

GOMOS Level 2 Daily Report

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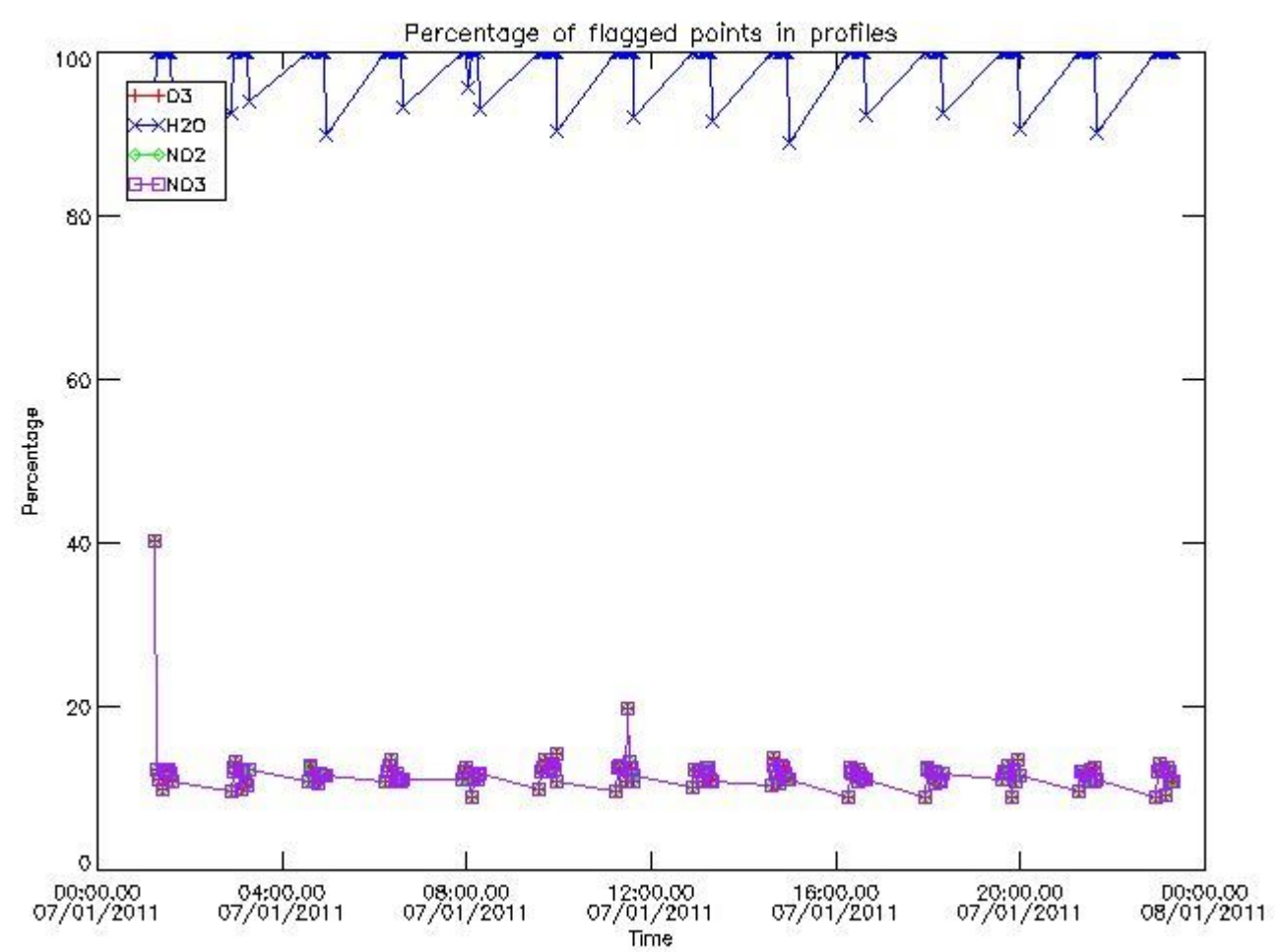
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338	GOM_NL__2PRFIN20110107_214330_000000433098_00173_46308_5169.N1	07-JAN-2011 21:43:30	Straylight	42.500	179	24Omi2CMa	3.0320	24000.	85	46308	No
339	GOM_NL__2PRFIN20110107_214549_000000523098_00173_46308_5170.N1	07-JAN-2011 21:45:49	Straylight	51.500	1	9Alp CMa	-1.4400	11000.	103	46308	No
340	GOM_NL__2PRFIN20110107_215305_000000533098_00173_46308_5171.N1	07-JAN-2011 21:53:05	Twilight_and_stray	53.000	14	58Alp Ori	0.87000	3000.0	106	46308	No
341	GOM_NL__2PRFIN20110107_215555_000000433098_00173_46308_5172.N1	07-JAN-2011 21:55:55	Twilight_and_stray	43.000	44	24Gam Gem	1.9280	11000.	86	46308	No
342	GOM_NL__2PRFIN20110107_215736_000000473098_00173_46308_5173.N1	07-JAN-2011 21:57:36	Bright	47.000	151	13Mu Gem	2.8900	3000.0	94	46308	No
343	GOM_NL__2PRFIN20110107_220139_000000383098_00173_46308_5174.N1	07-JAN-2011 22:01:39	Bright	37.500	107	37The Aur	2.6490	11000.	75	46308	No
344	GOM_NL__2PRFIN20110107_220352_000000363098_00173_46308_5175.N1	07-JAN-2011 22:03:52	Bright	36.000	42	34Bet Aur	1.9000	10200.	72	46308	No
345	GOM_NL__2PRFIN20110107_222027_000000553098_00173_46308_5176.N1	07-JAN-2011 22:20:27	Bright	55.000	60	7Bet UMi	2.0810	3950.0	110	46308	No
346	GOM_NL__2PRFIN20110107_222431_000000373098_00173_46308_5177.N1	07-JAN-2011 22:24:31	Bright	37.000	119	14Eta Dra	2.7270	4700.0	74	46308	No
347	GOM_NL__2PRFIN20110107_222708_000000323098_00173_46308_5178.N1	07-JAN-2011 22:27:08	Twilight_and_stray	32.000	39	85Eta UMa	1.8540	24000.	64	46308	No
348	GOM_NL__2PRFIN20110107_223138_000000683098_00173_46308_5179.N1	07-JAN-2011 22:31:38	Bright	68.000	180	27Gam Boo	3.0400	8000.0	136	46308	No
349	GOM_NL__2PRFIN20110107_223540_000000683098_00173_46308_5180.N1	07-JAN-2011 22:35:40	Bright	68.000	83		2.3780	11000.	136	46308	No
350	GOM_NL__2PRFIN20110107_224107_000000573098_00173_46308_5181.N1	07-JAN-2011 22:41:07	Bright	57.000	102	24Alp Ser	2.6000	4250.0	114	46308	No
351	GOM_NL__2PRFIN20110107_224628_000000453098_00173_46308_5182.N1	07-JAN-2011 22:46:28	Bright	45.000	104	27Bet Lib	2.6140	13100.	90	46308	No
352	GOM_NL__2PRFIN20110107_224923_000000493098_00173_46308_5183.N1	07-JAN-2011 22:49:23	Twilight_and_stray	48.500	122	9Alp2Lib	2.7470	9700.0	97	46308	No
353	GOM_NL__2PRFIN20110107_225626_000000573098_00173_46308_5184.N1	07-JAN-2011 22:56:26	Dark	57.000	54	5The Cen	2.0550	4500.0	114	46308	No
354	GOM_NL__2PRFIN20110107_225859_000000433098_00173_46308_5185.N1	07-JAN-2011 22:58:59	Dark	42.500	95	Zet Cen	2.5450	26000.	85	46308	No
355	GOM_NL__2PRFIN20110107_230037_000000403098_00174_46309_5170.N1	07-JAN-2011 23:00:37	Dark	39.500	77	Eps Cen	2.3030	28000.	79	46309	No
356	GOM_NL__2PRFIN20110107_230318_000000423098_00174_46309_5171.N1	07-JAN-2011 23:03:18	Dark	41.500	20	Bet Cru	1.2530	30000.	83	46309	No
357	GOM_NL__2PRFIN20110107_230857_000000563098_00174_46309_5172.N1	07-JAN-2011 23:08:57	Dark	56.000	113	Mu Vel	2.6920	5000.0	112	46309	No
358	GOM_NL__2PRFIN20110107_231055_000000413098_00174_46309_5173.N1	07-JAN-2011 23:10:55	Dark	41.000	71	lot Car	2.2460	7700.0	82	46309	No
359	GOM_NL__2PRFIN20110107_231249_000000423098_00174_46309_5174.N1	07-JAN-2011 23:12:49	Dark	42.000	46	Del Vel	1.9540	10600.	84	46309	No
360	GOM_NL__2PRFIN20110107_231536_000000473098_00174_46309_5175.N1	07-JAN-2011 23:15:36	Dark	46.500	34	Gam2Vel	1.7930	23000.	93	46309	No
361	GOM_NL__2PRFIN20110107_231746_000000483098_00174_46309_5176.N1	07-JAN-2011 23:17:46	Dark	47.500	70	Zet Pup	2.2460	39000.	95	46309	No
362	GOM_NL__2PRFIN20110107_231937_000000553098_00174_46309_5177.N1	07-JAN-2011 23:19:37	Straylight	54.500	117	Pi Pup	2.7060	3800.0	109	46309	No
363	GOM_NL__2PRFIN20110107_232216_000000453098_00174_46309_5178.N1	07-JAN-2011 23:22:16	Straylight	45.000	23	21Eps CMa	1.5020	26000.	90	46309	No
364	GOM_NL__2PRFIN20110107_232344_000000443098_00174_46309_5179.N1	07-JAN-2011 23:23:44	Straylight	44.000	179	24Omi2CMa	3.0320	24000.	88	46309	No
365	GOM_NL__2PRFIN20110107_232603_000000553098_00174_46309_5180.N1	07-JAN-2011 23:26:03	Straylight	55.000	1	9Alp CMa	-1.4400	11000.	110	46309	No
366	GOM_NL__2PRFIN20110107_233319_000000523098_00174_46309_5181.N1	07-JAN-2011 23:33:19	Twilight_and_stray	52.000	14	58Alp Ori	0.87000	3000.0	104	46309	No
367	GOM_NL__2PRFIN20110107_233609_000000463098_00174_46309_5182.N1	07-JAN-2011 23:36:09	Twilight_and_stray	45.500	44	24Gam Gem	1.9280	11000.	91	46309	No
368	GOM_NL__2PRFIN20110107_233749_000000463098_00174_46309_5183.N1	07-JAN-2011 23:37:49	Bright	45.500	151	13Mu Gem	2.8900	3000.0	91	46309	No
369	GOM_NL__2PRFIN20110107_234153_000000383098_00174_46309_5184.N1	07-JAN-2011 23:41:53	Bright	37.500	107	37The Aur	2.6490	11000.	75	46309	No
370	GOM_NL__2PRFIN20110107_234406_000000383098_00174_46309_5185.N1	07-JAN-2011 23:44:06	Bright	37.500	42	34Bet Aur	1.9000	10200.	75	46309	No

3. Quality information per product

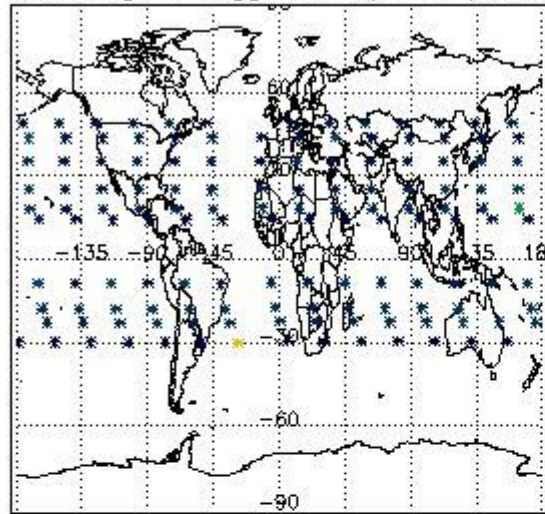
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

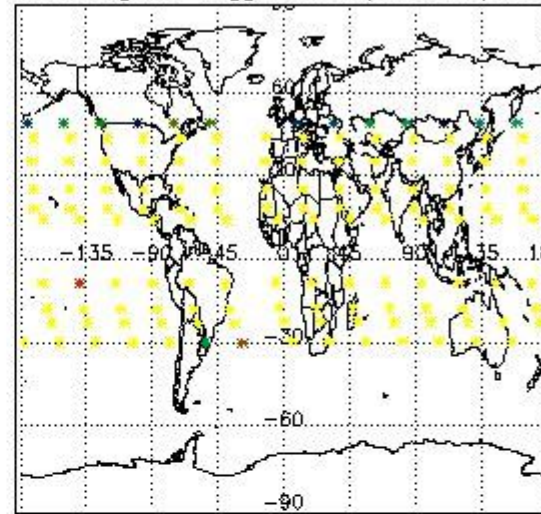


3.2 Plot quality information per product (world map)

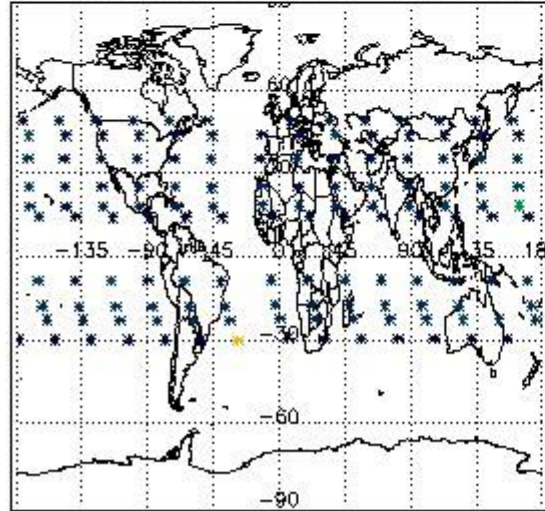
Percentage of flagged data per O3 profile



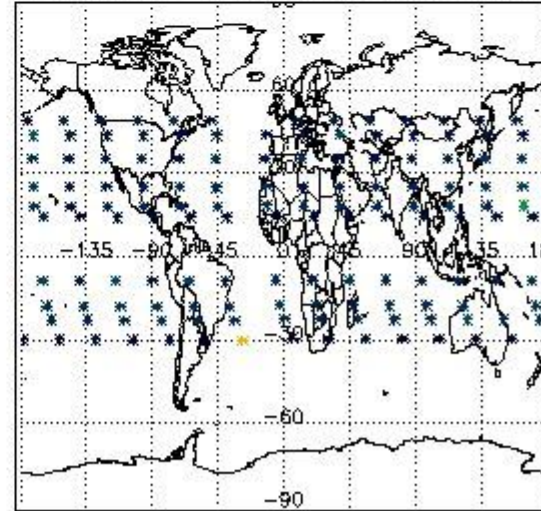
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

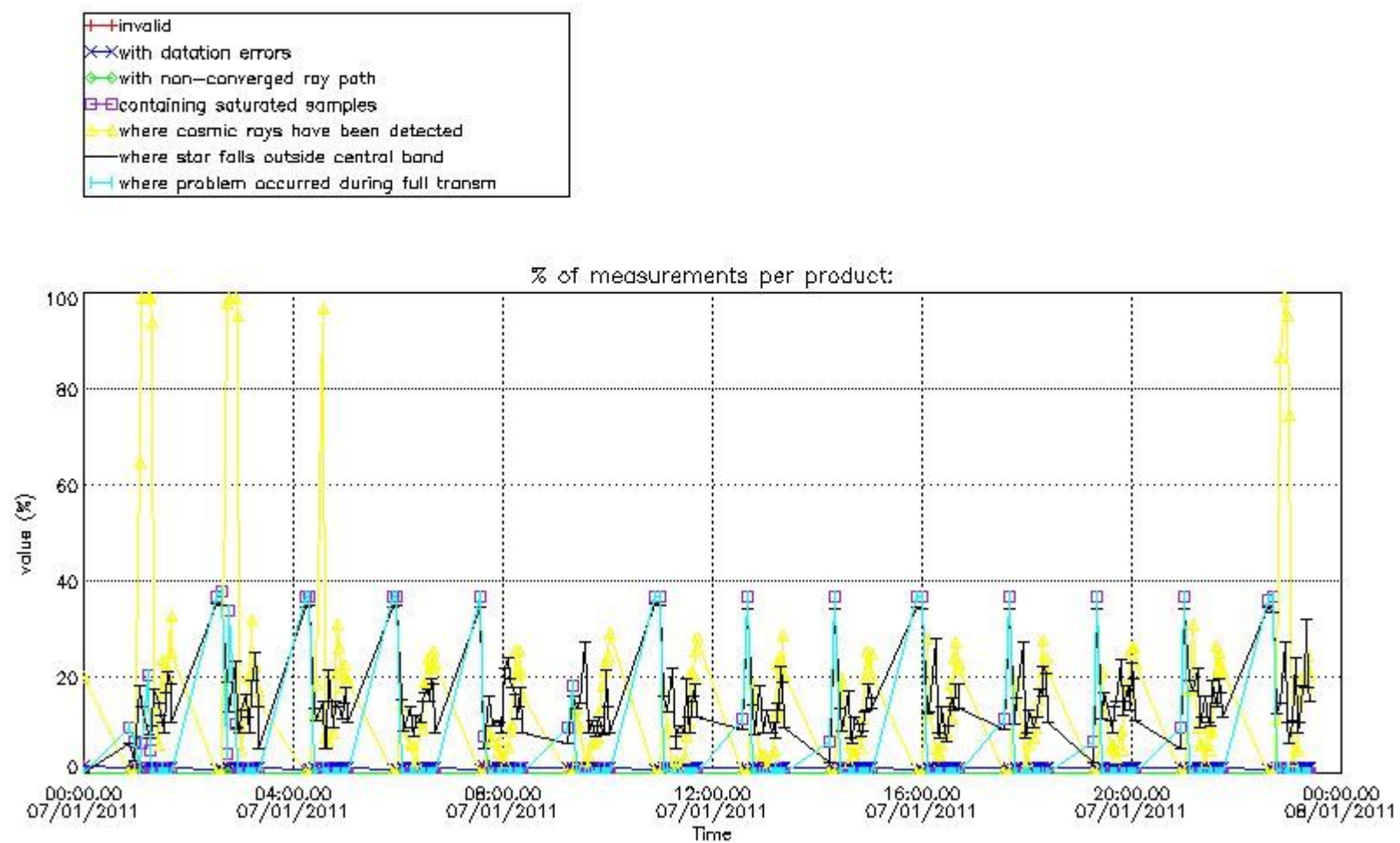


4. Level 1 quality information per product

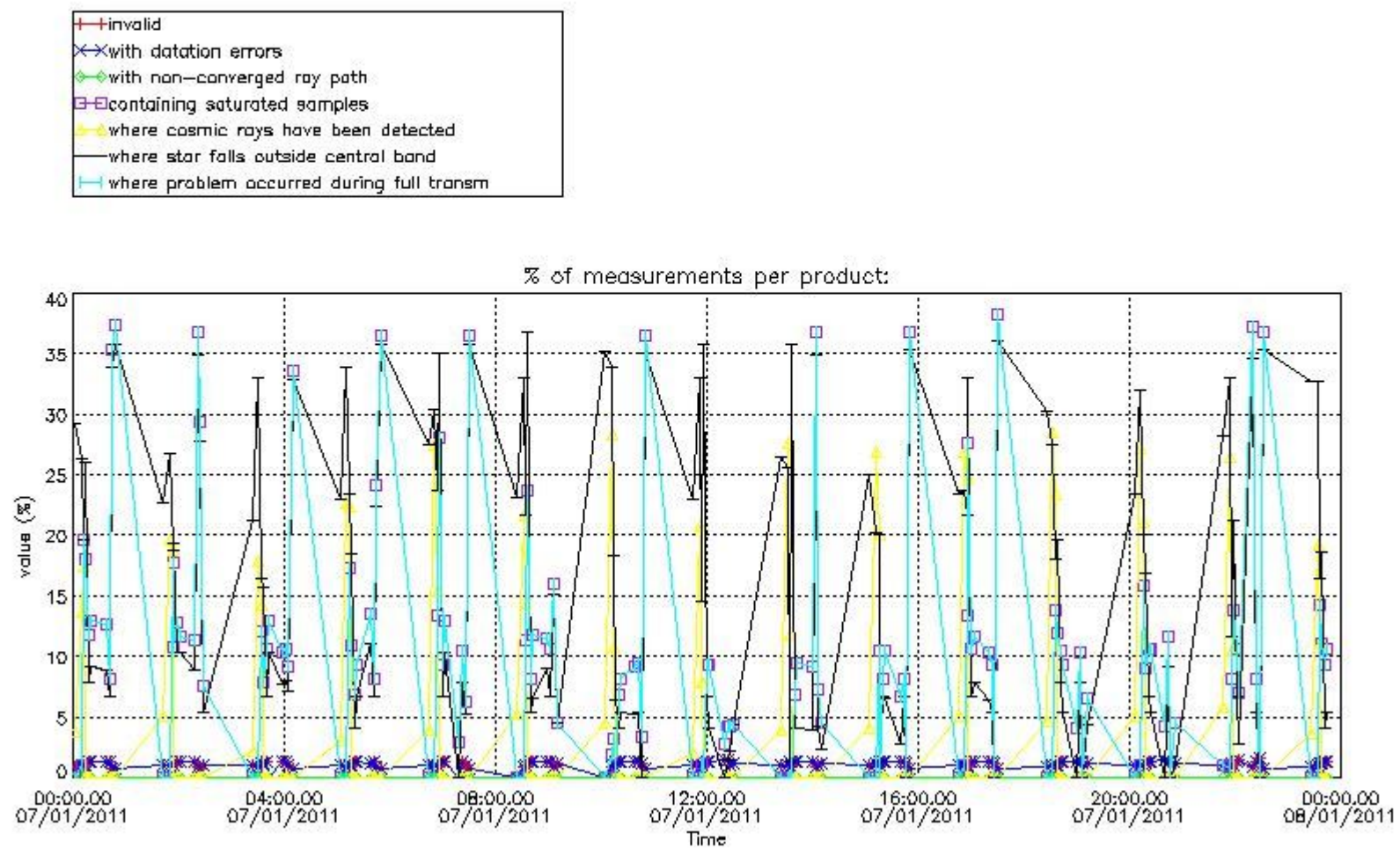
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

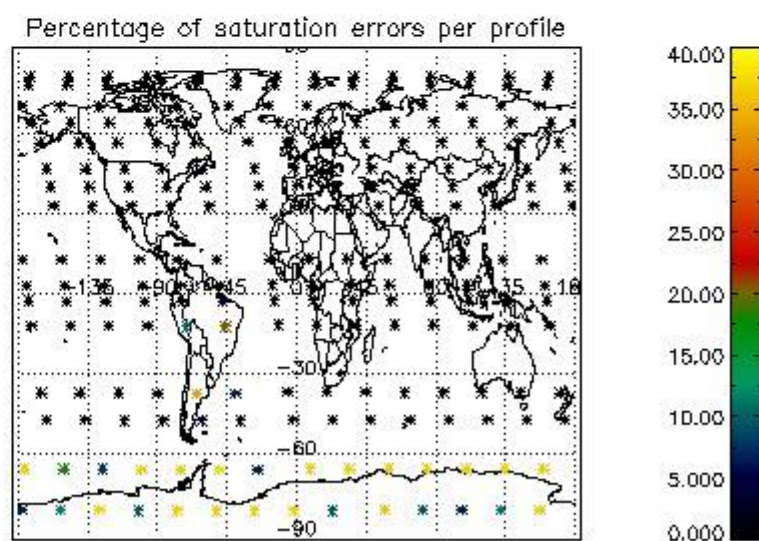
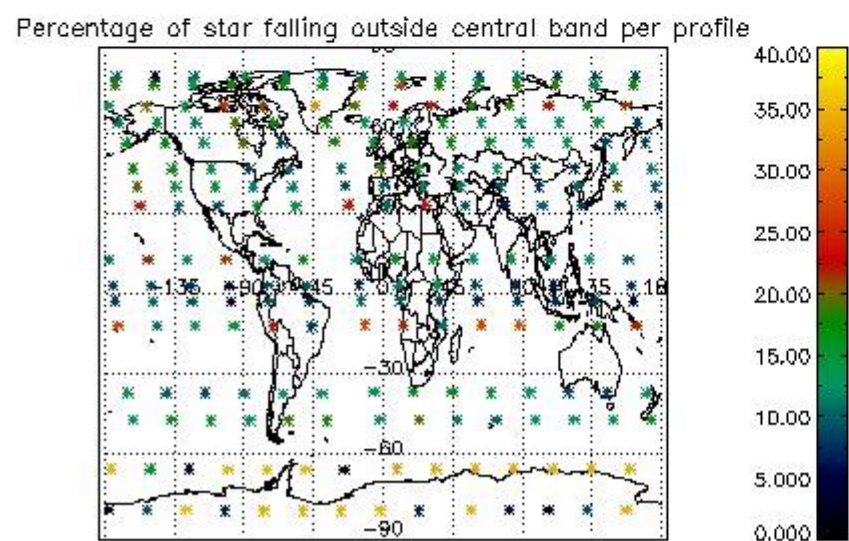
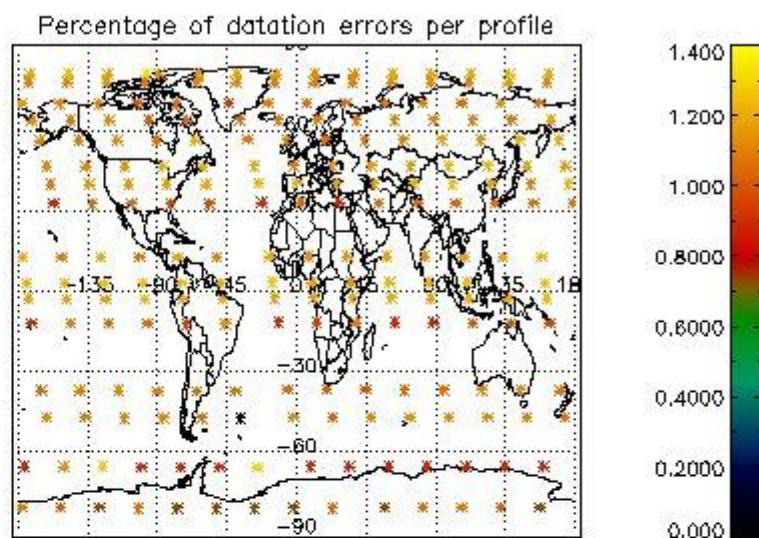
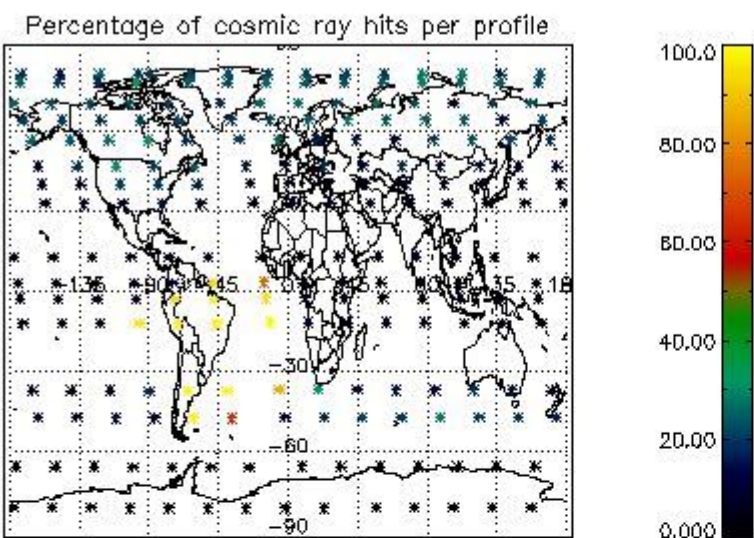


