

GOMOS Level 2 Daily Report

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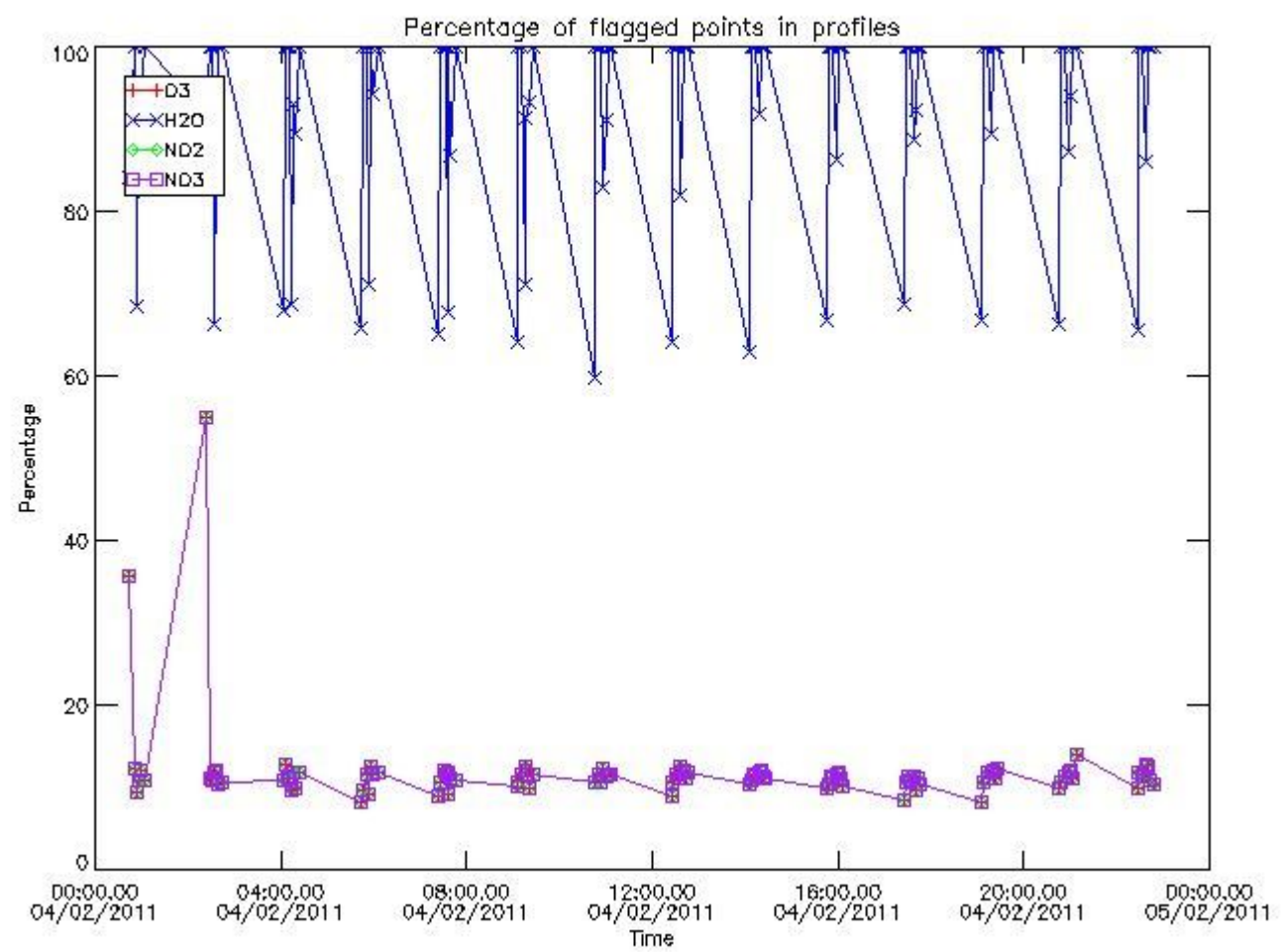
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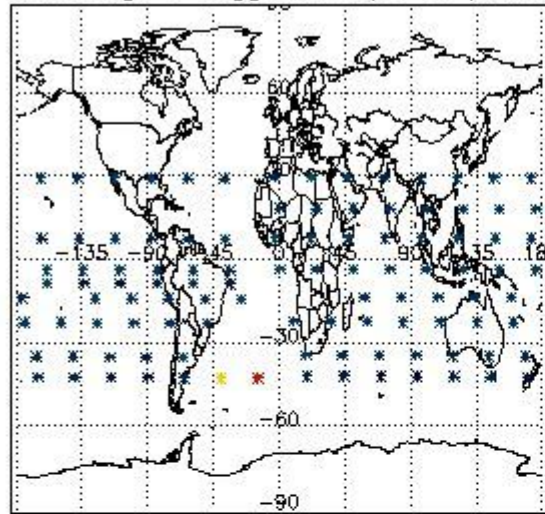
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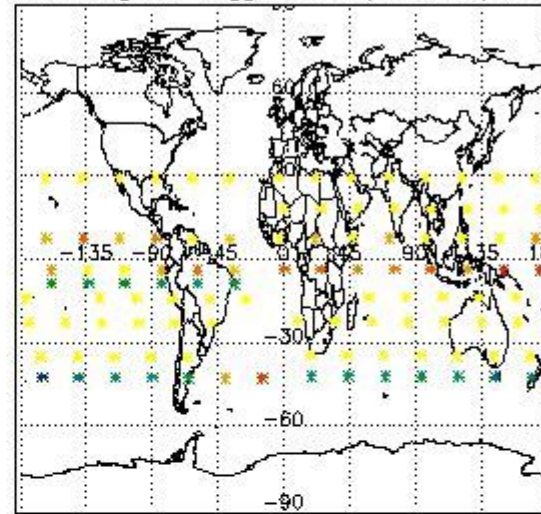


3.2 Plot quality information per product (world map)

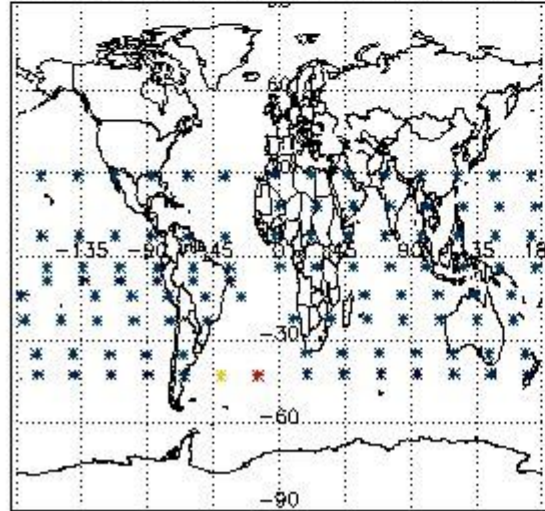
Percentage of flagged data per O3 profile



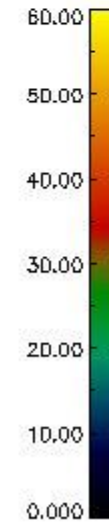
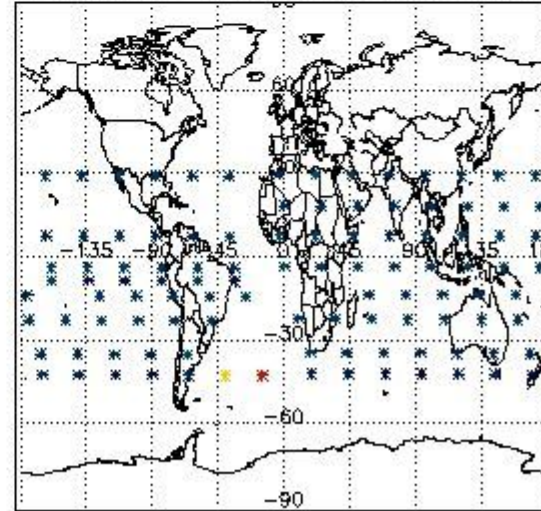
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

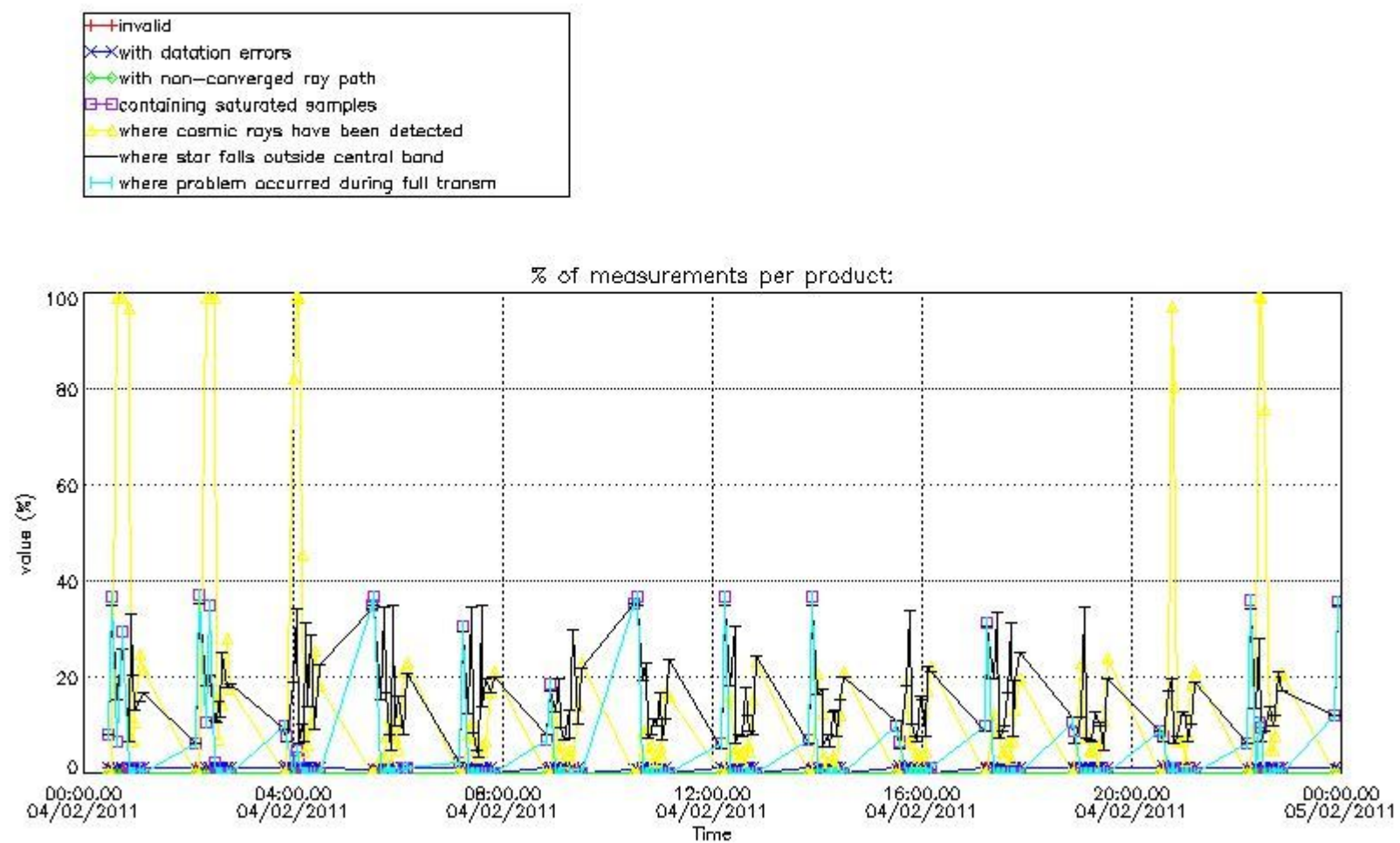


4. Level 1 quality information per product

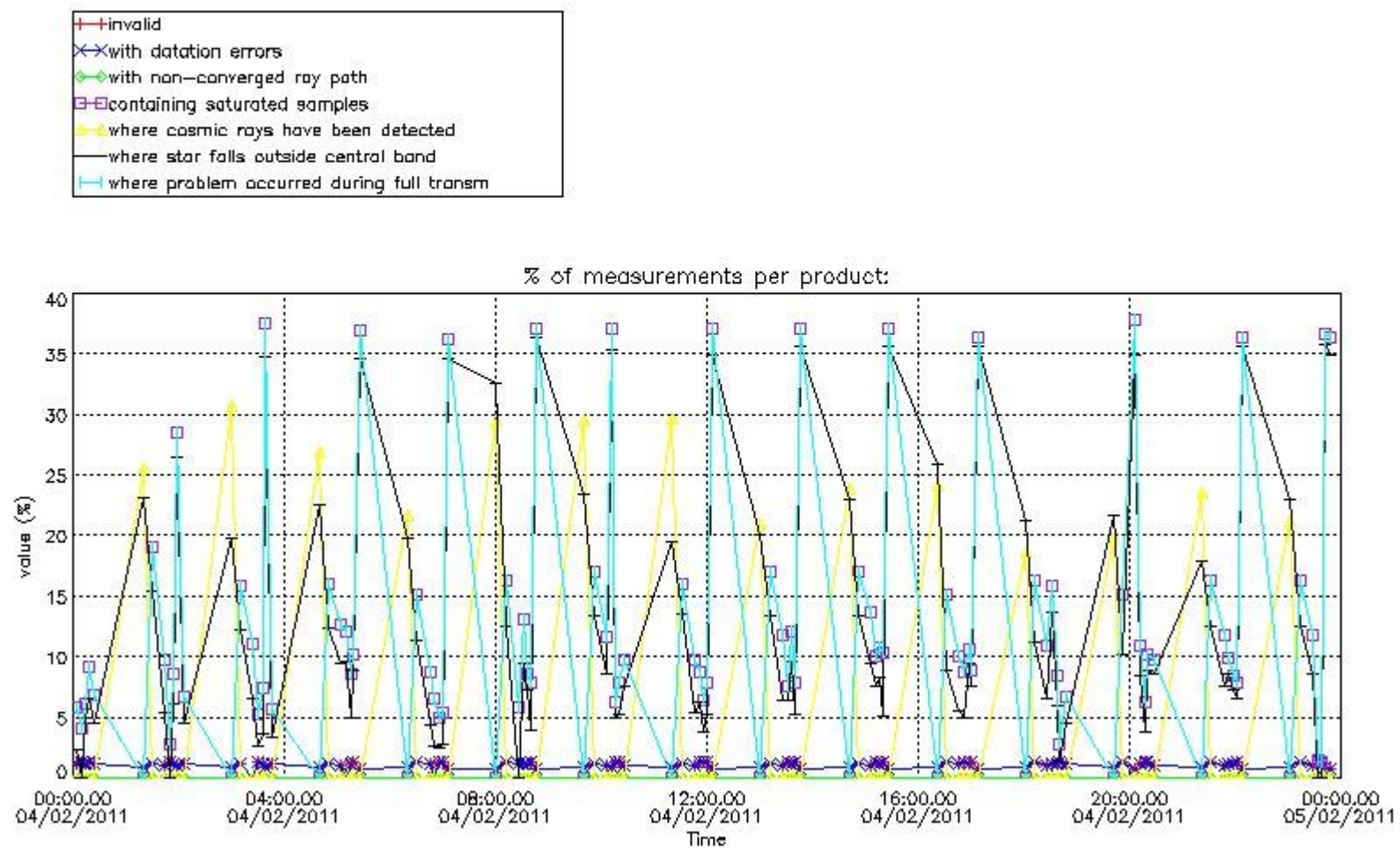
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

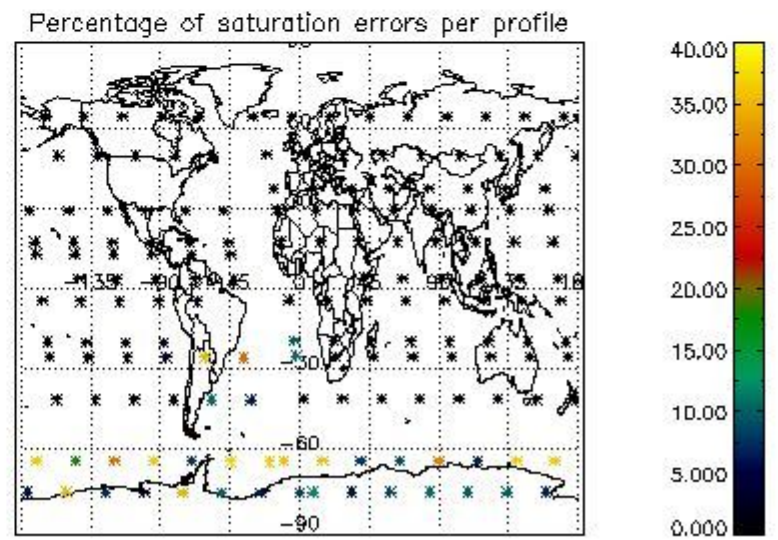
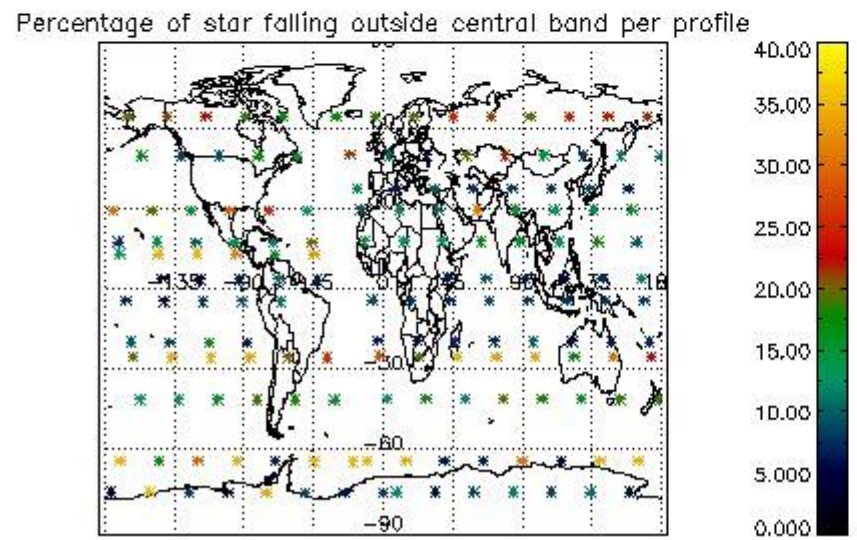
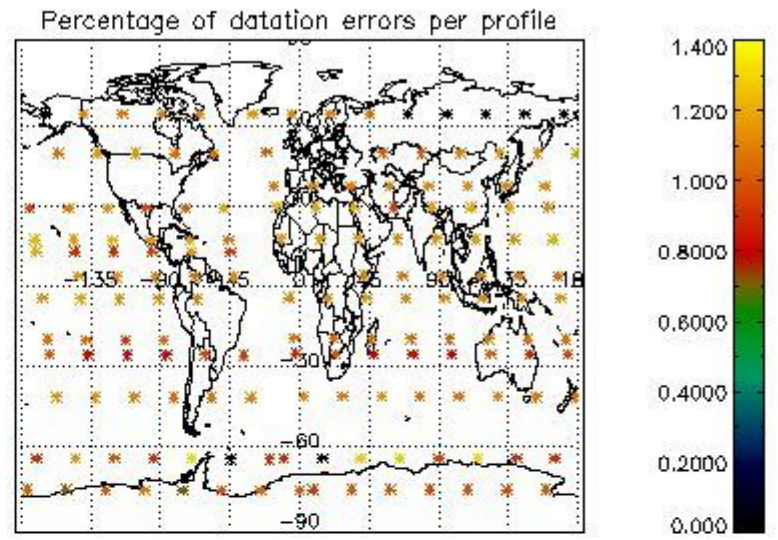
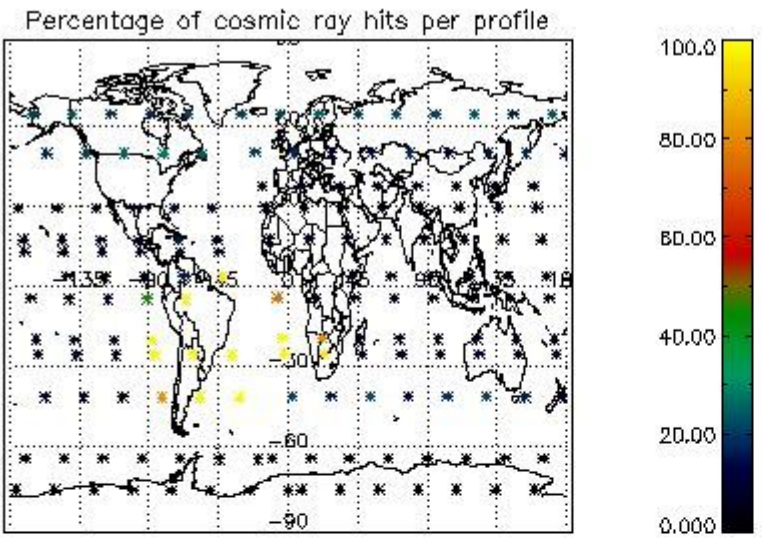


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

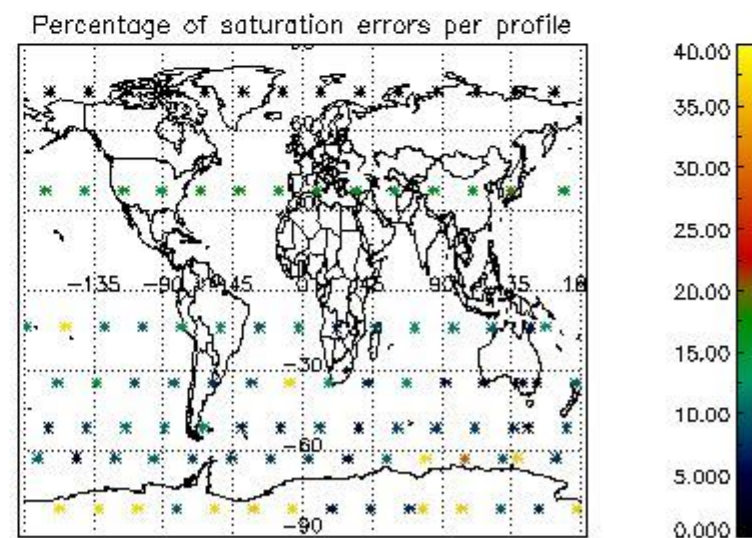
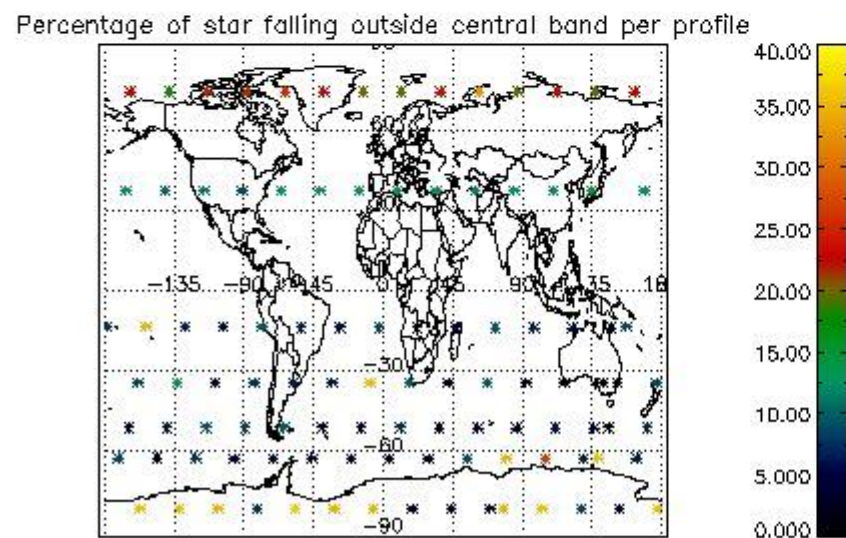
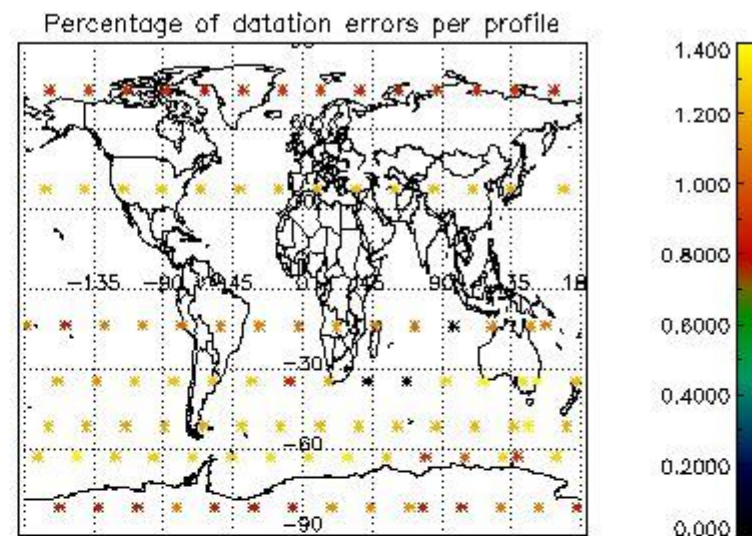
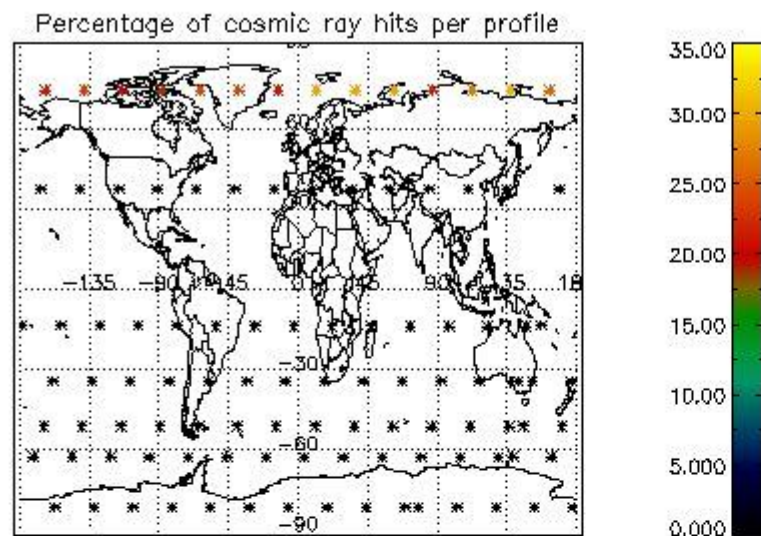


4.2 Plot quality information per product coming from level 1b processing (world map)

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

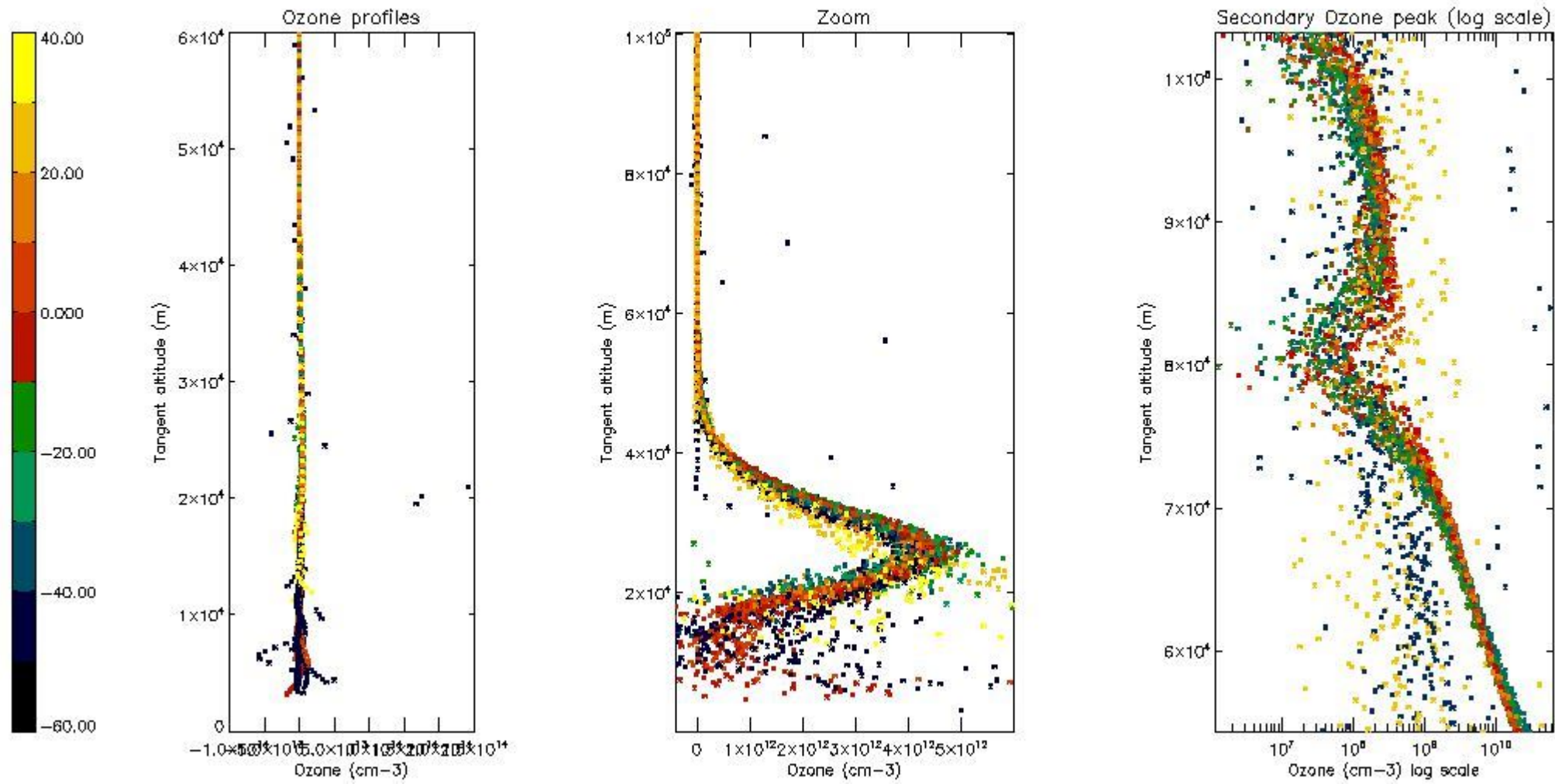
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	40
STD < 20	21

