

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 12:41:19
Data source version	GOMOS/6.01
Start time of products	21-04-2011 (21APR2011 00:00:00)
Stop time of products	22-04-2011 (22APR2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	315
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

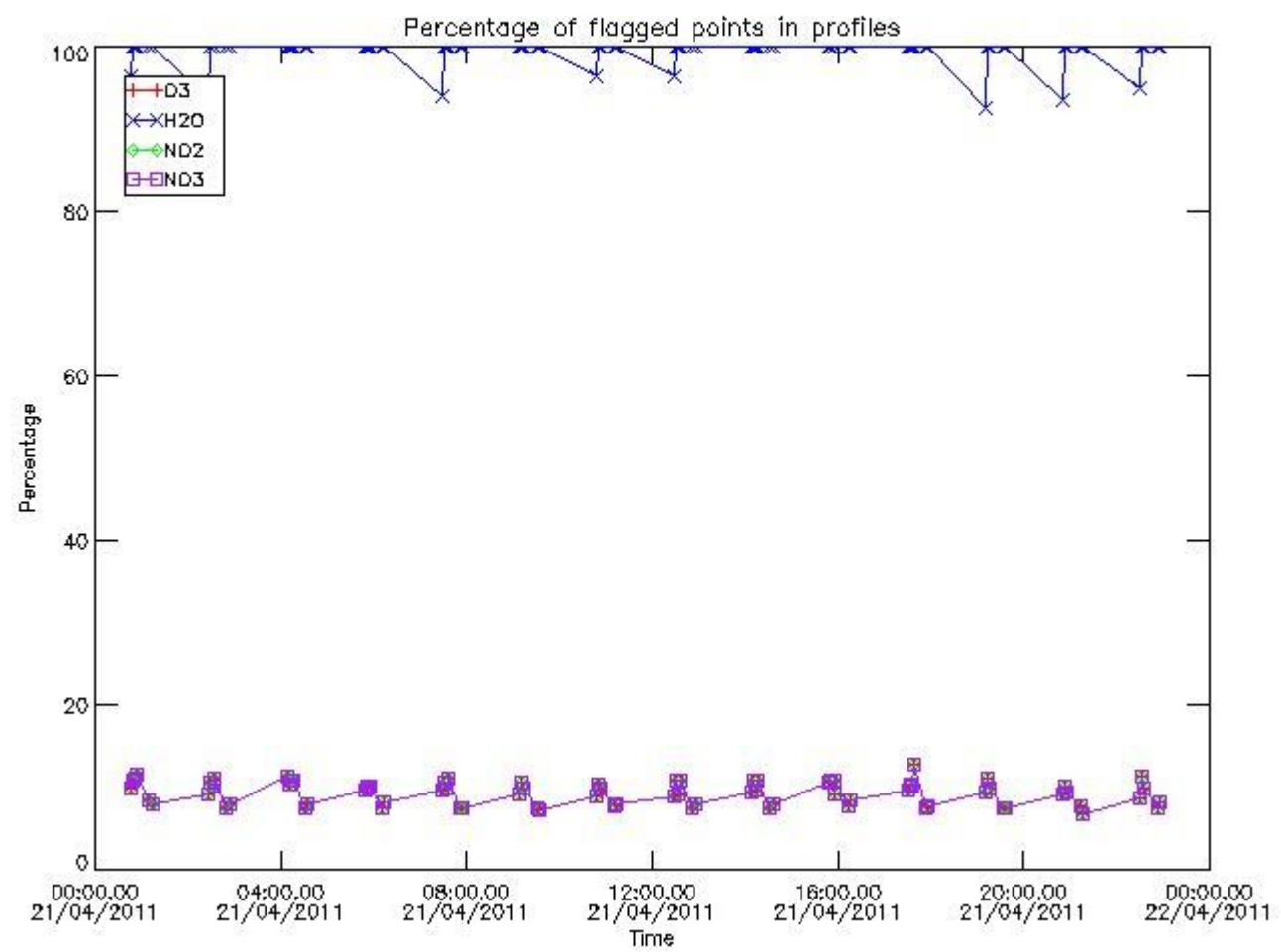
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110421_000239_000000443101_00361_47789_5973.N1	21-APR-2011 00:02:39	Bright	44.000	111	8Eta Boo	2.6800	6000.0	88	47789	No
2	GOM_NL__2PRFIN20110421_000716_000000523101_00361_47789_5974.N1	21-APR-2011 00:07:16	Bright	51.500	83		2.3780	11000.	103	47789	No
3	GOM_NL__2PRFIN20110421_001003_000000653101_00361_47789_5975.N1	21-APR-2011 00:10:03	Bright	64.500	180	27Gam Boo	3.0400	8000.0	129	47789	No
4	GOM_NL__2PRFIN20110421_001140_000000413101_00361_47789_5976.N1	21-APR-2011 00:11:40	Bright	40.500	39	85Eta UMa	1.8540	24000.	81	47789	No
5	GOM_NL__2PRFIN20110421_001945_000000453101_00361_47789_5977.N1	21-APR-2011 00:19:45	Bright	45.000	119	14Eta Dra	2.7270	4700.0	90	47789	No
6	GOM_NL__2PRFIN20110421_002908_000000413101_00361_47789_5978.N1	21-APR-2011 00:29:08	Bright	40.500	89	5Alp Cep	2.4510	8000.0	81	47789	No
7	GOM_NL__2PRFIN20110421_003421_000000533101_00361_47789_5979.N1	21-APR-2011 00:34:21	Bright	52.500	19	50Alp Cyg	1.2460	10500.	105	47789	No
8	GOM_NL__2PRFIN20110421_003611_000000613101_00361_47789_5980.N1	21-APR-2011 00:36:11	Bright	60.500	66	37Gam Cyg	2.2080	5900.0	121	47789	No
9	GOM_NL__2PRFIN20110421_003902_000000663101_00361_47789_5981.N1	21-APR-2011 00:39:02	Bright	66.000	92	53Eps Cyg	2.5000	4500.0	132	47789	No
10	GOM_NL__2PRFIN20110421_004701_000000573101_00361_47789_5982.N1	21-APR-2011 00:47:01	Dark	56.500	61	8Eps Peg	2.1000	3900.0	113	47789	No
11	GOM_NL__2PRFIN20110421_004929_000000473101_00361_47789_5983.N1	21-APR-2011 00:49:29	Dark	46.500	162	34Alp Aqr	2.9440	5350.0	93	47789	No
12	GOM_NL__2PRFIN20110421_005225_000000503101_00361_47789_5984.N1	21-APR-2011 00:52:25	Dark	50.000	154	22Bet Aqr	2.8990	5700.0	100	47789	No
13	GOM_NL__2PRFIN20110421_005442_000000453101_00361_47789_5985.N1	21-APR-2011 00:54:42	Dark	44.500	142	49Del Cap	2.8500	8900.0	89	47789	No
14	GOM_NL__2PRFIN20110421_011007_000000663101_00362_47790_6051.N1	21-APR-2011 01:10:07	Dark	66.000	103	38Zet Sgr	2.6000	9700.0	132	47790	No
15	GOM_NL__2PRFIN20110421_011324_000000643101_00362_47790_6052.N1	21-APR-2011 01:13:24	Dark	64.000	38	20Eps Sgr	1.8360	11000.	128	47790	No
16	GOM_NL__2PRFIN20110421_011519_000000553101_00362_47790_6053.N1	21-APR-2011 01:15:19	Straylight	55.000	178	1ot1Sco	3.0220	6550.0	110	47790	No
17	GOM_NL__2PRFIN20110421_011656_000000653101_00362_47790_6054.N1	21-APR-2011 01:16:56	Straylight	64.500	25	35Lam Sco	1.6200	28000.	129	47790	No
18	GOM_NL__2PRFIN20110421_012036_000000683101_00362_47790_6055.N1	21-APR-2011 01:20:36	Straylight	67.500	75	26Eps Sco	2.2910	4250.0	135	47790	No
19	GOM_NL__2PRFIN20110421_012343_000000403101_00362_47790_6056.N1	21-APR-2011 01:23:43	Straylight	40.000	136	23Tau Sco	2.8220	30000.	80	47790	No
20	GOM_NL__2PRFIN20110421_012737_000000373101_00362_47790_6057.N1	21-APR-2011 01:27:37	Tw_i_and_stray	37.000	80	7Del Sco	2.3160	30000.	74	47790	No
21	GOM_NL__2PRFIN20110421_013123_000000593101_00362_47790_6058.N1	21-APR-2011 01:31:23	Bright	58.500	122	9Alp2Lib	2.7470	9700.0	117	47790	No
22	GOM_NL__2PRFIN20110421_013409_000000493101_00362_47790_6059.N1	21-APR-2011 01:34:09	Bright	49.000	104	27Bet Lib	2.6140	13100.	98	47790	No
23	GOM_NL__2PRFIN20110421_014253_000000453101_00362_47790_6060.N1	21-APR-2011 01:42:53	Bright	44.500	111	8Eta Boo	2.6800	6000.0	89	47790	No
24	GOM_NL__2PRFIN20110421_014729_000000663101_00362_47790_6061.N1	21-APR-2011 01:47:29	Bright	66.000	83		2.3780	11000.	132	47790	No
25	GOM_NL__2PRFIN20110421_015016_000000453101_00362_47790_6062.N1	21-APR-2011 01:50:16	Bright	45.000	180	27Gam Boo	3.0400	8000.0	90	47790	No
26	GOM_NL__2PRFIN20110421_015154_000000443101_00362_47790_6063.N1	21-APR-2011 01:51:54	Bright	44.000	39	85Eta UMa	1.8540	24000.	88	47790	No
27	GOM_NL__2PRFIN20110421_015959_000000483101_00362_47790_6064.N1	21-APR-2011 01:59:59	Bright	47.500	119	14Eta Dra	2.7270	4700.0	95	47790	No
28	GOM_NL__2PRFIN20110421_020921_000000393101_00362_47790_6065.N1	21-APR-2011 02:09:21	Bright	39.000	89	5Alp Cep	2.4510	8000.0	78	47790	No
29	GOM_NL__2PRFIN20110421_021435_000000523101_00362_47790_6066.N1	21-APR-2011 02:14:35	Bright	51.500	19	50Alp Cyg	1.2460	10500.	103	47790	No
30	GOM_NL__2PRFIN20110421_021625_000000593101_00362_47790_6067.N1	21-APR-2011 02:16:25	Bright	59.000	66	37Gam Cyg	2.2080	5900.0	118	47790	No
31	GOM_NL__2PRFIN20110421_021916_000000623101_00362_47790_6068.N1	21-APR-2011 02:19:16	Bright	61.500	92	53Eps Cyg	2.5000	4500.0	123	47790	No
32	GOM_NL__2PRFIN20110421_022715_000000563101_00362_47790_6069.N1	21-APR-2011 02:27:15	Dark	55.500	61	8Eps Peg	2.1000	3900.0	111	47790	No
33	GOM_NL__2PRFIN20110421_022943_000000493101_00362_47790_6070.N1	21-APR-2011 02:29:43	Dark	48.500	162	34Alp Aqr	2.9440	5350.0	97	47790	No
34	GOM_NL__2PRFIN20110421_023240_000000503101_00362_47790_6071.N1	21-APR-2011 02:32:40	Dark	50.000	154	22Bet Aqr	2.8990	5700.0	100	47790	No
35	GOM_NL__2PRFIN20110421_023456_000000463101_00362_47790_6072.N1	21-APR-2011 02:34:56	Dark	46.000	142	49Del Cap	2.8500	8900.0	92	47790	No
36	GOM_NL__2PRFIN20110421_025022_000000693101_00363_47791_6063.N1	21-APR-2011 02:50:22	Dark	69.000	103	38Zet Sgr	2.6000	9700.0	138	47791	No
37	GOM_NL__2PRFIN20110421_025340_000000643101_00363_47791_6064.N1	21-APR-2011 02:53:40	Dark	64.000	38	20Eps Sgr	1.8360	11000.	128	47791	No
38	GOM_NL__2PRFIN20110421_025534_000000563101_00363_47791_6065.N1	21-APR-2011 02:55:34	Straylight	55.500	178	1ot1Sco	3.0220	6550.0	111	47791	No
39	GOM_NL__2PRFIN20110421_025712_000000663101_00363_47791_6066.N1	21-APR-2011 02:57:12	Straylight	65.500	25	35Lam Sco	1.6200	28000.	131	47791	No
40	GOM_NL__2PRFIN20110421_030051_000000653101_00363_47791_6067.N1	21-APR-2011 03:00:51	Straylight	65.000	75	26Eps Sco	2.2910	4250.0	130	47791	No
41	GOM_NL__2PRFIN20110421_030357_000000403101_00363_47791_6068.N1	21-APR-2011 03:03:57	Straylight	40.000	136	23Tau Sco	2.8220	30000.	80	47791	No
42	GOM_NL__2PRFIN20110421_030752_000000373101_00363_47791_6069.N1	21-APR-2011 03:07:52	Tw_i_and_stray	37.000	80	7Del Sco	2.3160	30000.	74	47791	No

279	GOM_NL__2PRFIN20110421_212008_000000593101_00374_47802_6501.N1	21-APR-2011 21:20:08	Straylight	58.500	115	34Ups Sco	2.6960	26000.	117	47802	No
280	GOM_NL__2PRFIN20110421_212335_000000603101_00374_47802_6502.N1	21-APR-2011 21:23:35	Straylight	59.500	75	26Eps Sco	2.2910	4250.0	119	47802	No
281	GOM_NL__2PRFIN20110421_212641_000000563101_00374_47802_6503.N1	21-APR-2011 21:26:41	Straylight	56.000	136	23Tau Sco	2.8220	30000.	112	47802	No
282	GOM_NL__2PRFIN20110421_212829_000000303101_00374_47802_6504.N1	21-APR-2011 21:28:29	Tw_i_and_stray	30.000	156	20Sig Sco	2.9030	28000.	60	47802	No
283	GOM_NL__2PRFIN20110421_213031_000000623101_00374_47802_6505.N1	21-APR-2011 21:30:31	Tw_i_and_stray	62.000	80	7Del Sco	2.3160	30000.	124	47802	No
284	GOM_NL__2PRFIN20110421_213412_000000503101_00374_47802_6506.N1	21-APR-2011 21:34:12	Bright	50.000	122	9Alp2Lib	2.7470	9700.0	100	47802	No
285	GOM_NL__2PRFIN20110421_213655_000000573101_00374_47802_6507.N1	21-APR-2011 21:36:55	Bright	57.000	104	27Bet Lib	2.6140	13100.	114	47802	No
286	GOM_NL__2PRFIN20110421_214537_000000423101_00374_47802_6508.N1	21-APR-2011 21:45:37	Bright	42.000	111	8Eta Boo	2.6800	6000.0	84	47802	No
287	GOM_NL__2PRFIN20110421_215008_000000533101_00374_47802_6509.N1	21-APR-2011 21:50:08	Bright	52.500	83		2.3780	11000.	105	47802	No
288	GOM_NL__2PRFIN20110421_215256_000000573101_00374_47802_6510.N1	21-APR-2011 21:52:56	Bright	56.500	180	27Gam Boo	3.0400	8000.0	113	47802	No
289	GOM_NL__2PRFIN20110421_215438_000000393101_00374_47802_6511.N1	21-APR-2011 21:54:38	Bright	39.000	39	85Eta UMa	1.8540	24000.	78	47802	No
290	GOM_NL__2PRFIN20110421_220239_000000433101_00374_47802_6512.N1	21-APR-2011 22:02:39	Bright	42.500	119	14Eta Dra	2.7270	4700.0	85	47802	No
291	GOM_NL__2PRFIN20110421_221207_000000413101_00374_47802_6513.N1	21-APR-2011 22:12:07	Bright	41.000	89	5Alp Cep	2.4510	8000.0	82	47802	No
292	GOM_NL__2PRFIN20110421_221720_000000533101_00374_47802_6514.N1	21-APR-2011 22:17:20	Bright	53.000	19	50Alp Cyg	1.2460	10500.	106	47802	No
293	GOM_NL__2PRFIN20110421_221910_000000633101_00374_47802_6515.N1	21-APR-2011 22:19:10	Bright	63.000	66	37Gam Cyg	2.2080	5900.0	126	47802	No
294	GOM_NL__2PRFIN20110421_222205_000000643101_00374_47802_6516.N1	21-APR-2011 22:22:05	Tw_i_and_stray	63.500	92	53Eps Cyg	2.5000	4500.0	127	47802	No
295	GOM_NL__2PRFIN20110421_223010_000000593101_00374_47802_6517.N1	21-APR-2011 22:30:10	Dark	58.500	61	8Eps Peg	2.1000	3900.0	117	47802	No
296	GOM_NL__2PRFIN20110421_223238_000000493101_00374_47802_6518.N1	21-APR-2011 22:32:38	Dark	49.000	162	34Alp Aqr	2.9440	5350.0	98	47802	No
297	GOM_NL__2PRFIN20110421_223538_000000513101_00374_47802_6519.N1	21-APR-2011 22:35:38	Dark	50.500	154	22Bet Aqr	2.8990	5700.0	101	47802	No
298	GOM_NL__2PRFIN20110421_225331_000000693101_00375_47803_6508.N1	21-APR-2011 22:53:31	Dark	68.500	103	38Zet Sgr	2.6000	9700.0	137	47803	No
299	GOM_NL__2PRFIN20110421_225645_000000633101_00375_47803_6509.N1	21-APR-2011 22:56:45	Dark	62.500	38	20Eps Sgr	1.8360	11000.	125	47803	No
300	GOM_NL__2PRFIN20110421_225843_000000513101_00375_47803_6510.N1	21-APR-2011 22:58:43	Straylight	51.000	40	The Sco	1.8590	7100.0	102	47803	No
301	GOM_NL__2PRFIN20110421_230022_000000583101_00375_47803_6511.N1	21-APR-2011 23:00:22	Straylight	58.000	115	34Ups Sco	2.6960	26000.	116	47803	No
302	GOM_NL__2PRFIN20110421_230350_000000733101_00375_47803_6512.N1	21-APR-2011 23:03:50	Straylight	72.500	75	26Eps Sco	2.2910	4250.0	145	47803	No
303	GOM_NL__2PRFIN20110421_230655_000000563101_00375_47803_6513.N1	21-APR-2011 23:06:55	Straylight	56.000	136	23Tau Sco	2.8220	30000.	112	47803	No
304	GOM_NL__2PRFIN20110421_230843_000000303101_00375_47803_6514.N1	21-APR-2011 23:08:43	Tw_i_and_stray	30.000	156	20Sig Sco	2.9030	28000.	60	47803	No
305	GOM_NL__2PRFIN20110421_231045_000000623101_00375_47803_6515.N1	21-APR-2011 23:10:45	Tw_i_and_stray	62.000	80	7Del Sco	2.3160	30000.	124	47803	No
306	GOM_NL__2PRFIN20110421_231426_000000513101_00375_47803_6516.N1	21-APR-2011 23:14:26	Bright	50.500	122	9Alp2Lib	2.7470	9700.0	101	47803	No
307	GOM_NL__2PRFIN20110421_231709_000000583101_00375_47803_6517.N1	21-APR-2011 23:17:09	Bright	57.500	104	27Bet Lib	2.6140	13100.	115	47803	No
308	GOM_NL__2PRFIN20110421_232550_000000433101_00375_47803_6518.N1	21-APR-2011 23:25:50	Bright	42.500	111	8Eta Boo	2.6800	6000.0	85	47803	No
309	GOM_NL__2PRFIN20110421_233021_000000543101_00375_47803_6519.N1	21-APR-2011 23:30:21	Bright	53.500	83		2.3780	11000.	107	47803	No
310	GOM_NL__2PRFIN20110421_233309_000000553101_00375_47803_6520.N1	21-APR-2011 23:33:09	Bright	54.500	180	27Gam Boo	3.0400	8000.0	109	47803	No
311	GOM_NL__2PRFIN20110421_233451_000000393101_00375_47803_6521.N1	21-APR-2011 23:34:51	Bright	39.000	39	85Eta UMa	1.8540	24000.	78	47803	No
312	GOM_NL__2PRFIN20110421_234252_000000483101_00375_47803_6522.N1	21-APR-2011 23:42:52	Bright	47.500	119	14Eta Dra	2.7270	4700.0	95	47803	No
313	GOM_NL__2PRFIN20110421_235220_000000413101_00375_47803_6523.N1	21-APR-2011 23:52:20	Bright	41.000	89	5Alp Cep	2.4510	8000.0	82	47803	No
314	GOM_NL__2PRFIN20110421_235734_000000543101_00375_47803_6524.N1	21-APR-2011 23:57:34	Bright	54.000	19	50Alp Cyg	1.2460	10500.	108	47803	No
315	GOM_NL__2PRFIN20110421_235924_000000613101_00375_47803_6525.N1	21-APR-2011 23:59:24	Bright	60.500	66	37Gam Cyg	2.2080	5900.0	121	47803	No

3. Quality information per product

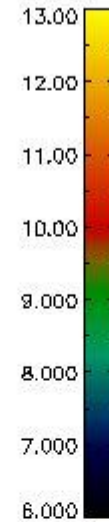
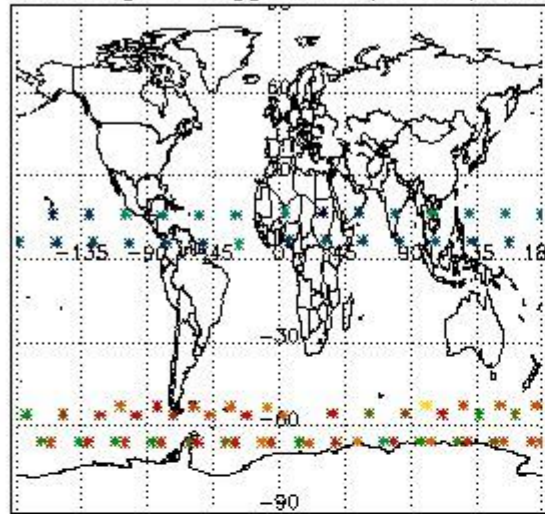
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

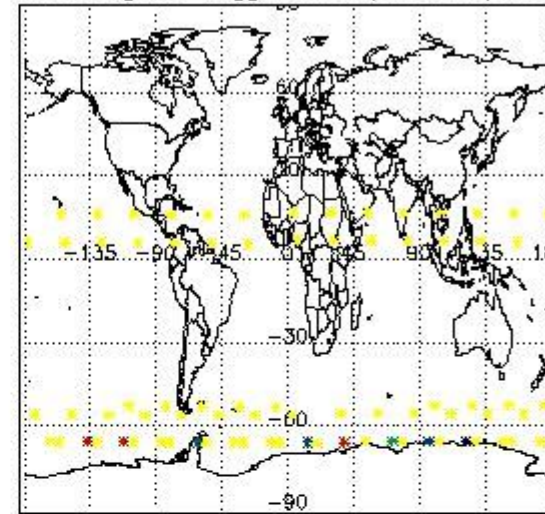


3.2 Plot quality information per product (world map)

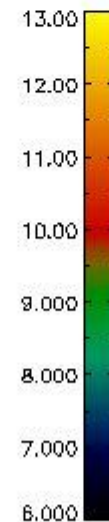
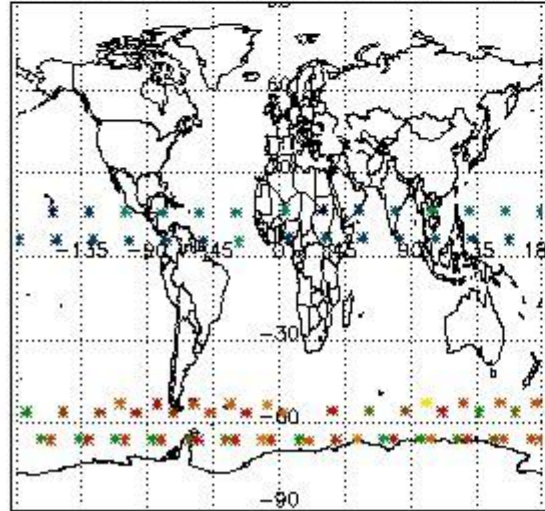
Percentage of flagged data per O3 profile



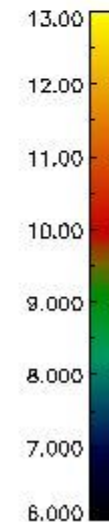
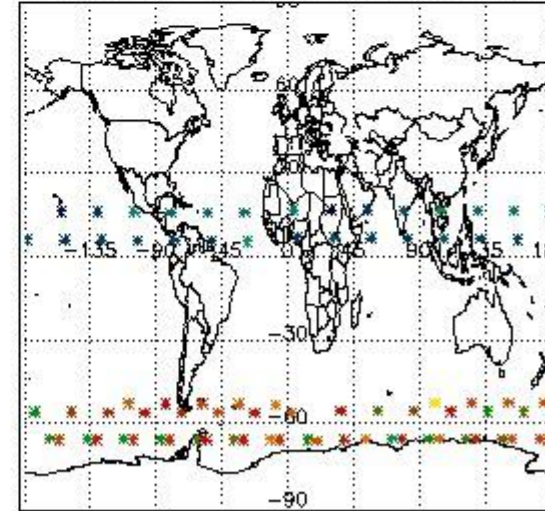
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

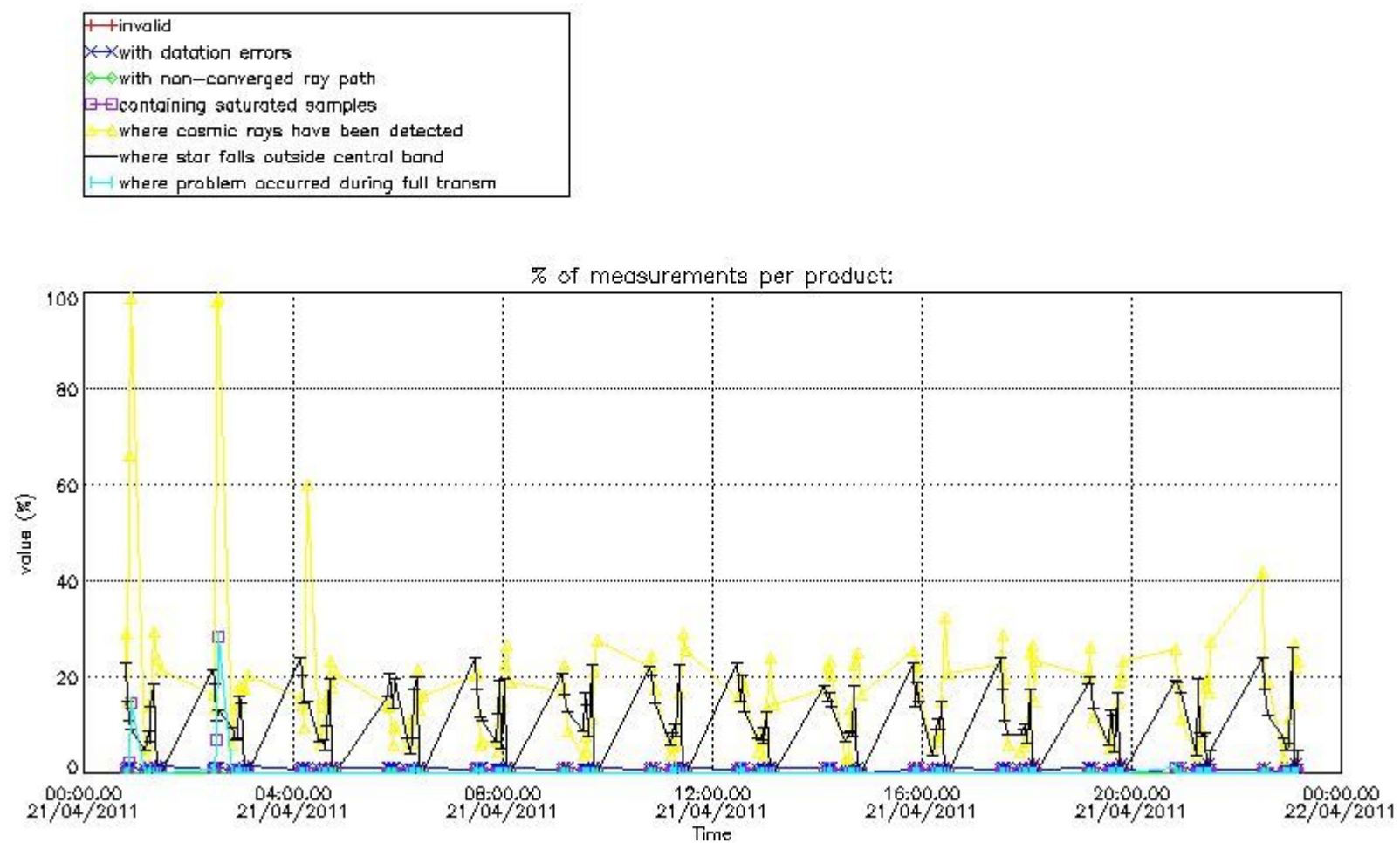


4. Level 1 quality information per product

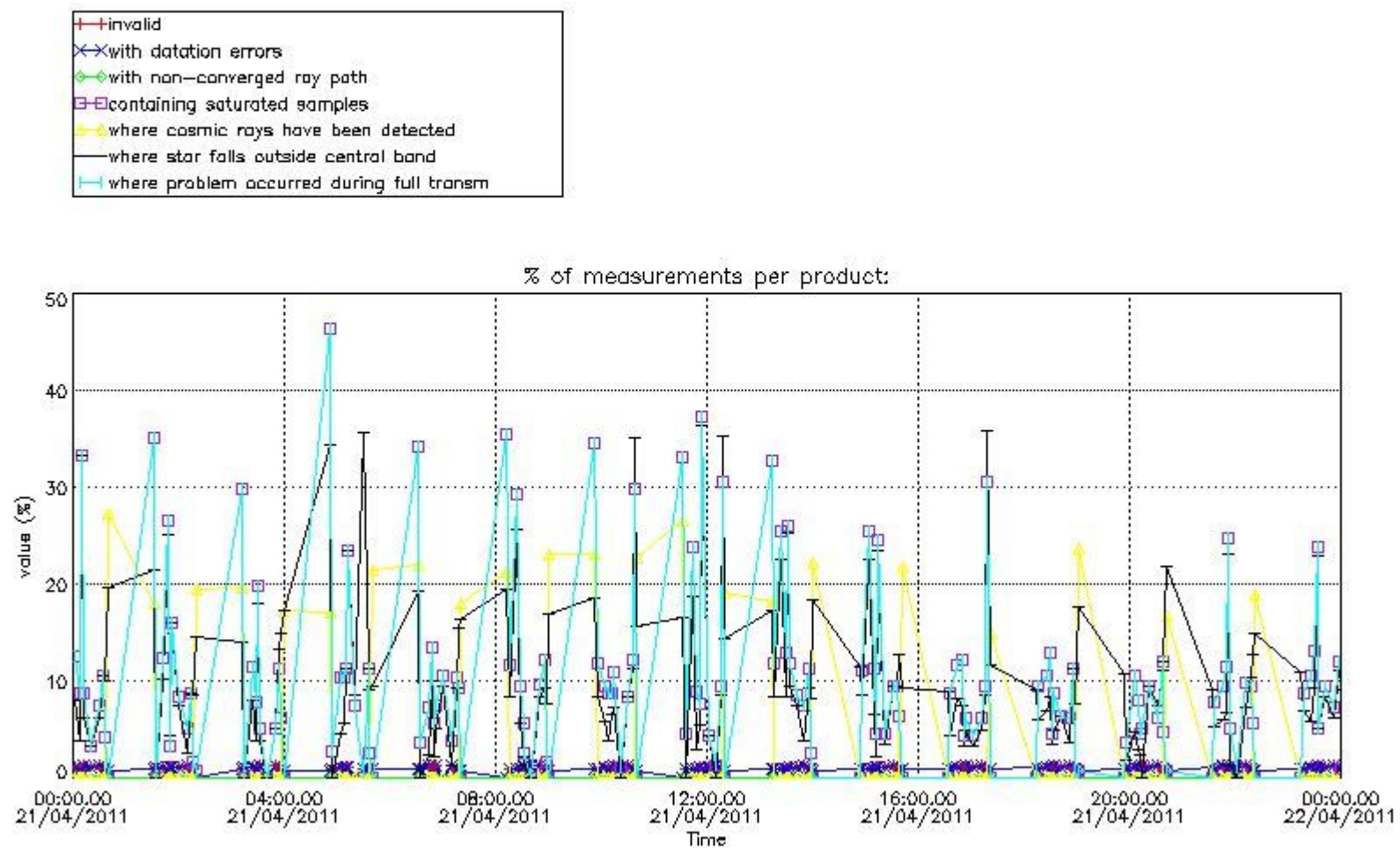
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

