

GOMOS Level 2 Daily Report

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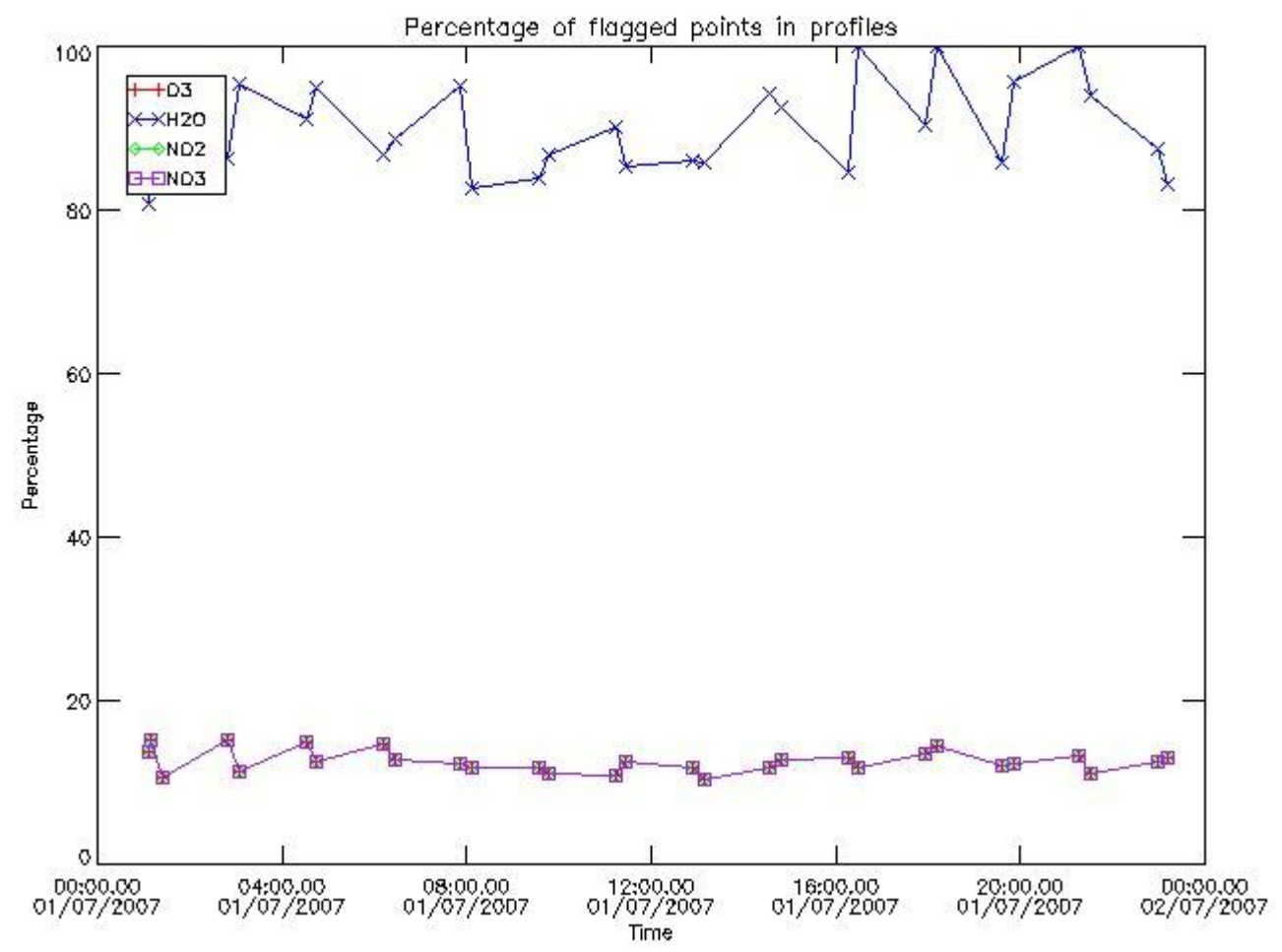
This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also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

Item	Value
Time of report generation	22APR2013 21:21:02
Data source version	GOMOS/6.01
Start time of products	01-07-2007 (01JUL2007 00:00:00)
Stop time of products	02-07-2007 (02JUL2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	271
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

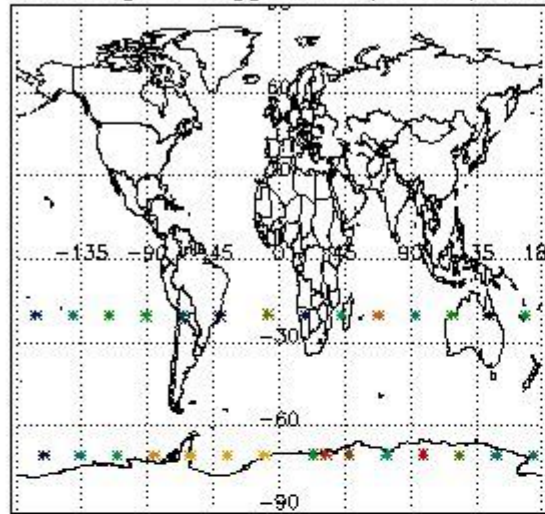
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070701_000047_000000382059_00274_27883_5211.N1	01-JUL-2007 00:00:47	Twilight	37.500	147	Alp Ara	2.8770	26000.	75	27883	No
2	GOM_NL__2PRFIN20070701_000235_000000402059_00274_27883_5212.N1	01-JUL-2007 00:02:35	Twilight	40.000	40	The Sco	1.8590	7100.0	80	27883	No
3	GOM_NL__2PRFIN20070701_000415_000000412059_00274_27883_5213.N1	01-JUL-2007 00:04:15	Twilight	40.500	25	35Lam Sco	1.6200	28000.	81	27883	No
4	GOM_NL__2PRFIN20070701_000540_000000552059_00274_27883_5214.N1	01-JUL-2007 00:05:40	Bright	55.000	116	19Del Sgr	2.7000	4100.0	110	27883	No
5	GOM_NL__2PRFIN20070701_000652_000000412059_00274_27883_5215.N1	01-JUL-2007 00:06:52	Bright	41.000	137	22Lam Sgr	2.8240	4400.0	82	27883	No
6	GOM_NL__2PRFIN20070701_001027_000000372059_00274_27883_5216.N1	01-JUL-2007 00:10:27	Bright	36.500	86	35Eta Oph	2.4300	10200.	73	27883	No
7	GOM_NL__2PRFIN20070701_001607_000000372059_00274_27883_5217.N1	01-JUL-2007 00:16:07	Bright	36.500	126	60Bet Oph	2.7700	4250.0	73	27883	No
8	GOM_NL__2PRFIN20070701_001828_000000382059_00274_27883_5218.N1	01-JUL-2007 00:18:28	Bright	37.500	59	55Alp Oph	2.0800	8900.0	75	27883	No
9	GOM_NL__2PRFIN20070701_002108_000000352059_00274_27883_5219.N1	01-JUL-2007 00:21:08	Bright	34.500	127	27Bet Her	2.7810	4700.0	69	27883	No
10	GOM_NL__2PRFIN20070701_002353_000000372059_00274_27883_5220.N1	01-JUL-2007 00:23:53	Bright	37.000	133	40Zet Her	2.8070	6000.0	74	27883	No
11	GOM_NL__2PRFIN20070701_002955_000000372059_00274_27883_5221.N1	01-JUL-2007 00:29:55	Bright	36.500	130	23Bet Dra	2.7990	5800.0	73	27883	No
12	GOM_NL__2PRFIN20070701_003218_000000362059_00274_27883_5222.N1	01-JUL-2007 00:32:18	Bright	35.500	119	14Eta Dra	2.7270	4700.0	71	27883	No
13	GOM_NL__2PRFIN20070701_003616_000000352059_00274_27883_5223.N1	01-JUL-2007 00:36:16	Bright	35.000	60	7Bet UMi	2.0810	3950.0	70	27883	No
14	GOM_NL__2PRFIN20070701_004031_000000332059_00274_27883_5224.N1	01-JUL-2007 00:40:31	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	27883	No
15	GOM_NL__2PRFIN20070701_005049_000000372059_00274_27883_5225.N1	01-JUL-2007 00:50:49	Bright	36.500	160	23Gam Per	2.9300	4700.0	73	27883	No
16	GOM_NL__2PRFIN20070701_005231_000000342059_00274_27883_5226.N1	01-JUL-2007 00:52:31	Bright	34.000	175	39Del Per	3.0100	19400.	68	27883	No
17	GOM_NL__2PRFIN20070701_010600_000000372059_00274_27883_5227.N1	01-JUL-2007 01:06:00	Dark	37.000	94	92Alp Cet	2.5260	3100.0	74	27883	No
18	GOM_NL__2PRFIN20070701_010945_000000372059_00274_27883_5228.N1	01-JUL-2007 01:09:45	Dark	37.000	165	34Gam Eri	2.9500	3200.0	74	27883	No
19	GOM_NL__2PRFIN20070701_012415_000000492059_00275_27884_5219.N1	01-JUL-2007 01:24:15	Dark	48.500	9	Alp Eri	0.45300	24000.	97	27884	No
20	GOM_NL__2PRFIN20070701_013142_000000412059_00275_27884_5220.N1	01-JUL-2007 01:31:42	Straylight	41.000	148	Alp Tuc	2.8780	4100.0	82	27884	No
21	GOM_NL__2PRFIN20070701_013604_000000412059_00275_27884_5221.N1	01-JUL-2007 01:36:04	Straylight	41.000	45	Alp Pav	1.9400	26000.	82	27884	No
22	GOM_NL__2PRFIN20070701_014123_000000382059_00275_27884_5222.N1	01-JUL-2007 01:41:23	Twilight	38.000	147	Alp Ara	2.8770	26000.	76	27884	No
23	GOM_NL__2PRFIN20070701_014311_000000422059_00275_27884_5223.N1	01-JUL-2007 01:43:11	Twilight	41.500	40	The Sco	1.8590	7100.0	83	27884	No
24	GOM_NL__2PRFIN20070701_014451_000000412059_00275_27884_5224.N1	01-JUL-2007 01:44:51	Twilight	41.000	25	35Lam Sco	1.6200	28000.	82	27884	No
25	GOM_NL__2PRFIN20070701_014616_000000452059_00275_27884_5225.N1	01-JUL-2007 01:46:16	Bright	44.500	116	19Del Sgr	2.7000	4100.0	89	27884	No
26	GOM_NL__2PRFIN20070701_015103_000000372059_00275_27884_5226.N1	01-JUL-2007 01:51:03	Bright	37.000	86	35Eta Oph	2.4300	10200.	74	27884	No
27	GOM_NL__2PRFIN20070701_015643_000000362059_00275_27884_5227.N1	01-JUL-2007 01:56:43	Bright	36.000	126	60Bet Oph	2.7700	4250.0	72	27884	No
28	GOM_NL__2PRFIN20070701_015904_000000392059_00275_27884_5228.N1	01-JUL-2007 01:59:04	Bright	38.500	59	55Alp Oph	2.0800	8900.0	77	27884	No
29	GOM_NL__2PRFIN20070701_020144_000000362059_00275_27884_5229.N1	01-JUL-2007 02:01:44	Bright	35.500	127	27Bet Her	2.7810	4700.0	71	27884	No
30	GOM_NL__2PRFIN20070701_020429_000000372059_00275_27884_5230.N1	01-JUL-2007 02:04:29	Bright	36.500	133	40Zet Her	2.8070	6000.0	73	27884	No
31	GOM_NL__2PRFIN20070701_021031_000000382059_00275_27884_5231.N1	01-JUL-2007 02:10:31	Bright	38.000	130	23Bet Dra	2.7990	5800.0	76	27884	No
32	GOM_NL__2PRFIN20070701_021254_000000362059_00275_27884_5232.N1	01-JUL-2007 02:12:54	Bright	36.000	119	14Eta Dra	2.7270	4700.0	72	27884	No
33	GOM_NL__2PRFIN20070701_021652_000000332059_00275_27884_5233.N1	01-JUL-2007 02:16:52	Bright	32.500	60	7Bet UMi	2.0810	3950.0	65	27884	No
34	GOM_NL__2PRFIN20070701_022107_000000362059_00275_27884_5234.N1	01-JUL-2007 02:21:07	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	27884	No
35	GOM_NL__2PRFIN20070701_023125_000000362059_00275_27884_5235.N1	01-JUL-2007 02:31:25	Bright	36.000	160	23Gam Per	2.9300	4700.0	72	27884	No
36	GOM_NL__2PRFIN20070701_023307_000000332059_00275_27884_5236.N1	01-JUL-2007 02:33:07	Bright	32.500	175	39Del Per	3.0100	19400.	65	27884	No
37	GOM_NL__2PRFIN20070701_025021_000000412059_00275_27884_5237.N1	01-JUL-2007 02:50:21	Dark	40.500	165	34Gam Eri	2.9500	3200.0	81	27884	No
38	GOM_NL__2PRFIN20070701_030451_000000452059_00276_27885_5239.N1	01-JUL-2007 03:04:51	Dark	45.000	9	Alp Eri	0.45300	24000.	90	27885	No
39	GOM_NL__2PRFIN20070701_031218_000000412059_00276_27885_5240.N1	01-JUL-2007 03:12:18	Straylight	40.500	148	Alp Tuc	2.8780	4100.0	81	27885	No
40	GOM_NL__2PRFIN20070701_031641_000000422059_00276_27885_5241.N1	01-JUL-2007 03:16:41	Straylight	41.500	45	Alp Pav	1.9400	26000.	83	27885	No
41	GOM_NL__2PRFIN20070701_032159_000000372059_00276_27885_5242.N1	01-JUL-2007 03:21:59	Twilight	37.000	147	Alp Ara	2.8770	26000.	74	27885	No
42	GOM_NL__2PRFIN20070701_032347_000000412059_00276_27885_5243.N1	01-JUL-2007 03:23:47	Twilight	41.000	40	The Sco	1.8590	7100.0	82	27885	No

3.1 Plot quality information per product (time dependant)

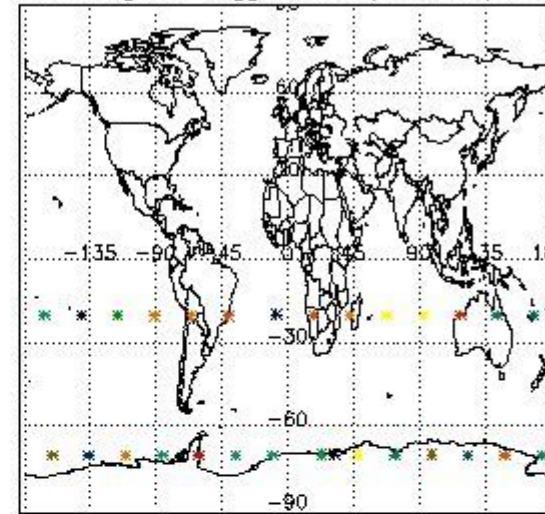


3.2 Plot quality information per product (world map)

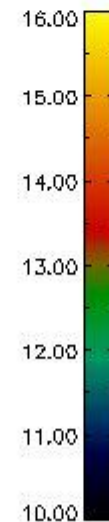
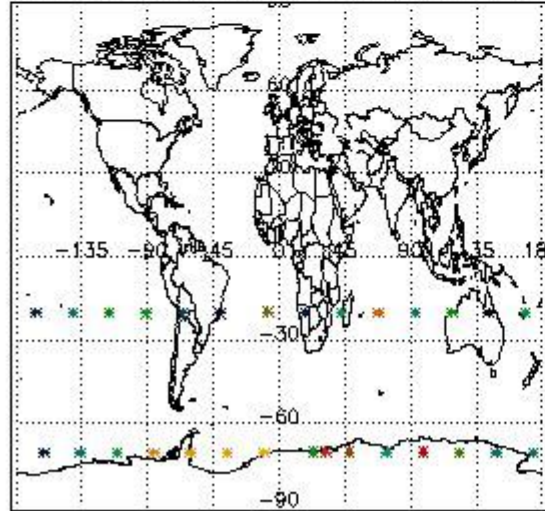
Percentage of flagged data per O3 profile



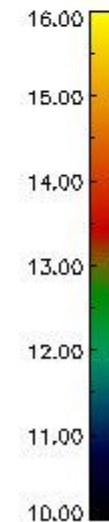
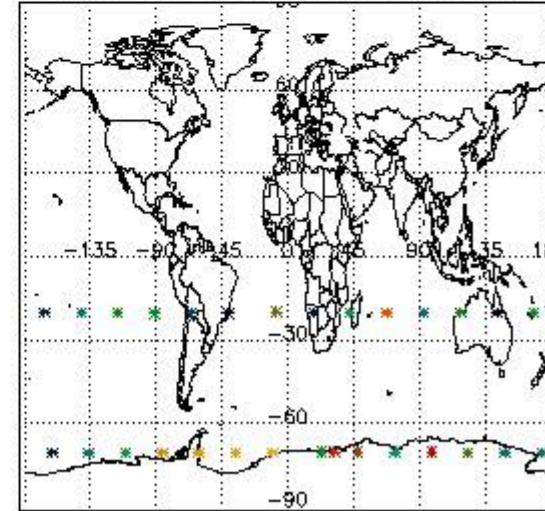
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

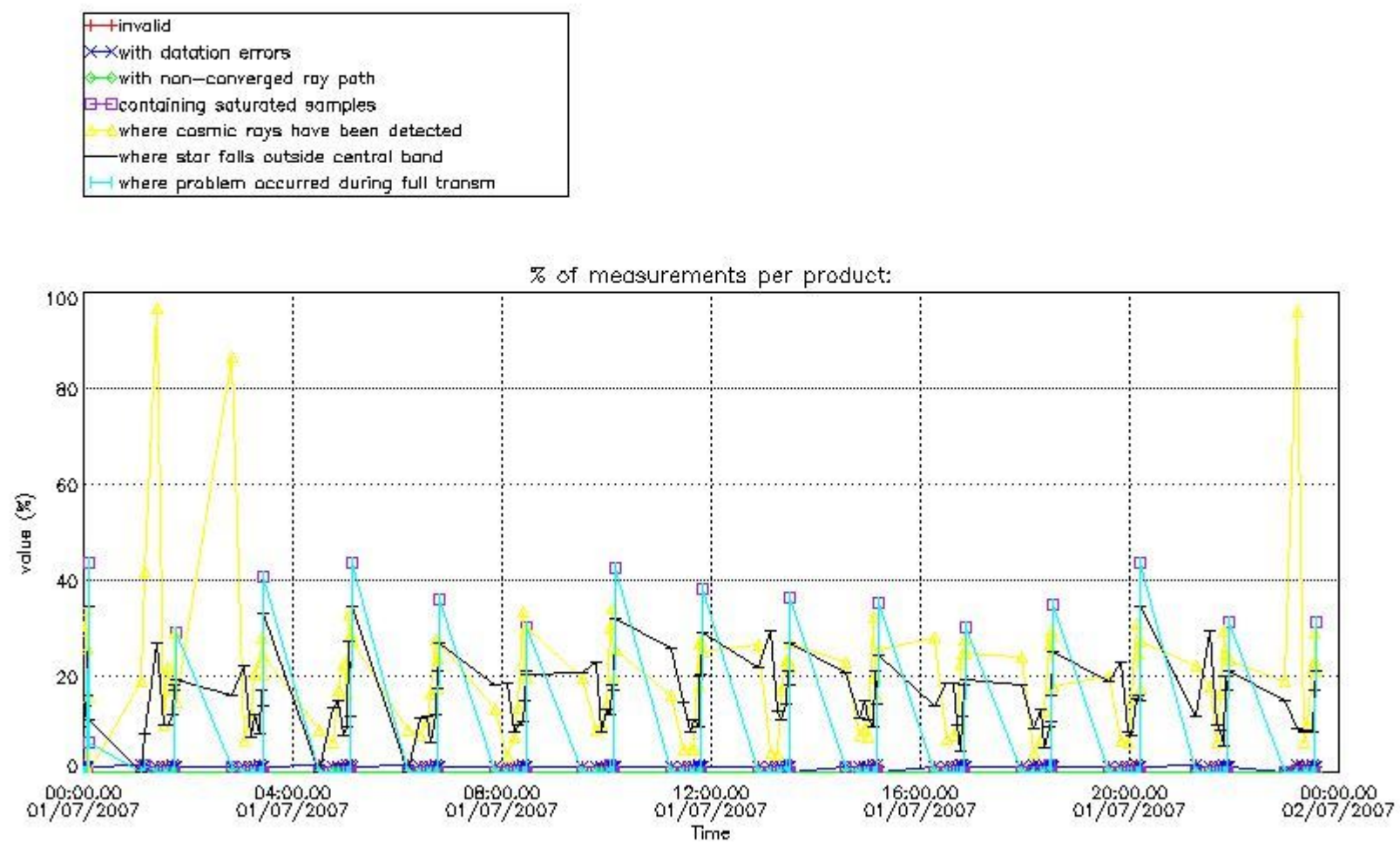


4. Level 1 quality information per product

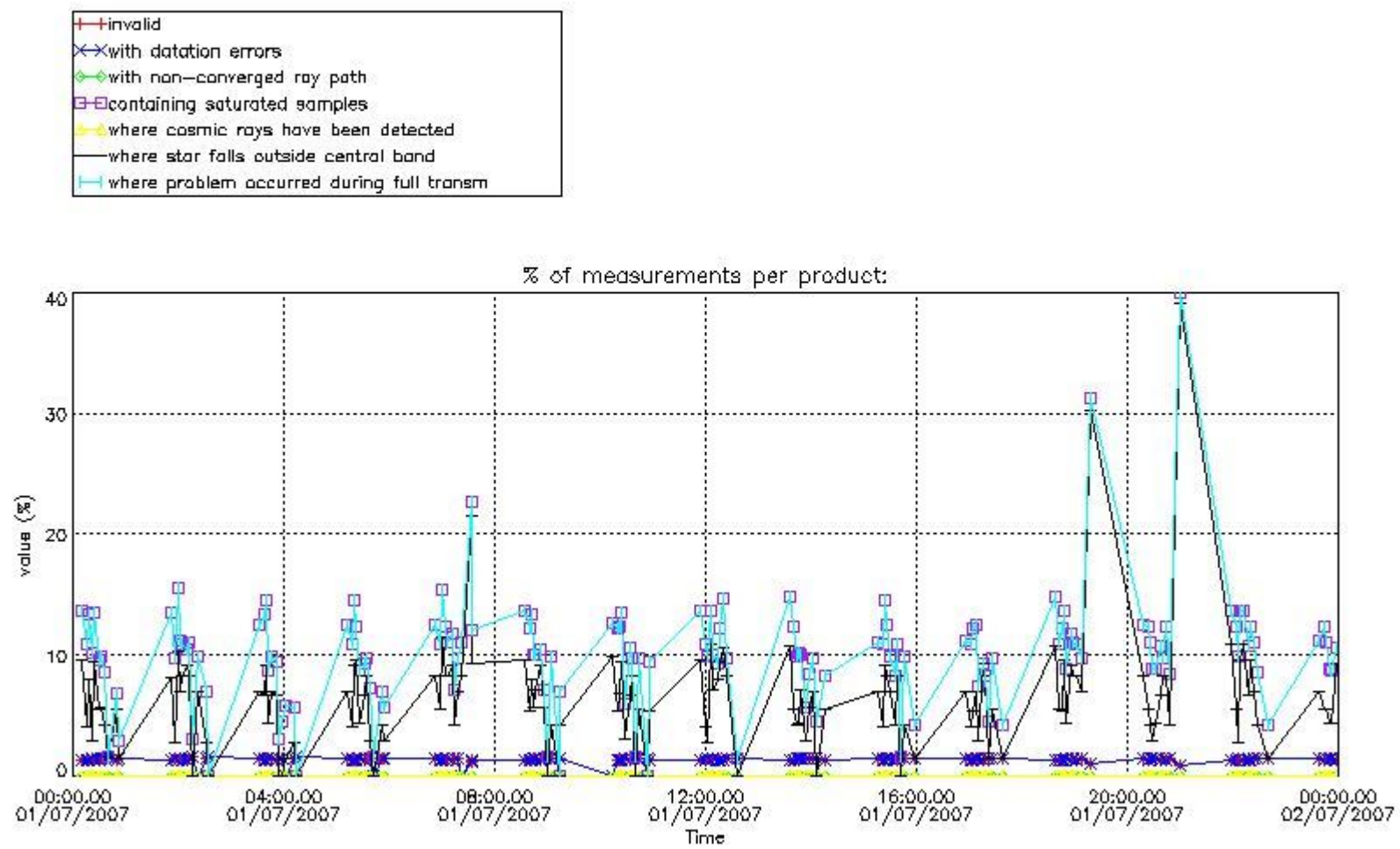
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



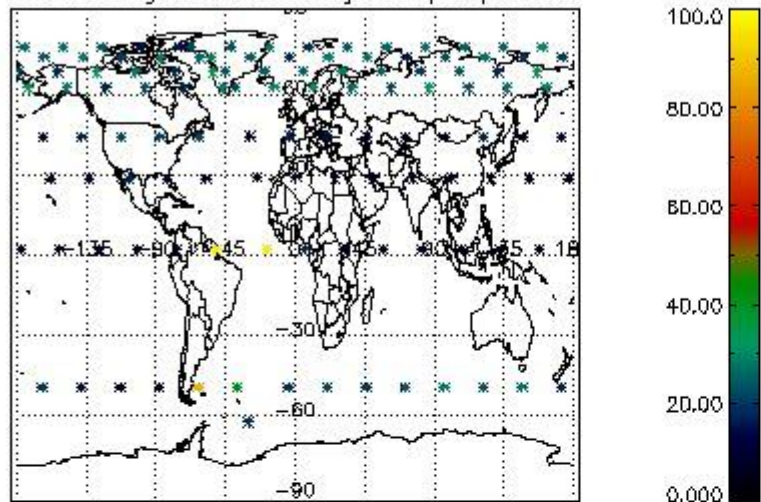
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



