

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	29APR2013 08:46:49
Data source version	GOMOS/6.01
Start time of products	22-03-2010 (22MAR2010 00:00:00)
Stop time of products	23-03-2010 (23MAR2010 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	349
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

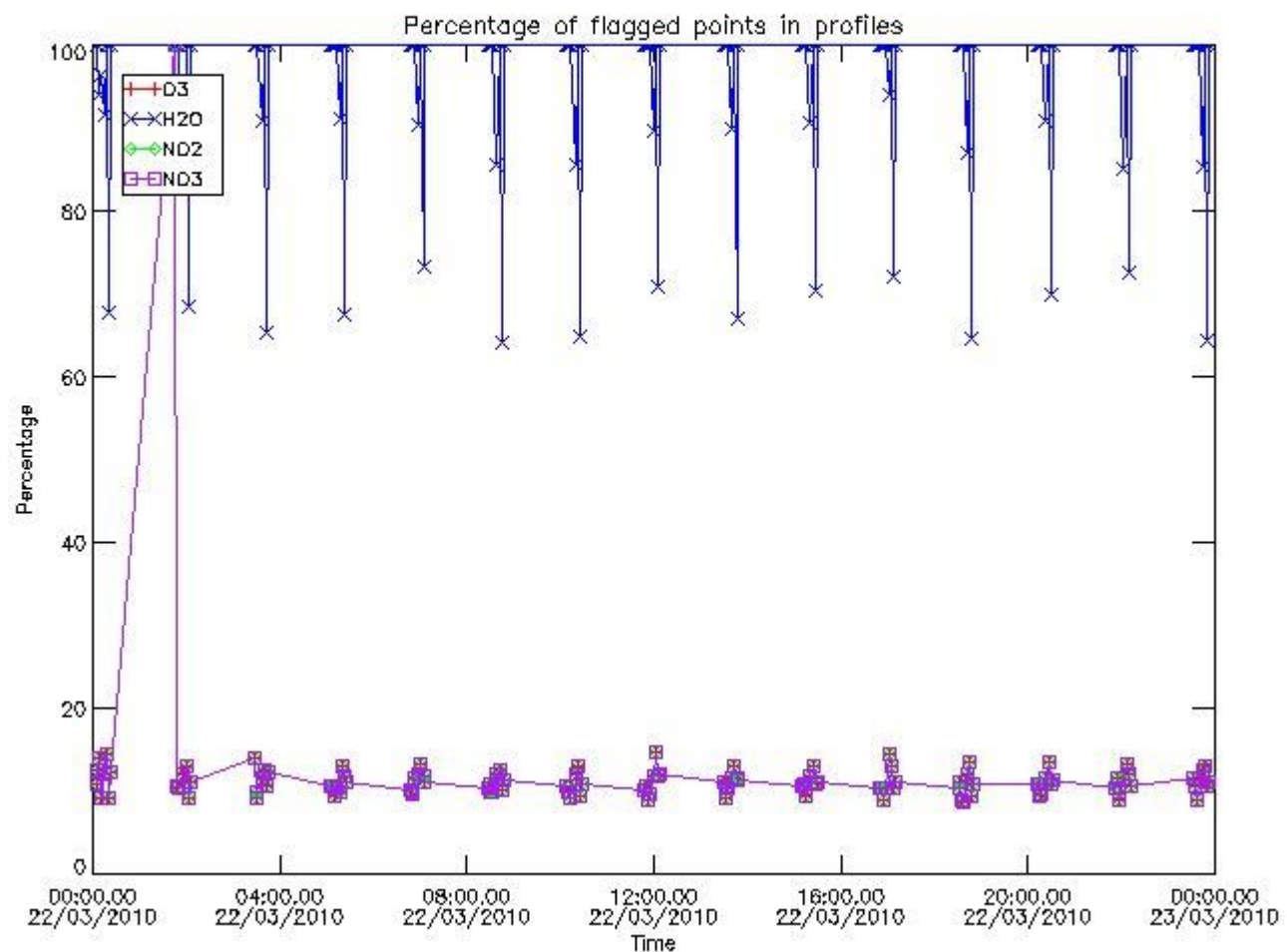
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20100322_000408_000000482087_00488_42125_0452.N1	22-MAR-2010 00:04:08	Dark	47.500	155	41Pi Sgr	2.9000	6600.0	95	42125	No
2	GOM_NL__2PRFIN20100322_000615_000000492087_00488_42125_0453.N1	22-MAR-2010 00:06:15	Dark	48.500	57	34Sig Sgr	2.0660	26000.	97	42125	No
3	GOM_NL__2PRFIN20100322_000757_000000592087_00488_42125_0454.N1	22-MAR-2010 00:07:57	Dark	58.500	137	22Lam Sgr	2.8240	4400.0	117	42125	No
4	GOM_NL__2PRFIN20100322_000948_000000562087_00488_42125_0455.N1	22-MAR-2010 00:09:48	Dark	56.000	38	20Eps Sgr	1.8360	11000.	112	42125	No
5	GOM_NL__2PRFIN20100322_001523_000000432087_00489_42126_0439.N1	22-MAR-2010 00:15:23	Dark	42.500	141	Bet Ara	2.8400	4600.0	85	42126	No
6	GOM_NL__2PRFIN20100322_001854_000000392087_00489_42126_0440.N1	22-MAR-2010 00:18:54	Dark	39.000	134	Bet TrA	2.8100	6600.0	78	42126	No
7	GOM_NL__2PRFIN20100322_002137_000000562087_00489_42126_0441.N1	22-MAR-2010 00:21:37	Dark	56.000	4	Alp1Cen	-0.010000	5800.0	112	42126	No
8	GOM_NL__2PRFIN20100322_002354_000000462087_00489_42126_0442.N1	22-MAR-2010 00:23:54	Dark	45.500	78	Alp Lup	2.3040	28000.	91	42126	No
9	GOM_NL__2PRFIN20100322_002526_000000492087_00489_42126_0443.N1	22-MAR-2010 00:25:26	Straylight	49.000	81	Eta Cen	2.3560	28000.	98	42126	No
10	GOM_NL__2PRFIN20100322_002738_000000442087_00489_42126_0444.N1	22-MAR-2010 00:27:38	Straylight	43.500	64	Gam Cen	2.2000	10600.	87	42126	No
11	GOM_NL__2PRFIN20100322_002959_000000492087_00489_42126_0445.N1	22-MAR-2010 00:29:59	Straylight	49.000	123	Iot Cen	2.7500	10200.	98	42126	No
12	GOM_NL__2PRFIN20100322_003445_000000382087_00489_42126_0446.N1	22-MAR-2010 00:34:45	Straylight	38.000	169	46Gam Hya	2.9910	4700.0	76	42126	No
13	GOM_NL__2PRFIN20100322_003558_000000492087_00489_42126_0447.N1	22-MAR-2010 00:35:58	Straylight	48.500	171	2Eps Crv	3.0010	4250.0	97	42126	No
14	GOM_NL__2PRFIN20100322_003734_000000462087_00489_42126_0448.N1	22-MAR-2010 00:37:34	Twilight_stray	46.000	100	4Gam Crv	2.5800	13100.	92	42126	No
15	GOM_NL__2PRFIN20100322_004804_000000432087_00489_42126_0449.N1	22-MAR-2010 00:48:04	Bright	43.000	62	94Bet Leo	2.1360	9700.0	86	42126	No
16	GOM_NL__2PRFIN20100322_005623_000000392087_00489_42126_0450.N1	22-MAR-2010 00:56:23	Bright	39.000	174	52Psi UMa	3.0040	4400.0	78	42126	No
17	GOM_NL__2PRFIN20100322_005939_000000382087_00489_42126_0451.N1	22-MAR-2010 00:59:39	Bright	37.500	82	48Bet UMa	2.3650	10600.	75	42126	No
18	GOM_NL__2PRFIN20100322_010110_000000402087_00489_42126_0452.N1	22-MAR-2010 01:01:10	Bright	40.000	36	50Alp UMa	1.8000	6300.0	80	42126	No
19	GOM_NL__2PRFIN20100322_010310_000000462087_00489_42126_0453.N1	22-MAR-2010 01:03:10	Bright	46.000	55	79Zet UMa	2.0600	10200.	92	42126	No
20	GOM_NL__2PRFIN20100322_010802_000000392087_00489_42126_0454.N1	22-MAR-2010 01:08:02	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	42126	No
21	GOM_NL__2PRFIN20100322_011145_000000532087_00489_42126_0455.N1	22-MAR-2010 01:11:45	Bright	52.500	119	14Eta Dra	2.7270	4700.0	105	42126	No
22	GOM_NL__2PRFIN20100322_012148_000000442087_00489_42126_0456.N1	22-MAR-2010 01:21:48	Bright	44.000	19	50Alp Cyg	1.2460	10500.	88	42126	No
23	GOM_NL__2PRFIN20100322_012324_000000392087_00489_42126_0457.N1	22-MAR-2010 01:23:24	Bright	39.000	66	37Gam Cyg	2.2080	5900.0	78	42126	No
24	GOM_NL__2PRFIN20100322_012512_000000402087_00489_42126_0458.N1	22-MAR-2010 01:25:12	Bright	39.500	92	53Eps Cyg	2.5000	4500.0	79	42126	No
25	GOM_NL__2PRFIN20100322_013401_000000602087_00489_42126_0459.N1	22-MAR-2010 01:34:01	Twilight_stray	60.000	11	53Alp Aql	0.76500	8000.0	120	42126	No
26	GOM_NL__2PRFIN20100322_014445_000000492087_00489_42126_0460.N1	22-MAR-2010 01:44:45	Dark	48.500	155	41Pi Sgr	2.9000	6600.0	97	42126	No
27	GOM_NL__2PRFIN20100322_014652_000000492087_00489_42126_0461.N1	22-MAR-2010 01:46:52	Dark	48.500	57	34Sig Sgr	2.0660	26000.	97	42126	No
28	GOM_NL__2PRFIN20100322_015026_000000502087_00489_42126_0462.N1	22-MAR-2010 01:50:26	Dark	49.500	38	20Eps Sgr	1.8360	11000.	99	42126	No
29	GOM_NL__2PRFIN20100322_015600_000000422087_00490_42127_0450.N1	22-MAR-2010 01:56:00	Dark	42.000	141	Bet Ara	2.8400	4600.0	84	42127	No
30	GOM_NL__2PRFIN20100322_015930_000000392087_00490_42127_0451.N1	22-MAR-2010 01:59:30	Dark	39.000	134	Bet TrA	2.8100	6600.0	78	42127	No
31	GOM_NL__2PRFIN20100322_020214_000000562087_00490_42127_0452.N1	22-MAR-2010 02:02:14	Dark	56.000	4	Alp1Cen	-0.010000	5800.0	112	42127	No
32	GOM_NL__2PRFIN20100322_020431_000000462087_00490_42127_0453.N1	22-MAR-2010 02:04:31	Dark	46.000	78	Alp Lup	2.3040	28000.	92	42127	No
33	GOM_NL__2PRFIN20100322_020603_000000502087_00490_42127_0454.N1	22-MAR-2010 02:06:03	Straylight	50.000	81	Eta Cen	2.3560	28000.	100	42127	No
34	GOM_NL__2PRFIN20100322_020814_000000422087_00490_42127_0455.N1	22-MAR-2010 02:08:14	Straylight	42.000	64	Gam Cen	2.2000	10600.	84	42127	No
35	GOM_NL__2PRFIN20100322_021036_000000492087_00490_42127_0456.N1	22-MAR-2010 02:10:36	Straylight	49.000	123	Iot Cen	2.7500	10200.	98	42127	No
36	GOM_NL__2PRFIN20100322_021521_000000382087_00490_42127_0457.N1	22-MAR-2010 02:15:21	Straylight	38.000	169	46Gam Hya	2.9910	4700.0	76	42127	No
37	GOM_NL__2PRFIN20100322_021634_000000492087_00490_42127_0458.N1	22-MAR-2010 02:16:34	Straylight	49.000	171	2Eps Crv	3.0010	4250.0	98	42127	No
38	GOM_NL__2PRFIN20100322_021809_000000472087_00490_42127_0459.N1	22-MAR-2010 02:18:09	Twilight_stray	46.500	100	4Gam Crv	2.5800	13100.	93	42127	No
39	GOM_NL__2PRFIN20100322_022840_000000432087_00490_42127_0460.N1	22-MAR-2010 02:28:40	Bright	42.500	62	94Bet Leo	2.1360	9700.0	85	42127	No
40	GOM_NL__2PRFIN20100322_023659_000000382087_00490_42127_0461.N1	22-MAR-2010 02:36:59	Bright	37.500	174	52Psi UMa	3.0040	4400.0	75	42127	No
41	GOM_NL__2PRFIN20100322_024015_000000362087_00490_42127_0462.N1	22-MAR-2010 02:40:15	Bright	36.000	82	48Bet UMa	2.3650	10600.	72	42127	No
42	GOM_NL__2PRFIN20100322_024146_000000402087_00490_42127_0463.N1	22-MAR-2010 02:41:46	Bright	39.500	36	50Alp UMa	1.8000	6300.0	79	42127	No

338	GOM_NL__2PRFIN20100322_232155_000000562088_00001_42139_0750.N1	22-MAR-2010 23:21:55	Twilight_stray	55.500	11	53Alp Aql	0.76500	8000.0	111	42139	No
339	GOM_NL__2PRFIN20100322_233245_000000492088_00001_42139_0751.N1	22-MAR-2010 23:32:45	Dark	48.500	155	41Pi Sgr	2.9000	6600.0	97	42139	No
340	GOM_NL__2PRFIN20100322_233452_000000482088_00001_42139_0752.N1	22-MAR-2010 23:34:52	Dark	48.000	57	34Sig Sgr	2.0660	26000.	96	42139	No
341	GOM_NL__2PRFIN20100322_233638_000000692088_00001_42139_0753.N1	22-MAR-2010 23:36:38	Dark	68.500	137	22Lam Sgr	2.8240	4400.0	137	42139	No
342	GOM_NL__2PRFIN20100322_233827_000000482088_00001_42139_0754.N1	22-MAR-2010 23:38:27	Dark	48.000	38	20Eps Sgr	1.8360	11000.	96	42139	No
343	GOM_NL__2PRFIN20100322_234356_000000412088_00002_42140_0739.N1	22-MAR-2010 23:43:56	Dark	41.000	141	Bet Ara	2.8400	4600.0	82	42140	No
344	GOM_NL__2PRFIN20100322_234725_000000392088_00002_42140_0740.N1	22-MAR-2010 23:47:25	Dark	39.000	134	Bet TrA	2.8100	6600.0	78	42140	No
345	GOM_NL__2PRFIN20100322_235008_000000482088_00002_42140_0741.N1	22-MAR-2010 23:50:08	Dark	48.000	4	Alp1Cen	-0.010000	5800.0	96	42140	No
346	GOM_NL__2PRFIN20100322_235227_000000462088_00002_42140_0742.N1	22-MAR-2010 23:52:27	Dark	45.500	78	Alp Lup	2.3040	28000.	91	42140	No
347	GOM_NL__2PRFIN20100322_235400_000000512088_00002_42140_0743.N1	22-MAR-2010 23:54:00	Straylight	51.000	81	Eta Cen	2.3560	28000.	102	42140	No
348	GOM_NL__2PRFIN20100322_235606_000000412088_00002_42140_0744.N1	22-MAR-2010 23:56:06	Straylight	41.000	64	Gam Cen	2.2000	10600.	82	42140	No
349	GOM_NL__2PRFIN20100322_235829_000000482088_00002_42140_0745.N1	22-MAR-2010 23:58:29	Straylight	48.000	123	Iot Cen	2.7500	10200.	96	42140	No

3. Quality information per product

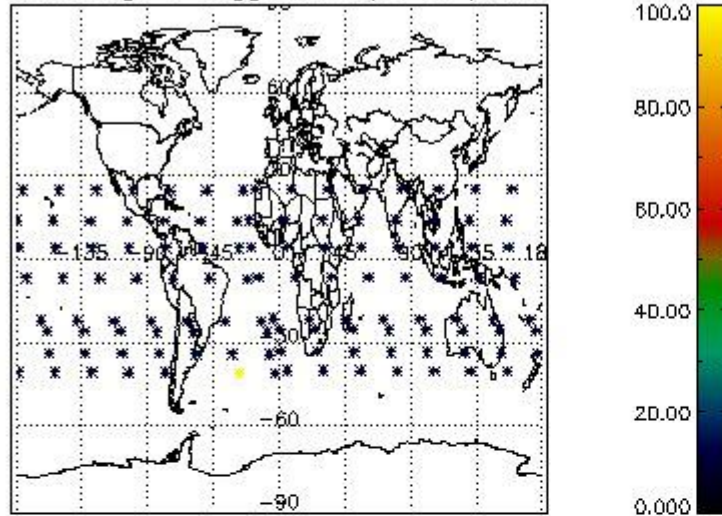
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

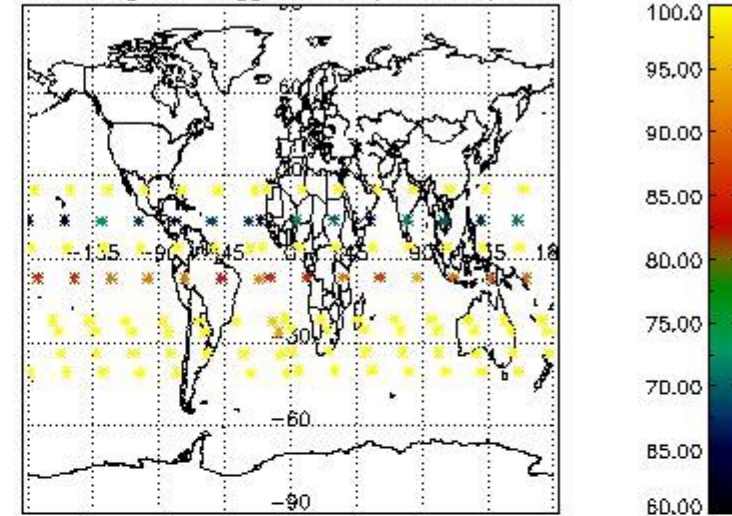


3.2 Plot quality information per product (world map)

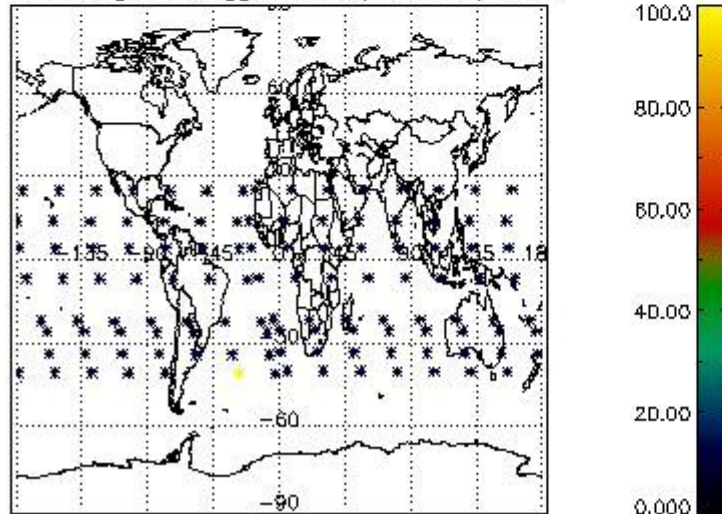
Percentage of flagged data per O3 profile



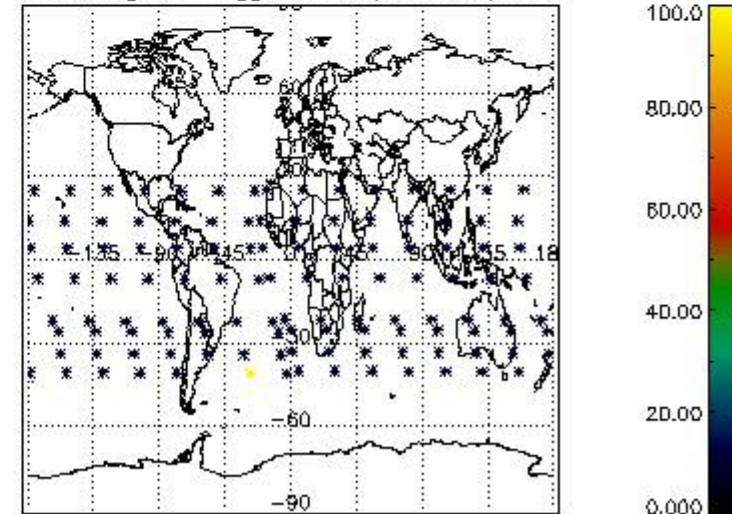
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

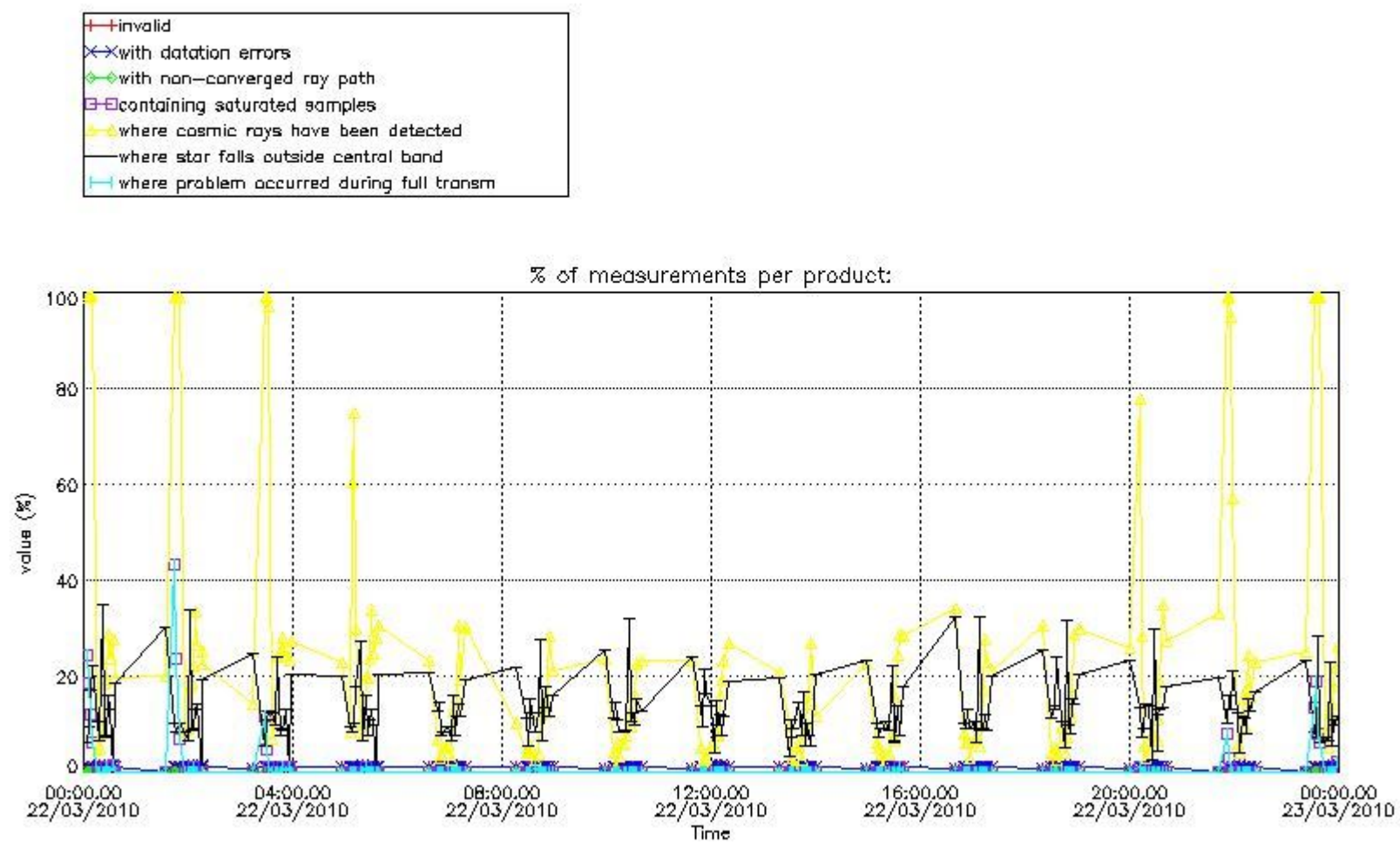


4. Level 1 quality information per product

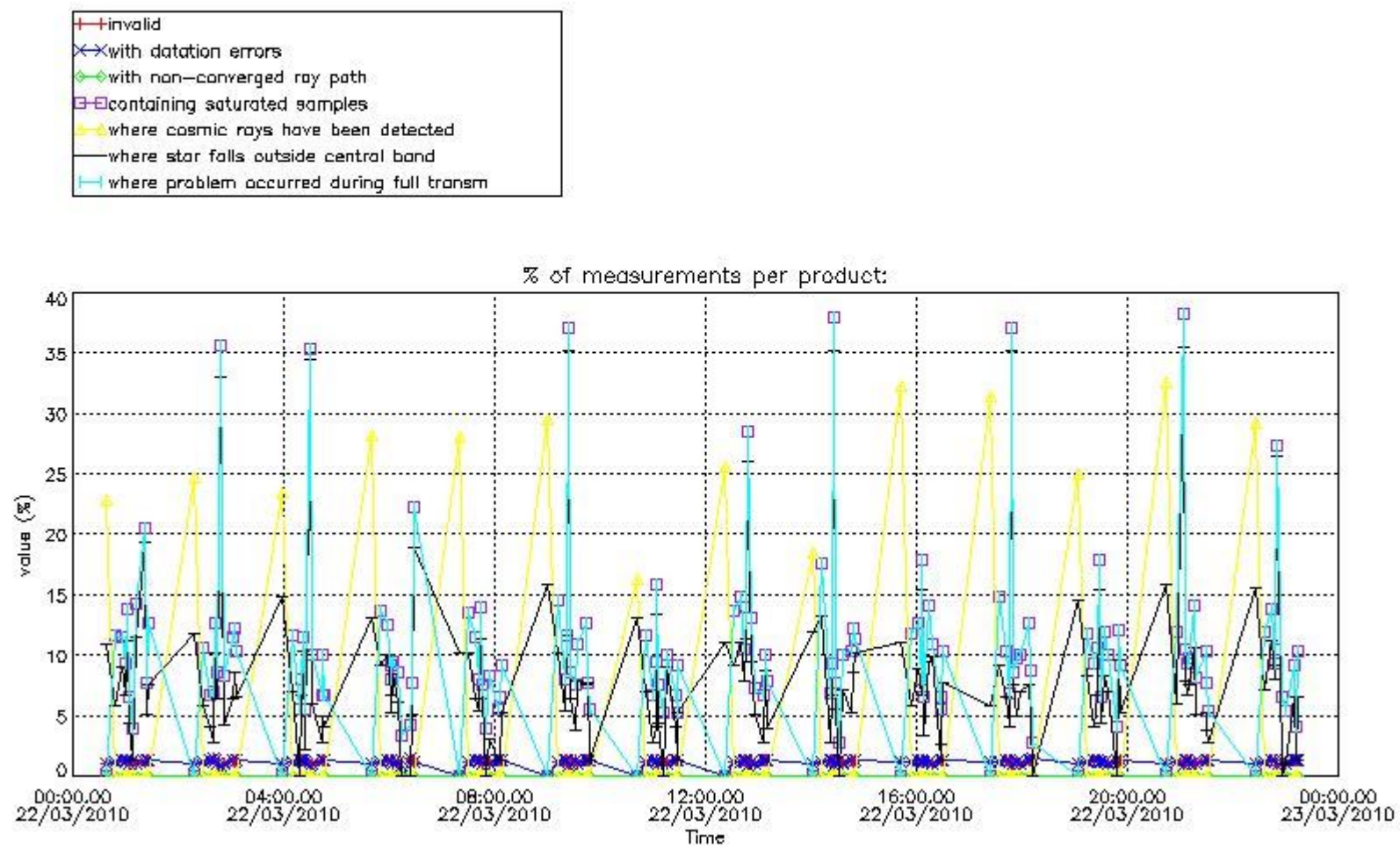
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

