

GOMOS Level 2 Daily Report

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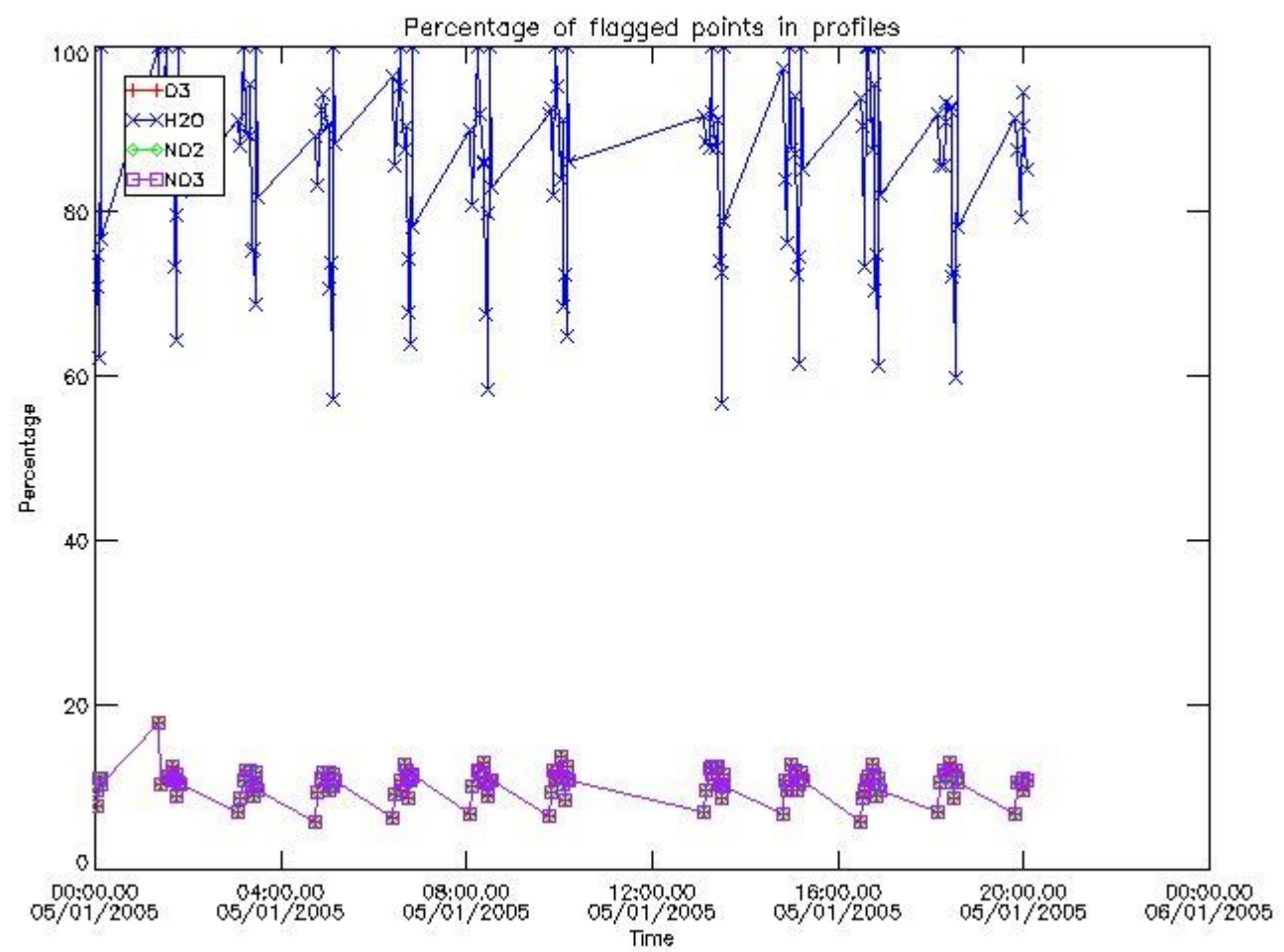
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397	GOM_NL__2PRFIN20050105_185913_000000382033_00328_14911_7547.N1	05-JAN-2005 18:59:13	Bright	37.500	149	45Eps Per	2.8880	30000.	75	14911	No
398	GOM_NL__2PRFIN20050105_190131_000000382033_00328_14911_7548.N1	05-JAN-2005 19:01:31	Bright	37.500	175	39Del Per	3.0100	19400.	75	14911	No
399	GOM_NL__2PRFIN20050105_190343_000000402033_00328_14911_7549.N1	05-JAN-2005 19:03:43	Bright	40.000	160	23Gam Per	2.9300	4700.0	80	14911	No
400	GOM_NL__2PRFIN20050105_191225_000000392033_00328_14911_7550.N1	05-JAN-2005 19:12:25	Bright	38.500	49	1Alp UMi	1.9900	6300.0	77	14911	No
401	GOM_NL__2PRFIN20050105_191429_000000502033_00328_14911_7551.N1	05-JAN-2005 19:14:29	Bright	50.000	36	50Alp UMa	1.8000	6300.0	100	14911	No
402	GOM_NL__2PRFIN20050105_191644_000000372033_00328_14911_7552.N1	05-JAN-2005 19:16:44	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	14911	No
403	GOM_NL__2PRFIN20050105_191829_000000562033_00328_14911_7553.N1	05-JAN-2005 19:18:29	Bright	55.500	87	64Gam UMa	2.4330	11000.	111	14911	No
404	GOM_NL__2PRFIN20050105_192045_000000382033_00328_14911_7554.N1	05-JAN-2005 19:20:45	Bright	37.500	119	14Eta Dra	2.7270	4700.0	75	14911	No
405	GOM_NL__2PRFIN20050105_192301_000000382033_00328_14911_7555.N1	05-JAN-2005 19:23:01	Bright	37.500	130	23Bet Dra	2.7990	5800.0	75	14911	No
406	GOM_NL__2PRFIN20050105_192730_000000682033_00328_14911_7556.N1	05-JAN-2005 19:27:30	Bright	68.000	152	12Alp2CVn	2.8900	11000.	136	14911	No
407	GOM_NL__2PRFIN20050105_193151_000000492033_00328_14911_7557.N1	05-JAN-2005 19:31:51	Bright	48.500	83		2.3780	11000.	97	14911	No
408	GOM_NL__2PRFIN20050105_193401_000000352033_00328_14911_7558.N1	05-JAN-2005 19:34:01	Bright	35.000	59	55Alp Oph	2.0800	8900.0	70	14911	No
409	GOM_NL__2PRFIN20050105_193632_000000632033_00328_14911_7559.N1	05-JAN-2005 19:36:32	Bright	62.500	111	8Eta Boo	2.6800	6000.0	125	14911	No
410	GOM_NL__2PRFIN20050105_193930_000000382033_00328_14911_7560.N1	05-JAN-2005 19:39:30	Bright	38.000	120	1Del Oph	2.7340	3200.0	76	14911	No
411	GOM_NL__2PRFIN20050105_194232_000000472033_00328_14911_7561.N1	05-JAN-2005 19:42:32	Bright	46.500	104	27Bet Lib	2.6140	13100.	93	14911	No
412	GOM_NL__2PRFIN20050105_194457_000000442033_00328_14911_7562.N1	05-JAN-2005 19:44:57	Bright	44.000	80	7Del Sco	2.3160	30000.	88	14911	No
413	GOM_NL__2PRFIN20050105_194953_000000752033_00328_14911_7563.N1	05-JAN-2005 19:49:53	Dark	74.500	15	67Alp Vir	0.97600	28000.	149	14911	No
414	GOM_NL__2PRFIN20050105_195224_000000492033_00328_14911_7564.N1	05-JAN-2005 19:52:24	Dark	48.500	54	5The Cen	2.0550	4500.0	97	14911	No
415	GOM_NL__2PRFIN20050105_195621_000000492033_00329_14912_7528.N1	05-JAN-2005 19:56:21	Dark	48.500	4	Alp1Cen	-0.010000	5800.0	97	14912	No
416	GOM_NL__2PRFIN20050105_195844_000000462033_00329_14912_7529.N1	05-JAN-2005 19:58:44	Dark	46.000	64	Gam Cen	2.2000	10600.	92	14912	No
417	GOM_NL__2PRFIN20050105_200025_000000532033_00329_14912_7530.N1	05-JAN-2005 20:00:25	Dark	52.500	12	Alp1Cru	0.77500	30000.	105	14912	No
418	GOM_NL__2PRFIN20050105_200530_000000482033_00329_14912_7531.N1	05-JAN-2005 20:05:30	Dark	47.500	29	Bet Car	1.6720	10200.	95	14912	No

