

GOMOS Level 2 Daily Report

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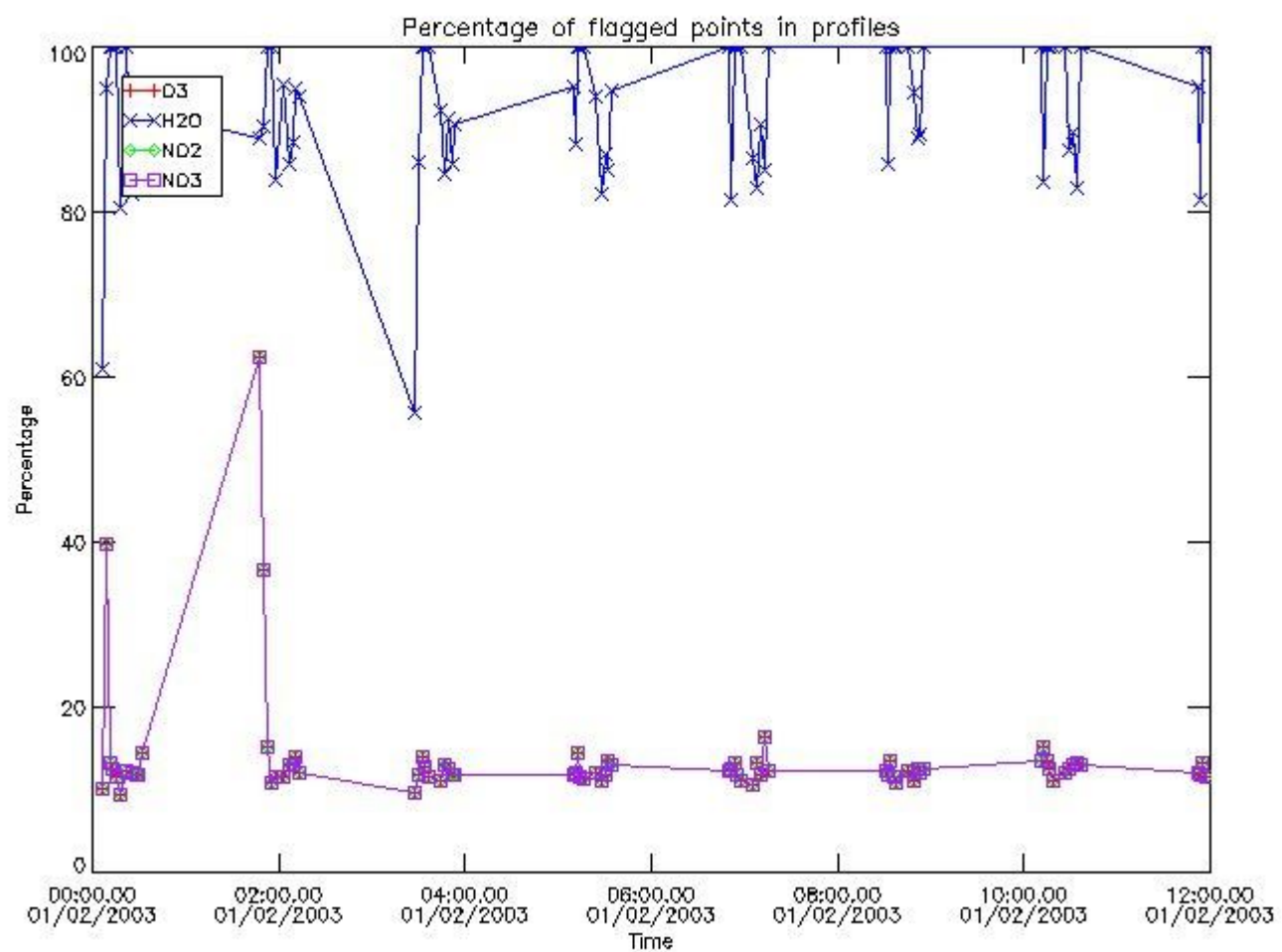
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220	GOM_NL__2PRFIN20030201_110304_000000382013_00266_04829_5592.N1	01-FEB-2003 11:03:04	Bright	37.500	42	34Bet Aur	1.9000	10200.	75	4829	No
221	GOM_NL__2PRFIN20030201_111518_000000382013_00266_04829_5593.N1	01-FEB-2003 11:15:18	Bright	38.000	49	1Alp UMi	1.9900	6300.0	76	4829	No
222	GOM_NL__2PRFIN20030201_111823_000000442013_00266_04829_5594.N1	01-FEB-2003 11:18:23	Bright	43.500	60	7Bet UMi	2.0810	3950.0	87	4829	No
223	GOM_NL__2PRFIN20030201_112021_000000572013_00266_04829_5595.N1	01-FEB-2003 11:20:21	Bright	56.500	55	79Zet UMa	2.0600	10200.	113	4829	No
224	GOM_NL__2PRFIN20030201_112307_000000422013_00266_04829_5596.N1	01-FEB-2003 11:23:07	Bright	42.000	119	14Eta Dra	2.7270	4700.0	84	4829	No
225	GOM_NL__2PRFIN20030201_112617_000000392013_00266_04829_5597.N1	01-FEB-2003 11:26:17	Bright	39.000	130	23Bet Dra	2.7990	5800.0	78	4829	No
226	GOM_NL__2PRFIN20030201_112956_000000372013_00266_04829_5598.N1	01-FEB-2003 11:29:56	Bright	37.000	5	3Alp Lyr	0.033000	11000.	74	4829	No
227	GOM_NL__2PRFIN20030201_113258_000000462013_00266_04829_5599.N1	01-FEB-2003 11:32:58	Bright	45.500	133	40Zet Her	2.8070	6000.0	91	4829	No
228	GOM_NL__2PRFIN20030201_113708_000001012013_00266_04829_5600.N1	01-FEB-2003 11:37:08	Bright	100.50	83		2.3780	11000.	201	4829	No
229	GOM_NL__2PRFIN20030201_114016_000000412013_00266_04829_5601.N1	01-FEB-2003 11:40:16	Bright	40.500	126	60Bet Oph	2.7700	4250.0	81	4829	No
230	GOM_NL__2PRFIN20030201_114352_000000722013_00266_04829_5602.N1	01-FEB-2003 11:43:52	Twl_and_stray	71.500	102	24Alp Ser	2.6000	4250.0	143	4829	No
231	GOM_NL__2PRFIN20030201_114713_00000012013_00266_04829_5603.N1	01-FEB-2003 11:47:13	Dark	0.50000	1012	Venus	0.0000	0.0000	1	4829	Yes
232	GOM_NL__2PRFIN20030201_114943_000000582013_00266_04829_5604.N1	01-FEB-2003 11:49:43	Dark	58.000	1014	Mars	0.0000	0.0000	116	4829	Yes
233	GOM_NL__2PRFIN20030201_115148_000000432013_00266_04829_5605.N1	01-FEB-2003 11:51:48	Dark	42.500	25	35Lam Sco	1.6200	28000.	85	4829	No
234	GOM_NL__2PRFIN20030201_115318_000000442013_00266_04829_5606.N1	01-FEB-2003 11:53:18	Dark	43.500	40	The Sco	1.8590	7100.0	87	4829	No
235	GOM_NL__2PRFIN20030201_115511_000000392013_00266_04829_5607.N1	01-FEB-2003 11:55:11	Dark	38.500	147	Alp Ara	2.8770	26000.	77	4829	No
236	GOM_NL__2PRFIN20030201_115653_000000452013_00266_04829_5608.N1	01-FEB-2003 11:56:53	Dark	44.500	131	Gam Lup	2.8000	26000.	89	4829	No

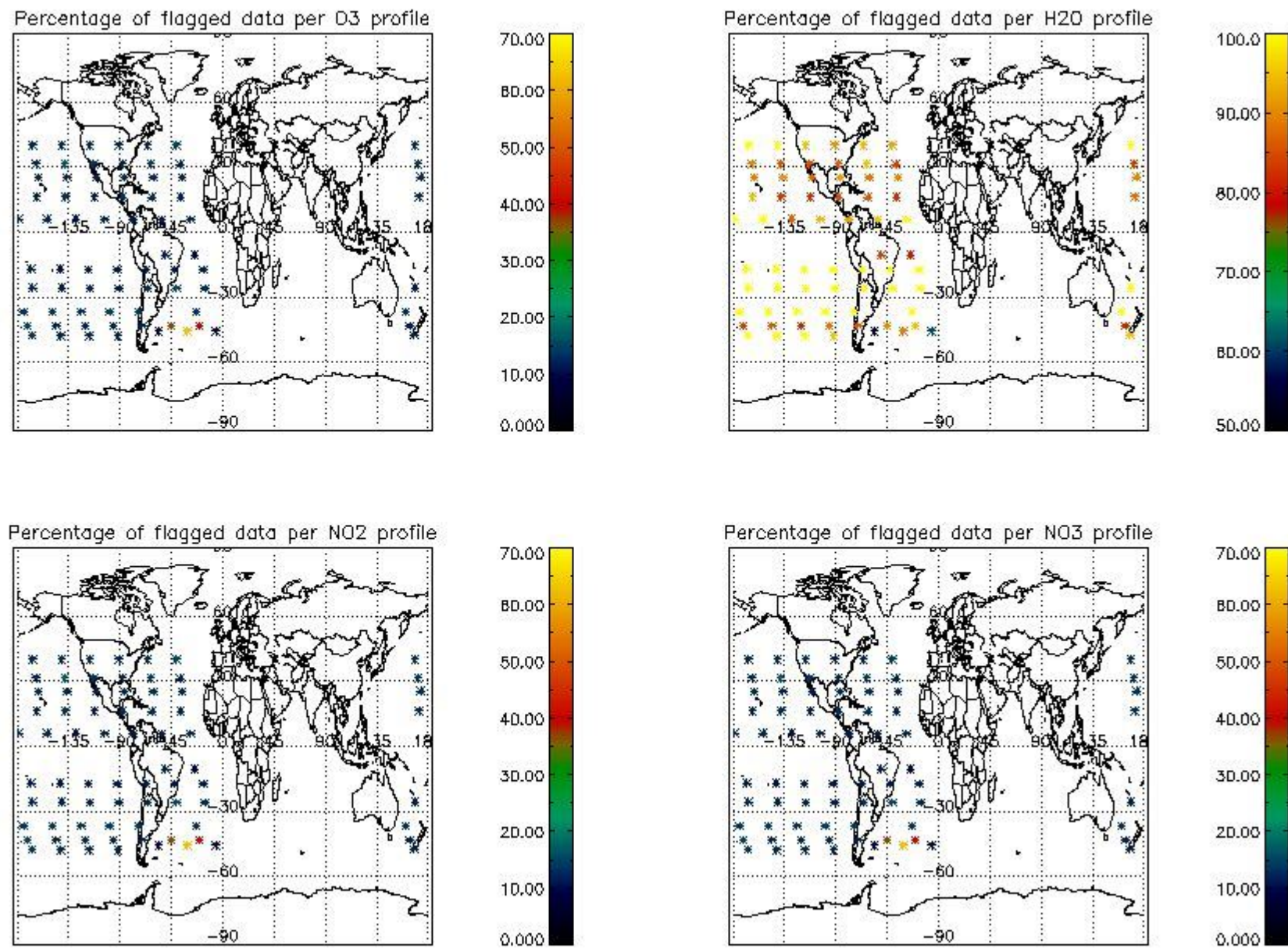
3. Quality information per product

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)

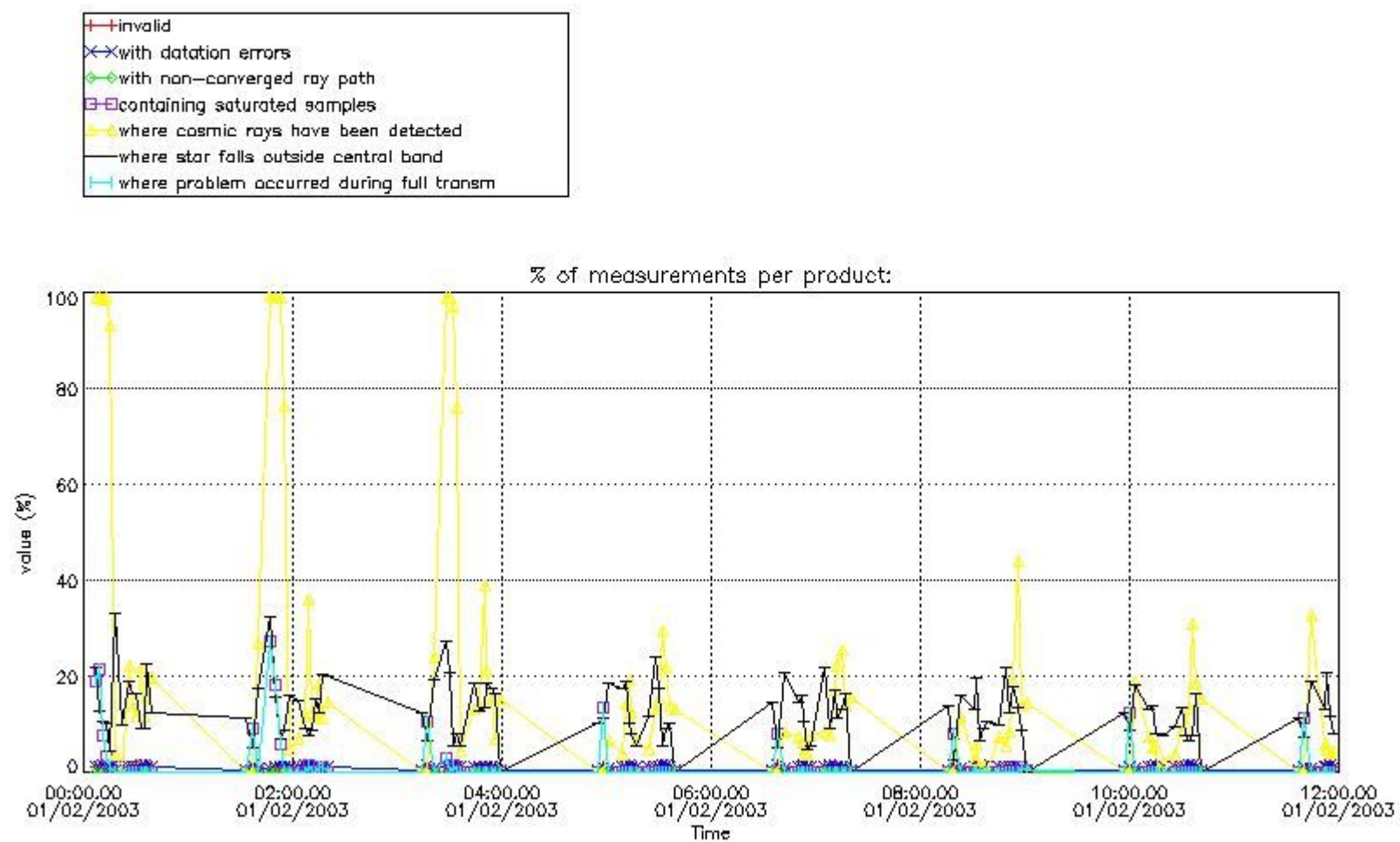


4. Level 1 quality information per product

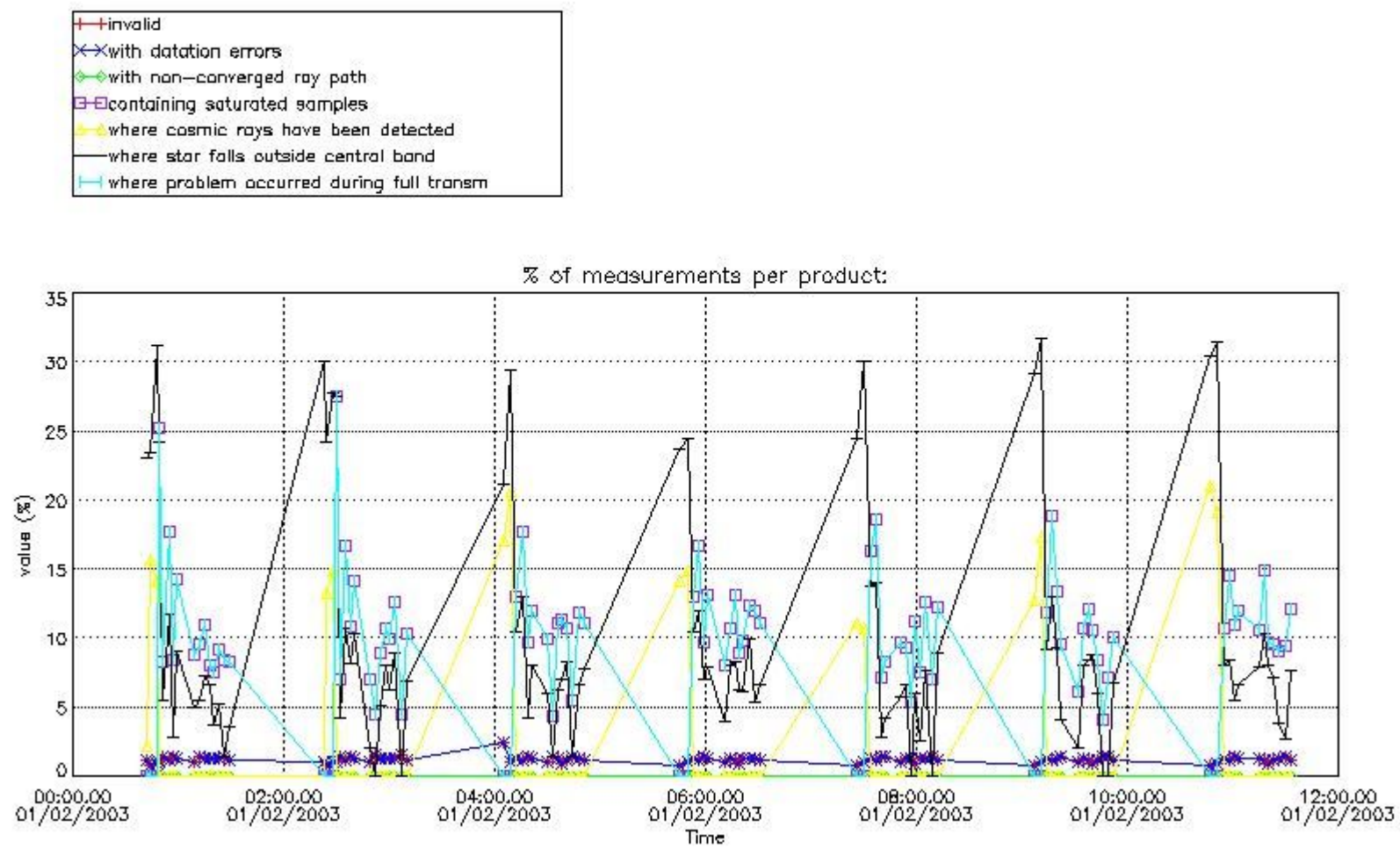
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



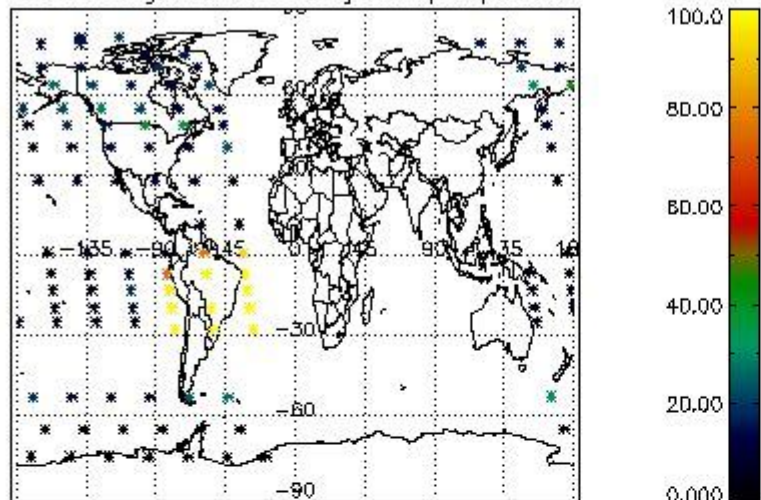
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



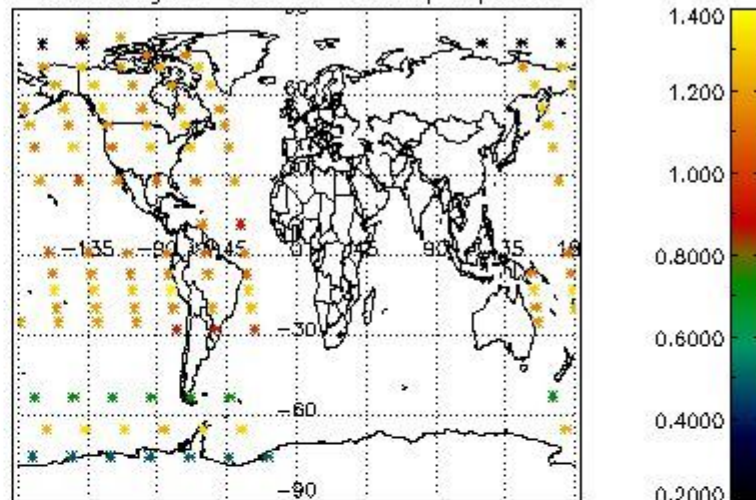
4.2 Plot quality information per product coming from level 1b processing (world map)

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

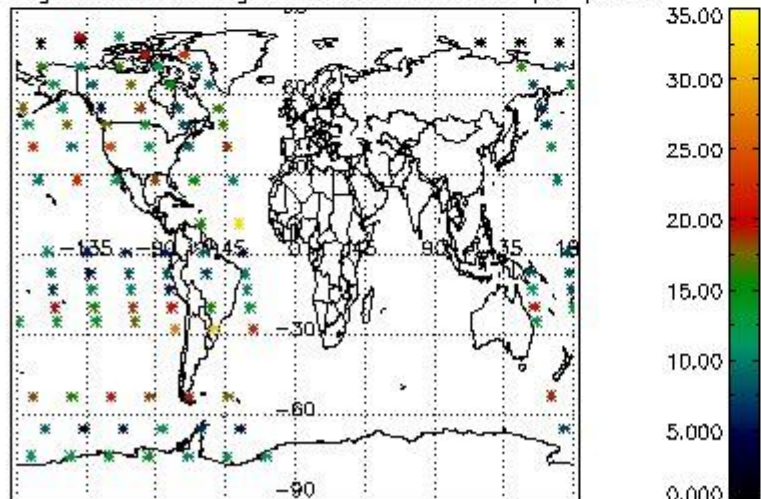
Percentage of cosmic ray hits per profile



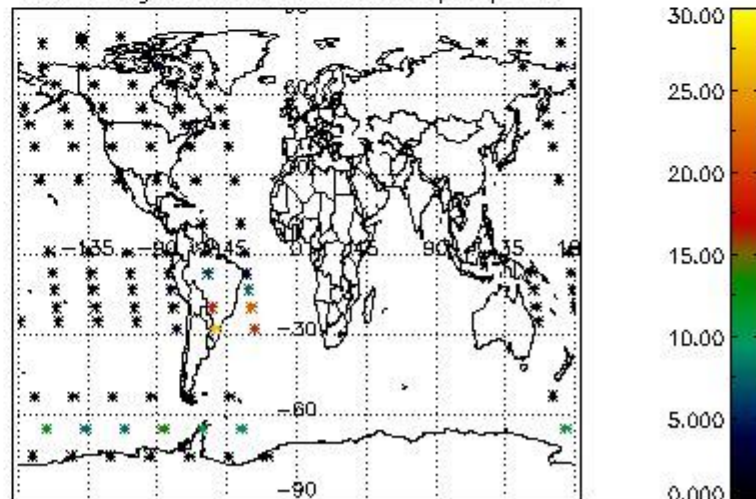
Percentage of datation errors per profile



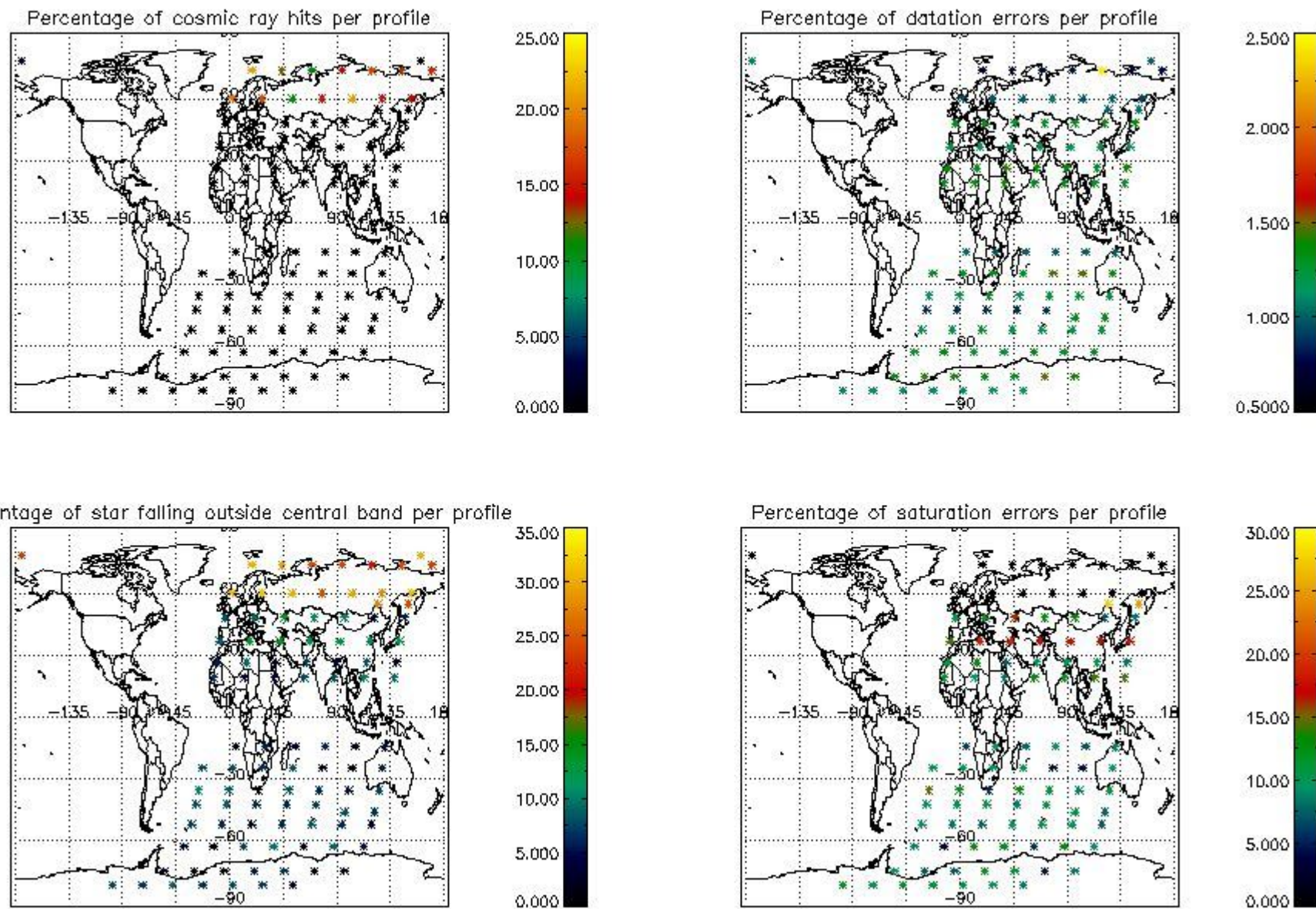
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

