

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[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](#)

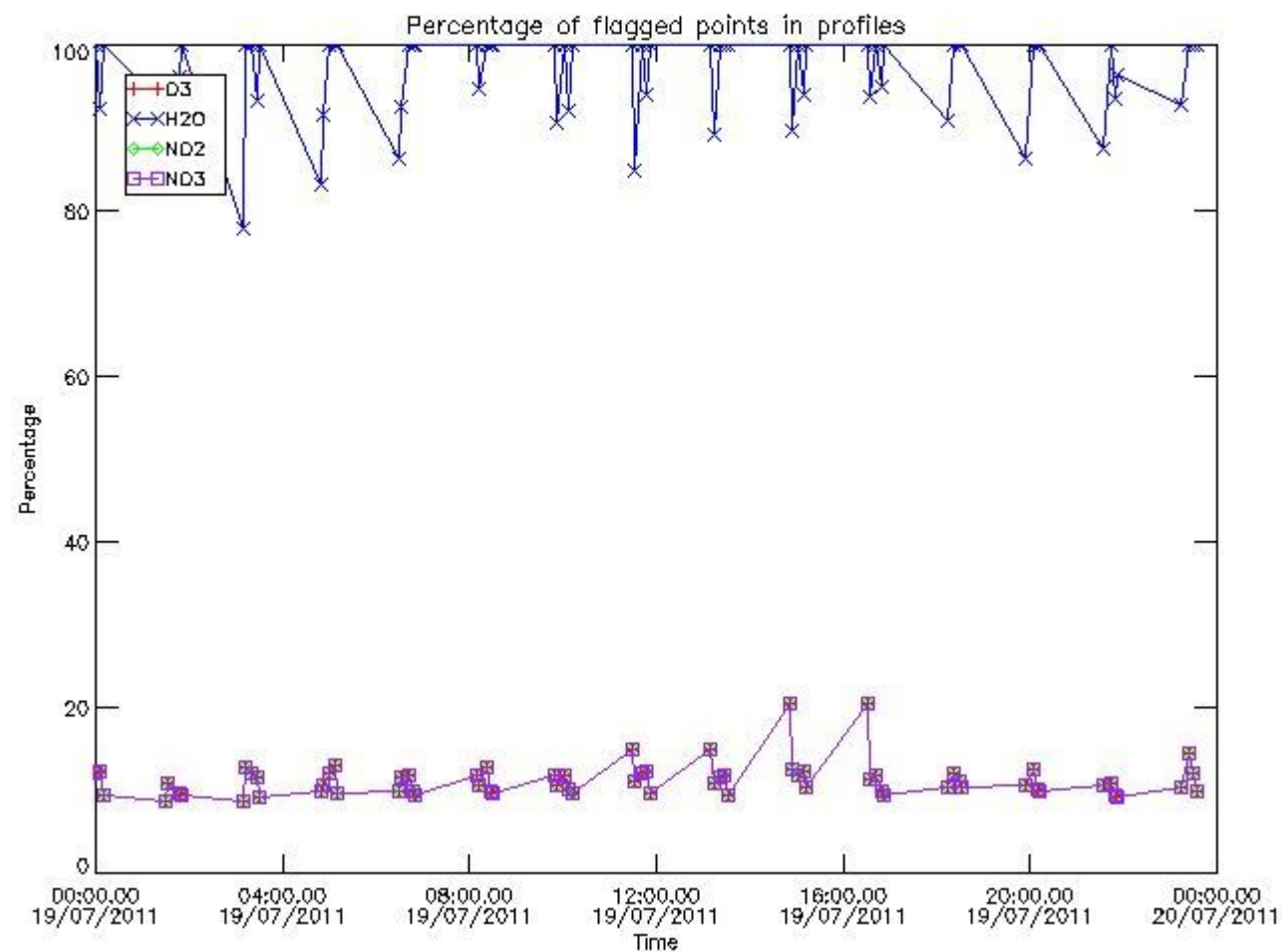
[6. Auxiliary Data Files used for the production reported in section 2](#)

279	GOM_NL__2PRFIN20110719_223144_000000403104_00360_49081_8957.N1	19-JUL-2011 22:31:44	Bright	39.500	144	18Del Cyg	2.8600	11000.	79	49081	No
280	GOM_NL__2PRFIN20110719_223340_000000493104_00360_49081_8958.N1	19-JUL-2011 22:33:40	Bright	49.000	19	50Alp Cyg	1.2460	10500.	98	49081	No
281	GOM_NL__2PRFIN20110719_223846_000000443104_00360_49081_8959.N1	19-JUL-2011 22:38:46	Bright	43.500	89	5Alp Cep	2.4510	8000.0	87	49081	No
282	GOM_NL__2PRFIN20110719_224733_000000483104_00360_49081_8960.N1	19-JUL-2011 22:47:33	Bright	48.000	76	27Gam Cas	2.3000	30000.	96	49081	No
283	GOM_NL__2PRFIN20110719_225259_000000633104_00360_49081_8961.N1	19-JUL-2011 22:52:59	Bright	63.000	160	23Gam Per	2.9300	4700.0	126	49081	No
284	GOM_NL__2PRFIN20110719_225425_000000623104_00360_49081_8962.N1	19-JUL-2011 22:54:25	Bright	62.000	35	33Alp Per	1.7950	6250.0	124	49081	No
285	GOM_NL__2PRFIN20110719_225725_000000463104_00360_49081_8963.N1	19-JUL-2011 22:57:25	Bright	46.000	79	26Bet Per	2.3100	13100.	92	49081	No
286	GOM_NL__2PRFIN20110719_230031_000000453104_00360_49081_8964.N1	19-JUL-2011 23:00:31	Twilight	44.500	150	44Zet Per	2.8900	28000.	89	49081	No
287	GOM_NL__2PRFIN20110719_230313_000000493104_00360_49081_8965.N1	19-JUL-2011 23:03:13	Twilight	48.500	146	25Eta Tau	2.8730	15200.	97	49081	No
288	GOM_NL__2PRFIN20110719_230448_000000463104_00360_49081_8966.N1	19-JUL-2011 23:04:48	Twilight	46.000	13	87Alp Tau	0.86700	3800.0	92	49081	No
289	GOM_NL__2PRFIN20110719_231432_000000503104_00360_49081_8967.N1	19-JUL-2011 23:14:32	Dark	49.500	165	34Gam Eri	2.9500	3200.0	99	49081	No
290	GOM_NL__2PRFIN20110719_232341_000000423104_00360_49081_8968.N1	19-JUL-2011 23:23:41	Dark	42.000	157	The1Eri	2.9060	9300.0	84	49081	No
291	GOM_NL__2PRFIN20110719_232942_000000433104_00361_49082_8949.N1	19-JUL-2011 23:29:42	Dark	42.500	9	Alp Eri	0.45300	24000.	85	49082	No
292	GOM_NL__2PRFIN20110719_233314_000000523104_00361_49082_8950.N1	19-JUL-2011 23:33:14	Dark	51.500	84	Alp Phe	2.3970	4500.0	103	49082	No
293	GOM_NL__2PRFIN20110719_233704_000000403104_00361_49082_8951.N1	19-JUL-2011 23:37:04	Straylight	39.500	148	Alp Tuc	2.8780	4100.0	79	49082	No
294	GOM_NL__2PRFIN20110719_233837_000000653104_00361_49082_8952.N1	19-JUL-2011 23:38:37	Straylight	65.000	63	Bet Gru	2.1500	2800.0	130	49082	No
295	GOM_NL__2PRFIN20110719_234005_000000563104_00361_49082_8953.N1	19-JUL-2011 23:40:05	Straylight	56.000	31	Alp Gru	1.7340	15200.	112	49082	No
296	GOM_NL__2PRFIN20110719_234317_000000483104_00361_49082_8954.N1	19-JUL-2011 23:43:17	Straylight	47.500	172	Gam Gru	3.0030	13100.	95	49082	No

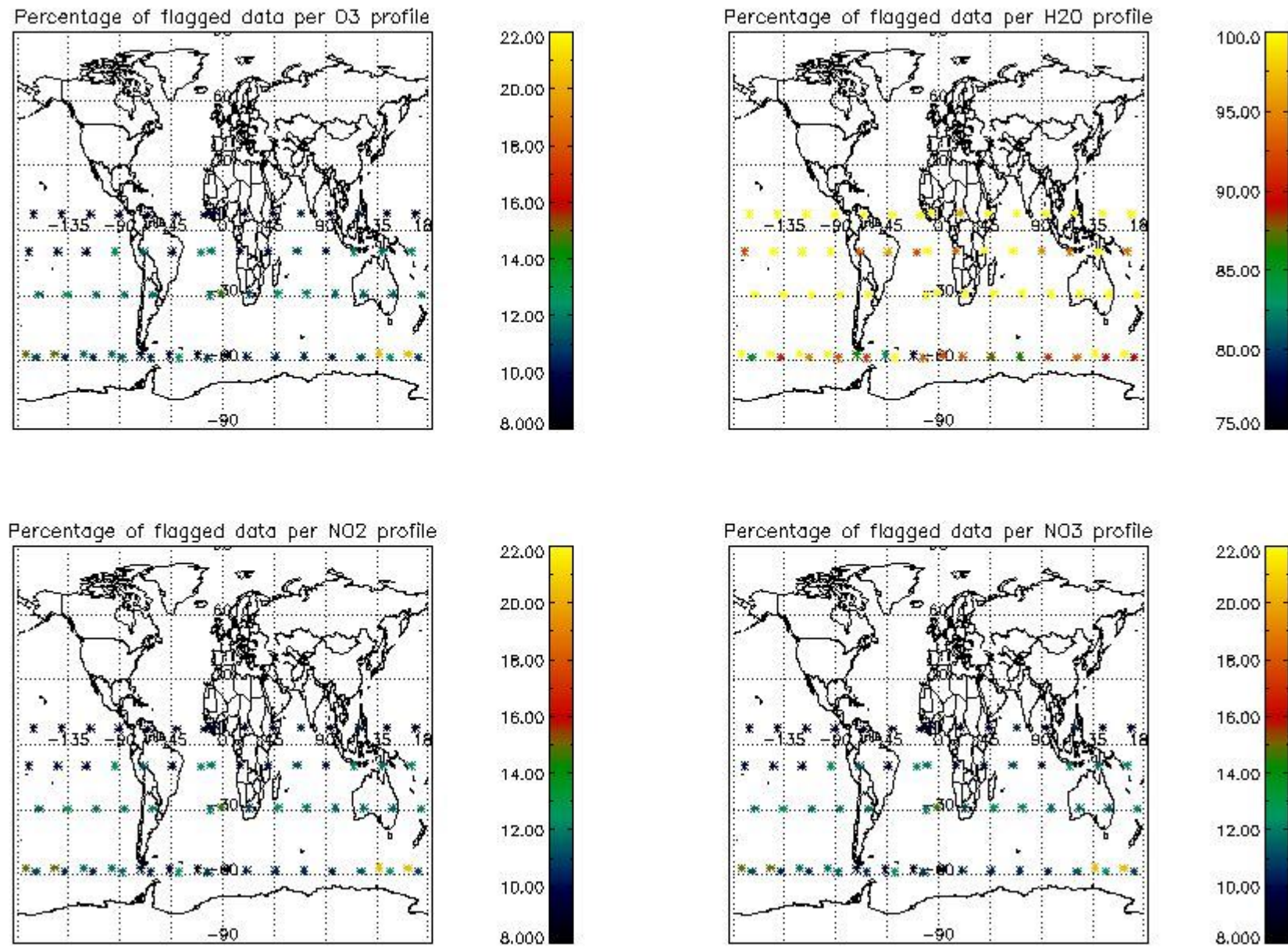
3. Quality information per product

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)

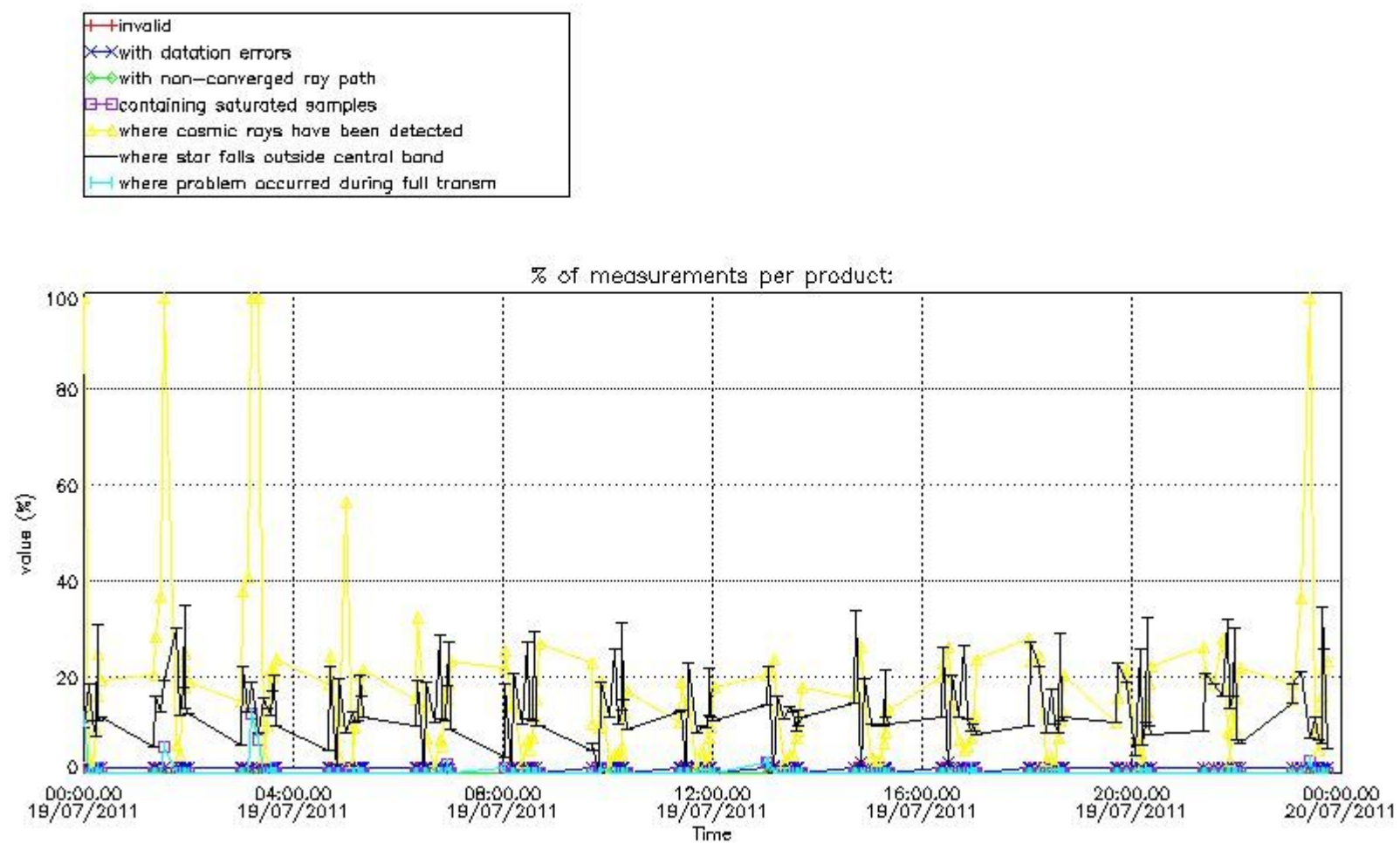


4. Level 1 quality information per product

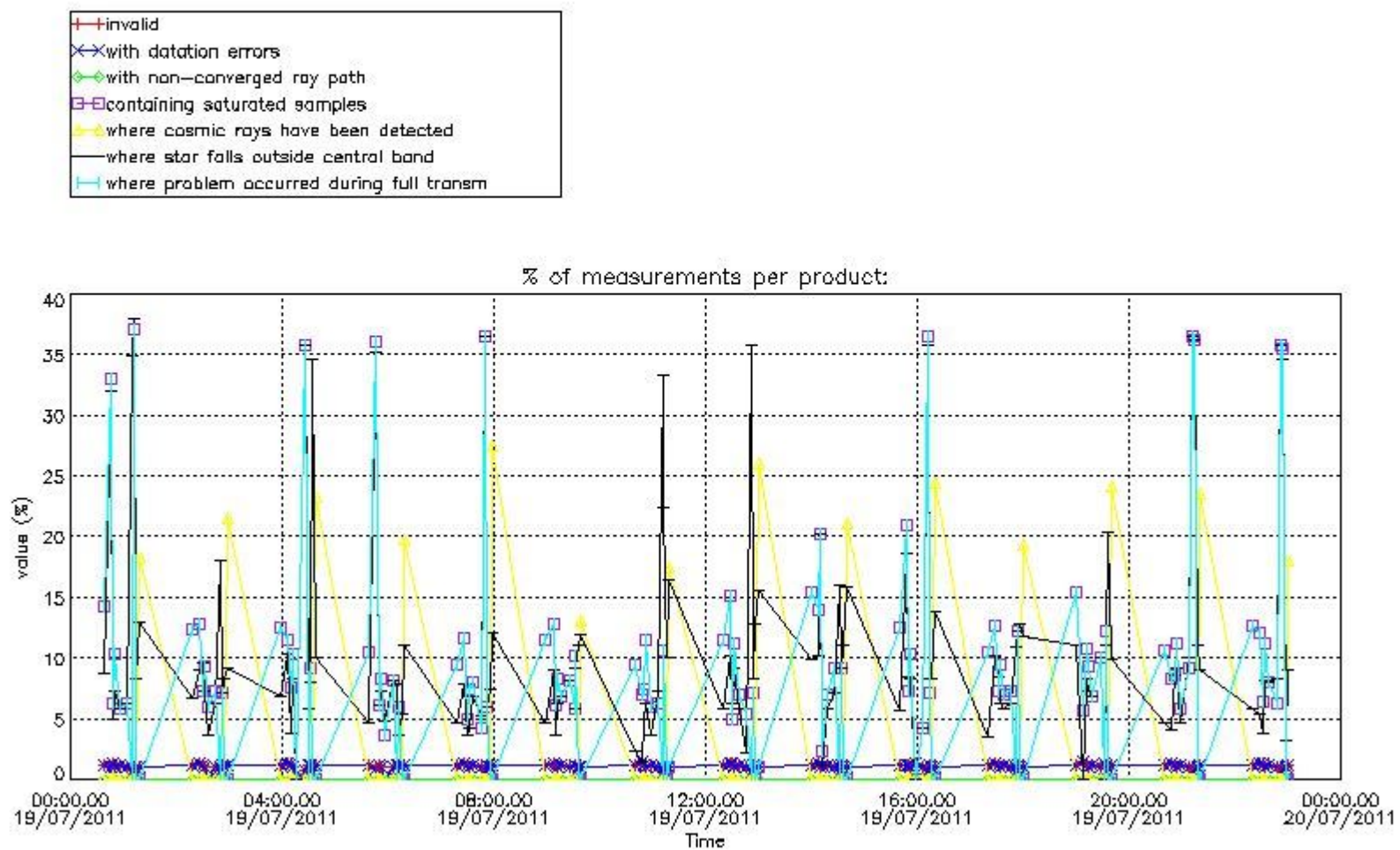
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



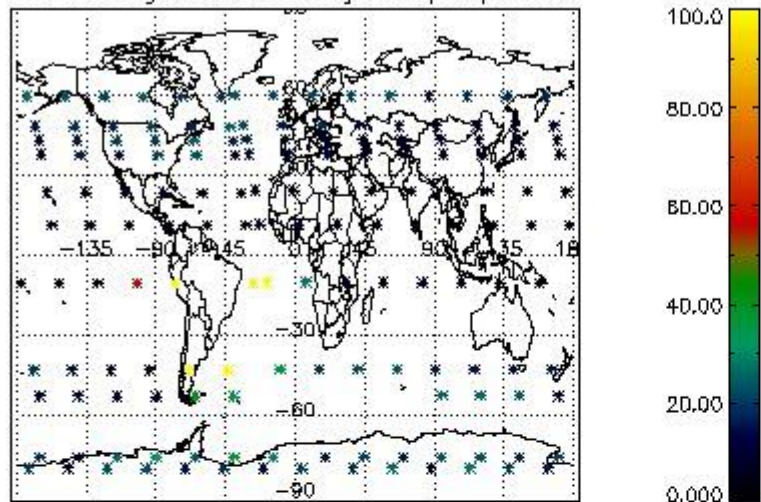
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



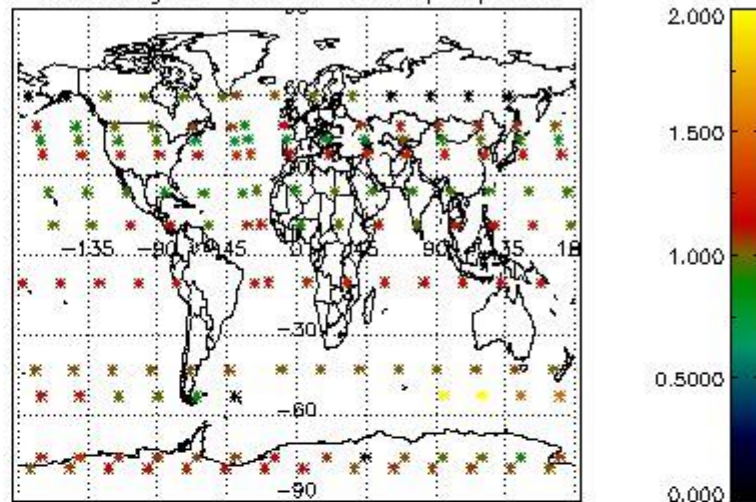
4.2 Plot quality information per product coming from level 1b processing (world map)

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

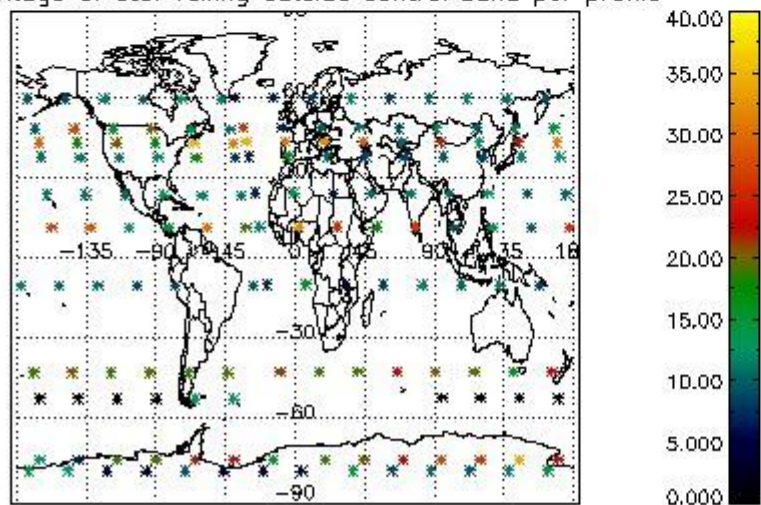
Percentage of cosmic ray hits per profile



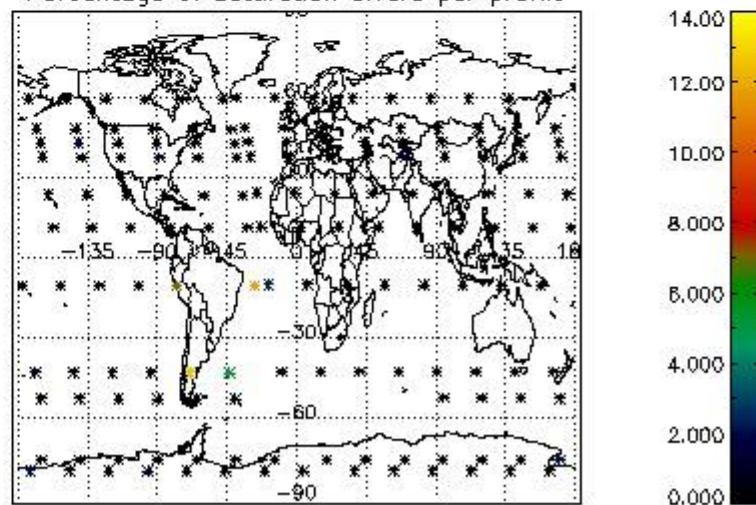
Percentage of datation errors per profile



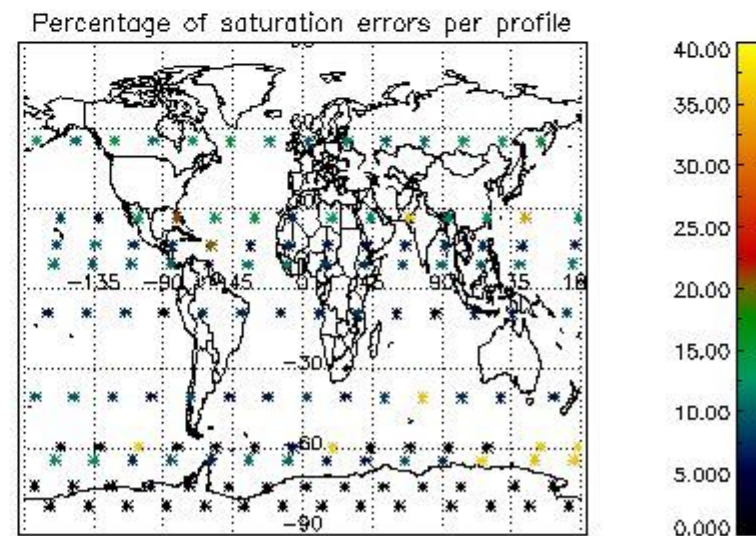
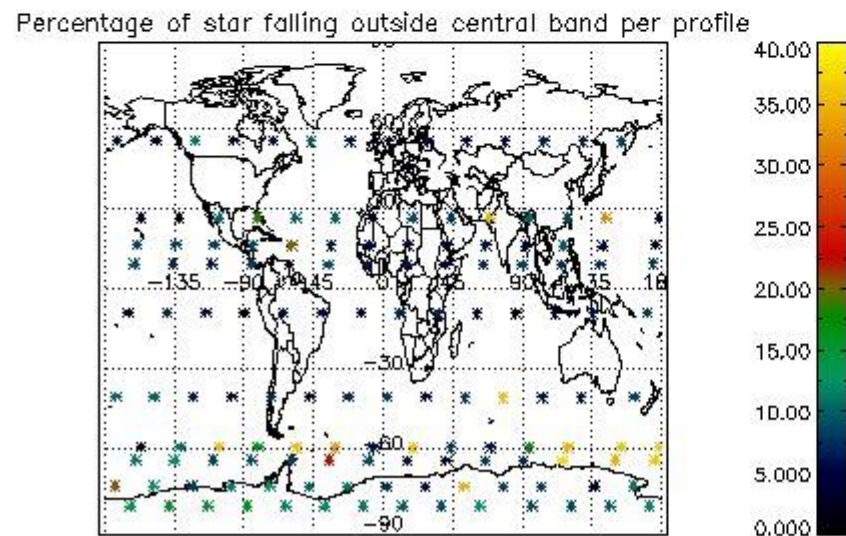
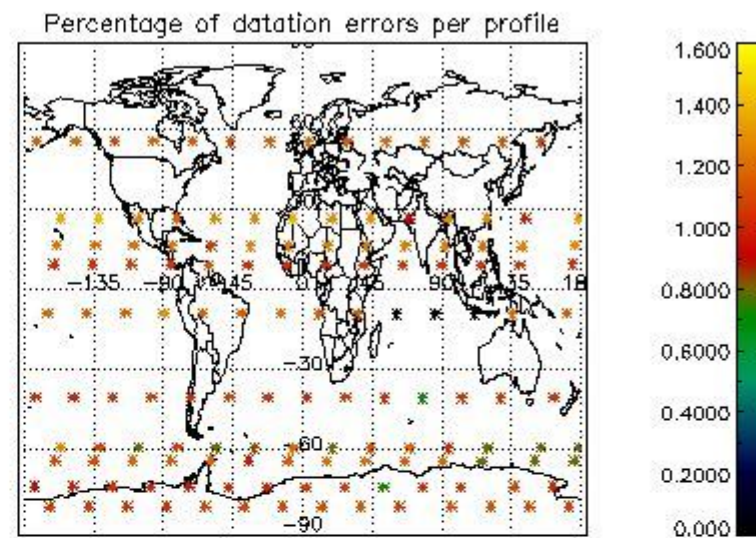
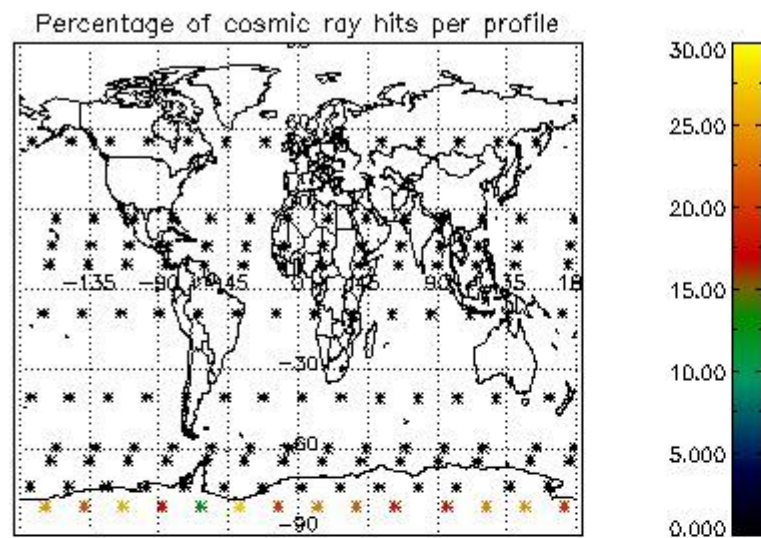
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

