

GOMOS Level 2 Daily Report

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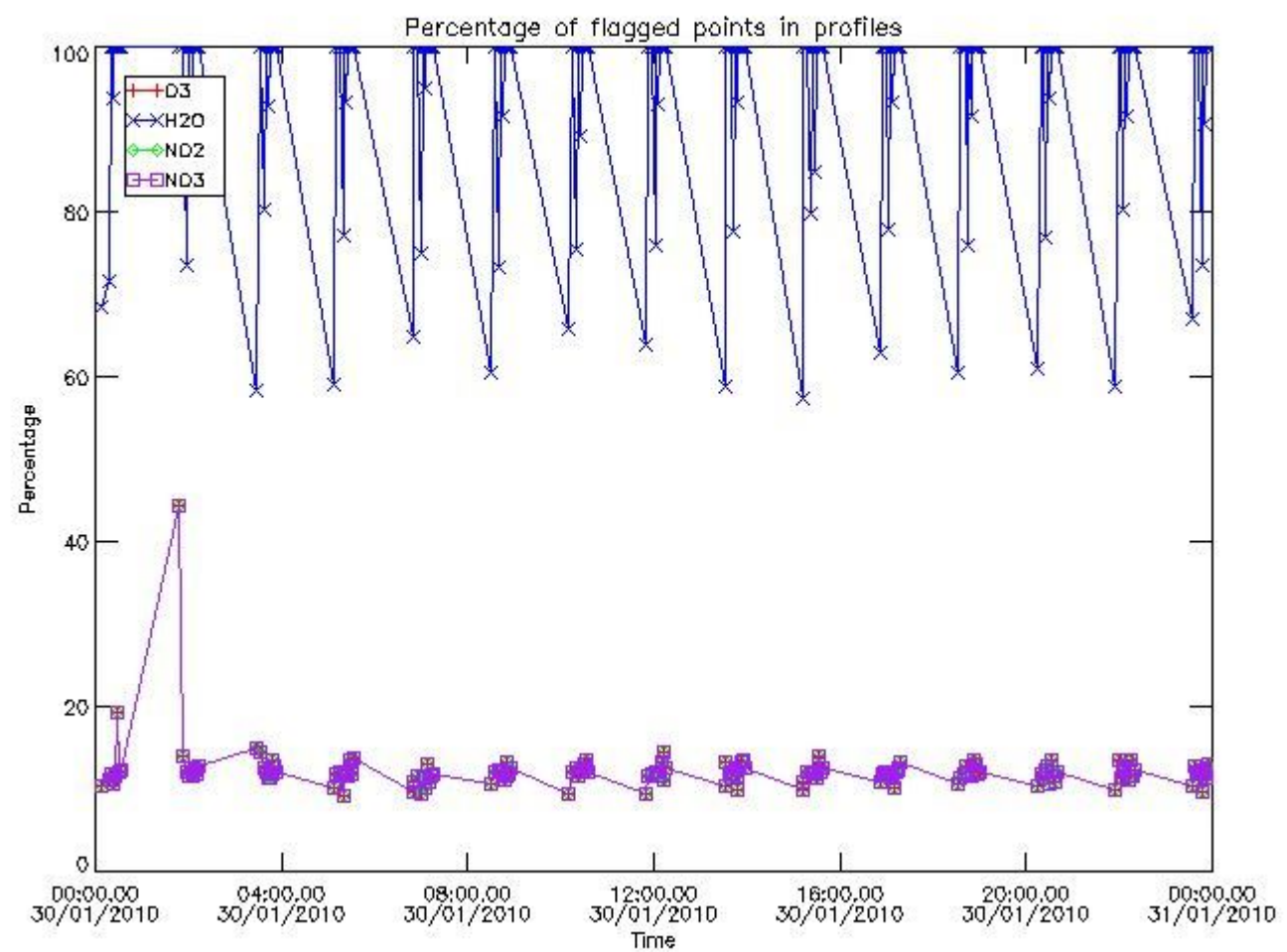
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338	GOM_NL__2PRFIN20100130_224313_000000402086_00273_41409_2741.N1	30-JAN-2010 22:43:13	Bright	39.500	24	66Alp Gem	1.5800	10200.	79	41409	No
339	GOM_NL__2PRFIN20100130_225923_000000362086_00273_41409_2742.N1	30-JAN-2010 22:59:23	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	41409	No
340	GOM_NL__2PRFIN20100130_230232_000000422086_00273_41409_2743.N1	30-JAN-2010 23:02:32	Bright	41.500	60	7Bet UMi	2.0810	3950.0	83	41409	No
341	GOM_NL__2PRFIN20100130_230714_000000362086_00273_41409_2744.N1	30-JAN-2010 23:07:14	Bright	36.000	119	14Eta Dra	2.7270	4700.0	72	41409	No
342	GOM_NL__2PRFIN20100130_231022_000000392086_00273_41409_2745.N1	30-JAN-2010 23:10:22	Bright	39.000	130	23Bet Dra	2.7990	5800.0	78	41409	No
343	GOM_NL__2PRFIN20100130_231358_000000472086_00273_41409_2746.N1	30-JAN-2010 23:13:58	Bright	46.500	5	3Alp Lyr	0.033000	11000.	93	41409	No
344	GOM_NL__2PRFIN20100130_231700_000000432086_00273_41409_2747.N1	30-JAN-2010 23:17:00	Bright	42.500	133	40Zet Her	2.8070	6000.0	85	41409	No
345	GOM_NL__2PRFIN20100130_232208_000000552086_00273_41409_2748.N1	30-JAN-2010 23:22:08	Bright	54.500	59	55Alp Oph	2.0800	8900.0	109	41409	No
346	GOM_NL__2PRFIN20100130_233042_000000442086_00273_41409_2749.N1	30-JAN-2010 23:30:42	Twilight_stray	44.000	86	35Eta Oph	2.4300	10200.	88	41409	No
347	GOM_NL__2PRFIN20100130_233457_000000492086_00273_41409_2750.N1	30-JAN-2010 23:34:57	Dark	49.000	16	21Alp Sco	1.0200	3000.0	98	41409	No
348	GOM_NL__2PRFIN20100130_233618_000000442086_00273_41409_2751.N1	30-JAN-2010 23:36:18	Dark	44.000	158	6Pi Sco	2.9060	28000.	88	41409	No
349	GOM_NL__2PRFIN20100130_234043_000000432086_00273_41409_2752.N1	30-JAN-2010 23:40:43	Dark	42.500	131	Gam Lup	2.8000	26000.	85	41409	No
350	GOM_NL__2PRFIN20100130_234255_000000432086_00273_41409_2736.N1	30-JAN-2010 23:42:55	Dark	43.000	109	Bet Lup	2.6770	26000.	86	41409	No
351	GOM_NL__2PRFIN20100130_234558_000000542086_00274_41410_2737.N1	30-JAN-2010 23:45:58	Dark	53.500	4	Alp1Cen	-0.010000	5800.0	107	41410	No
352	GOM_NL__2PRFIN20100130_234750_000000422086_00274_41410_2738.N1	30-JAN-2010 23:47:50	Dark	41.500	77	Eps Cen	2.3030	28000.	83	41410	No
353	GOM_NL__2PRFIN20100130_235033_000000442086_00274_41410_2739.N1	30-JAN-2010 23:50:33	Dark	43.500	12	Alp1Cru	0.77500	30000.	87	41410	No
354	GOM_NL__2PRFIN20100130_235231_000000452086_00274_41410_2740.N1	30-JAN-2010 23:52:31	Dark	45.000	99	Del Cen	2.5750	26000.	90	41410	No
355	GOM_NL__2PRFIN20100130_235435_000000402086_00274_41410_2741.N1	30-JAN-2010 23:54:35	Dark	39.500	159	Ups Car	2.9200	7200.0	79	41410	No
356	GOM_NL__2PRFIN20100130_235630_000000432086_00274_41410_2742.N1	30-JAN-2010 23:56:30	Dark	42.500	71	lot Car	2.2460	7700.0	85	41410	No
357	GOM_NL__2PRFIN20100130_235815_000000412086_00274_41410_2743.N1	30-JAN-2010 23:58:15	Dark	41.000	46	Del Vel	1.9540	10600.	82	41410	No

3. Quality information per product

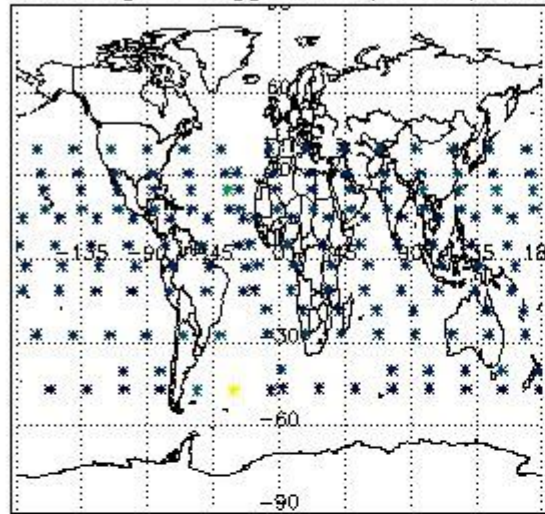
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

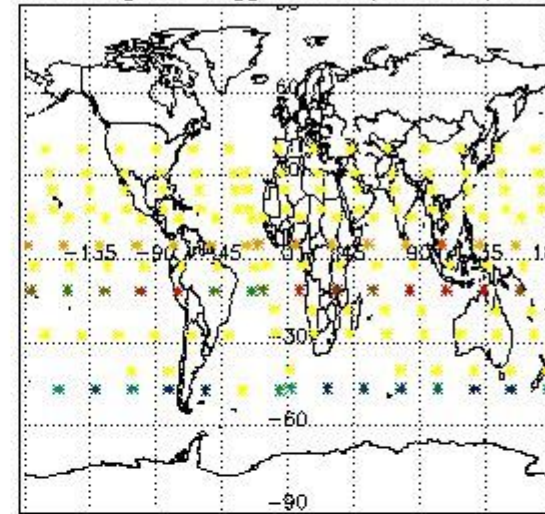


3.2 Plot quality information per product (world map)

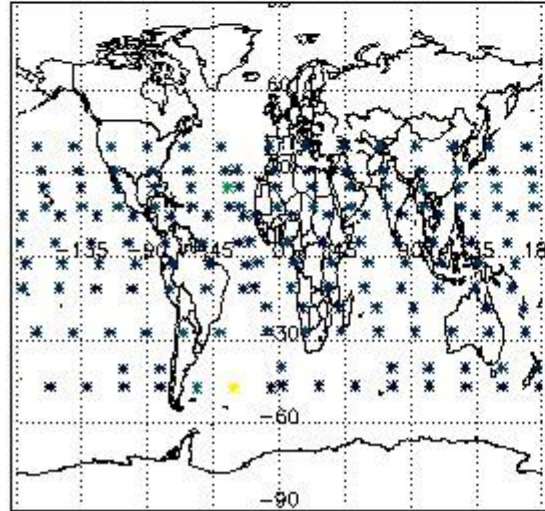
Percentage of flagged data per O3 profile



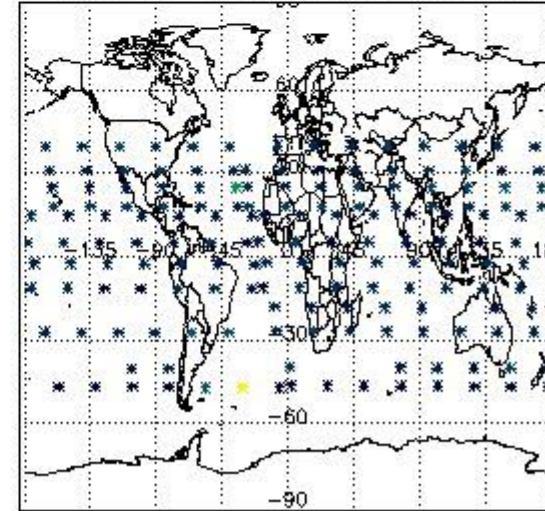
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

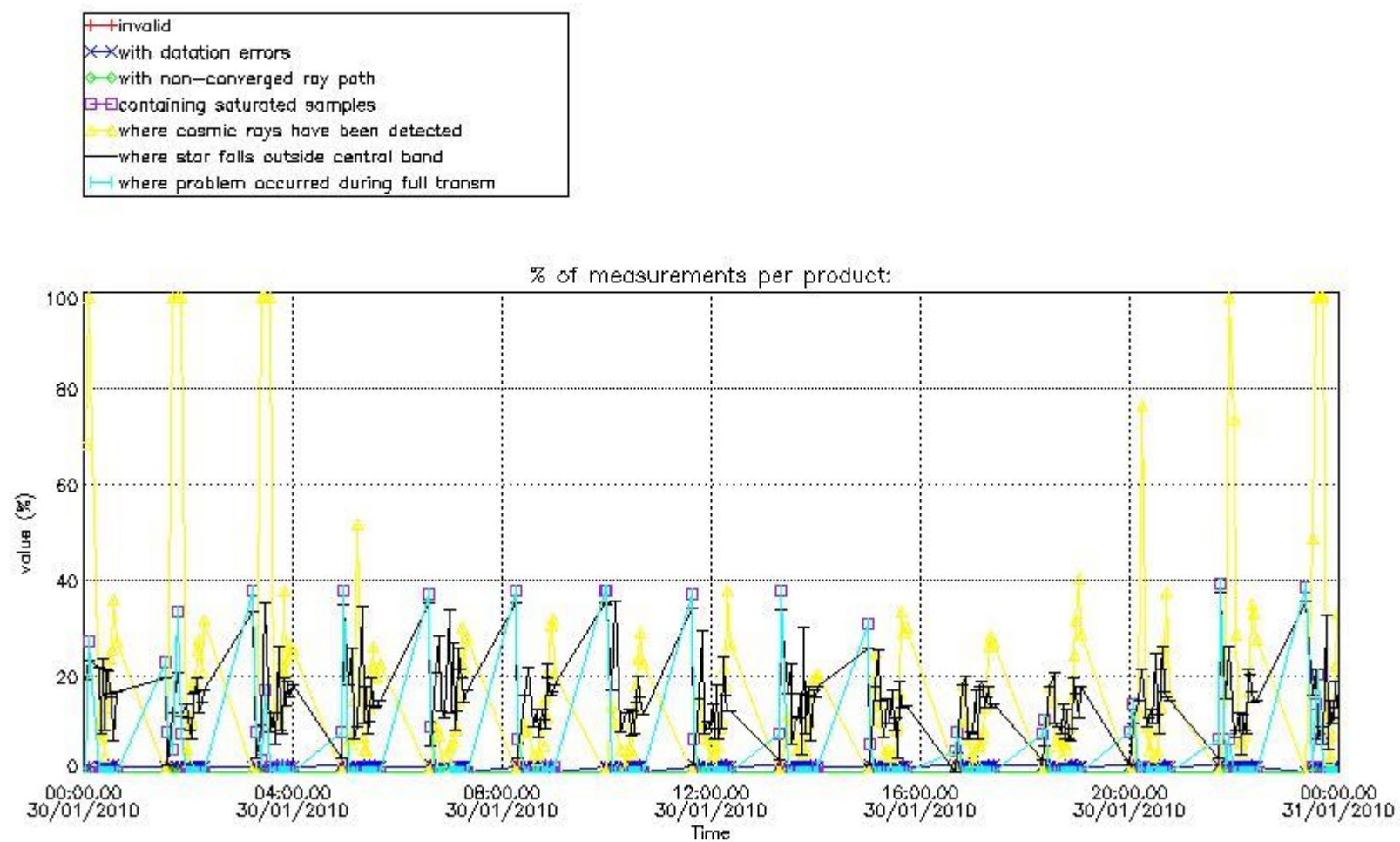


4. Level 1 quality information per product

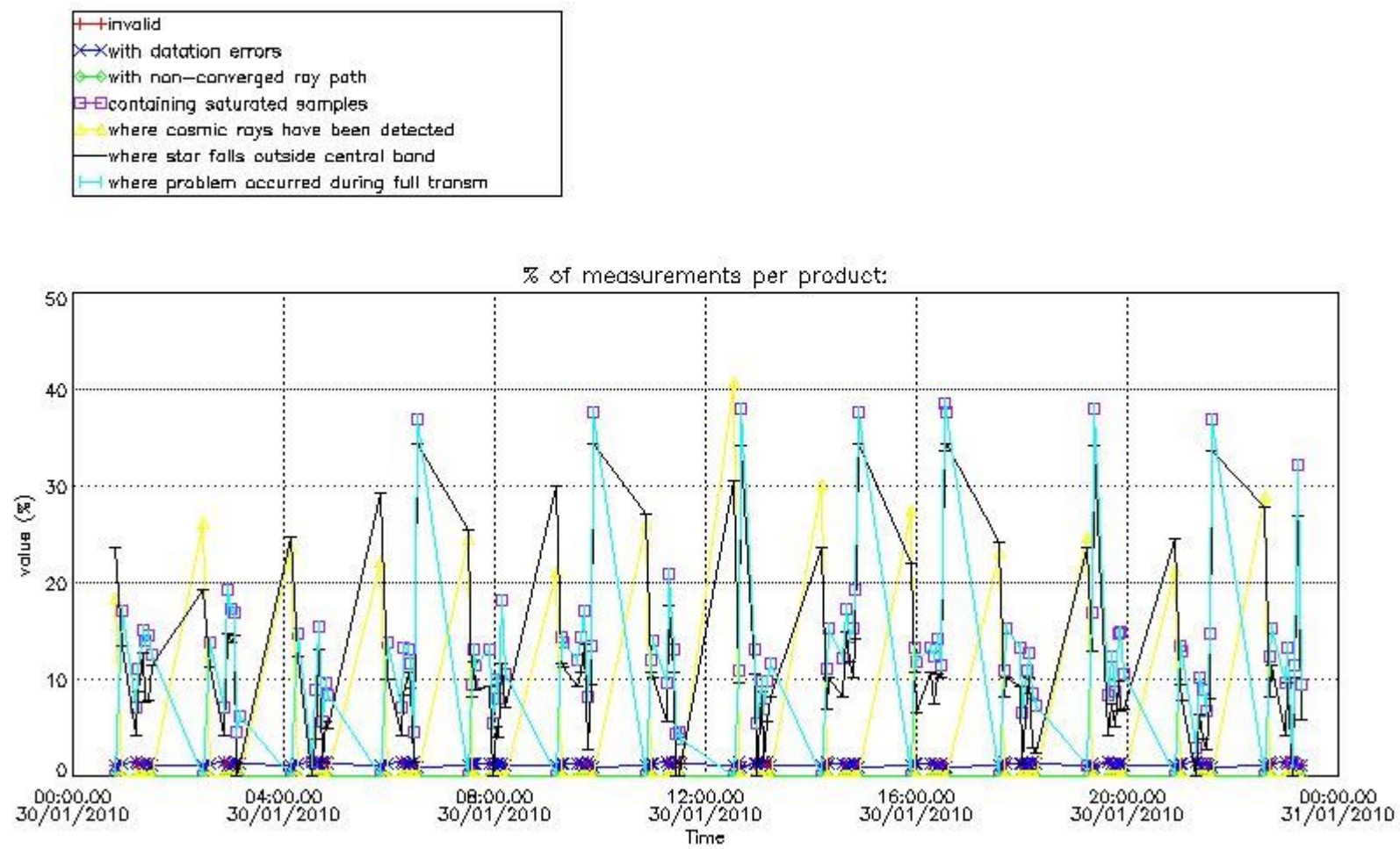
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

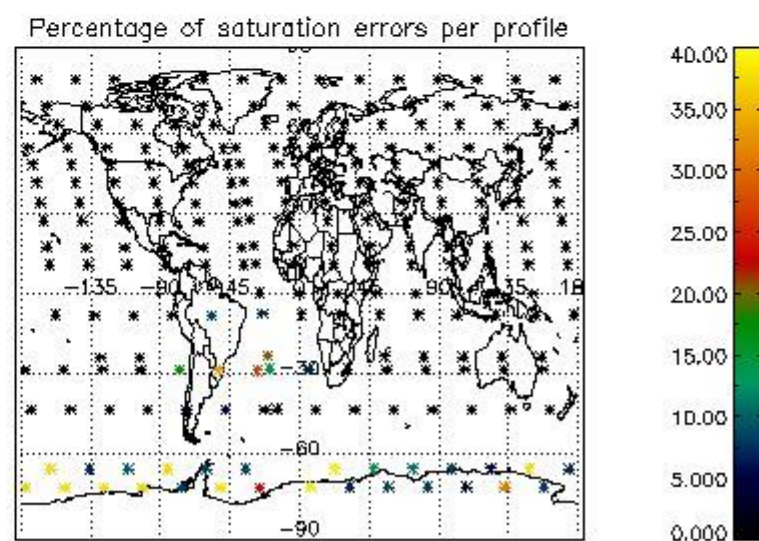
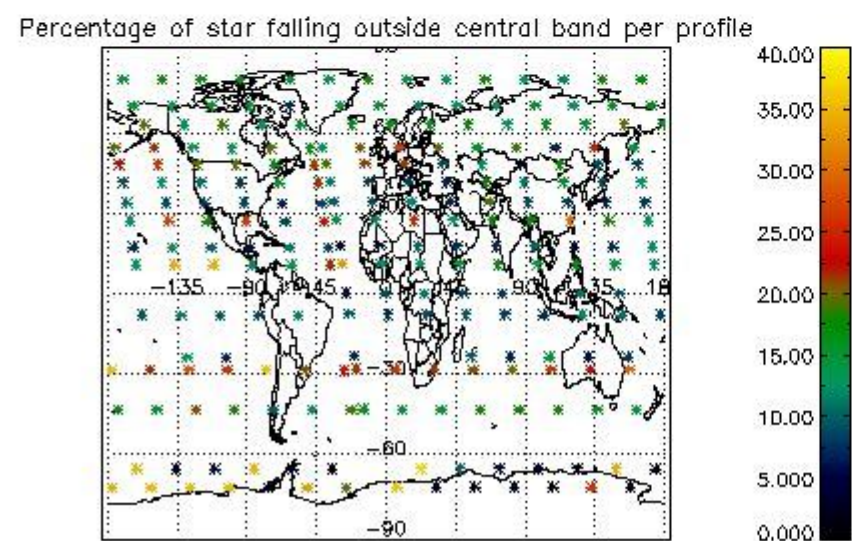
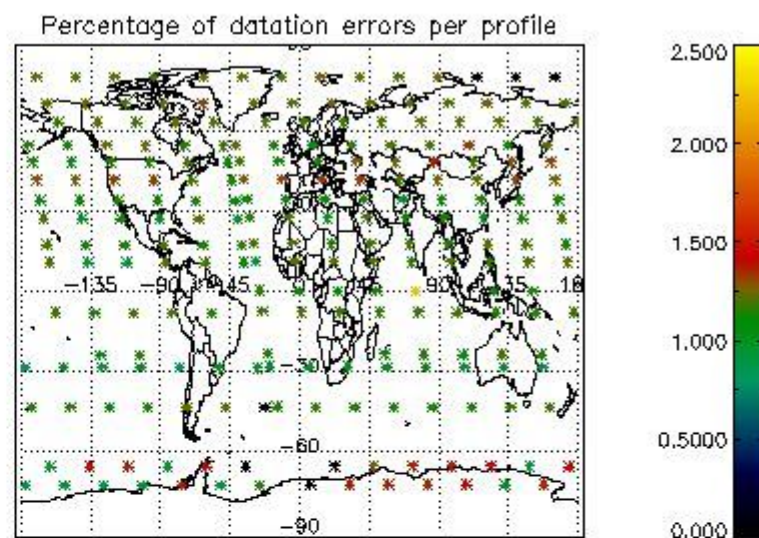
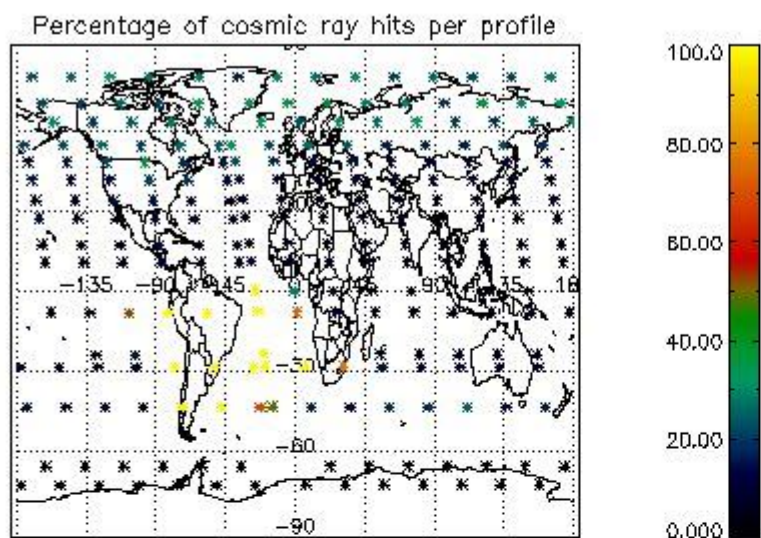


