

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	24APR2013 10:36:07
Data source version	GOMOS/6.01
Start time of products	23-02-2011 (23FEB2011 00:00:00)
Stop time of products	24-02-2011 (24FEB2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	254
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

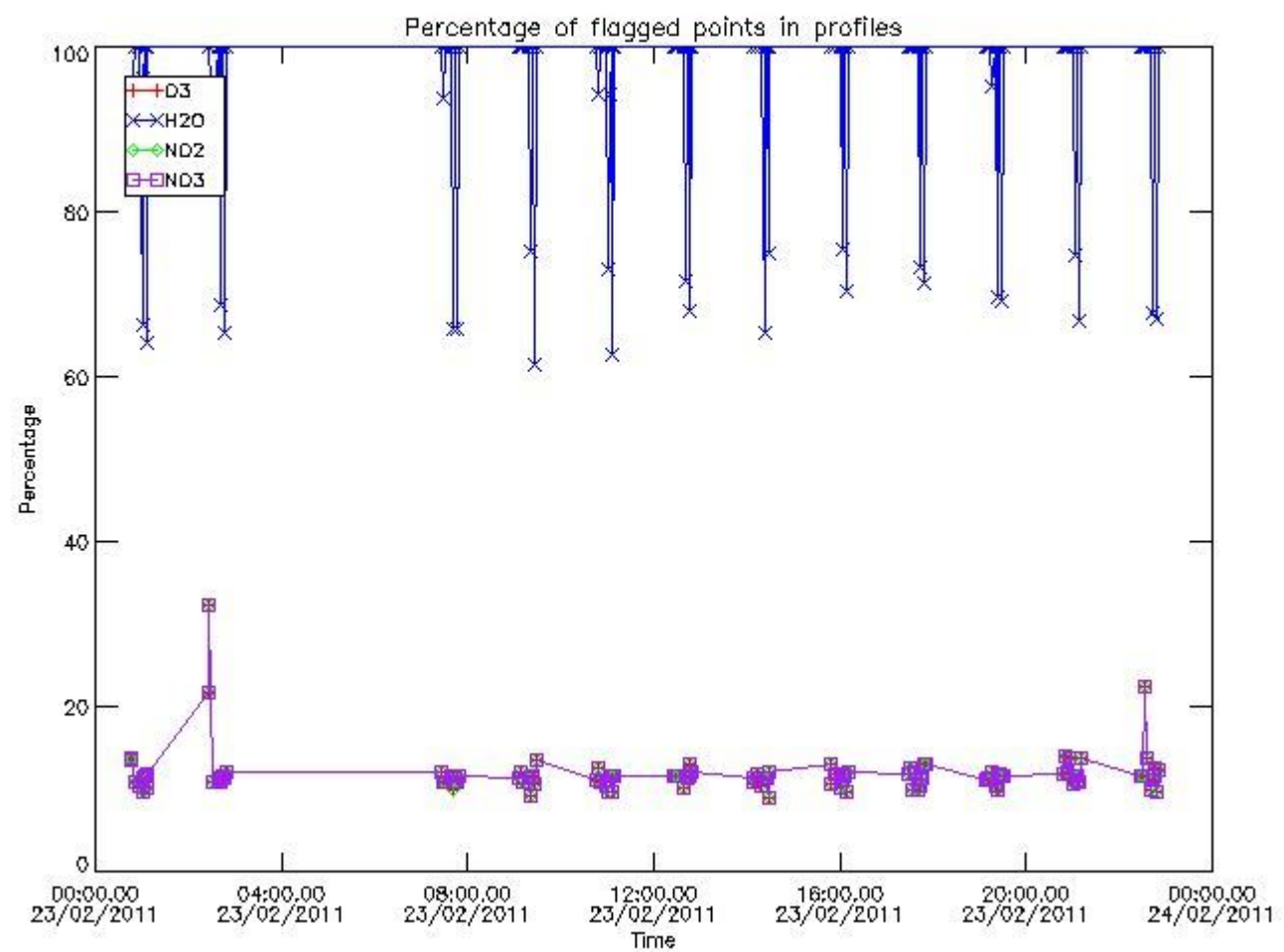
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110223_000410_000000443099_00404_46970_8345.N1	23-FEB-2011 00:04:10	Bright	43.500	82	48Bet UMa	2.3650	10600.	87	46970	No
2	GOM_NL__2PRFIN20110223_001223_000000373099_00404_46970_8346.N1	23-FEB-2011 00:12:23	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	46970	No
3	GOM_NL__2PRFIN20110223_001710_000000443099_00404_46970_8347.N1	23-FEB-2011 00:17:10	Bright	44.000	119	14Eta Dra	2.7270	4700.0	88	46970	No
4	GOM_NL__2PRFIN20110223_002117_000000443099_00404_46970_8348.N1	23-FEB-2011 00:21:17	Bright	43.500	130	23Bet Dra	2.7990	5800.0	87	46970	No
5	GOM_NL__2PRFIN20110223_002558_000000433099_00404_46970_8349.N1	23-FEB-2011 00:25:58	Bright	42.500	5	3Alp Lyr	0.033000	11000.	85	46970	No
6	GOM_NL__2PRFIN20110223_003312_000000383099_00404_46970_8350.N1	23-FEB-2011 00:33:12	Bright	37.500	168	17Zet Aql	2.9860	11000.	75	46970	No
7	GOM_NL__2PRFIN20110223_003553_000000493099_00404_46970_8351.N1	23-FEB-2011 00:35:53	Twilight	49.000	59	55Alp Oph	2.0800	8900.0	98	46970	No
8	GOM_NL__2PRFIN20110223_003818_000000613099_00404_46970_8352.N1	23-FEB-2011 00:38:18	Twilight	60.500	126	60Bet Oph	2.7700	4250.0	121	46970	No
9	GOM_NL__2PRFIN20110223_004506_000000453099_00404_46970_8353.N1	23-FEB-2011 00:45:06	Dark	45.000	137	22Lam Sgr	2.8240	4400.0	90	46970	No
10	GOM_NL__2PRFIN20110223_004627_000000413099_00404_46970_8354.N1	23-FEB-2011 00:46:27	Dark	41.000	116	19Del Sgr	2.7000	4100.0	82	46970	No
11	GOM_NL__2PRFIN20110223_005002_000000473099_00404_46970_8355.N1	23-FEB-2011 00:50:02	Dark	46.500	25	35Lam Sco	1.6200	28000.	93	46970	No
12	GOM_NL__2PRFIN20110223_005729_000000503099_00405_46971_8391.N1	23-FEB-2011 00:57:29	Dark	49.500	131	Gam Lup	2.8000	26000.	99	46971	No
13	GOM_NL__2PRFIN20110223_010032_000000453099_00405_46971_8392.N1	23-FEB-2011 01:00:32	Dark	45.000	4	Alp1Cen	-0.010000	5800.0	90	46971	No
14	GOM_NL__2PRFIN20110223_010152_000000543099_00405_46971_8393.N1	23-FEB-2011 01:01:52	Dark	53.500	10	Bet Cen	0.61000	28000.	107	46971	No
15	GOM_NL__2PRFIN20110223_010329_000000453099_00405_46971_8394.N1	23-FEB-2011 01:03:29	Dark	44.500	77	Eps Cen	2.3030	28000.	89	46971	No
16	GOM_NL__2PRFIN20110223_010533_000000513099_00405_46971_8395.N1	23-FEB-2011 01:05:33	Dark	50.500	26	Gam Cru	1.6240	2900.0	101	46971	No
17	GOM_NL__2PRFIN20110223_010738_000000433099_00405_46971_8396.N1	23-FEB-2011 01:07:38	Dark	43.000	99	Del Cen	2.5750	26000.	86	46971	No
18	GOM_NL__2PRFIN20110223_011017_000000463099_00405_46971_8397.N1	23-FEB-2011 01:10:17	Straylight	45.500	113	Mu Vel	2.6920	5000.0	91	46971	No
19	GOM_NL__2PRFIN20110223_012310_000000503099_00405_46971_8398.N1	23-FEB-2011 01:23:10	Twilight	49.500	48	30Alp Hya	1.9770	4100.0	99	46971	No
20	GOM_NL__2PRFIN20110223_012945_000000433099_00405_46971_8399.N1	23-FEB-2011 01:29:45	Bright	42.500	22	32Alp Leo	1.3600	15200.	85	46971	No
21	GOM_NL__2PRFIN20110223_013304_000000423099_00405_46971_8400.N1	23-FEB-2011 01:33:04	Bright	41.500	166	17Eps Leo	2.9800	6000.0	83	46971	No
22	GOM_NL__2PRFIN20110223_014424_000000433099_00405_46971_8401.N1	23-FEB-2011 01:44:24	Bright	42.500	82	48Bet UMa	2.3650	10600.	85	46971	No
23	GOM_NL__2PRFIN20110223_015237_000000393099_00405_46971_8402.N1	23-FEB-2011 01:52:37	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	46971	No
24	GOM_NL__2PRFIN20110223_015724_000000453099_00405_46971_8403.N1	23-FEB-2011 01:57:24	Bright	44.500	119	14Eta Dra	2.7270	4700.0	89	46971	No
25	GOM_NL__2PRFIN20110223_020131_000000443099_00405_46971_8404.N1	23-FEB-2011 02:01:31	Bright	44.000	130	23Bet Dra	2.7990	5800.0	88	46971	No
26	GOM_NL__2PRFIN20110223_020612_000000403099_00405_46971_8405.N1	23-FEB-2011 02:06:12	Bright	39.500	5	3Alp Lyr	0.033000	11000.	79	46971	No
27	GOM_NL__2PRFIN20110223_021326_000000373099_00405_46971_8406.N1	23-FEB-2011 02:13:26	Bright	36.500	168	17Zet Aql	2.9860	11000.	73	46971	No
28	GOM_NL__2PRFIN20110223_021608_000000493099_00405_46971_8407.N1	23-FEB-2011 02:16:08	Twilight	49.000	59	55Alp Oph	2.0800	8900.0	98	46971	No
29	GOM_NL__2PRFIN20110223_021832_000000593099_00405_46971_8408.N1	23-FEB-2011 02:18:32	Twilight	59.000	126	60Bet Oph	2.7700	4250.0	118	46971	No
30	GOM_NL__2PRFIN20110223_022520_000000453099_00405_46971_8409.N1	23-FEB-2011 02:25:20	Dark	44.500	137	22Lam Sgr	2.8240	4400.0	89	46971	No
31	GOM_NL__2PRFIN20110223_022642_000000463099_00405_46971_8410.N1	23-FEB-2011 02:26:42	Dark	45.500	116	19Del Sgr	2.7000	4100.0	91	46971	No
32	GOM_NL__2PRFIN20110223_023016_000000483099_00405_46971_8411.N1	23-FEB-2011 02:30:16	Dark	47.500	25	35Lam Sco	1.6200	28000.	95	46971	No
33	GOM_NL__2PRFIN20110223_023744_000000513099_00406_46972_8526.N1	23-FEB-2011 02:37:44	Dark	51.000	131	Gam Lup	2.8000	26000.	102	46972	No
34	GOM_NL__2PRFIN20110223_024047_000000453099_00406_46972_8527.N1	23-FEB-2011 02:40:47	Dark	45.000	4	Alp1Cen	-0.010000	5800.0	90	46972	No
35	GOM_NL__2PRFIN20110223_024206_000000473099_00406_46972_8528.N1	23-FEB-2011 02:42:06	Dark	46.500	10	Bet Cen	0.61000	28000.	93	46972	No
36	GOM_NL__2PRFIN20110223_024344_000000443099_00406_46972_8529.N1	23-FEB-2011 02:43:44	Dark	44.000	77	Eps Cen	2.3030	28000.	88	46972	No
37	GOM_NL__2PRFIN20110223_024548_000000583099_00406_46972_8530.N1	23-FEB-2011 02:45:48	Dark	58.000	26	Gam Cru	1.6240	2900.0	116	46972	No
38	GOM_NL__2PRFIN20110223_024753_000000433099_00406_46972_8531.N1	23-FEB-2011 02:47:53	Dark	42.500	99	Del Cen	2.5750	26000.	85	46972	No
39	GOM_NL__2PRFIN20110223_025031_000000413099_00406_46972_8532.N1	23-FEB-2011 02:50:31	Straylight	41.000	113	Mu Vel	2.6920	5000.0	82	46972	No
40	GOM_NL__2PRFIN20110223_030324_000000533099_00406_46972_8533.N1	23-FEB-2011 03:03:24	Twilight	53.000	48	30Alp Hya	1.9770	4100.0	106	46972	No
41	GOM_NL__2PRFIN20110223_030959_000000633099_00406_46972_8534.N1	23-FEB-2011 03:09:59	Bright	63.000	22	32Alp Leo	1.3600	15200.	126	46972	No
42	GOM_NL__2PRFIN20110223_031318_000000423099_00406_46972_8535.N1	23-FEB-2011 03:13:18	Bright	41.500	166	17Eps Leo	2.9800	6000.0	83	46972	No

220	GOM_NL__2PRFIN20110223_210447_000000453099_00417_46983_8940.N1	23-FEB-2011 21:04:47	Dark	44.500	10	Bet Cen	0.61000	28000.	89	46983	No
221	GOM_NL__2PRFIN20110223_210626_000000463099_00417_46983_8941.N1	23-FEB-2011 21:06:26	Dark	45.500	77	Eps Cen	2.3030	28000.	91	46983	No
222	GOM_NL__2PRFIN20110223_210828_000000473099_00417_46983_8942.N1	23-FEB-2011 21:08:28	Dark	47.000	26	Gam Cru	1.6240	2900.0	94	46983	No
223	GOM_NL__2PRFIN20110223_211033_000000413099_00417_46983_8943.N1	23-FEB-2011 21:10:33	Dark	41.000	99	Del Cen	2.5750	26000.	82	46983	No
224	GOM_NL__2PRFIN20110223_211309_000000473099_00417_46983_8944.N1	23-FEB-2011 21:13:09	Straylight	46.500	113	Mu Vel	2.6920	5000.0	93	46983	No
225	GOM_NL__2PRFIN20110223_212559_000000493099_00417_46983_8945.N1	23-FEB-2011 21:25:59	Twilight_and_stray	49.000	48	30Alp Hya	1.9770	4100.0	98	46983	No
226	GOM_NL__2PRFIN20110223_213230_000000463099_00417_46983_8946.N1	23-FEB-2011 21:32:30	Bright	45.500	22	32Alp Leo	1.3600	15200.	91	46983	No
227	GOM_NL__2PRFIN20110223_213549_000000413099_00417_46983_8947.N1	23-FEB-2011 21:35:49	Bright	40.500	166	17Eps Leo	2.9800	6000.0	81	46983	No
228	GOM_NL__2PRFIN20110223_214705_000000433099_00417_46983_8948.N1	23-FEB-2011 21:47:05	Bright	42.500	82	48Bet UMa	2.3650	10600.	85	46983	No
229	GOM_NL__2PRFIN20110223_215521_000000423099_00417_46983_8949.N1	23-FEB-2011 21:55:21	Bright	42.000	60	7Bet UMi	2.0810	3950.0	84	46983	No
230	GOM_NL__2PRFIN20110223_220007_000000453099_00417_46983_8950.N1	23-FEB-2011 22:00:07	Bright	45.000	119	14Eta Dra	2.7270	4700.0	90	46983	No
231	GOM_NL__2PRFIN20110223_220417_000000453099_00417_46983_8951.N1	23-FEB-2011 22:04:17	Bright	44.500	130	23Bet Dra	2.7990	5800.0	89	46983	No
232	GOM_NL__2PRFIN20110223_220901_000000583099_00417_46983_8952.N1	23-FEB-2011 22:09:01	Bright	58.000	5	3Alp Lyr	0.033000	11000.	116	46983	No
233	GOM_NL__2PRFIN20110223_221617_000000543099_00417_46983_8953.N1	23-FEB-2011 22:16:17	Bright	54.000	168	17Zet Aql	2.9860	11000.	108	46983	No
234	GOM_NL__2PRFIN20110223_222129_000000553099_00417_46983_8954.N1	23-FEB-2011 22:21:29	Twilight_and_stray	54.500	126	60Bet Oph	2.7700	4250.0	109	46983	No
235	GOM_NL__2PRFIN20110223_222815_000000443099_00417_46983_8955.N1	23-FEB-2011 22:28:15	Dark	44.000	137	22Lam Sgr	2.8240	4400.0	88	46983	No
236	GOM_NL__2PRFIN20110223_223039_000000453099_00417_46983_8956.N1	23-FEB-2011 22:30:39	Dark	44.500	38	20Eps Sgr	1.8360	11000.	89	46983	No
237	GOM_NL__2PRFIN20110223_223313_000000503099_00417_46983_8957.N1	23-FEB-2011 22:33:13	Dark	49.500	25	35Lam Sco	1.6200	28000.	99	46983	No
238	GOM_NL__2PRFIN20110223_223509_000000373099_00417_46983_8958.N1	23-FEB-2011 22:35:09	Dark	37.000	16	21Alp Sco	1.0200	3000.0	74	46983	No
239	GOM_NL__2PRFIN20110223_224046_000000513099_00418_46984_8947.N1	23-FEB-2011 22:40:46	Dark	51.000	131	Gam Lup	2.8000	26000.	102	46984	No
240	GOM_NL__2PRFIN20110223_224342_000000463099_00418_46984_8948.N1	23-FEB-2011 22:43:42	Dark	45.500	4	Alp1Cen	-0.010000	5800.0	91	46984	No
241	GOM_NL__2PRFIN20110223_224502_000000443099_00418_46984_8949.N1	23-FEB-2011 22:45:02	Dark	44.000	10	Bet Cen	0.61000	28000.	88	46984	No
242	GOM_NL__2PRFIN20110223_224640_000000453099_00418_46984_8950.N1	23-FEB-2011 22:46:40	Dark	44.500	77	Eps Cen	2.3030	28000.	89	46984	No
243	GOM_NL__2PRFIN20110223_224843_000000583099_00418_46984_8951.N1	23-FEB-2011 22:48:43	Dark	58.000	26	Gam Cru	1.6240	2900.0	116	46984	No
244	GOM_NL__2PRFIN20110223_225048_000000463099_00418_46984_8952.N1	23-FEB-2011 22:50:48	Dark	45.500	99	Del Cen	2.5750	26000.	91	46984	No
245	GOM_NL__2PRFIN20110223_225324_000000423099_00418_46984_8953.N1	23-FEB-2011 22:53:24	Straylight	41.500	113	Mu Vel	2.6920	5000.0	83	46984	No
246	GOM_NL__2PRFIN20110223_230613_000000503099_00418_46984_8954.N1	23-FEB-2011 23:06:13	Twilight_and_stray	49.500	48	30Alp Hya	1.9770	4100.0	99	46984	No
247	GOM_NL__2PRFIN20110223_231244_000000463099_00418_46984_8955.N1	23-FEB-2011 23:12:44	Bright	45.500	22	32Alp Leo	1.3600	15200.	91	46984	No
248	GOM_NL__2PRFIN20110223_231603_000000413099_00418_46984_8956.N1	23-FEB-2011 23:16:03	Bright	41.000	166	17Eps Leo	2.9800	6000.0	82	46984	No
249	GOM_NL__2PRFIN20110223_232719_000000433099_00418_46984_8957.N1	23-FEB-2011 23:27:19	Bright	42.500	82	48Bet UMa	2.3650	10600.	85	46984	No
250	GOM_NL__2PRFIN20110223_233535_000000383099_00418_46984_8958.N1	23-FEB-2011 23:35:35	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	46984	No
251	GOM_NL__2PRFIN20110223_234021_000000453099_00418_46984_8959.N1	23-FEB-2011 23:40:21	Bright	44.500	119	14Eta Dra	2.7270	4700.0	89	46984	No
252	GOM_NL__2PRFIN20110223_234430_000000443099_00418_46984_8960.N1	23-FEB-2011 23:44:30	Bright	43.500	130	23Bet Dra	2.7990	5800.0	87	46984	No
253	GOM_NL__2PRFIN20110223_234915_000000423099_00418_46984_8961.N1	23-FEB-2011 23:49:15	Bright	42.000	5	3Alp Lyr	0.033000	11000.	84	46984	No
254	GOM_NL__2PRFIN20110223_235632_000000563099_00418_46984_8962.N1	23-FEB-2011 23:56:32	Bright	56.000	168	17Zet Aql	2.9860	11000.	112	46984	No

3. Quality information per product

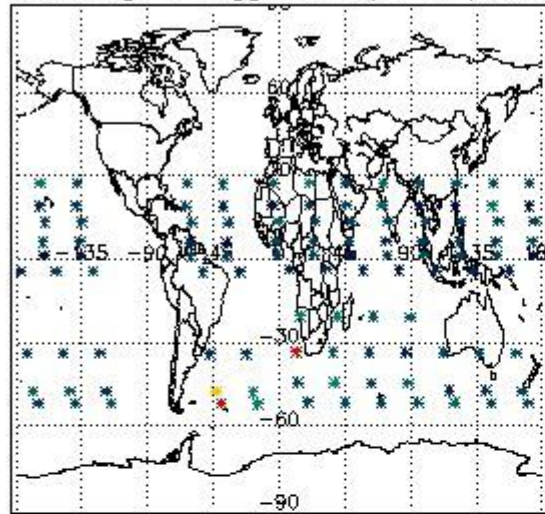
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

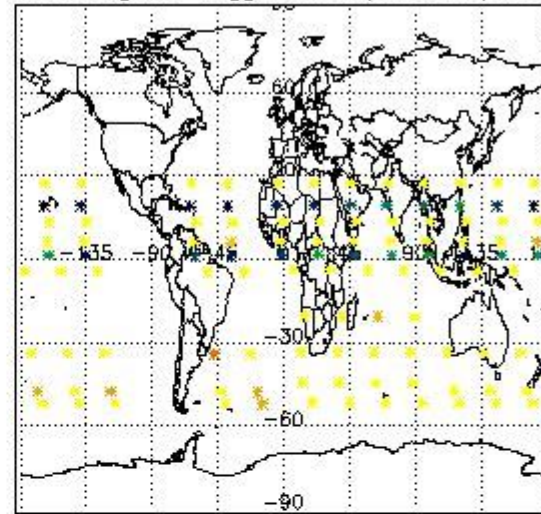


3.2 Plot quality information per product (world map)

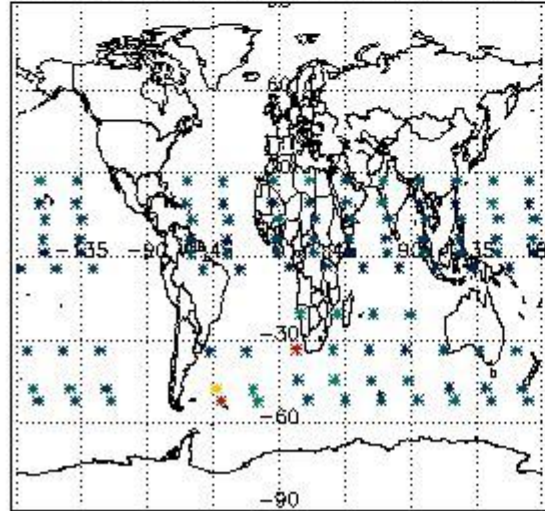
Percentage of flagged data per O3 profile



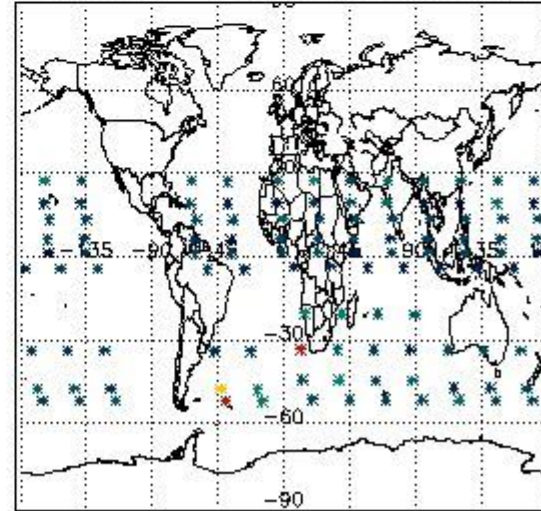
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

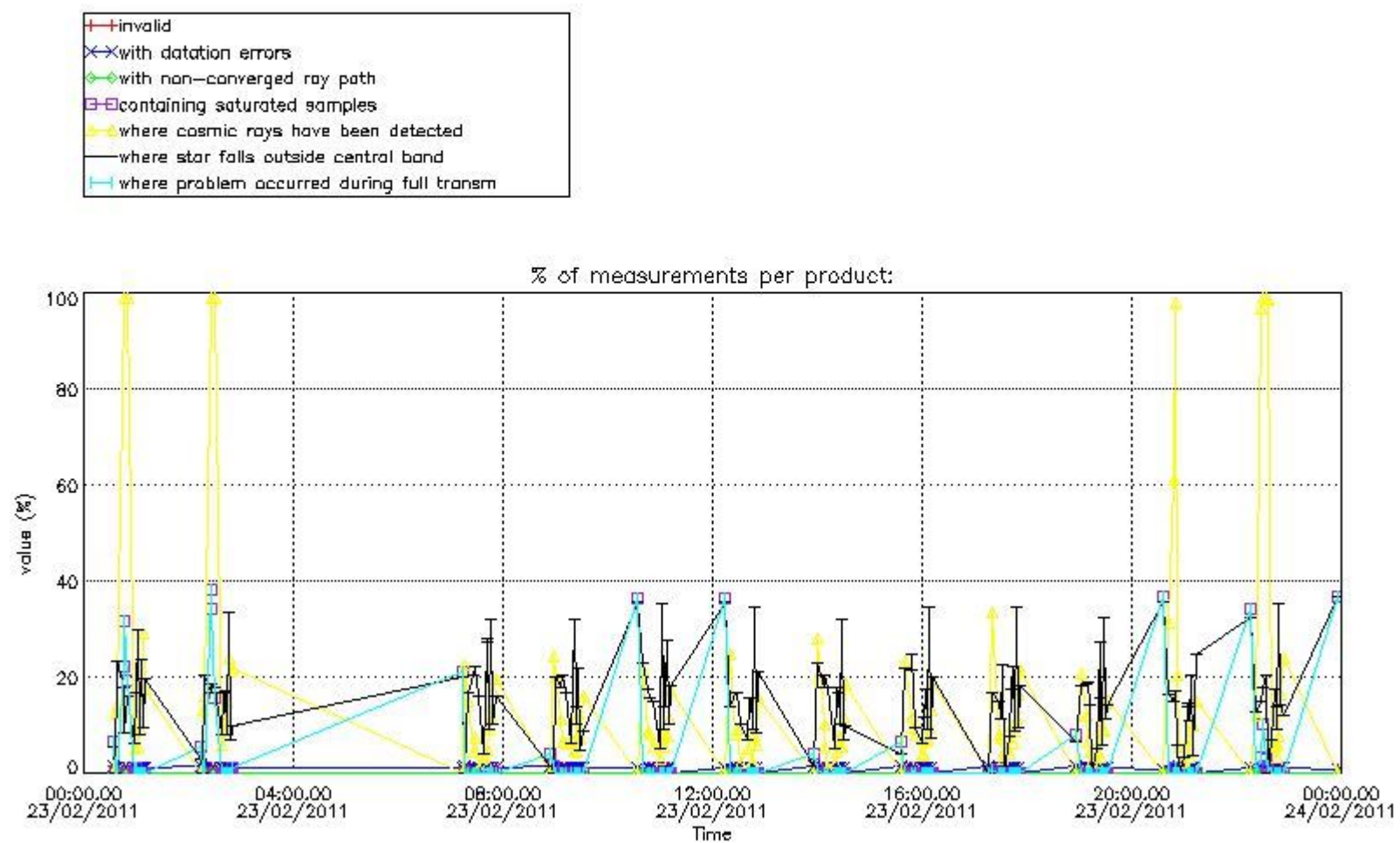


4. Level 1 quality information per product

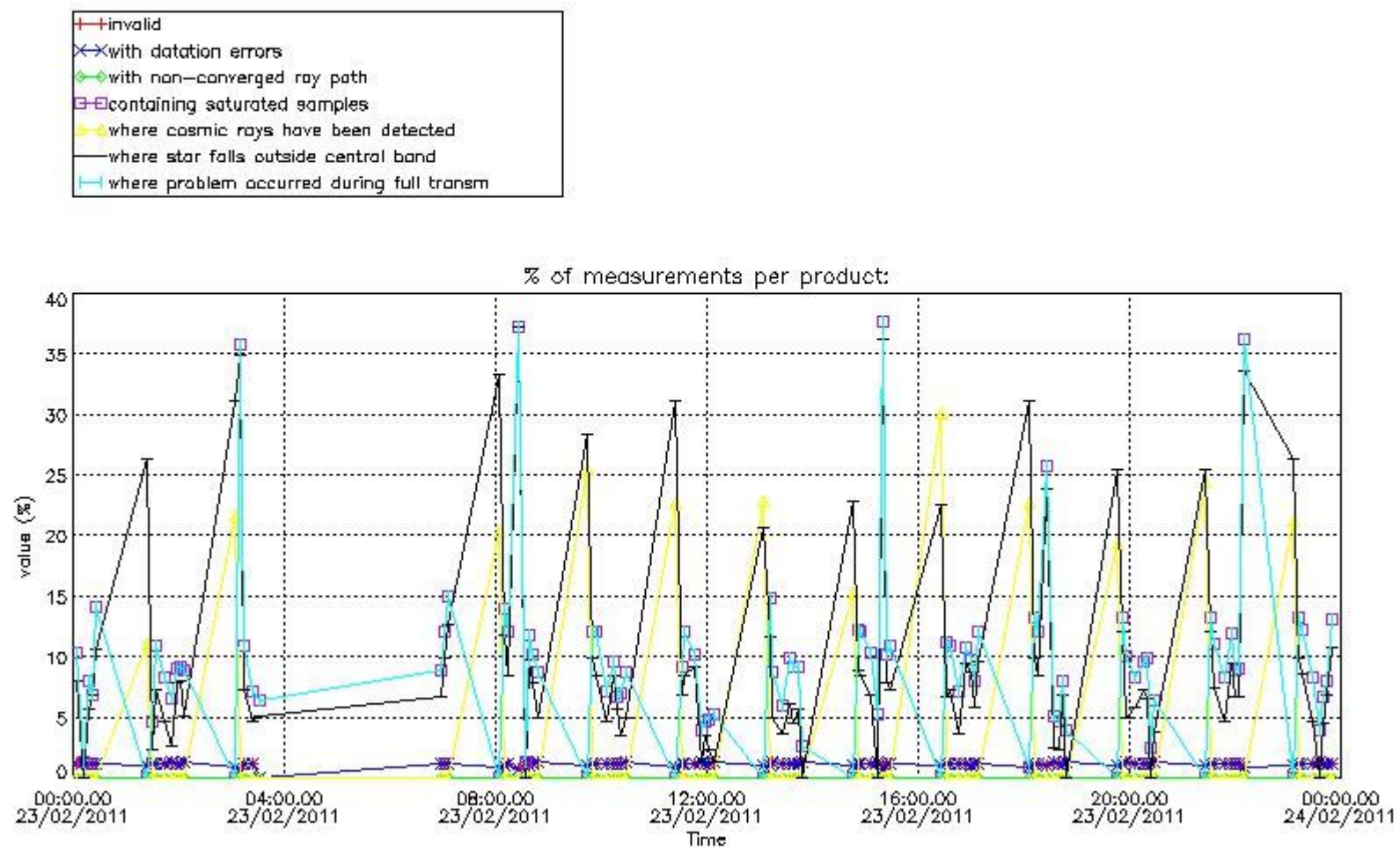
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