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

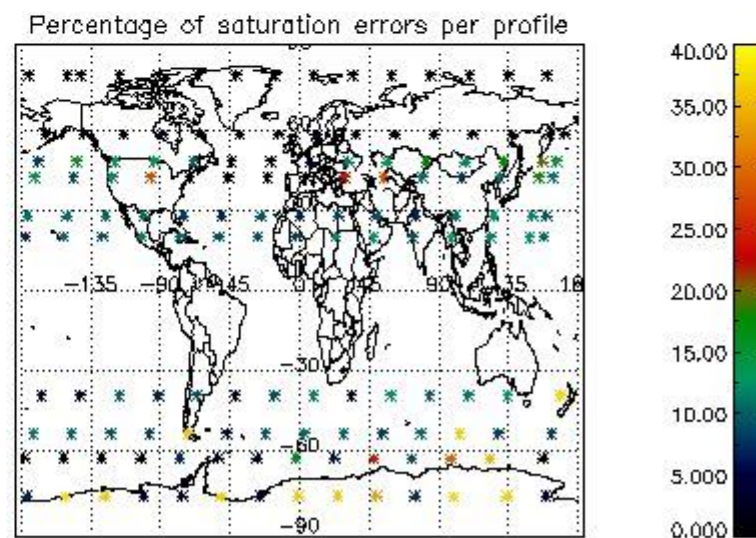
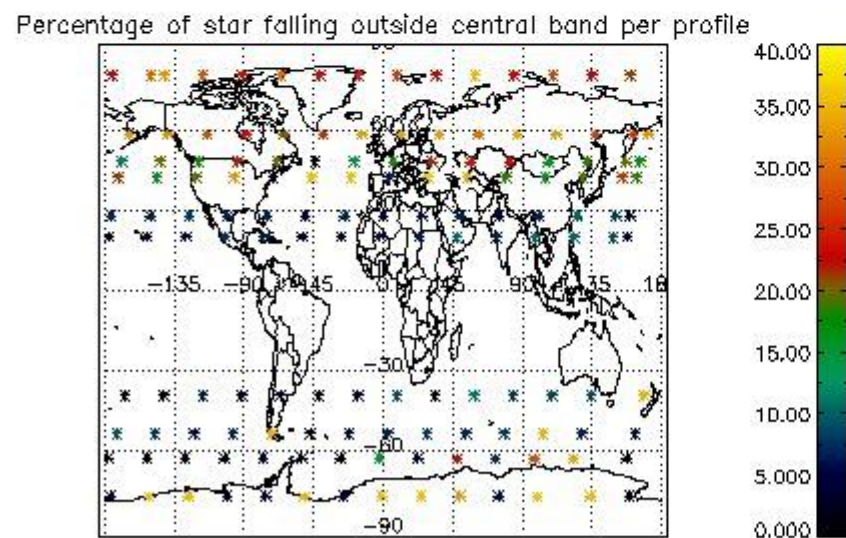
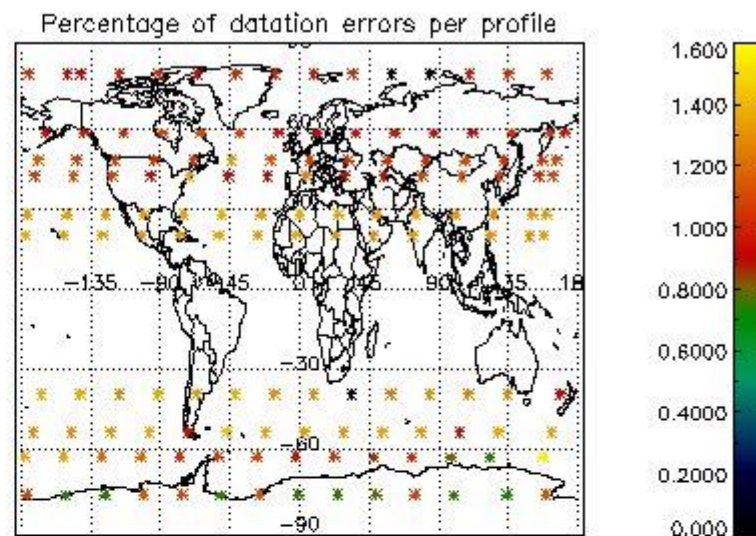
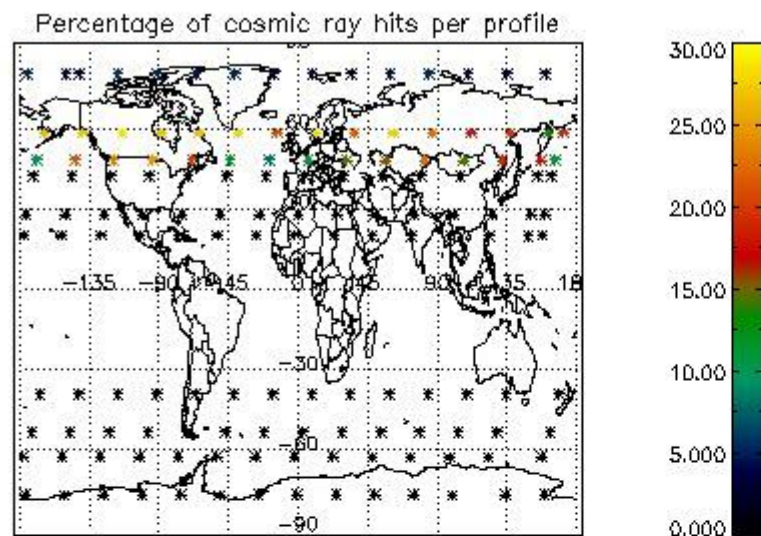


4.2 Plot quality information per product coming from level 1b processing (world map)

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

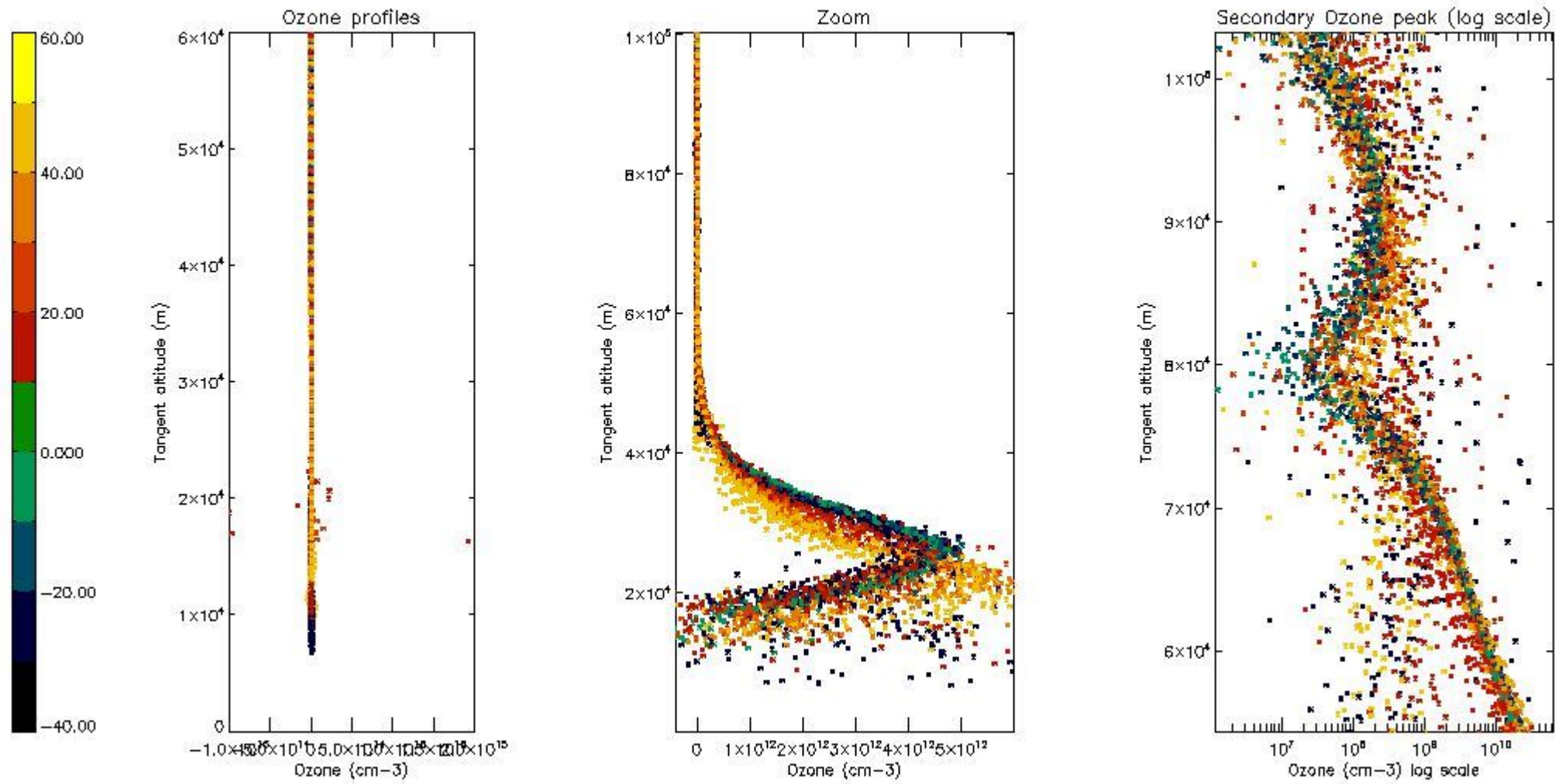
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	18

STD < 10	14
STD < 5	9

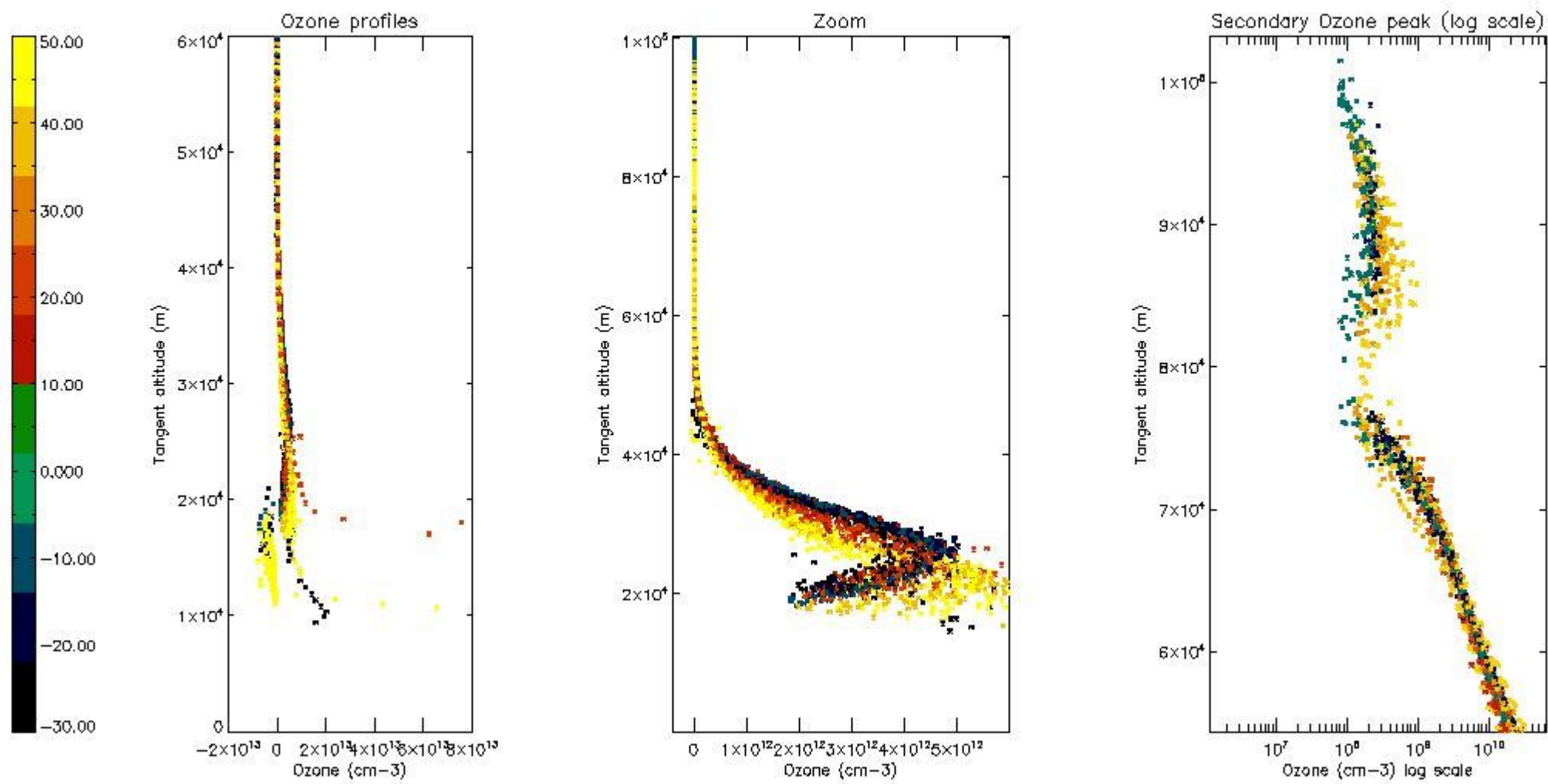
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



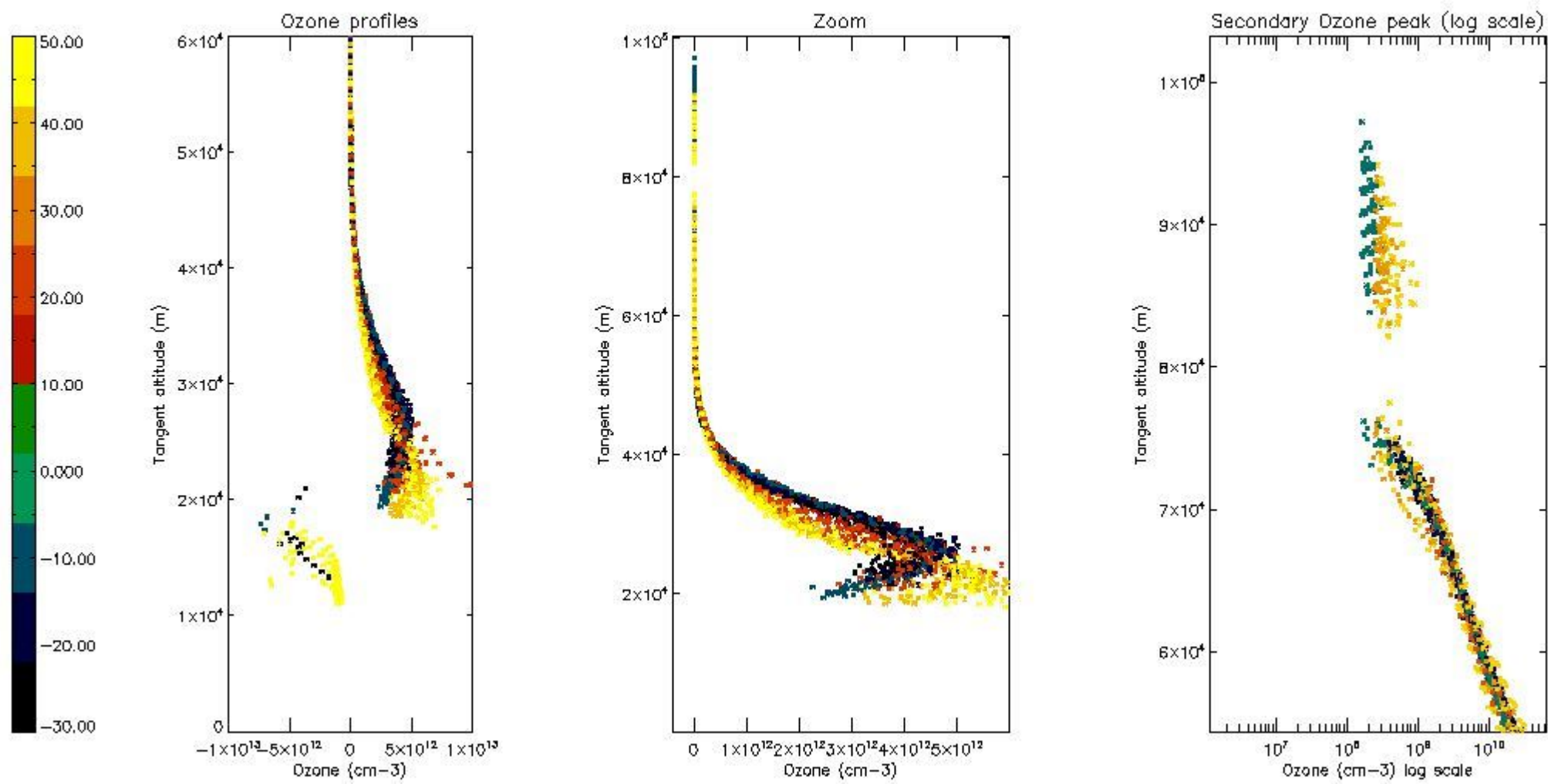
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



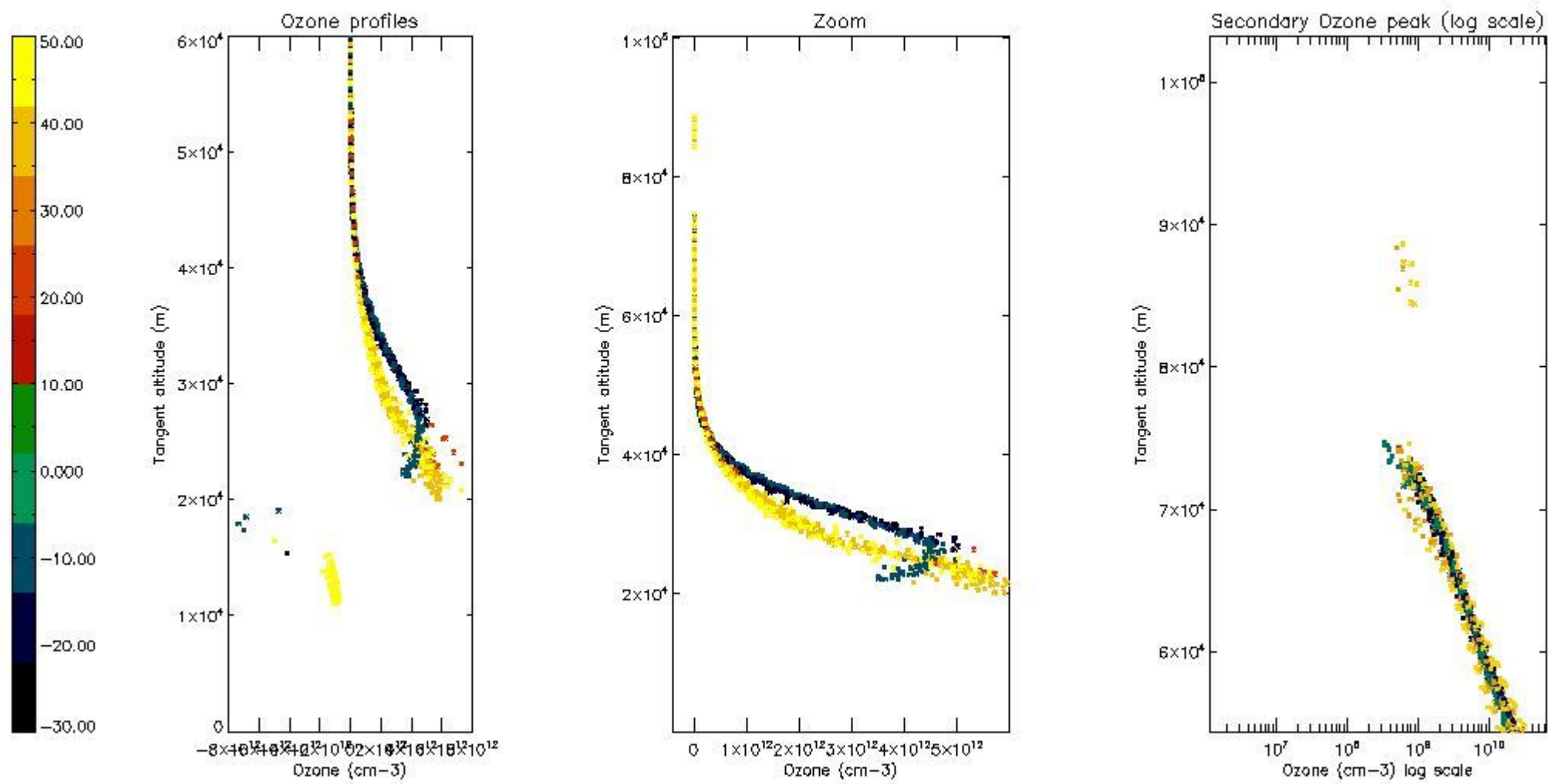
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



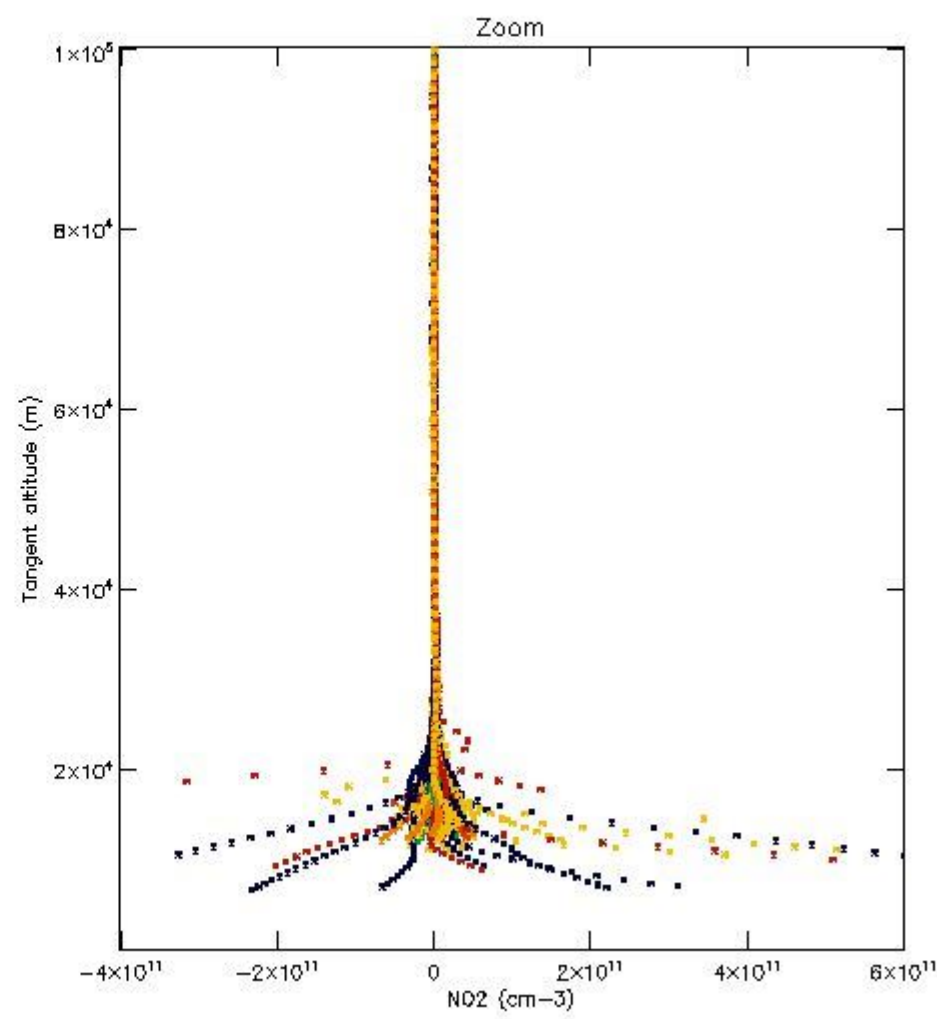
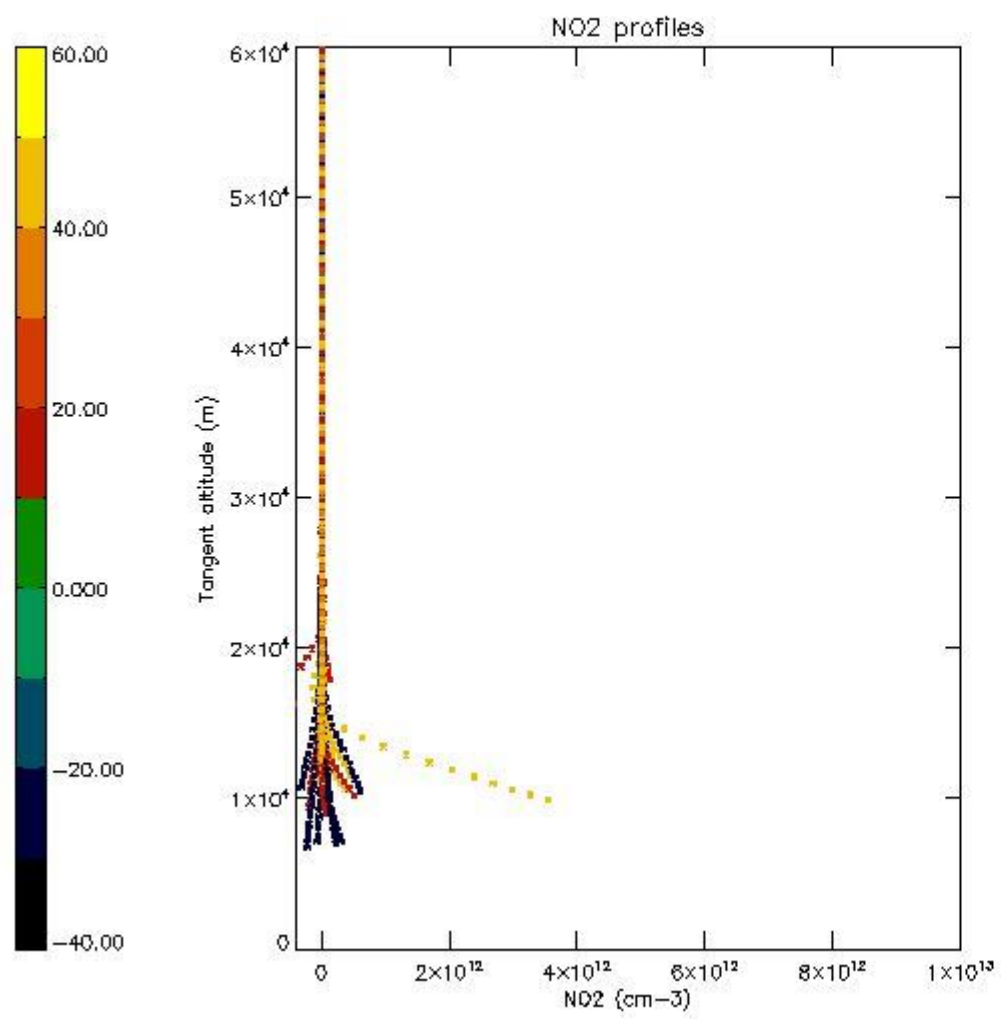
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



