

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	18APR2013 09:53:34
Data source version	GOMOS/6.01
Start time of products	28-06-2005 (28JUN2005 00:00:00)
Stop time of products	29-06-2005 (29JUN2005 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	62
Nb of prods with errors	4

2. Summary of processed GOM_NL__2P products.

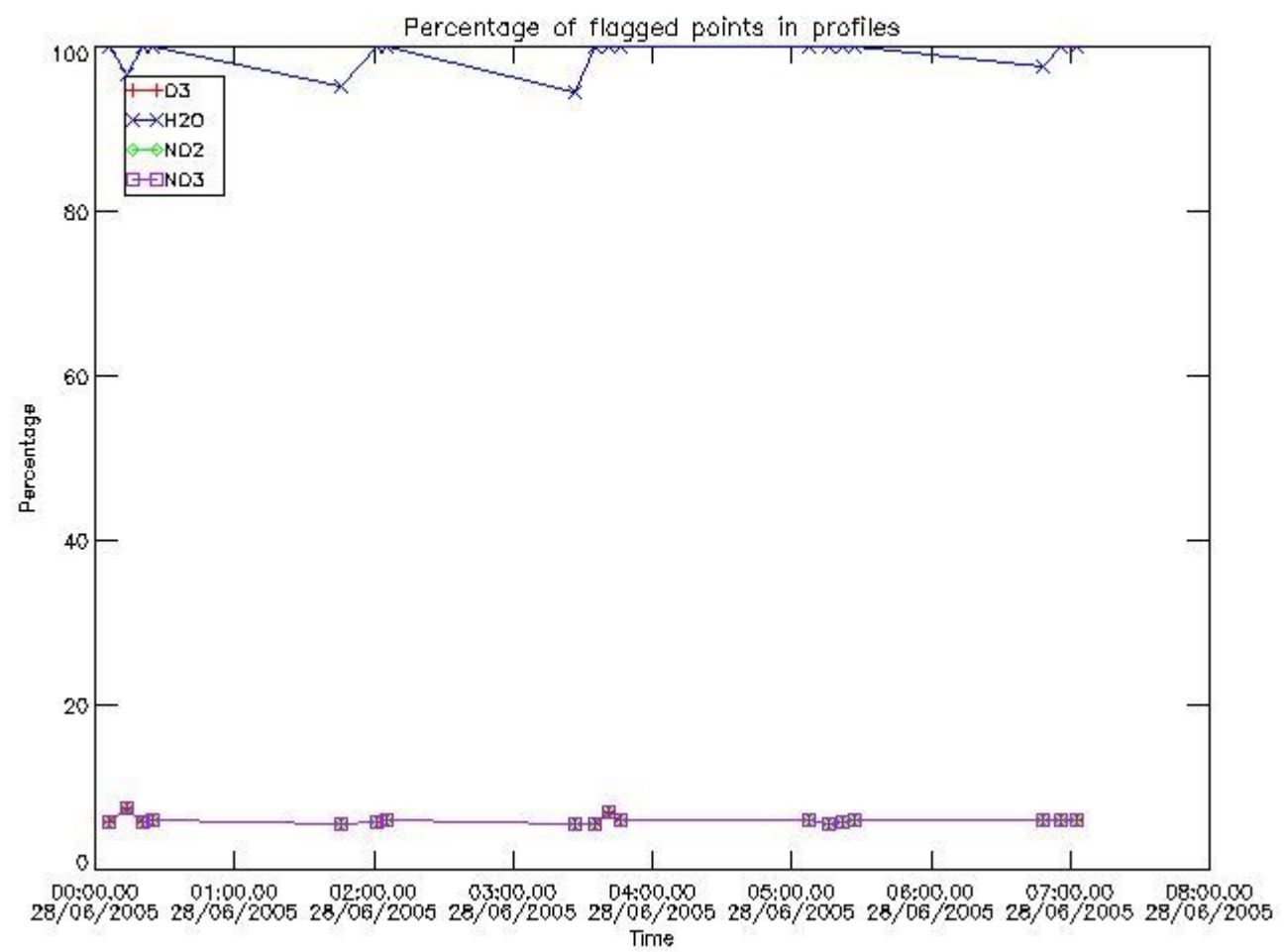
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20050628_000540_000000892038_00302_17390_4756.N1	28-JUN-2005 00:05:40	Dark	88.500	165	34Gam Eri	2.9500	3200.0	177	17390	No
2	GOM_NL__2PRFIN20050628_001356_000000902038_00302_17390_4757.N1	28-JUN-2005 00:13:56	Dark	90.000	157	The1Eri	2.9060	9300.0	180	17390	No
3	GOM_NL__2PRFIN20050628_002024_000000872038_00303_17391_4758.N1	28-JUN-2005 00:20:24	Dark	87.000	143	Alp Hyi	2.8570	7200.0	174	17391	No
4	GOM_NL__2PRFIN20050628_002453_000000852038_00303_17391_4809.N1	28-JUN-2005 00:24:53	Dark	85.000	135	Bet Hyi	2.8200	5800.0	170	17391	No
5	GOM_NL__2PRFIN20050628_003232_000001002038_00303_17391_4810.N1	28-JUN-2005 00:32:32	Straylight	99.500	43	Alp TrA	1.9100	4250.0	199	17391	No
6	GOM_NL__2PRFIN20050628_003554_000000912038_00303_17391_4811.N1	28-JUN-2005 00:35:54	Straylight	90.500	141	Bet Ara	2.8400	4600.0	181	17391	No
7	GOM_NL__2PRFIN20050628_003945_000000272038_00303_17391_4812.N1	28-JUN-2005 00:39:45	Dark	27.000	178	lot1Sco	3.0220	6550.0	54	17391	Yes
8	GOM_NL__2PRFIN20050628_004047_000000932038_00303_17391_4813.N1	28-JUN-2005 00:40:47	Twilight	93.000	25	35Lam Sco	1.6200	28000.	186	17391	No
9	GOM_NL__2PRFIN20050628_004427_000000912038_00303_17391_4814.N1	28-JUN-2005 00:44:27	Bright	91.000	16	21Alp Sco	1.0200	3000.0	182	17391	No
10	GOM_NL__2PRFIN20050628_004633_000000892038_00303_17391_4815.N1	28-JUN-2005 00:46:33	Bright	88.500	97	8Bet1Sco	2.5610	30000.	177	17391	No
11	GOM_NL__2PRFIN20050628_004846_000000872038_00303_17391_4816.N1	28-JUN-2005 00:48:46	Bright	86.500	98	13Zet Oph	2.5710	30000.	173	17391	No
12	GOM_NL__2PRFIN20050628_005055_000000862038_00303_17391_4817.N1	28-JUN-2005 00:50:55	Bright	86.000	120	1Del Oph	2.7340	3200.0	172	17391	No
13	GOM_NL__2PRFIN20050628_005408_000000872038_00303_17391_4818.N1	28-JUN-2005 00:54:08	Bright	86.500	102	24Alp Ser	2.6000	4250.0	173	17391	No
14	GOM_NL__2PRFIN20050628_005745_000000852038_00303_17391_4819.N1	28-JUN-2005 00:57:45	Bright	85.000	127	27Bet Her	2.7810	4700.0	170	17391	No
15	GOM_NL__2PRFIN20050628_005950_000000852038_00303_17391_4820.N1	28-JUN-2005 00:59:50	Bright	85.000	67	5Alp CrB	2.2210	11000.	170	17391	No
16	GOM_NL__2PRFIN20050628_011251_000001022038_00303_17391_4821.N1	28-JUN-2005 01:12:51	Bright	102.00	60	7Bet UMi	2.0810	3950.0	204	17391	No
17	GOM_NL__2PRFIN20050628_014616_000000932038_00303_17391_4822.N1	28-JUN-2005 01:46:16	Dark	92.500	165	34Gam Eri	2.9500	3200.0	185	17391	No
18	GOM_NL__2PRFIN20050628_020100_000000872038_00304_17392_4823.N1	28-JUN-2005 02:01:00	Dark	87.000	143	Alp Hyi	2.8570	7200.0	174	17392	No
19	GOM_NL__2PRFIN20050628_020530_000000852038_00304_17392_4763.N1	28-JUN-2005 02:05:30	Dark	85.000	135	Bet Hyi	2.8200	5800.0	170	17392	No
20	GOM_NL__2PRFIN20050628_021308_000000952038_00304_17392_4764.N1	28-JUN-2005 02:13:08	Straylight	94.500	43	Alp TrA	1.9100	4250.0	189	17392	No
21	GOM_NL__2PRFIN20050628_021630_000000882038_00304_17392_4765.N1	28-JUN-2005 02:16:30	Straylight	88.000	141	Bet Ara	2.8400	4600.0	176	17392	No
22	GOM_NL__2PRFIN20050628_022021_000000272038_00304_17392_4766.N1	28-JUN-2005 02:20:21	Dark	27.000	178	lot1Sco	3.0220	6550.0	54	17392	Yes
23	GOM_NL__2PRFIN20050628_022123_000000922038_00304_17392_4767.N1	28-JUN-2005 02:21:23	Twilight	91.500	25	35Lam Sco	1.6200	28000.	183	17392	No
24	GOM_NL__2PRFIN20050628_022503_000000912038_00304_17392_4768.N1	28-JUN-2005 02:25:03	Bright	91.000	16	21Alp Sco	1.0200	3000.0	182	17392	No
25	GOM_NL__2PRFIN20050628_022709_000000872038_00304_17392_4769.N1	28-JUN-2005 02:27:09	Bright	87.000	97	8Bet1Sco	2.5610	30000.	174	17392	No
26	GOM_NL__2PRFIN20050628_022923_000000882038_00304_17392_4770.N1	28-JUN-2005 02:29:23	Bright	87.500	98	13Zet Oph	2.5710	30000.	175	17392	No
27	GOM_NL__2PRFIN20050628_023131_000000872038_00304_17392_4771.N1	28-JUN-2005 02:31:31	Bright	86.500	120	1Del Oph	2.7340	3200.0	173	17392	No
28	GOM_NL__2PRFIN20050628_024027_000000842038_00304_17392_4772.N1	28-JUN-2005 02:40:27	Bright	83.500	67	5Alp CrB	2.2210	11000.	167	17392	No
29	GOM_NL__2PRFIN20050628_025327_000000832038_00304_17392_4773.N1	28-JUN-2005 02:53:27	Bright	82.500	60	7Bet UMi	2.0810	3950.0	165	17392	No
30	GOM_NL__2PRFIN20050628_032653_000000932038_00304_17392_4774.N1	28-JUN-2005 03:26:53	Dark	92.500	165	34Gam Eri	2.9500	3200.0	185	17392	No
31	GOM_NL__2PRFIN20050628_033509_000000932038_00304_17392_4775.N1	28-JUN-2005 03:35:09	Dark	93.000	157	The1Eri	2.9060	9300.0	186	17392	No
32	GOM_NL__2PRFIN20050628_034137_000000862038_00305_17393_4776.N1	28-JUN-2005 03:41:37	Dark	86.000	143	Alp Hyi	2.8570	7200.0	172	17393	No
33	GOM_NL__2PRFIN20050628_034606_000000862038_00305_17393_4763.N1	28-JUN-2005 03:46:06	Dark	86.000	135	Bet Hyi	2.8200	5800.0	172	17393	No
34	GOM_NL__2PRFIN20050628_035344_000000902038_00305_17393_4764.N1	28-JUN-2005 03:53:44	Straylight	90.000	43	Alp TrA	1.9100	4250.0	180	17393	No
35	GOM_NL__2PRFIN20050628_035706_000000932038_00305_17393_4765.N1	28-JUN-2005 03:57:06	Straylight	92.500	141	Bet Ara	2.8400	4600.0	185	17393	No
36	GOM_NL__2PRFIN20050628_040057_000000272038_00305_17393_4766.N1	28-JUN-2005 04:00:57	Dark	27.000	178	lot1Sco	3.0220	6550.0	54	17393	Yes
37	GOM_NL__2PRFIN20050628_040159_000000932038_00305_17393_4767.N1	28-JUN-2005 04:01:59	Twilight	93.000	25	35Lam Sco	1.6200	28000.	186	17393	No
38	GOM_NL__2PRFIN20050628_040539_000000922038_00305_17393_4768.N1	28-JUN-2005 04:05:39	Bright	91.500	16	21Alp Sco	1.0200	3000.0	183	17393	No
39	GOM_NL__2PRFIN20050628_040745_000000882038_00305_17393_4769.N1	28-JUN-2005 04:07:45	Bright	88.000	97	8Bet1Sco	2.5610	30000.	176	17393	No
40	GOM_NL__2PRFIN20050628_040959_000000872038_00305_17393_4770.N1	28-JUN-2005 04:09:59	Bright	87.000	98	13Zet Oph	2.5710	30000.	174	17393	No
41	GOM_NL__2PRFIN20050628_041207_000000862038_00305_17393_4771.N1	28-JUN-2005 04:12:07	Bright	86.000	120	1Del Oph	2.7340	3200.0	172	17393	No
42	GOM_NL__2PRFIN20050628_041520_000000892038_00305_17393_4772.N1	28-JUN-2005 04:15:20	Bright	89.000	102	24Alp Ser	2.6000	4250.0	178	17393	No

43	GOM_NL__2PRFIN20050628_041857_000000852038_00305_17393_4773.N1	28-JUN-2005 04: 18: 57	Bright	84.500	127	27Bet Her	2.7810	4700.0	169	17393	No
44	GOM_NL__2PRFIN20050628_042103_000000842038_00305_17393_4774.N1	28-JUN-2005 04: 21: 03	Bright	83.500	67	5Alp CrB	2.2210	11000.	167	17393	No
45	GOM_NL__2PRFIN20050628_043404_000000832038_00305_17393_4775.N1	28-JUN-2005 04: 34: 04	Bright	83.000	60	7Bet UMi	2.0810	3950.0	166	17393	No
46	GOM_NL__2PRFIN20050628_050729_000000842038_00305_17393_4776.N1	28-JUN-2005 05: 07: 29	Dark	84.000	165	34Gam Eri	2.9500	3200.0	168	17393	No
47	GOM_NL__2PRFIN20050628_051545_000000912038_00305_17393_4777.N1	28-JUN-2005 05: 15: 45	Dark	91.000	157	The1Eri	2.9060	9300.0	182	17393	No
48	GOM_NL__2PRFIN20050628_052213_000000872038_00306_17394_4778.N1	28-JUN-2005 05: 22: 13	Dark	87.000	143	Alp Hyi	2.8570	7200.0	174	17394	No
49	GOM_NL__2PRFIN20050628_052642_000000842038_00306_17394_4763.N1	28-JUN-2005 05: 26: 42	Dark	84.000	135	Bet Hyi	2.8200	5800.0	168	17394	No
50	GOM_NL__2PRFIN20050628_053742_000000892038_00306_17394_4764.N1	28-JUN-2005 05: 37: 42	Straylight	89.000	141	Bet Ara	2.8400	4600.0	178	17394	No
51	GOM_NL__2PRFIN20050628_054133_000000272038_00306_17394_4765.N1	28-JUN-2005 05: 41: 33	Dark	27.000	178	lot1Sco	3.0220	6550.0	54	17394	Yes
52	GOM_NL__2PRFIN20050628_054235_000000952038_00306_17394_4766.N1	28-JUN-2005 05: 42: 35	Tw_i_and_stray	94.500	25	35Lam Sco	1.6200	28000.	189	17394	No
53	GOM_NL__2PRFIN20050628_054616_000000922038_00306_17394_4767.N1	28-JUN-2005 05: 46: 16	Bright	91.500	16	21Alp Sco	1.0200	3000.0	183	17394	No
54	GOM_NL__2PRFIN20050628_054821_000000872038_00306_17394_4768.N1	28-JUN-2005 05: 48: 21	Bright	87.000	97	8Bet1Sco	2.5610	30000.	174	17394	No
55	GOM_NL__2PRFIN20050628_055035_000000862038_00306_17394_4769.N1	28-JUN-2005 05: 50: 35	Bright	86.000	98	13Zet Oph	2.5710	30000.	172	17394	No
56	GOM_NL__2PRFIN20050628_055243_000000872038_00306_17394_4770.N1	28-JUN-2005 05: 52: 43	Bright	86.500	120	1Del Oph	2.7340	3200.0	173	17394	No
57	GOM_NL__2PRFIN20050628_055933_000000872038_00306_17394_4771.N1	28-JUN-2005 05: 59: 33	Bright	86.500	127	27Bet Her	2.7810	4700.0	173	17394	No
58	GOM_NL__2PRFIN20050628_060139_000000862038_00306_17394_4772.N1	28-JUN-2005 06: 01: 39	Bright	86.000	67	5Alp CrB	2.2210	11000.	172	17394	No
59	GOM_NL__2PRFIN20050628_061440_000000862038_00306_17394_4773.N1	28-JUN-2005 06: 14: 40	Bright	85.500	60	7Bet UMi	2.0810	3950.0	171	17394	No
60	GOM_NL__2PRFIN20050628_064805_000000842038_00306_17394_4774.N1	28-JUN-2005 06: 48: 05	Dark	84.000	165	34Gam Eri	2.9500	3200.0	168	17394	No
61	GOM_NL__2PRFIN20050628_065622_000000922038_00306_17394_4775.N1	28-JUN-2005 06: 56: 22	Dark	91.500	157	The1Eri	2.9060	9300.0	183	17394	No
62	GOM_NL__2PRFIN20050628_070249_000000862038_00307_17395_4776.N1	28-JUN-2005 07: 02: 49	Dark	86.000	143	Alp Hyi	2.8570	7200.0	172	17395	No

3. Quality information per product

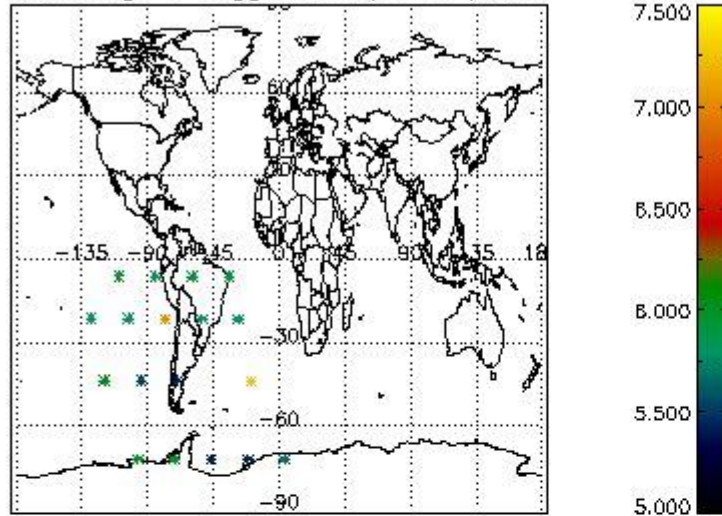
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

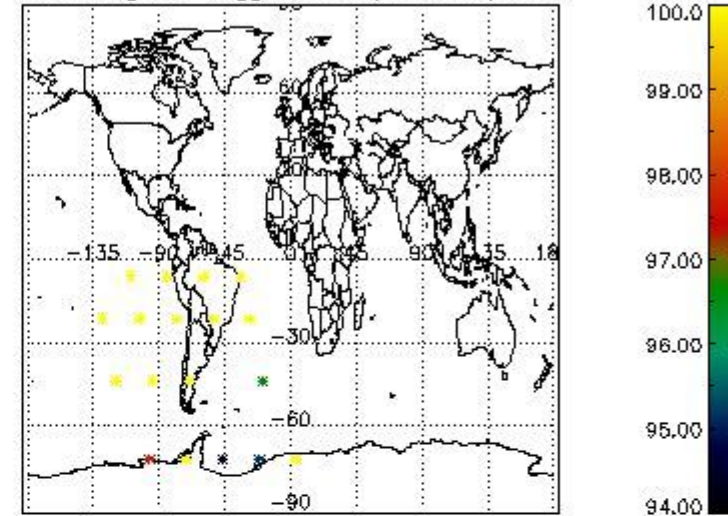


3.2 Plot quality information per product (world map)

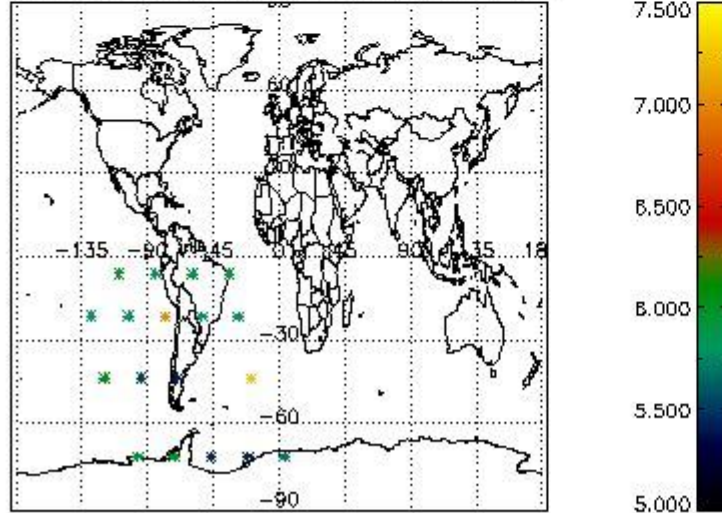
Percentage of flagged data per O3 profile



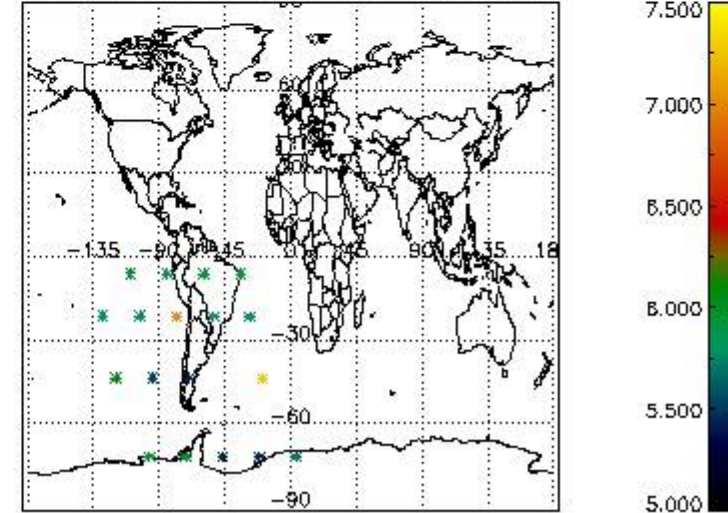
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

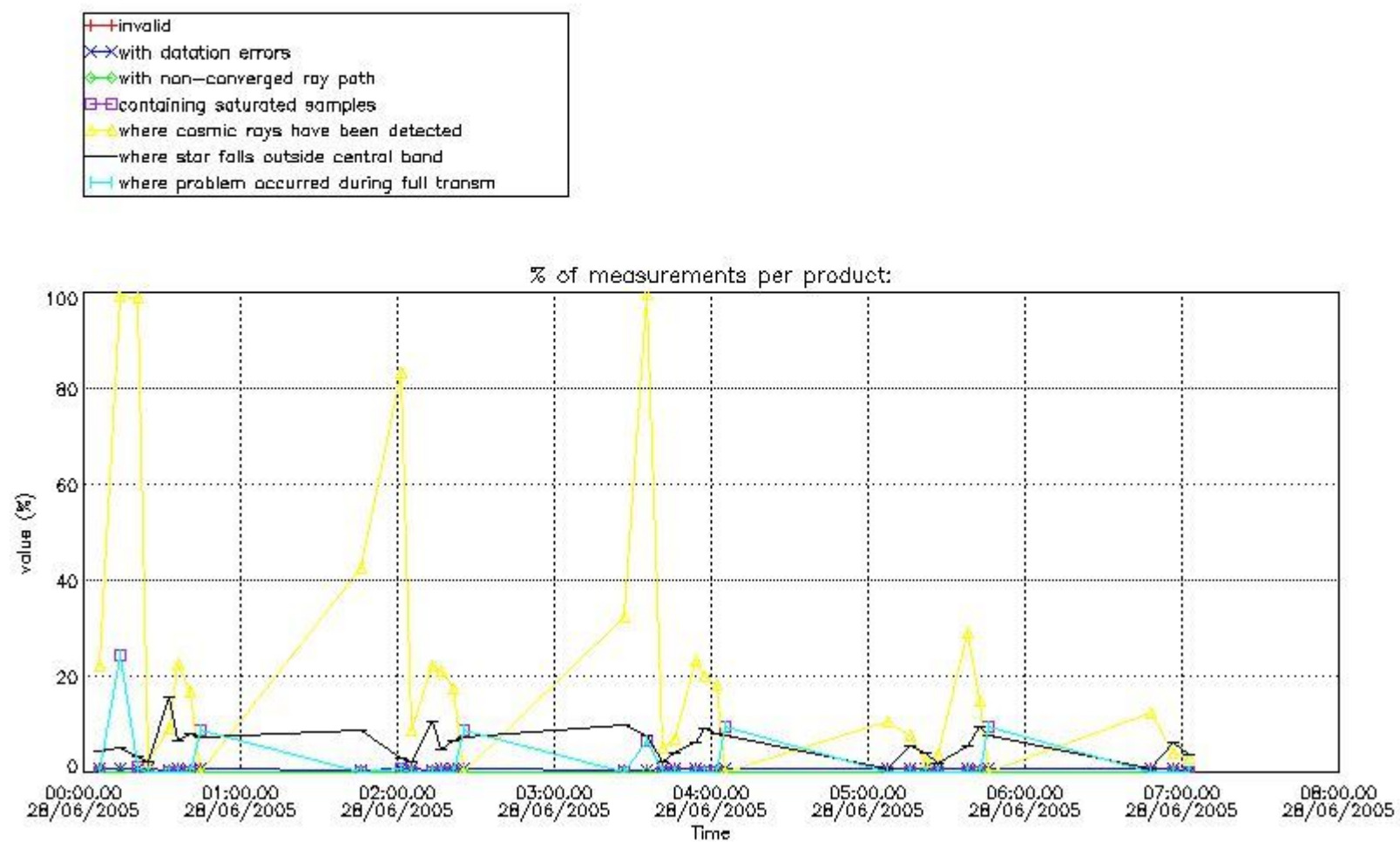


4. Level 1 quality information per product

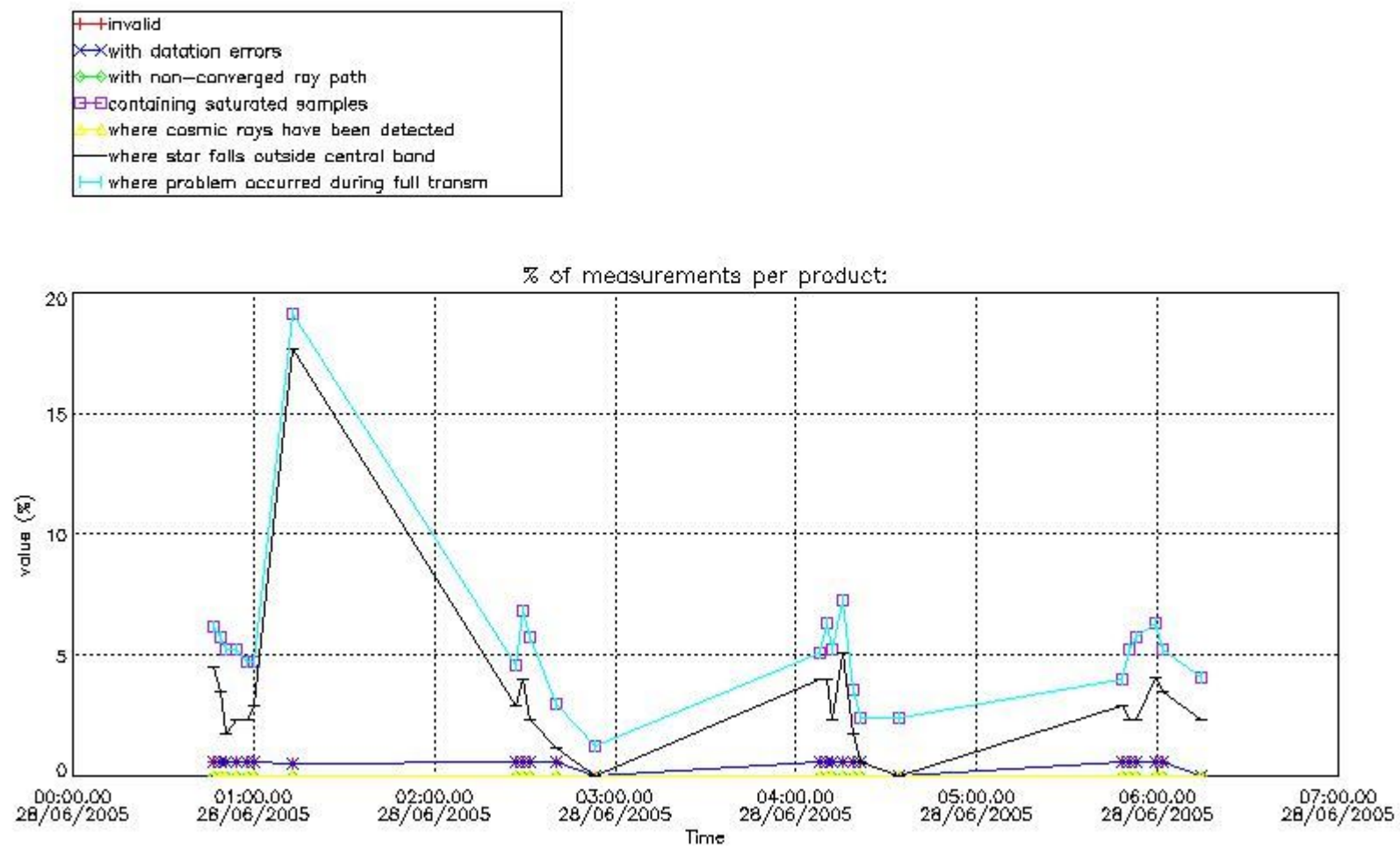
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



