

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	22APR2013 22:32:00
Data source version	GOMOS/6.01
Start time of products	31-07-2007 (31JUL2007 00:00:00)
Stop time of products	01-08-2007 (01AUG2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	281
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

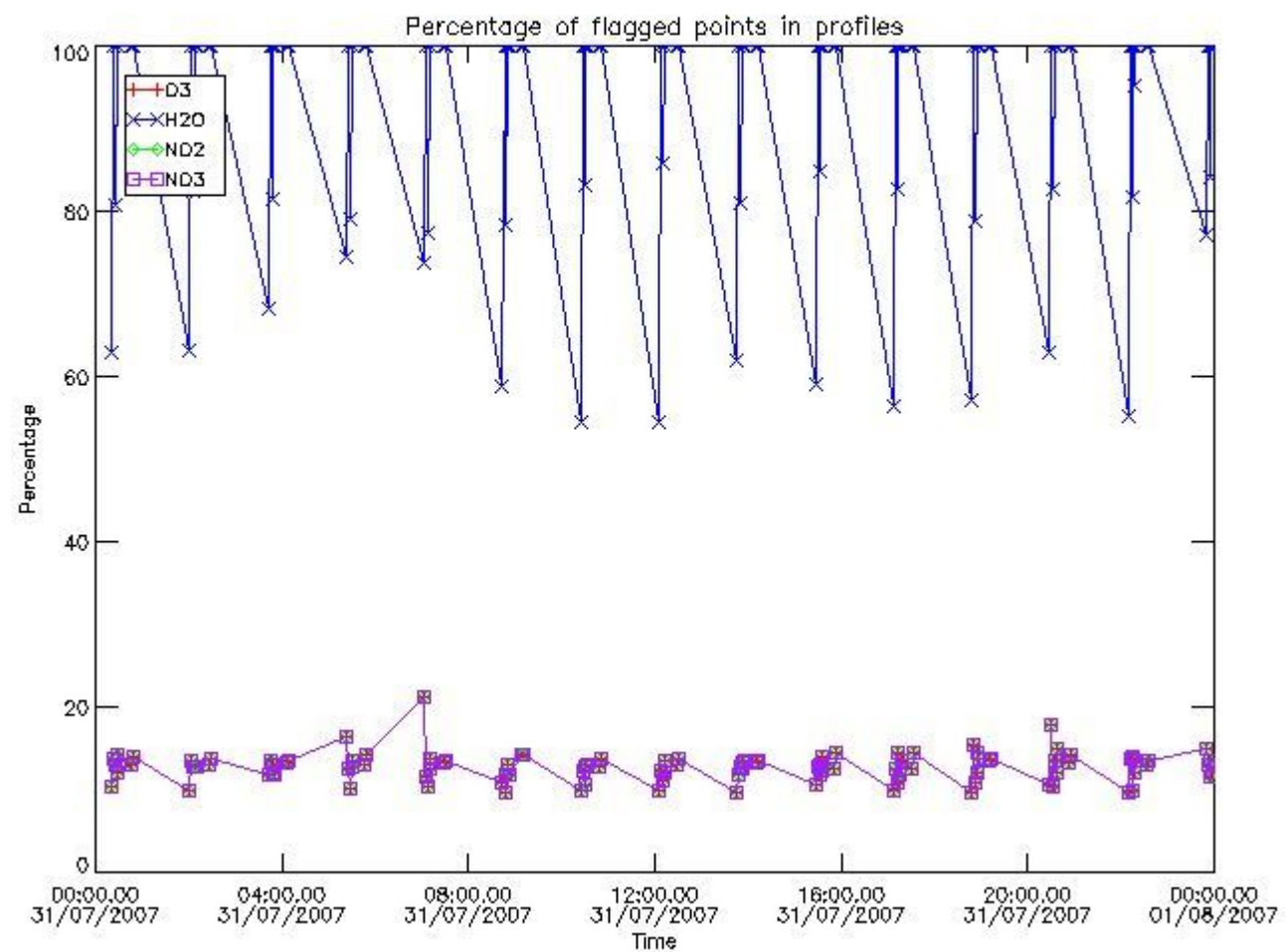
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070731_001009_000000372060_00202_28312_3968.N1	31-JUL-2007 00:10:09	Bright	37.000	42	34Bet Aur	1.9000	10200.	74	28312	No
2	GOM_NL__2PRFIN20070731_001713_000000372060_00202_28312_3969.N1	31-JUL-2007 00:17:13	Twi_and_stray	37.000	176	23Zet Tau	3.0200	22000.	74	28312	No
3	GOM_NL__2PRFIN20070731_002053_000000492060_00202_28312_3970.N1	31-JUL-2007 00:20:53	Dark	49.000	14	58Alp Ori	0.87000	3000.0	98	28312	No
4	GOM_NL__2PRFIN20070731_002336_000000412060_00202_28312_3971.N1	31-JUL-2007 00:23:36	Dark	40.500	30	46Eps Ori	1.6940	30000.	81	28312	No
5	GOM_NL__2PRFIN20070731_002602_000000402060_00202_28312_3972.N1	31-JUL-2007 00:26:02	Dark	39.500	7	19Bet Ori	0.10000	14000.	79	28312	No
6	GOM_NL__2PRFIN20070731_002731_000000362060_00202_28312_3973.N1	31-JUL-2007 00:27:31	Dark	36.000	47	2Bet CMa	1.9760	28000.	72	28312	No
7	GOM_NL__2PRFIN20070731_002908_000000432060_00202_28312_3974.N1	31-JUL-2007 00:29:08	Dark	42.500	139	9Bet Lep	2.8330	5600.0	85	28312	No
8	GOM_NL__2PRFIN20070731_004453_000000402060_00203_28313_3967.N1	31-JUL-2007 00:44:53	Dark	39.500	143	Alp Hyi	2.8570	7200.0	79	28313	No
9	GOM_NL__2PRFIN20070731_004735_000000372060_00203_28313_3968.N1	31-JUL-2007 00:47:35	Dark	36.500	135	Bet Hyi	2.8200	5800.0	73	28313	No
10	GOM_NL__2PRFIN20070731_005224_000000402060_00203_28313_3969.N1	31-JUL-2007 00:52:24	Straylight	39.500	148	Alp Tuc	2.8780	4100.0	79	28313	No
11	GOM_NL__2PRFIN20070731_005540_000000382060_00203_28313_3970.N1	31-JUL-2007 00:55:40	Straylight	38.000	45	Alp Pav	1.9400	26000.	76	28313	No
12	GOM_NL__2PRFIN20070731_010404_000000462060_00203_28313_3971.N1	31-JUL-2007 01:04:04	Bright	45.500	103	38Zet Sgr	2.6000	9700.0	91	28313	No
13	GOM_NL__2PRFIN20070731_010627_000000372060_00203_28313_3972.N1	31-JUL-2007 01:06:27	Bright	37.000	155	41Pi Sgr	2.9000	6600.0	74	28313	No
14	GOM_NL__2PRFIN20070731_011619_000000362060_00203_28313_3973.N1	31-JUL-2007 01:16:19	Bright	36.000	168	17Zet Aql	2.9860	11000.	72	28313	No
15	GOM_NL__2PRFIN20070731_012323_000000352060_00203_28313_3974.N1	31-JUL-2007 01:23:23	Bright	35.000	5	3Alp Lyr	0.033000	11000.	70	28313	No
16	GOM_NL__2PRFIN20070731_012709_000000382060_00203_28313_3975.N1	31-JUL-2007 01:27:09	Bright	37.500	69	33Gam Dra	2.2310	3800.0	75	28313	No
17	GOM_NL__2PRFIN20070731_013105_000000362060_00203_28313_3976.N1	31-JUL-2007 01:31:05	Bright	36.000	119	14Eta Dra	2.7270	4700.0	72	28313	No
18	GOM_NL__2PRFIN20070731_013515_000000352060_00203_28313_3977.N1	31-JUL-2007 01:35:15	Bright	35.000	60	7Bet UMi	2.0810	3950.0	70	28313	No
19	GOM_NL__2PRFIN20070731_013756_000000352060_00203_28313_3978.N1	31-JUL-2007 01:37:56	Bright	34.500	49	1Alp UMi	1.9900	6300.0	69	28313	No
20	GOM_NL__2PRFIN20070731_015045_000000472060_00203_28313_3979.N1	31-JUL-2007 01:50:45	Bright	47.000	42	34Bet Aur	1.9000	10200.	94	28313	No
21	GOM_NL__2PRFIN20070731_015749_000000412060_00203_28313_3980.N1	31-JUL-2007 01:57:49	Twi_and_stray	41.000	176	23Zet Tau	3.0200	22000.	82	28313	No
22	GOM_NL__2PRFIN20070731_020128_000000522060_00203_28313_3981.N1	31-JUL-2007 02:01:28	Dark	52.000	14	58Alp Ori	0.87000	3000.0	104	28313	No
23	GOM_NL__2PRFIN20070731_020412_000000382060_00203_28313_3982.N1	31-JUL-2007 02:04:12	Dark	38.000	30	46Eps Ori	1.6940	30000.	76	28313	No
24	GOM_NL__2PRFIN20070731_020639_000000402060_00203_28313_3983.N1	31-JUL-2007 02:06:39	Dark	40.000	7	19Bet Ori	0.10000	14000.	80	28313	No
25	GOM_NL__2PRFIN20070731_020807_000000402060_00203_28313_3984.N1	31-JUL-2007 02:08:07	Dark	40.000	47	2Bet CMa	1.9760	28000.	80	28313	No
26	GOM_NL__2PRFIN20070731_020944_000000442060_00203_28313_3985.N1	31-JUL-2007 02:09:44	Dark	44.000	139	9Bet Lep	2.8330	5600.0	88	28313	No
27	GOM_NL__2PRFIN20070731_022530_000000402060_00204_28314_3992.N1	31-JUL-2007 02:25:30	Dark	39.500	143	Alp Hyi	2.8570	7200.0	79	28314	No
28	GOM_NL__2PRFIN20070731_022811_000000372060_00204_28314_3993.N1	31-JUL-2007 02:28:11	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	28314	No
29	GOM_NL__2PRFIN20070731_023300_000000412060_00204_28314_3994.N1	31-JUL-2007 02:33:00	Straylight	40.500	148	Alp Tuc	2.8780	4100.0	81	28314	No
30	GOM_NL__2PRFIN20070731_023617_000000382060_00204_28314_3995.N1	31-JUL-2007 02:36:17	Straylight	38.000	45	Alp Pav	1.9400	26000.	76	28314	No
31	GOM_NL__2PRFIN20070731_024440_000000422060_00204_28314_3996.N1	31-JUL-2007 02:44:40	Bright	42.000	103	38Zet Sgr	2.6000	9700.0	84	28314	No
32	GOM_NL__2PRFIN20070731_024704_000000372060_00204_28314_3997.N1	31-JUL-2007 02:47:04	Bright	37.000	155	41Pi Sgr	2.9000	6600.0	74	28314	No
33	GOM_NL__2PRFIN20070731_025655_000000352060_00204_28314_3998.N1	31-JUL-2007 02:56:55	Bright	35.000	168	17Zet Aql	2.9860	11000.	70	28314	No
34	GOM_NL__2PRFIN20070731_030359_000000332060_00204_28314_3999.N1	31-JUL-2007 03:03:59	Bright	33.000	5	3Alp Lyr	0.033000	11000.	66	28314	No
35	GOM_NL__2PRFIN20070731_030745_000000382060_00204_28314_4000.N1	31-JUL-2007 03:07:45	Bright	37.500	69	33Gam Dra	2.2310	3800.0	75	28314	No
36	GOM_NL__2PRFIN20070731_031141_000000342060_00204_28314_4001.N1	31-JUL-2007 03:11:41	Bright	34.000	119	14Eta Dra	2.7270	4700.0	68	28314	No
37	GOM_NL__2PRFIN20070731_031552_000000332060_00204_28314_4002.N1	31-JUL-2007 03:15:52	Bright	32.500	60	7Bet UMi	2.0810	3950.0	65	28314	No
38	GOM_NL__2PRFIN20070731_031832_000000342060_00204_28314_4003.N1	31-JUL-2007 03:18:32	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	28314	No
39	GOM_NL__2PRFIN20070731_033121_000000342060_00204_28314_4004.N1	31-JUL-2007 03:31:21	Bright	33.500	42	34Bet Aur	1.9000	10200.	67	28314	No
40	GOM_NL__2PRFIN20070731_033826_000000412060_00204_28314_4005.N1	31-JUL-2007 03:38:26	Twi_and_stray	40.500	176	23Zet Tau	3.0200	22000.	81	28314	No
41	GOM_NL__2PRFIN20070731_034205_000000432060_00204_28314_4006.N1	31-JUL-2007 03:42:05	Dark	43.000	14	58Alp Ori	0.87000	3000.0	86	28314	No
42	GOM_NL__2PRFIN20070731_034449_000000382060_00204_28314_4007.N1	31-JUL-2007 03:44:49	Dark	37.500	30	46Eps Ori	1.6940	30000.	75	28314	No

279	GOM_NL__2PRFIN20070731_235431_000000452060_00216_28326_4217.N1	31-JUL-2007 23:54:31	Dark	44.500	7	19Bet Ori	0.10000	14000.	89	28326	No
280	GOM_NL__2PRFIN20070731_235556_000000382060_00216_28326_4218.N1	31-JUL-2007 23:55:56	Dark	38.000	47	2Bet CMa	1.9760	28000.	76	28326	No
281	GOM_NL__2PRFIN20070731_235736_000000422060_00216_28326_4219.N1	31-JUL-2007 23:57:36	Dark	42.000	139	9Bet Lep	2.8330	5600.0	84	28326	No

3. Quality information per product

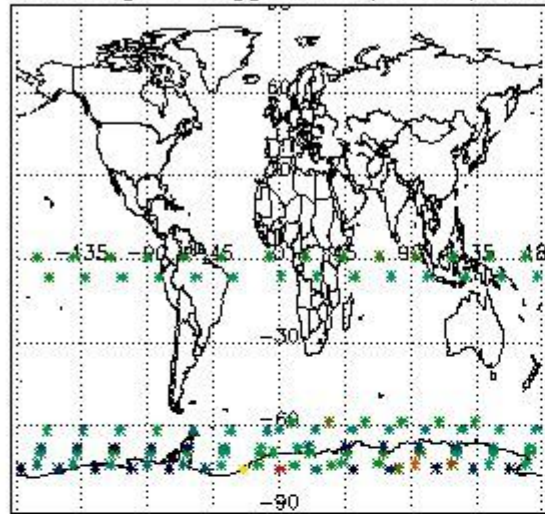
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

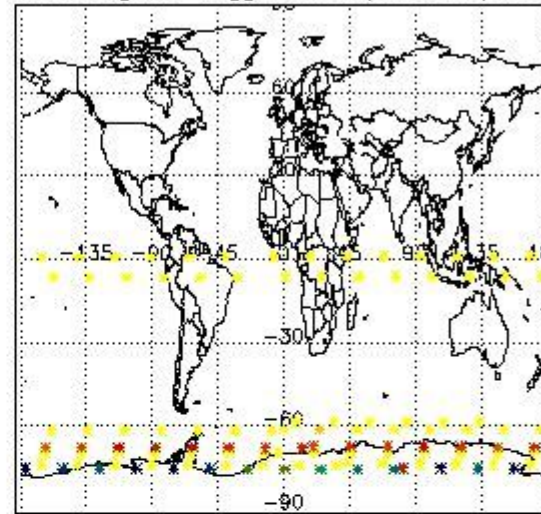


3.2 Plot quality information per product (world map)

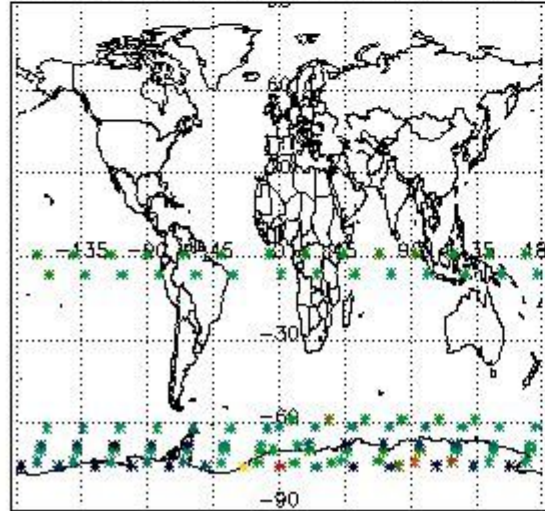
Percentage of flagged data per O3 profile



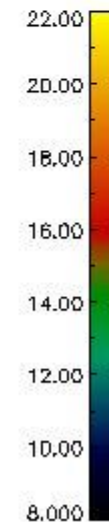
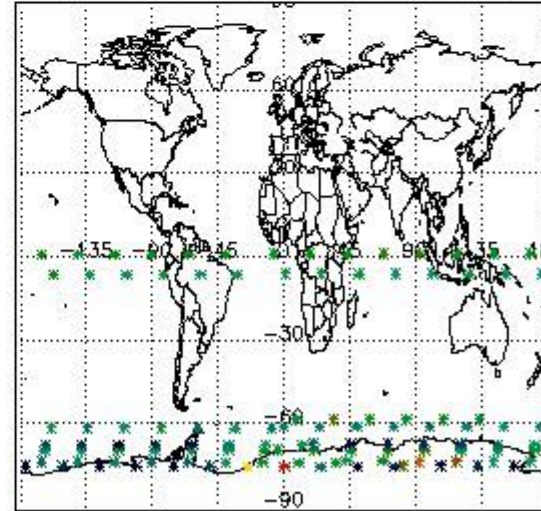
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

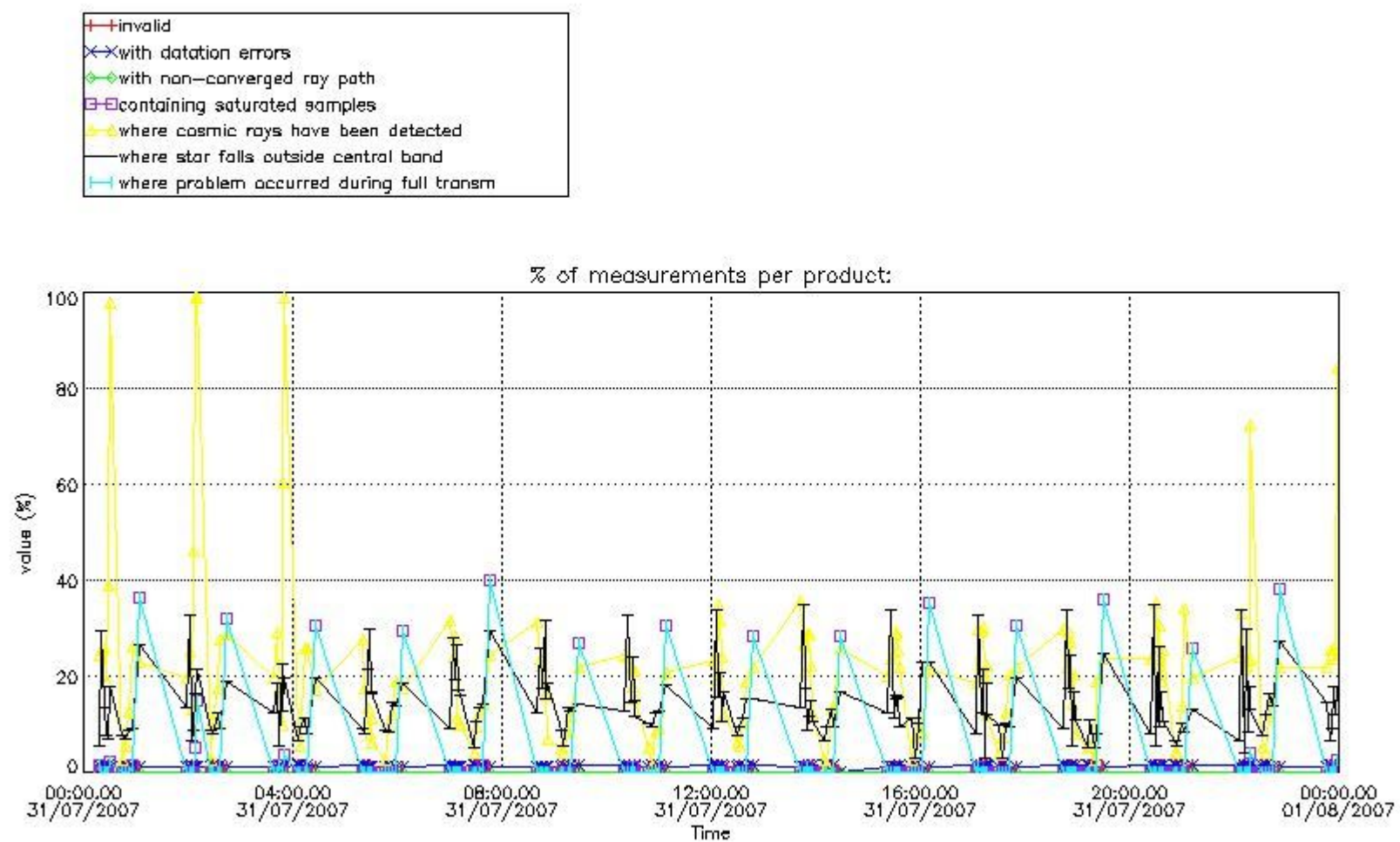


4. Level 1 quality information per product

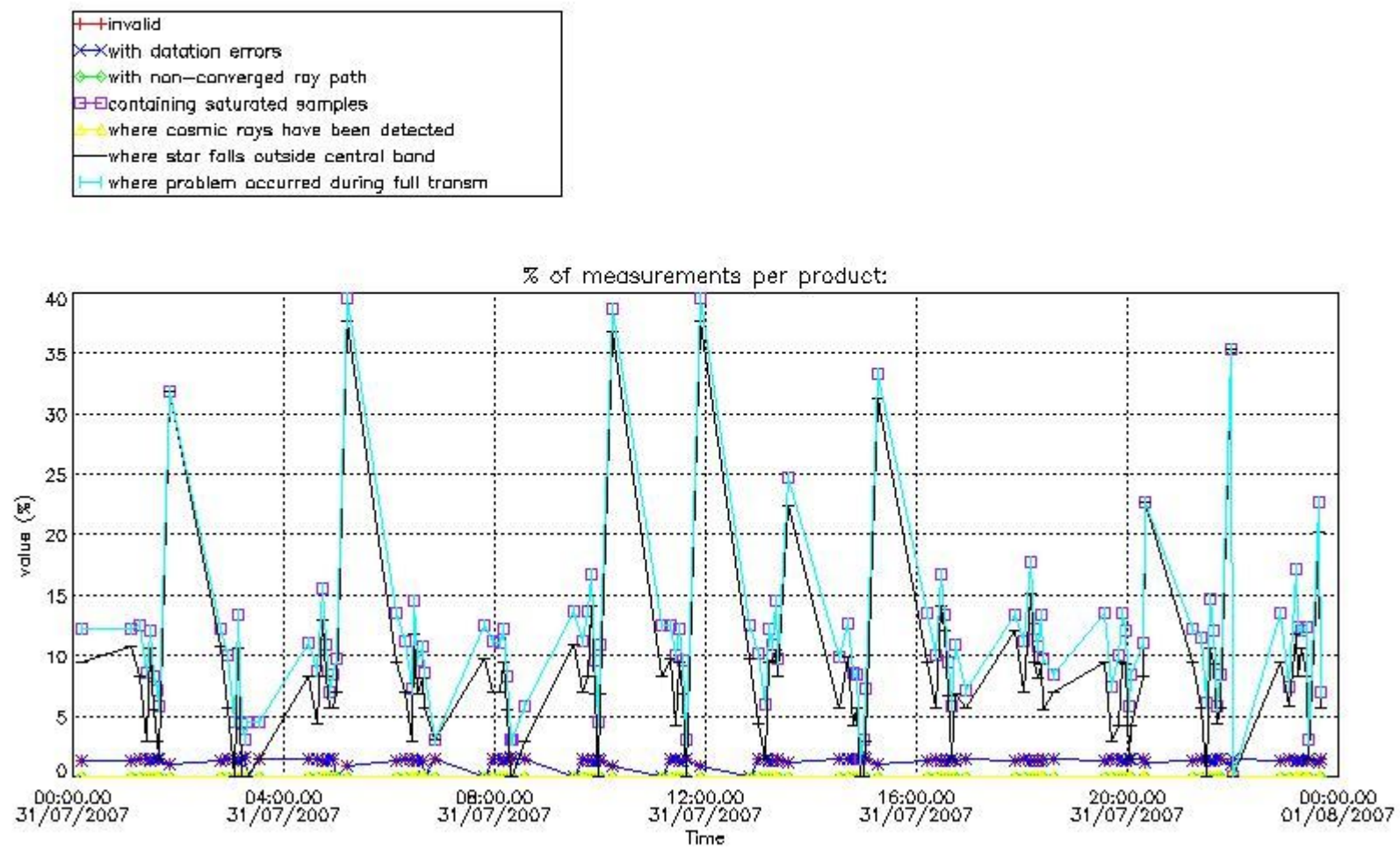
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

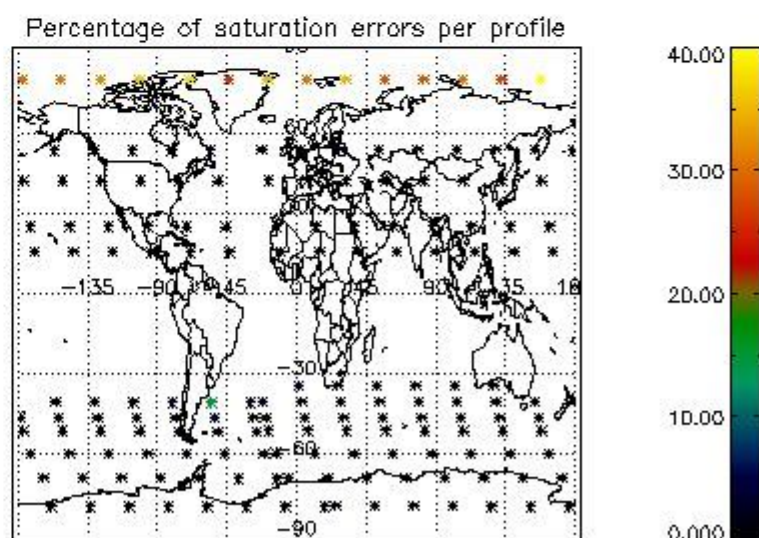
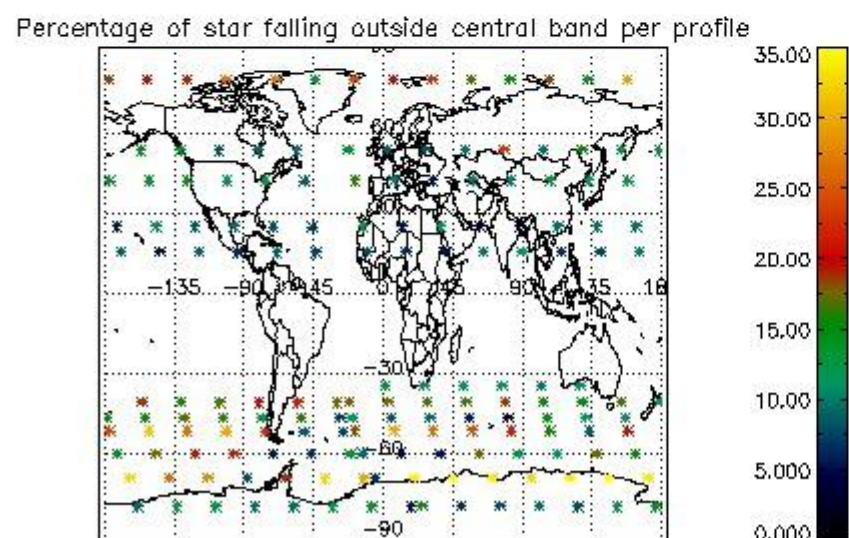
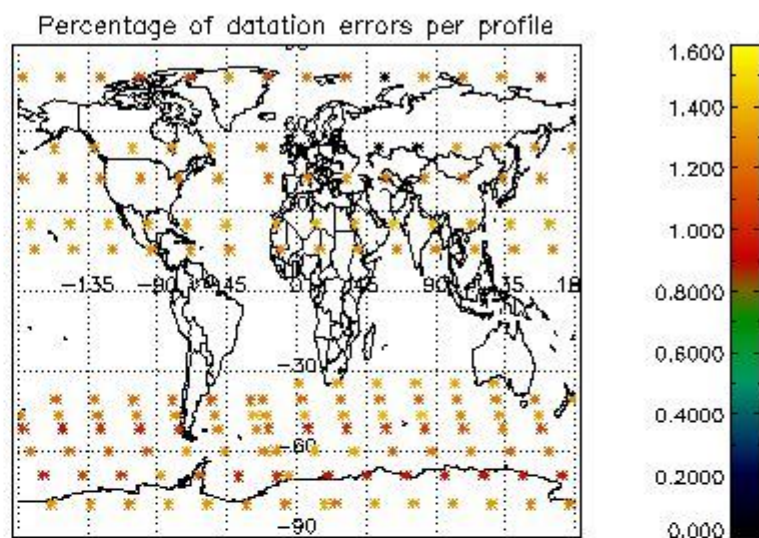
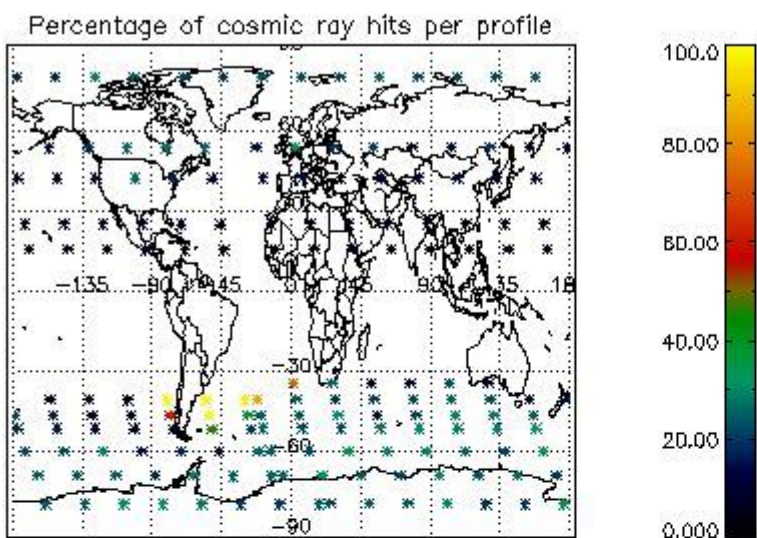


