

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	25APR2013 15:45:19
Data source version	GOMOS/6.01
Start time of products	04-06-2008 (04JUN2008 00:00:00)
Stop time of products	05-06-2008 (05JUN2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	334
Nb of prods with errors	0

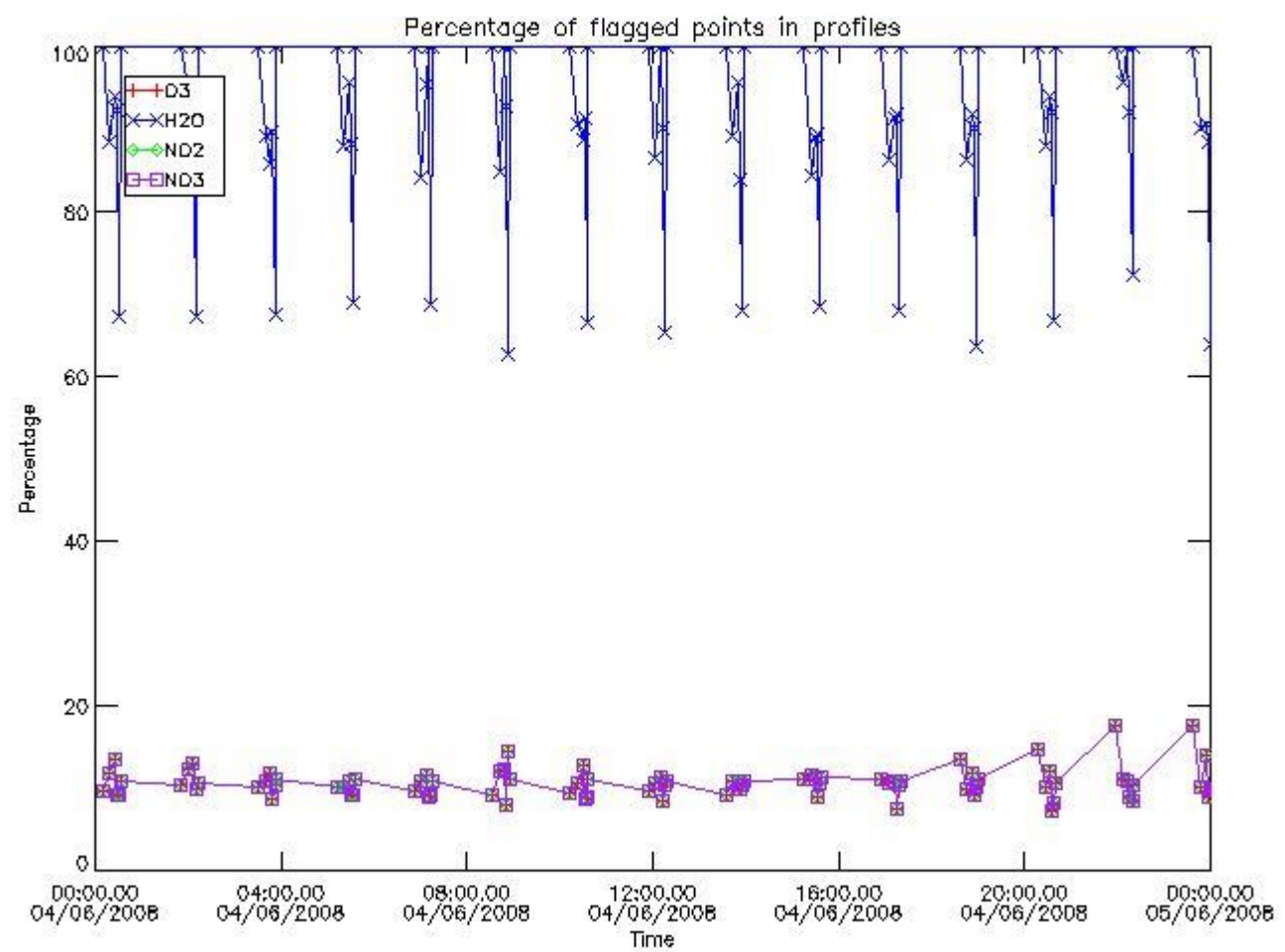
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080604_000141_000000482069_00116_32735_5109.N1	04-JUN-2008 00:01:41	Bright	48.000	53	43Bet And	2.0480	3300.0	96	32735	No
2	GOM_NL__2PRFIN20080604_000428_000000572069_00116_32735_5110.N1	04-JUN-2008 00:04:28	Twilight	57.000	58	21Alp And	2.0730	11000.	114	32735	No
3	GOM_NL__2PRFIN20080604_000940_000000532069_00116_32735_5111.N1	04-JUN-2008 00:09:40	Dark	52.500	140	88Gam Peg	2.8340	26000.	105	32735	No
4	GOM_NL__2PRFIN20080604_001845_000000442069_00116_32735_5112.N1	04-JUN-2008 00:18:45	Dark	43.500	52	16Bet Cet	2.0370	4500.0	87	32735	No
5	GOM_NL__2PRFIN20080604_002523_000000422069_00116_32735_5113.N1	04-JUN-2008 00:25:23	Dark	41.500	84	Alp Phe	2.3970	4500.0	83	32735	No
6	GOM_NL__2PRFIN20080604_002757_000000722069_00116_32735_5114.N1	04-JUN-2008 00:27:57	Dark	72.000	18	24Alp PsA	1.1660	9700.0	144	32735	No
7	GOM_NL__2PRFIN20080604_003056_000000622069_00117_32736_5099.N1	04-JUN-2008 00:30:56	Dark	61.500	63	Bet Gru	2.1500	2800.0	123	32736	No
8	GOM_NL__2PRFIN20080604_003252_000000472069_00117_32736_5100.N1	04-JUN-2008 00:32:52	Dark	47.000	31	Alp Gru	1.7340	15200.	94	32736	No
9	GOM_NL__2PRFIN20080604_003738_000000432069_00117_32736_5101.N1	04-JUN-2008 00:37:38	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	32736	No
10	GOM_NL__2PRFIN20080604_004452_000000402069_00117_32736_5102.N1	04-JUN-2008 00:44:52	Straylight	40.000	147	Alp Ara	2.8770	26000.	80	32736	No
11	GOM_NL__2PRFIN20080604_004634_000000502069_00117_32736_5103.N1	04-JUN-2008 00:46:34	Straylight	50.000	40	The Sco	1.8590	7100.0	100	32736	No
12	GOM_NL__2PRFIN20080604_004821_000000472069_00117_32736_5104.N1	04-JUN-2008 00:48:21	Twilight	46.500	25	35Lam Sco	1.6200	28000.	93	32736	No
13	GOM_NL__2PRFIN20080604_005002_000000462069_00117_32736_5105.N1	04-JUN-2008 00:50:02	Twilight	46.000	75	26Eps Sco	2.2910	4250.0	92	32736	No
14	GOM_NL__2PRFIN20080604_005202_000000452069_00117_32736_5106.N1	04-JUN-2008 00:52:02	Bright	45.000	136	23Tau Sco	2.8220	30000.	90	32736	No
15	GOM_NL__2PRFIN20080604_005534_000000452069_00117_32736_5107.N1	04-JUN-2008 00:55:34	Bright	44.500	86	35Eta Oph	2.4300	10200.	89	32736	No
16	GOM_NL__2PRFIN20080604_005723_000000572069_00117_32736_5108.N1	04-JUN-2008 00:57:23	Bright	57.000	98	13Zet Oph	2.5710	30000.	114	32736	No
17	GOM_NL__2PRFIN20080604_005932_000000392069_00117_32736_5109.N1	04-JUN-2008 00:59:32	Bright	38.500	120	1Del Oph	2.7340	3200.0	77	32736	No
18	GOM_NL__2PRFIN20080604_010232_000000362069_00117_32736_5110.N1	04-JUN-2008 01:02:32	Bright	35.500	102	24Alp Ser	2.6000	4250.0	71	32736	No
19	GOM_NL__2PRFIN20080604_010725_000000402069_00117_32736_5111.N1	04-JUN-2008 01:07:25	Bright	39.500	127	27Bet Her	2.7810	4700.0	79	32736	No
20	GOM_NL__2PRFIN20080604_011045_000000432069_00117_32736_5112.N1	04-JUN-2008 01:10:45	Bright	42.500	133	40Zet Her	2.8070	6000.0	85	32736	No
21	GOM_NL__2PRFIN20080604_011806_000000422069_00117_32736_5113.N1	04-JUN-2008 01:18:06	Bright	41.500	130	23Bet Dra	2.7990	5800.0	83	32736	No
22	GOM_NL__2PRFIN20080604_012858_000000462069_00117_32736_5114.N1	04-JUN-2008 01:28:58	Bright	46.000	89	5Alp Cep	2.4510	8000.0	92	32736	No
23	GOM_NL__2PRFIN20080604_013422_000000402069_00117_32736_5115.N1	04-JUN-2008 01:34:22	Bright	40.000	76	27Gam Cas	2.3000	30000.	80	32736	No
24	GOM_NL__2PRFIN20080604_014216_000000492069_00117_32736_5116.N1	04-JUN-2008 01:42:16	Bright	49.000	53	43Bet And	2.0480	3300.0	98	32736	No
25	GOM_NL__2PRFIN20080604_014504_000000562069_00117_32736_5117.N1	04-JUN-2008 01:45:04	Twilight	55.500	58	21Alp And	2.0730	11000.	111	32736	No
26	GOM_NL__2PRFIN20080604_015017_000000532069_00117_32736_5118.N1	04-JUN-2008 01:50:17	Dark	53.000	140	88Gam Peg	2.8340	26000.	106	32736	No
27	GOM_NL__2PRFIN20080604_015921_000000502069_00117_32736_5119.N1	04-JUN-2008 01:59:21	Dark	50.000	52	16Bet Cet	2.0370	4500.0	100	32736	No
28	GOM_NL__2PRFIN20080604_020600_000000432069_00117_32736_5120.N1	04-JUN-2008 02:06:00	Dark	43.000	84	Alp Phe	2.3970	4500.0	86	32736	No
29	GOM_NL__2PRFIN20080604_021133_000000622069_00118_32737_5108.N1	04-JUN-2008 02:11:33	Dark	61.500	63	Bet Gru	2.1500	2800.0	123	32737	No
30	GOM_NL__2PRFIN20080604_021329_000000482069_00118_32737_5109.N1	04-JUN-2008 02:13:29	Dark	48.000	31	Alp Gru	1.7340	15200.	96	32737	No
31	GOM_NL__2PRFIN20080604_021815_000000432069_00118_32737_5110.N1	04-JUN-2008 02:18:15	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	32737	No
32	GOM_NL__2PRFIN20080604_022529_000000392069_00118_32737_5111.N1	04-JUN-2008 02:25:29	Straylight	39.000	147	Alp Ara	2.8770	26000.	78	32737	No
33	GOM_NL__2PRFIN20080604_022711_000000452069_00118_32737_5112.N1	04-JUN-2008 02:27:11	Straylight	45.000	40	The Sco	1.8590	7100.0	90	32737	No
34	GOM_NL__2PRFIN20080604_022858_000000432069_00118_32737_5113.N1	04-JUN-2008 02:28:58	Twilight	43.000	25	35Lam Sco	1.6200	28000.	86	32737	No
35	GOM_NL__2PRFIN20080604_023039_000000452069_00118_32737_5114.N1	04-JUN-2008 02:30:39	Twilight	45.000	75	26Eps Sco	2.2910	4250.0	90	32737	No
36	GOM_NL__2PRFIN20080604_023238_000000442069_00118_32737_5115.N1	04-JUN-2008 02:32:38	Bright	44.000	136	23Tau Sco	2.8220	30000.	88	32737	No
37	GOM_NL__2PRFIN20080604_023610_000000432069_00118_32737_5116.N1	04-JUN-2008 02:36:10	Bright	43.000	86	35Eta Oph	2.4300	10200.	86	32737	No
38	GOM_NL__2PRFIN20080604_023759_000000392069_00118_32737_5117.N1	04-JUN-2008 02:37:59	Bright	38.500	98	13Zet Oph	2.5710	30000.	77	32737	No
39	GOM_NL__2PRFIN20080604_024008_000000382069_00118_32737_5118.N1	04-JUN-2008 02:40:08	Bright	38.000	120	1Del Oph	2.7340	3200.0	76	32737	No
40	GOM_NL__2PRFIN20080604_024308_000000362069_00118_32737_5119.N1	04-JUN-2008 02:43:08	Bright	35.500	102	24Alp Ser	2.6000	4250.0	71	32737	No
41	GOM_NL__2PRFIN20080604_024801_000000592069_00118_32737_5120.N1	04-JUN-2008 02:48:01	Bright	59.000	127	27Bet Her	2.7810	4700.0	118	32737	No
42	GOM_NL__2PRFIN20080604_025120_000000402069_00118_32737_5121.N1	04-JUN-2008 02:51:20	Bright	40.000	133	40Zet Her	2.8070	6000.0	80	32737	No

3. Quality information per product

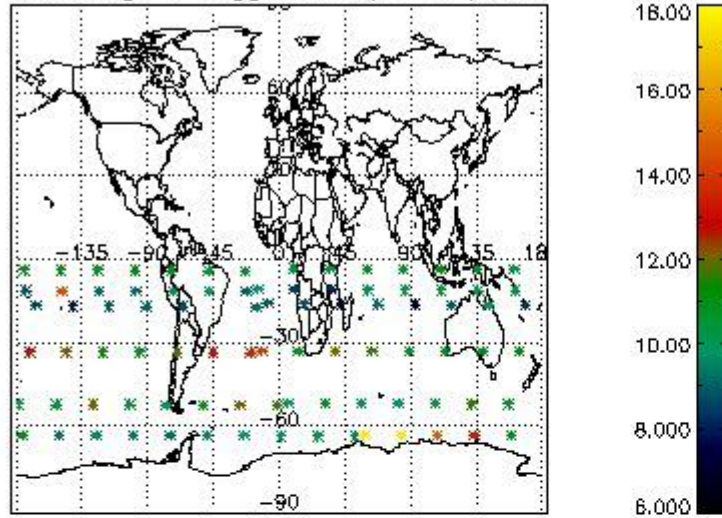
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

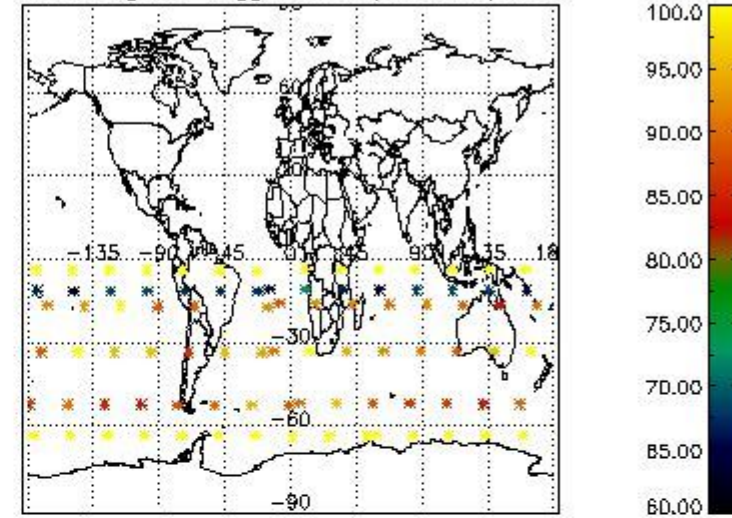


3.2 Plot quality information per product (world map)

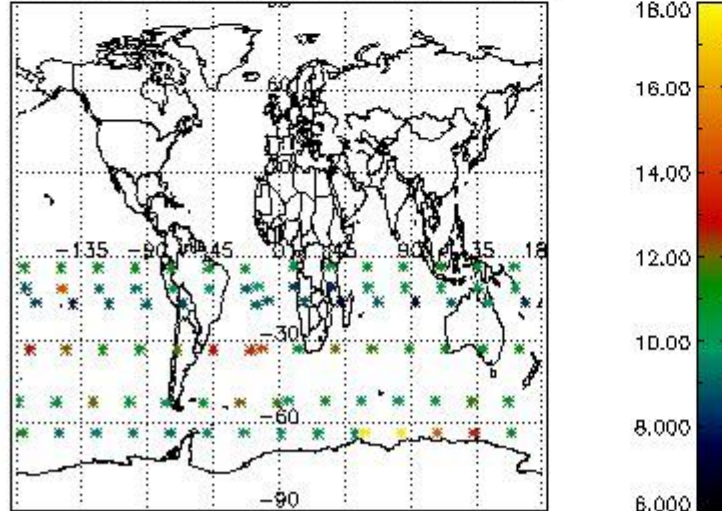
Percentage of flagged data per O3 profile



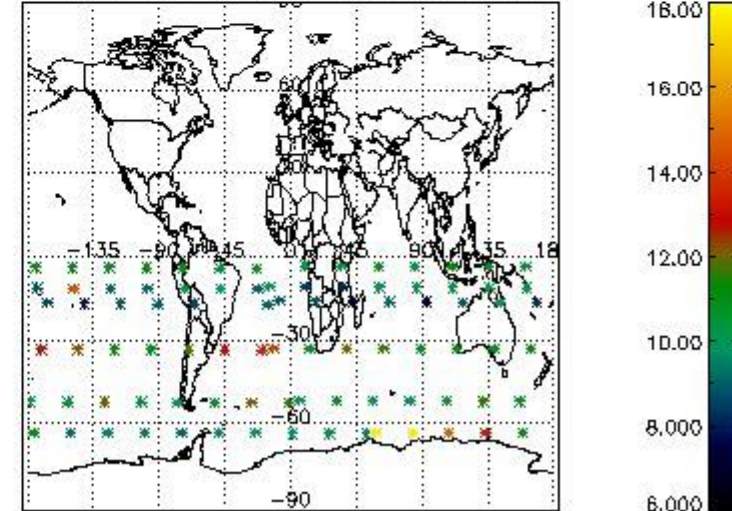
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

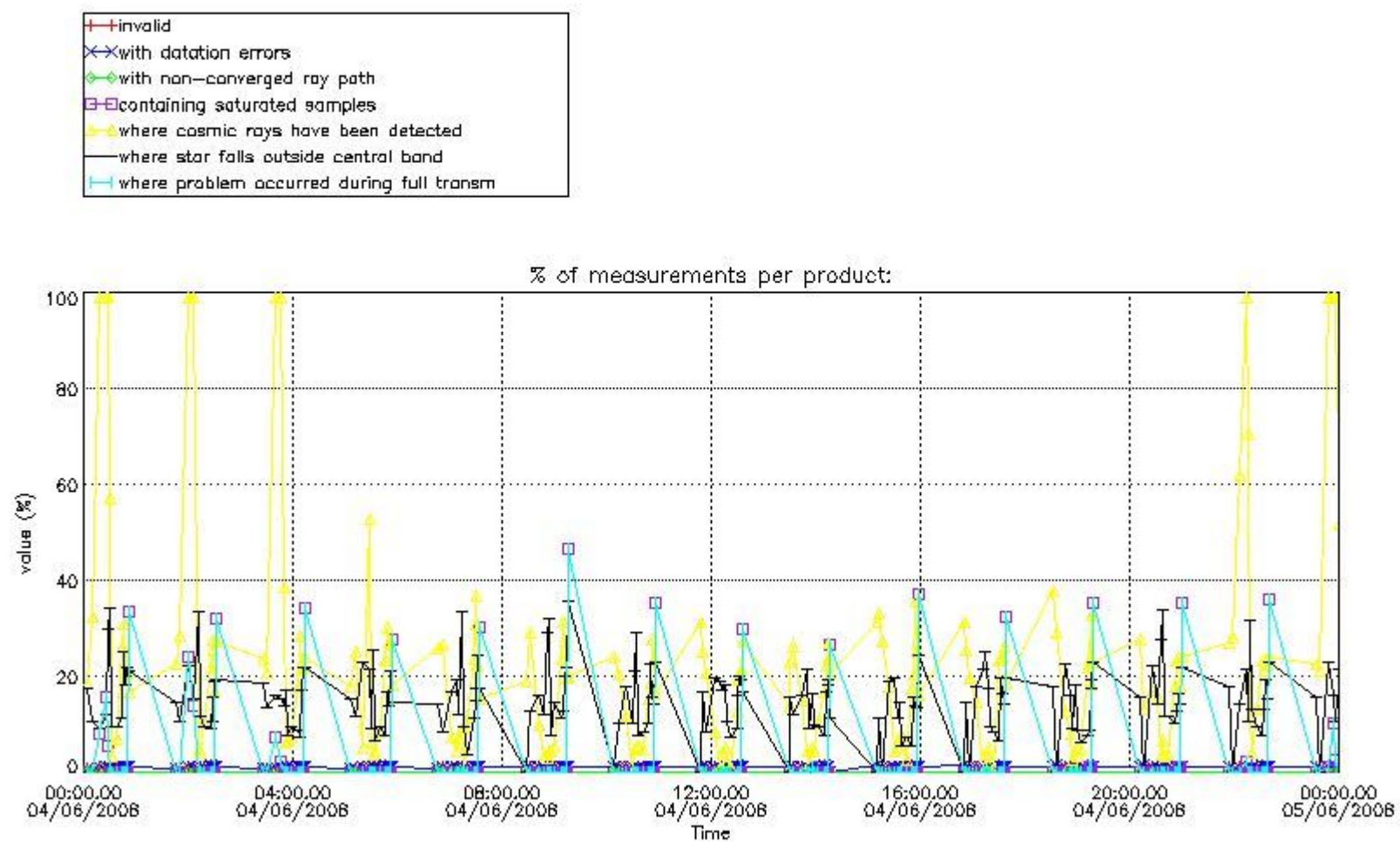


4. Level 1 quality information per product

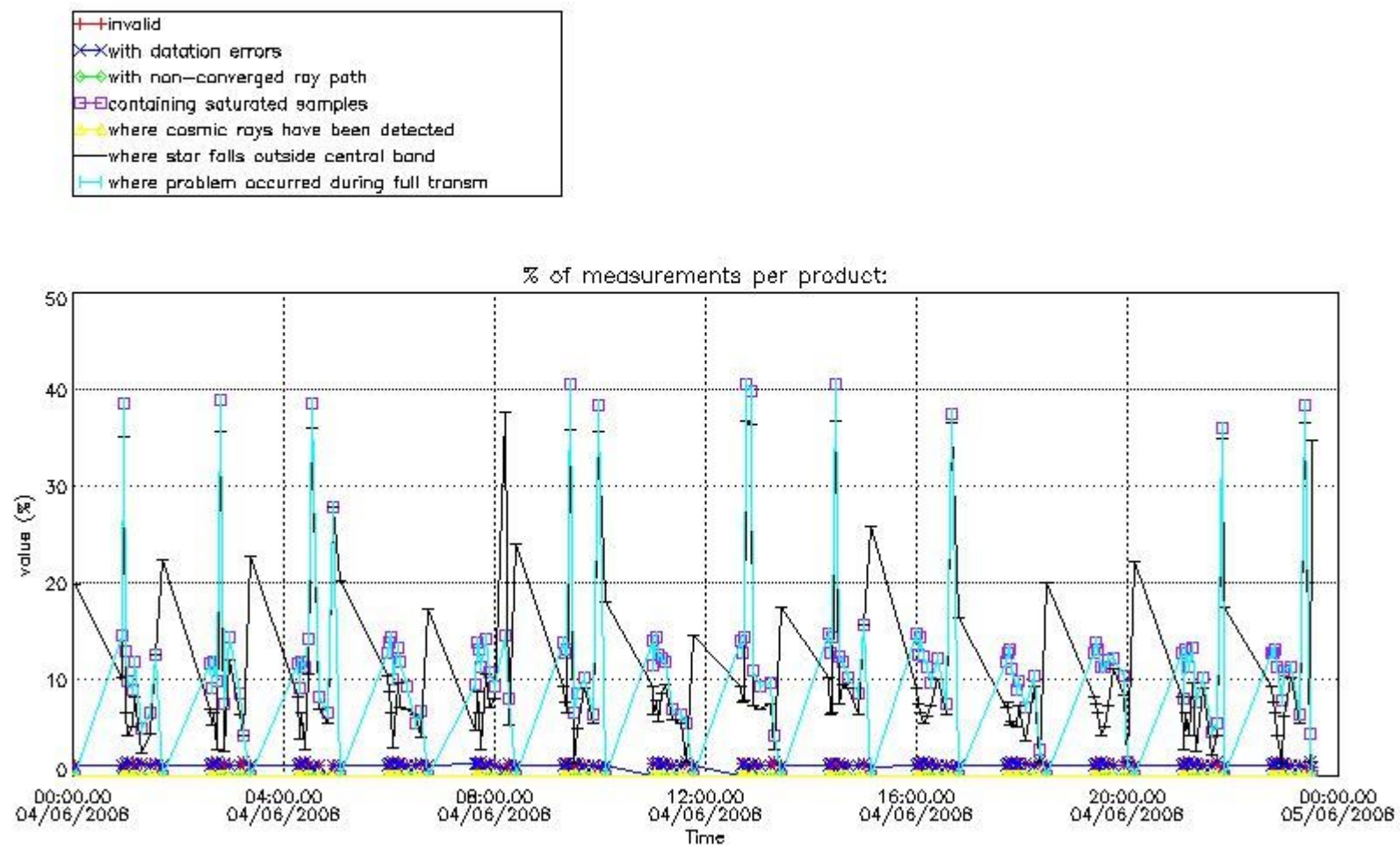
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

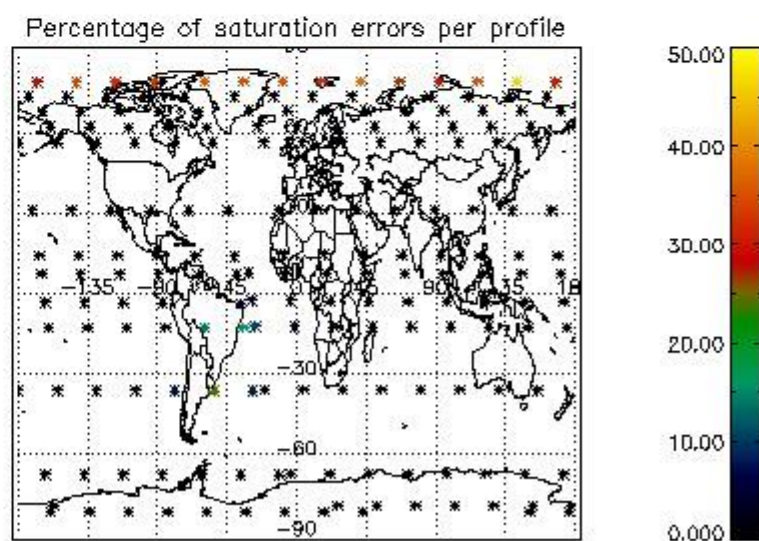
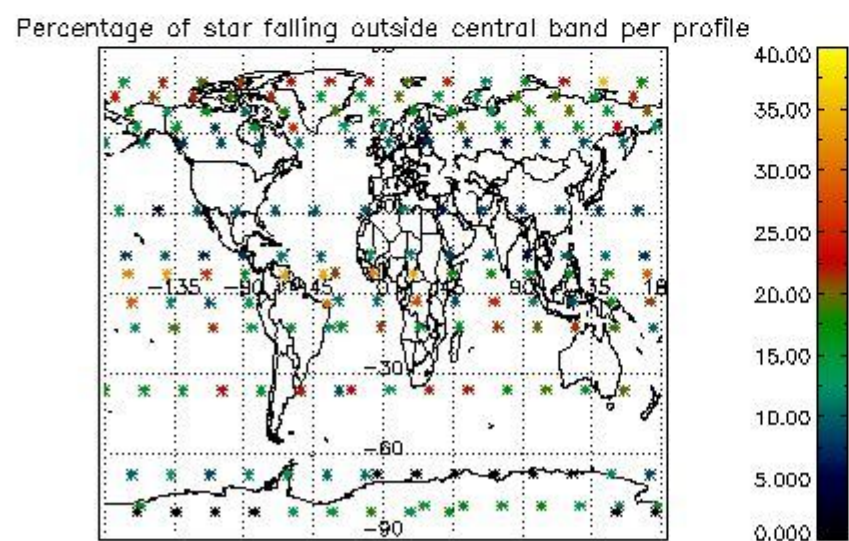
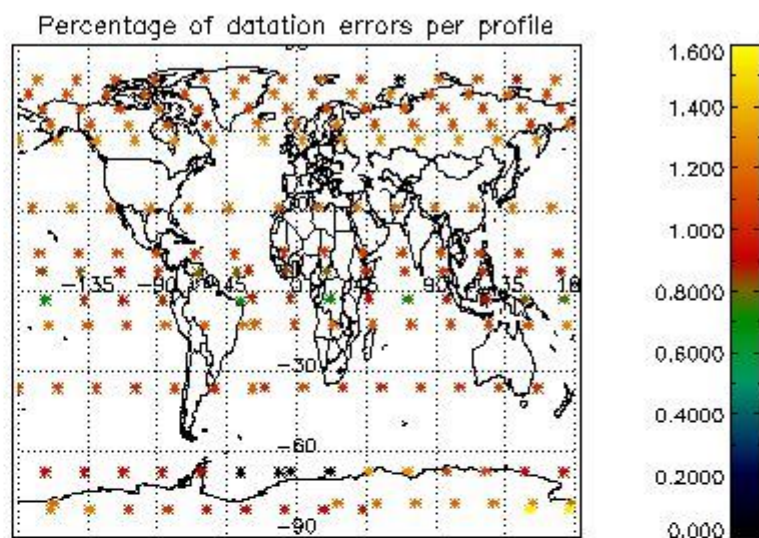
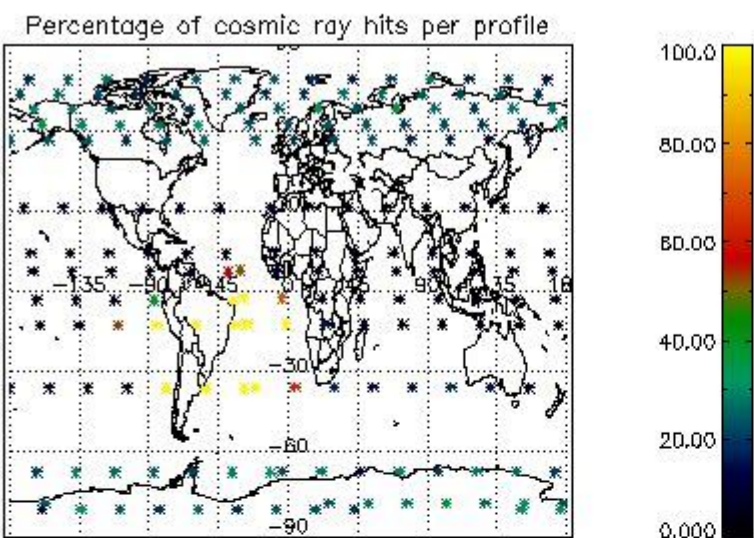