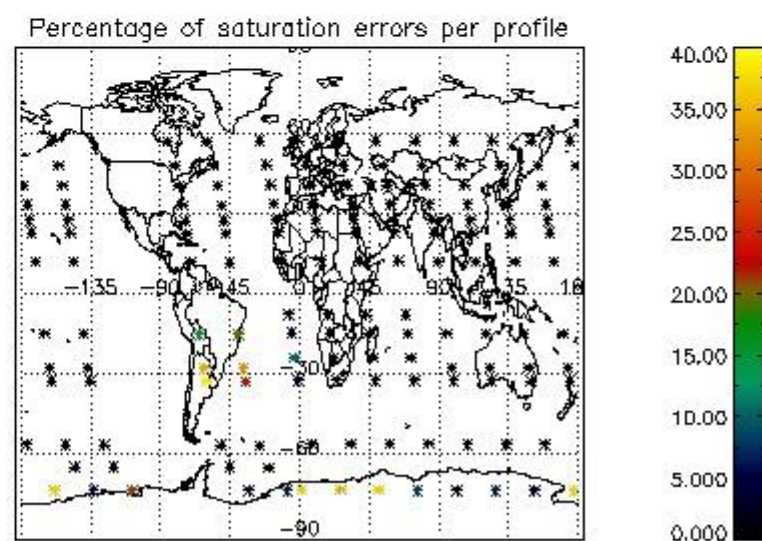
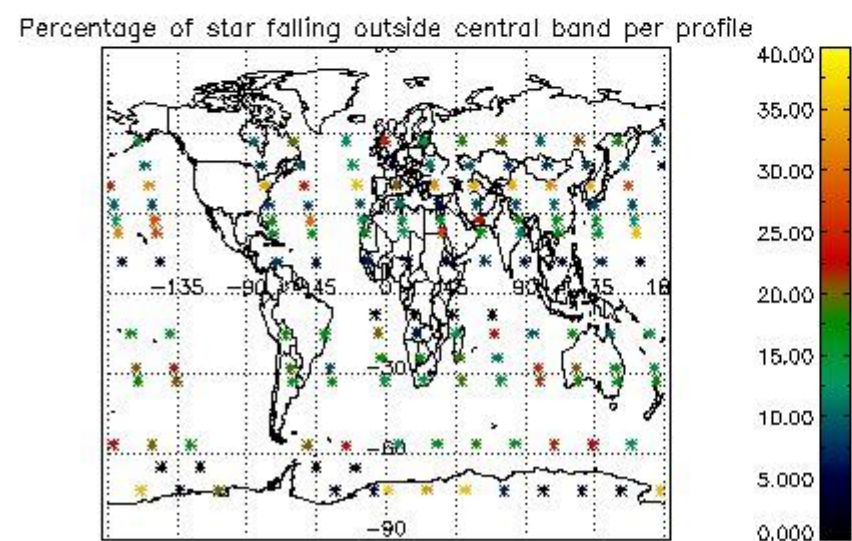
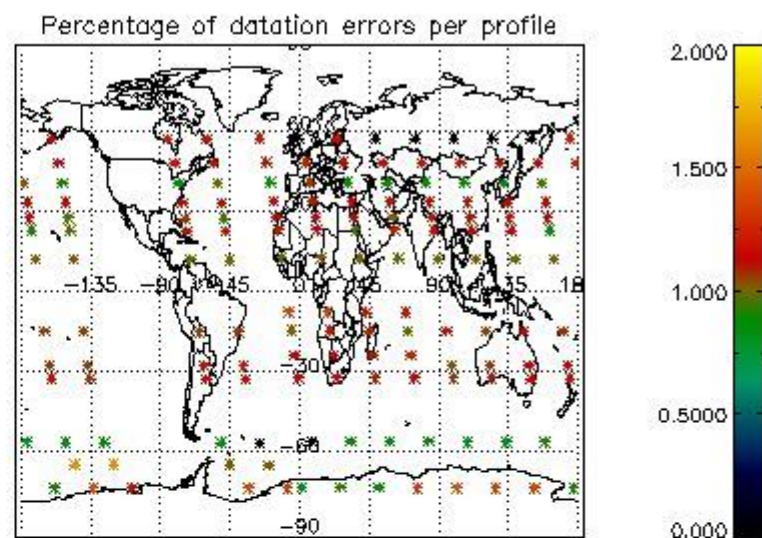
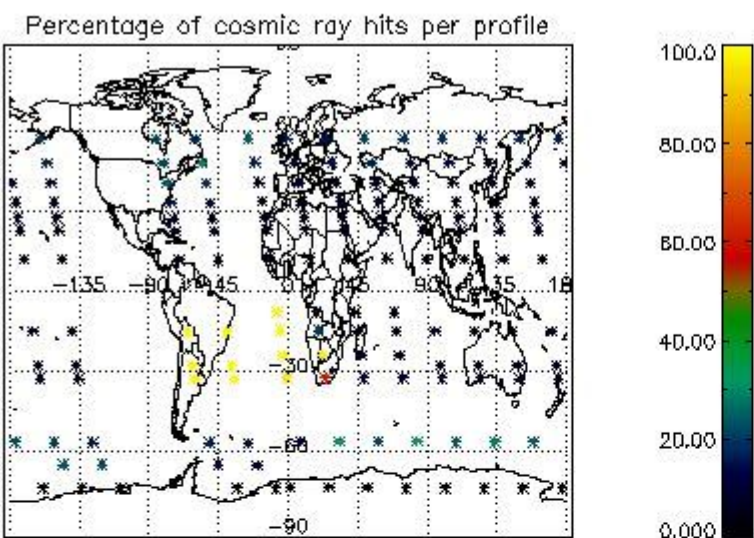


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

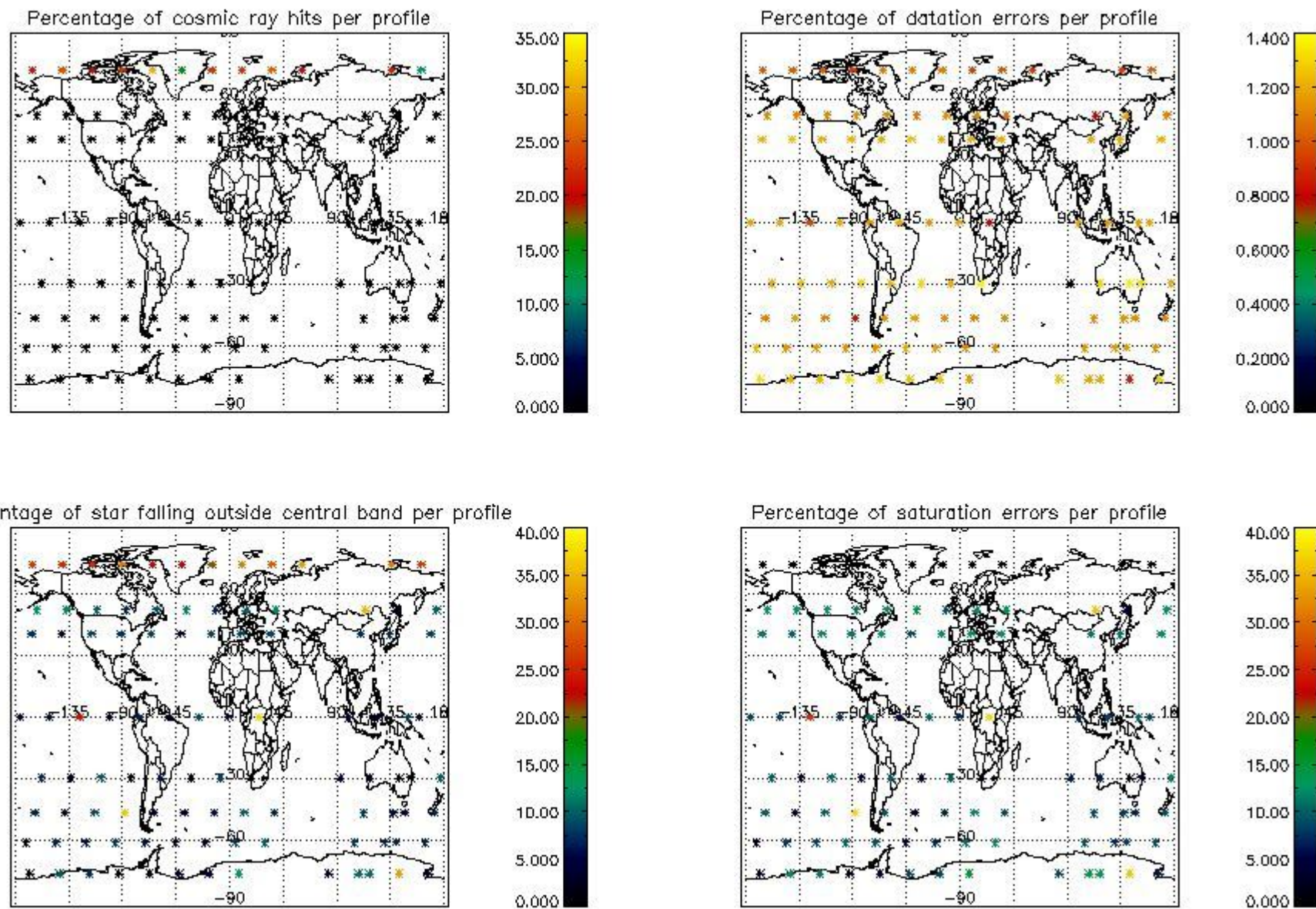


4.2 Plot quality information per product coming from level 1b processing (world map)

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

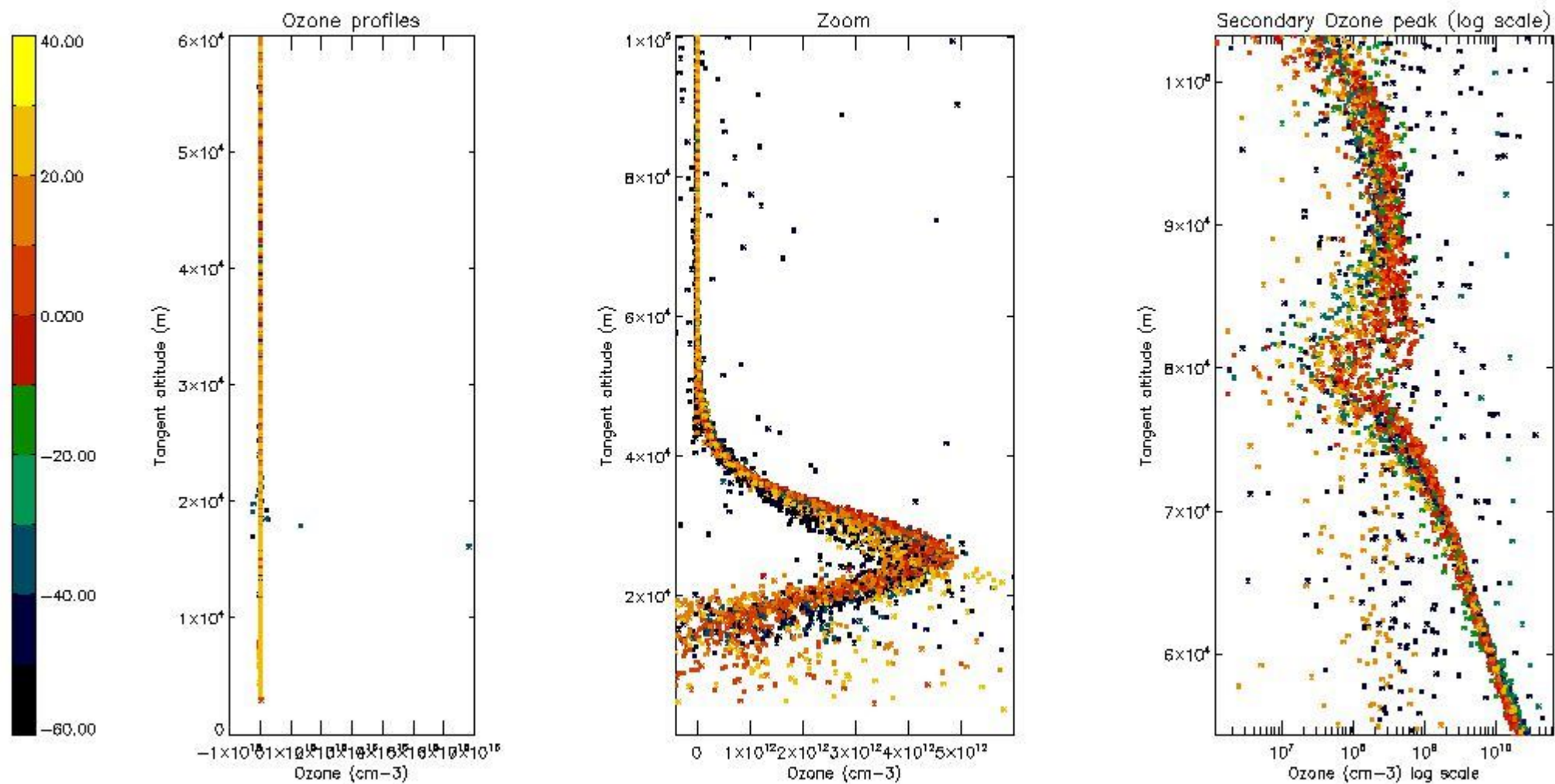
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	45
STD < 20	22

STD < 10	17
STD < 5	13

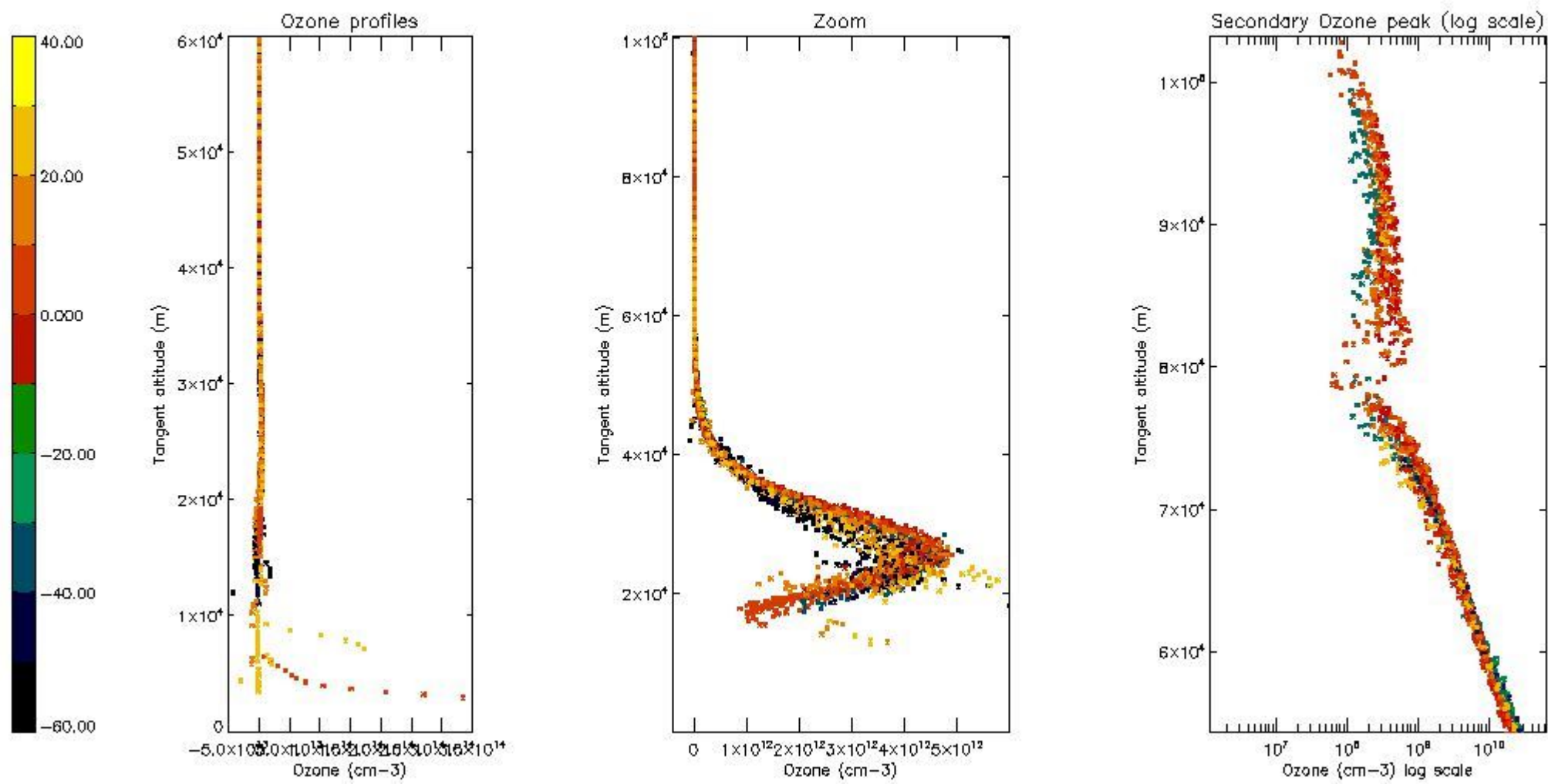
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



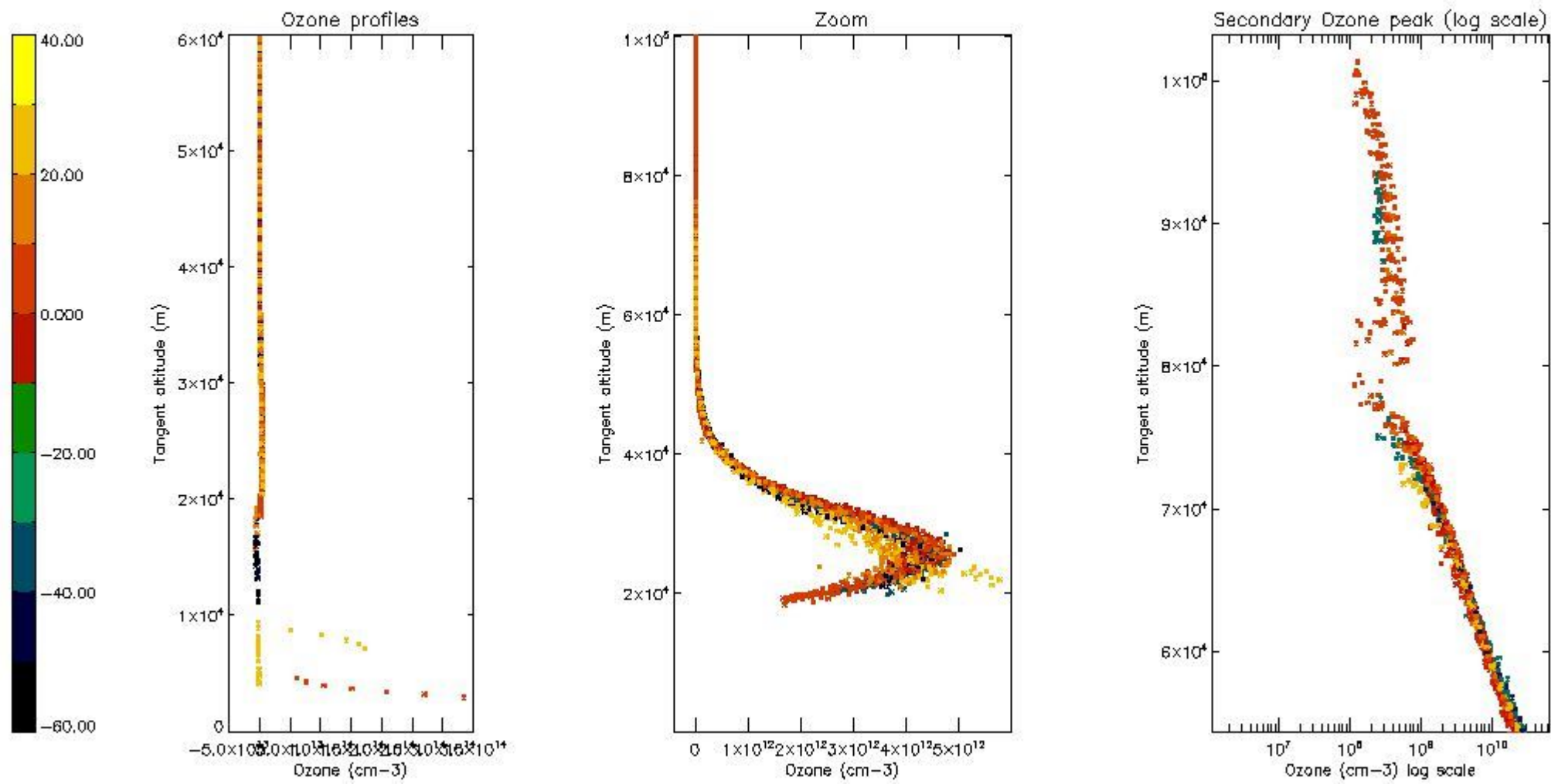
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



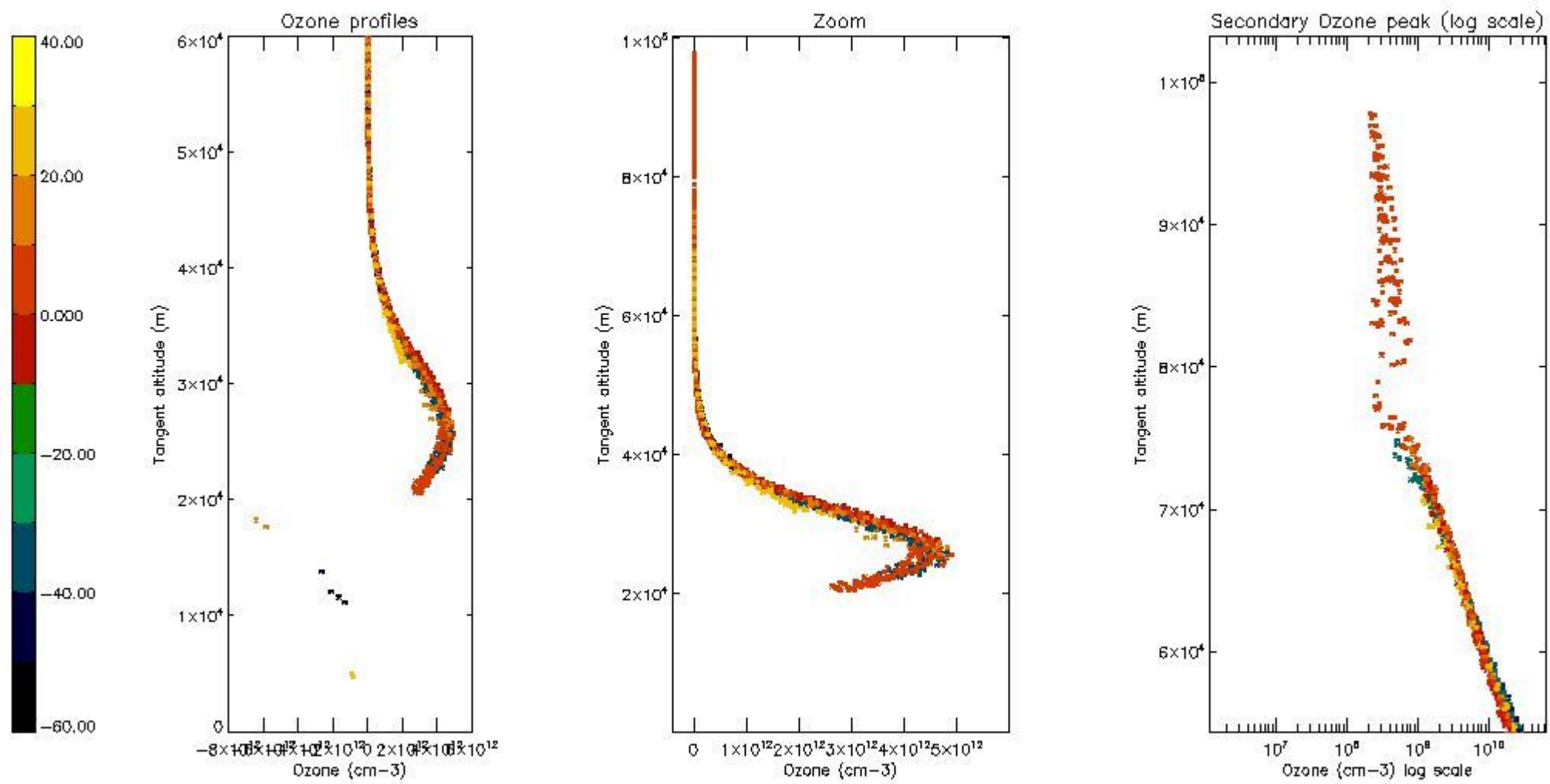
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



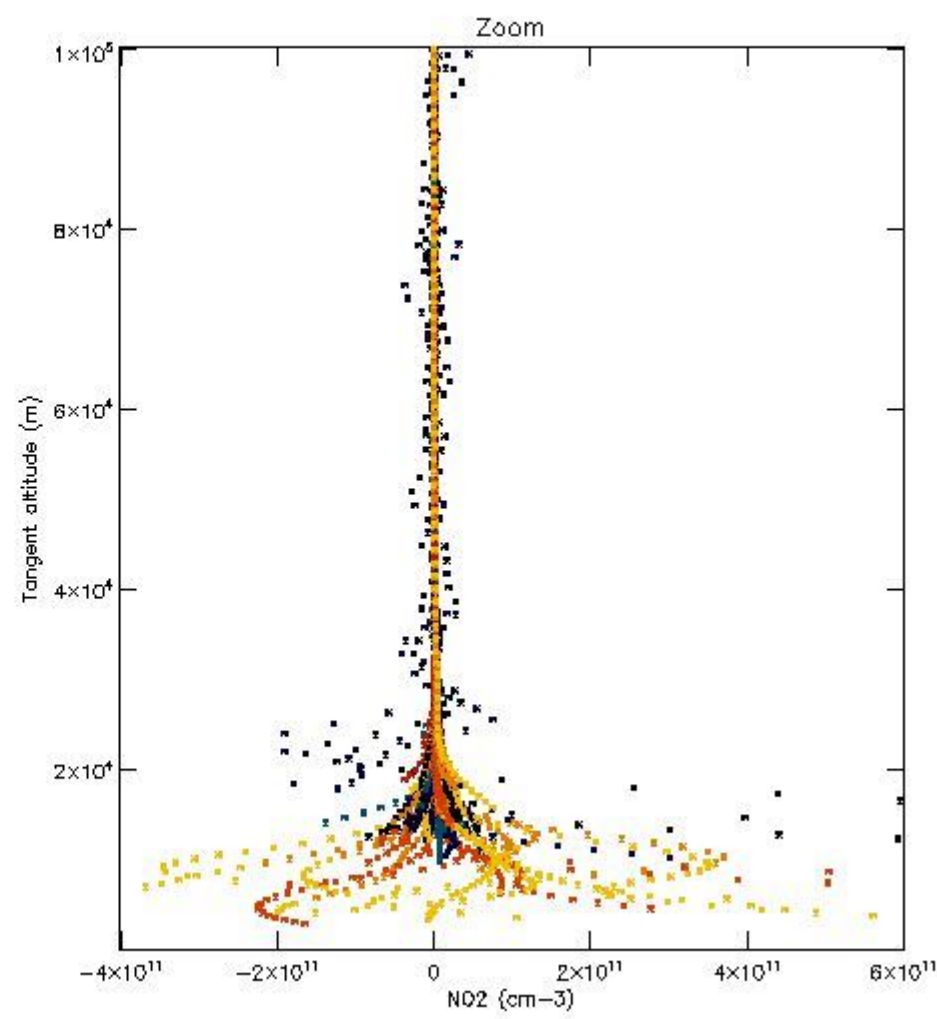
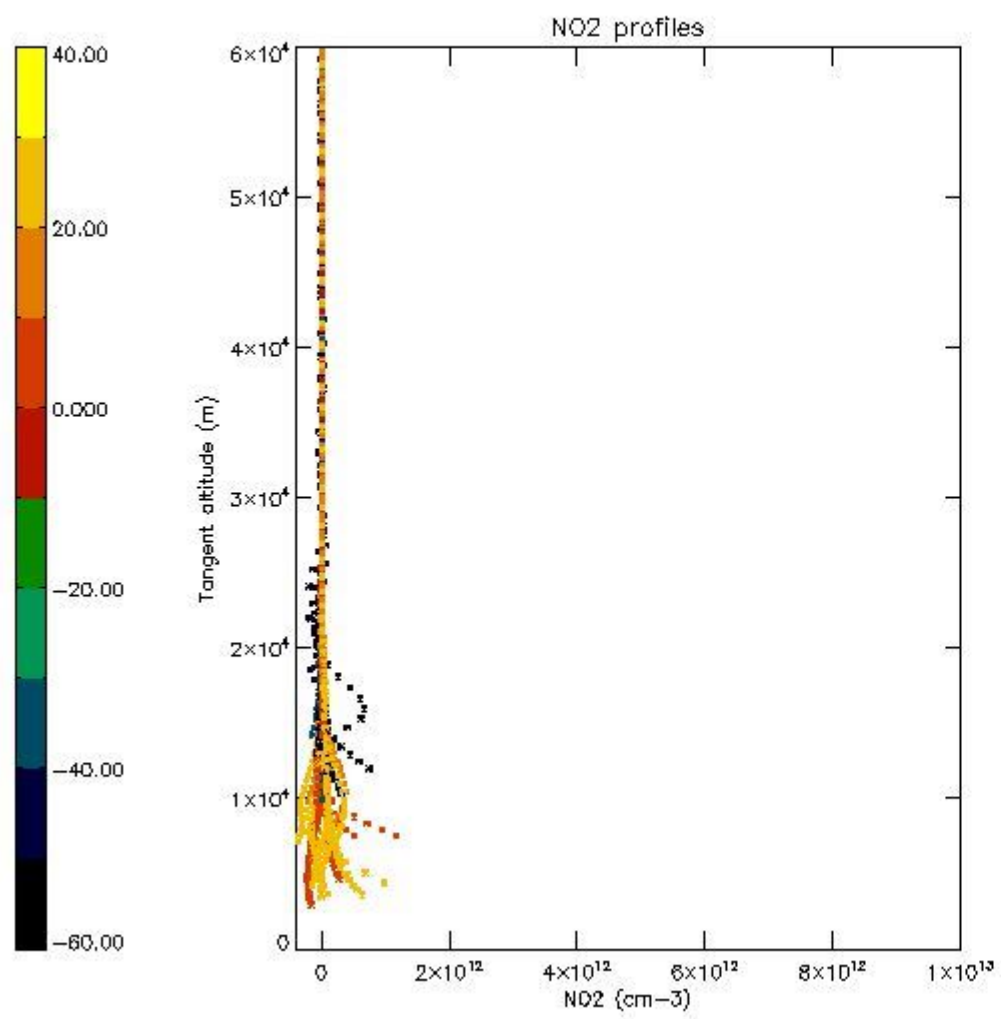
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