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

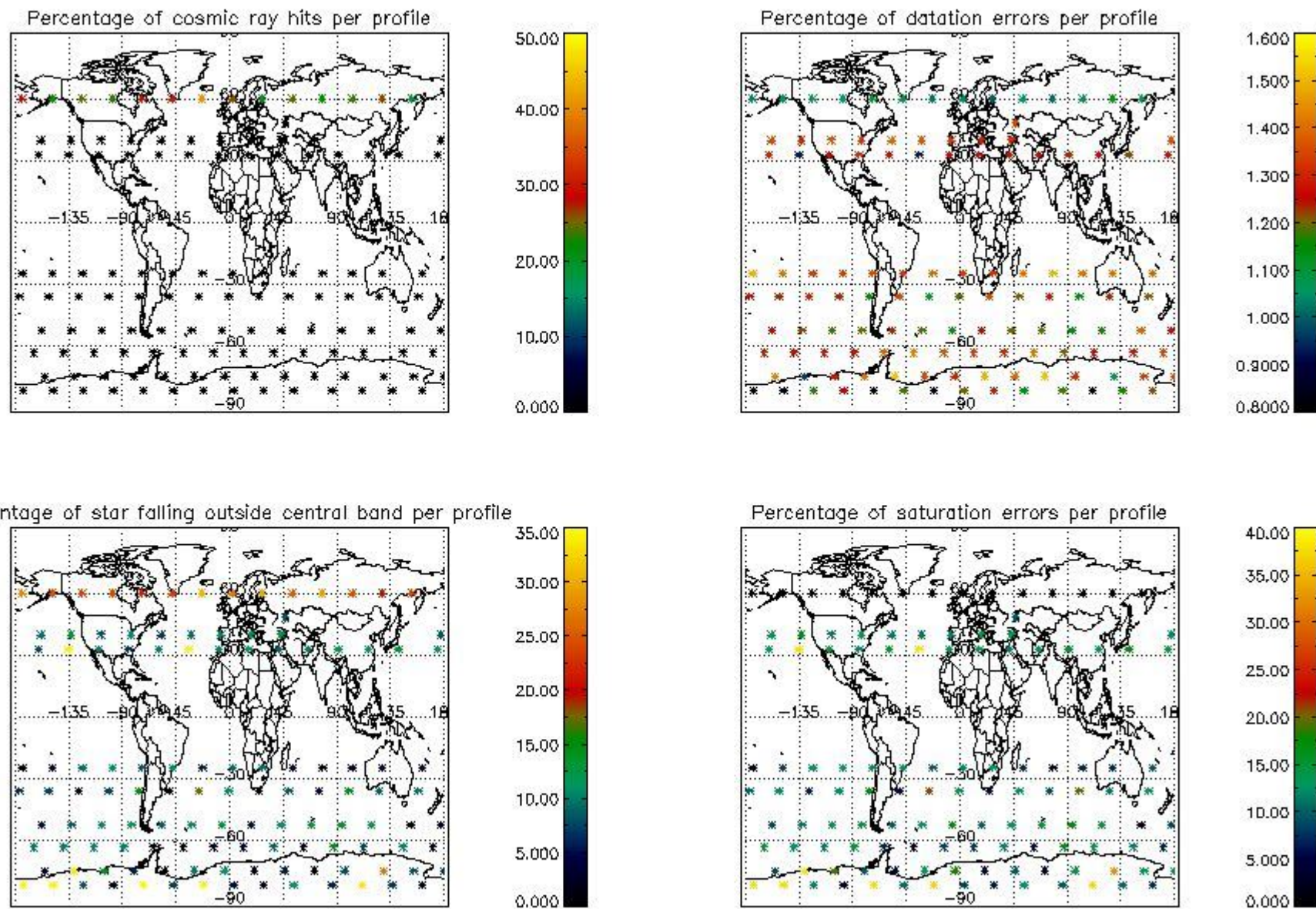


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

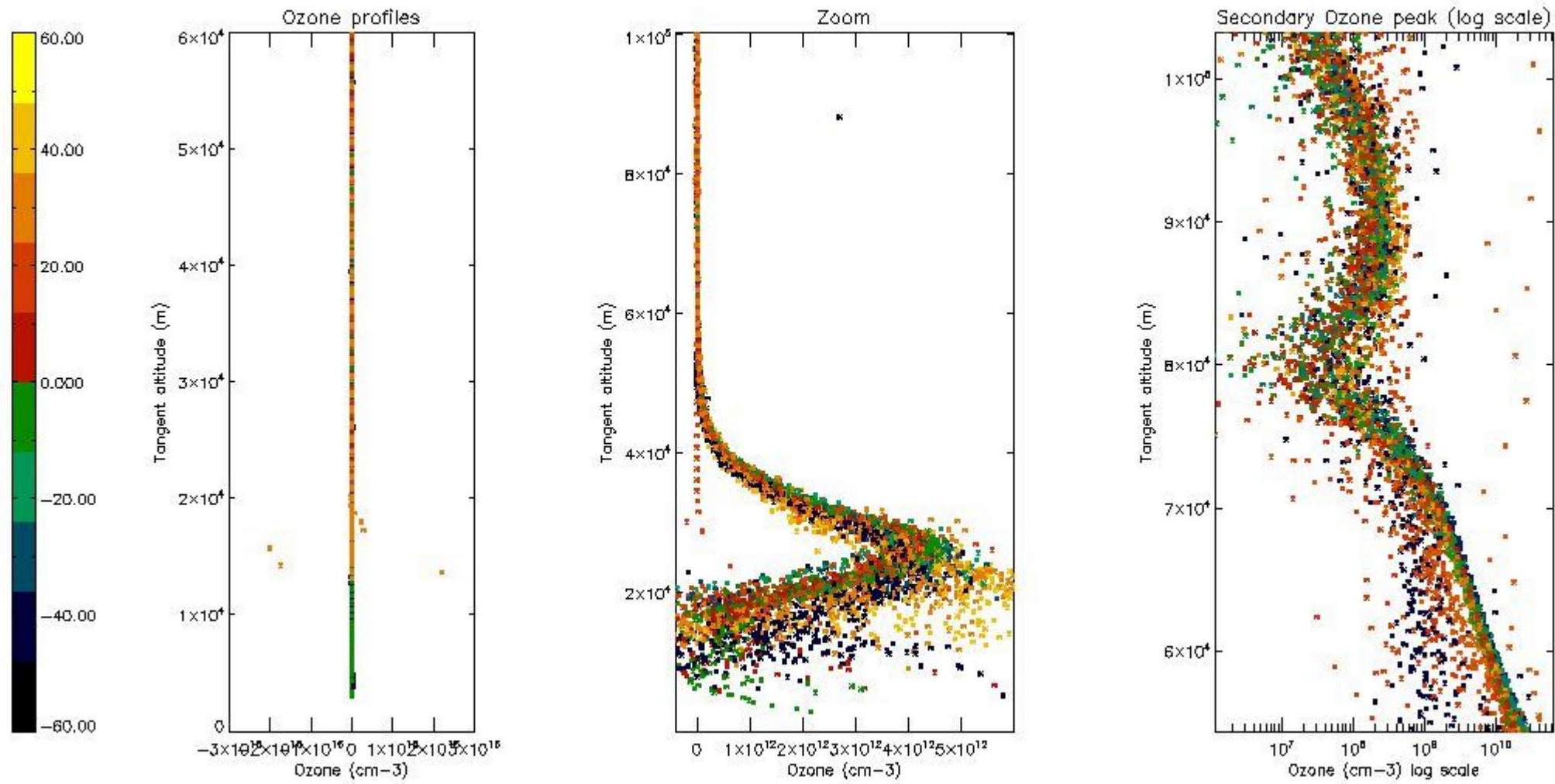
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	48
STD < 20	25

STD < 10	20
STD < 5	14

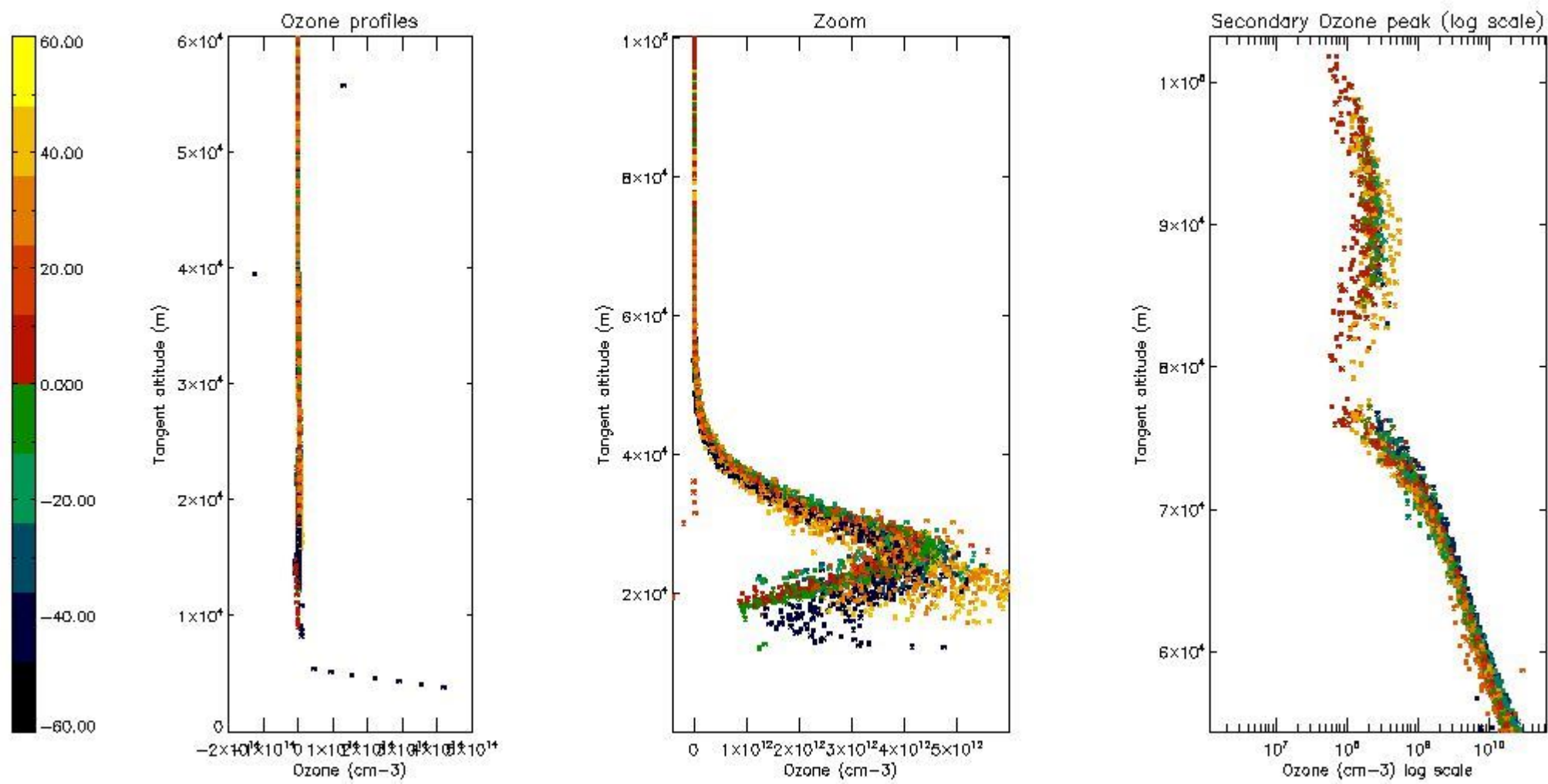
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



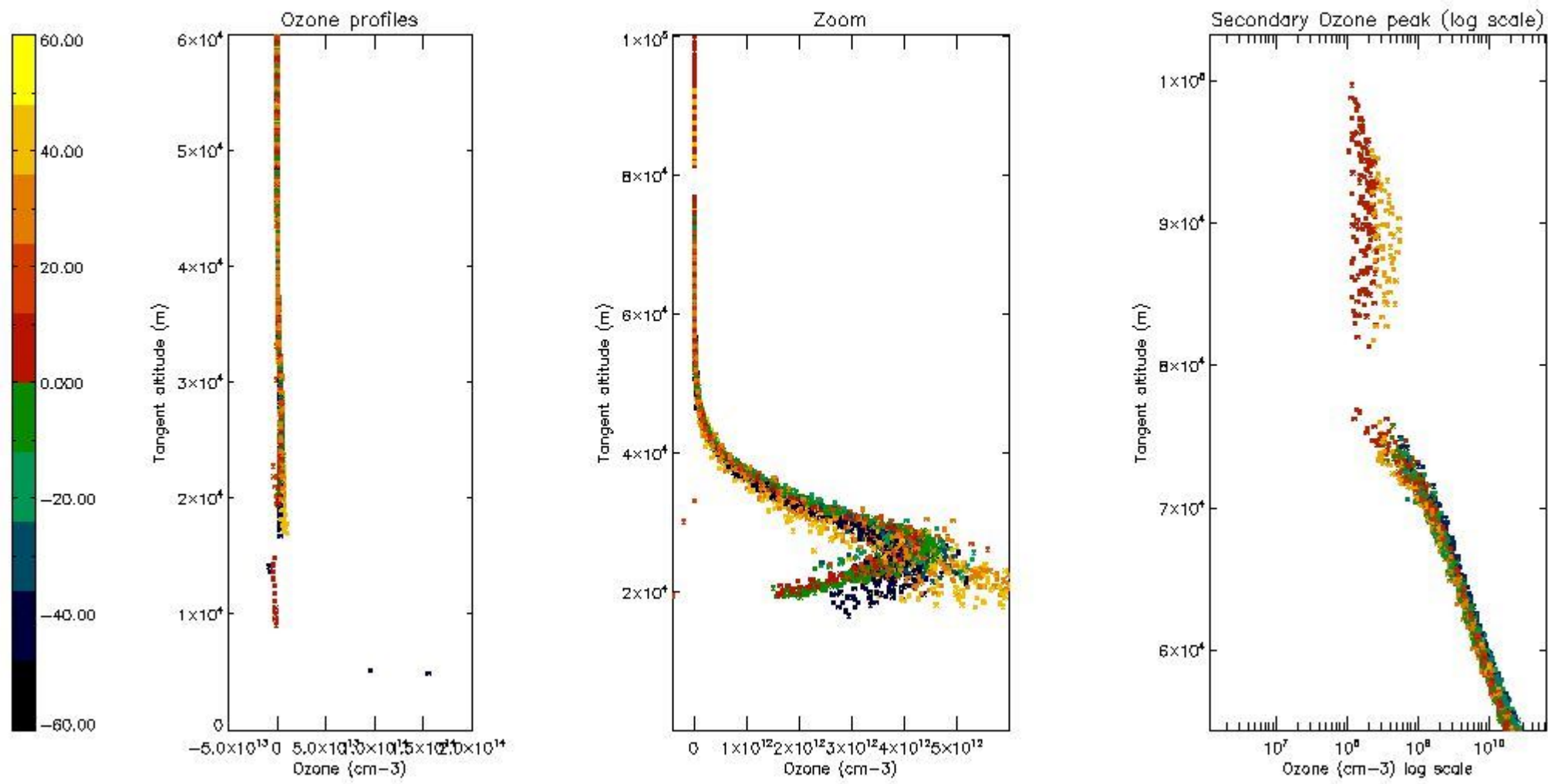
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



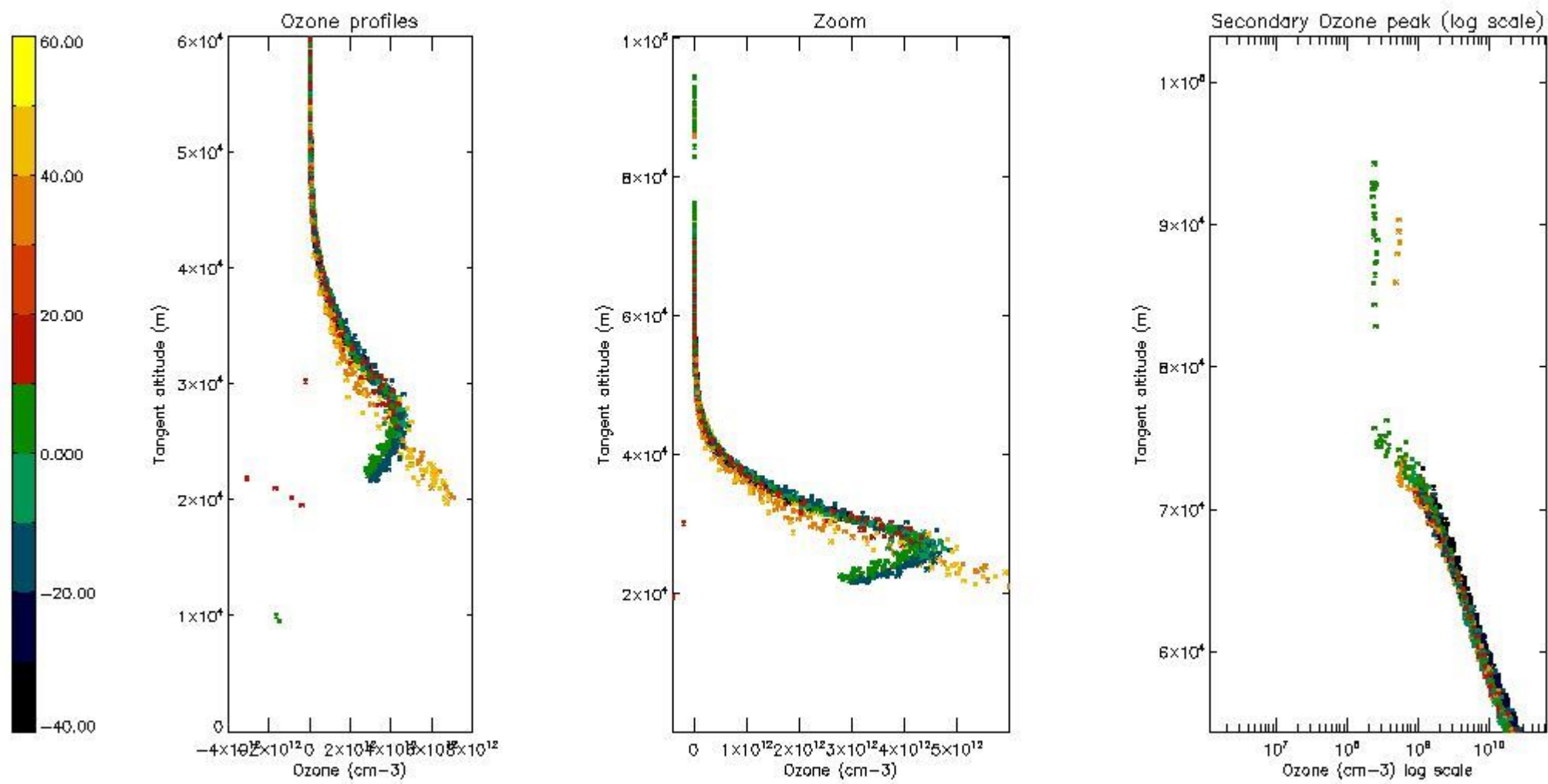
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



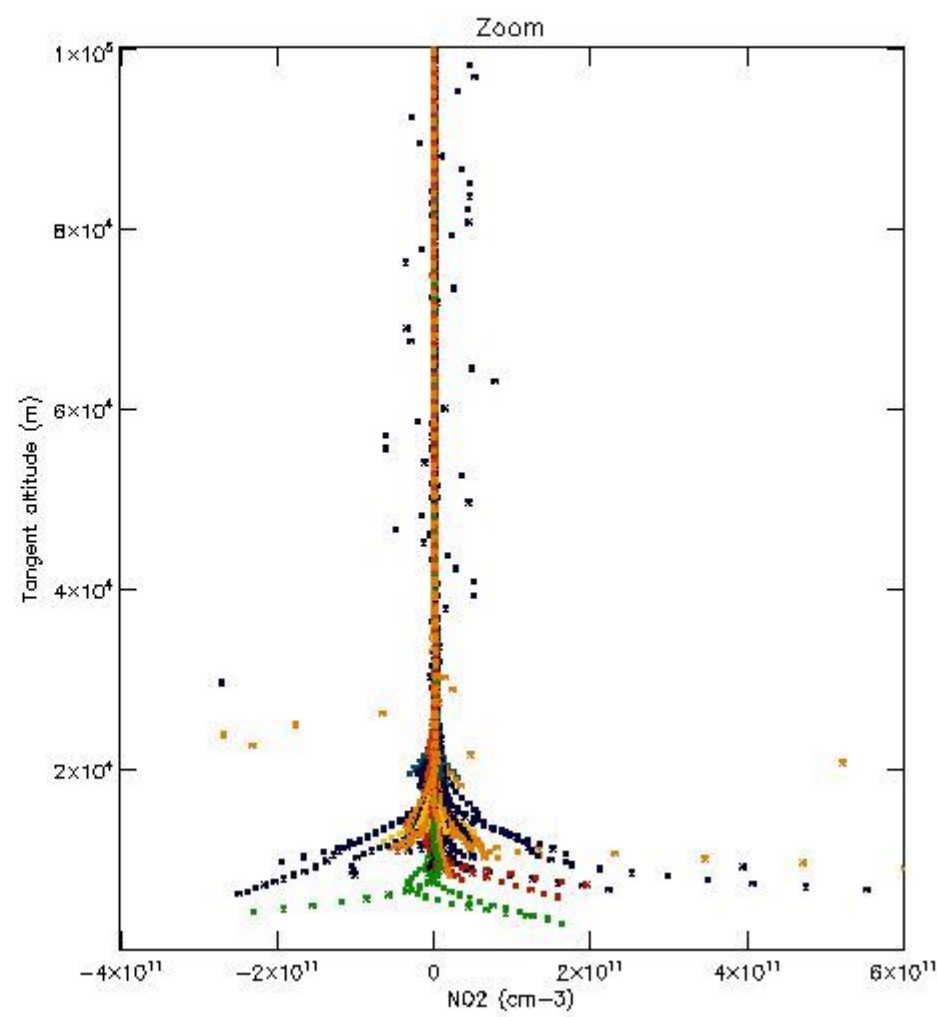
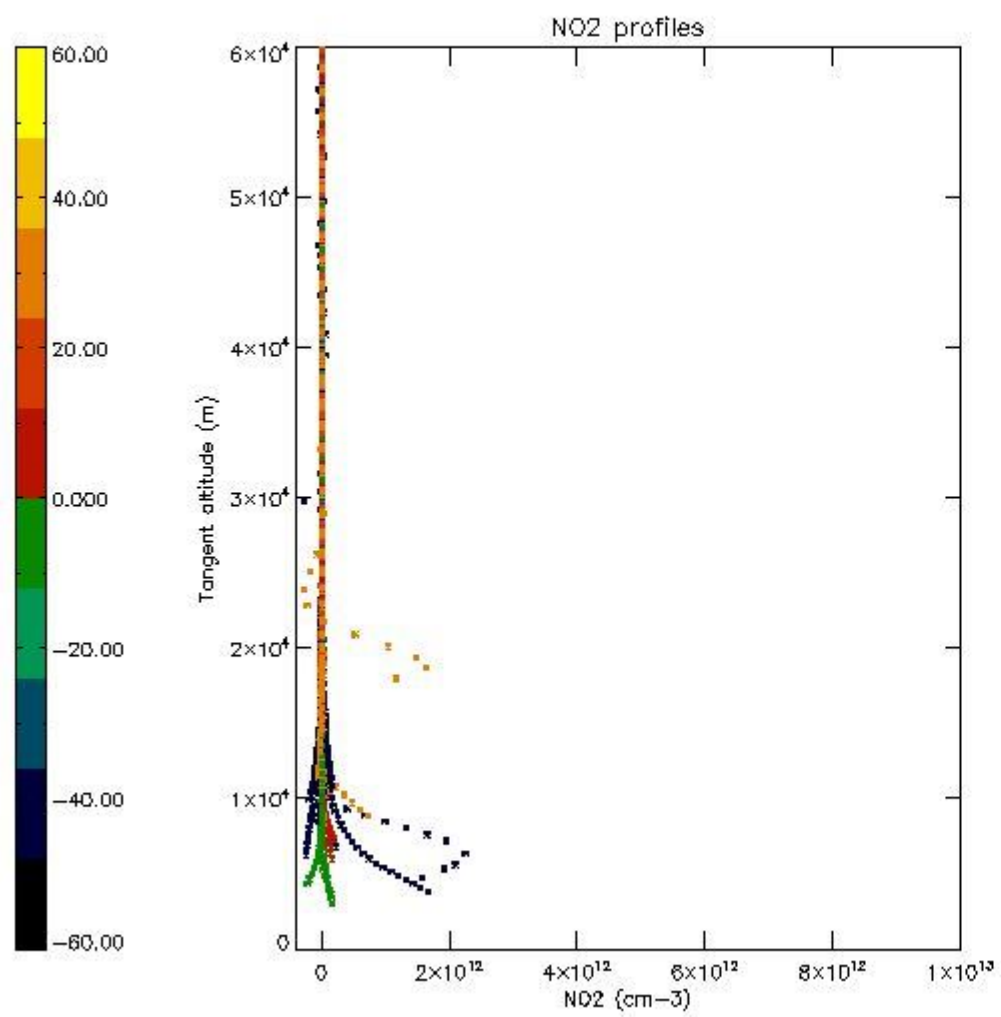
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



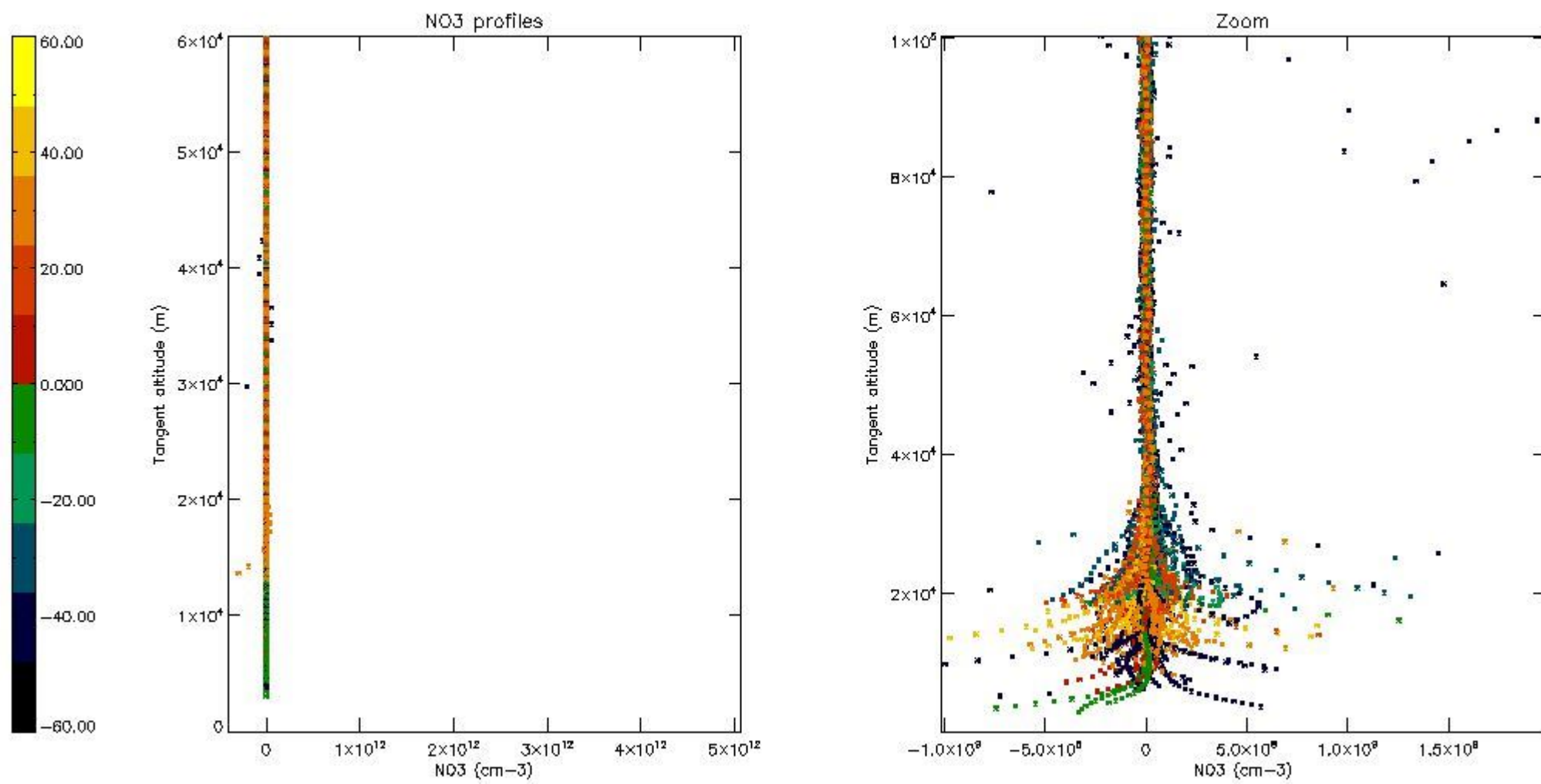
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



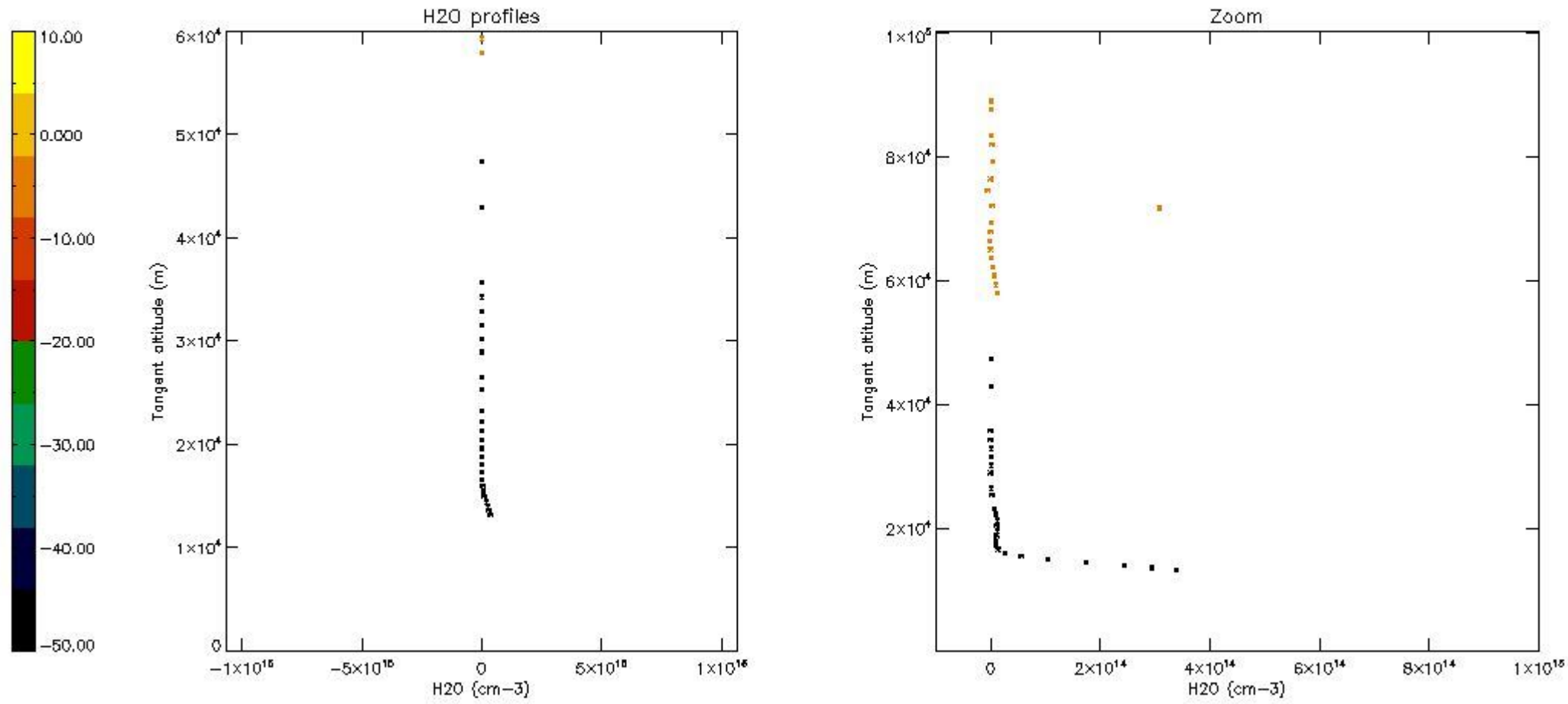
5.7 Plot NO3 profiles for all STD (dark without errors)