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

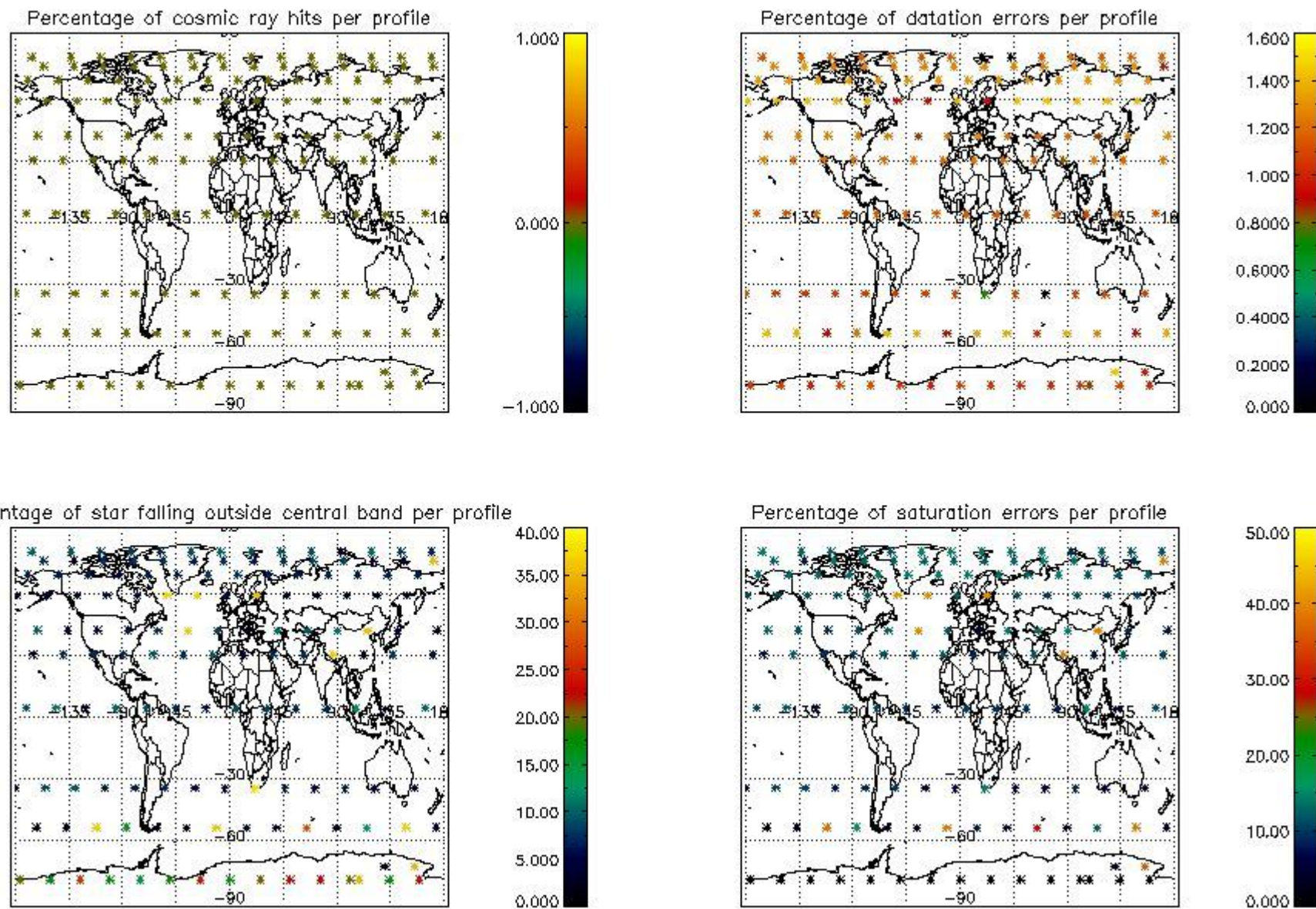


4.2 Plot quality information per product coming from level 1b processing (world map)

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

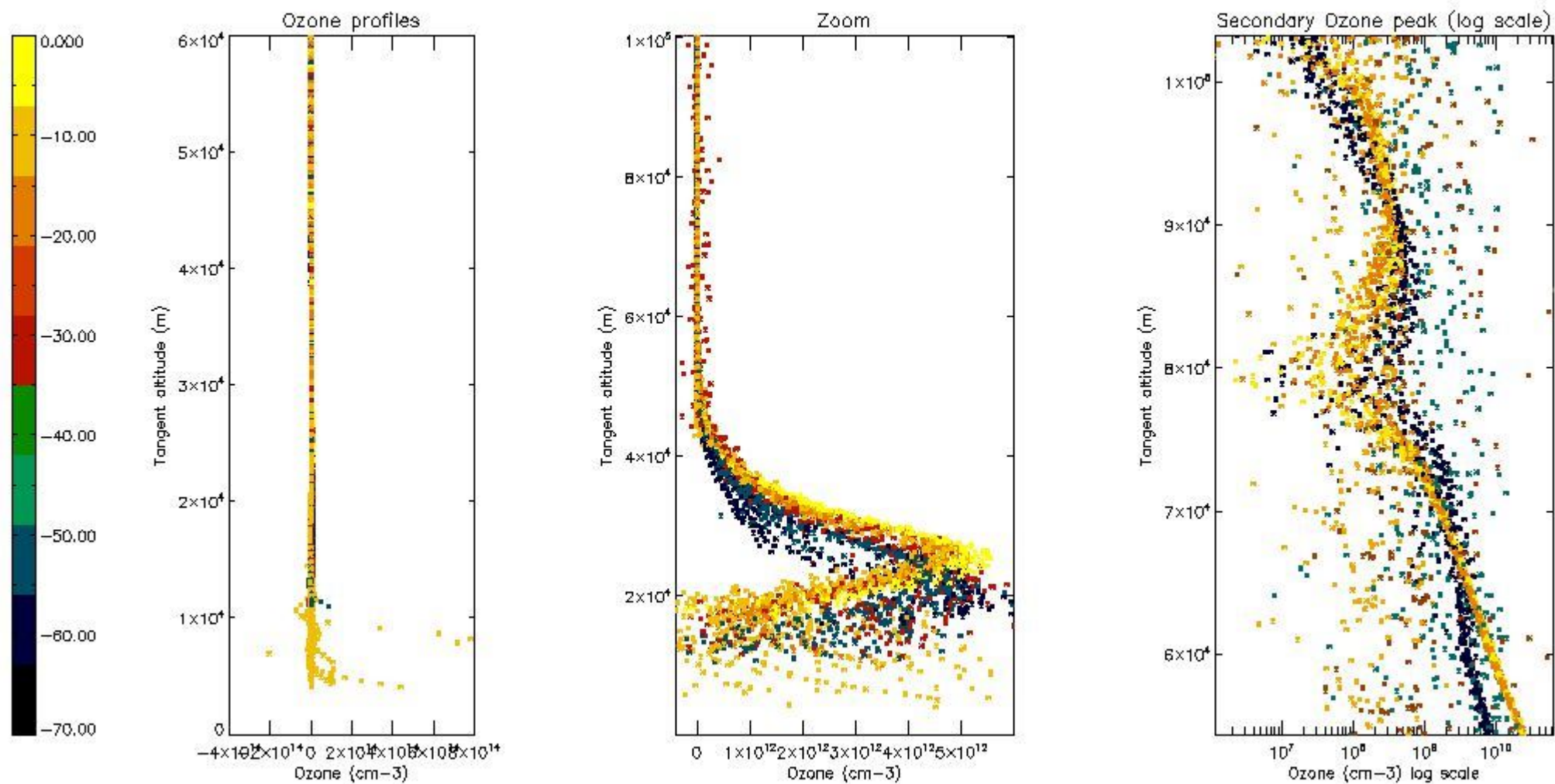
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	30
STD < 20	14

STD < 10	10
STD < 5	7

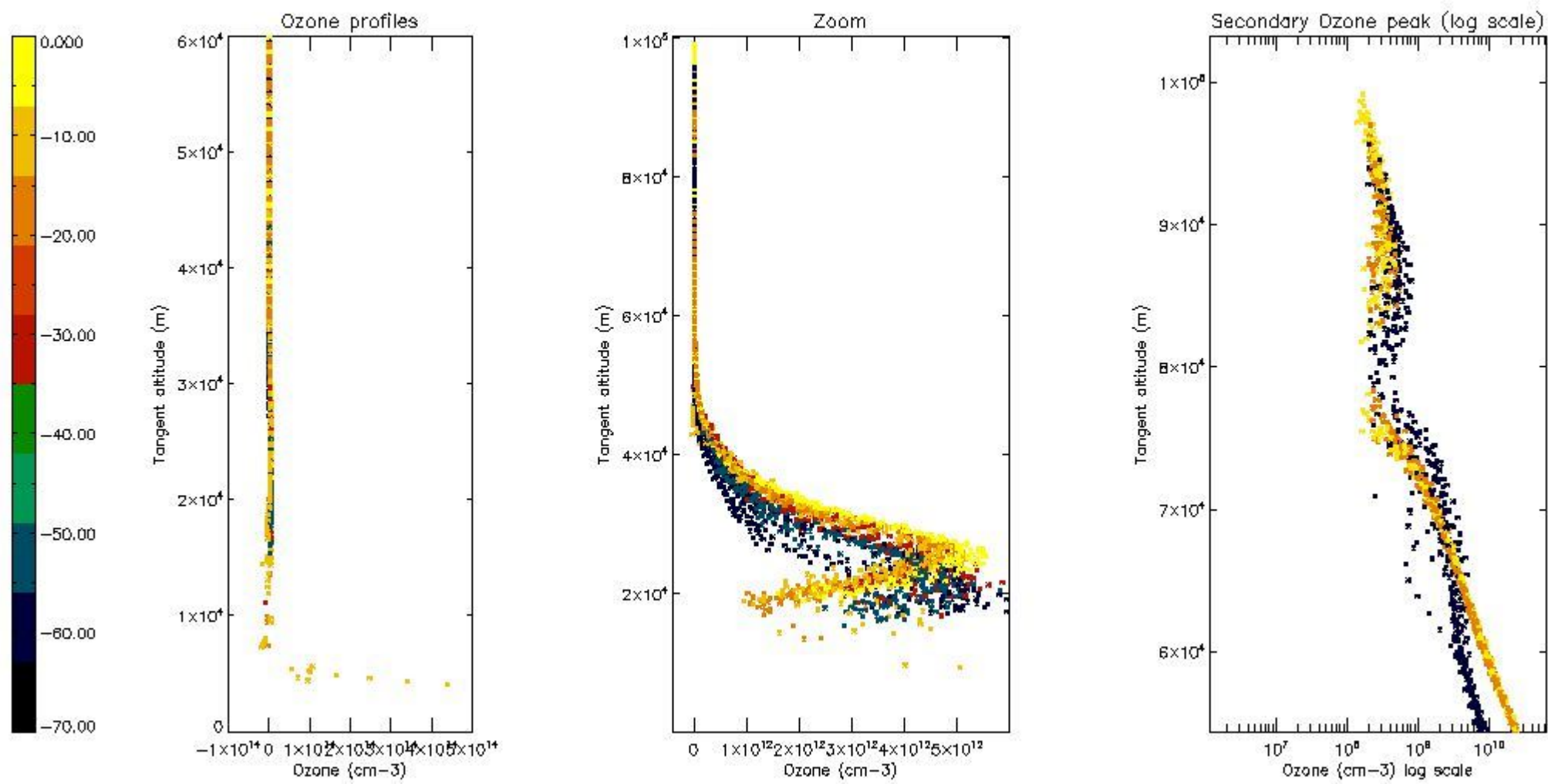
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



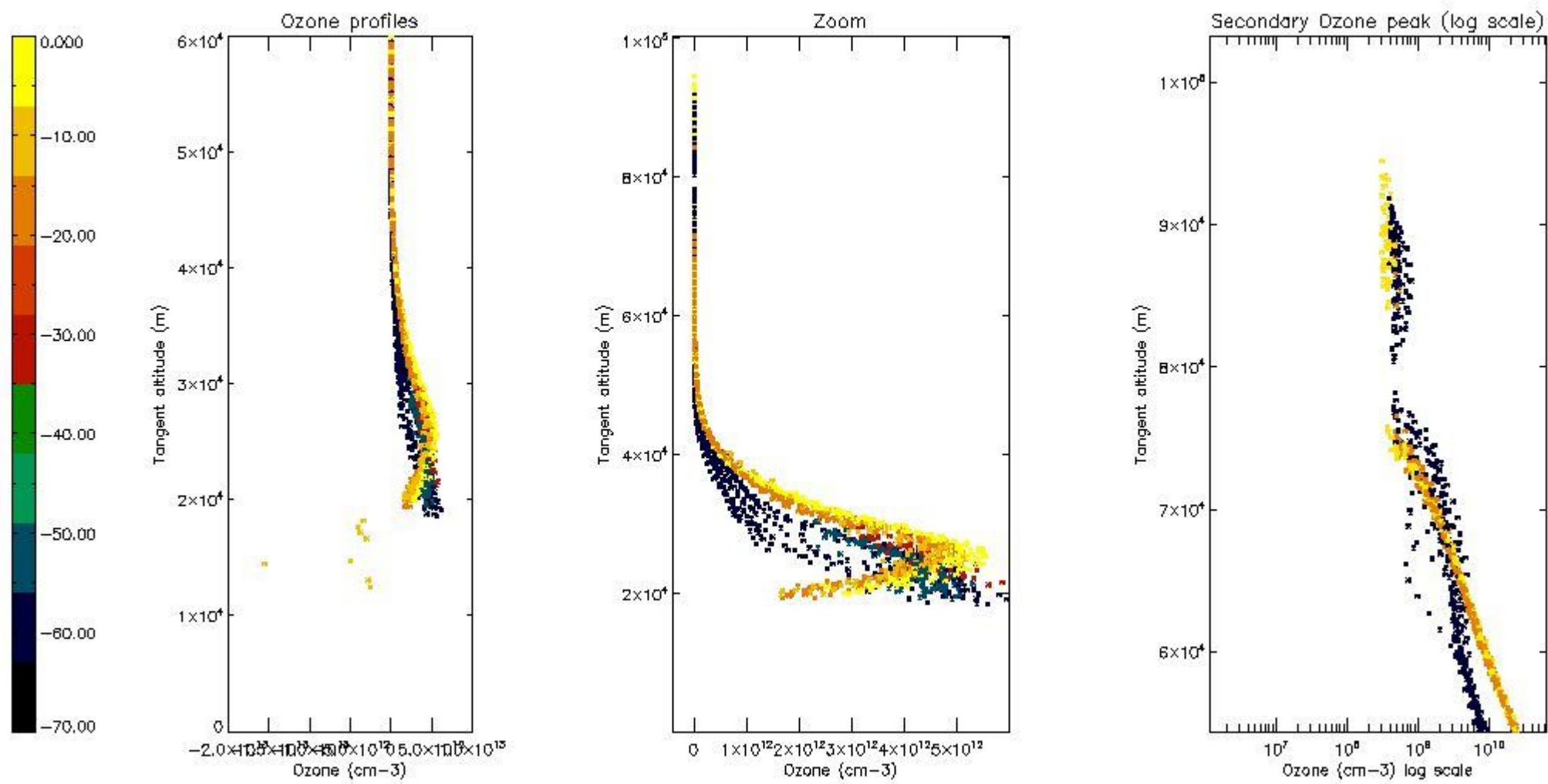
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



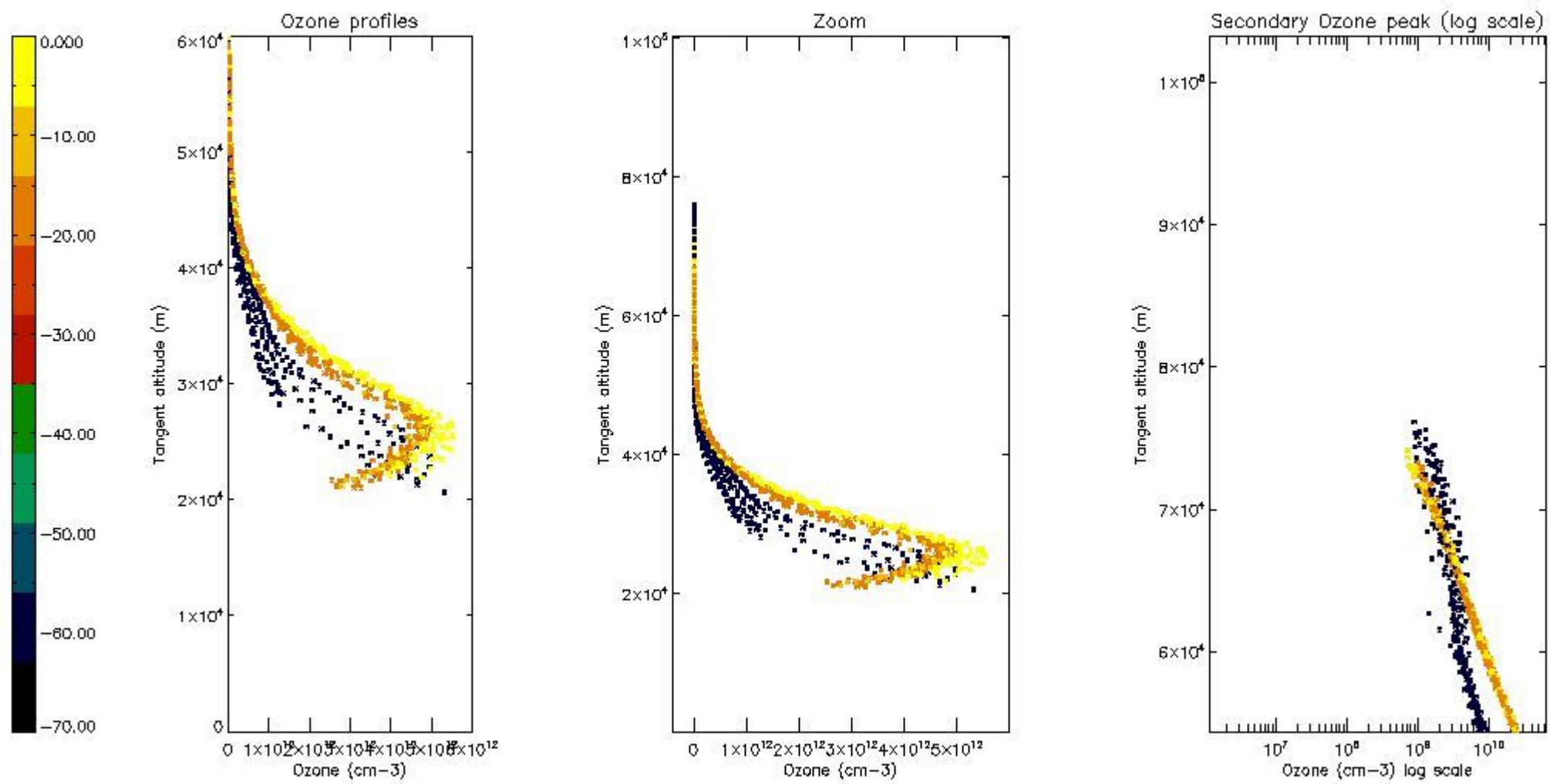
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



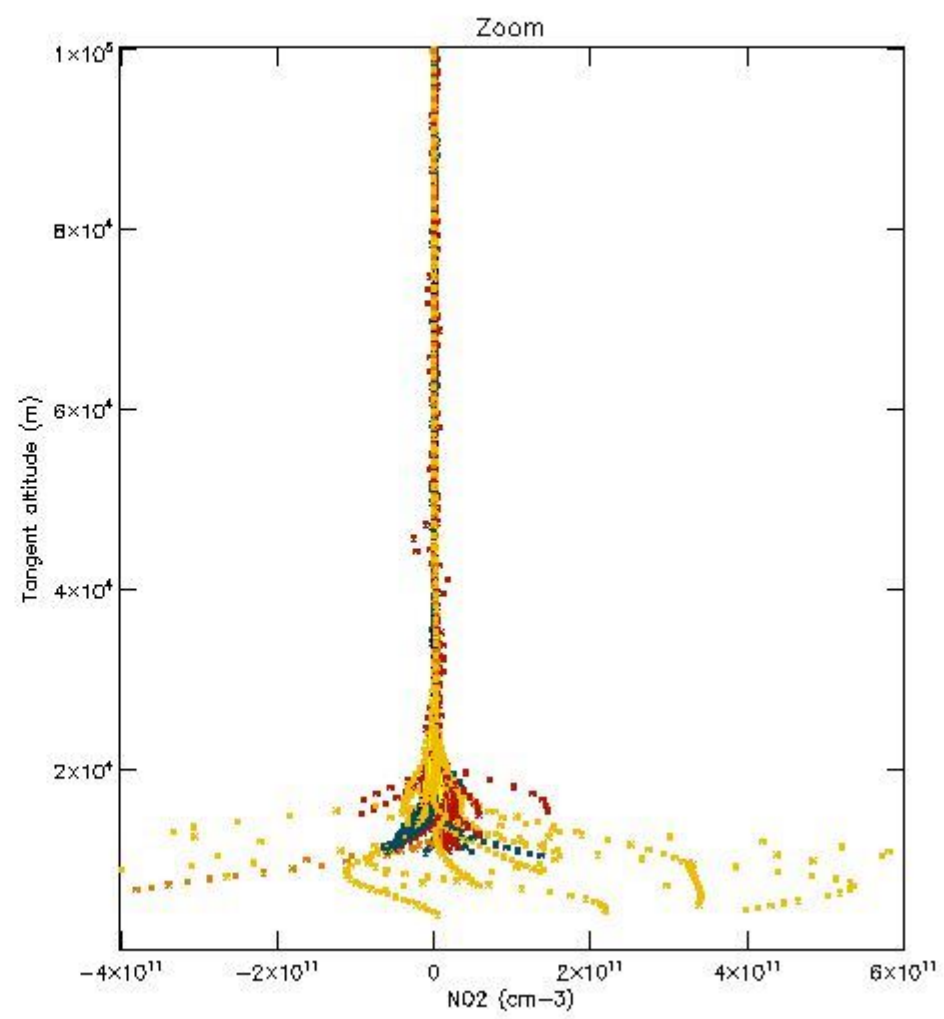
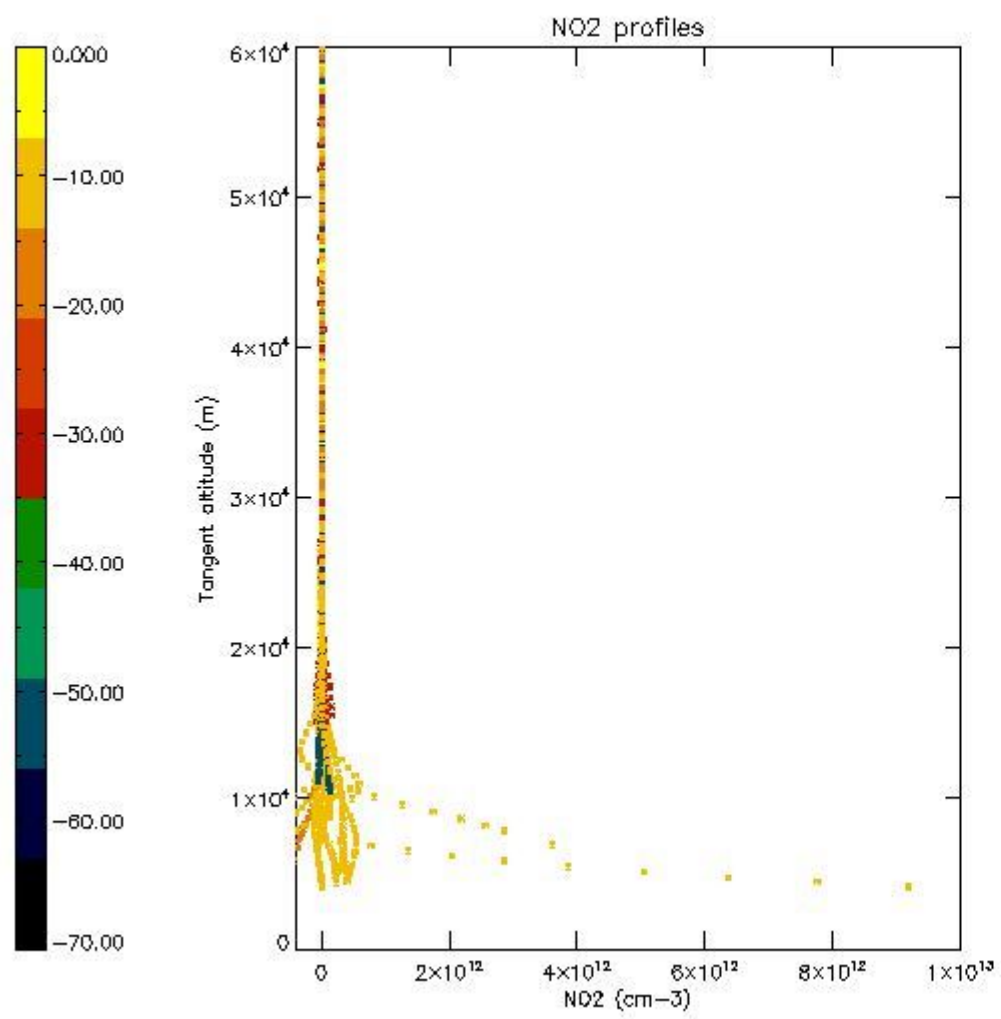
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



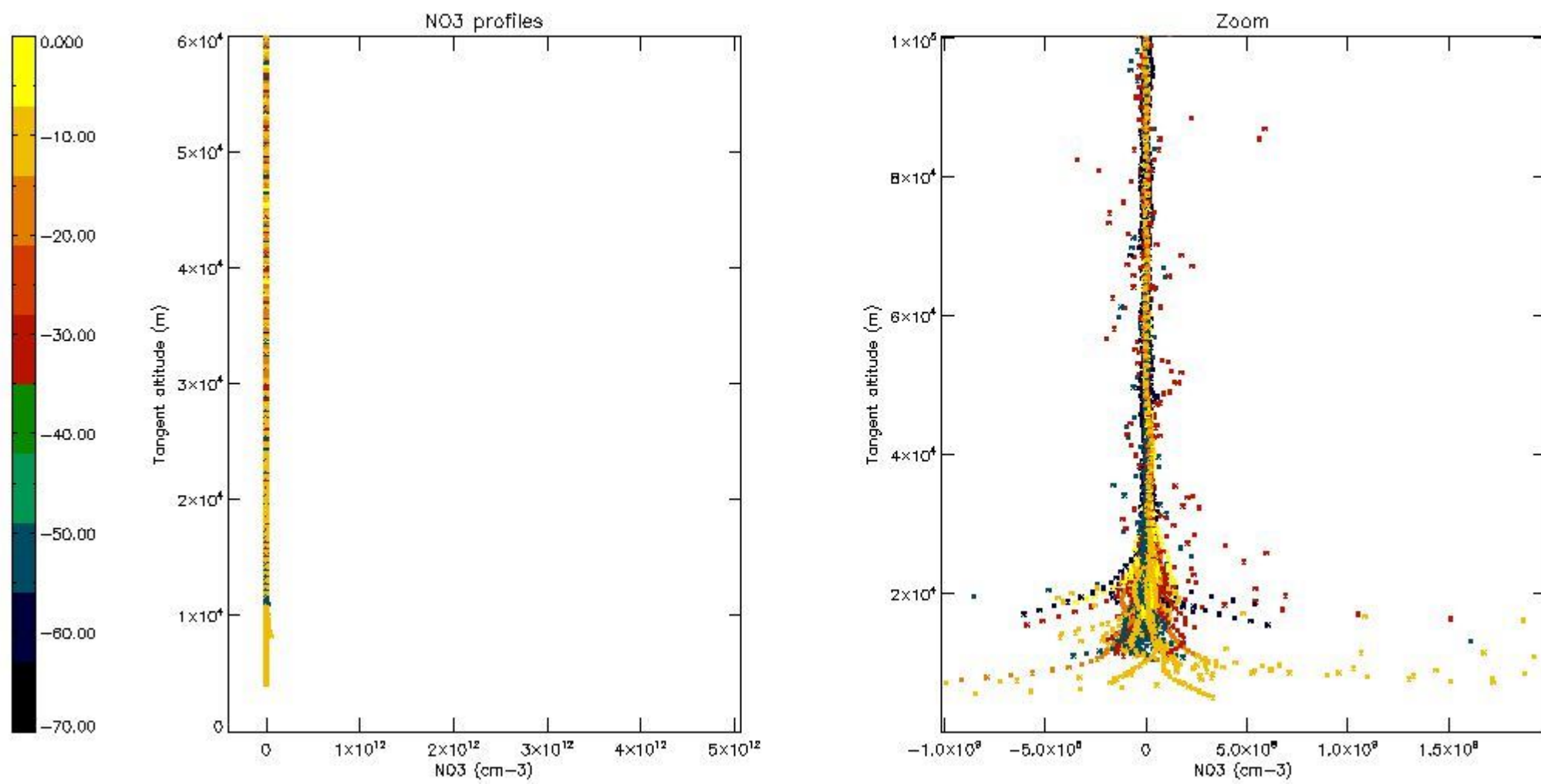
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



