

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Item	Value
Time of report generation	23APR2013 17:13:51
Data source version	GOMOS/6.01
Start time of products	01-04-2006 (01APR2006 00:00:00)
Stop time of products	02-04-2006 (02APR2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	293
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

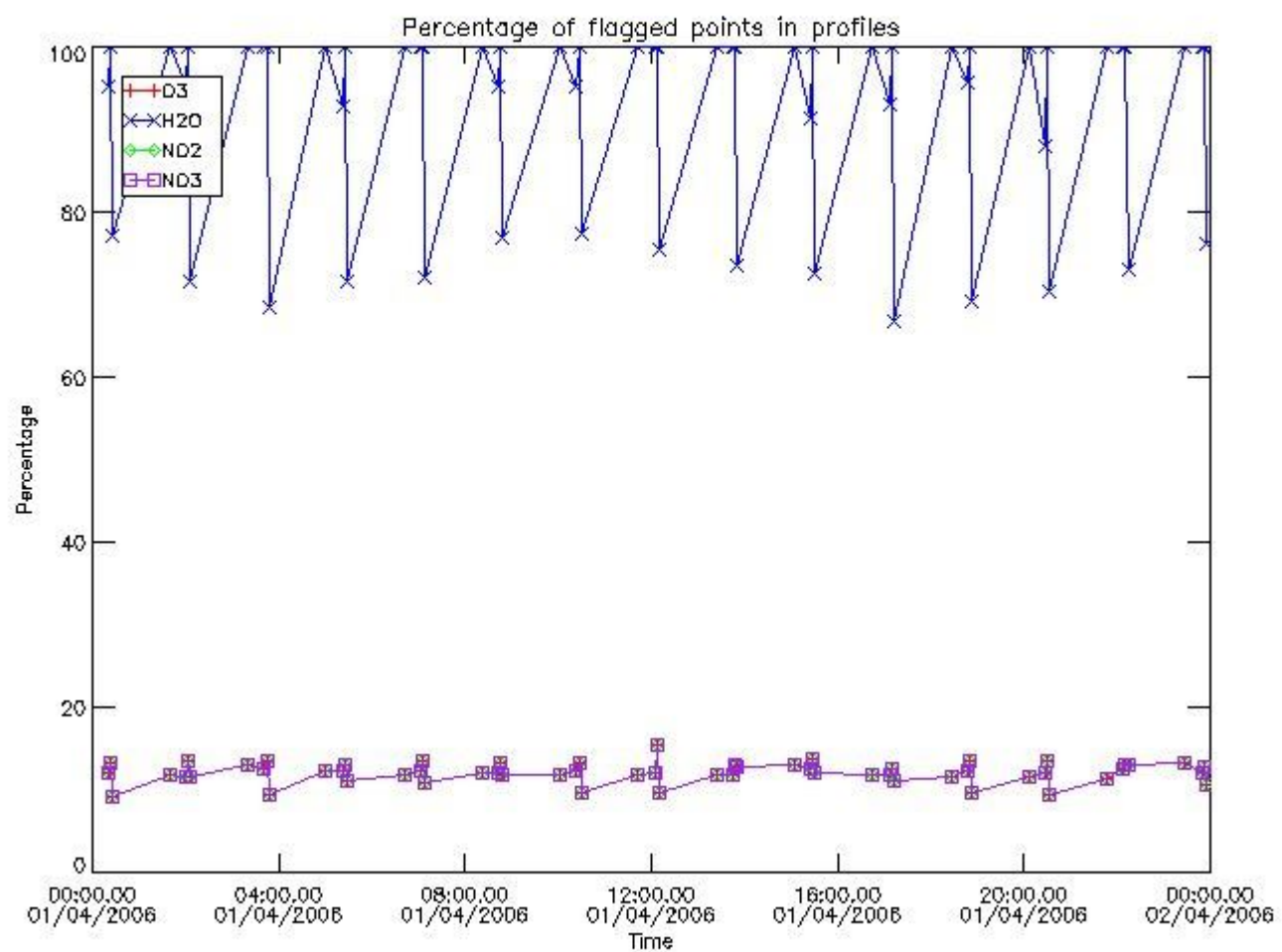
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20060401_002005_000000432046_00260_21356_8720.N1	01-APR-2006 00:20:05	Dark	42.500	141	Bet Ara	2.8400	4600.0	85	21356	No
2	GOM_NL__2PRFIN20060401_002308_000000392046_00260_21356_8721.N1	01-APR-2006 00:23:08	Dark	38.500	134	Bet TrA	2.8100	6600.0	77	21356	No
3	GOM_NL__2PRFIN20060401_002546_000000552046_00260_21356_8722.N1	01-APR-2006 00:25:46	Dark	55.000	4	Alp1Cen	-0.010000	5800.0	110	21356	No
4	GOM_NL__2PRFIN20060401_002831_000000442046_00260_21356_8723.N1	01-APR-2006 00:28:31	Straylight	44.000	78	Alp Lup	2.3040	28000.	88	21356	No
5	GOM_NL__2PRFIN20060401_003007_000000392046_00260_21356_8724.N1	01-APR-2006 00:30:07	Straylight	39.000	81	Eta Cen	2.3560	28000.	78	21356	No
6	GOM_NL__2PRFIN20060401_003127_000000392046_00260_21356_8725.N1	01-APR-2006 00:31:27	Straylight	38.500	64	Gam Cen	2.2000	10600.	77	21356	No
7	GOM_NL__2PRFIN20060401_003400_000000442046_00260_21356_8726.N1	01-APR-2006 00:34:00	Straylight	44.000	123	lot Cen	2.7500	10200.	88	21356	No
8	GOM_NL__2PRFIN20060401_003852_000000472046_00260_21356_8727.N1	01-APR-2006 00:38:52	Tw_i_and_stray	46.500	106	9Bet Crv	2.6480	5600.0	93	21356	No
9	GOM_NL__2PRFIN20060401_004050_000000412046_00260_21356_8728.N1	01-APR-2006 00:40:50	Tw_i_and_stray	40.500	100	4Gam Crv	2.5800	13100.	81	21356	No
10	GOM_NL__2PRFIN20060401_005034_000000392046_00260_21356_8729.N1	01-APR-2006 00:50:34	Bright	39.000	62	94Bet Leo	2.1360	9700.0	78	21356	No
11	GOM_NL__2PRFIN20060401_005210_000000362046_00260_21356_8730.N1	01-APR-2006 00:52:10	Bright	36.000	96	68Del Leo	2.5600	9300.0	72	21356	No
12	GOM_NL__2PRFIN20060401_005859_000000372046_00260_21356_8731.N1	01-APR-2006 00:58:59	Bright	37.000	174	52Psi UMa	3.0040	4400.0	74	21356	No
13	GOM_NL__2PRFIN20060401_010201_000000352046_00260_21356_8732.N1	01-APR-2006 01:02:01	Bright	35.000	87	64Gam UMa	2.4330	11000.	70	21356	No
14	GOM_NL__2PRFIN20060401_010351_000000362046_00260_21356_8733.N1	01-APR-2006 01:03:51	Bright	36.000	36	50Alp UMa	1.8000	6300.0	72	21356	No
15	GOM_NL__2PRFIN20060401_011011_000000412046_00260_21356_8734.N1	01-APR-2006 01:10:11	Bright	40.500	60	7Bet UMi	2.0810	3950.0	81	21356	No
16	GOM_NL__2PRFIN20060401_011152_000000332046_00260_21356_8735.N1	01-APR-2006 01:11:52	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	21356	No
17	GOM_NL__2PRFIN20060401_011935_000000372046_00260_21356_8736.N1	01-APR-2006 01:19:35	Bright	36.500	89	5Alp Cep	2.4510	8000.0	73	21356	No
18	GOM_NL__2PRFIN20060401_012446_000000432046_00260_21356_8737.N1	01-APR-2006 01:24:46	Bright	42.500	19	50Alp Cyg	1.2460	10500.	85	21356	No
19	GOM_NL__2PRFIN20060401_012827_000000432046_00260_21356_8738.N1	01-APR-2006 01:28:27	Bright	43.000	92	53Eps Cyg	2.5000	4500.0	86	21356	No
20	GOM_NL__2PRFIN20060401_013459_000000462046_00260_21356_8739.N1	01-APR-2006 01:34:59	Bright	45.500	61	8Eps Peg	2.1000	3900.0	91	21356	No
21	GOM_NL__2PRFIN20060401_013934_000000432046_00260_21356_8740.N1	01-APR-2006 01:39:34	Dark	43.000	154	22Bet Aqr	2.8990	5700.0	86	21356	No
22	GOM_NL__2PRFIN20060401_020041_000000442046_00261_21357_8720.N1	01-APR-2006 02:00:41	Dark	44.000	141	Bet Ara	2.8400	4600.0	88	21357	No
23	GOM_NL__2PRFIN20060401_020344_000000382046_00261_21357_8721.N1	01-APR-2006 02:03:44	Dark	37.500	134	Bet TrA	2.8100	6600.0	75	21357	No
24	GOM_NL__2PRFIN20060401_020623_000000452046_00261_21357_8722.N1	01-APR-2006 02:06:23	Dark	44.500	4	Alp1Cen	-0.010000	5800.0	89	21357	No
25	GOM_NL__2PRFIN20060401_020907_000000432046_00261_21357_8723.N1	01-APR-2006 02:09:07	Straylight	43.000	78	Alp Lup	2.3040	28000.	86	21357	No
26	GOM_NL__2PRFIN20060401_021043_000000392046_00261_21357_8724.N1	01-APR-2006 02:10:43	Straylight	39.000	81	Eta Cen	2.3560	28000.	78	21357	No
27	GOM_NL__2PRFIN20060401_021203_000000422046_00261_21357_8725.N1	01-APR-2006 02:12:03	Straylight	42.000	64	Gam Cen	2.2000	10600.	84	21357	No
28	GOM_NL__2PRFIN20060401_021437_000000452046_00261_21357_8726.N1	01-APR-2006 02:14:37	Straylight	45.000	123	lot Cen	2.7500	10200.	90	21357	No
29	GOM_NL__2PRFIN20060401_021928_000000462046_00261_21357_8727.N1	01-APR-2006 02:19:28	Tw_i_and_stray	46.000	106	9Bet Crv	2.6480	5600.0	92	21357	No
30	GOM_NL__2PRFIN20060401_022126_000000422046_00261_21357_8728.N1	01-APR-2006 02:21:26	Tw_i_and_stray	41.500	100	4Gam Crv	2.5800	13100.	83	21357	No
31	GOM_NL__2PRFIN20060401_023109_000000382046_00261_21357_8729.N1	01-APR-2006 02:31:09	Bright	38.000	62	94Bet Leo	2.1360	9700.0	76	21357	No
32	GOM_NL__2PRFIN20060401_023245_000000362046_00261_21357_8730.N1	01-APR-2006 02:32:45	Bright	35.500	96	68Del Leo	2.5600	9300.0	71	21357	No
33	GOM_NL__2PRFIN20060401_023935_000000382046_00261_21357_8731.N1	01-APR-2006 02:39:35	Bright	37.500	174	52Psi UMa	3.0040	4400.0	75	21357	No
34	GOM_NL__2PRFIN20060401_024237_000000372046_00261_21357_8732.N1	01-APR-2006 02:42:37	Bright	36.500	87	64Gam UMa	2.4330	11000.	73	21357	No
35	GOM_NL__2PRFIN20060401_024427_000000352046_00261_21357_8733.N1	01-APR-2006 02:44:27	Bright	35.000	36	50Alp UMa	1.8000	6300.0	70	21357	No
36	GOM_NL__2PRFIN20060401_025047_000000382046_00261_21357_8734.N1	01-APR-2006 02:50:47	Bright	37.500	60	7Bet UMi	2.0810	3950.0	75	21357	No
37	GOM_NL__2PRFIN20060401_025228_000000332046_00261_21357_8735.N1	01-APR-2006 02:52:28	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	21357	No
38	GOM_NL__2PRFIN20060401_030010_000000372046_00261_21357_8736.N1	01-APR-2006 03:00:10	Bright	37.000	89	5Alp Cep	2.4510	8000.0	74	21357	No
39	GOM_NL__2PRFIN20060401_030522_000000392046_00261_21357_8737.N1	01-APR-2006 03:05:22	Bright	39.000	19	50Alp Cyg	1.2460	10500.	78	21357	No
40	GOM_NL__2PRFIN20060401_030903_000000442046_00261_21357_8738.N1	01-APR-2006 03:09:03	Bright	43.500	92	53Eps Cyg	2.5000	4500.0	87	21357	No
41	GOM_NL__2PRFIN20060401_031535_000000462046_00261_21357_8739.N1	01-APR-2006 03:15:35	Bright	46.000	61	8Eps Peg	2.1000	3900.0	92	21357	No
42	GOM_NL__2PRFIN20060401_032010_000000402046_00261_21357_8740.N1	01-APR-2006 03:20:10	Dark	39.500	154	22Bet Aqr	2.8990	5700.0	79	21357	No

279	GOM_NL__2PRFIN20060401_224646_000000362046_00273_21369_8770.N1	01-APR-2006 22:46:46	Bright	36.000	174	52Psi UMa	3.0040	4400.0	72	21369	No
280	GOM_NL__2PRFIN20060401_224946_000000382046_00273_21369_8771.N1	01-APR-2006 22:49:46	Bright	38.000	87	64Gam UMa	2.4330	11000.	76	21369	No
281	GOM_NL__2PRFIN20060401_225137_000000392046_00273_21369_8772.N1	01-APR-2006 22:51:37	Bright	39.000	36	50Alp UMa	1.8000	6300.0	78	21369	No
282	GOM_NL__2PRFIN20060401_225754_000000402046_00273_21369_8773.N1	01-APR-2006 22:57:54	Bright	40.000	60	7Bet UMi	2.0810	3950.0	80	21369	No
283	GOM_NL__2PRFIN20060401_225940_000000362046_00273_21369_8774.N1	01-APR-2006 22:59:40	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	21369	No
284	GOM_NL__2PRFIN20060401_230721_000000542046_00273_21369_8775.N1	01-APR-2006 23:07:21	Bright	54.000	89	5Alp Cep	2.4510	8000.0	108	21369	No
285	GOM_NL__2PRFIN20060401_231233_000000392046_00273_21369_8776.N1	01-APR-2006 23:12:33	Bright	39.000	19	50Alp Cyg	1.2460	10500.	78	21369	No
286	GOM_NL__2PRFIN20060401_231615_000000442046_00273_21369_8777.N1	01-APR-2006 23:16:15	Bright	44.000	92	53Eps Cyg	2.5000	4500.0	88	21369	No
287	GOM_NL__2PRFIN20060401_232250_000000452046_00273_21369_8778.N1	01-APR-2006 23:22:50	Twilight	45.000	61	8Eps Peg	2.1000	3900.0	90	21369	No
288	GOM_NL__2PRFIN20060401_232726_000000422046_00273_21369_8779.N1	01-APR-2006 23:27:26	Dark	41.500	154	22Bet Aqr	2.8990	5700.0	83	21369	No
289	GOM_NL__2PRFIN20060401_234838_000000432046_00274_21370_8760.N1	01-APR-2006 23:48:38	Dark	42.500	141	Bet Ara	2.8400	4600.0	85	21370	No
290	GOM_NL__2PRFIN20060401_235138_000000402046_00274_21370_8761.N1	01-APR-2006 23:51:38	Dark	40.000	134	Bet TrA	2.8100	6600.0	80	21370	No
291	GOM_NL__2PRFIN20060401_235416_000000532046_00274_21370_8762.N1	01-APR-2006 23:54:16	Dark	53.000	4	Alp1Cen	-0.010000	5800.0	106	21370	No
292	GOM_NL__2PRFIN20060401_235703_000000462046_00274_21370_8763.N1	01-APR-2006 23:57:03	Straylight	45.500	78	Alp Lup	2.3040	28000.	91	21370	No
293	GOM_NL__2PRFIN20060401_235954_000000422046_00274_21370_8764.N1	01-APR-2006 23:59:54	Straylight	42.000	64	Gam Cen	2.2000	10600.	84	21370	No

3. Quality information per product

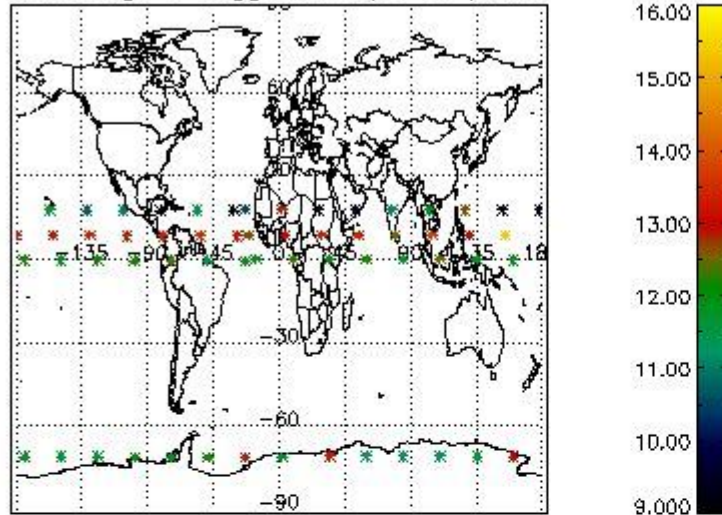
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

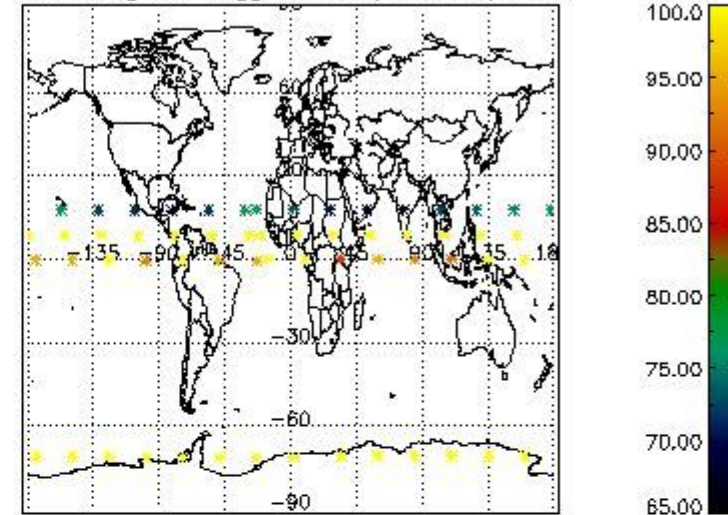


3.2 Plot quality information per product (world map)

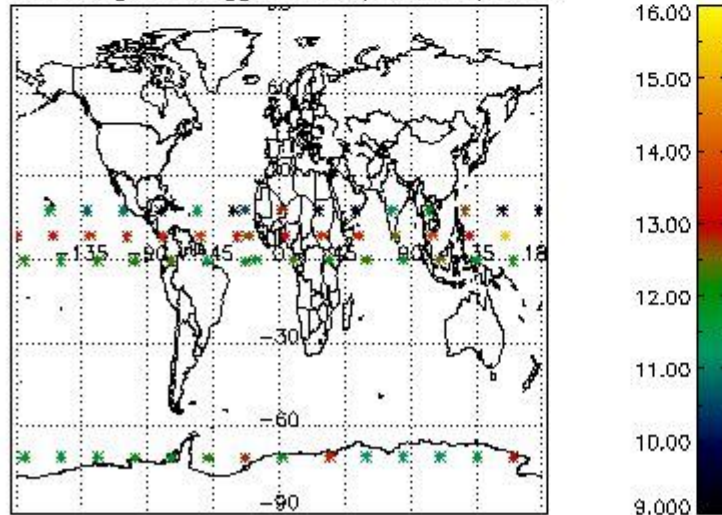
Percentage of flagged data per O3 profile



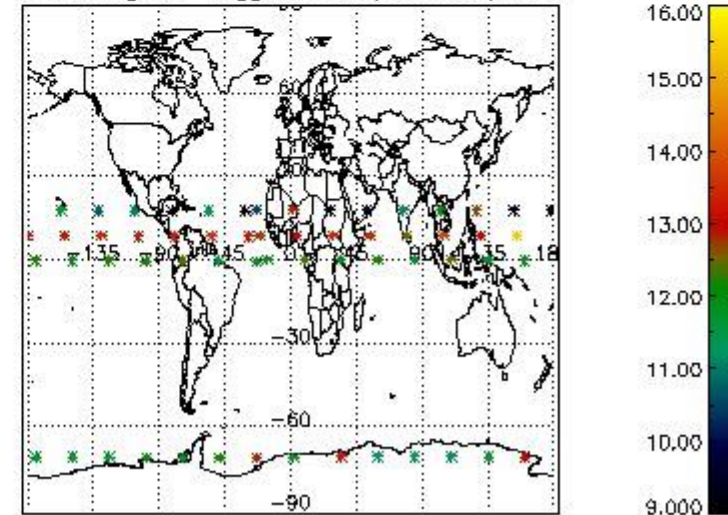
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

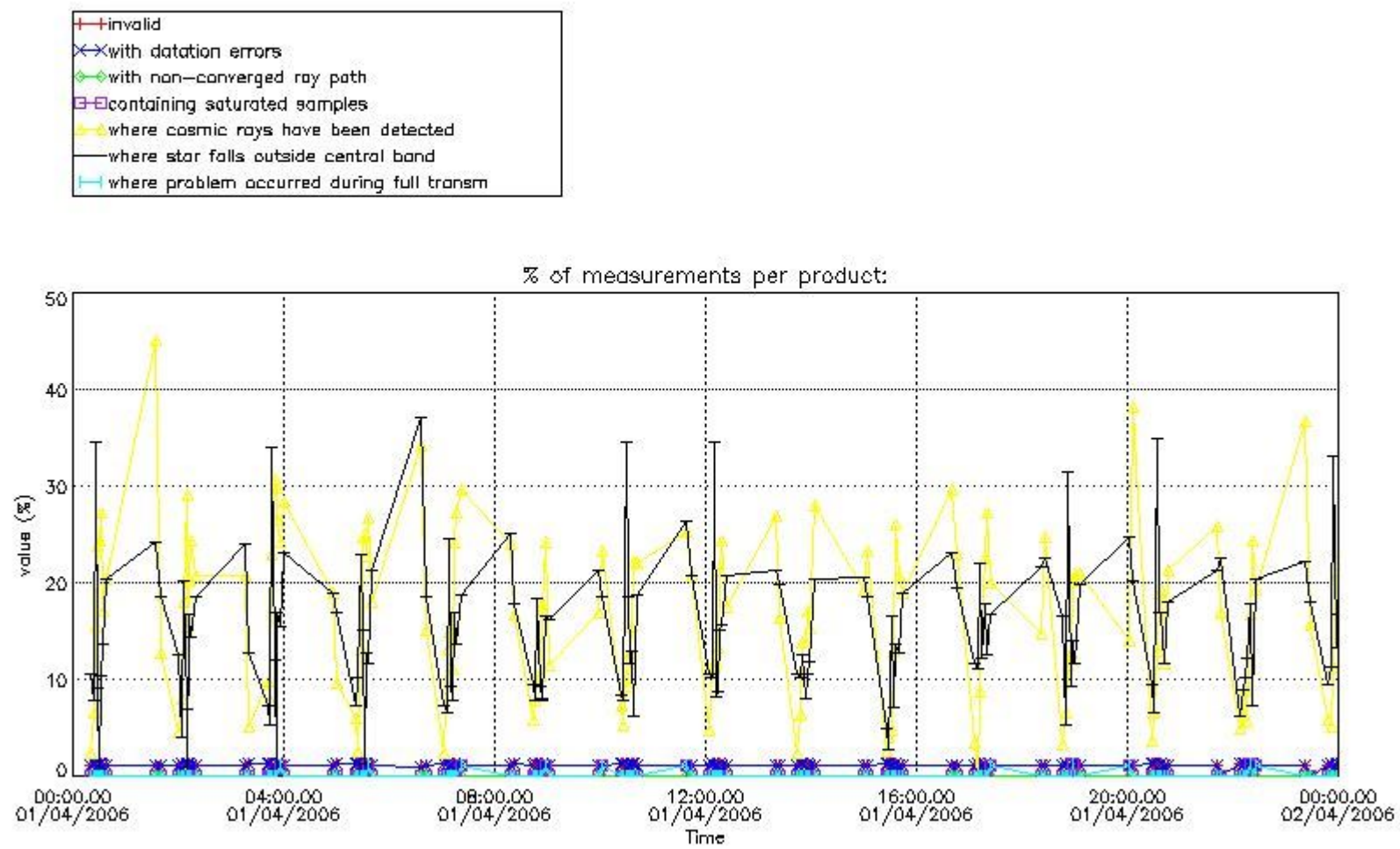


4. Level 1 quality information per product

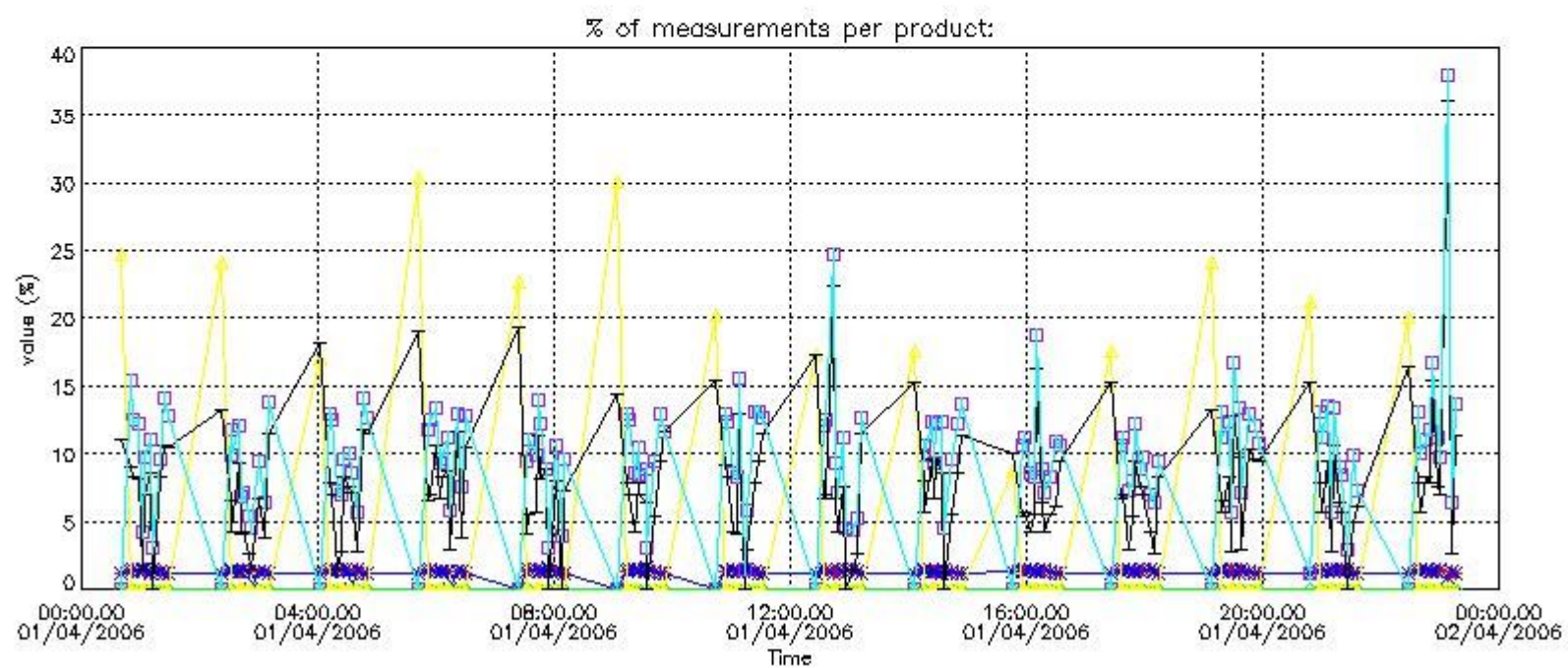
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

