

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.

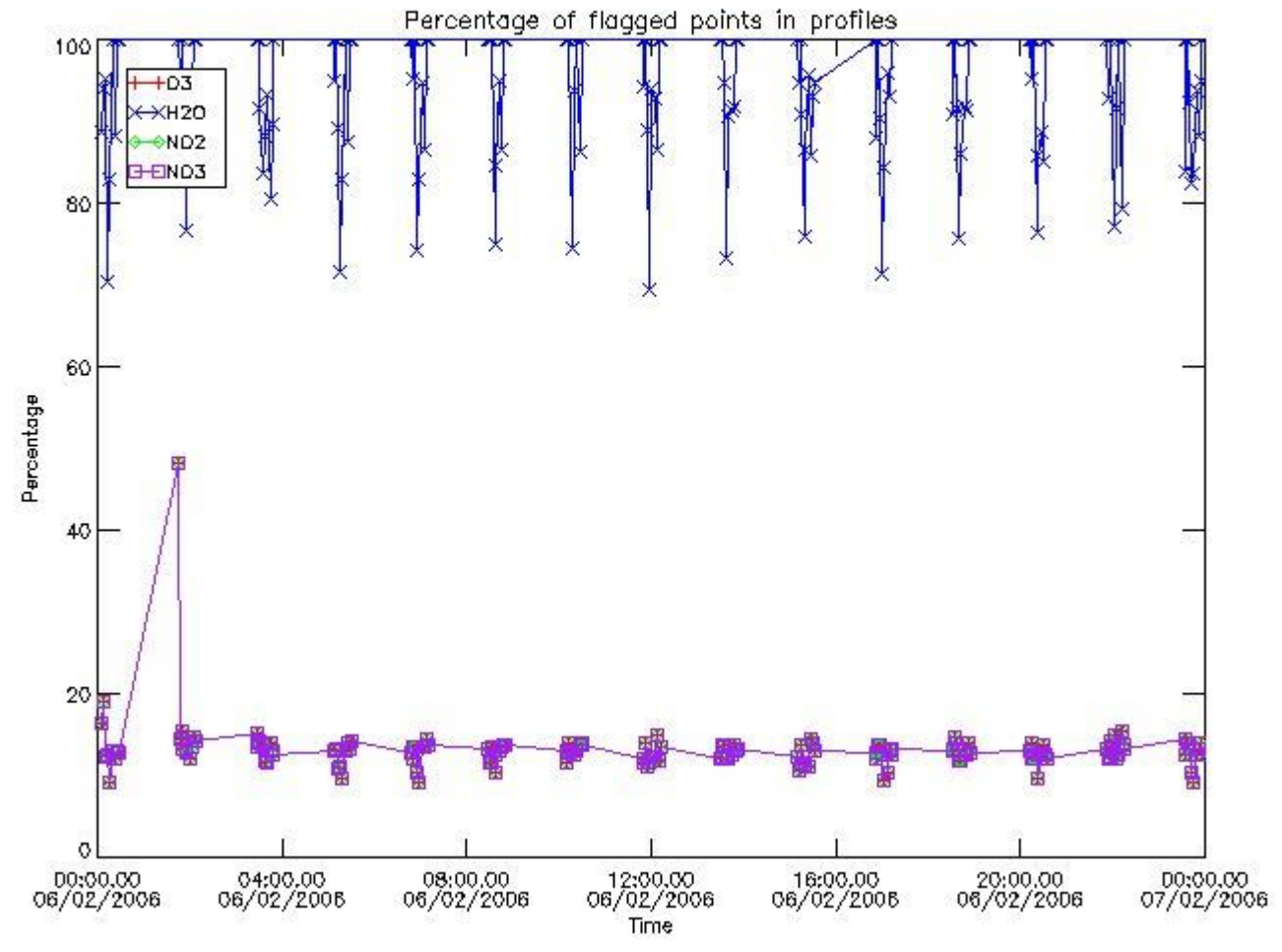
Item	Value
Time of report generation	22APR2013 15:24:38
Data source version	GOMOS/6.01
Start time of products	06-02-2006 (06FEB2006 00:00:00)
Stop time of products	07-02-2006 (07FEB2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	391
Nb of prods with errors	0

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__2PRFIN20060206_000101_000000412044_00488_20582_8201.N1	06-FEB-2006 00:01:01	Twilight	40.500	137	22Lam Sgr	2.8240	4400.0	81	20582	No
2	GOM_NL__2PRFIN20060206_000219_000000452044_00488_20582_8202.N1	06-FEB-2006 00:02:19	Twilight	44.500	116	19Del Sgr	2.7000	4100.0	89	20582	No
3	GOM_NL__2PRFIN20060206_000329_000000412044_00488_20582_8203.N1	06-FEB-2006 00:03:29	Twilight	41.000	38	20Eps Sgr	1.8360	11000.	82	20582	No
4	GOM_NL__2PRFIN20060206_000512_000000412044_00488_20582_8204.N1	06-FEB-2006 00:05:12	Dark	40.500	25	35Lam Sco	1.6200	28000.	81	20582	No
5	GOM_NL__2PRFIN20060206_000637_000000432044_00488_20582_8205.N1	06-FEB-2006 00:06:37	Dark	42.500	40	The Sco	1.8590	7100.0	85	20582	No
6	GOM_NL__2PRFIN20060206_000959_000000422044_00488_20582_8206.N1	06-FEB-2006 00:09:59	Dark	41.500	141	Bet Ara	2.8400	4600.0	83	20582	No
7	GOM_NL__2PRFIN20060206_001348_000000412044_00489_20583_8180.N1	06-FEB-2006 00:13:48	Dark	41.000	43	Alp TrA	1.9100	4250.0	82	20583	No
8	GOM_NL__2PRFIN20060206_001538_000000562044_00489_20583_8181.N1	06-FEB-2006 00:15:38	Dark	56.000	4	Alp1Cen	-0.010000	5800.0	112	20583	No
9	GOM_NL__2PRFIN20060206_002012_000000402044_00489_20583_8182.N1	06-FEB-2006 00:20:12	Dark	39.500	12	Alp1Cru	0.77500	30000.	79	20583	No
10	GOM_NL__2PRFIN20060206_002322_000000432044_00489_20583_8183.N1	06-FEB-2006 00:23:22	Dark	42.500	29	Bet Car	1.6720	10200.	85	20583	No
11	GOM_NL__2PRFIN20060206_002549_000000402044_00489_20583_8184.N1	06-FEB-2006 00:25:49	Dark	39.500	71	lot Car	2.2460	7700.0	79	20583	No
12	GOM_NL__2PRFIN20060206_002732_000000402044_00489_20583_8185.N1	06-FEB-2006 00:27:32	Dark	40.000	46	Del Vel	1.9540	10600.	80	20583	No
13	GOM_NL__2PRFIN20060206_003000_000000402044_00489_20583_8186.N1	06-FEB-2006 00:30:00	Straylight	40.000	34	Gam2Vel	1.7930	23000.	80	20583	No
14	GOM_NL__2PRFIN20060206_003205_000000402044_00489_20583_8187.N1	06-FEB-2006 00:32:05	Straylight	39.500	70	Zet Pup	2.2460	39000.	79	20583	No
15	GOM_NL__2PRFIN20060206_003323_000000402044_00489_20583_8188.N1	06-FEB-2006 00:33:23	Straylight	39.500	117	Pi Pup	2.7060	3800.0	79	20583	No
16	GOM_NL__2PRFIN20060206_003528_000000412044_00489_20583_8189.N1	06-FEB-2006 00:35:28	Straylight	40.500	88	31Eta CMa	2.4480	20000.	81	20583	No
17	GOM_NL__2PRFIN20060206_003712_000000372044_00489_20583_8190.N1	06-FEB-2006 00:37:12	Straylight	36.500	179	24Omi2CMa	3.0320	24000.	73	20583	No
18	GOM_NL__2PRFIN20060206_004459_000000442044_00489_20583_8191.N1	06-FEB-2006 00:44:59	Tw_and_stray	43.500	8	10Alp CMi	0.40000	6500.0	87	20583	No
19	GOM_NL__2PRFIN20060206_004836_000000382044_00489_20583_8192.N1	06-FEB-2006 00:48:36	Bright	37.500	44	24Gam Gem	1.9280	11000.	75	20583	No
20	GOM_NL__2PRFIN20060206_005030_000000392044_00489_20583_8193.N1	06-FEB-2006 00:50:30	Bright	39.000	151	13Mu Gem	2.8900	3000.0	78	20583	No
21	GOM_NL__2PRFIN20060206_005234_000000362044_00489_20583_8194.N1	06-FEB-2006 00:52:34	Bright	36.000	24	66Alp Gem	1.5800	10200.	72	20583	No
22	GOM_NL__2PRFIN20060206_005451_000000352044_00489_20583_8195.N1	06-FEB-2006 00:54:51	Bright	34.500	107	37The Aur	2.6490	11000.	69	20583	No
23	GOM_NL__2PRFIN20060206_005653_000000352044_00489_20583_8196.N1	06-FEB-2006 00:56:53	Bright	35.000	42	34Bet Aur	1.9000	10200.	70	20583	No
24	GOM_NL__2PRFIN20060206_010852_000000332044_00489_20583_8197.N1	06-FEB-2006 01:08:52	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	20583	No
25	GOM_NL__2PRFIN20060206_012115_000000352044_00489_20583_8198.N1	06-FEB-2006 01:21:15	Bright	34.500	144	18Del Cyg	2.8600	11000.	69	20583	No
26	GOM_NL__2PRFIN20060206_012338_000000342044_00489_20583_8199.N1	06-FEB-2006 01:23:38	Bright	33.500	5	3Alp Lyr	0.033000	11000.	67	20583	No
27	GOM_NL__2PRFIN20060206_013020_000000322044_00489_20583_8200.N1	06-FEB-2006 01:30:20	Bright	32.000	168	17Zet Aql	2.9860	11000.	64	20583	No
28	GOM_NL__2PRFIN20060206_014137_000000422044_00489_20583_8201.N1	06-FEB-2006 01:41:37	Twilight	42.000	137	22Lam Sgr	2.8240	4400.0	84	20583	No
29	GOM_NL__2PRFIN20060206_014406_000000422044_00489_20583_8202.N1	06-FEB-2006 01:44:06	Twilight	41.500	38	20Eps Sgr	1.8360	11000.	83	20583	No
30	GOM_NL__2PRFIN20060206_014548_000000432044_00489_20583_8203.N1	06-FEB-2006 01:45:48	Dark	43.000	25	35Lam Sco	1.6200	28000.	86	20583	No
31	GOM_NL__2PRFIN20060206_014713_000000422044_00489_20583_8204.N1	06-FEB-2006 01:47:13	Dark	42.000	40	The Sco	1.8590	7100.0	84	20583	No
32	GOM_NL__2PRFIN20060206_014904_000000372044_00489_20583_8205.N1	06-FEB-2006 01:49:04	Dark	36.500	147	Alp Ara	2.8770	26000.	73	20583	No
33	GOM_NL__2PRFIN20060206_015036_000000392044_00489_20583_8206.N1	06-FEB-2006 01:50:36	Dark	38.500	141	Bet Ara	2.8400	4600.0	77	20583	No
34	GOM_NL__2PRFIN20060206_015424_000000392044_00490_20584_8180.N1	06-FEB-2006 01:54:24	Dark	39.000	43	Alp TrA	1.9100	4250.0	78	20584	No
35	GOM_NL__2PRFIN20060206_015615_000000442044_00490_20584_8181.N1	06-FEB-2006 01:56:15	Dark	43.500	4	Alp1Cen	-0.010000	5800.0	87	20584	No
36	GOM_NL__2PRFIN20060206_020049_000000432044_00490_20584_8182.N1	06-FEB-2006 02:00:49	Dark	42.500	12	Alp1Cru	0.77500	30000.	85	20584	No
37	GOM_NL__2PRFIN20060206_020358_000000382044_00490_20584_8183.N1	06-FEB-2006 02:03:58	Dark	37.500	29	Bet Car	1.6720	10200.	75	20584	No
38	GOM_NL__2PRFIN20060206_020626_000000382044_00490_20584_8184.N1	06-FEB-2006 02:06:26	Dark	38.000	71	lot Car	2.2460	7700.0	76	20584	No
39	GOM_NL__2PRFIN20060206_020808_000000362044_00490_20584_8185.N1	06-FEB-2006 02:08:08	Dark	36.000	46	Del Vel	1.9540	10600.	72	20584	No
40	GOM_NL__2PRFIN20060206_021036_000000392044_00490_20584_8186.N1	06-FEB-2006 02:10:36	Straylight	38.500	34	Gam2Vel	1.7930	23000.	77	20584	No
41	GOM_NL__2PRFIN20060206_021241_000000402044_00490_20584_8187.N1	06-FEB-2006 02:12:41	Straylight	40.000	70	Zet Pup	2.2460	39000.	80	20584	No
42	GOM_NL__2PRFIN20060206_021359_000000402044_00490_20584_8188.N1	06-FEB-2006 02:13:59	Straylight	39.500	117	Pi Pup	2.7060	3800.0	79	20584	No

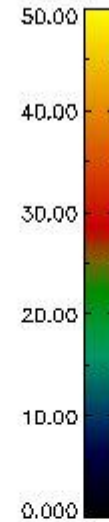
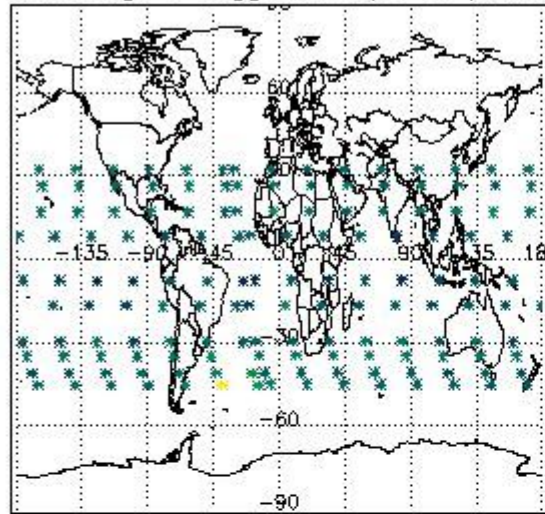
the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

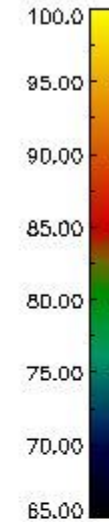
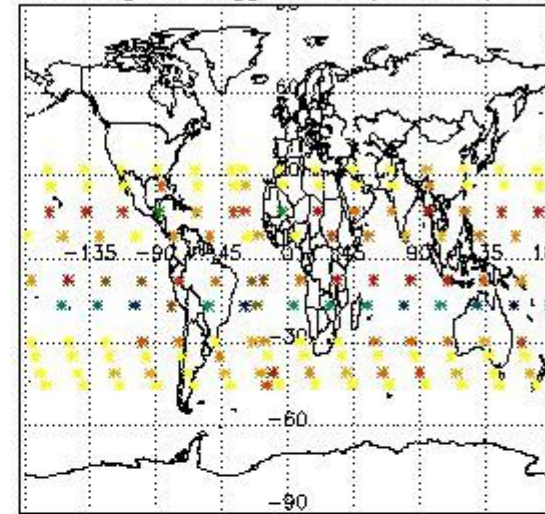


3.2 Plot quality information per product (world map)

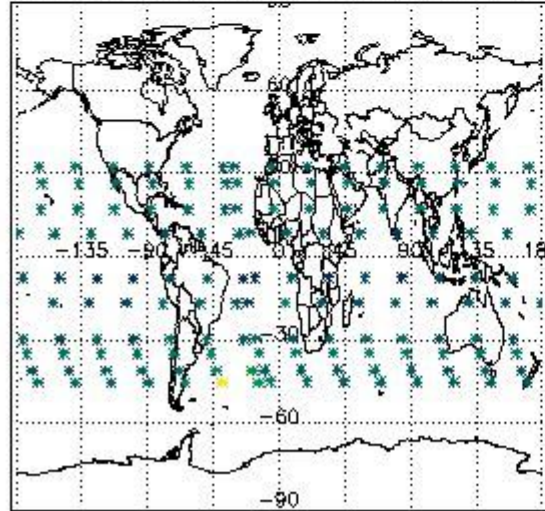
Percentage of flagged data per O3 profile



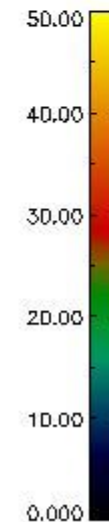
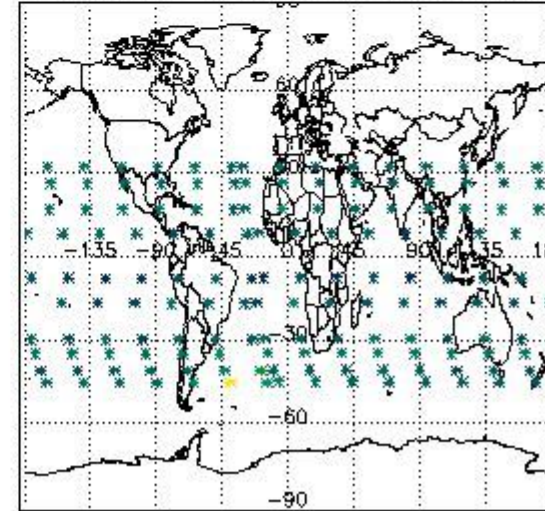
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

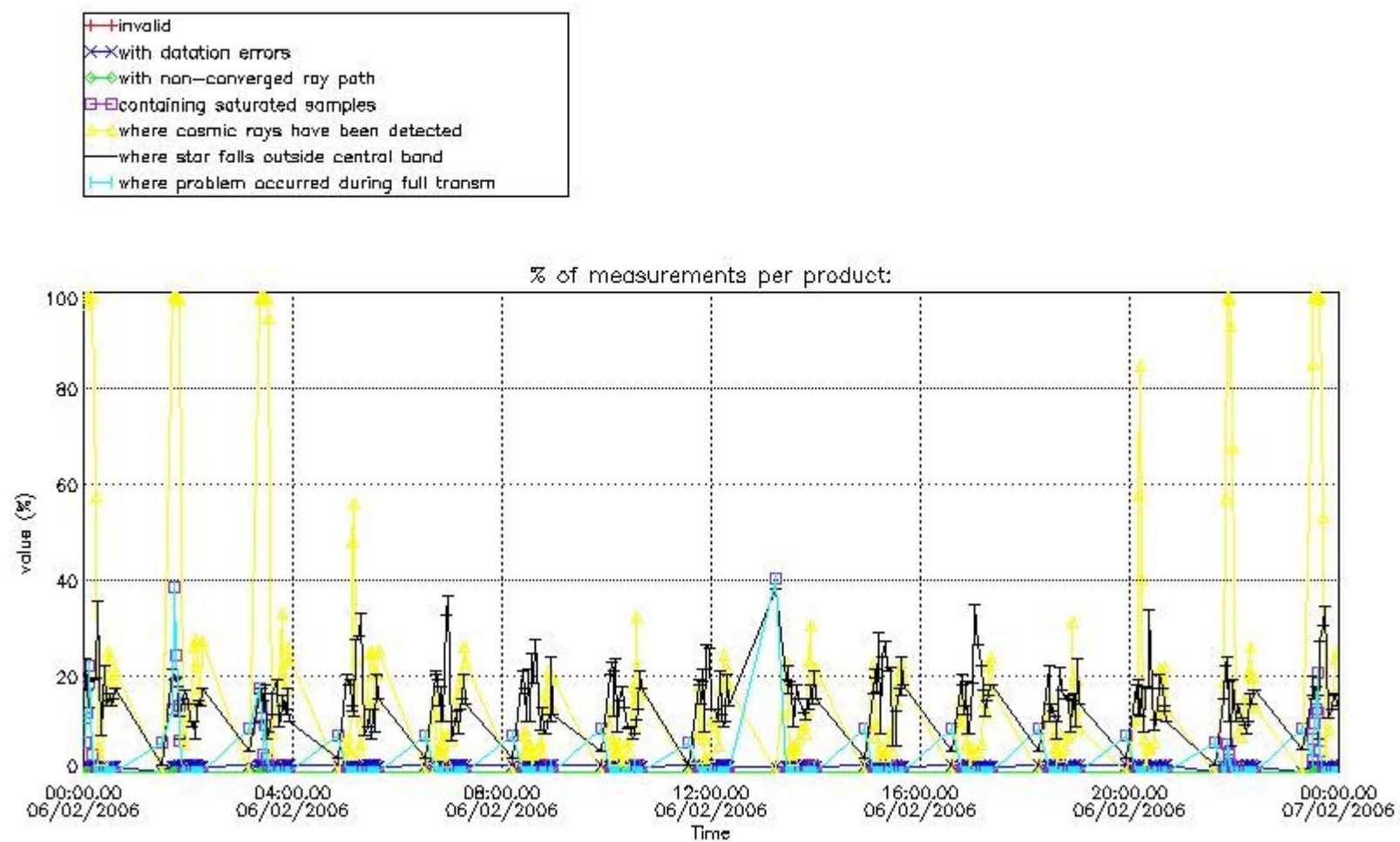


4. Level 1 quality information per product

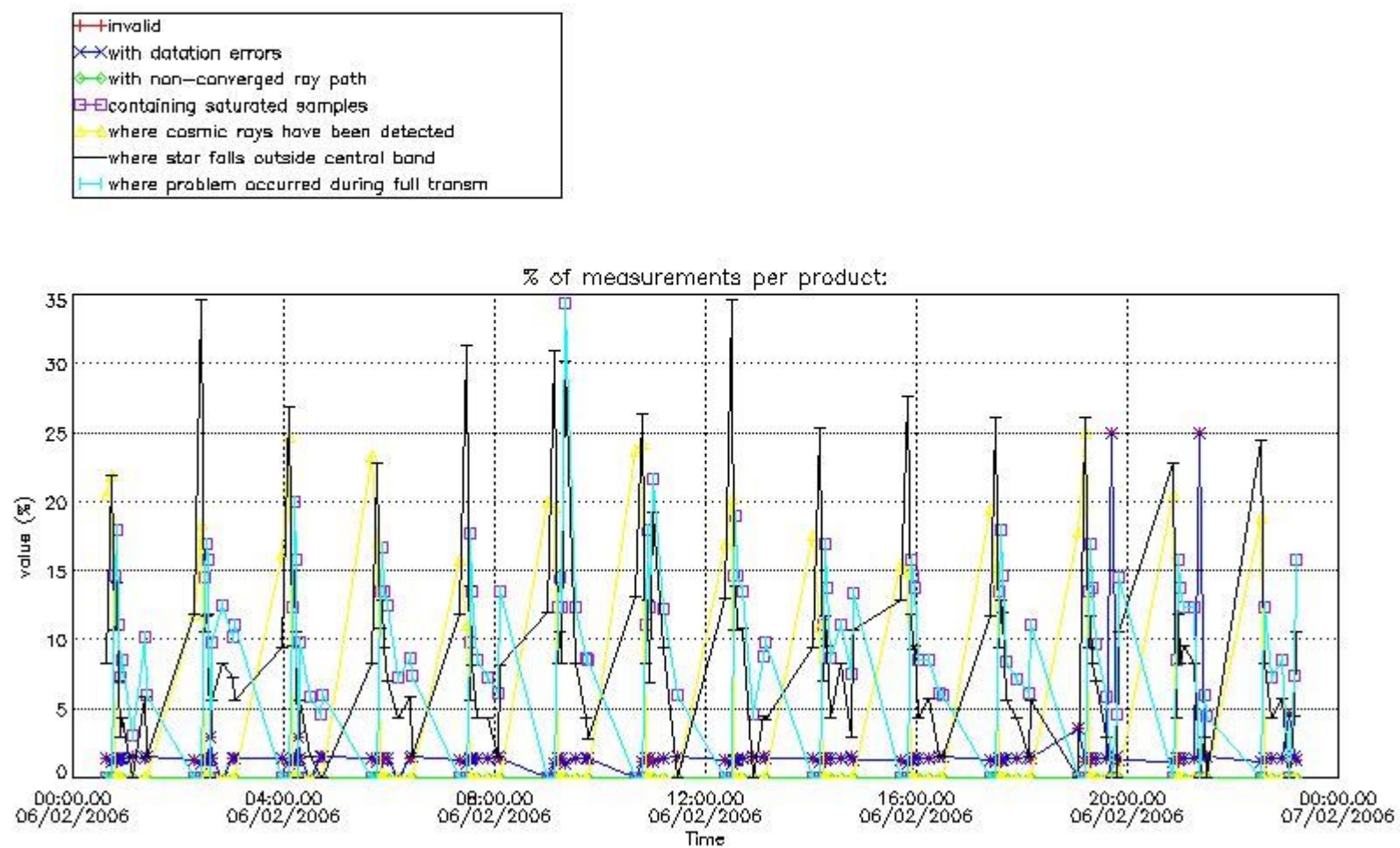
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes

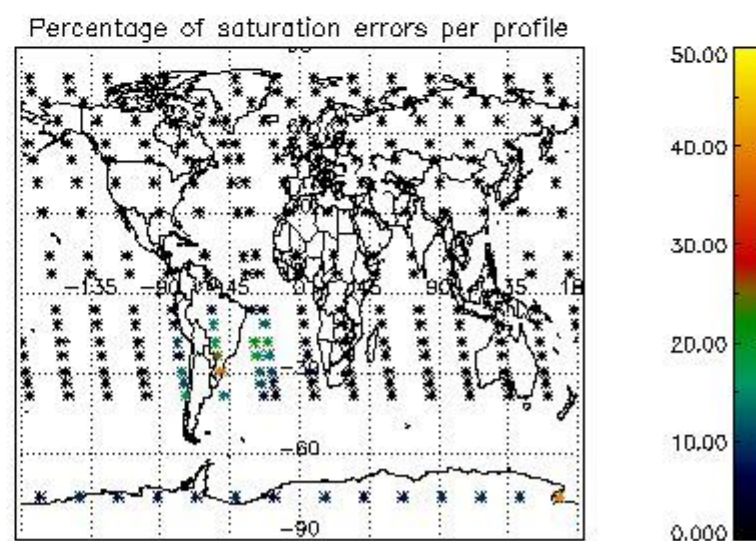
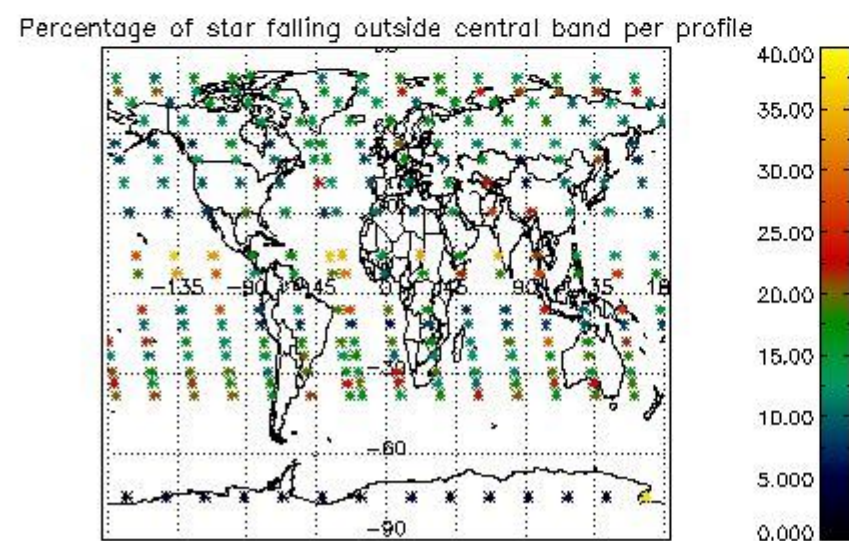
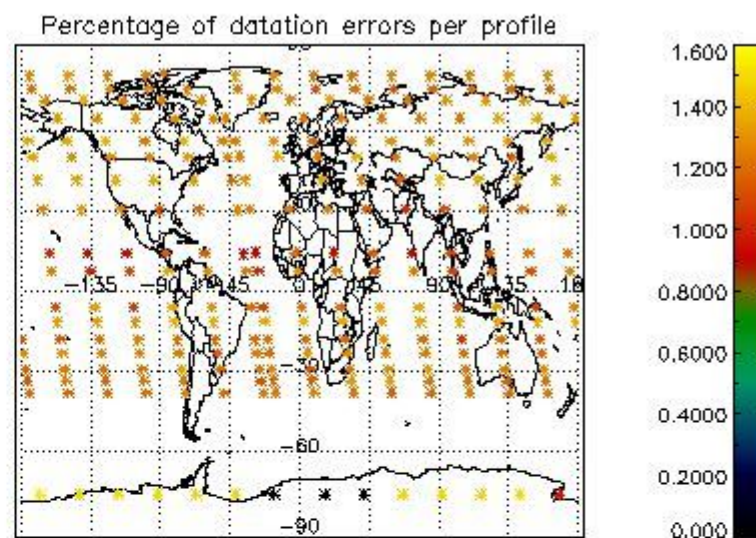
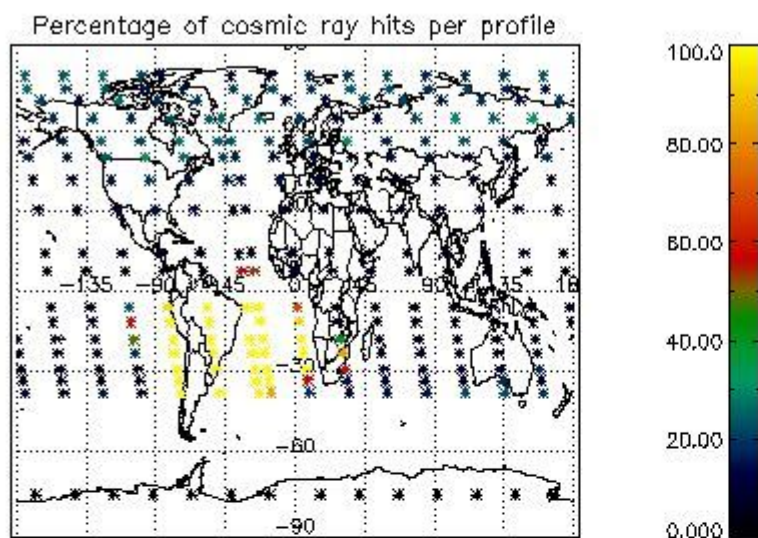