STD < 10	17
STD < 5	13

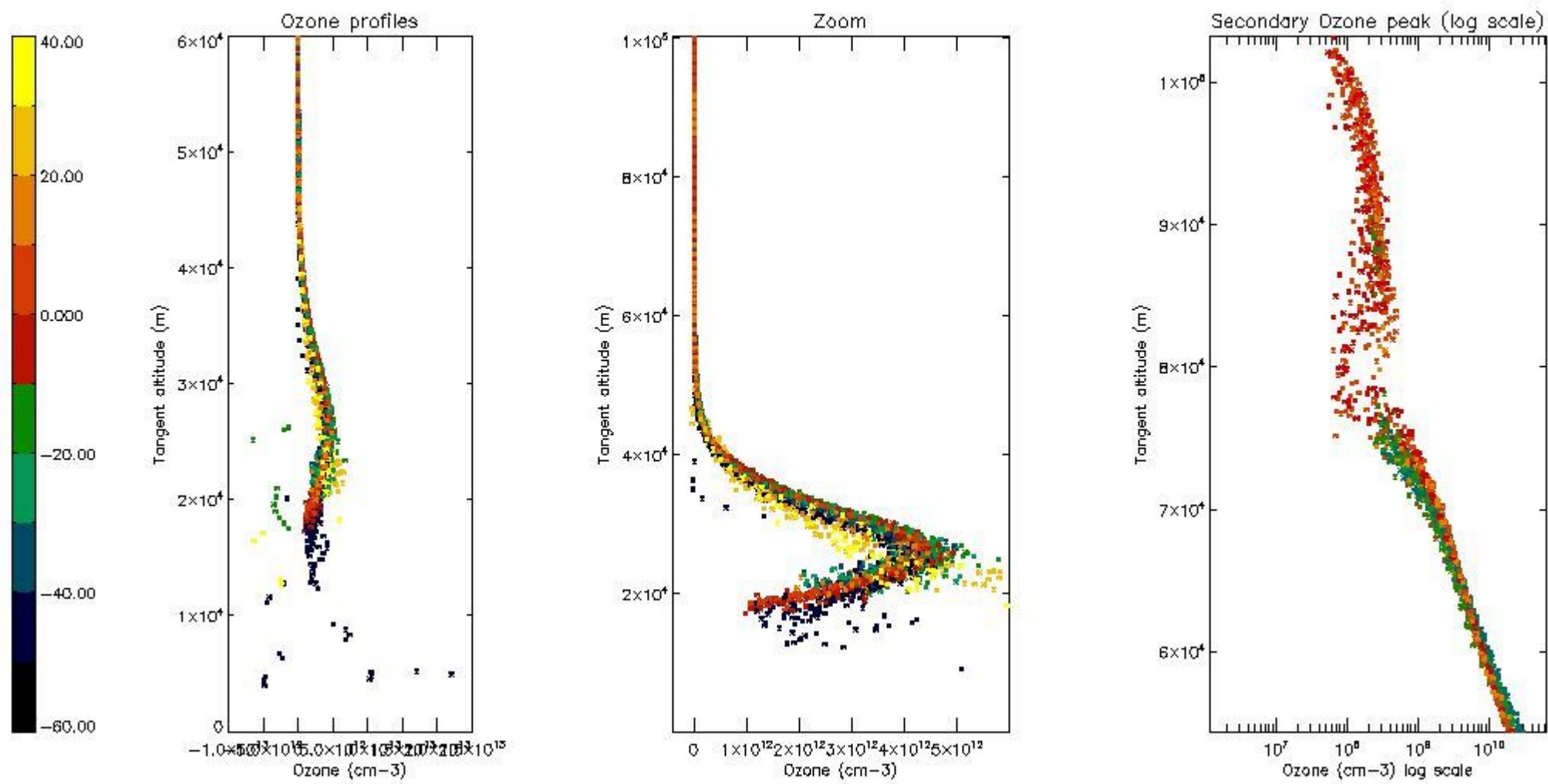
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



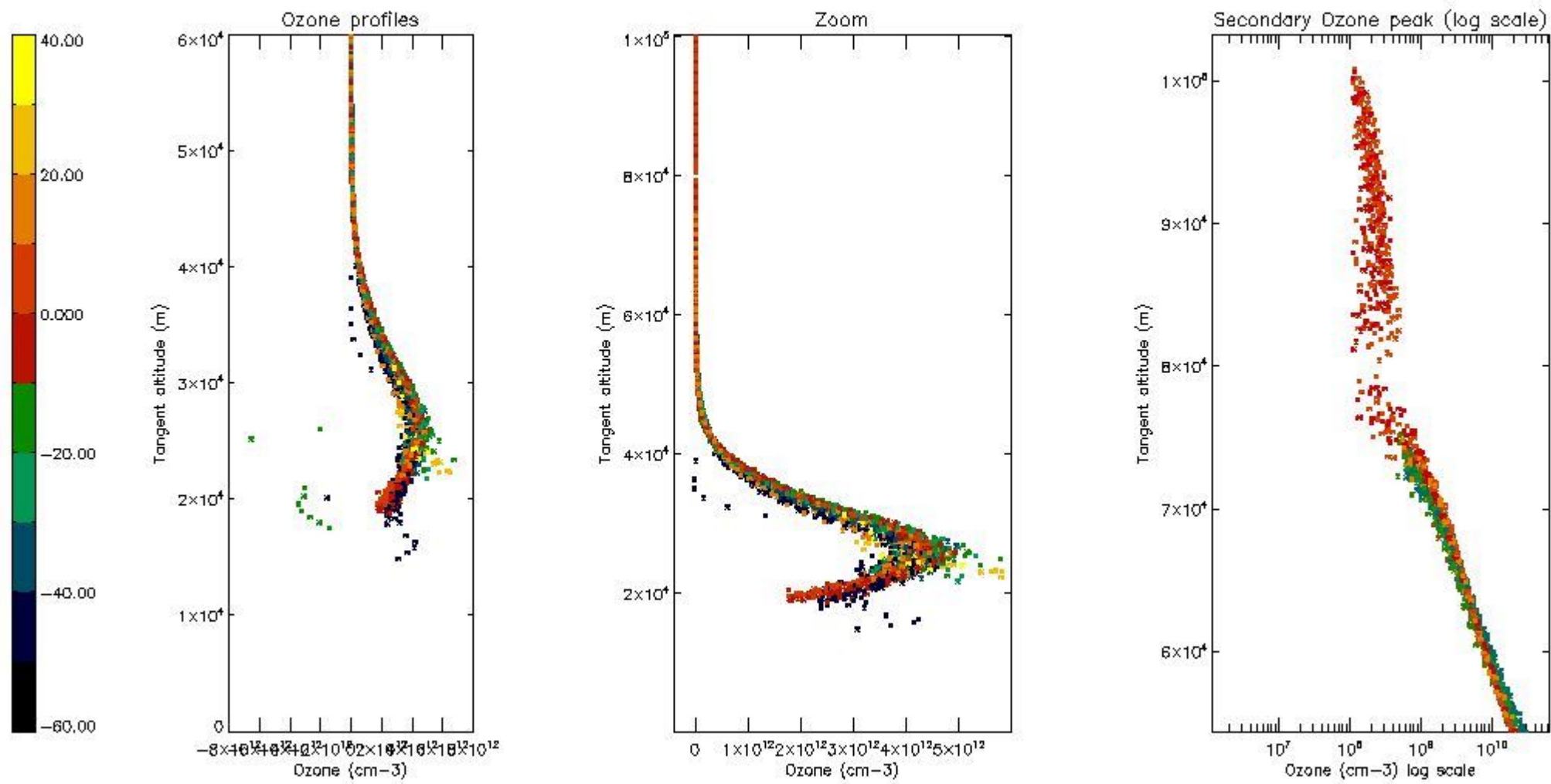
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



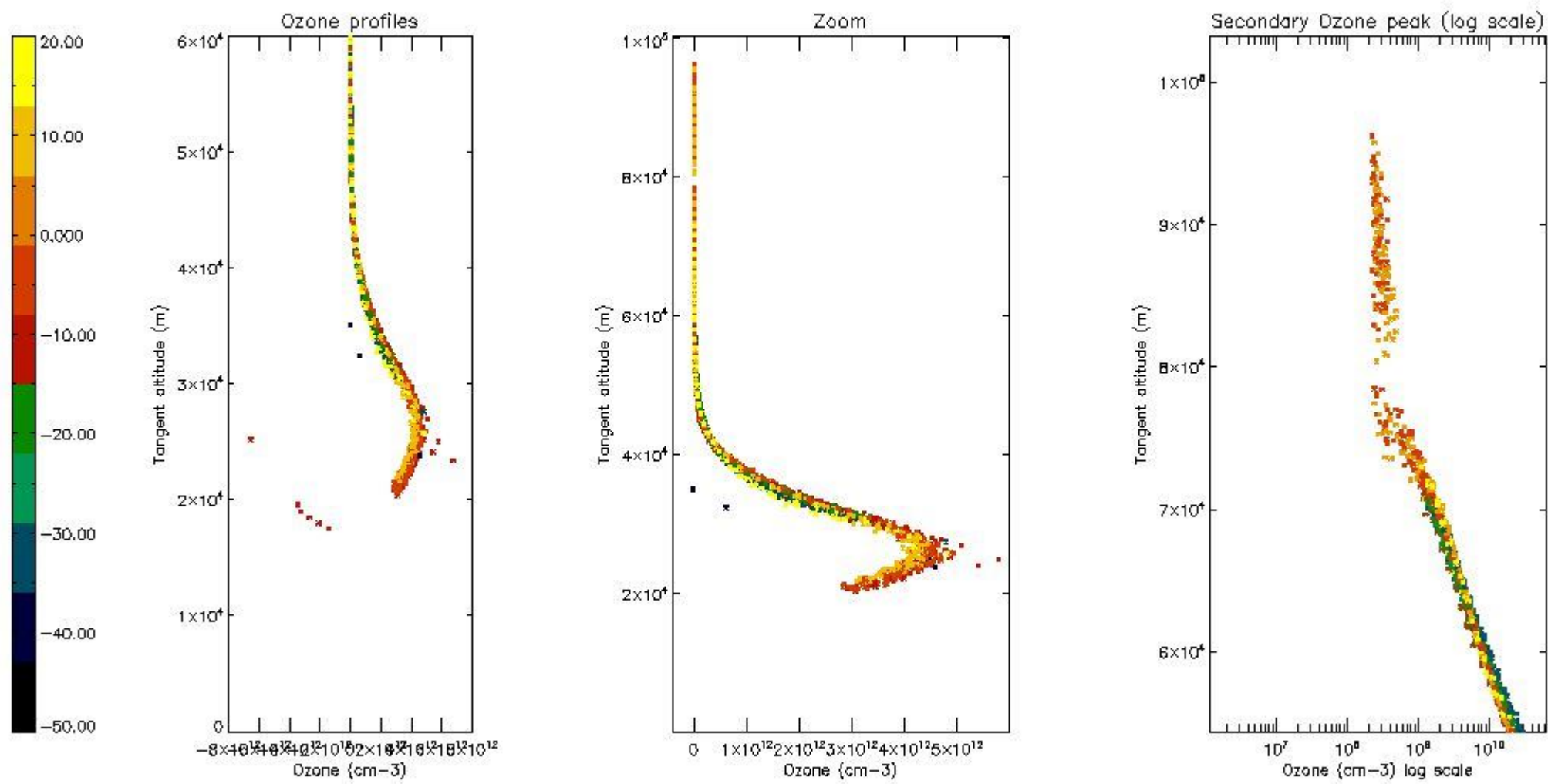
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



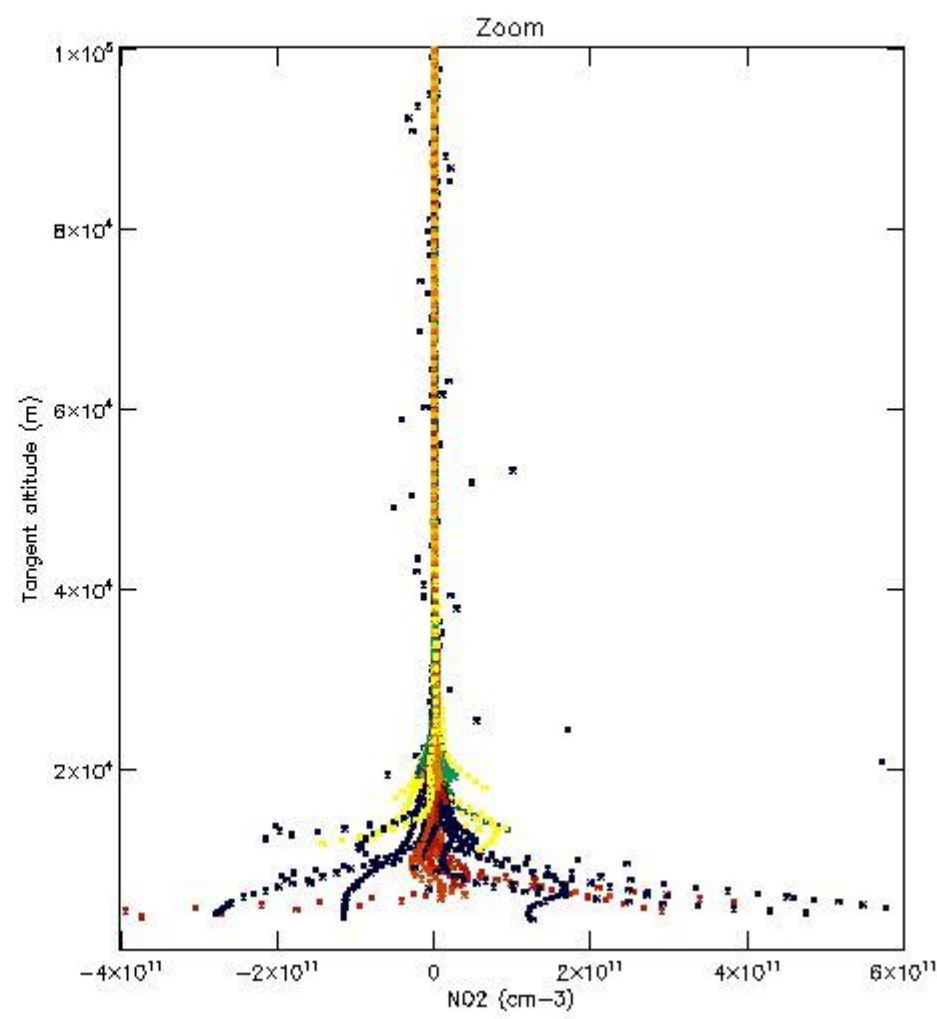
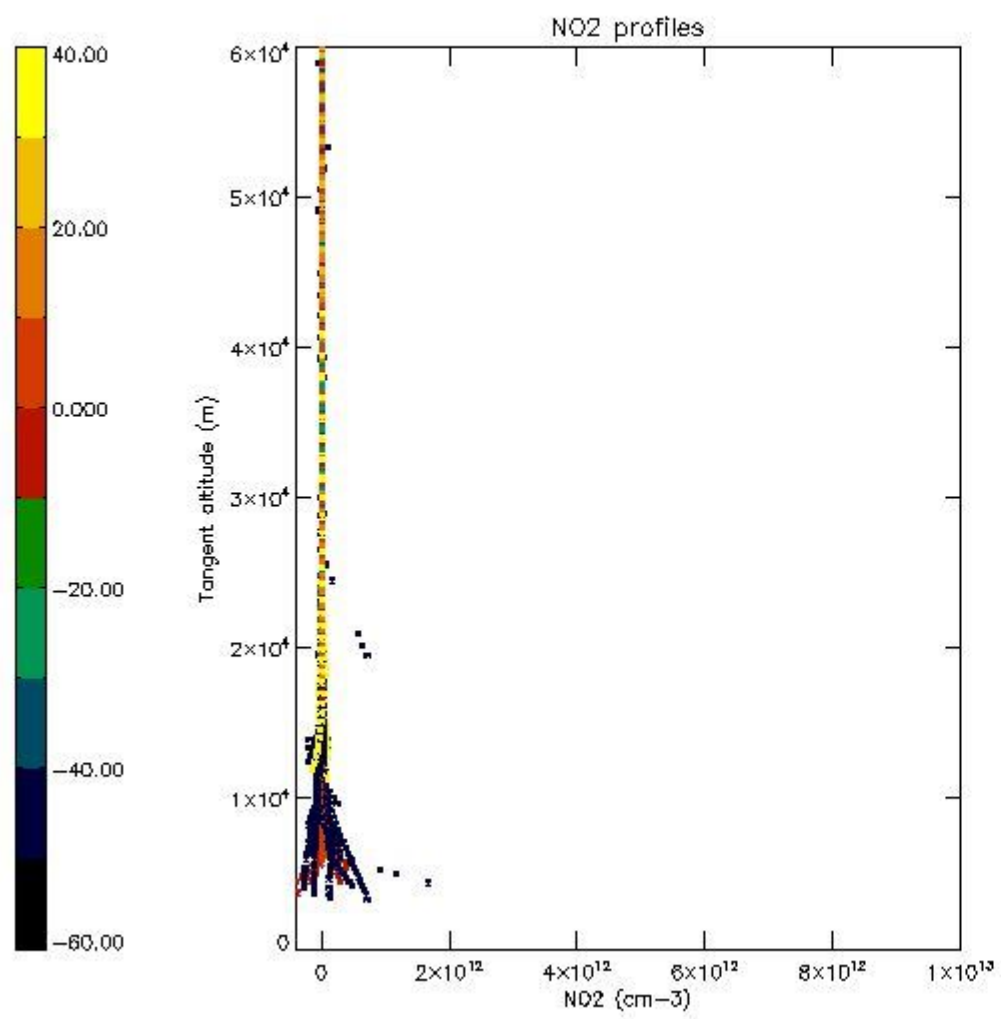
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



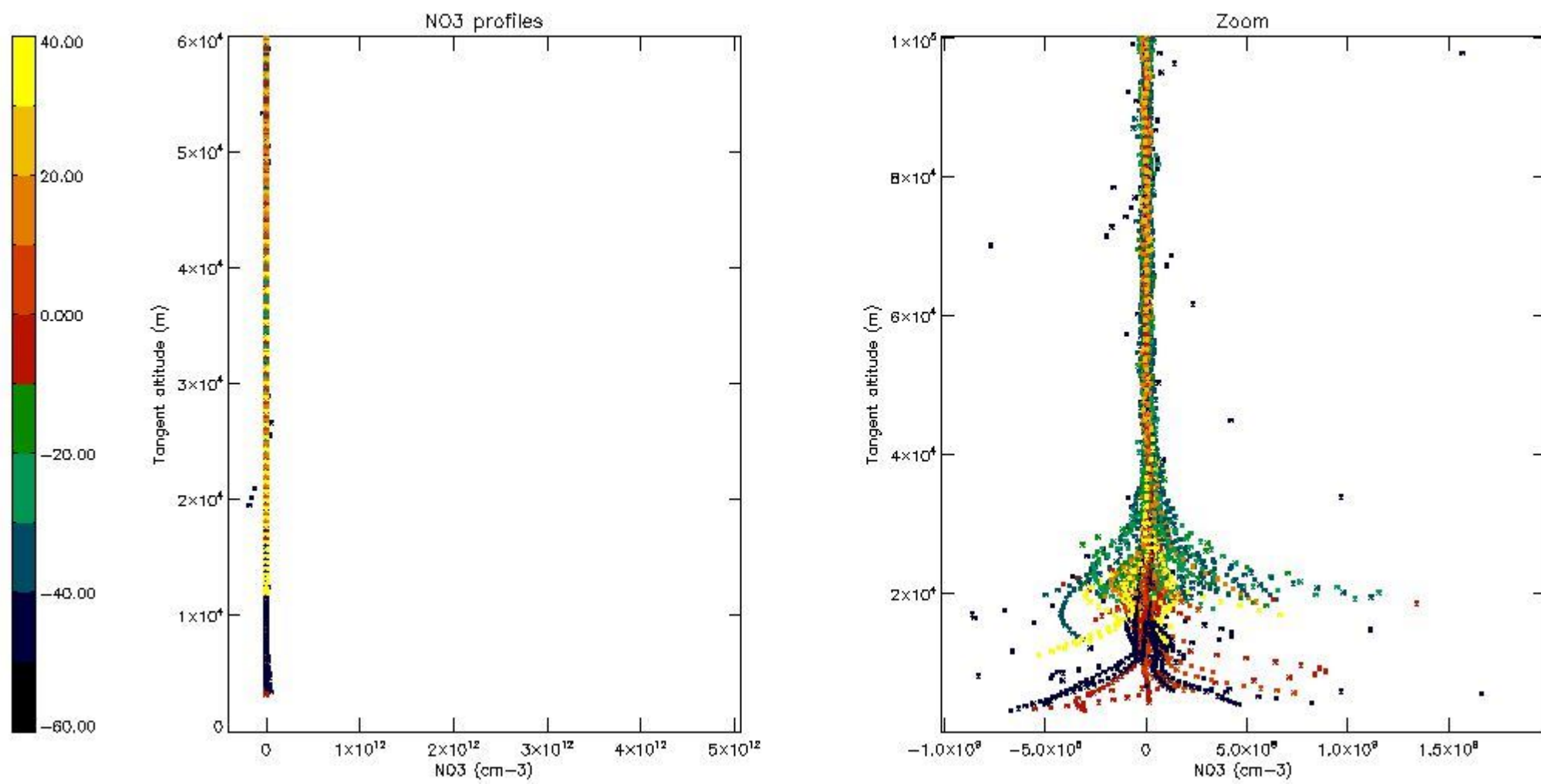
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



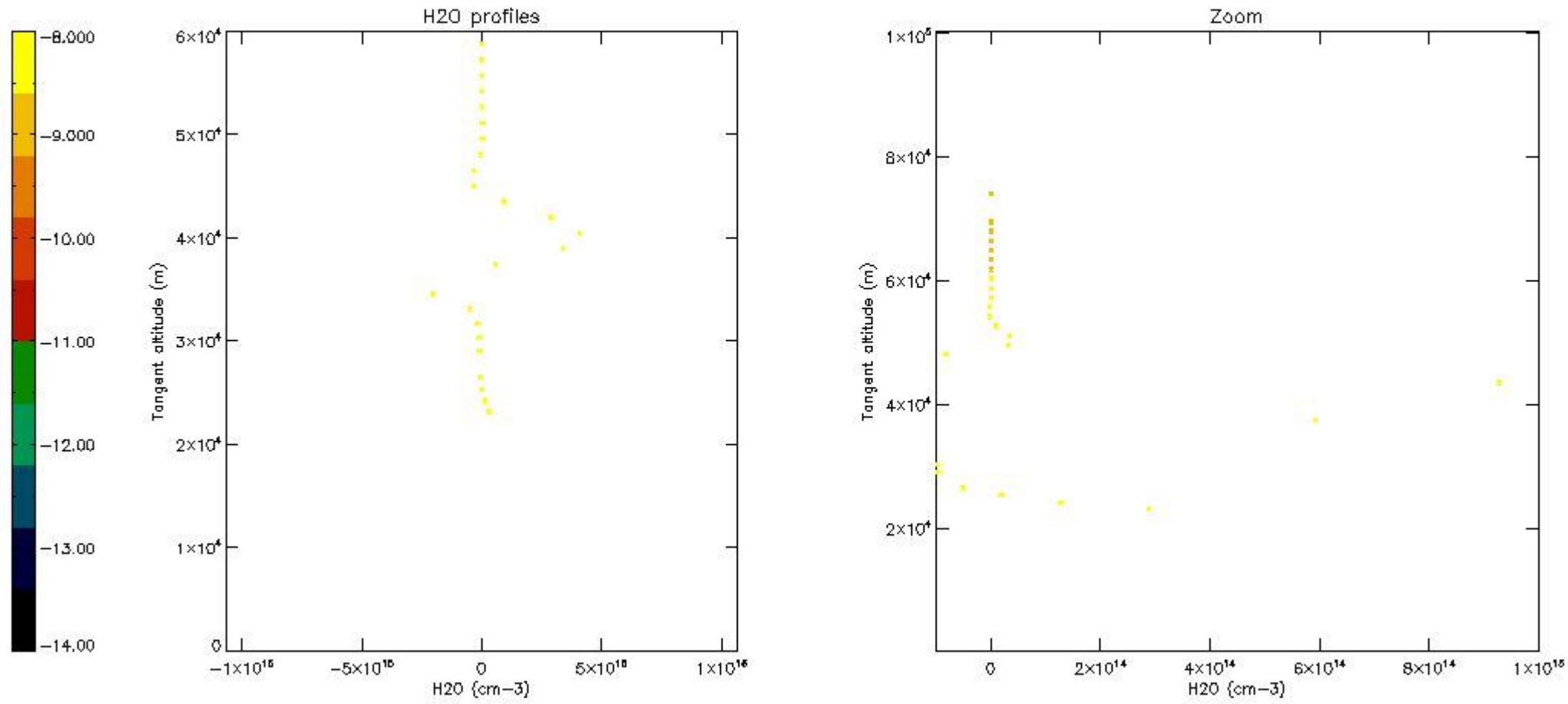
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	04-FEB-2011 00:04:14
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	04-FEB-2011 00:04:14
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	04-FEB-2011 00:04:14

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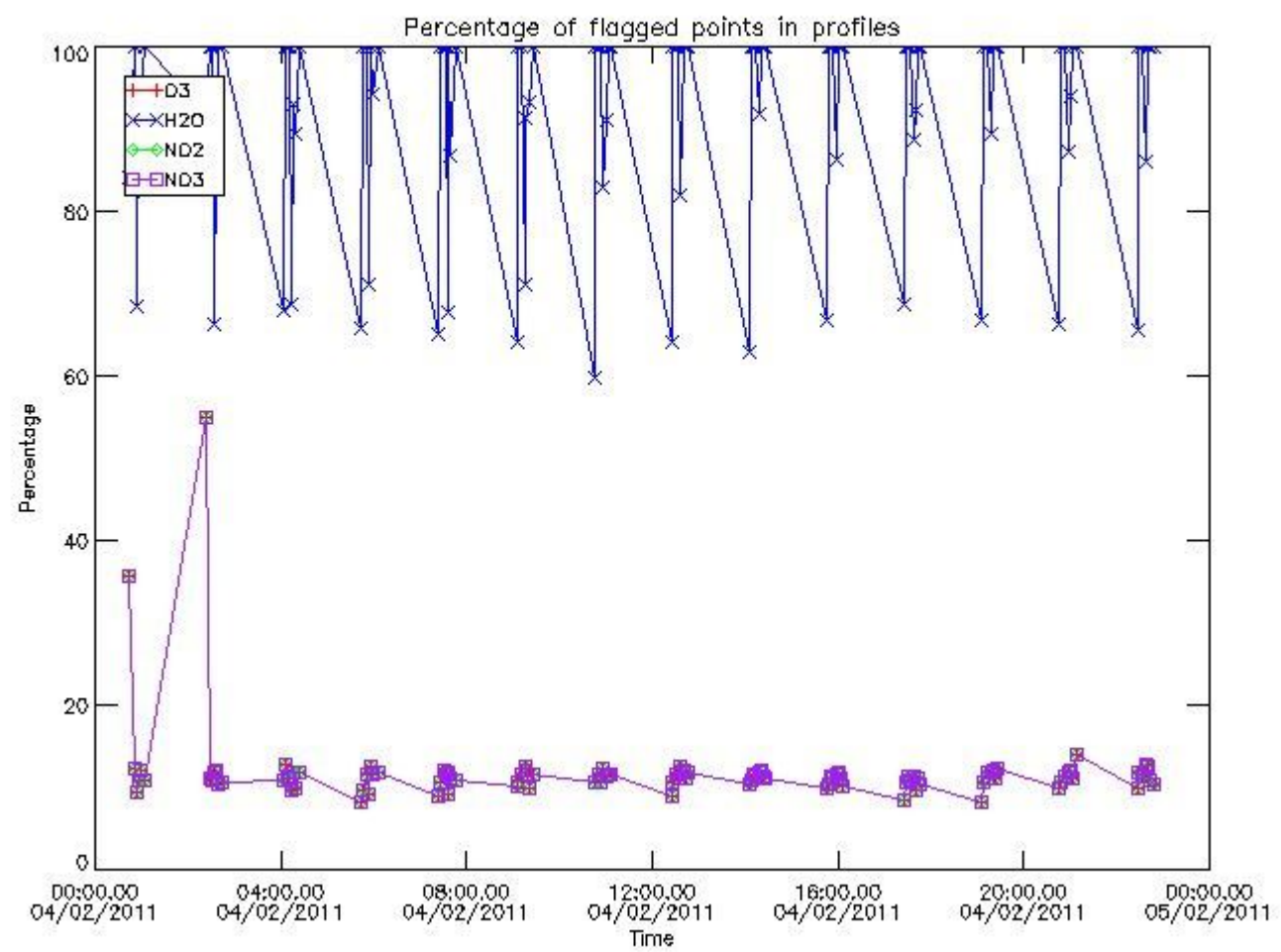
[6. Auxiliary Data Files used for the production reported in section 2](#)

This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also given.