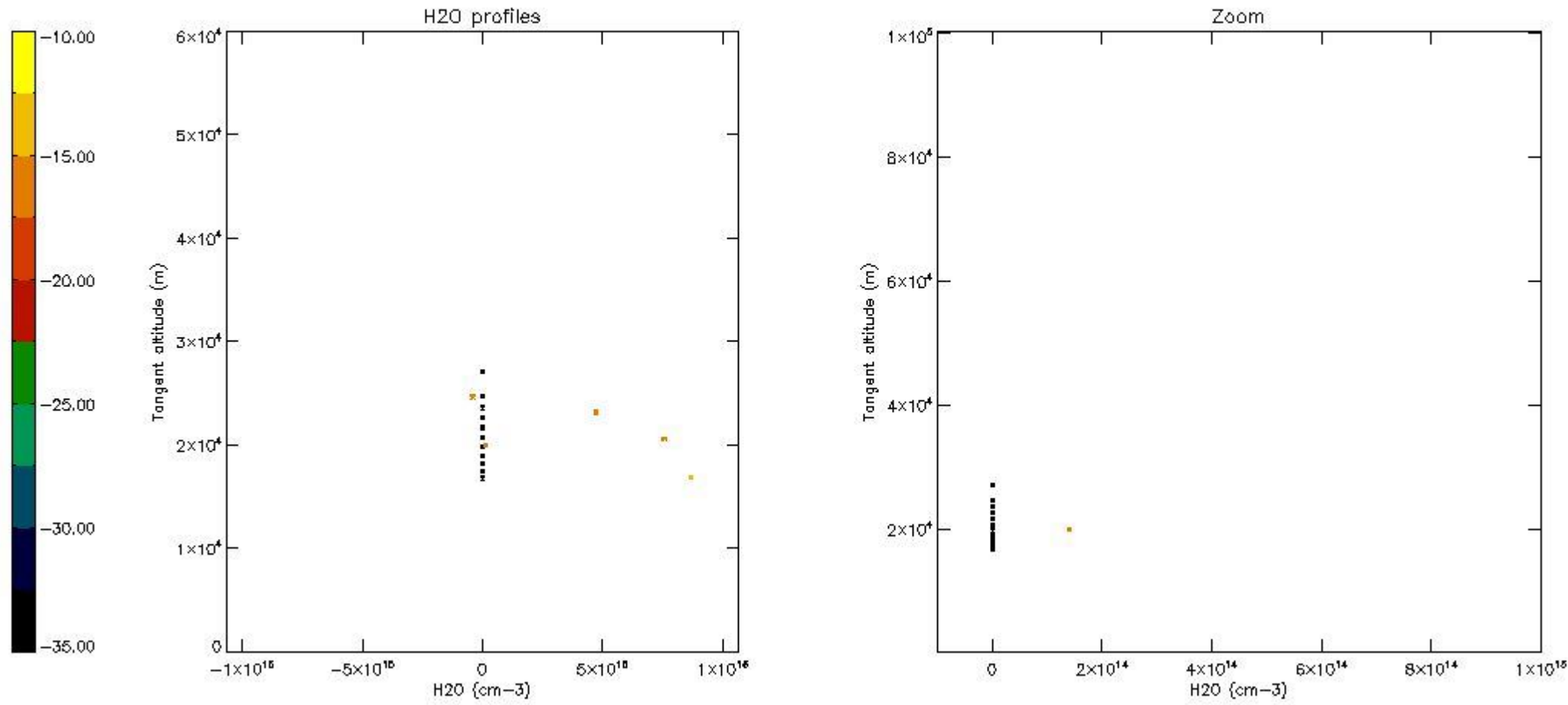
5.7 Plot NO3 profiles for all STD (dark without errors)

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	04-JUN-2008 00:01:41
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	04-JUN-2008 00:01:41
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	04-JUN-2008 00:01:41

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	25APR2013 15:45:19
Data source version	GOMOS/6.01
Start time of products	04-06-2008 (04JUN2008 00:00:00)
Stop time of products	05-06-2008 (05JUN2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	334
Nb of prods with errors	0

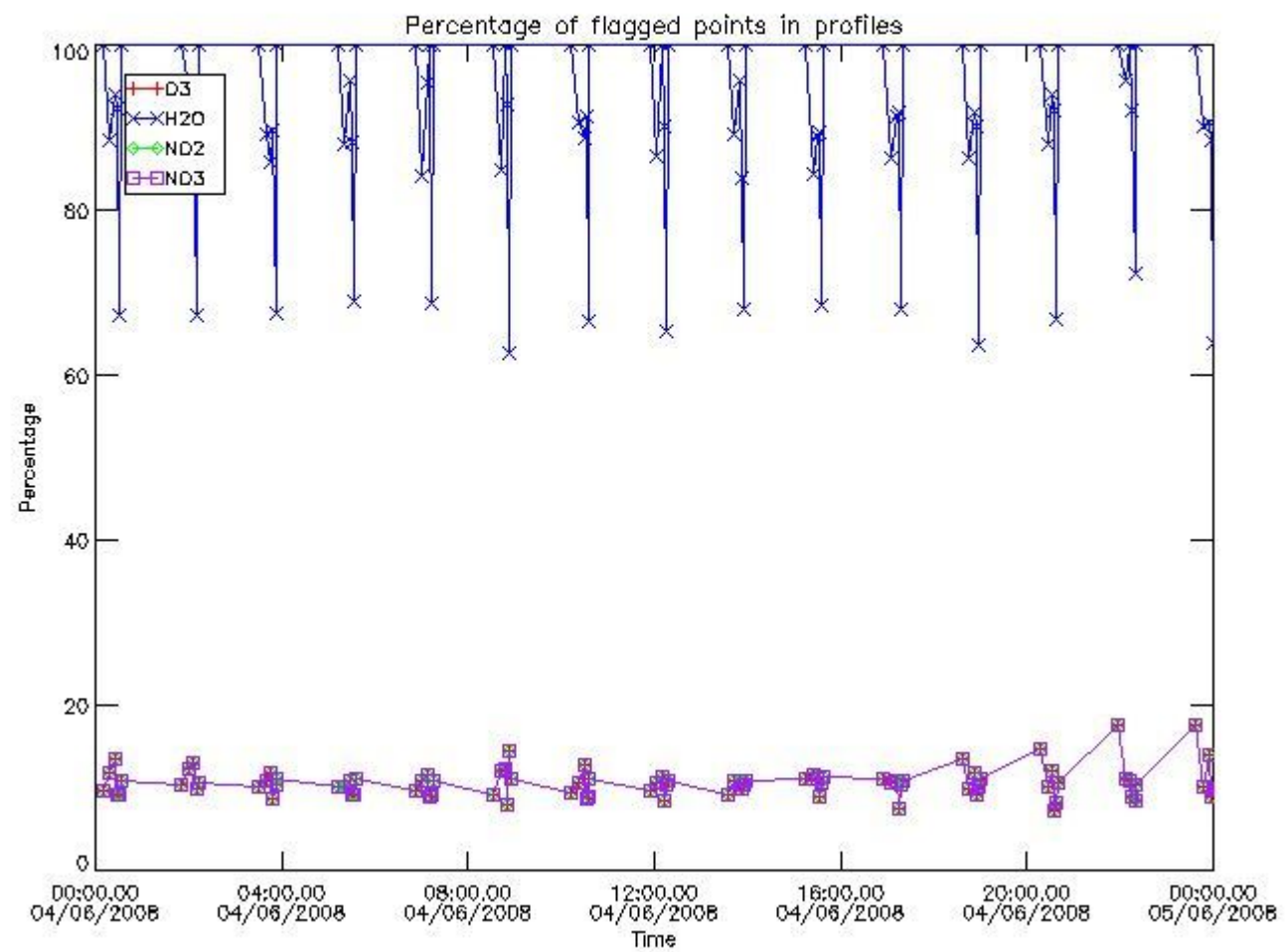
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080604_000141_000000482069_00116_32735_5109.N1	04-JUN-2008 00:01:41	Bright	48.000	53	43Bet And	2.0480	3300.0	96	32735	No
2	GOM_NL__2PRFIN20080604_000428_000000572069_00116_32735_5110.N1	04-JUN-2008 00:04:28	Twilight	57.000	58	21Alp And	2.0730	11000.	114	32735	No
3	GOM_NL__2PRFIN20080604_000940_000000532069_00116_32735_5111.N1	04-JUN-2008 00:09:40	Dark	52.500	140	88Gam Peg	2.8340	26000.	105	32735	No
4	GOM_NL__2PRFIN20080604_001845_000000442069_00116_32735_5112.N1	04-JUN-2008 00:18:45	Dark	43.500	52	16Bet Cet	2.0370	4500.0	87	32735	No
5	GOM_NL__2PRFIN20080604_002523_000000422069_00116_32735_5113.N1	04-JUN-2008 00:25:23	Dark	41.500	84	Alp Phe	2.3970	4500.0	83	32735	No
6	GOM_NL__2PRFIN20080604_002757_000000722069_00116_32735_5114.N1	04-JUN-2008 00:27:57	Dark	72.000	18	24Alp PsA	1.1660	9700.0	144	32735	No
7	GOM_NL__2PRFIN20080604_003056_000000622069_00117_32736_5099.N1	04-JUN-2008 00:30:56	Dark	61.500	63	Bet Gru	2.1500	2800.0	123	32736	No
8	GOM_NL__2PRFIN20080604_003252_000000472069_00117_32736_5100.N1	04-JUN-2008 00:32:52	Dark	47.000	31	Alp Gru	1.7340	15200.	94	32736	No
9	GOM_NL__2PRFIN20080604_003738_000000432069_00117_32736_5101.N1	04-JUN-2008 00:37:38	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	32736	No
10	GOM_NL__2PRFIN20080604_004452_000000402069_00117_32736_5102.N1	04-JUN-2008 00:44:52	Straylight	40.000	147	Alp Ara	2.8770	26000.	80	32736	No
11	GOM_NL__2PRFIN20080604_004634_000000502069_00117_32736_5103.N1	04-JUN-2008 00:46:34	Straylight	50.000	40	The Sco	1.8590	7100.0	100	32736	No
12	GOM_NL__2PRFIN20080604_004821_000000472069_00117_32736_5104.N1	04-JUN-2008 00:48:21	Twilight	46.500	25	35Lam Sco	1.6200	28000.	93	32736	No
13	GOM_NL__2PRFIN20080604_005002_000000462069_00117_32736_5105.N1	04-JUN-2008 00:50:02	Twilight	46.000	75	26Eps Sco	2.2910	4250.0	92	32736	No
14	GOM_NL__2PRFIN20080604_005202_000000452069_00117_32736_5106.N1	04-JUN-2008 00:52:02	Bright	45.000	136	23Tau Sco	2.8220	30000.	90	32736	No
15	GOM_NL__2PRFIN20080604_005534_000000452069_00117_32736_5107.N1	04-JUN-2008 00:55:34	Bright	44.500	86	35Eta Oph	2.4300	10200.	89	32736	No
16	GOM_NL__2PRFIN20080604_005723_000000572069_00117_32736_5108.N1	04-JUN-2008 00:57:23	Bright	57.000	98	13Zet Oph	2.5710	30000.	114	32736	No
17	GOM_NL__2PRFIN20080604_005932_000000392069_00117_32736_5109.N1	04-JUN-2008 00:59:32	Bright	38.500	120	1Del Oph	2.7340	3200.0	77	32736	No
18	GOM_NL__2PRFIN20080604_010232_000000362069_00117_32736_5110.N1	04-JUN-2008 01:02:32	Bright	35.500	102	24Alp Ser	2.6000	4250.0	71	32736	No
19	GOM_NL__2PRFIN20080604_010725_000000402069_00117_32736_5111.N1	04-JUN-2008 01:07:25	Bright	39.500	127	27Bet Her	2.7810	4700.0	79	32736	No
20	GOM_NL__2PRFIN20080604_011045_000000432069_00117_32736_5112.N1	04-JUN-2008 01:10:45	Bright	42.500	133	40Zet Her	2.8070	6000.0	85	32736	No
21	GOM_NL__2PRFIN20080604_011806_000000422069_00117_32736_5113.N1	04-JUN-2008 01:18:06	Bright	41.500	130	23Bet Dra	2.7990	5800.0	83	32736	No
22	GOM_NL__2PRFIN20080604_012858_000000462069_00117_32736_5114.N1	04-JUN-2008 01:28:58	Bright	46.000	89	5Alp Cep	2.4510	8000.0	92	32736	No
23	GOM_NL__2PRFIN20080604_013422_000000402069_00117_32736_5115.N1	04-JUN-2008 01:34:22	Bright	40.000	76	27Gam Cas	2.3000	30000.	80	32736	No
24	GOM_NL__2PRFIN20080604_014216_000000492069_00117_32736_5116.N1	04-JUN-2008 01:42:16	Bright	49.000	53	43Bet And	2.0480	3300.0	98	32736	No
25	GOM_NL__2PRFIN20080604_014504_000000562069_00117_32736_5117.N1	04-JUN-2008 01:45:04	Twilight	55.500	58	21Alp And	2.0730	11000.	111	32736	No
26	GOM_NL__2PRFIN20080604_015017_000000532069_00117_32736_5118.N1	04-JUN-2008 01:50:17	Dark	53.000	140	88Gam Peg	2.8340	26000.	106	32736	No
27	GOM_NL__2PRFIN20080604_015921_000000502069_00117_32736_5119.N1	04-JUN-2008 01:59:21	Dark	50.000	52	16Bet Cet	2.0370	4500.0	100	32736	No
28	GOM_NL__2PRFIN20080604_020600_000000432069_00117_32736_5120.N1	04-JUN-2008 02:06:00	Dark	43.000	84	Alp Phe	2.3970	4500.0	86	32736	No
29	GOM_NL__2PRFIN20080604_021133_000000622069_00118_32737_5108.N1	04-JUN-2008 02:11:33	Dark	61.500	63	Bet Gru	2.1500	2800.0	123	32737	No
30	GOM_NL__2PRFIN20080604_021329_000000482069_00118_32737_5109.N1	04-JUN-2008 02:13:29	Dark	48.000	31	Alp Gru	1.7340	15200.	96	32737	No
31	GOM_NL__2PRFIN20080604_021815_000000432069_00118_32737_5110.N1	04-JUN-2008 02:18:15	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	32737	No
32	GOM_NL__2PRFIN20080604_022529_000000392069_00118_32737_5111.N1	04-JUN-2008 02:25:29	Straylight	39.000	147	Alp Ara	2.8770	26000.	78	32737	No
33	GOM_NL__2PRFIN20080604_022711_000000452069_00118_32737_5112.N1	04-JUN-2008 02:27:11	Straylight	45.000	40	The Sco	1.8590	7100.0	90	32737	No
34	GOM_NL__2PRFIN20080604_022858_000000432069_00118_32737_5113.N1	04-JUN-2008 02:28:58	Twilight	43.000	25	35Lam Sco	1.6200	28000.	86	32737	No
35	GOM_NL__2PRFIN20080604_023039_000000452069_00118_32737_5114.N1	04-JUN-2008 02:30:39	Twilight	45.000	75	26Eps Sco	2.2910	4250.0	90	32737	No
36	GOM_NL__2PRFIN20080604_023238_000000442069_00118_32737_5115.N1	04-JUN-2008 02:32:38	Bright	44.000	136	23Tau Sco	2.8220	30000.	88	32737	No
37	GOM_NL__2PRFIN20080604_023610_000000432069_00118_32737_5116.N1	04-JUN-2008 02:36:10	Bright	43.000	86	35Eta Oph	2.4300	10200.	86	32737	No
38	GOM_NL__2PRFIN20080604_023759_000000392069_00118_32737_5117.N1	04-JUN-2008 02:37:59	Bright	38.500	98	13Zet Oph	2.5710	30000.	77	32737	No
39	GOM_NL__2PRFIN20080604_024008_000000382069_00118_32737_5118.N1	04-JUN-2008 02:40:08	Bright	38.000	120	1Del Oph	2.7340	3200.0	76	32737	No
40	GOM_NL__2PRFIN20080604_024308_000000362069_00118_32737_5119.N1	04-JUN-2008 02:43:08	Bright	35.500	102	24Alp Ser	2.6000	4250.0	71	32737	No
41	GOM_NL__2PRFIN20080604_024801_000000592069_00118_32737_5120.N1	04-JUN-2008 02:48:01	Bright	59.000	127	27Bet Her	2.7810	4700.0	118	32737	No
42	GOM_NL__2PRFIN20080604_025120_000000402069_00118_32737_5121.N1	04-JUN-2008 02:51:20	Bright	40.000	133	40Zet Her	2.8070	6000.0	80	32737	No

3. Quality information per product

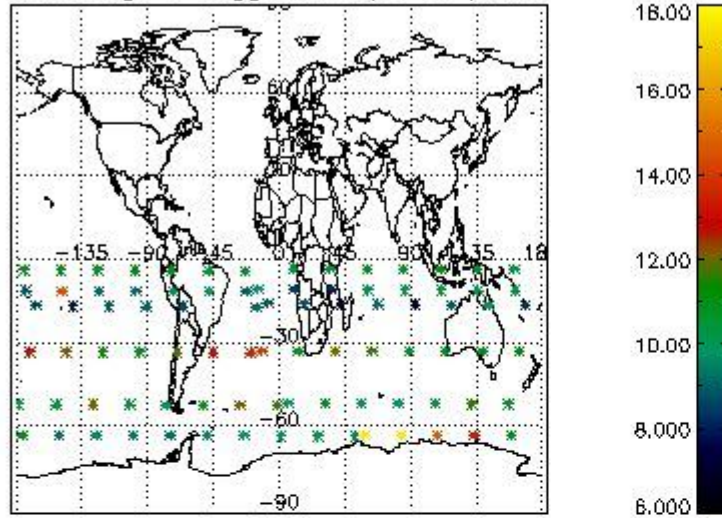
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

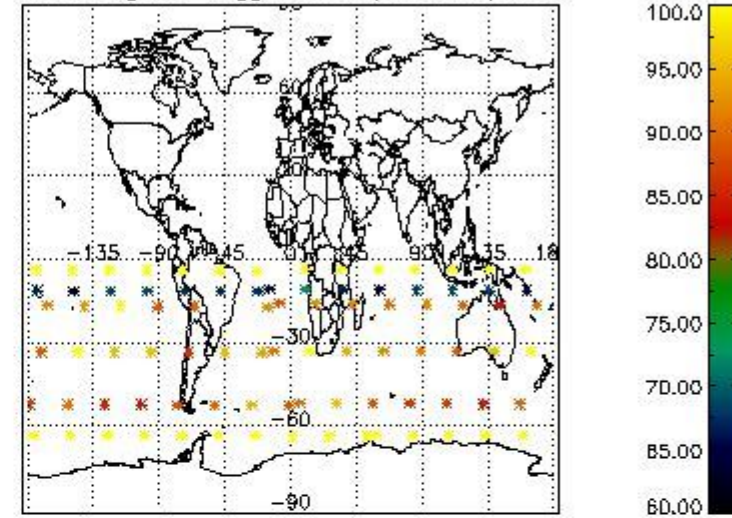


3.2 Plot quality information per product (world map)

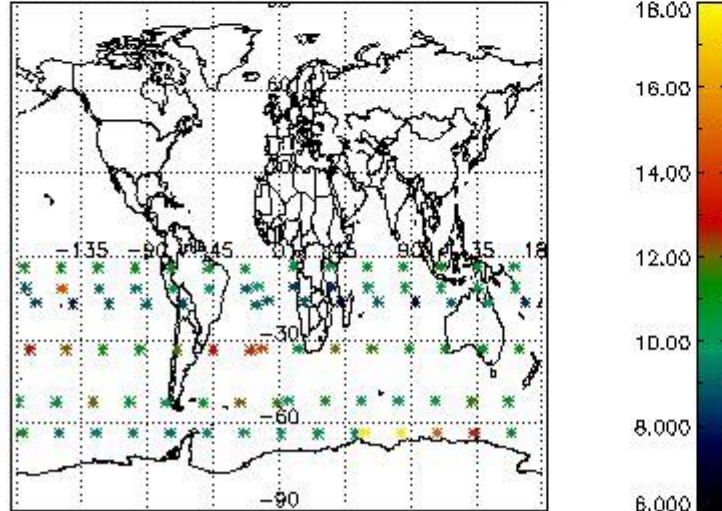
Percentage of flagged data per O3 profile



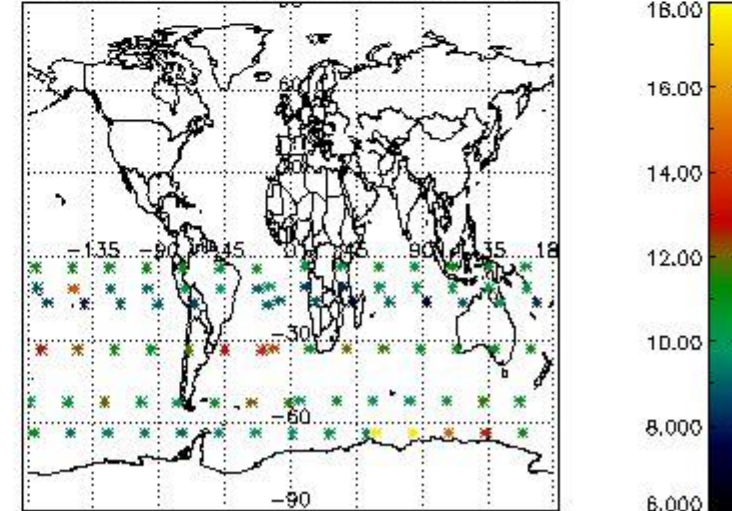
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

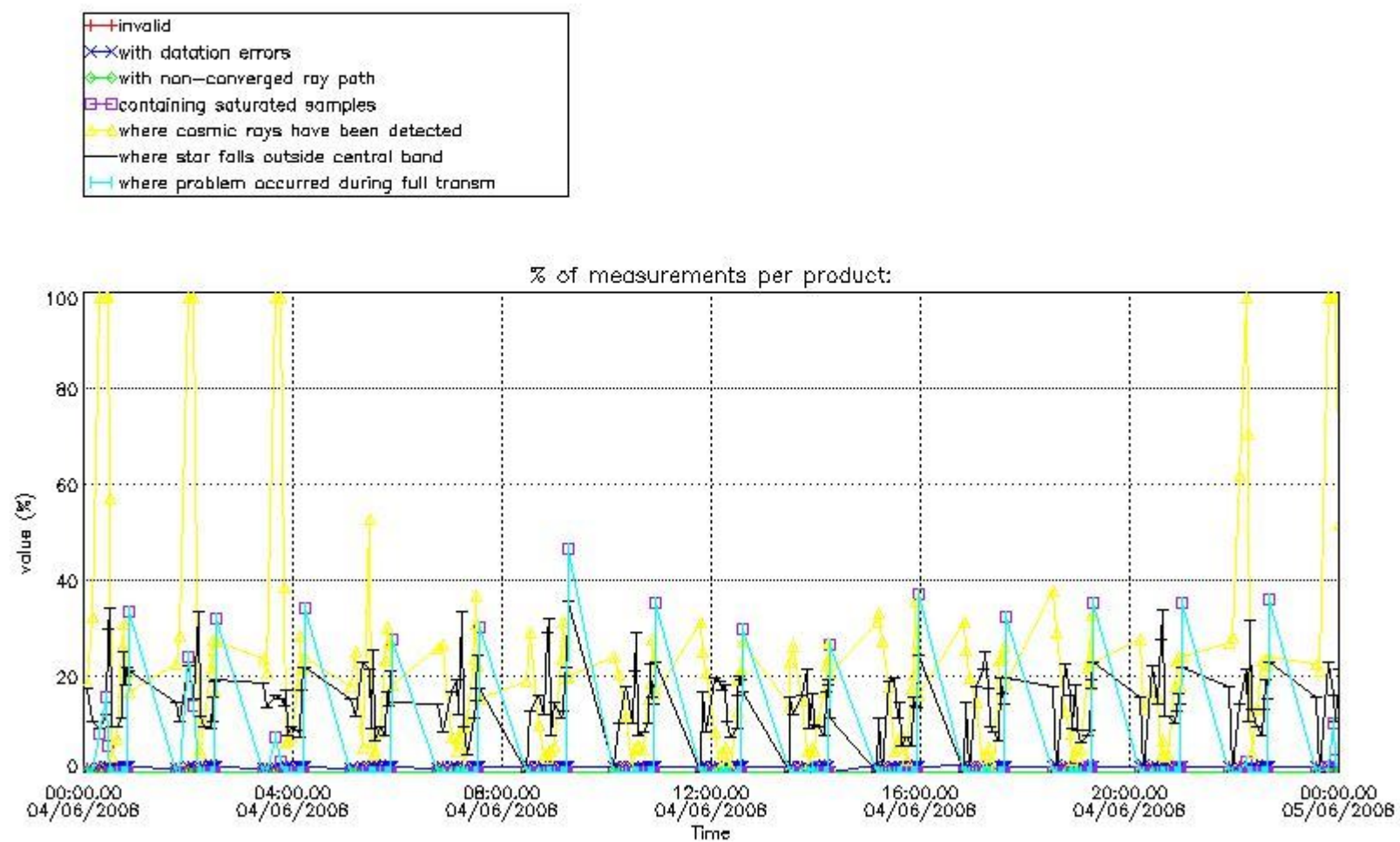


4. Level 1 quality information per product

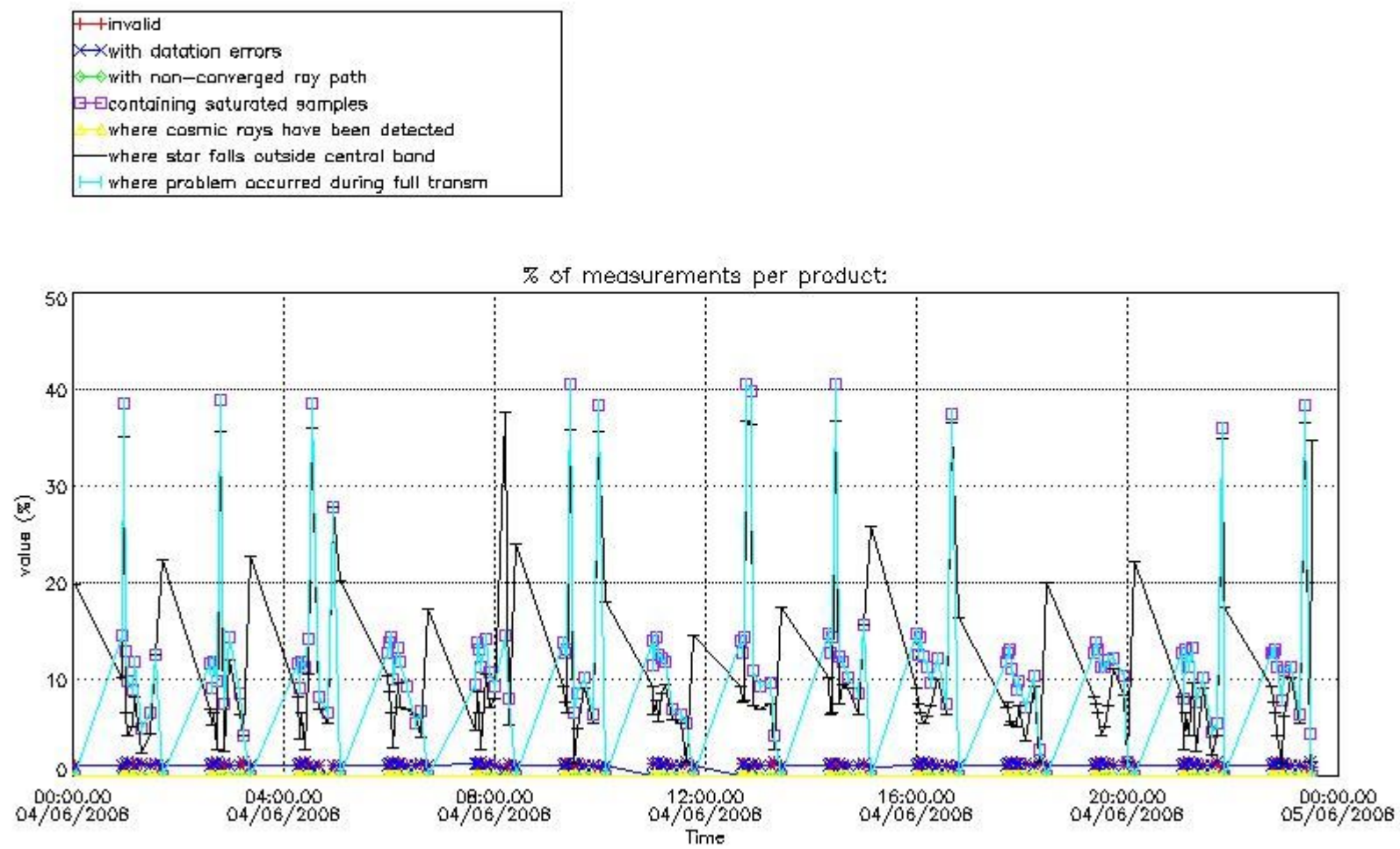
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

