

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	26APR2013 17:22:24
Data source version	GOMOS/6.01
Start time of products	13-02-2010 (13FEB2010 00:00:00)
Stop time of products	14-02-2010 (14FEB2010 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	192
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

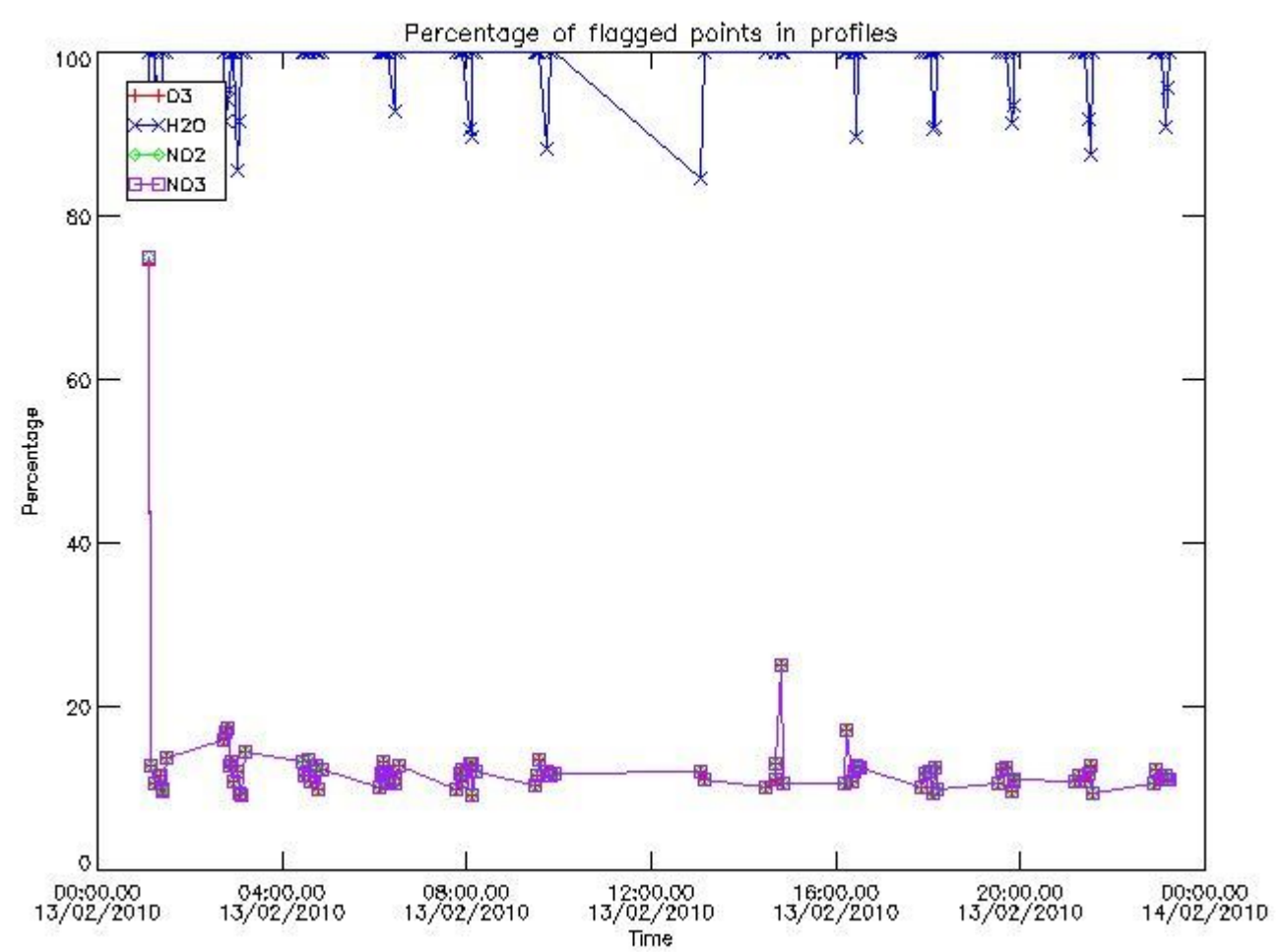
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20100213_000311_000000512086_00460_41596_4875.N1	13-FEB-2010 00:03:11	Straylight	51.000	48	30Alp Hya	1.9770	4100.0	102	41596	No
2	GOM_NL__2PRFIN20100213_001357_000000402086_00460_41596_4876.N1	13-FEB-2010 00:13:57	Bright	40.000	17	78Bet Gem	1.1610	4500.0	80	41596	No
3	GOM_NL__2PRFIN20100213_003122_000000392086_00460_41596_4877.N1	13-FEB-2010 00:31:22	Bright	38.500	49	1Alp UMi	1.9900	6300.0	77	41596	No
4	GOM_NL__2PRFIN20100213_003339_000000422086_00460_41596_4878.N1	13-FEB-2010 00:33:39	Bright	42.000	60	7Bet UMi	2.0810	3950.0	84	41596	No
5	GOM_NL__2PRFIN20100213_003830_000000362086_00460_41596_4879.N1	13-FEB-2010 00:38:30	Bright	36.000	119	14Eta Dra	2.7270	4700.0	72	41596	No
6	GOM_NL__2PRFIN20100213_004210_000000402086_00460_41596_4880.N1	13-FEB-2010 00:42:10	Bright	40.000	130	23Bet Dra	2.7990	5800.0	80	41596	No
7	GOM_NL__2PRFIN20100213_004400_000000452086_00460_41596_4881.N1	13-FEB-2010 00:44:00	Bright	45.000	144	18Del Cyg	2.8600	11000.	90	41596	No
8	GOM_NL__2PRFIN20100213_004617_000000352086_00460_41596_4882.N1	13-FEB-2010 00:46:17	Bright	34.500	5	3Alp Lyr	0.033000	11000.	69	41596	No
9	GOM_NL__2PRFIN20100213_005308_000000342086_00460_41596_4883.N1	13-FEB-2010 00:53:08	Bright	33.500	168	17Zet Aql	2.9860	11000.	67	41596	No
10	GOM_NL__2PRFIN20100213_005510_000000472086_00460_41596_4884.N1	13-FEB-2010 00:55:10	Bright	46.500	59	55Alp Oph	2.0800	8900.0	93	41596	No
11	GOM_NL__2PRFIN20100213_005725_000000472086_00460_41596_4885.N1	13-FEB-2010 00:57:25	Bright	46.500	126	60Bet Oph	2.7700	4250.0	93	41596	No
12	GOM_NL__2PRFIN20100213_010703_000000452086_00460_41596_4886.N1	13-FEB-2010 01:07:03	Dark	44.500	38	20Eps Sgr	1.8360	11000.	89	41596	No
13	GOM_NL__2PRFIN20100213_011023_000000442086_00460_41596_4887.N1	13-FEB-2010 01:10:23	Dark	43.500	40	The Sco	1.8590	7100.0	87	41596	No
14	GOM_NL__2PRFIN20100213_011338_000000492086_00460_41596_4888.N1	13-FEB-2010 01:13:38	Dark	48.500	141	Bet Ara	2.8400	4600.0	97	41596	No
15	GOM_NL__2PRFIN20100213_011528_000000492086_00461_41597_4877.N1	13-FEB-2010 01:15:28	Dark	48.500	131	Gam Lup	2.8000	26000.	97	41597	No
16	GOM_NL__2PRFIN20100213_012059_000000452086_00461_41597_4878.N1	13-FEB-2010 01:20:59	Dark	44.500	10	Bet Cen	0.61000	28000.	89	41597	No
17	GOM_NL__2PRFIN20100213_012408_000000532086_00461_41597_4879.N1	13-FEB-2010 01:24:08	Dark	53.000	12	Alp1Cru	0.77500	30000.	106	41597	No
18	GOM_NL__2PRFIN20100213_012537_000000522086_00461_41597_4880.N1	13-FEB-2010 01:25:37	Dark	51.500	64	Gam Cen	2.2000	10600.	103	41597	No
19	GOM_NL__2PRFIN20100213_013022_000000372086_00461_41597_4881.N1	13-FEB-2010 01:30:22	Dark	37.000	91	Kap Vel	2.4900	26000.	74	41597	No
20	GOM_NL__2PRFIN20100213_013341_000000532086_00461_41597_4882.N1	13-FEB-2010 01:33:41	Straylight	53.000	65	Lam Vel	2.2040	4400.0	106	41597	No
21	GOM_NL__2PRFIN20100213_014347_000000532086_00461_41597_4883.N1	13-FEB-2010 01:43:47	Straylight	52.500	48	30Alp Hya	1.9770	4100.0	105	41597	No
22	GOM_NL__2PRFIN20100213_015433_000000412086_00461_41597_4884.N1	13-FEB-2010 01:54:33	Bright	40.500	17	78Bet Gem	1.1610	4500.0	81	41597	No
23	GOM_NL__2PRFIN20100213_021158_000000332086_00461_41597_4885.N1	13-FEB-2010 02:11:58	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	41597	No
24	GOM_NL__2PRFIN20100213_021414_000000392086_00461_41597_4886.N1	13-FEB-2010 02:14:14	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	41597	No
25	GOM_NL__2PRFIN20100213_021906_000000362086_00461_41597_4887.N1	13-FEB-2010 02:19:06	Bright	36.000	119	14Eta Dra	2.7270	4700.0	72	41597	No
26	GOM_NL__2PRFIN20100213_022246_000000422086_00461_41597_4888.N1	13-FEB-2010 02:22:46	Bright	42.000	130	23Bet Dra	2.7990	5800.0	84	41597	No
27	GOM_NL__2PRFIN20100213_022436_000000332086_00461_41597_4889.N1	13-FEB-2010 02:24:36	Bright	33.000	144	18Del Cyg	2.8600	11000.	66	41597	No
28	GOM_NL__2PRFIN20100213_022653_000000382086_00461_41597_4890.N1	13-FEB-2010 02:26:53	Bright	38.000	5	3Alp Lyr	0.033000	11000.	76	41597	No
29	GOM_NL__2PRFIN20100213_023344_000000352086_00461_41597_4891.N1	13-FEB-2010 02:33:44	Bright	34.500	168	17Zet Aql	2.9860	11000.	69	41597	No
30	GOM_NL__2PRFIN20100213_023546_000000492086_00461_41597_4892.N1	13-FEB-2010 02:35:46	Bright	48.500	59	55Alp Oph	2.0800	8900.0	97	41597	No
31	GOM_NL__2PRFIN20100213_023801_000000472086_00461_41597_4893.N1	13-FEB-2010 02:38:01	Bright	47.000	126	60Bet Oph	2.7700	4250.0	94	41597	No
32	GOM_NL__2PRFIN20100213_024511_000000482086_00461_41597_4894.N1	13-FEB-2010 02:45:11	Dark	48.000	86	35Eta Oph	2.4300	10200.	96	41597	No
33	GOM_NL__2PRFIN20100213_024739_000000422086_00461_41597_4895.N1	13-FEB-2010 02:47:39	Dark	42.000	38	20Eps Sgr	1.8360	11000.	84	41597	No
34	GOM_NL__2PRFIN20100213_024941_000000442086_00461_41597_4896.N1	13-FEB-2010 02:49:41	Dark	44.000	25	35Lam Sco	1.6200	28000.	88	41597	No
35	GOM_NL__2PRFIN20100213_025059_000000442086_00461_41597_4897.N1	13-FEB-2010 02:50:59	Dark	44.000	40	The Sco	1.8590	7100.0	88	41597	No
36	GOM_NL__2PRFIN20100213_025415_000000392086_00461_41597_4898.N1	13-FEB-2010 02:54:15	Dark	38.500	141	Bet Ara	2.8400	4600.0	77	41597	No
37	GOM_NL__2PRFIN20100213_025605_000000472086_00462_41598_4899.N1	13-FEB-2010 02:56:05	Dark	46.500	131	Gam Lup	2.8000	26000.	93	41598	No
38	GOM_NL__2PRFIN20100213_030136_000000422086_00462_41598_4886.N1	13-FEB-2010 03:01:36	Dark	42.000	10	Bet Cen	0.61000	28000.	84	41598	No
39	GOM_NL__2PRFIN20100213_030444_000000552086_00462_41598_4887.N1	13-FEB-2010 03:04:44	Dark	54.500	12	Alp1Cru	0.77500	30000.	109	41598	No
40	GOM_NL__2PRFIN20100213_030614_000000562086_00462_41598_4888.N1	13-FEB-2010 03:06:14	Dark	55.500	64	Gam Cen	2.2000	10600.	111	41598	No
41	GOM_NL__2PRFIN20100213_031058_000000392086_00462_41598_4889.N1	13-FEB-2010 03:10:58	Dark	39.000	91	Kap Vel	2.4900	26000.	78	41598	No
42	GOM_NL__2PRFIN20100213_031417_000000502086_00462_41598_4890.N1	13-FEB-2010 03:14:17	Straylight	49.500	65	Lam Vel	2.2040	4400.0	99	41598	No

161	GOM_NL__2PRFIN20100213_192405_000000492086_00471_41607_4993.N1	13-FEB-2010 19:24:05	Bright	49.000	126	60Bet Oph	2.7700	4250.0	98	41607	No
162	GOM_NL__2PRFIN20100213_193119_000000482086_00471_41607_4994.N1	13-FEB-2010 19:31:19	Dark	48.000	86	35Eta Oph	2.4300	10200.	96	41607	No
163	GOM_NL__2PRFIN20100213_193545_000000422086_00471_41607_4995.N1	13-FEB-2010 19:35:45	Dark	41.500	25	35Lam Sco	1.6200	28000.	83	41607	No
164	GOM_NL__2PRFIN20100213_194214_000000452086_00472_41608_4991.N1	13-FEB-2010 19:42:14	Dark	45.000	131	Gam Lup	2.8000	26000.	90	41608	No
165	GOM_NL__2PRFIN20100213_194741_000000532086_00472_41608_4992.N1	13-FEB-2010 19:47:41	Dark	52.500	10	Bet Cen	0.61000	28000.	105	41608	No
166	GOM_NL__2PRFIN20100213_195049_000000472086_00472_41608_4993.N1	13-FEB-2010 19:50:49	Dark	47.000	12	Alp1Cru	0.77500	30000.	94	41608	No
167	GOM_NL__2PRFIN20100213_195221_000000462086_00472_41608_4994.N1	13-FEB-2010 19:52:21	Dark	45.500	64	Gam Cen	2.2000	10600.	91	41608	No
168	GOM_NL__2PRFIN20100213_201022_000000532086_00472_41608_4995.N1	13-FEB-2010 20:10:22	Straylight	52.500	48	30Alp Hya	1.9770	4100.0	105	41608	No
169	GOM_NL__2PRFIN20100213_204046_000000372086_00472_41608_4996.N1	13-FEB-2010 20:40:46	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	41608	No
170	GOM_NL__2PRFIN20100213_204920_000000432086_00472_41608_4997.N1	13-FEB-2010 20:49:20	Bright	43.000	130	23Bet Dra	2.7990	5800.0	86	41608	No
171	GOM_NL__2PRFIN20100213_205330_000000392086_00472_41608_4998.N1	13-FEB-2010 20:53:30	Bright	39.000	5	3Alp Lyr	0.033000	11000.	78	41608	No
172	GOM_NL__2PRFIN20100213_210226_000000472086_00472_41608_4999.N1	13-FEB-2010 21:02:26	Bright	47.000	59	55Alp Oph	2.0800	8900.0	94	41608	No
173	GOM_NL__2PRFIN20100213_210441_000000532086_00472_41608_5000.N1	13-FEB-2010 21:04:41	Bright	52.500	126	60Bet Oph	2.7700	4250.0	105	41608	No
174	GOM_NL__2PRFIN20100213_211156_000000472086_00472_41608_5001.N1	13-FEB-2010 21:11:56	Dark	46.500	86	35Eta Oph	2.4300	10200.	93	41608	No
175	GOM_NL__2PRFIN20100213_211622_000000442086_00472_41608_5002.N1	13-FEB-2010 21:16:22	Dark	44.000	25	35Lam Sco	1.6200	28000.	88	41608	No
176	GOM_NL__2PRFIN20100213_212251_000000472086_00473_41609_4999.N1	13-FEB-2010 21:22:51	Dark	47.000	131	Gam Lup	2.8000	26000.	94	41609	No
177	GOM_NL__2PRFIN20100213_212818_000000442086_00473_41609_5000.N1	13-FEB-2010 21:28:18	Dark	43.500	10	Bet Cen	0.61000	28000.	87	41609	No
178	GOM_NL__2PRFIN20100213_213125_000000402086_00473_41609_5001.N1	13-FEB-2010 21:31:25	Dark	40.000	12	Alp1Cru	0.77500	30000.	80	41609	No
179	GOM_NL__2PRFIN20100213_213258_000000552086_00473_41609_5002.N1	13-FEB-2010 21:32:58	Dark	54.500	64	Gam Cen	2.2000	10600.	109	41609	No
180	GOM_NL__2PRFIN20100213_215058_000000532086_00473_41609_5003.N1	13-FEB-2010 21:50:58	Straylight	52.500	48	30Alp Hya	1.9770	4100.0	105	41609	No
181	GOM_NL__2PRFIN20100213_222122_000000402086_00473_41609_5004.N1	13-FEB-2010 22:21:22	Bright	40.000	60	7Bet UMi	2.0810	3950.0	80	41609	No
182	GOM_NL__2PRFIN20100213_222955_000000382086_00473_41609_5005.N1	13-FEB-2010 22:29:55	Bright	37.500	130	23Bet Dra	2.7990	5800.0	75	41609	No
183	GOM_NL__2PRFIN20100213_223405_000000372086_00473_41609_5006.N1	13-FEB-2010 22:34:05	Bright	36.500	5	3Alp Lyr	0.033000	11000.	73	41609	No
184	GOM_NL__2PRFIN20100213_224303_000000472086_00473_41609_5007.N1	13-FEB-2010 22:43:03	Bright	46.500	59	55Alp Oph	2.0800	8900.0	93	41609	No
185	GOM_NL__2PRFIN20100213_224518_000000472086_00473_41609_5008.N1	13-FEB-2010 22:45:18	Bright	47.000	126	60Bet Oph	2.7700	4250.0	94	41609	No
186	GOM_NL__2PRFIN20100213_225232_000000492086_00473_41609_5009.N1	13-FEB-2010 22:52:32	Dark	48.500	86	35Eta Oph	2.4300	10200.	97	41609	No
187	GOM_NL__2PRFIN20100213_225658_000000502086_00473_41609_5010.N1	13-FEB-2010 22:56:58	Dark	50.000	25	35Lam Sco	1.6200	28000.	100	41609	No
188	GOM_NL__2PRFIN20100213_230328_000000462086_00474_41610_5007.N1	13-FEB-2010 23:03:28	Dark	46.000	131	Gam Lup	2.8000	26000.	92	41610	No
189	GOM_NL__2PRFIN20100213_230854_000000442086_00474_41610_5008.N1	13-FEB-2010 23:08:54	Dark	44.000	10	Bet Cen	0.61000	28000.	88	41610	No
190	GOM_NL__2PRFIN20100213_231201_000000462086_00474_41610_5009.N1	13-FEB-2010 23:12:01	Dark	46.000	12	Alp1Cru	0.77500	30000.	92	41610	No
191	GOM_NL__2PRFIN20100213_231334_000000462086_00474_41610_5010.N1	13-FEB-2010 23:13:34	Dark	46.000	64	Gam Cen	2.2000	10600.	92	41610	No
192	GOM_NL__2PRFIN20100213_233134_000000542086_00474_41610_5011.N1	13-FEB-2010 23:31:34	Straylight	53.500	48	30Alp Hya	1.9770	4100.0	107	41610	No

3. Quality information per product

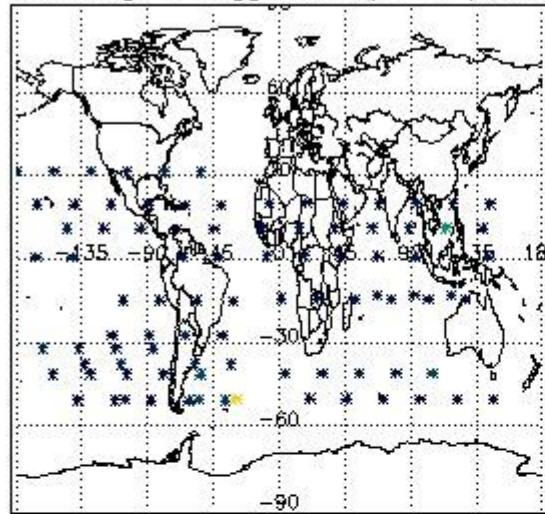
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

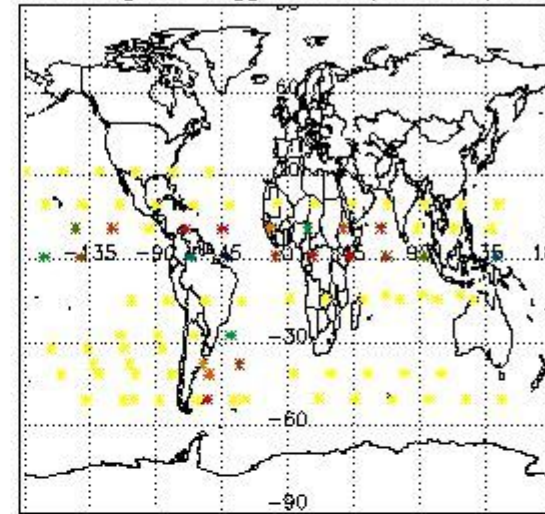


3.2 Plot quality information per product (world map)

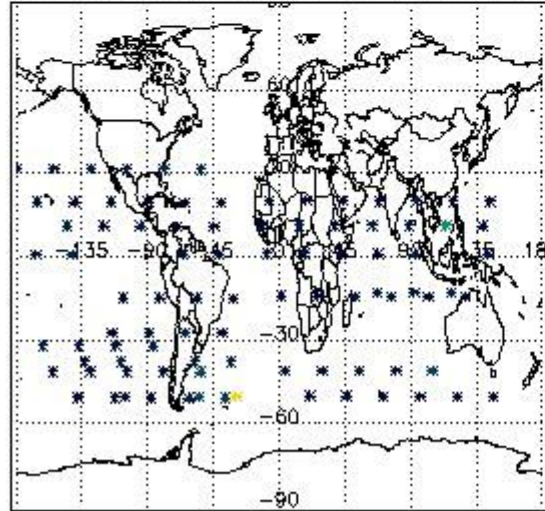
Percentage of flagged data per O3 profile



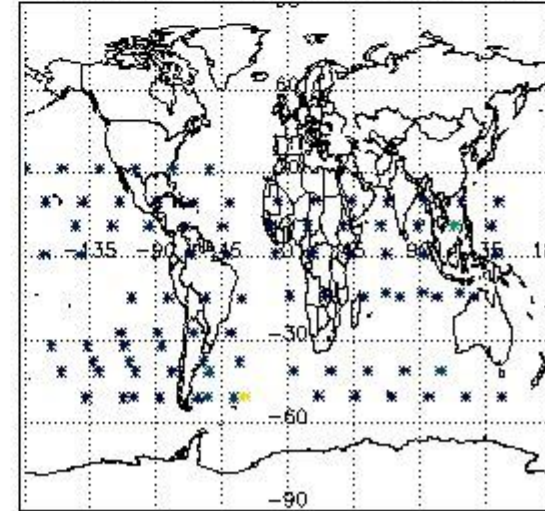
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

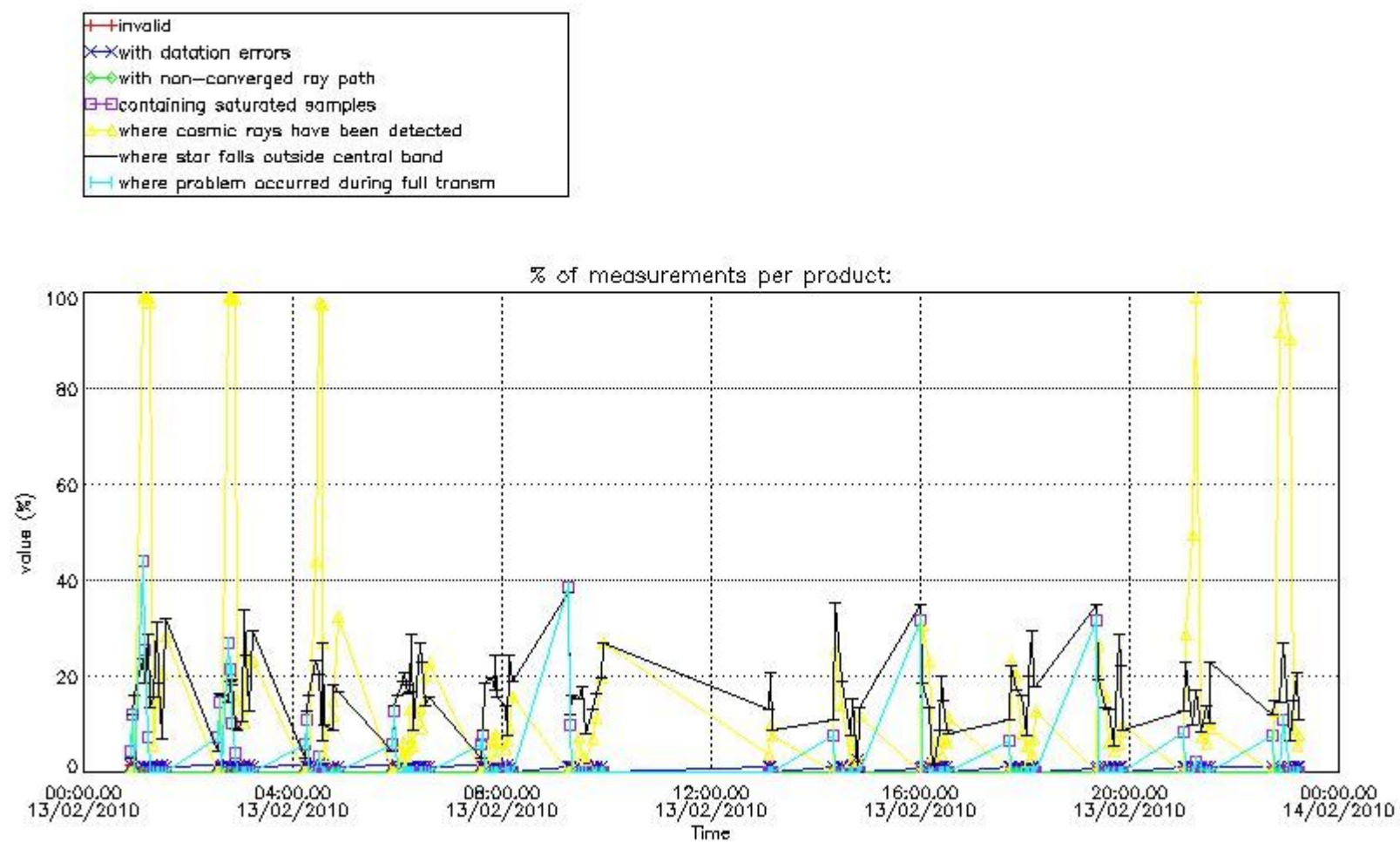


4. Level 1 quality information per product

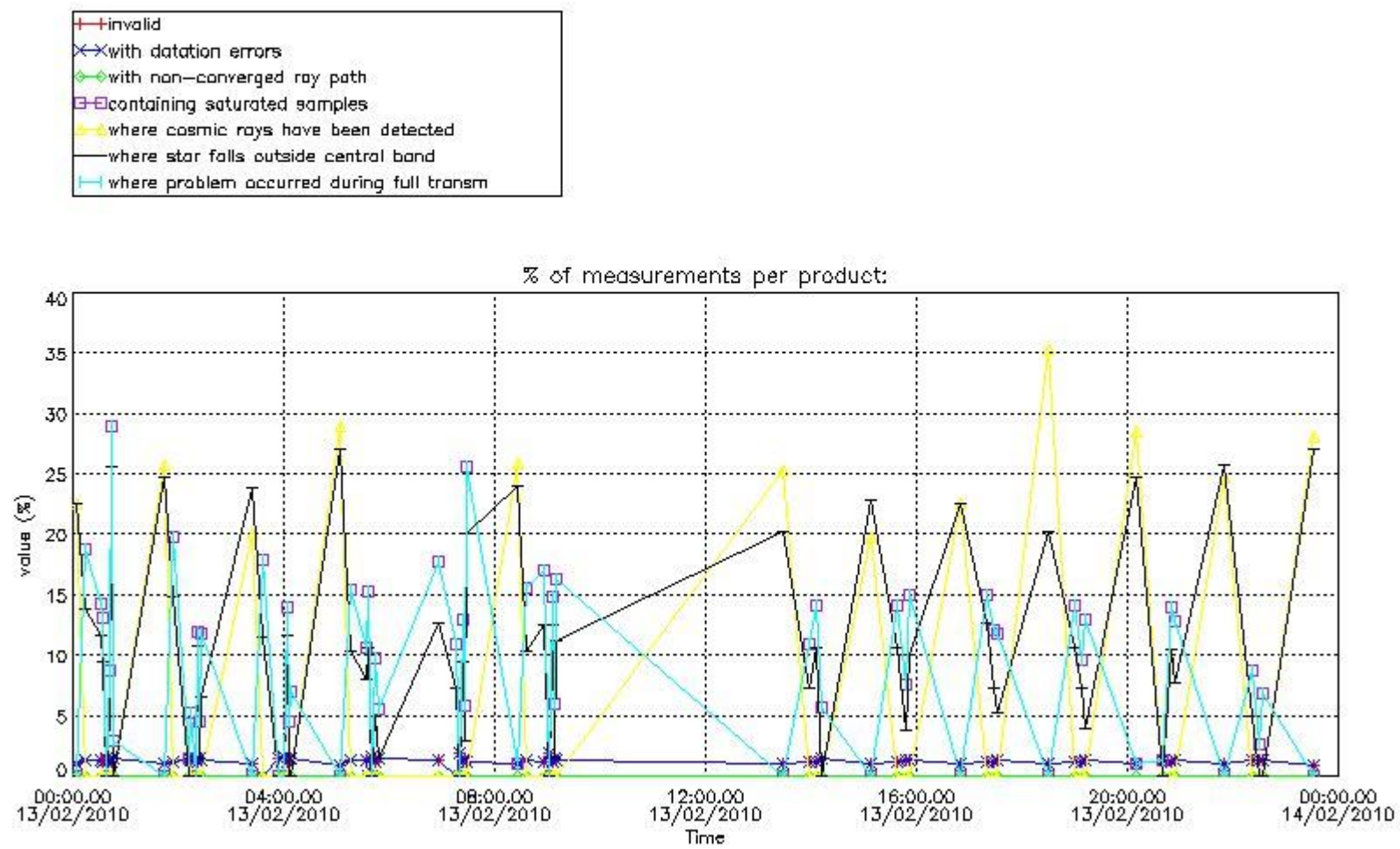
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes