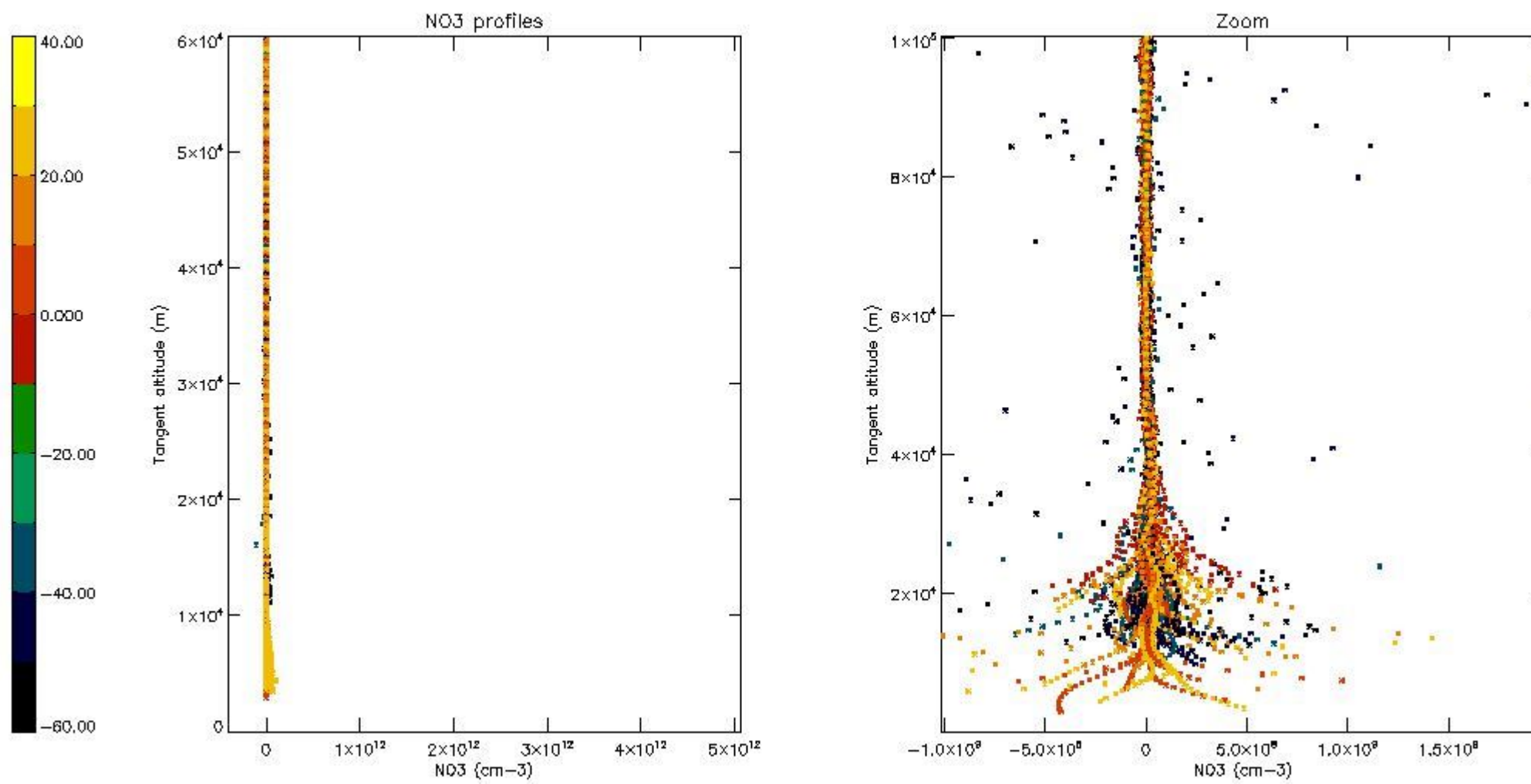
5.6 Plot NO₂ profiles for all STD (dark without errors)

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	23-FEB-2011 00:04:10
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	23-FEB-2011 00:04:10
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	23-FEB-2011 00:04:10

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

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

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

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

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[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](#)

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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](#)

[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	24APR2013 10:36:07
Data source version	GOMOS/6.01
Start time of products	23-02-2011 (23FEB2011 00:00:00)
Stop time of products	24-02-2011 (24FEB2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	254
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

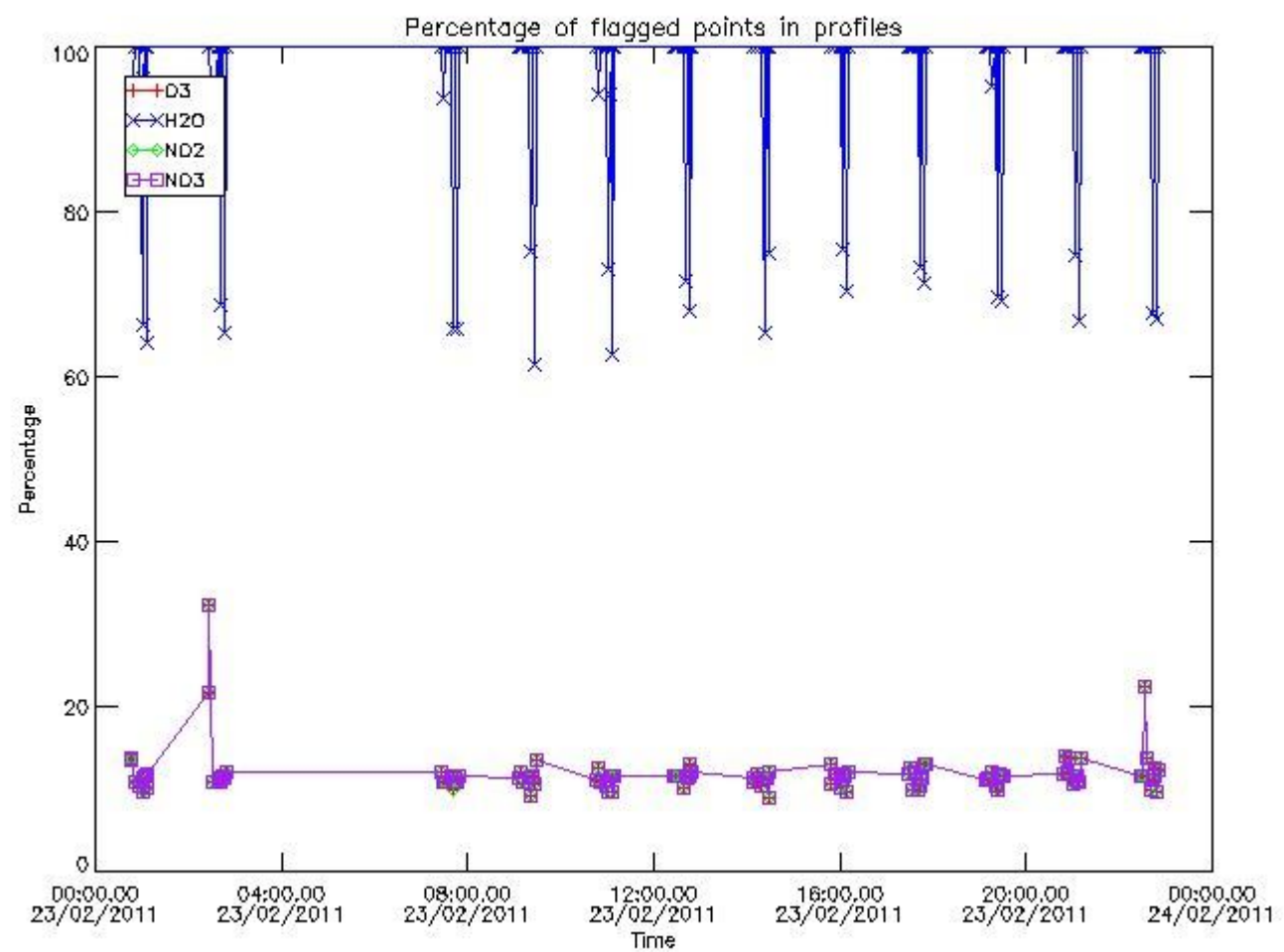
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110223_000410_000000443099_00404_46970_8345.N1	23-FEB-2011 00:04:10	Bright	43.500	82	48Bet UMa	2.3650	10600.	87	46970	No
2	GOM_NL__2PRFIN20110223_001223_000000373099_00404_46970_8346.N1	23-FEB-2011 00:12:23	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	46970	No
3	GOM_NL__2PRFIN20110223_001710_000000443099_00404_46970_8347.N1	23-FEB-2011 00:17:10	Bright	44.000	119	14Eta Dra	2.7270	4700.0	88	46970	No
4	GOM_NL__2PRFIN20110223_002117_000000443099_00404_46970_8348.N1	23-FEB-2011 00:21:17	Bright	43.500	130	23Bet Dra	2.7990	5800.0	87	46970	No
5	GOM_NL__2PRFIN20110223_002558_000000433099_00404_46970_8349.N1	23-FEB-2011 00:25:58	Bright	42.500	5	3Alp Lyr	0.033000	11000.	85	46970	No
6	GOM_NL__2PRFIN20110223_003312_000000383099_00404_46970_8350.N1	23-FEB-2011 00:33:12	Bright	37.500	168	17Zet Aql	2.9860	11000.	75	46970	No
7	GOM_NL__2PRFIN20110223_003553_000000493099_00404_46970_8351.N1	23-FEB-2011 00:35:53	Twilight	49.000	59	55Alp Oph	2.0800	8900.0	98	46970	No
8	GOM_NL__2PRFIN20110223_003818_000000613099_00404_46970_8352.N1	23-FEB-2011 00:38:18	Twilight	60.500	126	60Bet Oph	2.7700	4250.0	121	46970	No
9	GOM_NL__2PRFIN20110223_004506_000000453099_00404_46970_8353.N1	23-FEB-2011 00:45:06	Dark	45.000	137	22Lam Sgr	2.8240	4400.0	90	46970	No
10	GOM_NL__2PRFIN20110223_004627_000000413099_00404_46970_8354.N1	23-FEB-2011 00:46:27	Dark	41.000	116	19Del Sgr	2.7000	4100.0	82	46970	No
11	GOM_NL__2PRFIN20110223_005002_000000473099_00404_46970_8355.N1	23-FEB-2011 00:50:02	Dark	46.500	25	35Lam Sco	1.6200	28000.	93	46970	No
12	GOM_NL__2PRFIN20110223_005729_000000503099_00405_46971_8391.N1	23-FEB-2011 00:57:29	Dark	49.500	131	Gam Lup	2.8000	26000.	99	46971	No
13	GOM_NL__2PRFIN20110223_010032_000000453099_00405_46971_8392.N1	23-FEB-2011 01:00:32	Dark	45.000	4	Alp1Cen	-0.010000	5800.0	90	46971	No
14	GOM_NL__2PRFIN20110223_010152_000000543099_00405_46971_8393.N1	23-FEB-2011 01:01:52	Dark	53.500	10	Bet Cen	0.61000	28000.	107	46971	No
15	GOM_NL__2PRFIN20110223_010329_000000453099_00405_46971_8394.N1	23-FEB-2011 01:03:29	Dark	44.500	77	Eps Cen	2.3030	28000.	89	46971	No
16	GOM_NL__2PRFIN20110223_010533_000000513099_00405_46971_8395.N1	23-FEB-2011 01:05:33	Dark	50.500	26	Gam Cru	1.6240	2900.0	101	46971	No
17	GOM_NL__2PRFIN20110223_010738_000000433099_00405_46971_8396.N1	23-FEB-2011 01:07:38	Dark	43.000	99	Del Cen	2.5750	26000.	86	46971	No
18	GOM_NL__2PRFIN20110223_011017_000000463099_00405_46971_8397.N1	23-FEB-2011 01:10:17	Straylight	45.500	113	Mu Vel	2.6920	5000.0	91	46971	No
19	GOM_NL__2PRFIN20110223_012310_000000503099_00405_46971_8398.N1	23-FEB-2011 01:23:10	Twilight	49.500	48	30Alp Hya	1.9770	4100.0	99	46971	No
20	GOM_NL__2PRFIN20110223_012945_000000433099_00405_46971_8399.N1	23-FEB-2011 01:29:45	Bright	42.500	22	32Alp Leo	1.3600	15200.	85	46971	No
21	GOM_NL__2PRFIN20110223_013304_000000423099_00405_46971_8400.N1	23-FEB-2011 01:33:04	Bright	41.500	166	17Eps Leo	2.9800	6000.0	83	46971	No
22	GOM_NL__2PRFIN20110223_014424_000000433099_00405_46971_8401.N1	23-FEB-2011 01:44:24	Bright	42.500	82	48Bet UMa	2.3650	10600.	85	46971	No
23	GOM_NL__2PRFIN20110223_015237_000000393099_00405_46971_8402.N1	23-FEB-2011 01:52:37	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	46971	No
24	GOM_NL__2PRFIN20110223_015724_000000453099_00405_46971_8403.N1	23-FEB-2011 01:57:24	Bright	44.500	119	14Eta Dra	2.7270	4700.0	89	46971	No
25	GOM_NL__2PRFIN20110223_020131_000000443099_00405_46971_8404.N1	23-FEB-2011 02:01:31	Bright	44.000	130	23Bet Dra	2.7990	5800.0	88	46971	No
26	GOM_NL__2PRFIN20110223_020612_000000403099_00405_46971_8405.N1	23-FEB-2011 02:06:12	Bright	39.500	5	3Alp Lyr	0.033000	11000.	79	46971	No
27	GOM_NL__2PRFIN20110223_021326_000000373099_00405_46971_8406.N1	23-FEB-2011 02:13:26	Bright	36.500	168	17Zet Aql	2.9860	11000.	73	46971	No
28	GOM_NL__2PRFIN20110223_021608_000000493099_00405_46971_8407.N1	23-FEB-2011 02:16:08	Twilight	49.000	59	55Alp Oph	2.0800	8900.0	98	46971	No
29	GOM_NL__2PRFIN20110223_021832_000000593099_00405_46971_8408.N1	23-FEB-2011 02:18:32	Twilight	59.000	126	60Bet Oph	2.7700	4250.0	118	46971	No
30	GOM_NL__2PRFIN20110223_022520_000000453099_00405_46971_8409.N1	23-FEB-2011 02:25:20	Dark	44.500	137	22Lam Sgr	2.8240	4400.0	89	46971	No
31	GOM_NL__2PRFIN20110223_022642_000000463099_00405_46971_8410.N1	23-FEB-2011 02:26:42	Dark	45.500	116	19Del Sgr	2.7000	4100.0	91	46971	No
32	GOM_NL__2PRFIN20110223_023016_000000483099_00405_46971_8411.N1	23-FEB-2011 02:30:16	Dark	47.500	25	35Lam Sco	1.6200	28000.	95	46971	No
33	GOM_NL__2PRFIN20110223_023744_000000513099_00406_46972_8526.N1	23-FEB-2011 02:37:44	Dark	51.000	131	Gam Lup	2.8000	26000.	102	46972	No
34	GOM_NL__2PRFIN20110223_024047_000000453099_00406_46972_8527.N1	23-FEB-2011 02:40:47	Dark	45.000	4	Alp1Cen	-0.010000	5800.0	90	46972	No
35	GOM_NL__2PRFIN20110223_024206_000000473099_00406_46972_8528.N1	23-FEB-2011 02:42:06	Dark	46.500	10	Bet Cen	0.61000	28000.	93	46972	No
36	GOM_NL__2PRFIN20110223_024344_000000443099_00406_46972_8529.N1	23-FEB-2011 02:43:44	Dark	44.000	77	Eps Cen	2.3030	28000.	88	46972	No
37	GOM_NL__2PRFIN20110223_024548_000000583099_00406_46972_8530.N1	23-FEB-2011 02:45:48	Dark	58.000	26	Gam Cru	1.6240	2900.0	116	46972	No
38	GOM_NL__2PRFIN20110223_024753_000000433099_00406_46972_8531.N1	23-FEB-2011 02:47:53	Dark	42.500	99	Del Cen	2.5750	26000.	85	46972	No
39	GOM_NL__2PRFIN20110223_025031_000000413099_00406_46972_8532.N1	23-FEB-2011 02:50:31	Straylight	41.000	113	Mu Vel	2.6920	5000.0	82	46972	No
40	GOM_NL__2PRFIN20110223_030324_000000533099_00406_46972_8533.N1	23-FEB-2011 03:03:24	Twilight	53.000	48	30Alp Hya	1.9770	4100.0	106	46972	No
41	GOM_NL__2PRFIN20110223_030959_000000633099_00406_46972_8534.N1	23-FEB-2011 03:09:59	Bright	63.000	22	32Alp Leo	1.3600	15200.	126	46972	No
42	GOM_NL__2PRFIN20110223_031318_000000423099_00406_46972_8535.N1	23-FEB-2011 03:13:18	Bright	41.500	166	17Eps Leo	2.9800	6000.0	83	46972	No

220	GOM_NL__2PRFIN20110223_210447_000000453099_00417_46983_8940.N1	23-FEB-2011 21:04:47	Dark	44.500	10	Bet Cen	0.61000	28000.	89	46983	No
221	GOM_NL__2PRFIN20110223_210626_000000463099_00417_46983_8941.N1	23-FEB-2011 21:06:26	Dark	45.500	77	Eps Cen	2.3030	28000.	91	46983	No
222	GOM_NL__2PRFIN20110223_210828_000000473099_00417_46983_8942.N1	23-FEB-2011 21:08:28	Dark	47.000	26	Gam Cru	1.6240	2900.0	94	46983	No
223	GOM_NL__2PRFIN20110223_211033_000000413099_00417_46983_8943.N1	23-FEB-2011 21:10:33	Dark	41.000	99	Del Cen	2.5750	26000.	82	46983	No
224	GOM_NL__2PRFIN20110223_211309_000000473099_00417_46983_8944.N1	23-FEB-2011 21:13:09	Straylight	46.500	113	Mu Vel	2.6920	5000.0	93	46983	No
225	GOM_NL__2PRFIN20110223_212559_000000493099_00417_46983_8945.N1	23-FEB-2011 21:25:59	Twilight_and_stray	49.000	48	30Alp Hya	1.9770	4100.0	98	46983	No
226	GOM_NL__2PRFIN20110223_213230_000000463099_00417_46983_8946.N1	23-FEB-2011 21:32:30	Bright	45.500	22	32Alp Leo	1.3600	15200.	91	46983	No
227	GOM_NL__2PRFIN20110223_213549_000000413099_00417_46983_8947.N1	23-FEB-2011 21:35:49	Bright	40.500	166	17Eps Leo	2.9800	6000.0	81	46983	No
228	GOM_NL__2PRFIN20110223_214705_000000433099_00417_46983_8948.N1	23-FEB-2011 21:47:05	Bright	42.500	82	48Bet UMa	2.3650	10600.	85	46983	No
229	GOM_NL__2PRFIN20110223_215521_000000423099_00417_46983_8949.N1	23-FEB-2011 21:55:21	Bright	42.000	60	7Bet UMi	2.0810	3950.0	84	46983	No
230	GOM_NL__2PRFIN20110223_220007_000000453099_00417_46983_8950.N1	23-FEB-2011 22:00:07	Bright	45.000	119	14Eta Dra	2.7270	4700.0	90	46983	No
231	GOM_NL__2PRFIN20110223_220417_000000453099_00417_46983_8951.N1	23-FEB-2011 22:04:17	Bright	44.500	130	23Bet Dra	2.7990	5800.0	89	46983	No
232	GOM_NL__2PRFIN20110223_220901_000000583099_00417_46983_8952.N1	23-FEB-2011 22:09:01	Bright	58.000	5	3Alp Lyr	0.033000	11000.	116	46983	No
233	GOM_NL__2PRFIN20110223_221617_000000543099_00417_46983_8953.N1	23-FEB-2011 22:16:17	Bright	54.000	168	17Zet Aql	2.9860	11000.	108	46983	No
234	GOM_NL__2PRFIN20110223_222129_000000553099_00417_46983_8954.N1	23-FEB-2011 22:21:29	Twilight_and_stray	54.500	126	60Bet Oph	2.7700	4250.0	109	46983	No
235	GOM_NL__2PRFIN20110223_222815_000000443099_00417_46983_8955.N1	23-FEB-2011 22:28:15	Dark	44.000	137	22Lam Sgr	2.8240	4400.0	88	46983	No
236	GOM_NL__2PRFIN20110223_223039_000000453099_00417_46983_8956.N1	23-FEB-2011 22:30:39	Dark	44.500	38	20Eps Sgr	1.8360	11000.	89	46983	No
237	GOM_NL__2PRFIN20110223_223313_000000503099_00417_46983_8957.N1	23-FEB-2011 22:33:13	Dark	49.500	25	35Lam Sco	1.6200	28000.	99	46983	No
238	GOM_NL__2PRFIN20110223_223509_000000373099_00417_46983_8958.N1	23-FEB-2011 22:35:09	Dark	37.000	16	21Alp Sco	1.0200	3000.0	74	46983	No
239	GOM_NL__2PRFIN20110223_224046_000000513099_00418_46984_8947.N1	23-FEB-2011 22:40:46	Dark	51.000	131	Gam Lup	2.8000	26000.	102	46984	No
240	GOM_NL__2PRFIN20110223_224342_000000463099_00418_46984_8948.N1	23-FEB-2011 22:43:42	Dark	45.500	4	Alp1Cen	-0.010000	5800.0	91	46984	No
241	GOM_NL__2PRFIN20110223_224502_000000443099_00418_46984_8949.N1	23-FEB-2011 22:45:02	Dark	44.000	10	Bet Cen	0.61000	28000.	88	46984	No
242	GOM_NL__2PRFIN20110223_224640_000000453099_00418_46984_8950.N1	23-FEB-2011 22:46:40	Dark	44.500	77	Eps Cen	2.3030	28000.	89	46984	No
243	GOM_NL__2PRFIN20110223_224843_000000583099_00418_46984_8951.N1	23-FEB-2011 22:48:43	Dark	58.000	26	Gam Cru	1.6240	2900.0	116	46984	No
244	GOM_NL__2PRFIN20110223_225048_000000463099_00418_46984_8952.N1	23-FEB-2011 22:50:48	Dark	45.500	99	Del Cen	2.5750	26000.	91	46984	No
245	GOM_NL__2PRFIN20110223_225324_000000423099_00418_46984_8953.N1	23-FEB-2011 22:53:24	Straylight	41.500	113	Mu Vel	2.6920	5000.0	83	46984	No
246	GOM_NL__2PRFIN20110223_230613_000000503099_00418_46984_8954.N1	23-FEB-2011 23:06:13	Twilight_and_stray	49.500	48	30Alp Hya	1.9770	4100.0	99	46984	No
247	GOM_NL__2PRFIN20110223_231244_000000463099_00418_46984_8955.N1	23-FEB-2011 23:12:44	Bright	45.500	22	32Alp Leo	1.3600	15200.	91	46984	No
248	GOM_NL__2PRFIN20110223_231603_000000413099_00418_46984_8956.N1	23-FEB-2011 23:16:03	Bright	41.000	166	17Eps Leo	2.9800	6000.0	82	46984	No
249	GOM_NL__2PRFIN20110223_232719_000000433099_00418_46984_8957.N1	23-FEB-2011 23:27:19	Bright	42.500	82	48Bet UMa	2.3650	10600.	85	46984	No
250	GOM_NL__2PRFIN20110223_233535_000000383099_00418_46984_8958.N1	23-FEB-2011 23:35:35	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	46984	No
251	GOM_NL__2PRFIN20110223_234021_000000453099_00418_46984_8959.N1	23-FEB-2011 23:40:21	Bright	44.500	119	14Eta Dra	2.7270	4700.0	89	46984	No
252	GOM_NL__2PRFIN20110223_234430_000000443099_00418_46984_8960.N1	23-FEB-2011 23:44:30	Bright	43.500	130	23Bet Dra	2.7990	5800.0	87	46984	No
253	GOM_NL__2PRFIN20110223_234915_000000423099_00418_46984_8961.N1	23-FEB-2011 23:49:15	Bright	42.000	5	3Alp Lyr	0.033000	11000.	84	46984	No
254	GOM_NL__2PRFIN20110223_235632_000000563099_00418_46984_8962.N1	23-FEB-2011 23:56:32	Bright	56.000	168	17Zet Aql	2.9860	11000.	112	46984	No

3. Quality information per product

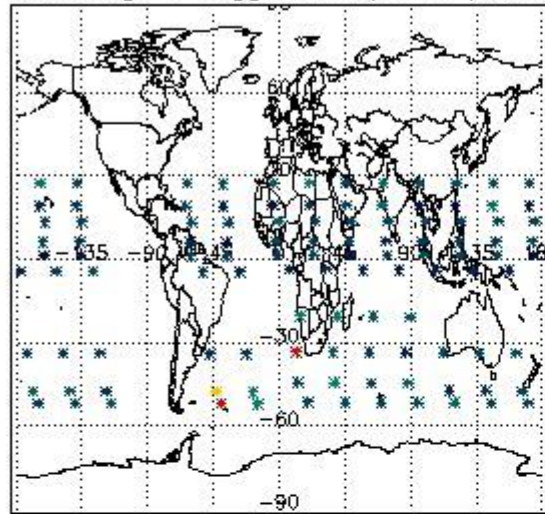
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

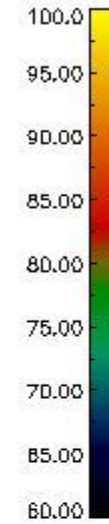
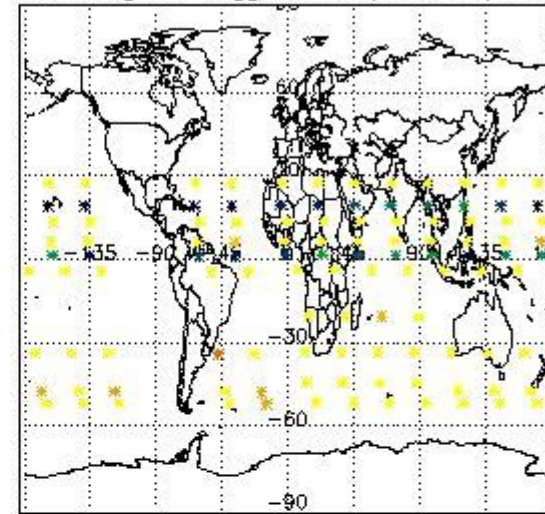


3.2 Plot quality information per product (world map)

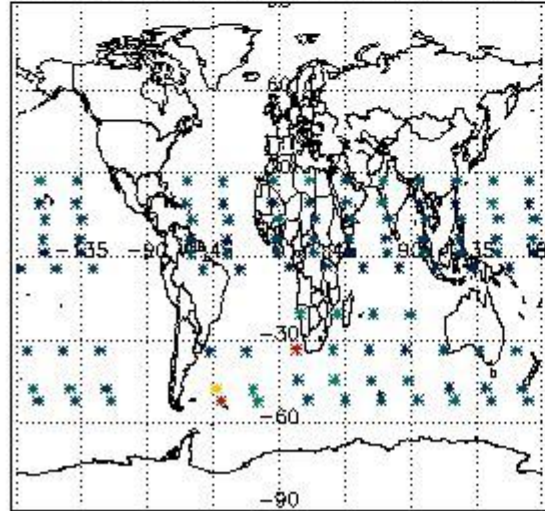
Percentage of flagged data per O3 profile