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

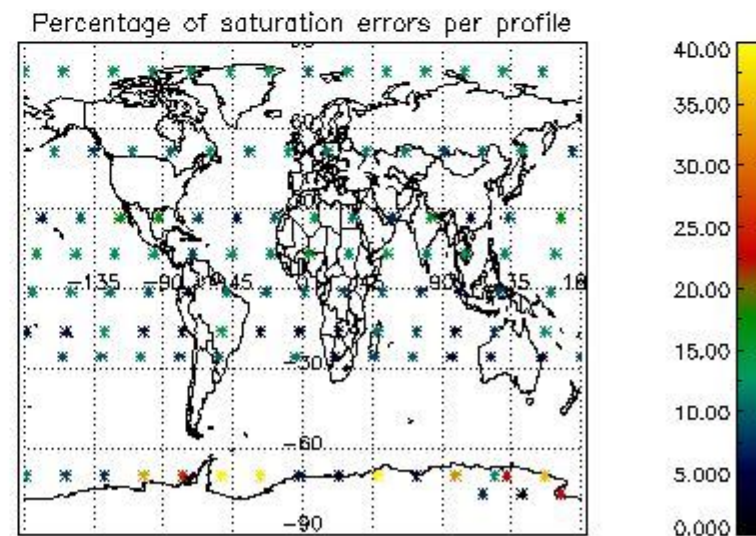
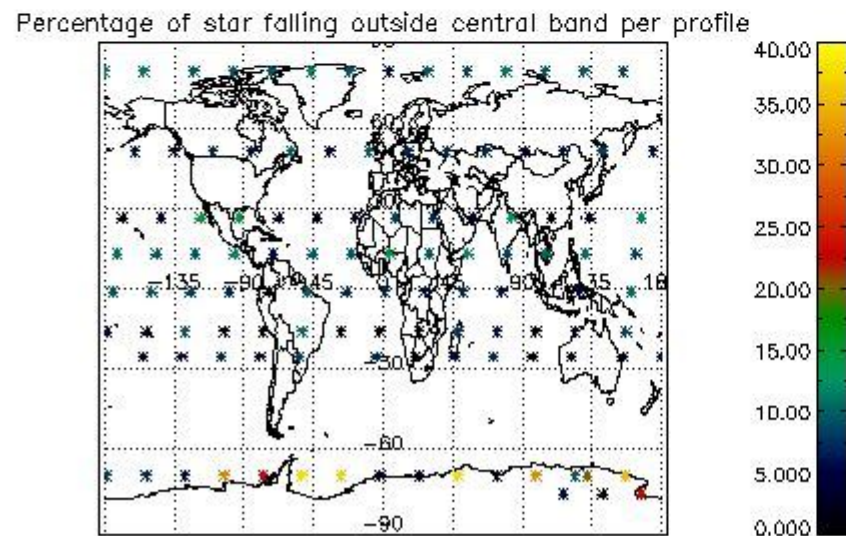
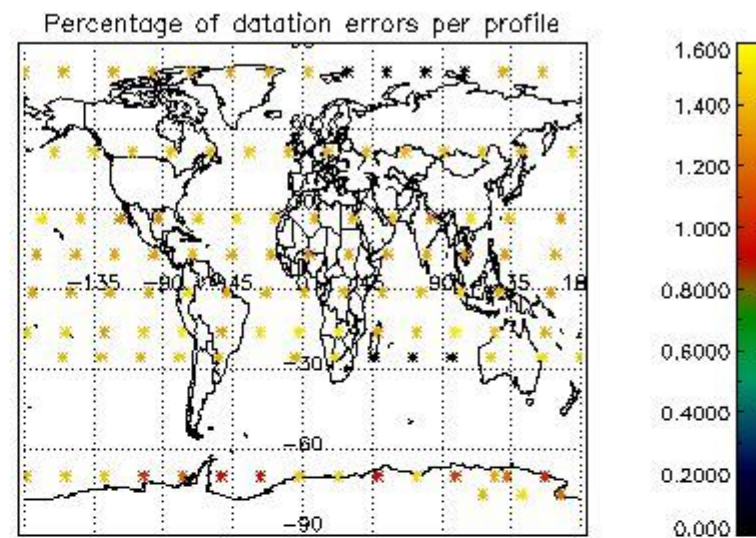
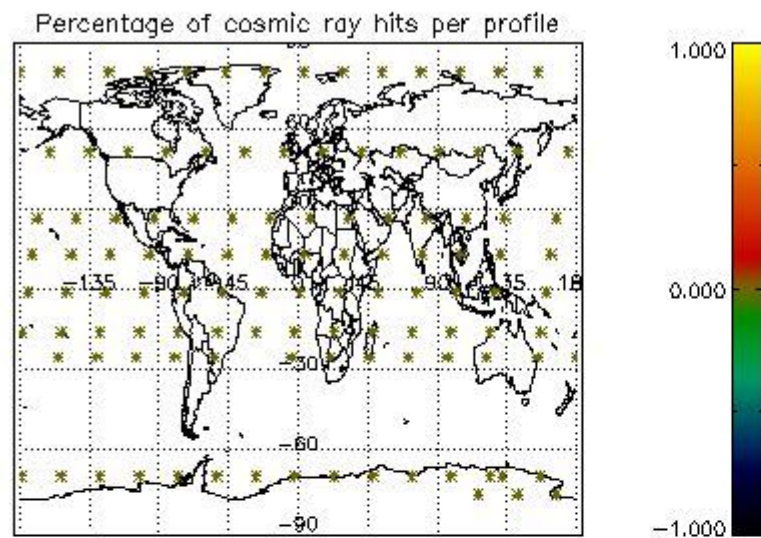


4.2 Plot quality information per product coming from level 1b processing (world map)

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

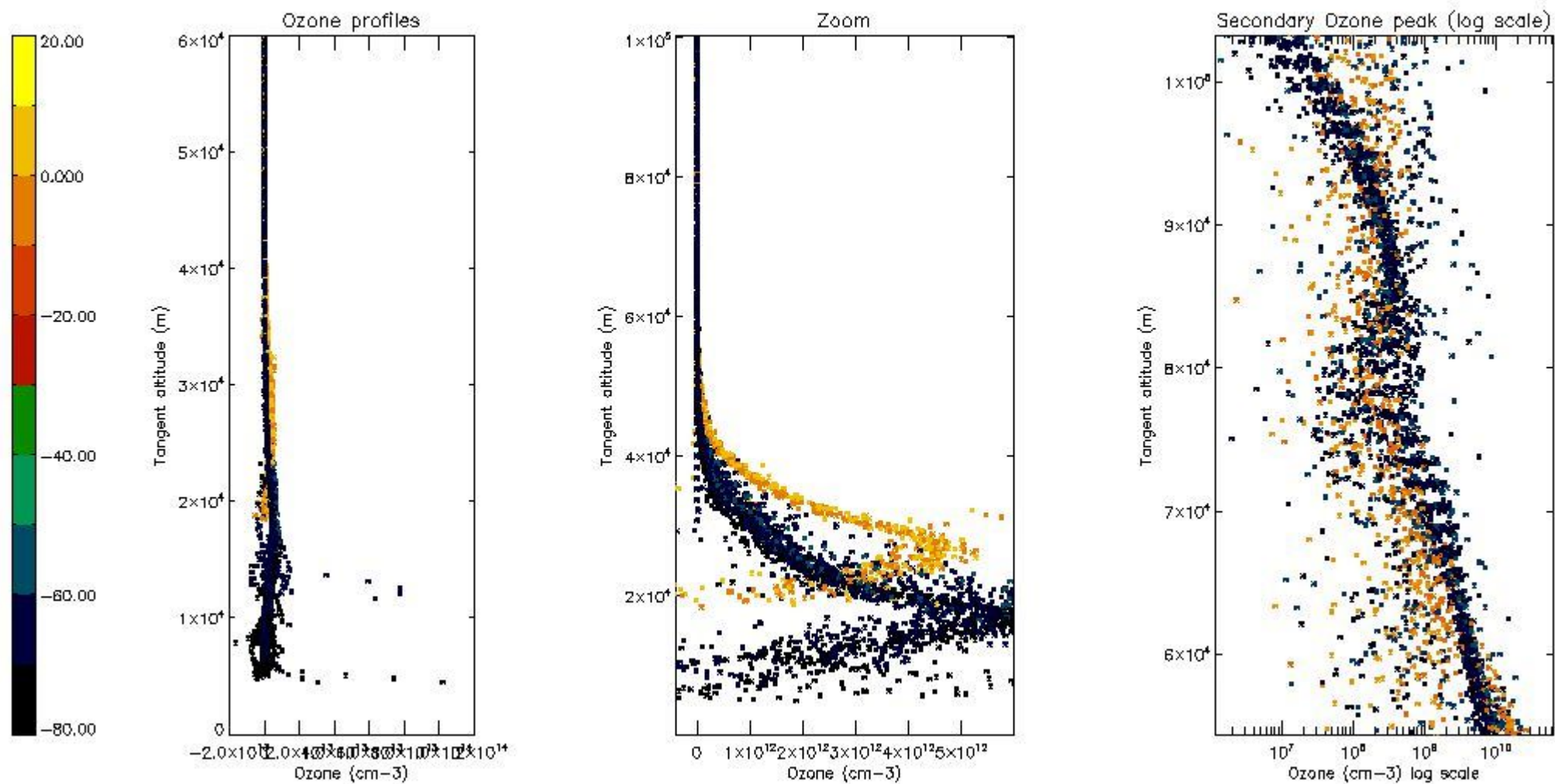
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	42
STD < 20	21

STD < 10	16
STD < 5	11

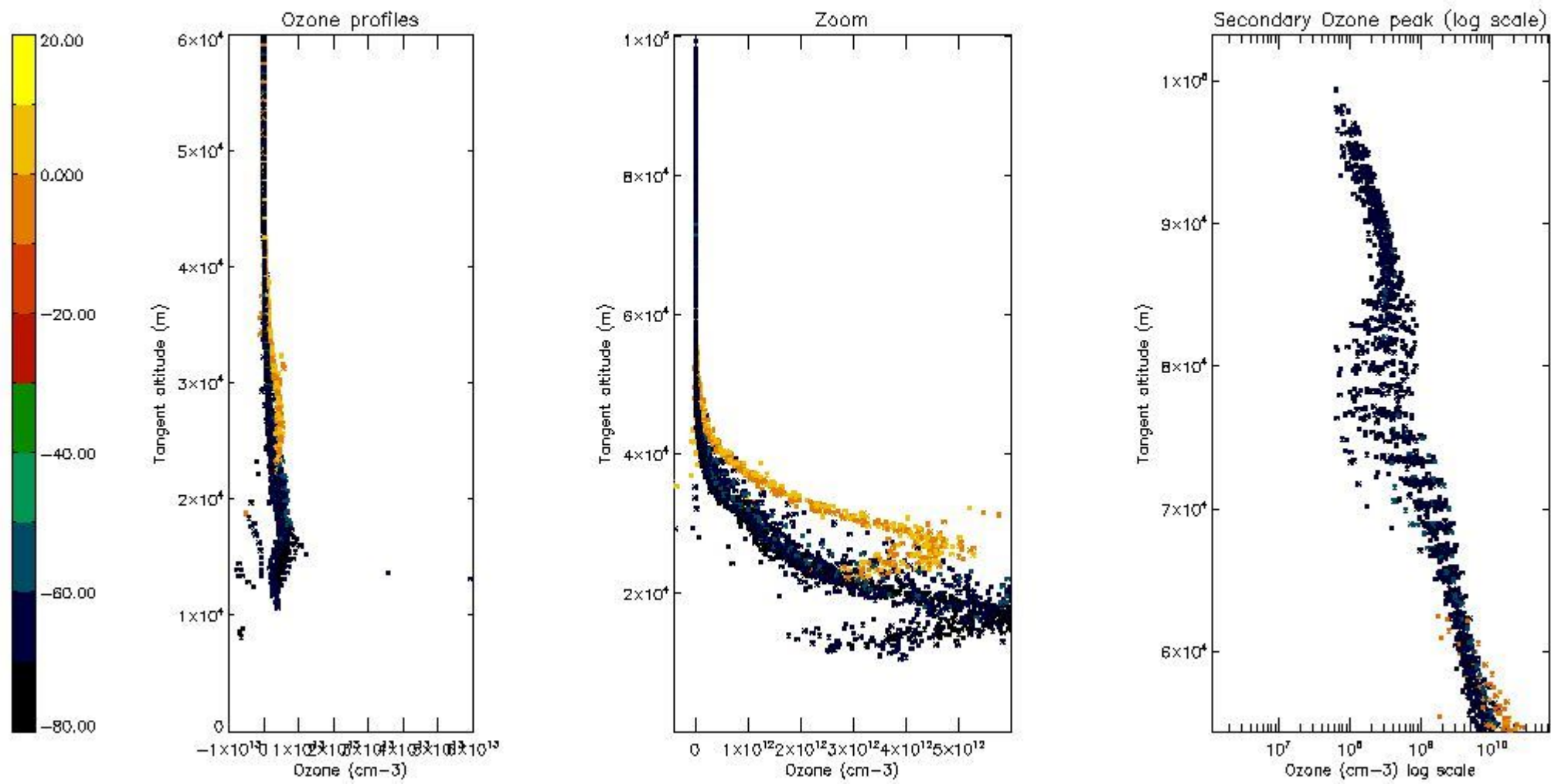
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



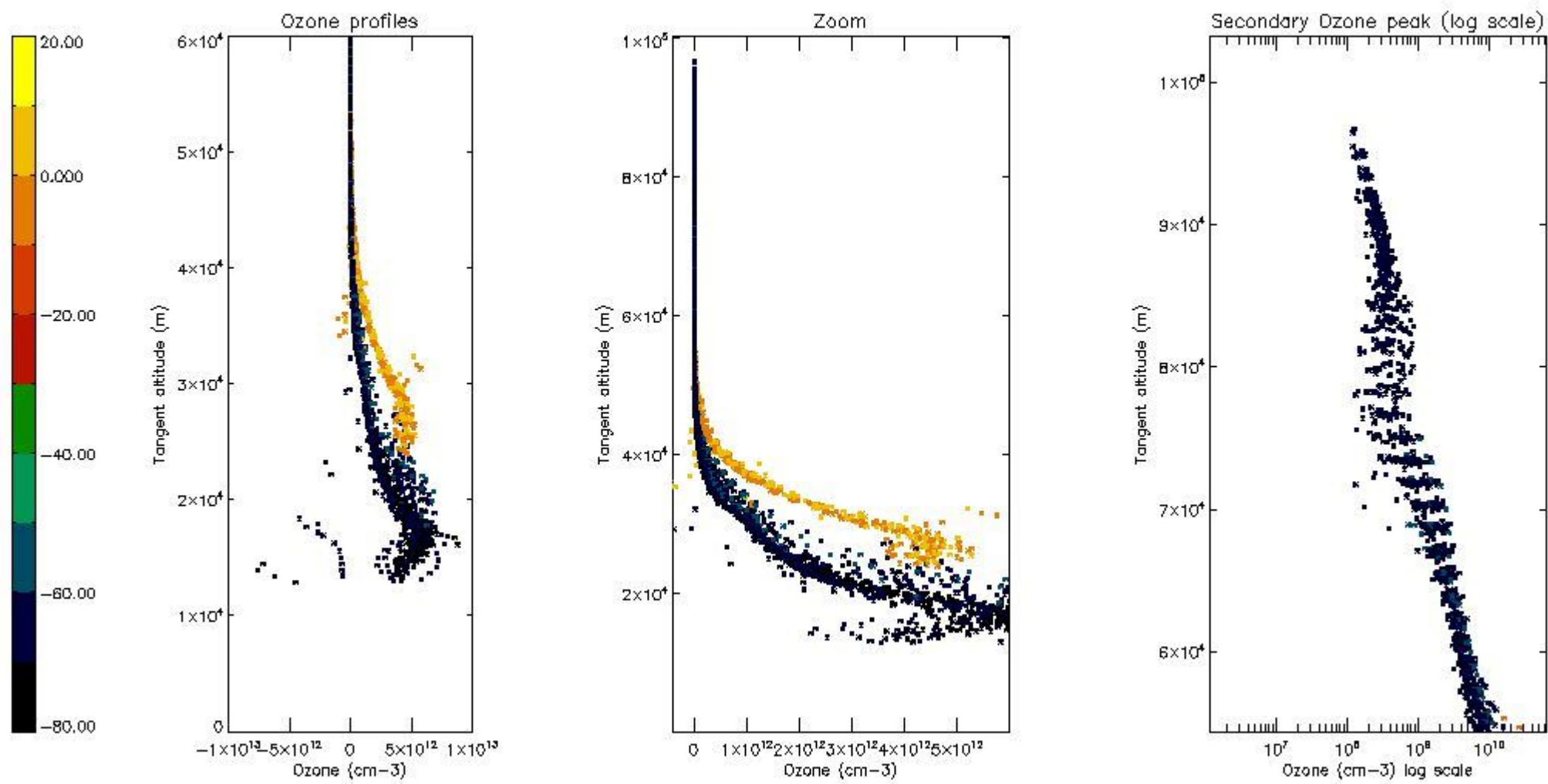
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



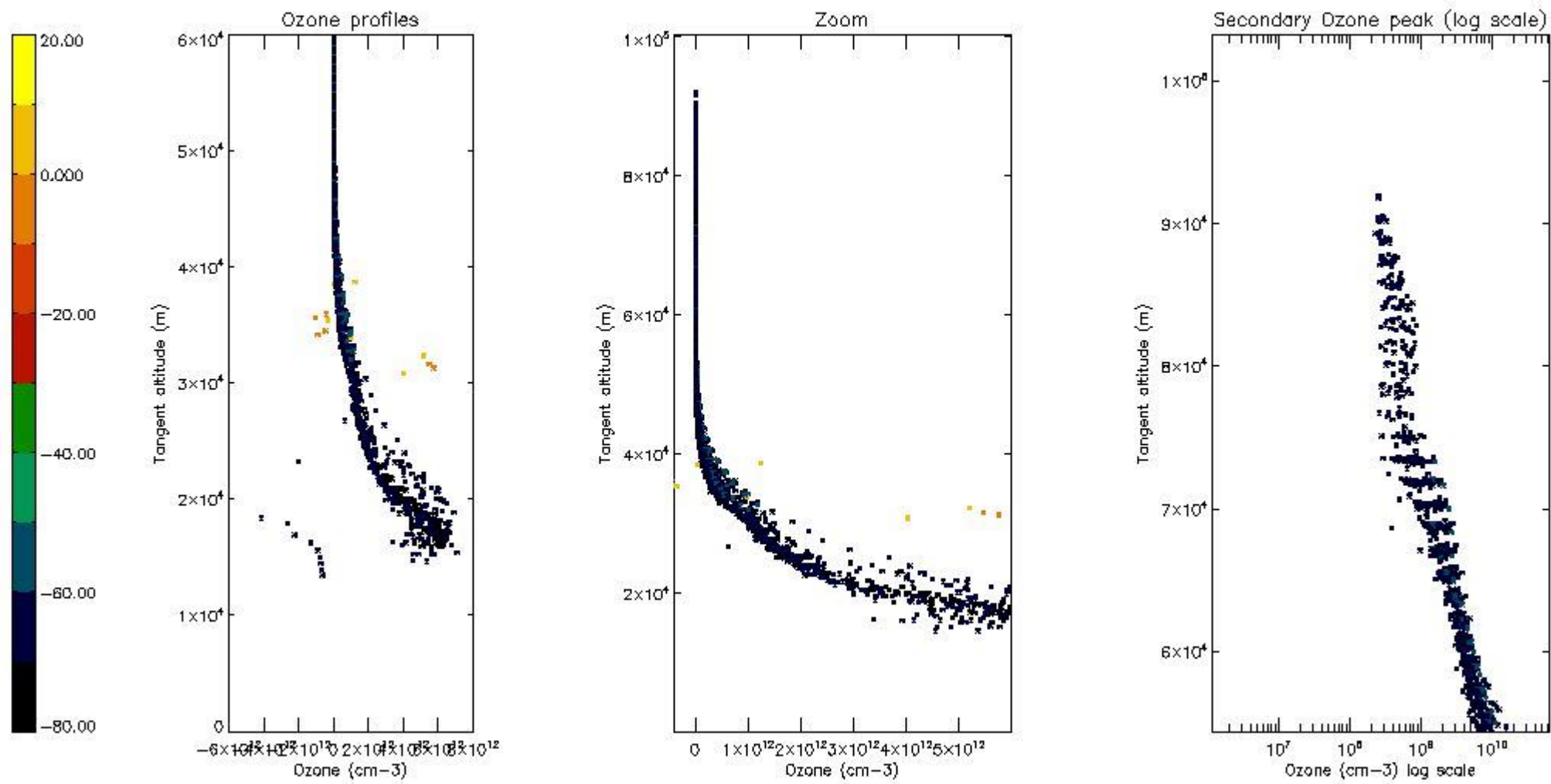
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



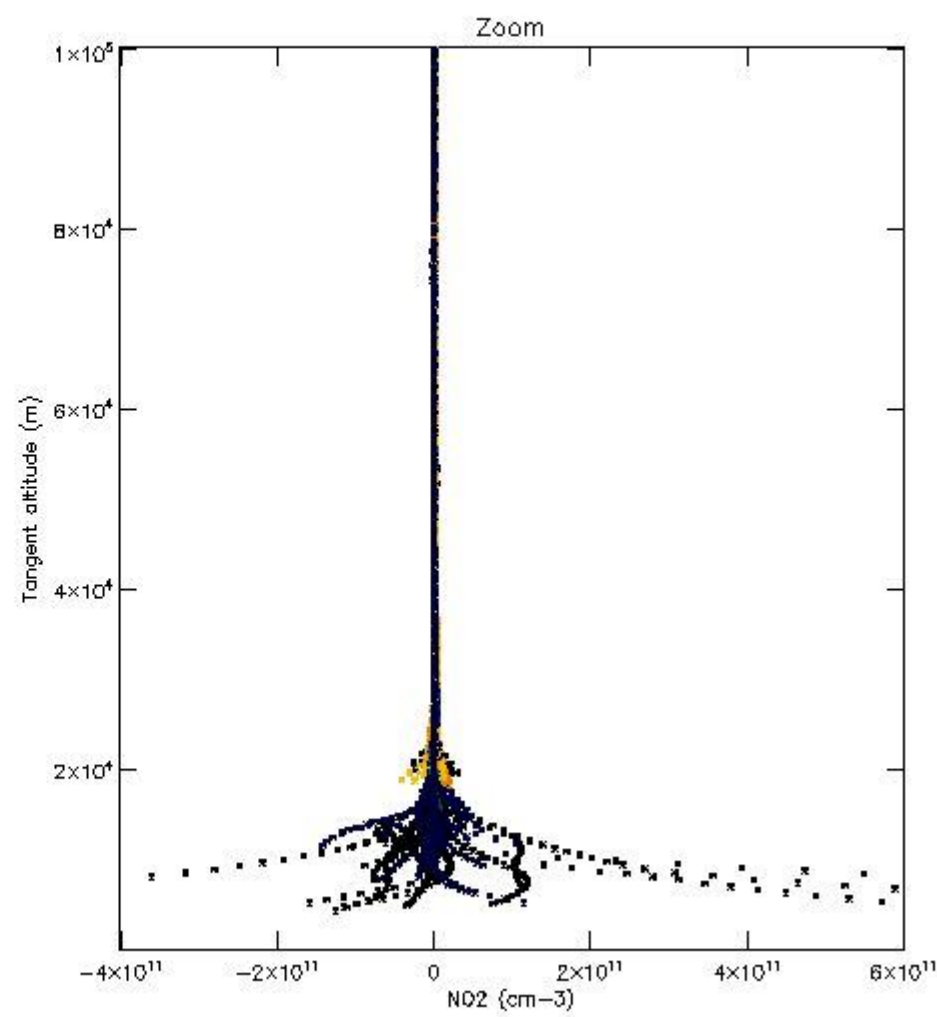
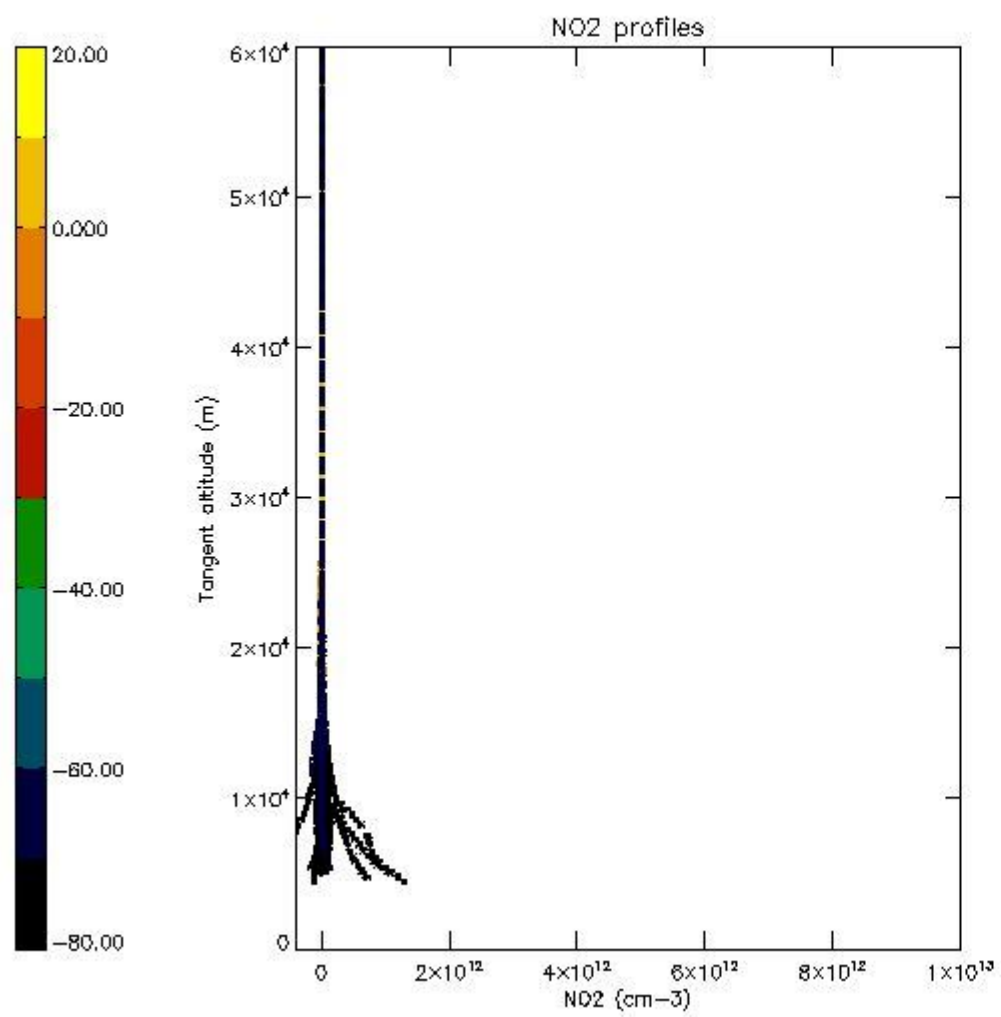
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



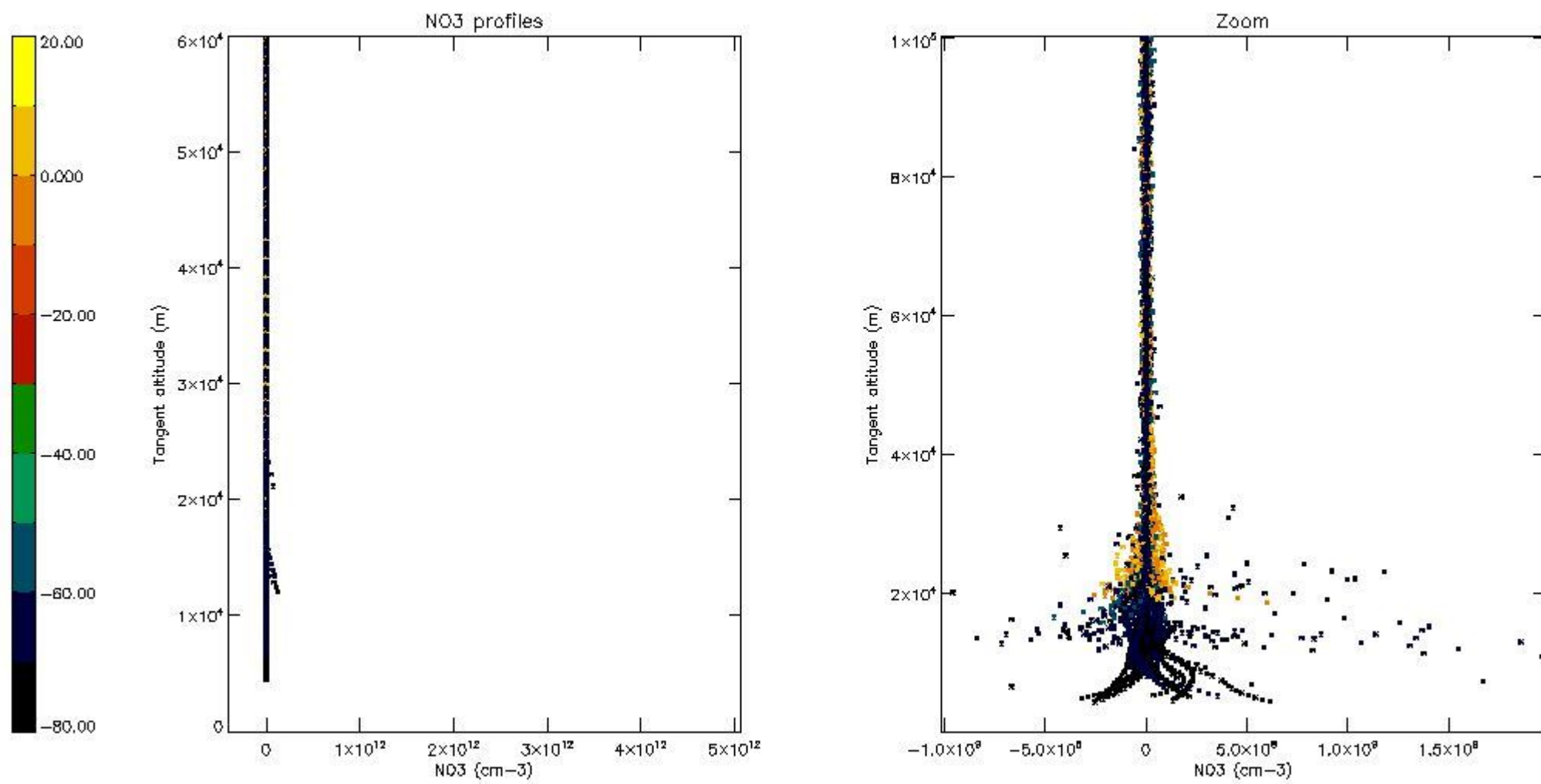
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