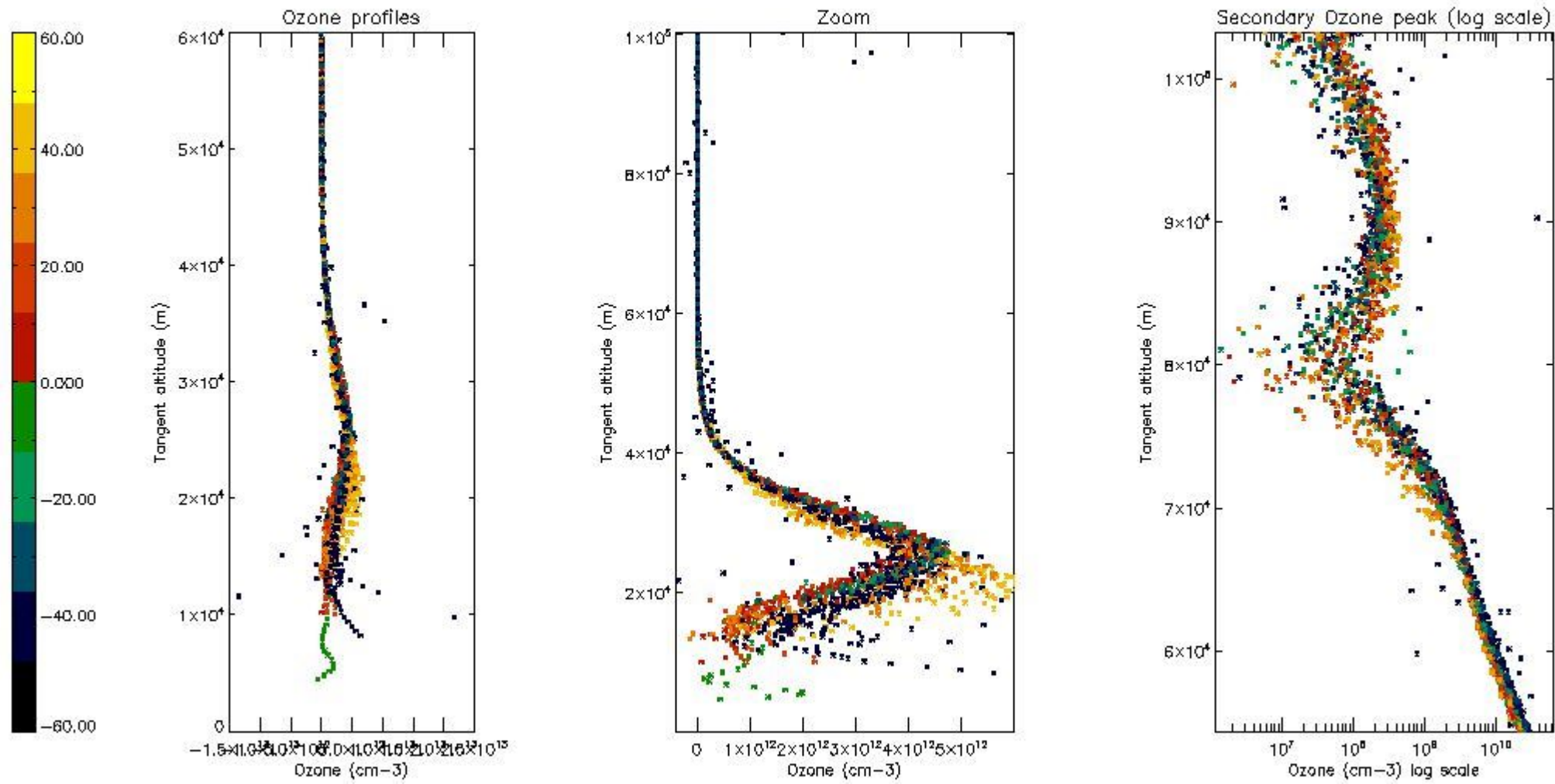
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	29
STD < 20	20

STD < 10	16
STD < 5	12

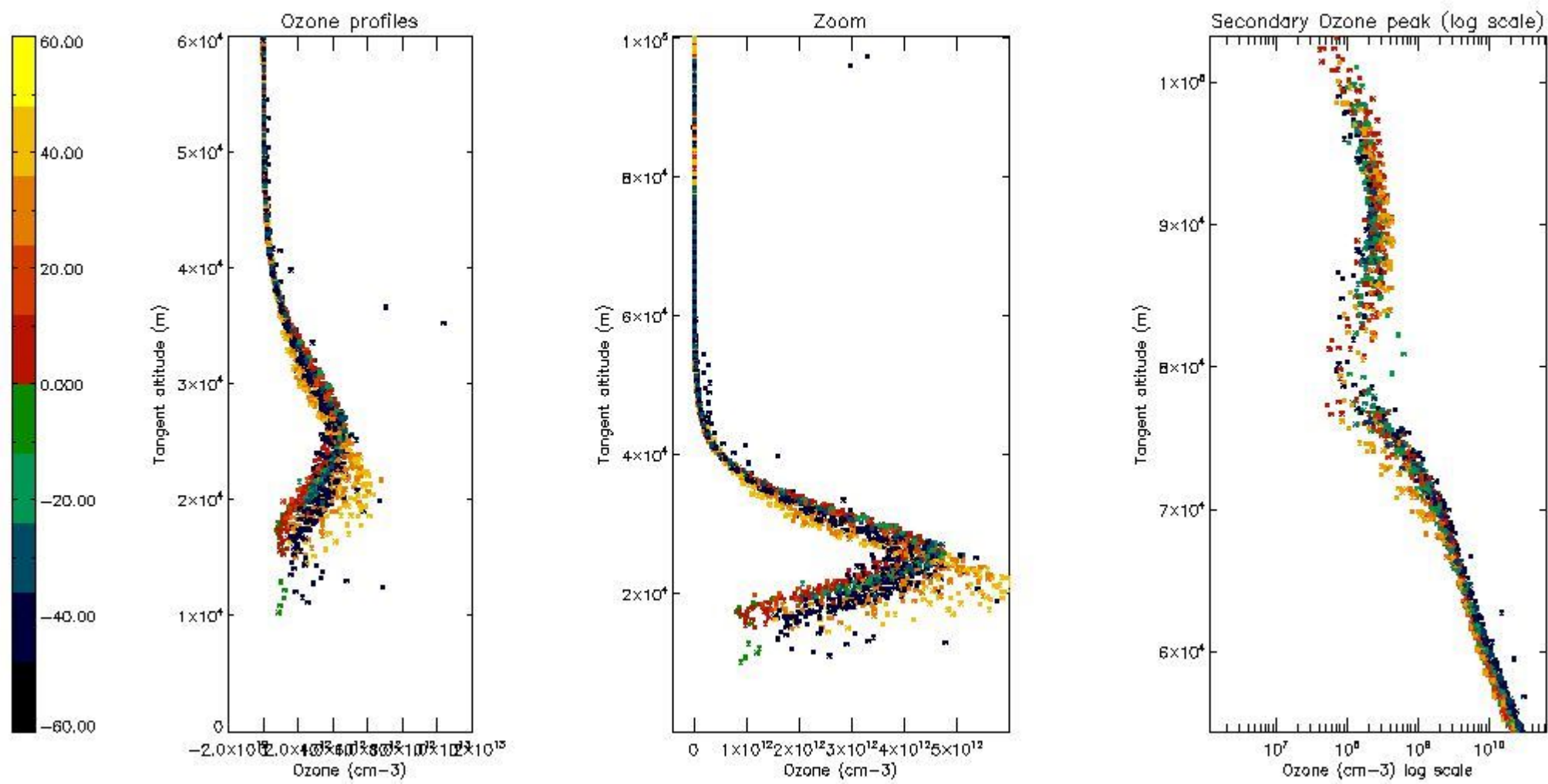
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



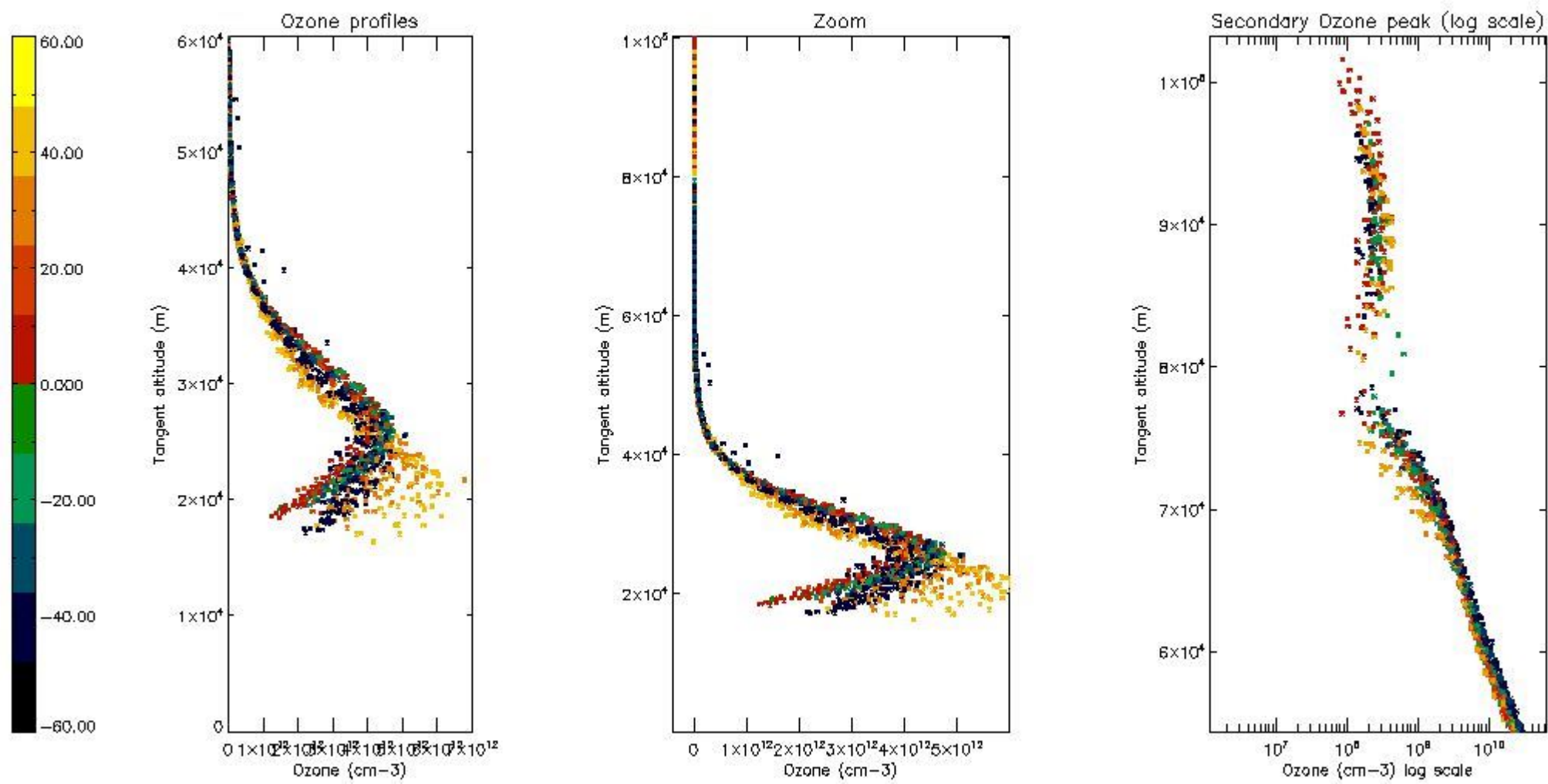
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



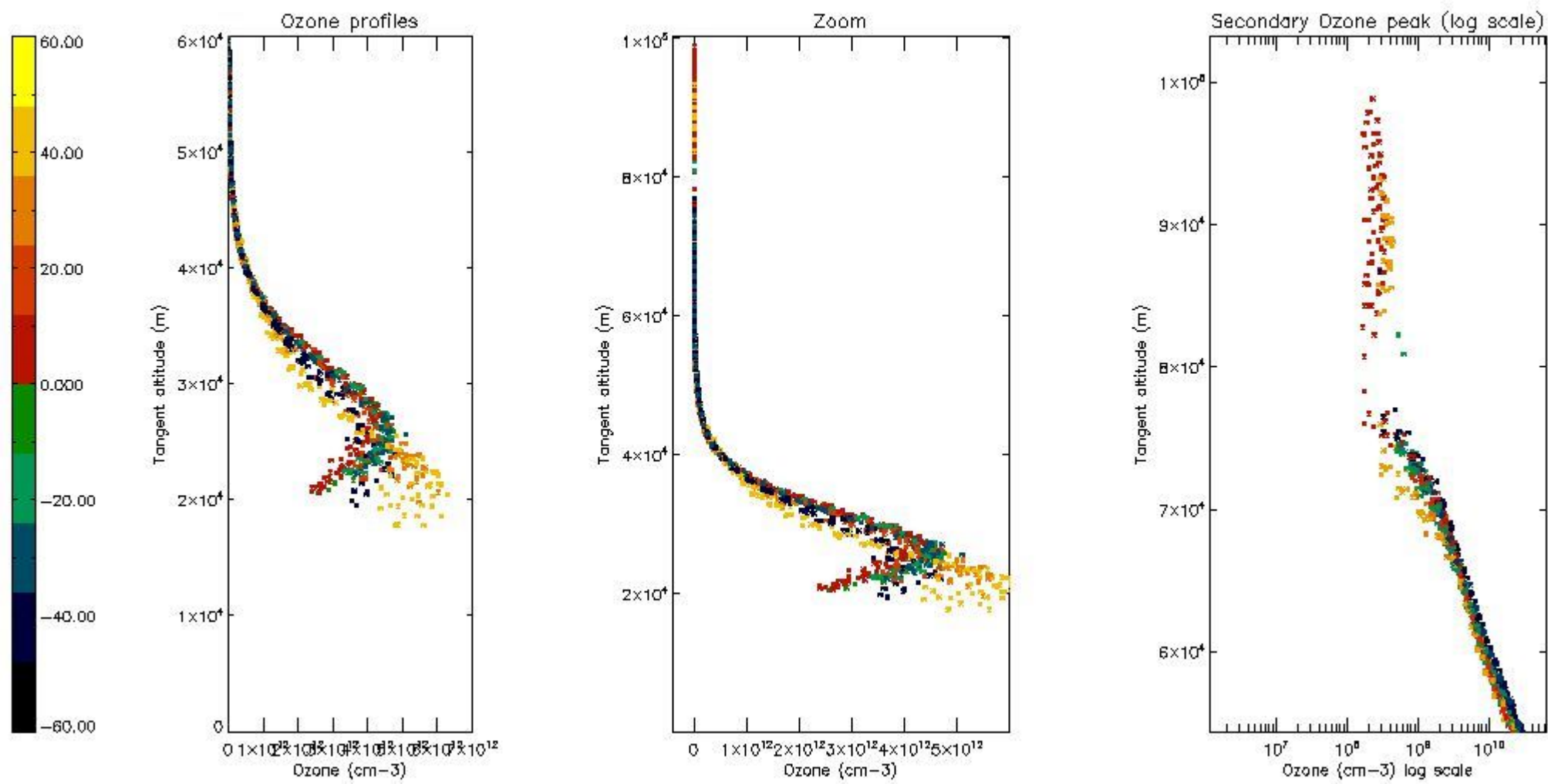
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



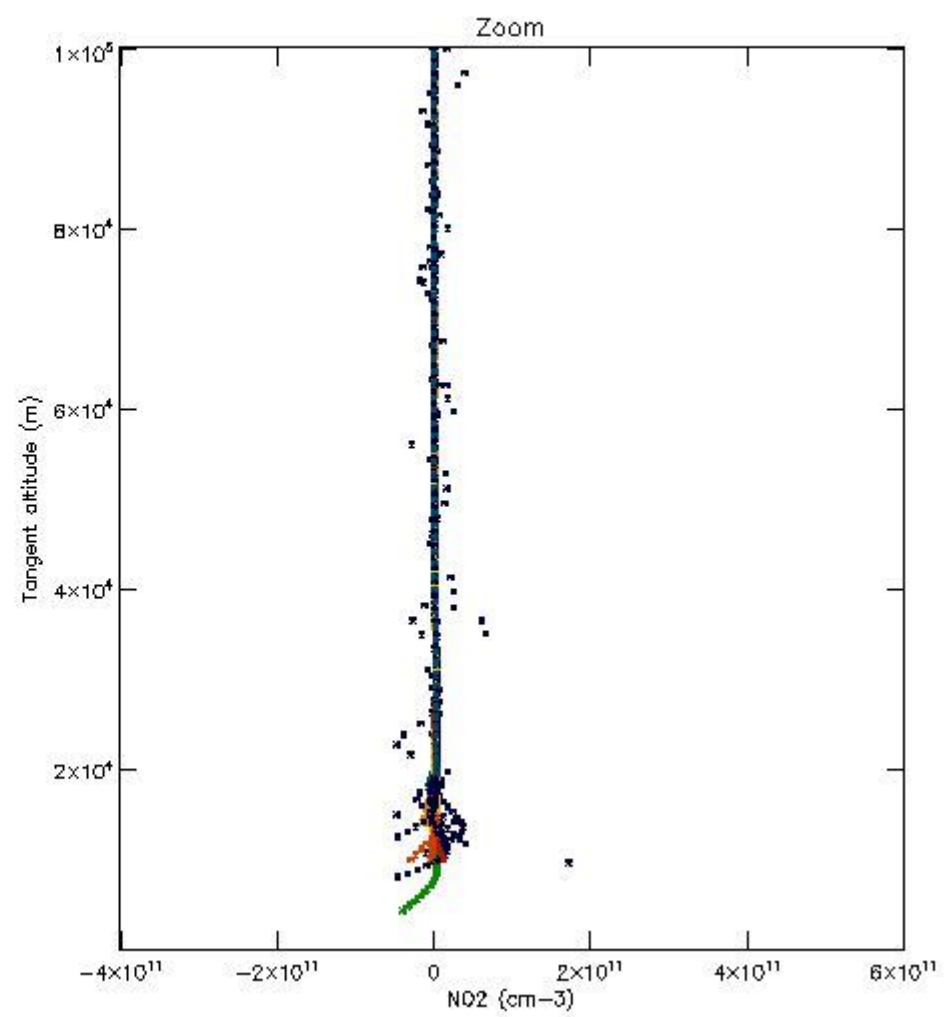
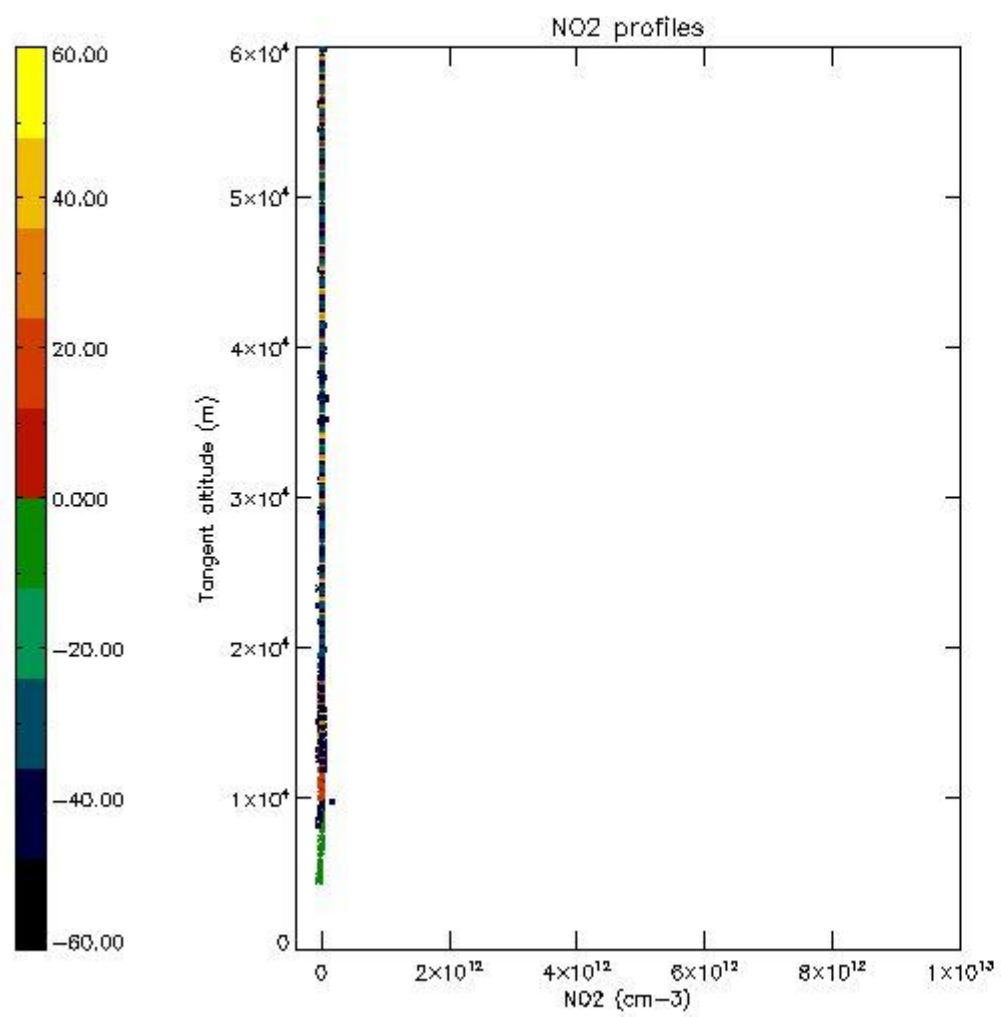
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



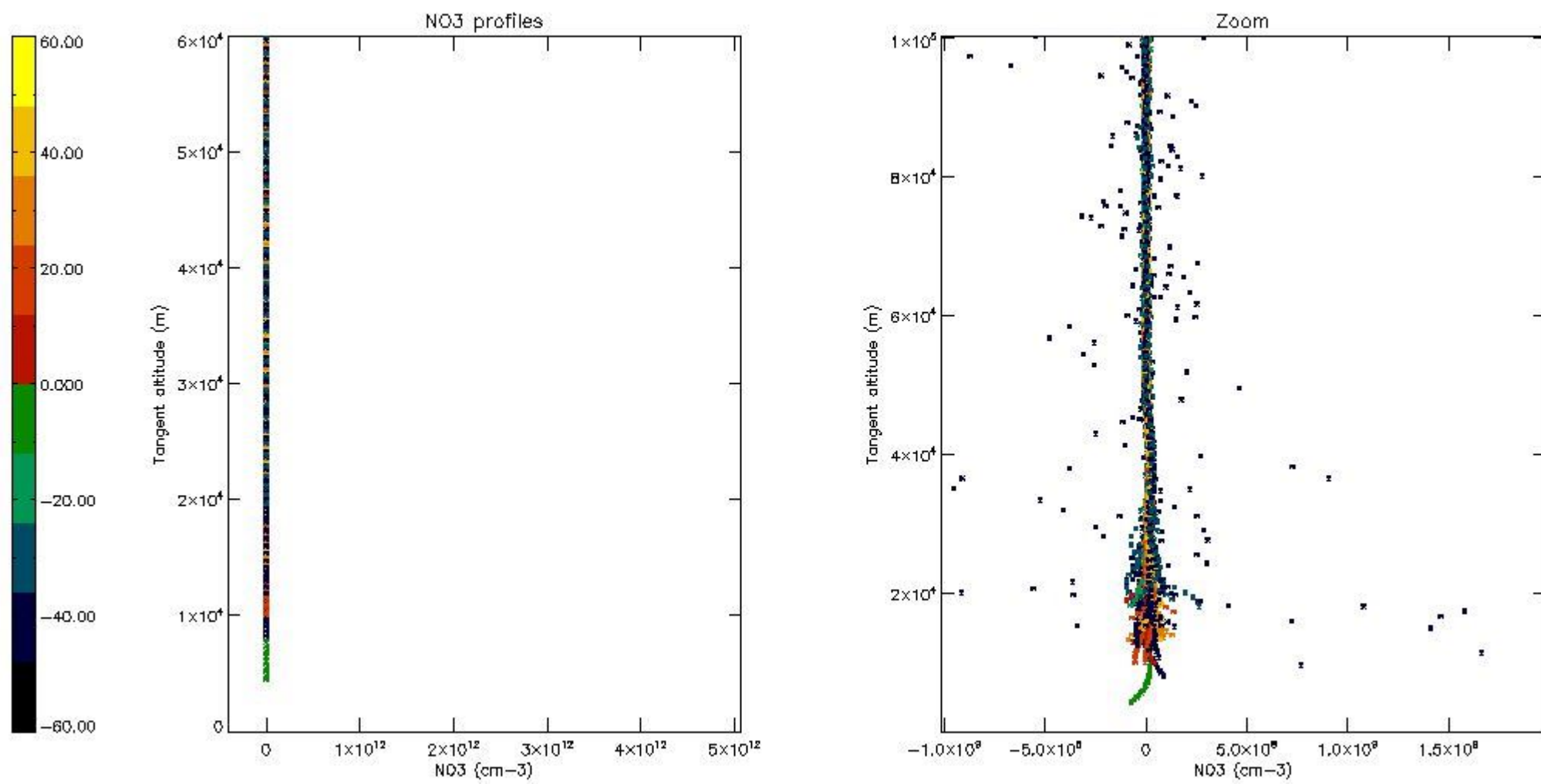
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