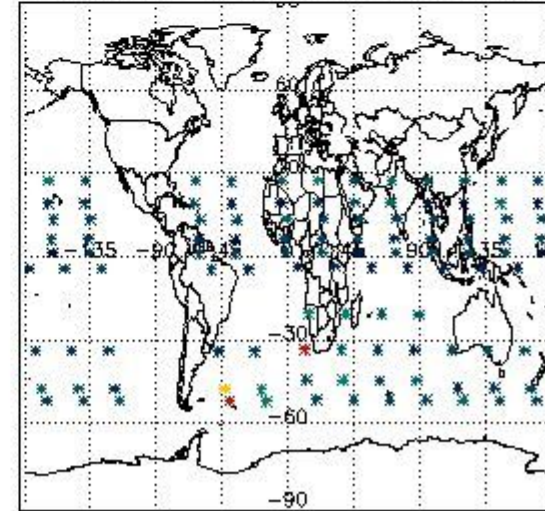
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

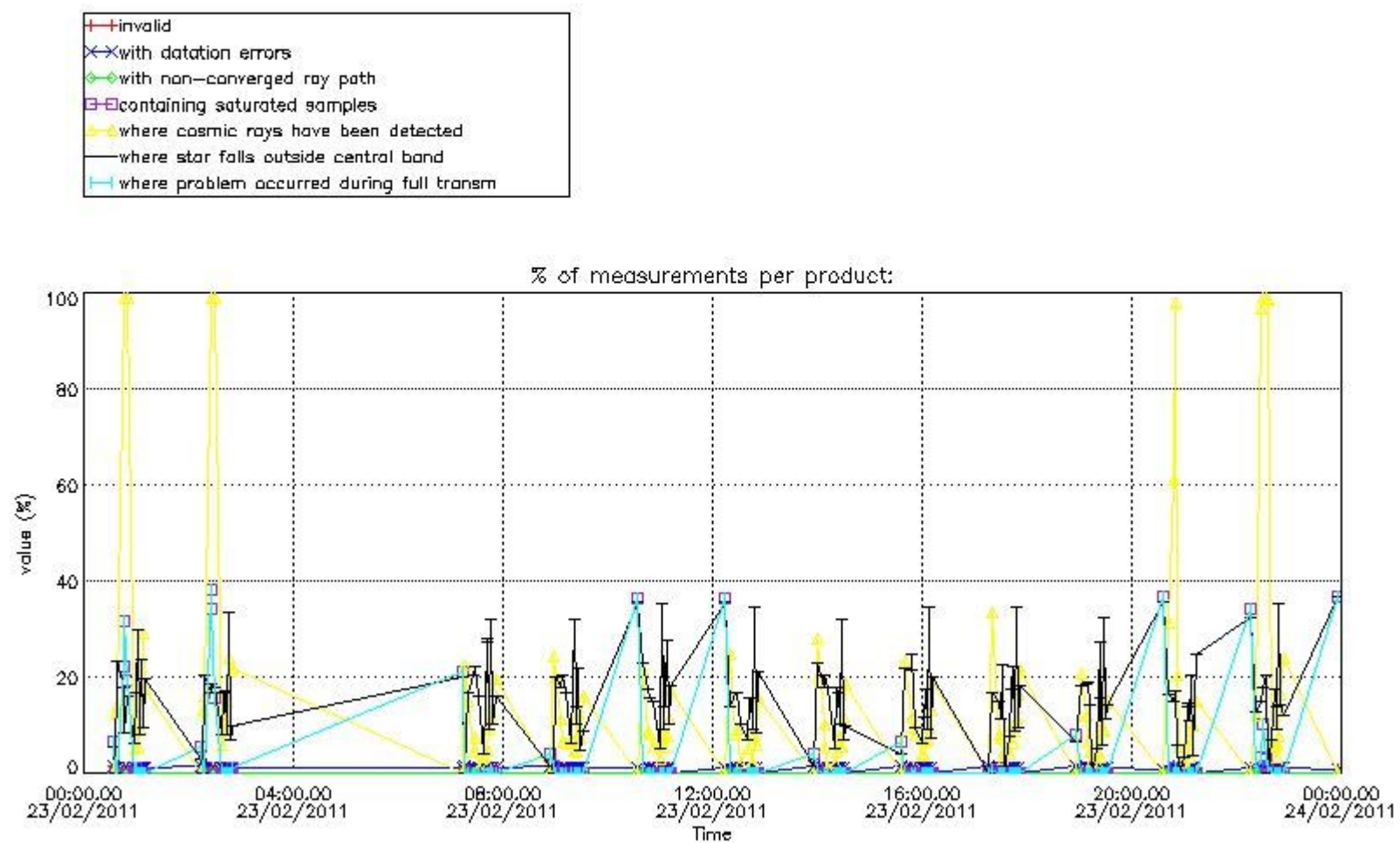


4. Level 1 quality information per product

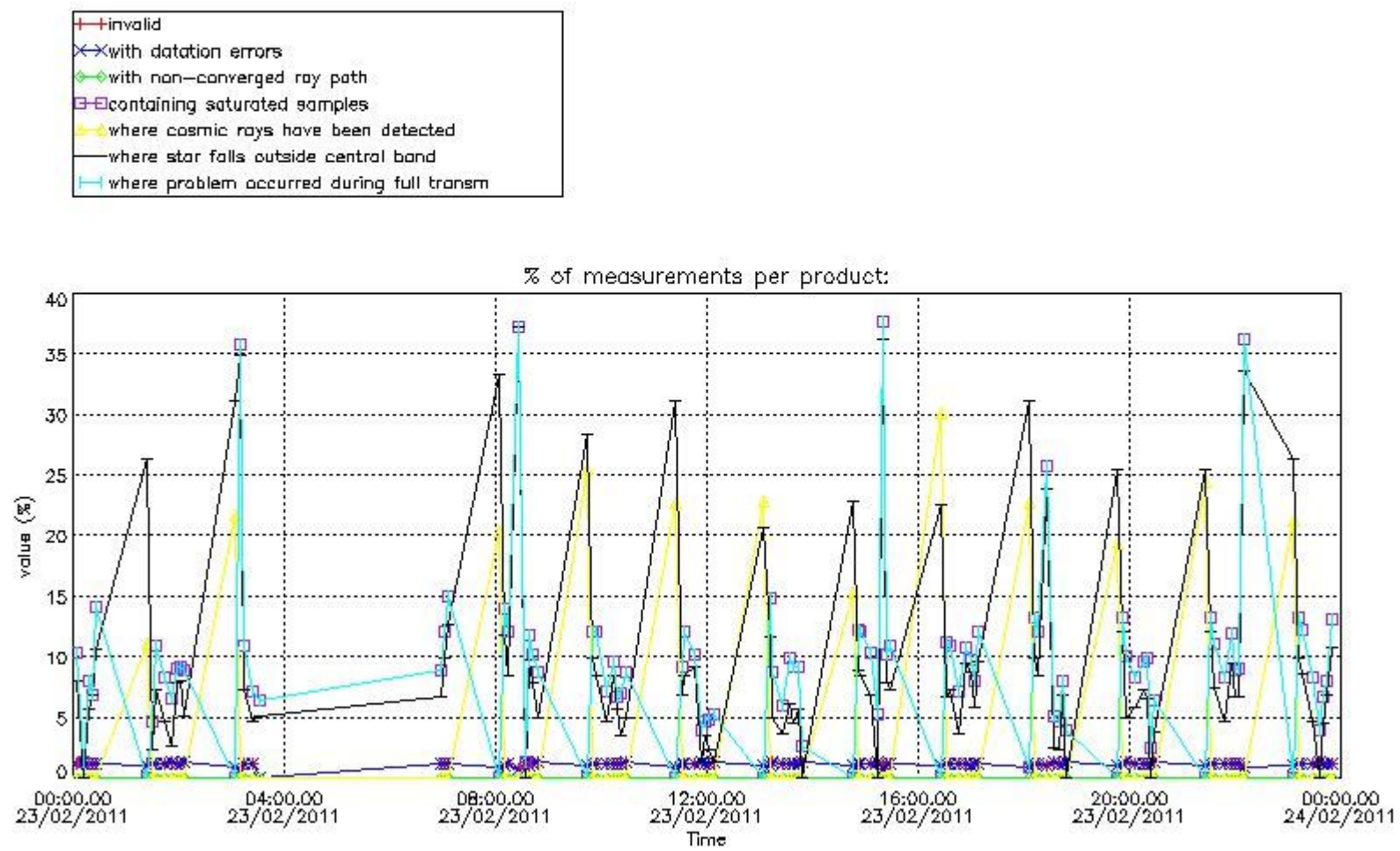
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

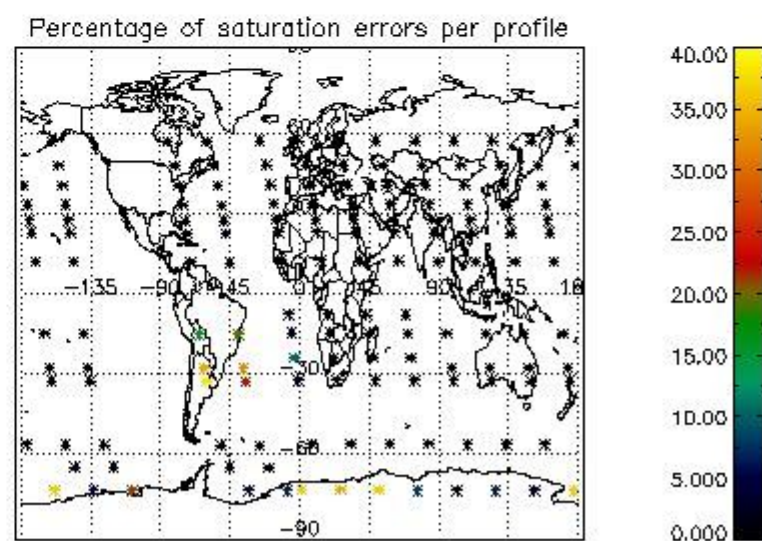
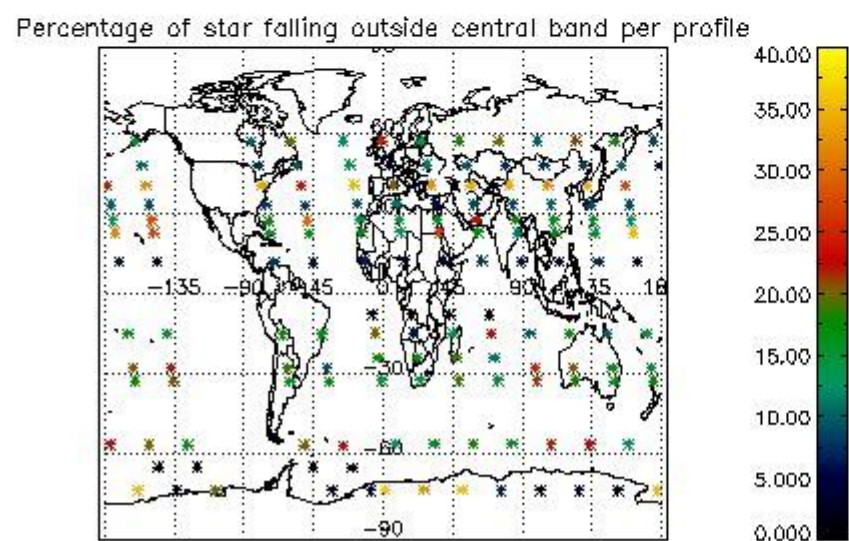
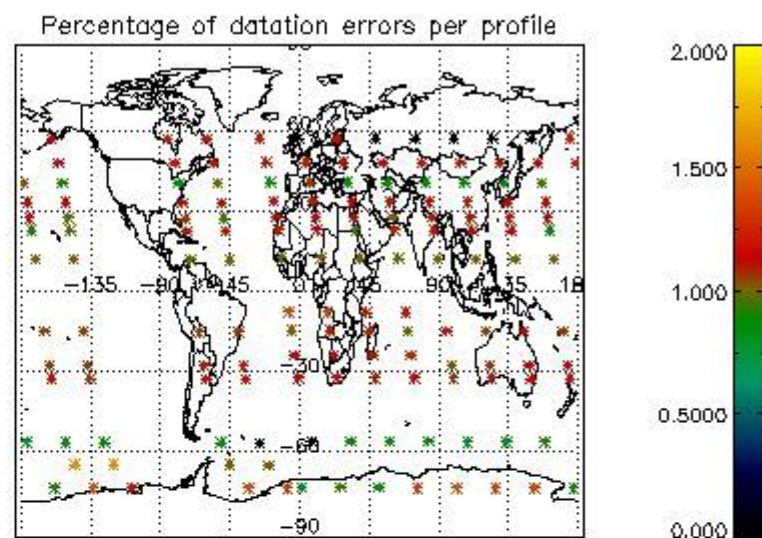
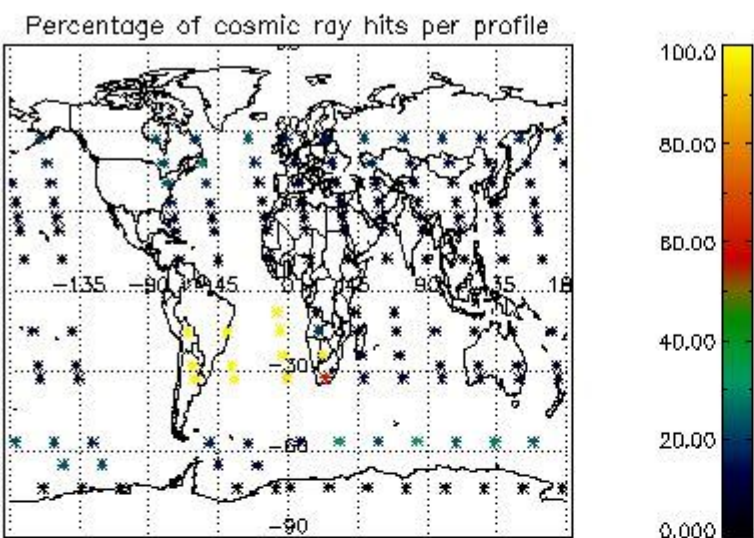


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

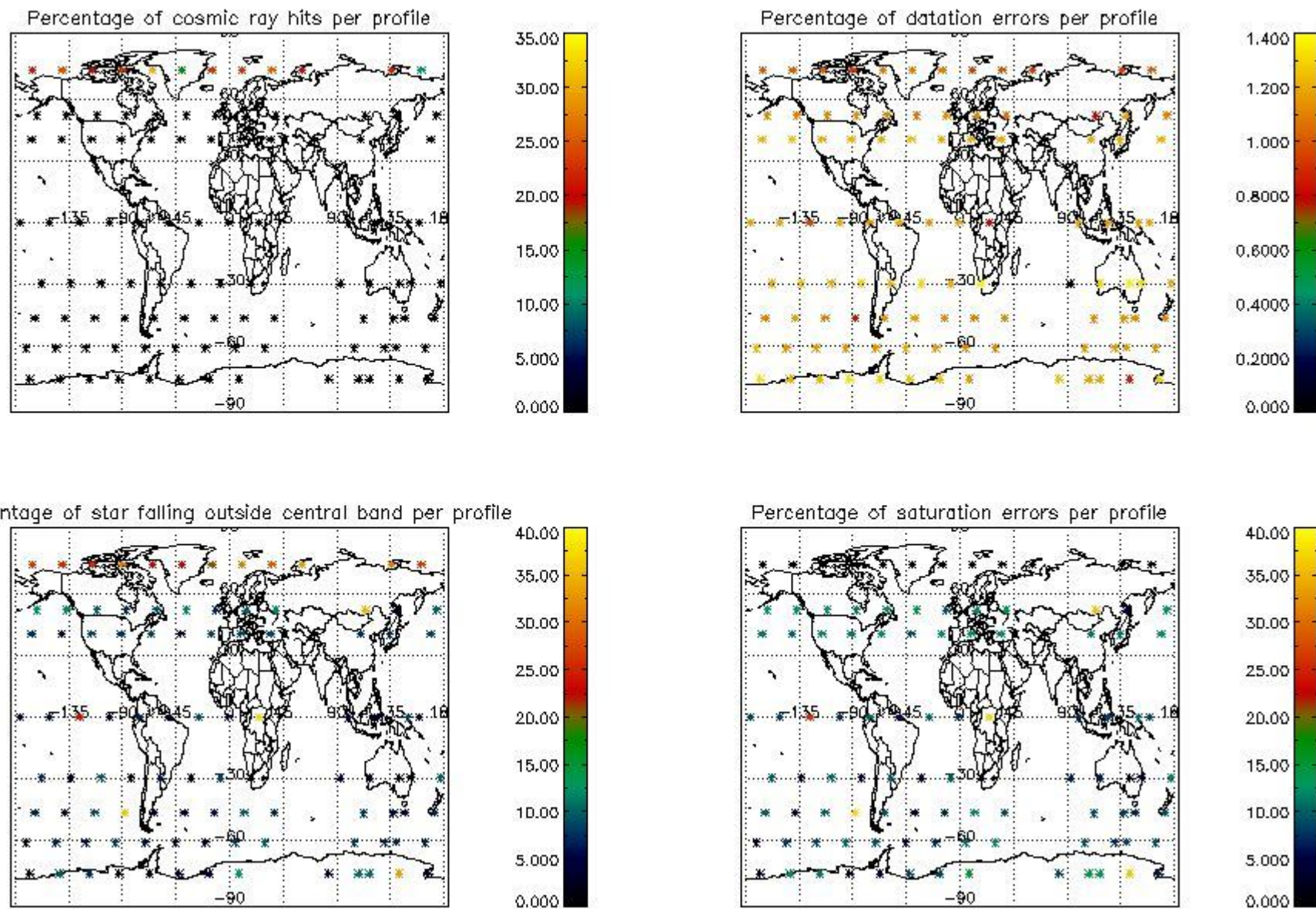


4.2 Plot quality information per product coming from level 1b processing (world map)

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

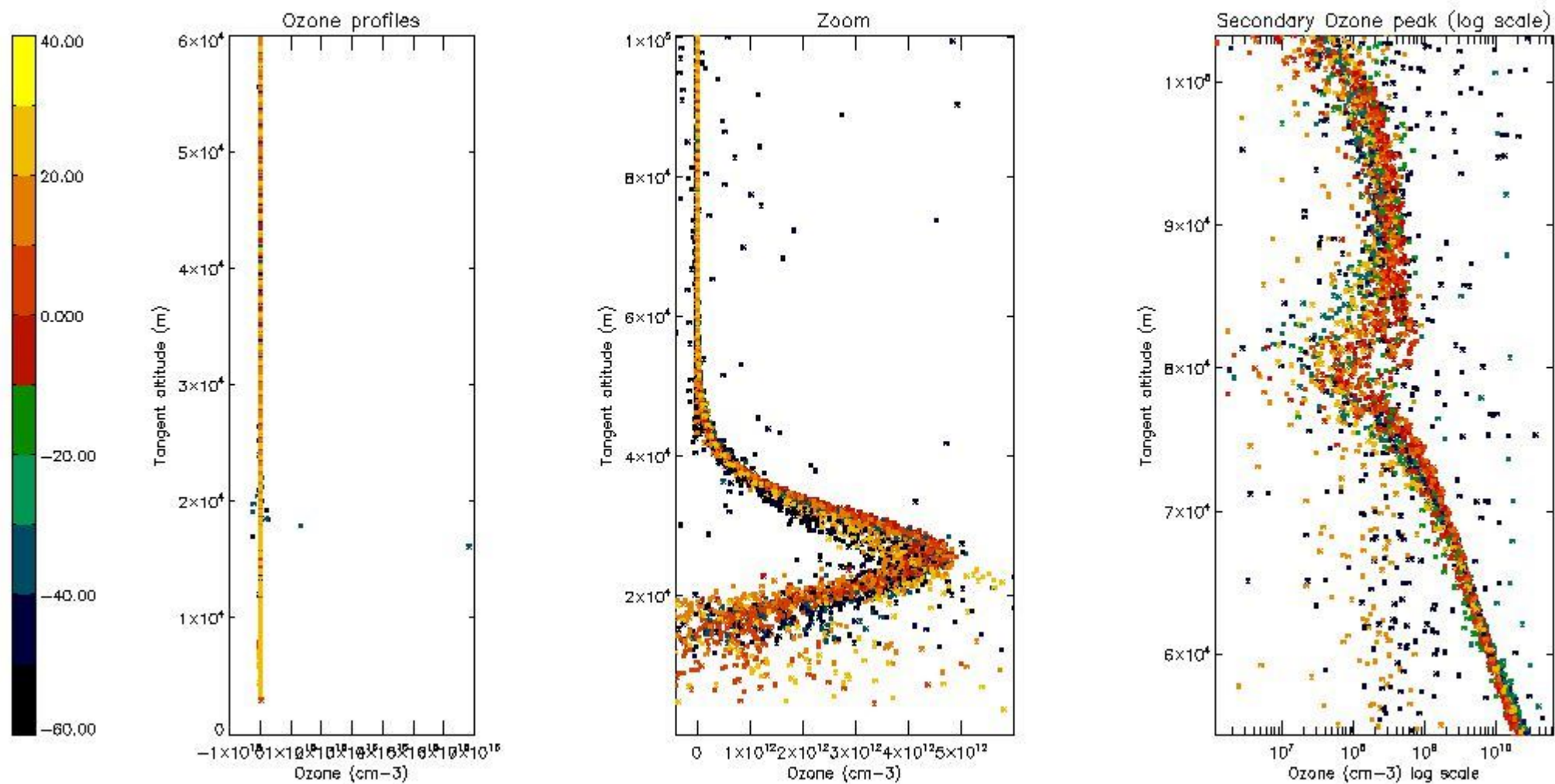
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	45
STD < 20	22

STD < 10	17
STD < 5	13

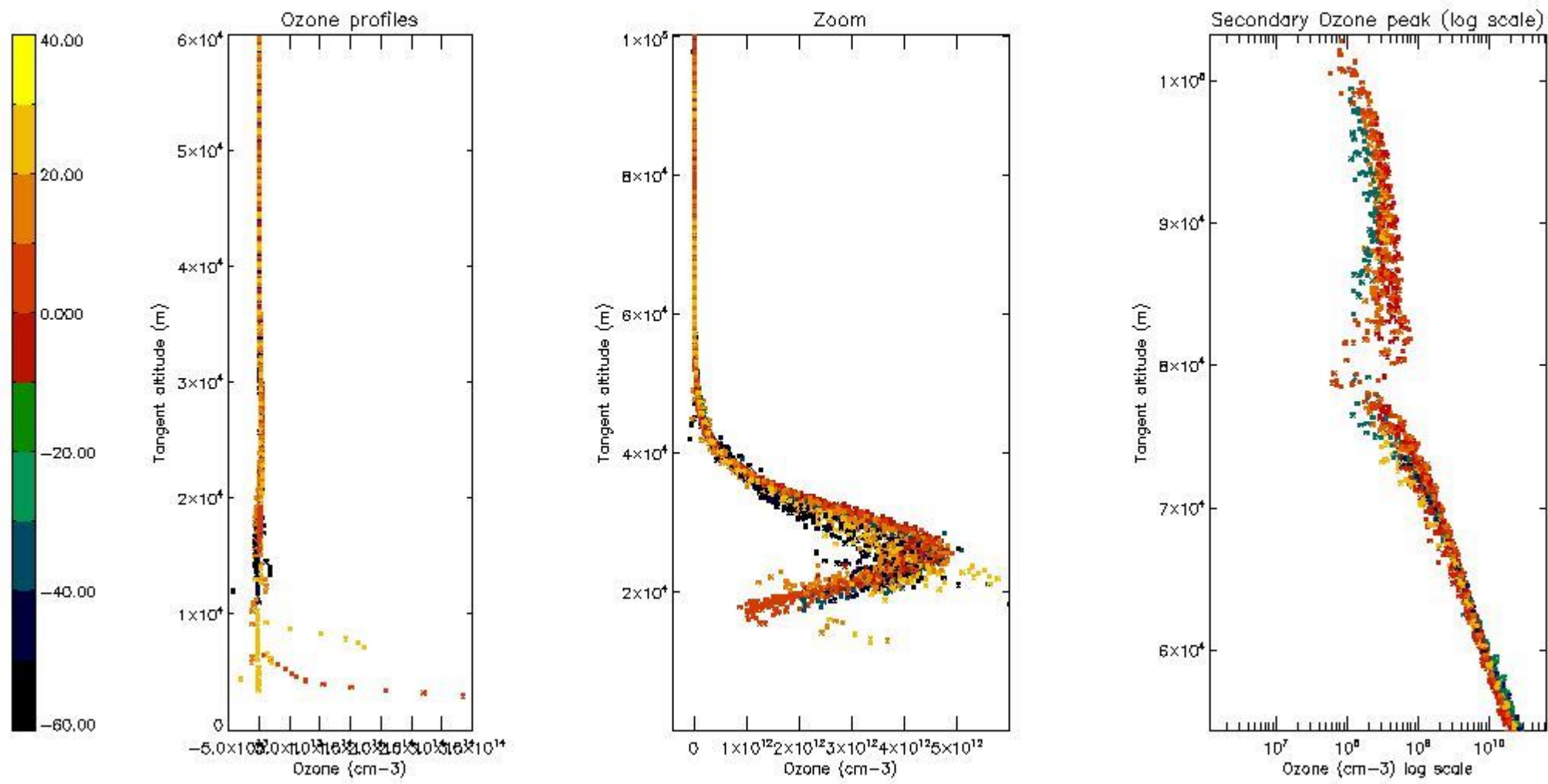
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



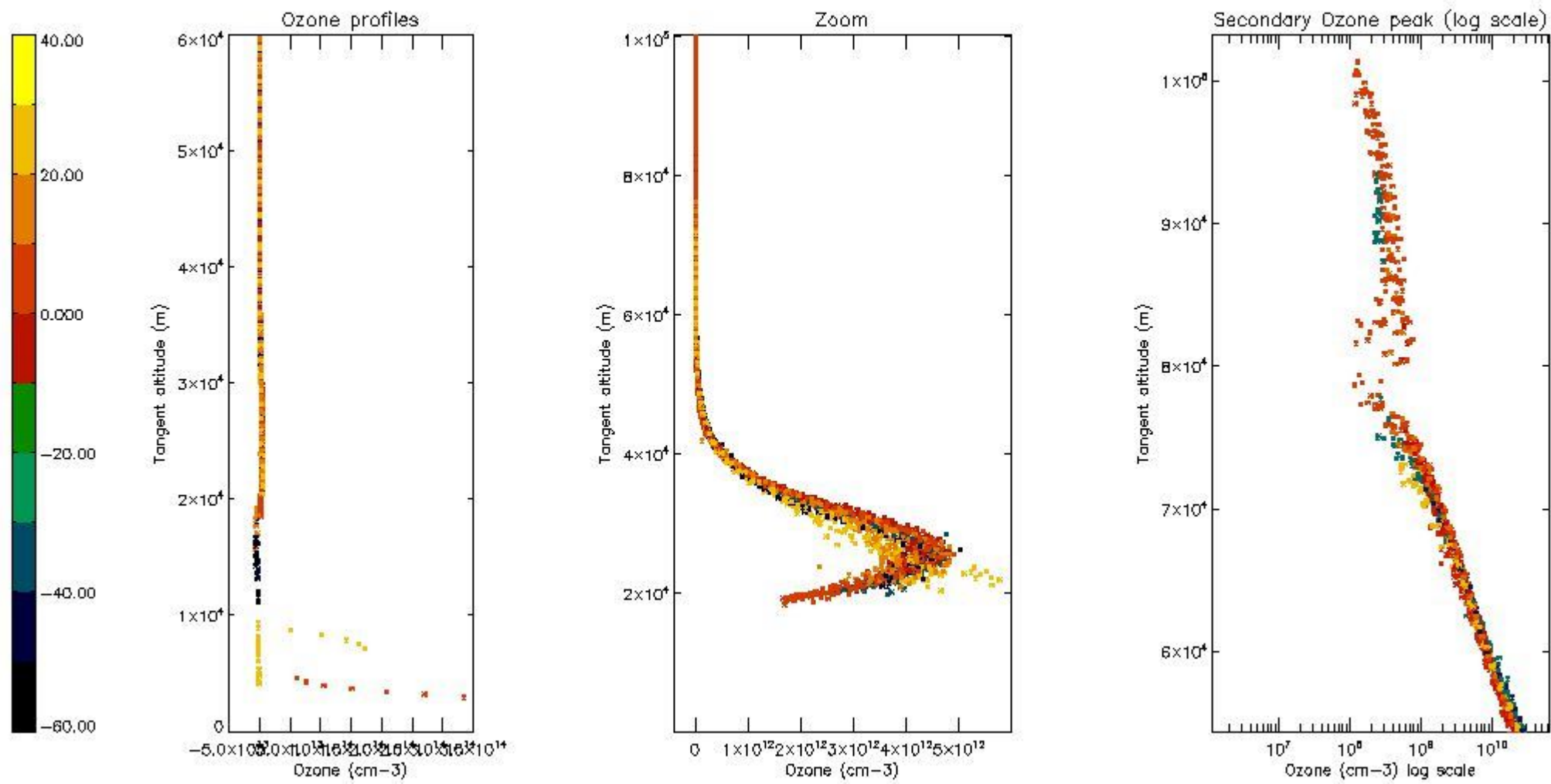
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



