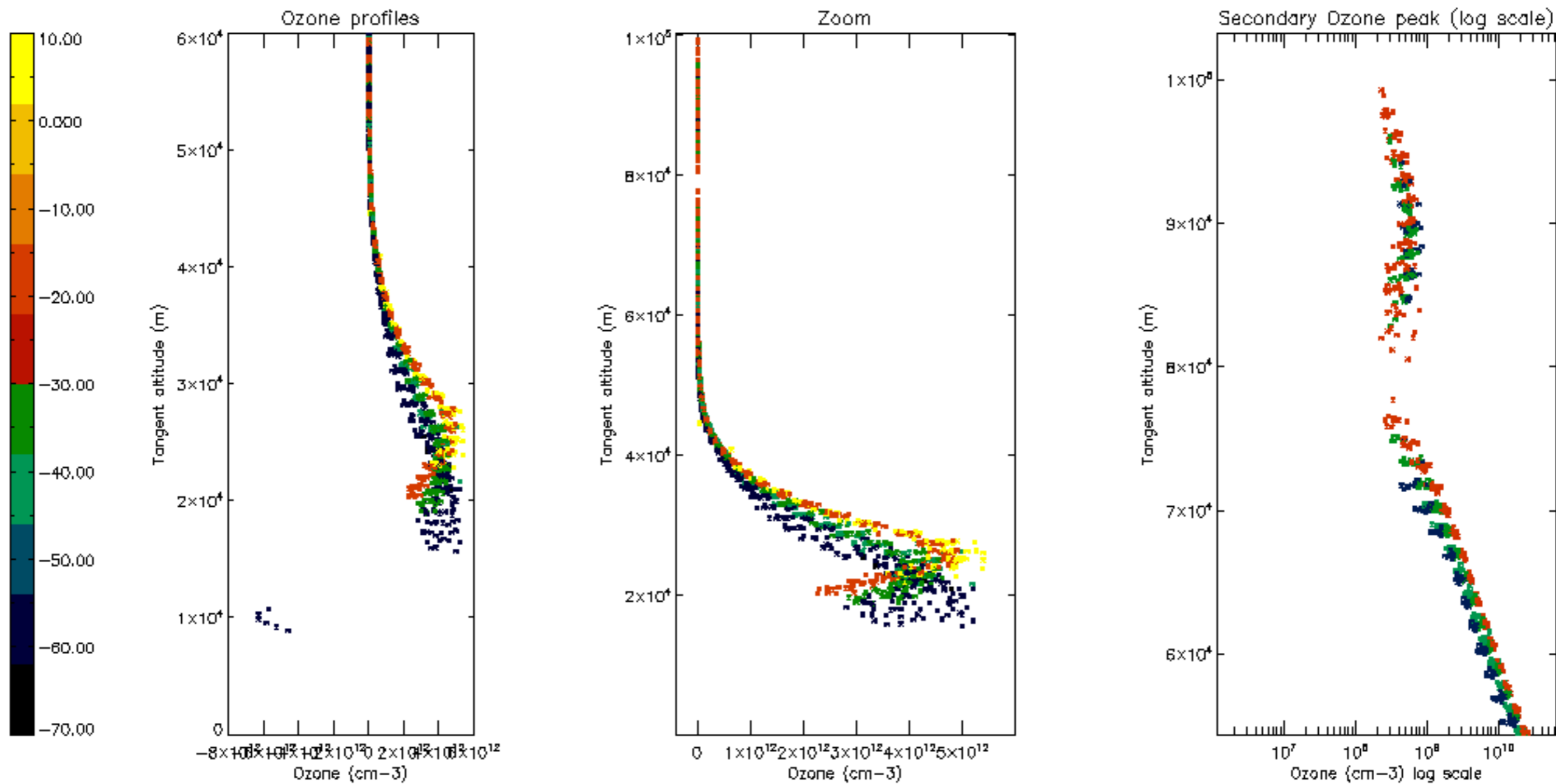


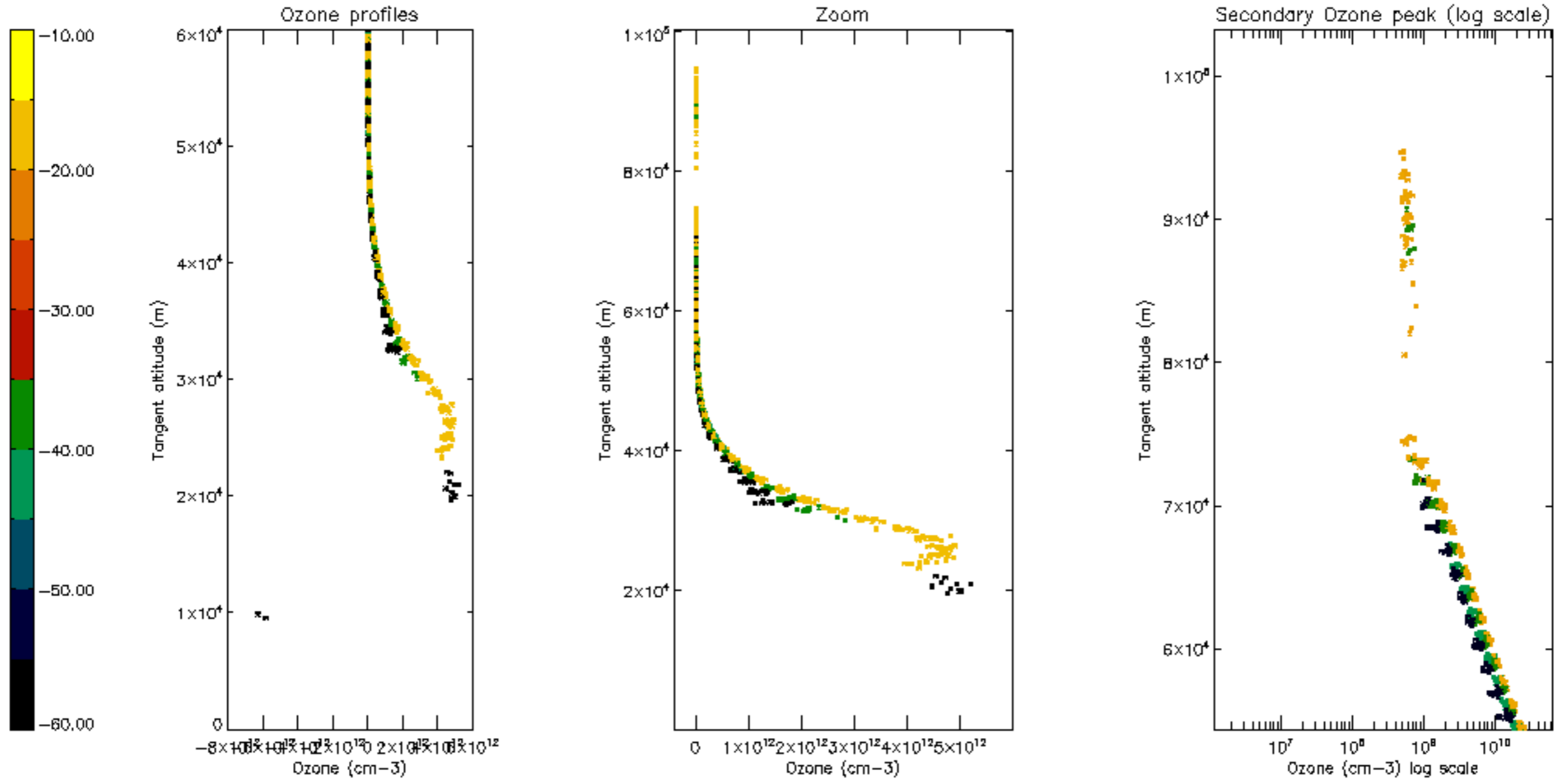
Percentage of saturation errors per profile