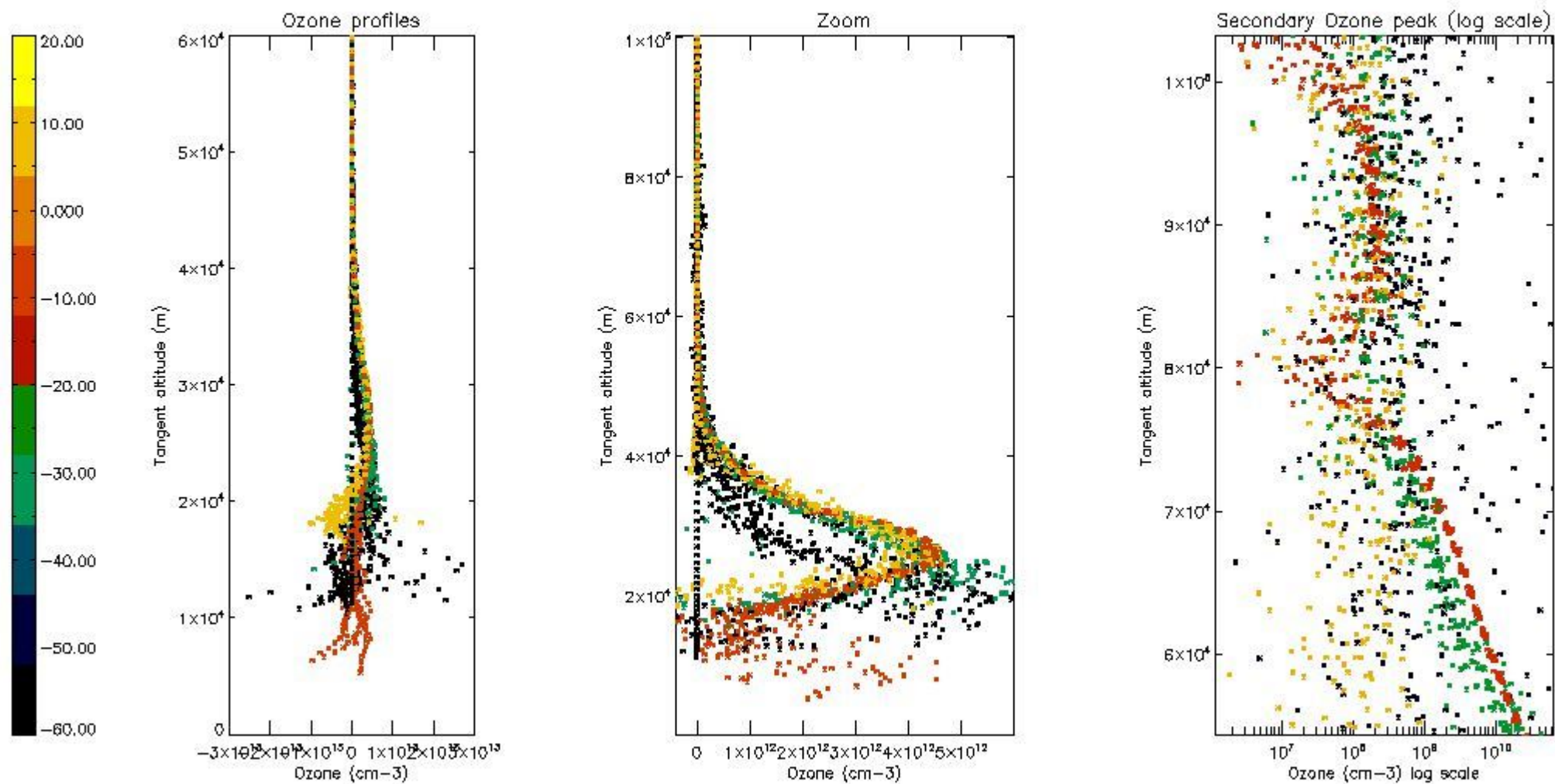
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	23
STD < 20	8

STD < 10	5
STD < 5	3

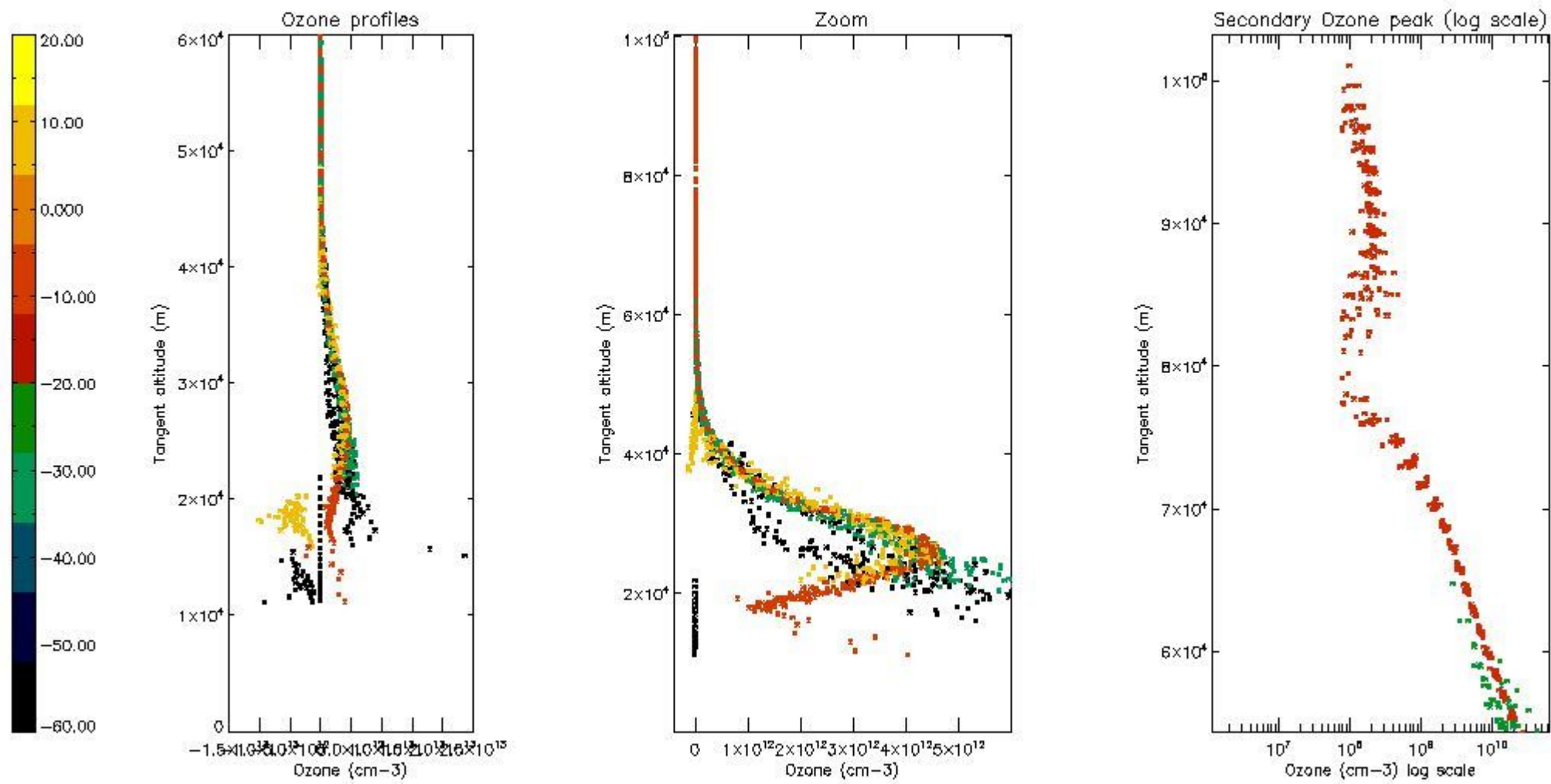
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



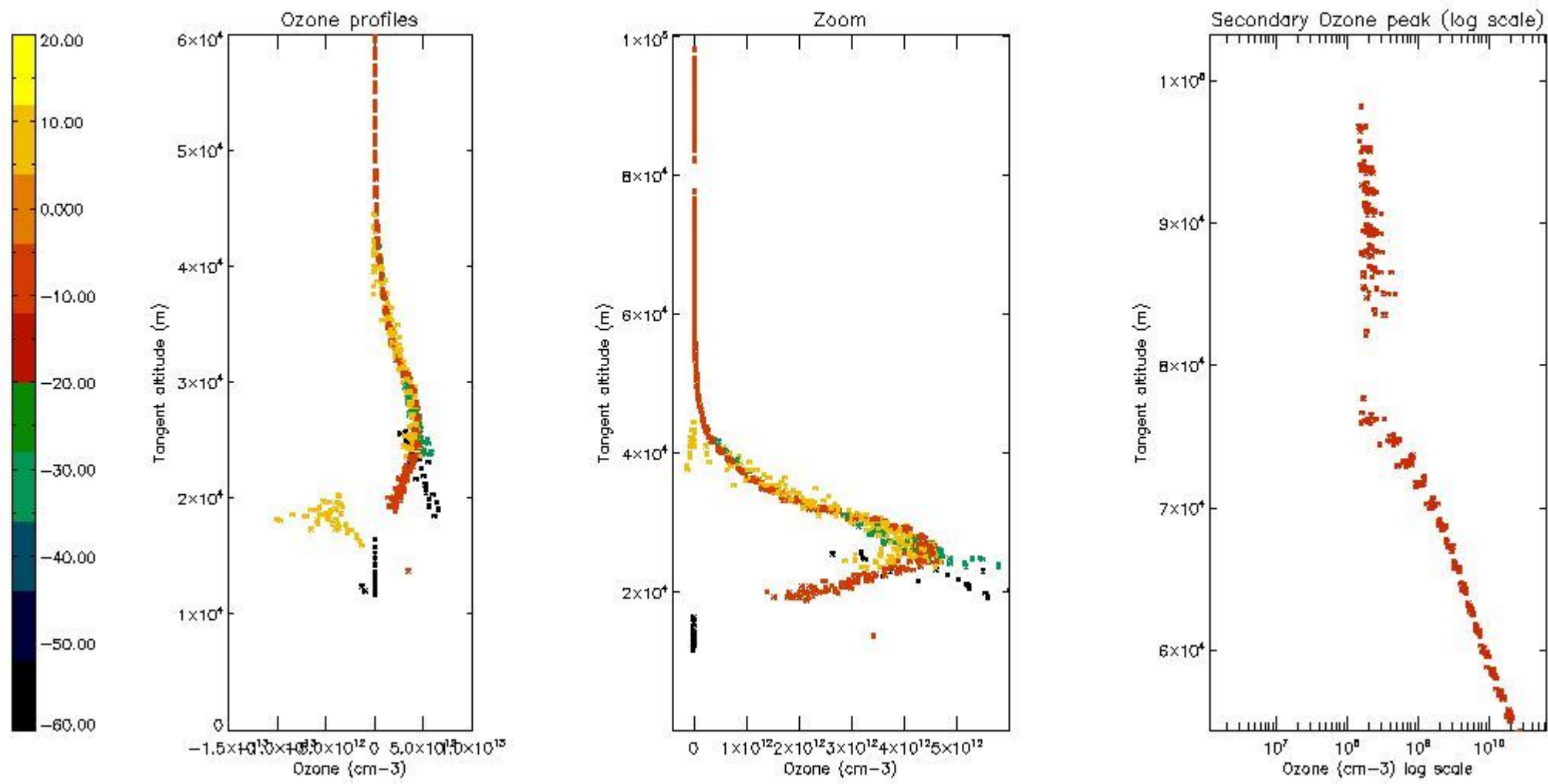
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



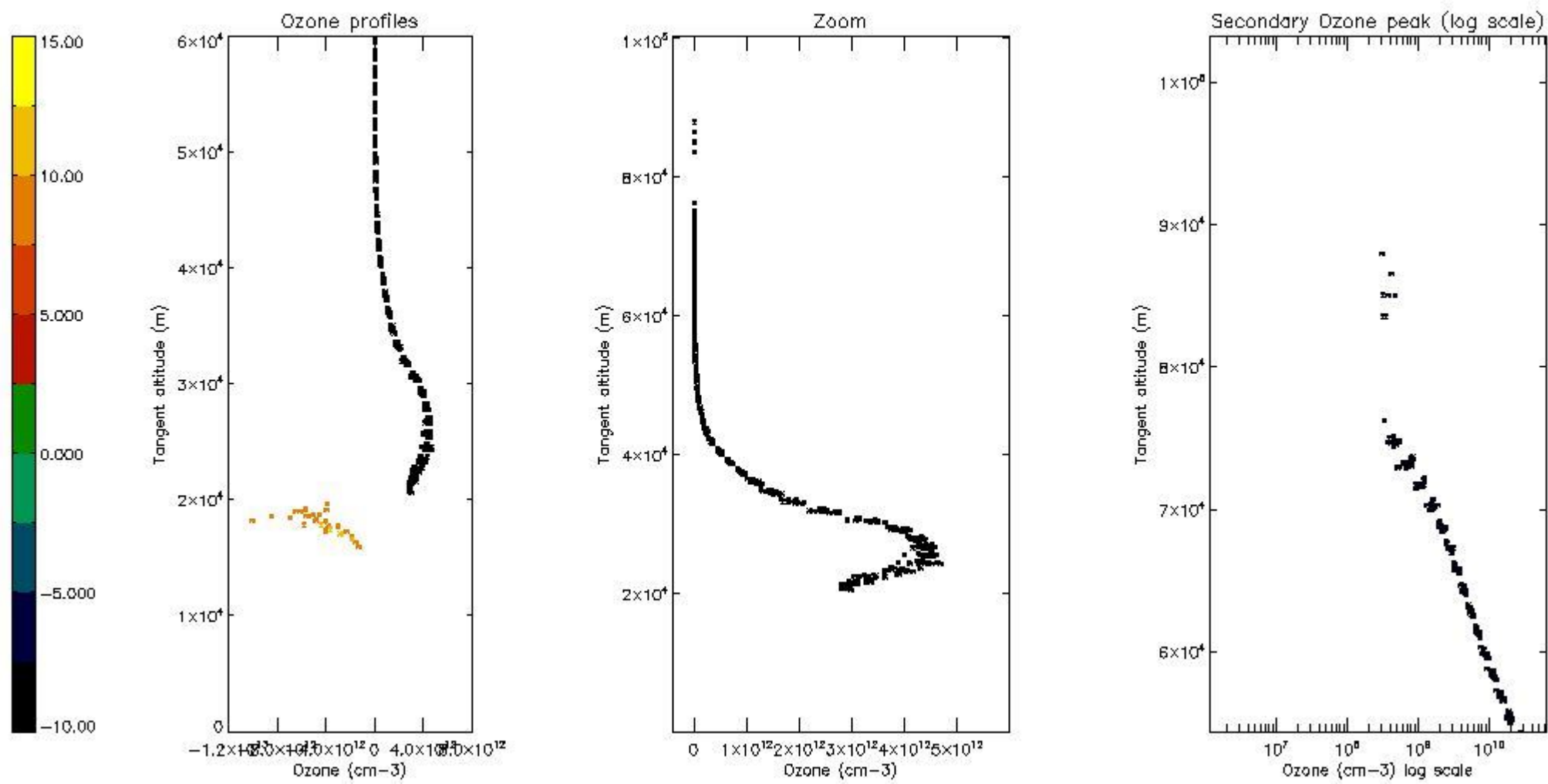
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



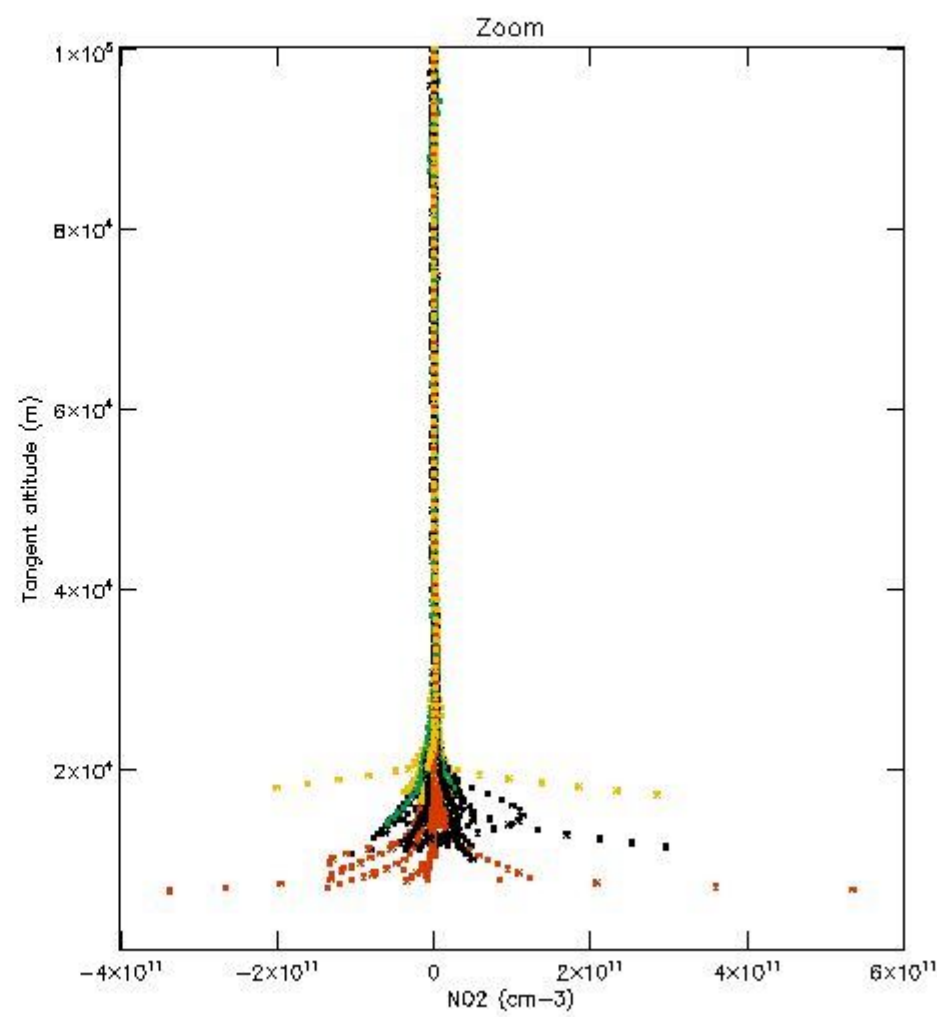
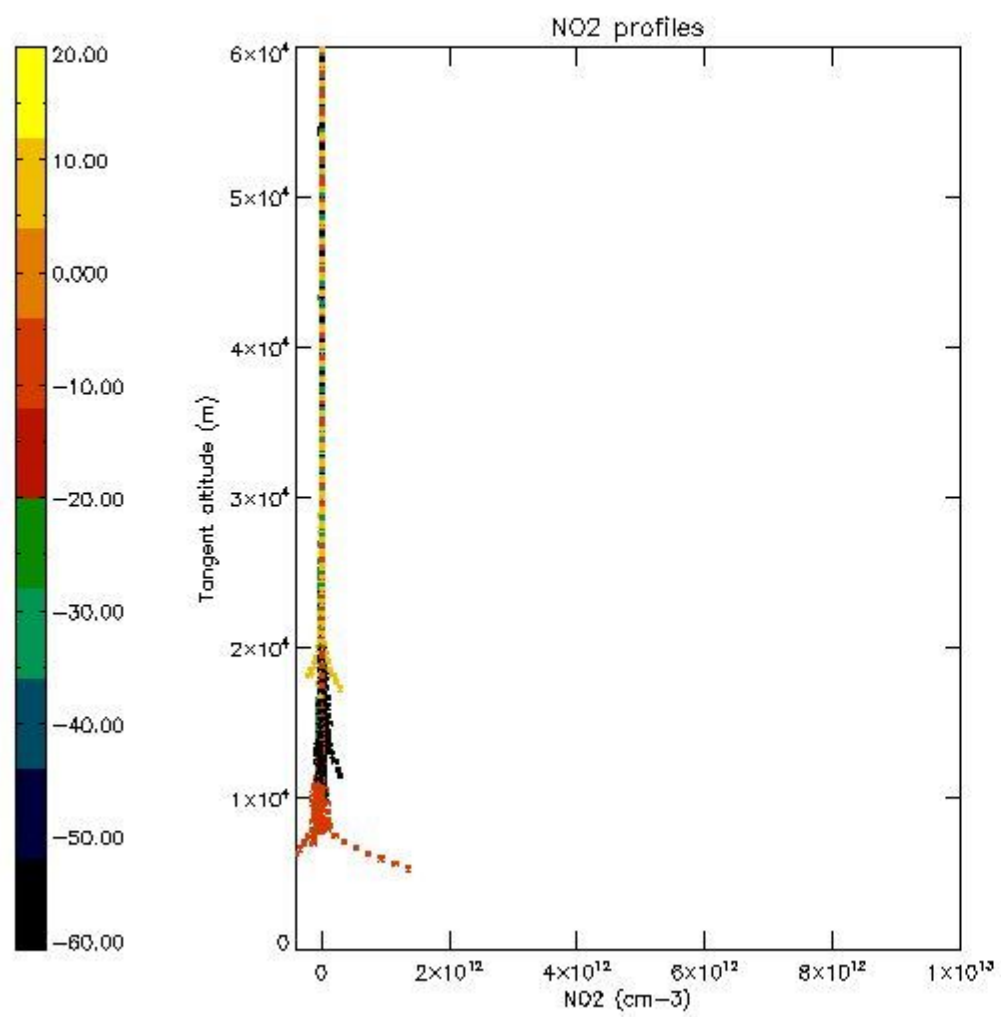
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



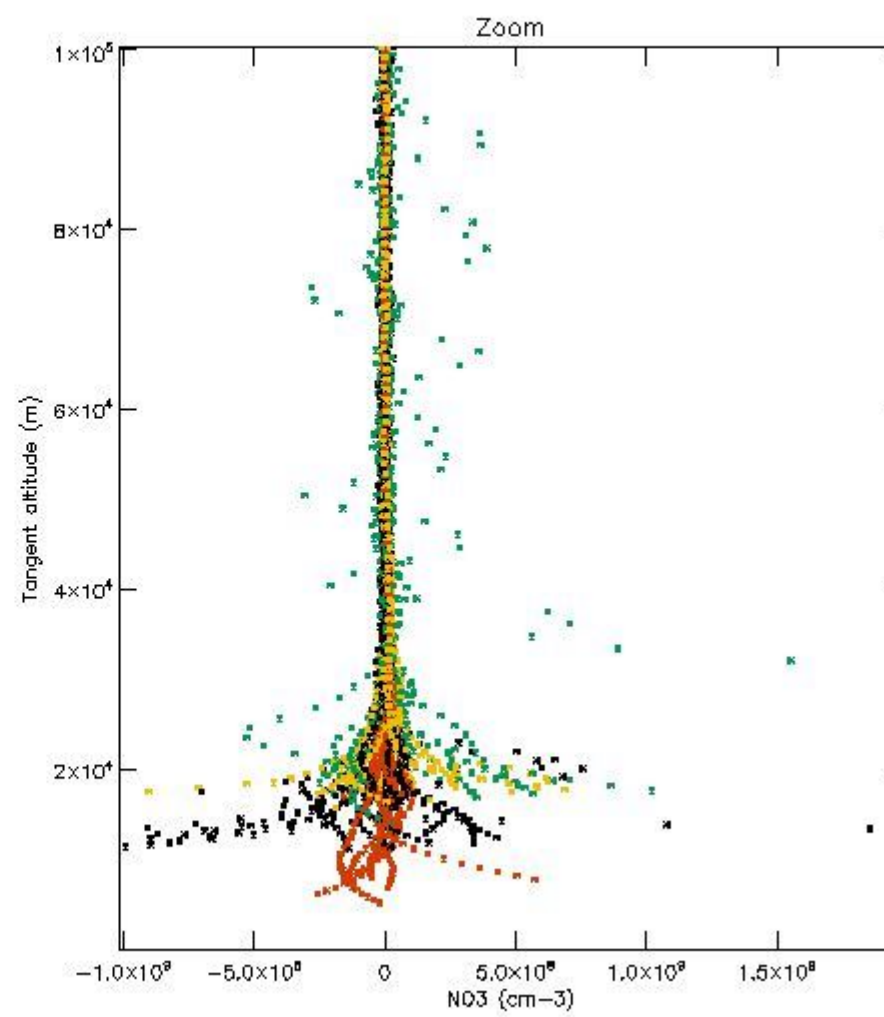
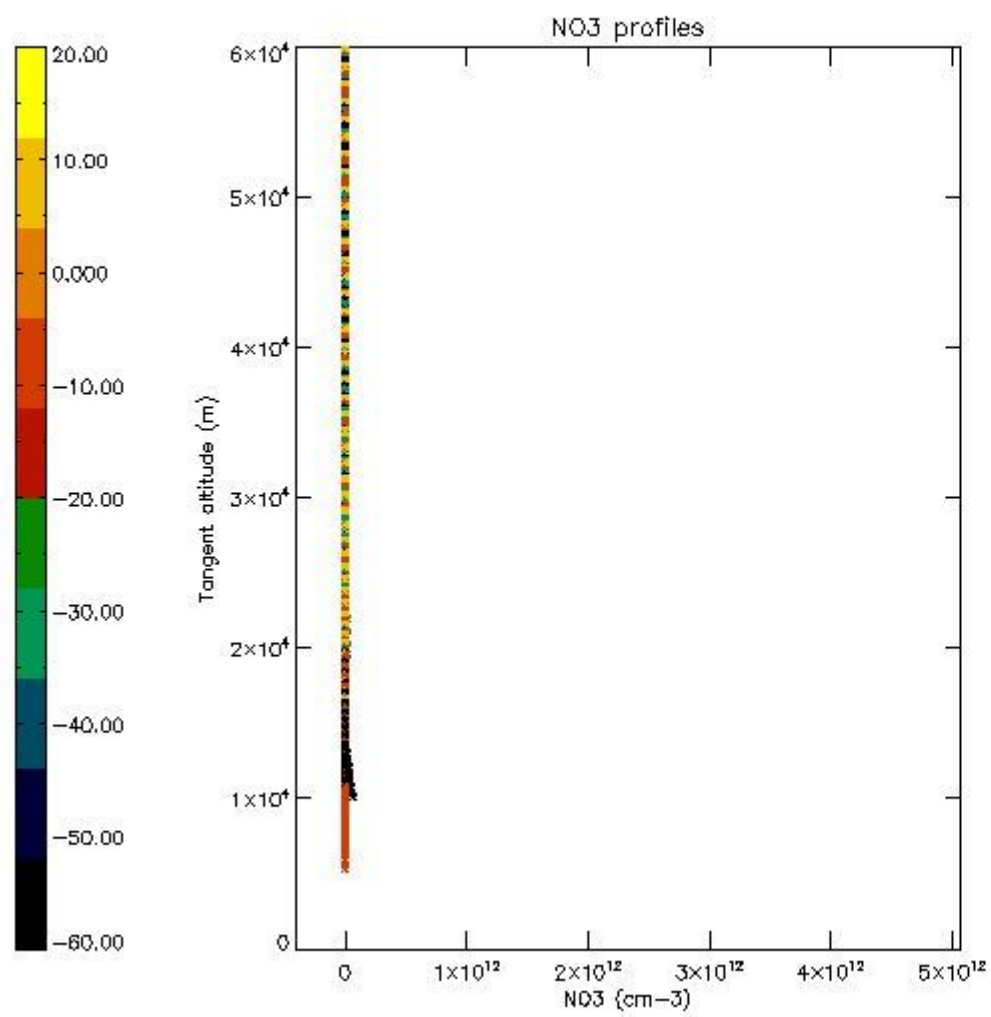
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