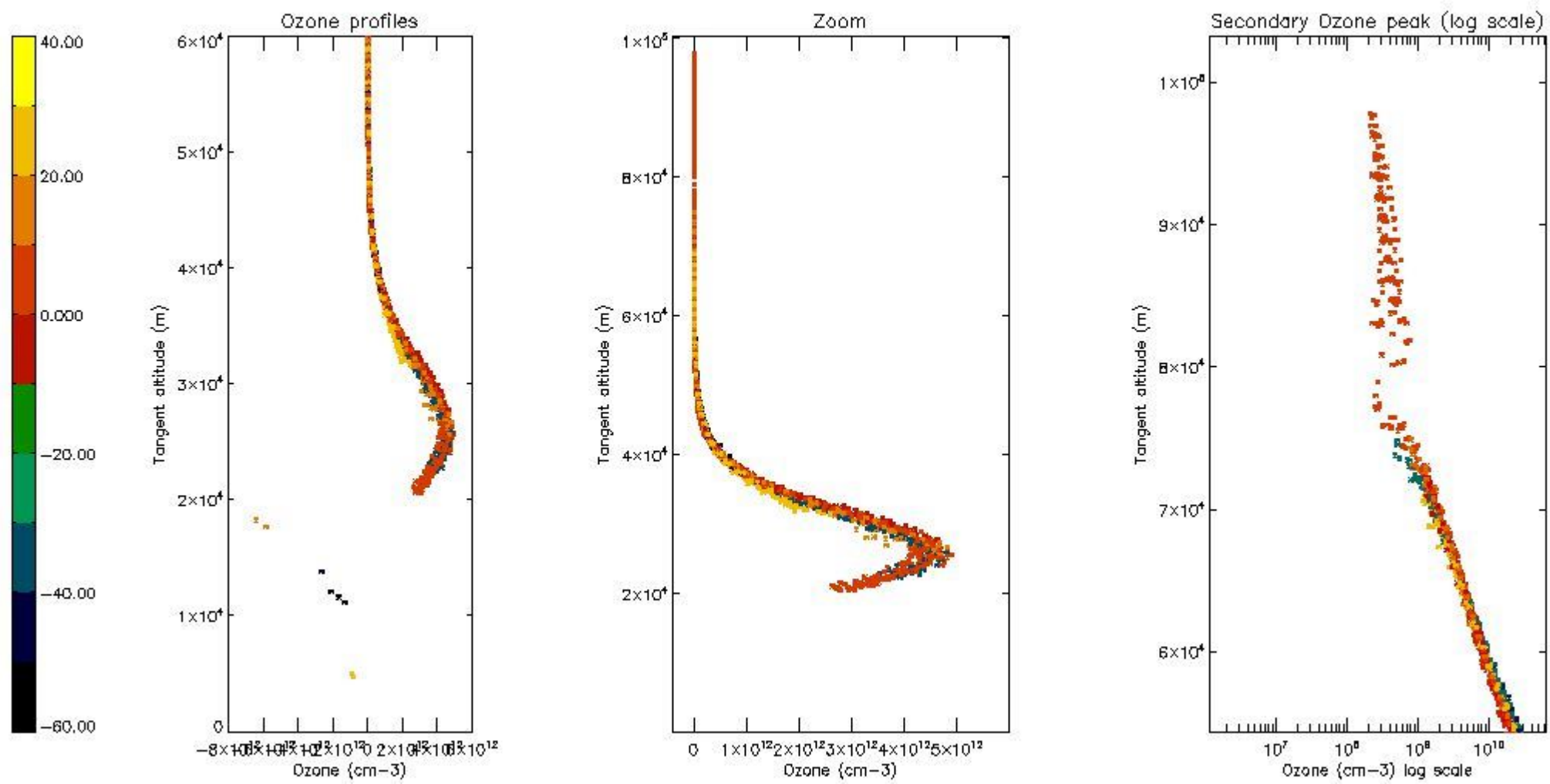
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



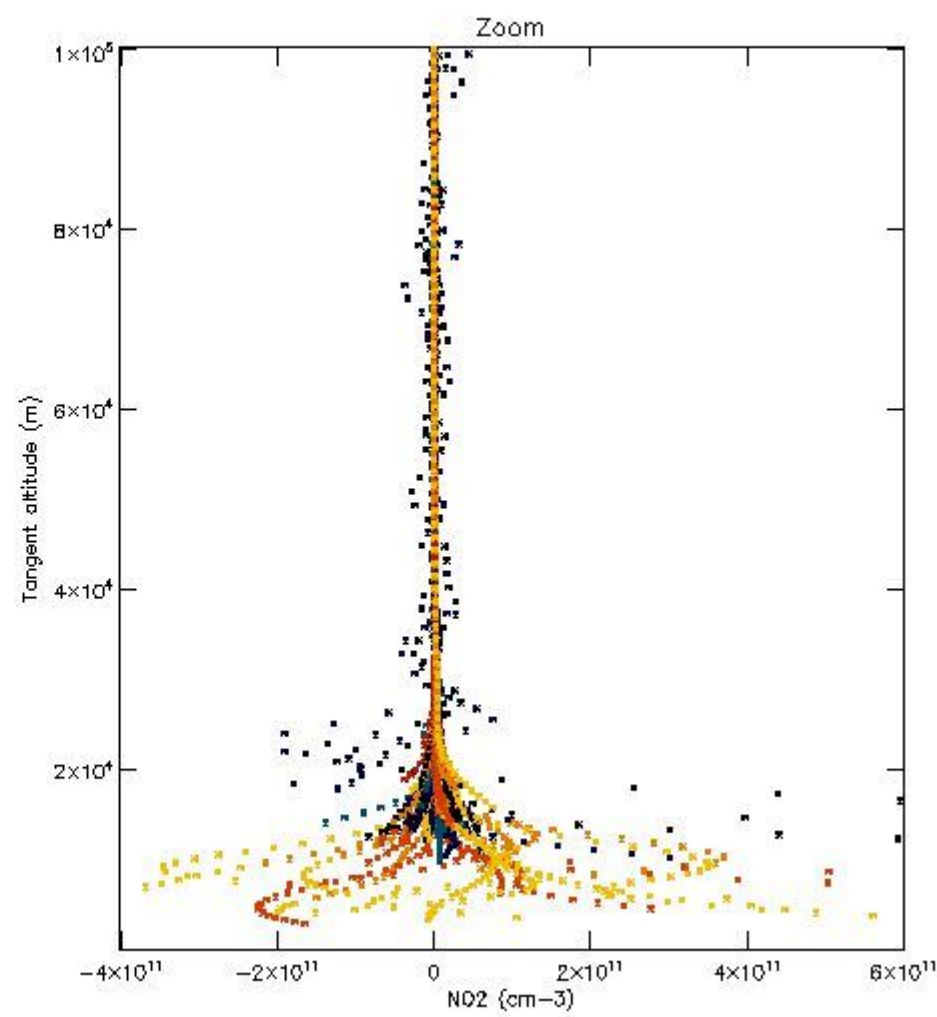
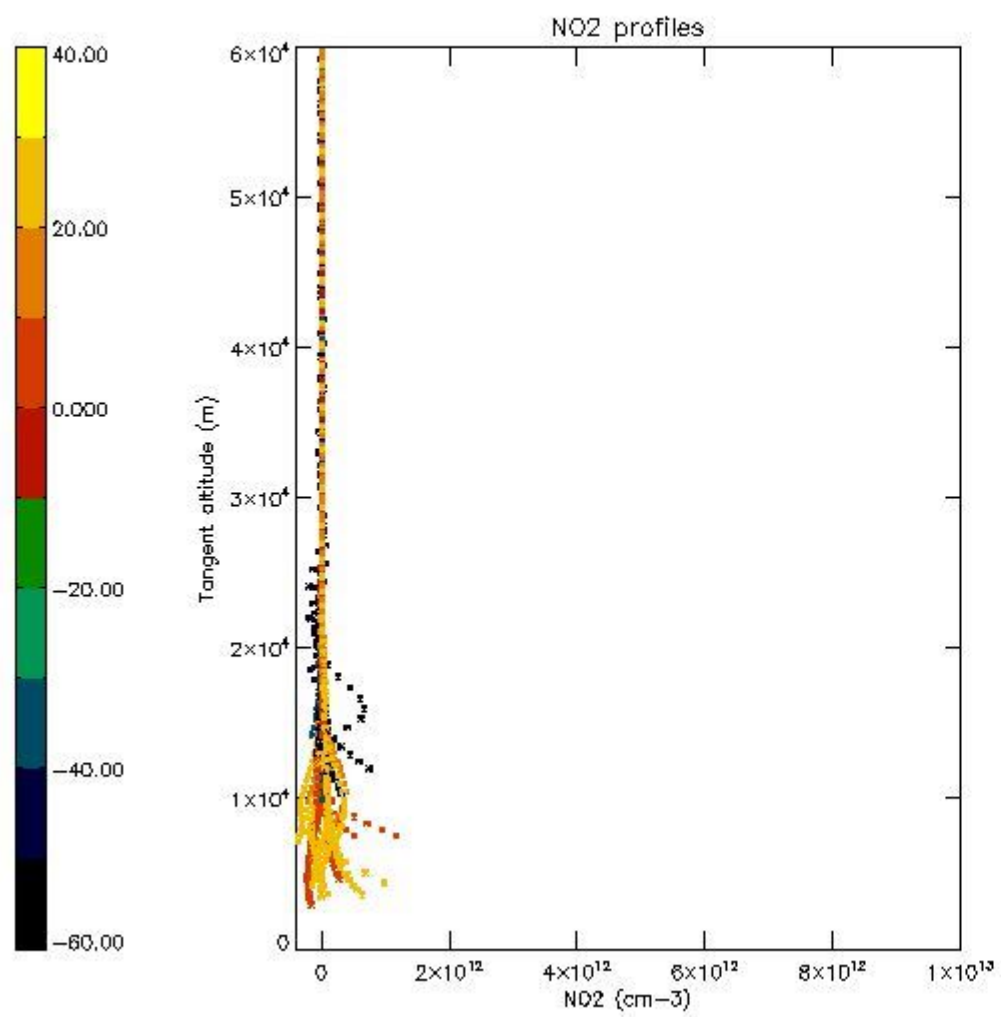
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



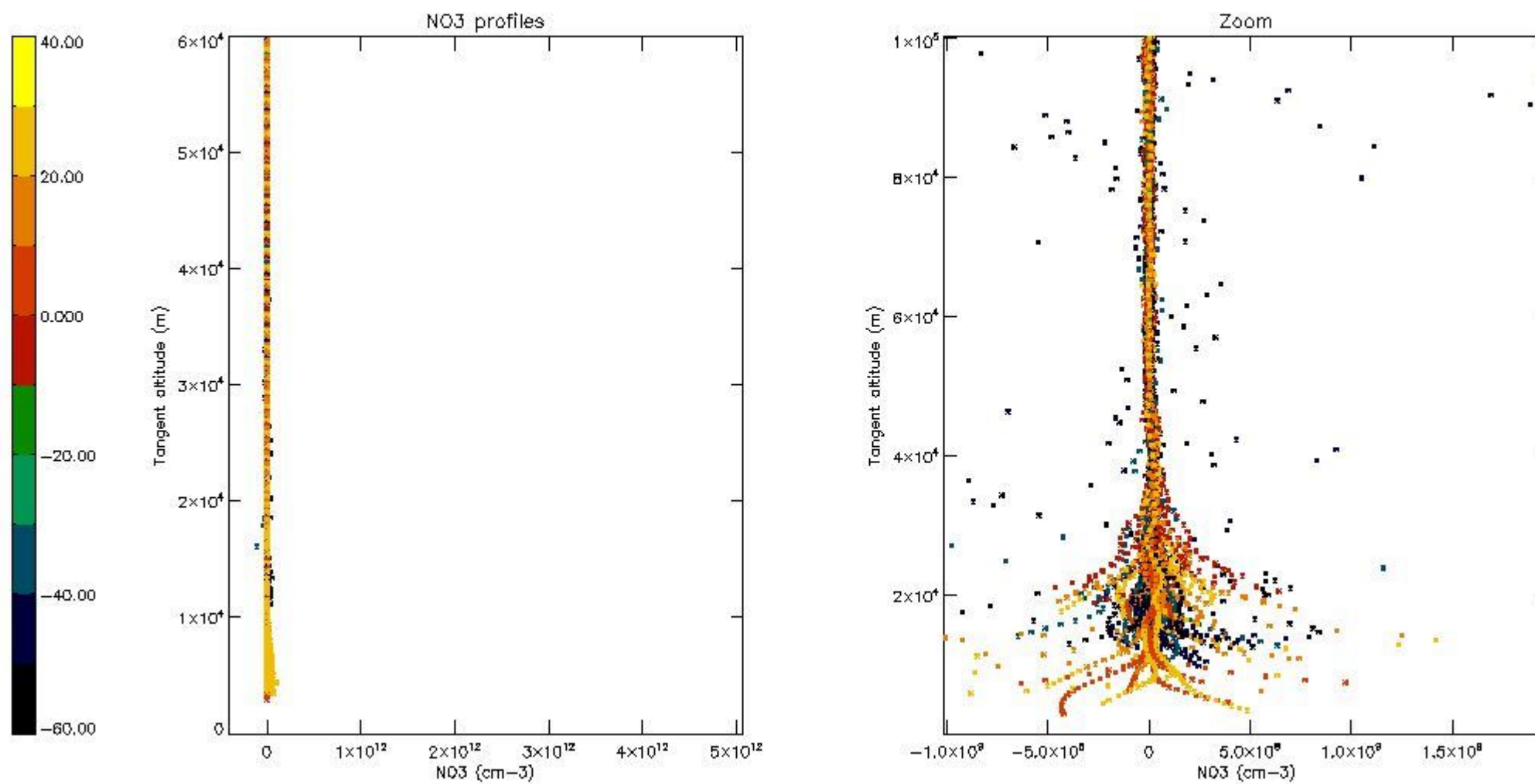
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

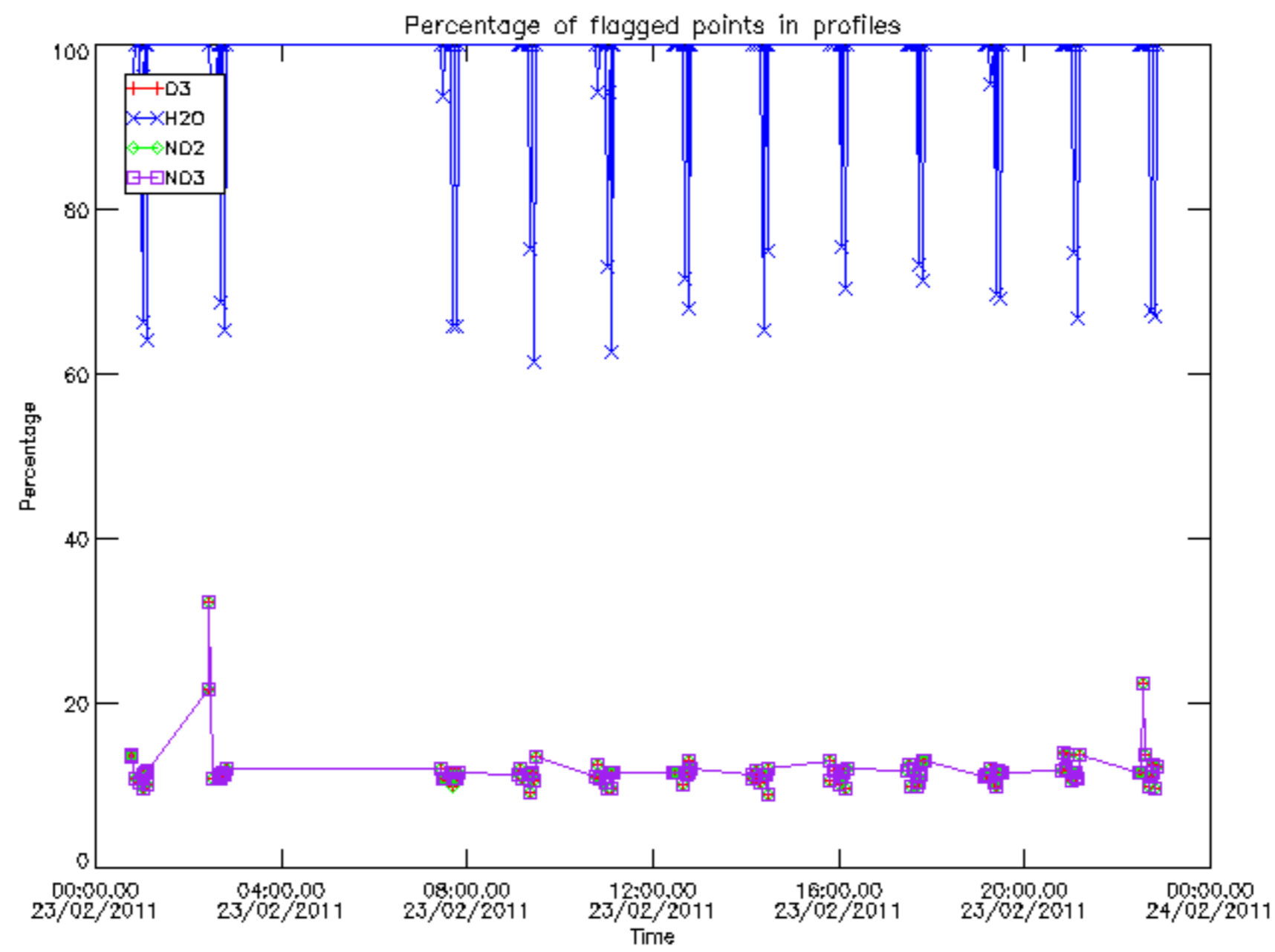
The colorbar represents the latitude.



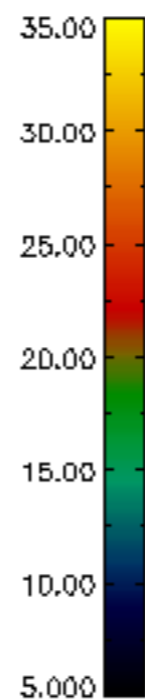
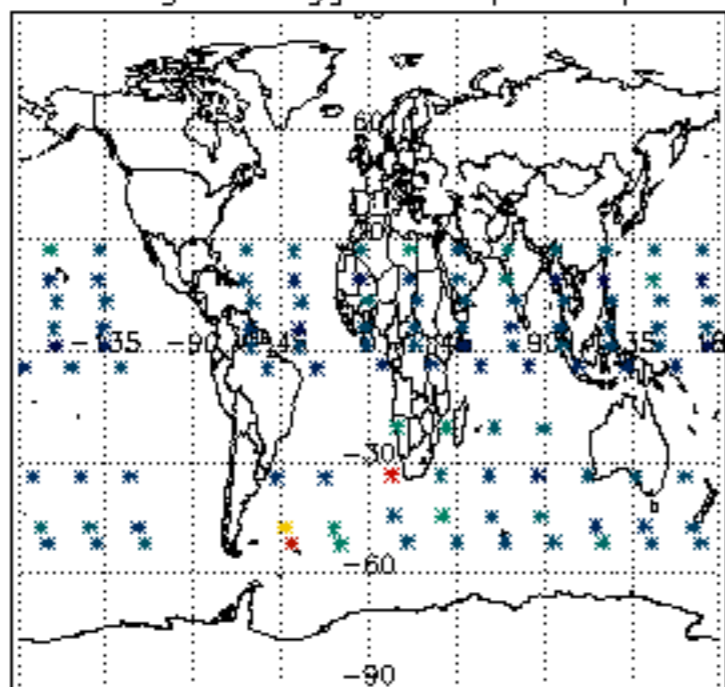
6. Auxiliary Data Files used for the production reported in section 2

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.

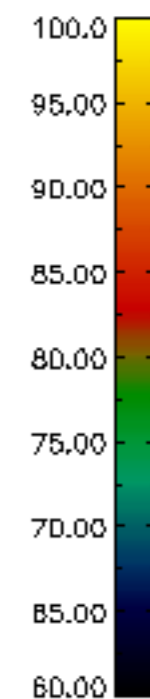
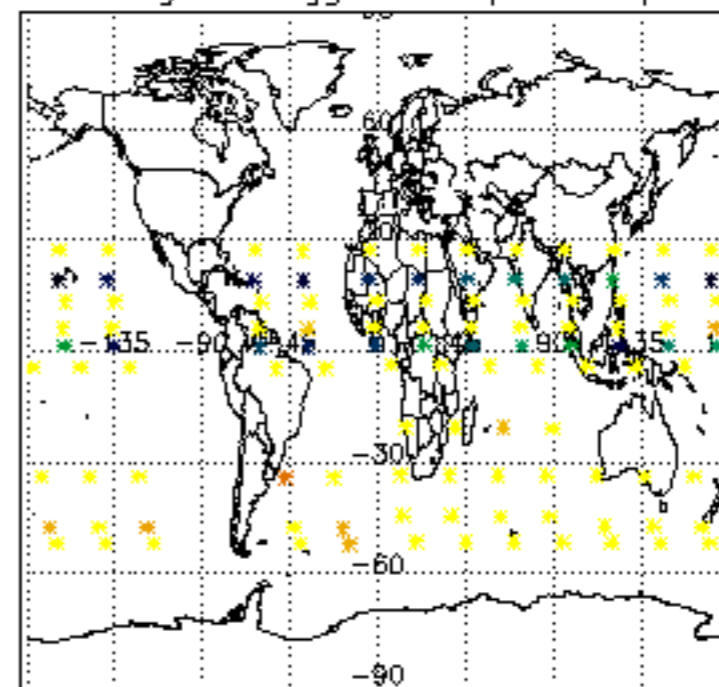
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	23-FEB-2011 00:04:10
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	23-FEB-2011 00:04:10
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	23-FEB-2011 00:04:10



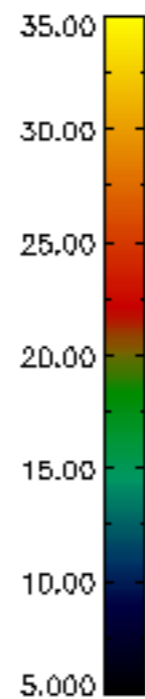
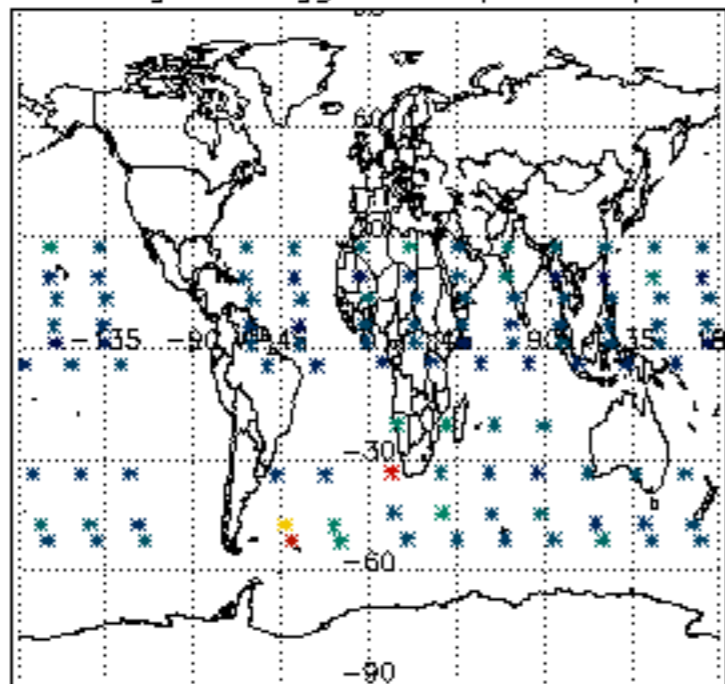
Percentage of flagged data per D3 profile



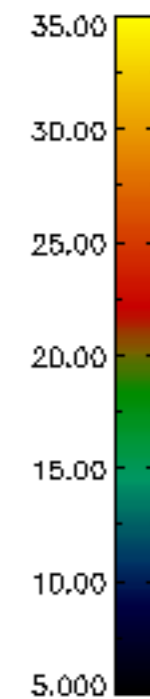
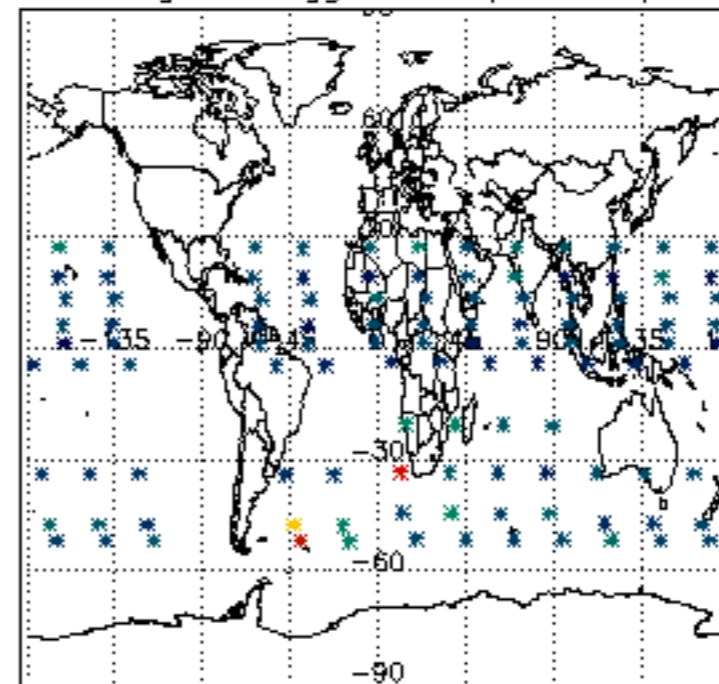
Percentage of flagged data per H2O profile

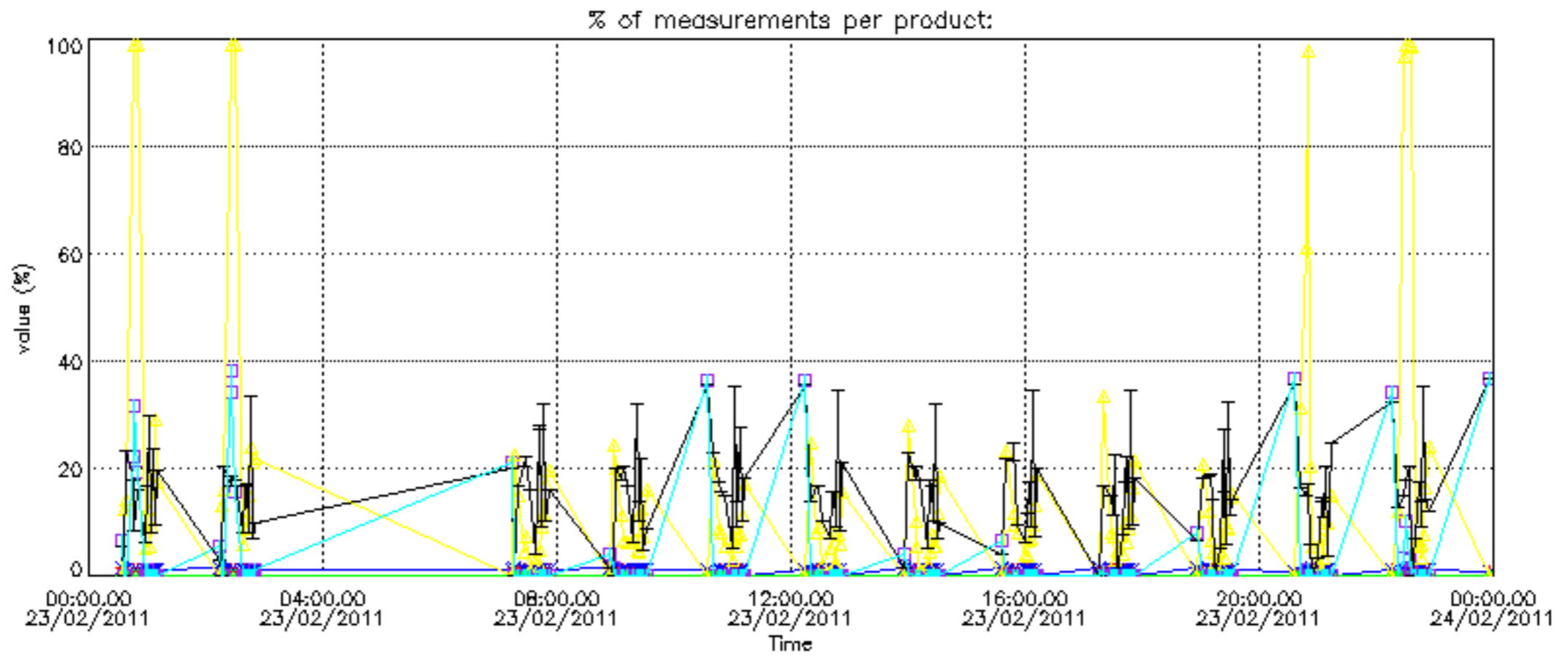


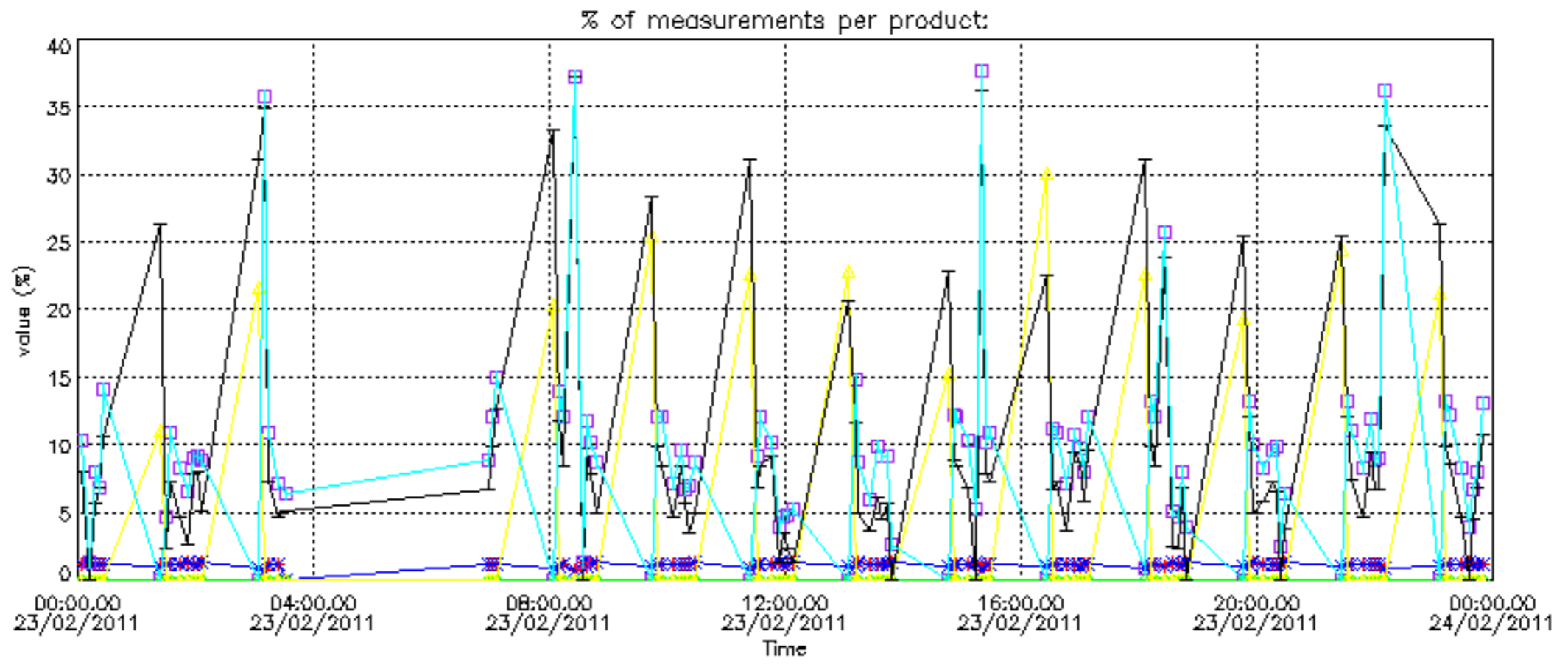
Percentage of flagged data per NO2 profile