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	30-JAN-2010 00:02:12
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	30-JAN-2010 00:02:12
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	30-JAN-2010 00:02:12

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[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](#)

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[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](#)

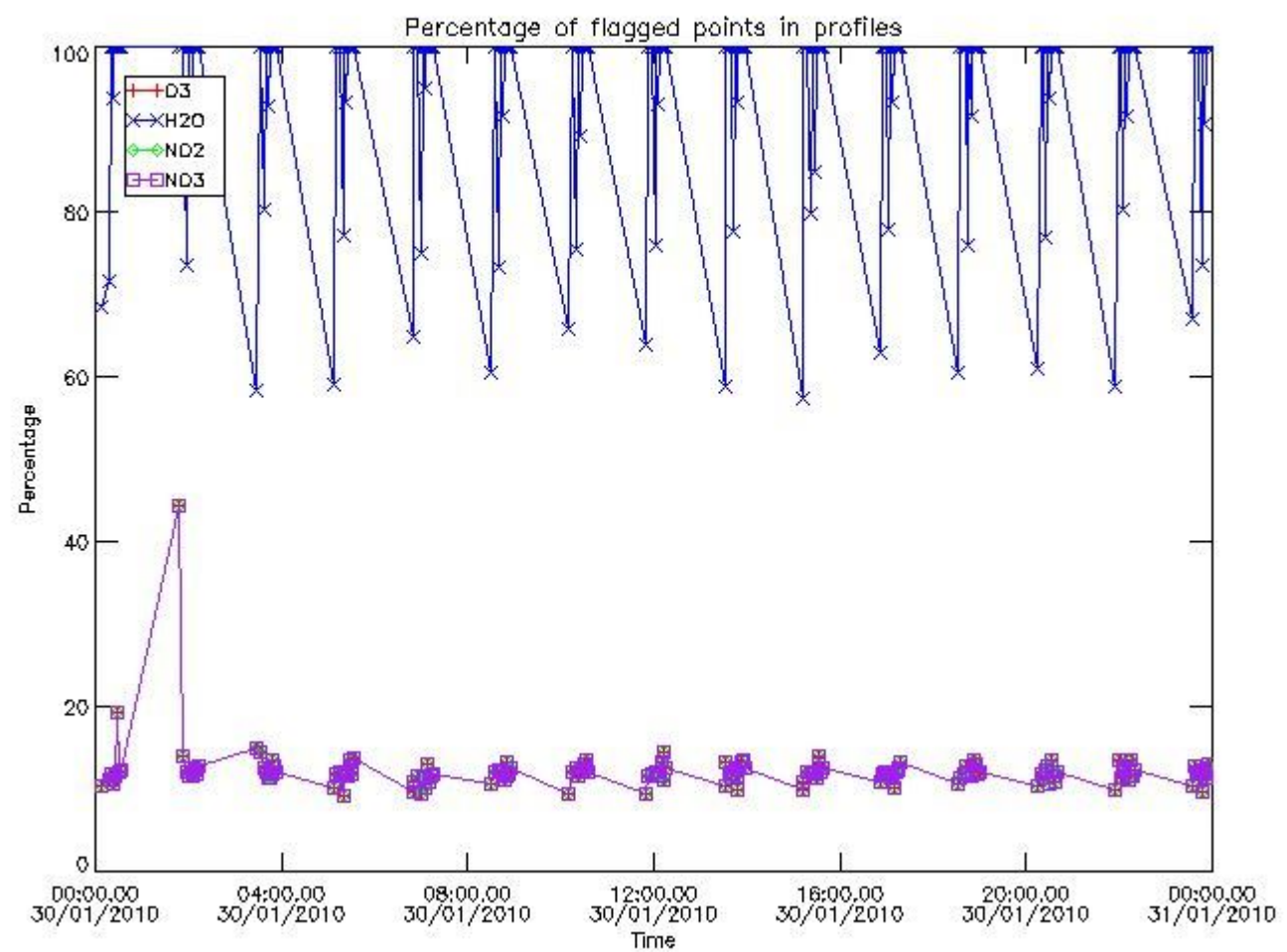
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338	GOM_NL__2PRFIN20100130_224313_000000402086_00273_41409_2741.N1	30-JAN-2010 22:43:13	Bright	39.500	24	66Alp Gem	1.5800	10200.	79	41409	No
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340	GOM_NL__2PRFIN20100130_230232_000000422086_00273_41409_2743.N1	30-JAN-2010 23:02:32	Bright	41.500	60	7Bet UMi	2.0810	3950.0	83	41409	No
341	GOM_NL__2PRFIN20100130_230714_000000362086_00273_41409_2744.N1	30-JAN-2010 23:07:14	Bright	36.000	119	14Eta Dra	2.7270	4700.0	72	41409	No
342	GOM_NL__2PRFIN20100130_231022_000000392086_00273_41409_2745.N1	30-JAN-2010 23:10:22	Bright	39.000	130	23Bet Dra	2.7990	5800.0	78	41409	No
343	GOM_NL__2PRFIN20100130_231358_000000472086_00273_41409_2746.N1	30-JAN-2010 23:13:58	Bright	46.500	5	3Alp Lyr	0.033000	11000.	93	41409	No
344	GOM_NL__2PRFIN20100130_231700_000000432086_00273_41409_2747.N1	30-JAN-2010 23:17:00	Bright	42.500	133	40Zet Her	2.8070	6000.0	85	41409	No
345	GOM_NL__2PRFIN20100130_232208_000000552086_00273_41409_2748.N1	30-JAN-2010 23:22:08	Bright	54.500	59	55Alp Oph	2.0800	8900.0	109	41409	No
346	GOM_NL__2PRFIN20100130_233042_000000442086_00273_41409_2749.N1	30-JAN-2010 23:30:42	Twilight_stray	44.000	86	35Eta Oph	2.4300	10200.	88	41409	No
347	GOM_NL__2PRFIN20100130_233457_000000492086_00273_41409_2750.N1	30-JAN-2010 23:34:57	Dark	49.000	16	21Alp Sco	1.0200	3000.0	98	41409	No
348	GOM_NL__2PRFIN20100130_233618_000000442086_00273_41409_2751.N1	30-JAN-2010 23:36:18	Dark	44.000	158	6Pi Sco	2.9060	28000.	88	41409	No
349	GOM_NL__2PRFIN20100130_234043_000000432086_00273_41409_2752.N1	30-JAN-2010 23:40:43	Dark	42.500	131	Gam Lup	2.8000	26000.	85	41409	No
350	GOM_NL__2PRFIN20100130_234255_000000432086_00273_41409_2736.N1	30-JAN-2010 23:42:55	Dark	43.000	109	Bet Lup	2.6770	26000.	86	41409	No
351	GOM_NL__2PRFIN20100130_234558_000000542086_00274_41410_2737.N1	30-JAN-2010 23:45:58	Dark	53.500	4	Alp1Cen	-0.010000	5800.0	107	41410	No
352	GOM_NL__2PRFIN20100130_234750_000000422086_00274_41410_2738.N1	30-JAN-2010 23:47:50	Dark	41.500	77	Eps Cen	2.3030	28000.	83	41410	No
353	GOM_NL__2PRFIN20100130_235033_000000442086_00274_41410_2739.N1	30-JAN-2010 23:50:33	Dark	43.500	12	Alp1Cru	0.77500	30000.	87	41410	No
354	GOM_NL__2PRFIN20100130_235231_000000452086_00274_41410_2740.N1	30-JAN-2010 23:52:31	Dark	45.000	99	Del Cen	2.5750	26000.	90	41410	No
355	GOM_NL__2PRFIN20100130_235435_000000402086_00274_41410_2741.N1	30-JAN-2010 23:54:35	Dark	39.500	159	Ups Car	2.9200	7200.0	79	41410	No
356	GOM_NL__2PRFIN20100130_235630_000000432086_00274_41410_2742.N1	30-JAN-2010 23:56:30	Dark	42.500	71	lot Car	2.2460	7700.0	85	41410	No
357	GOM_NL__2PRFIN20100130_235815_000000412086_00274_41410_2743.N1	30-JAN-2010 23:58:15	Dark	41.000	46	Del Vel	1.9540	10600.	82	41410	No

3. Quality information per product

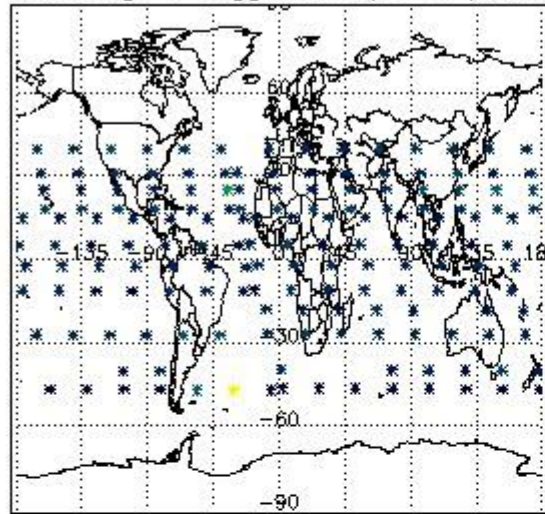
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

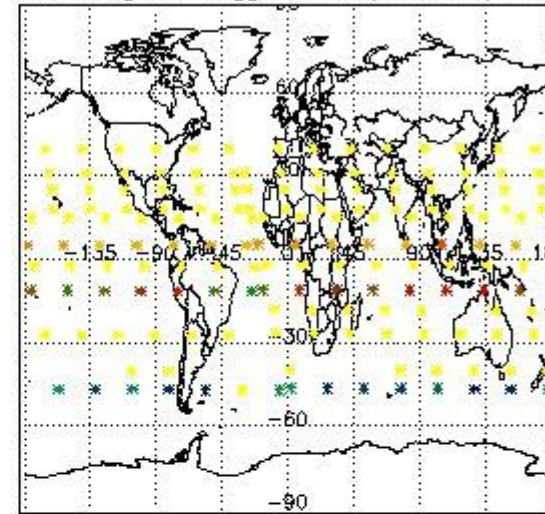


3.2 Plot quality information per product (world map)

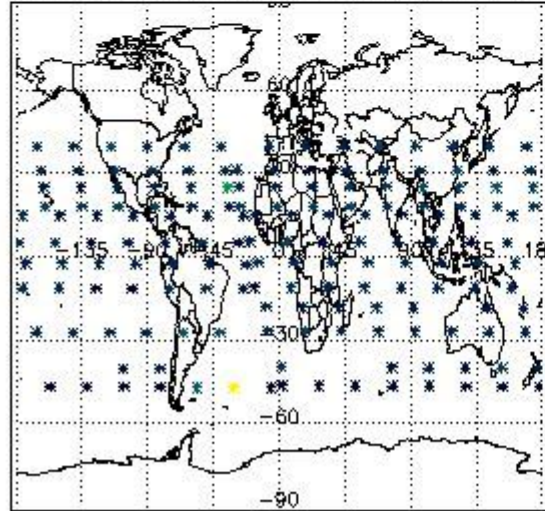
Percentage of flagged data per O3 profile



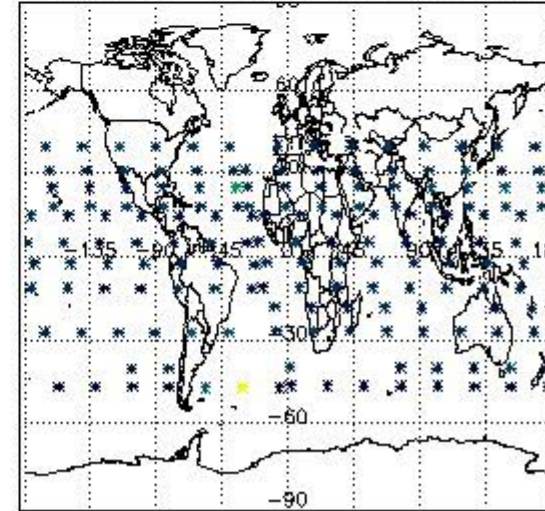
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

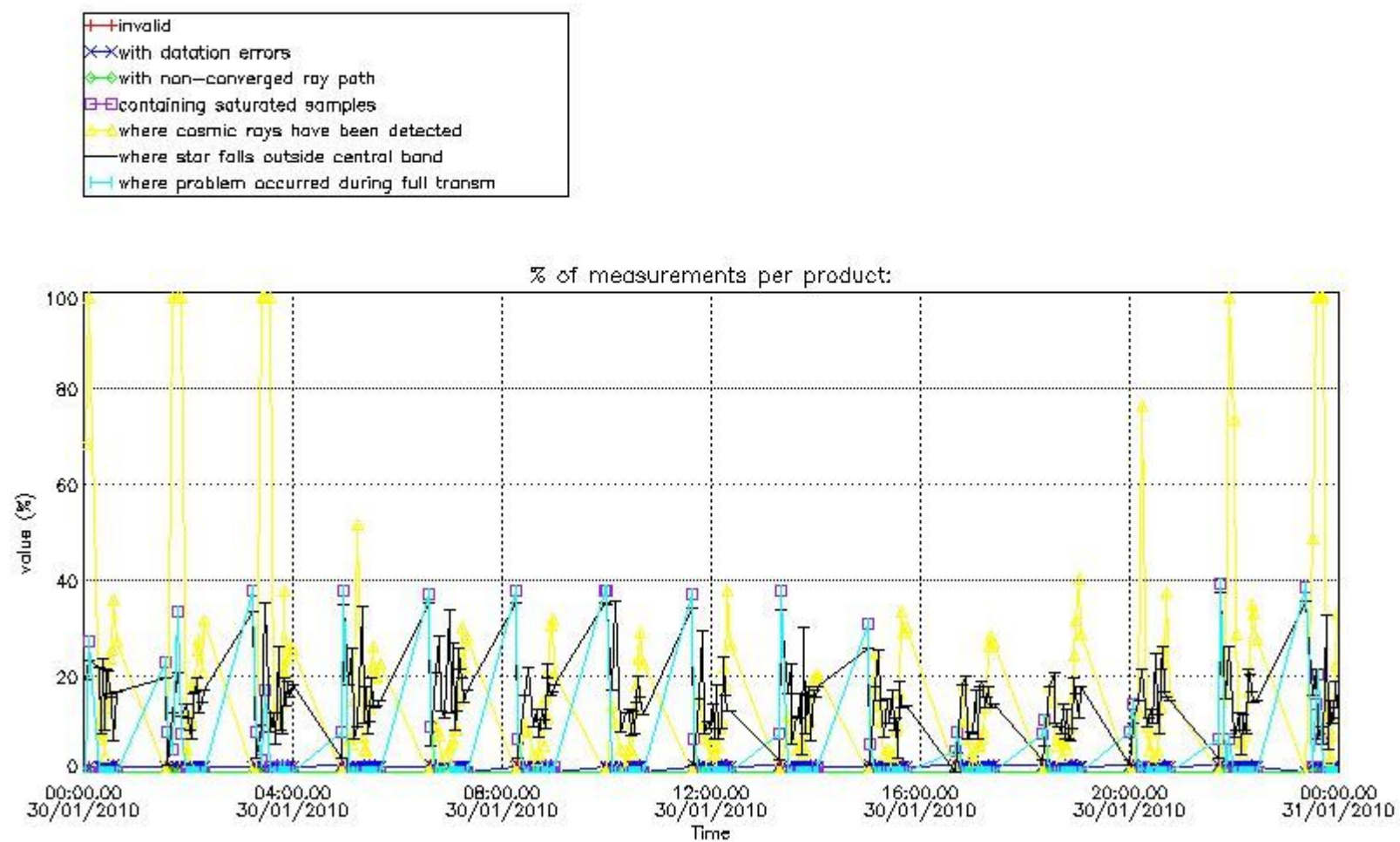


4. Level 1 quality information per product

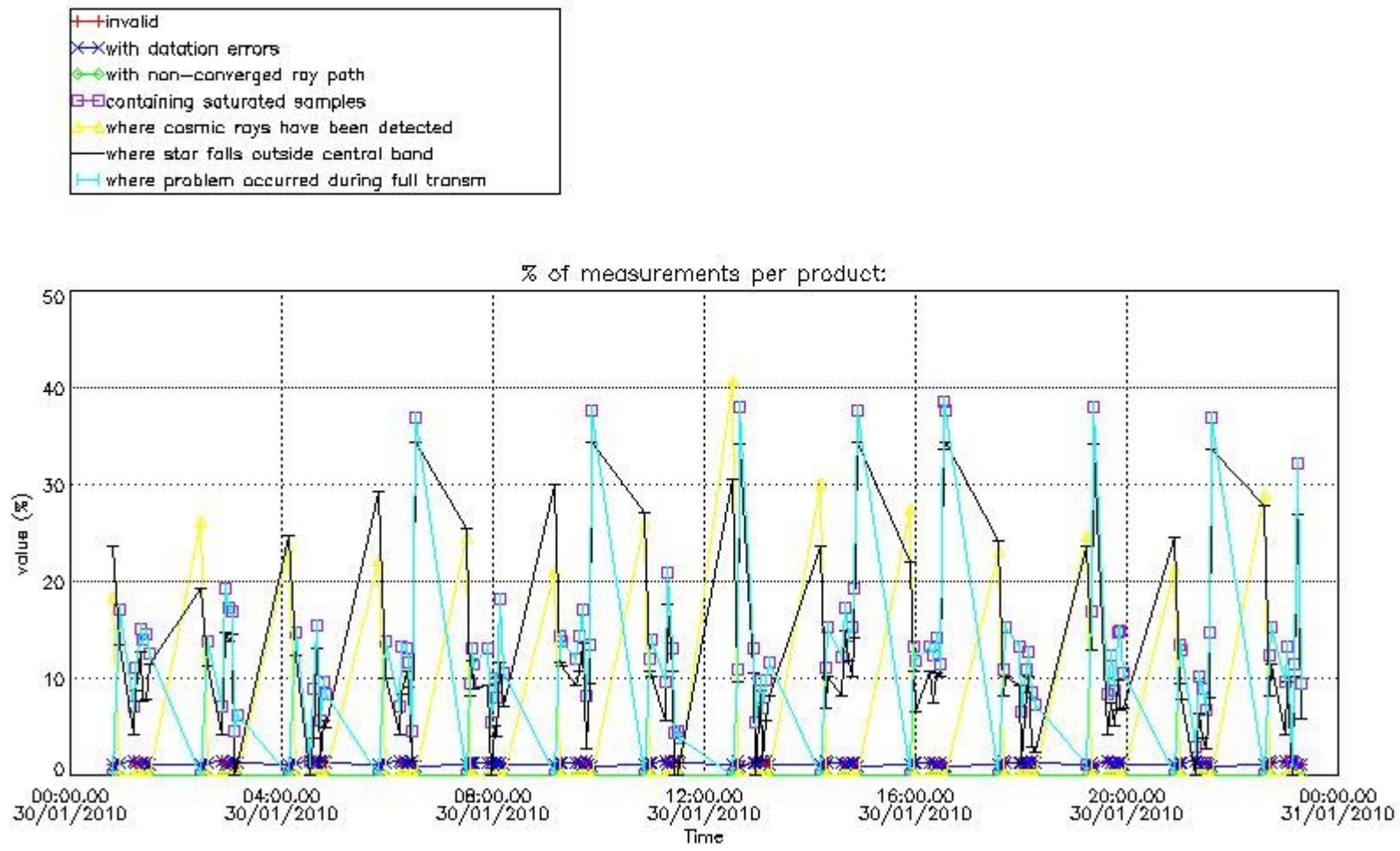
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

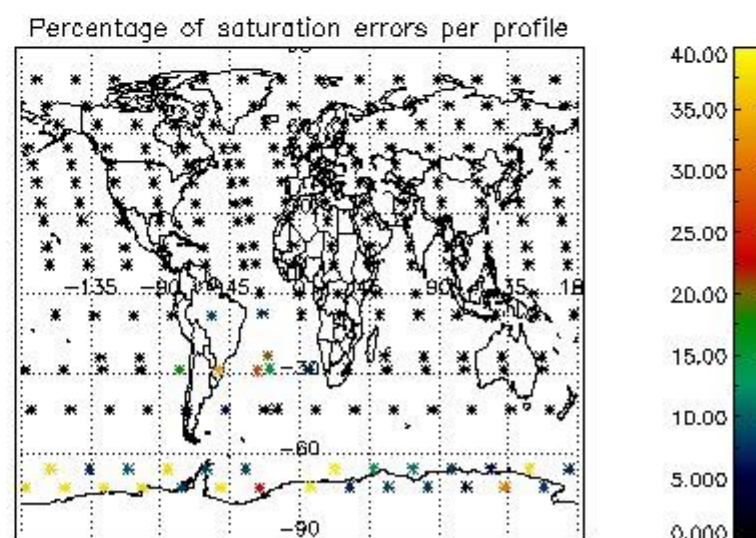
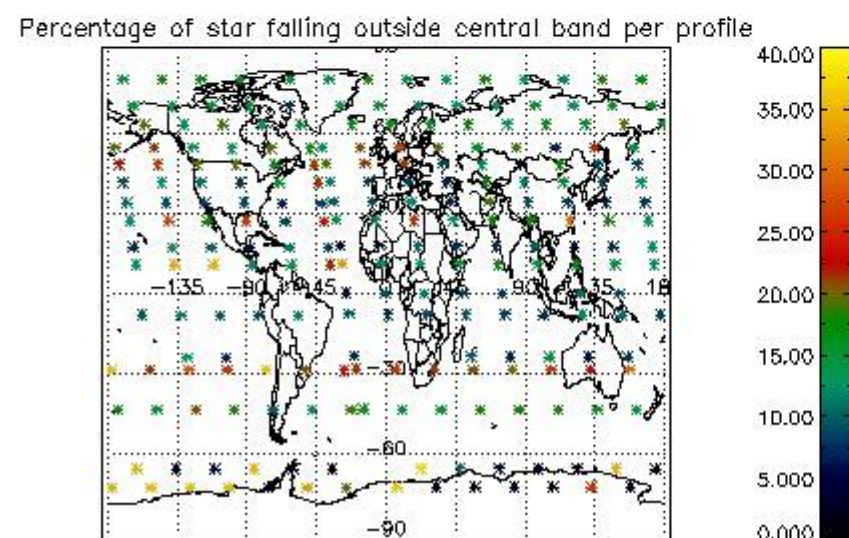
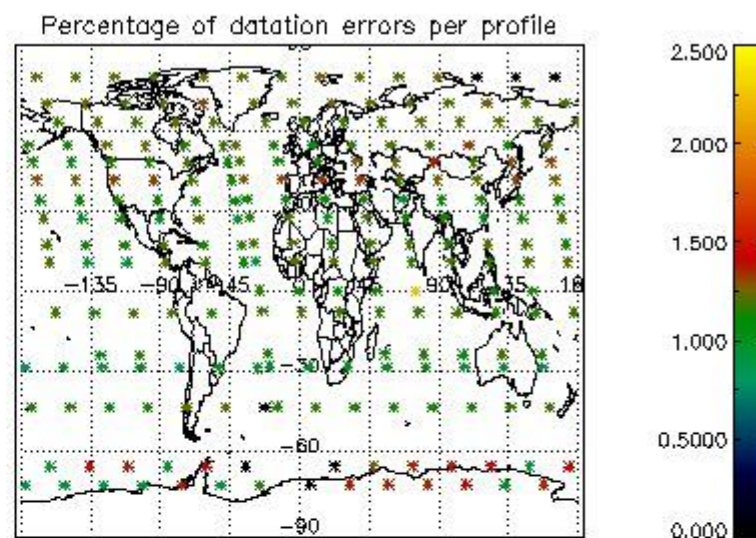
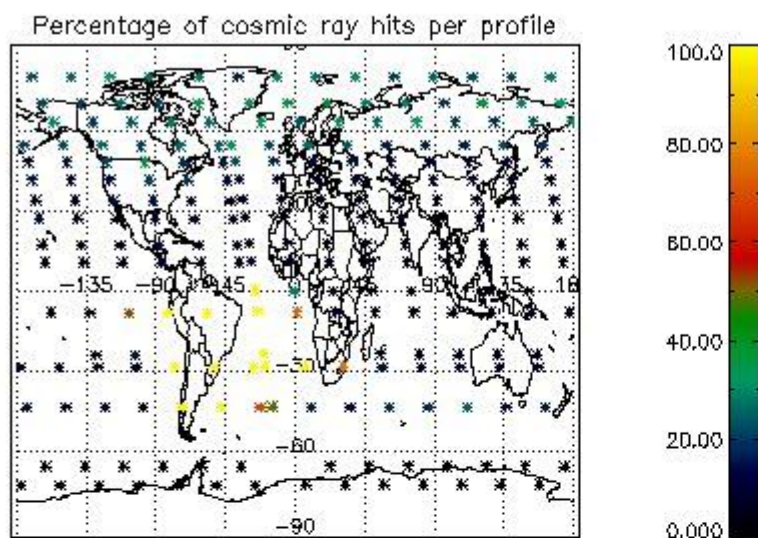