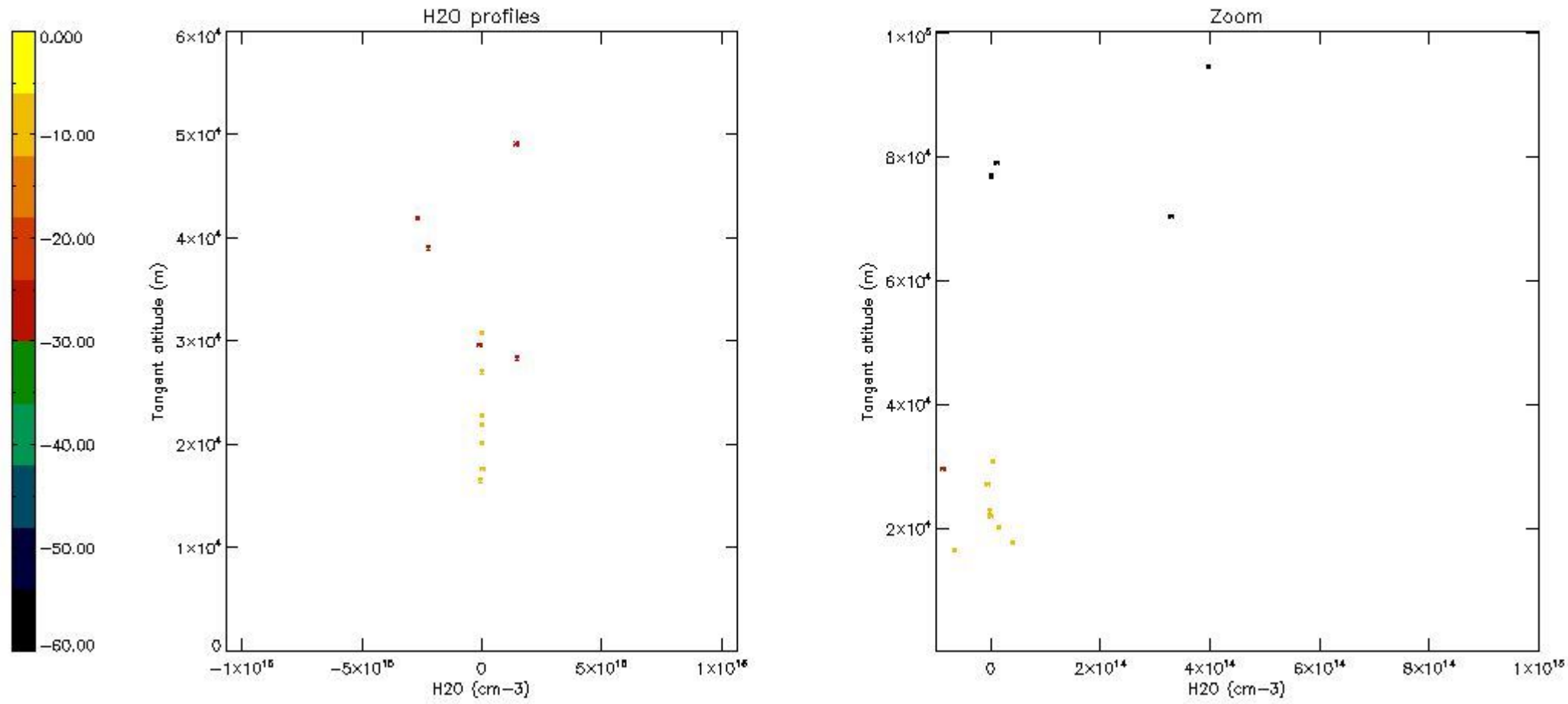
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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	19-JUL-2011 00:00:14
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	19-JUL-2011 00:00:14
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	19-JUL-2011 00:00:14

GOMOS Level 2 Daily Report

SUMMARY

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

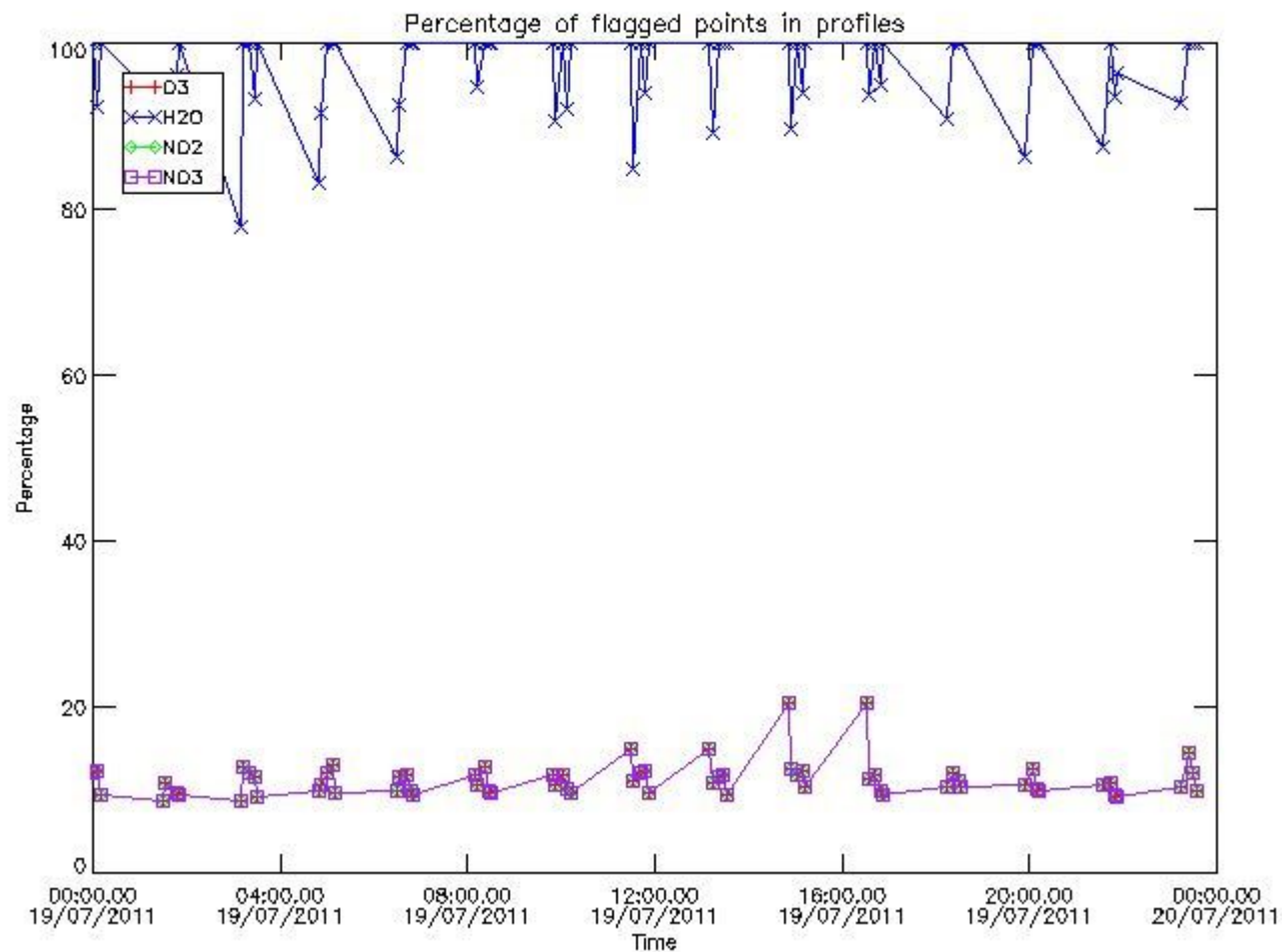
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279	GOM_NL__2PRFIN20110719_223144_000000403104_00360_49081_8957.N1	19-JUL-2011 22:31:44	Bright	39.500	144	18Del Cyg	2.8600	11000.	79	49081	No
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281	GOM_NL__2PRFIN20110719_223846_000000443104_00360_49081_8959.N1	19-JUL-2011 22:38:46	Bright	43.500	89	5Alp Cep	2.4510	8000.0	87	49081	No
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284	GOM_NL__2PRFIN20110719_225425_000000623104_00360_49081_8962.N1	19-JUL-2011 22:54:25	Bright	62.000	35	33Alp Per	1.7950	6250.0	124	49081	No
285	GOM_NL__2PRFIN20110719_225725_000000463104_00360_49081_8963.N1	19-JUL-2011 22:57:25	Bright	46.000	79	26Bet Per	2.3100	13100.	92	49081	No
286	GOM_NL__2PRFIN20110719_230031_000000453104_00360_49081_8964.N1	19-JUL-2011 23:00:31	Twilight	44.500	150	44Zet Per	2.8900	28000.	89	49081	No
287	GOM_NL__2PRFIN20110719_230313_000000493104_00360_49081_8965.N1	19-JUL-2011 23:03:13	Twilight	48.500	146	25Eta Tau	2.8730	15200.	97	49081	No
288	GOM_NL__2PRFIN20110719_230448_000000463104_00360_49081_8966.N1	19-JUL-2011 23:04:48	Twilight	46.000	13	87Alp Tau	0.86700	3800.0	92	49081	No
289	GOM_NL__2PRFIN20110719_231432_000000503104_00360_49081_8967.N1	19-JUL-2011 23:14:32	Dark	49.500	165	34Gam Eri	2.9500	3200.0	99	49081	No
290	GOM_NL__2PRFIN20110719_232341_000000423104_00360_49081_8968.N1	19-JUL-2011 23:23:41	Dark	42.000	157	The1Eri	2.9060	9300.0	84	49081	No
291	GOM_NL__2PRFIN20110719_232942_000000433104_00361_49082_8949.N1	19-JUL-2011 23:29:42	Dark	42.500	9	Alp Eri	0.45300	24000.	85	49082	No
292	GOM_NL__2PRFIN20110719_233314_000000523104_00361_49082_8950.N1	19-JUL-2011 23:33:14	Dark	51.500	84	Alp Phe	2.3970	4500.0	103	49082	No
293	GOM_NL__2PRFIN20110719_233704_000000403104_00361_49082_8951.N1	19-JUL-2011 23:37:04	Straylight	39.500	148	Alp Tuc	2.8780	4100.0	79	49082	No
294	GOM_NL__2PRFIN20110719_233837_000000653104_00361_49082_8952.N1	19-JUL-2011 23:38:37	Straylight	65.000	63	Bet Gru	2.1500	2800.0	130	49082	No
295	GOM_NL__2PRFIN20110719_234005_000000563104_00361_49082_8953.N1	19-JUL-2011 23:40:05	Straylight	56.000	31	Alp Gru	1.7340	15200.	112	49082	No
296	GOM_NL__2PRFIN20110719_234317_000000483104_00361_49082_8954.N1	19-JUL-2011 23:43:17	Straylight	47.500	172	Gam Gru	3.0030	13100.	95	49082	No

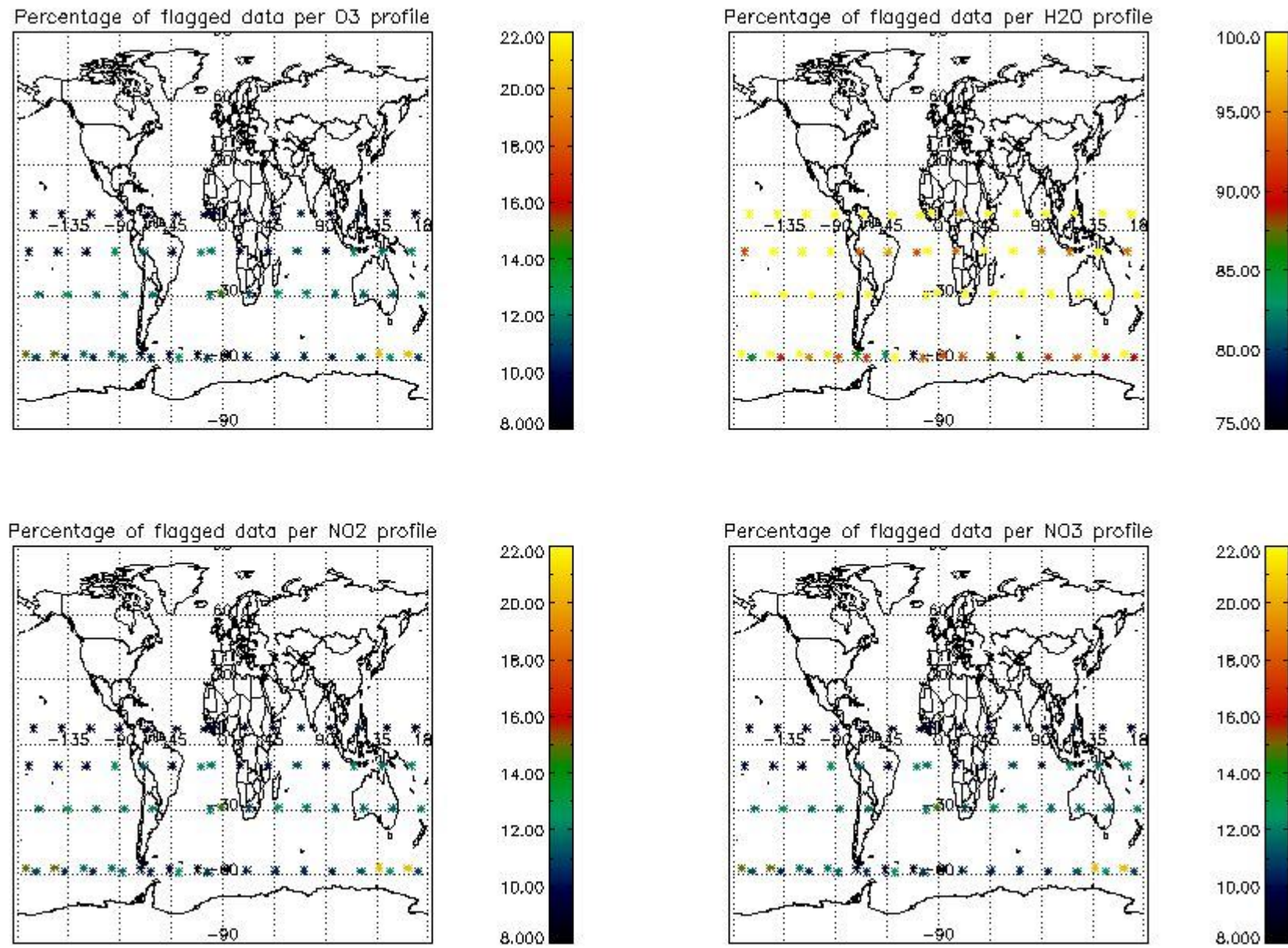
3. Quality information per product

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)

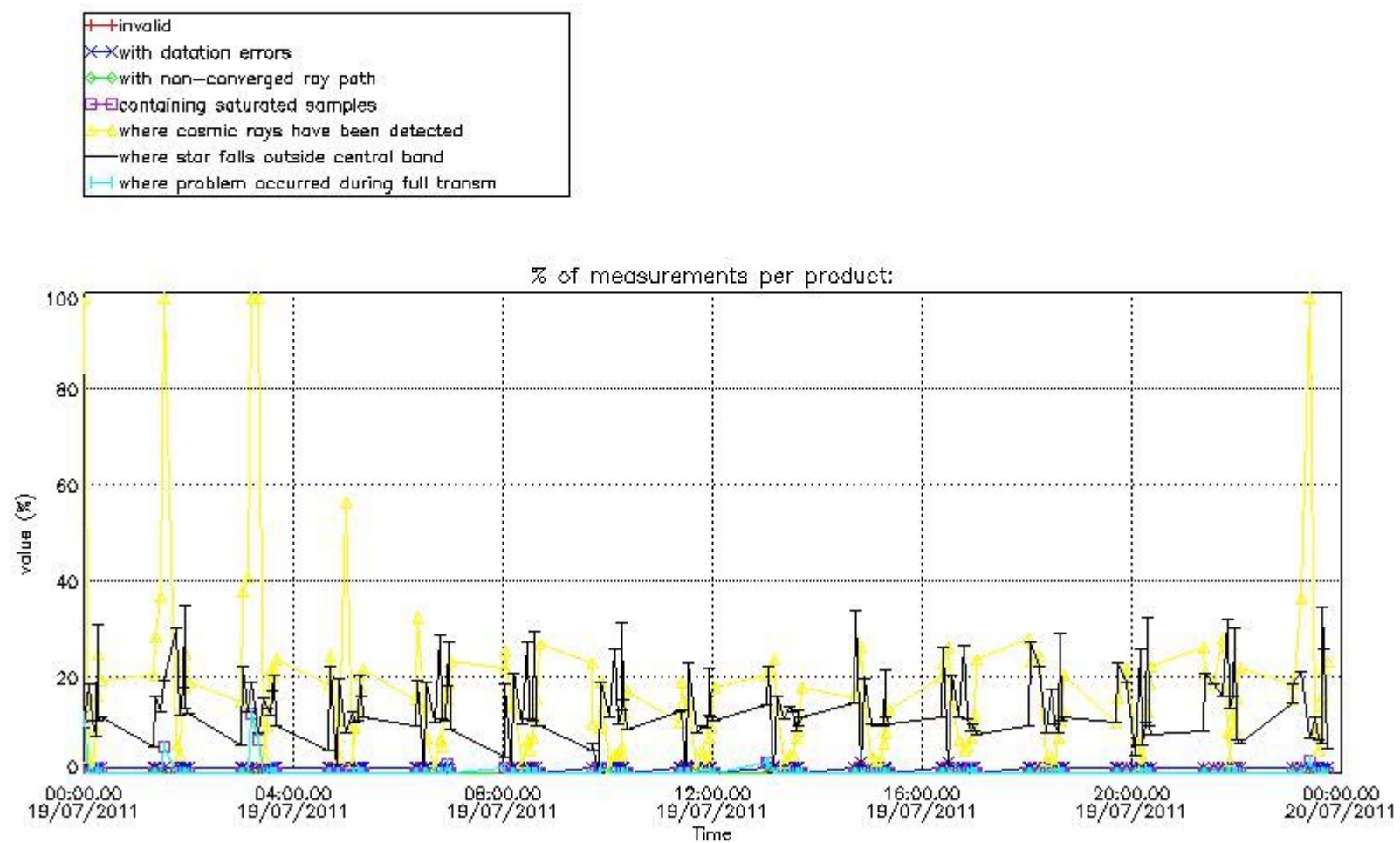


4. Level 1 quality information per product

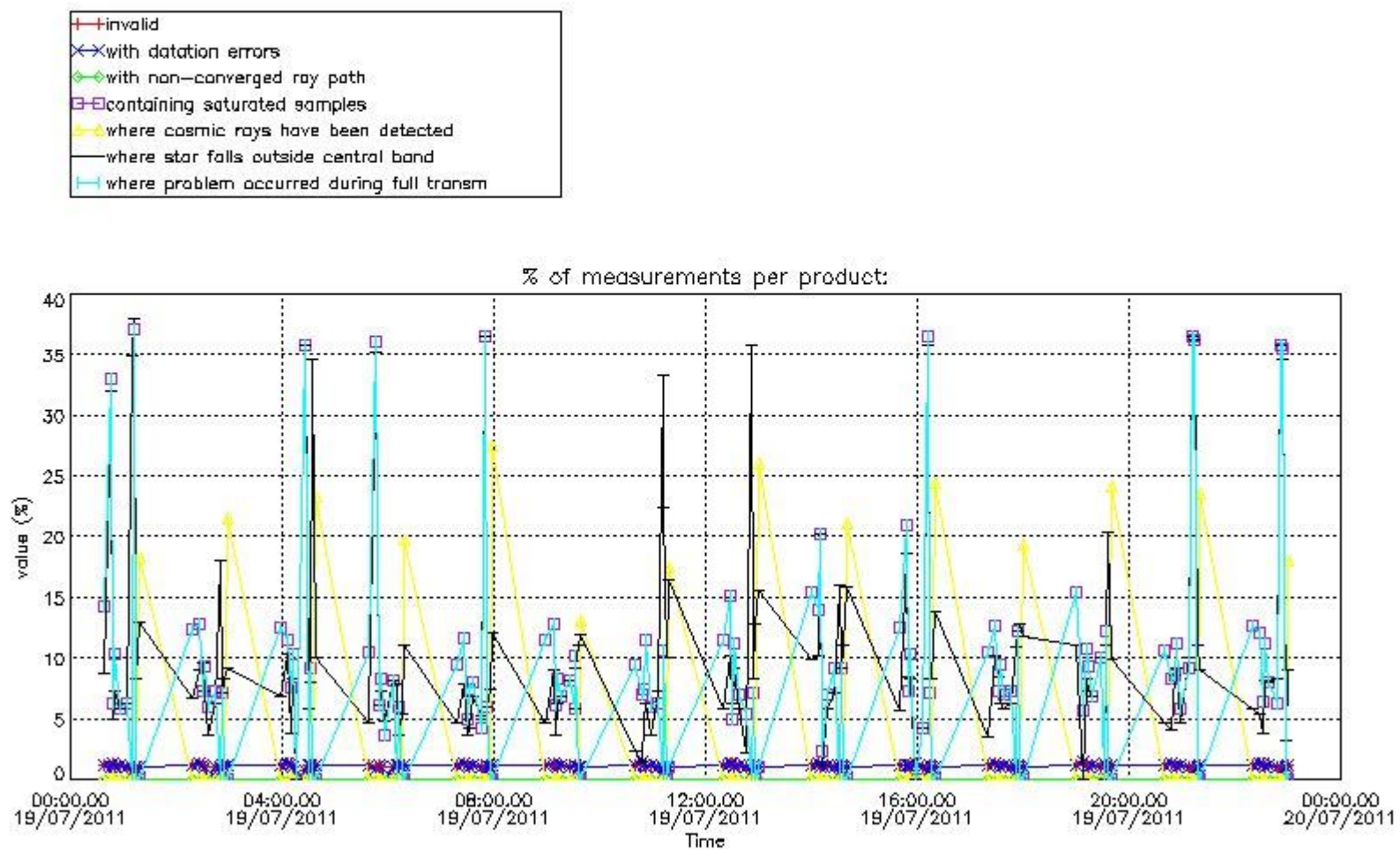
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



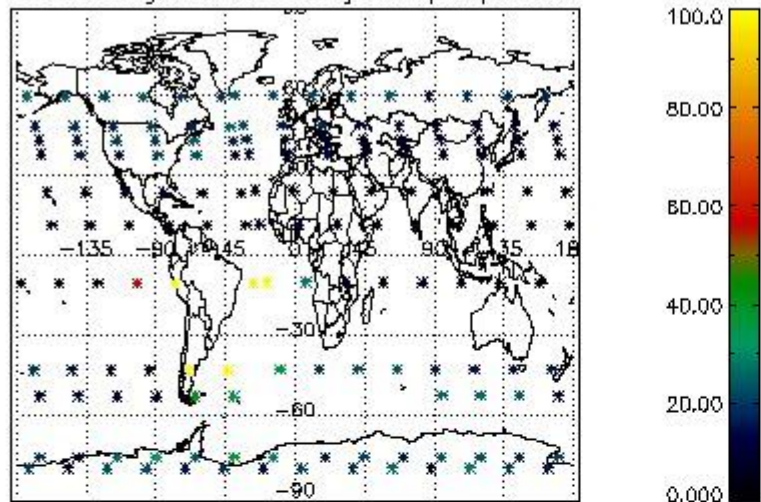
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



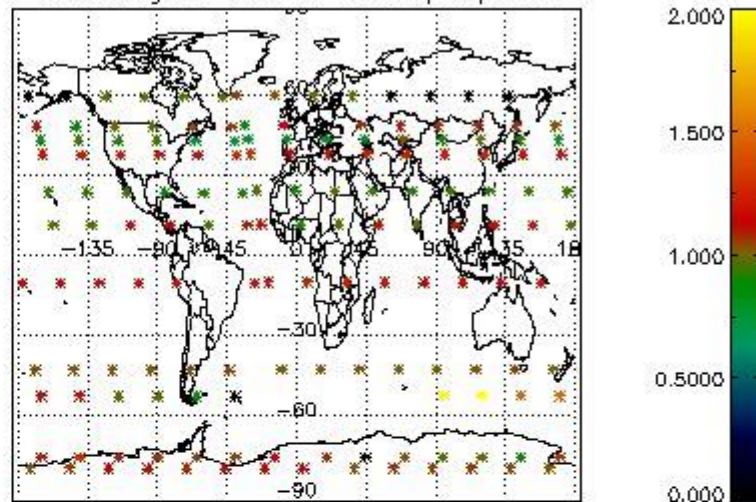
4.2 Plot quality information per product coming from level 1b processing (world map)

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

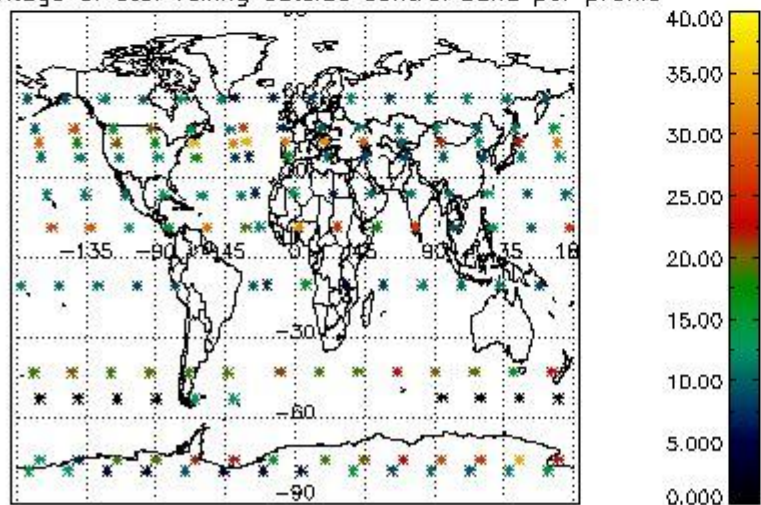
Percentage of cosmic ray hits per profile



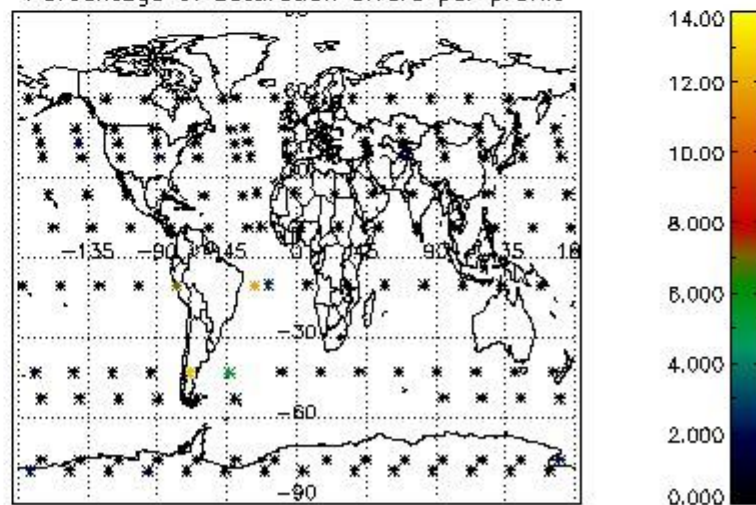
Percentage of datation errors per profile