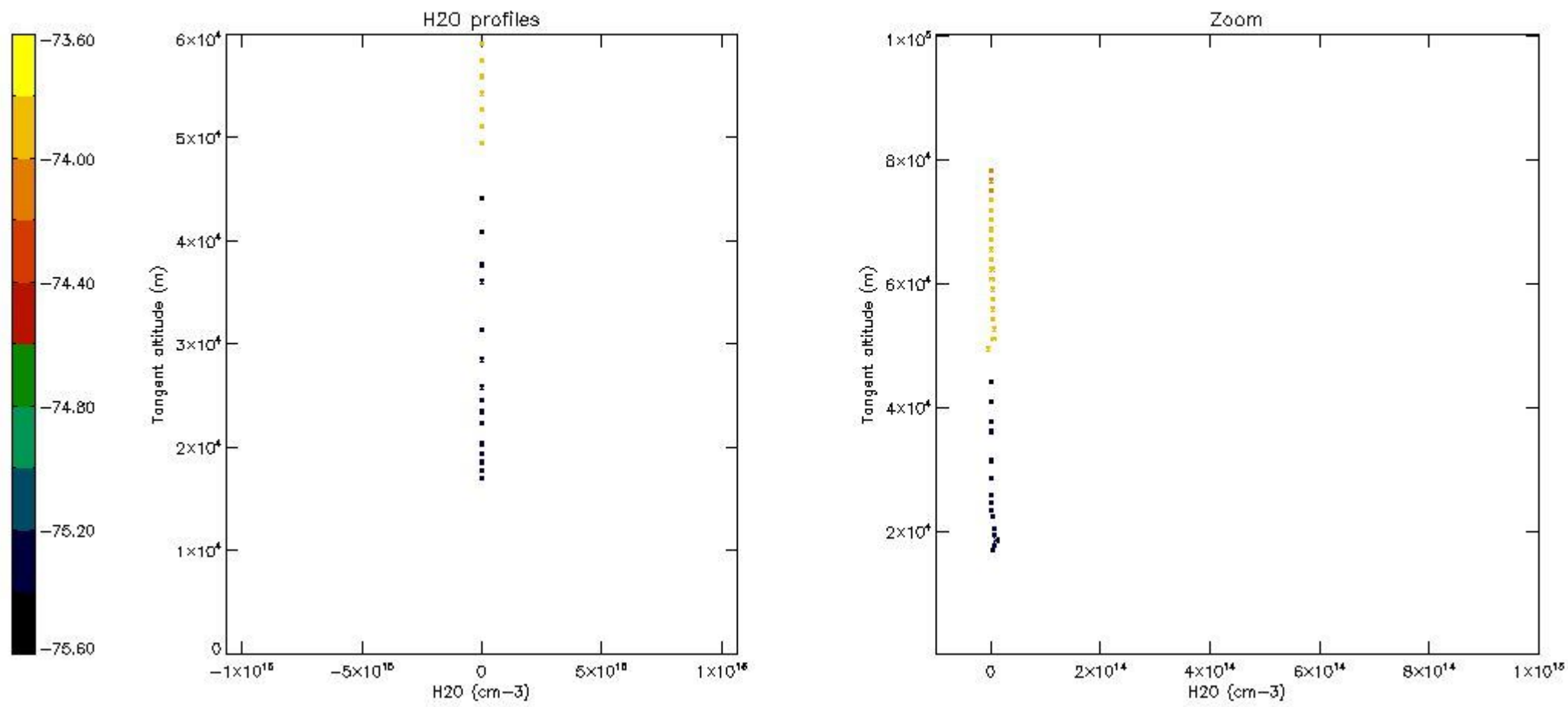
5.7 Plot NO3 profiles for all STD (dark without errors)

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	31-JUL-2007 00:10:09
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	31-JUL-2007 00:10:09
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	31-JUL-2007 00:10:09

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[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](#)

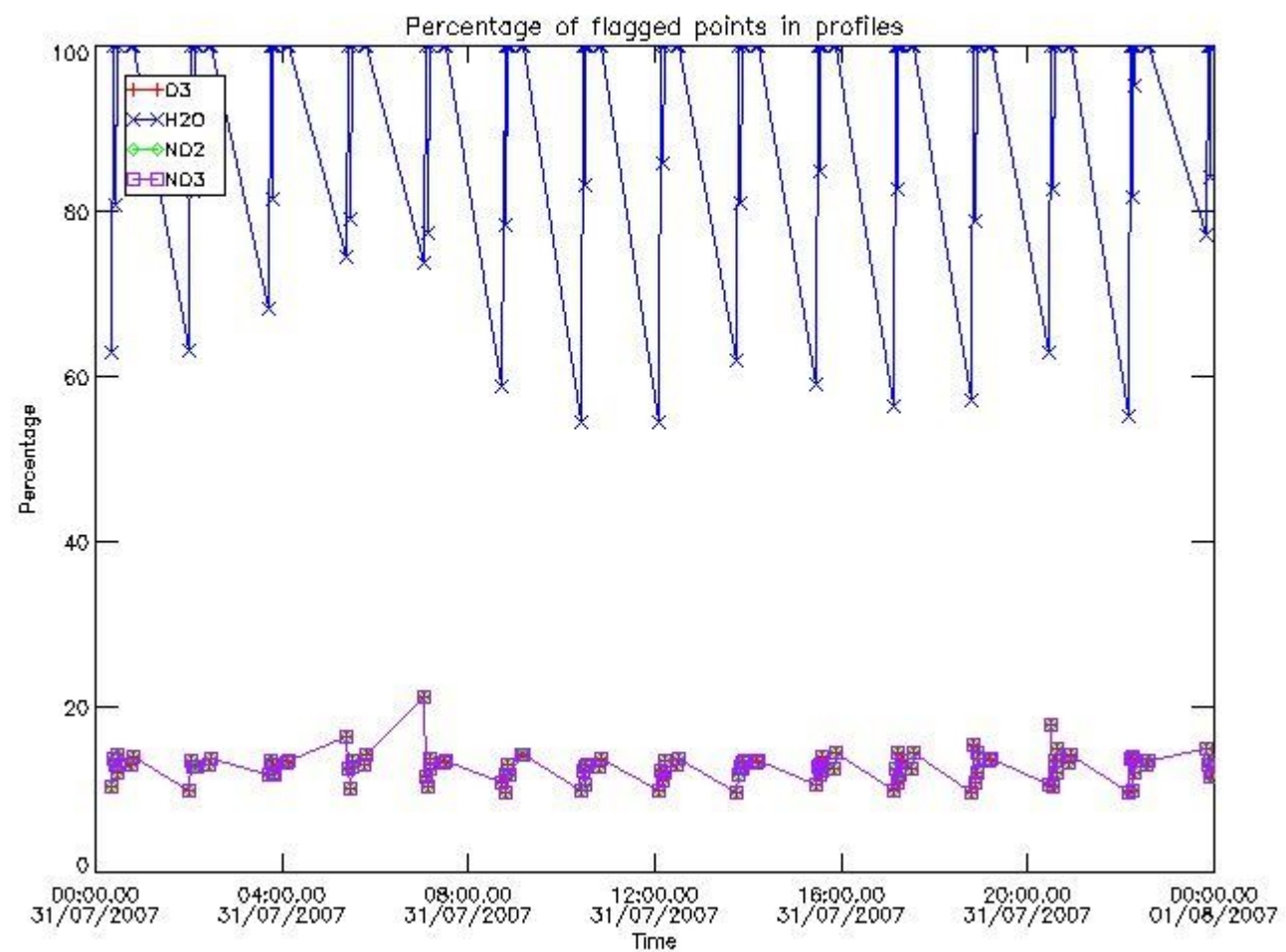
220	GOM_NL__2PRFIN20070731_191135_000000382060_00214_28324_4168.N1	31-JUL-2007 19:11:35	Dark	38.000	143	Alp Hyi	2.8570	7200.0	76	28324	No
221	GOM_NL__2PRFIN20070731_191414_000000372060_00214_28324_4169.N1	31-JUL-2007 19:14:14	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	28324	No
222	GOM_NL__2PRFIN20070731_191904_000000382060_00214_28324_4170.N1	31-JUL-2007 19:19:04	Straylight	38.000	148	Alp Tuc	2.8780	4100.0	76	28324	No
223	GOM_NL__2PRFIN20070731_192219_000000372060_00214_28324_4171.N1	31-JUL-2007 19:22:19	Straylight	37.000	45	Alp Pav	1.9400	26000.	74	28324	No
224	GOM_NL__2PRFIN20070731_193042_000000452060_00214_28324_4172.N1	31-JUL-2007 19:30:42	Bright	44.500	103	38Zet Sgr	2.6000	9700.0	89	28324	No
225	GOM_NL__2PRFIN20070731_193305_000000372060_00214_28324_4173.N1	31-JUL-2007 19:33:05	Bright	37.000	155	41Pi Sgr	2.9000	6600.0	74	28324	No
226	GOM_NL__2PRFIN20070731_194255_000000342060_00214_28324_4174.N1	31-JUL-2007 19:42:55	Bright	34.000	168	17Zet Aql	2.9860	11000.	68	28324	No
227	GOM_NL__2PRFIN20070731_194959_000000352060_00214_28324_4175.N1	31-JUL-2007 19:49:59	Bright	35.000	5	3Alp Lyr	0.033000	11000.	70	28324	No
228	GOM_NL__2PRFIN20070731_195346_000000372060_00214_28324_4176.N1	31-JUL-2007 19:53:46	Bright	37.000	69	33Gam Dra	2.2310	3800.0	74	28324	No
229	GOM_NL__2PRFIN20070731_195744_000000382060_00214_28324_4177.N1	31-JUL-2007 19:57:44	Bright	37.500	119	14Eta Dra	2.7270	4700.0	75	28324	No
230	GOM_NL__2PRFIN20070731_200154_000000342060_00214_28324_4178.N1	31-JUL-2007 20:01:54	Bright	34.000	60	7Bet UMi	2.0810	3950.0	68	28324	No
231	GOM_NL__2PRFIN20070731_200431_000000362060_00214_28324_4179.N1	31-JUL-2007 20:04:31	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	28324	No
232	GOM_NL__2PRFIN20070731_201722_000000362060_00214_28324_4180.N1	31-JUL-2007 20:17:22	Bright	36.000	42	34Bet Aur	1.9000	10200.	72	28324	No
233	GOM_NL__2PRFIN20070731_201936_000000422060_00214_28324_4181.N1	31-JUL-2007 20:19:36	Bright	42.000	107	37The Aur	2.6490	11000.	84	28324	No
234	GOM_NL__2PRFIN20070731_202428_000000382060_00214_28324_4182.N1	31-JUL-2007 20:24:28	Tw_i_and_stray	38.000	176	23Zet Tau	3.0200	22000.	76	28324	No
235	GOM_NL__2PRFIN20070731_202807_000000532060_00214_28324_4183.N1	31-JUL-2007 20:28:07	Dark	53.000	14	58Alp Ori	0.87000	3000.0	106	28324	No
236	GOM_NL__2PRFIN20070731_203051_000000372060_00214_28324_4184.N1	31-JUL-2007 20:30:51	Dark	37.000	30	46Eps Ori	1.6940	30000.	74	28324	No
237	GOM_NL__2PRFIN20070731_203319_000000502060_00214_28324_4185.N1	31-JUL-2007 20:33:19	Dark	49.500	7	19Bet Ori	0.10000	14000.	99	28324	No
238	GOM_NL__2PRFIN20070731_203444_000000382060_00214_28324_4186.N1	31-JUL-2007 20:34:44	Dark	37.500	47	2Bet CMa	1.9760	28000.	75	28324	No
239	GOM_NL__2PRFIN20070731_203624_000000422060_00214_28324_4187.N1	31-JUL-2007 20:36:24	Dark	42.000	139	9Bet Lep	2.8330	5600.0	84	28324	No
240	GOM_NL__2PRFIN20070731_203805_000000382060_00214_28324_4188.N1	31-JUL-2007 20:38:05	Dark	37.500	177	1Zet CMa	3.0220	26000.	75	28324	No
241	GOM_NL__2PRFIN20070731_205212_000000392060_00215_28325_4184.N1	31-JUL-2007 20:52:12	Dark	38.500	143	Alp Hyi	2.8570	7200.0	77	28325	No
242	GOM_NL__2PRFIN20070731_205450_000000362060_00215_28325_4185.N1	31-JUL-2007 20:54:50	Dark	36.000	135	Bet Hyi	2.8200	5800.0	72	28325	No
243	GOM_NL__2PRFIN20070731_205940_000000402060_00215_28325_4186.N1	31-JUL-2007 20:59:40	Straylight	40.000	148	Alp Tuc	2.8780	4100.0	80	28325	No
244	GOM_NL__2PRFIN20070731_210255_000000372060_00215_28325_4187.N1	31-JUL-2007 21:02:55	Straylight	36.500	45	Alp Pav	1.9400	26000.	73	28325	No
245	GOM_NL__2PRFIN20070731_211118_000000392060_00215_28325_4188.N1	31-JUL-2007 21:11:18	Bright	38.500	103	38Zet Sgr	2.6000	9700.0	77	28325	No
246	GOM_NL__2PRFIN20070731_211341_000000372060_00215_28325_4189.N1	31-JUL-2007 21:13:41	Bright	37.000	155	41Pi Sgr	2.9000	6600.0	74	28325	No
247	GOM_NL__2PRFIN20070731_212331_000000352060_00215_28325_4190.N1	31-JUL-2007 21:23:31	Bright	35.000	168	17Zet Aql	2.9860	11000.	70	28325	No
248	GOM_NL__2PRFIN20070731_213035_000000332060_00215_28325_4191.N1	31-JUL-2007 21:30:35	Bright	33.000	5	3Alp Lyr	0.033000	11000.	66	28325	No
249	GOM_NL__2PRFIN20070731_213422_000000382060_00215_28325_4192.N1	31-JUL-2007 21:34:22	Bright	37.500	69	33Gam Dra	2.2310	3800.0	75	28325	No
250	GOM_NL__2PRFIN20070731_213820_000000382060_00215_28325_4193.N1	31-JUL-2007 21:38:20	Bright	37.500	119	14Eta Dra	2.7270	4700.0	75	28325	No
251	GOM_NL__2PRFIN20070731_214230_000000352060_00215_28325_4194.N1	31-JUL-2007 21:42:30	Bright	34.500	60	7Bet UMi	2.0810	3950.0	69	28325	No
252	GOM_NL__2PRFIN20070731_214507_000000362060_00215_28325_4195.N1	31-JUL-2007 21:45:07	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	28325	No
253	GOM_NL__2PRFIN20070731_215758_000000502060_00215_28325_4196.N1	31-JUL-2007 21:57:58	Bright	49.500	42	34Bet Aur	1.9000	10200.	99	28325	No
254	GOM_NL__2PRFIN20070731_220012_000000332060_00215_28325_4197.N1	31-JUL-2007 22:00:12	Bright	33.000	107	37The Aur	2.6490	11000.	66	28325	No
255	GOM_NL__2PRFIN20070731_220504_000000382060_00215_28325_4198.N1	31-JUL-2007 22:05:04	Tw_i_and_stray	37.500	176	23Zet Tau	3.0200	22000.	75	28325	No
256	GOM_NL__2PRFIN20070731_220843_000000532060_00215_28325_4199.N1	31-JUL-2007 22:08:43	Dark	53.000	14	58Alp Ori	0.87000	3000.0	106	28325	No
257	GOM_NL__2PRFIN20070731_221128_000000372060_00215_28325_4200.N1	31-JUL-2007 22:11:28	Dark	37.000	30	46Eps Ori	1.6940	30000.	74	28325	No
258	GOM_NL__2PRFIN20070731_221355_000000522060_00215_28325_4201.N1	31-JUL-2007 22:13:55	Dark	52.000	7	19Bet Ori	0.10000	14000.	104	28325	No
259	GOM_NL__2PRFIN20070731_221520_000000372060_00215_28325_4202.N1	31-JUL-2007 22:15:20	Dark	36.500	47	2Bet CMa	1.9760	28000.	73	28325	No
260	GOM_NL__2PRFIN20070731_221700_000000432060_00215_28325_4203.N1	31-JUL-2007 22:17:00	Dark	42.500	139	9Bet Lep	2.8330	5600.0	85	28325	No
261	GOM_NL__2PRFIN20070731_221841_000000382060_00215_28325_4204.N1	31-JUL-2007 22:18:41	Dark	38.000	177	1Zet CMa	3.0220	26000.	76	28325	No
262	GOM_NL__2PRFIN20070731_223248_000000392060_00216_28326_4200.N1	31-JUL-2007 22:32:48	Dark	39.000	143	Alp Hyi	2.8570	7200.0	78	28326	No
263	GOM_NL__2PRFIN20070731_223526_000000382060_00216_28326_4201.N1	31-JUL-2007 22:35:26	Dark	37.500	135	Bet Hyi	2.8200	5800.0	75	28326	No
264	GOM_NL__2PRFIN20070731_224017_000000432060_00216_28326_4202.N1	31-JUL-2007 22:40:17	Straylight	43.000	148	Alp Tuc	2.8780	4100.0	86	28326	No
265	GOM_NL__2PRFIN20070731_224331_000000402060_00216_28326_4203.N1	31-JUL-2007 22:43:31	Straylight	40.000	45	Alp Pav	1.9400	26000.	80	28326	No
266	GOM_NL__2PRFIN20070731_225154_000000462060_00216_28326_4204.N1	31-JUL-2007 22:51:54	Bright	46.000	103	38Zet Sgr	2.6000	9700.0	92	28326	No
267	GOM_NL__2PRFIN20070731_225417_000000372060_00216_28326_4205.N1	31-JUL-2007 22:54:17	Bright	37.000	155	41Pi Sgr	2.9000	6600.0	74	28326	No
268	GOM_NL__2PRFIN20070731_230407_000000342060_00216_28326_4206.N1	31-JUL-2007 23:04:07	Bright	34.000	168	17Zet Aql	2.9860	11000.	68	28326	No
269	GOM_NL__2PRFIN20070731_231111_000000382060_00216_28326_4207.N1	31-JUL-2007 23:11:11	Bright	38.000	5	3Alp Lyr	0.033000	11000.	76	28326	No
270	GOM_NL__2PRFIN20070731_231458_000000372060_00216_28326_4208.N1	31-JUL-2007 23:14:58	Bright	36.500	69	33Gam Dra	2.2310	3800.0	73	28326	No
271	GOM_NL__2PRFIN20070731_231856_000000382060_00216_28326_4209.N1	31-JUL-2007 23:18:56	Bright	37.500	119	14Eta Dra	2.7270	4700.0	75	28326	No
272	GOM_NL__2PRFIN20070731_232306_000000372060_00216_28326_4210.N1	31-JUL-2007 23:23:06	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	28326	No
273	GOM_NL__2PRFIN20070731_232543_000000332060_00216_28326_4211.N1	31-JUL-2007 23:25:43	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	28326	No
274	GOM_NL__2PRFIN20070731_233834_000000422060_00216_28326_4212.N1	31-JUL-2007 23:38:34	Bright	42.000	42	34Bet Aur	1.9000	10200.	84	28326	No
275	GOM_NL__2PRFIN20070731_234048_000000362060_00216_28326_4213.N1	31-JUL-2007 23:40:48	Bright	35.500	107	37The Aur	2.6490	11000.	71	28326	No
276	GOM_NL__2PRFIN20070731_234540_000000422060_00216_28326_4214.N1	31-JUL-2007 23:45:40	Tw_i_and_stray	41.500	176	23Zet Tau	3.0200	22000.	83	28326	No
277	GOM_NL__2PRFIN20070731_234919_000000382060_00216_28326_4215.N1	31-JUL-2007 23:49:19	Dark	37.500	14	58Alp Ori	0.87000	3000.0	75	28326	No
278	GOM_NL__2PRFIN20070731_235204_000000392060_00216_28326_4216.N1	31-JUL-2007 23:52:04	Dark	39.000	30	46Eps Ori	1.6940	30000.	78	28326	No

279	GOM_NL__2PRFIN20070731_235431_000000452060_00216_28326_4217.N1	31-JUL-2007 23:54:31	Dark	44.500	7	19Bet Ori	0.10000	14000.	89	28326	No
280	GOM_NL__2PRFIN20070731_235556_000000382060_00216_28326_4218.N1	31-JUL-2007 23:55:56	Dark	38.000	47	2Bet CMa	1.9760	28000.	76	28326	No
281	GOM_NL__2PRFIN20070731_235736_000000422060_00216_28326_4219.N1	31-JUL-2007 23:57:36	Dark	42.000	139	9Bet Lep	2.8330	5600.0	84	28326	No

3. Quality information per product

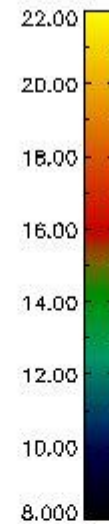
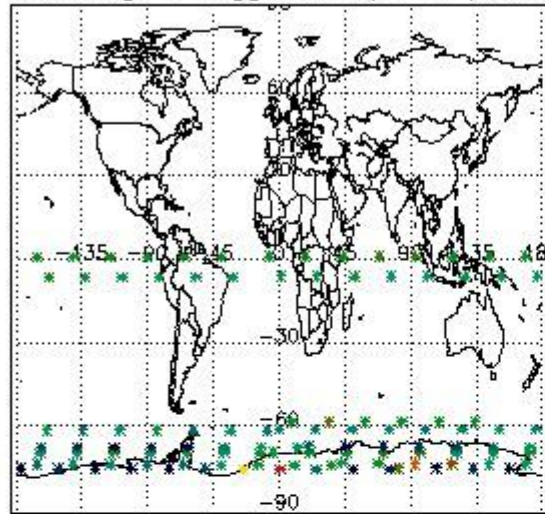
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

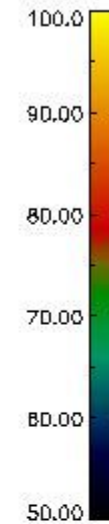
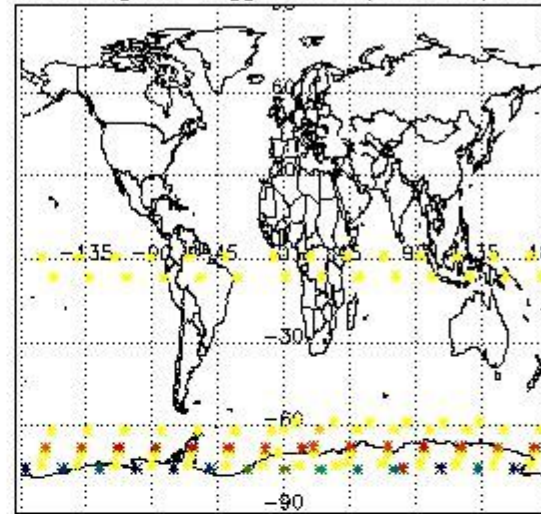


3.2 Plot quality information per product (world map)

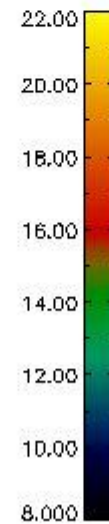
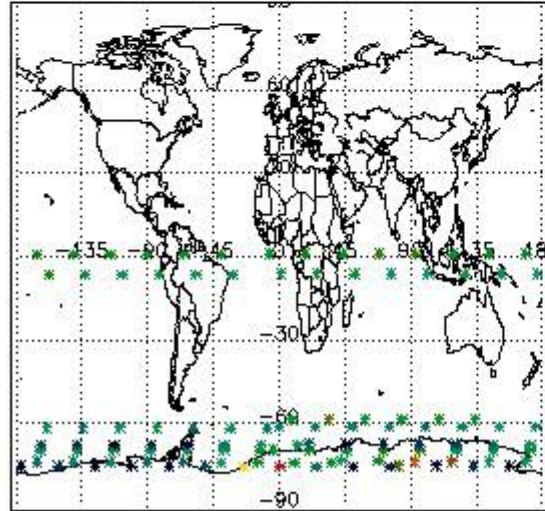
Percentage of flagged data per O3 profile



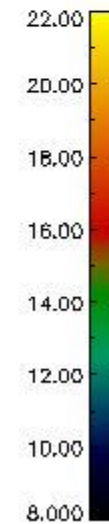
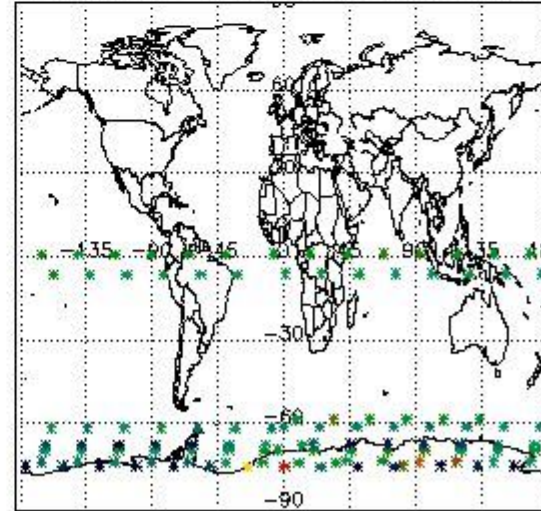
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

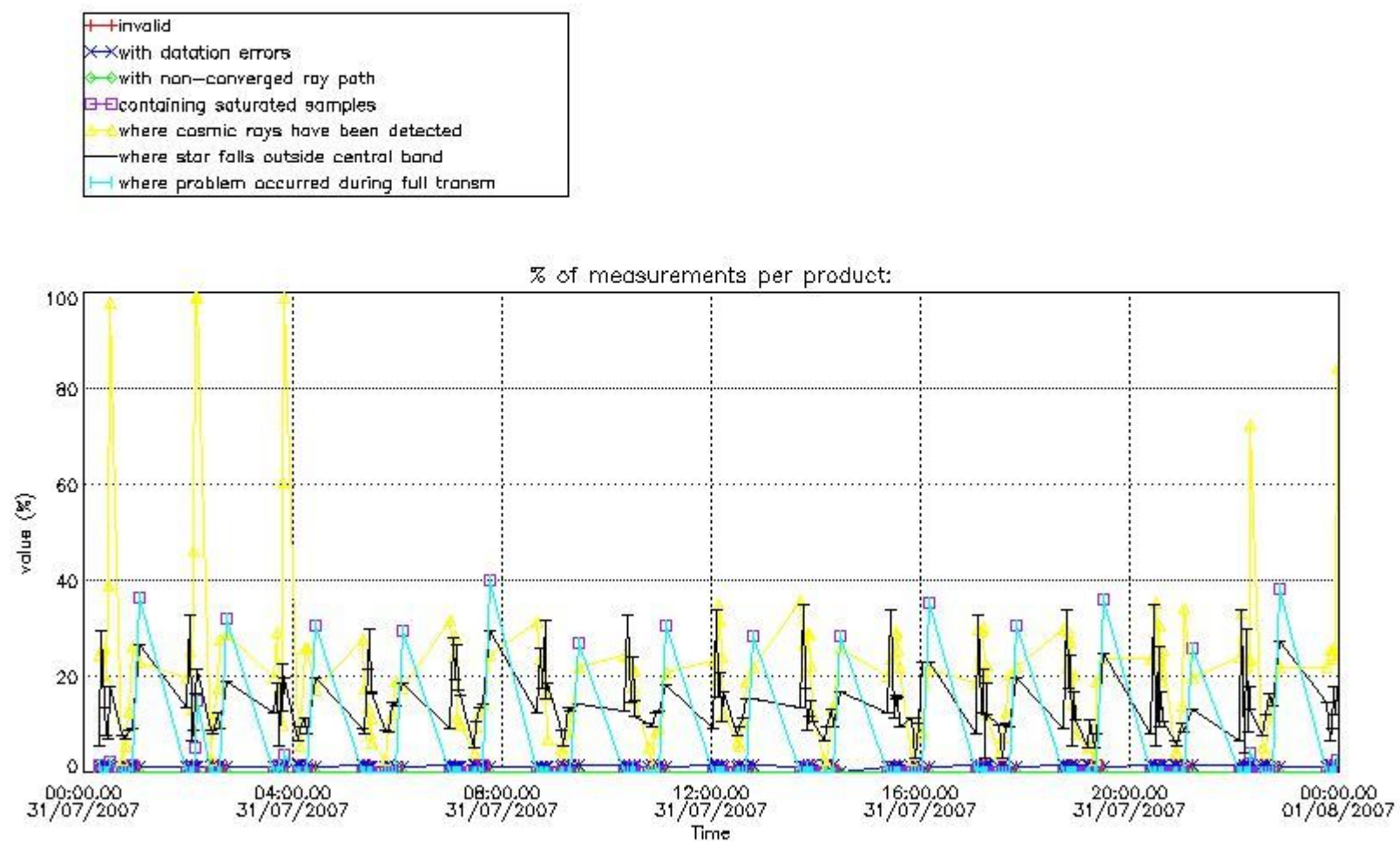


4. Level 1 quality information per product

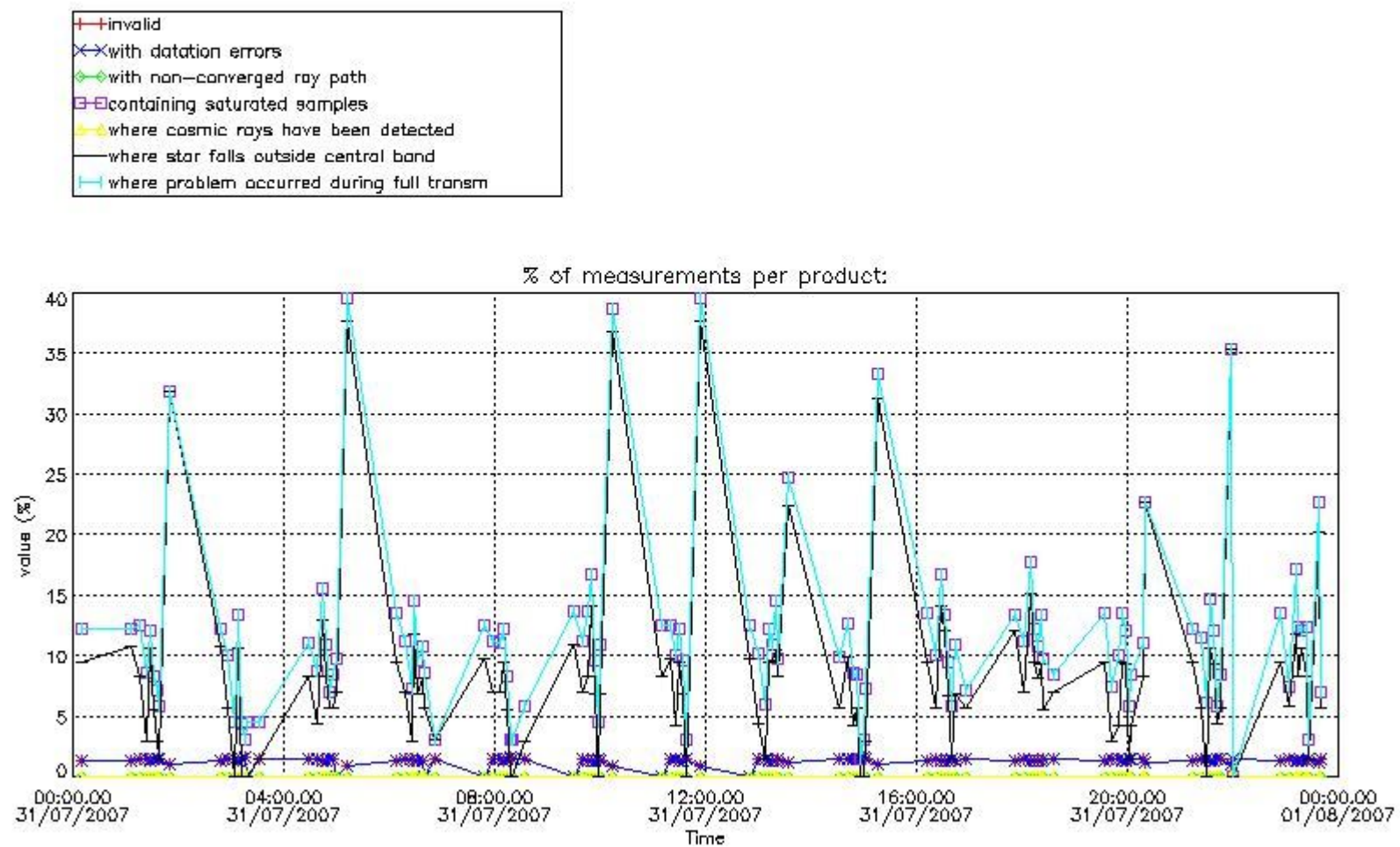
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