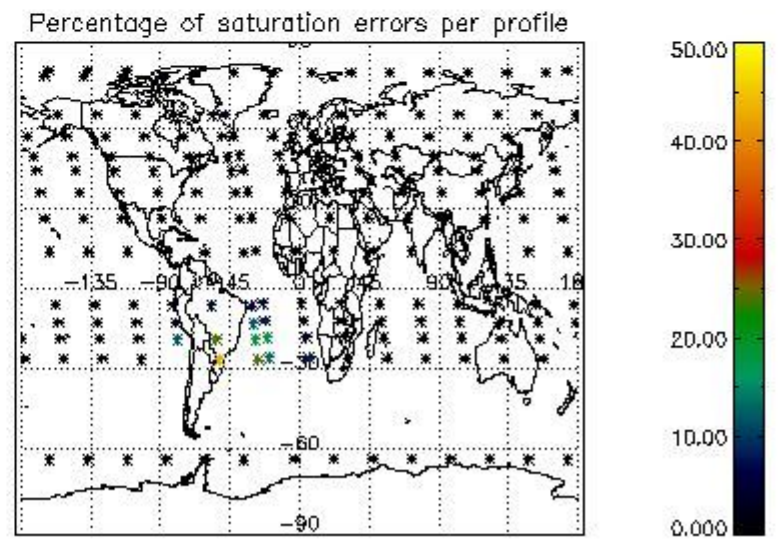
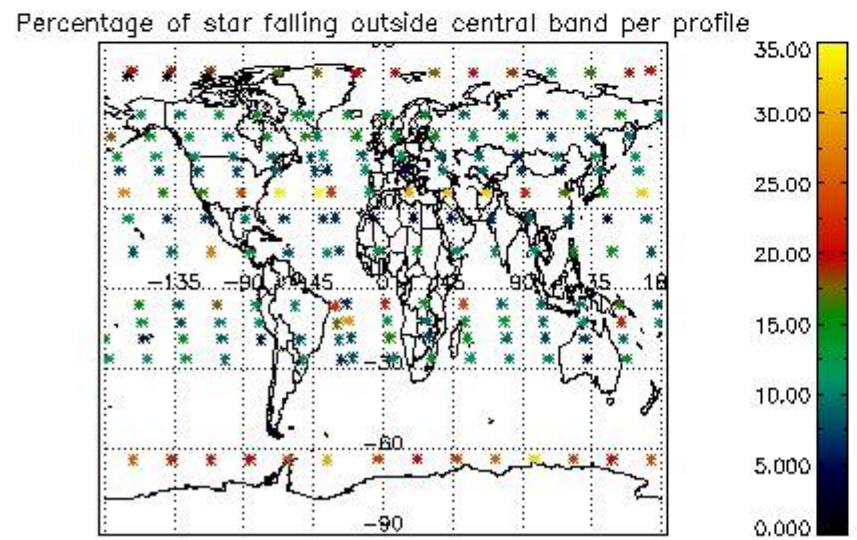
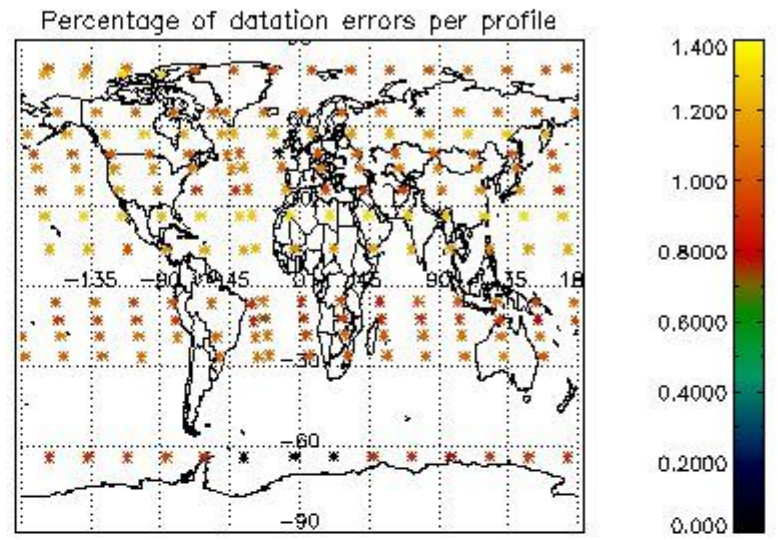
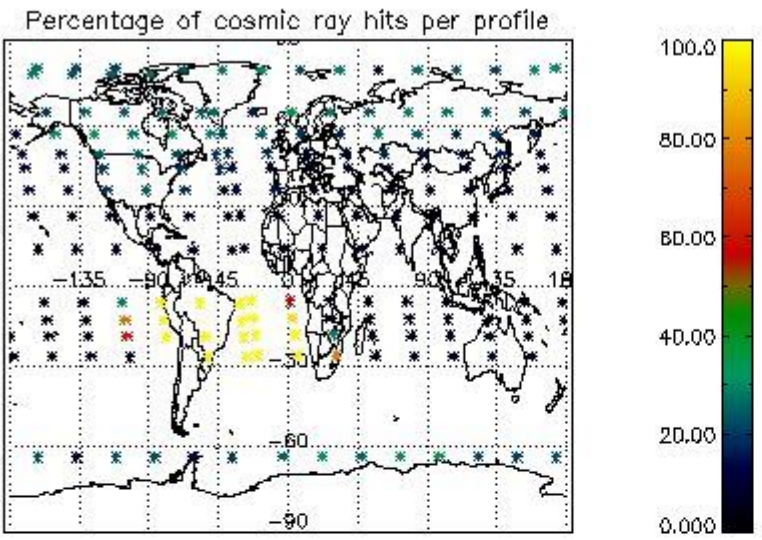


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

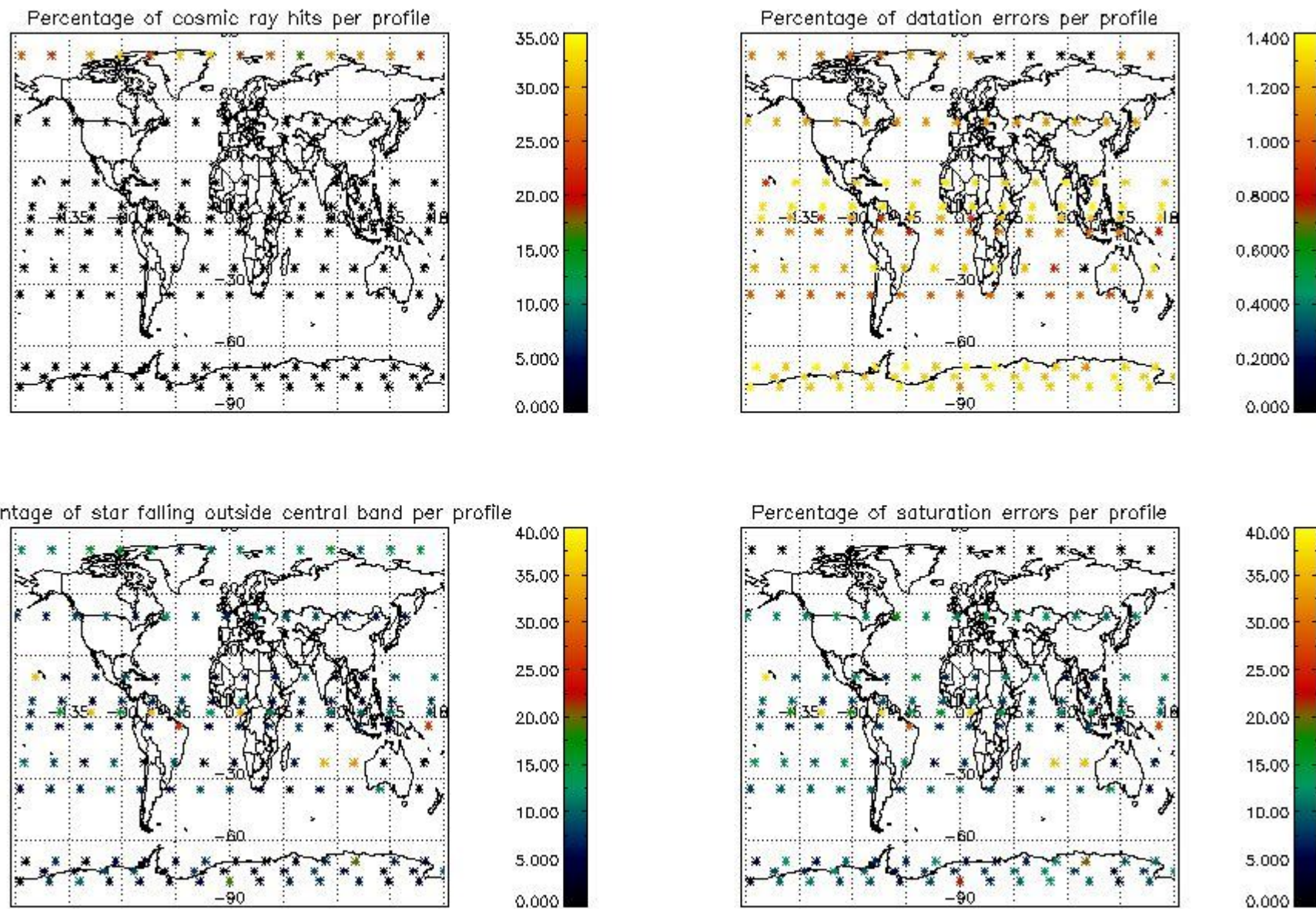


4.2 Plot quality information per product coming from level 1b processing (world map)

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

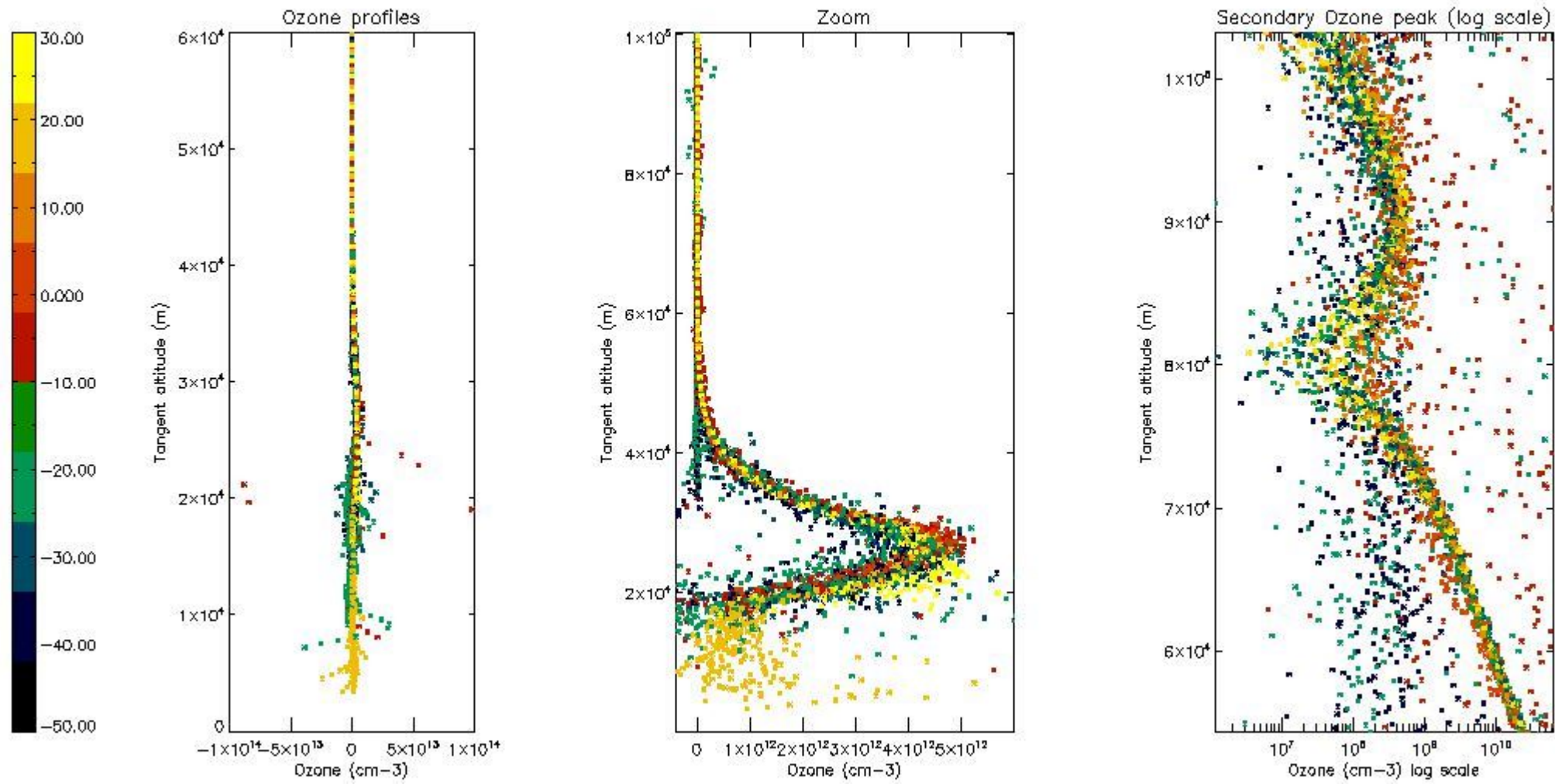
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	36
STD < 20	15

STD < 10	11
STD < 5	7

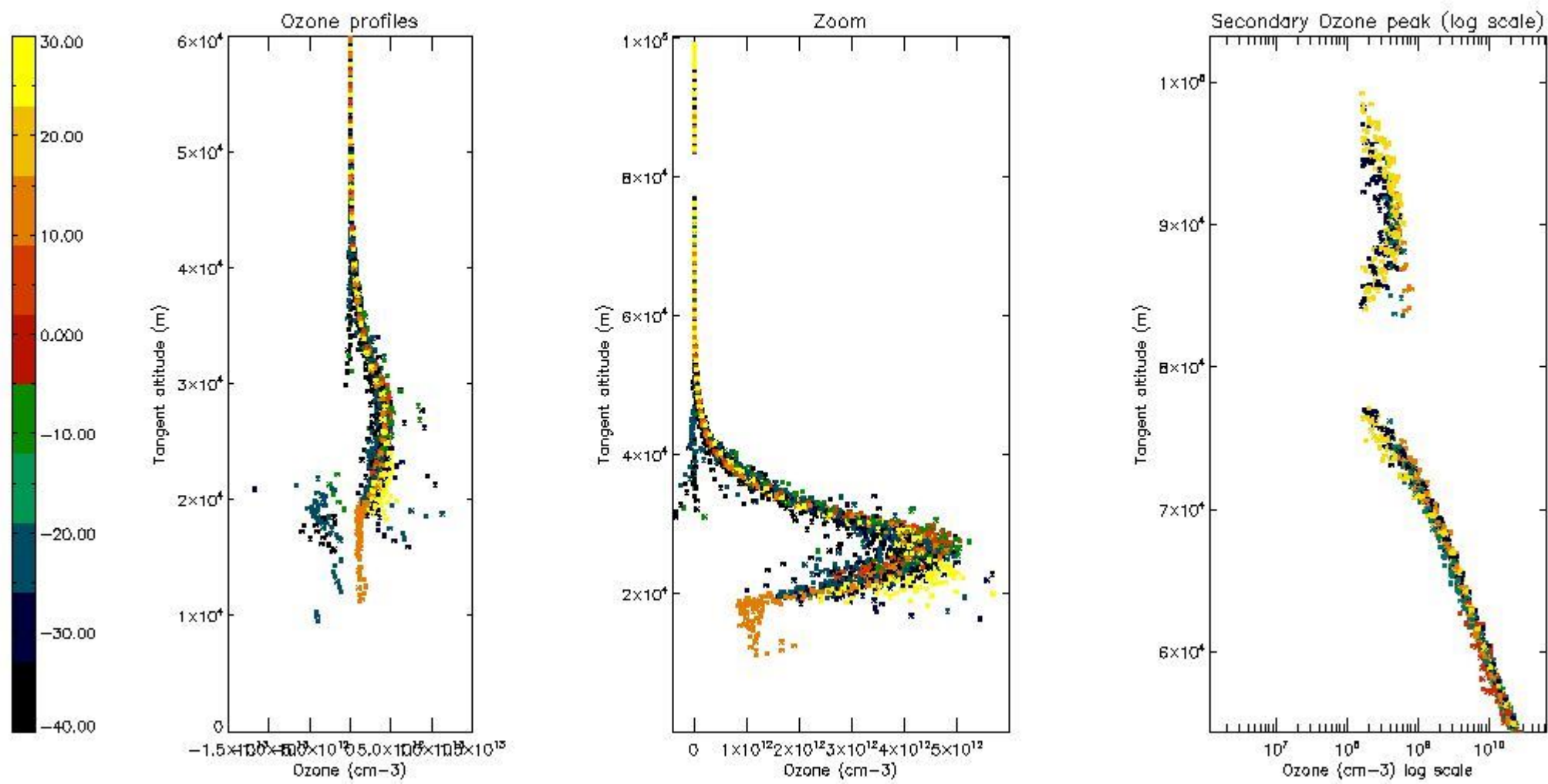
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



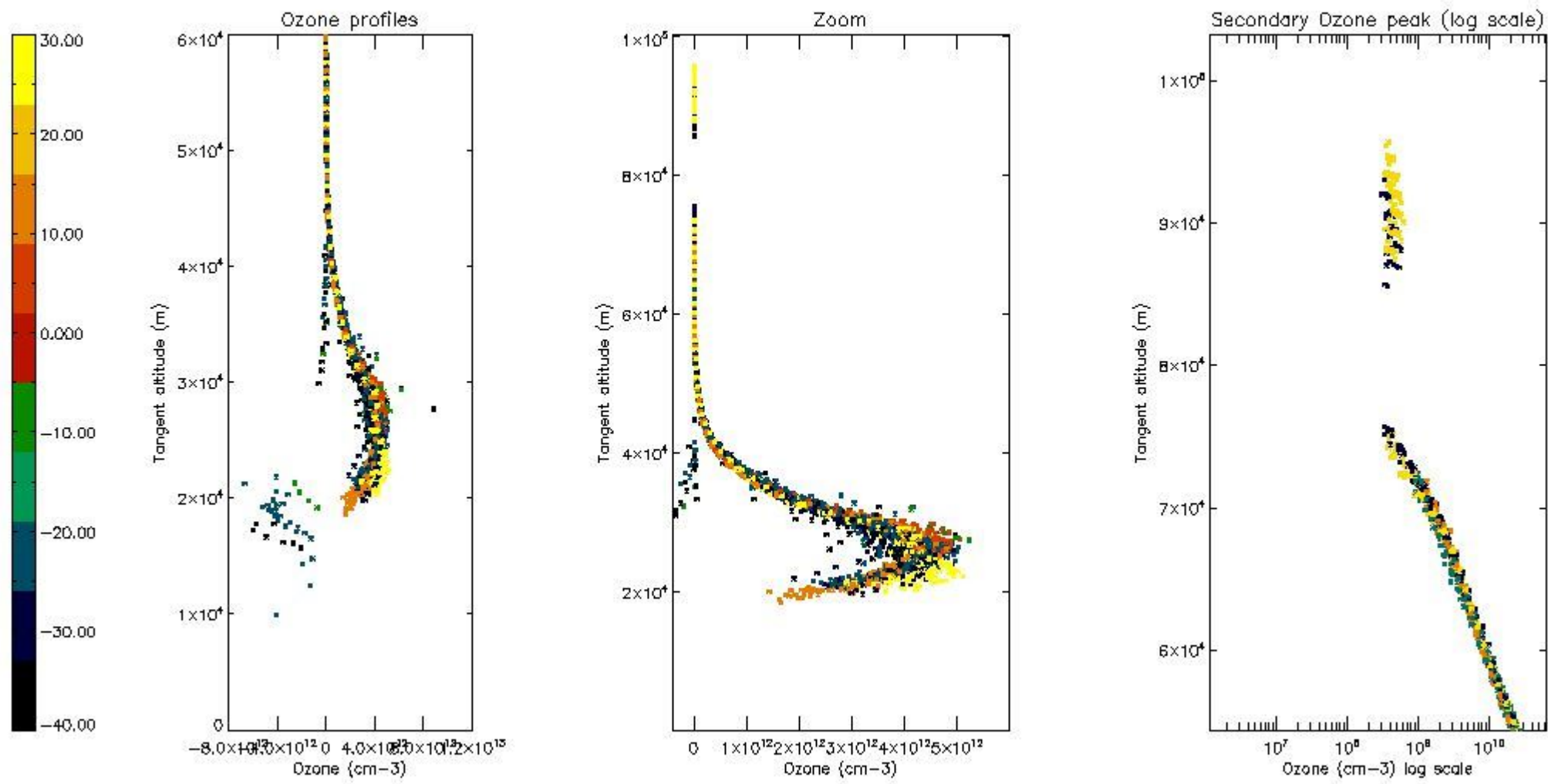
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



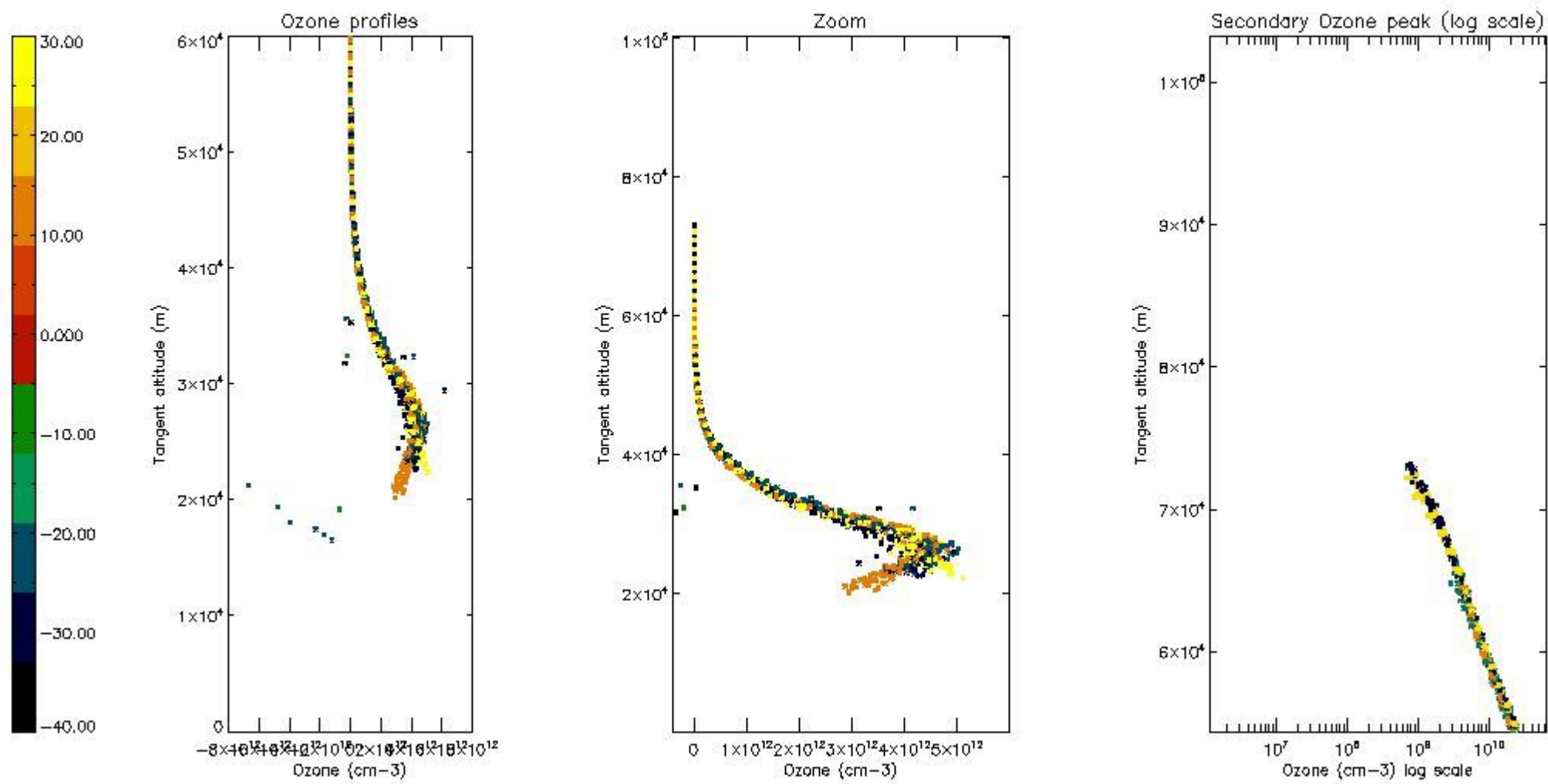
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



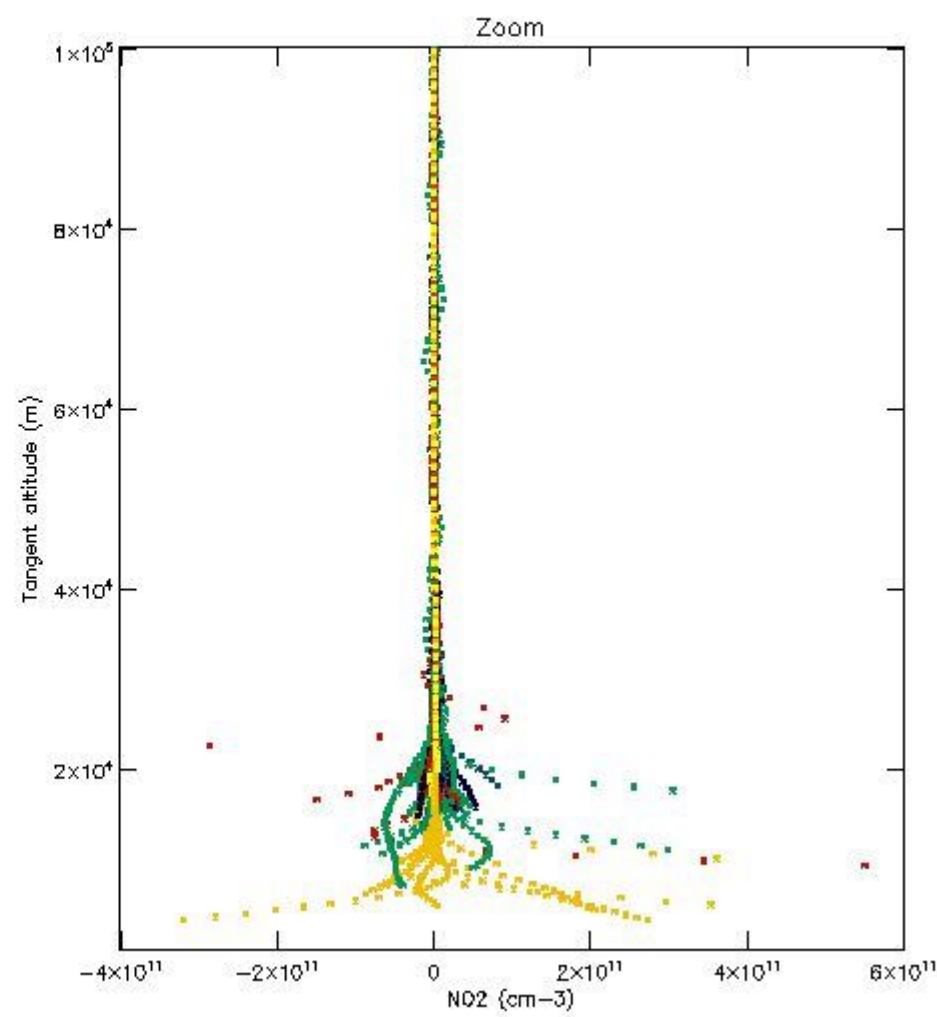
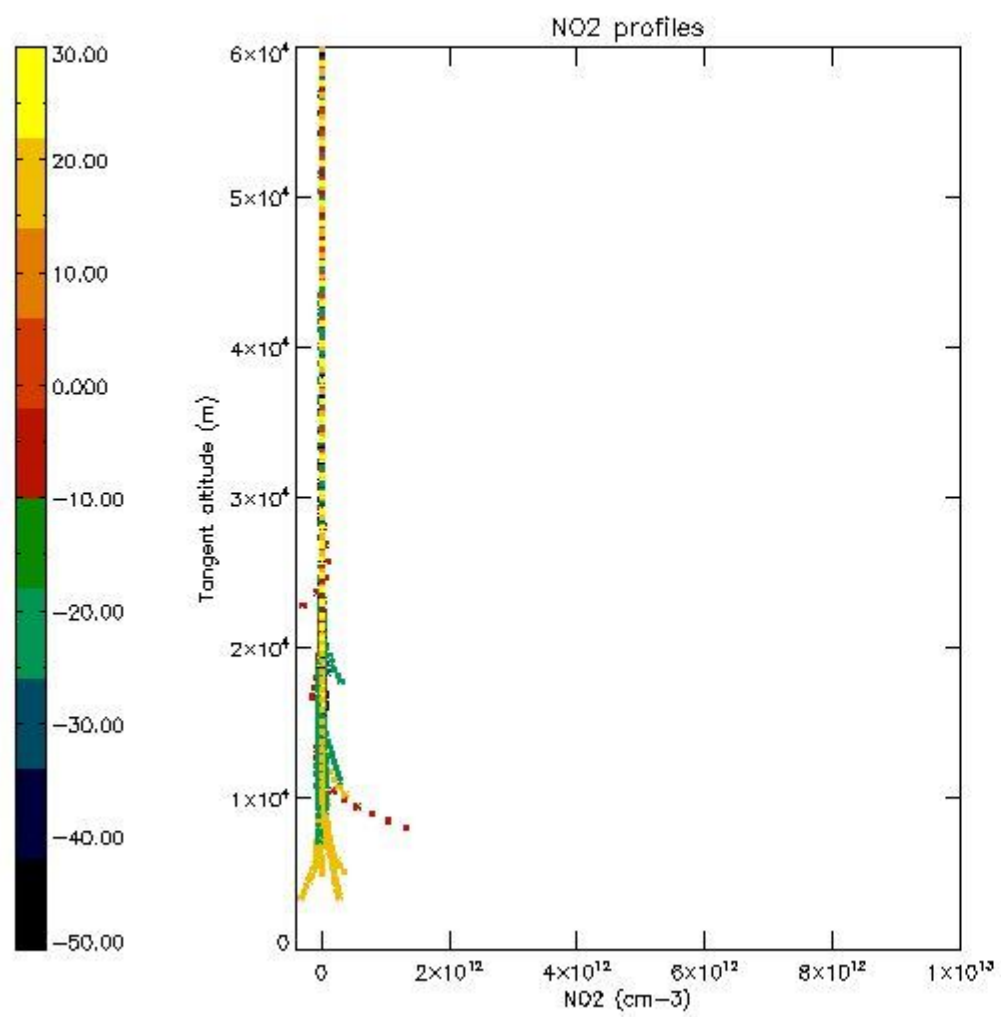
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