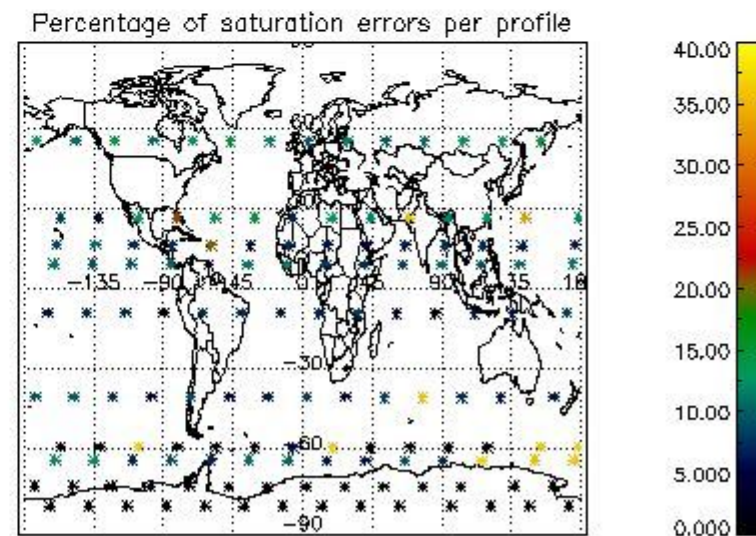
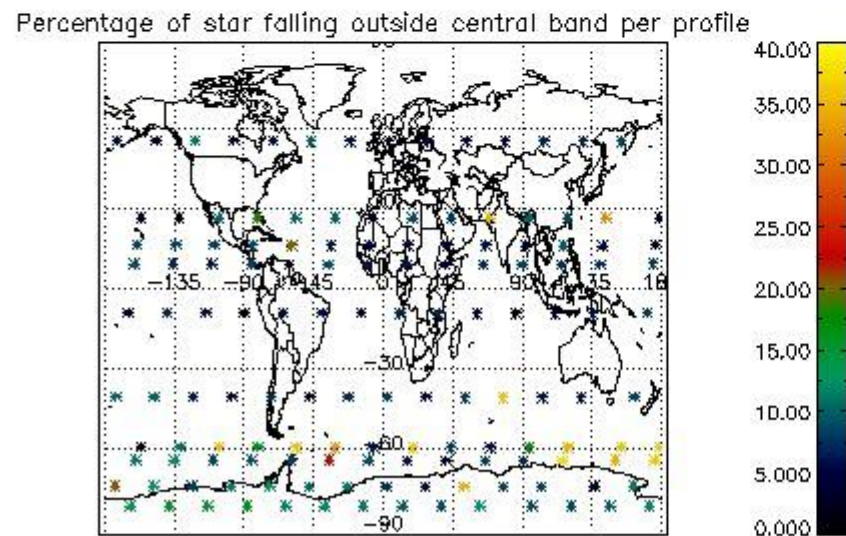
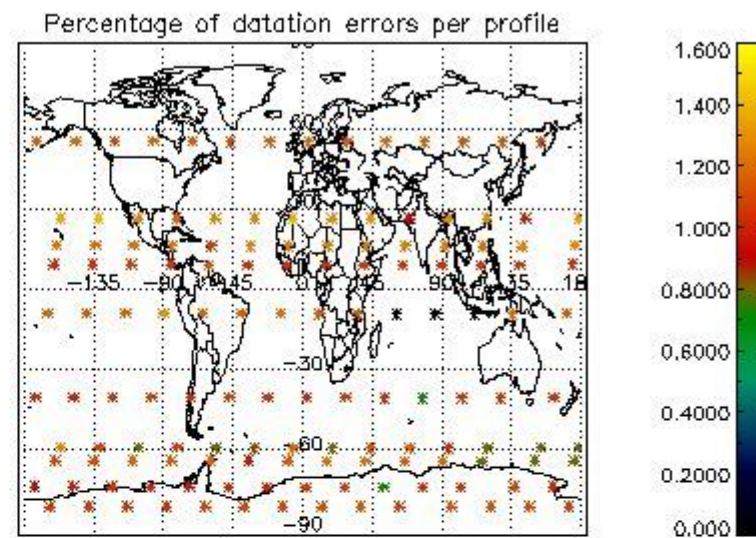
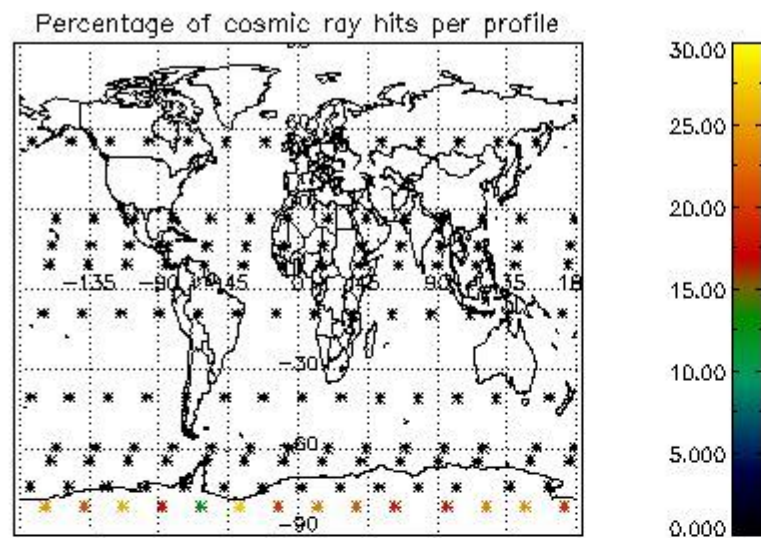
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

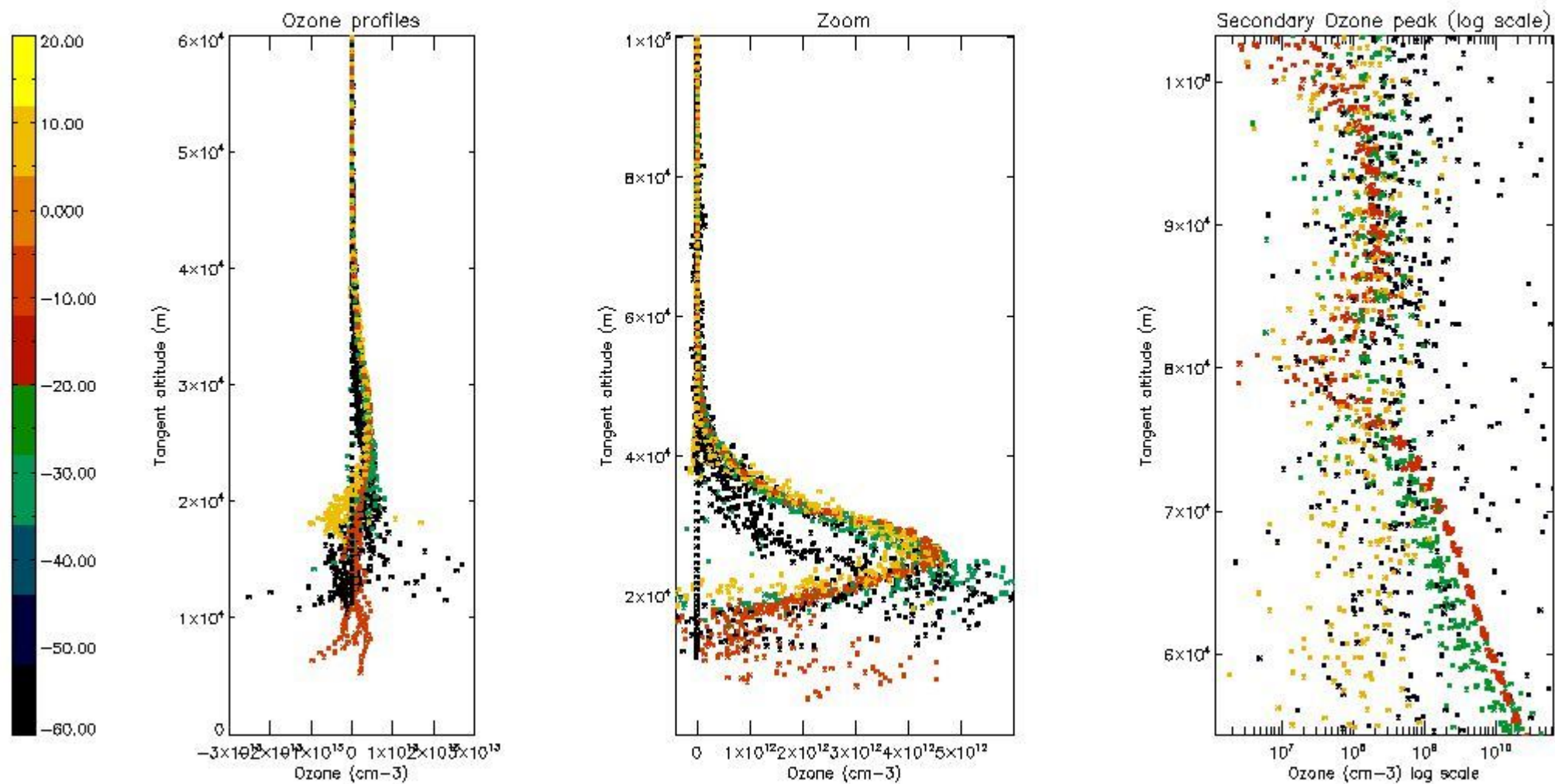
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	23
STD < 20	8

STD < 10	5
STD < 5	3

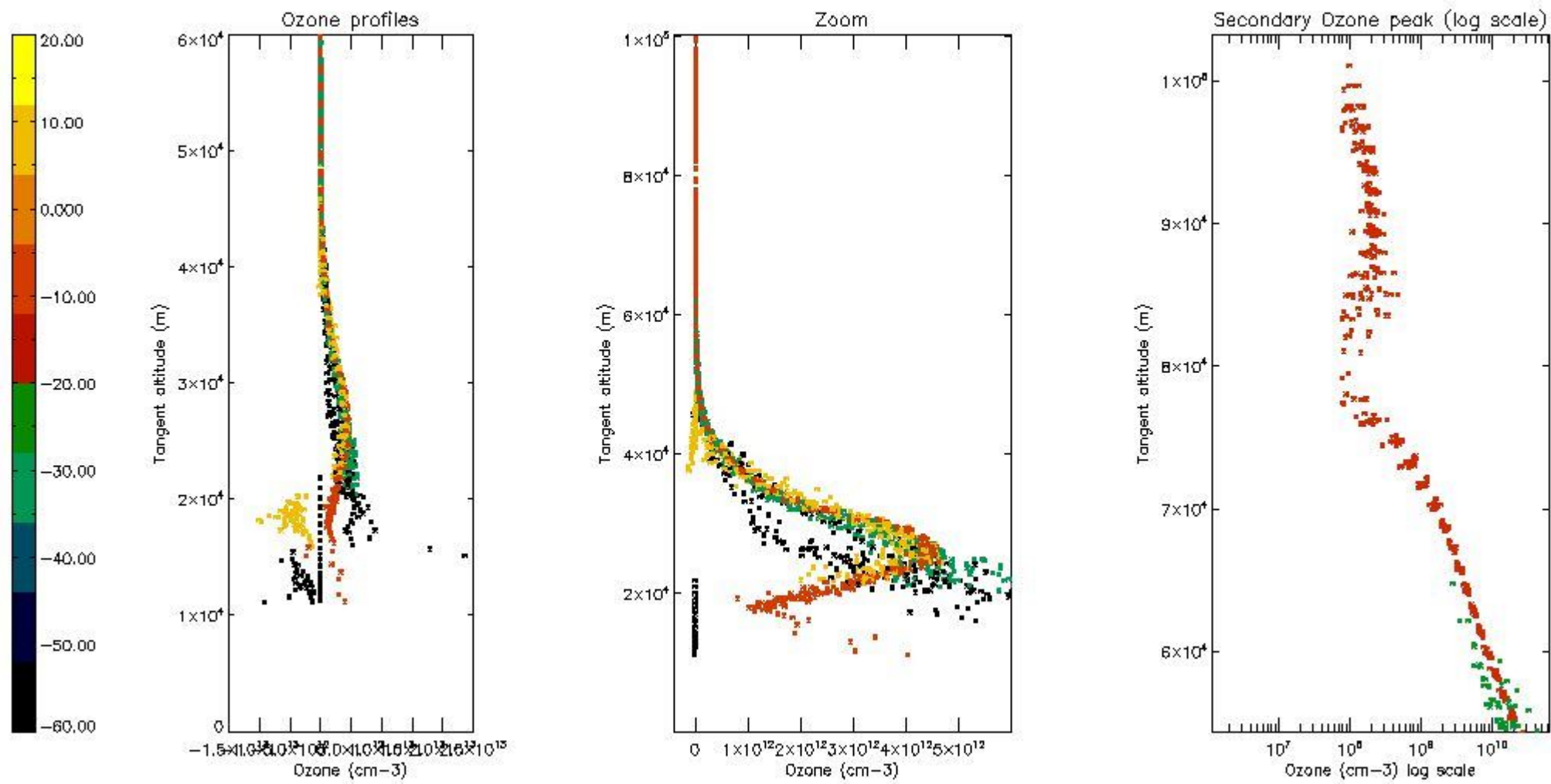
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



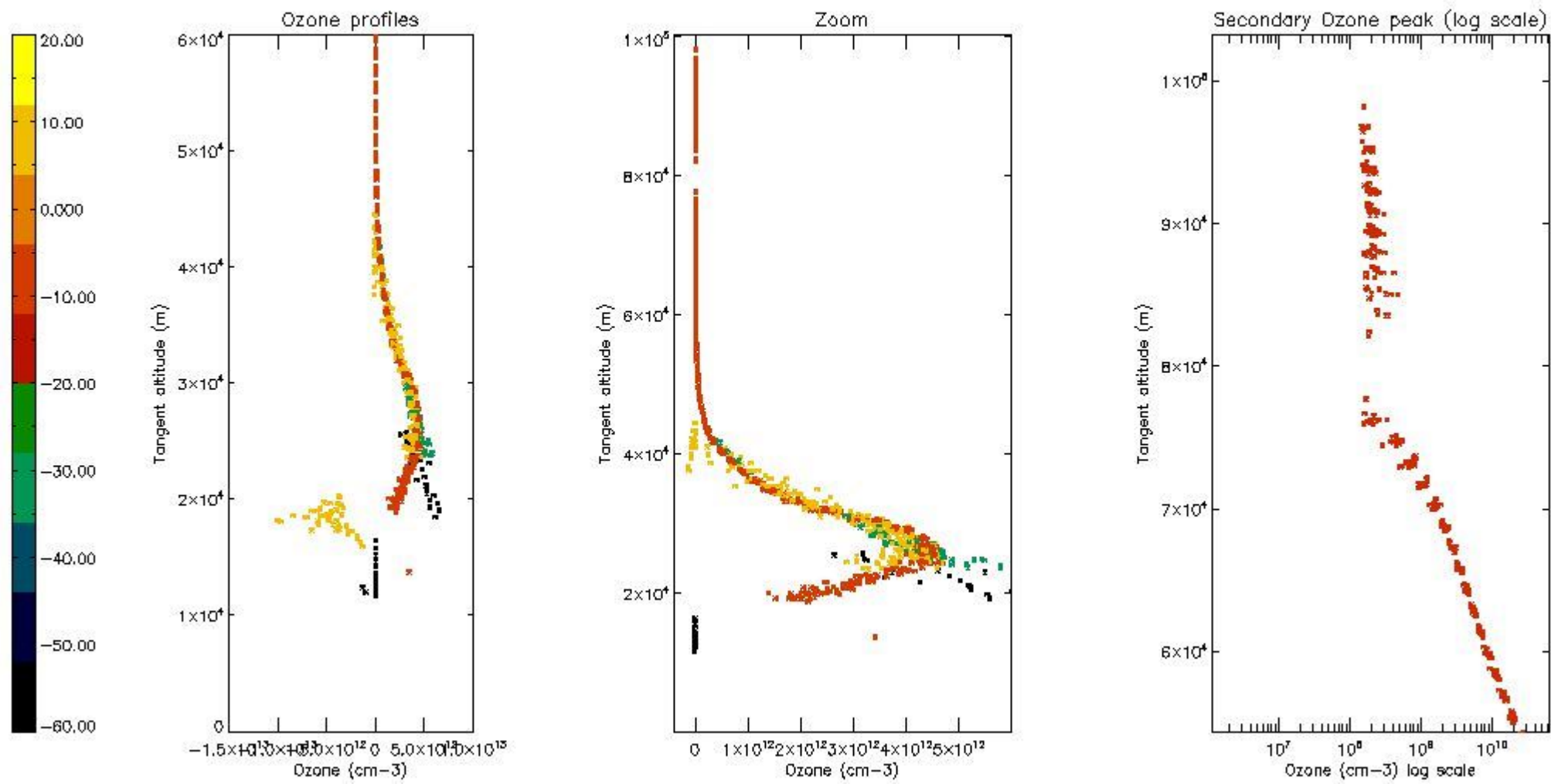
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



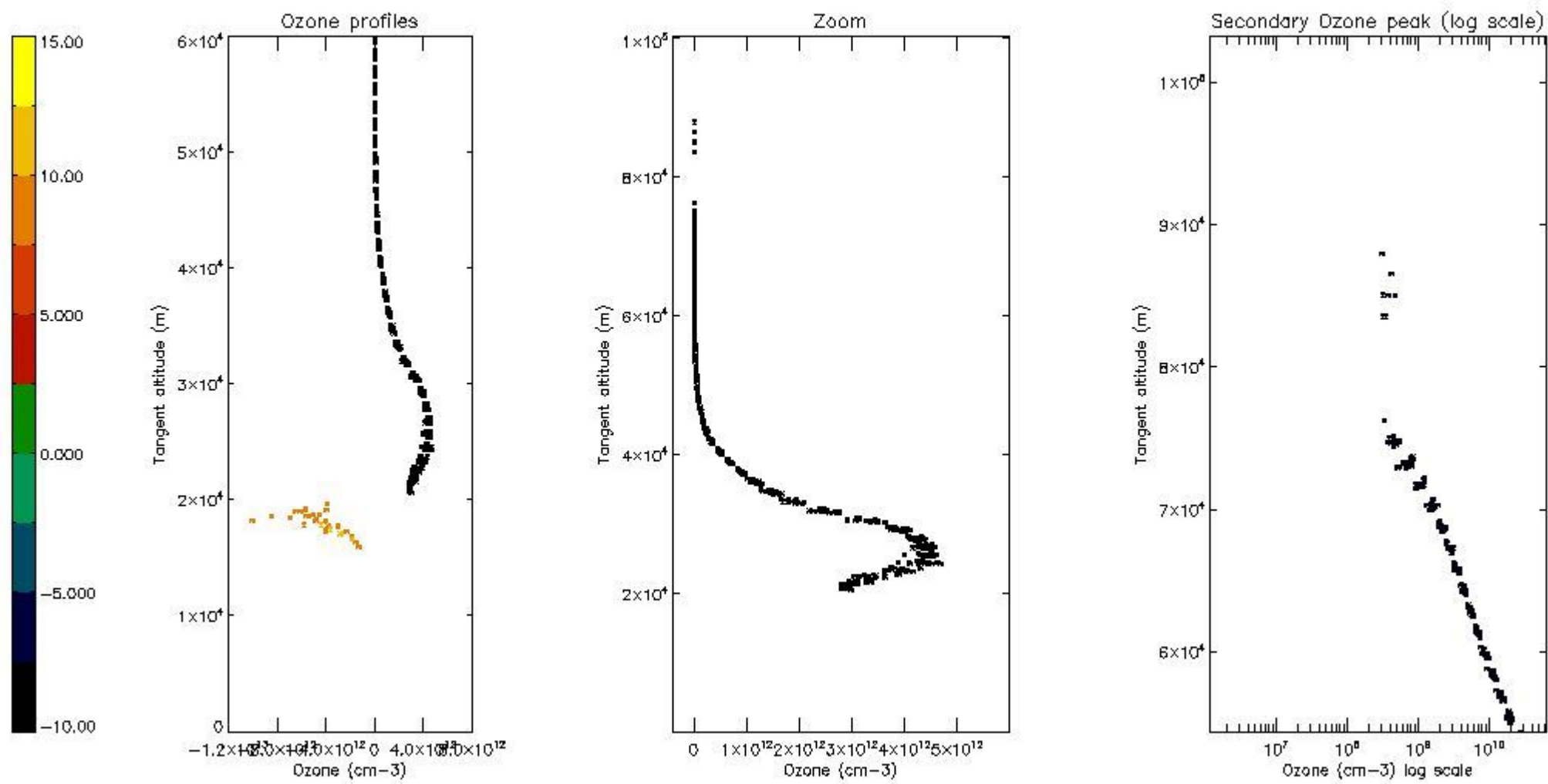
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



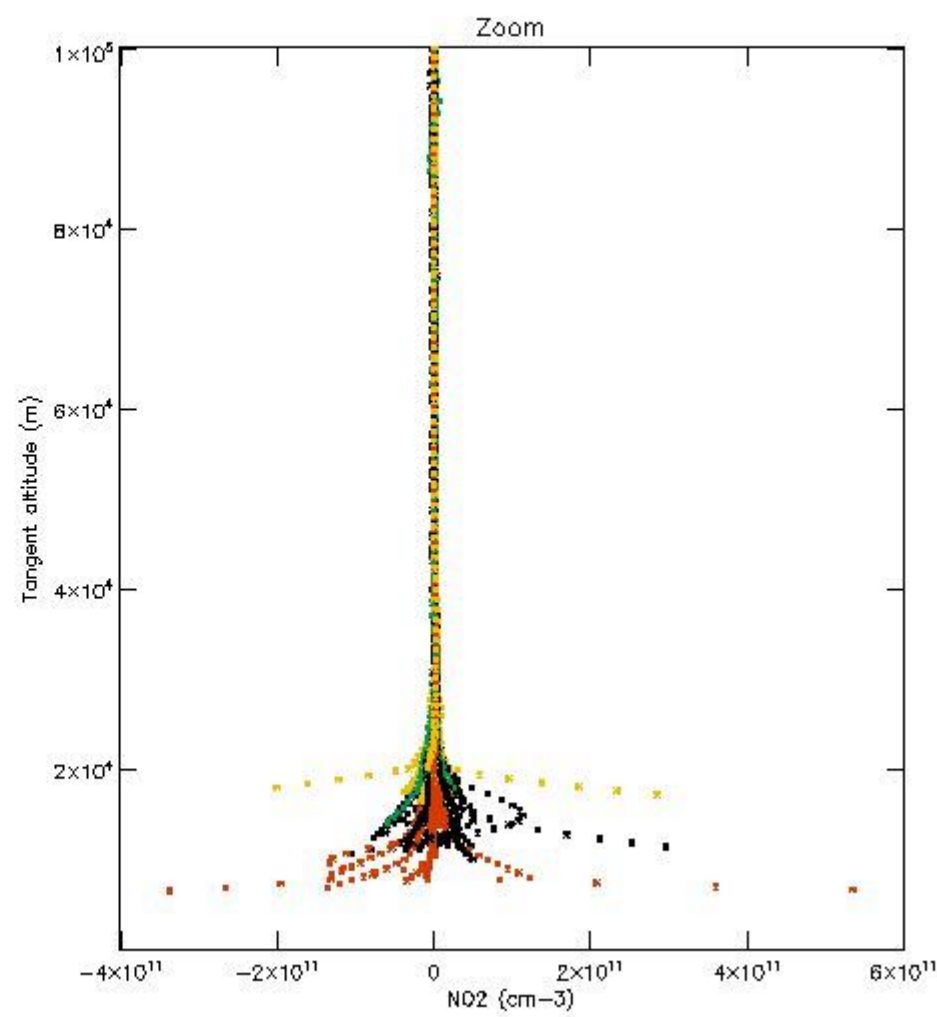
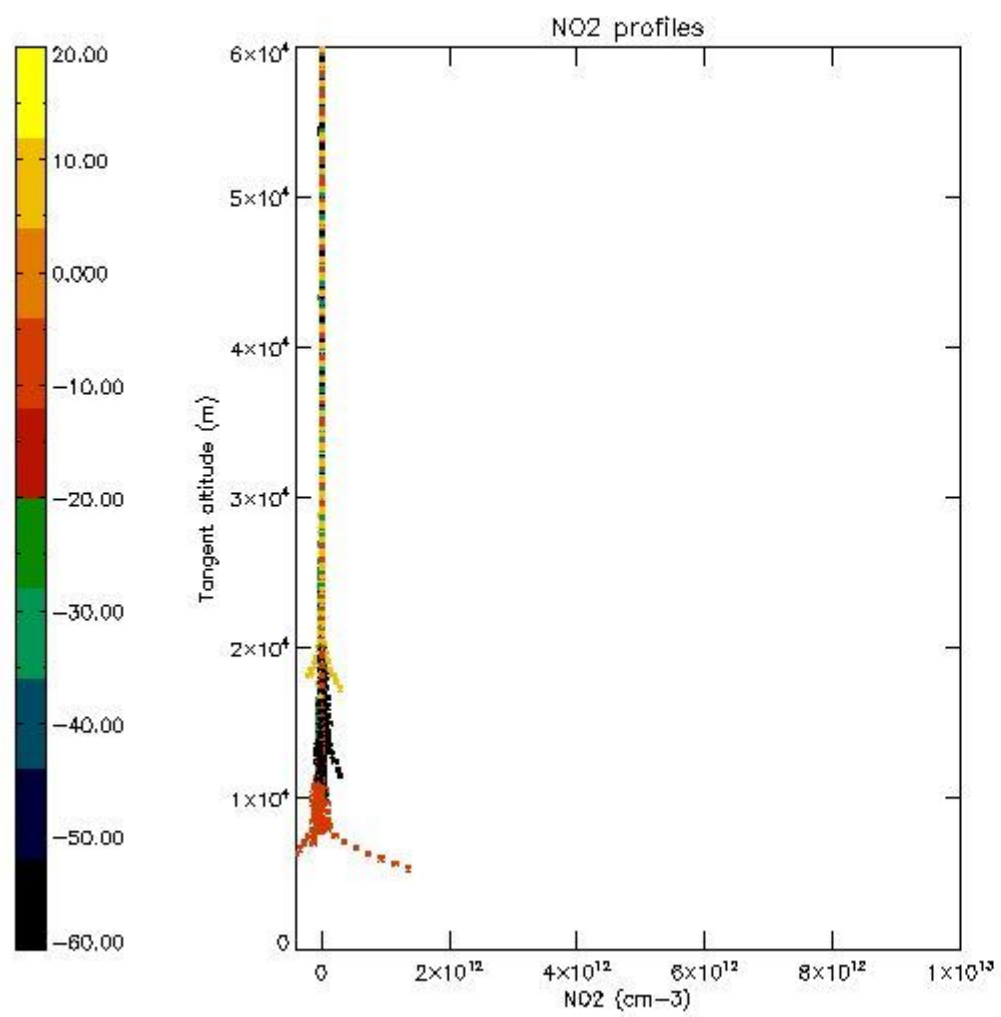
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