Item	Value
Time of report generation	24APR2013 09:58:44
Data source version	GOMOS/6.01
Start time of products	04-02-2011 (04FEB2011 00:00:00)
Stop time of products	05-02-2011 (05FEB2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	267
Nb of prods with errors	0

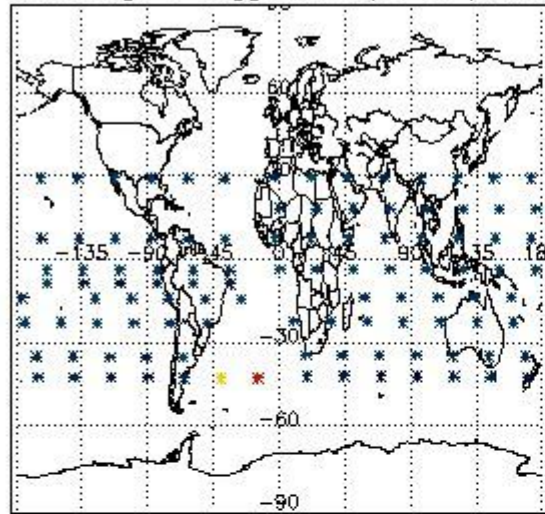
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110204_000414_000000443099_00131_46697_5819.N1	04-FEB-2011 00:04:14	Bright	43.500	36	50Alp UMa	1.8000	6300.0	87	46697	No
2	GOM_NL__2PRFIN20110204_001001_000000383099_00131_46697_5820.N1	04-FEB-2011 00:10:01	Bright	37.500	60	7Bet UMi	2.0810	3950.0	75	46697	No
3	GOM_NL__2PRFIN20110204_001446_000000413099_00131_46697_5821.N1	04-FEB-2011 00:14:46	Bright	40.500	119	14Eta Dra	2.7270	4700.0	81	46697	No
4	GOM_NL__2PRFIN20110204_001803_000000393099_00131_46697_5822.N1	04-FEB-2011 00:18:03	Bright	38.500	130	23Bet Dra	2.7990	5800.0	77	46697	No
5	GOM_NL__2PRFIN20110204_002449_000000443099_00131_46697_5823.N1	04-FEB-2011 00:24:49	Bright	44.000	133	40Zet Her	2.8070	6000.0	88	46697	No
6	GOM_NL__2PRFIN20110204_002835_000000503099_00131_46697_5824.N1	04-FEB-2011 00:28:35	Bright	49.500	127	27Bet Her	2.7810	4700.0	99	46697	No
7	GOM_NL__2PRFIN20110204_003216_000000563099_00131_46697_5825.N1	04-FEB-2011 00:32:16	Bright	56.000	126	60Bet Oph	2.7700	4250.0	112	46697	No
8	GOM_NL__2PRFIN20110204_003852_000000463099_00131_46697_5826.N1	04-FEB-2011 00:38:52	Twilight	45.500	86	35Eta Oph	2.4300	10200.	91	46697	No
9	GOM_NL__2PRFIN20110204_004319_000000543099_00131_46697_5827.N1	04-FEB-2011 00:43:19	Dark	54.000	16	21Alp Sco	1.0200	3000.0	108	46697	No
10	GOM_NL__2PRFIN20110204_005127_000000463099_00132_46698_5915.N1	04-FEB-2011 00:51:27	Dark	45.500	109	Bet Lup	2.6770	26000.	91	46698	No
11	GOM_NL__2PRFIN20110204_005407_000000553099_00132_46698_5916.N1	04-FEB-2011 00:54:07	Dark	54.500	4	Alp1Cen	-0.010000	5800.0	109	46698	No
12	GOM_NL__2PRFIN20110204_005521_000000473099_00132_46698_5917.N1	04-FEB-2011 00:55:21	Dark	47.000	10	Bet Cen	0.61000	28000.	94	46698	No
13	GOM_NL__2PRFIN20110204_005841_000000433099_00132_46698_5918.N1	04-FEB-2011 00:58:41	Dark	42.500	12	Alp1Cru	0.77500	30000.	85	46698	No
14	GOM_NL__2PRFIN20110204_010426_000000473099_00132_46698_5919.N1	04-FEB-2011 01:04:26	Dark	46.500	113	Mu Vel	2.6920	5000.0	93	46698	No
15	GOM_NL__2PRFIN20110204_010839_000000453099_00132_46698_5920.N1	04-FEB-2011 01:08:39	Straylight	44.500	65	Lam Vel	2.2040	4400.0	89	46698	No
16	GOM_NL__2PRFIN20110204_011920_000000593099_00132_46698_5921.N1	04-FEB-2011 01:19:20	Straylight	58.500	48	30Alp Hya	1.9770	4100.0	117	46698	No
17	GOM_NL__2PRFIN20110204_013006_000000423099_00132_46698_5922.N1	04-FEB-2011 01:30:06	Bright	42.000	17	78Bet Gem	1.1610	4500.0	84	46698	No
18	GOM_NL__2PRFIN20110204_014428_000000463099_00132_46698_5923.N1	04-FEB-2011 01:44:28	Bright	46.000	36	50Alp UMa	1.8000	6300.0	92	46698	No
19	GOM_NL__2PRFIN20110204_015014_000000373099_00132_46698_5924.N1	04-FEB-2011 01:50:14	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	46698	No
20	GOM_NL__2PRFIN20110204_015459_000000413099_00132_46698_5925.N1	04-FEB-2011 01:54:59	Bright	40.500	119	14Eta Dra	2.7270	4700.0	81	46698	No
21	GOM_NL__2PRFIN20110204_015817_000000493099_00132_46698_5926.N1	04-FEB-2011 01:58:17	Bright	49.000	130	23Bet Dra	2.7990	5800.0	98	46698	No
22	GOM_NL__2PRFIN20110204_020503_000000453099_00132_46698_5927.N1	04-FEB-2011 02:05:03	Bright	44.500	133	40Zet Her	2.8070	6000.0	89	46698	No
23	GOM_NL__2PRFIN20110204_020850_000000493099_00132_46698_5928.N1	04-FEB-2011 02:08:50	Bright	48.500	127	27Bet Her	2.7810	4700.0	97	46698	No
24	GOM_NL__2PRFIN20110204_021230_000000563099_00132_46698_5929.N1	04-FEB-2011 02:12:30	Bright	55.500	126	60Bet Oph	2.7700	4250.0	111	46698	No
25	GOM_NL__2PRFIN20110204_021907_000000473099_00132_46698_5930.N1	04-FEB-2011 02:19:07	Twilight	47.000	86	35Eta Oph	2.4300	10200.	94	46698	No
26	GOM_NL__2PRFIN20110204_022334_000000523099_00132_46698_5931.N1	04-FEB-2011 02:23:34	Dark	51.500	16	21Alp Sco	1.0200	3000.0	103	46698	No
27	GOM_NL__2PRFIN20110204_022925_000000463099_00132_46698_5932.N1	04-FEB-2011 02:29:25	Dark	46.000	131	Gam Lup	2.8000	26000.	92	46698	No
28	GOM_NL__2PRFIN20110204_023143_000000483099_00133_46699_5928.N1	04-FEB-2011 02:31:43	Dark	47.500	109	Bet Lup	2.6770	26000.	95	46699	No
29	GOM_NL__2PRFIN20110204_023422_000000443099_00133_46699_5929.N1	04-FEB-2011 02:34:22	Dark	43.500	4	Alp1Cen	-0.010000	5800.0	87	46699	No
30	GOM_NL__2PRFIN20110204_023535_000000433099_00133_46699_5930.N1	04-FEB-2011 02:35:35	Dark	42.500	10	Bet Cen	0.61000	28000.	85	46699	No
31	GOM_NL__2PRFIN20110204_023855_000000503099_00133_46699_5931.N1	04-FEB-2011 02:38:55	Dark	49.500	12	Alp1Cru	0.77500	30000.	99	46699	No
32	GOM_NL__2PRFIN20110204_024440_000000483099_00133_46699_5932.N1	04-FEB-2011 02:44:40	Dark	48.000	113	Mu Vel	2.6920	5000.0	96	46699	No
33	GOM_NL__2PRFIN20110204_024853_000000463099_00133_46699_5933.N1	04-FEB-2011 02:48:53	Straylight	45.500	65	Lam Vel	2.2040	4400.0	91	46699	No
34	GOM_NL__2PRFIN20110204_025934_000000563099_00133_46699_5934.N1	04-FEB-2011 02:59:34	Straylight	55.500	48	30Alp Hya	1.9770	4100.0	111	46699	No
35	GOM_NL__2PRFIN20110204_031020_000000413099_00133_46699_5935.N1	04-FEB-2011 03:10:20	Bright	41.000	17	78Bet Gem	1.1610	4500.0	82	46699	No
36	GOM_NL__2PRFIN20110204_032441_000000463099_00133_46699_5936.N1	04-FEB-2011 03:24:41	Bright	45.500	36	50Alp UMa	1.8000	6300.0	91	46699	No
37	GOM_NL__2PRFIN20110204_033028_000000393099_00133_46699_5937.N1	04-FEB-2011 03:30:28	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	46699	No
38	GOM_NL__2PRFIN20110204_033513_000000413099_00133_46699_5938.N1	04-FEB-2011 03:35:13	Bright	40.500	119	14Eta Dra	2.7270	4700.0	81	46699	No
39	GOM_NL__2PRFIN20110204_033831_000000563099_00133_46699_5939.N1	04-FEB-2011 03:38:31	Bright	56.000	130	23Bet Dra	2.7990	5800.0	112	46699	No
40	GOM_NL__2PRFIN20110204_034517_000000443099_00133_46699_5940.N1	04-FEB-2011 03:45:17	Bright	44.000	133	40Zet Her	2.8070	6000.0	88	46699	No
41	GOM_NL__2PRFIN20110204_034904_000000513099_00133_46699_5941.N1	04-FEB-2011 03:49:04	Bright	50.500	127	27Bet Her	2.7810	4700.0	101	46699	No
42	GOM_NL__2PRFIN20110204_035245_000000393099_00133_46699_5942.N1	04-FEB-2011 03:52:45	Bright	38.500	126	60Bet Oph	2.7700	4250.0	77	46699	No

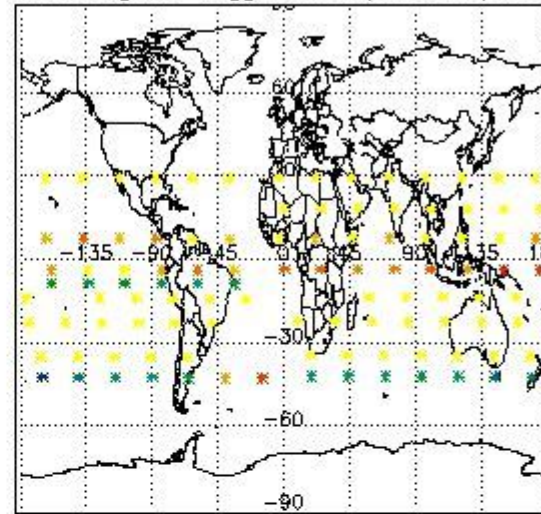


3.2 Plot quality information per product (world map)

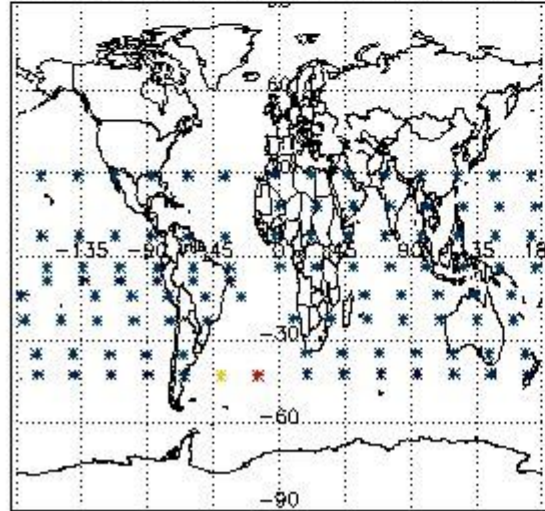
Percentage of flagged data per O3 profile



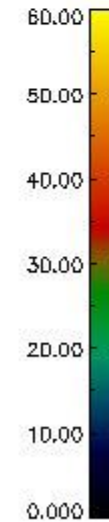
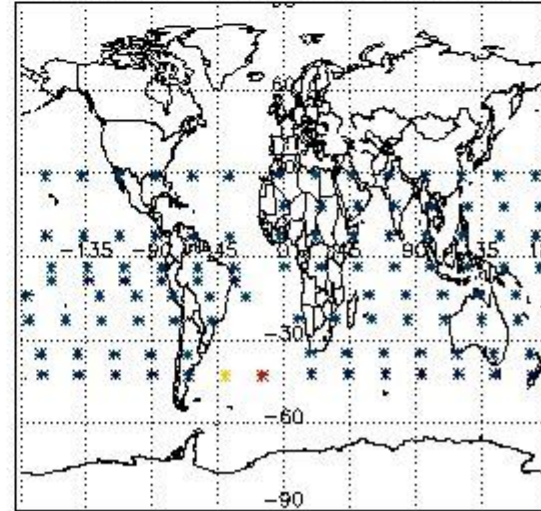
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

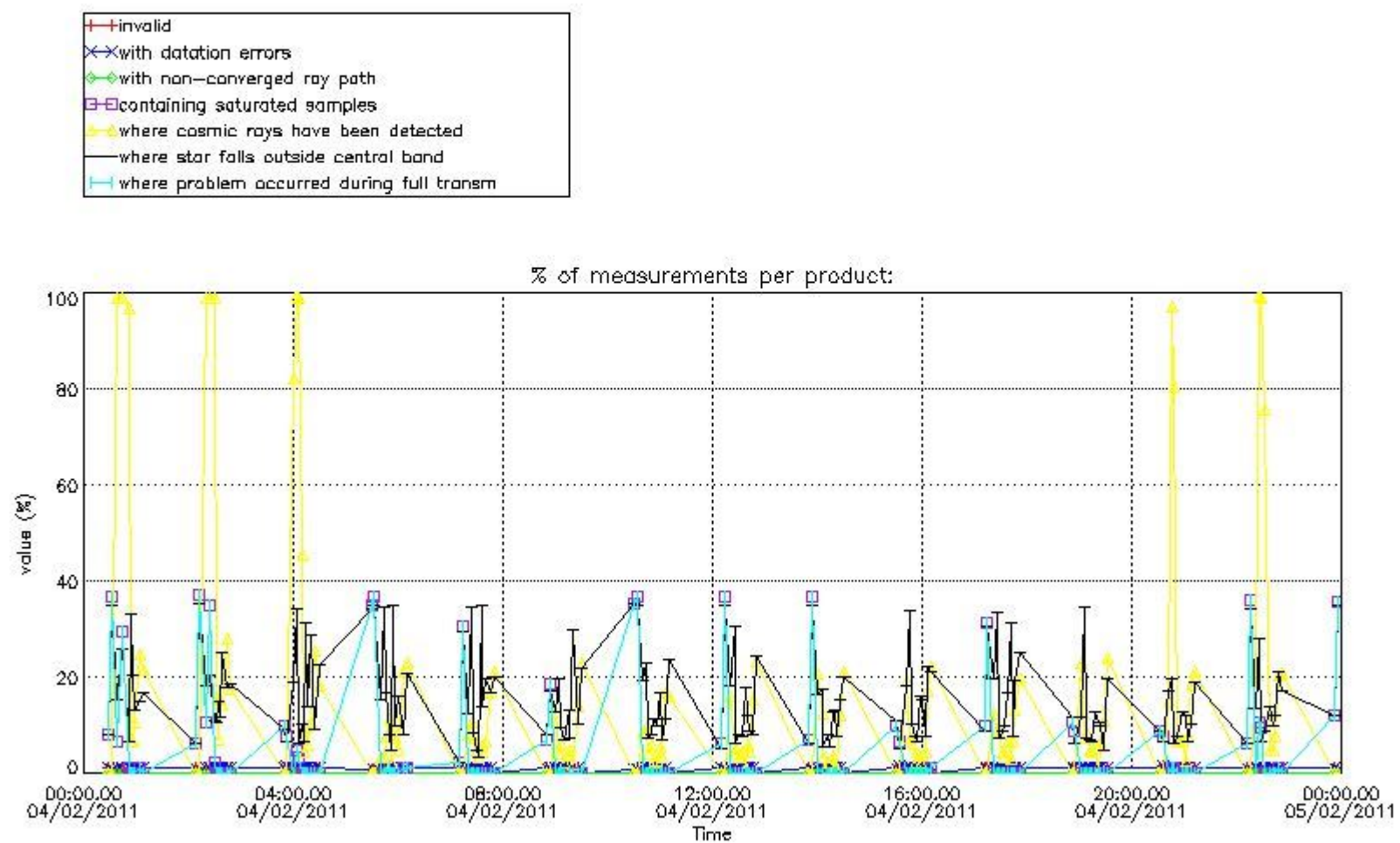


4. Level 1 quality information per product

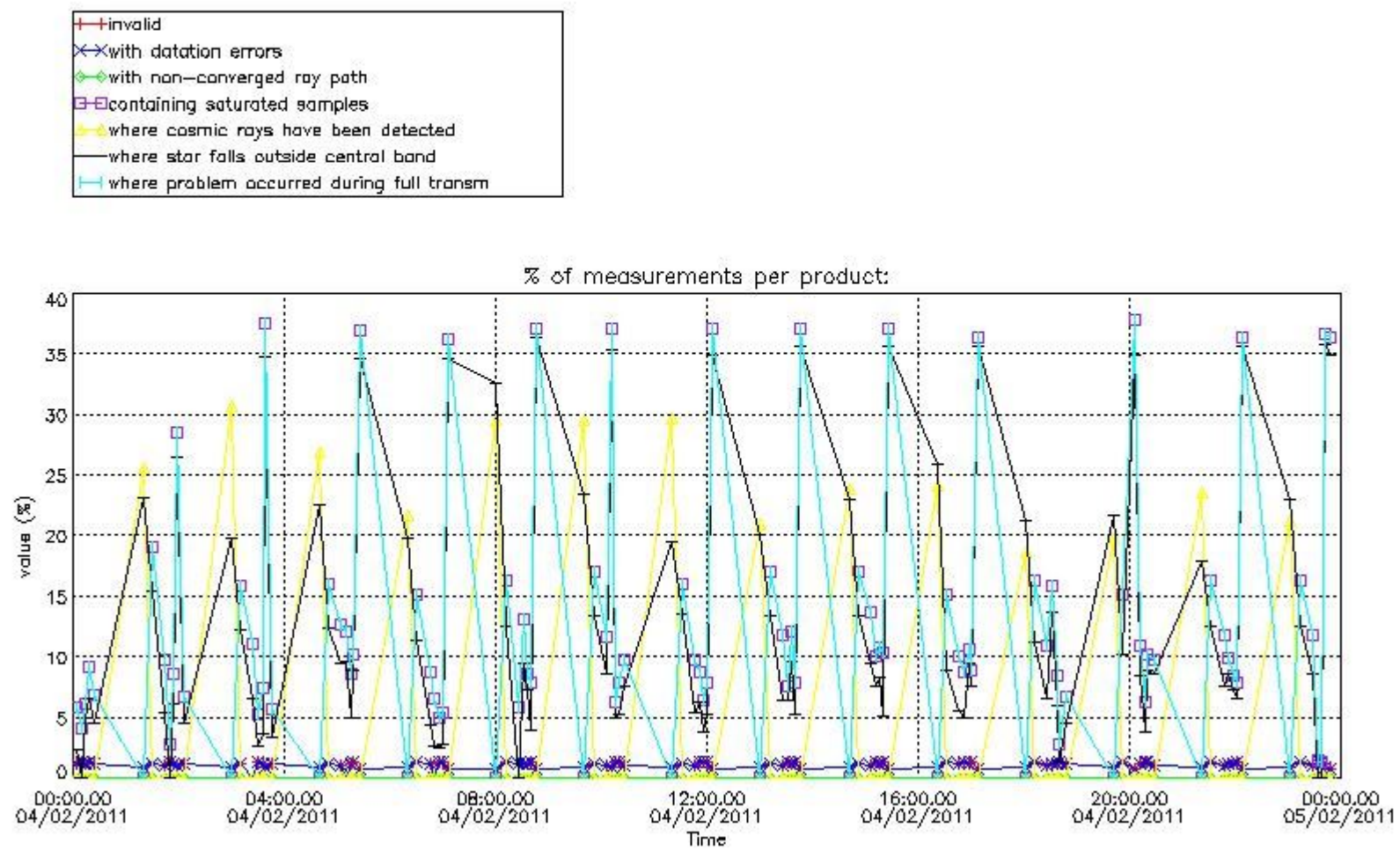
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

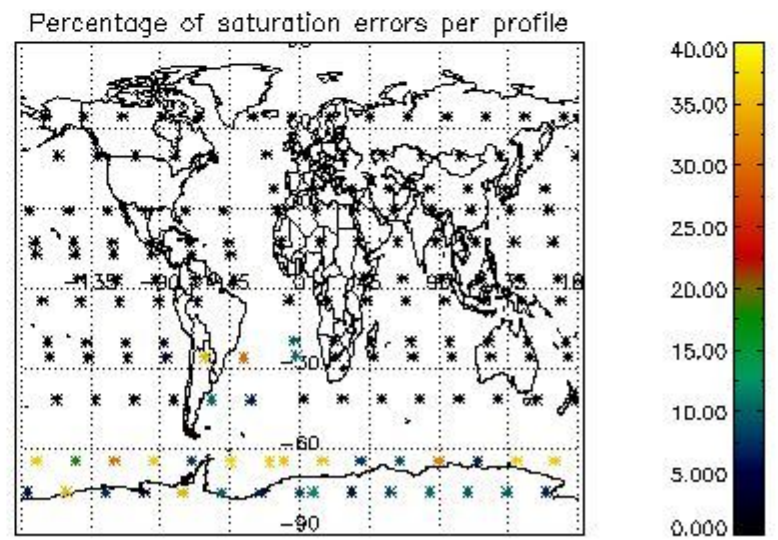
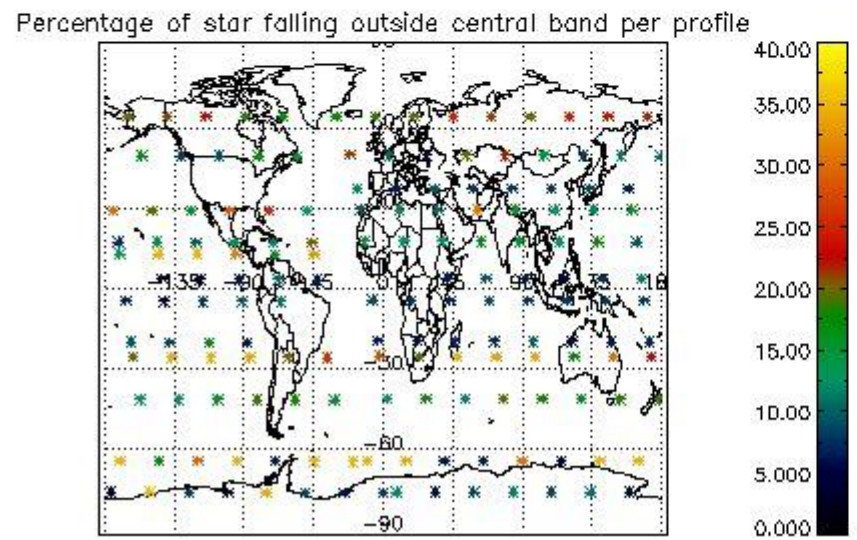
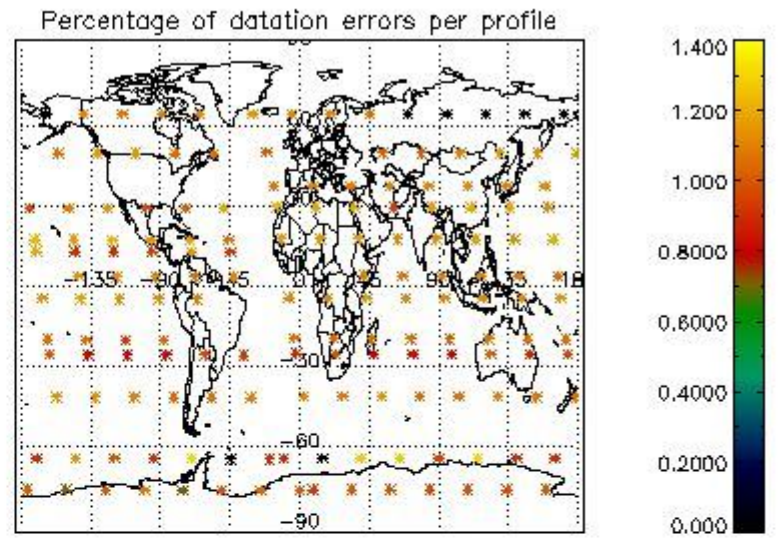
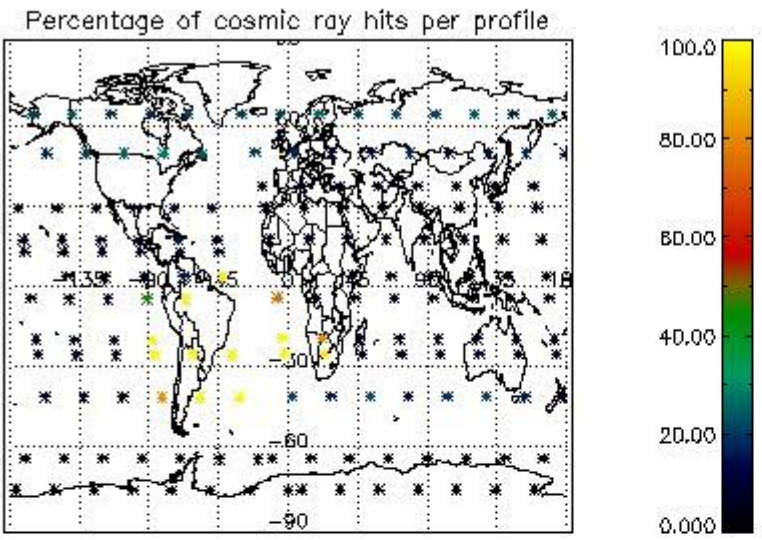