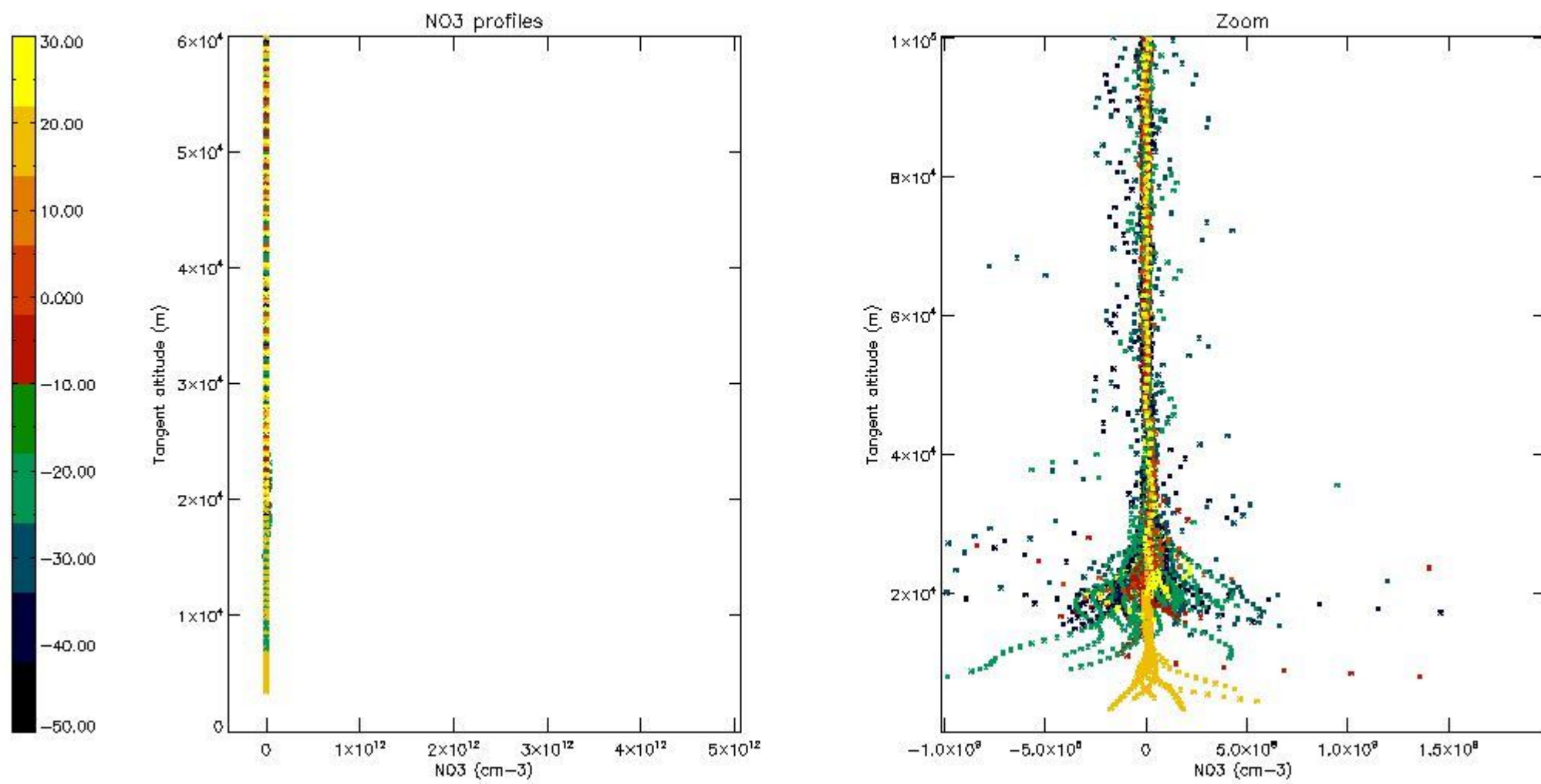
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



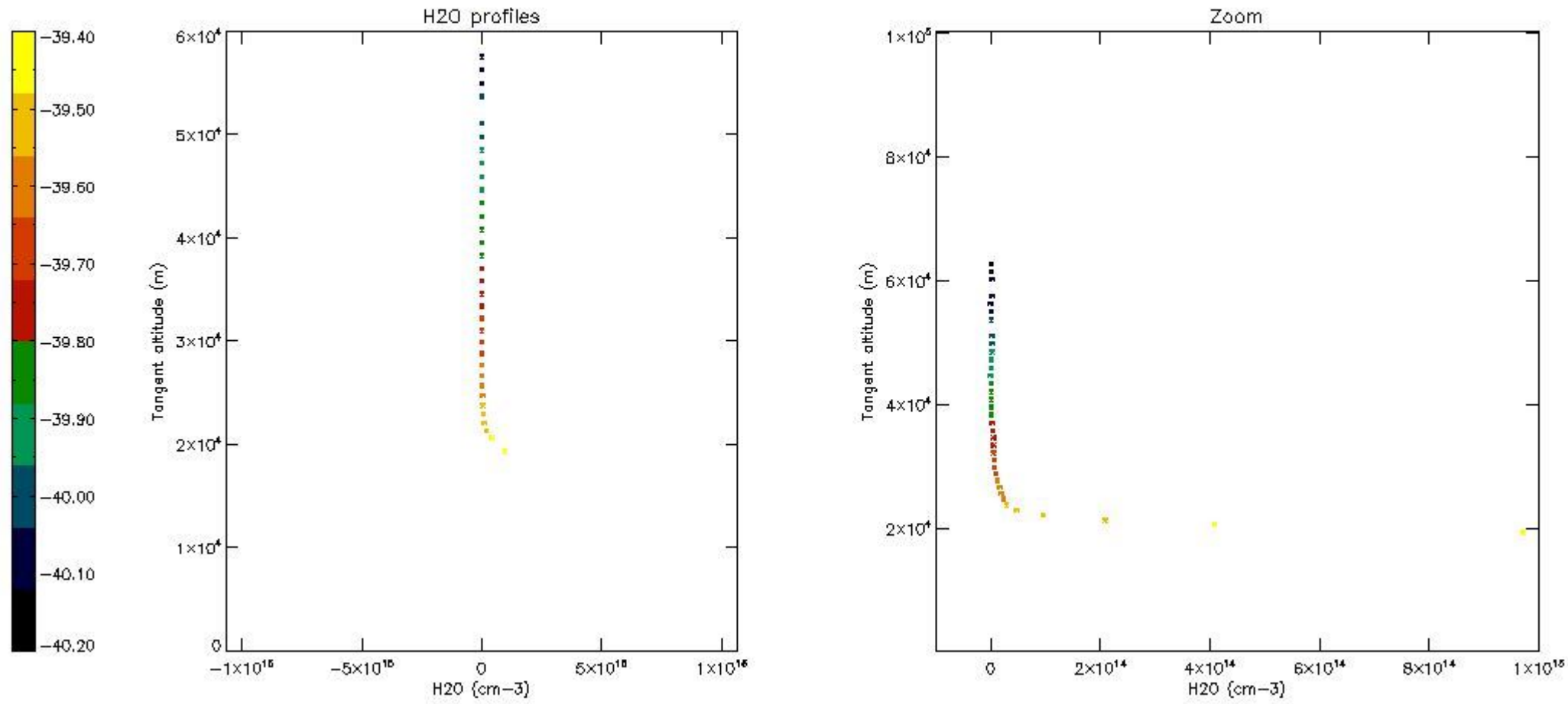
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

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

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	22-MAR-2010 00:04:08
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	22-MAR-2010 00:04:08
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	22-MAR-2010 00:04:08

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

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

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[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	29APR2013 08:46:49
Data source version	GOMOS/6.01
Start time of products	22-03-2010 (22MAR2010 00:00:00)
Stop time of products	23-03-2010 (23MAR2010 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	349
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

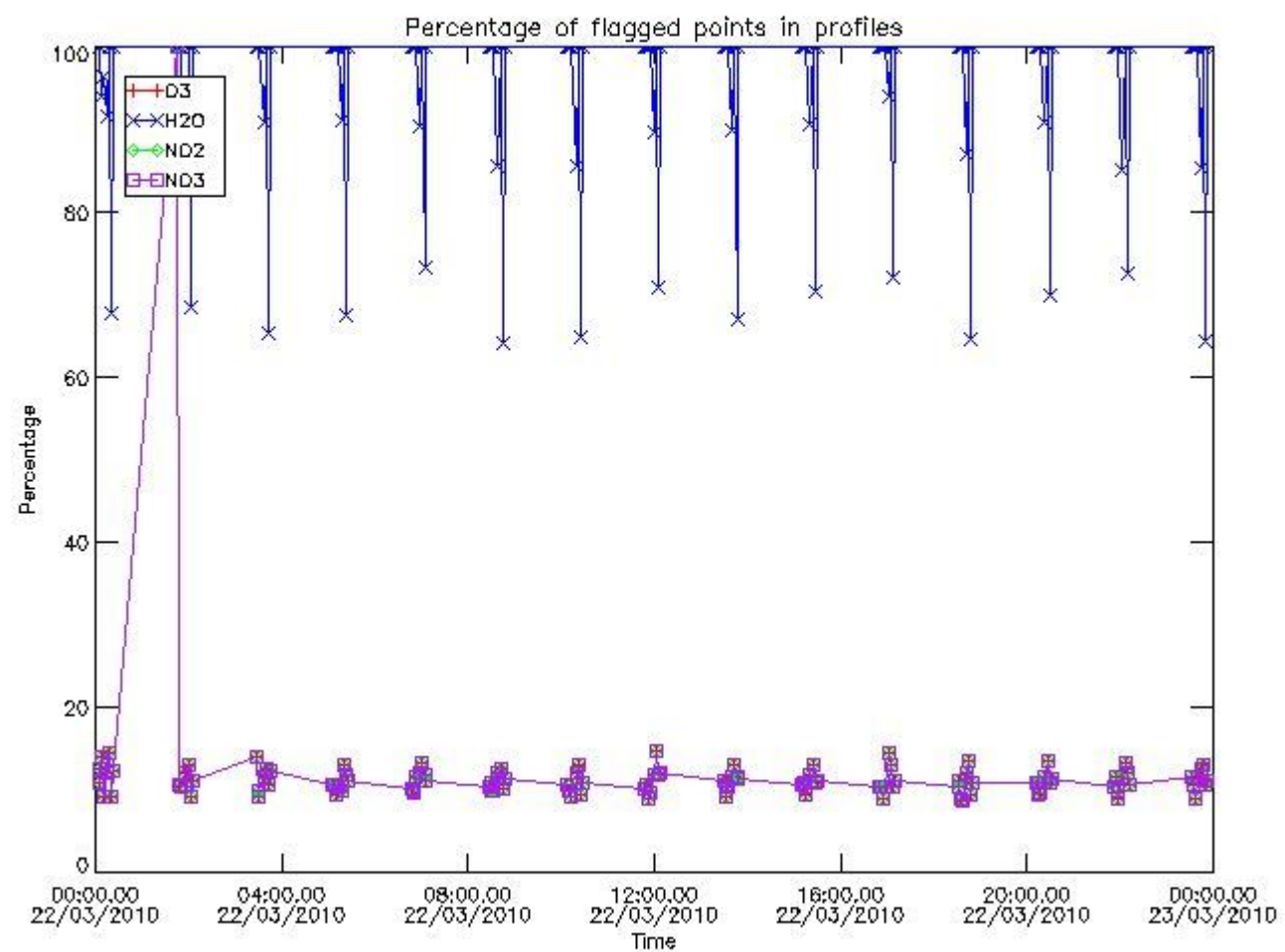
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20100322_000408_000000482087_00488_42125_0452.N1	22-MAR-2010 00:04:08	Dark	47.500	155	41Pi Sgr	2.9000	6600.0	95	42125	No
2	GOM_NL__2PRFIN20100322_000615_000000492087_00488_42125_0453.N1	22-MAR-2010 00:06:15	Dark	48.500	57	34Sig Sgr	2.0660	26000.	97	42125	No
3	GOM_NL__2PRFIN20100322_000757_000000592087_00488_42125_0454.N1	22-MAR-2010 00:07:57	Dark	58.500	137	22Lam Sgr	2.8240	4400.0	117	42125	No
4	GOM_NL__2PRFIN20100322_000948_000000562087_00488_42125_0455.N1	22-MAR-2010 00:09:48	Dark	56.000	38	20Eps Sgr	1.8360	11000.	112	42125	No
5	GOM_NL__2PRFIN20100322_001523_000000432087_00489_42126_0439.N1	22-MAR-2010 00:15:23	Dark	42.500	141	Bet Ara	2.8400	4600.0	85	42126	No
6	GOM_NL__2PRFIN20100322_001854_000000392087_00489_42126_0440.N1	22-MAR-2010 00:18:54	Dark	39.000	134	Bet TrA	2.8100	6600.0	78	42126	No
7	GOM_NL__2PRFIN20100322_002137_000000562087_00489_42126_0441.N1	22-MAR-2010 00:21:37	Dark	56.000	4	Alp1Cen	-0.010000	5800.0	112	42126	No
8	GOM_NL__2PRFIN20100322_002354_000000462087_00489_42126_0442.N1	22-MAR-2010 00:23:54	Dark	45.500	78	Alp Lup	2.3040	28000.	91	42126	No
9	GOM_NL__2PRFIN20100322_002526_000000492087_00489_42126_0443.N1	22-MAR-2010 00:25:26	Straylight	49.000	81	Eta Cen	2.3560	28000.	98	42126	No
10	GOM_NL__2PRFIN20100322_002738_000000442087_00489_42126_0444.N1	22-MAR-2010 00:27:38	Straylight	43.500	64	Gam Cen	2.2000	10600.	87	42126	No
11	GOM_NL__2PRFIN20100322_002959_000000492087_00489_42126_0445.N1	22-MAR-2010 00:29:59	Straylight	49.000	123	Iot Cen	2.7500	10200.	98	42126	No
12	GOM_NL__2PRFIN20100322_003445_000000382087_00489_42126_0446.N1	22-MAR-2010 00:34:45	Straylight	38.000	169	46Gam Hya	2.9910	4700.0	76	42126	No
13	GOM_NL__2PRFIN20100322_003558_000000492087_00489_42126_0447.N1	22-MAR-2010 00:35:58	Straylight	48.500	171	2Eps Crv	3.0010	4250.0	97	42126	No
14	GOM_NL__2PRFIN20100322_003734_000000462087_00489_42126_0448.N1	22-MAR-2010 00:37:34	Tw_i_and_stray	46.000	100	4Gam Crv	2.5800	13100.	92	42126	No
15	GOM_NL__2PRFIN20100322_004804_000000432087_00489_42126_0449.N1	22-MAR-2010 00:48:04	Bright	43.000	62	94Bet Leo	2.1360	9700.0	86	42126	No
16	GOM_NL__2PRFIN20100322_005623_000000392087_00489_42126_0450.N1	22-MAR-2010 00:56:23	Bright	39.000	174	52Psi UMa	3.0040	4400.0	78	42126	No
17	GOM_NL__2PRFIN20100322_005939_000000382087_00489_42126_0451.N1	22-MAR-2010 00:59:39	Bright	37.500	82	48Bet UMa	2.3650	10600.	75	42126	No
18	GOM_NL__2PRFIN20100322_010110_000000402087_00489_42126_0452.N1	22-MAR-2010 01:01:10	Bright	40.000	36	50Alp UMa	1.8000	6300.0	80	42126	No
19	GOM_NL__2PRFIN20100322_010310_000000462087_00489_42126_0453.N1	22-MAR-2010 01:03:10	Bright	46.000	55	79Zet UMa	2.0600	10200.	92	42126	No
20	GOM_NL__2PRFIN20100322_010802_000000392087_00489_42126_0454.N1	22-MAR-2010 01:08:02	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	42126	No
21	GOM_NL__2PRFIN20100322_011145_000000532087_00489_42126_0455.N1	22-MAR-2010 01:11:45	Bright	52.500	119	14Eta Dra	2.7270	4700.0	105	42126	No
22	GOM_NL__2PRFIN20100322_012148_000000442087_00489_42126_0456.N1	22-MAR-2010 01:21:48	Bright	44.000	19	50Alp Cyg	1.2460	10500.	88	42126	No
23	GOM_NL__2PRFIN20100322_012324_000000392087_00489_42126_0457.N1	22-MAR-2010 01:23:24	Bright	39.000	66	37Gam Cyg	2.2080	5900.0	78	42126	No
24	GOM_NL__2PRFIN20100322_012512_000000402087_00489_42126_0458.N1	22-MAR-2010 01:25:12	Bright	39.500	92	53Eps Cyg	2.5000	4500.0	79	42126	No
25	GOM_NL__2PRFIN20100322_013401_000000602087_00489_42126_0459.N1	22-MAR-2010 01:34:01	Tw_i_and_stray	60.000	11	53Alp Aql	0.76500	8000.0	120	42126	No
26	GOM_NL__2PRFIN20100322_014445_000000492087_00489_42126_0460.N1	22-MAR-2010 01:44:45	Dark	48.500	155	41Pi Sgr	2.9000	6600.0	97	42126	No
27	GOM_NL__2PRFIN20100322_014652_000000492087_00489_42126_0461.N1	22-MAR-2010 01:46:52	Dark	48.500	57	34Sig Sgr	2.0660	26000.	97	42126	No
28	GOM_NL__2PRFIN20100322_015026_000000502087_00489_42126_0462.N1	22-MAR-2010 01:50:26	Dark	49.500	38	20Eps Sgr	1.8360	11000.	99	42126	No
29	GOM_NL__2PRFIN20100322_015600_000000422087_00490_42127_0450.N1	22-MAR-2010 01:56:00	Dark	42.000	141	Bet Ara	2.8400	4600.0	84	42127	No
30	GOM_NL__2PRFIN20100322_015930_000000392087_00490_42127_0451.N1	22-MAR-2010 01:59:30	Dark	39.000	134	Bet TrA	2.8100	6600.0	78	42127	No
31	GOM_NL__2PRFIN20100322_020214_000000562087_00490_42127_0452.N1	22-MAR-2010 02:02:14	Dark	56.000	4	Alp1Cen	-0.010000	5800.0	112	42127	No
32	GOM_NL__2PRFIN20100322_020431_000000462087_00490_42127_0453.N1	22-MAR-2010 02:04:31	Dark	46.000	78	Alp Lup	2.3040	28000.	92	42127	No
33	GOM_NL__2PRFIN20100322_020603_000000502087_00490_42127_0454.N1	22-MAR-2010 02:06:03	Straylight	50.000	81	Eta Cen	2.3560	28000.	100	42127	No
34	GOM_NL__2PRFIN20100322_020814_000000422087_00490_42127_0455.N1	22-MAR-2010 02:08:14	Straylight	42.000	64	Gam Cen	2.2000	10600.	84	42127	No
35	GOM_NL__2PRFIN20100322_021036_000000492087_00490_42127_0456.N1	22-MAR-2010 02:10:36	Straylight	49.000	123	Iot Cen	2.7500	10200.	98	42127	No
36	GOM_NL__2PRFIN20100322_021521_000000382087_00490_42127_0457.N1	22-MAR-2010 02:15:21	Straylight	38.000	169	46Gam Hya	2.9910	4700.0	76	42127	No
37	GOM_NL__2PRFIN20100322_021634_000000492087_00490_42127_0458.N1	22-MAR-2010 02:16:34	Straylight	49.000	171	2Eps Crv	3.0010	4250.0	98	42127	No
38	GOM_NL__2PRFIN20100322_021809_000000472087_00490_42127_0459.N1	22-MAR-2010 02:18:09	Tw_i_and_stray	46.500	100	4Gam Crv	2.5800	13100.	93	42127	No
39	GOM_NL__2PRFIN20100322_022840_000000432087_00490_42127_0460.N1	22-MAR-2010 02:28:40	Bright	42.500	62	94Bet Leo	2.1360	9700.0	85	42127	No
40	GOM_NL__2PRFIN20100322_023659_000000382087_00490_42127_0461.N1	22-MAR-2010 02:36:59	Bright	37.500	174	52Psi UMa	3.0040	4400.0	75	42127	No
41	GOM_NL__2PRFIN20100322_024015_000000362087_00490_42127_0462.N1	22-MAR-2010 02:40:15	Bright	36.000	82	48Bet UMa	2.3650	10600.	72	42127	No
42	GOM_NL__2PRFIN20100322_024146_000000402087_00490_42127_0463.N1	22-MAR-2010 02:41:46	Bright	39.500	36	50Alp UMa	1.8000	6300.0	79	42127	No

338	GOM_NL__2PRFIN20100322_232155_000000562088_00001_42139_0750.N1	22-MAR-2010 23:21:55	Twilight_stray	55.500	11	53Alp Aql	0.76500	8000.0	111	42139	No
339	GOM_NL__2PRFIN20100322_233245_000000492088_00001_42139_0751.N1	22-MAR-2010 23:32:45	Dark	48.500	155	41Pi Sgr	2.9000	6600.0	97	42139	No
340	GOM_NL__2PRFIN20100322_233452_000000482088_00001_42139_0752.N1	22-MAR-2010 23:34:52	Dark	48.000	57	34Sig Sgr	2.0660	26000.	96	42139	No
341	GOM_NL__2PRFIN20100322_233638_000000692088_00001_42139_0753.N1	22-MAR-2010 23:36:38	Dark	68.500	137	22Lam Sgr	2.8240	4400.0	137	42139	No
342	GOM_NL__2PRFIN20100322_233827_000000482088_00001_42139_0754.N1	22-MAR-2010 23:38:27	Dark	48.000	38	20Eps Sgr	1.8360	11000.	96	42139	No
343	GOM_NL__2PRFIN20100322_234356_000000412088_00002_42140_0739.N1	22-MAR-2010 23:43:56	Dark	41.000	141	Bet Ara	2.8400	4600.0	82	42140	No
344	GOM_NL__2PRFIN20100322_234725_000000392088_00002_42140_0740.N1	22-MAR-2010 23:47:25	Dark	39.000	134	Bet TrA	2.8100	6600.0	78	42140	No
345	GOM_NL__2PRFIN20100322_235008_000000482088_00002_42140_0741.N1	22-MAR-2010 23:50:08	Dark	48.000	4	Alp1Cen	-0.010000	5800.0	96	42140	No
346	GOM_NL__2PRFIN20100322_235227_000000462088_00002_42140_0742.N1	22-MAR-2010 23:52:27	Dark	45.500	78	Alp Lup	2.3040	28000.	91	42140	No
347	GOM_NL__2PRFIN20100322_235400_000000512088_00002_42140_0743.N1	22-MAR-2010 23:54:00	Straylight	51.000	81	Eta Cen	2.3560	28000.	102	42140	No
348	GOM_NL__2PRFIN20100322_235606_000000412088_00002_42140_0744.N1	22-MAR-2010 23:56:06	Straylight	41.000	64	Gam Cen	2.2000	10600.	82	42140	No
349	GOM_NL__2PRFIN20100322_235829_000000482088_00002_42140_0745.N1	22-MAR-2010 23:58:29	Straylight	48.000	123	Iot Cen	2.7500	10200.	96	42140	No

3. Quality information per product

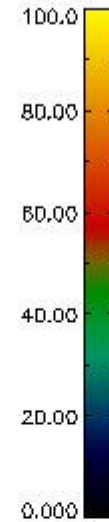
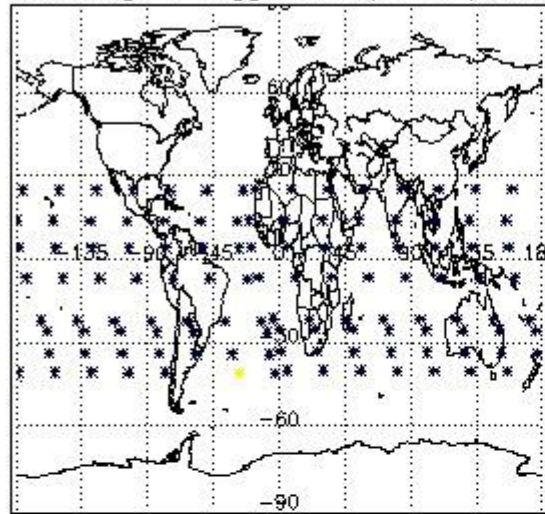
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

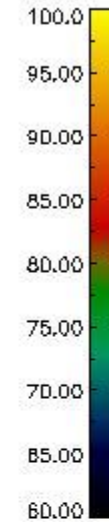
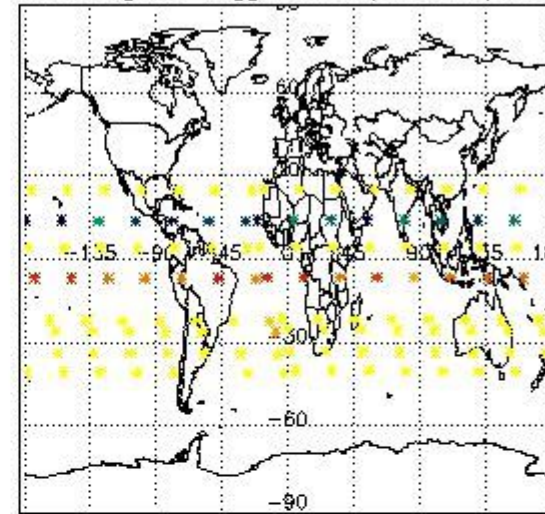


3.2 Plot quality information per product (world map)

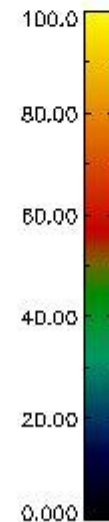
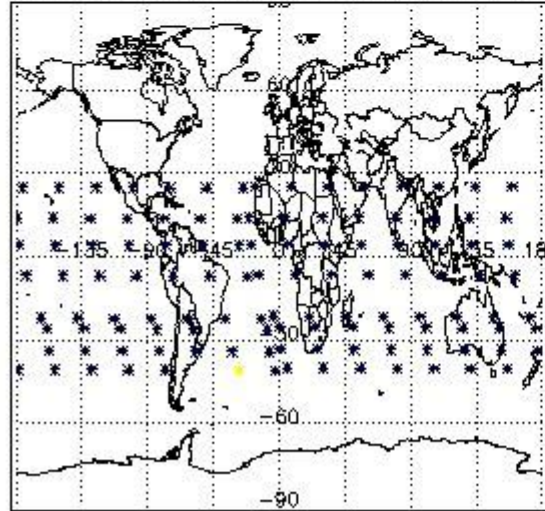
Percentage of flagged data per O3 profile



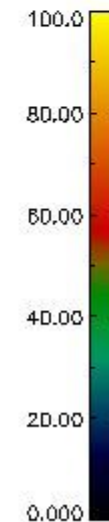
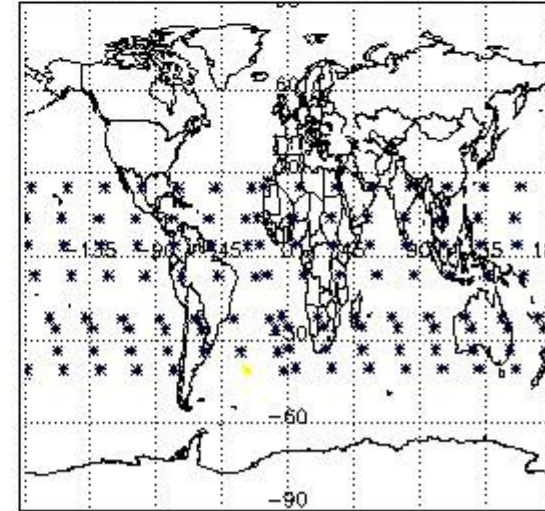
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