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

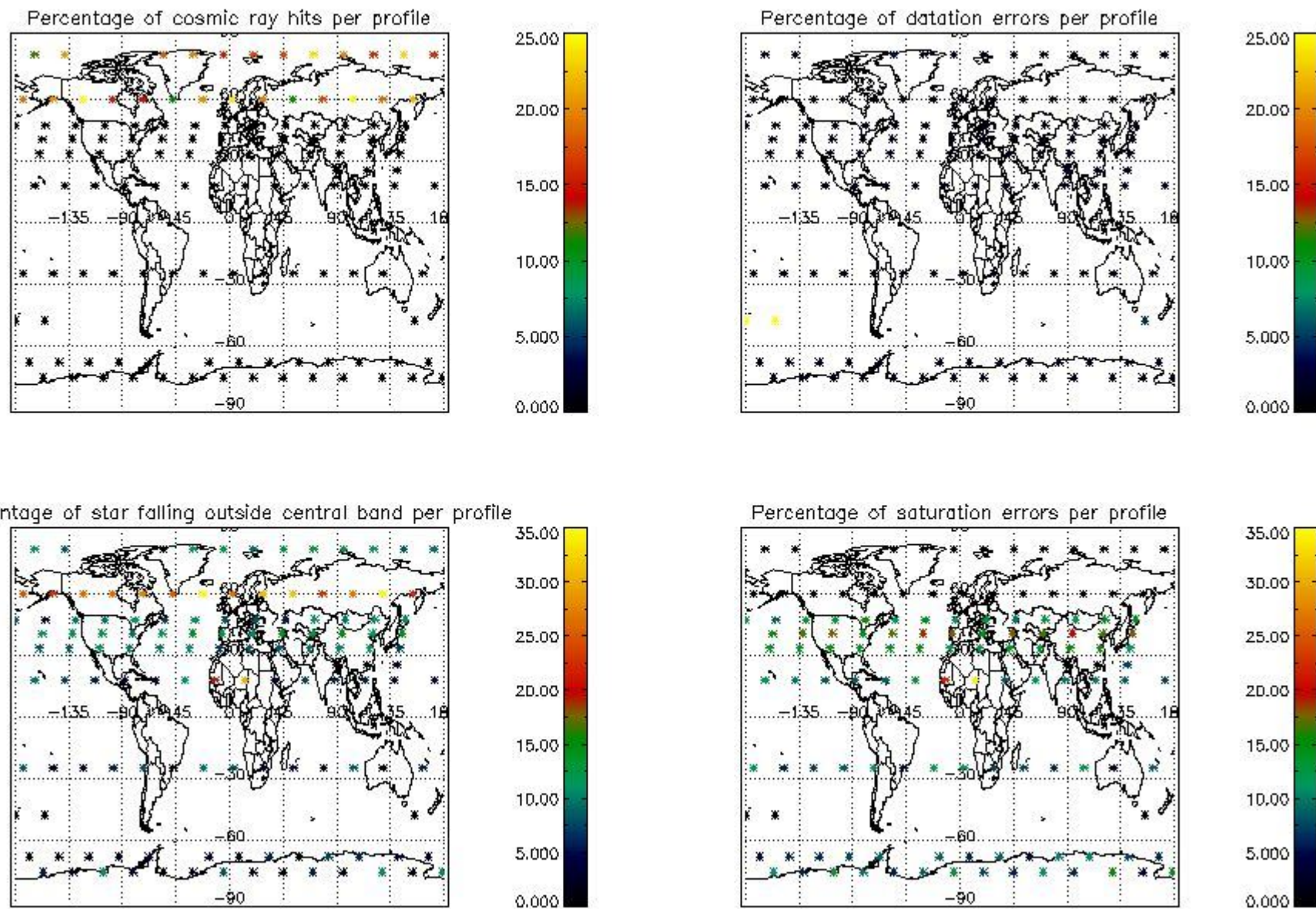


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

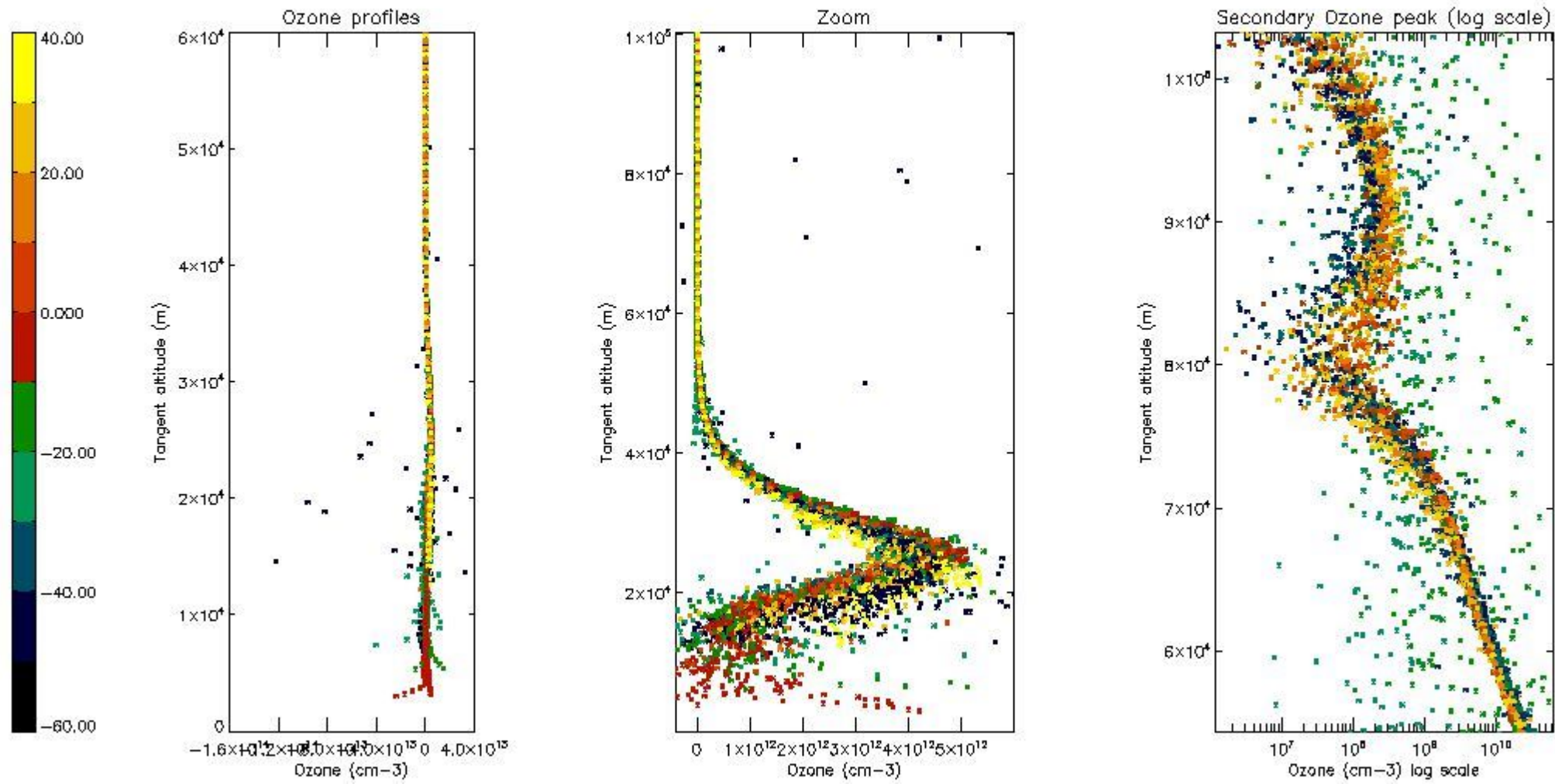
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	41
STD < 20	22

STD < 10	18
STD < 5	12

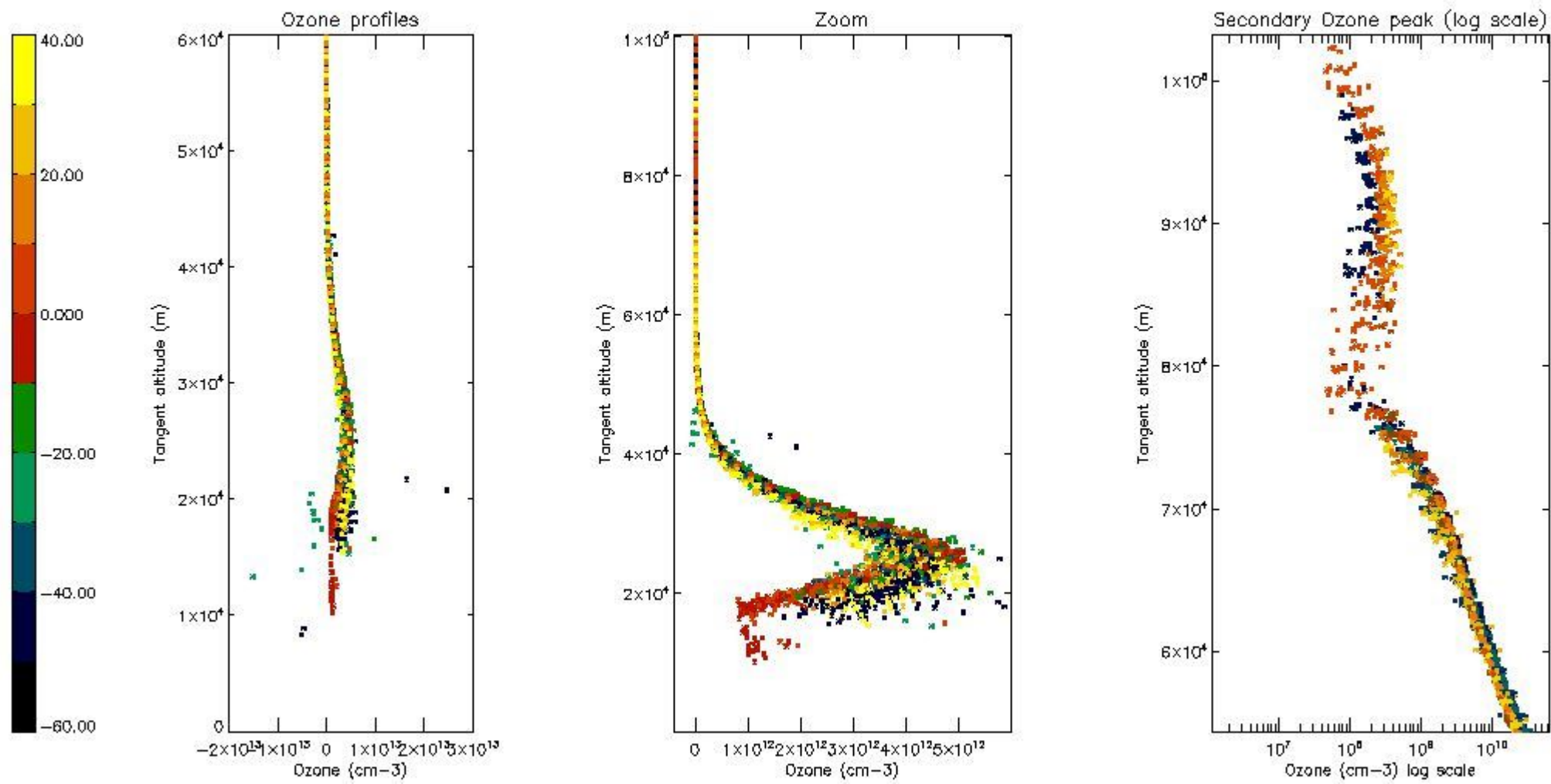
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



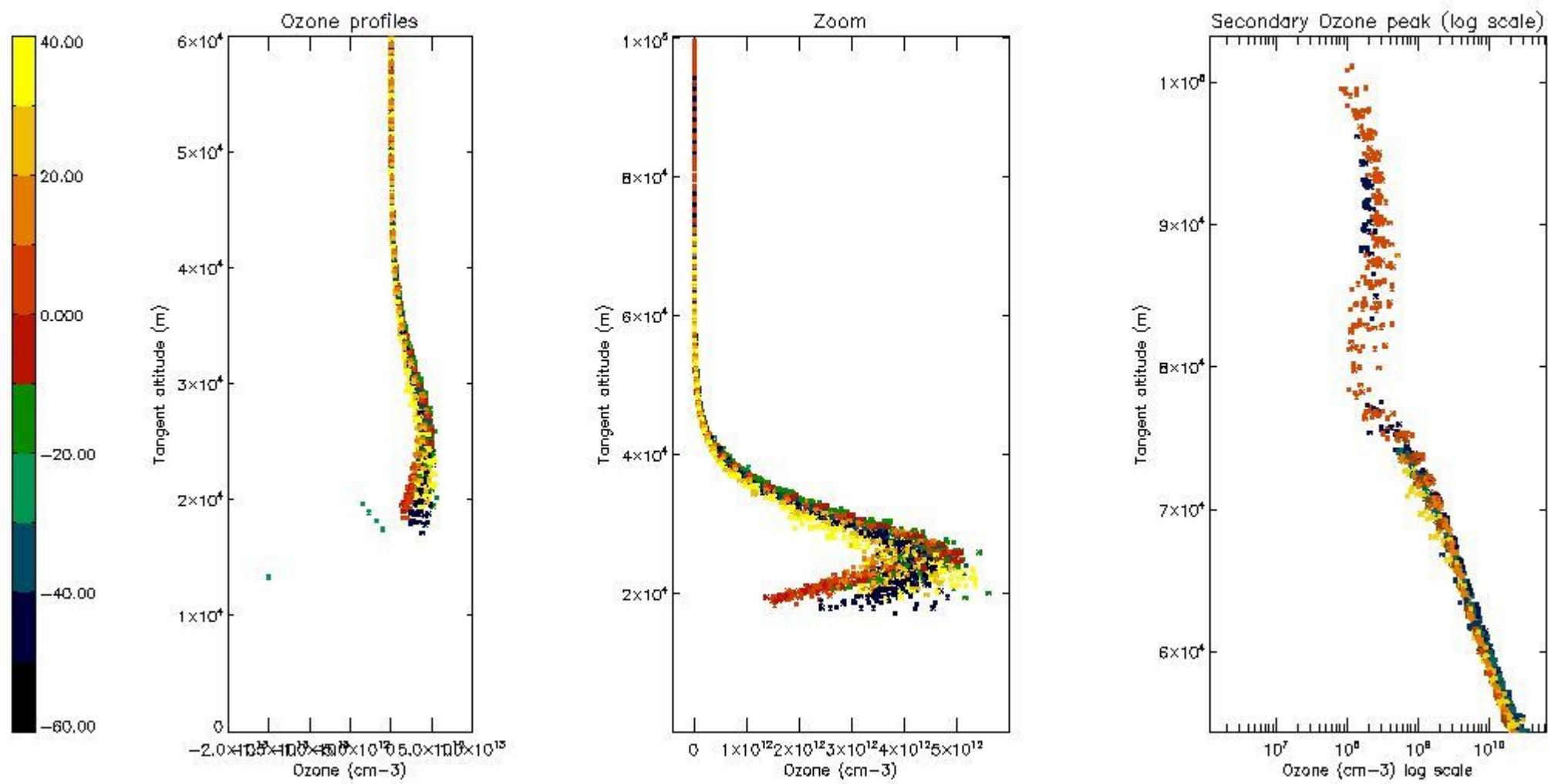
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



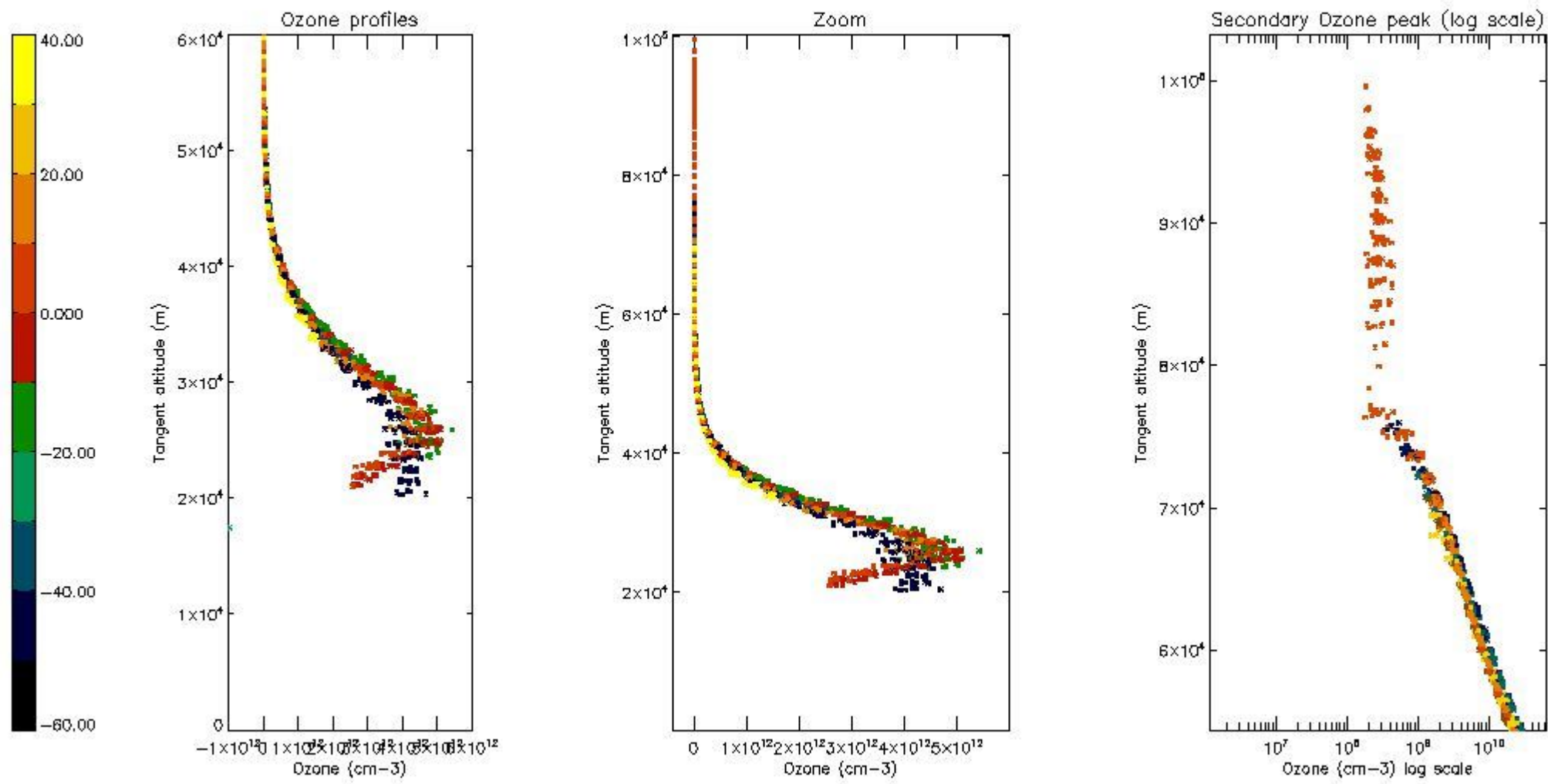
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



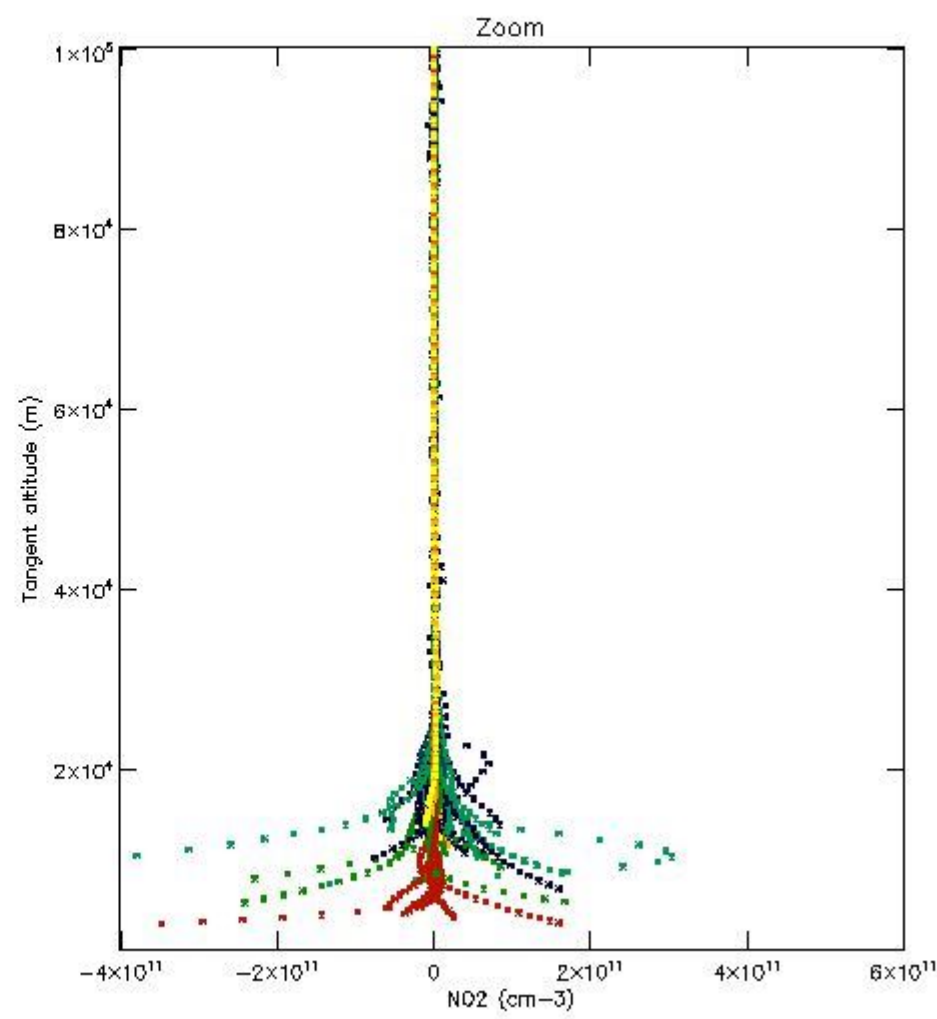
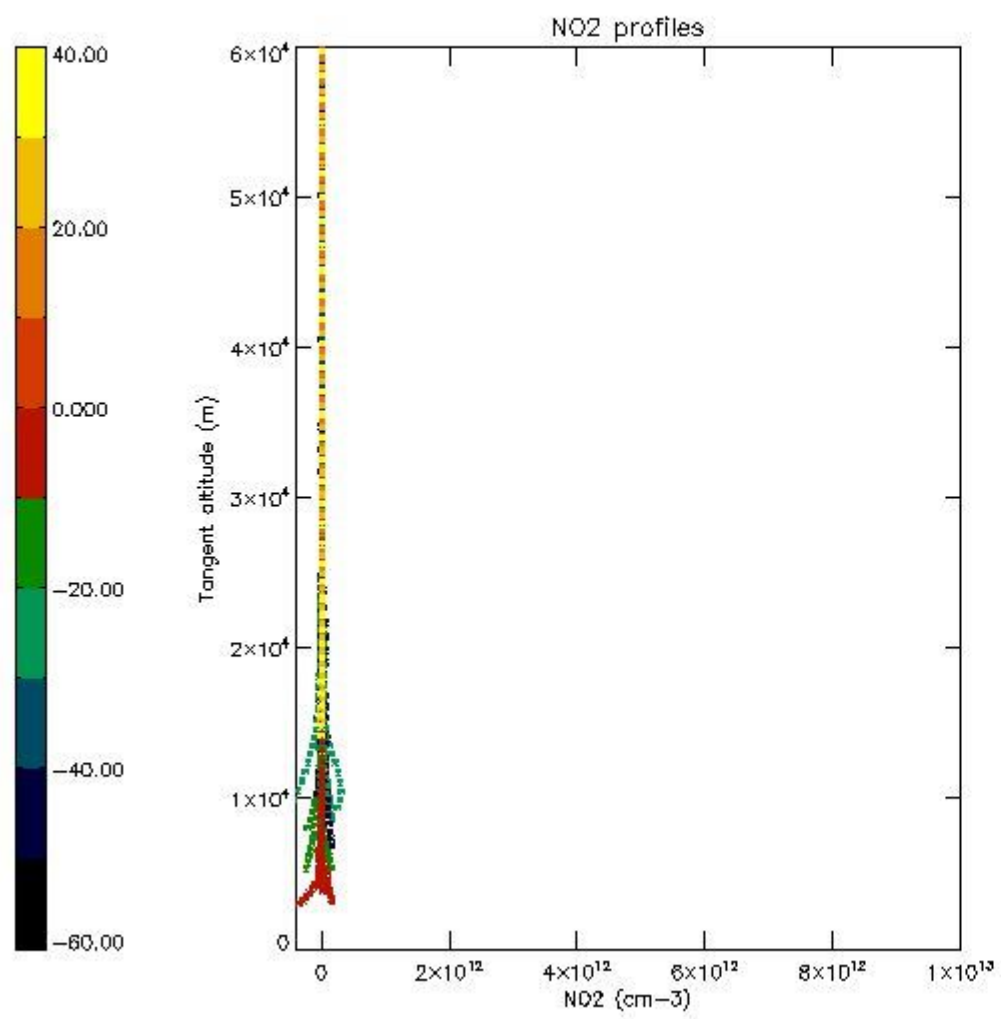
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