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

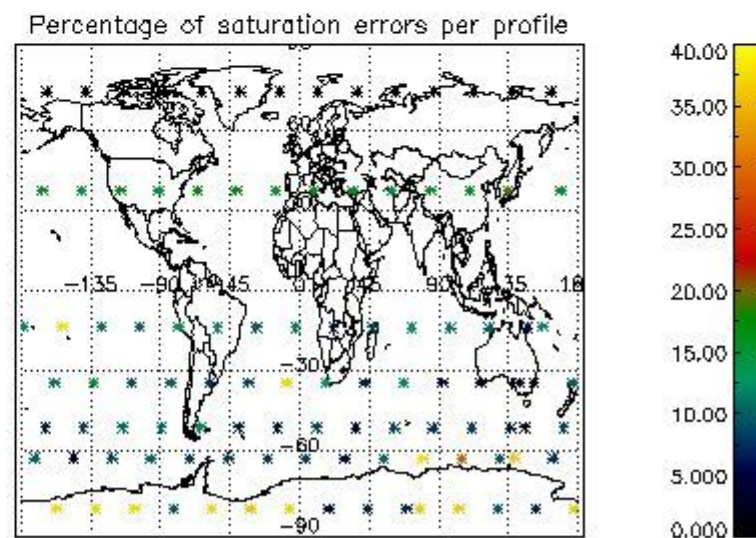
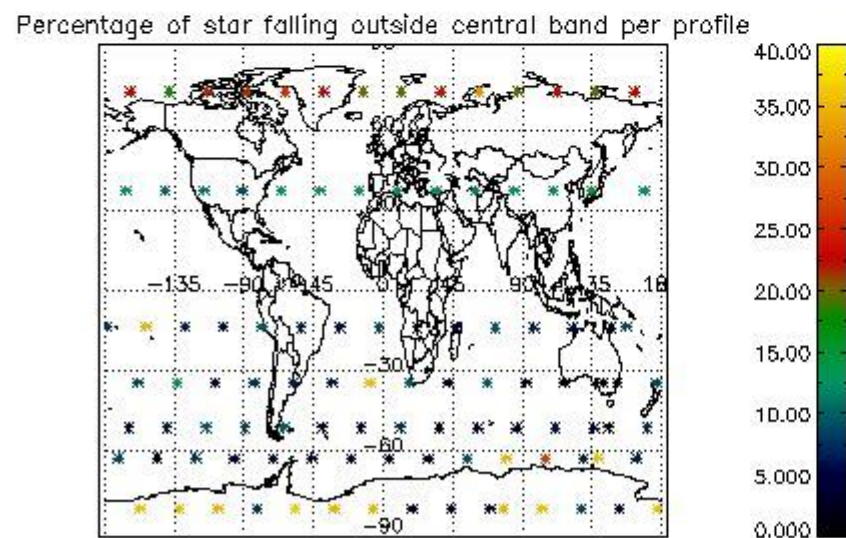
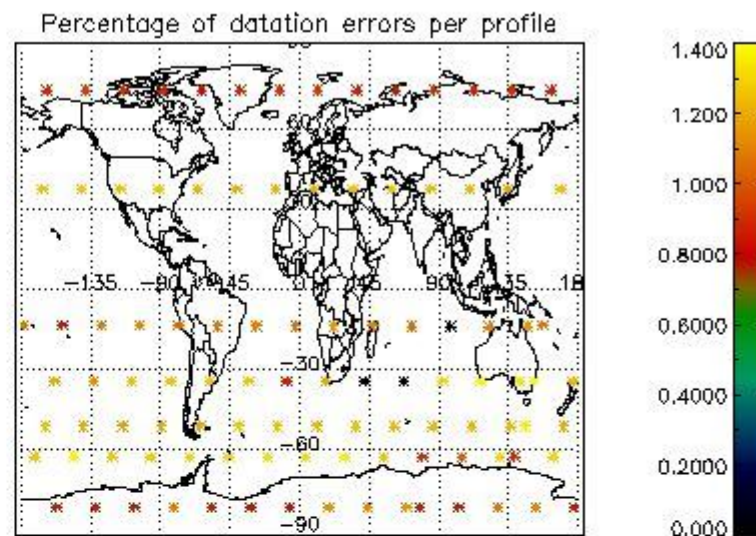
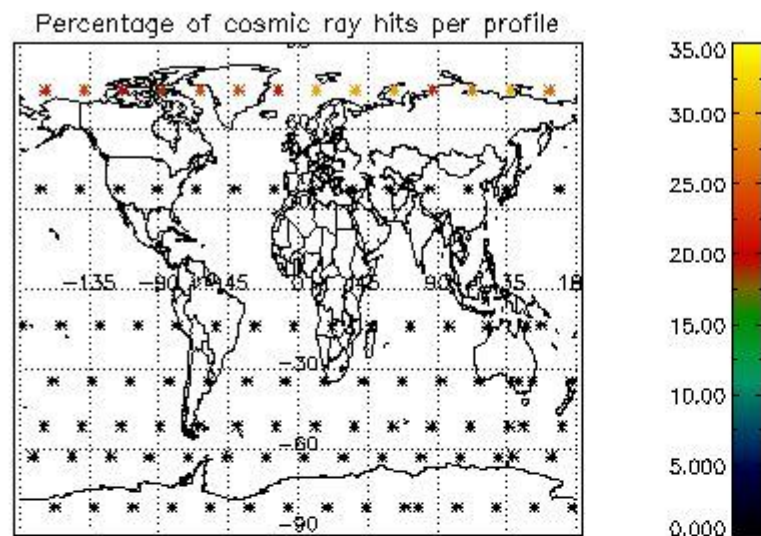


4.2 Plot quality information per product coming from level 1b processing (world map)

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

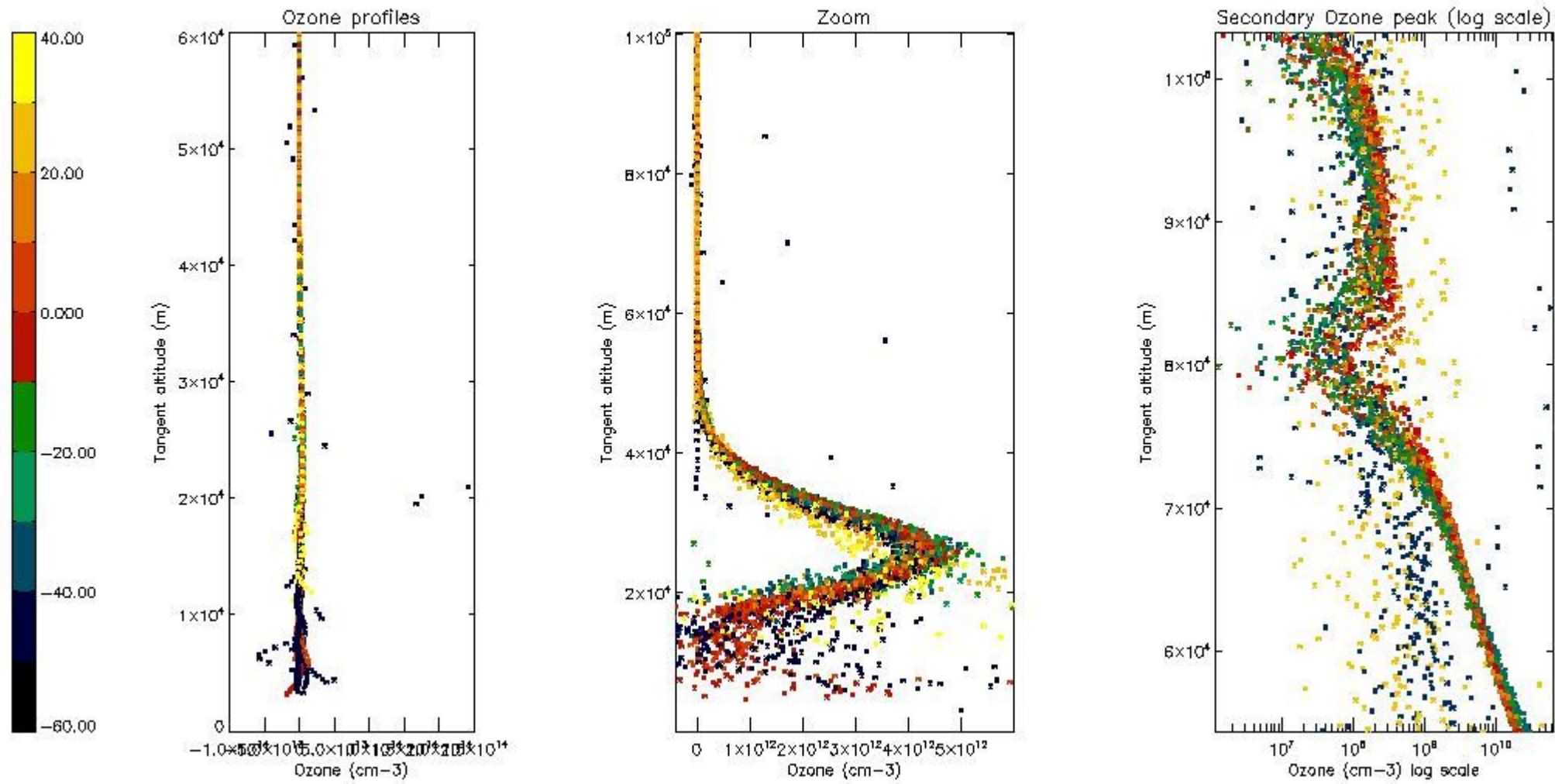
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	40
STD < 20	21

STD < 10	17
STD < 5	13

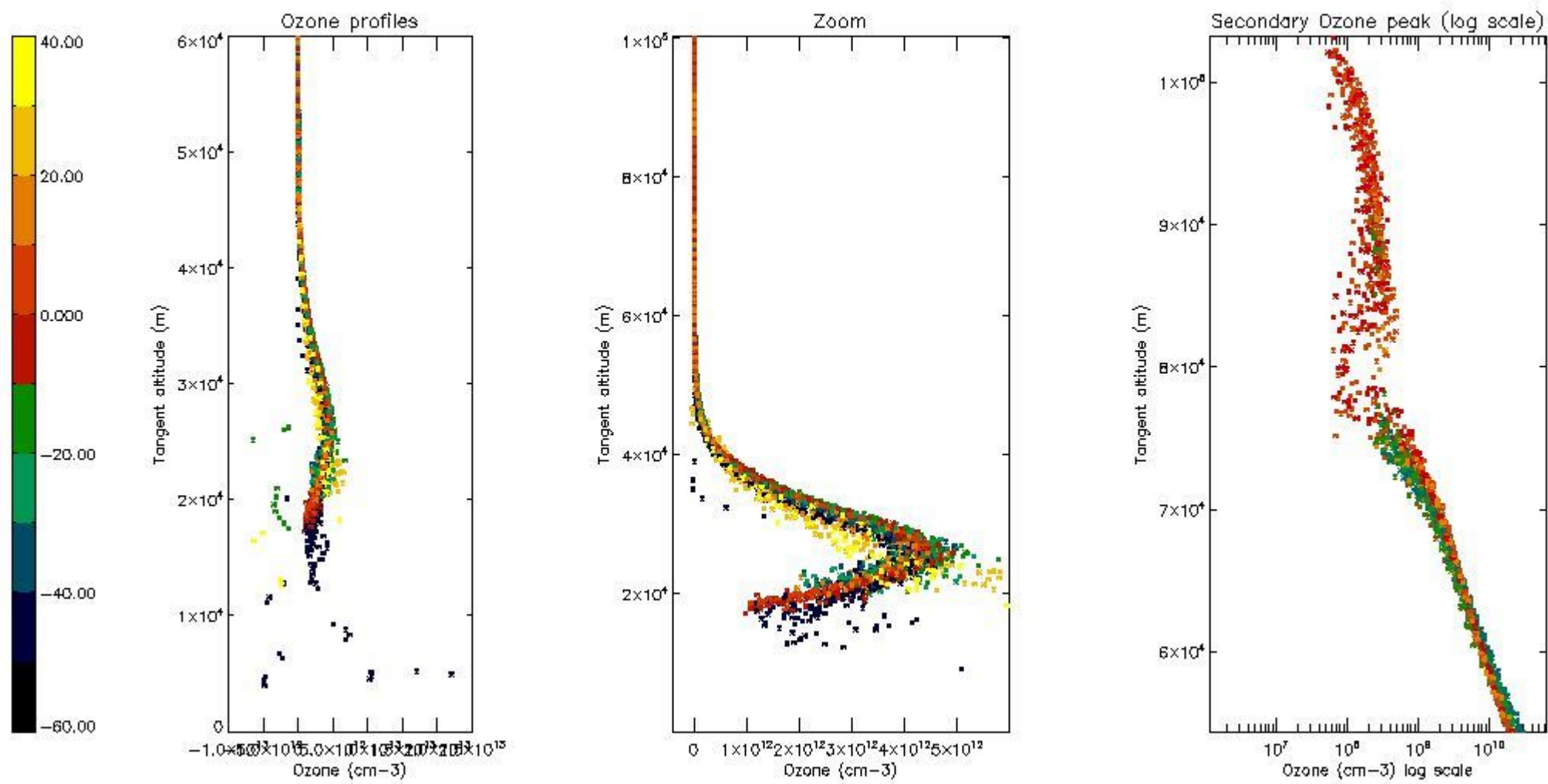
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



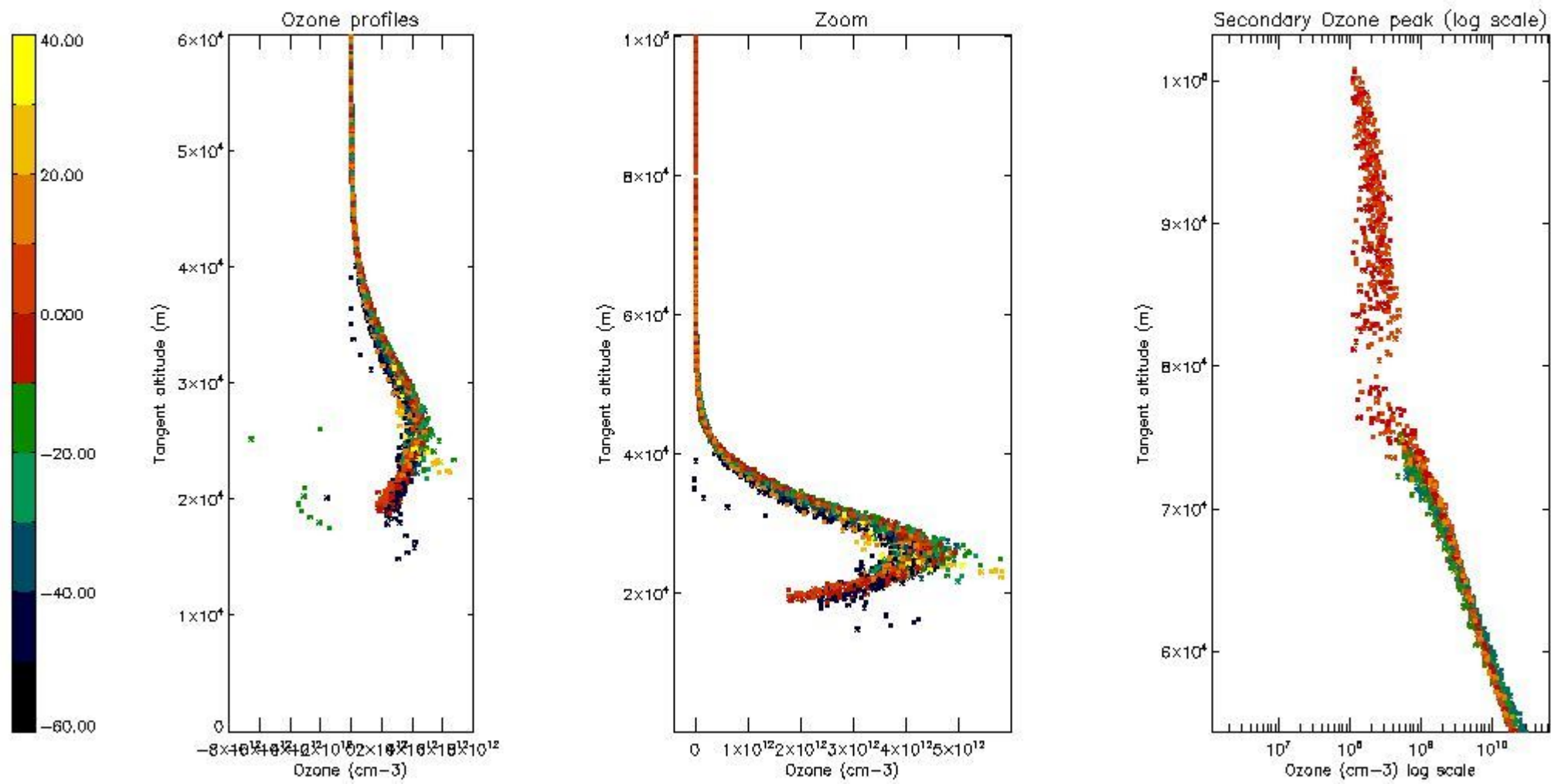
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



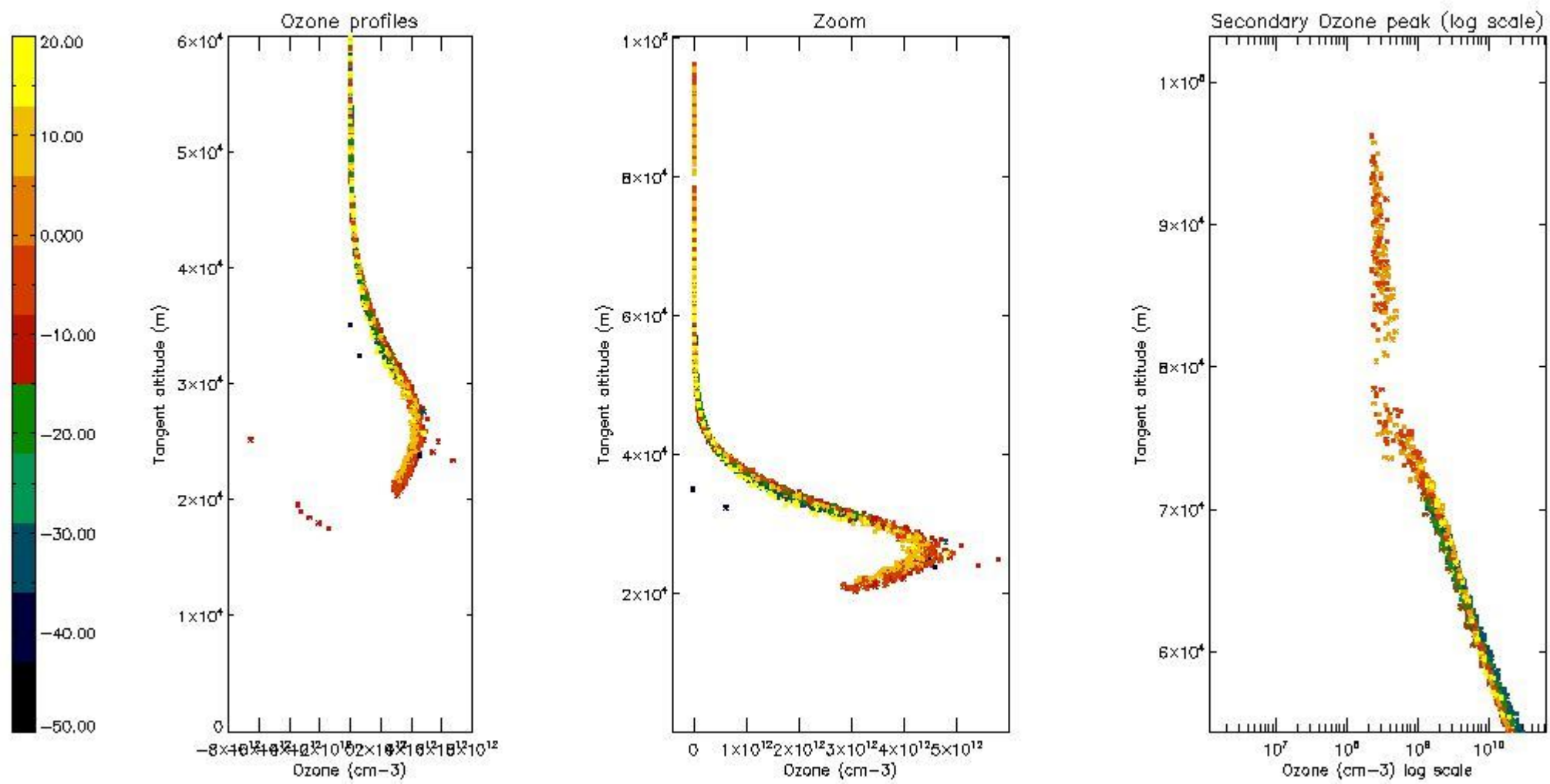
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



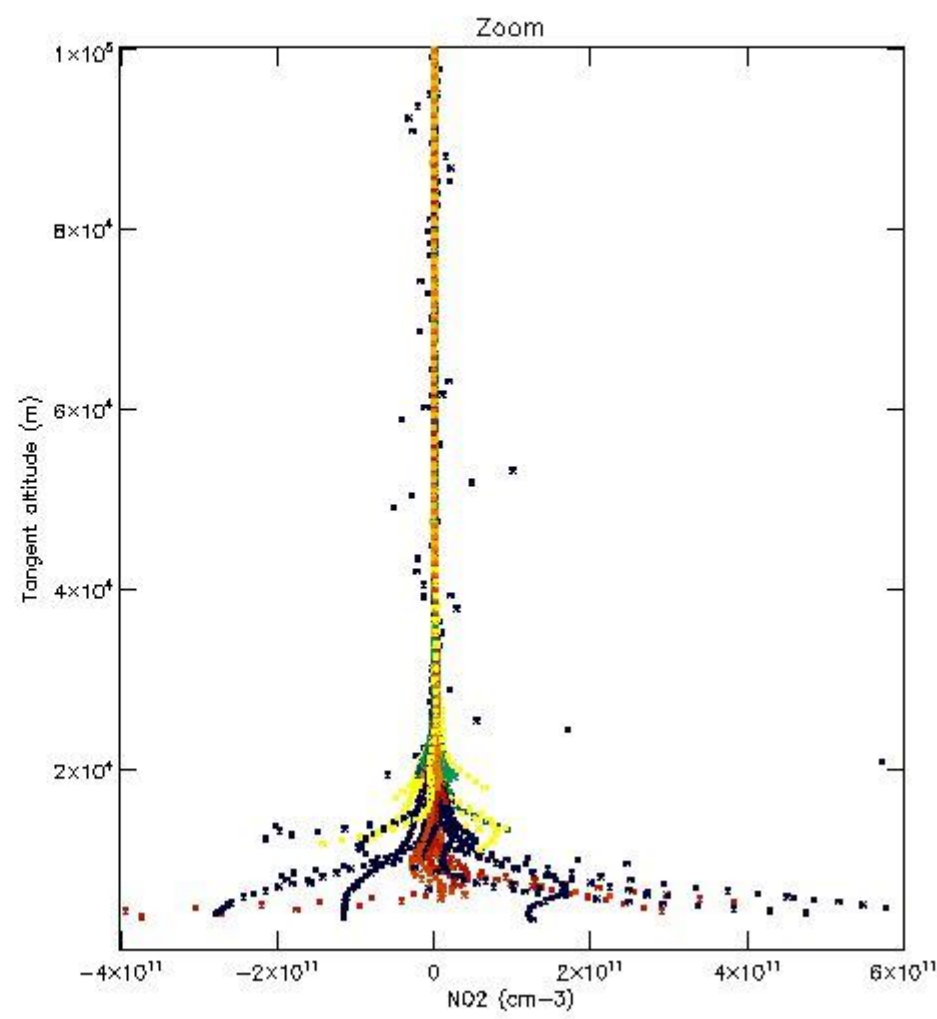
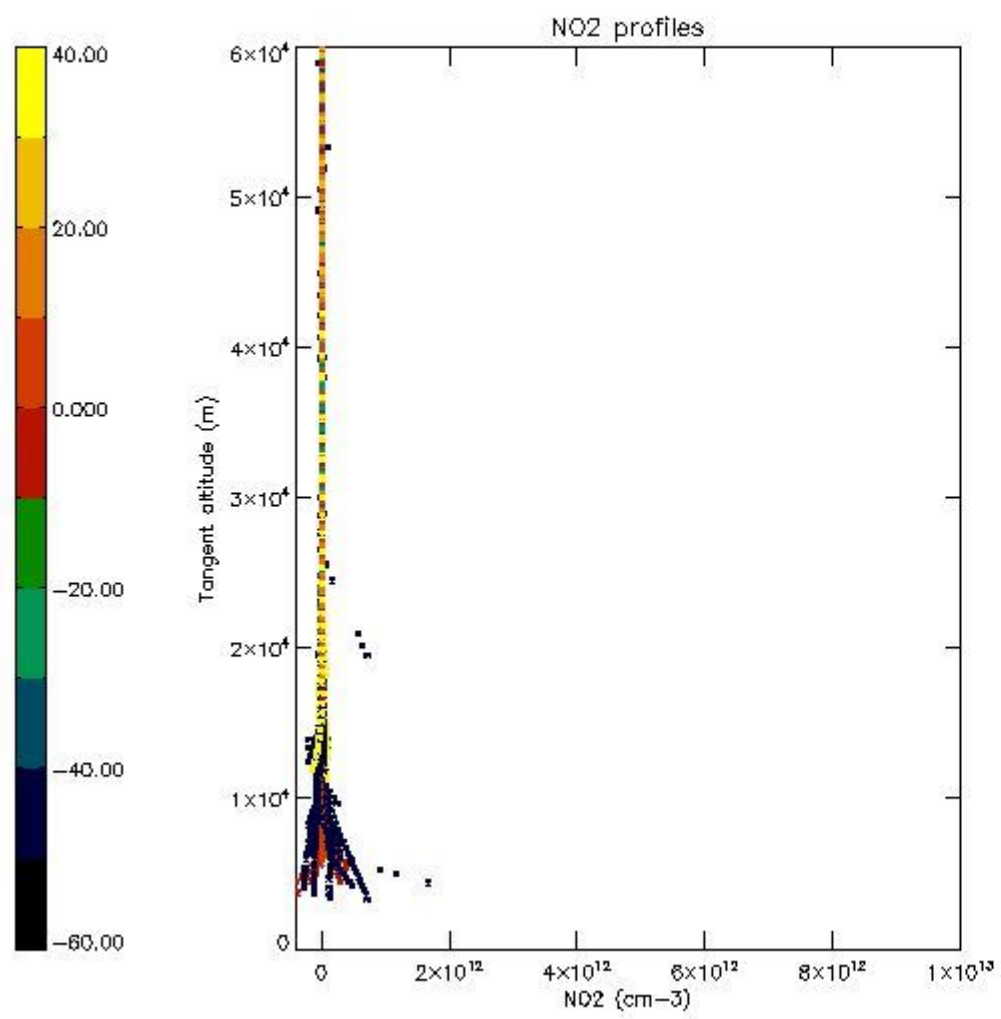
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