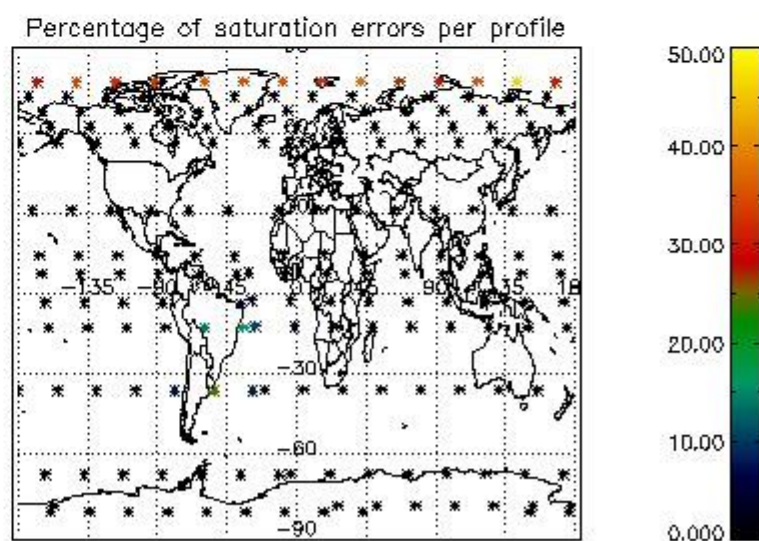
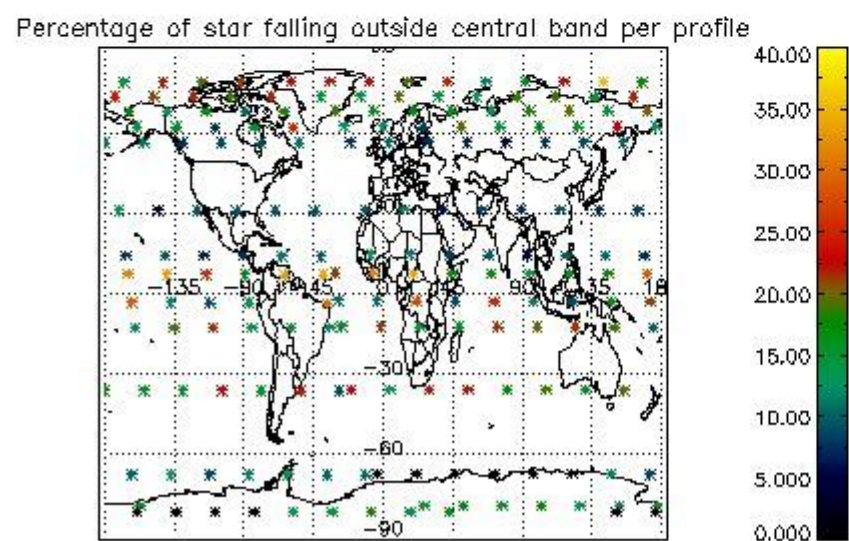
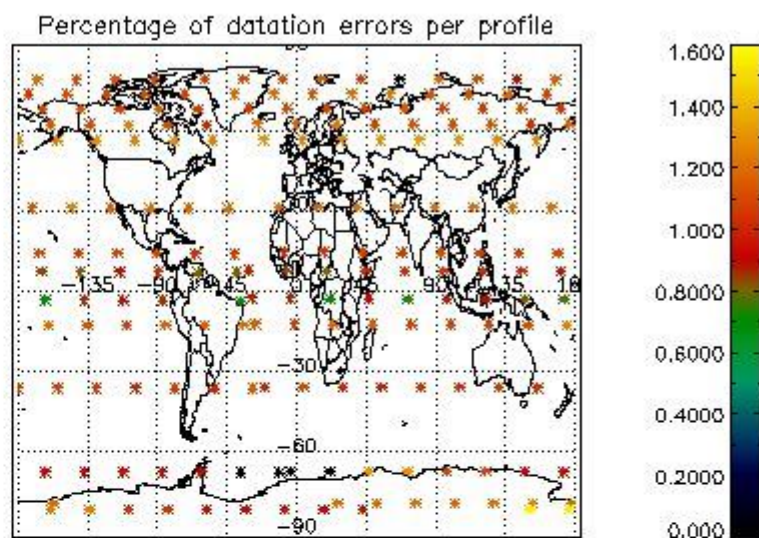
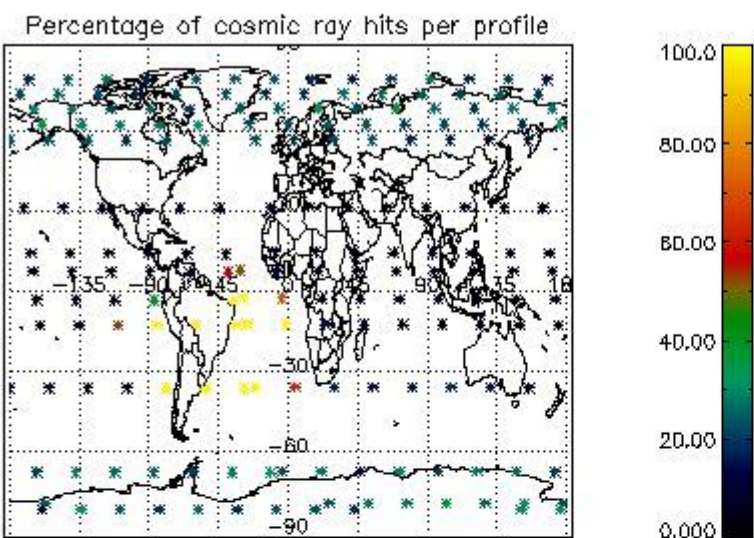


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

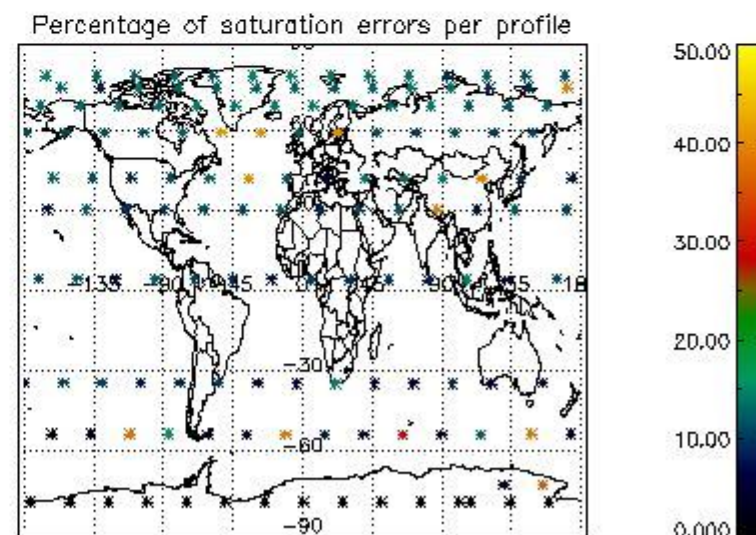
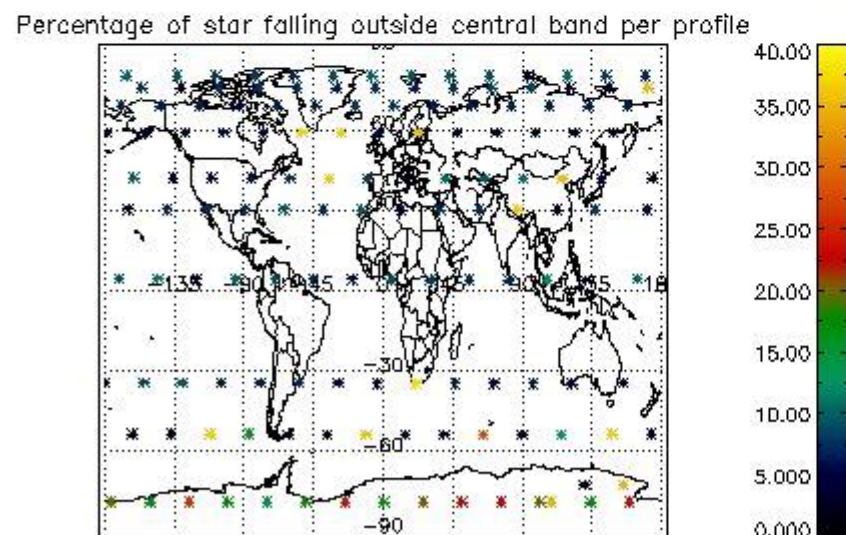
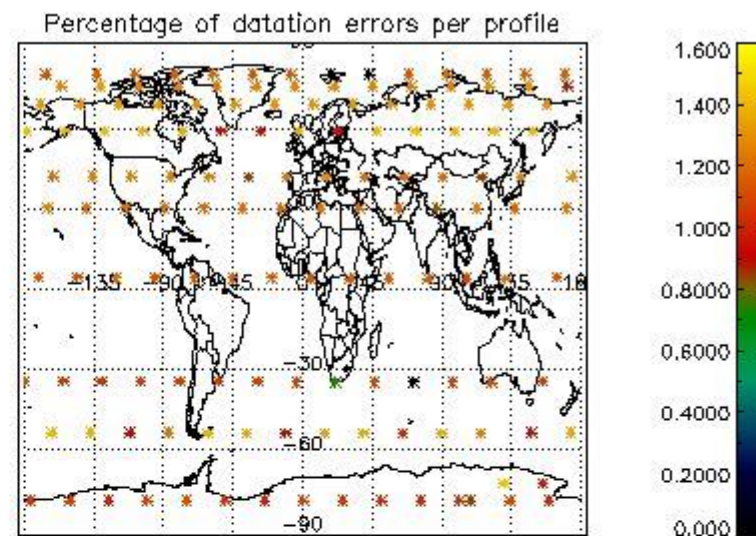
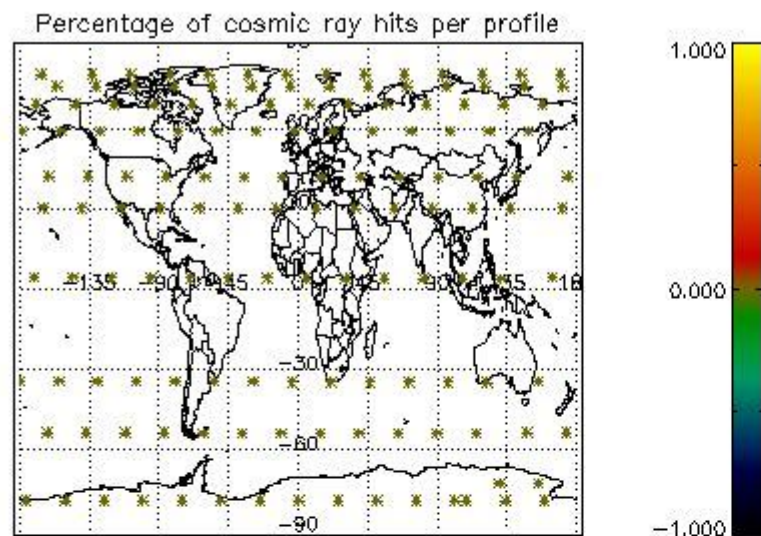


4.2 Plot quality information per product coming from level 1b processing (world map)

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

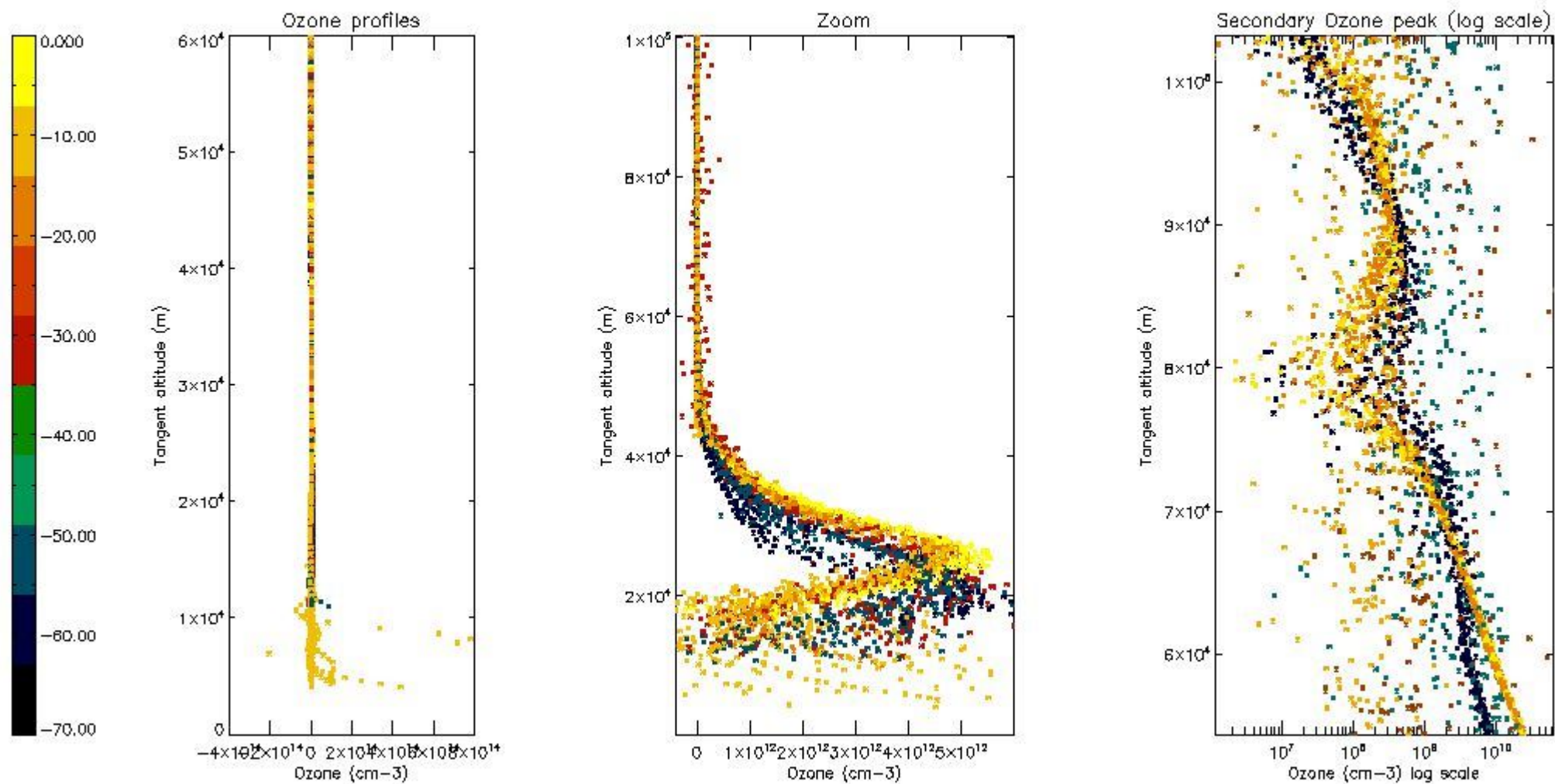
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	30
STD < 20	14

STD < 10	10
STD < 5	7

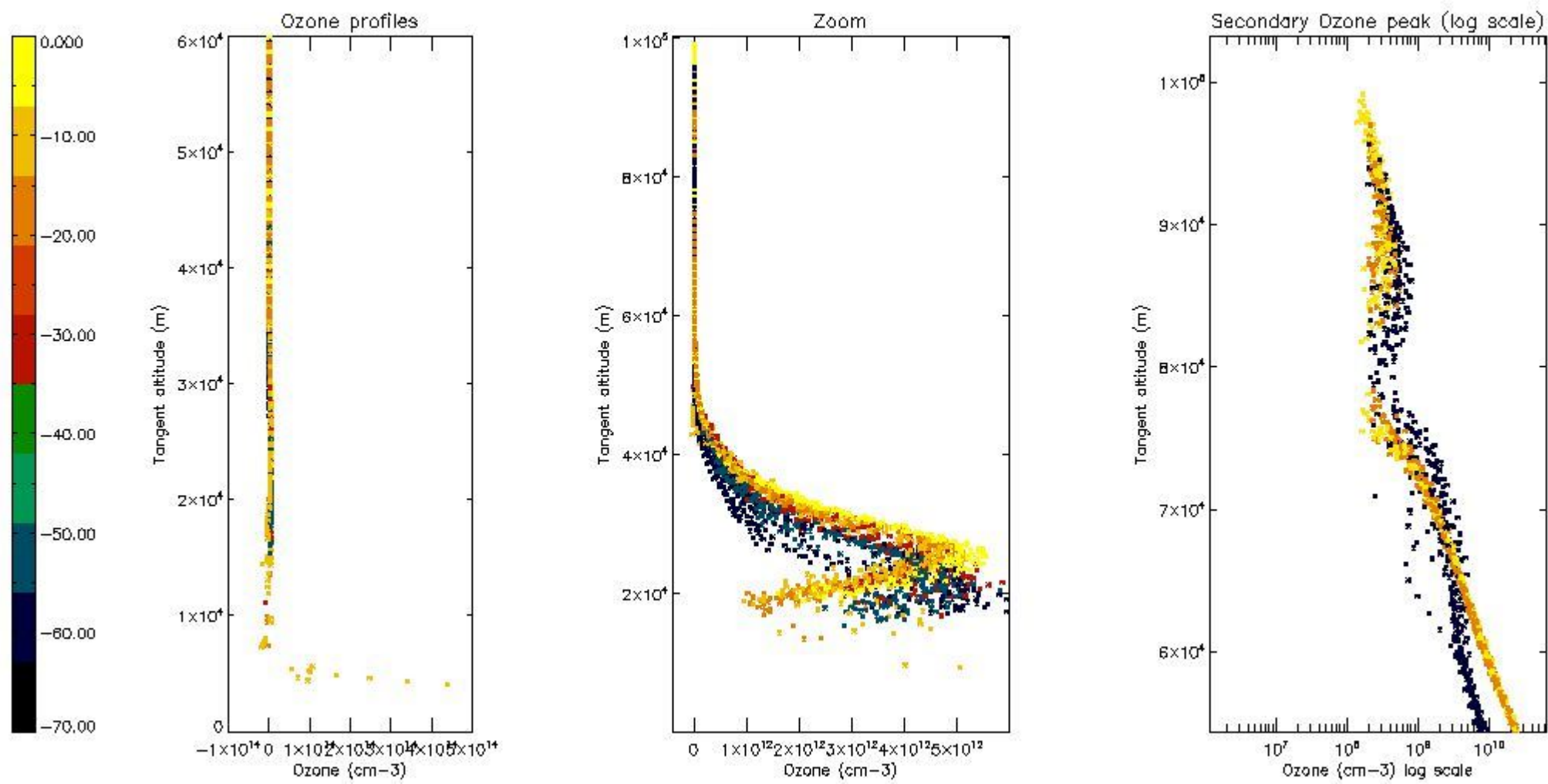
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



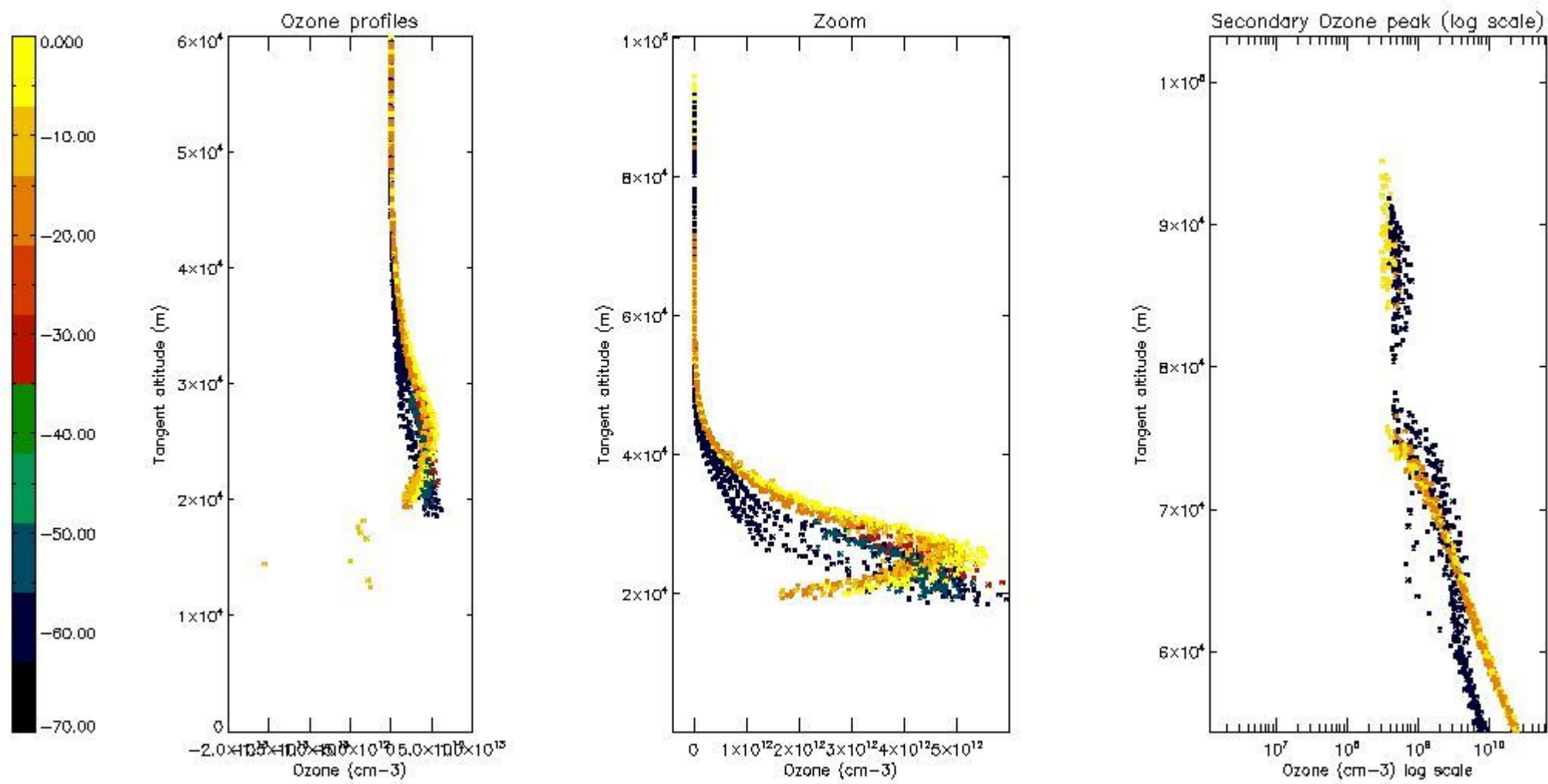
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



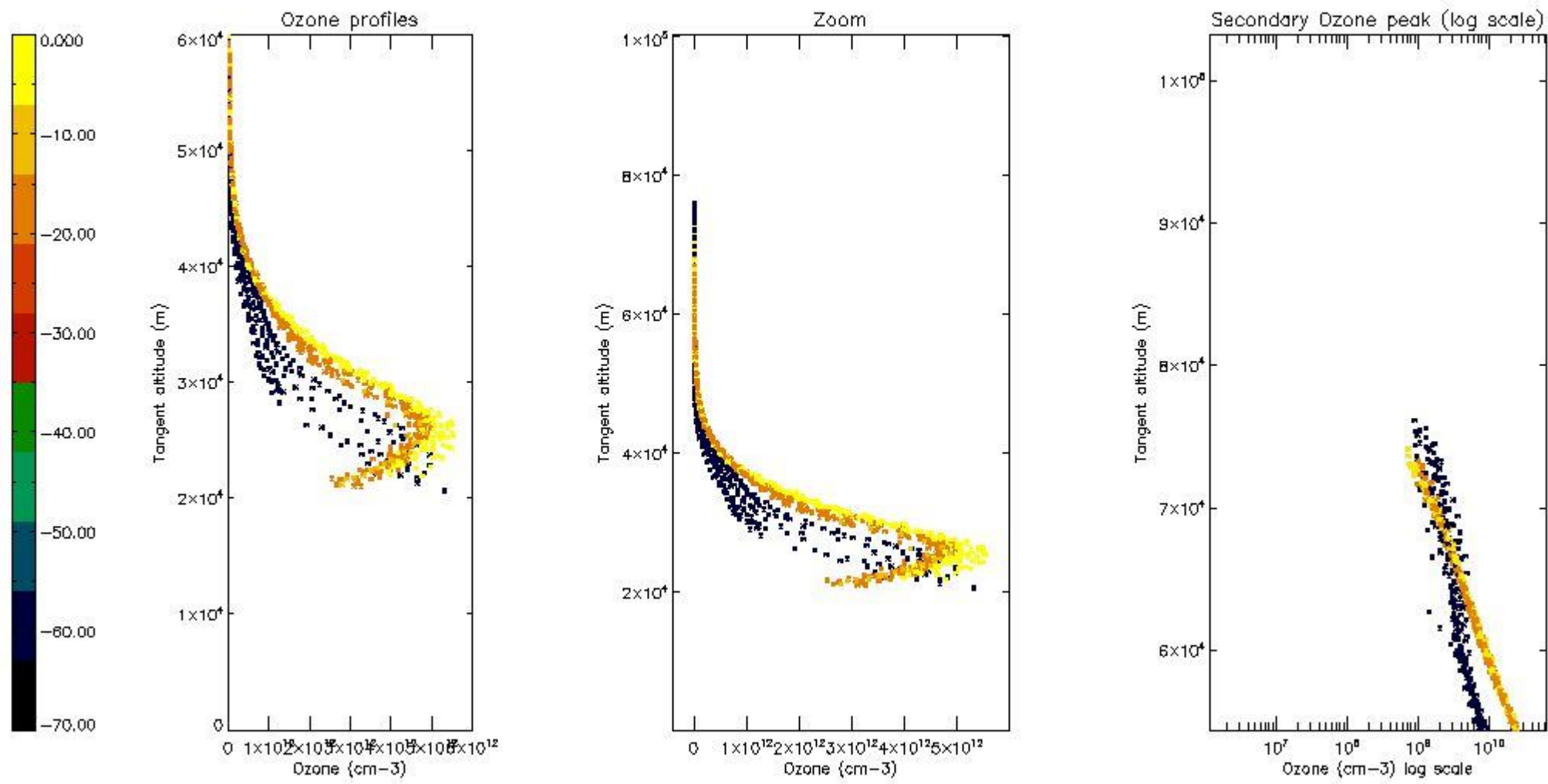
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