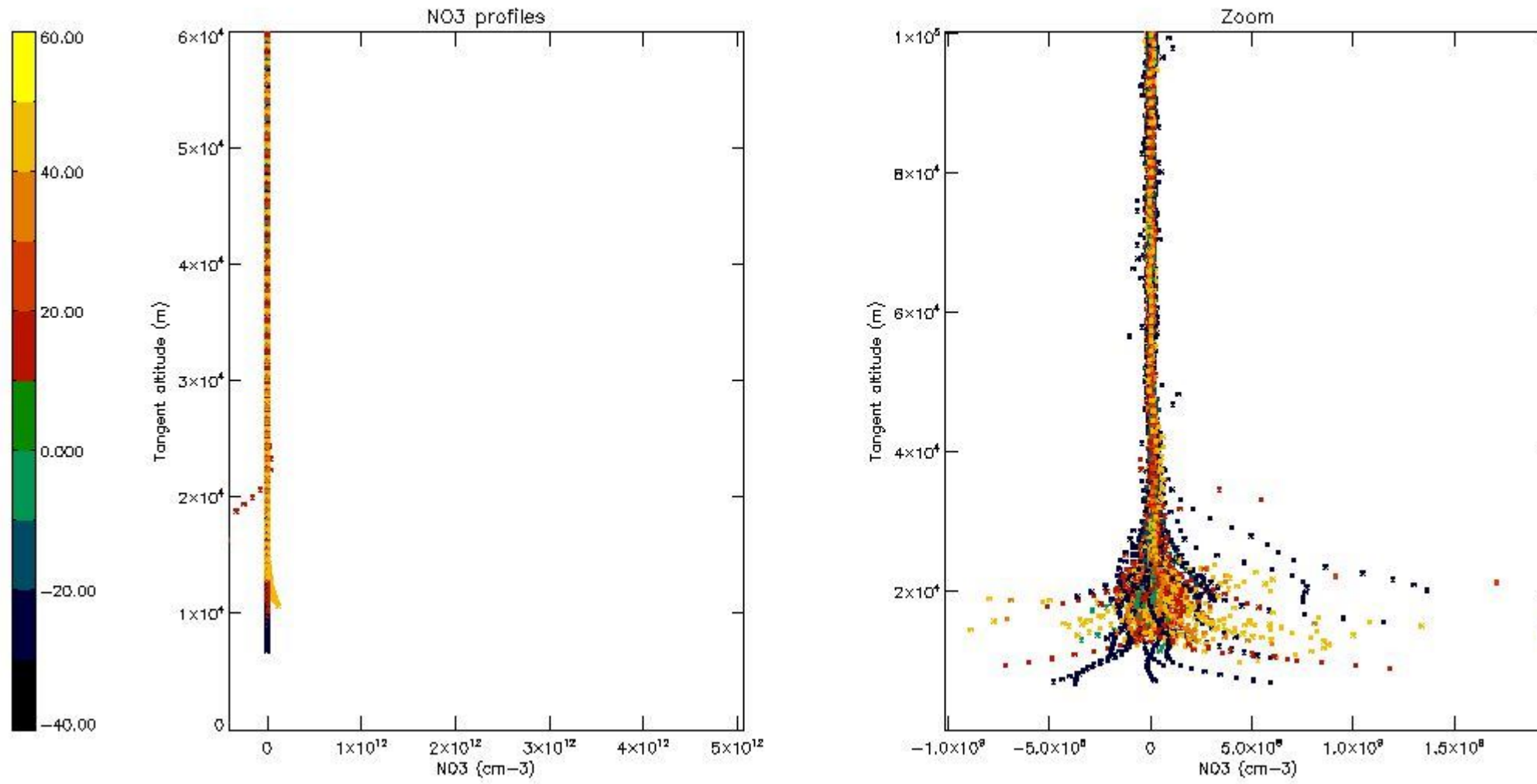
5.6 Plot NO₂ profiles for all STD (dark without errors)

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	07-JAN-2011 00:00:25
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	07-JAN-2011 00:00:25
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	07-JAN-2011 00:00:25

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[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% \(dark without errors\)](#)

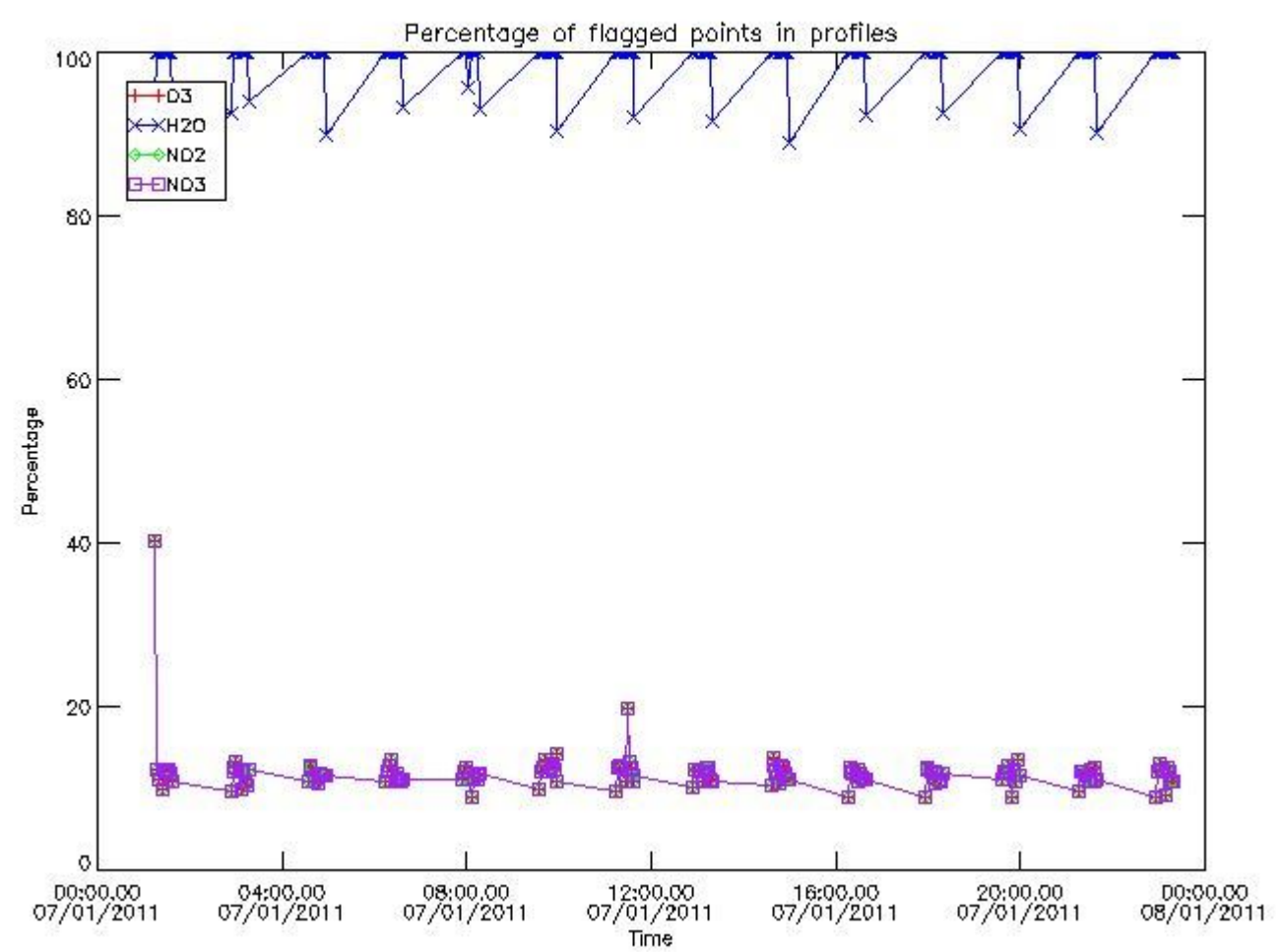
[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

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

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

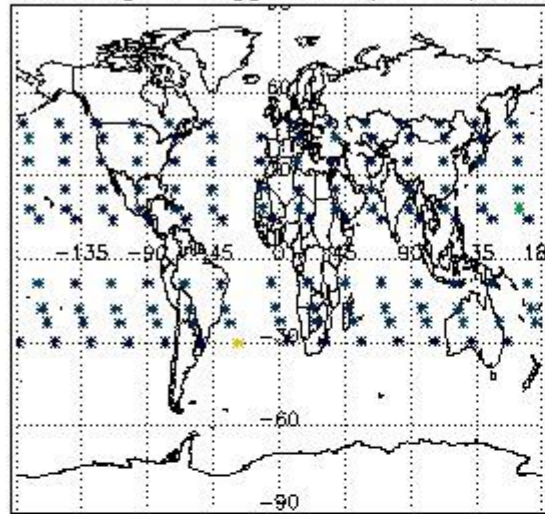
[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

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

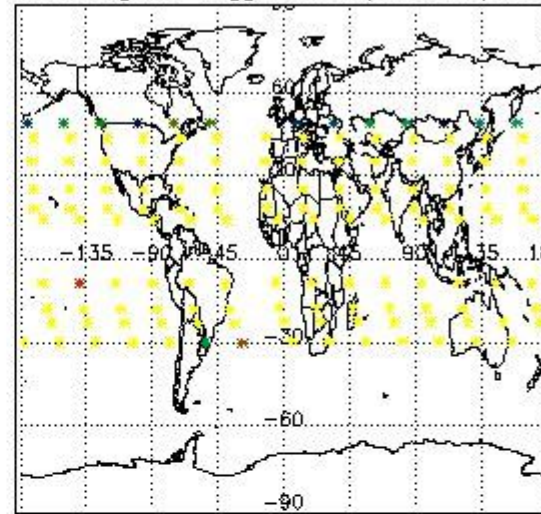


3.2 Plot quality information per product (world map)

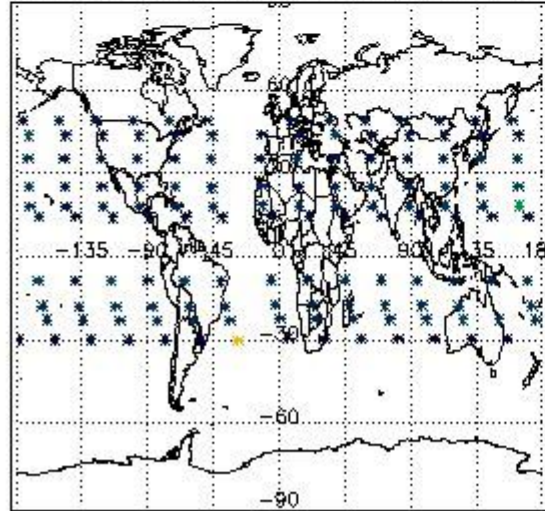
Percentage of flagged data per O3 profile



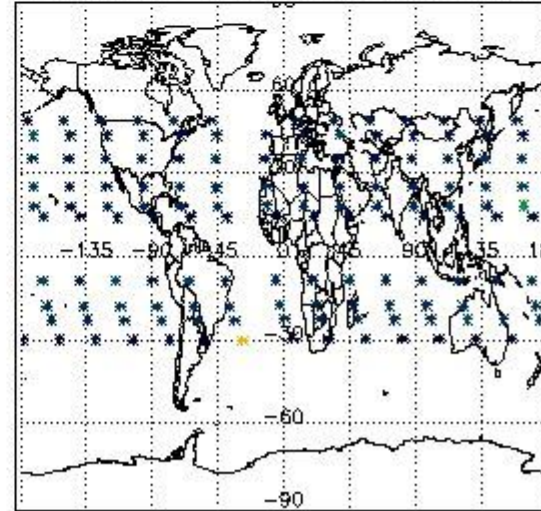
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

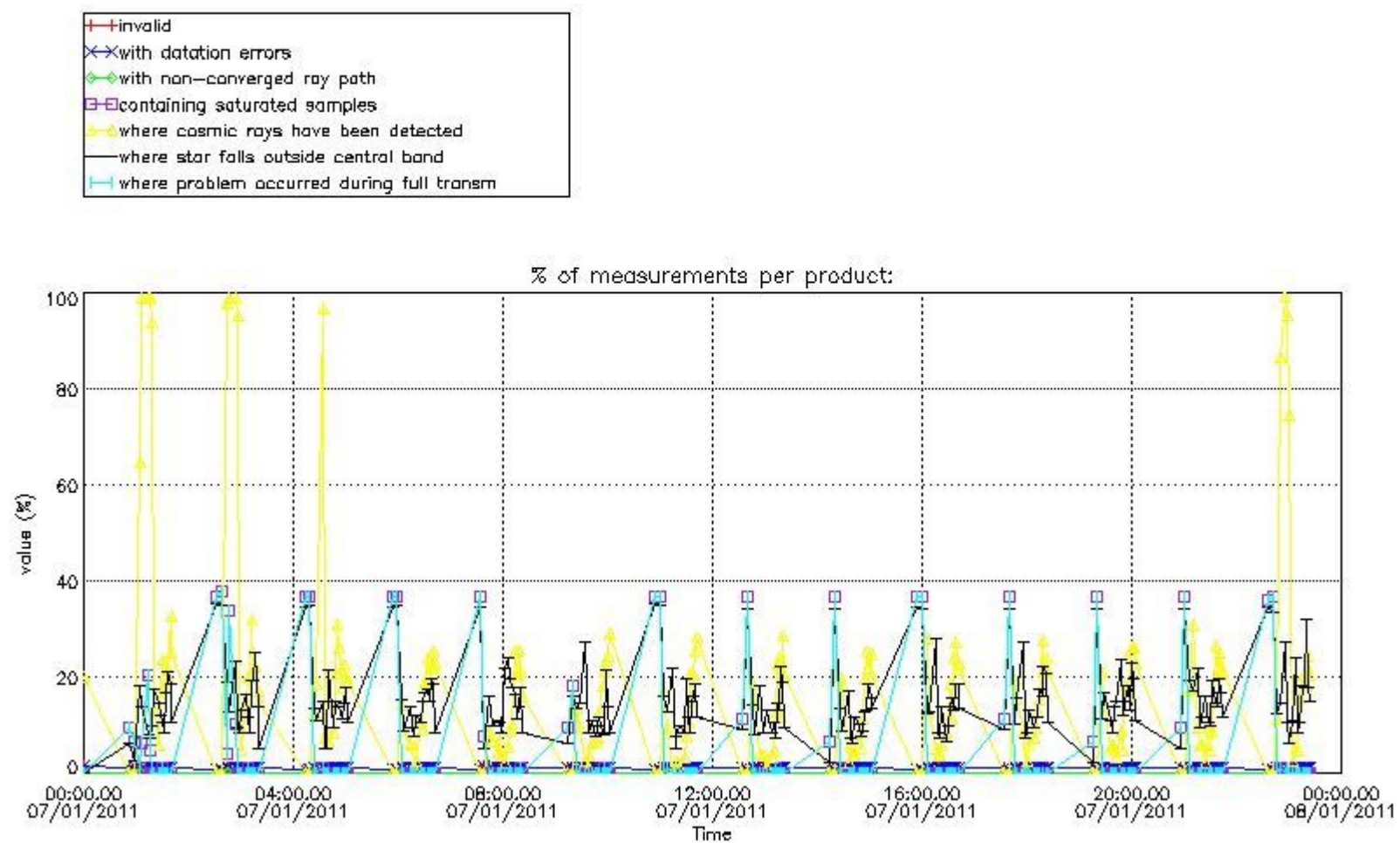


4. Level 1 quality information per product

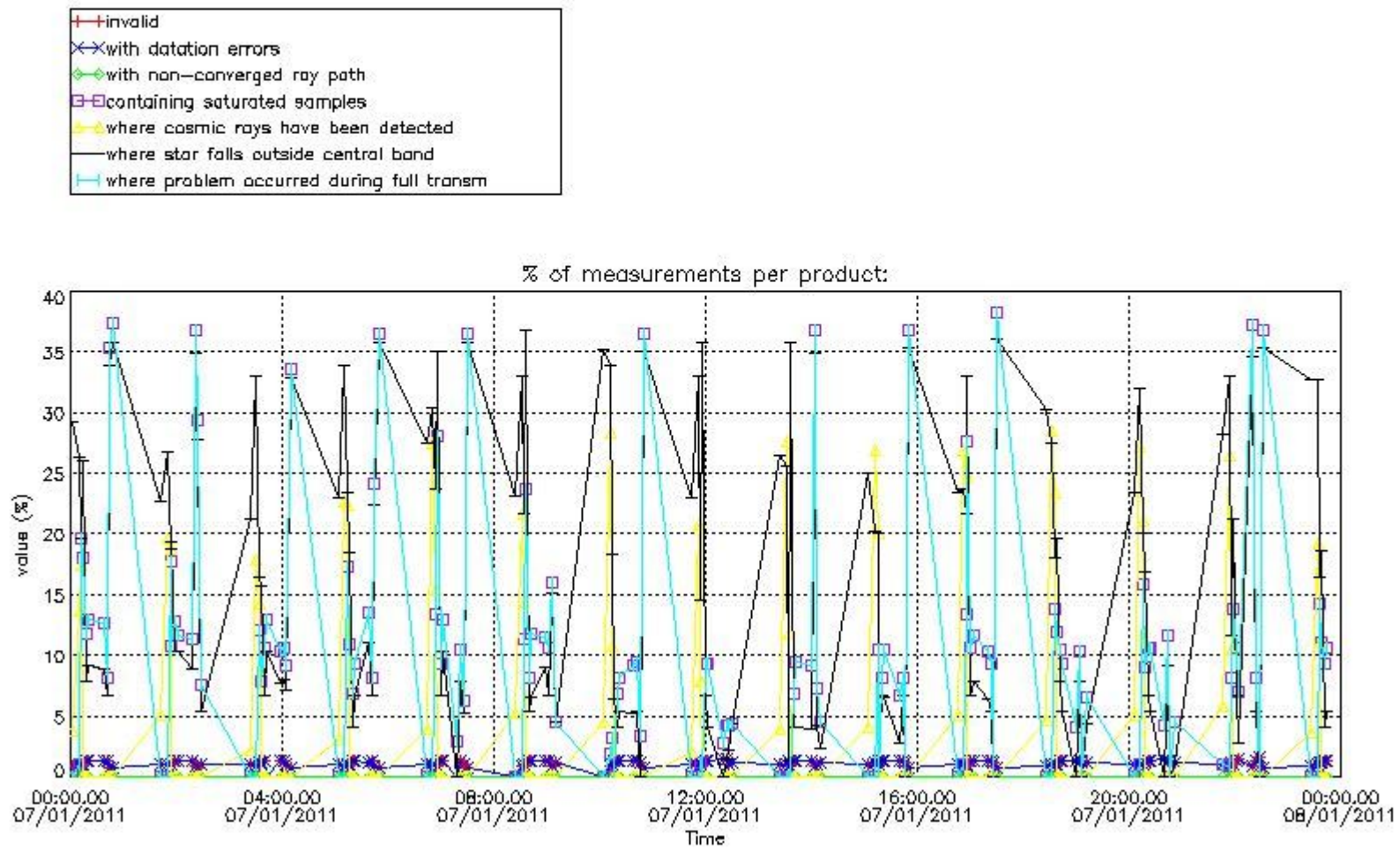
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

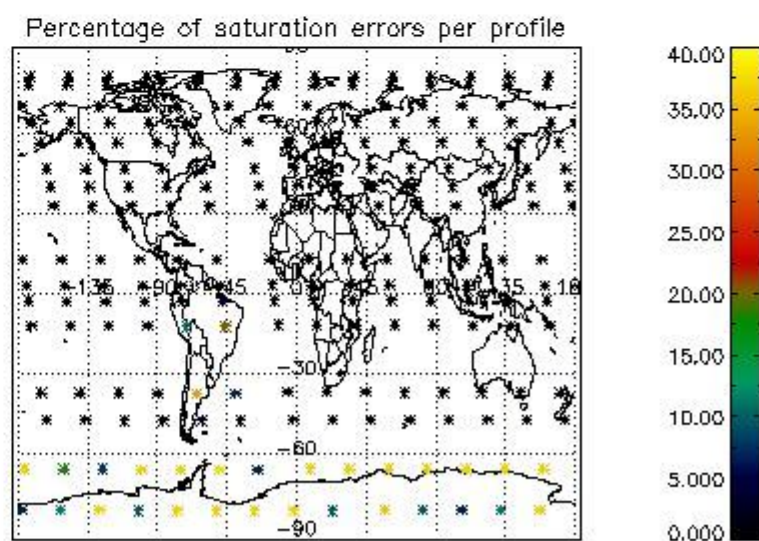
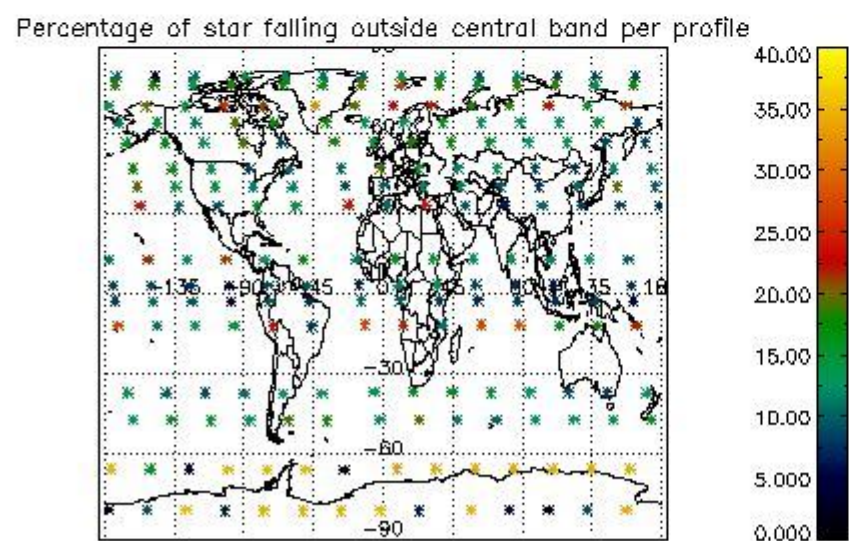
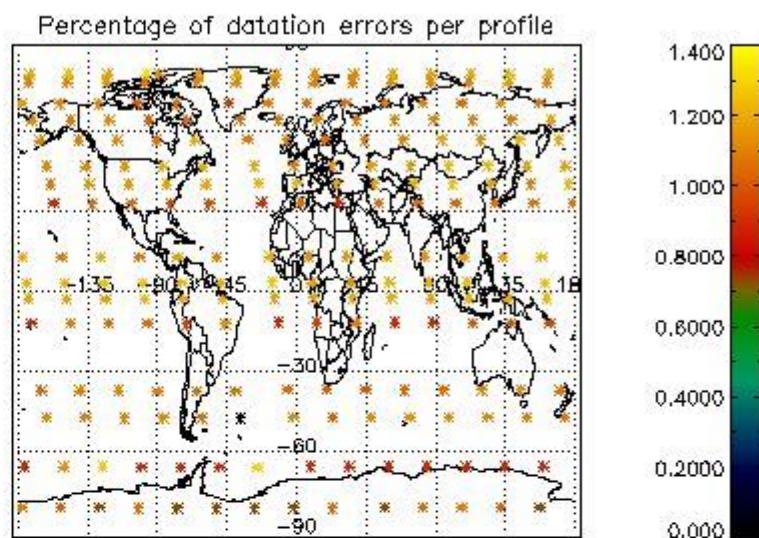
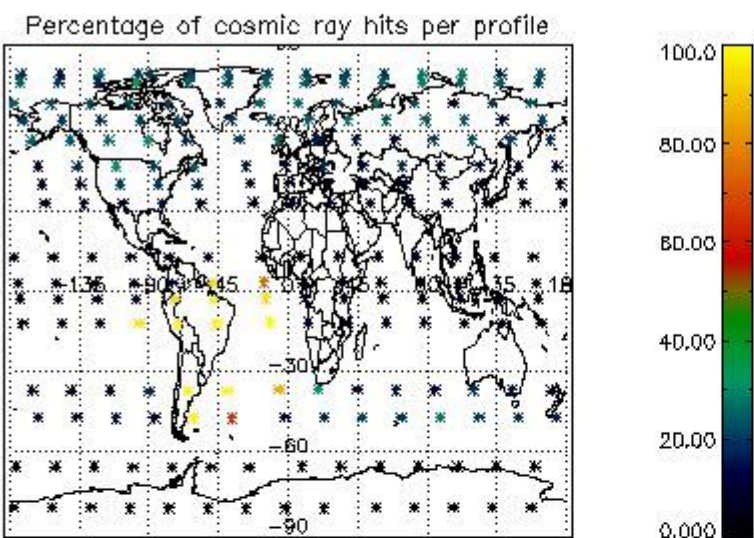