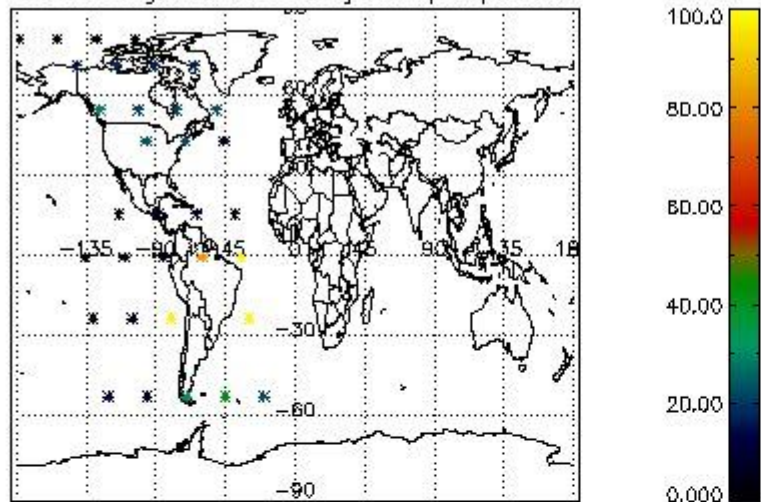
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



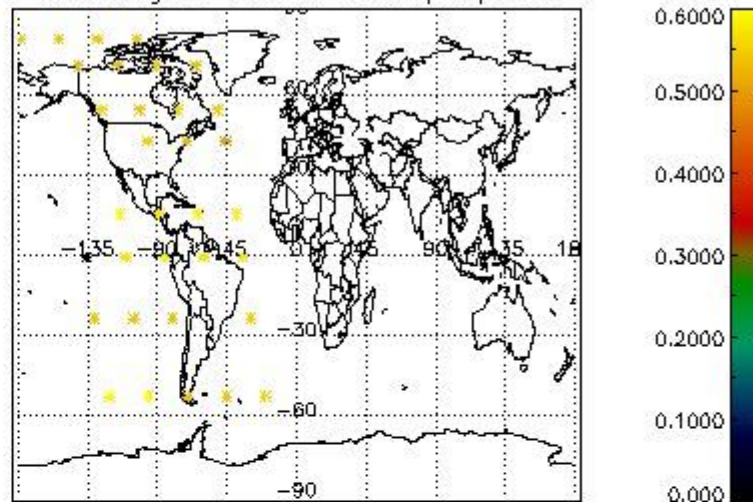
4.2 Plot quality information per product coming from level 1b processing (world map)

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

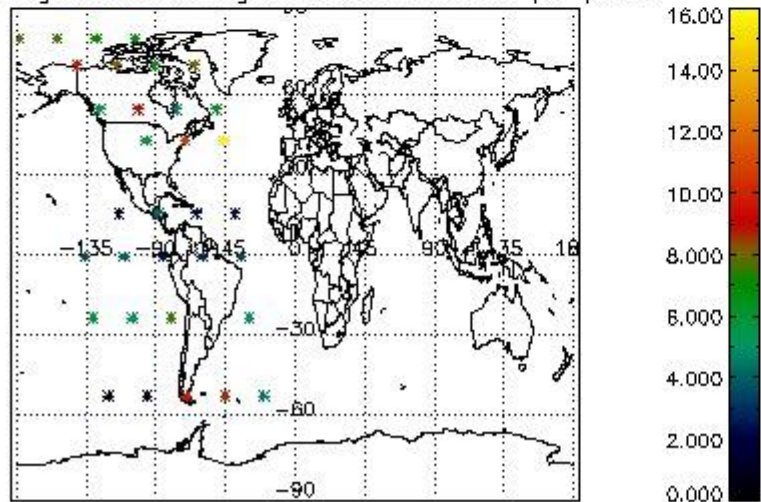
Percentage of cosmic ray hits per profile



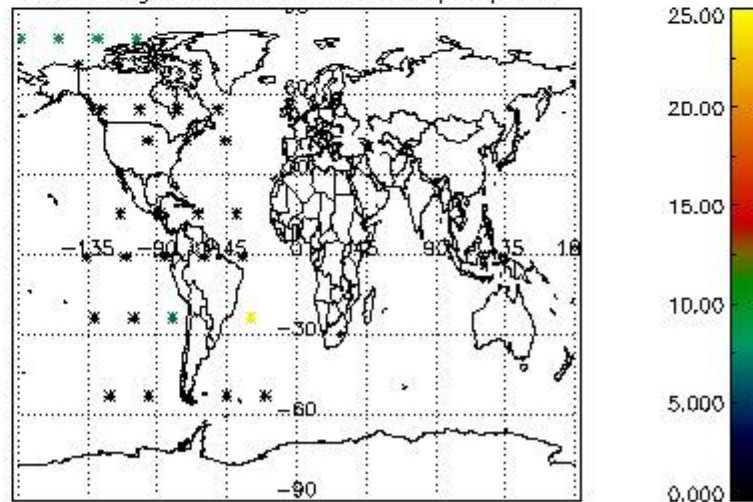
Percentage of datation errors per profile



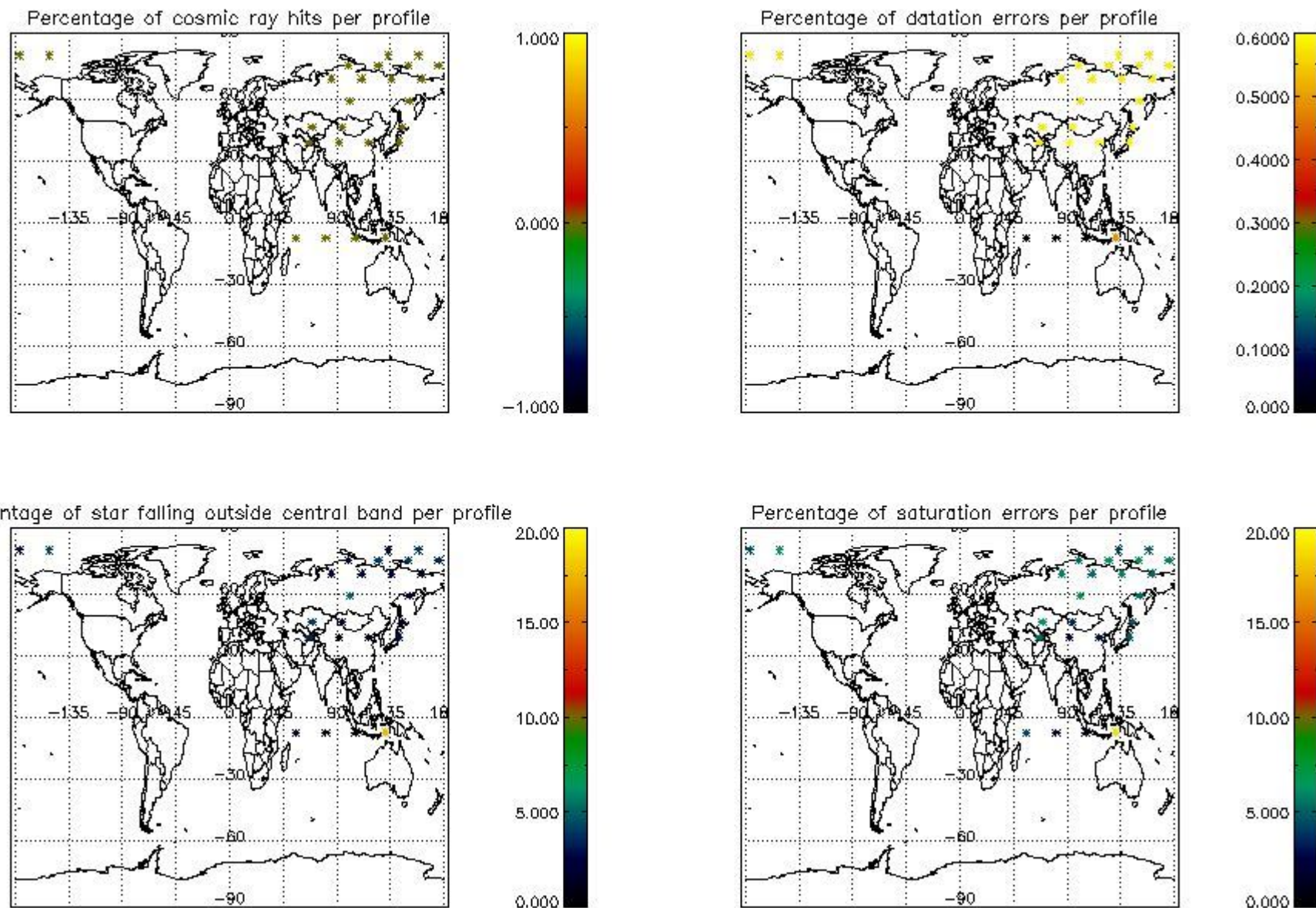
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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

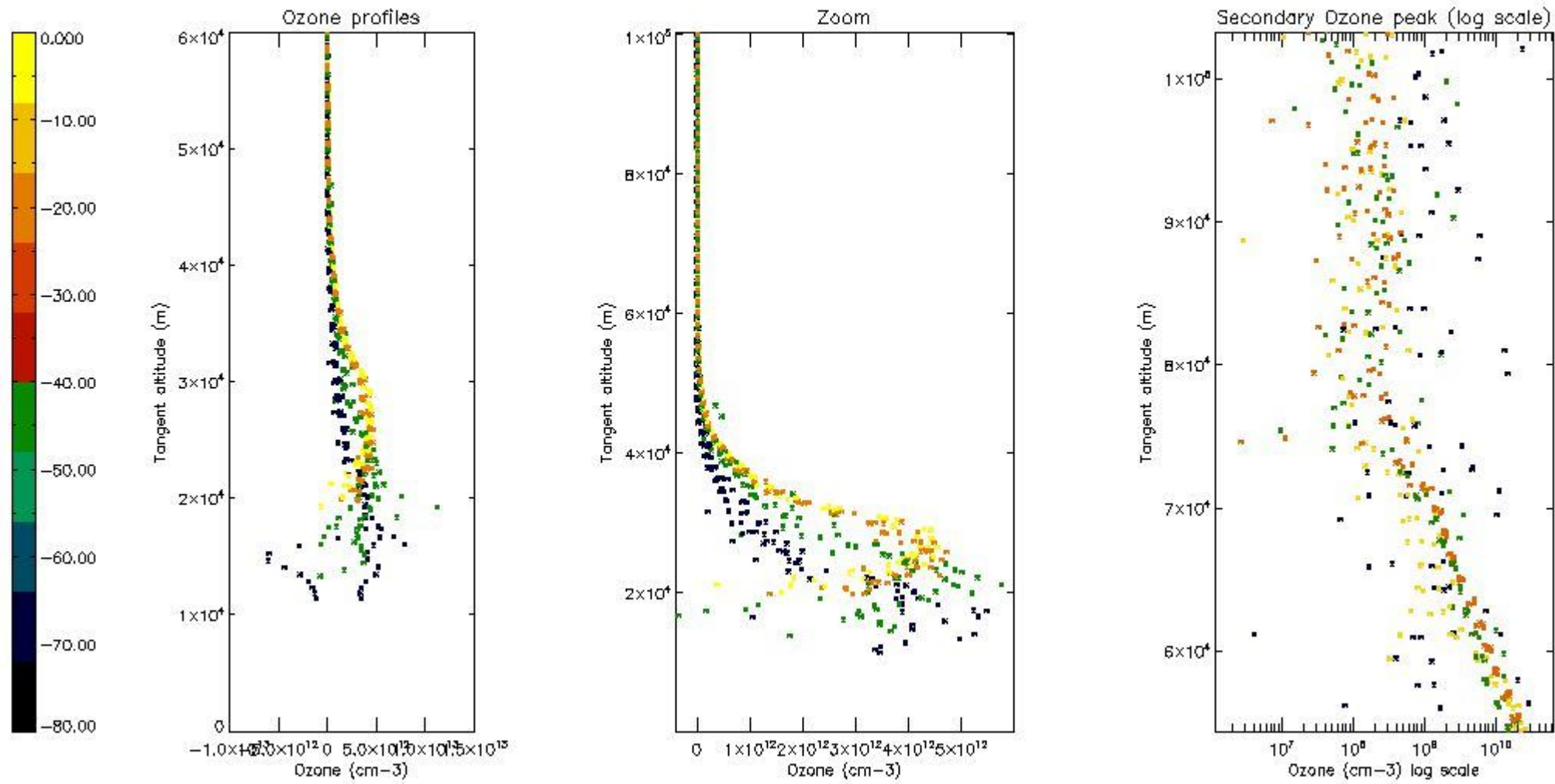
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	31
STD < 20	4

STD < 10	2
STD < 5	0

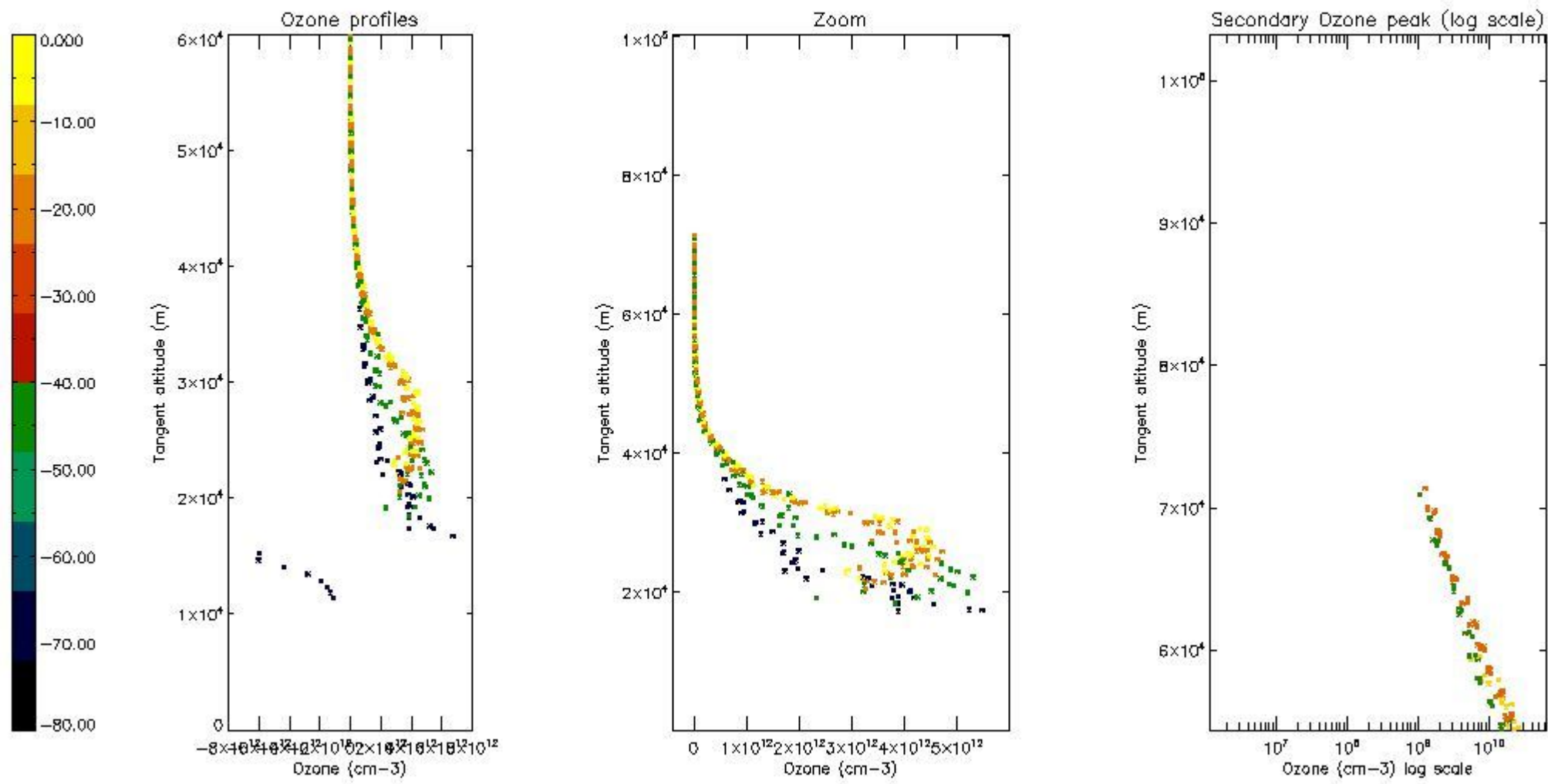
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



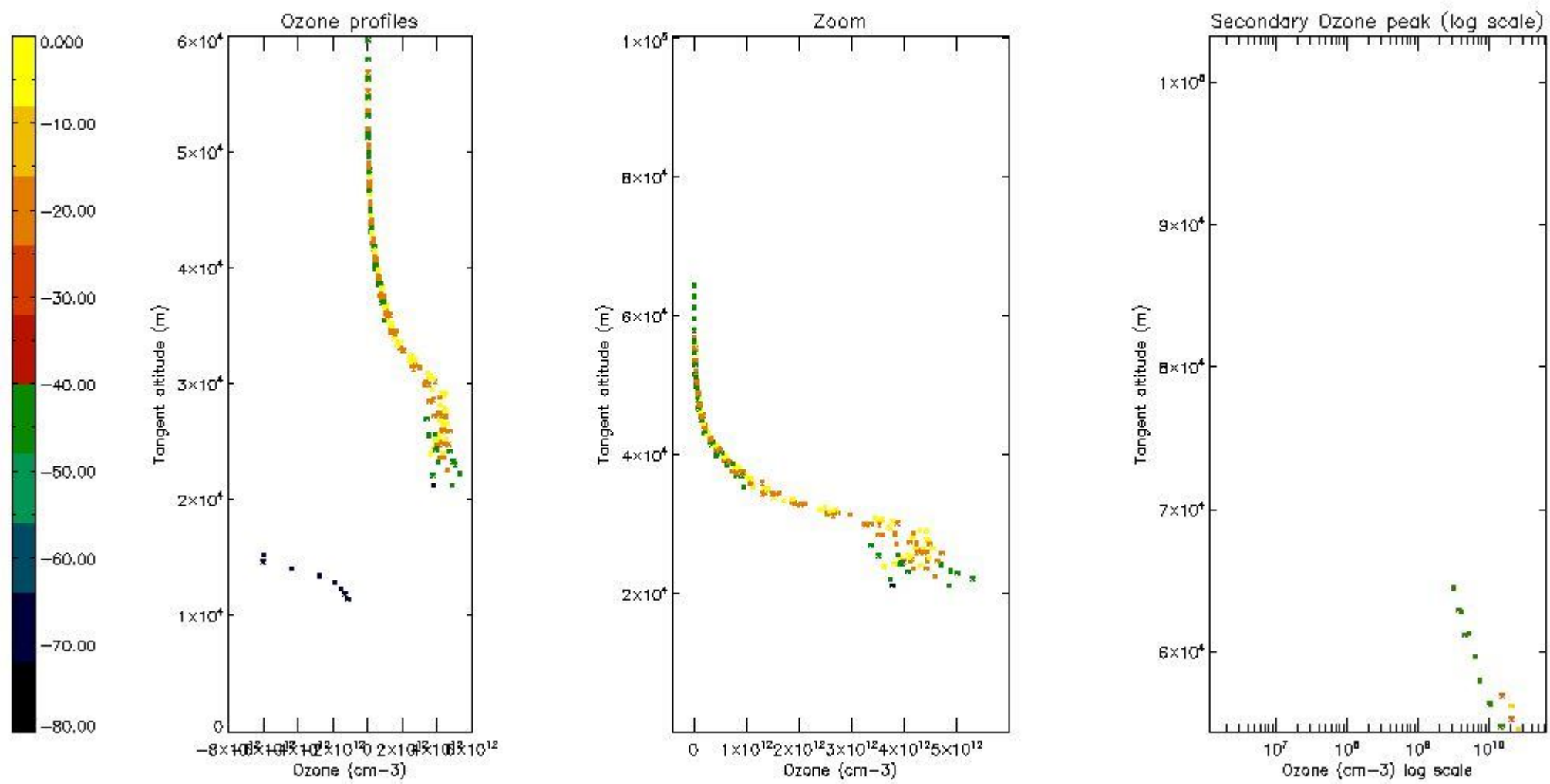
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



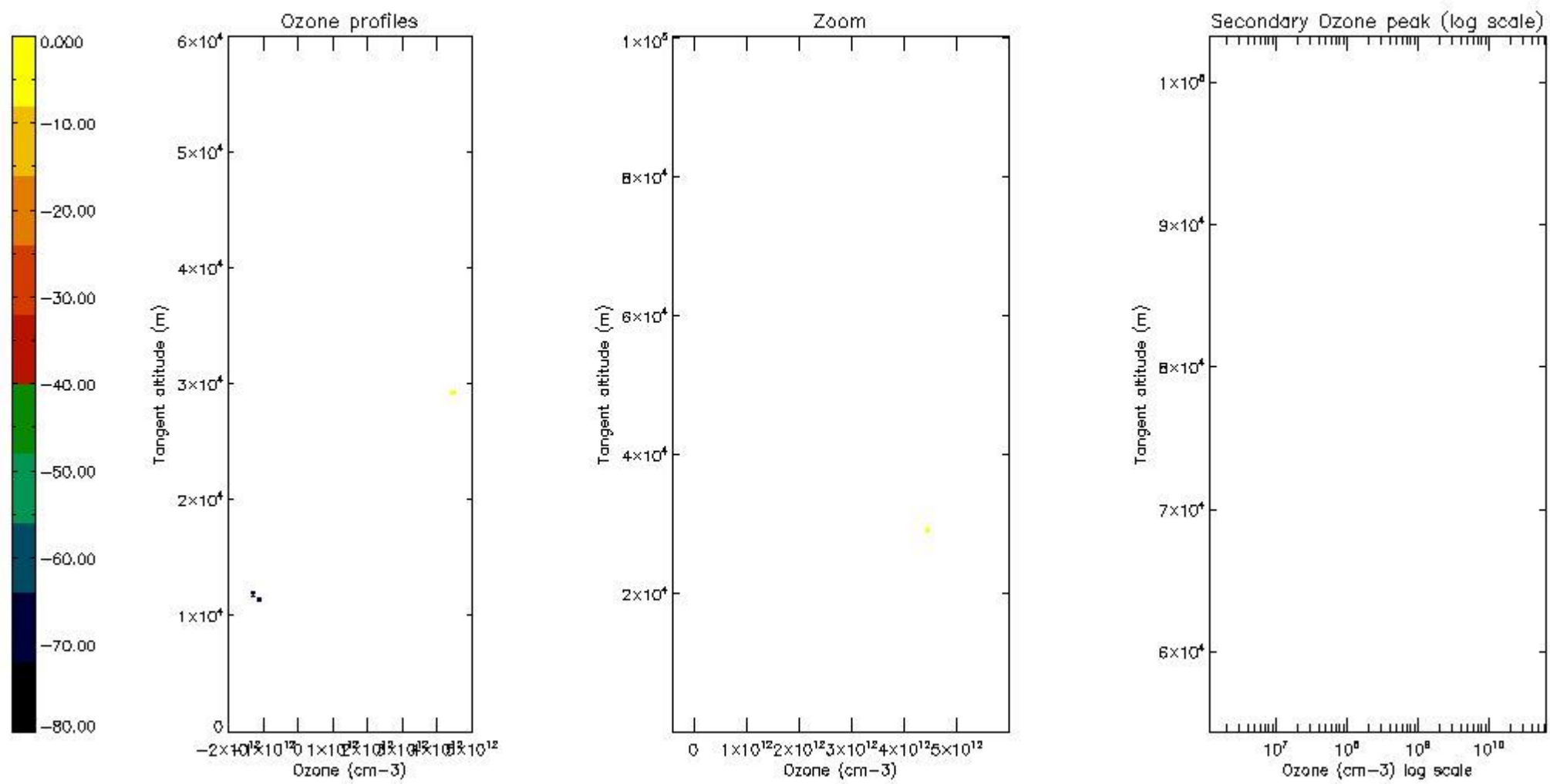
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



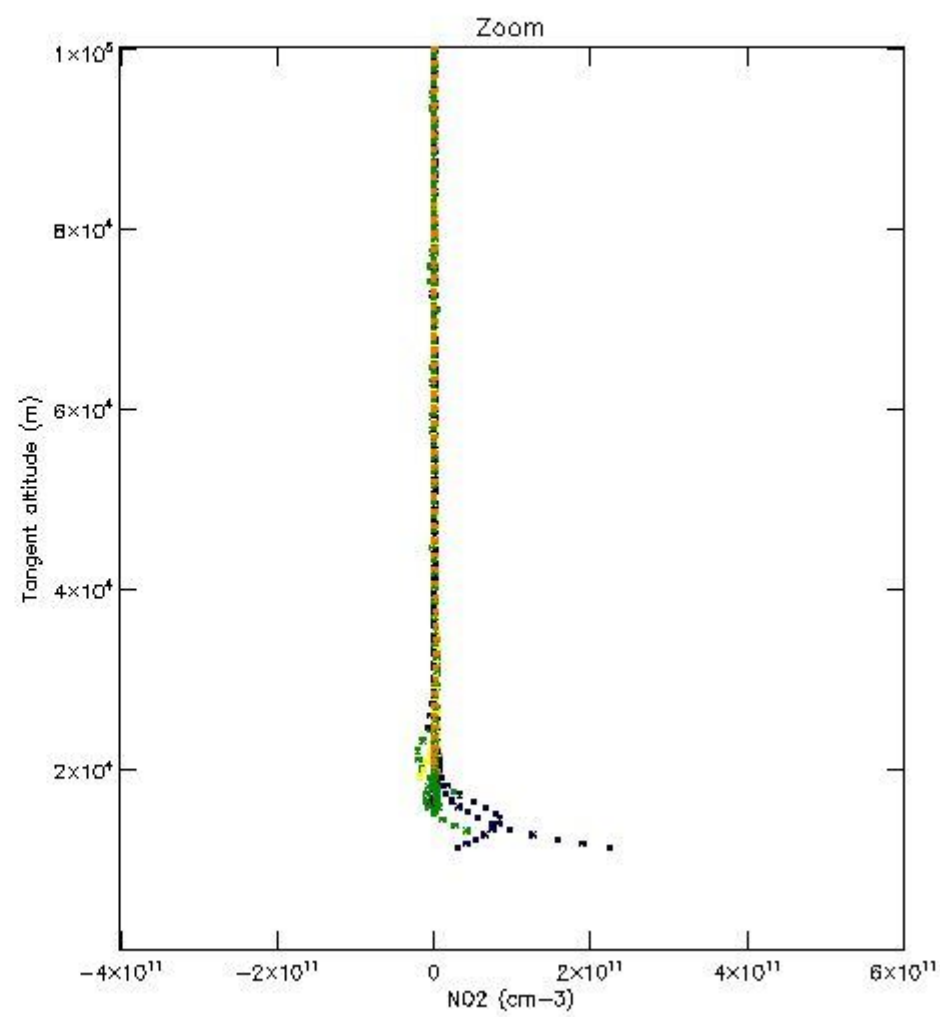
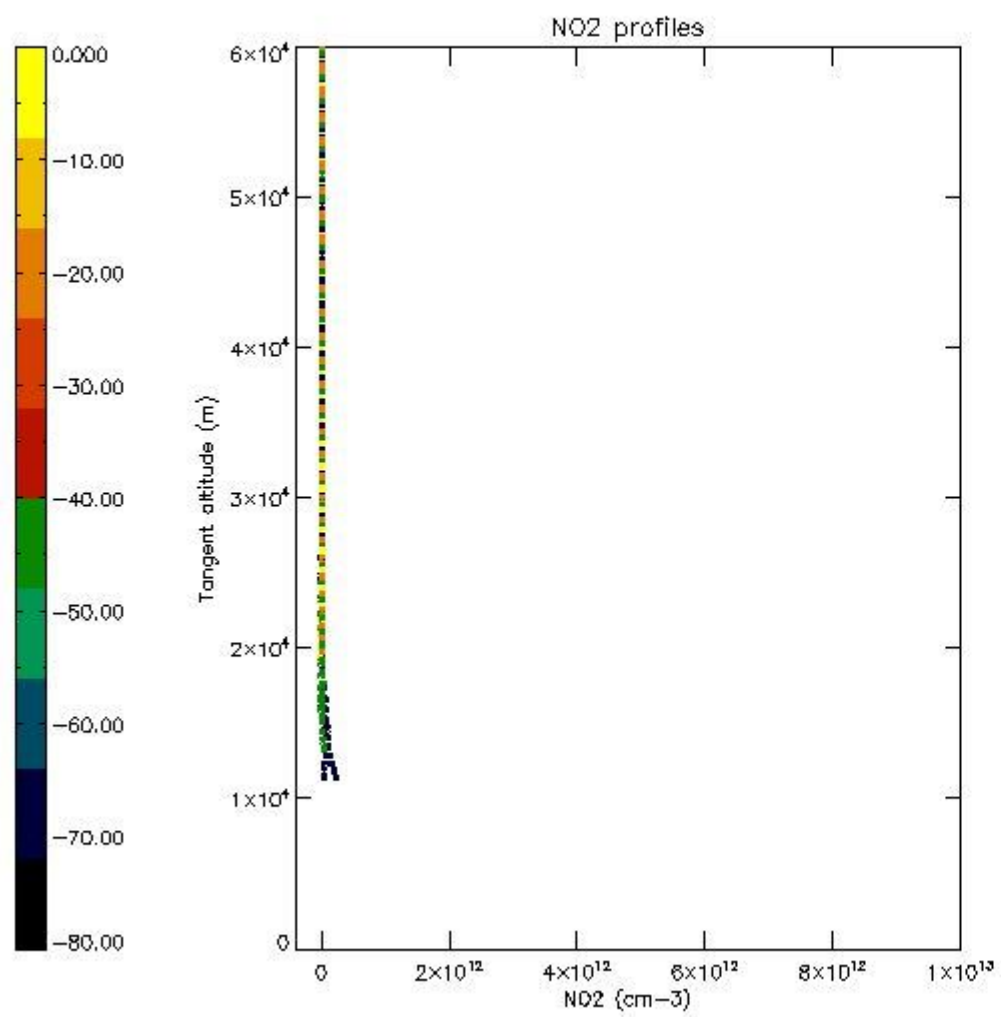
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