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

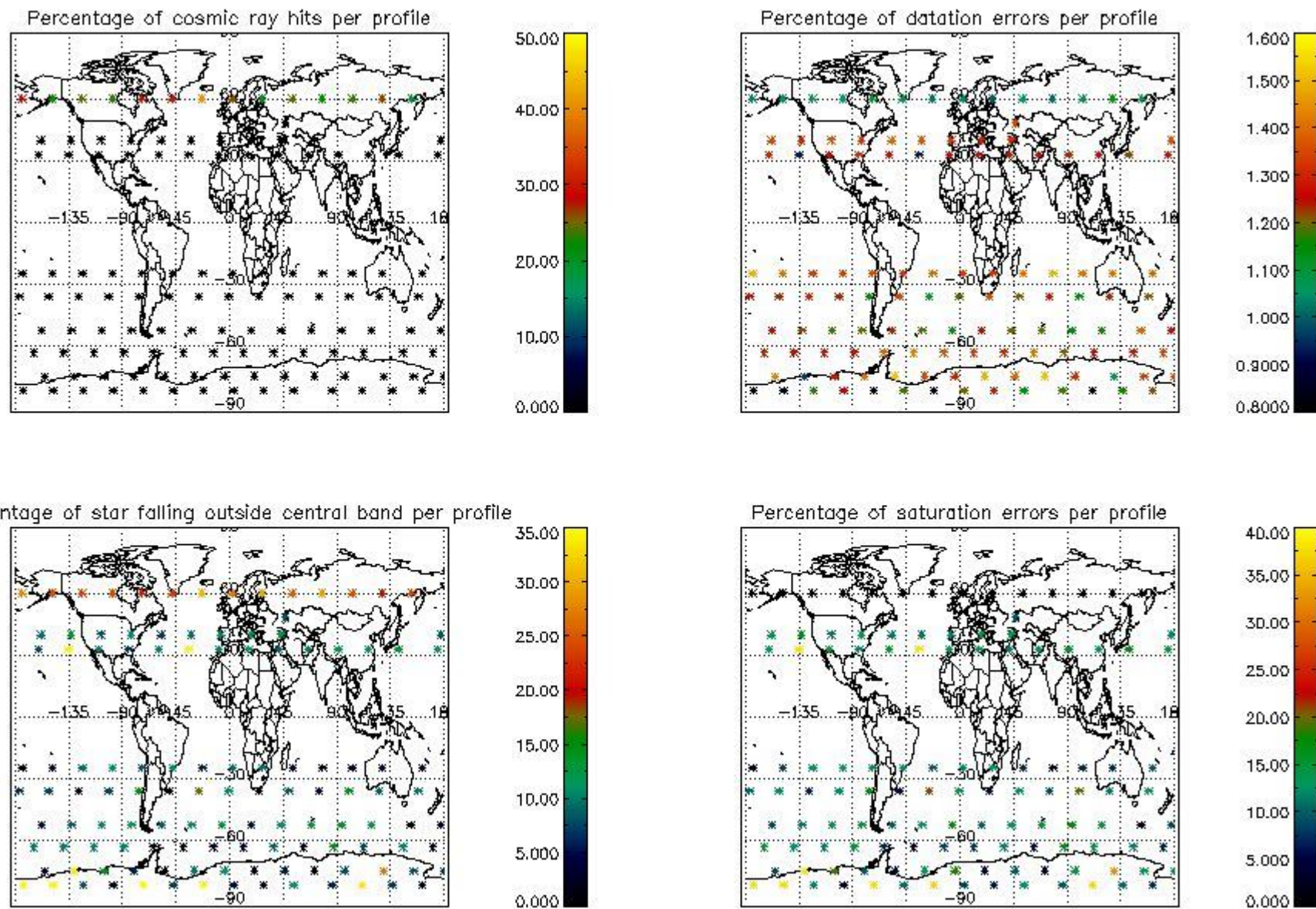


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

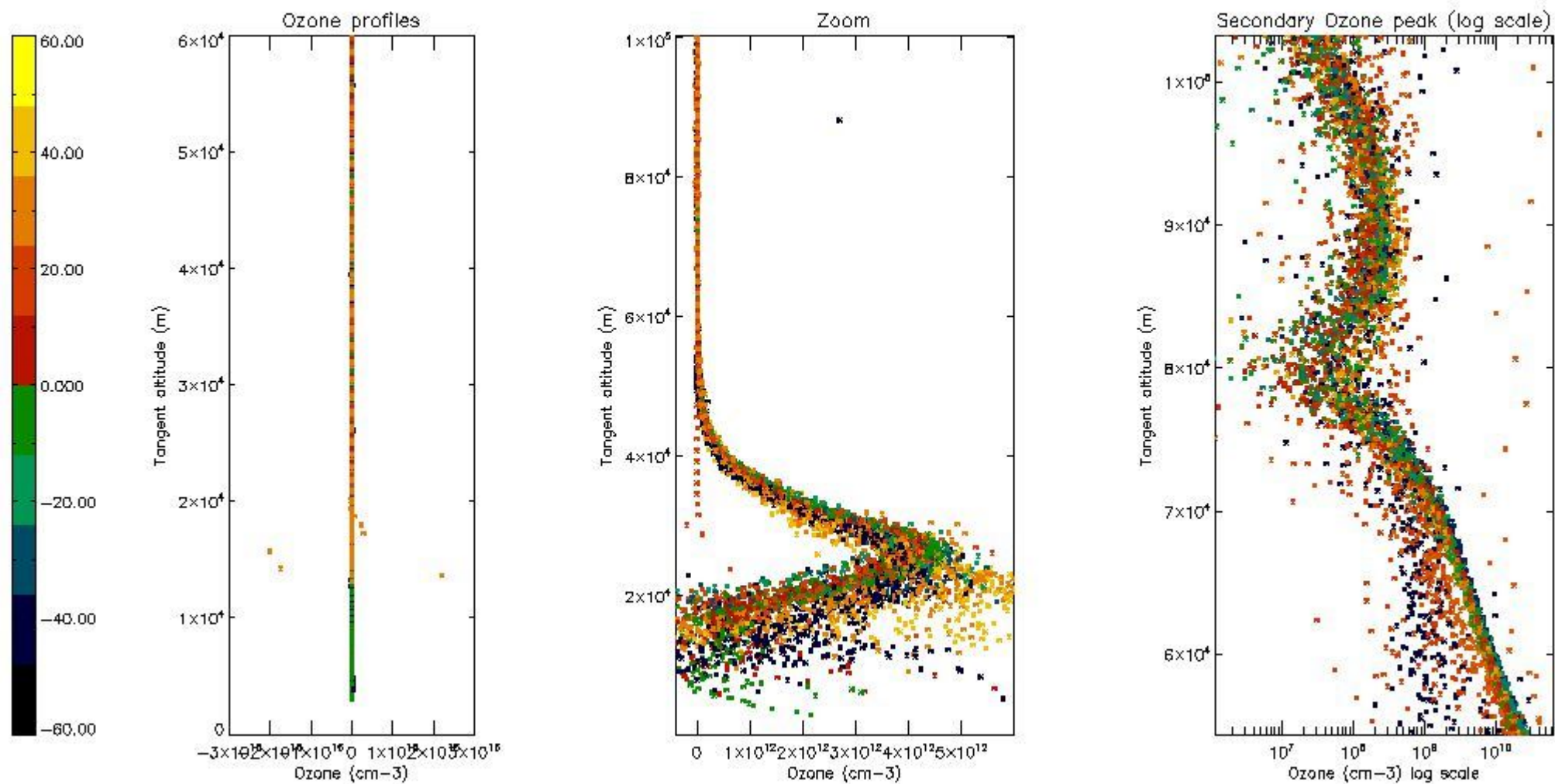
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	48
STD < 20	25

STD < 10	20
STD < 5	14

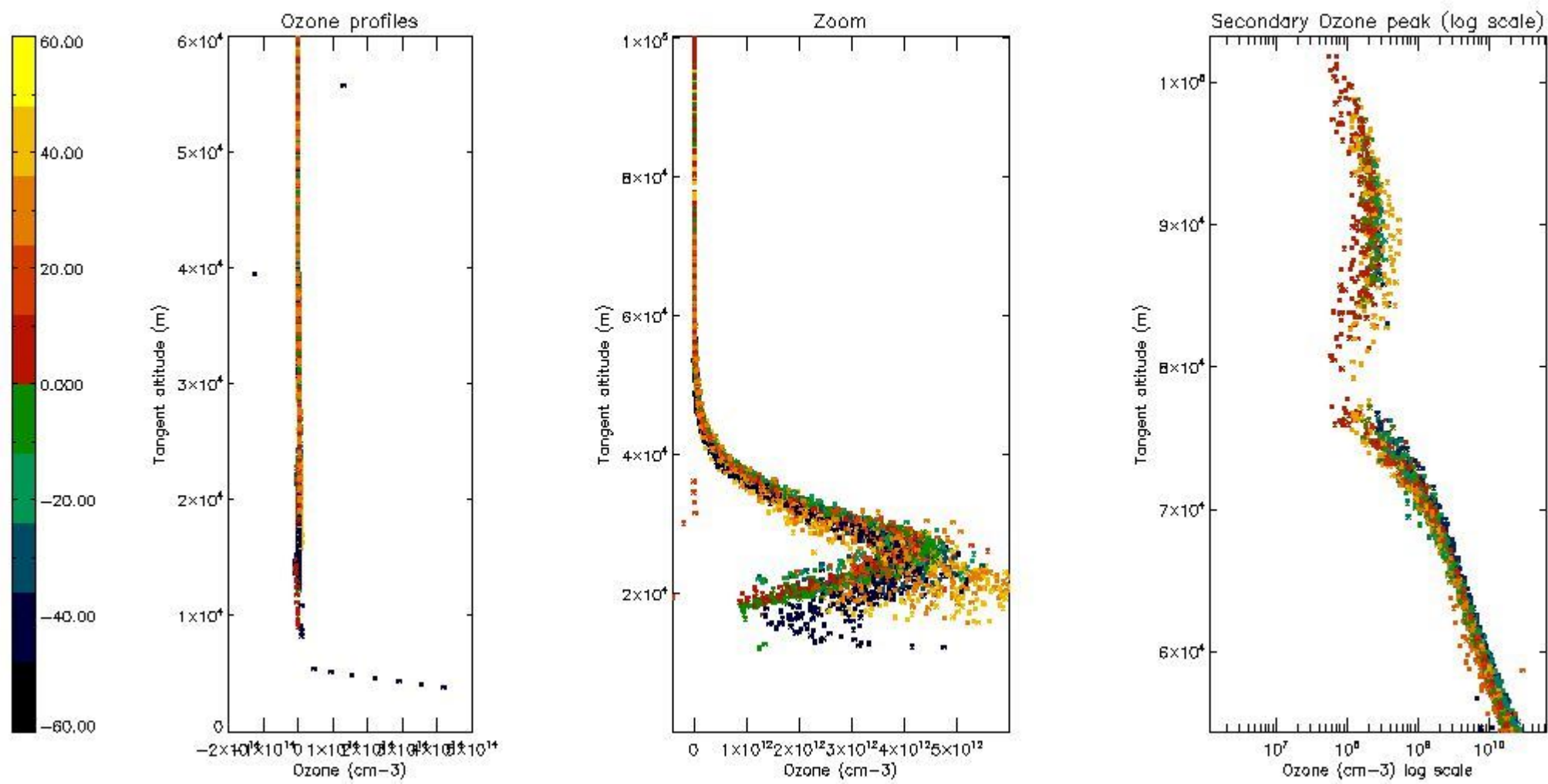
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



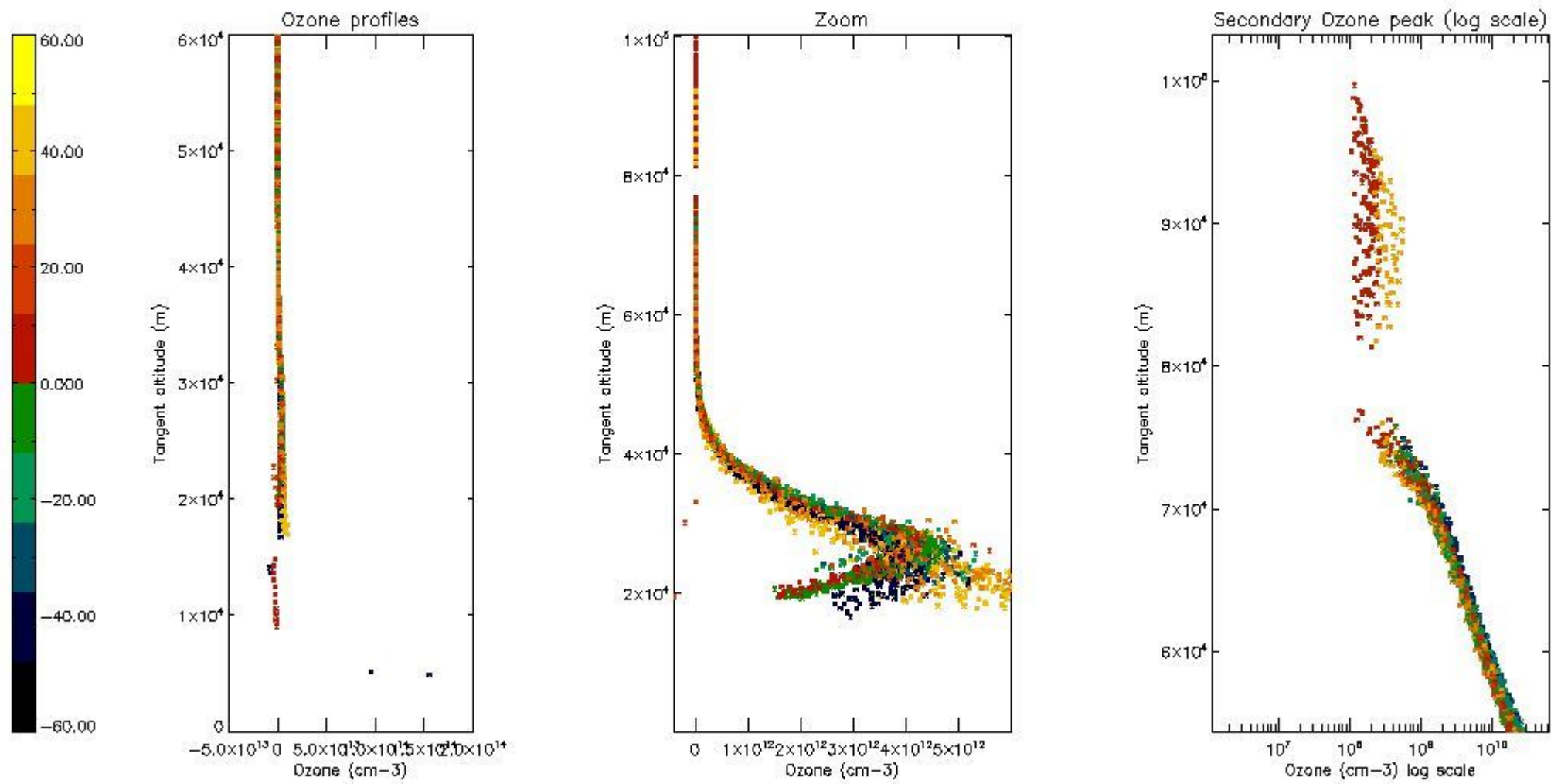
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



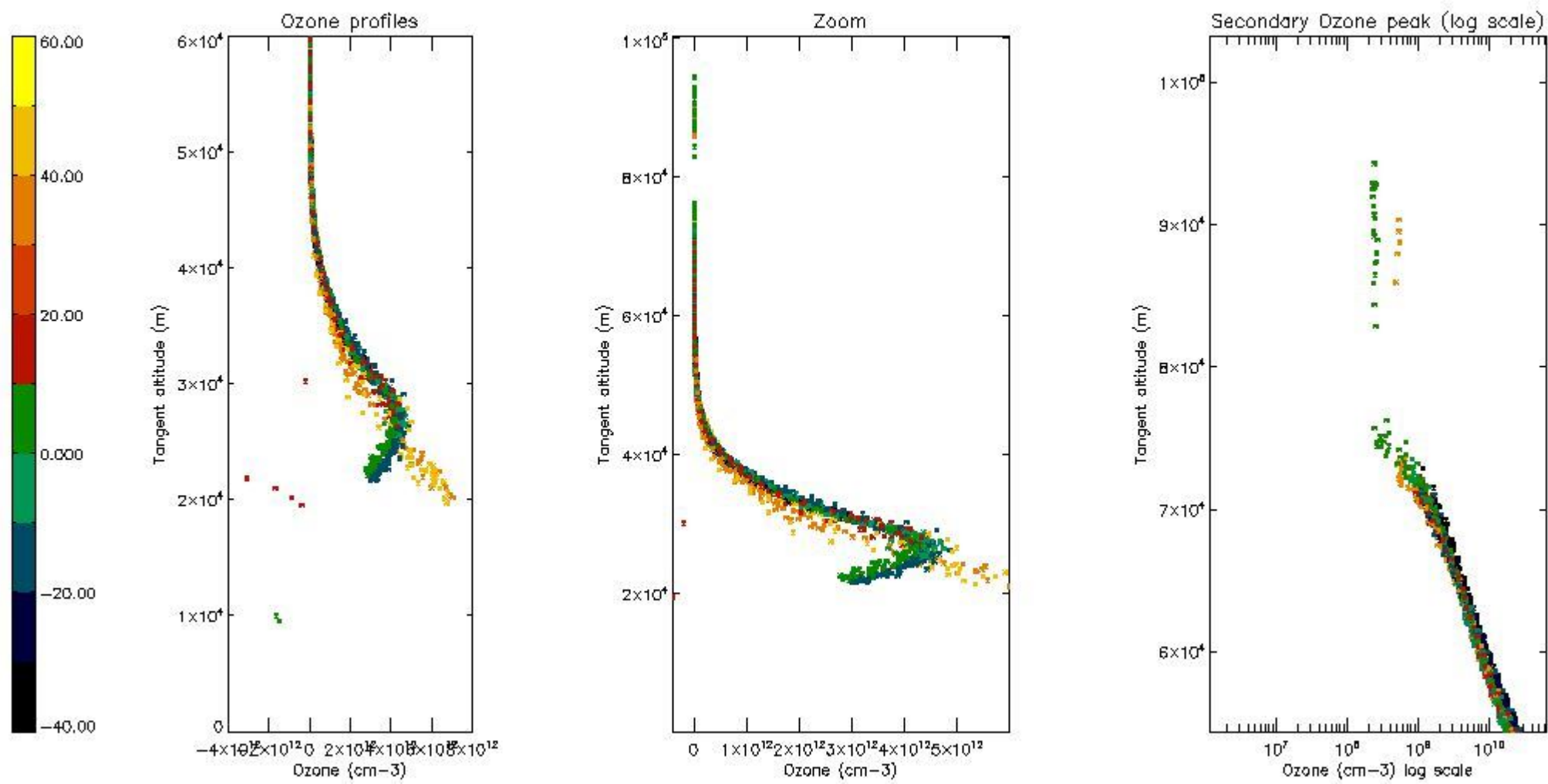
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



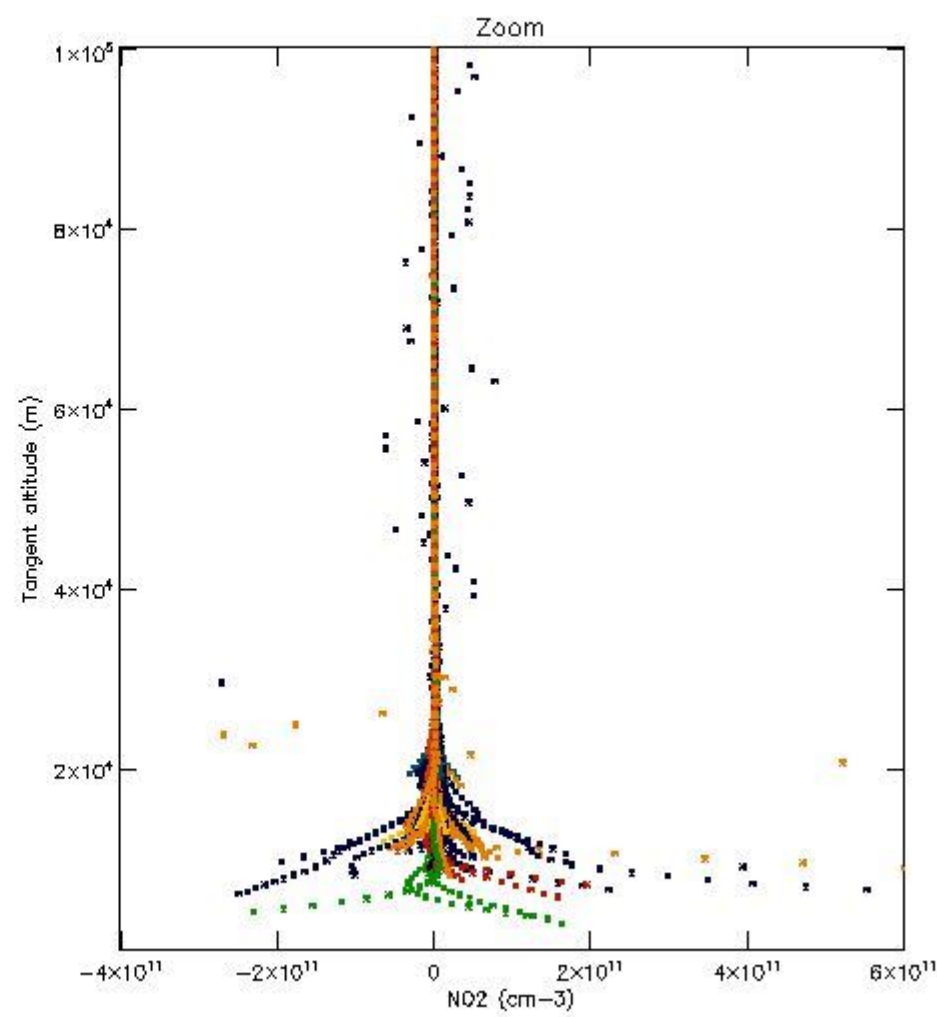
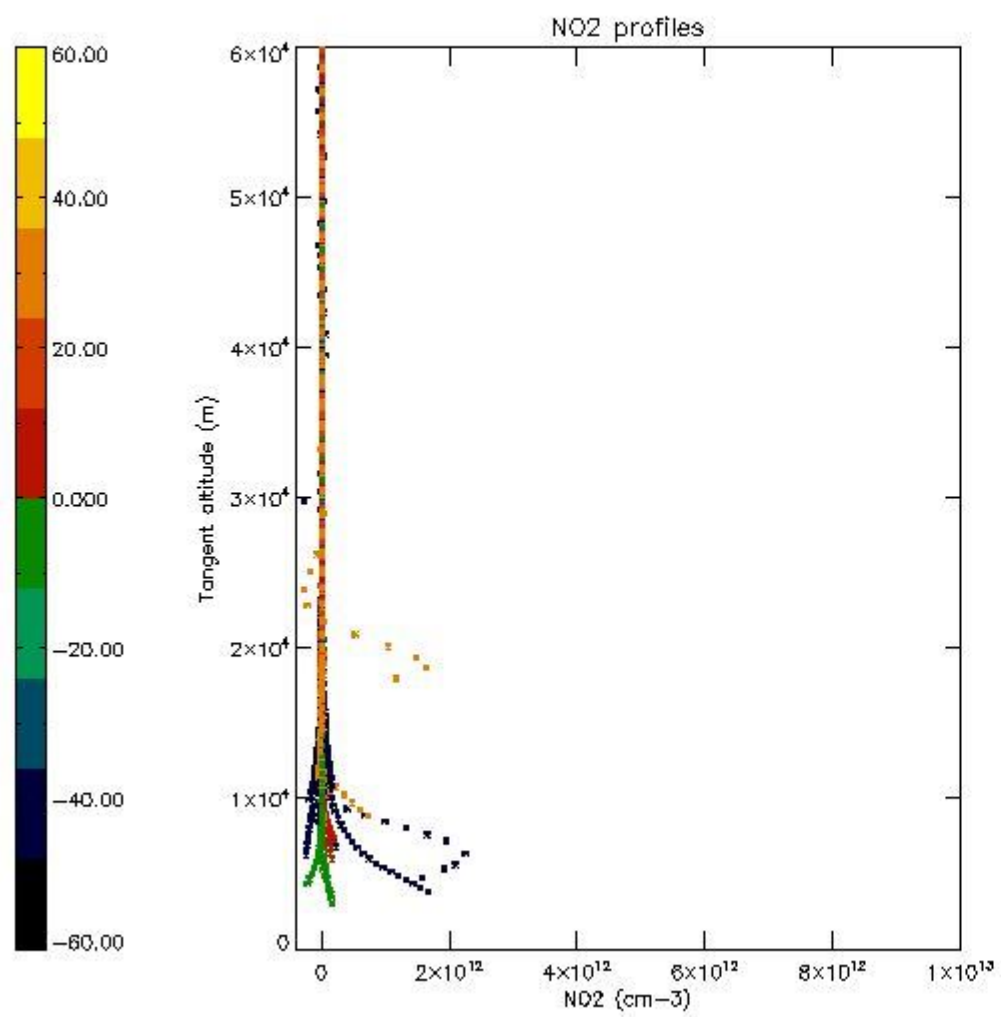
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



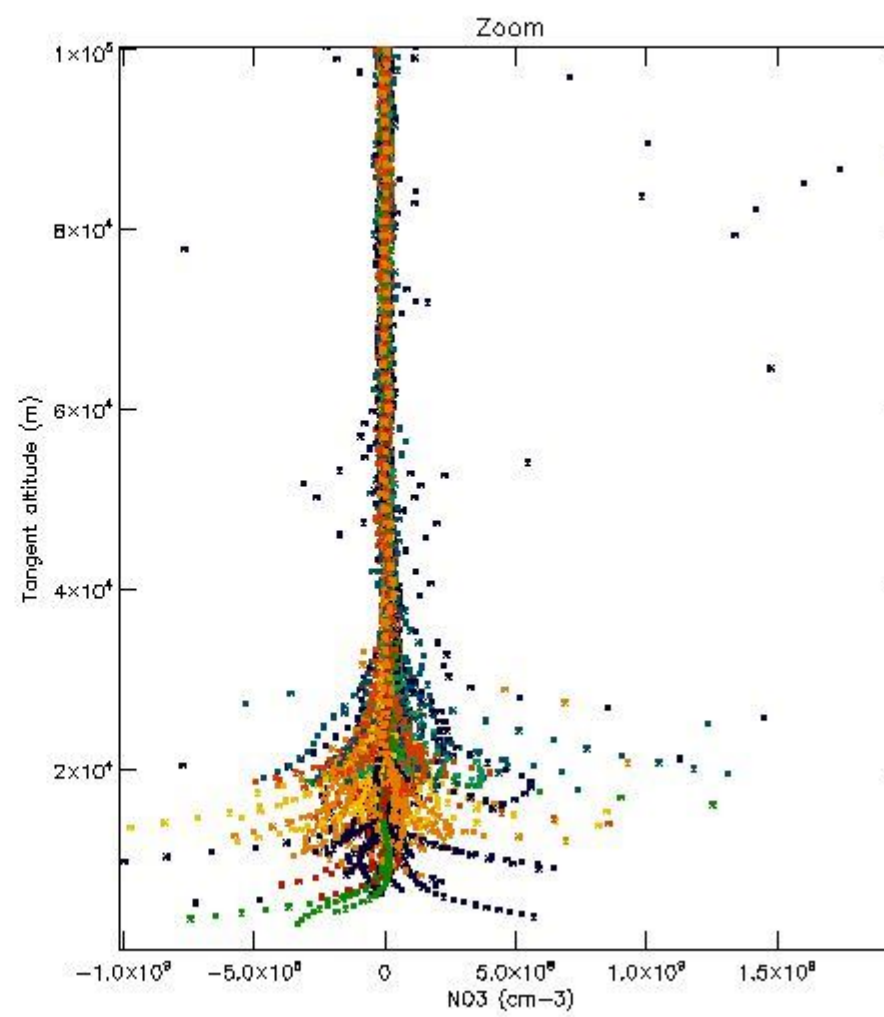
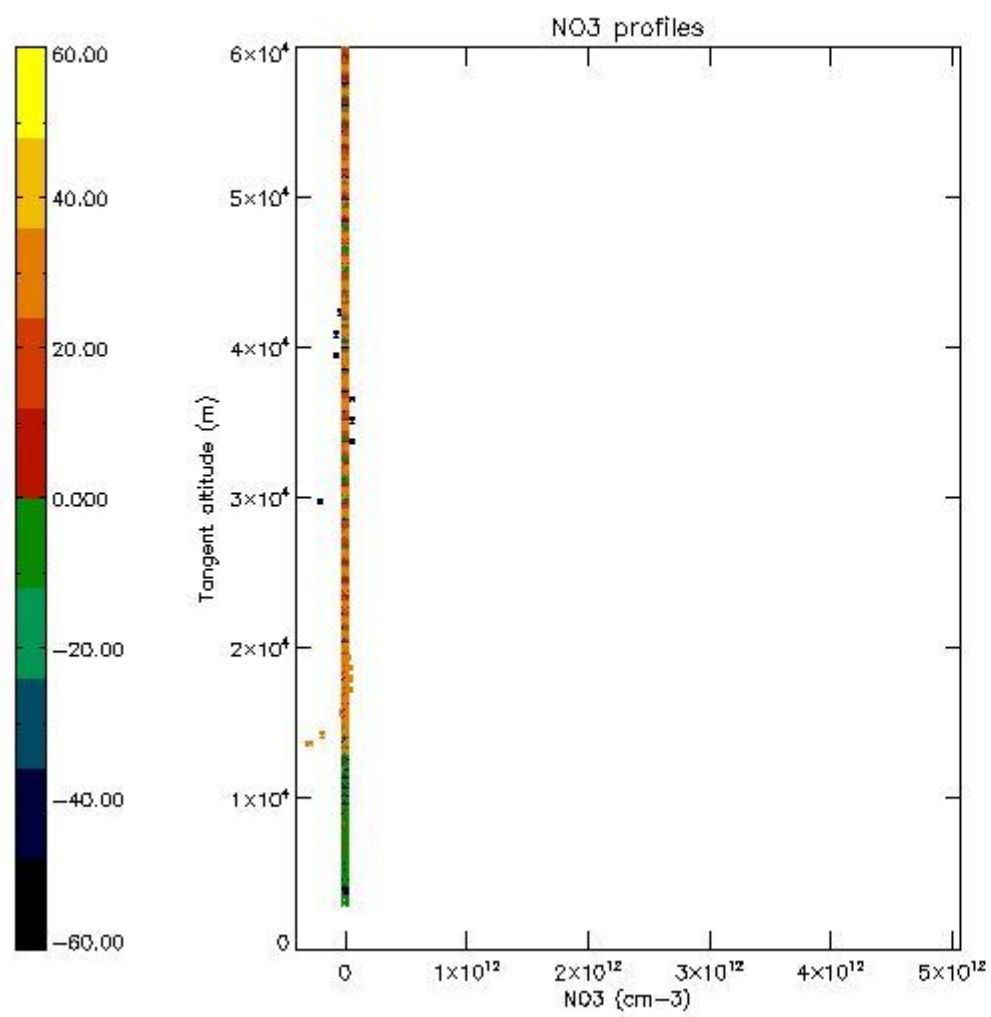
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