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

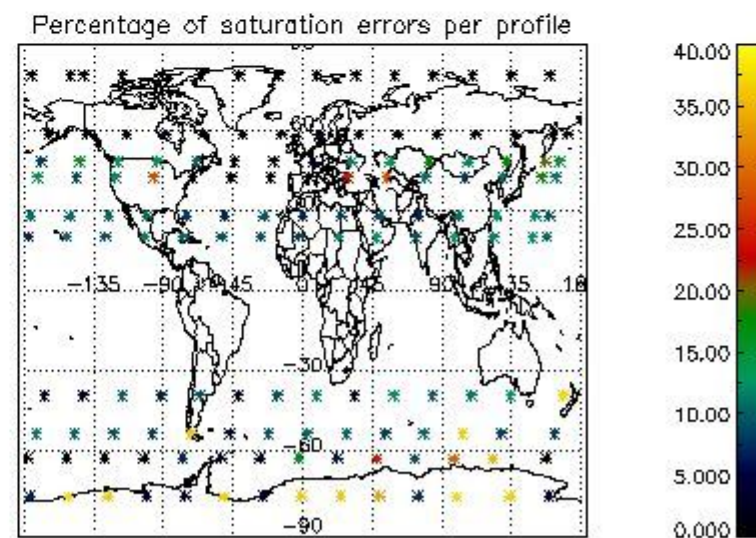
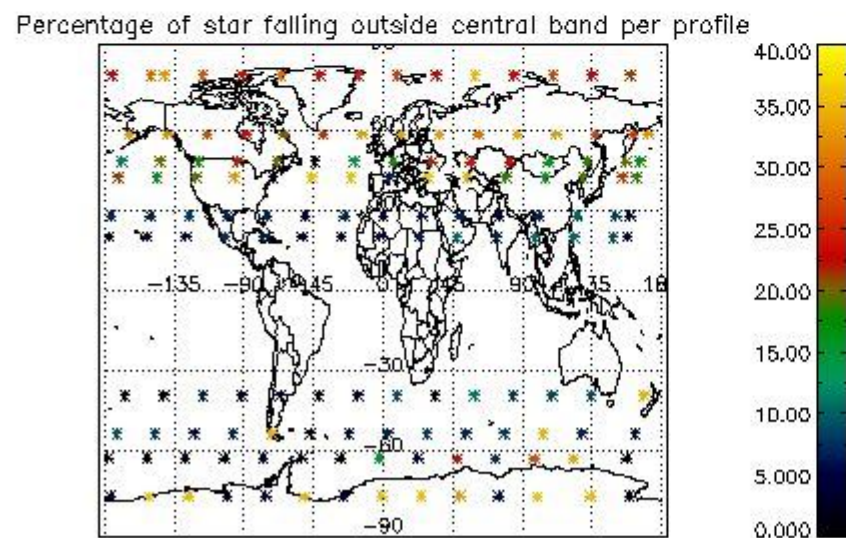
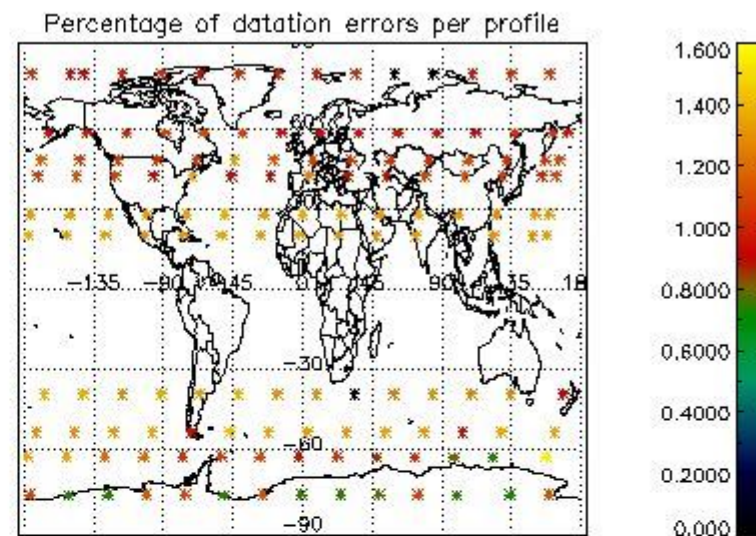
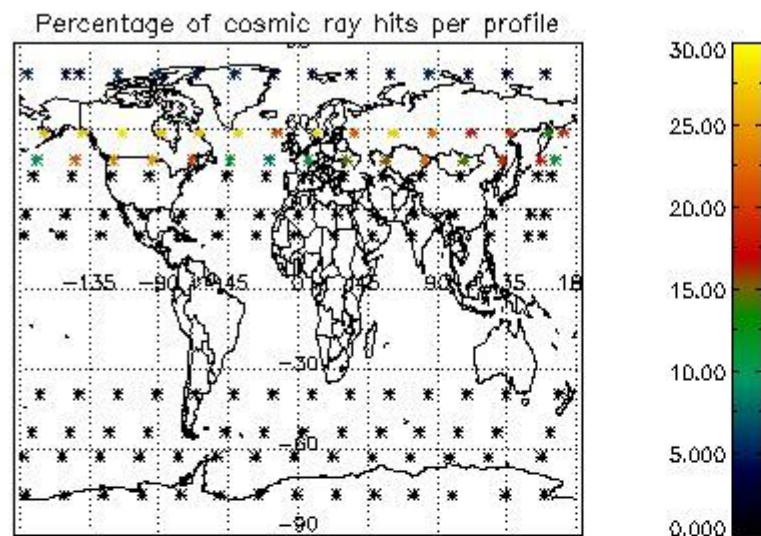


4.2 Plot quality information per product coming from level 1b processing (world map)

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

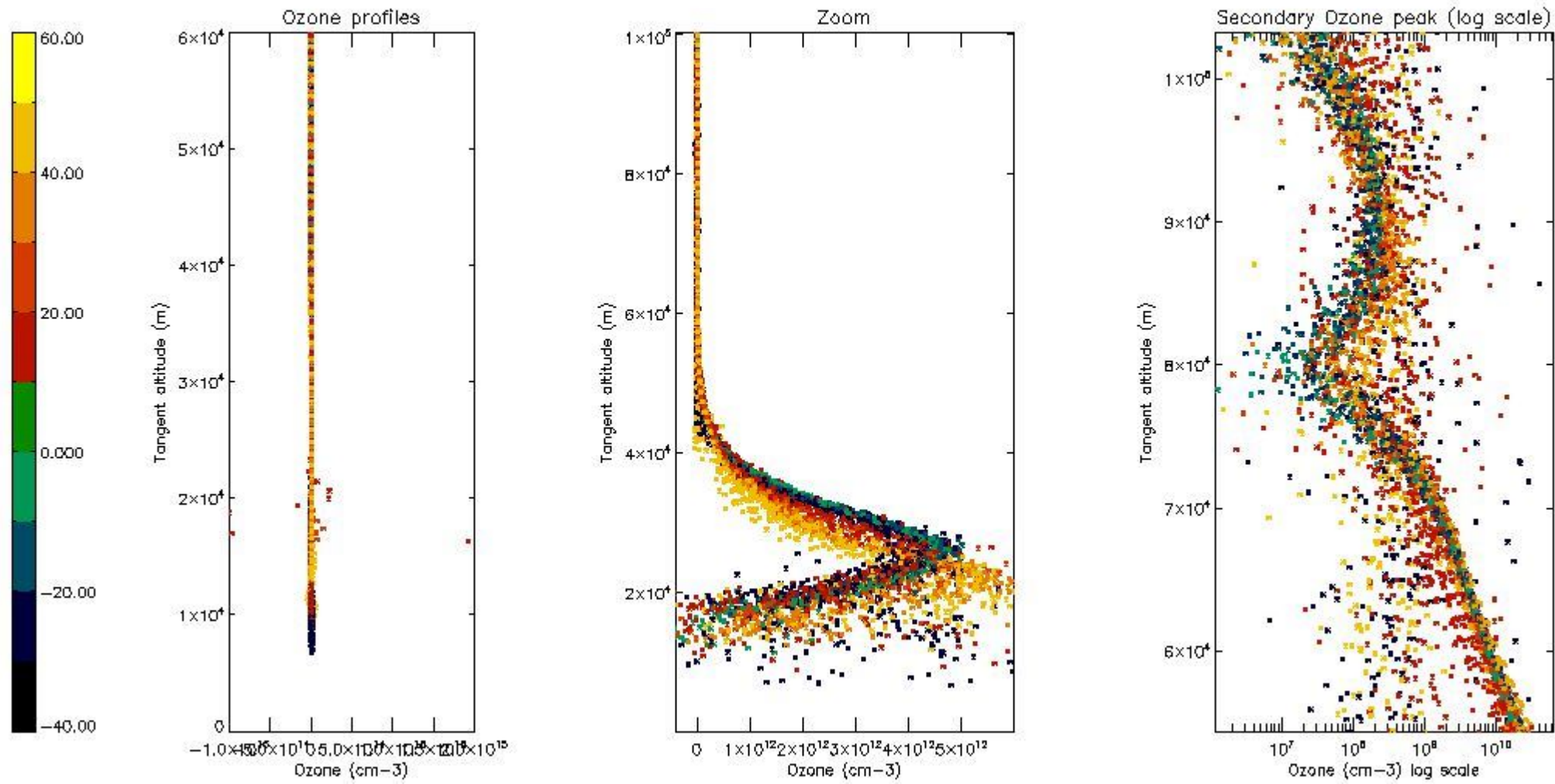
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	18

STD < 10	14
STD < 5	9

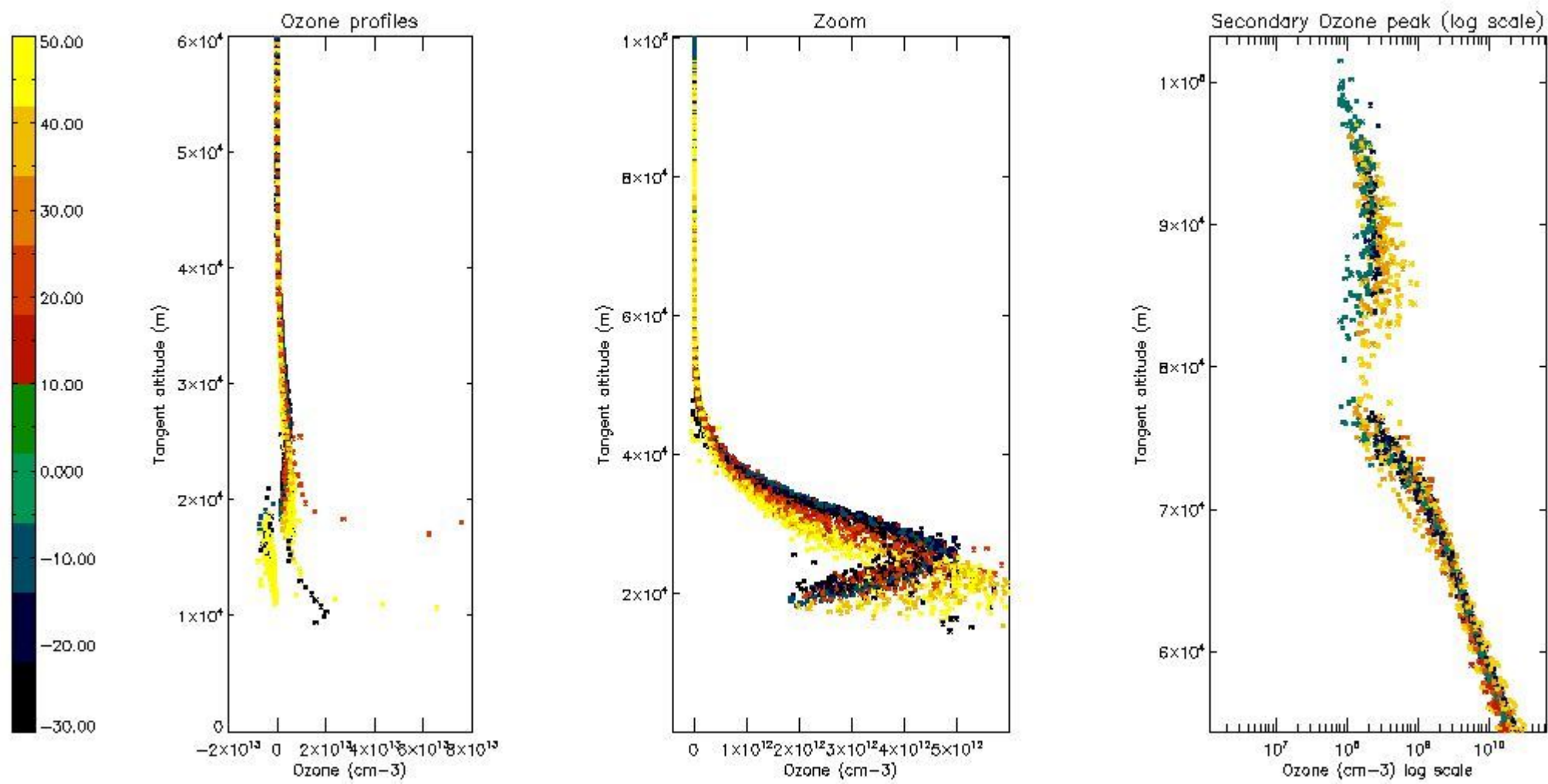
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



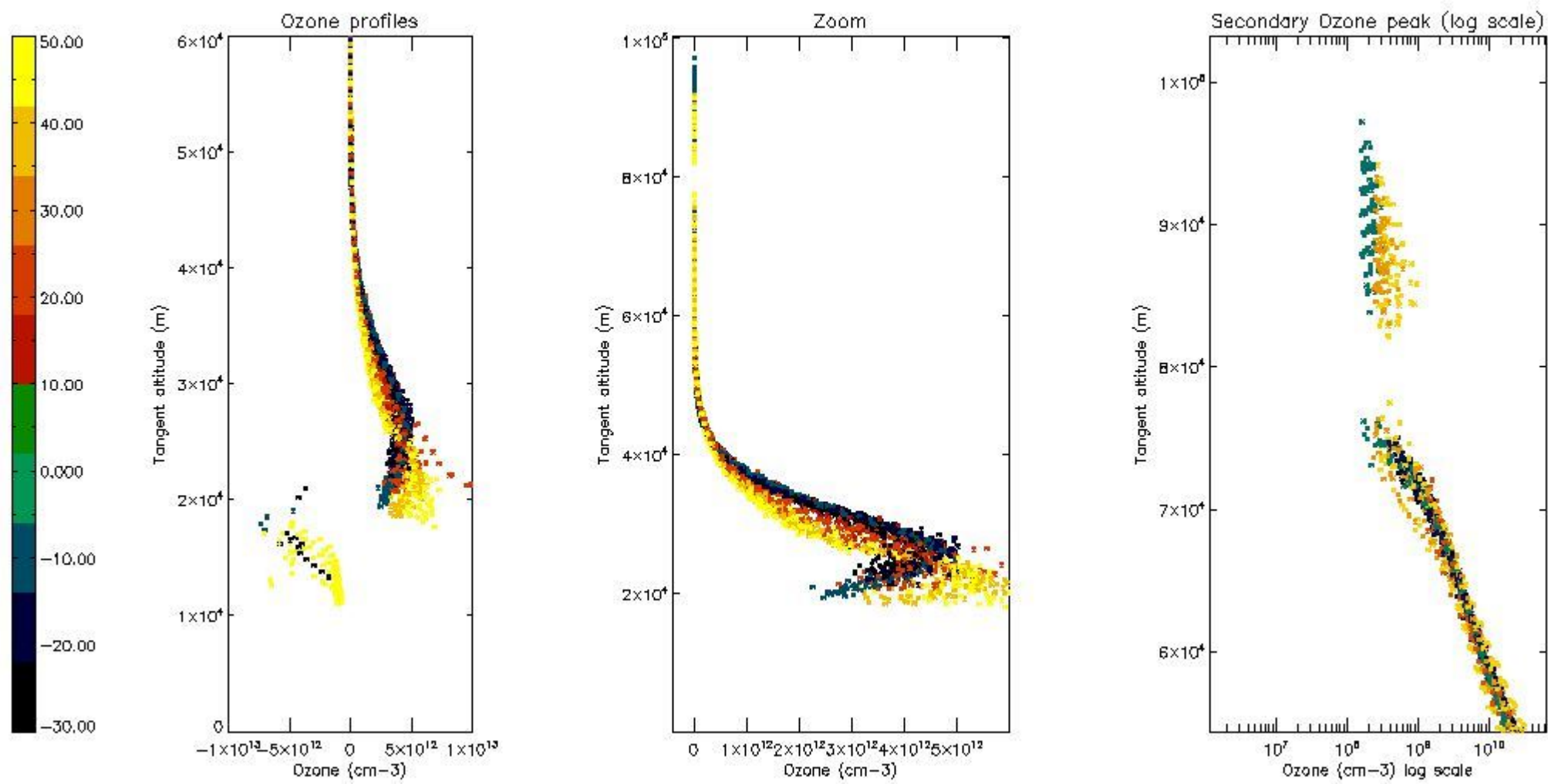
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



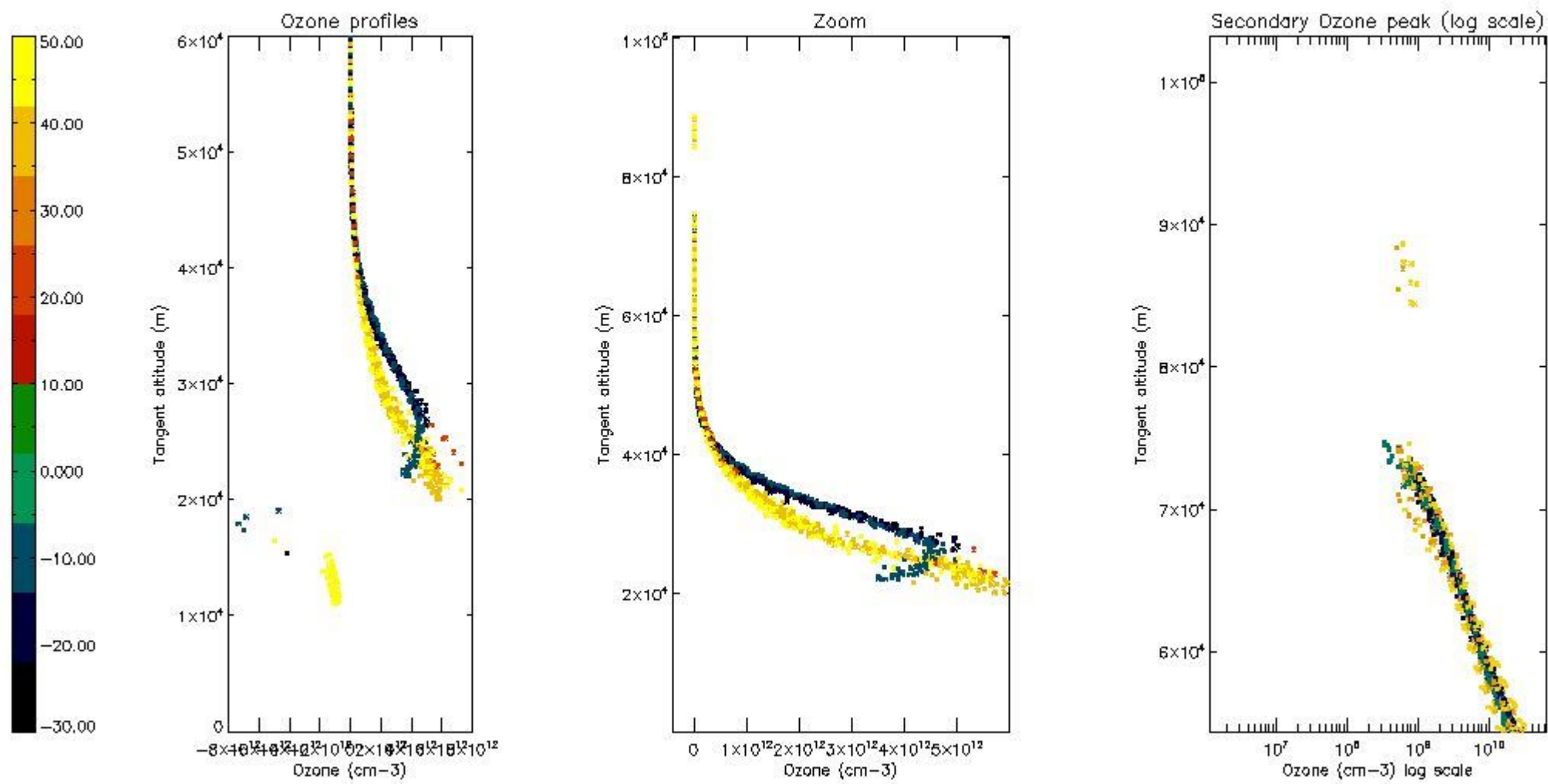
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



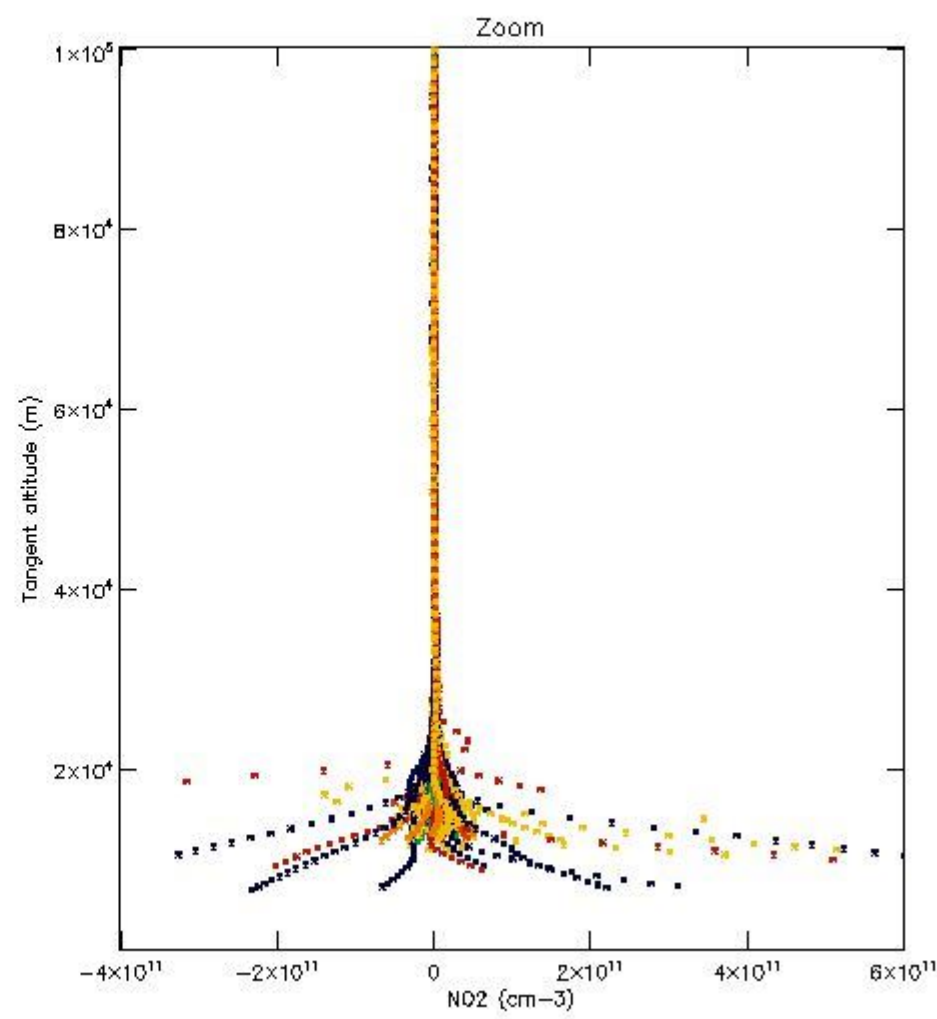
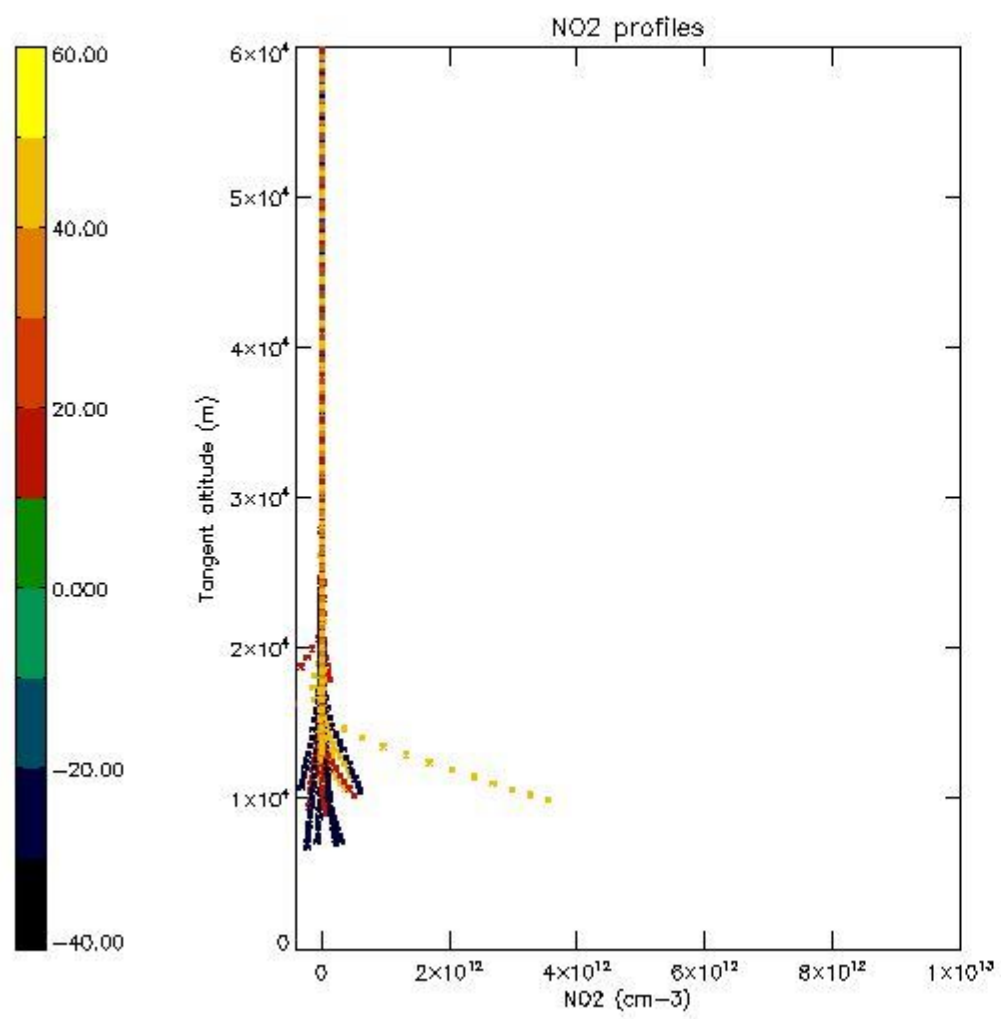
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