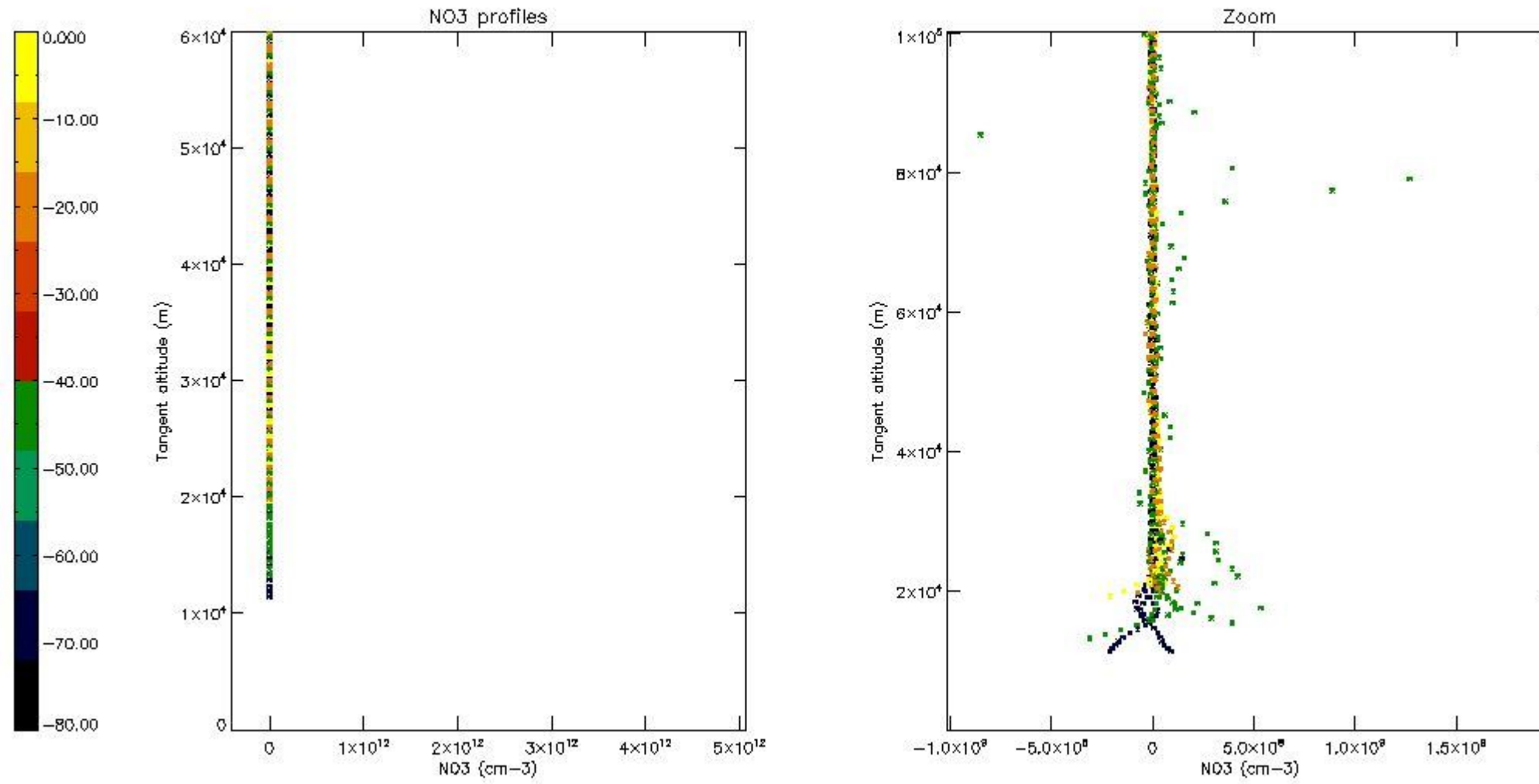
5.6 Plot NO₂ profiles for all STD (dark without errors)

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	28-JUN-2005 00:05:40
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	28-JUN-2005 00:05:40
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	28-JUN-2005 00:05:40

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	18APR2013 09:53:34
Data source version	GOMOS/6.01
Start time of products	28-06-2005 (28JUN2005 00:00:00)
Stop time of products	29-06-2005 (29JUN2005 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	62
Nb of prods with errors	4

2. Summary of processed GOM_NL__2P products.

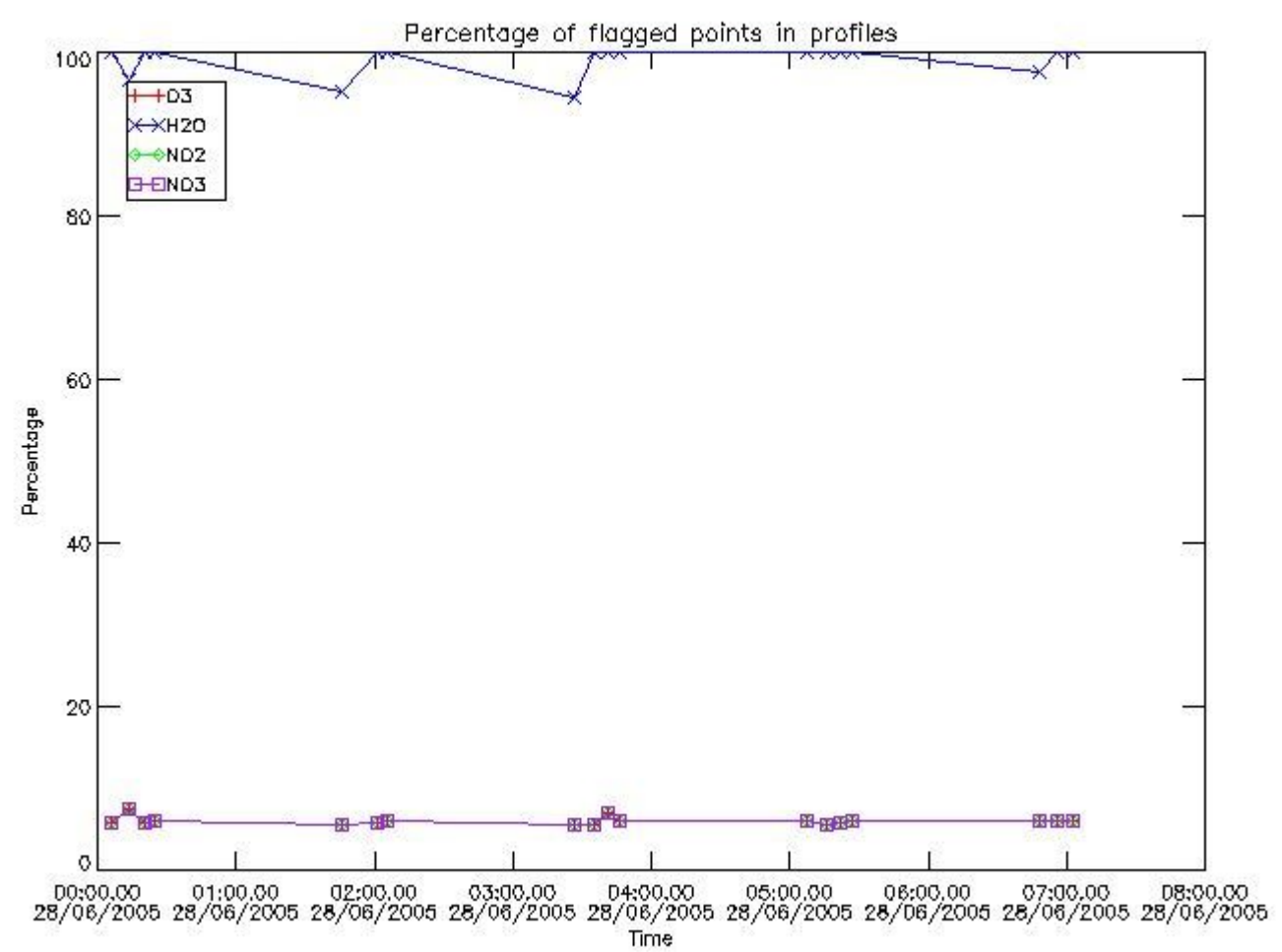
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20050628_000540_000000892038_00302_17390_4756.N1	28-JUN-2005 00:05:40	Dark	88.500	165	34Gam Eri	2.9500	3200.0	177	17390	No
2	GOM_NL__2PRFIN20050628_001356_000000902038_00302_17390_4757.N1	28-JUN-2005 00:13:56	Dark	90.000	157	The1Eri	2.9060	9300.0	180	17390	No
3	GOM_NL__2PRFIN20050628_002024_000000872038_00303_17391_4758.N1	28-JUN-2005 00:20:24	Dark	87.000	143	Alp Hyi	2.8570	7200.0	174	17391	No
4	GOM_NL__2PRFIN20050628_002453_000000852038_00303_17391_4809.N1	28-JUN-2005 00:24:53	Dark	85.000	135	Bet Hyi	2.8200	5800.0	170	17391	No
5	GOM_NL__2PRFIN20050628_003232_000001002038_00303_17391_4810.N1	28-JUN-2005 00:32:32	Straylight	99.500	43	Alp TrA	1.9100	4250.0	199	17391	No
6	GOM_NL__2PRFIN20050628_003554_000000912038_00303_17391_4811.N1	28-JUN-2005 00:35:54	Straylight	90.500	141	Bet Ara	2.8400	4600.0	181	17391	No
7	GOM_NL__2PRFIN20050628_003945_000000272038_00303_17391_4812.N1	28-JUN-2005 00:39:45	Dark	27.000	178	lot1Sco	3.0220	6550.0	54	17391	Yes
8	GOM_NL__2PRFIN20050628_004047_000000932038_00303_17391_4813.N1	28-JUN-2005 00:40:47	Twilight	93.000	25	35Lam Sco	1.6200	28000.	186	17391	No
9	GOM_NL__2PRFIN20050628_004427_000000912038_00303_17391_4814.N1	28-JUN-2005 00:44:27	Bright	91.000	16	21Alp Sco	1.0200	3000.0	182	17391	No
10	GOM_NL__2PRFIN20050628_004633_000000892038_00303_17391_4815.N1	28-JUN-2005 00:46:33	Bright	88.500	97	8Bet1Sco	2.5610	30000.	177	17391	No
11	GOM_NL__2PRFIN20050628_004846_000000872038_00303_17391_4816.N1	28-JUN-2005 00:48:46	Bright	86.500	98	13Zet Oph	2.5710	30000.	173	17391	No
12	GOM_NL__2PRFIN20050628_005055_000000862038_00303_17391_4817.N1	28-JUN-2005 00:50:55	Bright	86.000	120	1Del Oph	2.7340	3200.0	172	17391	No
13	GOM_NL__2PRFIN20050628_005408_000000872038_00303_17391_4818.N1	28-JUN-2005 00:54:08	Bright	86.500	102	24Alp Ser	2.6000	4250.0	173	17391	No
14	GOM_NL__2PRFIN20050628_005745_000000852038_00303_17391_4819.N1	28-JUN-2005 00:57:45	Bright	85.000	127	27Bet Her	2.7810	4700.0	170	17391	No
15	GOM_NL__2PRFIN20050628_005950_000000852038_00303_17391_4820.N1	28-JUN-2005 00:59:50	Bright	85.000	67	5Alp CrB	2.2210	11000.	170	17391	No
16	GOM_NL__2PRFIN20050628_011251_000001022038_00303_17391_4821.N1	28-JUN-2005 01:12:51	Bright	102.00	60	7Bet UMi	2.0810	3950.0	204	17391	No
17	GOM_NL__2PRFIN20050628_014616_000000932038_00303_17391_4822.N1	28-JUN-2005 01:46:16	Dark	92.500	165	34Gam Eri	2.9500	3200.0	185	17391	No
18	GOM_NL__2PRFIN20050628_020100_000000872038_00304_17392_4823.N1	28-JUN-2005 02:01:00	Dark	87.000	143	Alp Hyi	2.8570	7200.0	174	17392	No
19	GOM_NL__2PRFIN20050628_020530_000000852038_00304_17392_4763.N1	28-JUN-2005 02:05:30	Dark	85.000	135	Bet Hyi	2.8200	5800.0	170	17392	No
20	GOM_NL__2PRFIN20050628_021308_000000952038_00304_17392_4764.N1	28-JUN-2005 02:13:08	Straylight	94.500	43	Alp TrA	1.9100	4250.0	189	17392	No
21	GOM_NL__2PRFIN20050628_021630_000000882038_00304_17392_4765.N1	28-JUN-2005 02:16:30	Straylight	88.000	141	Bet Ara	2.8400	4600.0	176	17392	No
22	GOM_NL__2PRFIN20050628_022021_000000272038_00304_17392_4766.N1	28-JUN-2005 02:20:21	Dark	27.000	178	lot1Sco	3.0220	6550.0	54	17392	Yes
23	GOM_NL__2PRFIN20050628_022123_000000922038_00304_17392_4767.N1	28-JUN-2005 02:21:23	Twilight	91.500	25	35Lam Sco	1.6200	28000.	183	17392	No
24	GOM_NL__2PRFIN20050628_022503_000000912038_00304_17392_4768.N1	28-JUN-2005 02:25:03	Bright	91.000	16	21Alp Sco	1.0200	3000.0	182	17392	No
25	GOM_NL__2PRFIN20050628_022709_000000872038_00304_17392_4769.N1	28-JUN-2005 02:27:09	Bright	87.000	97	8Bet1Sco	2.5610	30000.	174	17392	No
26	GOM_NL__2PRFIN20050628_022923_000000882038_00304_17392_4770.N1	28-JUN-2005 02:29:23	Bright	87.500	98	13Zet Oph	2.5710	30000.	175	17392	No
27	GOM_NL__2PRFIN20050628_023131_000000872038_00304_17392_4771.N1	28-JUN-2005 02:31:31	Bright	86.500	120	1Del Oph	2.7340	3200.0	173	17392	No
28	GOM_NL__2PRFIN20050628_024027_000000842038_00304_17392_4772.N1	28-JUN-2005 02:40:27	Bright	83.500	67	5Alp CrB	2.2210	11000.	167	17392	No
29	GOM_NL__2PRFIN20050628_025327_000000832038_00304_17392_4773.N1	28-JUN-2005 02:53:27	Bright	82.500	60	7Bet UMi	2.0810	3950.0	165	17392	No
30	GOM_NL__2PRFIN20050628_032653_000000932038_00304_17392_4774.N1	28-JUN-2005 03:26:53	Dark	92.500	165	34Gam Eri	2.9500	3200.0	185	17392	No
31	GOM_NL__2PRFIN20050628_033509_000000932038_00304_17392_4775.N1	28-JUN-2005 03:35:09	Dark	93.000	157	The1Eri	2.9060	9300.0	186	17392	No
32	GOM_NL__2PRFIN20050628_034137_000000862038_00305_17393_4776.N1	28-JUN-2005 03:41:37	Dark	86.000	143	Alp Hyi	2.8570	7200.0	172	17393	No
33	GOM_NL__2PRFIN20050628_034606_000000862038_00305_17393_4763.N1	28-JUN-2005 03:46:06	Dark	86.000	135	Bet Hyi	2.8200	5800.0	172	17393	No
34	GOM_NL__2PRFIN20050628_035344_000000902038_00305_17393_4764.N1	28-JUN-2005 03:53:44	Straylight	90.000	43	Alp TrA	1.9100	4250.0	180	17393	No
35	GOM_NL__2PRFIN20050628_035706_000000932038_00305_17393_4765.N1	28-JUN-2005 03:57:06	Straylight	92.500	141	Bet Ara	2.8400	4600.0	185	17393	No
36	GOM_NL__2PRFIN20050628_040057_000000272038_00305_17393_4766.N1	28-JUN-2005 04:00:57	Dark	27.000	178	lot1Sco	3.0220	6550.0	54	17393	Yes
37	GOM_NL__2PRFIN20050628_040159_000000932038_00305_17393_4767.N1	28-JUN-2005 04:01:59	Twilight	93.000	25	35Lam Sco	1.6200	28000.	186	17393	No
38	GOM_NL__2PRFIN20050628_040539_000000922038_00305_17393_4768.N1	28-JUN-2005 04:05:39	Bright	91.500	16	21Alp Sco	1.0200	3000.0	183	17393	No
39	GOM_NL__2PRFIN20050628_040745_000000882038_00305_17393_4769.N1	28-JUN-2005 04:07:45	Bright	88.000	97	8Bet1Sco	2.5610	30000.	176	17393	No
40	GOM_NL__2PRFIN20050628_040959_000000872038_00305_17393_4770.N1	28-JUN-2005 04:09:59	Bright	87.000	98	13Zet Oph	2.5710	30000.	174	17393	No
41	GOM_NL__2PRFIN20050628_041207_000000862038_00305_17393_4771.N1	28-JUN-2005 04:12:07	Bright	86.000	120	1Del Oph	2.7340	3200.0	172	17393	No
42	GOM_NL__2PRFIN20050628_041520_000000892038_00305_17393_4772.N1	28-JUN-2005 04:15:20	Bright	89.000	102	24Alp Ser	2.6000	4250.0	178	17393	No

43	GOM_NL__2PRFIN20050628_041857_000000852038_00305_17393_4773.N1	28-JUN-2005 04: 18: 57	Bright	84.500	127	27Bet Her	2.7810	4700.0	169	17393	No
44	GOM_NL__2PRFIN20050628_042103_000000842038_00305_17393_4774.N1	28-JUN-2005 04: 21: 03	Bright	83.500	67	5Alp CrB	2.2210	11000.	167	17393	No
45	GOM_NL__2PRFIN20050628_043404_000000832038_00305_17393_4775.N1	28-JUN-2005 04: 34: 04	Bright	83.000	60	7Bet UMi	2.0810	3950.0	166	17393	No
46	GOM_NL__2PRFIN20050628_050729_000000842038_00305_17393_4776.N1	28-JUN-2005 05: 07: 29	Dark	84.000	165	34Gam Eri	2.9500	3200.0	168	17393	No
47	GOM_NL__2PRFIN20050628_051545_000000912038_00305_17393_4777.N1	28-JUN-2005 05: 15: 45	Dark	91.000	157	The1Eri	2.9060	9300.0	182	17393	No
48	GOM_NL__2PRFIN20050628_052213_000000872038_00306_17394_4778.N1	28-JUN-2005 05: 22: 13	Dark	87.000	143	Alp Hyi	2.8570	7200.0	174	17394	No
49	GOM_NL__2PRFIN20050628_052642_000000842038_00306_17394_4763.N1	28-JUN-2005 05: 26: 42	Dark	84.000	135	Bet Hyi	2.8200	5800.0	168	17394	No
50	GOM_NL__2PRFIN20050628_053742_000000892038_00306_17394_4764.N1	28-JUN-2005 05: 37: 42	Straylight	89.000	141	Bet Ara	2.8400	4600.0	178	17394	No
51	GOM_NL__2PRFIN20050628_054133_000000272038_00306_17394_4765.N1	28-JUN-2005 05: 41: 33	Dark	27.000	178	lot1Sco	3.0220	6550.0	54	17394	Yes
52	GOM_NL__2PRFIN20050628_054235_000000952038_00306_17394_4766.N1	28-JUN-2005 05: 42: 35	Tw_i_and_stray	94.500	25	35Lam Sco	1.6200	28000.	189	17394	No
53	GOM_NL__2PRFIN20050628_054616_000000922038_00306_17394_4767.N1	28-JUN-2005 05: 46: 16	Bright	91.500	16	21Alp Sco	1.0200	3000.0	183	17394	No
54	GOM_NL__2PRFIN20050628_054821_000000872038_00306_17394_4768.N1	28-JUN-2005 05: 48: 21	Bright	87.000	97	8Bet1Sco	2.5610	30000.	174	17394	No
55	GOM_NL__2PRFIN20050628_055035_000000862038_00306_17394_4769.N1	28-JUN-2005 05: 50: 35	Bright	86.000	98	13Zet Oph	2.5710	30000.	172	17394	No
56	GOM_NL__2PRFIN20050628_055243_000000872038_00306_17394_4770.N1	28-JUN-2005 05: 52: 43	Bright	86.500	120	1Del Oph	2.7340	3200.0	173	17394	No
57	GOM_NL__2PRFIN20050628_055933_000000872038_00306_17394_4771.N1	28-JUN-2005 05: 59: 33	Bright	86.500	127	27Bet Her	2.7810	4700.0	173	17394	No
58	GOM_NL__2PRFIN20050628_060139_000000862038_00306_17394_4772.N1	28-JUN-2005 06: 01: 39	Bright	86.000	67	5Alp CrB	2.2210	11000.	172	17394	No
59	GOM_NL__2PRFIN20050628_061440_000000862038_00306_17394_4773.N1	28-JUN-2005 06: 14: 40	Bright	85.500	60	7Bet UMi	2.0810	3950.0	171	17394	No
60	GOM_NL__2PRFIN20050628_064805_000000842038_00306_17394_4774.N1	28-JUN-2005 06: 48: 05	Dark	84.000	165	34Gam Eri	2.9500	3200.0	168	17394	No
61	GOM_NL__2PRFIN20050628_065622_000000922038_00306_17394_4775.N1	28-JUN-2005 06: 56: 22	Dark	91.500	157	The1Eri	2.9060	9300.0	183	17394	No
62	GOM_NL__2PRFIN20050628_070249_000000862038_00307_17395_4776.N1	28-JUN-2005 07: 02: 49	Dark	86.000	143	Alp Hyi	2.8570	7200.0	172	17395	No

3. Quality information per product

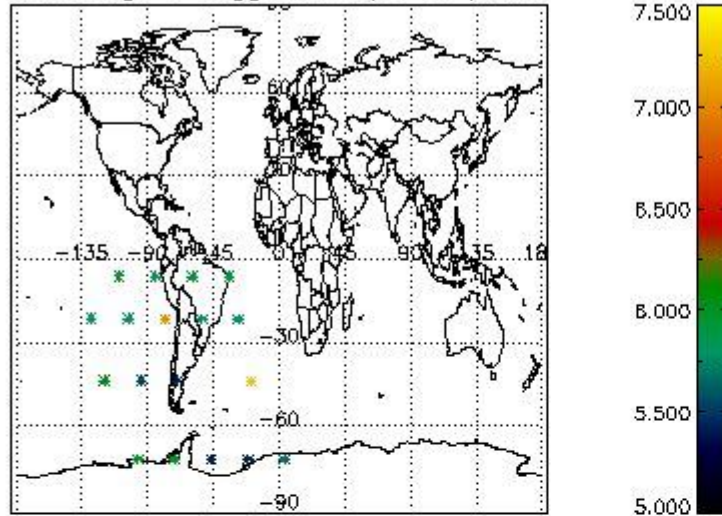
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

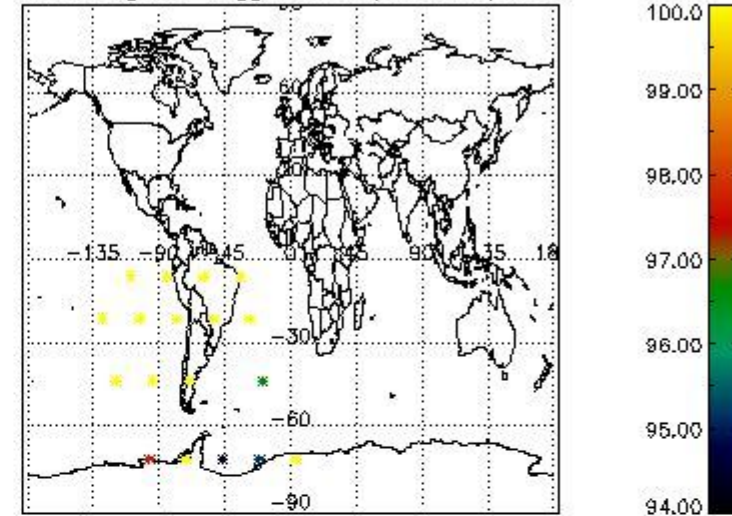


3.2 Plot quality information per product (world map)

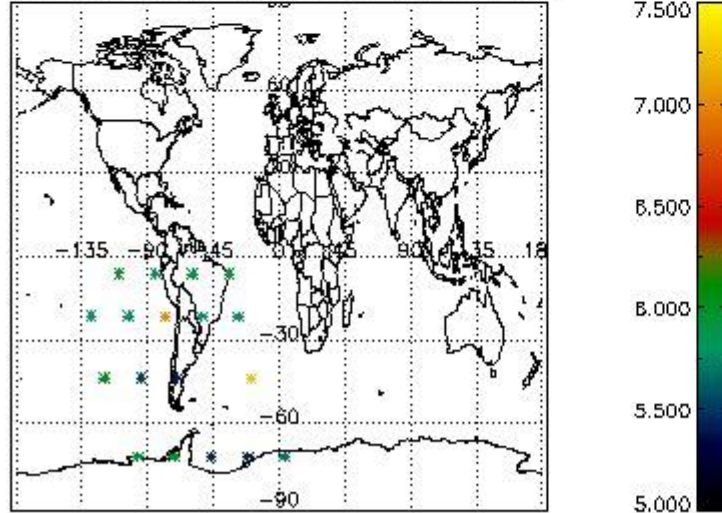
Percentage of flagged data per O3 profile