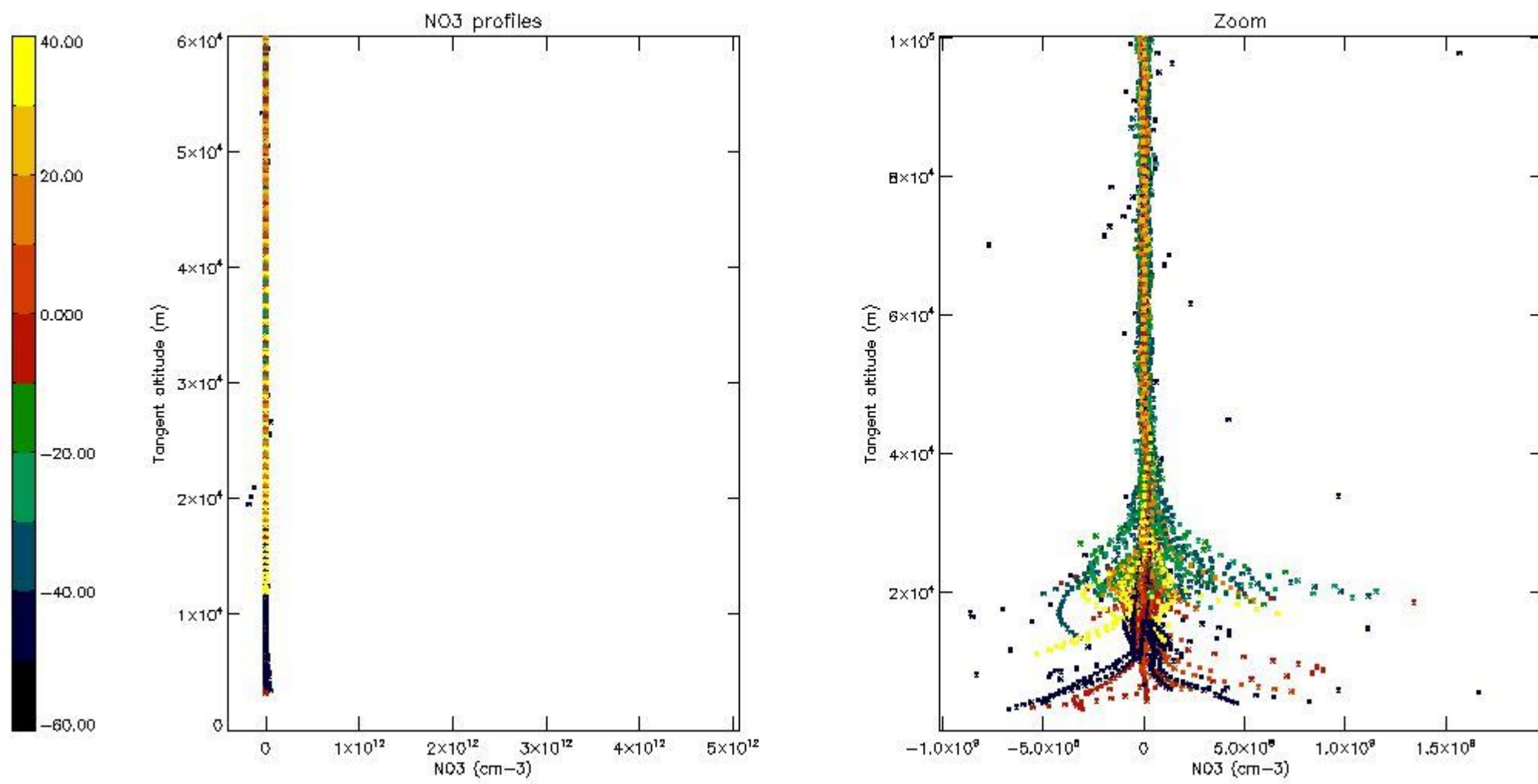
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



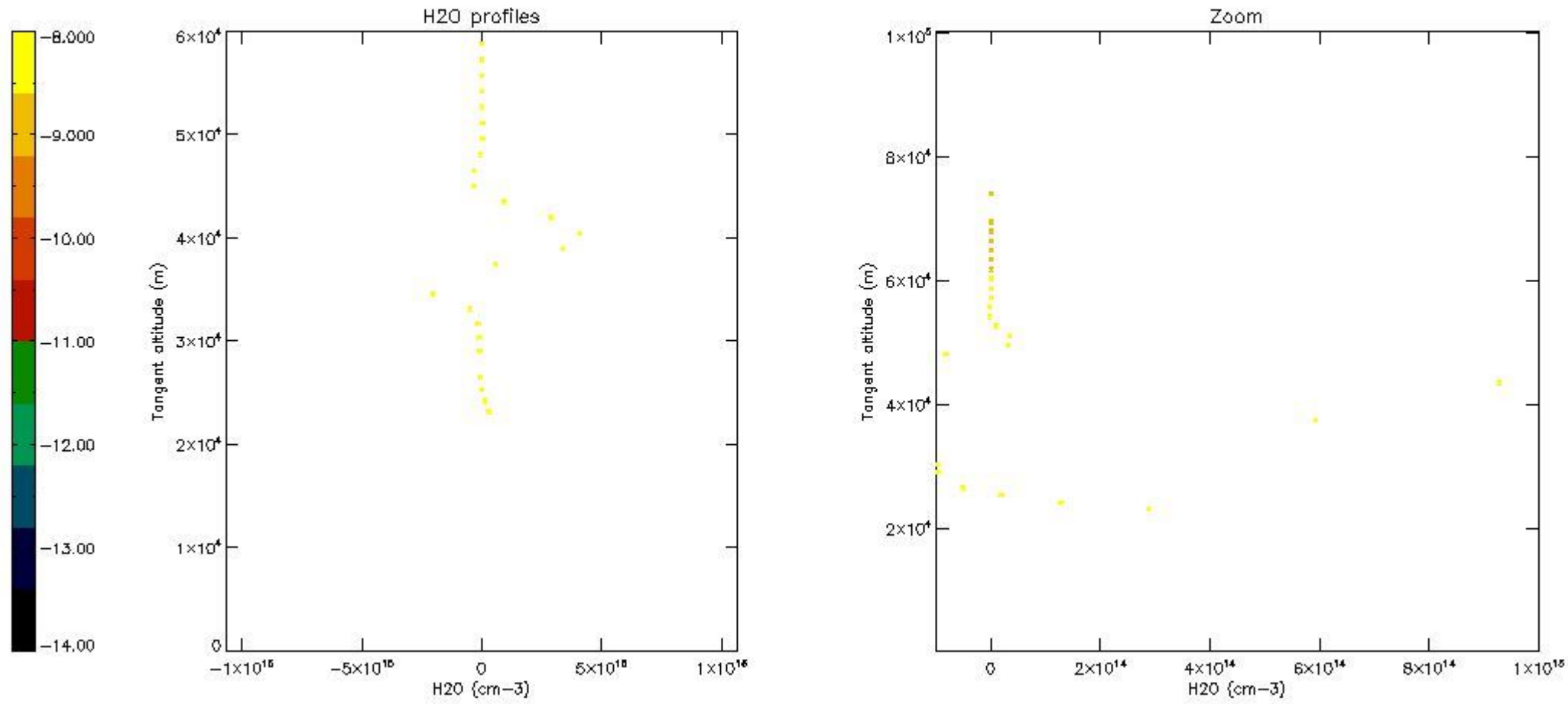
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

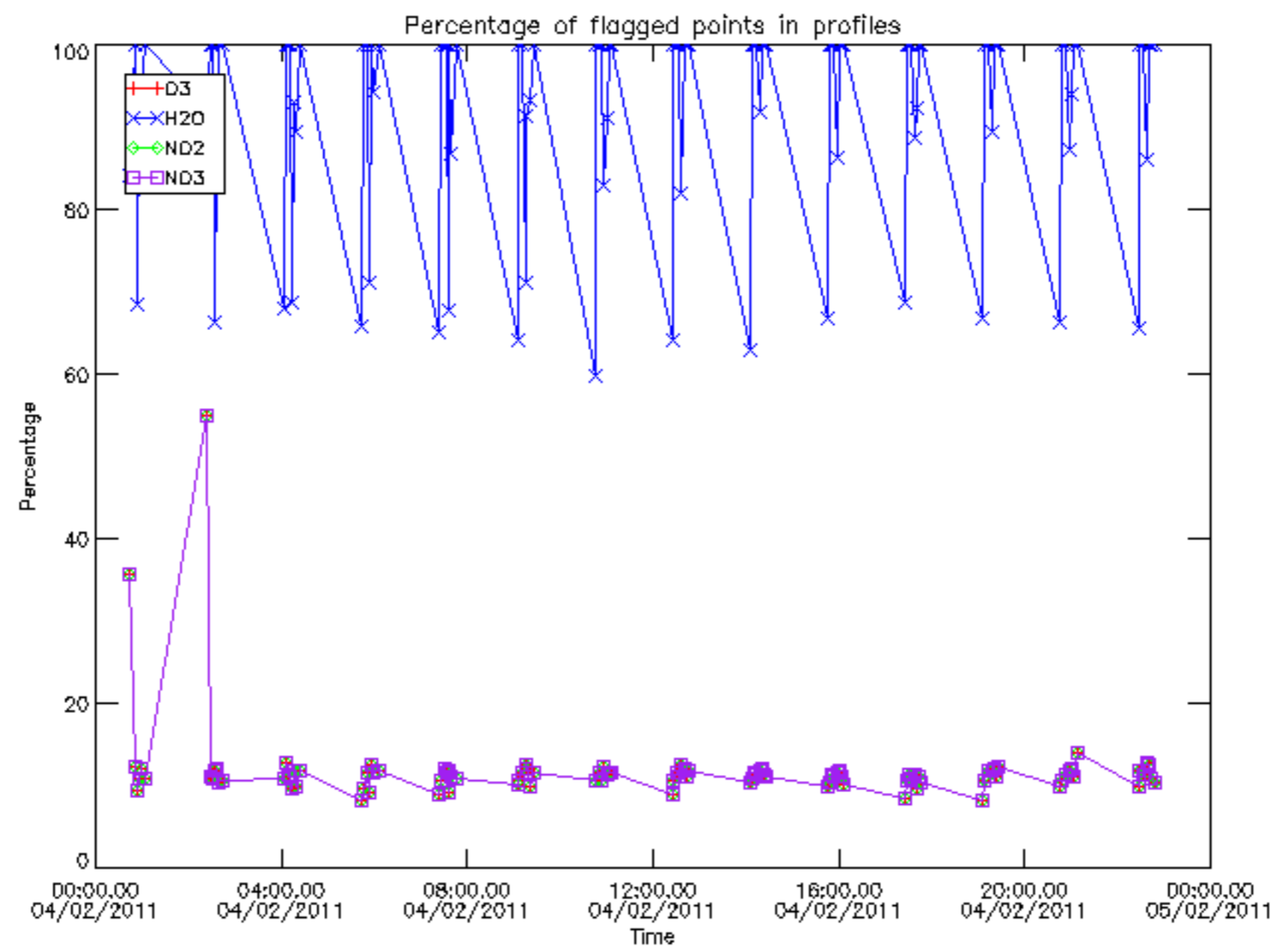
The colorbar represents the latitude.



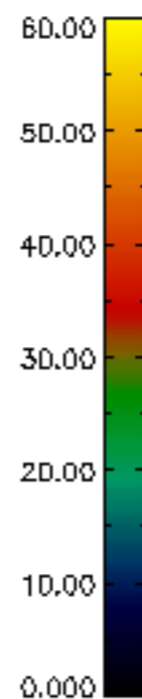
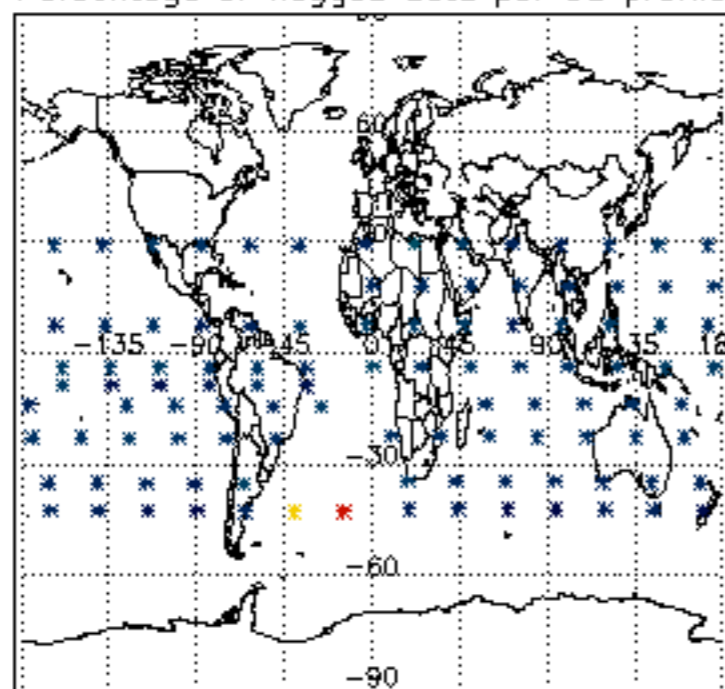
6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

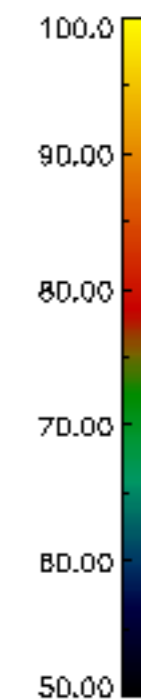
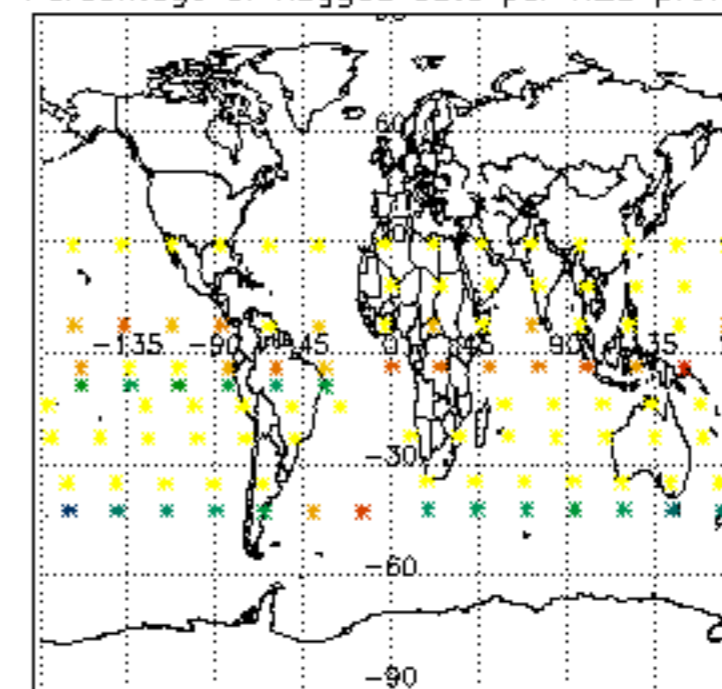
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	04-FEB-2011 00:04:14
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	04-FEB-2011 00:04:14
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	04-FEB-2011 00:04:14



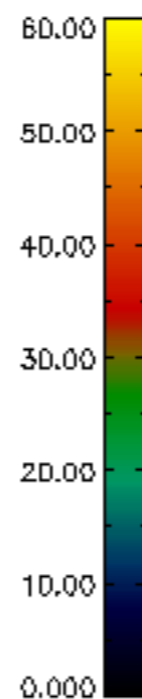
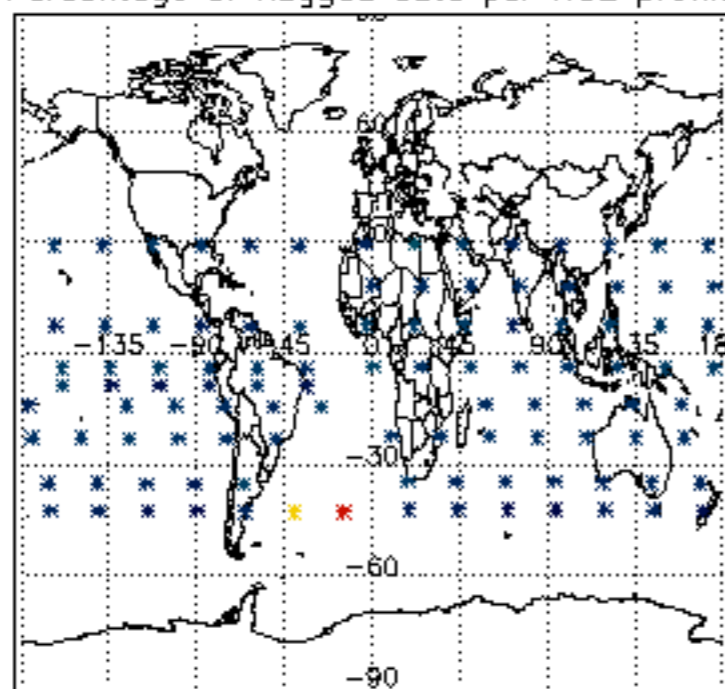
Percentage of flagged data per D3 profile



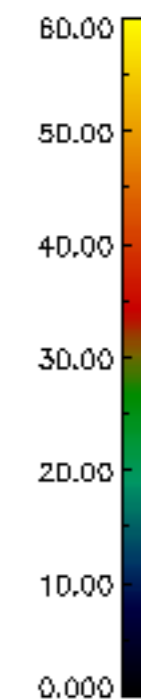
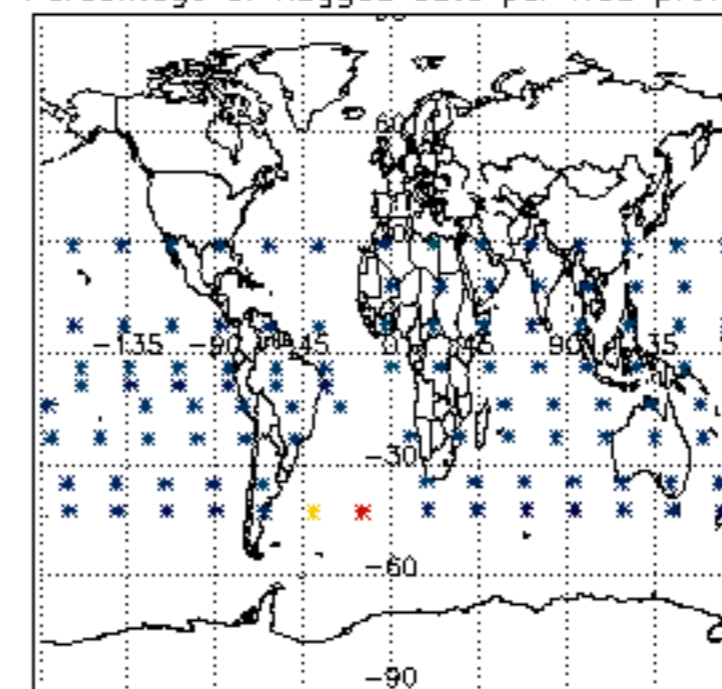
Percentage of flagged data per H2O profile

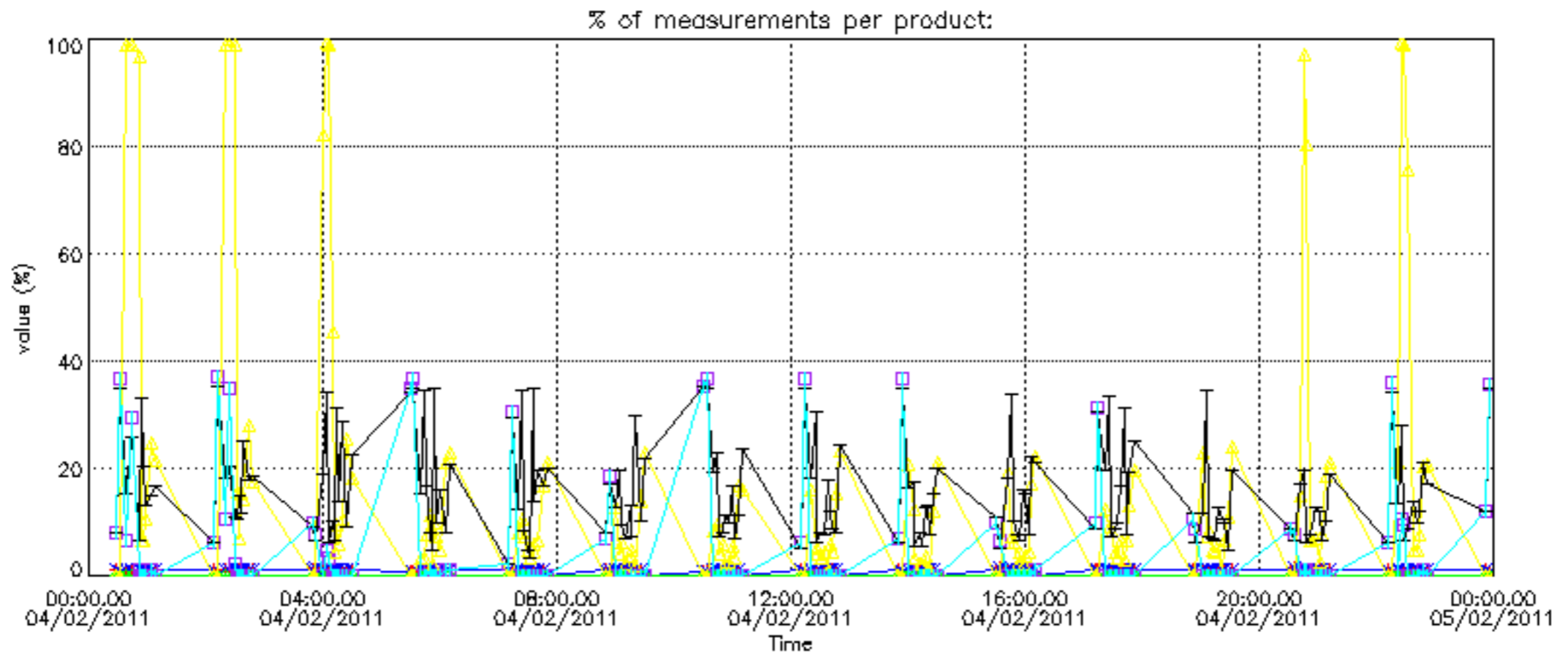


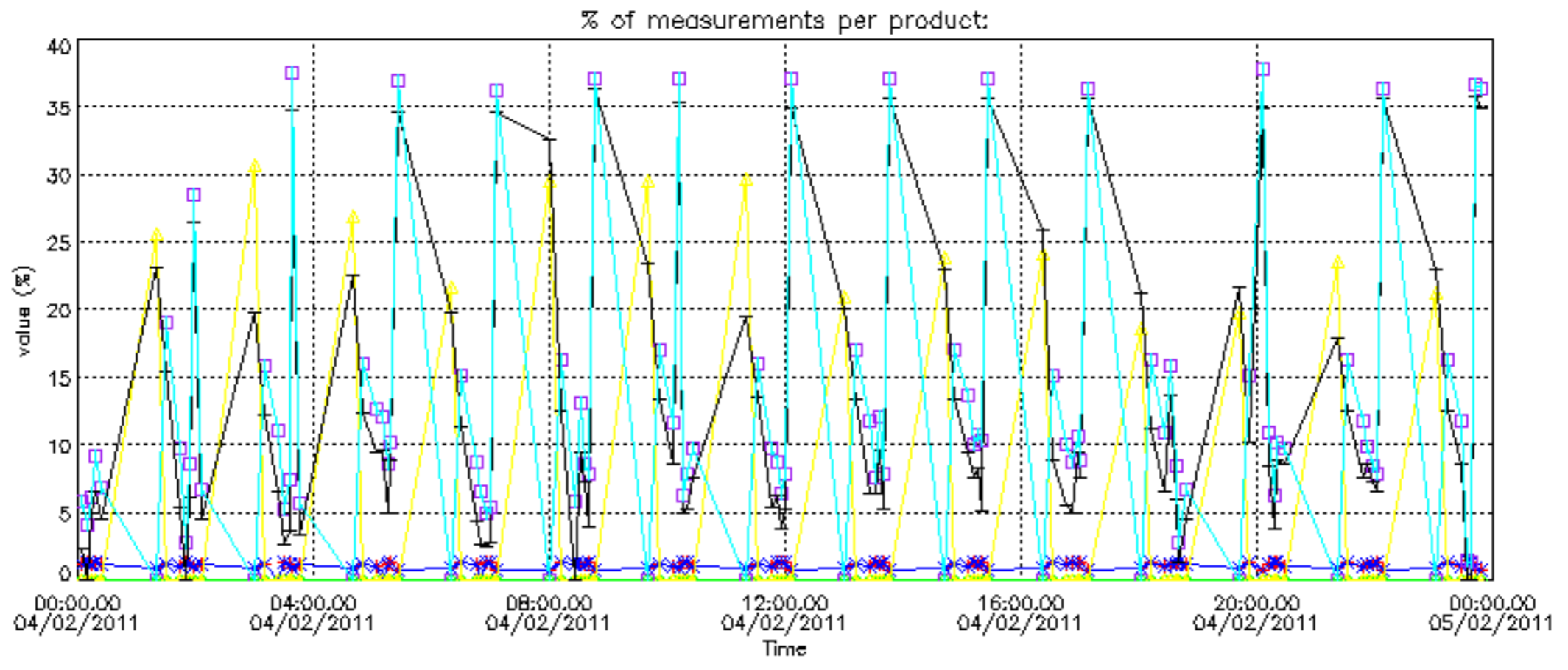
Percentage of flagged data per NO2 profile



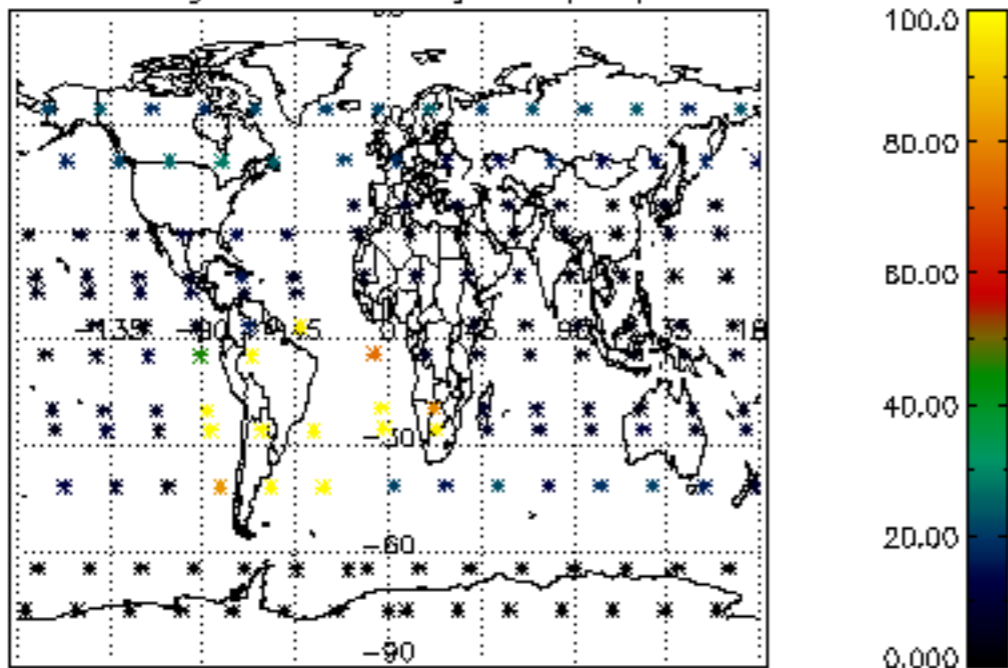
Percentage of flagged data per NO3 profile