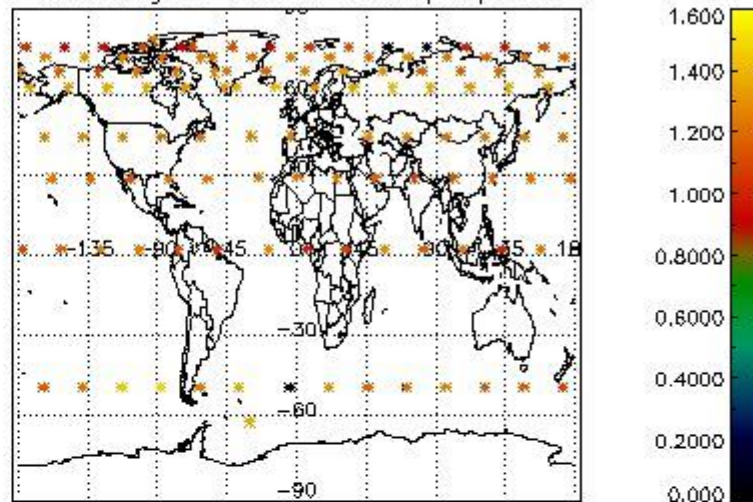
4.2 Plot quality information per product coming from level 1b processing (world map)

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

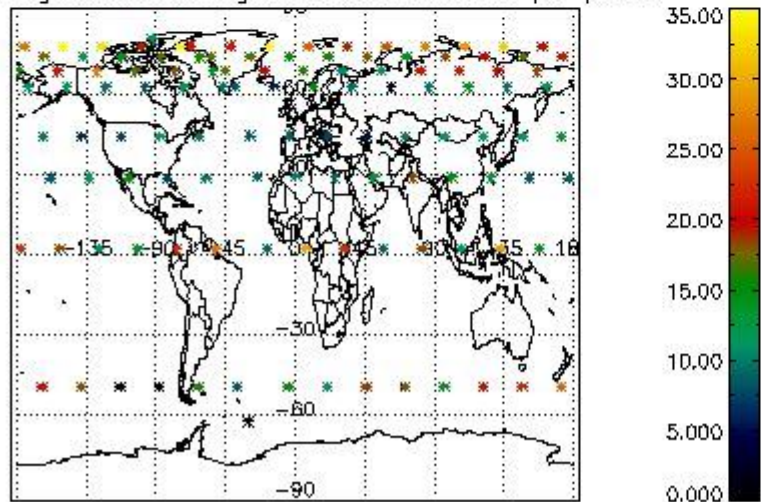
Percentage of cosmic ray hits per profile



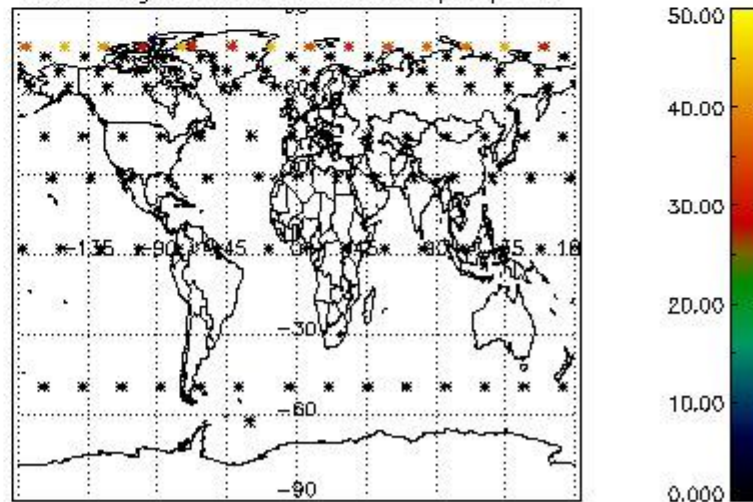
Percentage of datation errors per profile



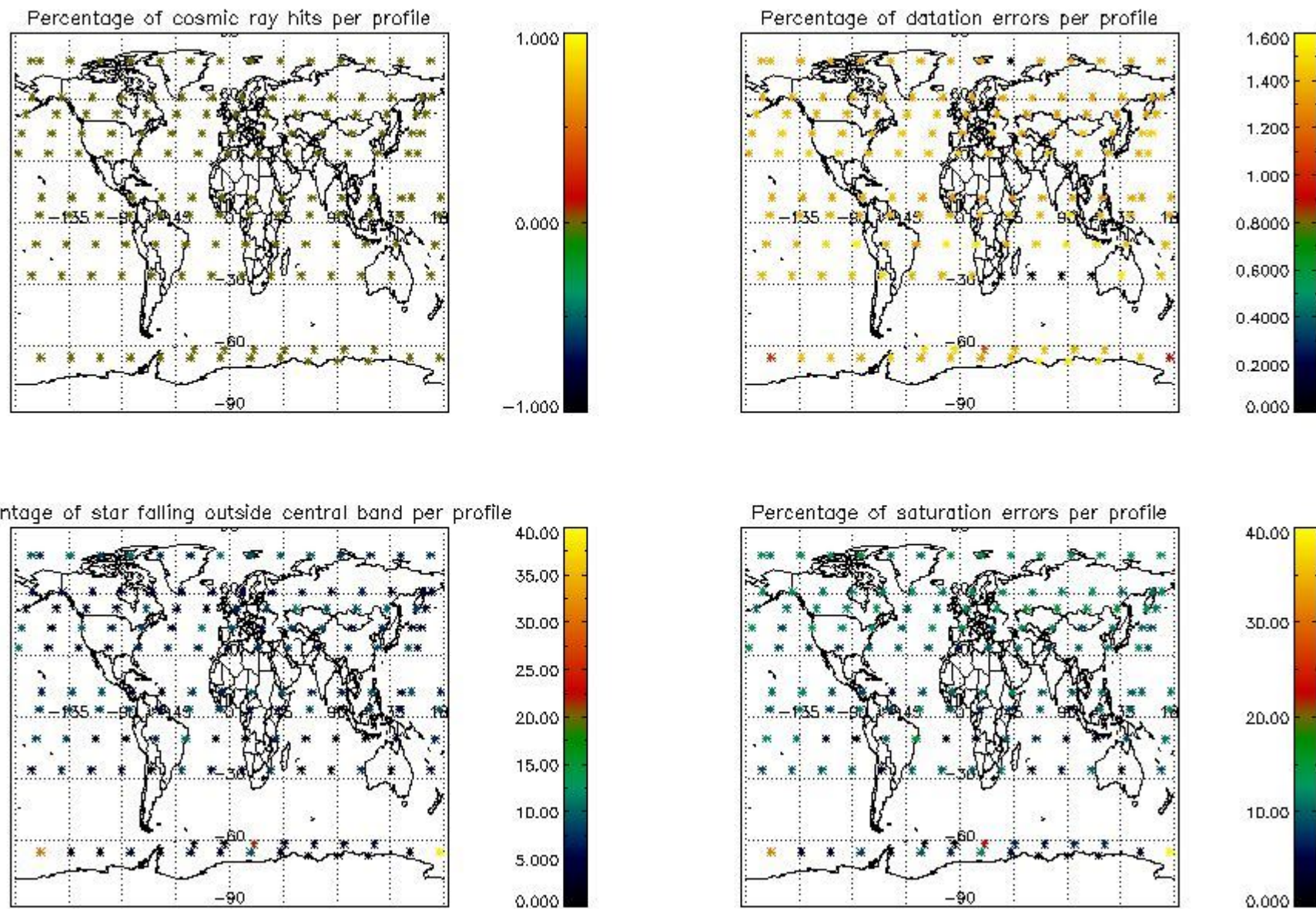
Percentage of star falling outside central band per profile



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

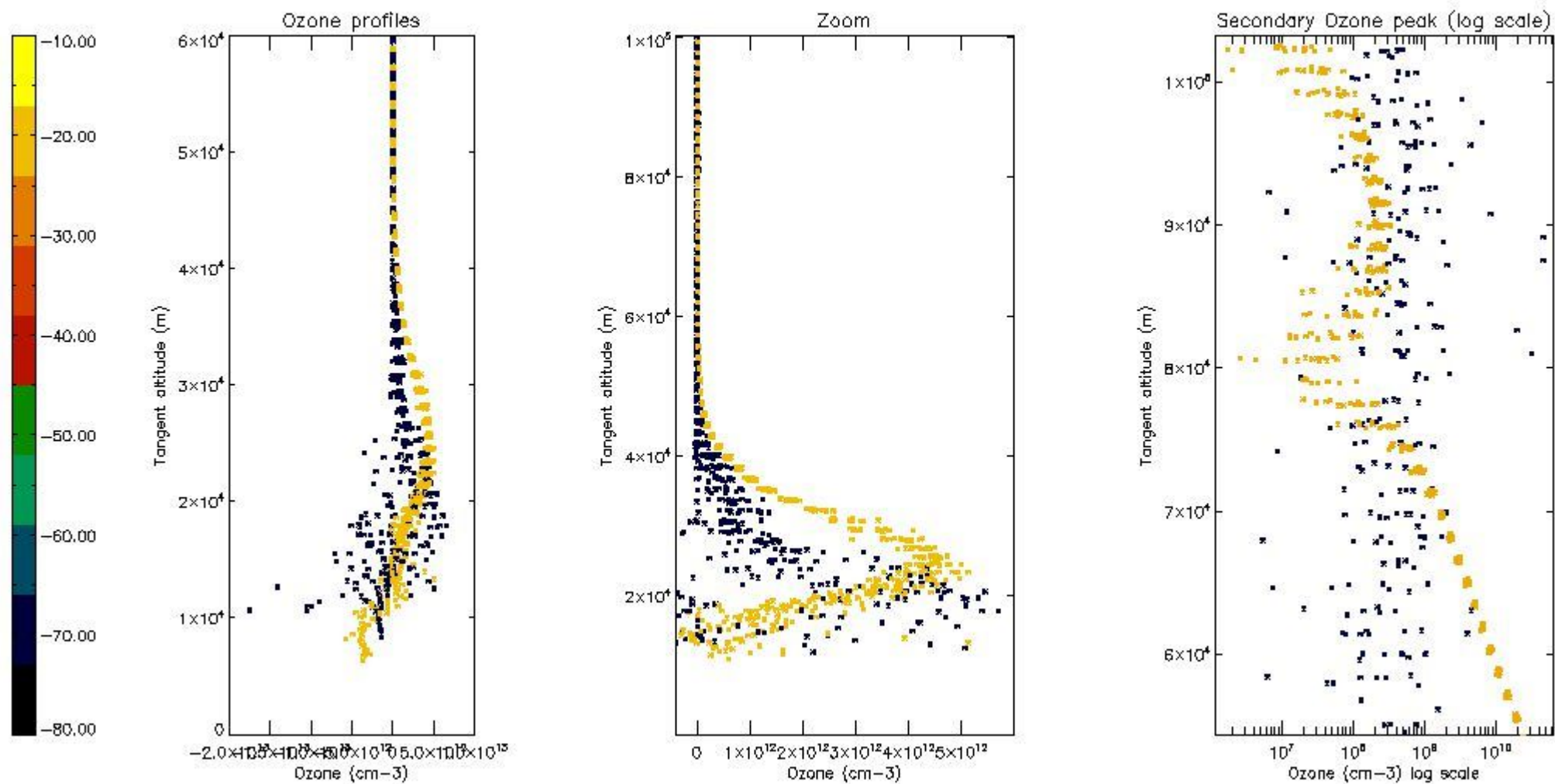
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	12
STD < 20	5

STD < 10	4
STD < 5	3

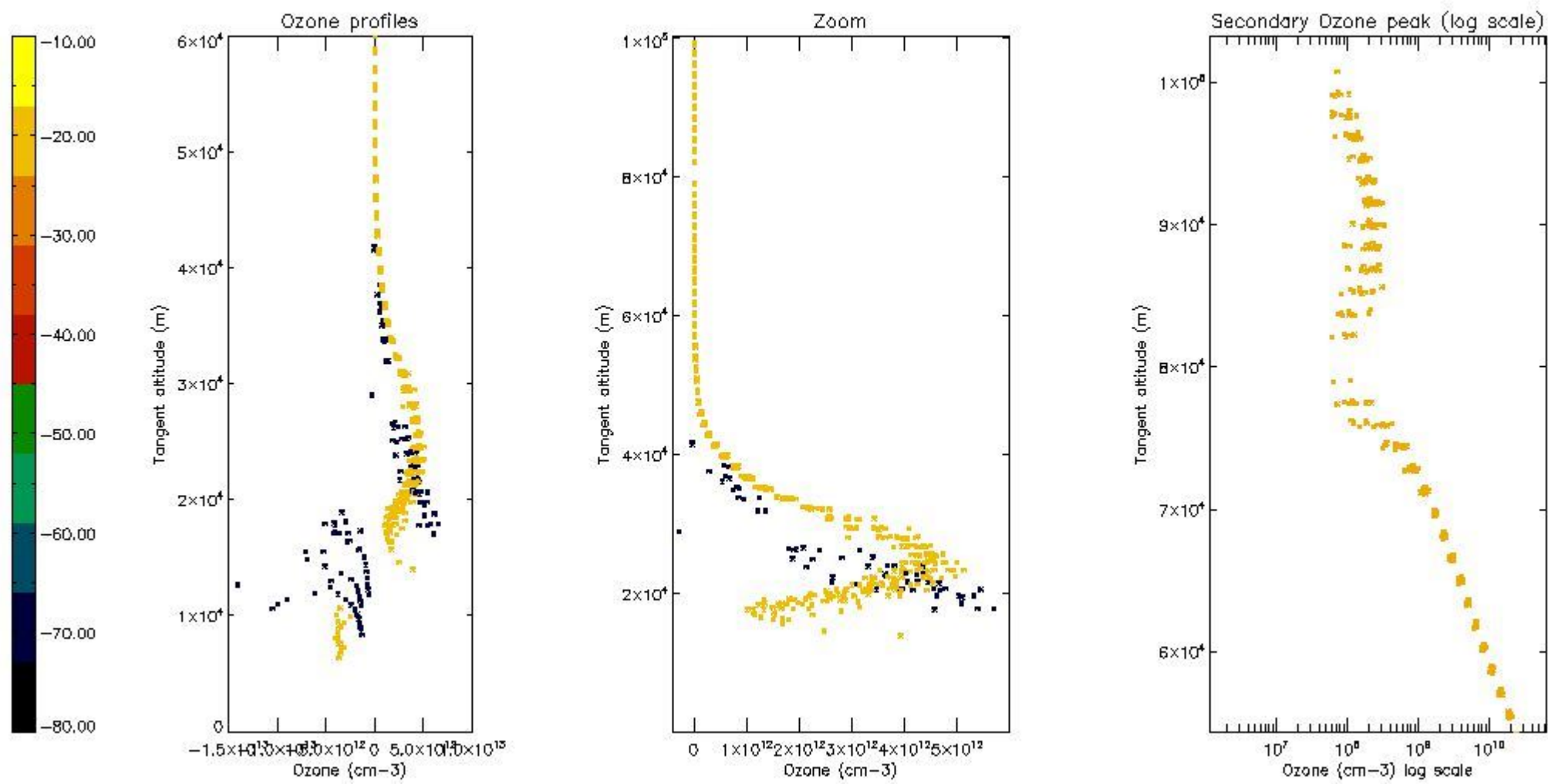
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



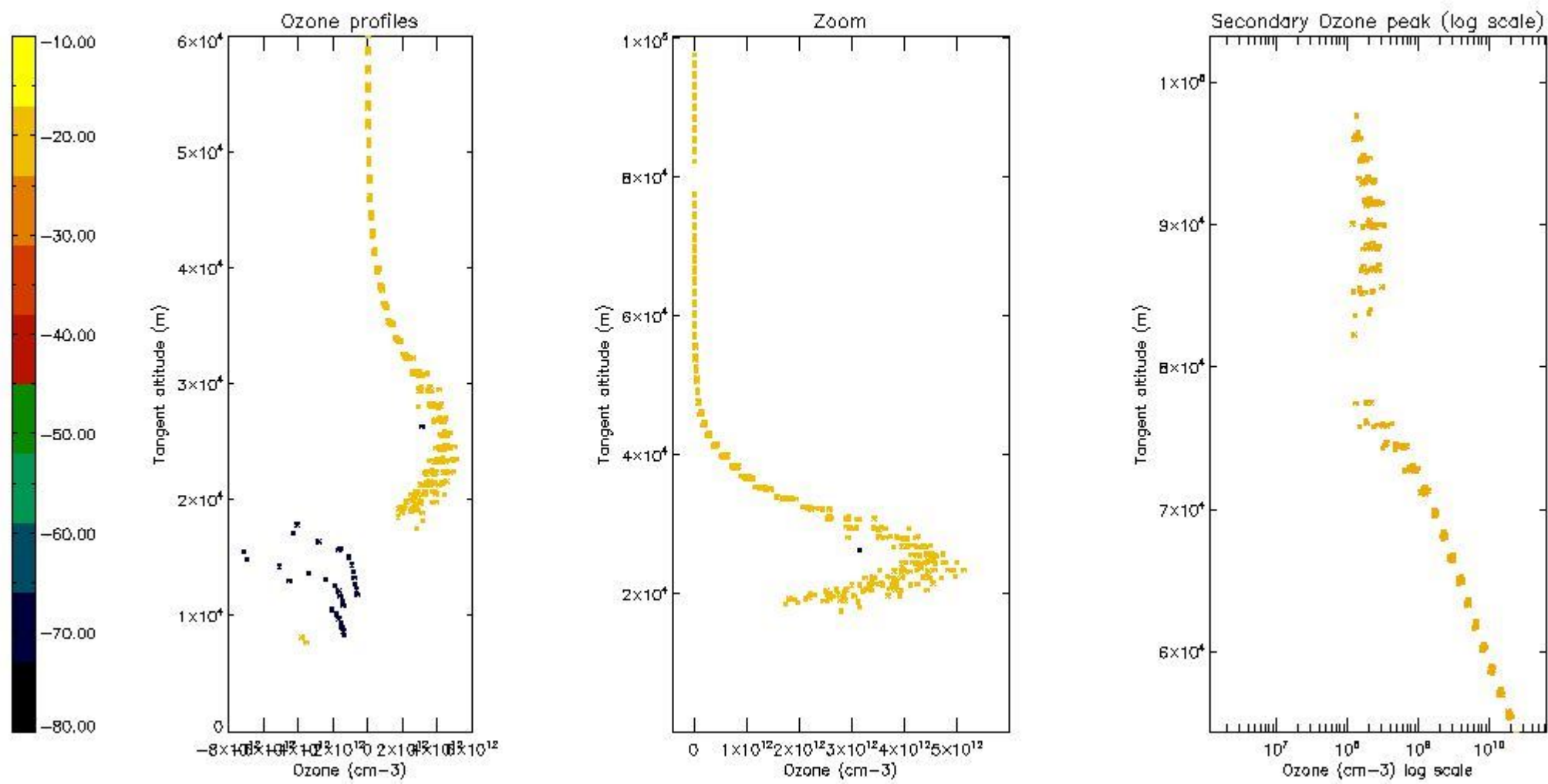
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



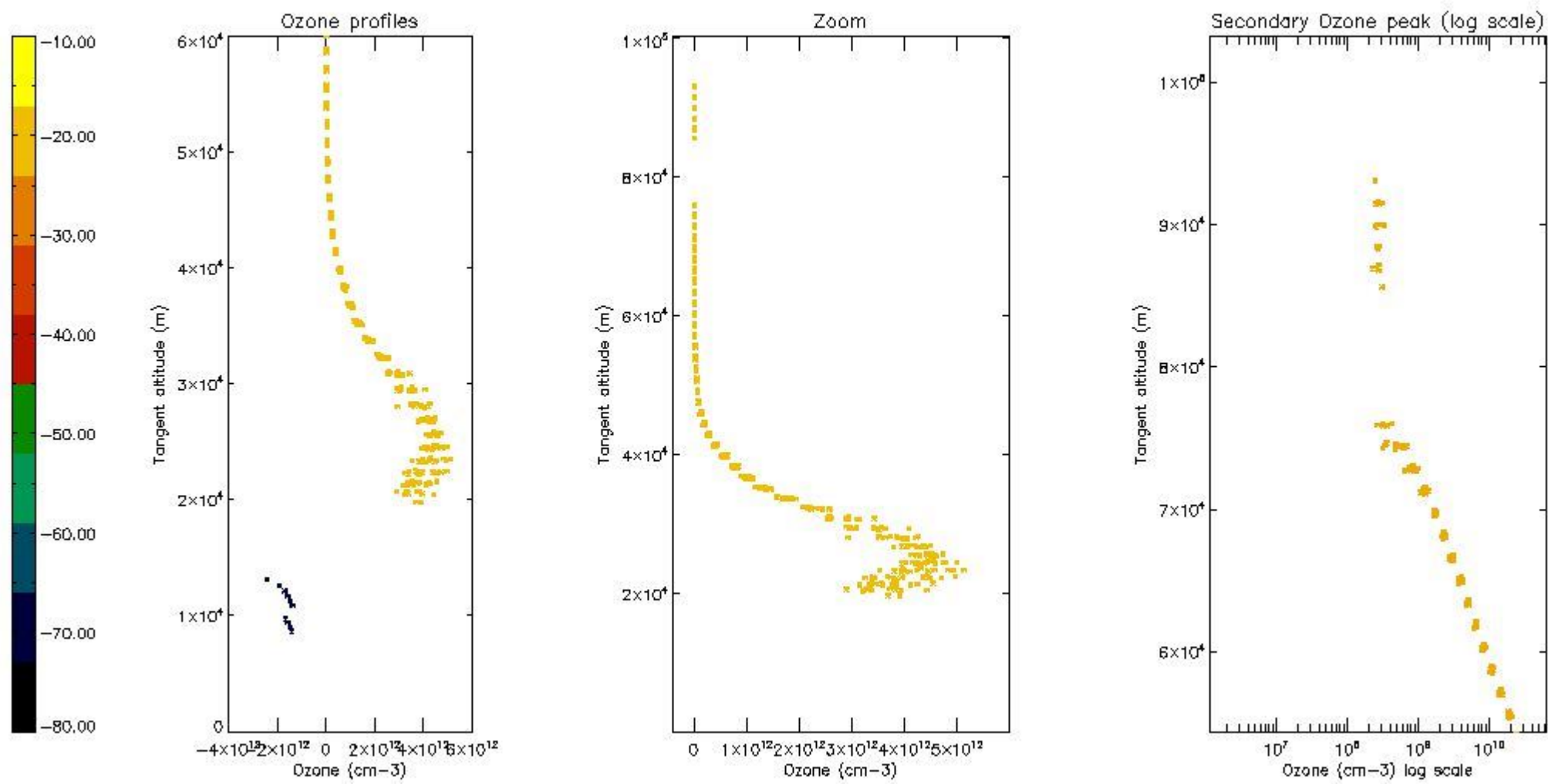
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



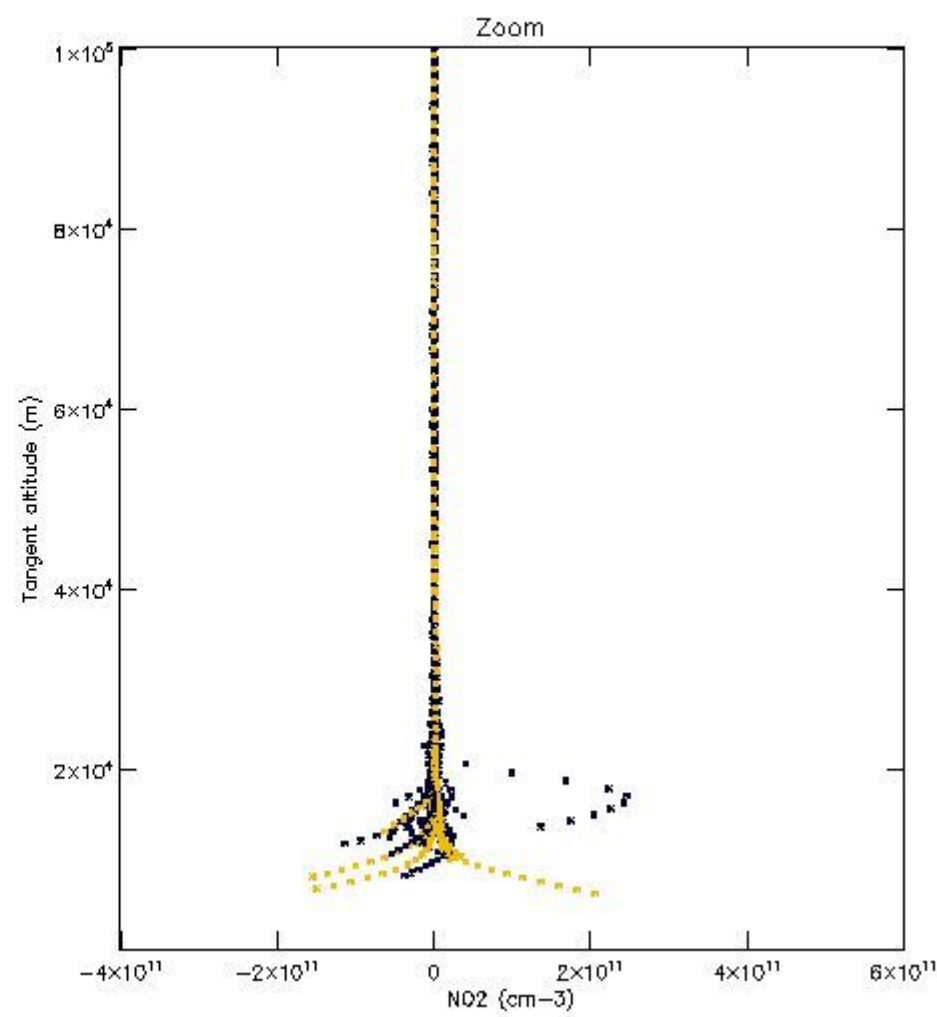
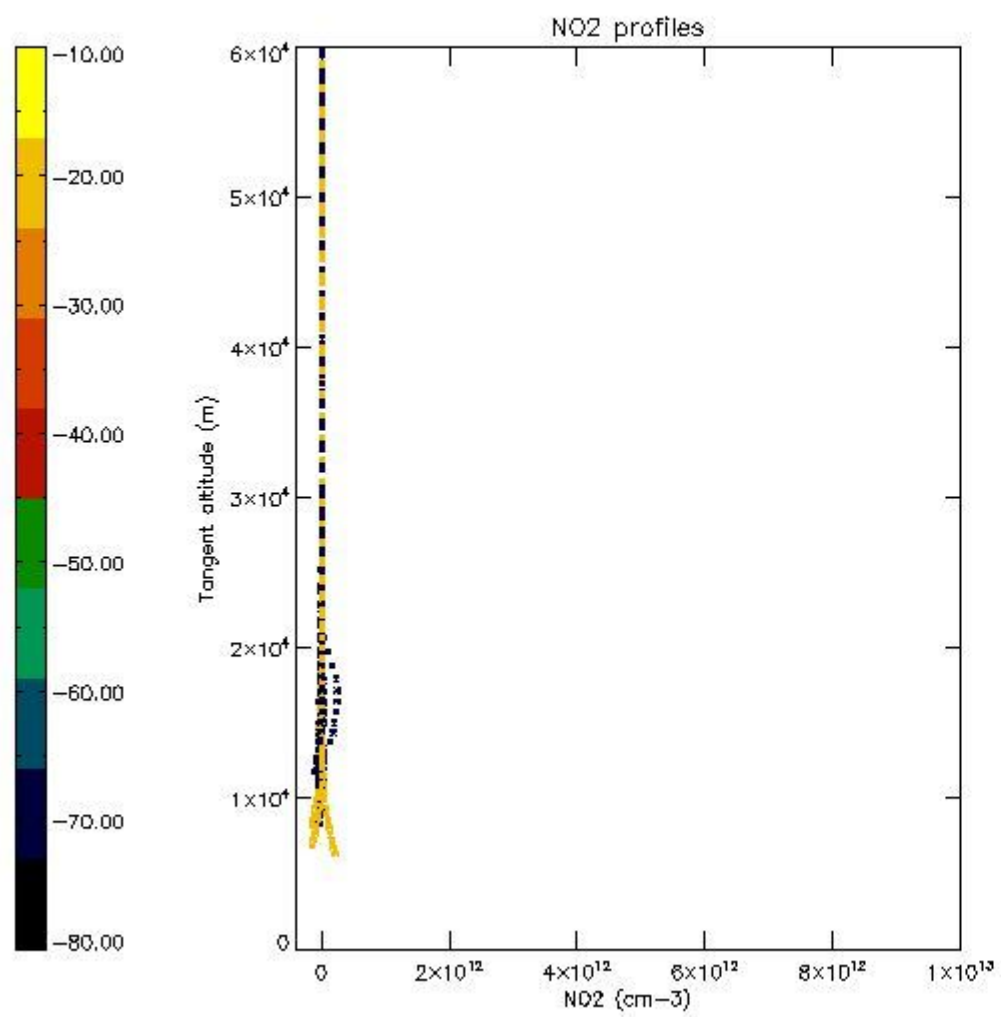
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