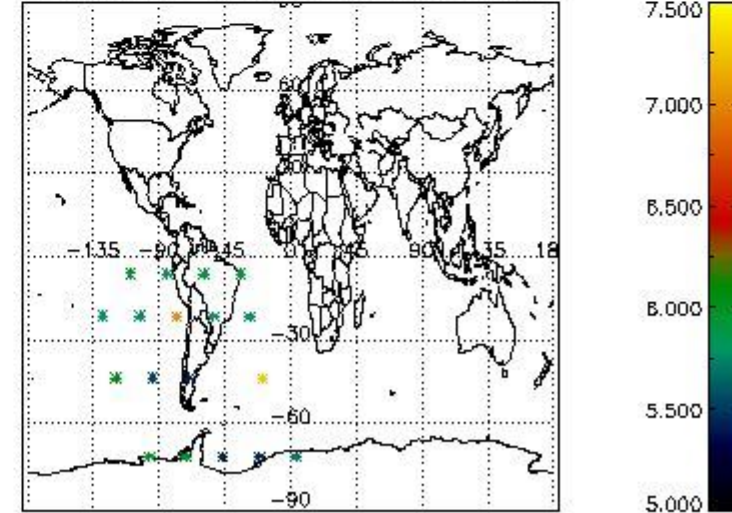
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

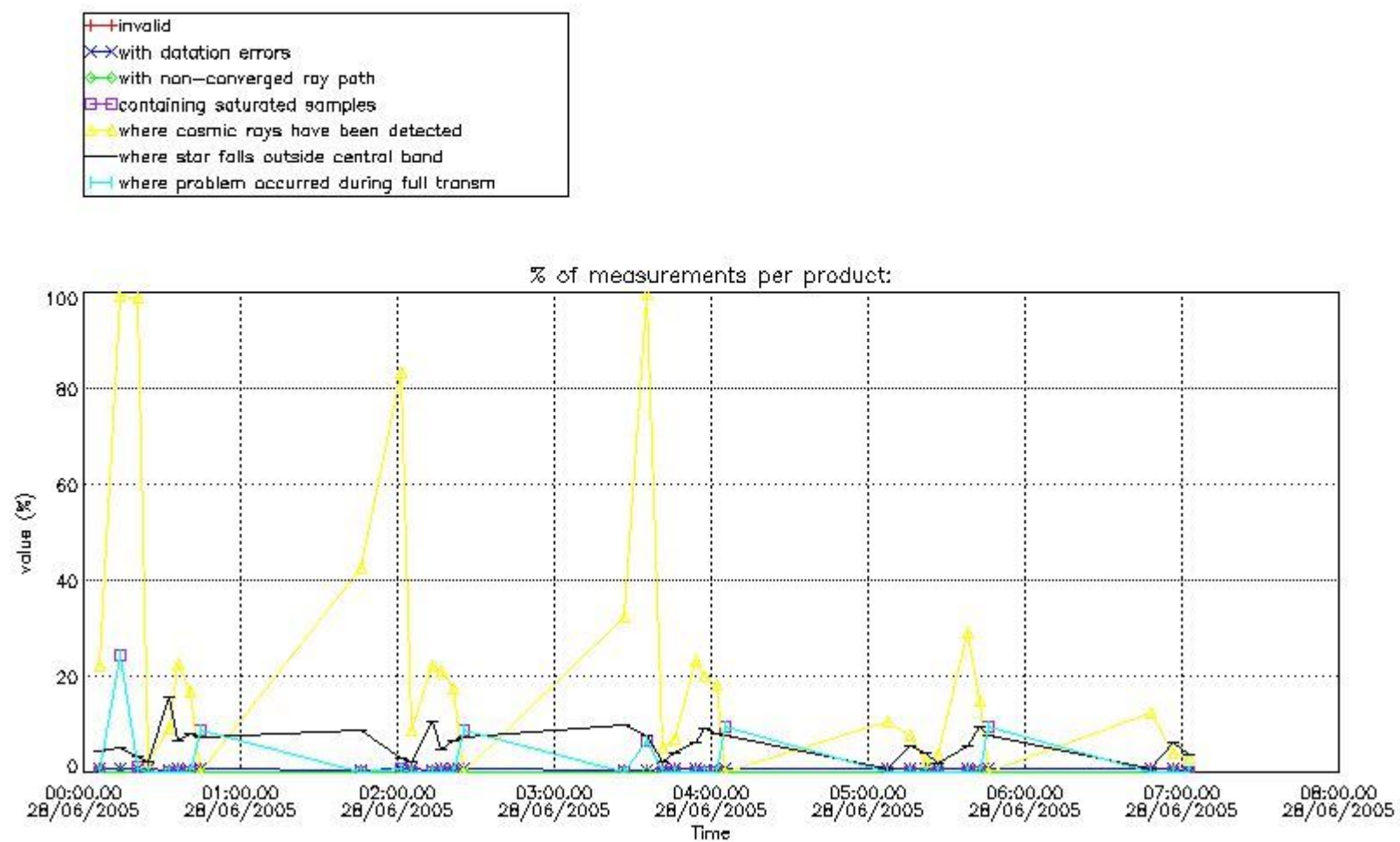


4. Level 1 quality information per product

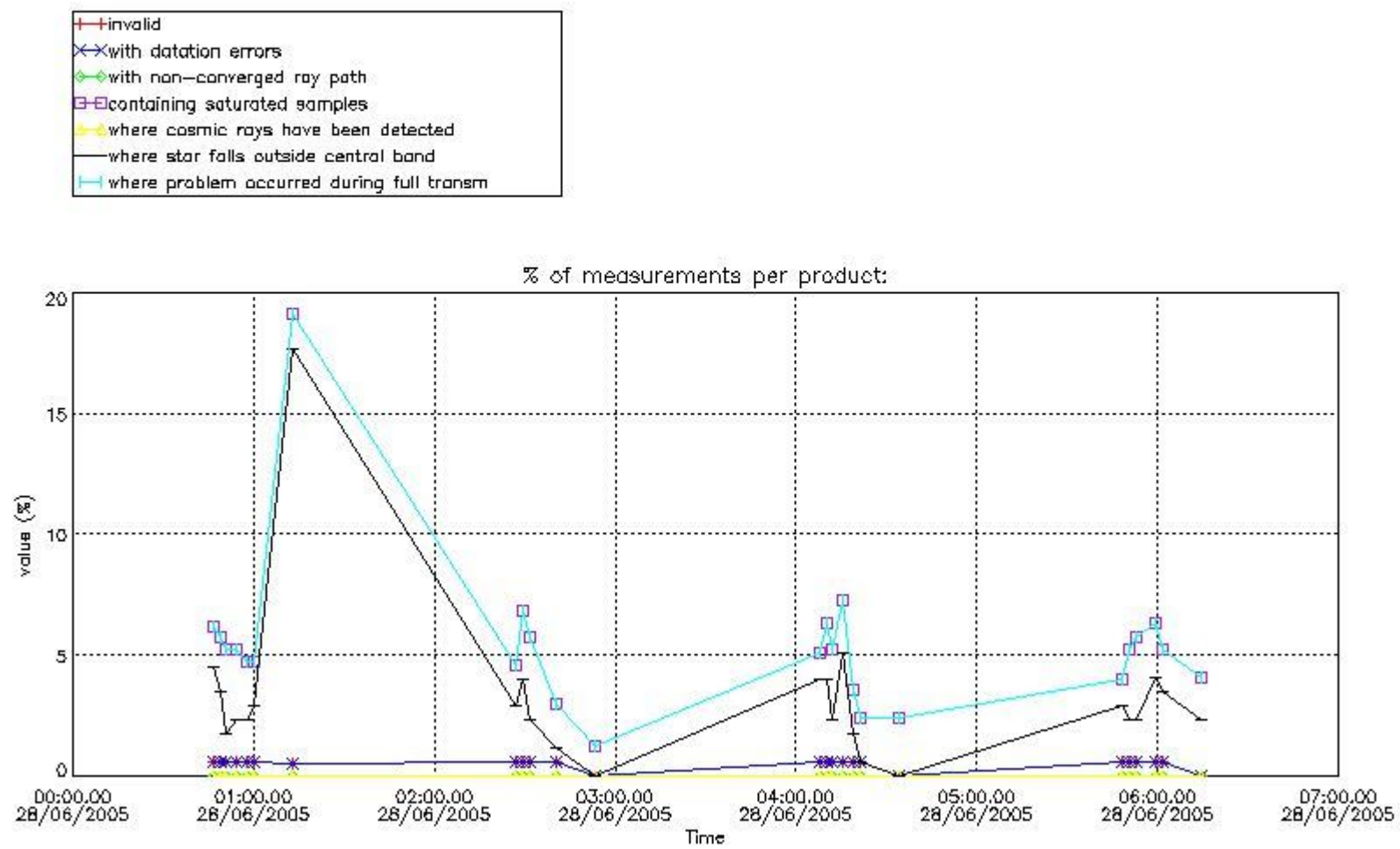
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



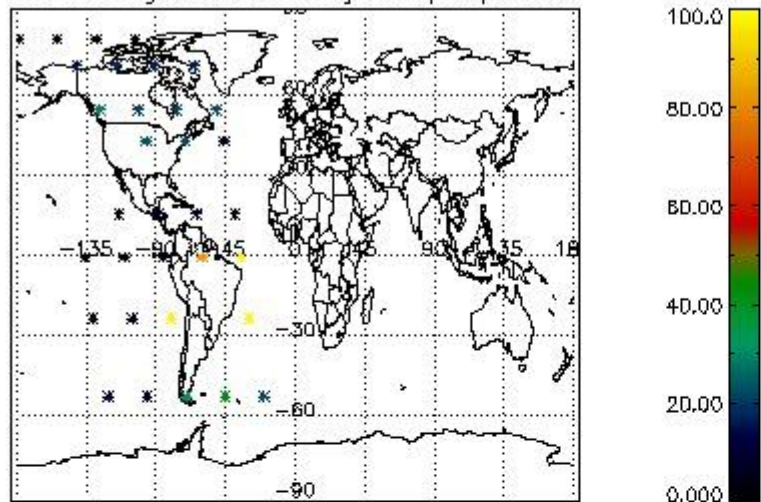
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



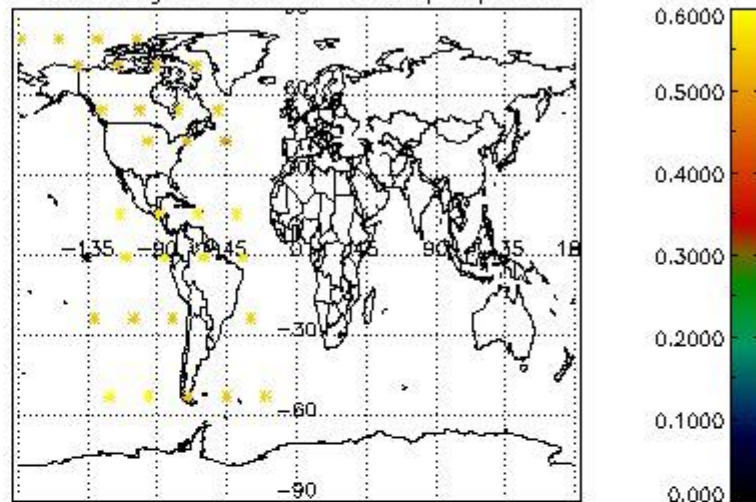
4.2 Plot quality information per product coming from level 1b processing (world map)

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

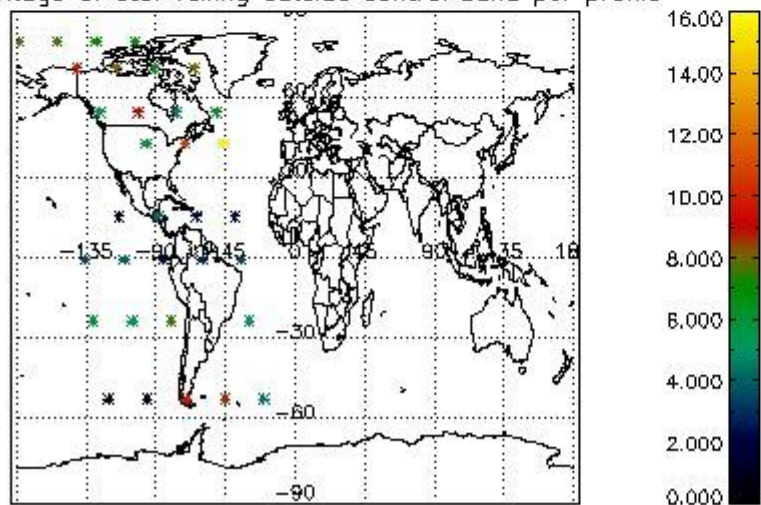
Percentage of cosmic ray hits per profile



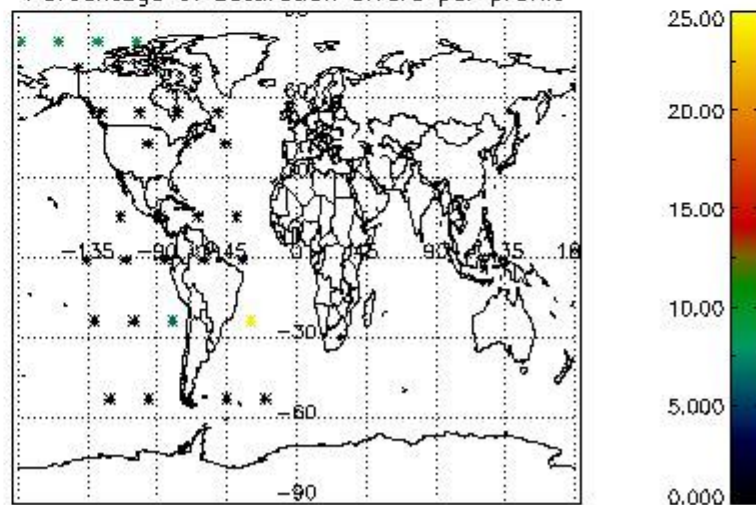
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

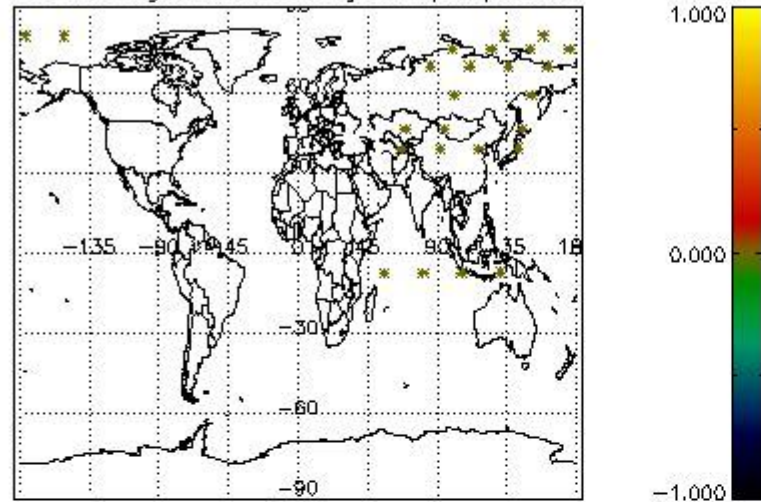


Percentage of saturation errors per profile

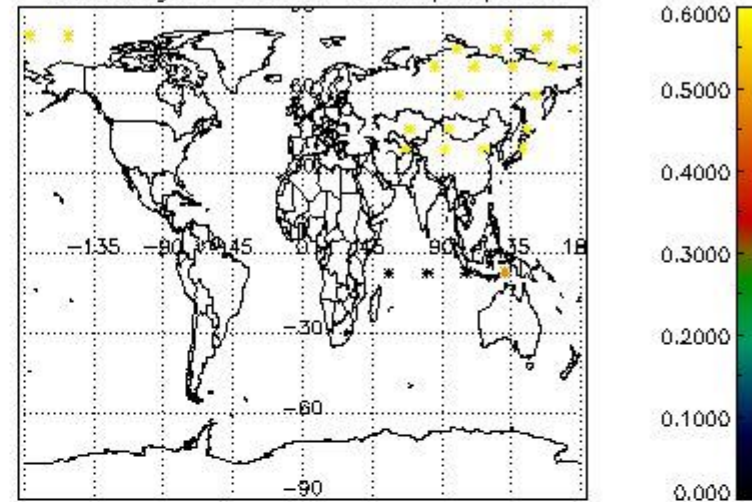


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

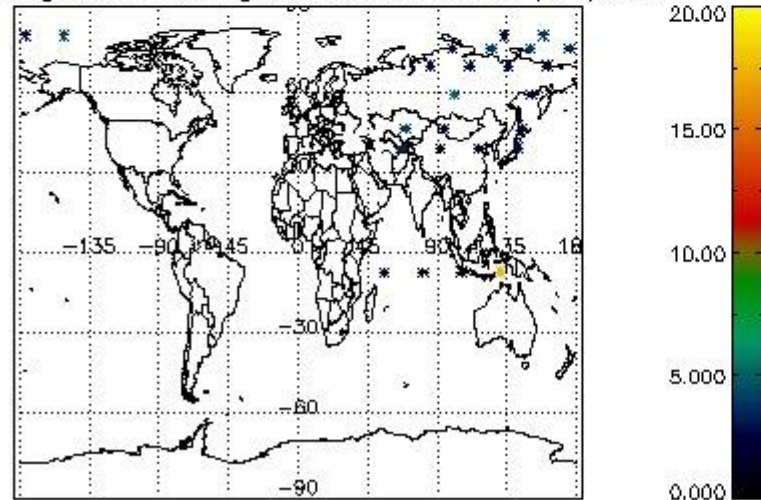
Percentage of cosmic ray hits per profile



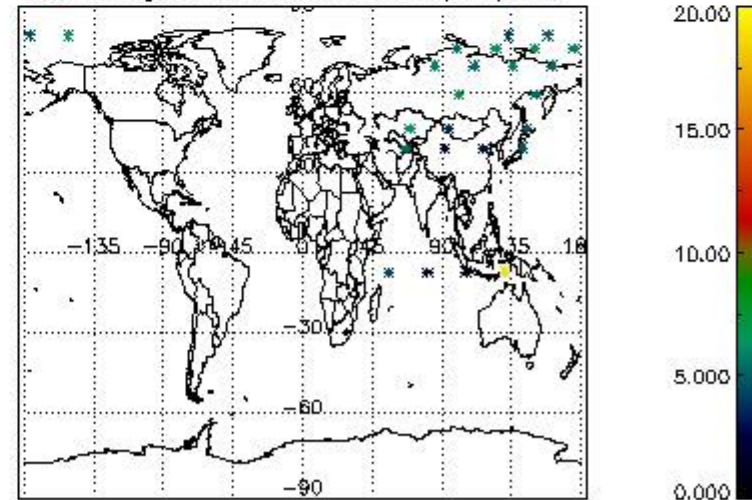
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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

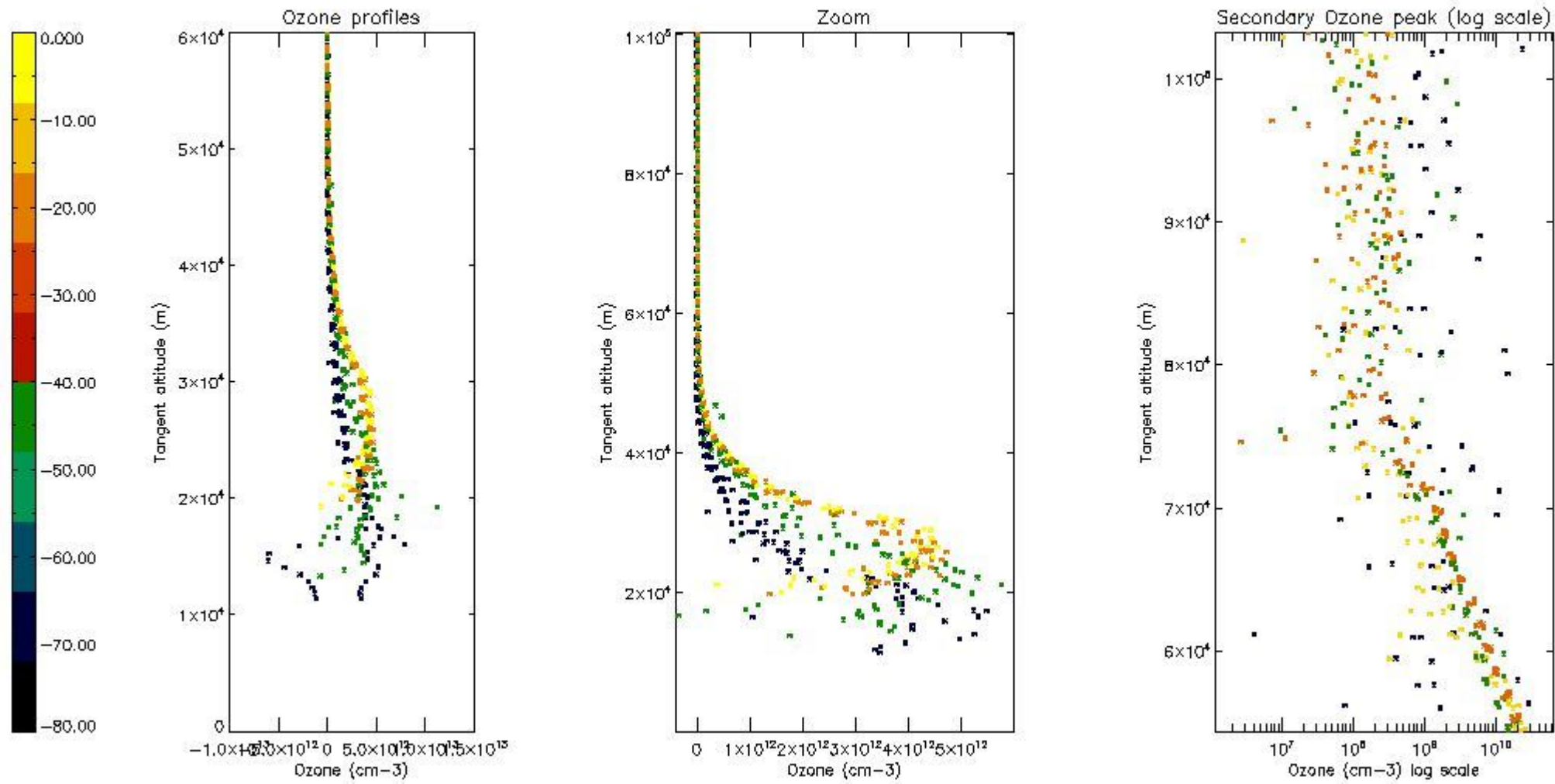
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	31
STD < 20	4

STD < 10	2
STD < 5	0

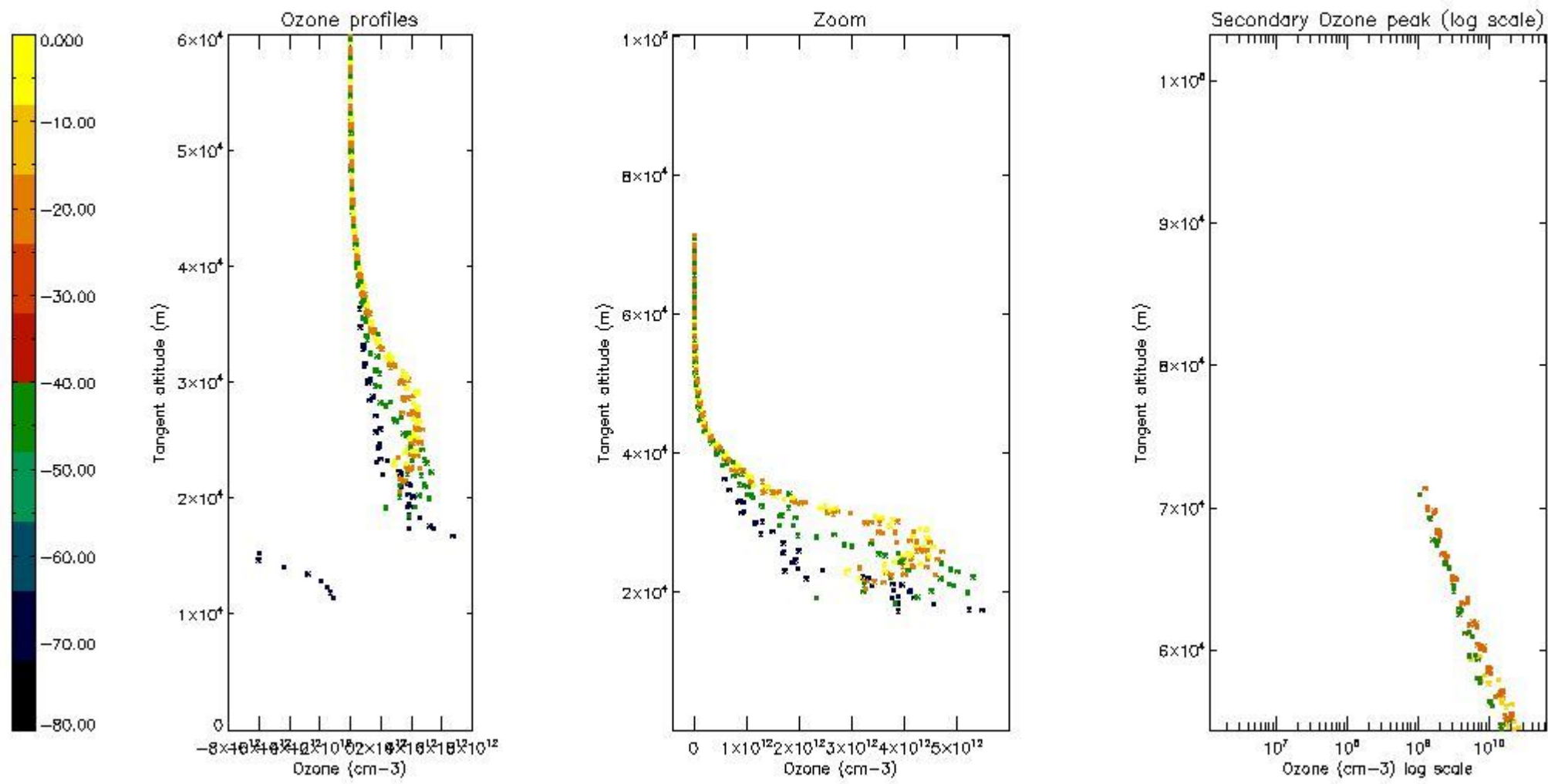
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



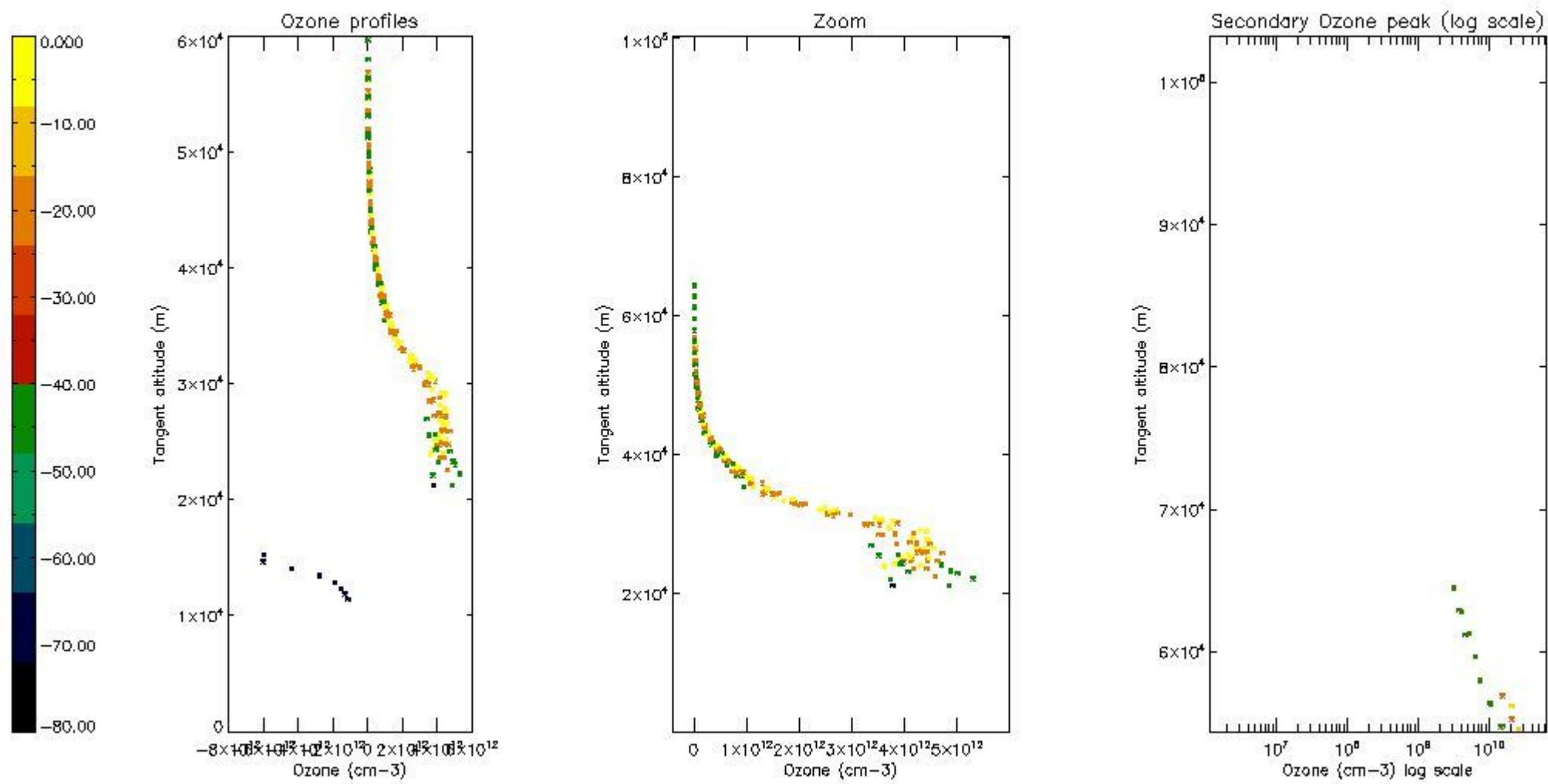
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