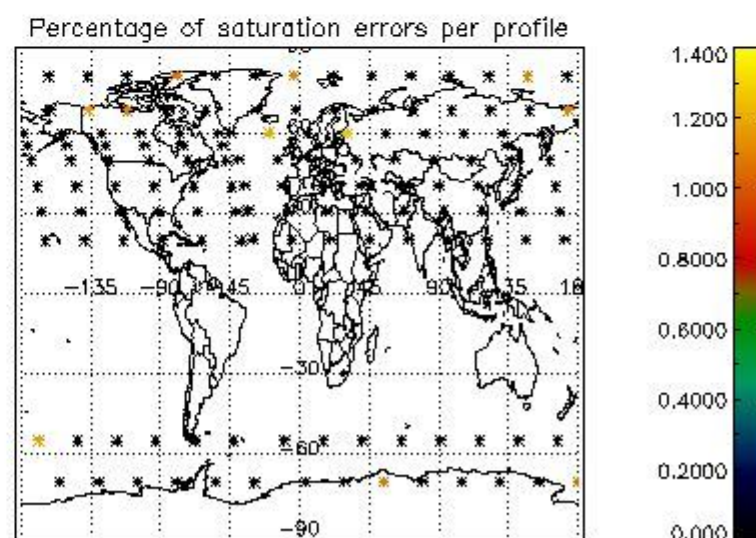
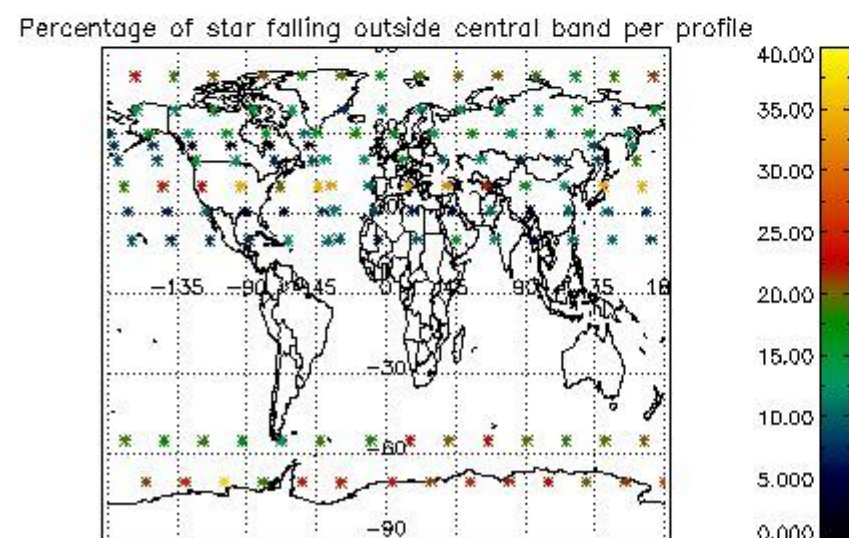
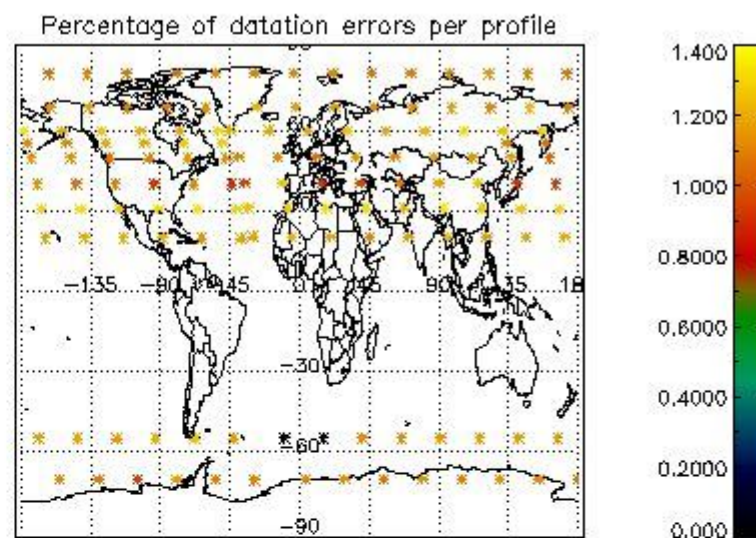
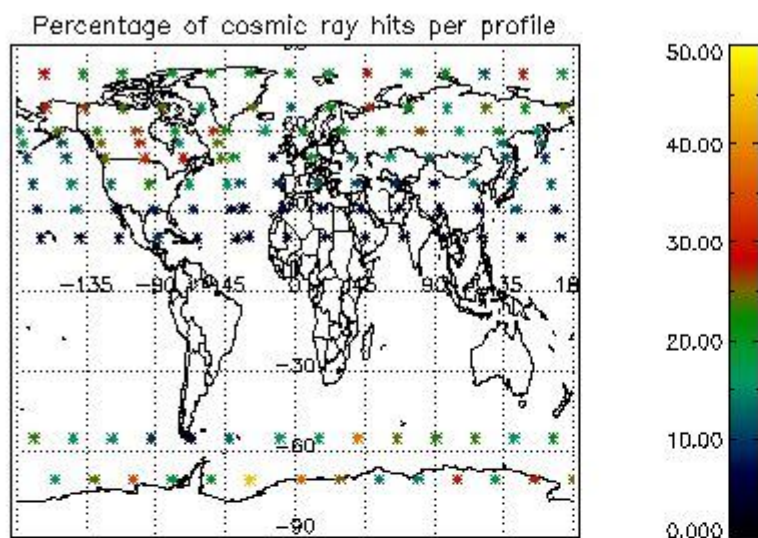


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

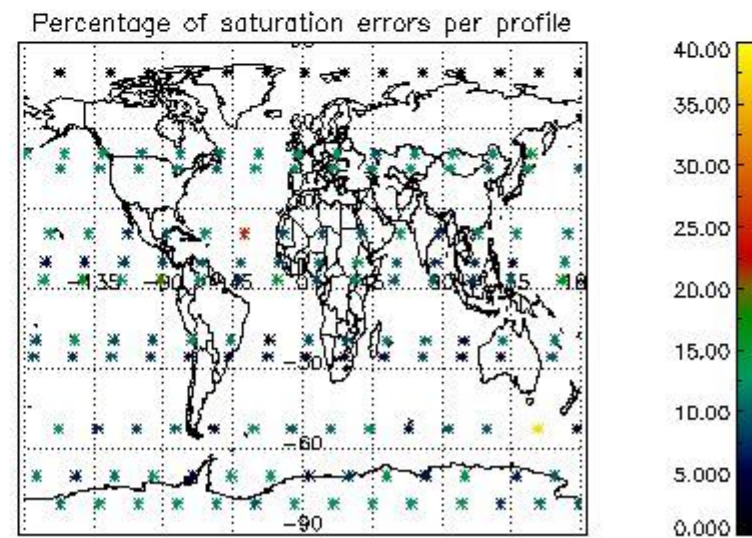
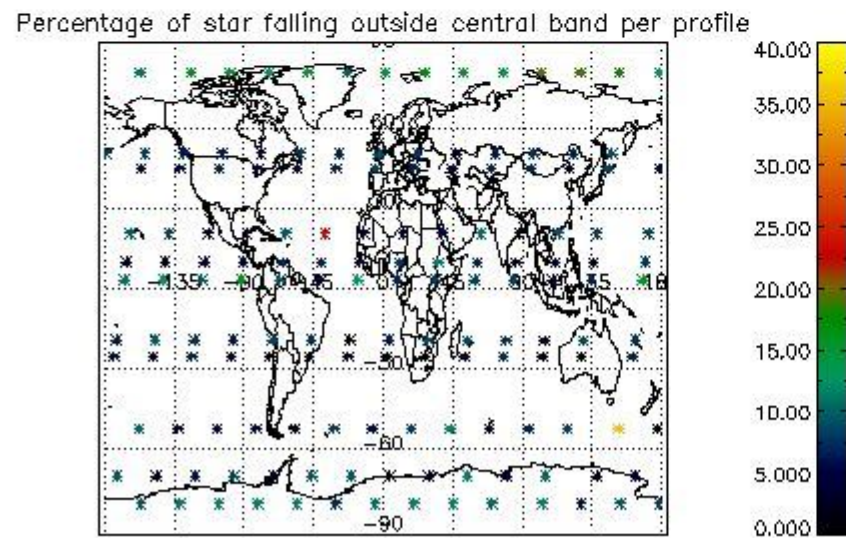
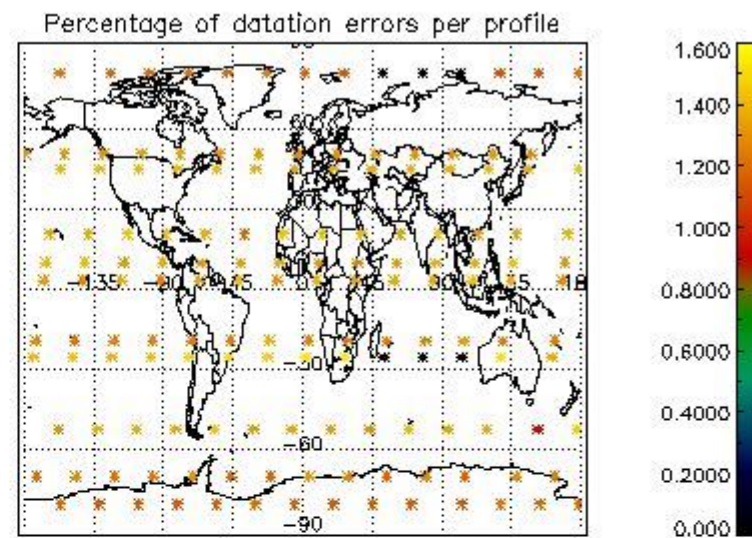
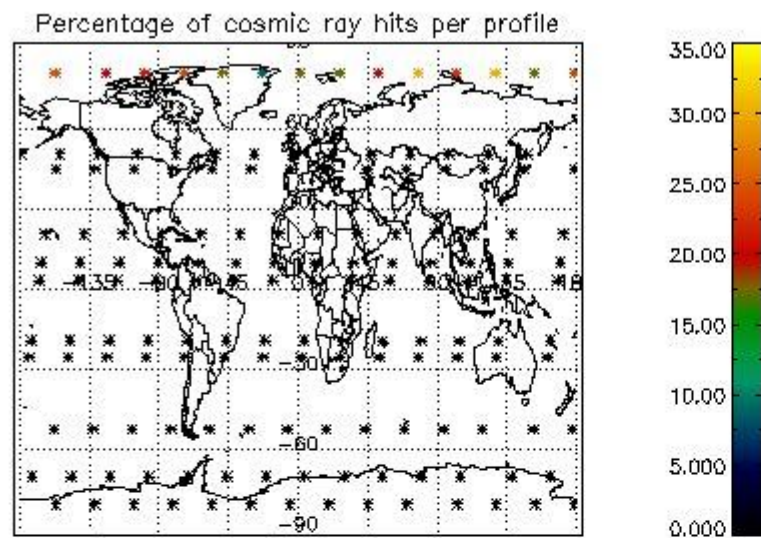


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

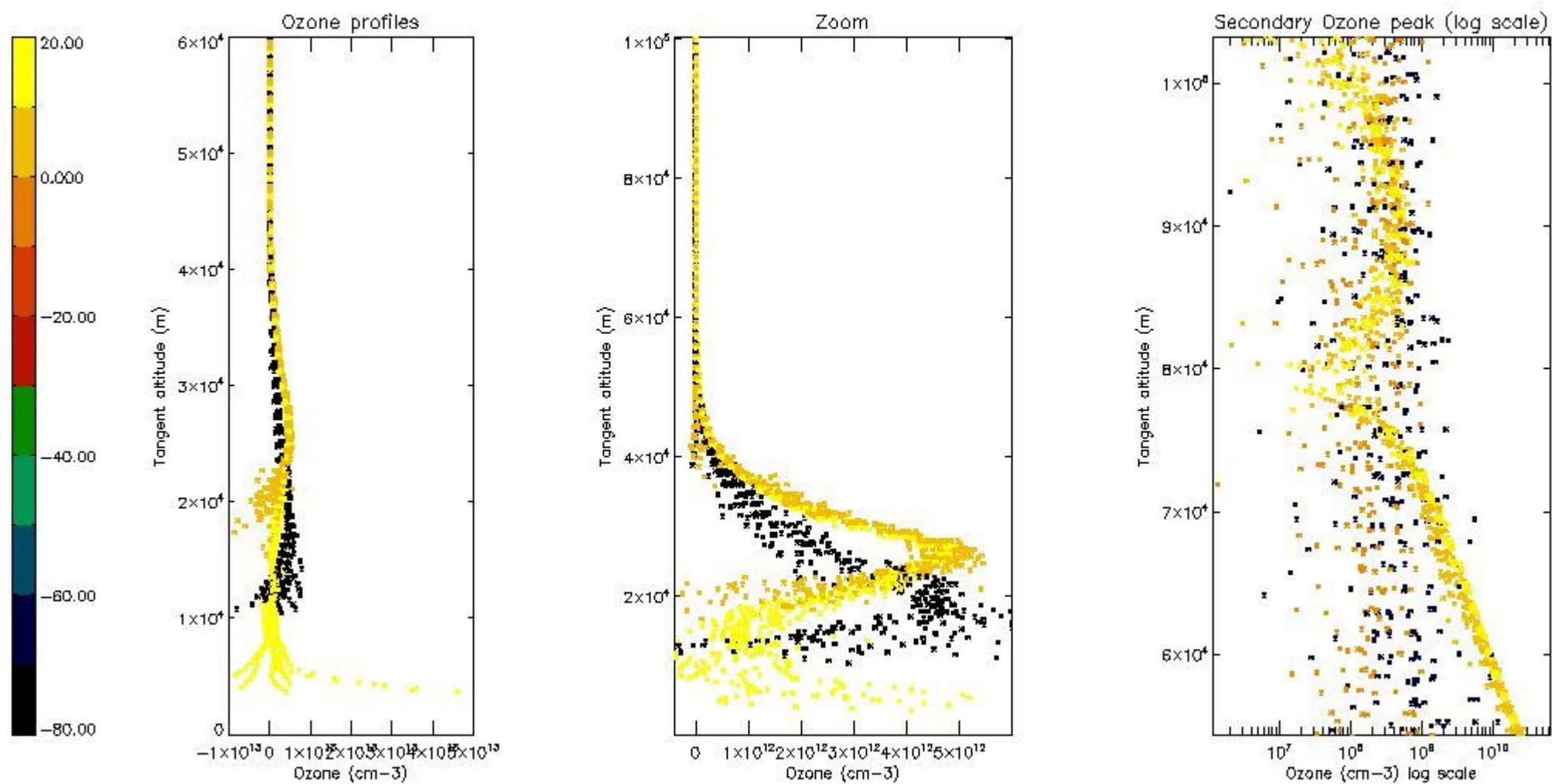
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	22
STD < 20	9

STD < 10	6
STD < 5	3

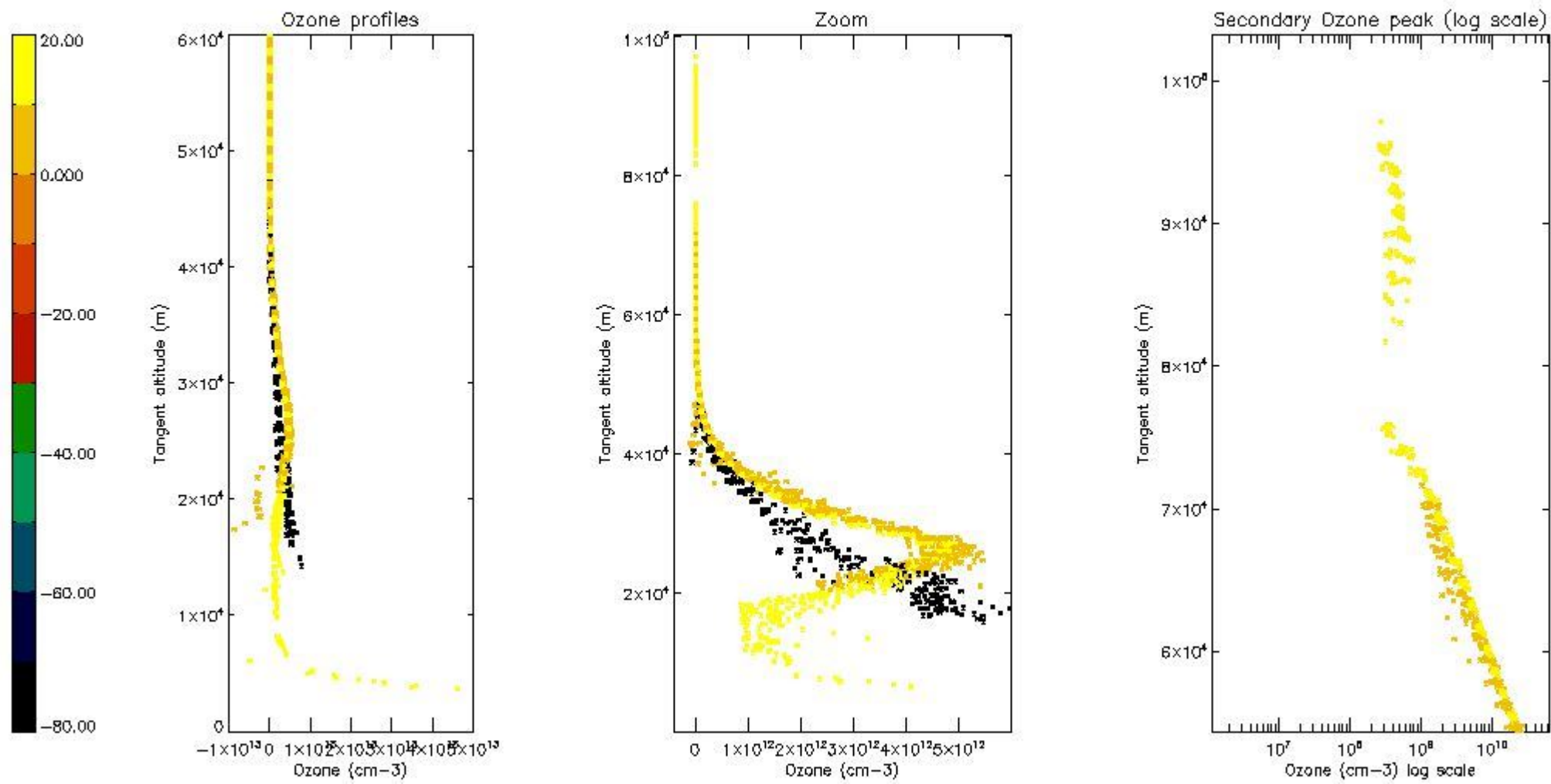
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



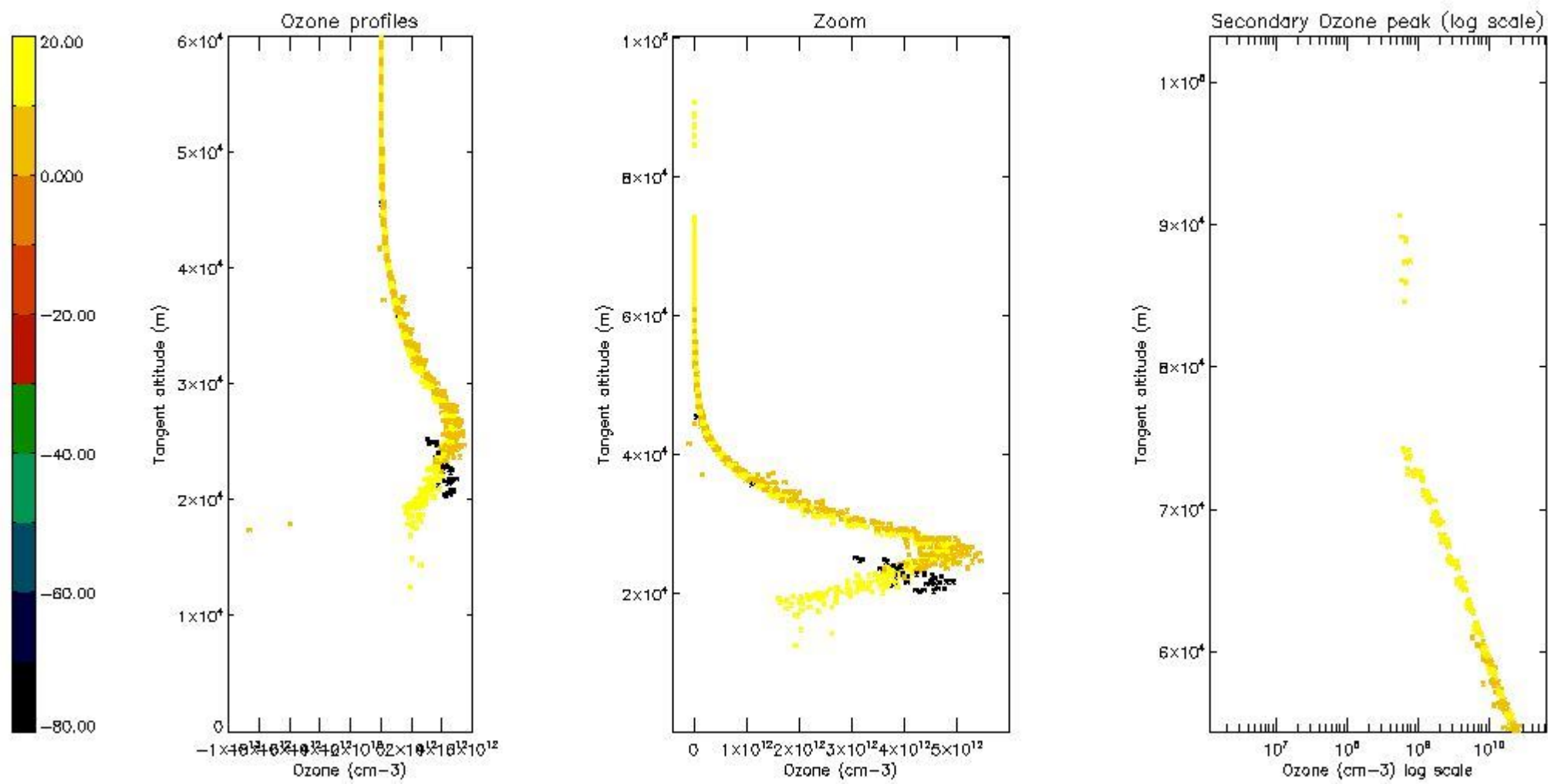
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



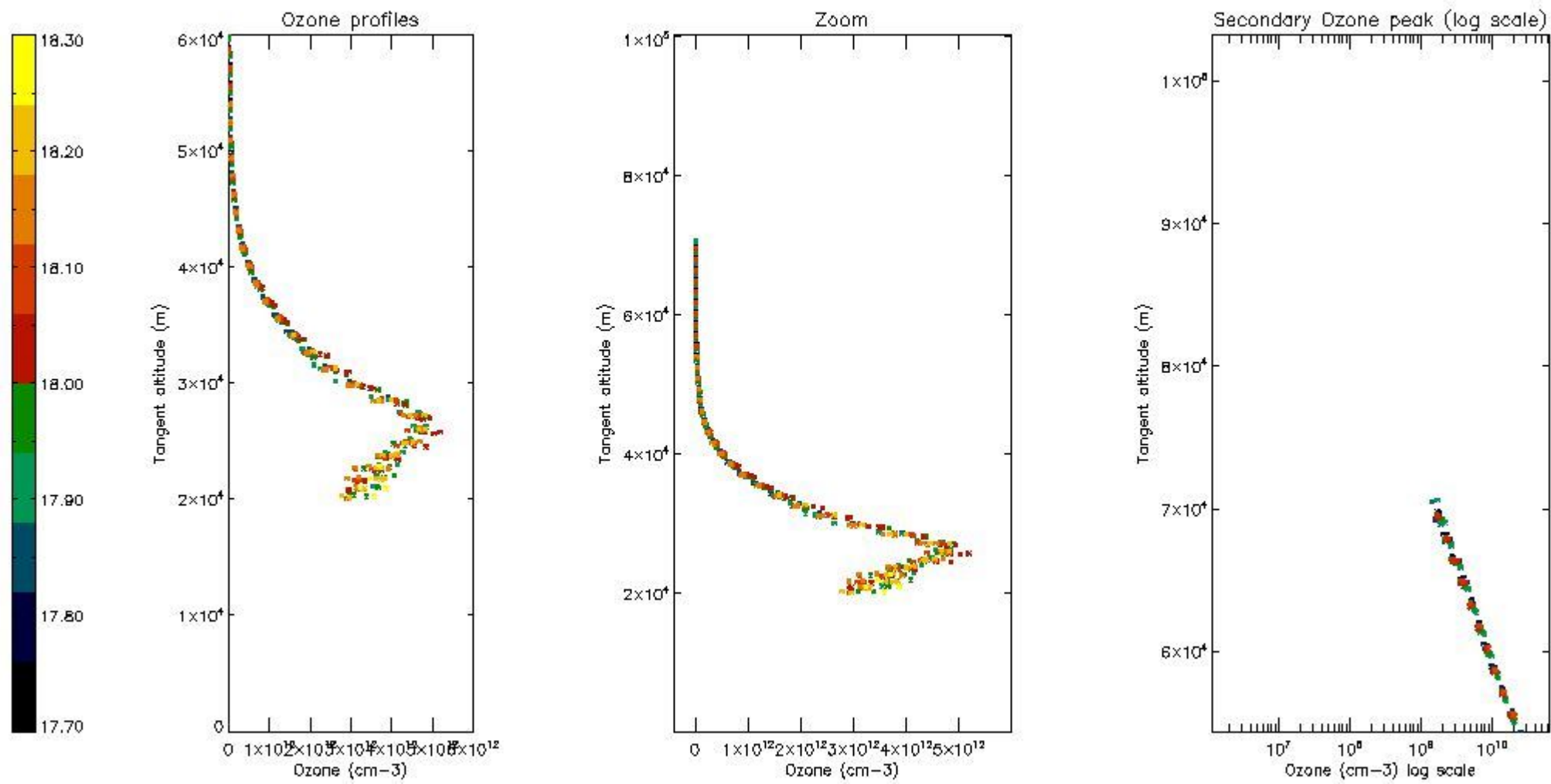
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



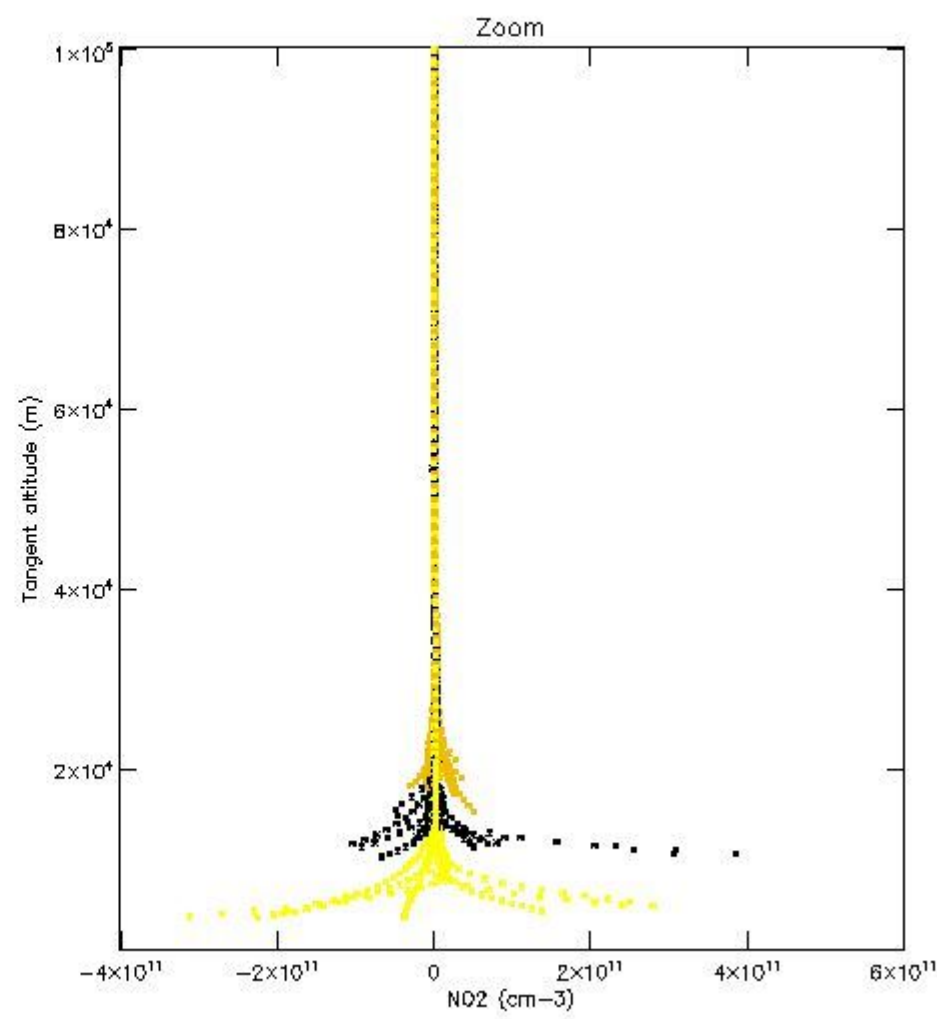
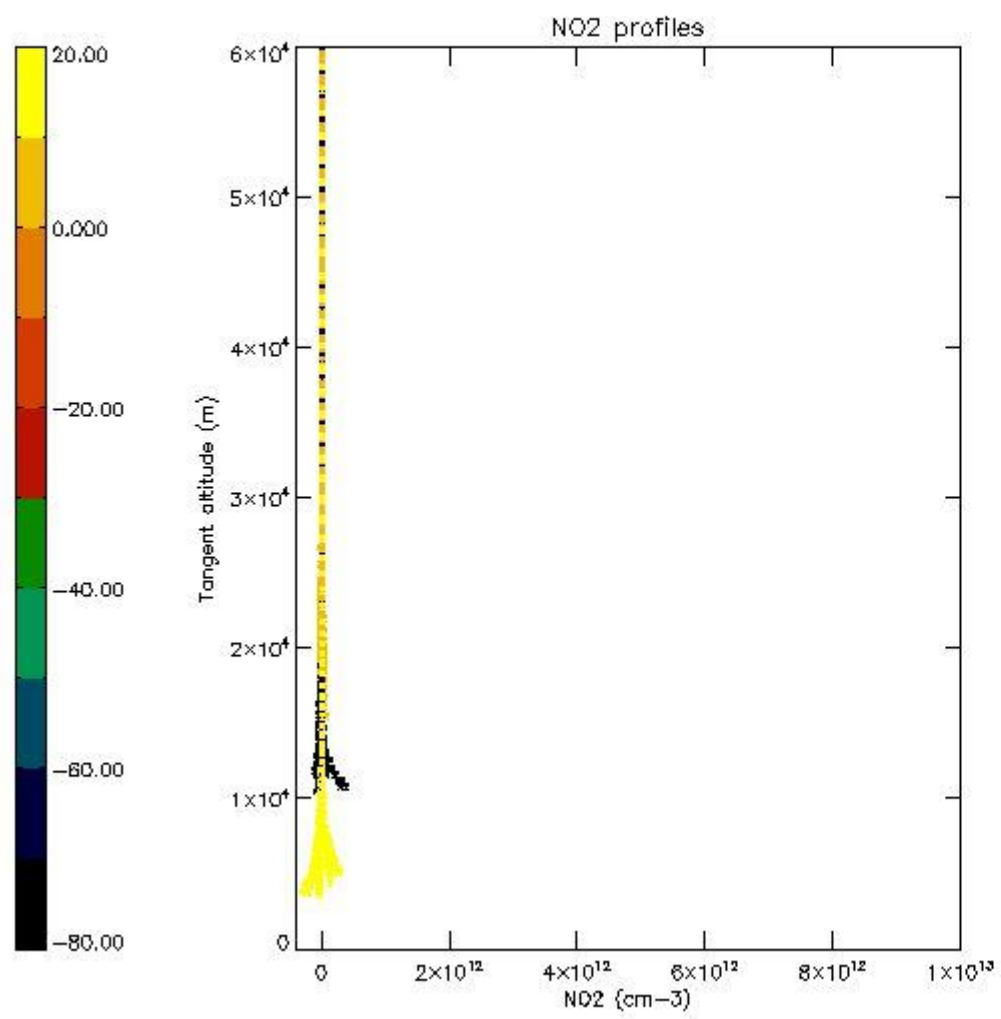
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