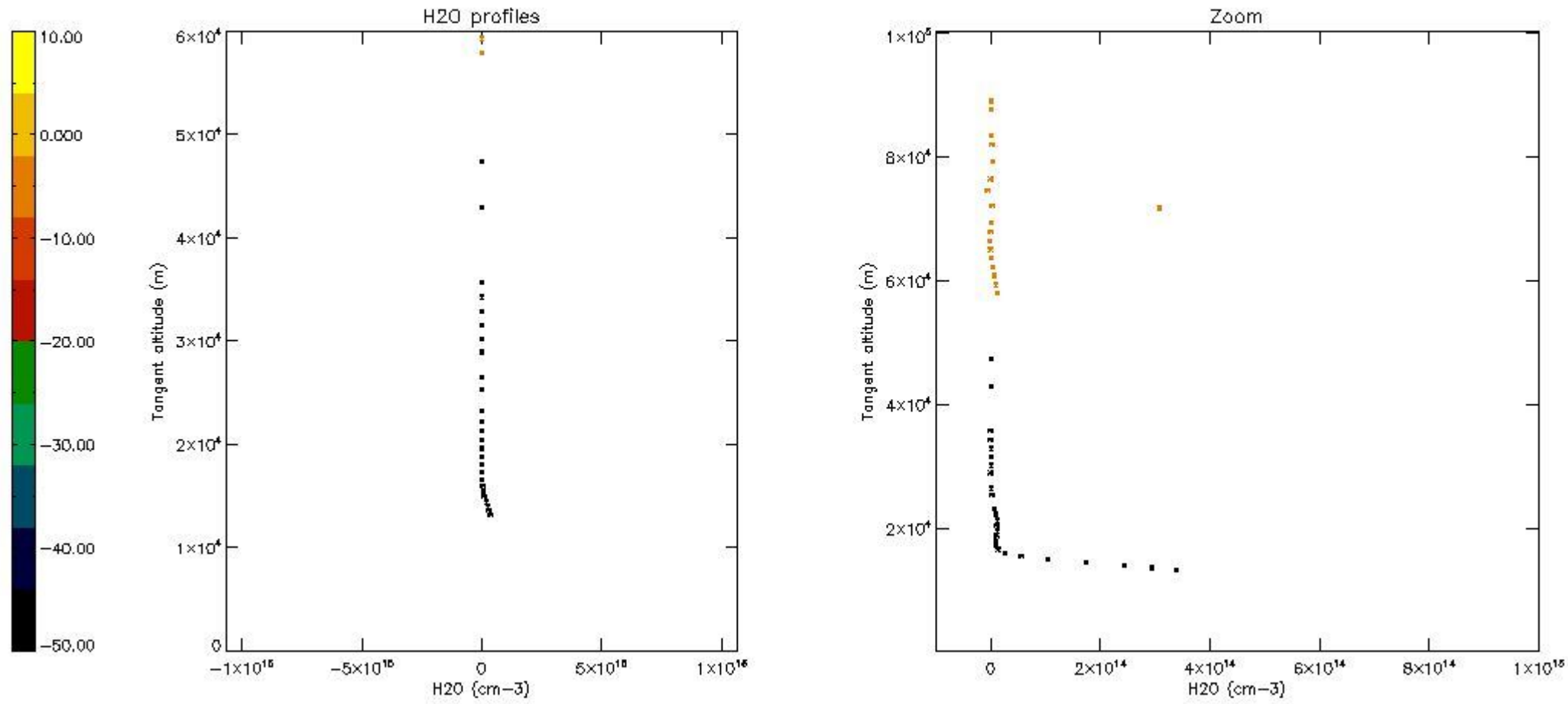
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

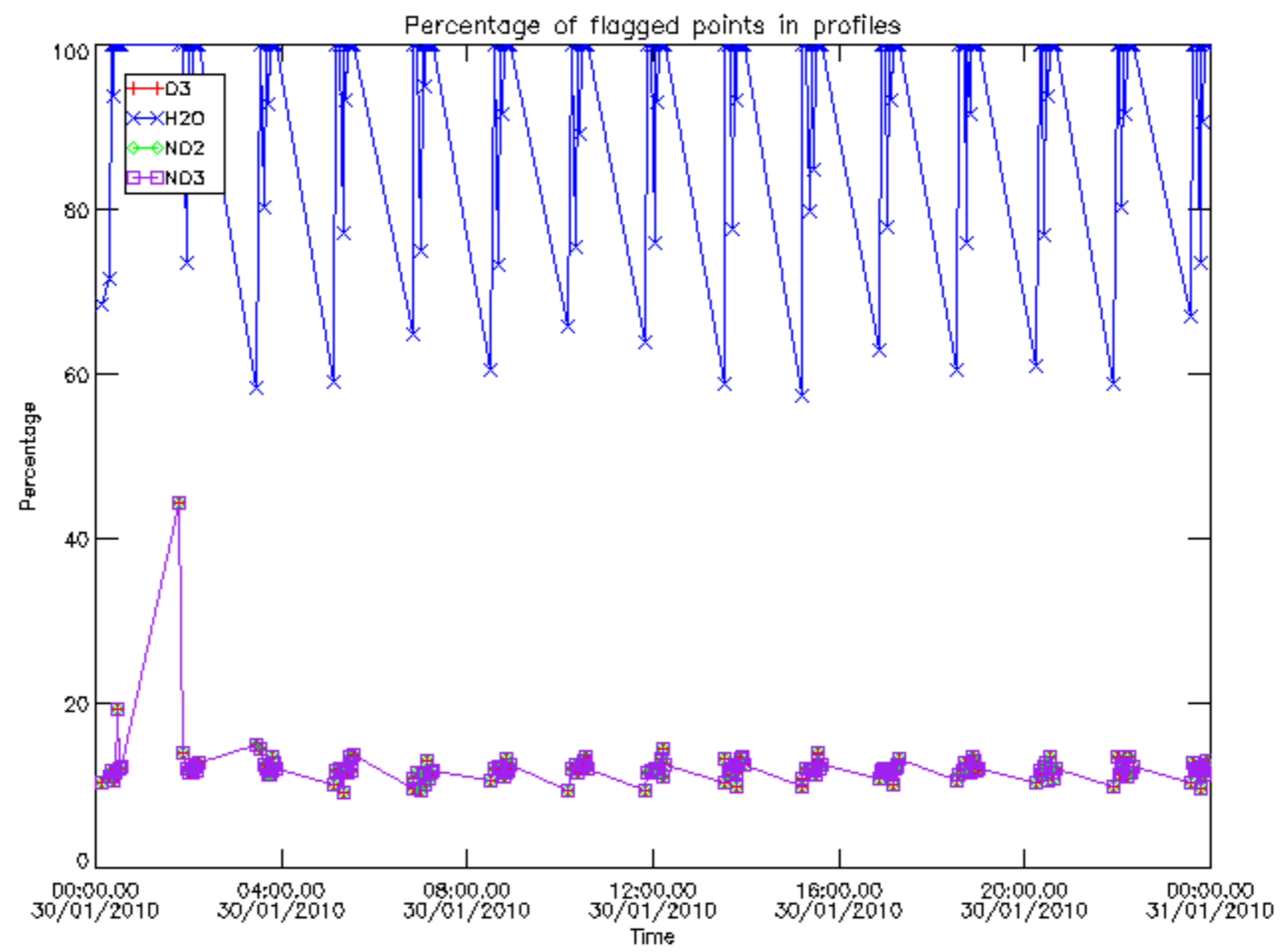
The colorbar represents the latitude.



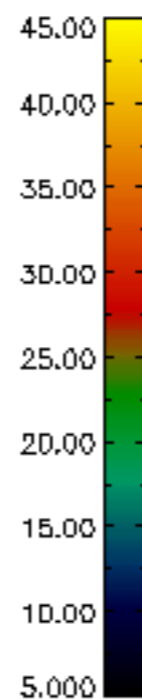
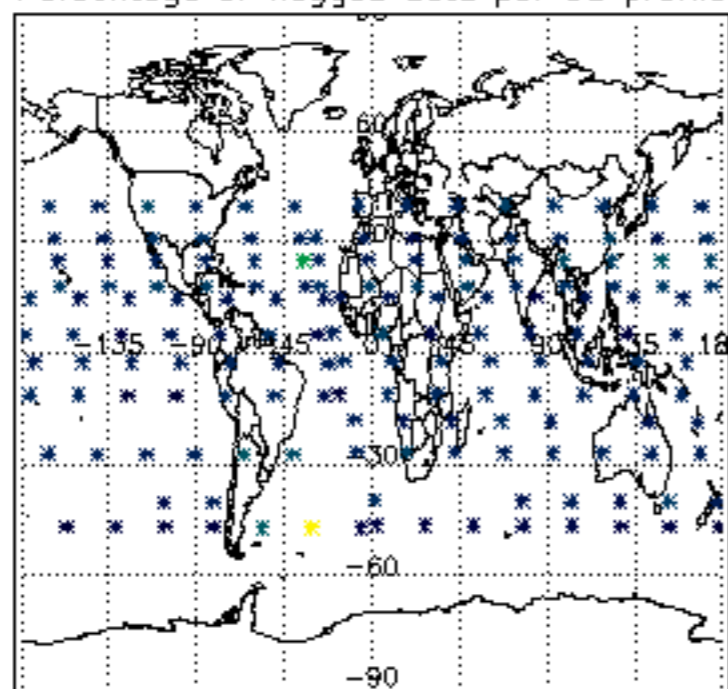
6. Auxiliary Data Files used for the production reported in section 2

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.

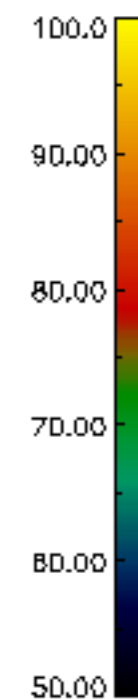
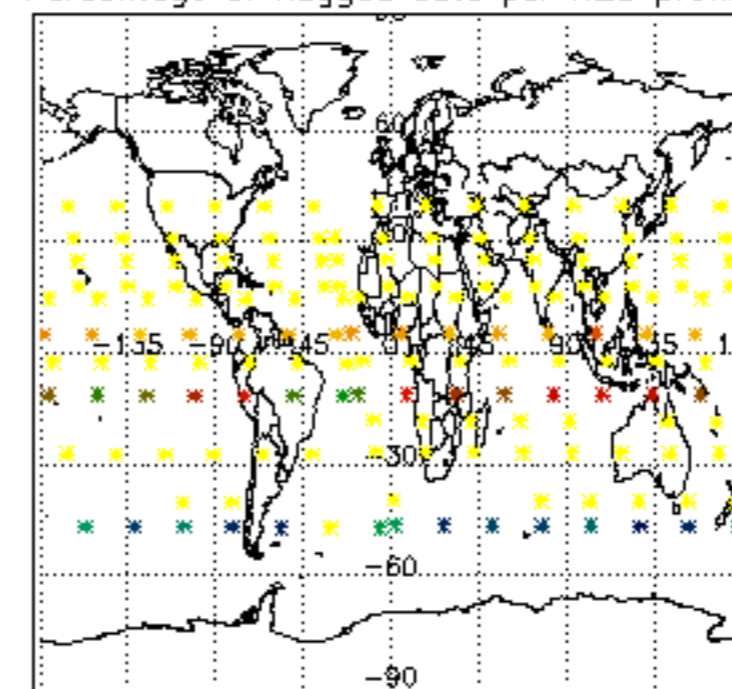
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	30-JAN-2010 00:02:12
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	30-JAN-2010 00:02:12
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	30-JAN-2010 00:02:12



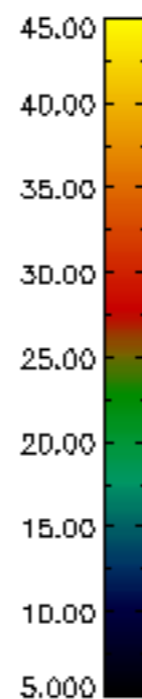
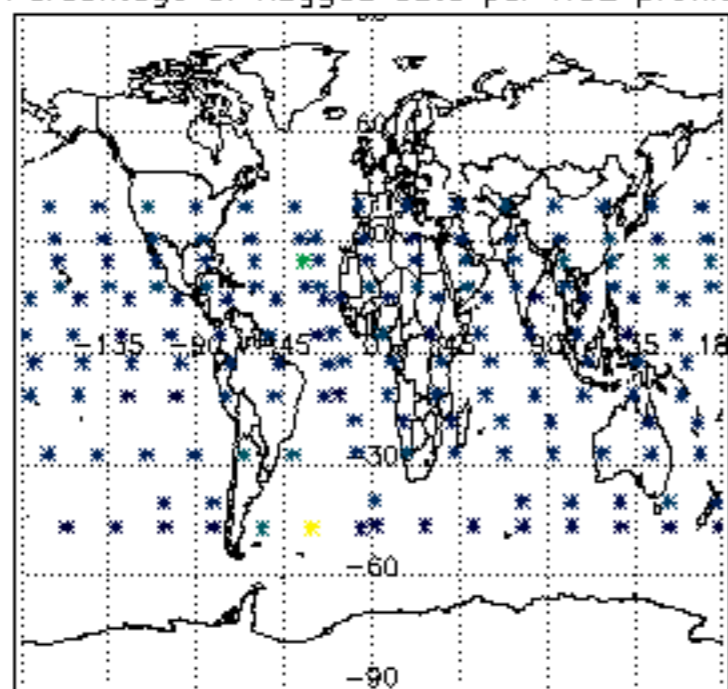
Percentage of flagged data per D3 profile



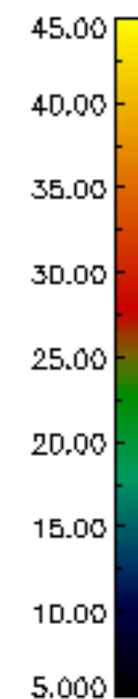
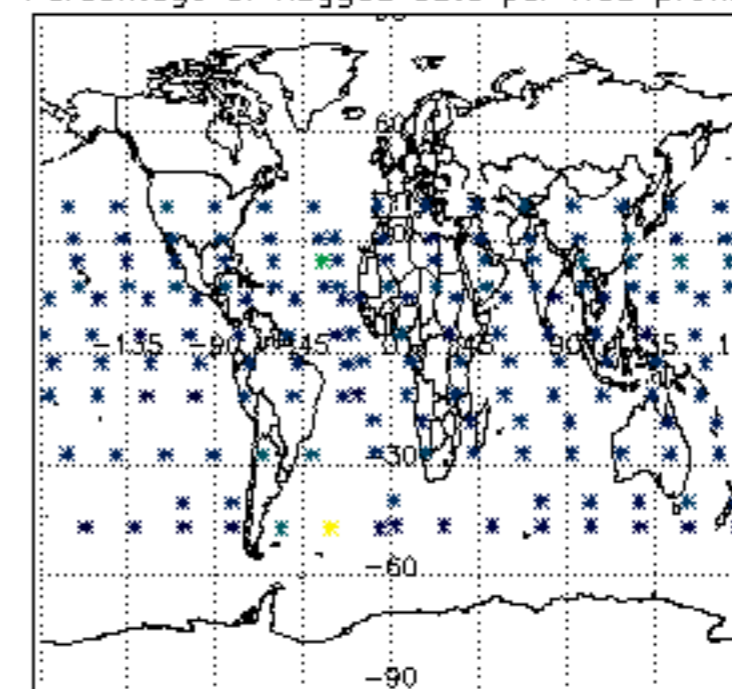
Percentage of flagged data per H2O profile

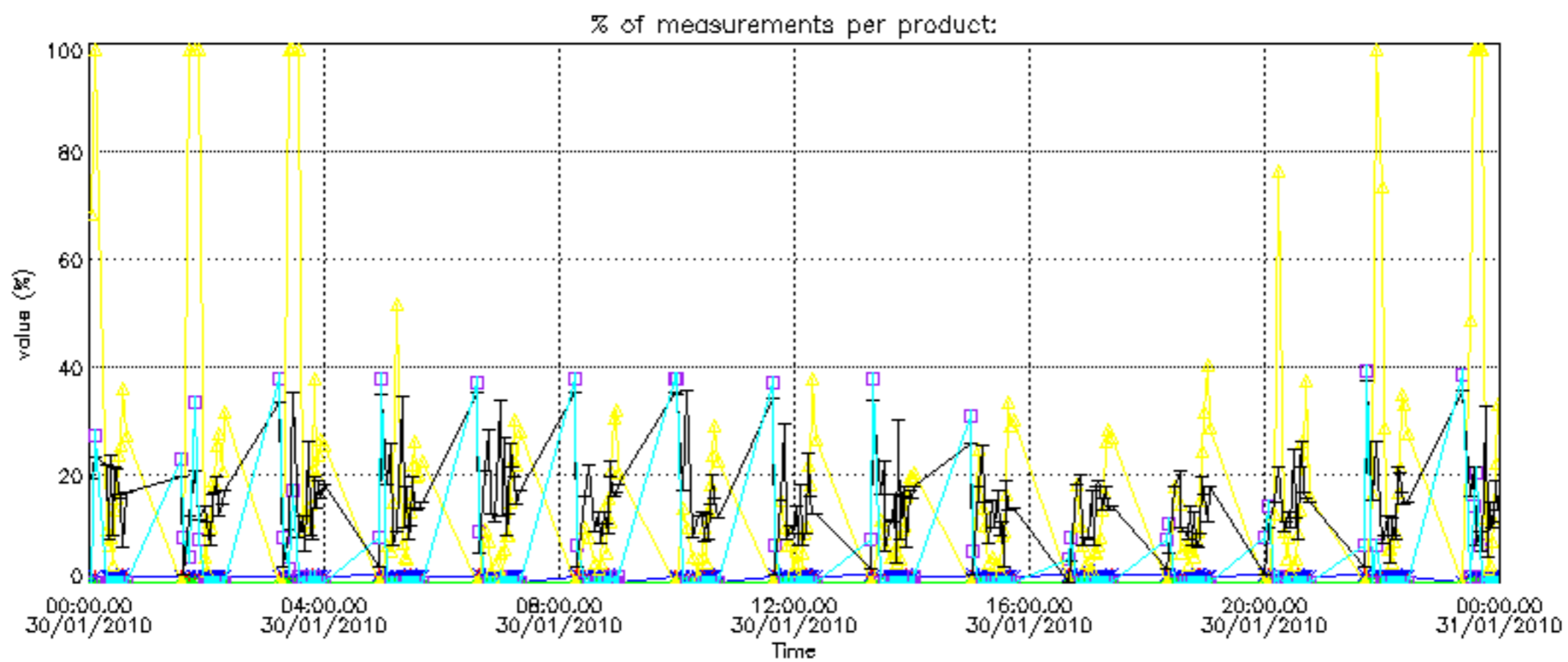


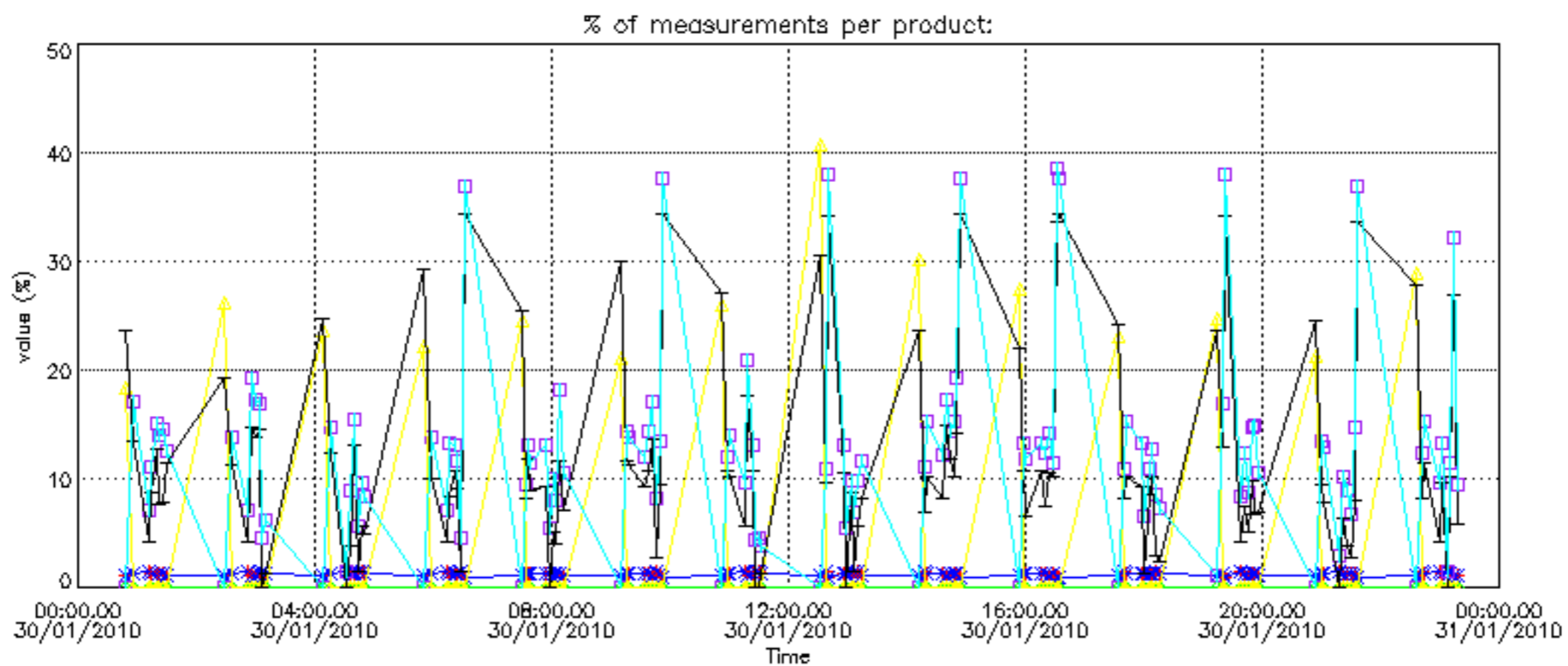
Percentage of flagged data per NO2 profile



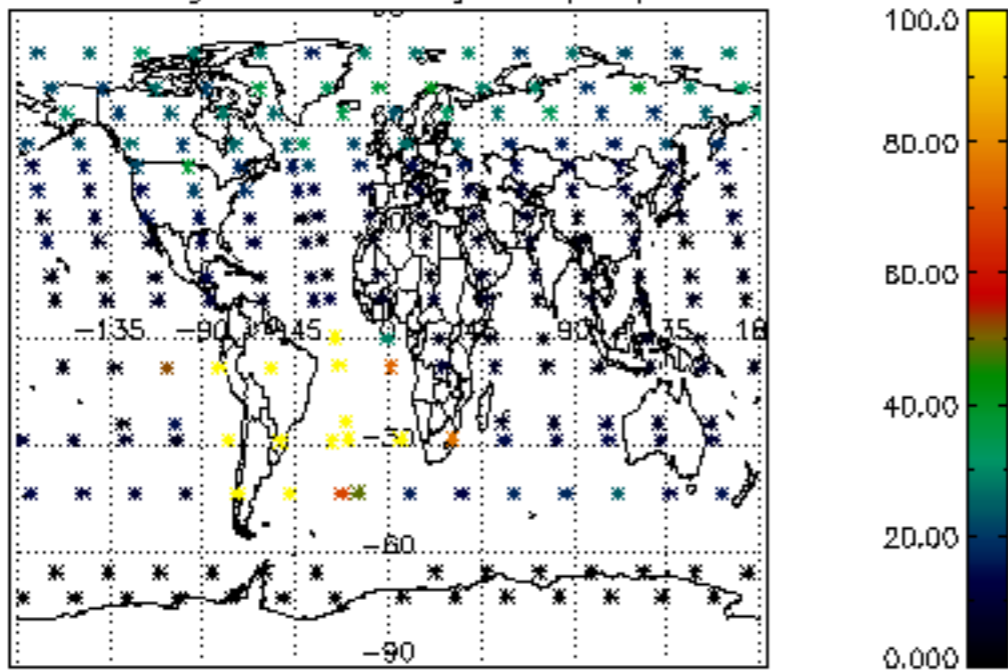
Percentage of flagged data per NO3 profile