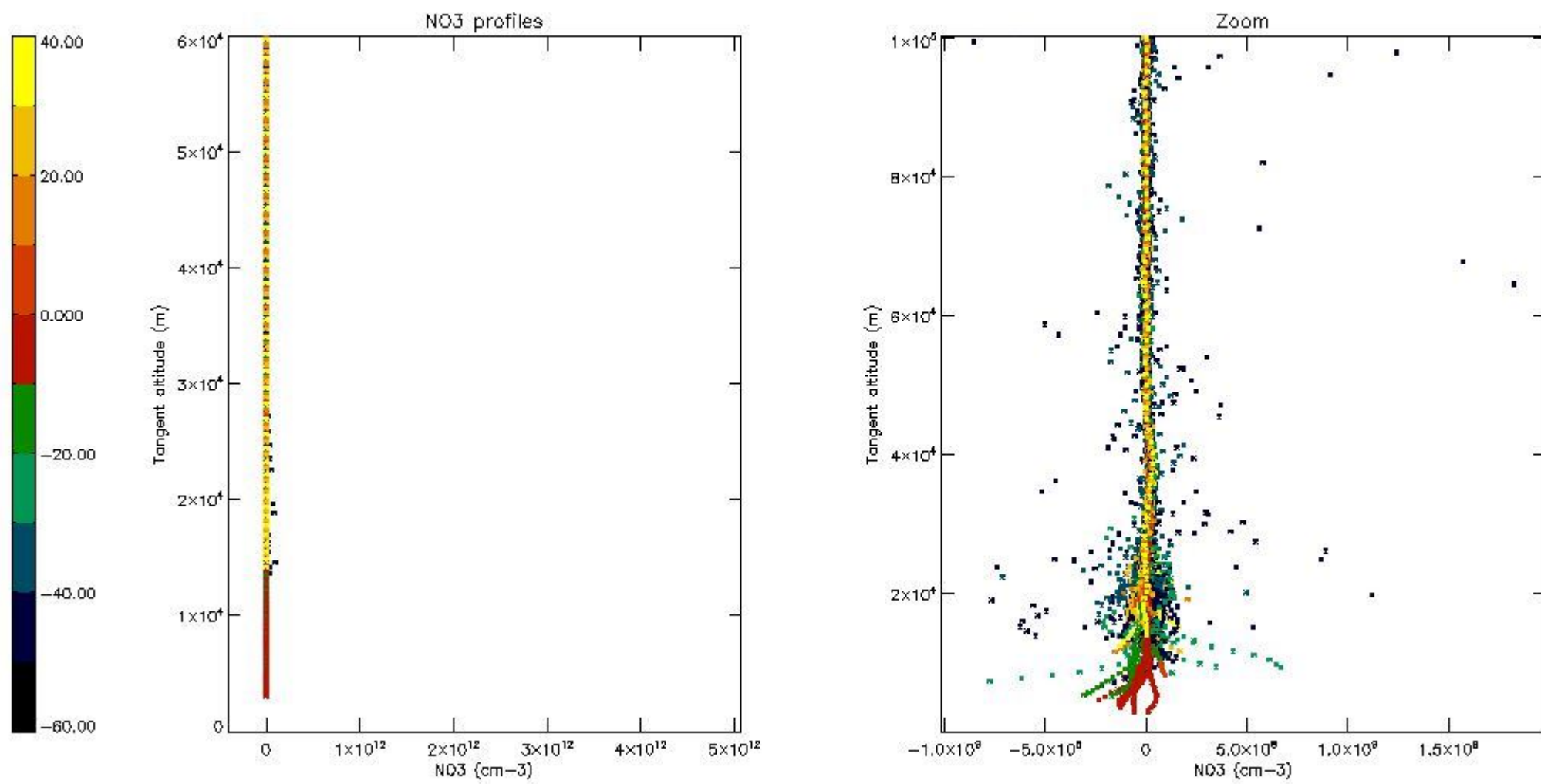
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



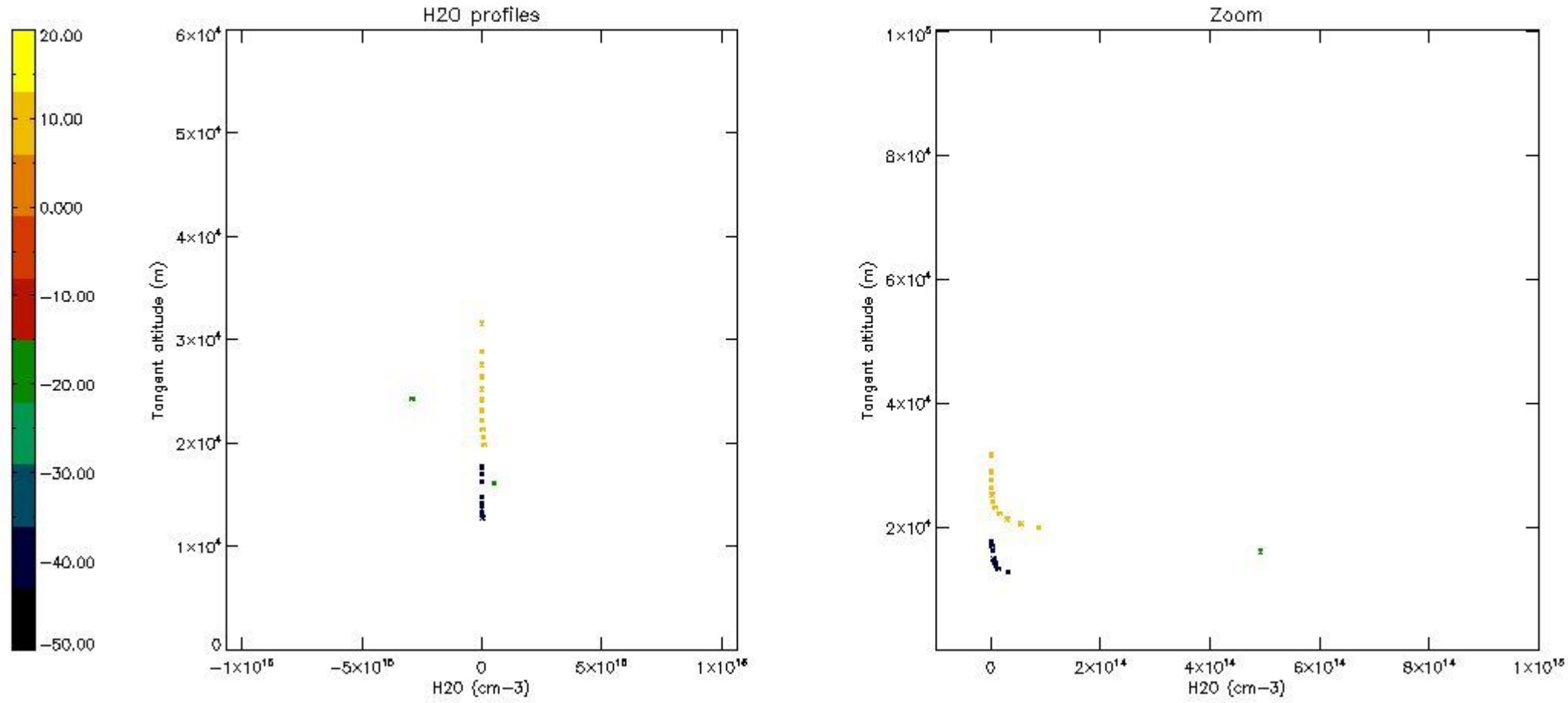
5.7 Plot NO3 profiles for all STD (dark without errors)

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	06-FEB-2006 00:01:01
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	06-FEB-2006 00:01:01
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	06-FEB-2006 00:01:01

GOMOS Level 2 Daily Report

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

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

[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

[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](#)

[5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

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

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

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

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

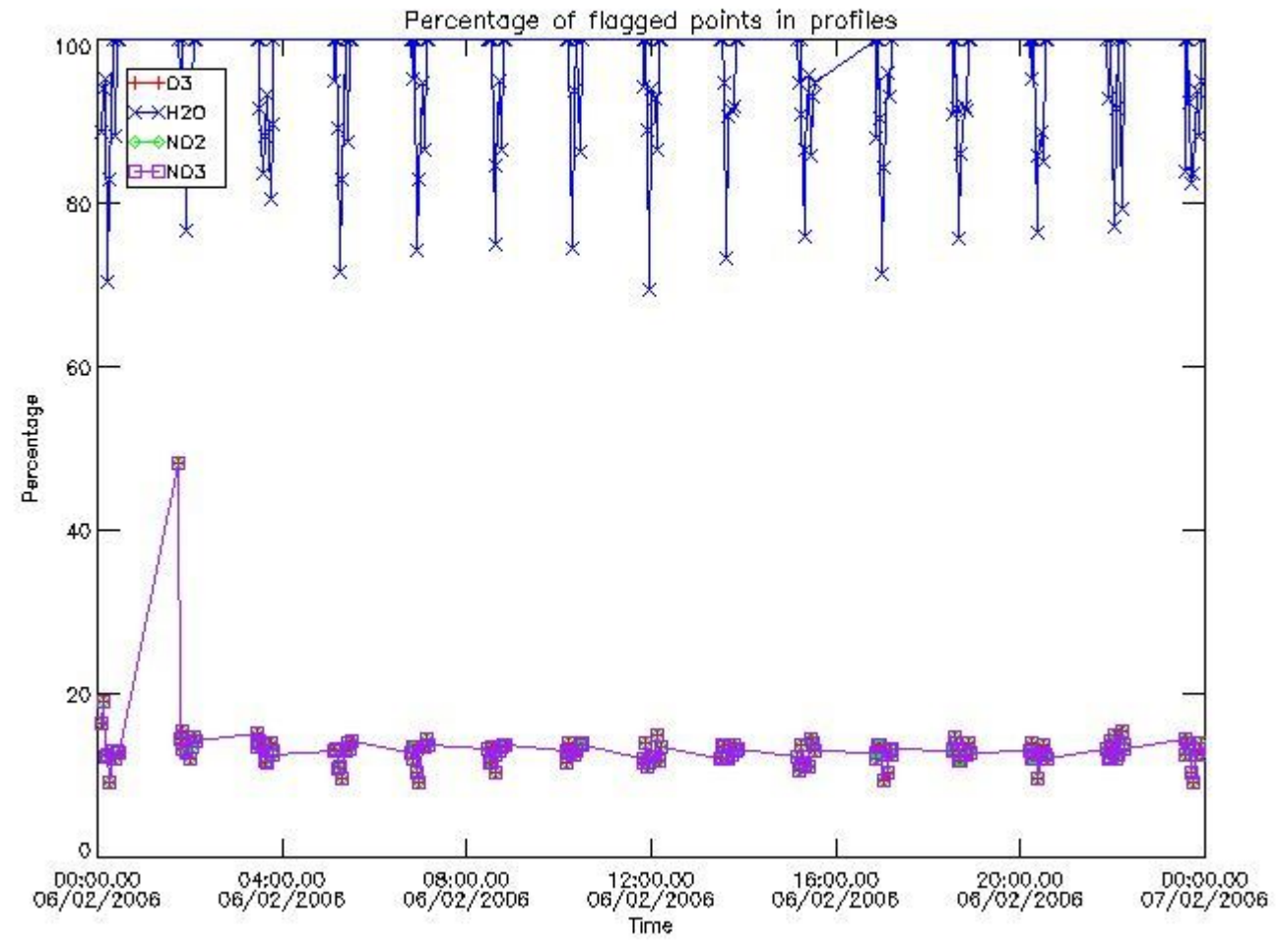
[5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

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

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

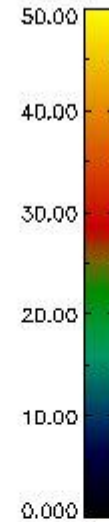
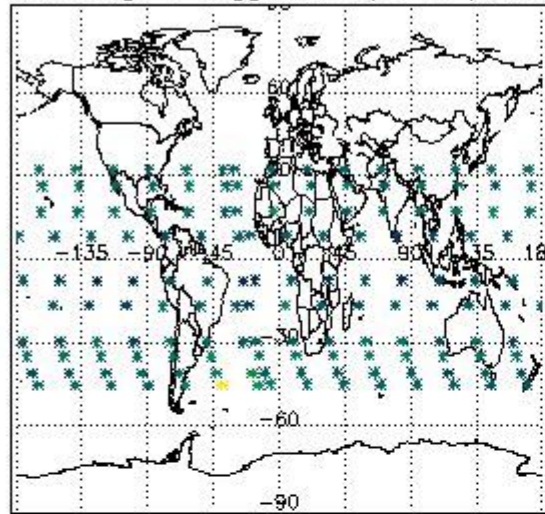
the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

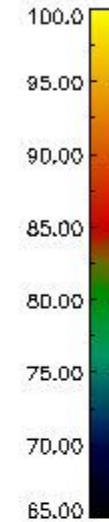
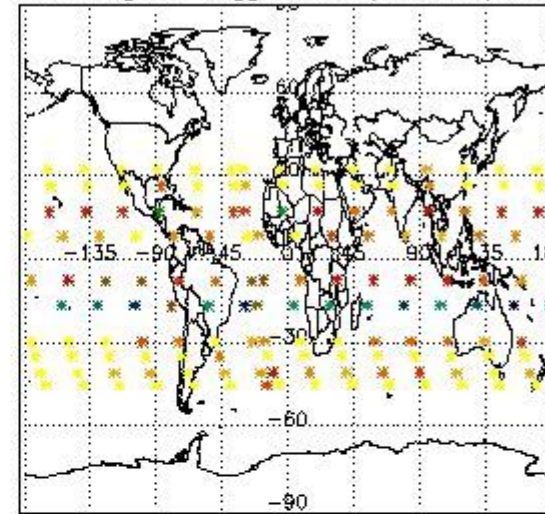


3.2 Plot quality information per product (world map)

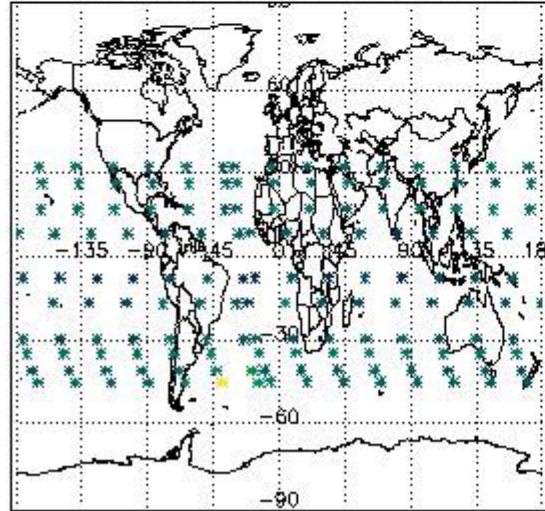
Percentage of flagged data per O3 profile



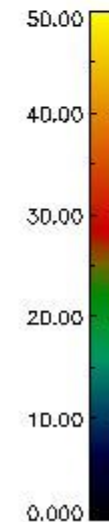
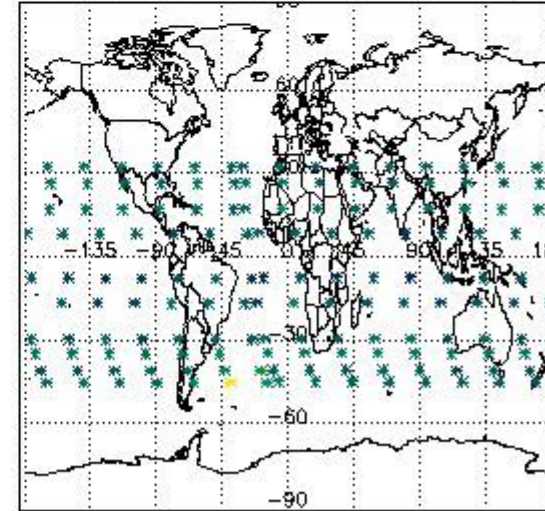
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

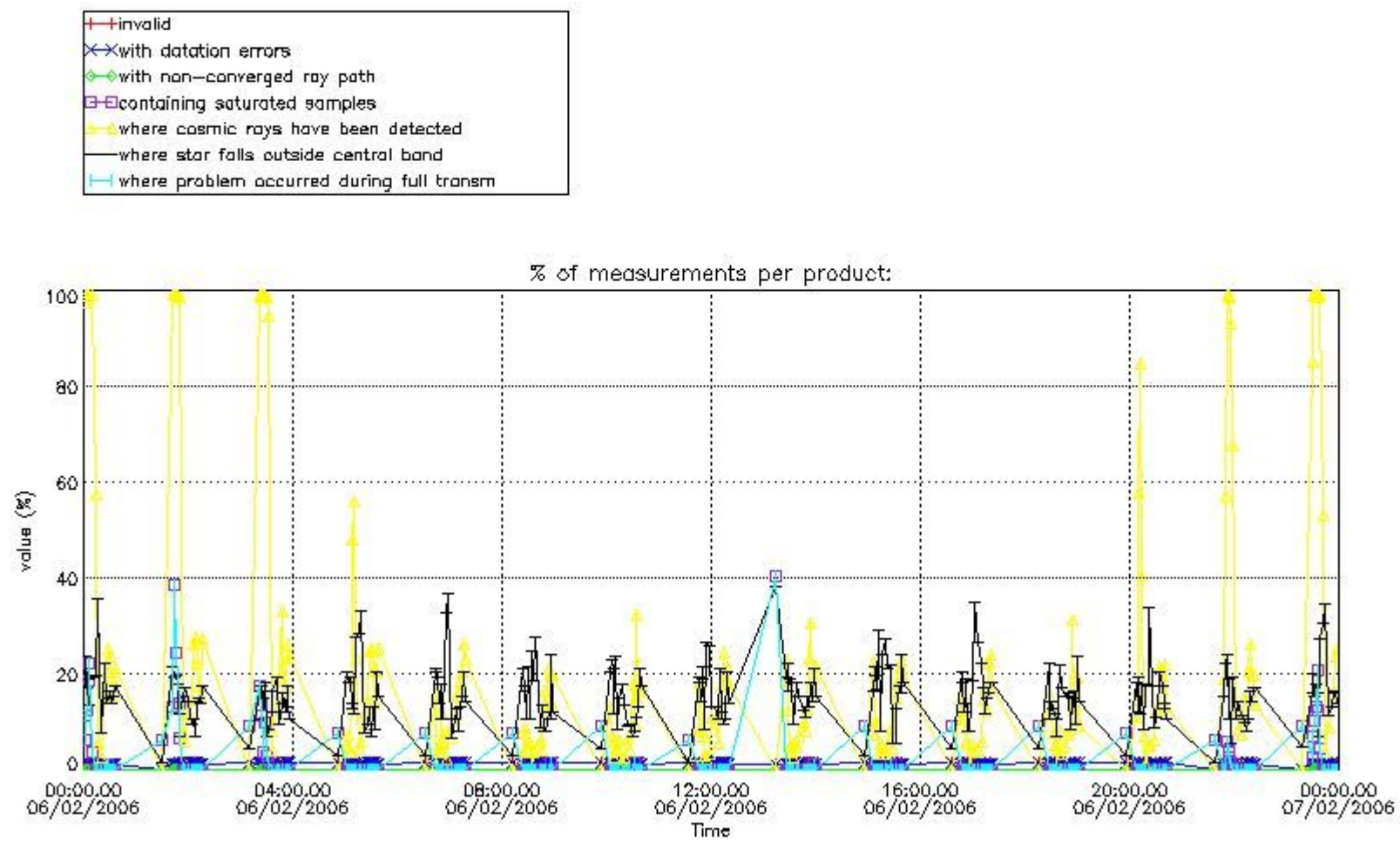


4. Level 1 quality information per product

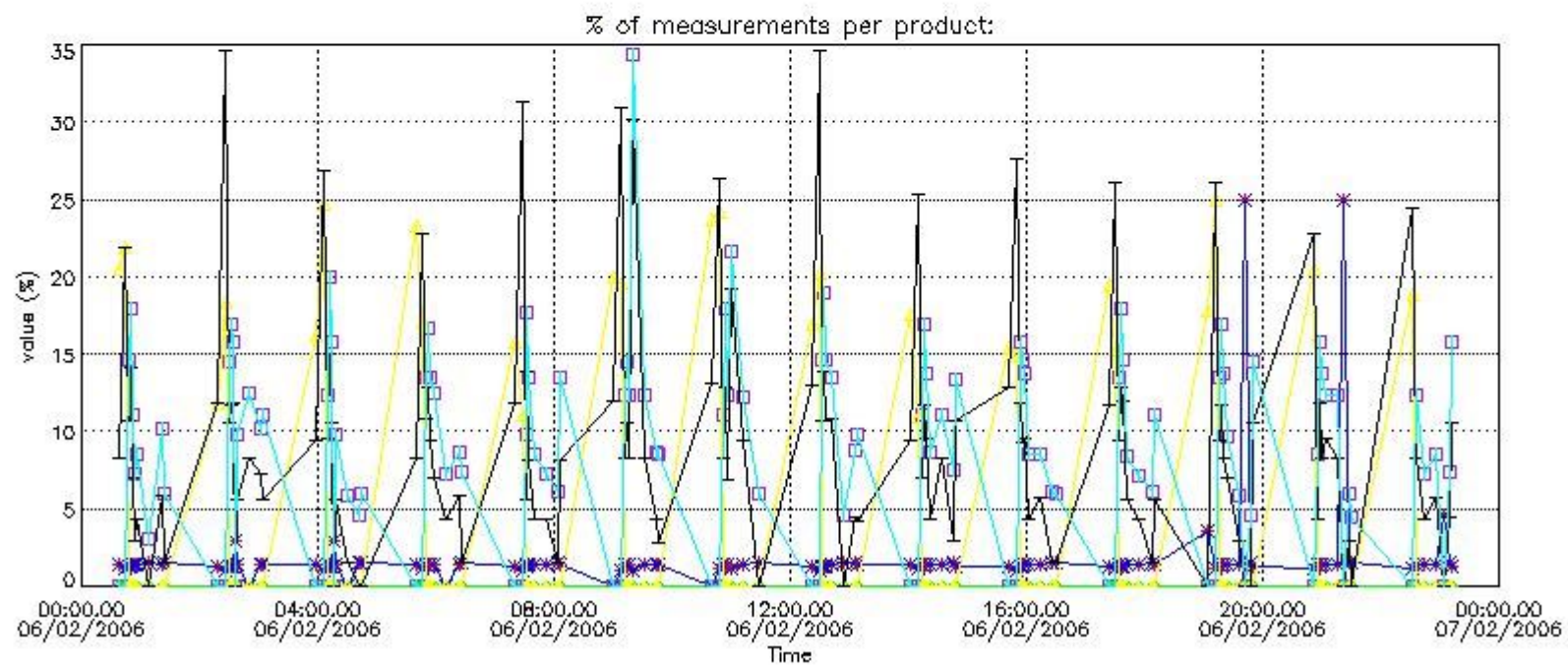
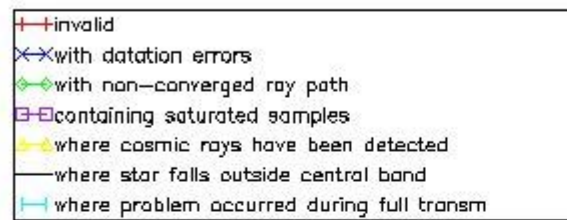
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes

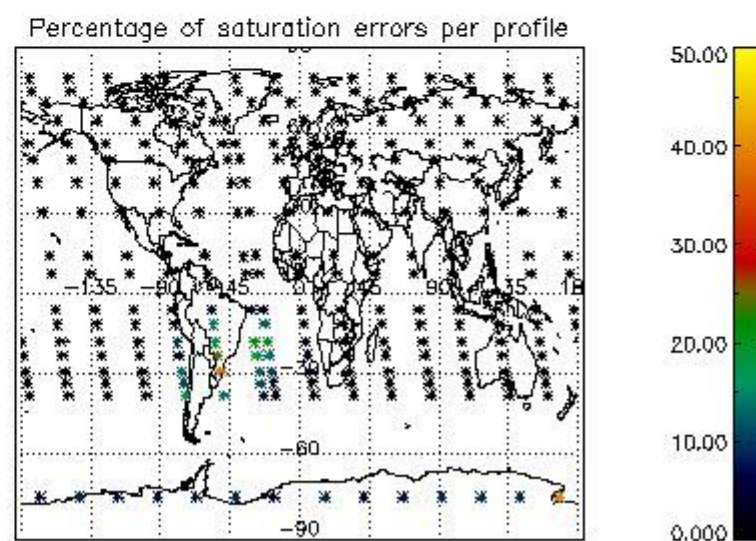
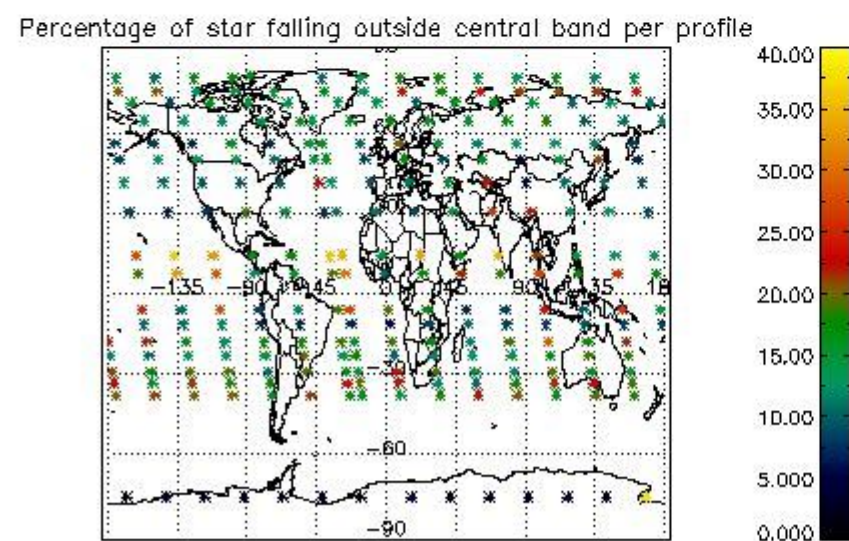
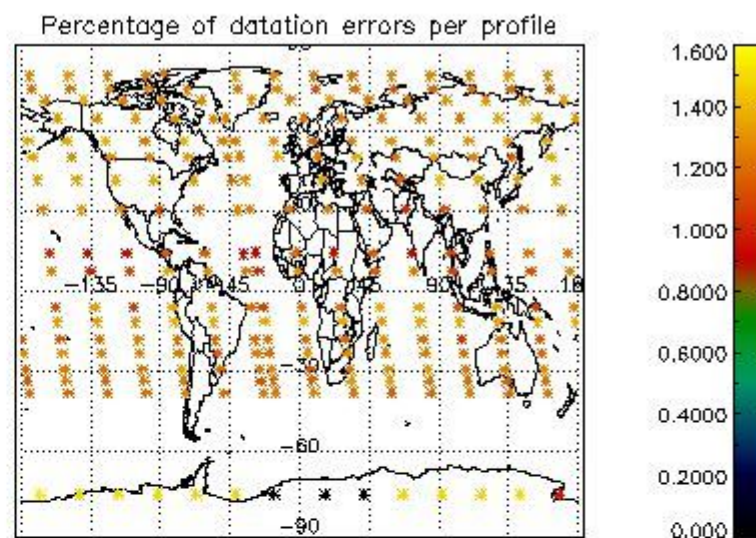
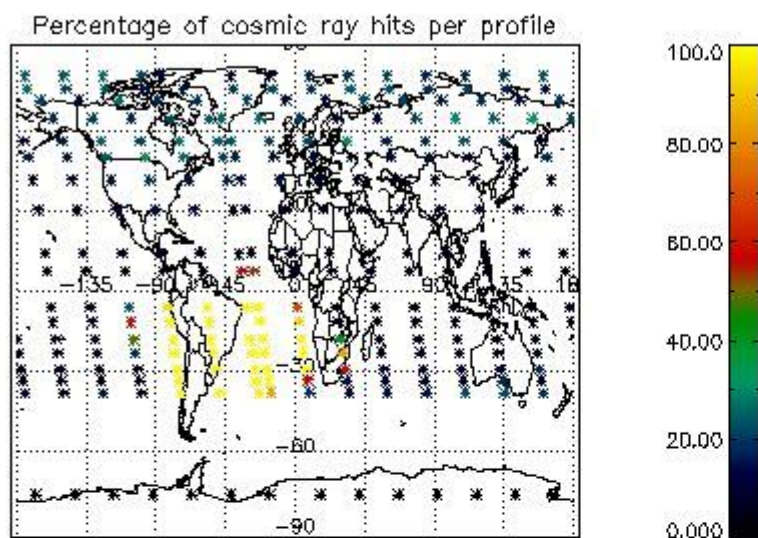