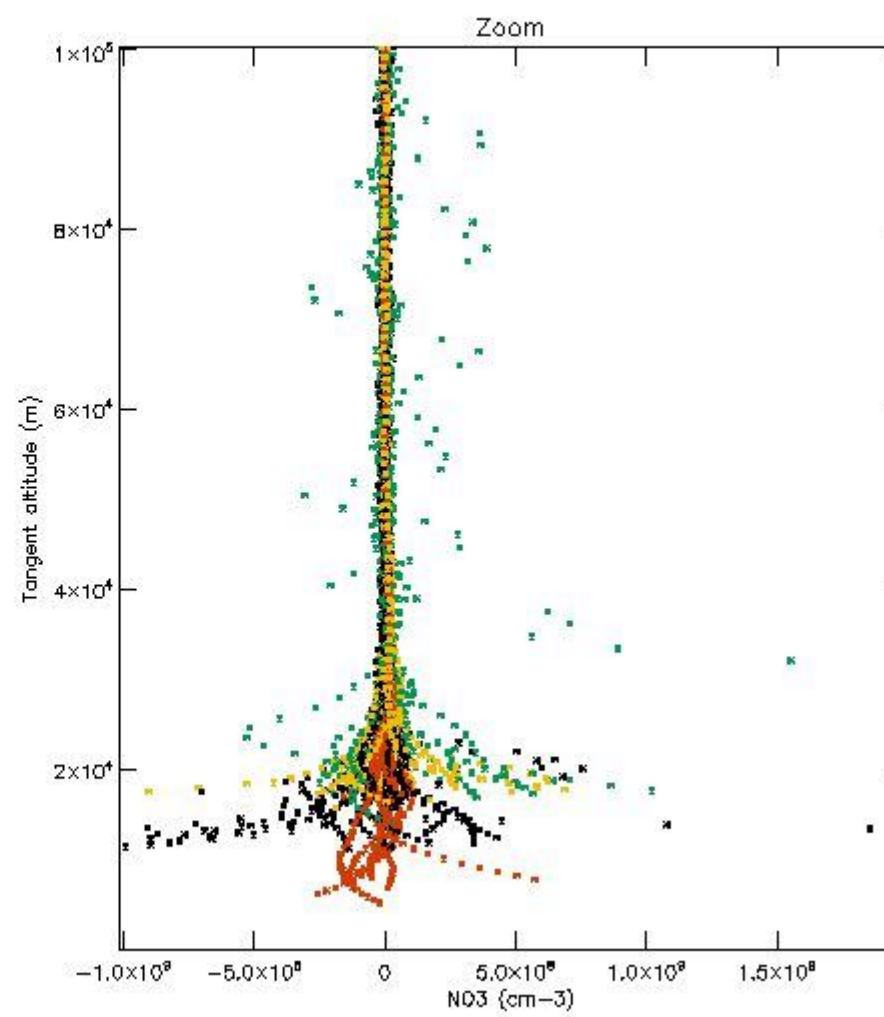
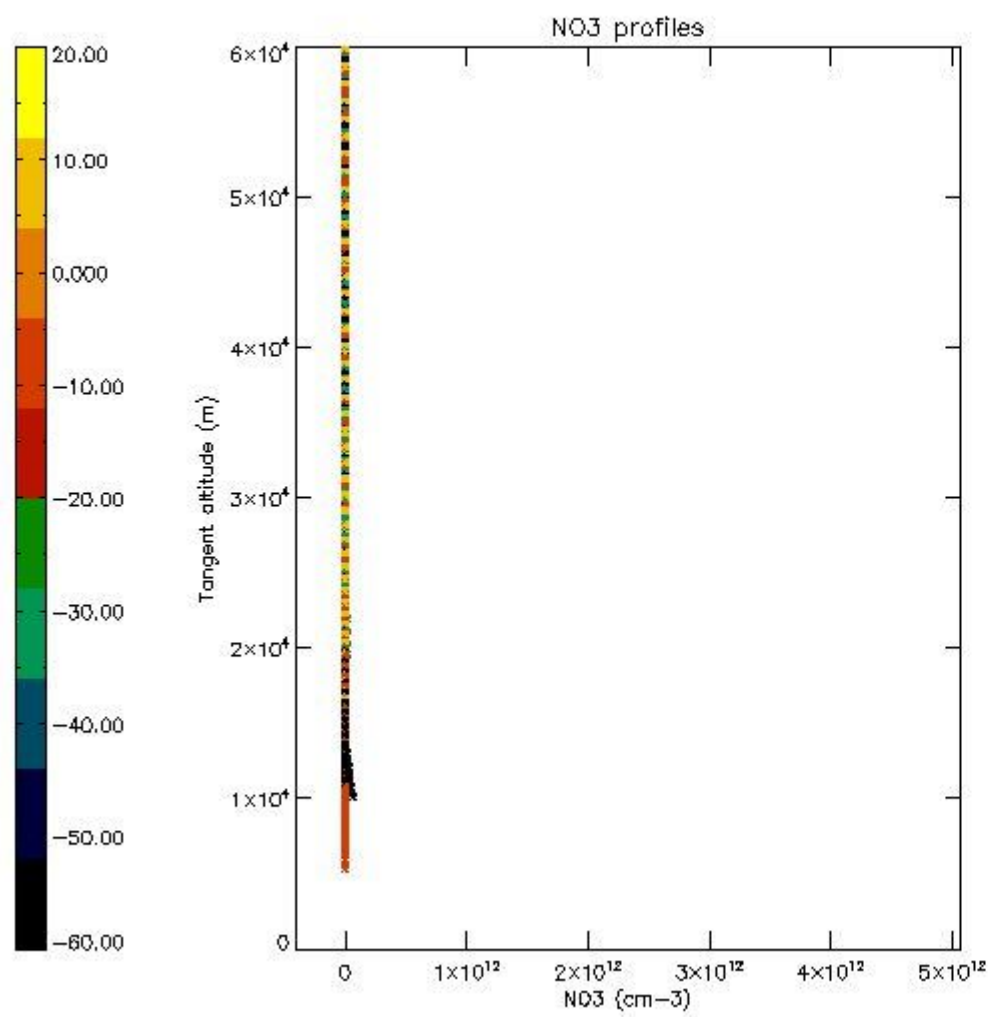
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



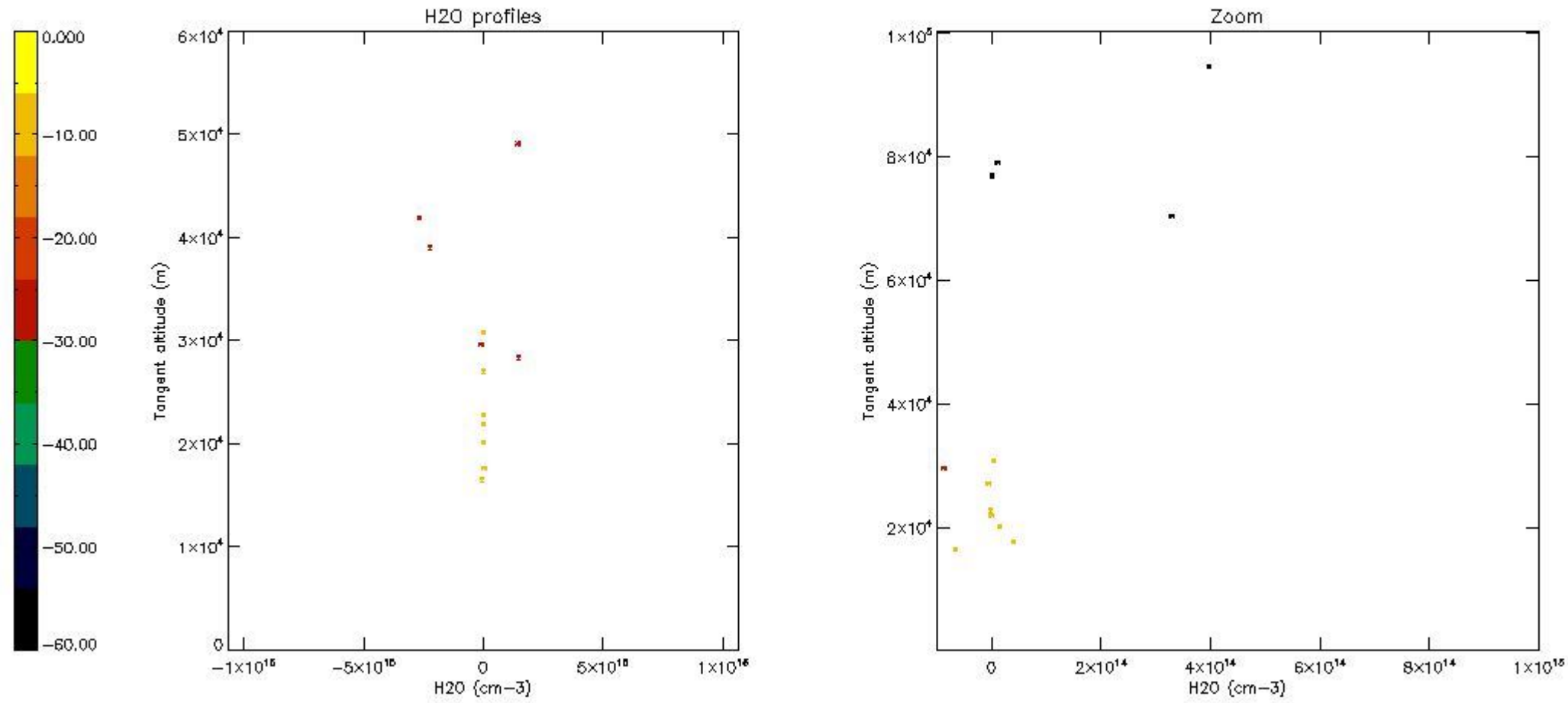
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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)

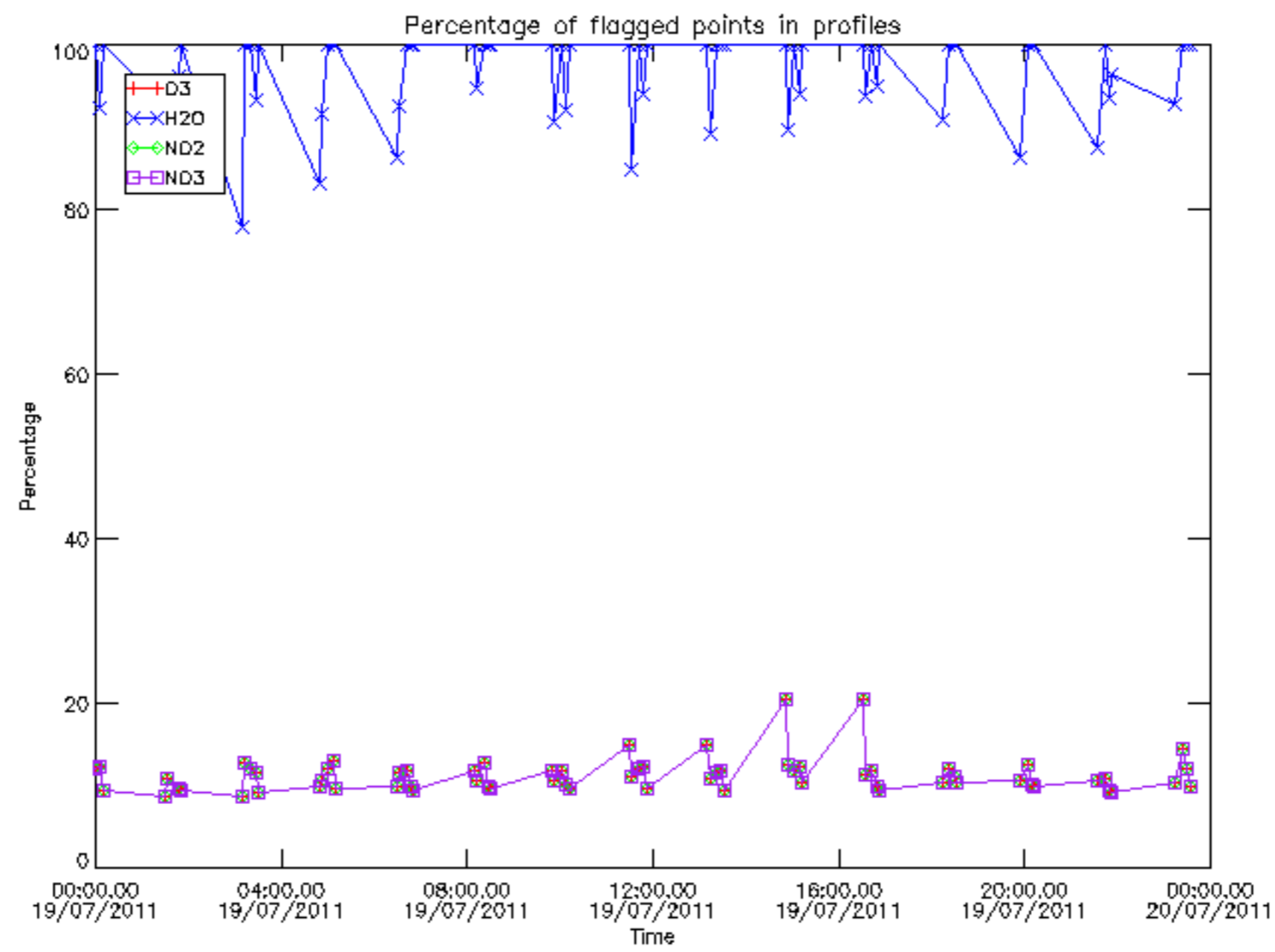
The colorbar represents the latitude.



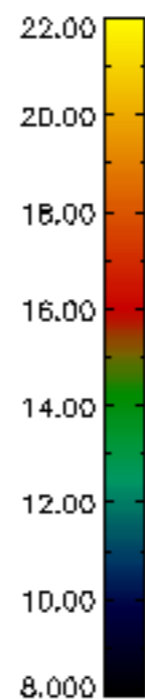
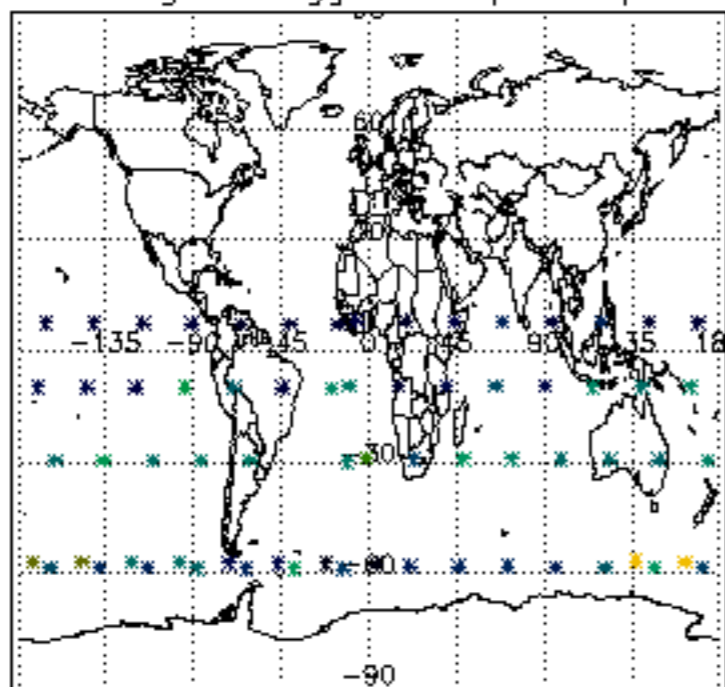
6. Auxiliary Data Files used for the production reported in section 2

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.

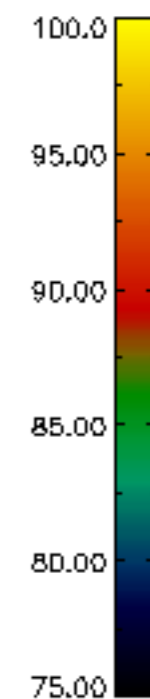
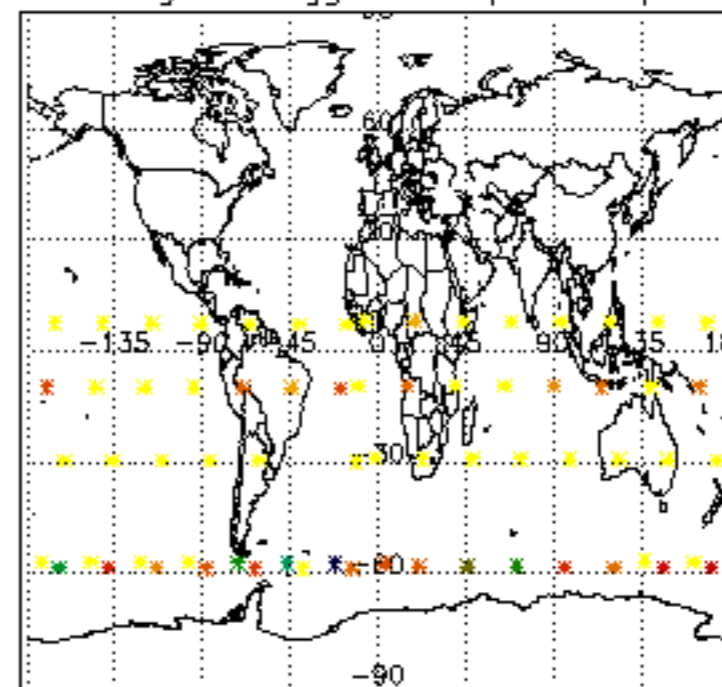
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	19-JUL-2011 00:00:14
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	19-JUL-2011 00:00:14
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	19-JUL-2011 00:00:14



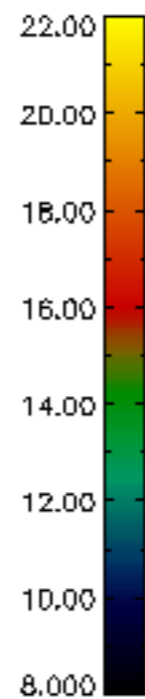
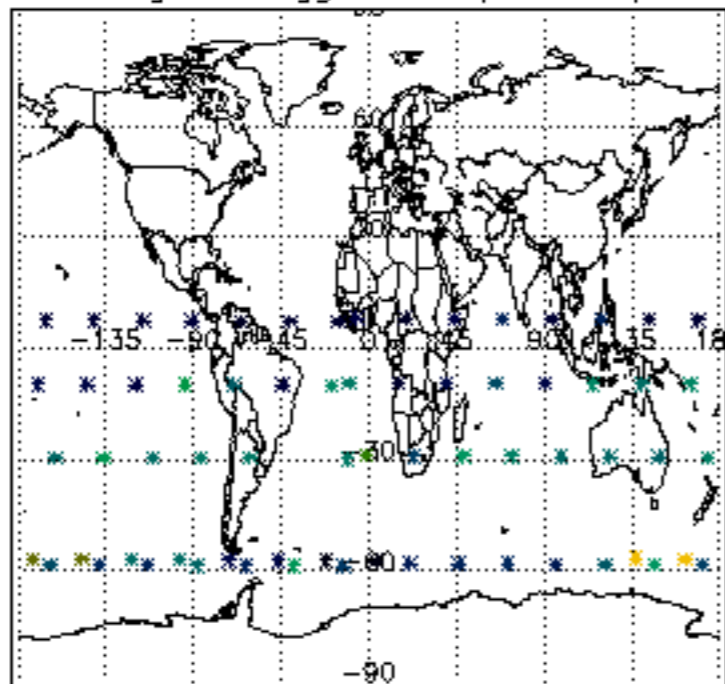
Percentage of flagged data per D3 profile



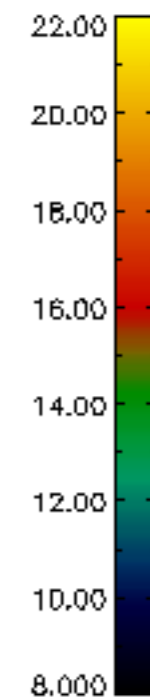
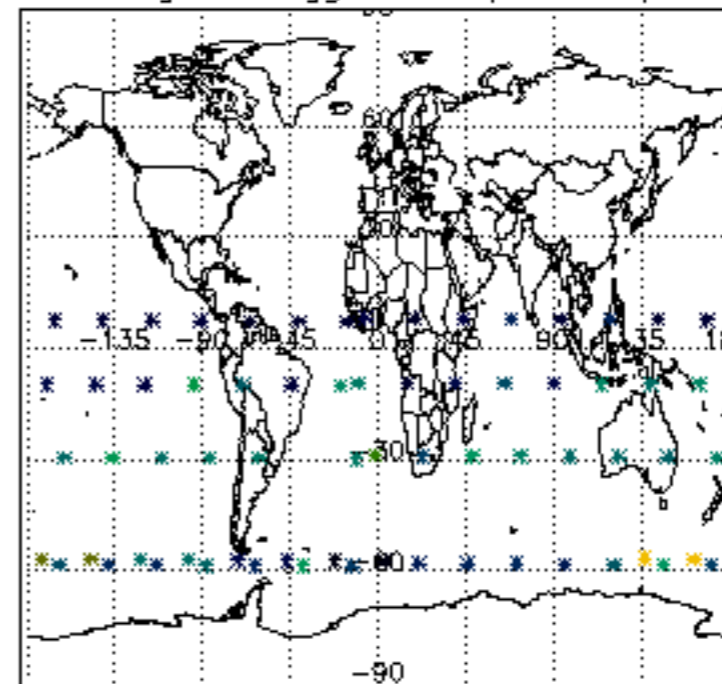
Percentage of flagged data per H2O profile

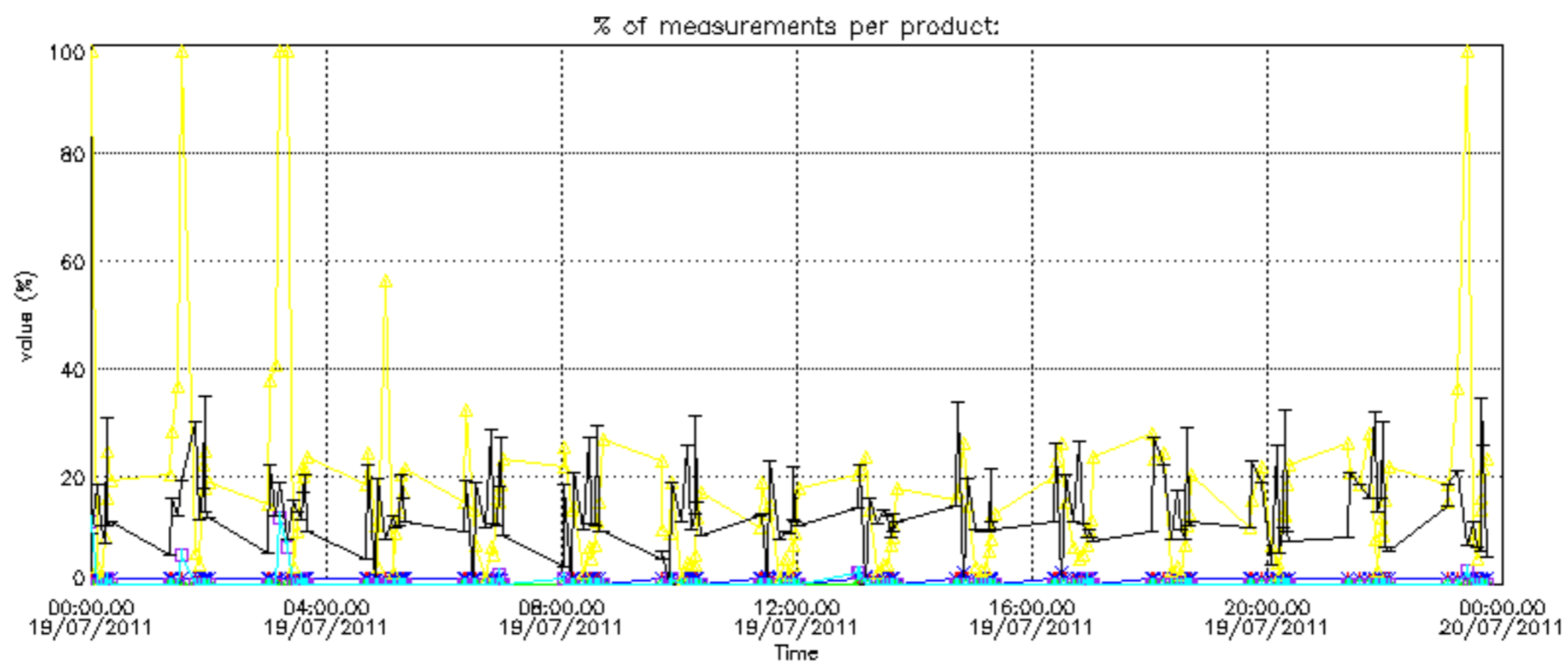
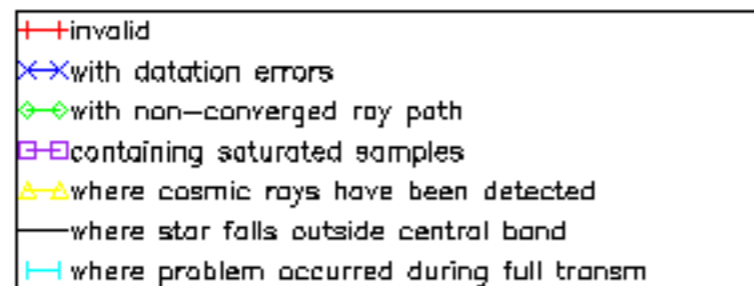


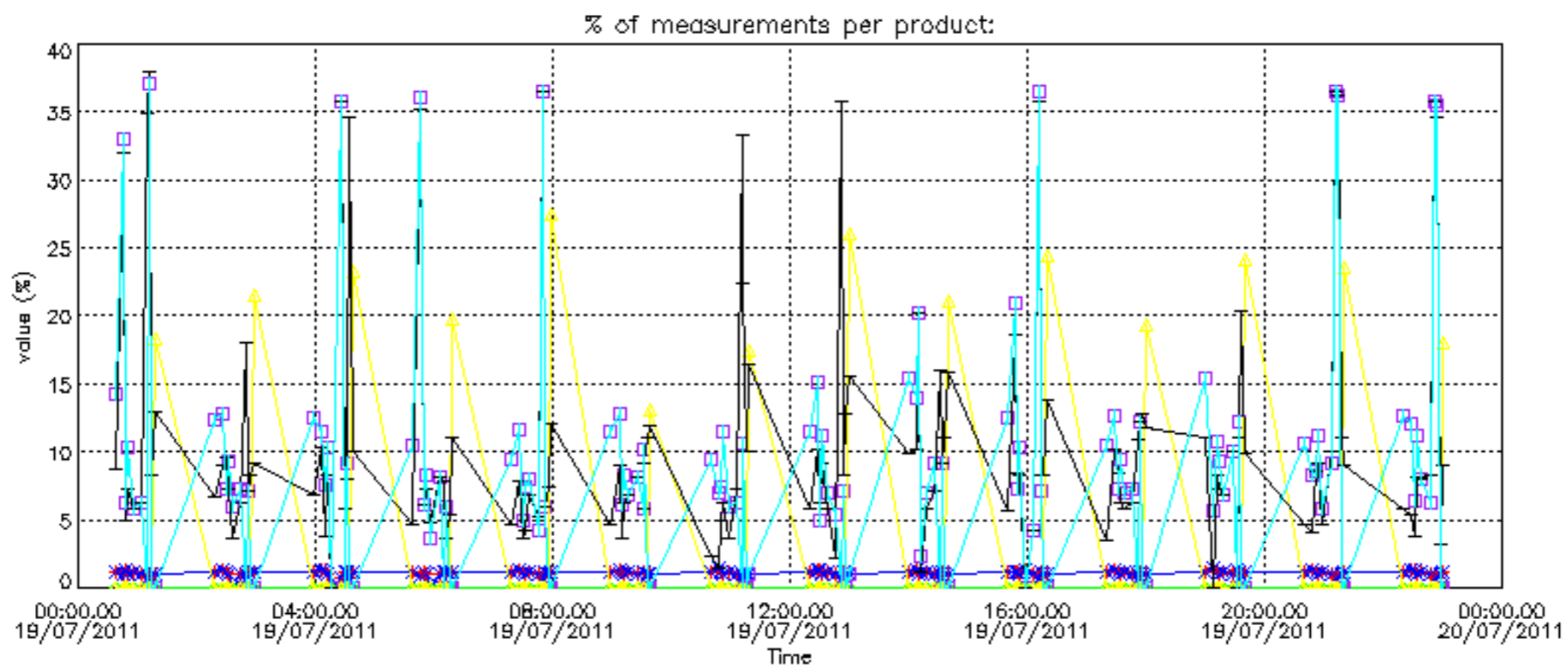
Percentage of flagged data per NO2 profile



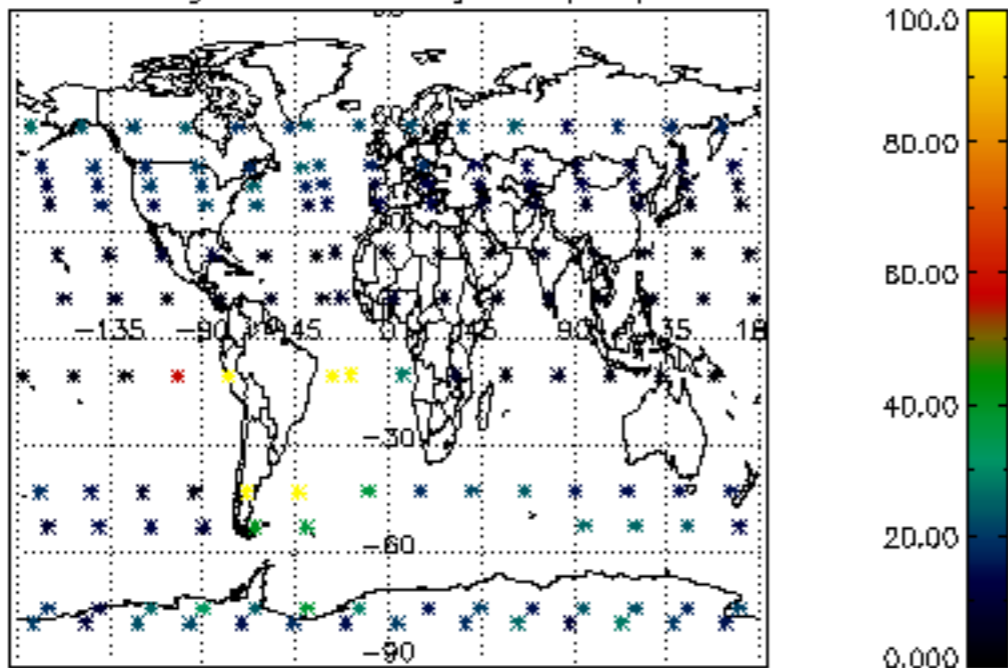
Percentage of flagged data per NO3 profile