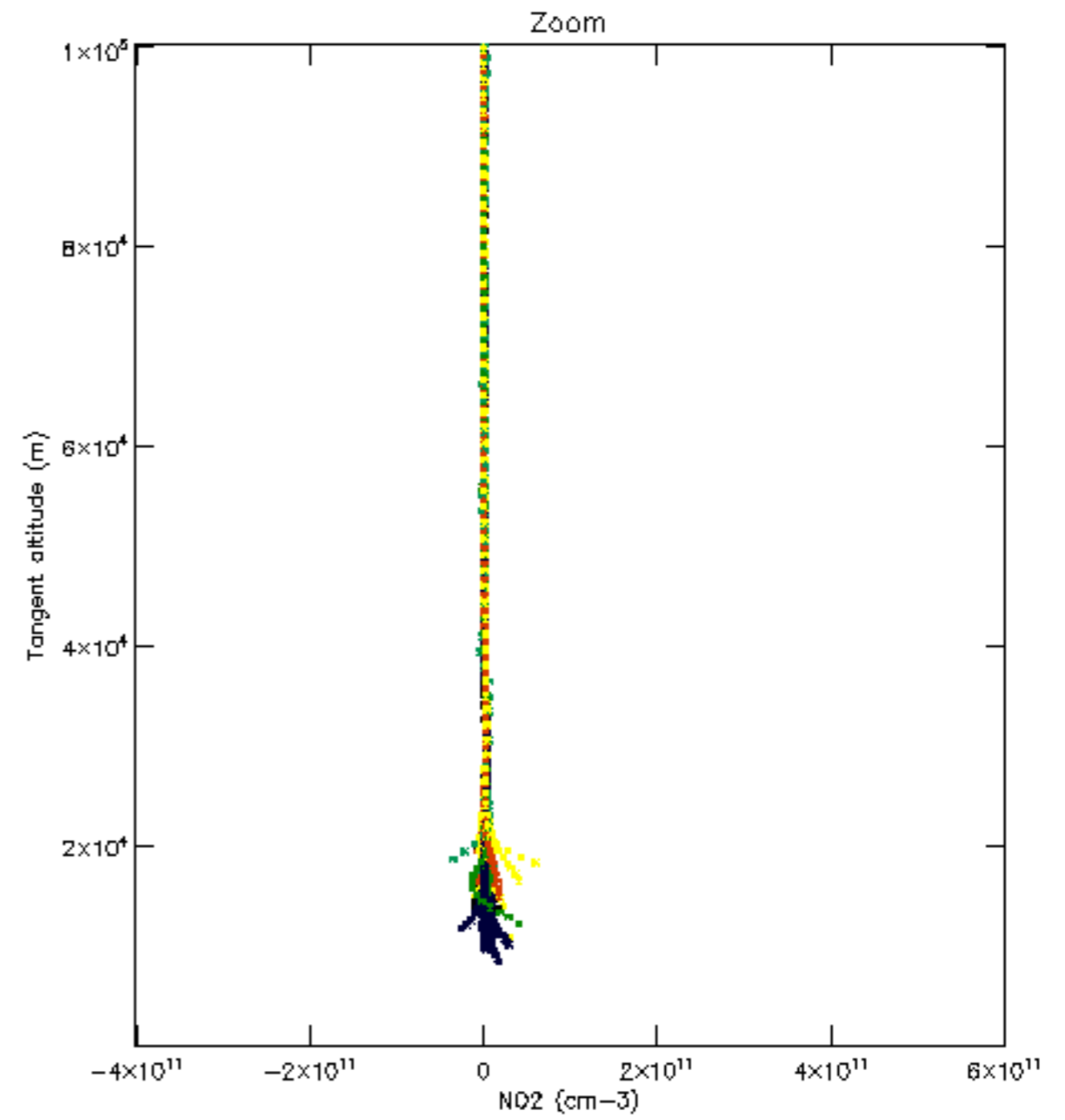
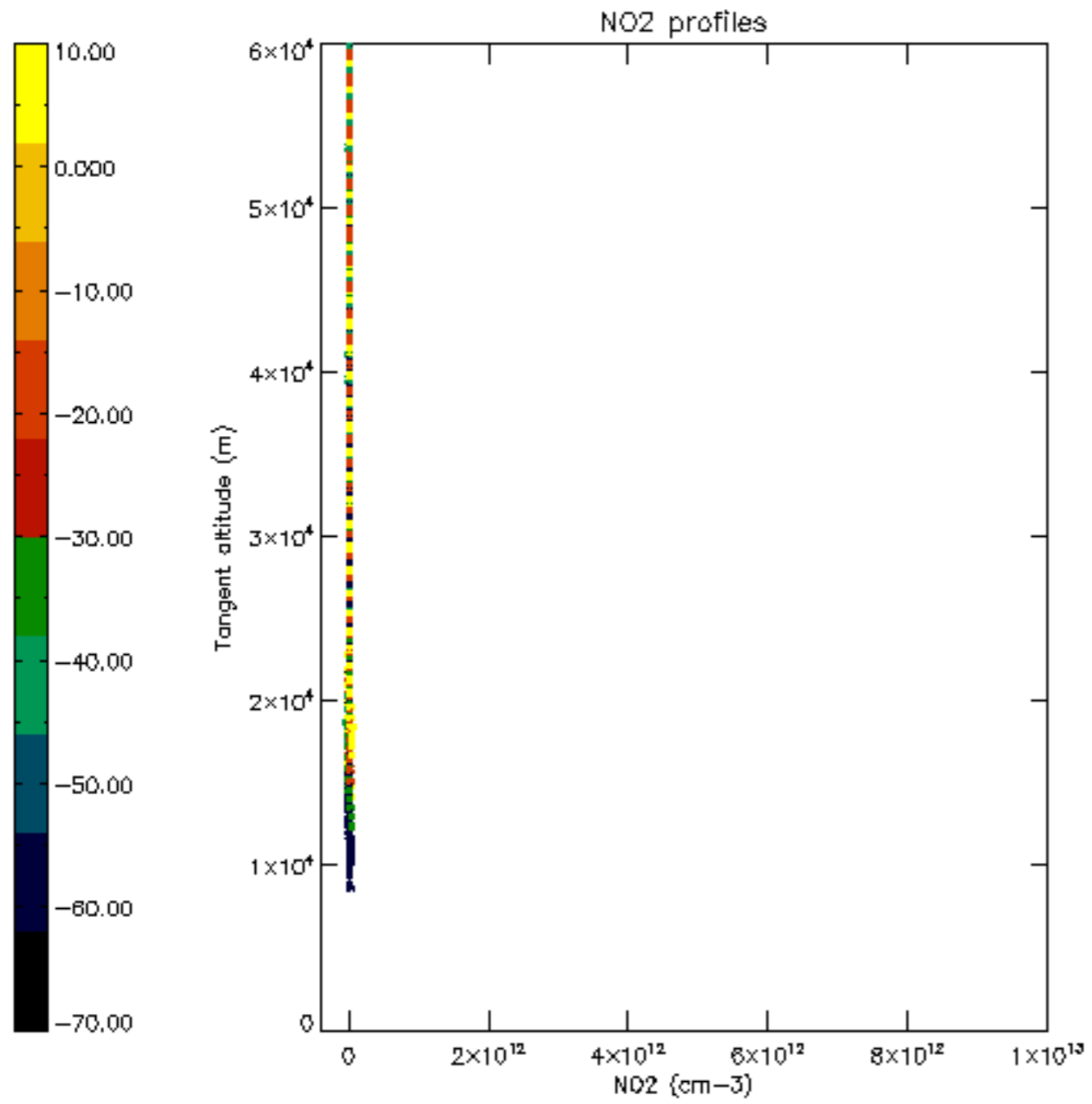