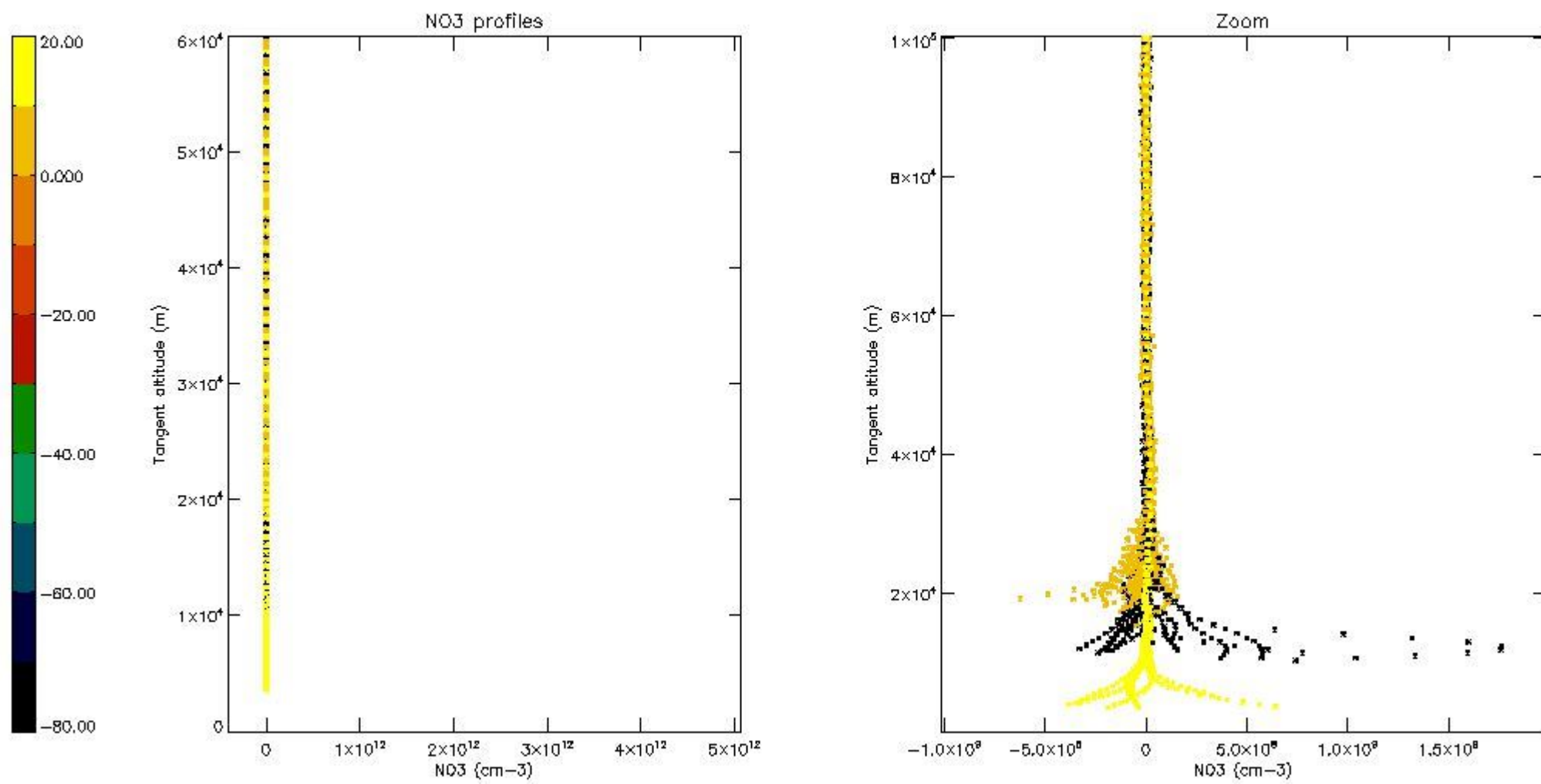
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



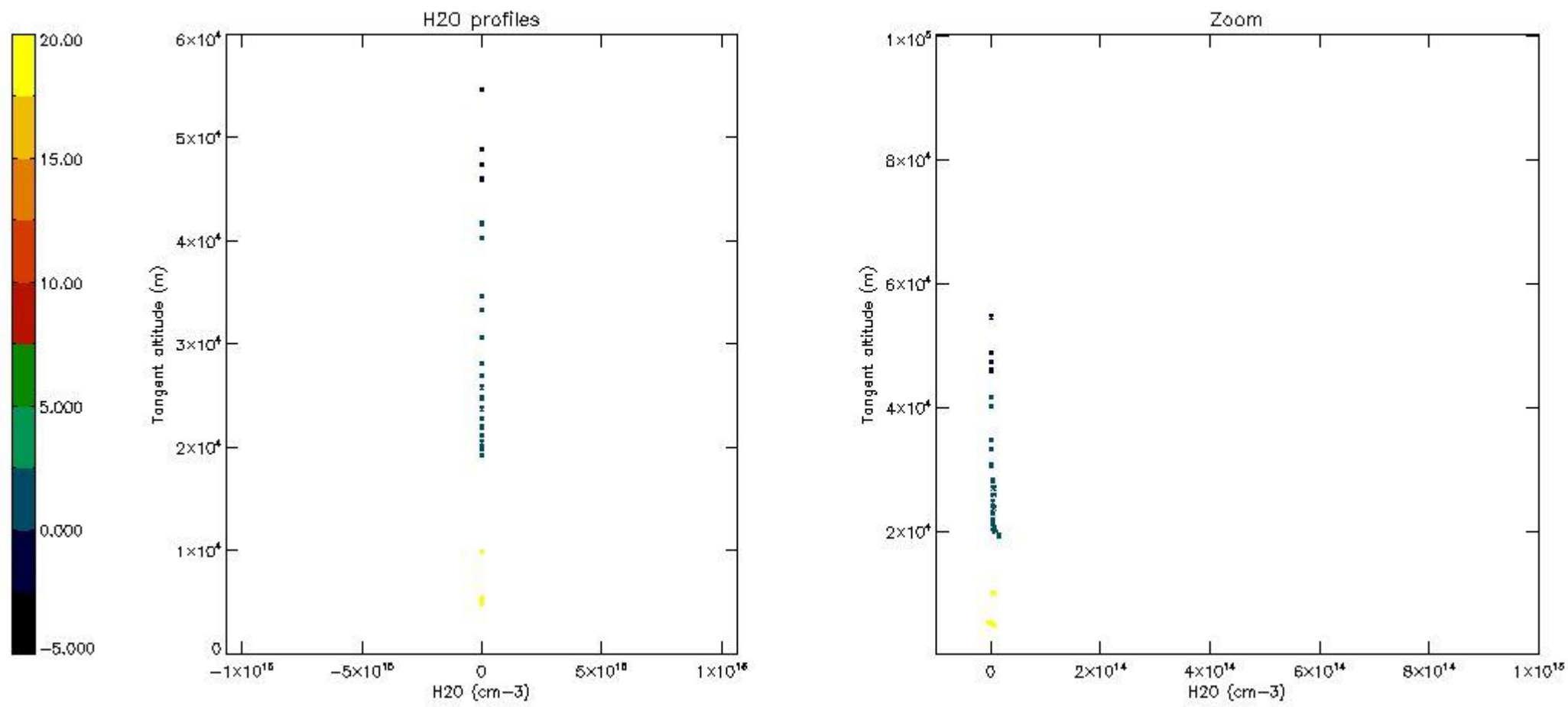
5.7 Plot NO3 profiles for all STD (dark without errors)

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	01-APR-2006 00:20:05
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-APR-2006 00:20:05
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-APR-2006 00:20:05

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

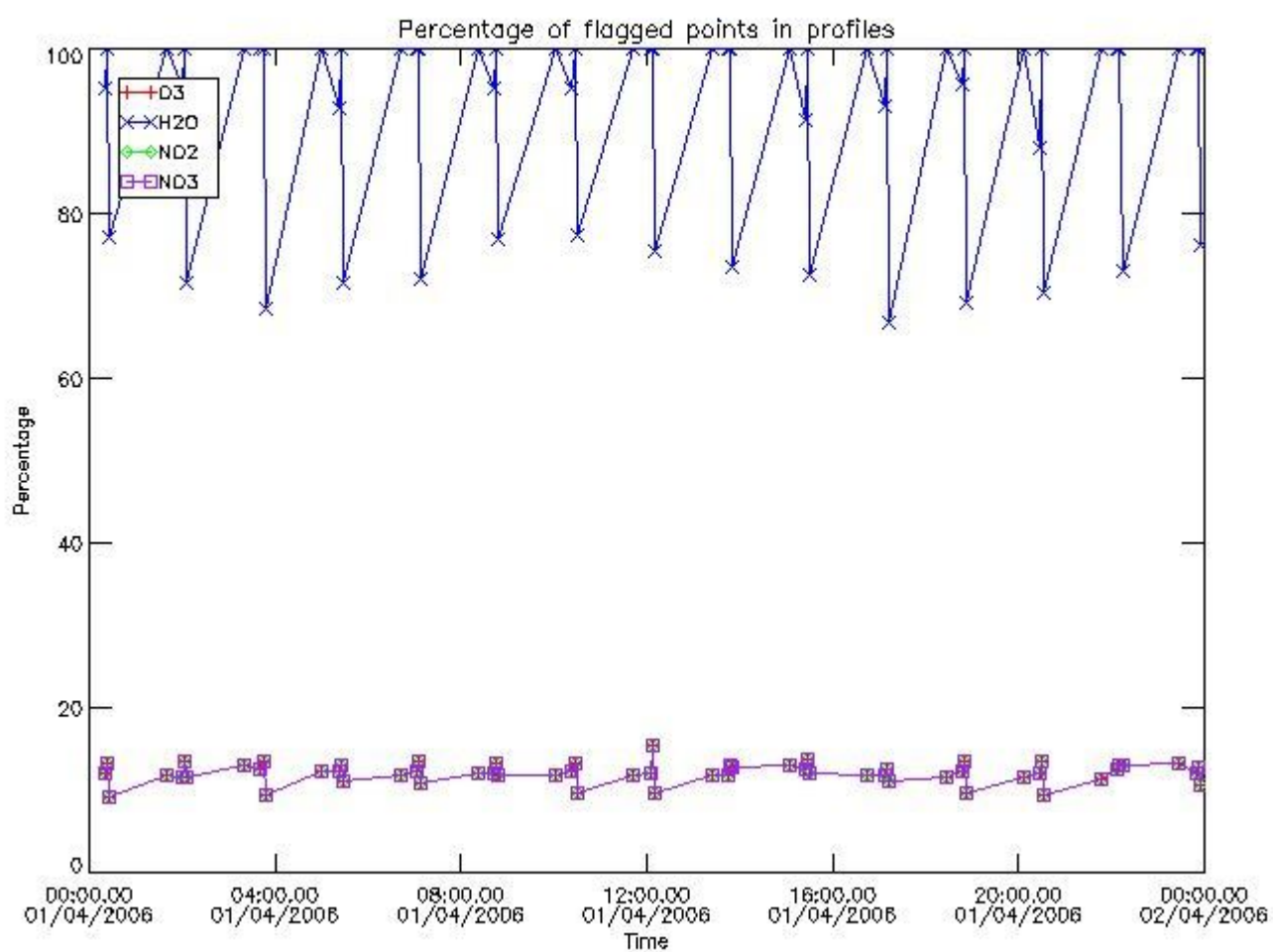
[6. Auxiliary Data Files used for the production reported in section 2](#)

279	GOM_NL__2PRFIN20060401_224646_000000362046_00273_21369_8770.N1	01-APR-2006 22:46:46	Bright	36.000	174	52Psi UMa	3.0040	4400.0	72	21369	No
280	GOM_NL__2PRFIN20060401_224946_000000382046_00273_21369_8771.N1	01-APR-2006 22:49:46	Bright	38.000	87	64Gam UMa	2.4330	11000.	76	21369	No
281	GOM_NL__2PRFIN20060401_225137_000000392046_00273_21369_8772.N1	01-APR-2006 22:51:37	Bright	39.000	36	50Alp UMa	1.8000	6300.0	78	21369	No
282	GOM_NL__2PRFIN20060401_225754_000000402046_00273_21369_8773.N1	01-APR-2006 22:57:54	Bright	40.000	60	7Bet UMi	2.0810	3950.0	80	21369	No
283	GOM_NL__2PRFIN20060401_225940_000000362046_00273_21369_8774.N1	01-APR-2006 22:59:40	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	21369	No
284	GOM_NL__2PRFIN20060401_230721_000000542046_00273_21369_8775.N1	01-APR-2006 23:07:21	Bright	54.000	89	5Alp Cep	2.4510	8000.0	108	21369	No
285	GOM_NL__2PRFIN20060401_231233_000000392046_00273_21369_8776.N1	01-APR-2006 23:12:33	Bright	39.000	19	50Alp Cyg	1.2460	10500.	78	21369	No
286	GOM_NL__2PRFIN20060401_231615_000000442046_00273_21369_8777.N1	01-APR-2006 23:16:15	Bright	44.000	92	53Eps Cyg	2.5000	4500.0	88	21369	No
287	GOM_NL__2PRFIN20060401_232250_000000452046_00273_21369_8778.N1	01-APR-2006 23:22:50	Twilight	45.000	61	8Eps Peg	2.1000	3900.0	90	21369	No
288	GOM_NL__2PRFIN20060401_232726_000000422046_00273_21369_8779.N1	01-APR-2006 23:27:26	Dark	41.500	154	22Bet Aqr	2.8990	5700.0	83	21369	No
289	GOM_NL__2PRFIN20060401_234838_000000432046_00274_21370_8760.N1	01-APR-2006 23:48:38	Dark	42.500	141	Bet Ara	2.8400	4600.0	85	21370	No
290	GOM_NL__2PRFIN20060401_235138_000000402046_00274_21370_8761.N1	01-APR-2006 23:51:38	Dark	40.000	134	Bet TrA	2.8100	6600.0	80	21370	No
291	GOM_NL__2PRFIN20060401_235416_000000532046_00274_21370_8762.N1	01-APR-2006 23:54:16	Dark	53.000	4	Alp1Cen	-0.010000	5800.0	106	21370	No
292	GOM_NL__2PRFIN20060401_235703_000000462046_00274_21370_8763.N1	01-APR-2006 23:57:03	Straylight	45.500	78	Alp Lup	2.3040	28000.	91	21370	No
293	GOM_NL__2PRFIN20060401_235954_000000422046_00274_21370_8764.N1	01-APR-2006 23:59:54	Straylight	42.000	64	Gam Cen	2.2000	10600.	84	21370	No

3. Quality information per product

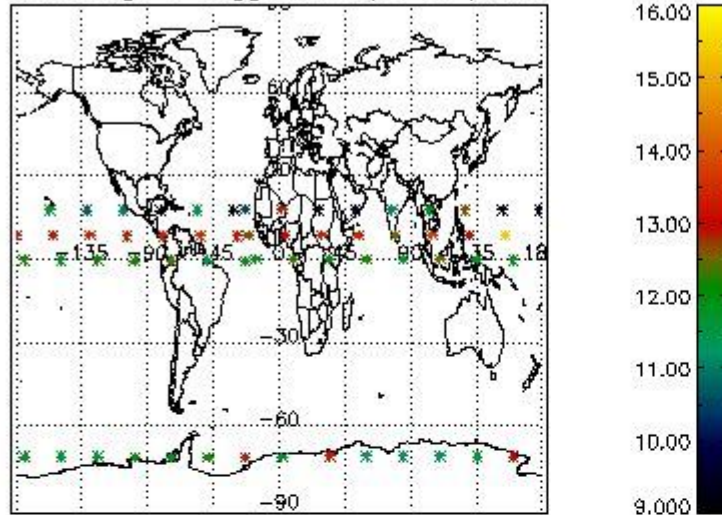
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

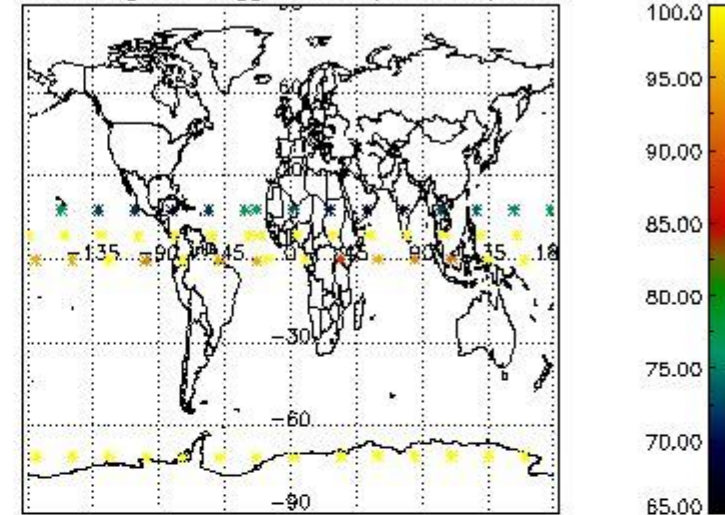


3.2 Plot quality information per product (world map)

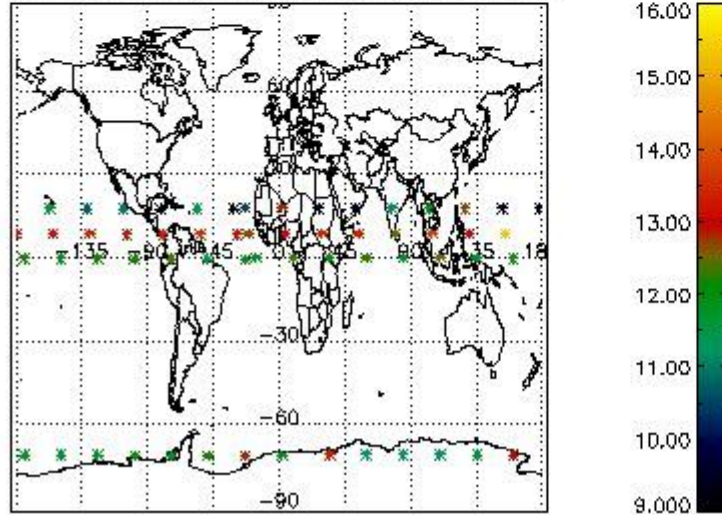
Percentage of flagged data per O3 profile



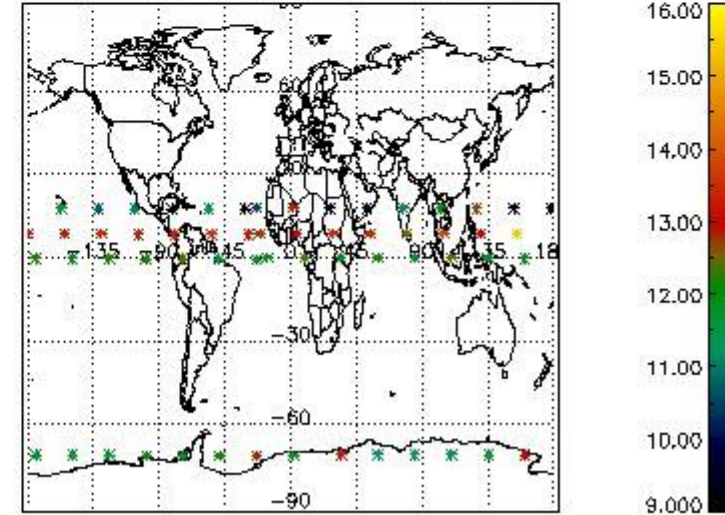
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

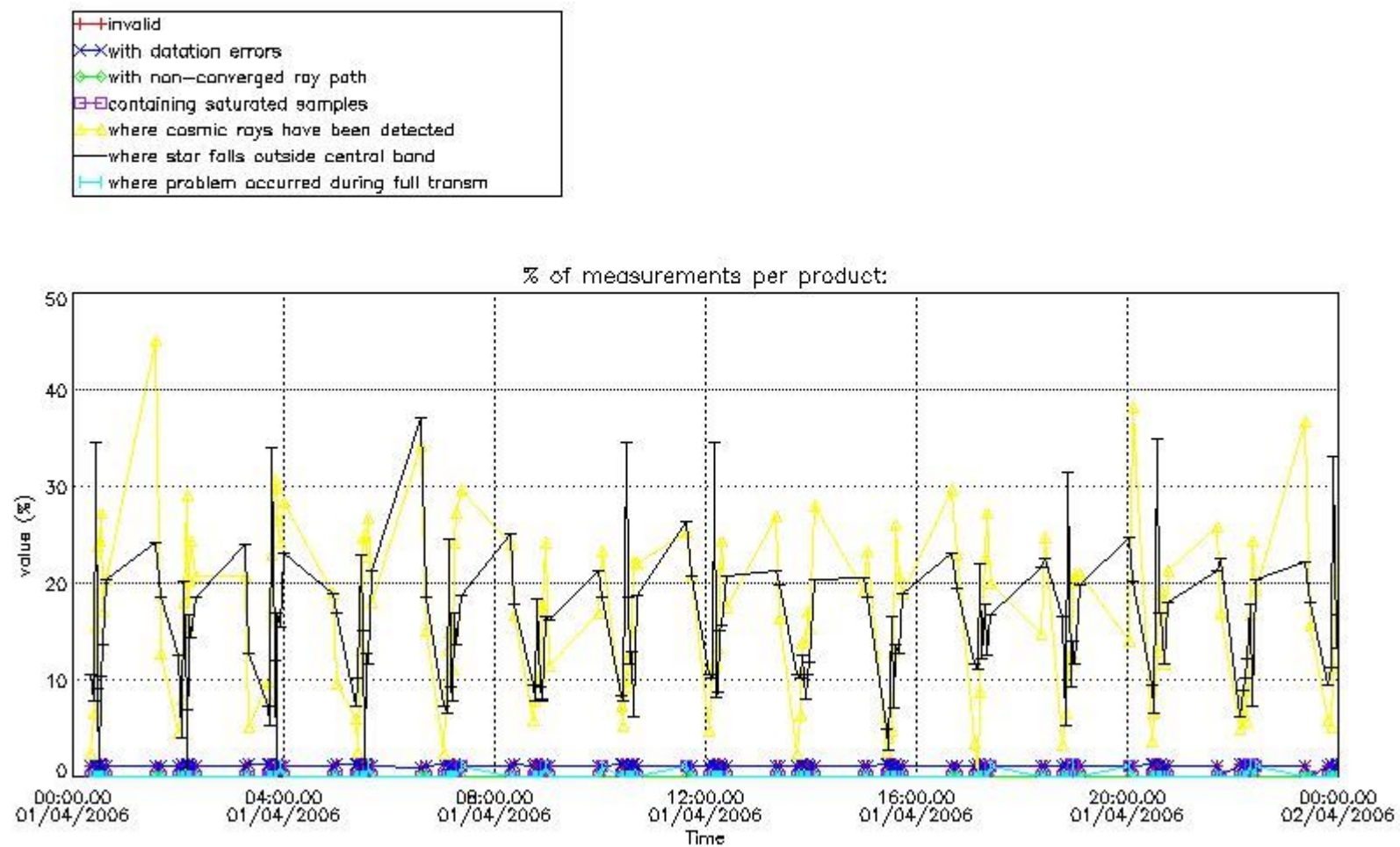


4. Level 1 quality information per product

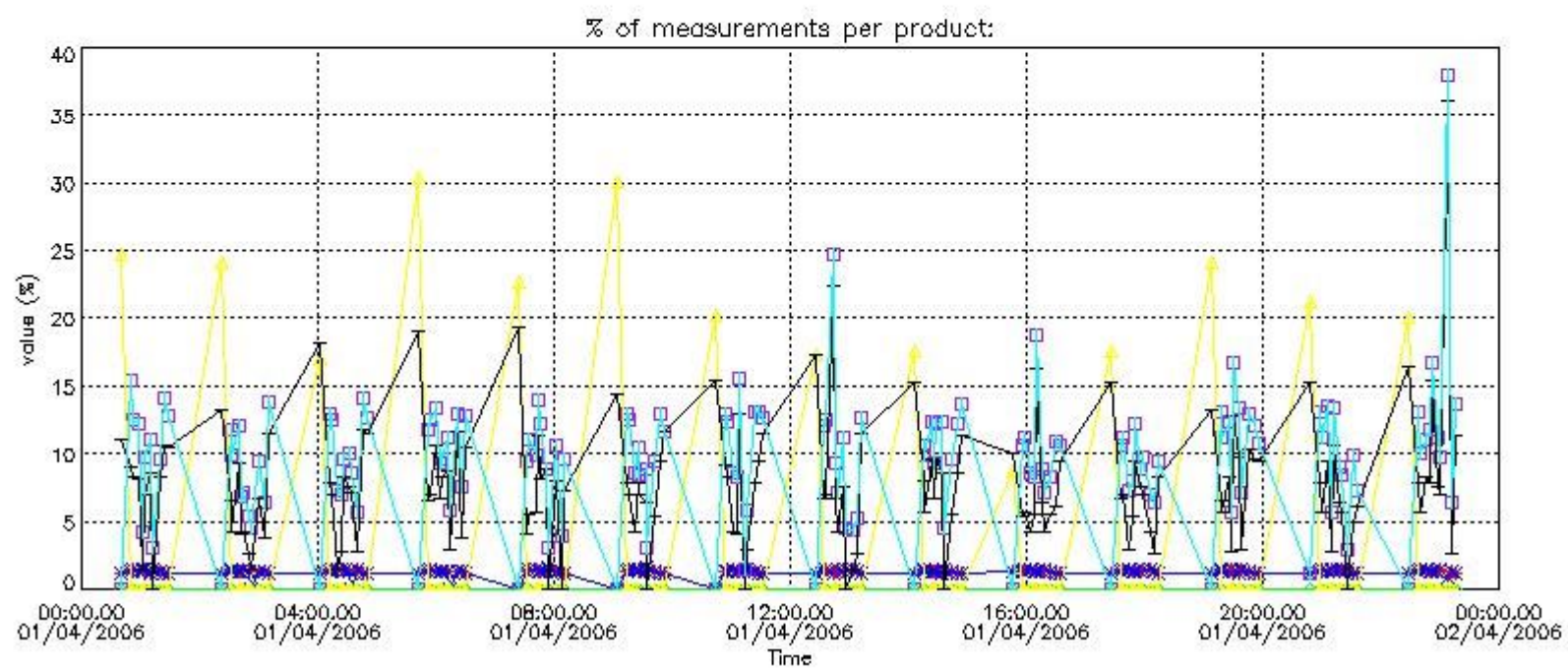
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