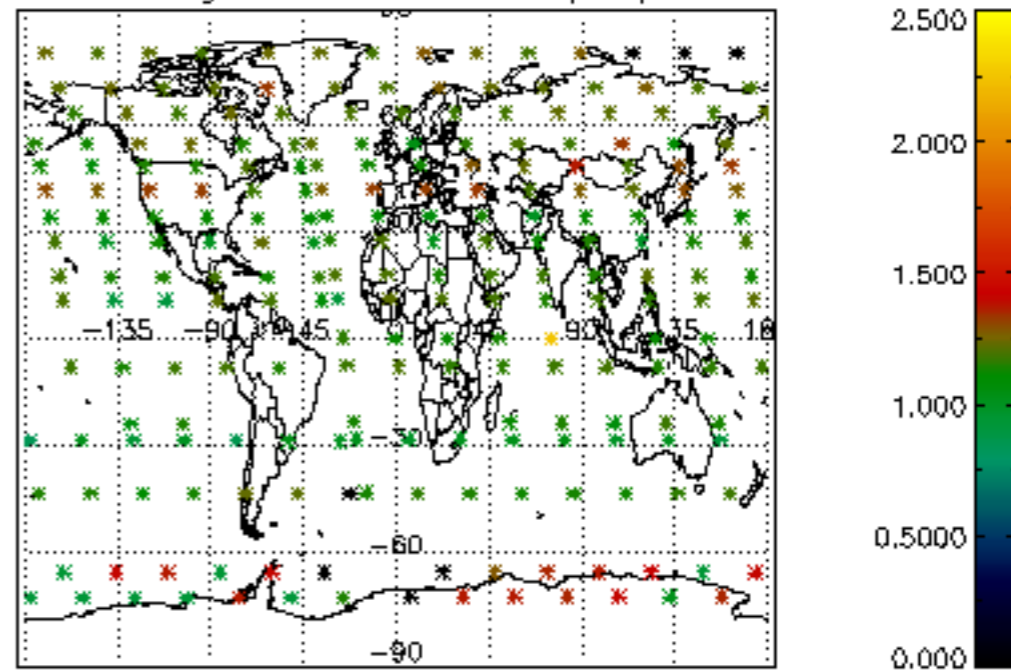




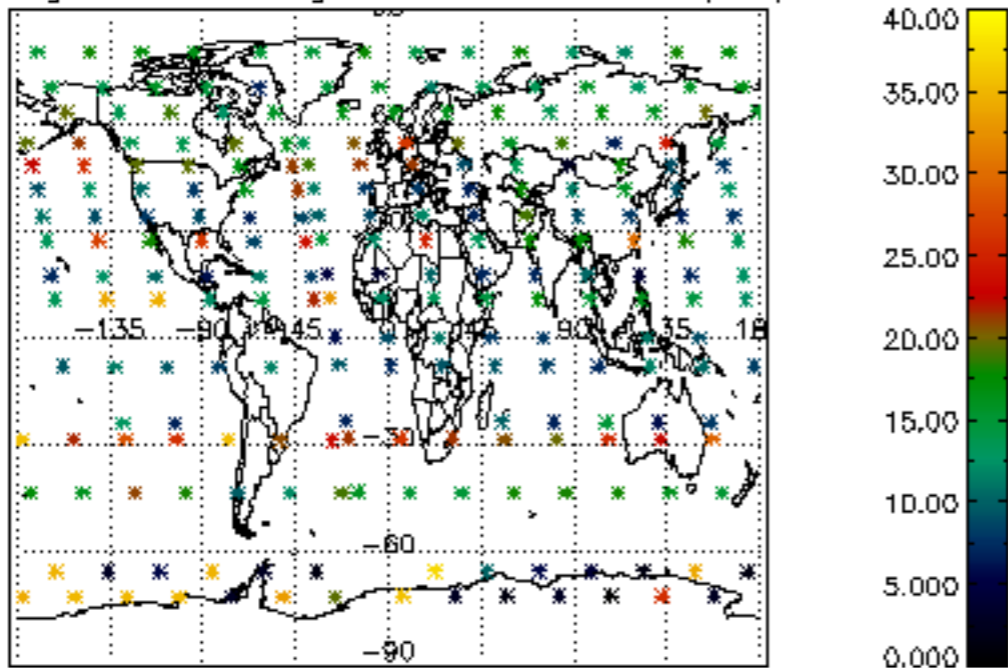
Percentage of cosmic ray hits per profile



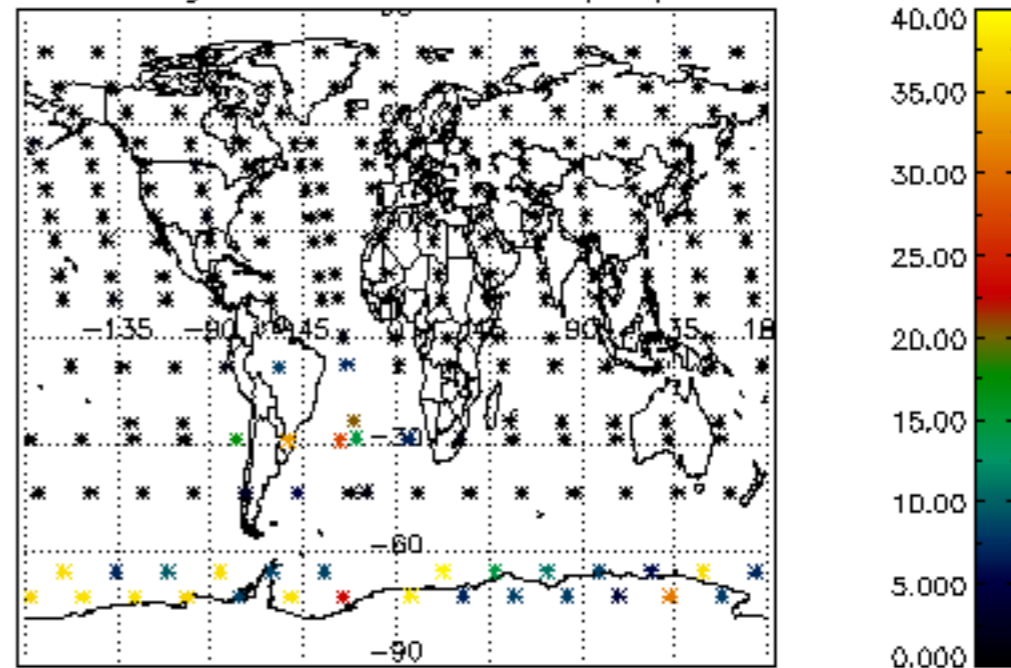
Percentage of datation errors per profile



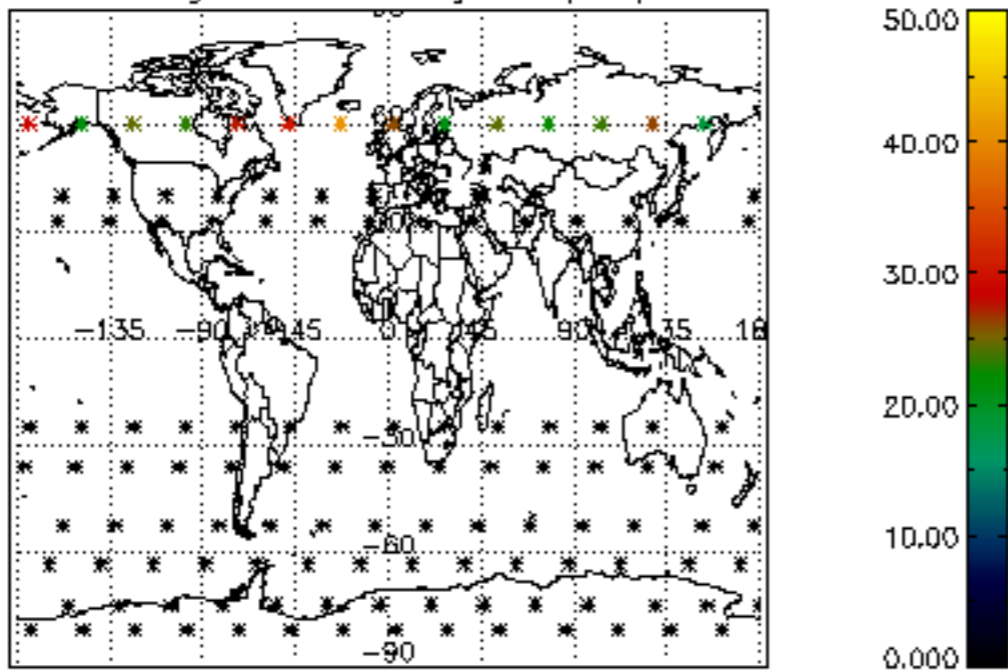
Percentage of star falling outside central band per profile



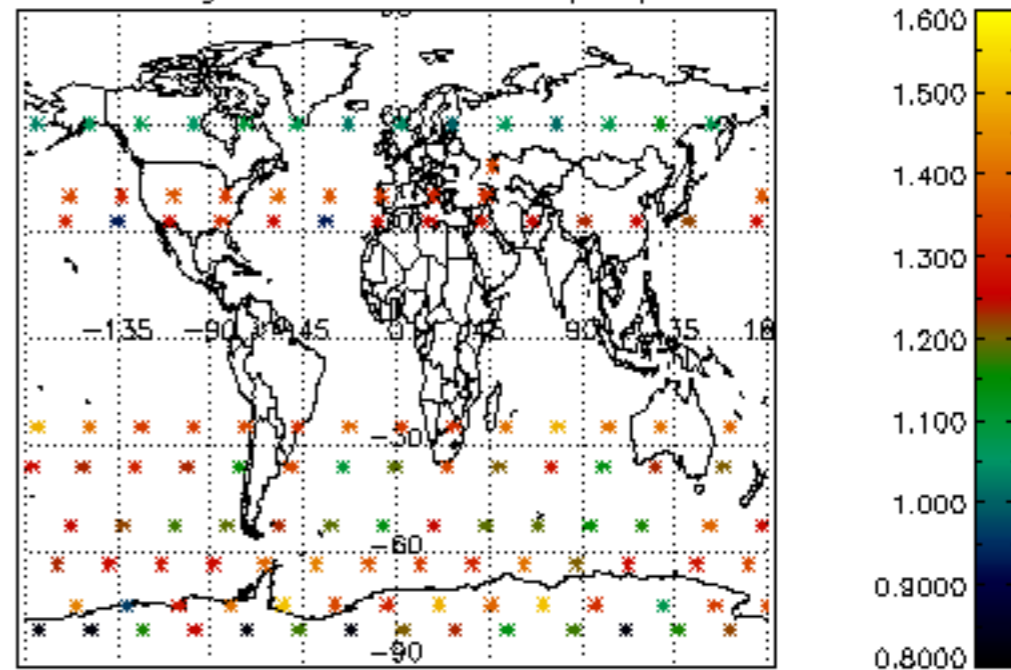
Percentage of saturation errors per profile



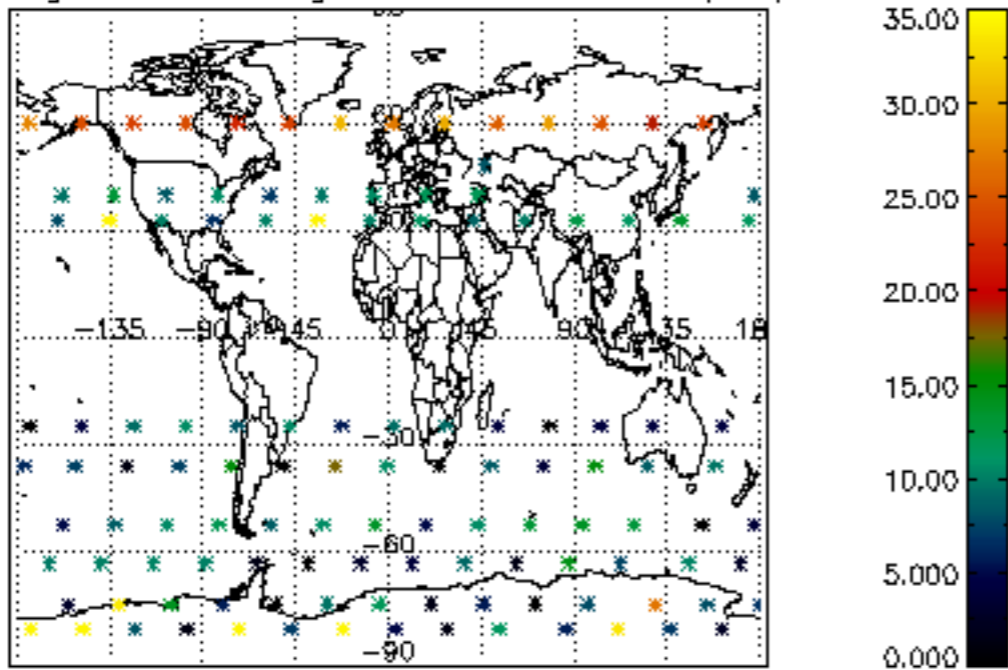
Percentage of cosmic ray hits per profile



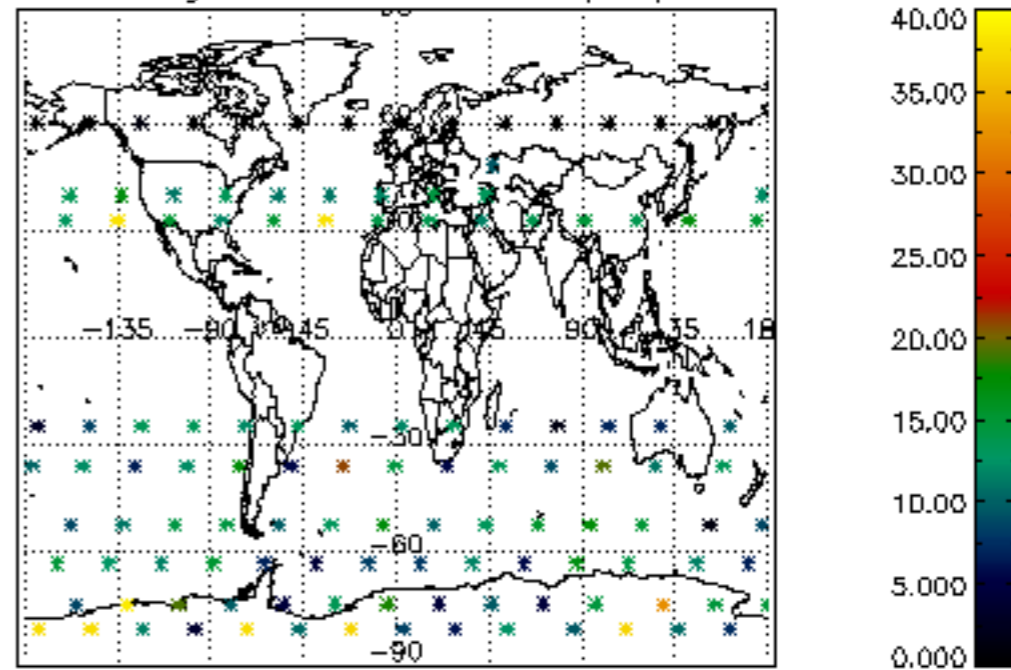
Percentage of datation errors per profile

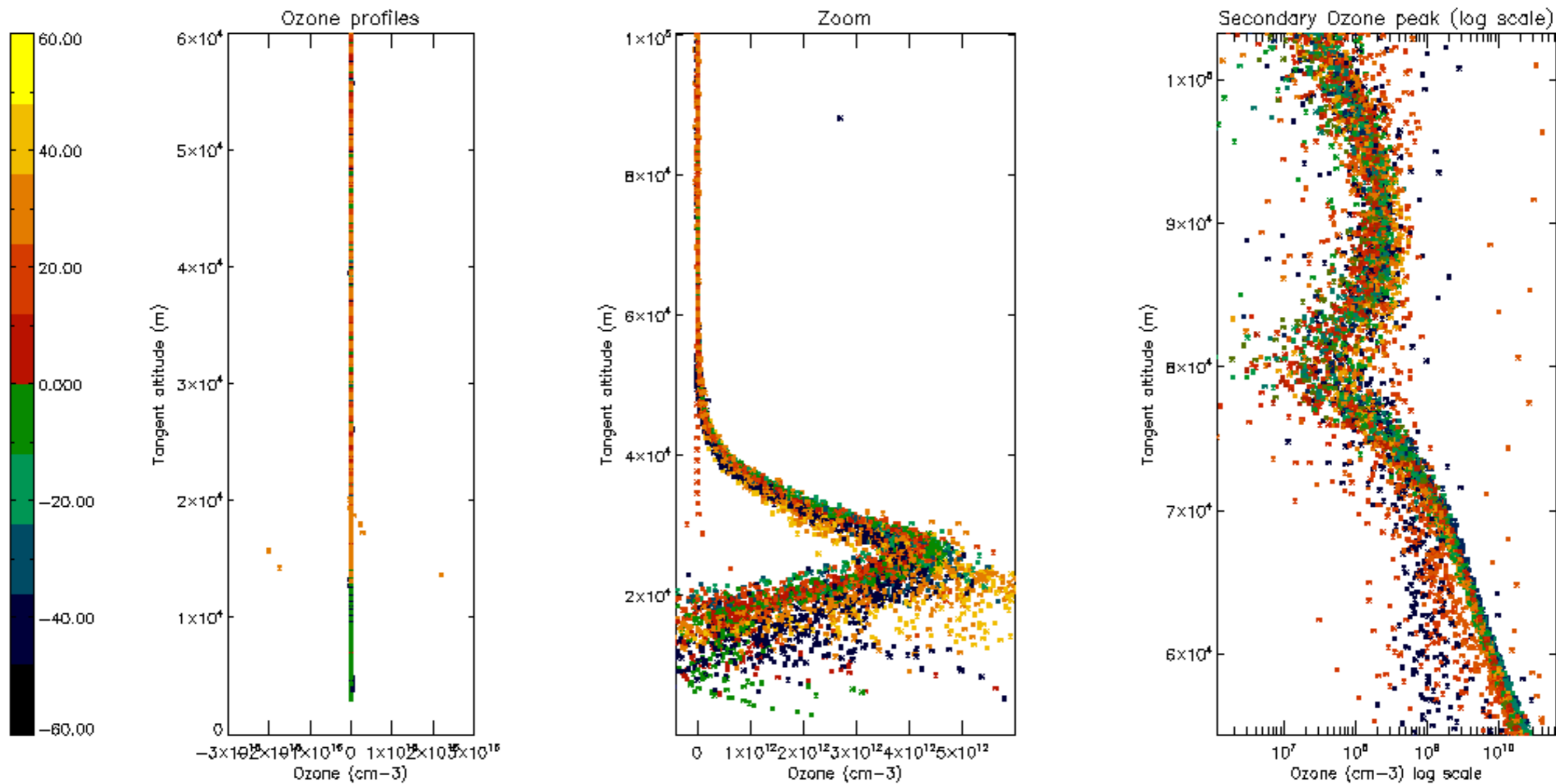


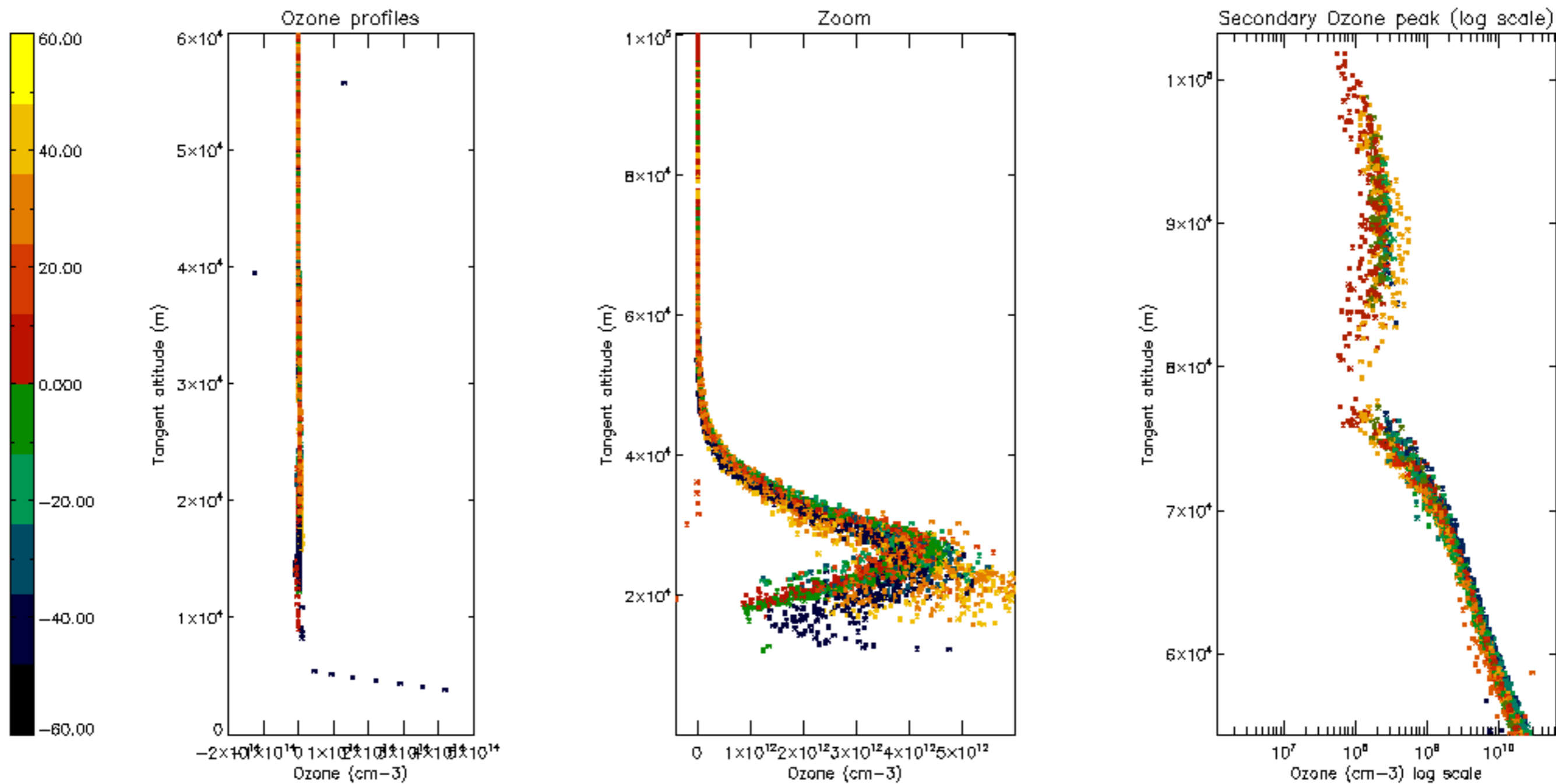
Percentage of star falling outside central band per profile

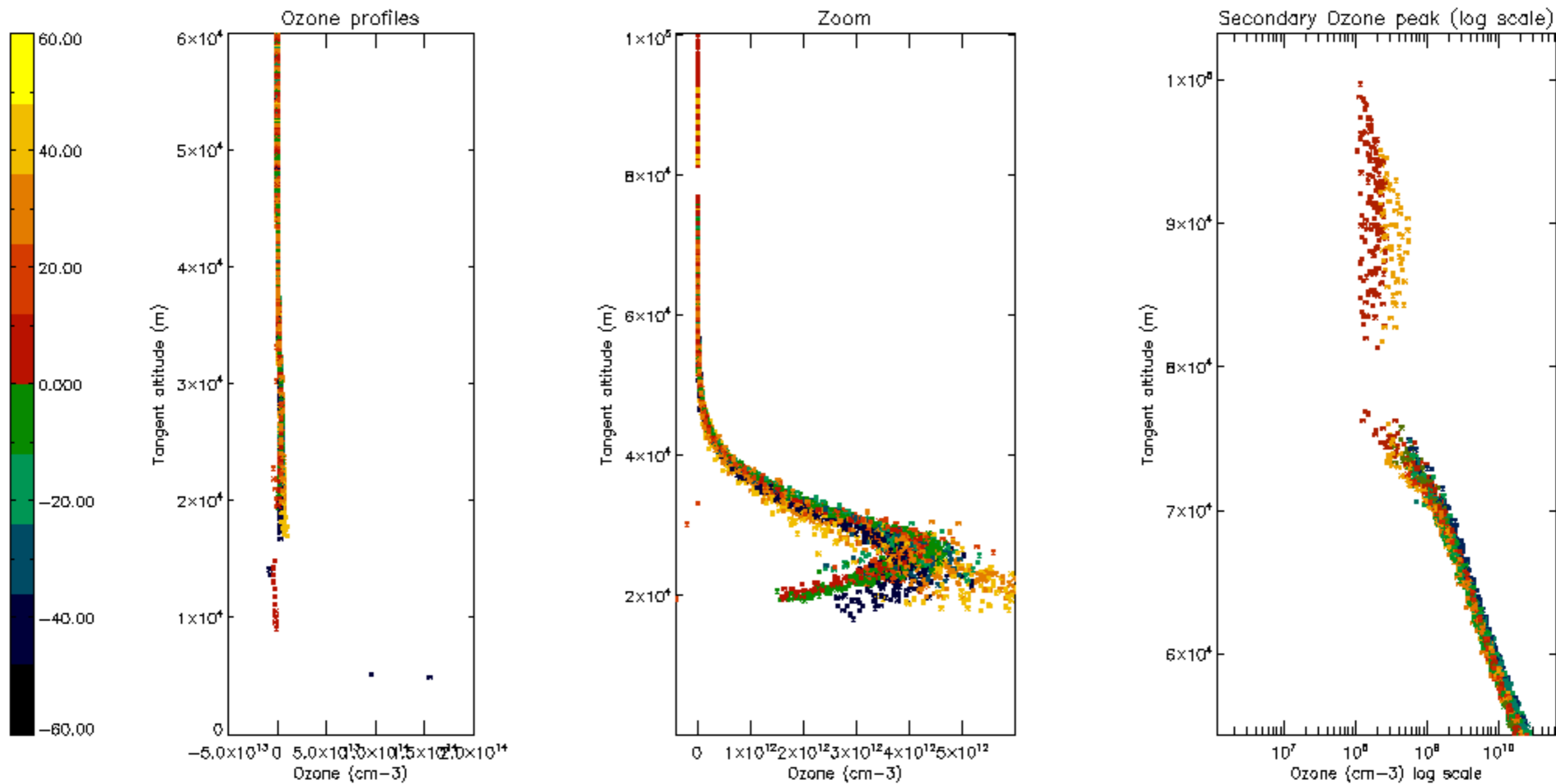


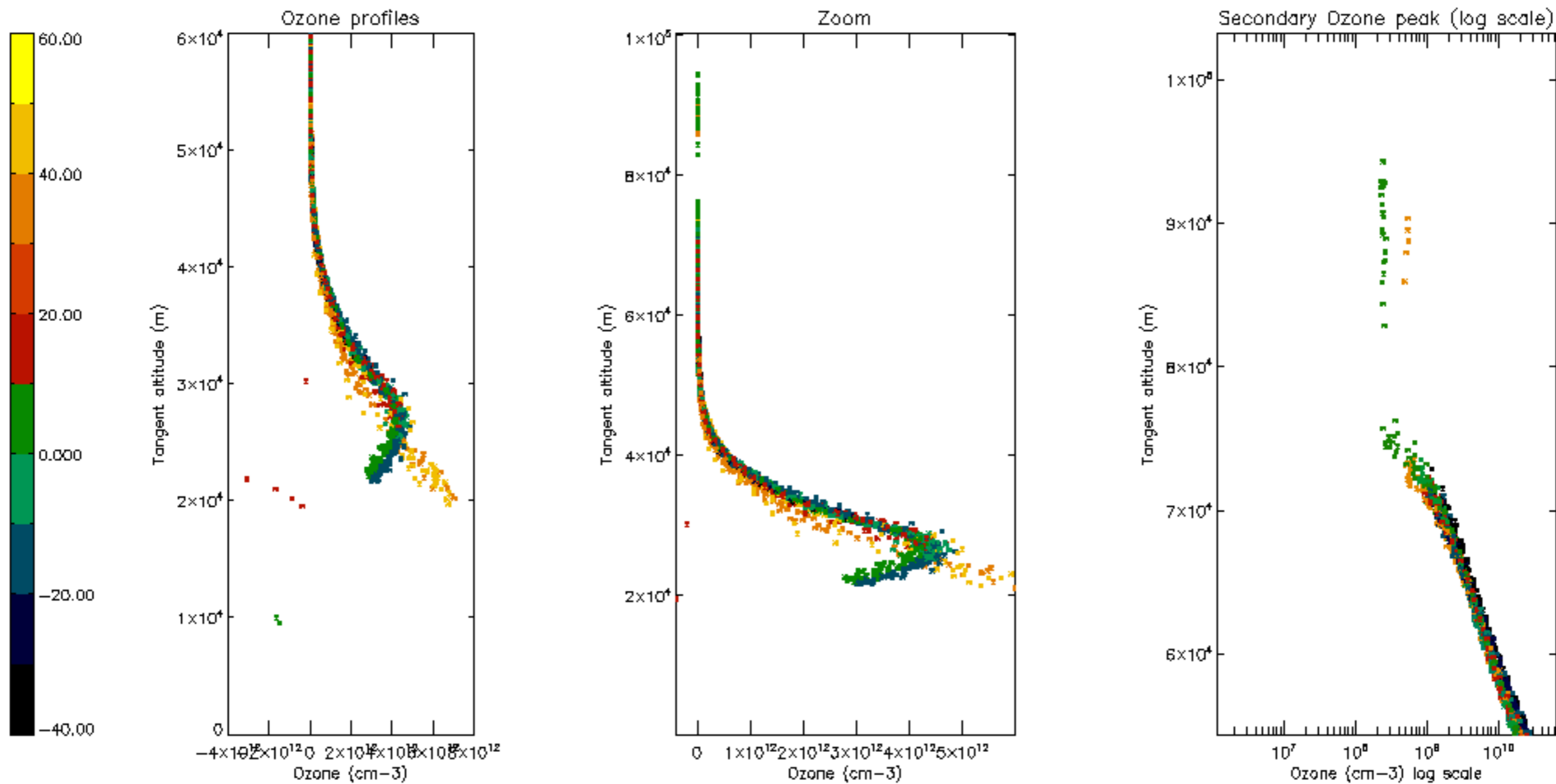
Percentage of saturation errors per profile