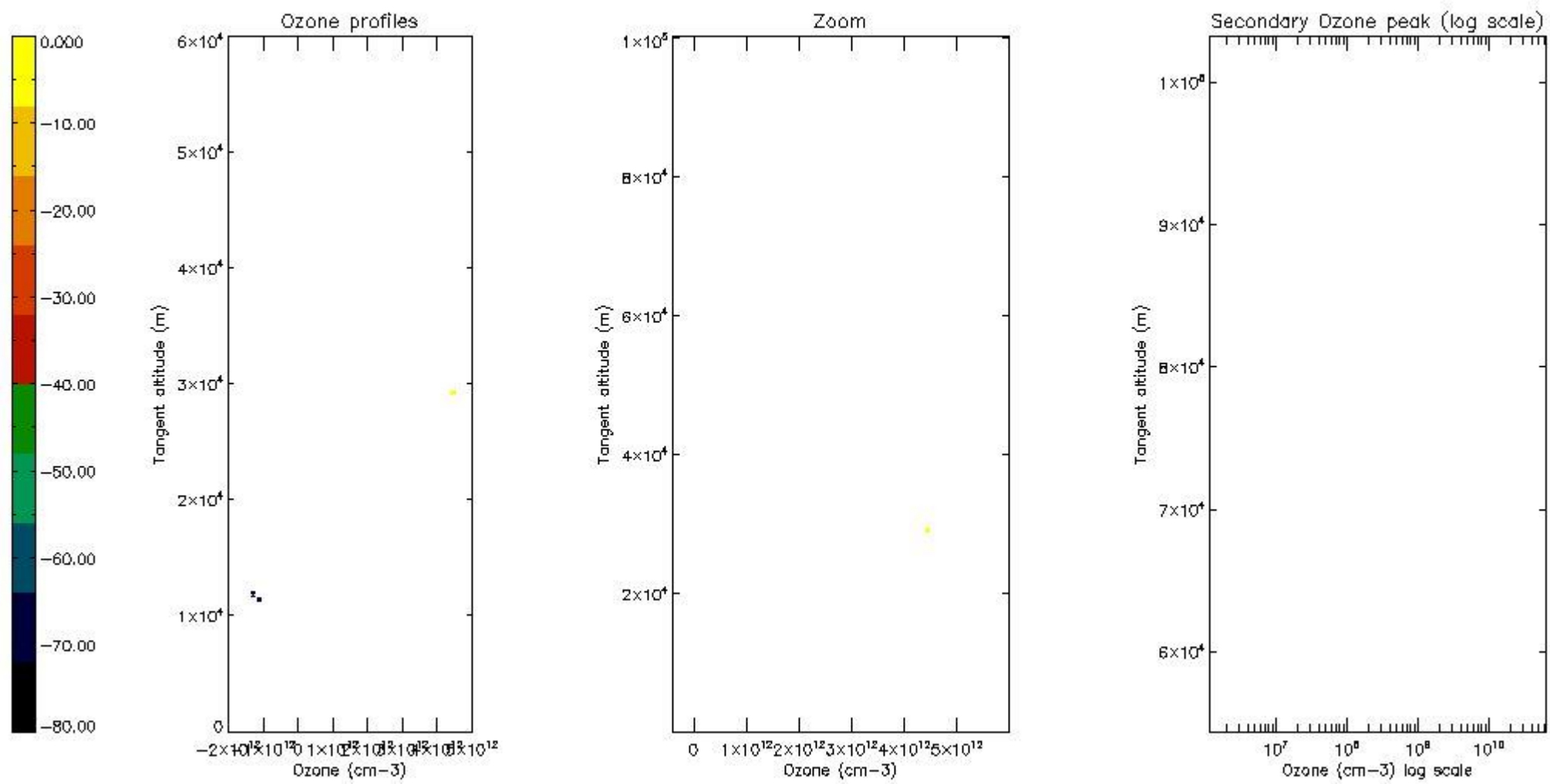
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



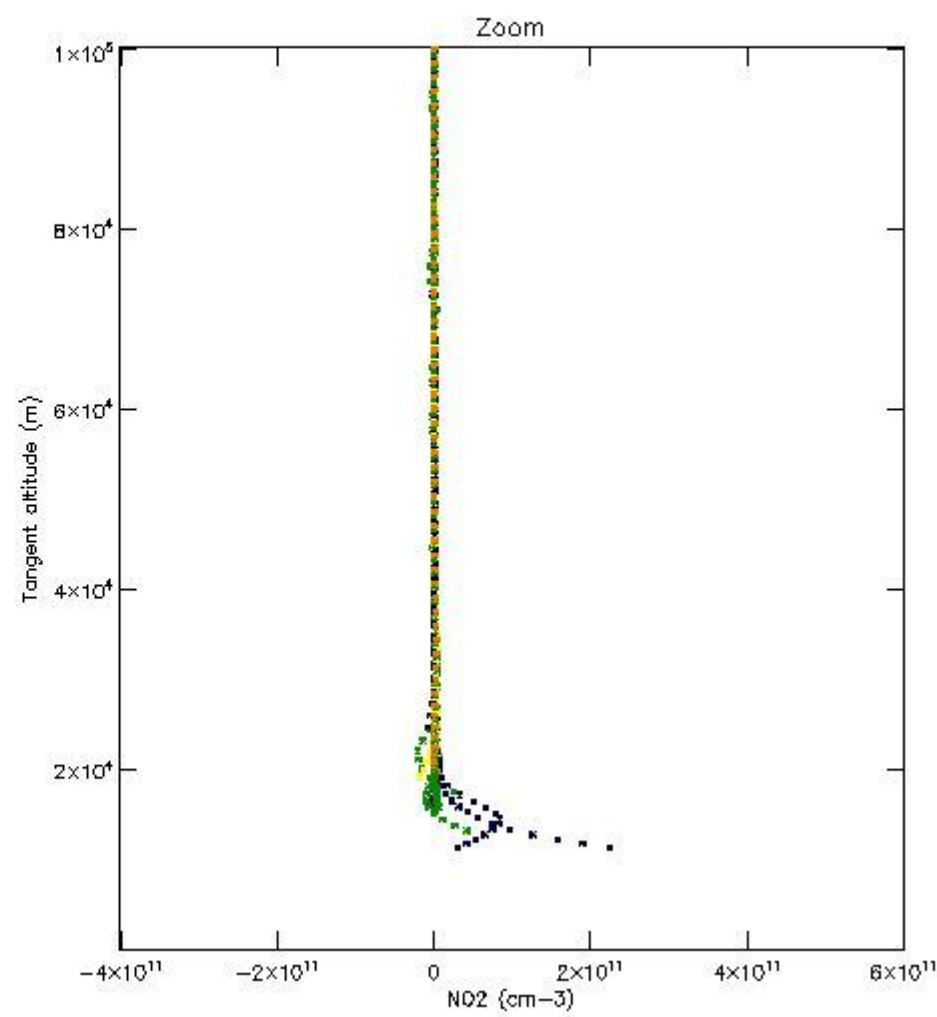
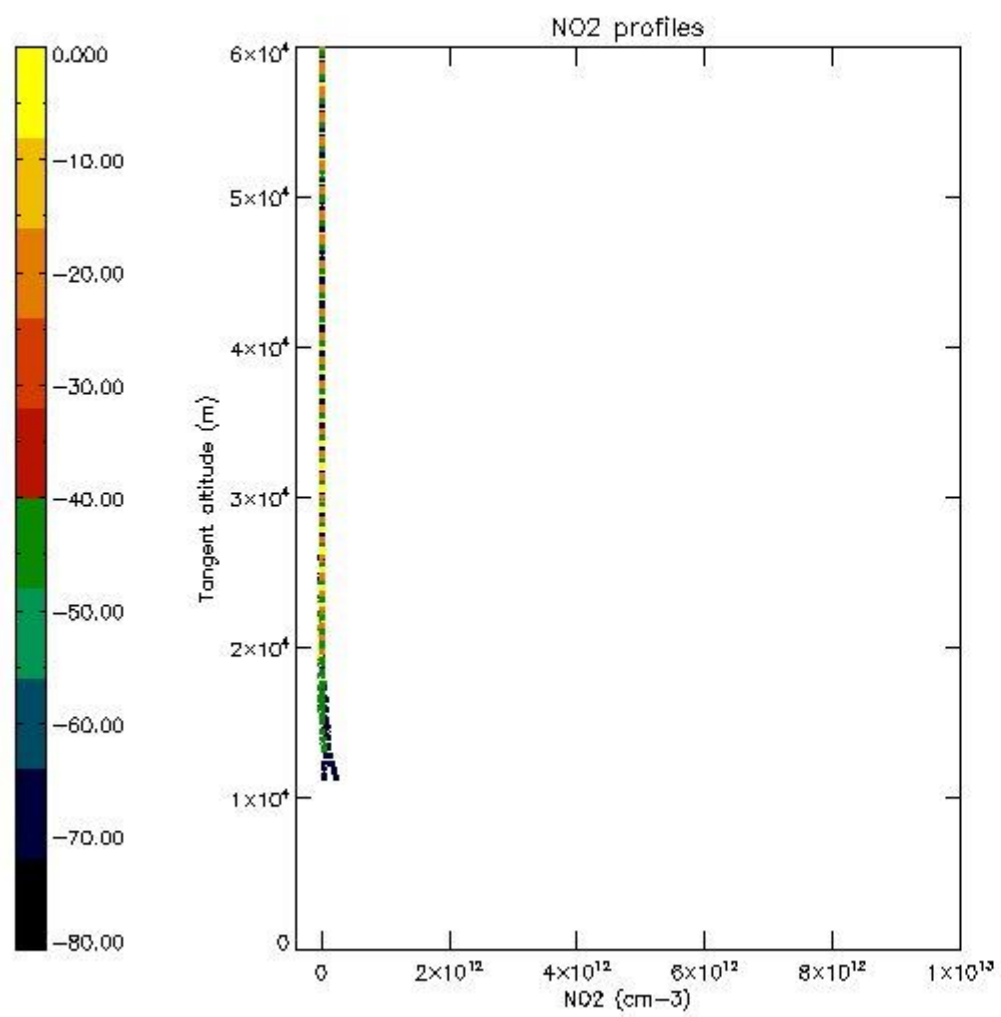
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



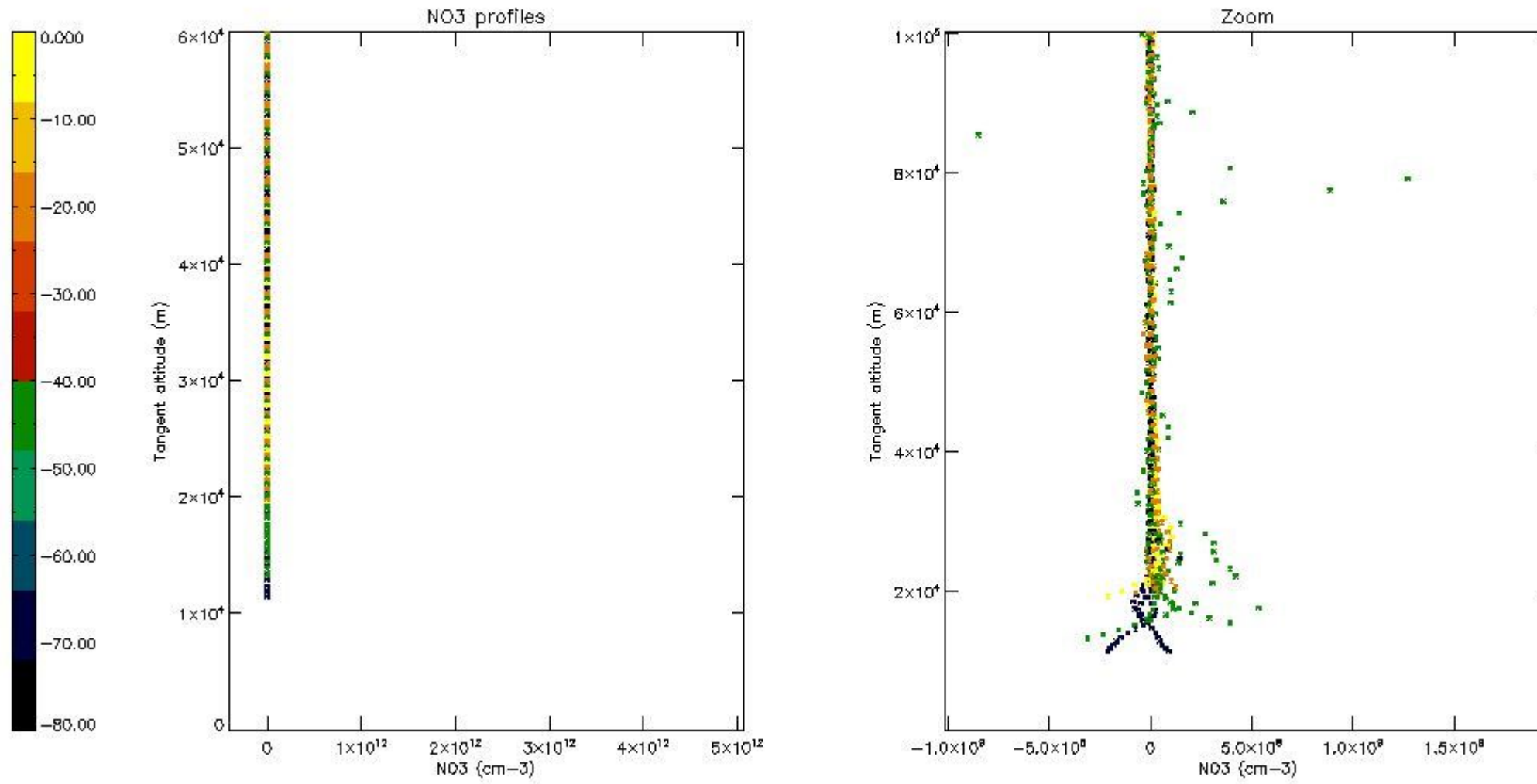
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

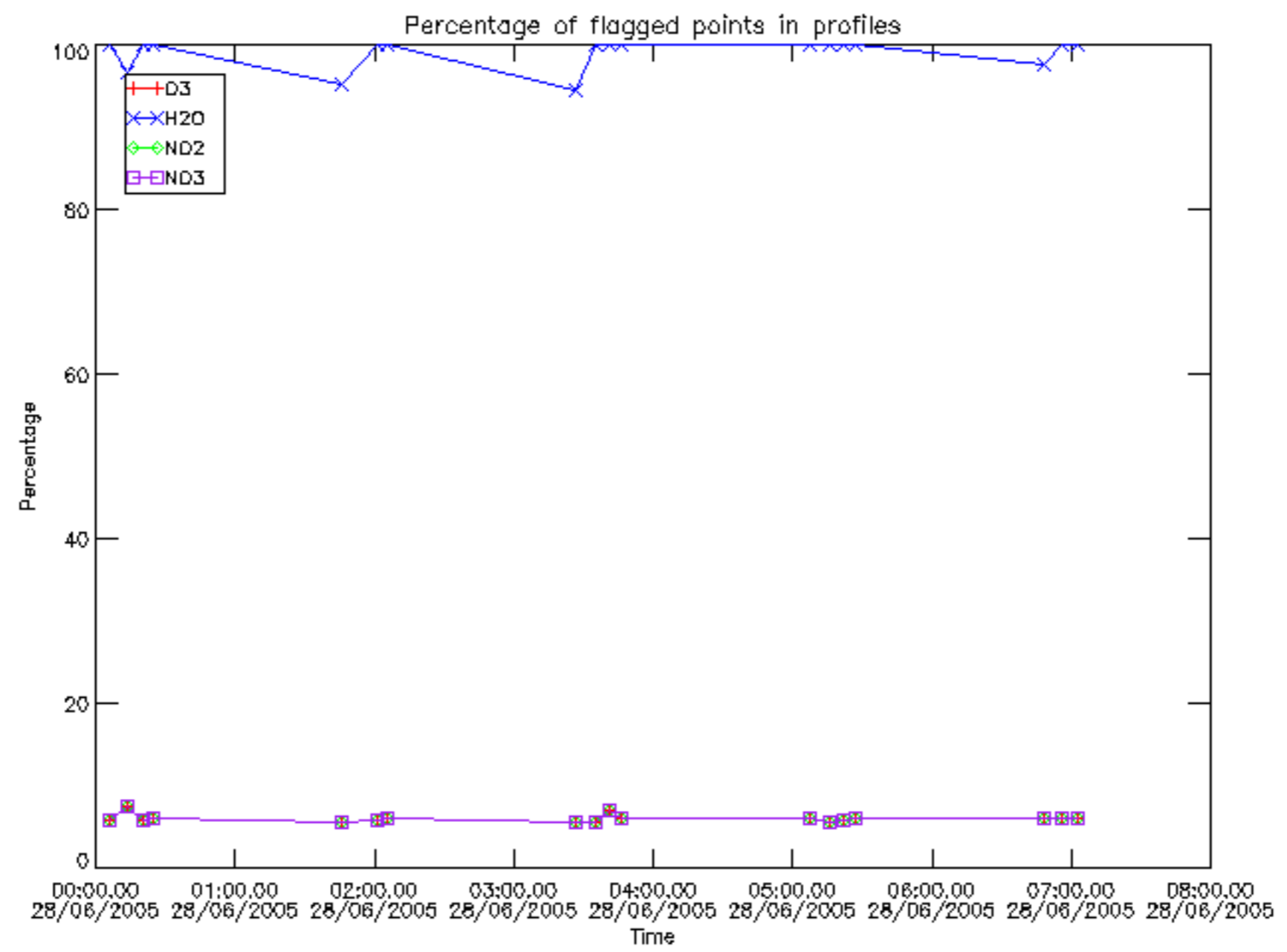
The colorbar represents the latitude.



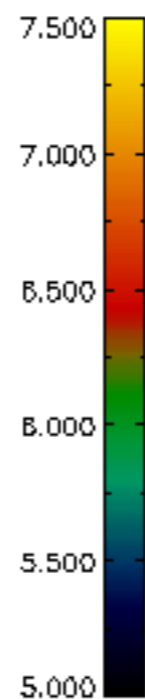
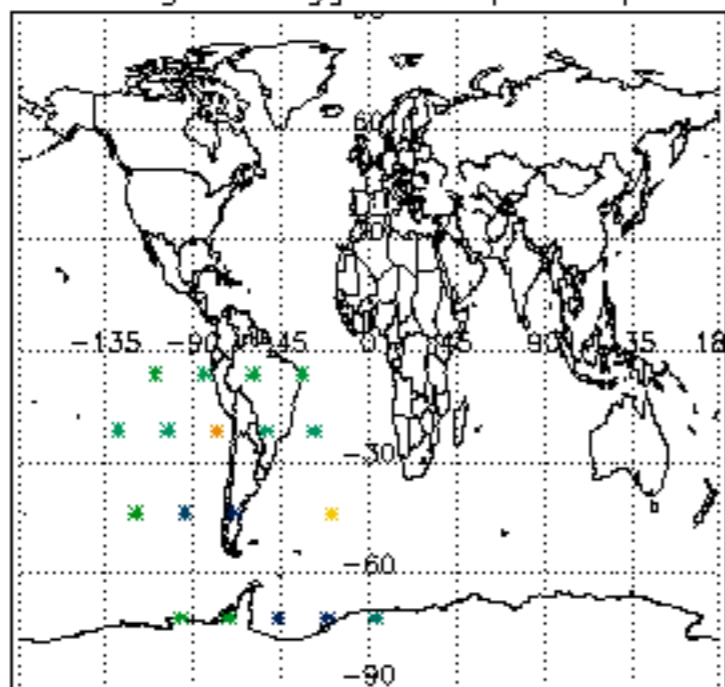
6. Auxiliary Data Files used for the production reported in section 2

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.

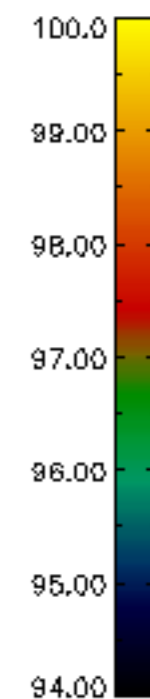
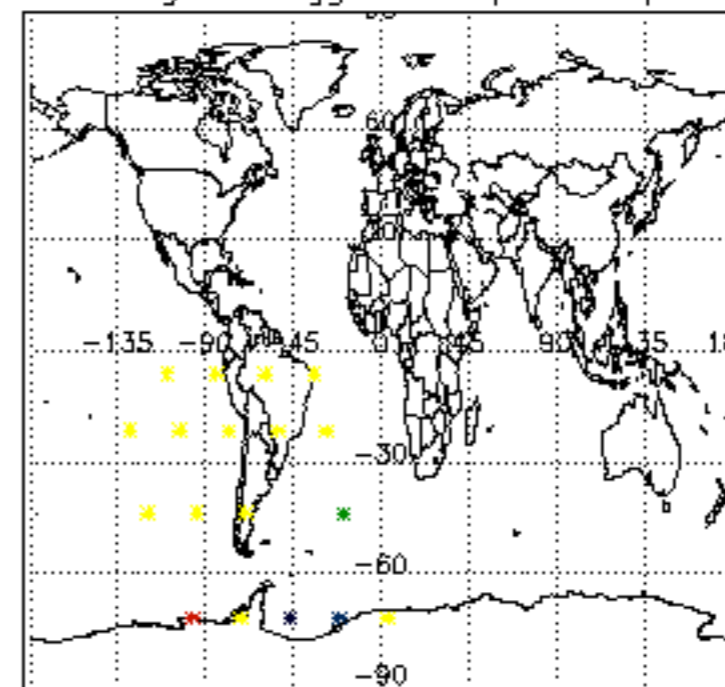
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	28-JUN-2005 00:05:40
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	28-JUN-2005 00:05:40
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	28-JUN-2005 00:05:40



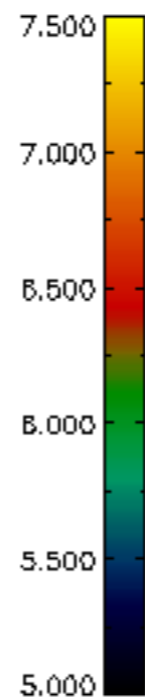
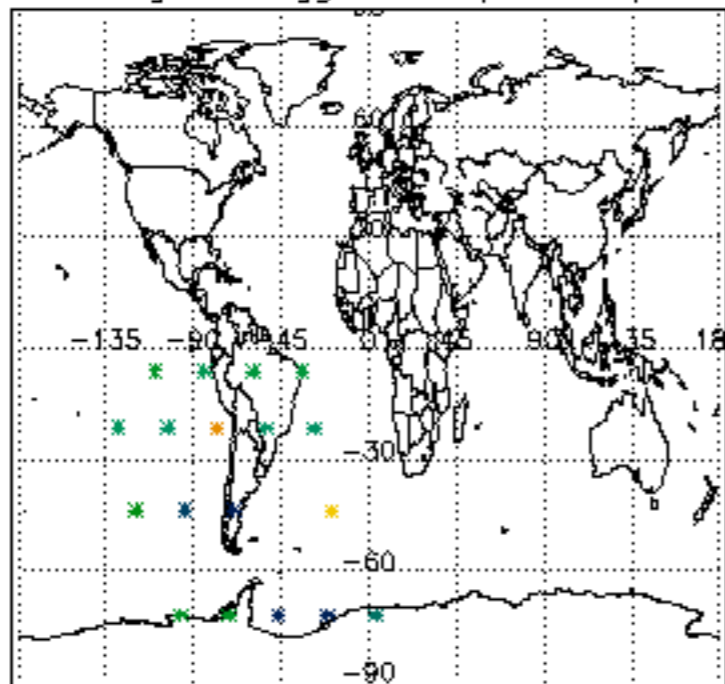
Percentage of flagged data per D3 profile



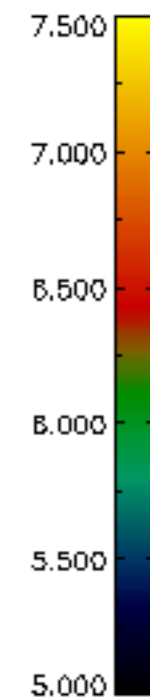
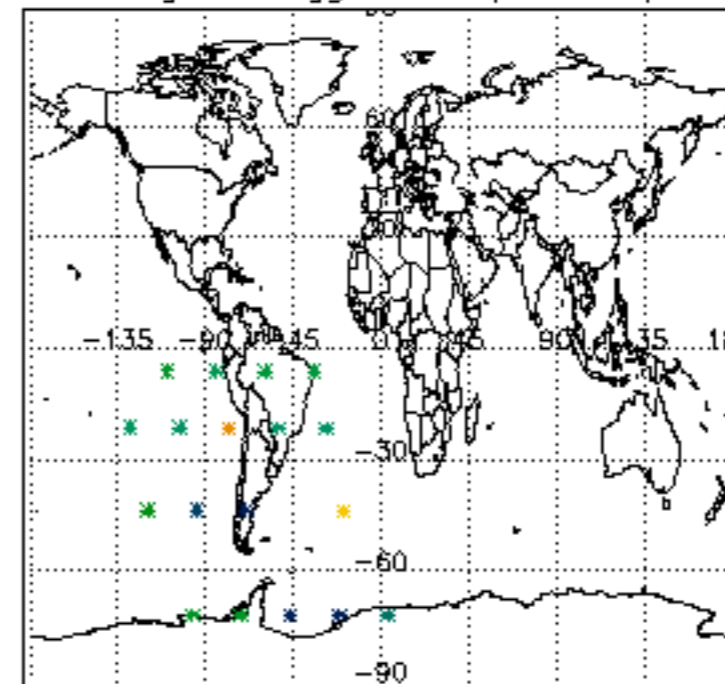
Percentage of flagged data per H2O profile