3. Quality information per product

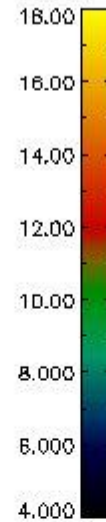
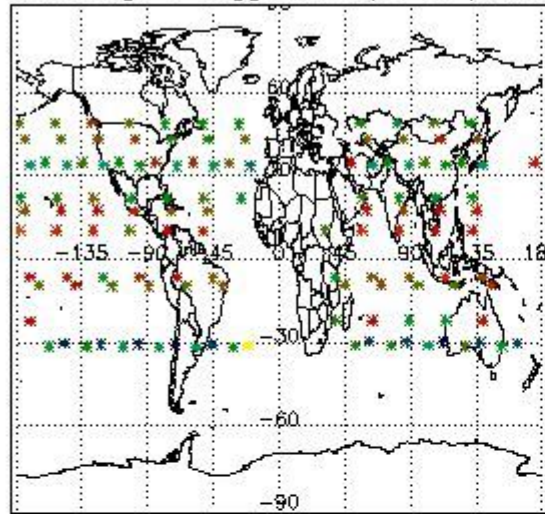
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

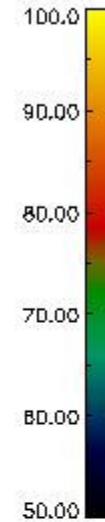
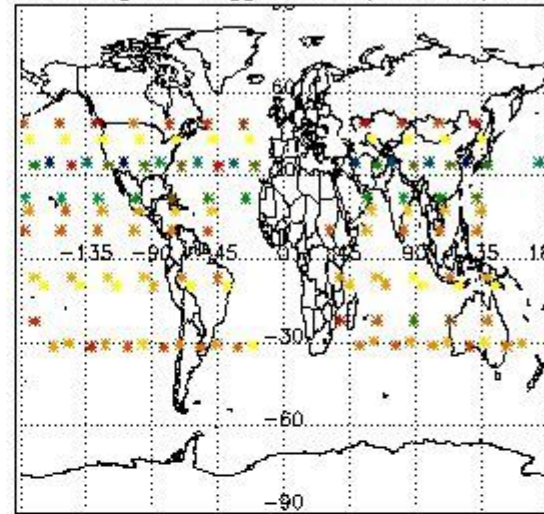


3.2 Plot quality information per product (world map)

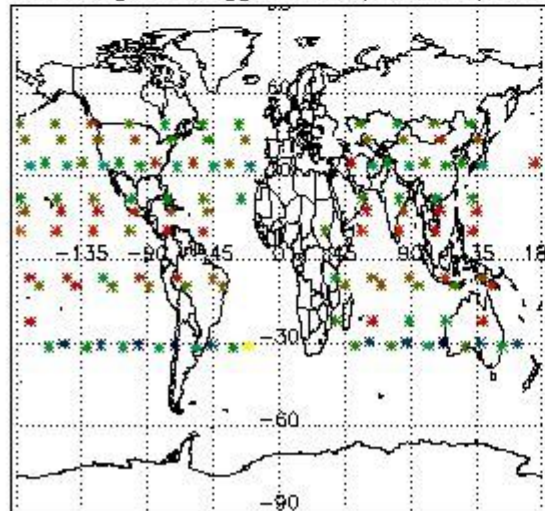
Percentage of flagged data per O3 profile