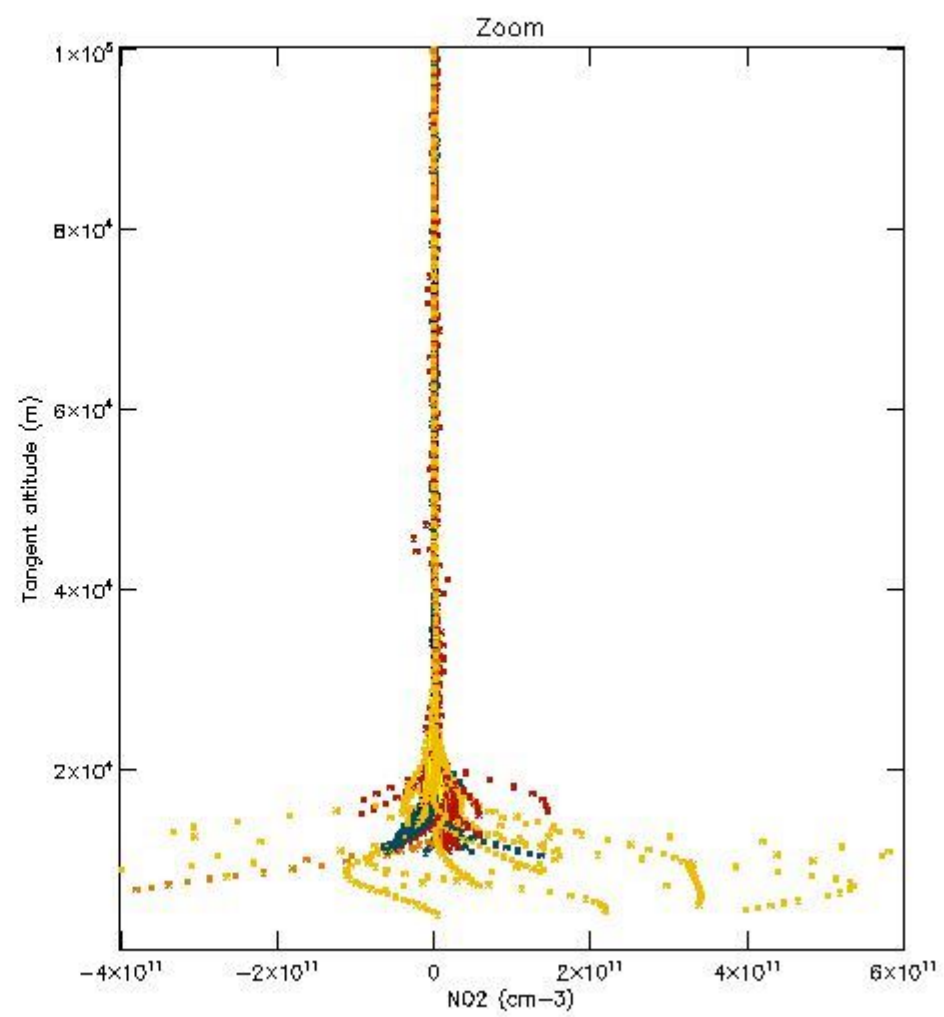
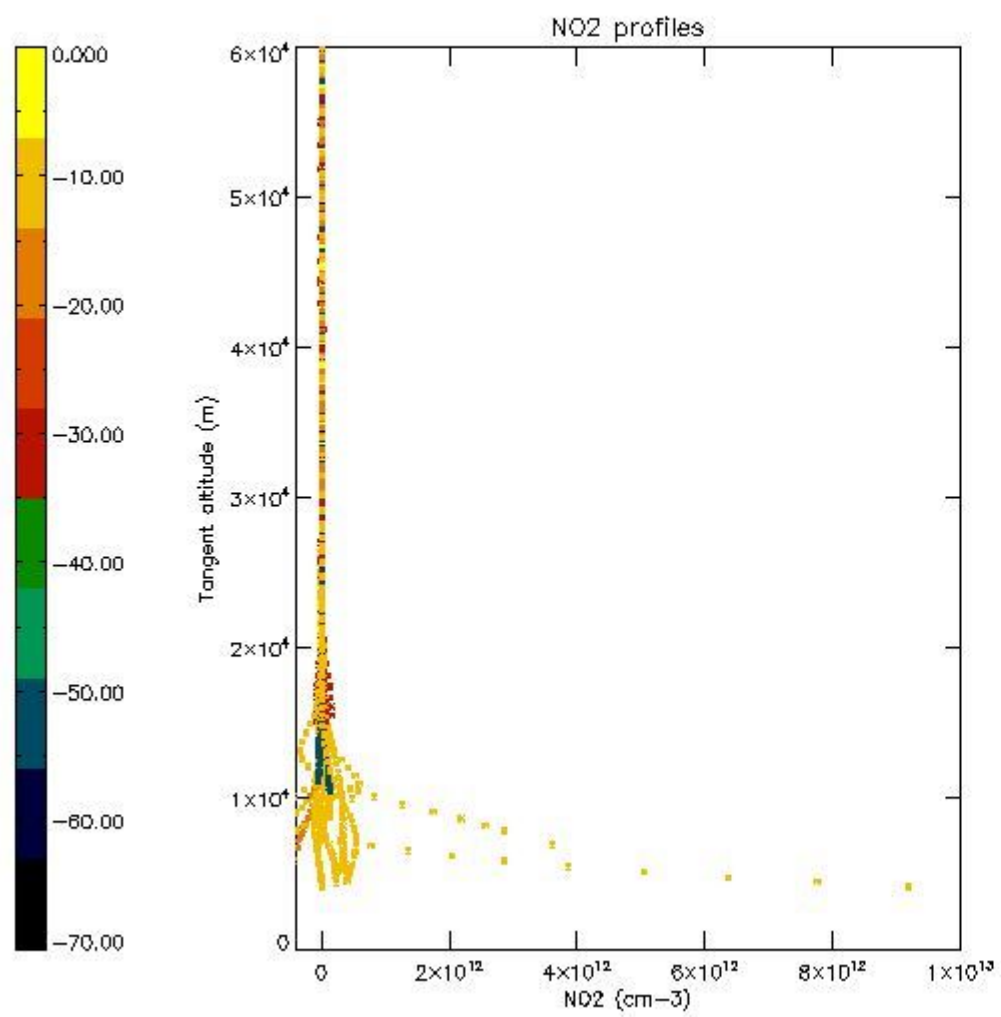
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



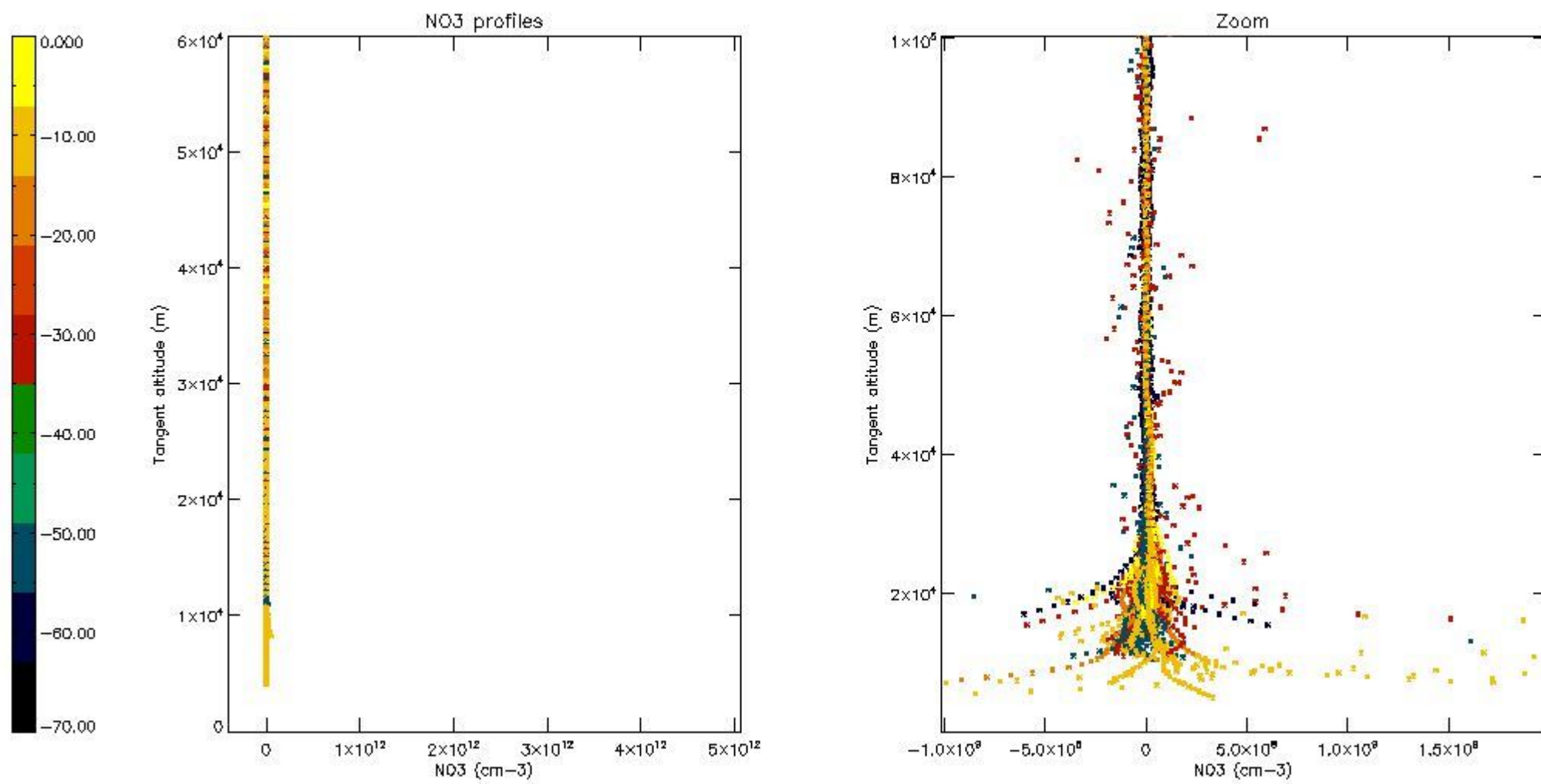
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



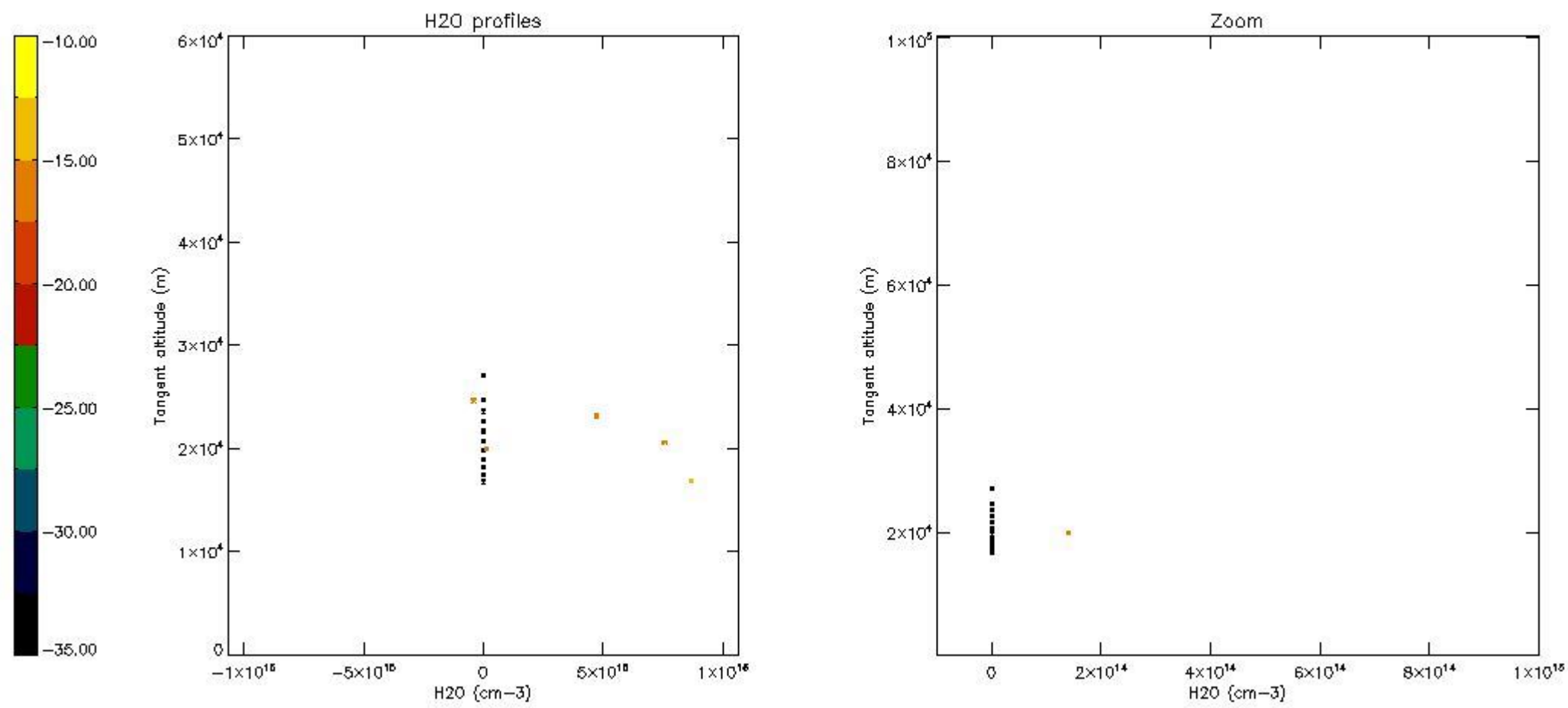
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

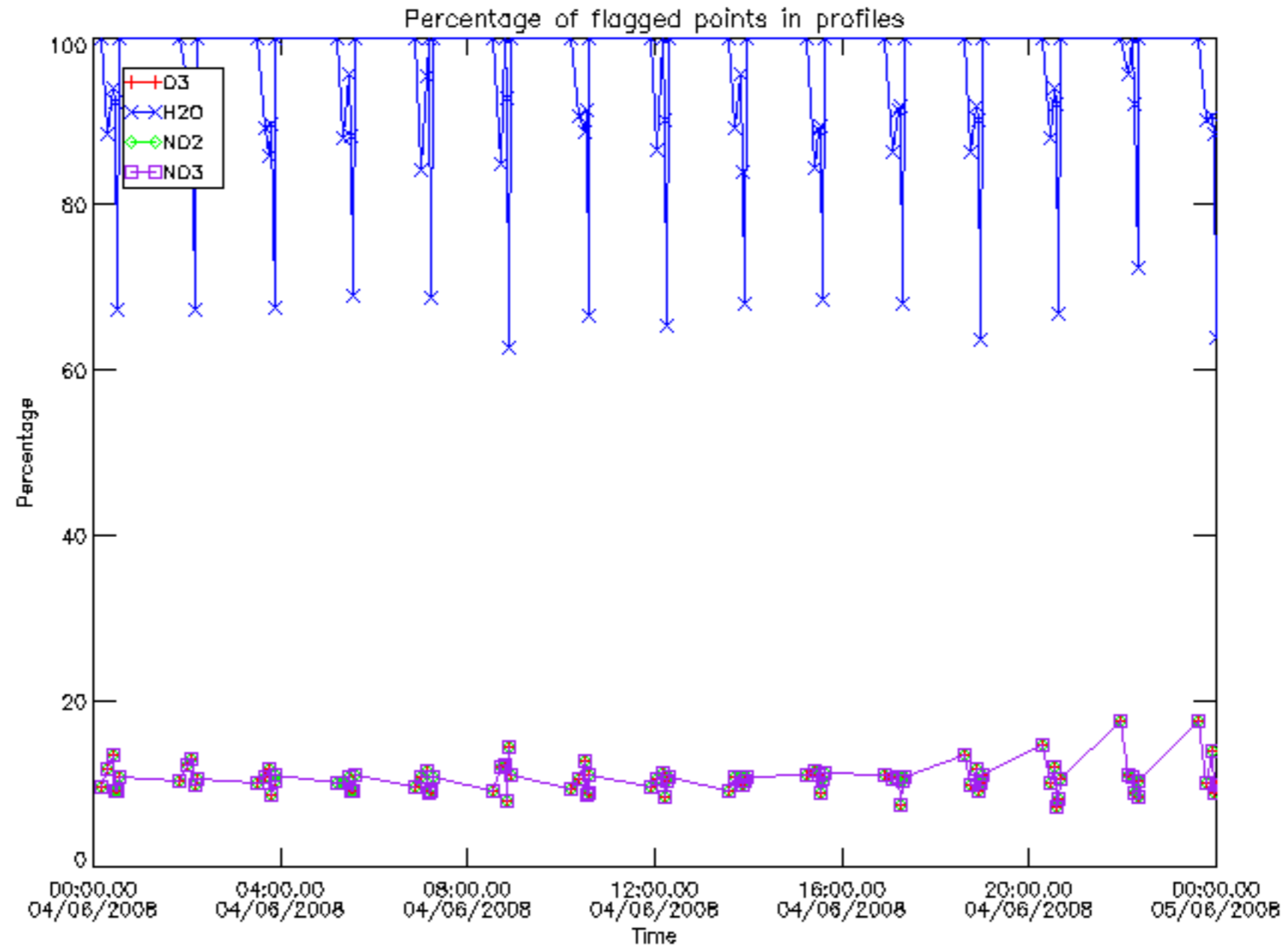
The colorbar represents the latitude.



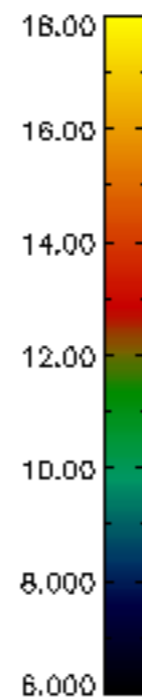
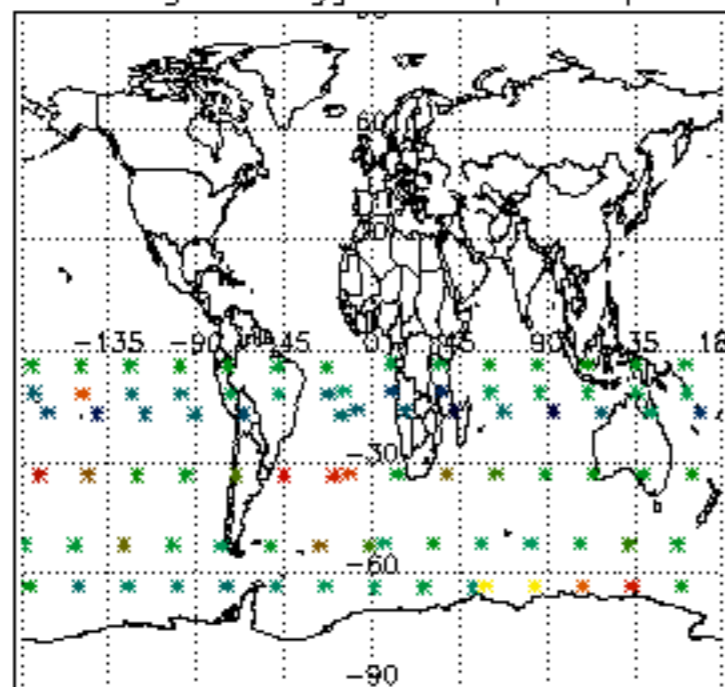
6. Auxiliary Data Files used for the production reported in section 2

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.

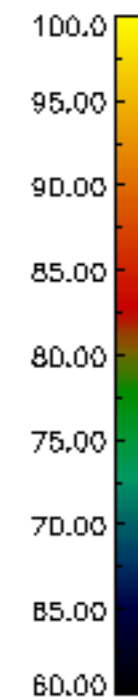
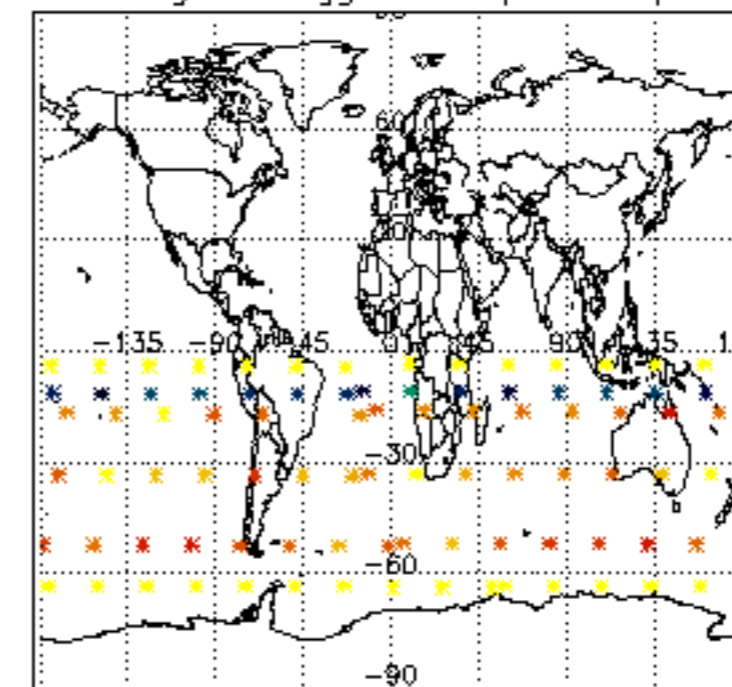
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	04-JUN-2008 00:01:41
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	04-JUN-2008 00:01:41
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	04-JUN-2008 00:01:41



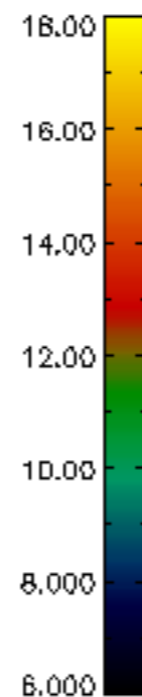
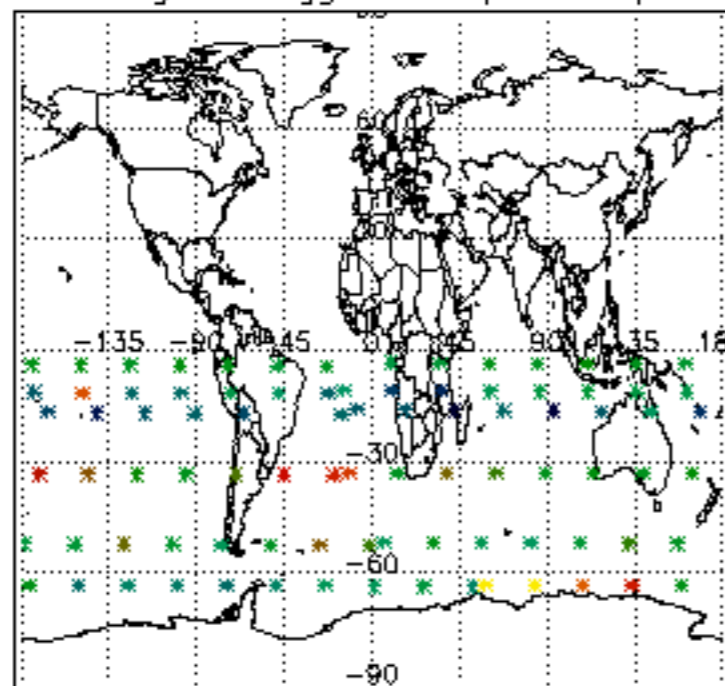
Percentage of flagged data per D3 profile



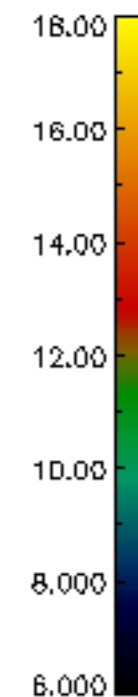
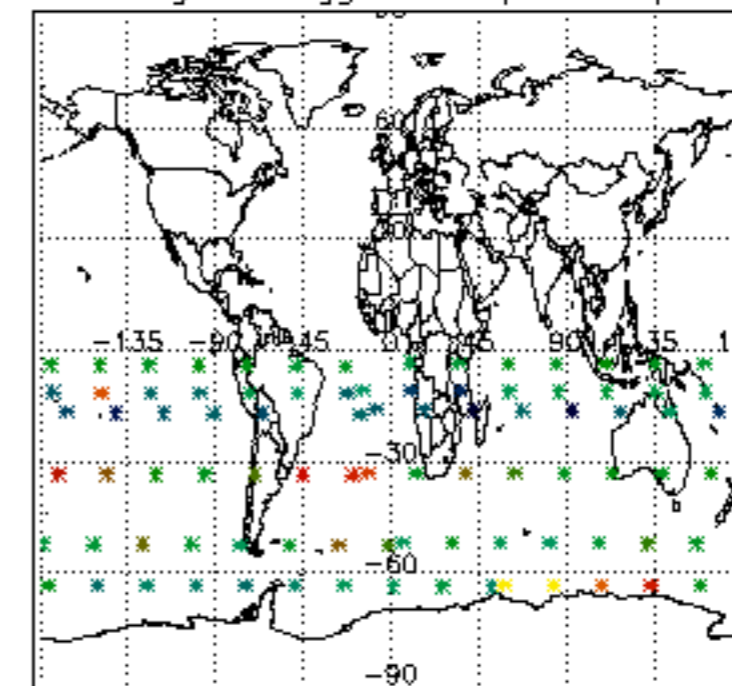
Percentage of flagged data per H2O profile

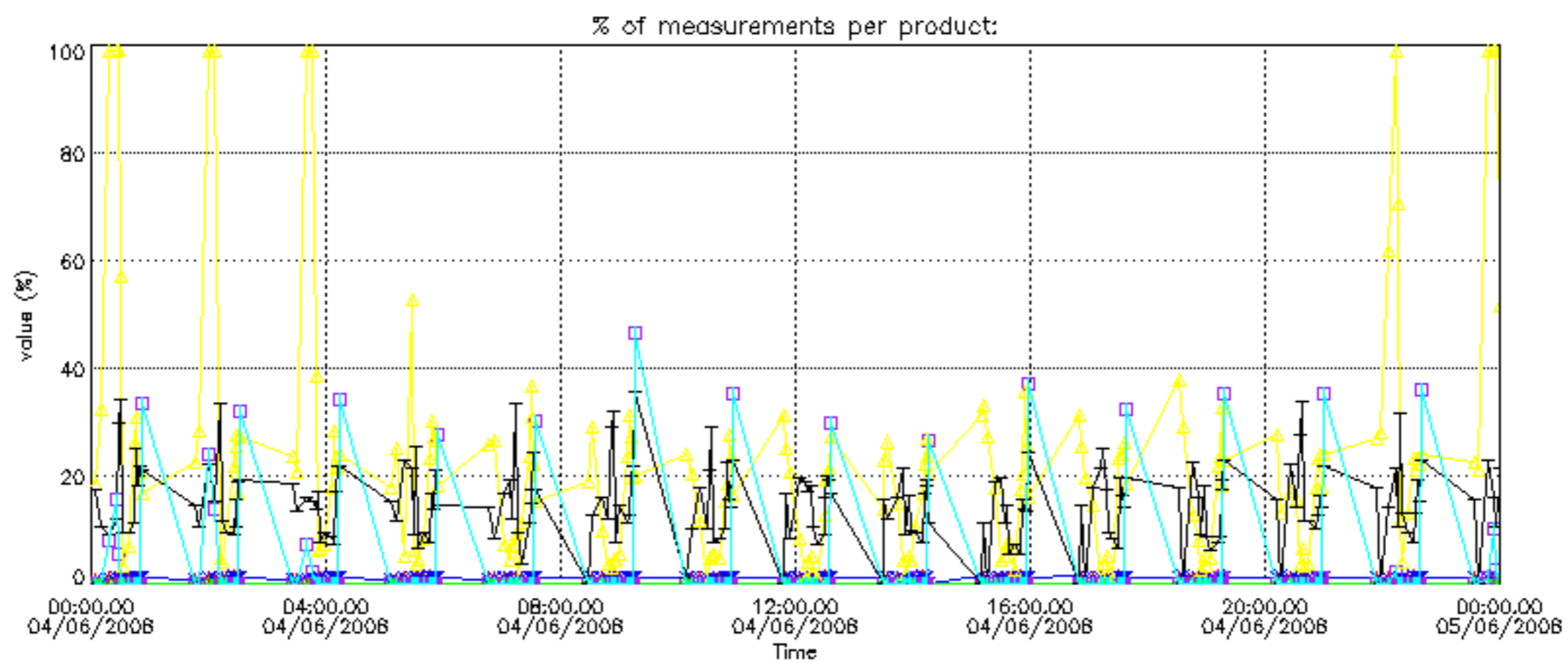
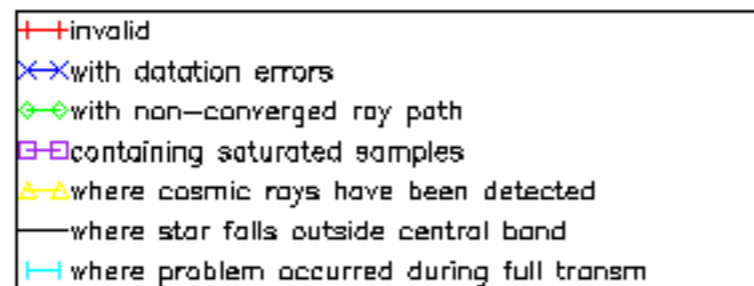