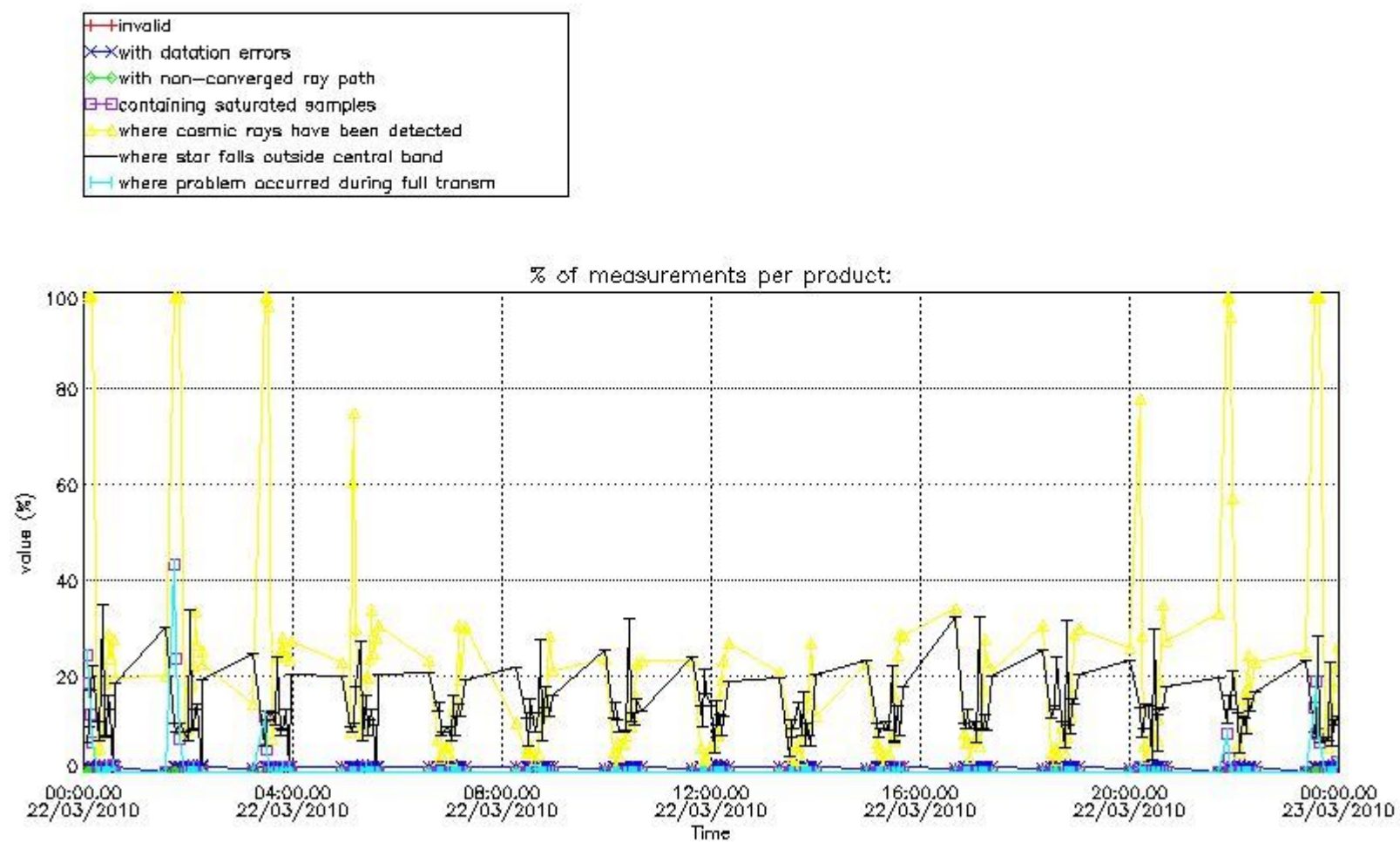


4. Level 1 quality information per product

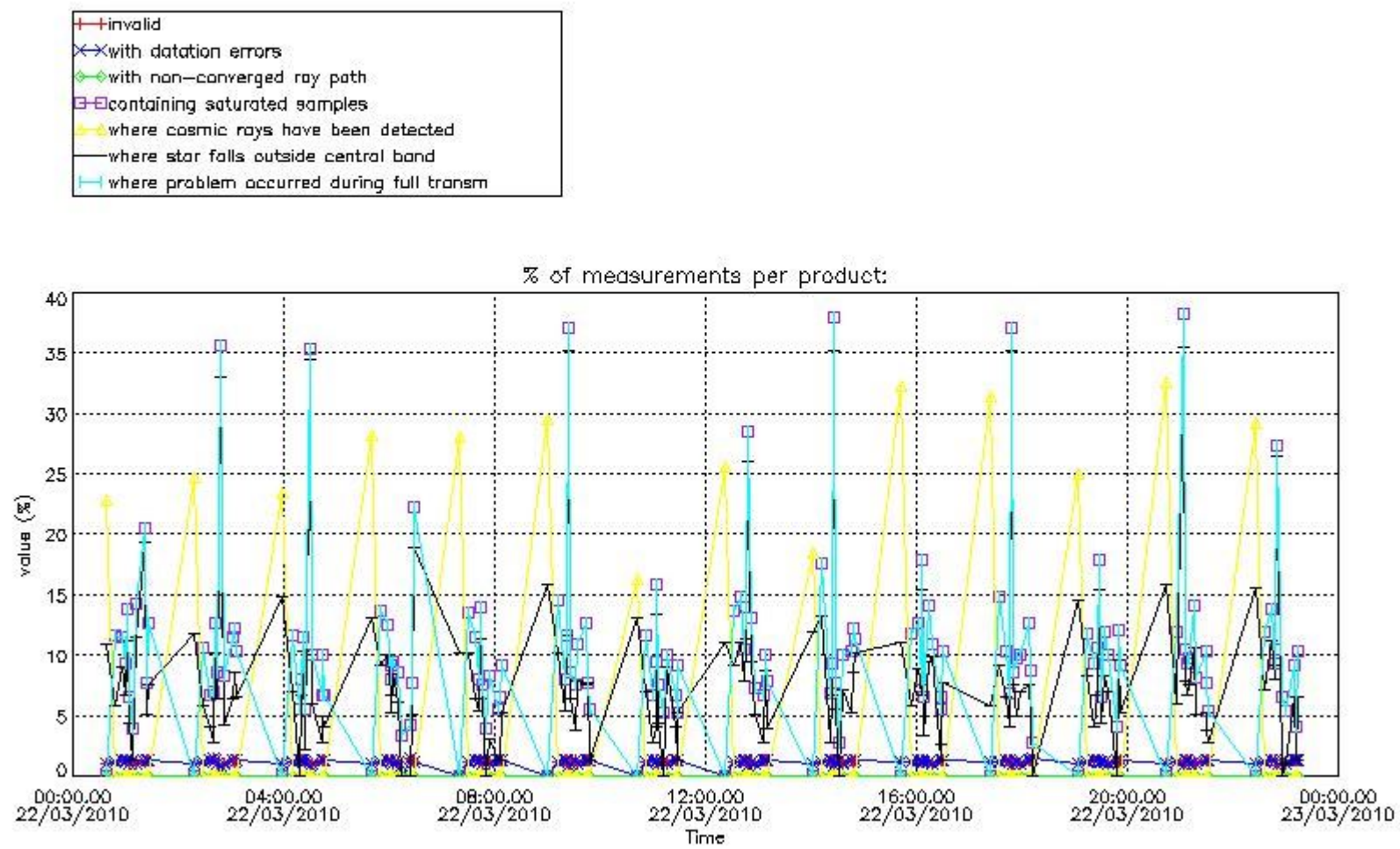
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

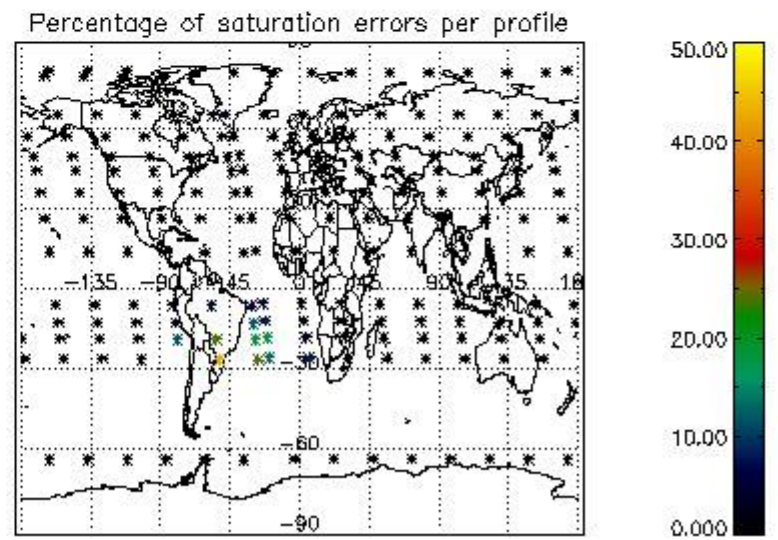
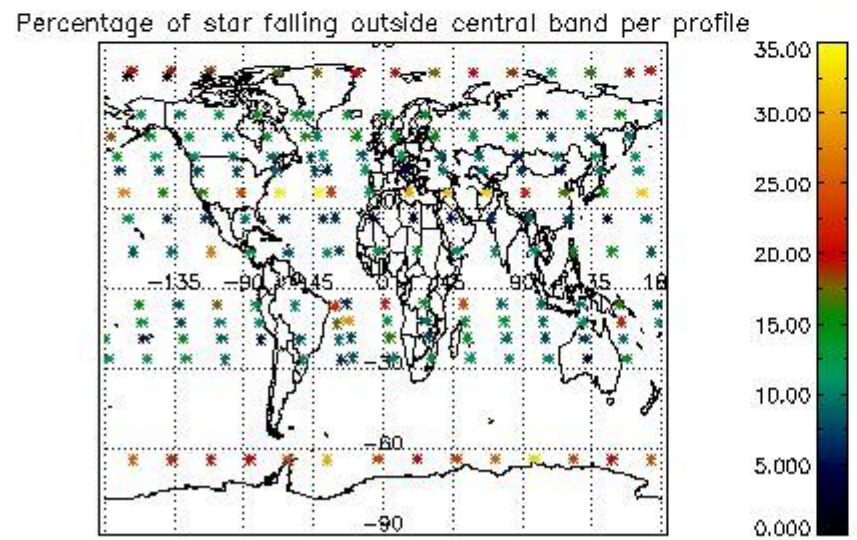
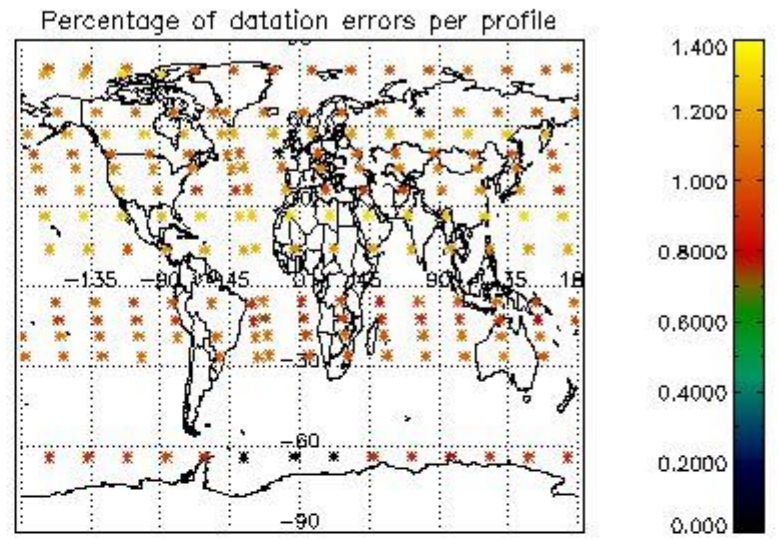
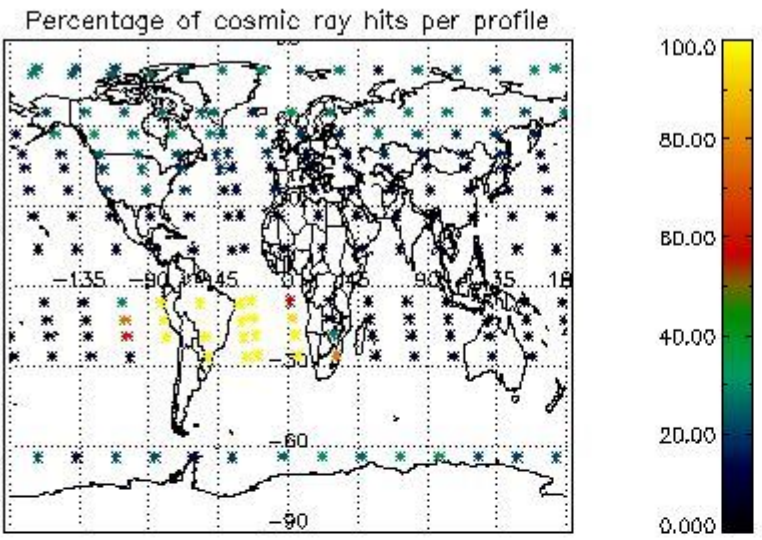


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

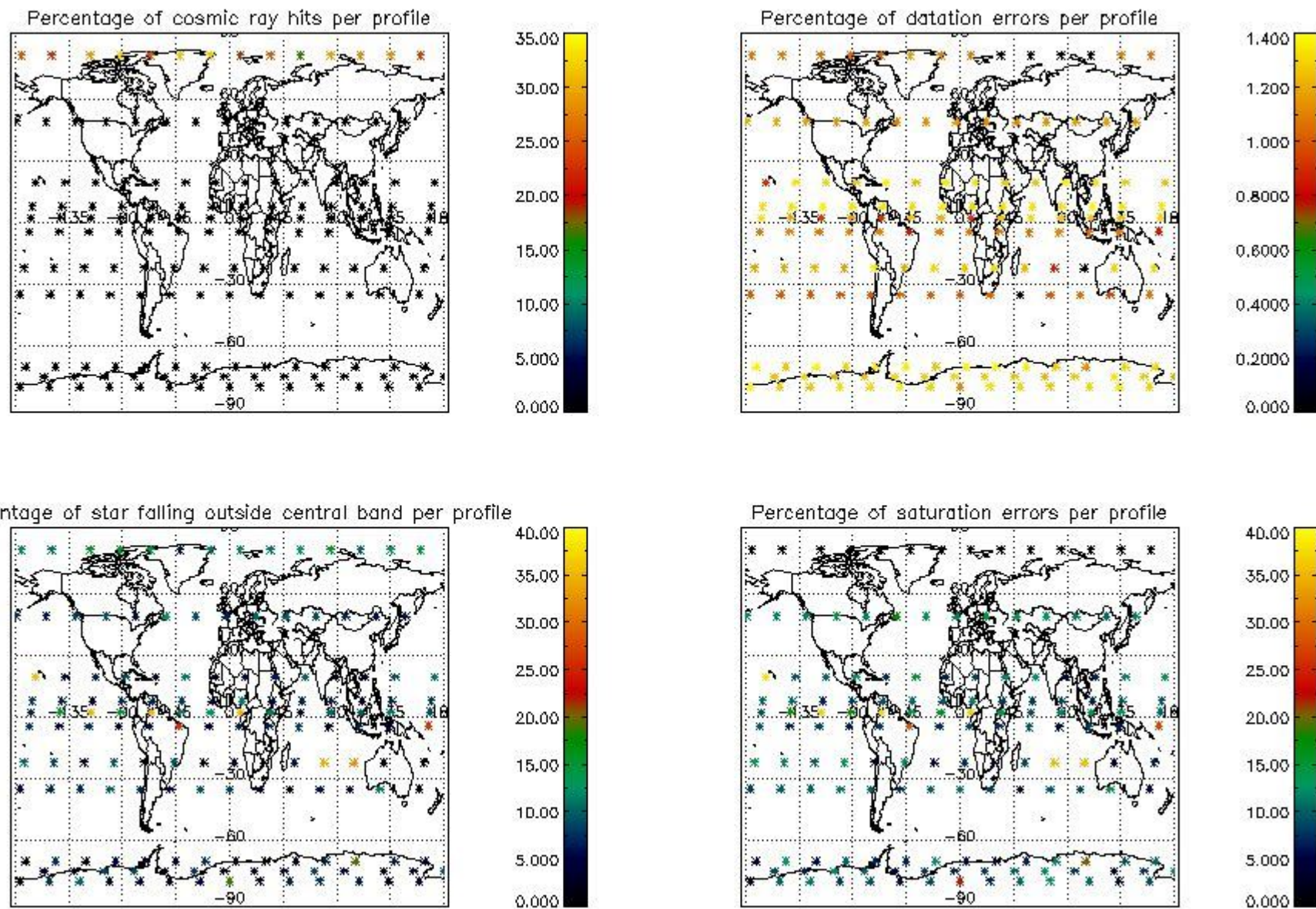


4.2 Plot quality information per product coming from level 1b processing (world map)

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

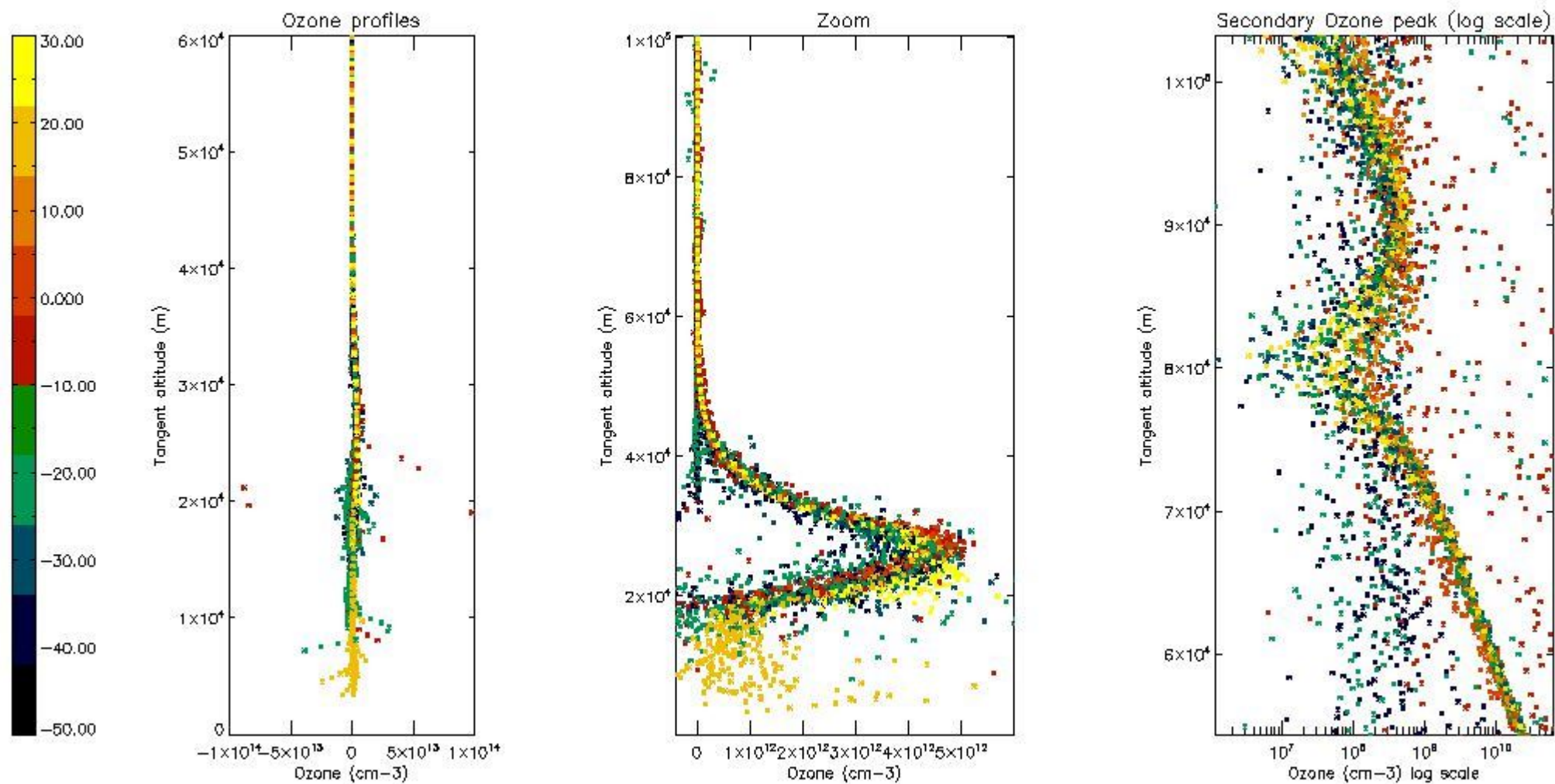
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	36
STD < 20	15

STD < 10	11
STD < 5	7

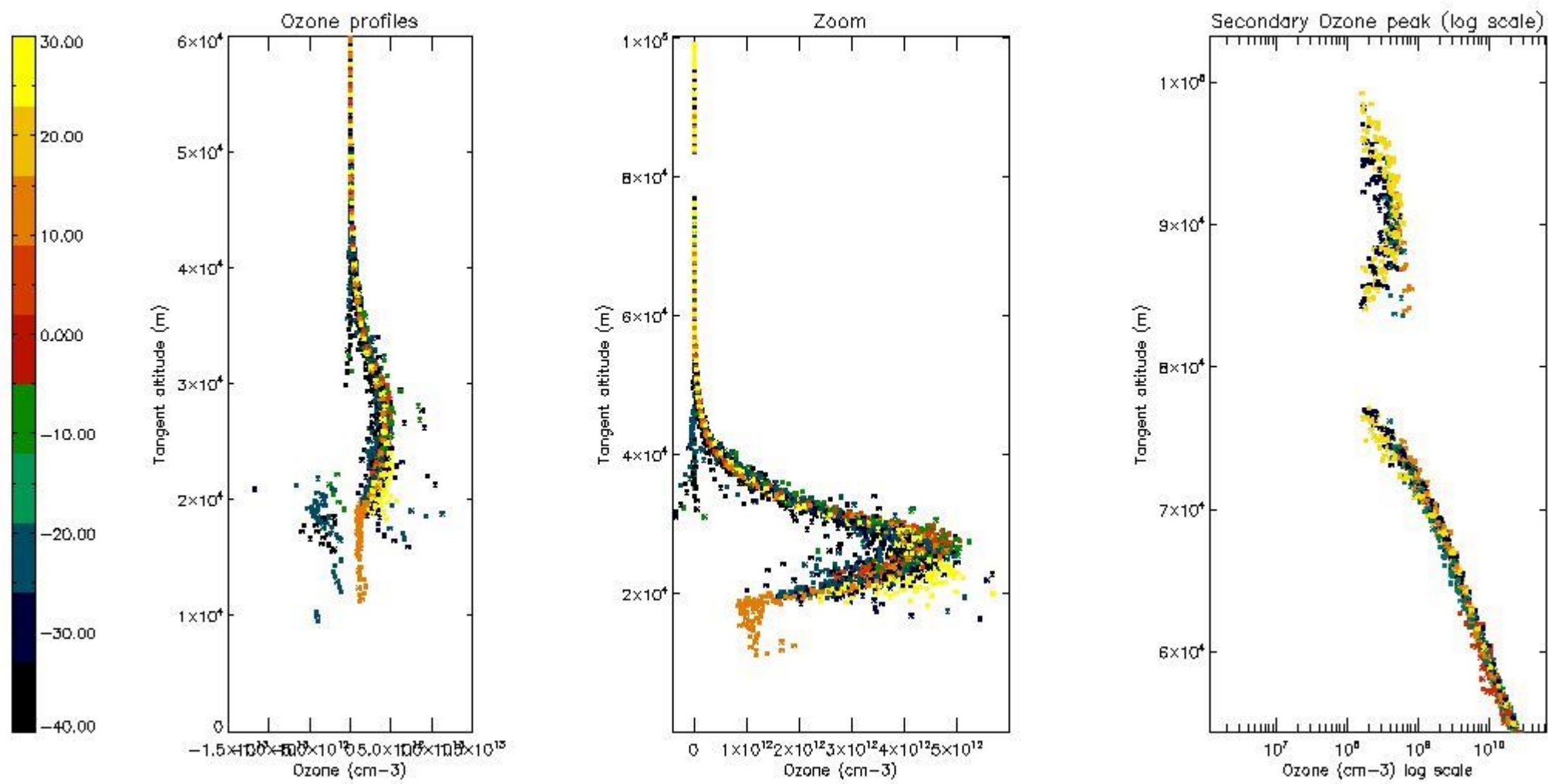
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



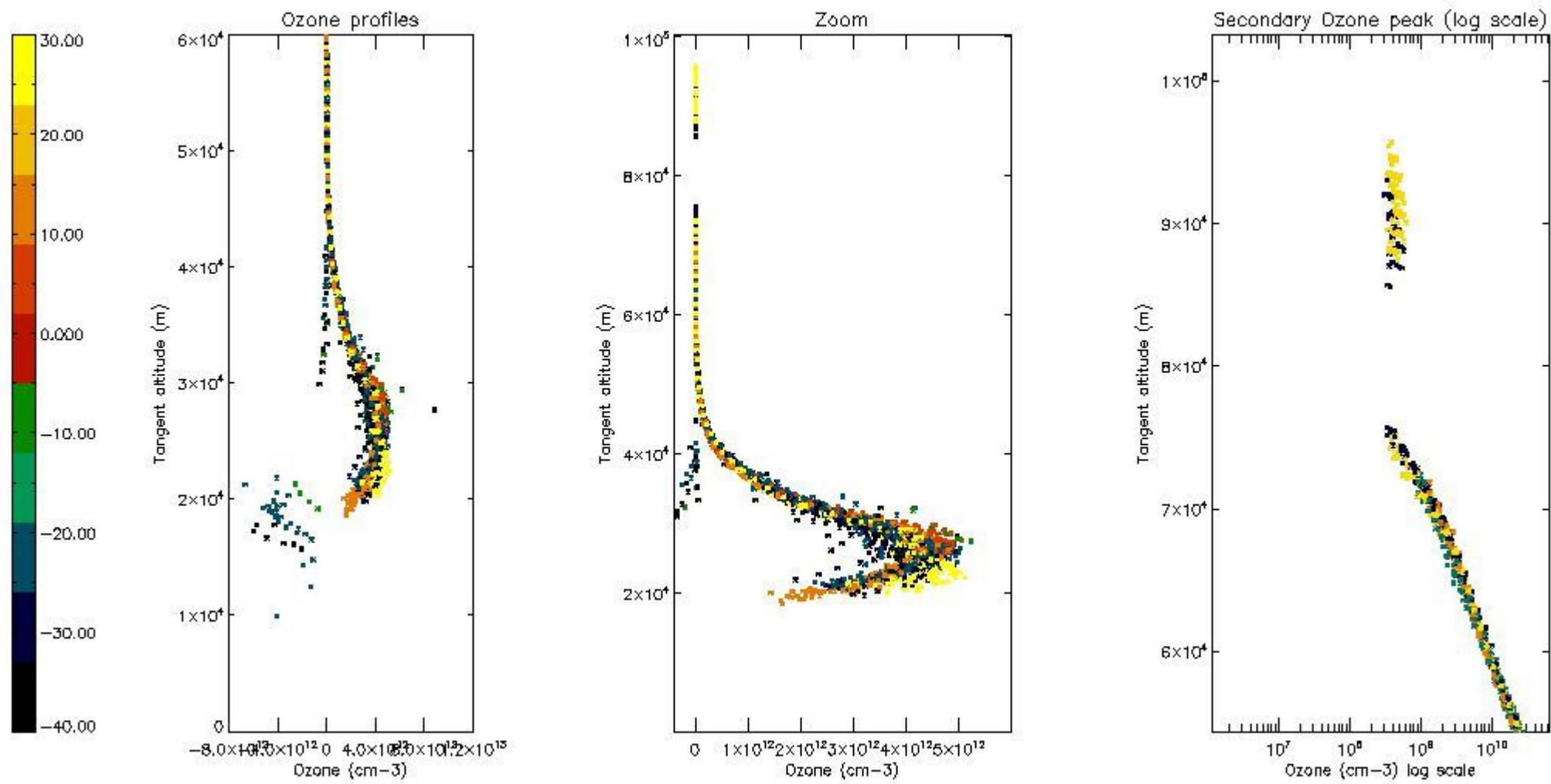
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



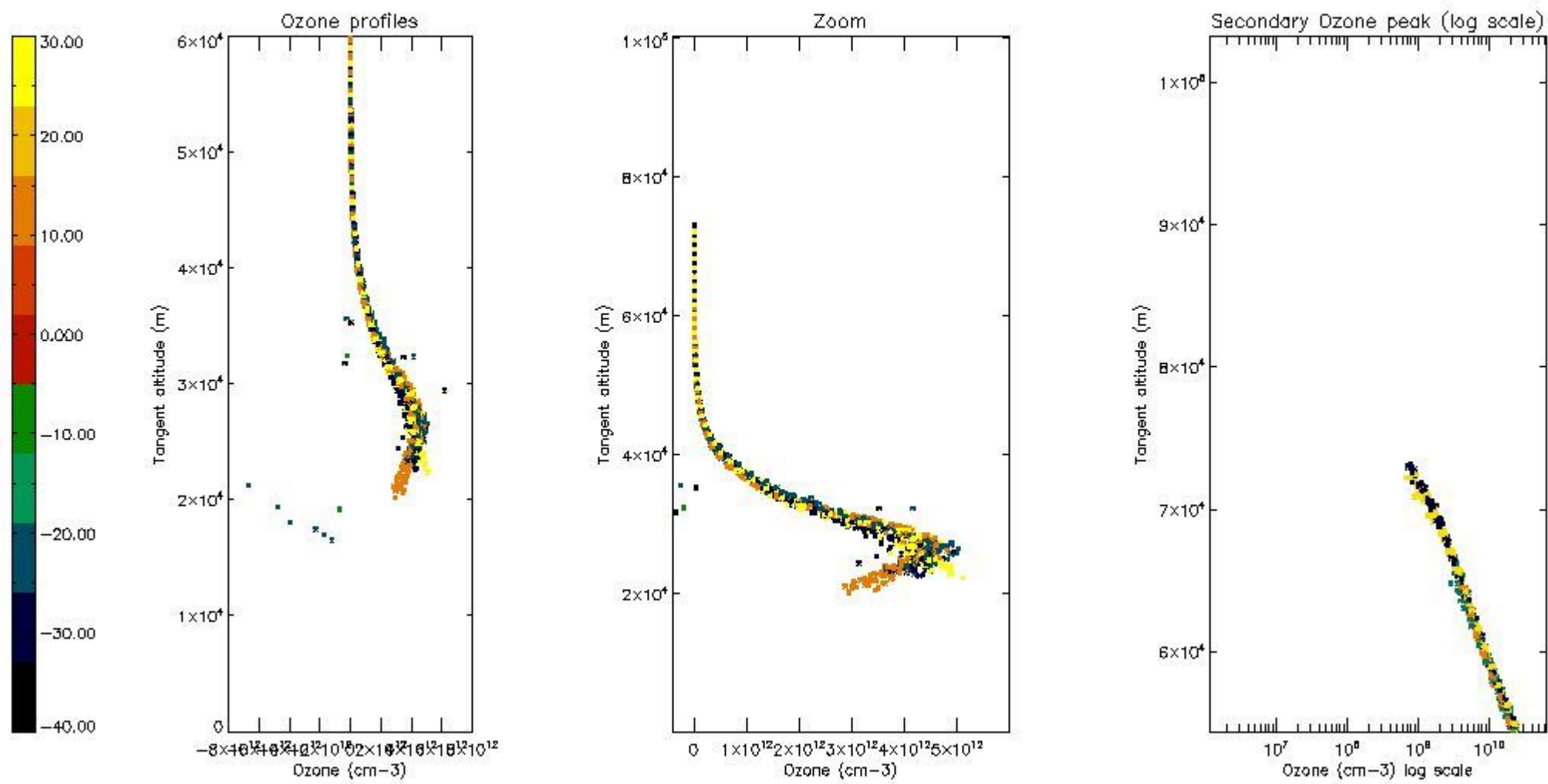
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