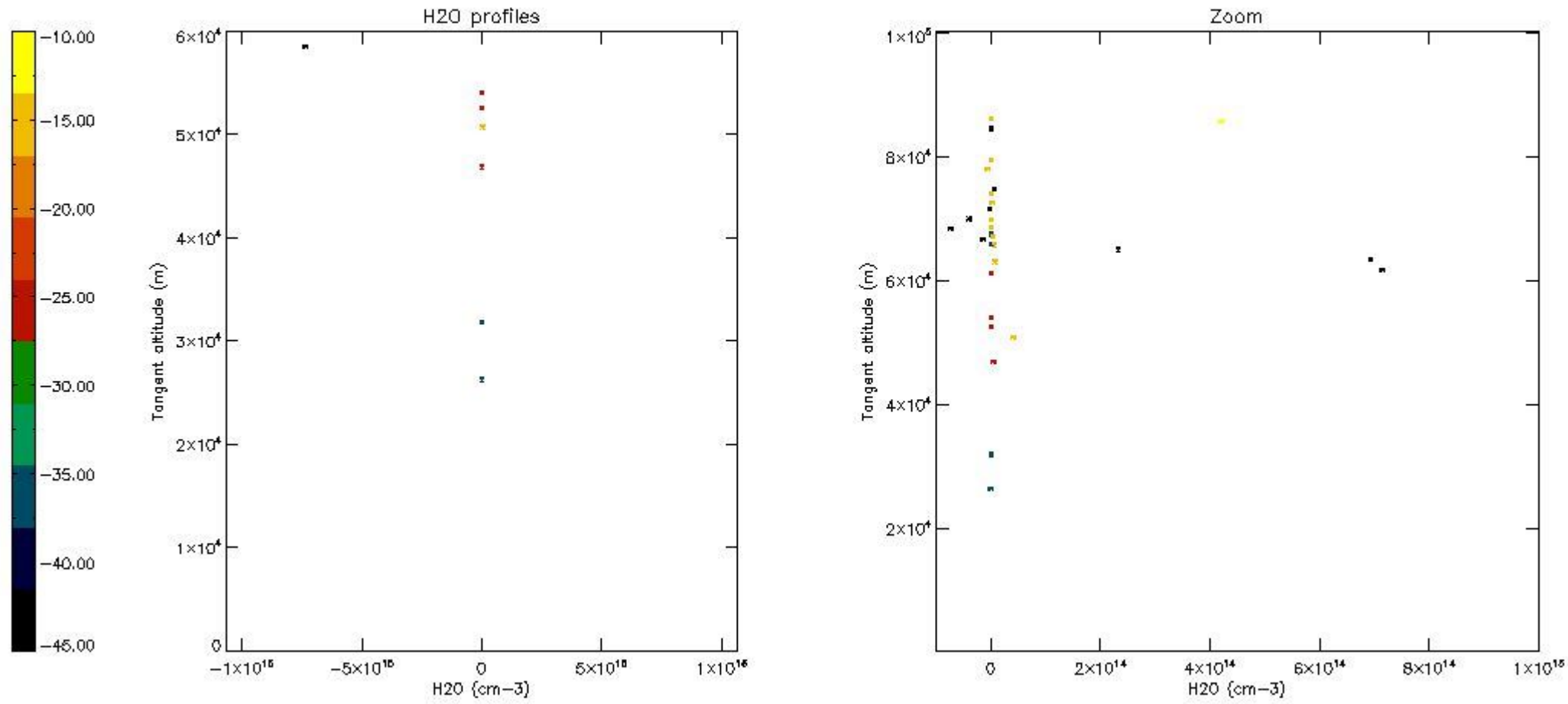
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	01-FEB-2003 00:03:03
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-FEB-2003 00:03:03
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-FEB-2003 00:03:03

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](#)

[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](#)

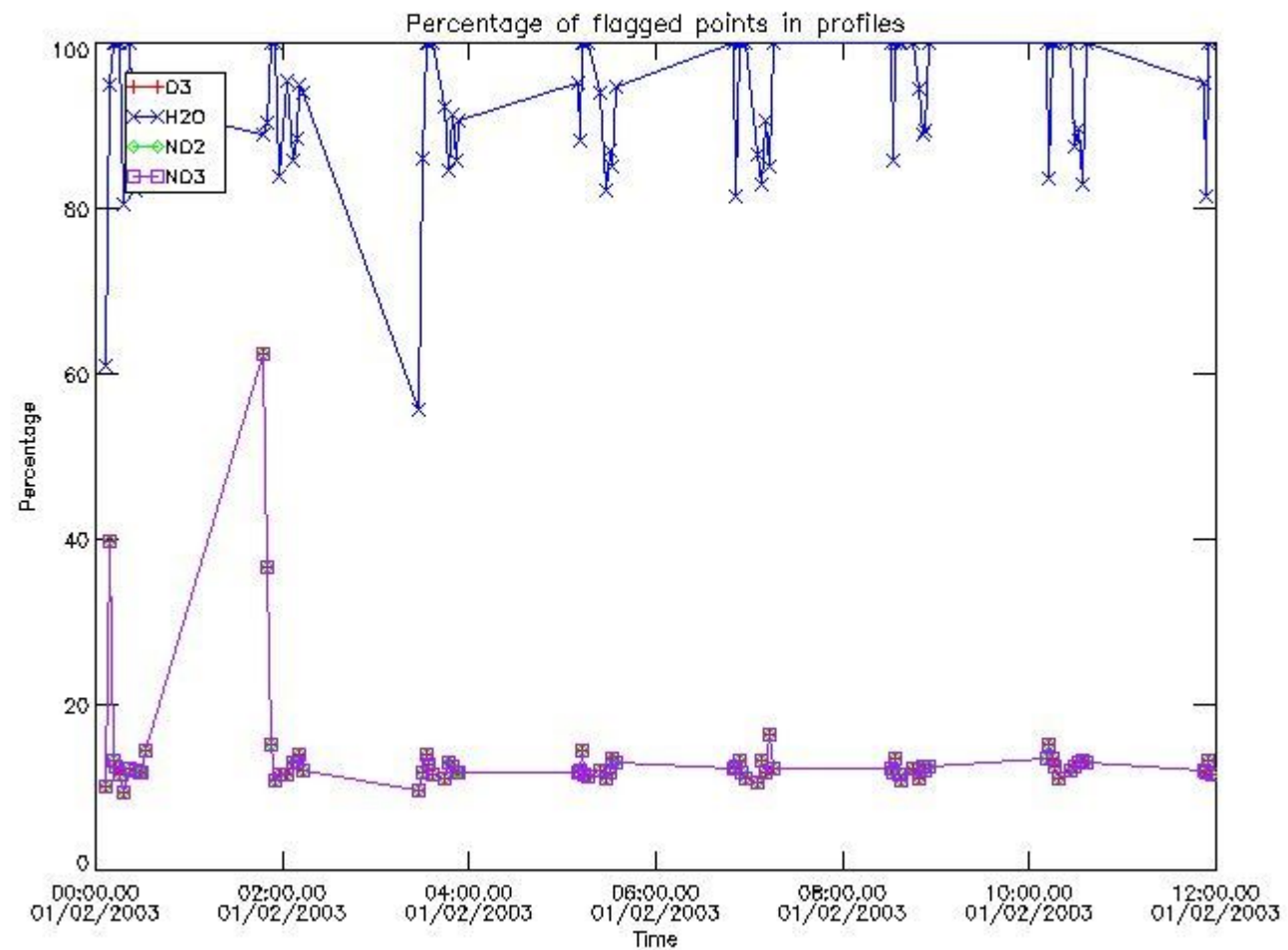
[6. Auxiliary Data Files used for the production reported in section 2](#)

220	GOM_NL__2PRFIN20030201_110304_000000382013_00266_04829_5592.N1	01-FEB-2003 11:03:04	Bright	37.500	42	34Bet Aur	1.9000	10200.	75	4829	No
221	GOM_NL__2PRFIN20030201_111518_000000382013_00266_04829_5593.N1	01-FEB-2003 11:15:18	Bright	38.000	49	1Alp UMi	1.9900	6300.0	76	4829	No
222	GOM_NL__2PRFIN20030201_111823_000000442013_00266_04829_5594.N1	01-FEB-2003 11:18:23	Bright	43.500	60	7Bet UMi	2.0810	3950.0	87	4829	No
223	GOM_NL__2PRFIN20030201_112021_000000572013_00266_04829_5595.N1	01-FEB-2003 11:20:21	Bright	56.500	55	79Zet UMa	2.0600	10200.	113	4829	No
224	GOM_NL__2PRFIN20030201_112307_000000422013_00266_04829_5596.N1	01-FEB-2003 11:23:07	Bright	42.000	119	14Eta Dra	2.7270	4700.0	84	4829	No
225	GOM_NL__2PRFIN20030201_112617_000000392013_00266_04829_5597.N1	01-FEB-2003 11:26:17	Bright	39.000	130	23Bet Dra	2.7990	5800.0	78	4829	No
226	GOM_NL__2PRFIN20030201_112956_000000372013_00266_04829_5598.N1	01-FEB-2003 11:29:56	Bright	37.000	5	3Alp Lyr	0.033000	11000.	74	4829	No
227	GOM_NL__2PRFIN20030201_113258_000000462013_00266_04829_5599.N1	01-FEB-2003 11:32:58	Bright	45.500	133	40Zet Her	2.8070	6000.0	91	4829	No
228	GOM_NL__2PRFIN20030201_113708_000001012013_00266_04829_5600.N1	01-FEB-2003 11:37:08	Bright	100.50	83		2.3780	11000.	201	4829	No
229	GOM_NL__2PRFIN20030201_114016_000000412013_00266_04829_5601.N1	01-FEB-2003 11:40:16	Bright	40.500	126	60Bet Oph	2.7700	4250.0	81	4829	No
230	GOM_NL__2PRFIN20030201_114352_000000722013_00266_04829_5602.N1	01-FEB-2003 11:43:52	Twl_and_stray	71.500	102	24Alp Ser	2.6000	4250.0	143	4829	No
231	GOM_NL__2PRFIN20030201_114713_00000012013_00266_04829_5603.N1	01-FEB-2003 11:47:13	Dark	0.50000	1012	Venus	0.0000	0.0000	1	4829	Yes
232	GOM_NL__2PRFIN20030201_114943_000000582013_00266_04829_5604.N1	01-FEB-2003 11:49:43	Dark	58.000	1014	Mars	0.0000	0.0000	116	4829	Yes
233	GOM_NL__2PRFIN20030201_115148_000000432013_00266_04829_5605.N1	01-FEB-2003 11:51:48	Dark	42.500	25	35Lam Sco	1.6200	28000.	85	4829	No
234	GOM_NL__2PRFIN20030201_115318_000000442013_00266_04829_5606.N1	01-FEB-2003 11:53:18	Dark	43.500	40	The Sco	1.8590	7100.0	87	4829	No
235	GOM_NL__2PRFIN20030201_115511_000000392013_00266_04829_5607.N1	01-FEB-2003 11:55:11	Dark	38.500	147	Alp Ara	2.8770	26000.	77	4829	No
236	GOM_NL__2PRFIN20030201_115653_000000452013_00266_04829_5608.N1	01-FEB-2003 11:56:53	Dark	44.500	131	Gam Lup	2.8000	26000.	89	4829	No

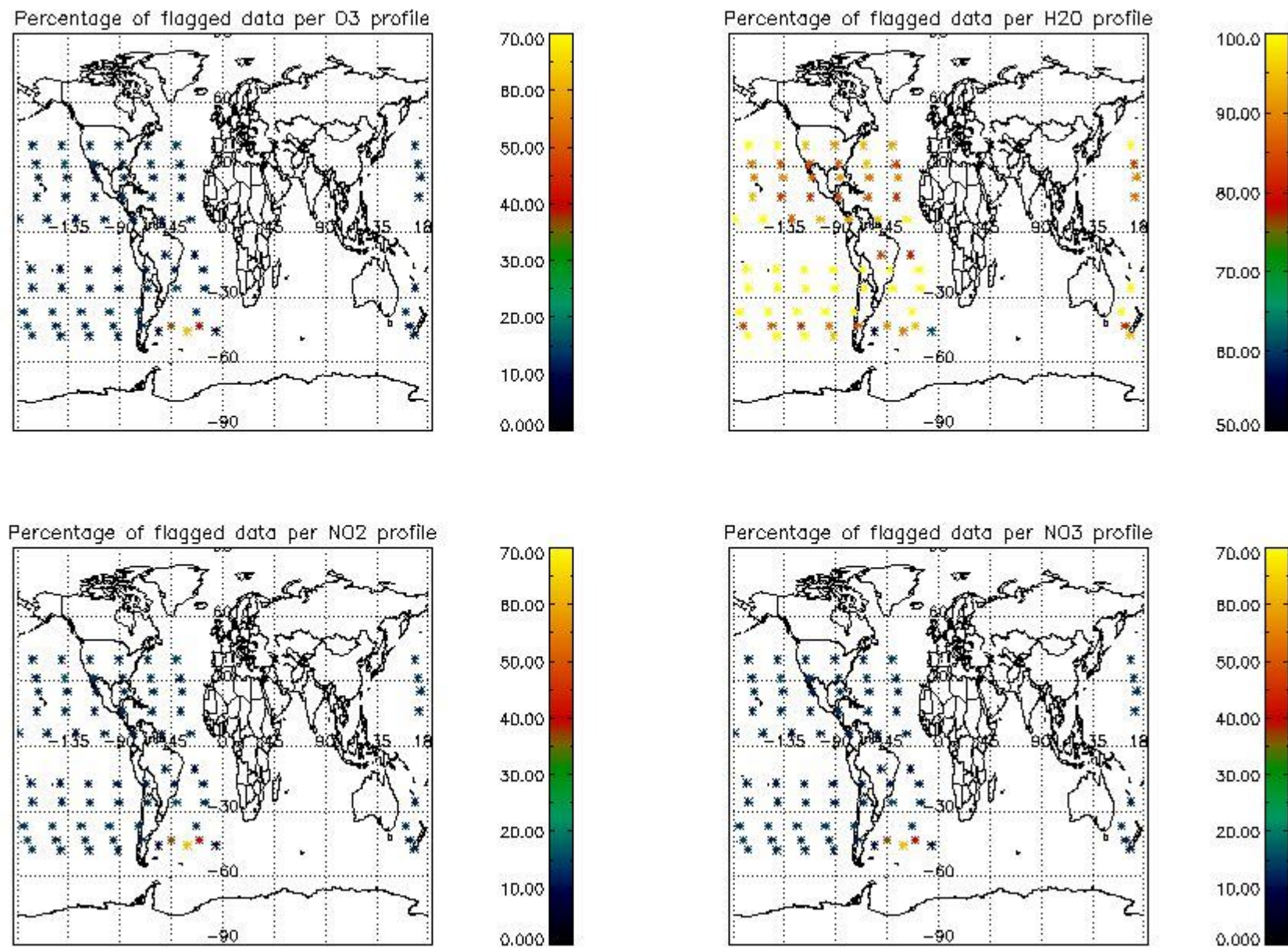
3. Quality information per product

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)

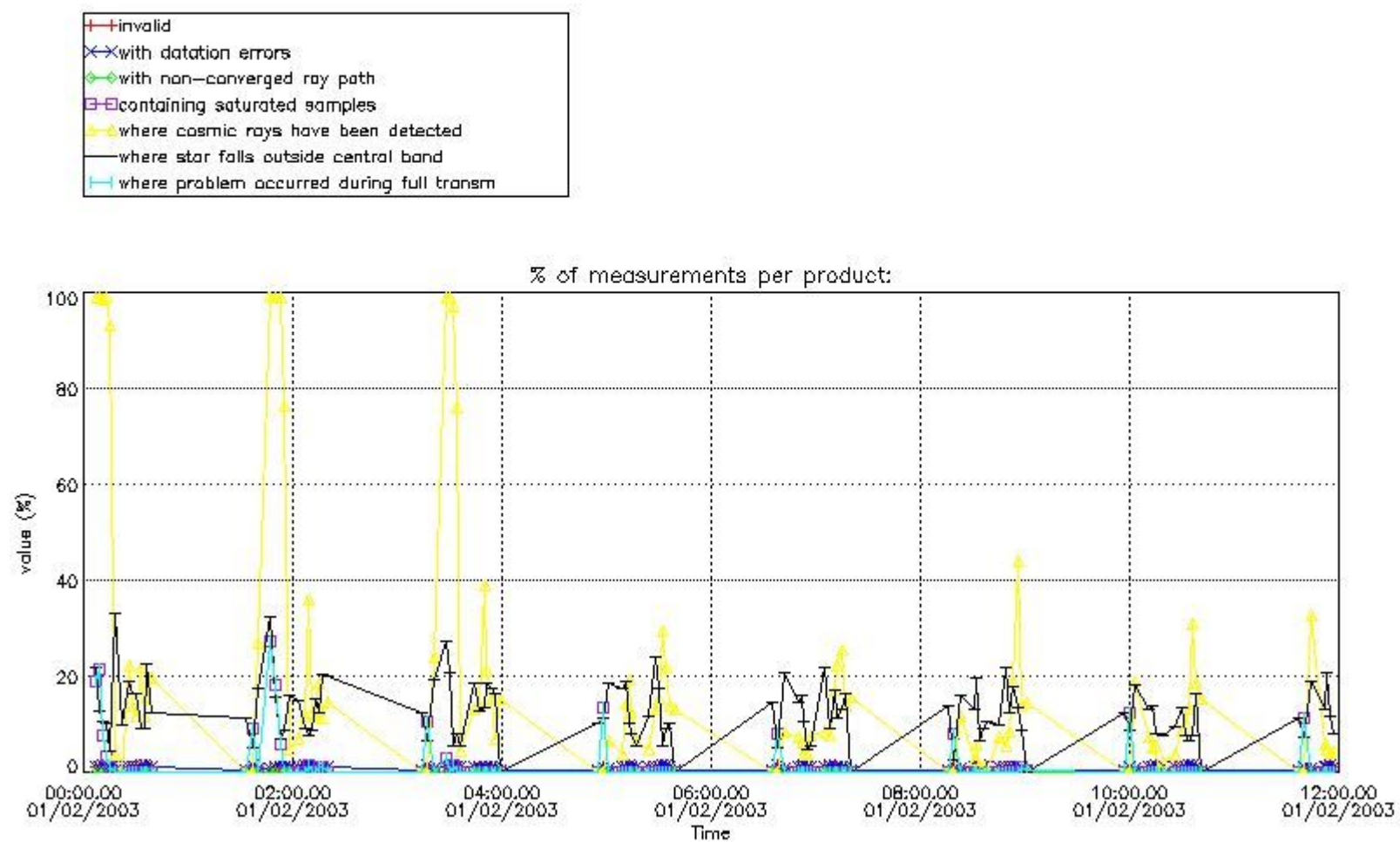


4. Level 1 quality information per product

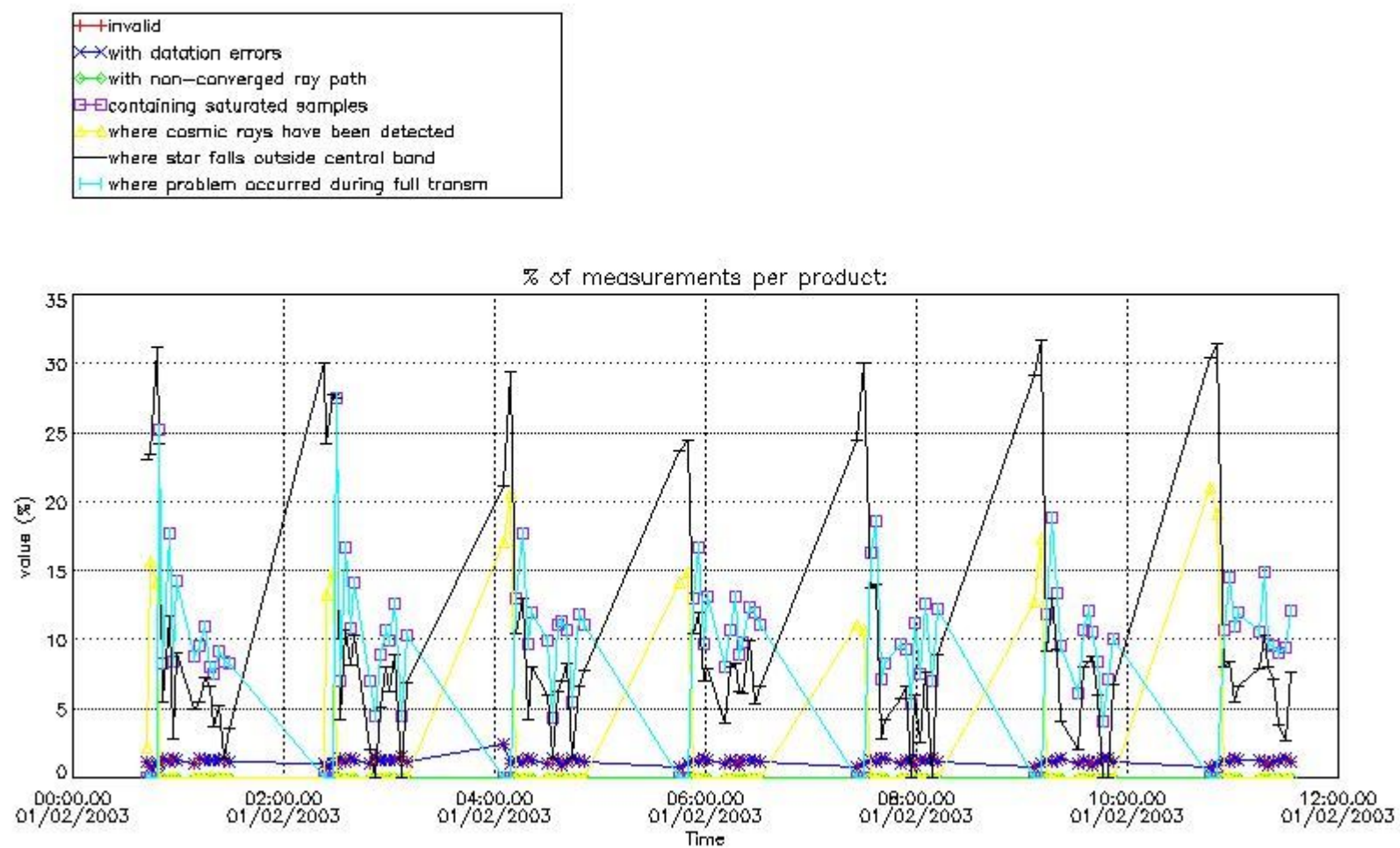
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



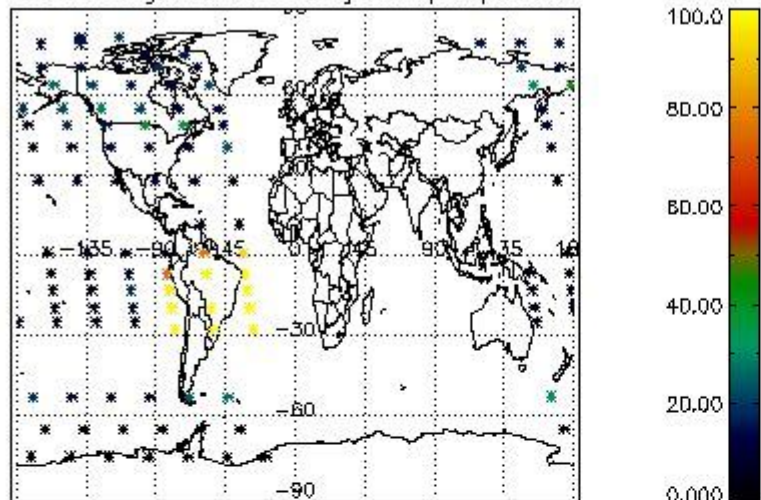
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



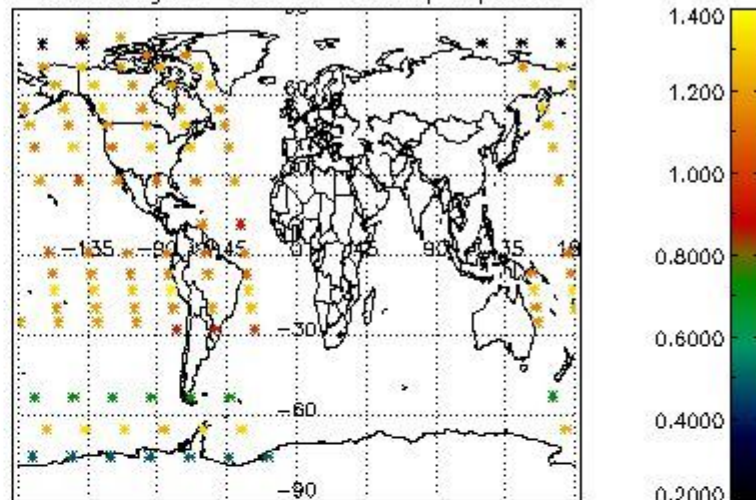
4.2 Plot quality information per product coming from level 1b processing (world map)

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

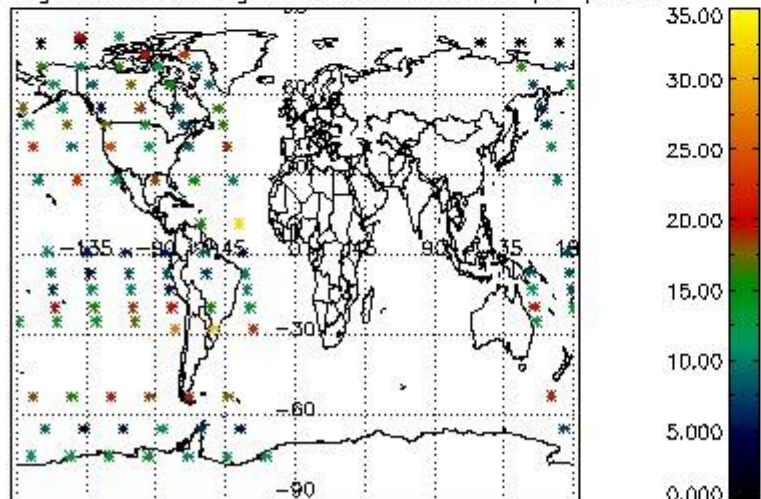
Percentage of cosmic ray hits per profile



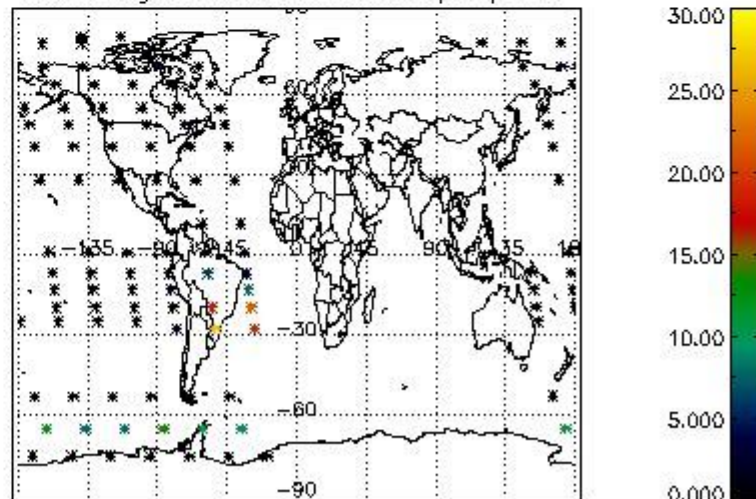
Percentage of datation errors per profile