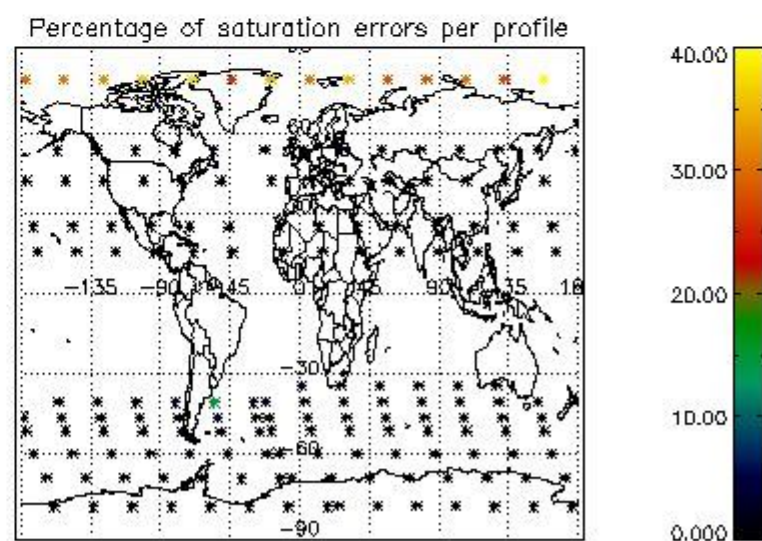
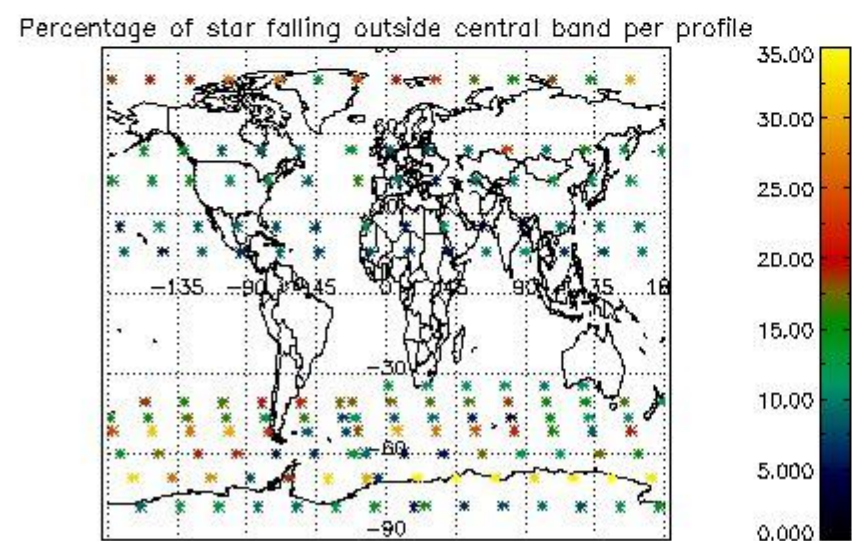
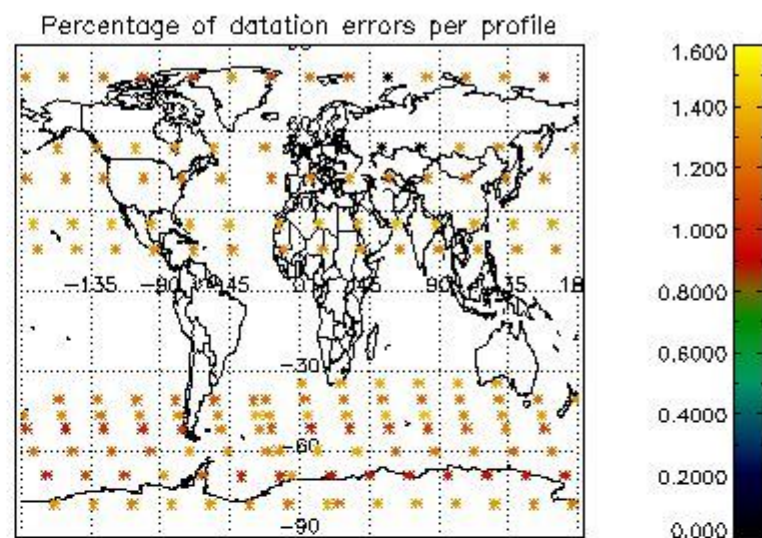
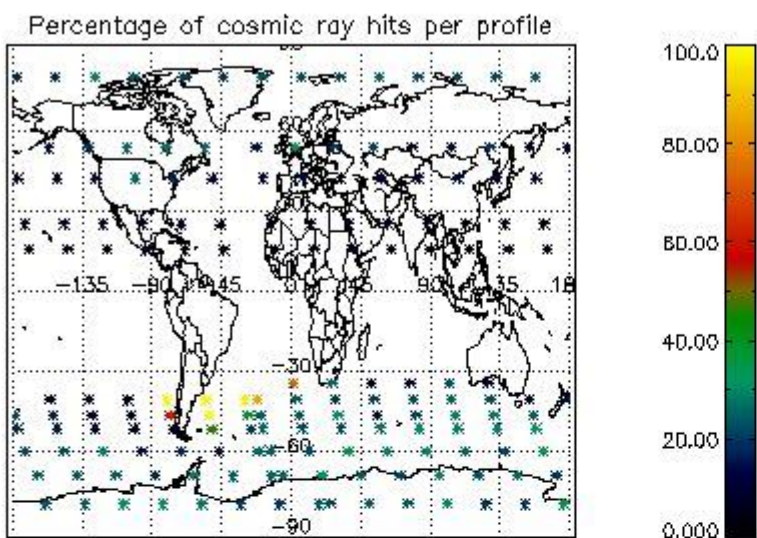


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

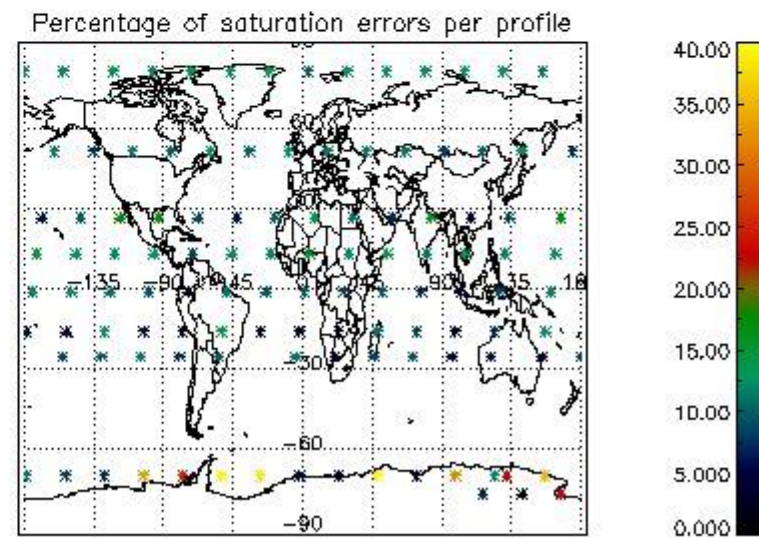
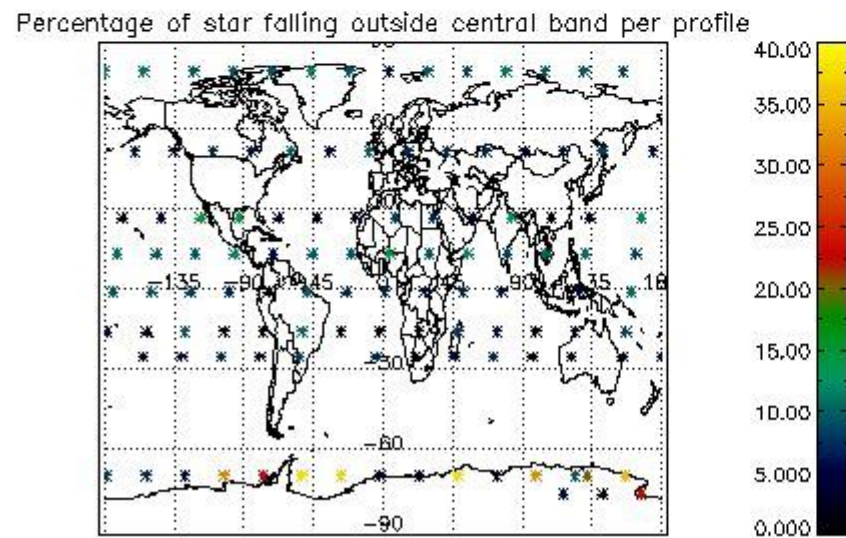
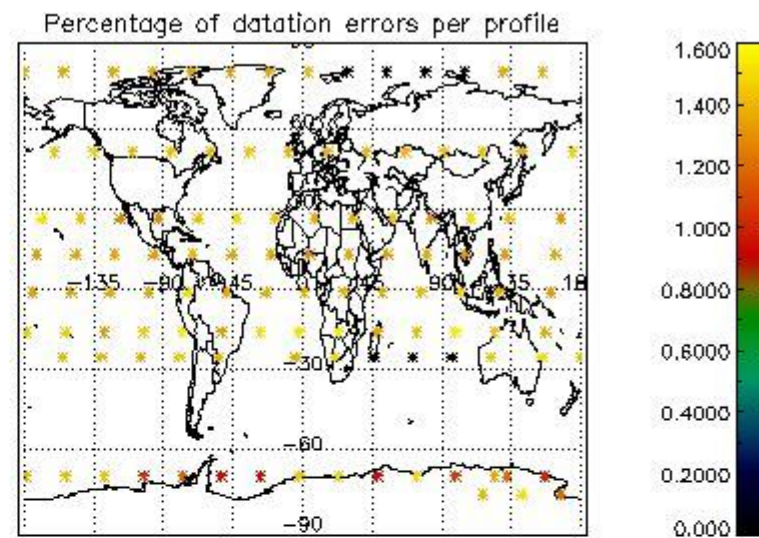
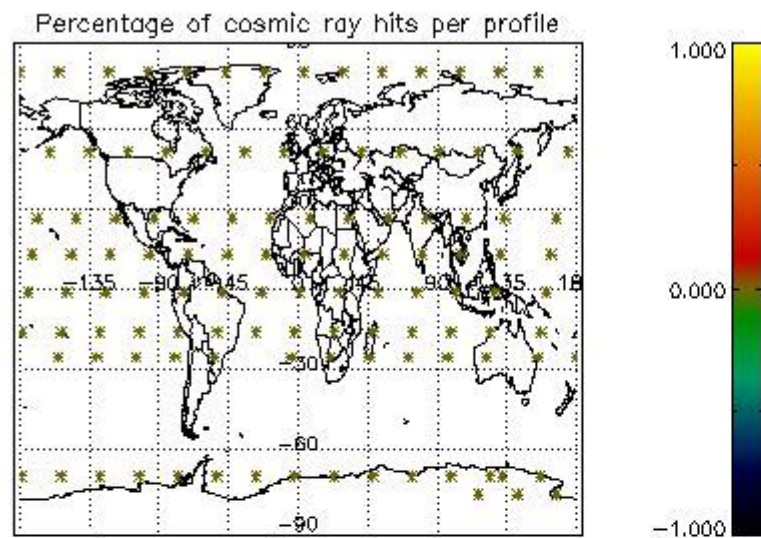


4.2 Plot quality information per product coming from level 1b processing (world map)

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

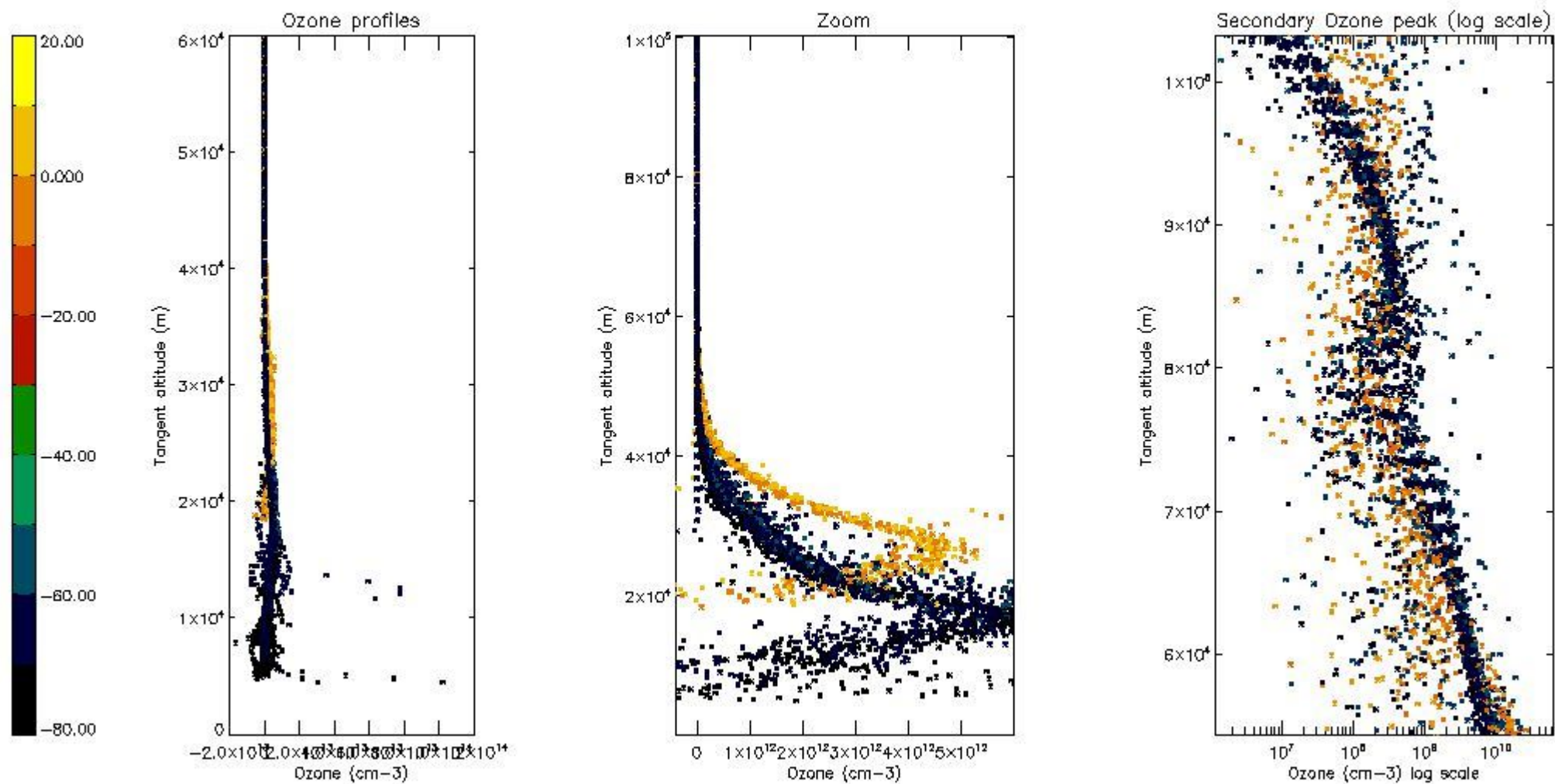
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	42
STD < 20	21

STD < 10	16
STD < 5	11

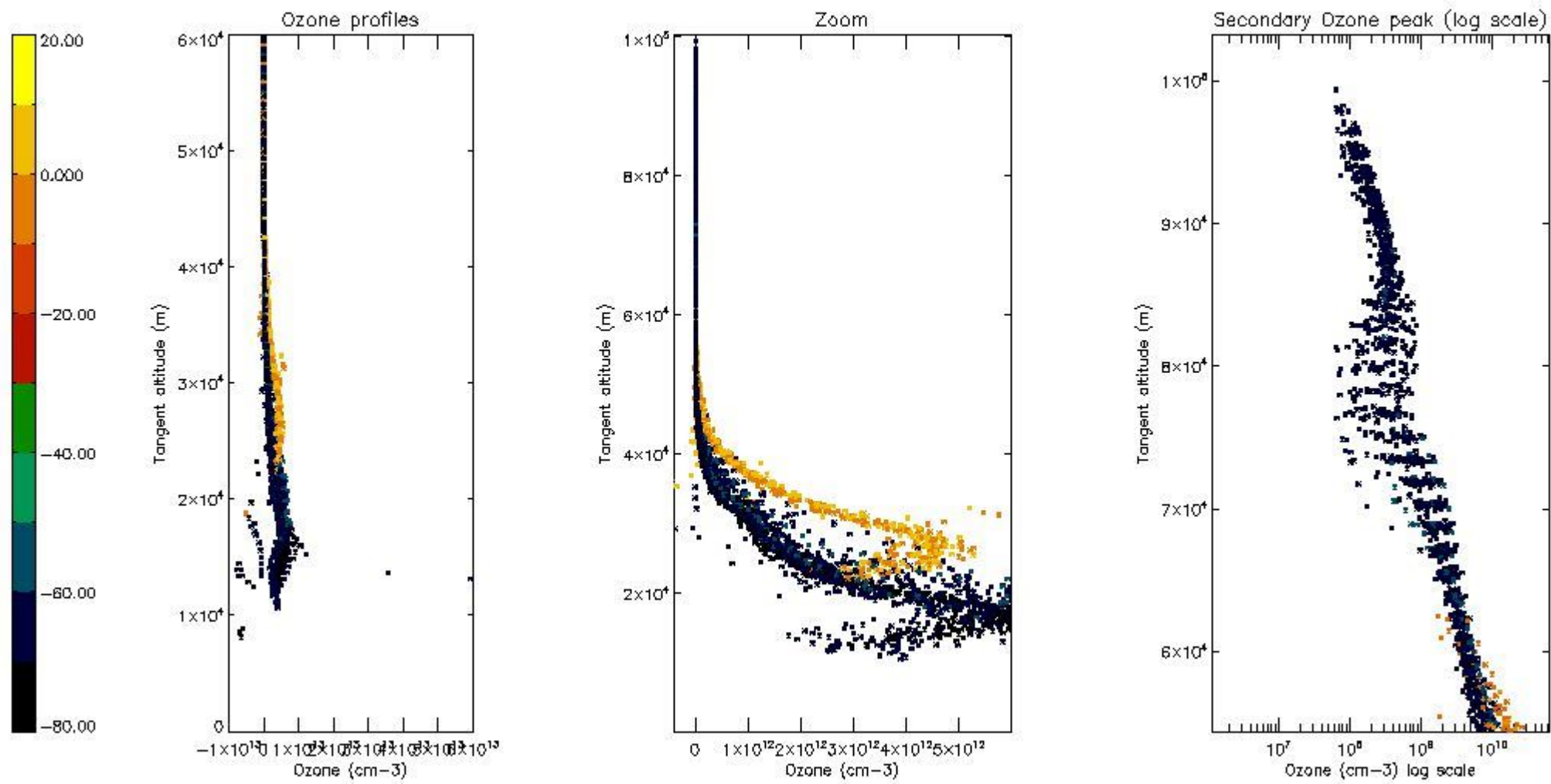
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



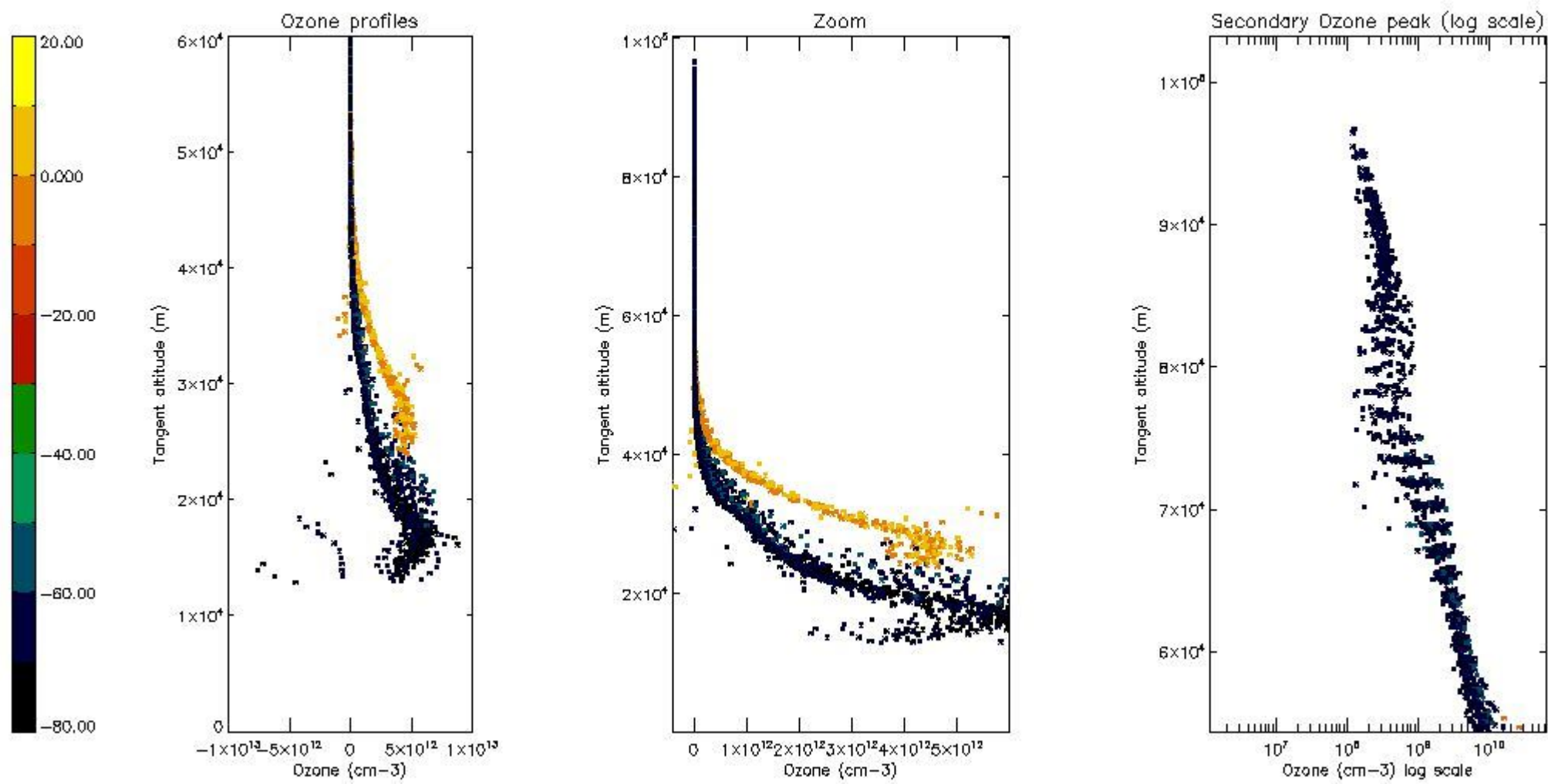
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



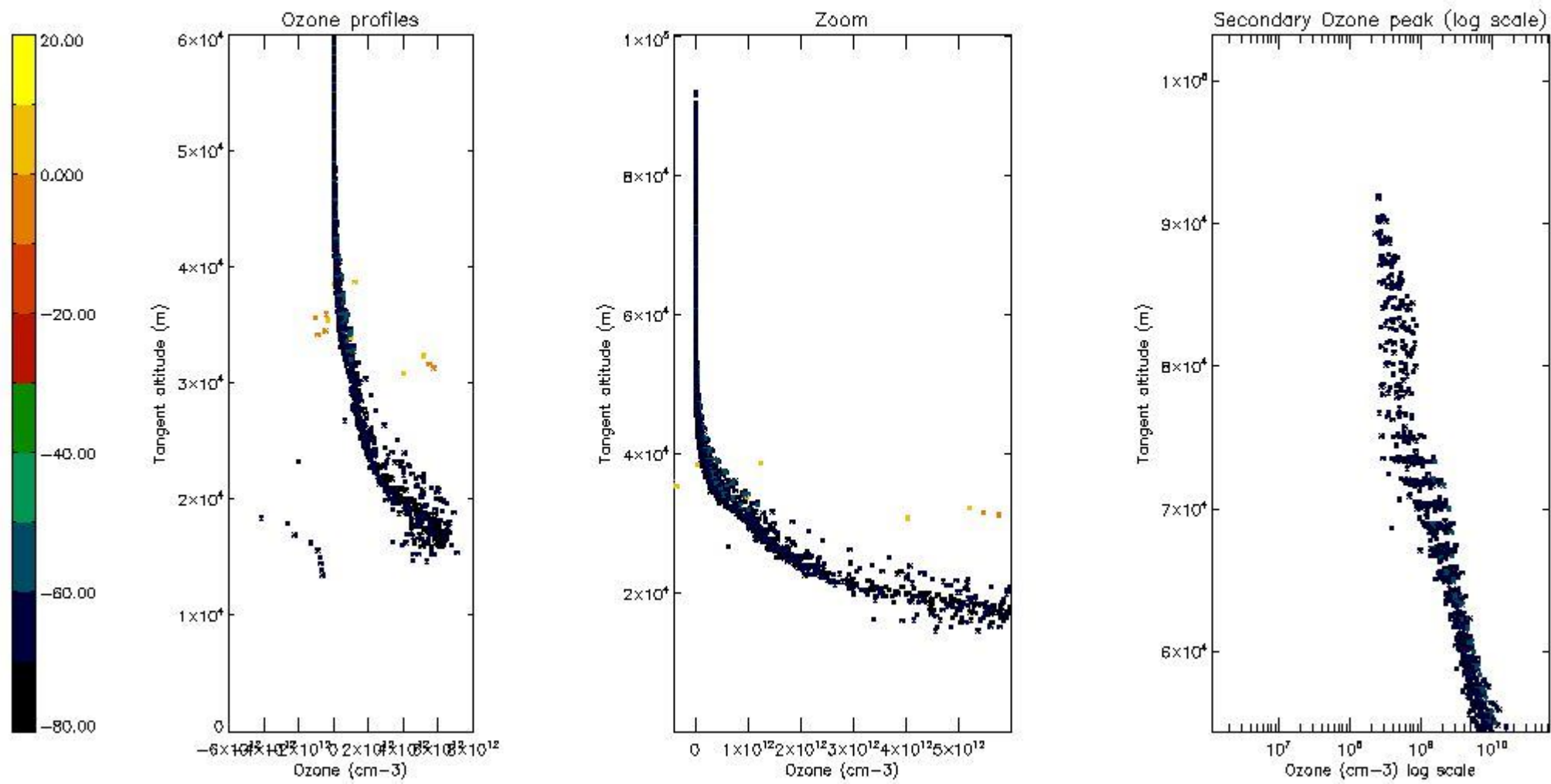
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