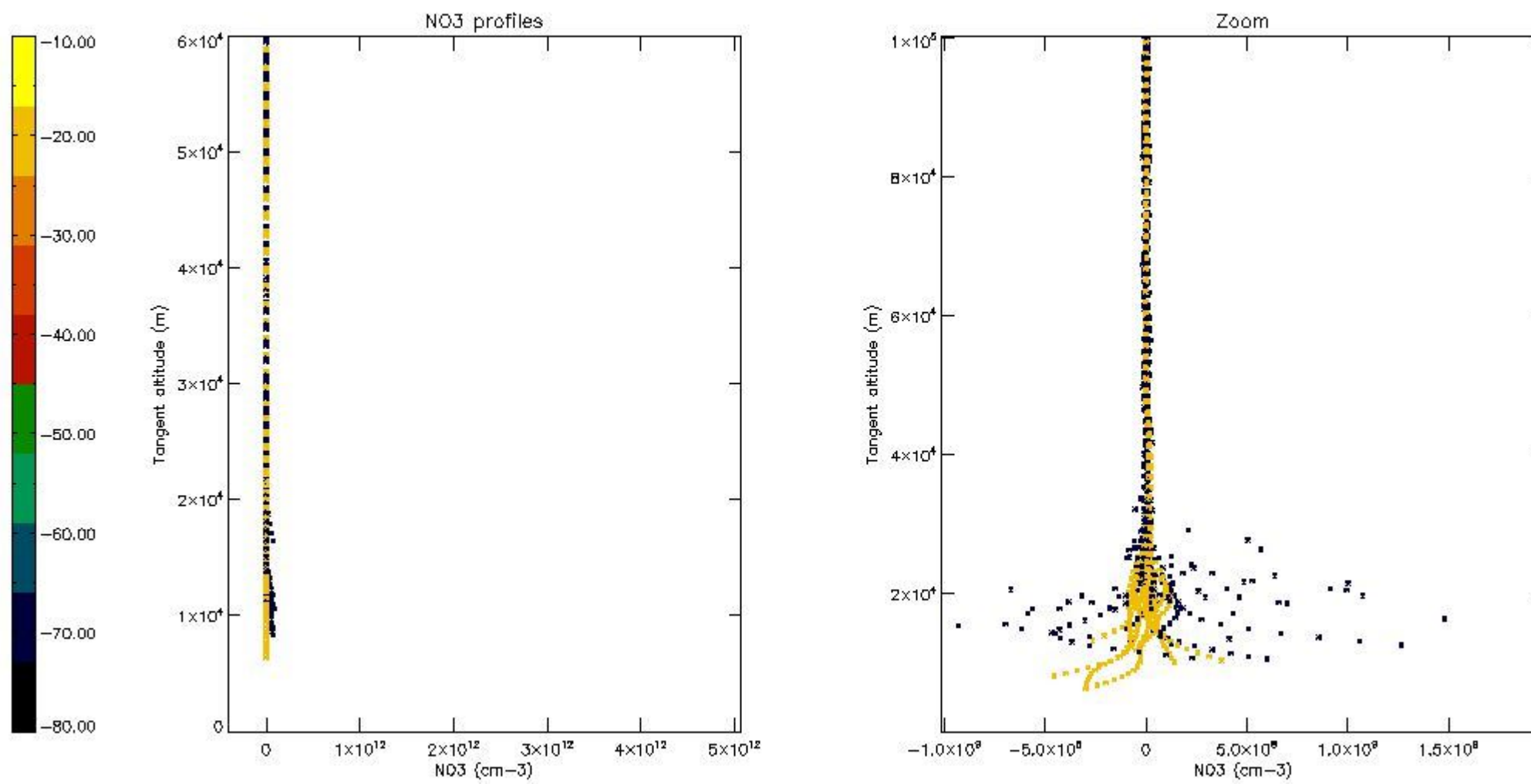
5.6 Plot NO₂ profiles for all STD (dark without errors)

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	01-JUL-2007 00:00:47
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-JUL-2007 00:00:47
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-JUL-2007 00:00:47

GOMOS Level 2 Daily Report

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[3.2 Plot of level 2 quality information per product \(world map\)](#)

[4. Level 1 Quality information per product \(stored on level 2 products\)](#)

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

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

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

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

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

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

[5. Ozone profiles based on quality statistics and other trace gas profiles](#)

[5.1 Ozone statistics based on quality of products](#)

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[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

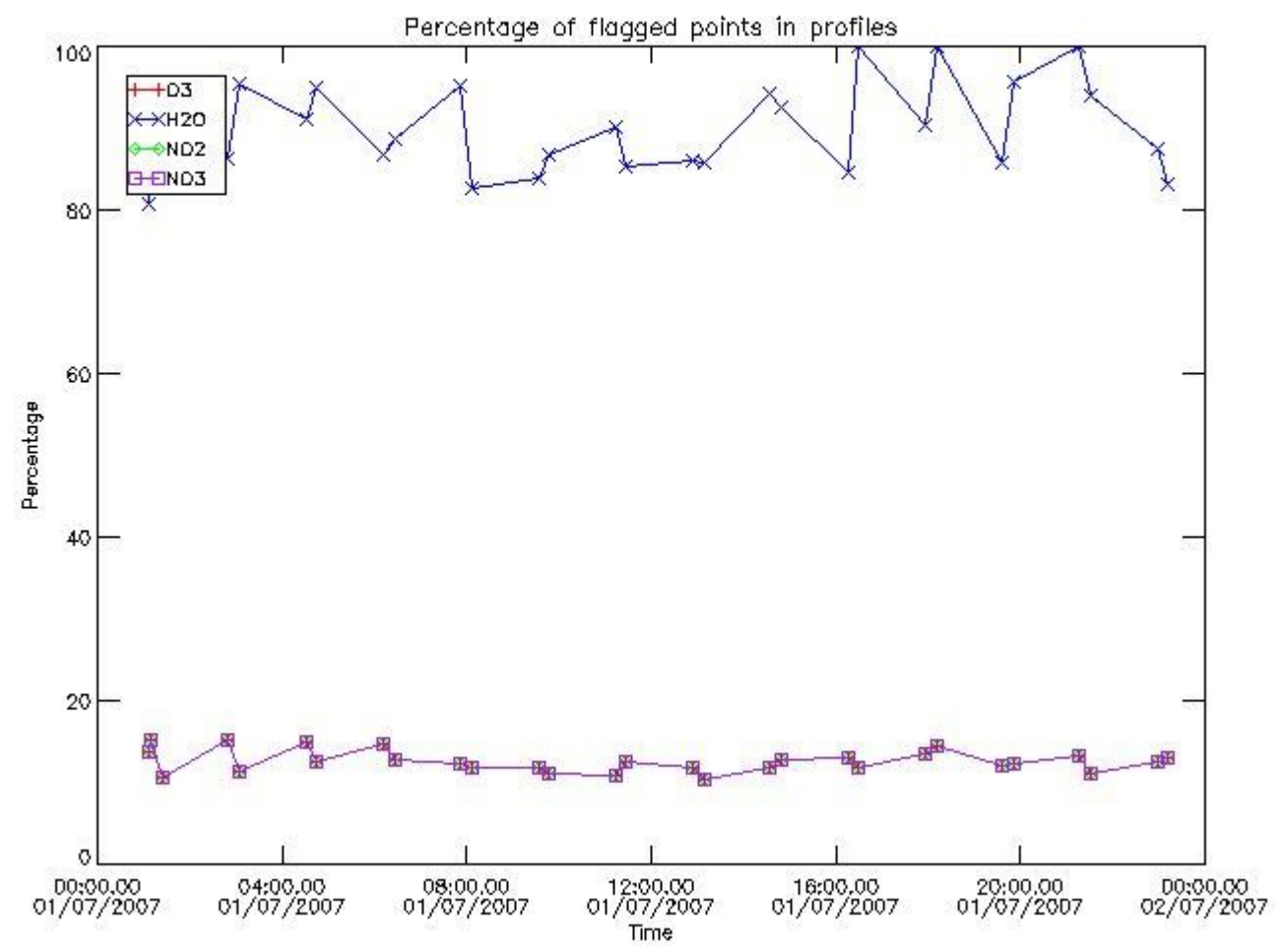
[5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

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

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

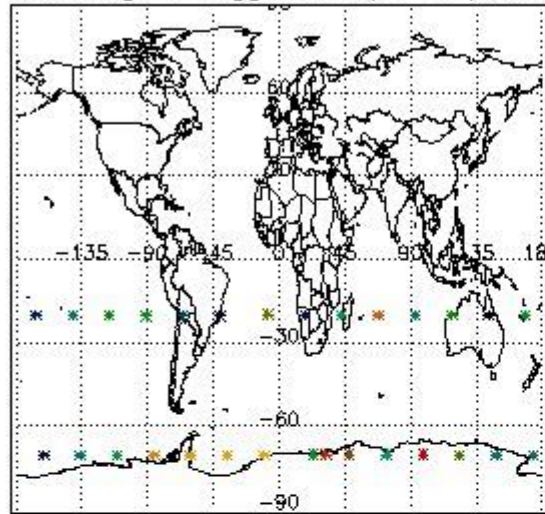
[6. Auxiliary Data Files used for the production reported in section 2](#)

3.1 Plot quality information per product (time dependant)

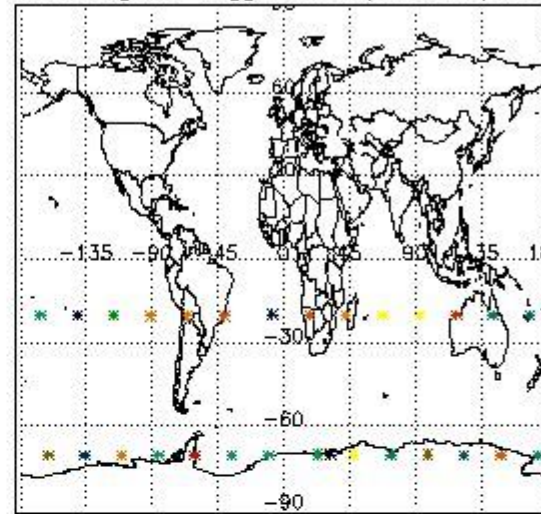


3.2 Plot quality information per product (world map)

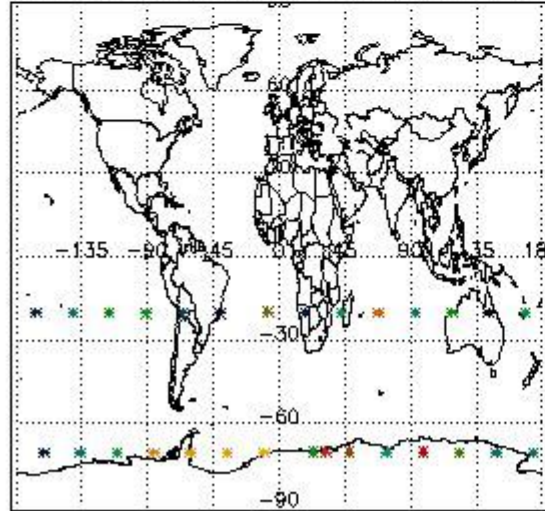
Percentage of flagged data per O3 profile



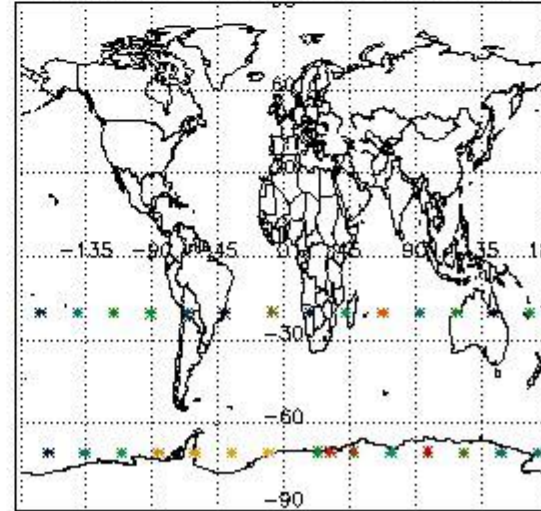
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

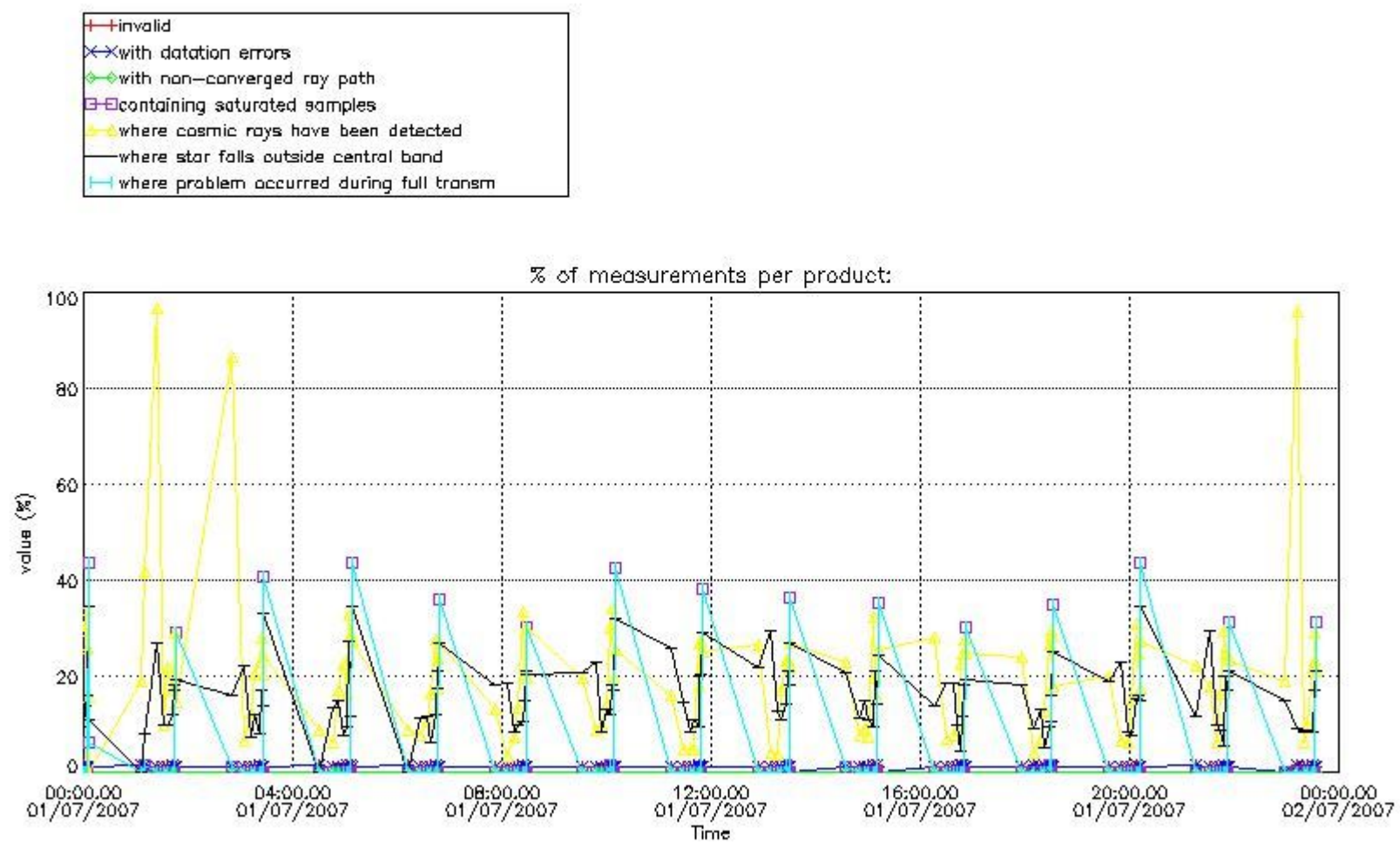


4. Level 1 quality information per product

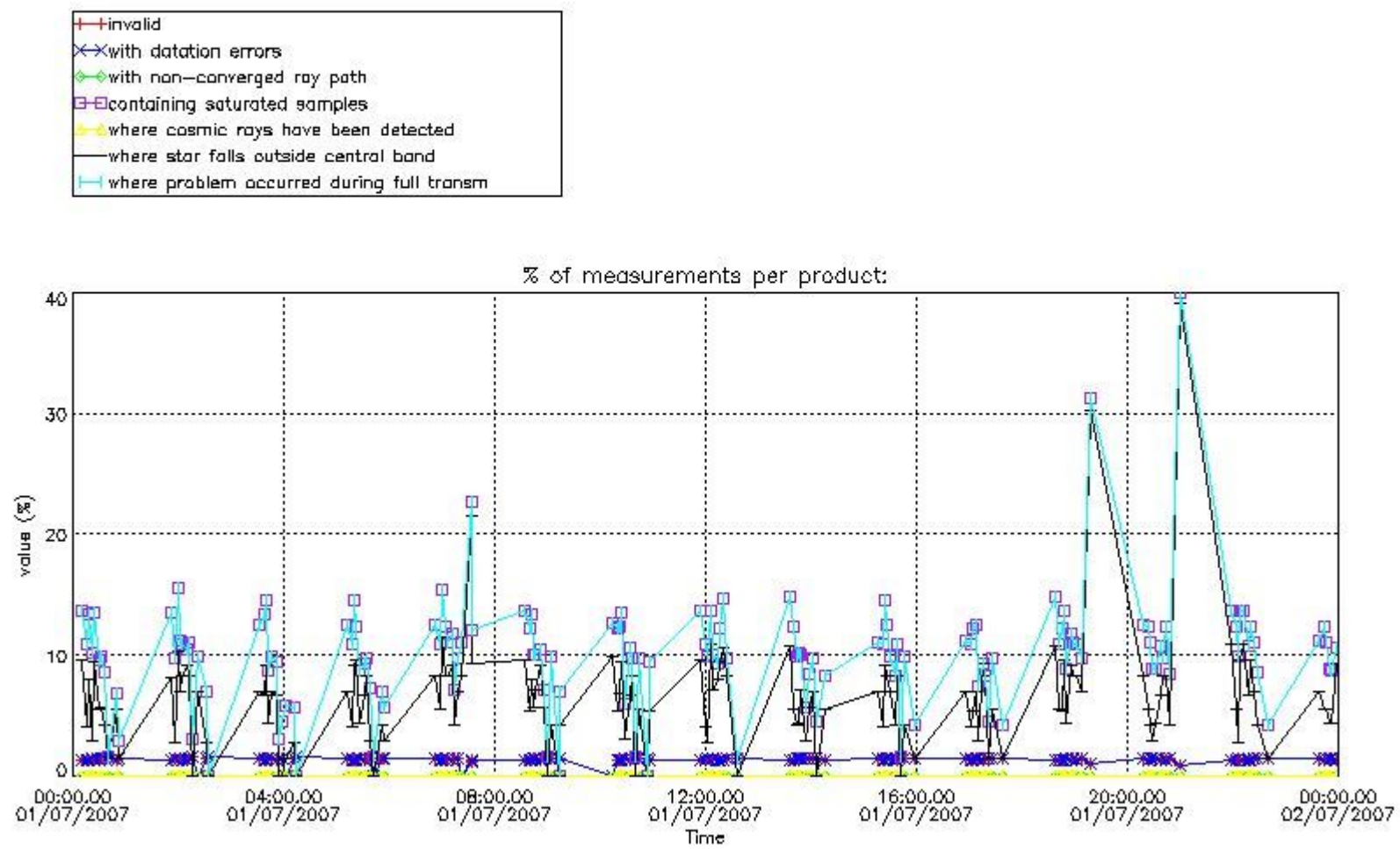
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



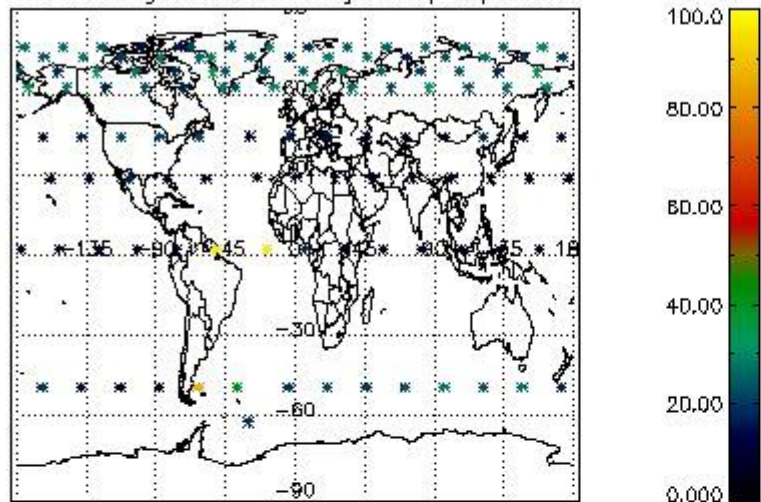
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



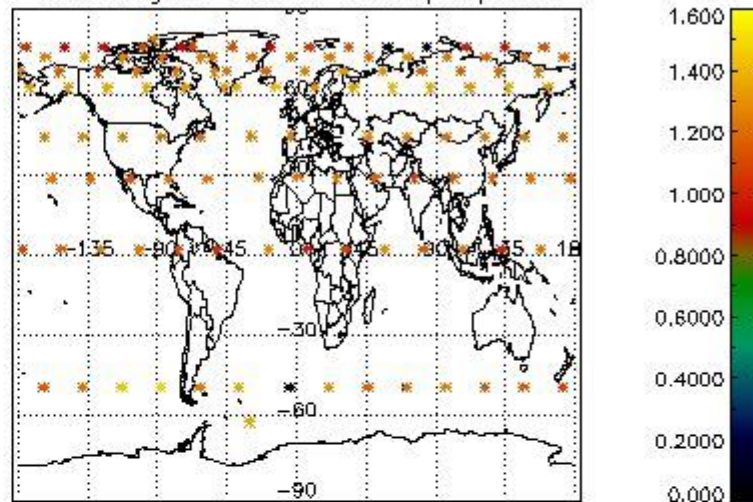
4.2 Plot quality information per product coming from level 1b processing (world map)

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

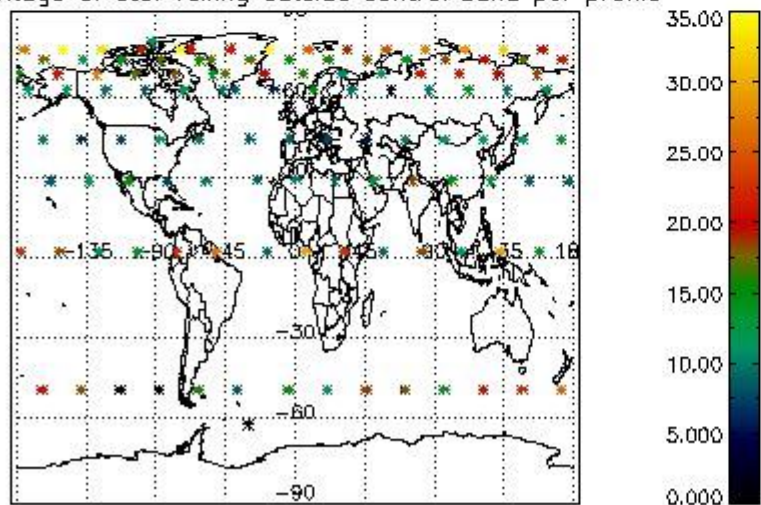
Percentage of cosmic ray hits per profile