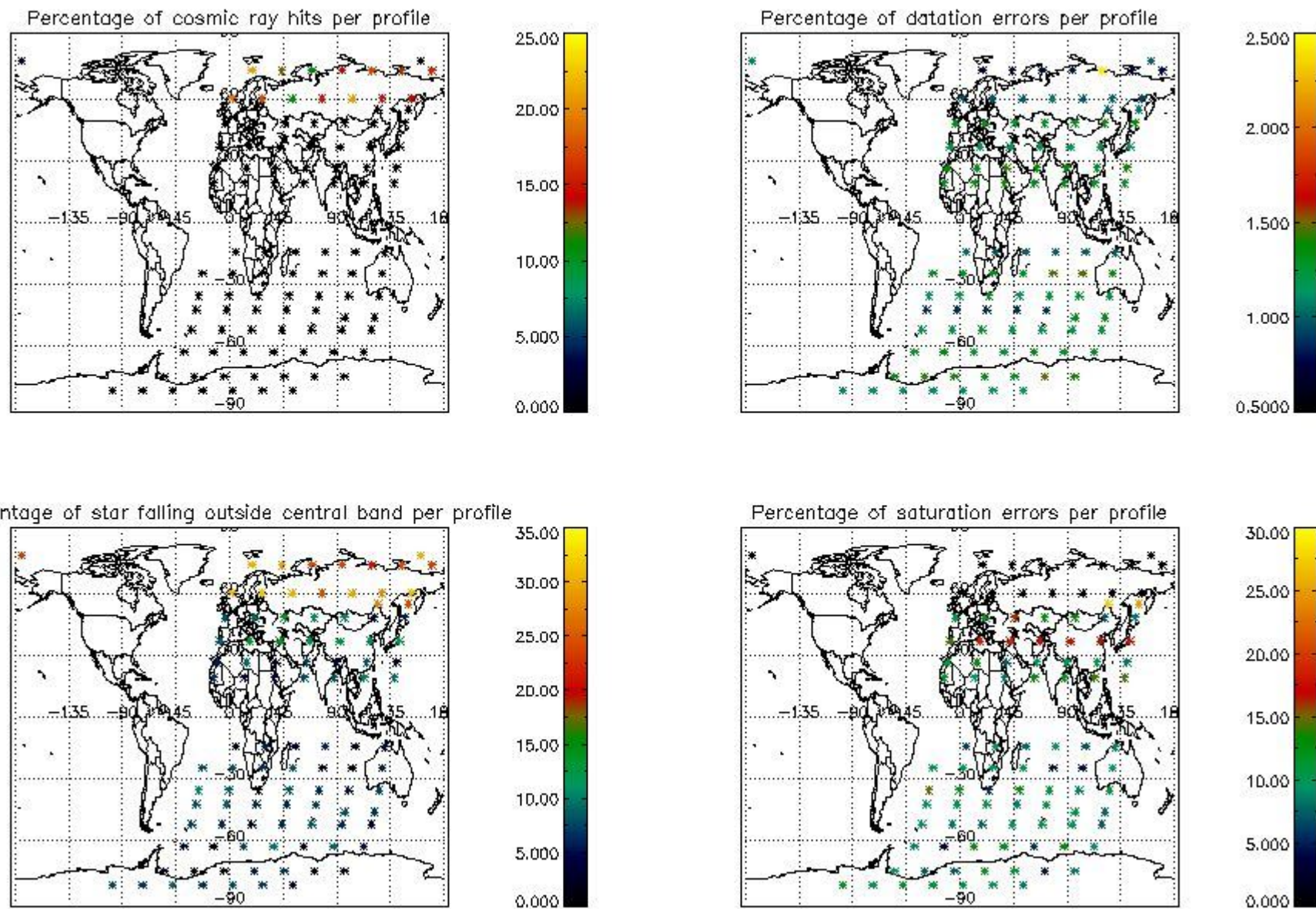
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

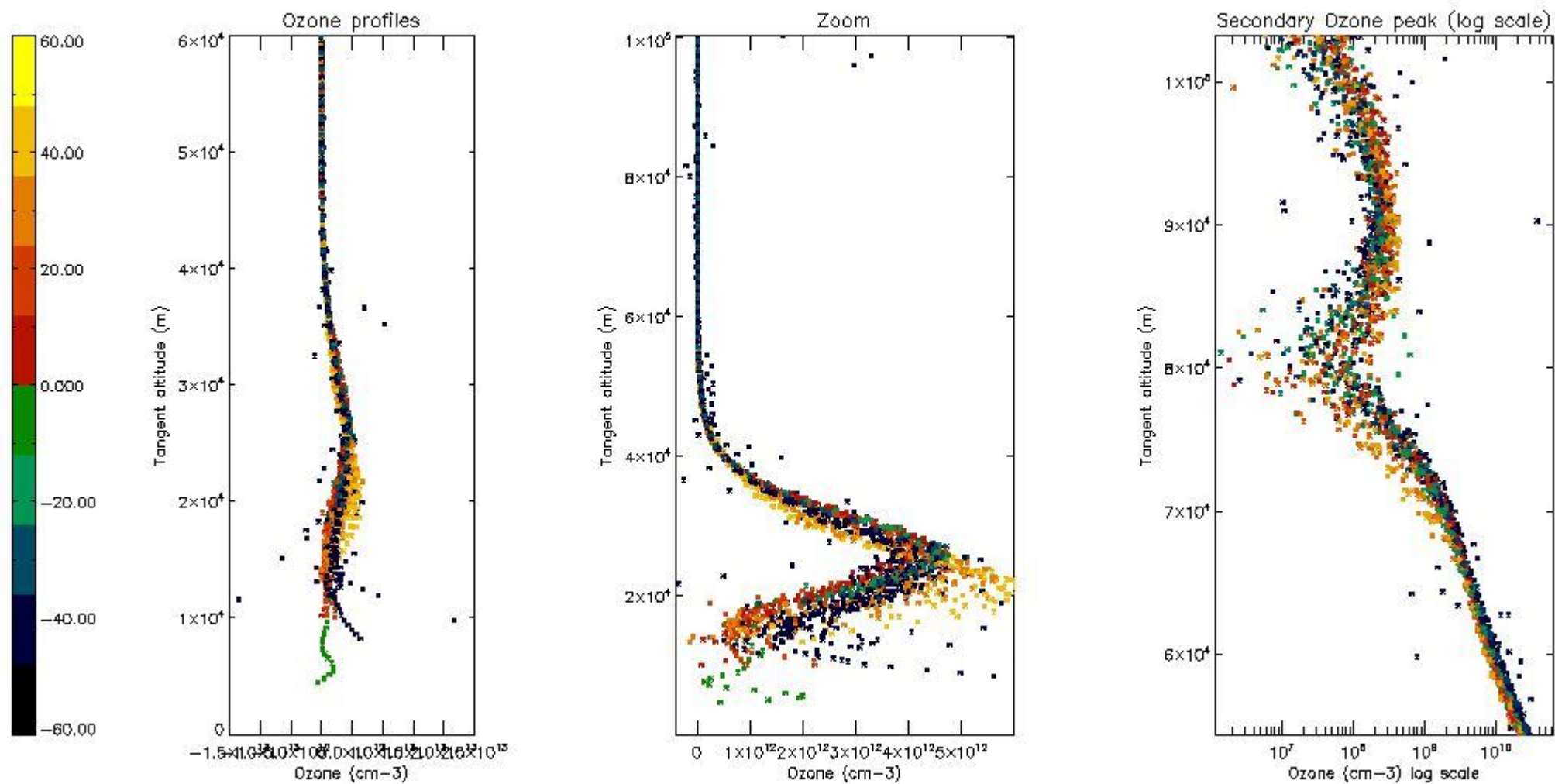
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	29
STD < 20	20

STD < 10	16
STD < 5	12

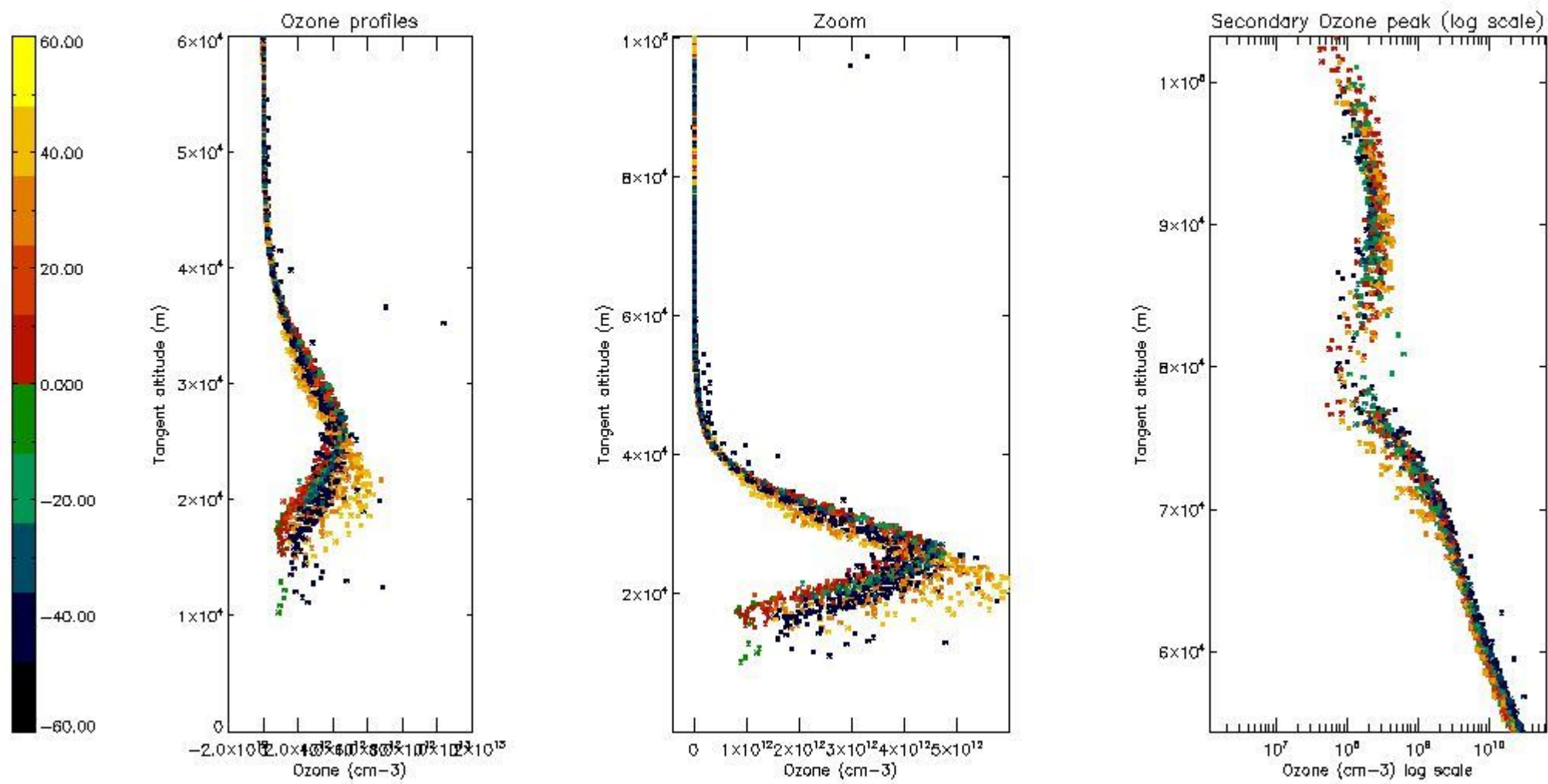
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



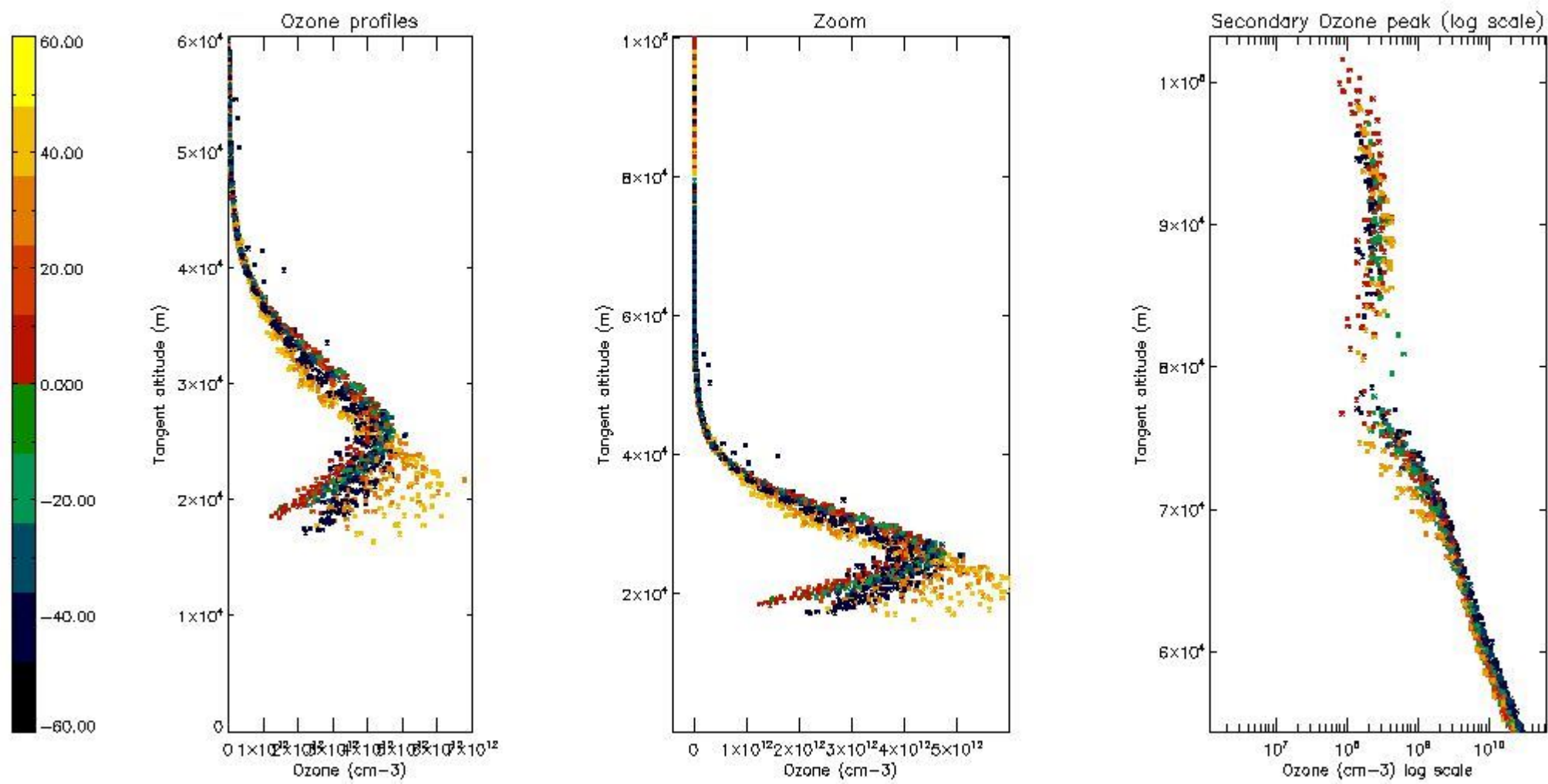
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



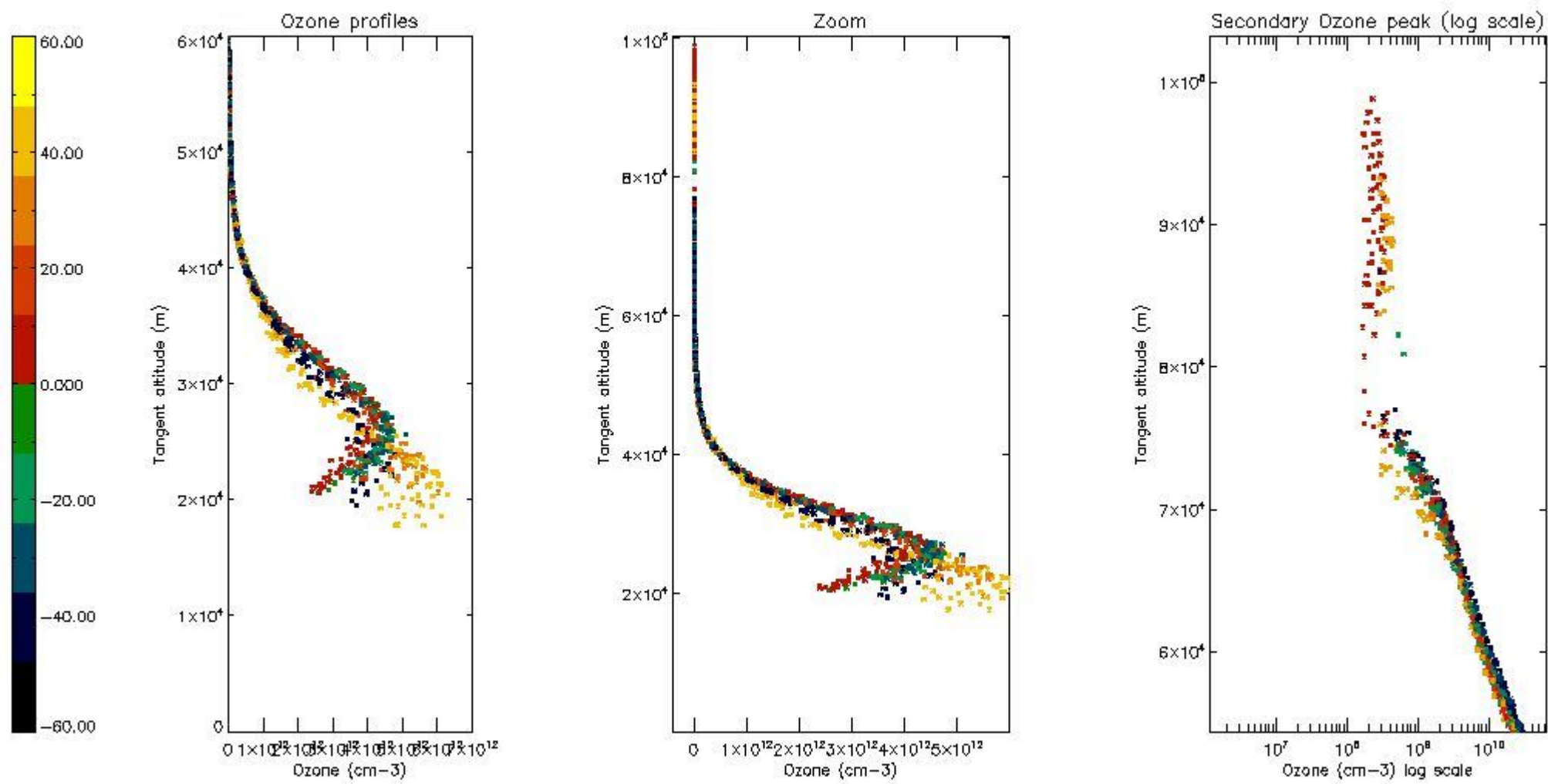
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



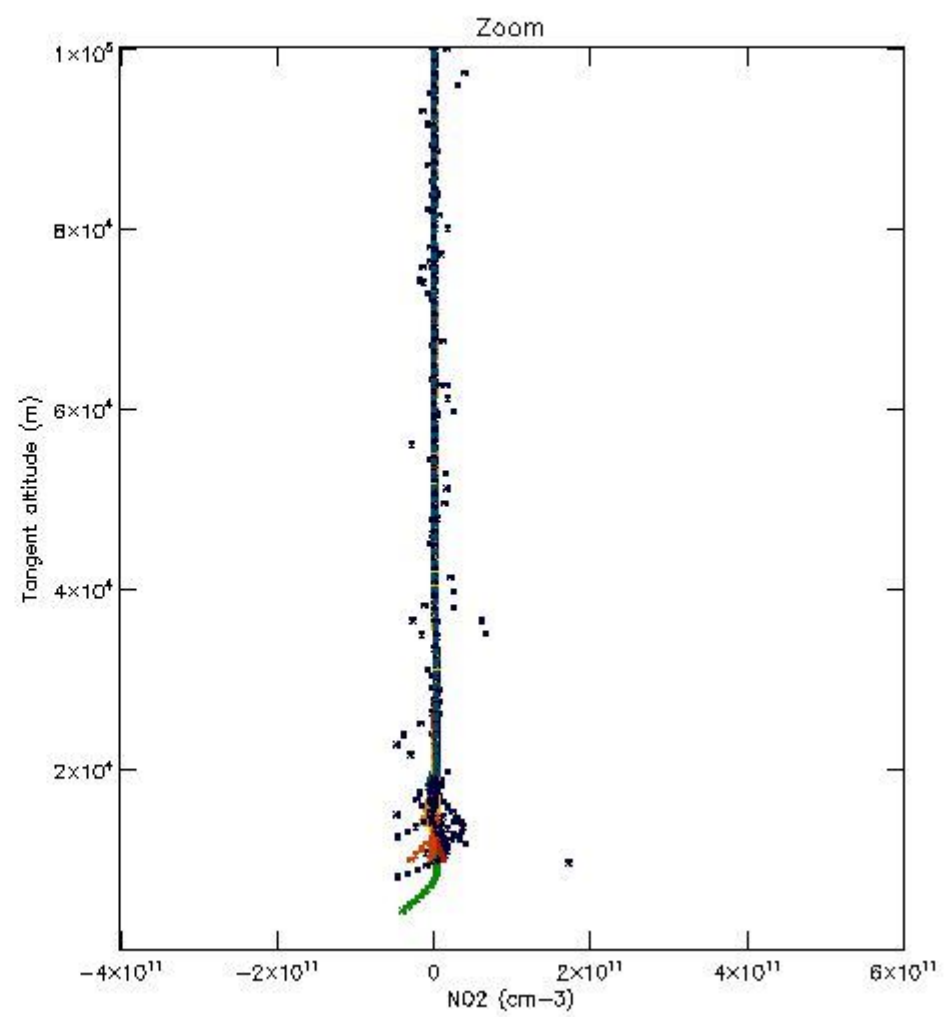
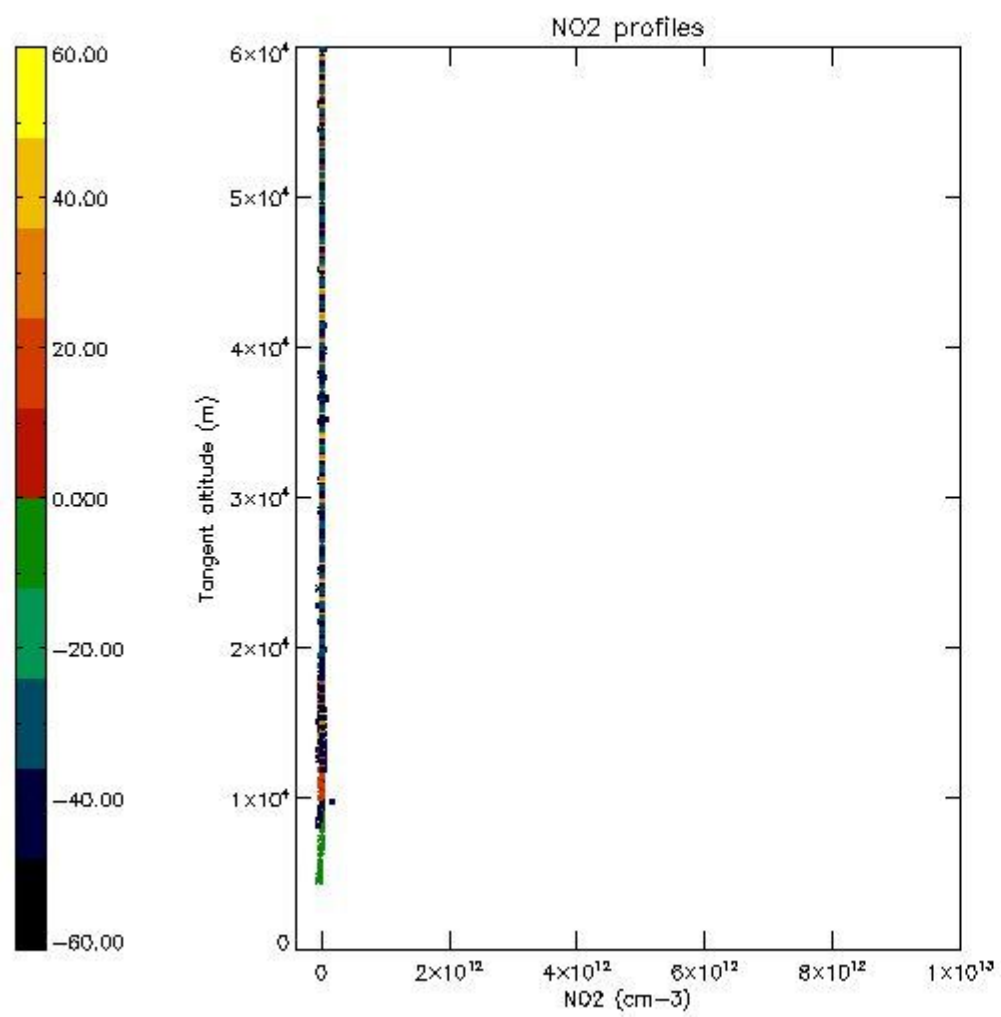
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



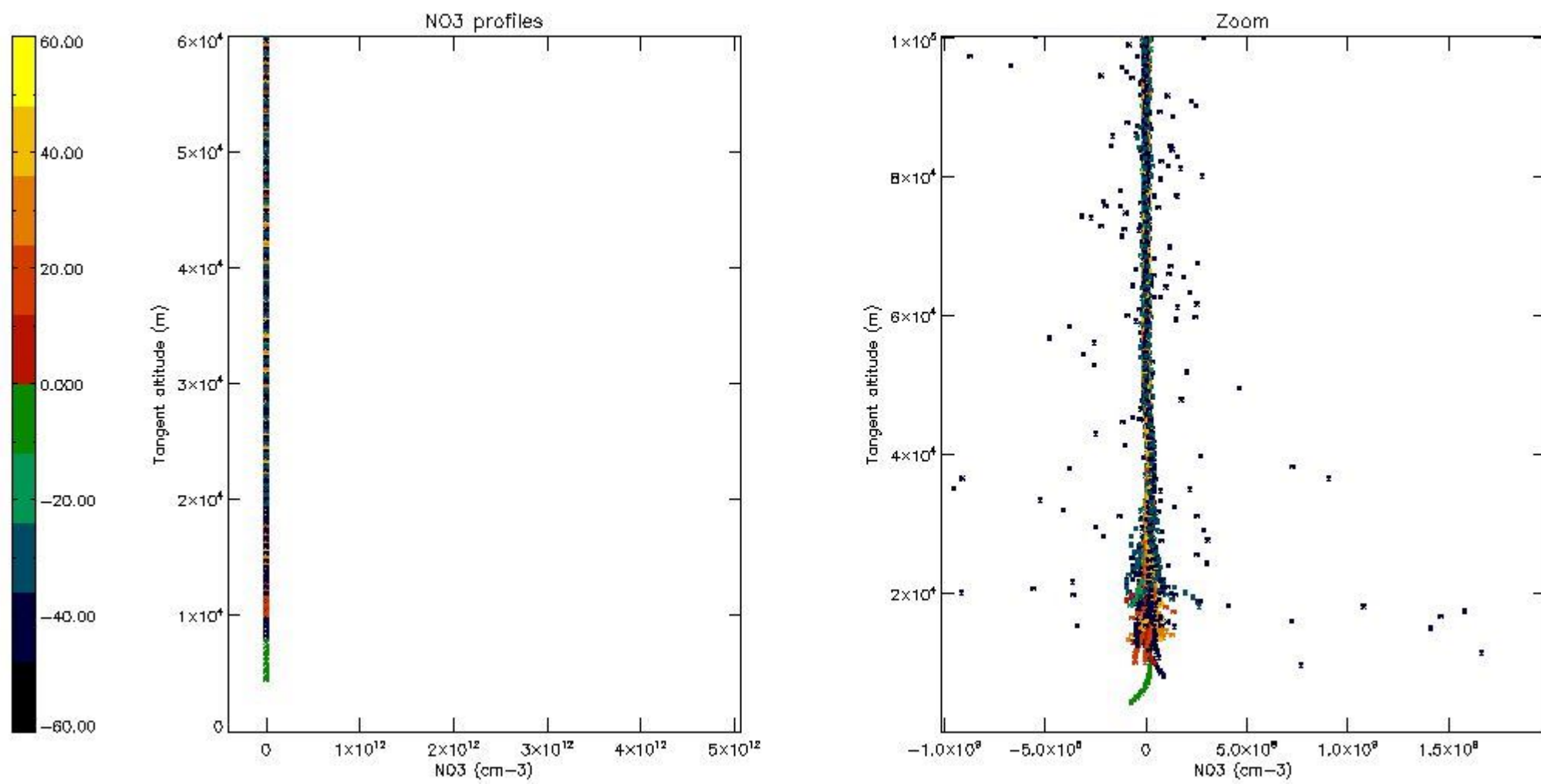
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