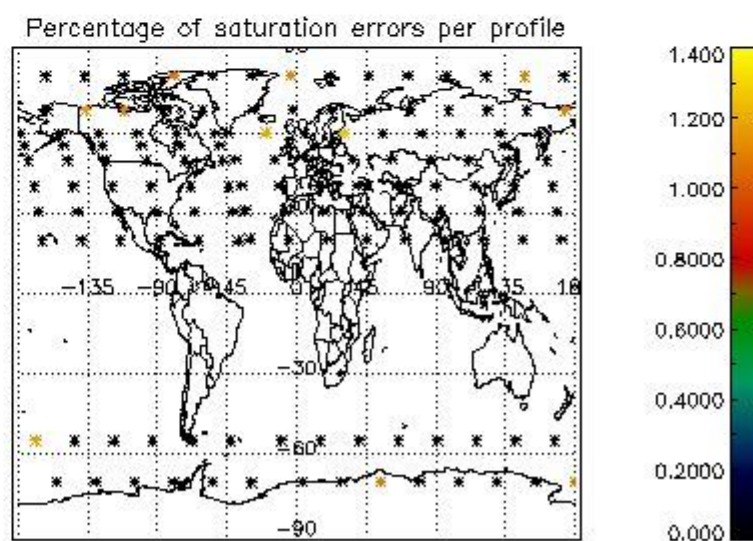
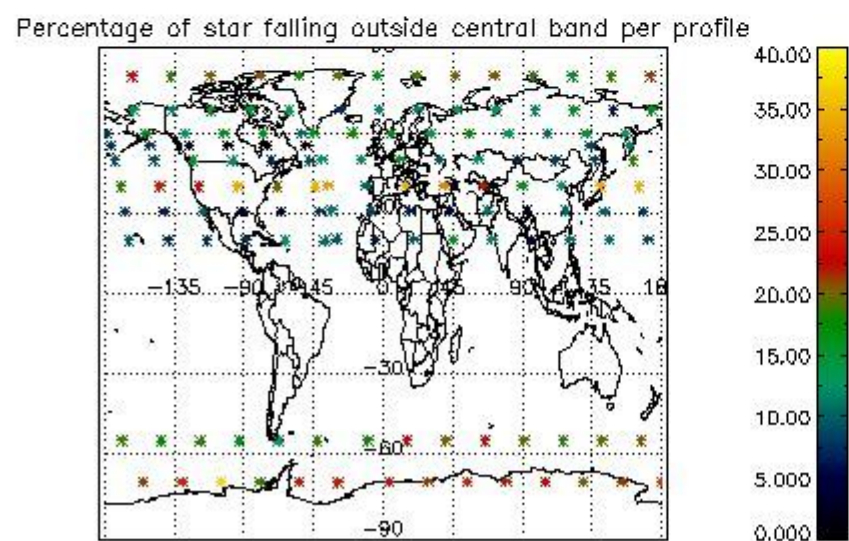
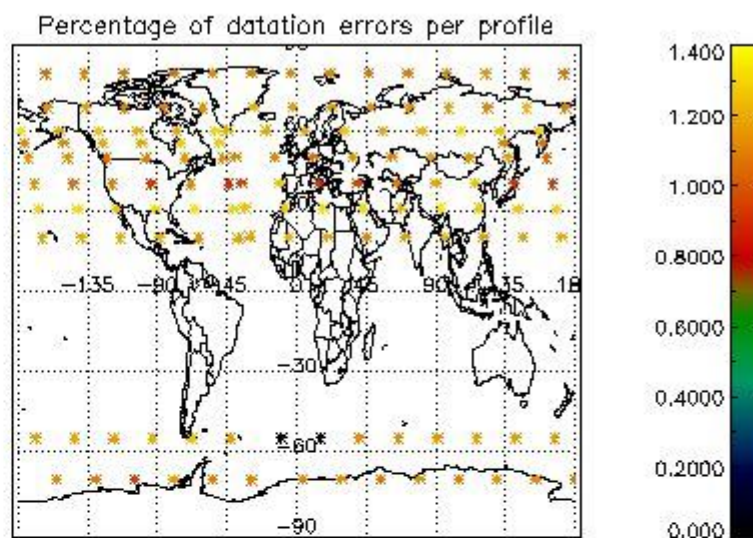
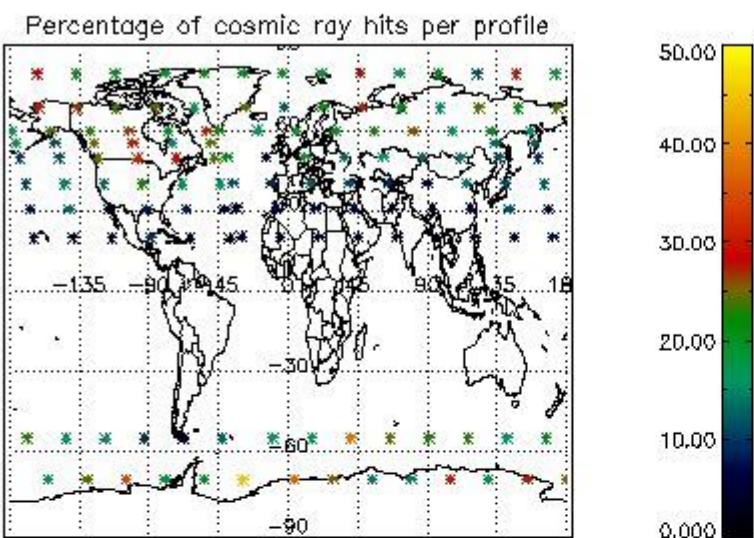


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

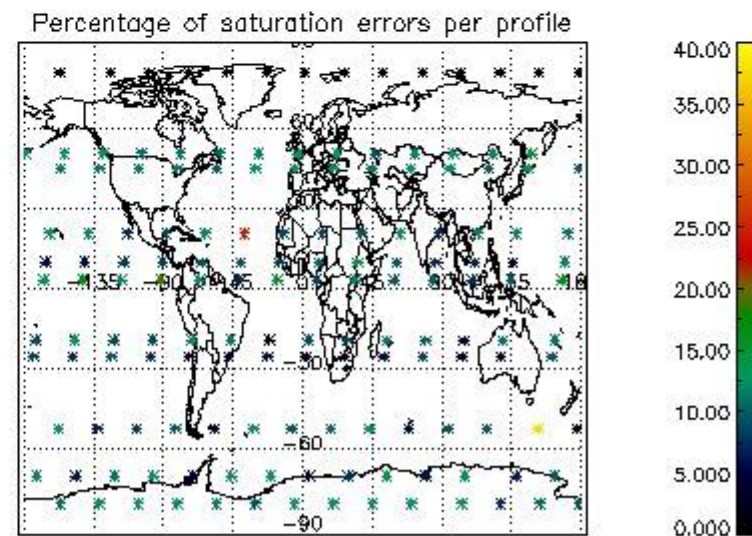
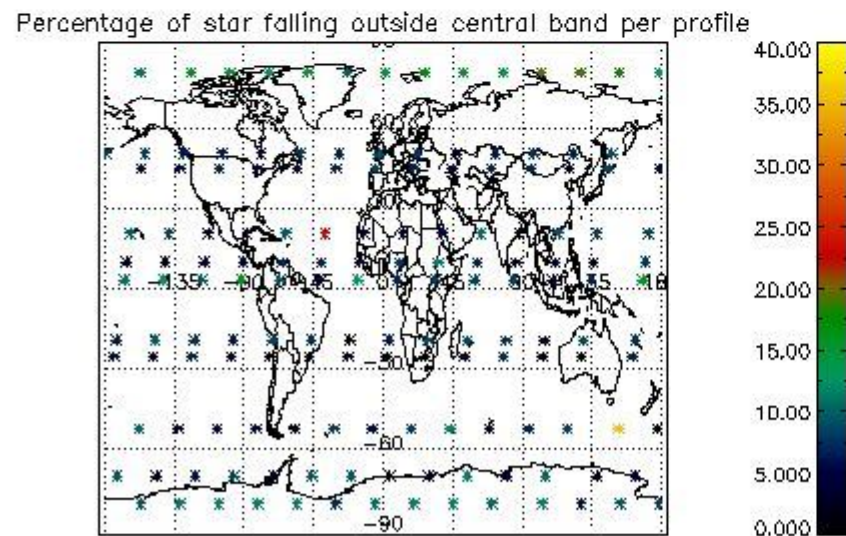
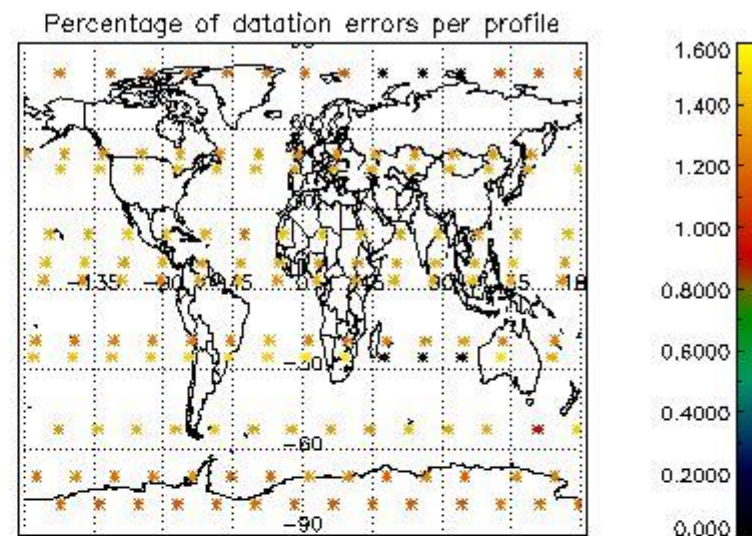
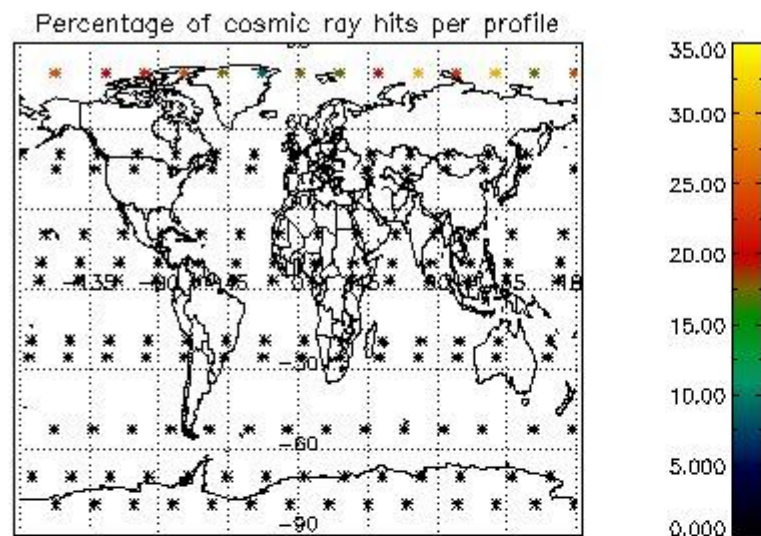


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

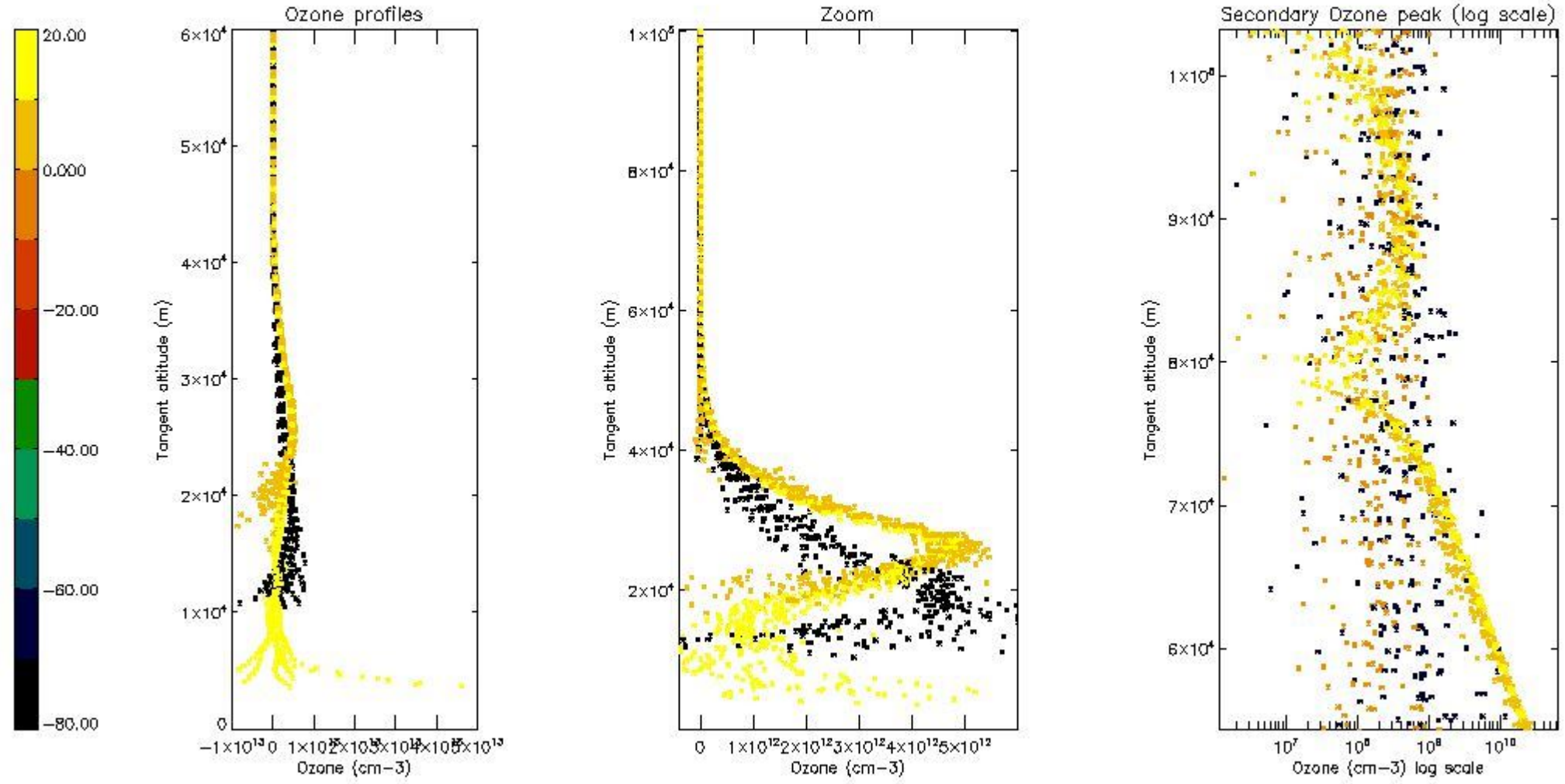
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	22
STD < 20	9

STD < 10	6
STD < 5	3

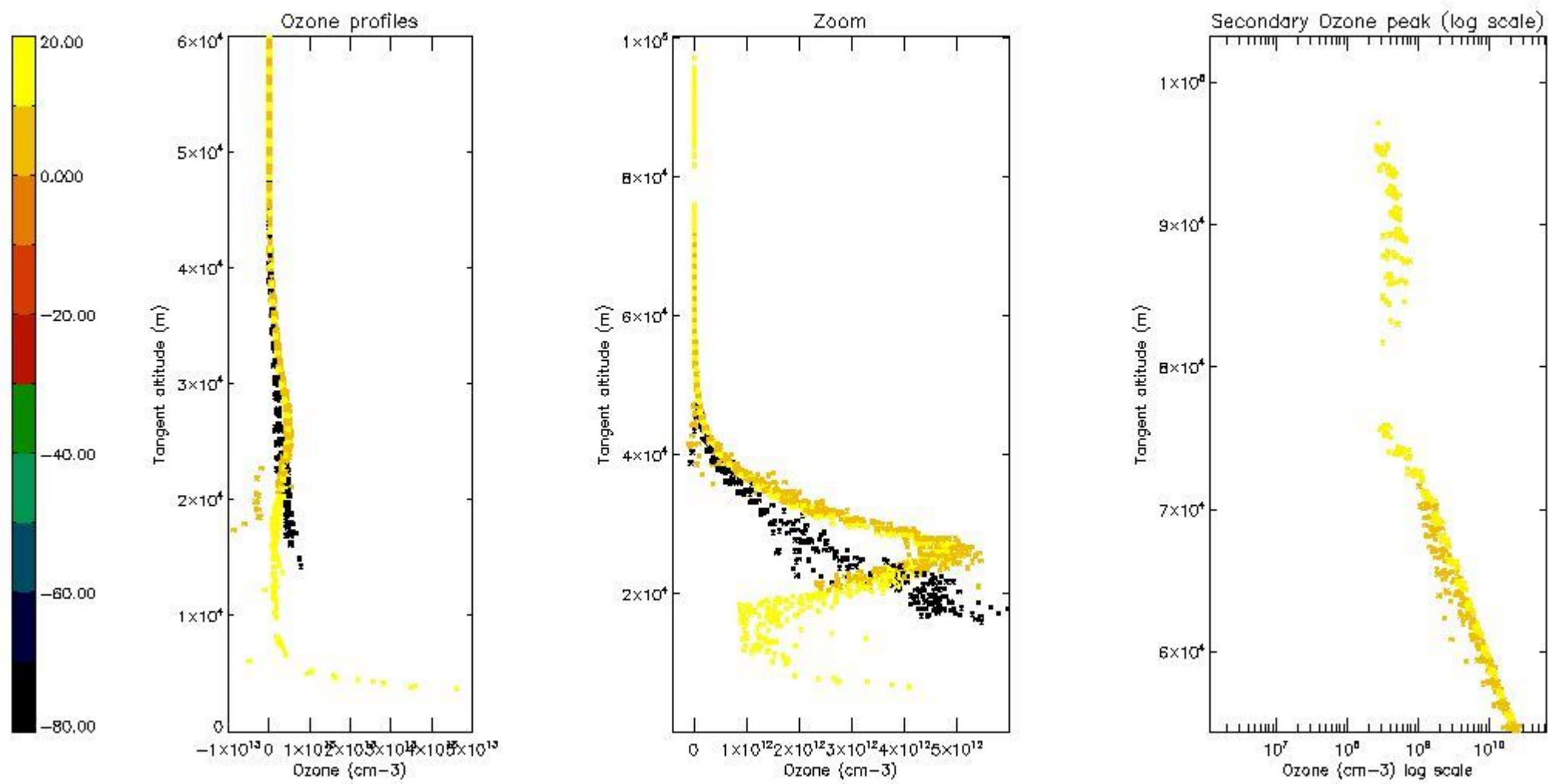
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



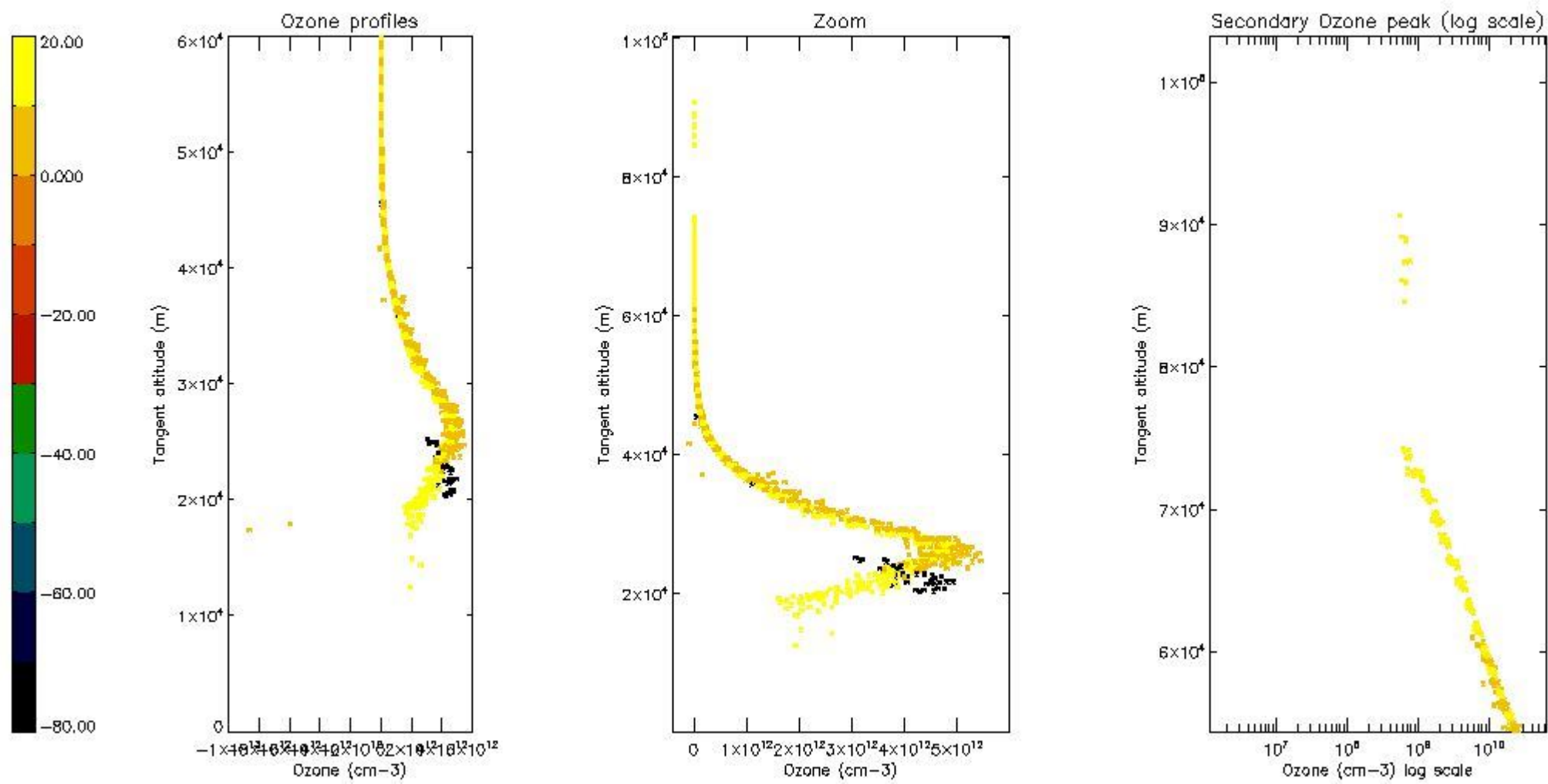
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



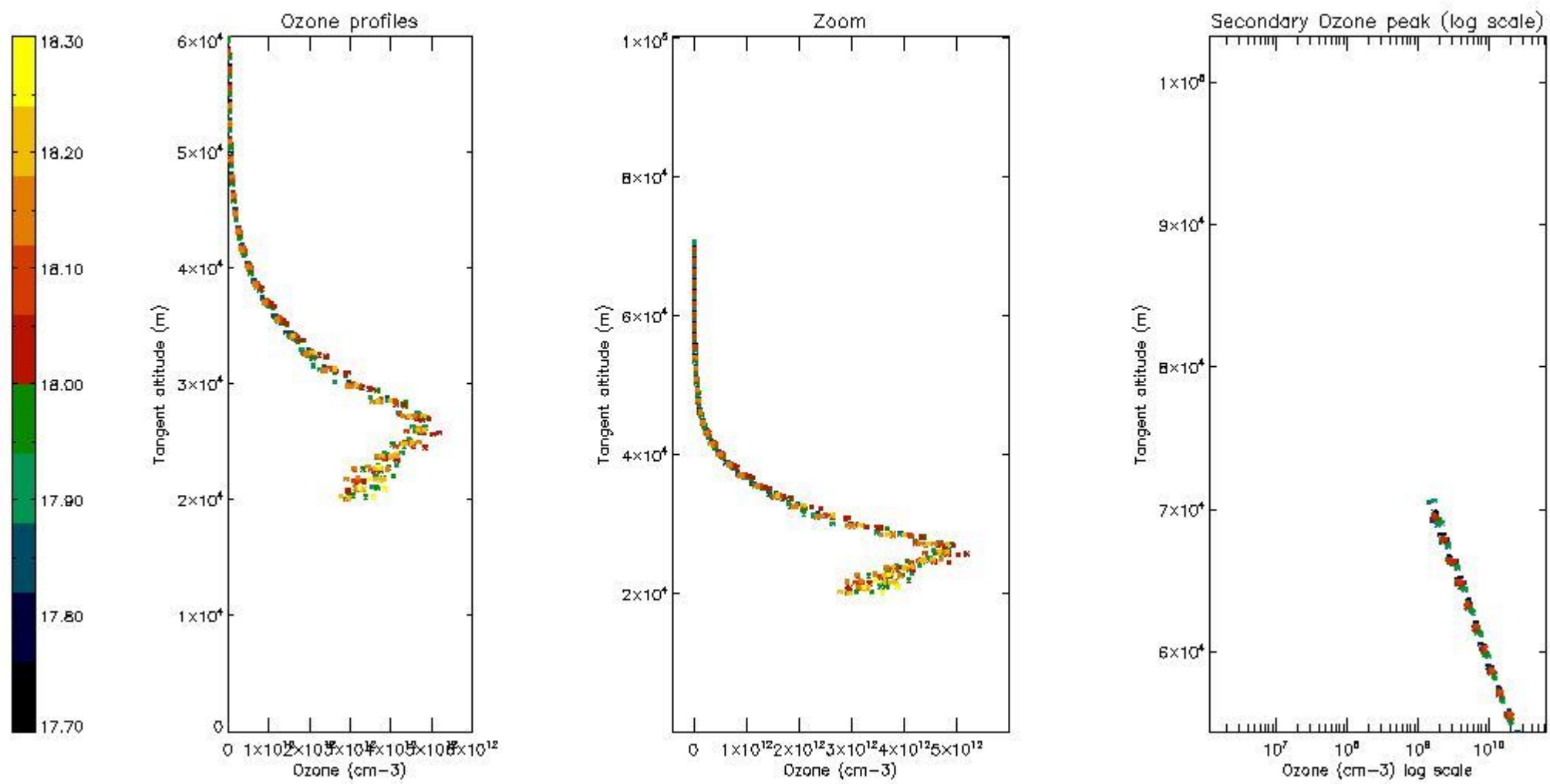
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



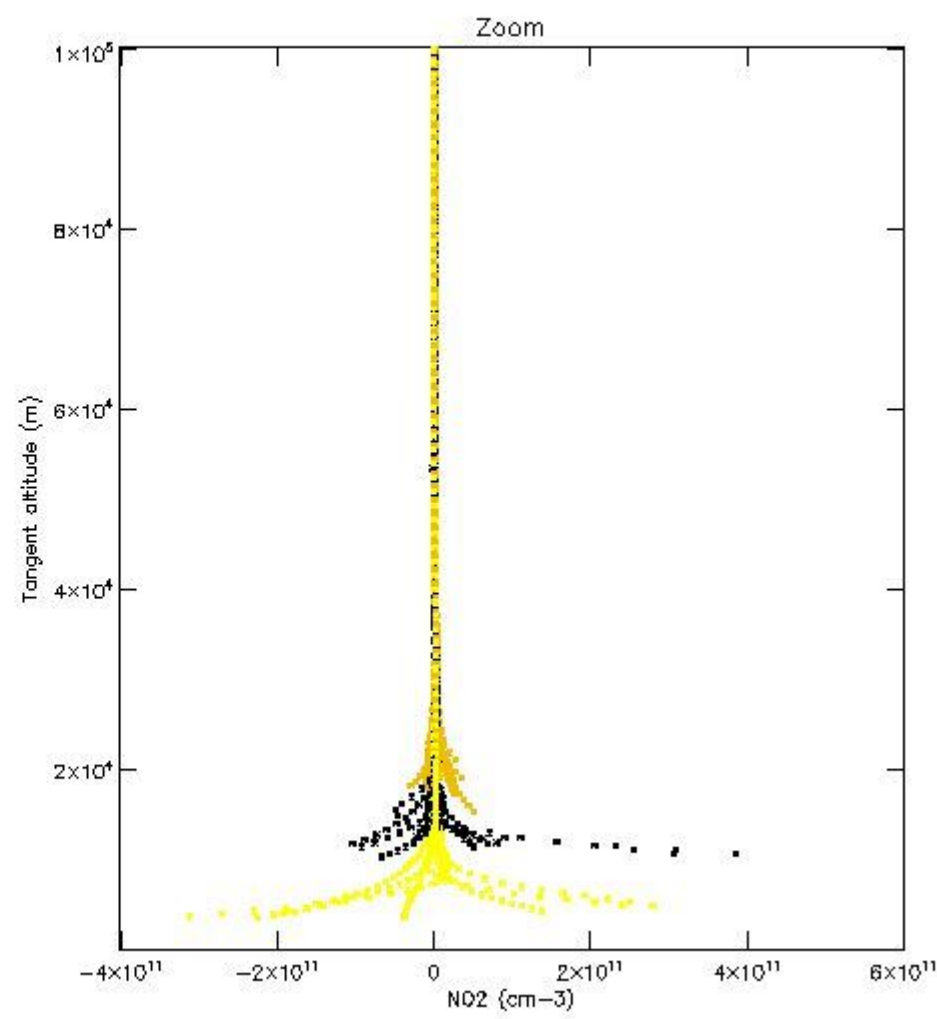
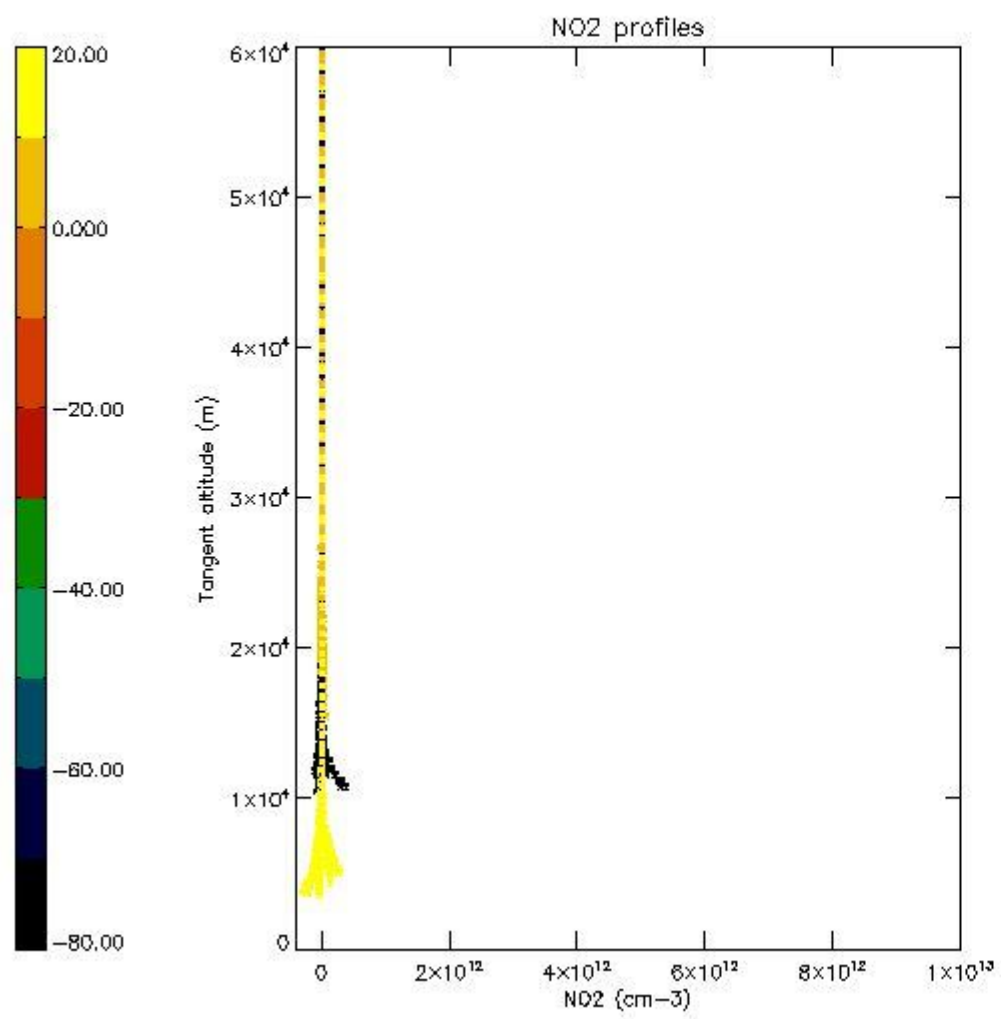
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