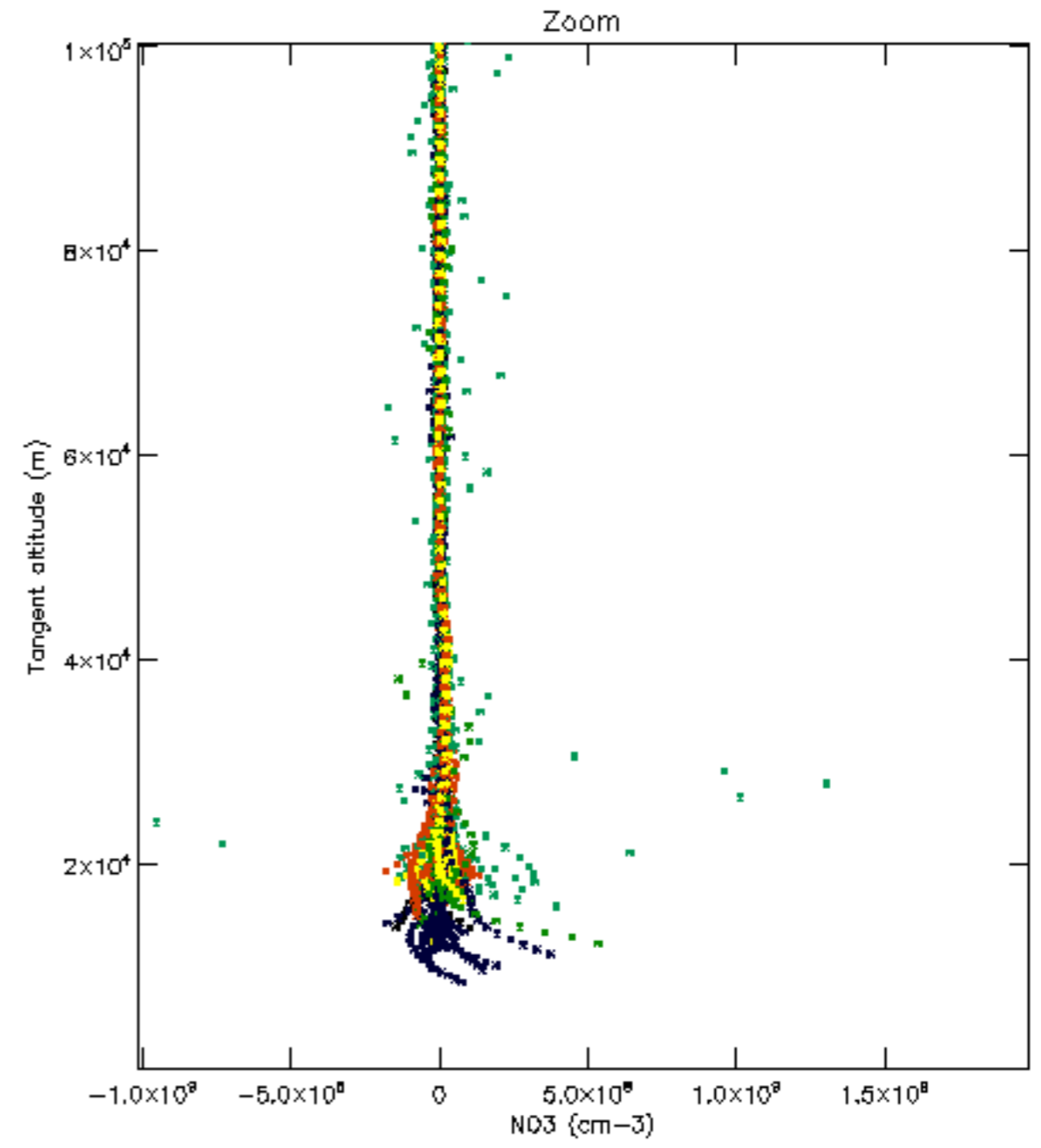
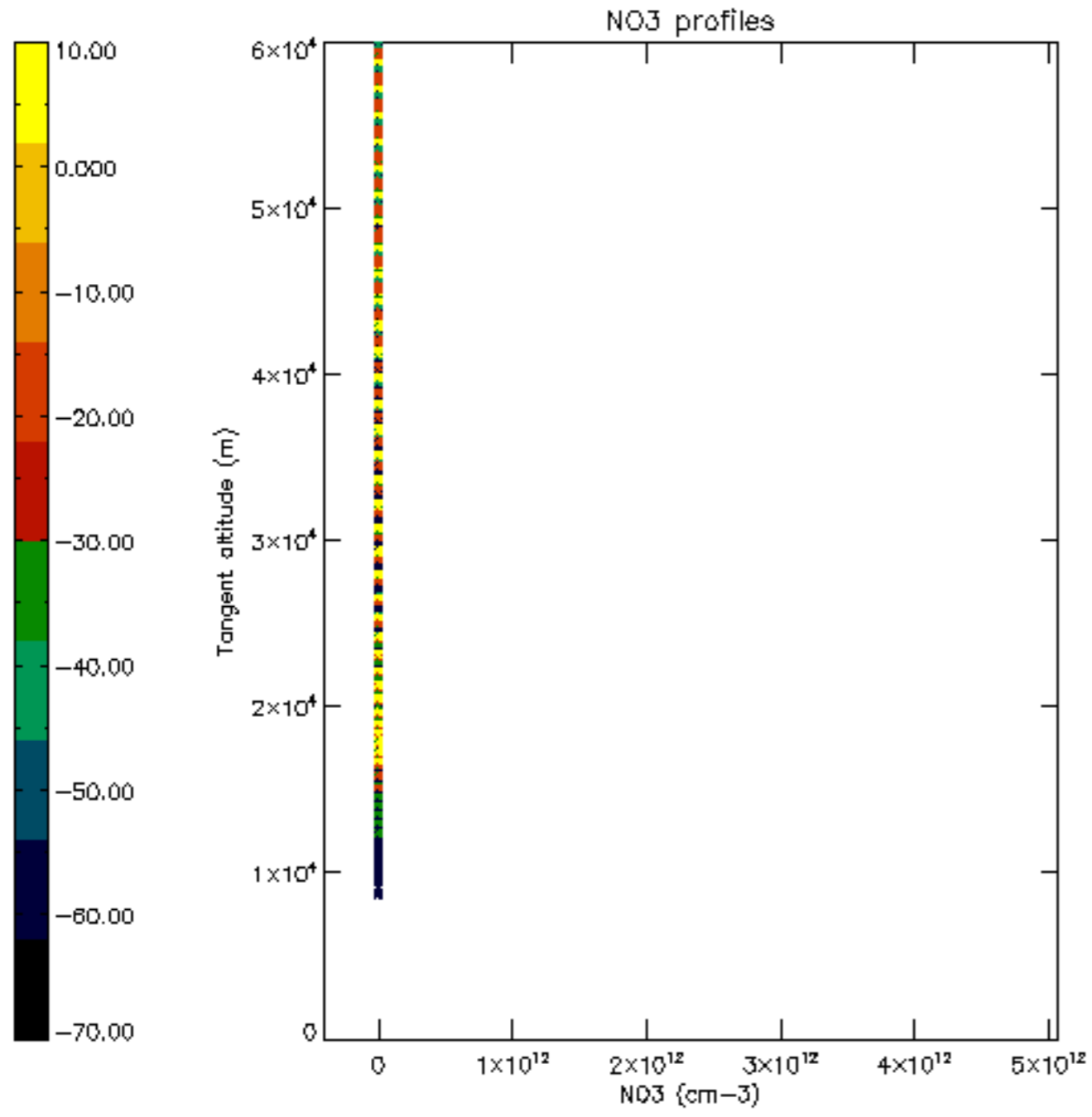