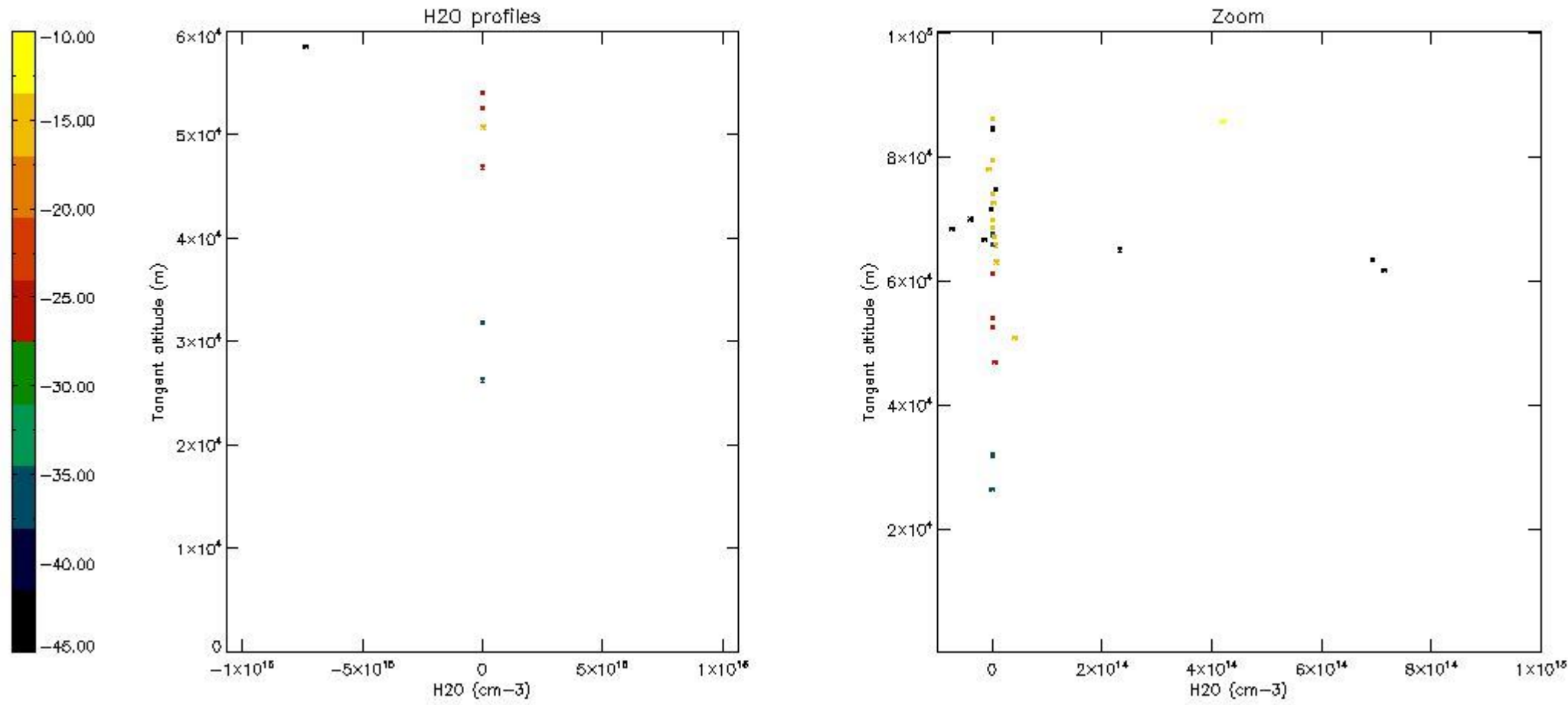
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.

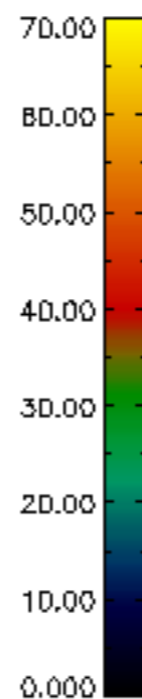
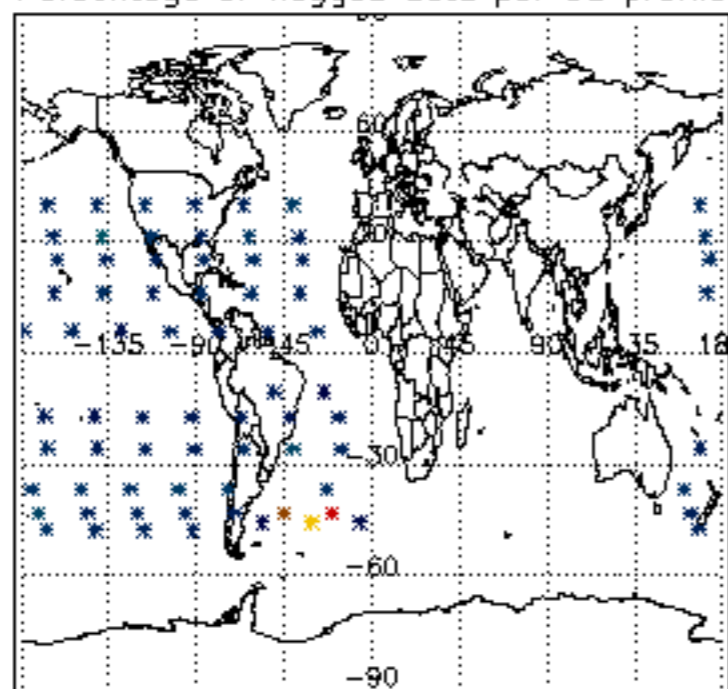


6. Auxiliary Data Files used for the production reported in section 2

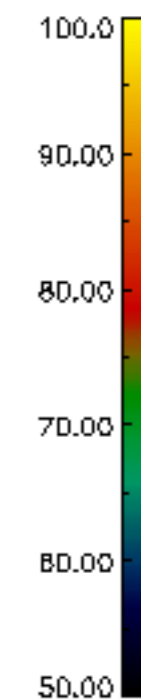
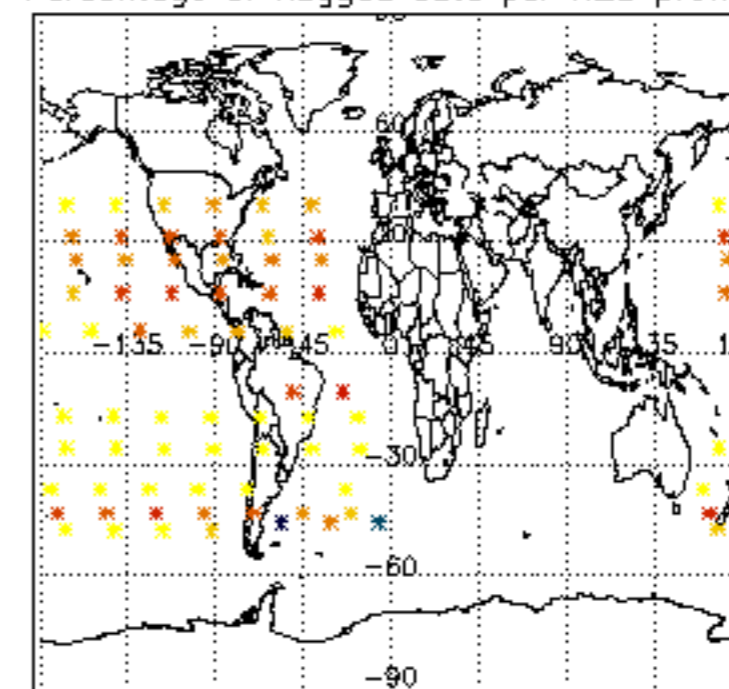
The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	01-FEB-2003 00:03:03
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-FEB-2003 00:03:03
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-FEB-2003 00:03:03

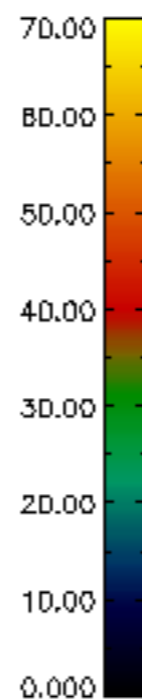
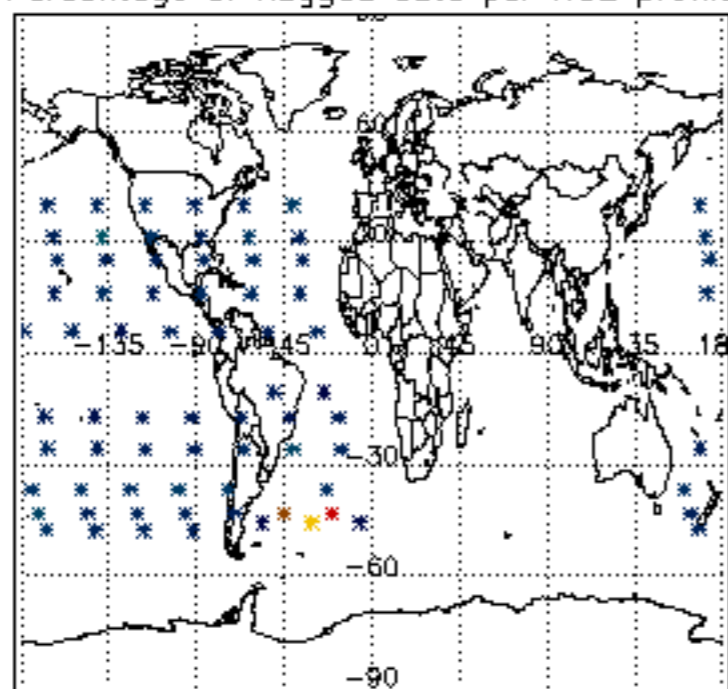
Percentage of flagged data per D3 profile



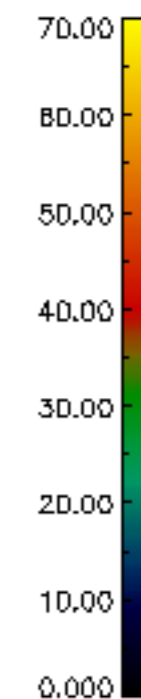
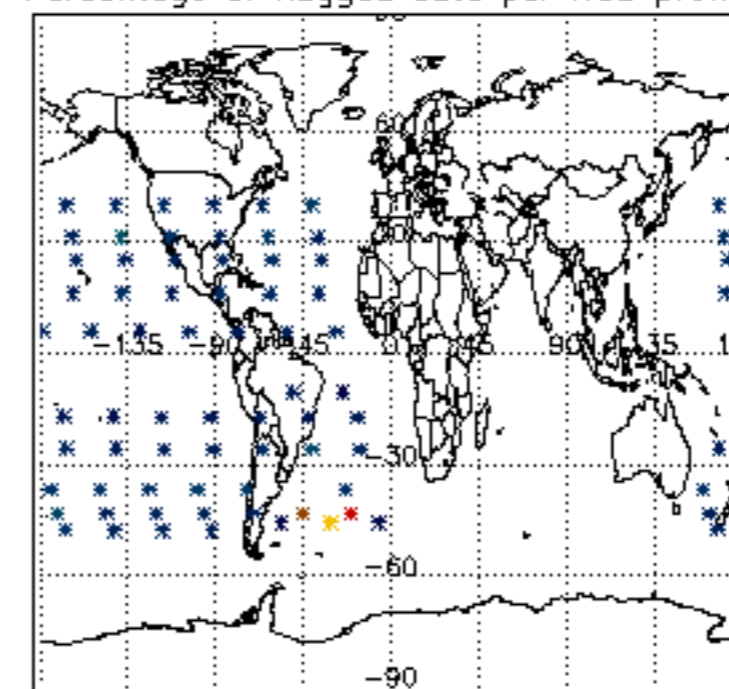
Percentage of flagged data per H2O profile

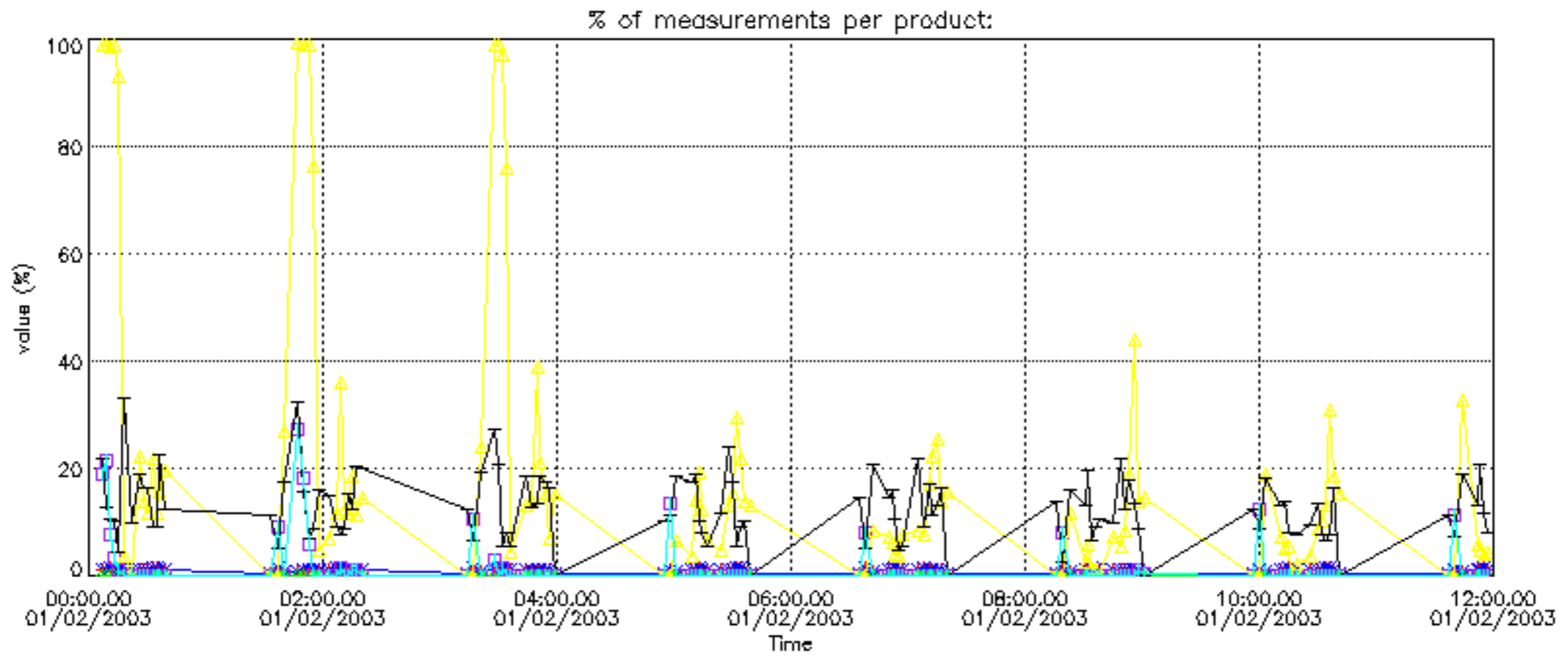


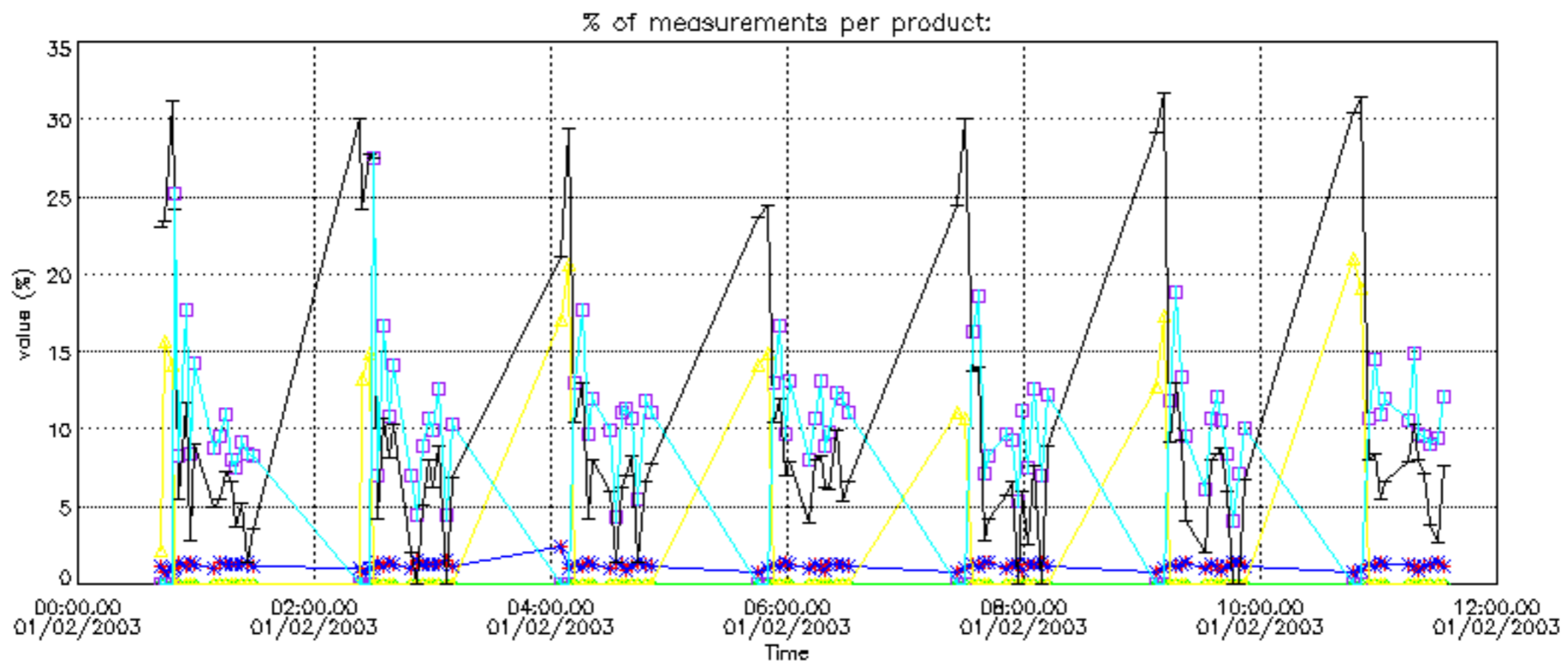
Percentage of flagged data per NO2 profile



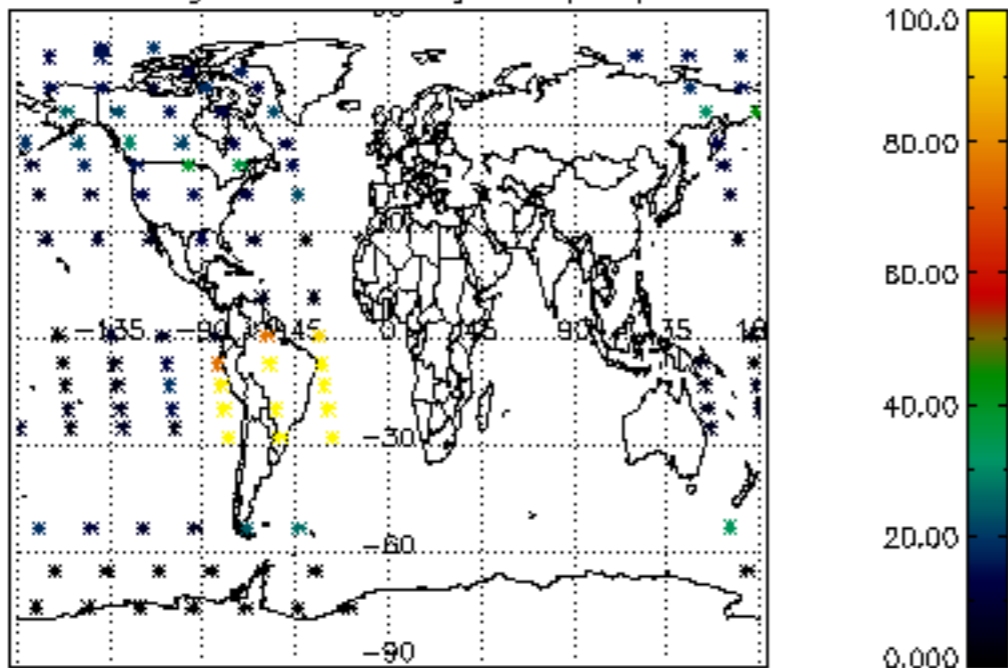
Percentage of flagged data per NO3 profile



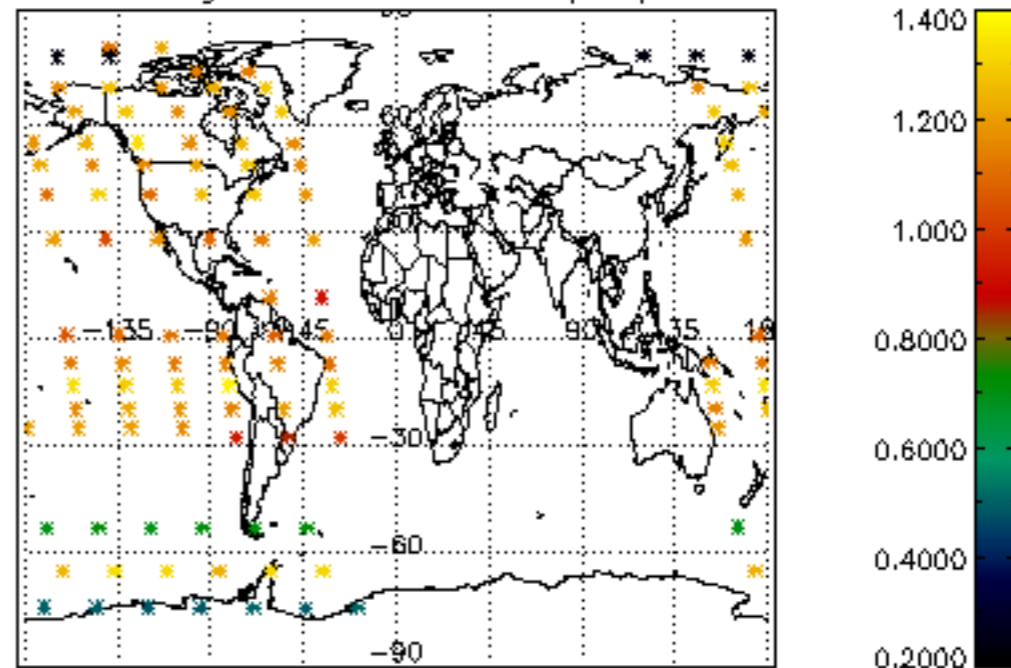




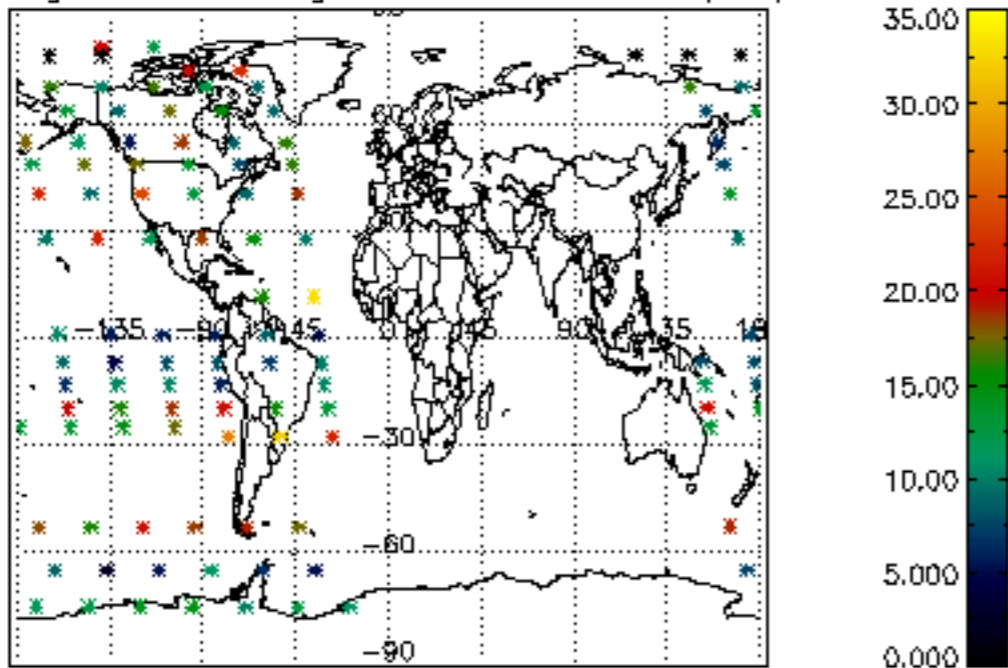
Percentage of cosmic ray hits per profile