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

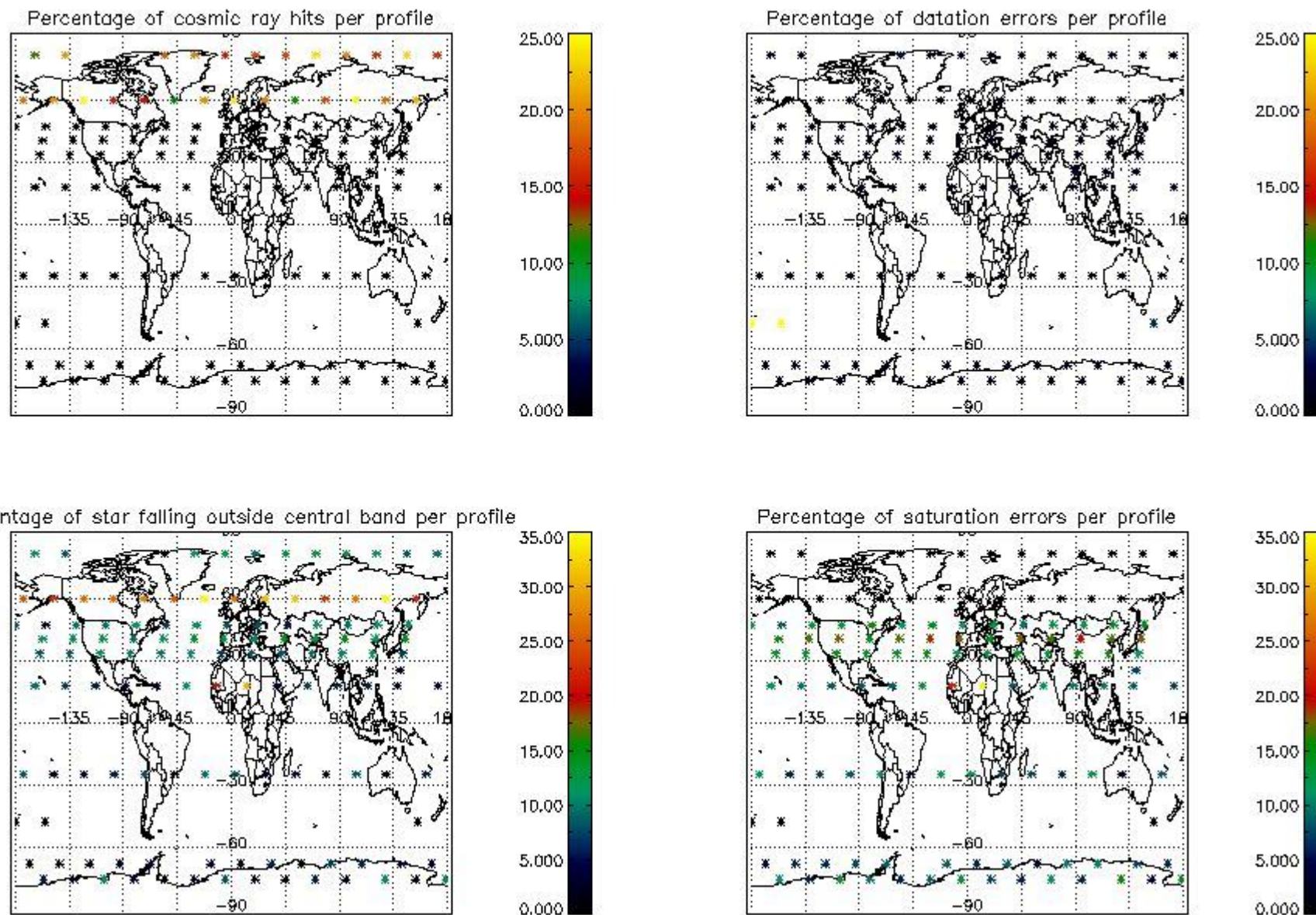


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

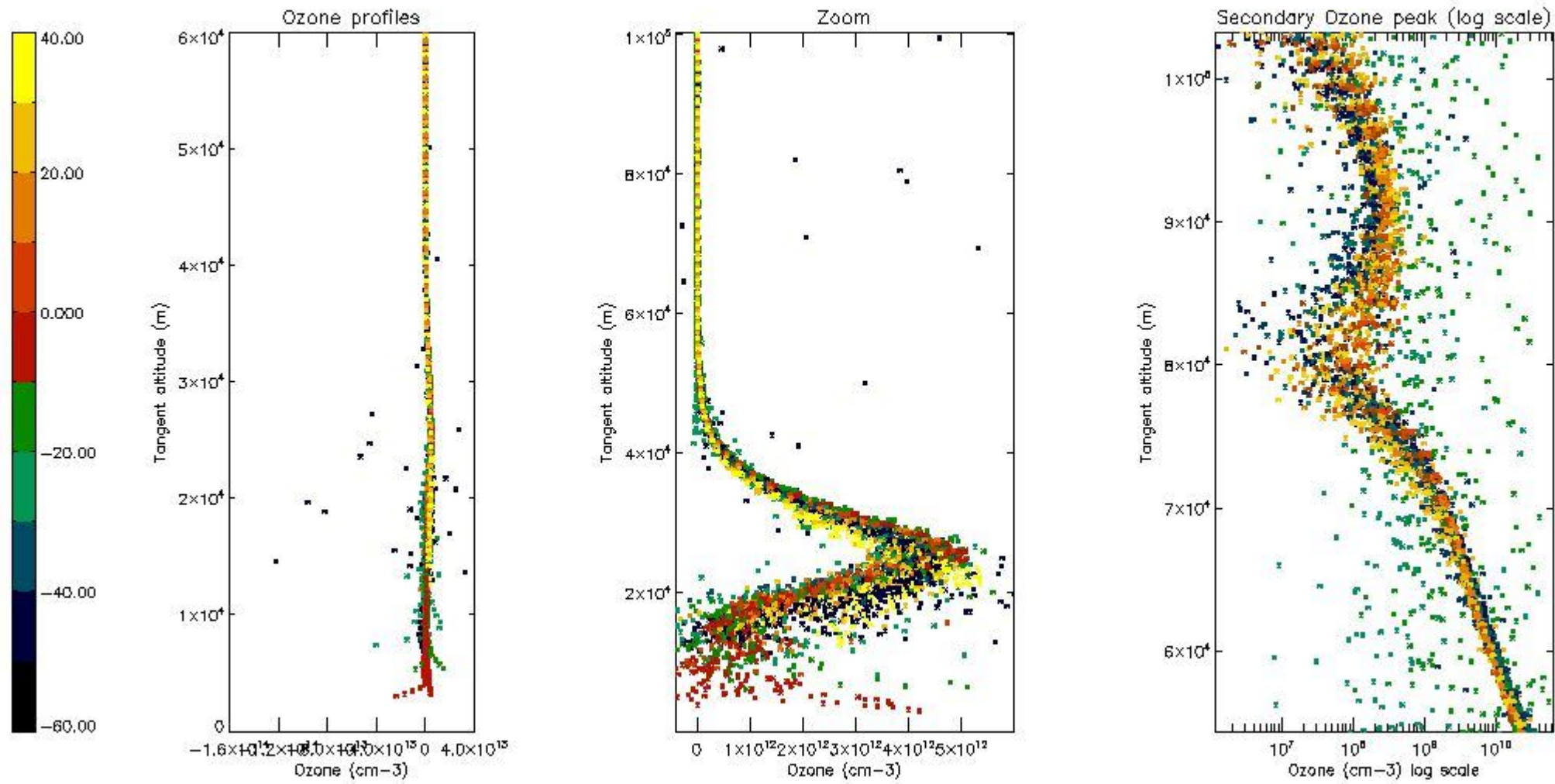
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	41
STD < 20	22

STD < 10	18
STD < 5	12

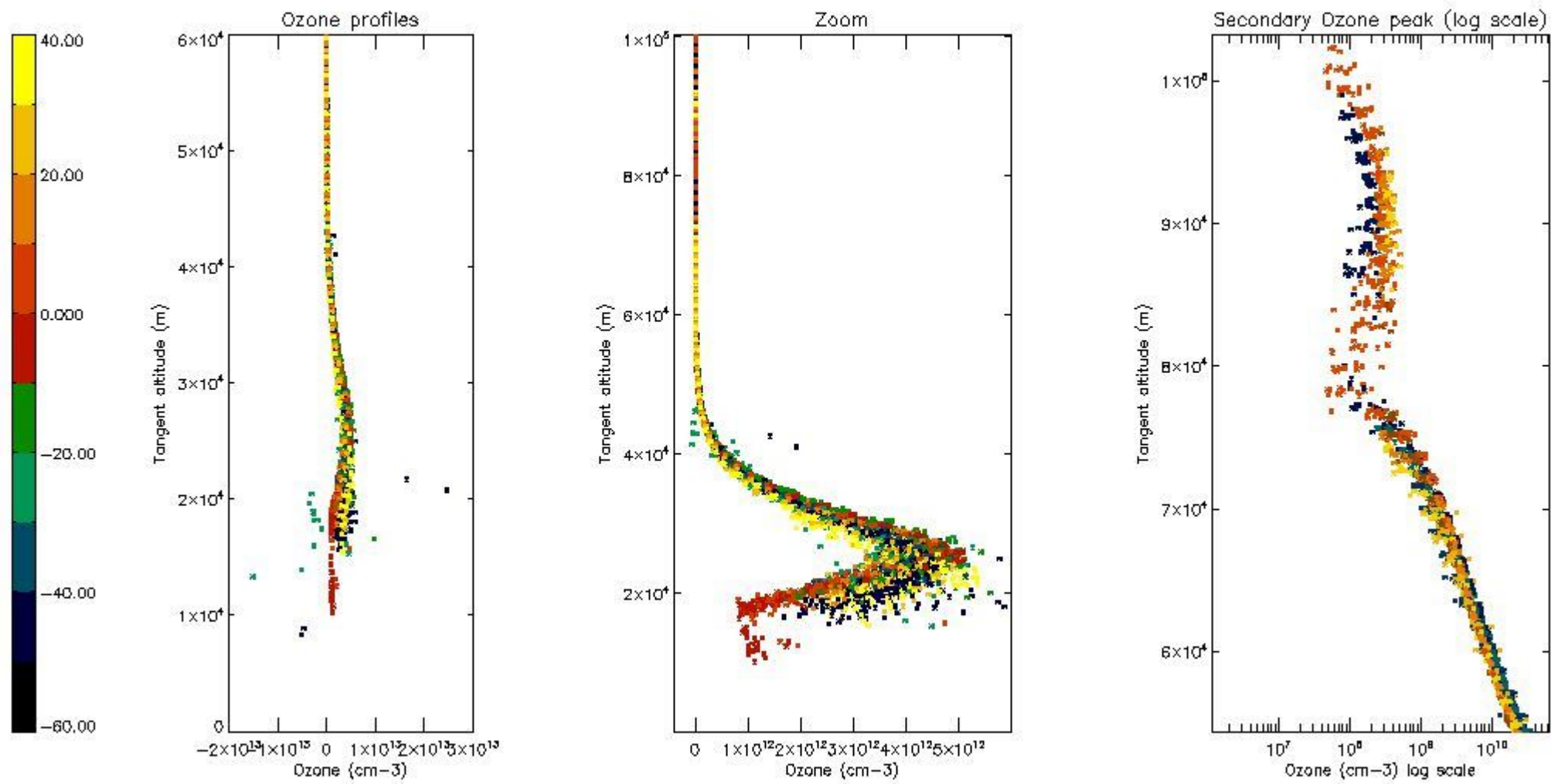
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



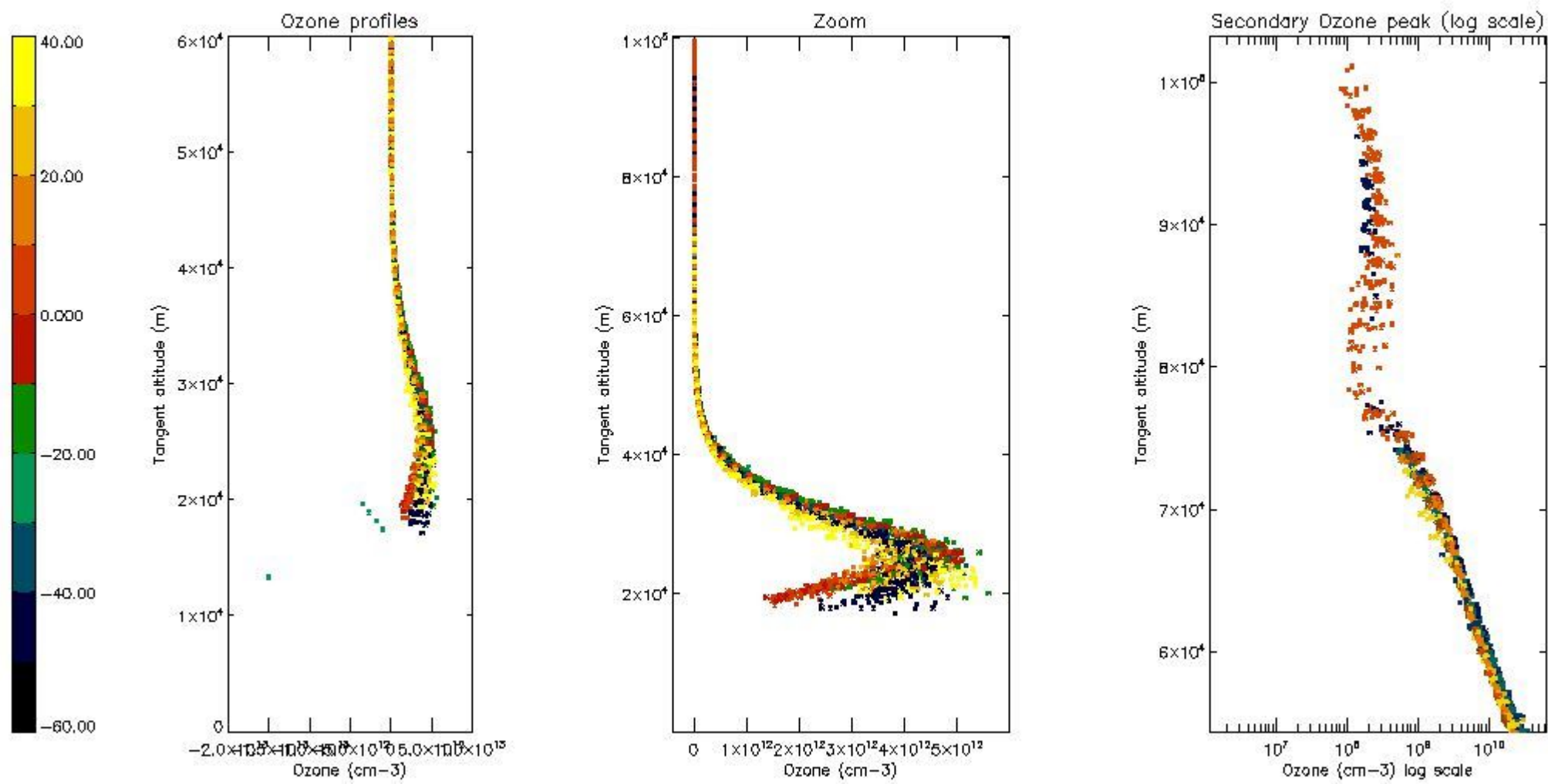
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



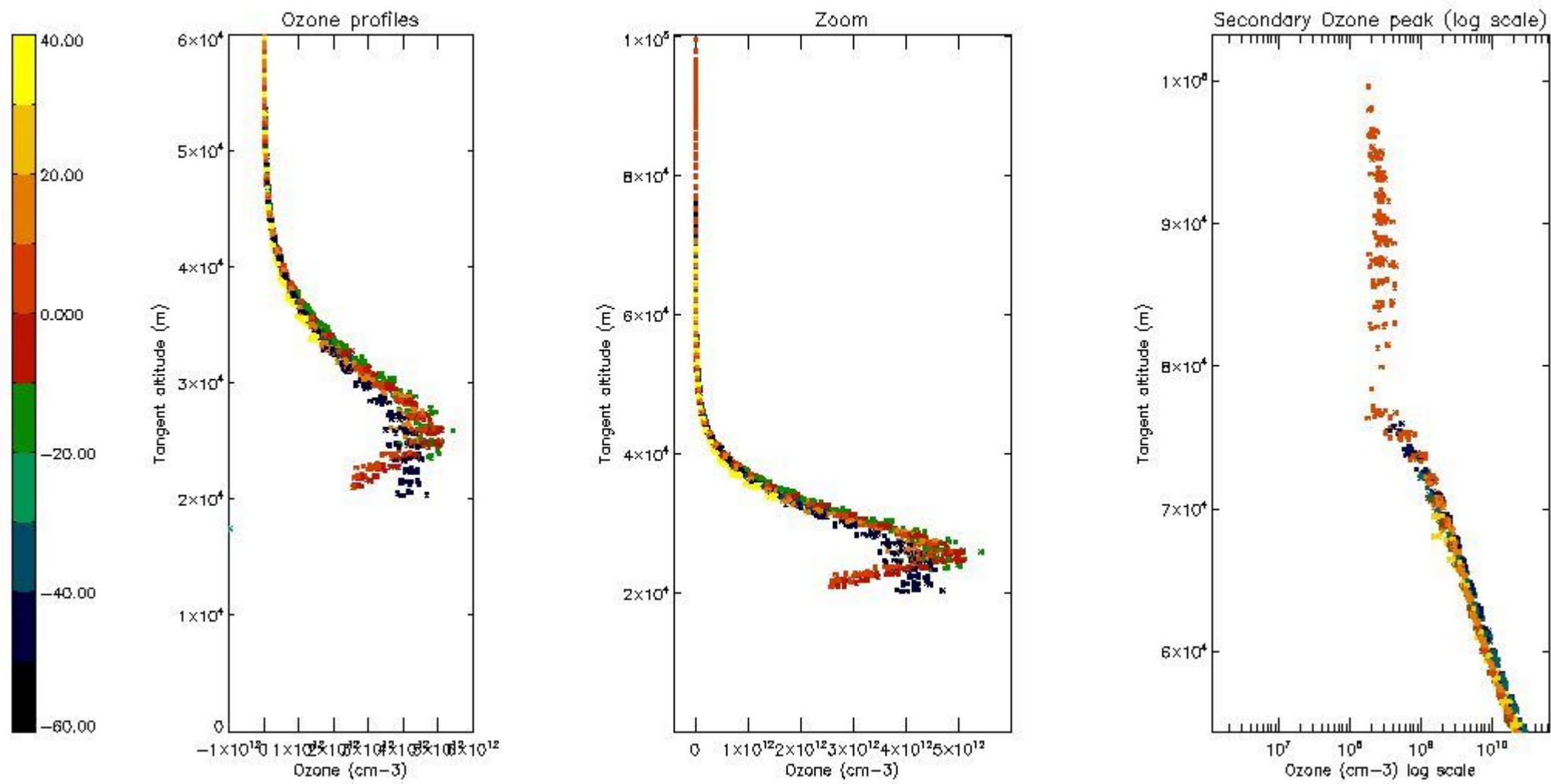
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



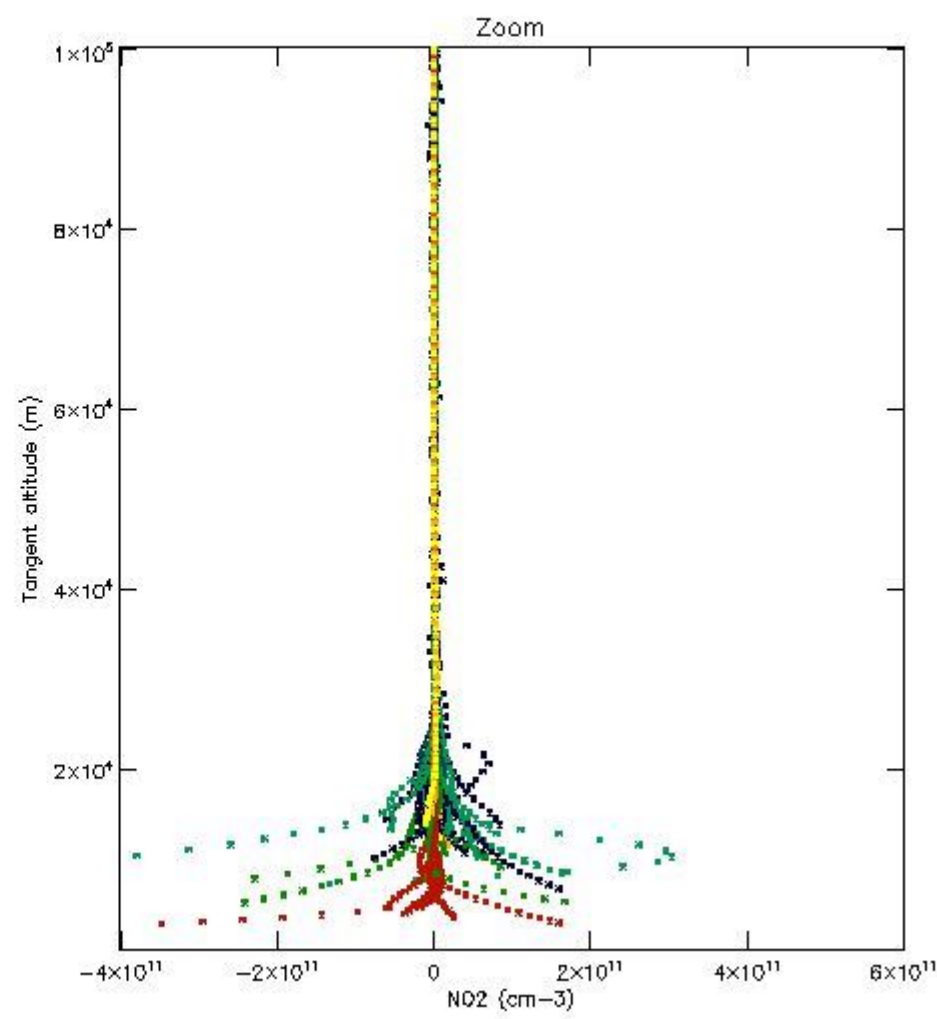
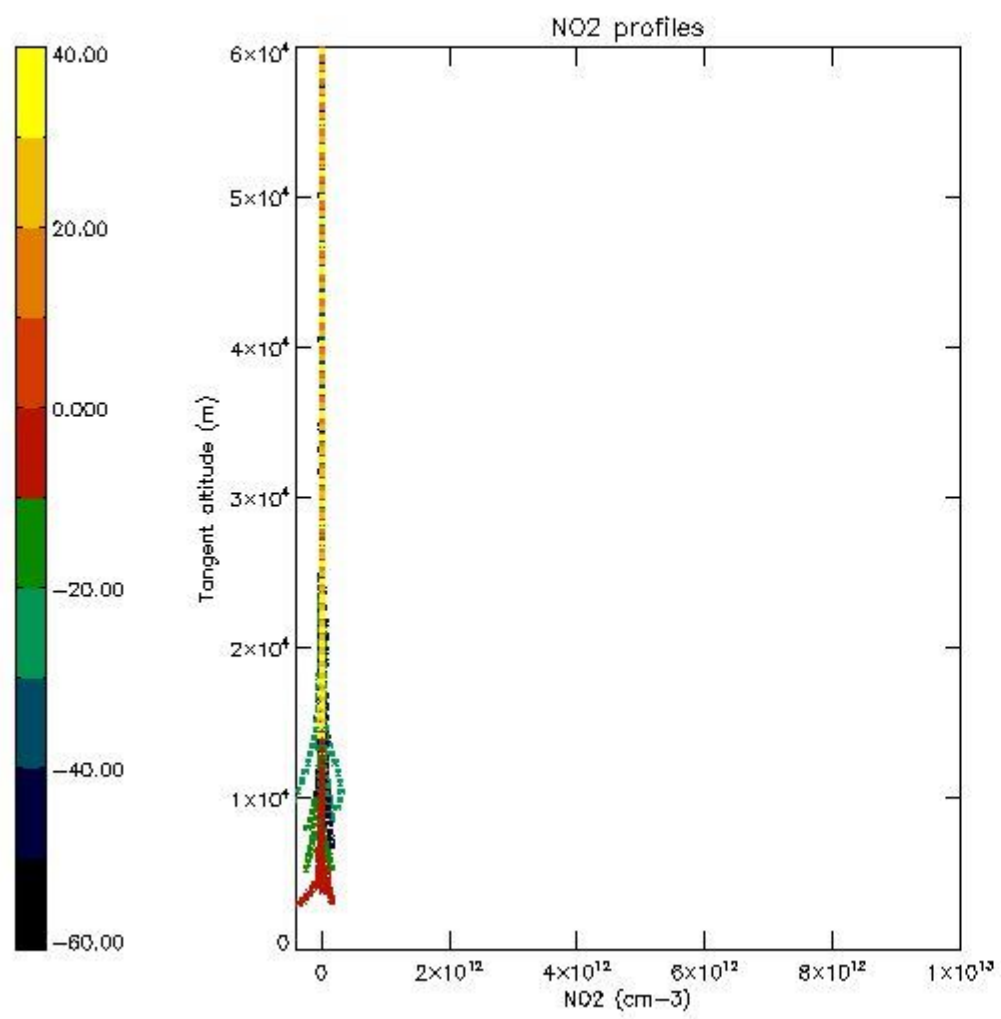
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



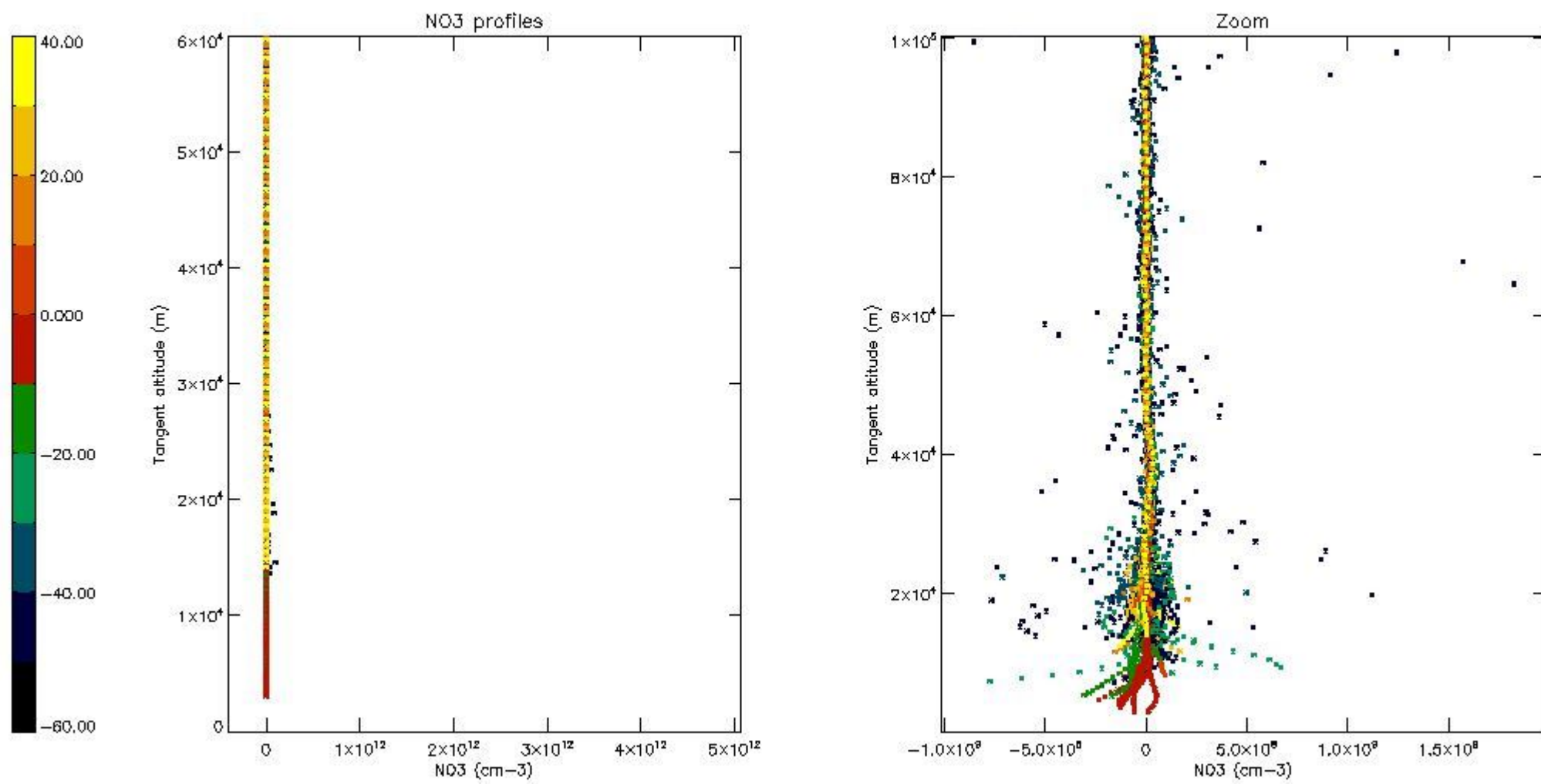
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