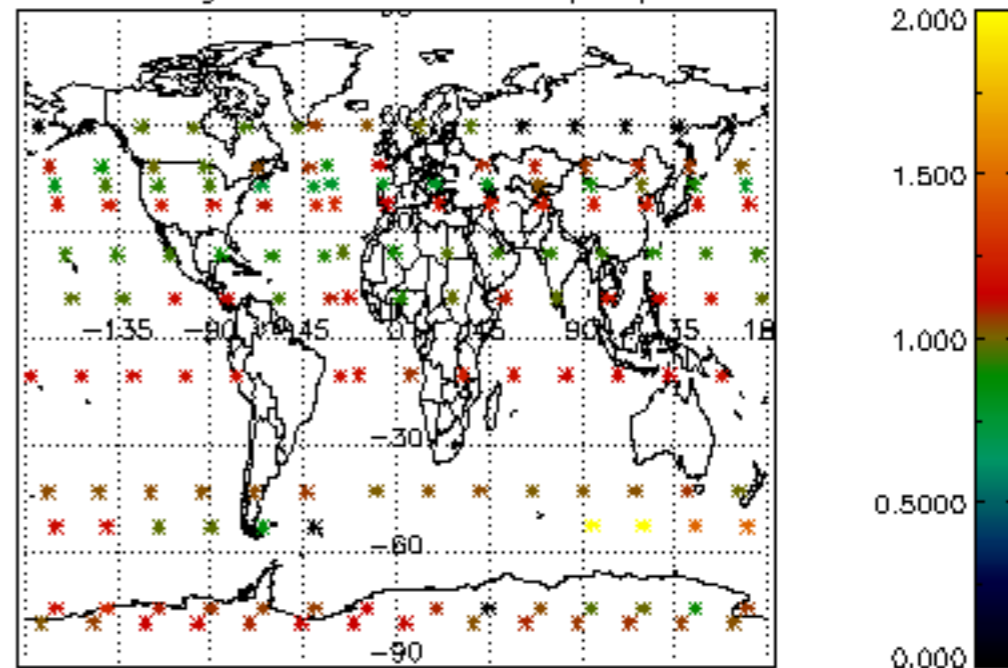




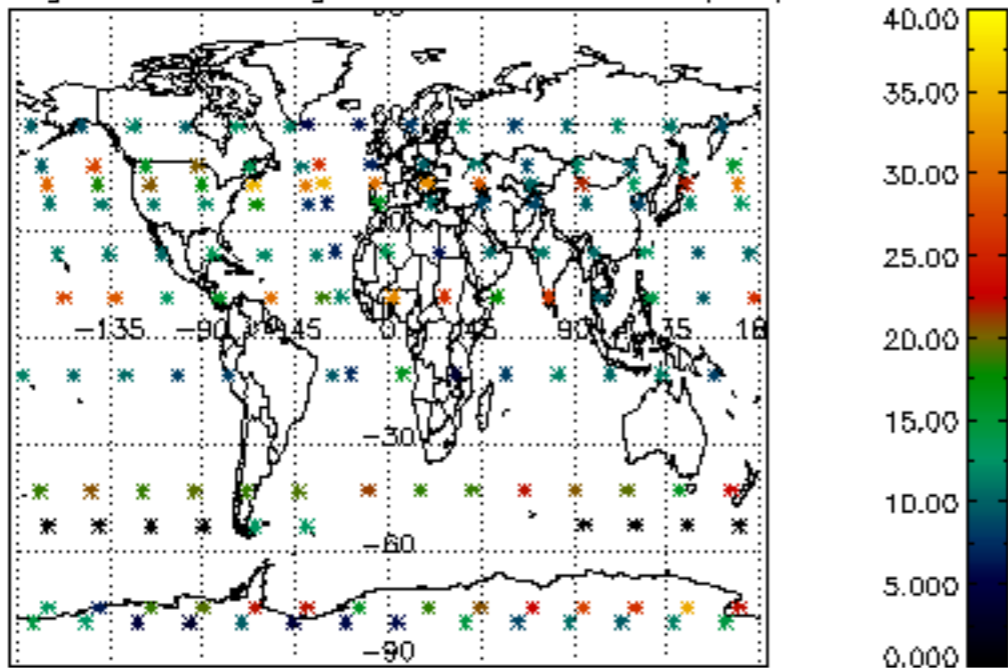
Percentage of cosmic ray hits per profile



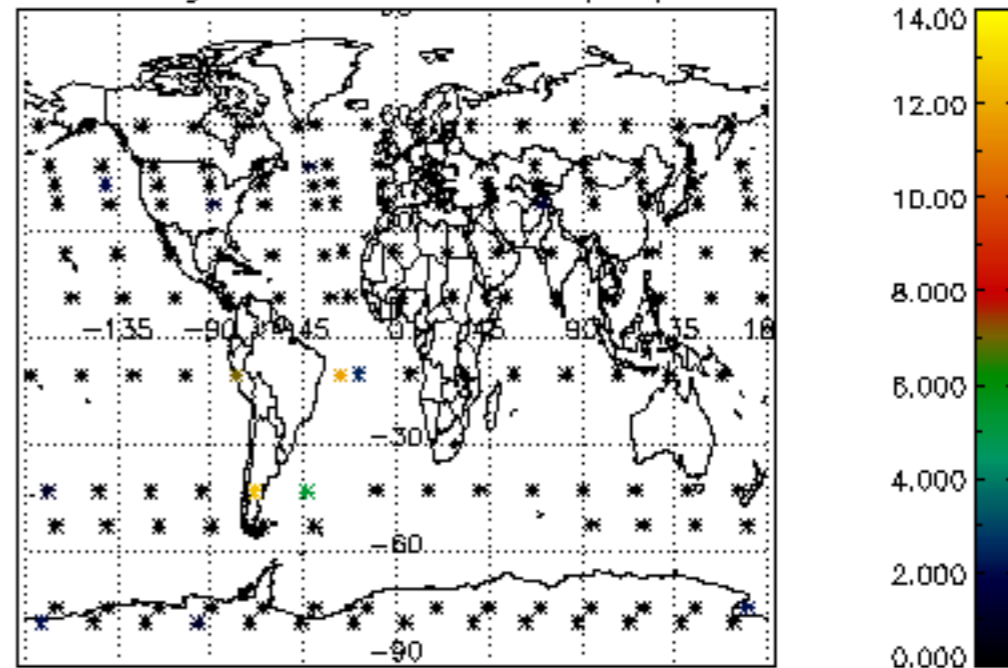
Percentage of datation errors per profile



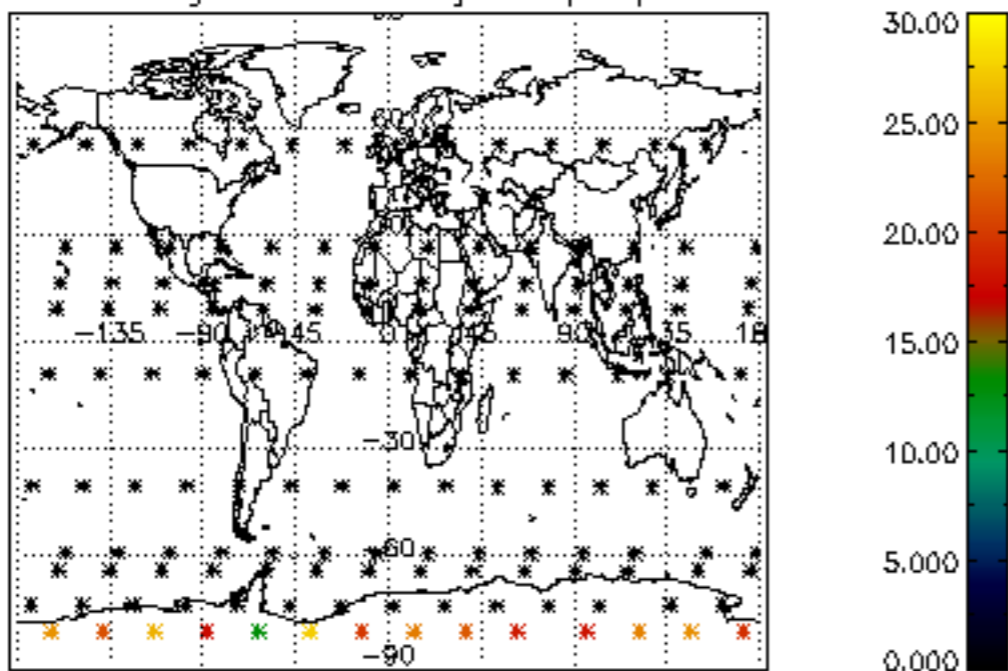
Percentage of star falling outside central band per profile



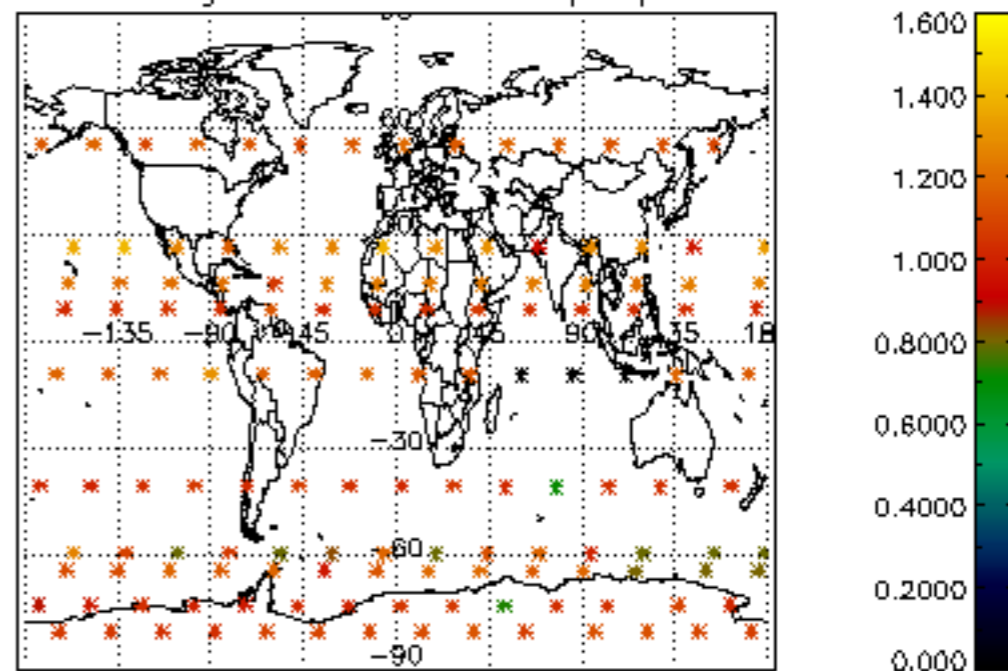
Percentage of saturation errors per profile



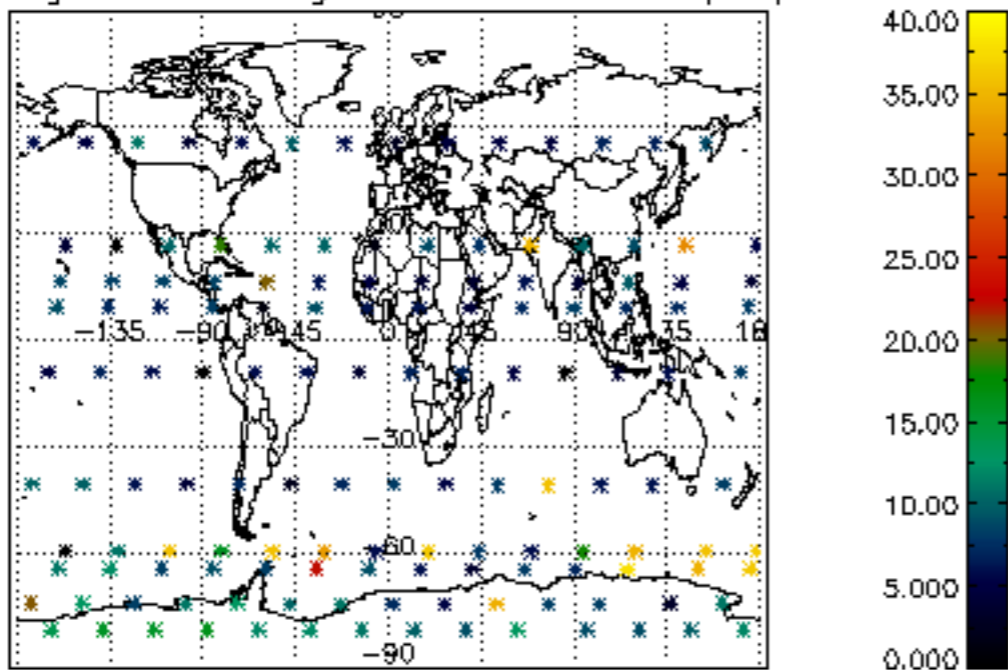
Percentage of cosmic ray hits per profile



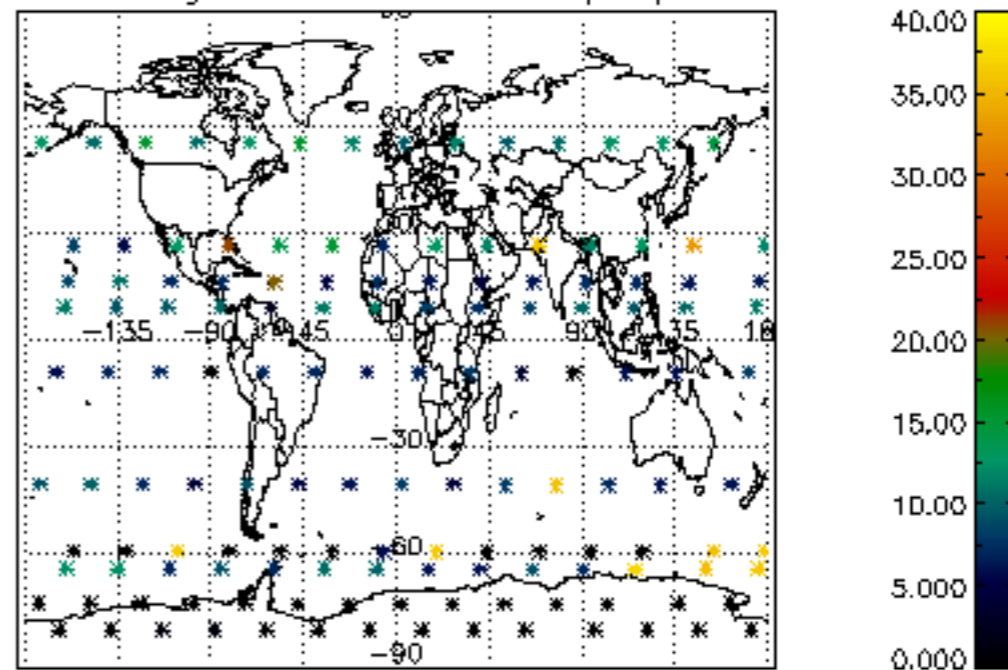
Percentage of datation errors per profile

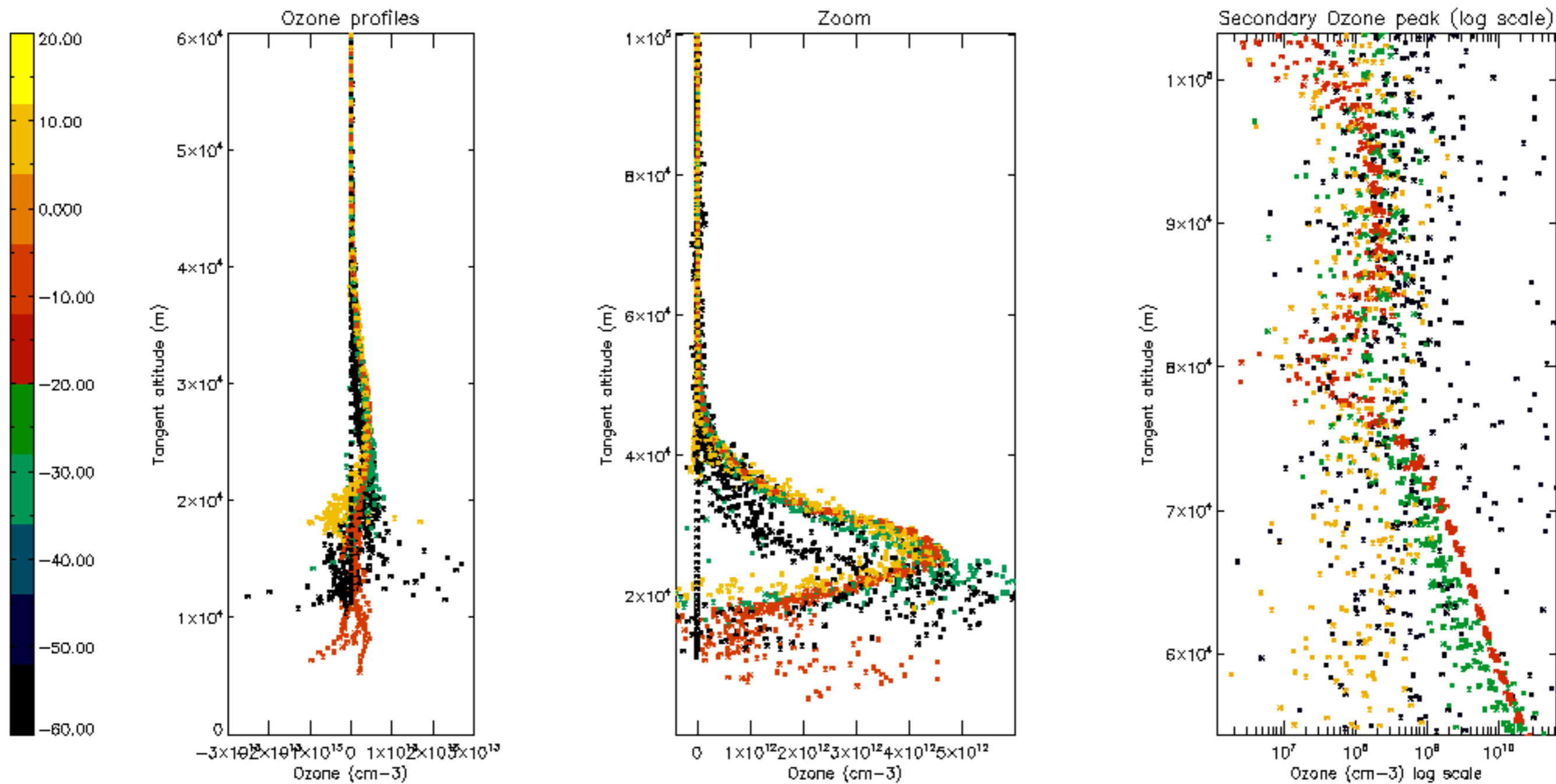


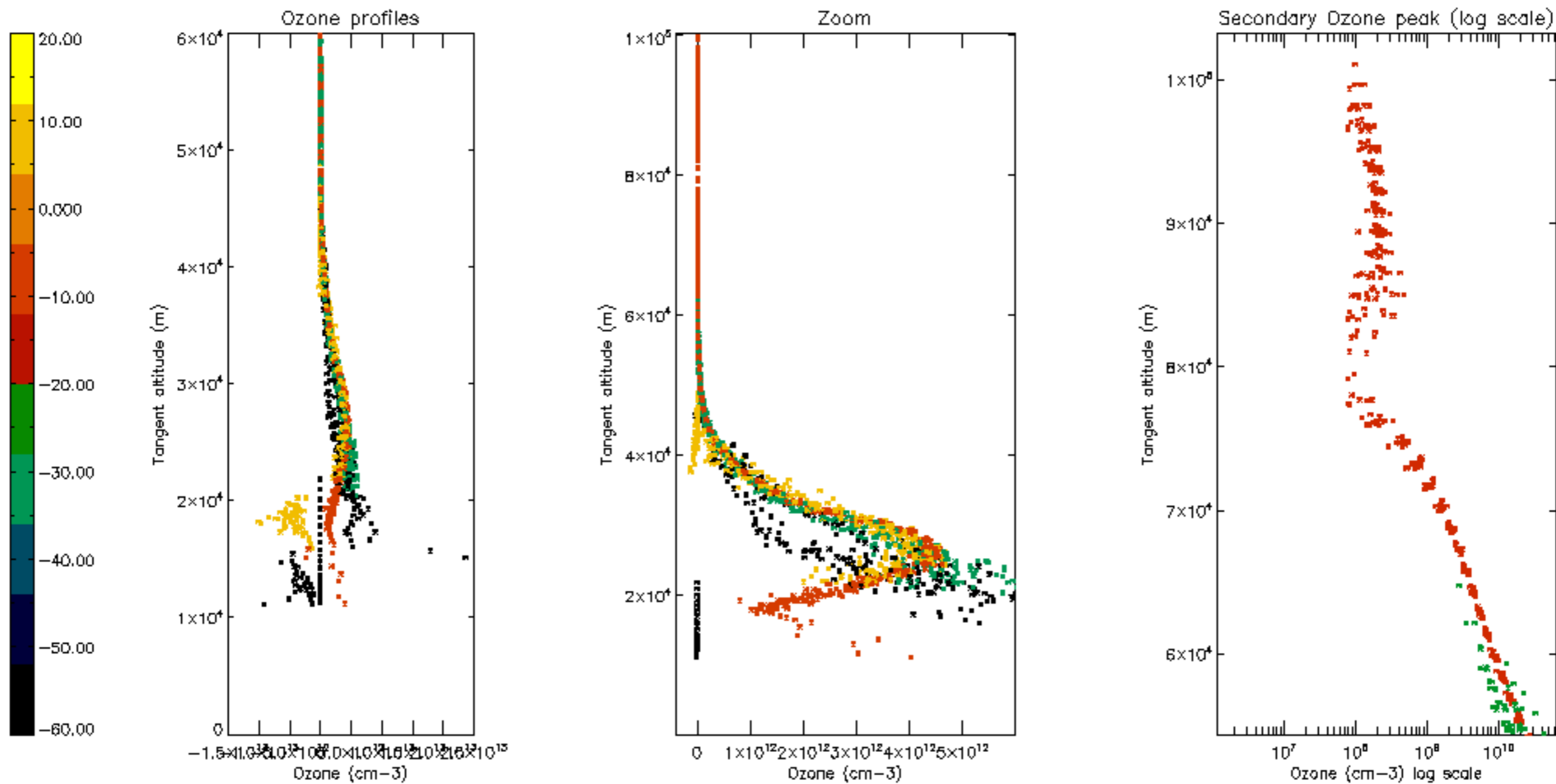
Percentage of star falling outside central band per profile

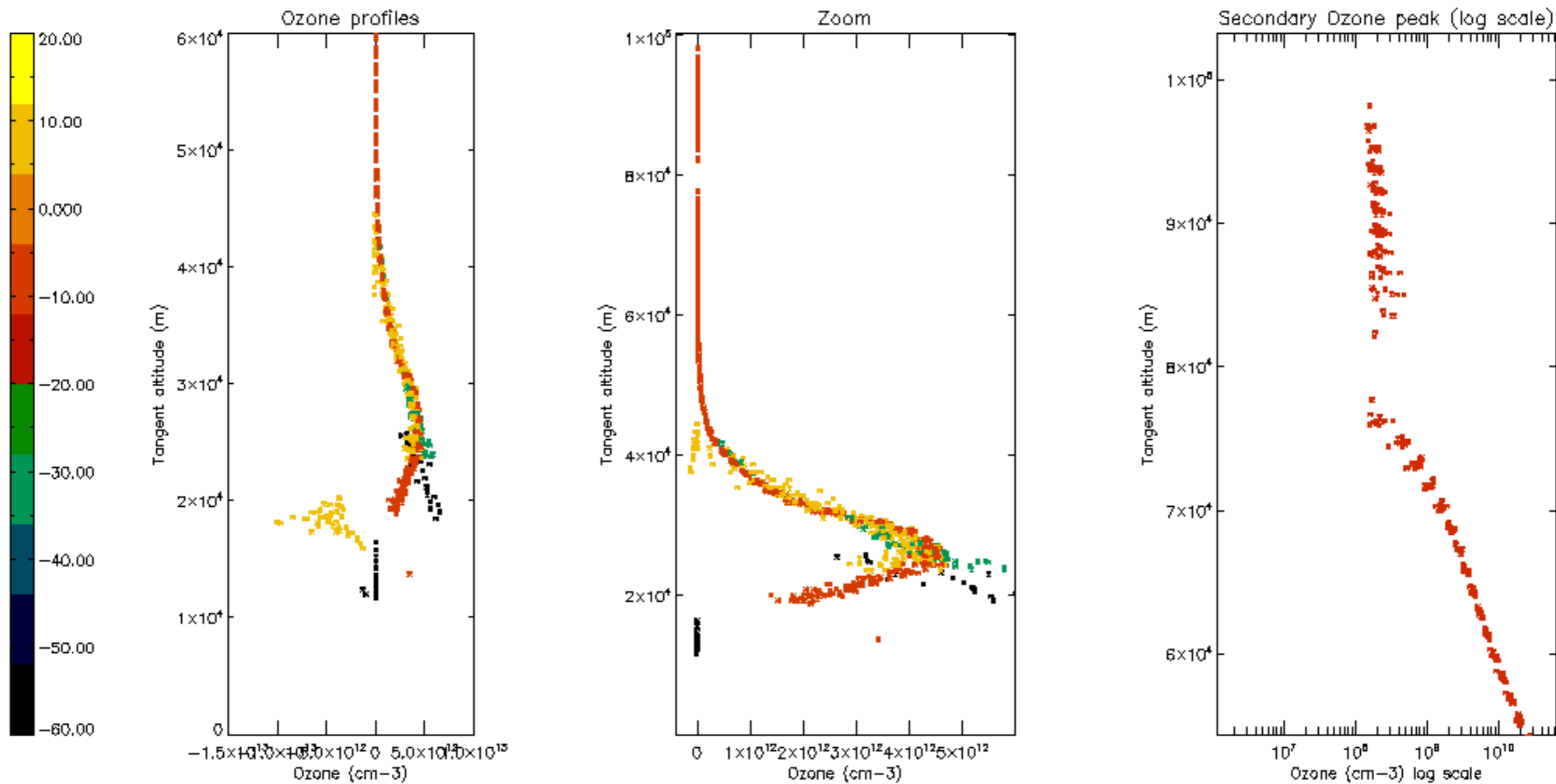


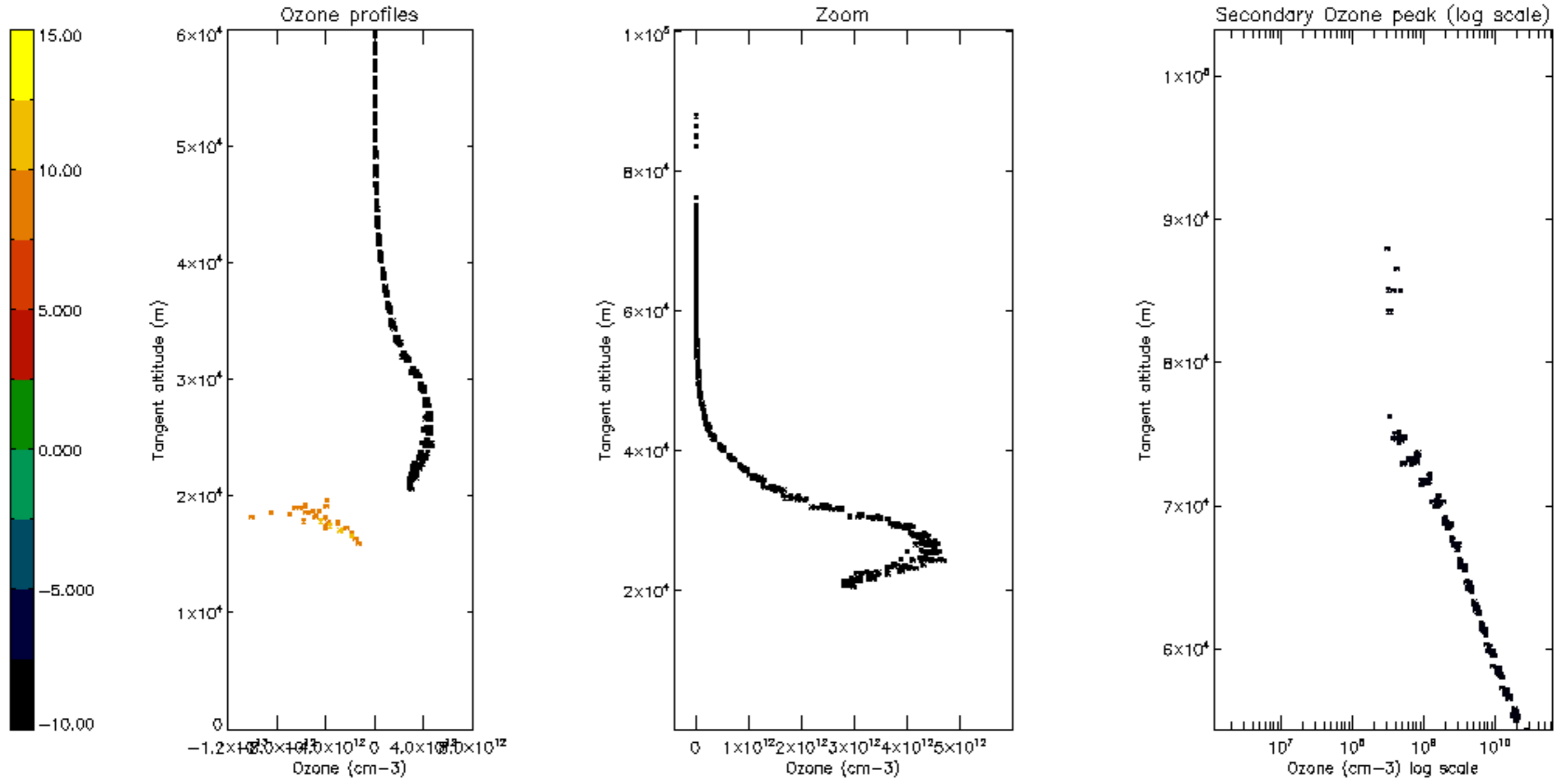
Percentage of saturation errors per profile