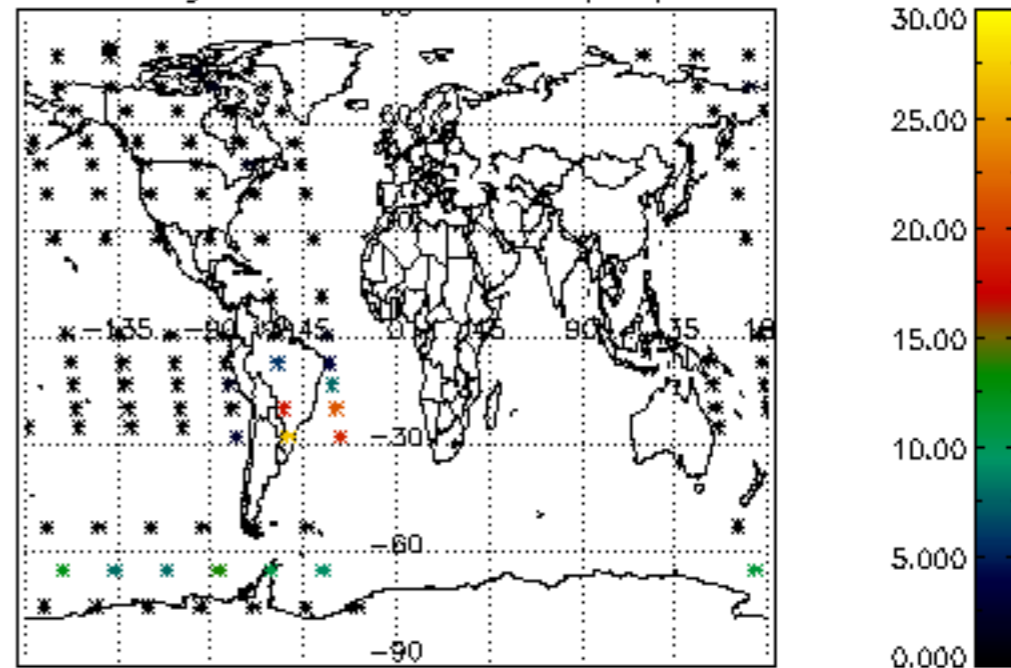
Percentage of datation errors per profile



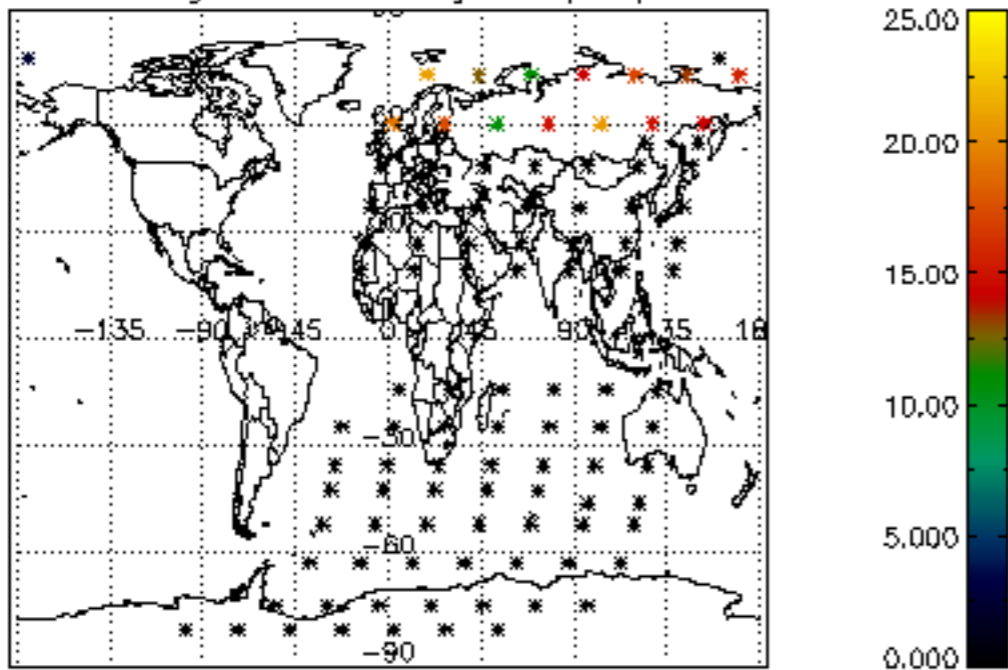
Percentage of star falling outside central band per profile



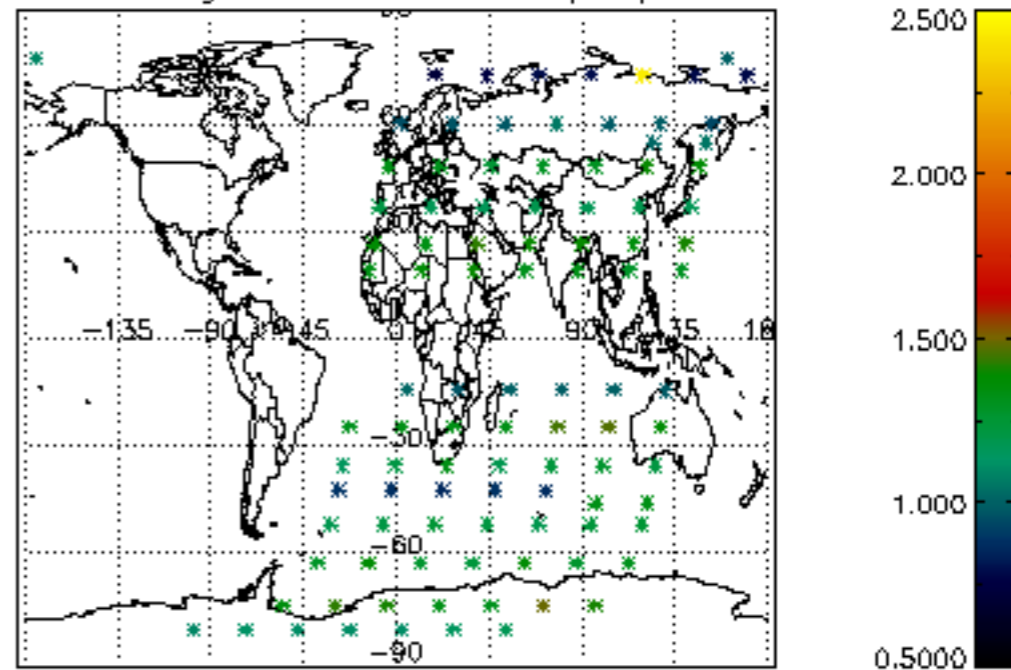
Percentage of saturation errors per profile



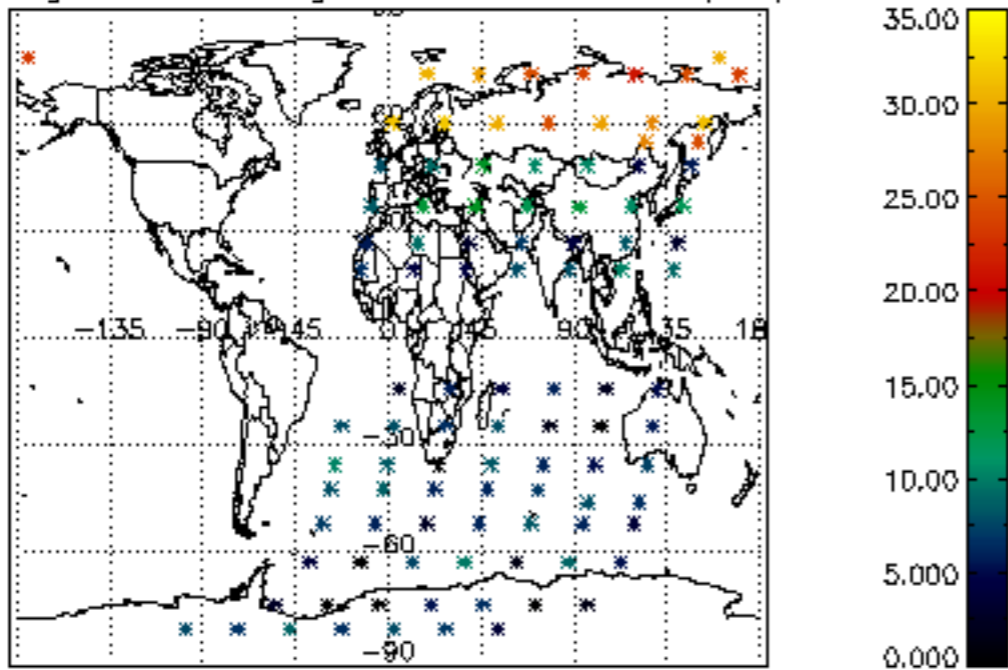
Percentage of cosmic ray hits per profile



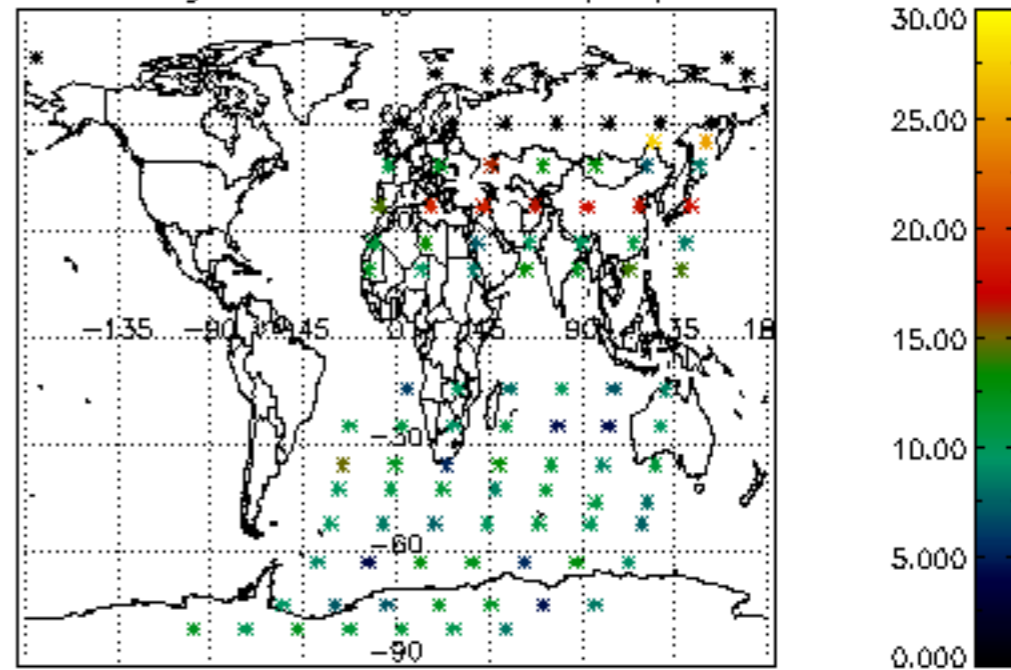
Percentage of datation errors per profile

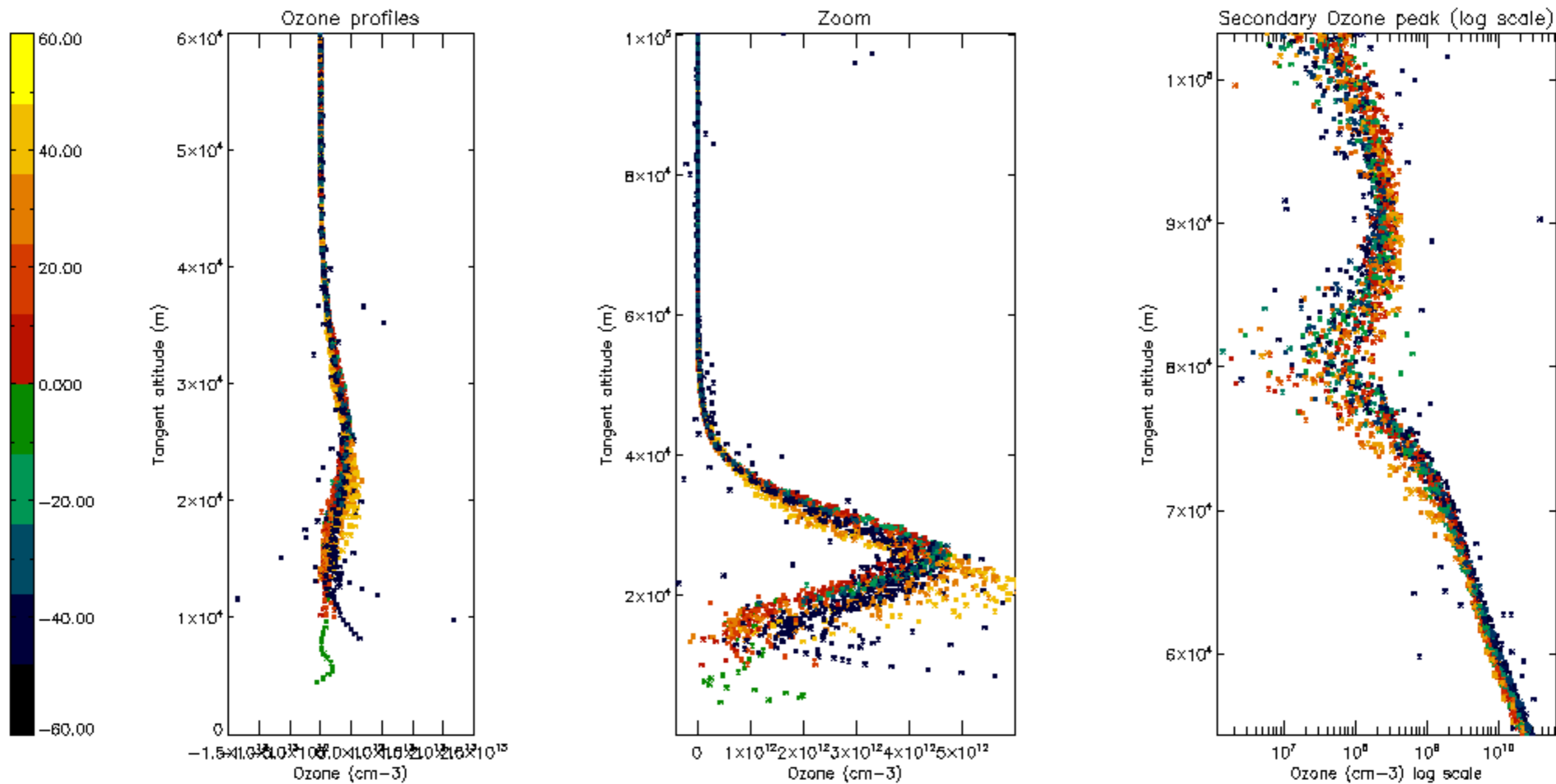


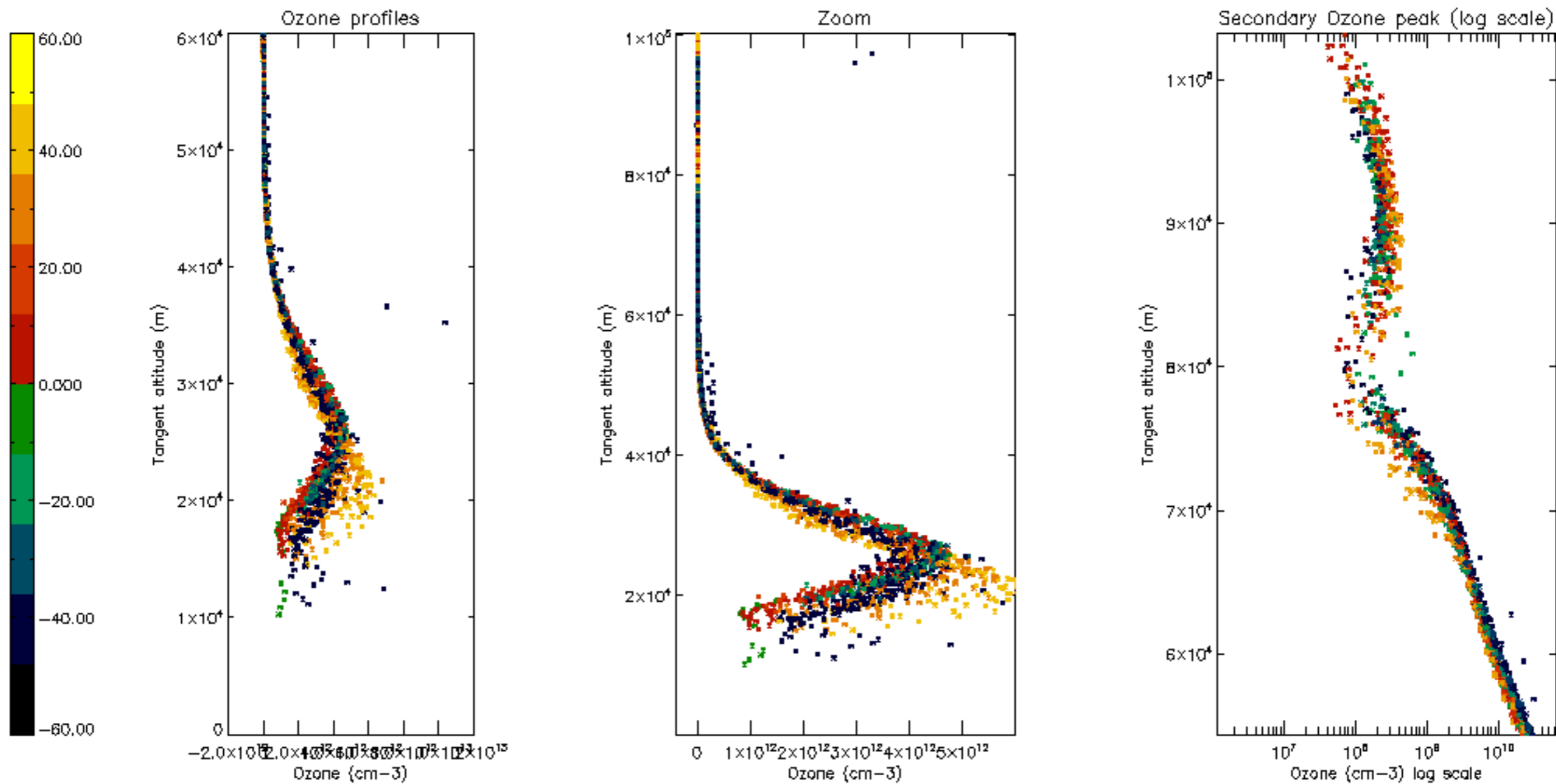
Percentage of star falling outside central band per profile

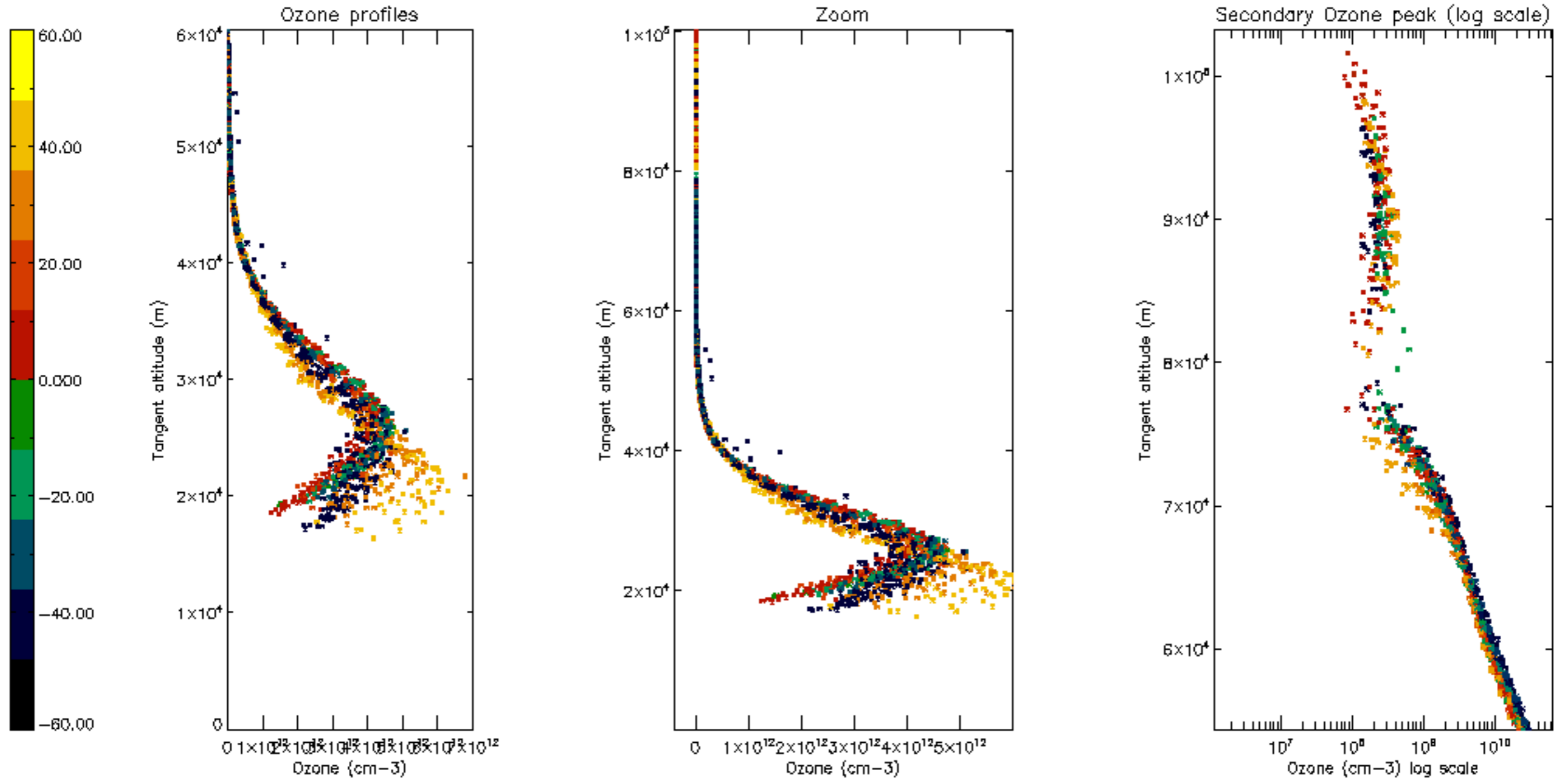


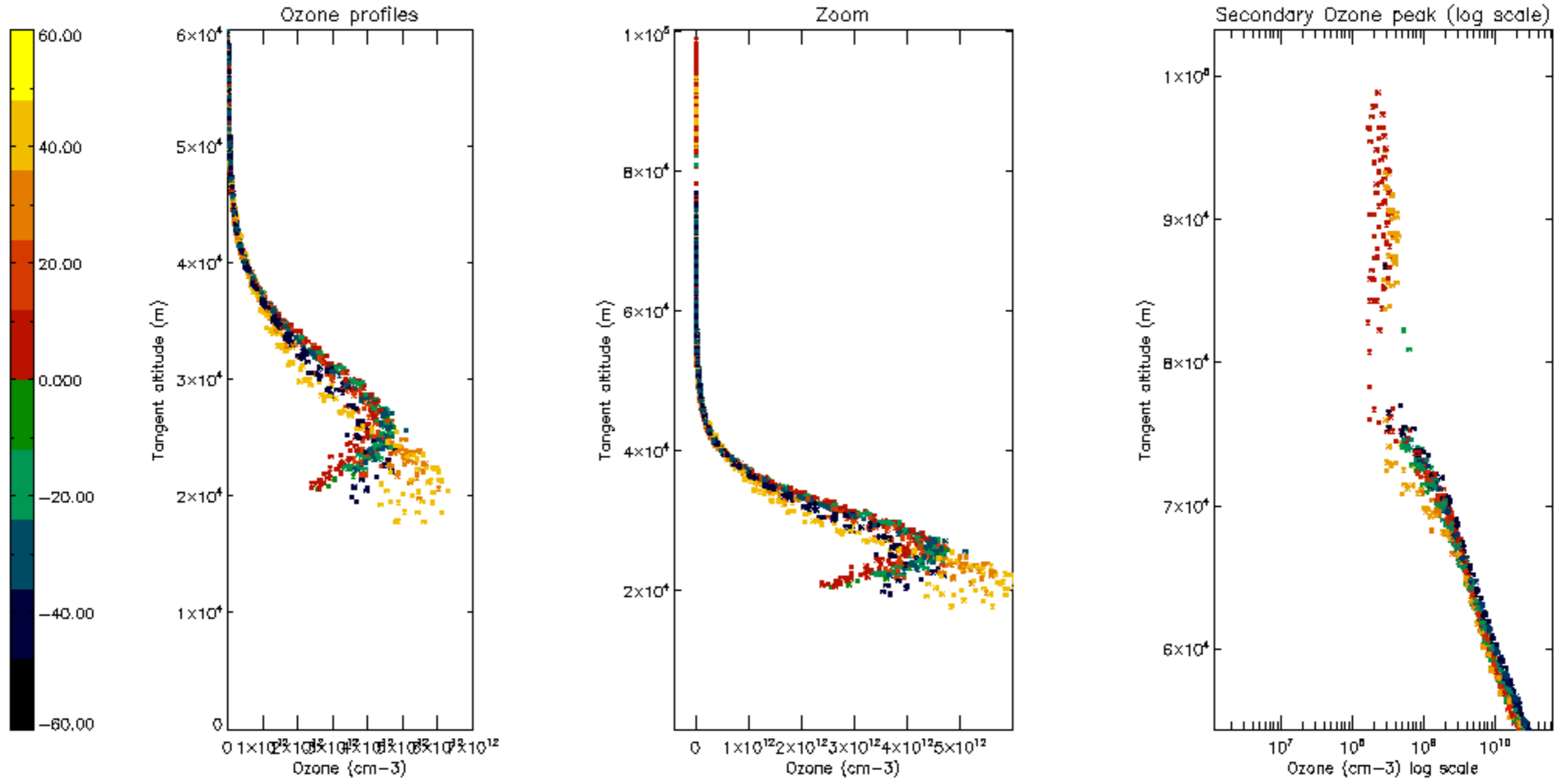
Percentage of saturation errors per profile