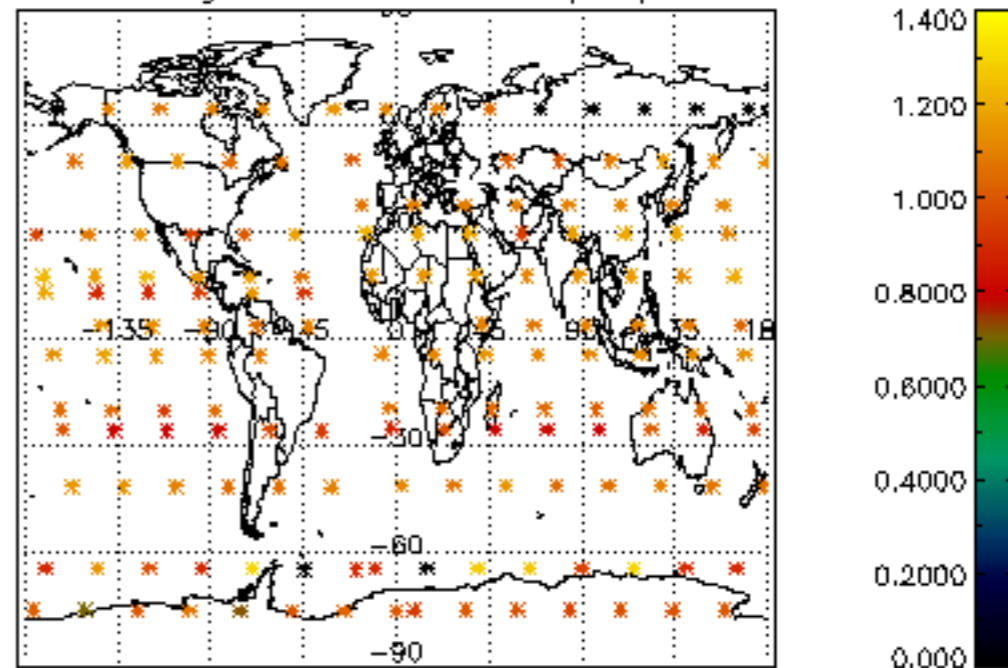




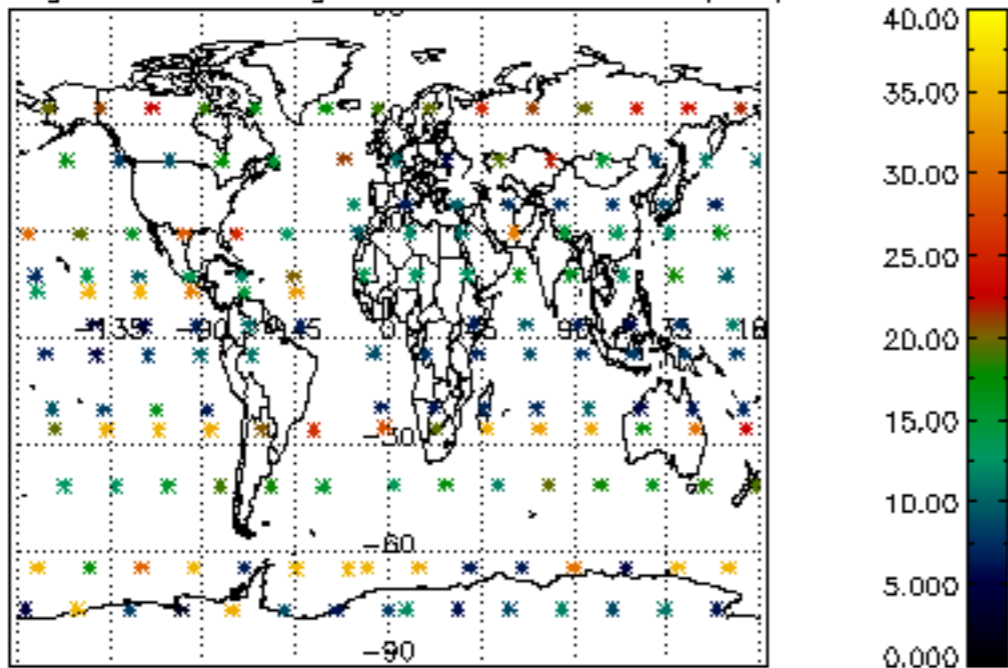
Percentage of cosmic ray hits per profile



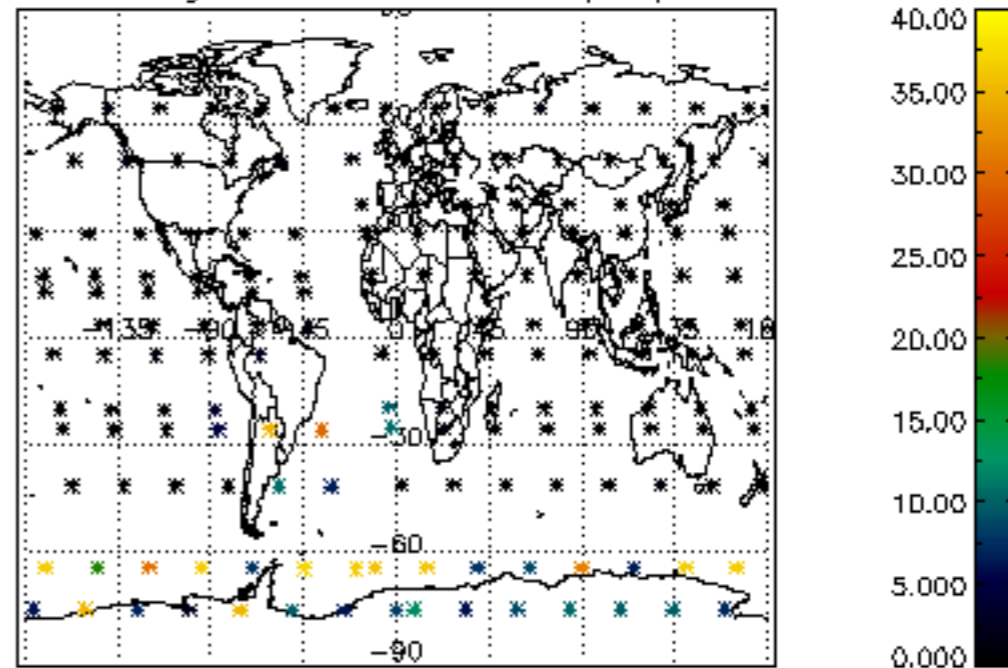
Percentage of datation errors per profile



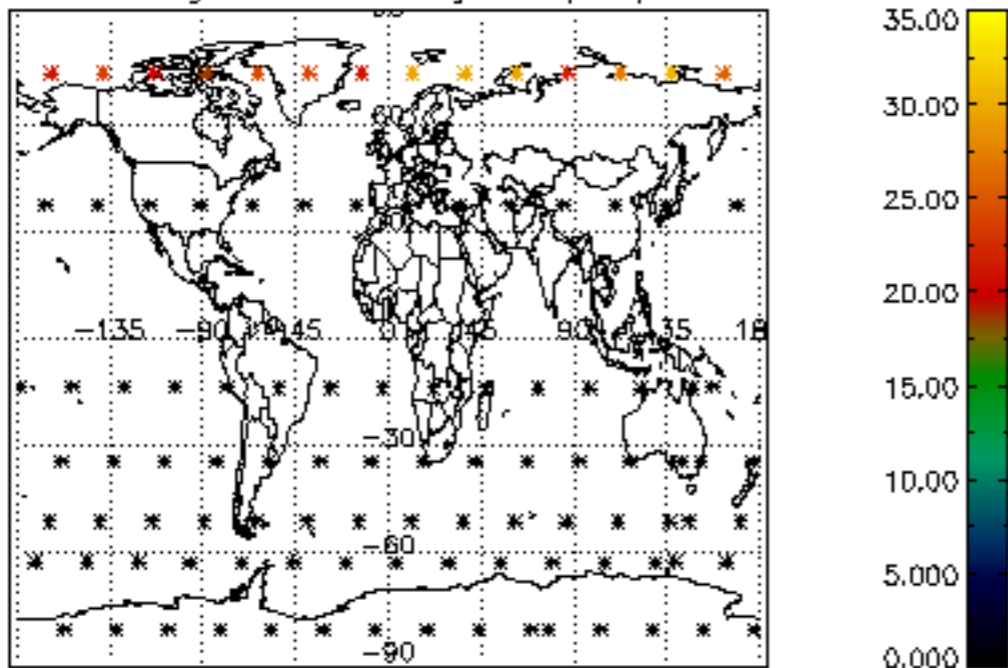
Percentage of star falling outside central band per profile



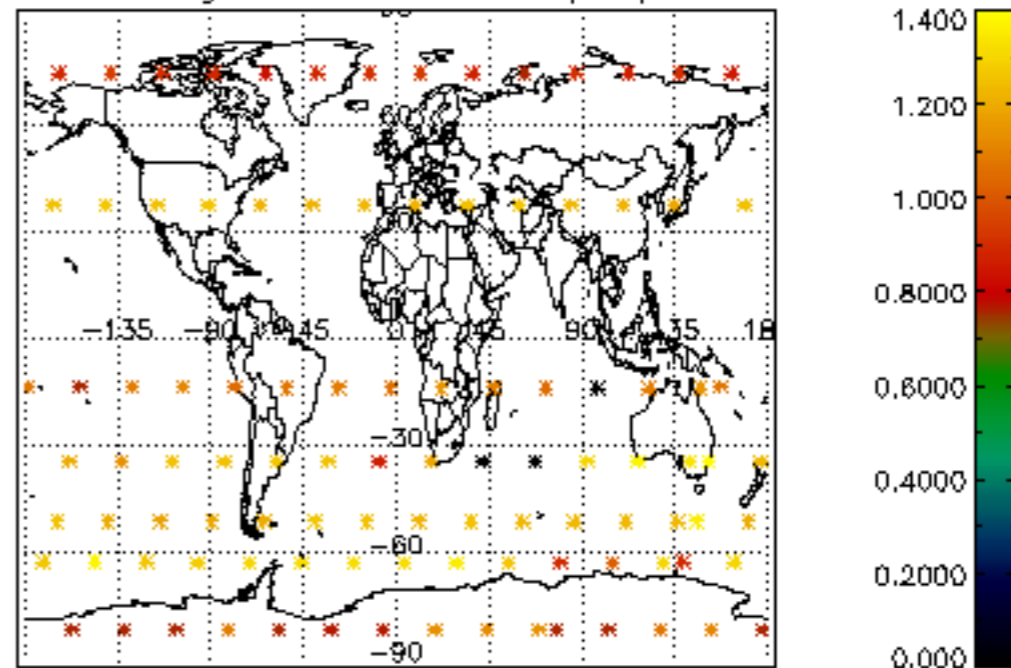
Percentage of saturation errors per profile



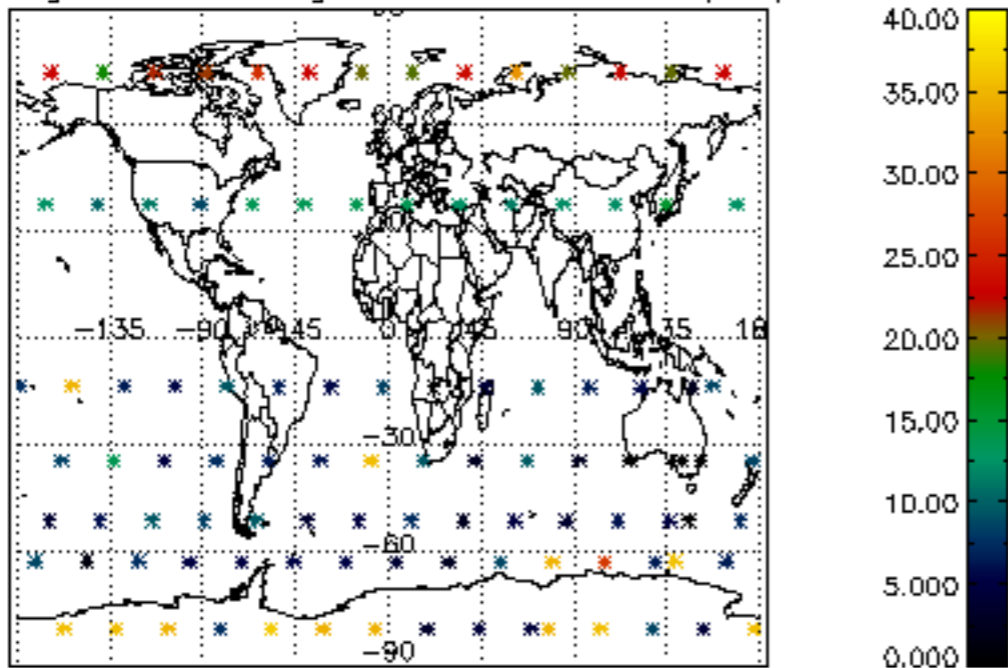
Percentage of cosmic ray hits per profile



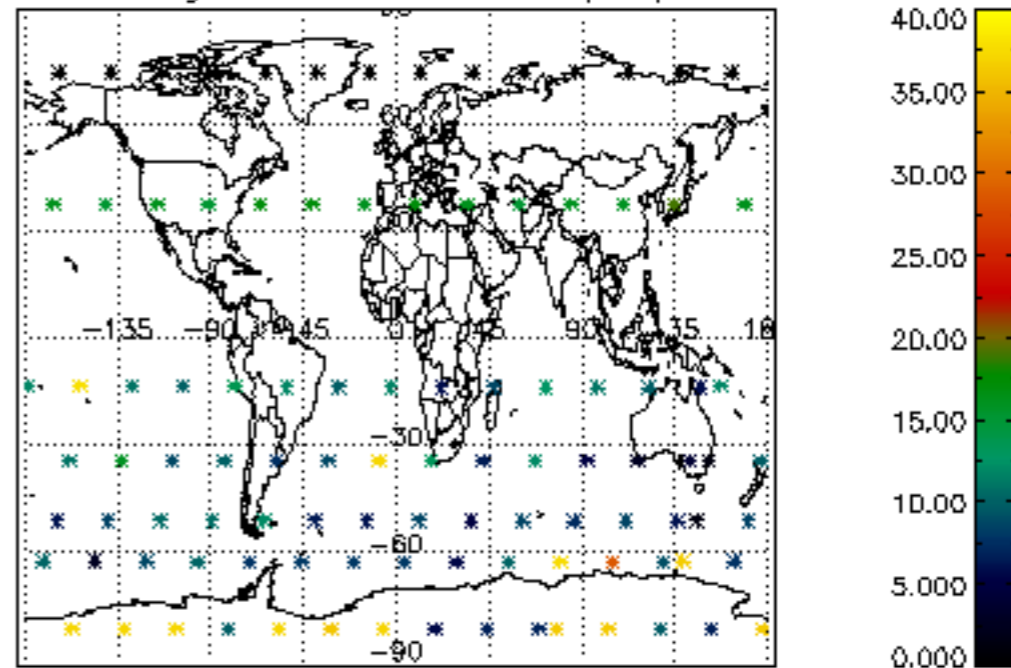
Percentage of datation errors per profile

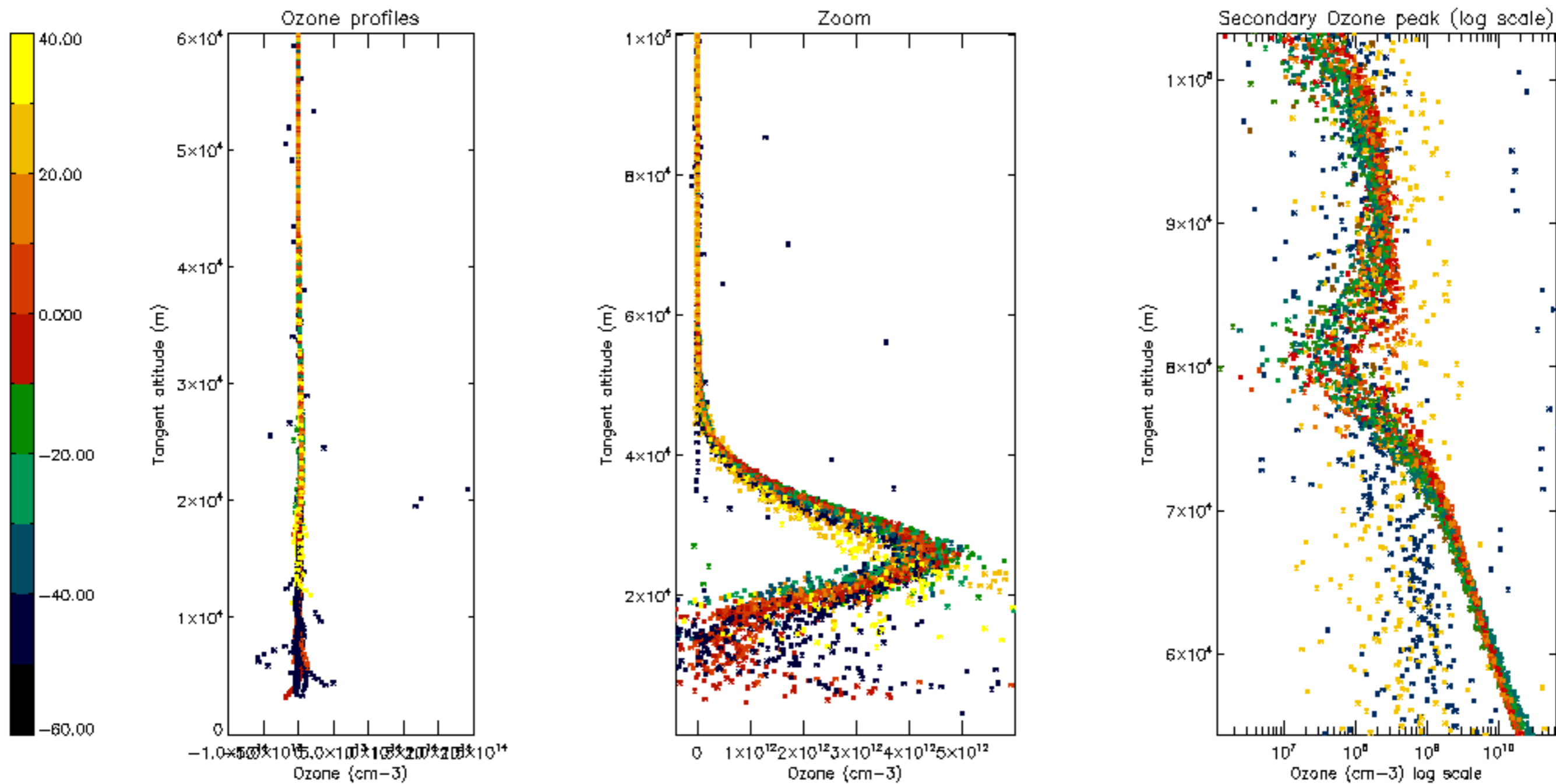


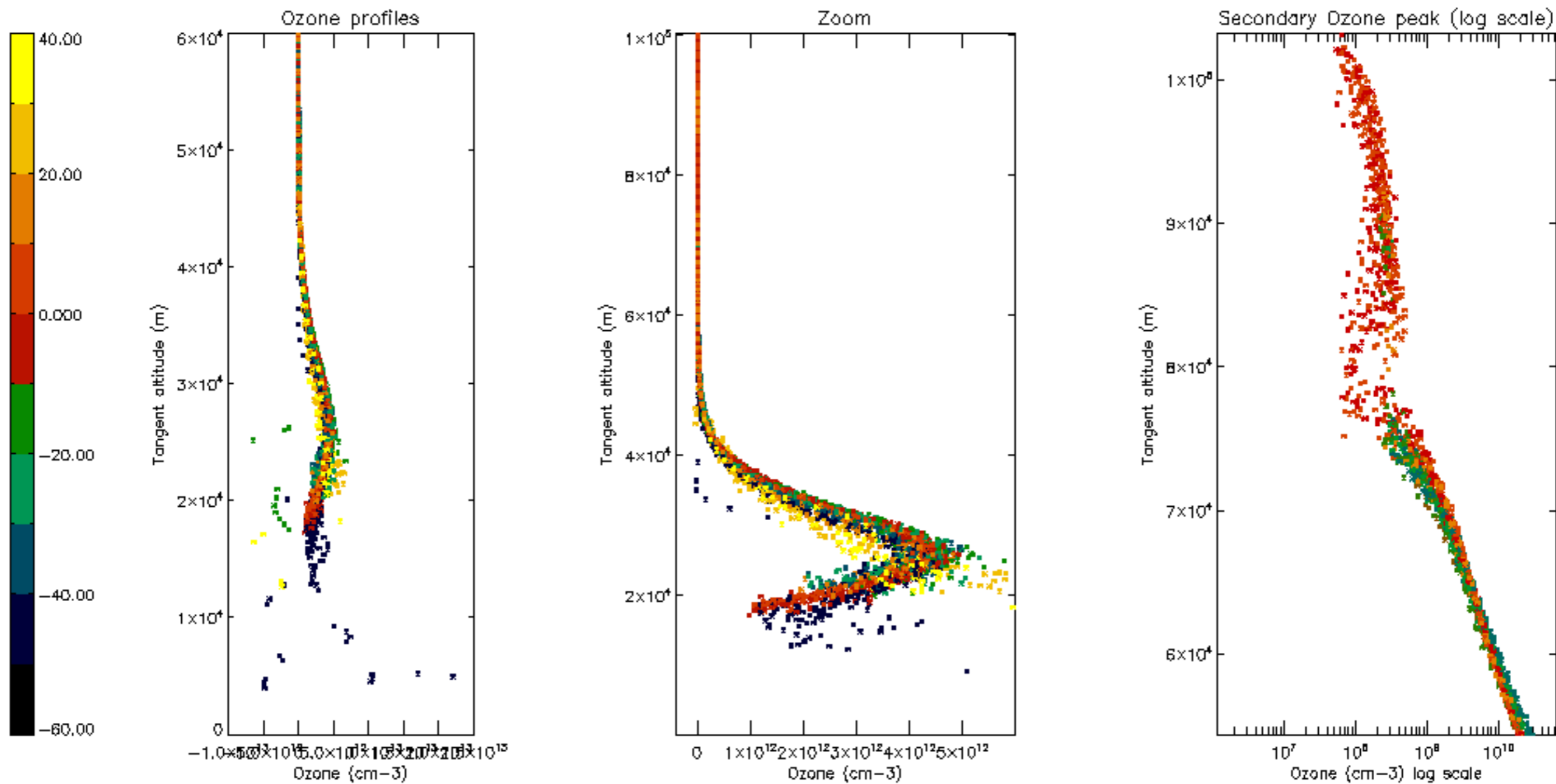
Percentage of star falling outside central band per profile

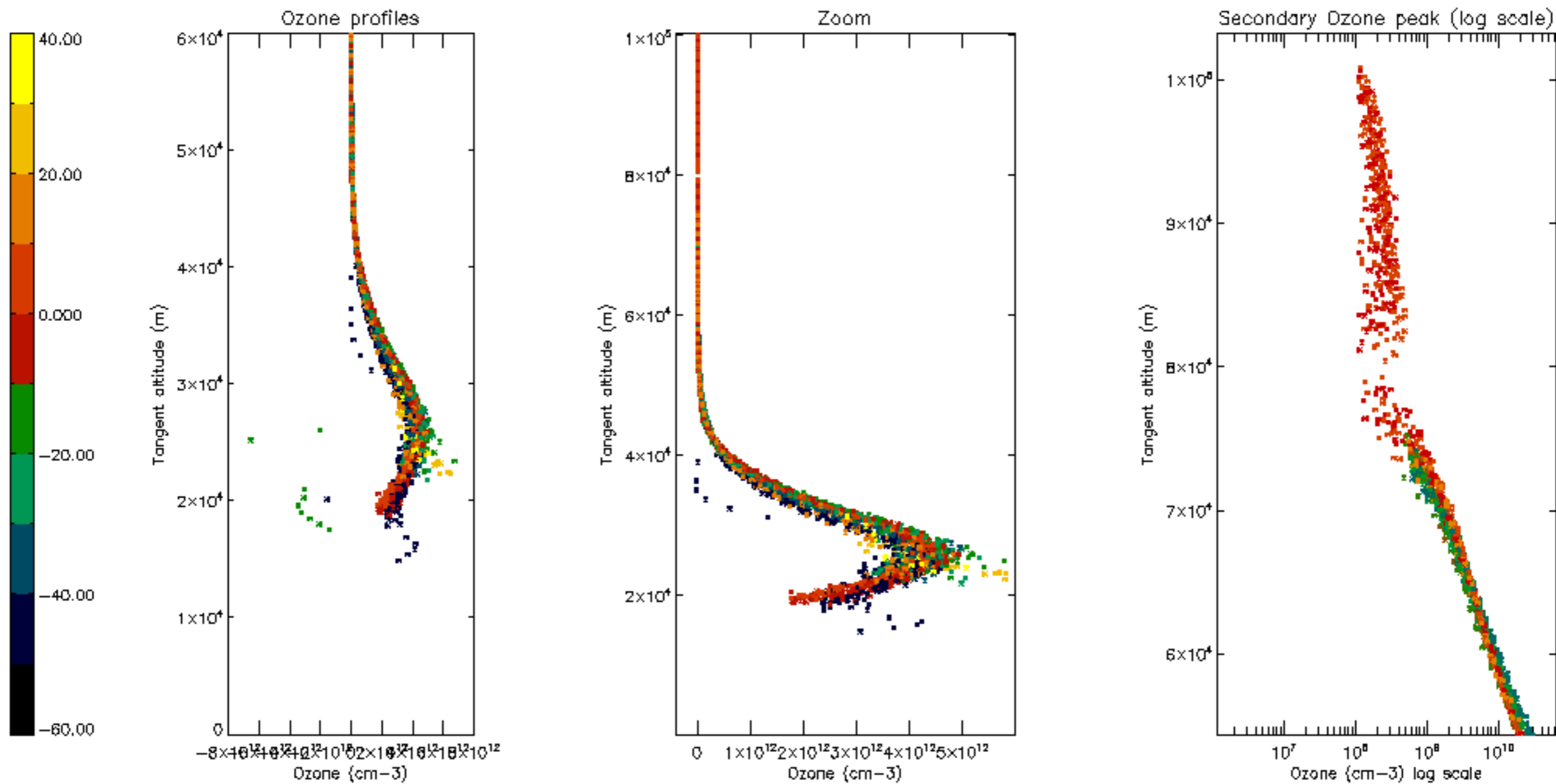


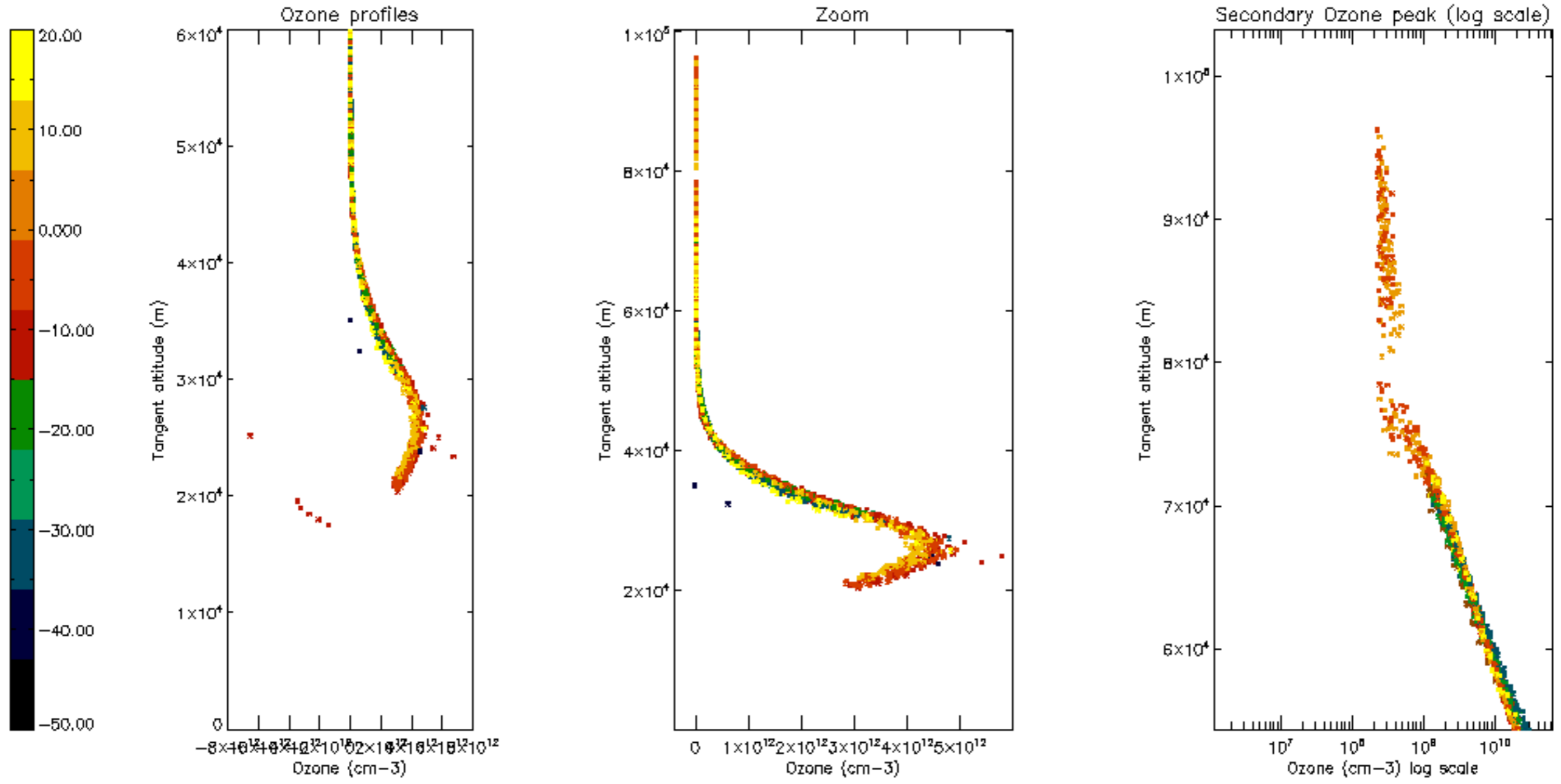
Percentage of saturation errors per profile