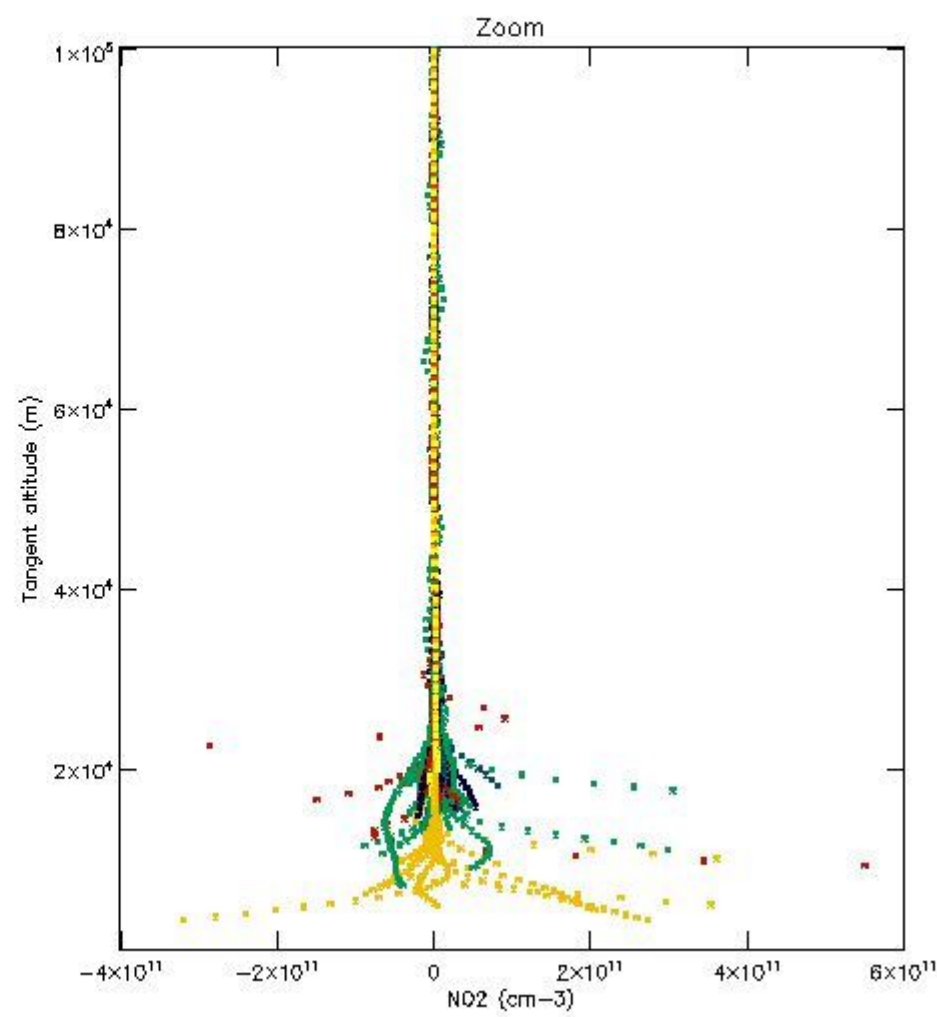
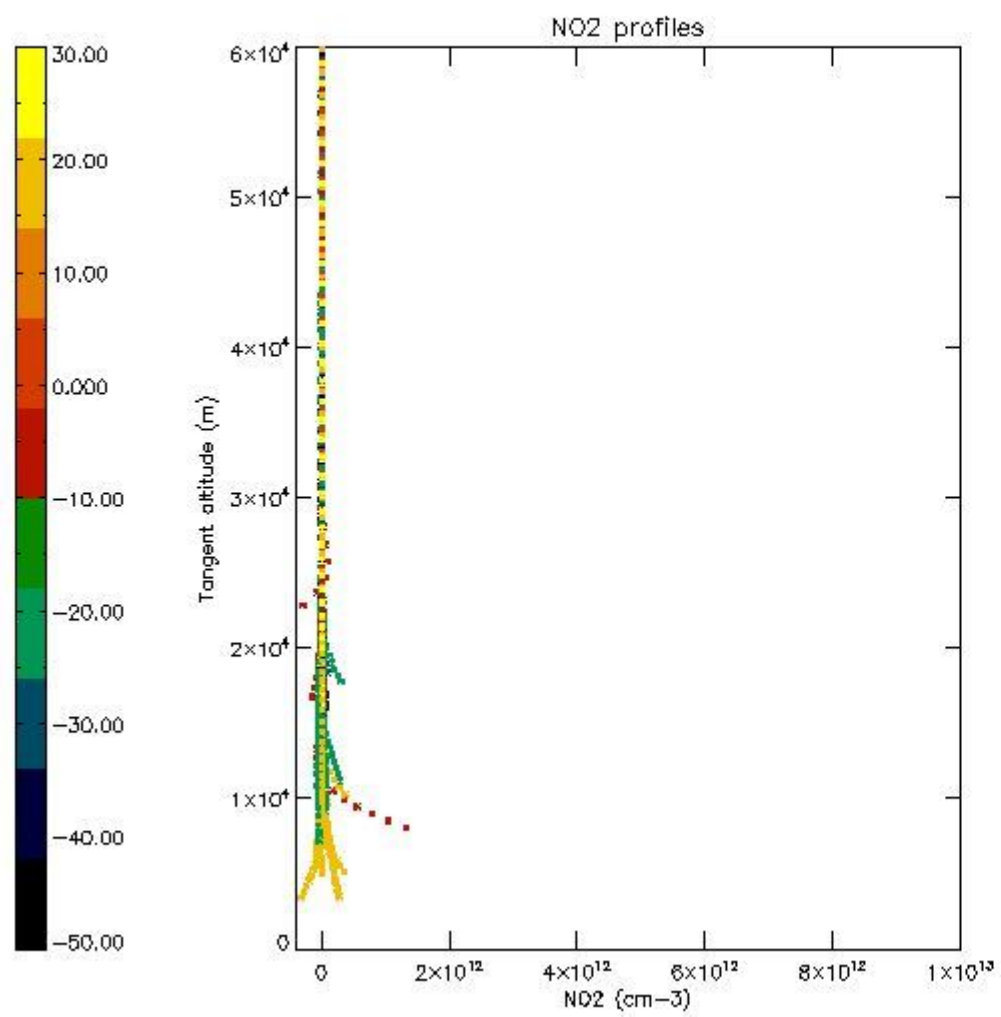
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



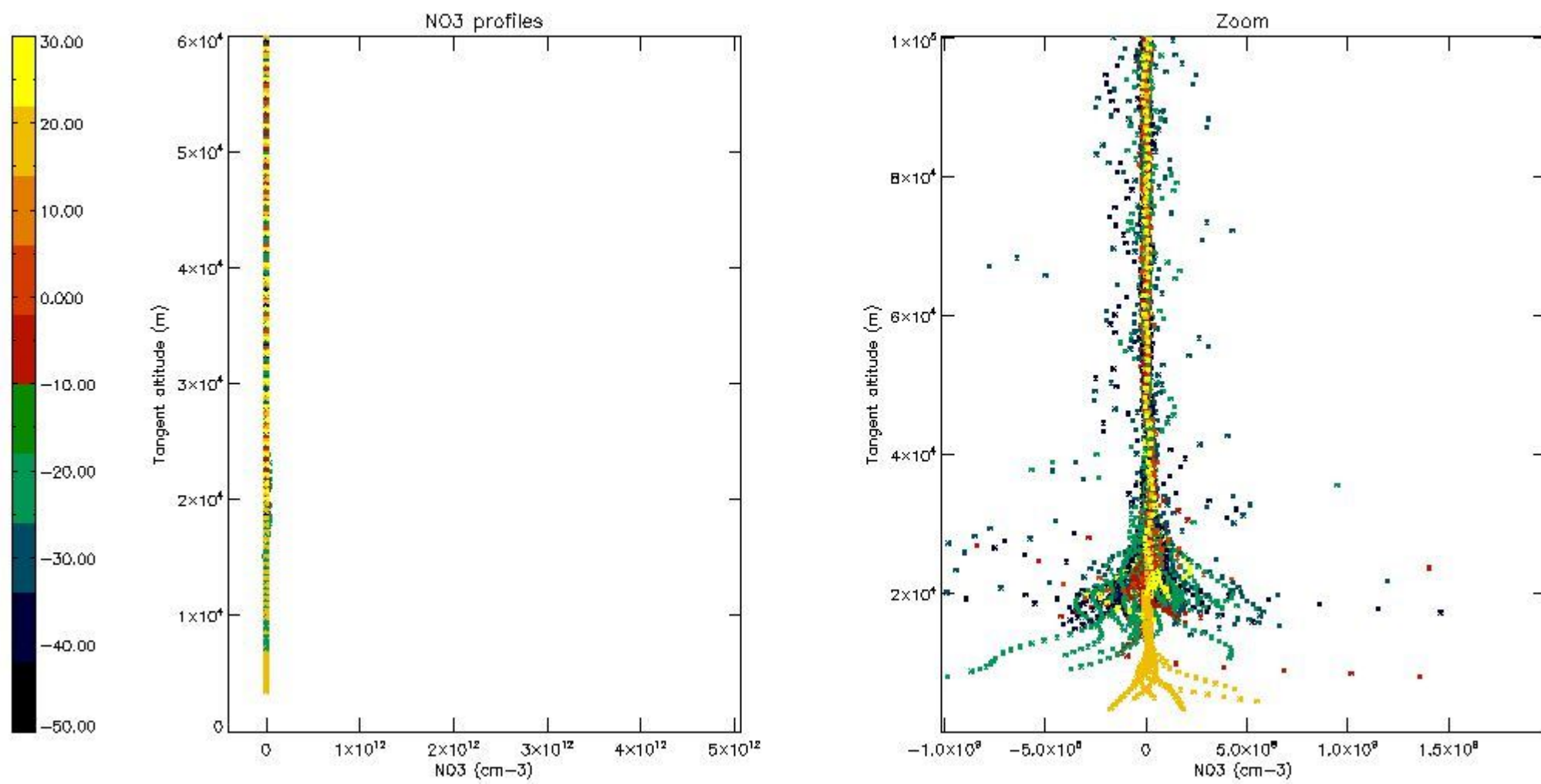
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



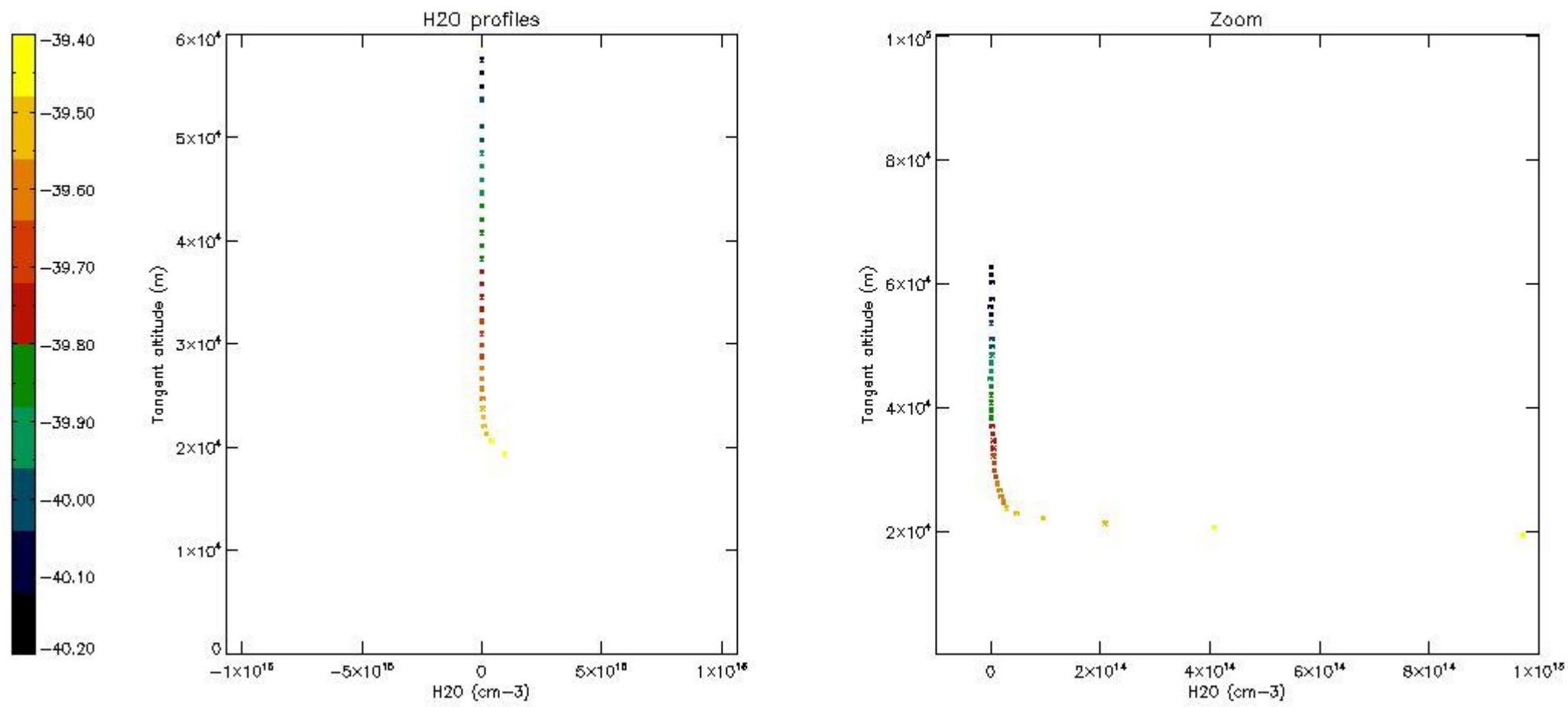
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

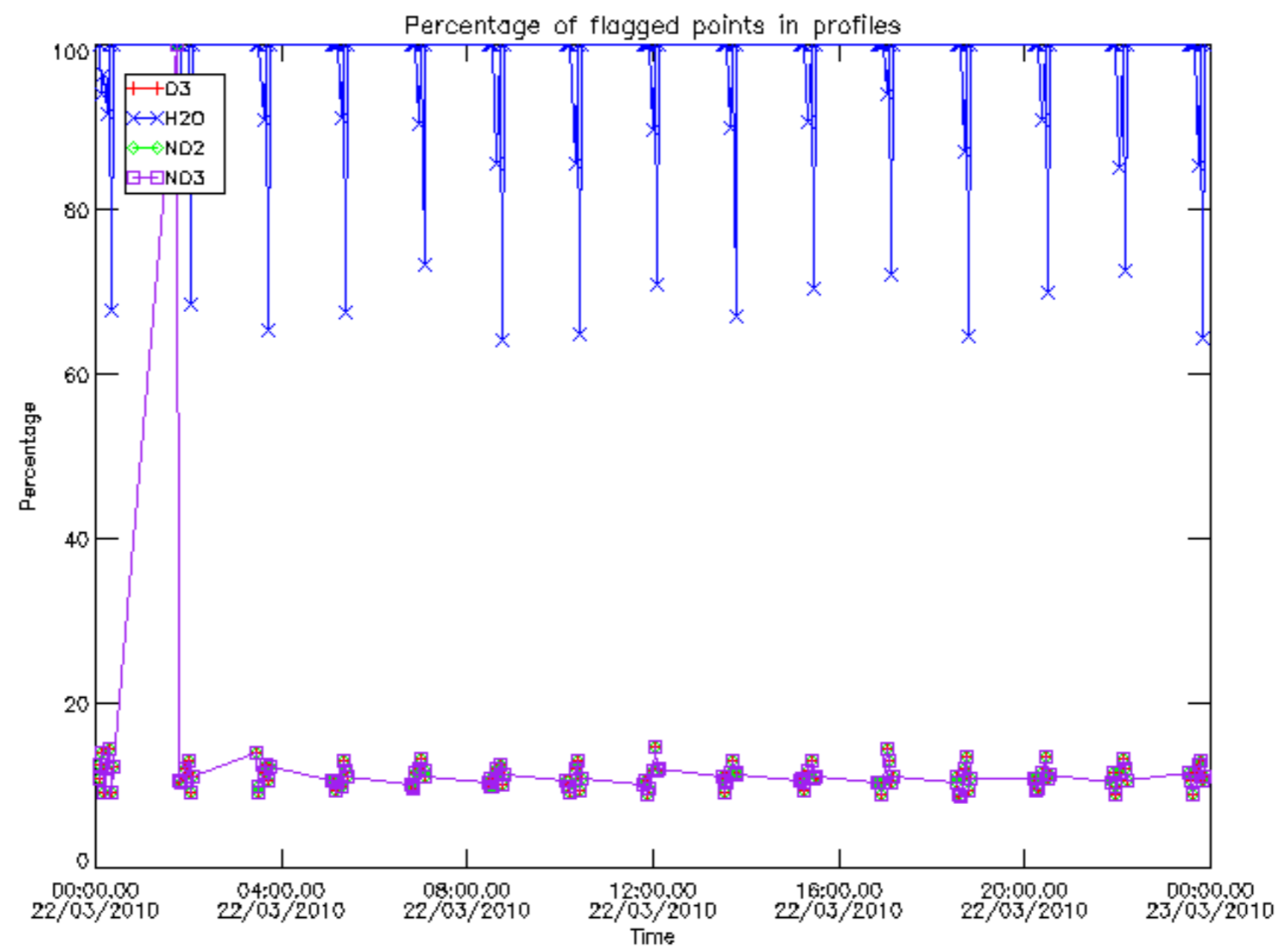
The colorbar represents the latitude.



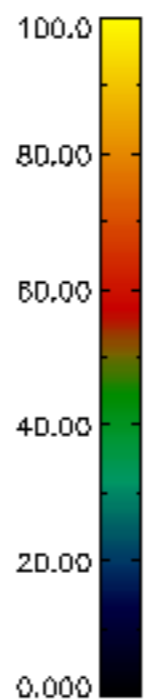
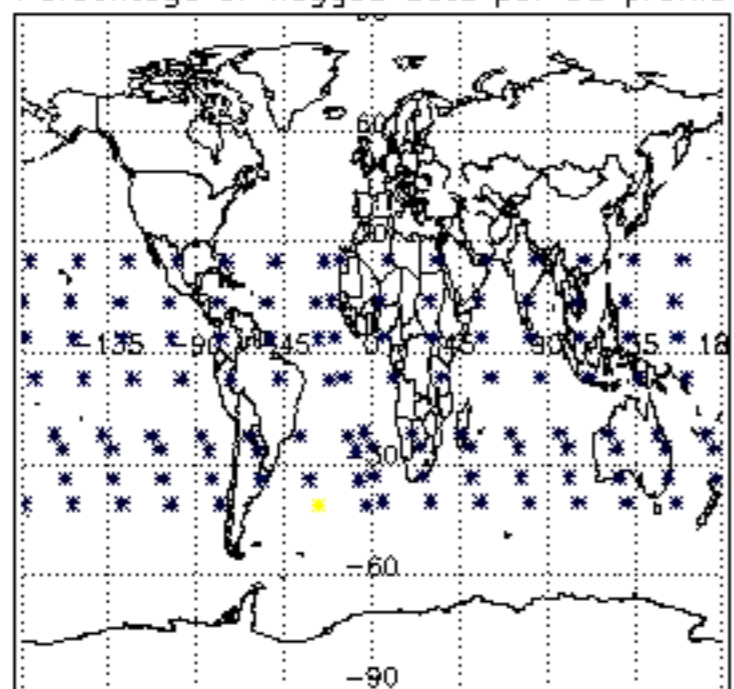
6. Auxiliary Data Files used for the production reported in section 2

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

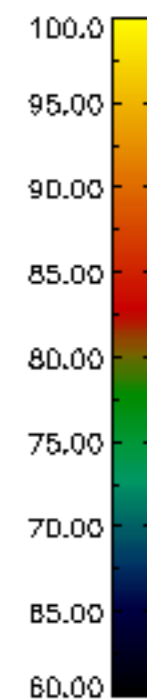
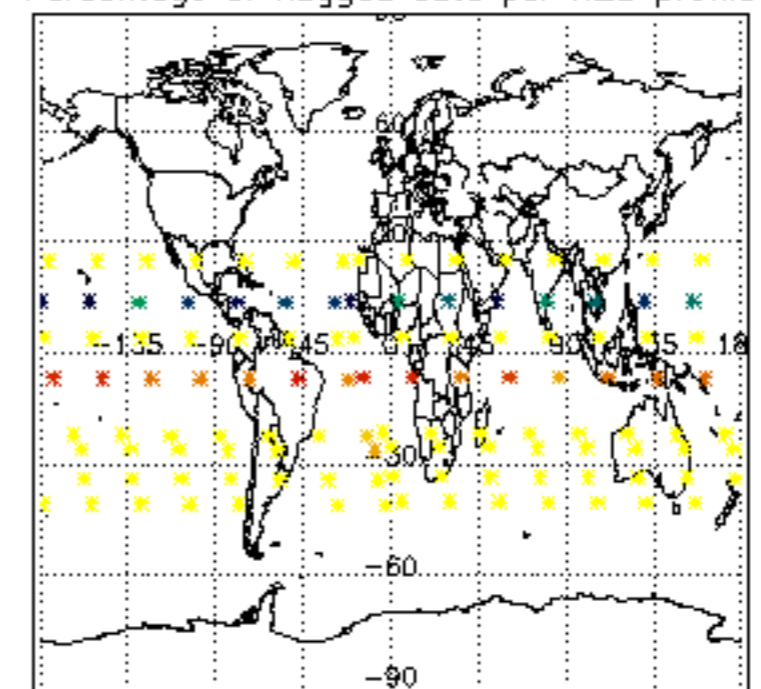
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	22-MAR-2010 00:04:08
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	22-MAR-2010 00:04:08
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	22-MAR-2010 00:04:08



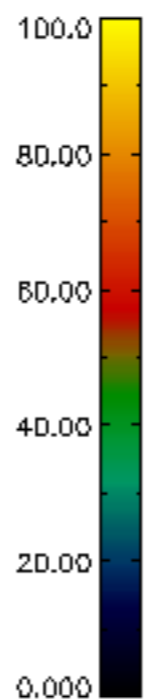
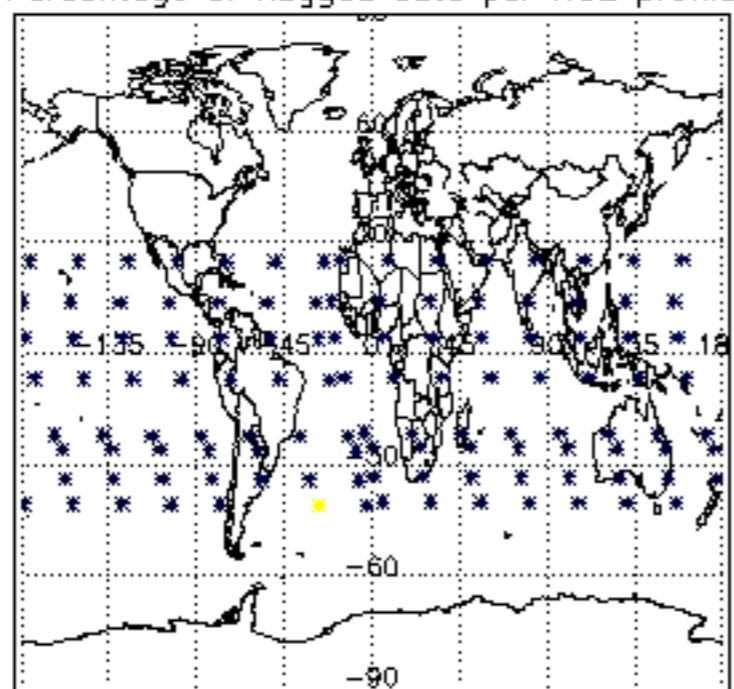
Percentage of flagged data per D3 profile



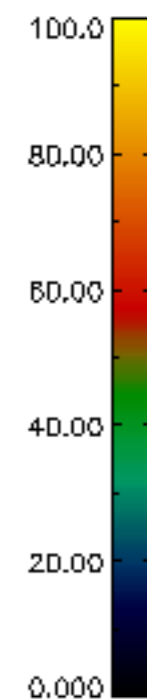
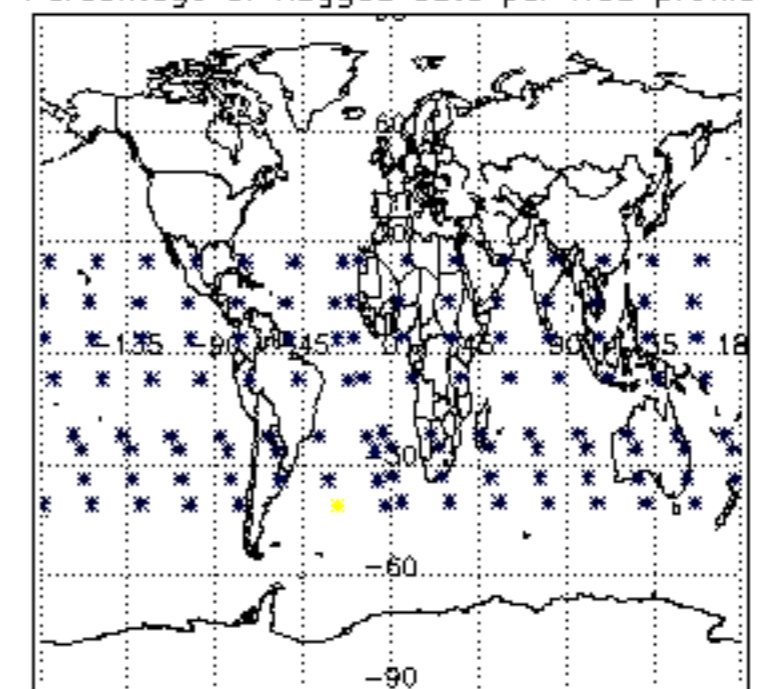
Percentage of flagged data per H2O profile

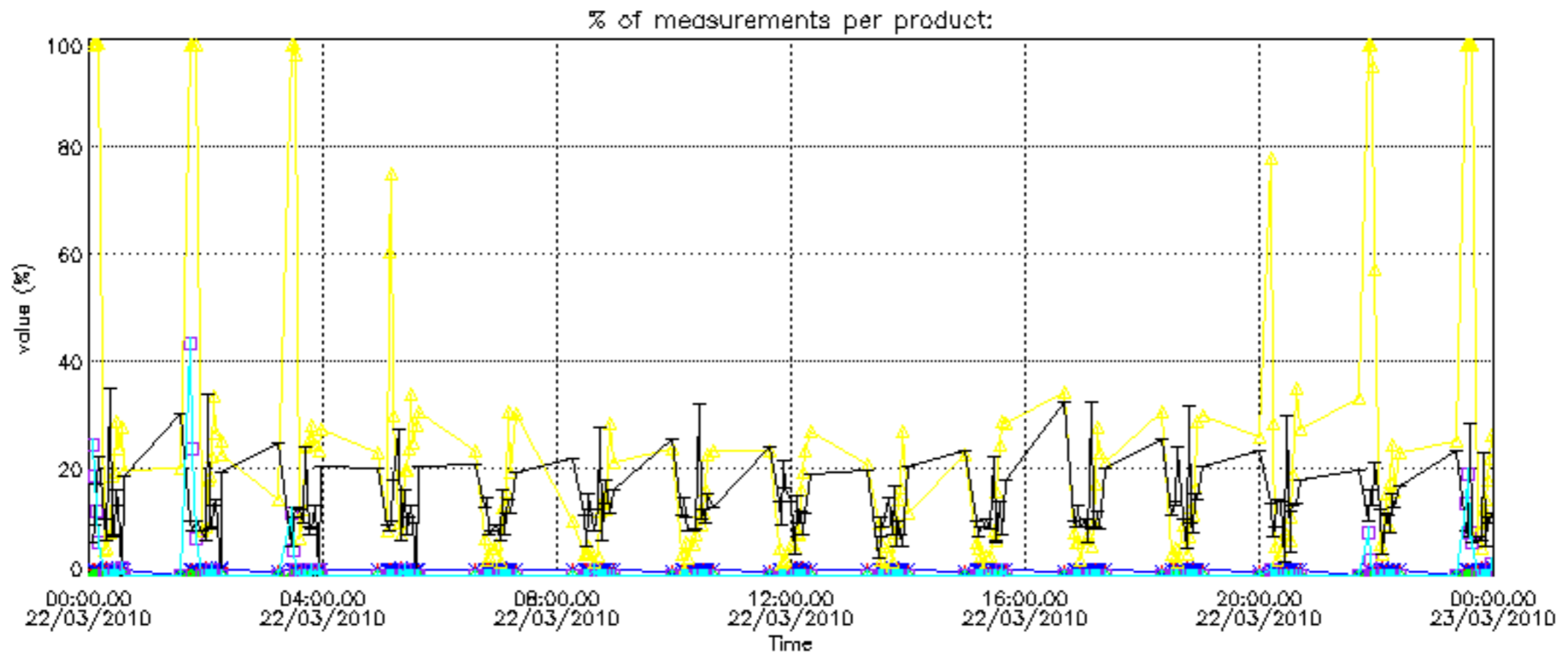


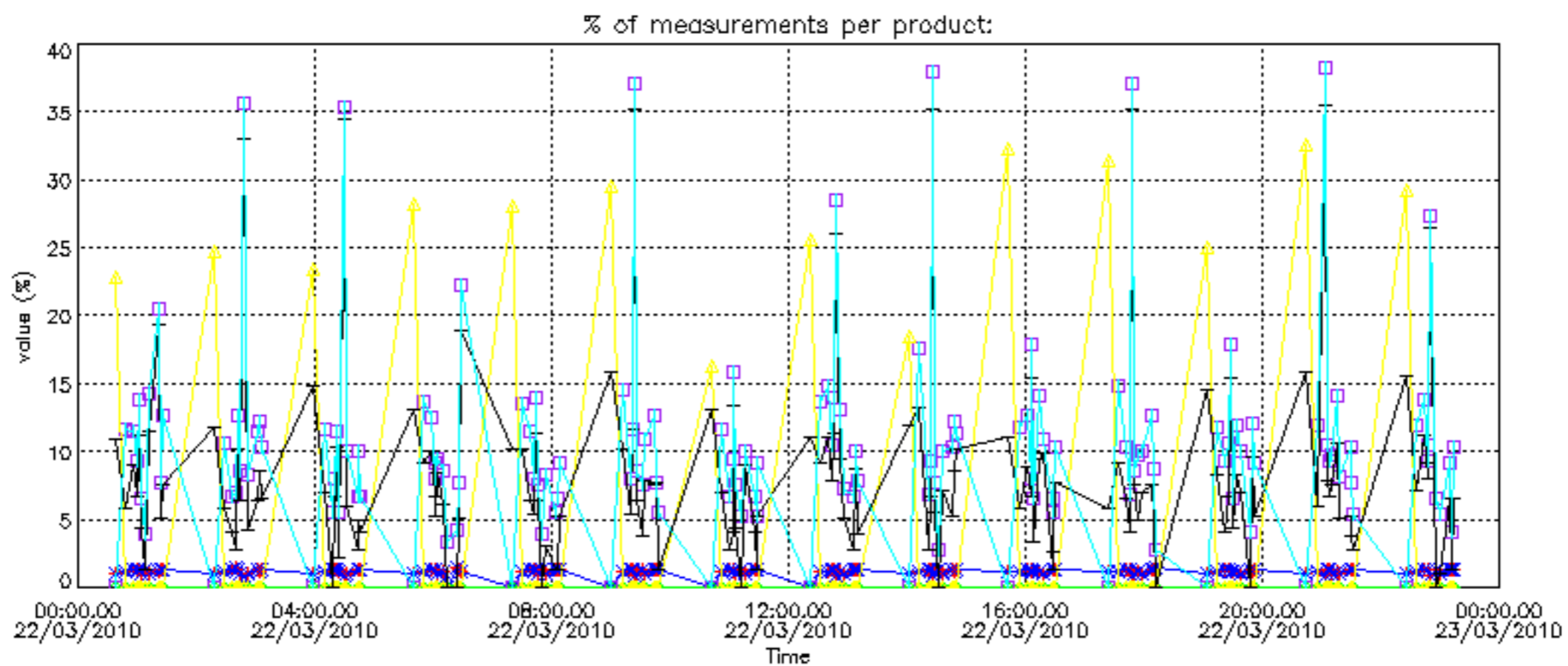
Percentage of flagged data per NO2 profile