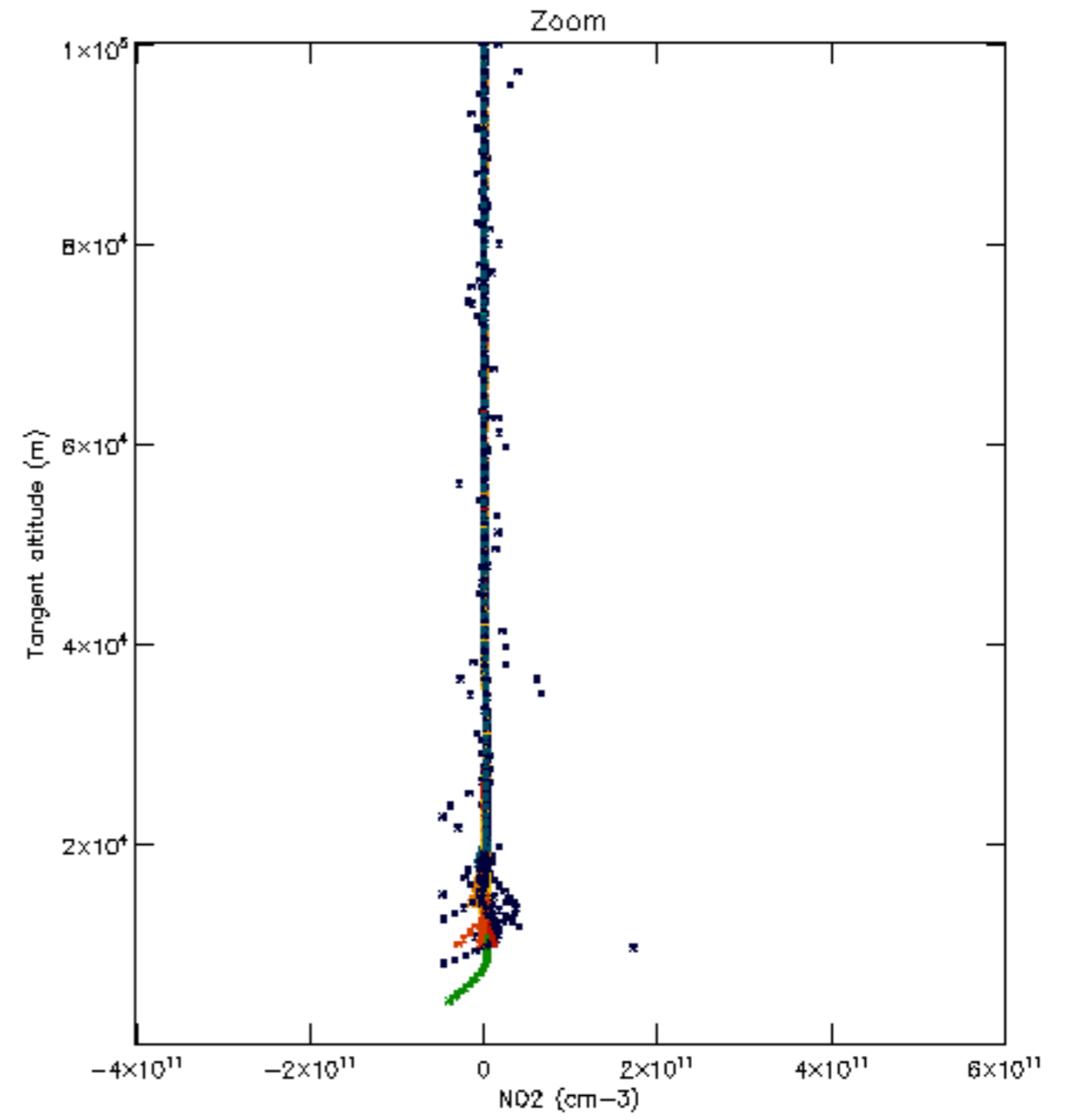
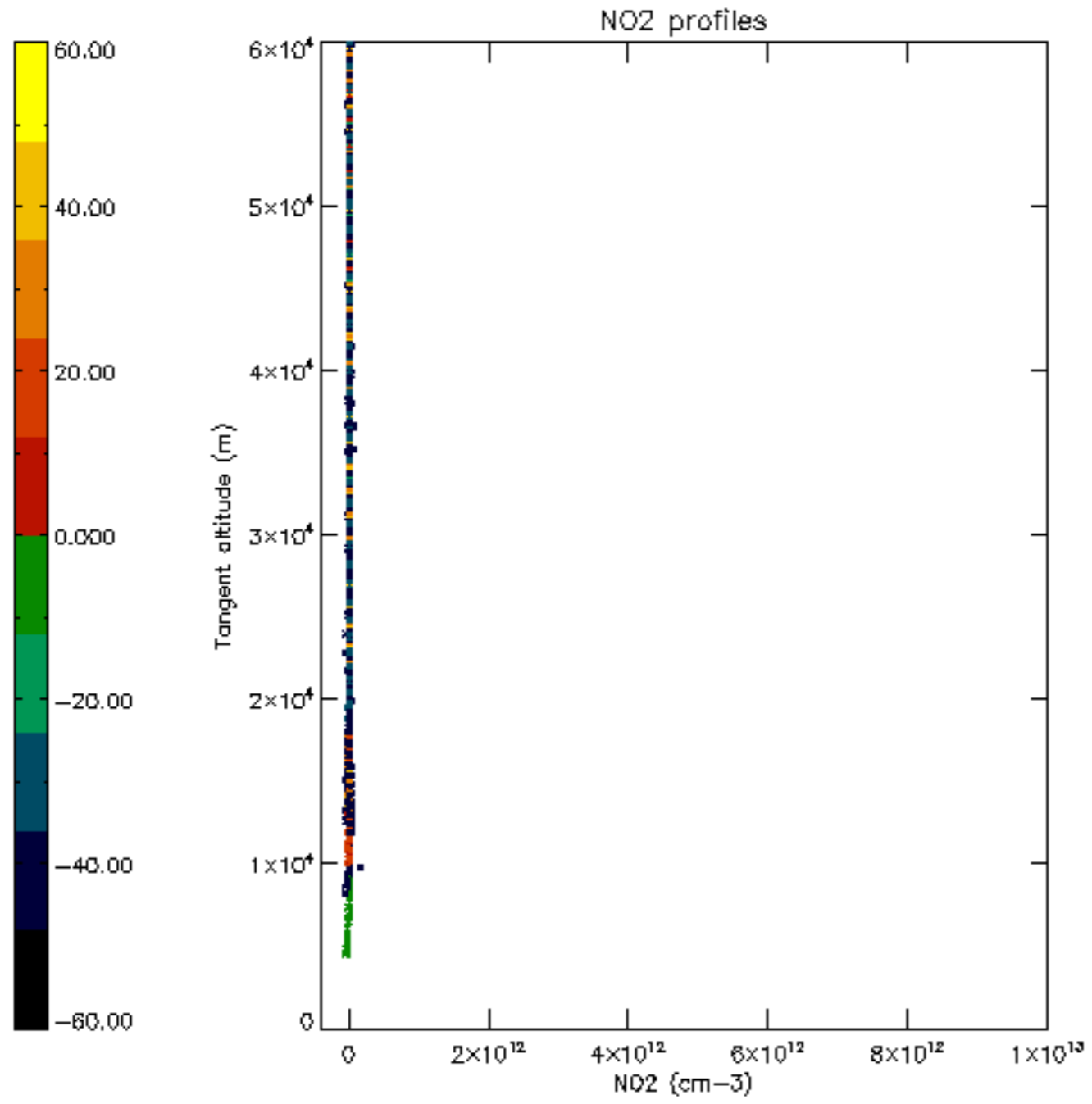


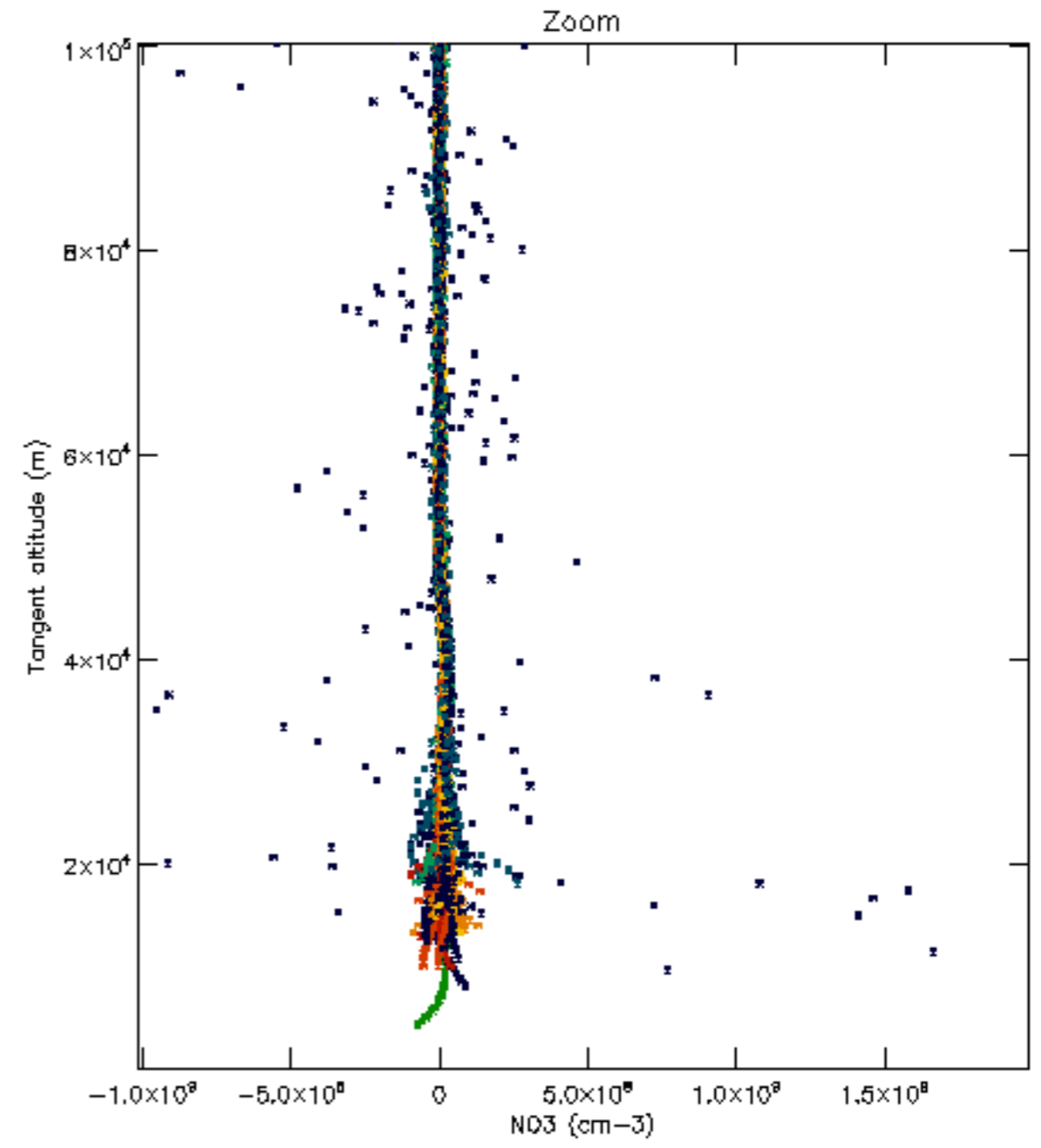
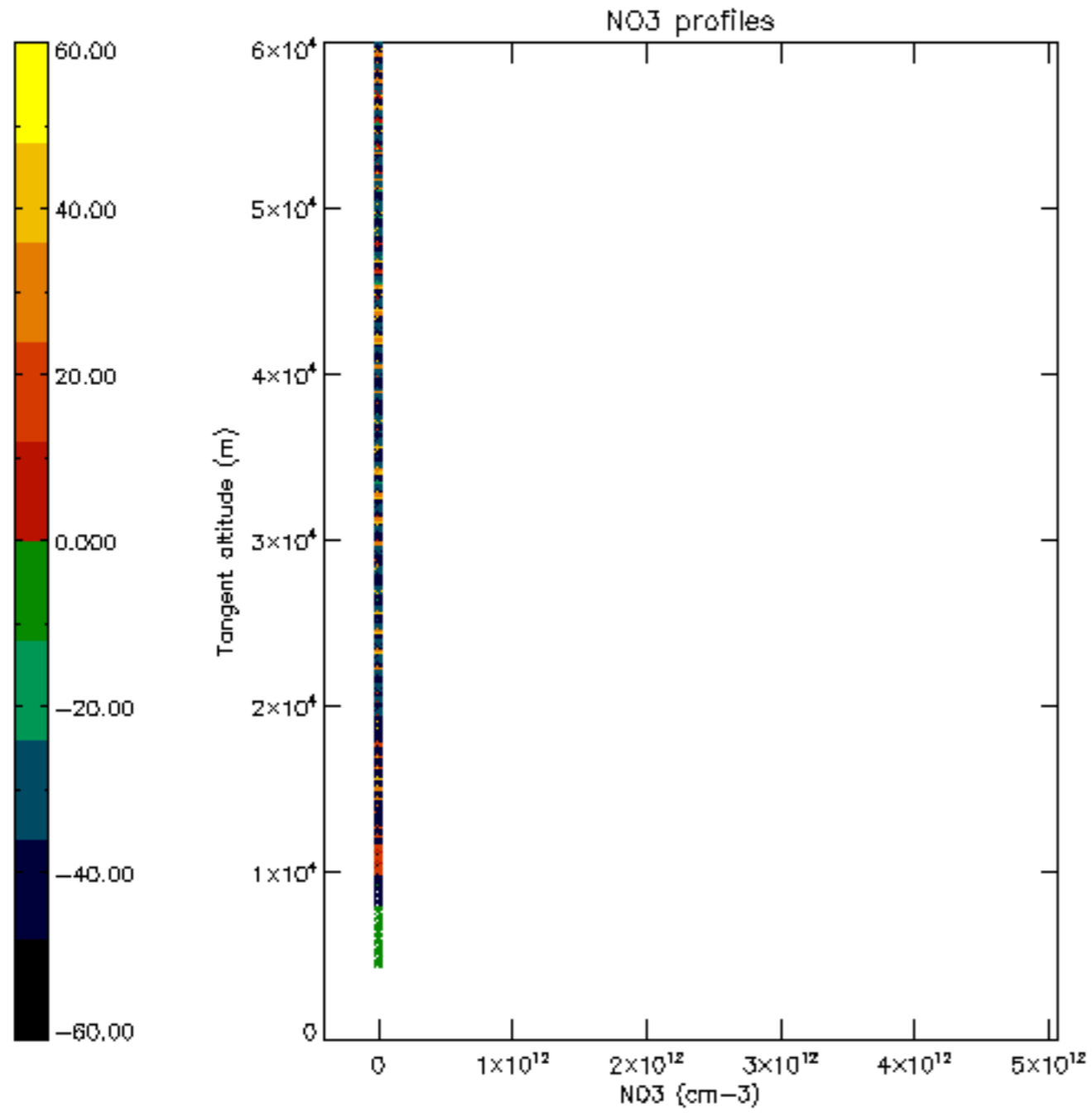


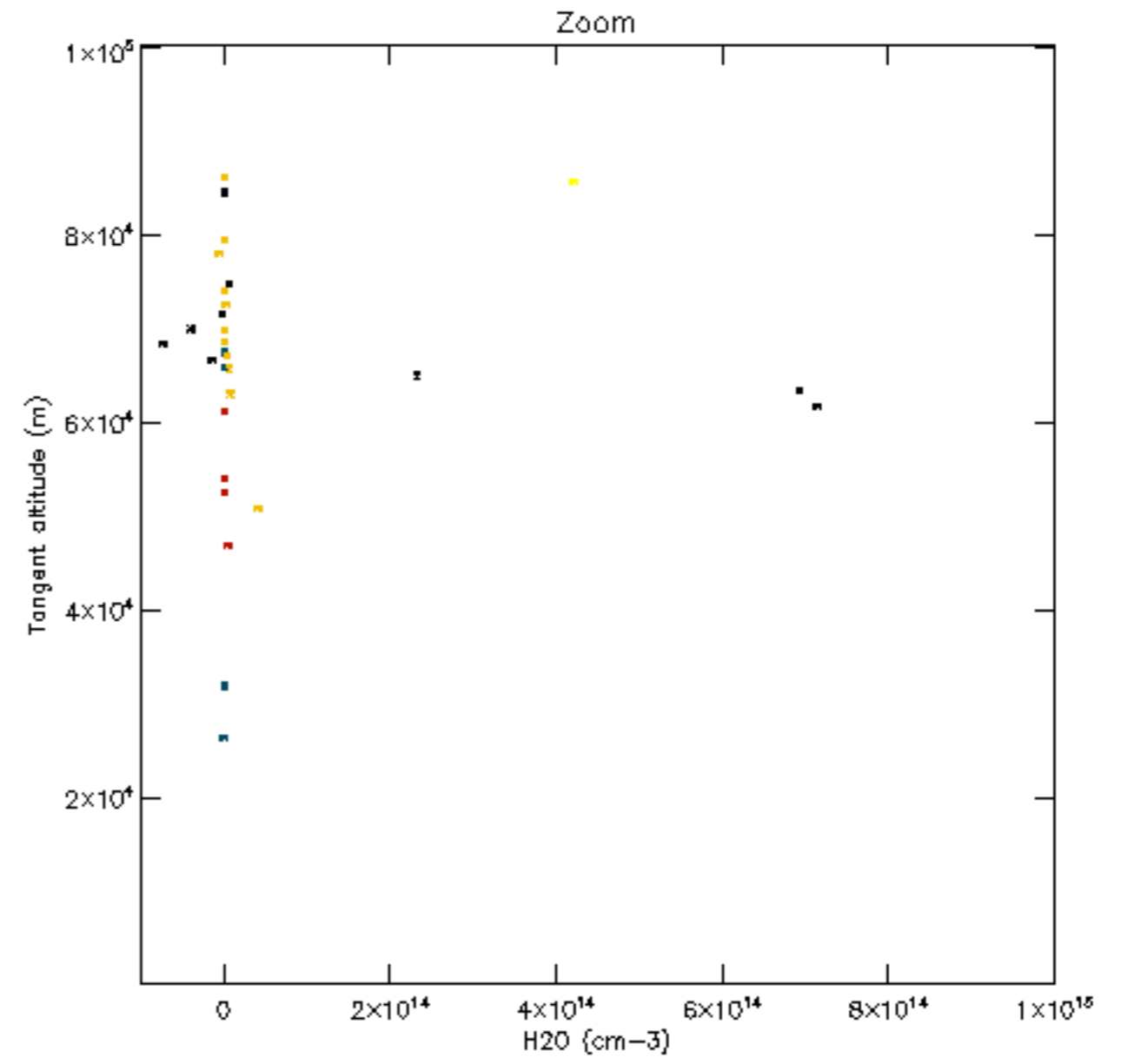
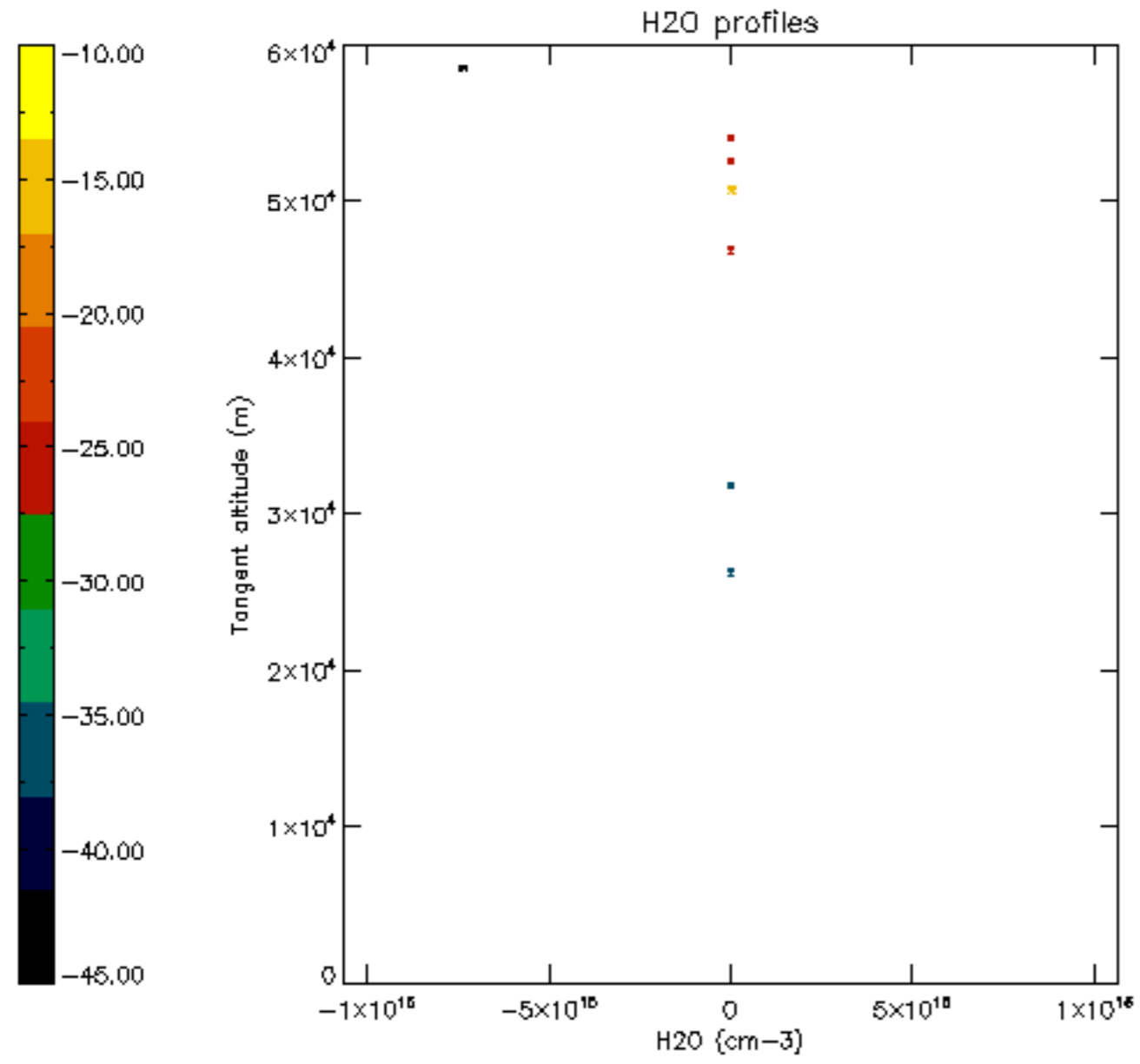


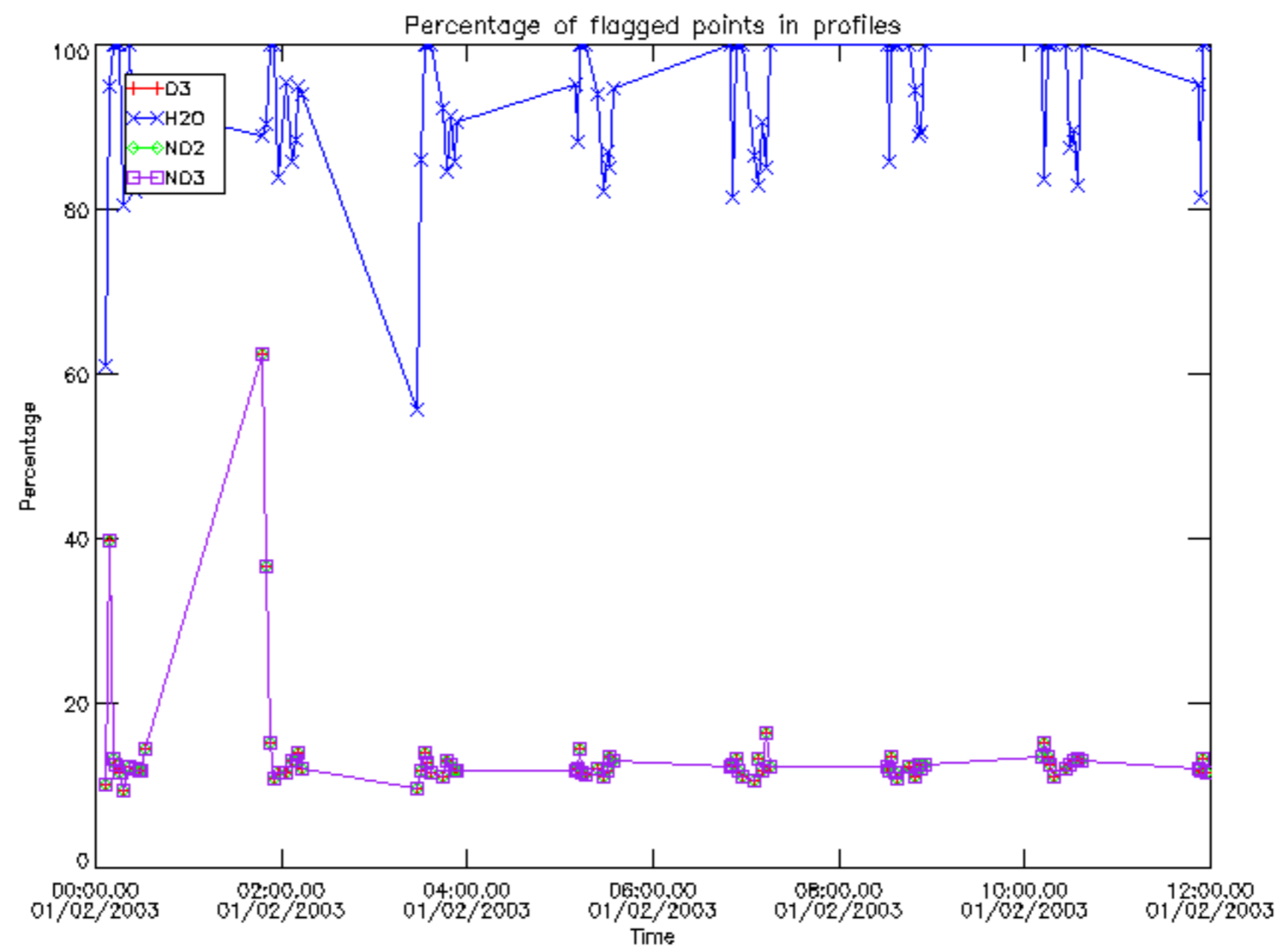




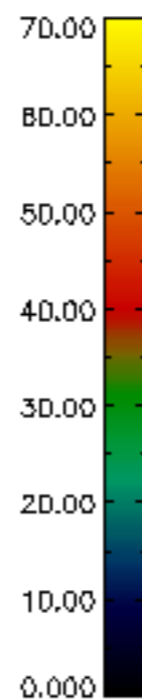
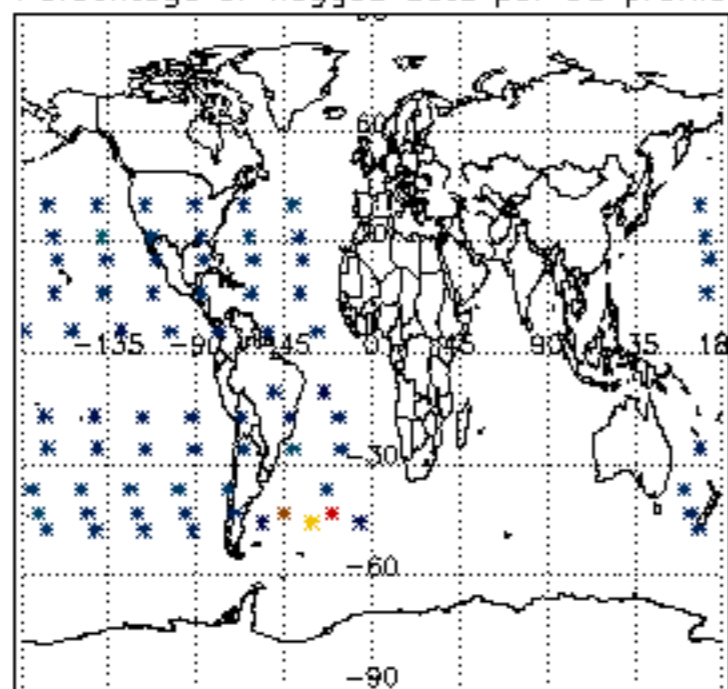