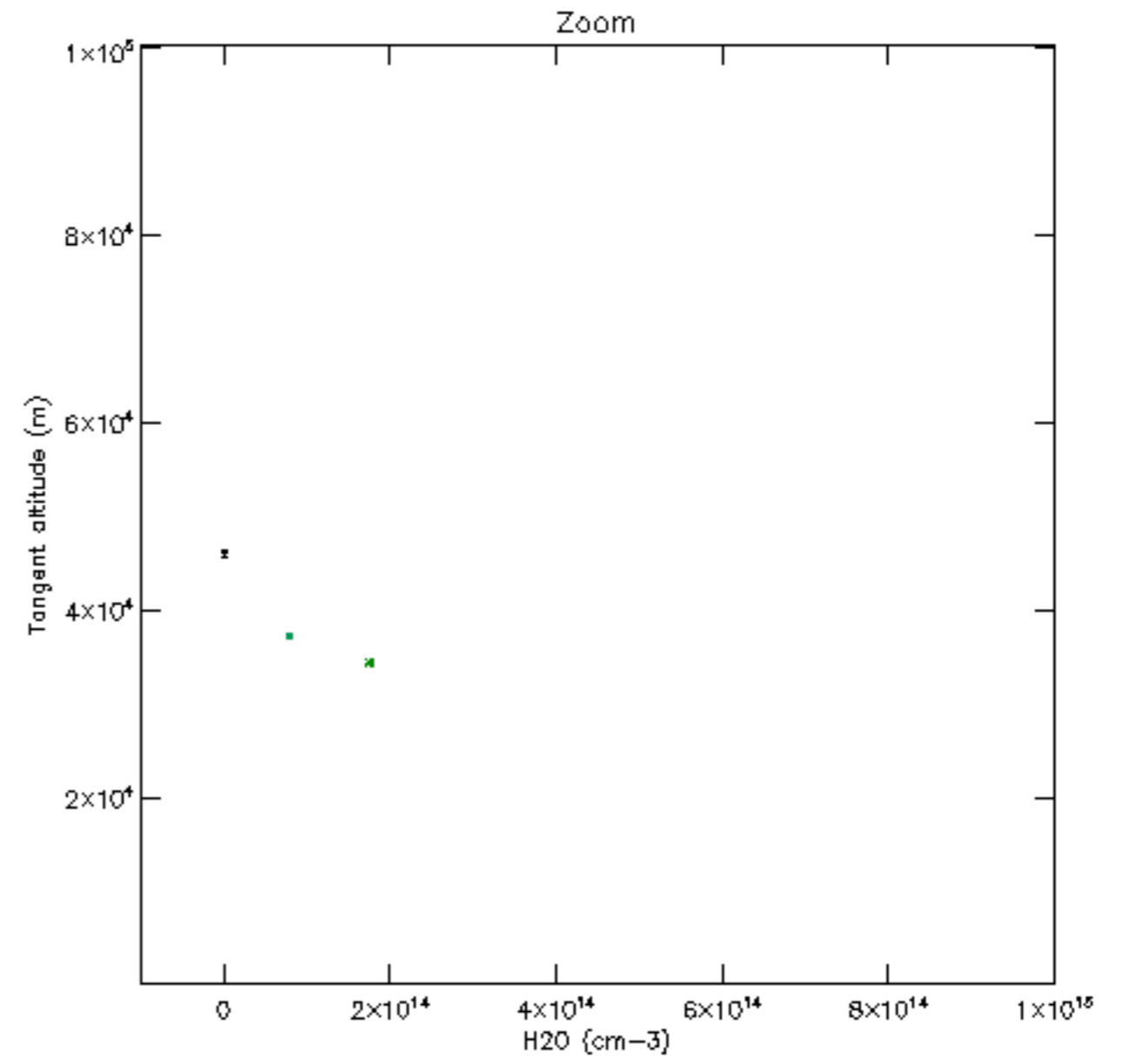
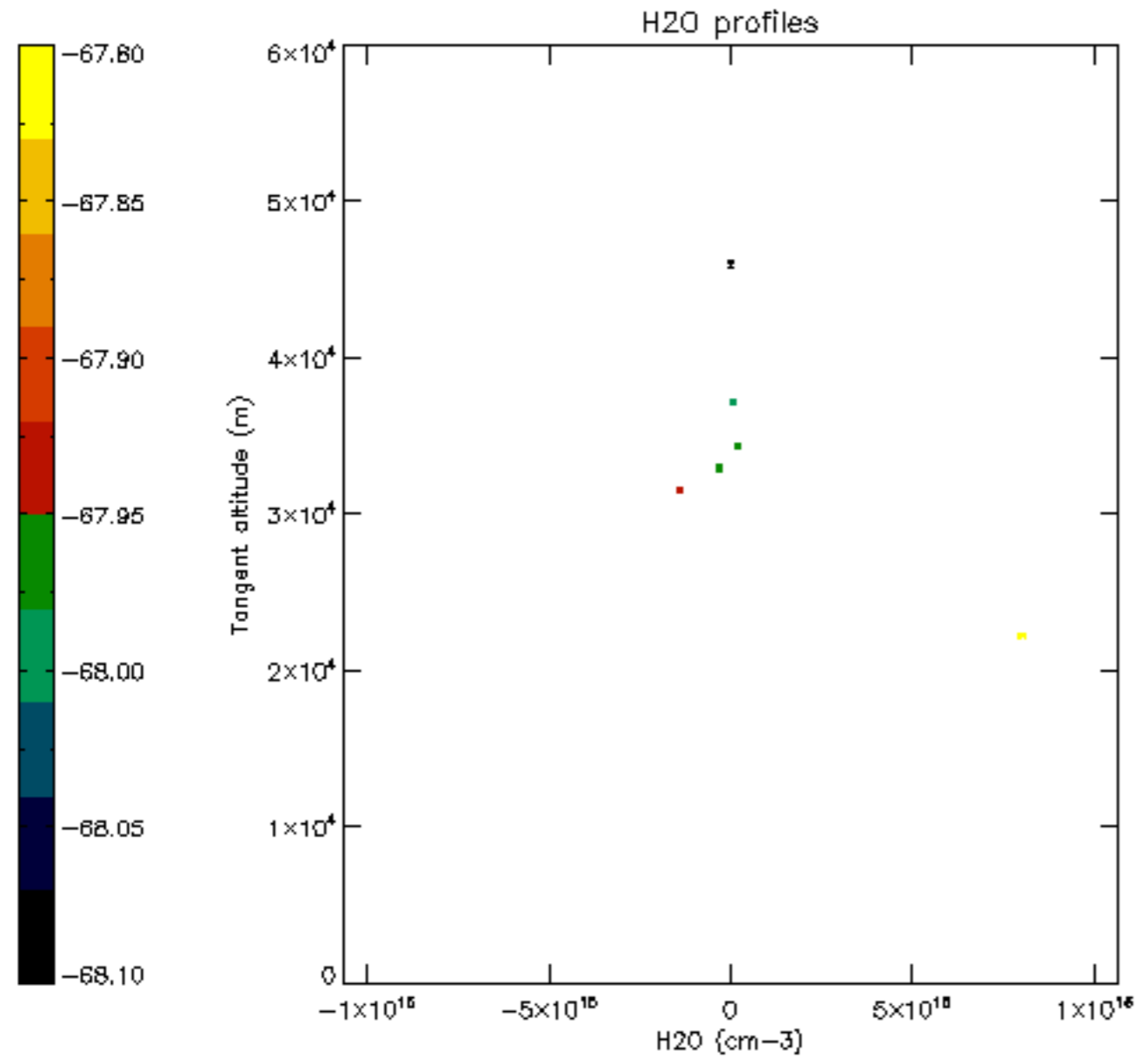