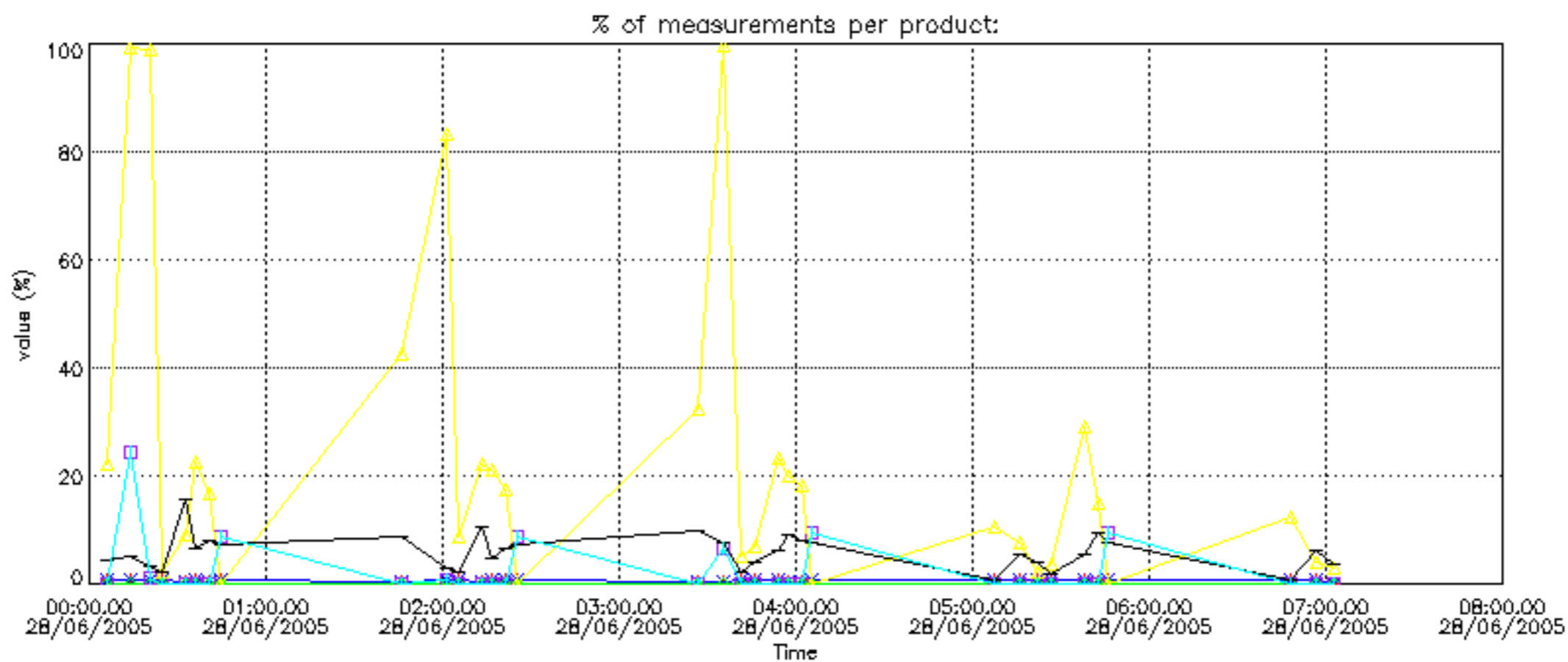


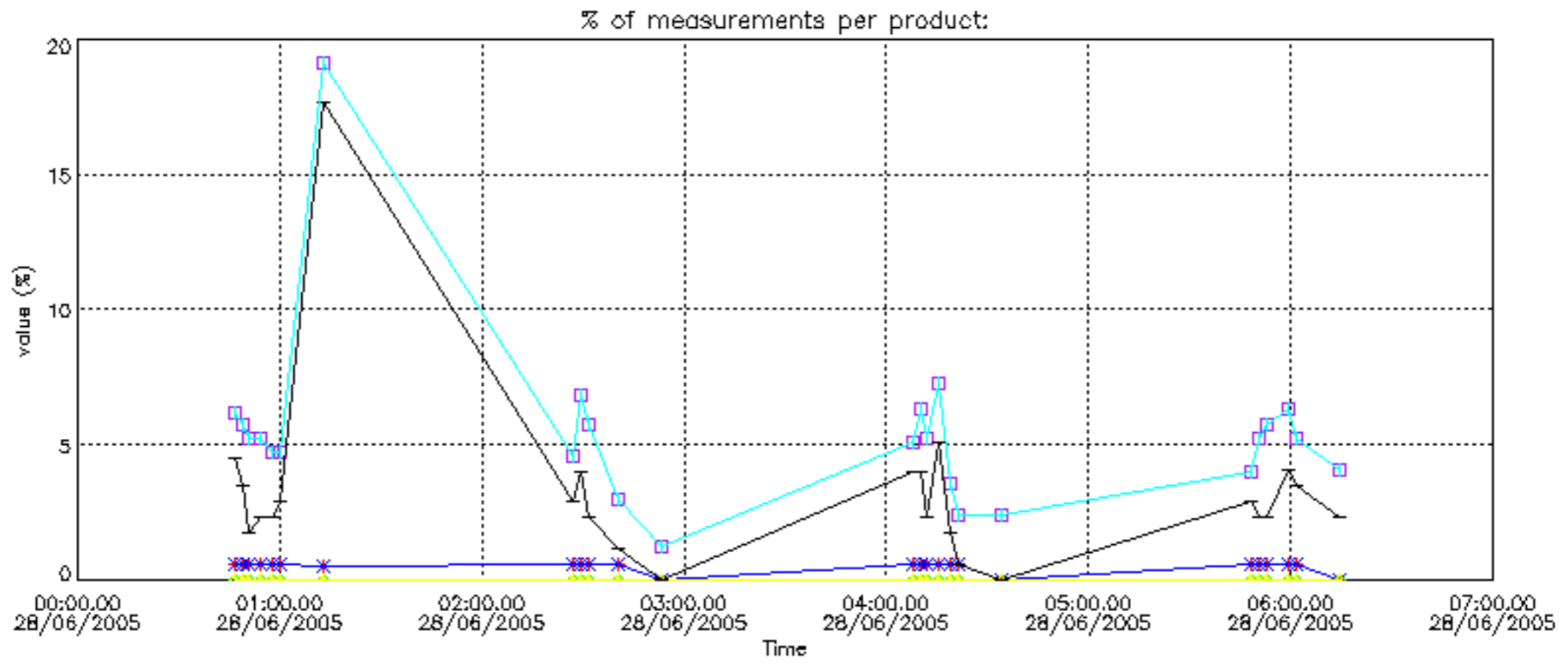
Percentage of flagged data per NO2 profile



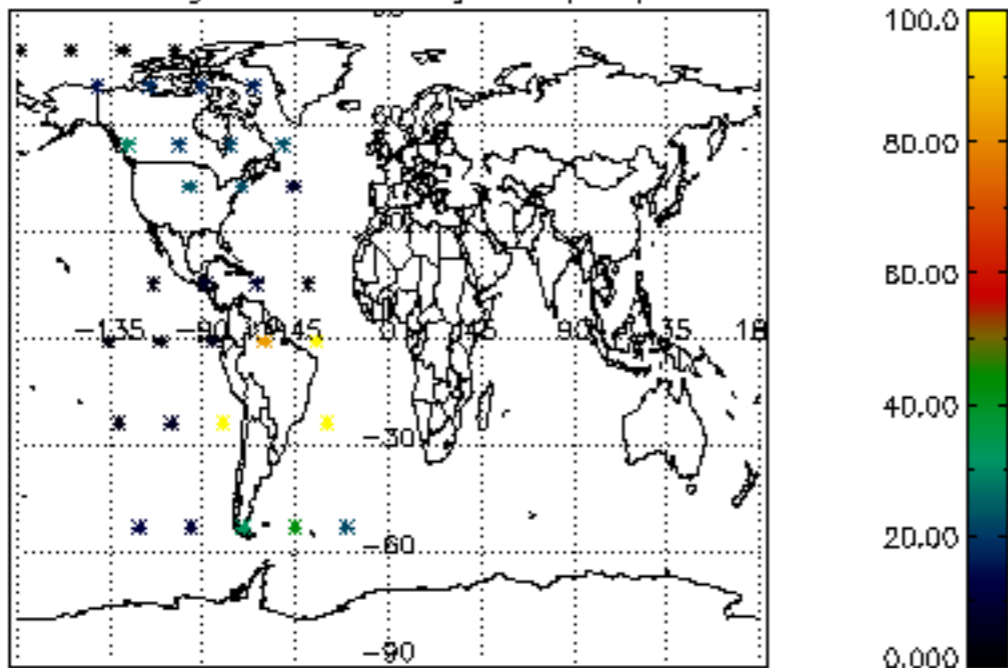
Percentage of flagged data per NO3 profile



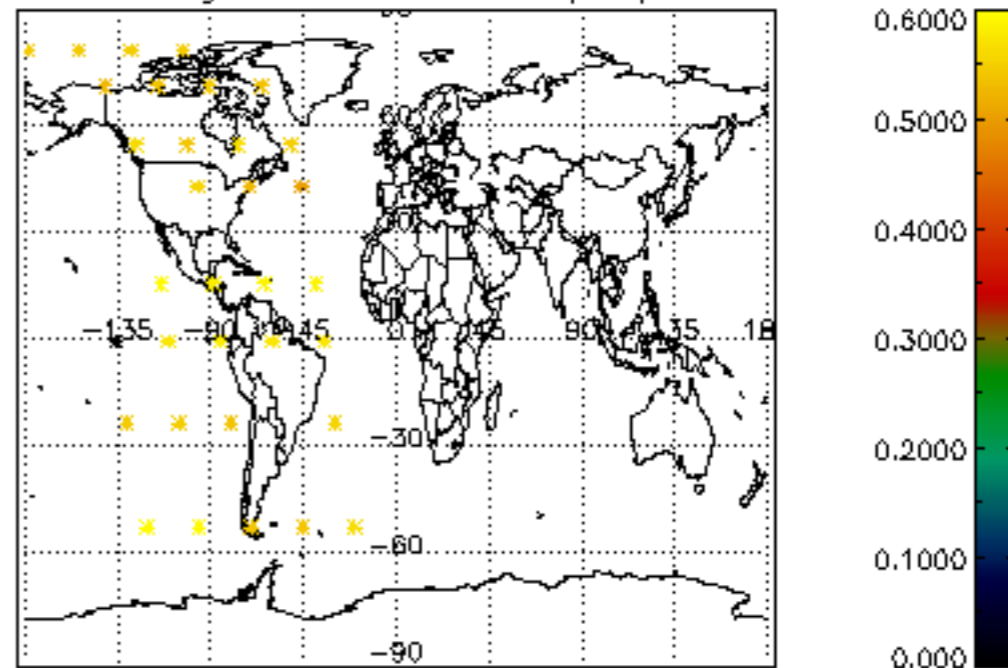




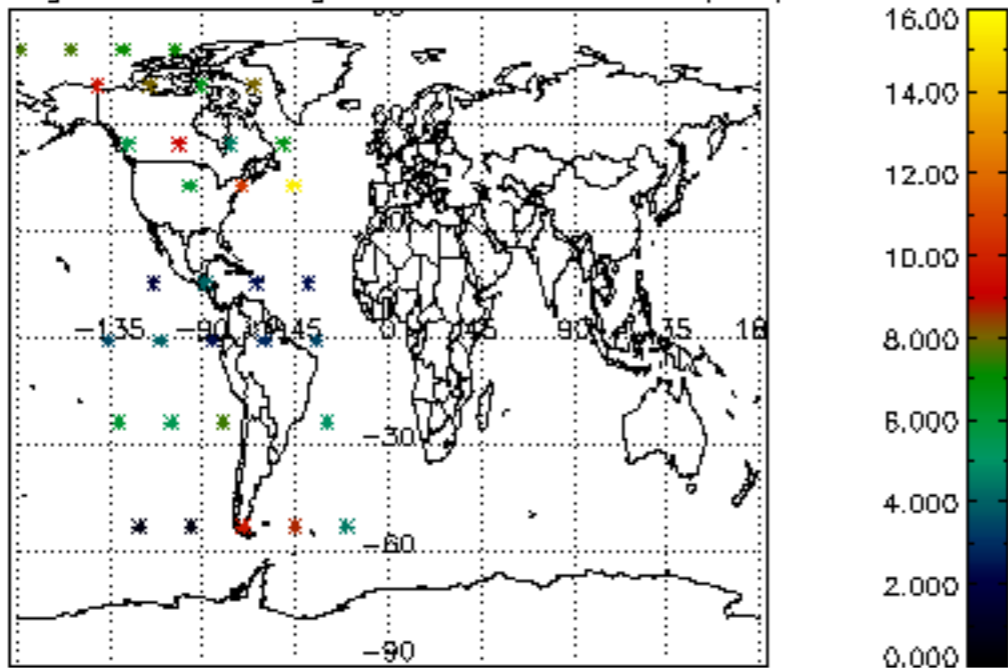
Percentage of cosmic ray hits per profile



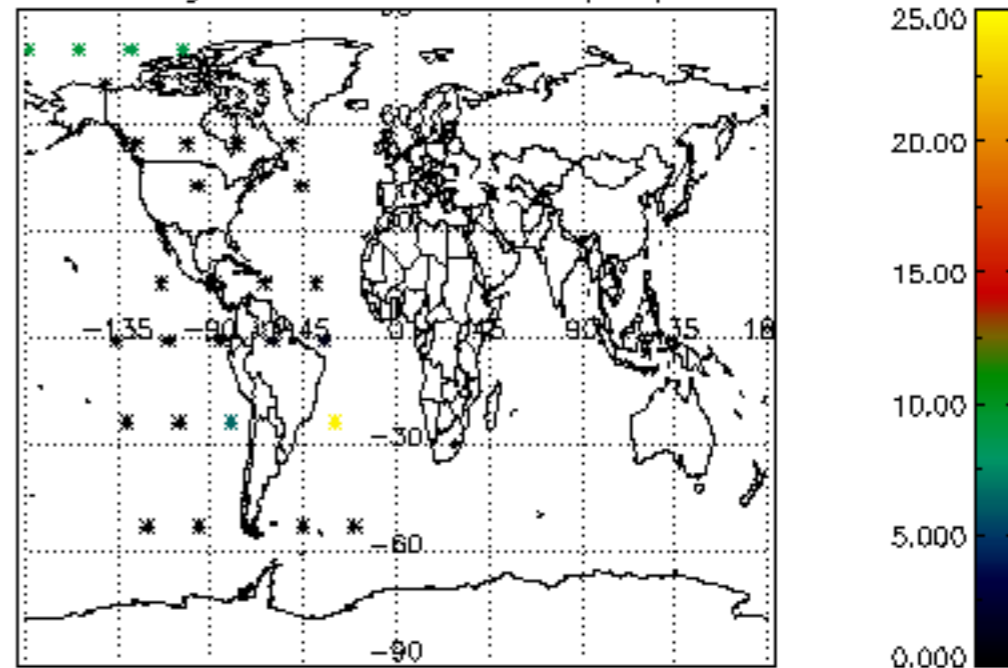
Percentage of datation errors per profile



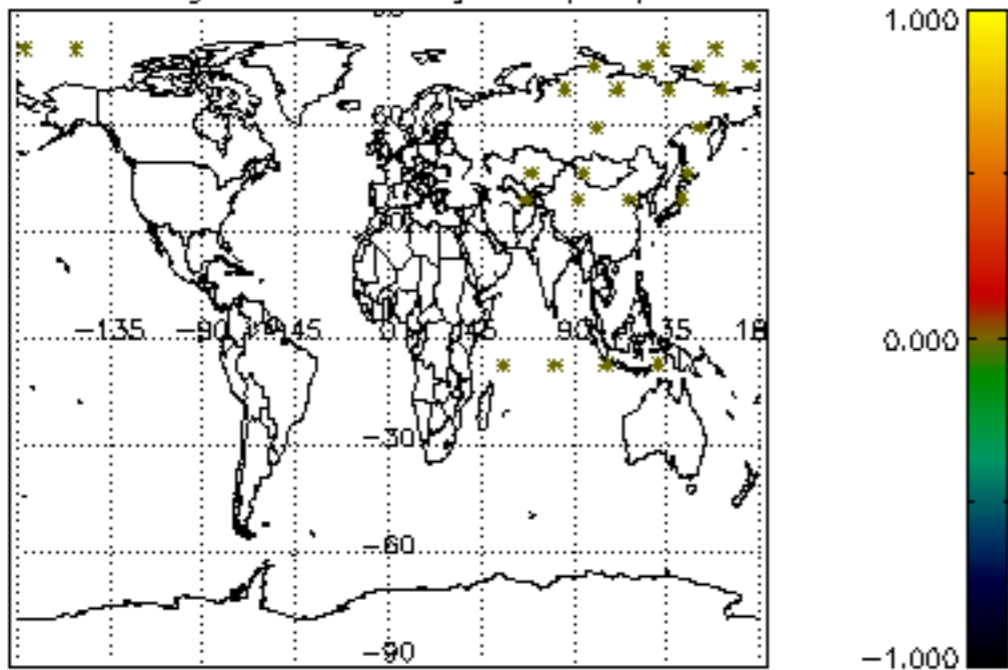
Percentage of star falling outside central band per profile



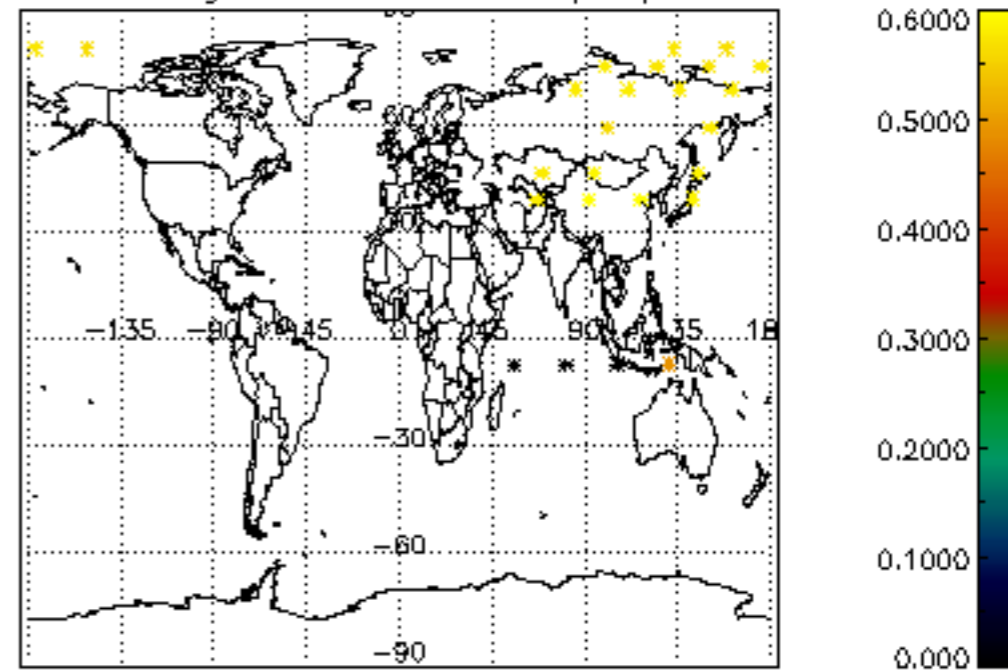
Percentage of saturation errors per profile



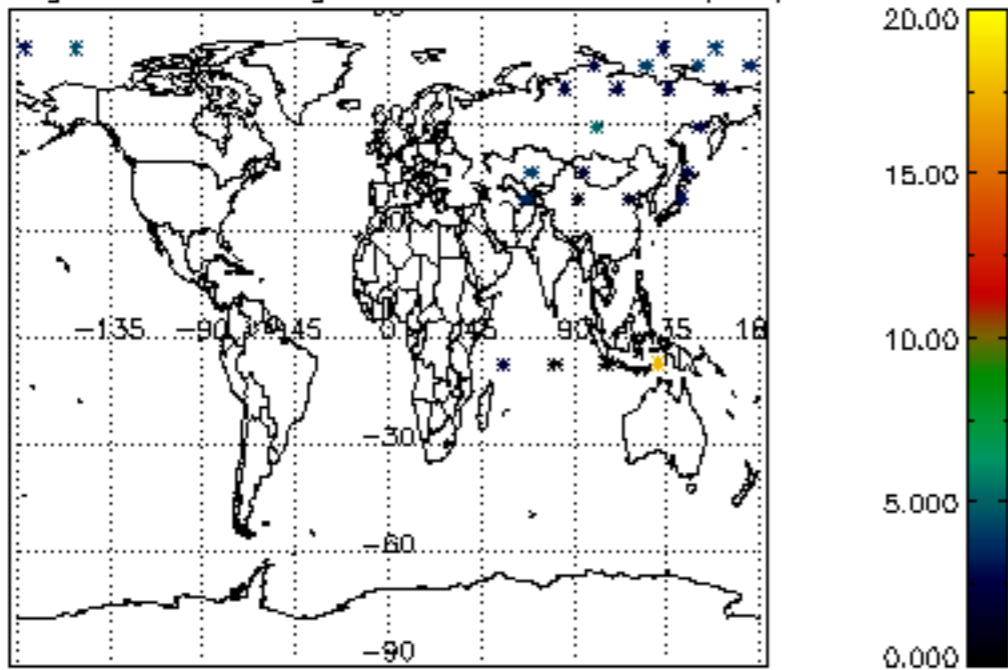
Percentage of cosmic ray hits per profile



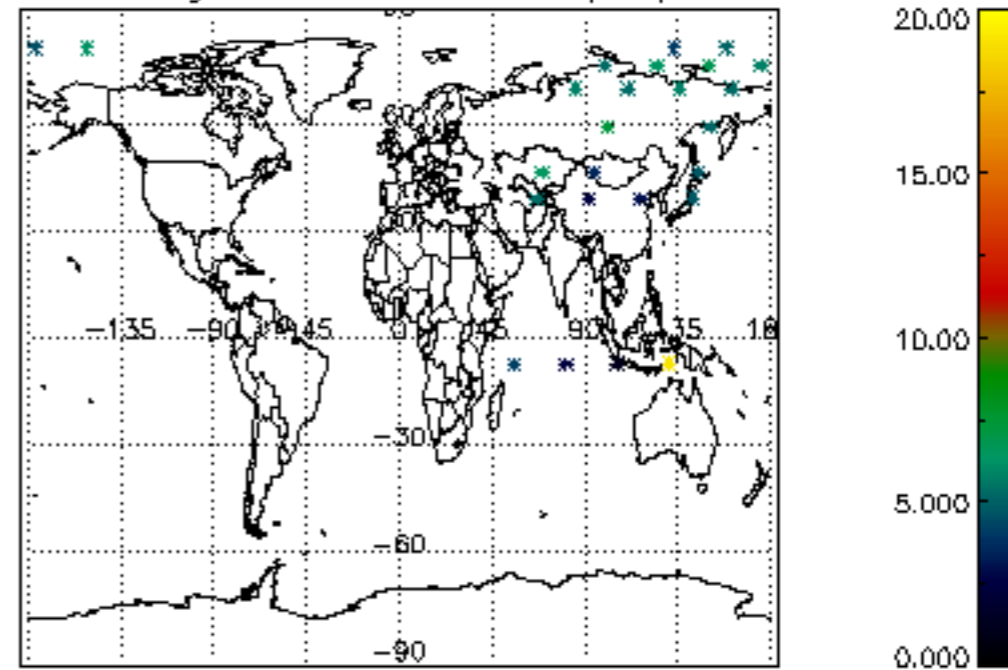
Percentage of datation errors per profile

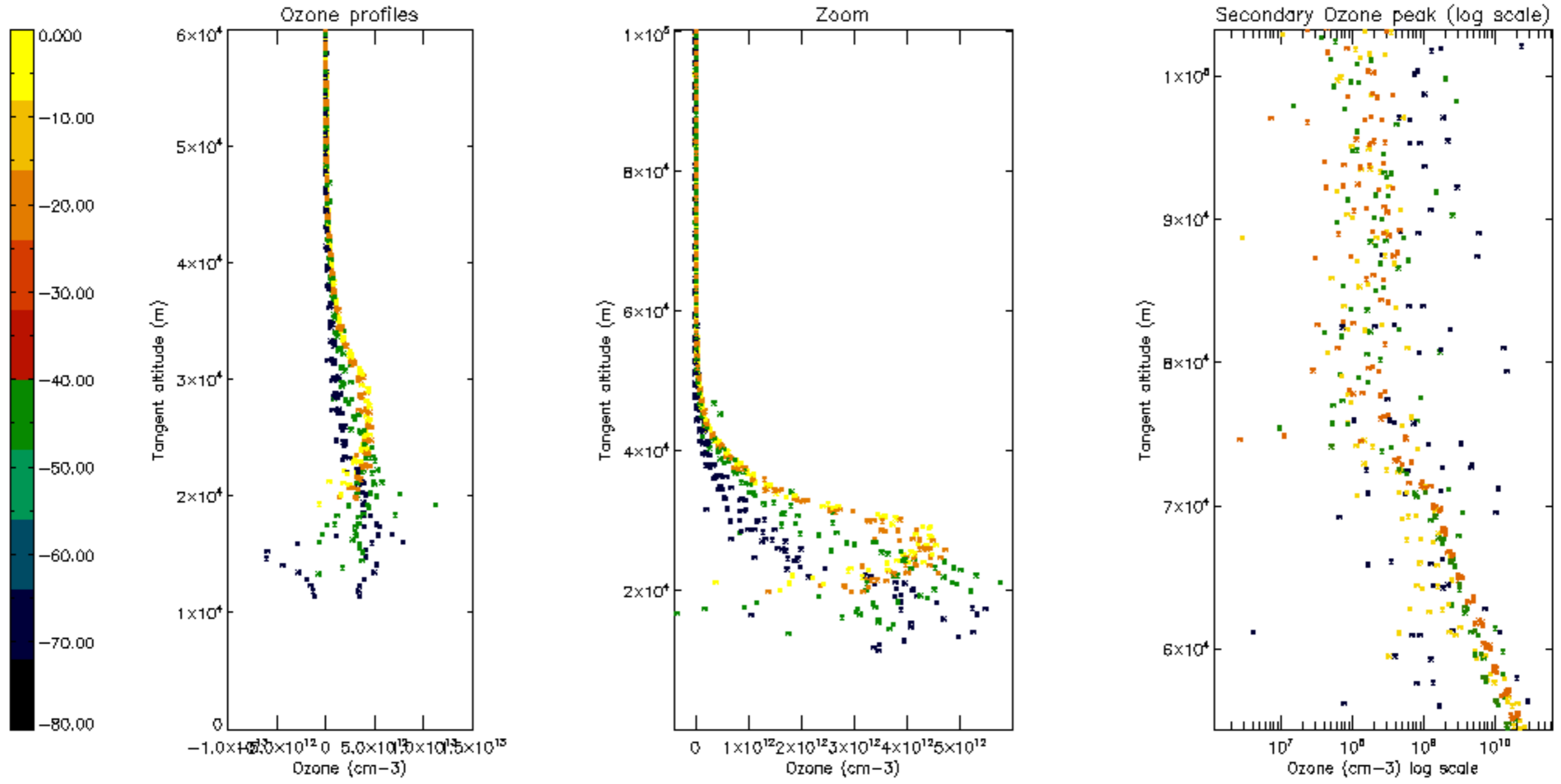


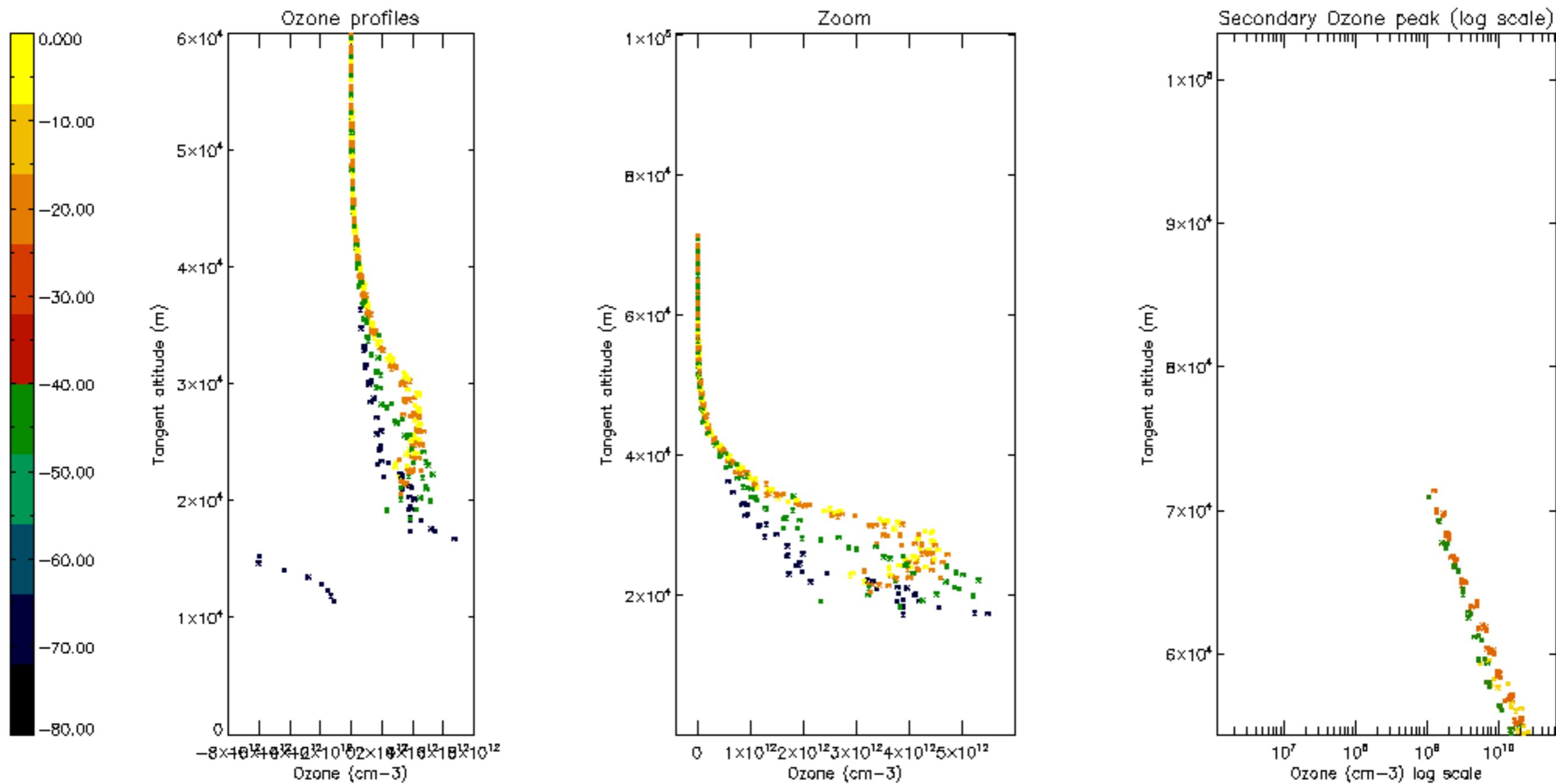
Percentage of star falling outside central band per profile