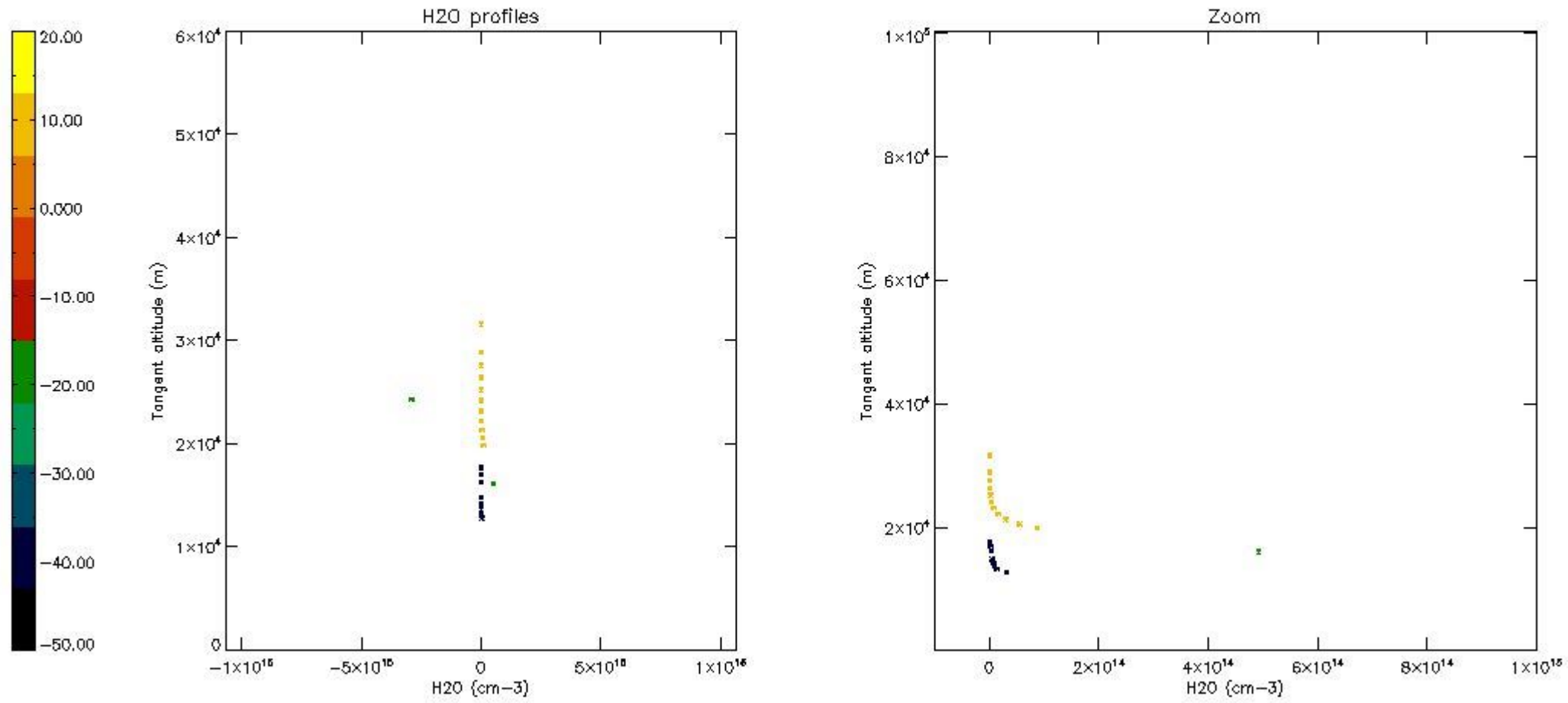
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

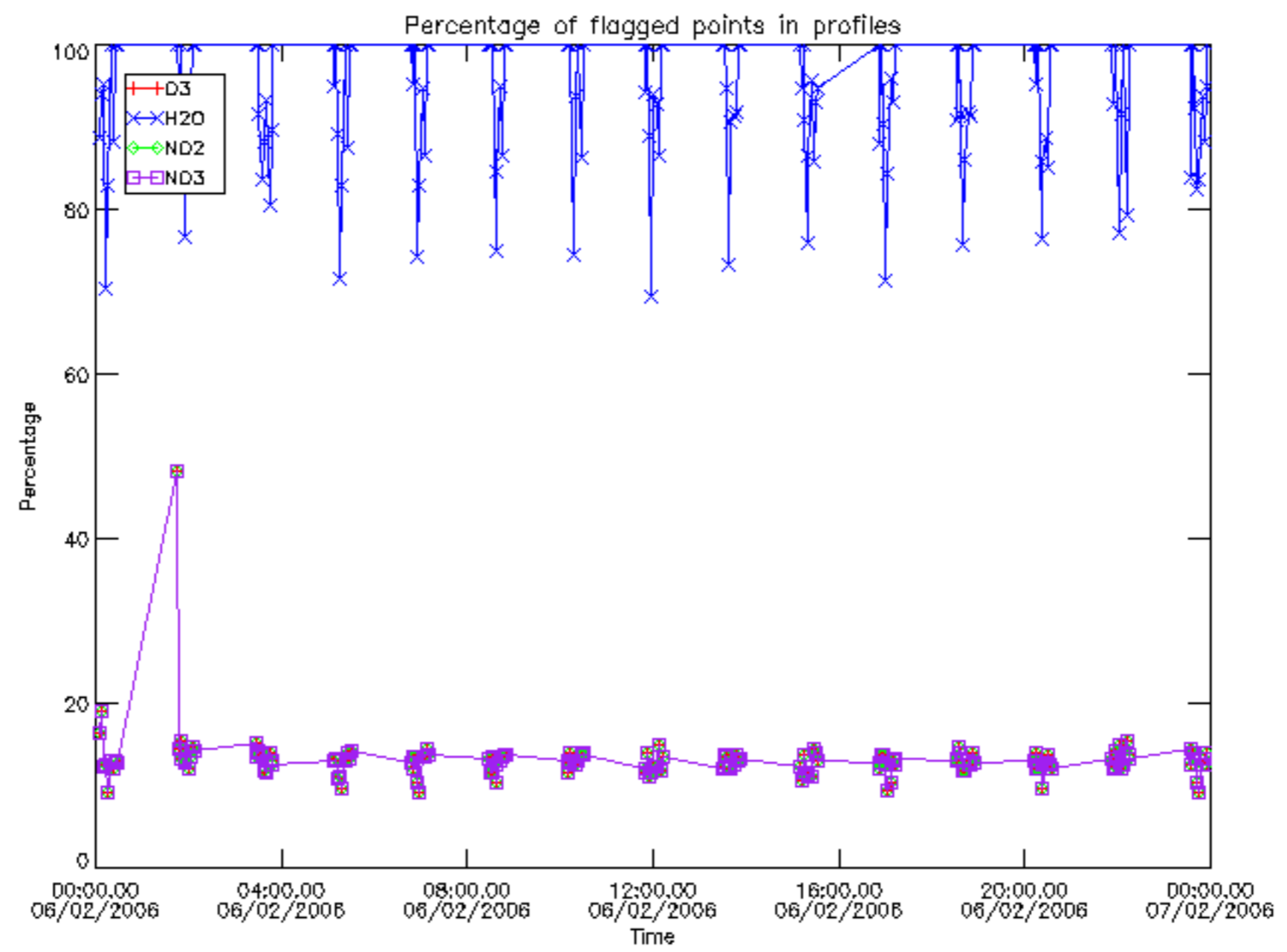
The colorbar represents the latitude.



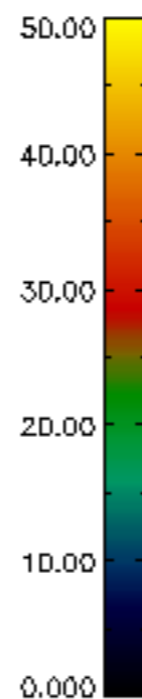
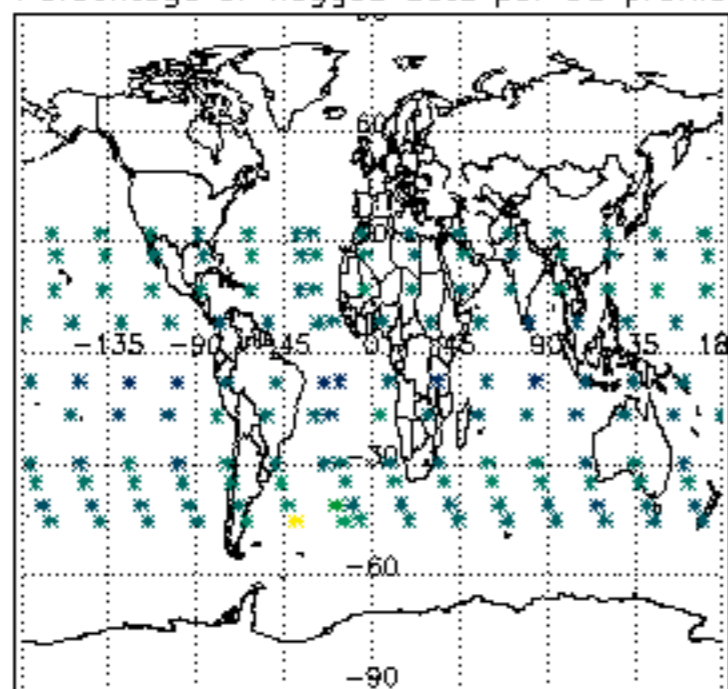
6. Auxiliary Data Files used for the production reported in section 2

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.

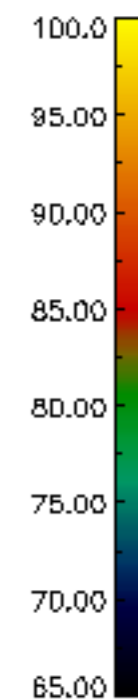
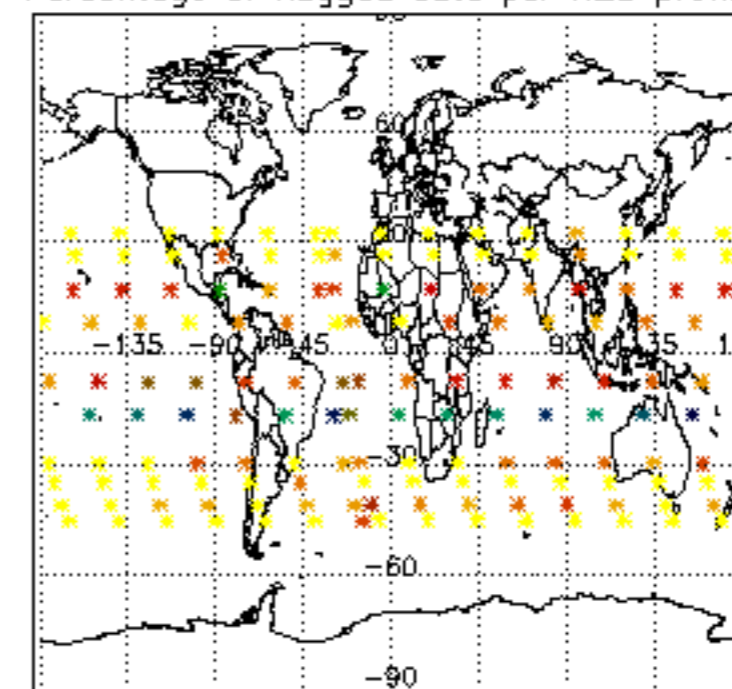
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	06-FEB-2006 00:01:01
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	06-FEB-2006 00:01:01
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	06-FEB-2006 00:01:01



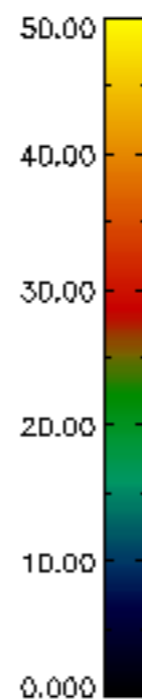
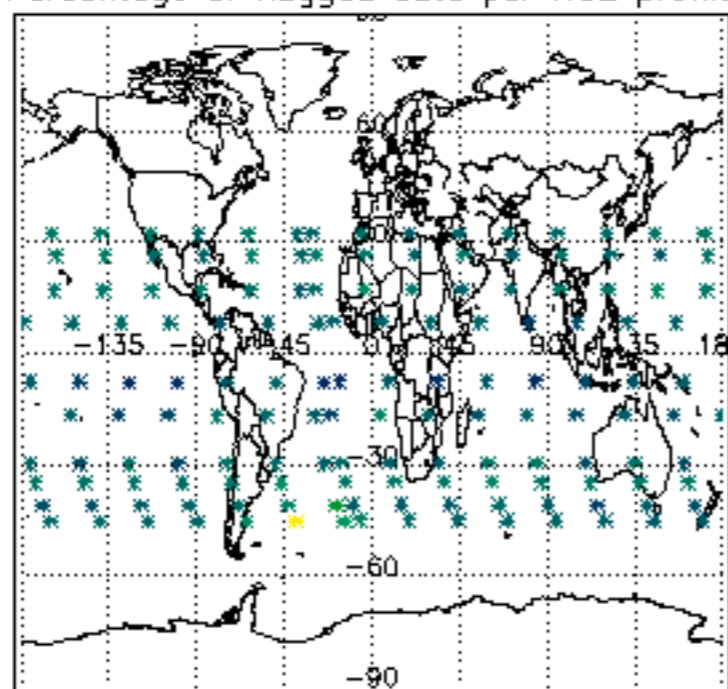
Percentage of flagged data per D3 profile



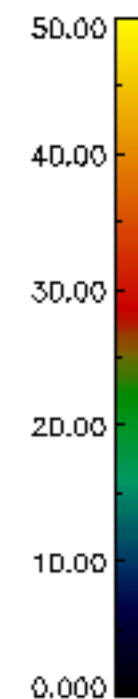
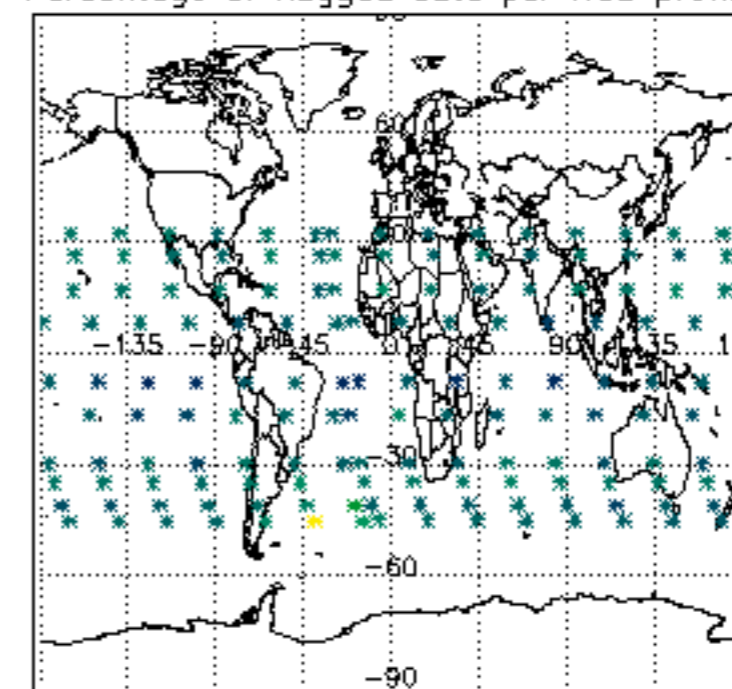
Percentage of flagged data per H2O profile

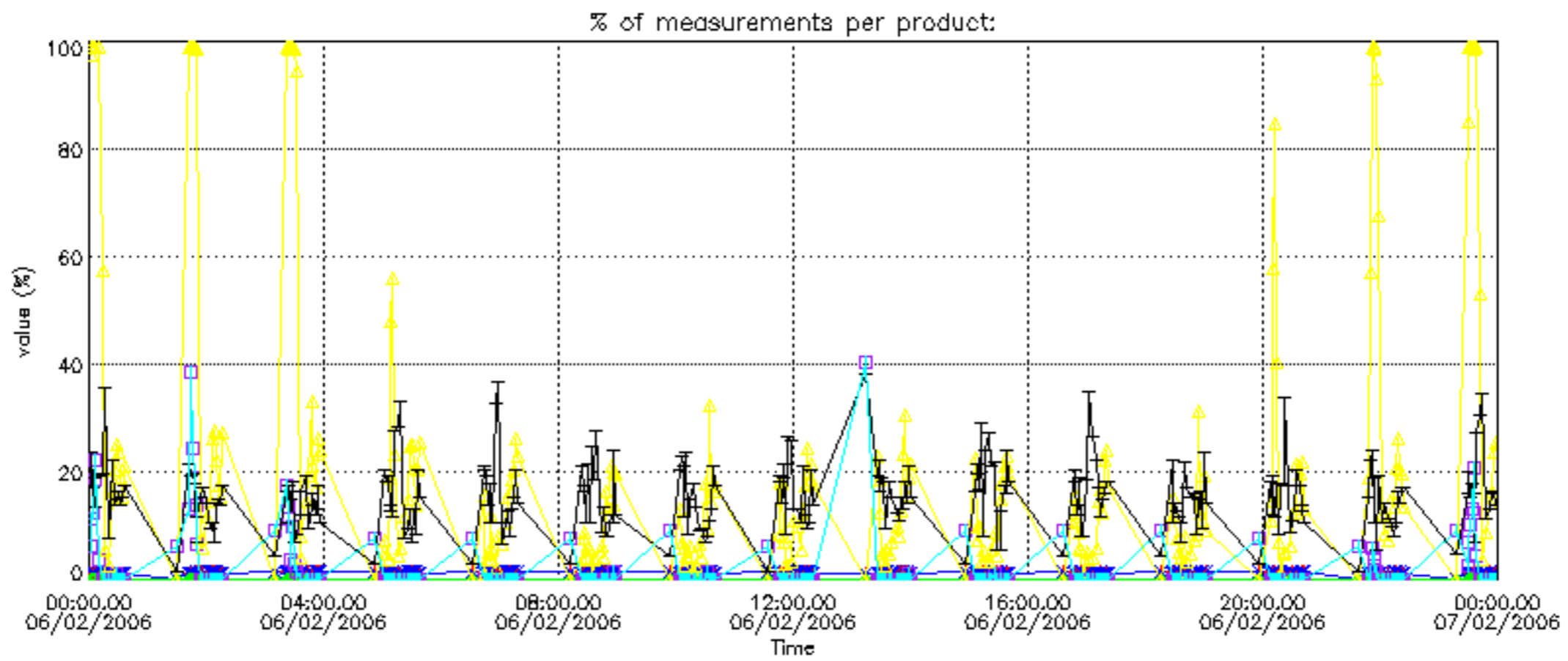


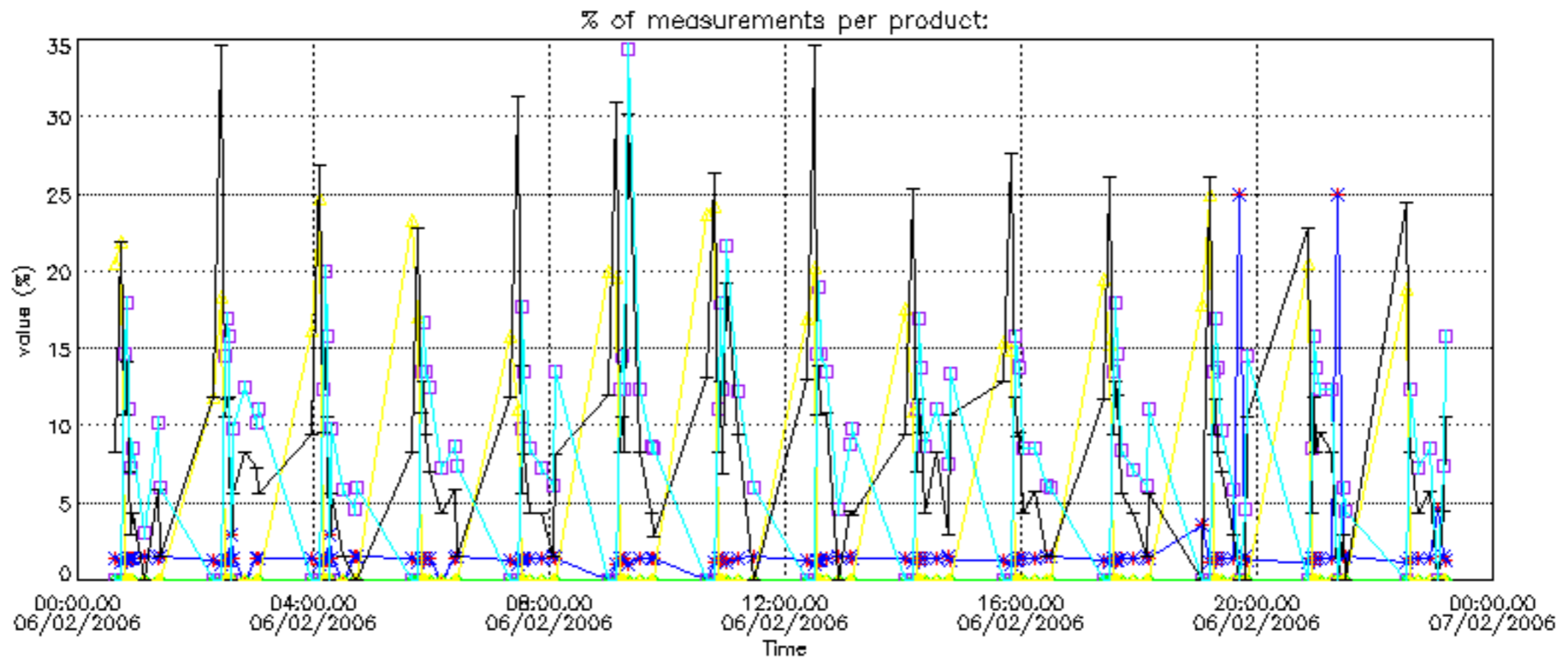
Percentage of flagged data per NO2 profile



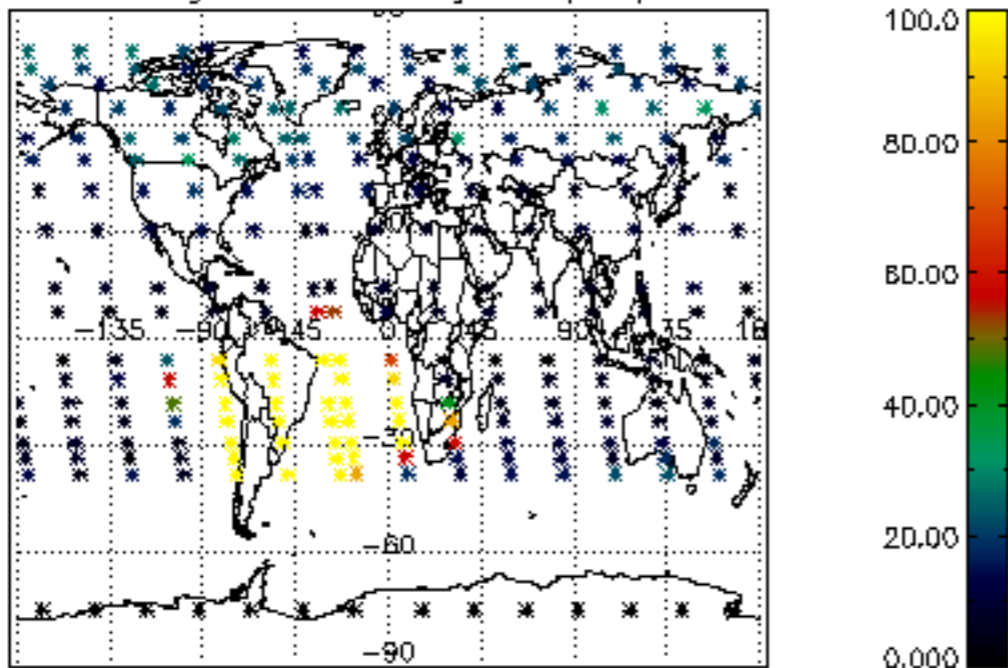
Percentage of flagged data per NO3 profile



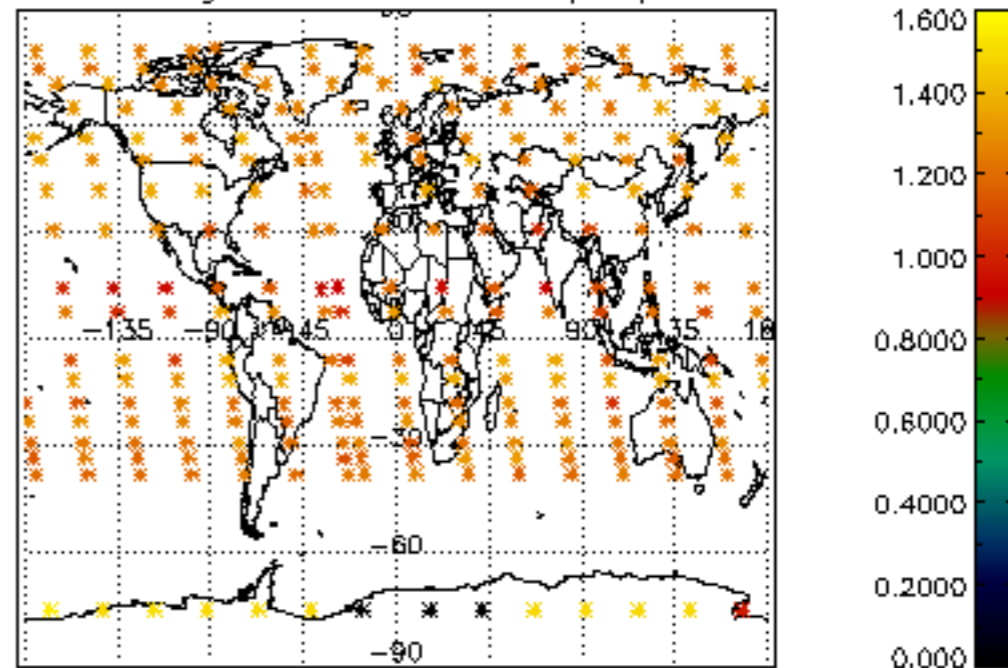




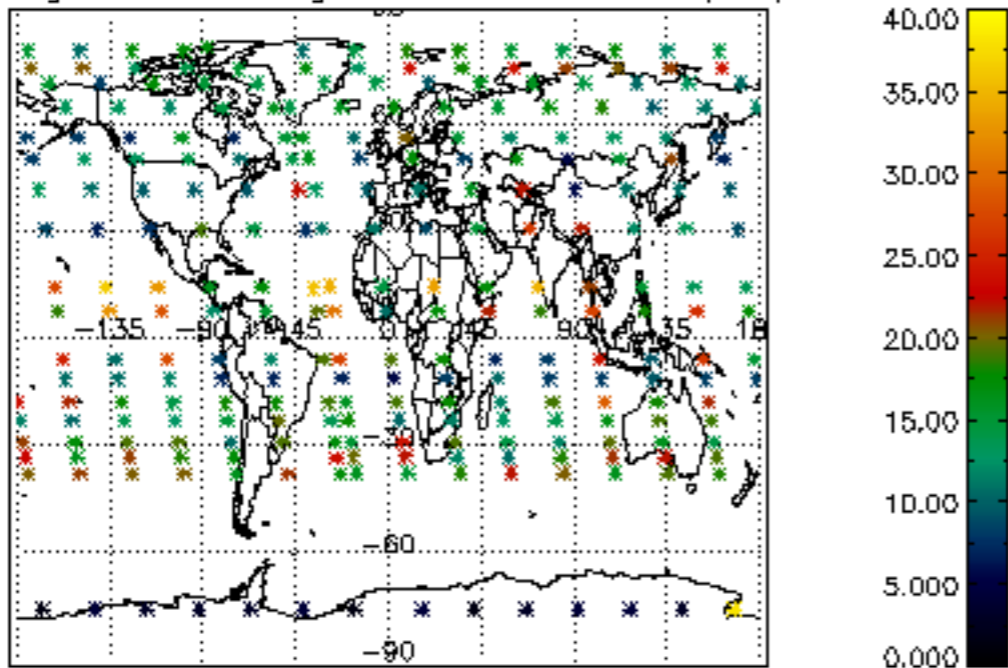
Percentage of cosmic ray hits per profile