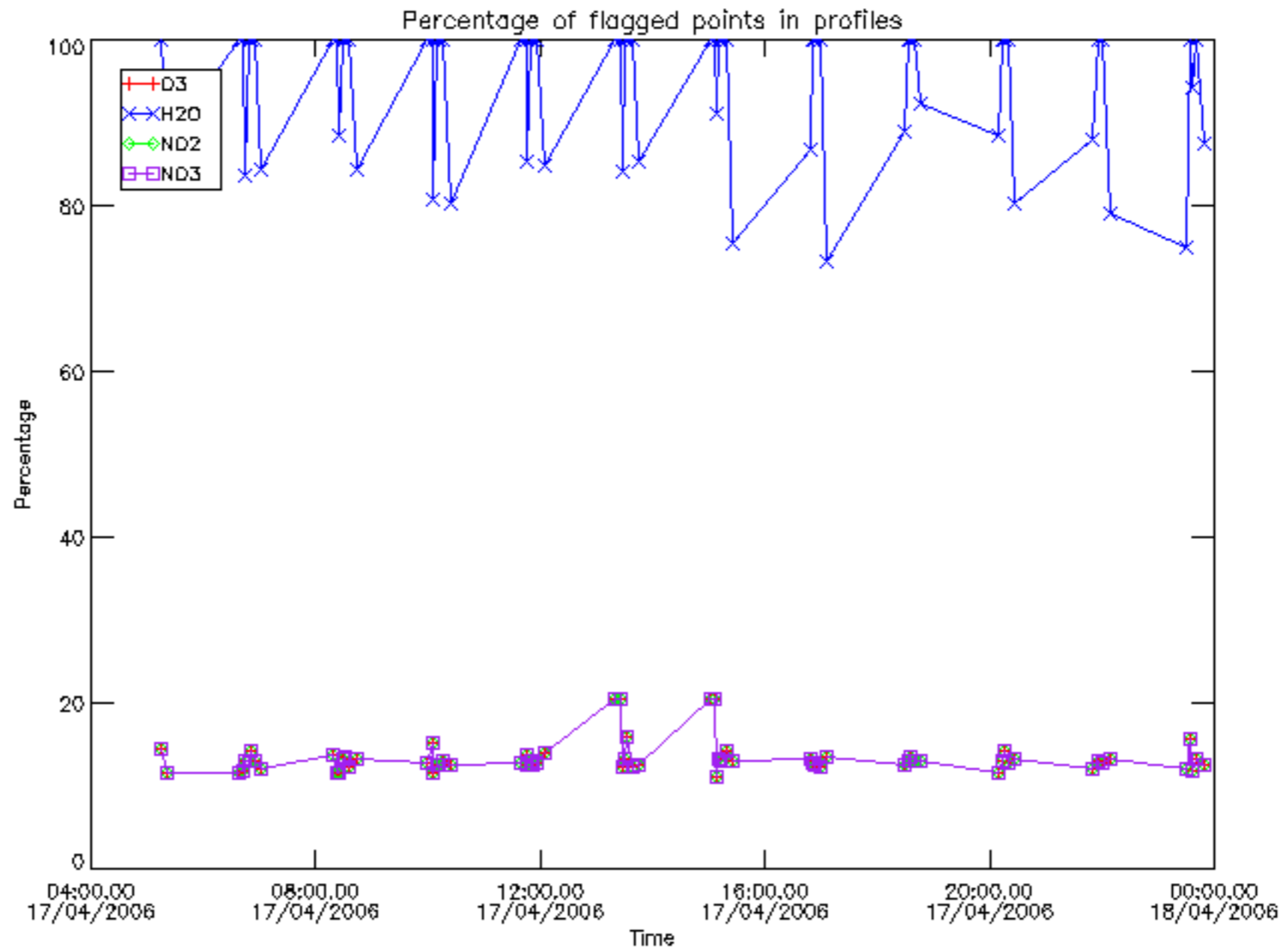




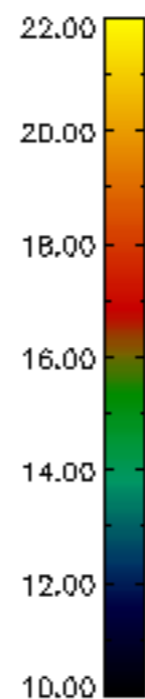
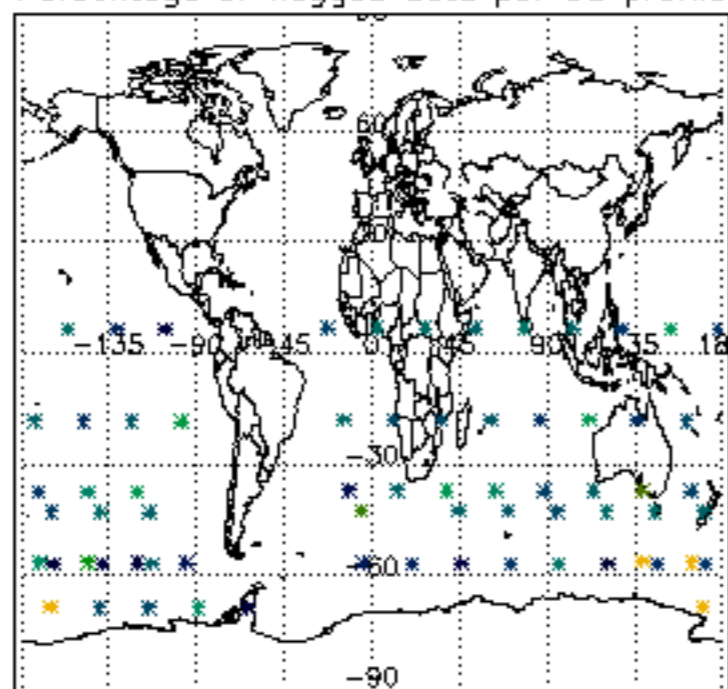




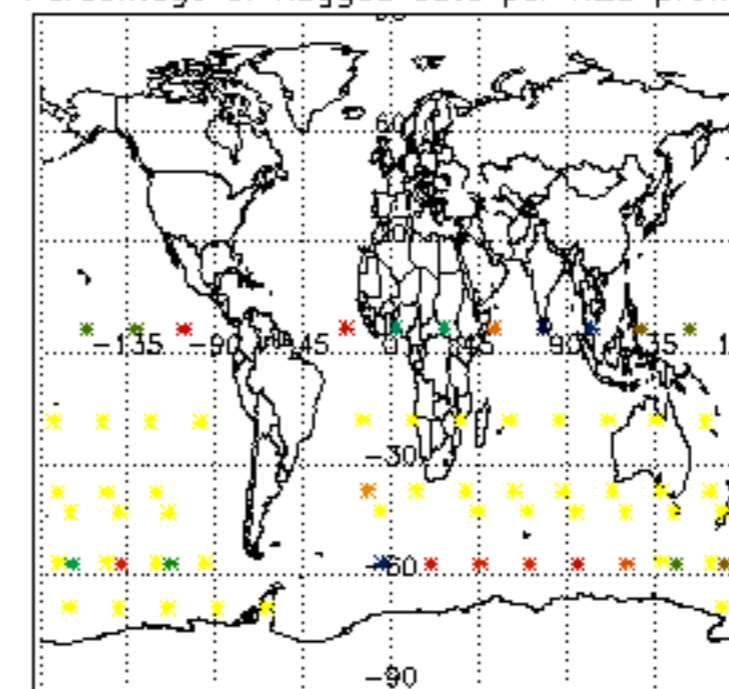




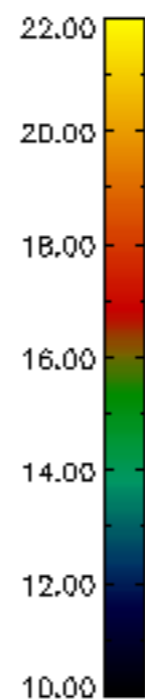
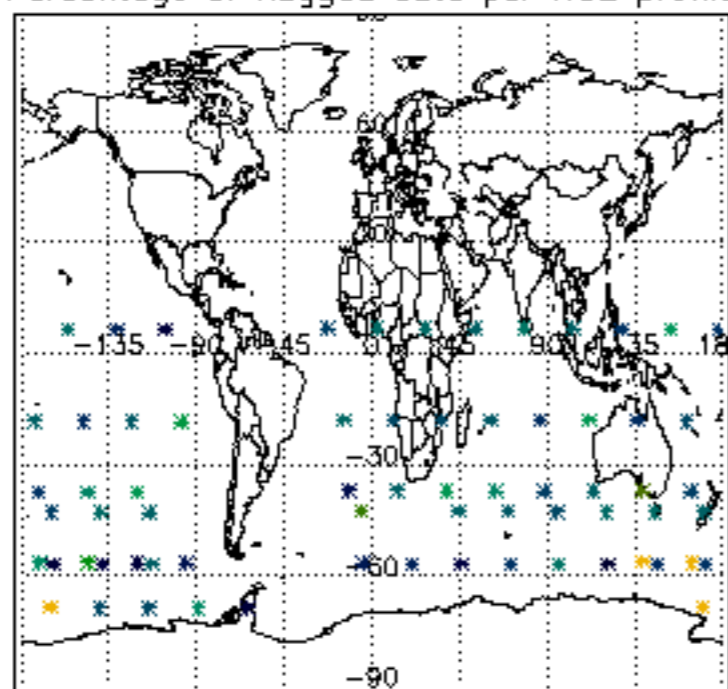
Percentage of flagged data per D3 profile