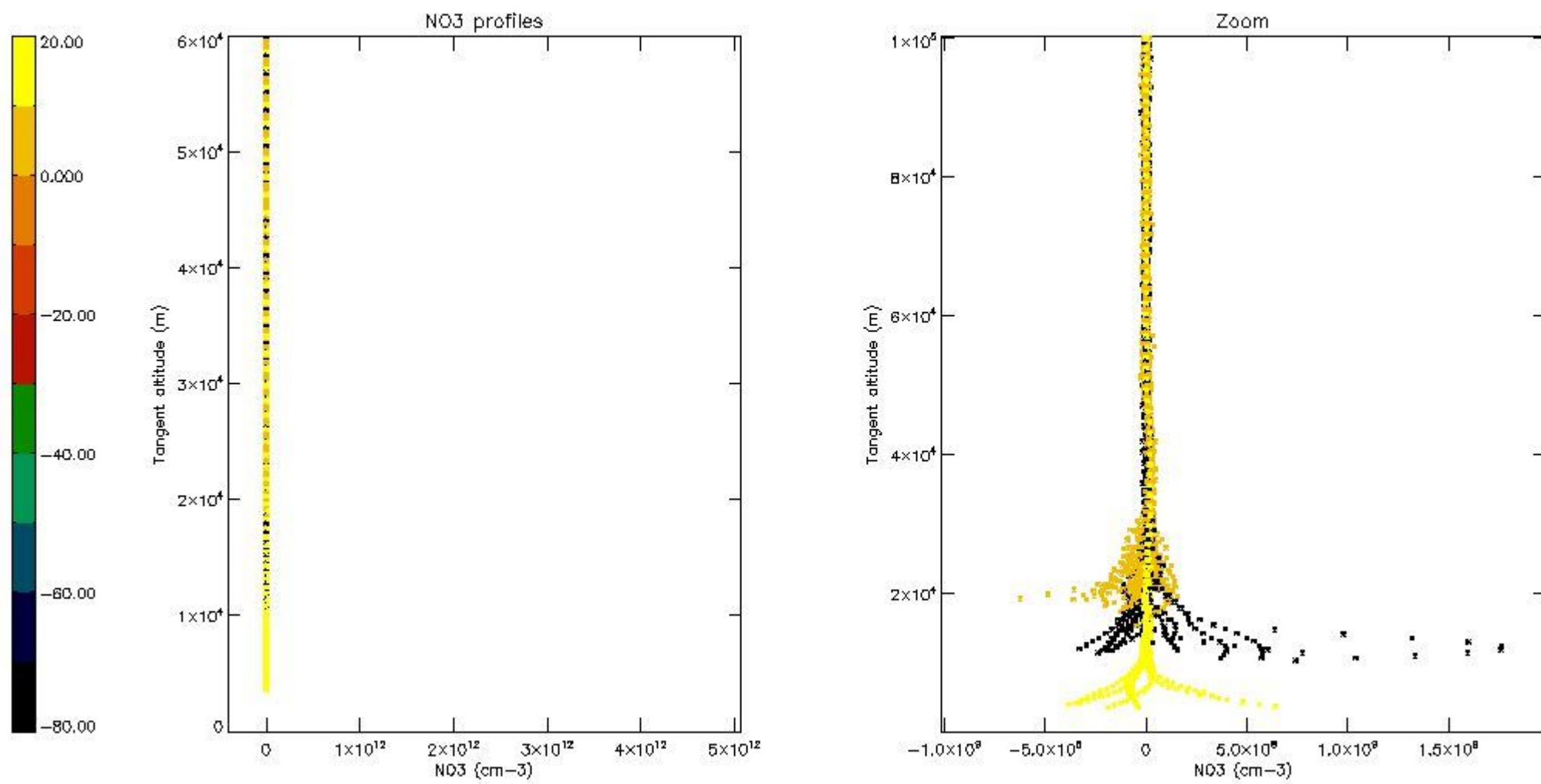
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



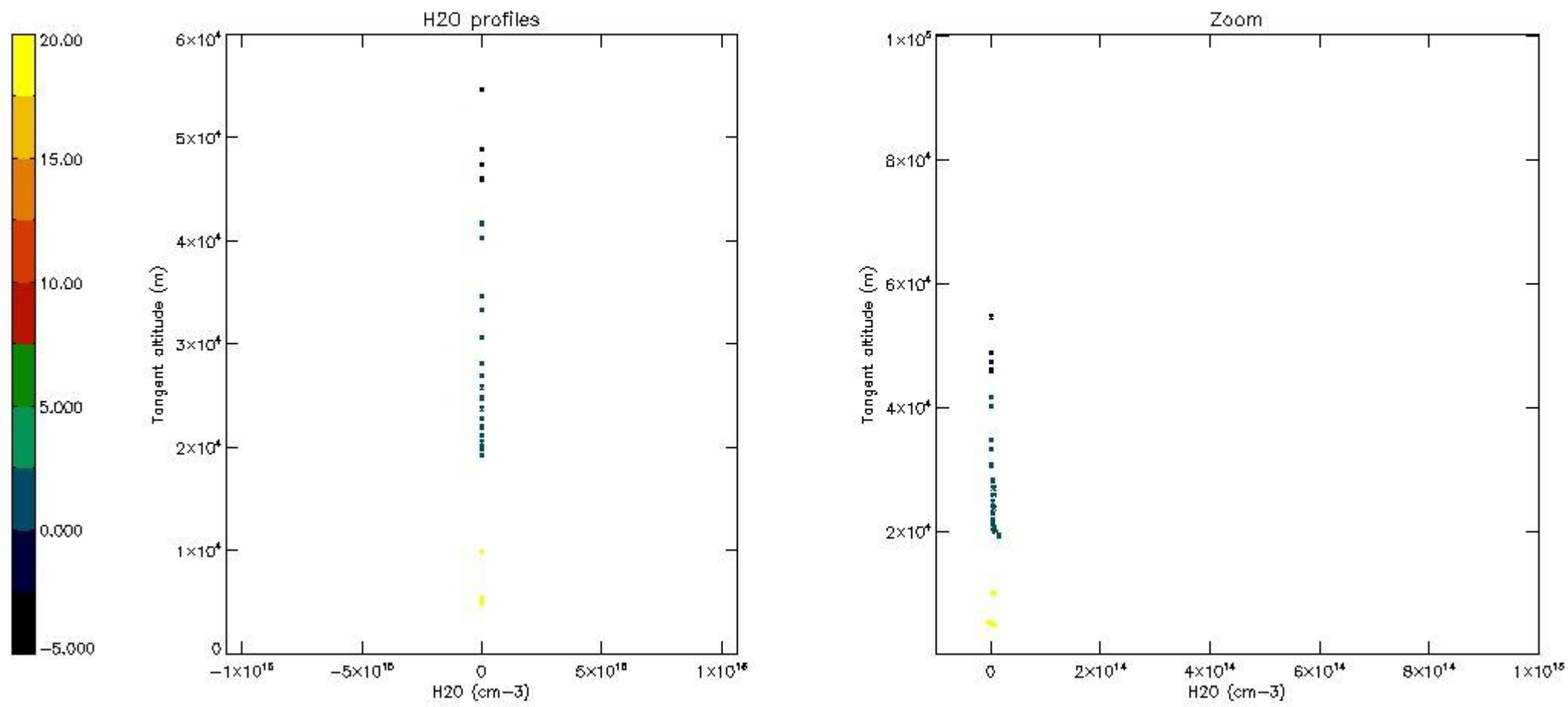
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

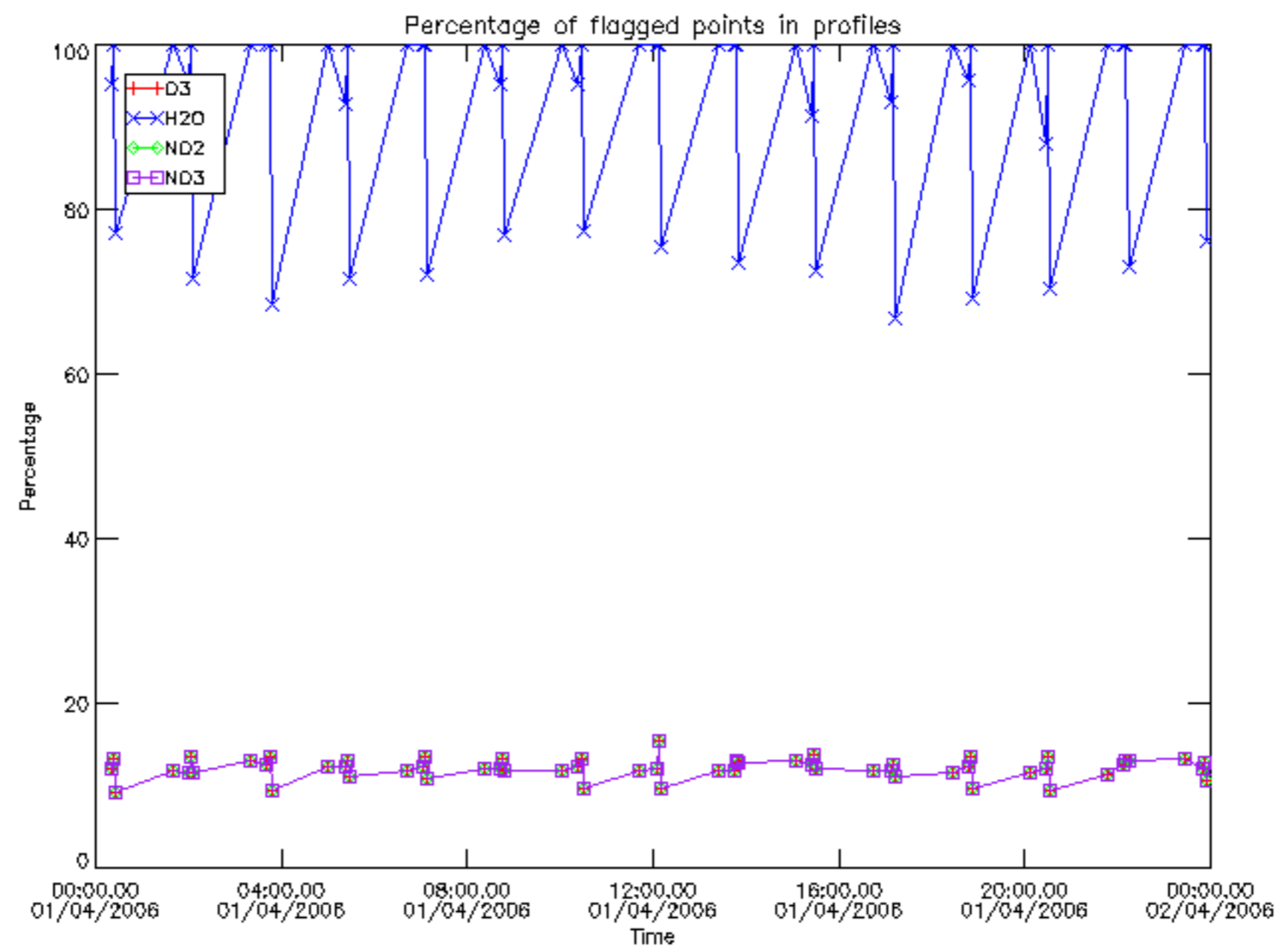
The colorbar represents the latitude.



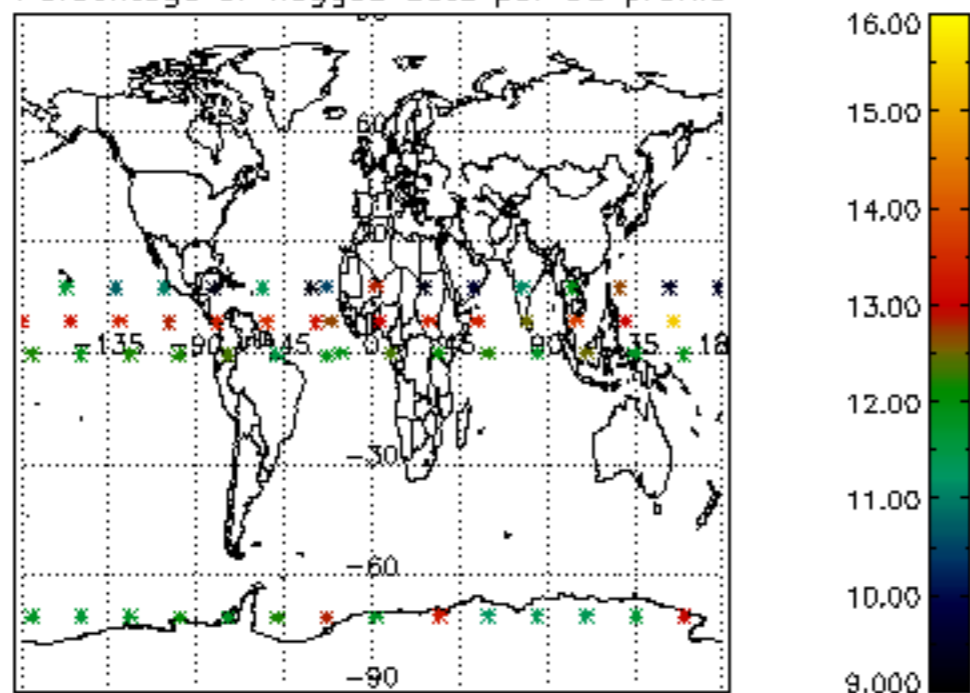
6. Auxiliary Data Files used for the production reported in section 2

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.

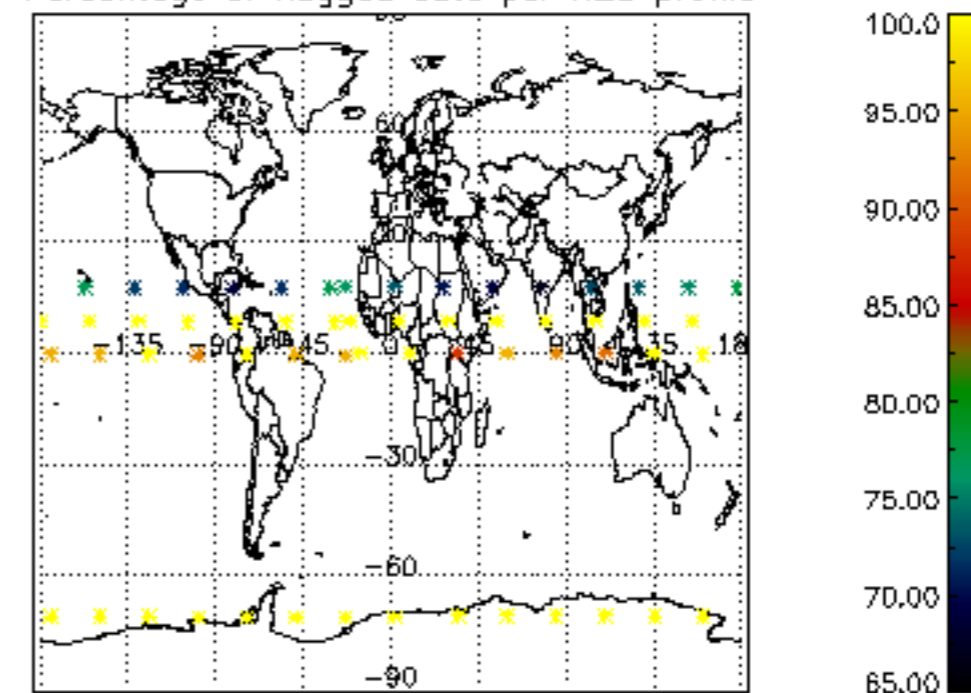
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	01-APR-2006 00:20:05
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-APR-2006 00:20:05
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-APR-2006 00:20:05



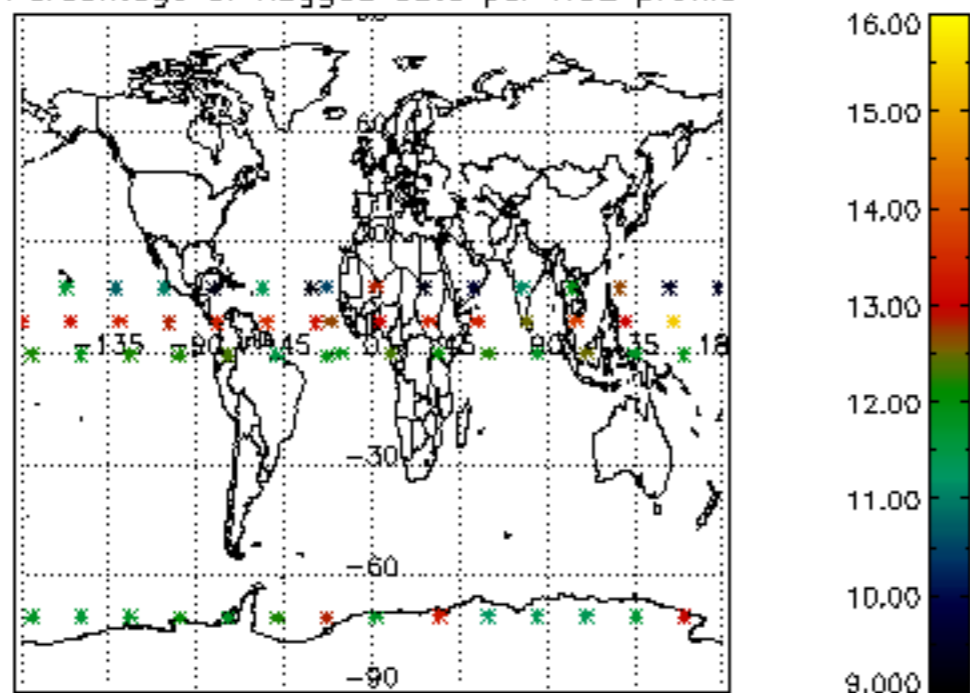
Percentage of flagged data per D3 profile



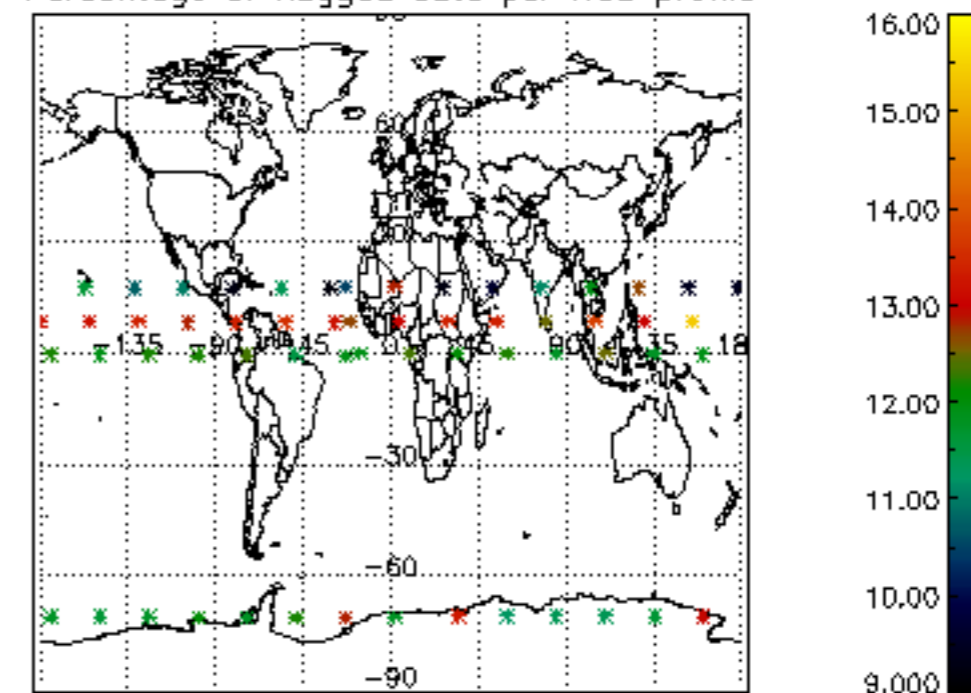
Percentage of flagged data per H2O profile

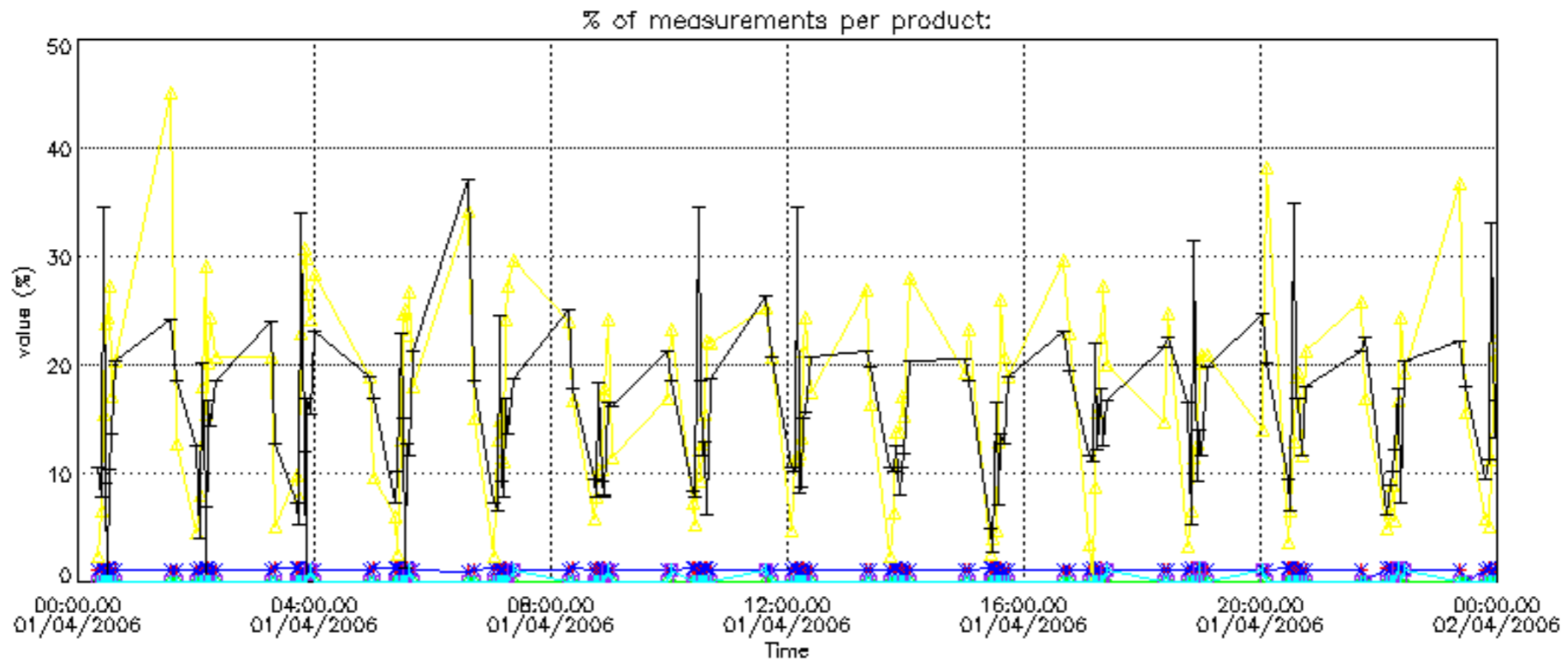
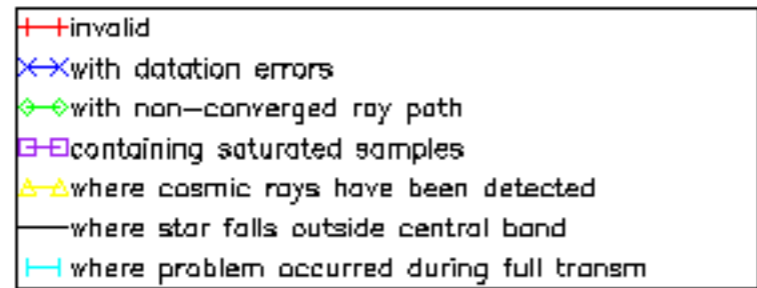


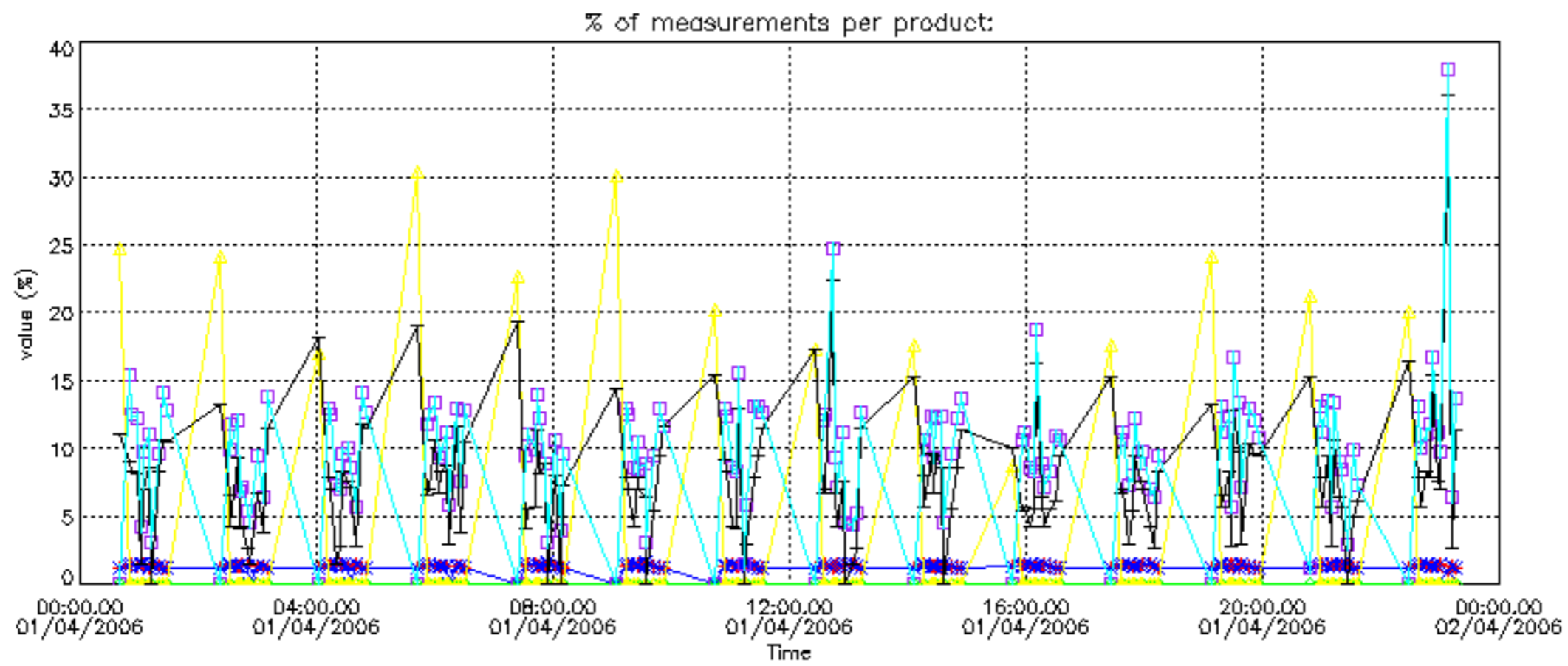
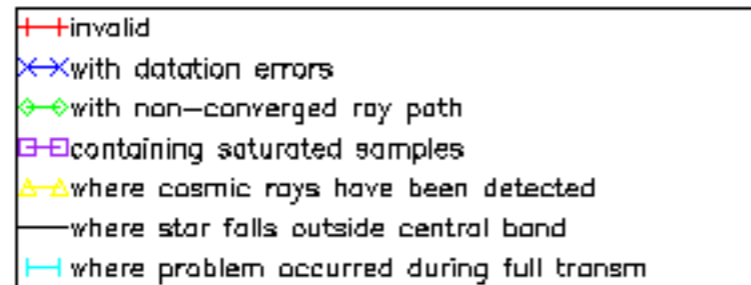
Percentage of flagged data per NO2 profile