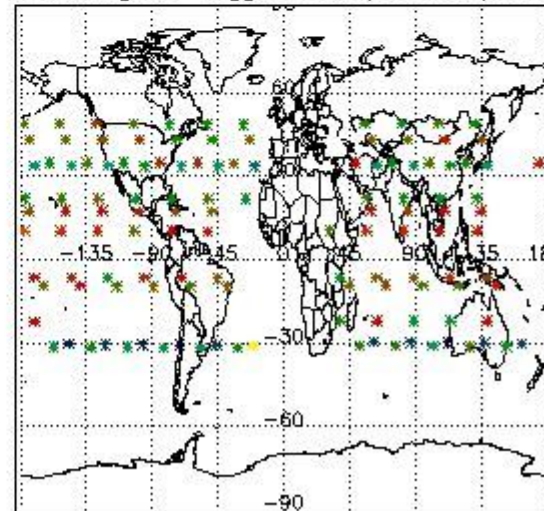
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

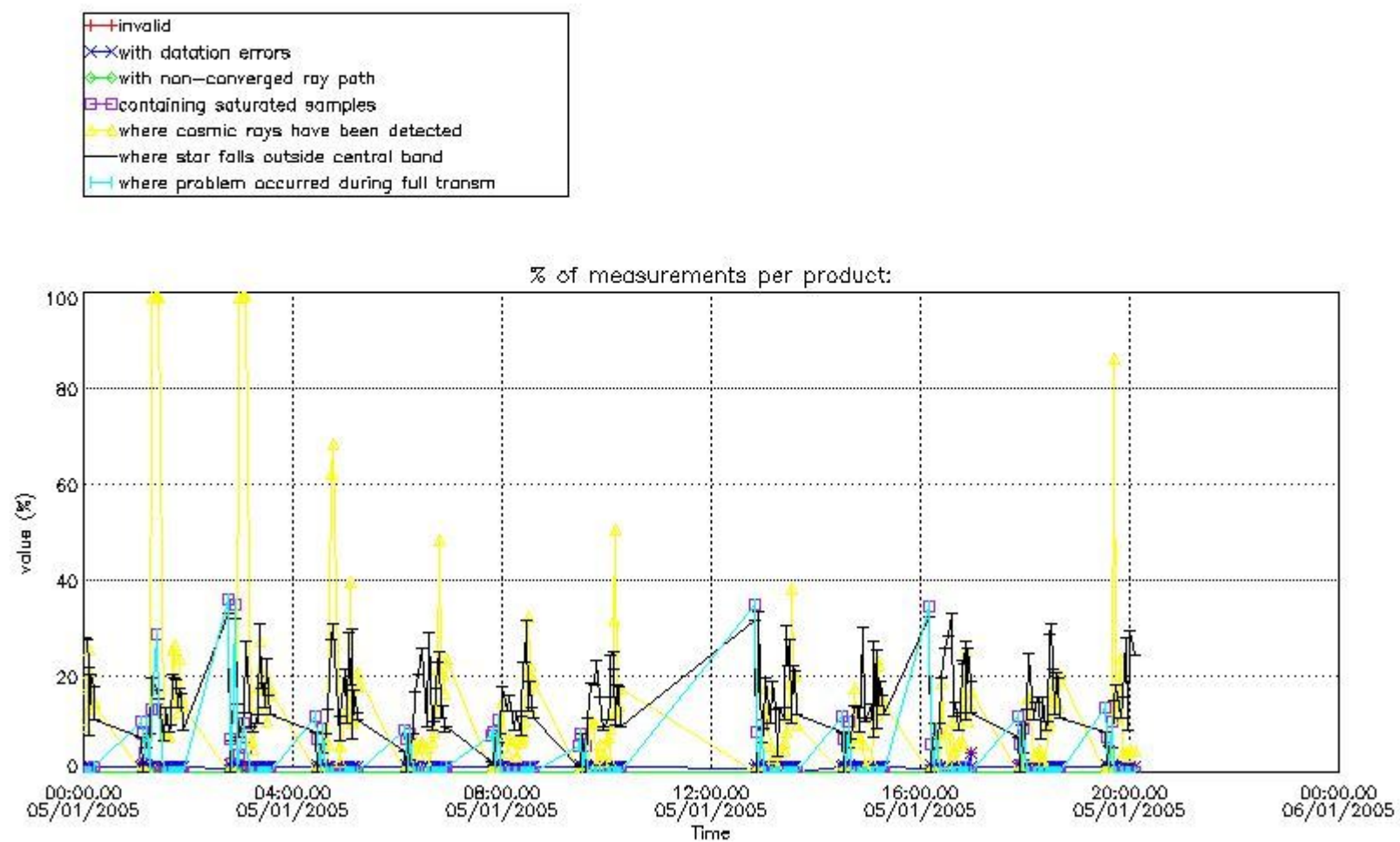


4. Level 1 quality information per product

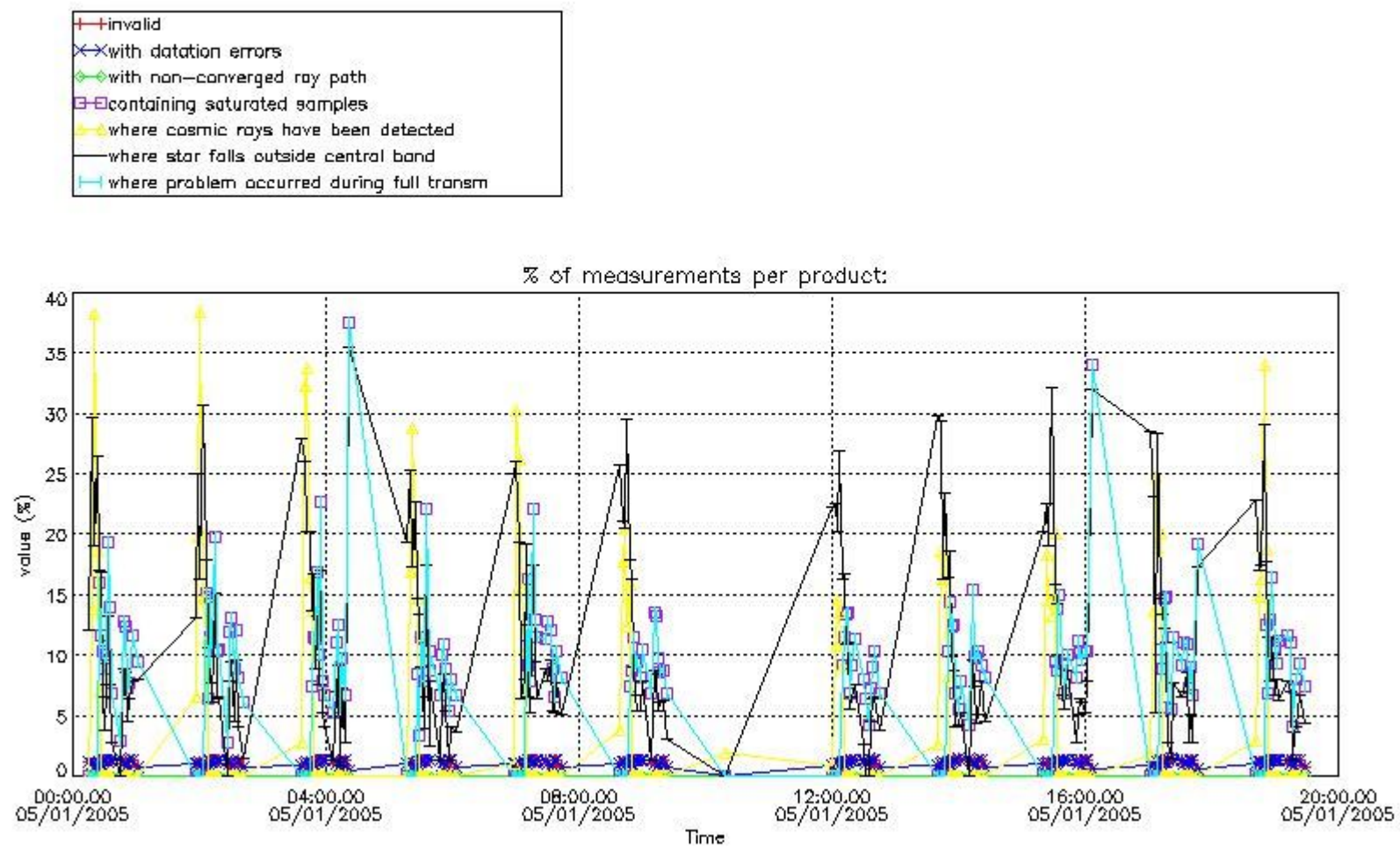
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



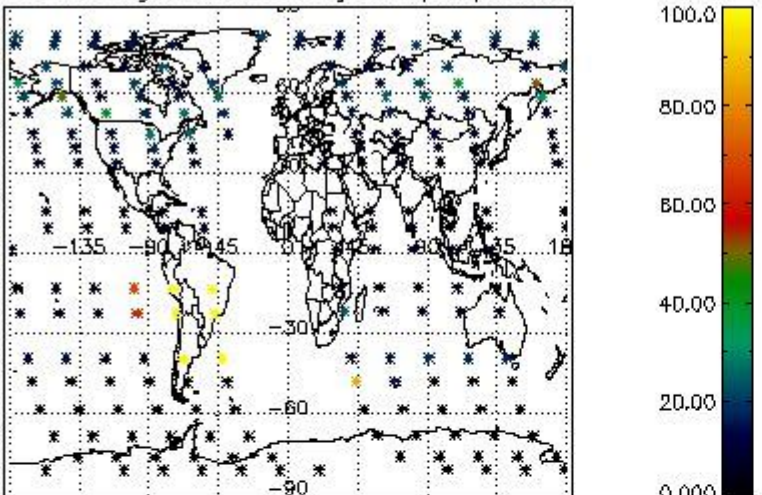