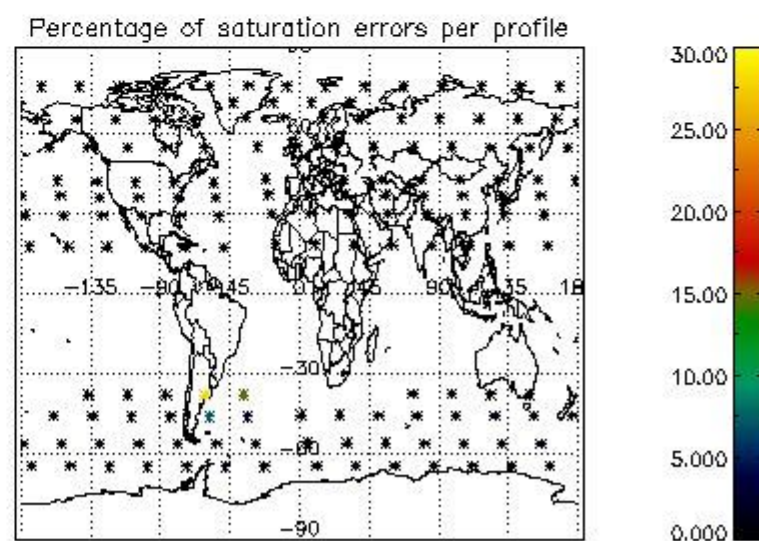
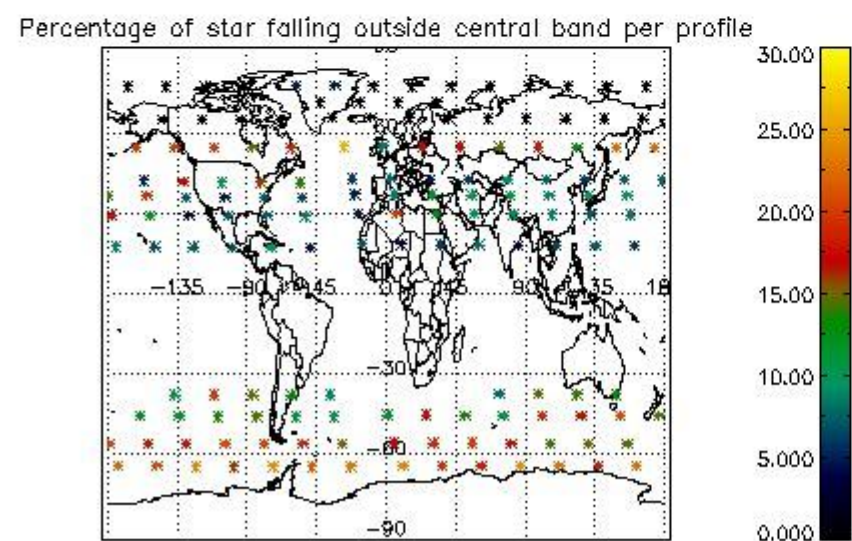
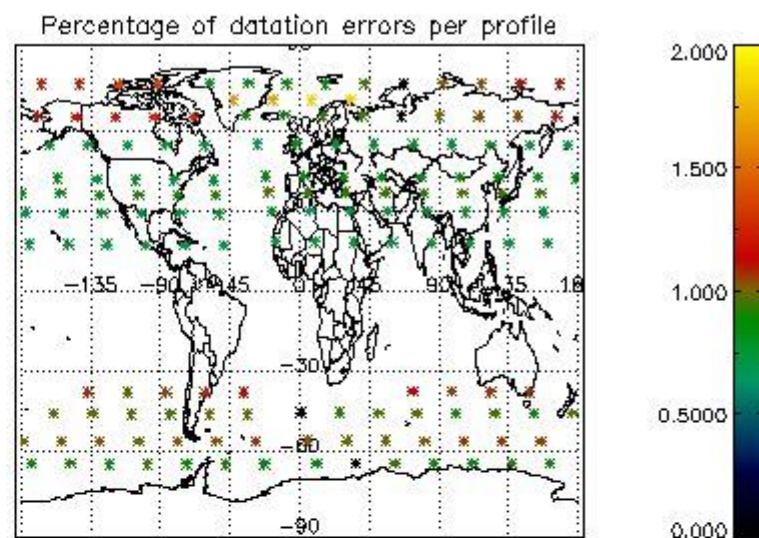
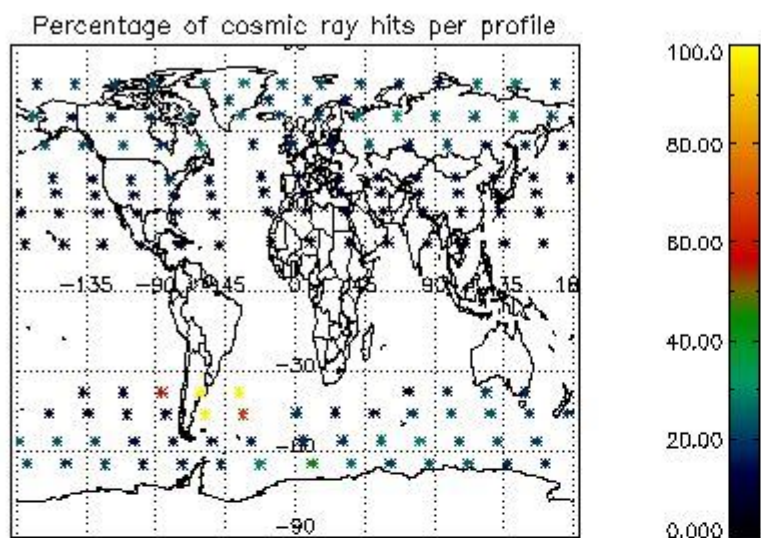


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

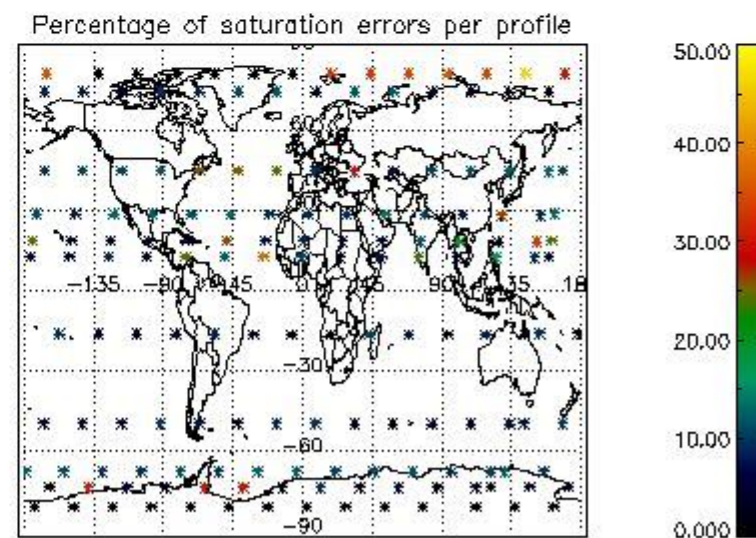
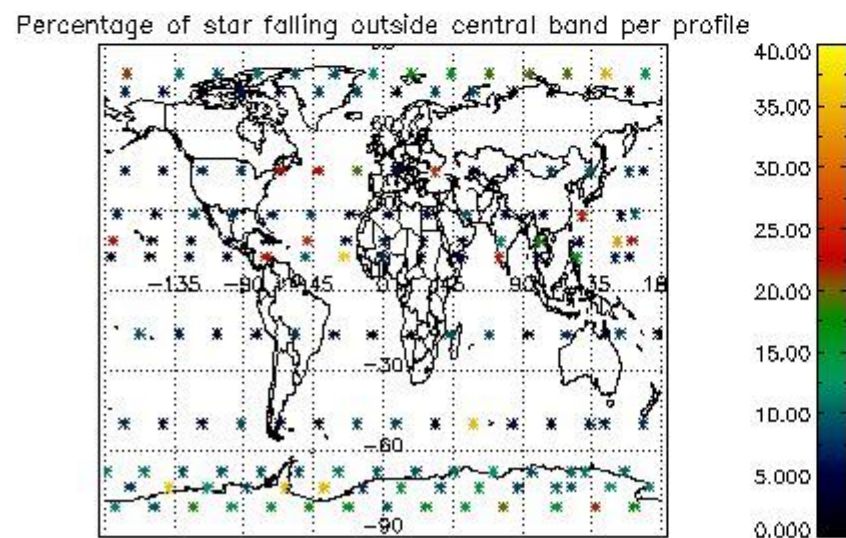
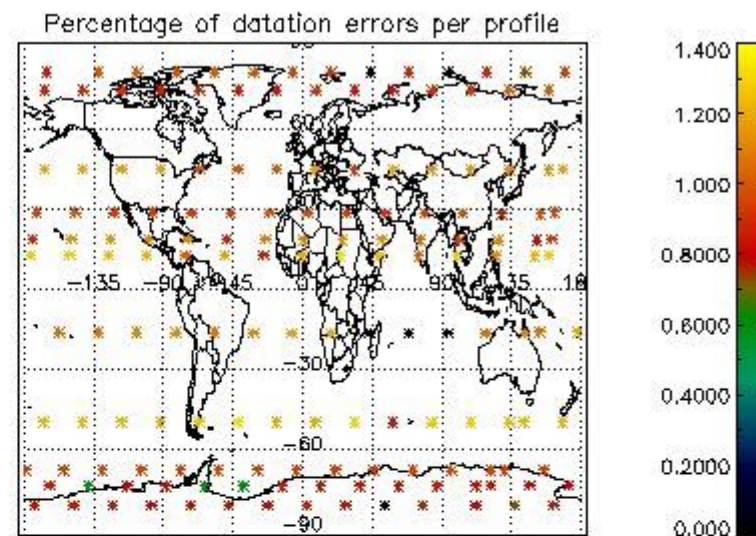
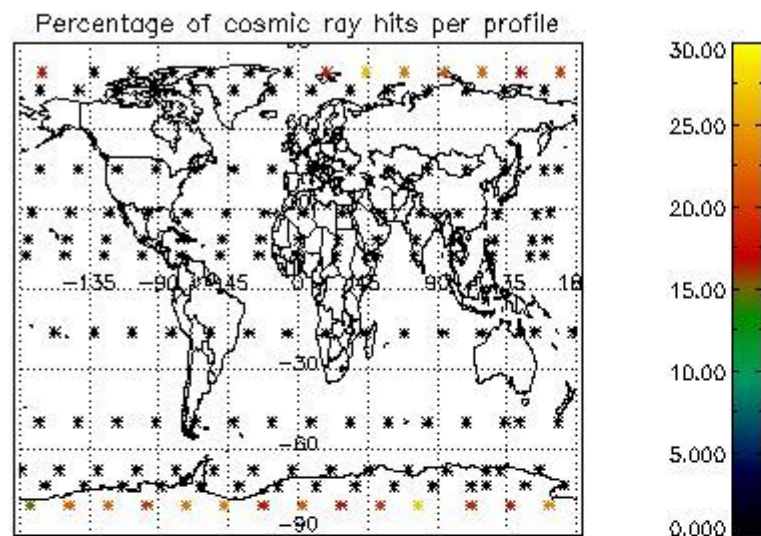


4.2 Plot quality information per product coming from level 1b processing (world map)

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

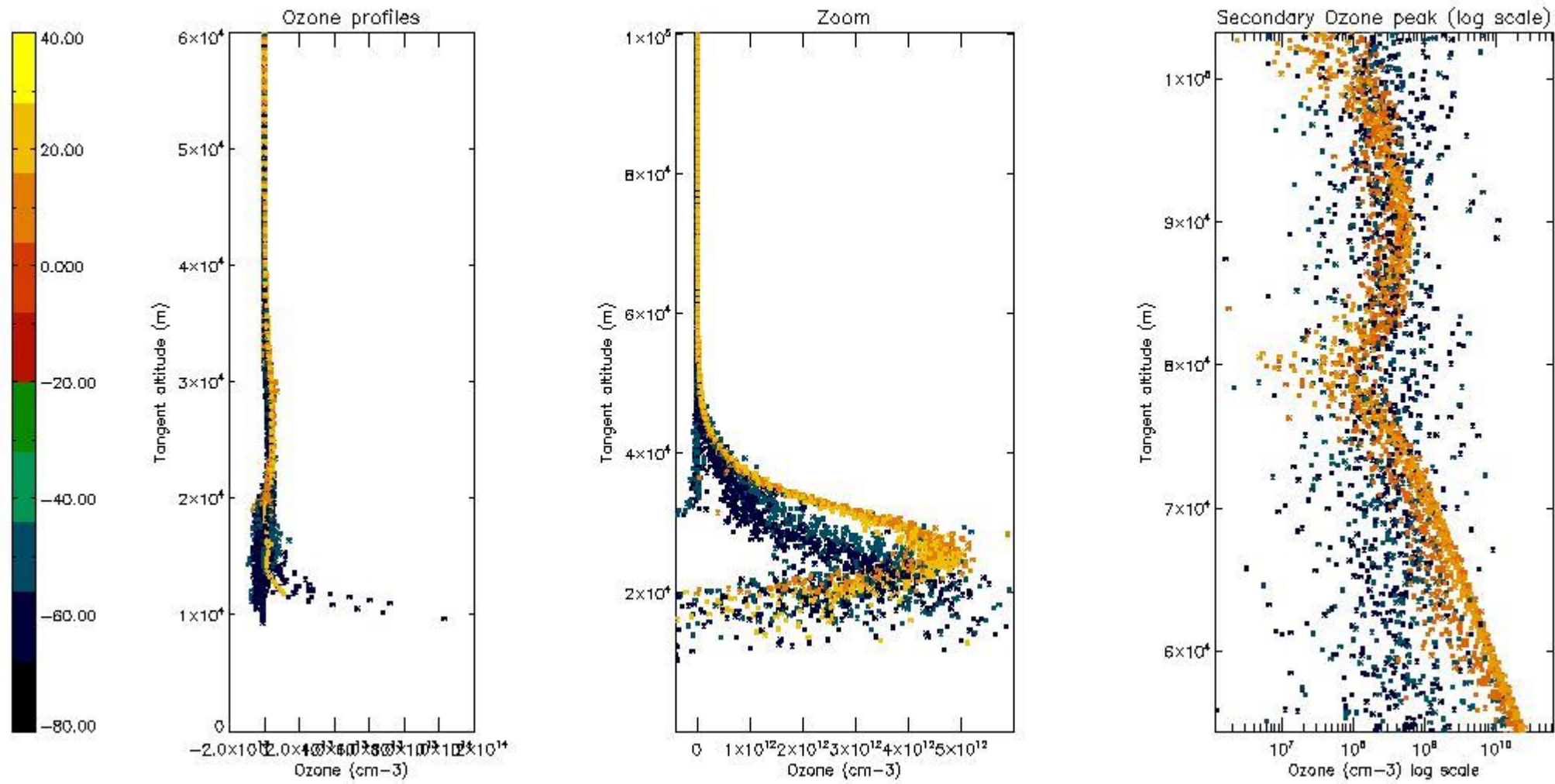
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	27
STD < 20	10

STD < 10	6
STD < 5	3

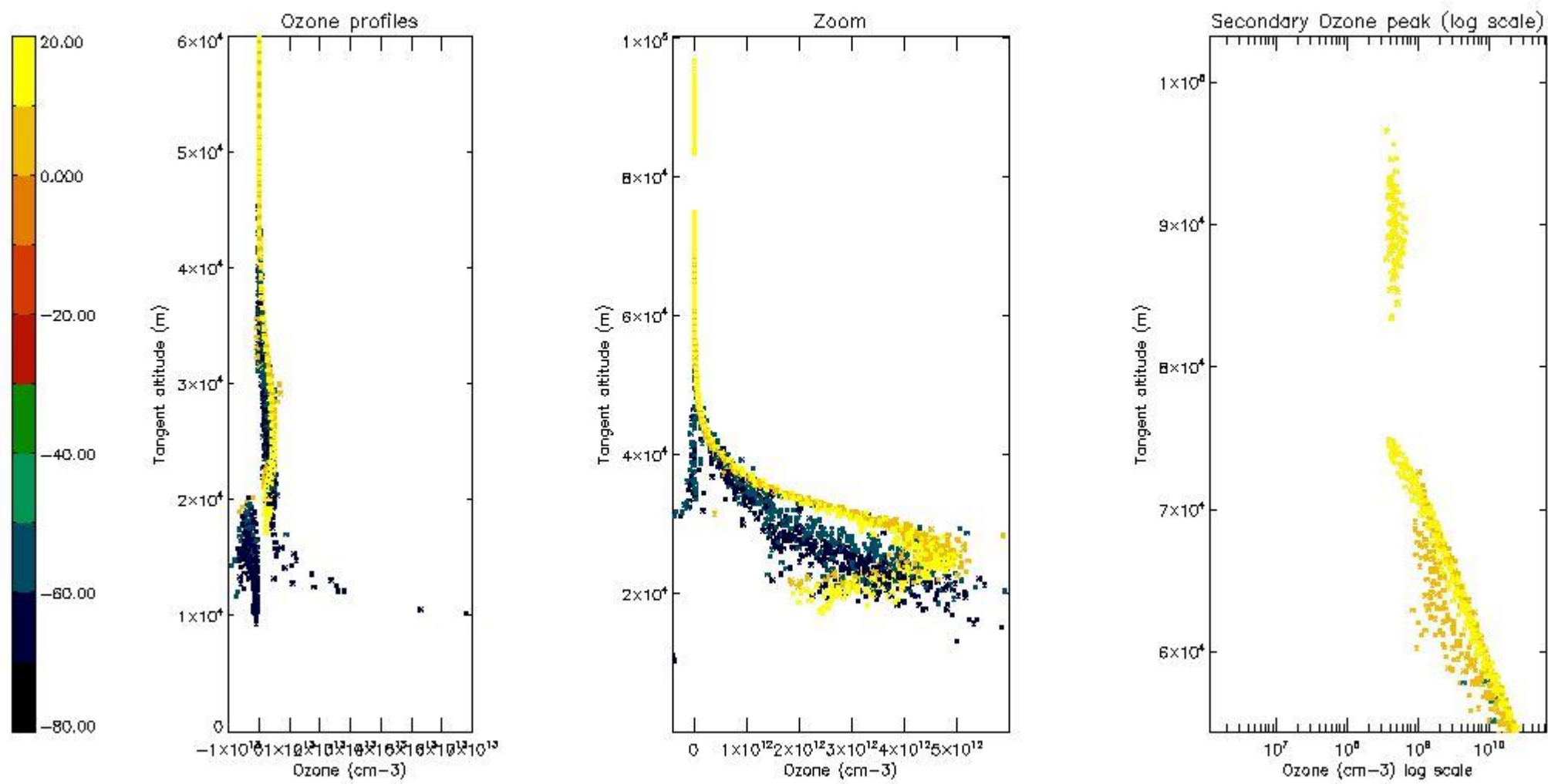
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



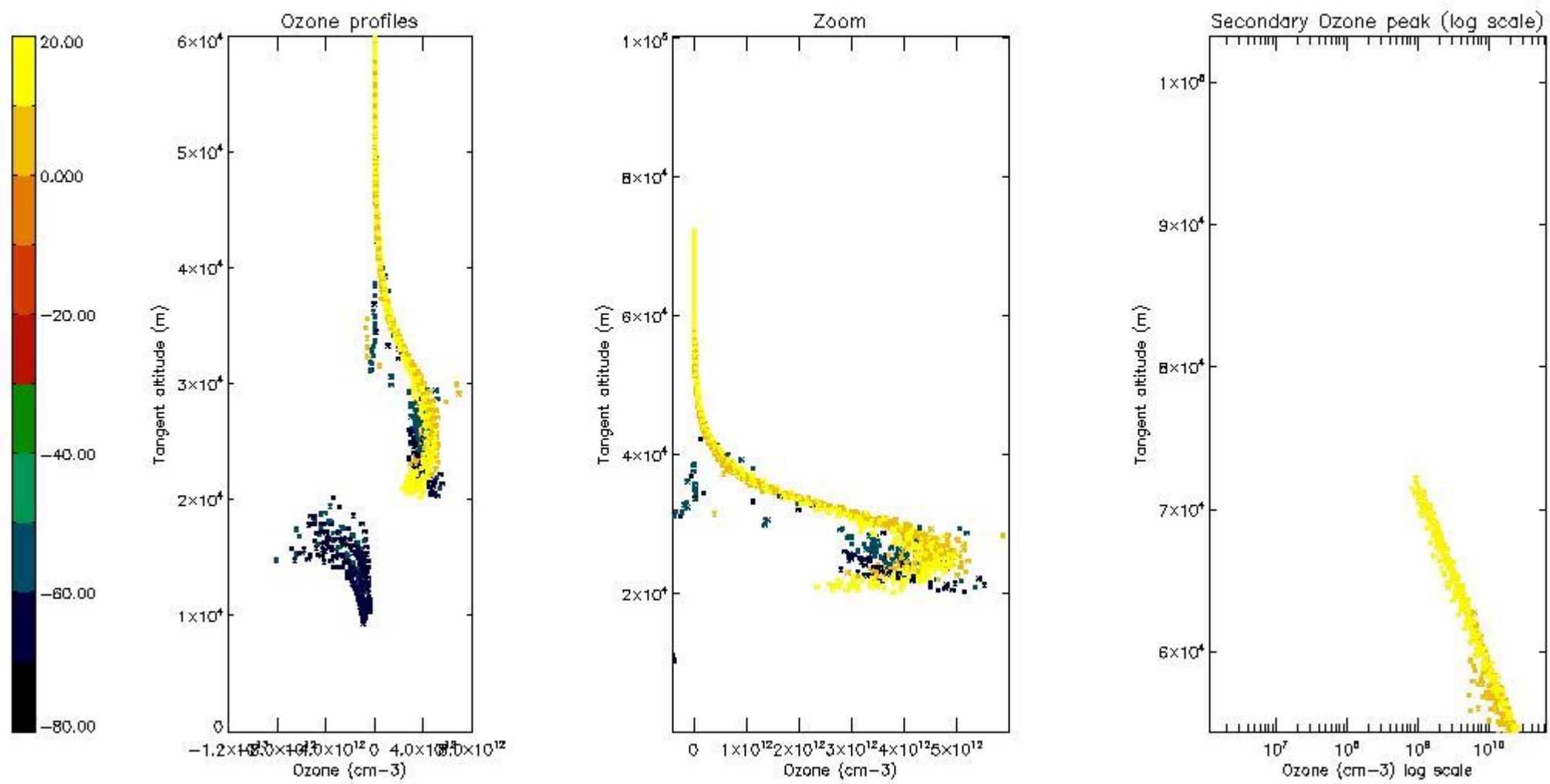
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



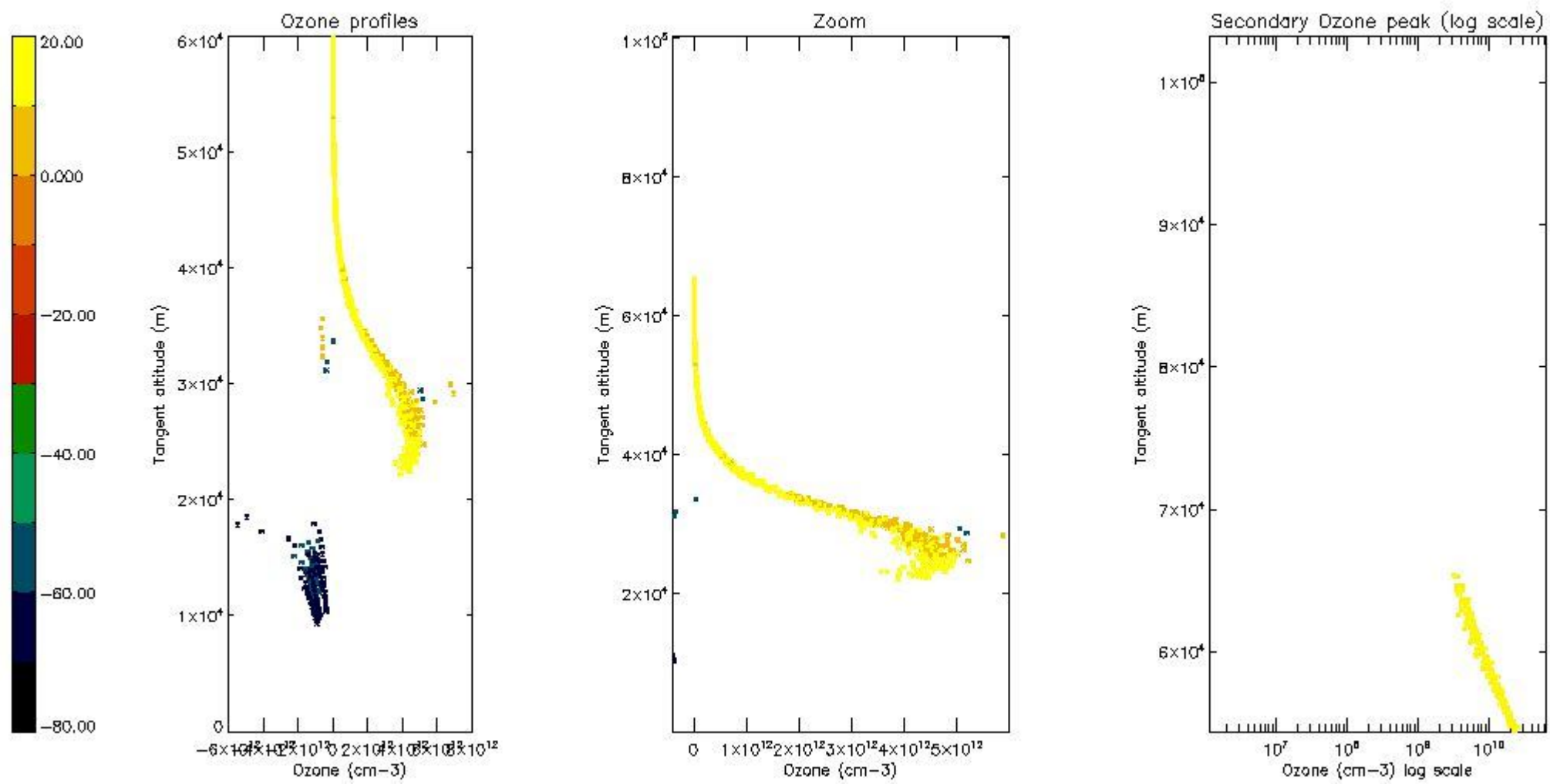
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