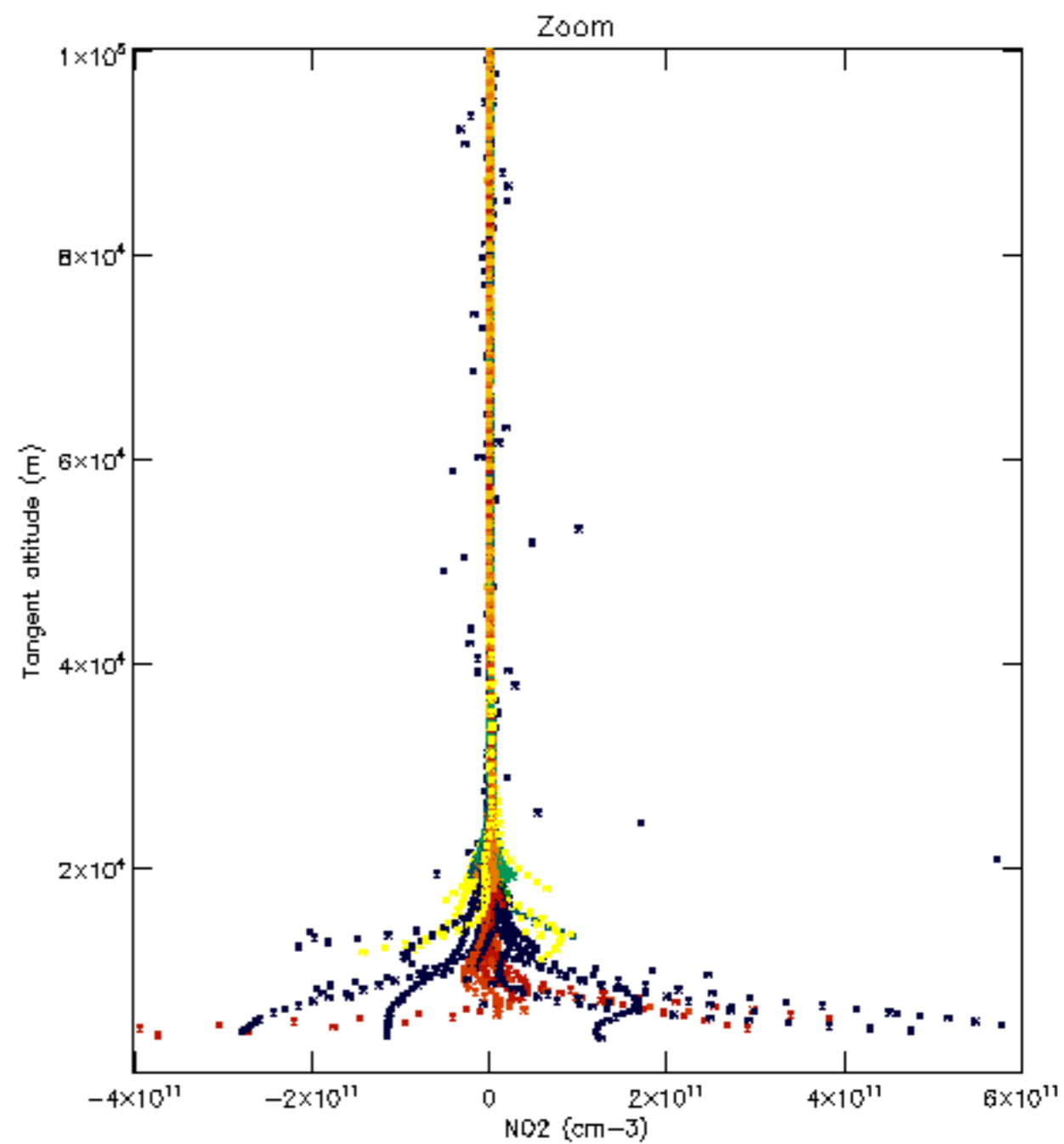
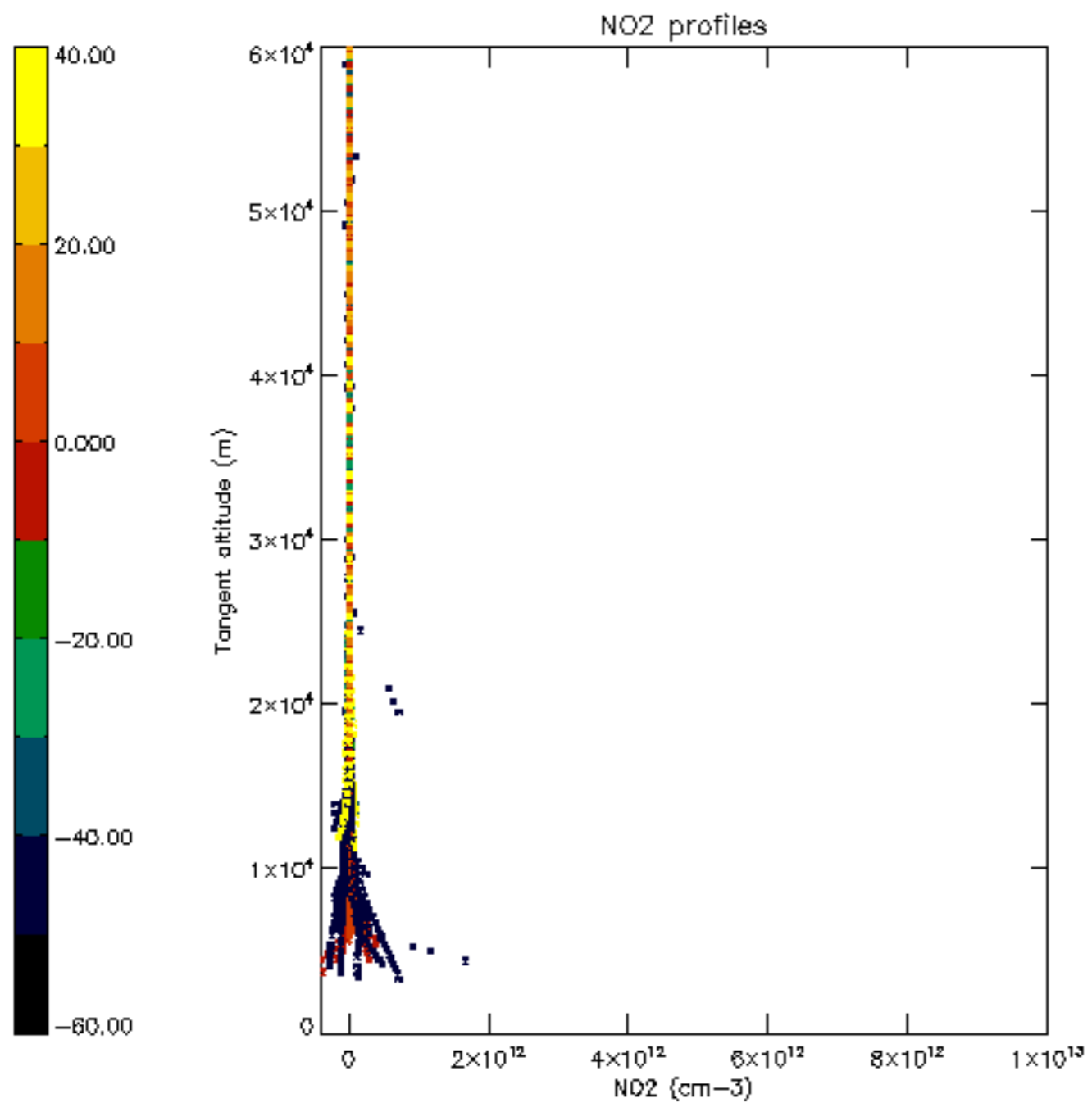


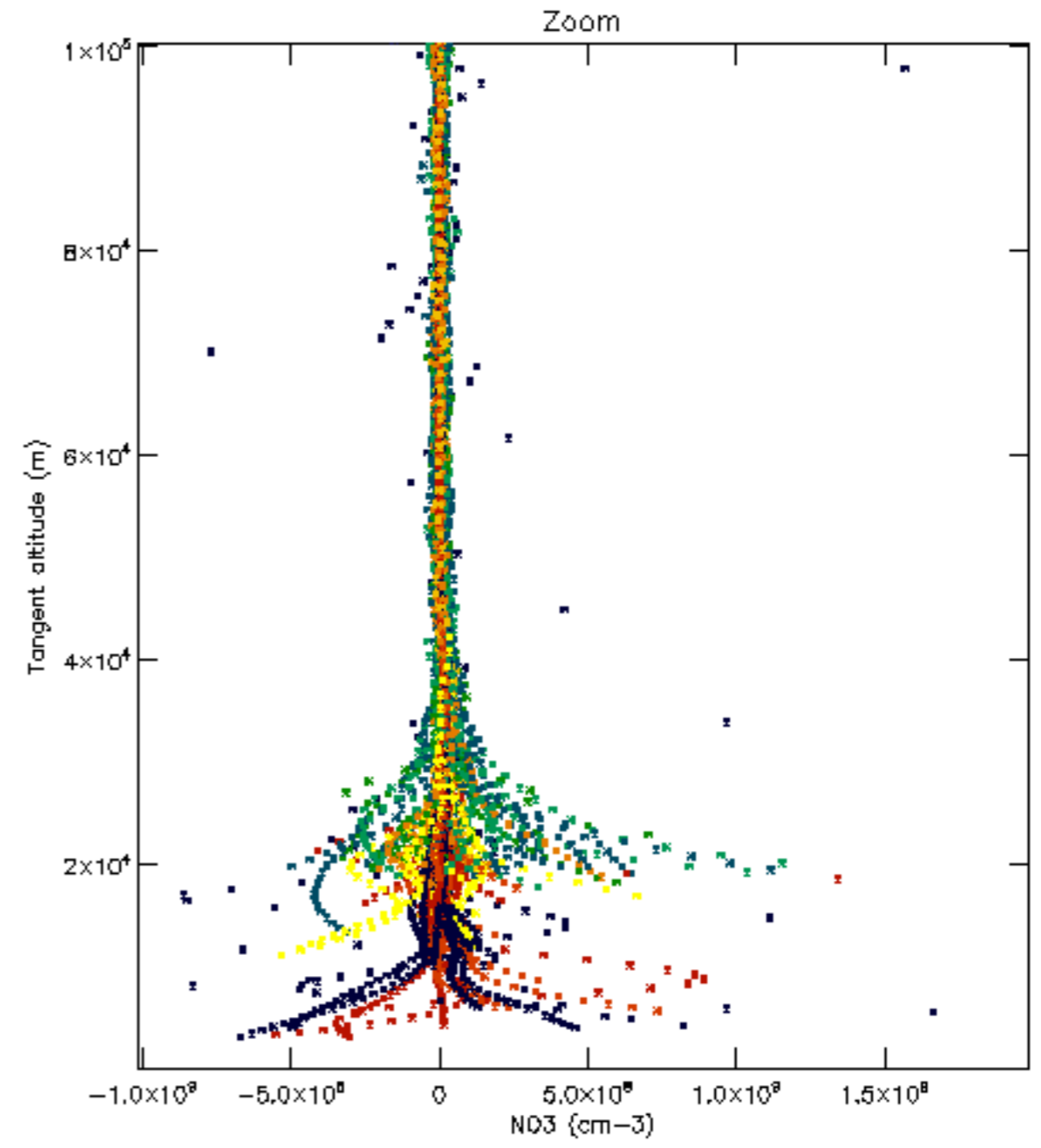
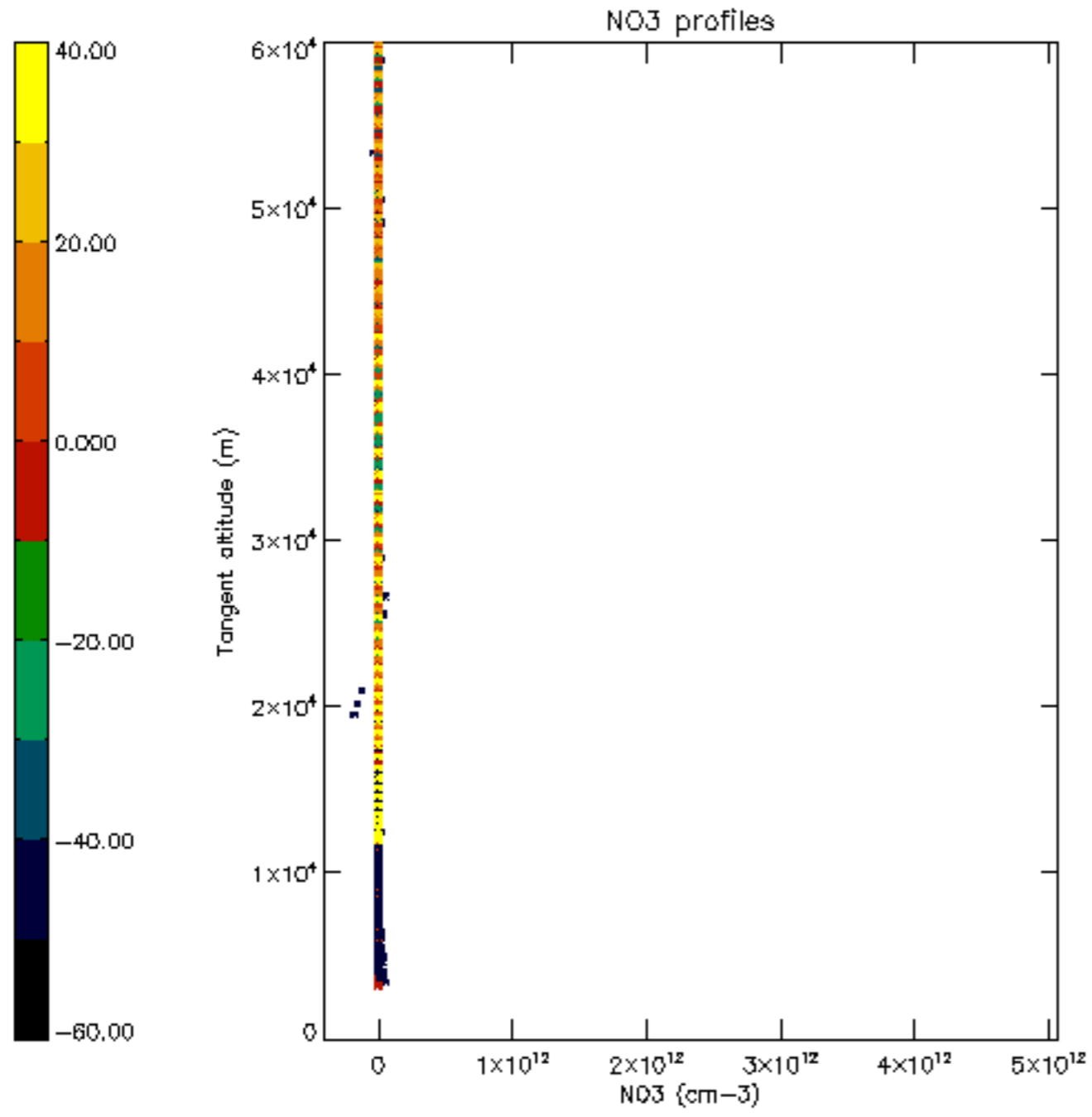


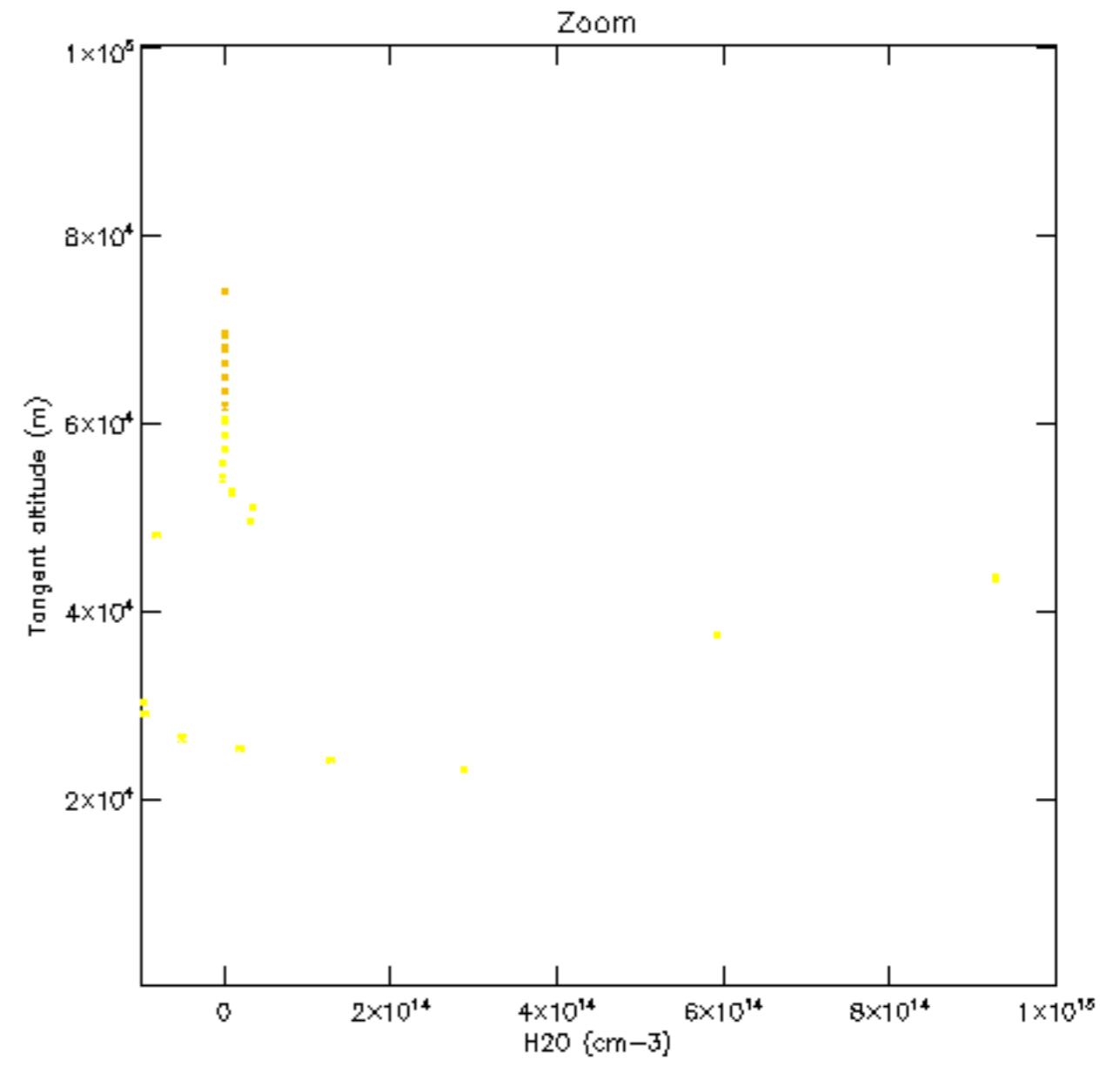
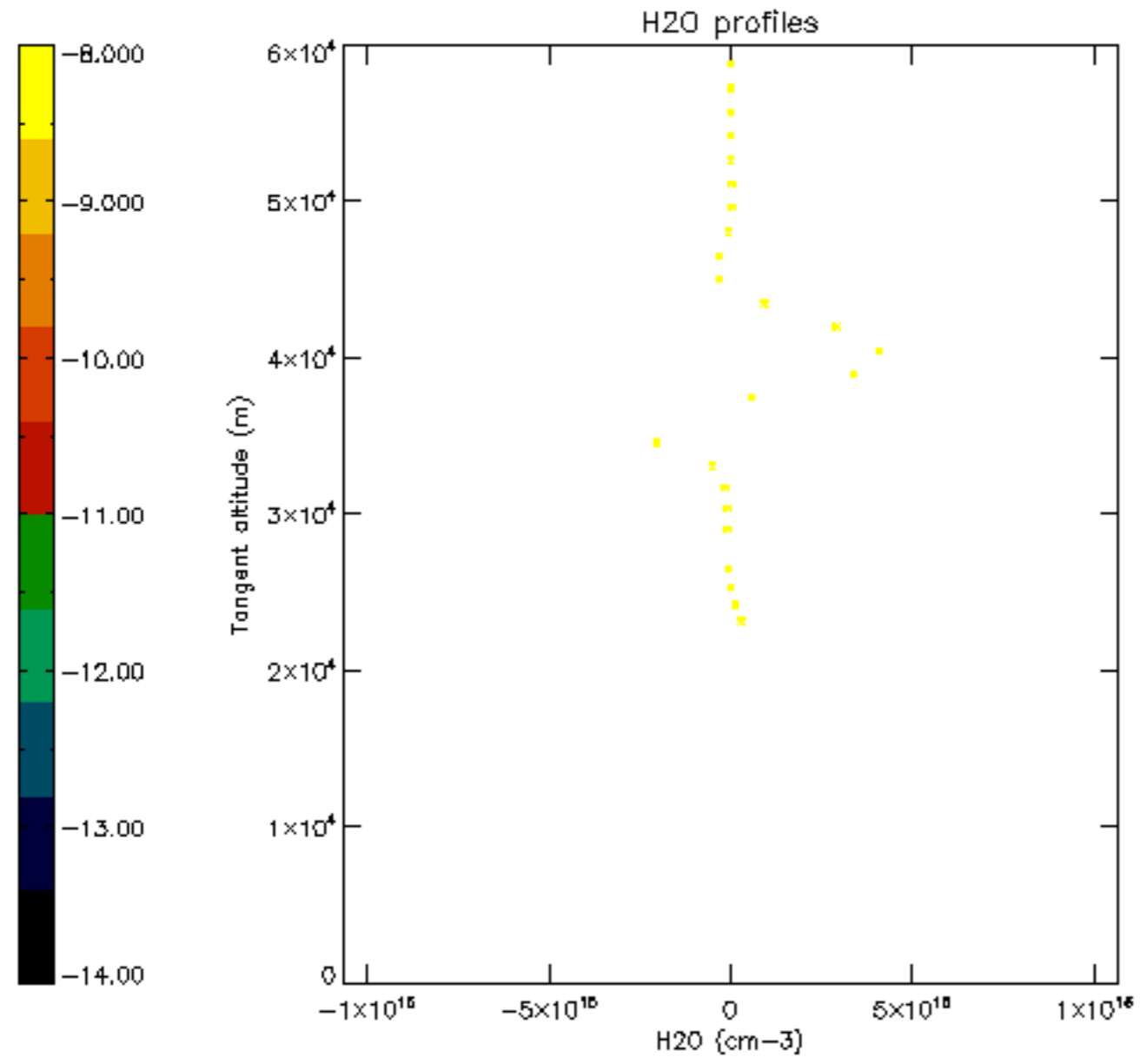