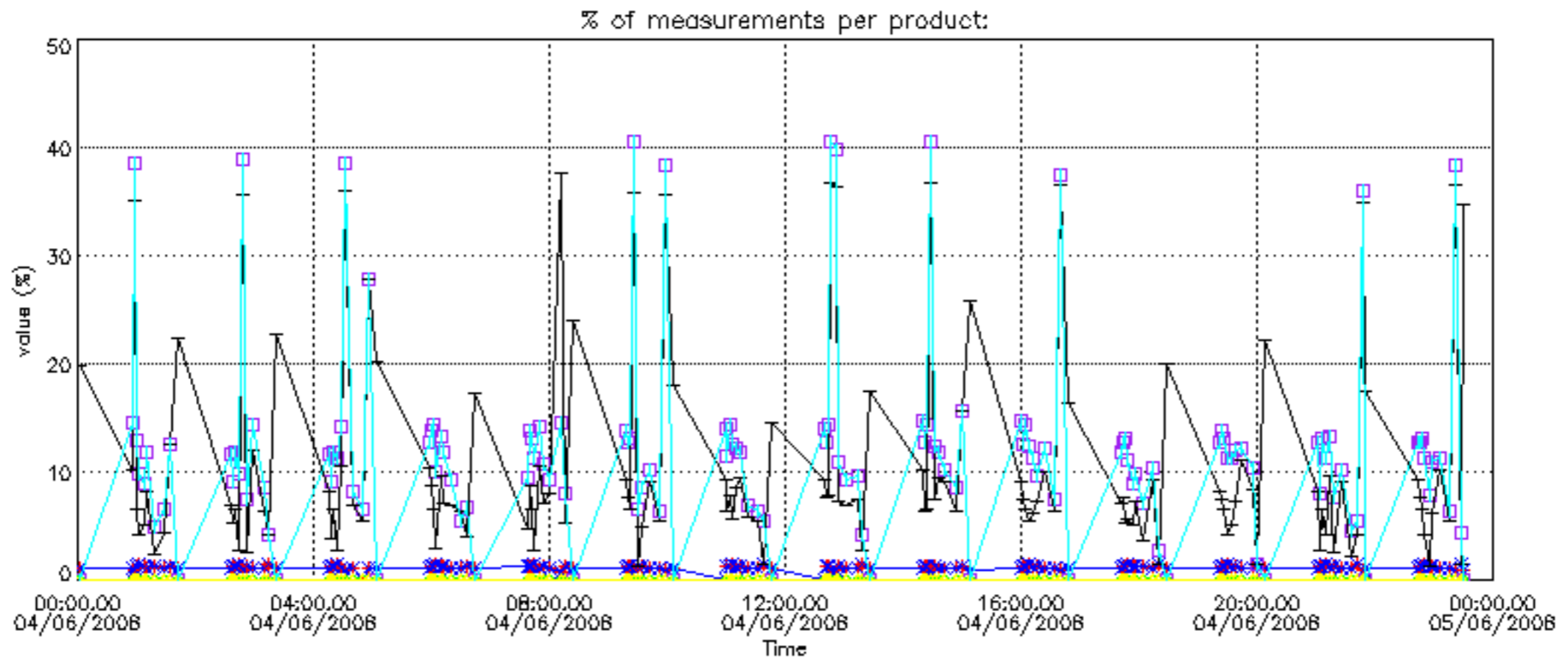
Percentage of flagged data per NO2 profile



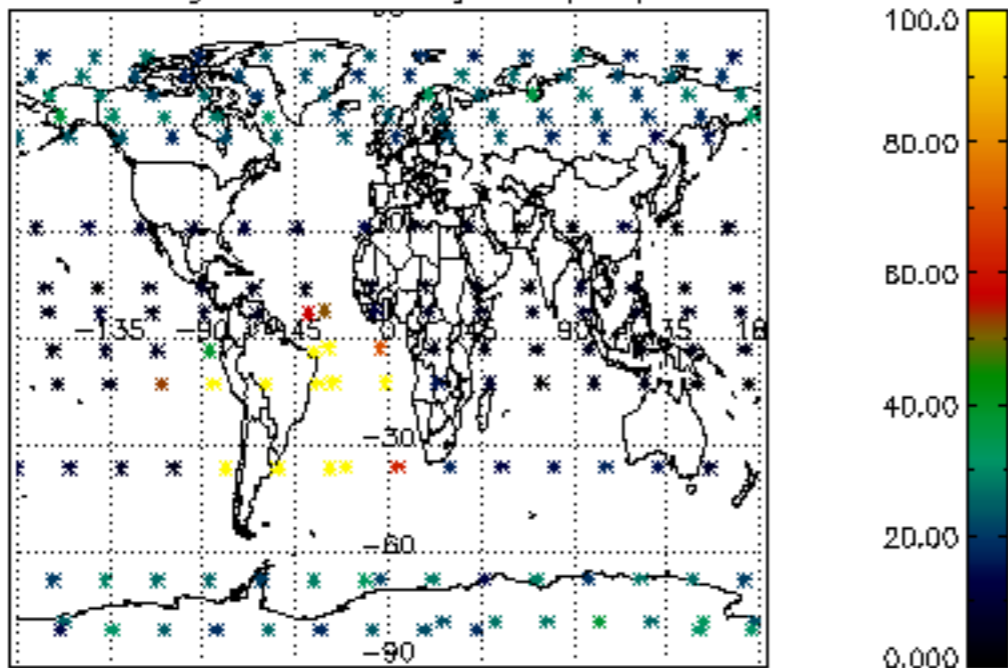
Percentage of flagged data per NO3 profile



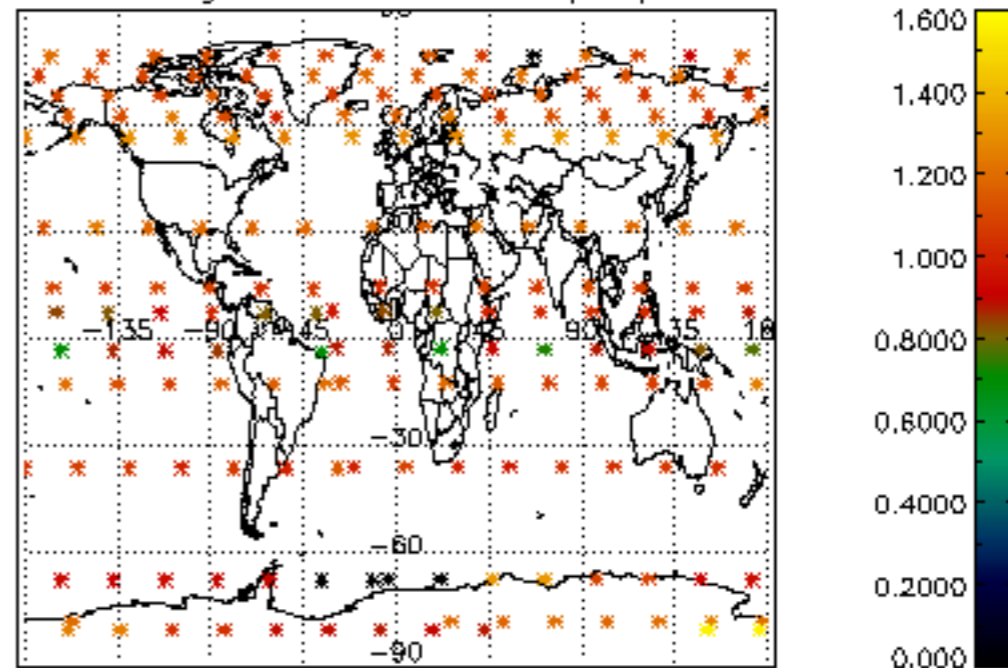




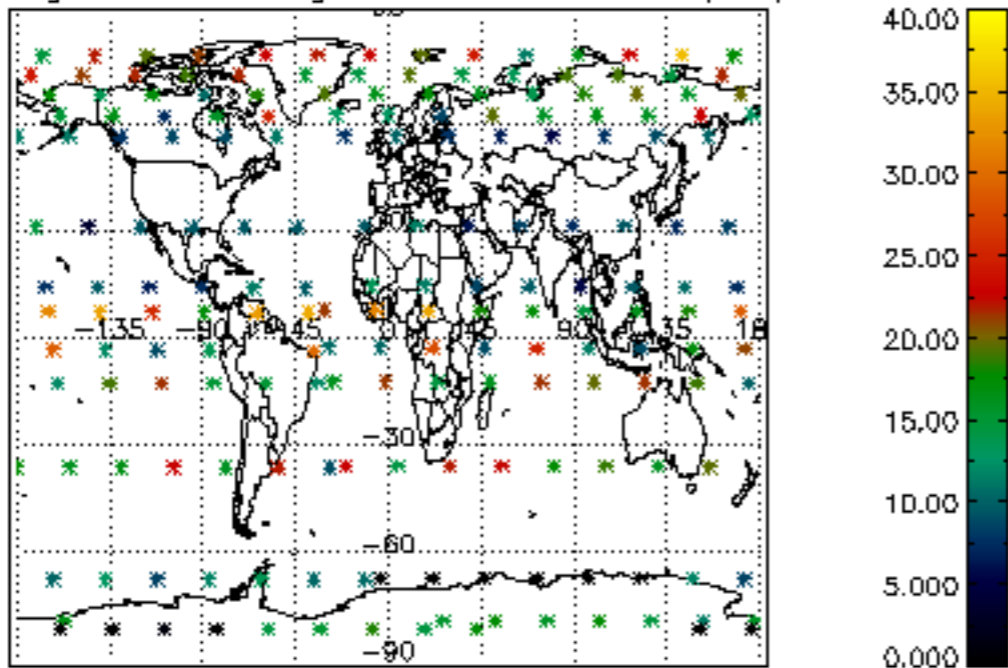
Percentage of cosmic ray hits per profile



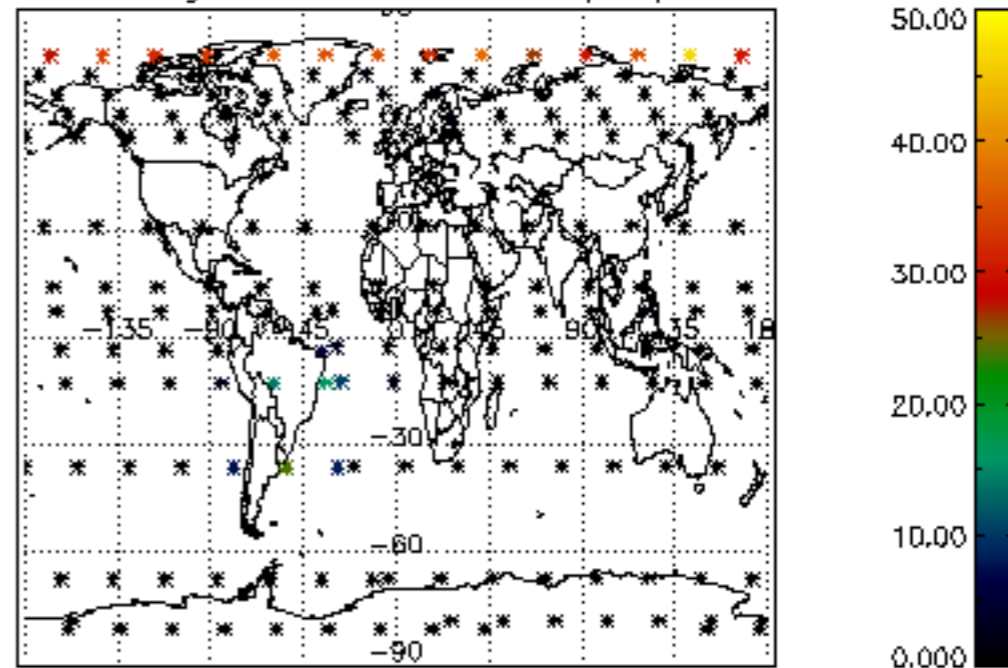
Percentage of datation errors per profile



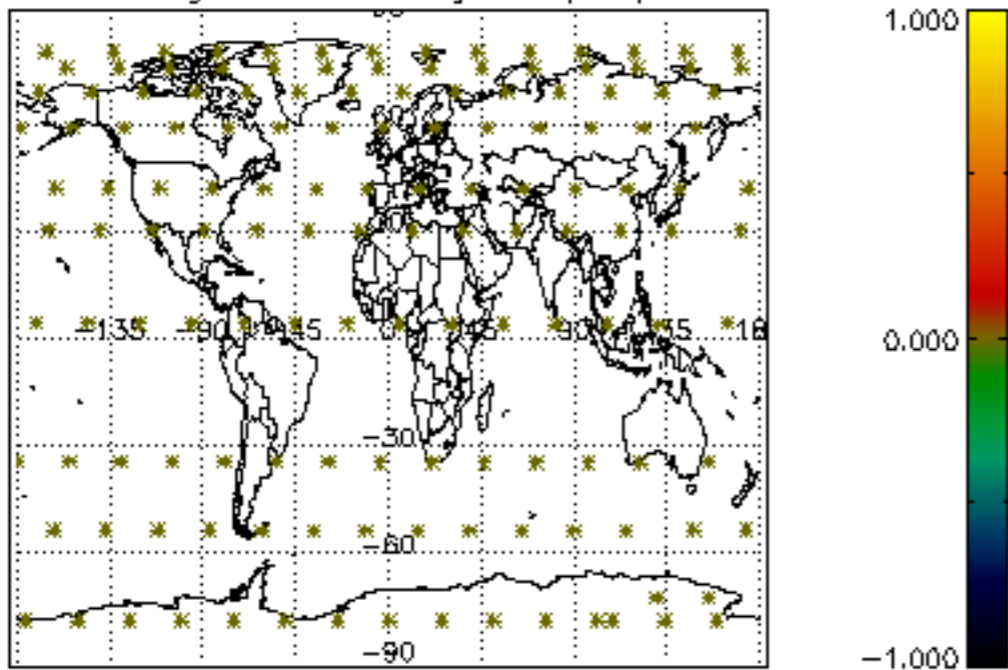
Percentage of star falling outside central band per profile



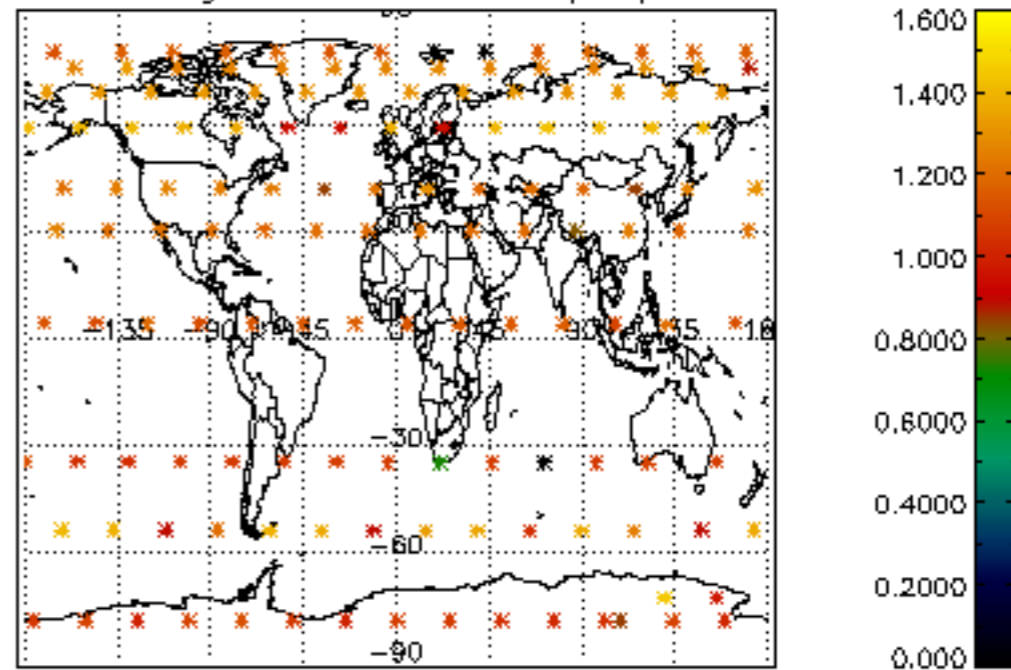
Percentage of saturation errors per profile



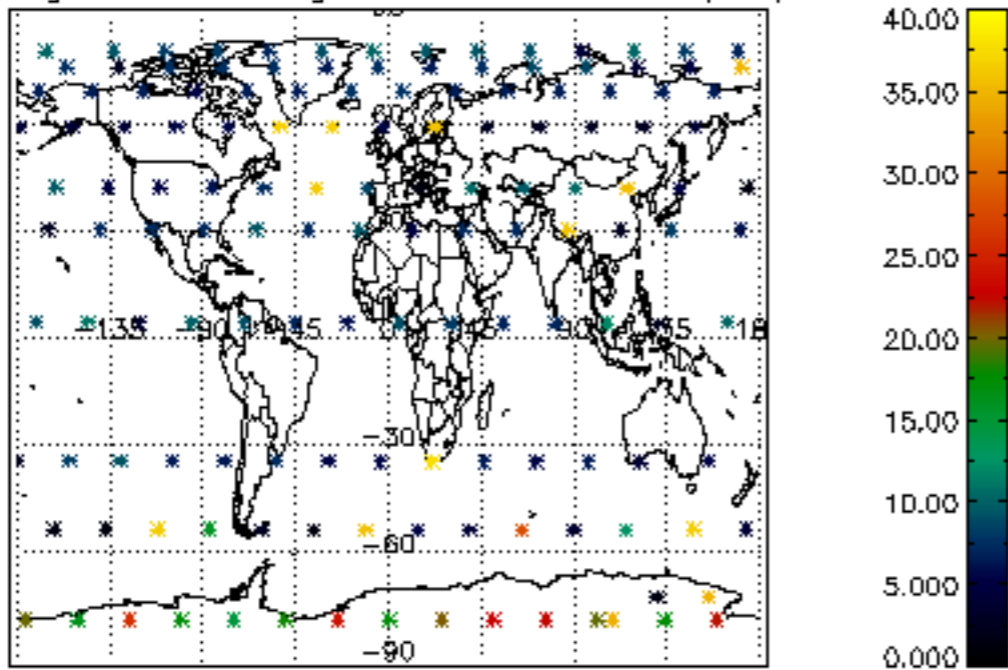
Percentage of cosmic ray hits per profile



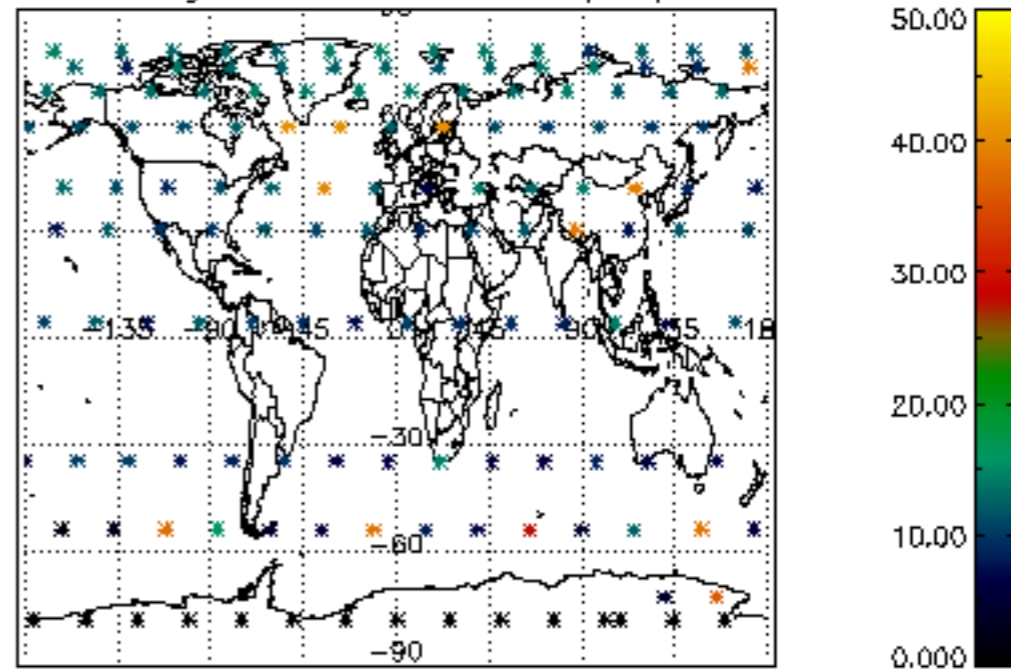
Percentage of datation errors per profile

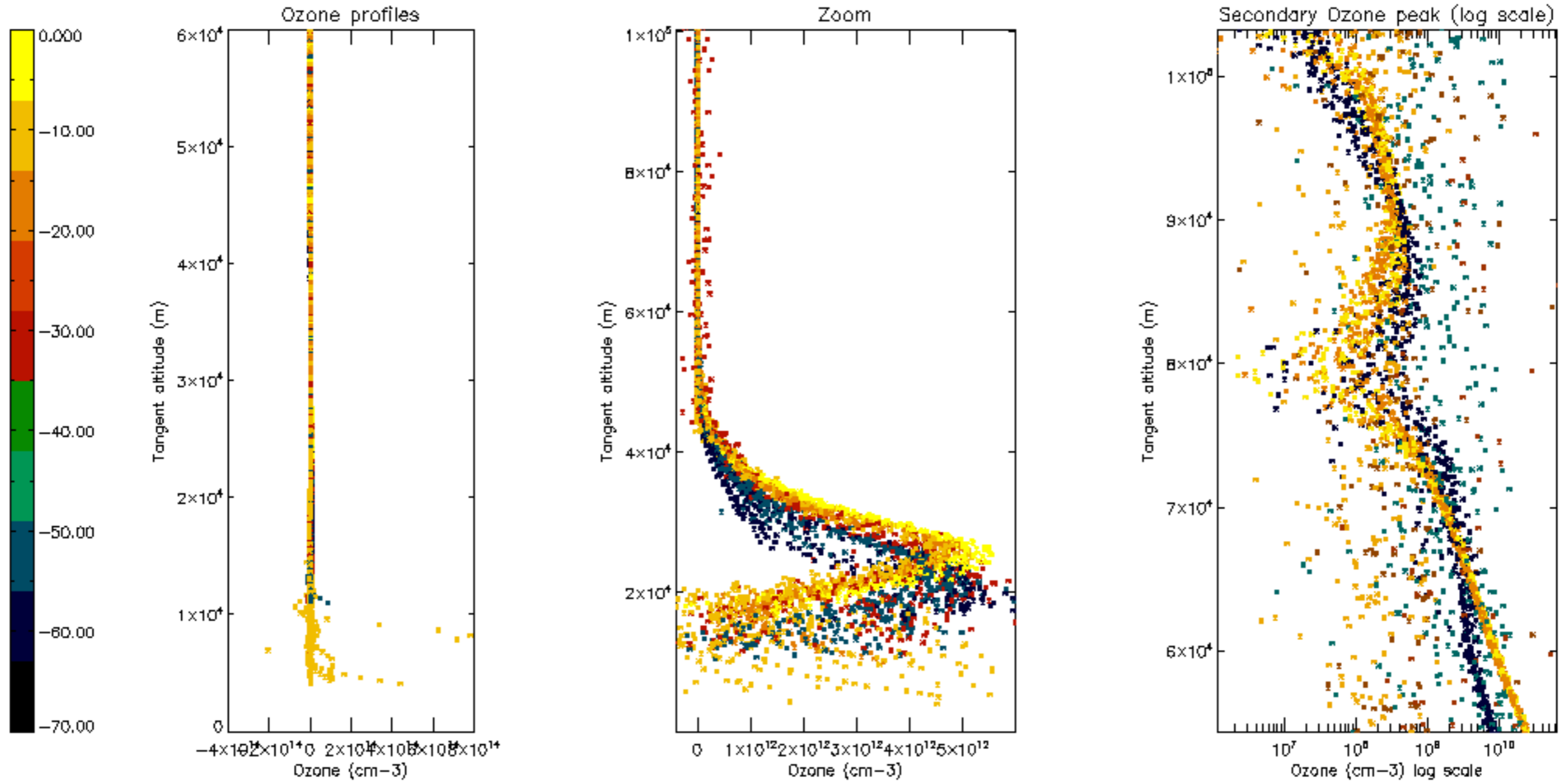


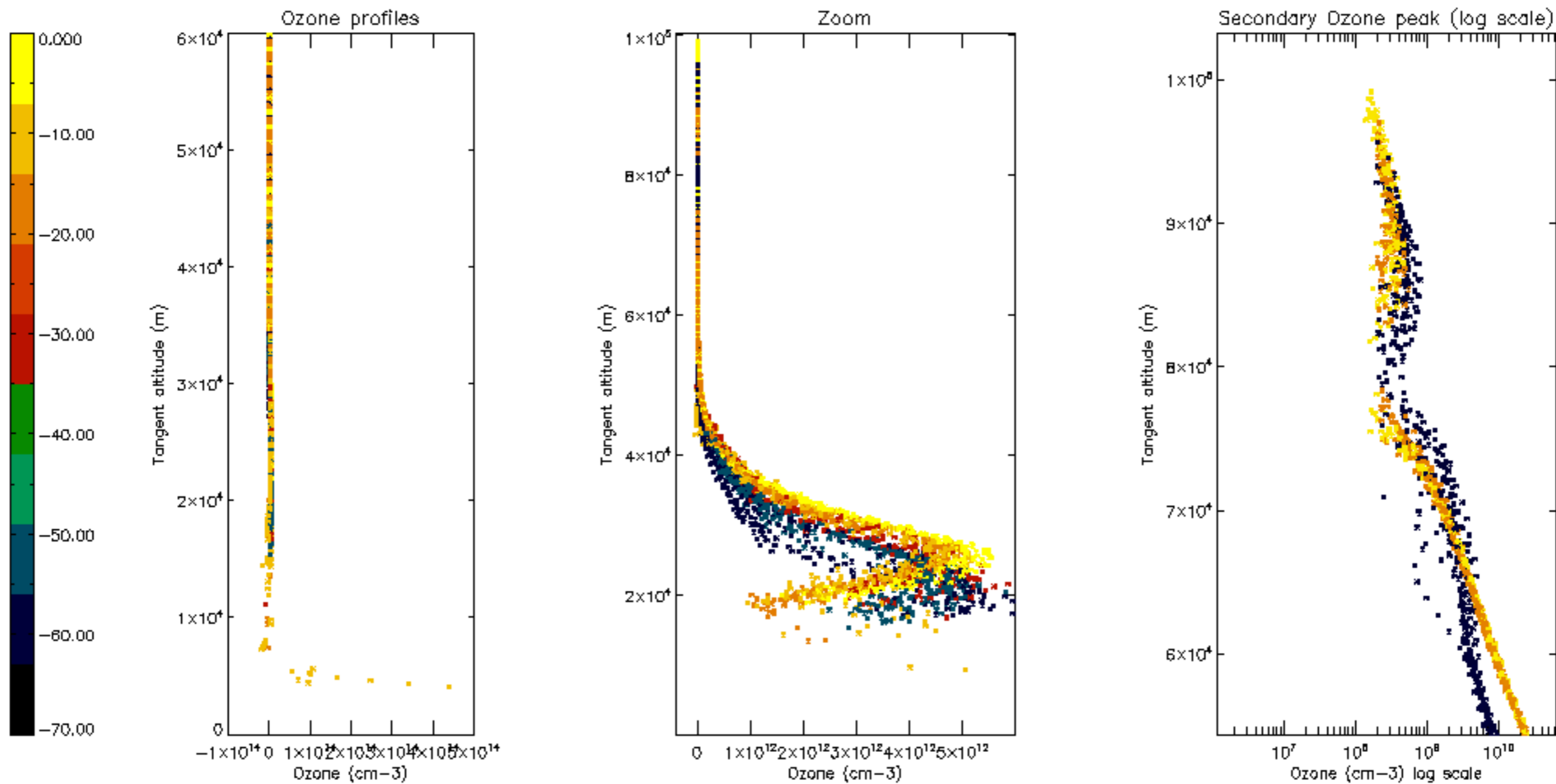
Percentage of star falling outside central band per profile