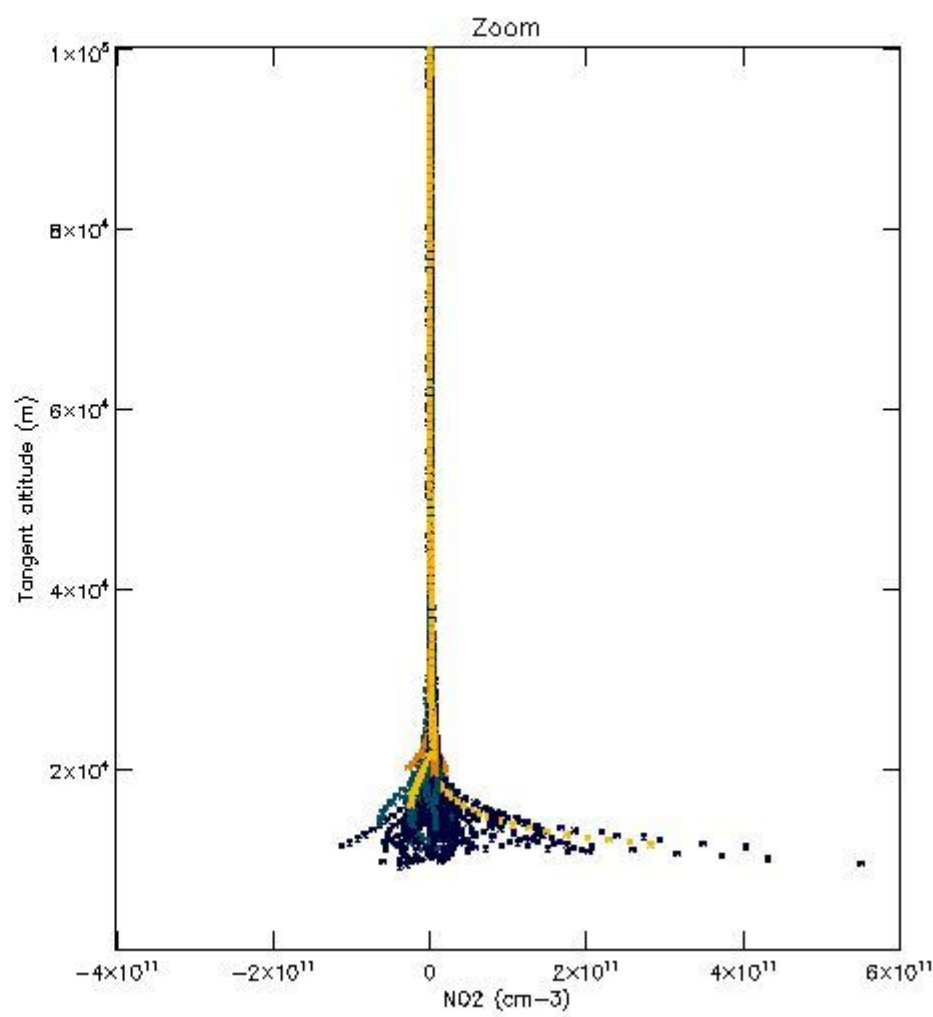
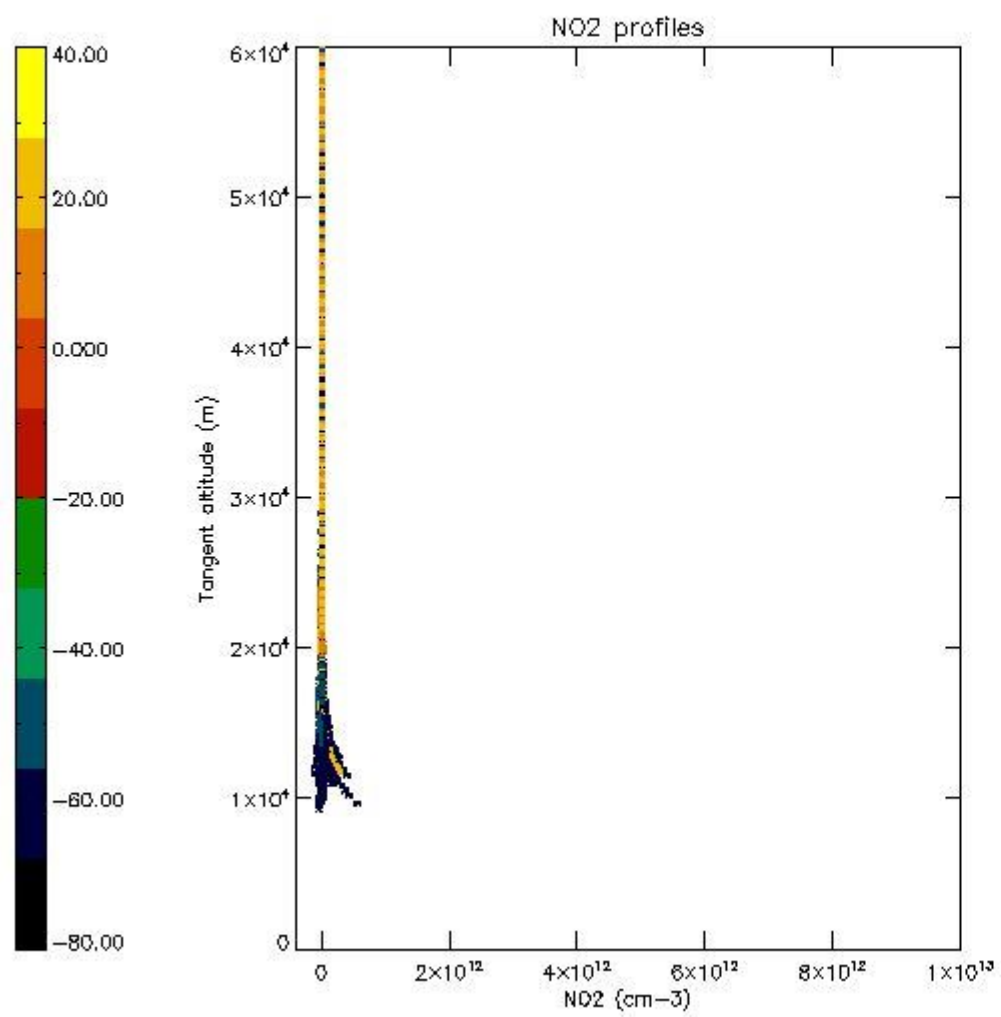
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



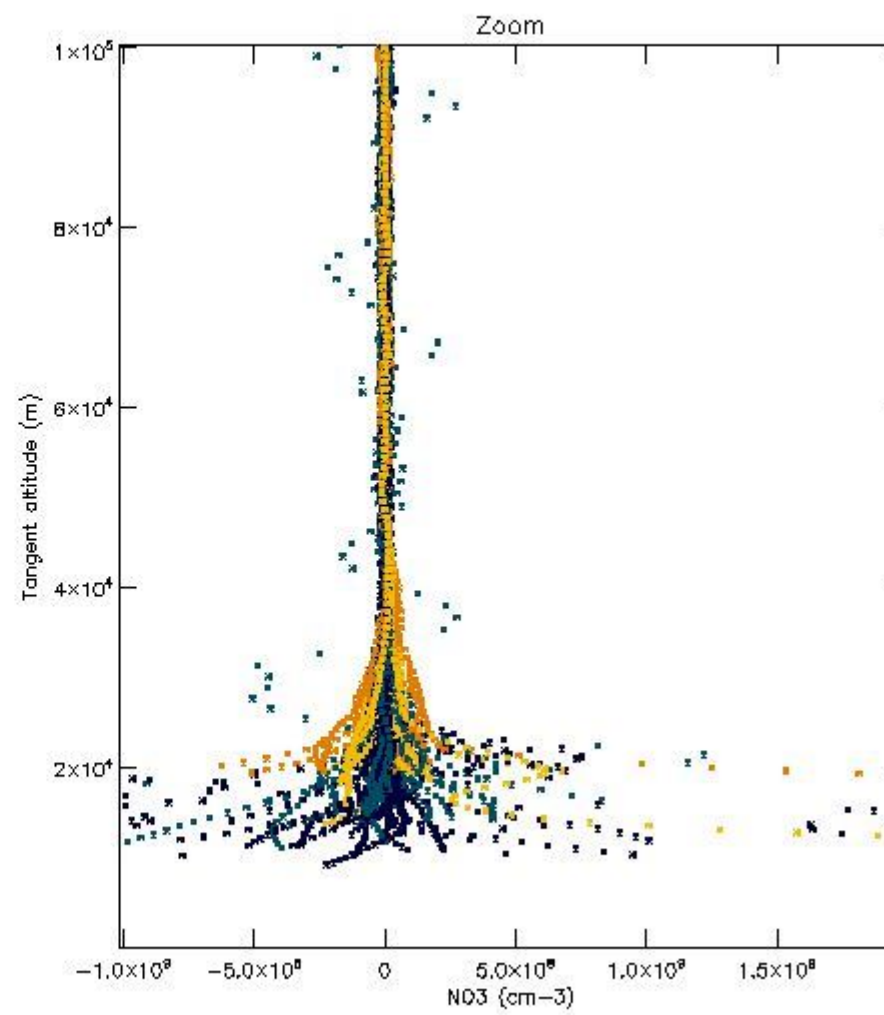
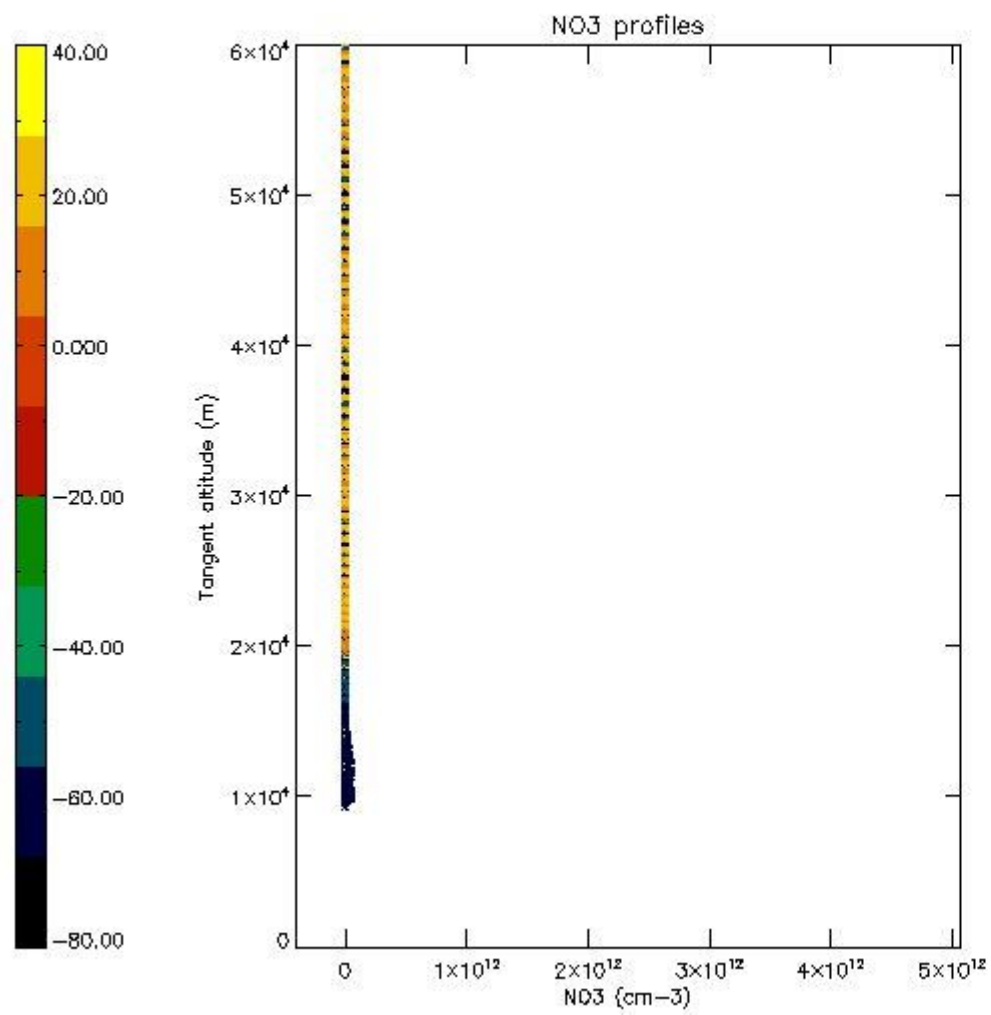
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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	21-APR-2011 00:02:39
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	21-APR-2011 00:02:39
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	21-APR-2011 00:02:39

GOMOS Level 2 Daily Report

SUMMARY

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

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

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

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

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

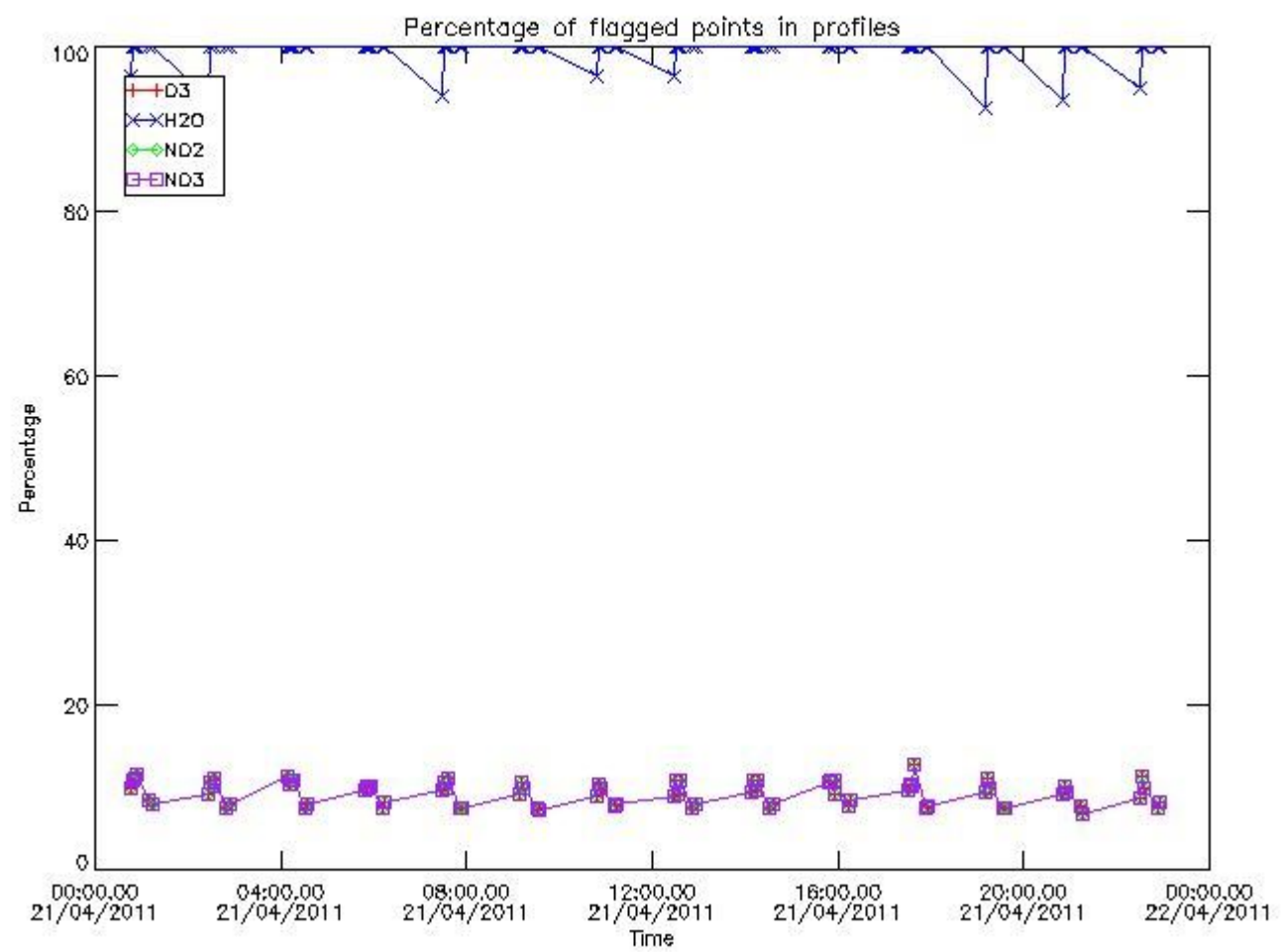
[6. Auxiliary Data Files used for the production reported in section 2](#)

279	GOM_NL__2PRFIN20110421_212008_000000593101_00374_47802_6501.N1	21-APR-2011 21:20:08	Straylight	58.500	115	34Ups Sco	2.6960	26000.	117	47802	No
280	GOM_NL__2PRFIN20110421_212335_000000603101_00374_47802_6502.N1	21-APR-2011 21:23:35	Straylight	59.500	75	26Eps Sco	2.2910	4250.0	119	47802	No
281	GOM_NL__2PRFIN20110421_212641_000000563101_00374_47802_6503.N1	21-APR-2011 21:26:41	Straylight	56.000	136	23Tau Sco	2.8220	30000.	112	47802	No
282	GOM_NL__2PRFIN20110421_212829_000000303101_00374_47802_6504.N1	21-APR-2011 21:28:29	Tw_i_and_stray	30.000	156	20Sig Sco	2.9030	28000.	60	47802	No
283	GOM_NL__2PRFIN20110421_213031_000000623101_00374_47802_6505.N1	21-APR-2011 21:30:31	Tw_i_and_stray	62.000	80	7Del Sco	2.3160	30000.	124	47802	No
284	GOM_NL__2PRFIN20110421_213412_000000503101_00374_47802_6506.N1	21-APR-2011 21:34:12	Bright	50.000	122	9Alp2Lib	2.7470	9700.0	100	47802	No
285	GOM_NL__2PRFIN20110421_213655_000000573101_00374_47802_6507.N1	21-APR-2011 21:36:55	Bright	57.000	104	27Bet Lib	2.6140	13100.	114	47802	No
286	GOM_NL__2PRFIN20110421_214537_000000423101_00374_47802_6508.N1	21-APR-2011 21:45:37	Bright	42.000	111	8Eta Boo	2.6800	6000.0	84	47802	No
287	GOM_NL__2PRFIN20110421_215008_000000533101_00374_47802_6509.N1	21-APR-2011 21:50:08	Bright	52.500	83		2.3780	11000.	105	47802	No
288	GOM_NL__2PRFIN20110421_215256_000000573101_00374_47802_6510.N1	21-APR-2011 21:52:56	Bright	56.500	180	27Gam Boo	3.0400	8000.0	113	47802	No
289	GOM_NL__2PRFIN20110421_215438_000000393101_00374_47802_6511.N1	21-APR-2011 21:54:38	Bright	39.000	39	85Eta UMa	1.8540	24000.	78	47802	No
290	GOM_NL__2PRFIN20110421_220239_000000433101_00374_47802_6512.N1	21-APR-2011 22:02:39	Bright	42.500	119	14Eta Dra	2.7270	4700.0	85	47802	No
291	GOM_NL__2PRFIN20110421_221207_000000413101_00374_47802_6513.N1	21-APR-2011 22:12:07	Bright	41.000	89	5Alp Cep	2.4510	8000.0	82	47802	No
292	GOM_NL__2PRFIN20110421_221720_000000533101_00374_47802_6514.N1	21-APR-2011 22:17:20	Bright	53.000	19	50Alp Cyg	1.2460	10500.	106	47802	No
293	GOM_NL__2PRFIN20110421_221910_000000633101_00374_47802_6515.N1	21-APR-2011 22:19:10	Bright	63.000	66	37Gam Cyg	2.2080	5900.0	126	47802	No
294	GOM_NL__2PRFIN20110421_222205_000000643101_00374_47802_6516.N1	21-APR-2011 22:22:05	Tw_i_and_stray	63.500	92	53Eps Cyg	2.5000	4500.0	127	47802	No
295	GOM_NL__2PRFIN20110421_223010_000000593101_00374_47802_6517.N1	21-APR-2011 22:30:10	Dark	58.500	61	8Eps Peg	2.1000	3900.0	117	47802	No
296	GOM_NL__2PRFIN20110421_223238_000000493101_00374_47802_6518.N1	21-APR-2011 22:32:38	Dark	49.000	162	34Alp Aqr	2.9440	5350.0	98	47802	No
297	GOM_NL__2PRFIN20110421_223538_000000513101_00374_47802_6519.N1	21-APR-2011 22:35:38	Dark	50.500	154	22Bet Aqr	2.8990	5700.0	101	47802	No
298	GOM_NL__2PRFIN20110421_225331_000000693101_00375_47803_6508.N1	21-APR-2011 22:53:31	Dark	68.500	103	38Zet Sgr	2.6000	9700.0	137	47803	No
299	GOM_NL__2PRFIN20110421_225645_000000633101_00375_47803_6509.N1	21-APR-2011 22:56:45	Dark	62.500	38	20Eps Sgr	1.8360	11000.	125	47803	No
300	GOM_NL__2PRFIN20110421_225843_000000513101_00375_47803_6510.N1	21-APR-2011 22:58:43	Straylight	51.000	40	The Sco	1.8590	7100.0	102	47803	No
301	GOM_NL__2PRFIN20110421_230022_000000583101_00375_47803_6511.N1	21-APR-2011 23:00:22	Straylight	58.000	115	34Ups Sco	2.6960	26000.	116	47803	No
302	GOM_NL__2PRFIN20110421_230350_000000733101_00375_47803_6512.N1	21-APR-2011 23:03:50	Straylight	72.500	75	26Eps Sco	2.2910	4250.0	145	47803	No
303	GOM_NL__2PRFIN20110421_230655_000000563101_00375_47803_6513.N1	21-APR-2011 23:06:55	Straylight	56.000	136	23Tau Sco	2.8220	30000.	112	47803	No
304	GOM_NL__2PRFIN20110421_230843_000000303101_00375_47803_6514.N1	21-APR-2011 23:08:43	Tw_i_and_stray	30.000	156	20Sig Sco	2.9030	28000.	60	47803	No
305	GOM_NL__2PRFIN20110421_231045_000000623101_00375_47803_6515.N1	21-APR-2011 23:10:45	Tw_i_and_stray	62.000	80	7Del Sco	2.3160	30000.	124	47803	No
306	GOM_NL__2PRFIN20110421_231426_000000513101_00375_47803_6516.N1	21-APR-2011 23:14:26	Bright	50.500	122	9Alp2Lib	2.7470	9700.0	101	47803	No
307	GOM_NL__2PRFIN20110421_231709_000000583101_00375_47803_6517.N1	21-APR-2011 23:17:09	Bright	57.500	104	27Bet Lib	2.6140	13100.	115	47803	No
308	GOM_NL__2PRFIN20110421_232550_000000433101_00375_47803_6518.N1	21-APR-2011 23:25:50	Bright	42.500	111	8Eta Boo	2.6800	6000.0	85	47803	No
309	GOM_NL__2PRFIN20110421_233021_000000543101_00375_47803_6519.N1	21-APR-2011 23:30:21	Bright	53.500	83		2.3780	11000.	107	47803	No
310	GOM_NL__2PRFIN20110421_233309_000000553101_00375_47803_6520.N1	21-APR-2011 23:33:09	Bright	54.500	180	27Gam Boo	3.0400	8000.0	109	47803	No
311	GOM_NL__2PRFIN20110421_233451_000000393101_00375_47803_6521.N1	21-APR-2011 23:34:51	Bright	39.000	39	85Eta UMa	1.8540	24000.	78	47803	No
312	GOM_NL__2PRFIN20110421_234252_000000483101_00375_47803_6522.N1	21-APR-2011 23:42:52	Bright	47.500	119	14Eta Dra	2.7270	4700.0	95	47803	No
313	GOM_NL__2PRFIN20110421_235220_000000413101_00375_47803_6523.N1	21-APR-2011 23:52:20	Bright	41.000	89	5Alp Cep	2.4510	8000.0	82	47803	No
314	GOM_NL__2PRFIN20110421_235734_000000543101_00375_47803_6524.N1	21-APR-2011 23:57:34	Bright	54.000	19	50Alp Cyg	1.2460	10500.	108	47803	No
315	GOM_NL__2PRFIN20110421_235924_000000613101_00375_47803_6525.N1	21-APR-2011 23:59:24	Bright	60.500	66	37Gam Cyg	2.2080	5900.0	121	47803	No

3. Quality information per product

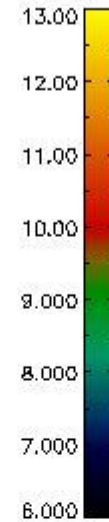
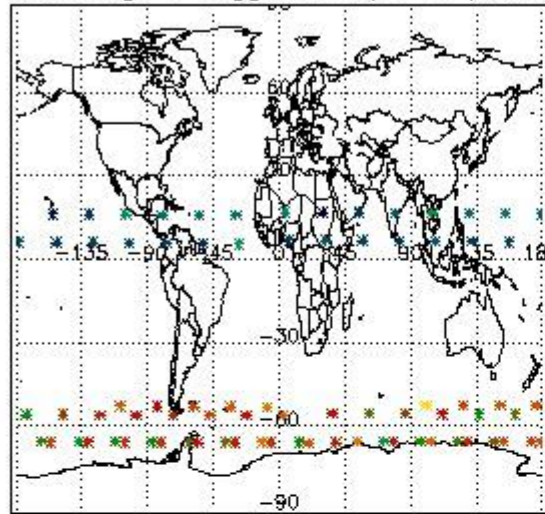
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

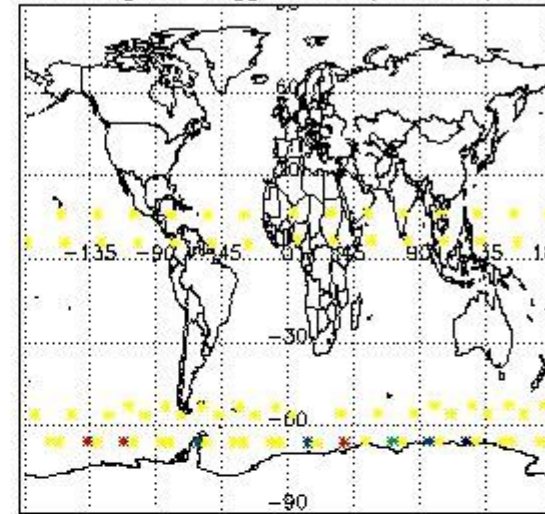


3.2 Plot quality information per product (world map)

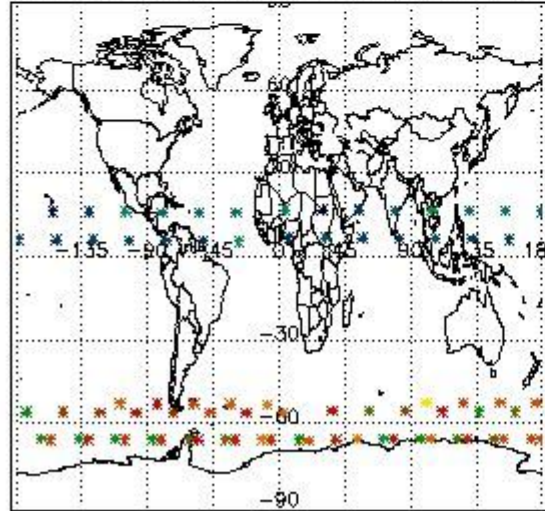
Percentage of flagged data per O3 profile



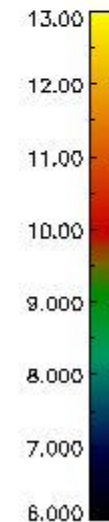
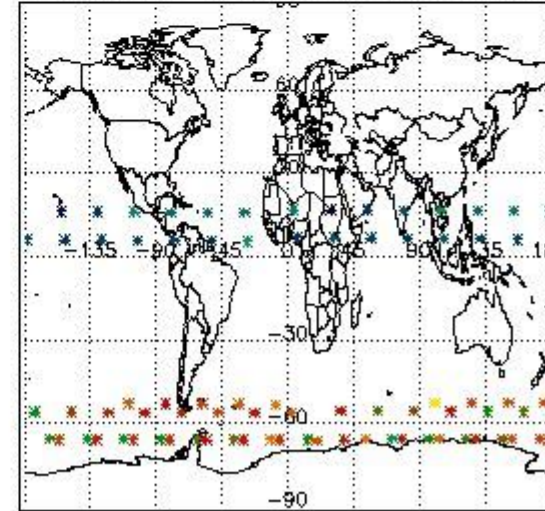
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