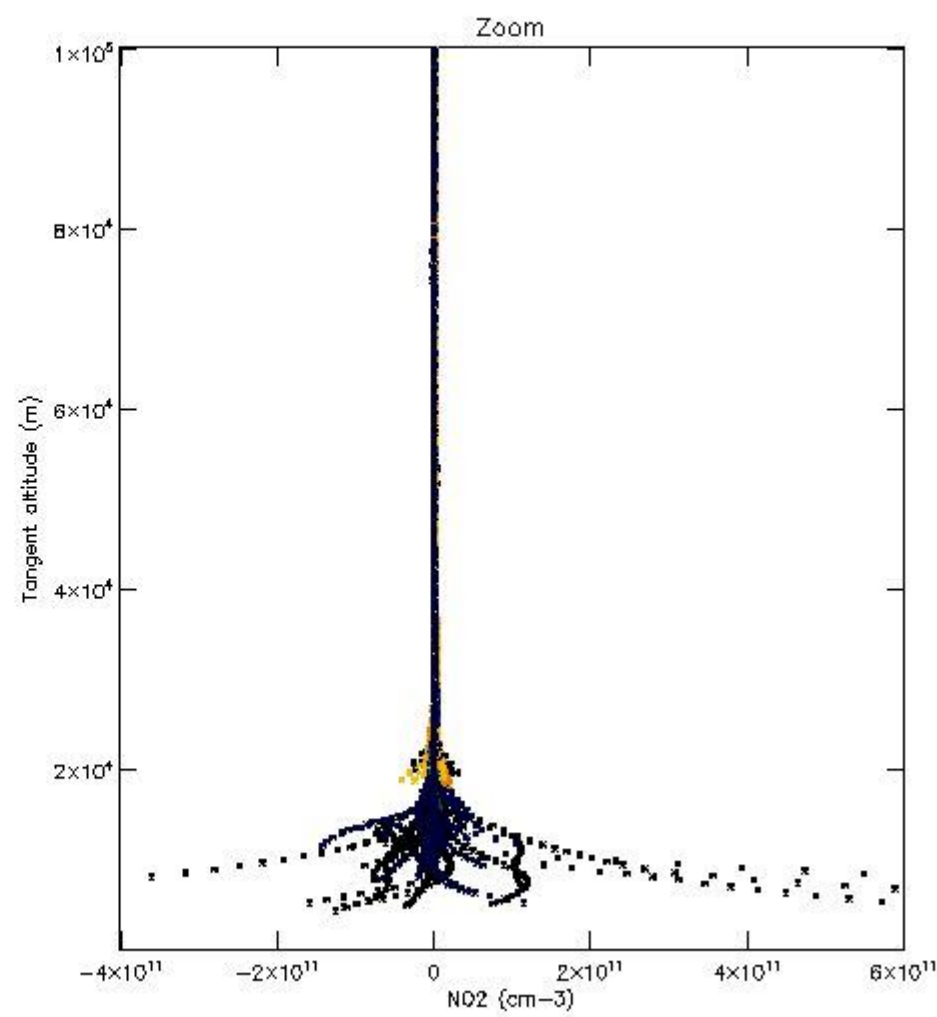
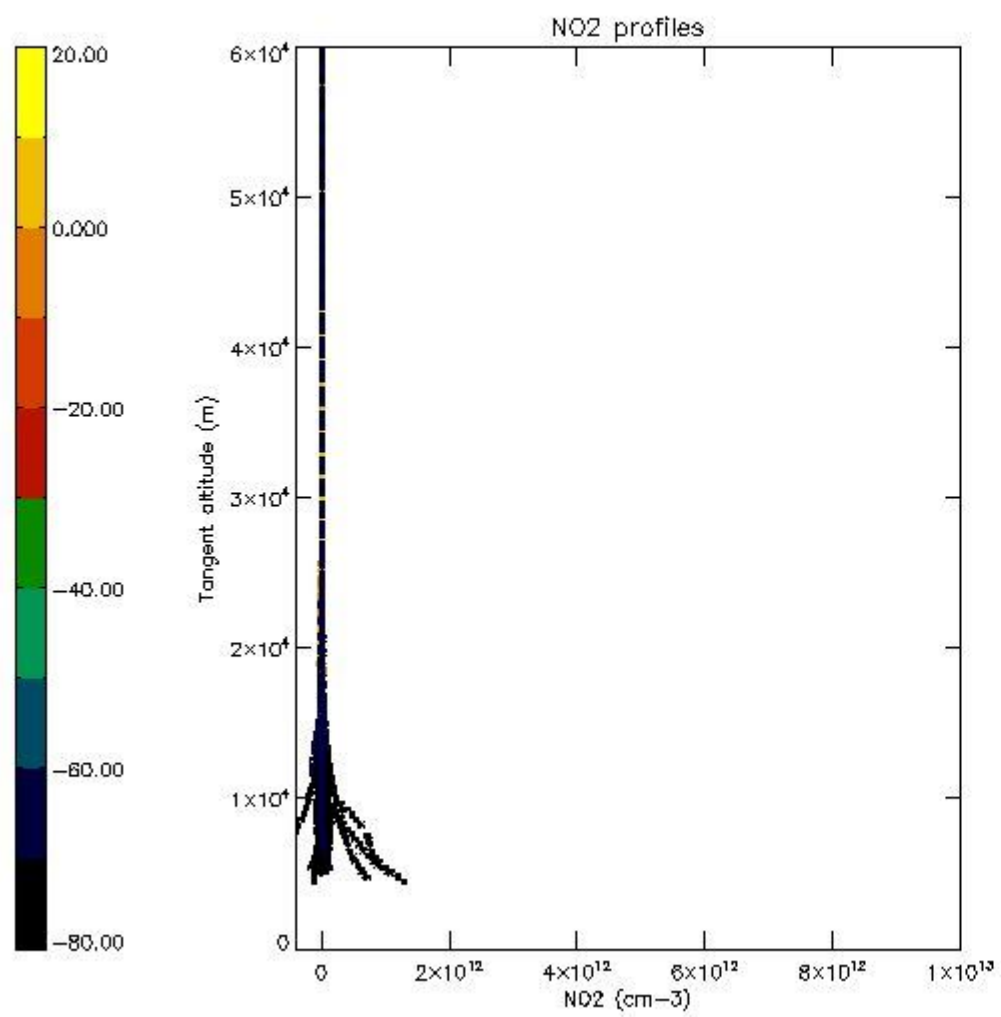
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



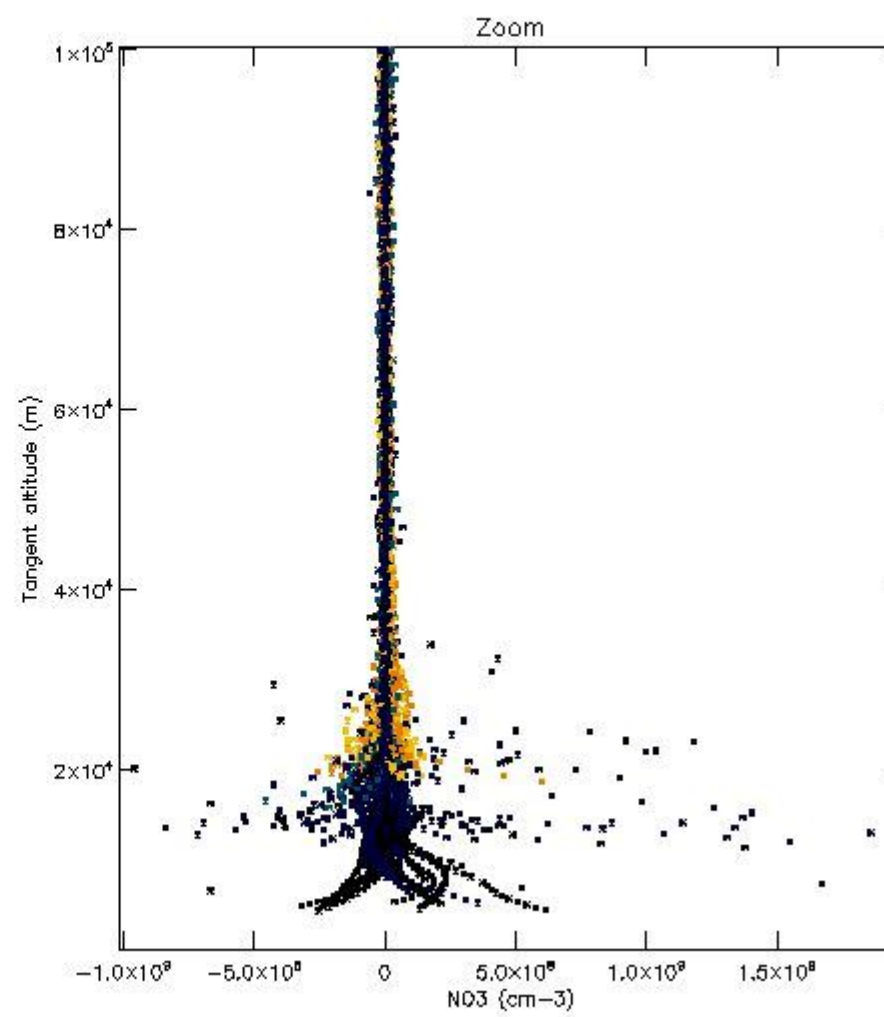
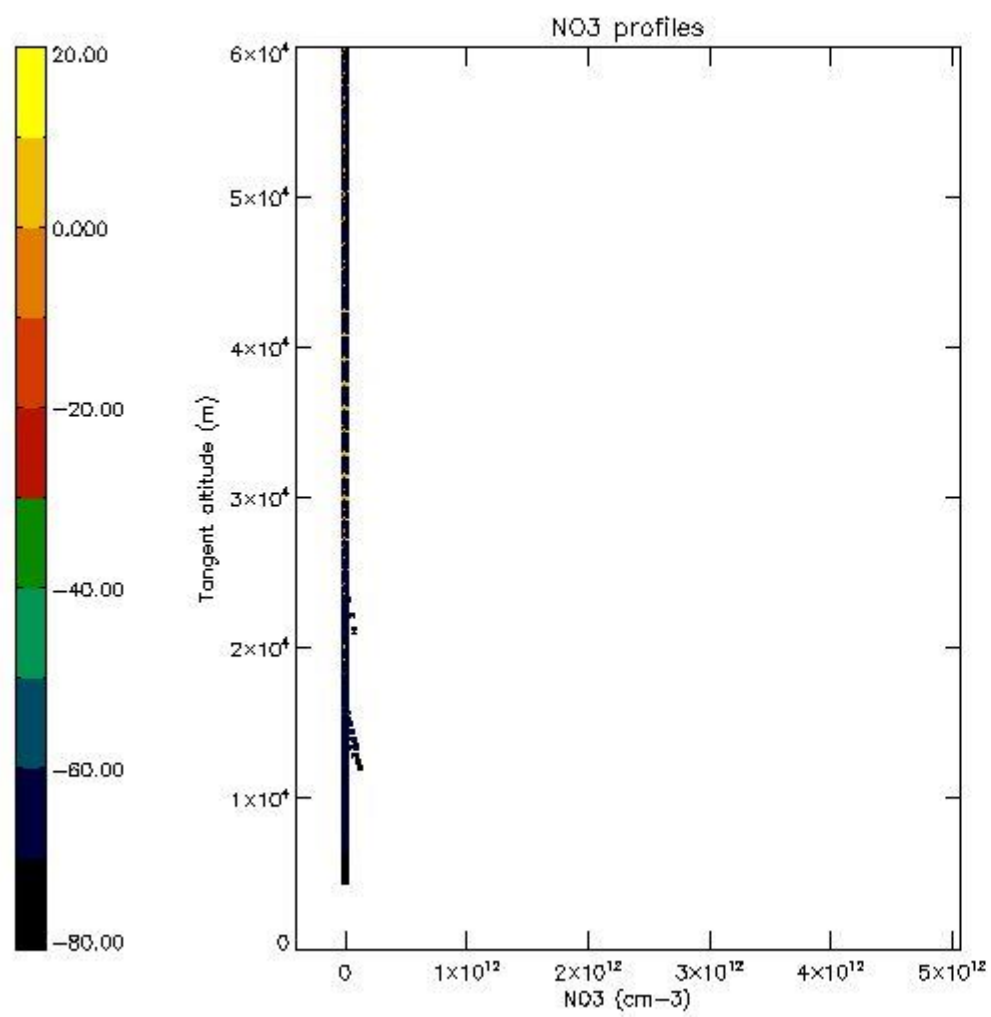
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



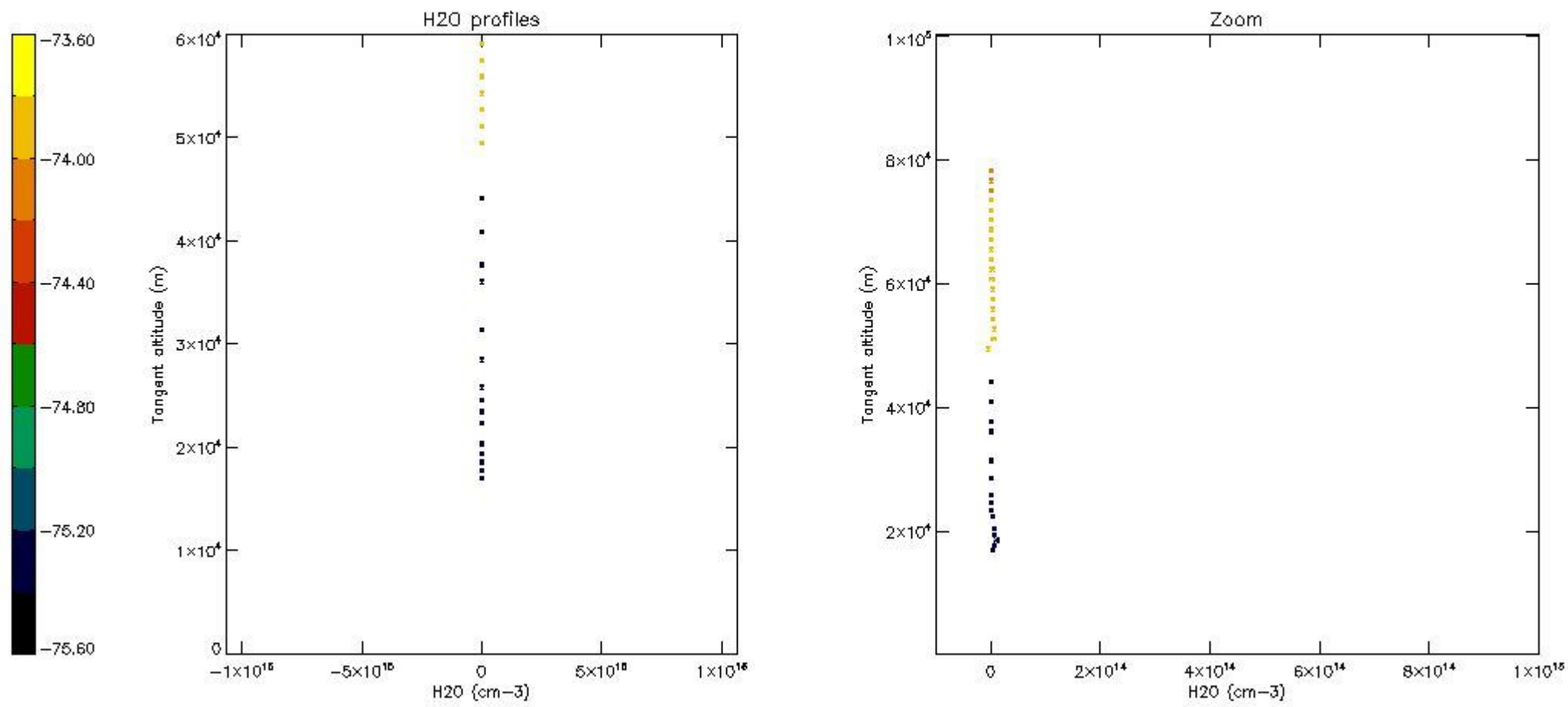
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

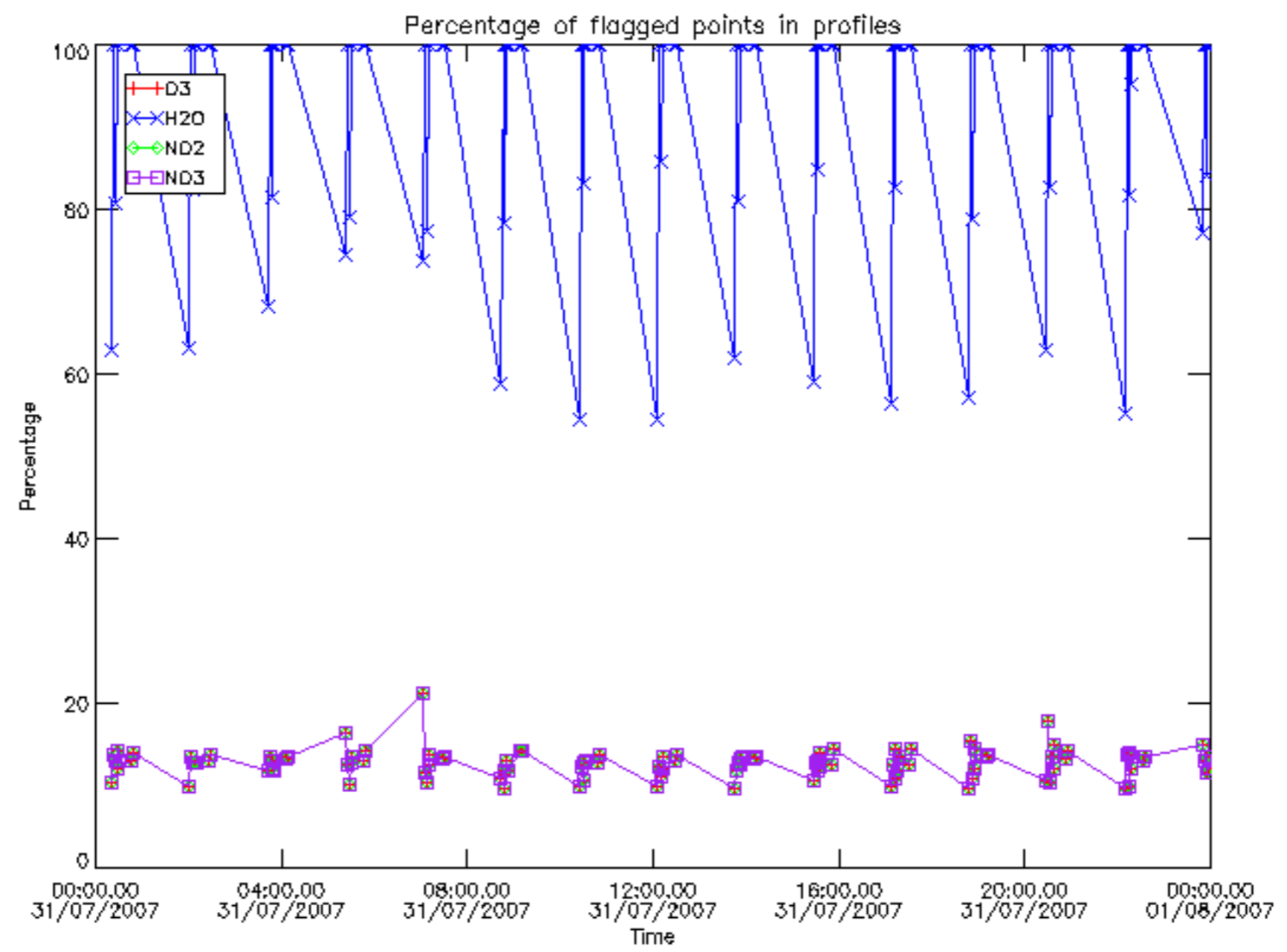
The colorbar represents the latitude.



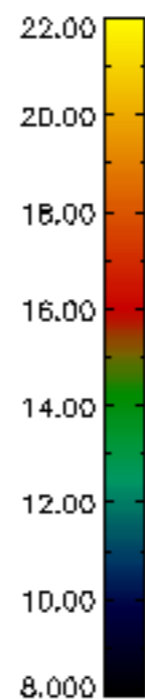
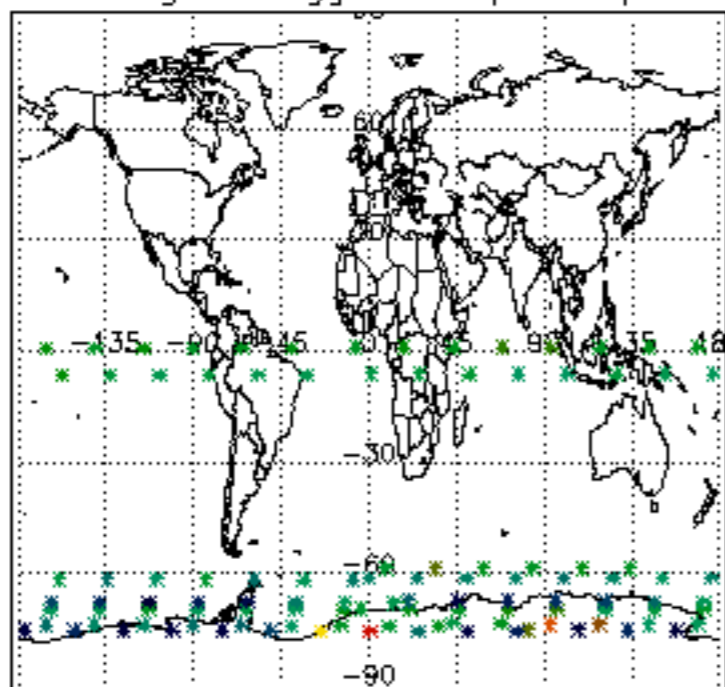
6. Auxiliary Data Files used for the production reported in section 2

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.

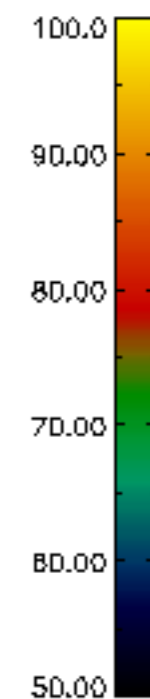
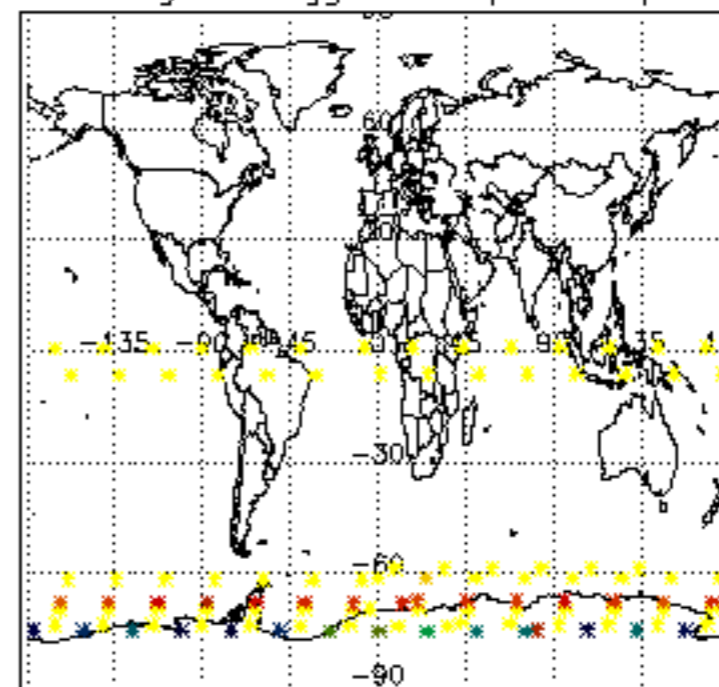
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	31-JUL-2007 00:10:09
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	31-JUL-2007 00:10:09
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	31-JUL-2007 00:10:09



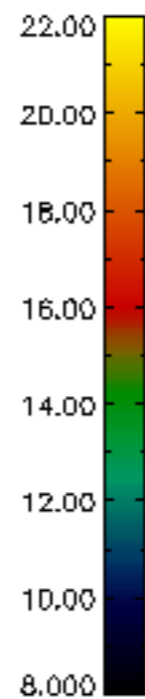
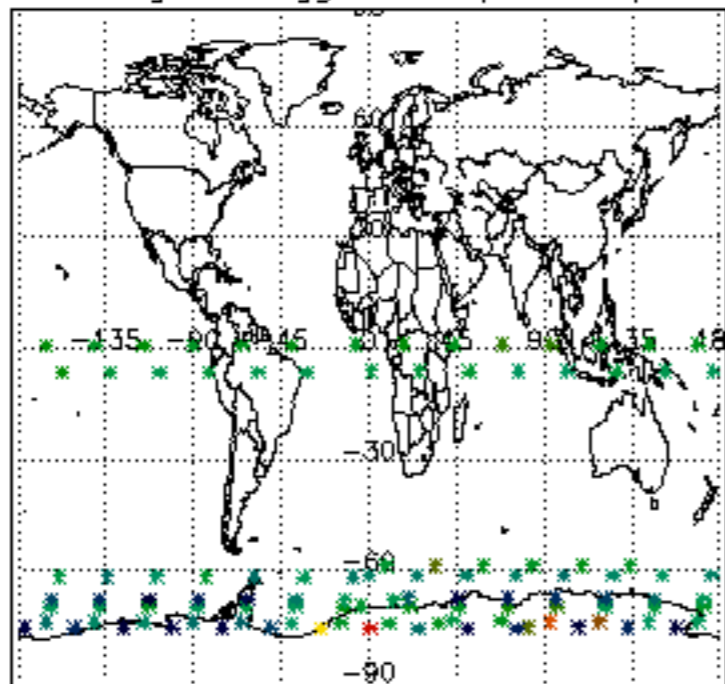
Percentage of flagged data per D3 profile



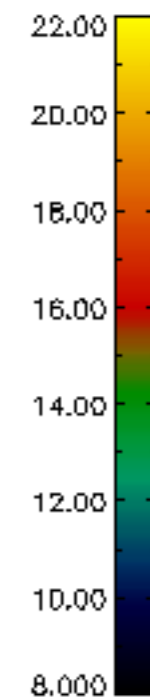
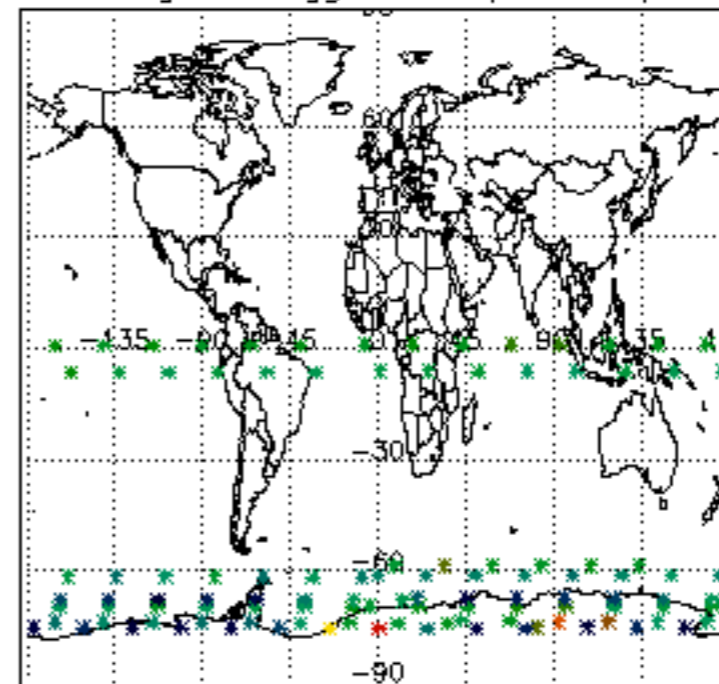
Percentage of flagged data per H2O profile

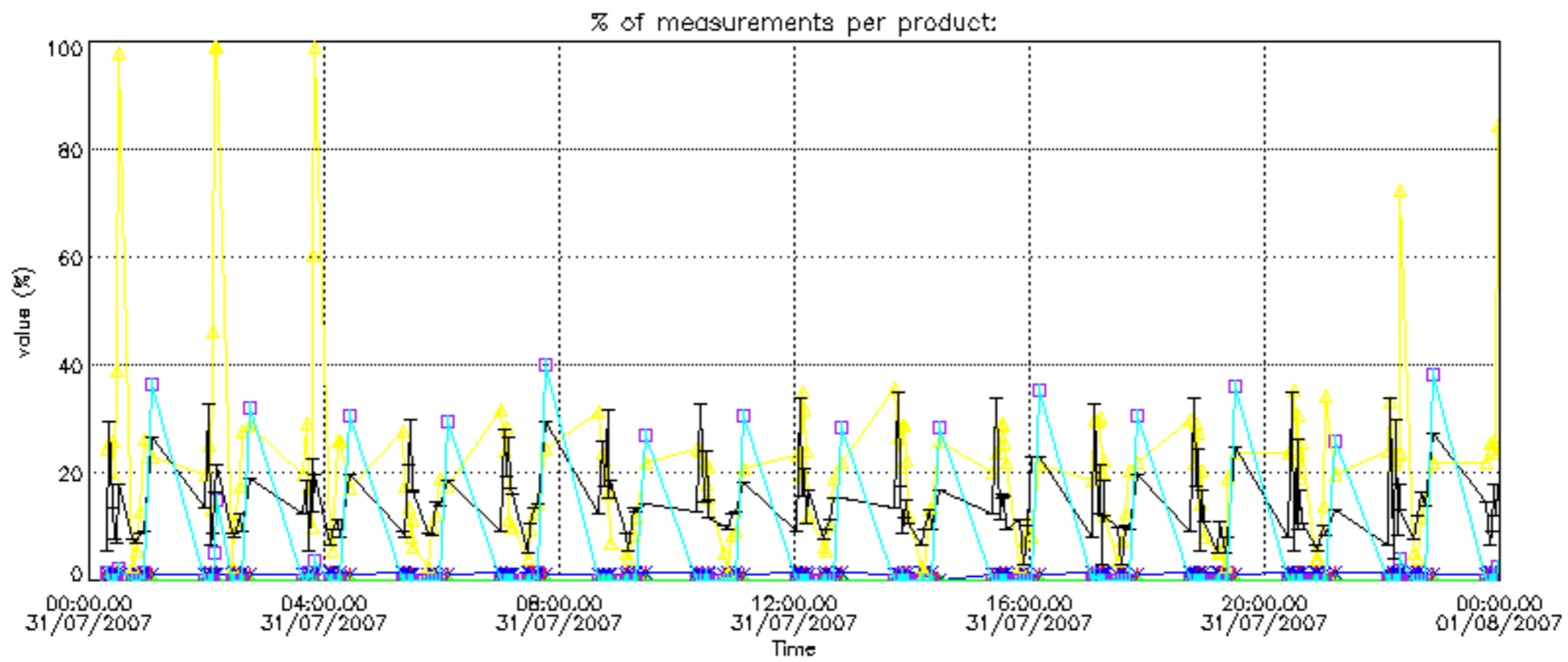


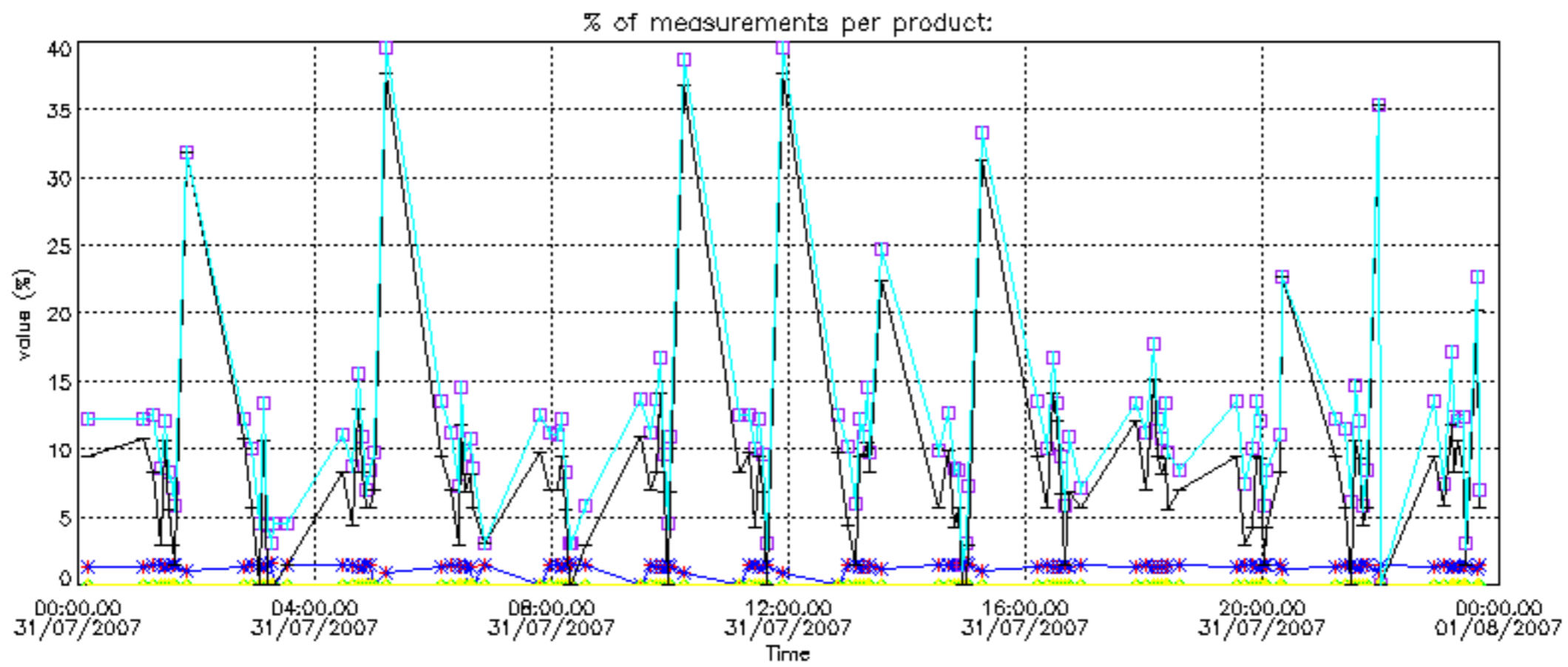
Percentage of flagged data per NO2 profile