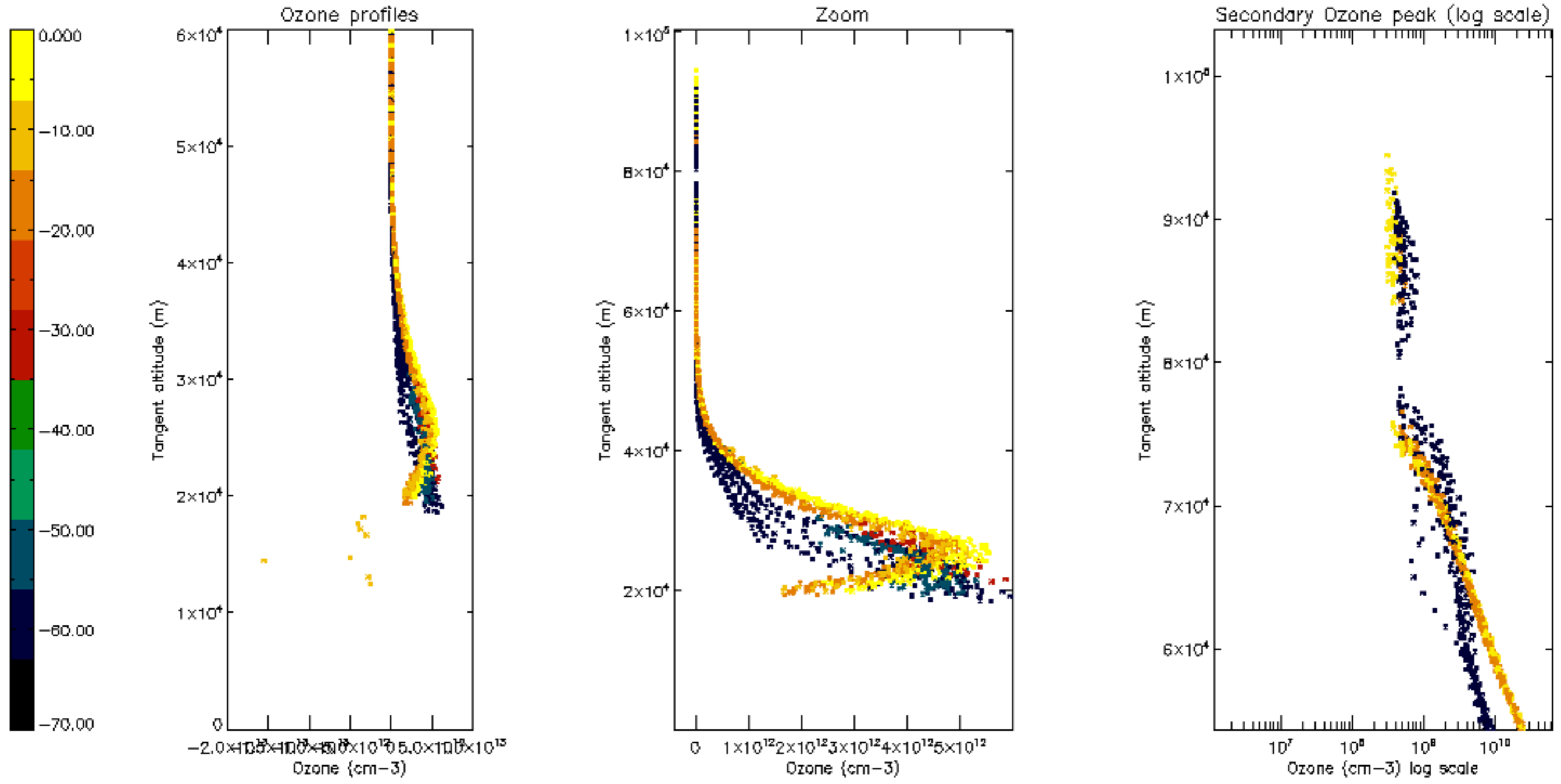


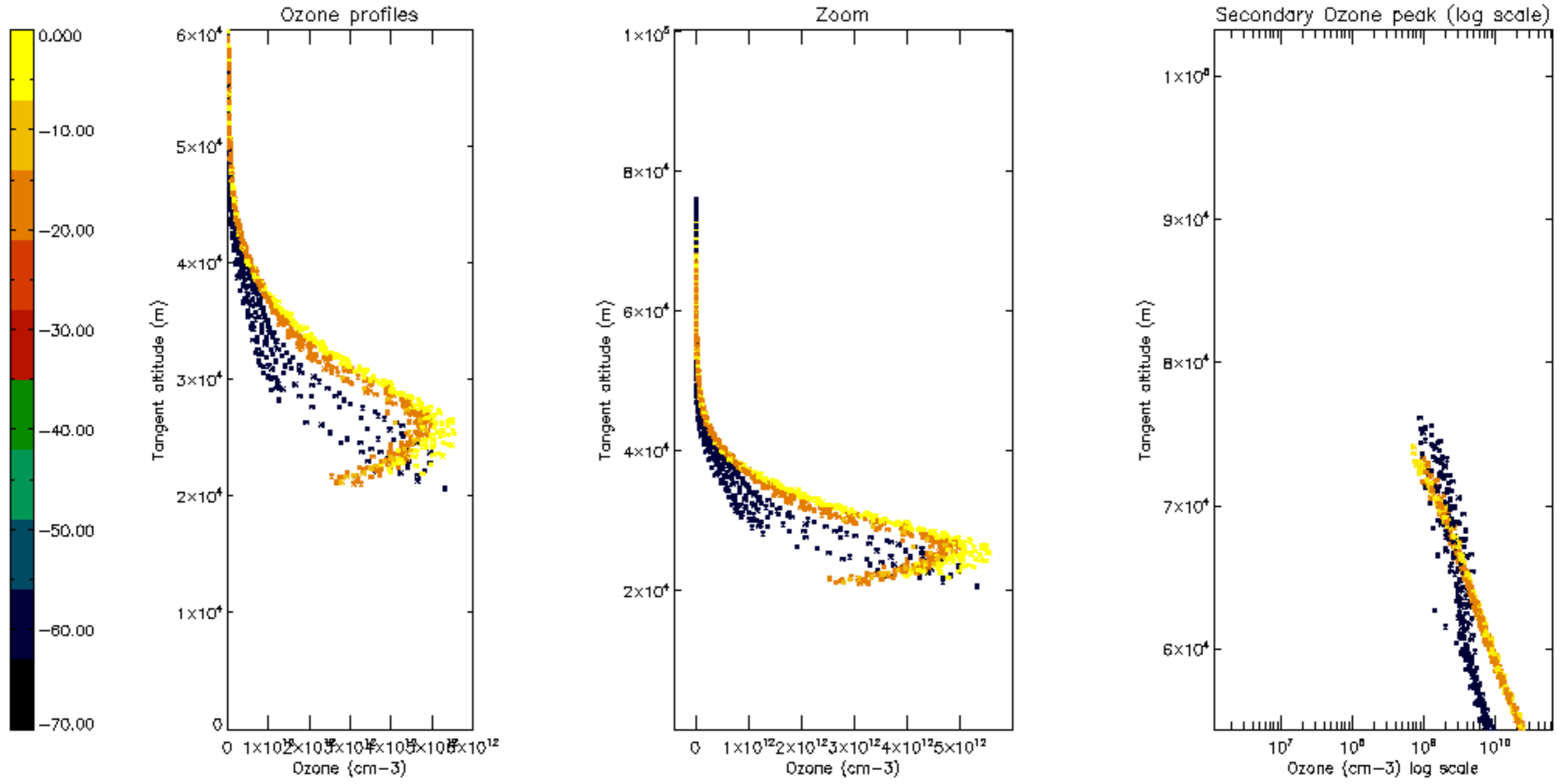
Percentage of saturation errors per profile

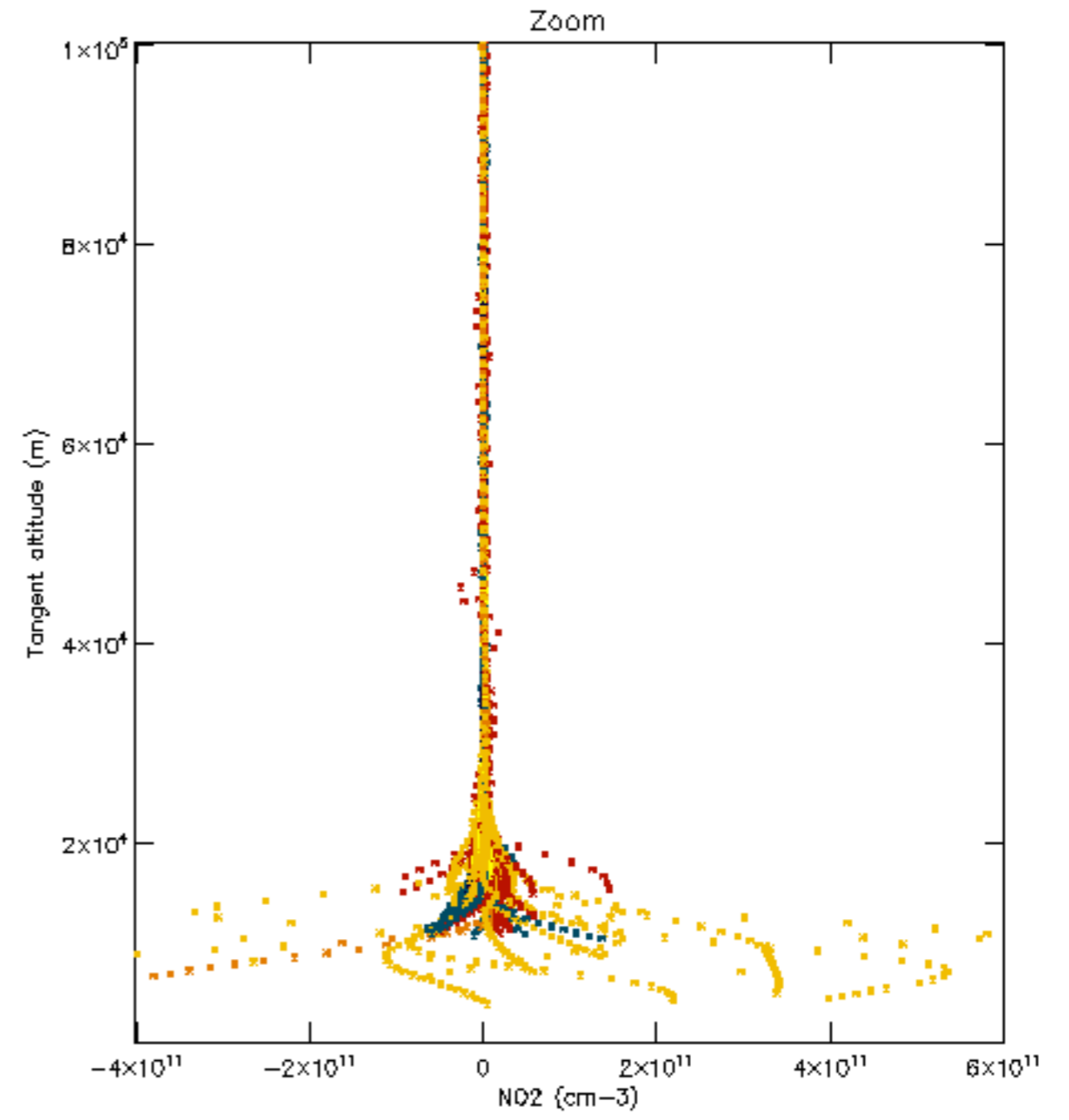
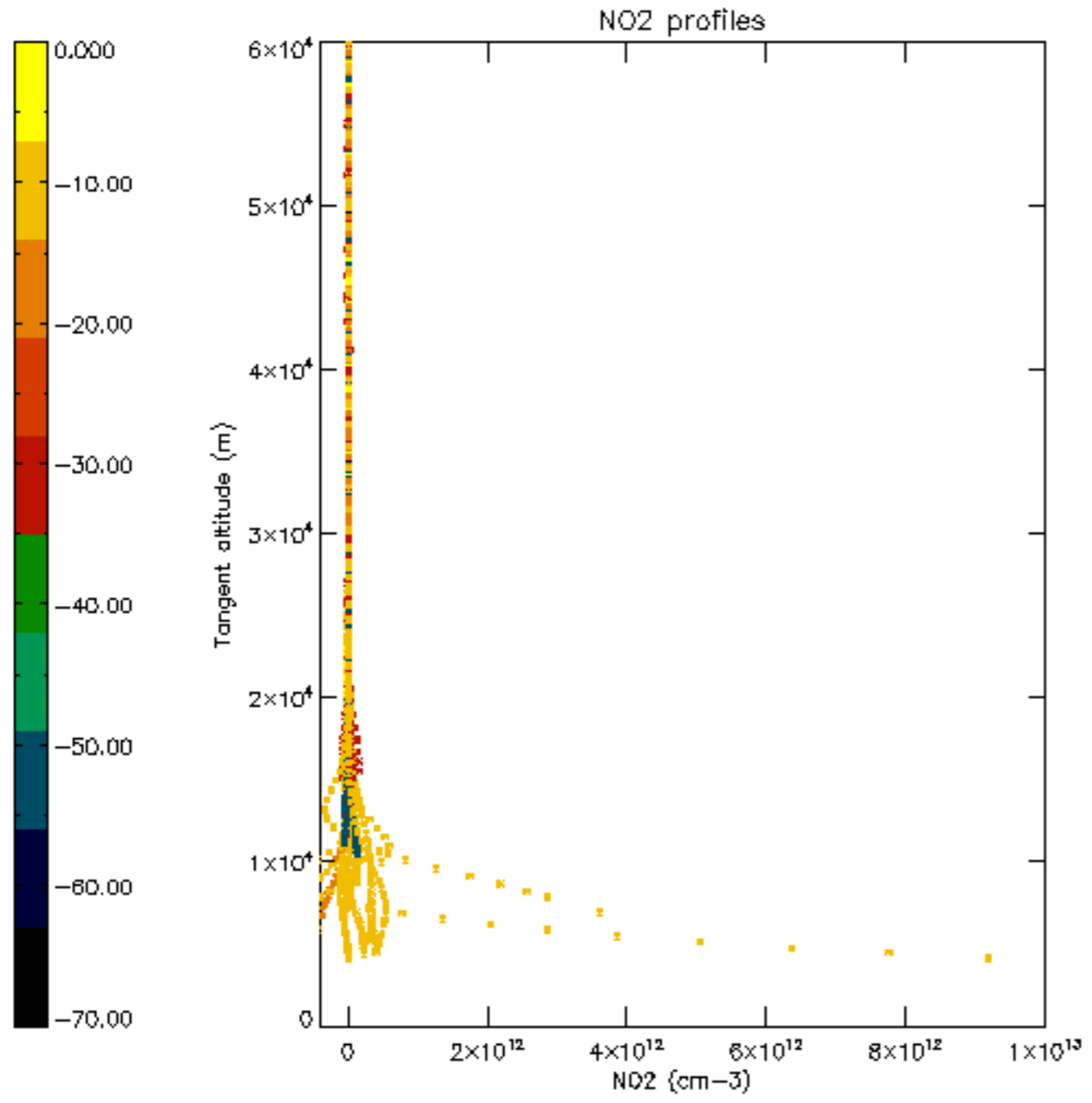


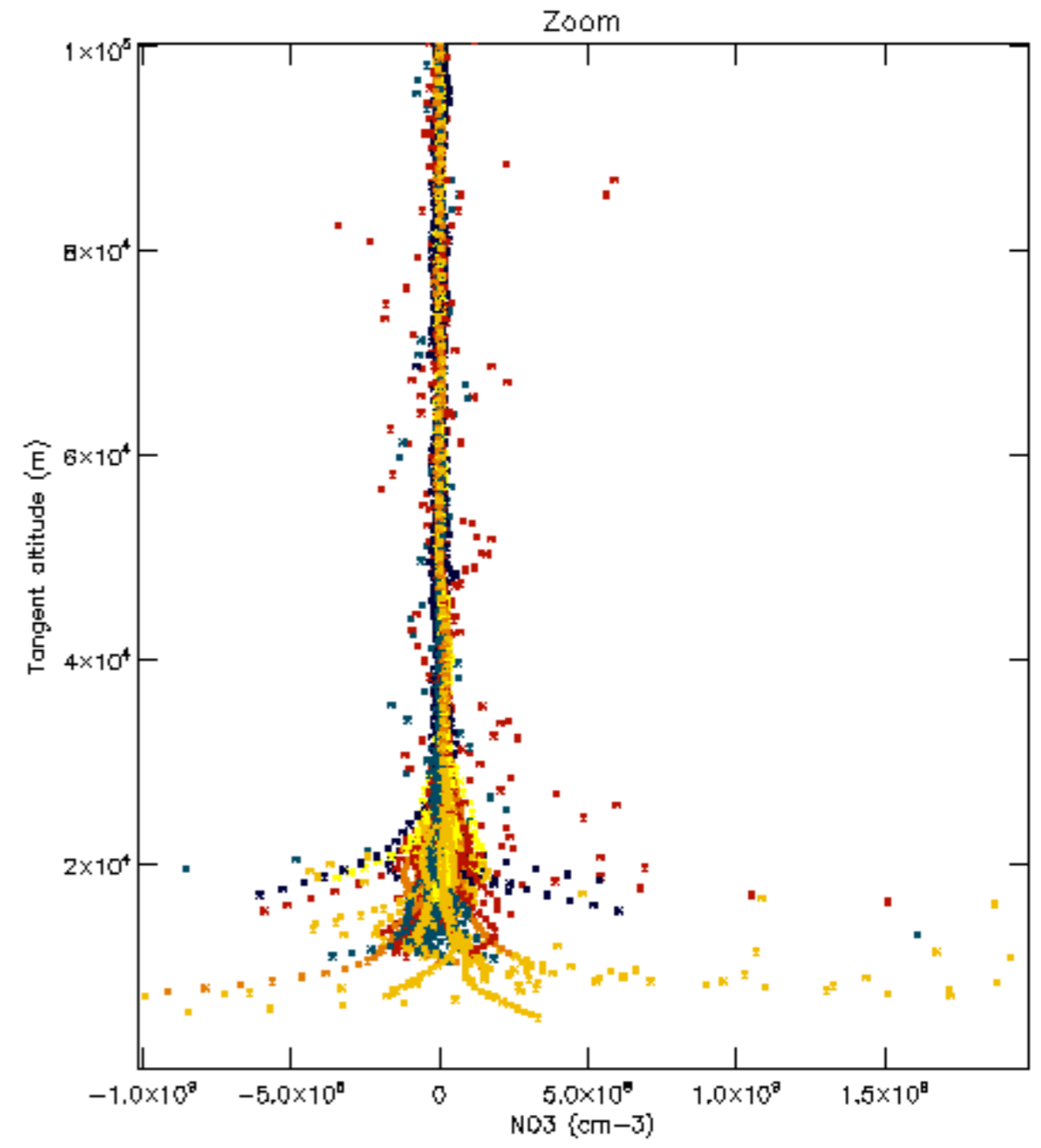
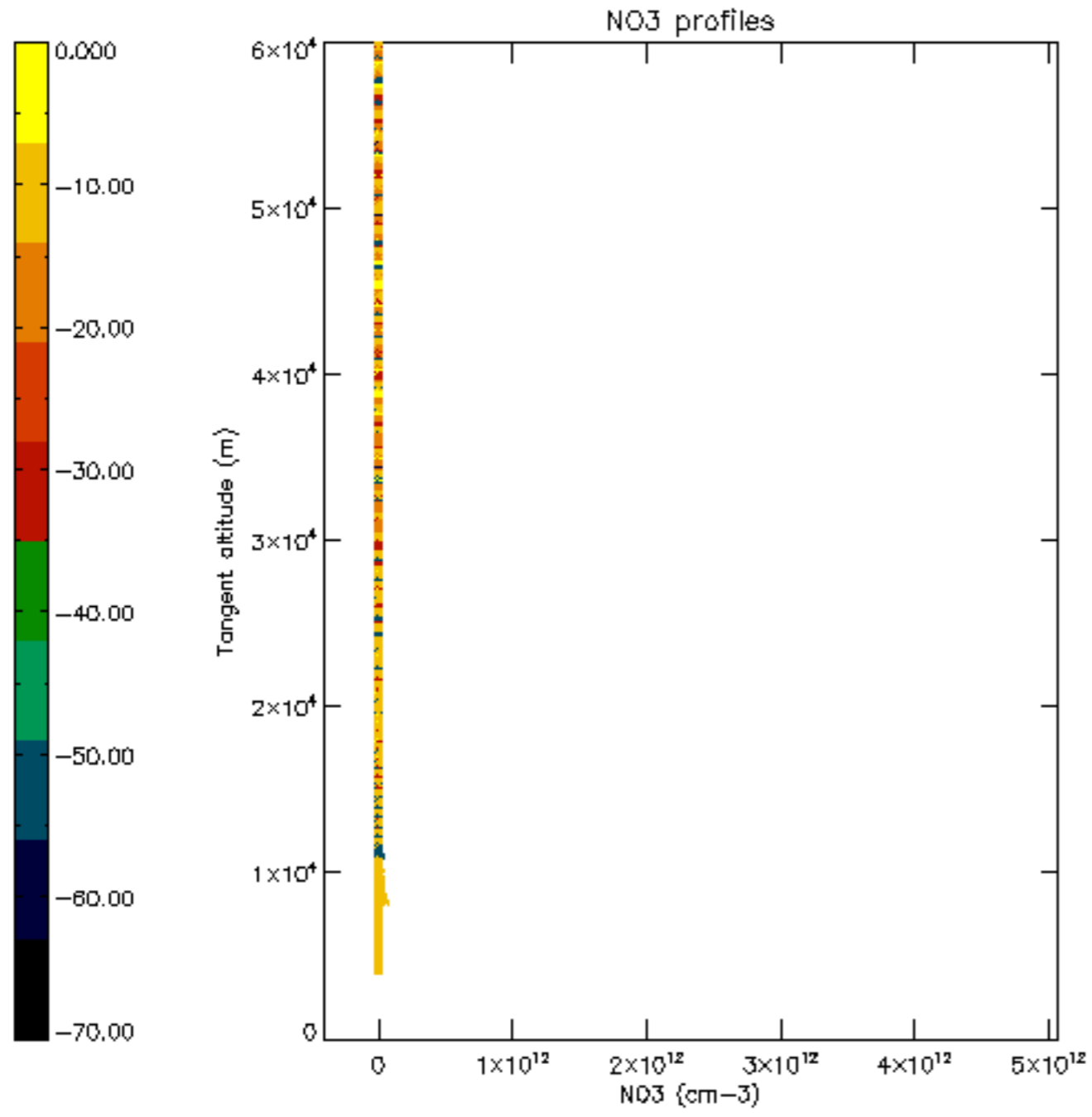


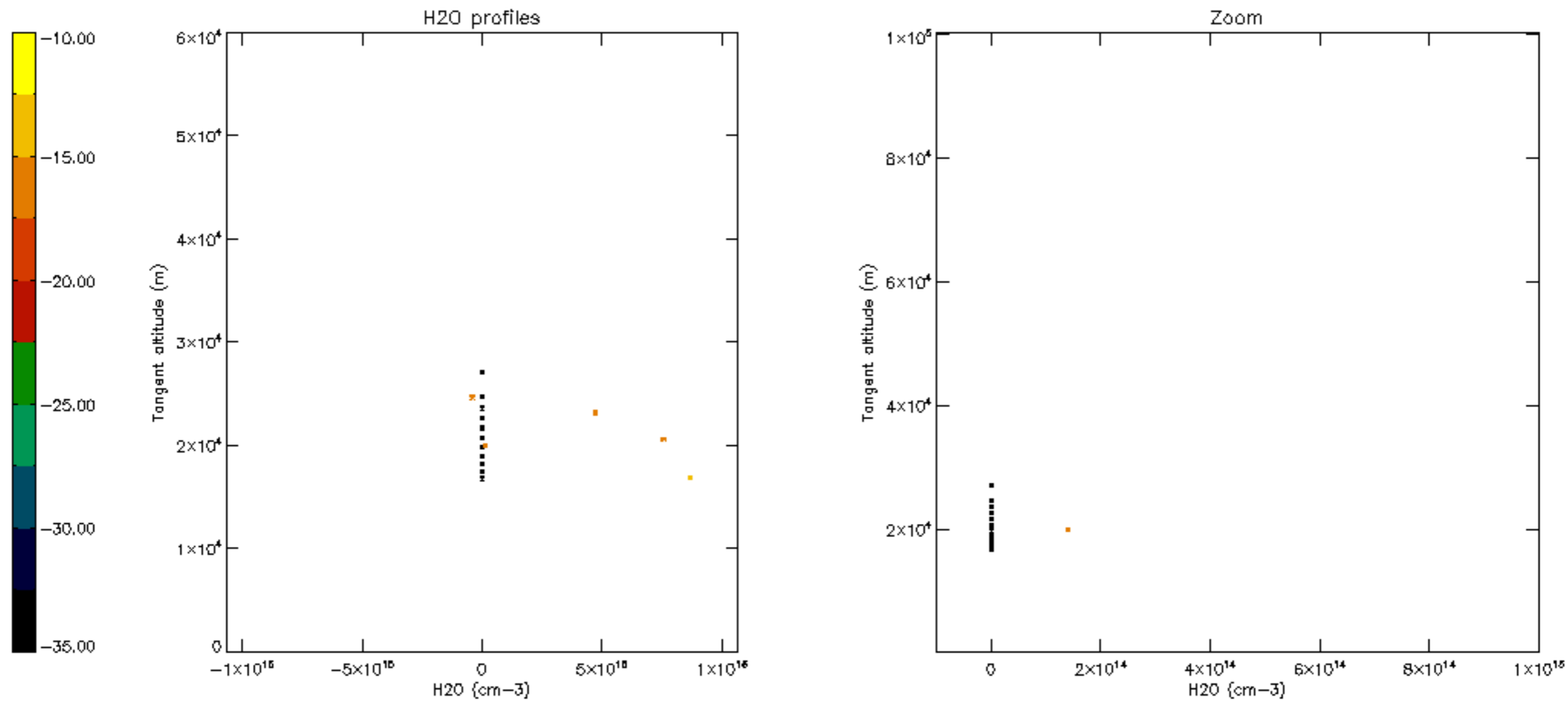


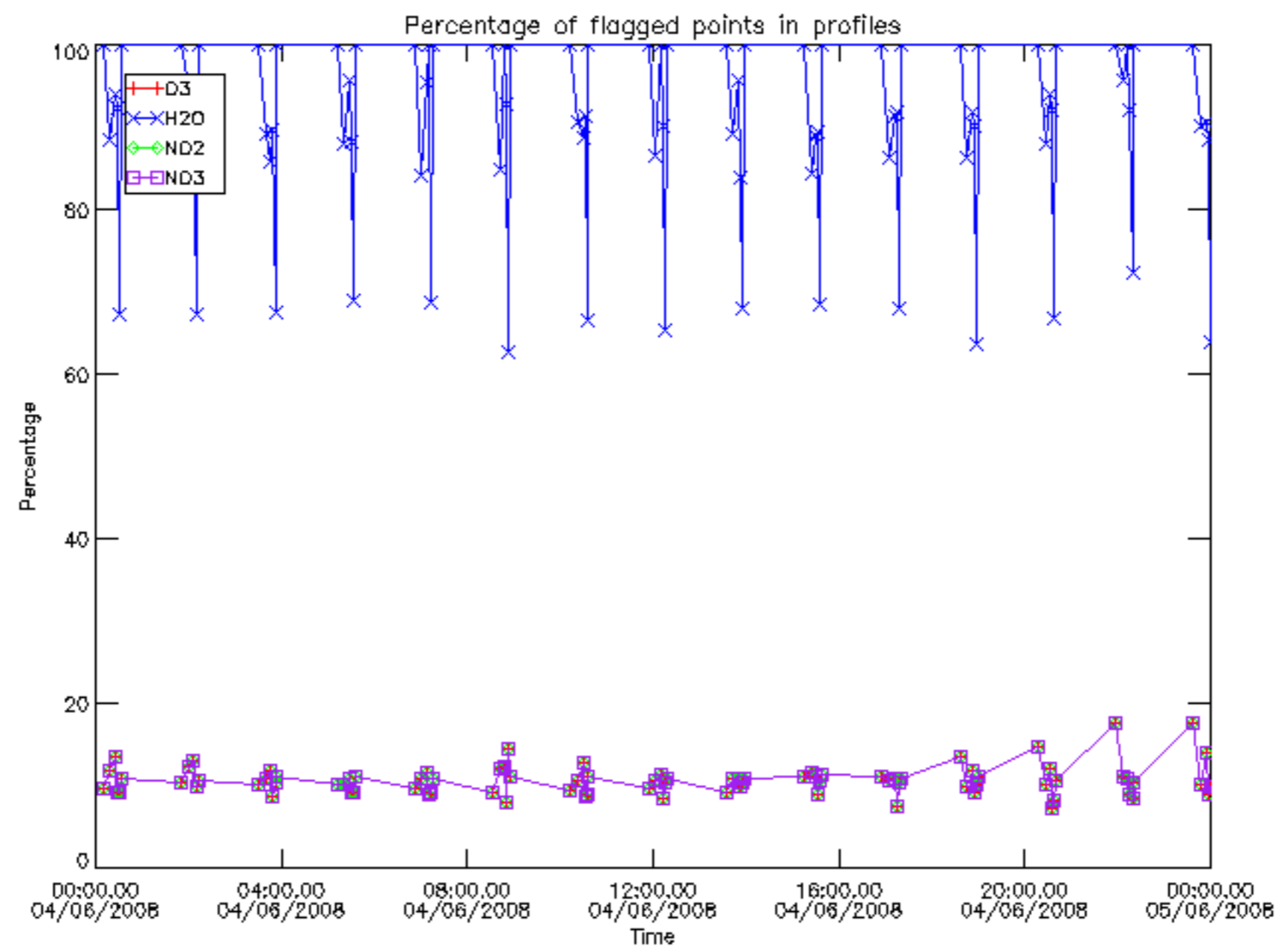




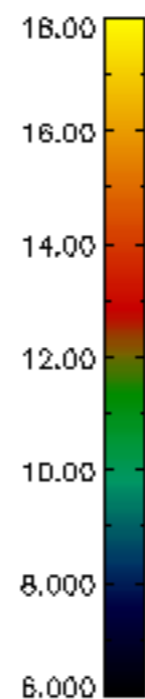
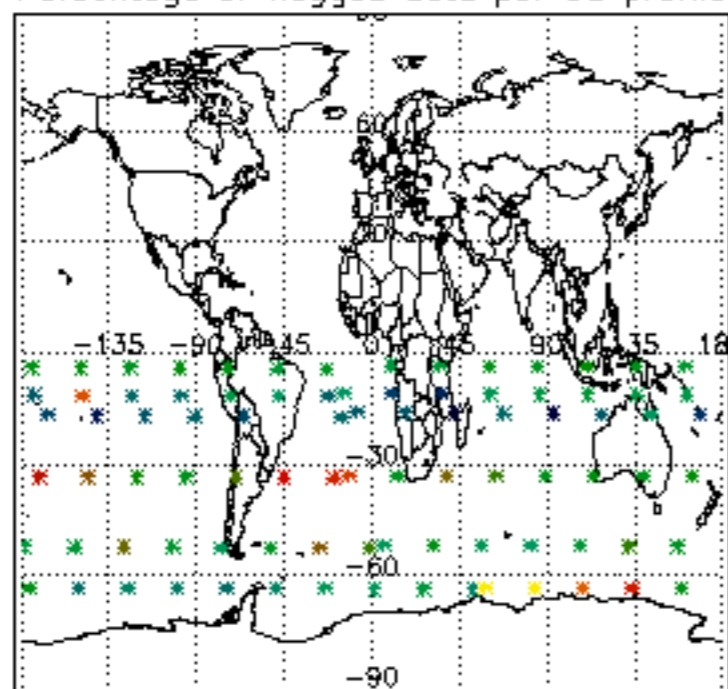