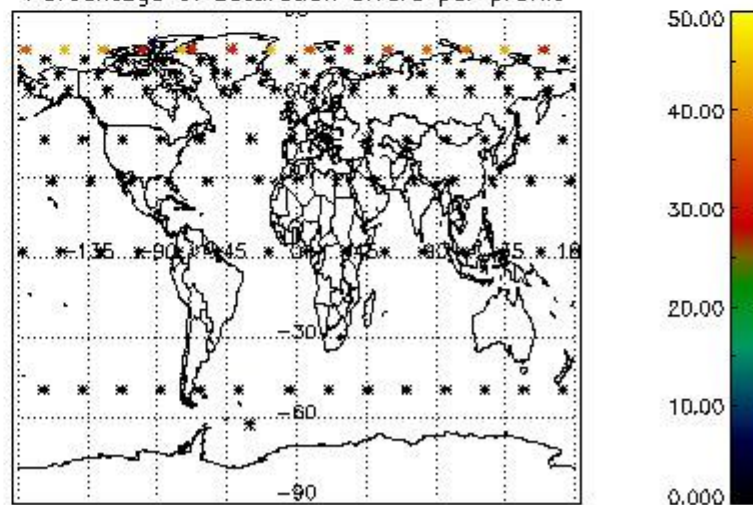
Percentage of datation errors per profile



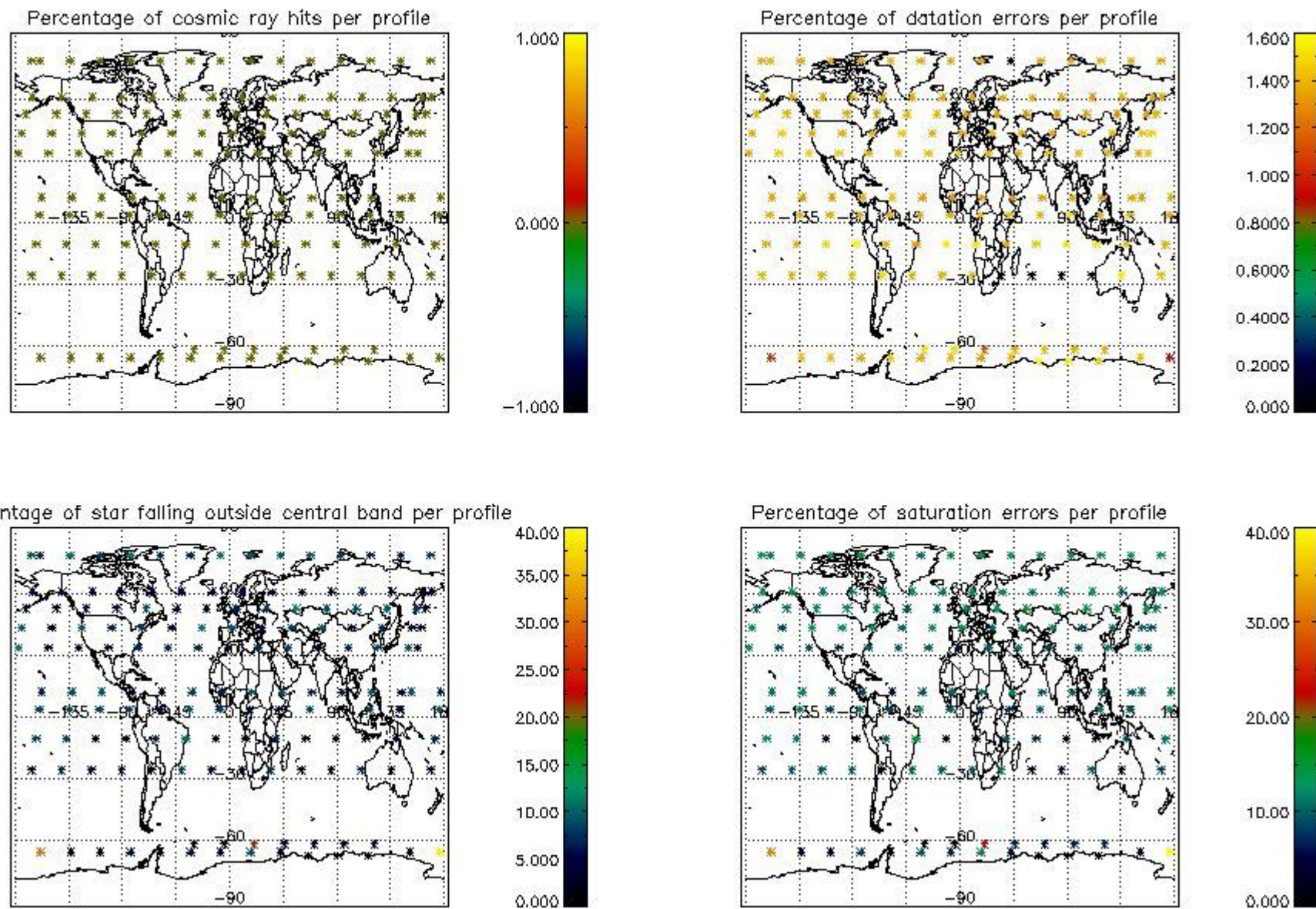
Percentage of star falling outside central band per profile



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

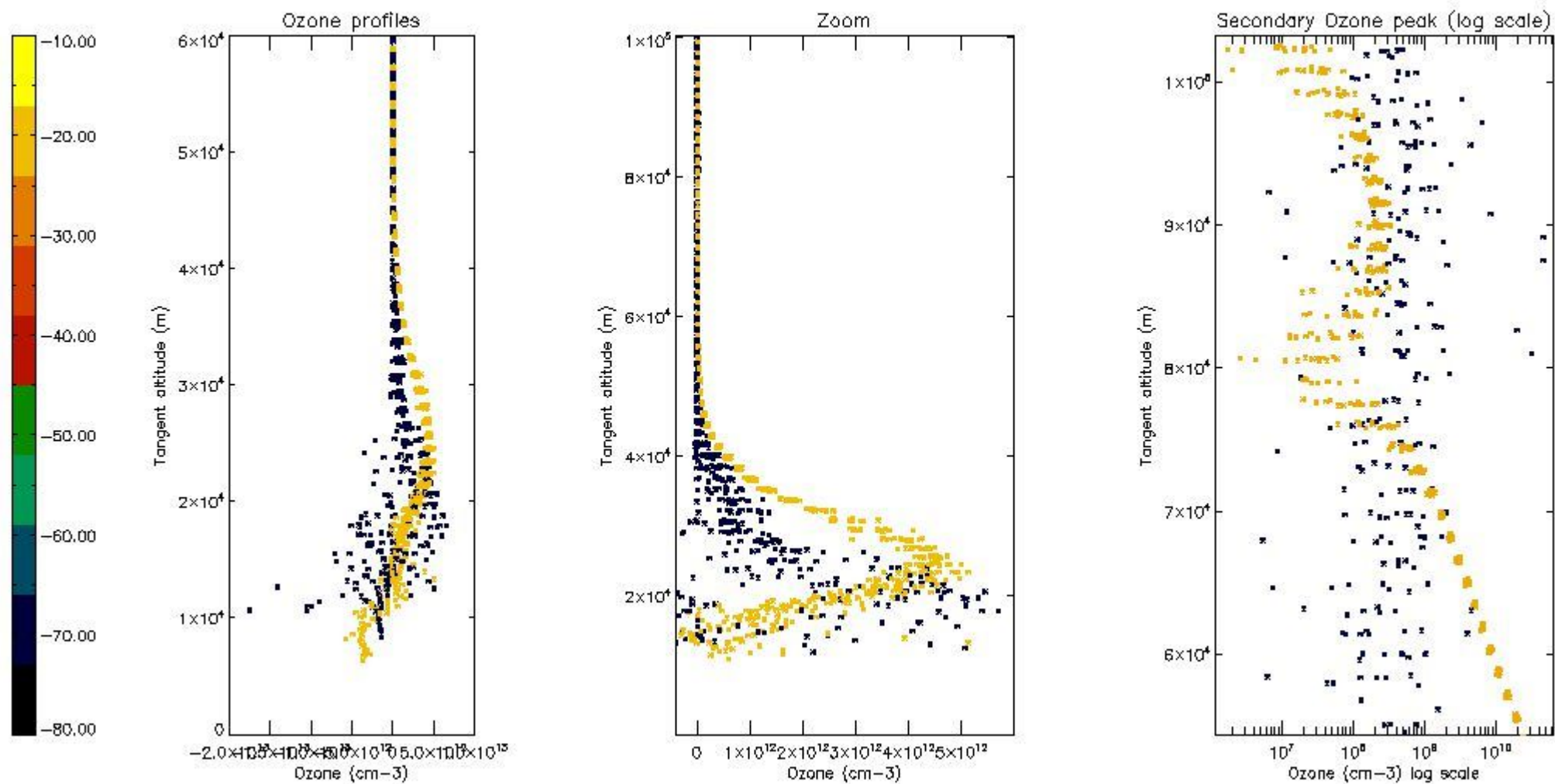
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	12
STD < 20	5

STD < 10	4
STD < 5	3

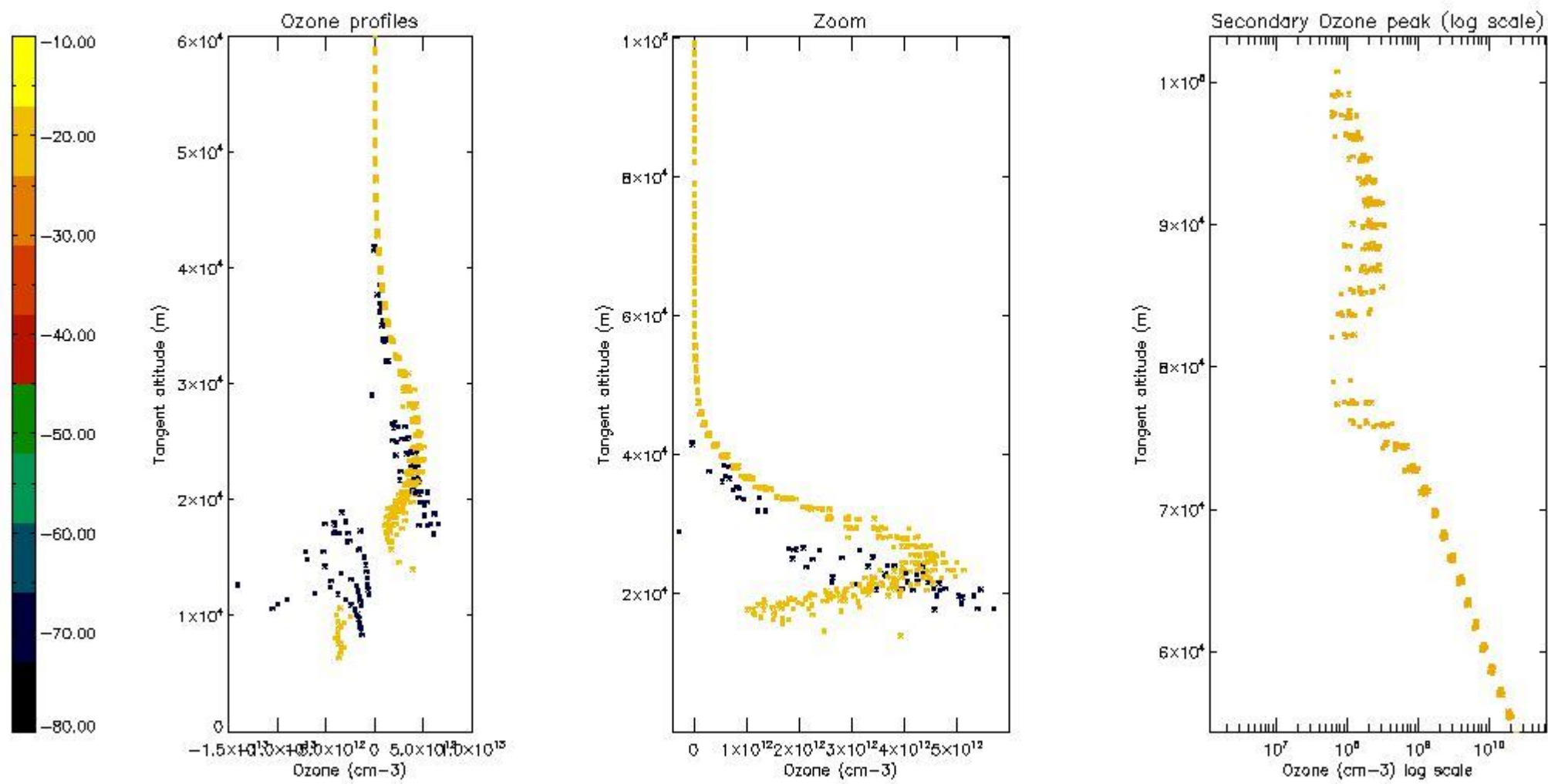
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



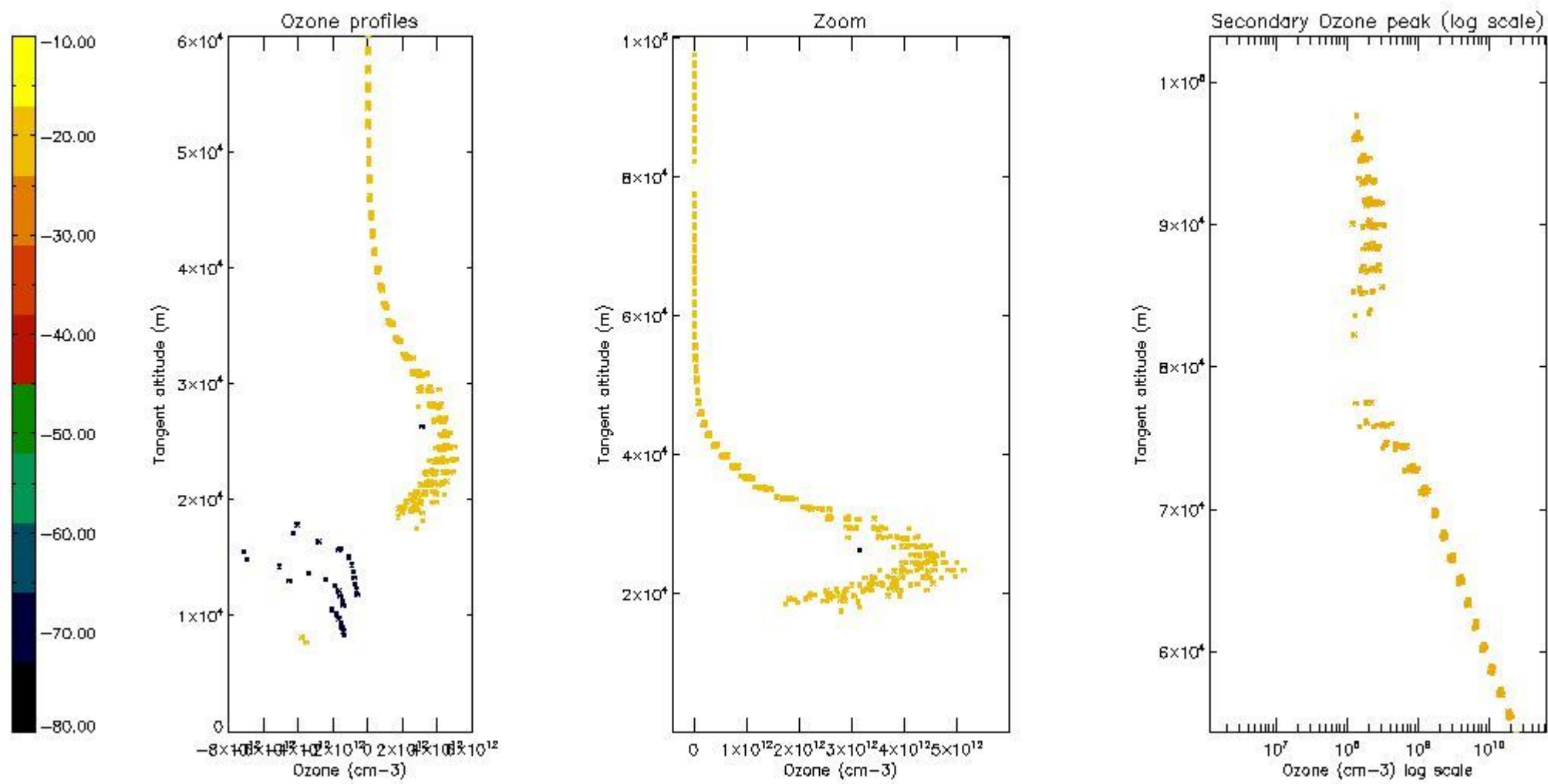
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



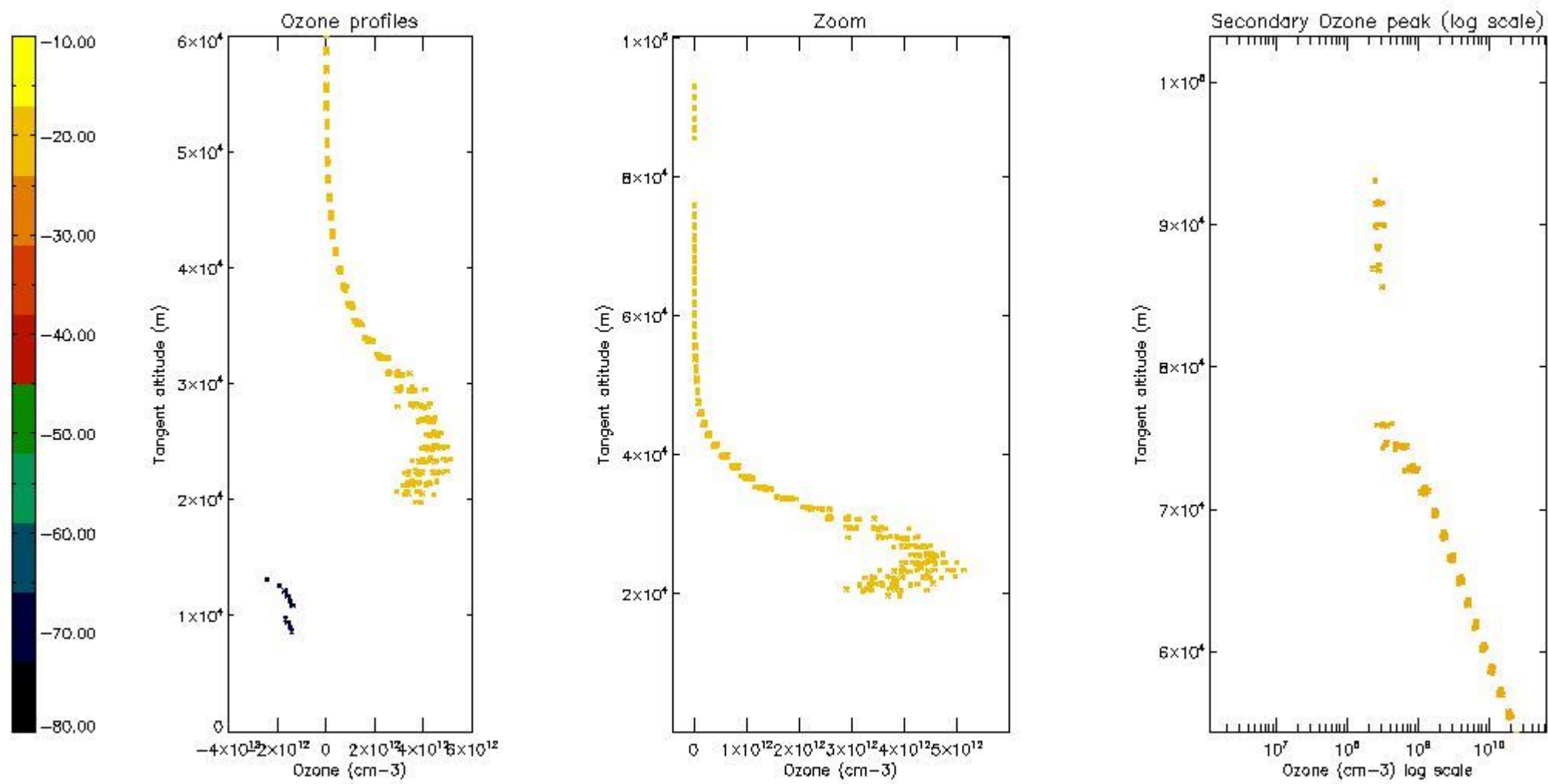
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



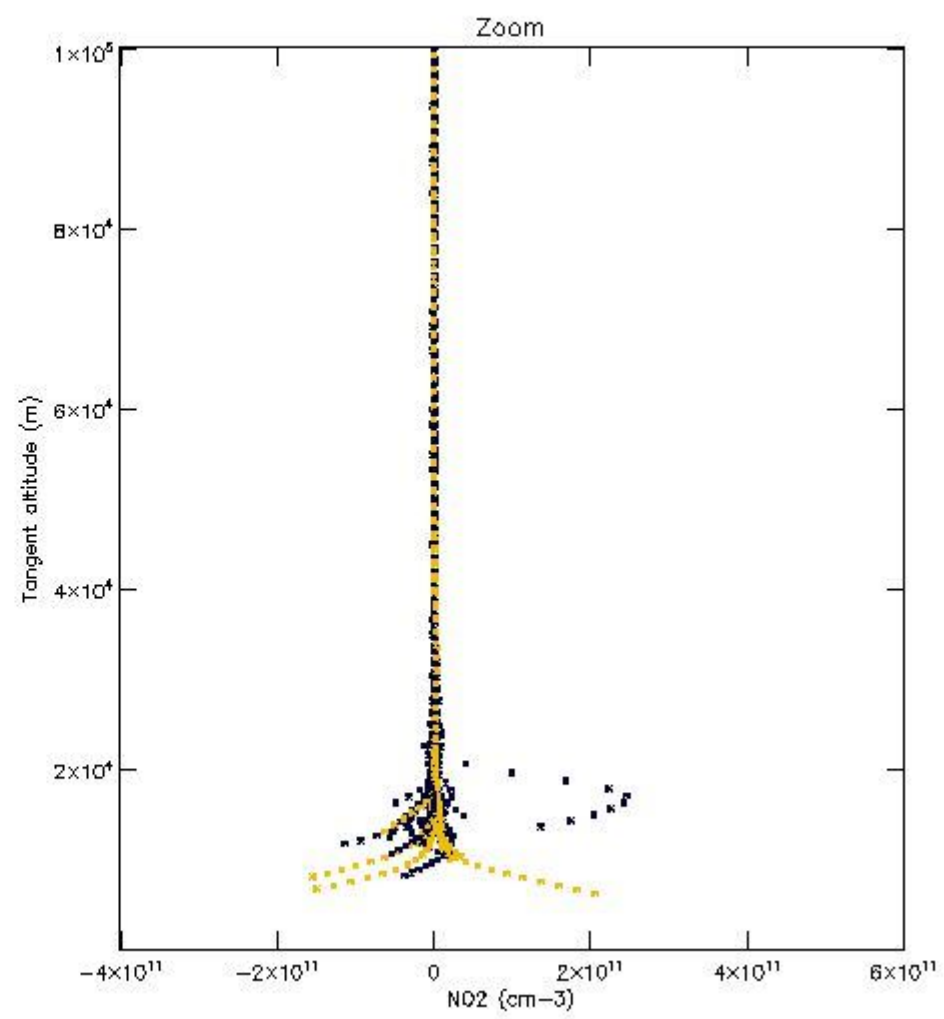
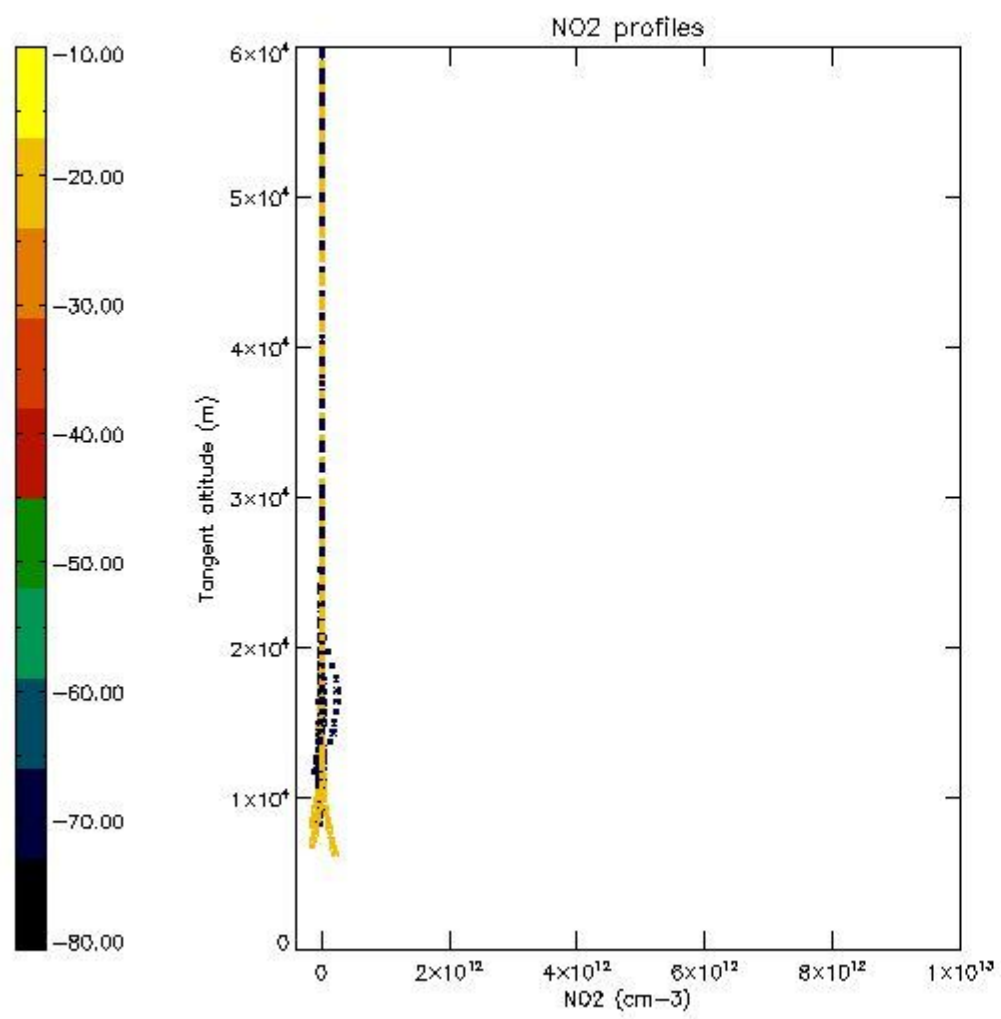
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