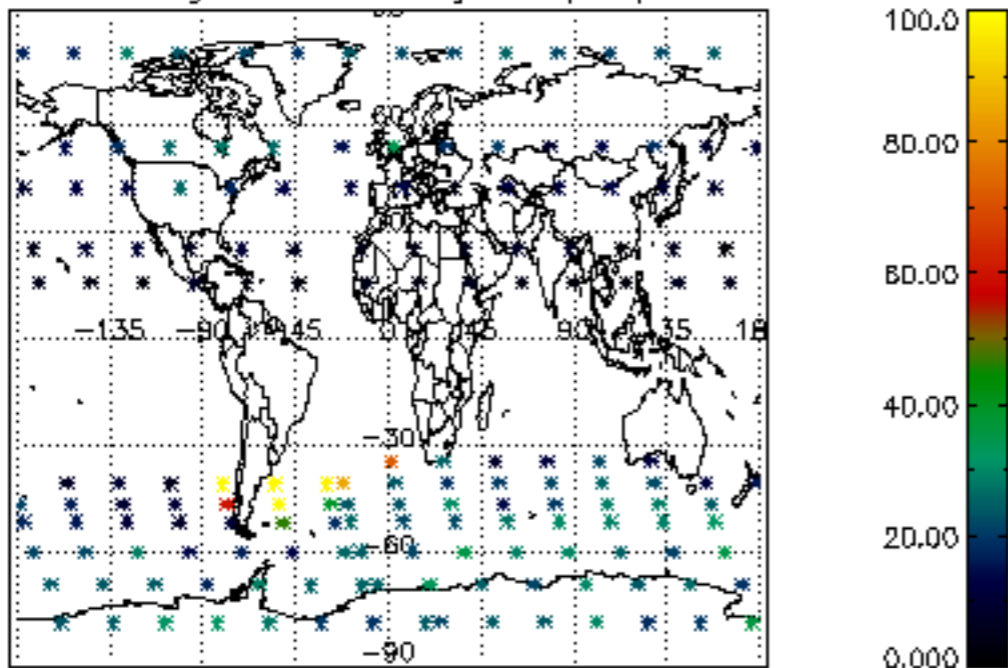
Percentage of flagged data per NO3 profile



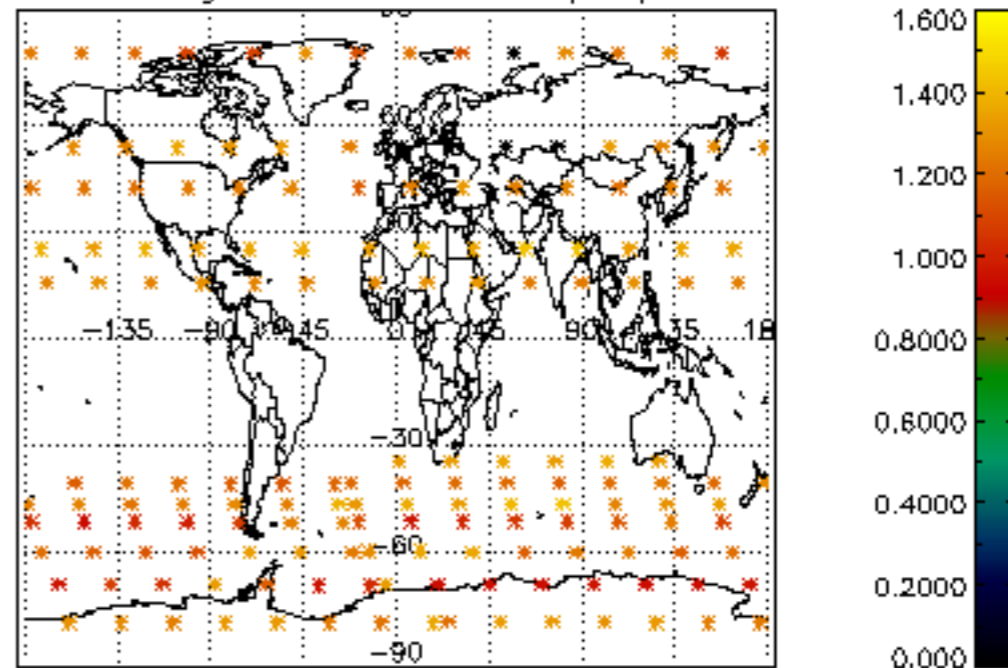




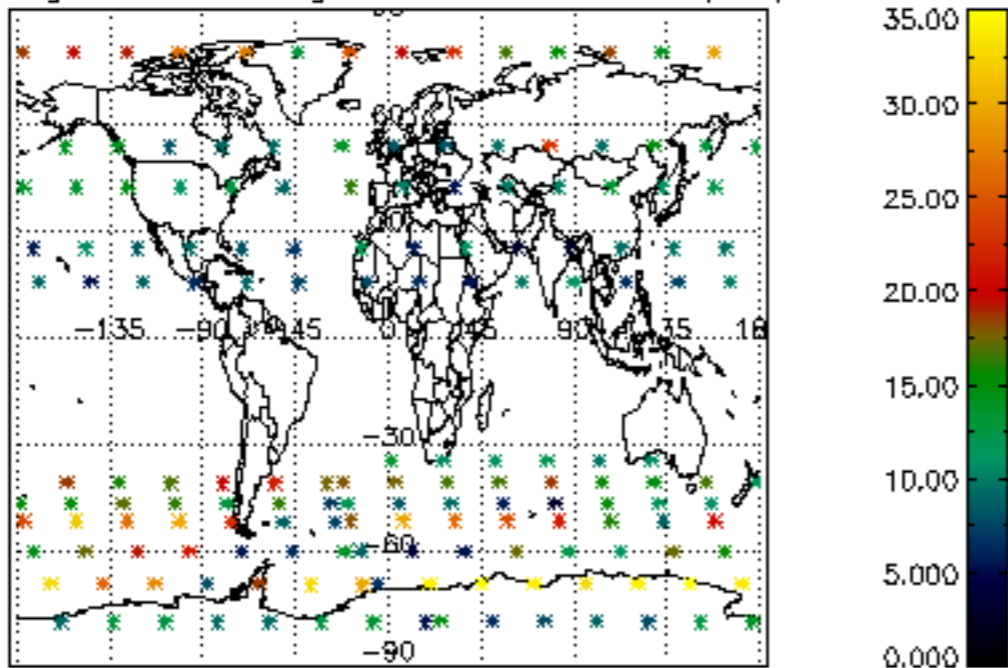
Percentage of cosmic ray hits per profile



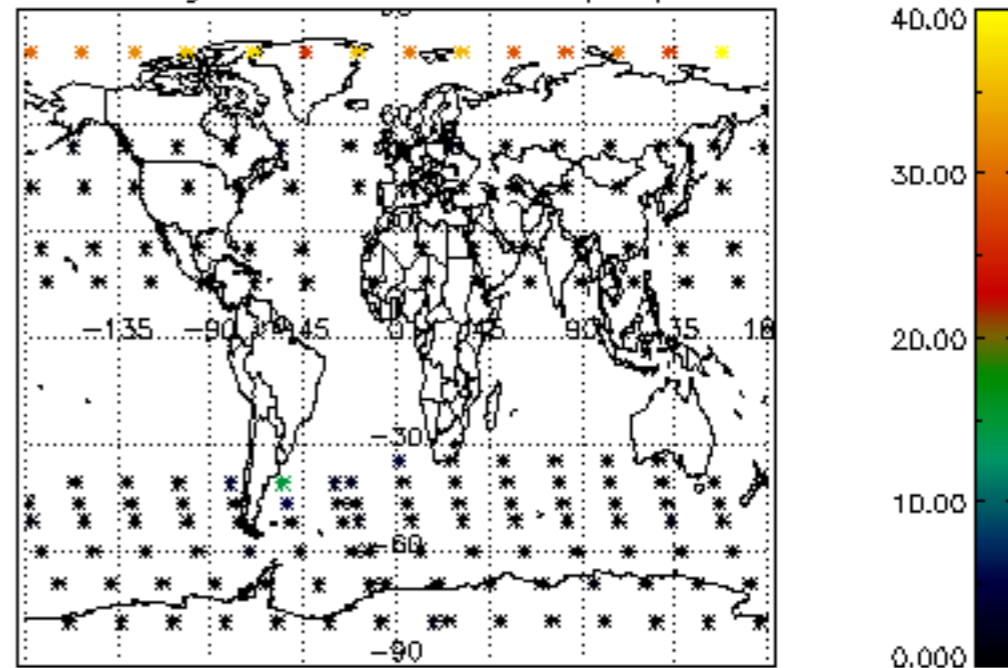
Percentage of datation errors per profile



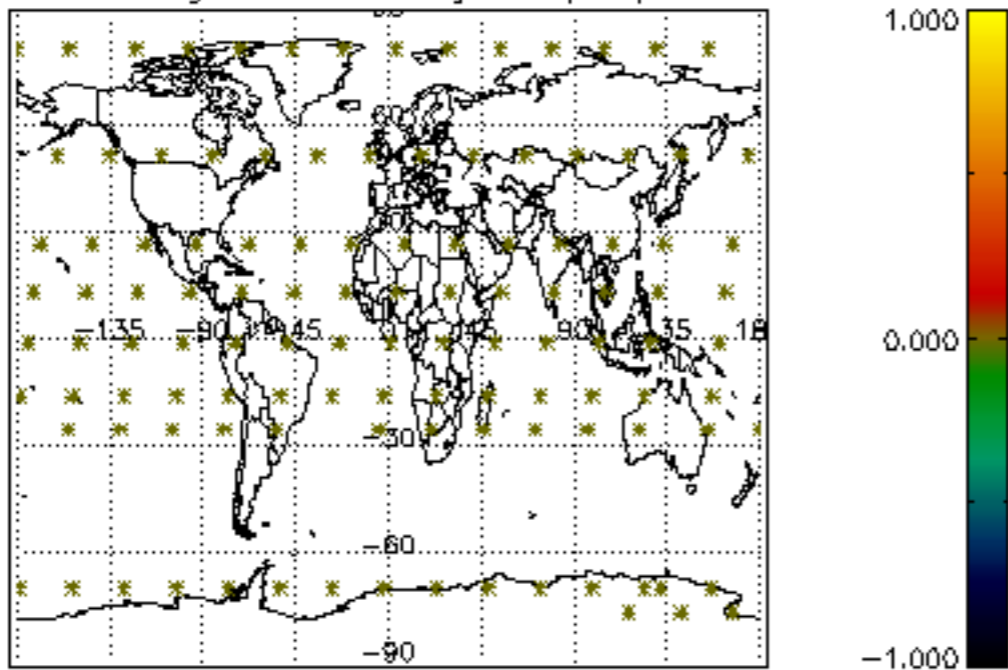
Percentage of star falling outside central band per profile



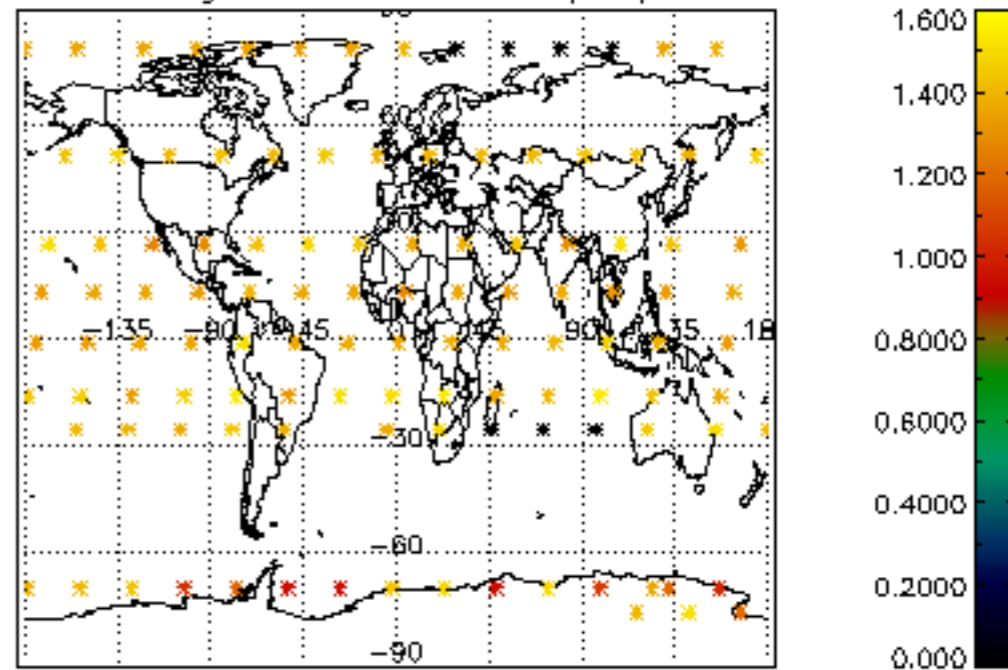
Percentage of saturation errors per profile



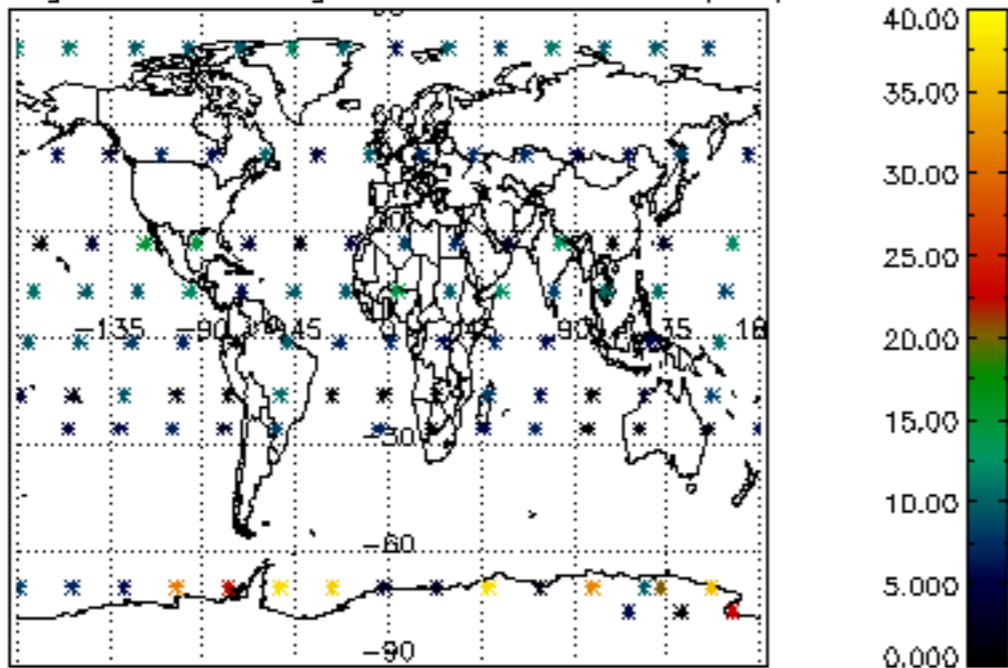
Percentage of cosmic ray hits per profile



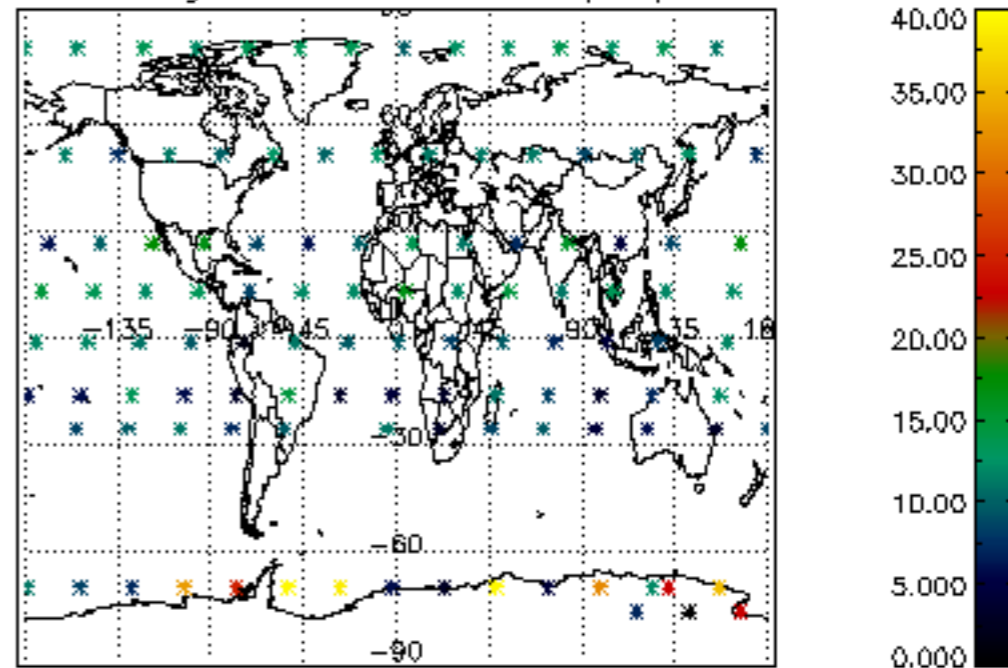
Percentage of datation errors per profile

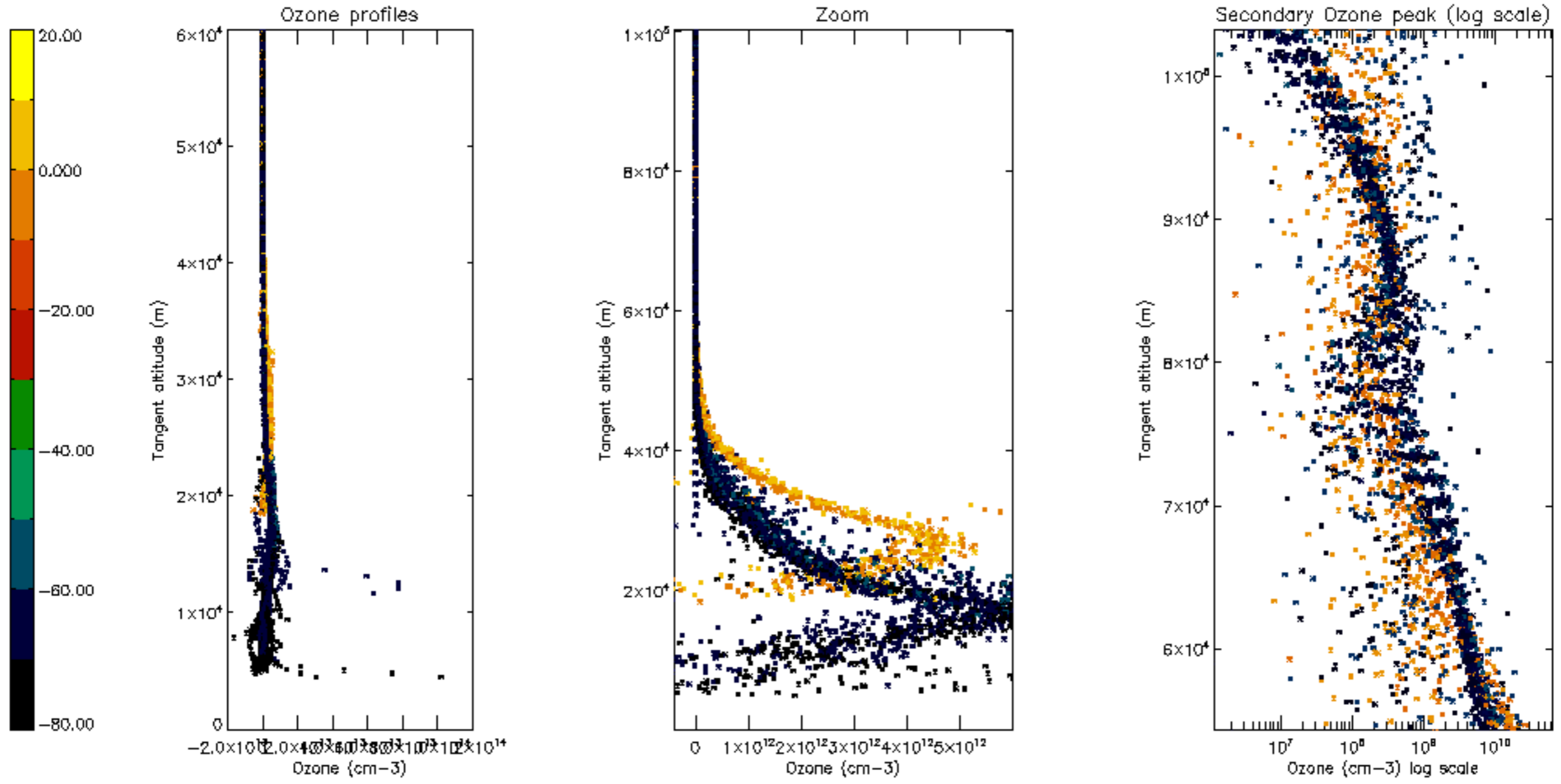


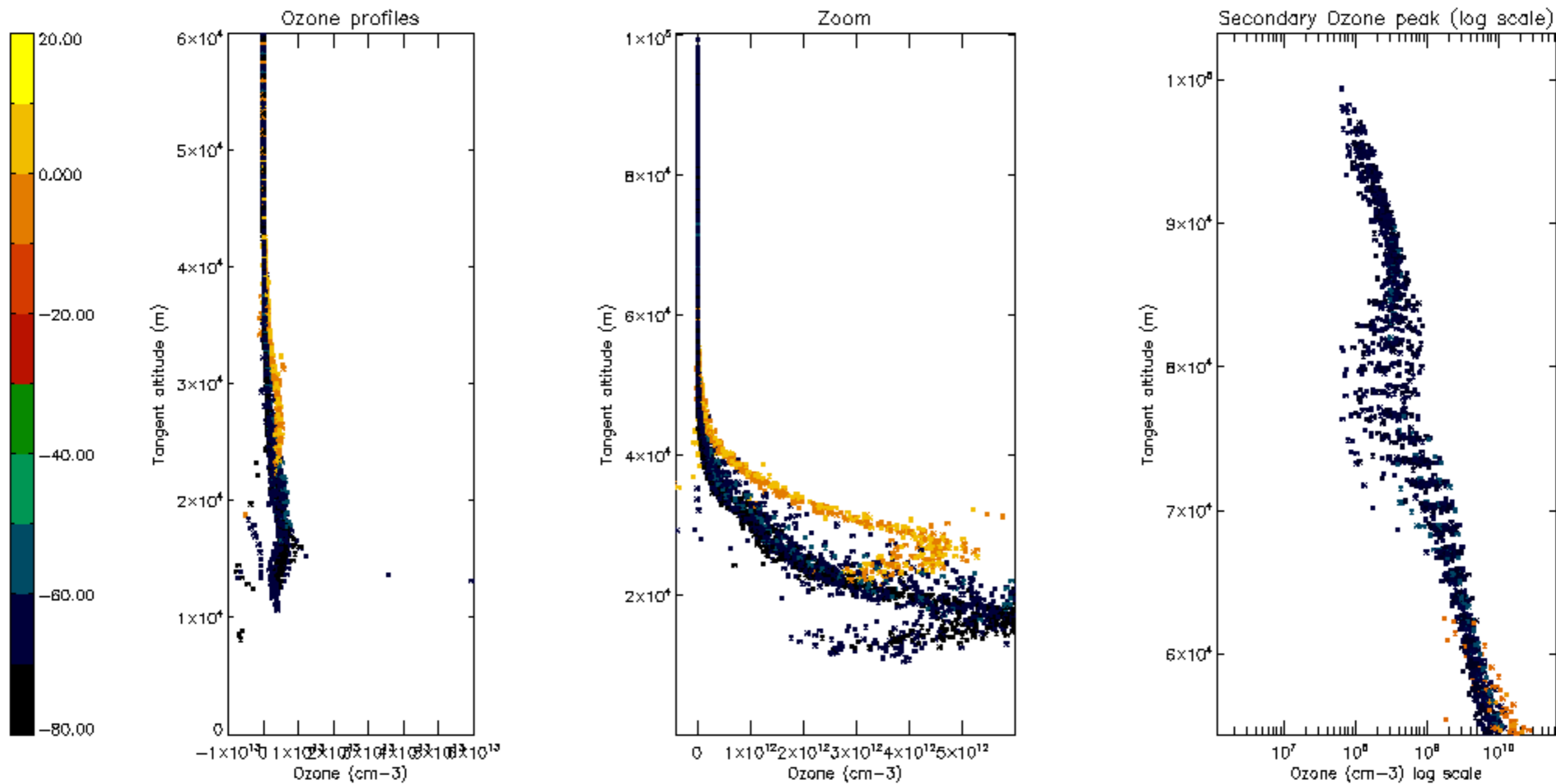
Percentage of star falling outside central band per profile