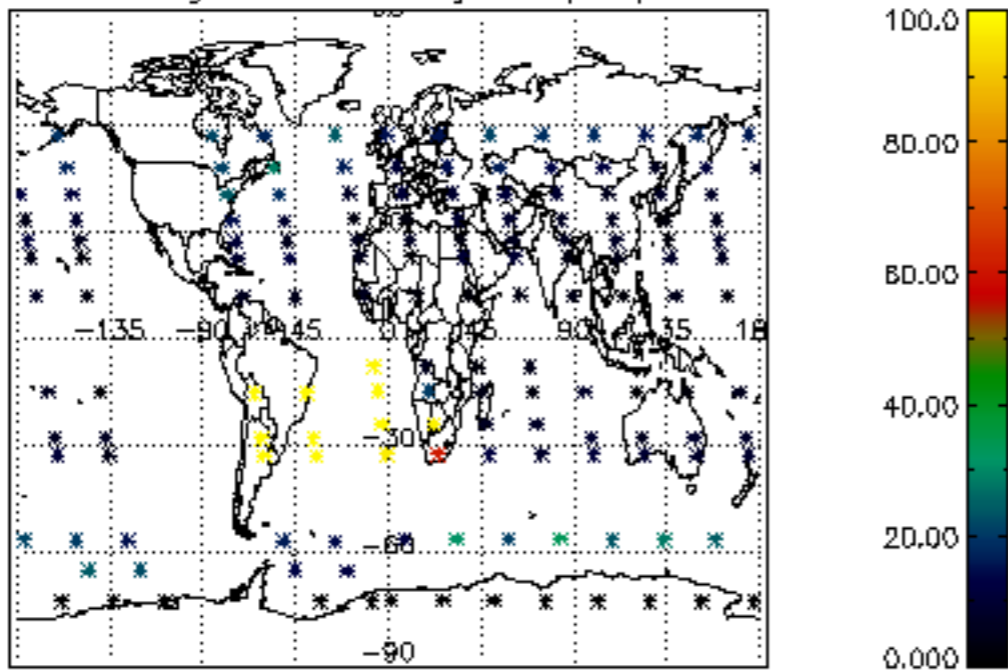
Percentage of flagged data per NO3 profile



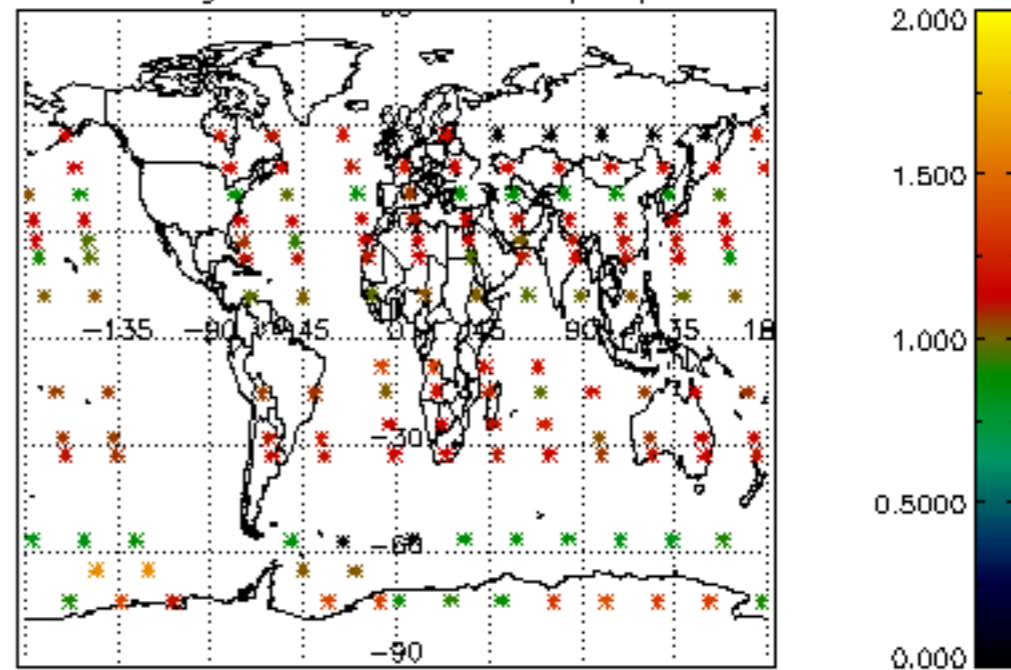




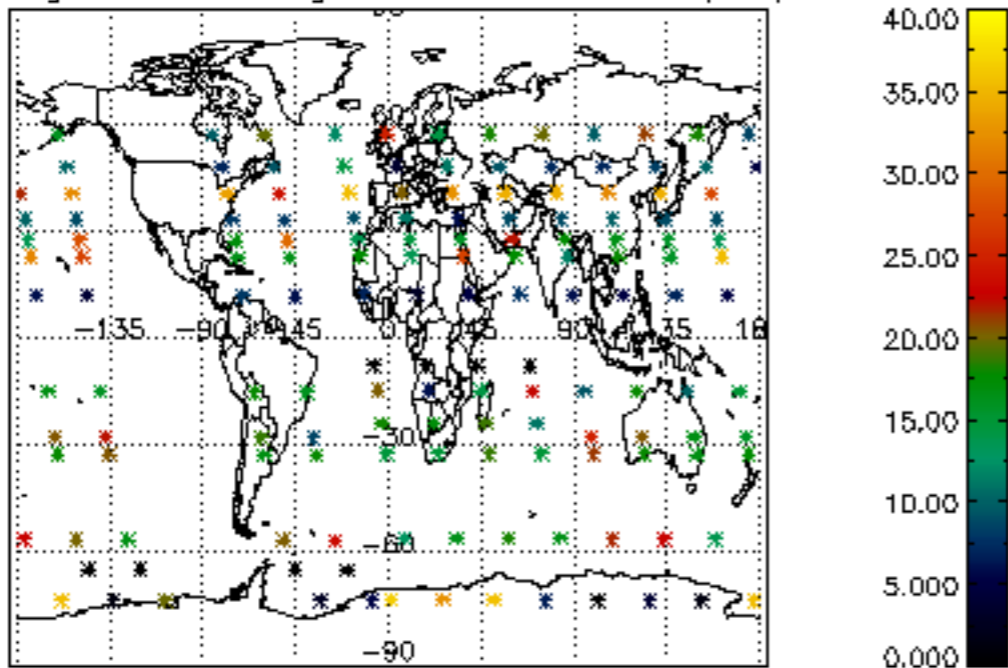
Percentage of cosmic ray hits per profile



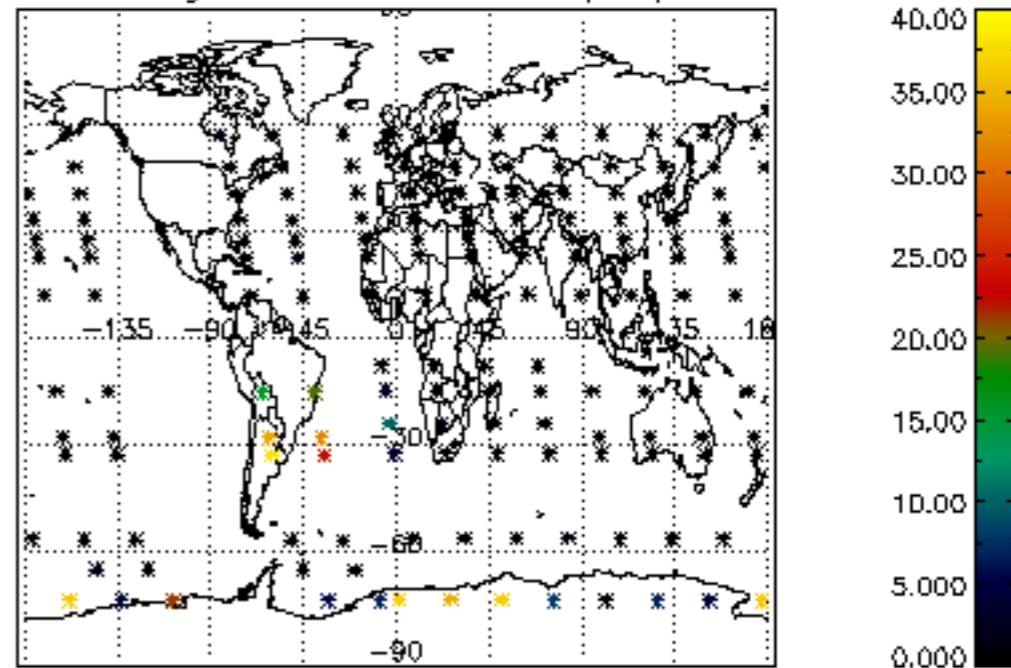
Percentage of datation errors per profile



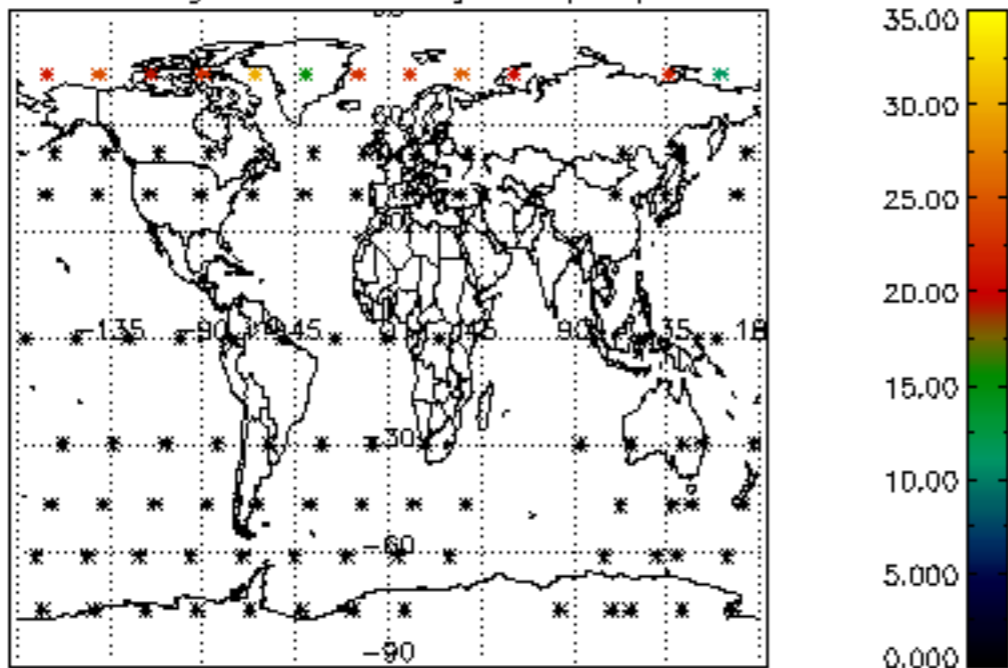
Percentage of star falling outside central band per profile



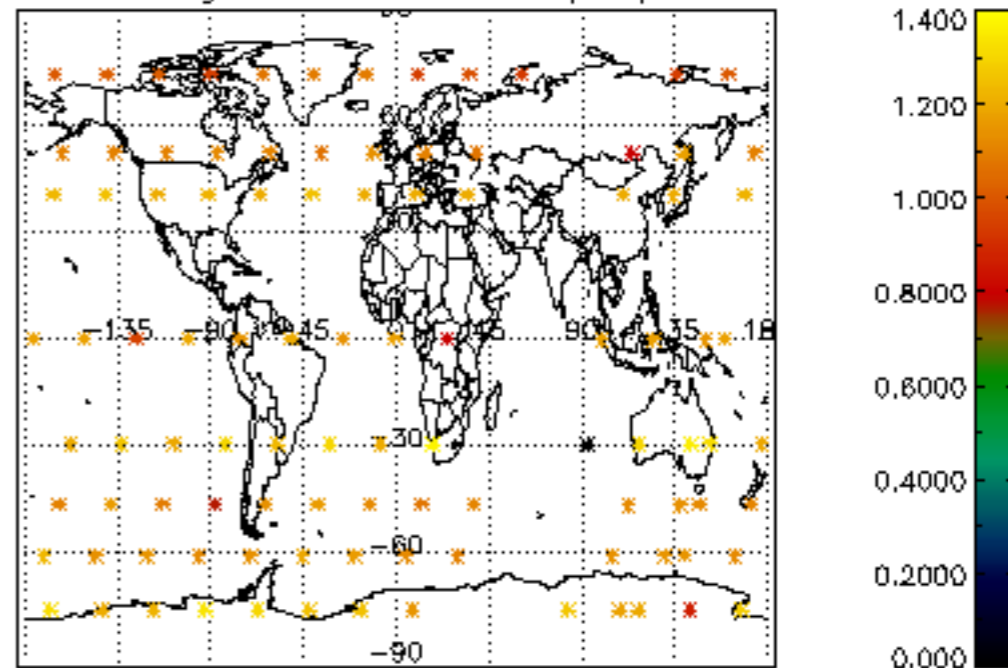
Percentage of saturation errors per profile



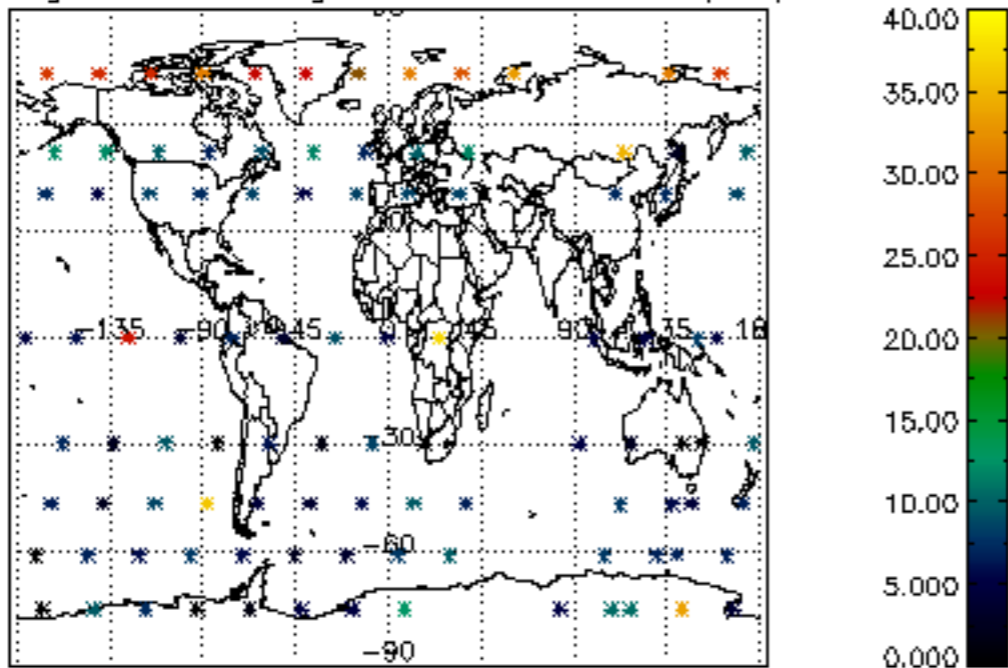
Percentage of cosmic ray hits per profile



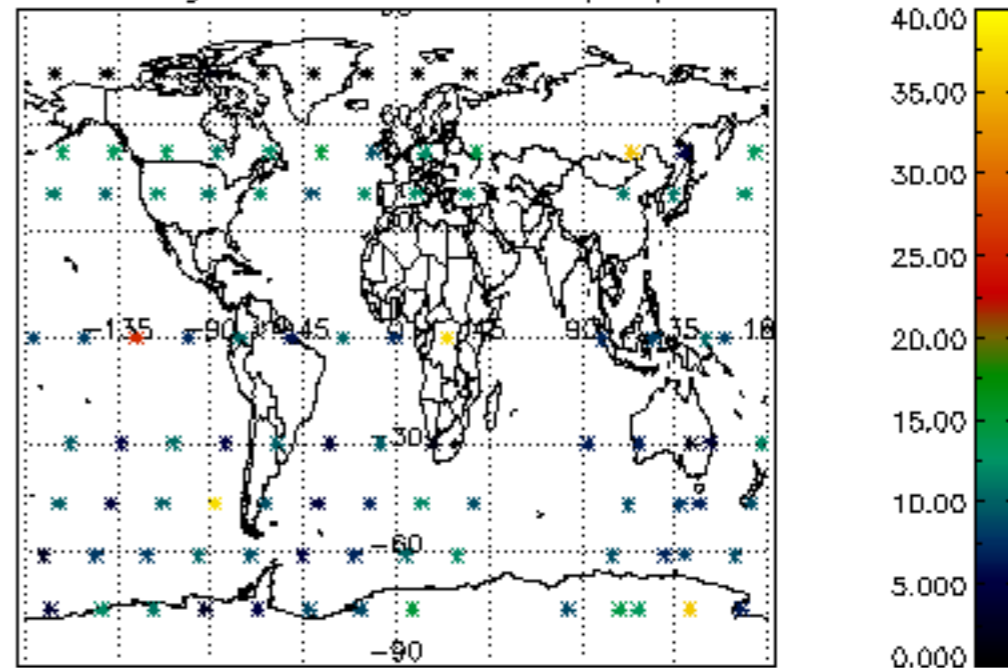
Percentage of datation errors per profile

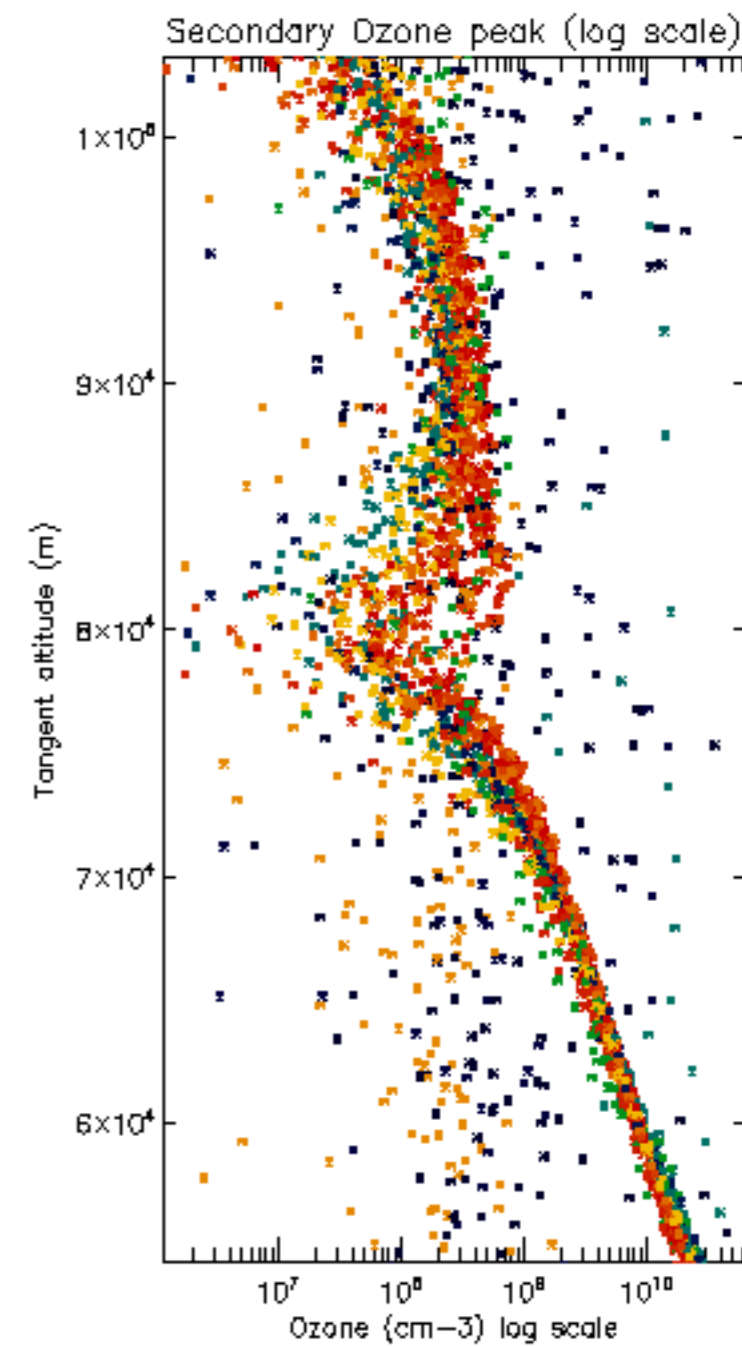
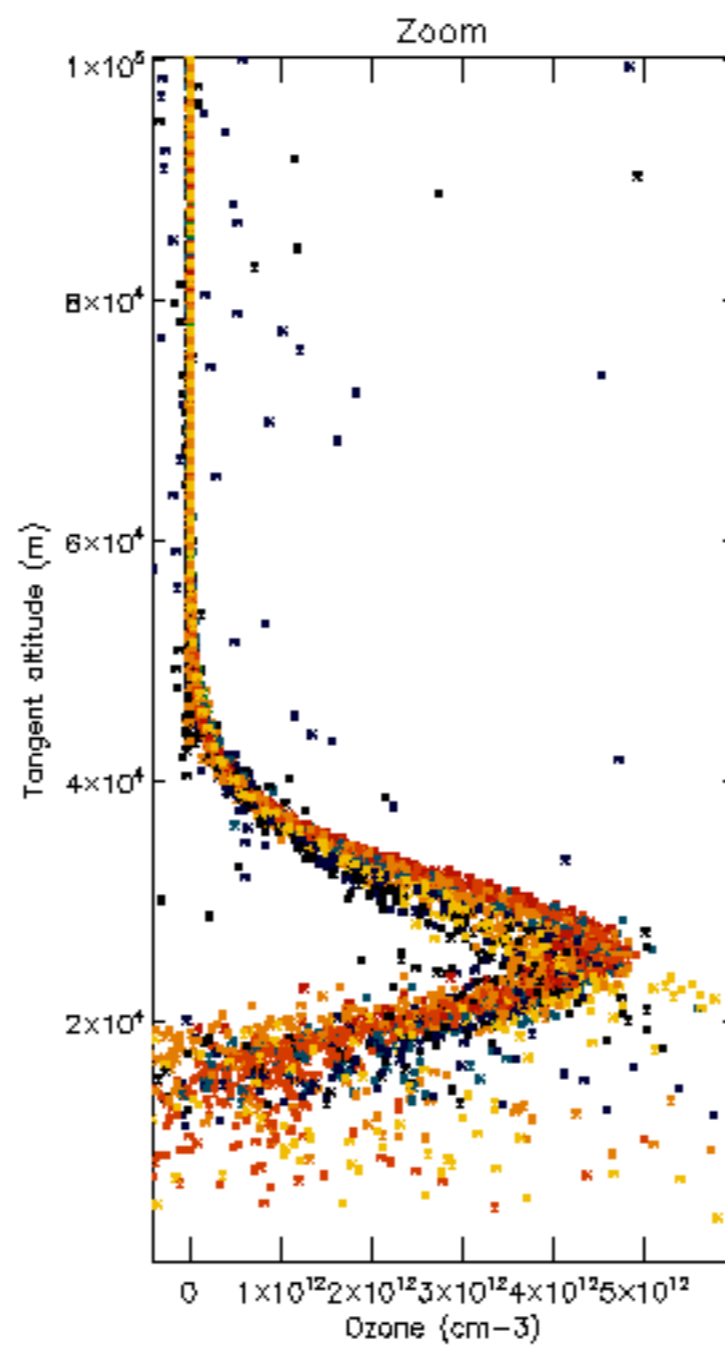
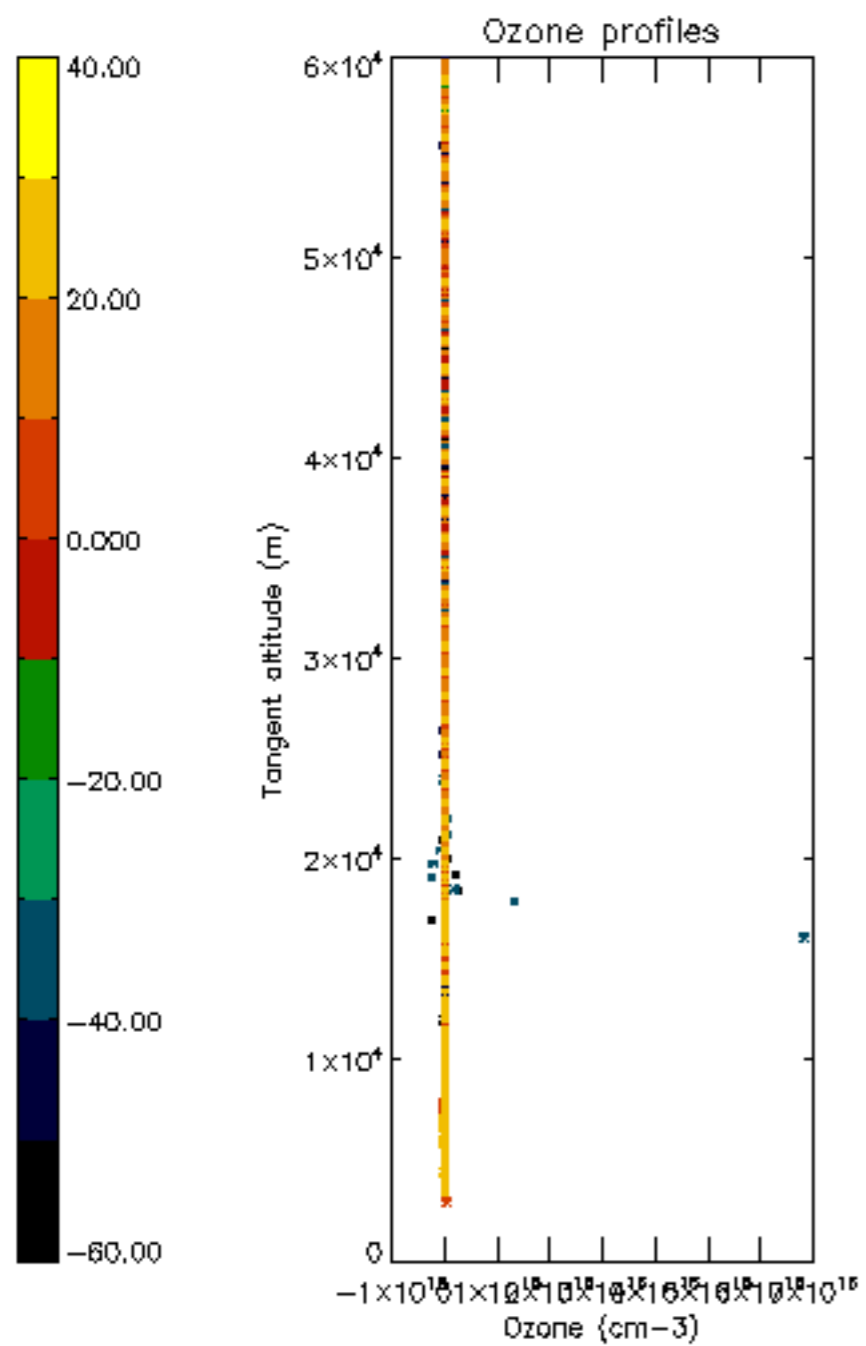