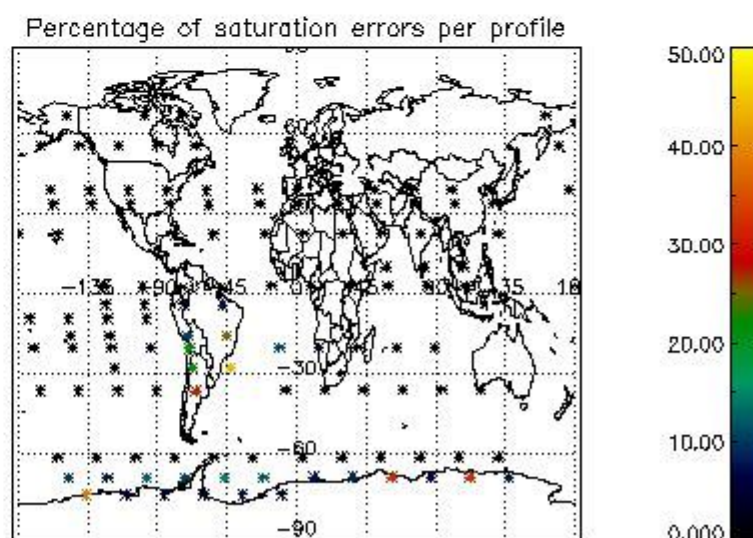
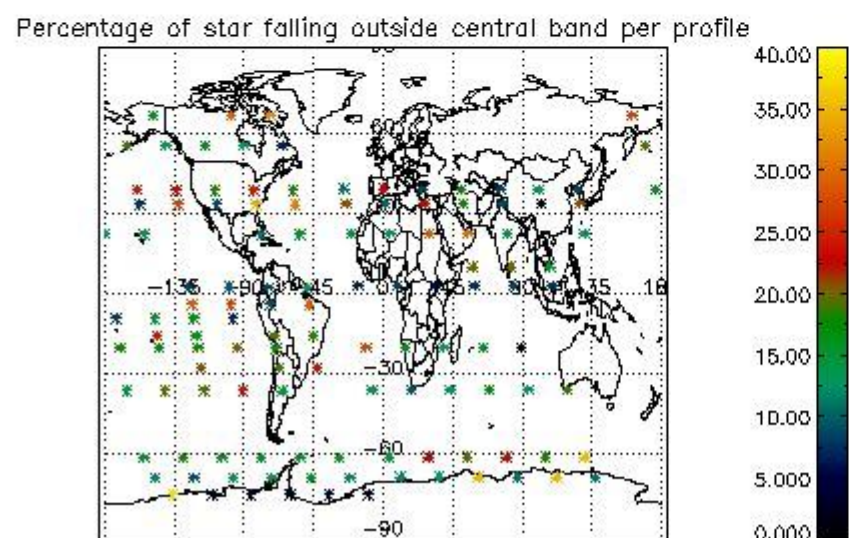
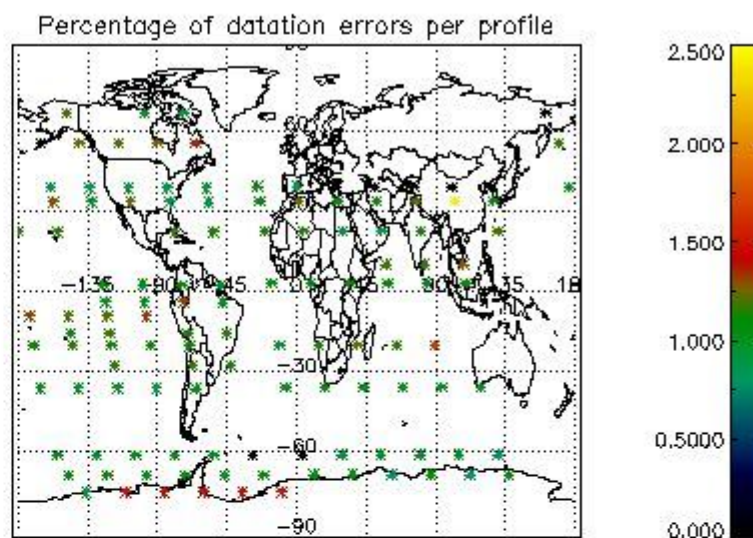
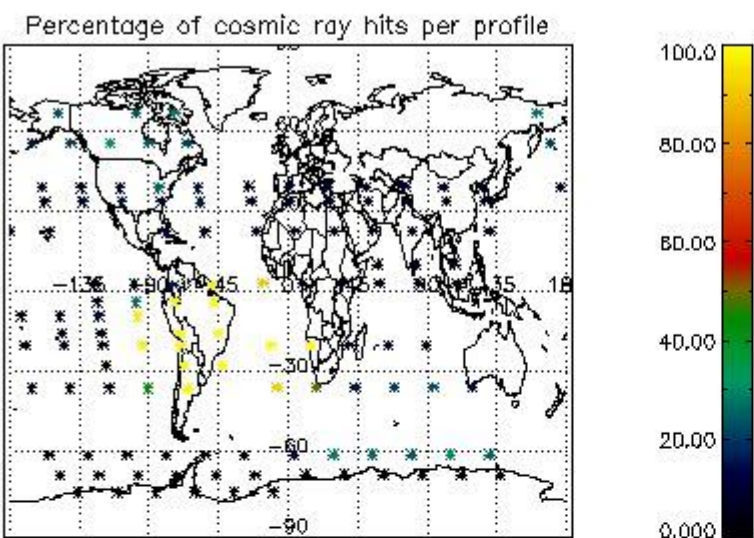


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

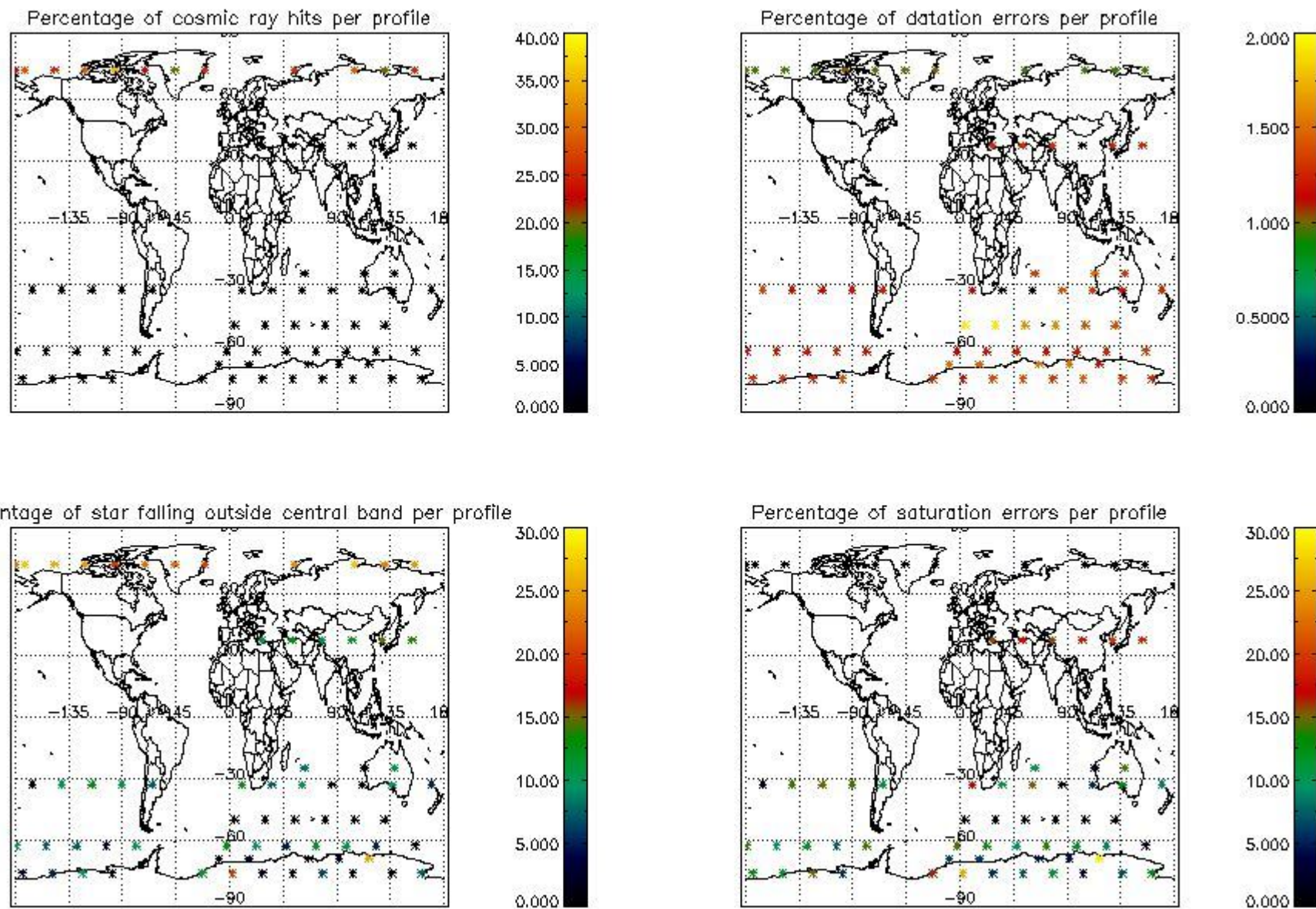


4.2 Plot quality information per product coming from level 1b processing (world map)

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



4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

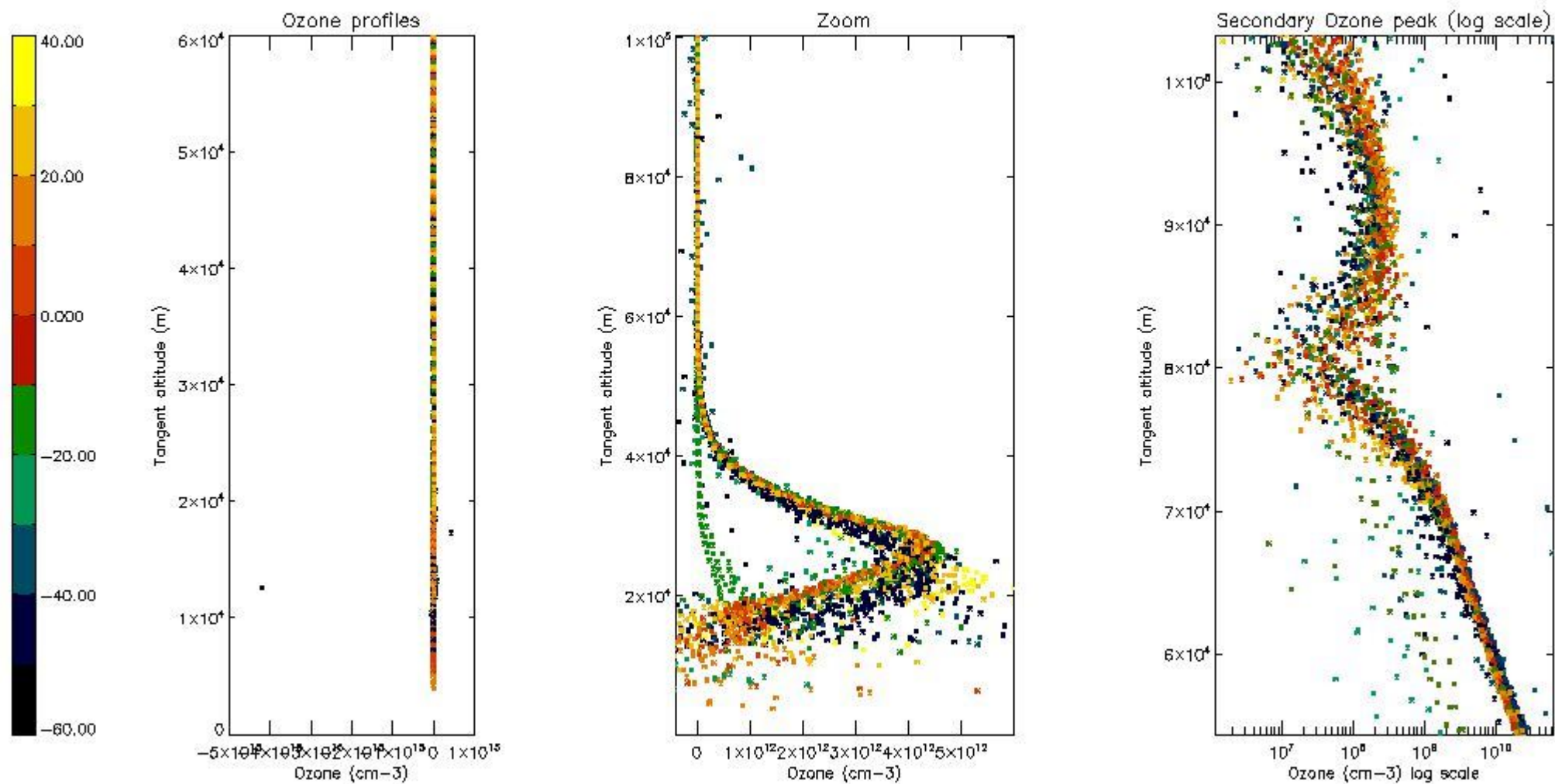
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	49
STD < 20	27

STD < 10	22
STD < 5	14

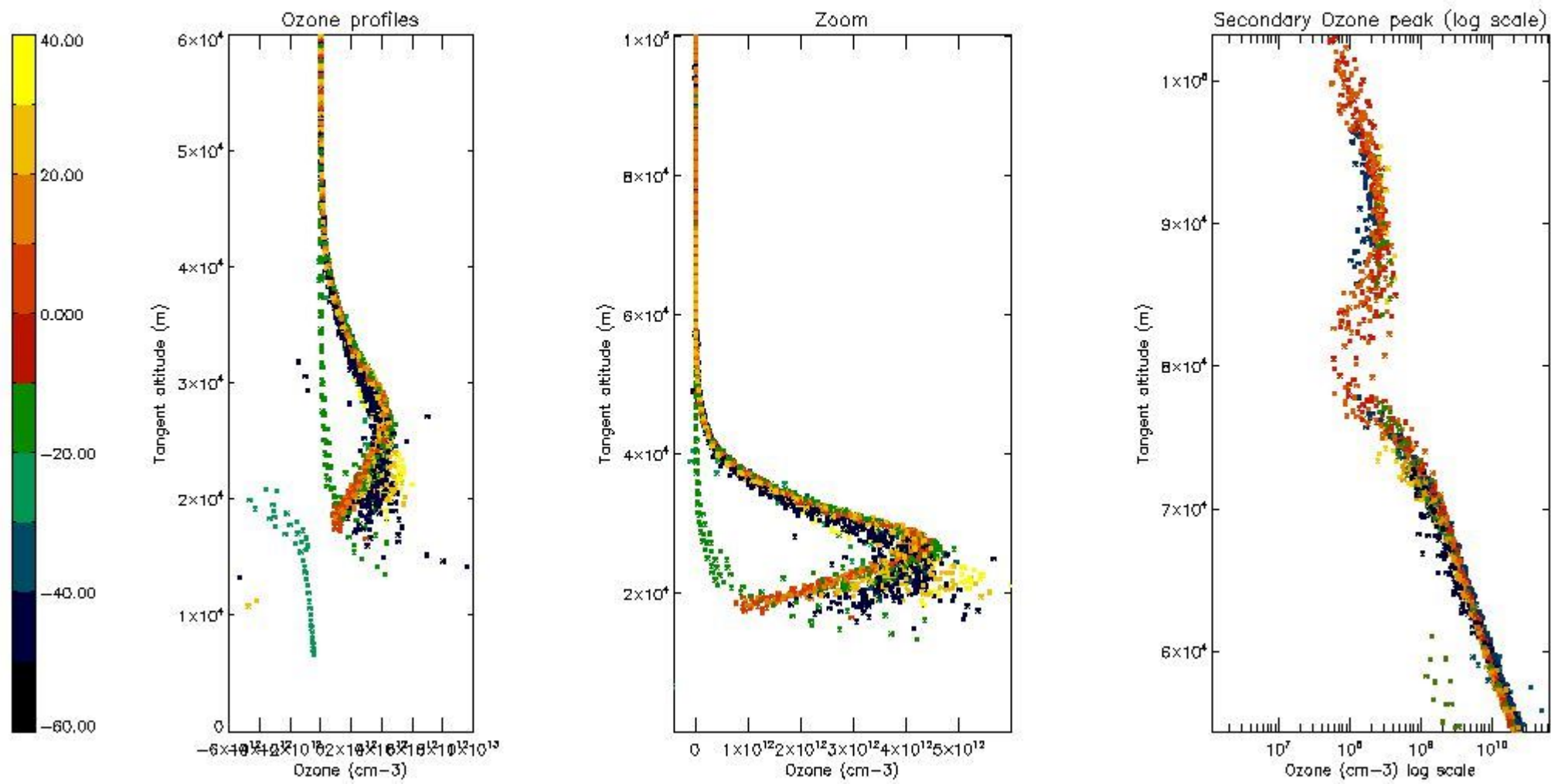
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



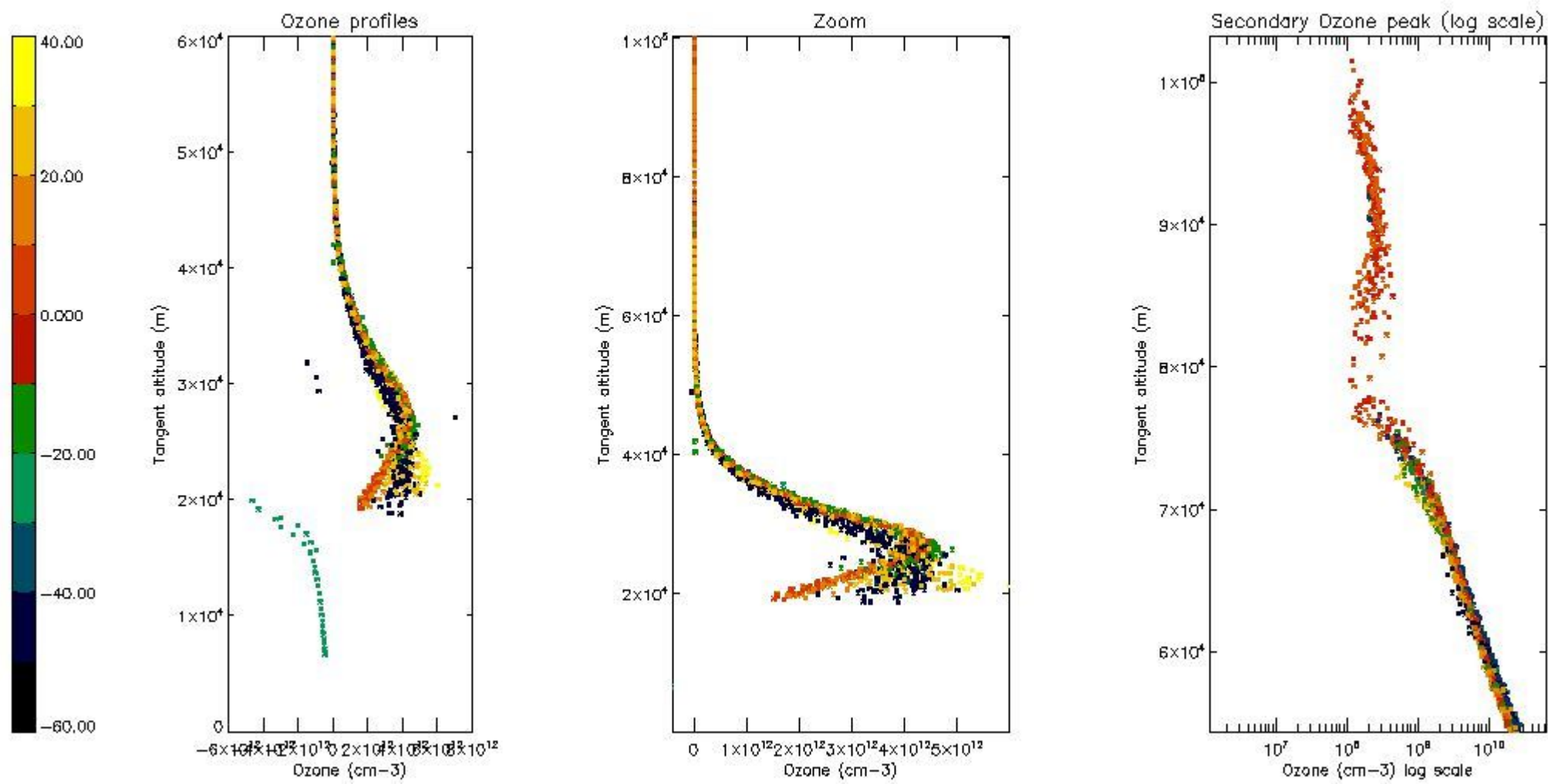
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



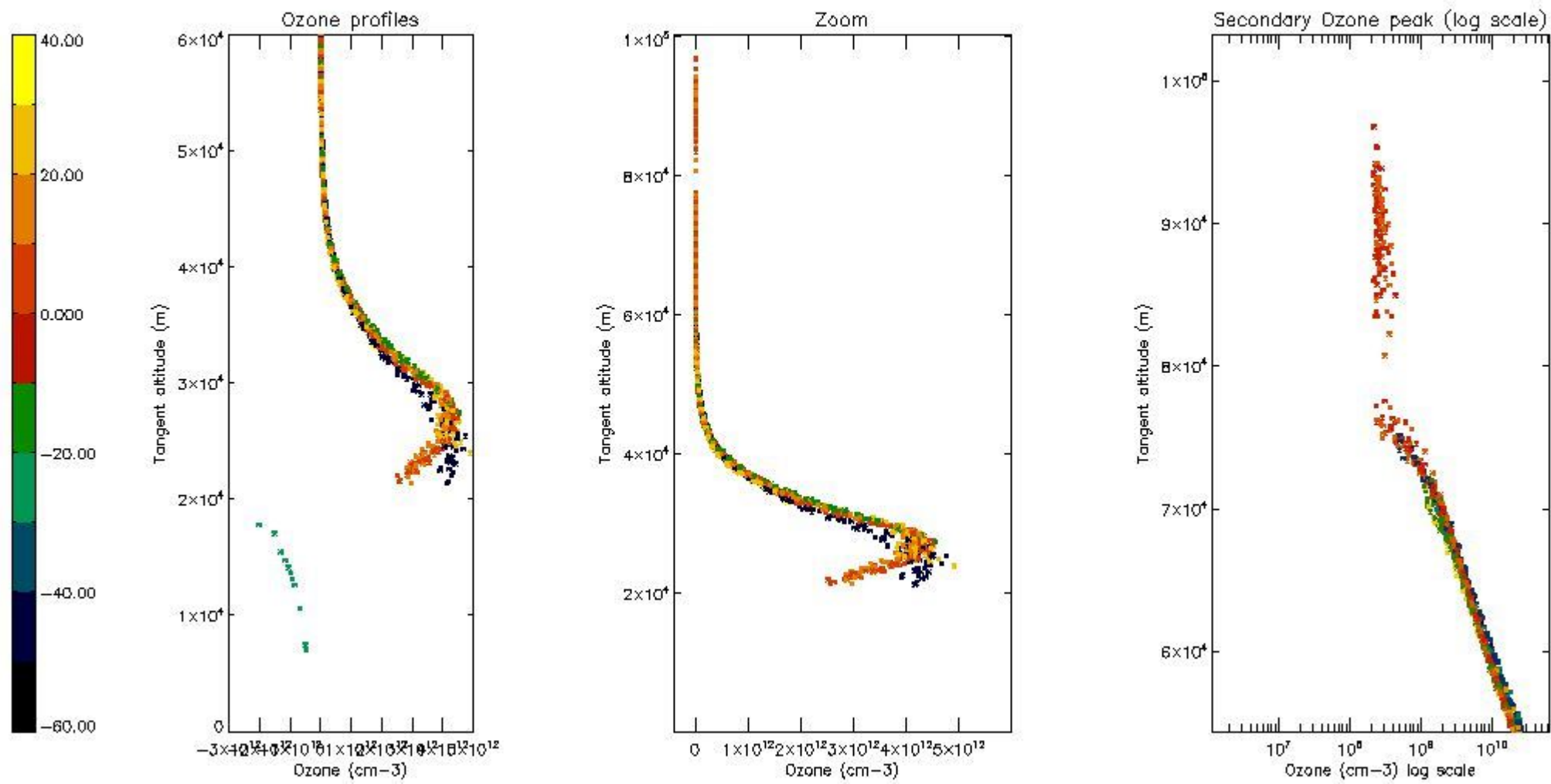
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