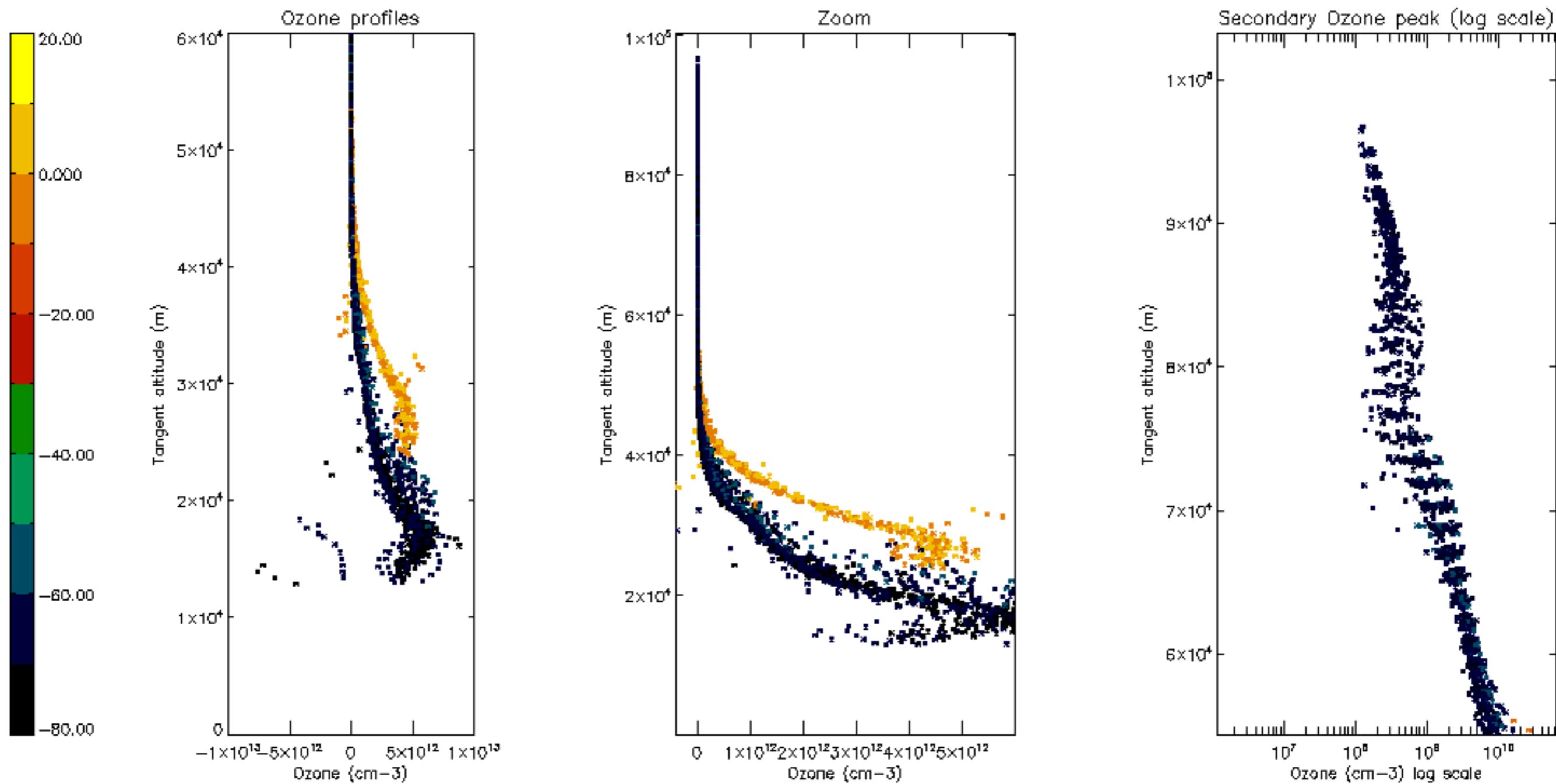


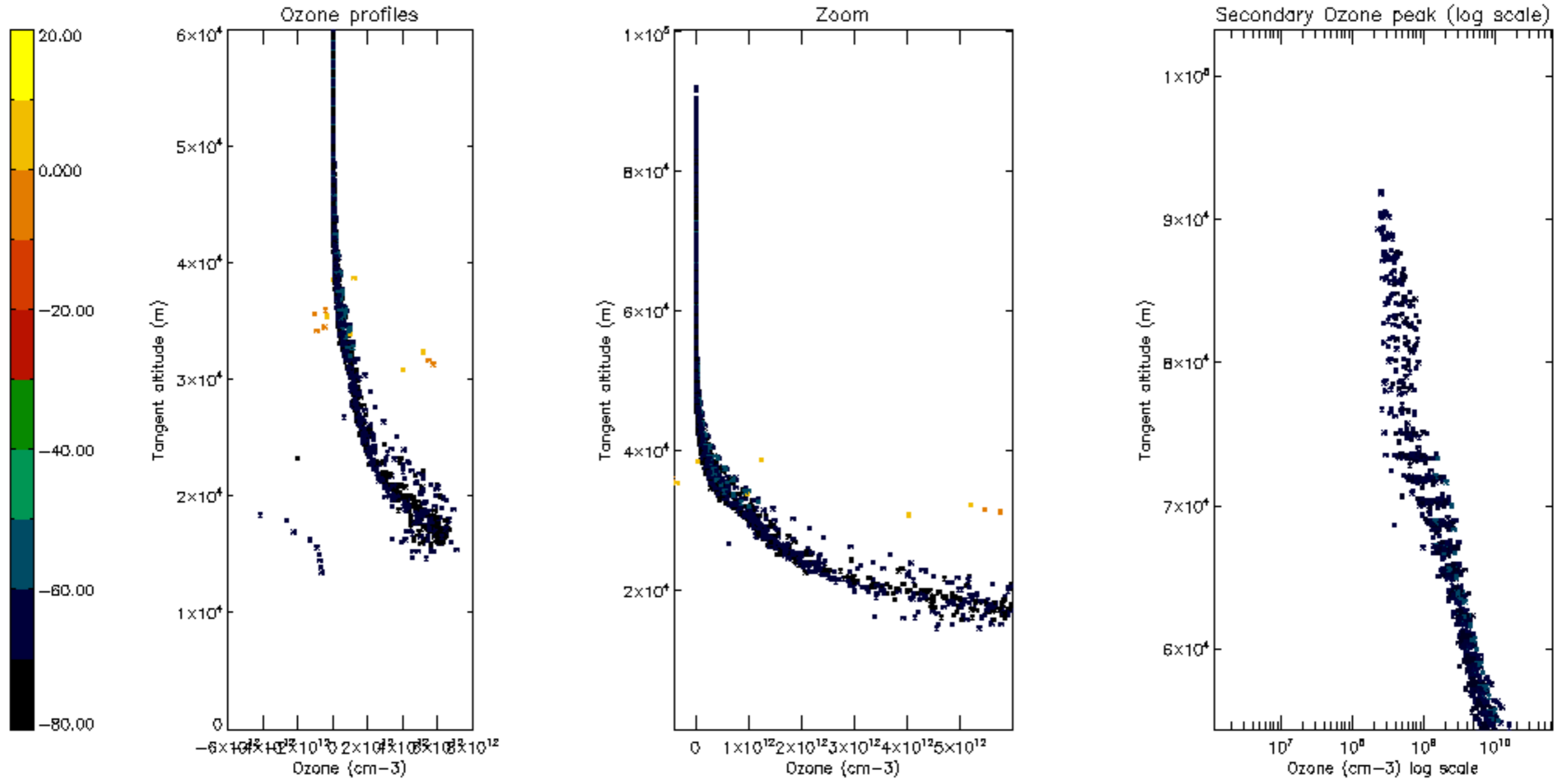
Percentage of saturation errors per profile

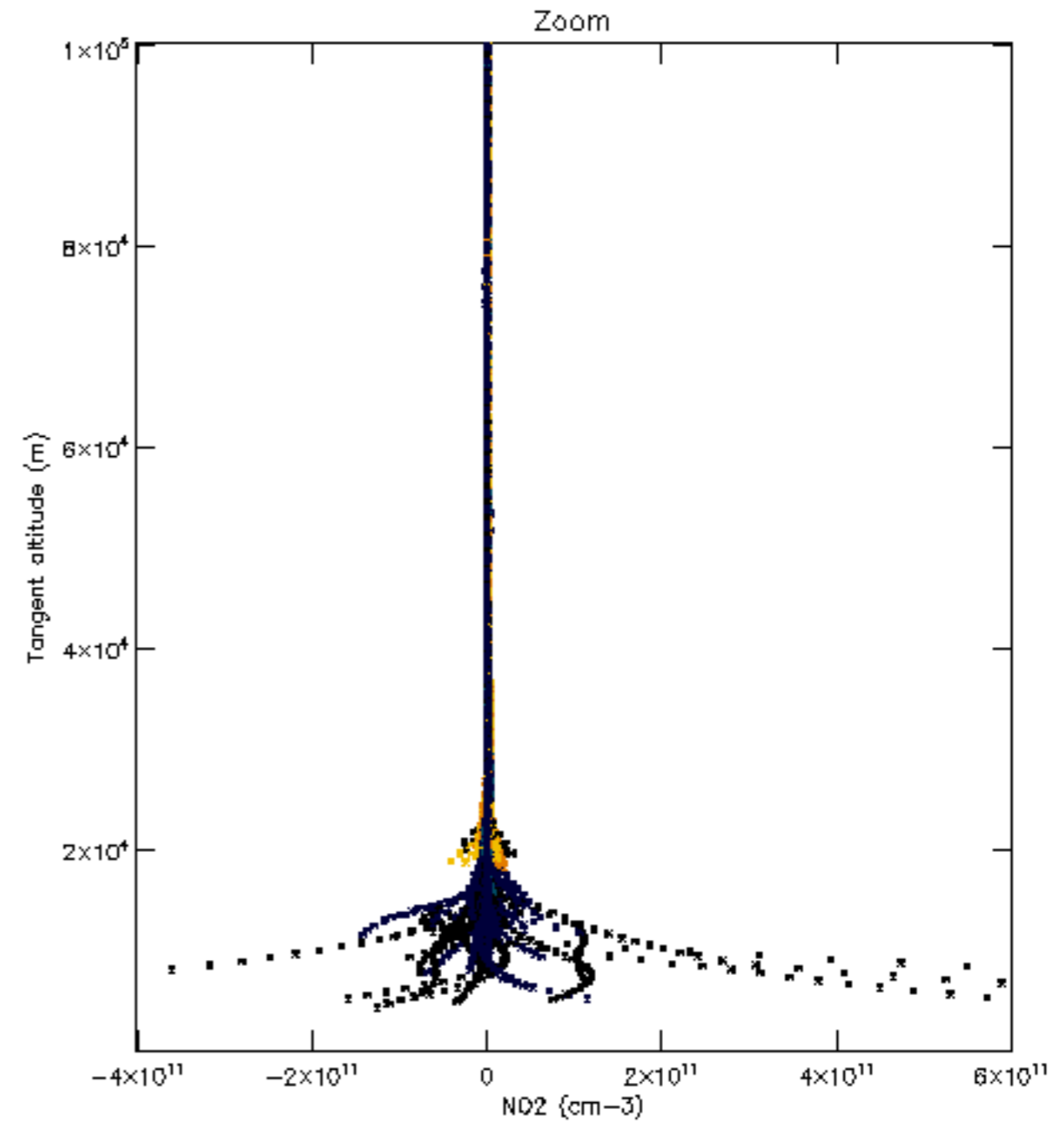
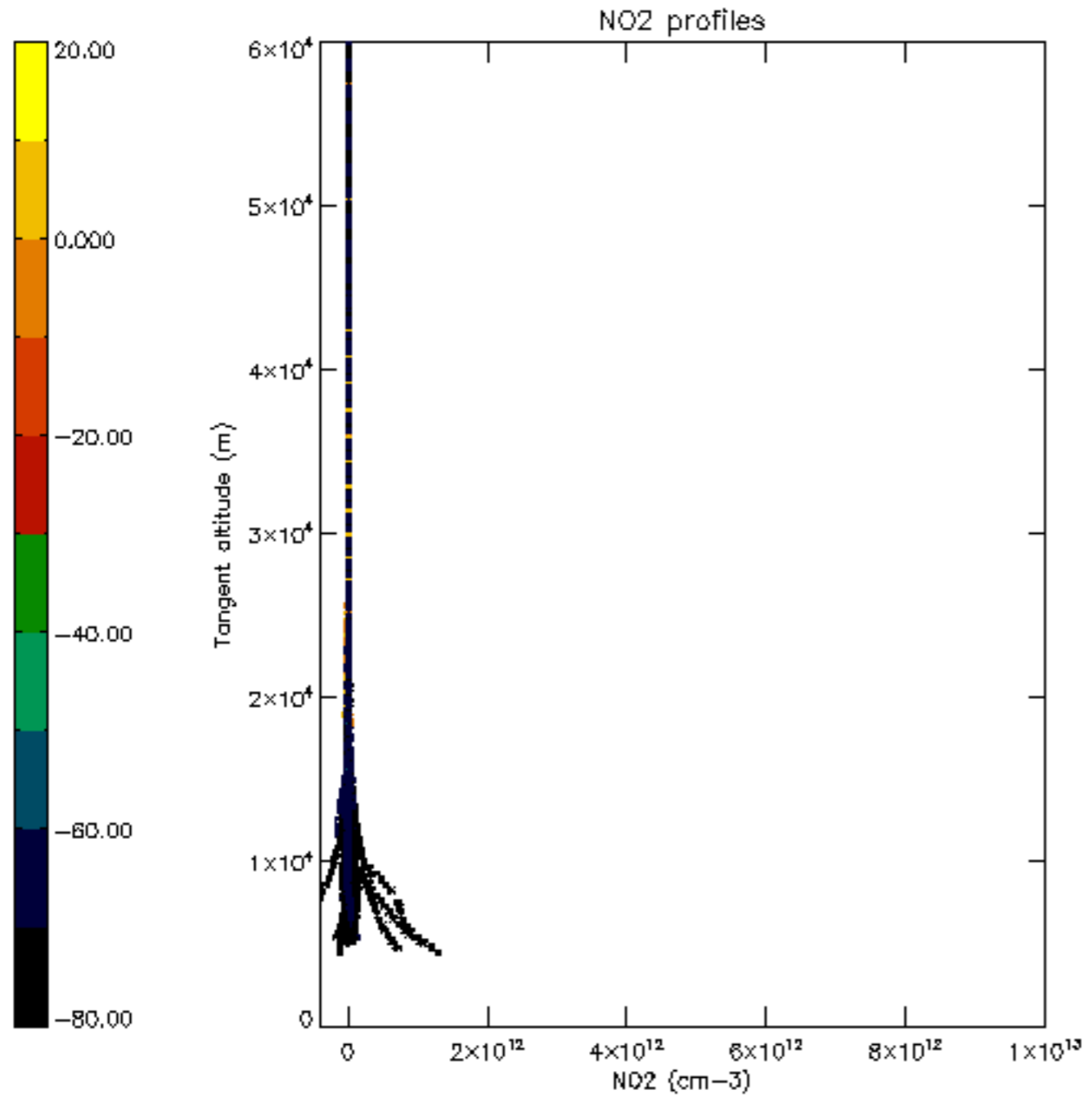


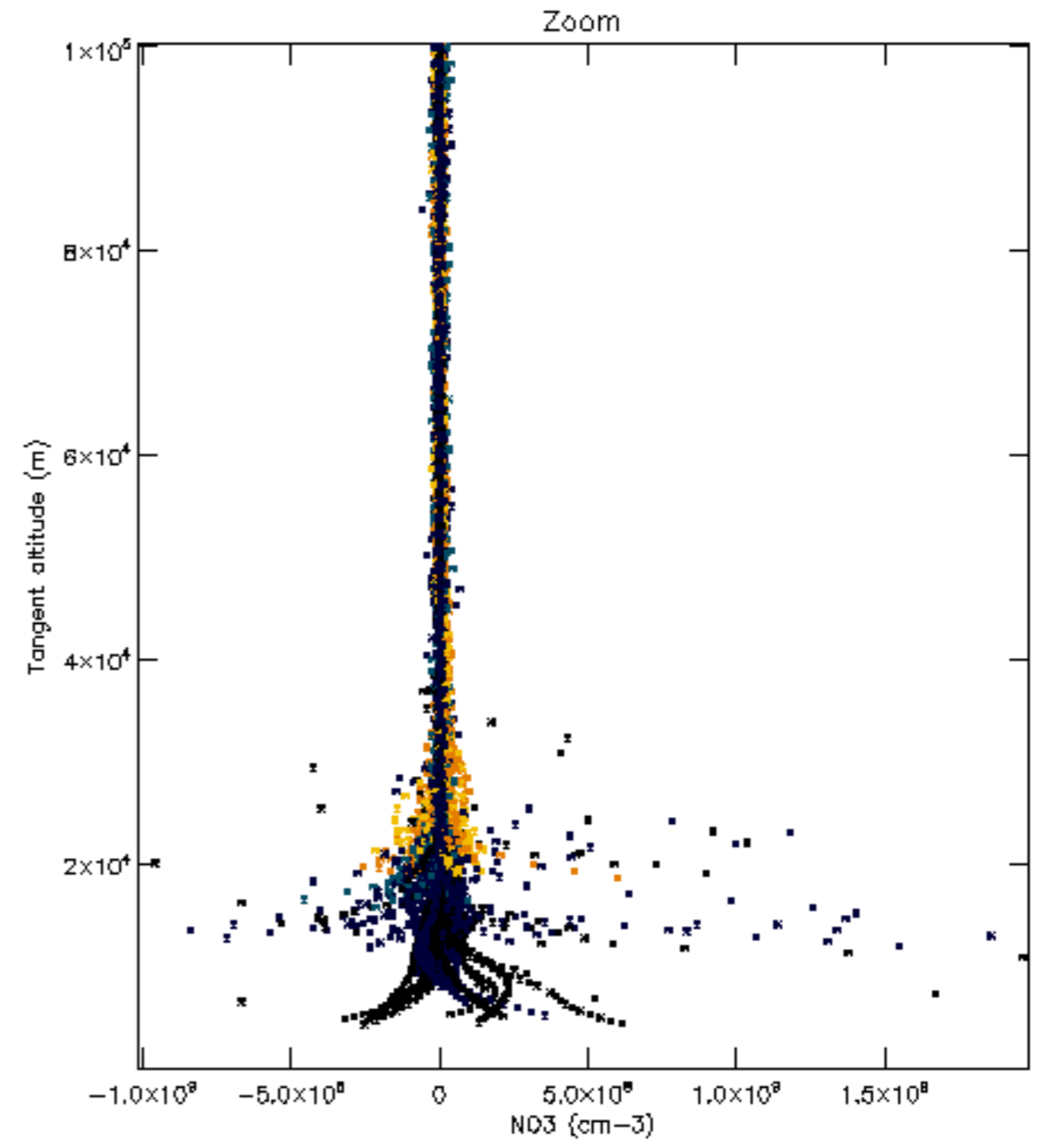
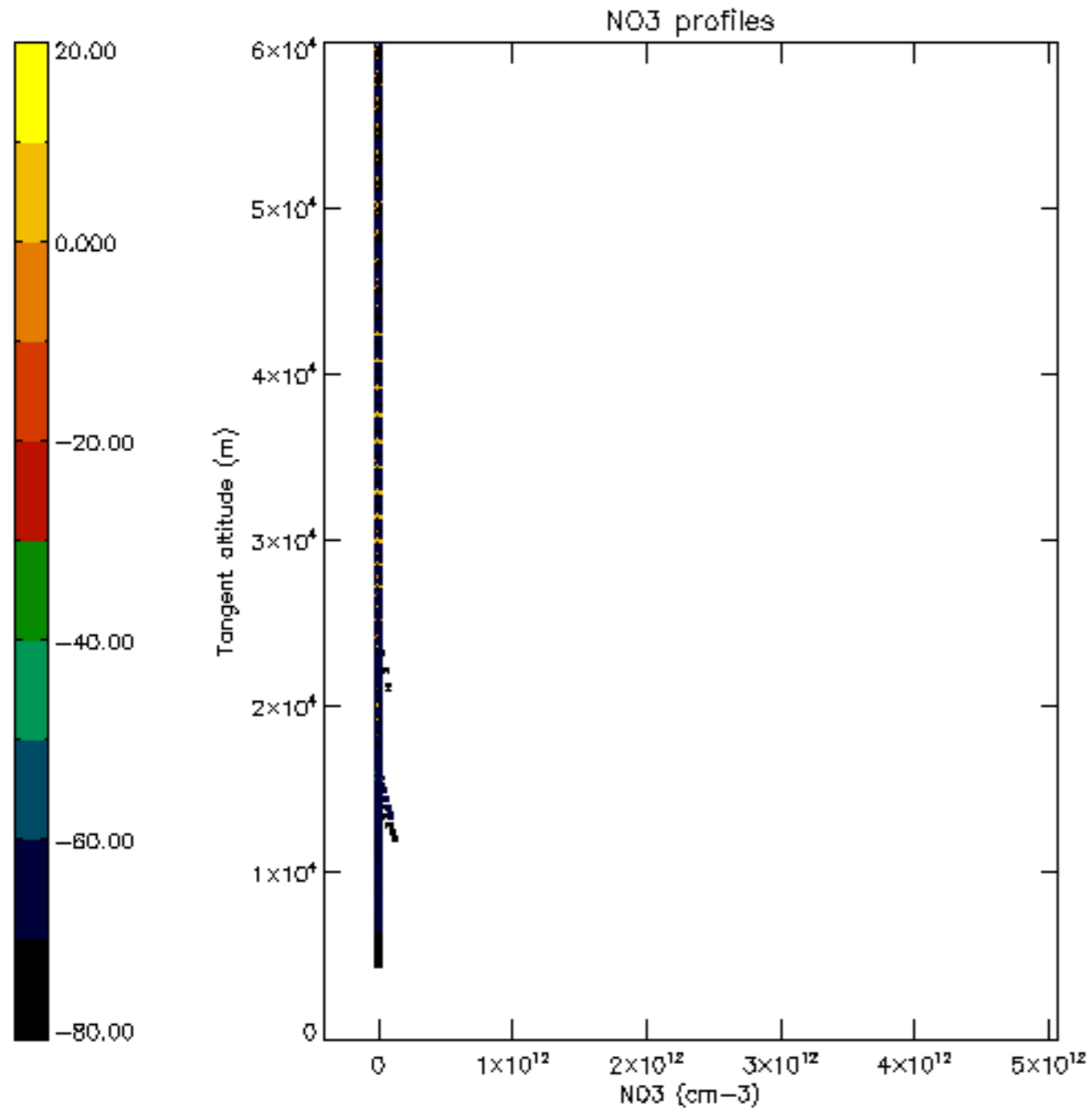


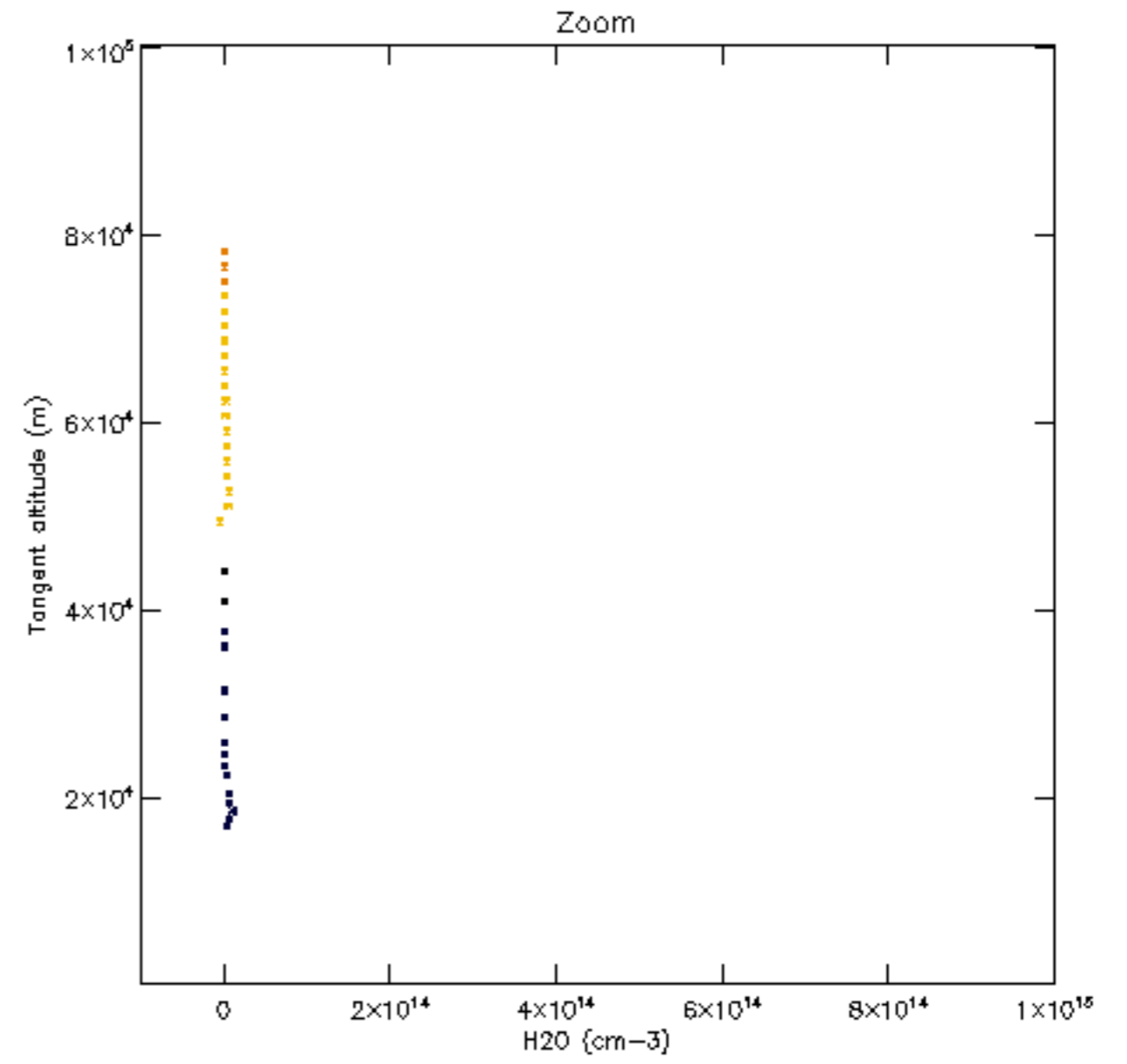
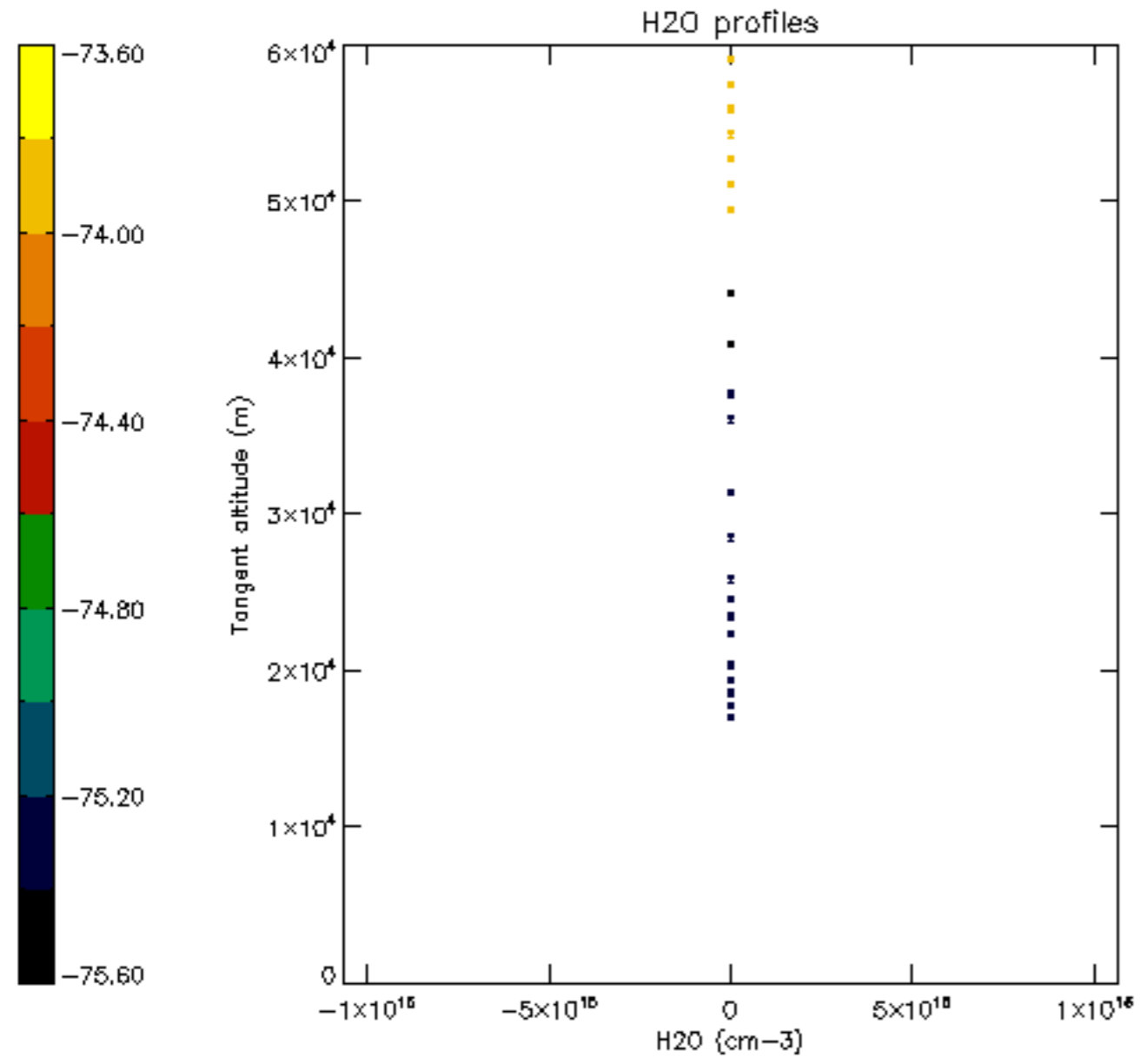