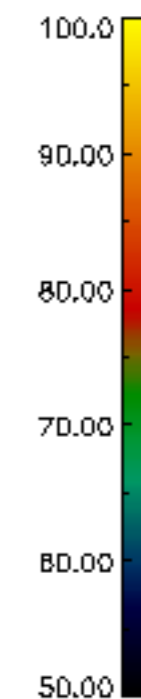
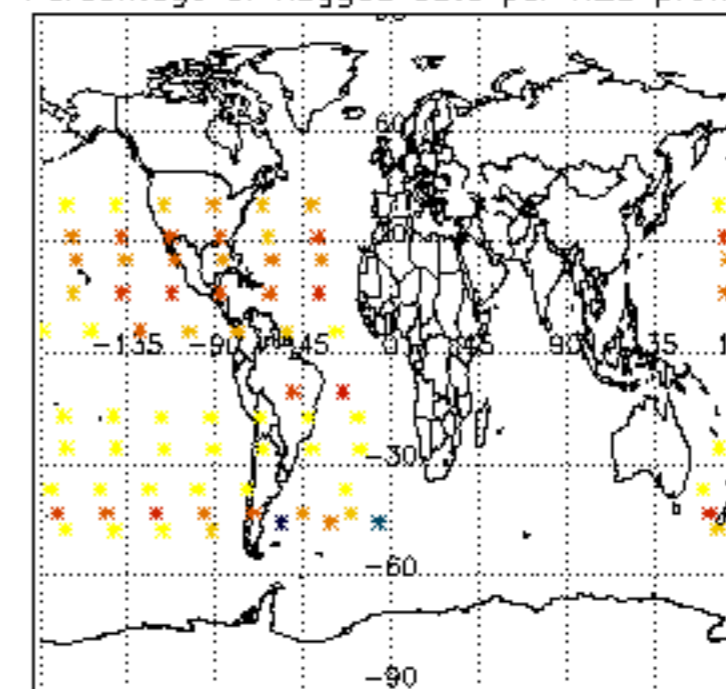




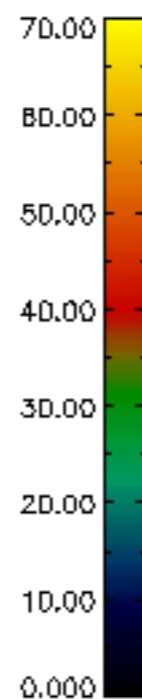
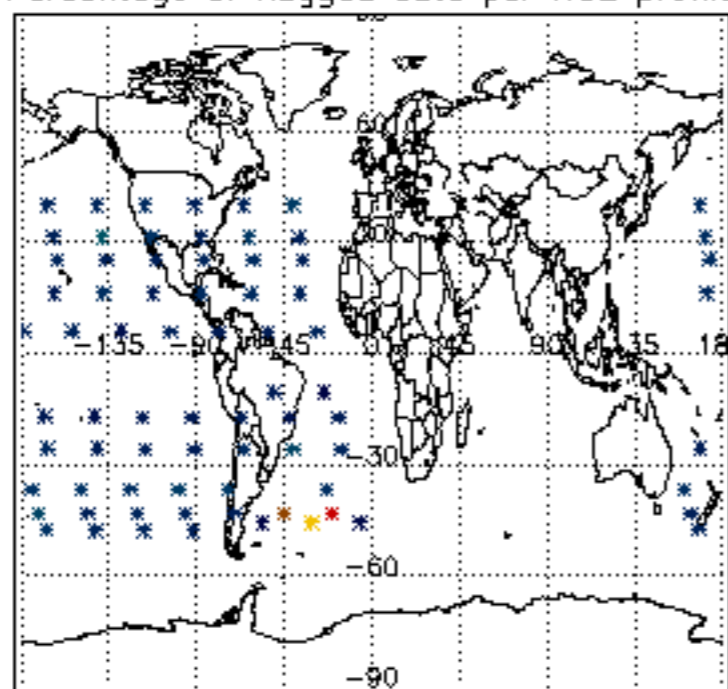
Percentage of flagged data per D3 profile



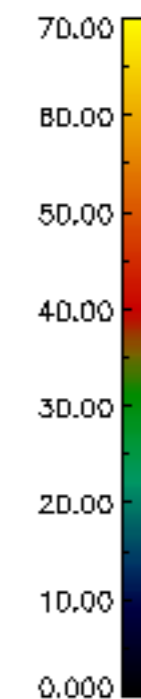
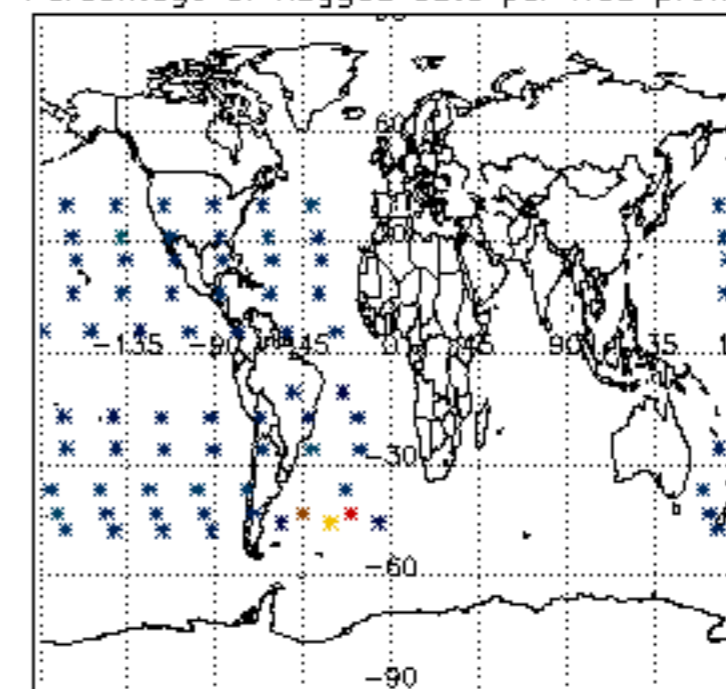
Percentage of flagged data per H2O profile

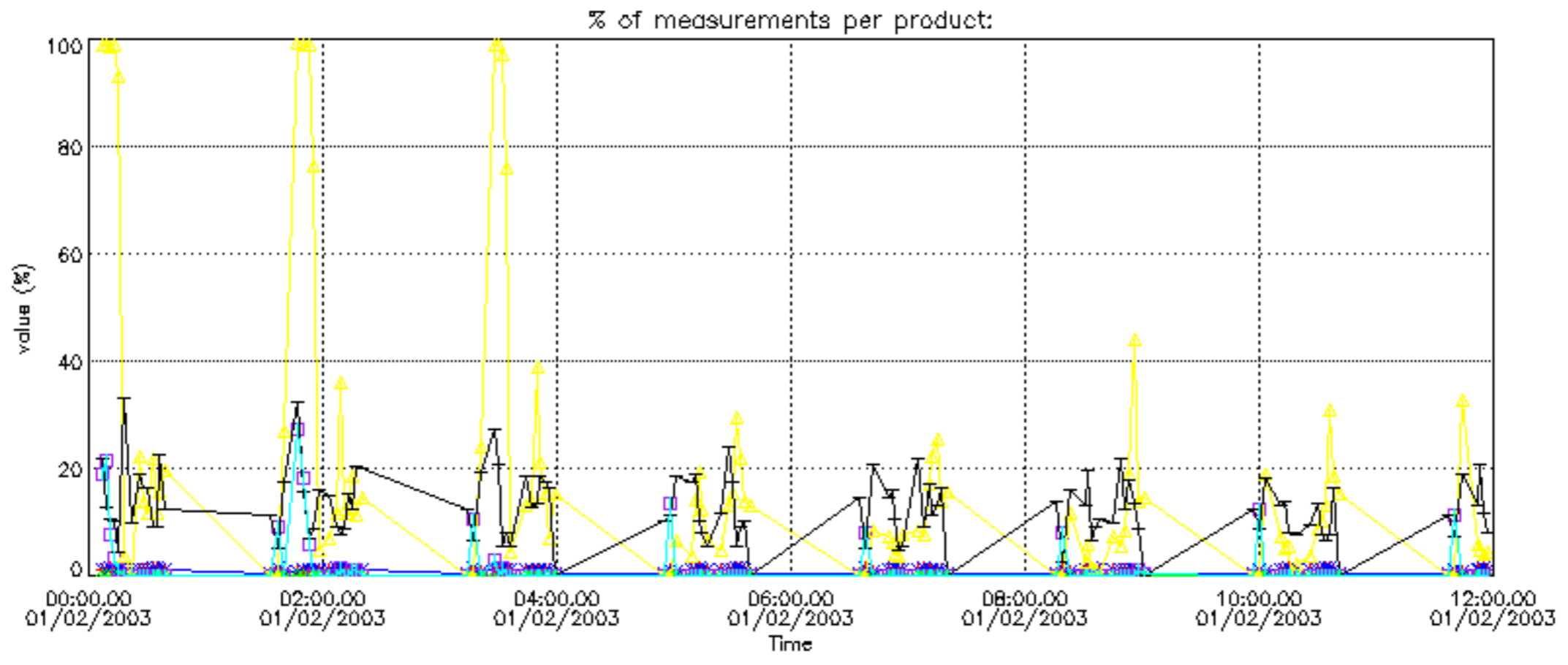


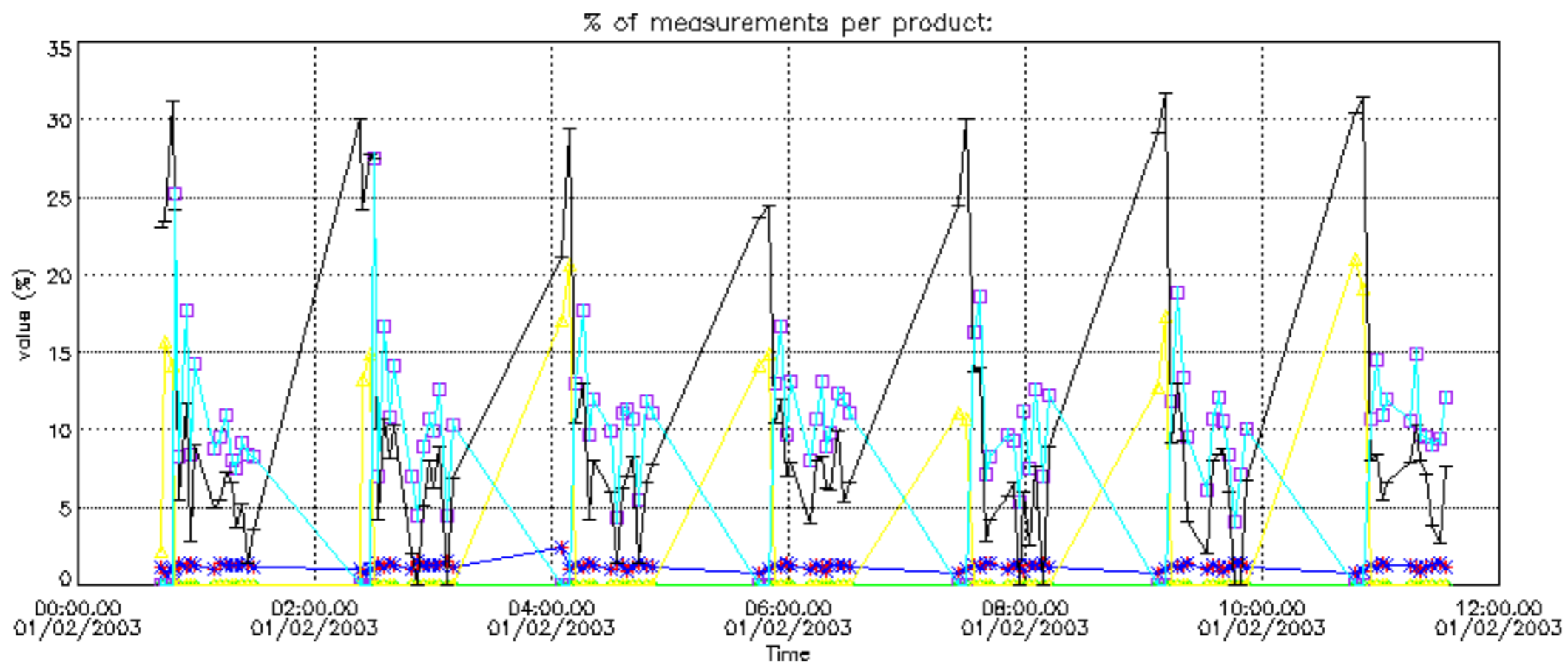
Percentage of flagged data per NO2 profile



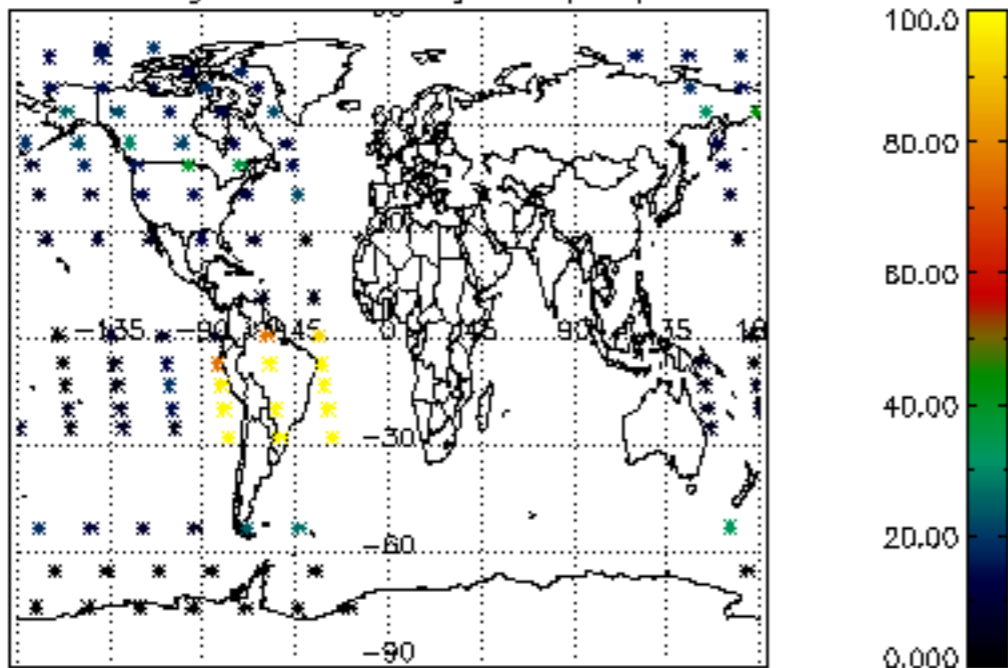
Percentage of flagged data per NO3 profile



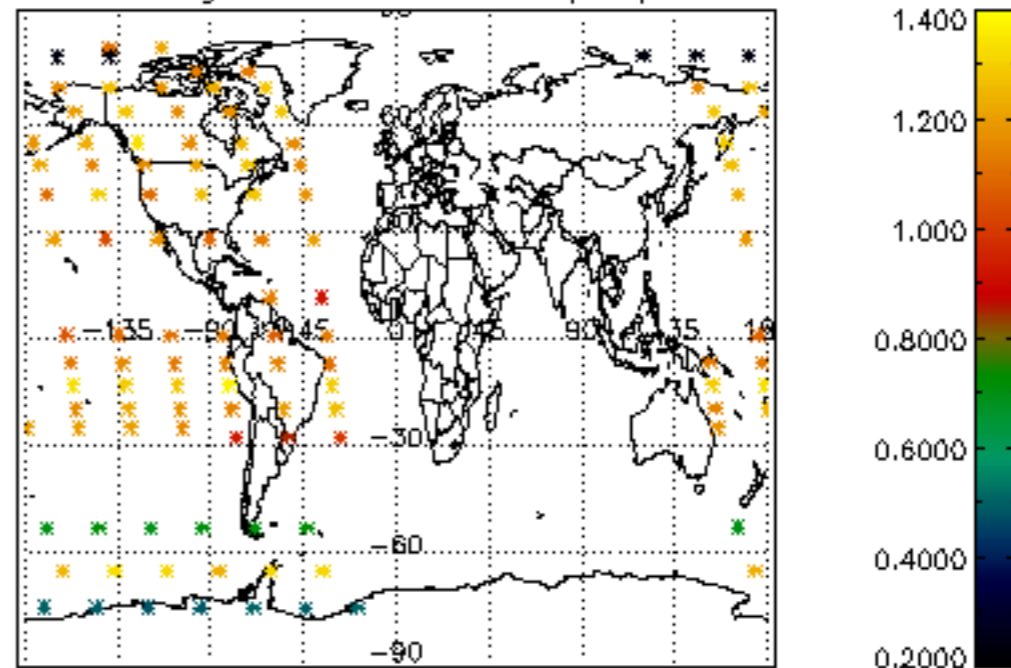




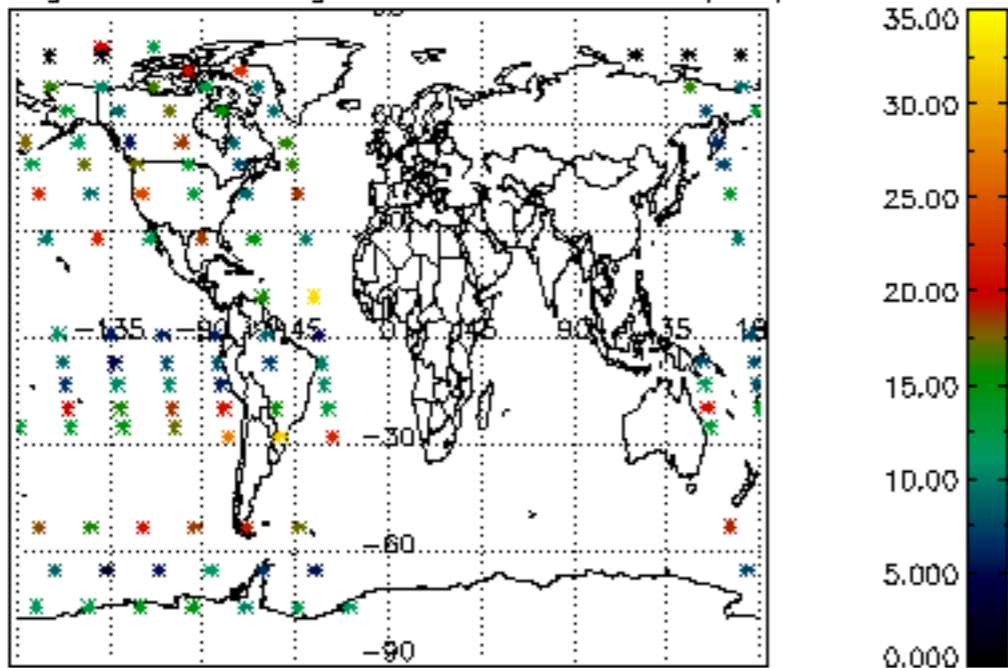
Percentage of cosmic ray hits per profile



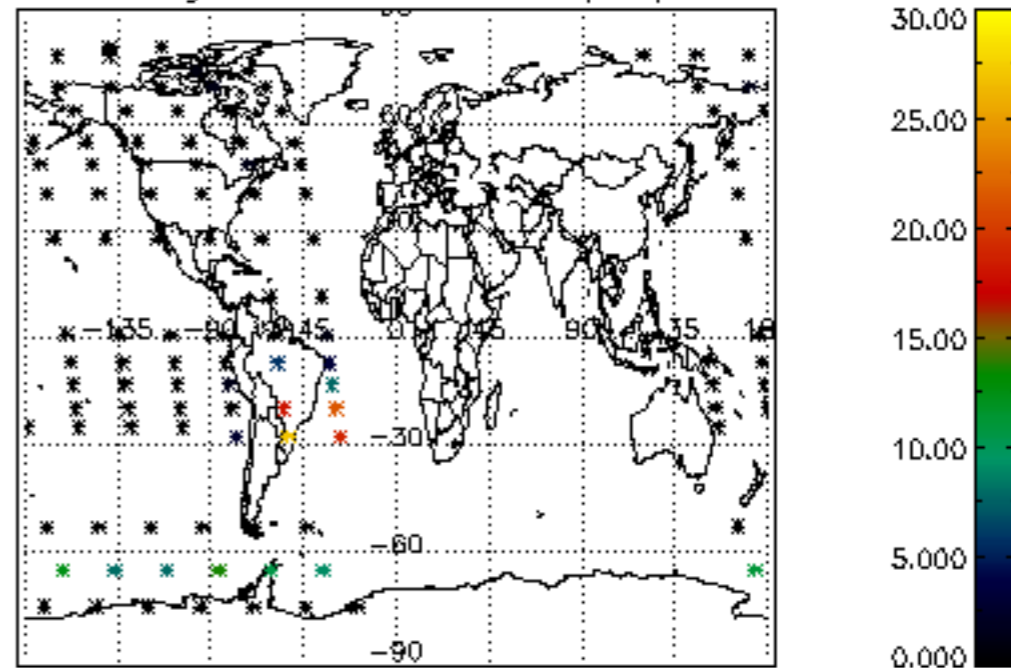
Percentage of datation errors per profile



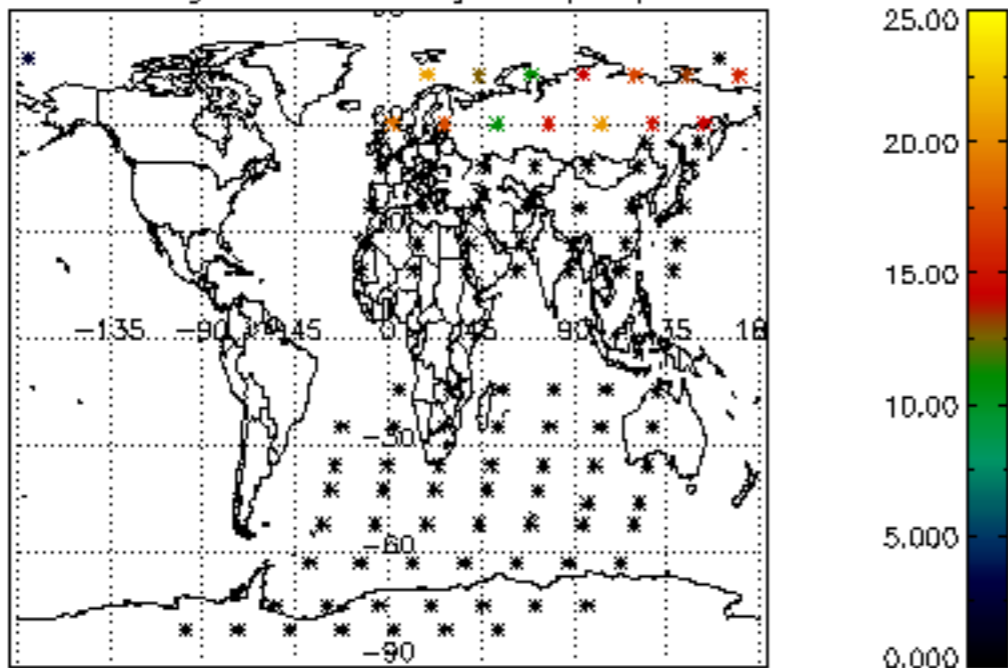
Percentage of star falling outside central band per profile



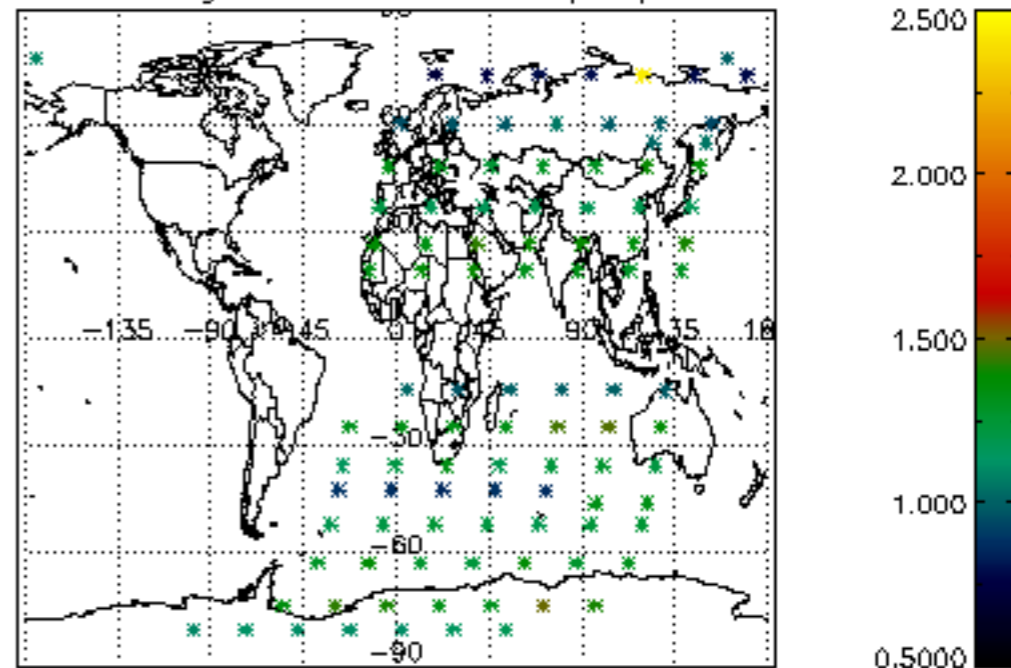
Percentage of saturation errors per profile



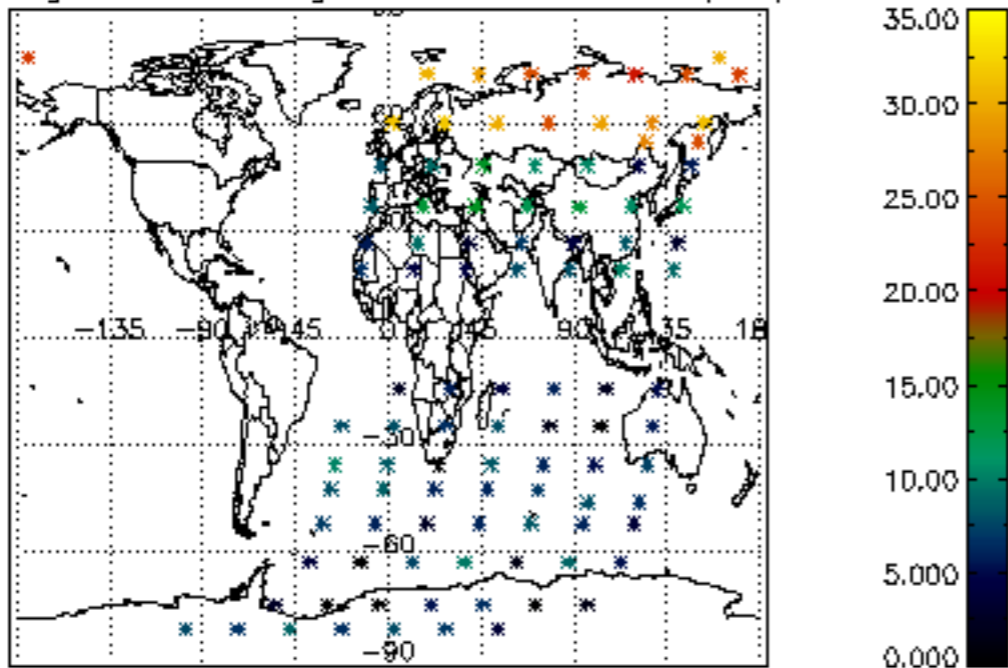
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