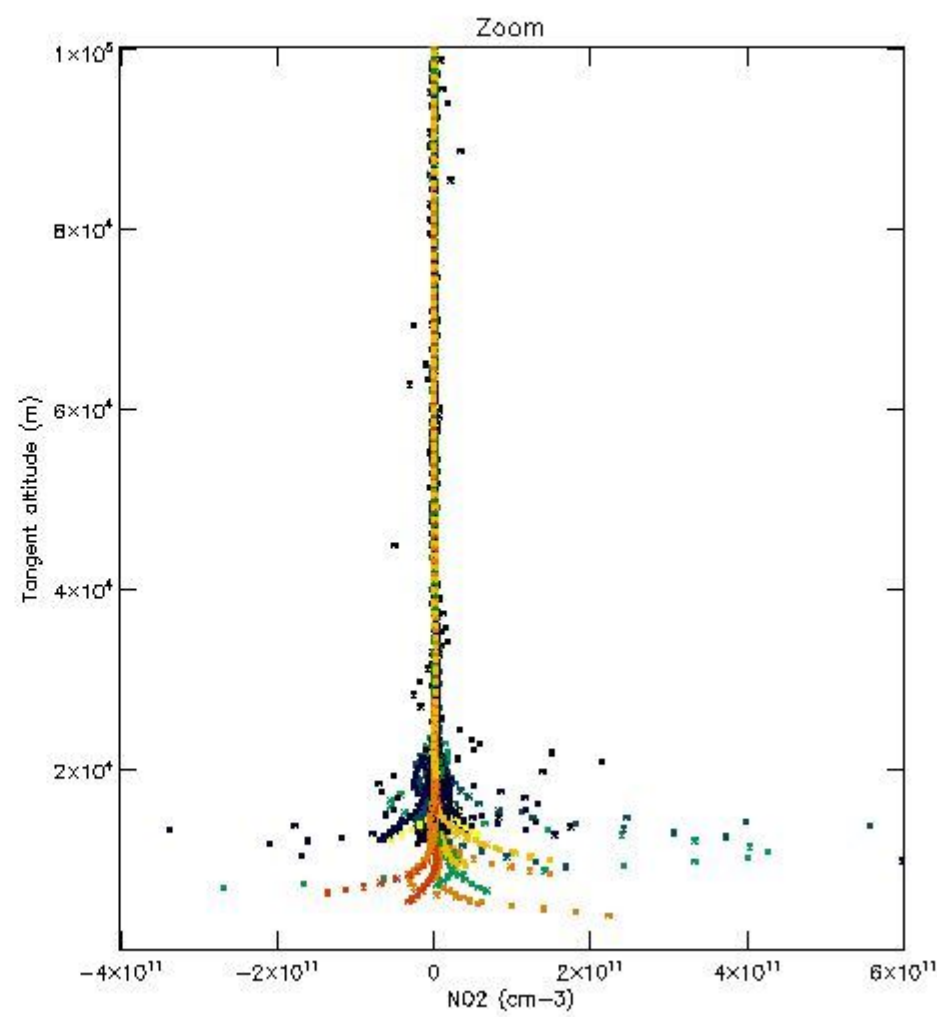
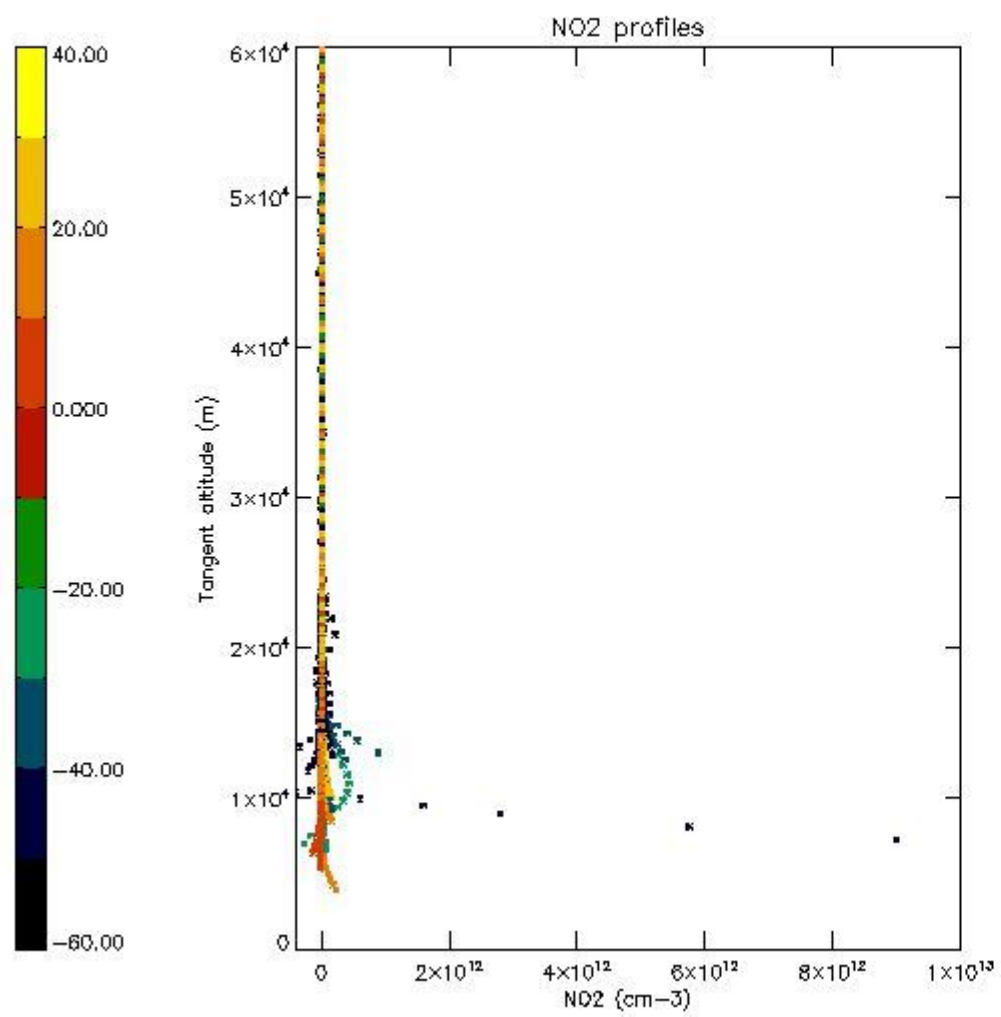
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



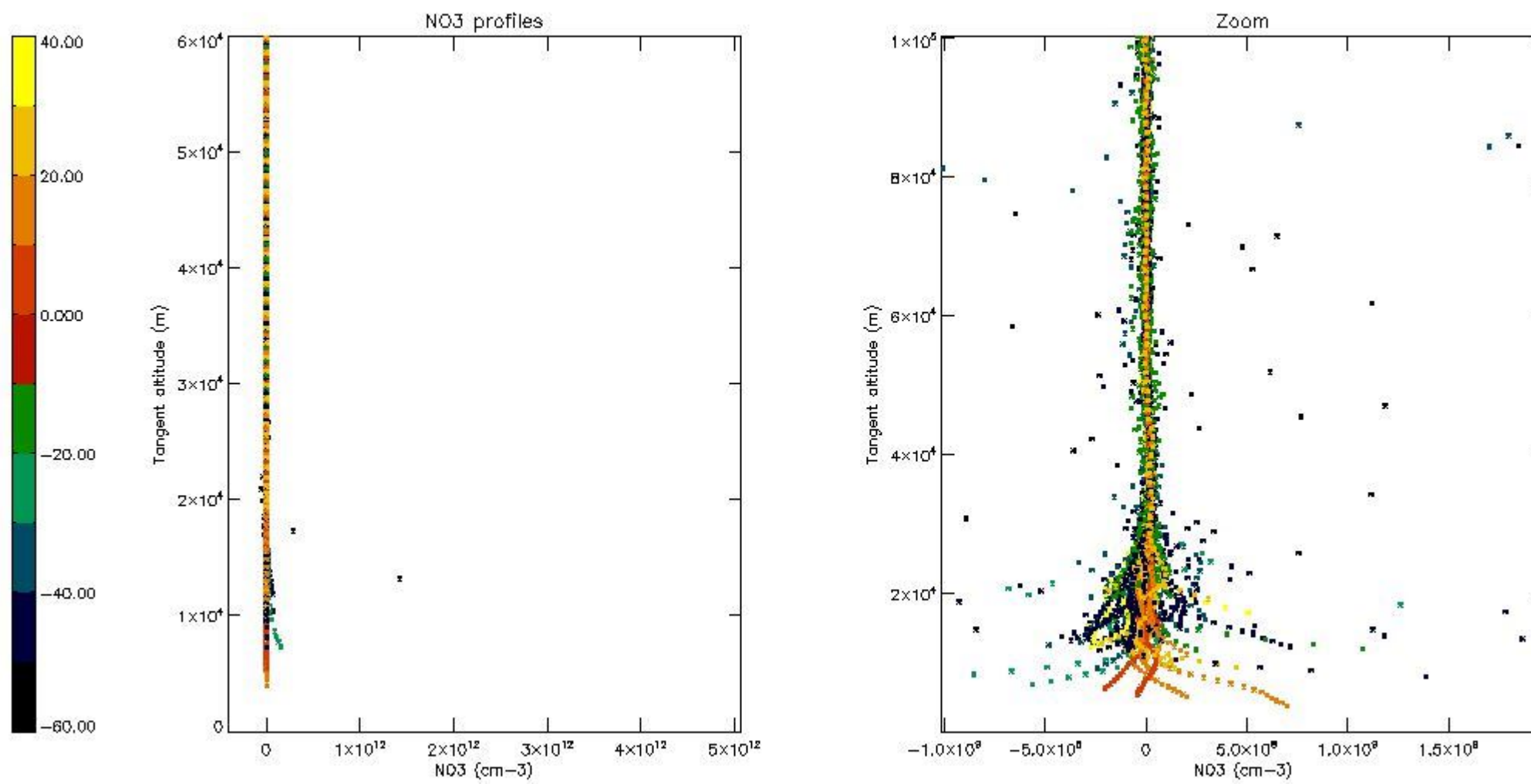
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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	13-FEB-2010 00:03:11
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	13-FEB-2010 00:03:11
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	13-FEB-2010 00:03:11

GOMOS Level 2 Daily Report

SUMMARY

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[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](#)

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[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% \(dark without errors\)](#)

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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](#)

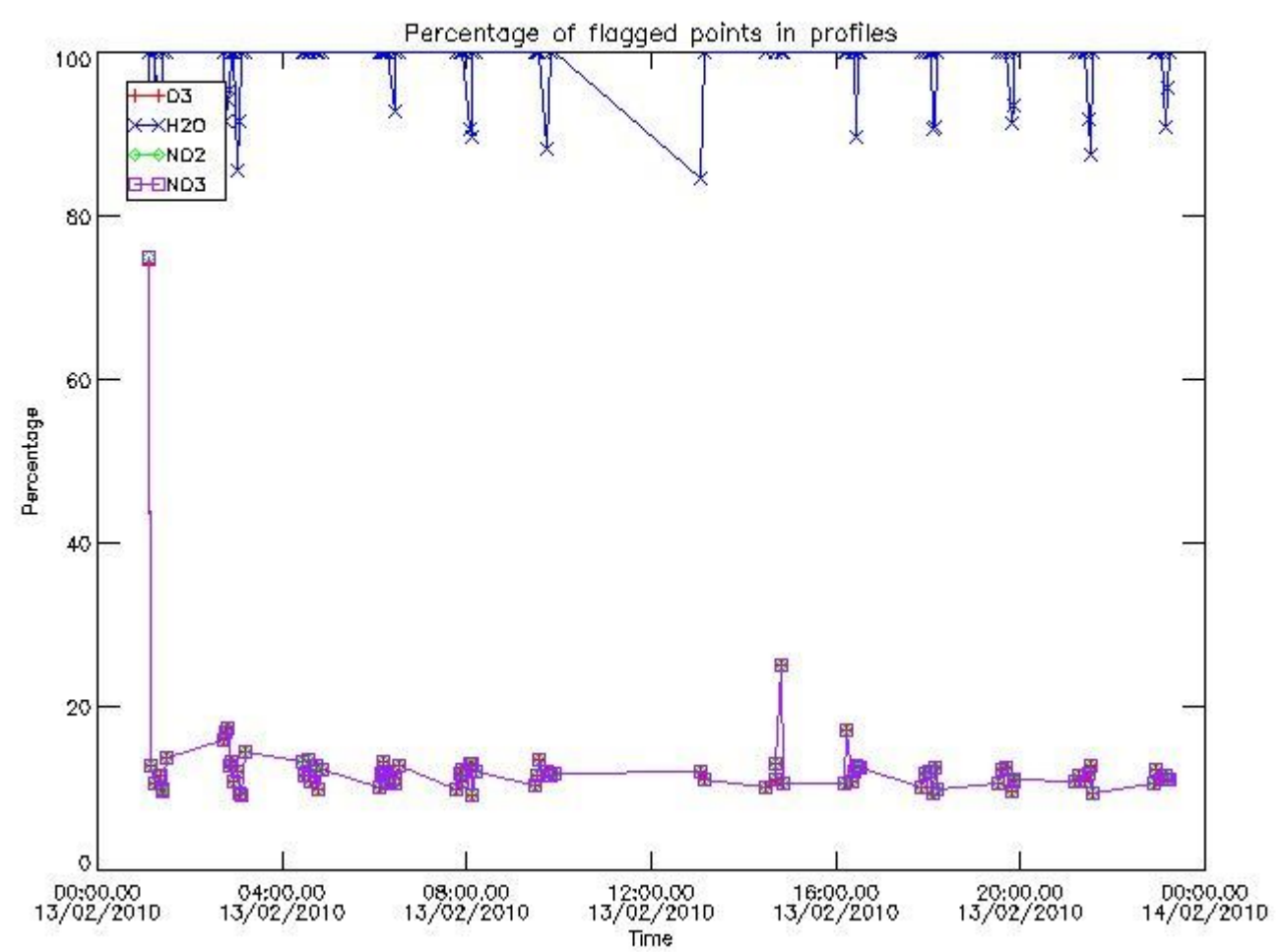
[6. Auxiliary Data Files used for the production reported in section 2](#)

161	GOM_NL__2PRFIN20100213_192405_000000492086_00471_41607_4993.N1	13-FEB-2010 19:24:05	Bright	49.000	126	60Bet Oph	2.7700	4250.0	98	41607	No
162	GOM_NL__2PRFIN20100213_193119_000000482086_00471_41607_4994.N1	13-FEB-2010 19:31:19	Dark	48.000	86	35Eta Oph	2.4300	10200.	96	41607	No
163	GOM_NL__2PRFIN20100213_193545_000000422086_00471_41607_4995.N1	13-FEB-2010 19:35:45	Dark	41.500	25	35Lam Sco	1.6200	28000.	83	41607	No
164	GOM_NL__2PRFIN20100213_194214_000000452086_00472_41608_4991.N1	13-FEB-2010 19:42:14	Dark	45.000	131	Gam Lup	2.8000	26000.	90	41608	No
165	GOM_NL__2PRFIN20100213_194741_000000532086_00472_41608_4992.N1	13-FEB-2010 19:47:41	Dark	52.500	10	Bet Cen	0.61000	28000.	105	41608	No
166	GOM_NL__2PRFIN20100213_195049_000000472086_00472_41608_4993.N1	13-FEB-2010 19:50:49	Dark	47.000	12	Alp1Cru	0.77500	30000.	94	41608	No
167	GOM_NL__2PRFIN20100213_195221_000000462086_00472_41608_4994.N1	13-FEB-2010 19:52:21	Dark	45.500	64	Gam Cen	2.2000	10600.	91	41608	No
168	GOM_NL__2PRFIN20100213_201022_000000532086_00472_41608_4995.N1	13-FEB-2010 20:10:22	Straylight	52.500	48	30Alp Hya	1.9770	4100.0	105	41608	No
169	GOM_NL__2PRFIN20100213_204046_000000372086_00472_41608_4996.N1	13-FEB-2010 20:40:46	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	41608	No
170	GOM_NL__2PRFIN20100213_204920_000000432086_00472_41608_4997.N1	13-FEB-2010 20:49:20	Bright	43.000	130	23Bet Dra	2.7990	5800.0	86	41608	No
171	GOM_NL__2PRFIN20100213_205330_000000392086_00472_41608_4998.N1	13-FEB-2010 20:53:30	Bright	39.000	5	3Alp Lyr	0.033000	11000.	78	41608	No
172	GOM_NL__2PRFIN20100213_210226_000000472086_00472_41608_4999.N1	13-FEB-2010 21:02:26	Bright	47.000	59	55Alp Oph	2.0800	8900.0	94	41608	No
173	GOM_NL__2PRFIN20100213_210441_000000532086_00472_41608_5000.N1	13-FEB-2010 21:04:41	Bright	52.500	126	60Bet Oph	2.7700	4250.0	105	41608	No
174	GOM_NL__2PRFIN20100213_211156_000000472086_00472_41608_5001.N1	13-FEB-2010 21:11:56	Dark	46.500	86	35Eta Oph	2.4300	10200.	93	41608	No
175	GOM_NL__2PRFIN20100213_211622_000000442086_00472_41608_5002.N1	13-FEB-2010 21:16:22	Dark	44.000	25	35Lam Sco	1.6200	28000.	88	41608	No
176	GOM_NL__2PRFIN20100213_212251_000000472086_00473_41609_4999.N1	13-FEB-2010 21:22:51	Dark	47.000	131	Gam Lup	2.8000	26000.	94	41609	No
177	GOM_NL__2PRFIN20100213_212818_000000442086_00473_41609_5000.N1	13-FEB-2010 21:28:18	Dark	43.500	10	Bet Cen	0.61000	28000.	87	41609	No
178	GOM_NL__2PRFIN20100213_213125_000000402086_00473_41609_5001.N1	13-FEB-2010 21:31:25	Dark	40.000	12	Alp1Cru	0.77500	30000.	80	41609	No
179	GOM_NL__2PRFIN20100213_213258_000000552086_00473_41609_5002.N1	13-FEB-2010 21:32:58	Dark	54.500	64	Gam Cen	2.2000	10600.	109	41609	No
180	GOM_NL__2PRFIN20100213_215058_000000532086_00473_41609_5003.N1	13-FEB-2010 21:50:58	Straylight	52.500	48	30Alp Hya	1.9770	4100.0	105	41609	No
181	GOM_NL__2PRFIN20100213_222122_000000402086_00473_41609_5004.N1	13-FEB-2010 22:21:22	Bright	40.000	60	7Bet UMi	2.0810	3950.0	80	41609	No
182	GOM_NL__2PRFIN20100213_222955_000000382086_00473_41609_5005.N1	13-FEB-2010 22:29:55	Bright	37.500	130	23Bet Dra	2.7990	5800.0	75	41609	No
183	GOM_NL__2PRFIN20100213_223405_000000372086_00473_41609_5006.N1	13-FEB-2010 22:34:05	Bright	36.500	5	3Alp Lyr	0.033000	11000.	73	41609	No
184	GOM_NL__2PRFIN20100213_224303_000000472086_00473_41609_5007.N1	13-FEB-2010 22:43:03	Bright	46.500	59	55Alp Oph	2.0800	8900.0	93	41609	No
185	GOM_NL__2PRFIN20100213_224518_000000472086_00473_41609_5008.N1	13-FEB-2010 22:45:18	Bright	47.000	126	60Bet Oph	2.7700	4250.0	94	41609	No
186	GOM_NL__2PRFIN20100213_225232_000000492086_00473_41609_5009.N1	13-FEB-2010 22:52:32	Dark	48.500	86	35Eta Oph	2.4300	10200.	97	41609	No
187	GOM_NL__2PRFIN20100213_225658_000000502086_00473_41609_5010.N1	13-FEB-2010 22:56:58	Dark	50.000	25	35Lam Sco	1.6200	28000.	100	41609	No
188	GOM_NL__2PRFIN20100213_230328_000000462086_00474_41610_5007.N1	13-FEB-2010 23:03:28	Dark	46.000	131	Gam Lup	2.8000	26000.	92	41610	No
189	GOM_NL__2PRFIN20100213_230854_000000442086_00474_41610_5008.N1	13-FEB-2010 23:08:54	Dark	44.000	10	Bet Cen	0.61000	28000.	88	41610	No
190	GOM_NL__2PRFIN20100213_231201_000000462086_00474_41610_5009.N1	13-FEB-2010 23:12:01	Dark	46.000	12	Alp1Cru	0.77500	30000.	92	41610	No
191	GOM_NL__2PRFIN20100213_231334_000000462086_00474_41610_5010.N1	13-FEB-2010 23:13:34	Dark	46.000	64	Gam Cen	2.2000	10600.	92	41610	No
192	GOM_NL__2PRFIN20100213_233134_000000542086_00474_41610_5011.N1	13-FEB-2010 23:31:34	Straylight	53.500	48	30Alp Hya	1.9770	4100.0	107	41610	No

3. Quality information per product

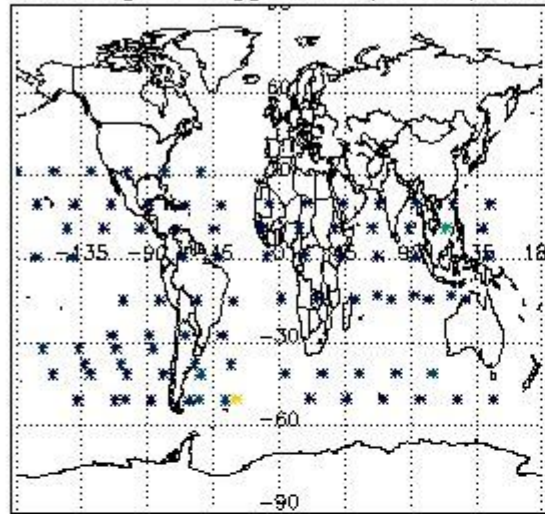
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

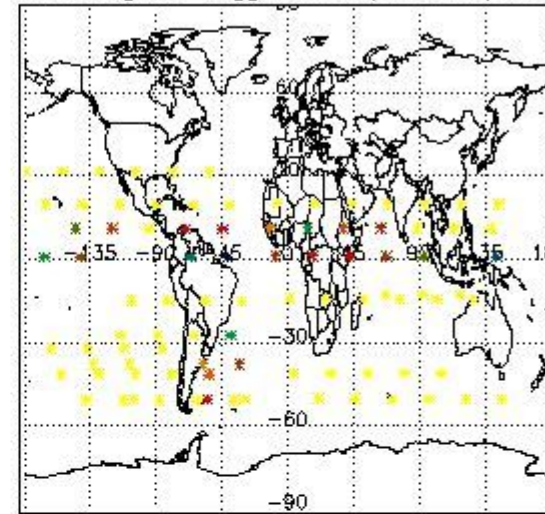


3.2 Plot quality information per product (world map)

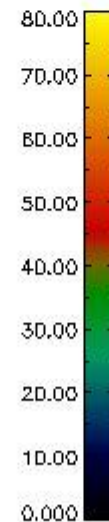
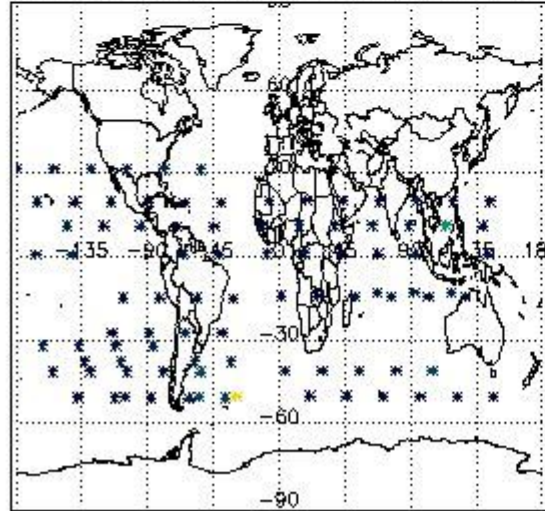
Percentage of flagged data per O3 profile



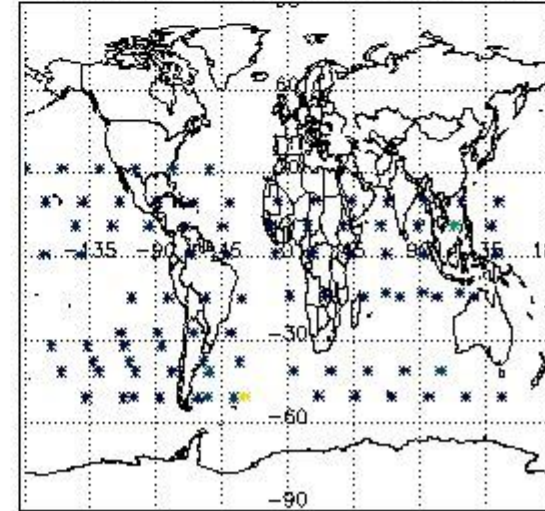
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