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



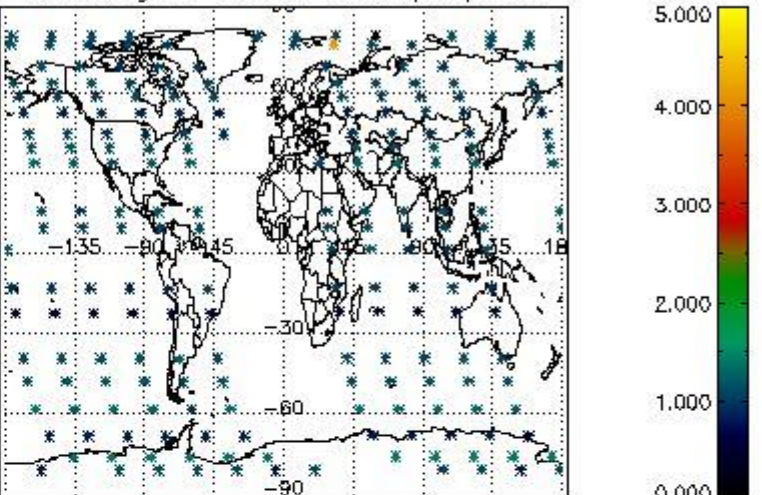
4.2 Plot quality information per product coming from level 1b processing (world map)

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

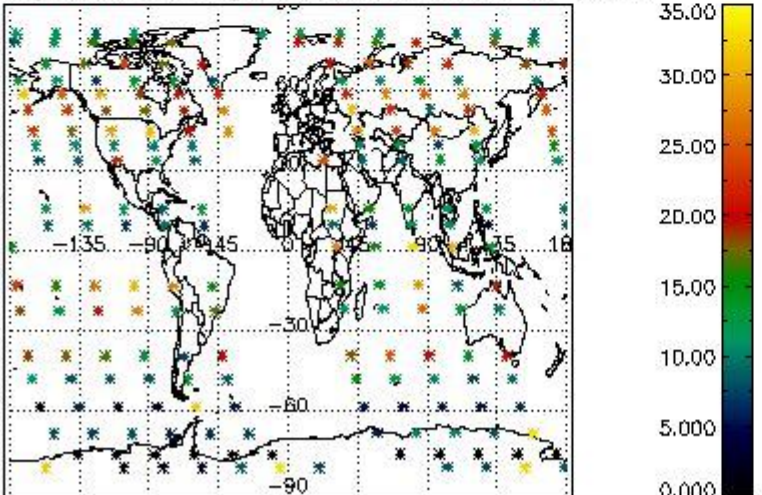
Percentage of cosmic ray hits per profile