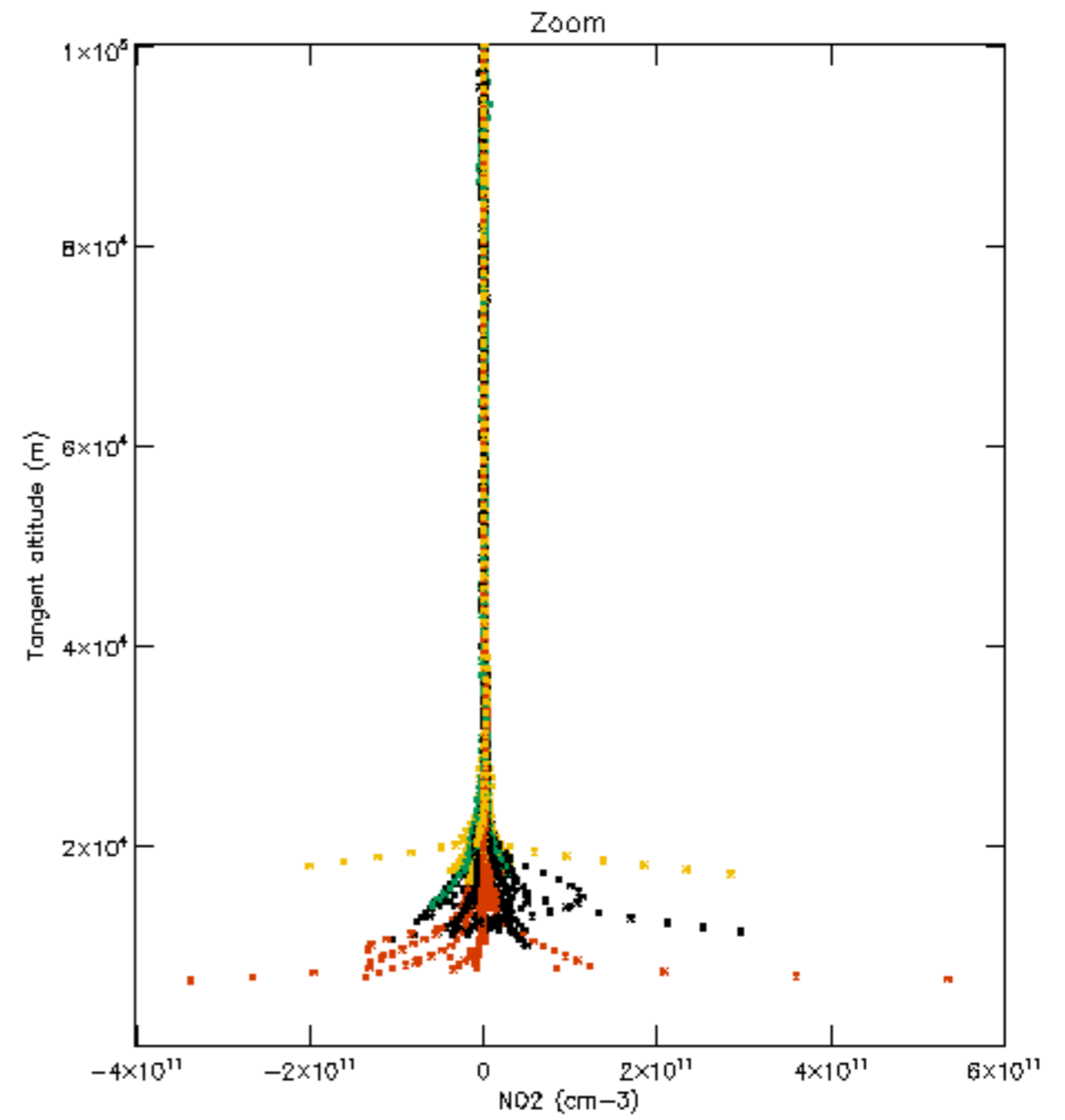
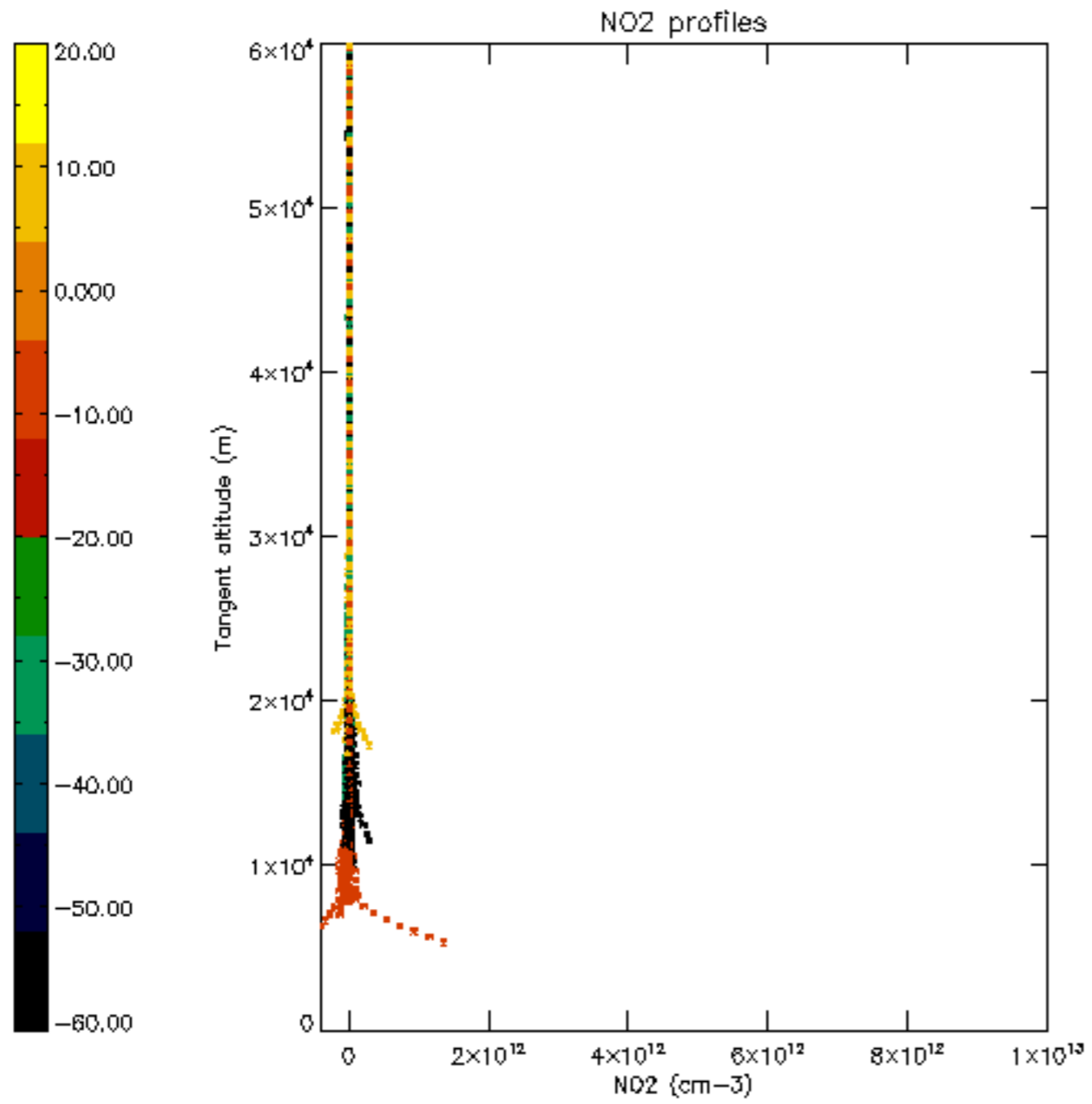


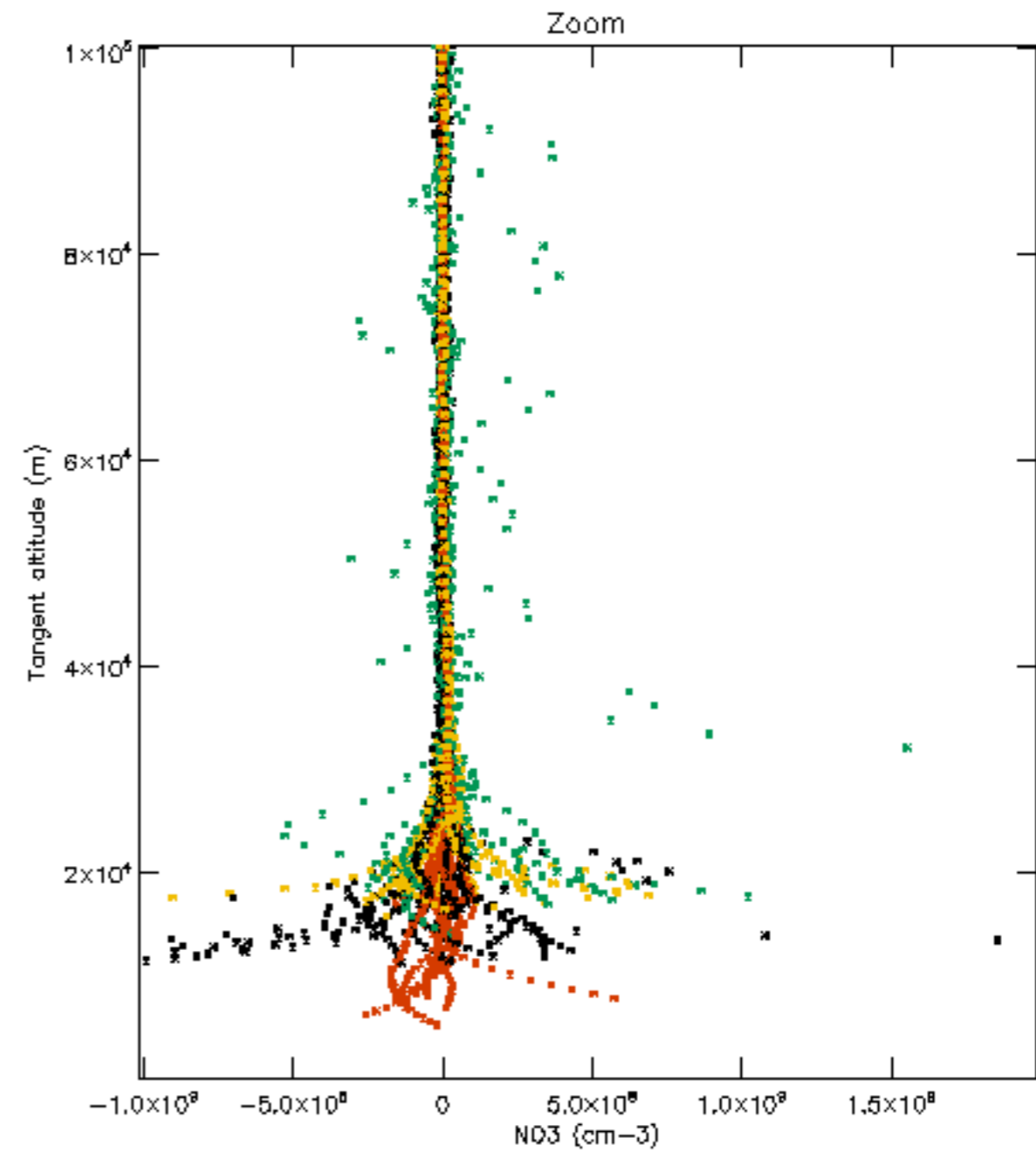
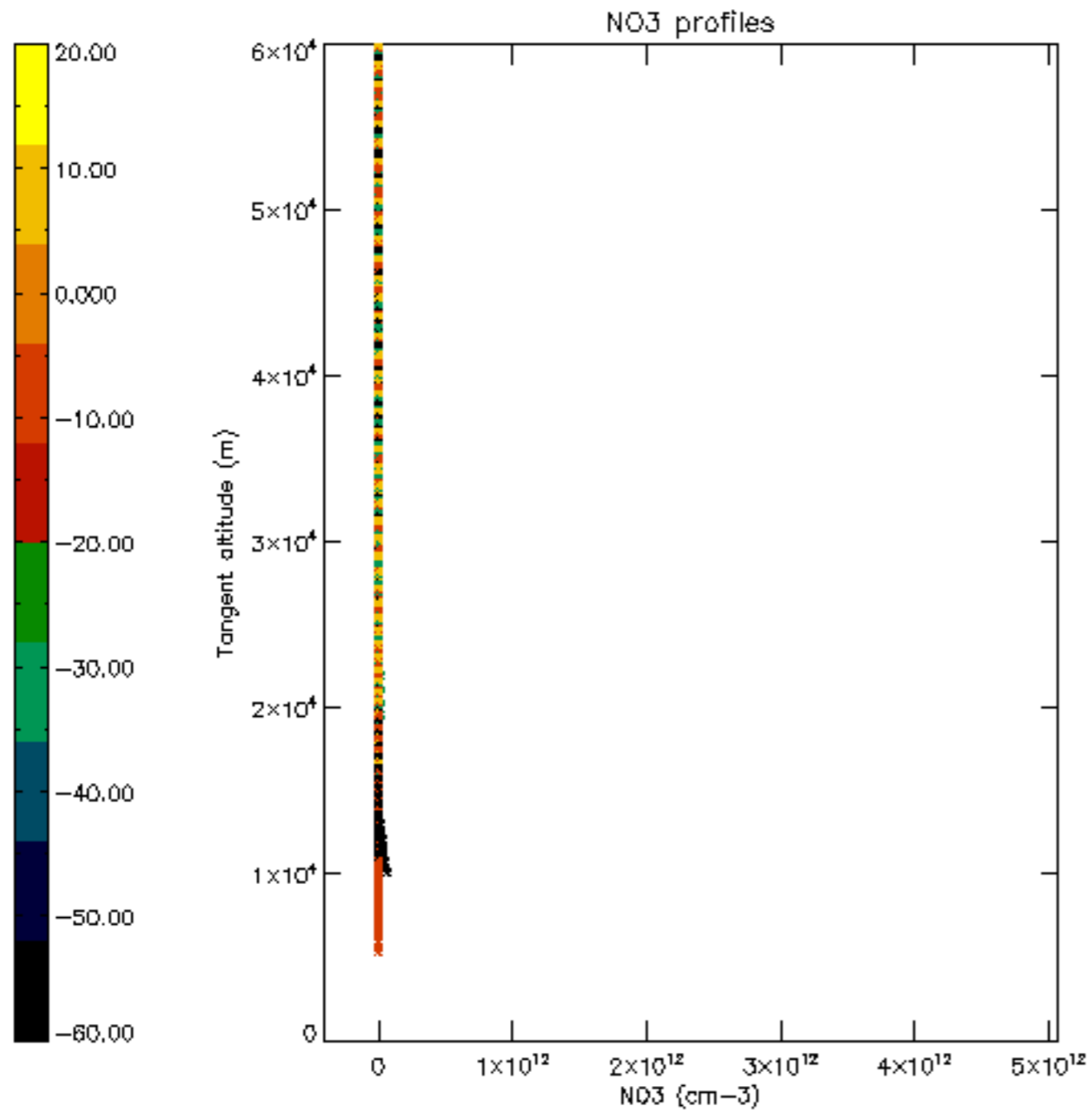


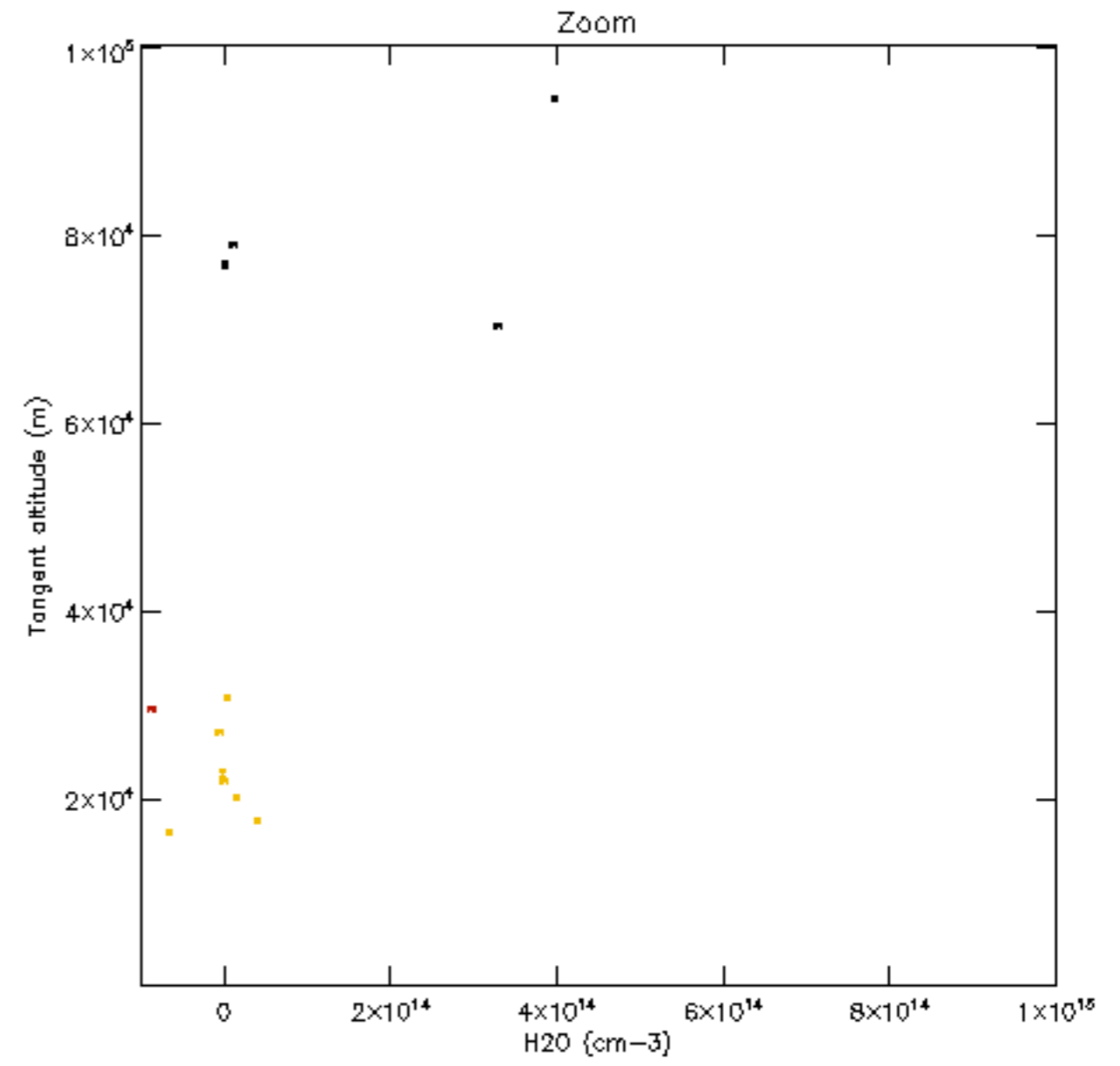
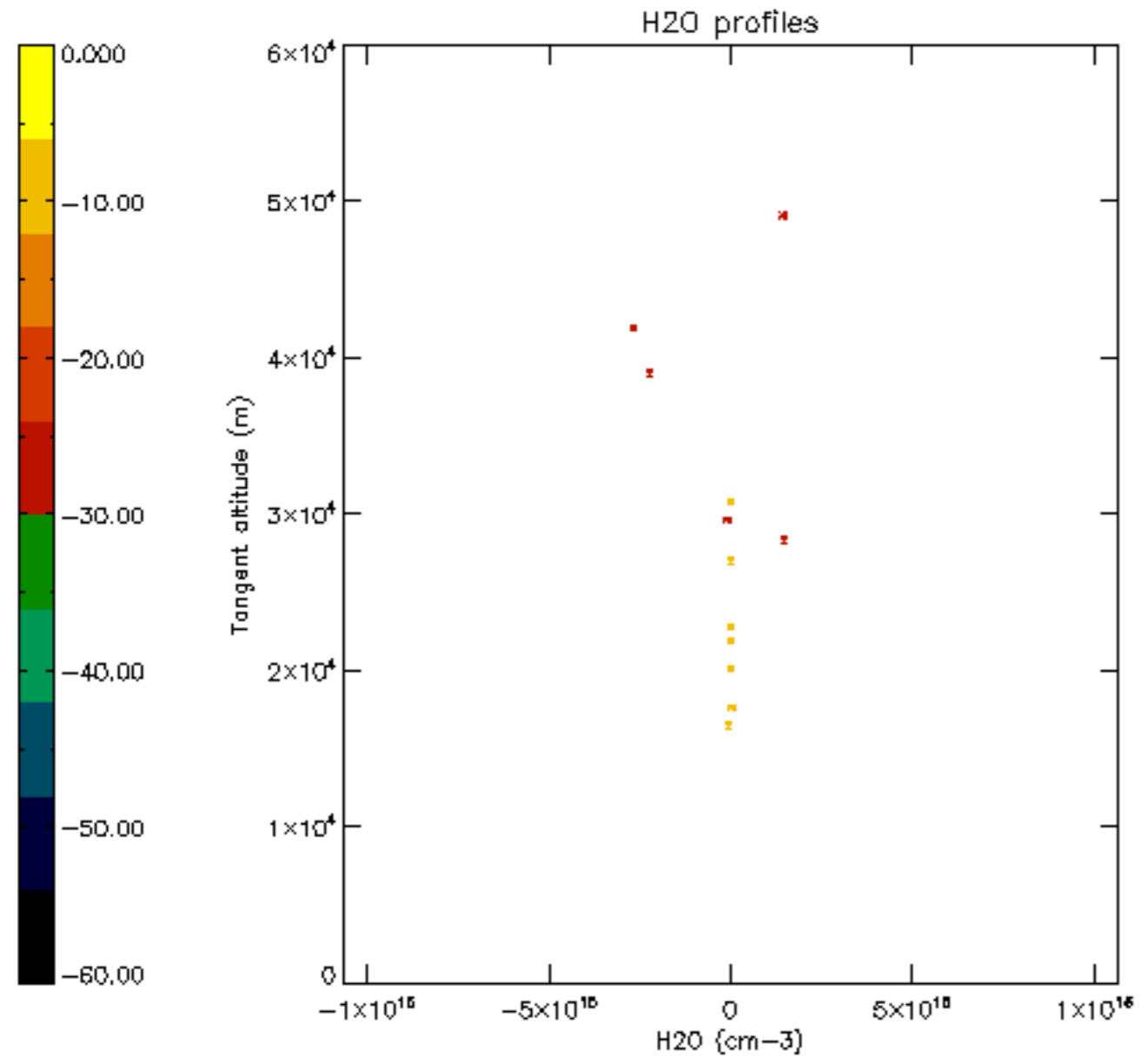


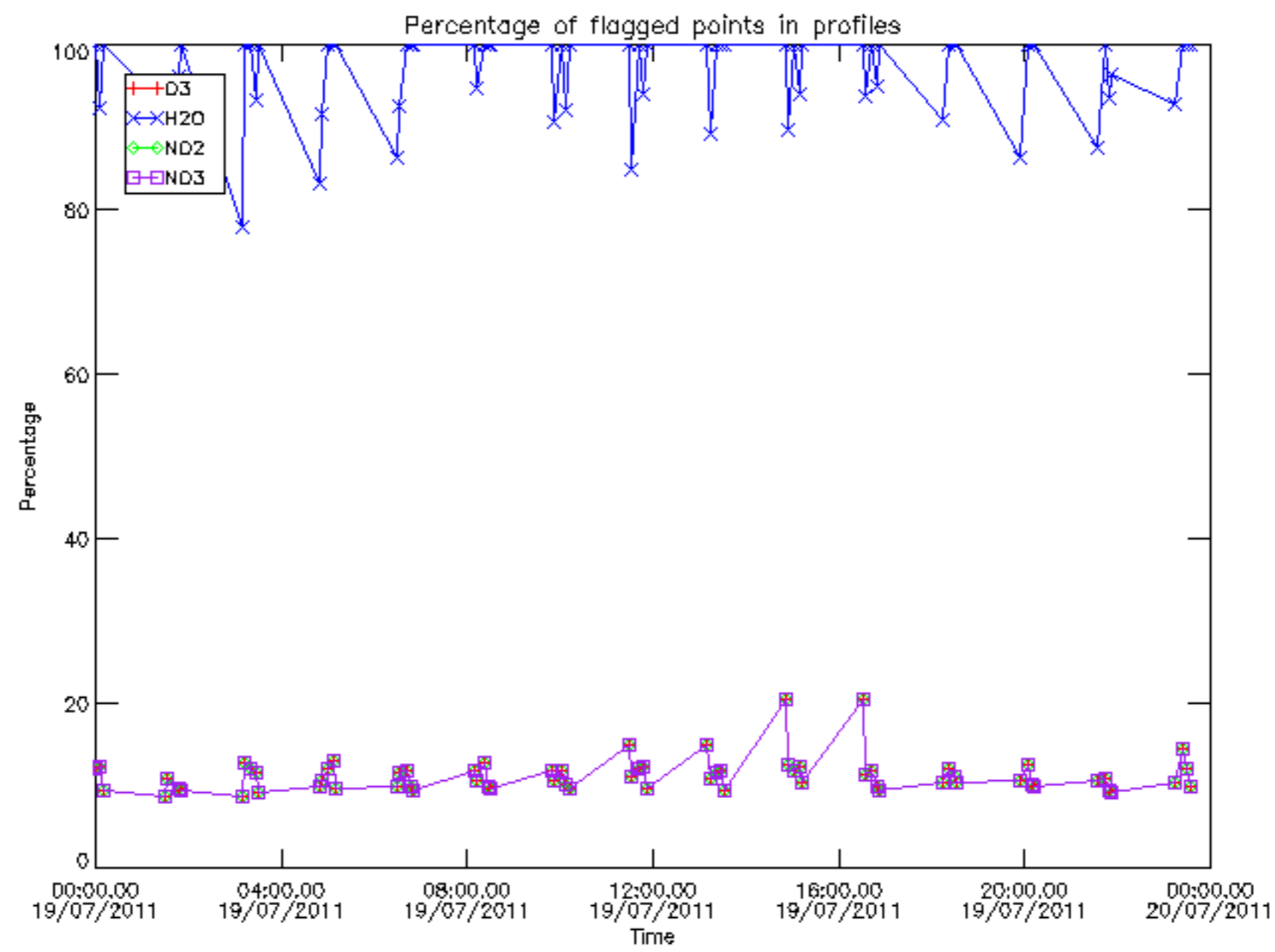




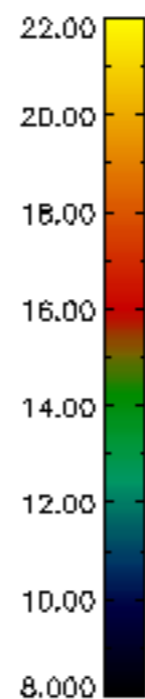
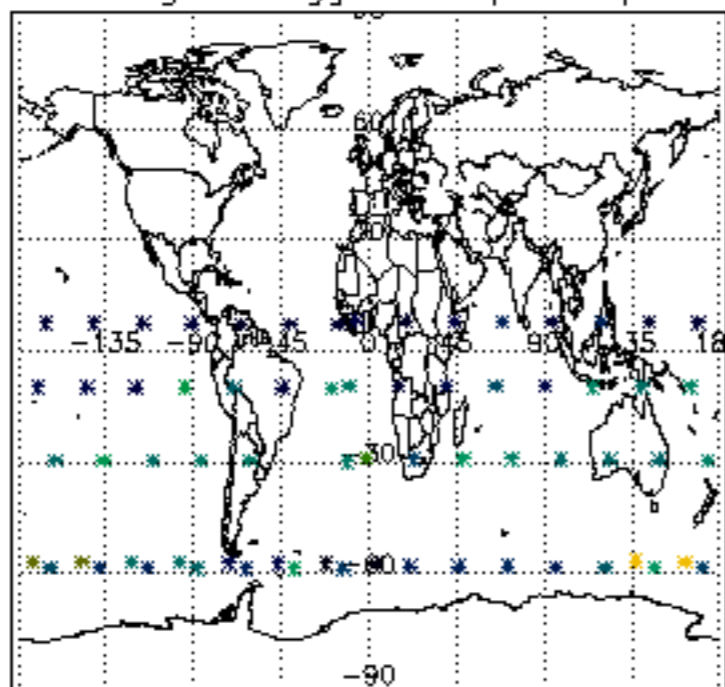