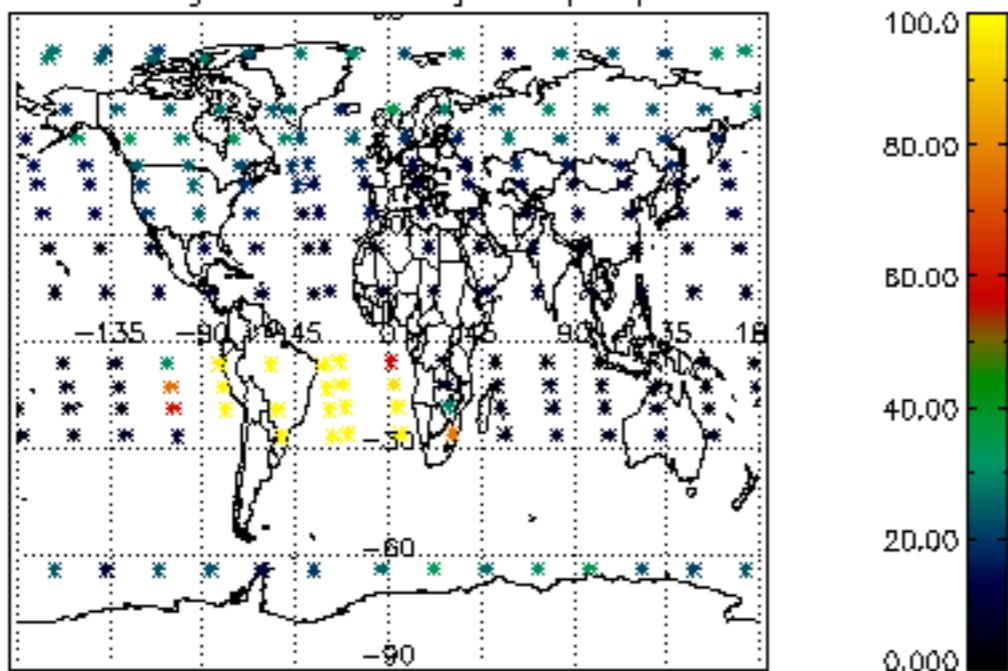
Percentage of flagged data per NO3 profile



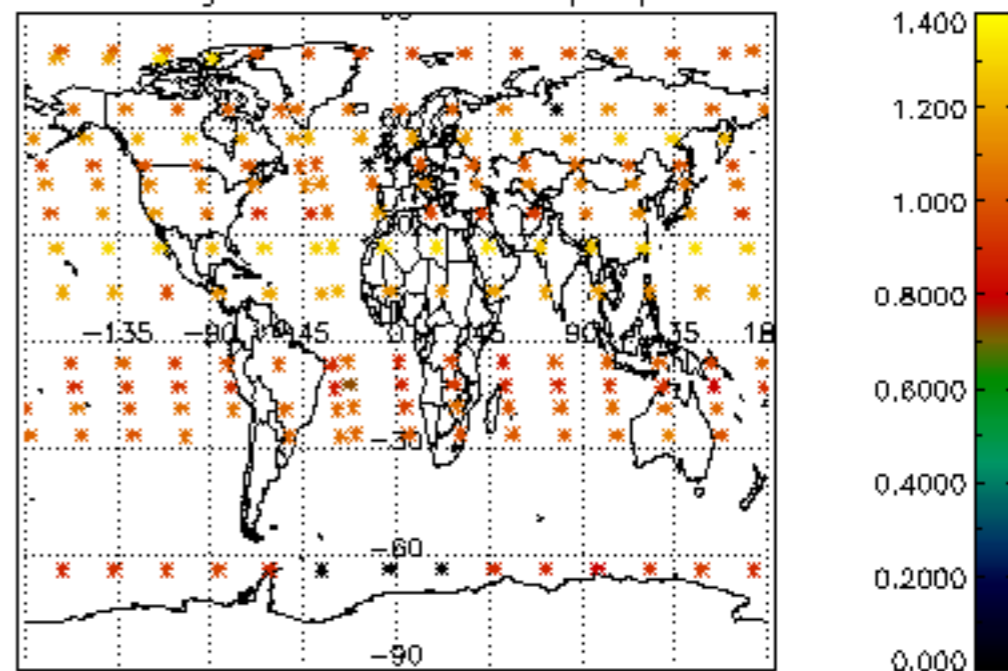




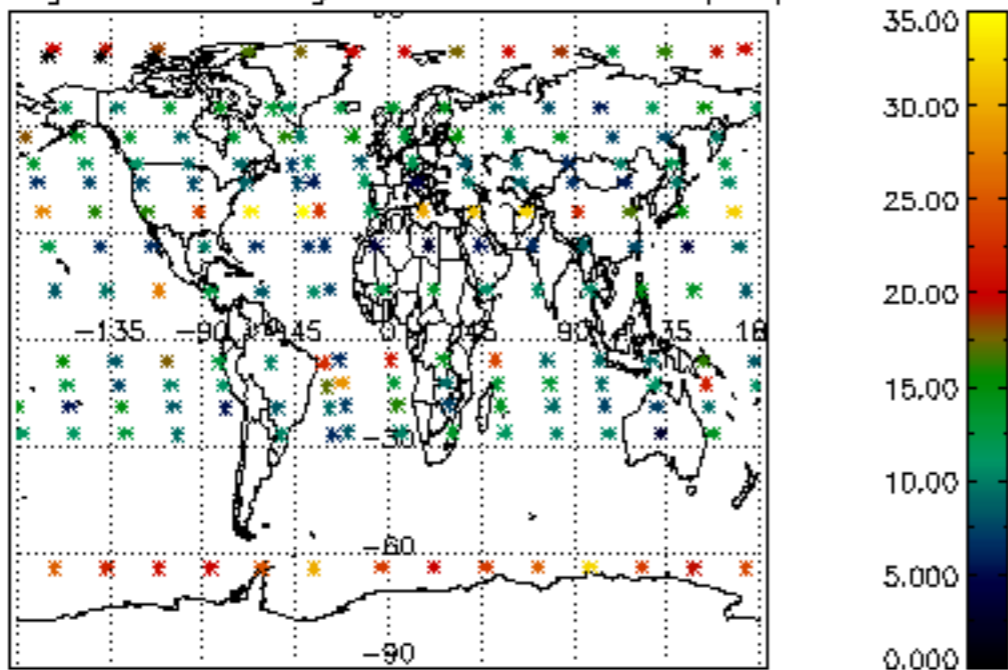
Percentage of cosmic ray hits per profile



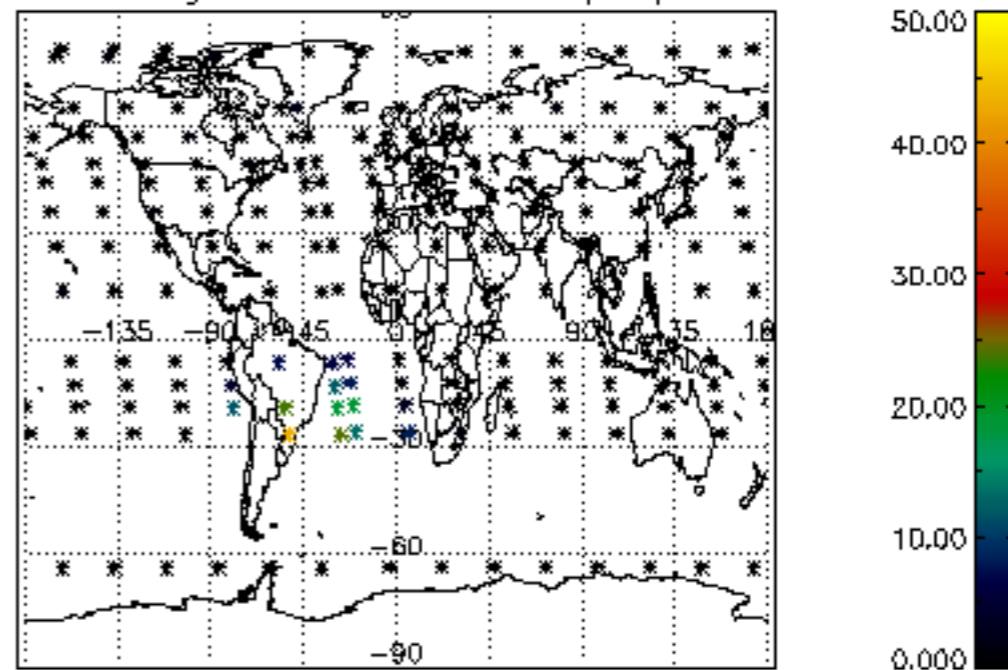
Percentage of datation errors per profile



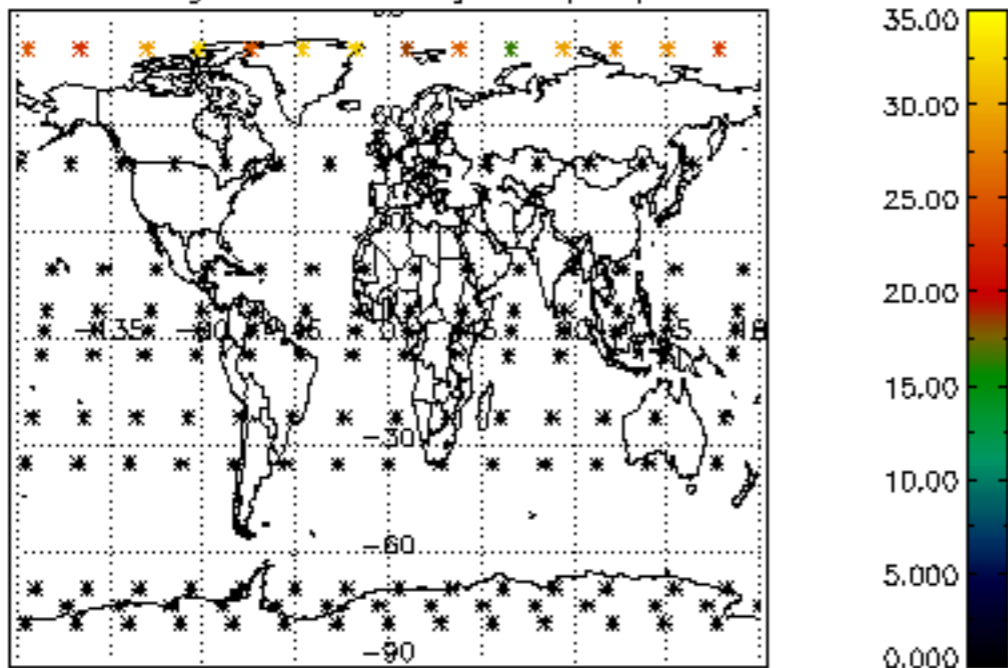
Percentage of star falling outside central band per profile



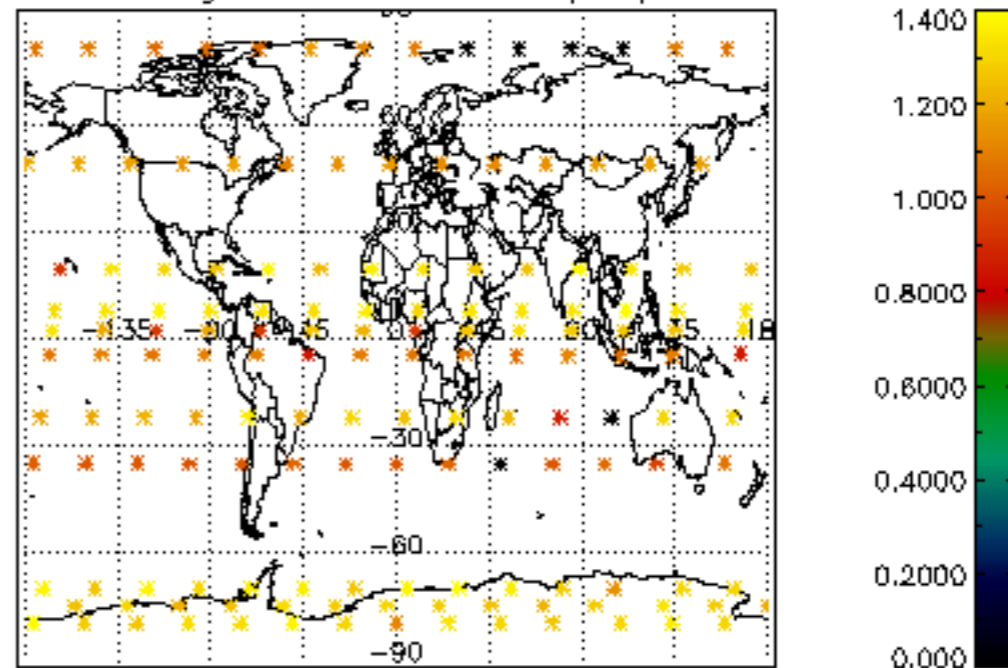
Percentage of saturation errors per profile



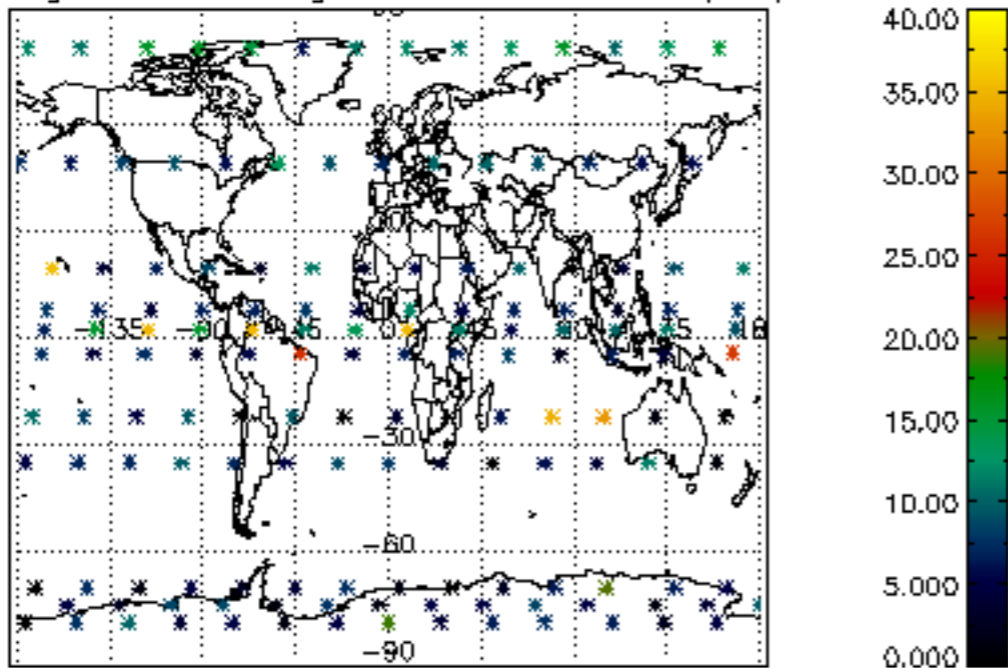
Percentage of cosmic ray hits per profile



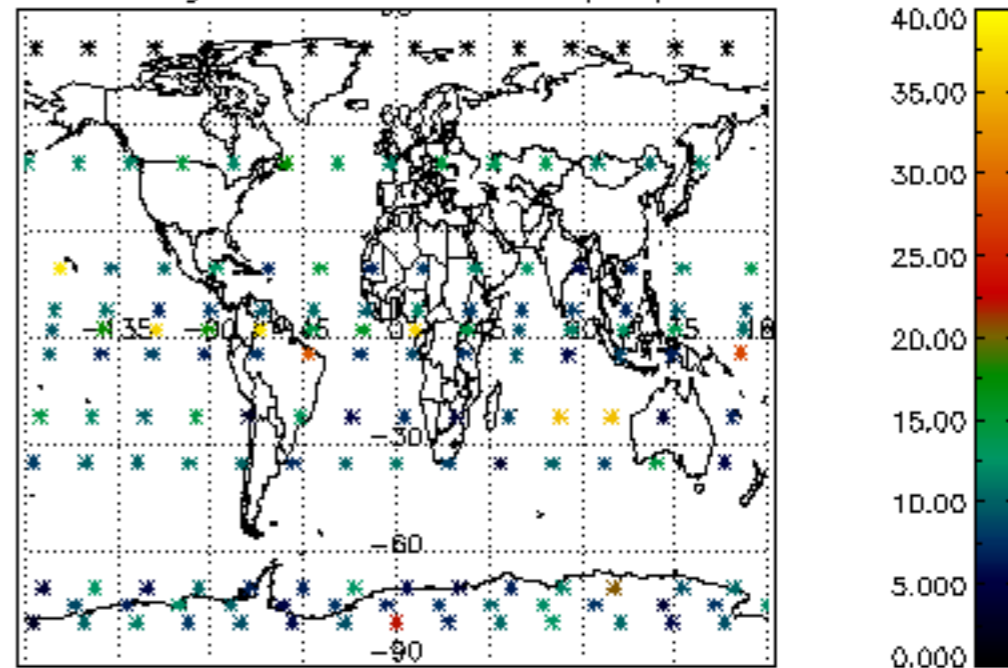
Percentage of datation errors per profile

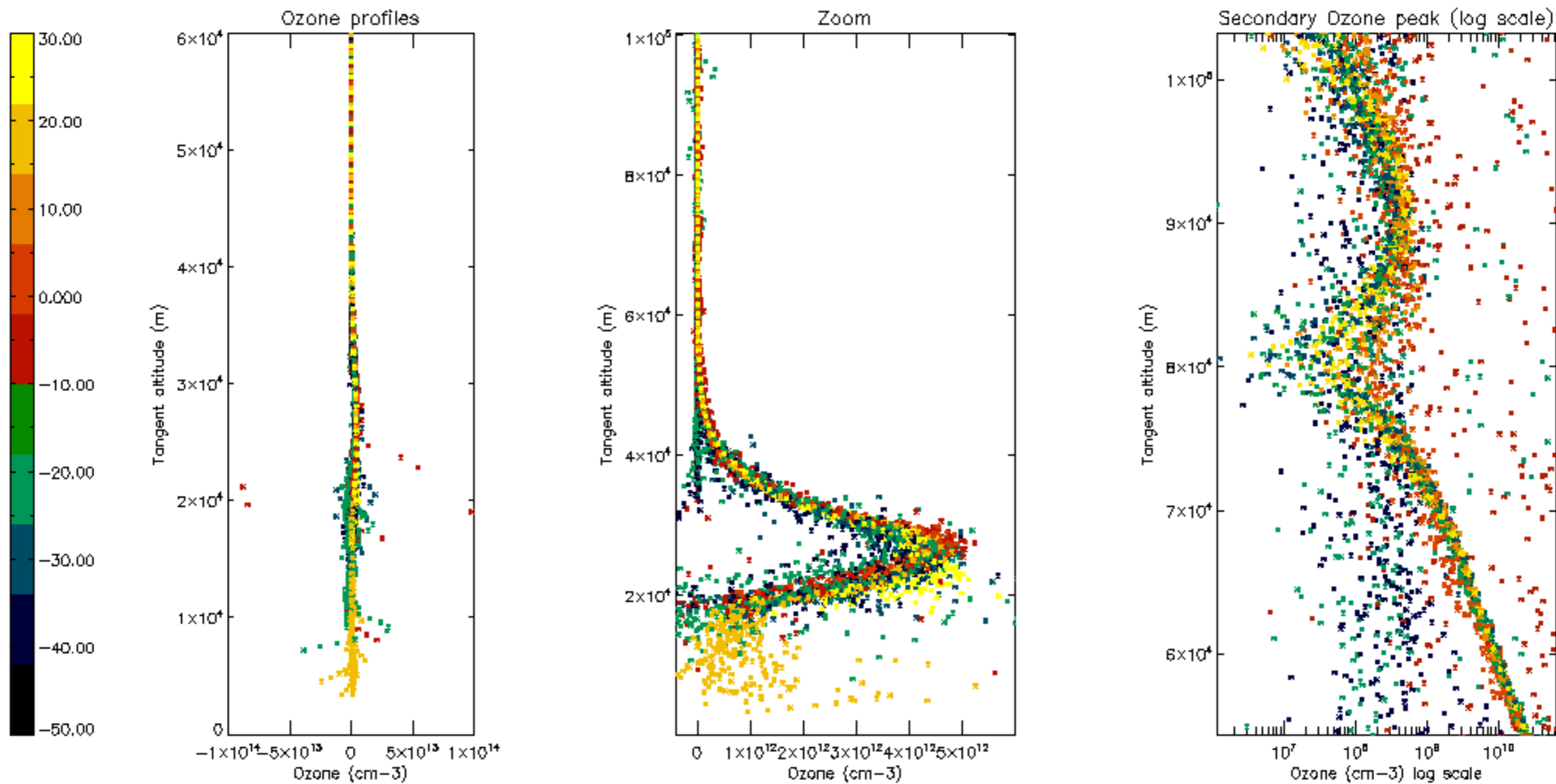


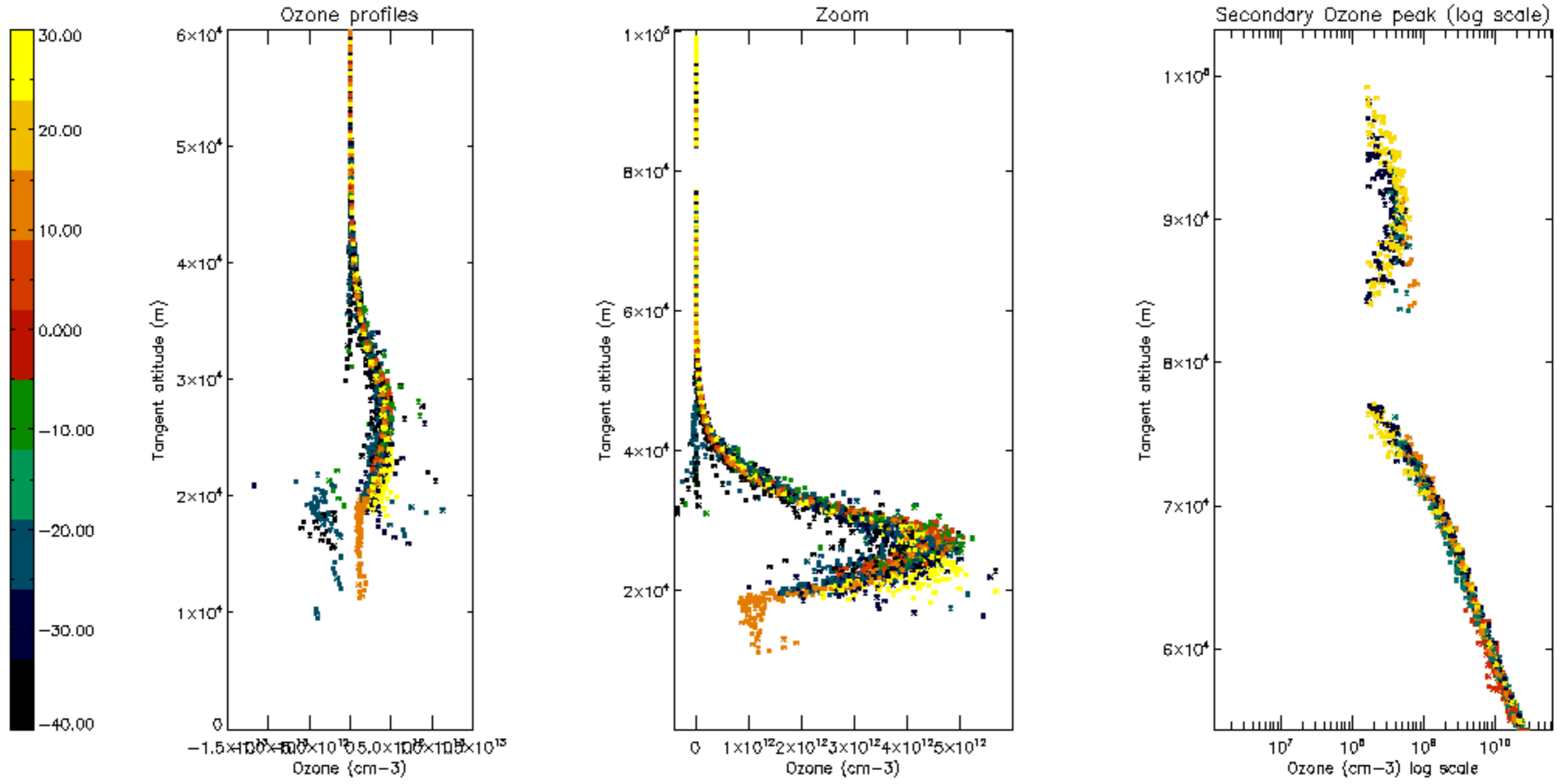
Percentage of star falling outside central band per profile