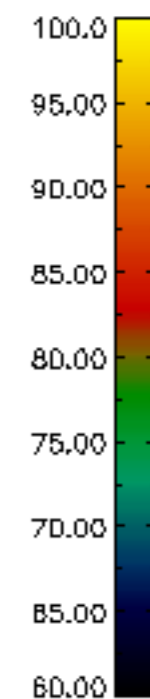
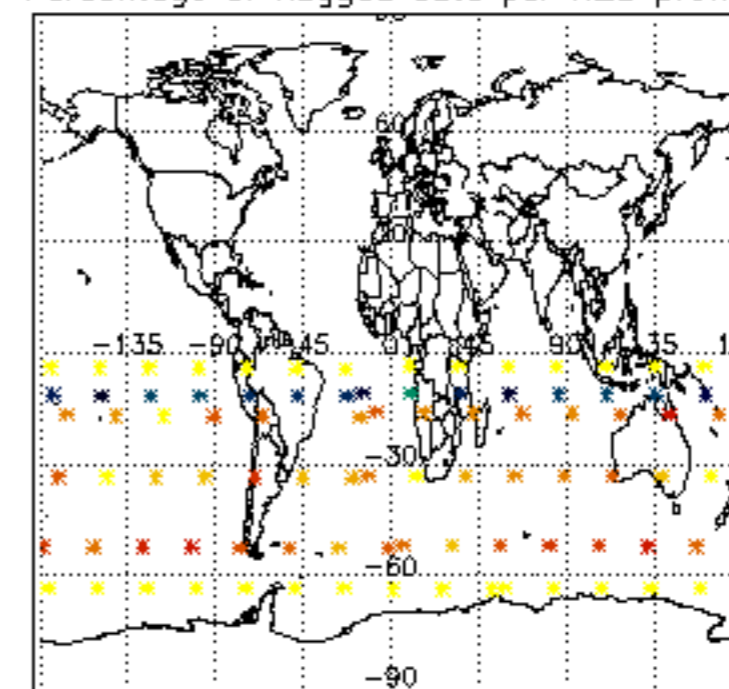




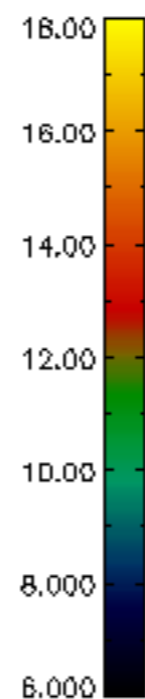
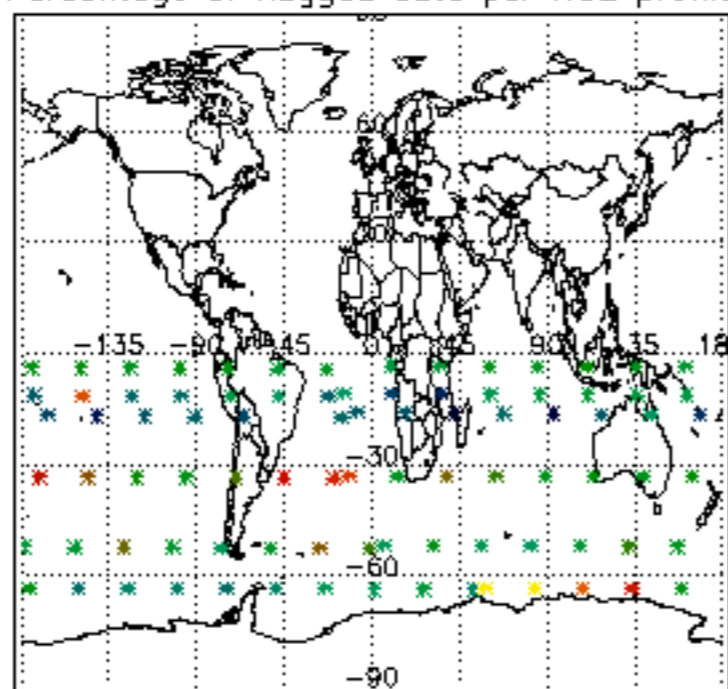
Percentage of flagged data per D3 profile



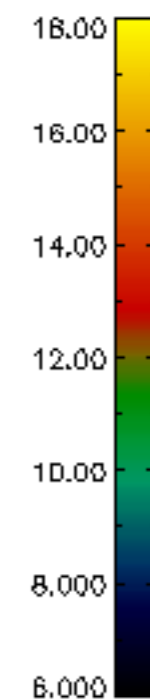
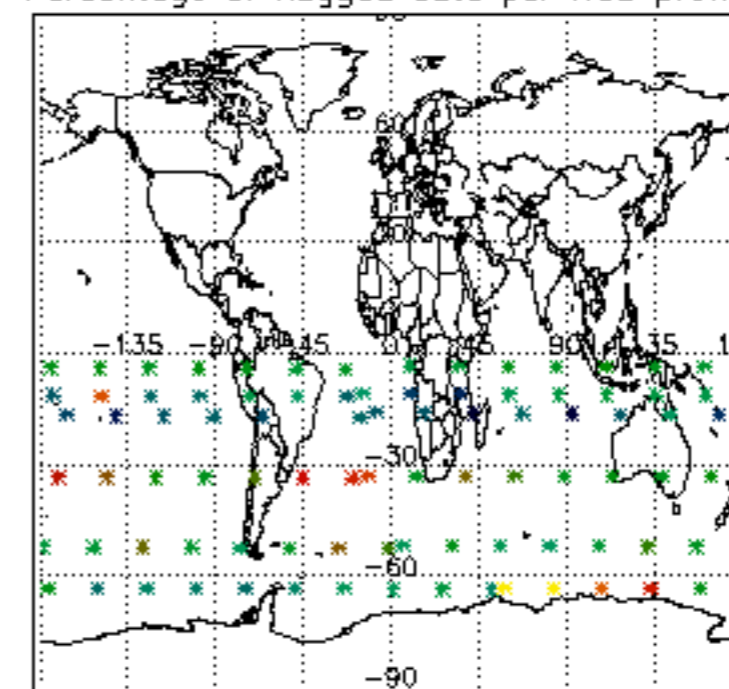
Percentage of flagged data per H2O profile

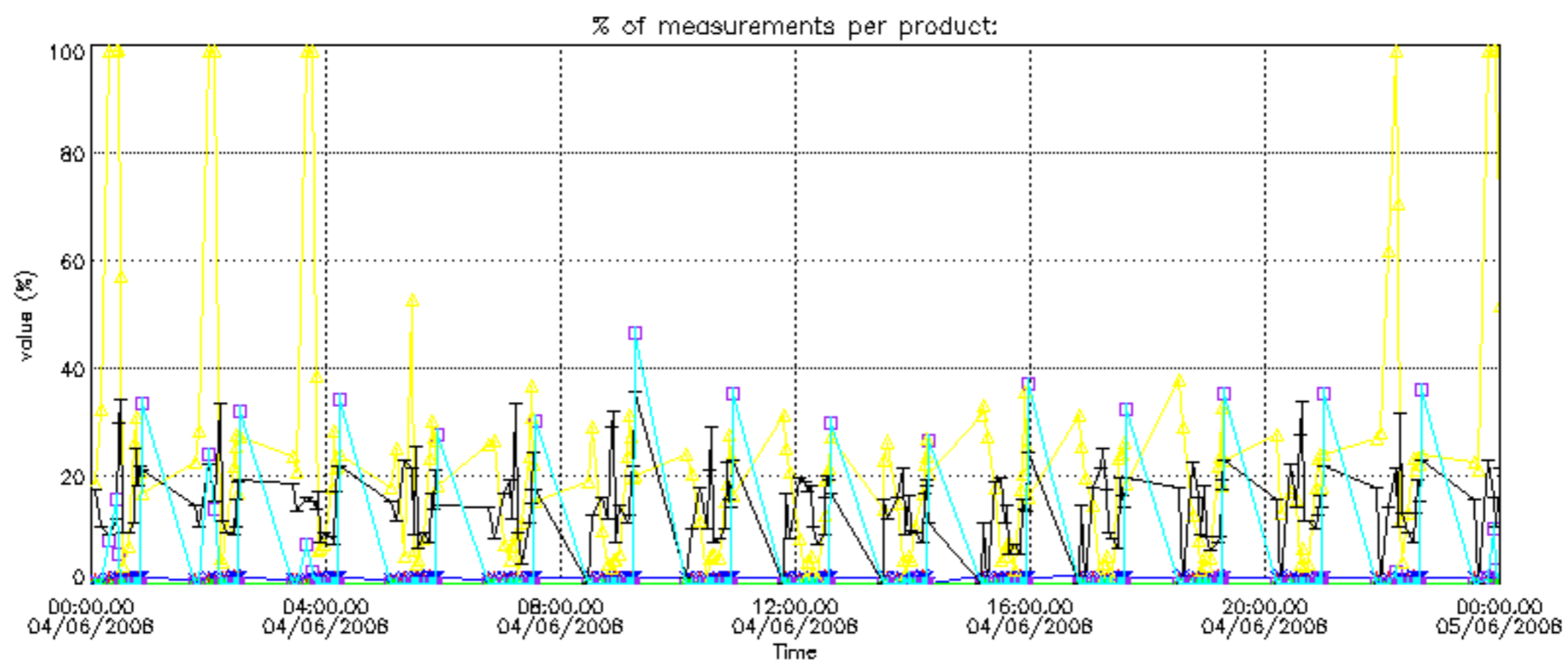
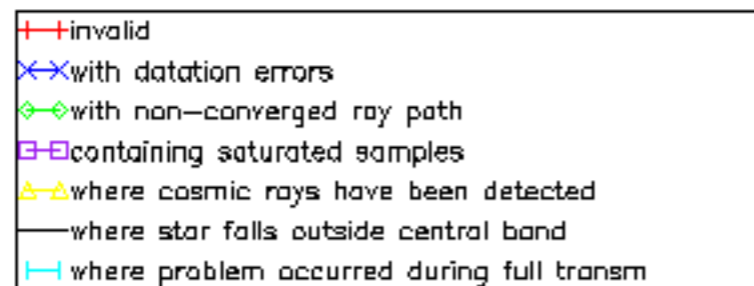


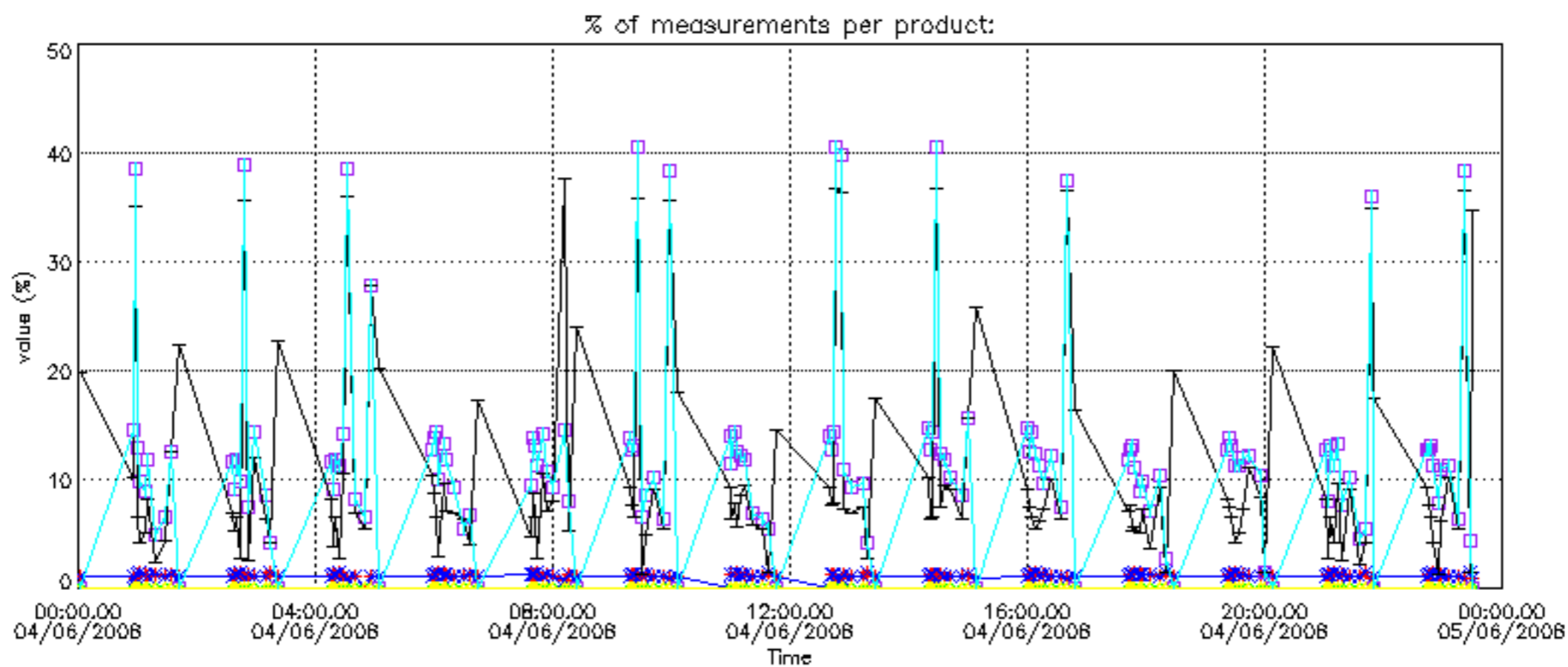
Percentage of flagged data per NO2 profile



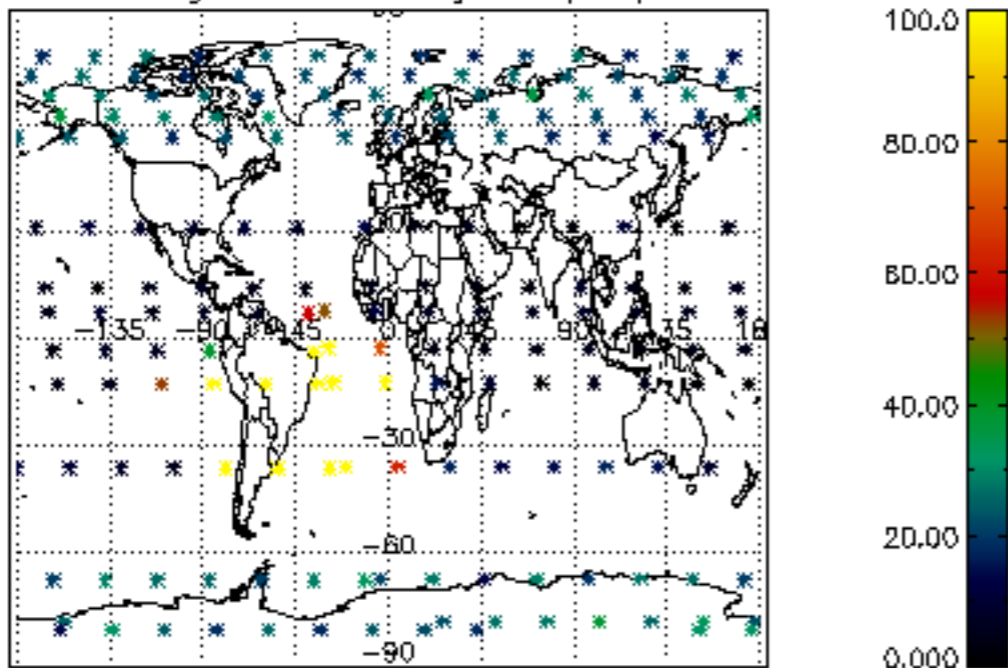
Percentage of flagged data per NO3 profile



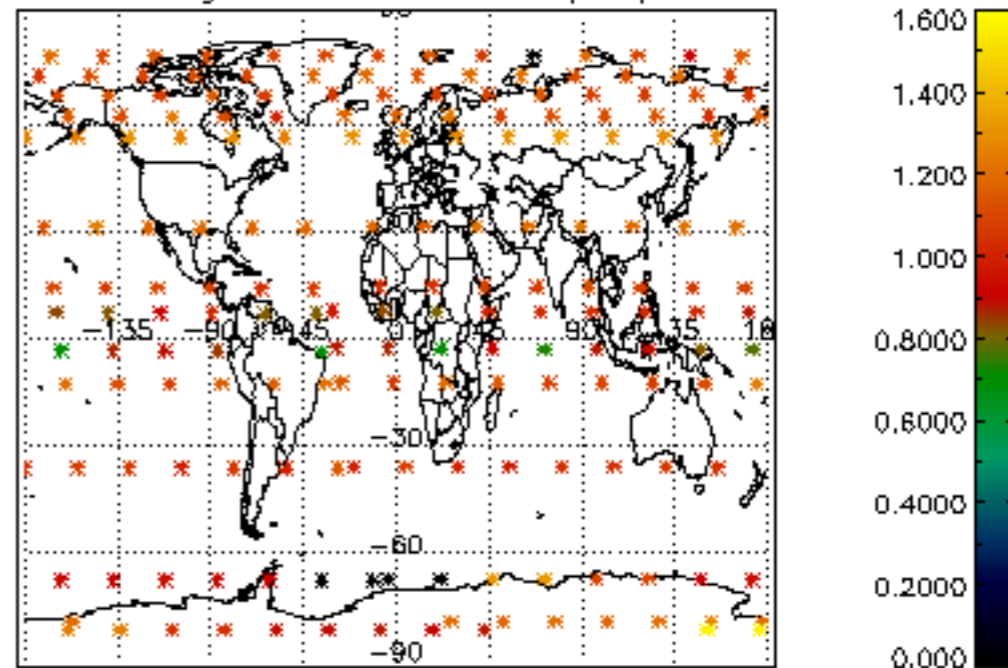




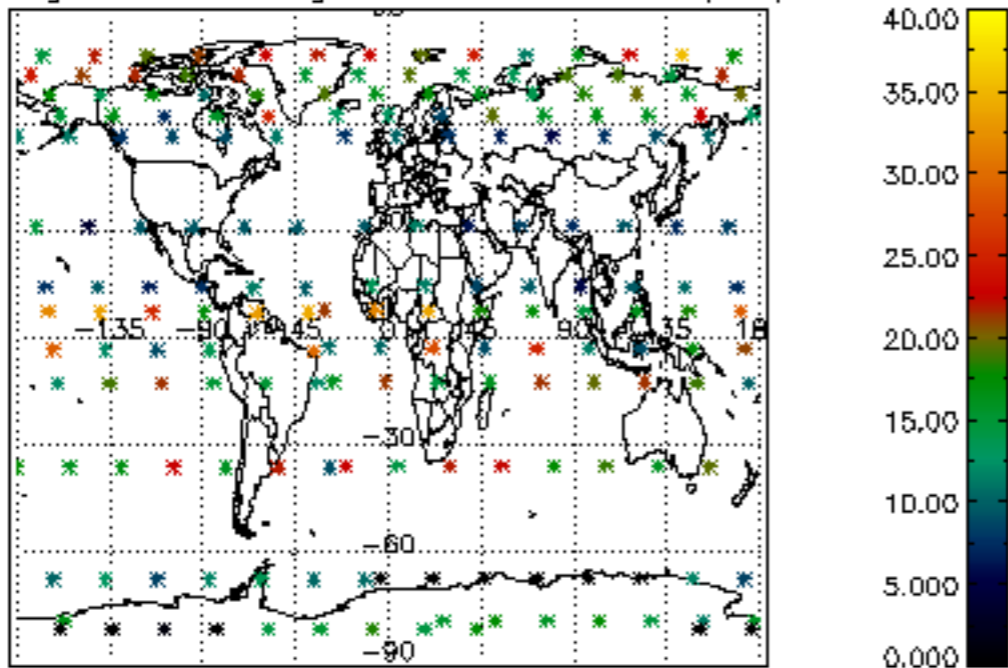
Percentage of cosmic ray hits per profile



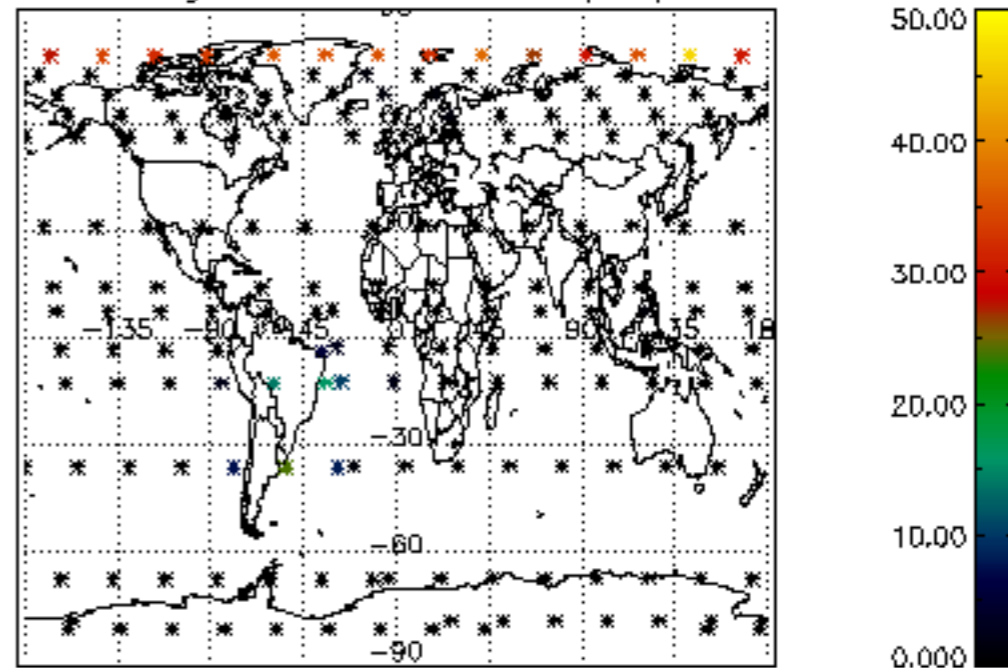
Percentage of datation errors per profile



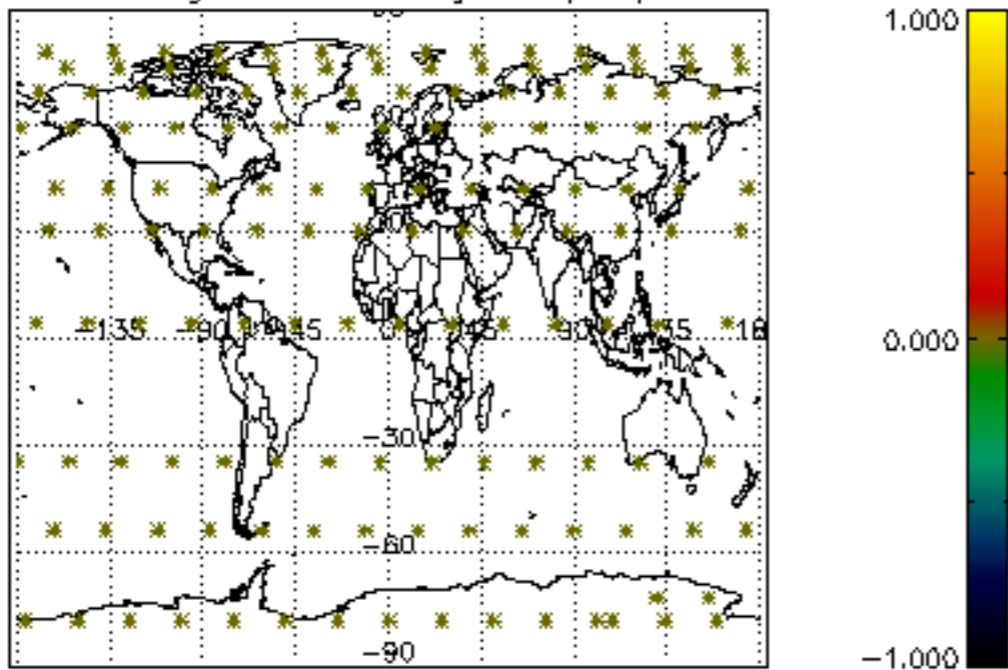
Percentage of star falling outside central band per profile



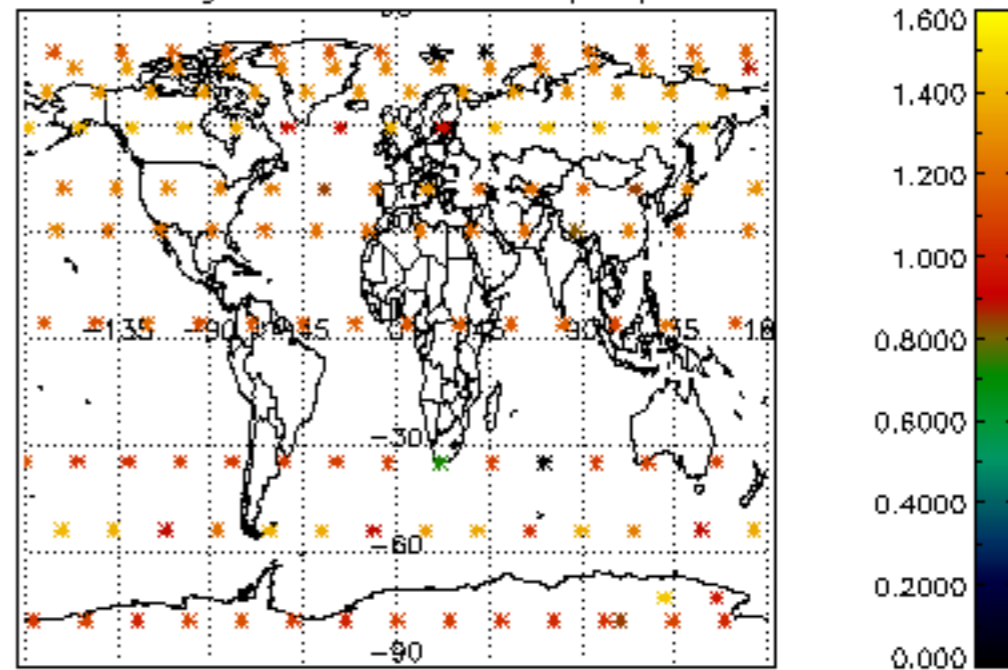
Percentage of saturation errors per profile



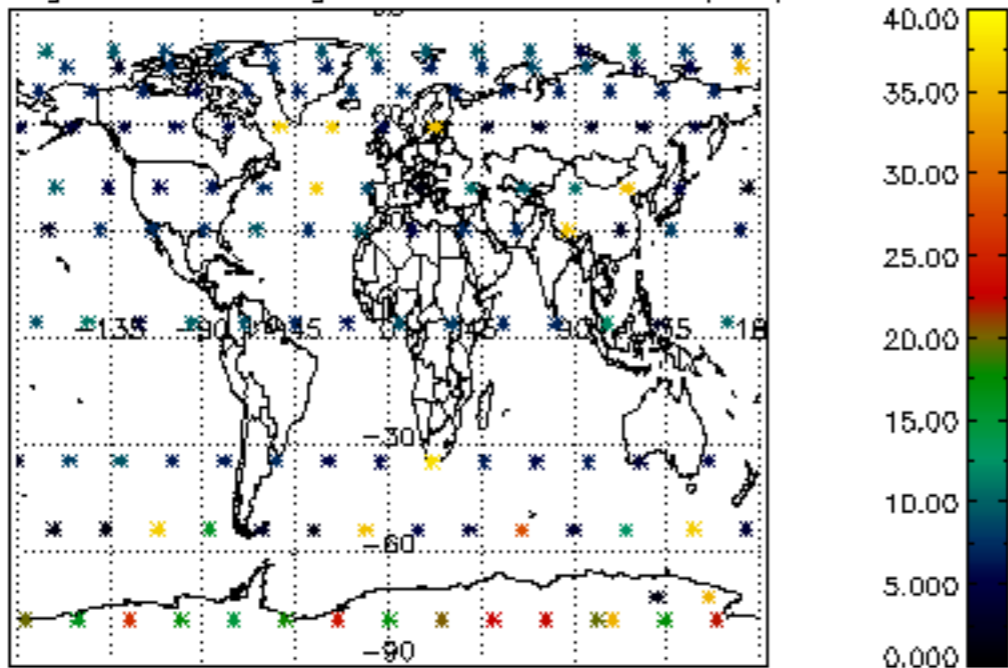
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