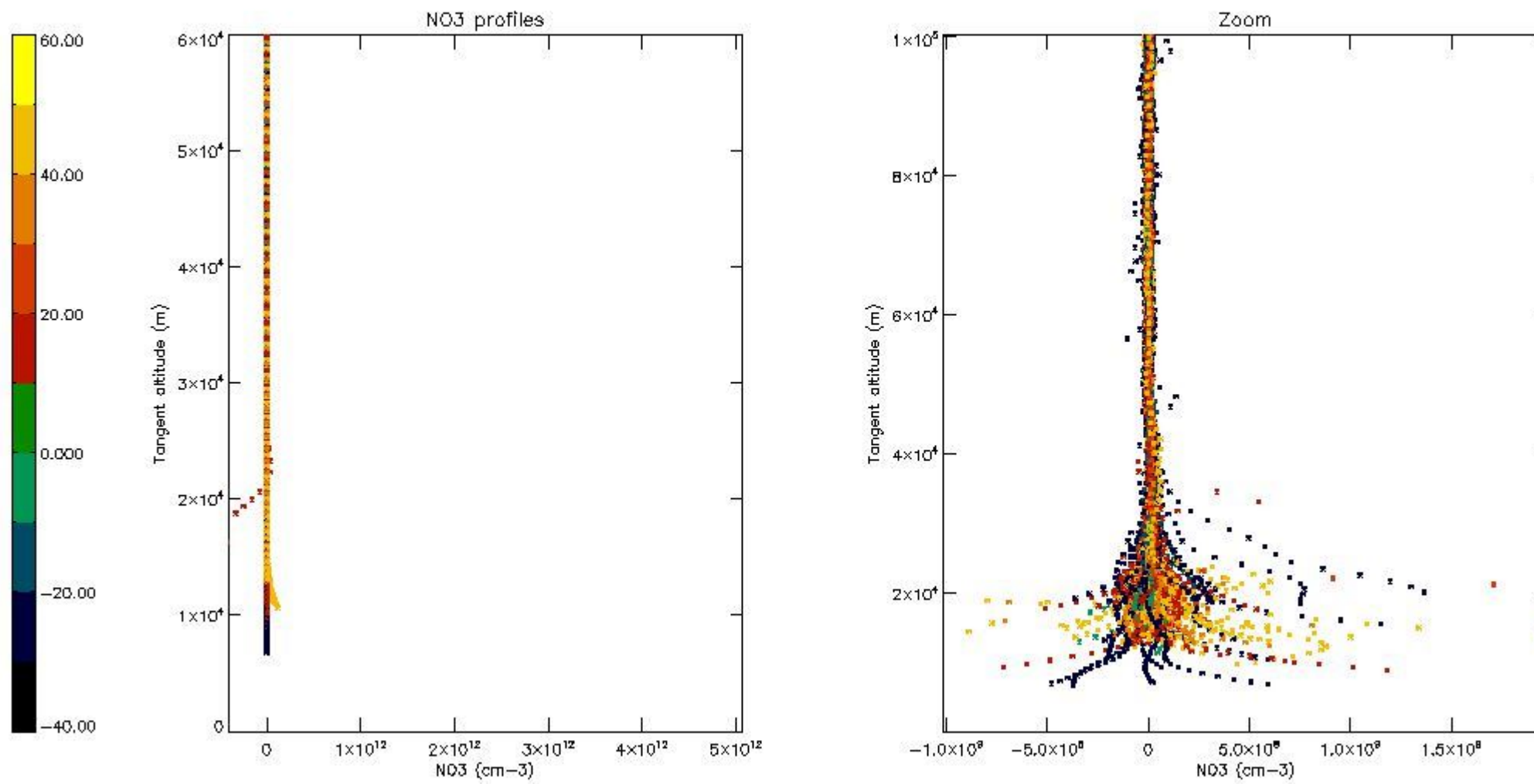
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

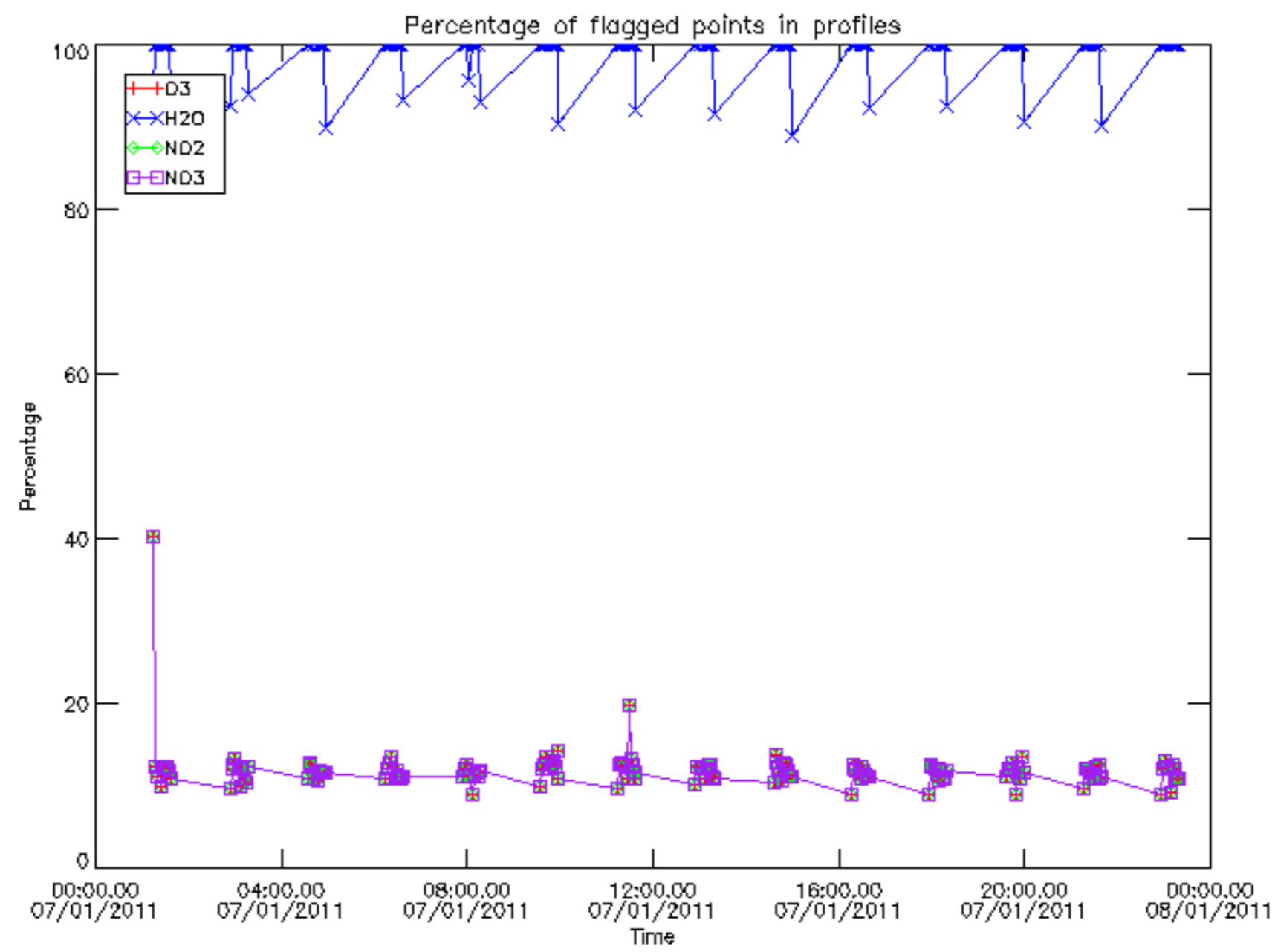
The colorbar represents the latitude.



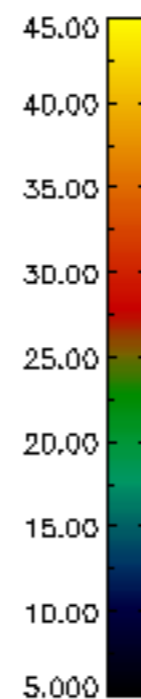
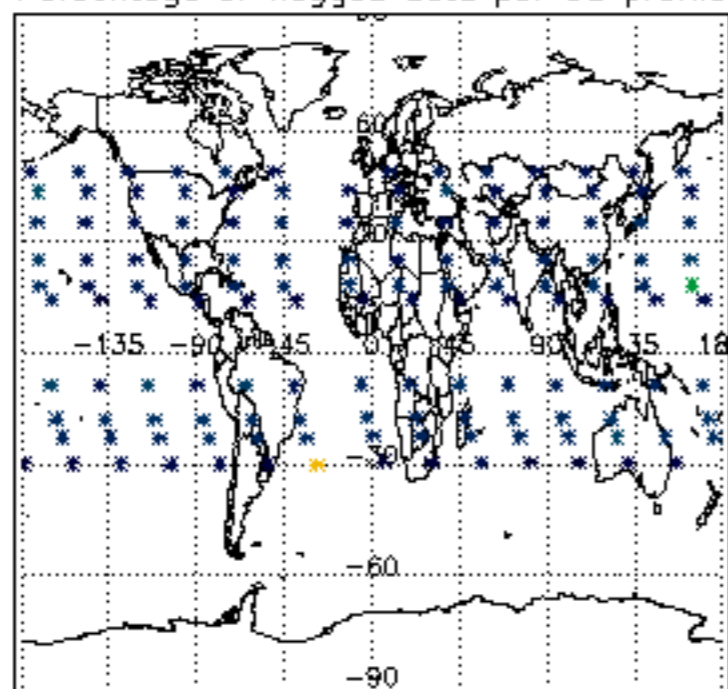
6. Auxiliary Data Files used for the production reported in section 2

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.

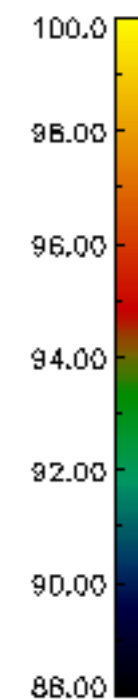
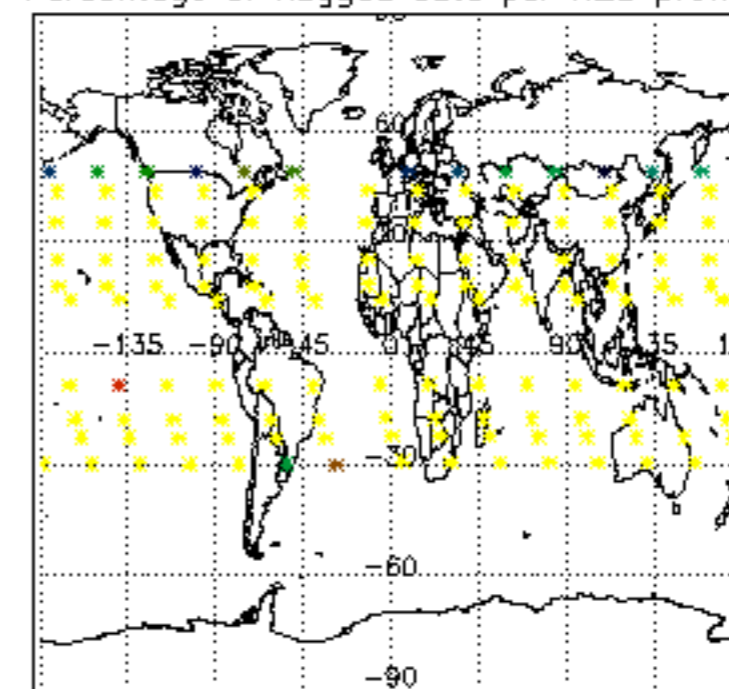
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	07-JAN-2011 00:00:25
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	07-JAN-2011 00:00:25
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	07-JAN-2011 00:00:25



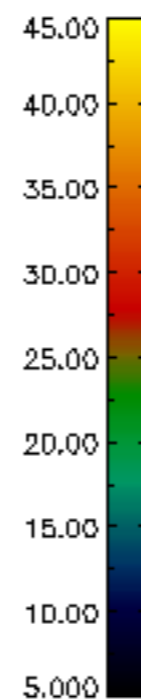
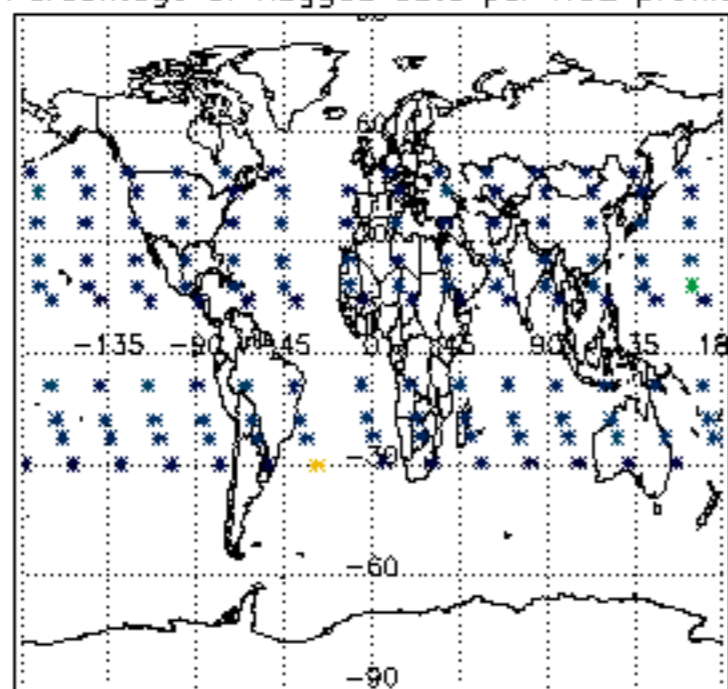
Percentage of flagged data per D3 profile



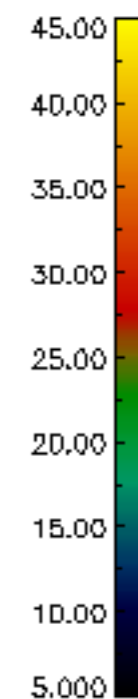
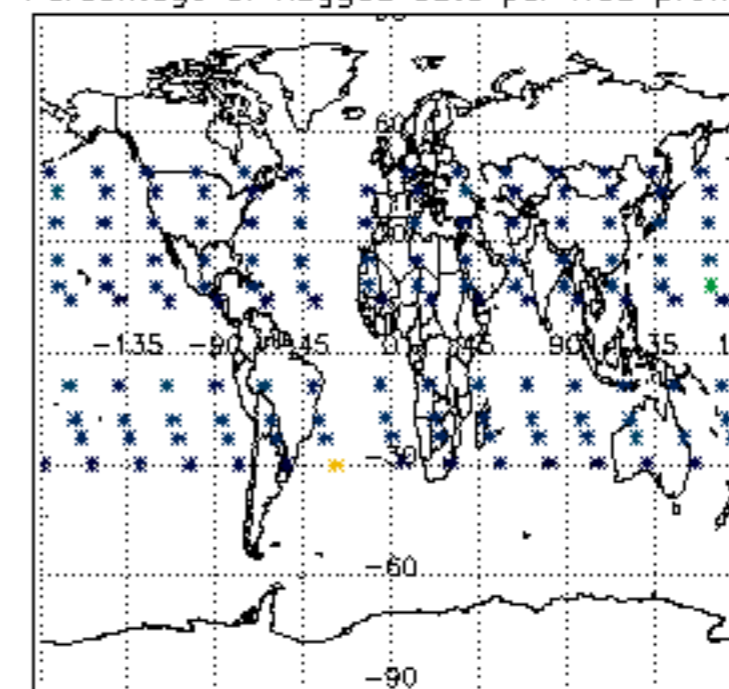
Percentage of flagged data per H2O profile

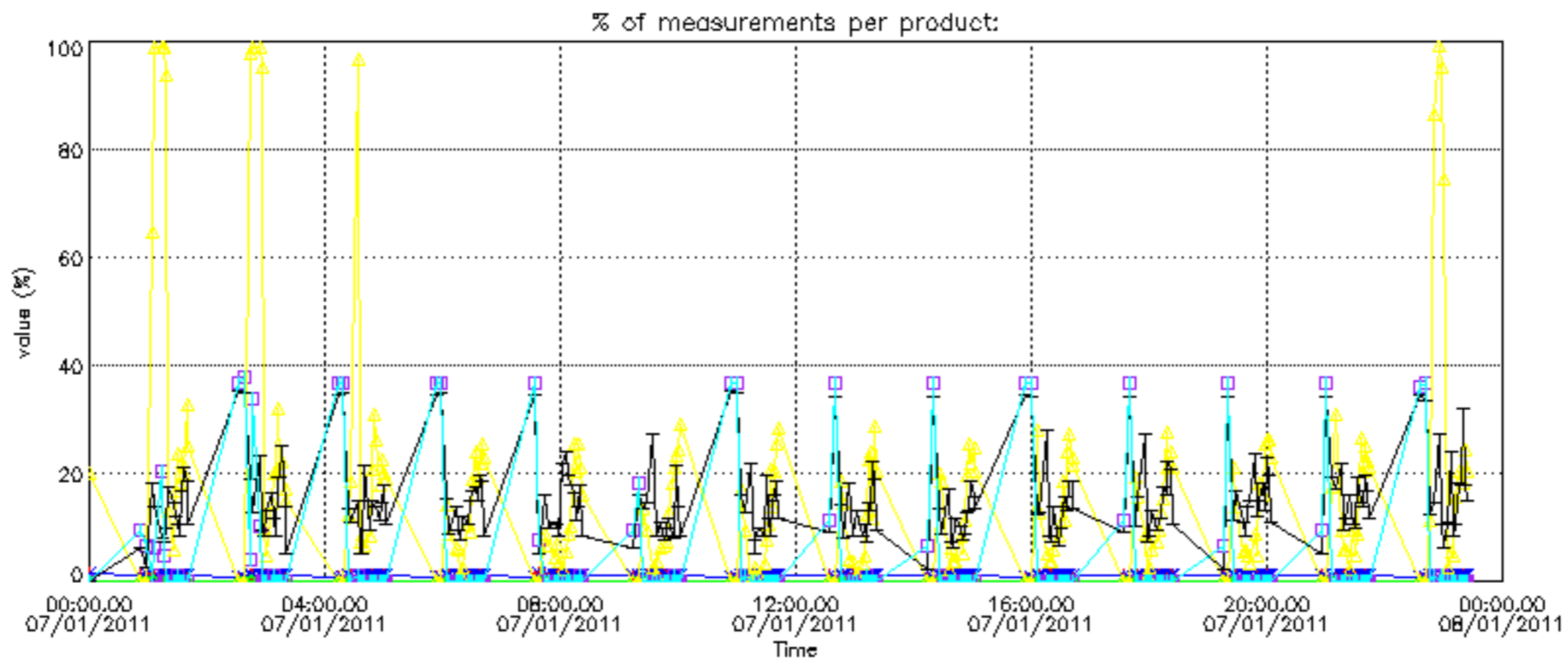
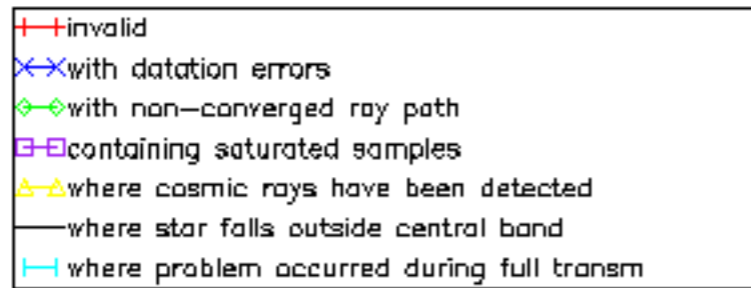


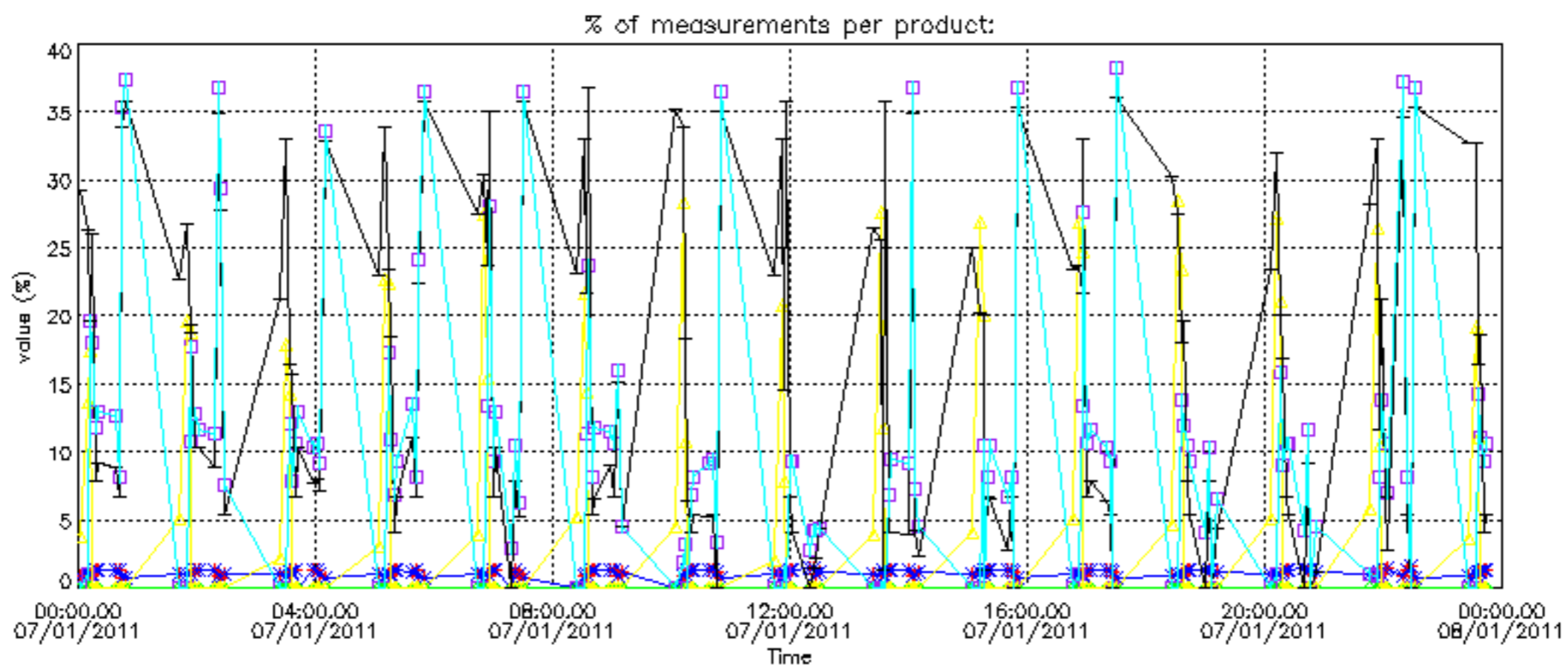
Percentage of flagged data per NO2 profile



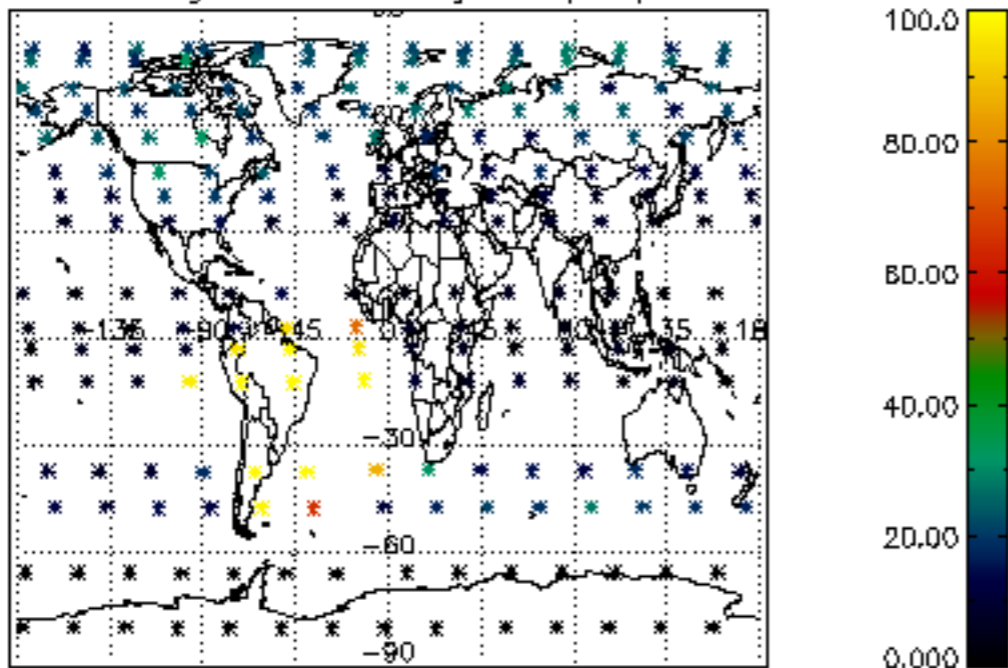
Percentage of flagged data per NO3 profile