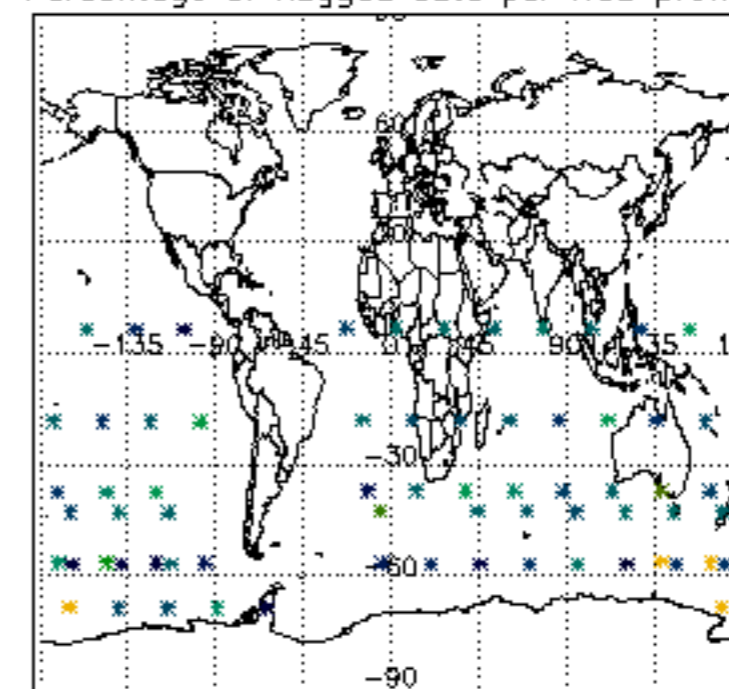
Percentage of flagged data per H2O profile

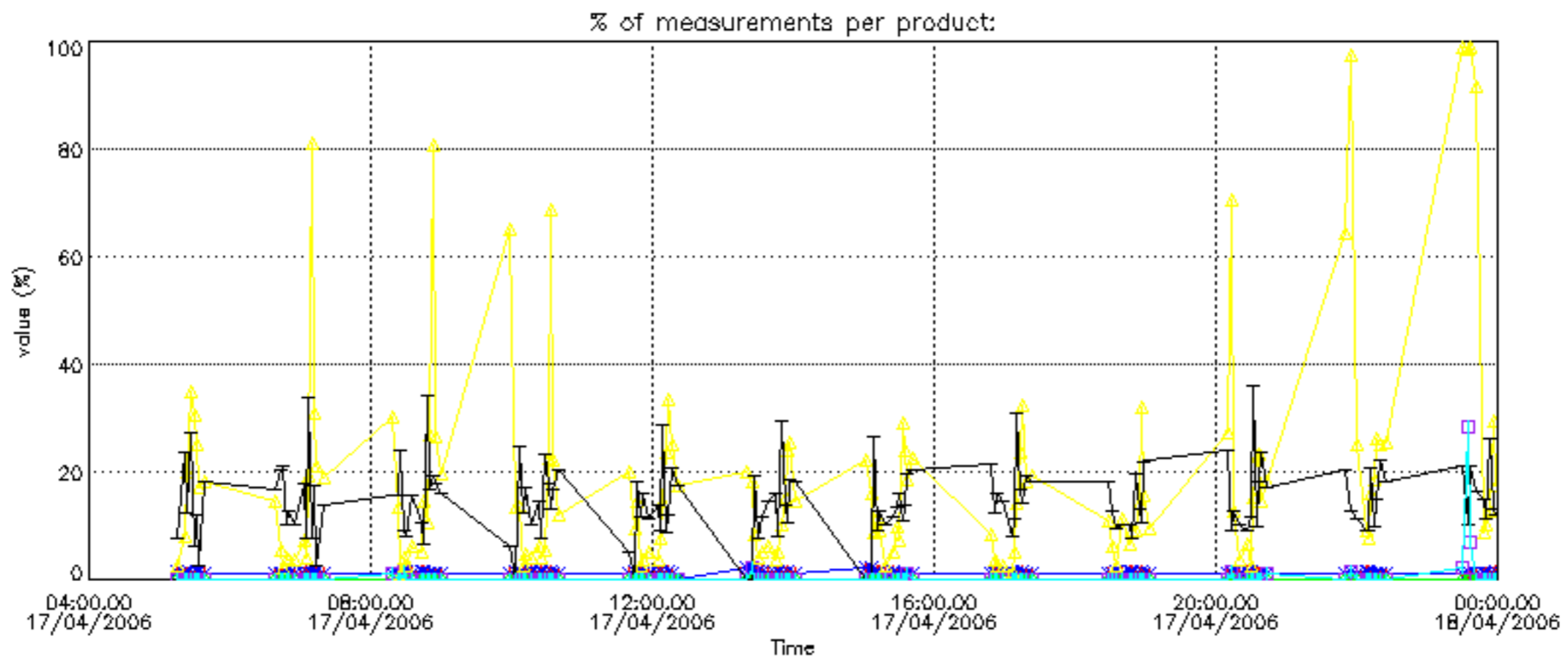


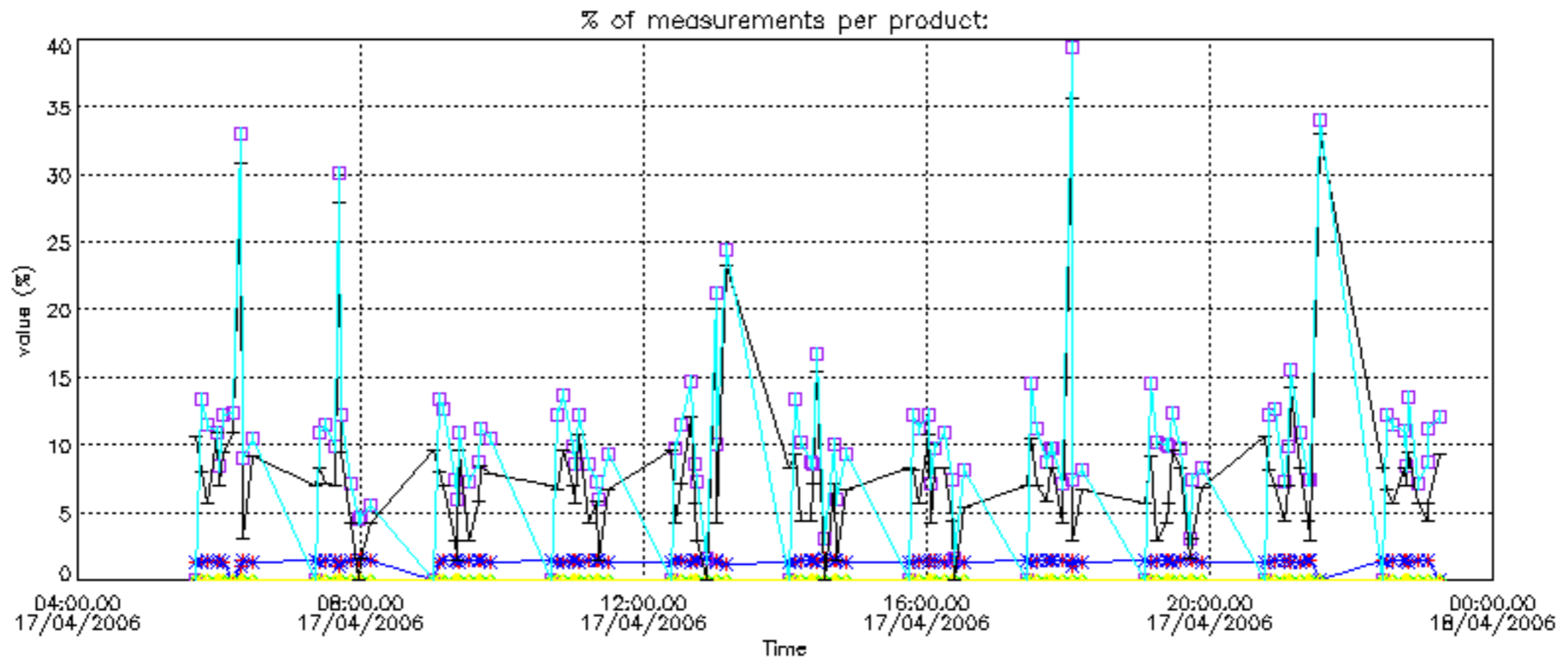
Percentage of flagged data per NO2 profile