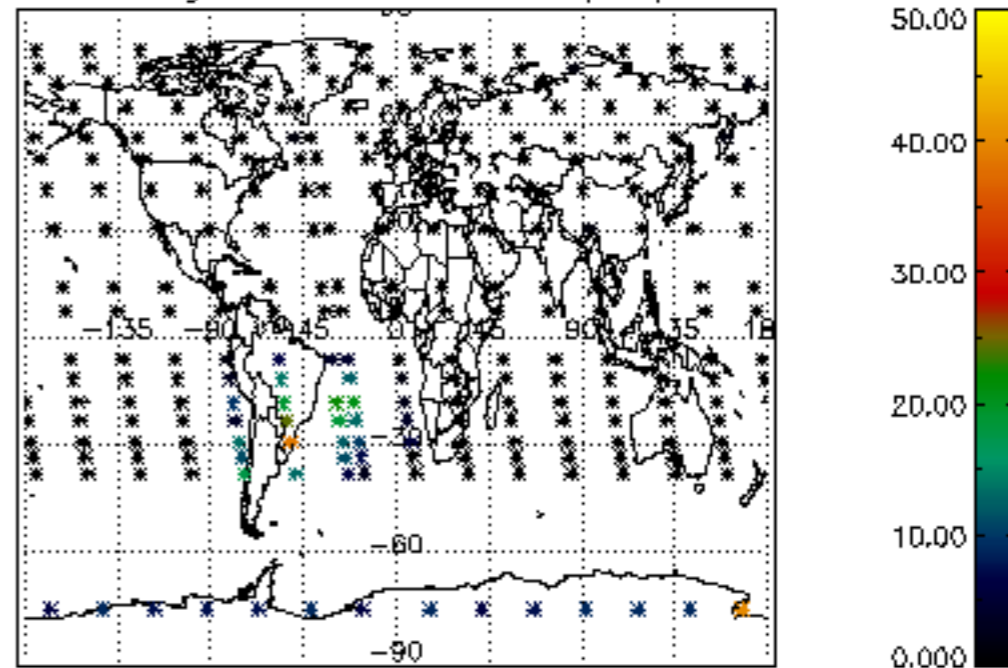
Percentage of datation errors per profile



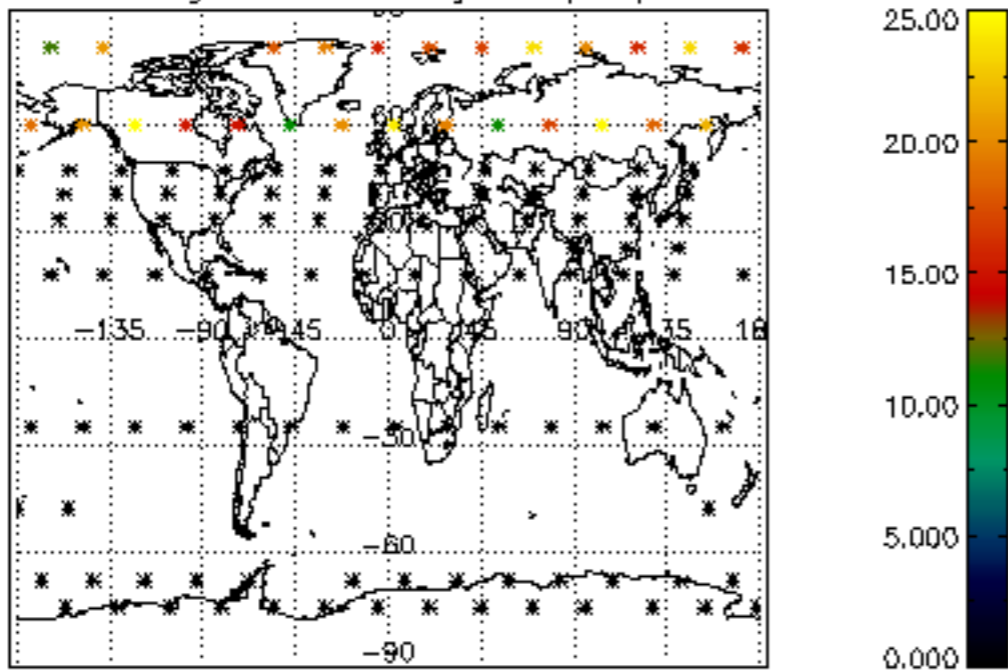
Percentage of star falling outside central band per profile



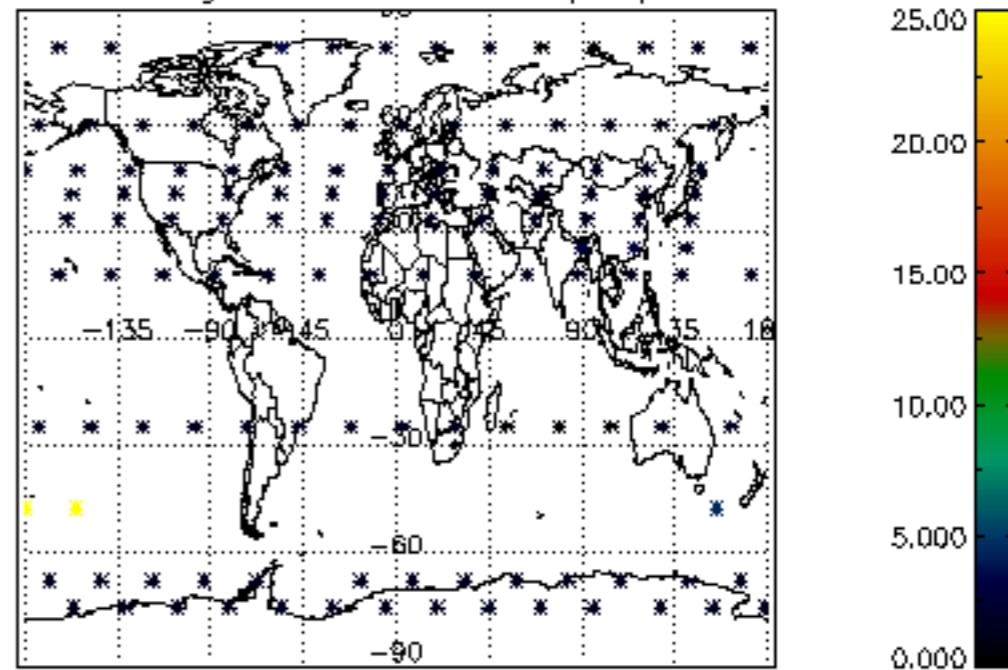
Percentage of saturation errors per profile



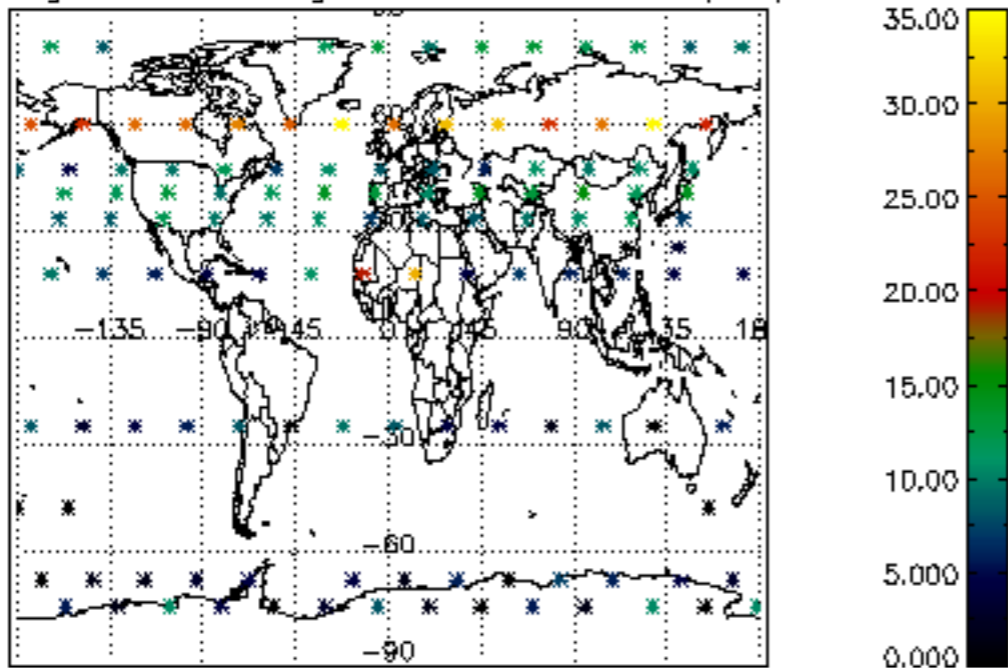
Percentage of cosmic ray hits per profile



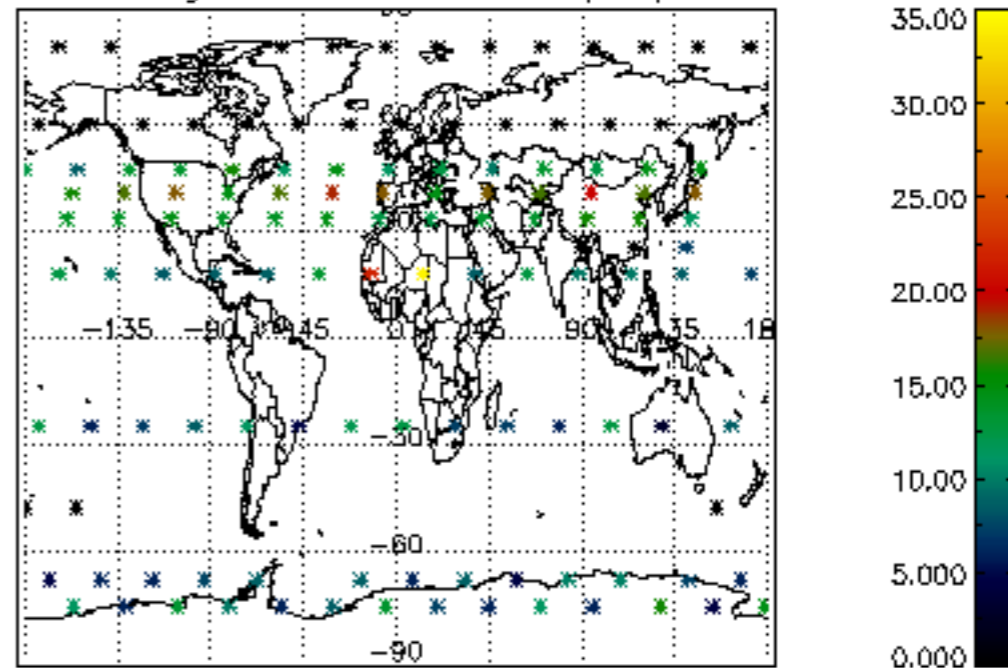
Percentage of datation errors per profile

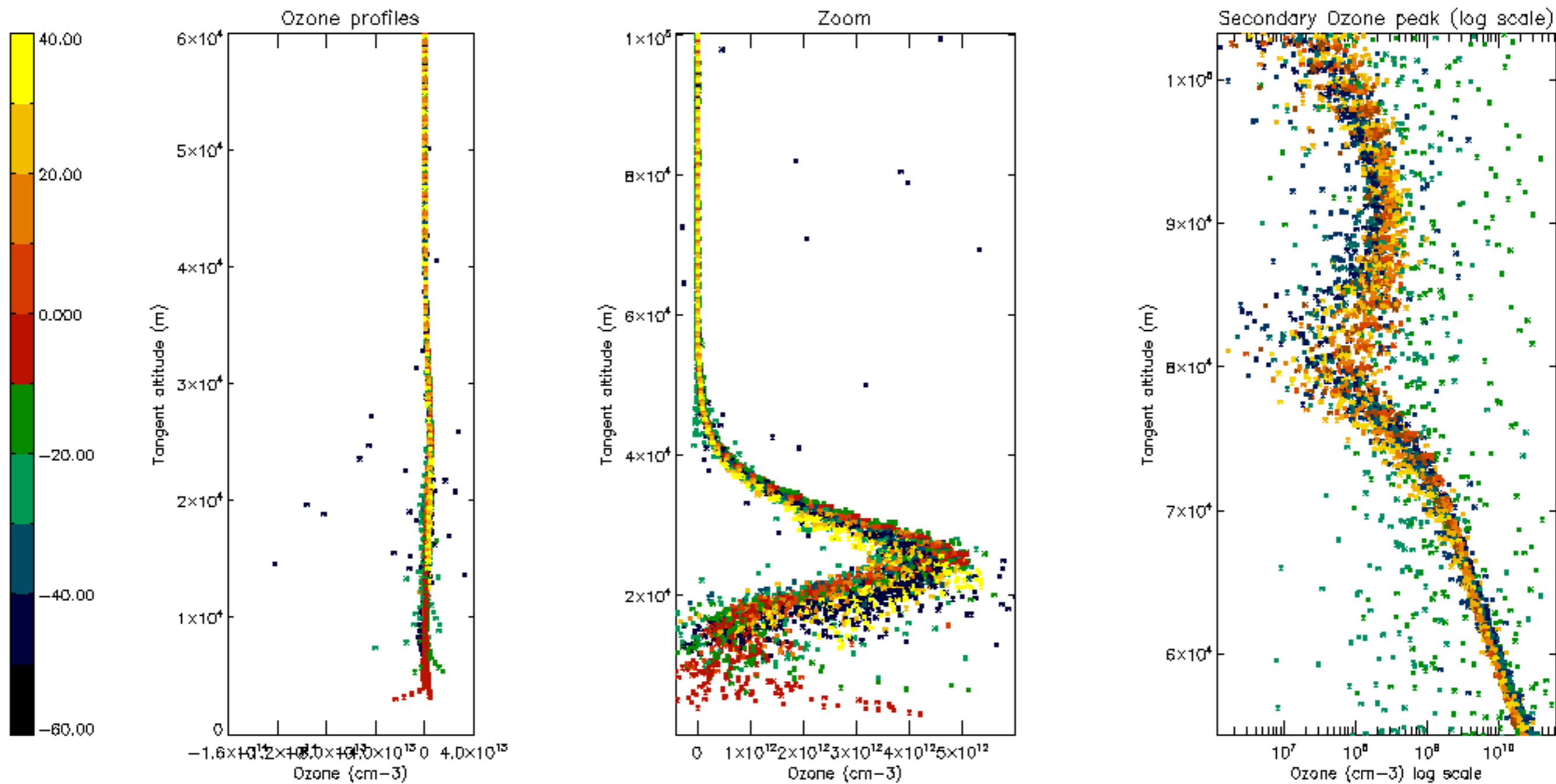


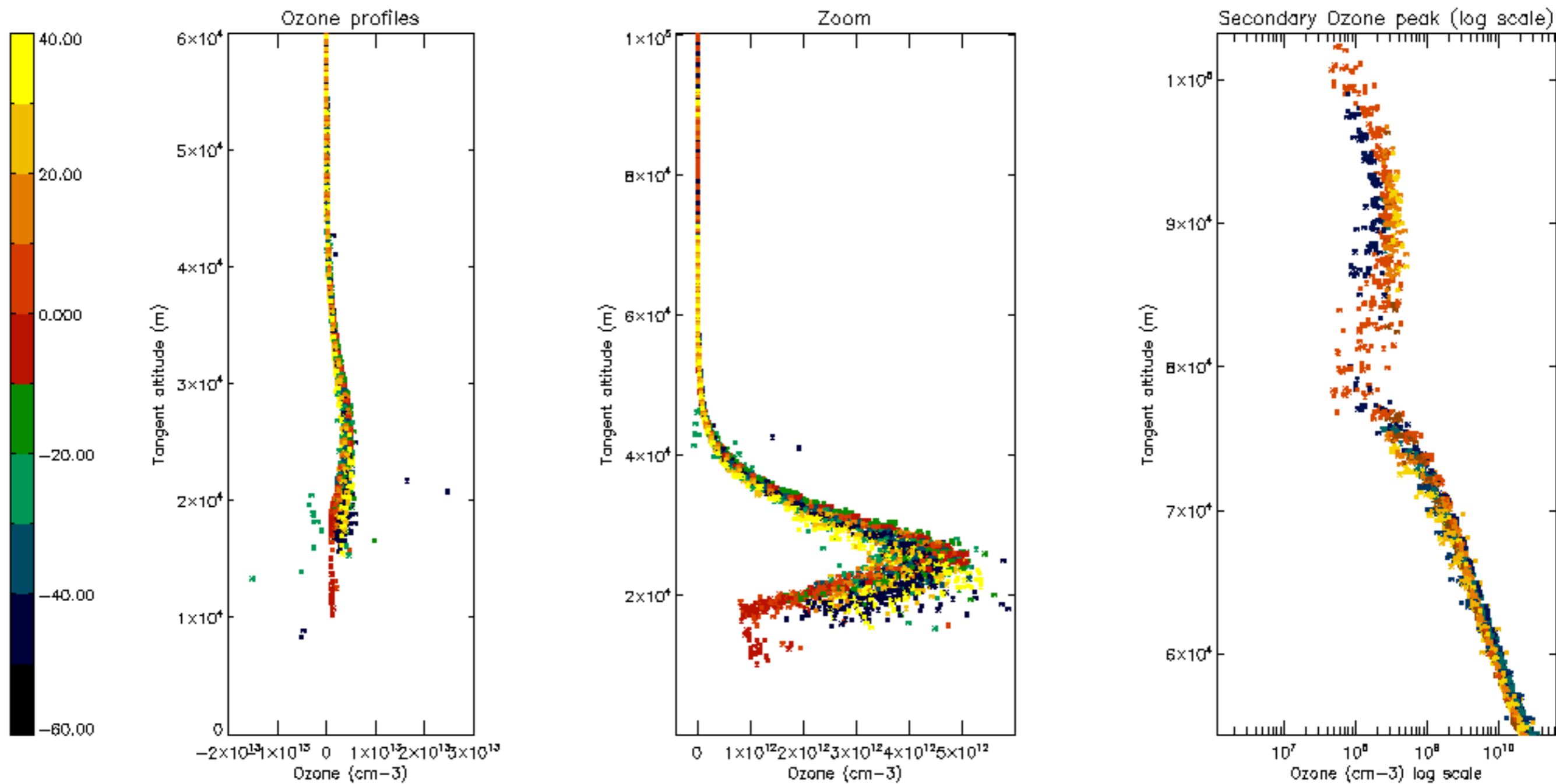
Percentage of star falling outside central band per profile

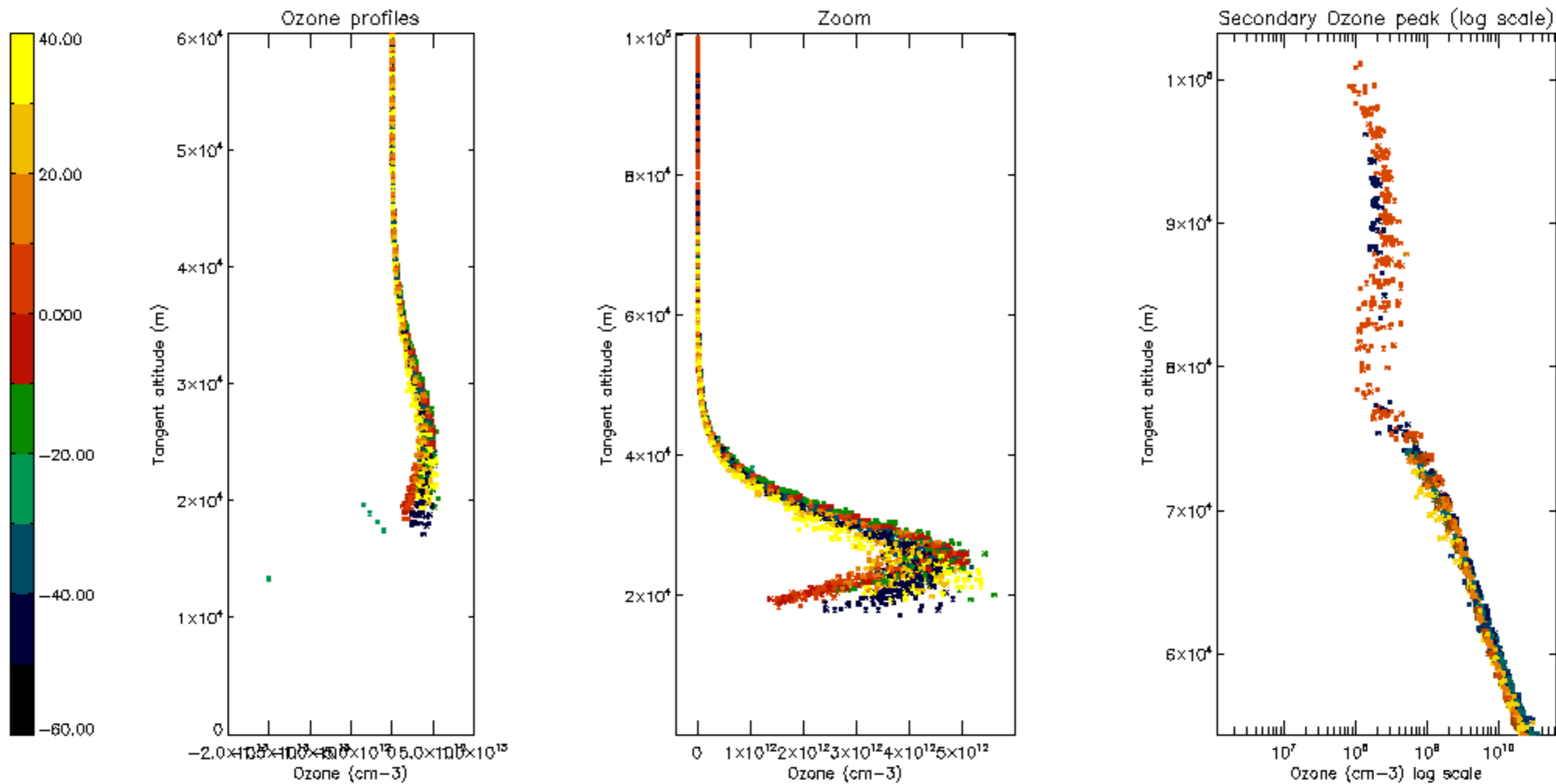


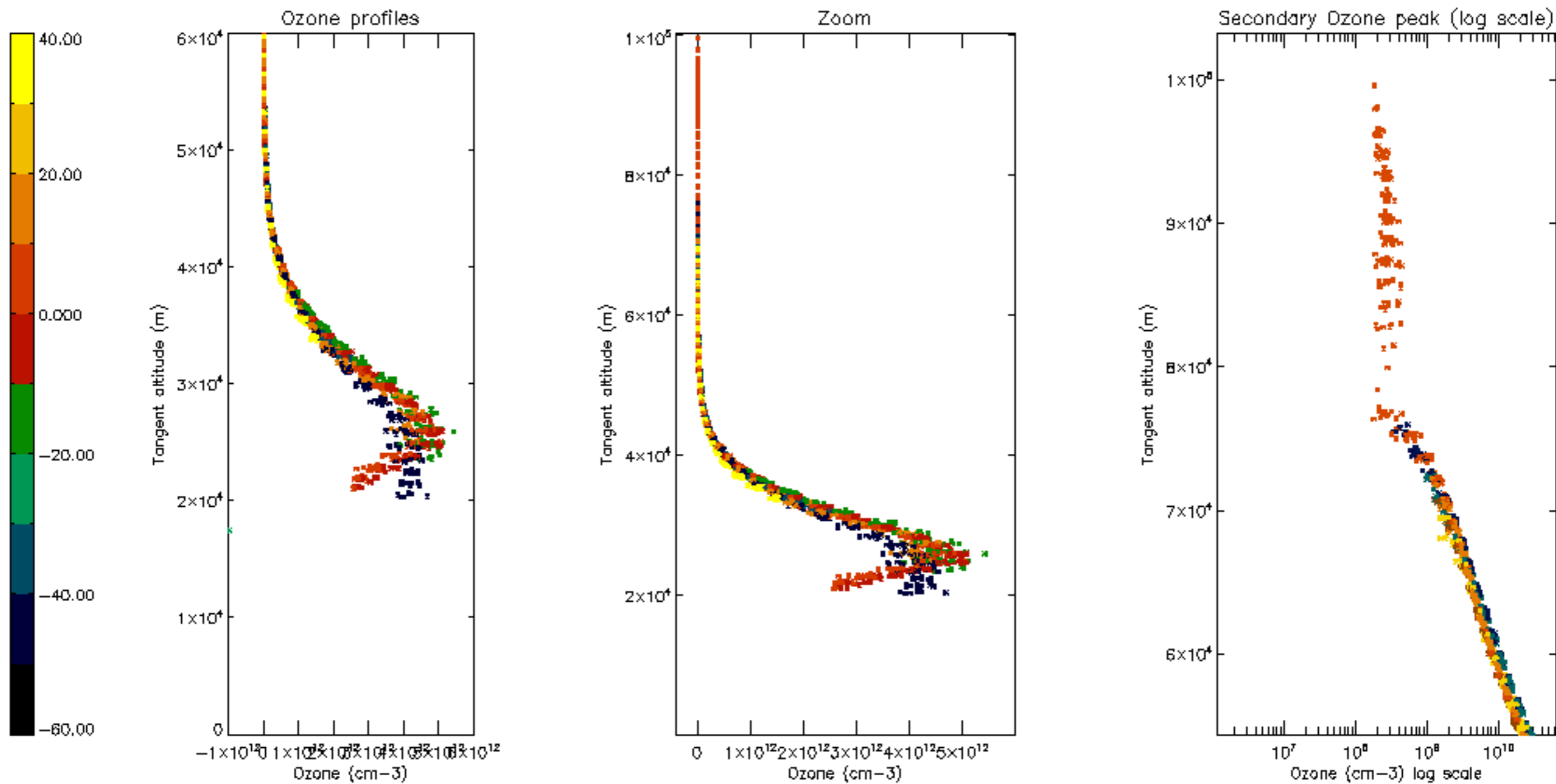
Percentage of saturation errors per profile