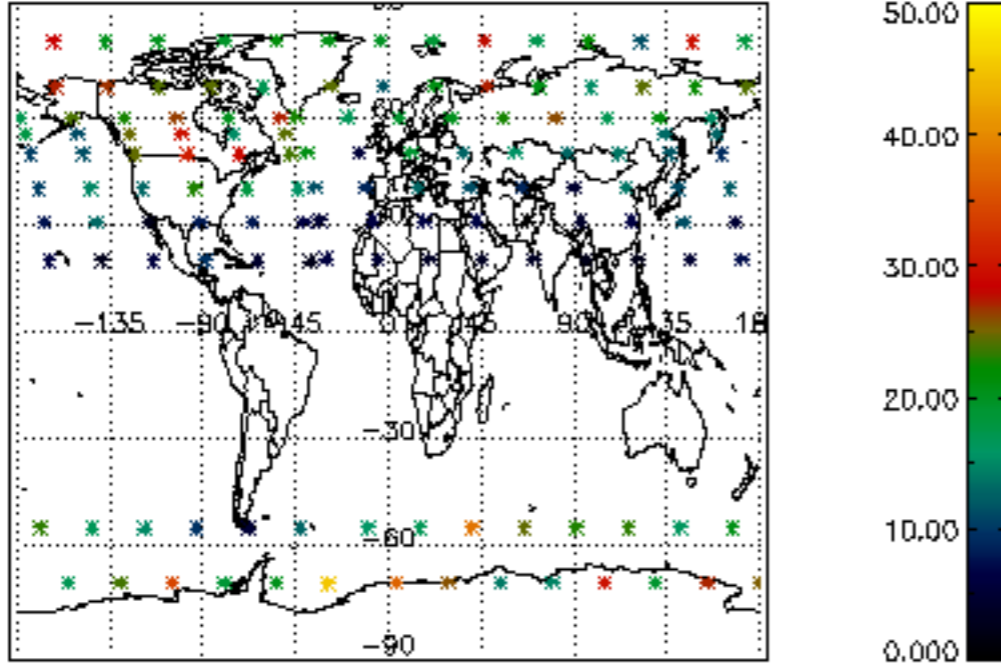
Percentage of flagged data per NO3 profile



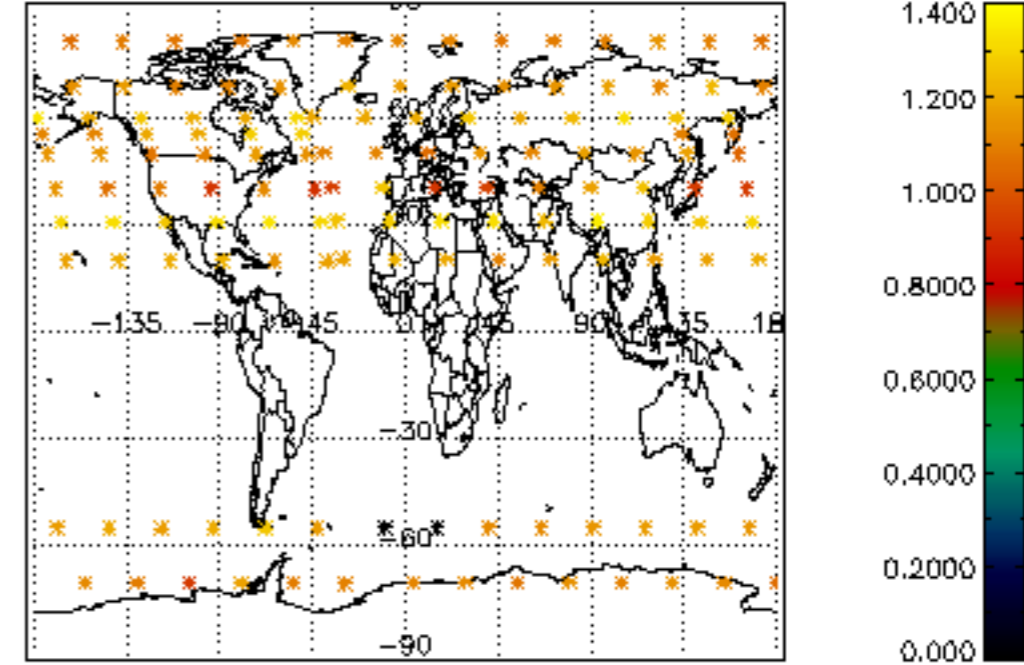




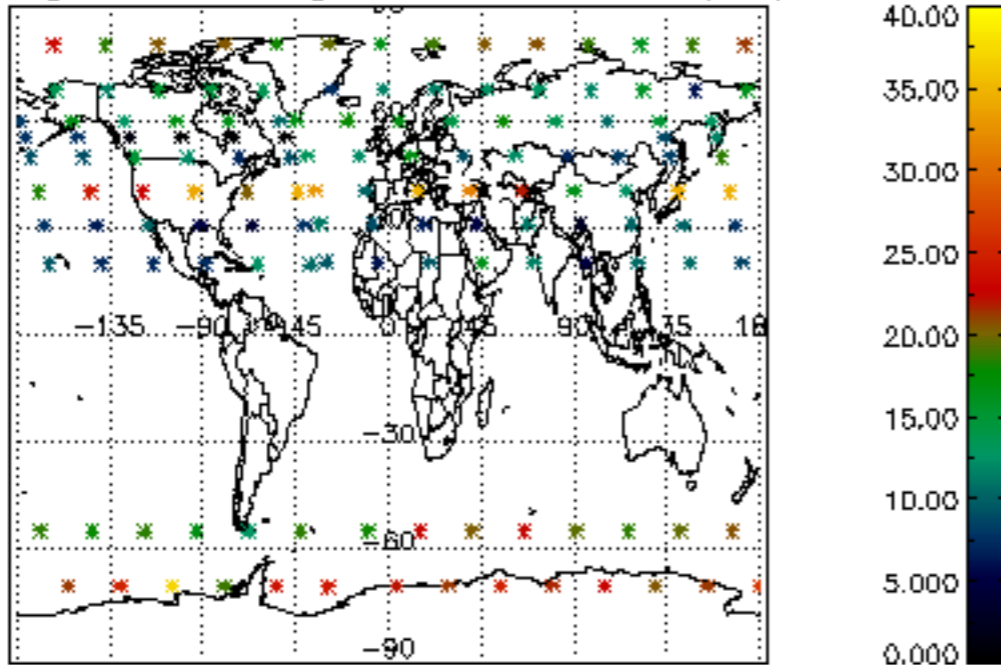
Percentage of cosmic ray hits per profile



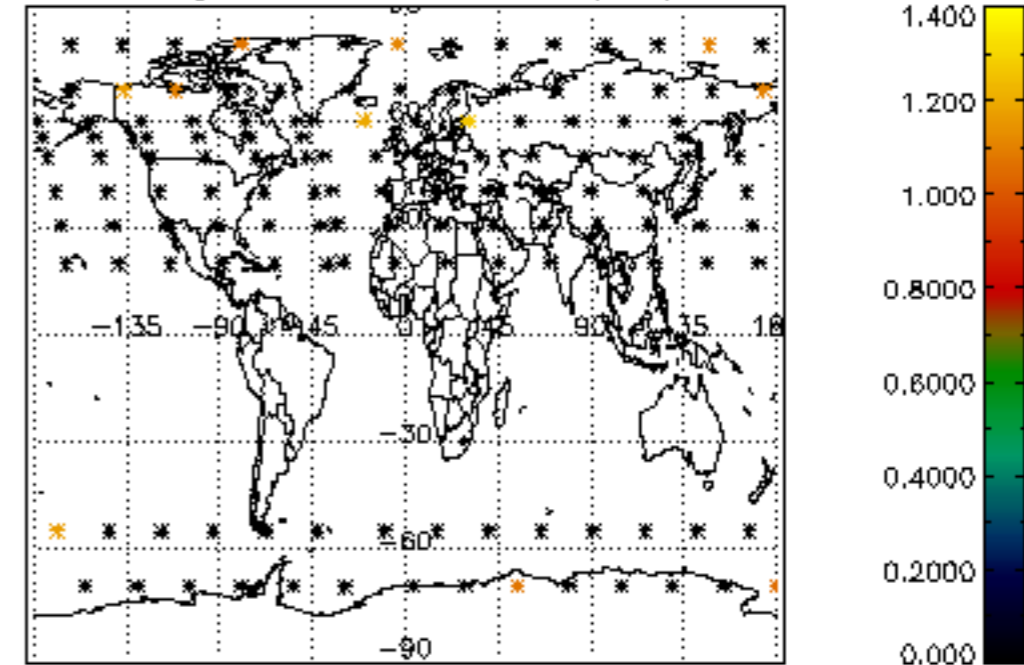
Percentage of datation errors per profile



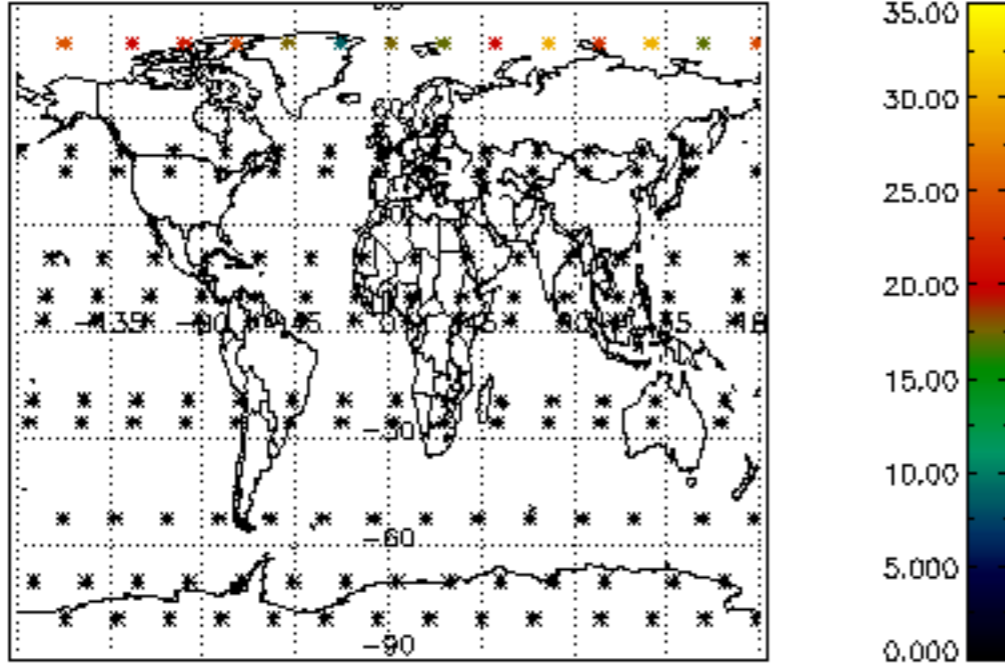
Percentage of star falling outside central band per profile



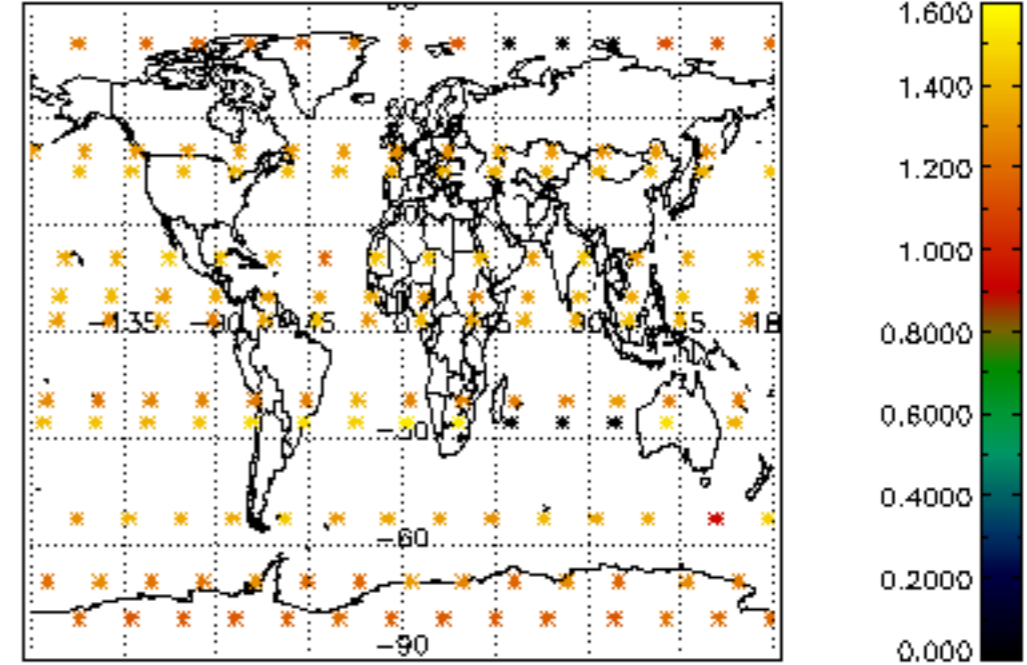
Percentage of saturation errors per profile



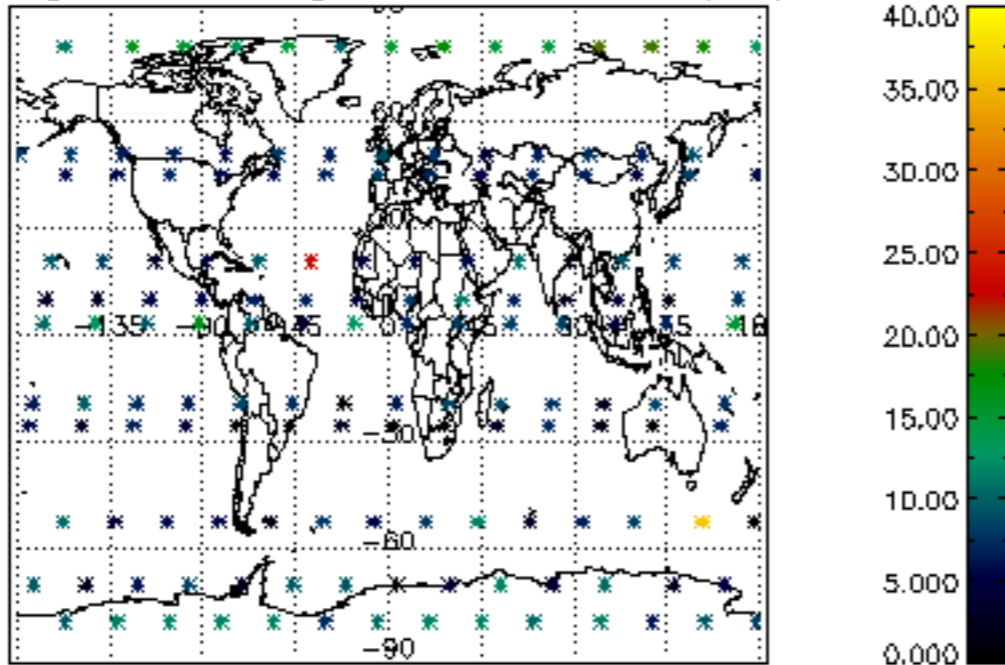
Percentage of cosmic ray hits per profile



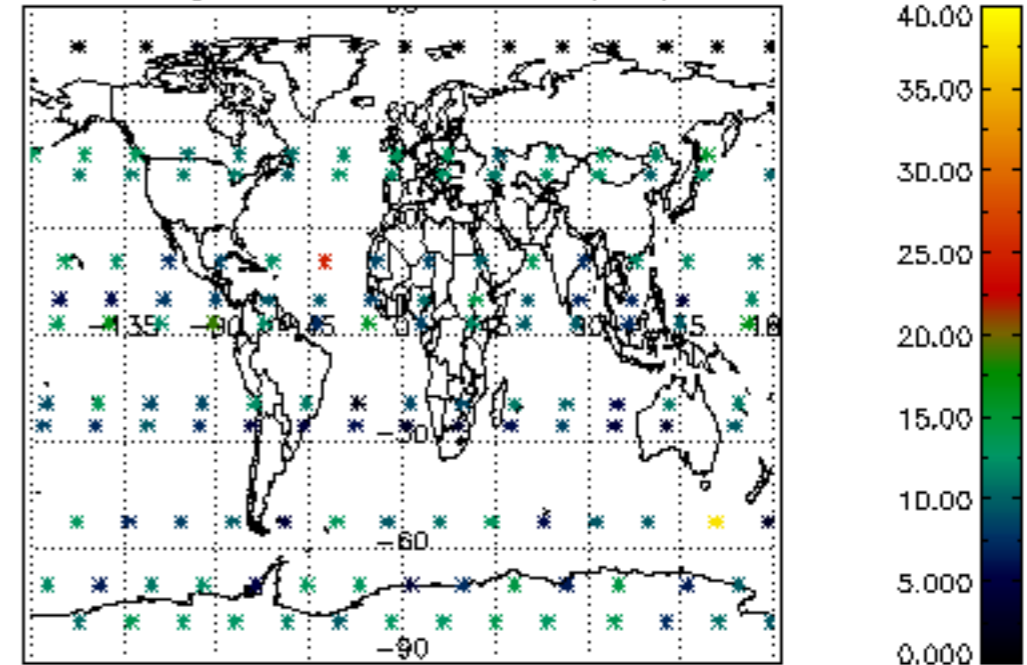
Percentage of datation errors per profile

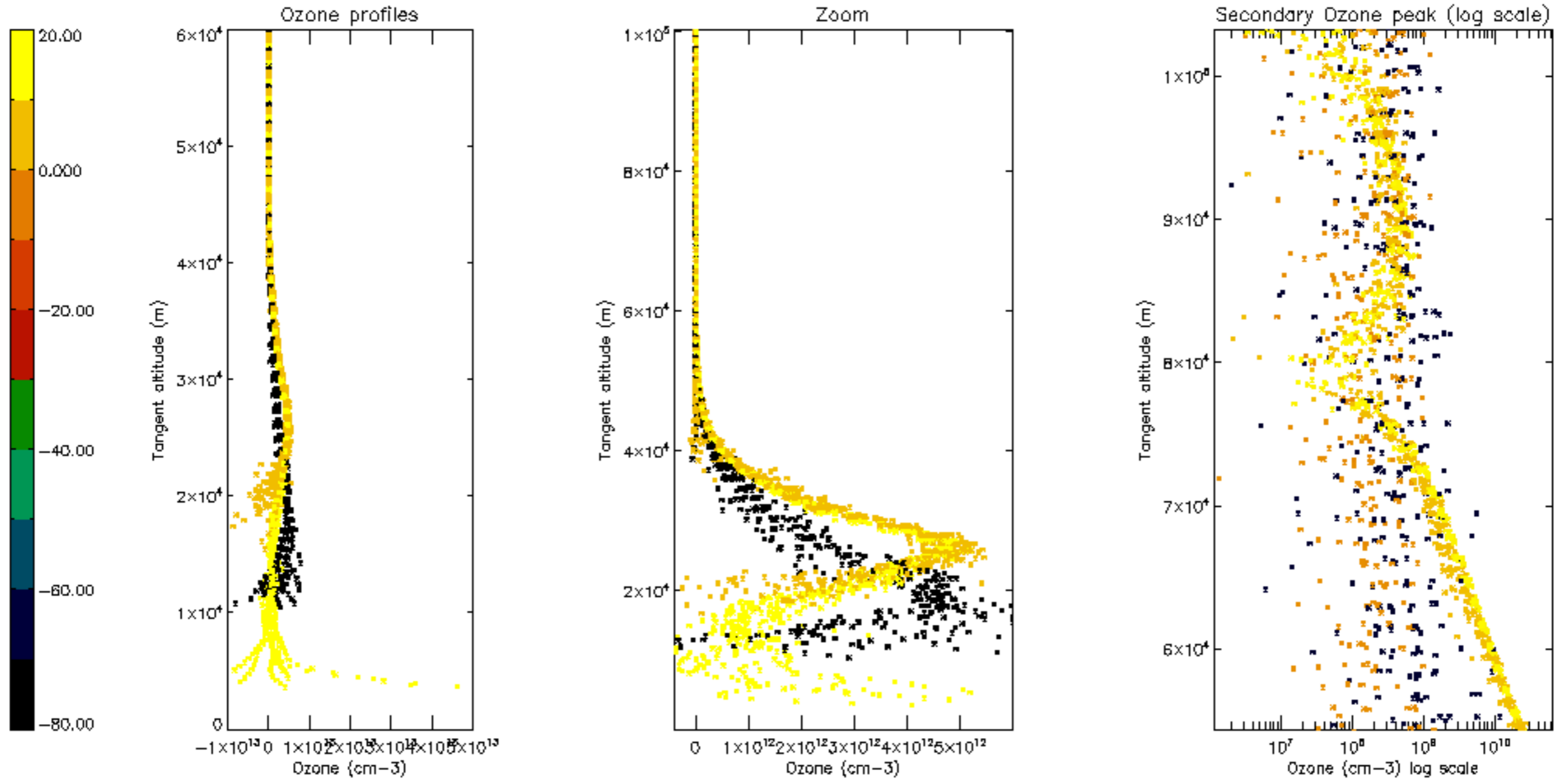


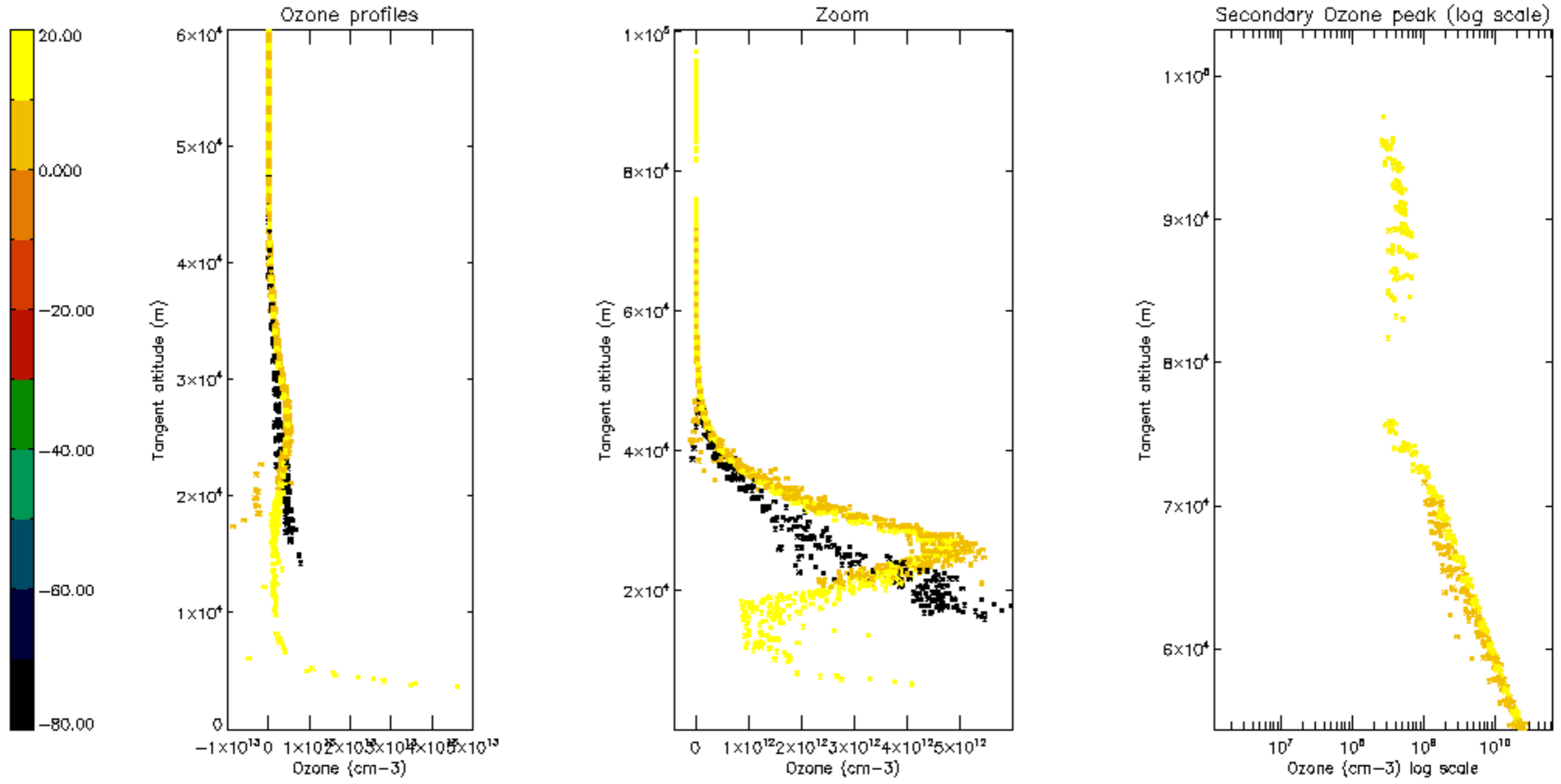
Percentage of star falling outside central band per profile

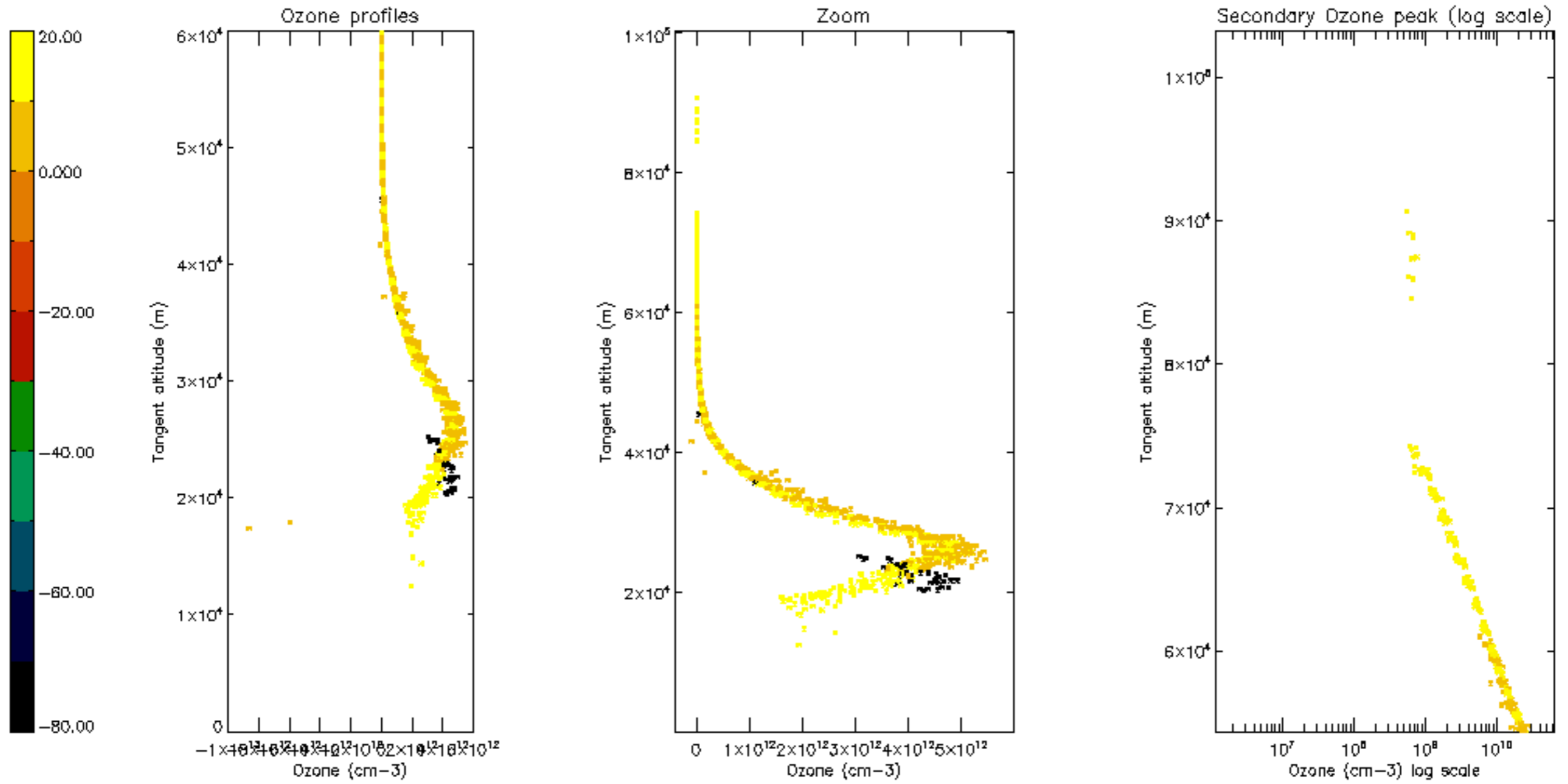


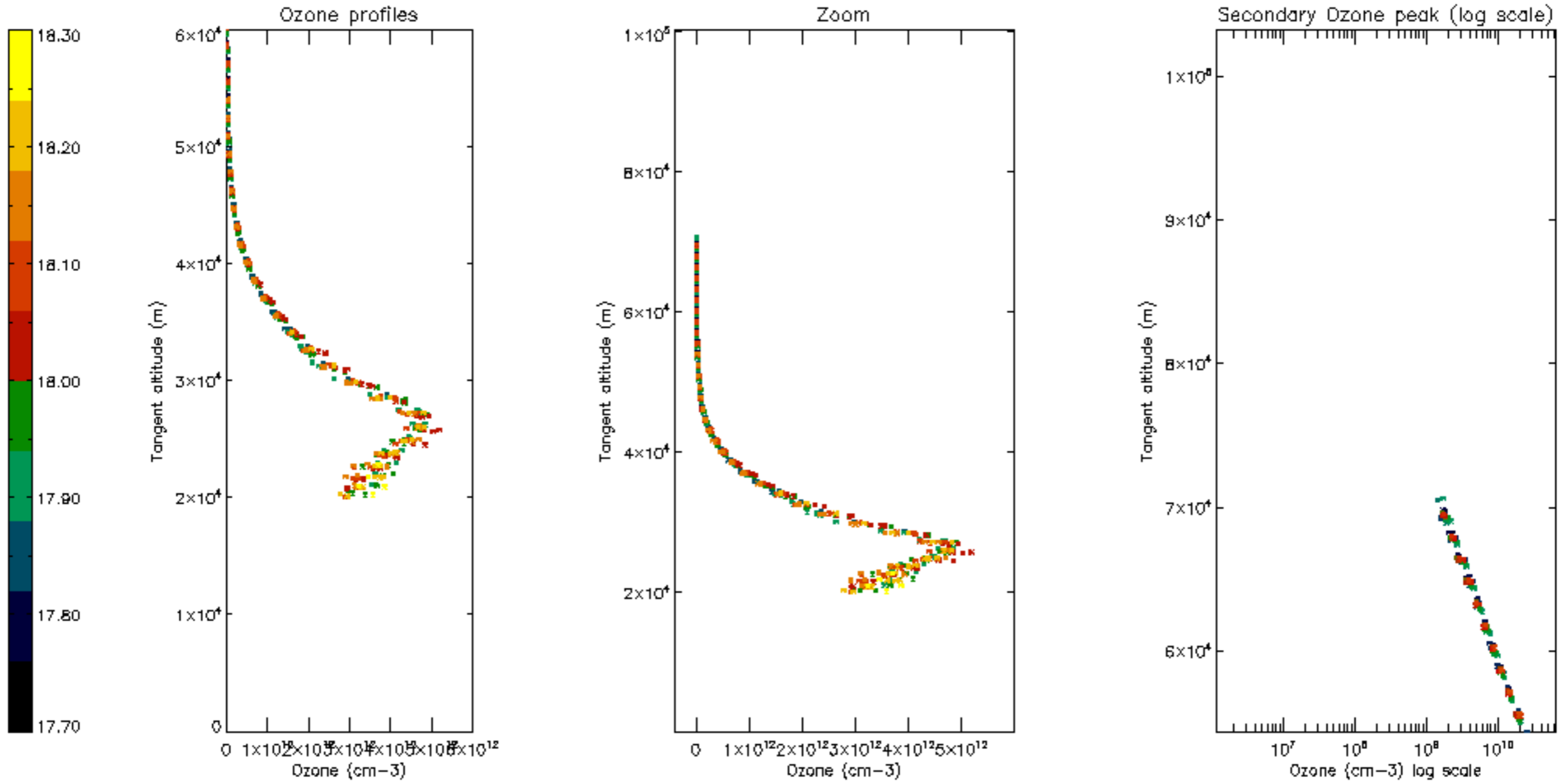
Percentage of saturation errors per profile