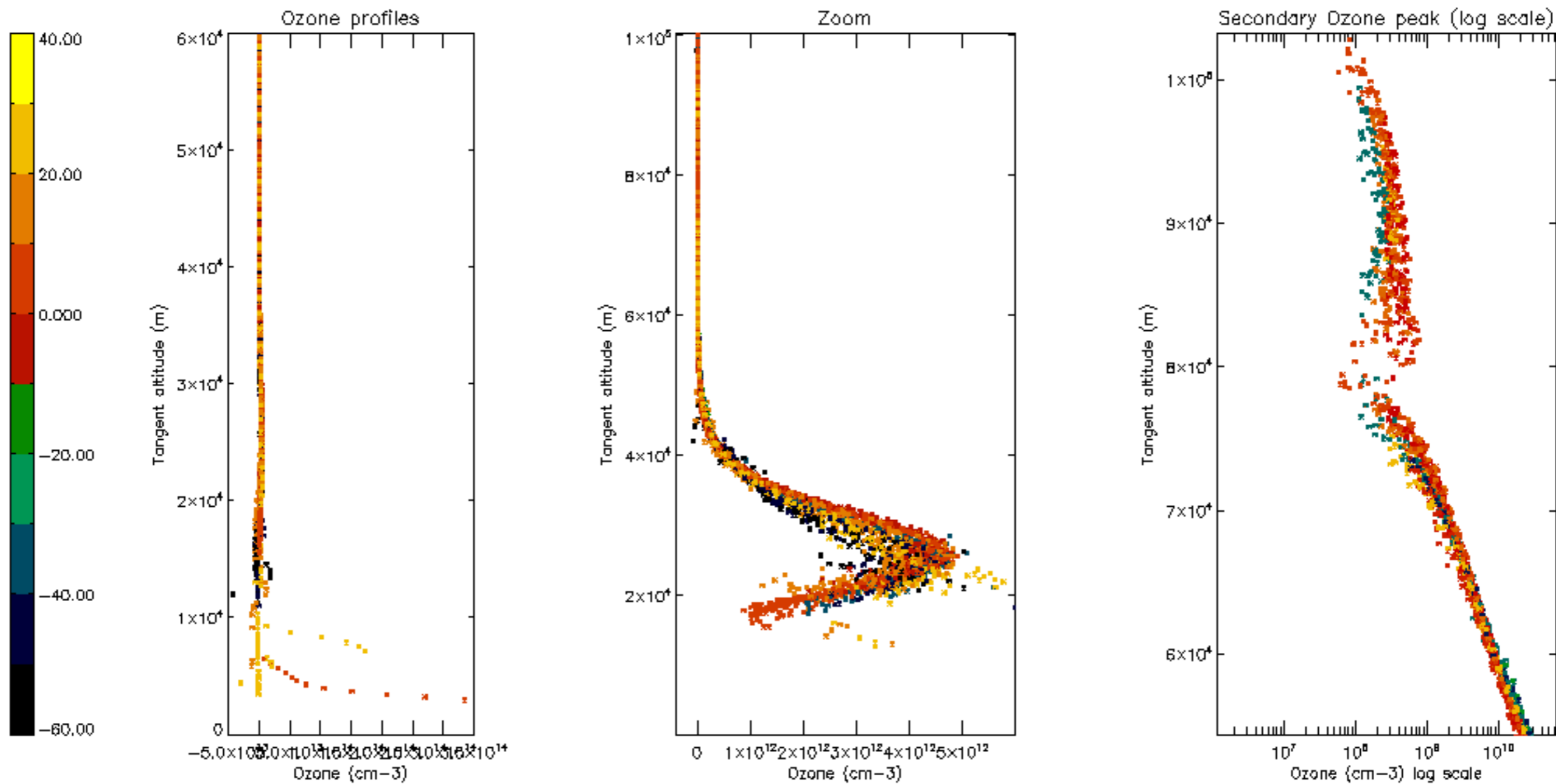
Percentage of star falling outside central band per profile

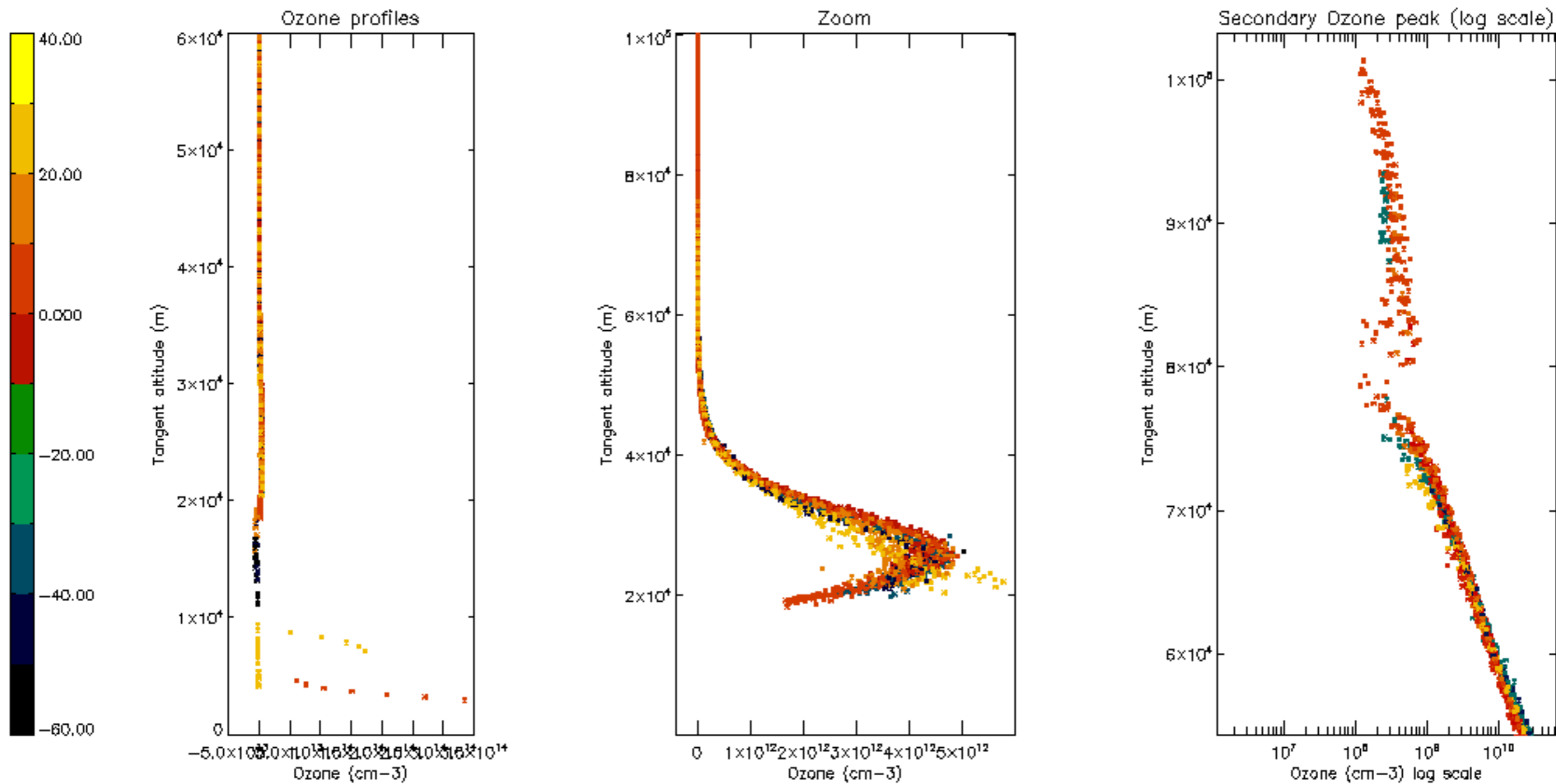


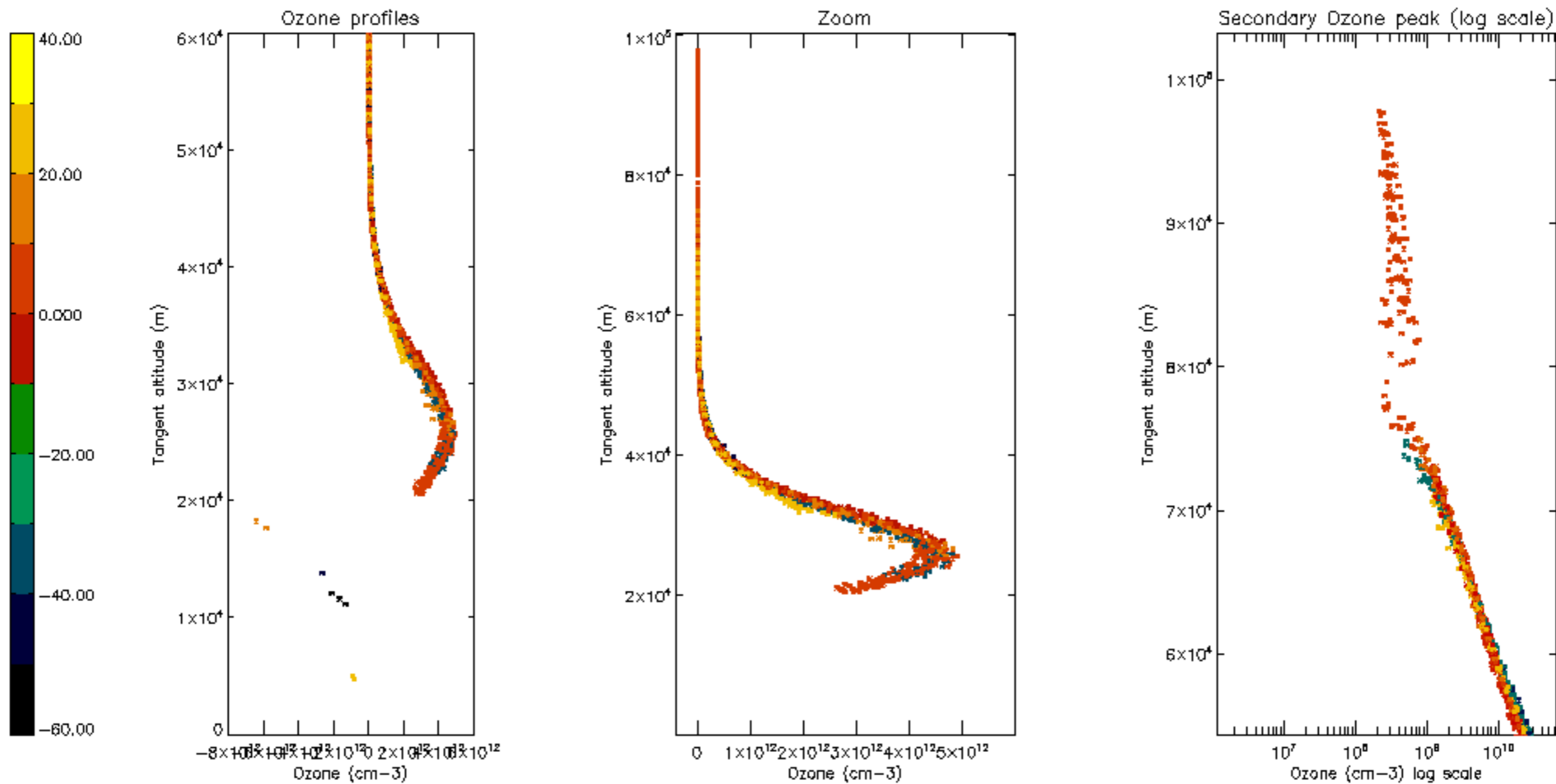
Percentage of saturation errors per profile

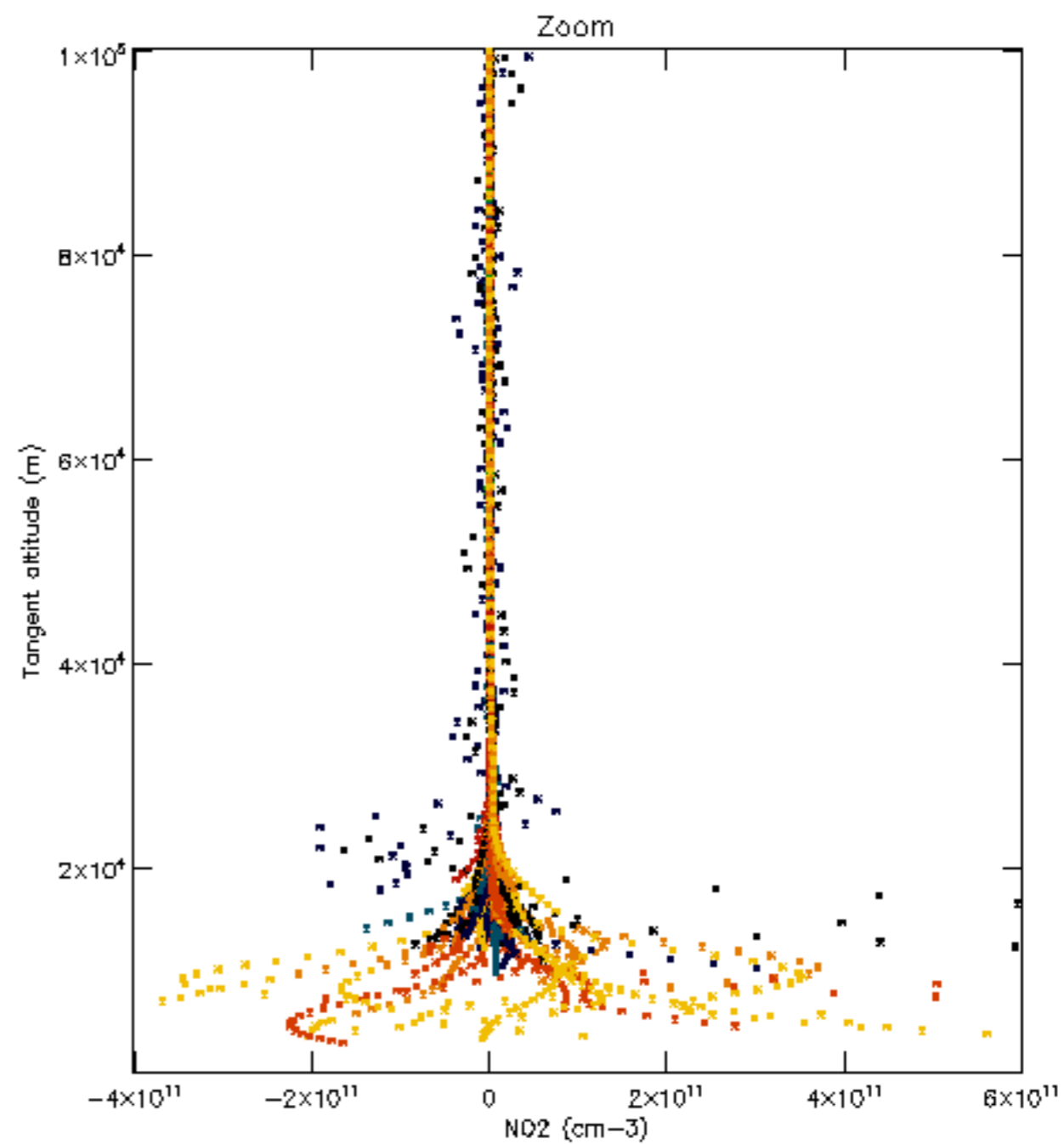
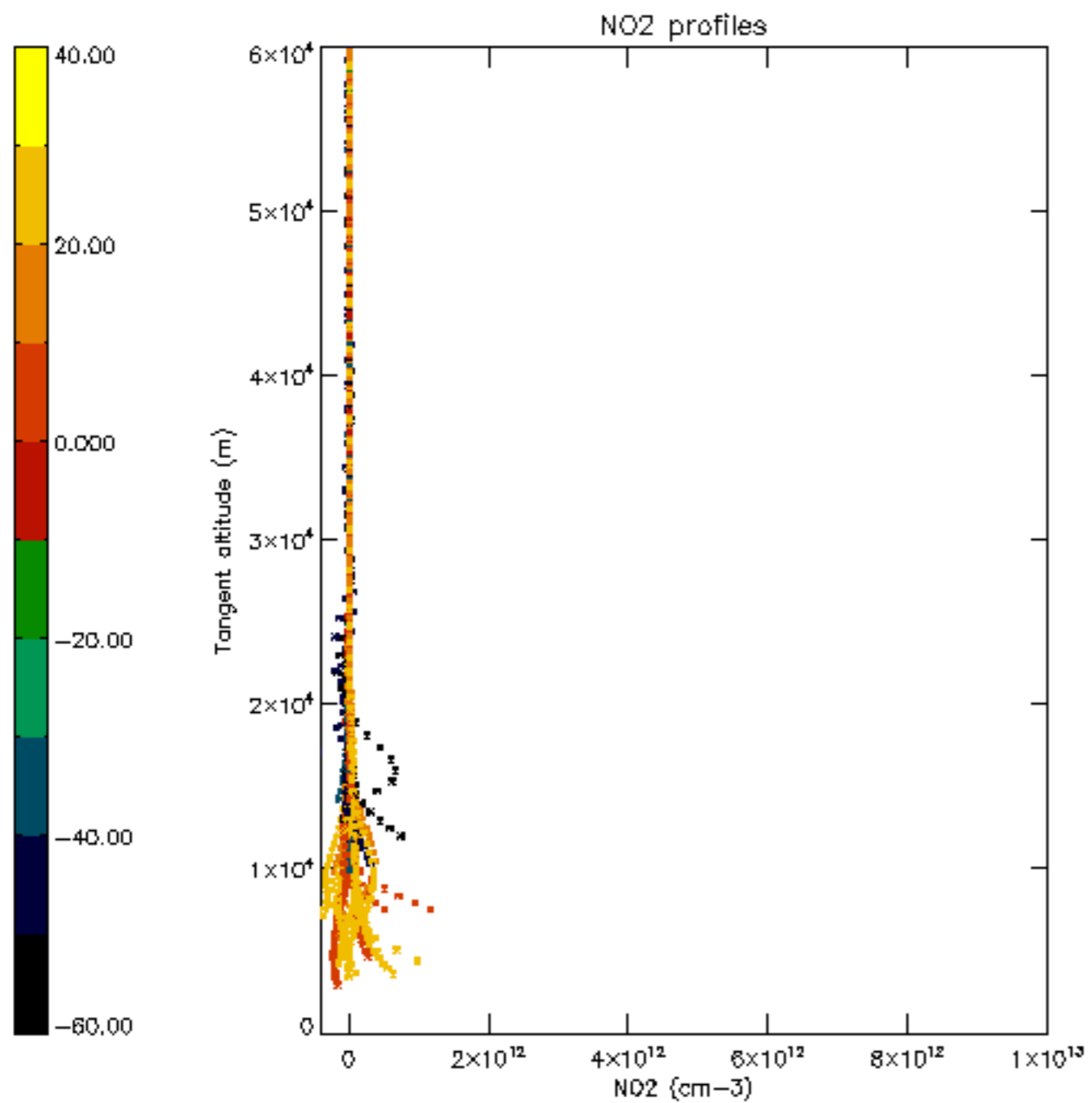


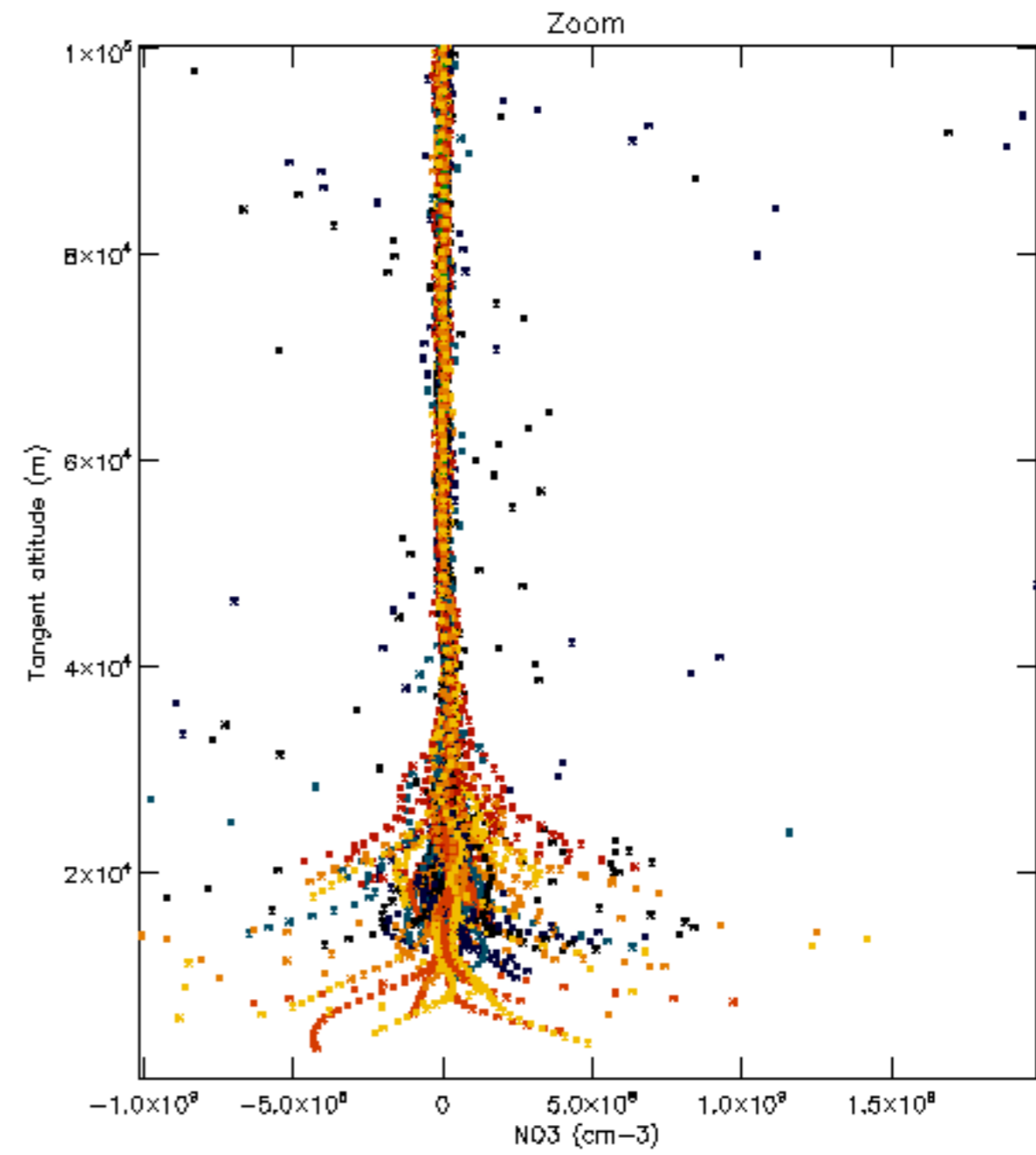
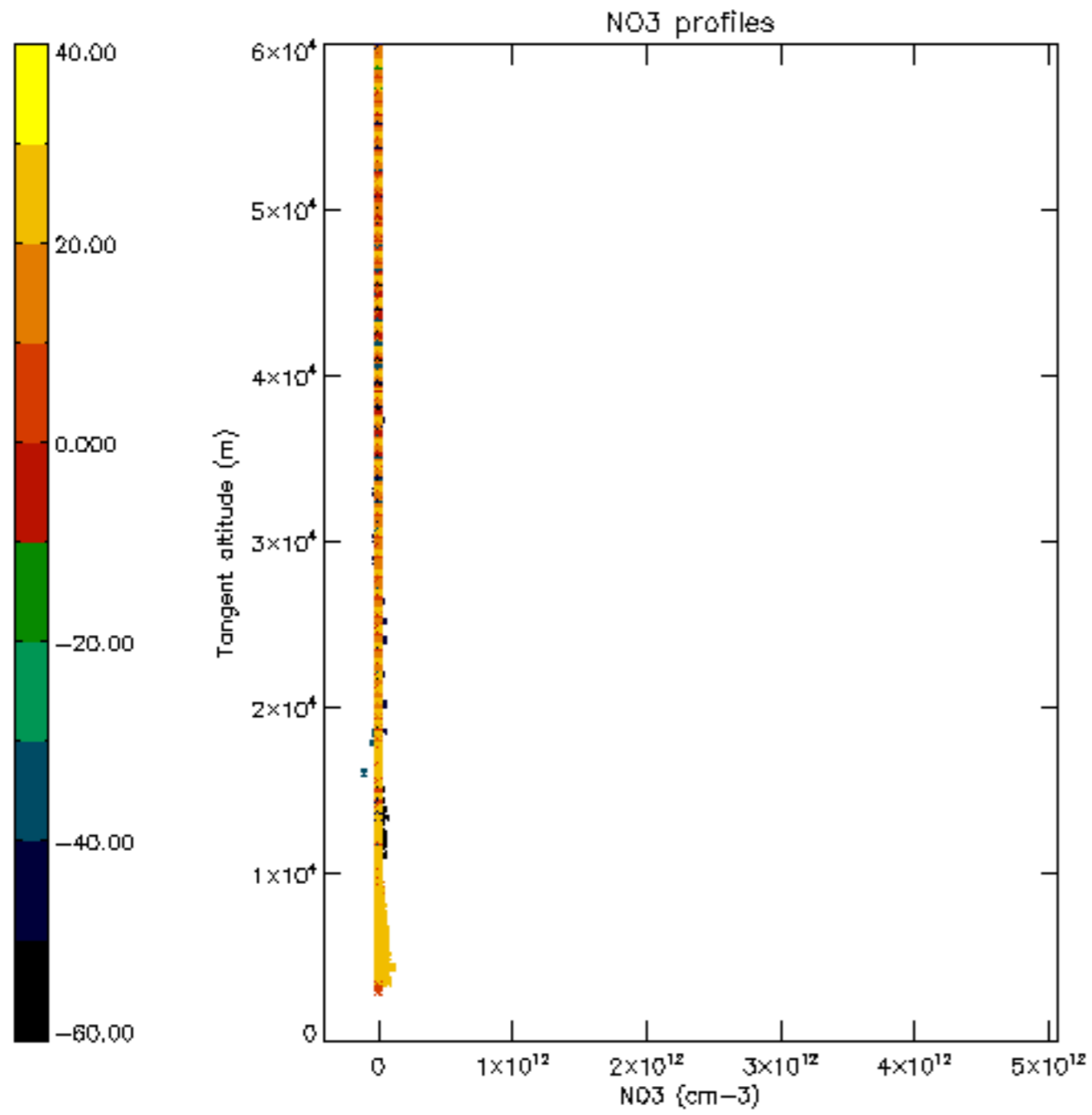