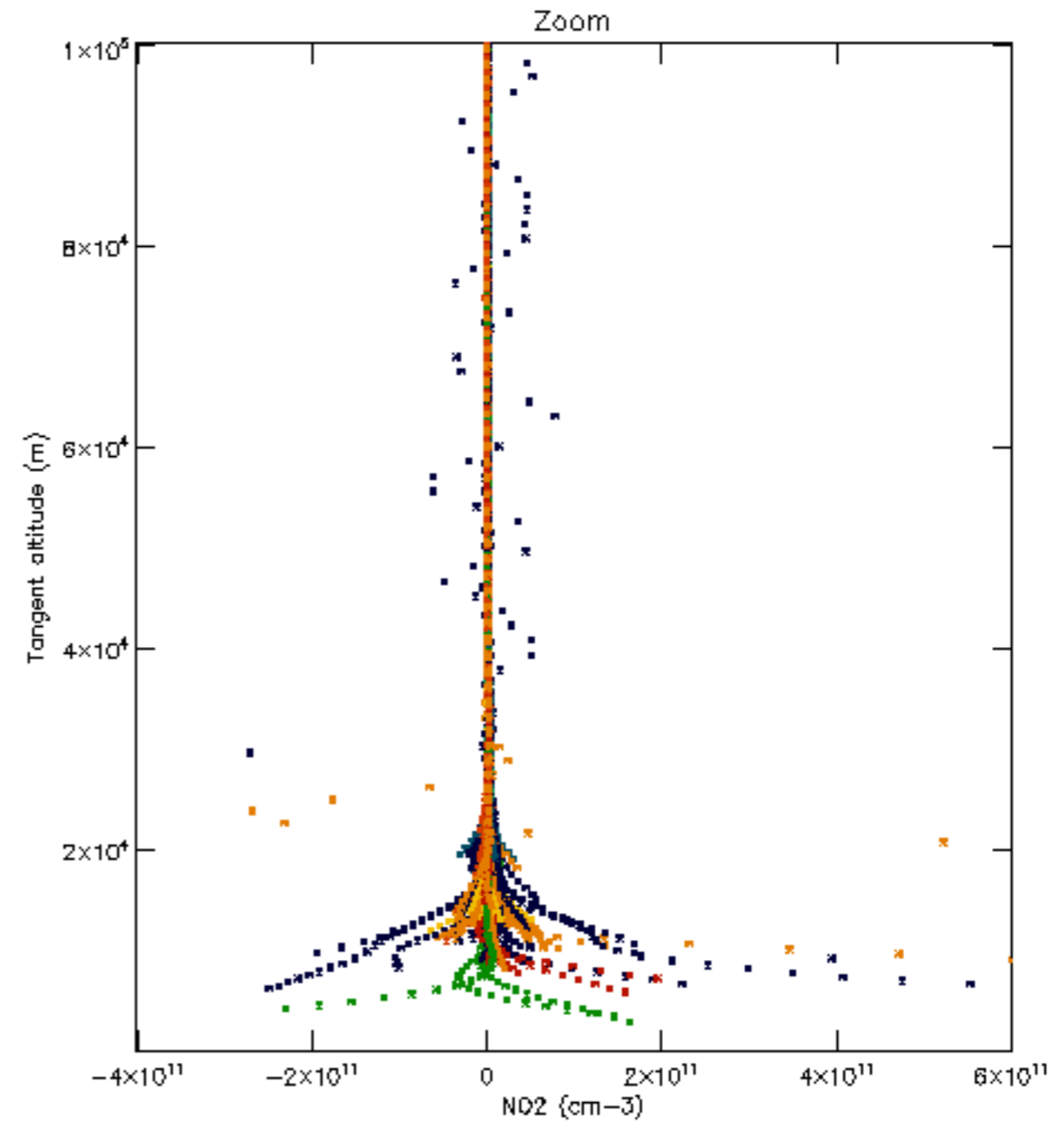
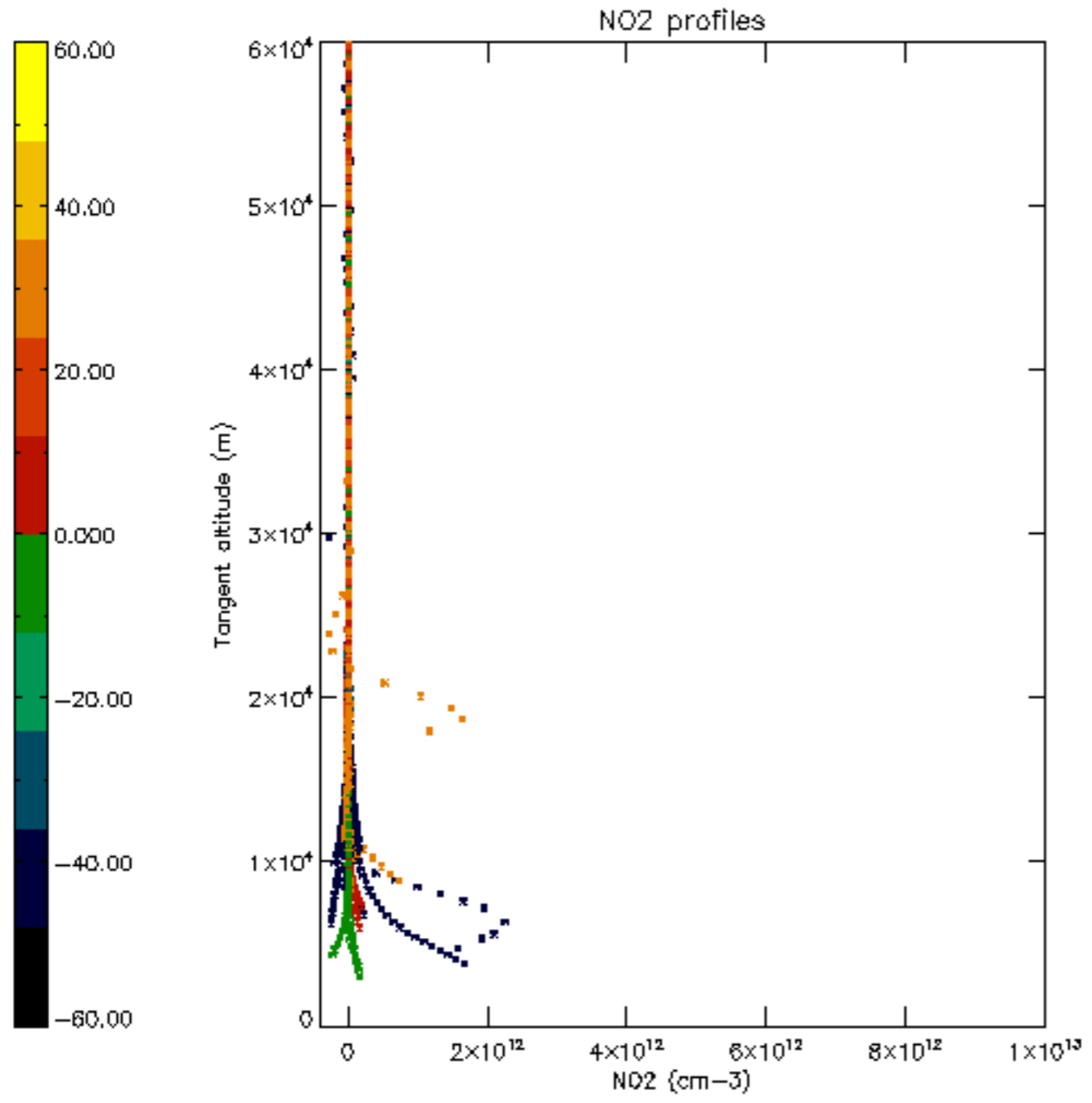


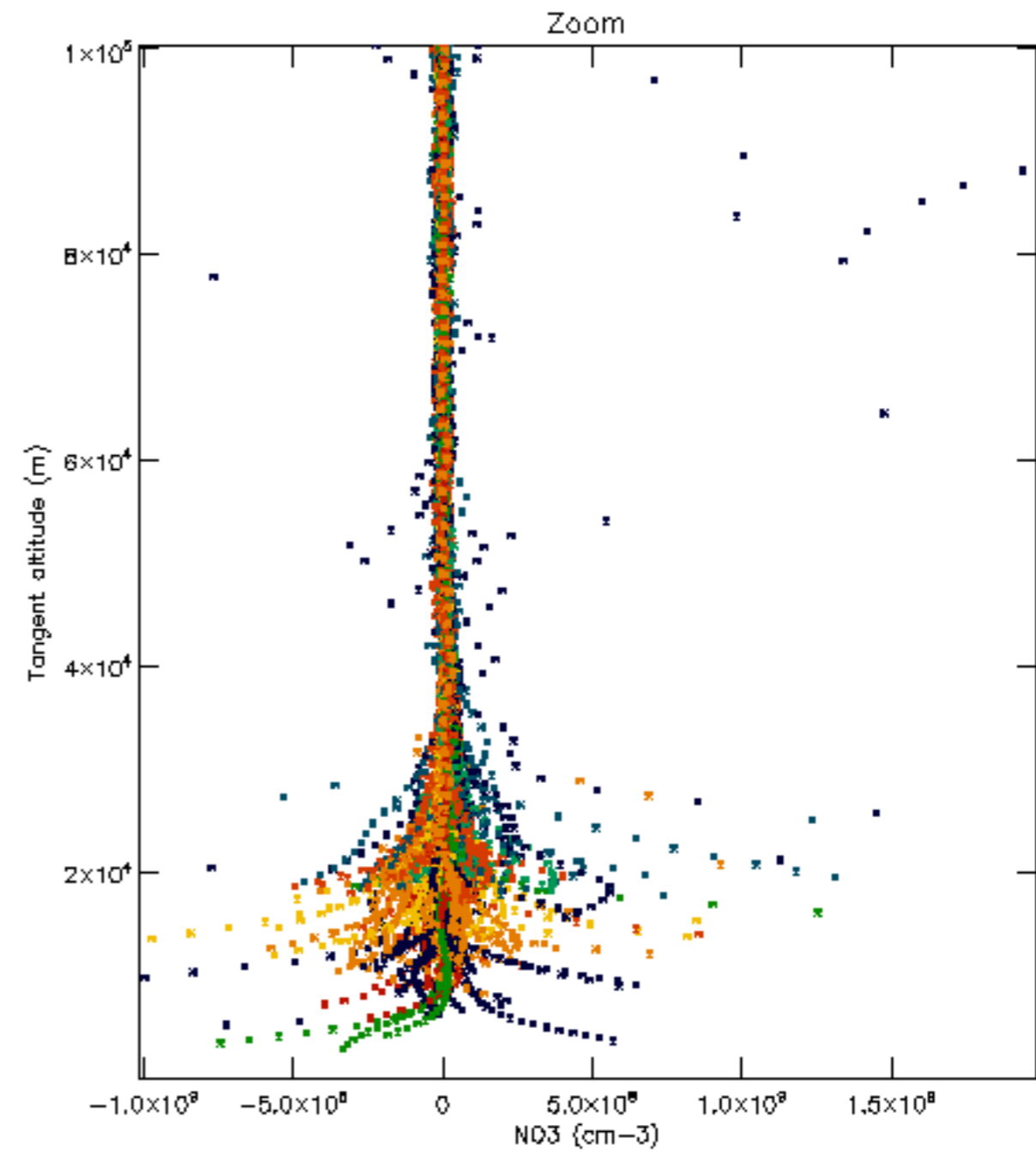
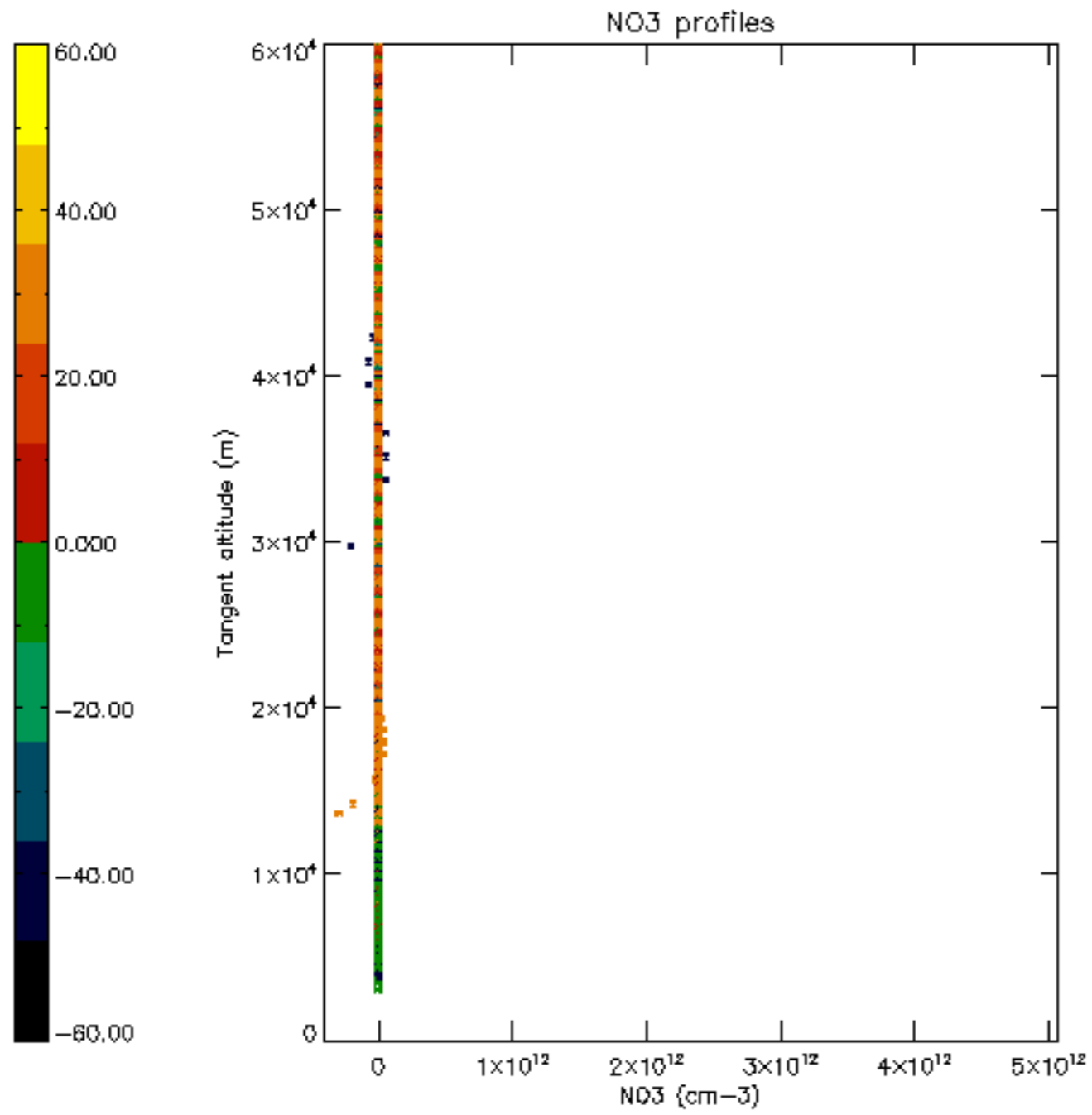


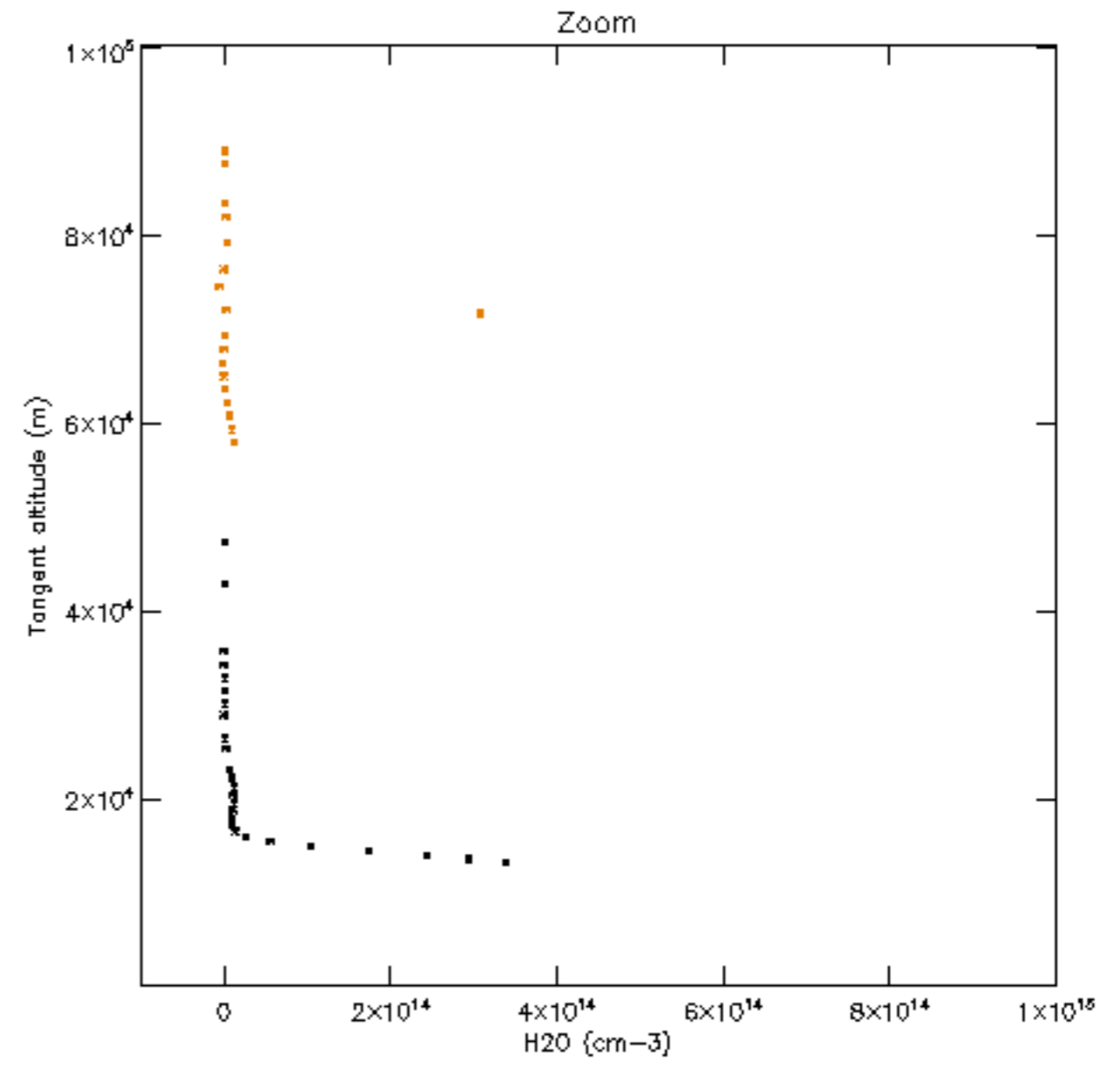
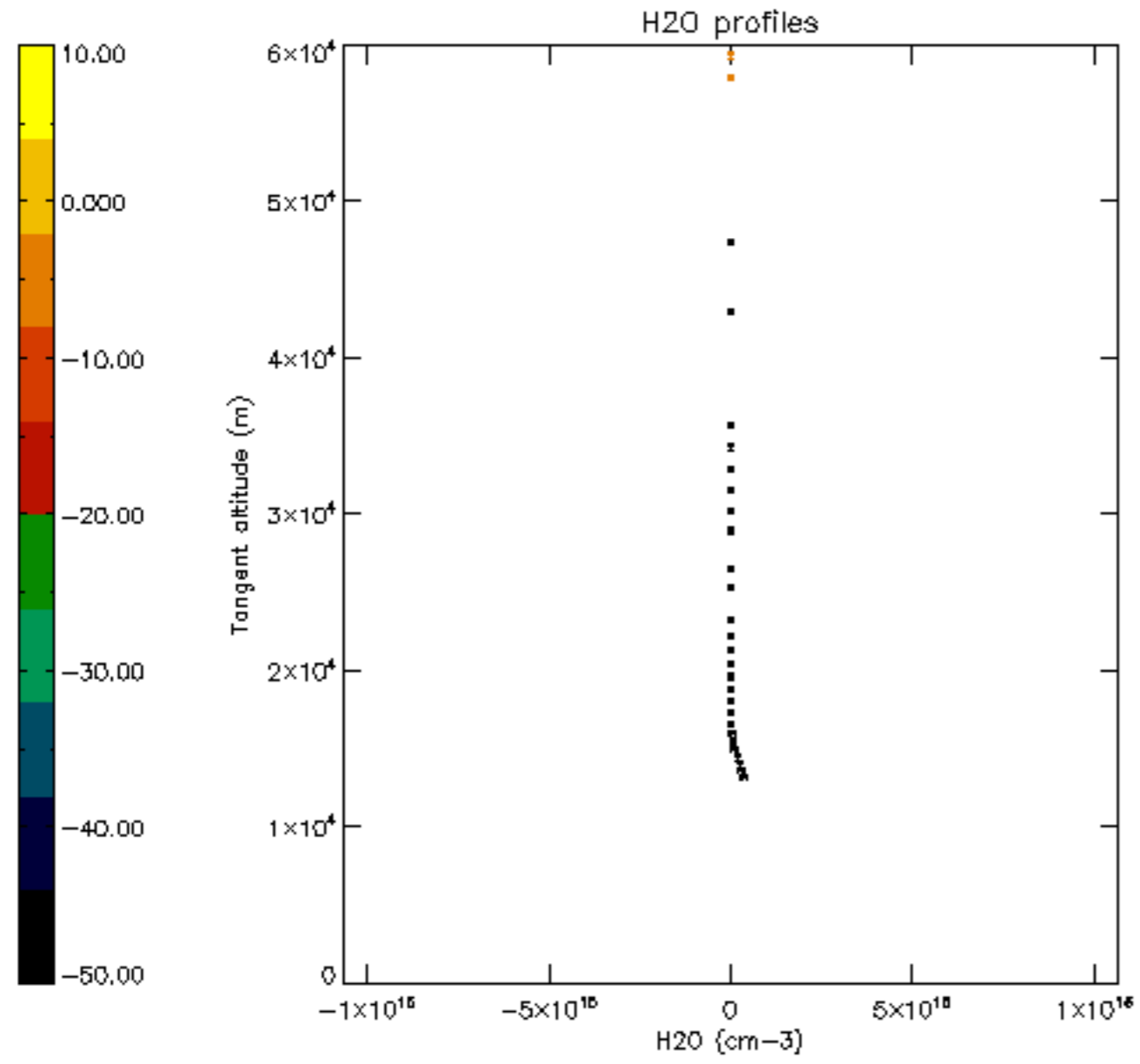


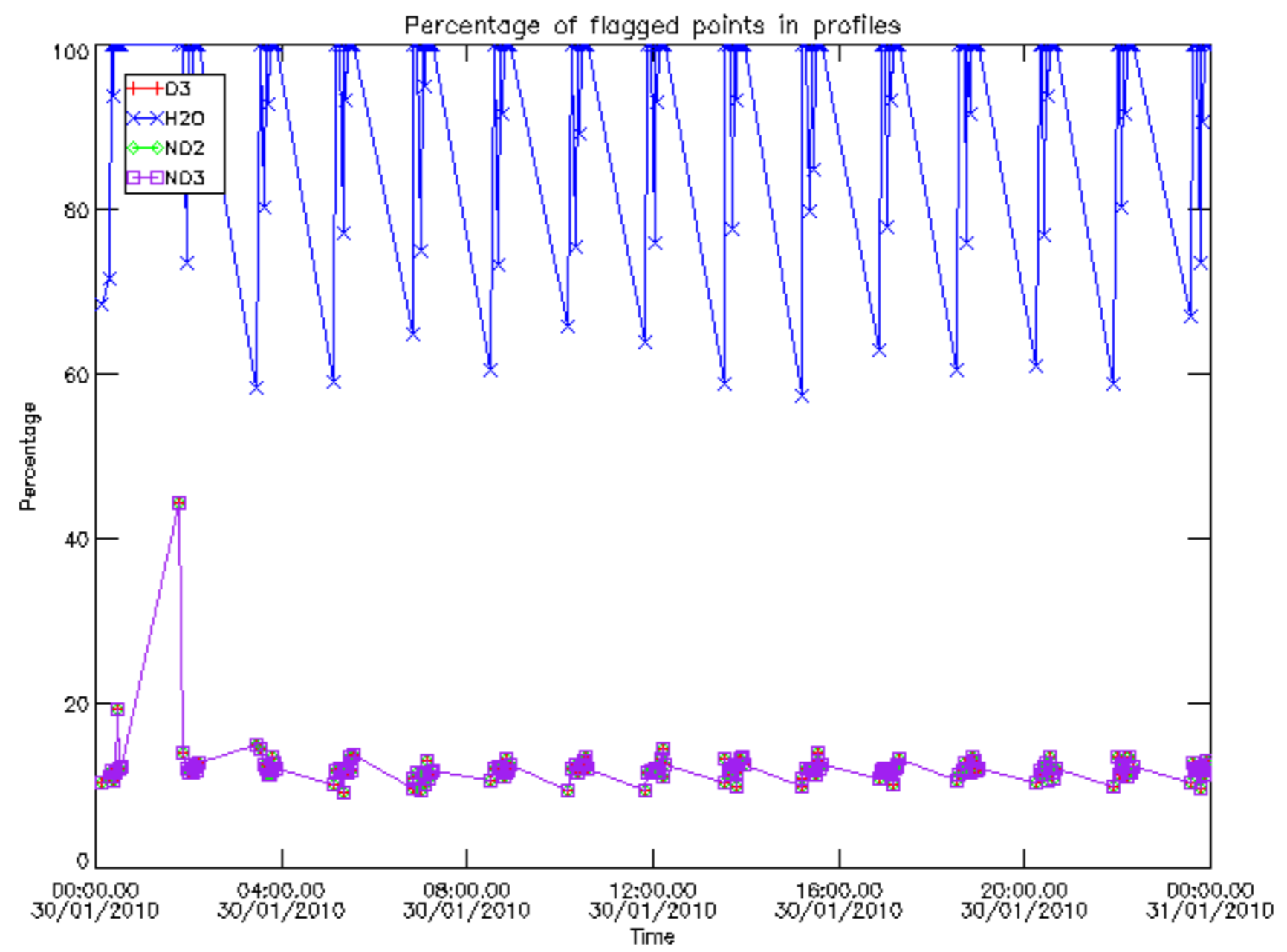




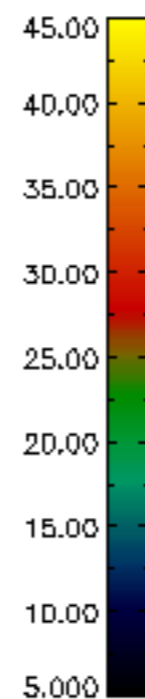
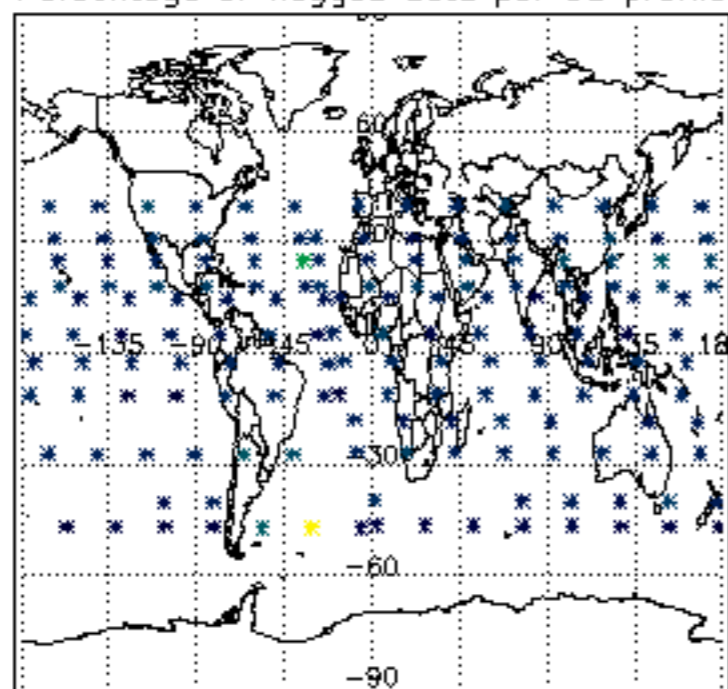