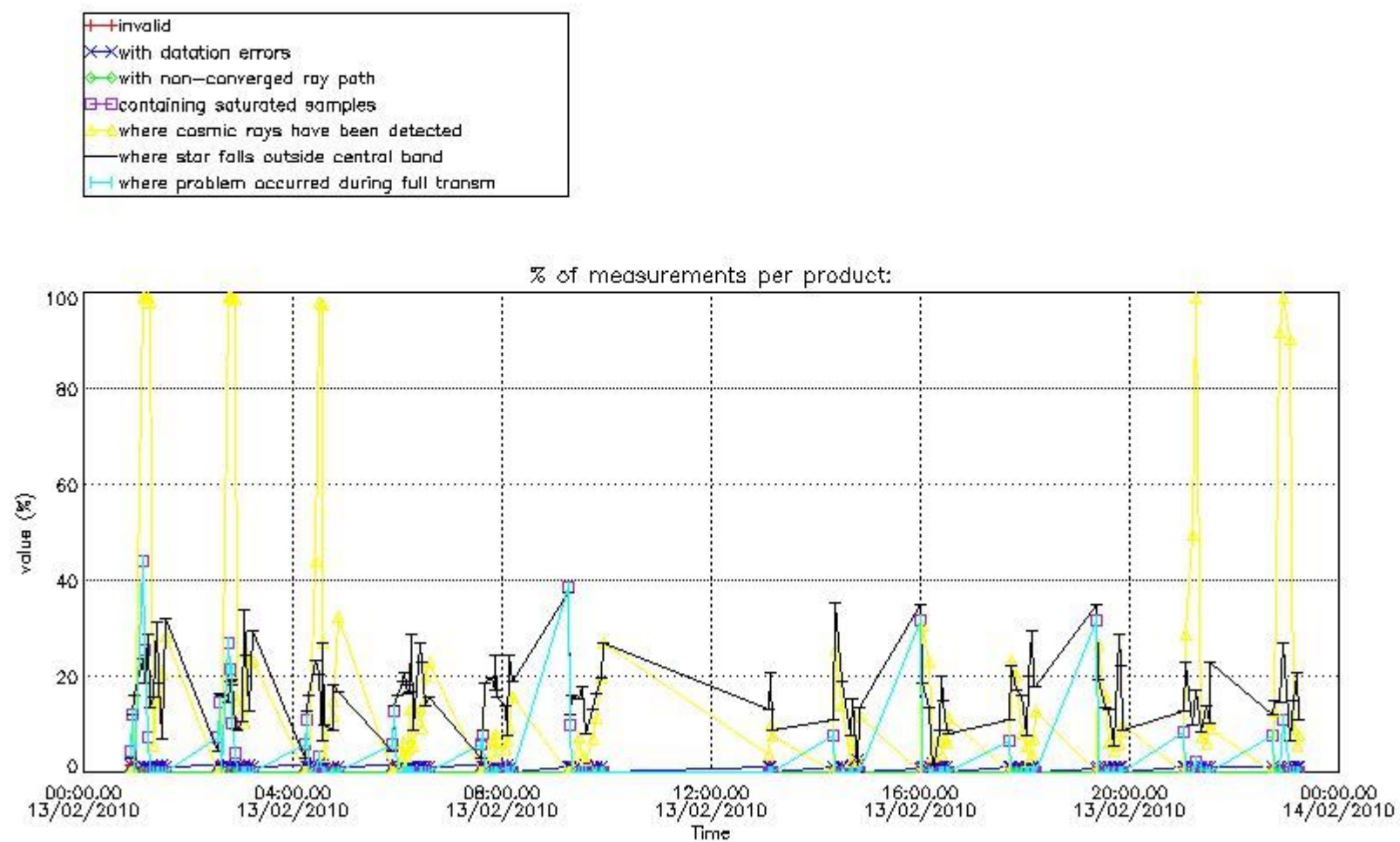


4. Level 1 quality information per product

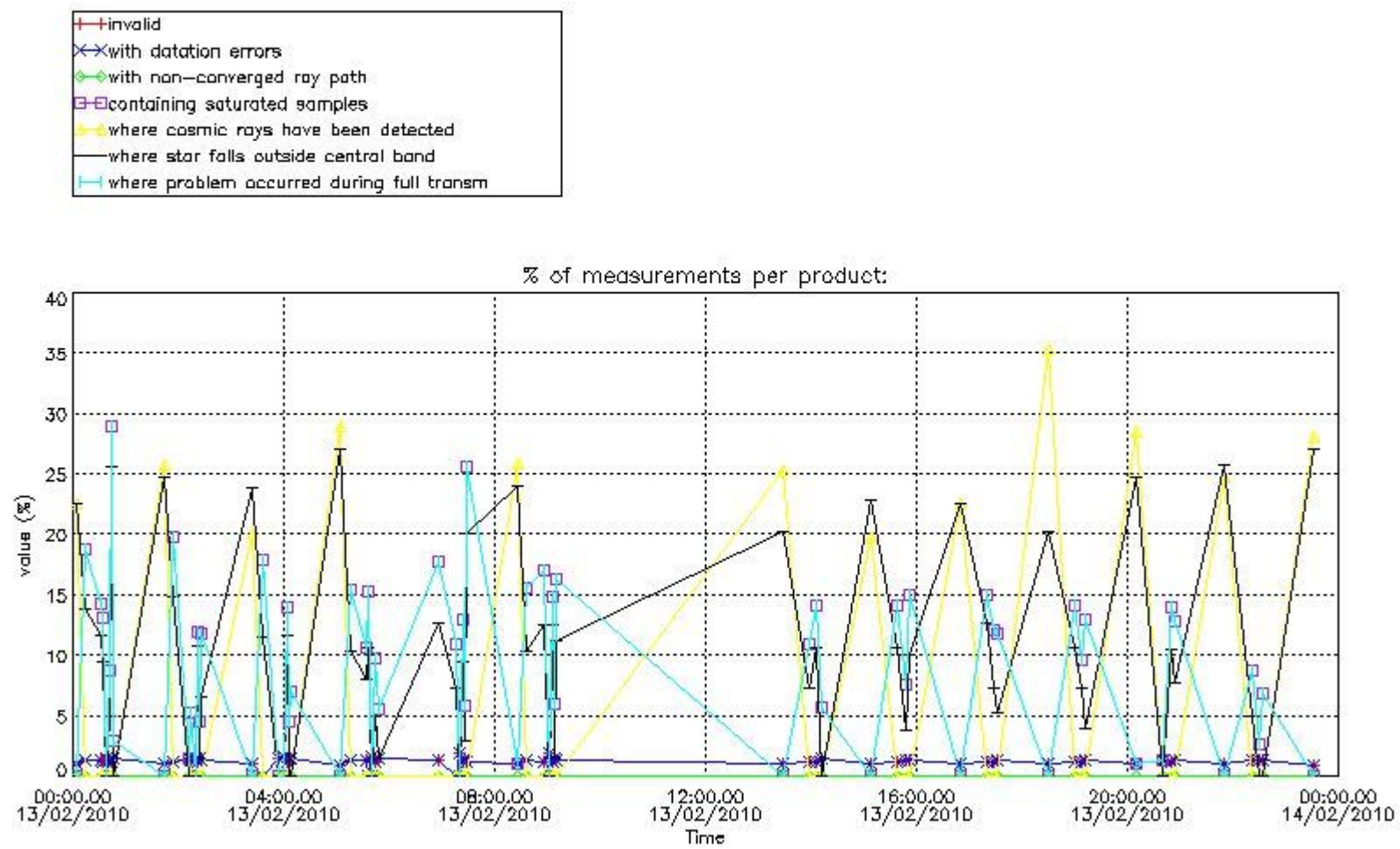
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

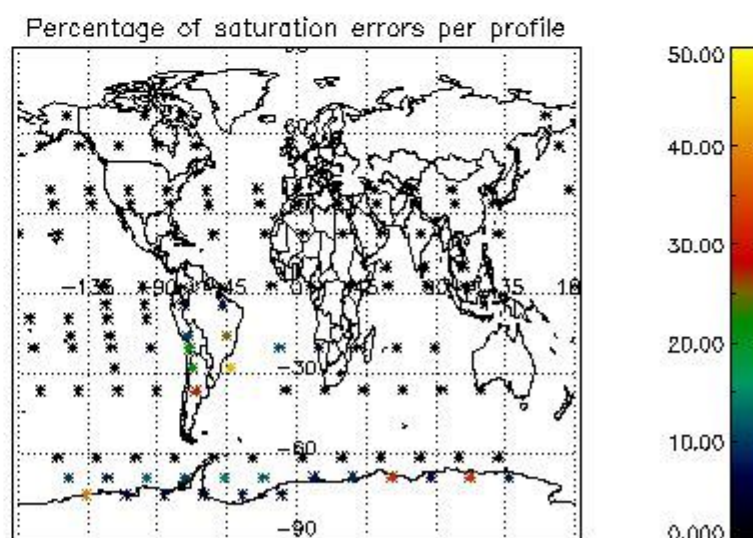
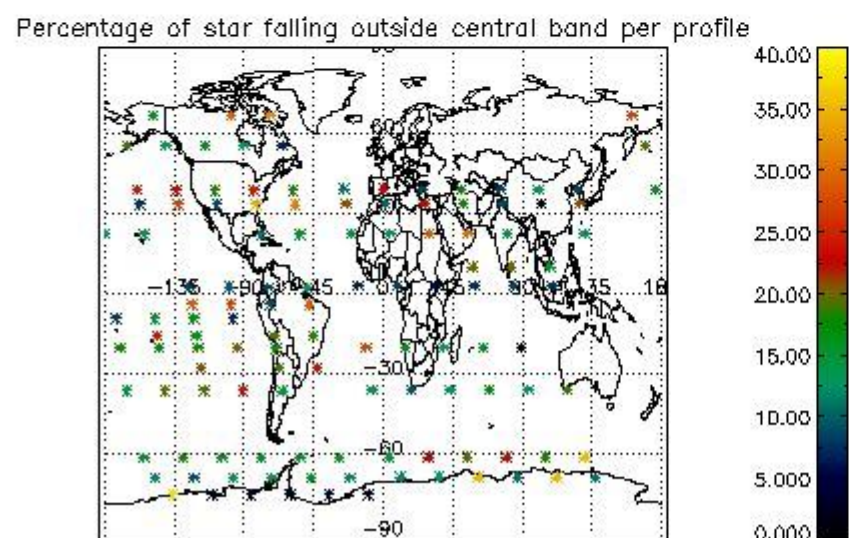
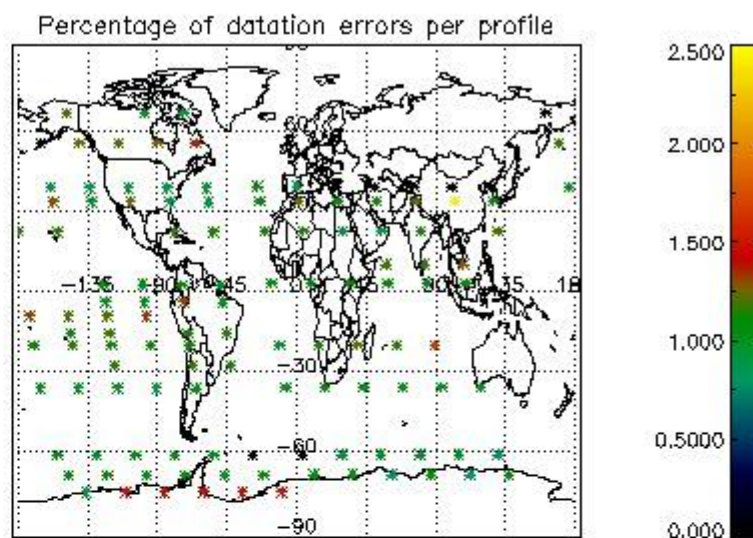
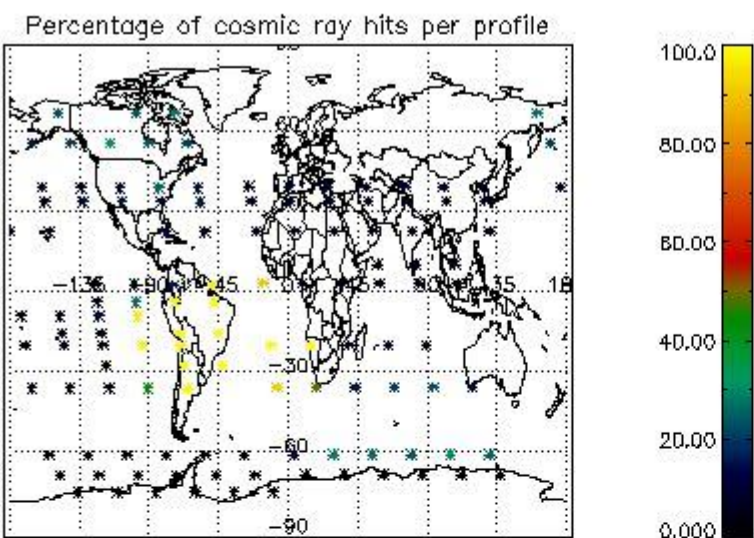


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

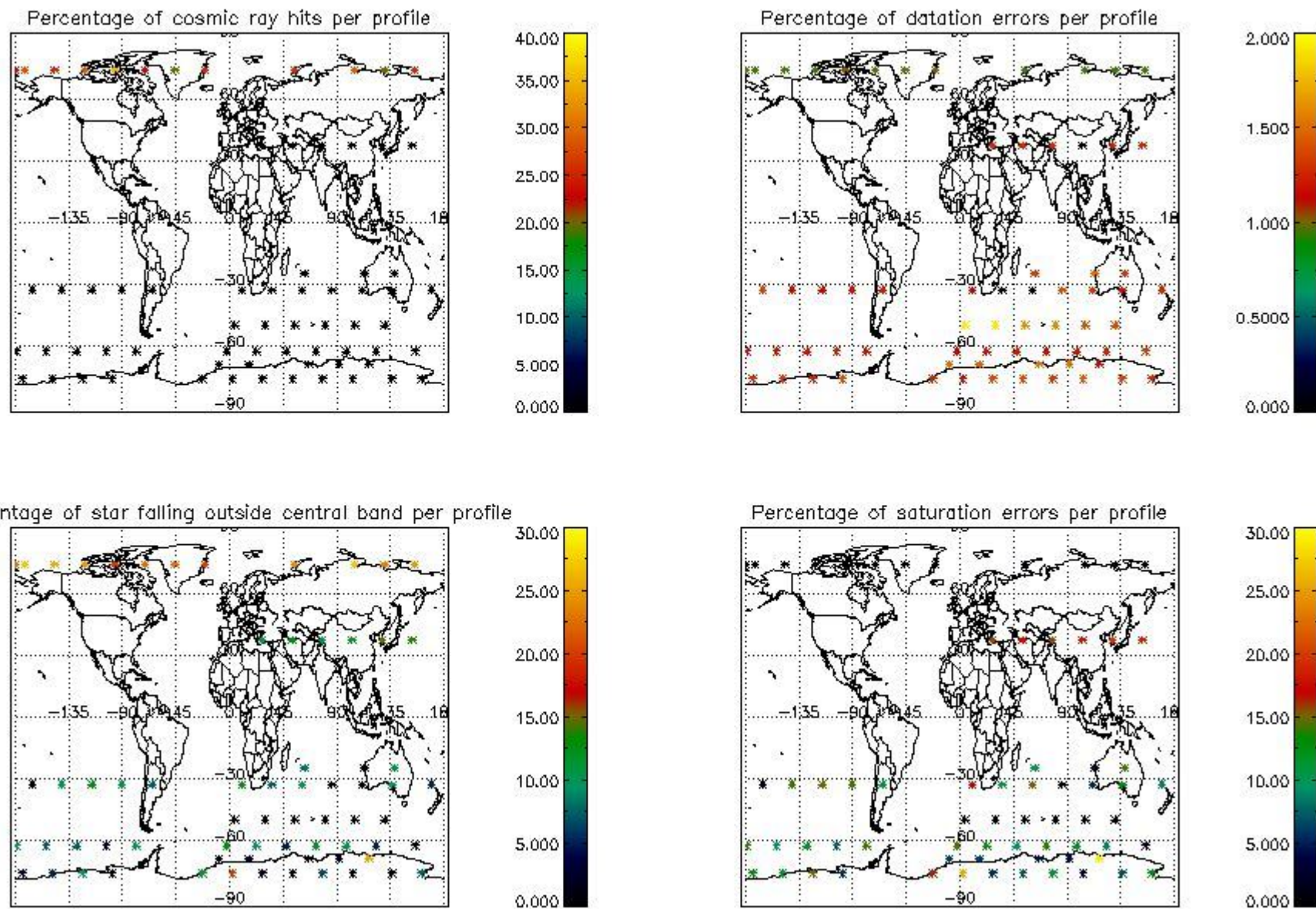


4.2 Plot quality information per product coming from level 1b processing (world map)

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

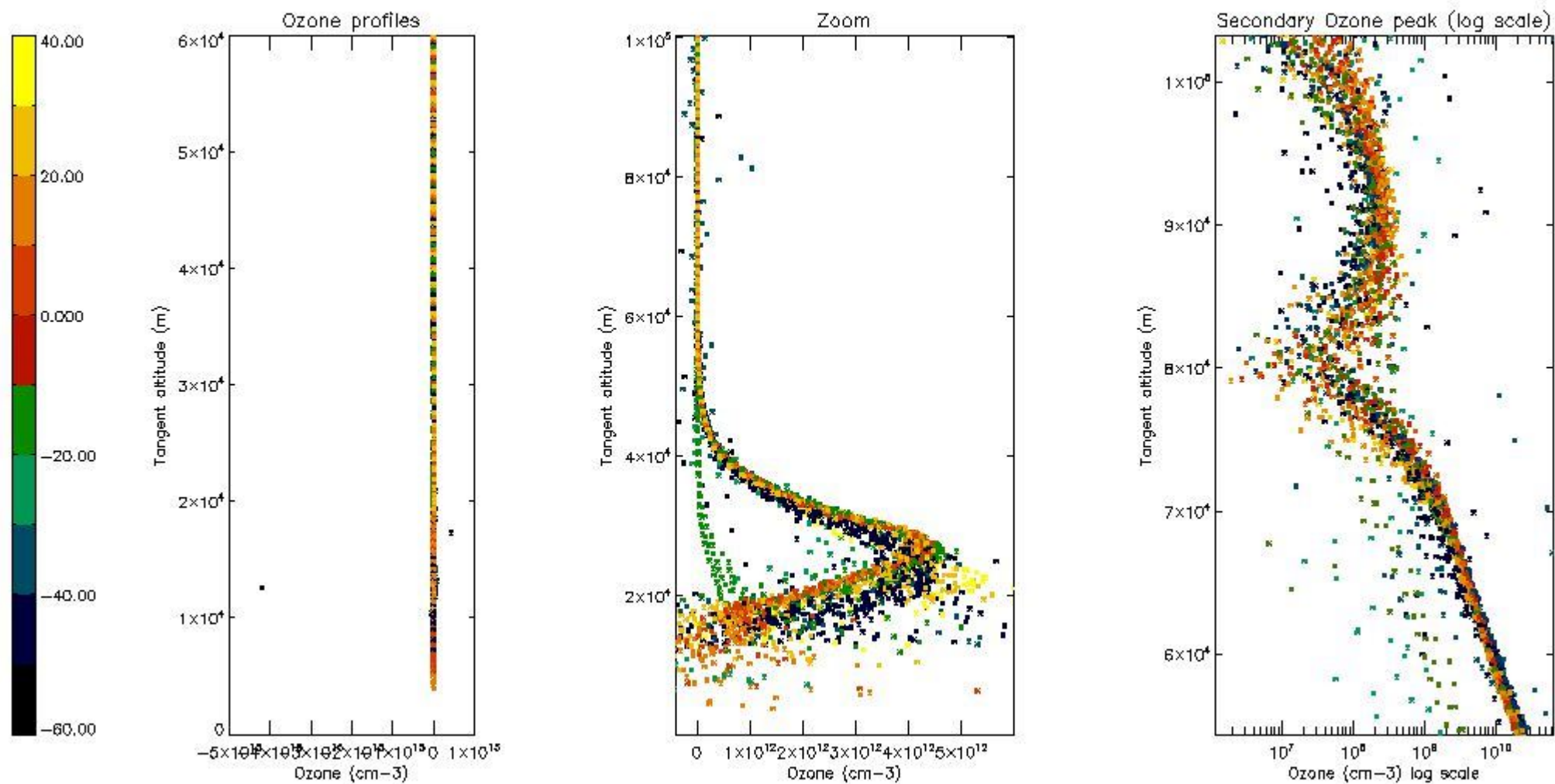
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	49
STD < 20	27

STD < 10	22
STD < 5	14

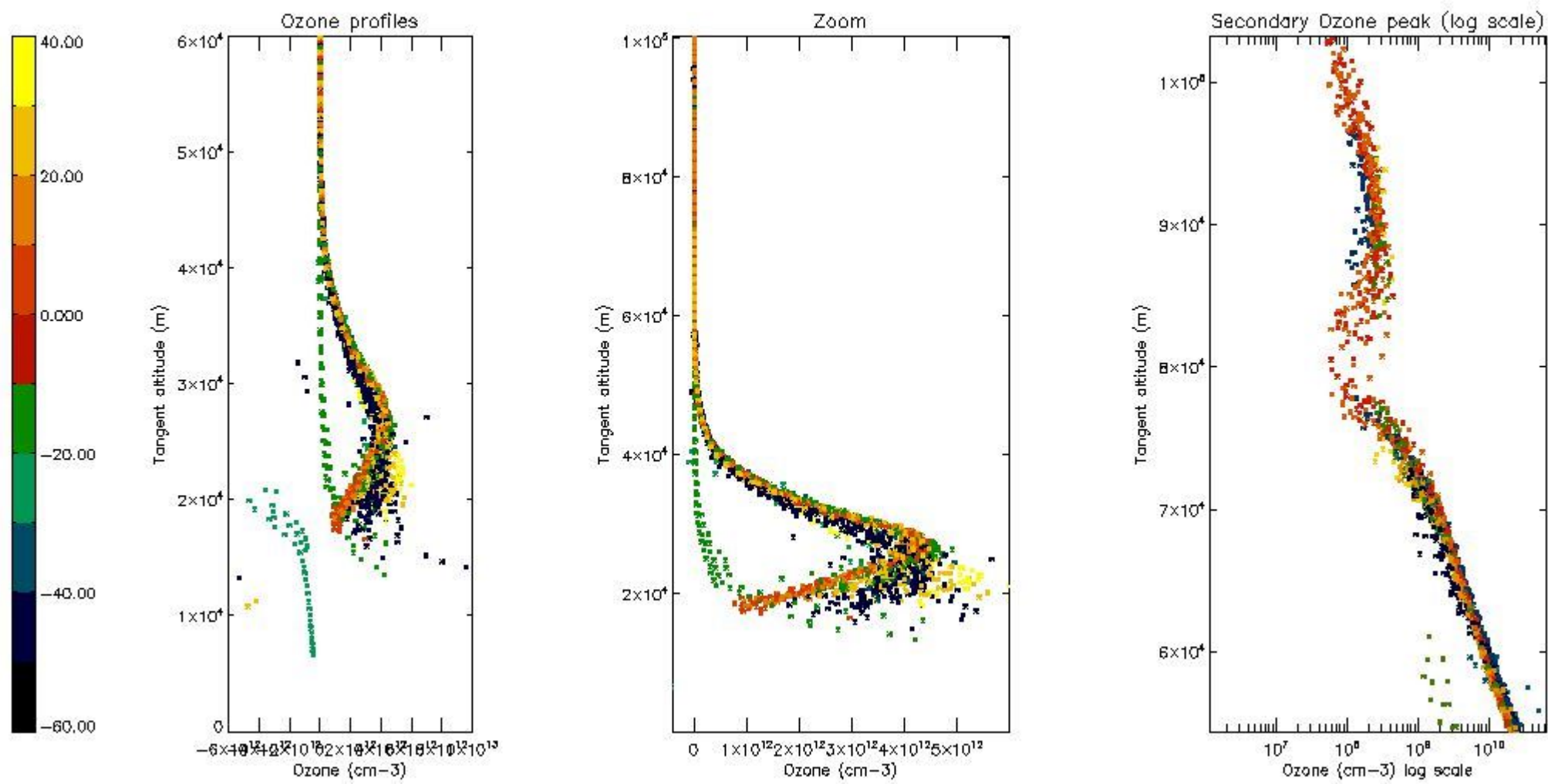
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



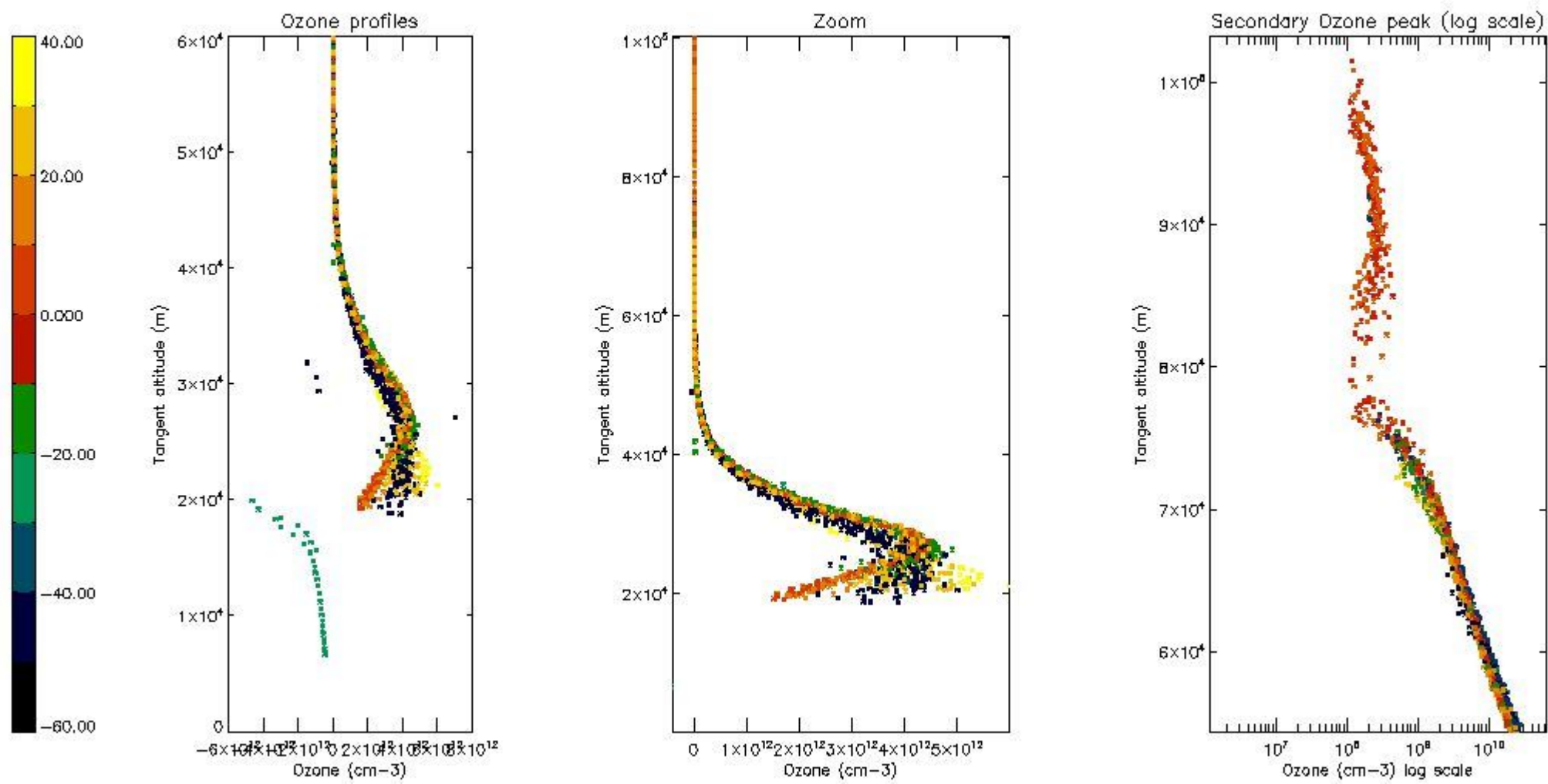
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



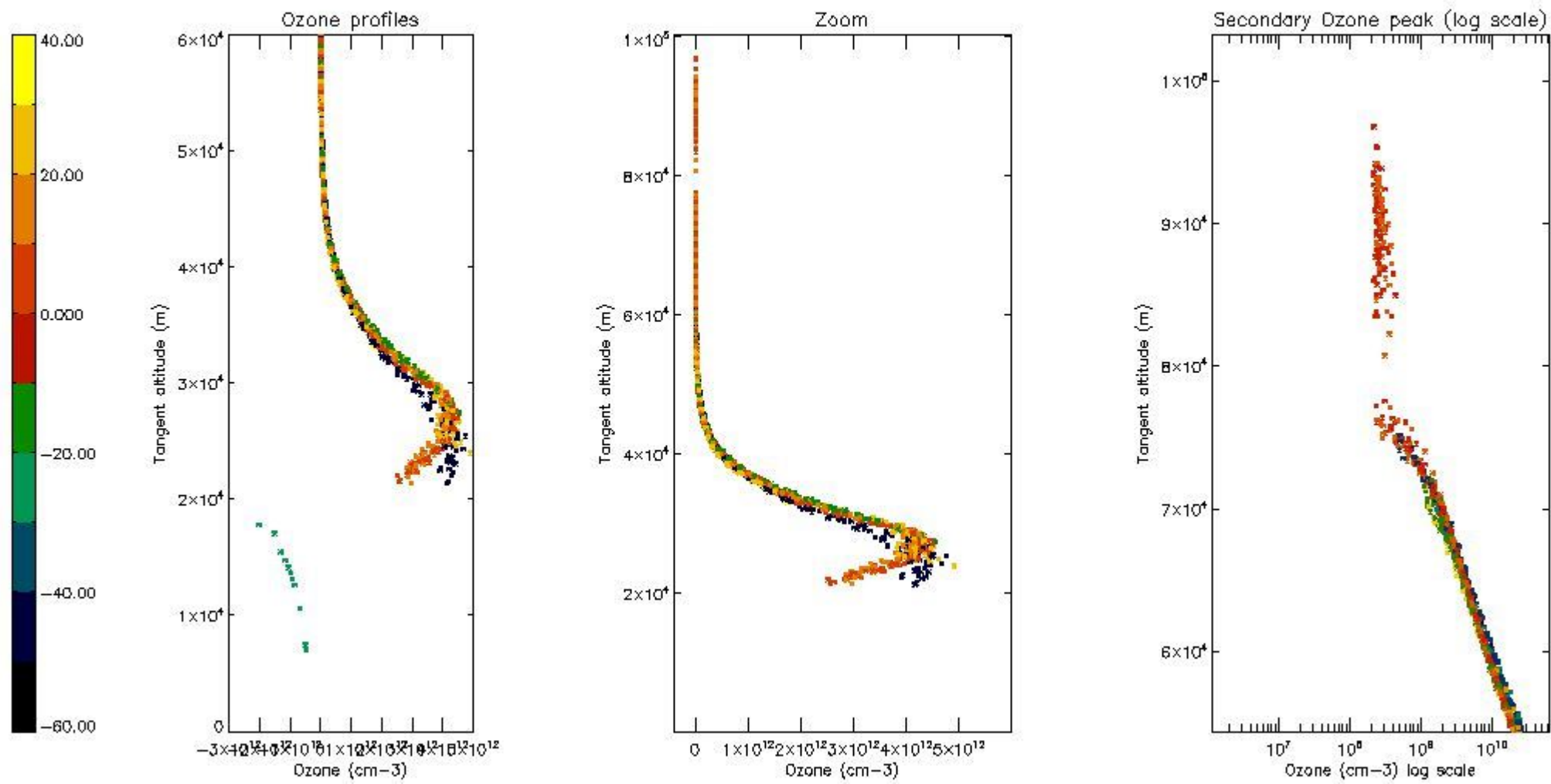
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