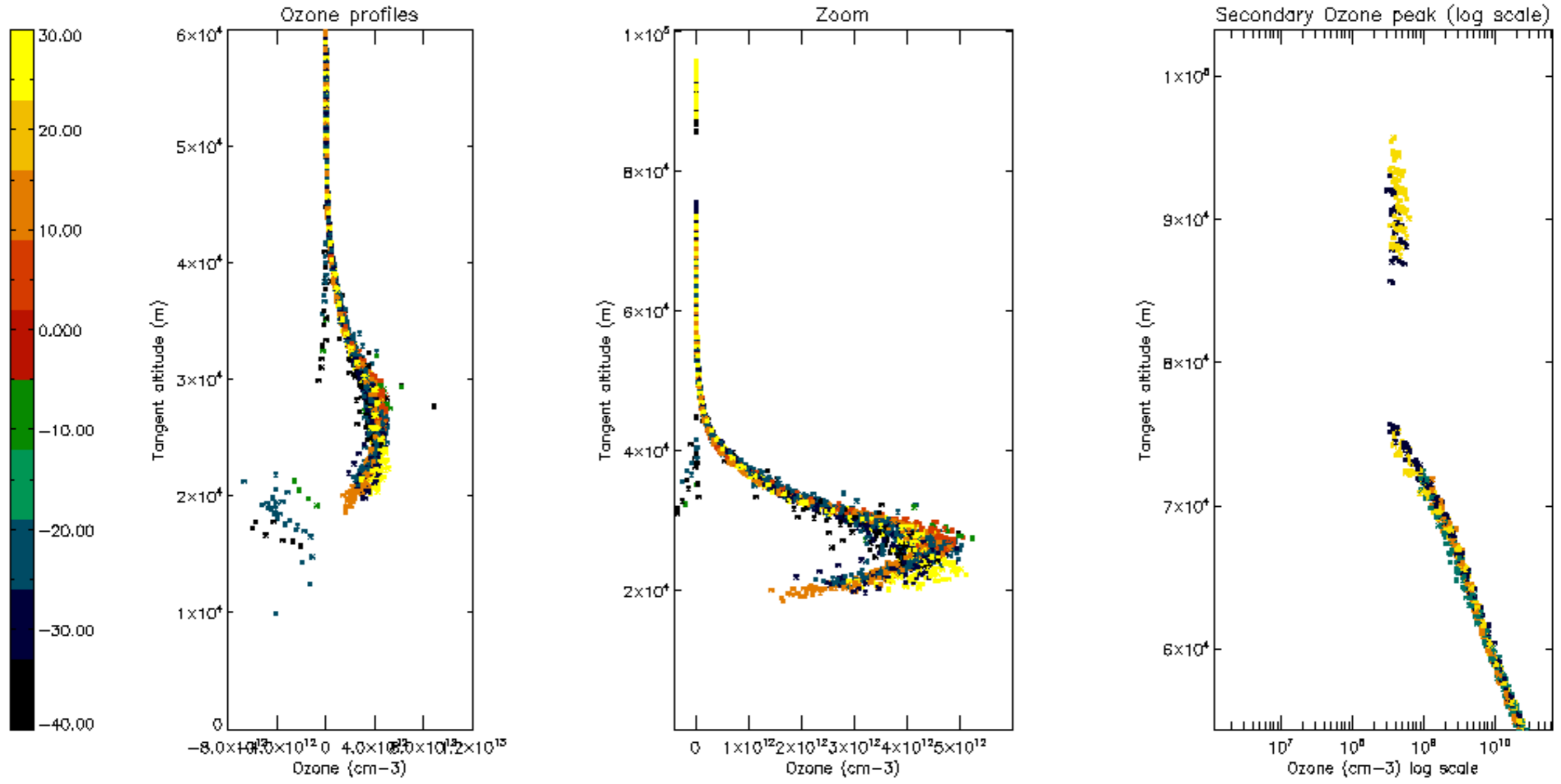


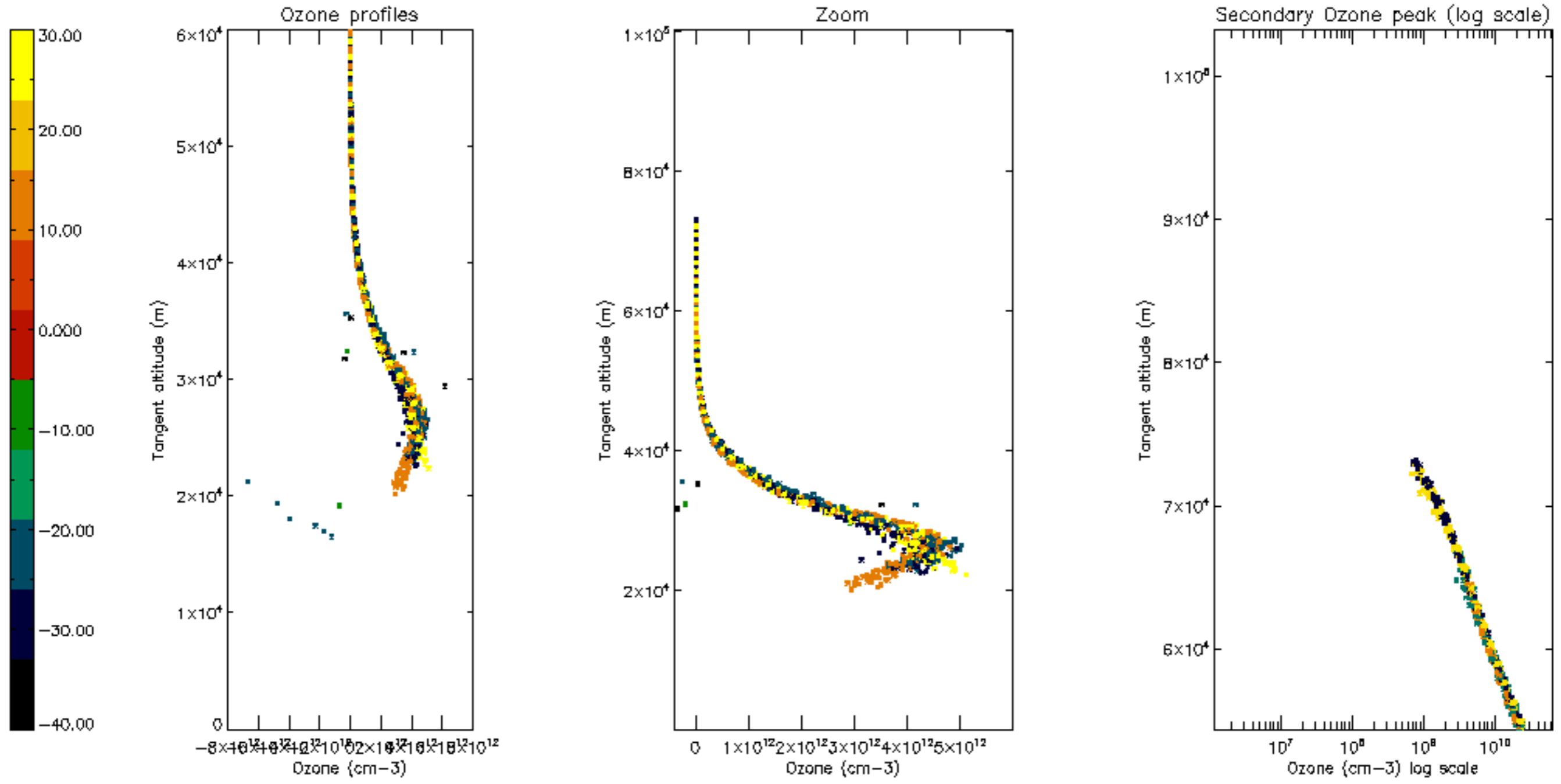
Percentage of saturation errors per profile

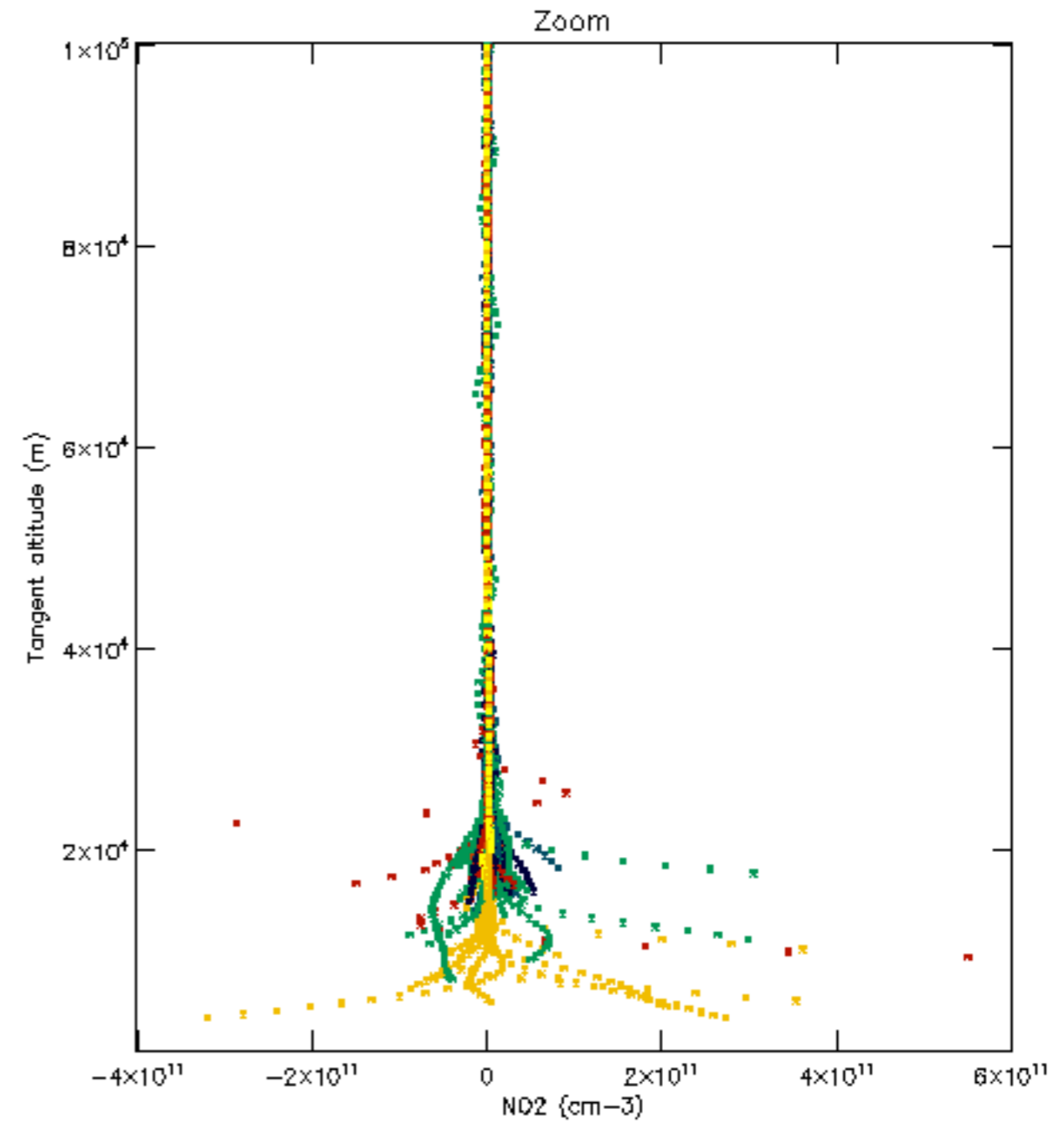
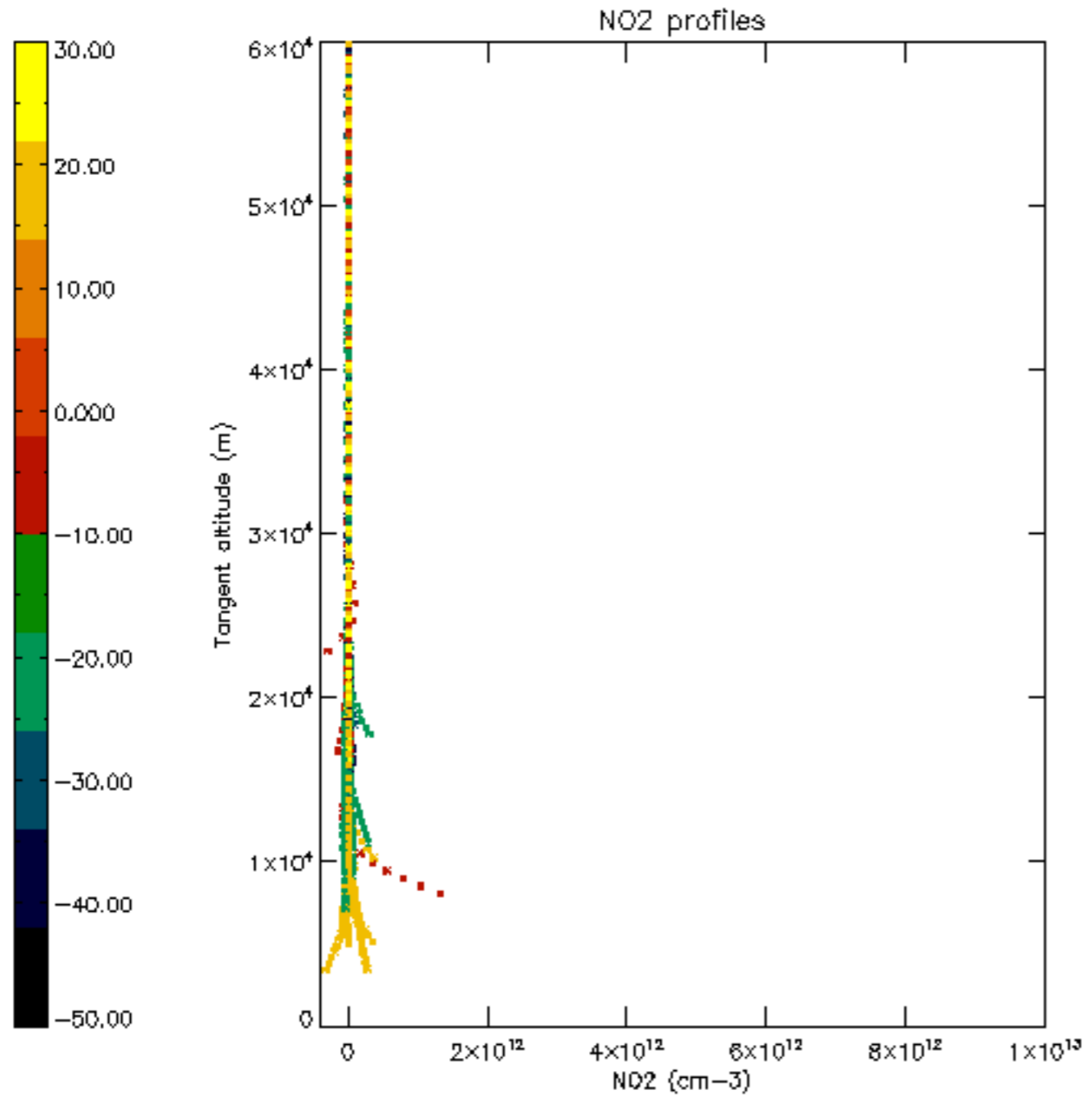


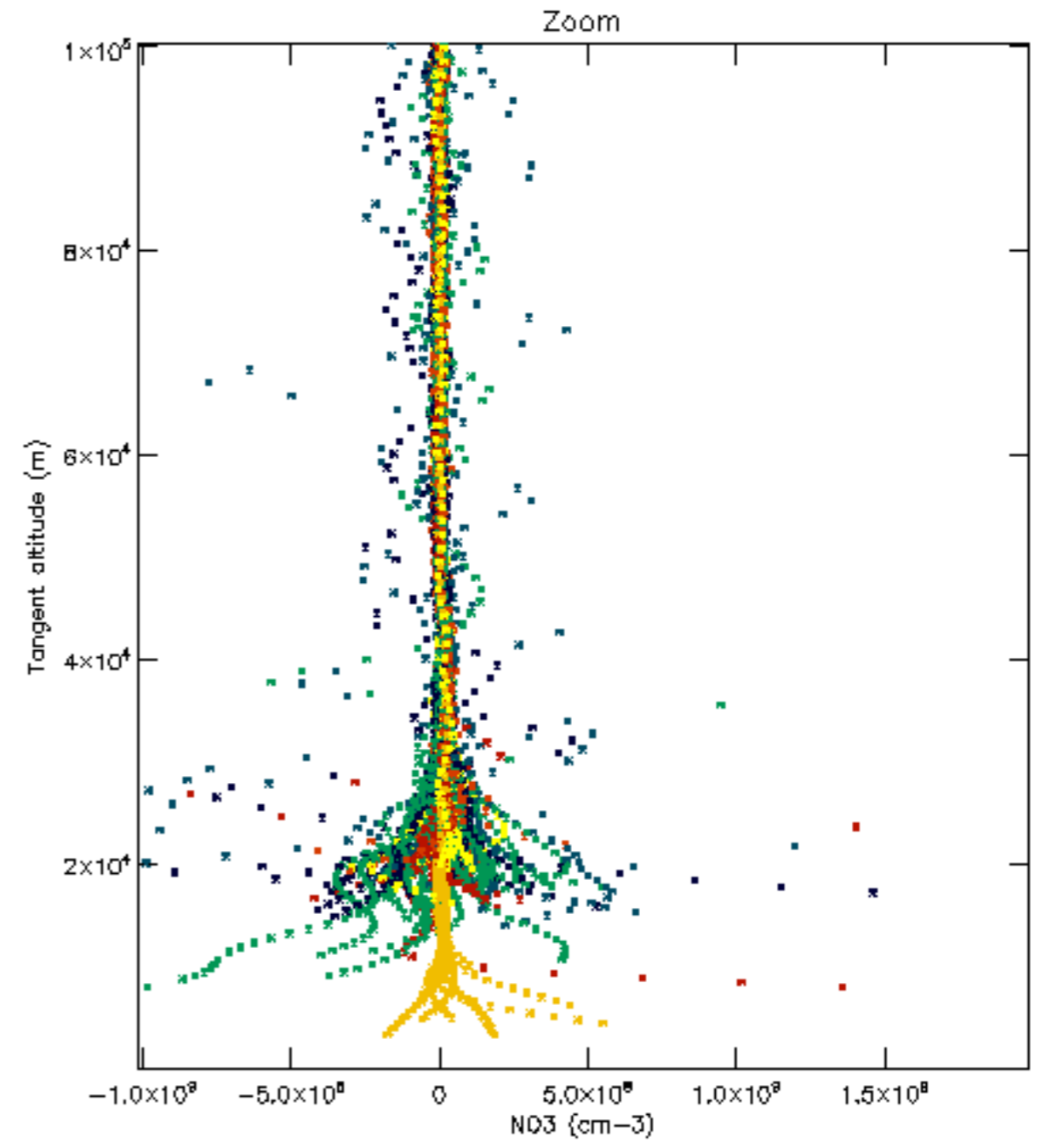
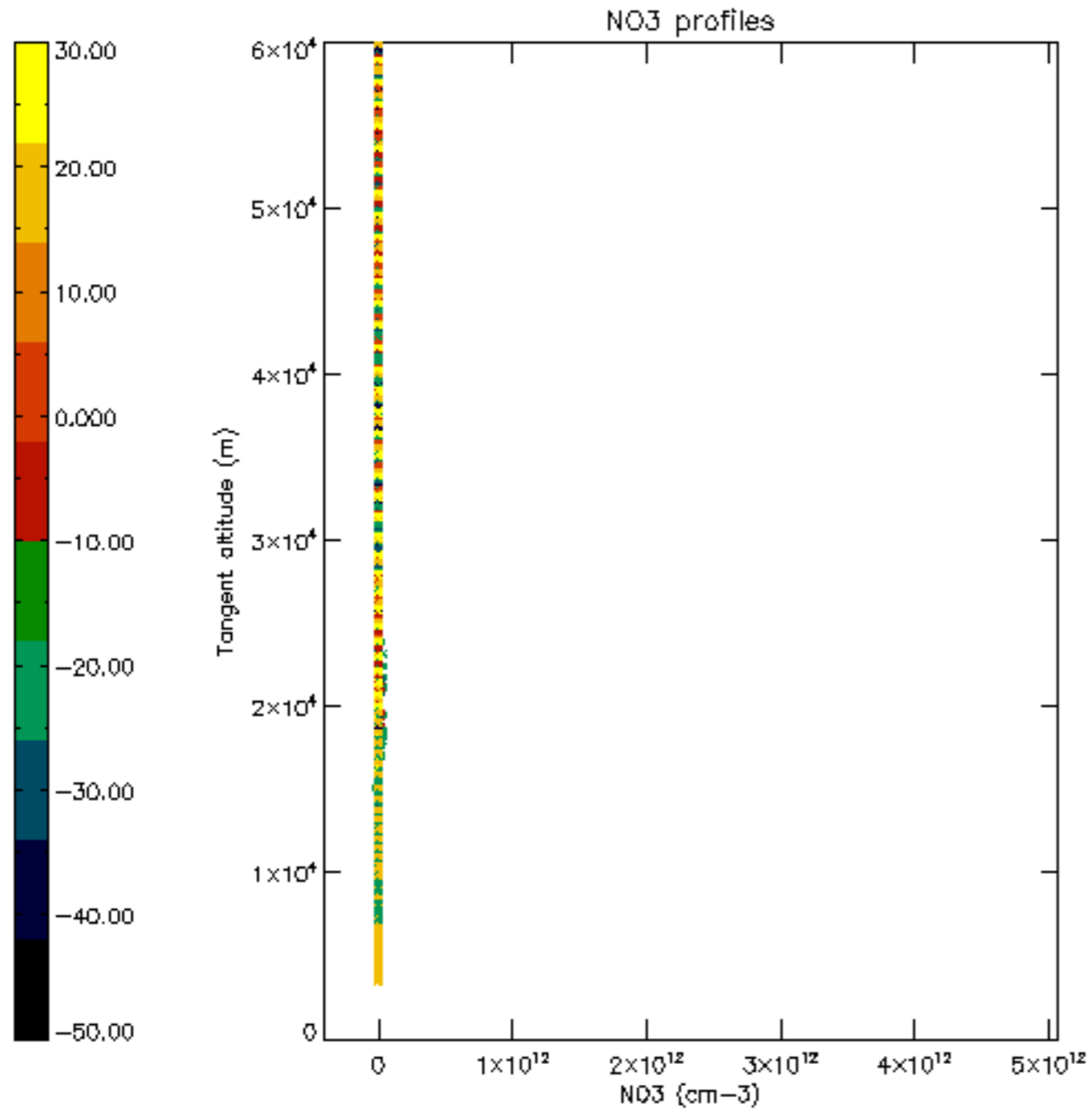


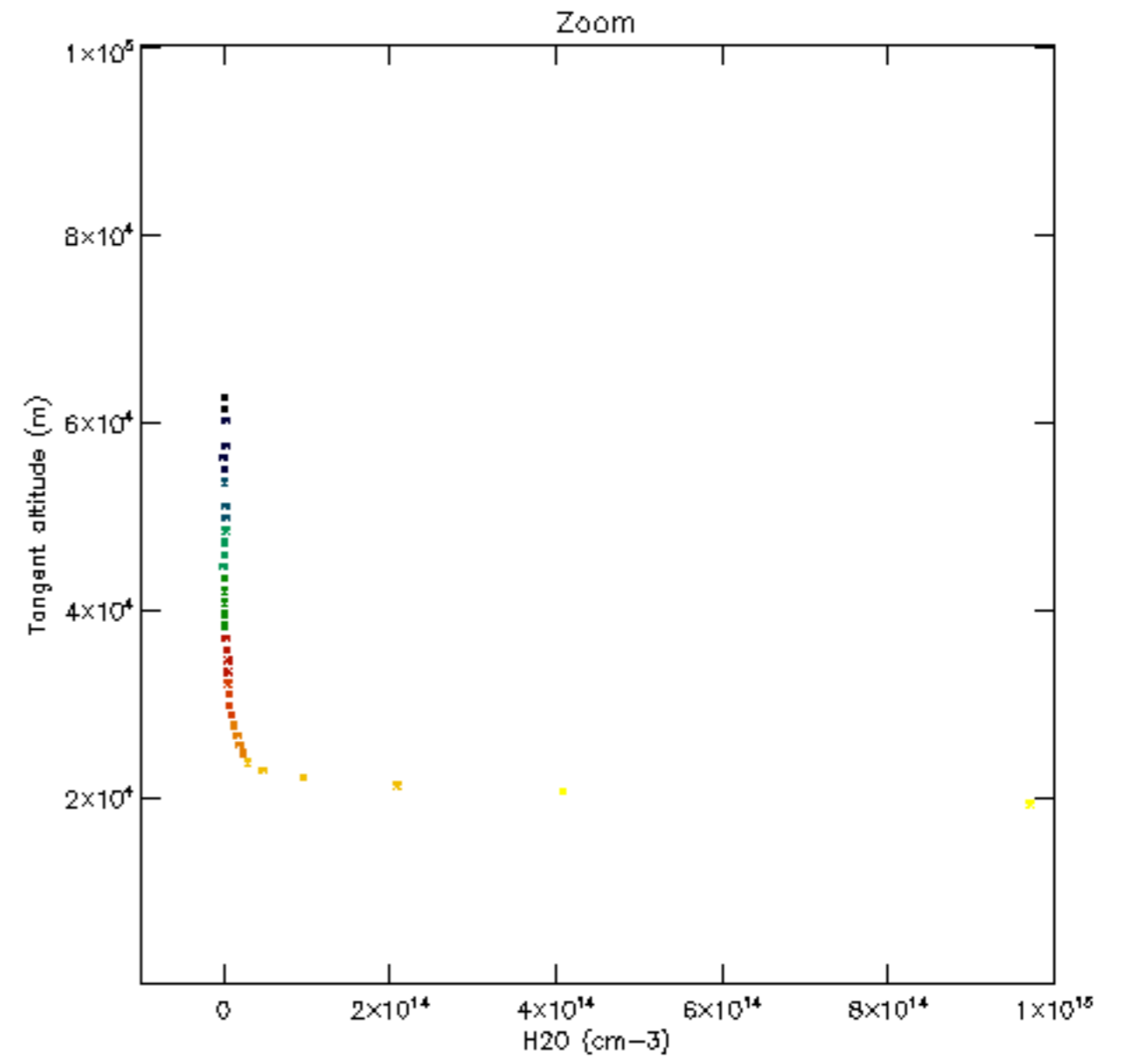
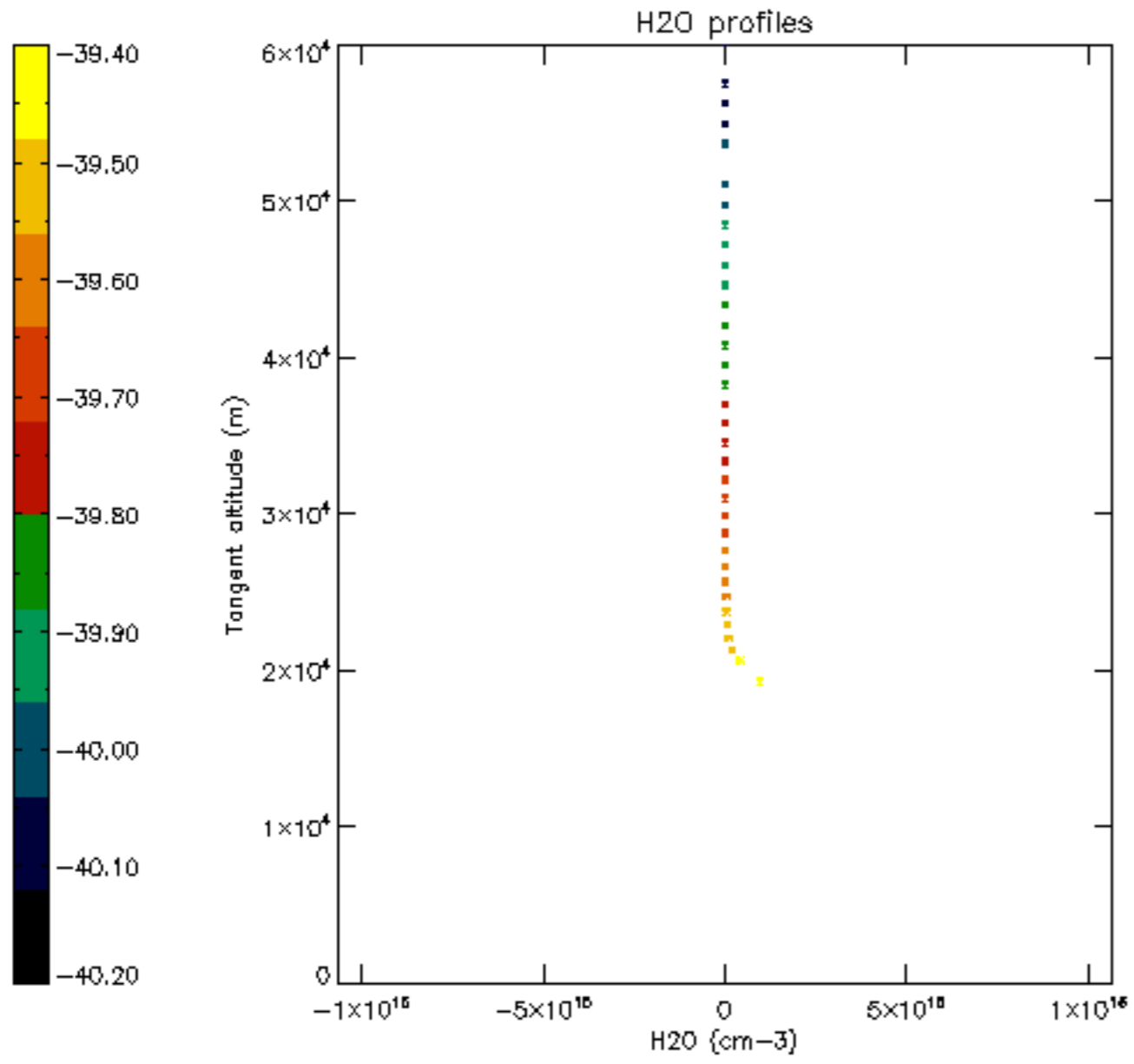


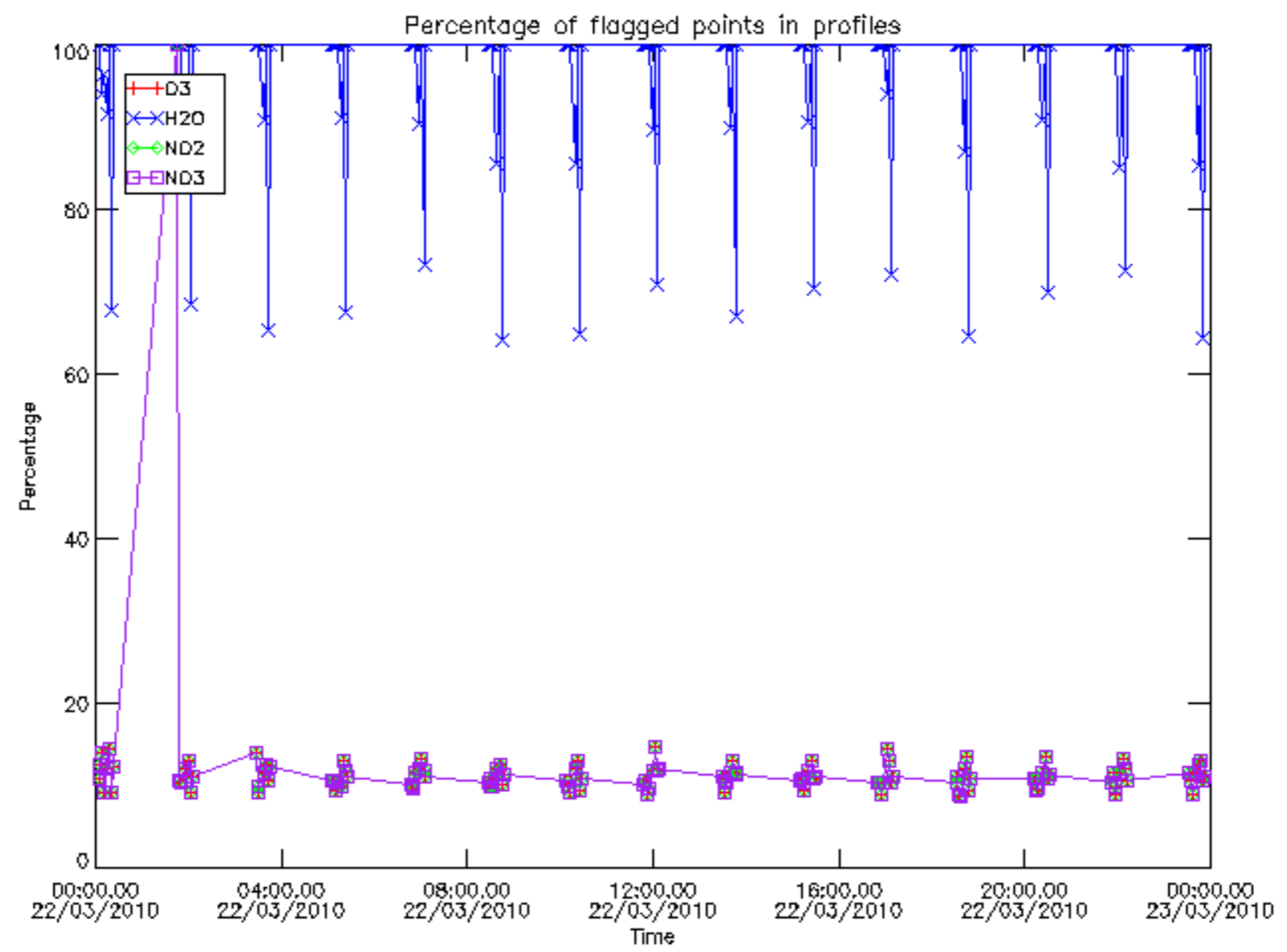




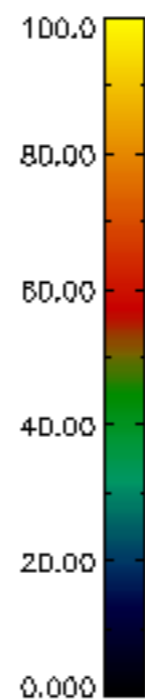
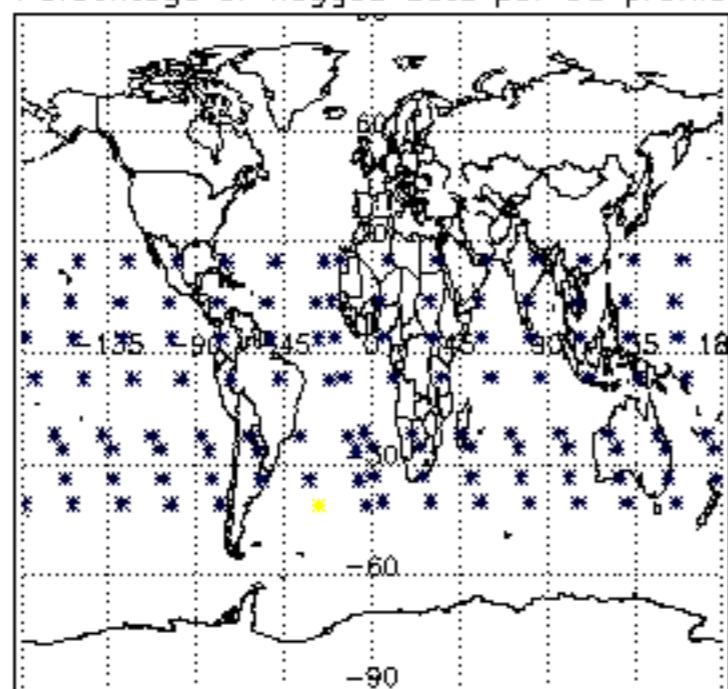