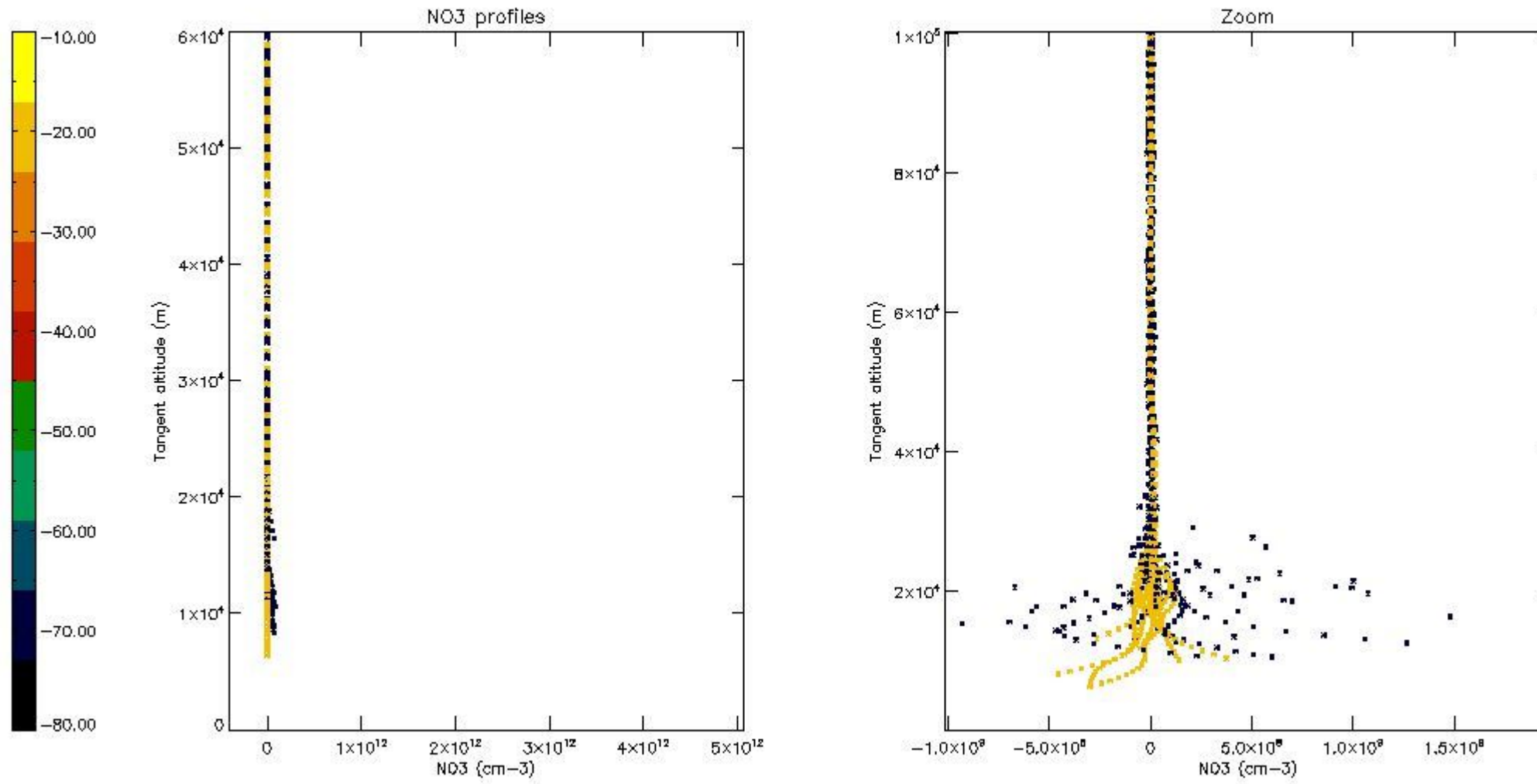
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

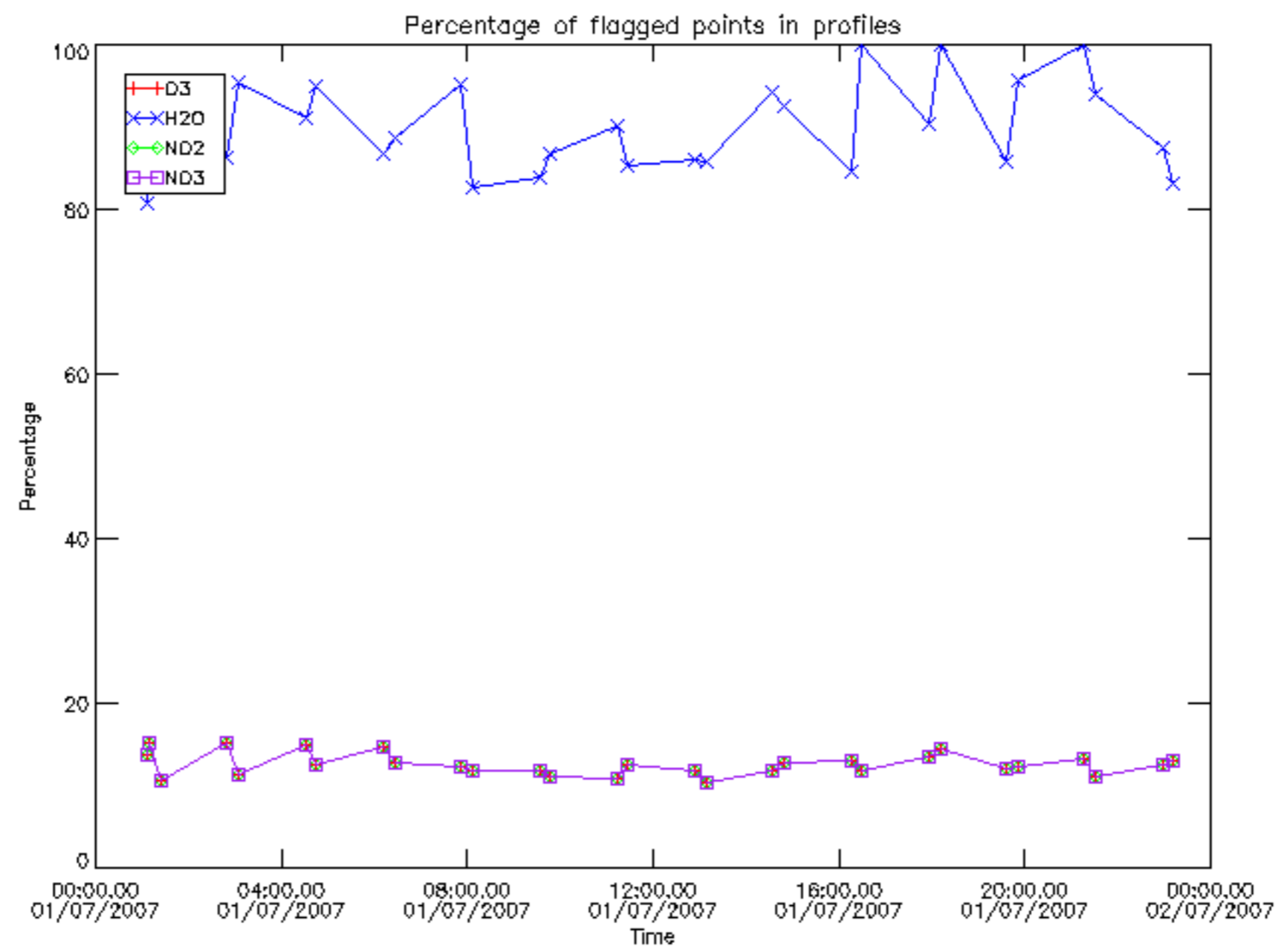
The colorbar represents the latitude.



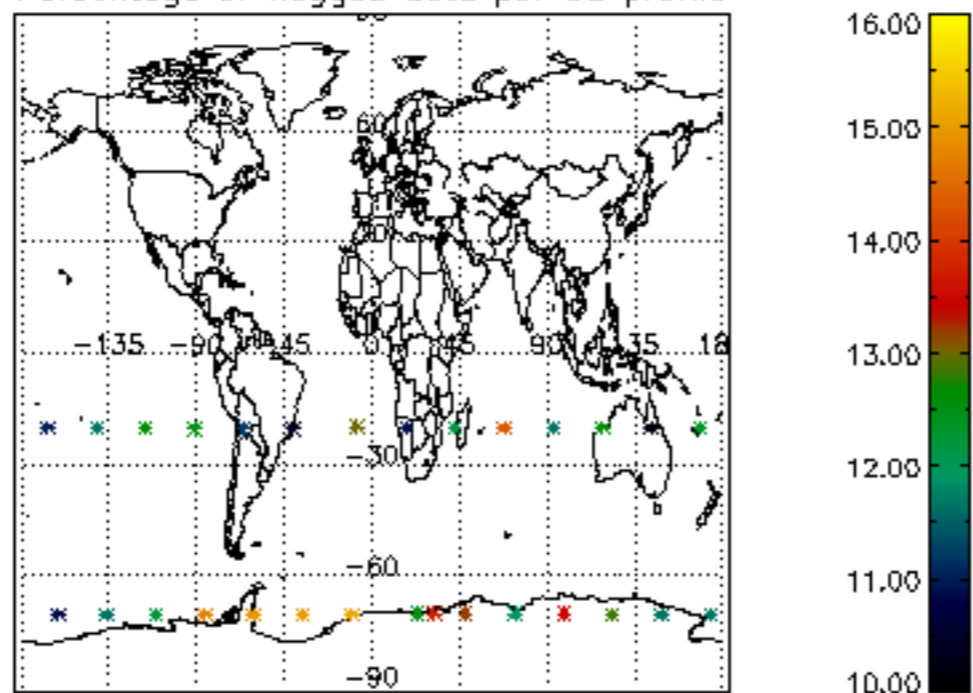
6. Auxiliary Data Files used for the production reported in section 2

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.

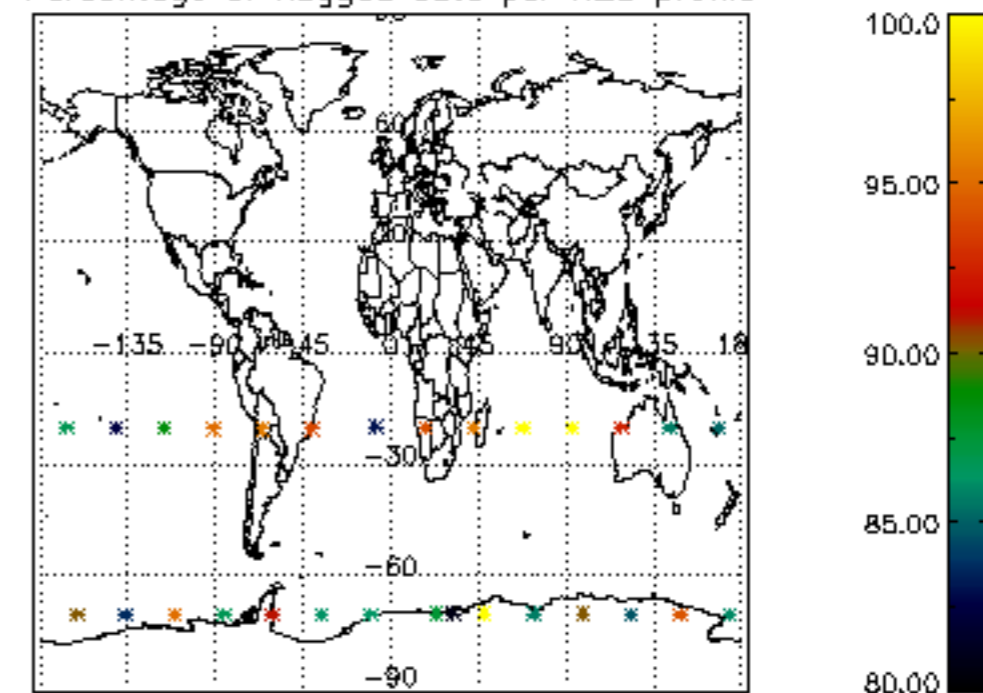
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	01-JUL-2007 00:00:47
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-JUL-2007 00:00:47
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-JUL-2007 00:00:47



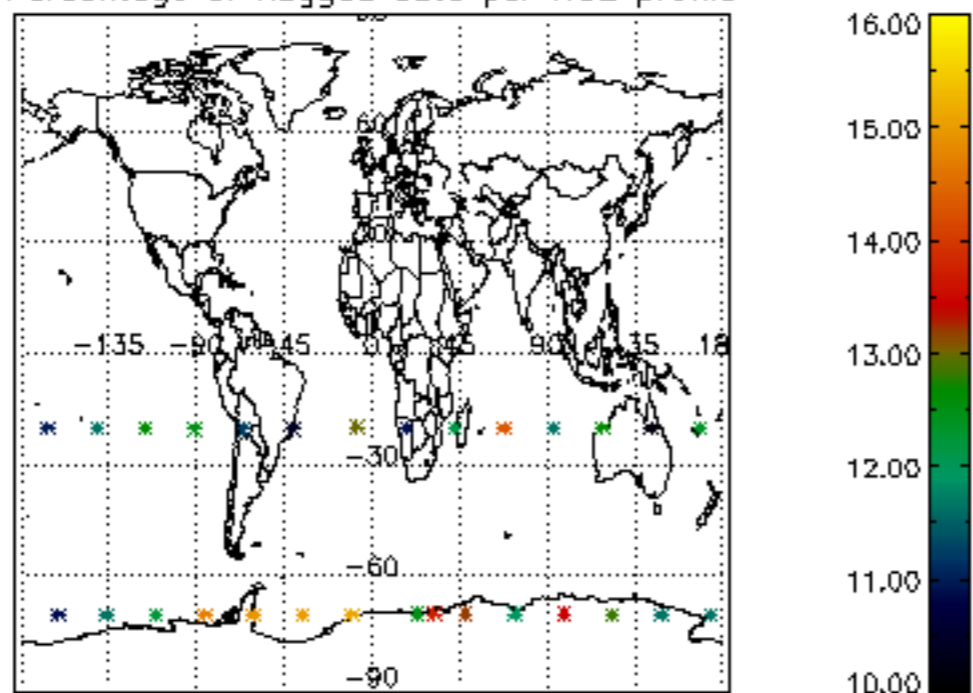
Percentage of flagged data per D3 profile



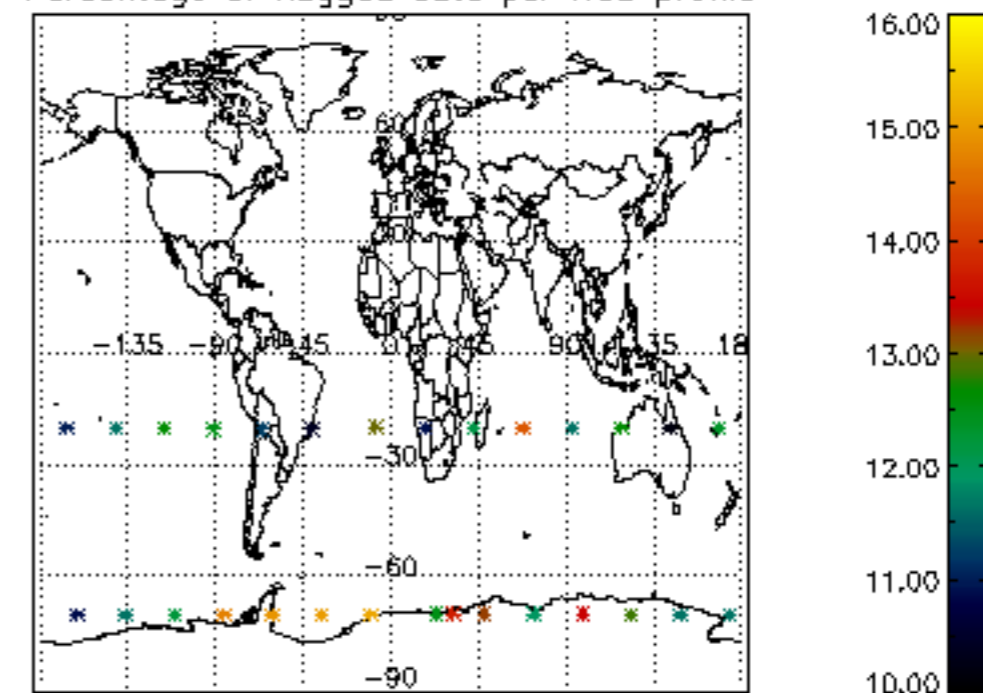
Percentage of flagged data per H2O profile

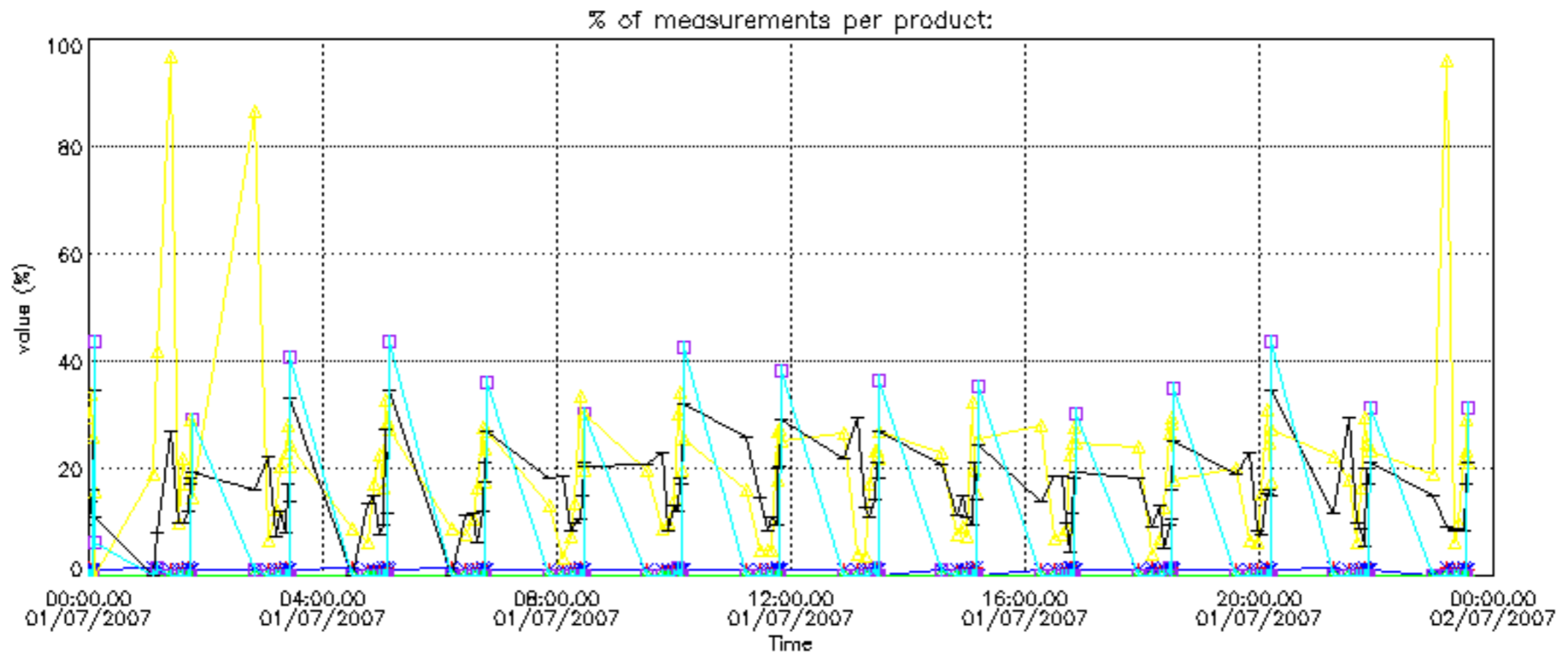


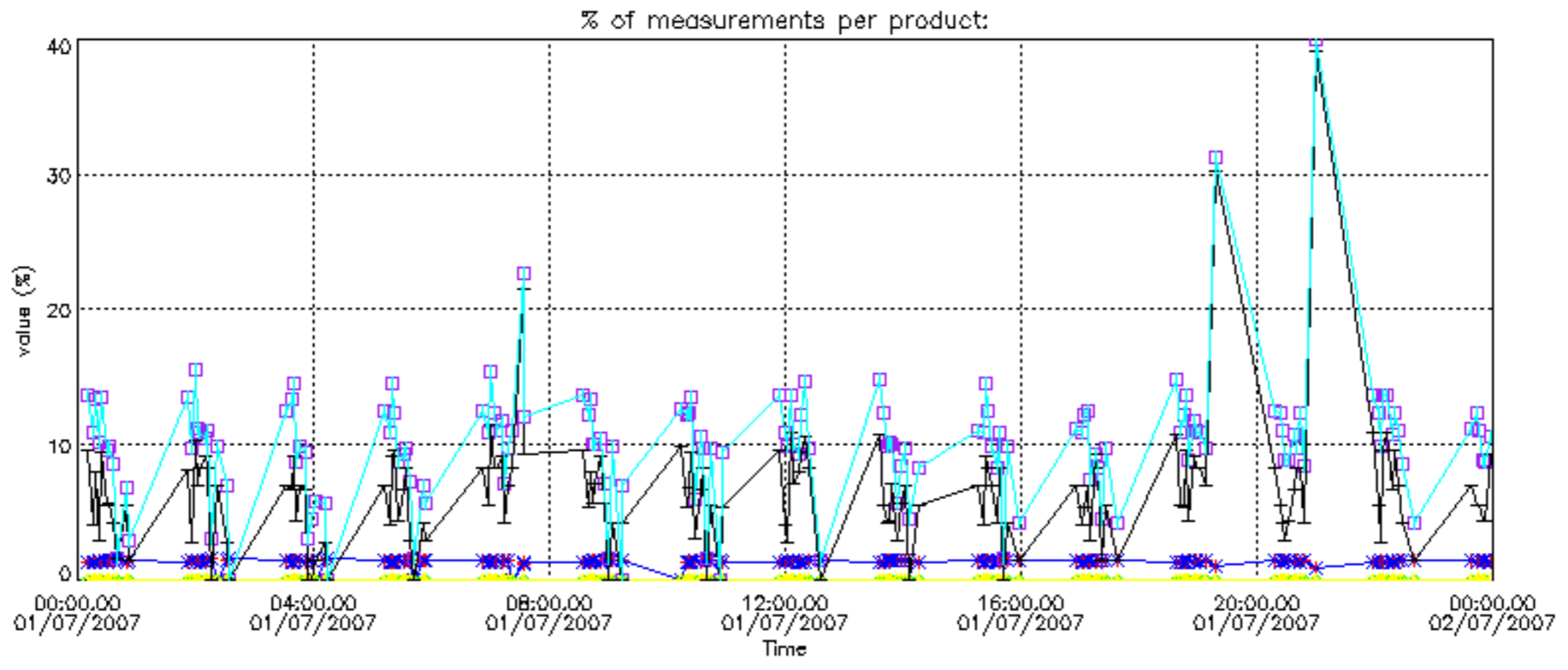
Percentage of flagged data per NO2 profile



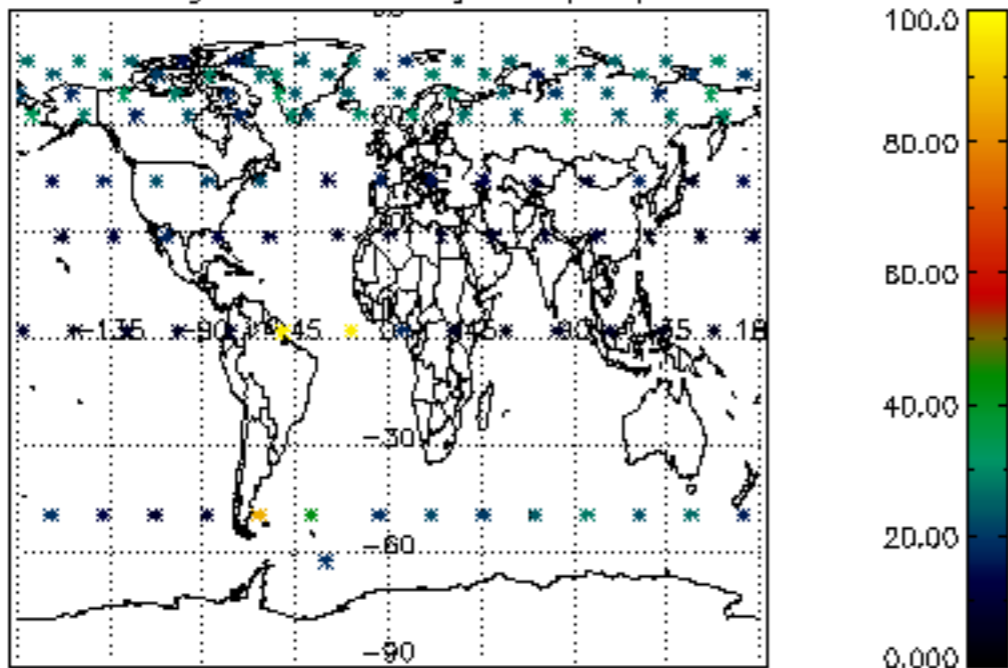
Percentage of flagged data per NO3 profile