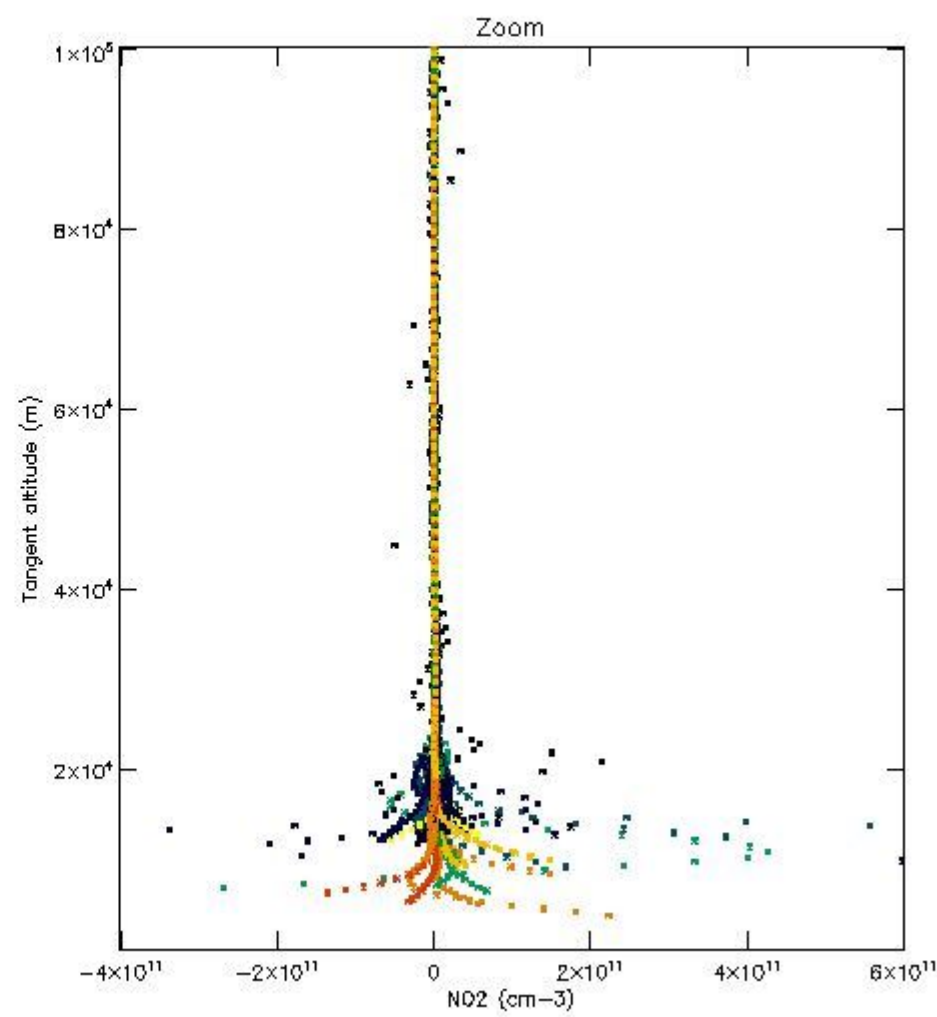
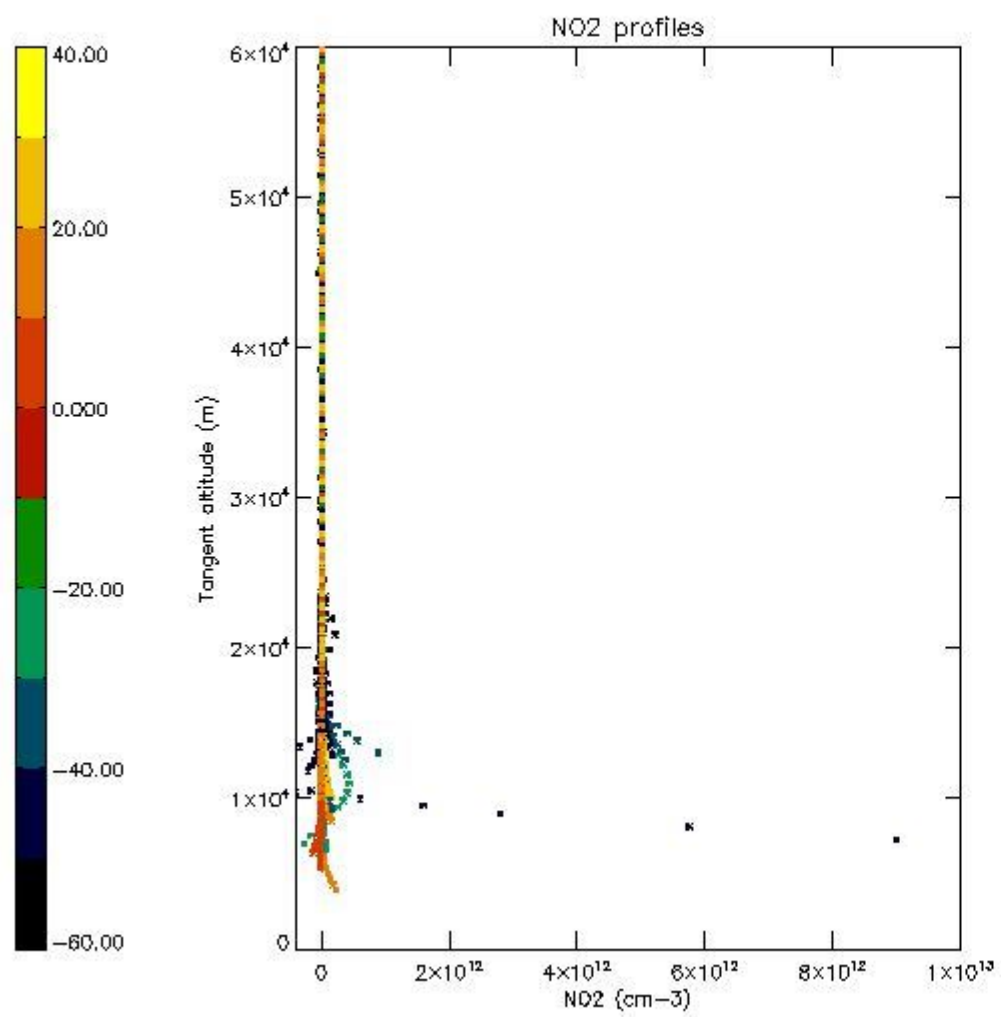
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



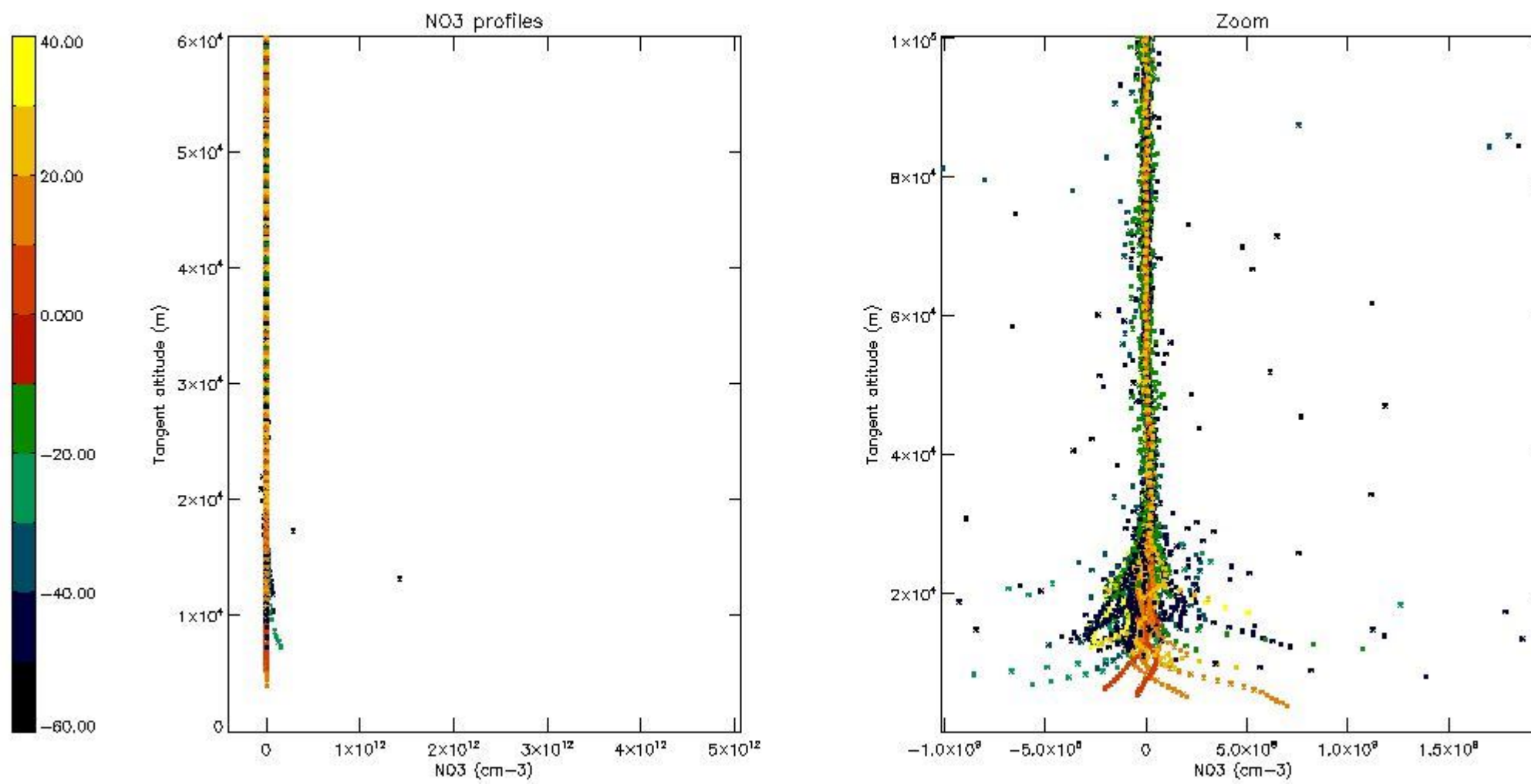
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

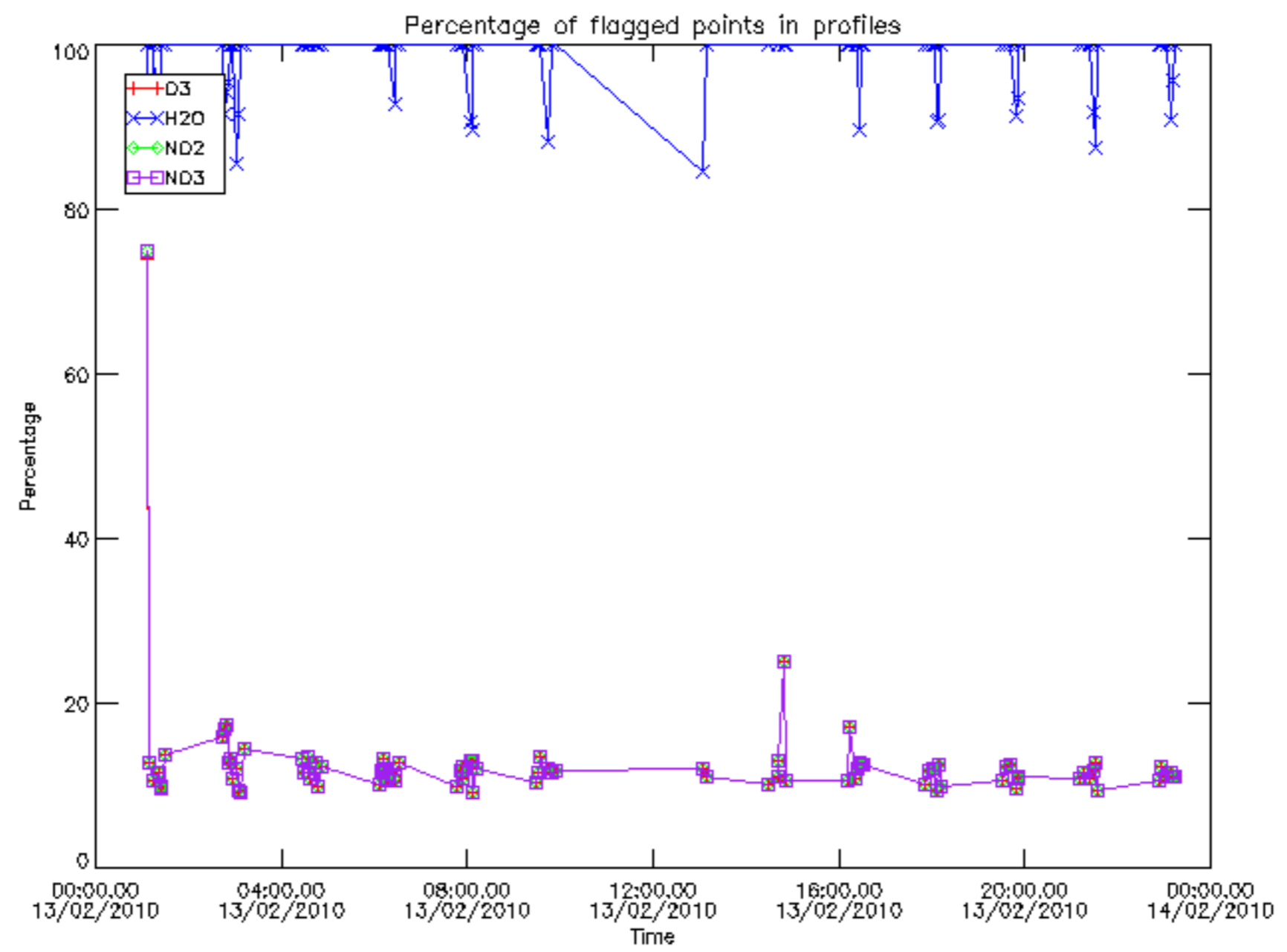
The colorbar represents the latitude.



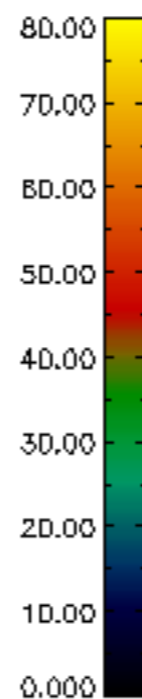
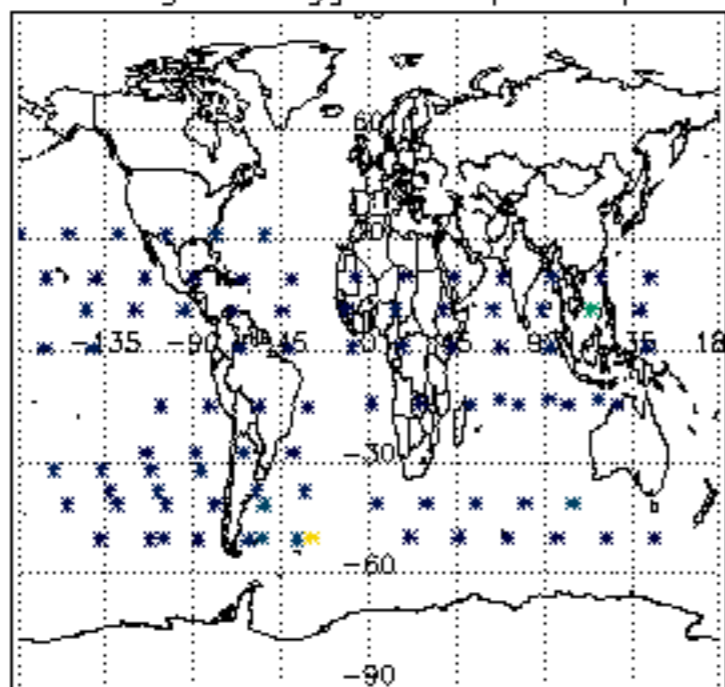
6. Auxiliary Data Files used for the production reported in section 2

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.

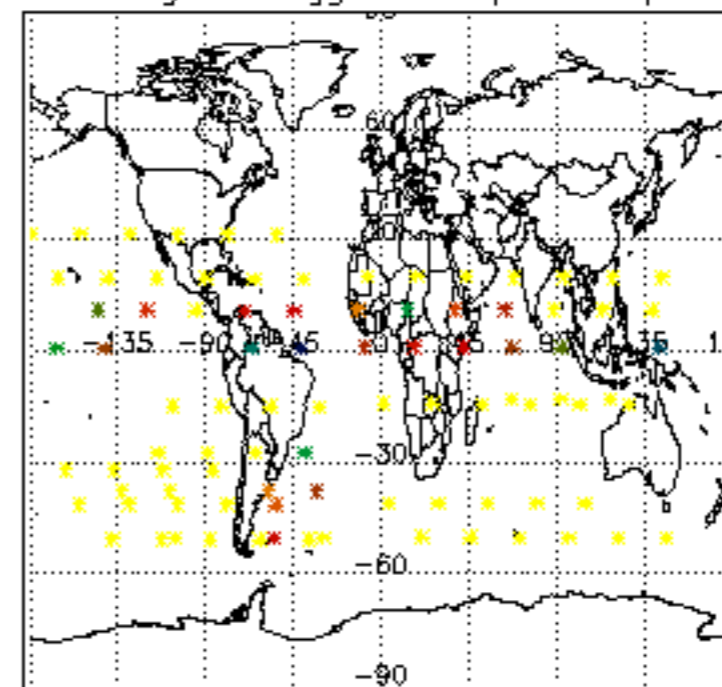
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	13-FEB-2010 00:03:11
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	13-FEB-2010 00:03:11
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	13-FEB-2010 00:03:11



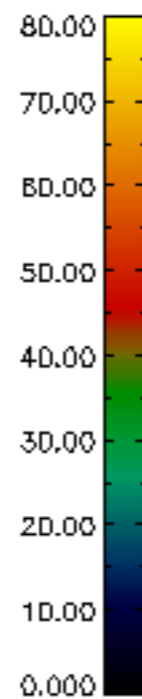
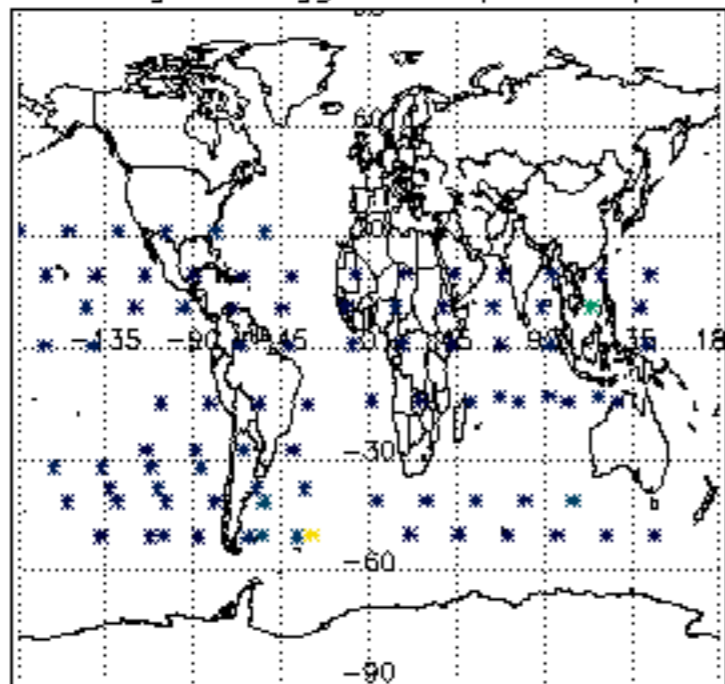
Percentage of flagged data per D3 profile



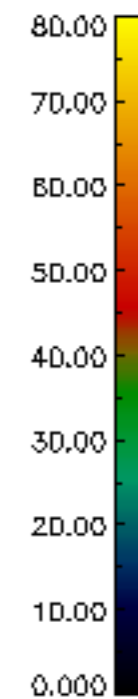
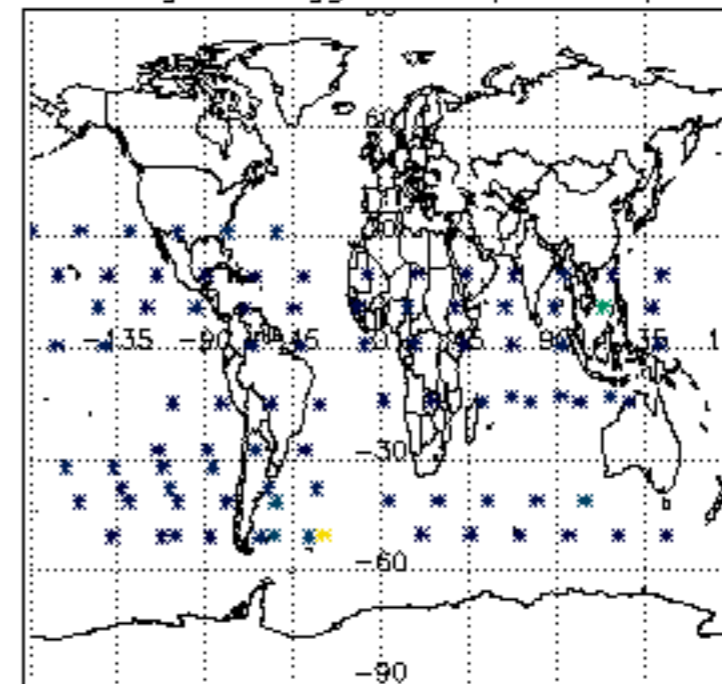
Percentage of flagged data per H2O profile

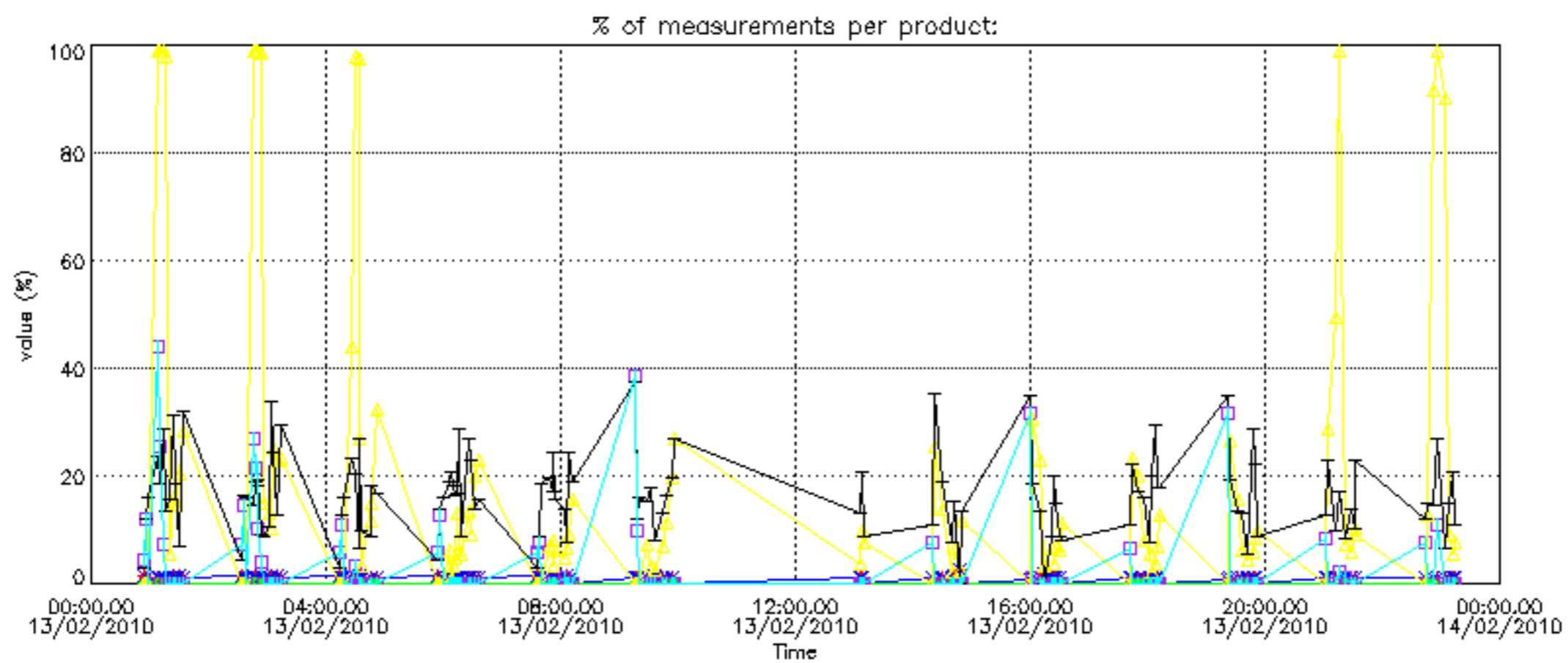
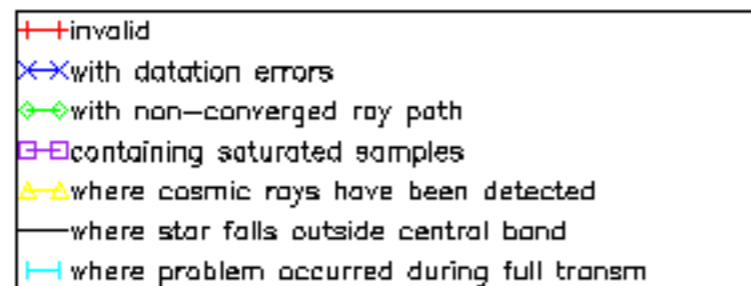