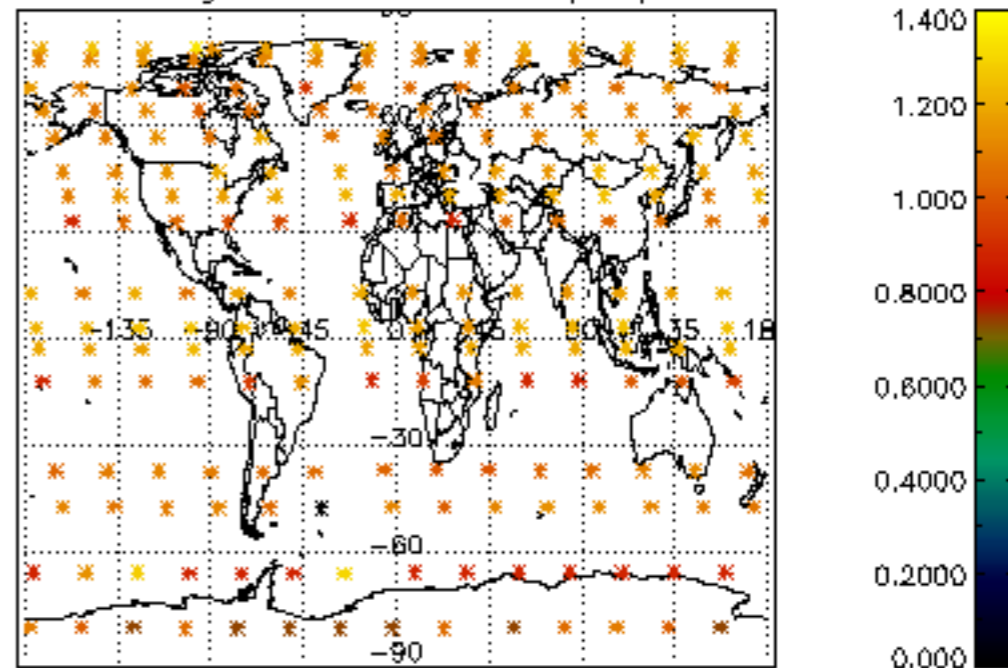




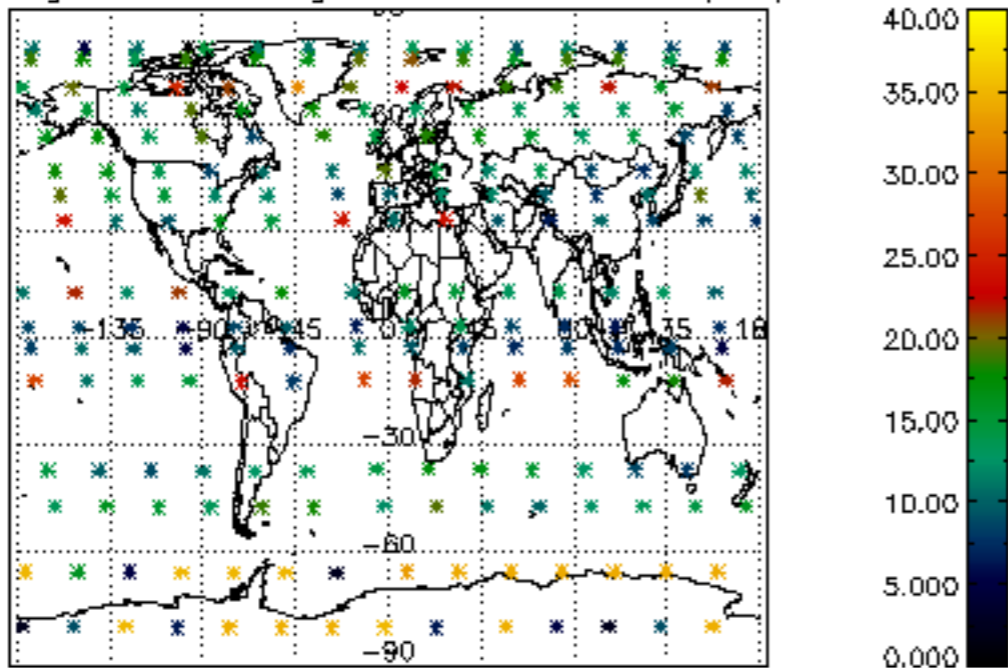
Percentage of cosmic ray hits per profile



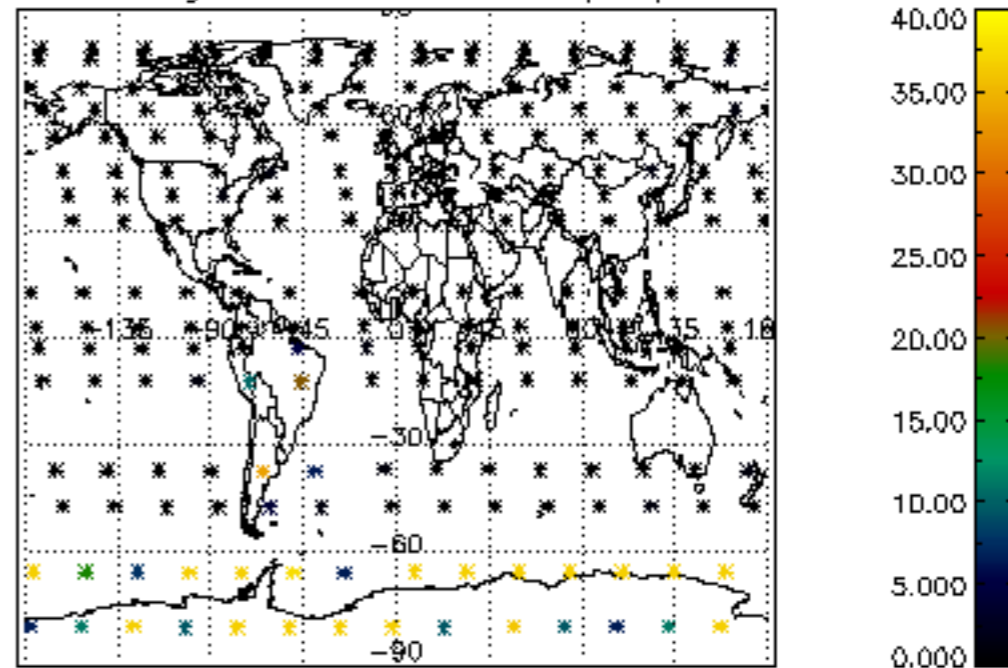
Percentage of datation errors per profile



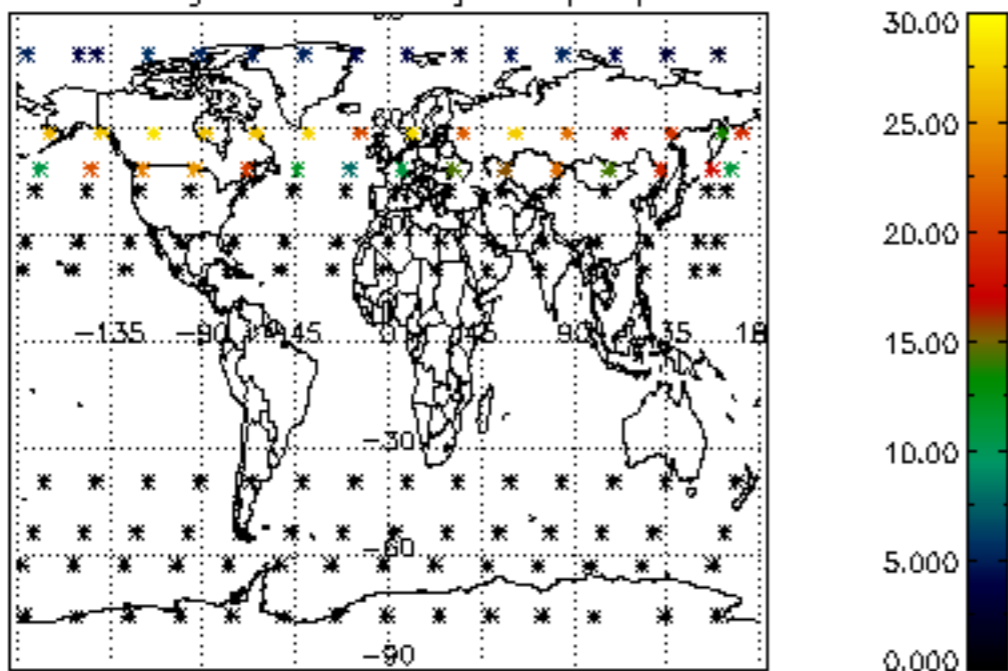
Percentage of star falling outside central band per profile



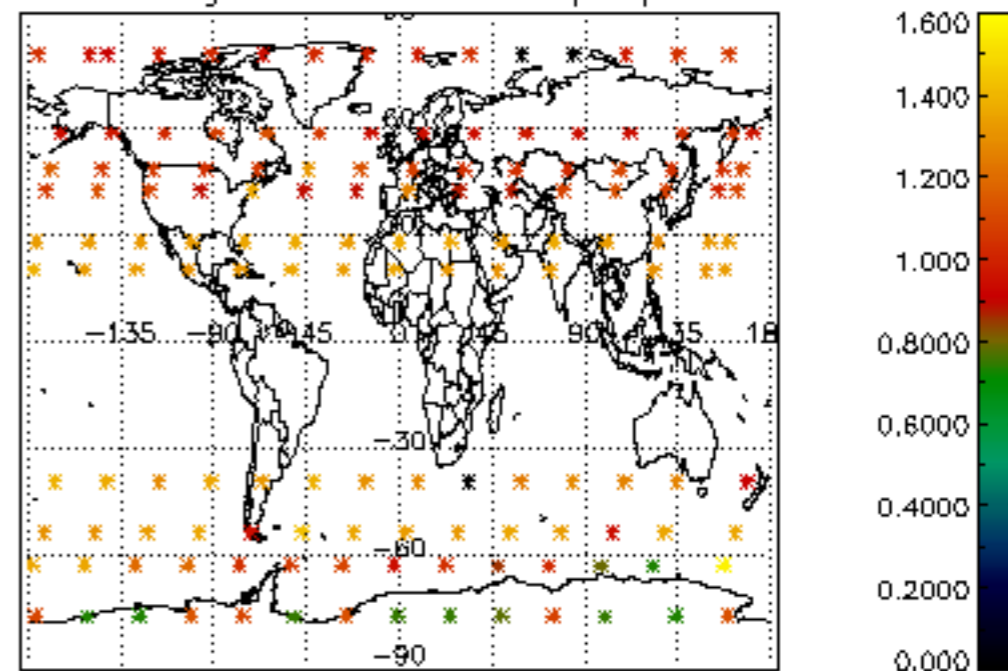
Percentage of saturation errors per profile



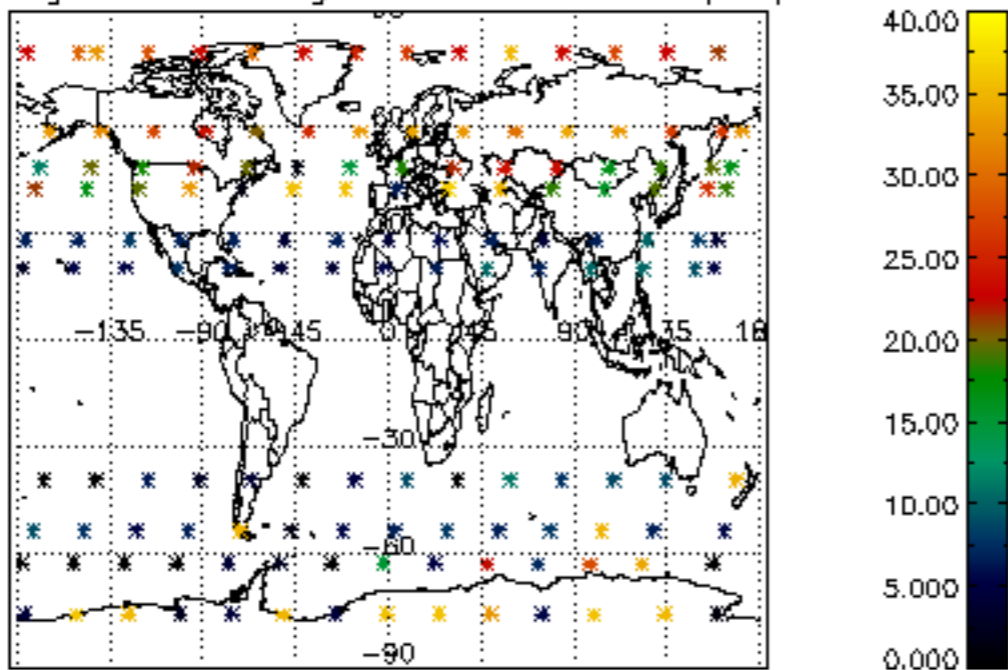
Percentage of cosmic ray hits per profile



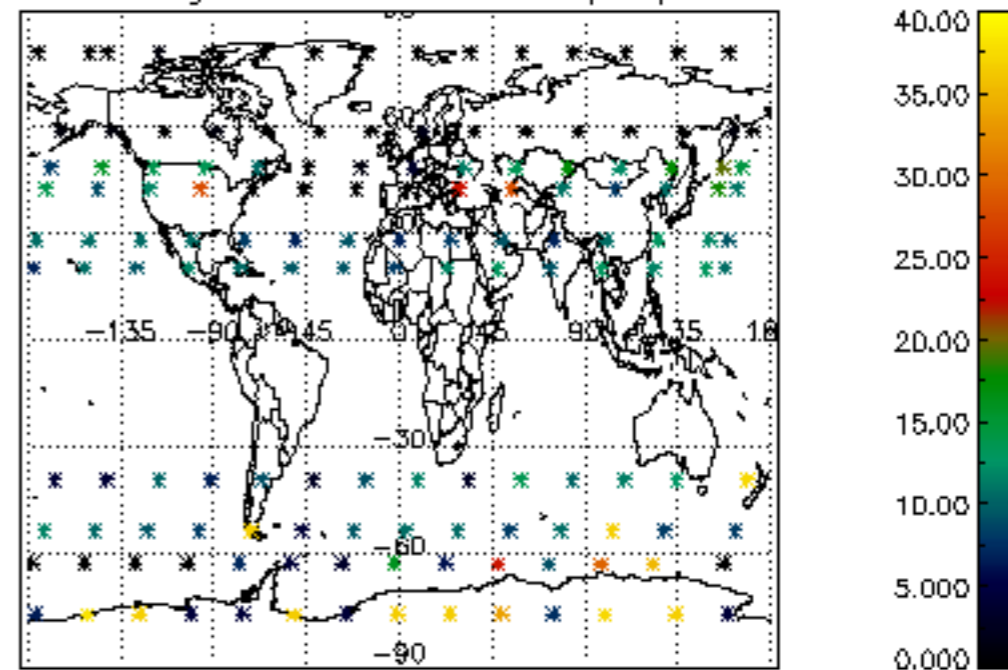
Percentage of datation errors per profile

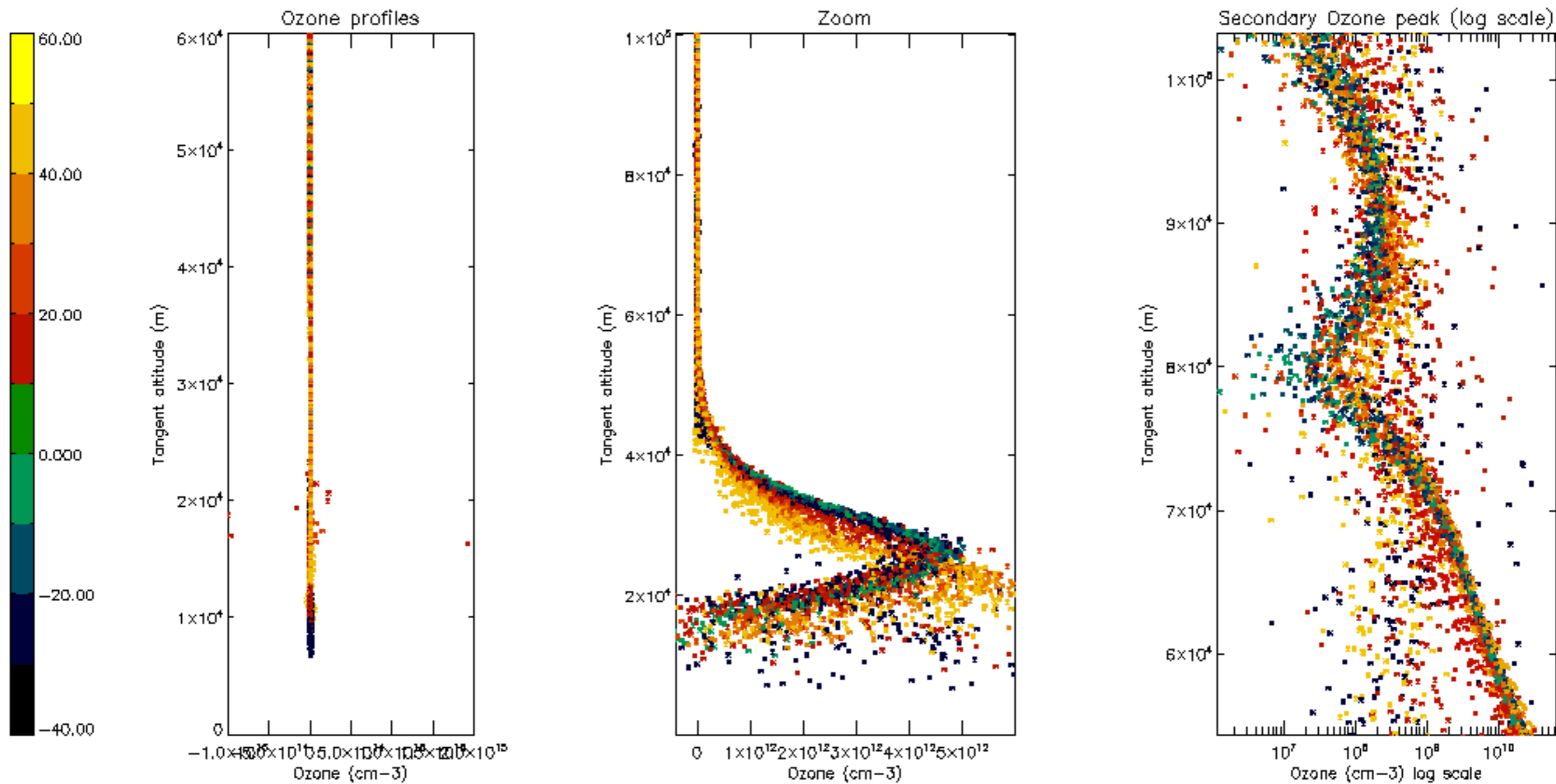


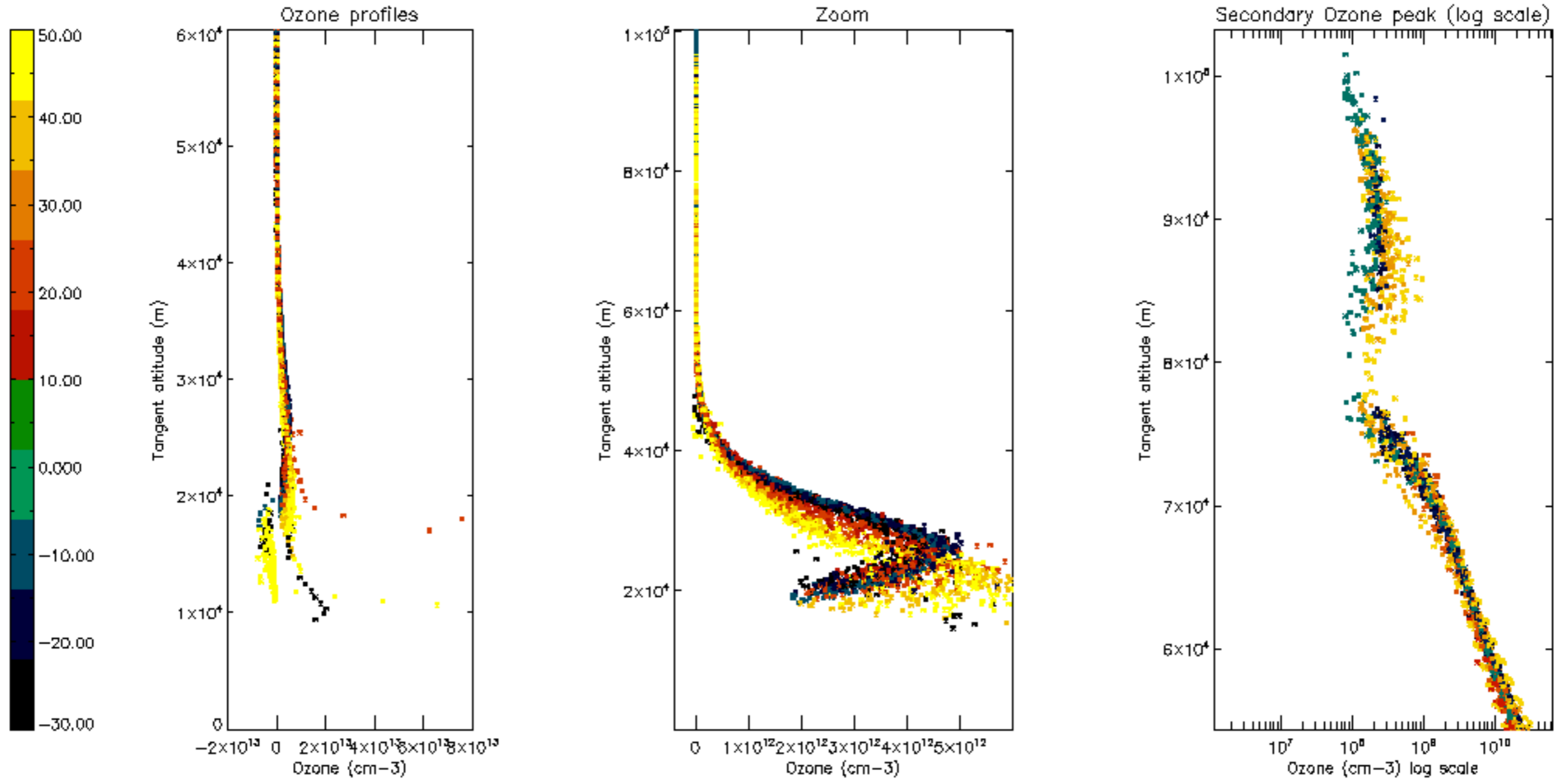
Percentage of star falling outside central band per profile

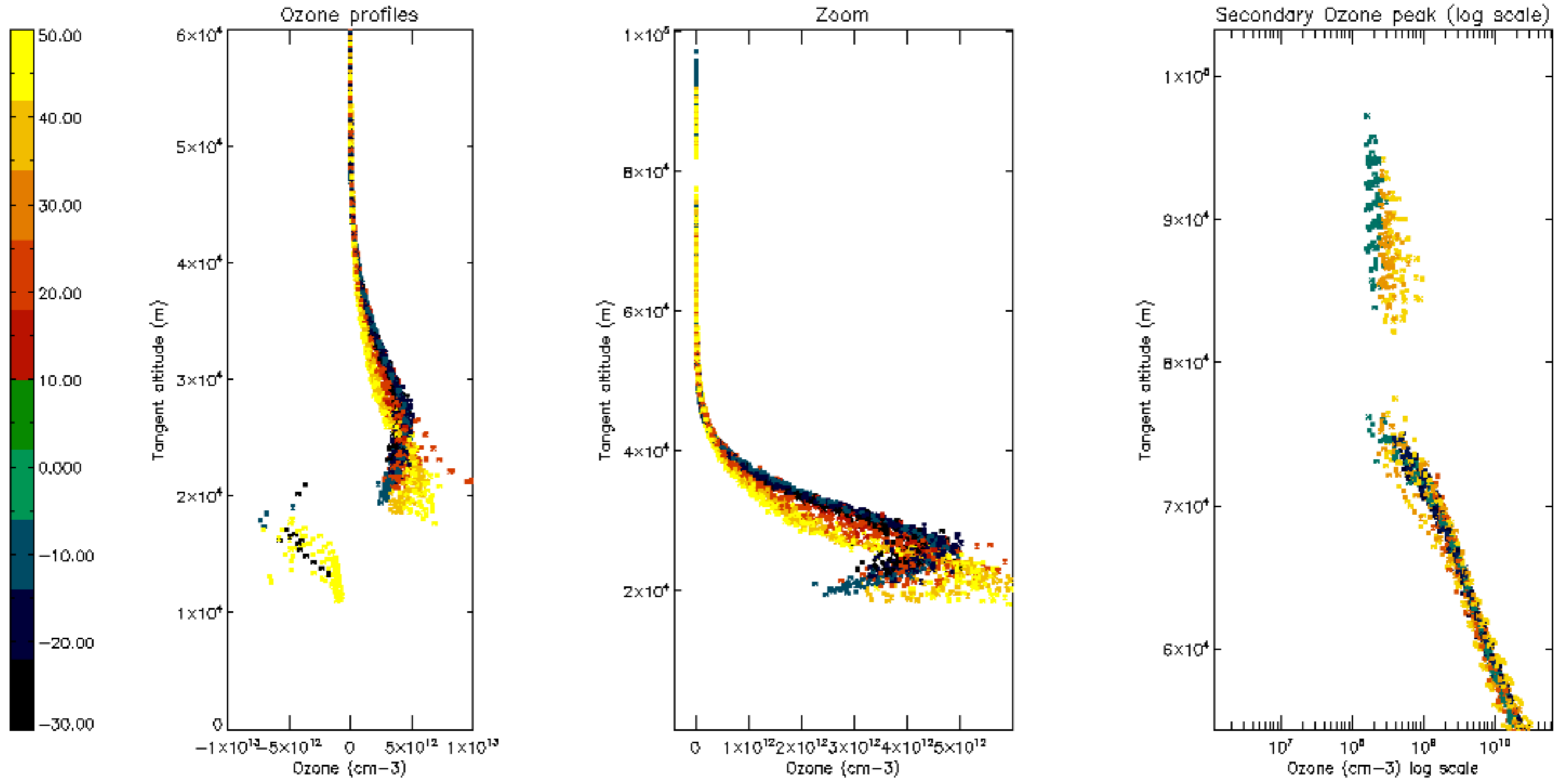


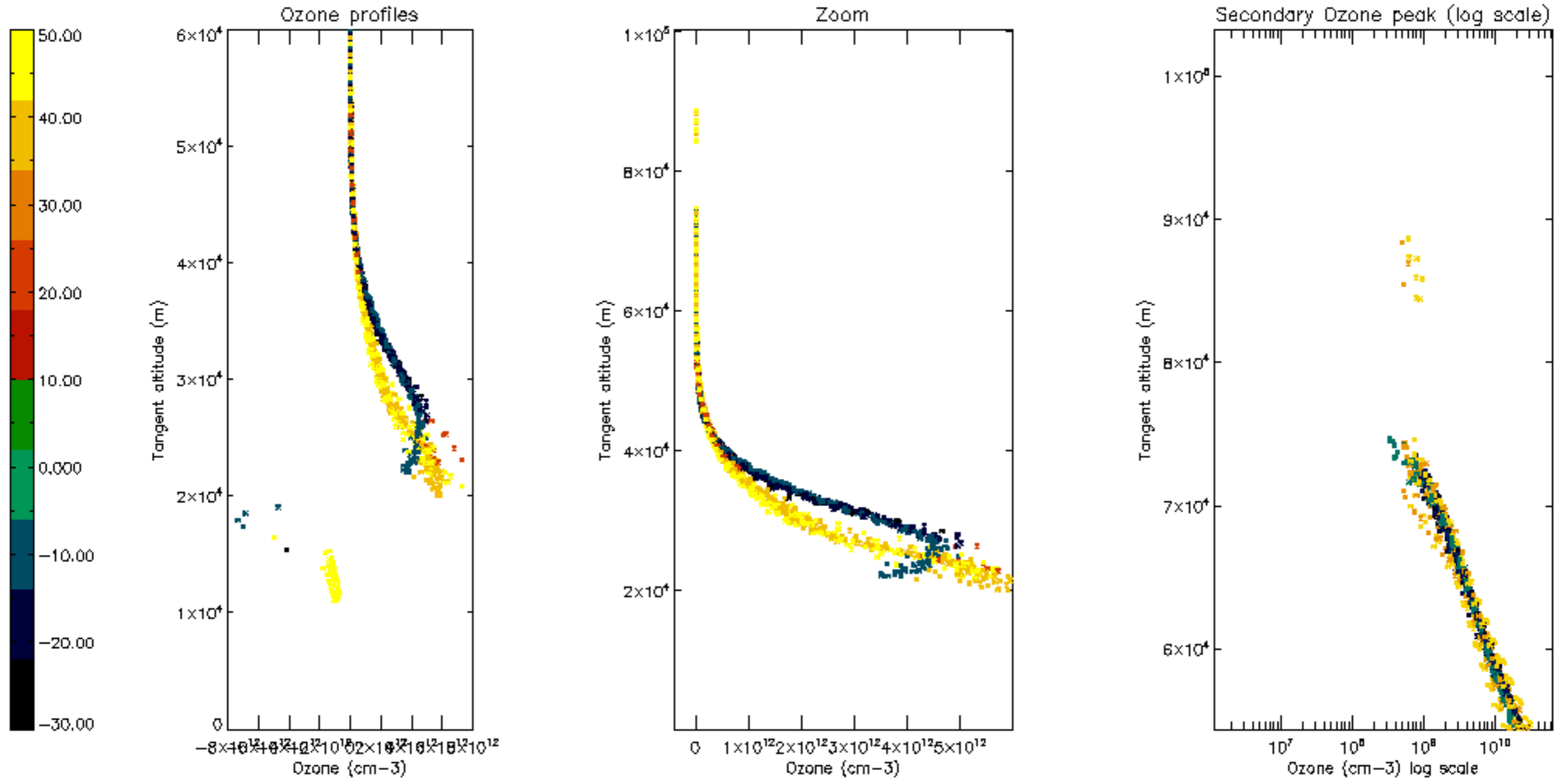
Percentage of saturation errors per profile