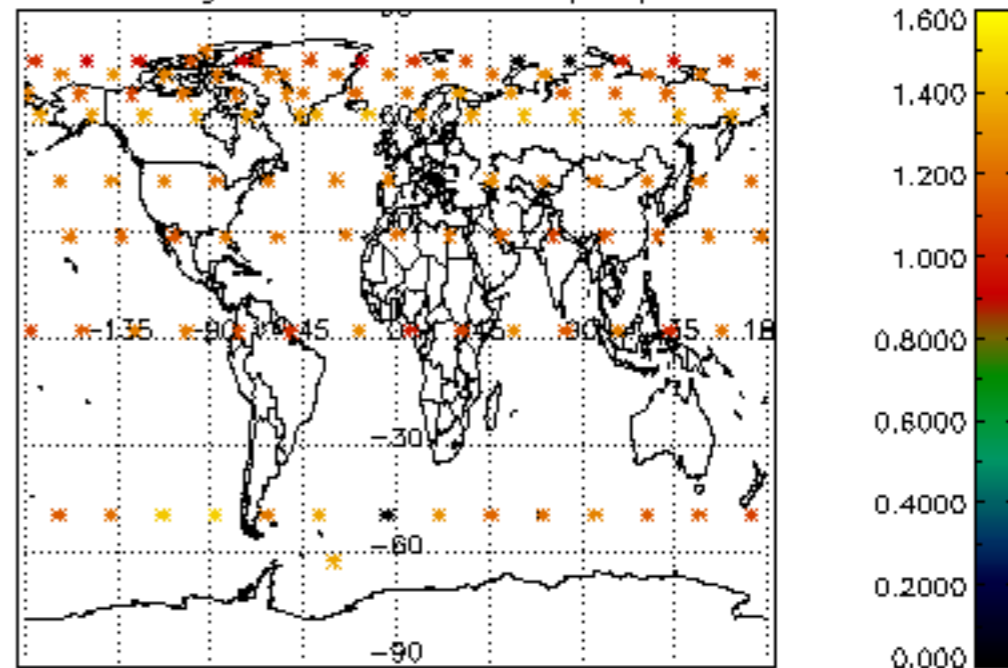




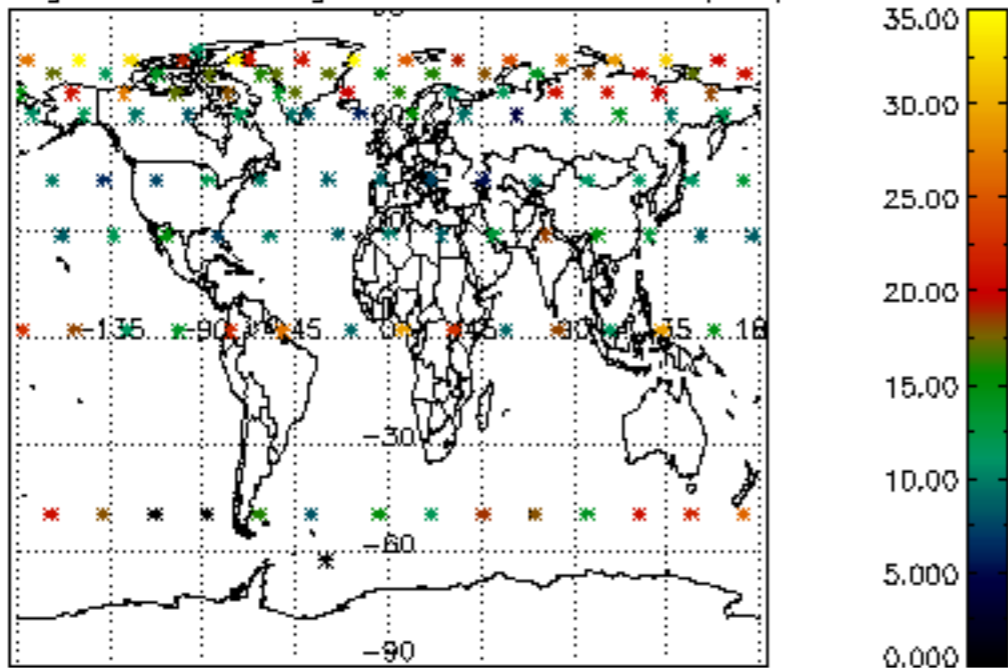
Percentage of cosmic ray hits per profile



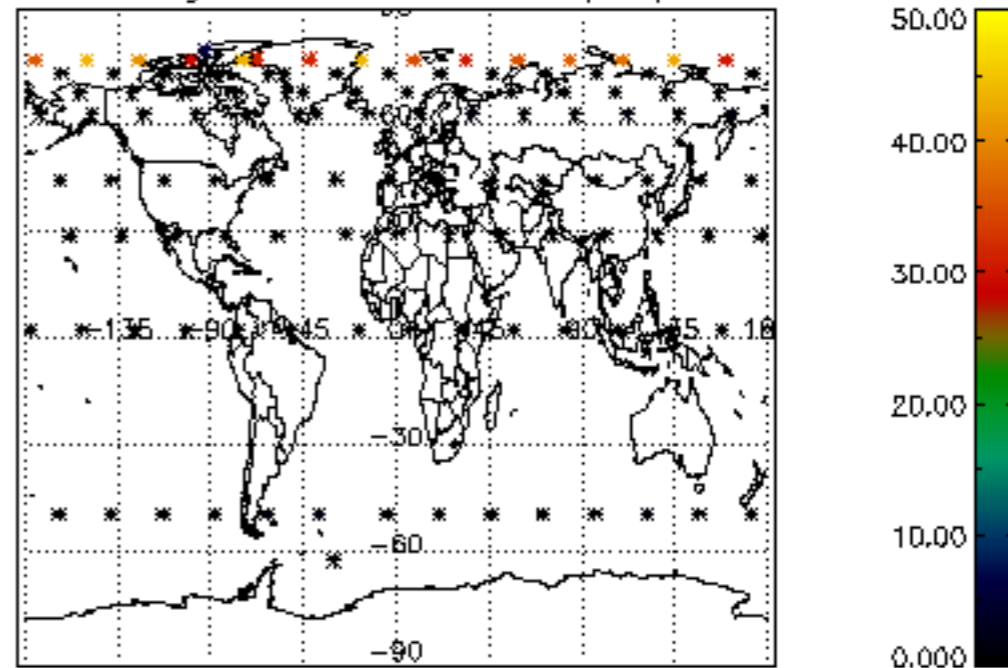
Percentage of datation errors per profile



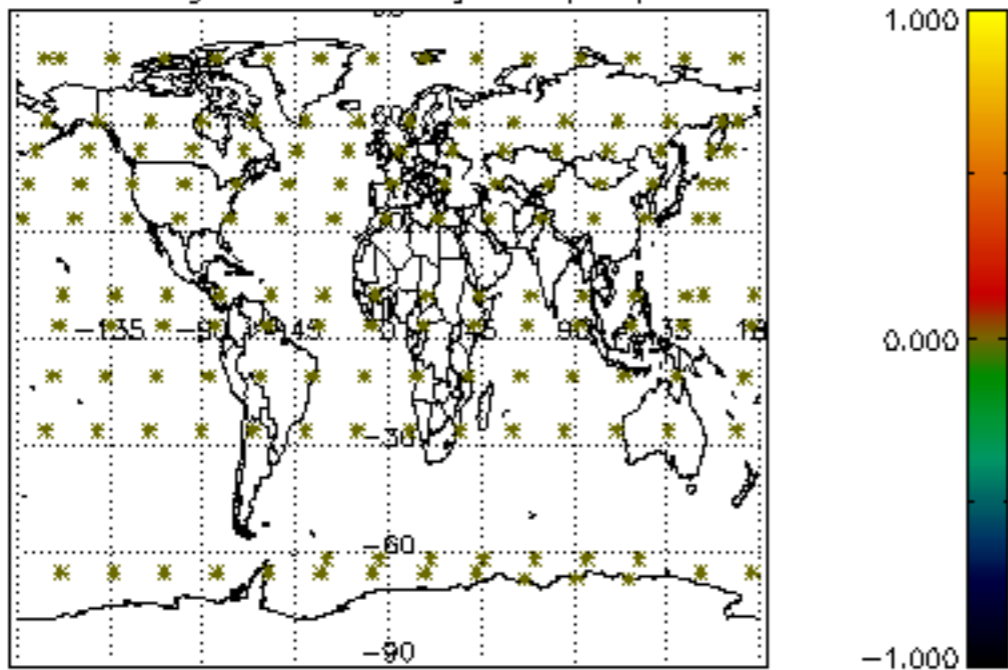
Percentage of star falling outside central band per profile



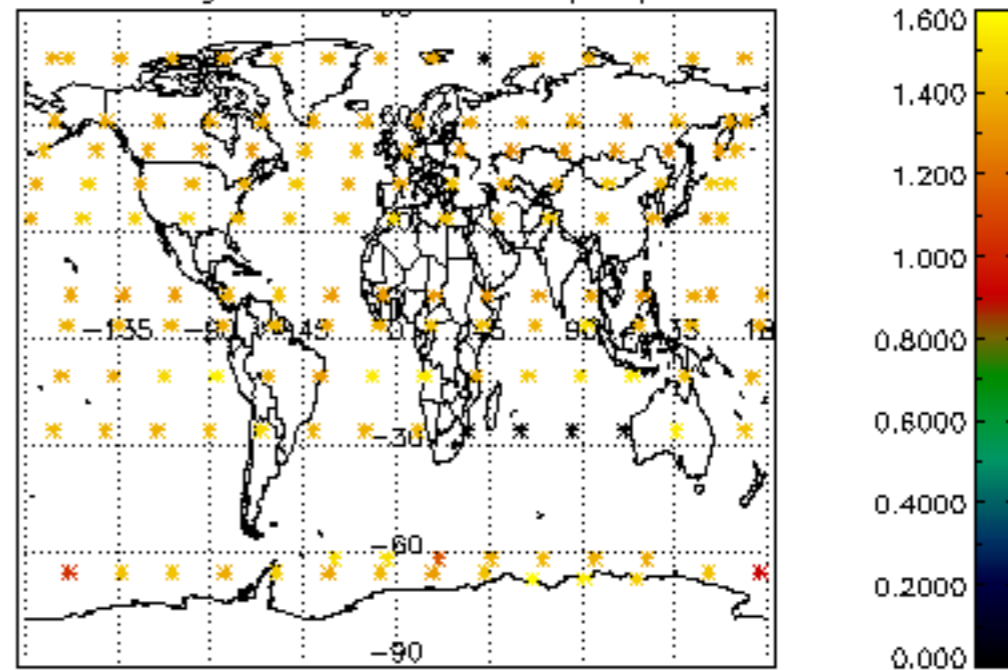
Percentage of saturation errors per profile



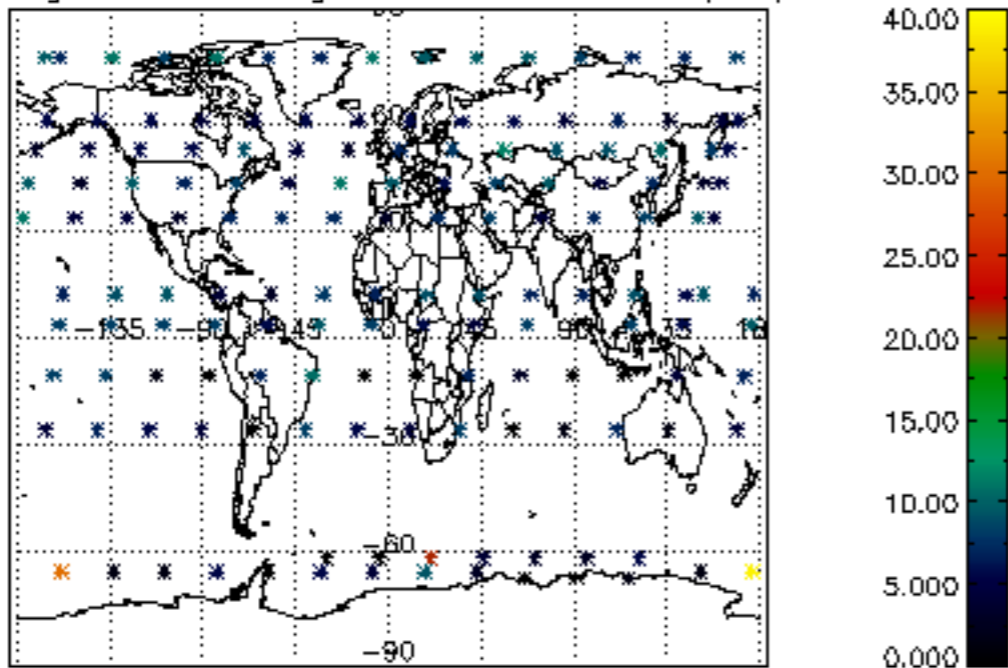
Percentage of cosmic ray hits per profile



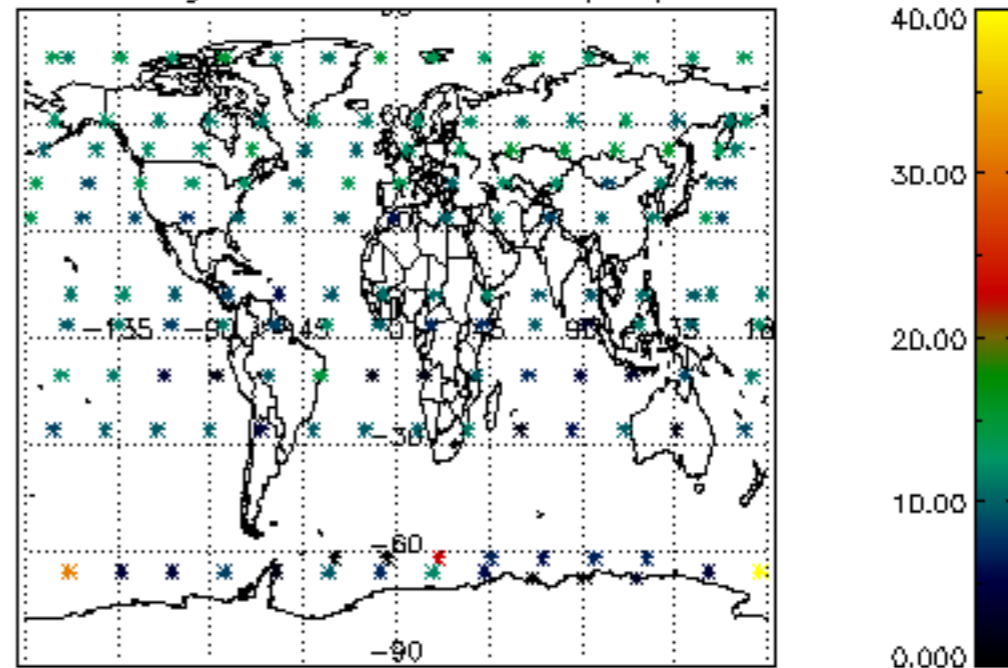
Percentage of datation errors per profile

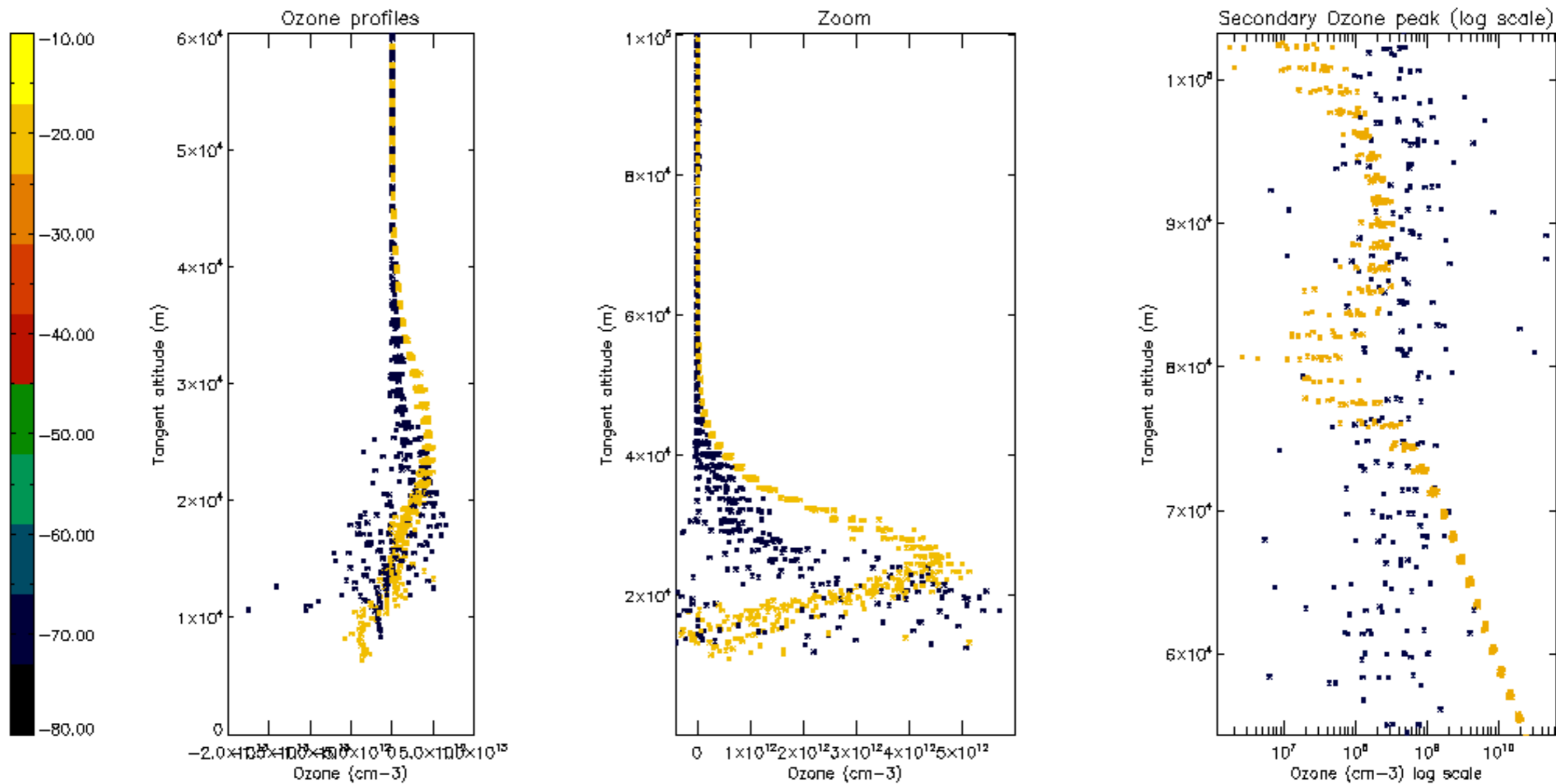


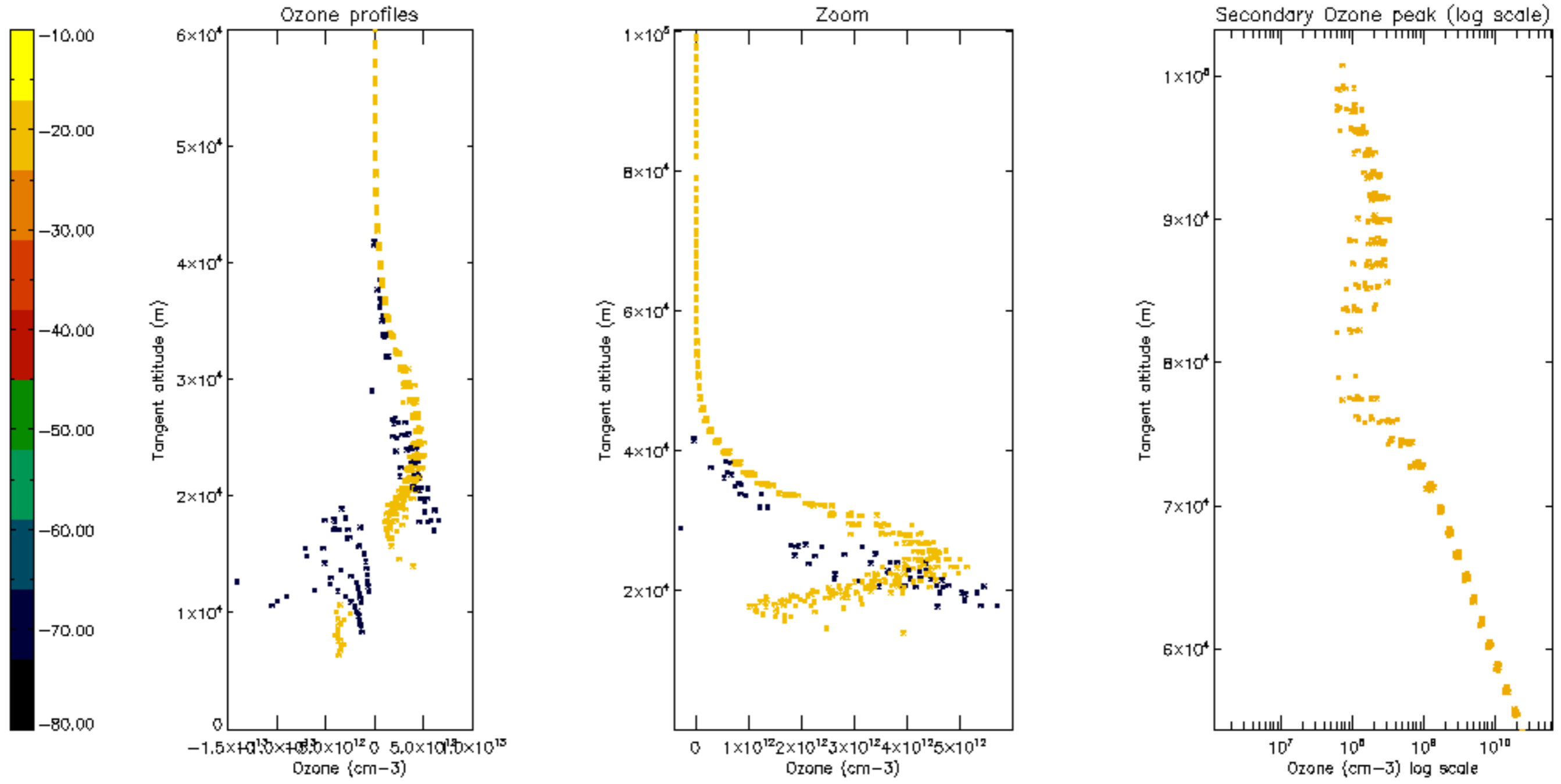
Percentage of star falling outside central band per profile

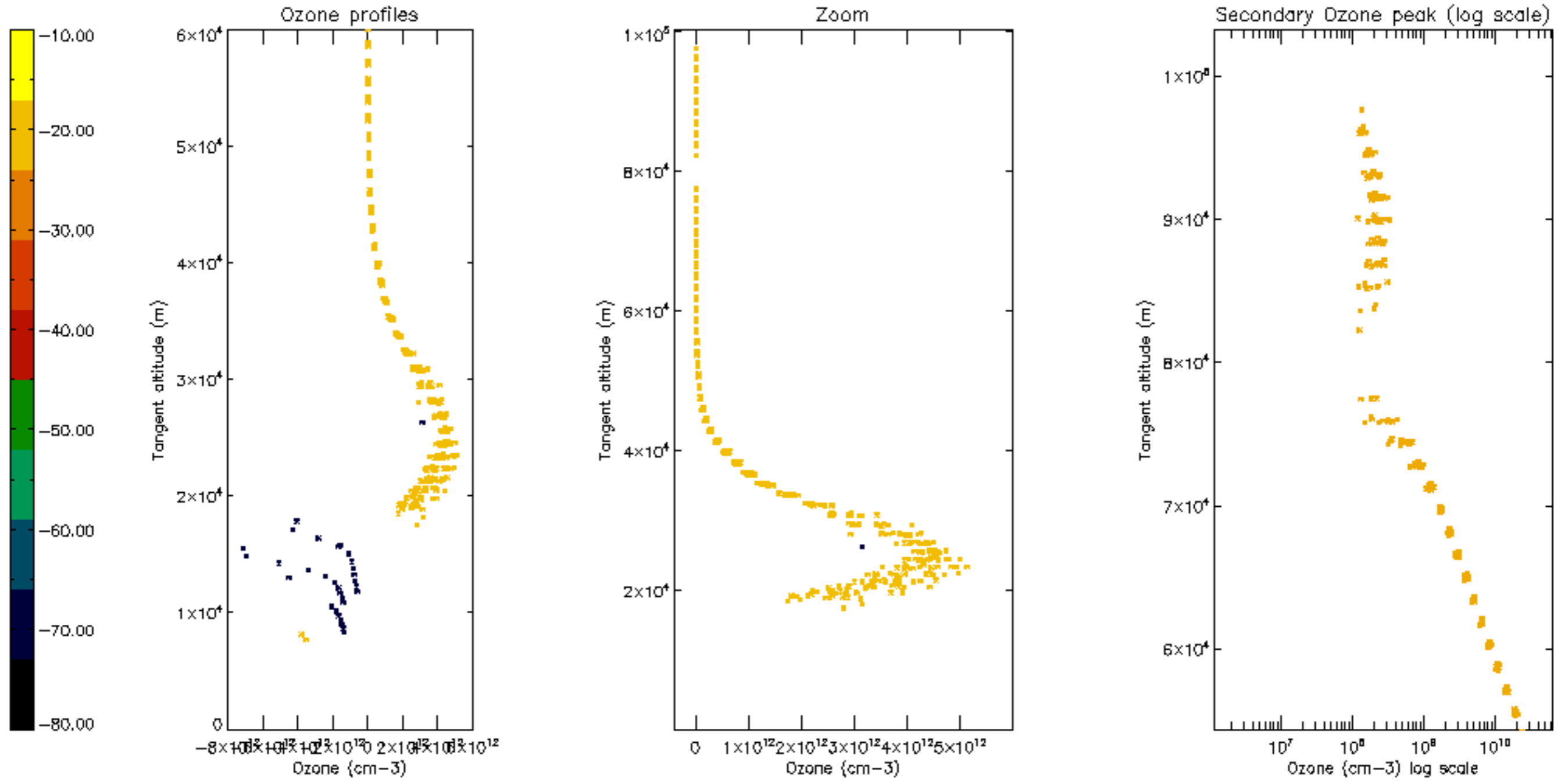


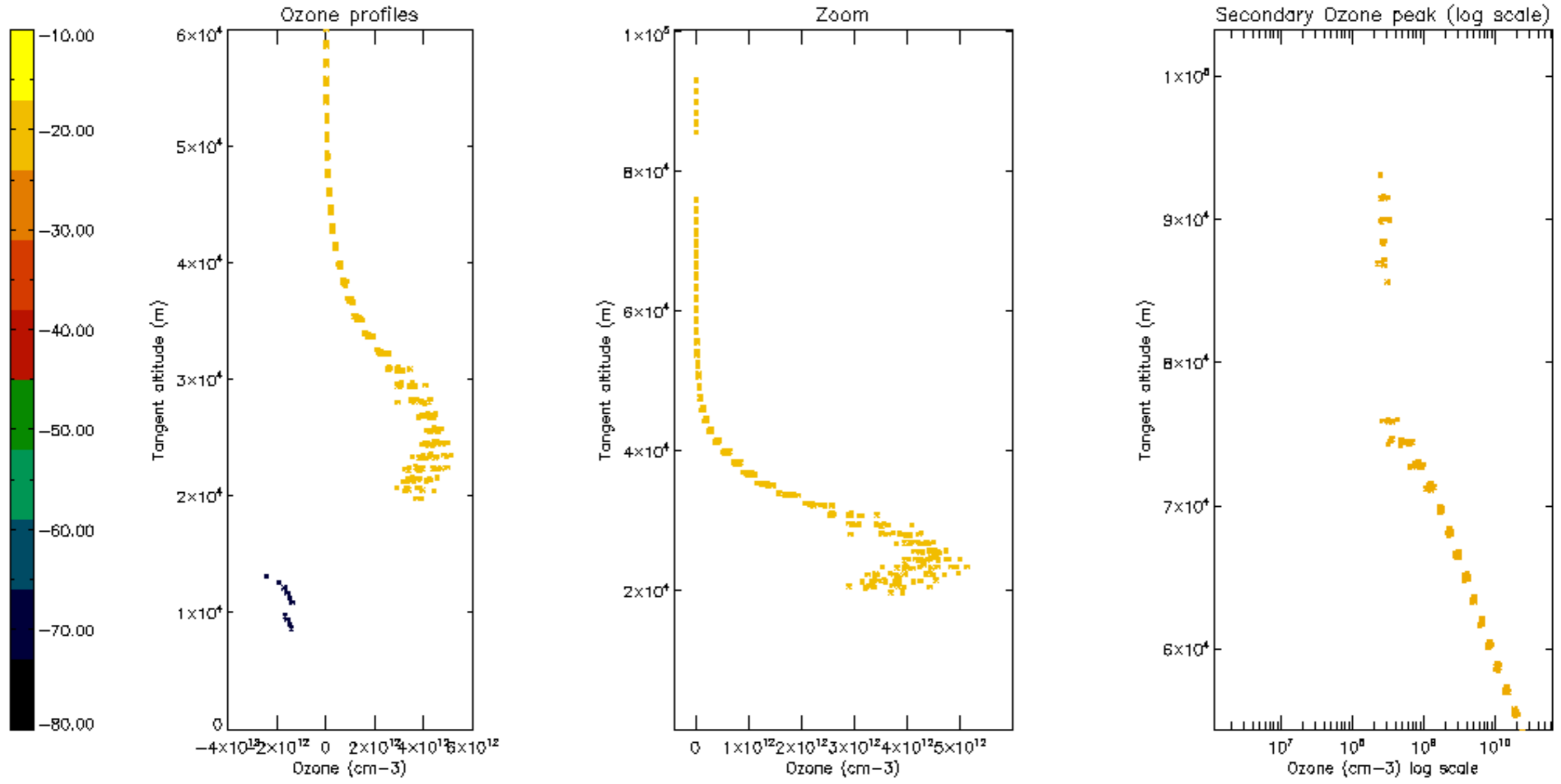
Percentage of saturation errors per profile