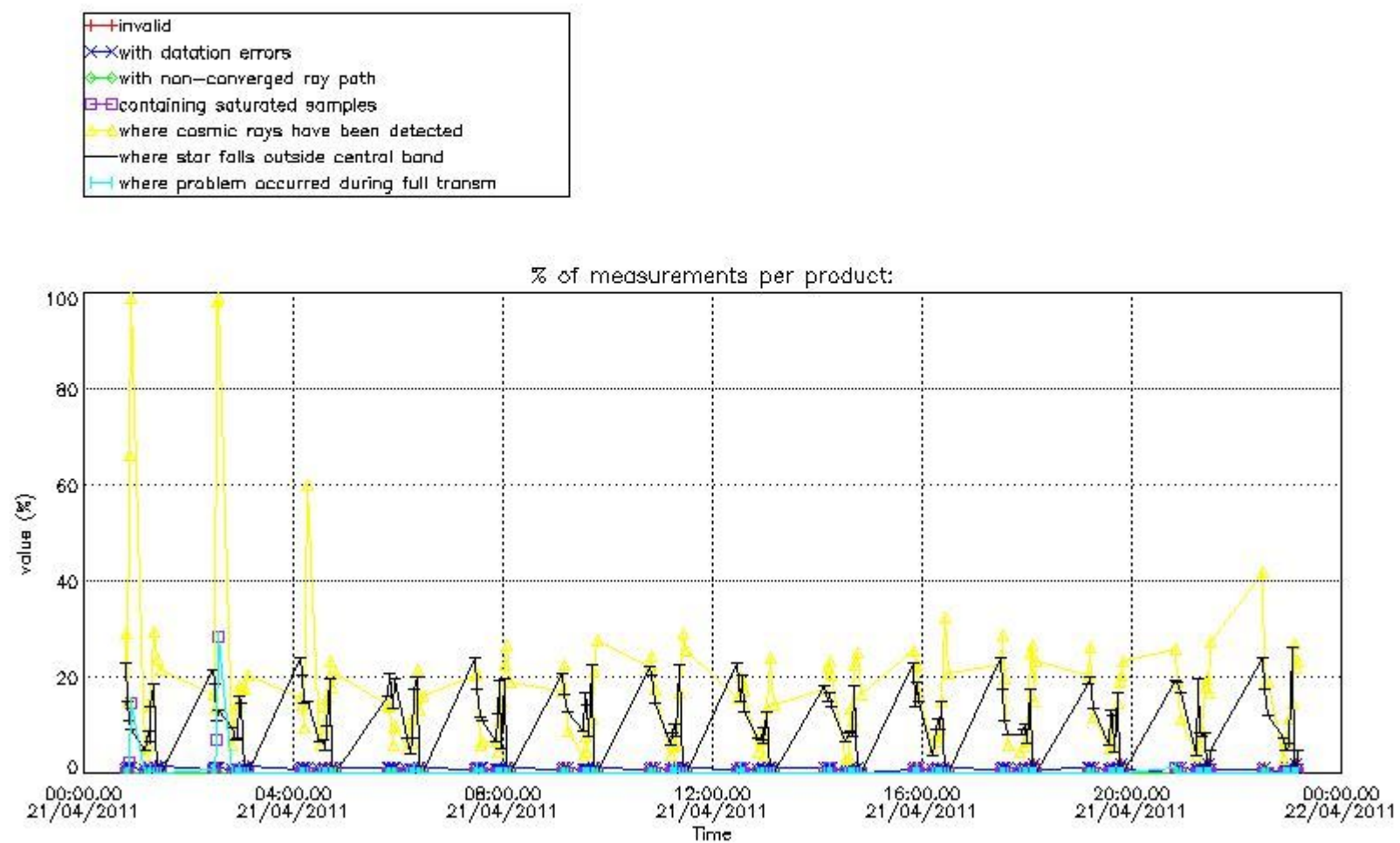


4. Level 1 quality information per product

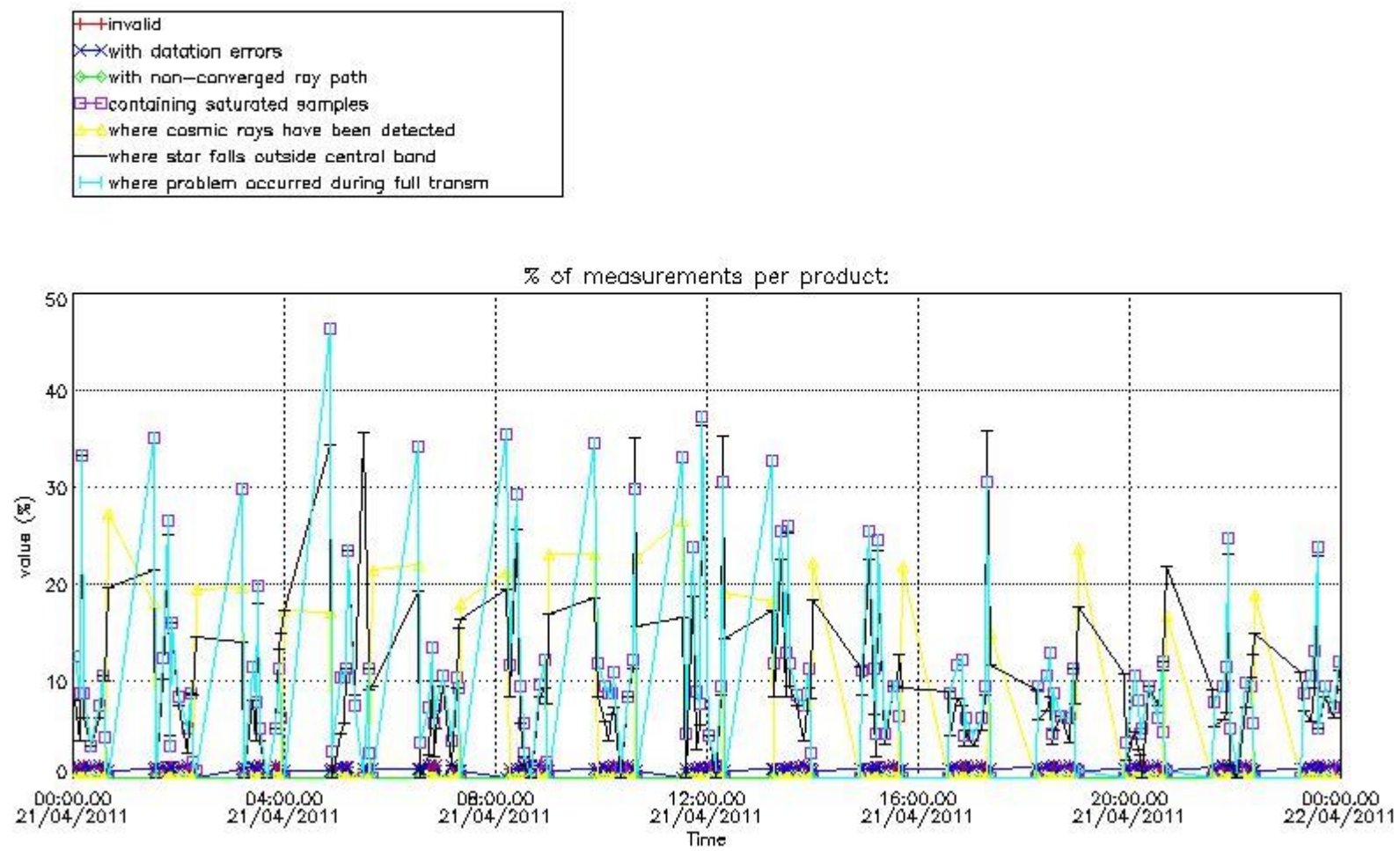
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

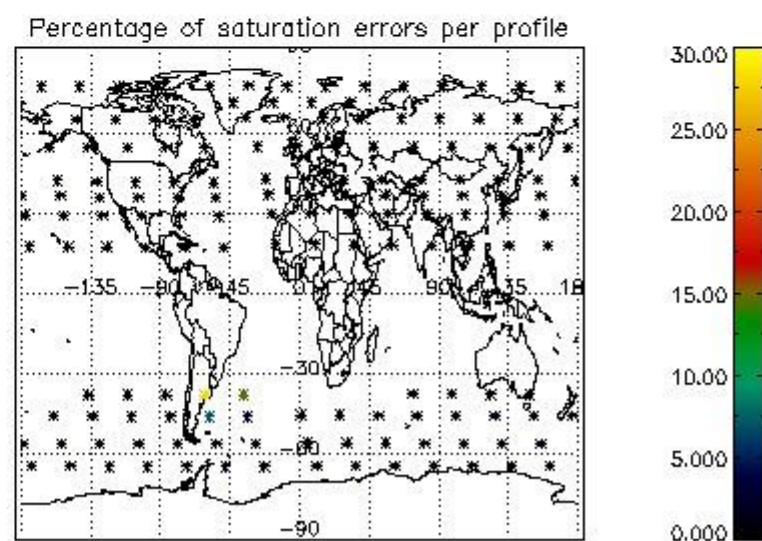
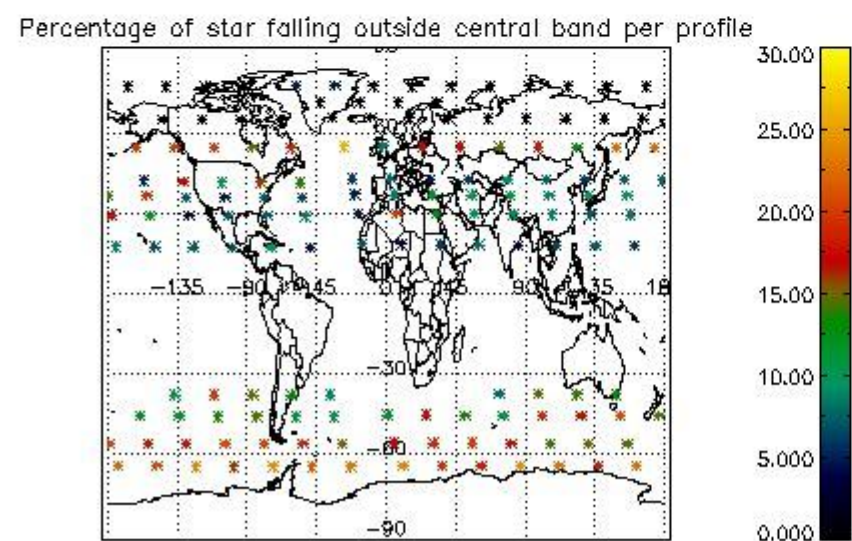
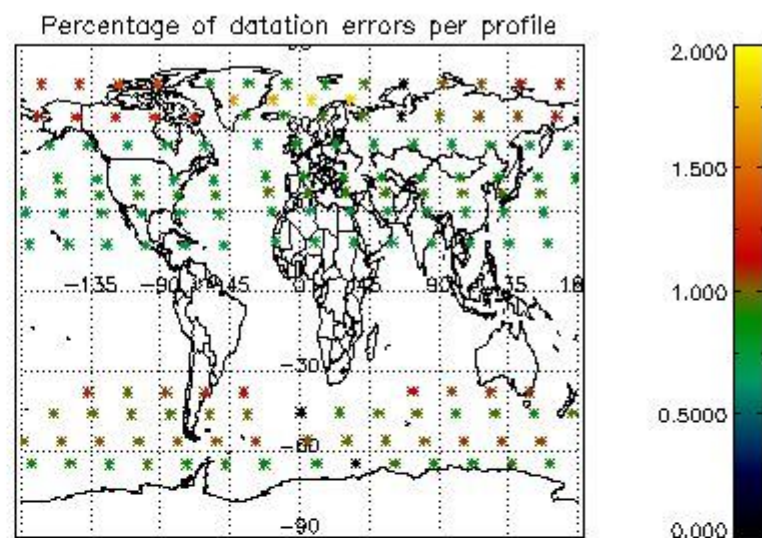
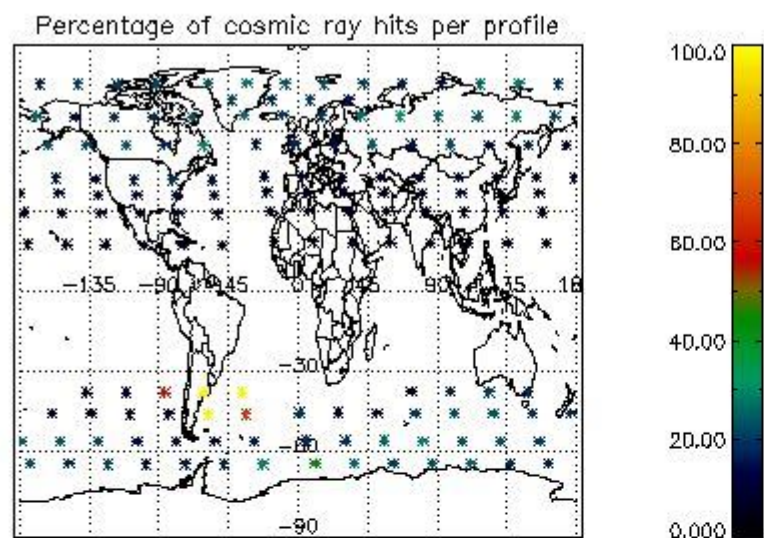


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

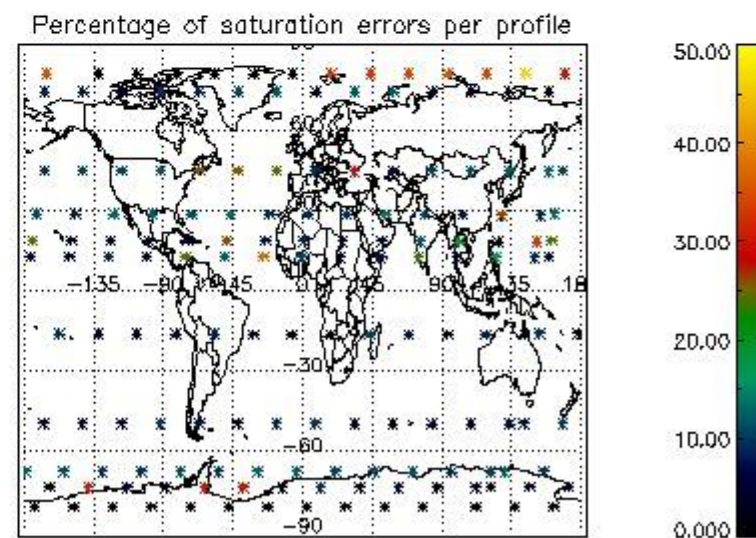
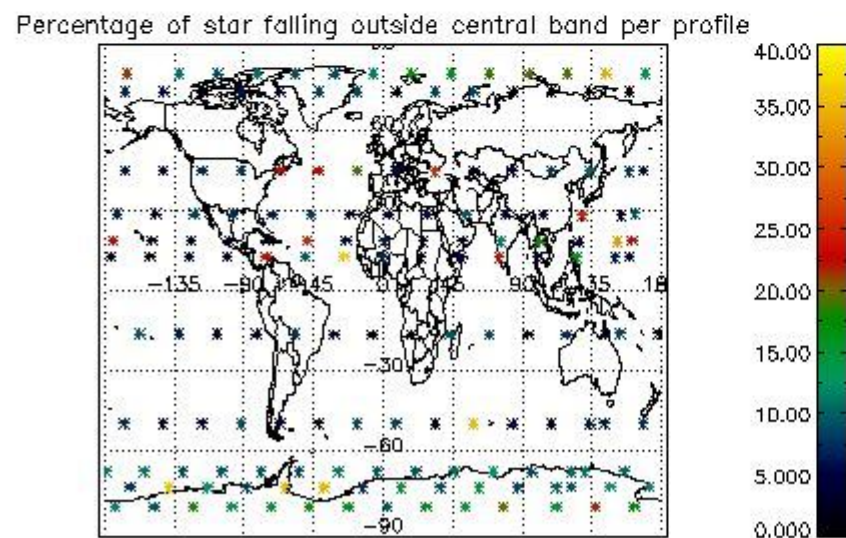
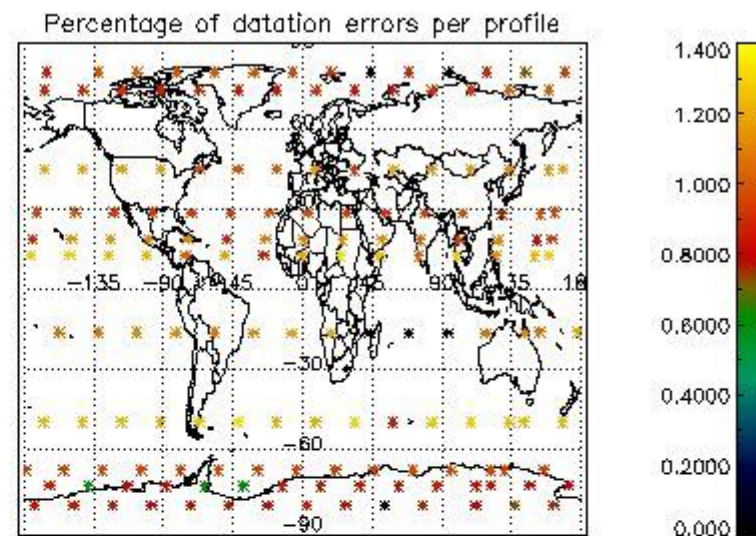
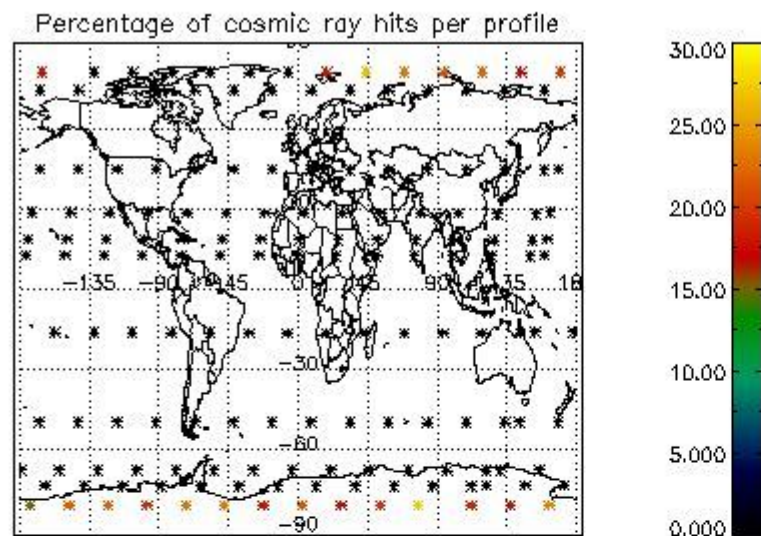


4.2 Plot quality information per product coming from level 1b processing (world map)

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

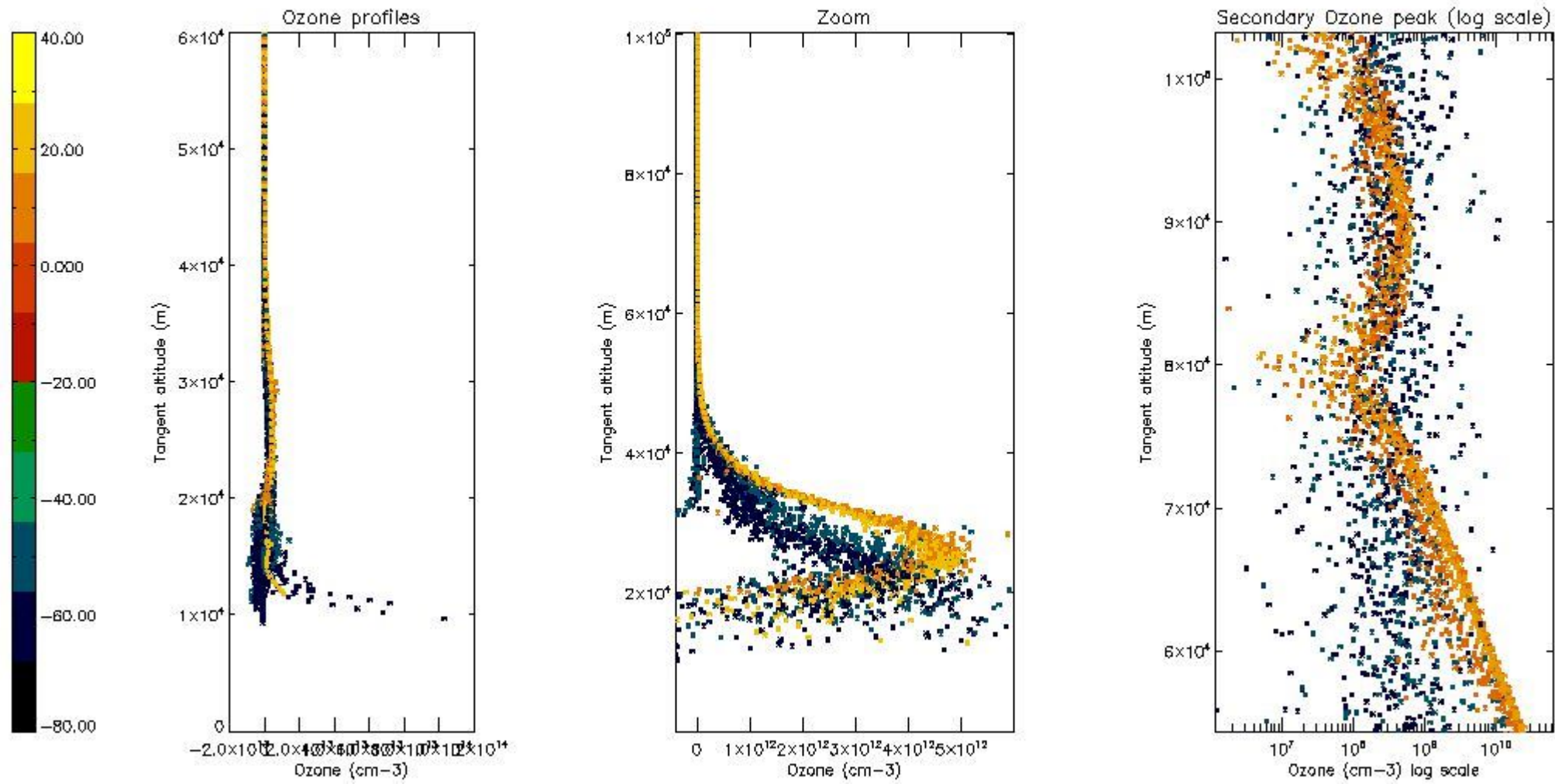
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	27
STD < 20	10

STD < 10	6
STD < 5	3

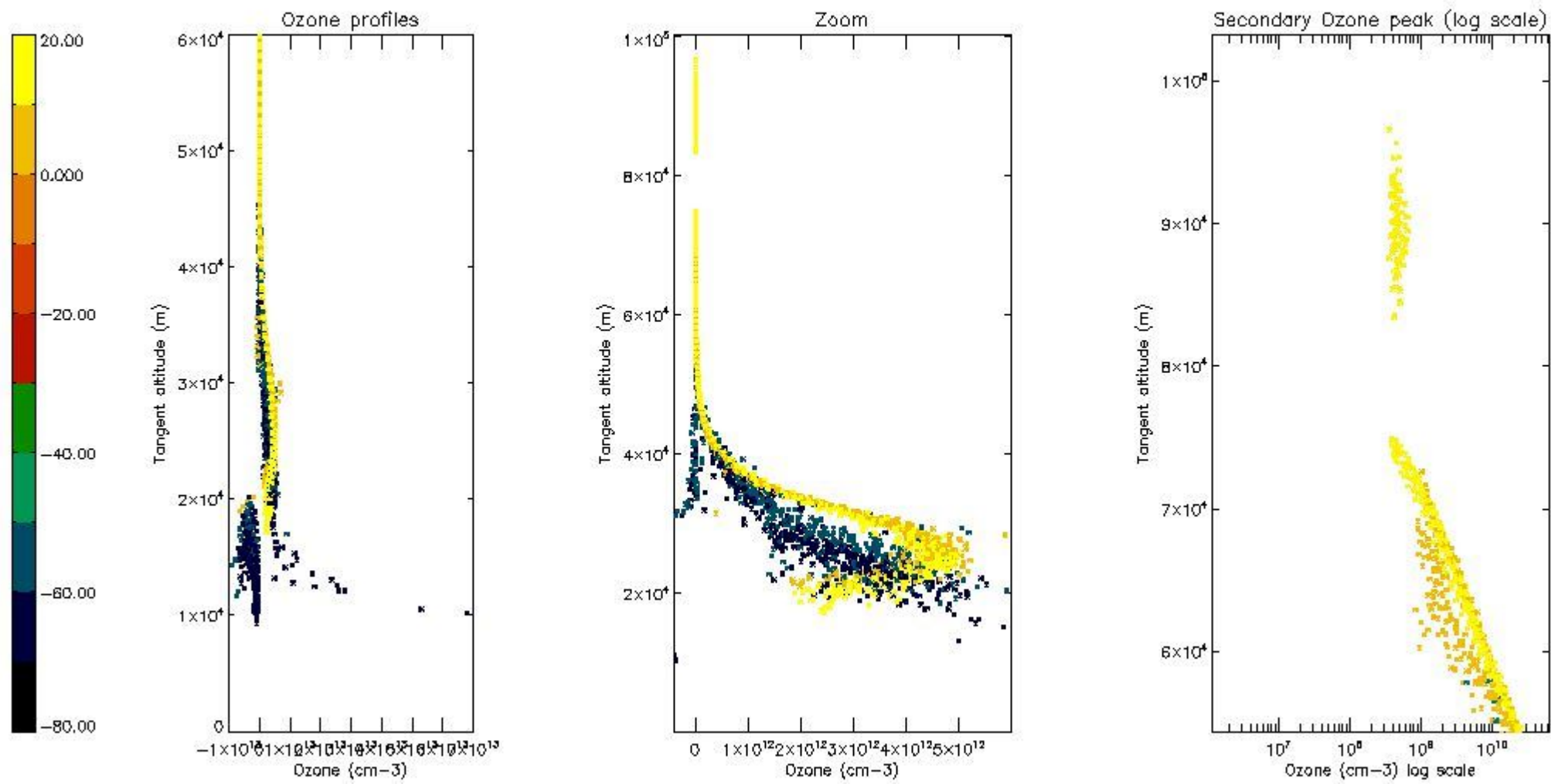
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



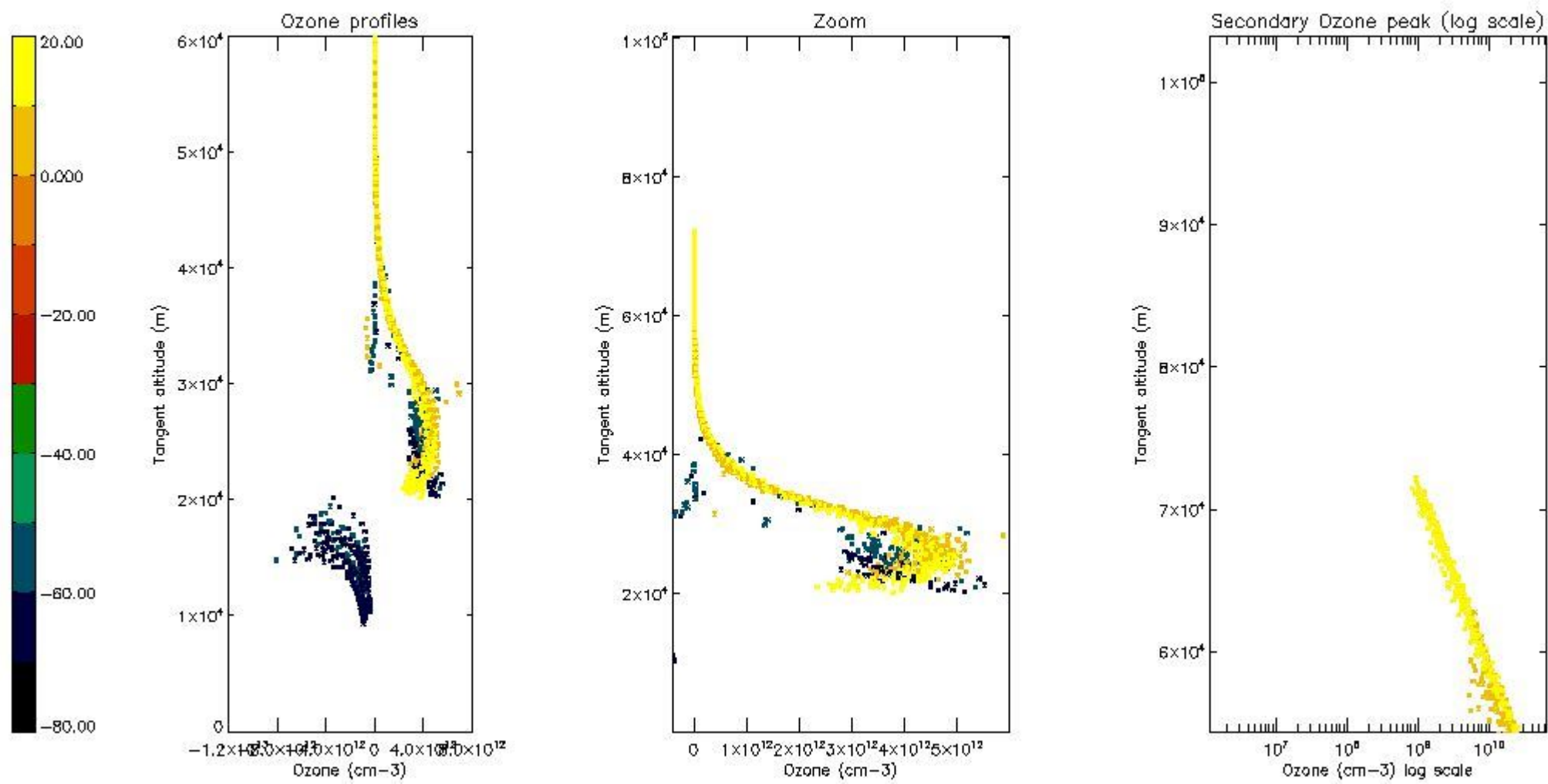
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