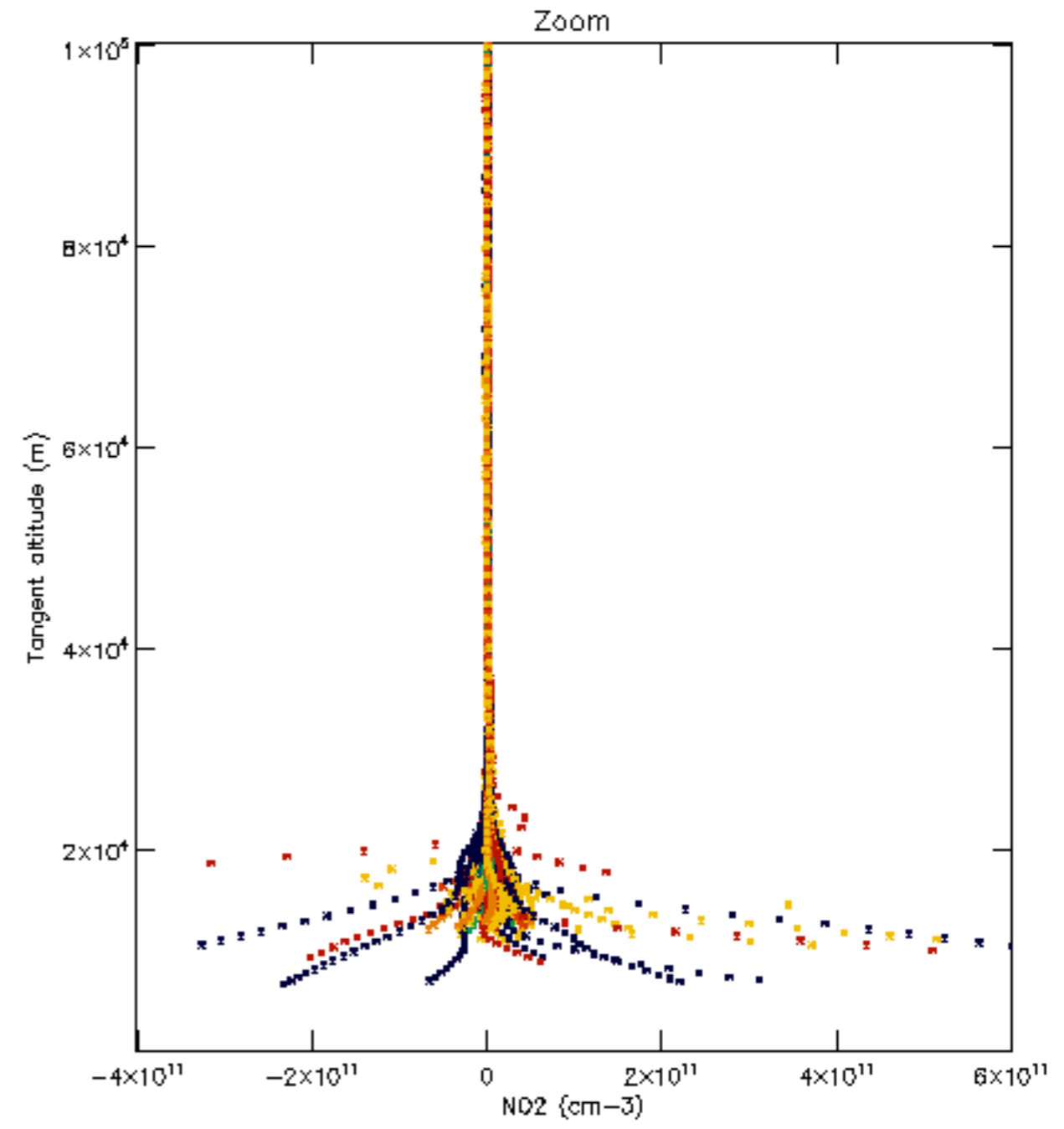
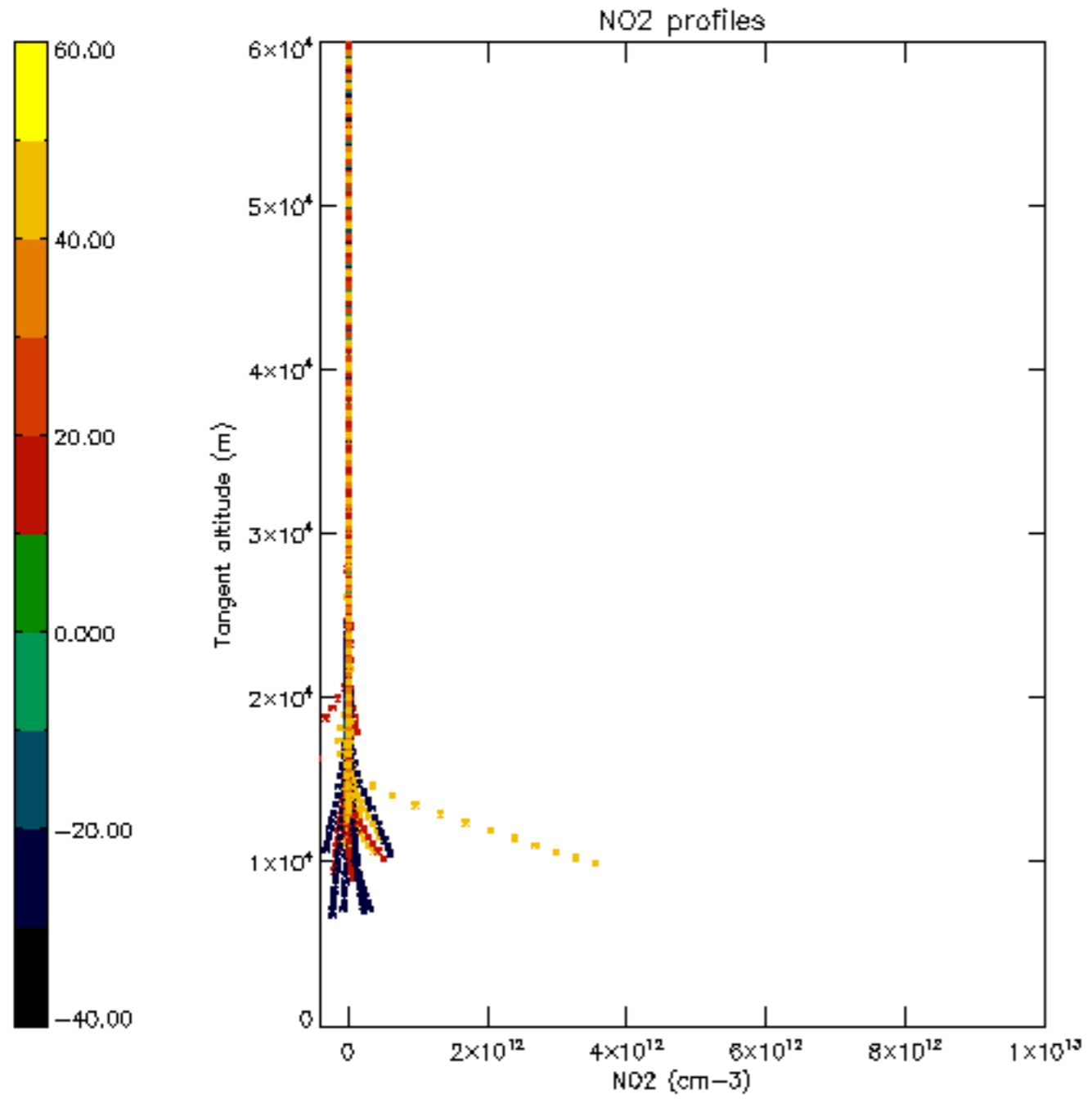


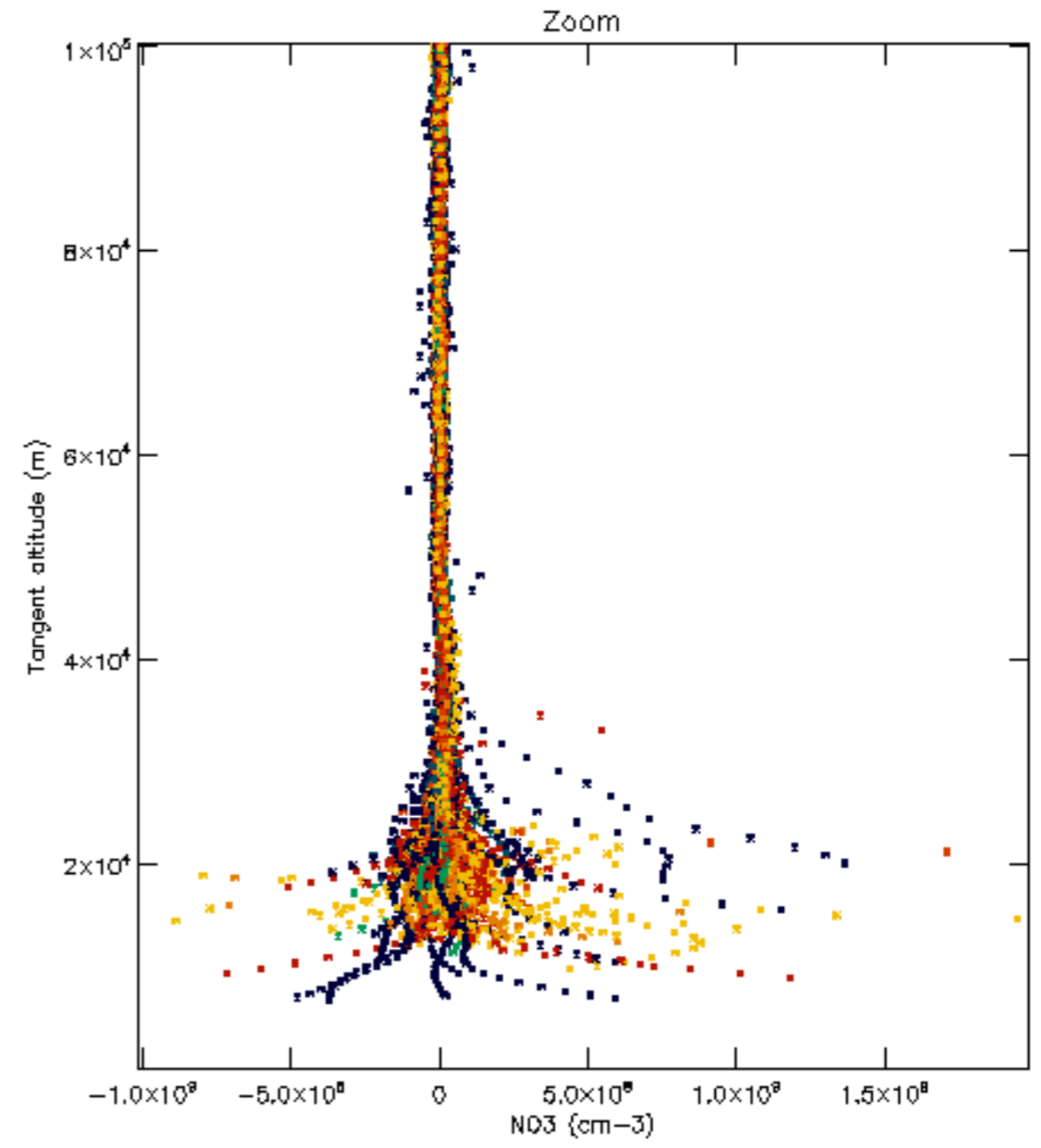
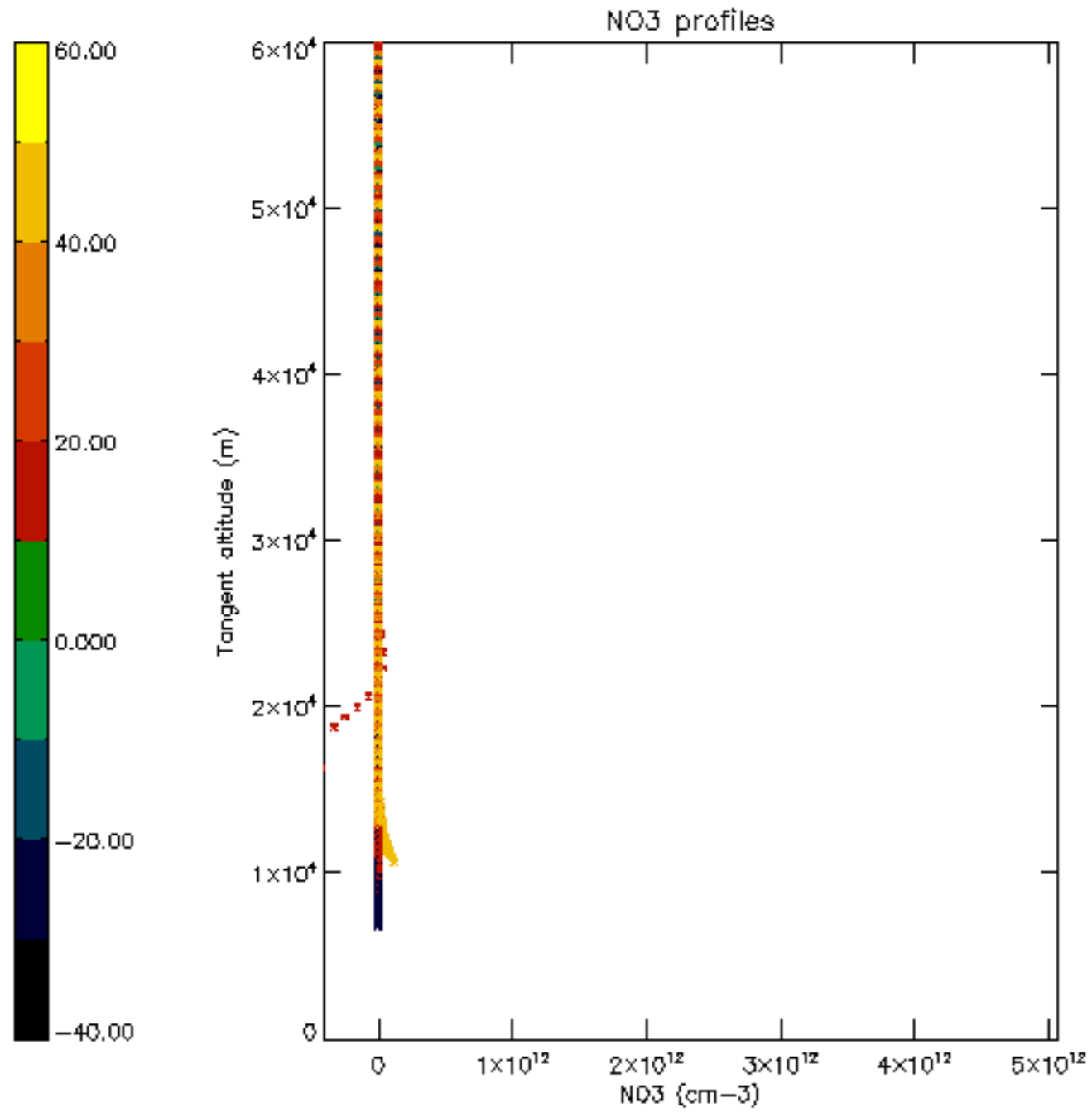


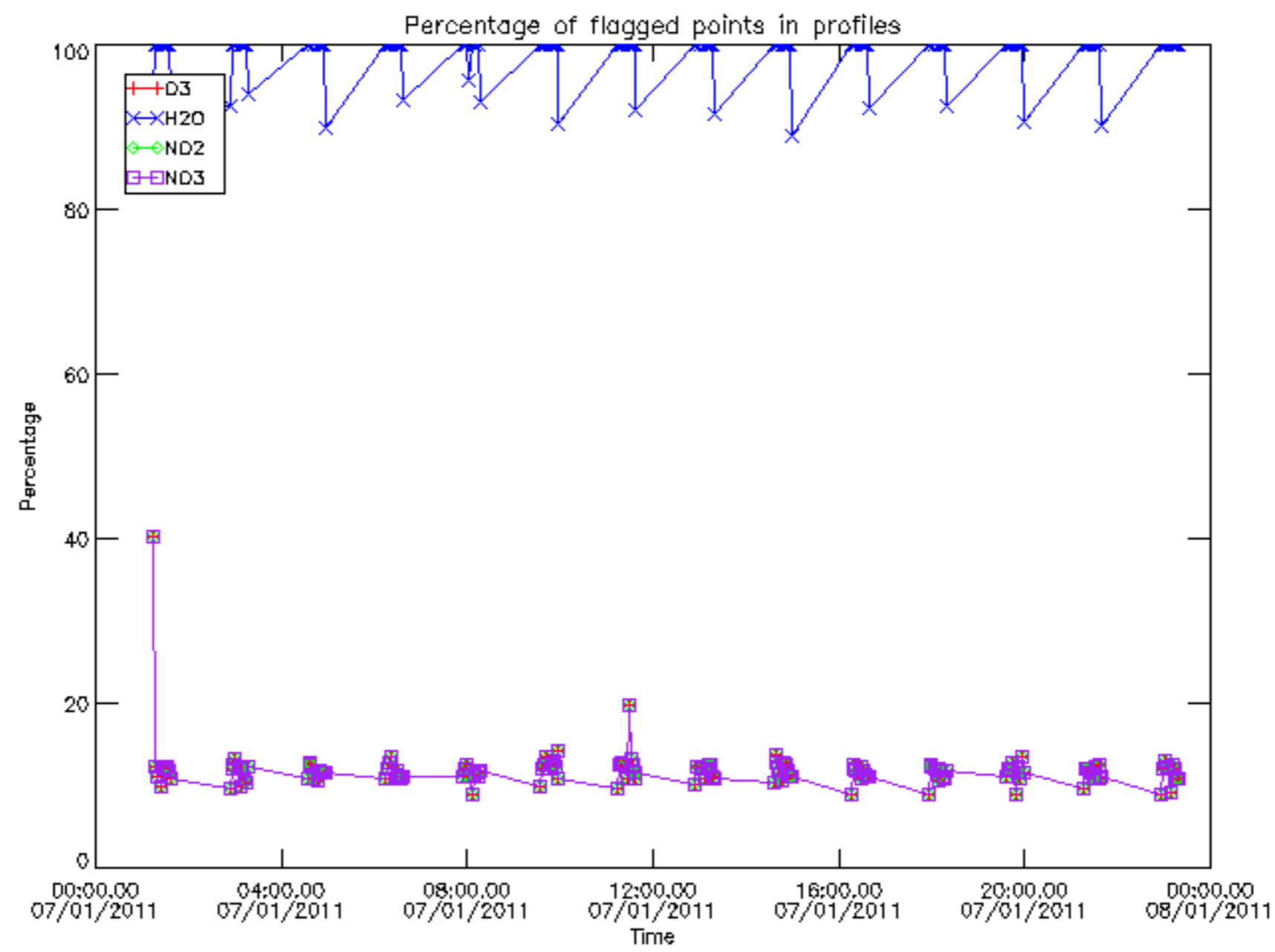




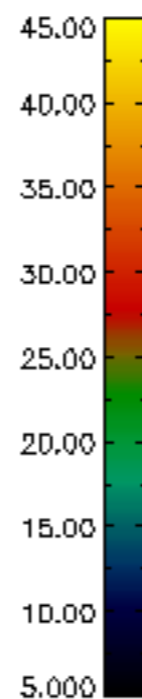
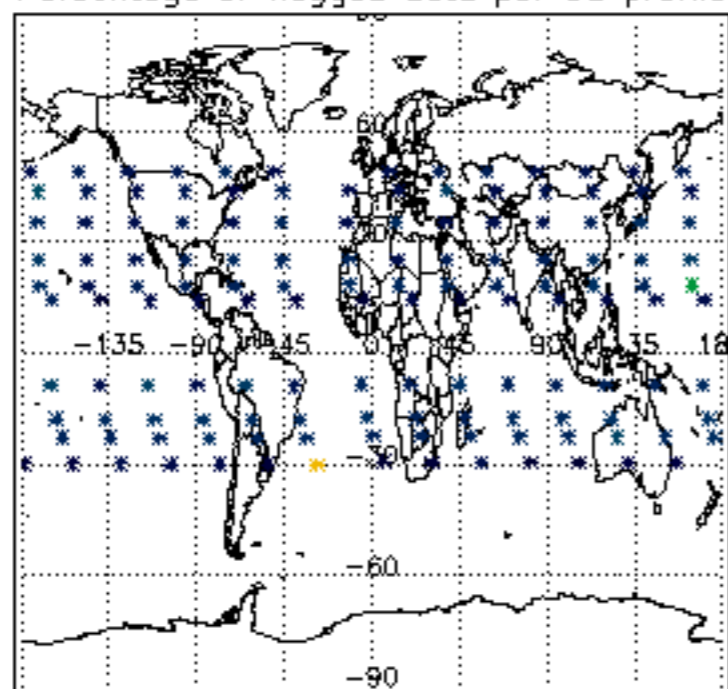




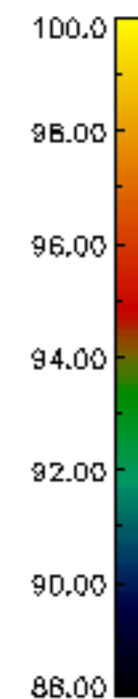
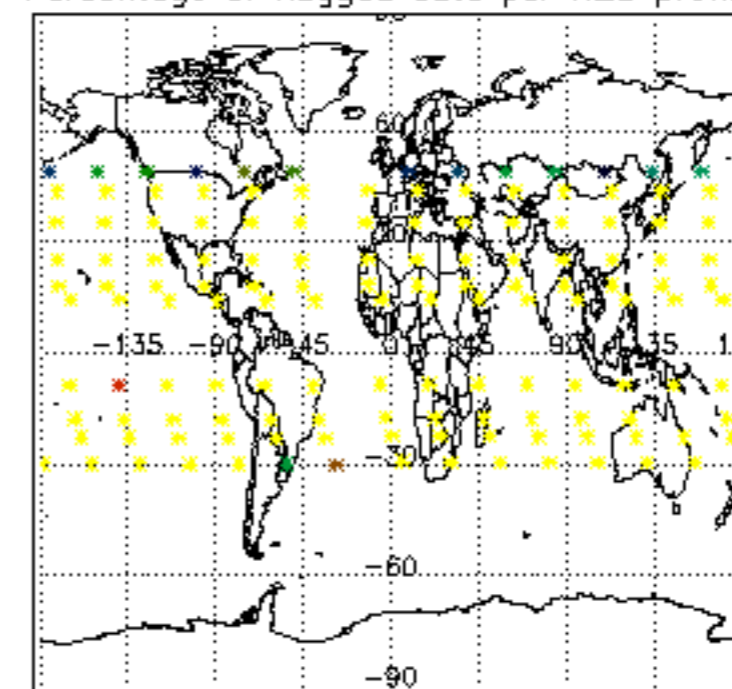