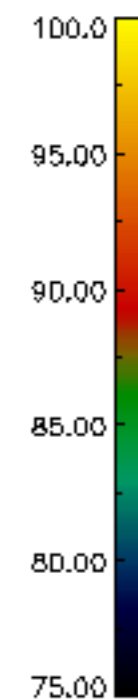
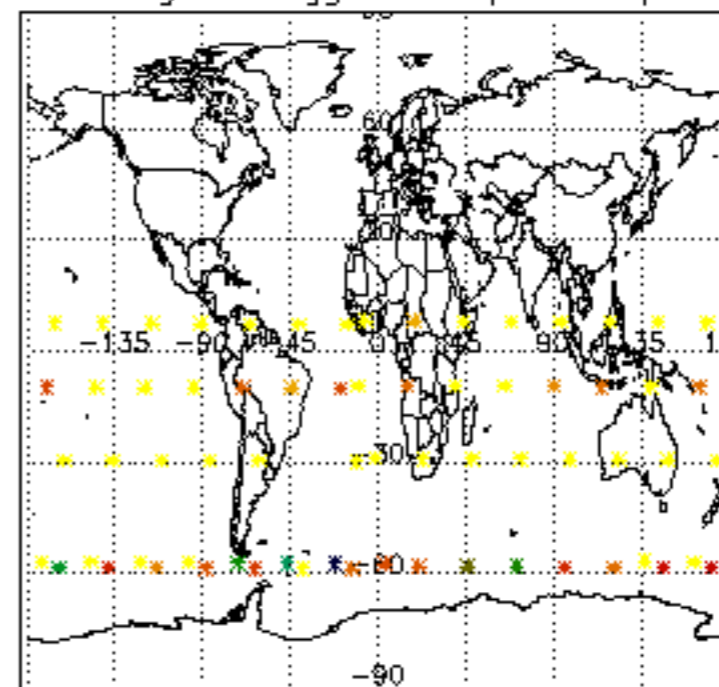




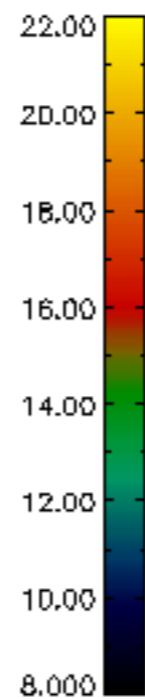
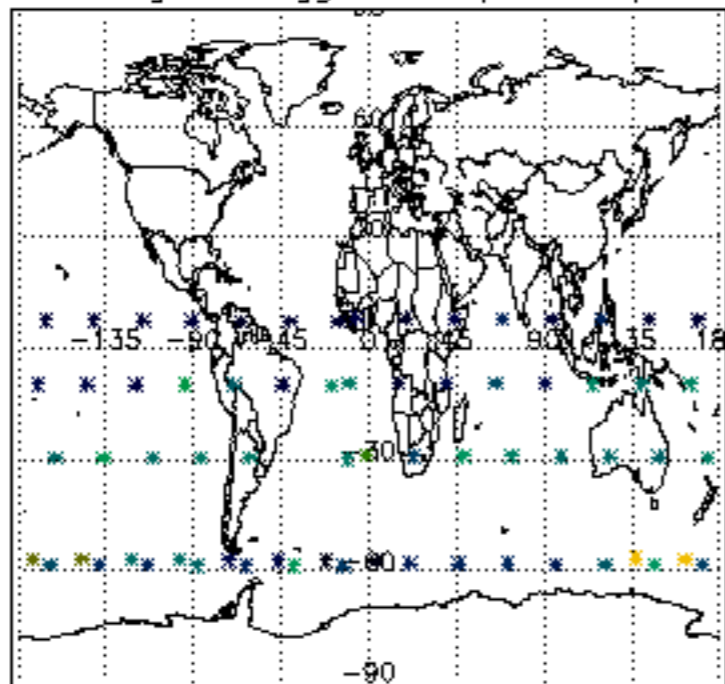
Percentage of flagged data per D3 profile



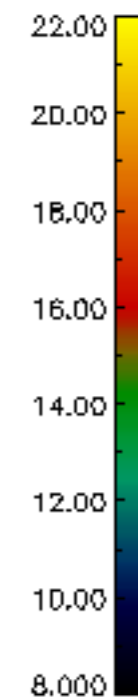
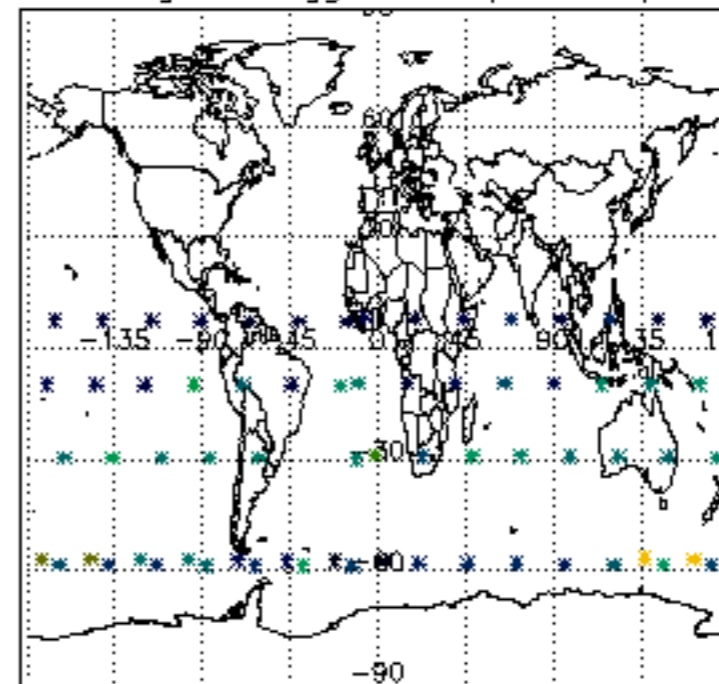
Percentage of flagged data per H2O profile

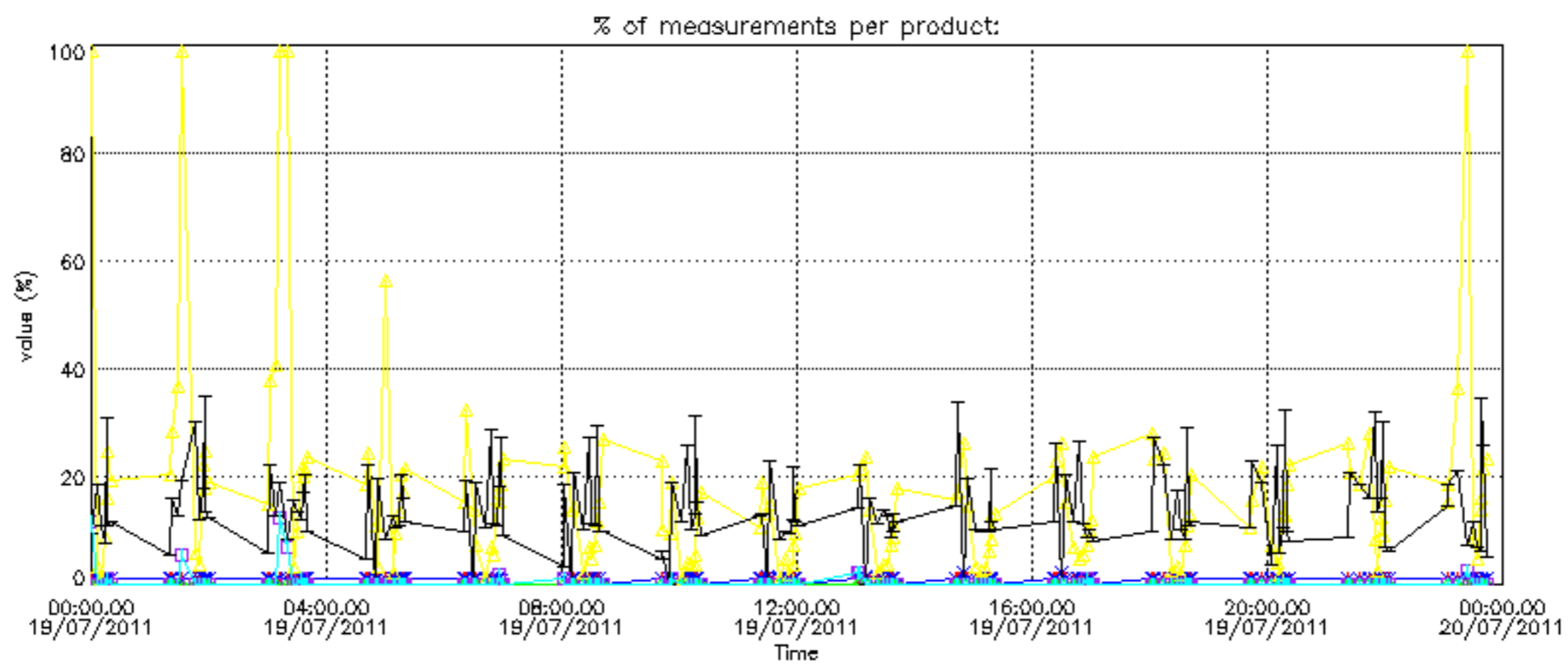
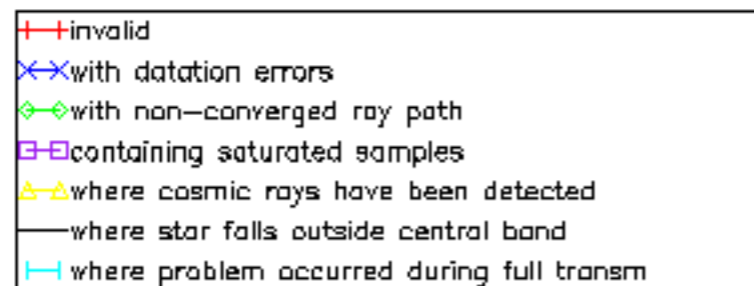


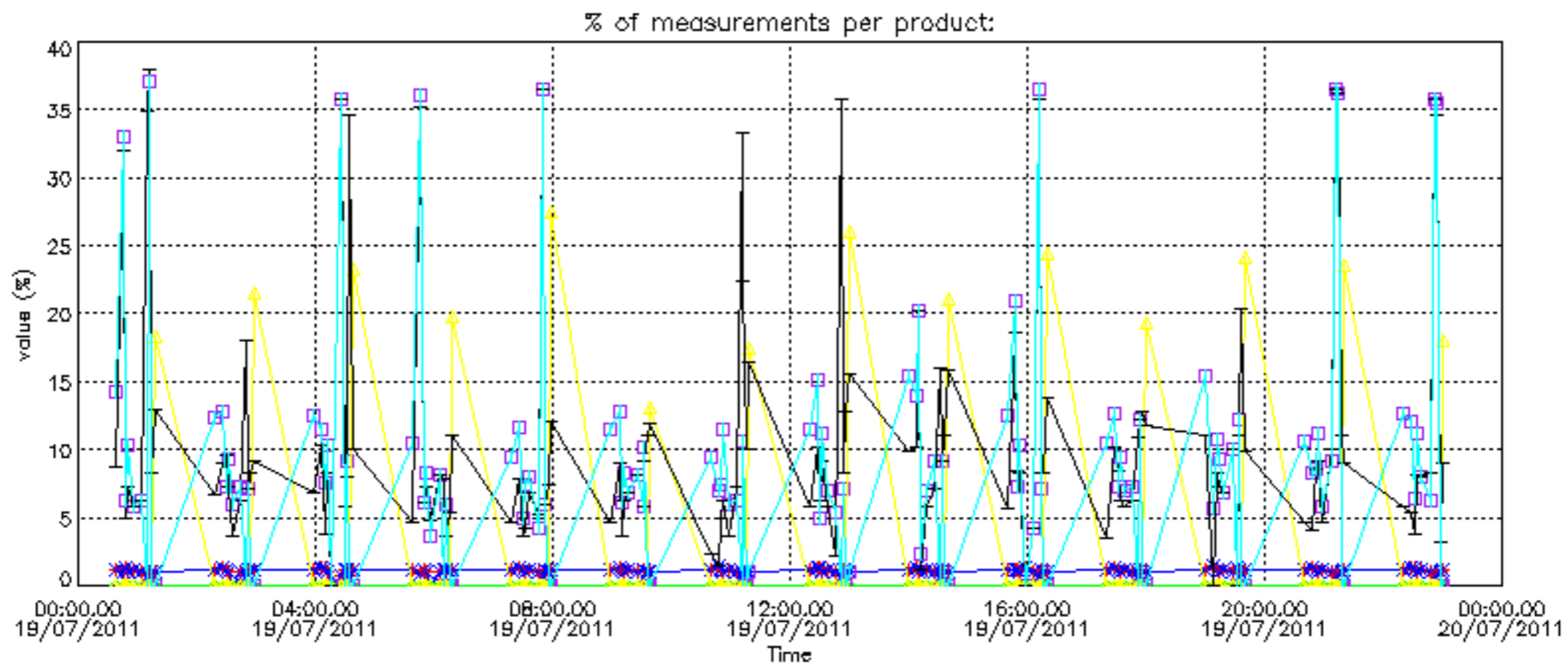
Percentage of flagged data per NO2 profile



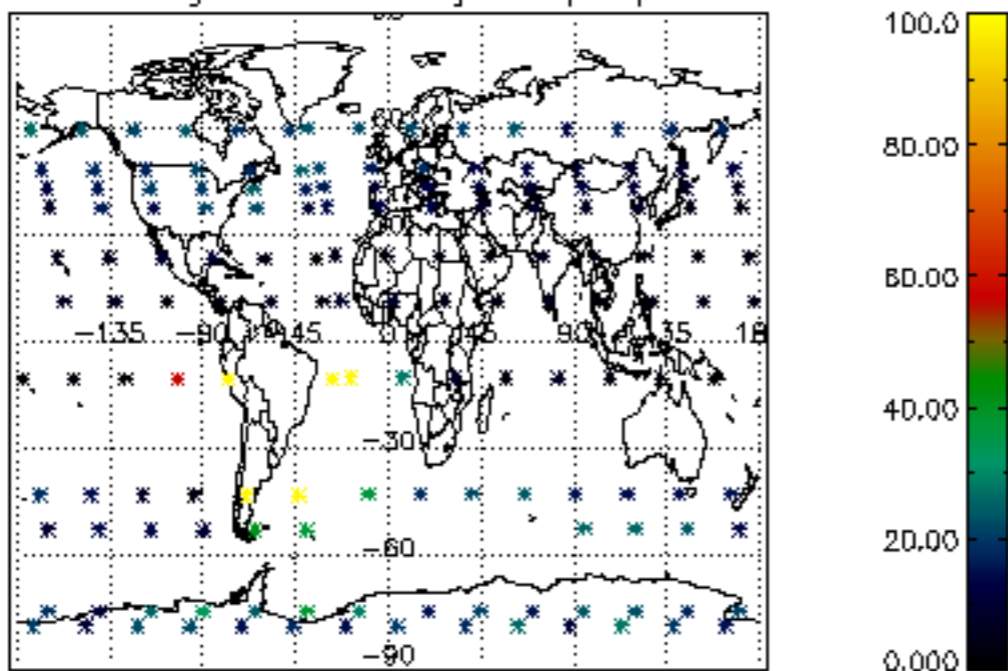
Percentage of flagged data per NO3 profile



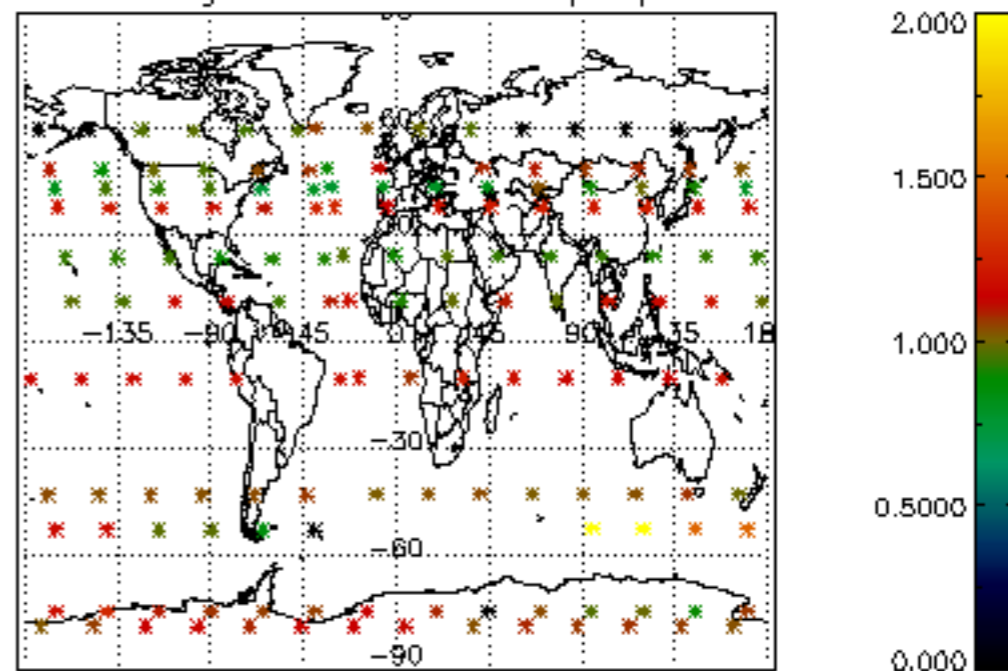




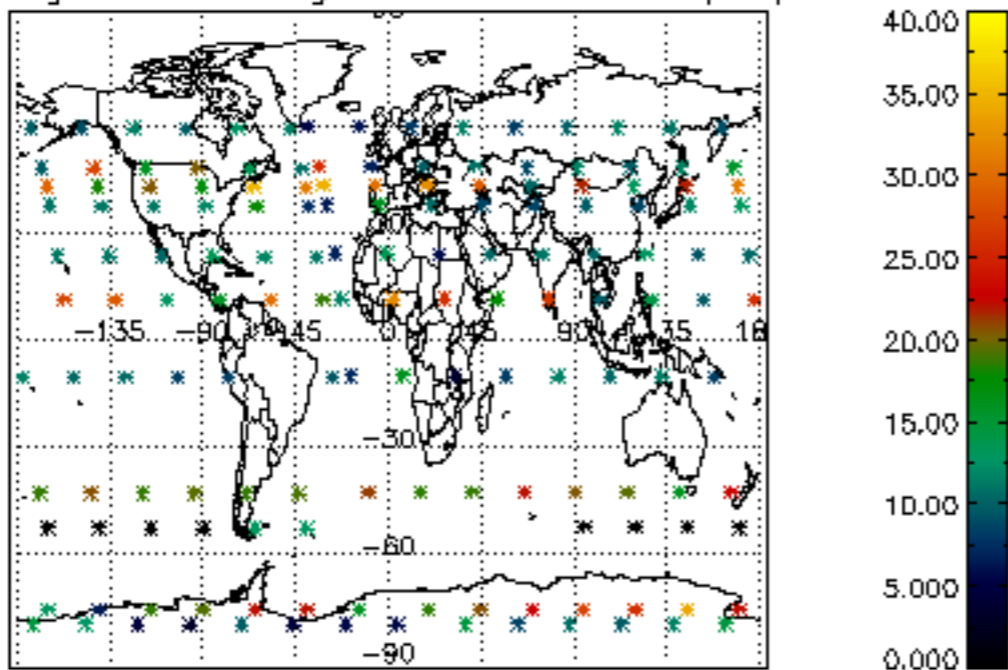
Percentage of cosmic ray hits per profile



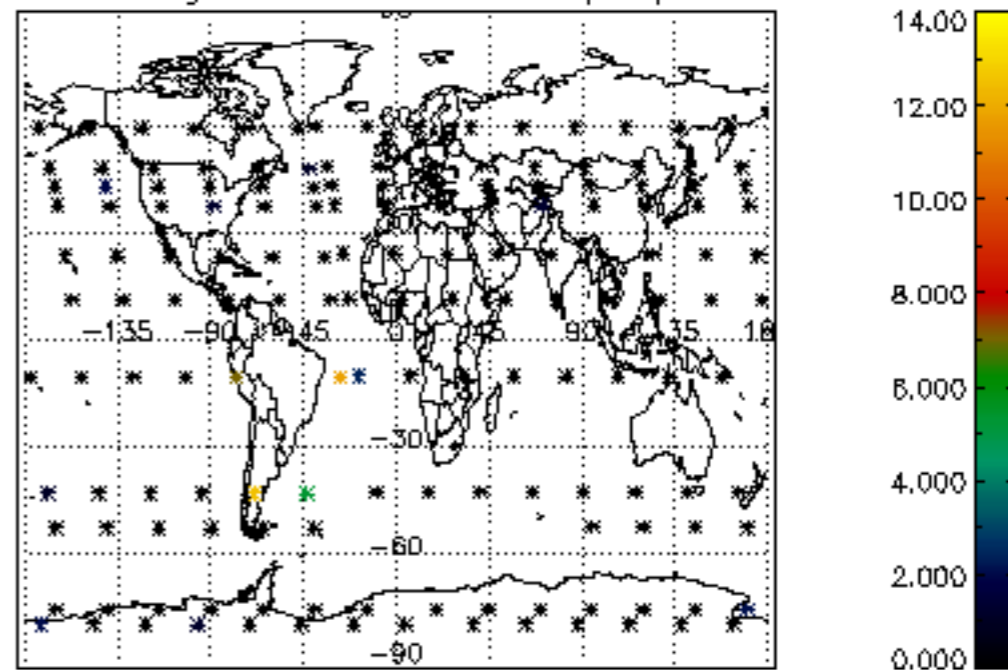
Percentage of datation errors per profile



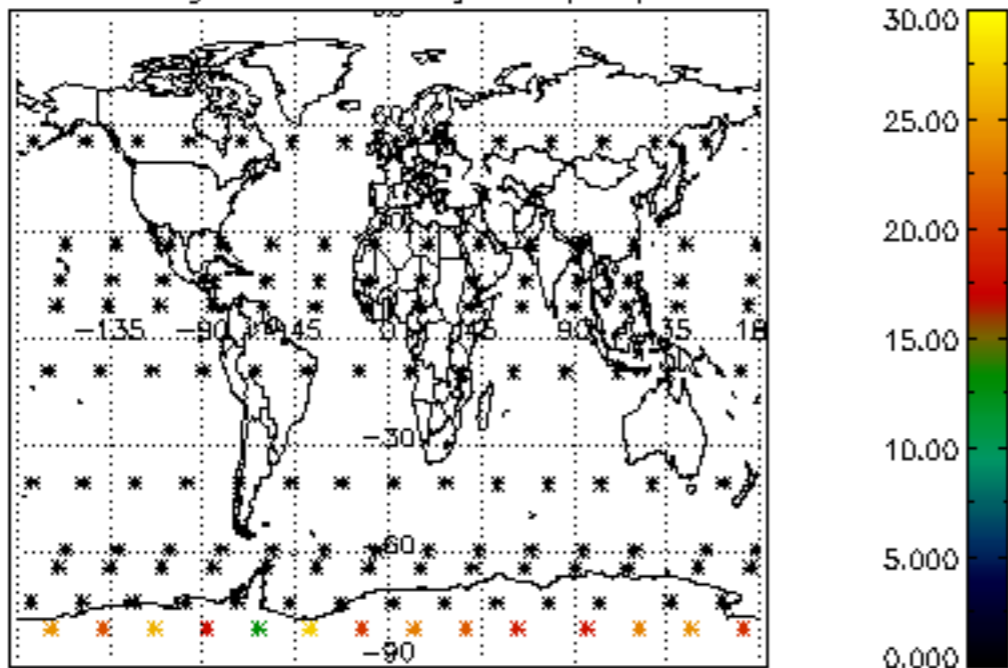
Percentage of star falling outside central band per profile



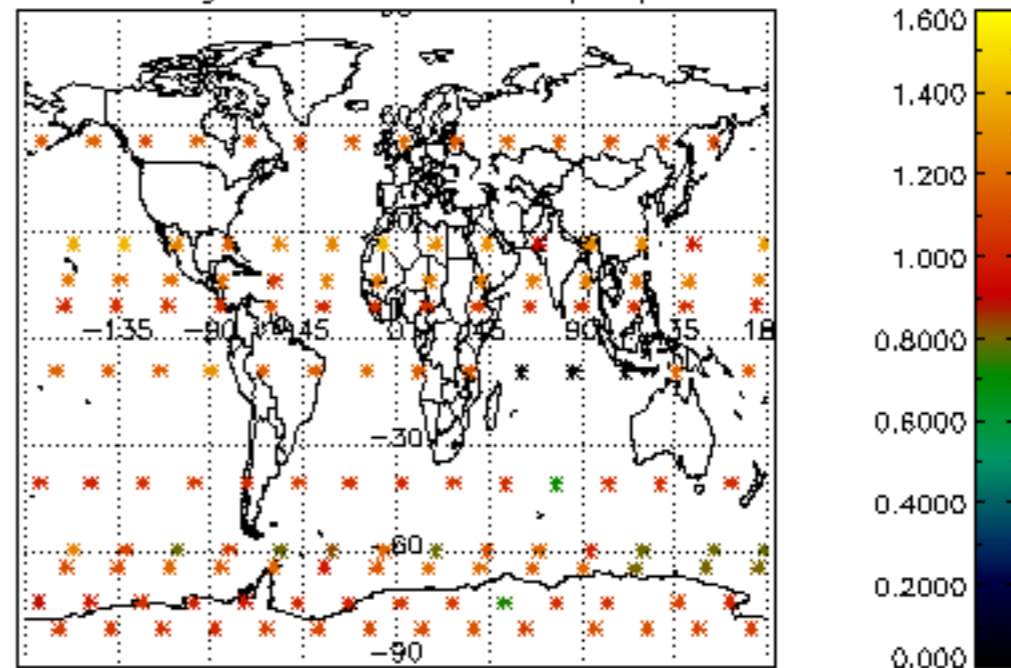
Percentage of saturation errors per profile



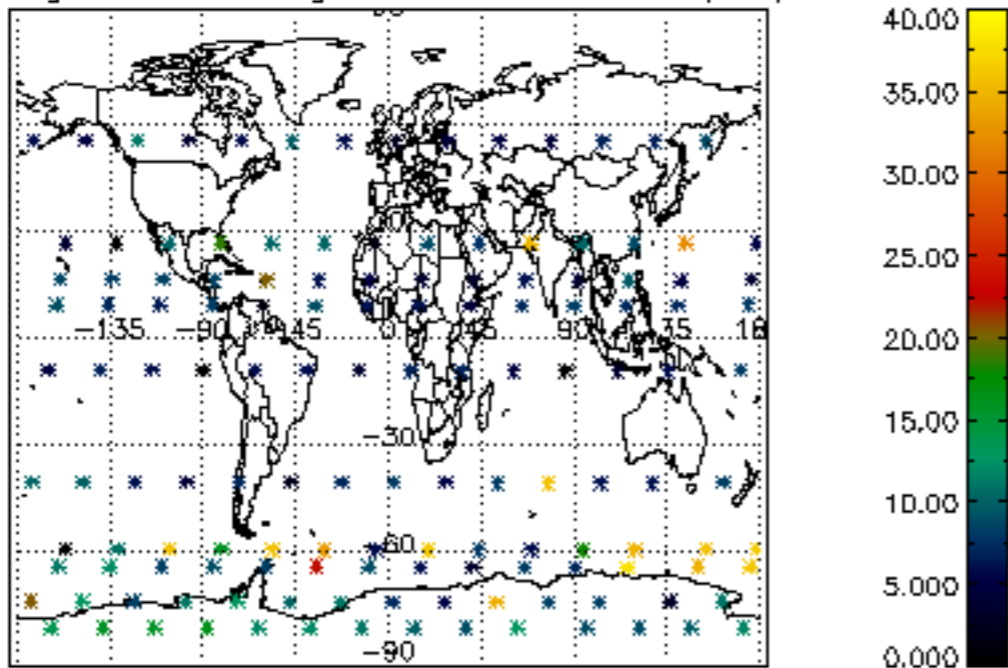
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