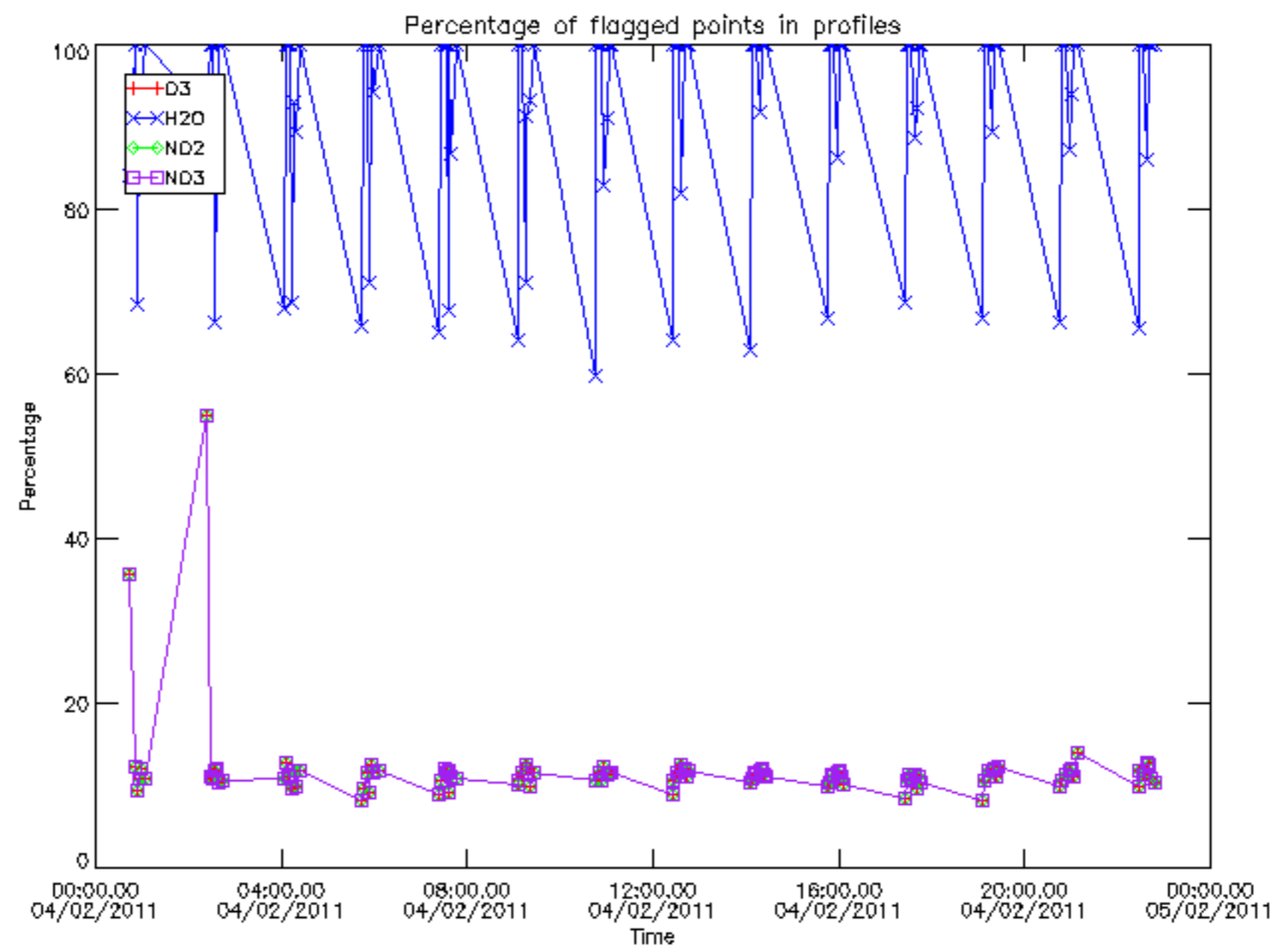




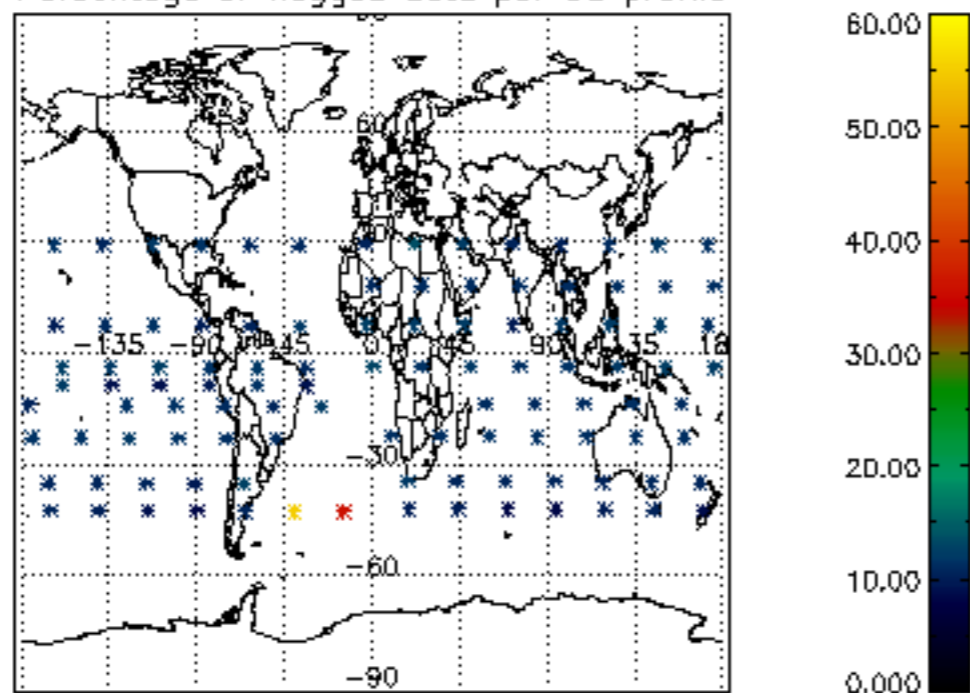




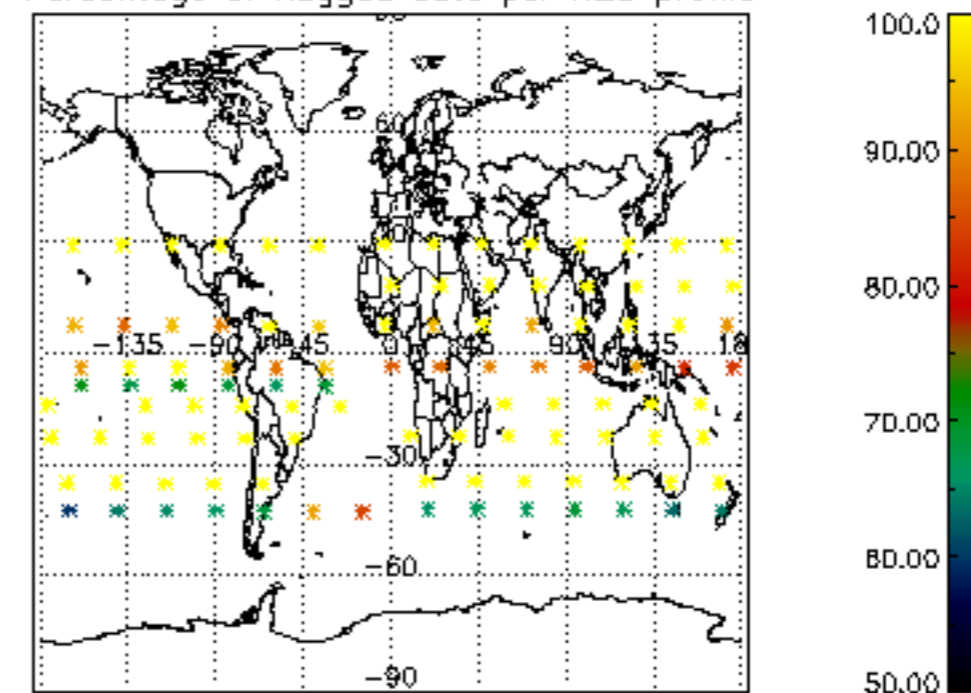




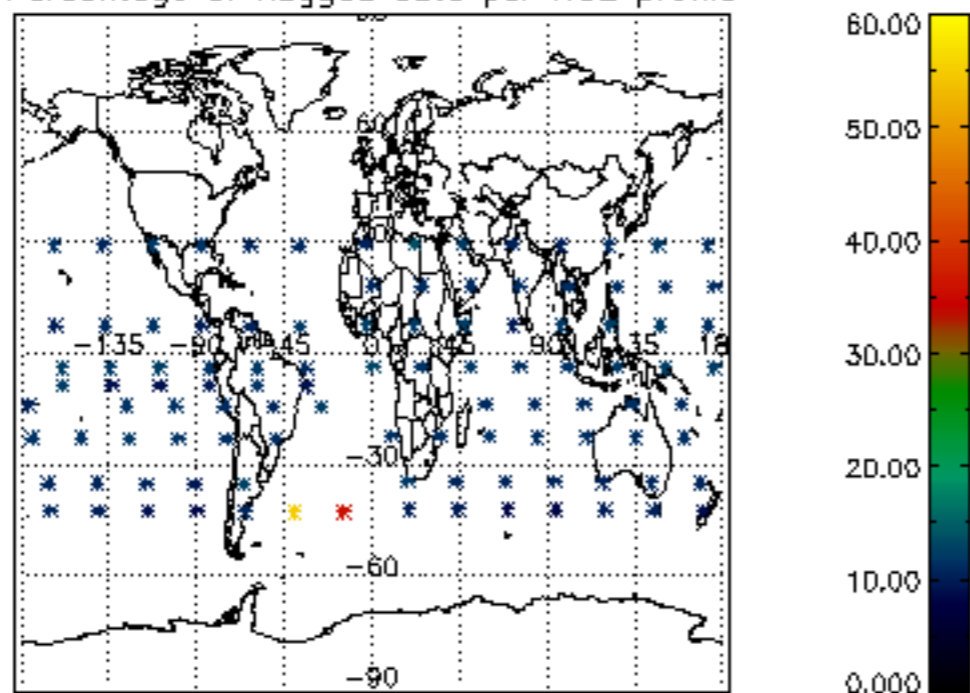
Percentage of flagged data per D3 profile



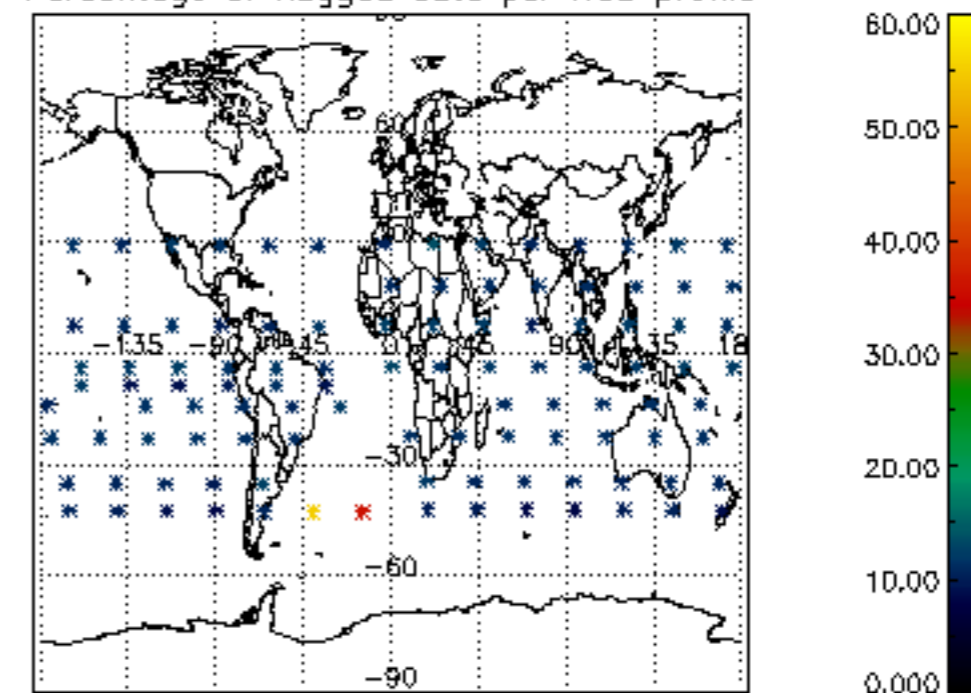
Percentage of flagged data per H2O profile

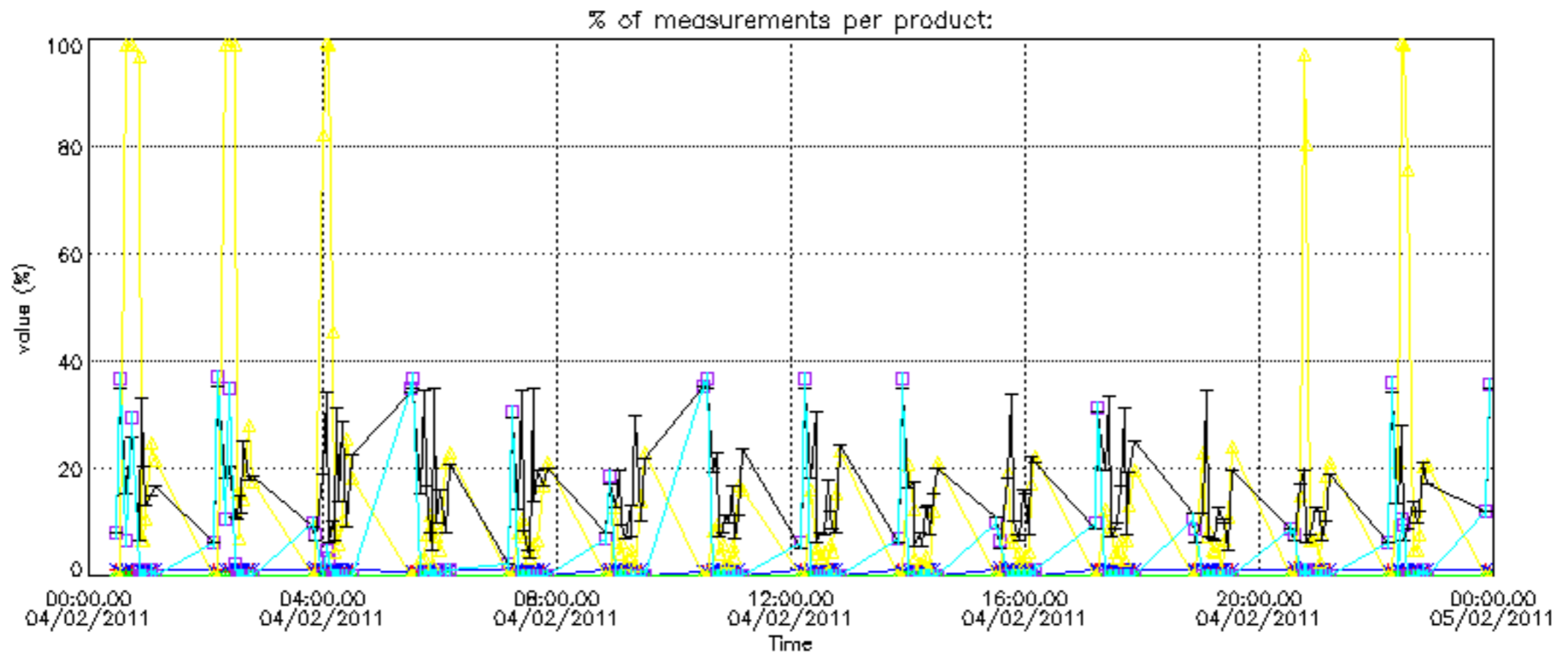


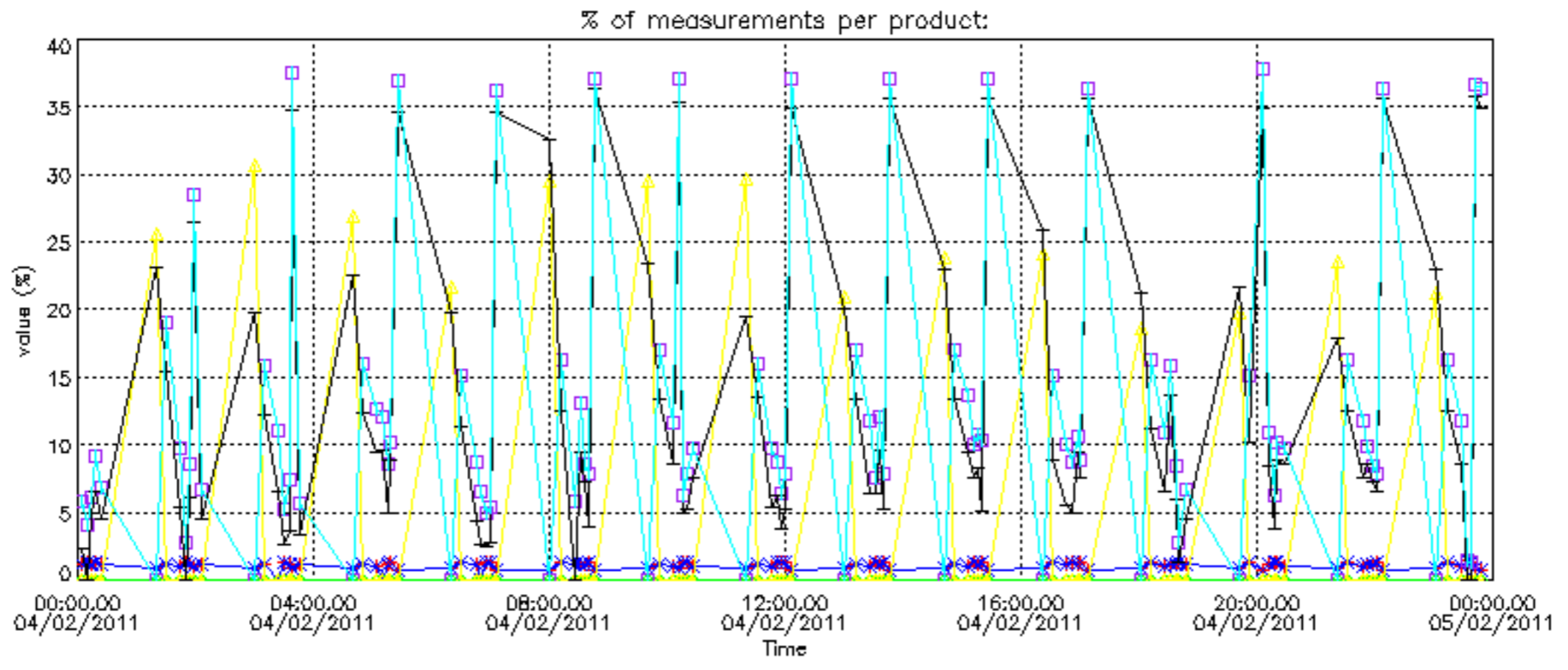
Percentage of flagged data per NO2 profile



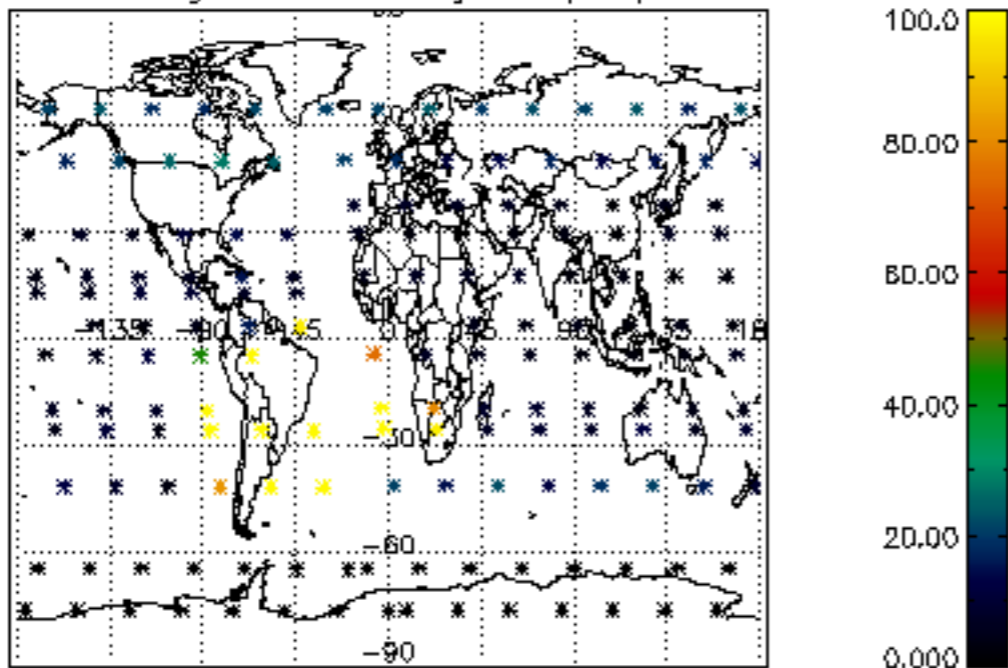
Percentage of flagged data per NO3 profile



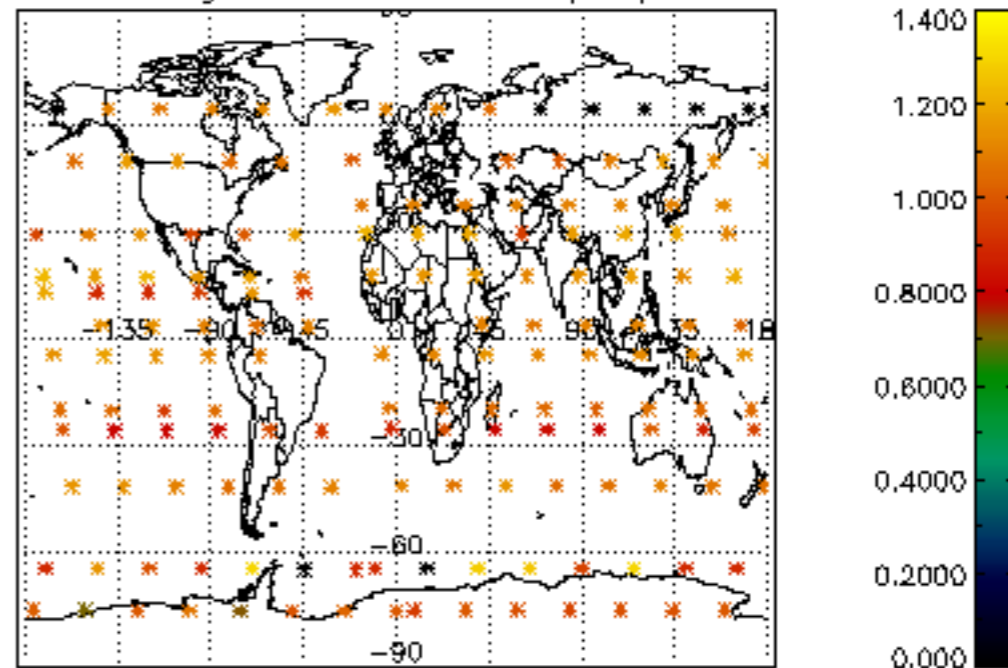




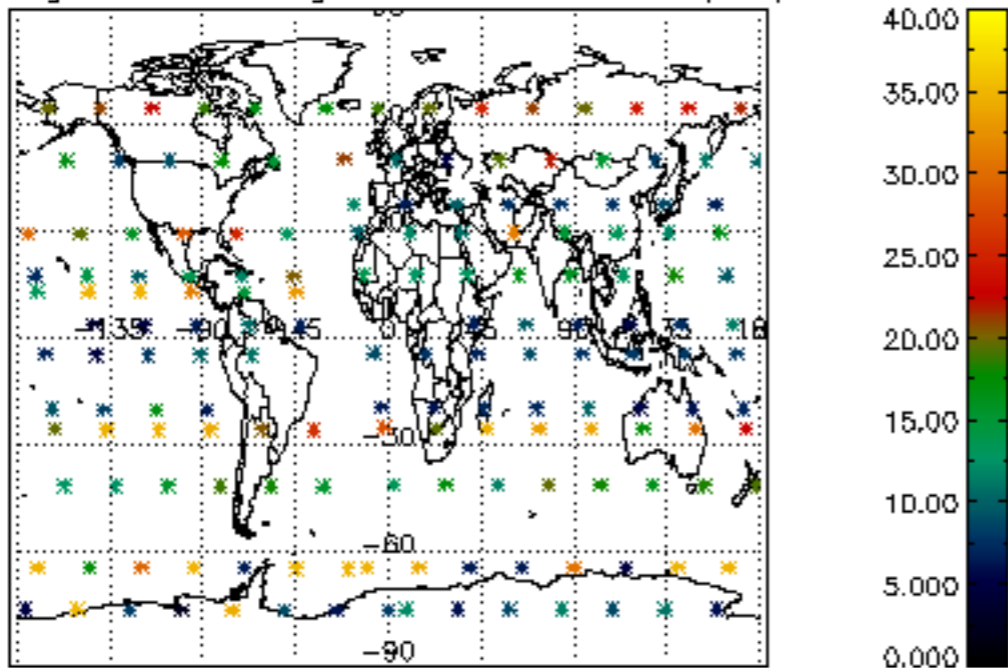
Percentage of cosmic ray hits per profile



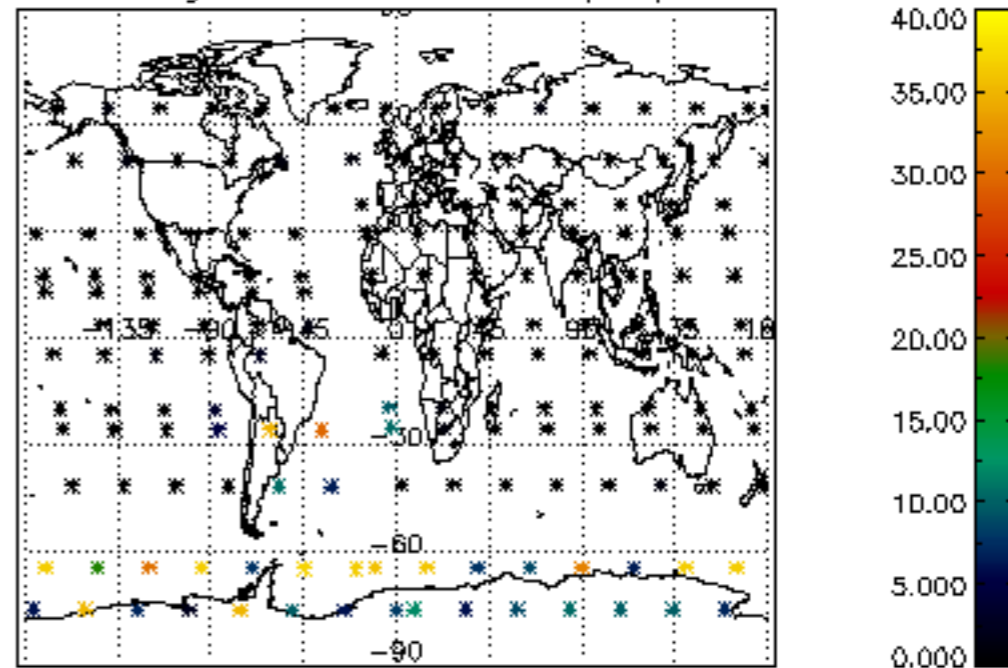
Percentage of datation errors per profile



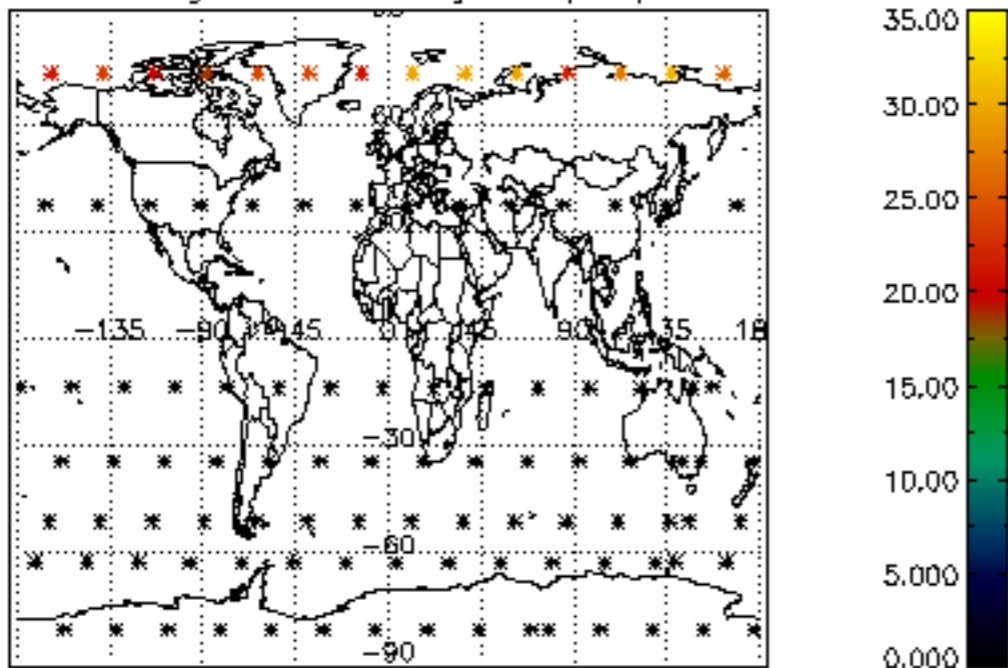
Percentage of star falling outside central band per profile



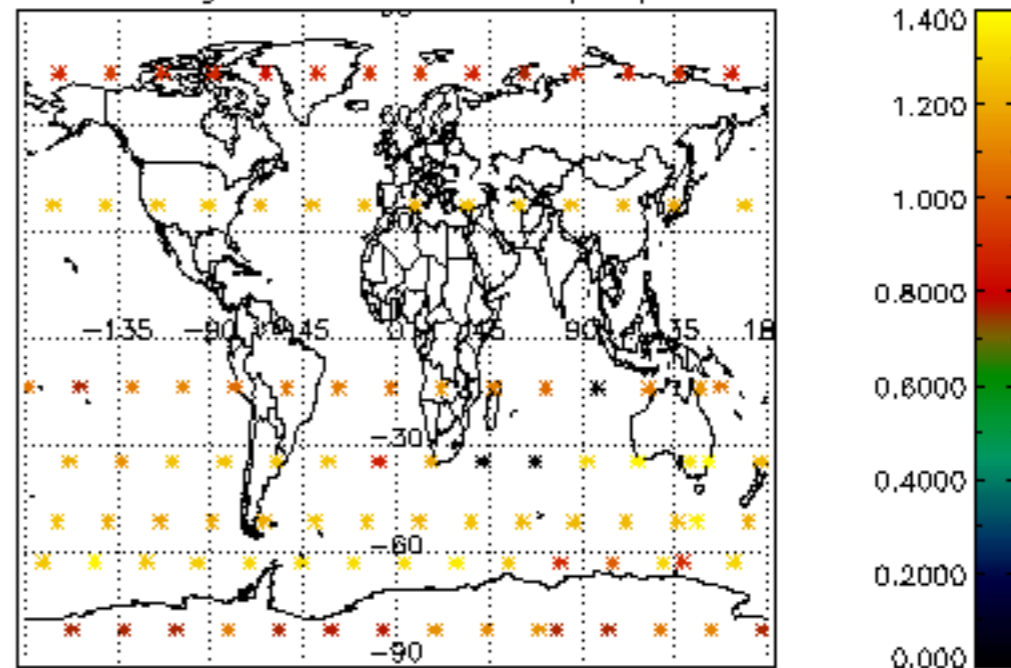
Percentage of saturation errors per profile



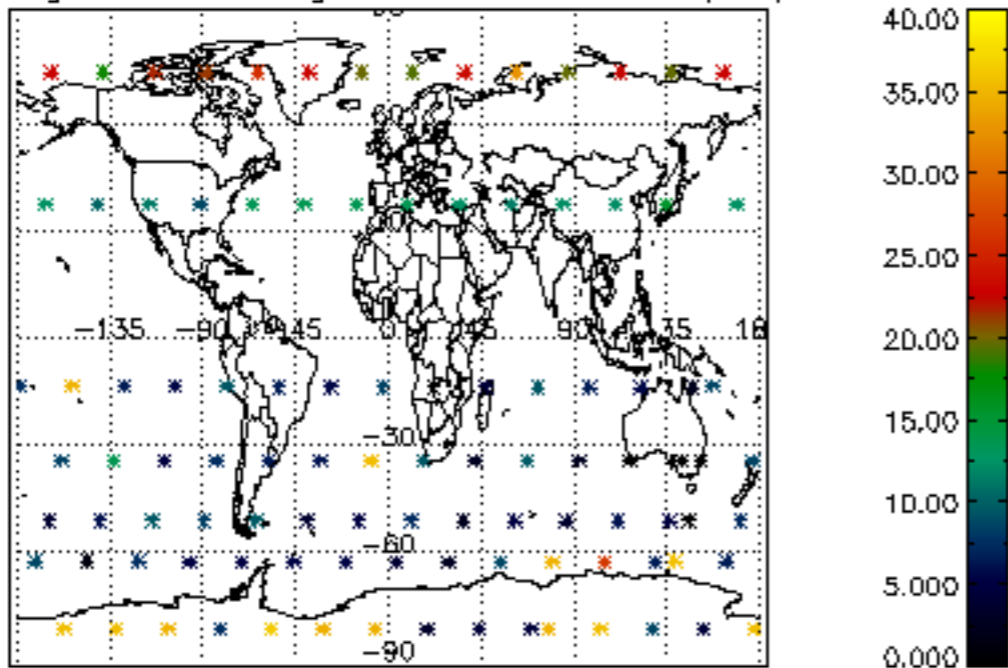
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