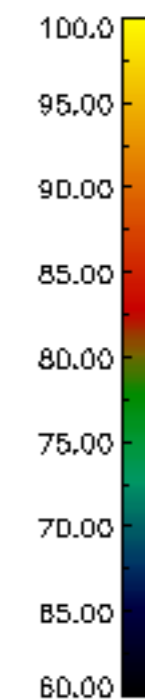
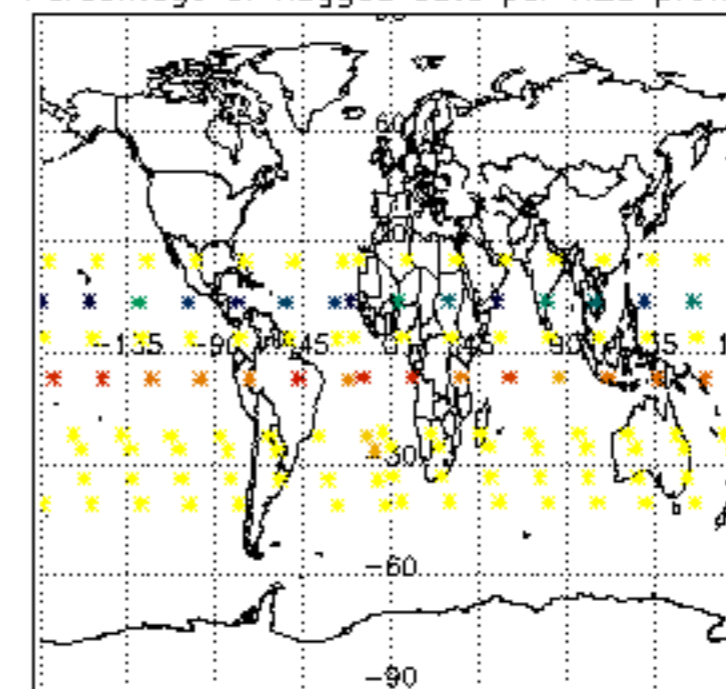




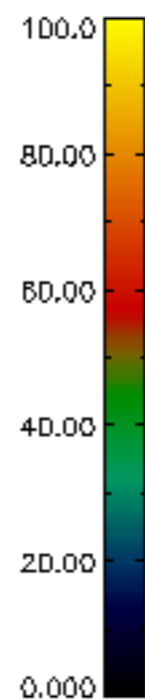
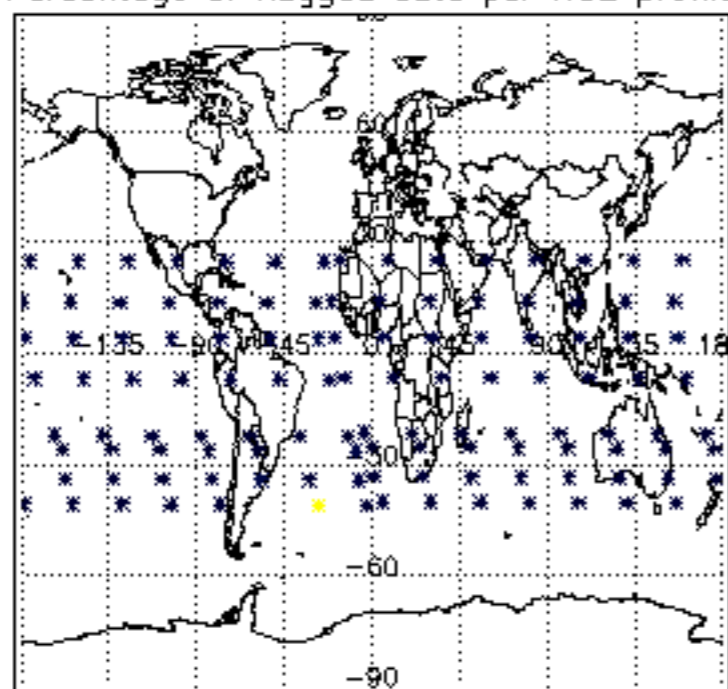
Percentage of flagged data per D3 profile



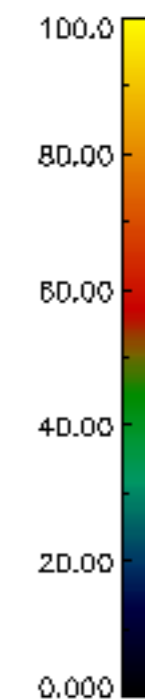
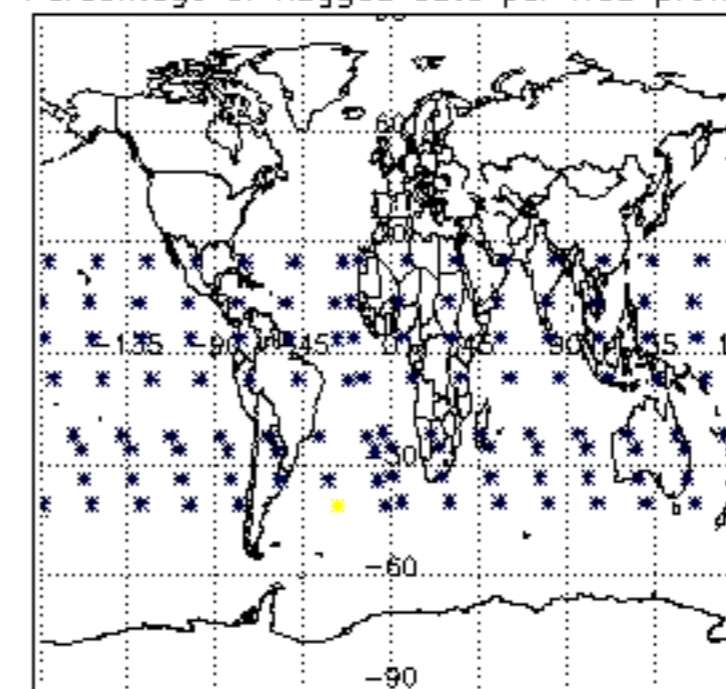
Percentage of flagged data per H2O profile

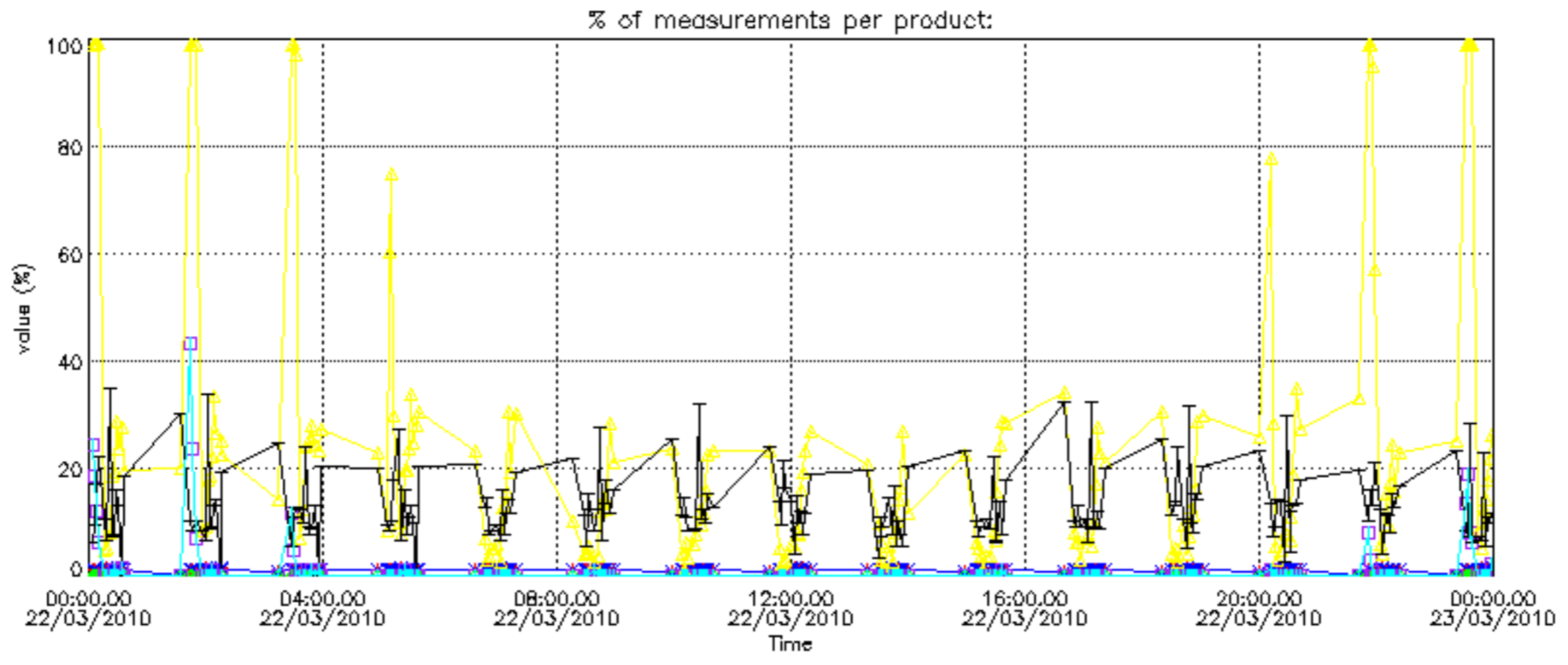


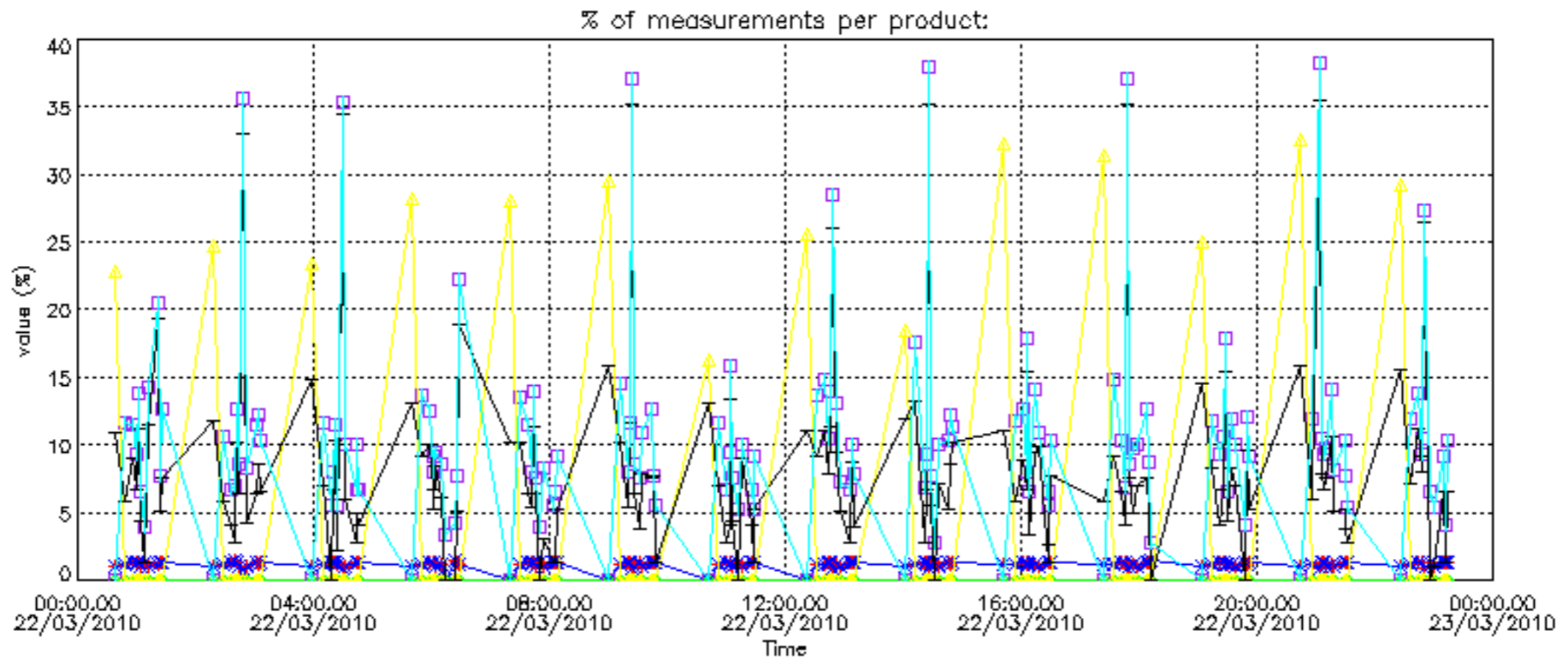
Percentage of flagged data per NO2 profile



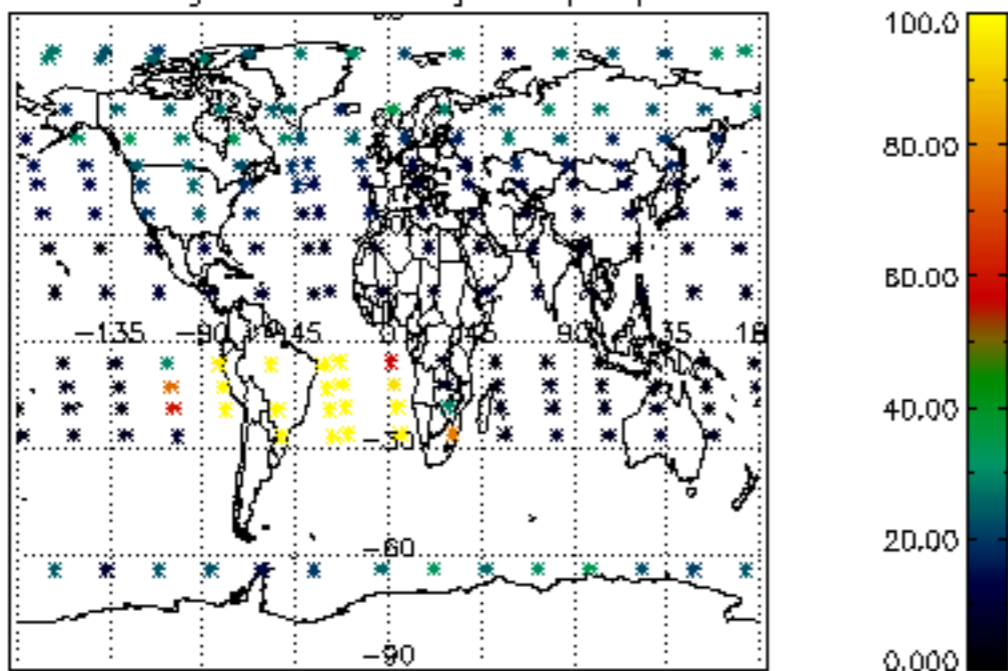
Percentage of flagged data per NO3 profile



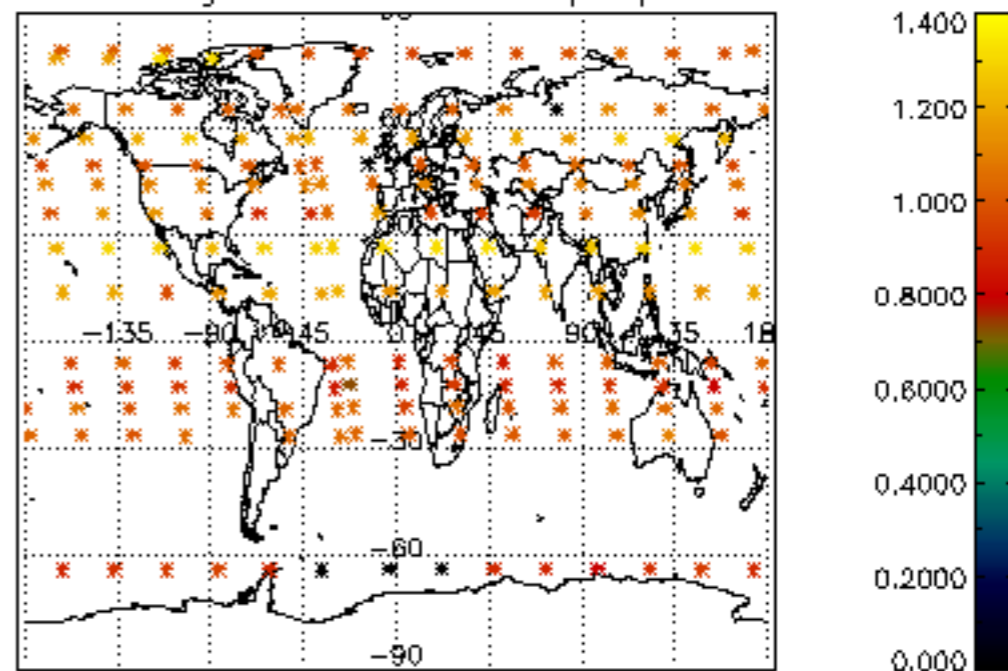




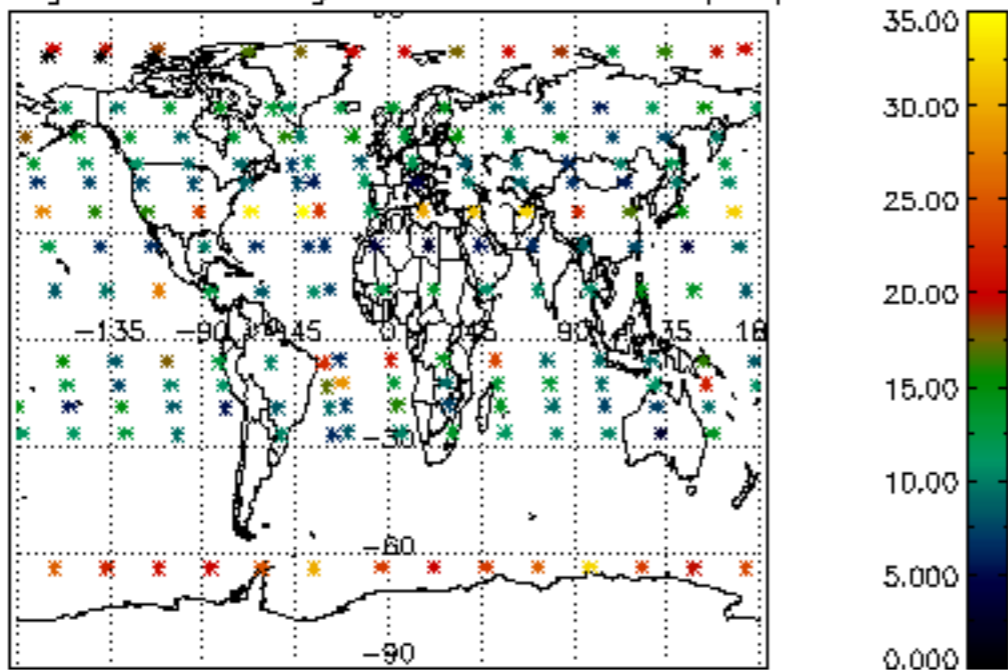
Percentage of cosmic ray hits per profile



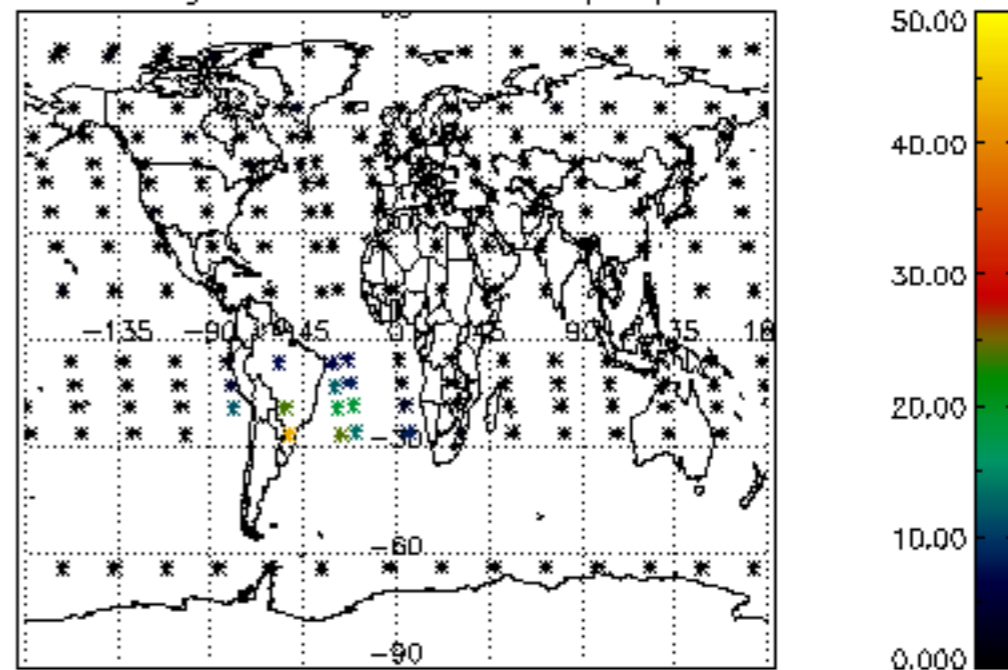
Percentage of datation errors per profile



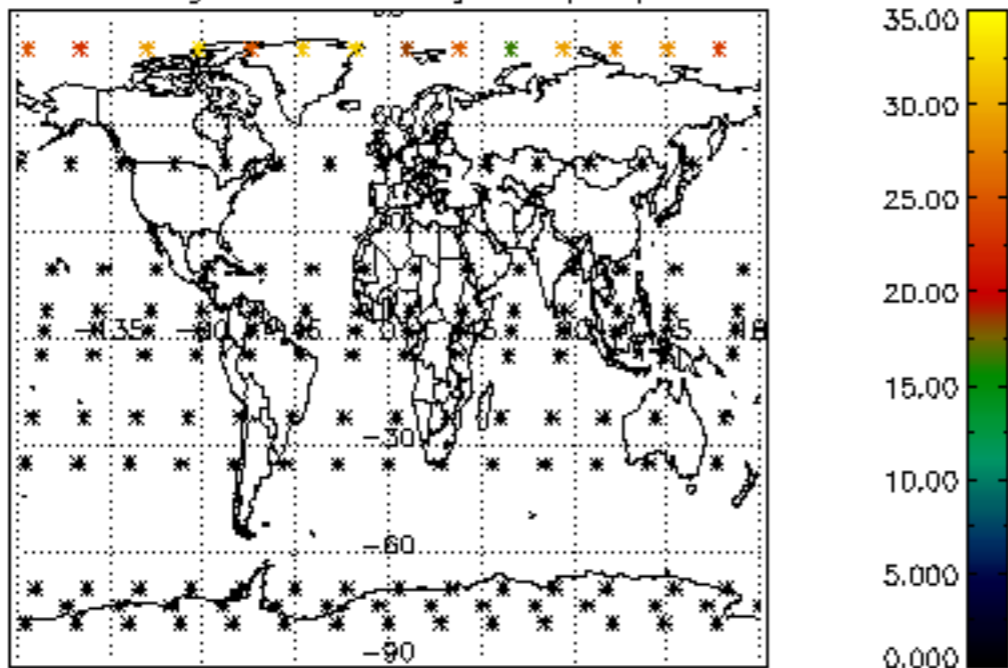
Percentage of star falling outside central band per profile



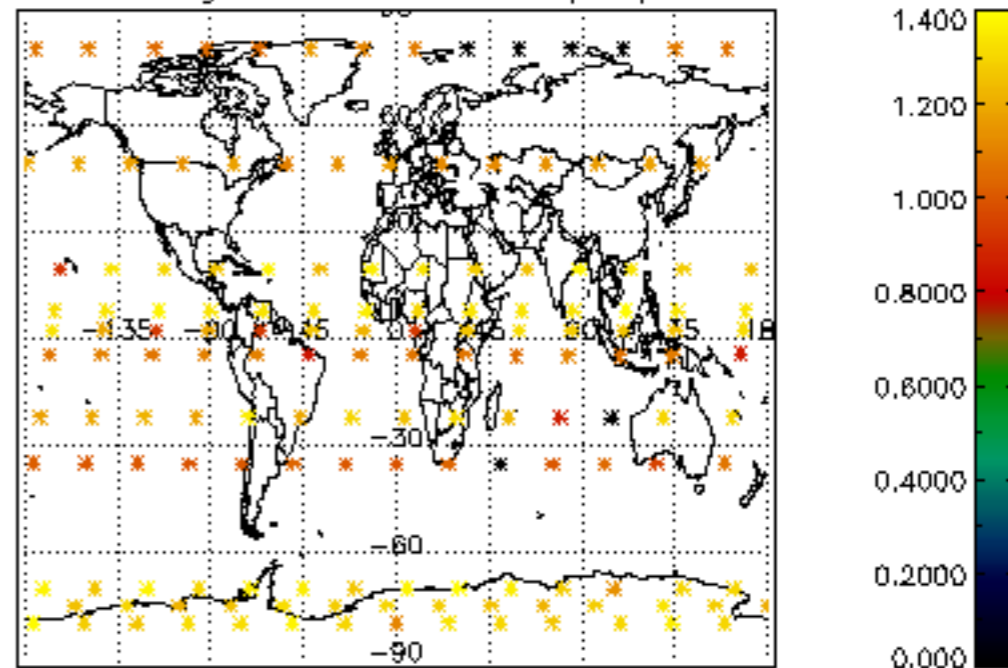
Percentage of saturation errors per profile



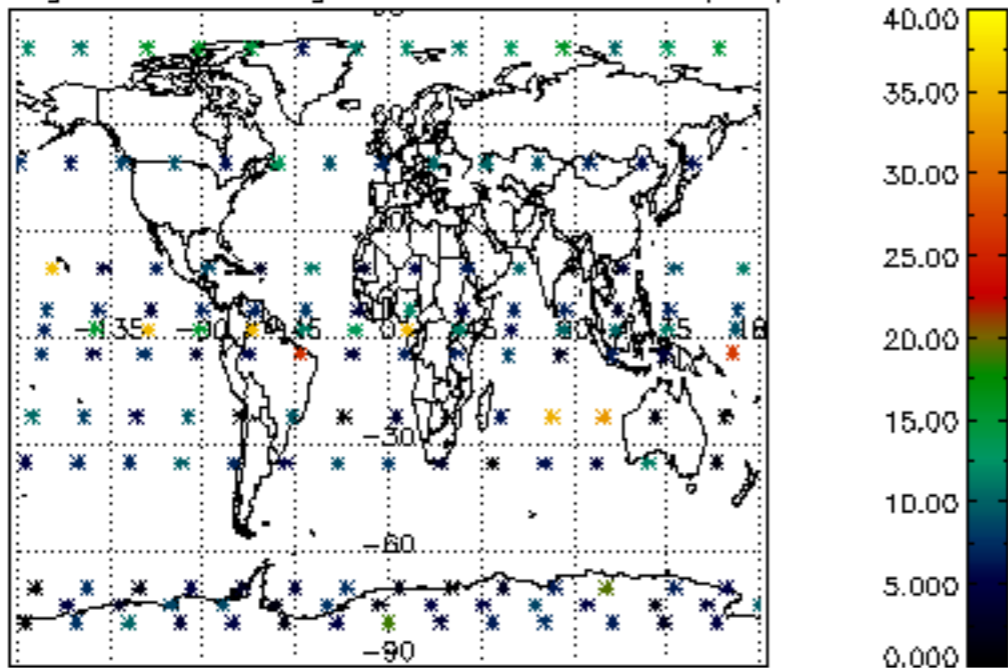
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