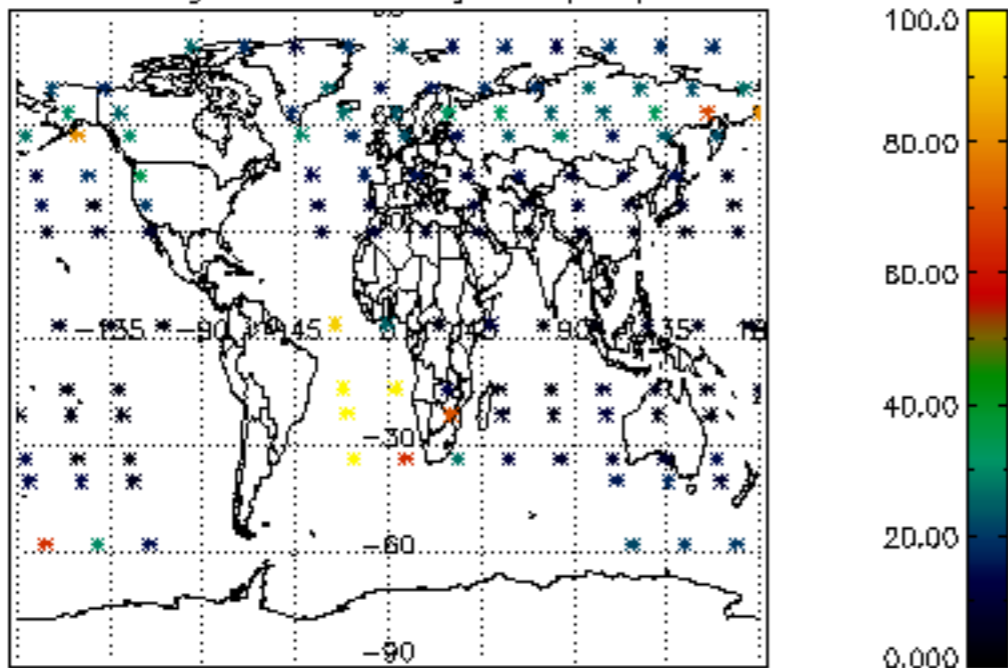
Percentage of flagged data per NO3 profile



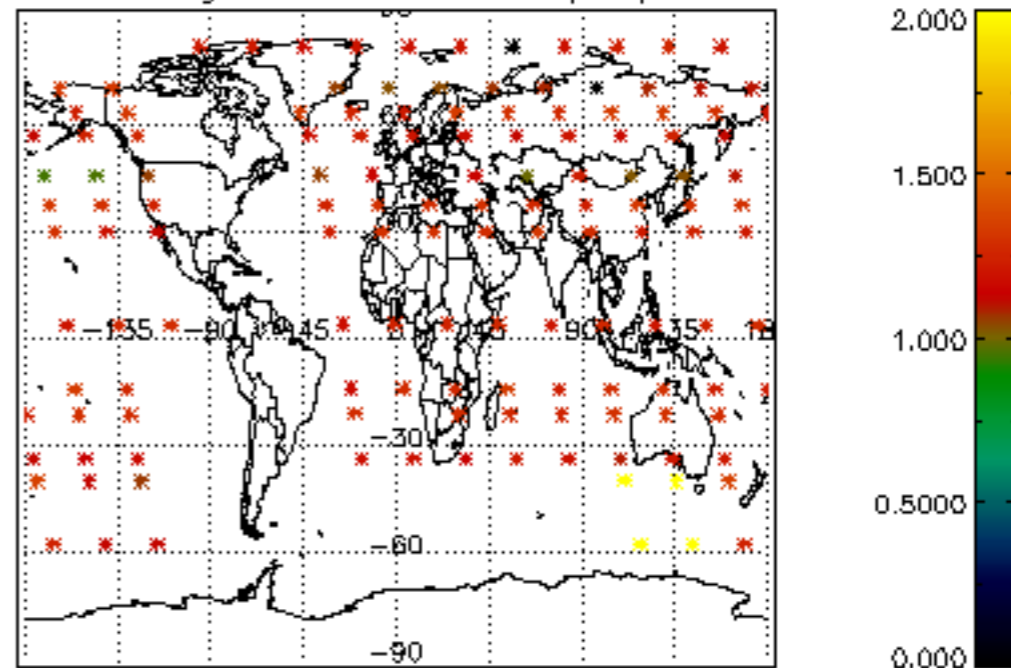




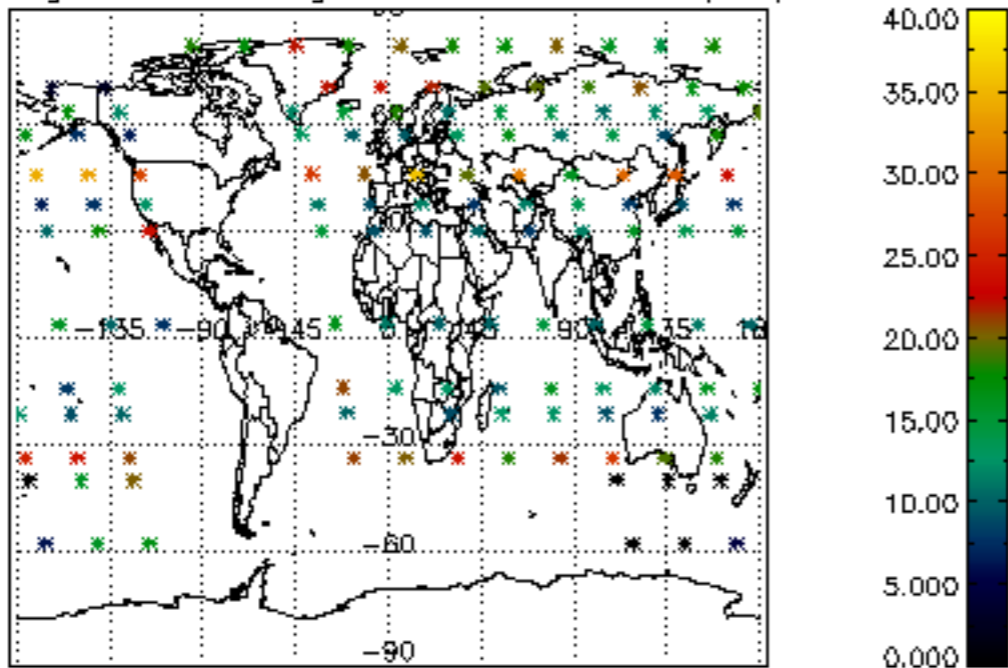
Percentage of cosmic ray hits per profile