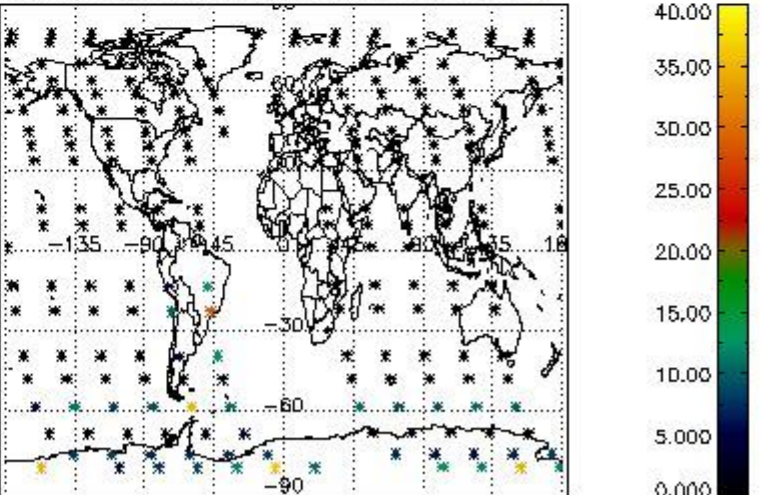
Percentage of datation errors per profile



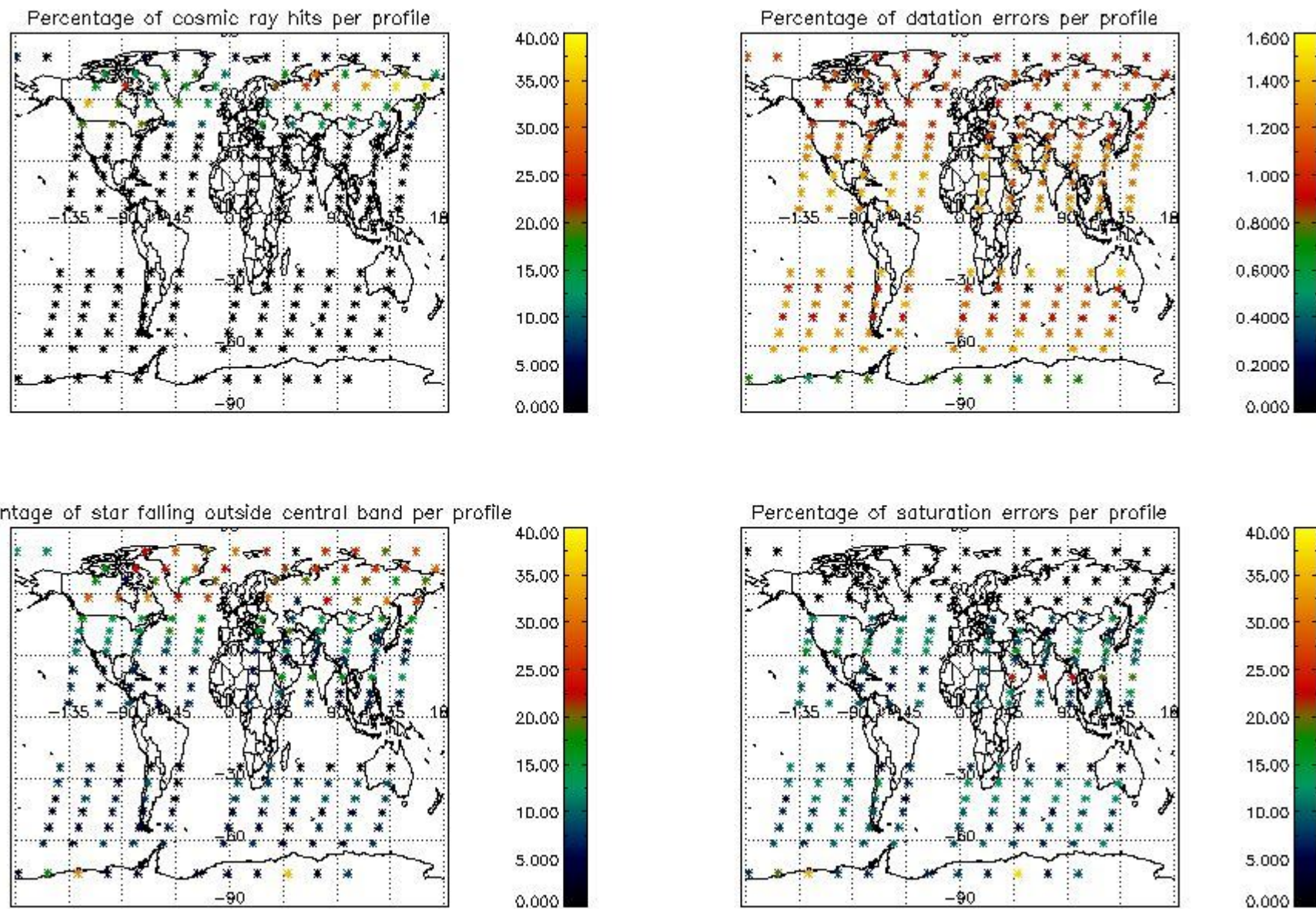
Percentage of star falling outside central band per profile