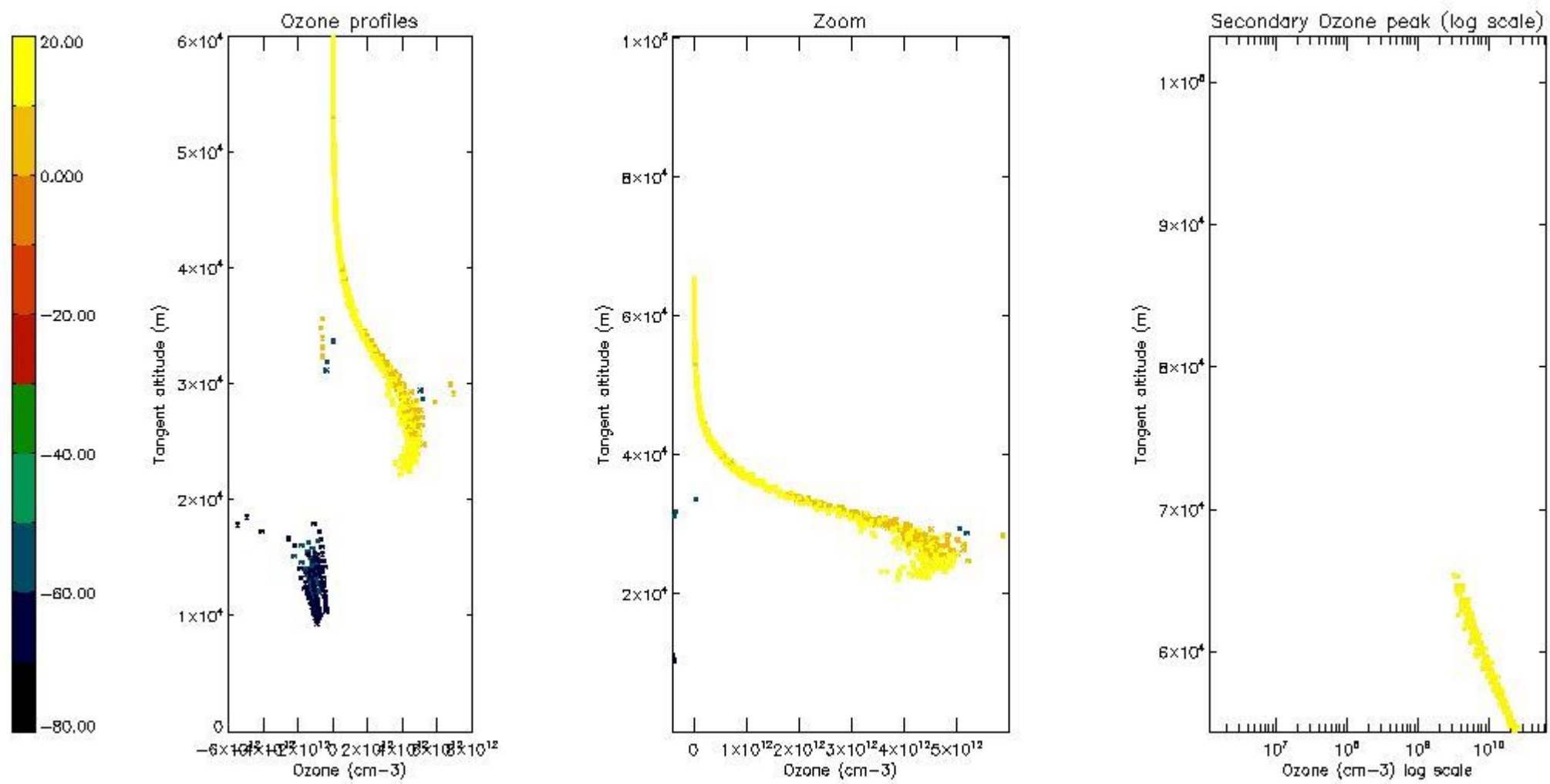
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



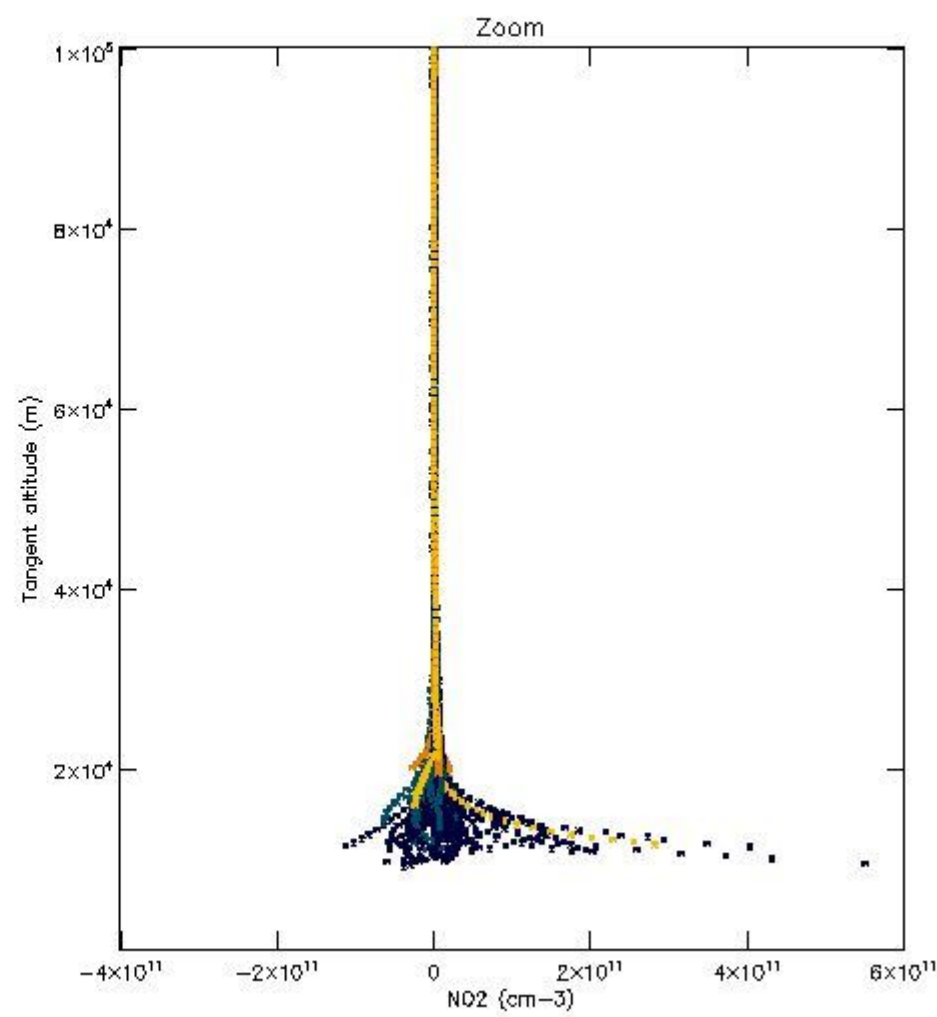
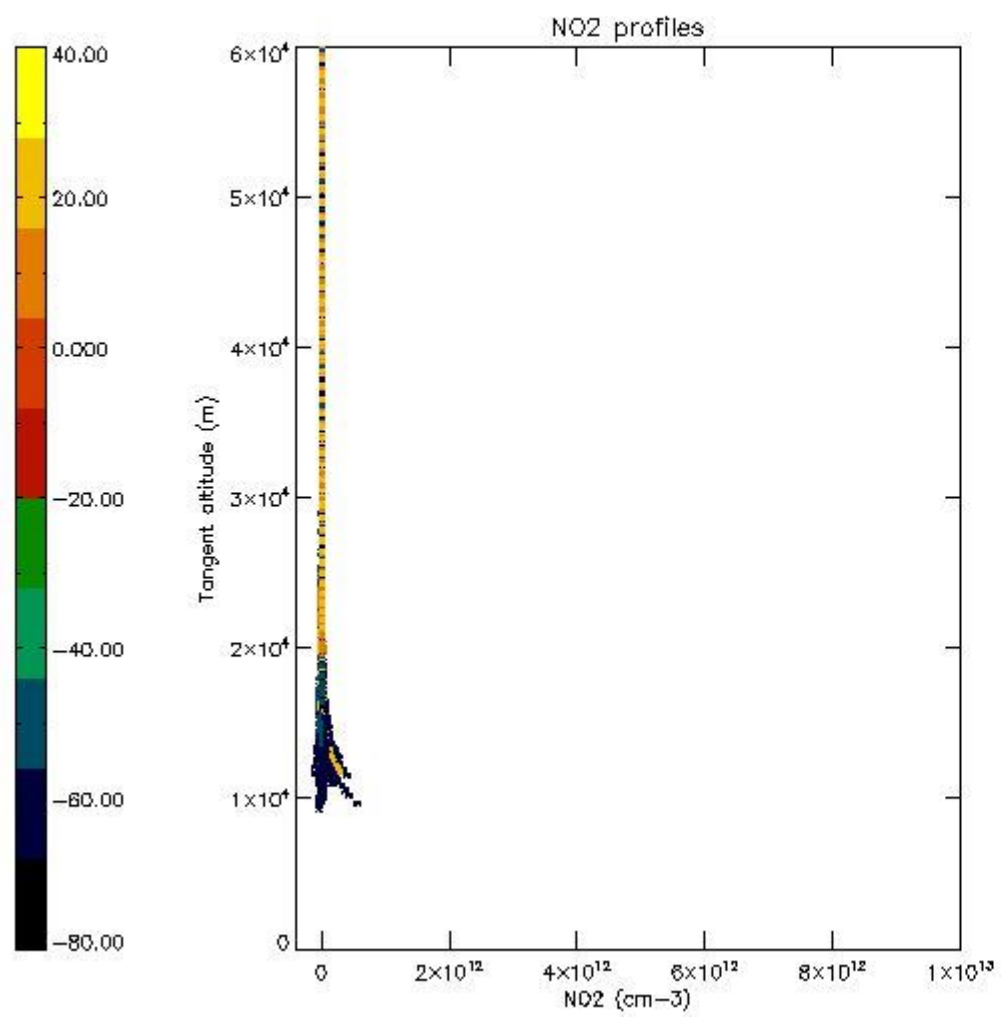
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



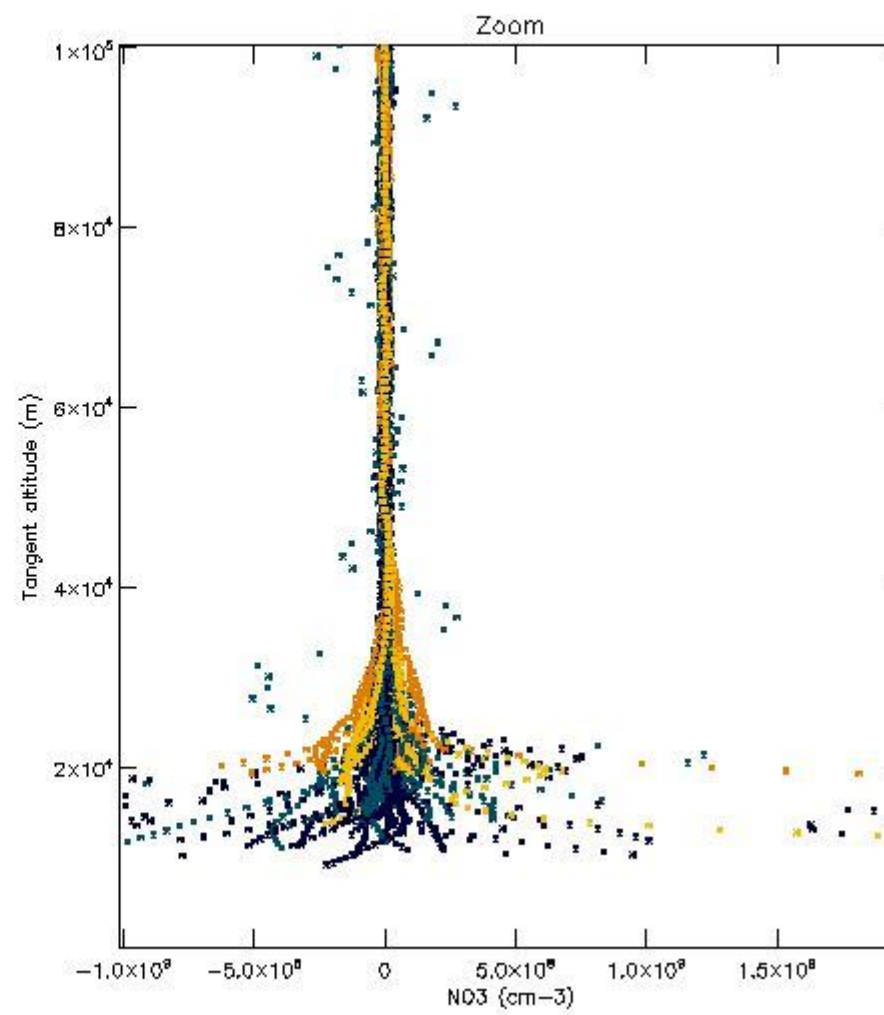
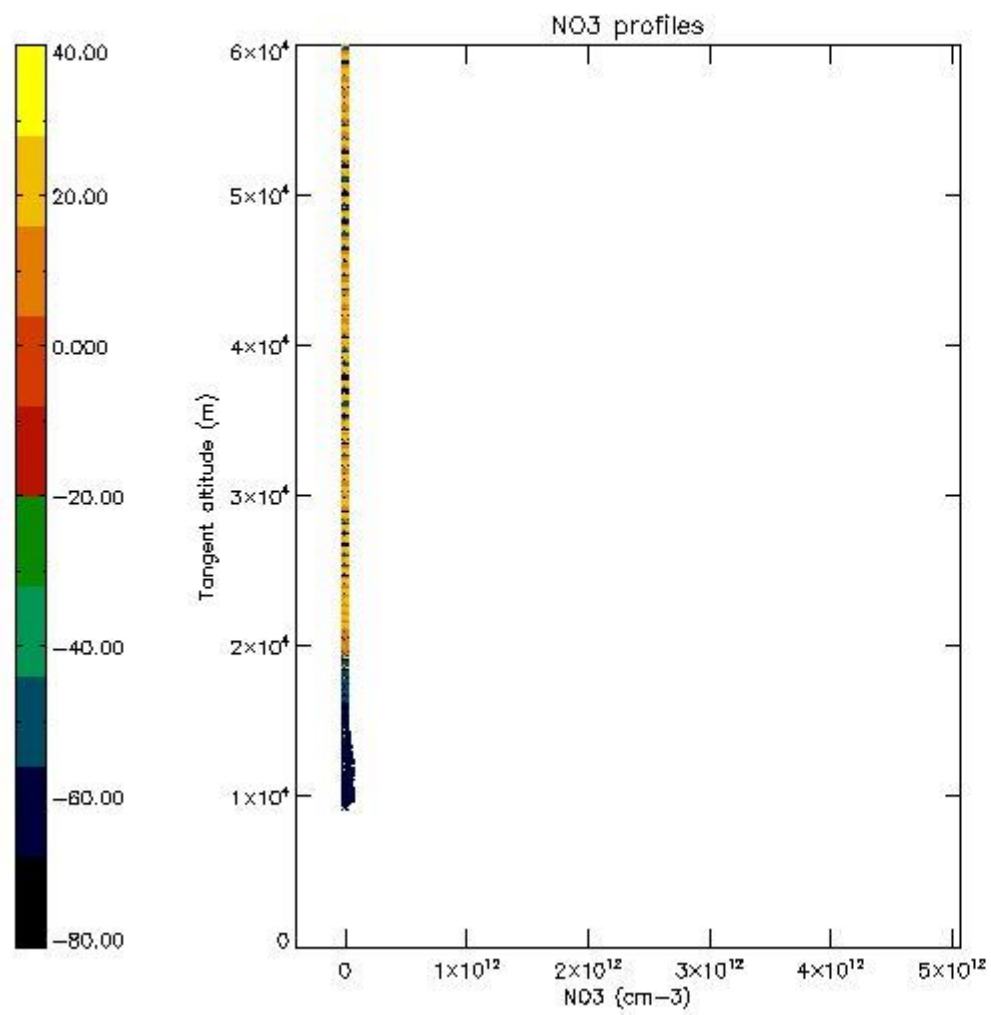
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

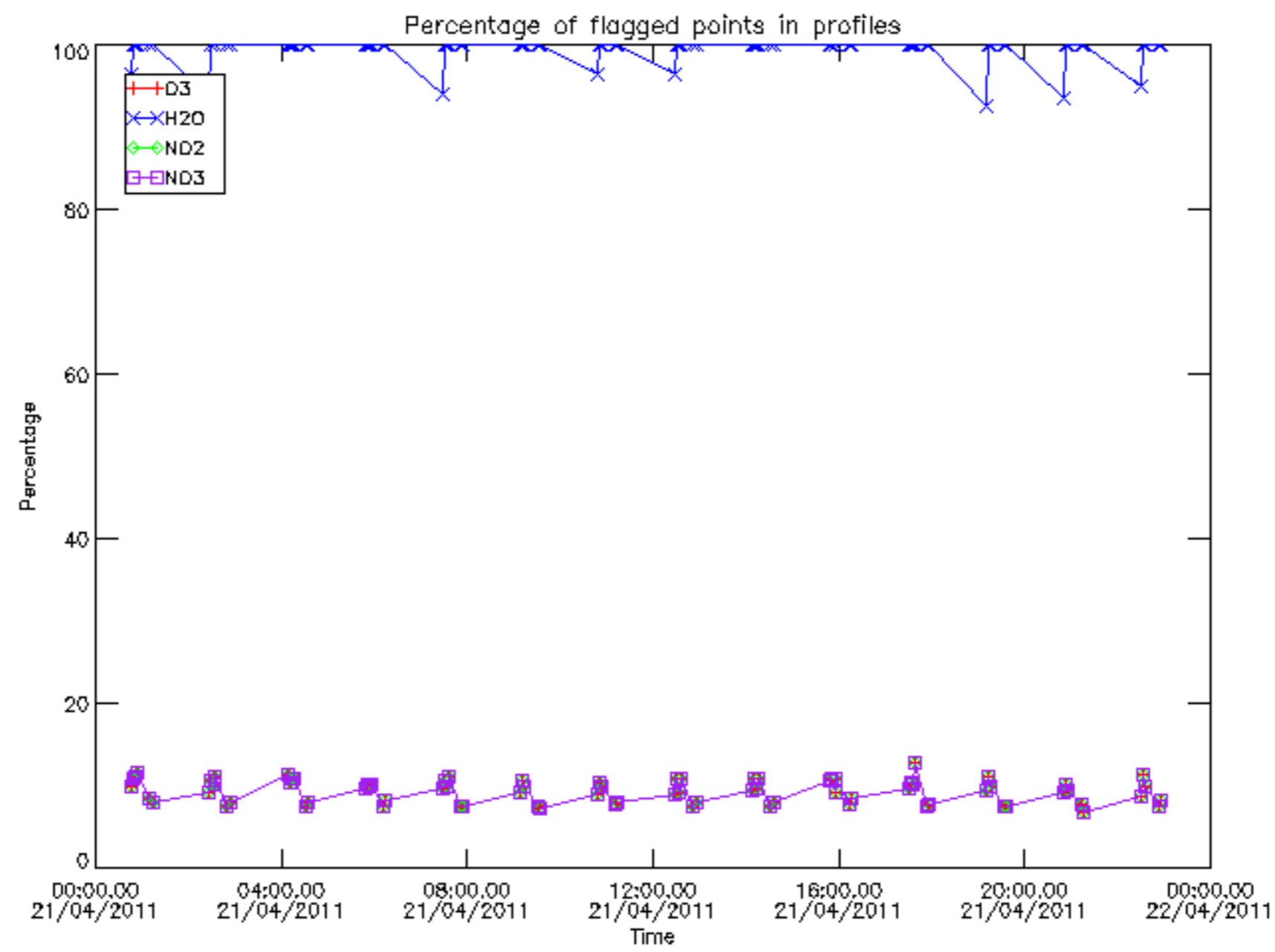
The colorbar represents the latitude.



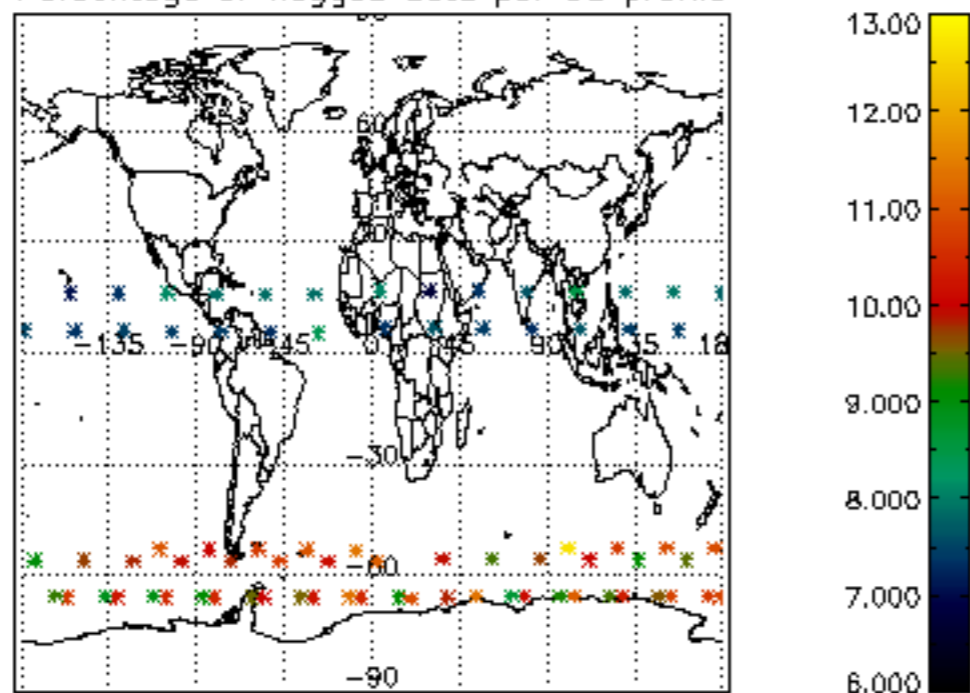
6. Auxiliary Data Files used for the production reported in section 2

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.

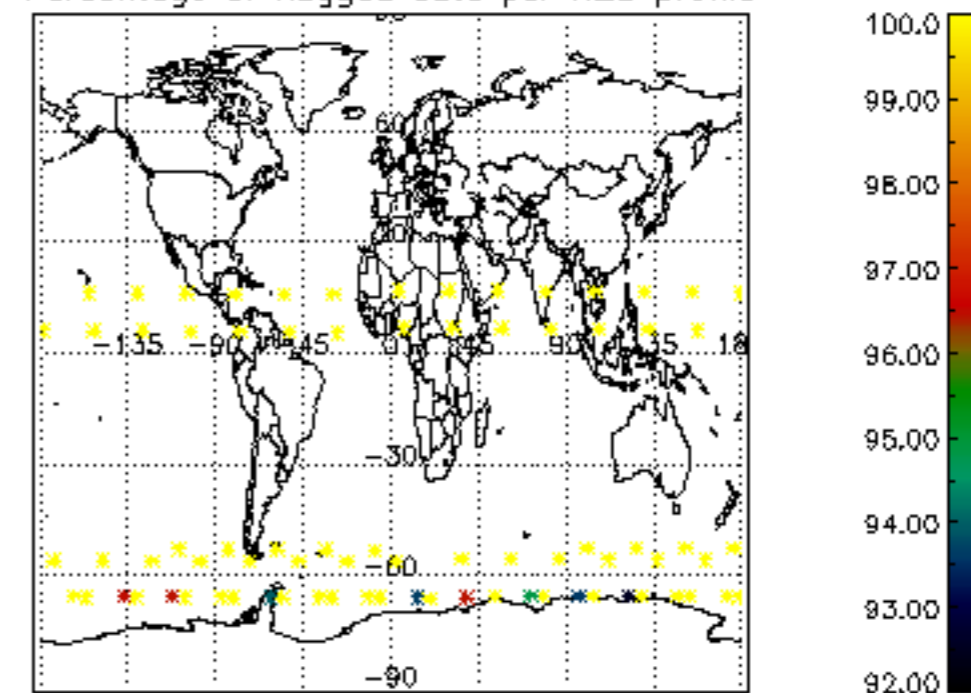
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	21-APR-2011 00:02:39
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	21-APR-2011 00:02:39
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	21-APR-2011 00:02:39



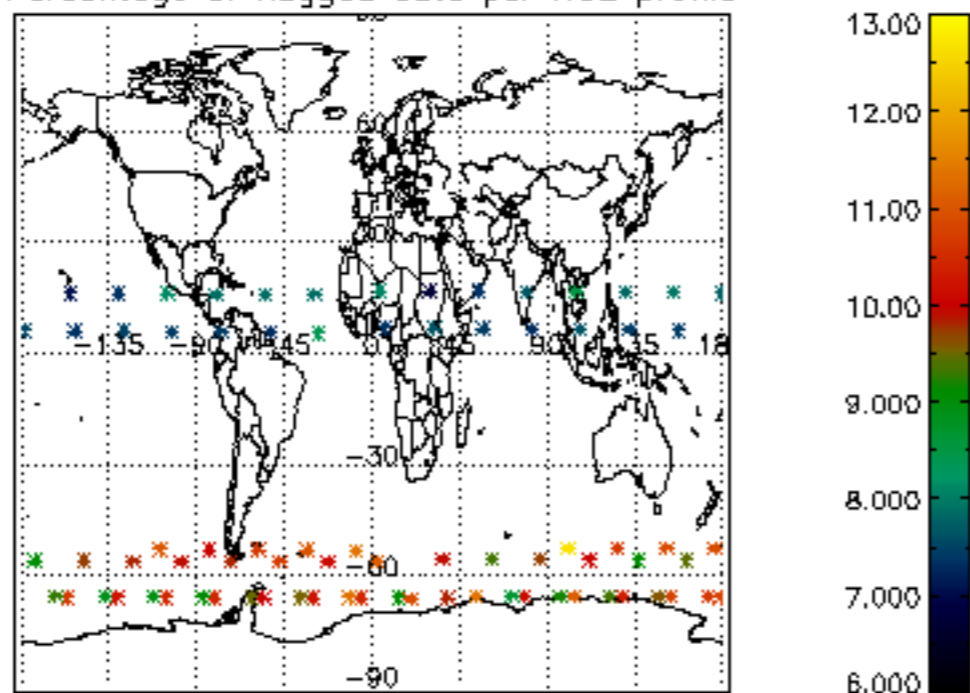
Percentage of flagged data per D3 profile



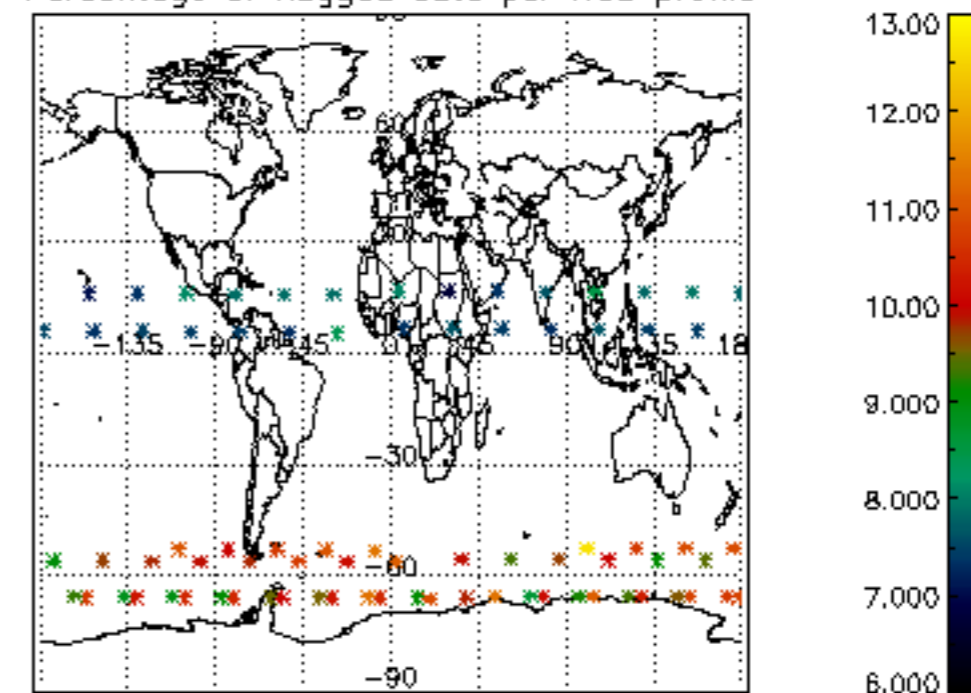
Percentage of flagged data per H2O profile