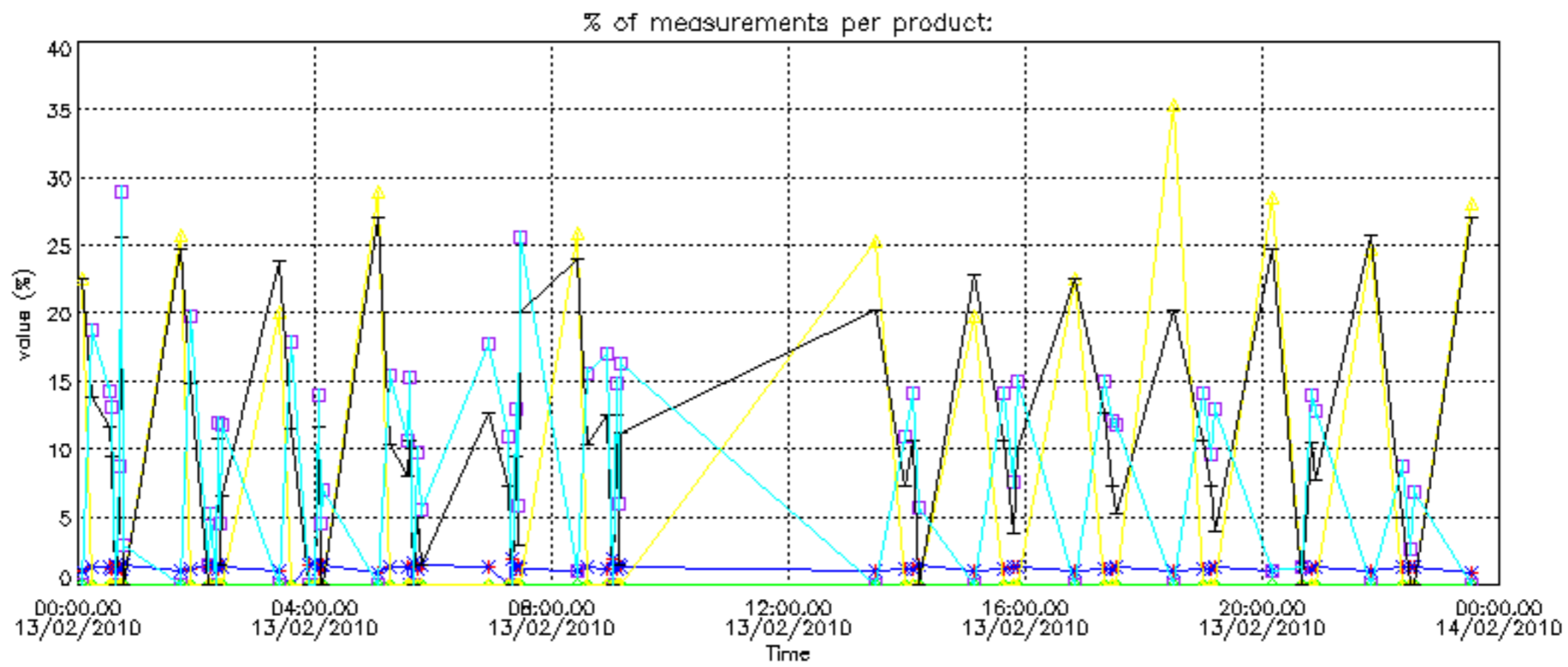
Percentage of flagged data per NO2 profile



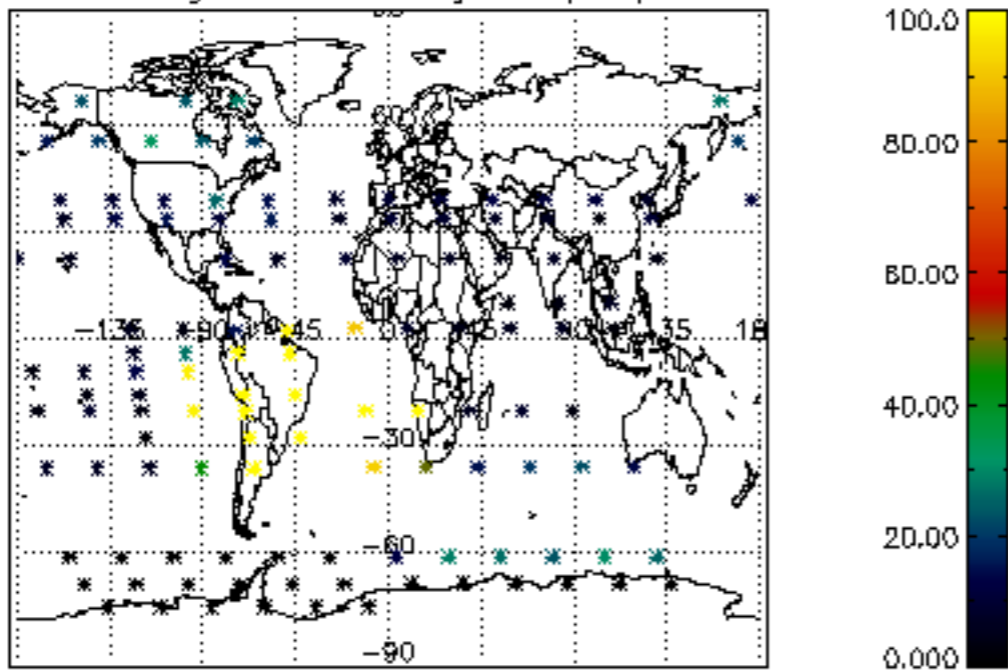
Percentage of flagged data per NO3 profile



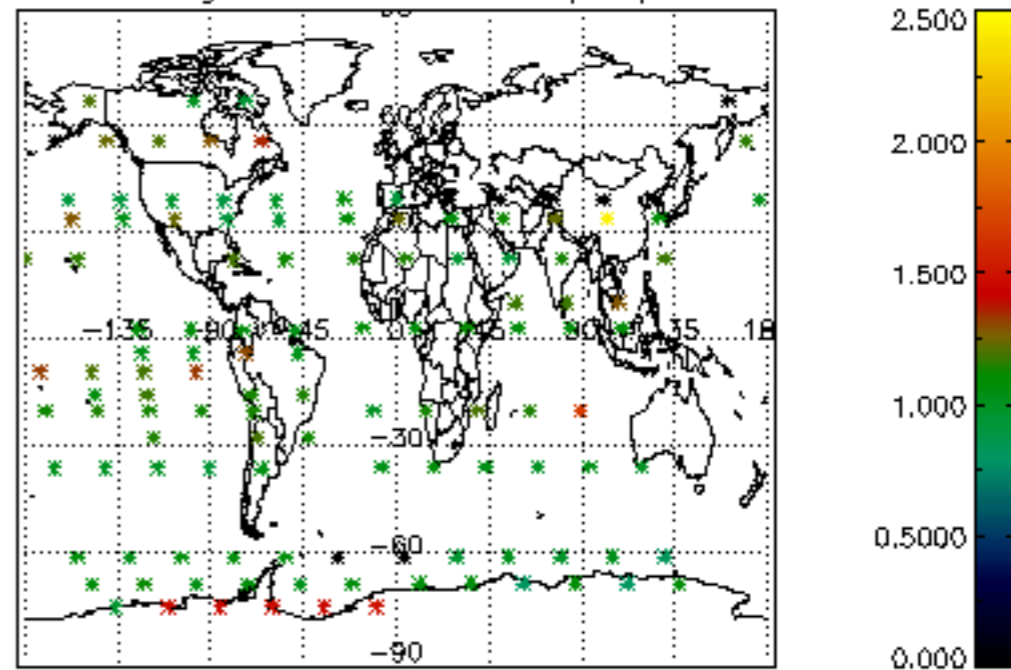




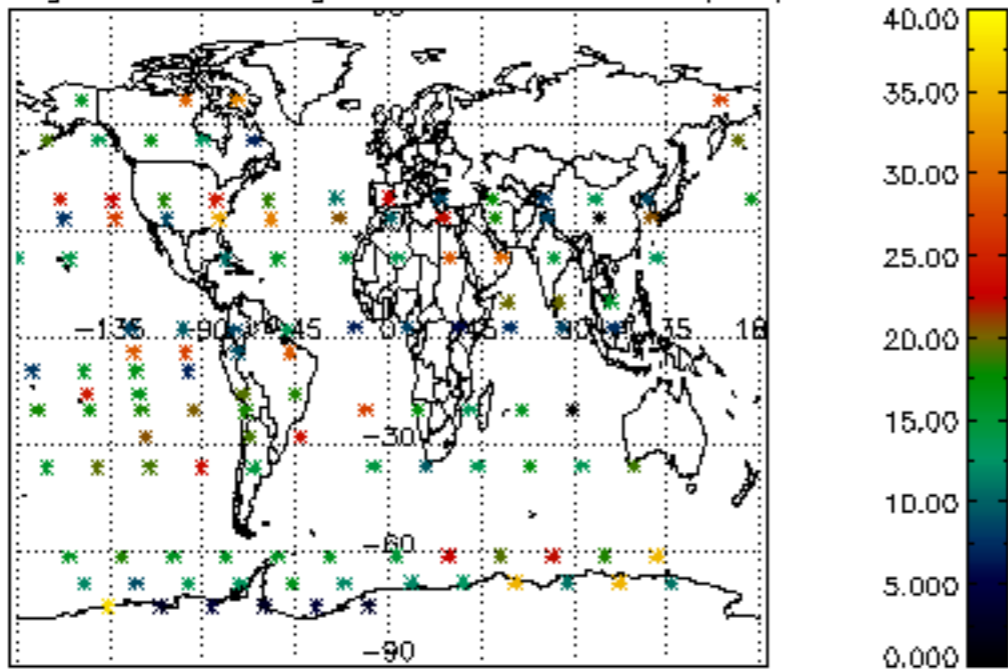
Percentage of cosmic ray hits per profile



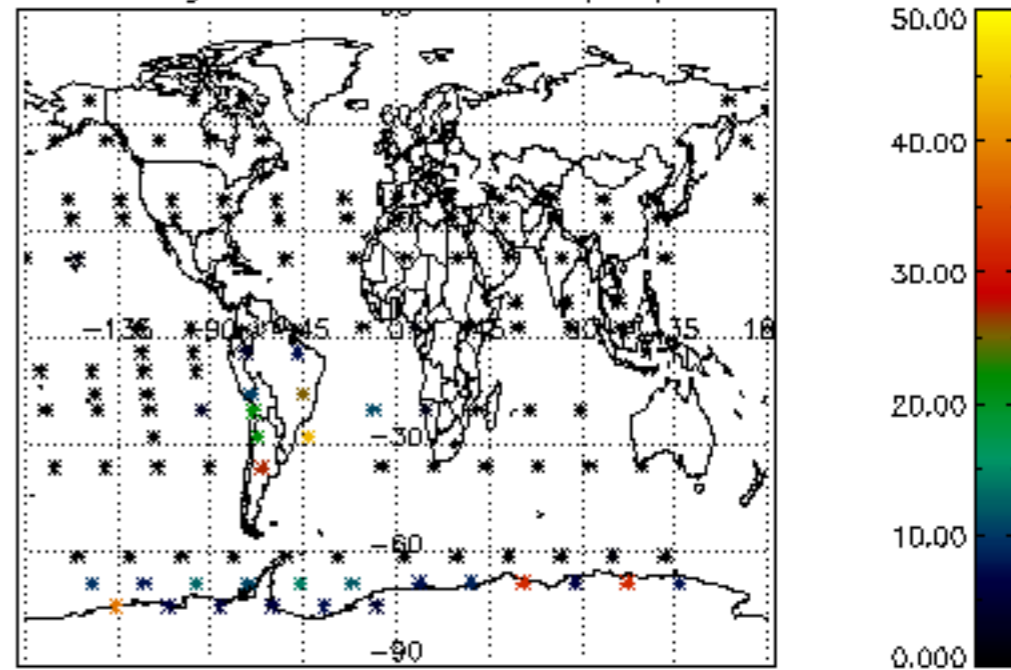
Percentage of datation errors per profile



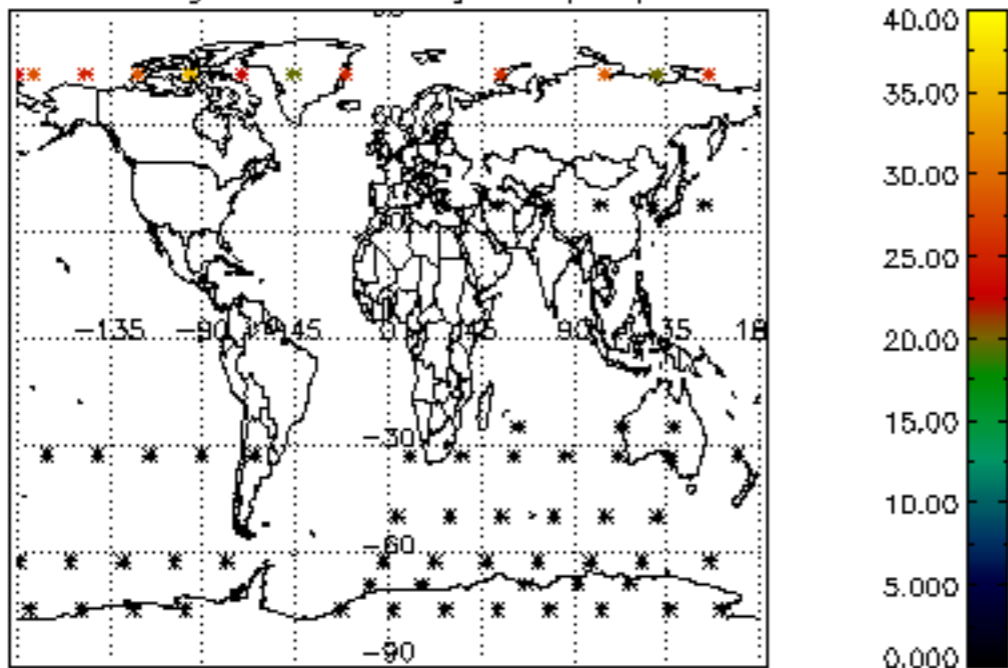
Percentage of star falling outside central band per profile



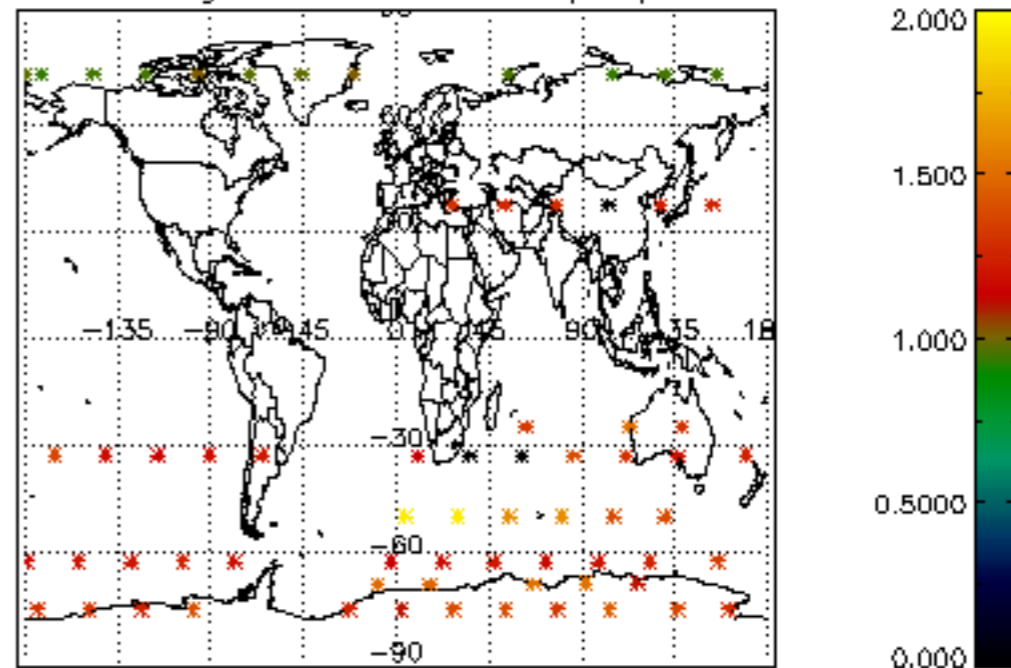
Percentage of saturation errors per profile



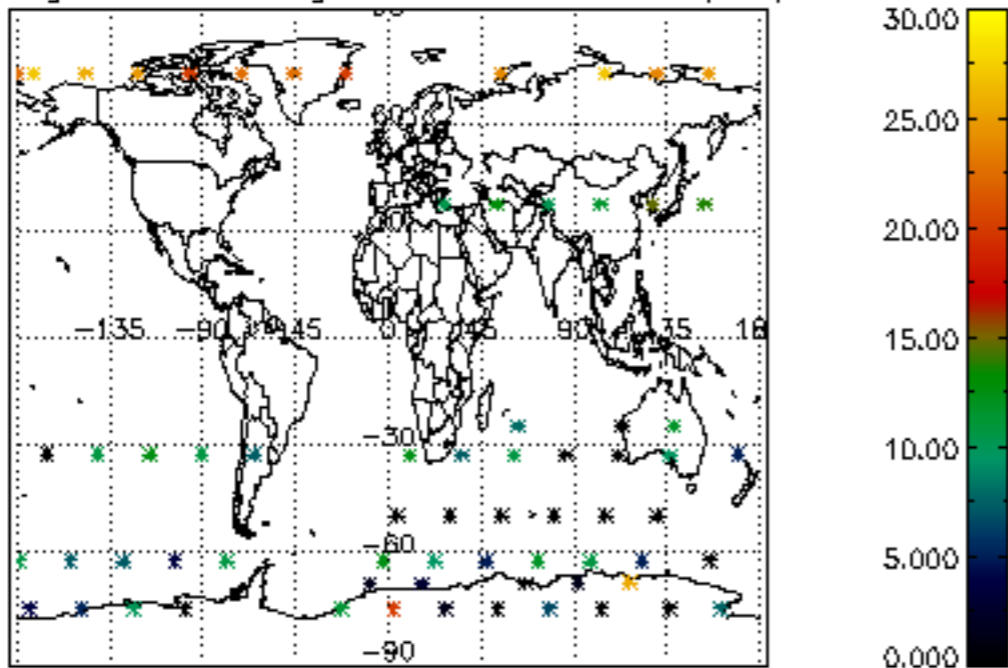
Percentage of cosmic ray hits per profile



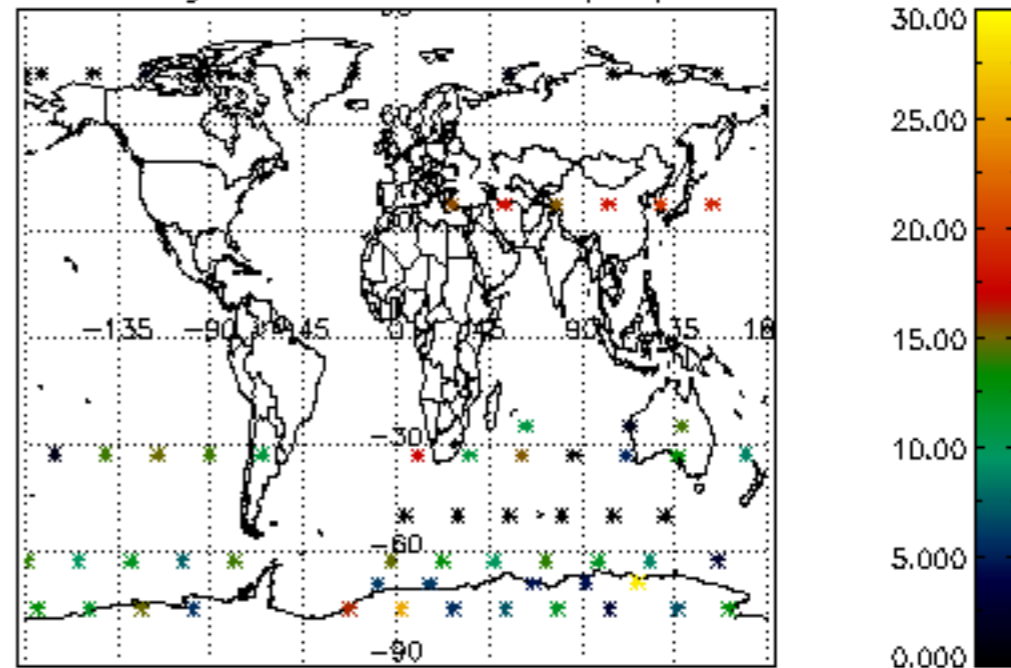
Percentage of datation errors per profile

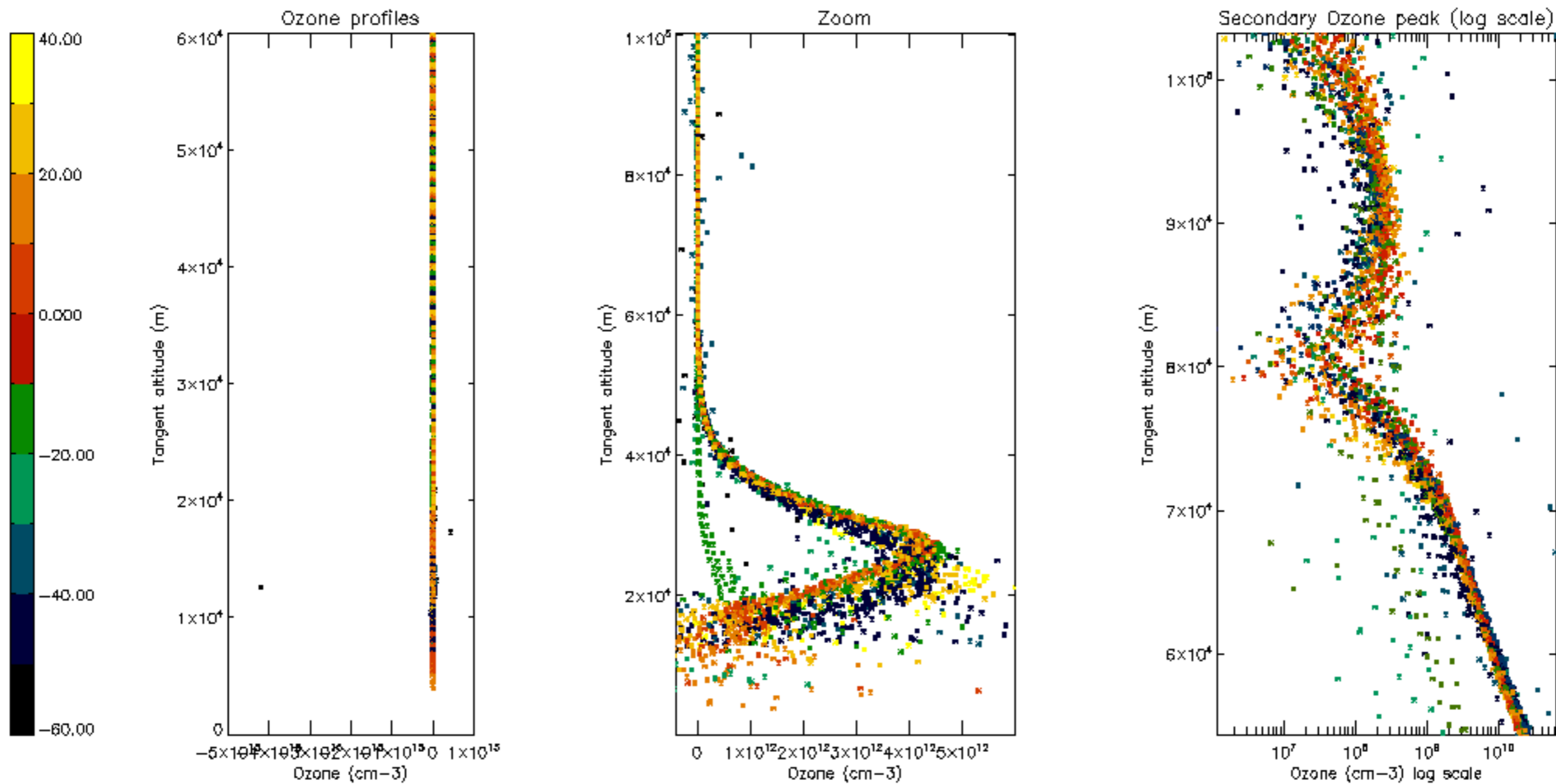


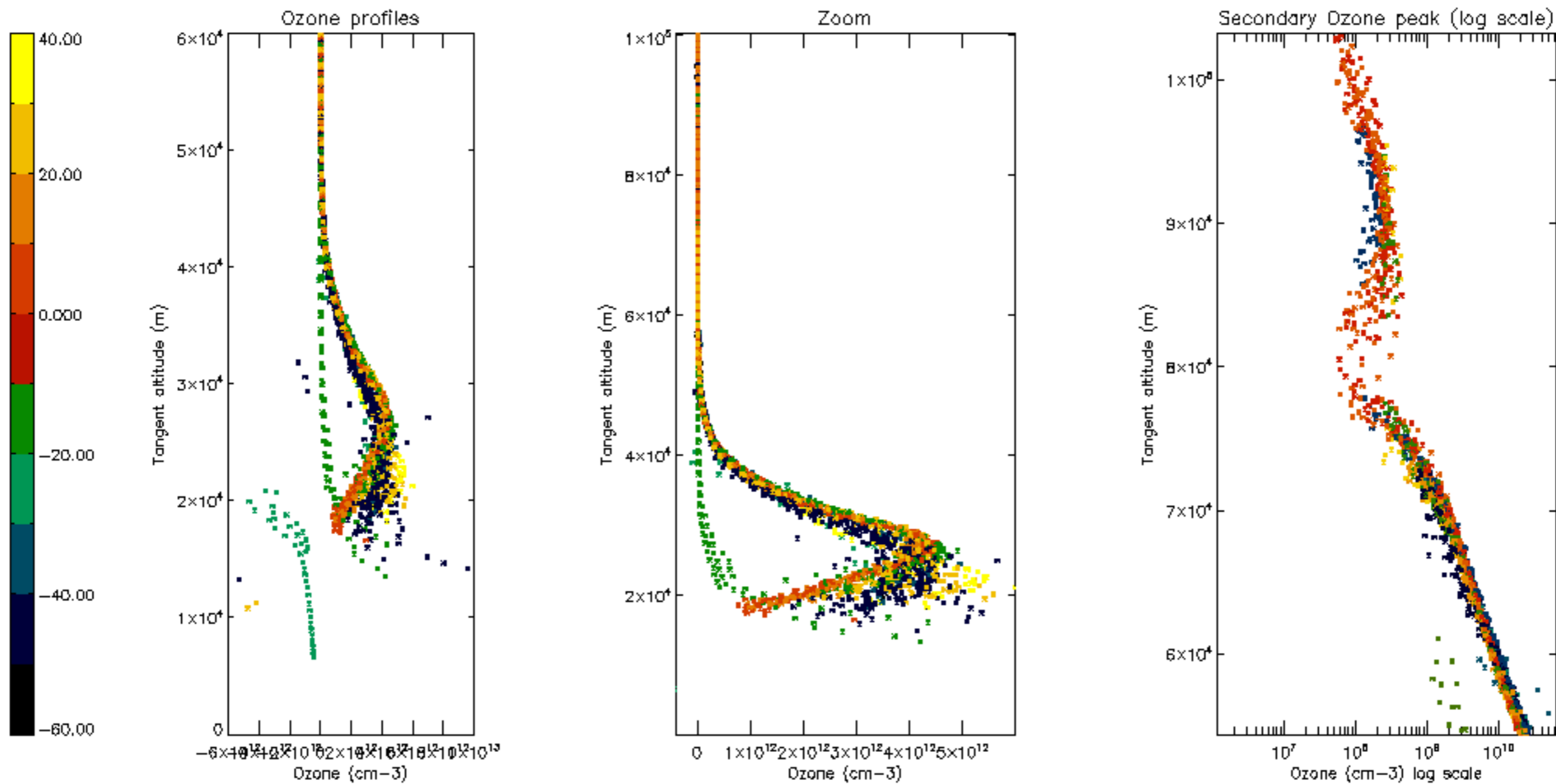
Percentage of star falling outside central band per profile