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

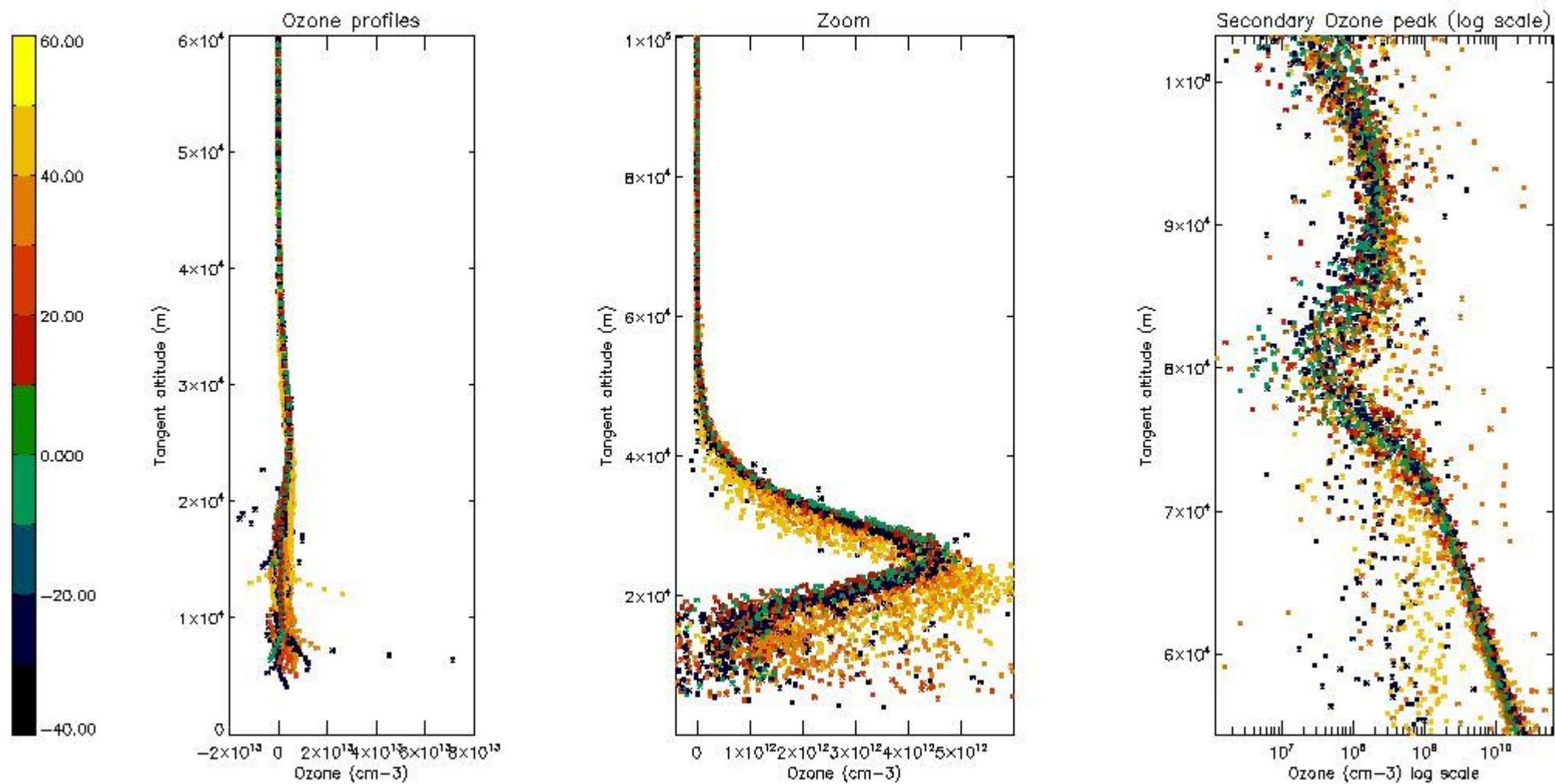
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	33
STD < 20	17

STD < 10	14
STD < 5	10

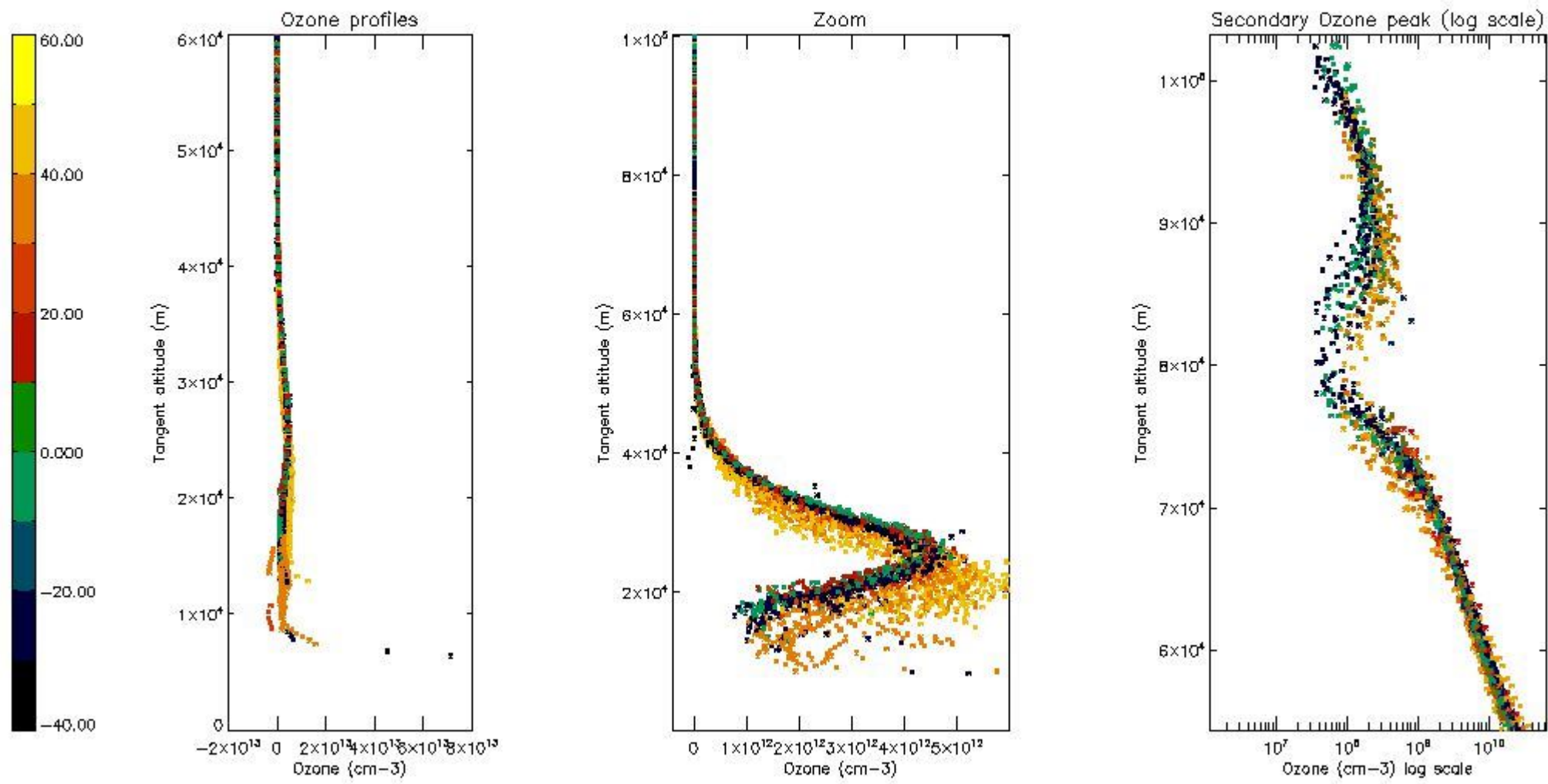
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