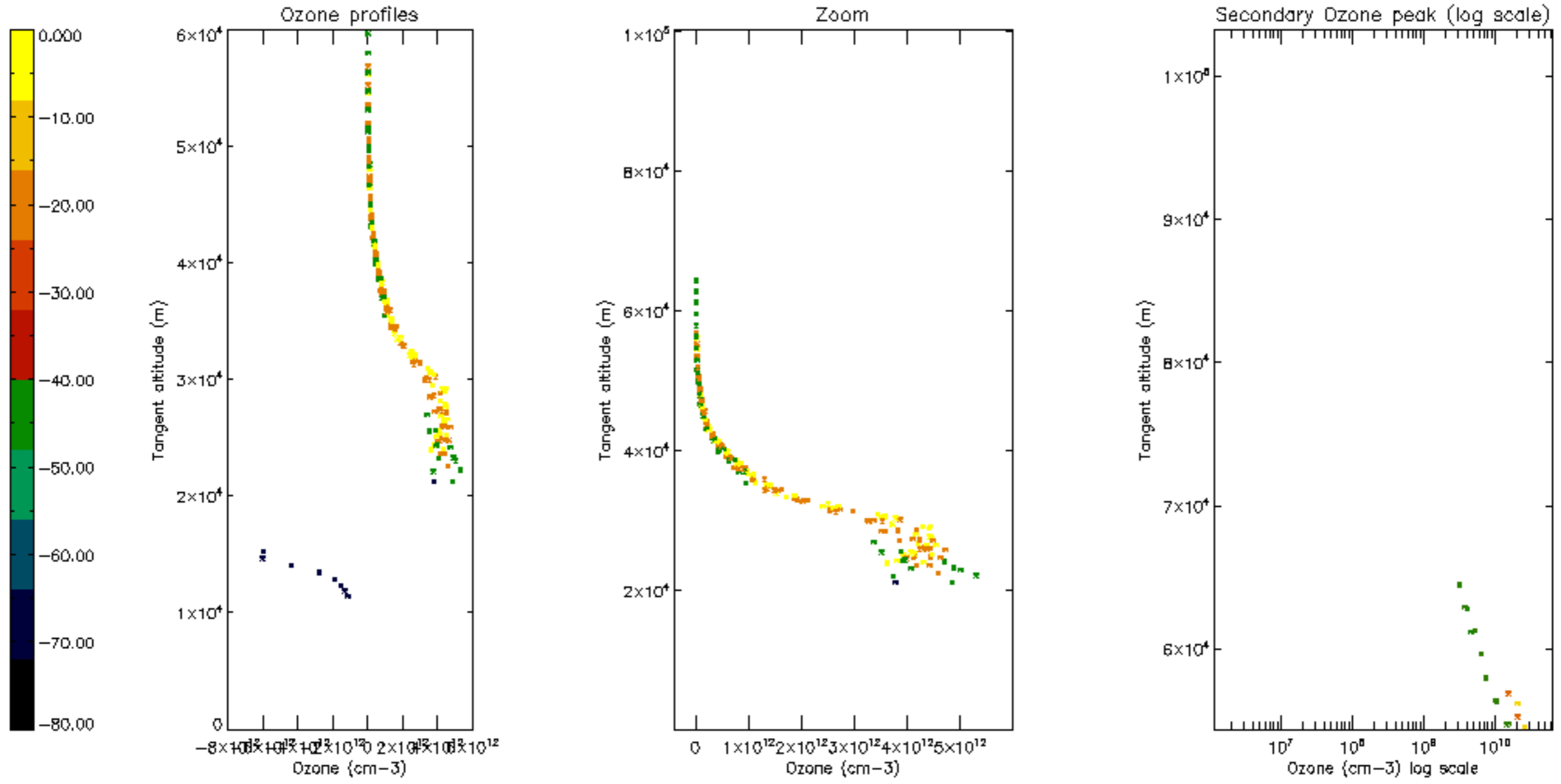


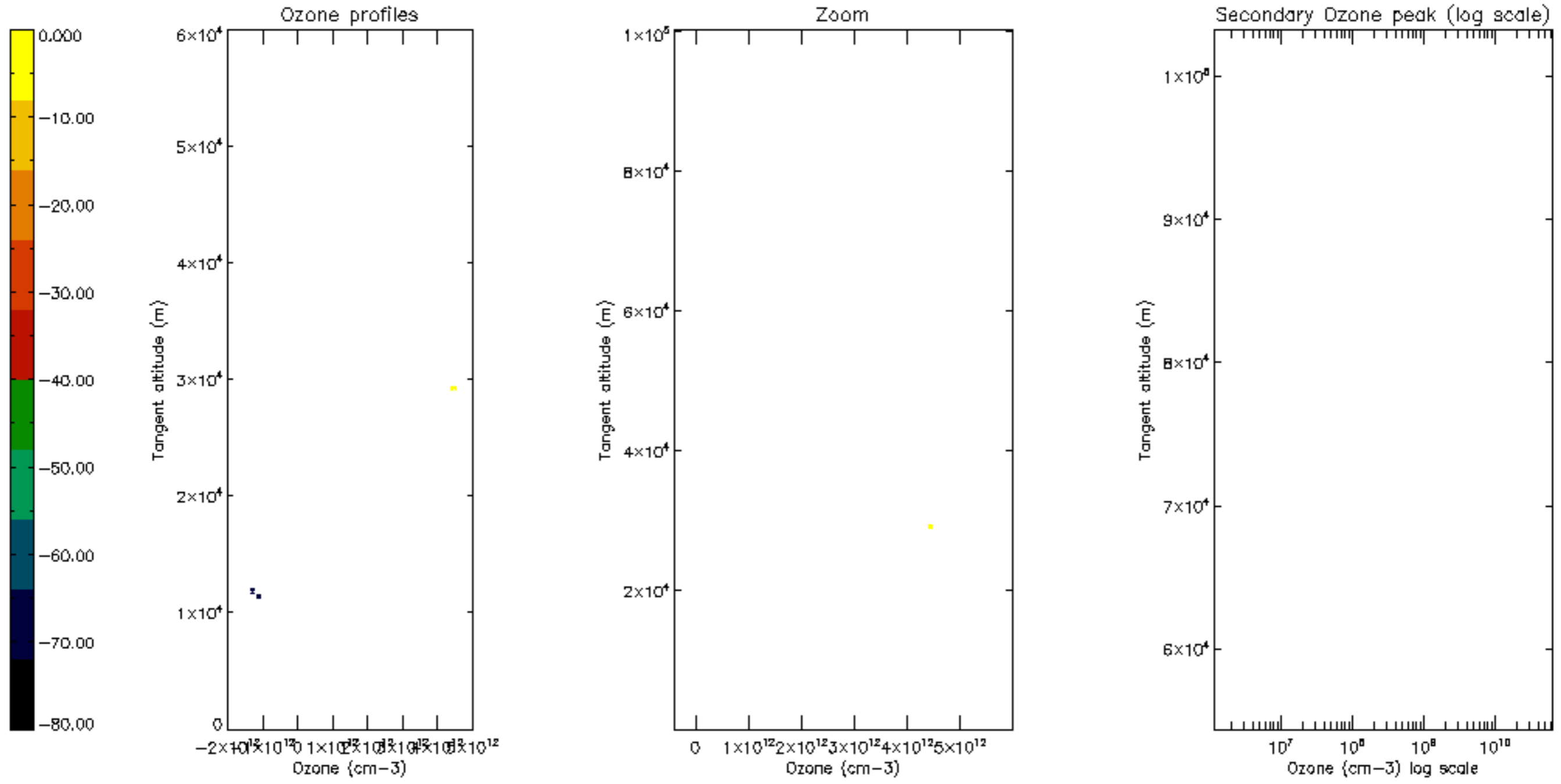
Percentage of saturation errors per profile

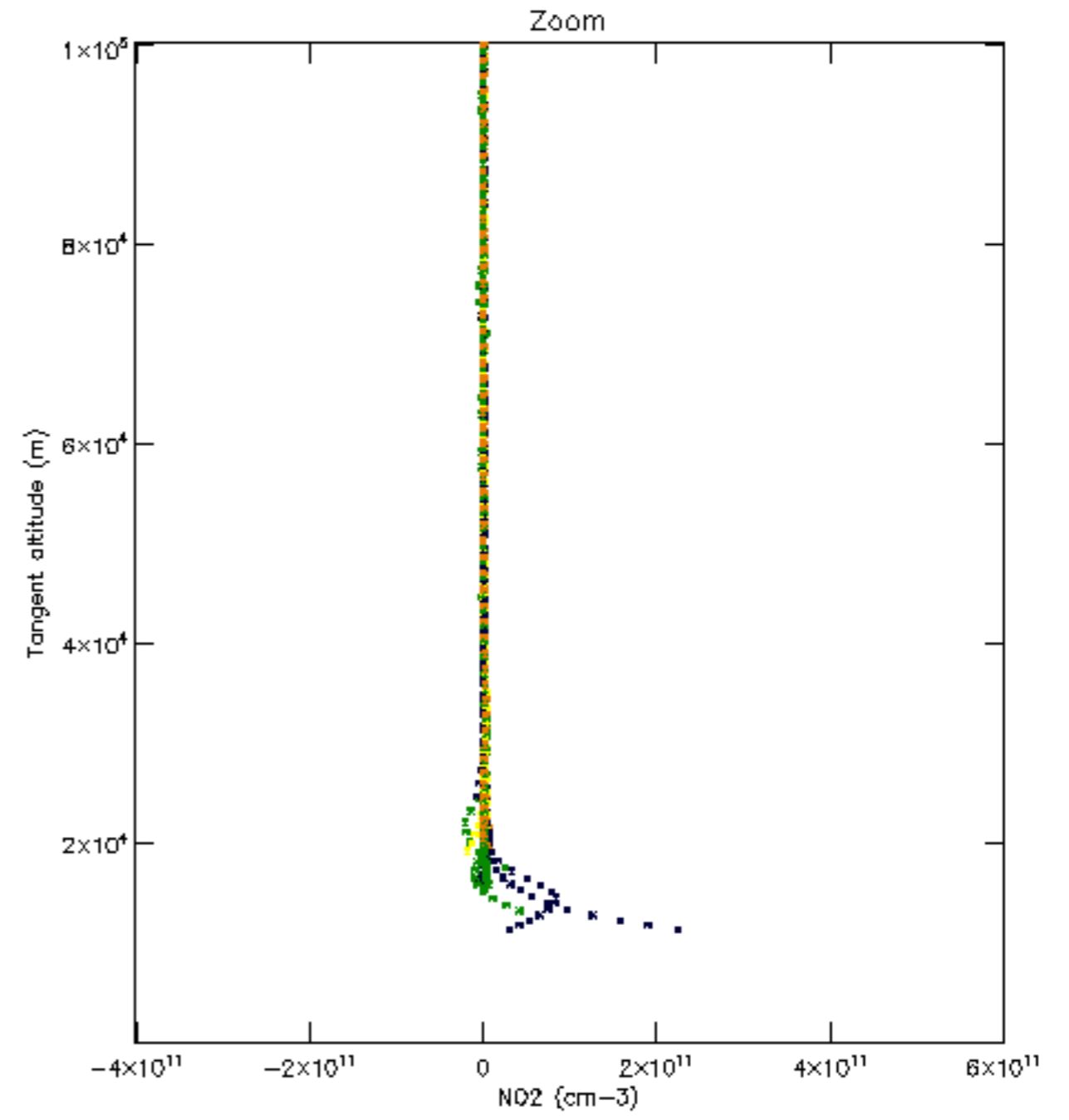
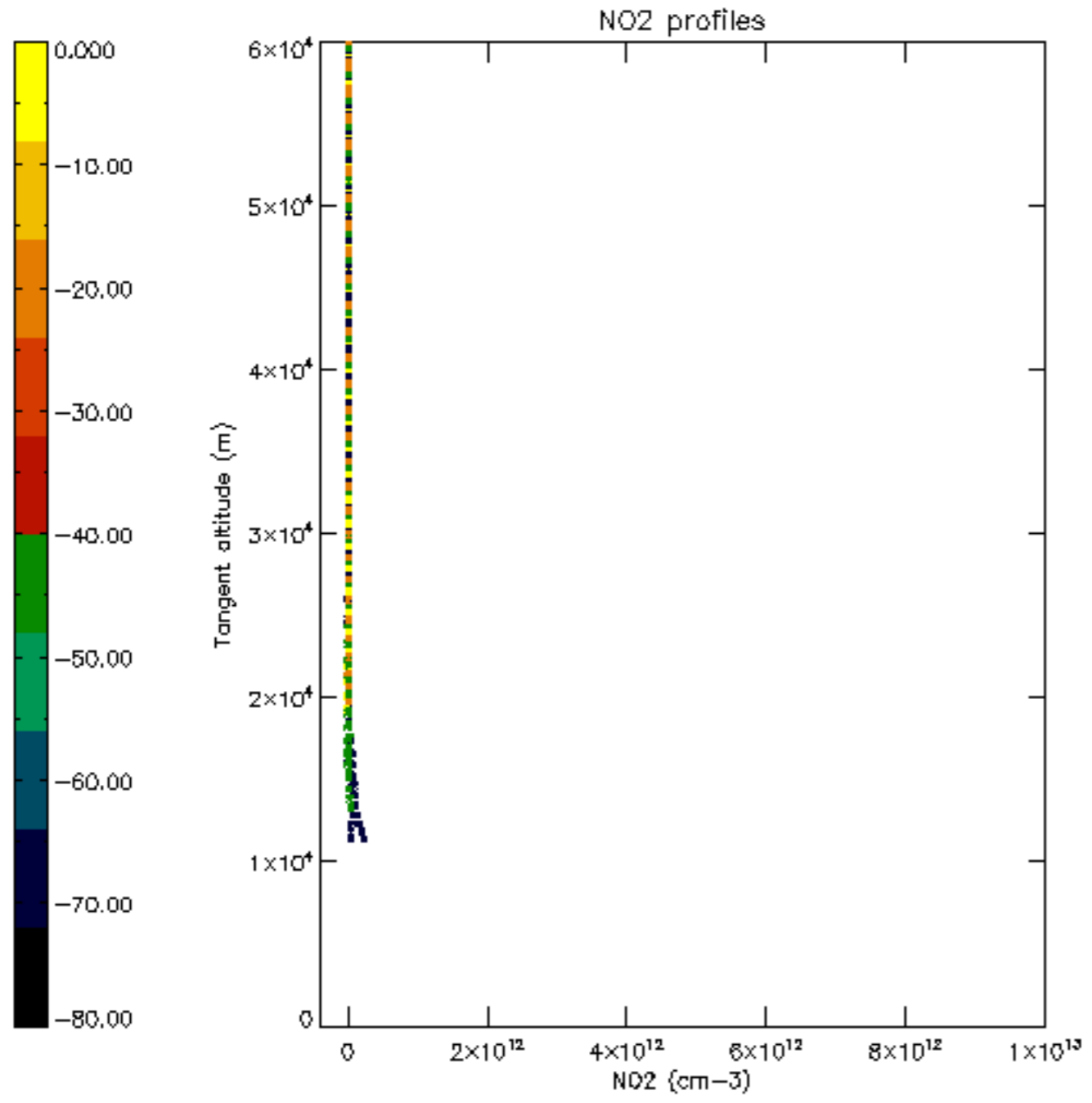


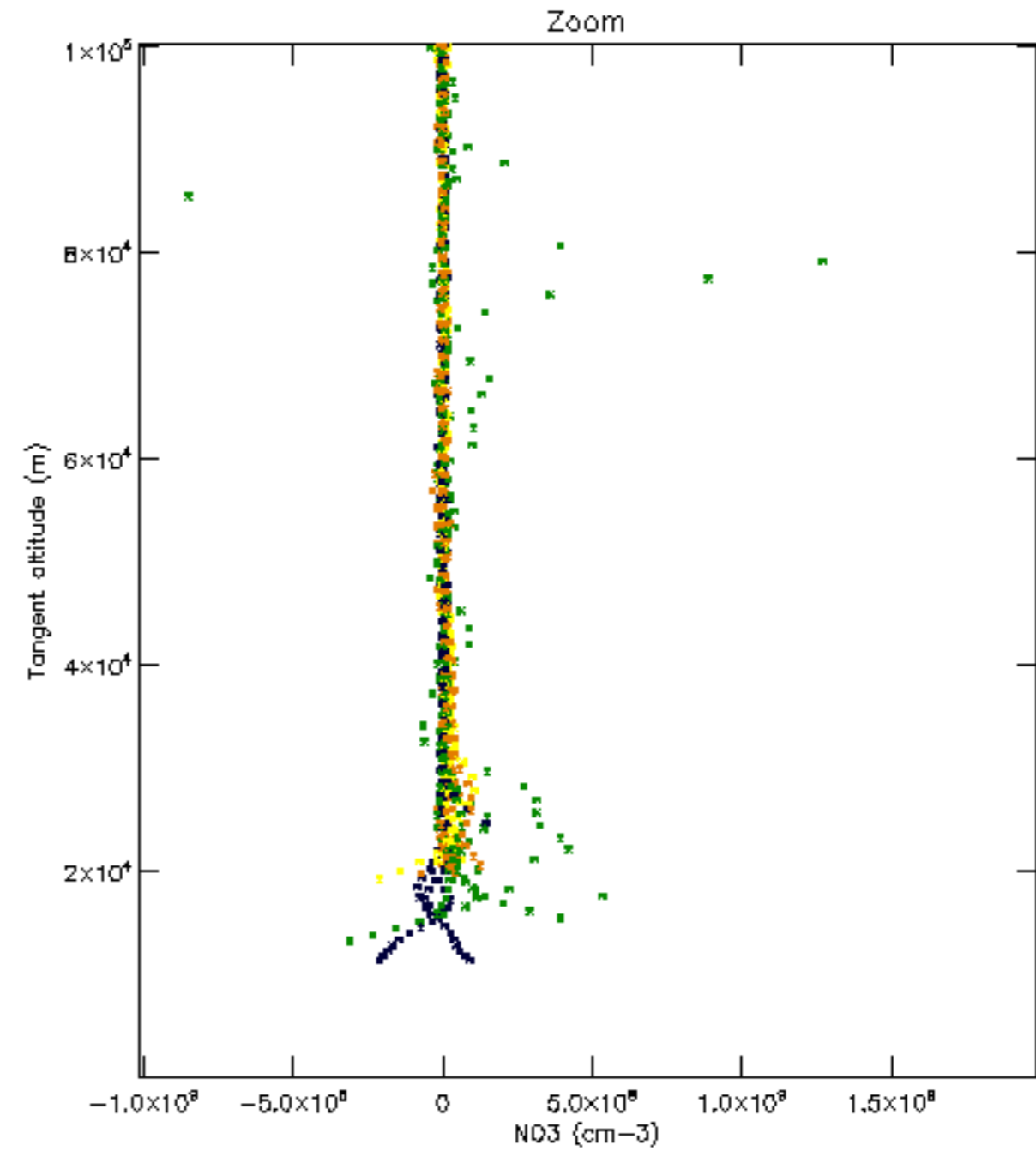
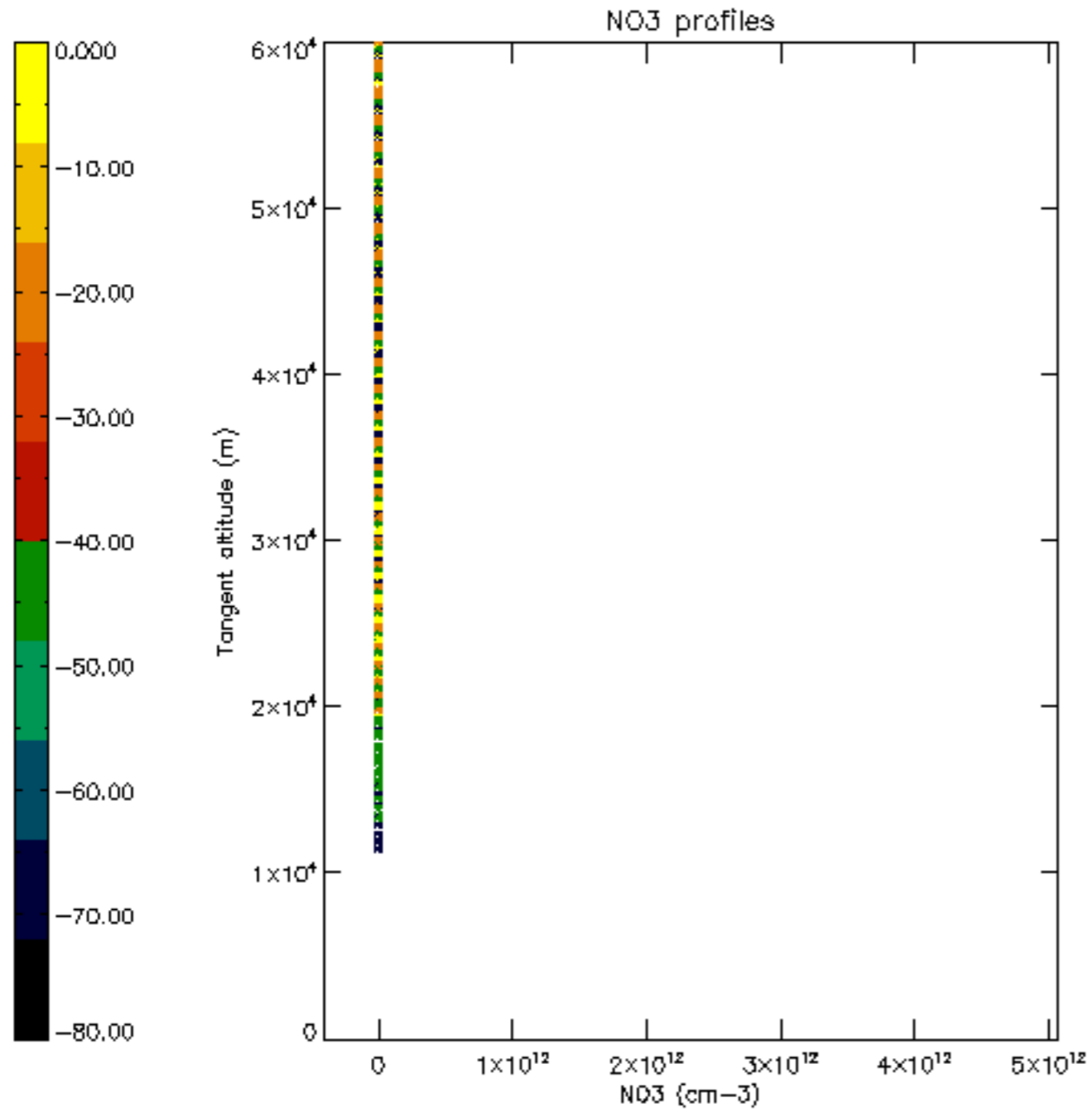


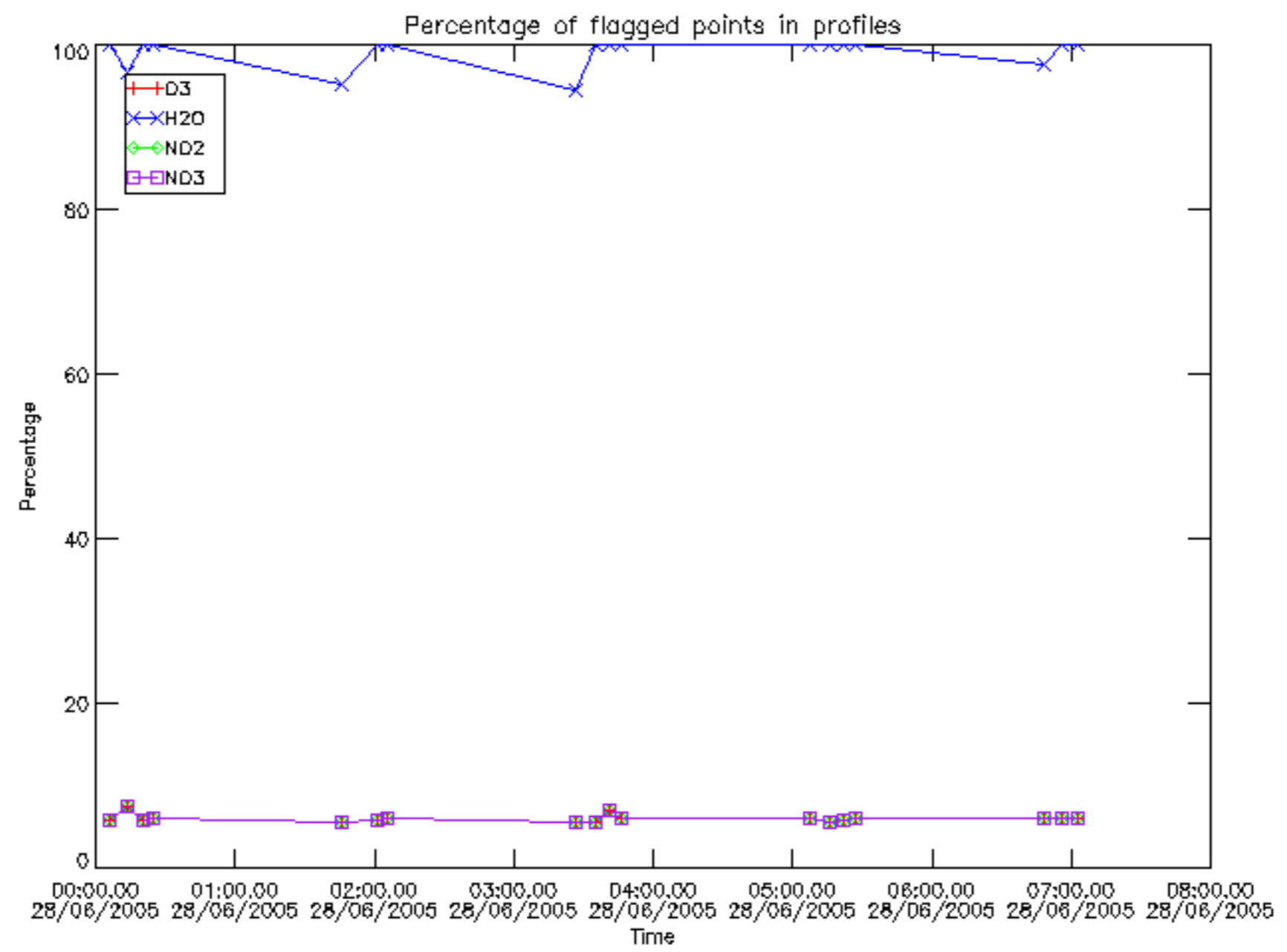




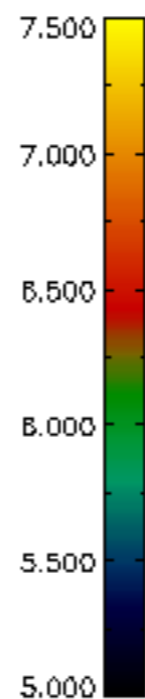
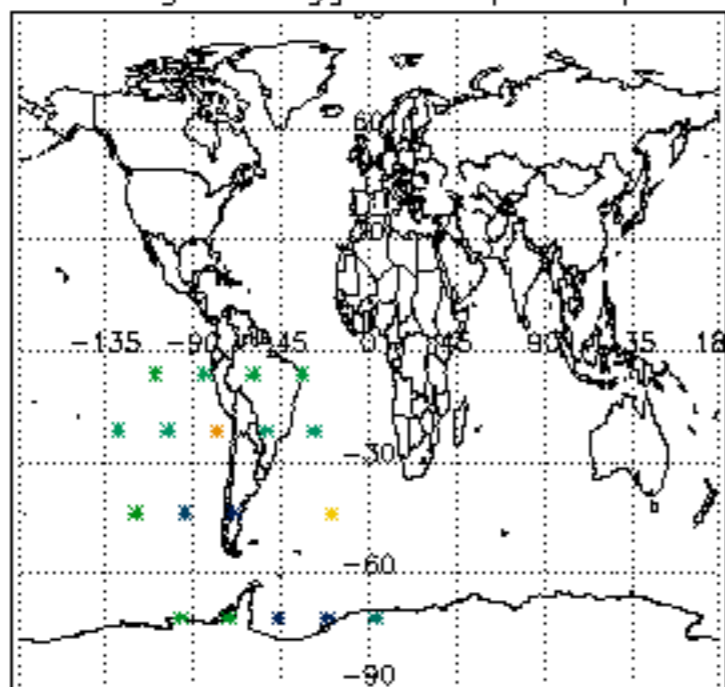