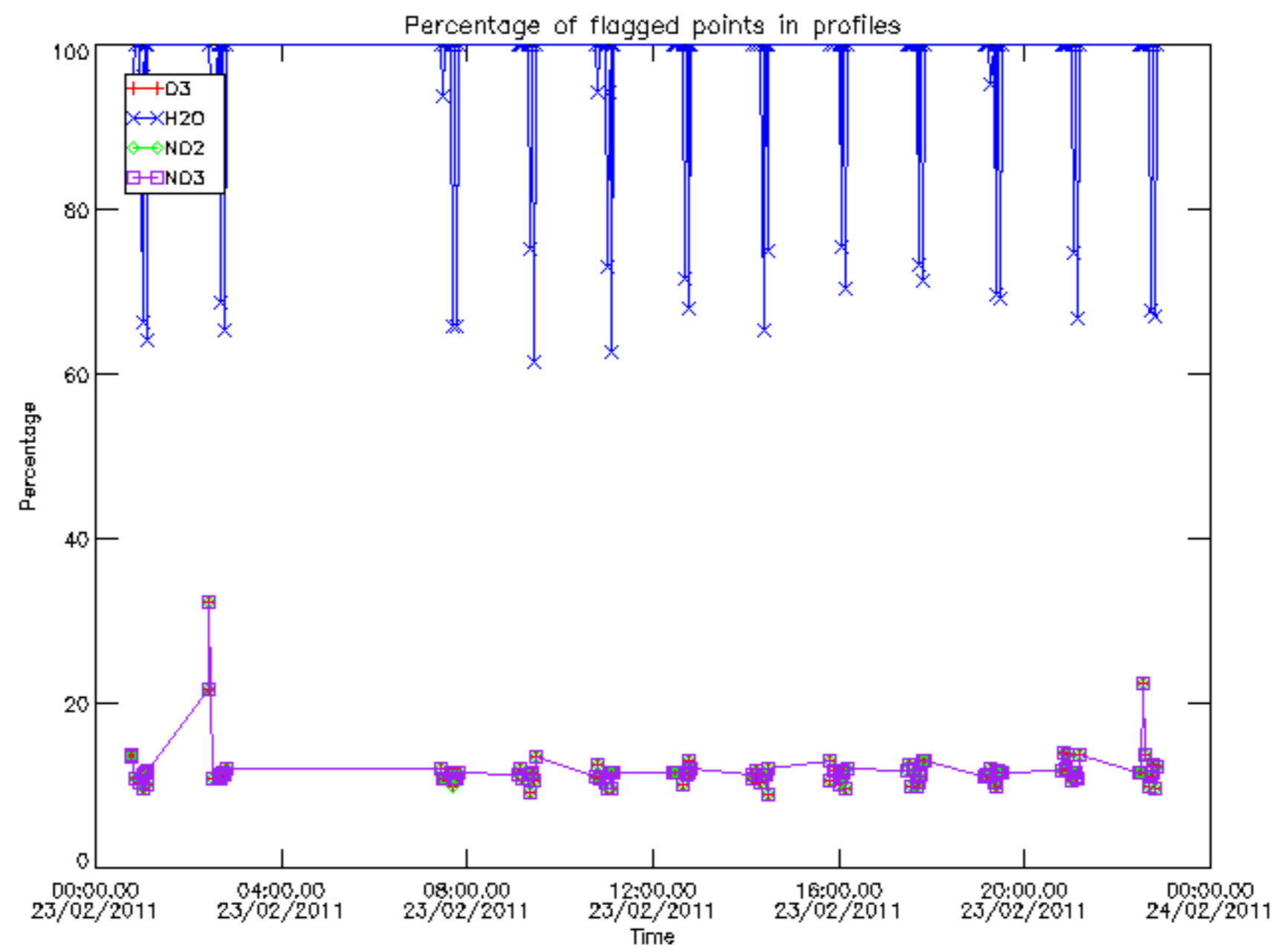




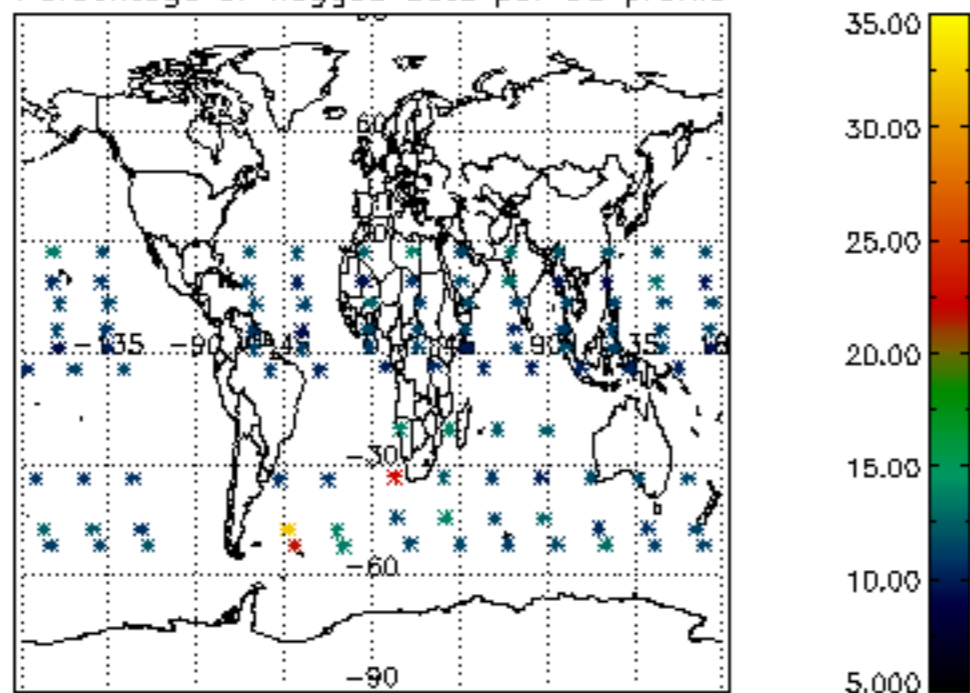




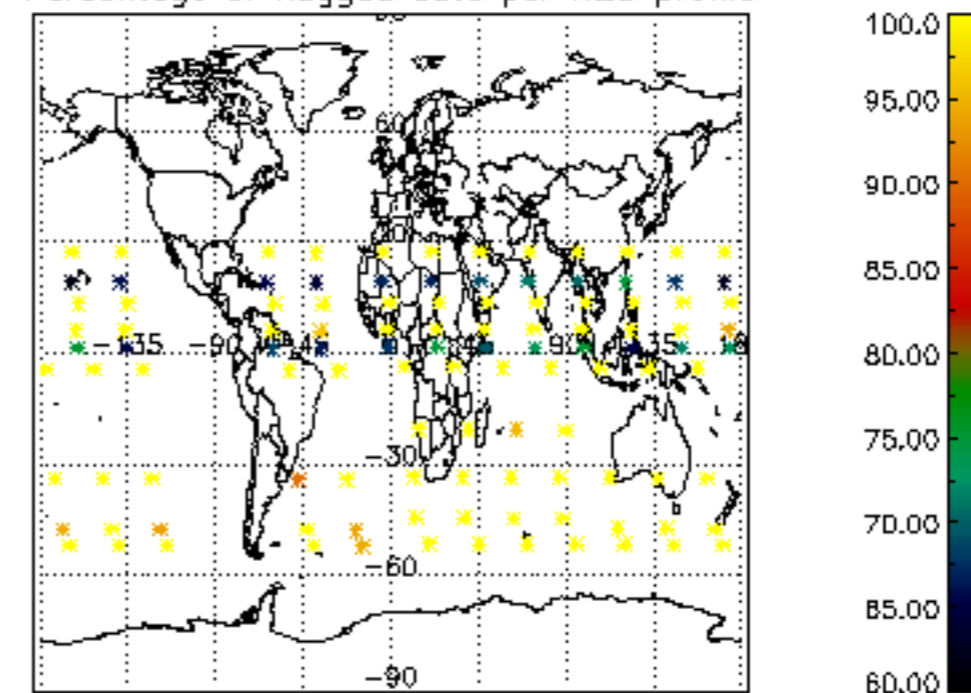




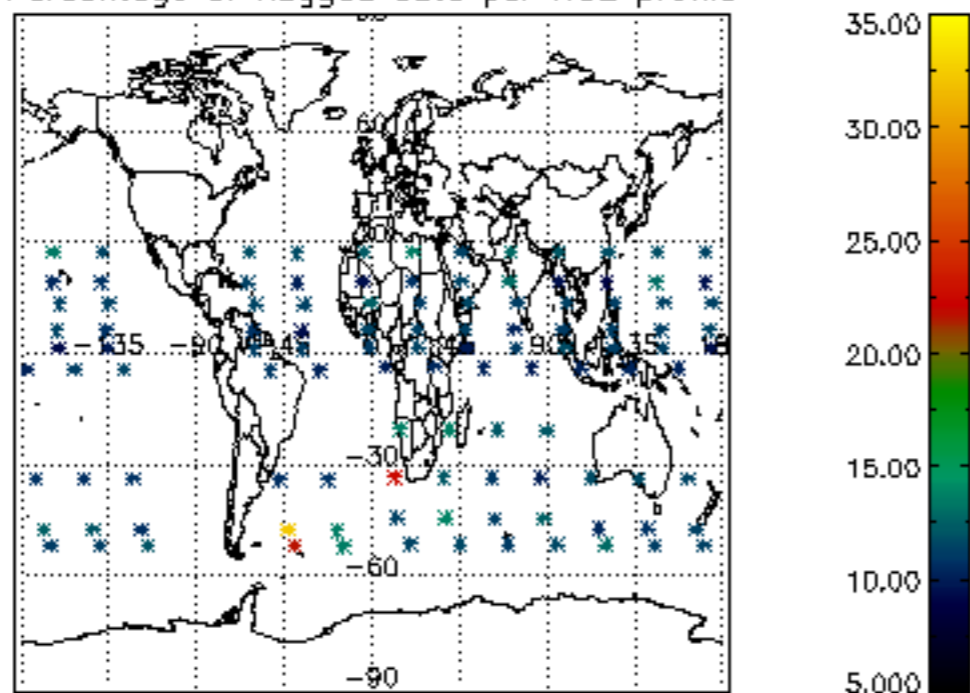
Percentage of flagged data per D3 profile



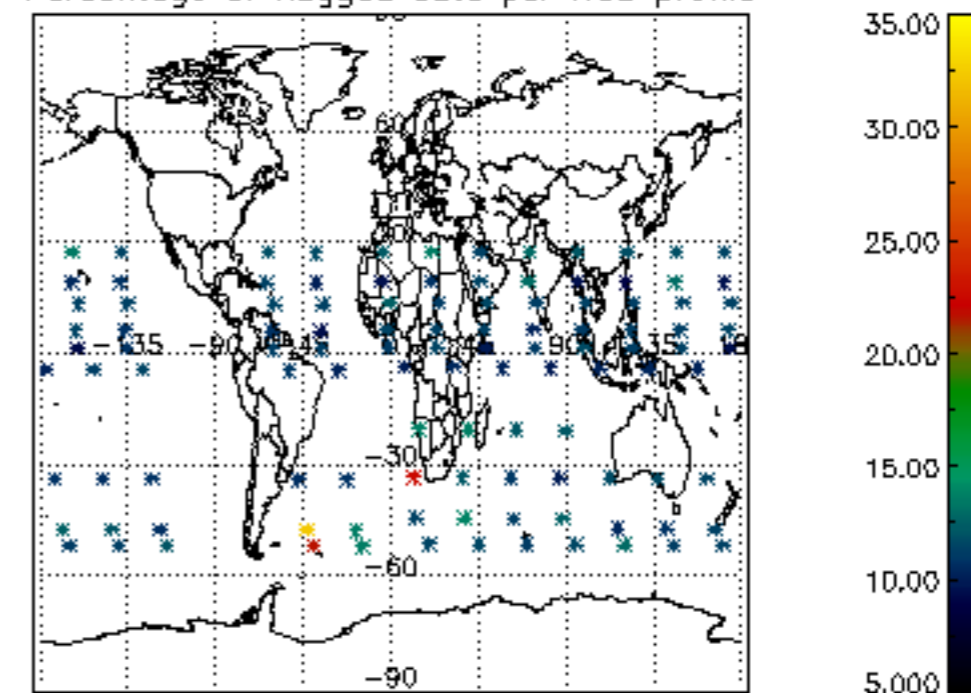
Percentage of flagged data per H2O profile

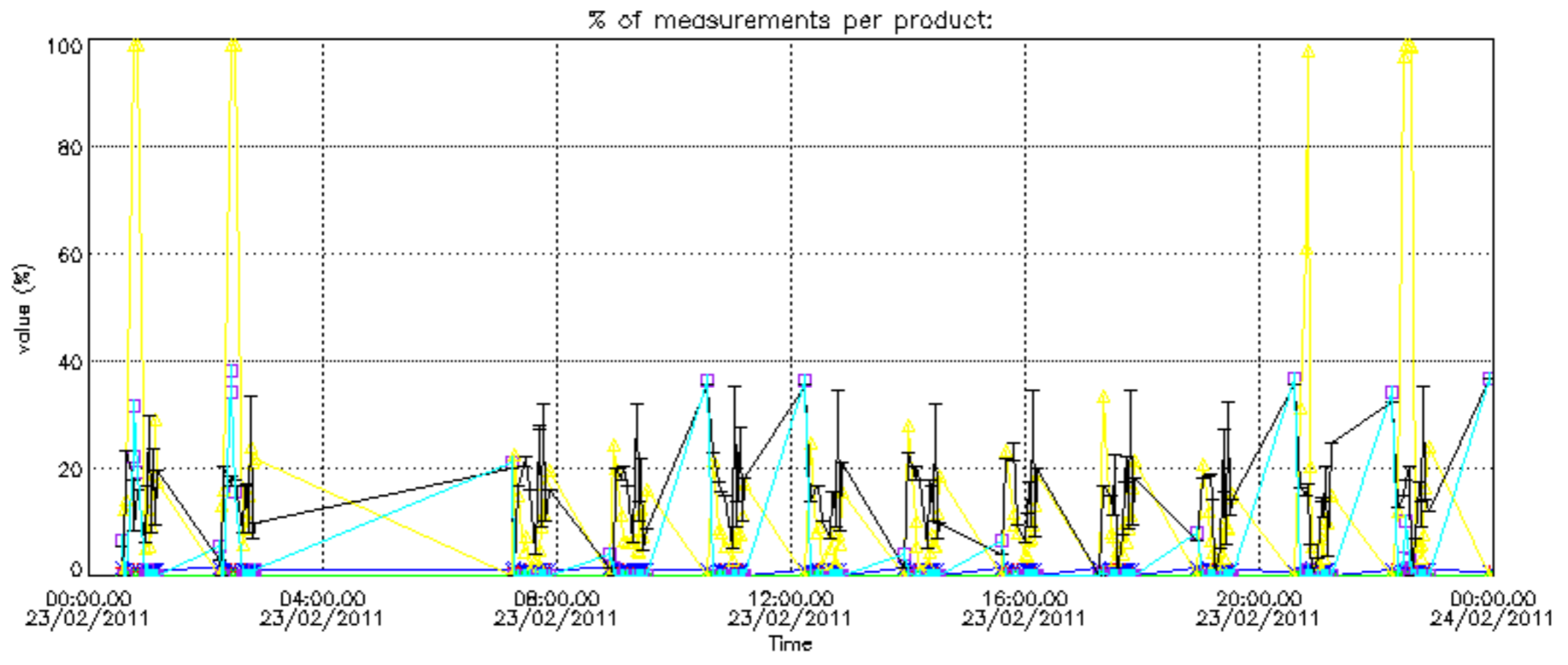


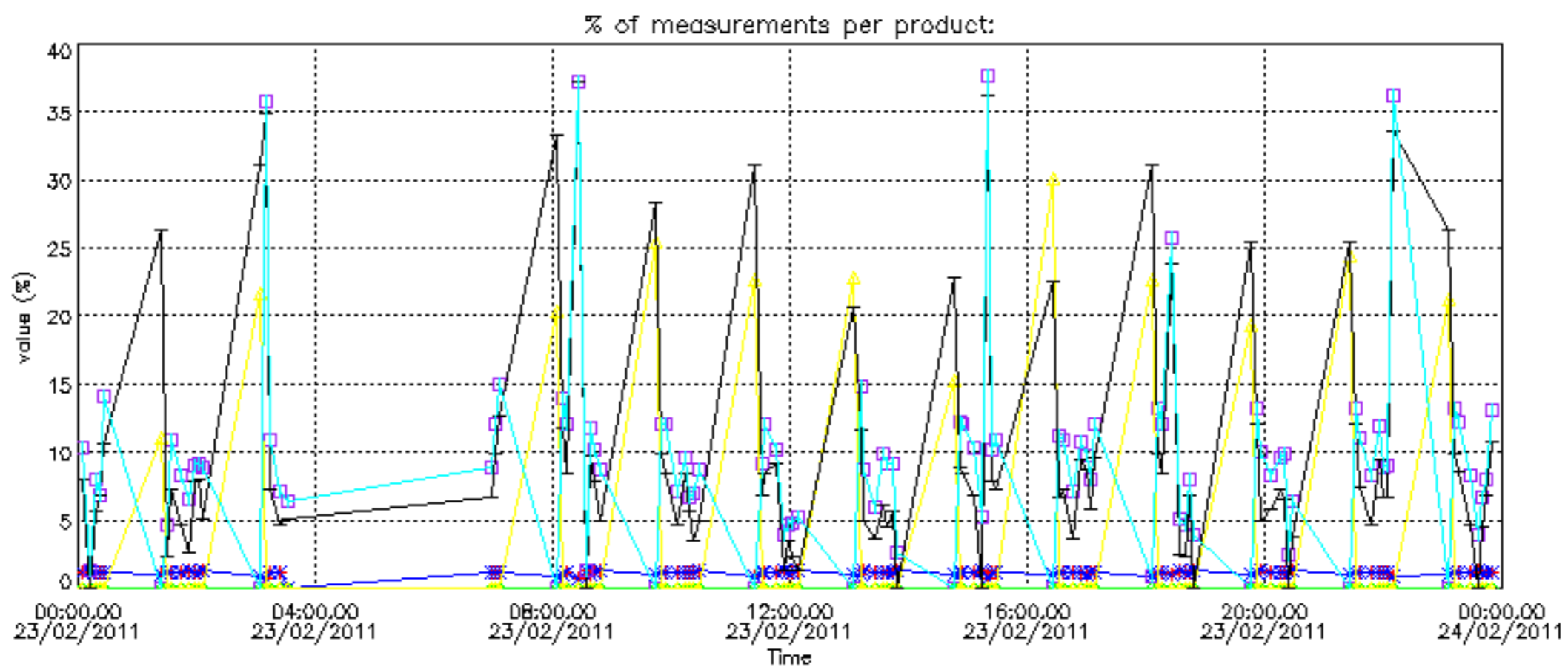
Percentage of flagged data per NO2 profile



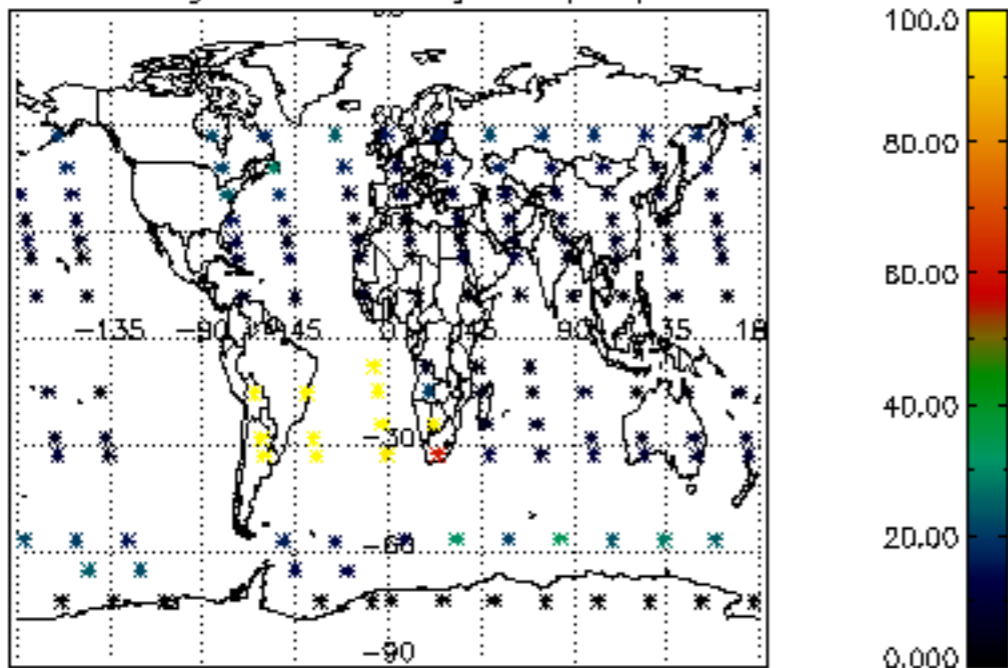
Percentage of flagged data per NO3 profile



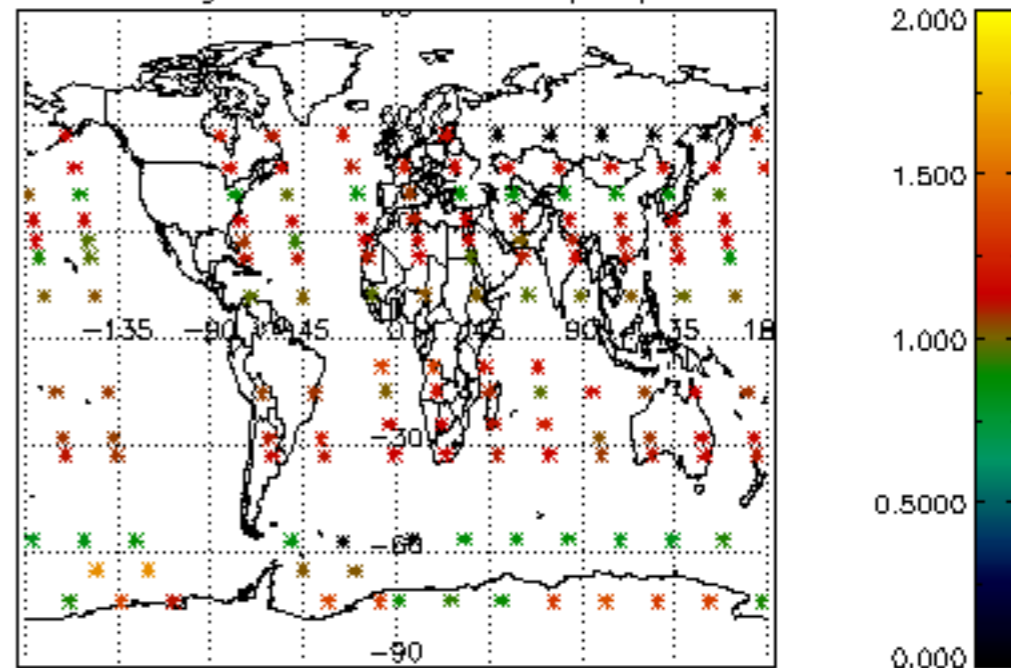




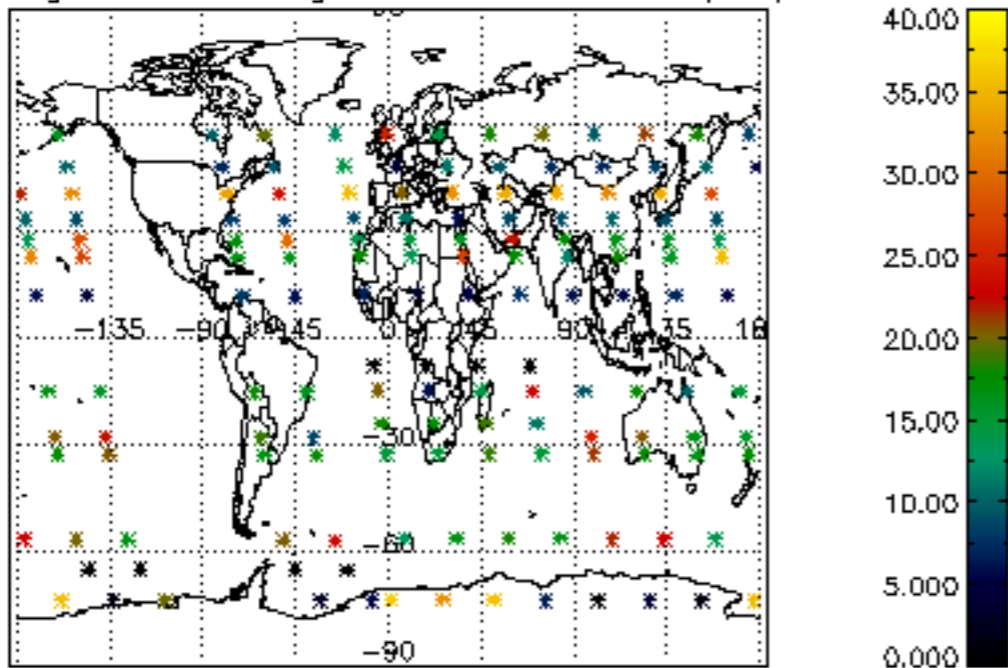
Percentage of cosmic ray hits per profile



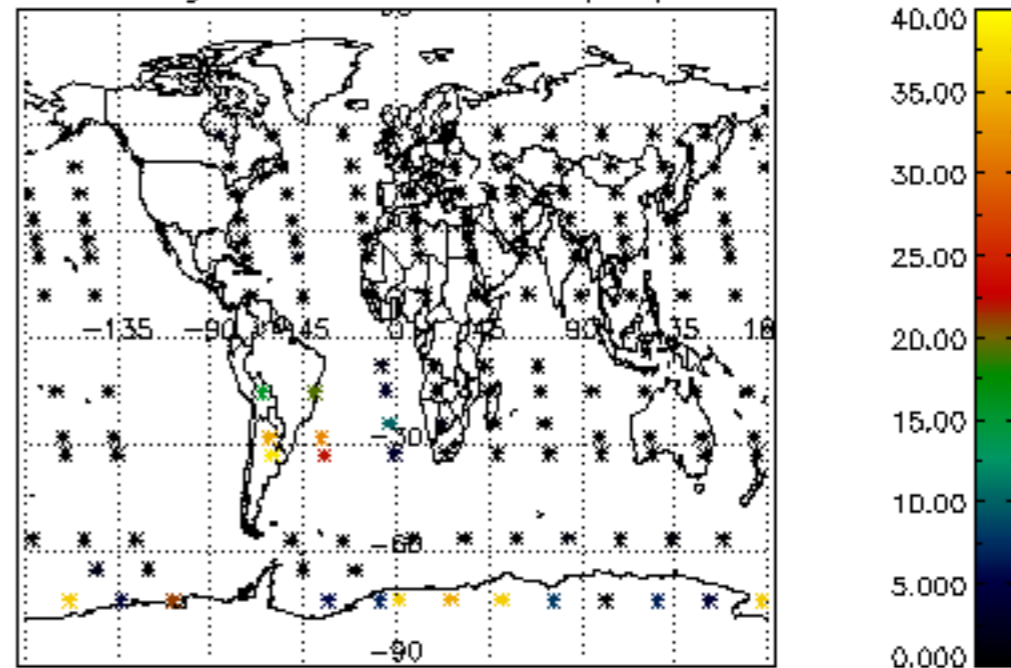
Percentage of datation errors per profile



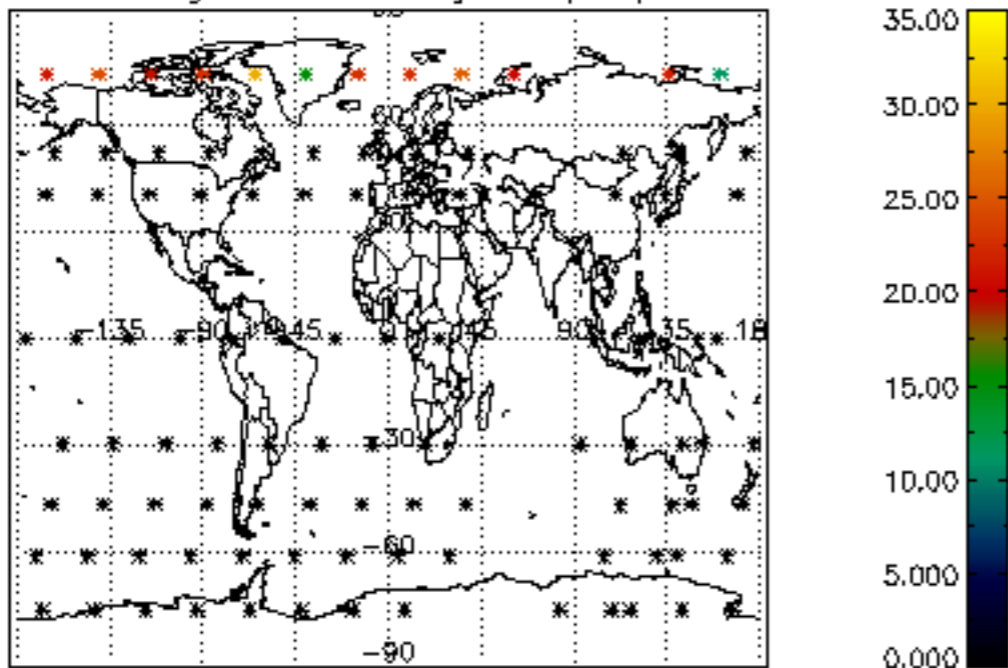
Percentage of star falling outside central band per profile



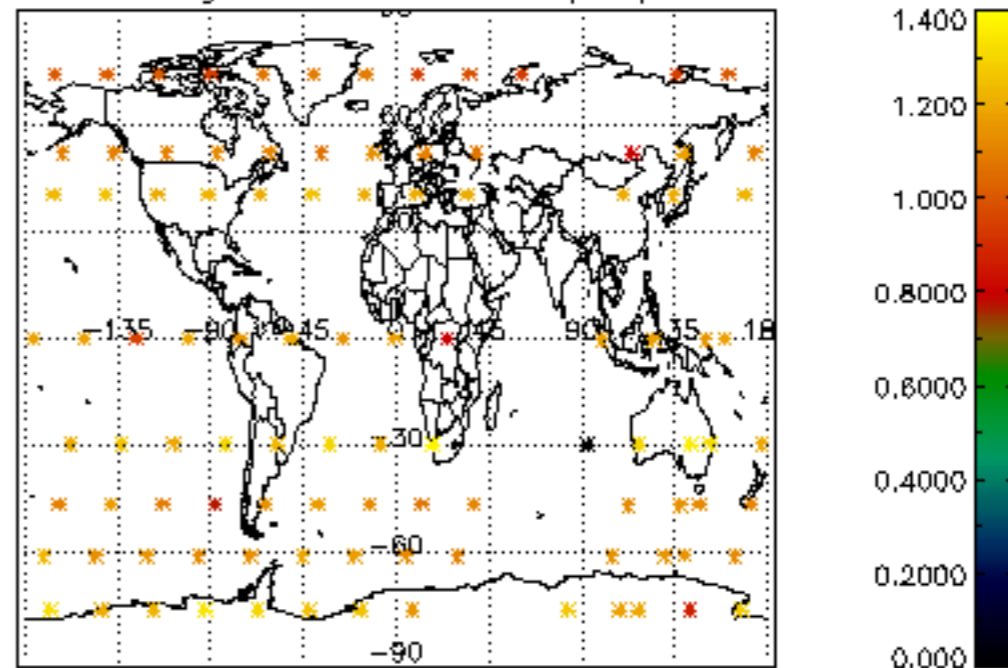
Percentage of saturation errors per profile



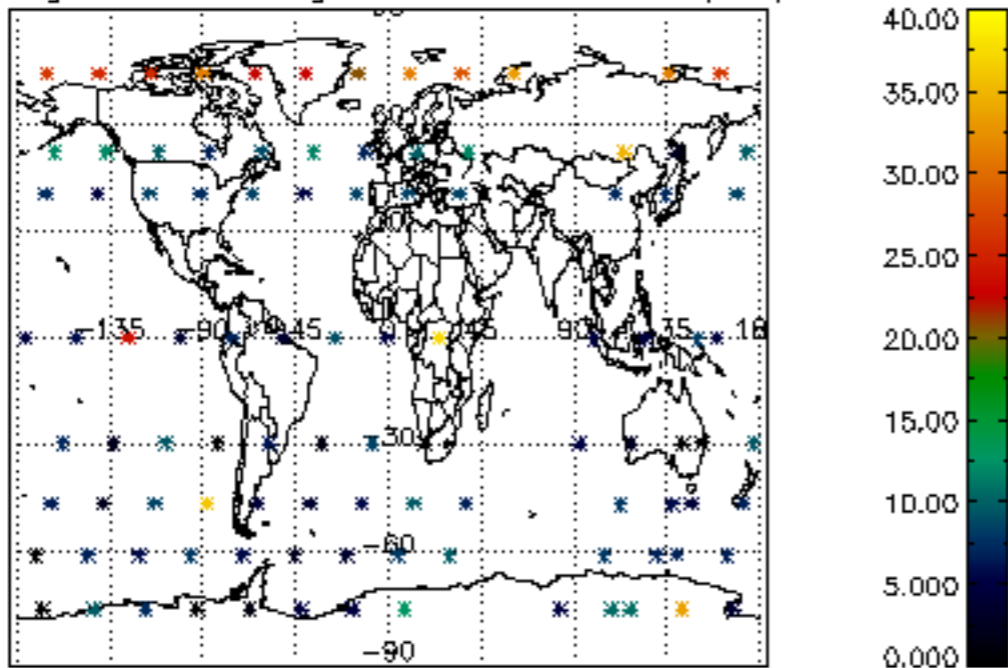
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