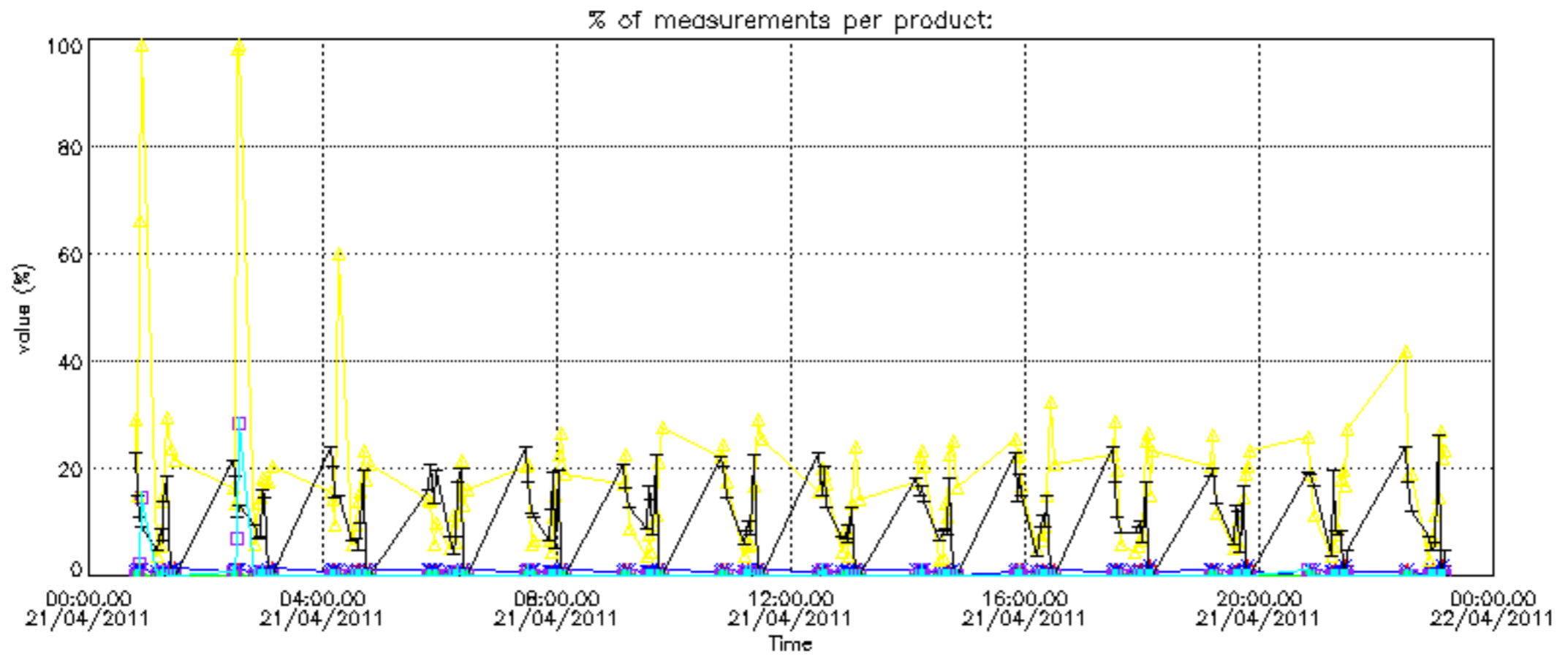


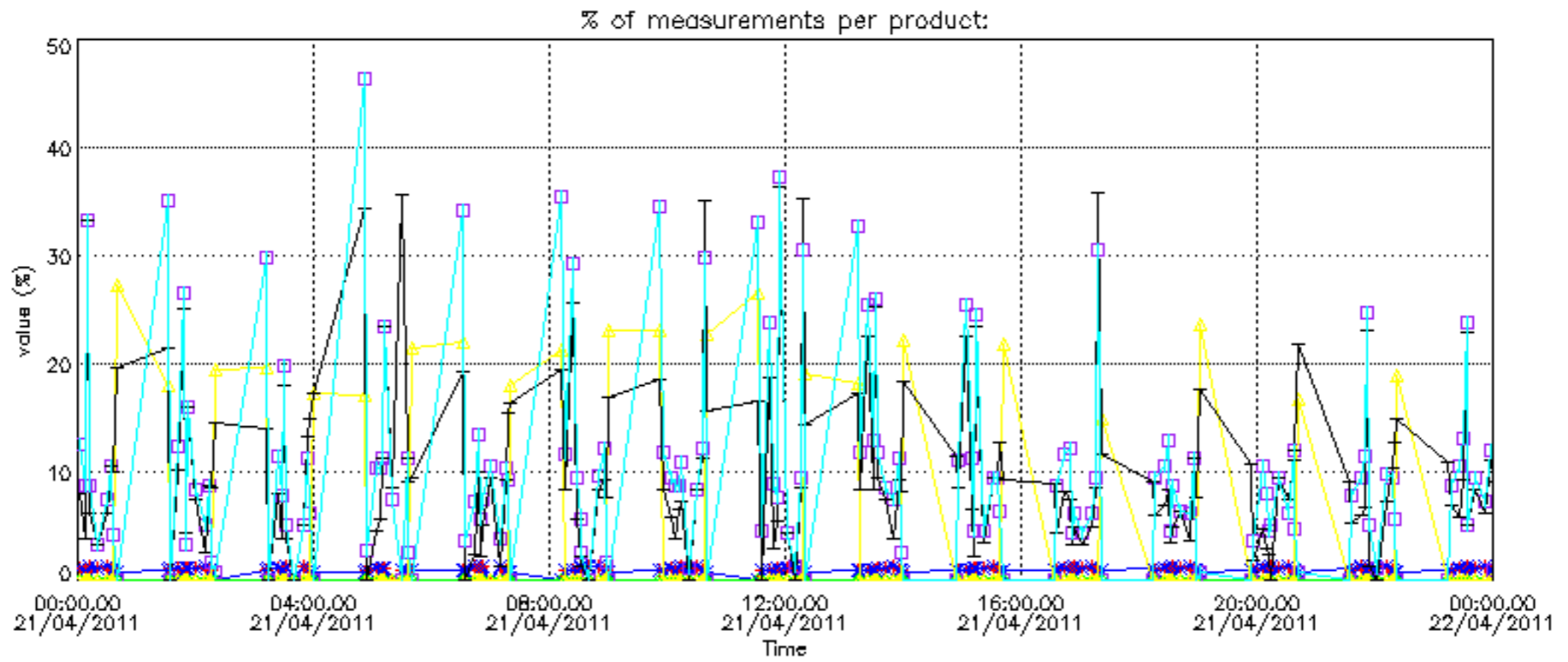
Percentage of flagged data per NO2 profile



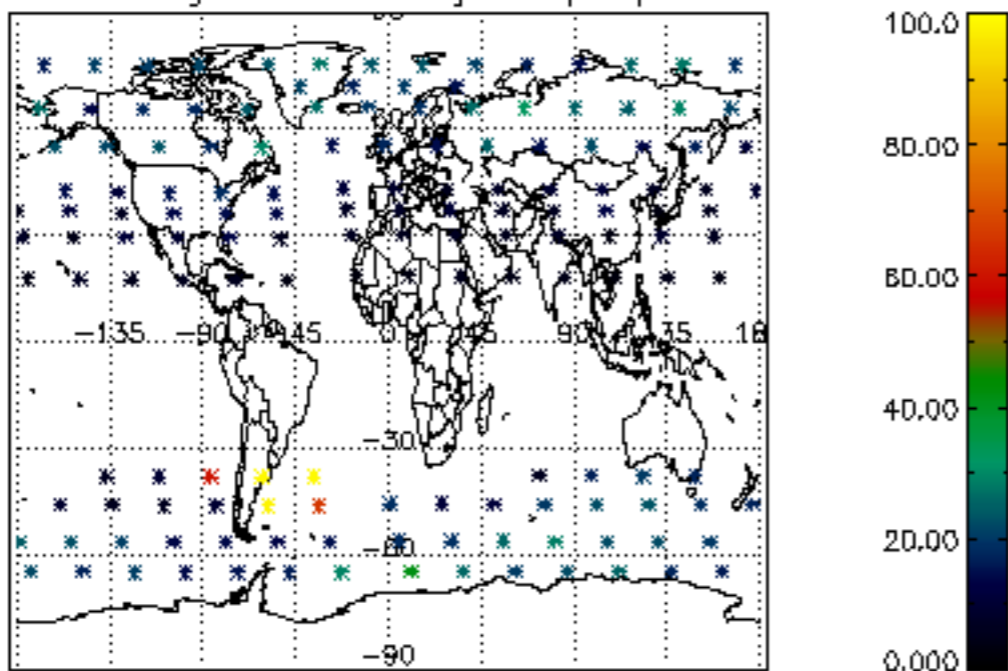
Percentage of flagged data per NO3 profile



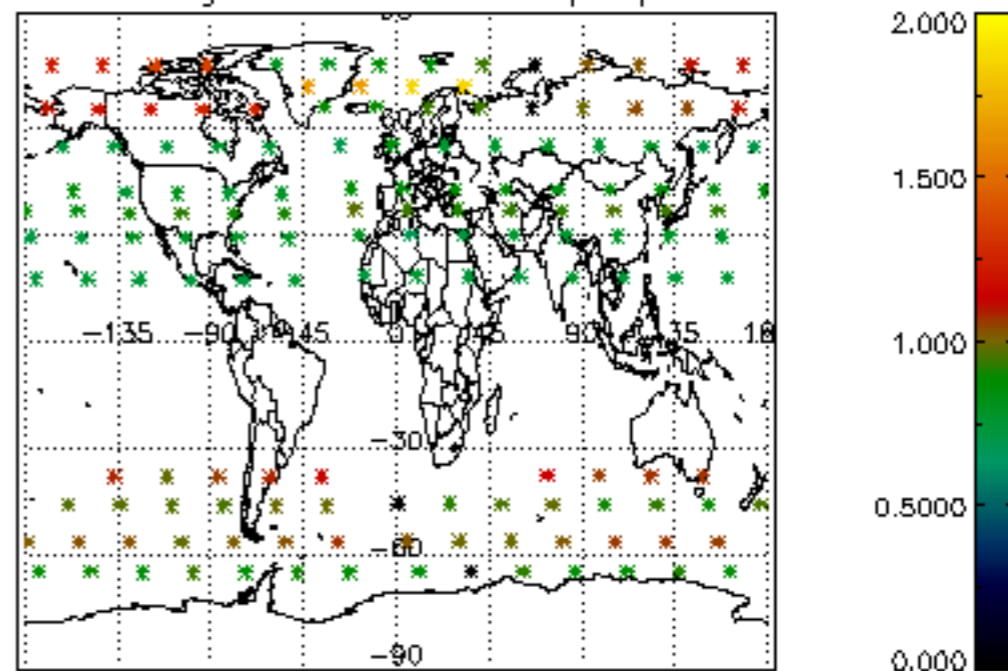




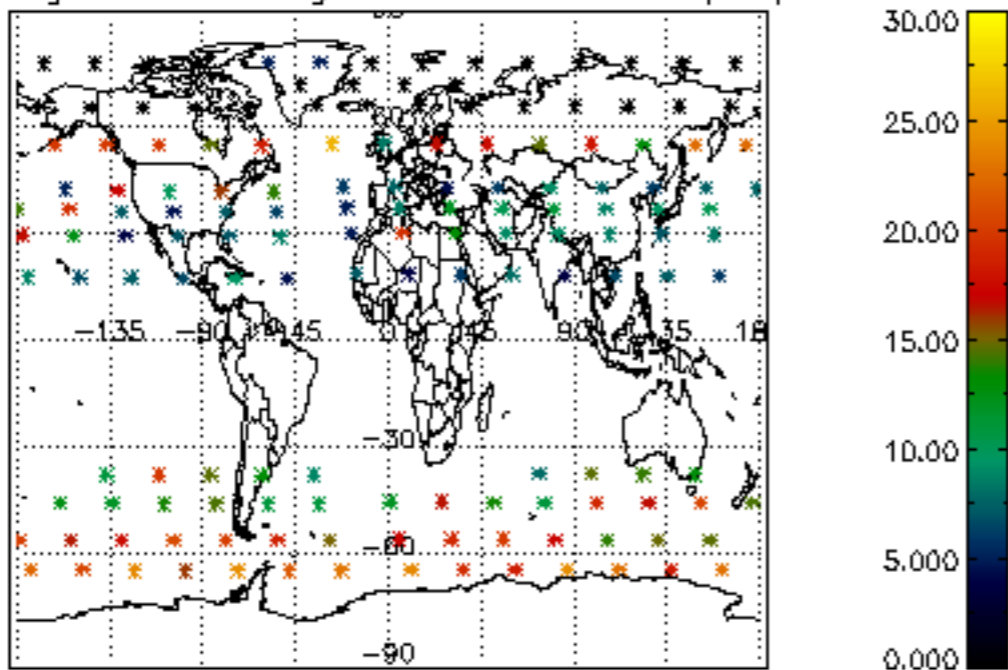
Percentage of cosmic ray hits per profile



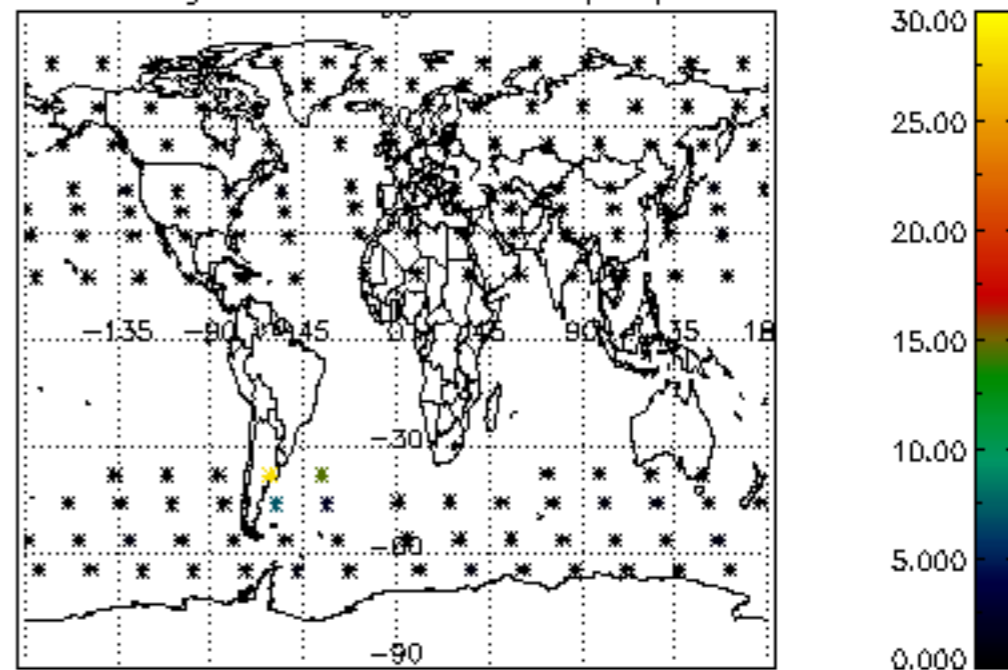
Percentage of datation errors per profile



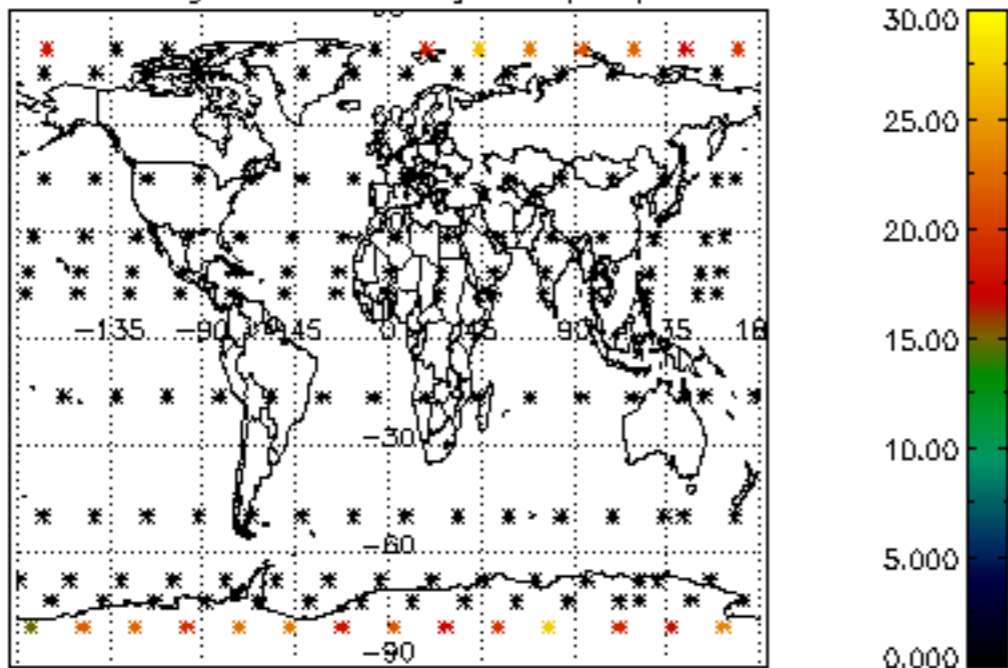
Percentage of star falling outside central band per profile



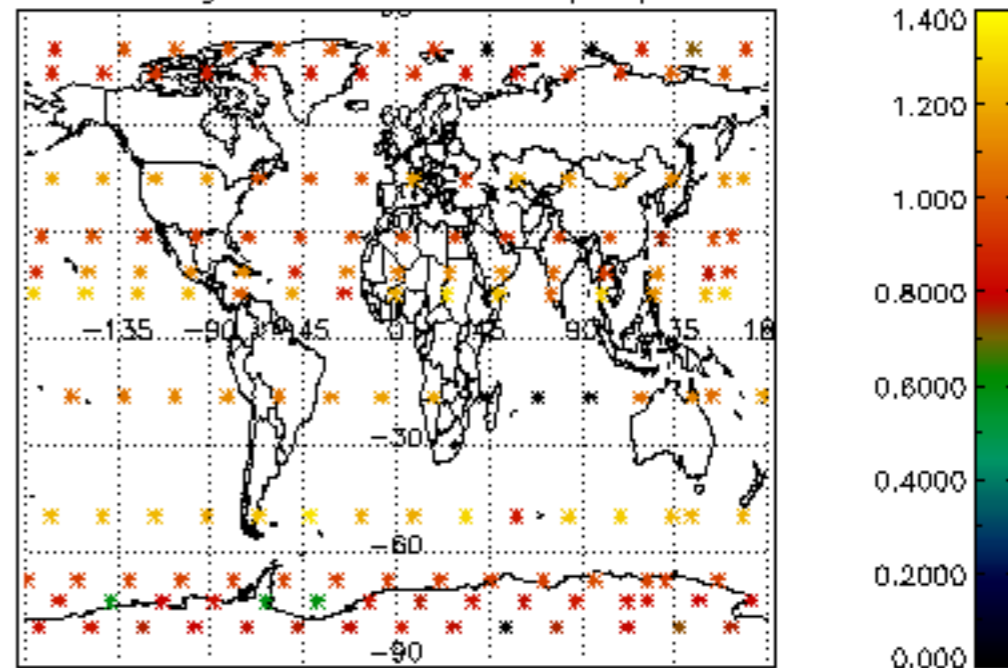
Percentage of saturation errors per profile



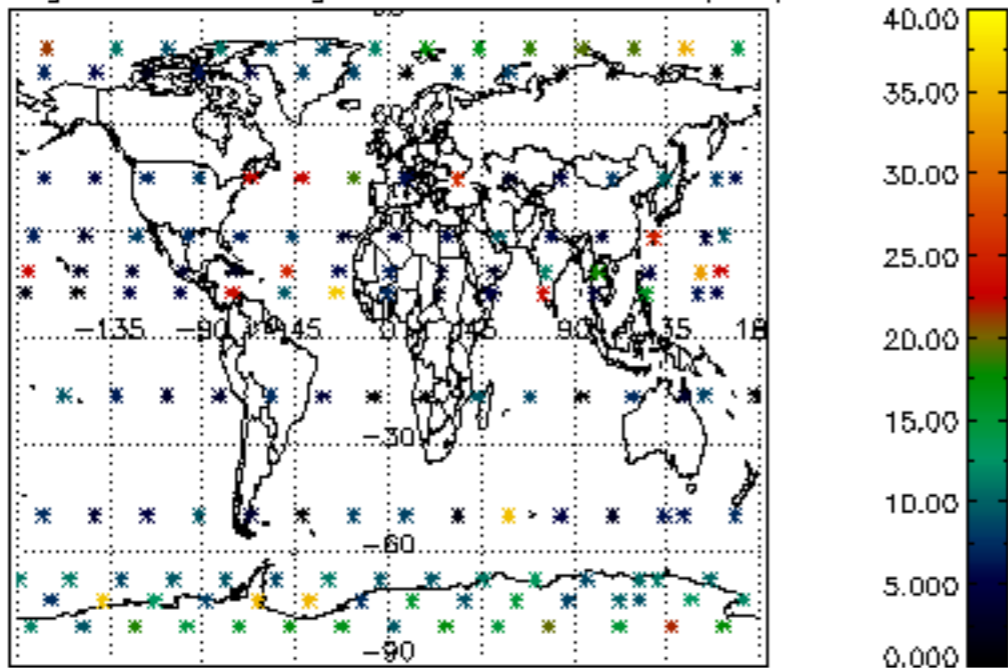
Percentage of cosmic ray hits per profile



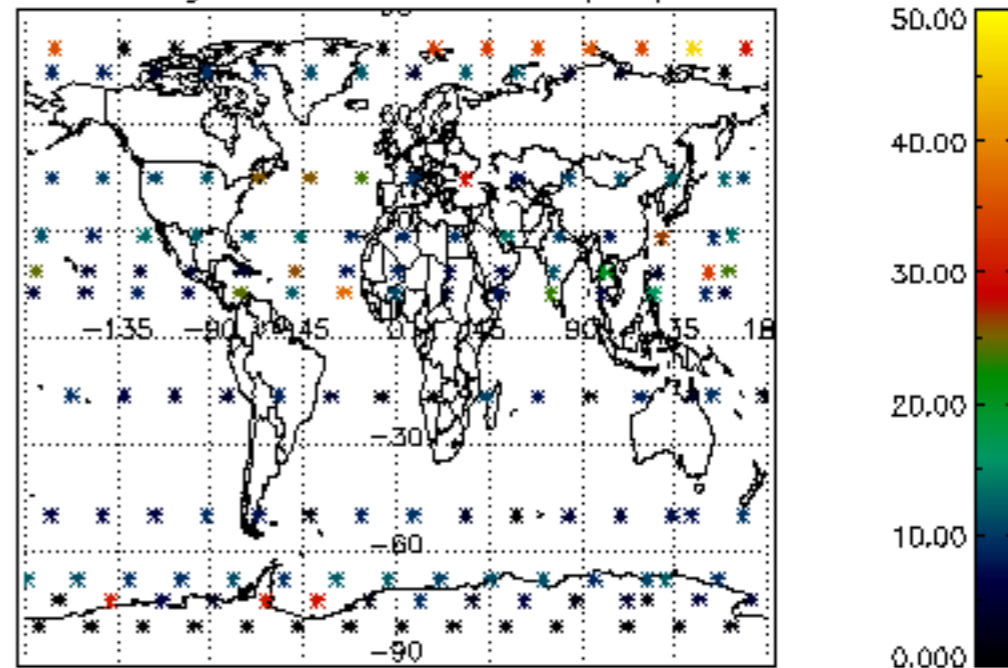
Percentage of datation errors per profile

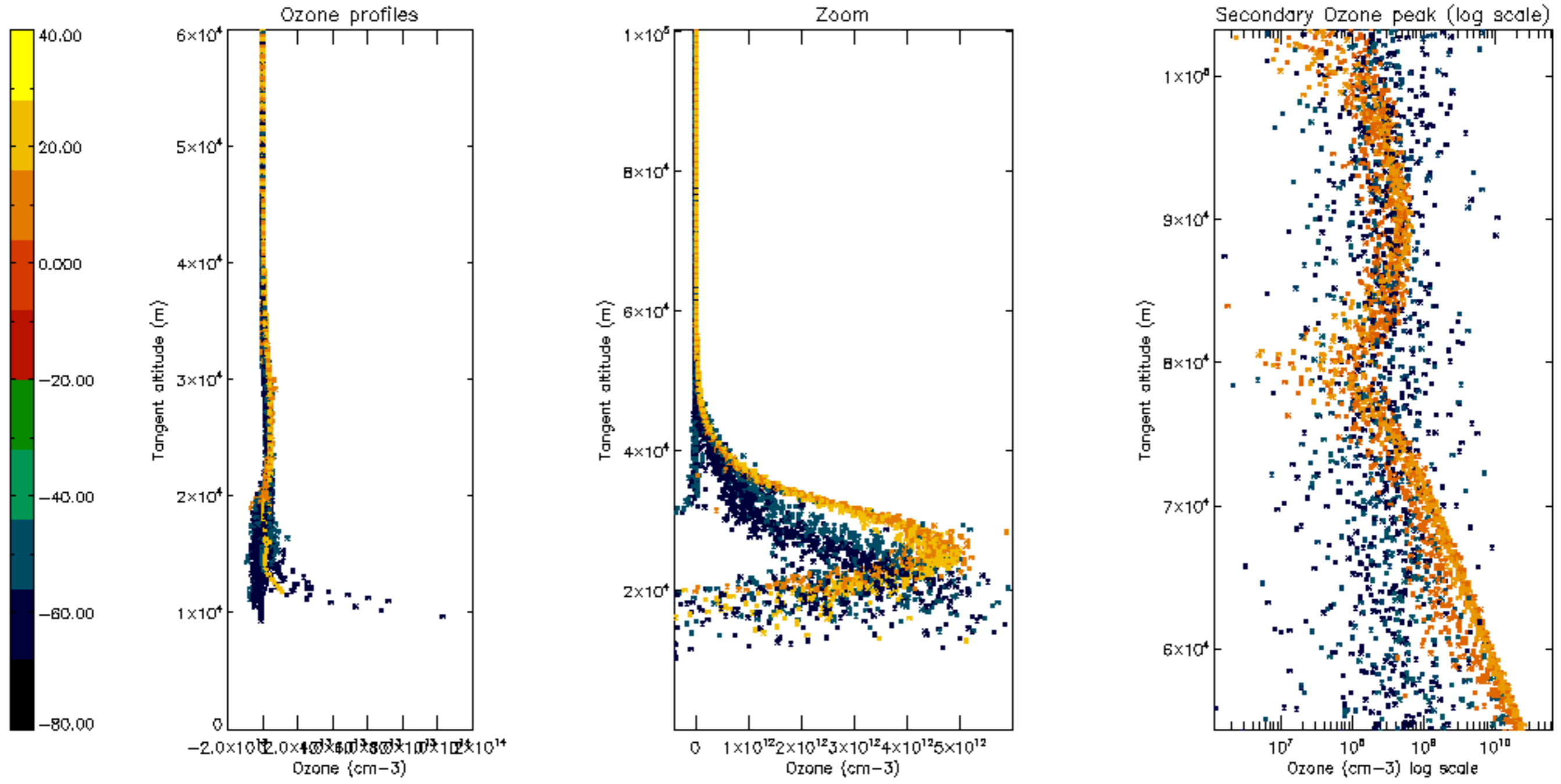


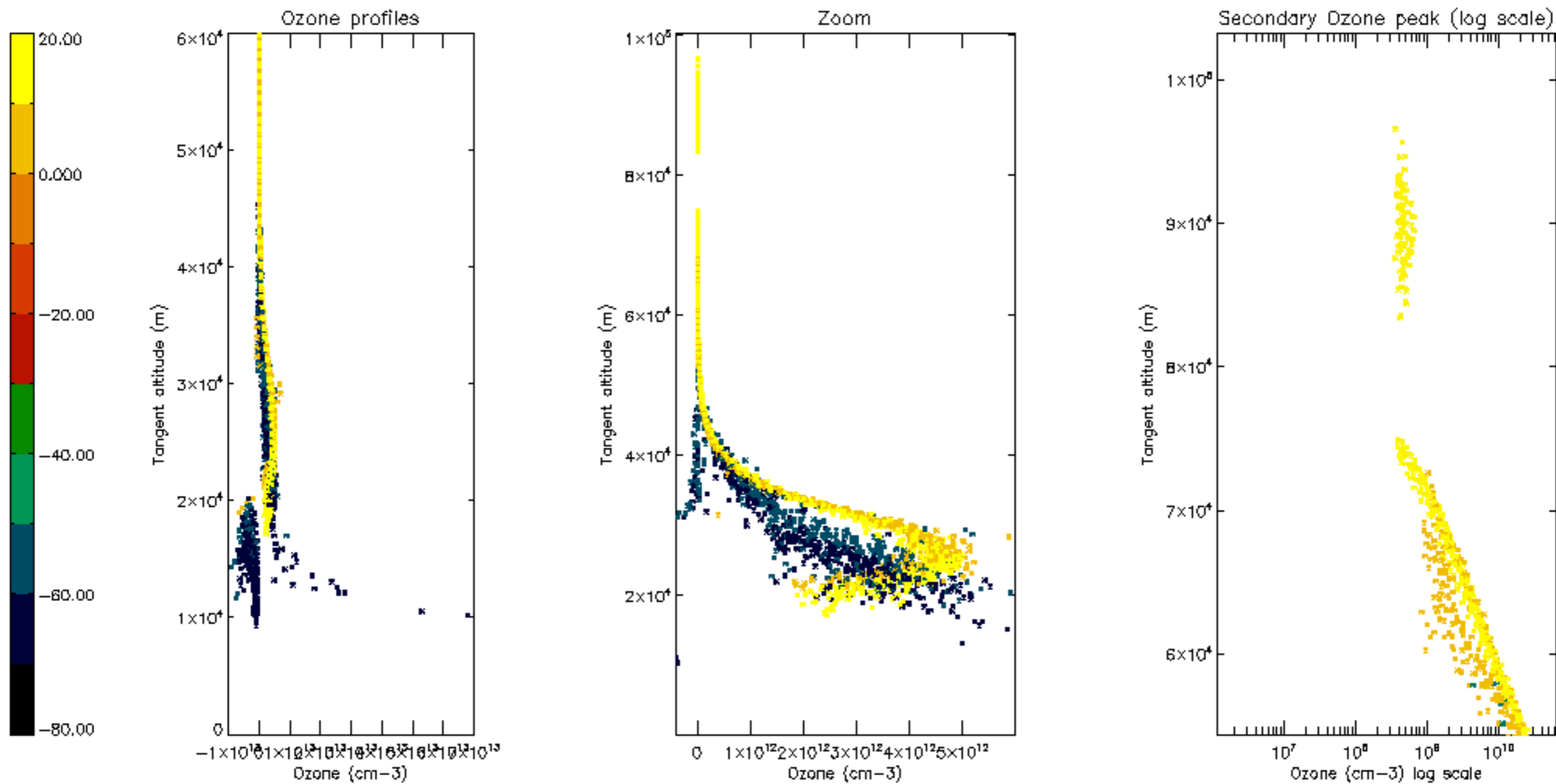
Percentage of star falling outside central band per profile