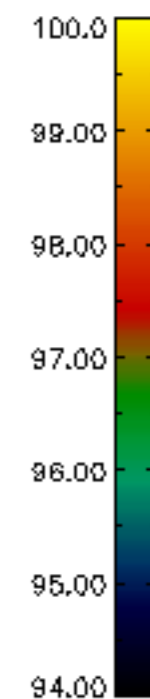
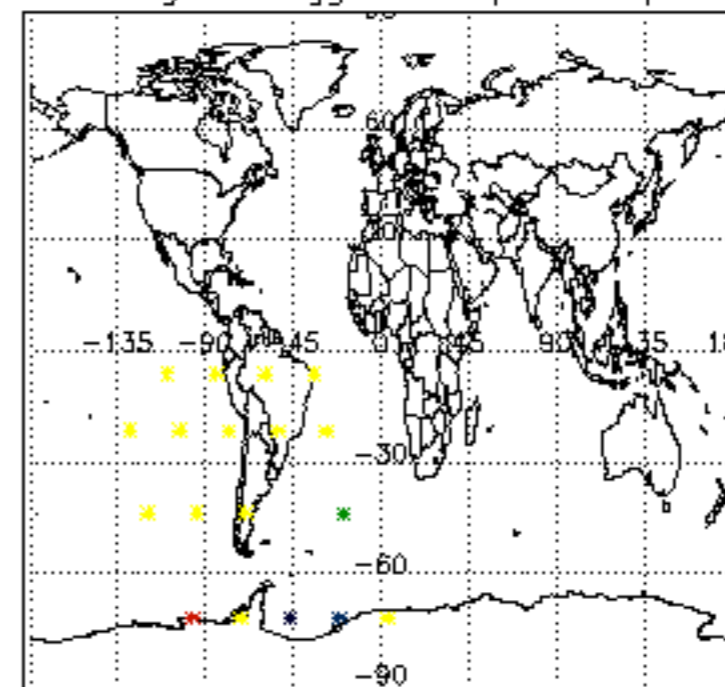




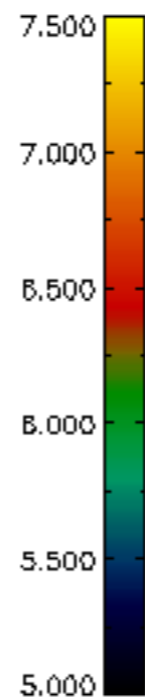
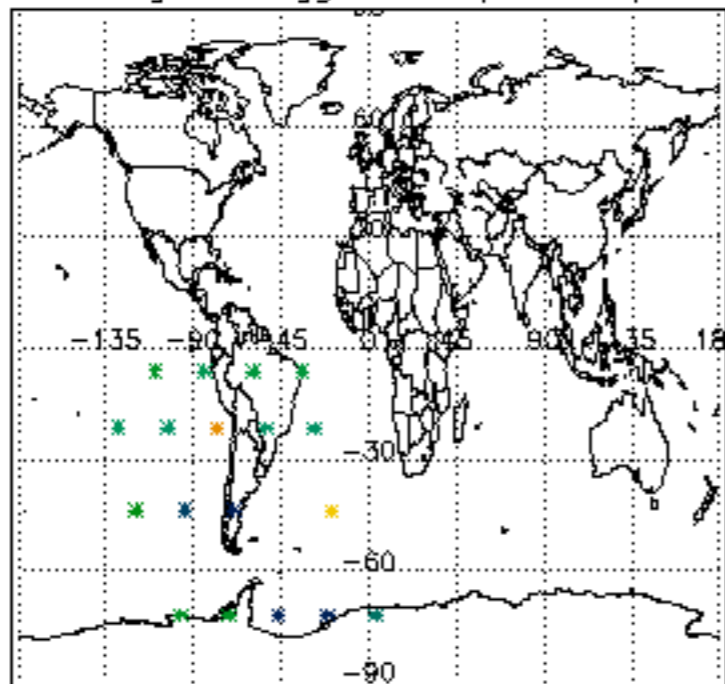
Percentage of flagged data per D3 profile



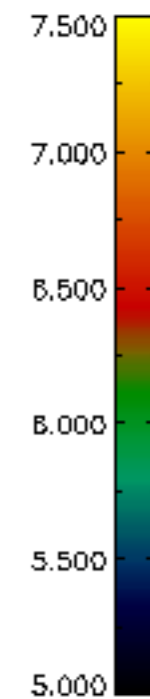
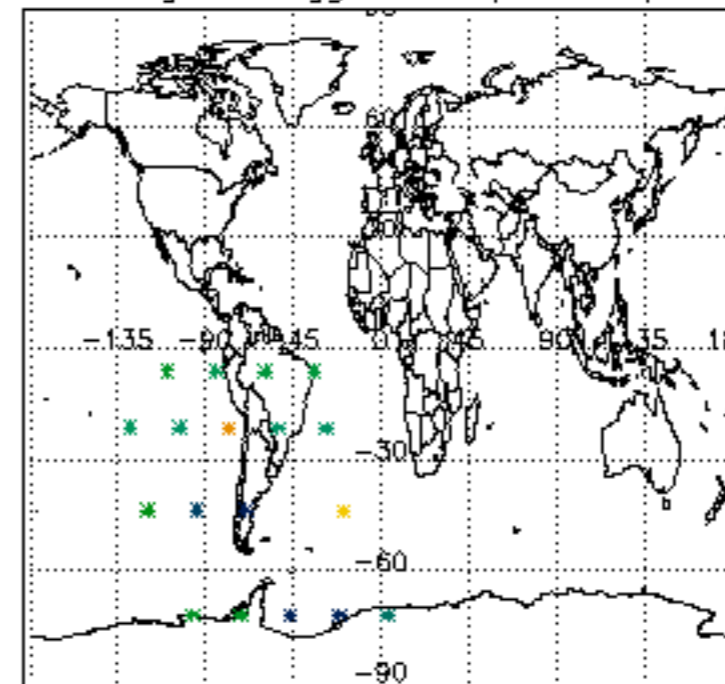
Percentage of flagged data per H2O profile

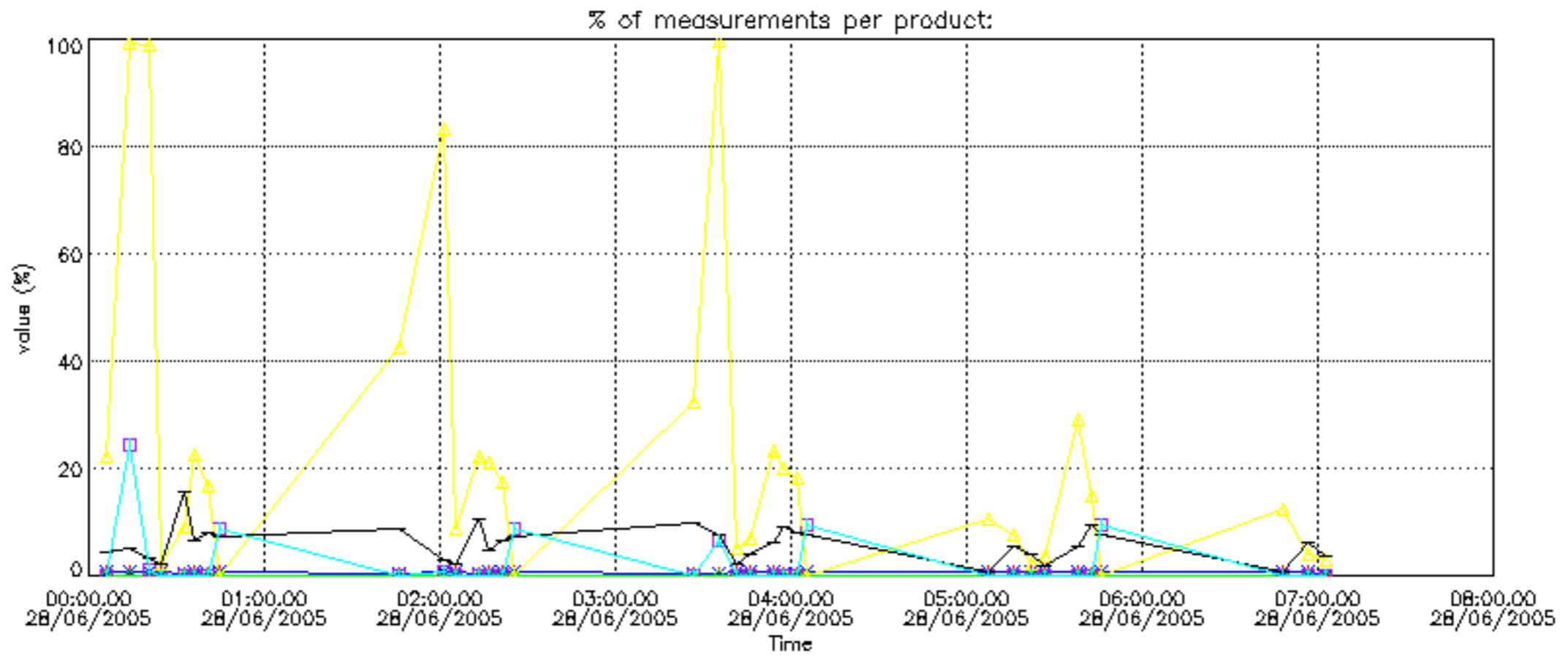


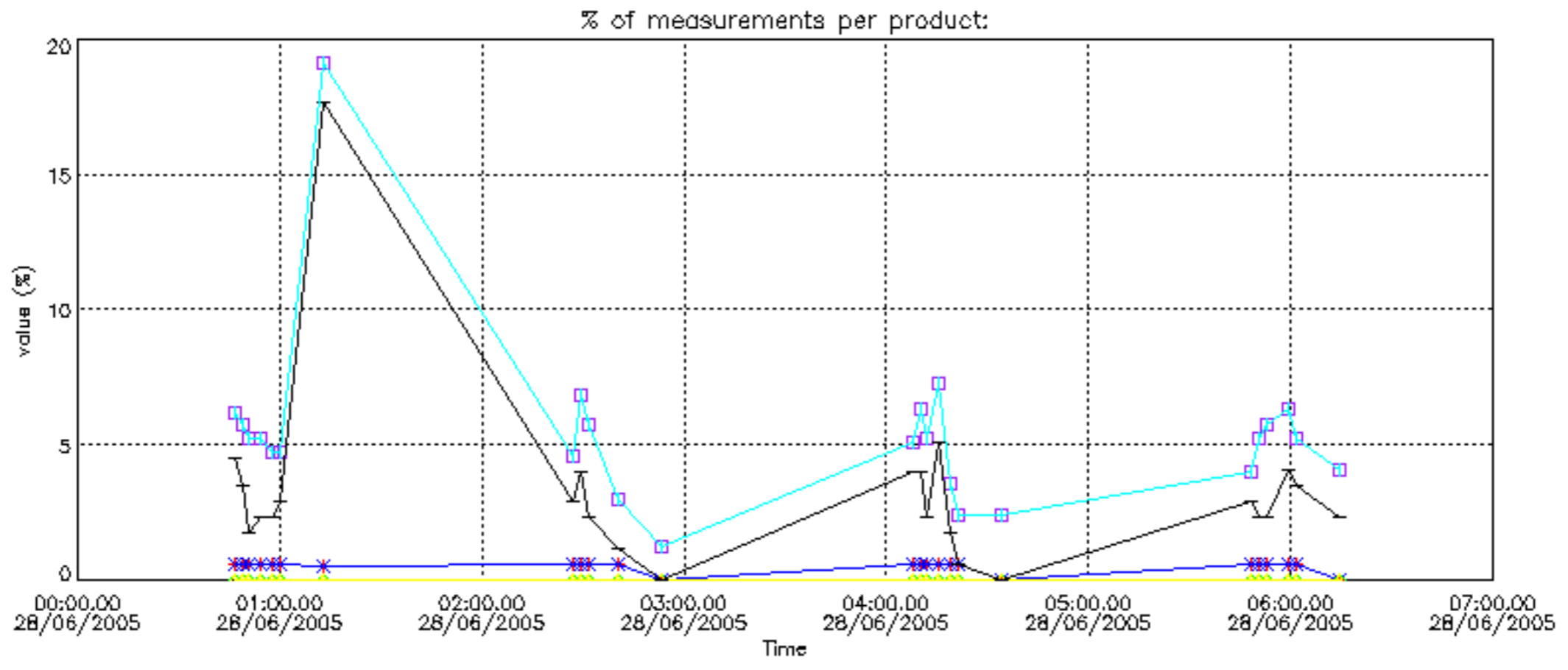
Percentage of flagged data per NO2 profile



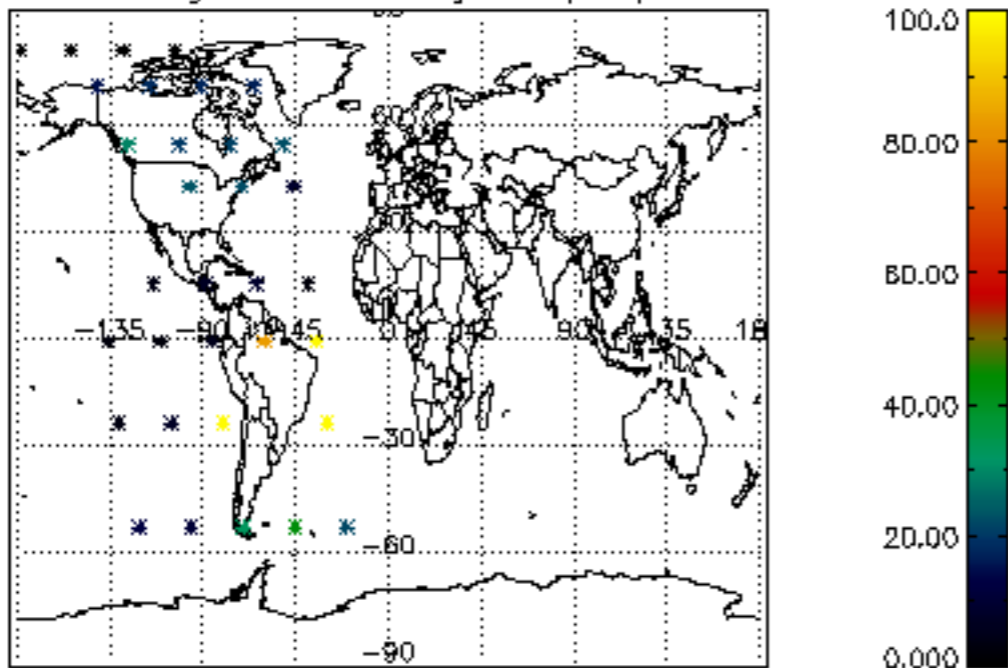
Percentage of flagged data per NO3 profile



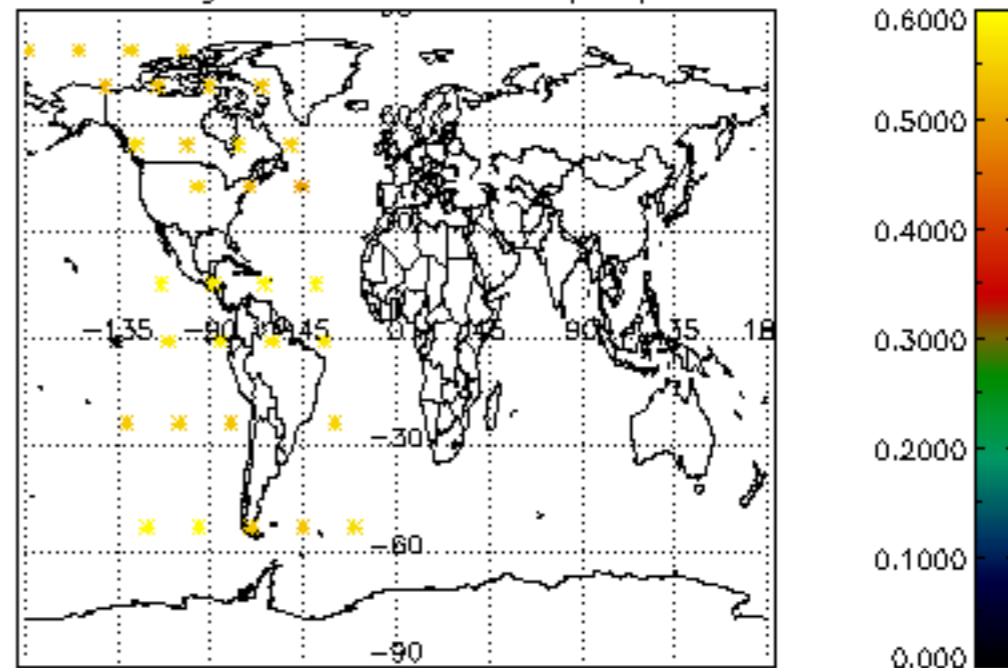




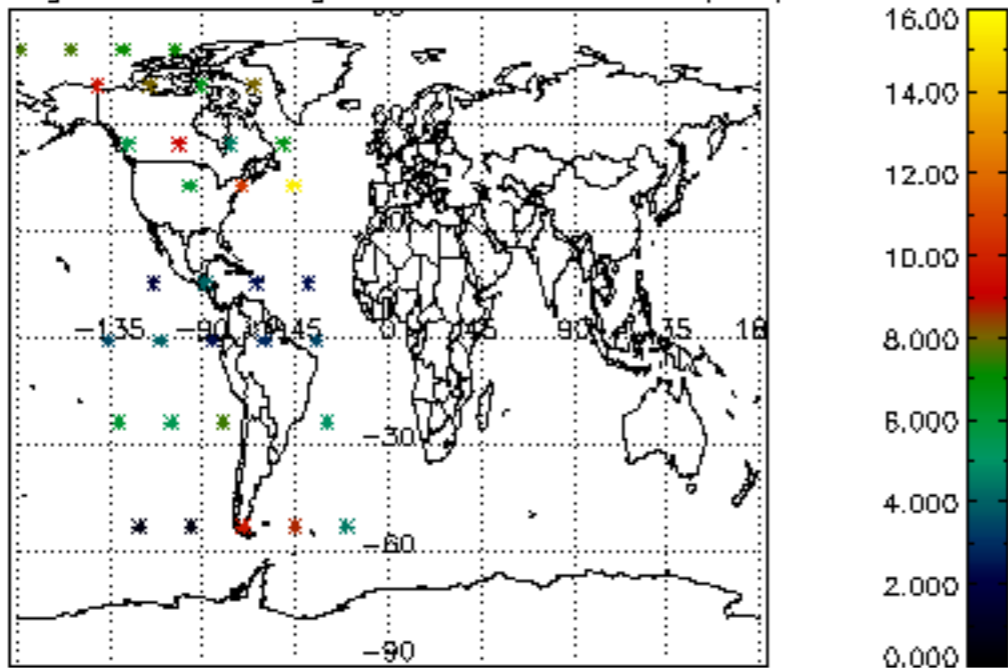
Percentage of cosmic ray hits per profile



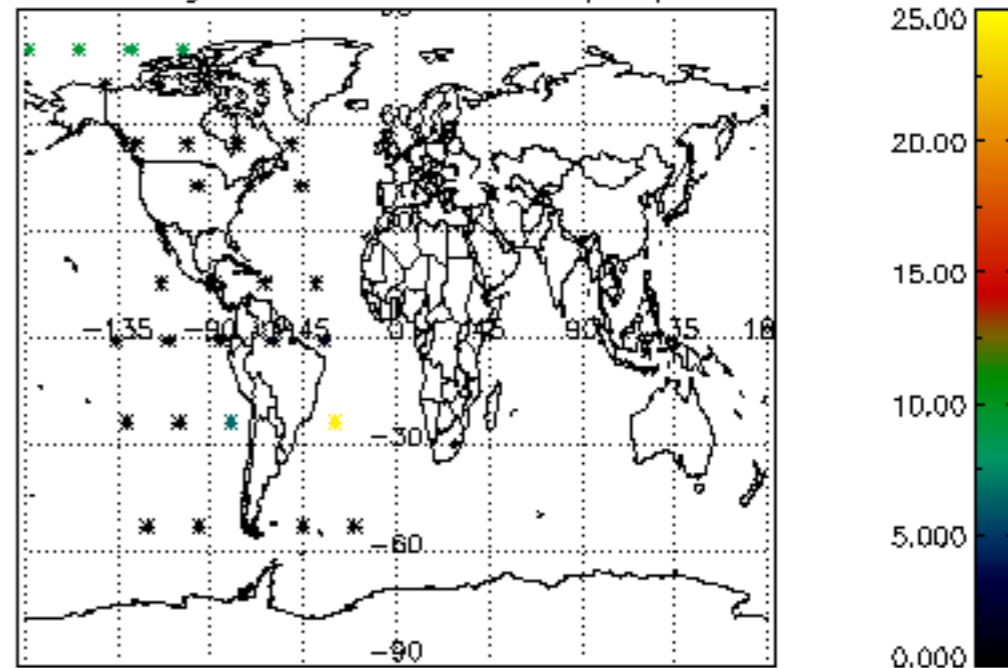
Percentage of datation errors per profile



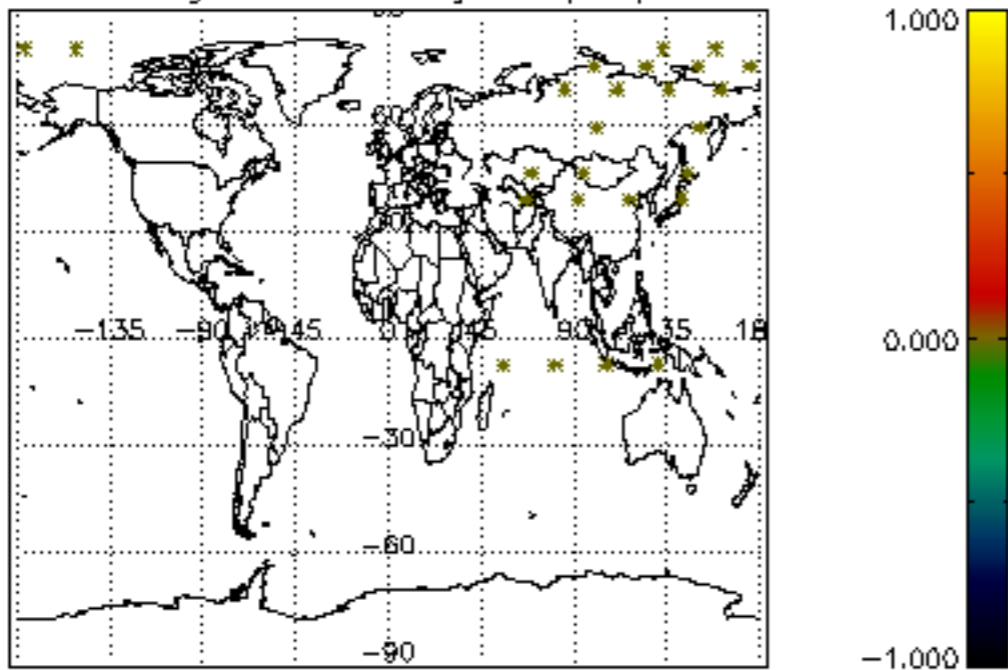
Percentage of star falling outside central band per profile



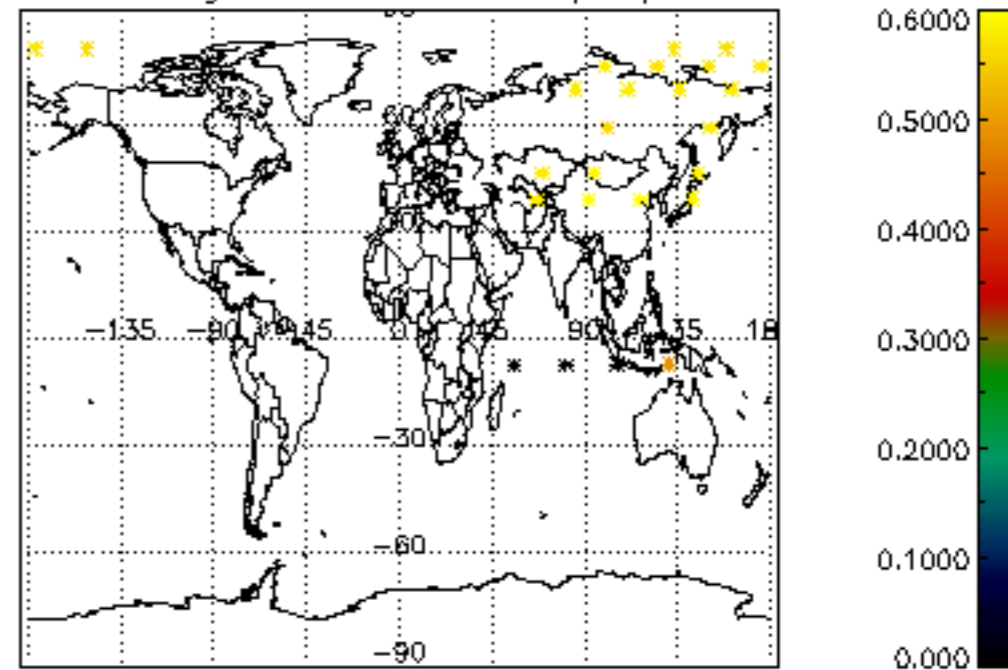
Percentage of saturation errors per profile



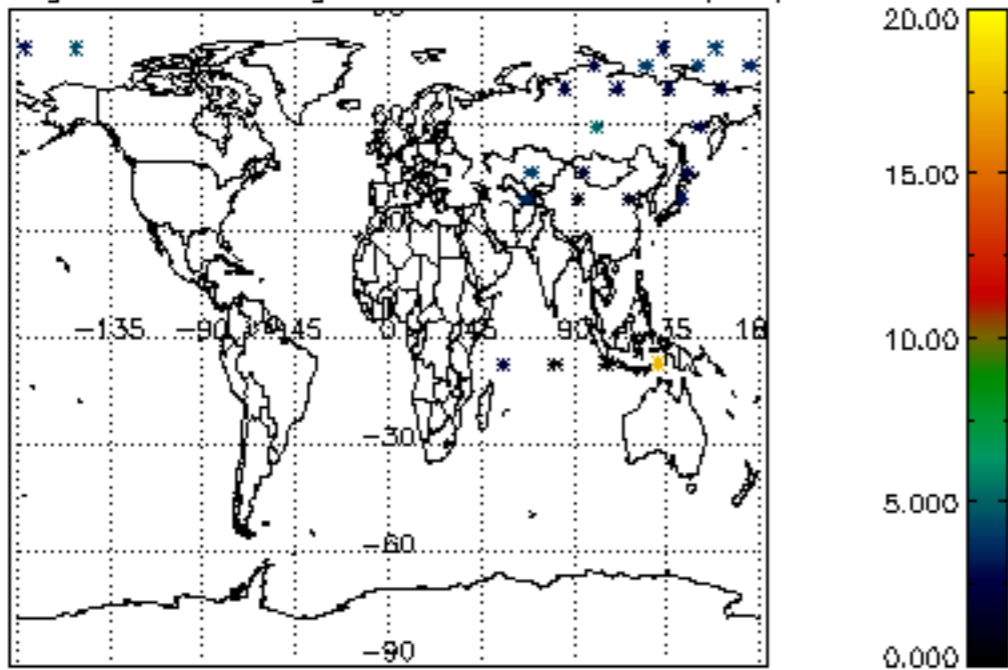
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