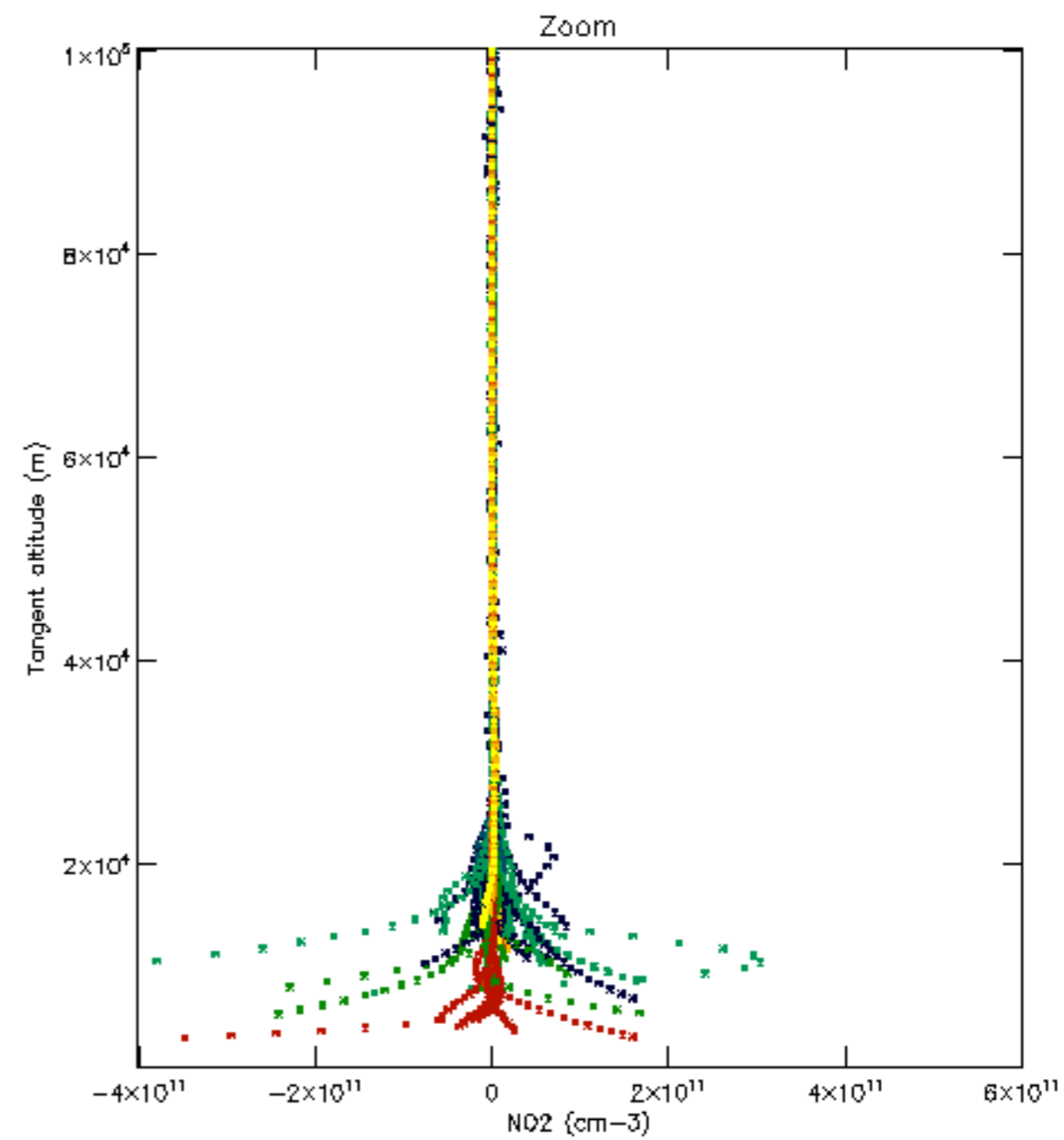
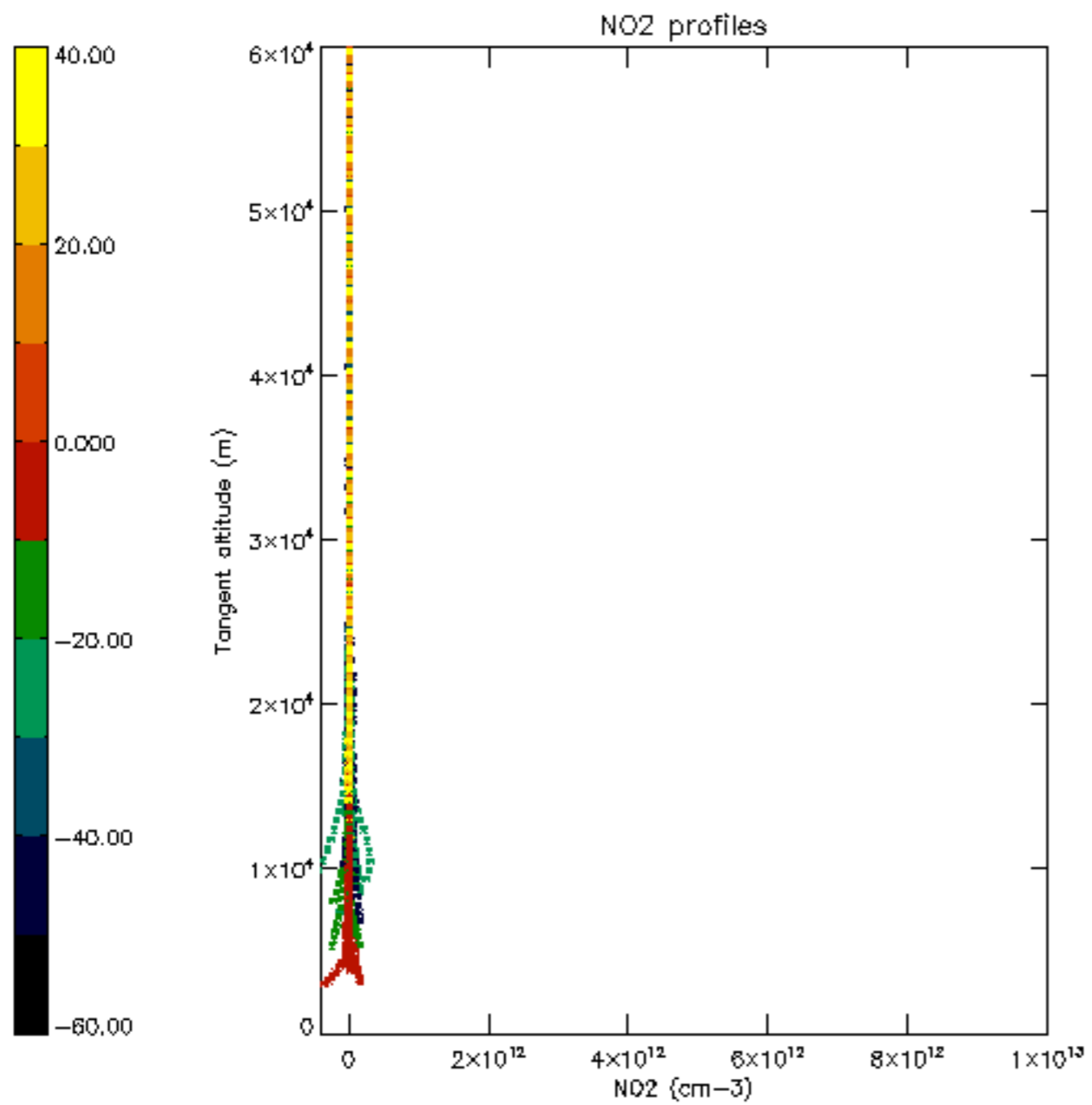


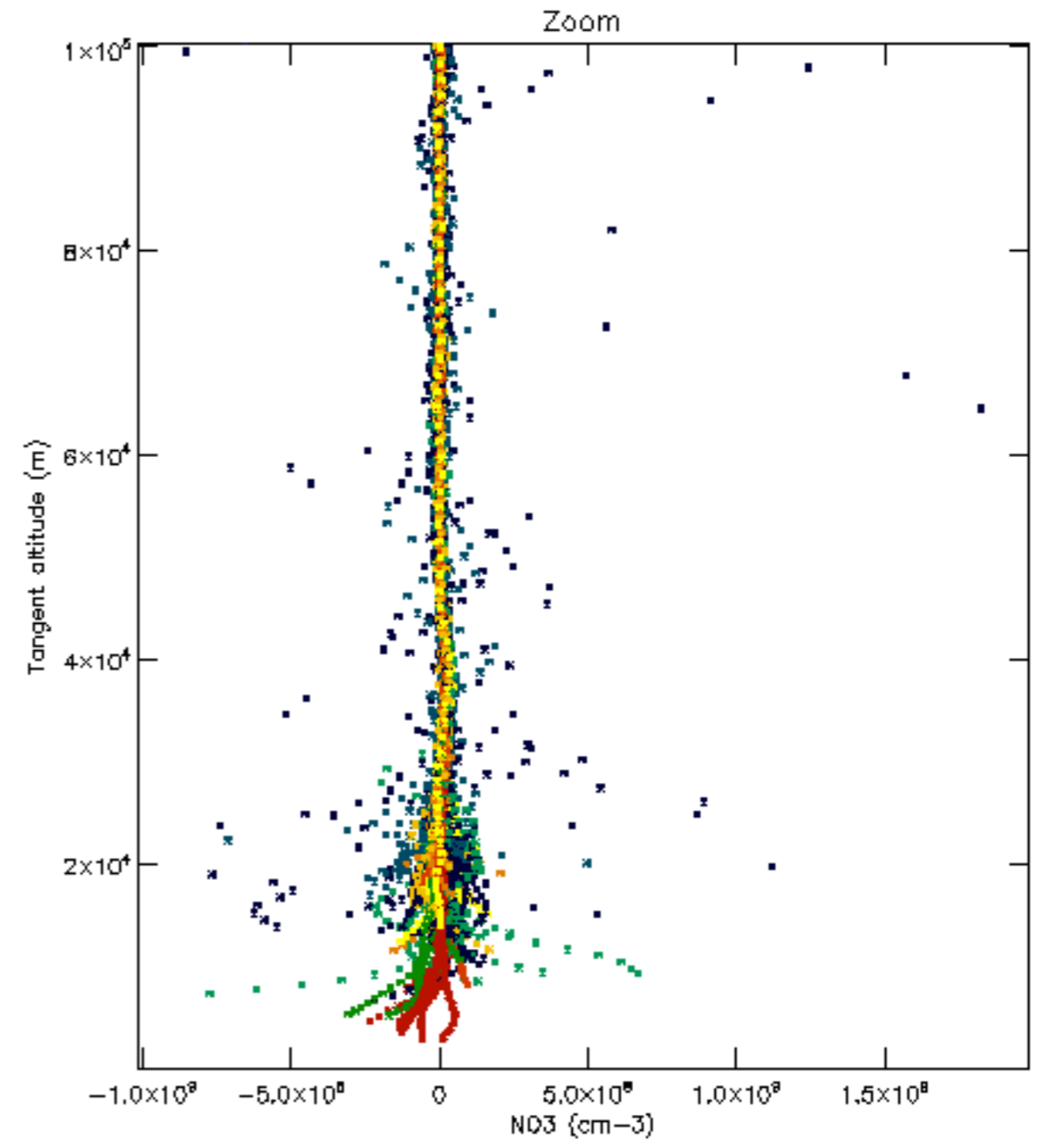
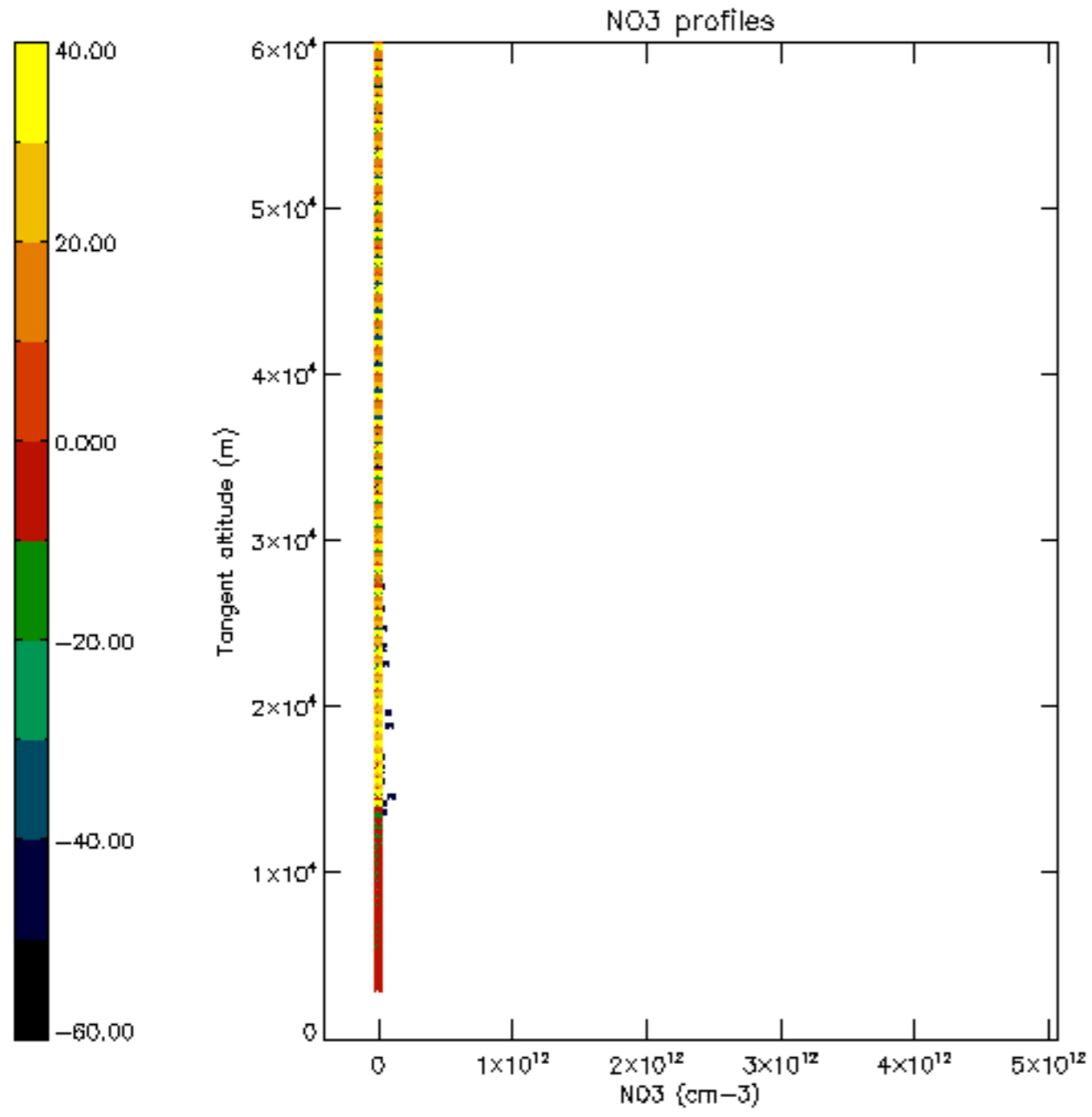


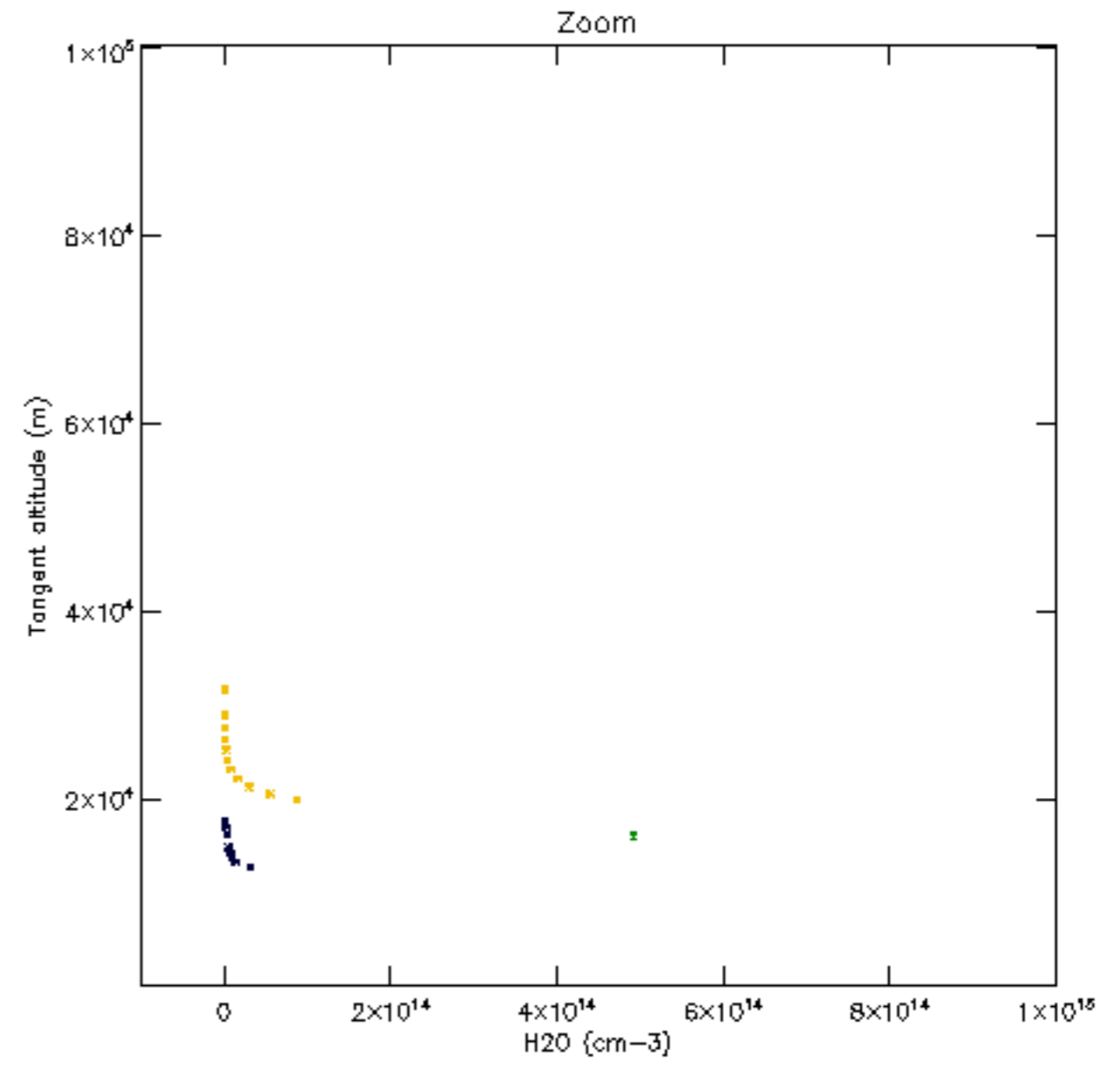
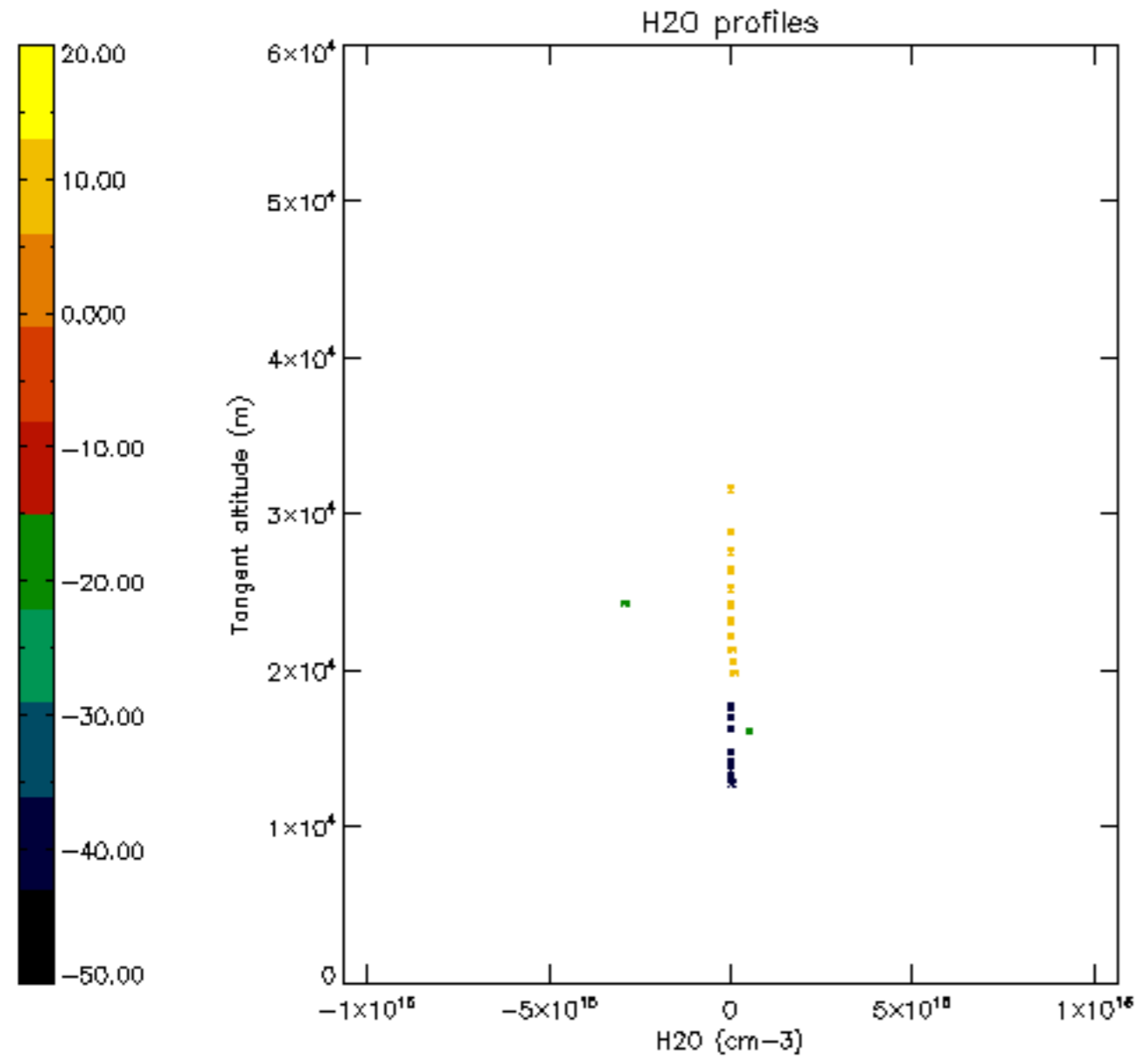


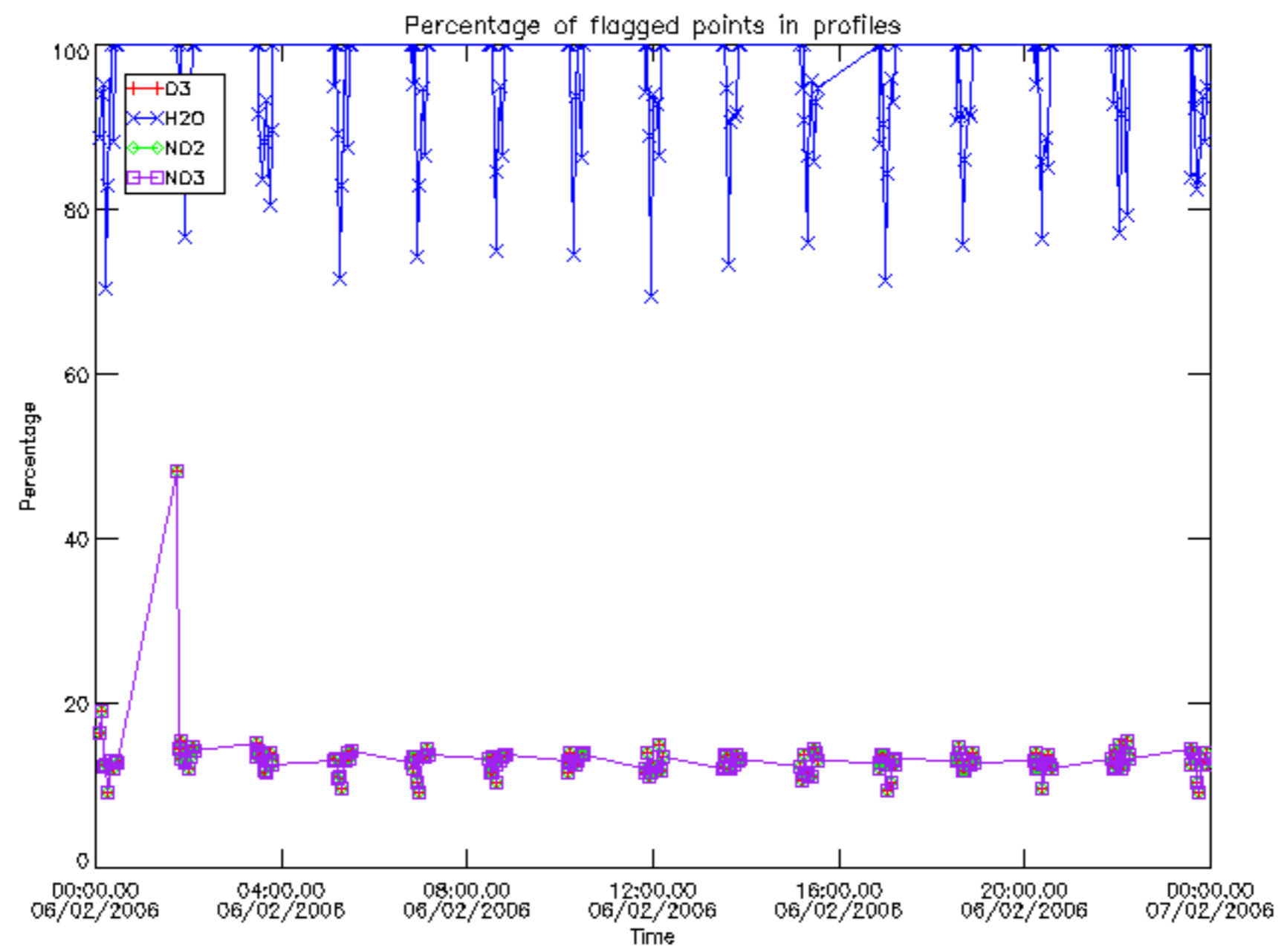




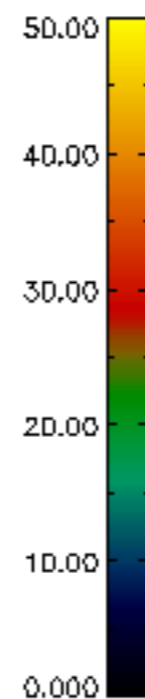
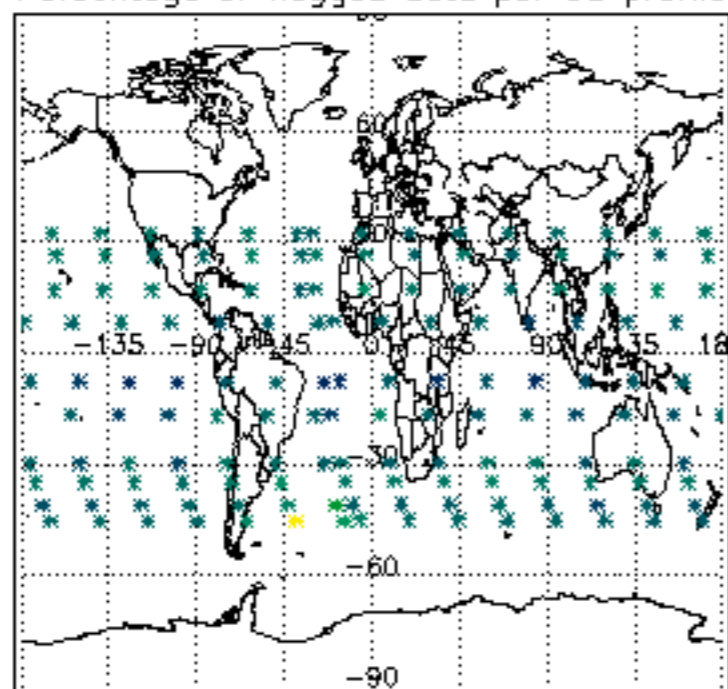