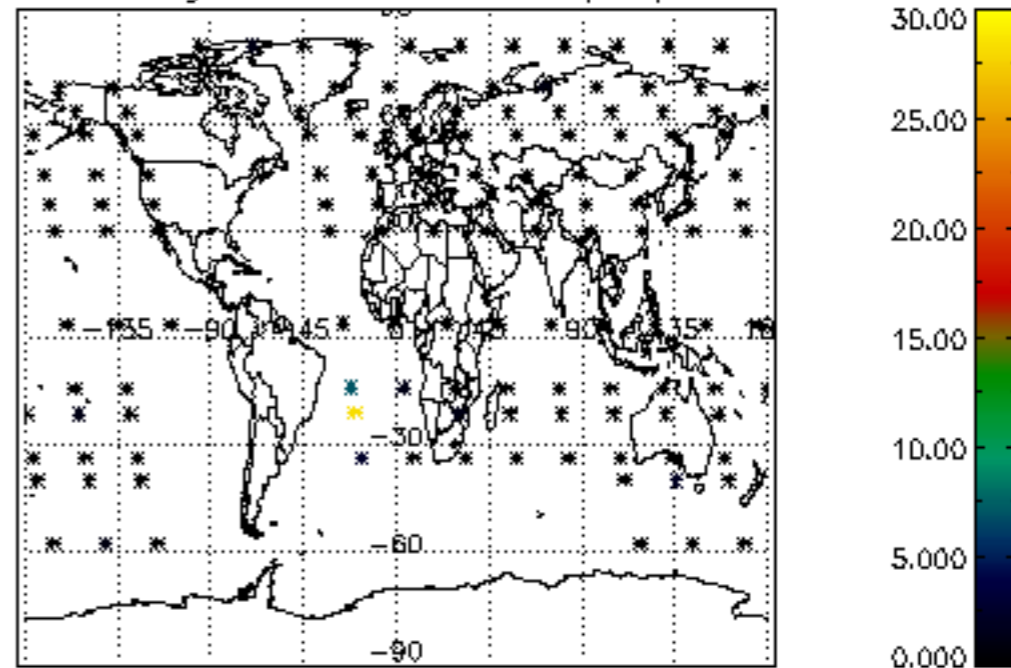
Percentage of datation errors per profile



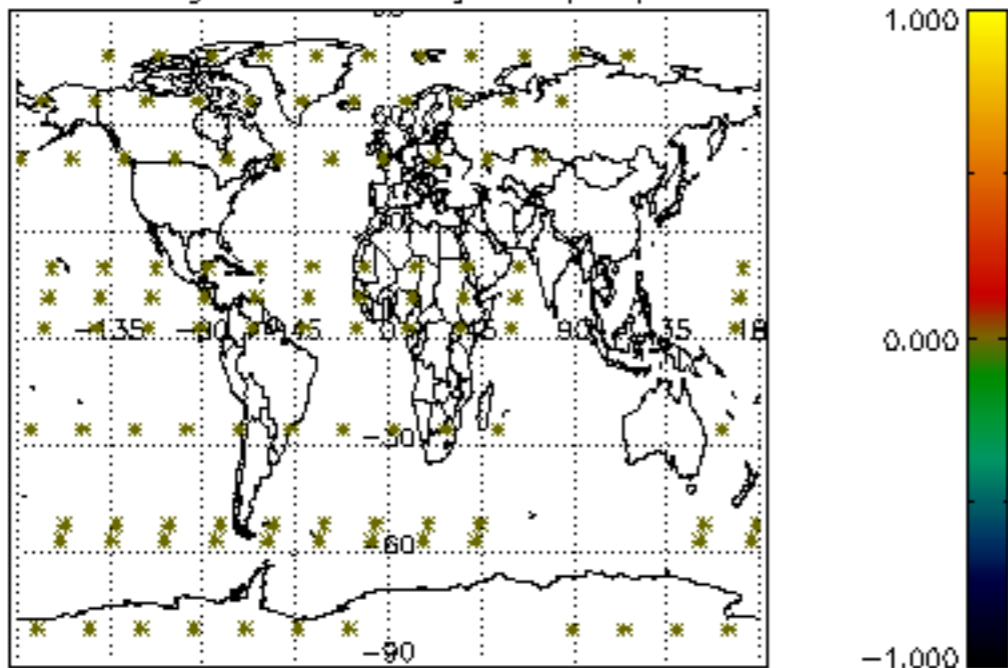
Percentage of star falling outside central band per profile



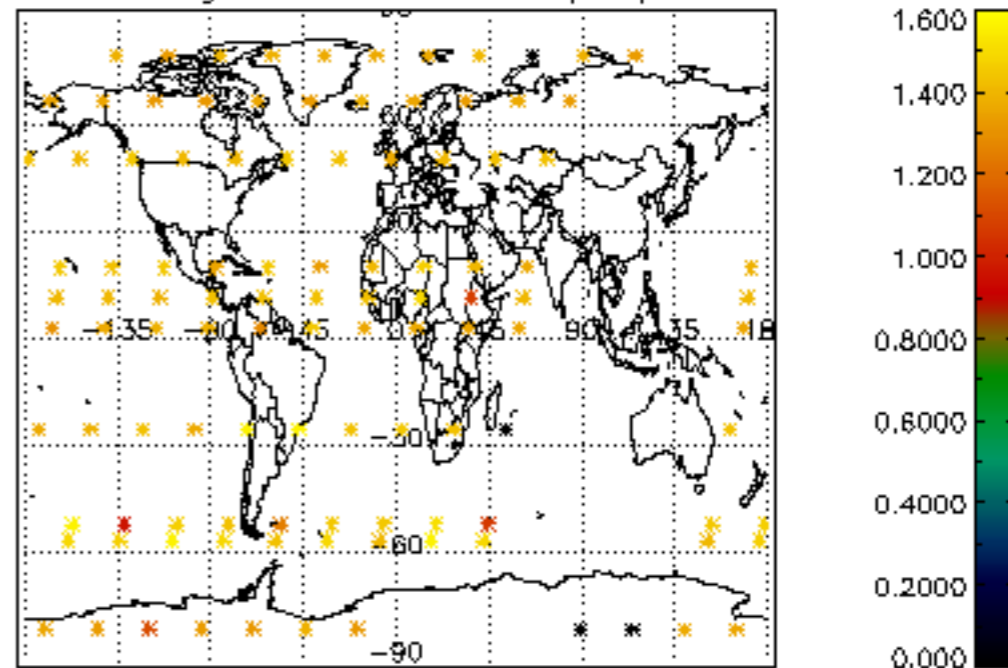
Percentage of saturation errors per profile



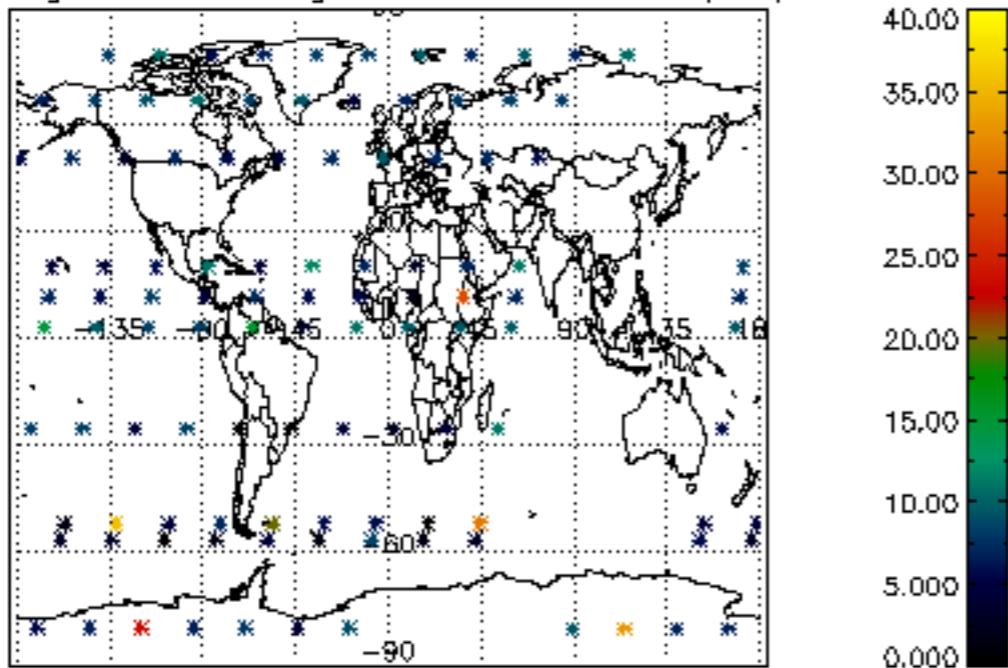
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