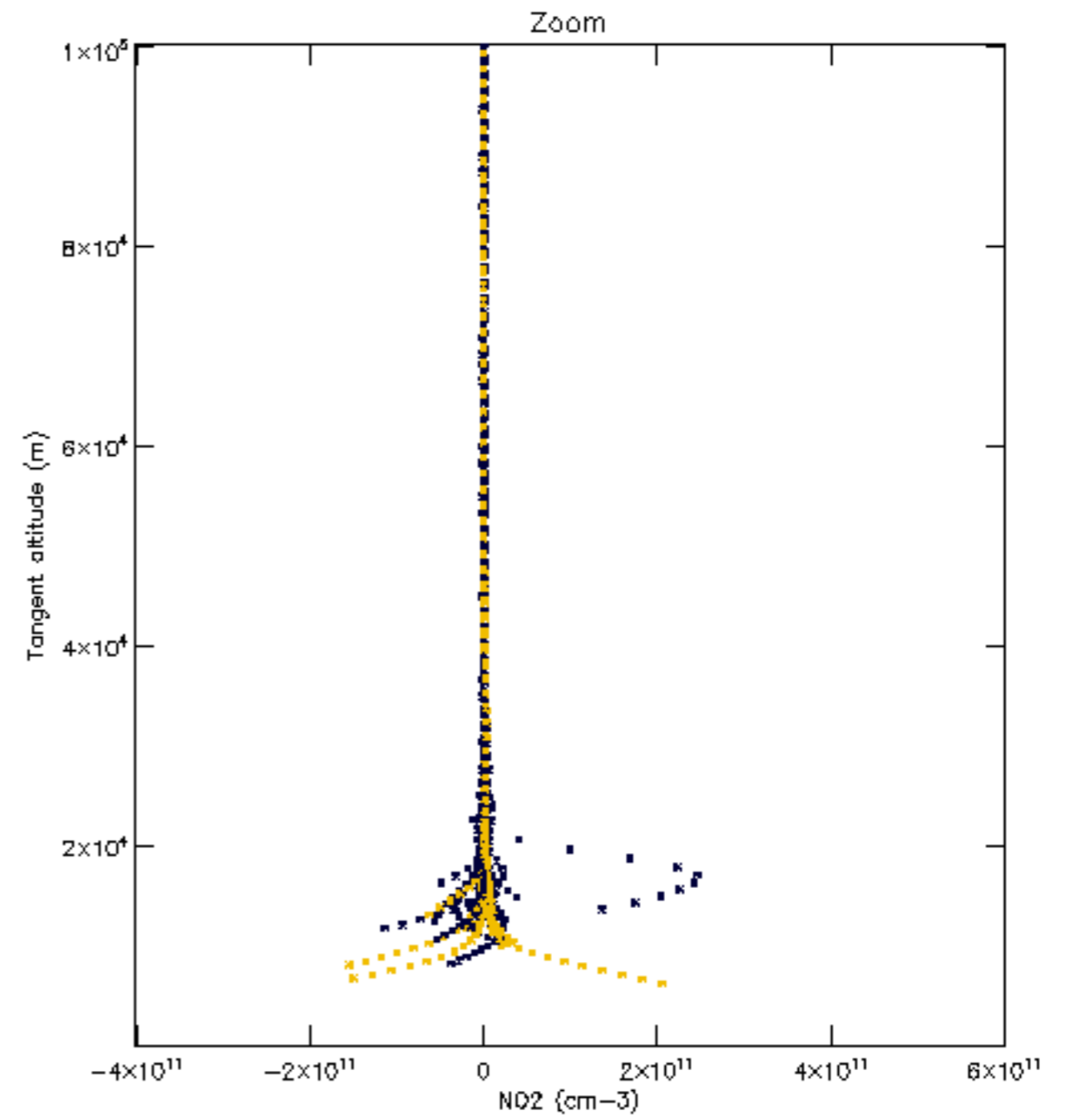
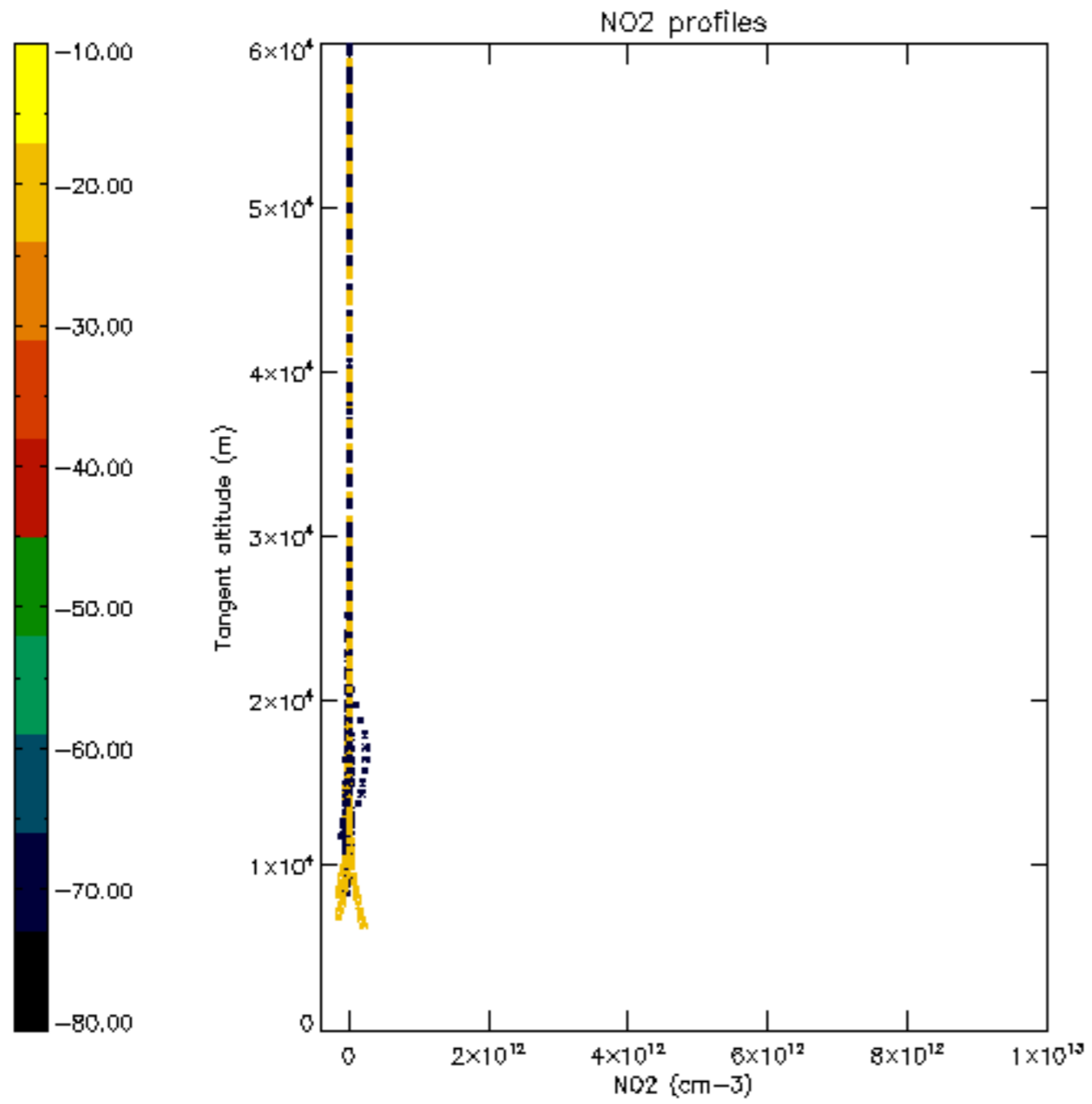


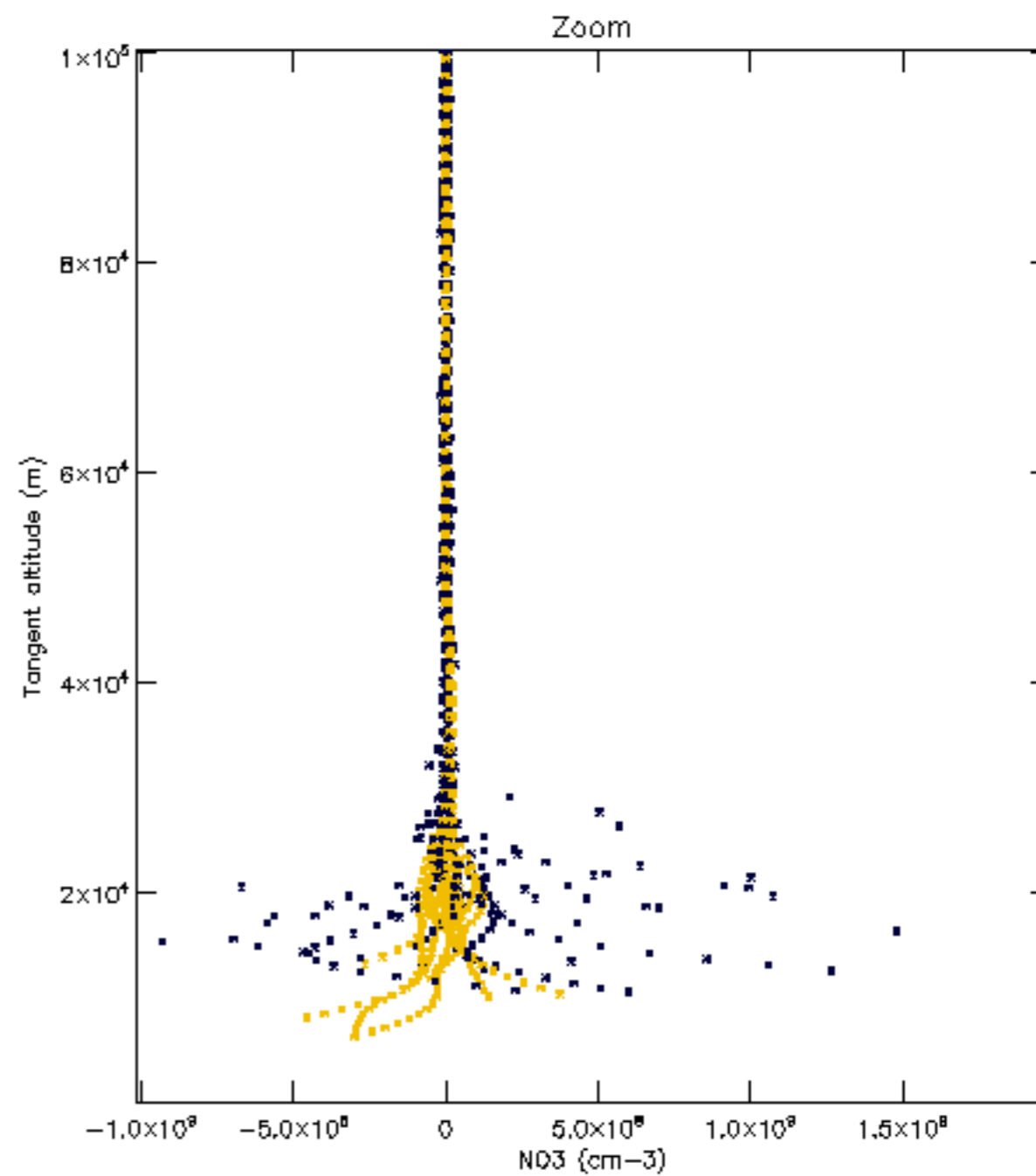
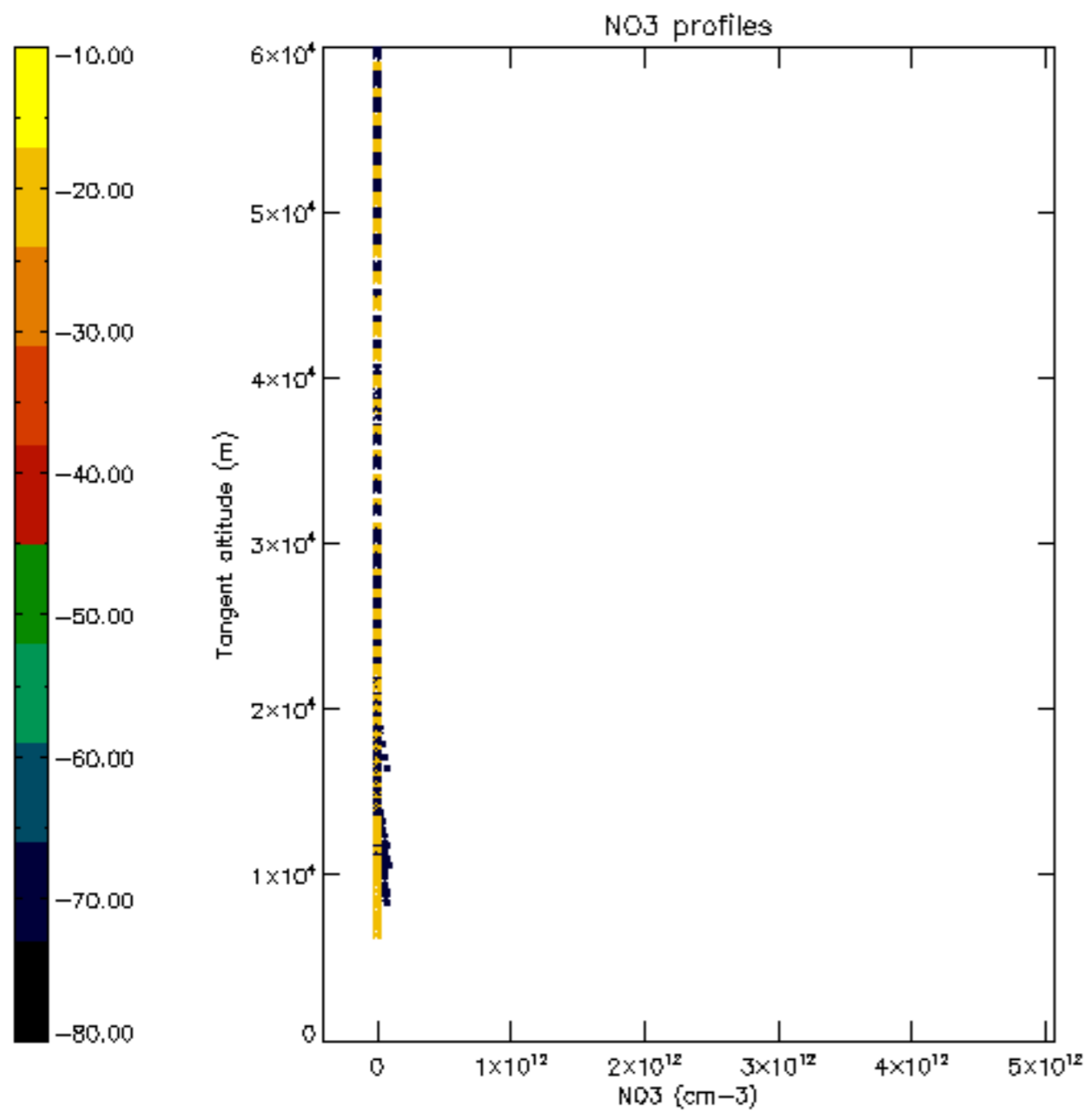


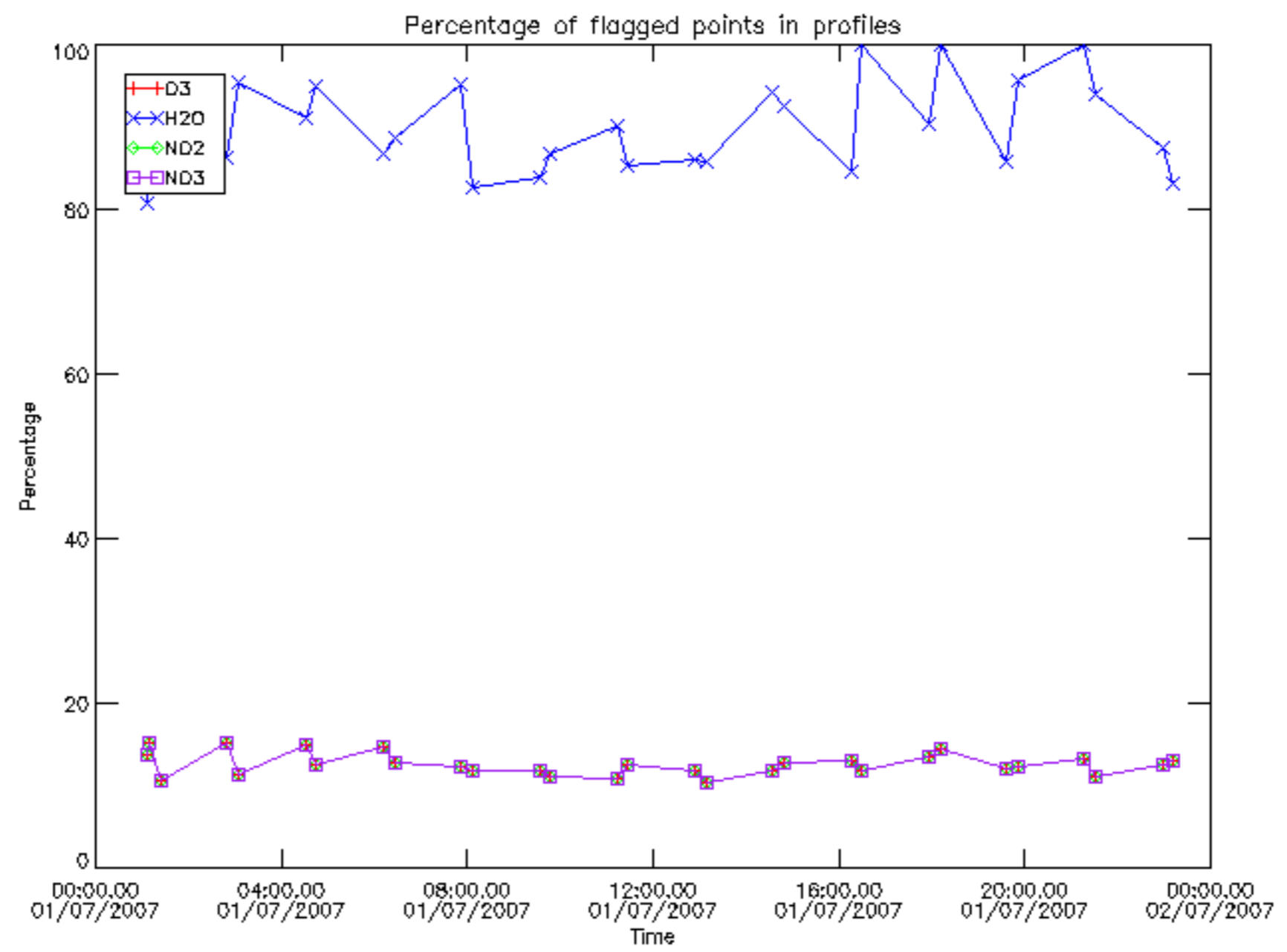




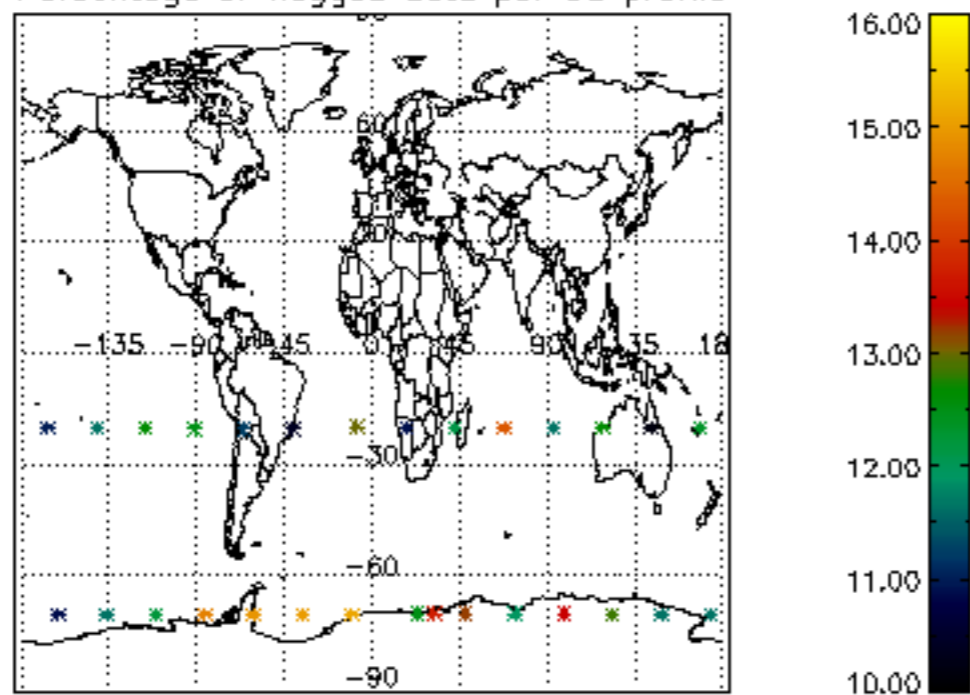




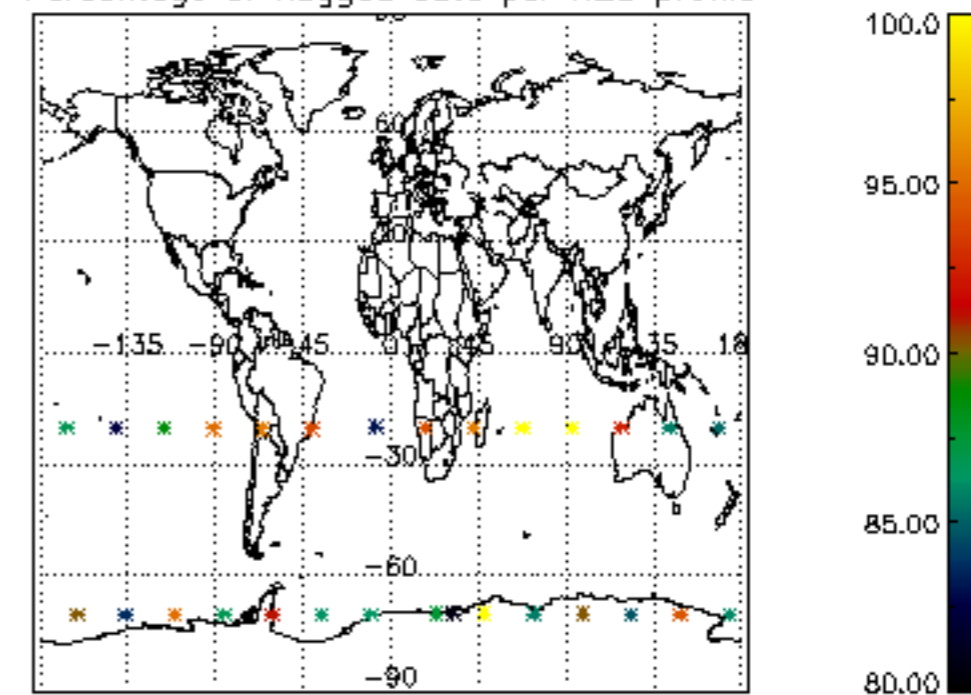




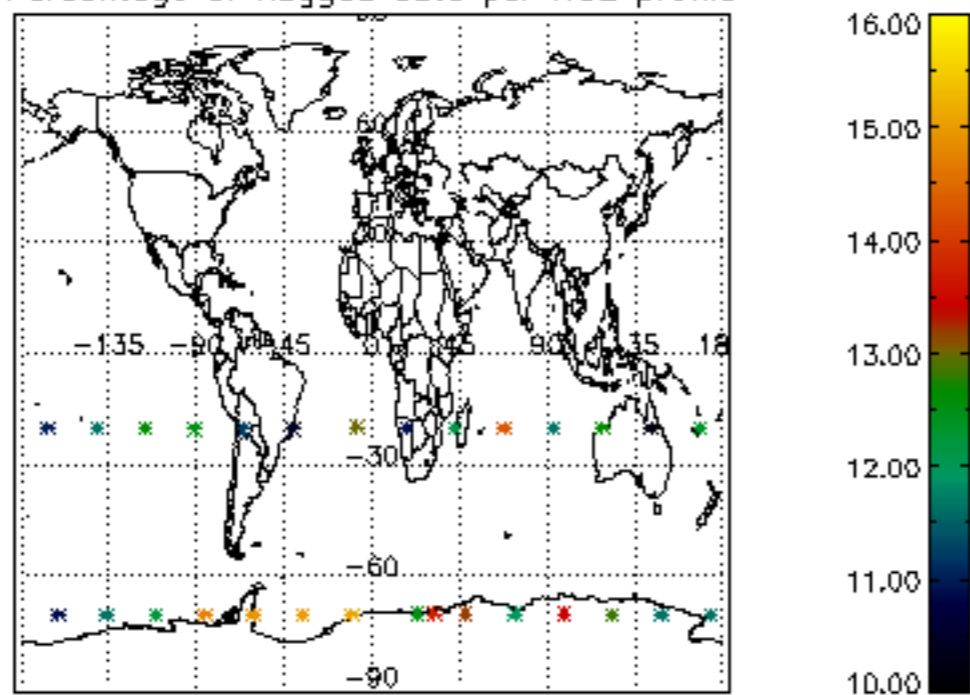
Percentage of flagged data per D3 profile