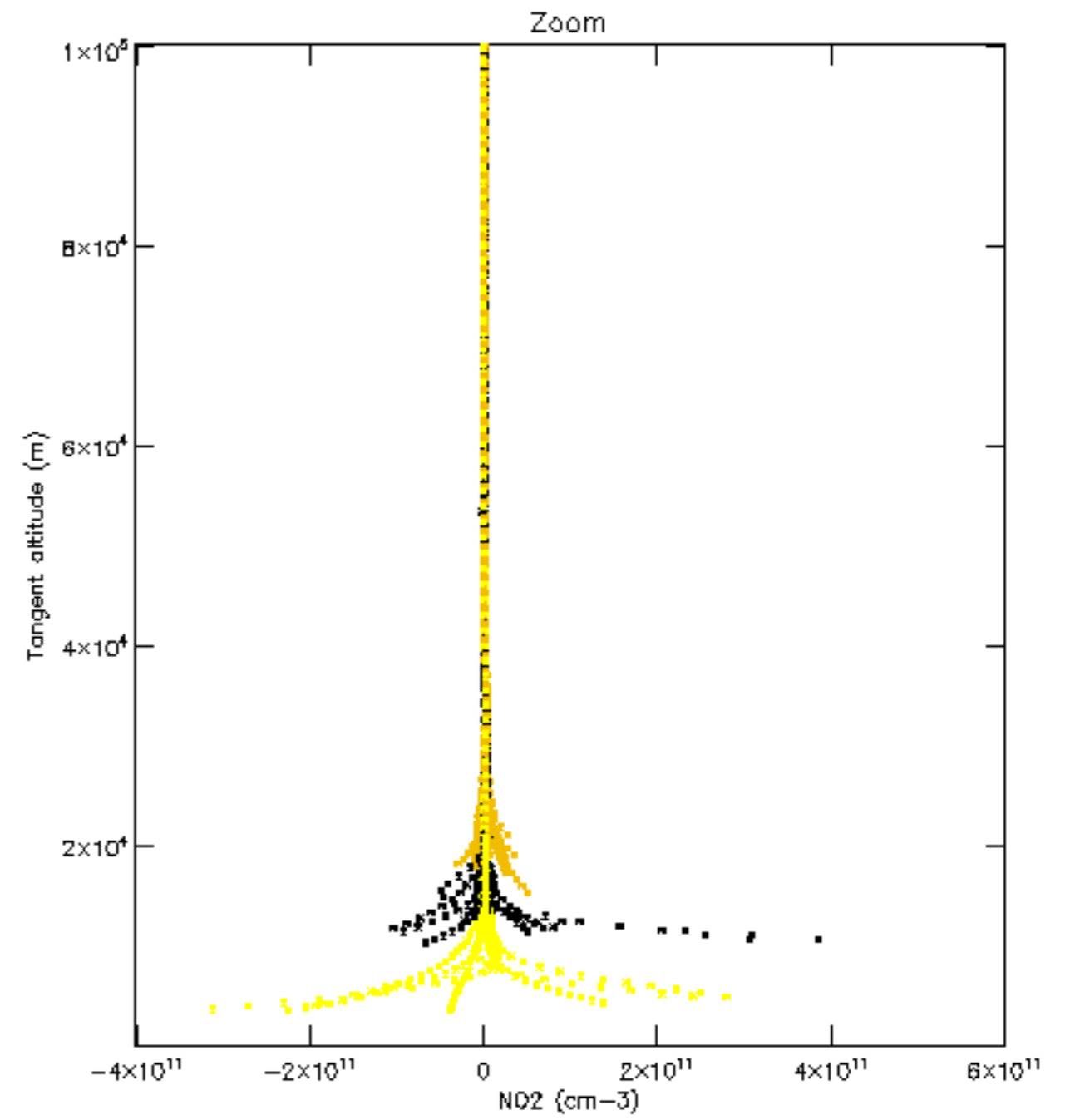
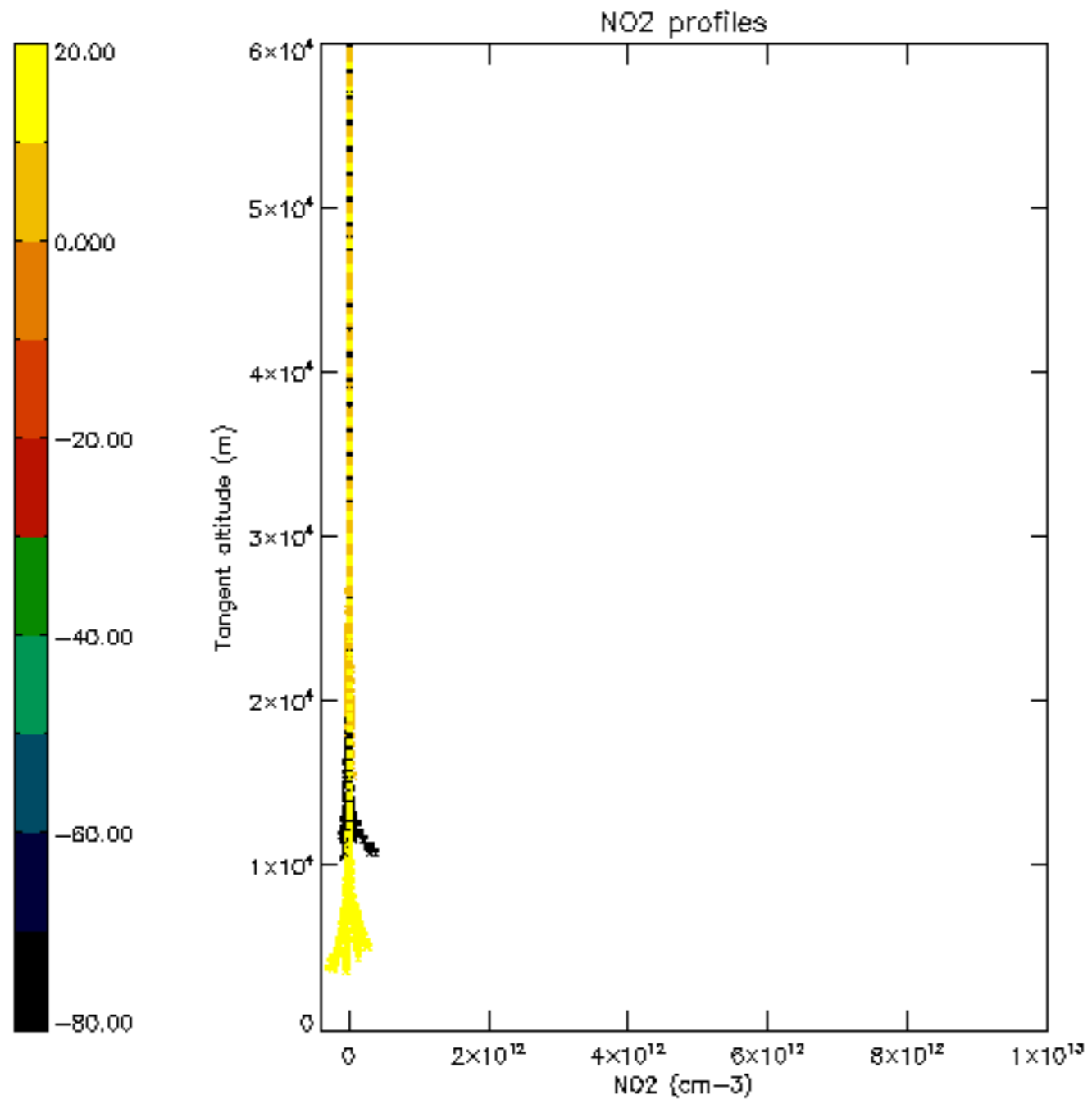


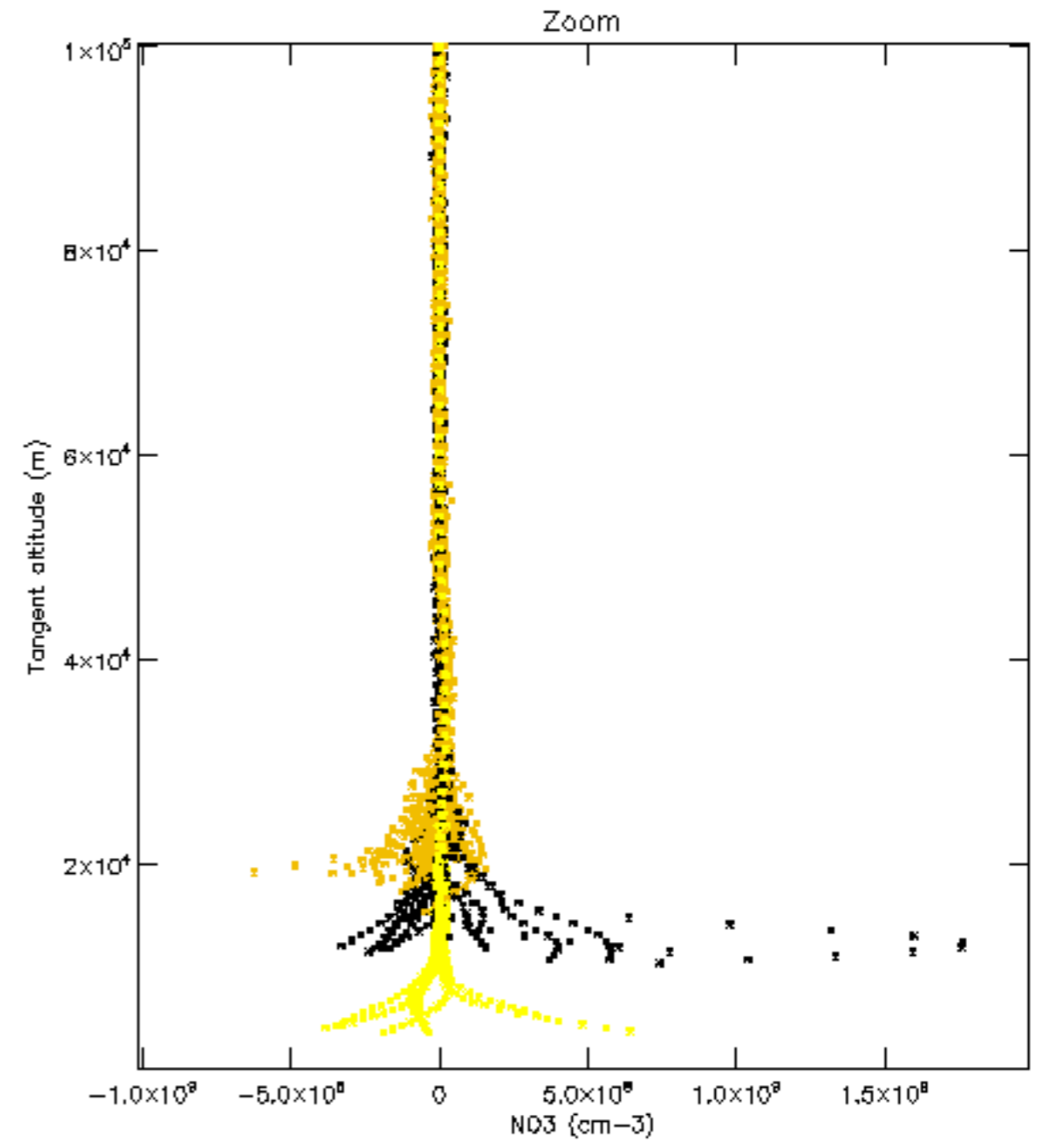
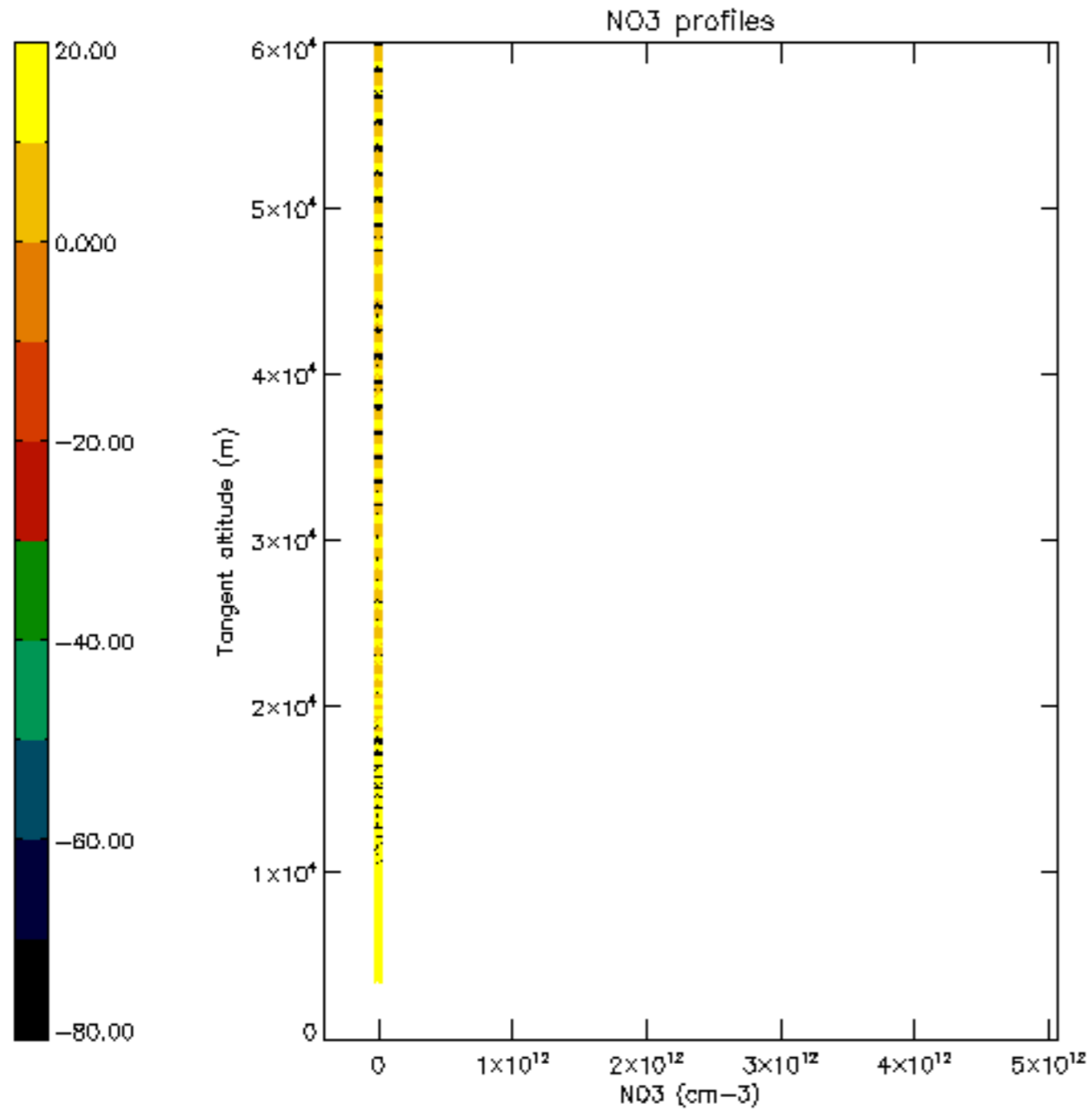


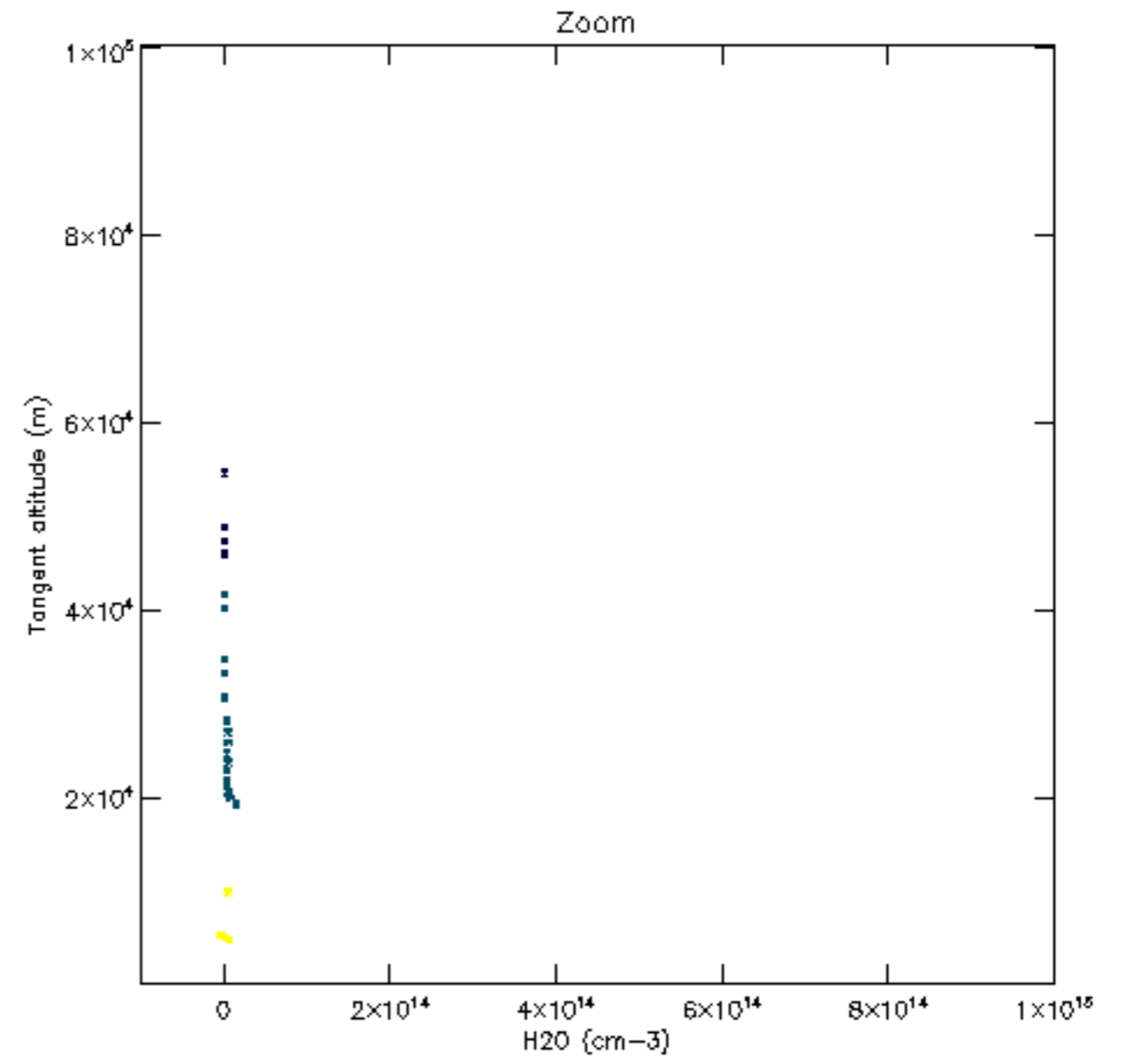
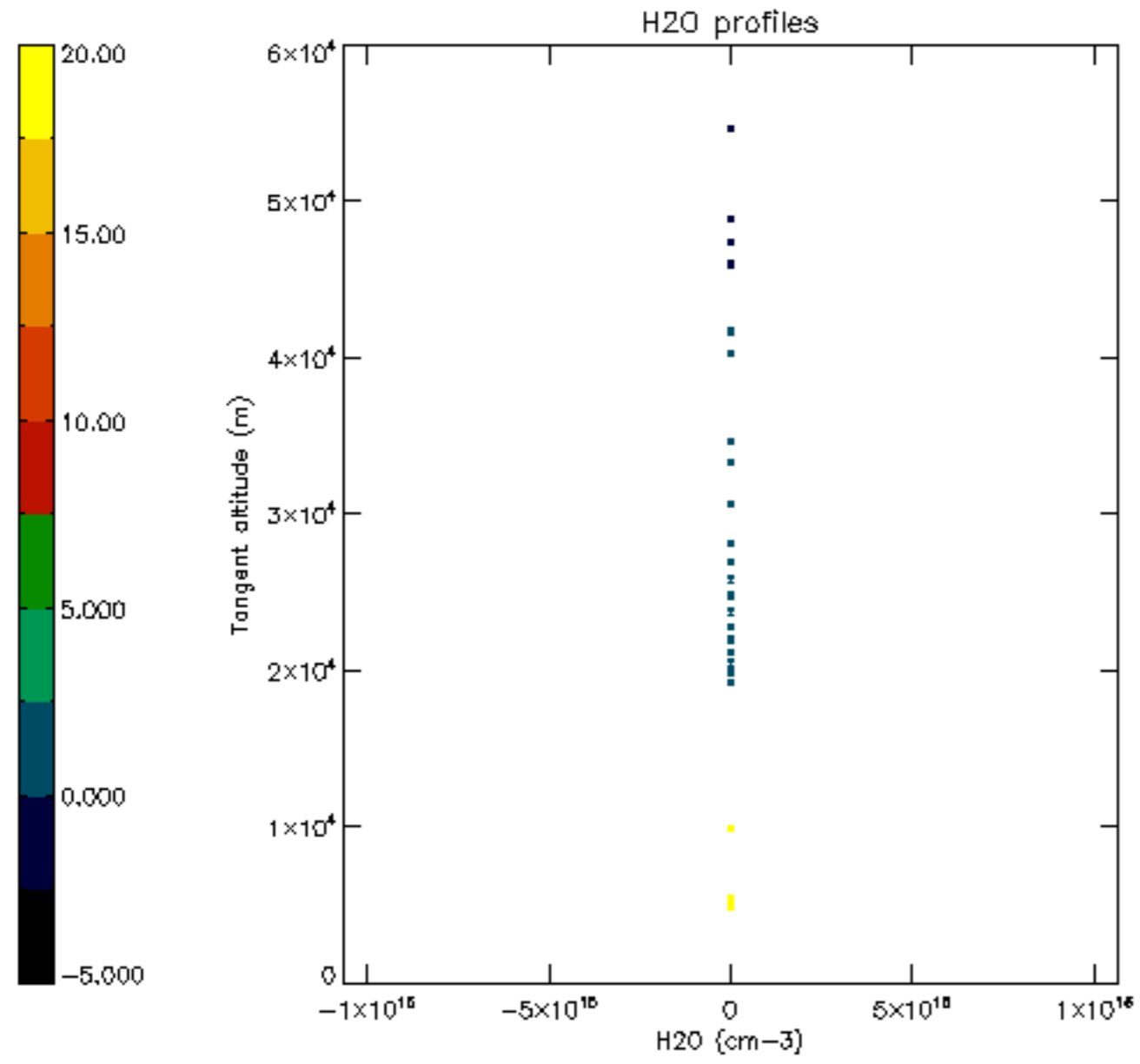