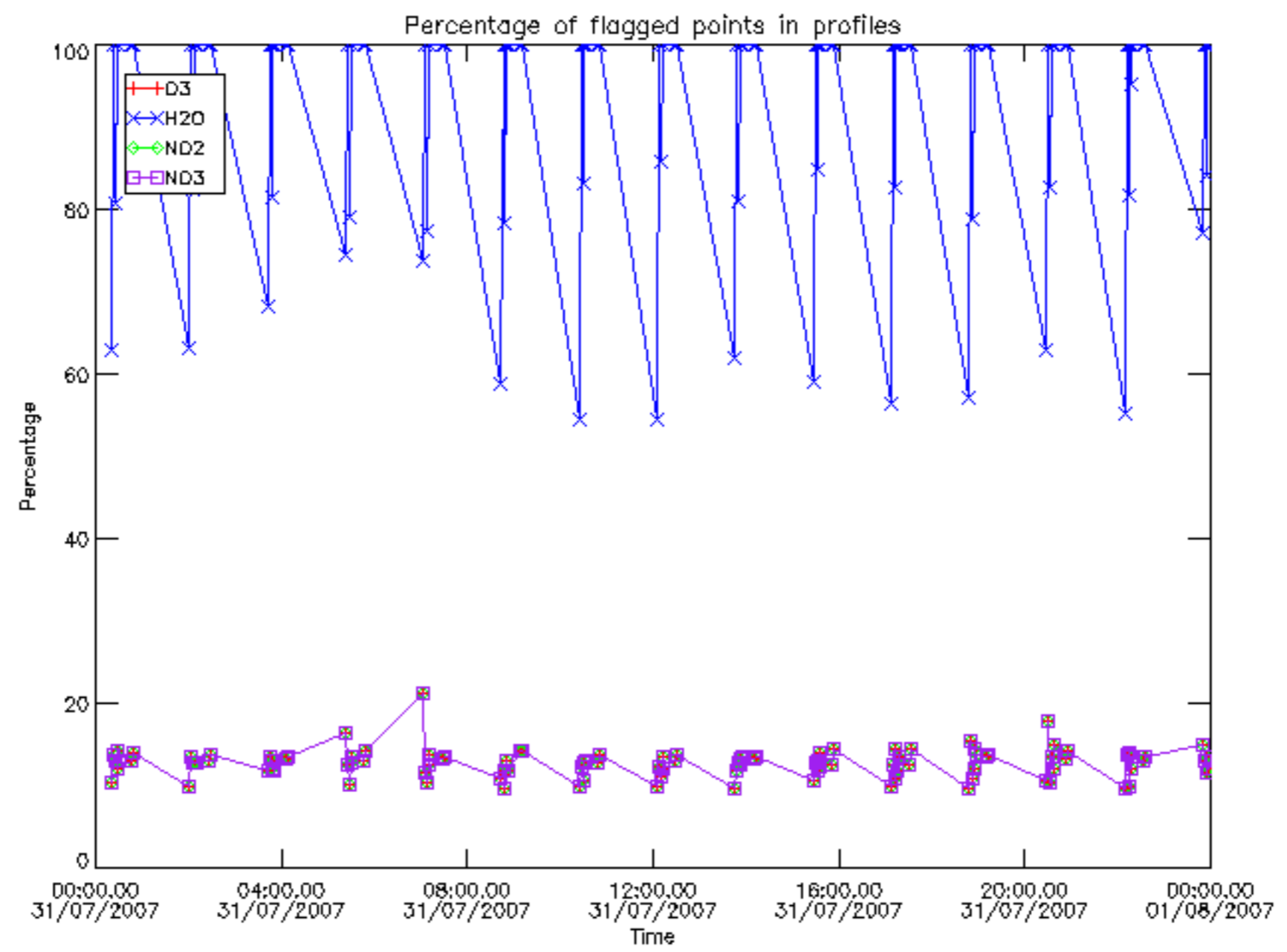




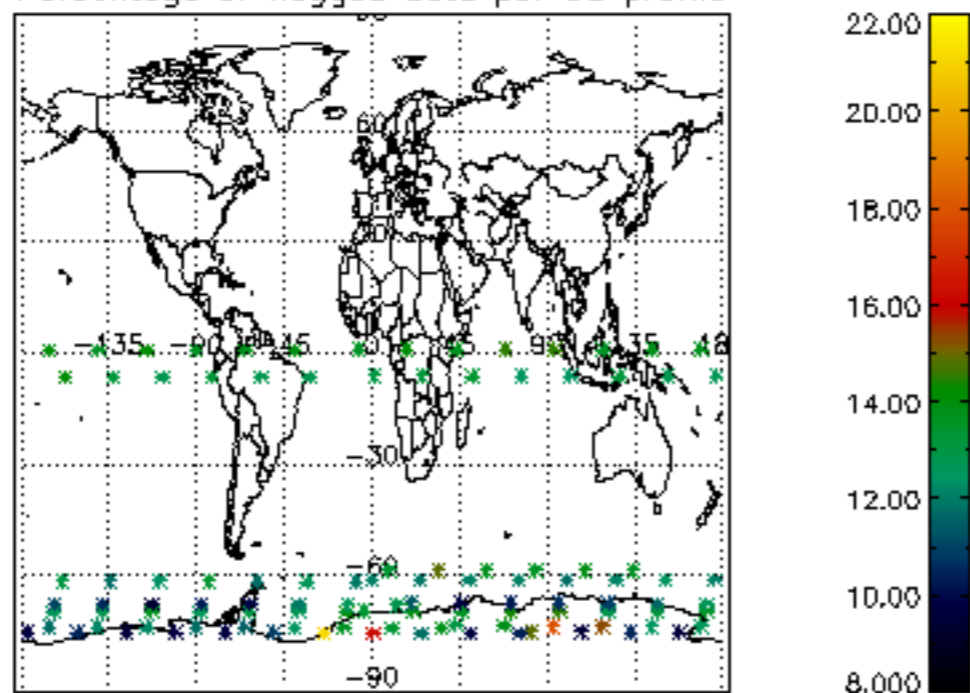




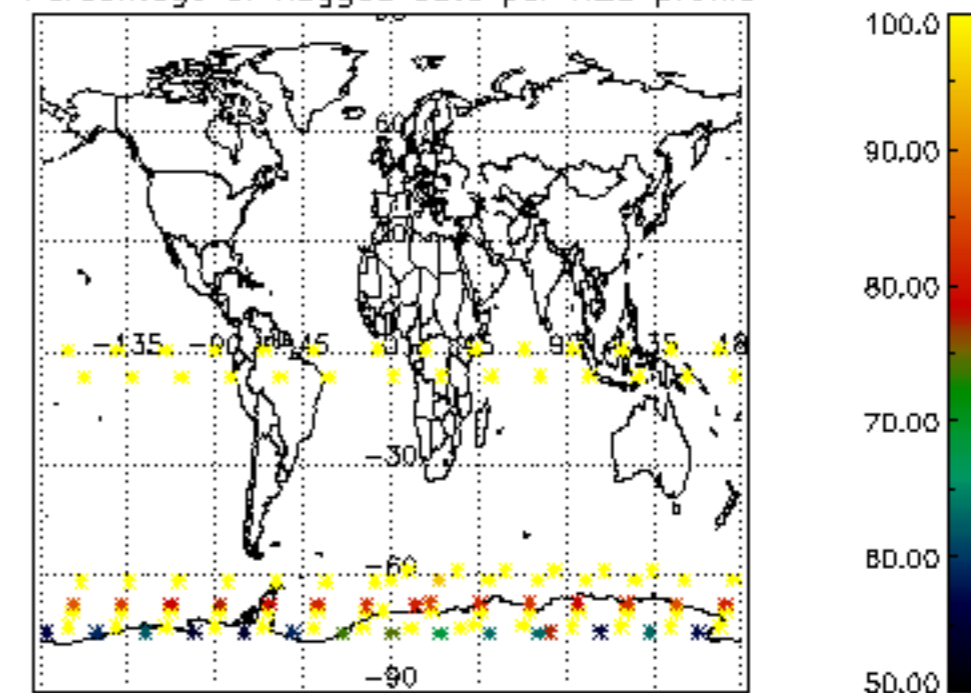




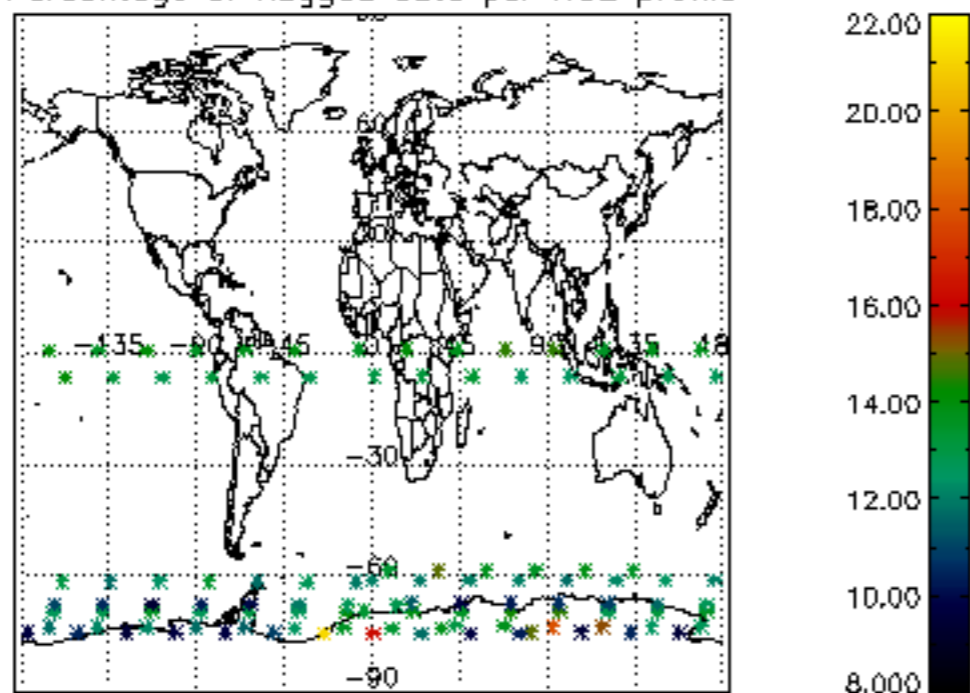
Percentage of flagged data per D3 profile



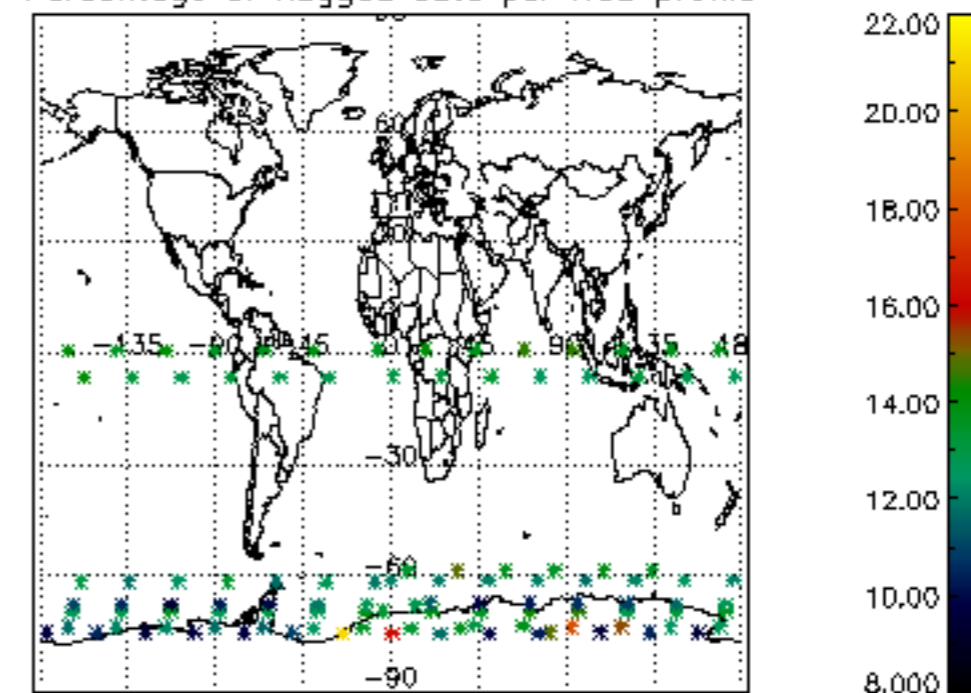
Percentage of flagged data per H2O profile

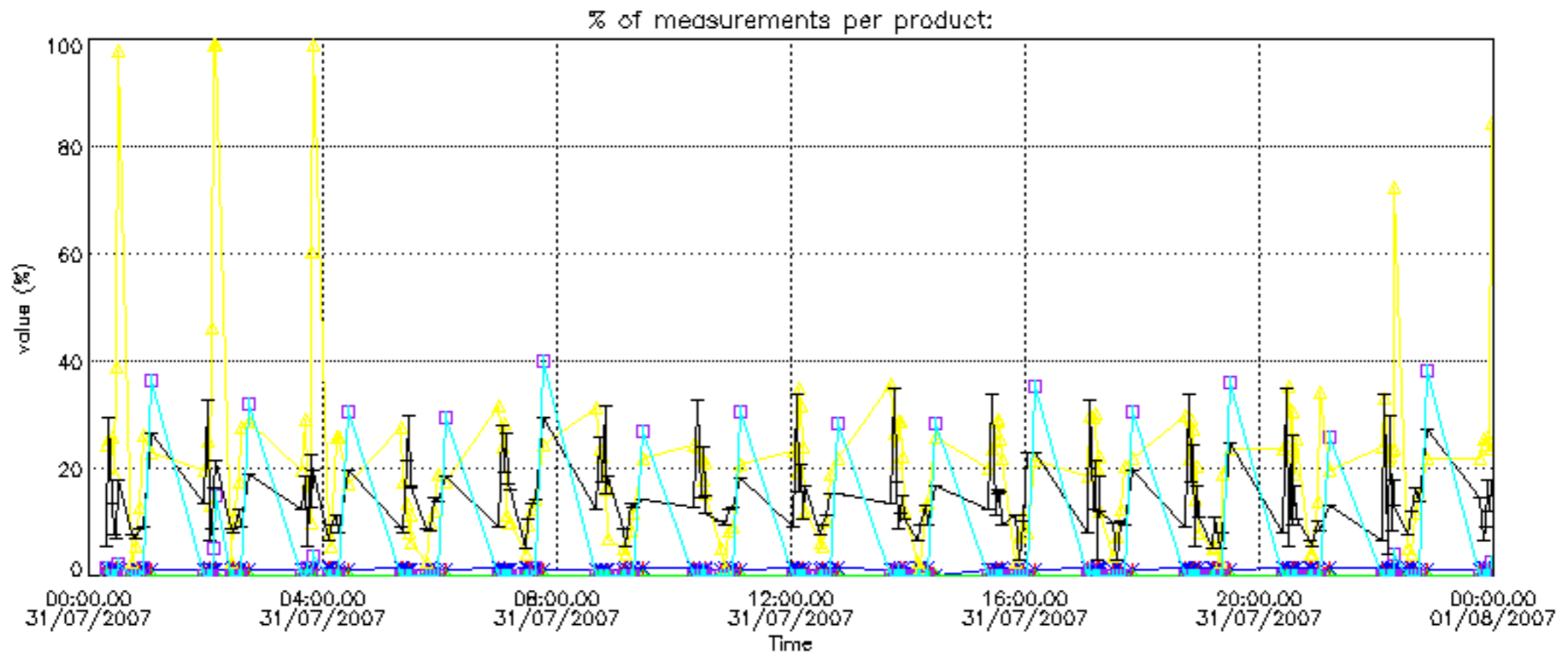


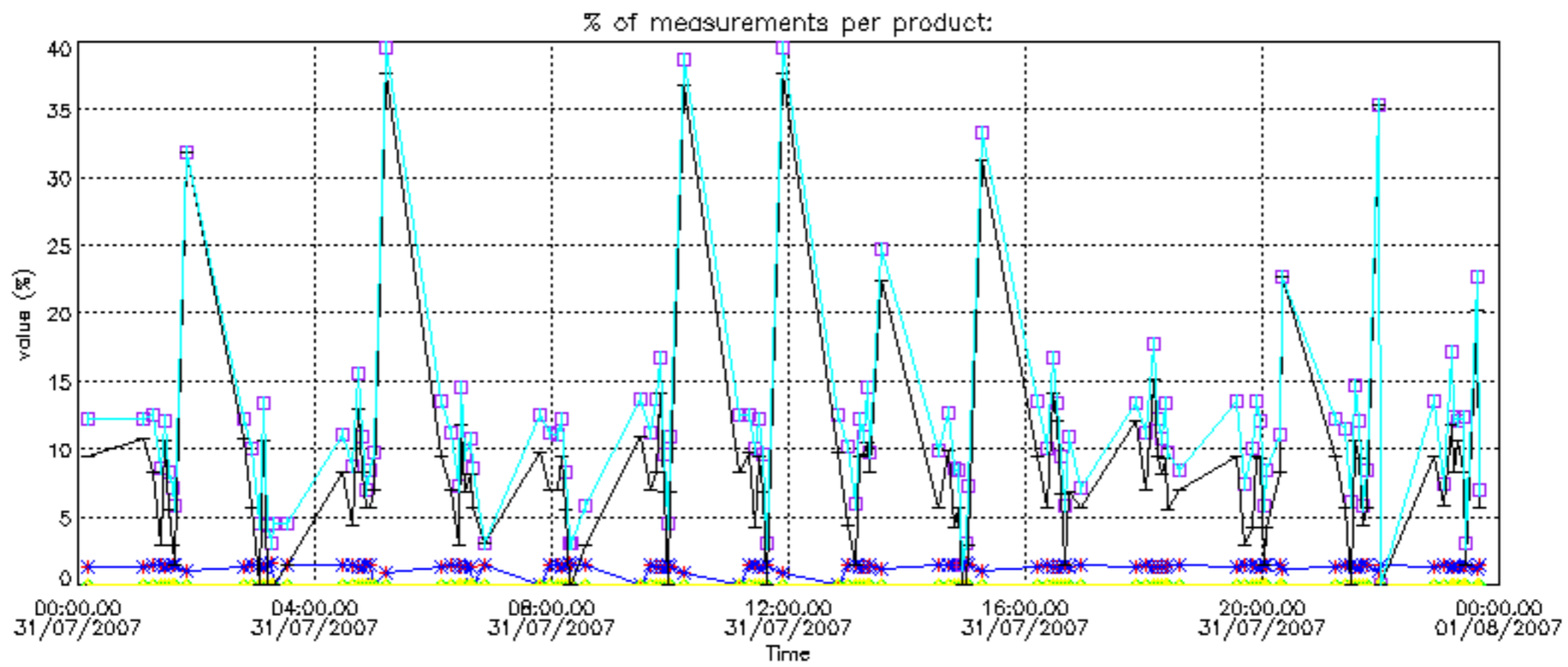
Percentage of flagged data per NO2 profile



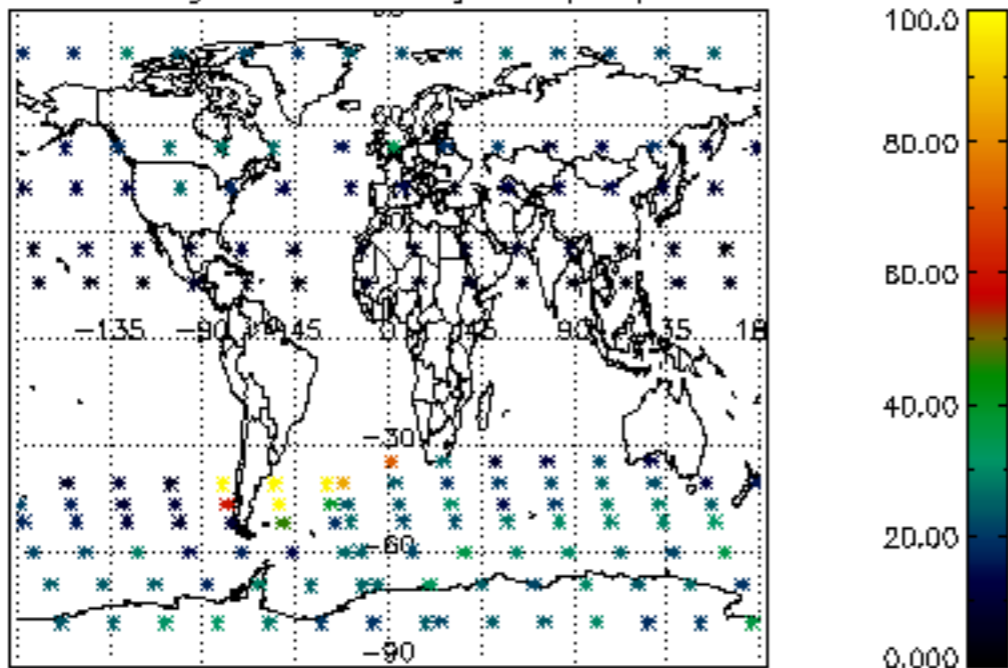
Percentage of flagged data per NO3 profile



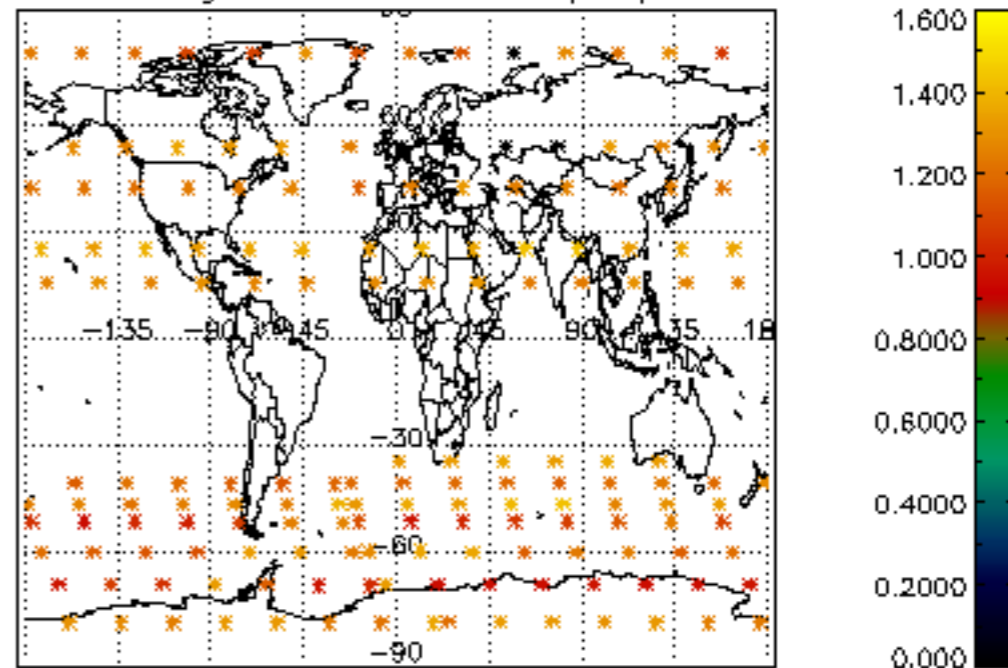




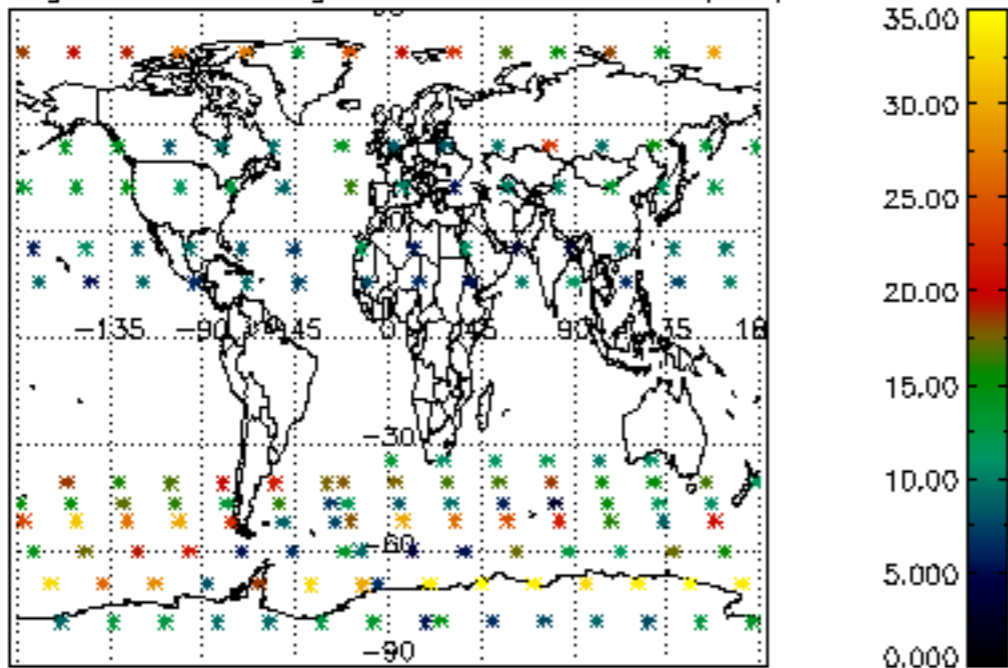
Percentage of cosmic ray hits per profile



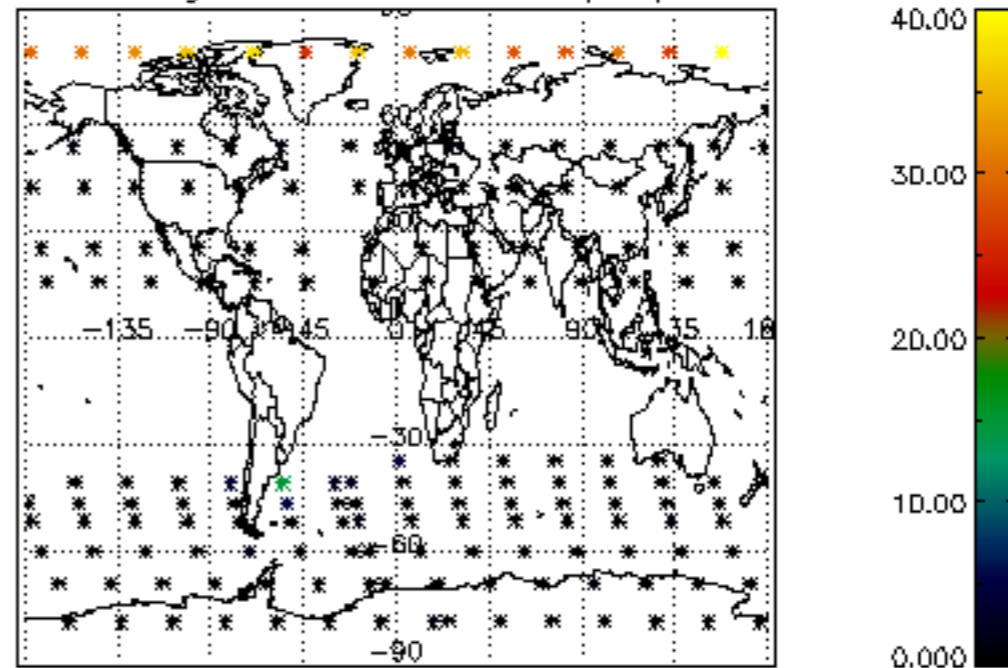
Percentage of datation errors per profile



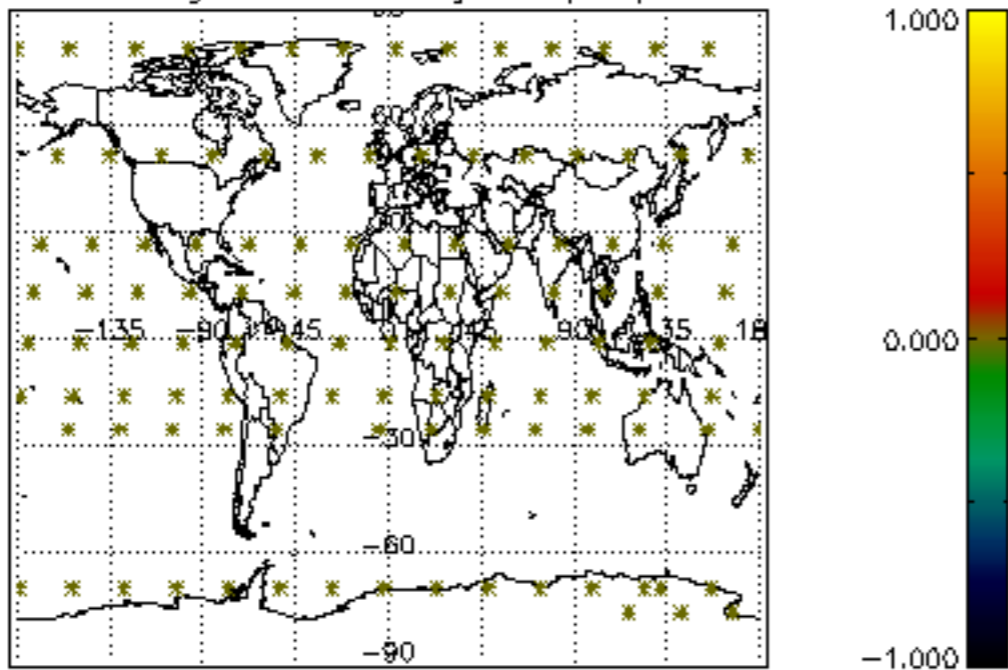
Percentage of star falling outside central band per profile



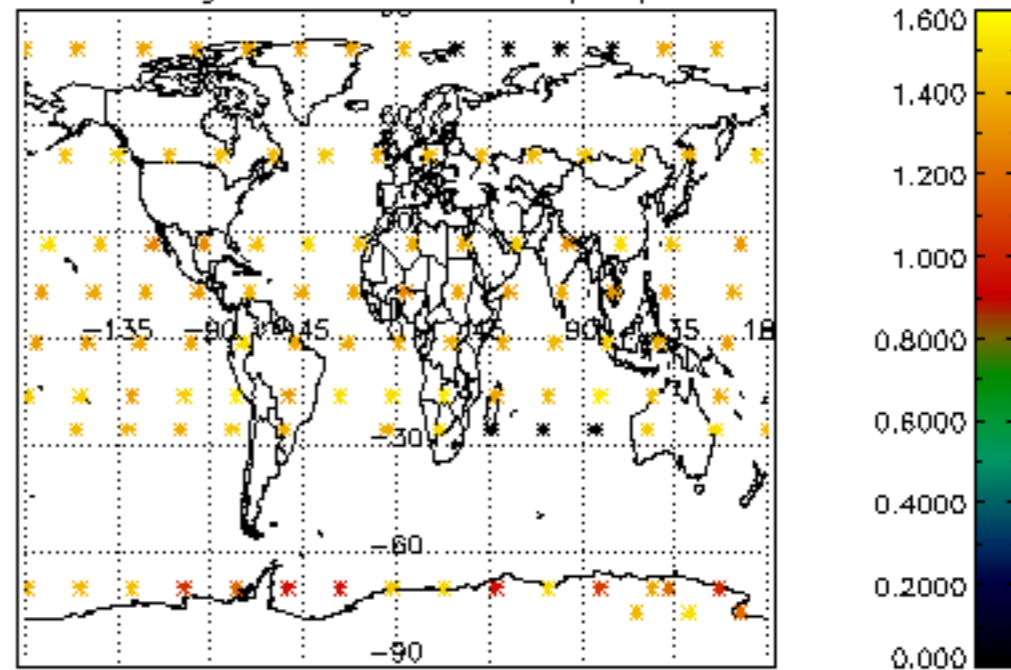
Percentage of saturation errors per profile



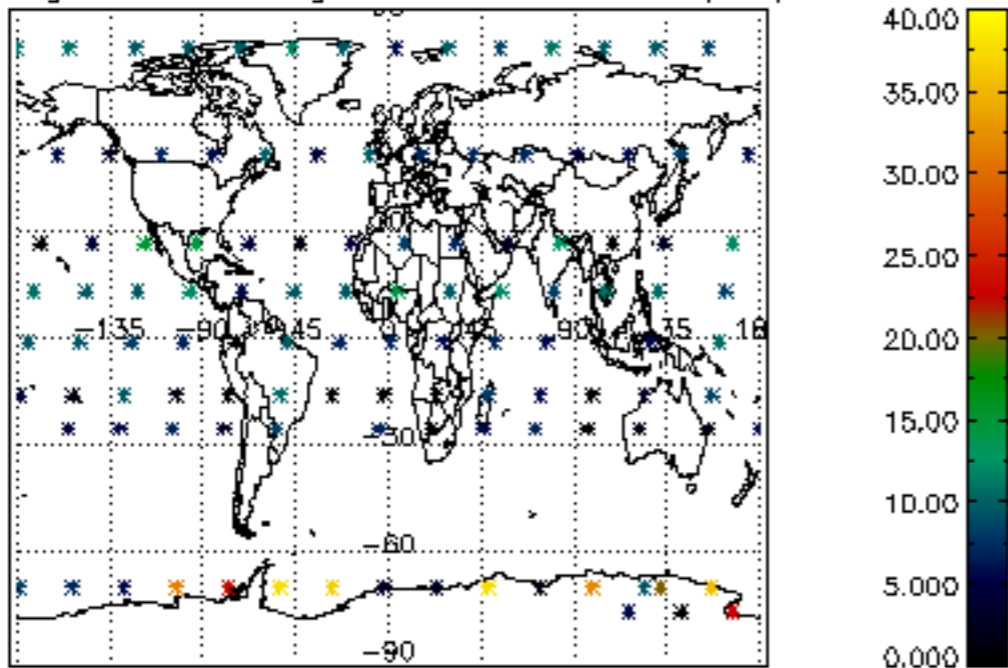
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