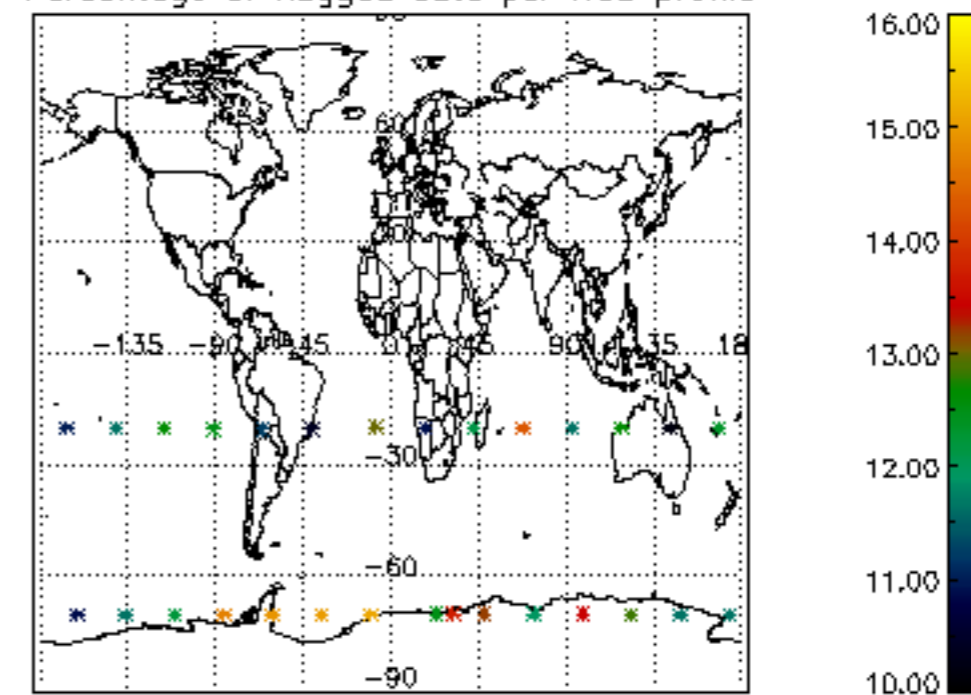
Percentage of flagged data per H2O profile

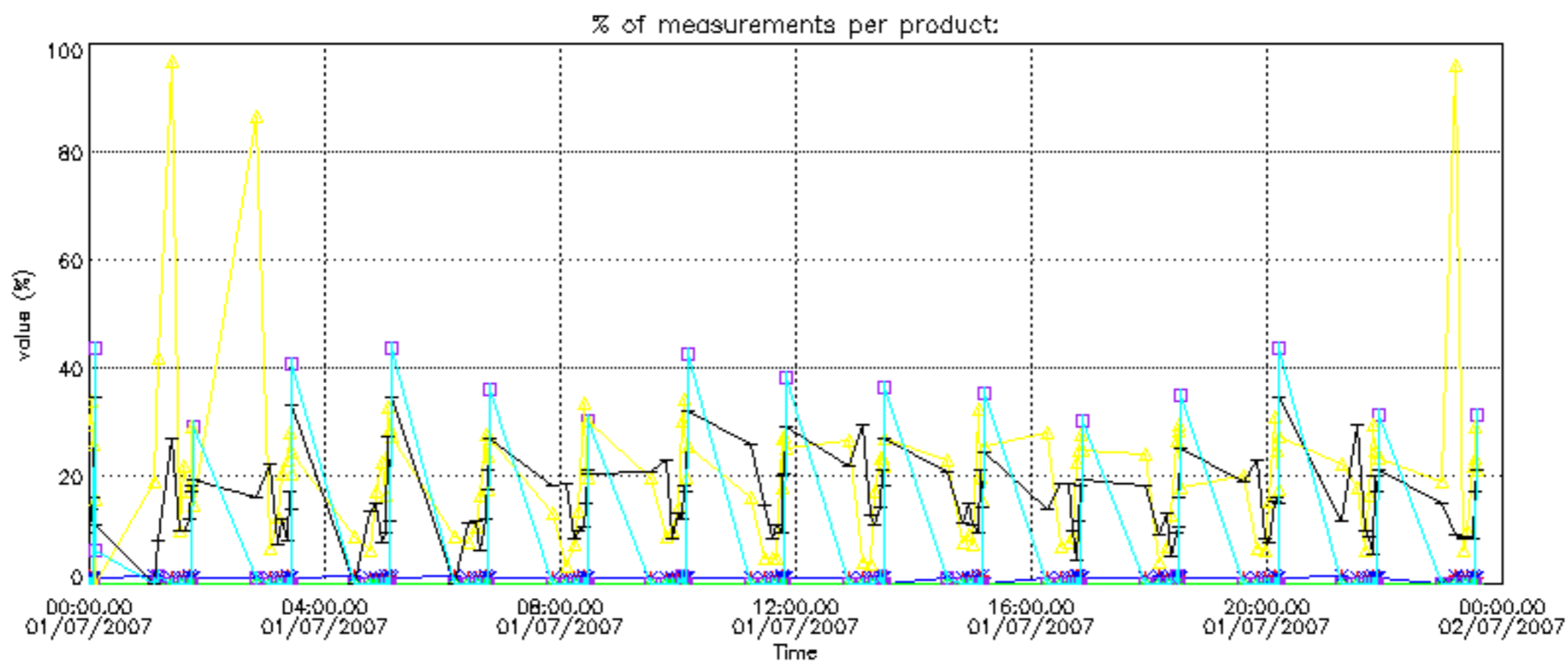


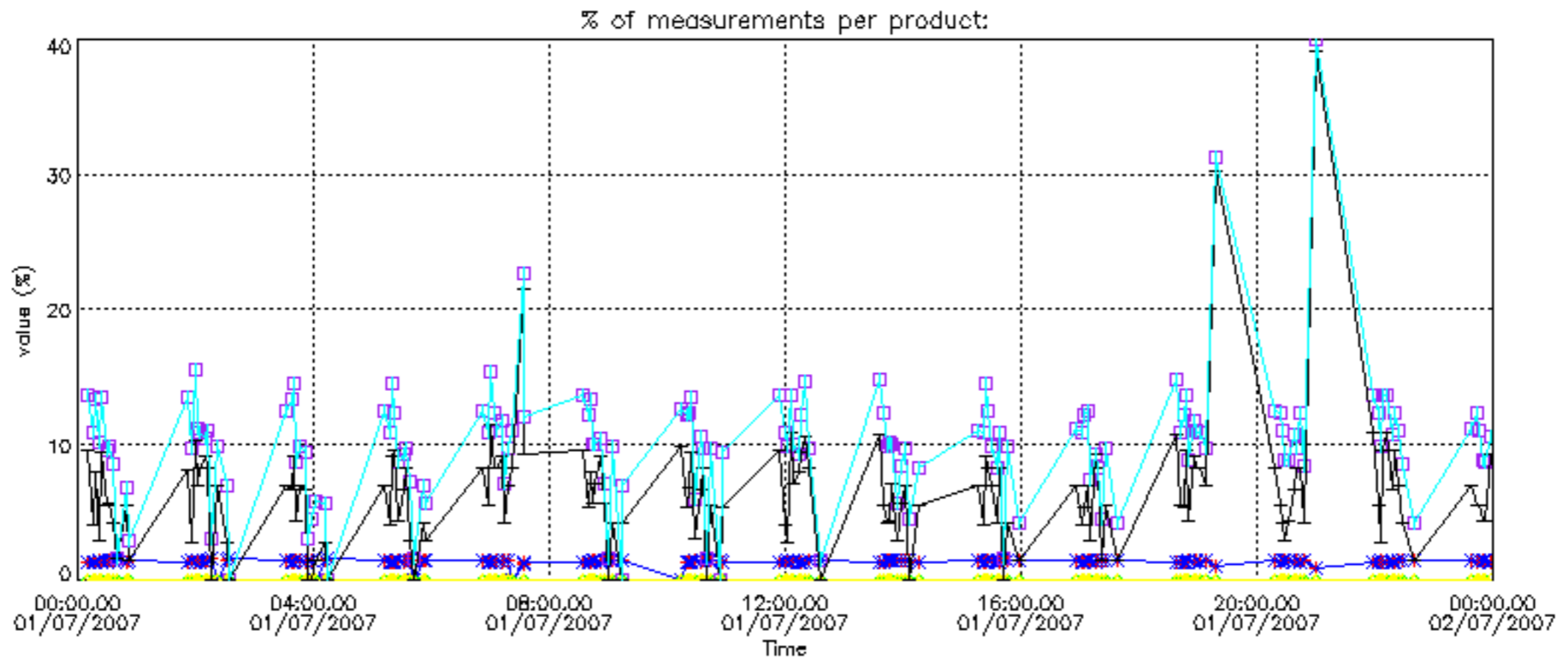
Percentage of flagged data per NO2 profile



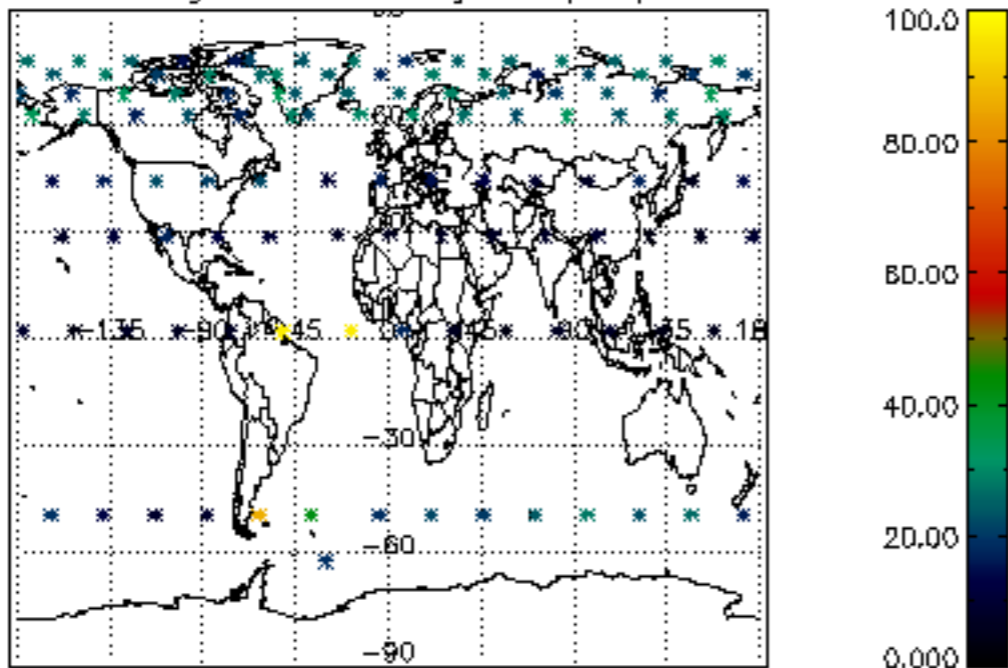
Percentage of flagged data per NO3 profile



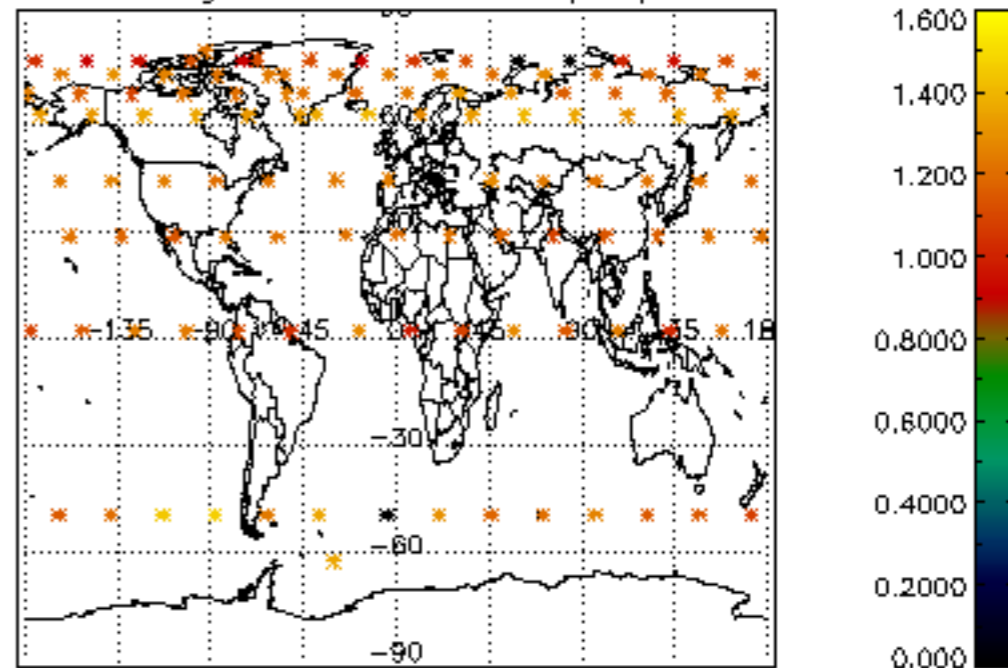




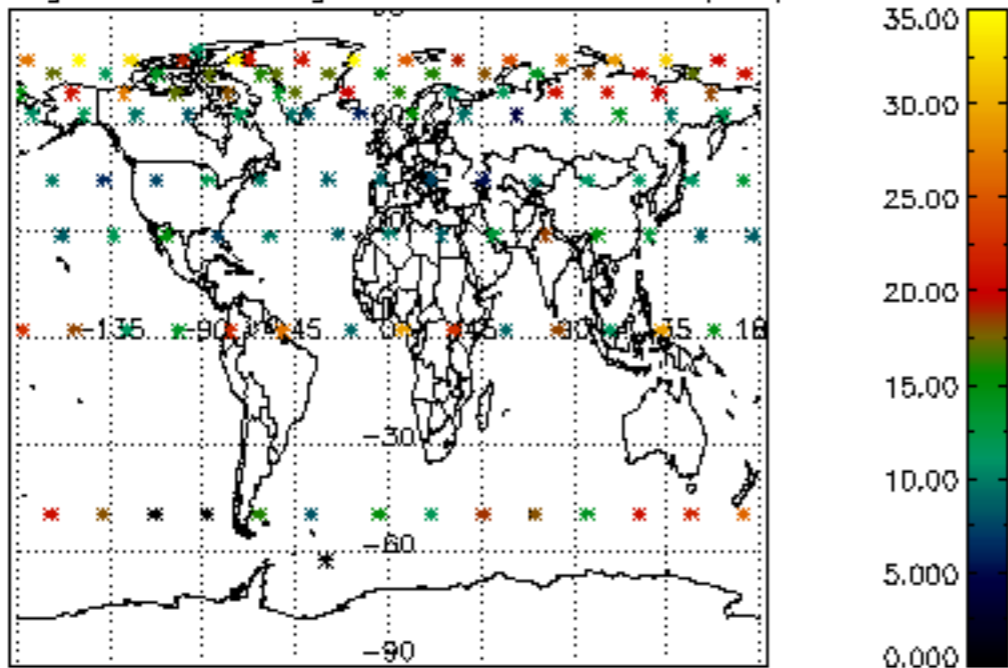
Percentage of cosmic ray hits per profile



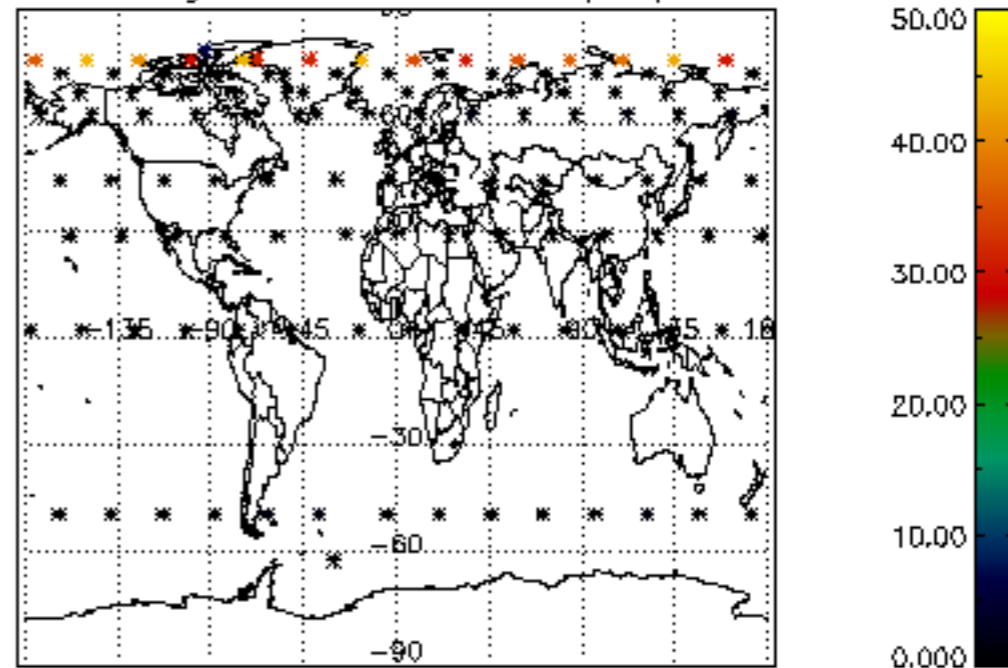
Percentage of datation errors per profile



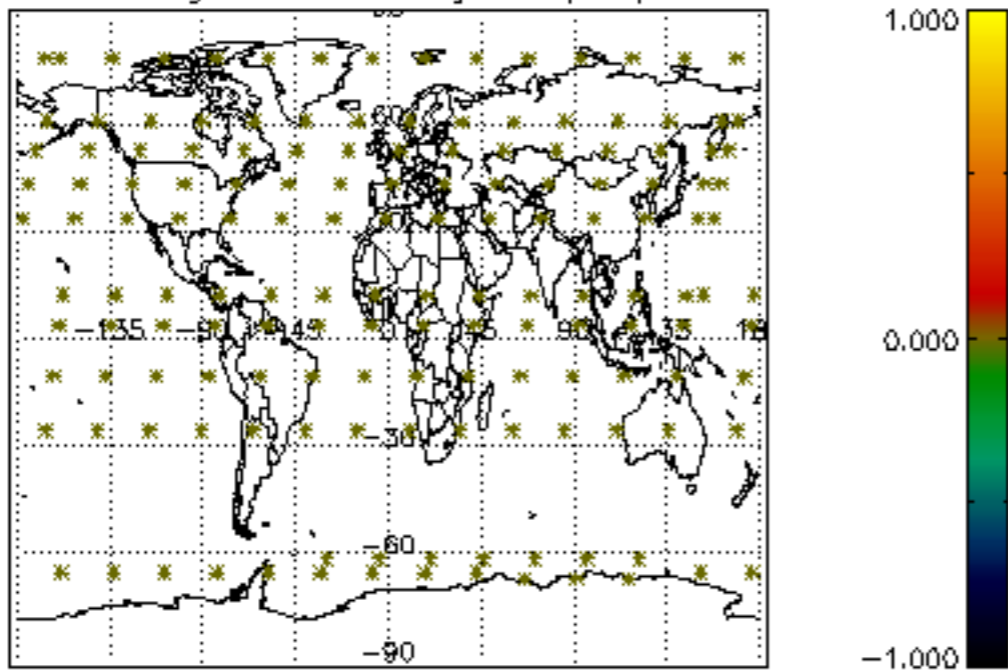
Percentage of star falling outside central band per profile



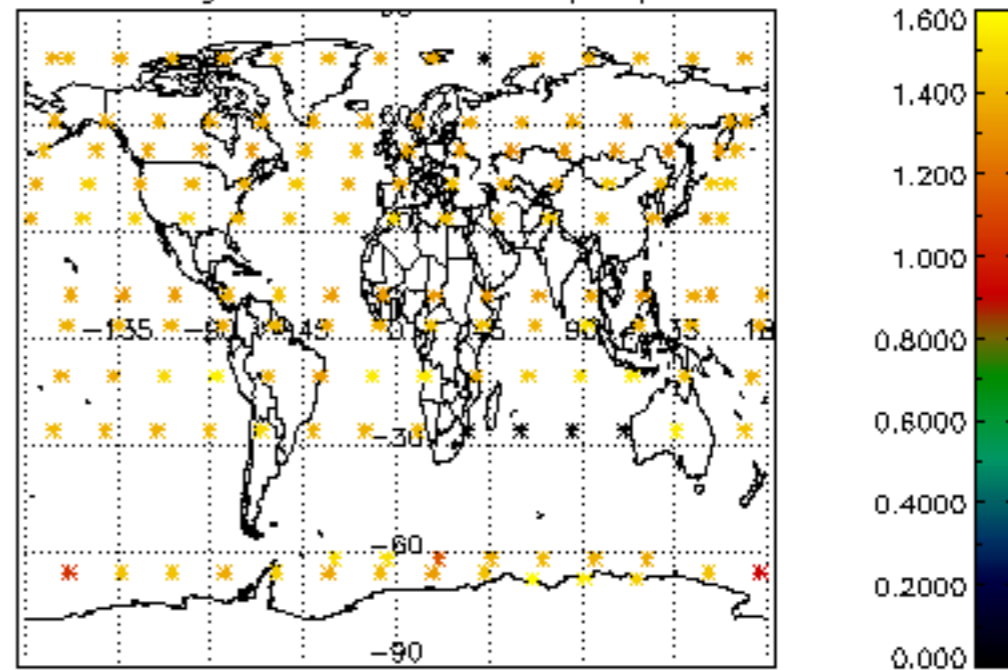
Percentage of saturation errors per profile



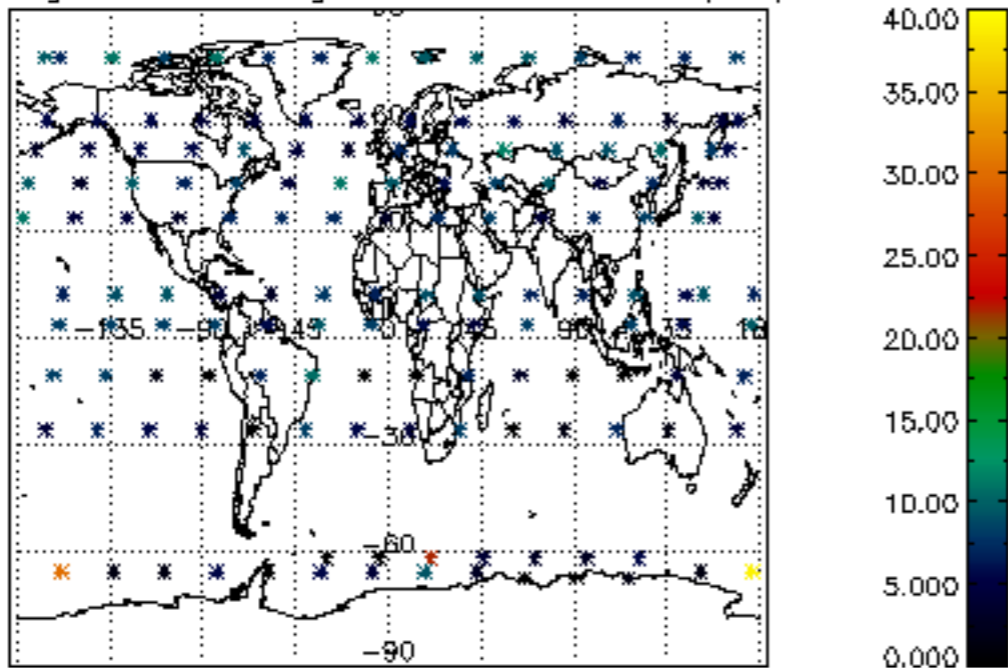
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