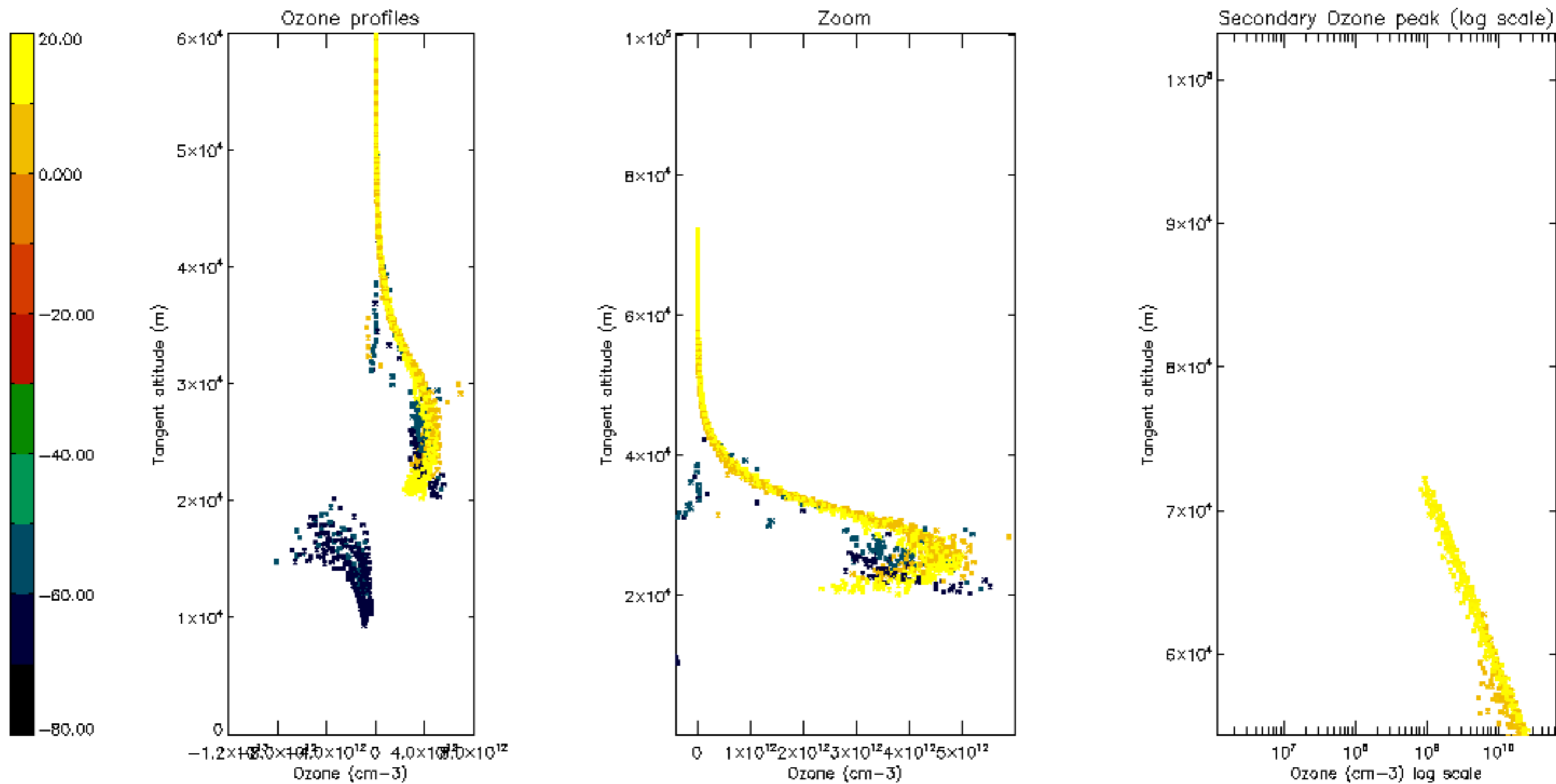


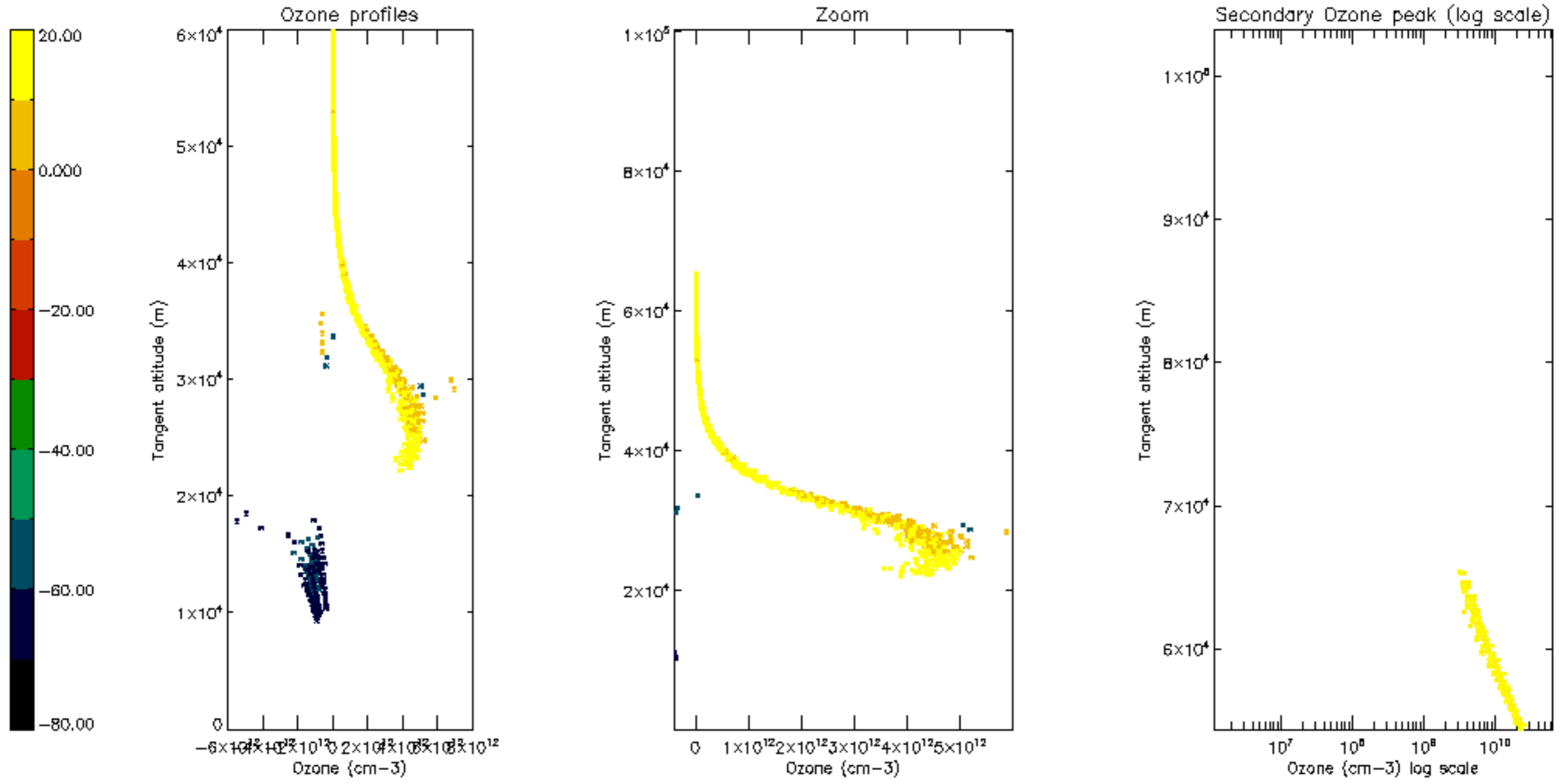
Percentage of saturation errors per profile

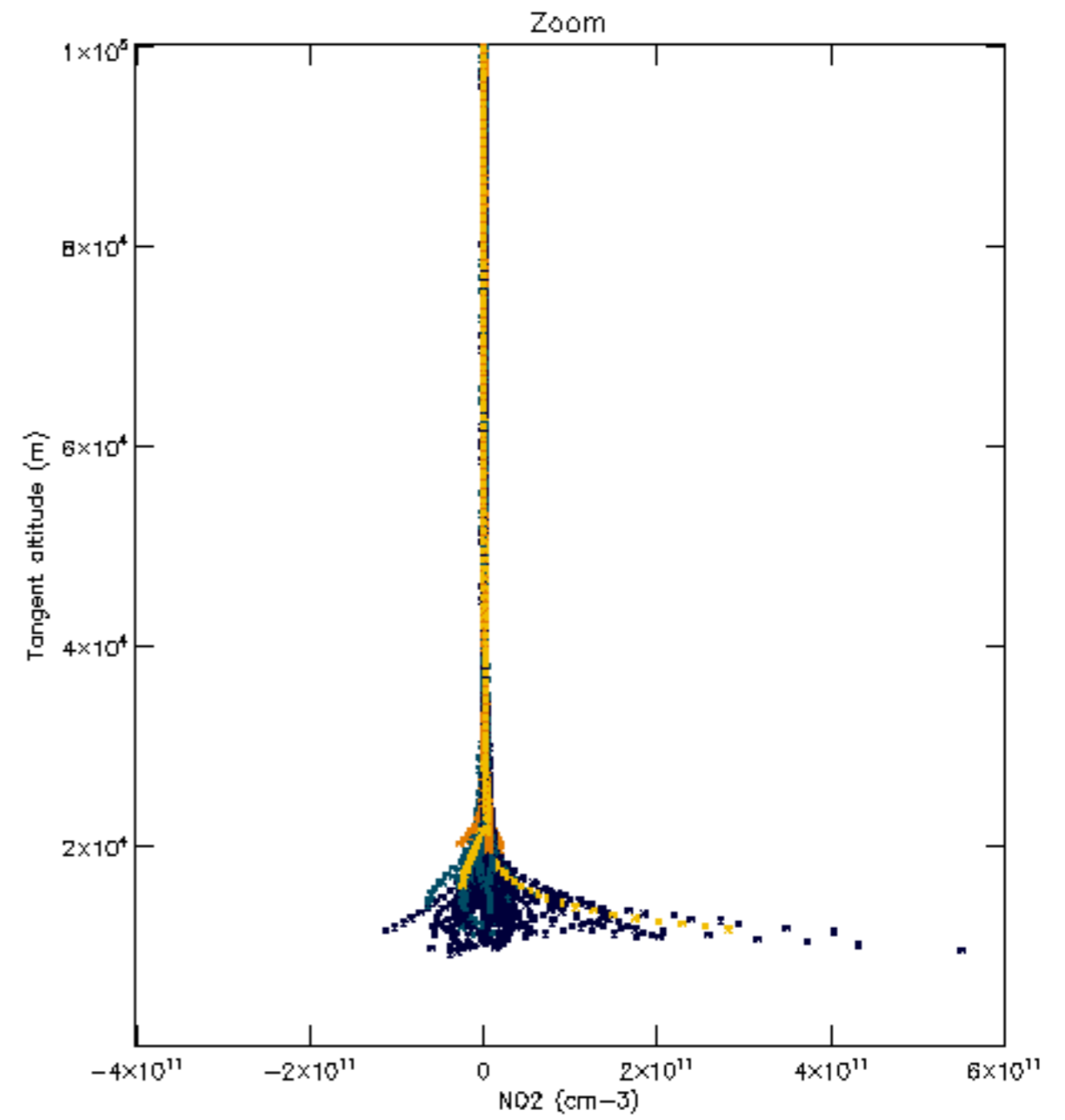
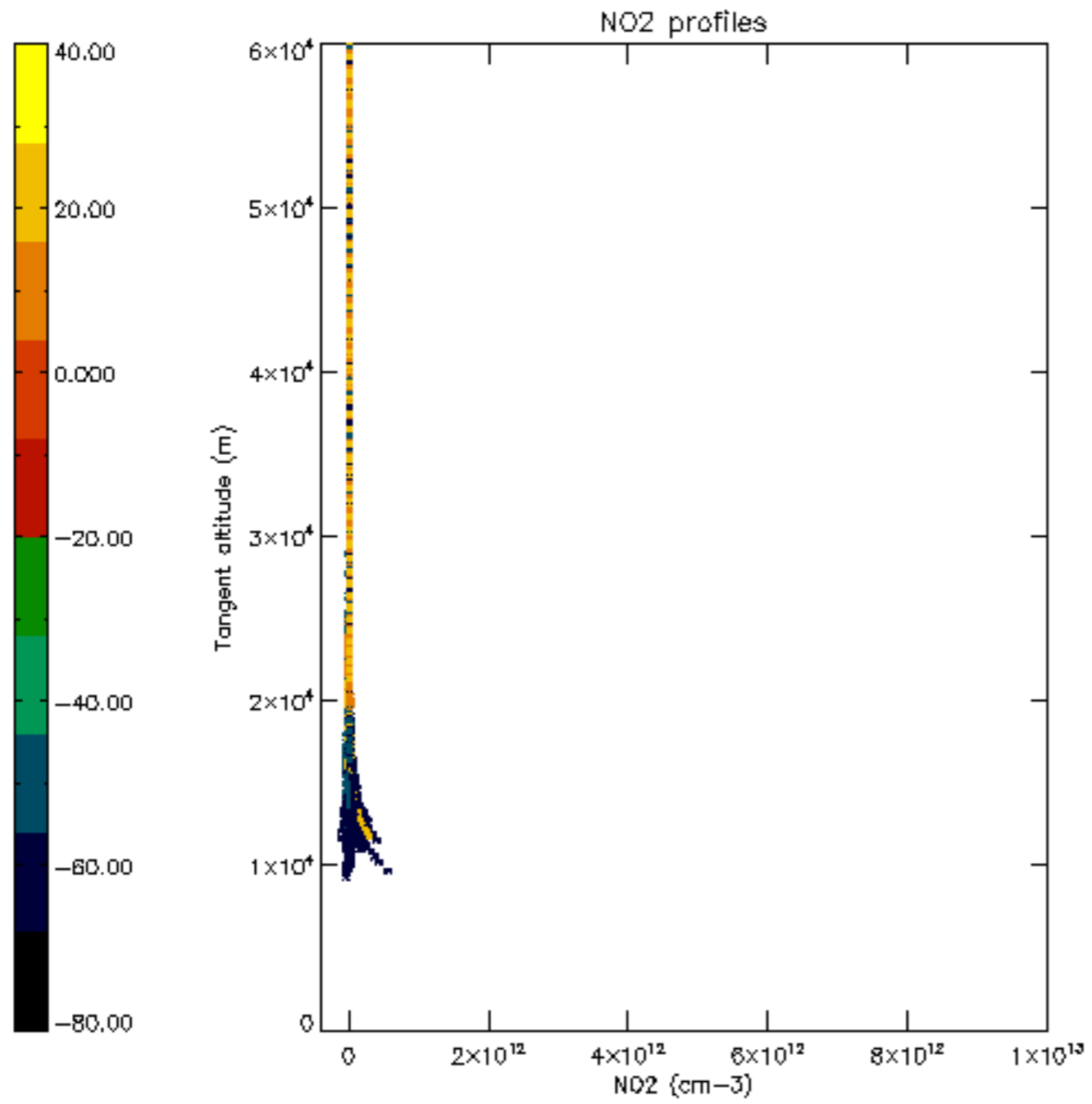


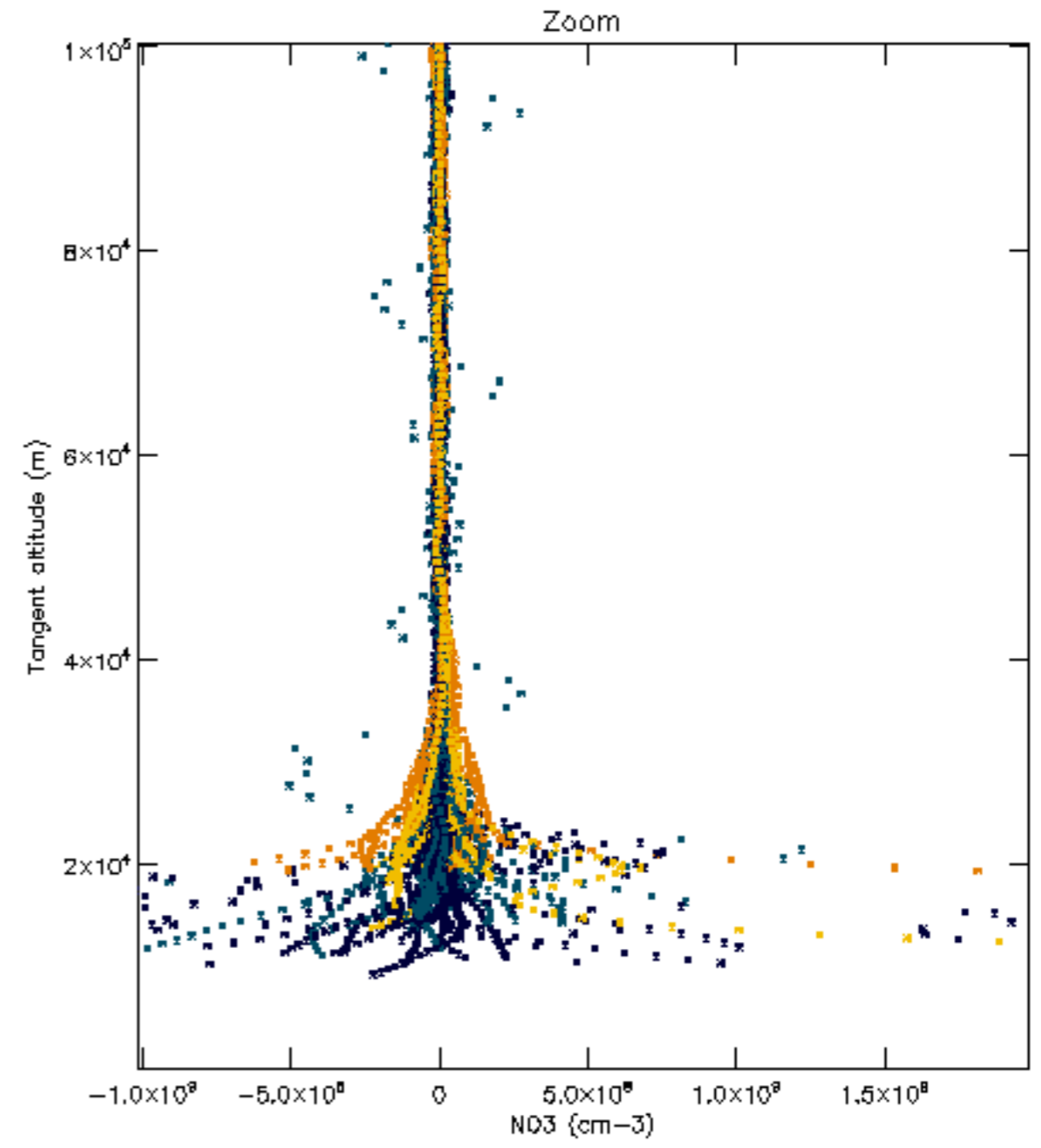
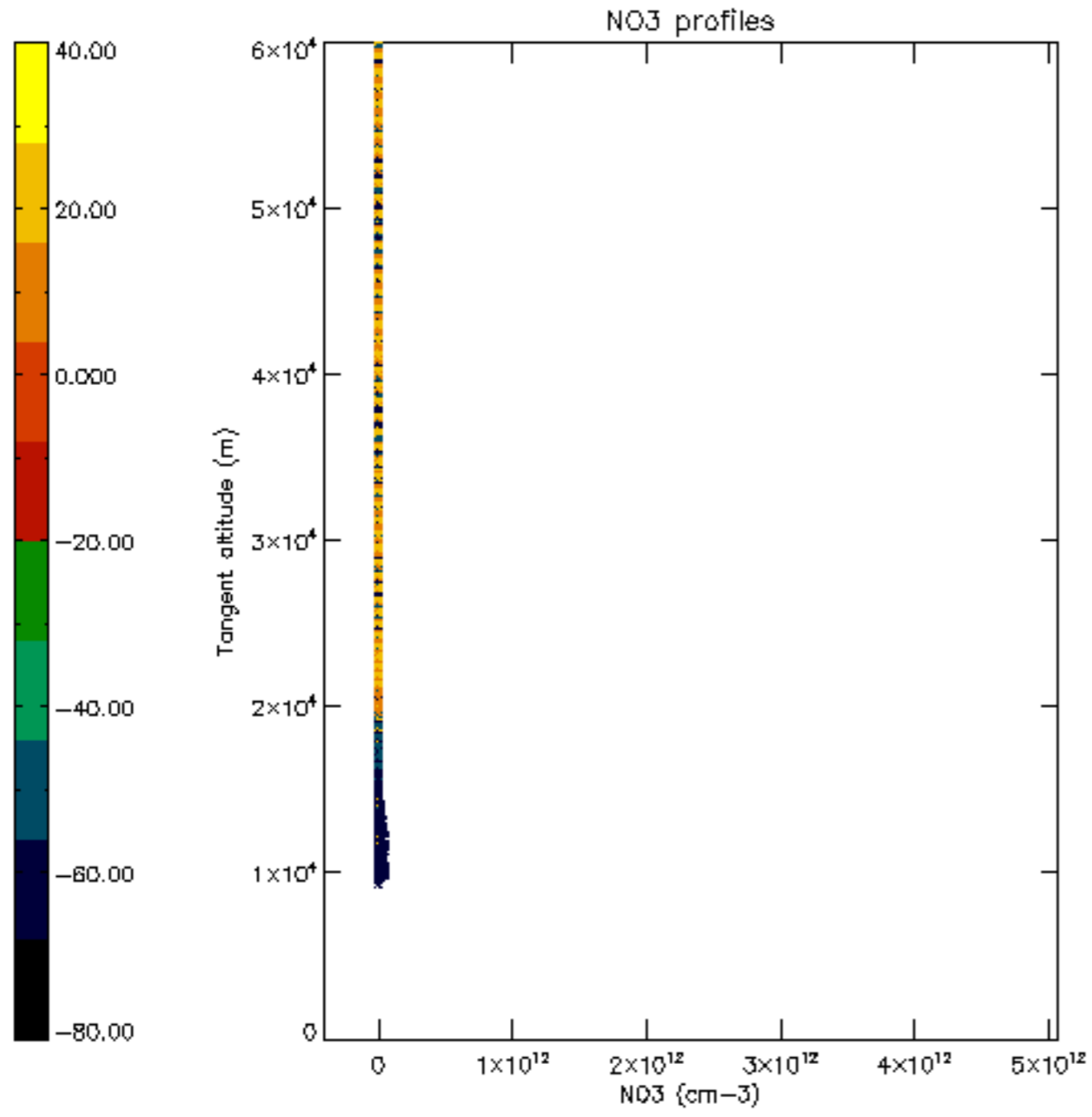