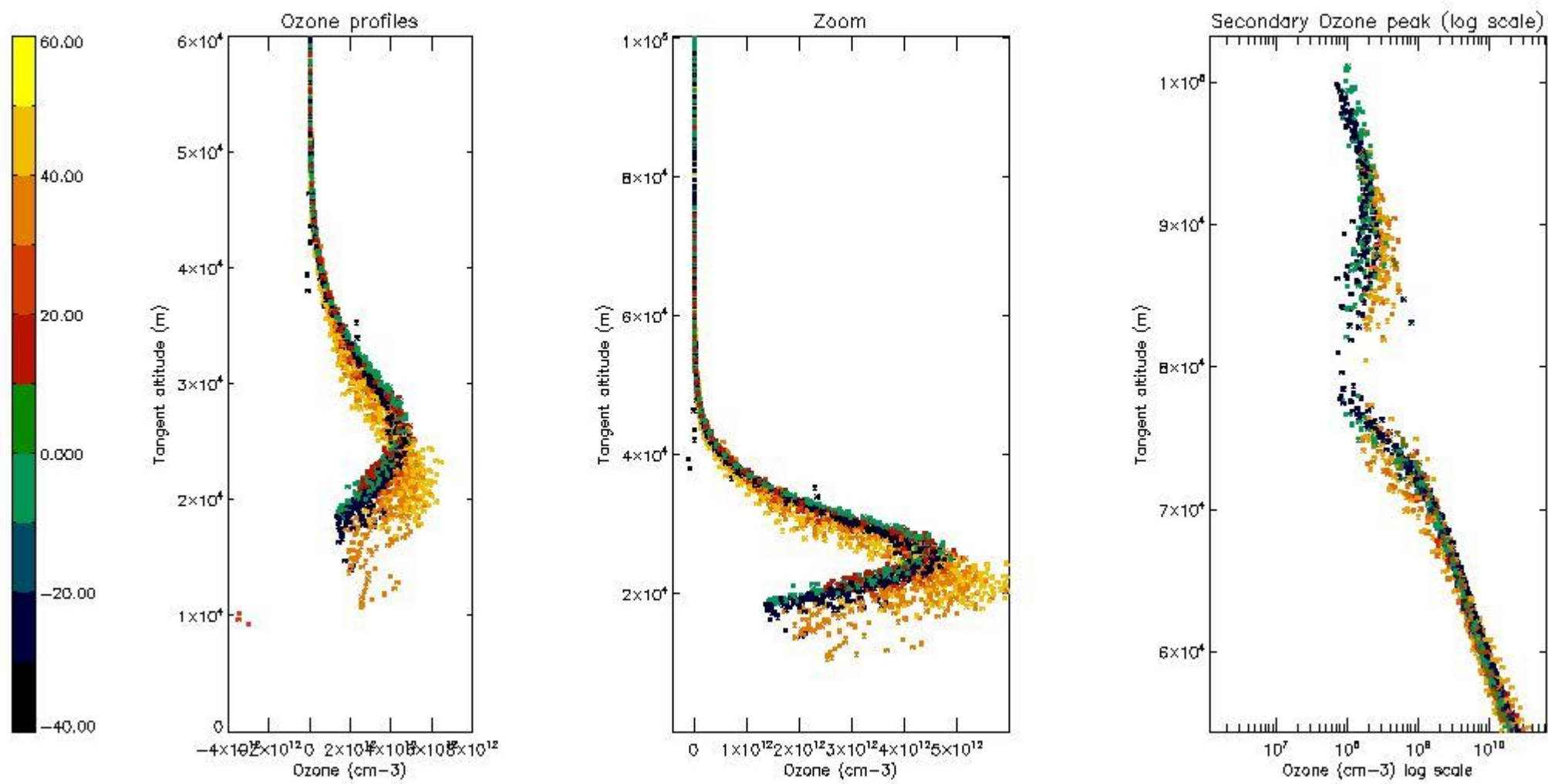
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