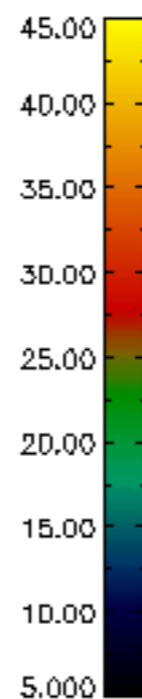
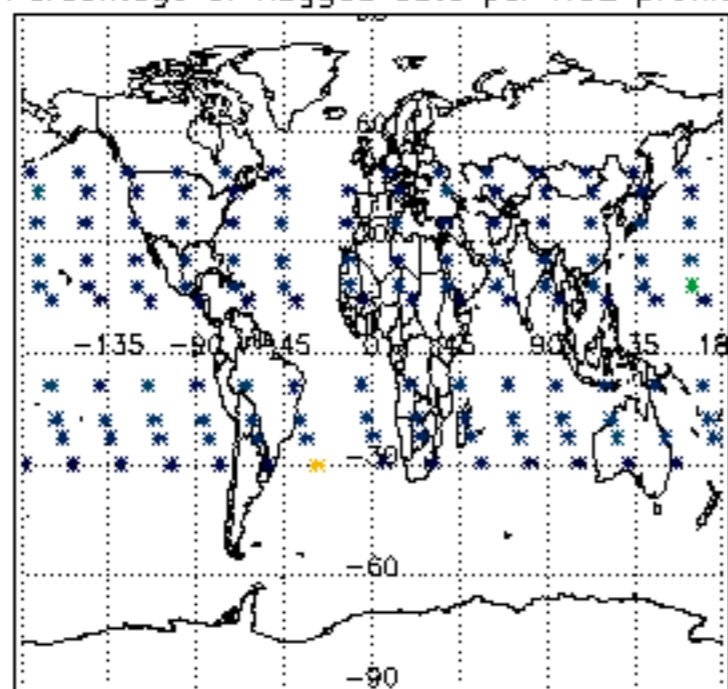
Percentage of flagged data per D3 profile



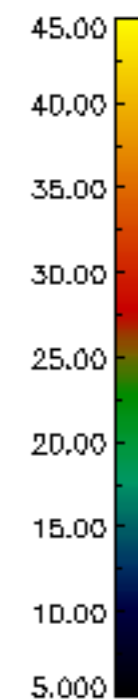
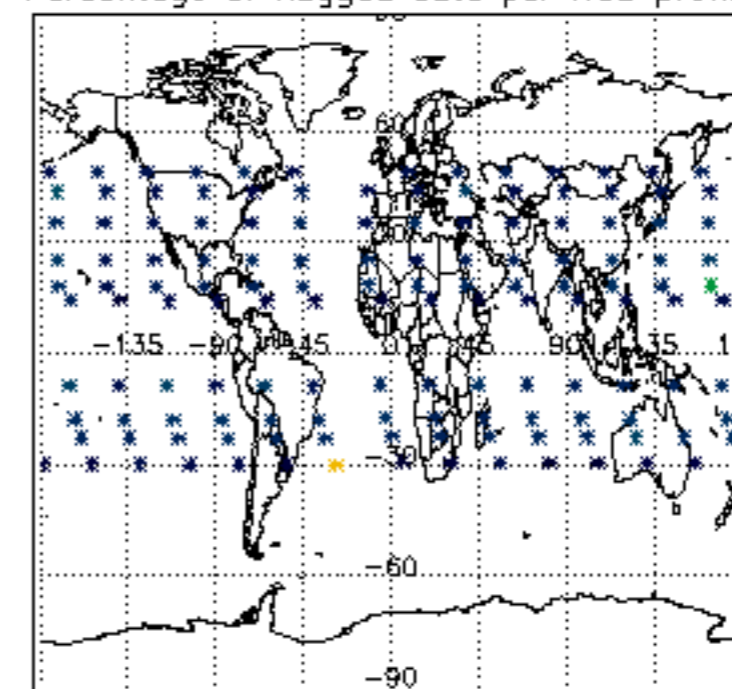
Percentage of flagged data per H2O profile

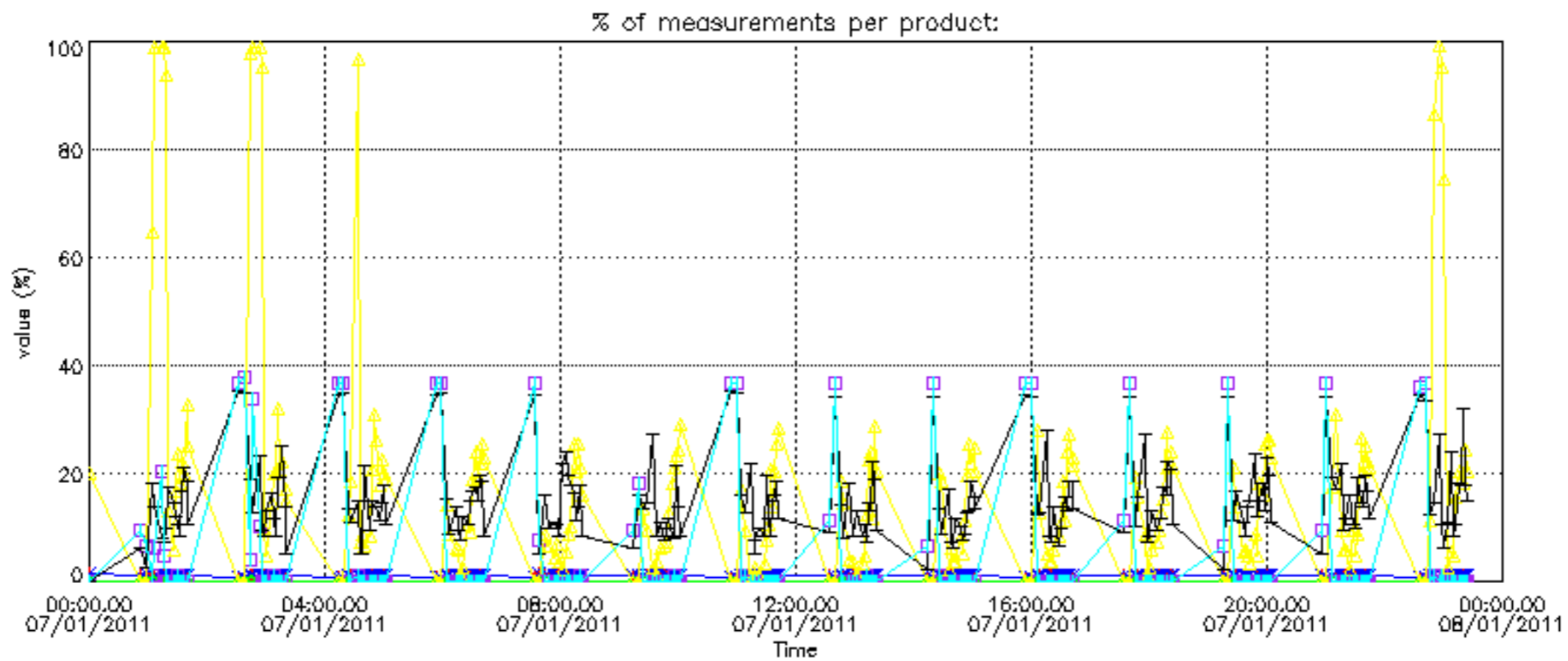


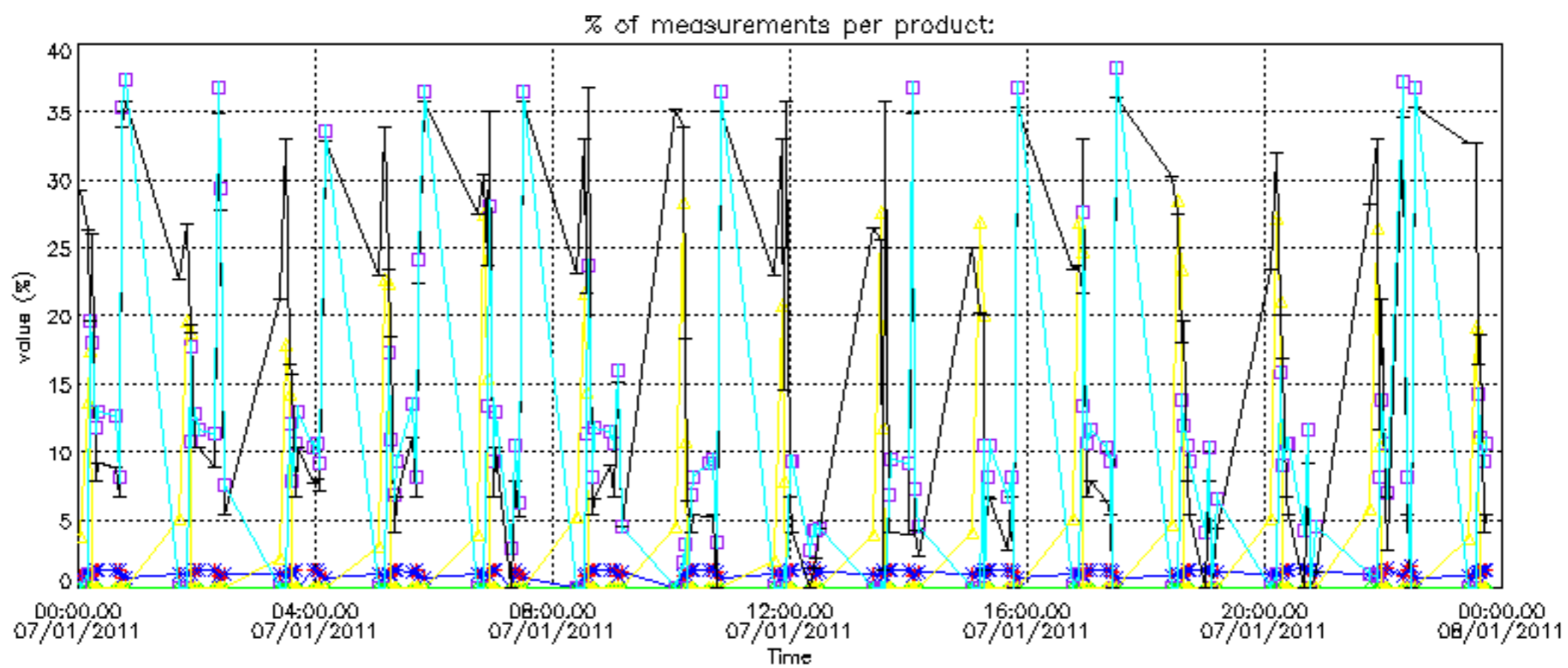
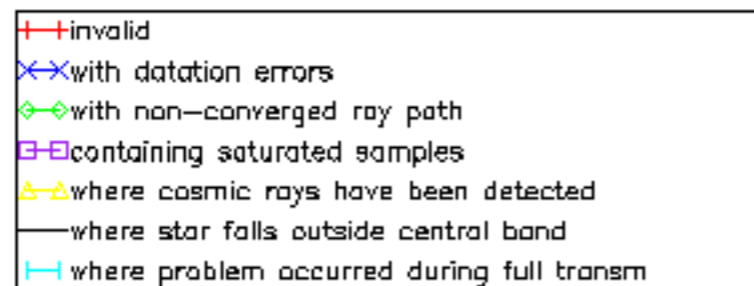
Percentage of flagged data per NO2 profile



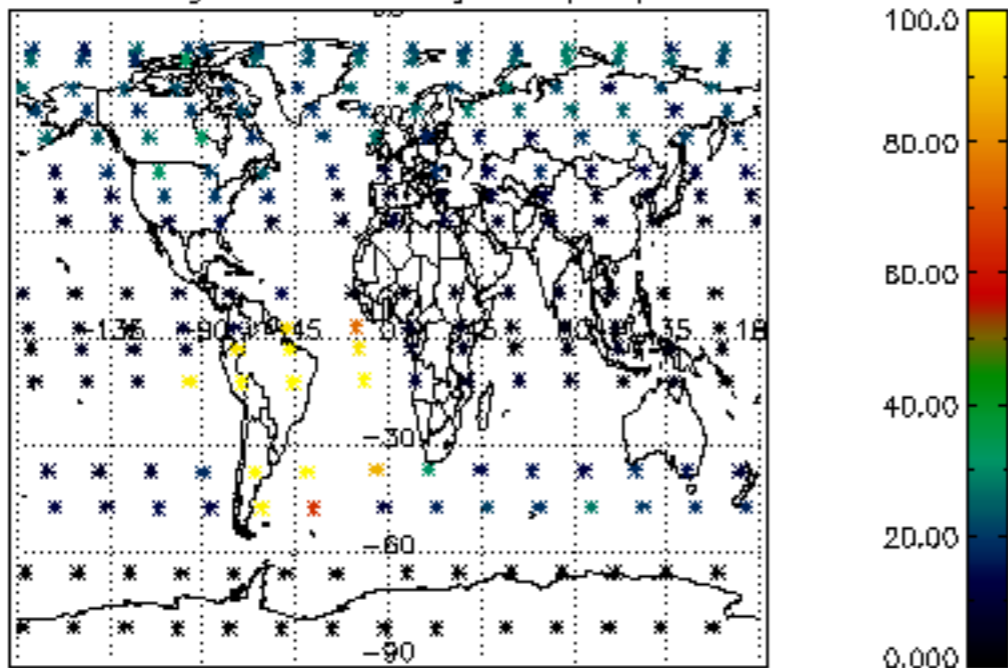
Percentage of flagged data per NO3 profile



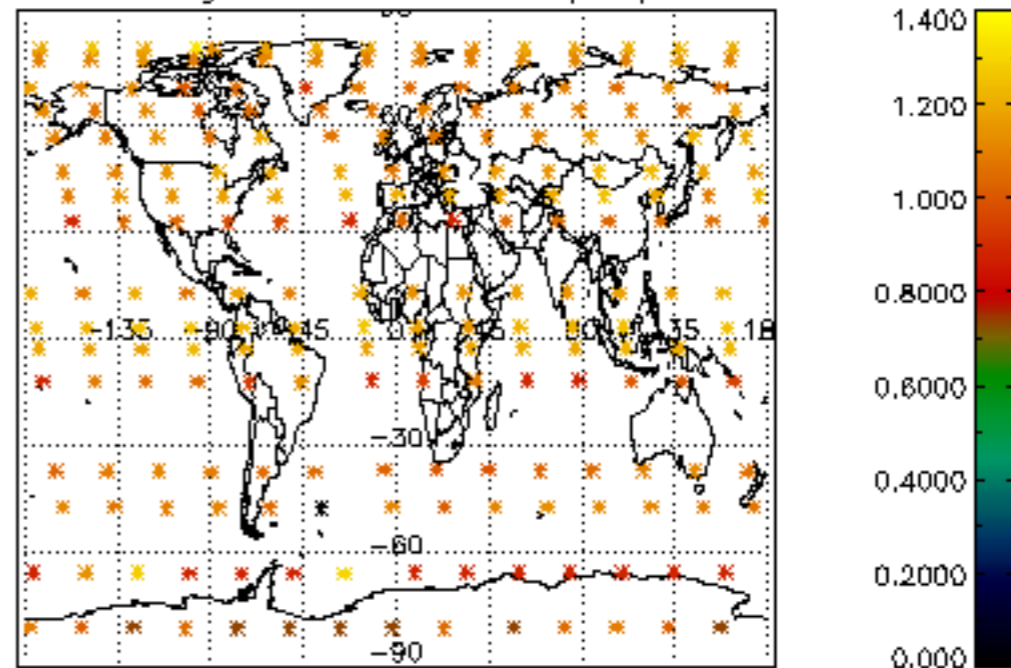




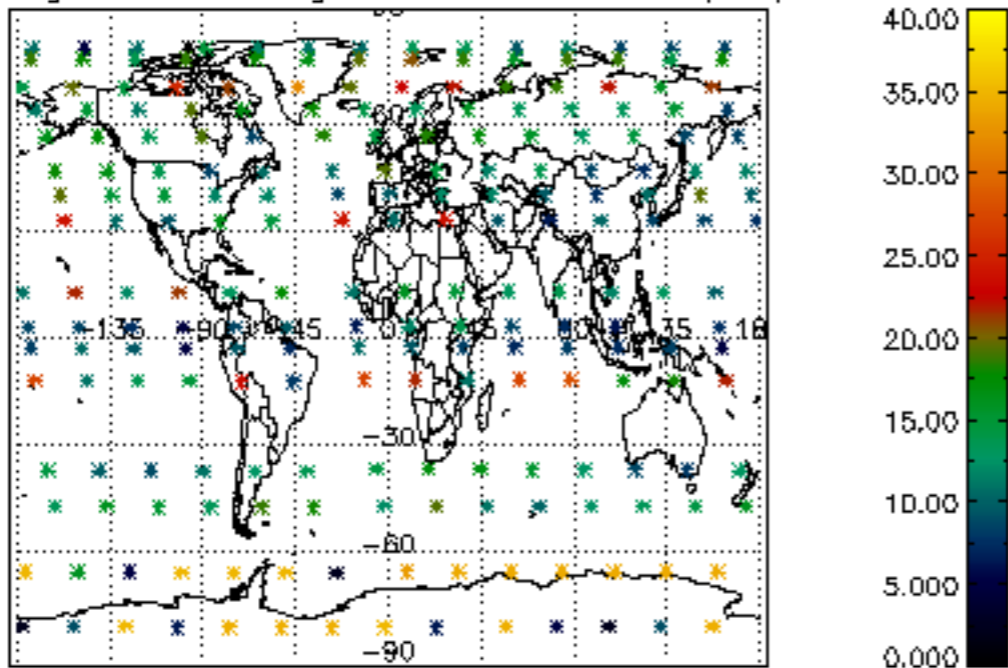
Percentage of cosmic ray hits per profile



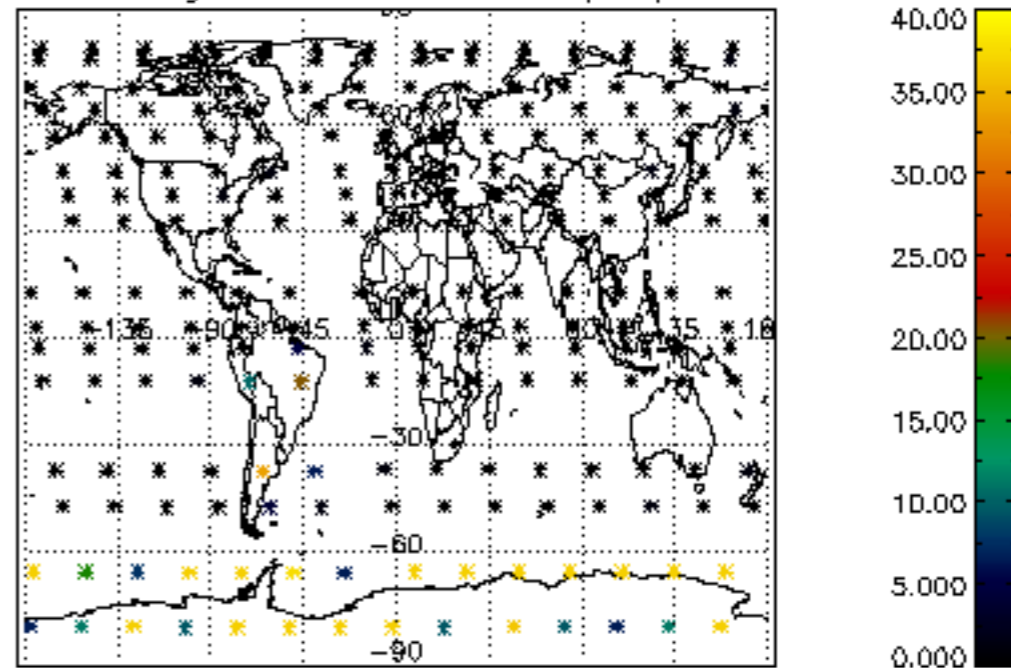
Percentage of datation errors per profile



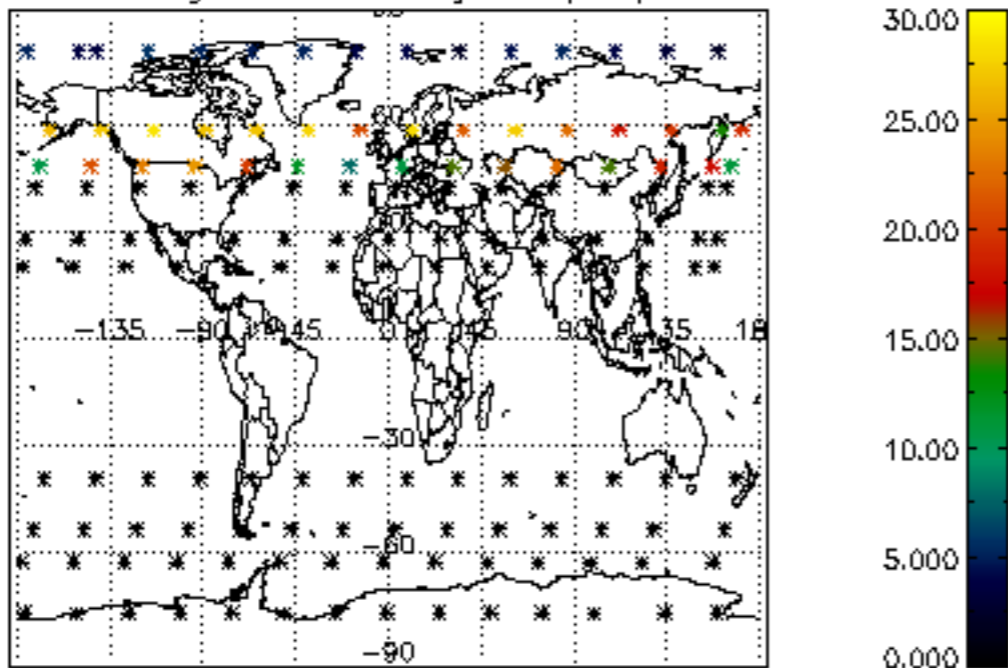
Percentage of star falling outside central band per profile



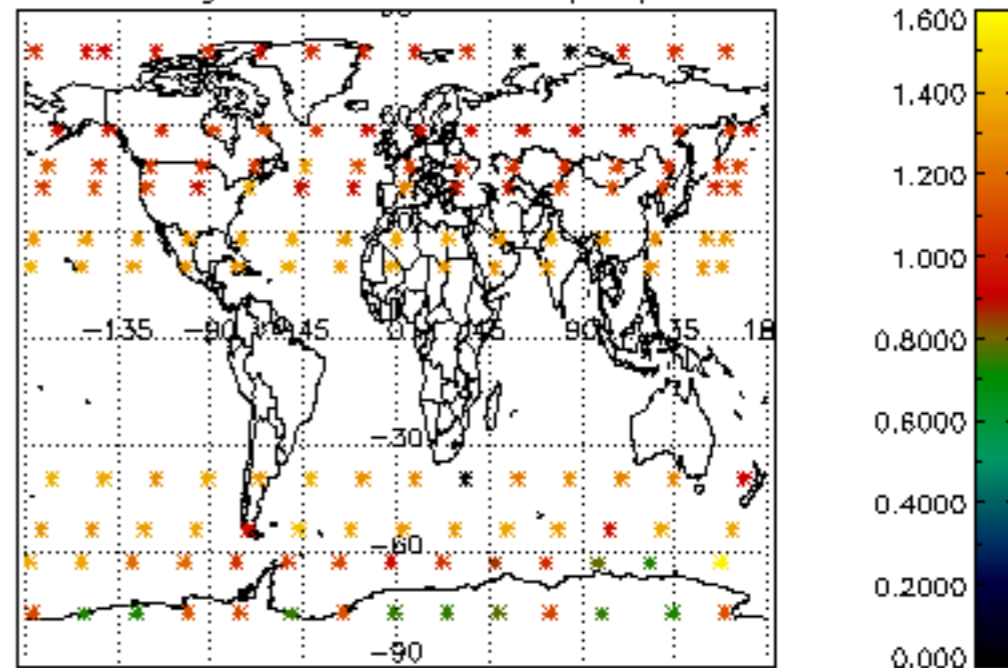
Percentage of saturation errors per profile



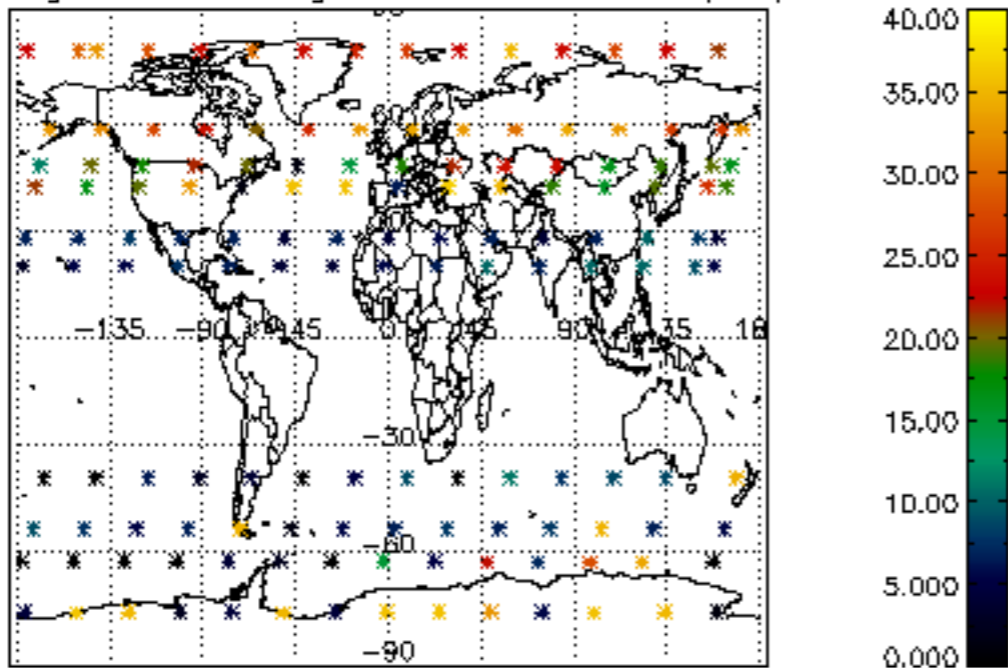
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