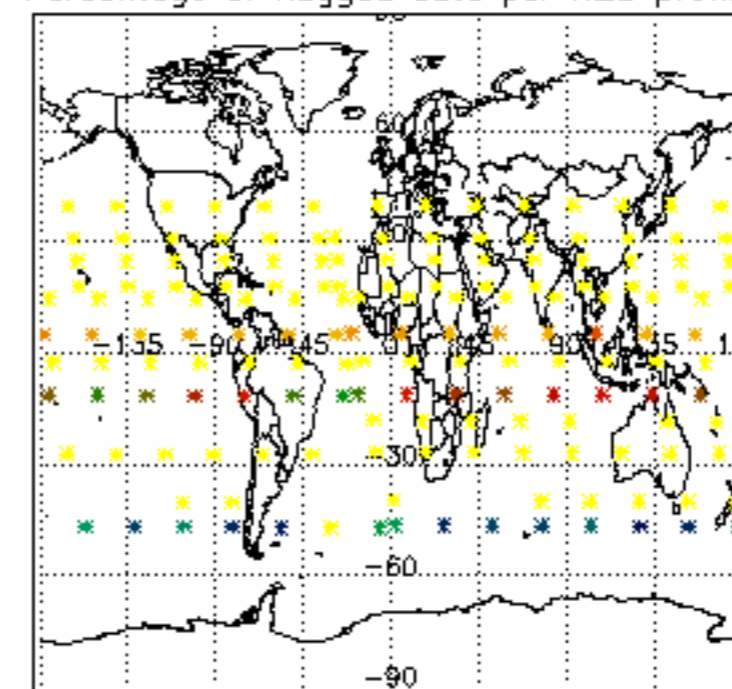




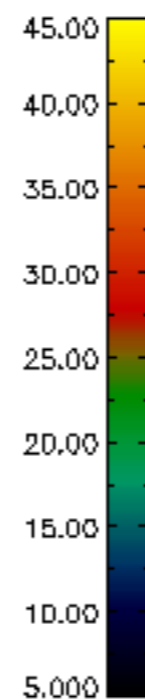
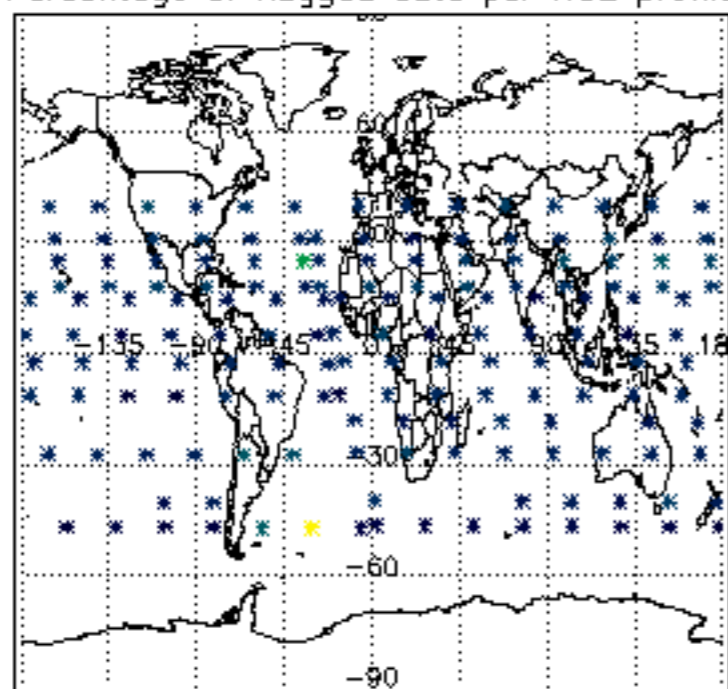
Percentage of flagged data per D3 profile



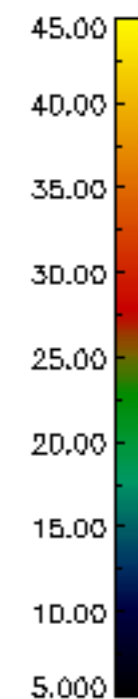
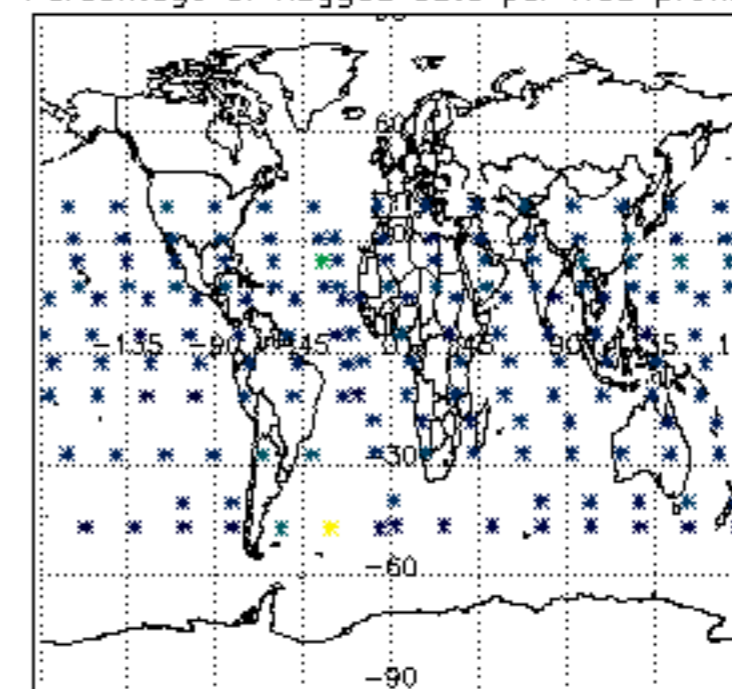
Percentage of flagged data per H2O profile

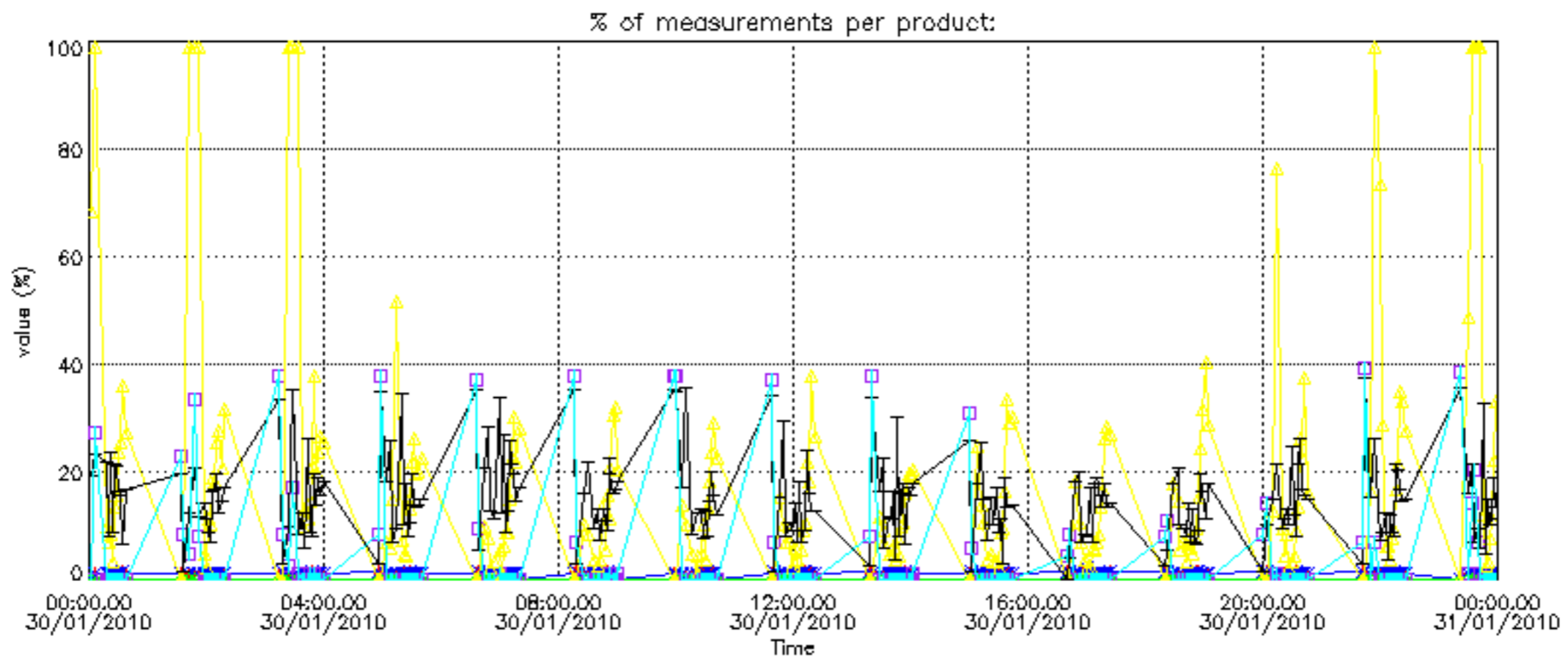


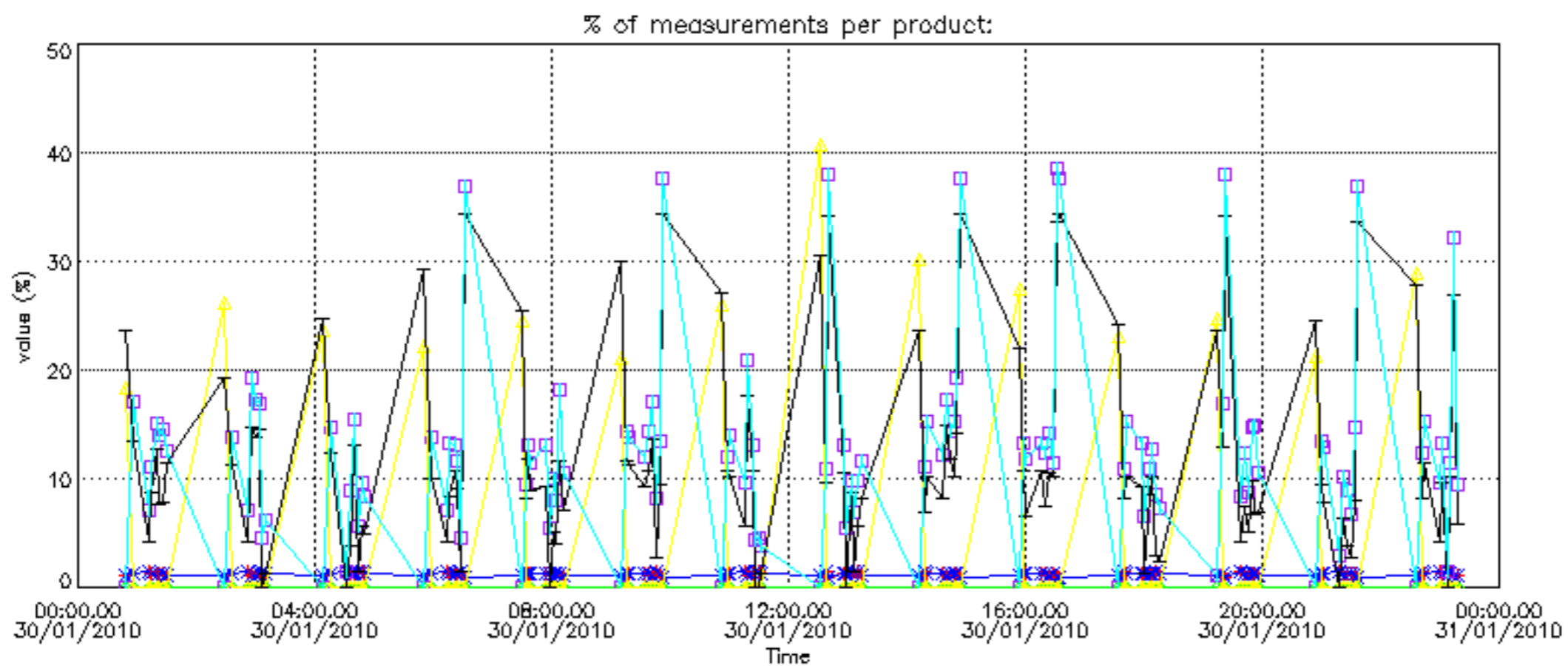
Percentage of flagged data per NO2 profile



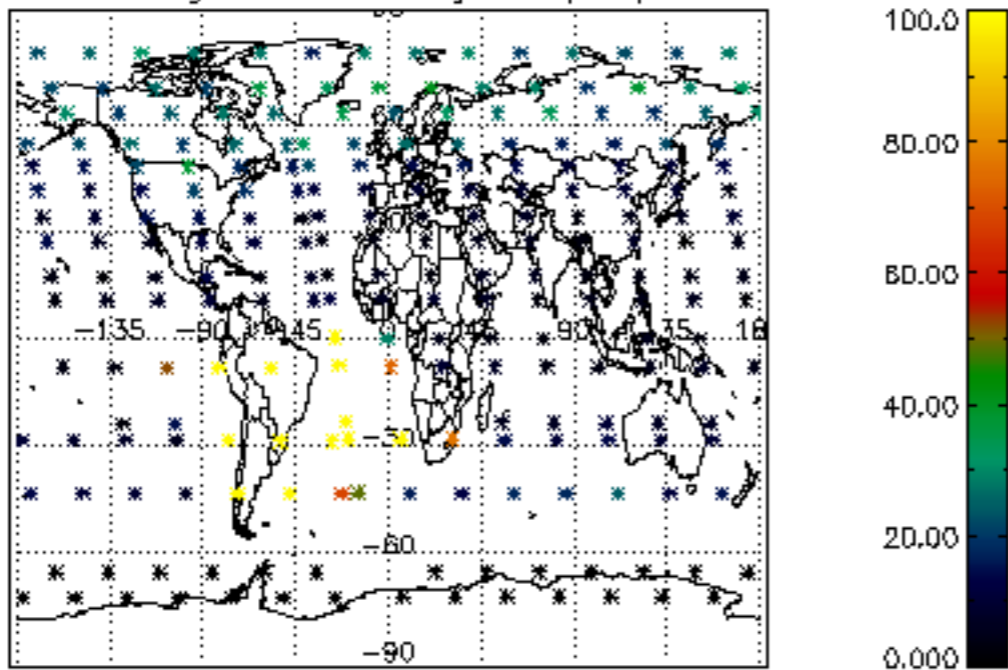
Percentage of flagged data per NO3 profile



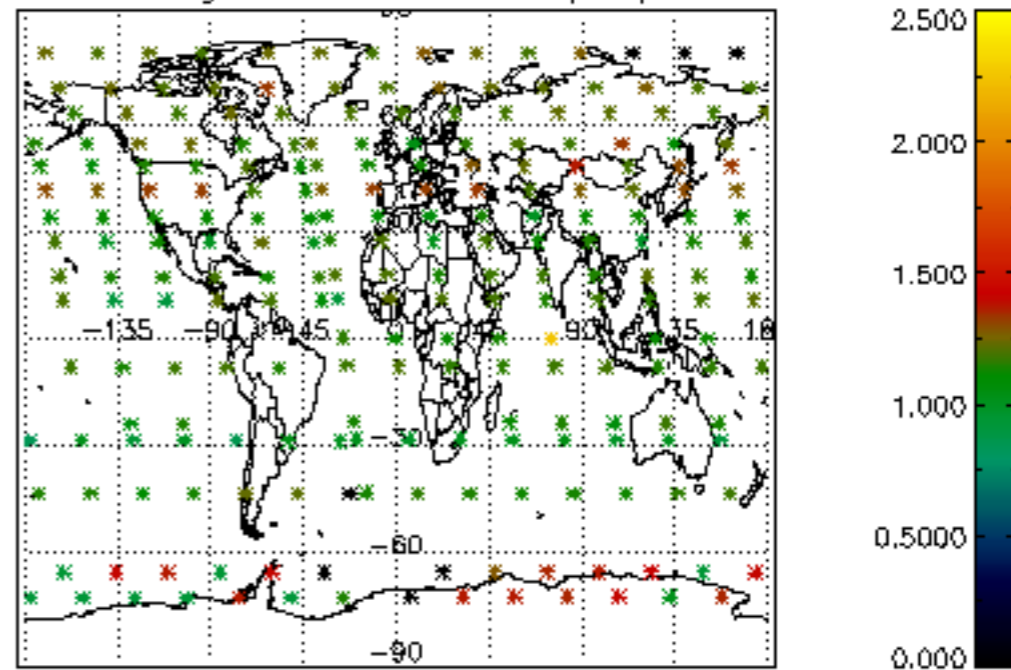




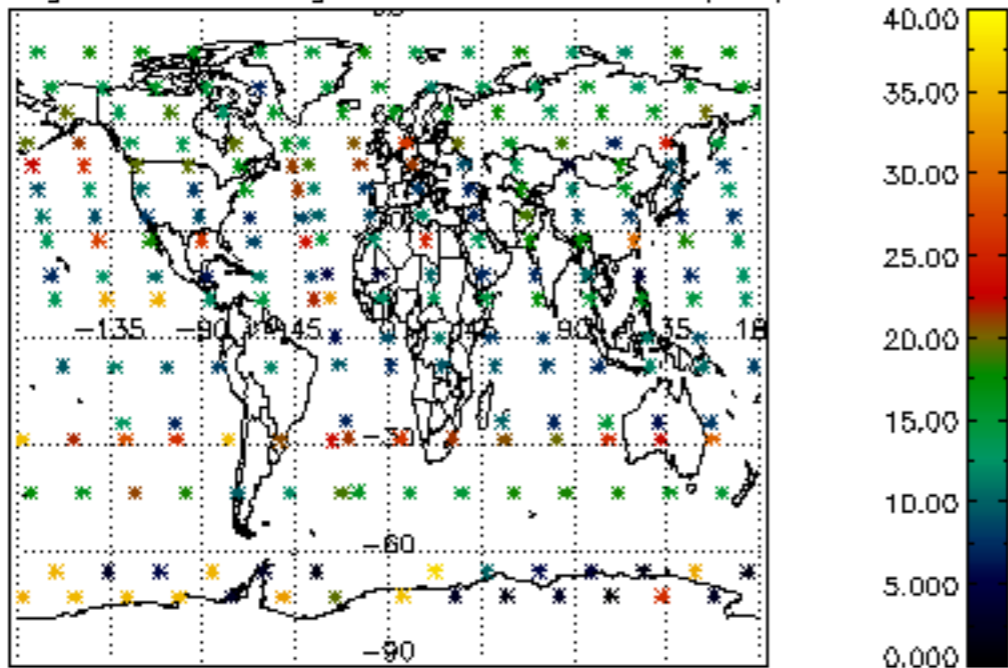
Percentage of cosmic ray hits per profile



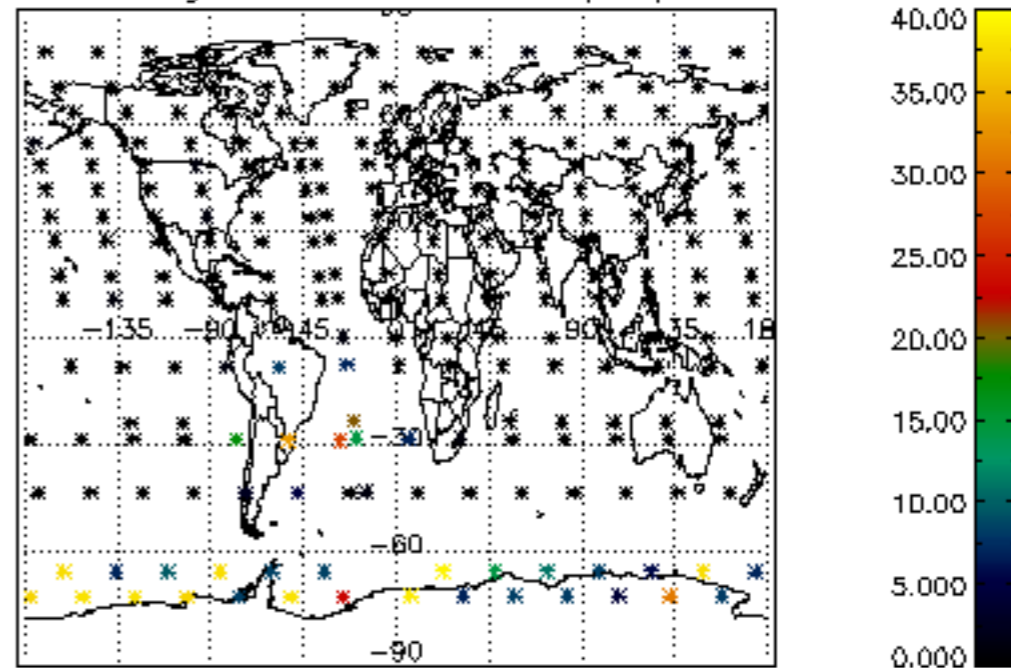
Percentage of datation errors per profile



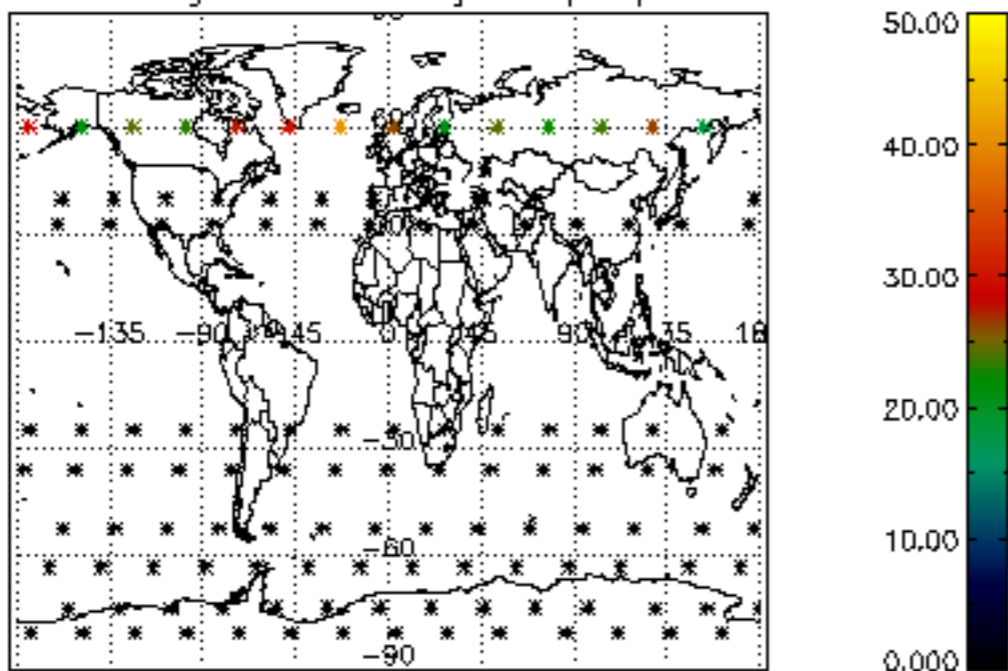
Percentage of star falling outside central band per profile



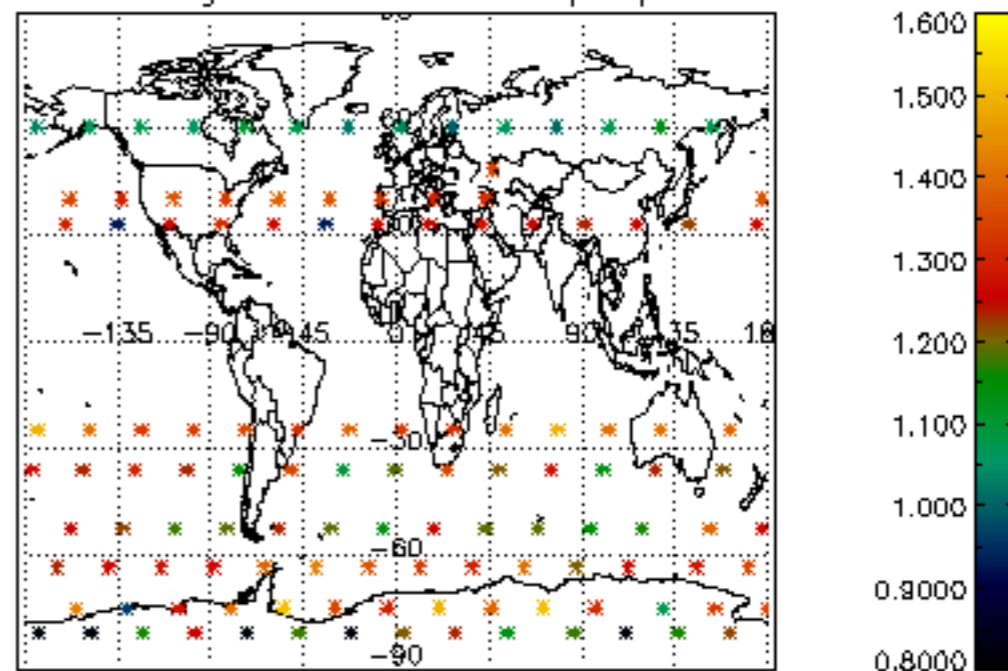
Percentage of saturation errors per profile



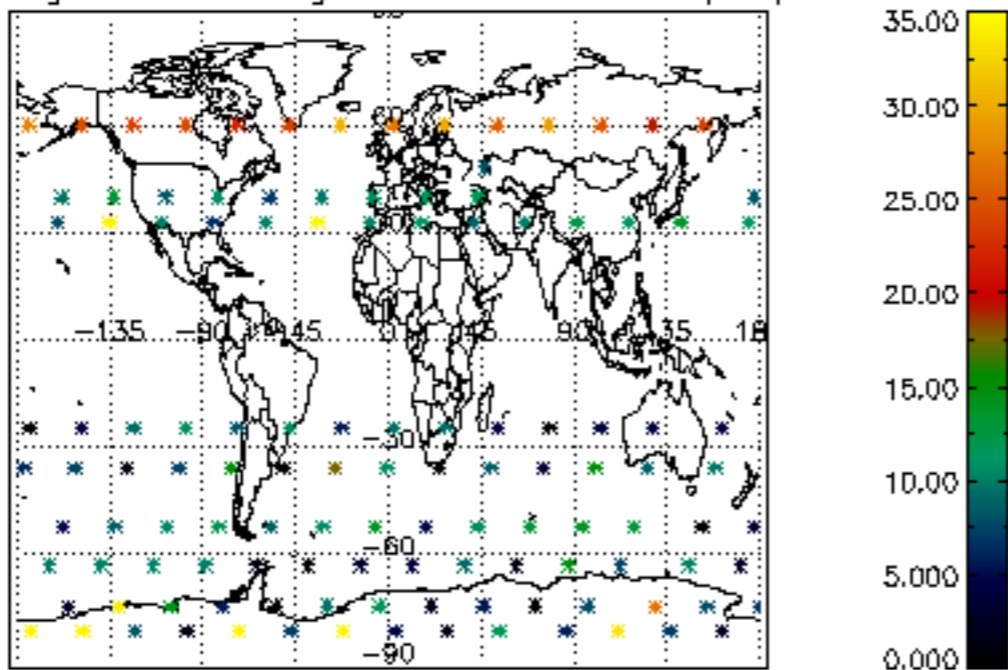
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