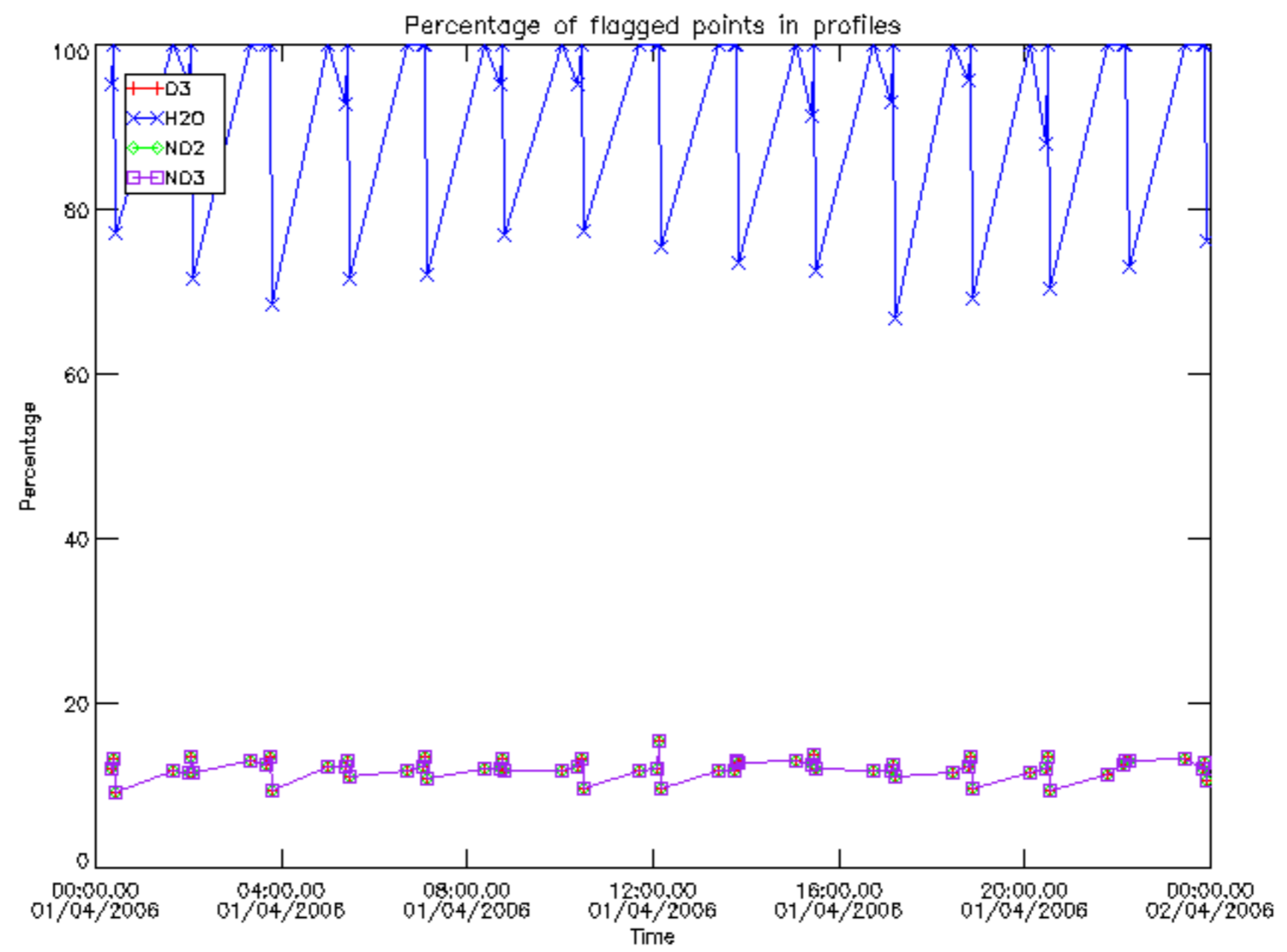




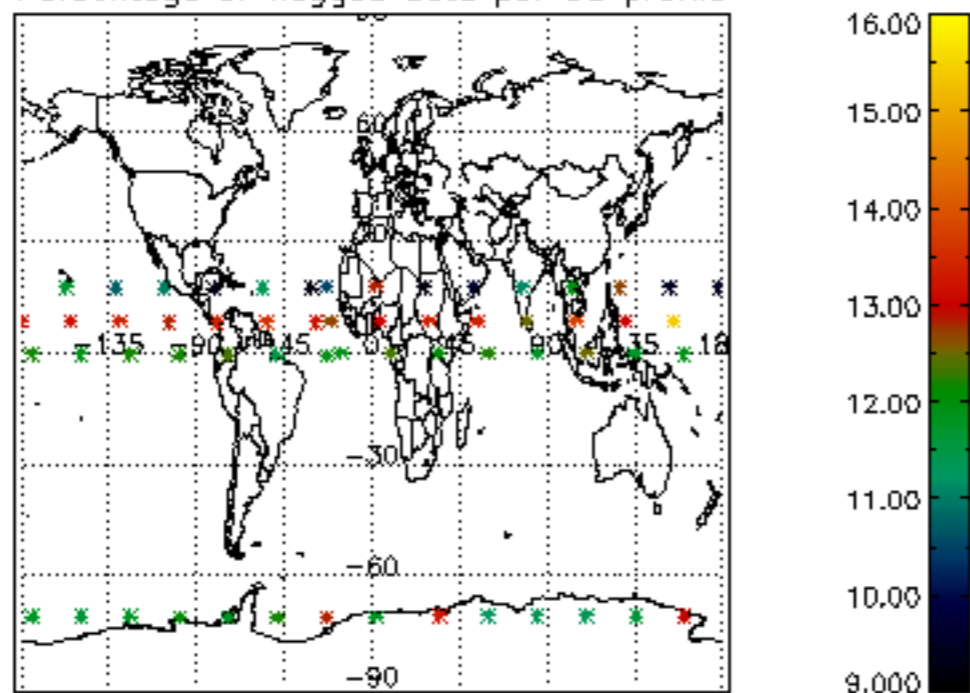




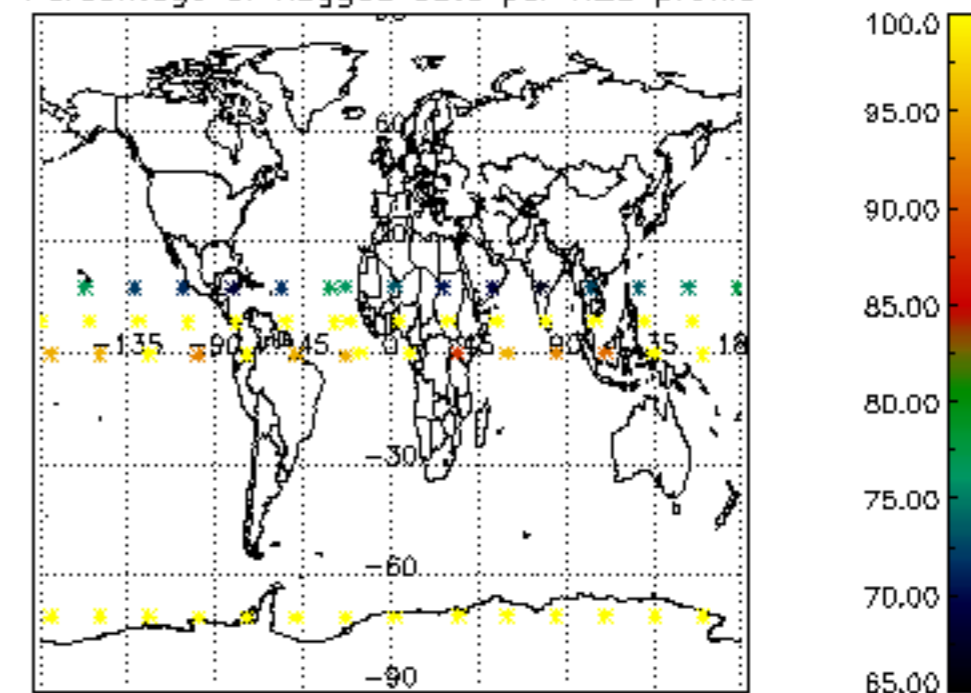




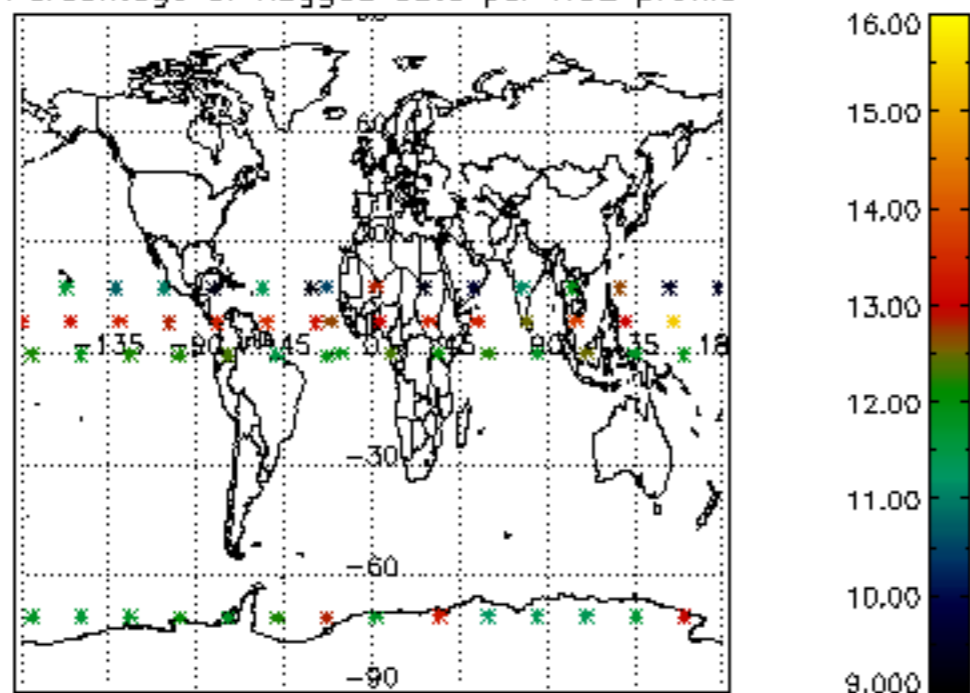
Percentage of flagged data per D3 profile



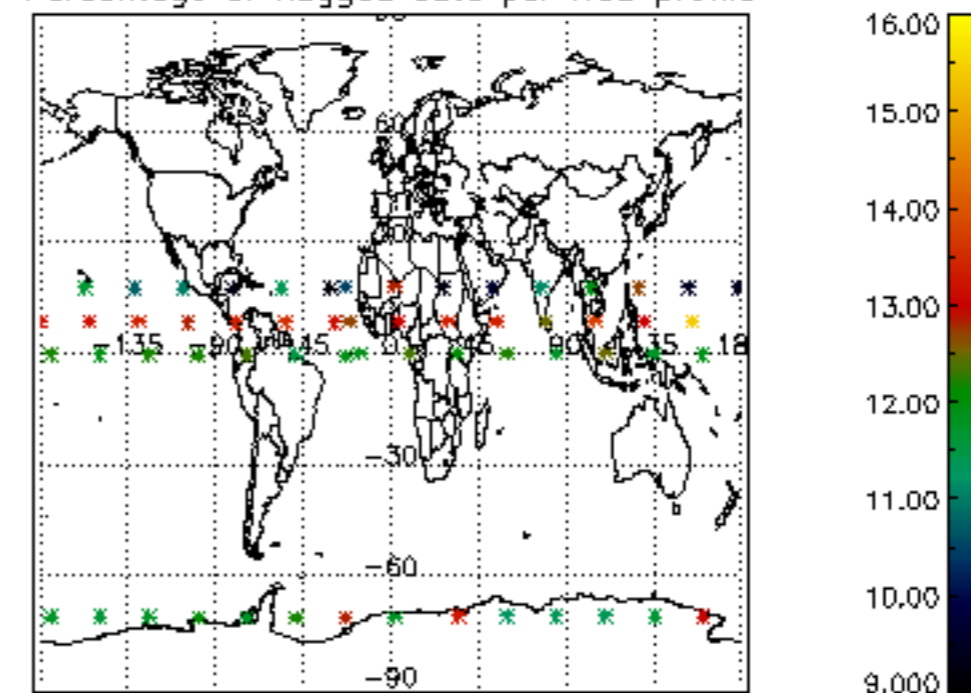
Percentage of flagged data per H2O profile

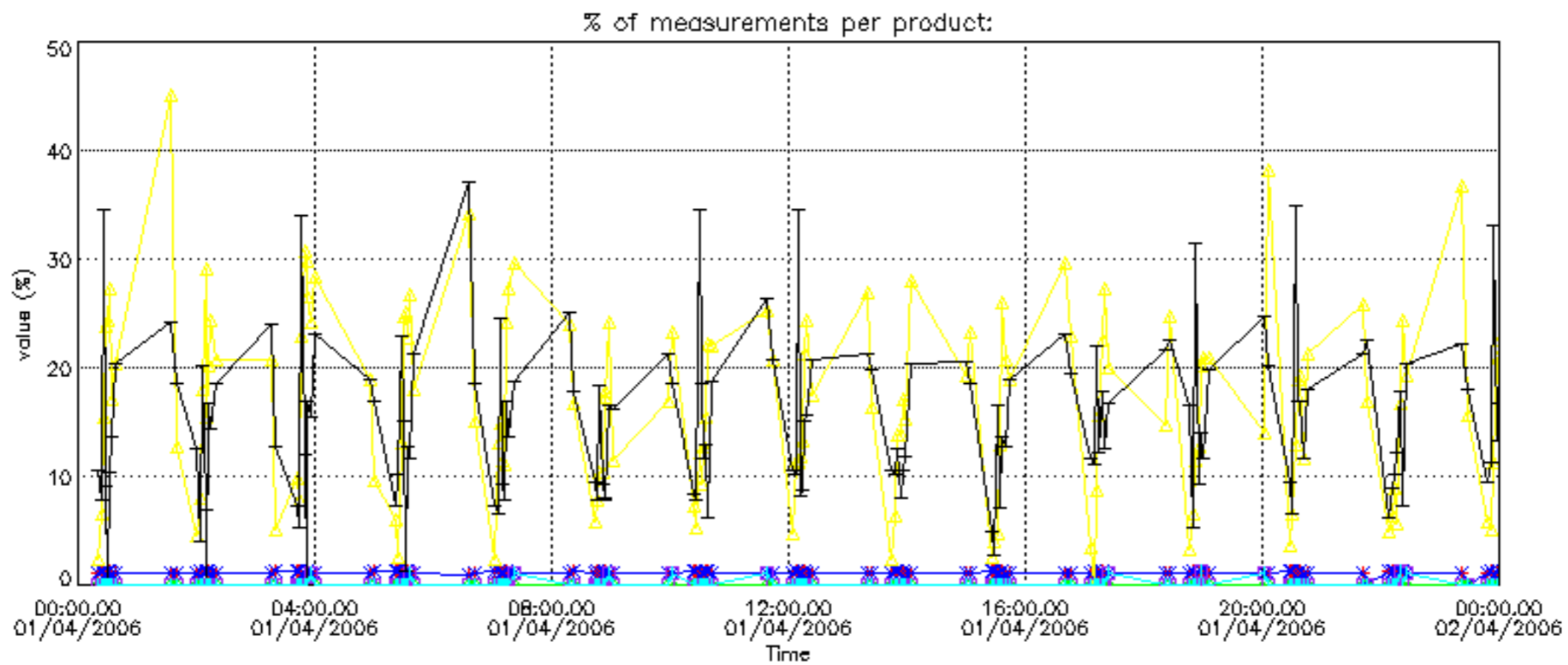


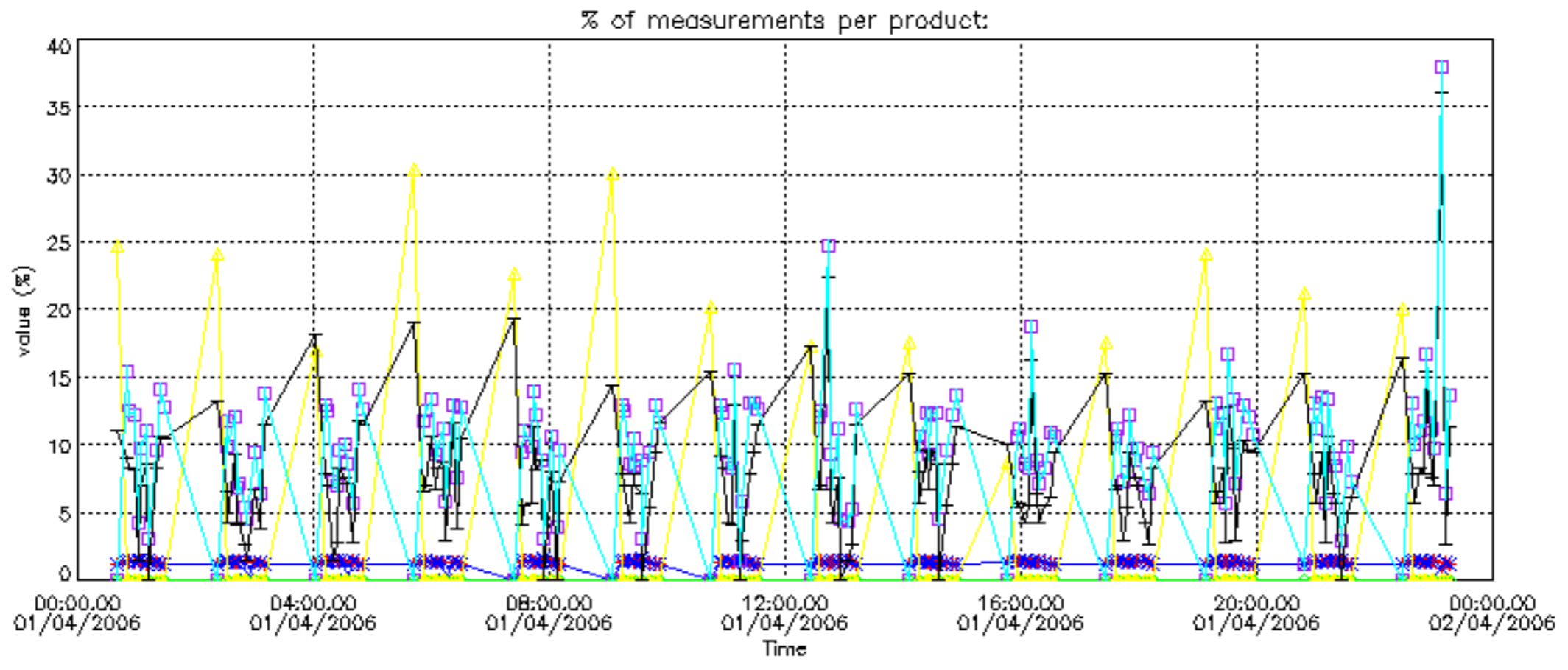
Percentage of flagged data per NO2 profile



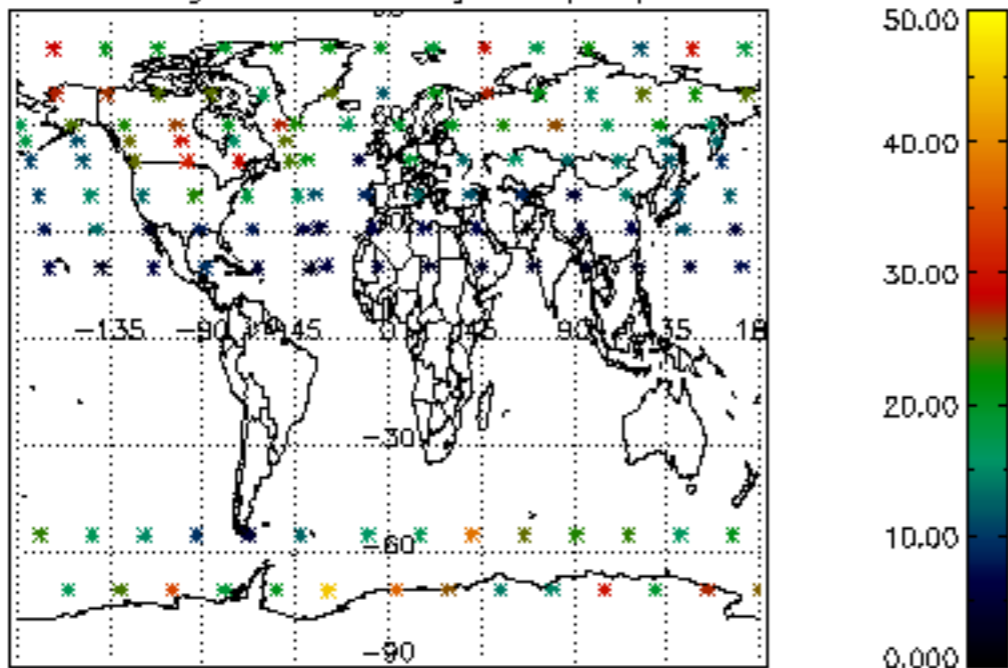
Percentage of flagged data per NO3 profile



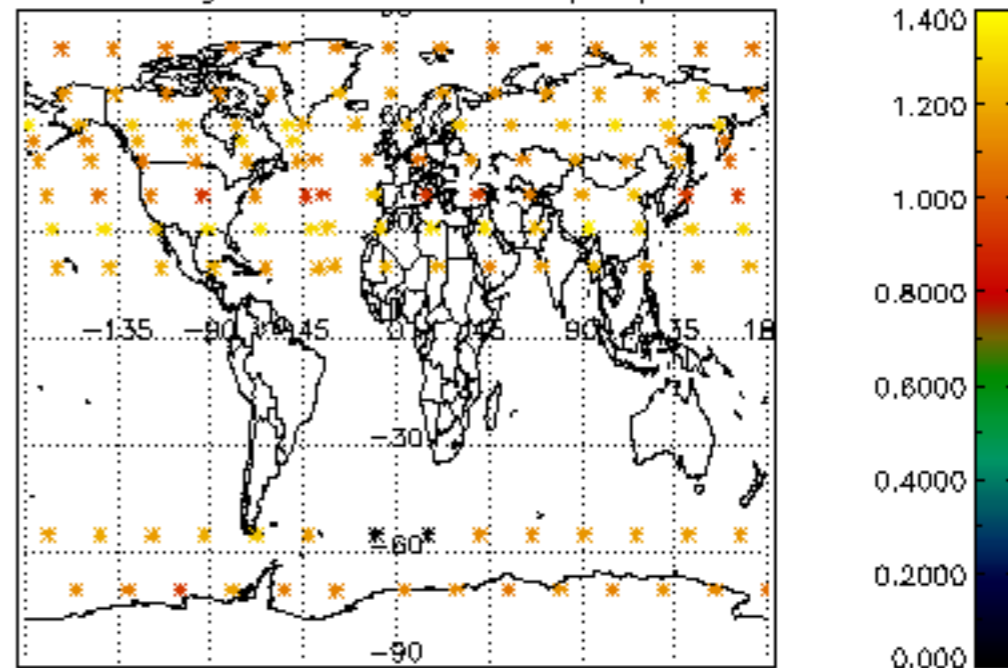




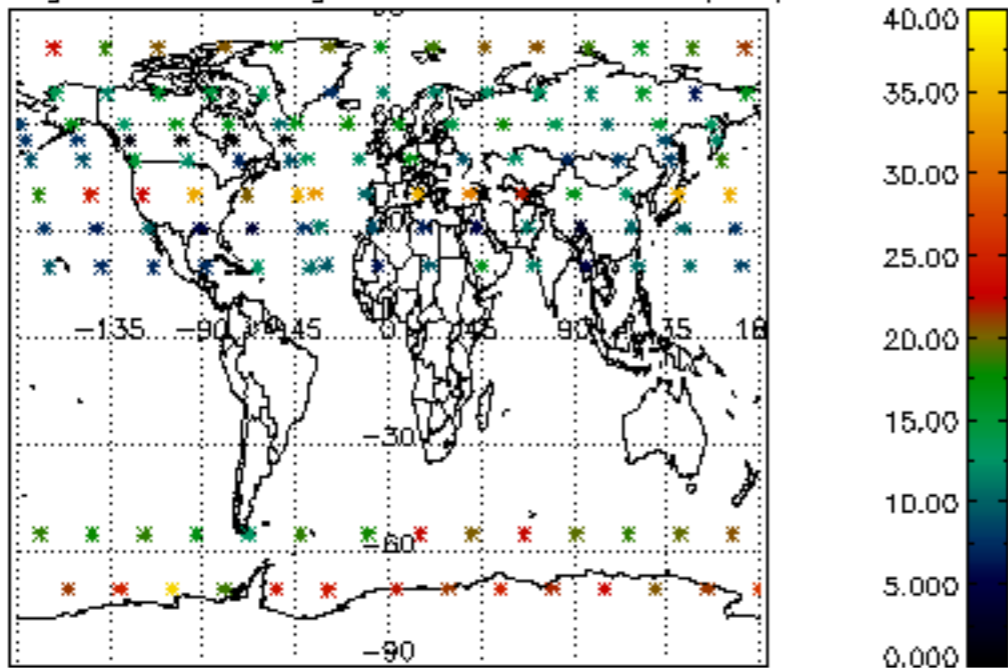
Percentage of cosmic ray hits per profile



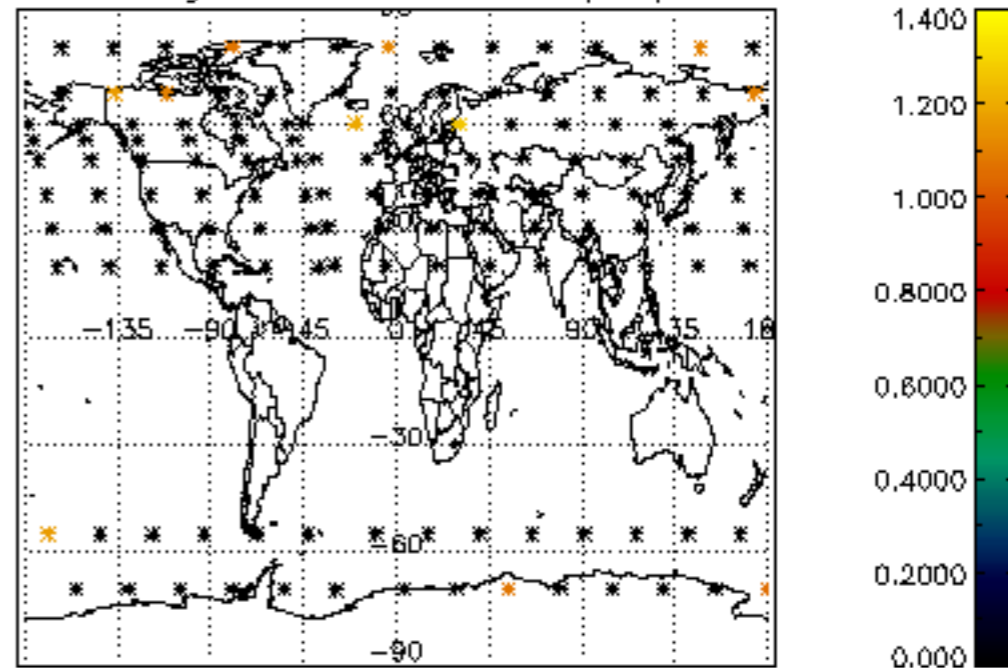
Percentage of datation errors per profile



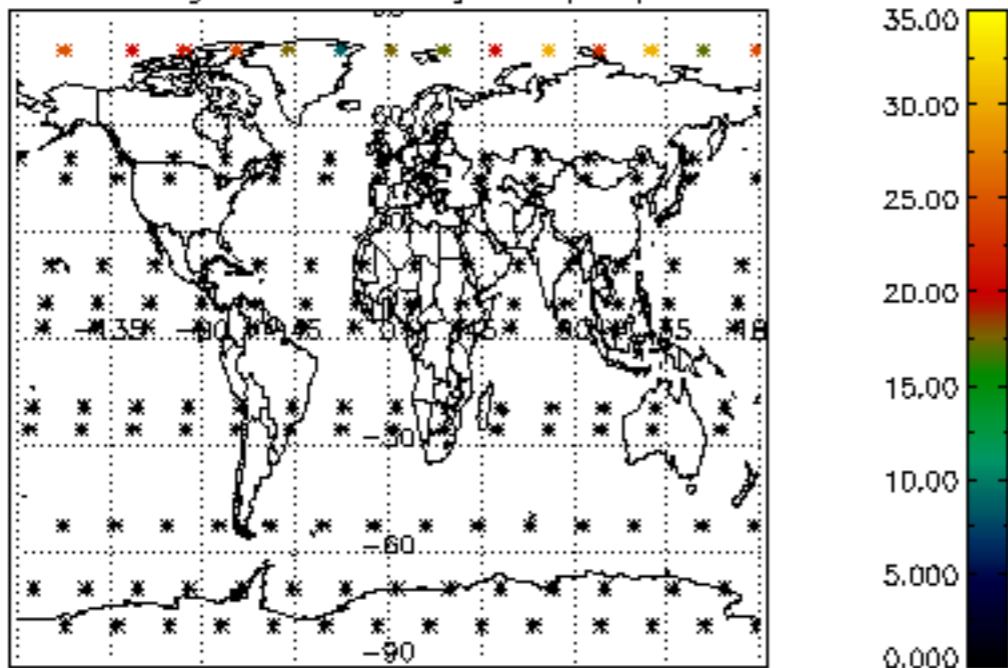
Percentage of star falling outside central band per profile



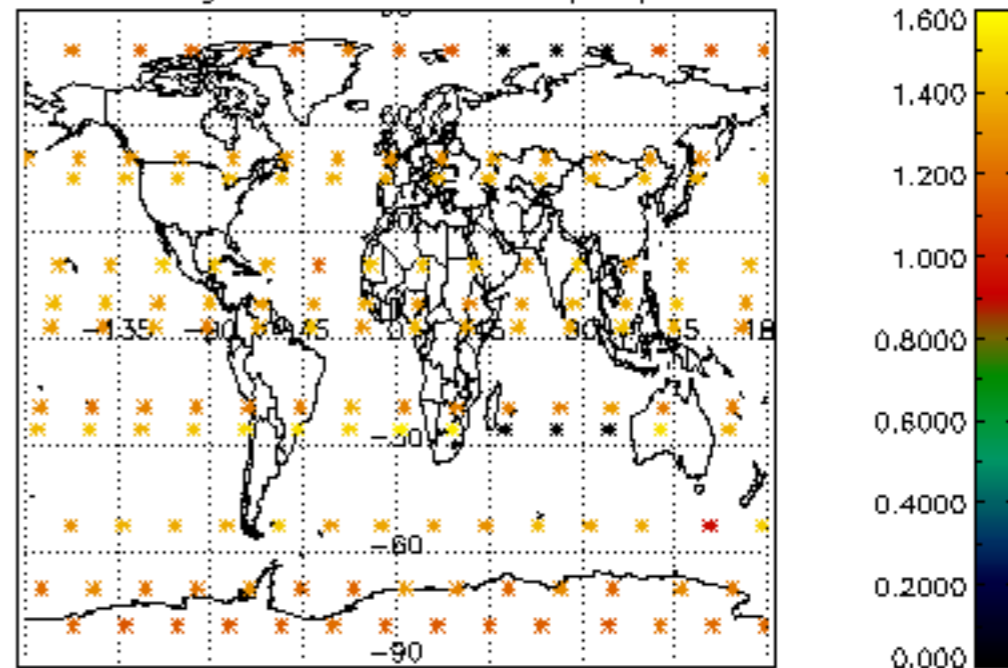
Percentage of saturation errors per profile



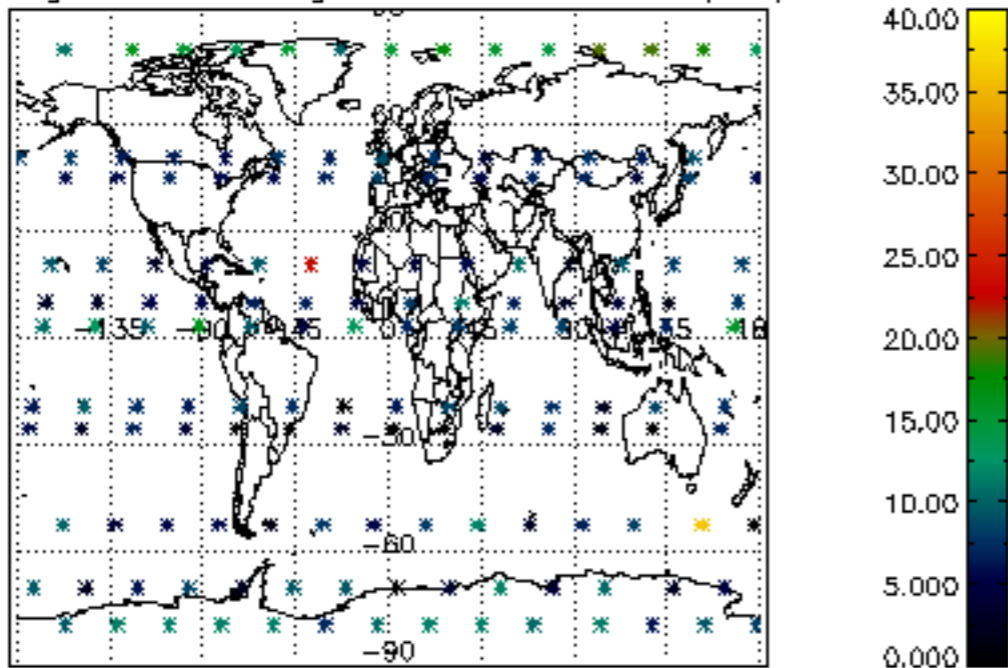
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