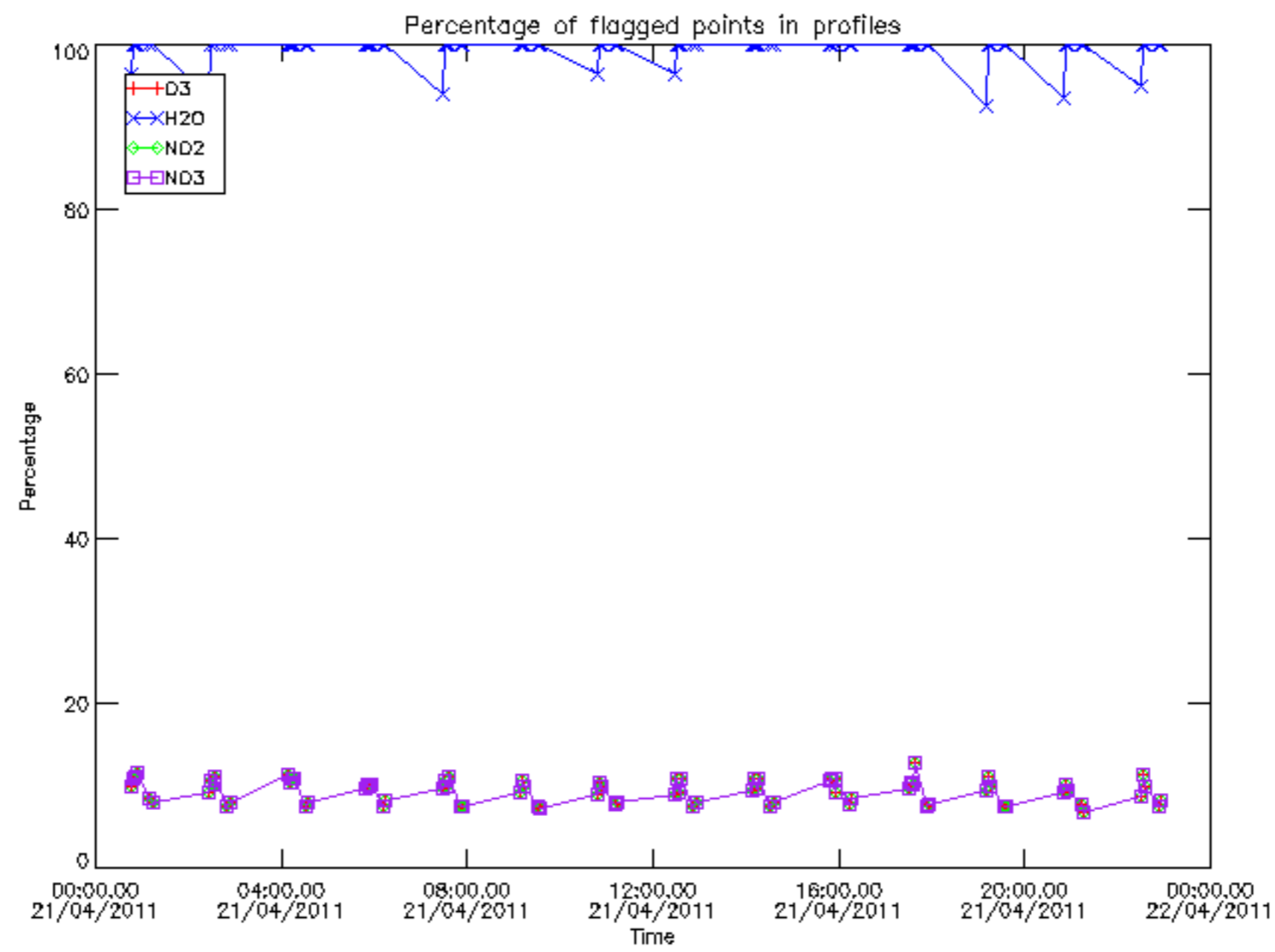




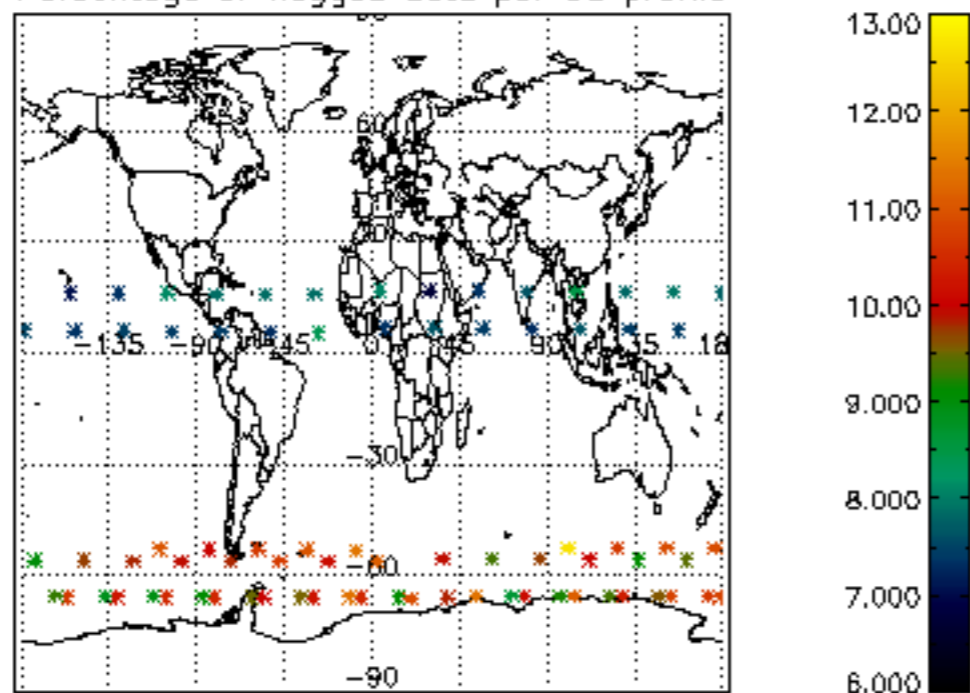




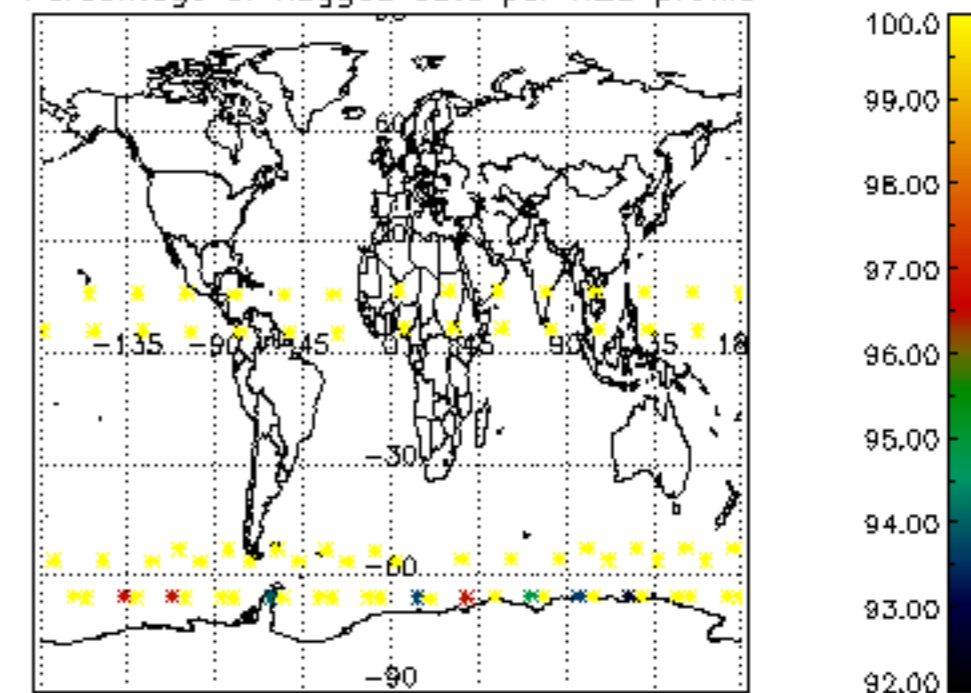




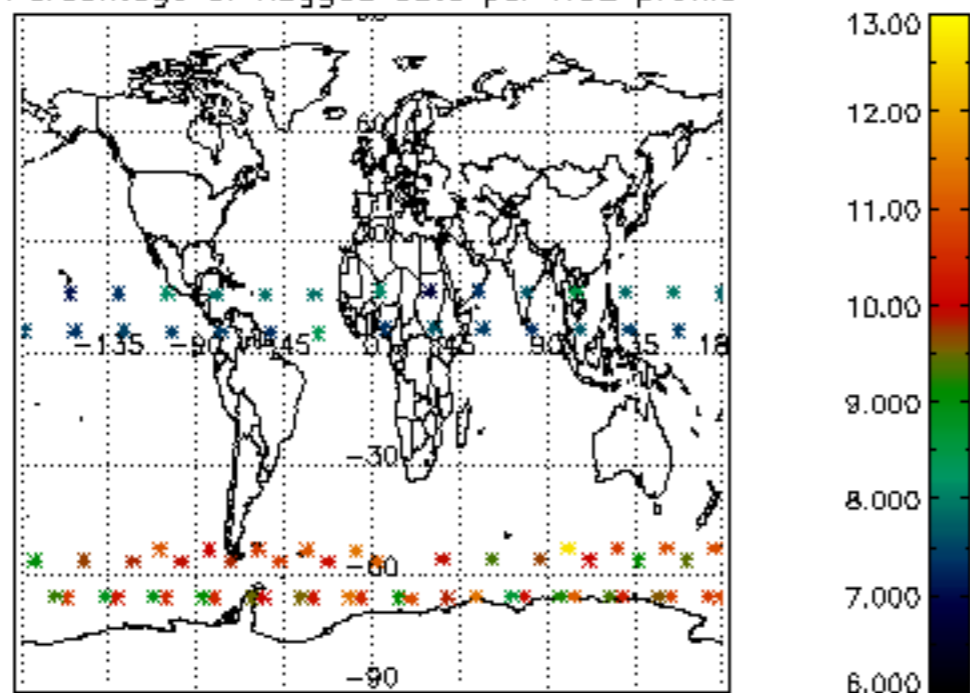
Percentage of flagged data per D3 profile



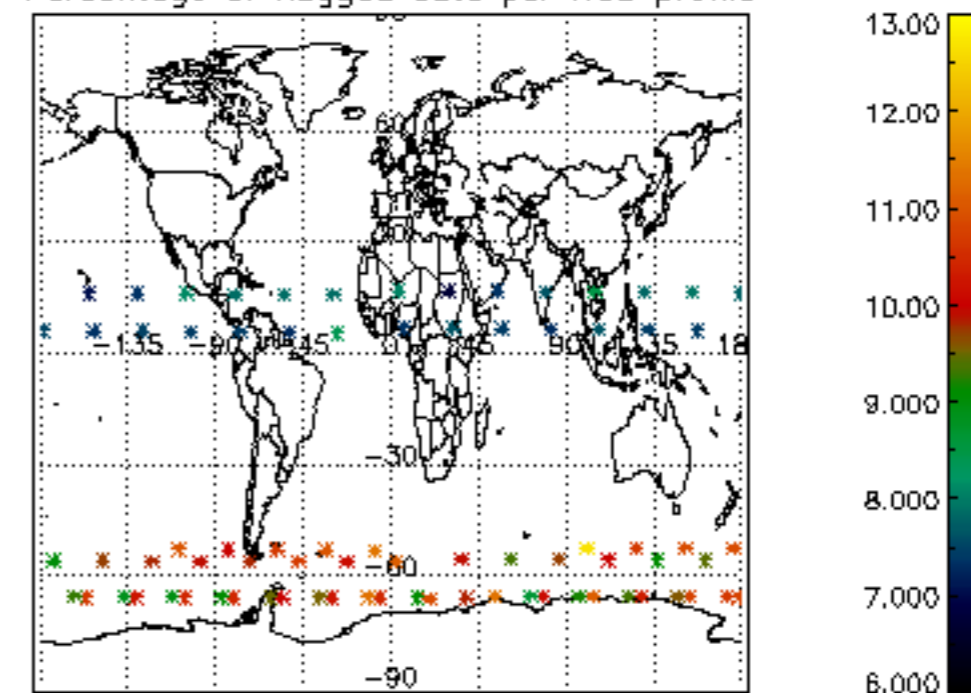
Percentage of flagged data per H2O profile

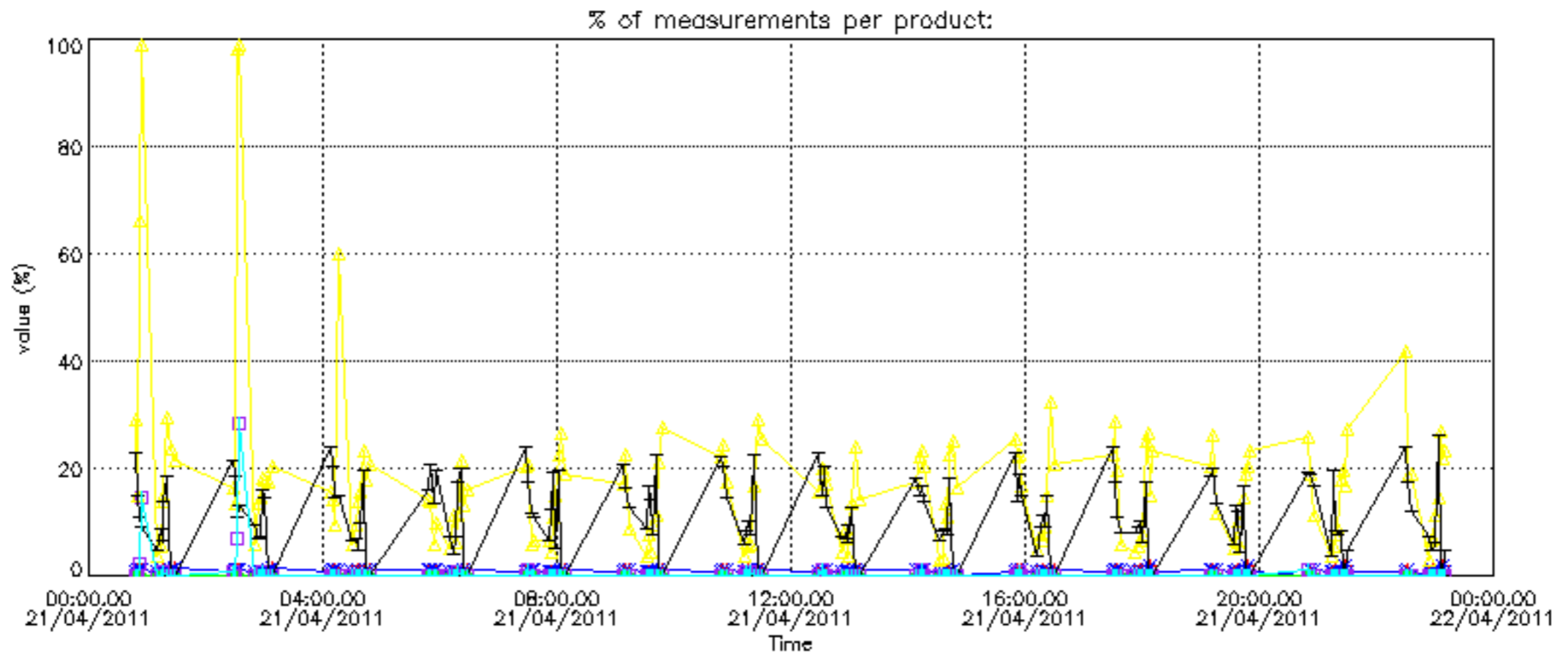


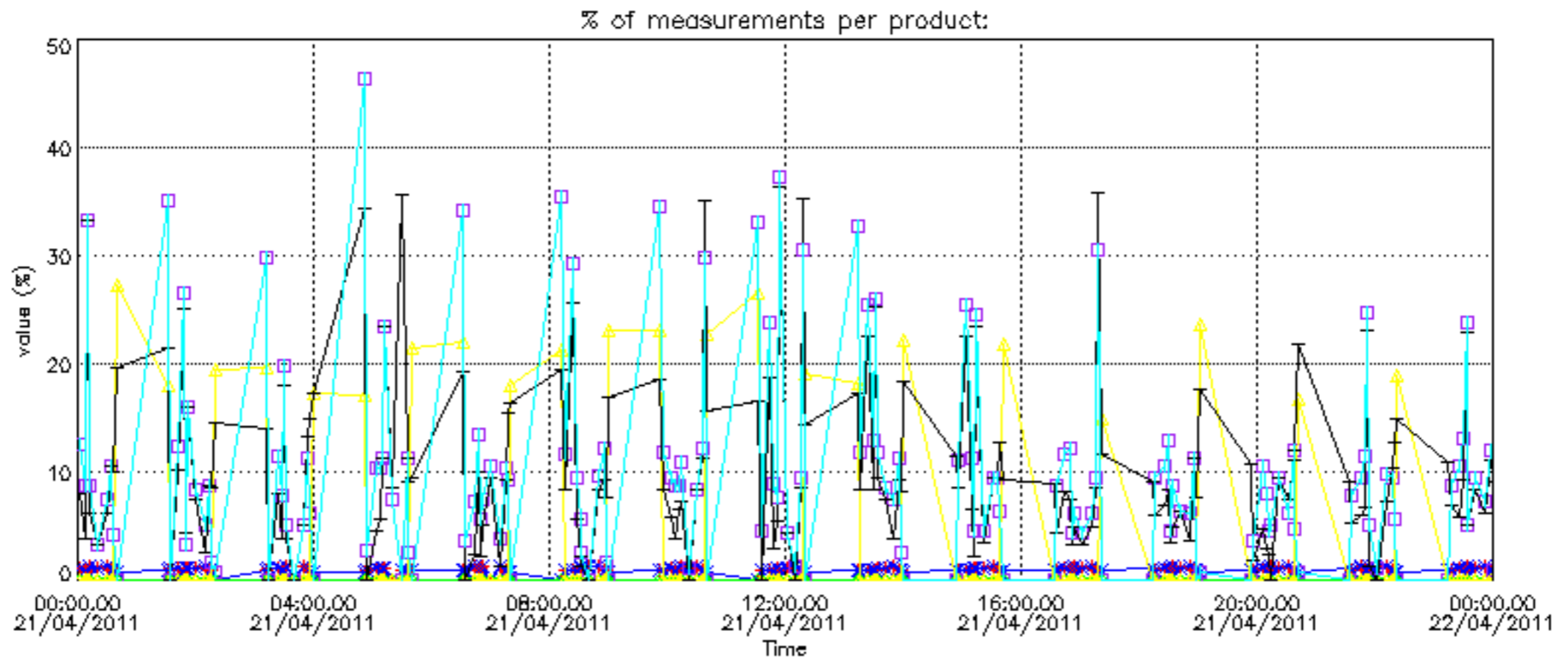
Percentage of flagged data per NO2 profile



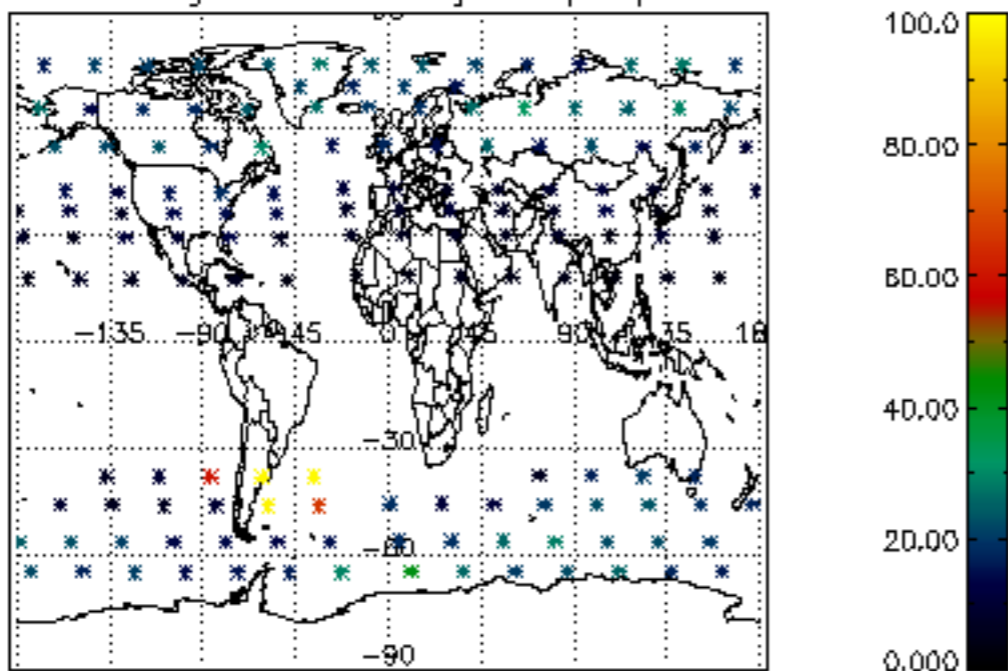
Percentage of flagged data per NO3 profile



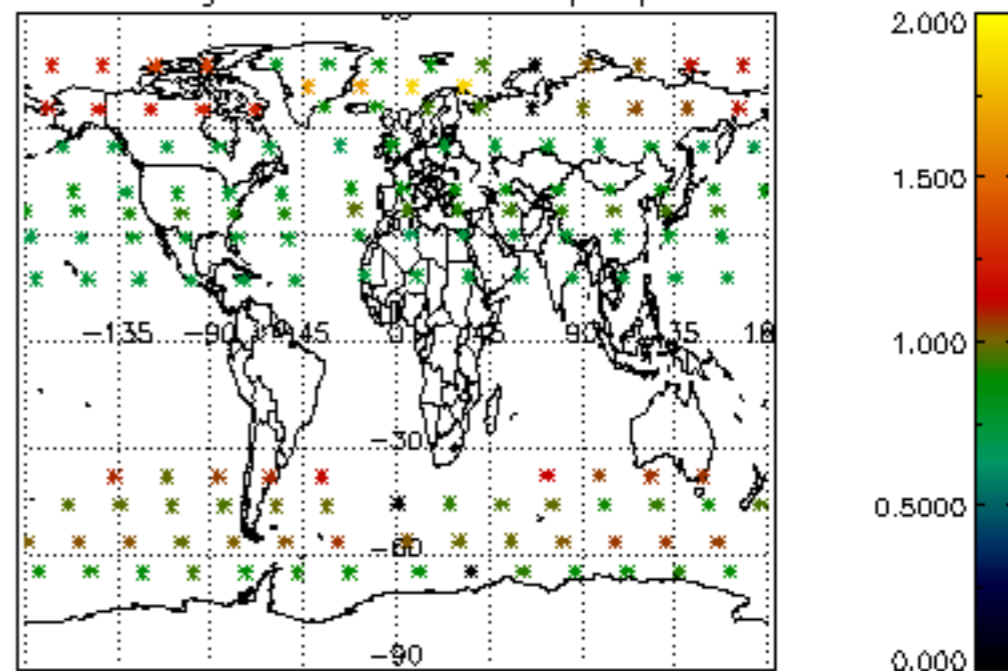




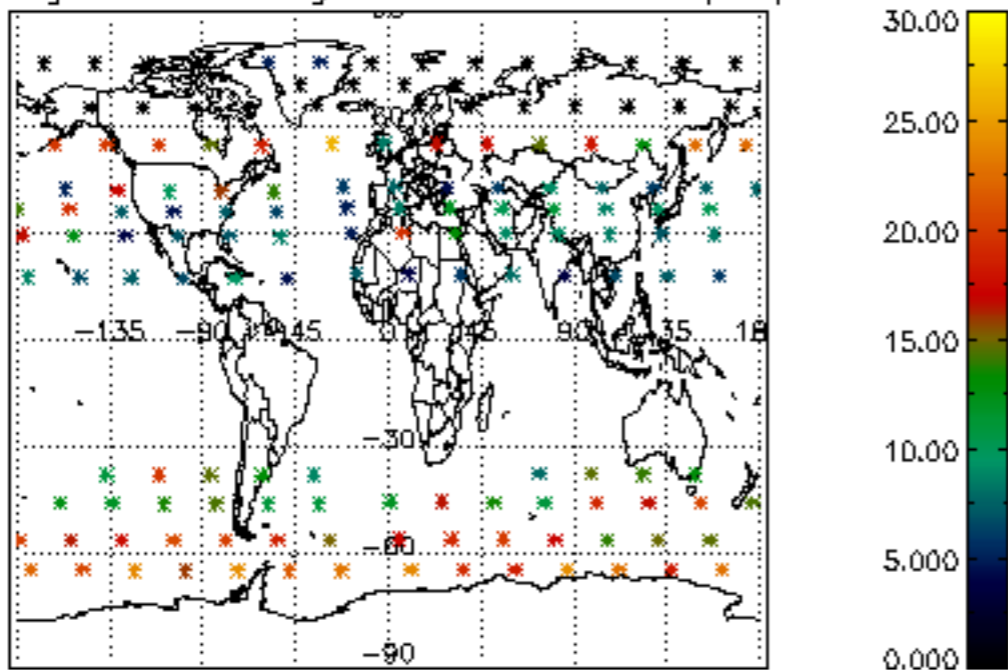
Percentage of cosmic ray hits per profile



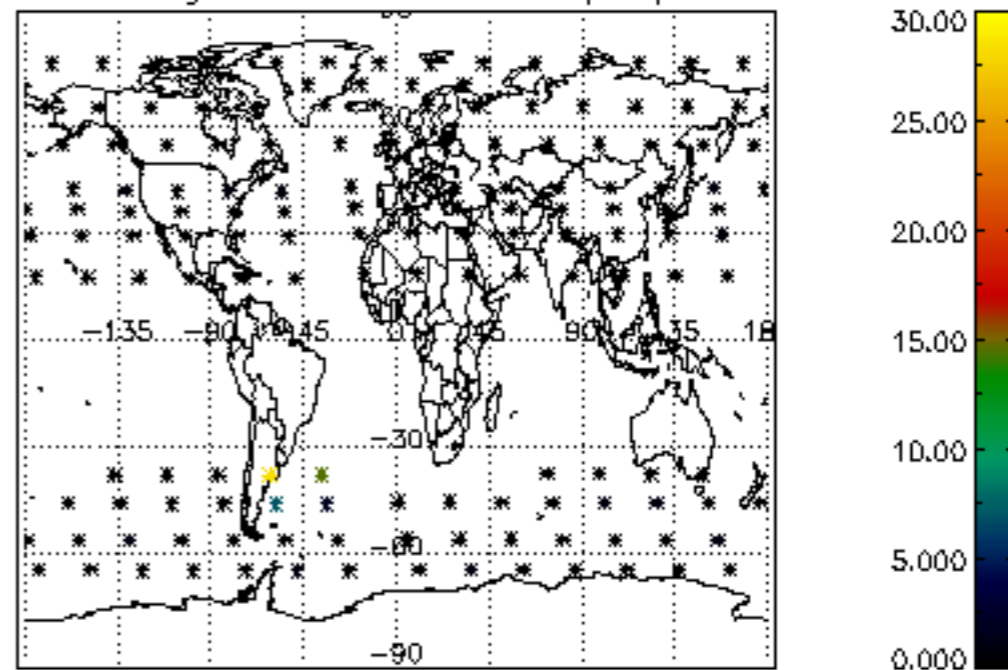
Percentage of datation errors per profile



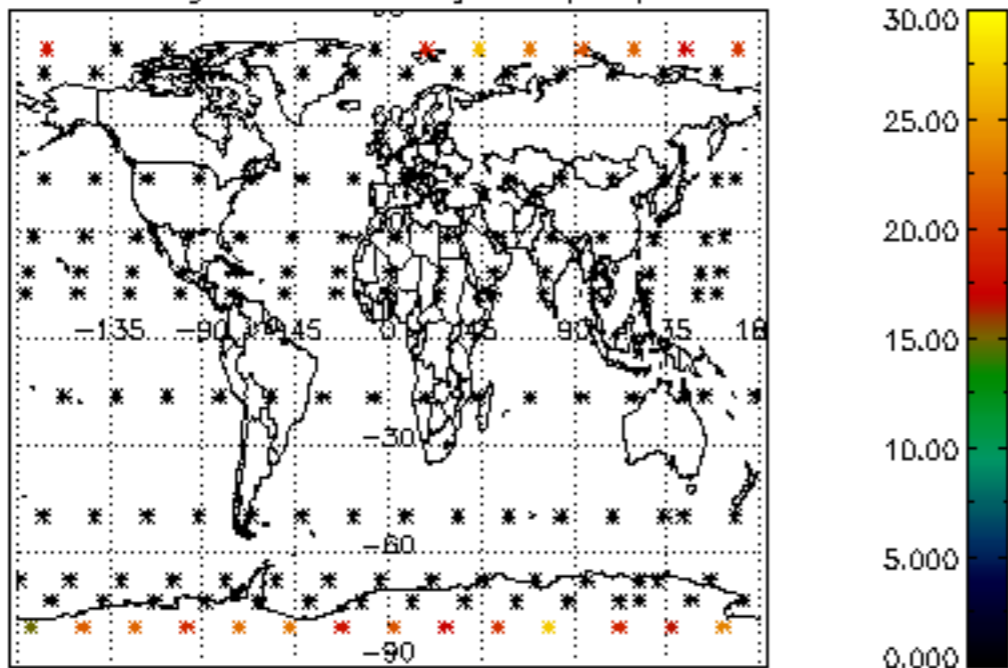
Percentage of star falling outside central band per profile



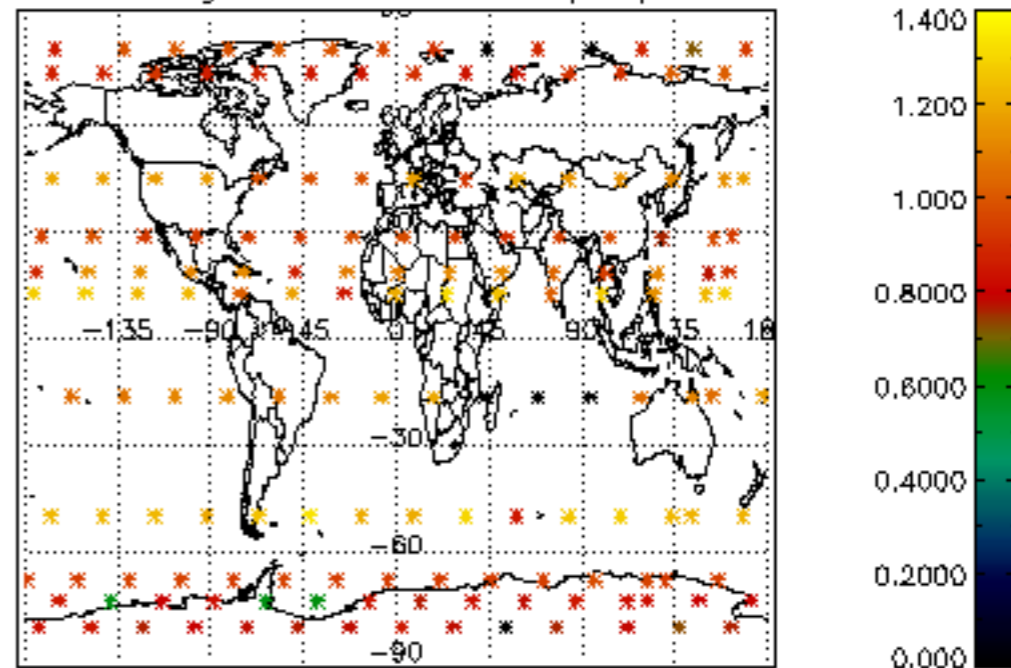
Percentage of saturation errors per profile



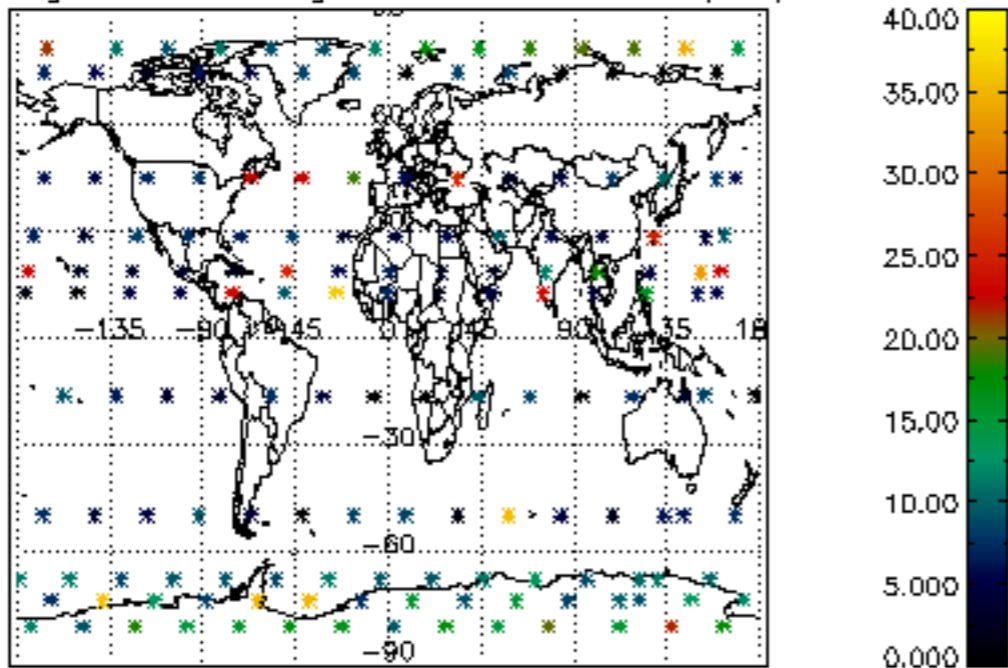
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