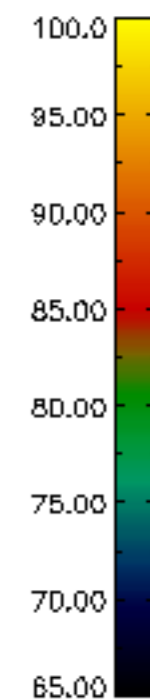
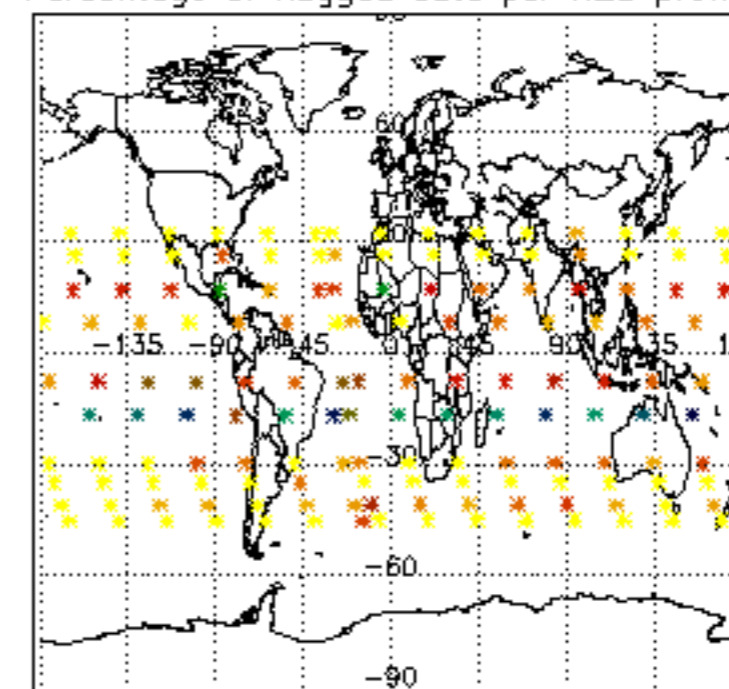




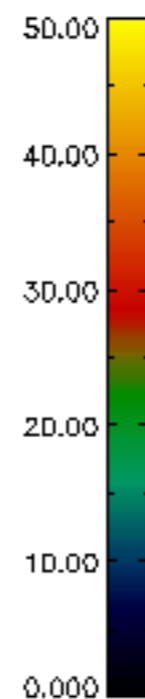
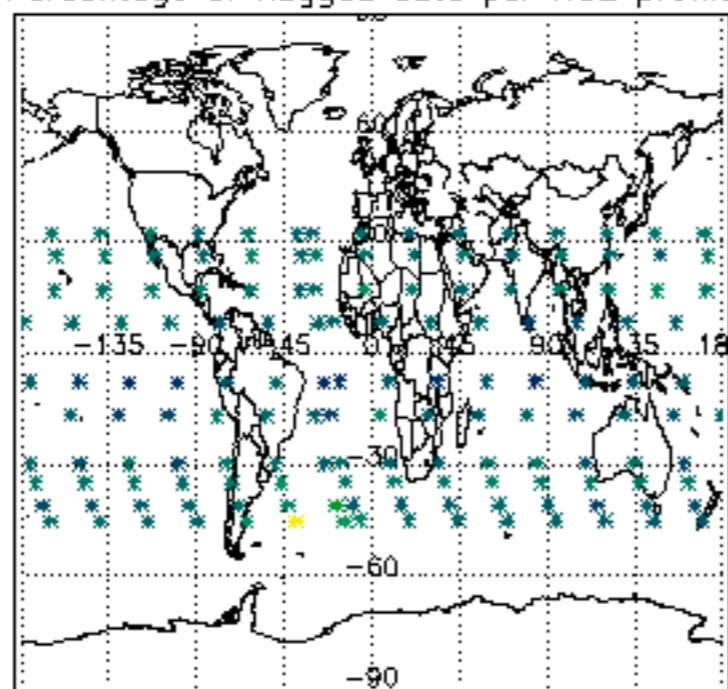
Percentage of flagged data per D3 profile



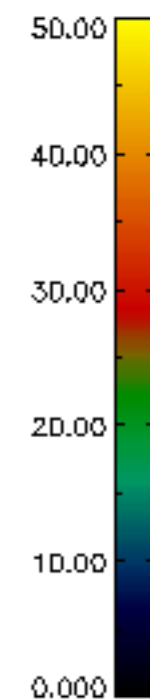
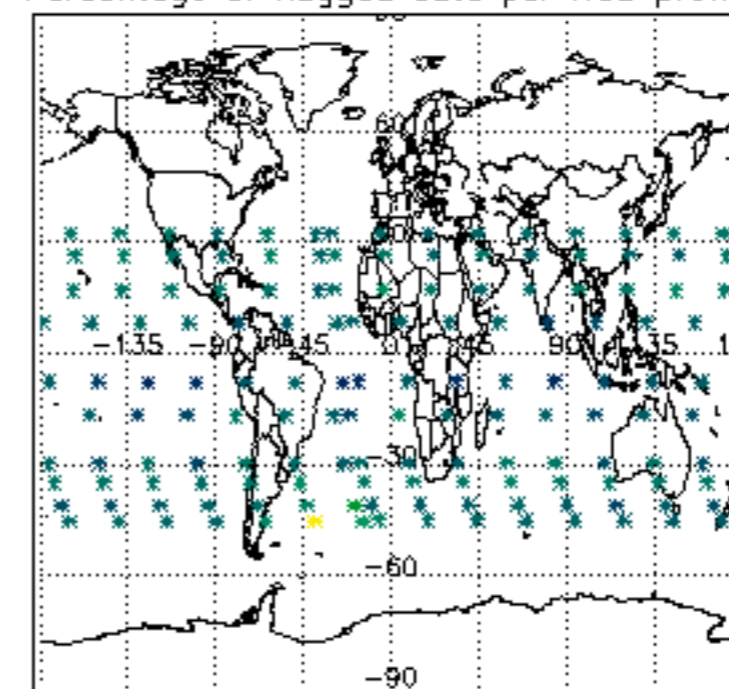
Percentage of flagged data per H2O profile

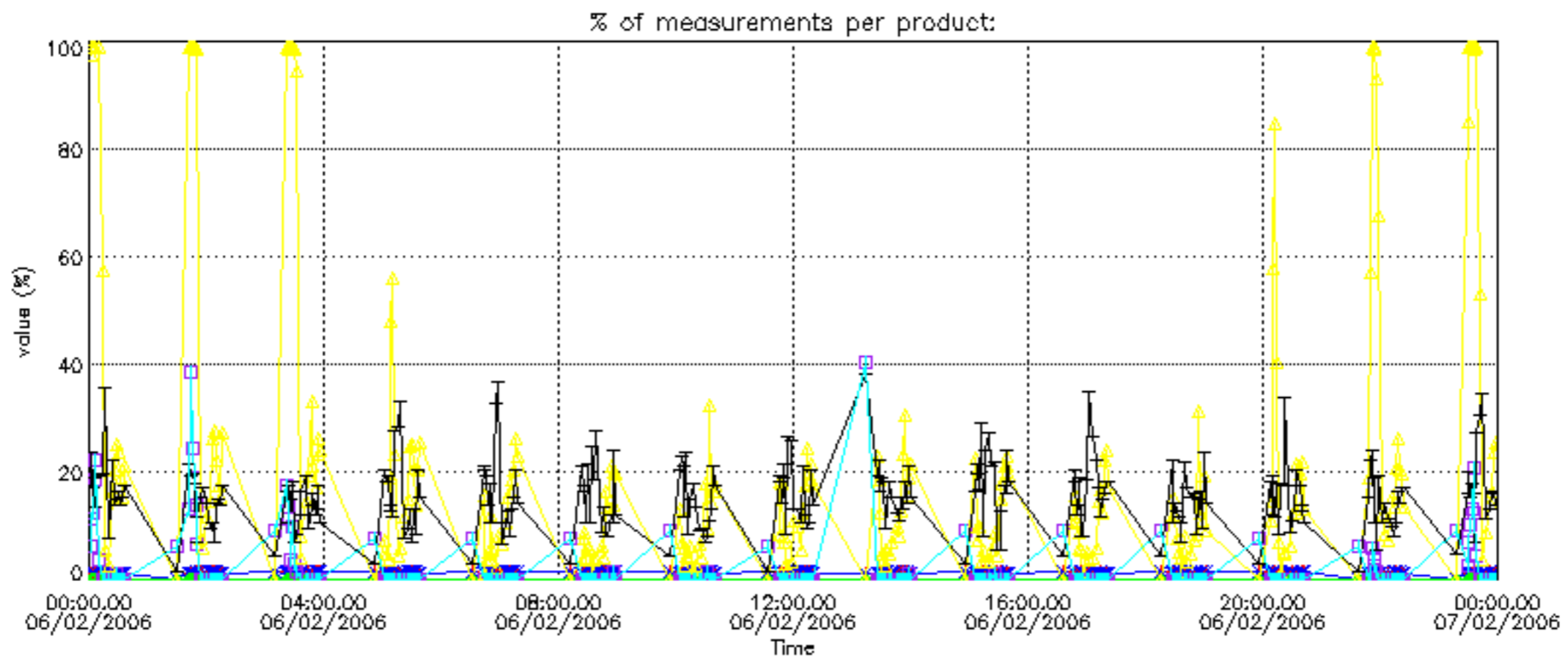


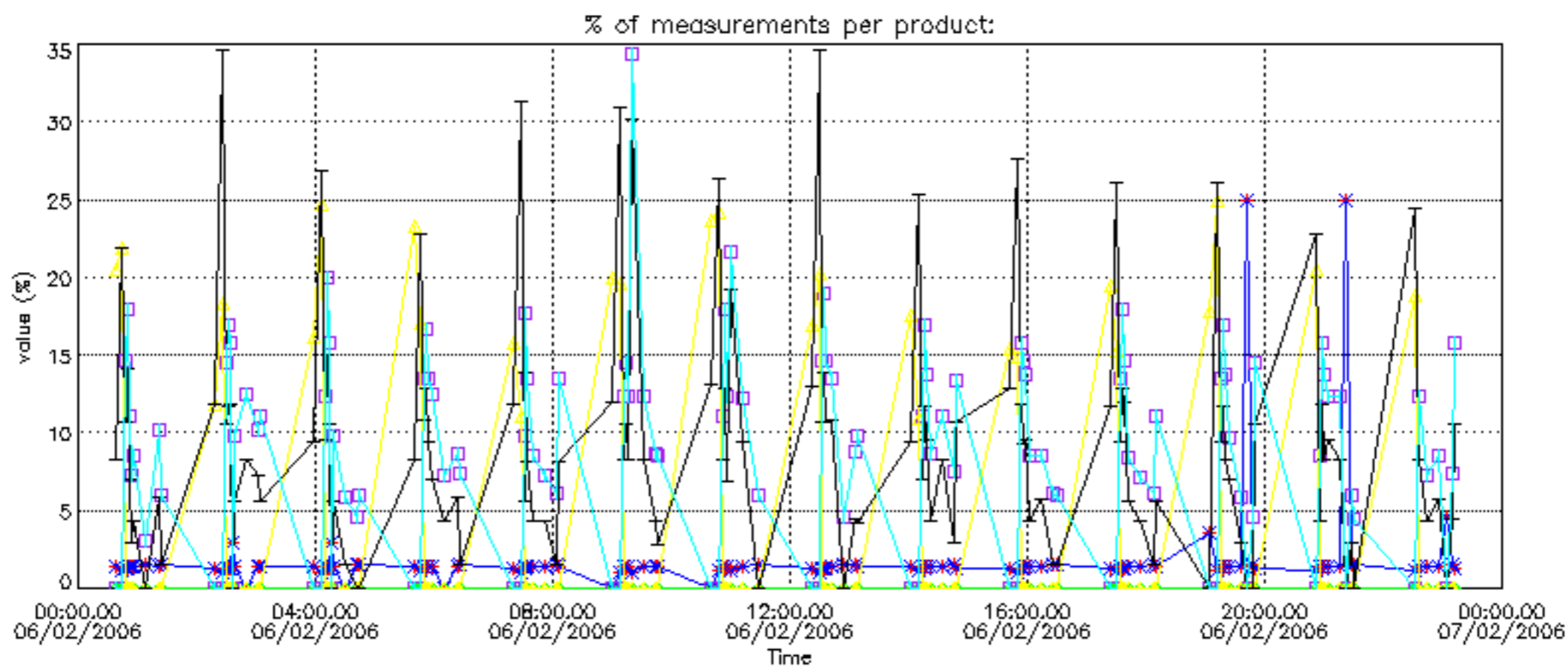
Percentage of flagged data per NO2 profile



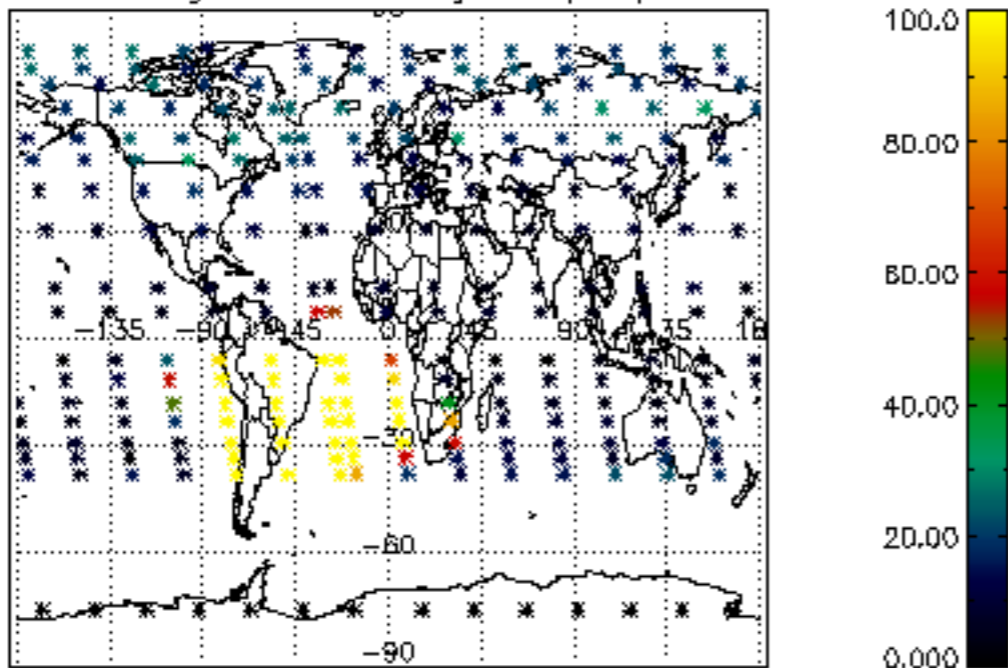
Percentage of flagged data per NO3 profile



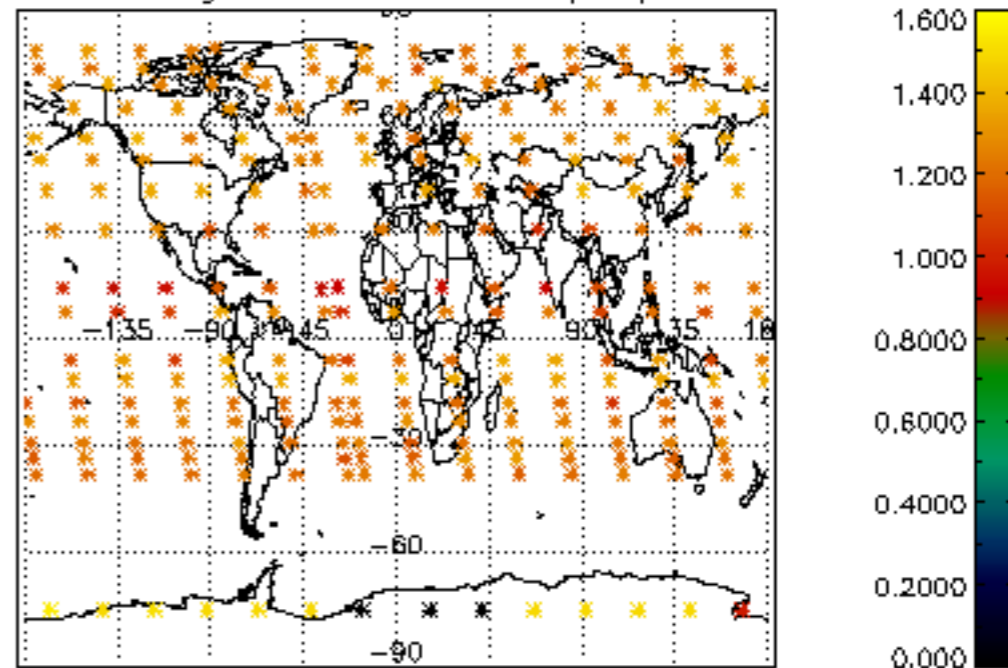




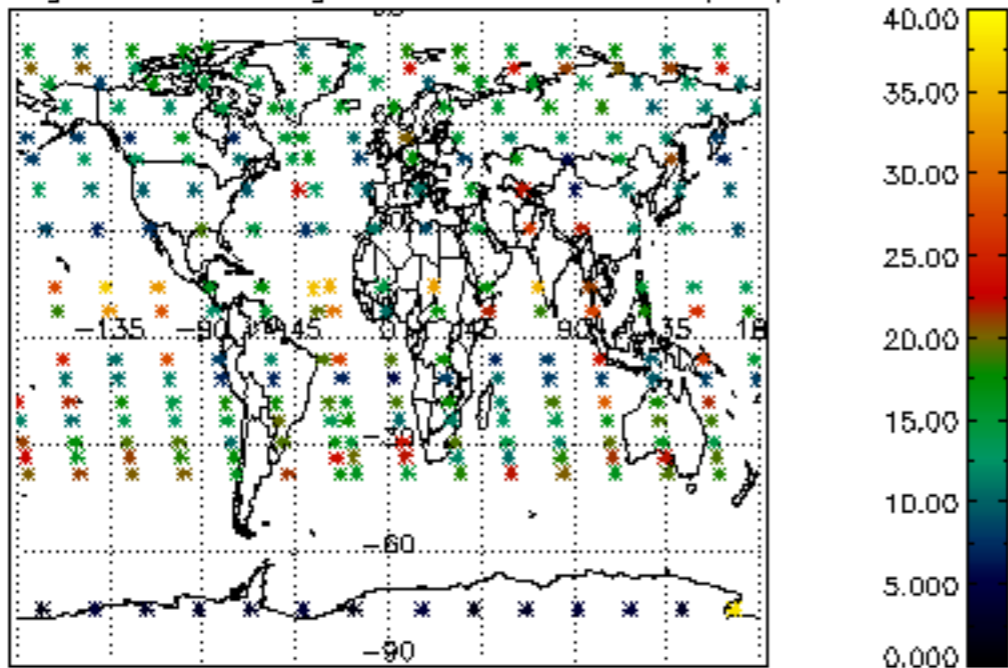
Percentage of cosmic ray hits per profile



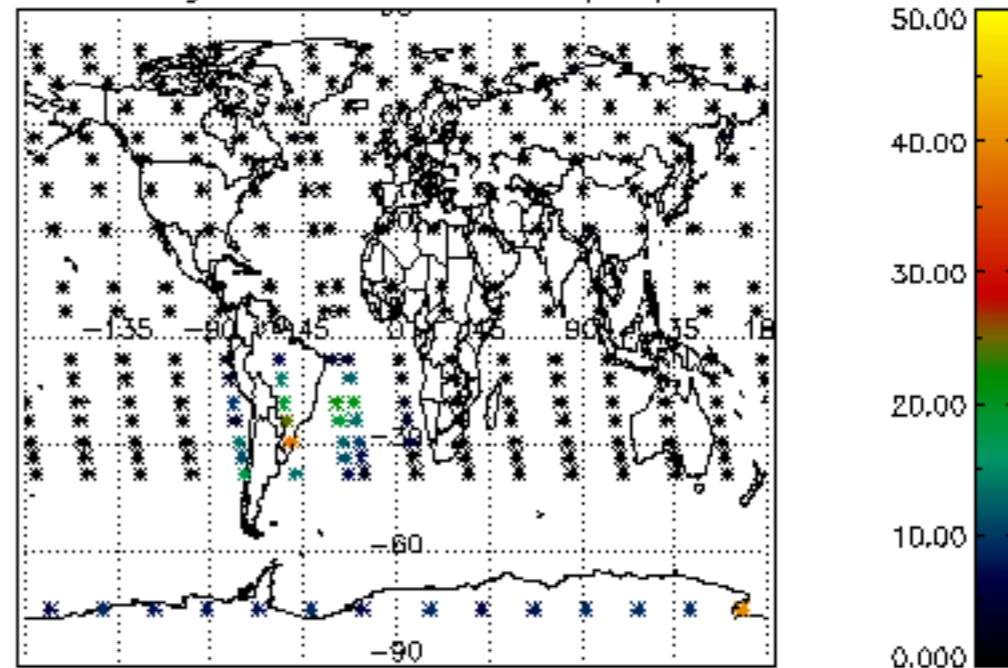
Percentage of datation errors per profile



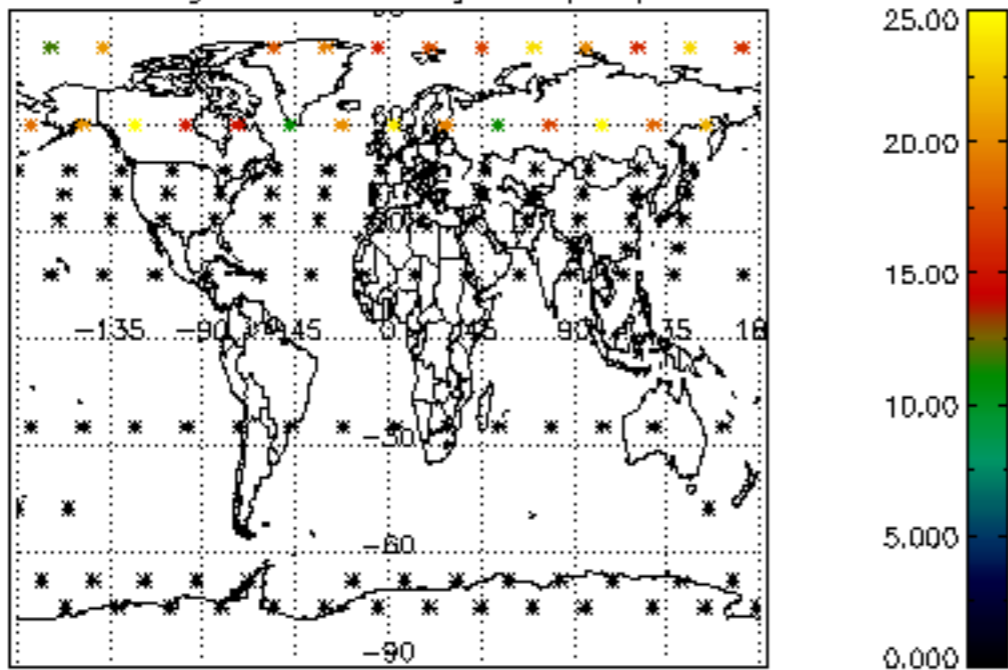
Percentage of star falling outside central band per profile



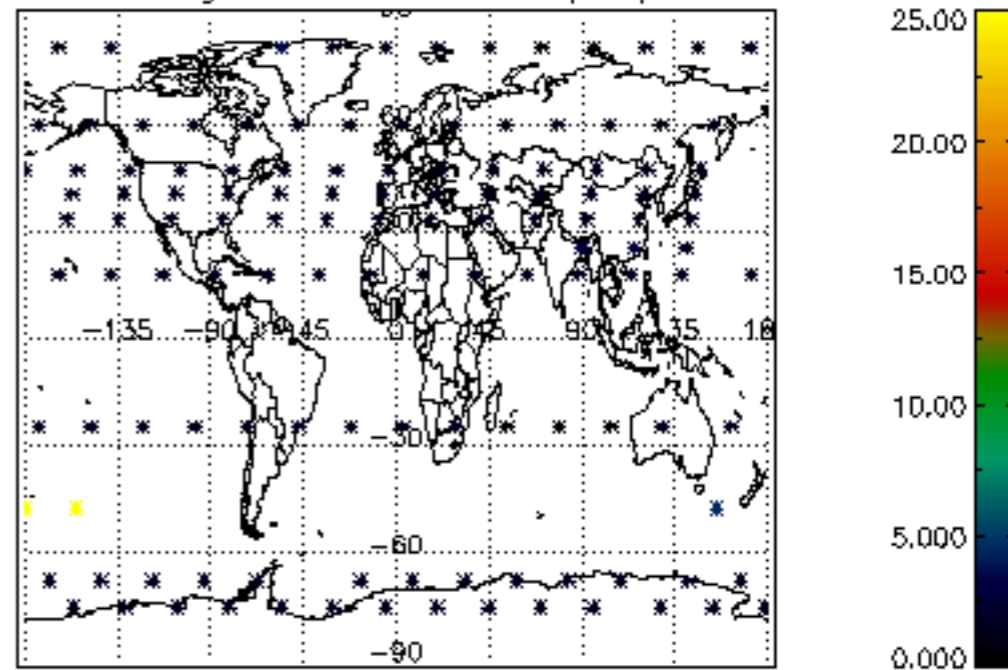
Percentage of saturation errors per profile



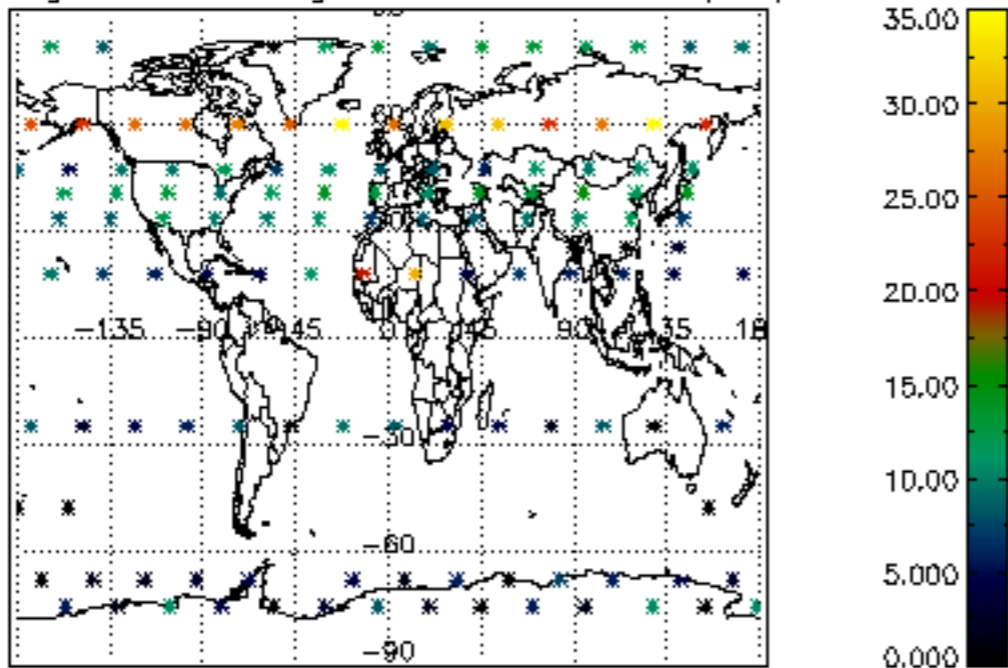
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