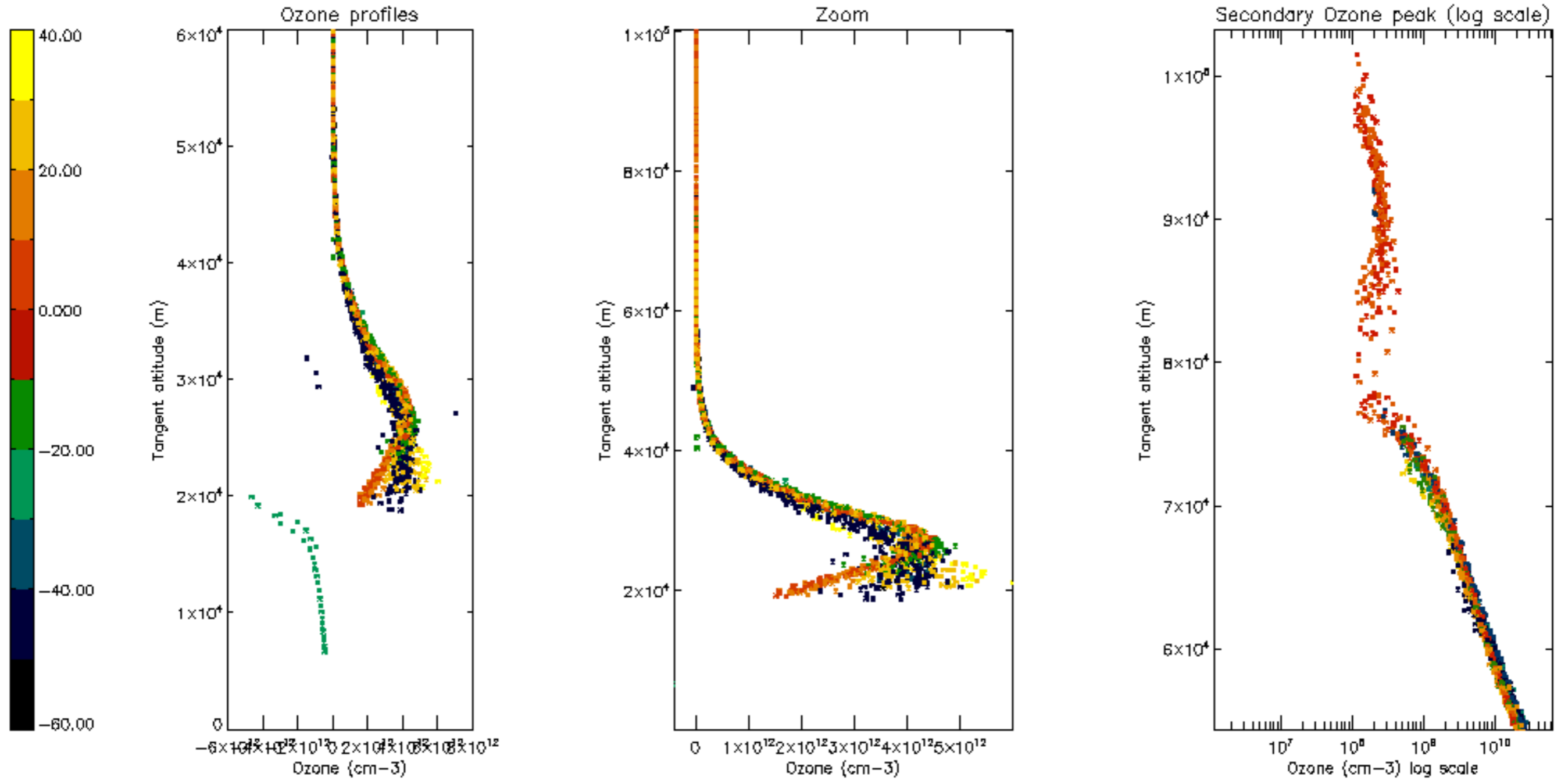


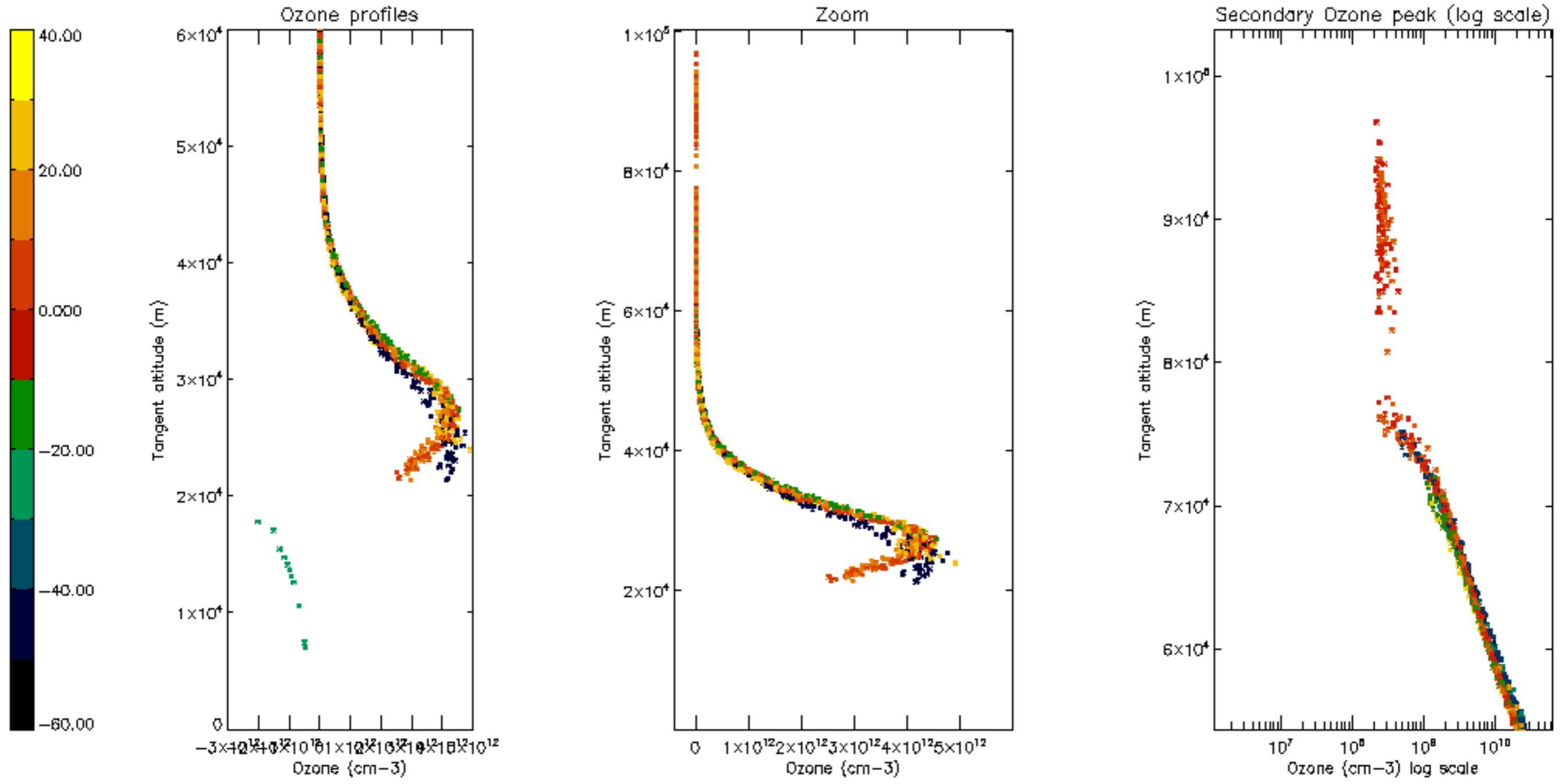
Percentage of saturation errors per profile

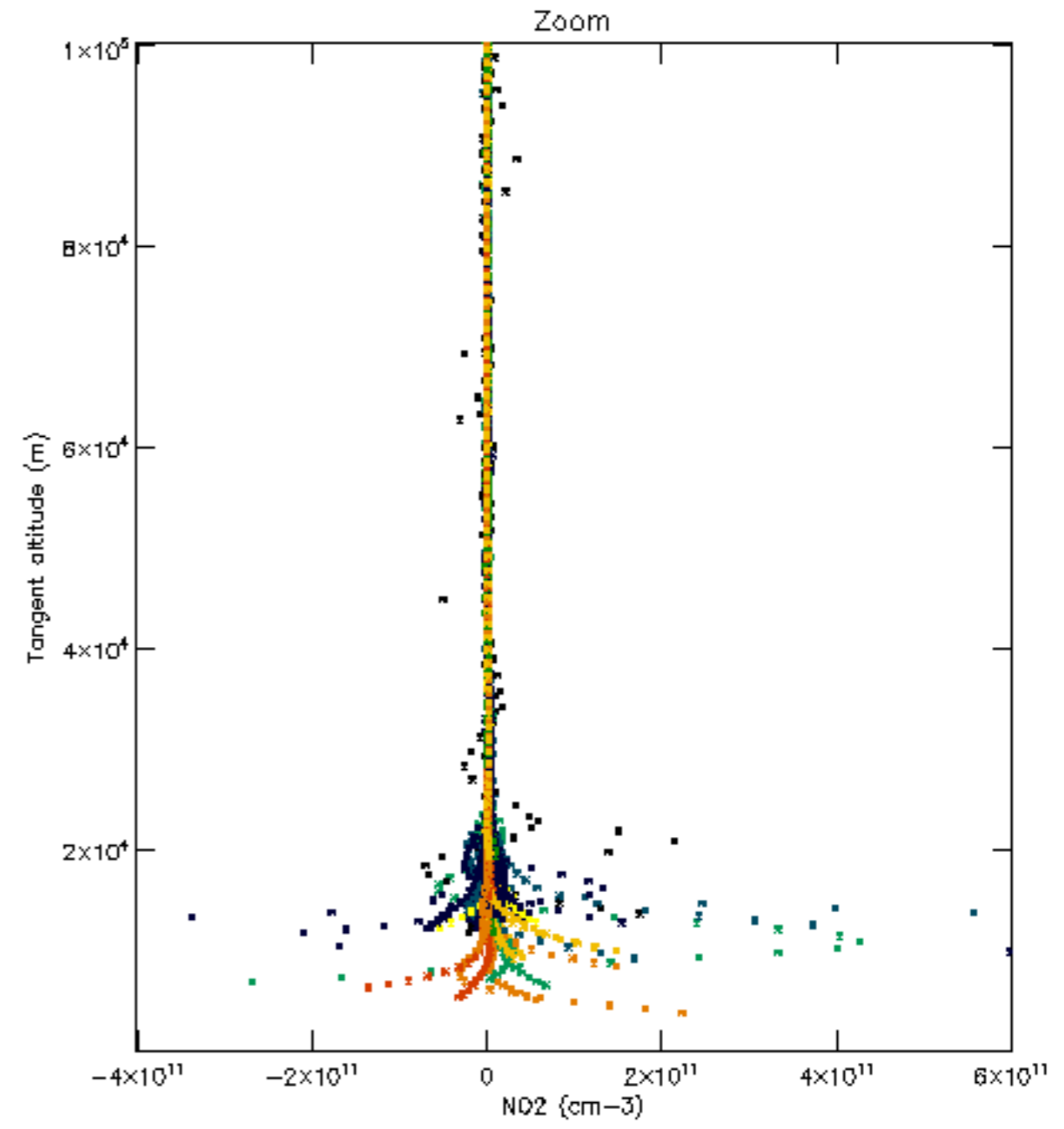
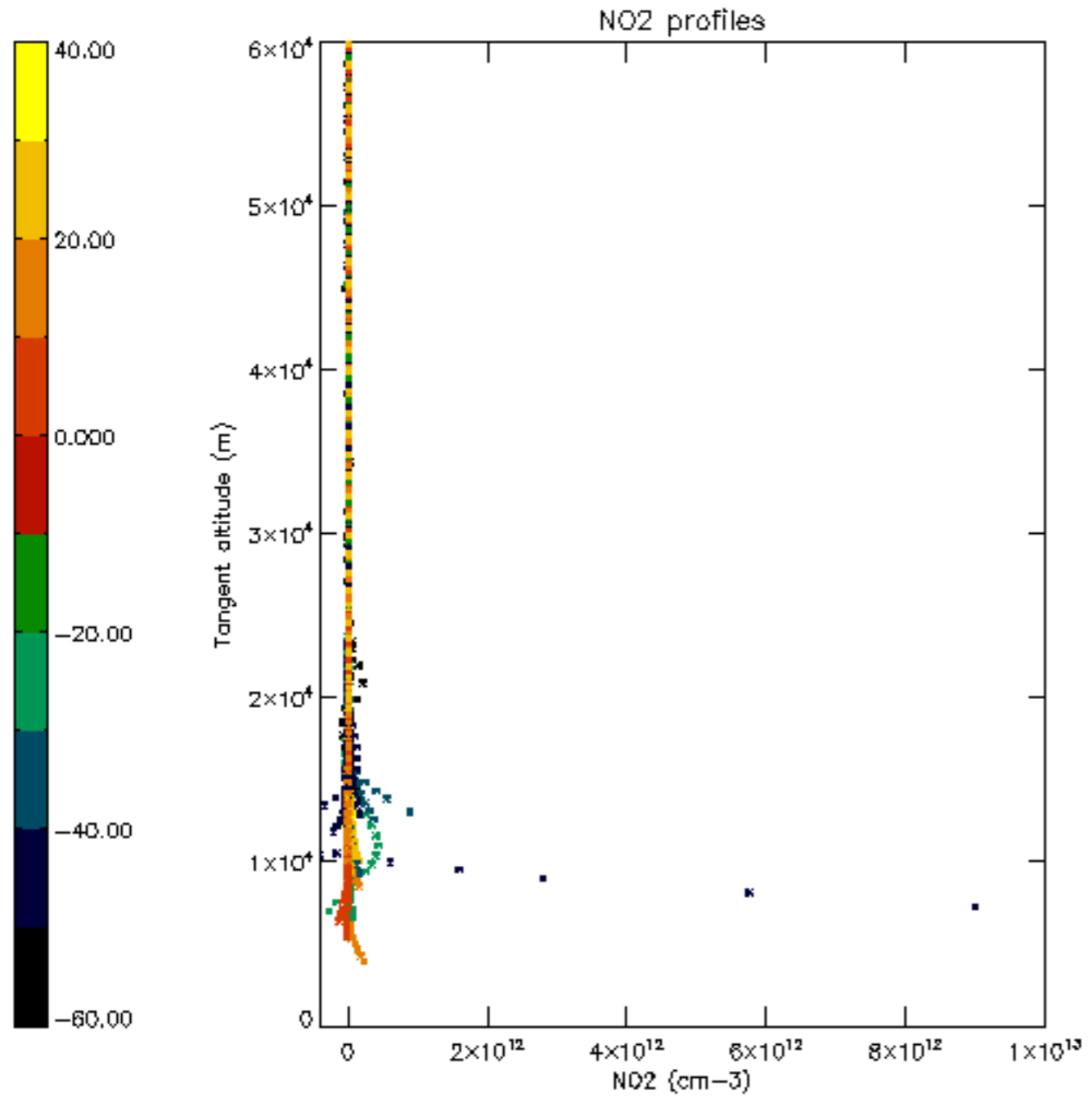


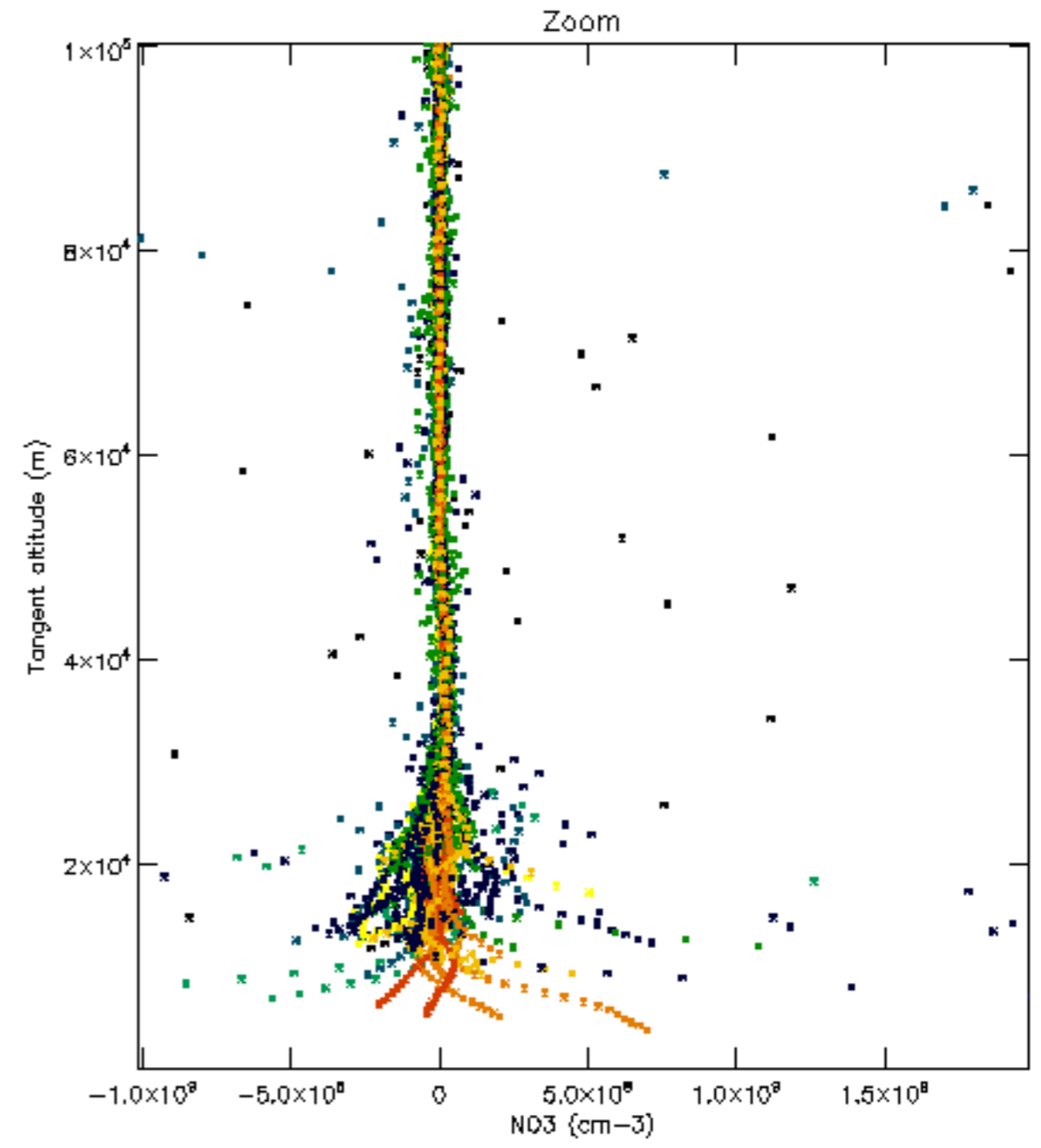
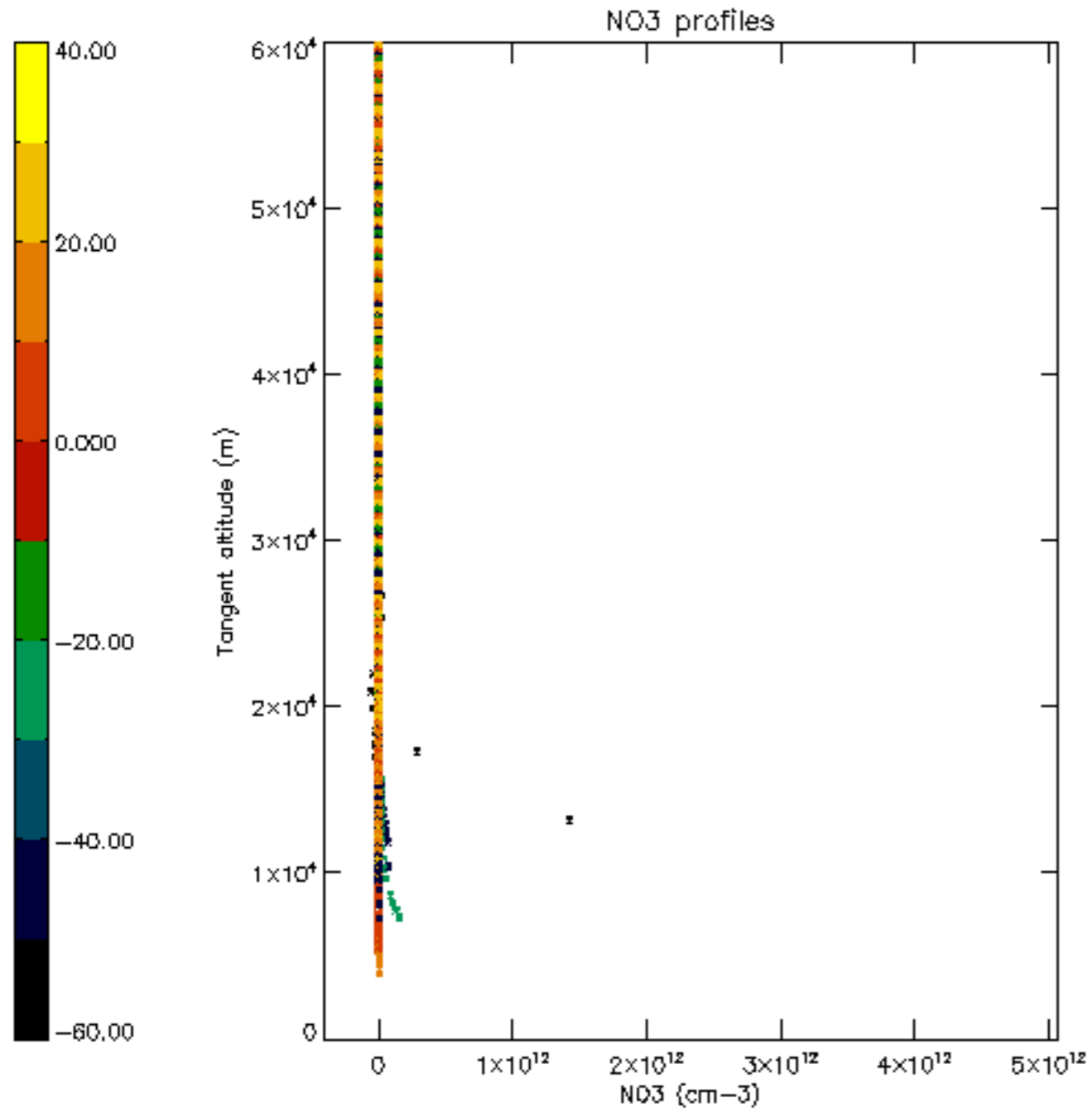


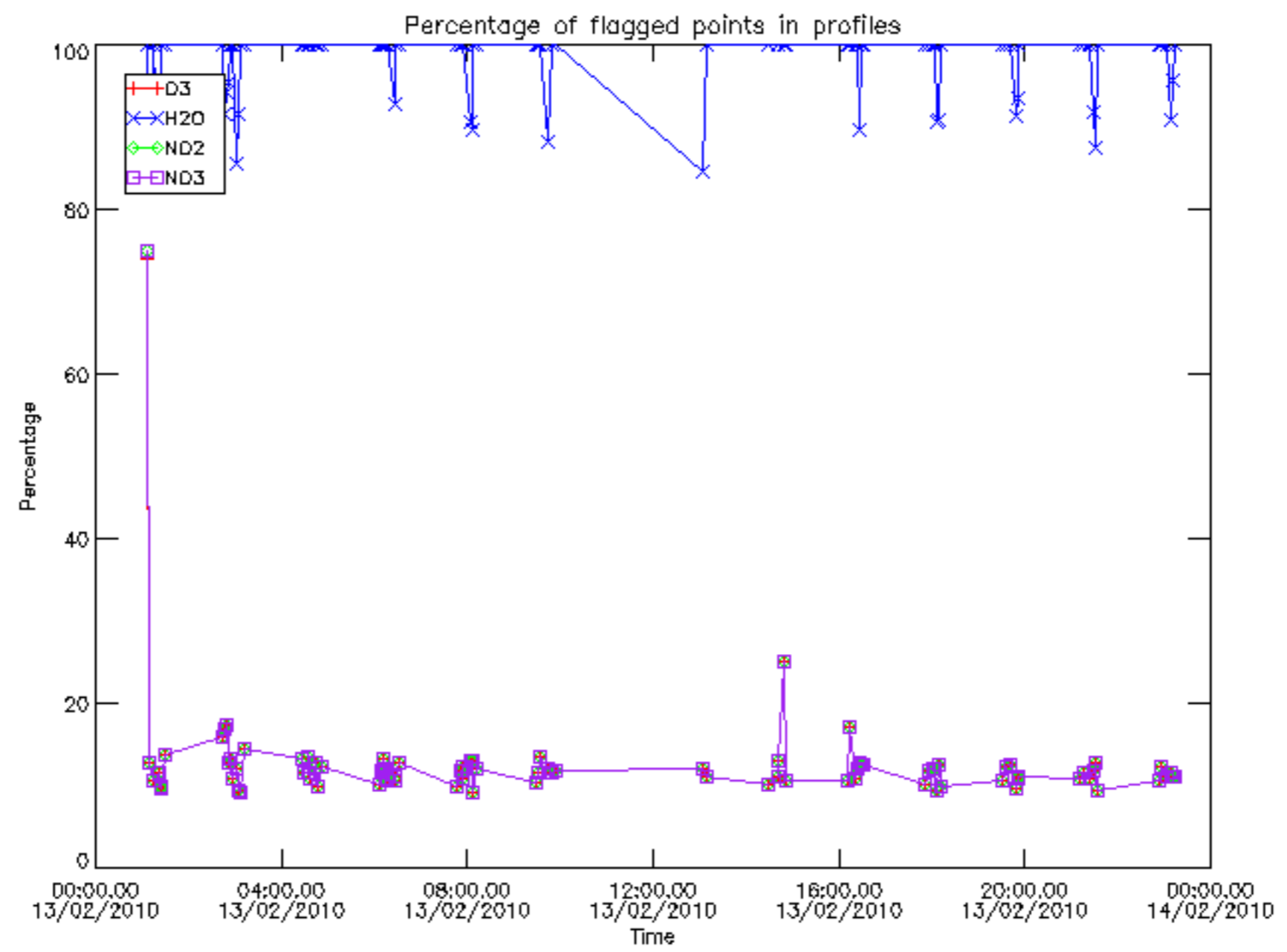




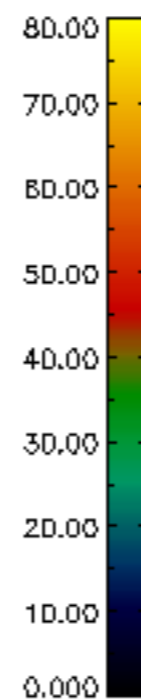
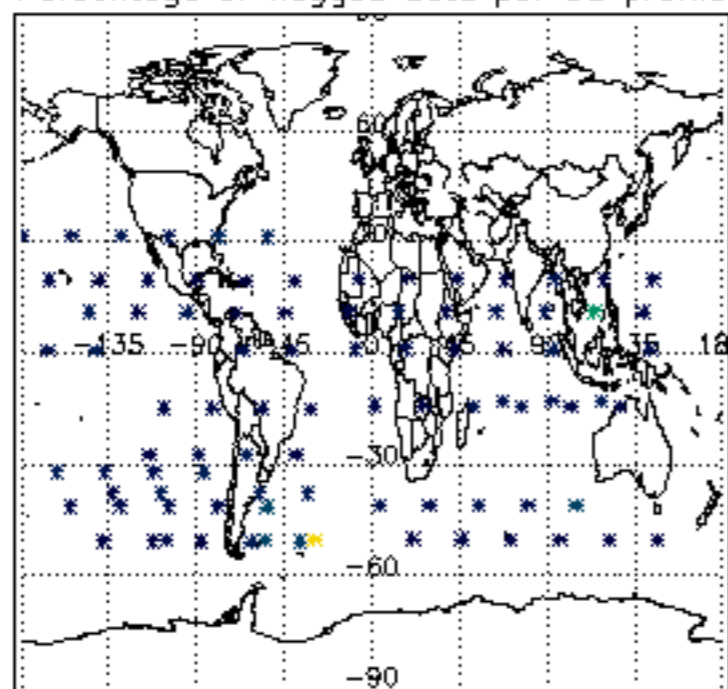




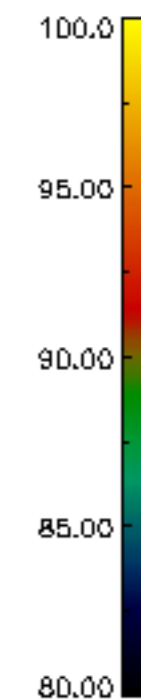
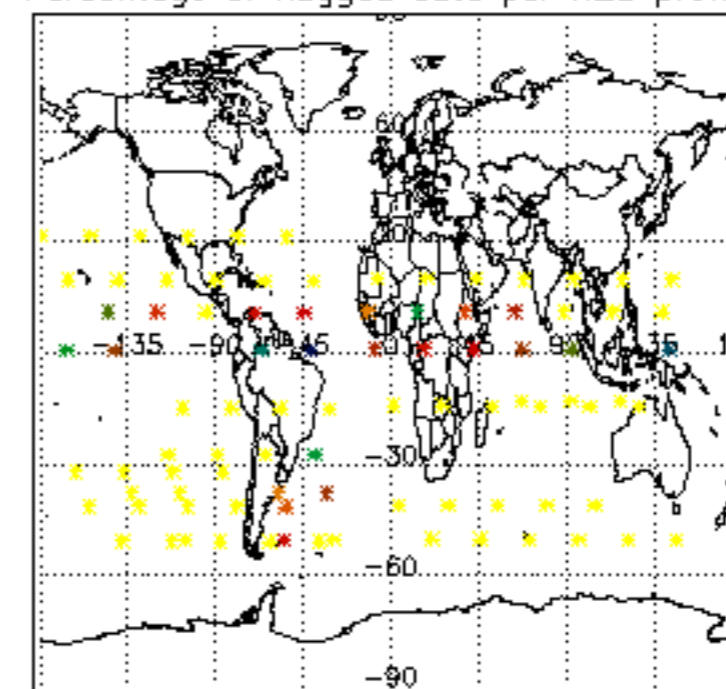




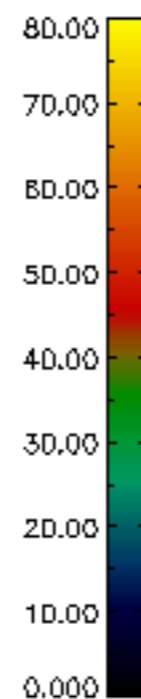
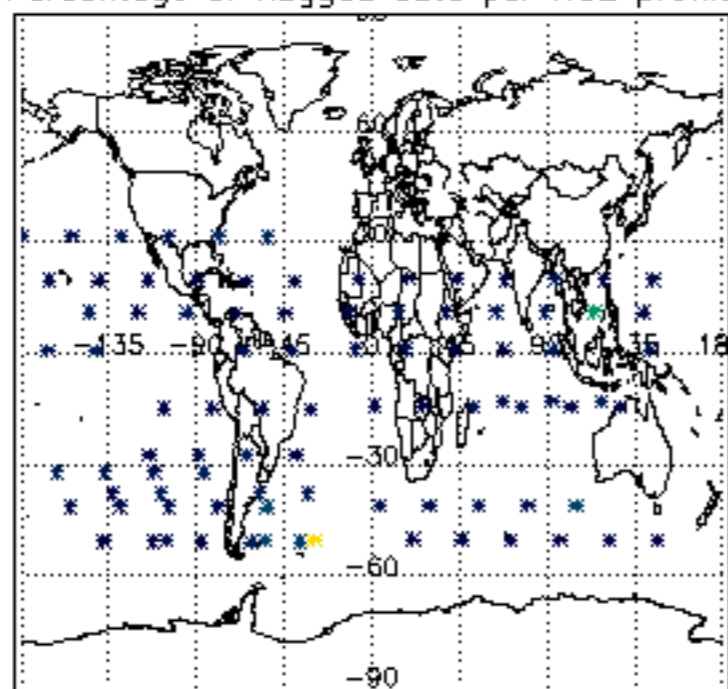
Percentage of flagged data per D3 profile



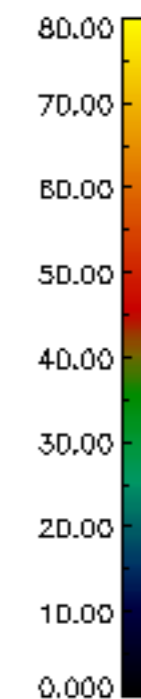
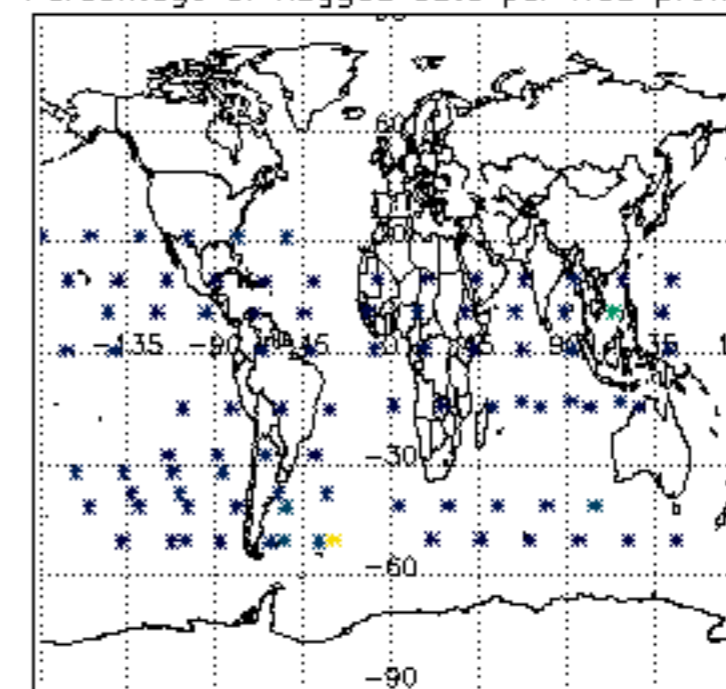
Percentage of flagged data per H2O profile

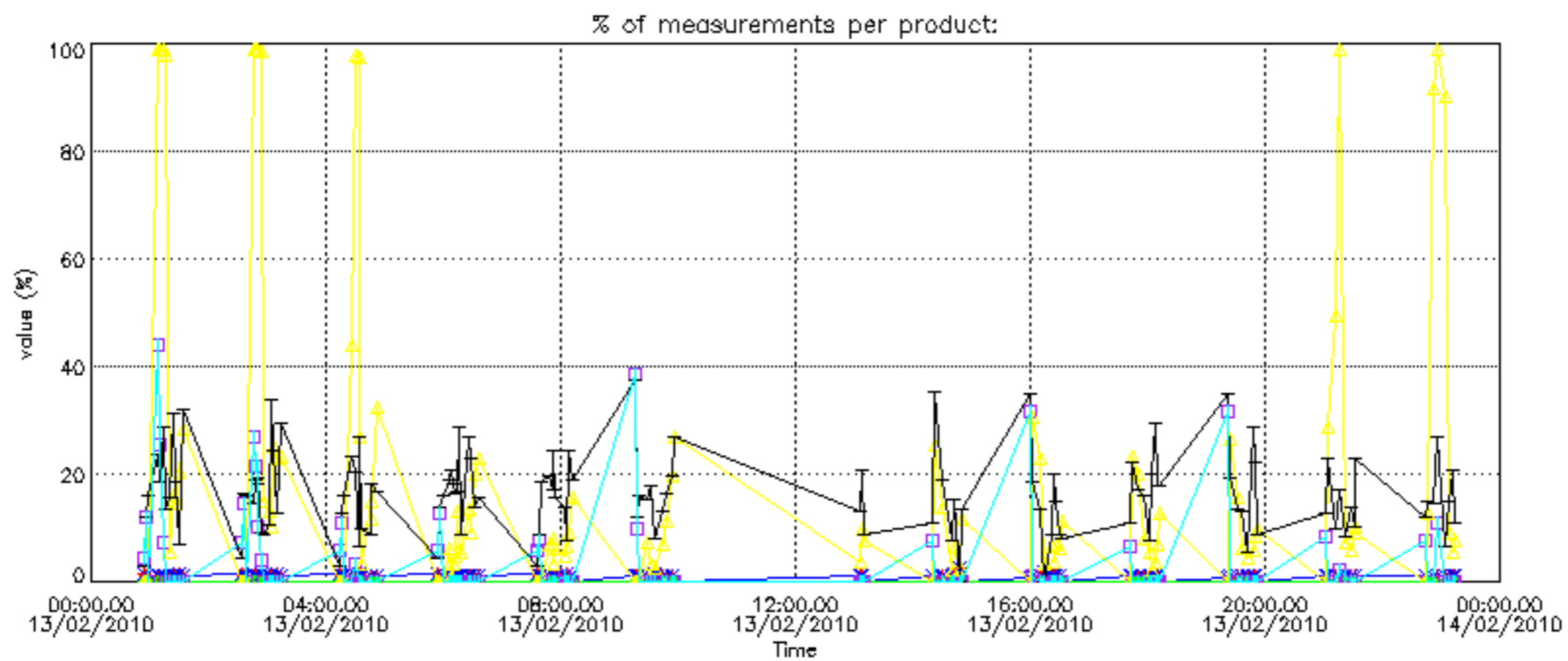
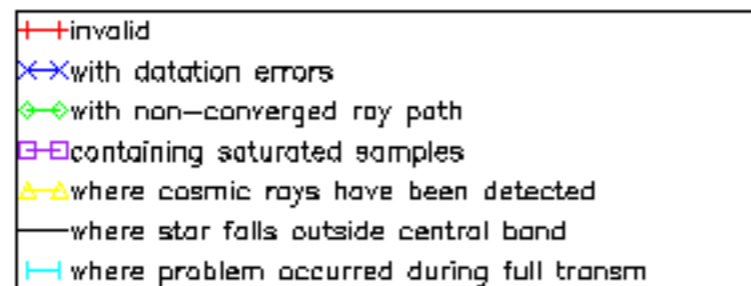


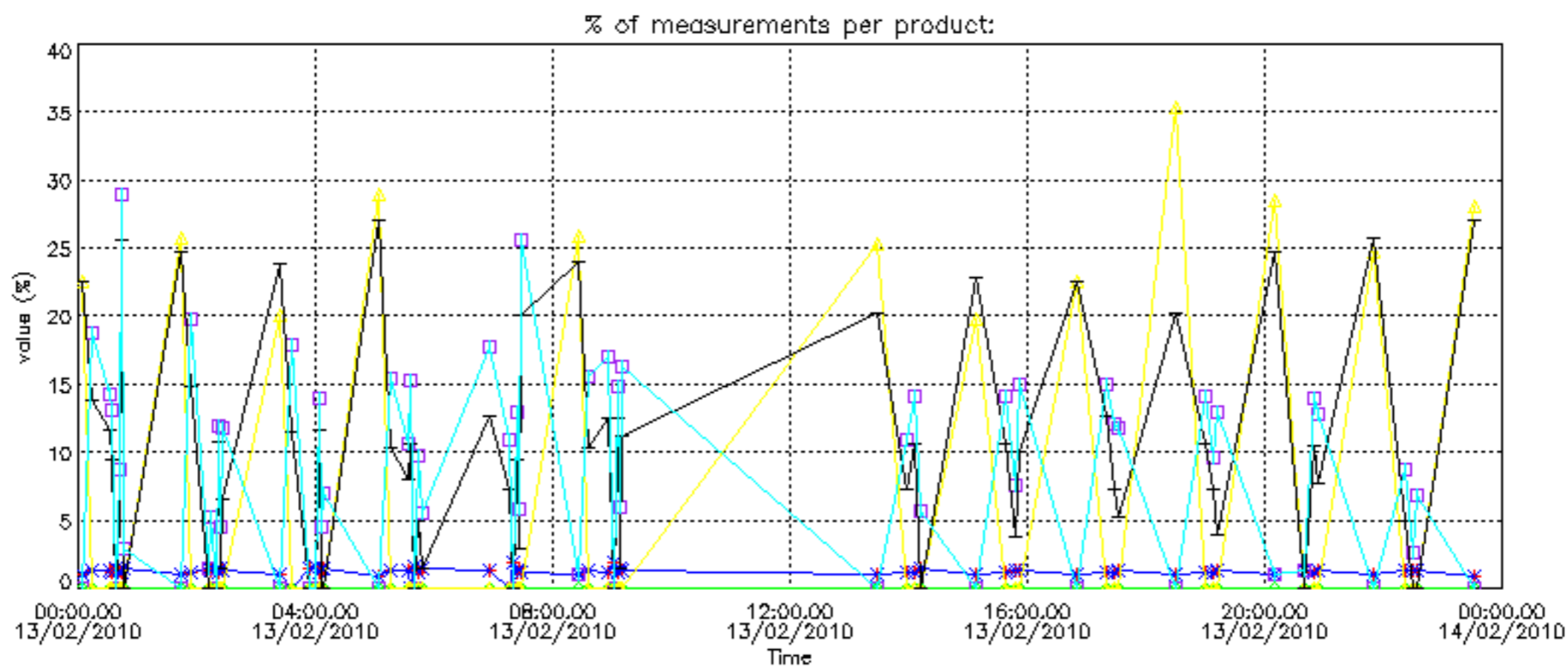
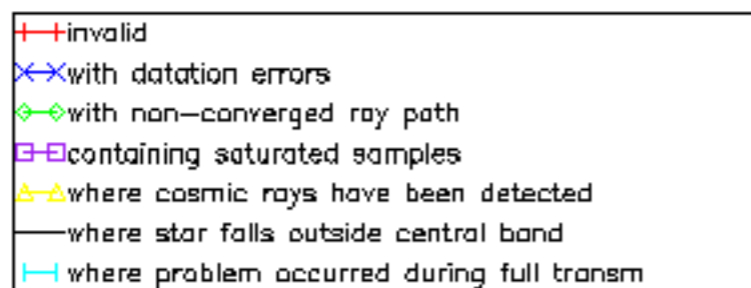
Percentage of flagged data per NO2 profile



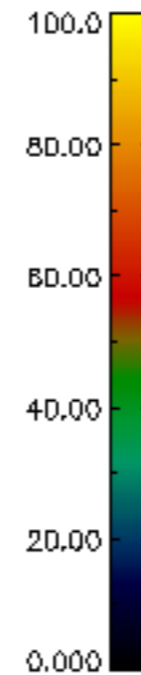
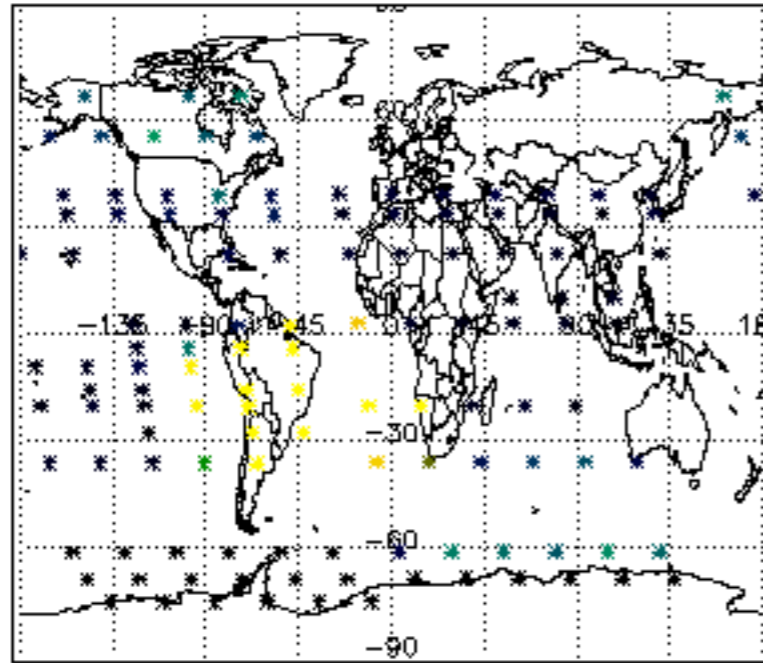
Percentage of flagged data per NO3 profile



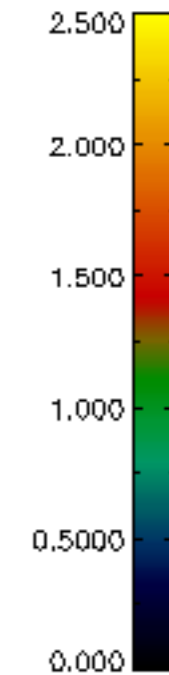
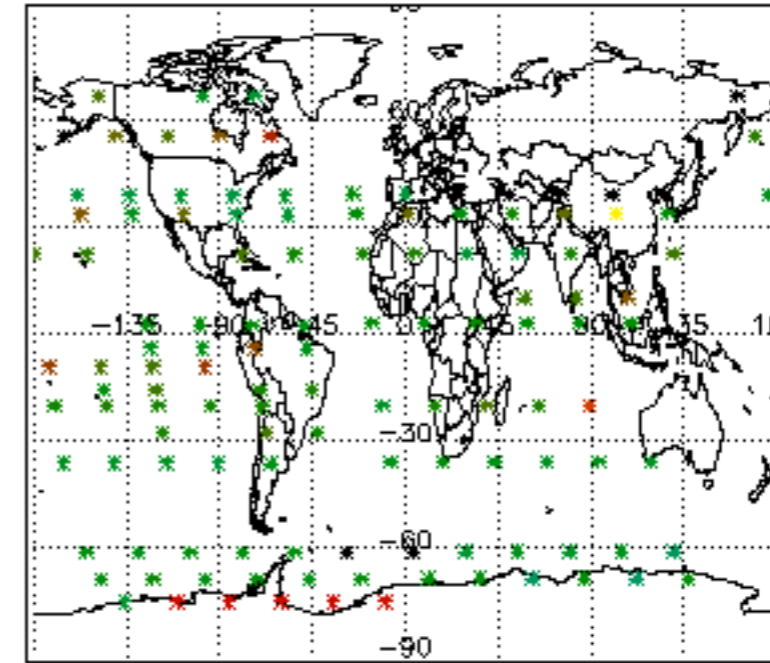




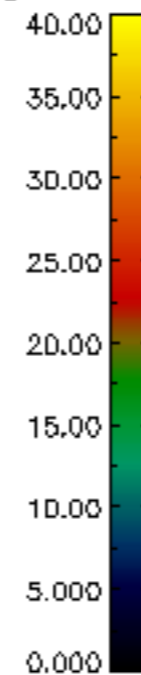
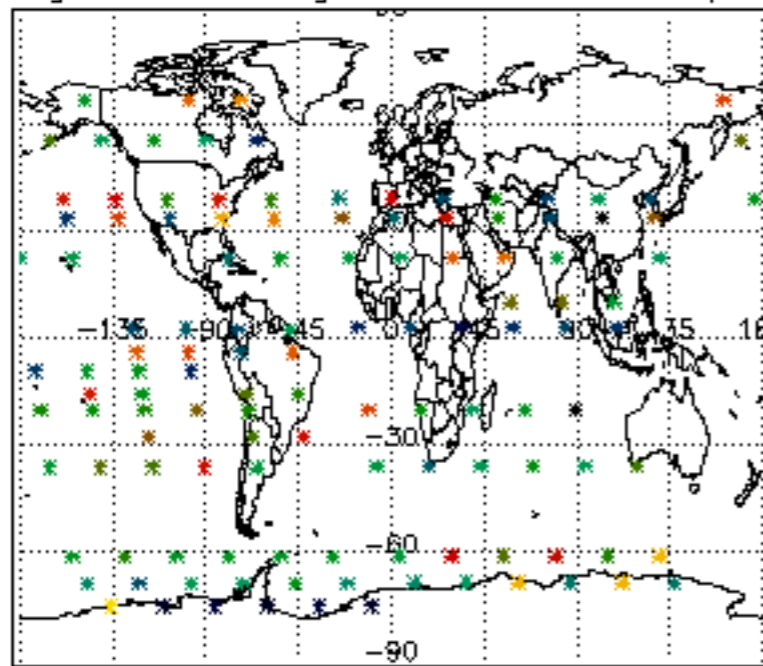
Percentage of cosmic ray hits per profile



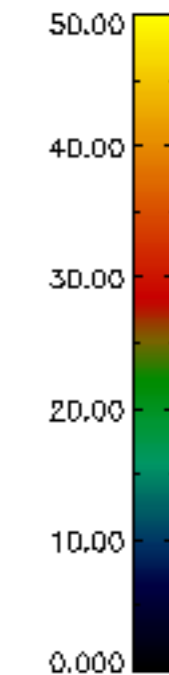
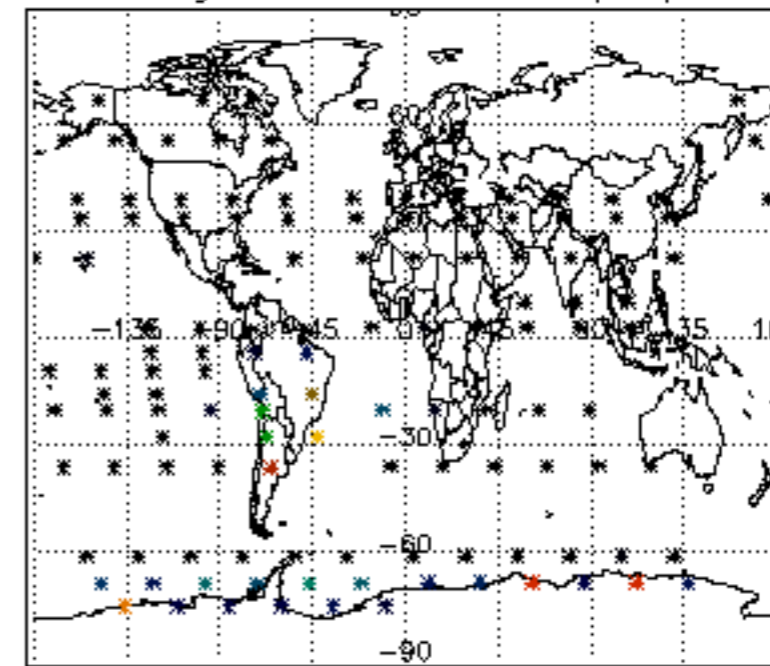
Percentage of datation errors per profile



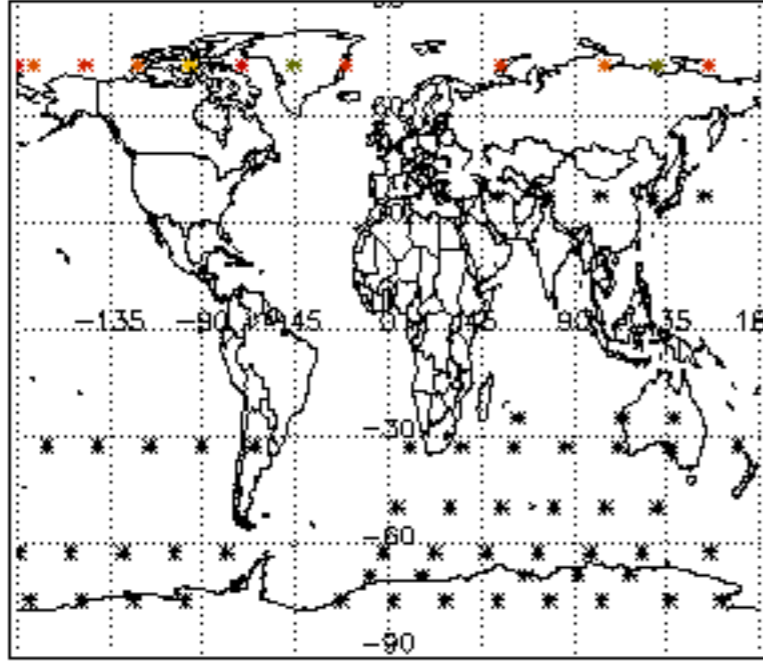
Percentage of star falling outside central band per profile



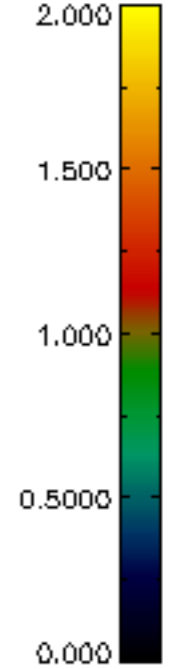
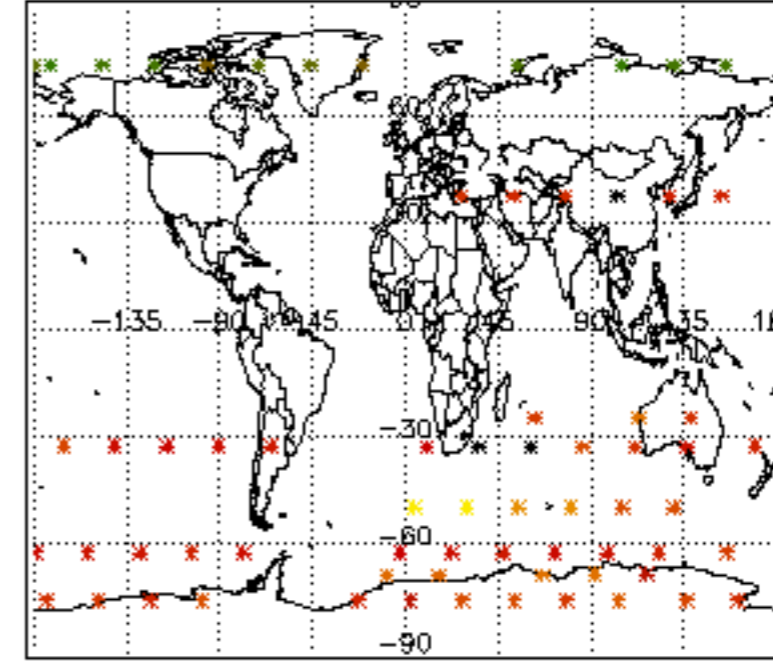
Percentage of saturation errors per profile



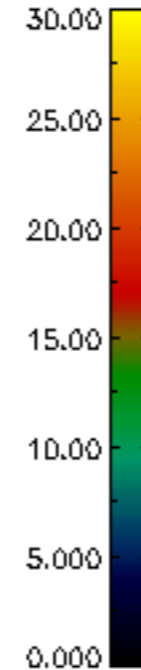
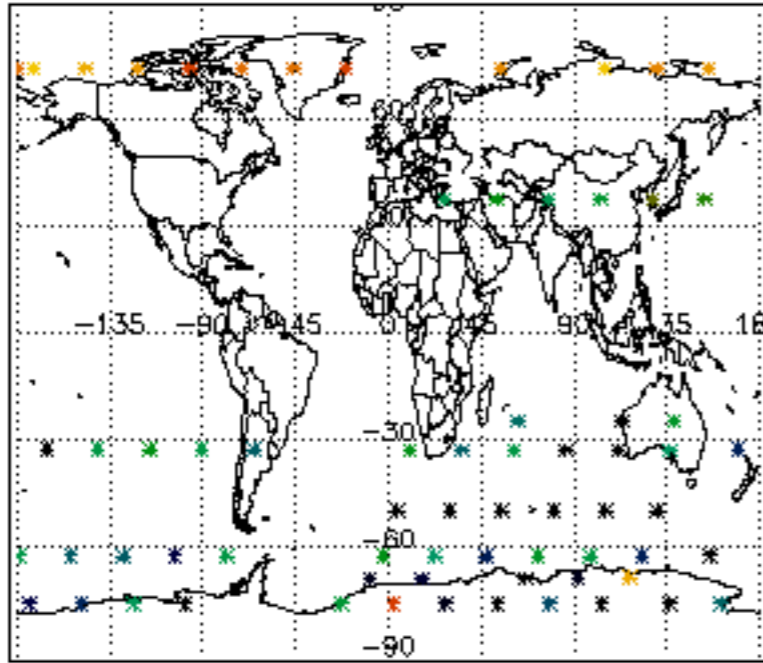
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