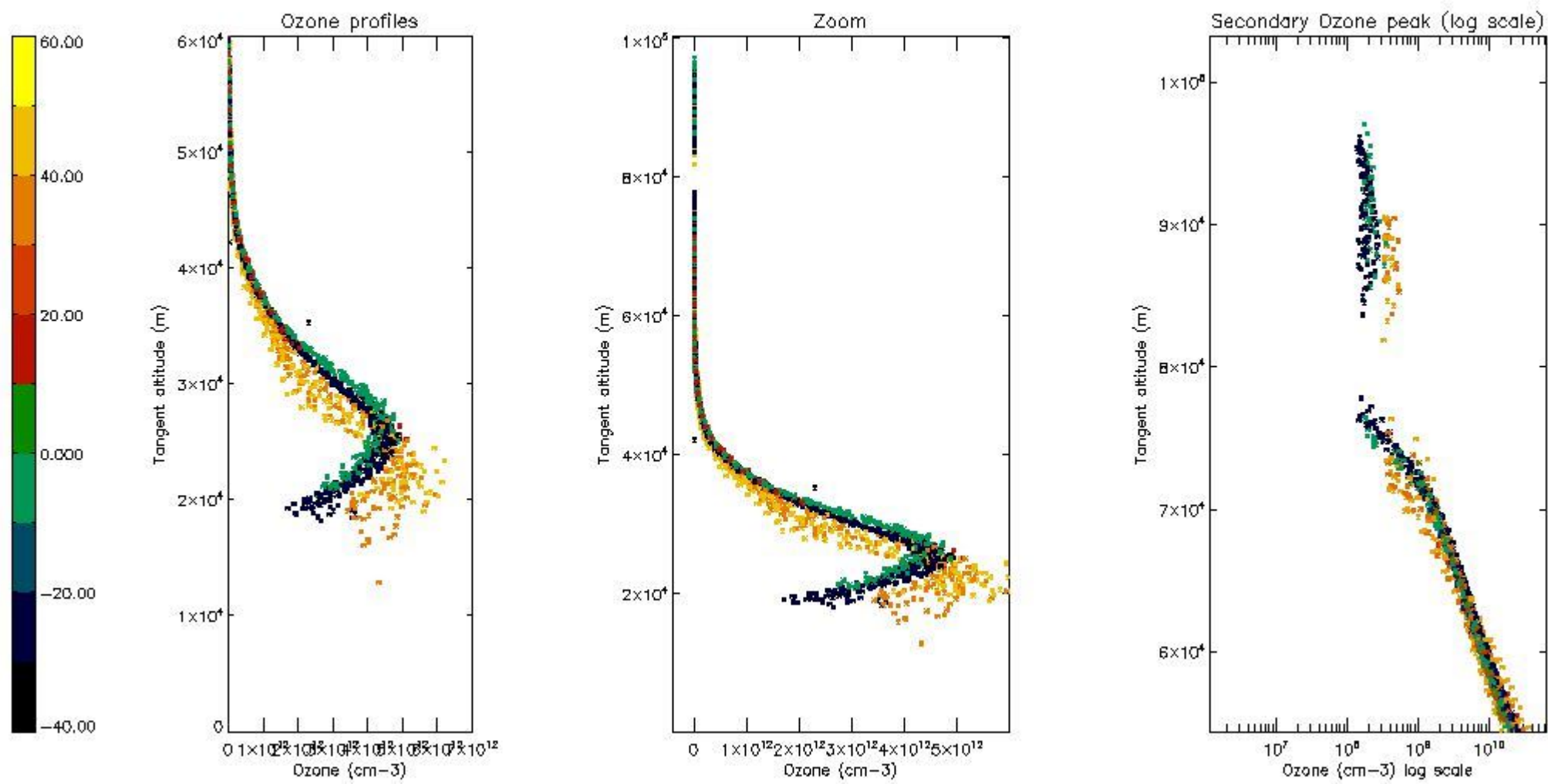
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



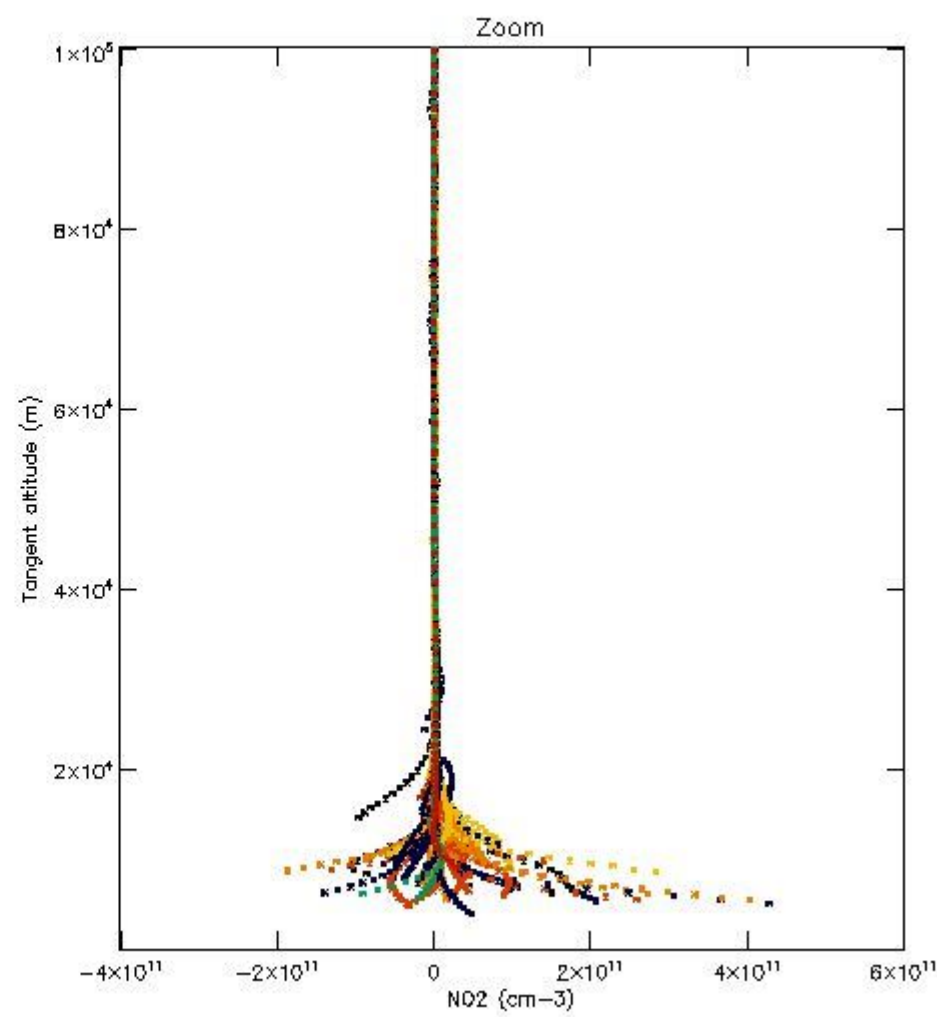
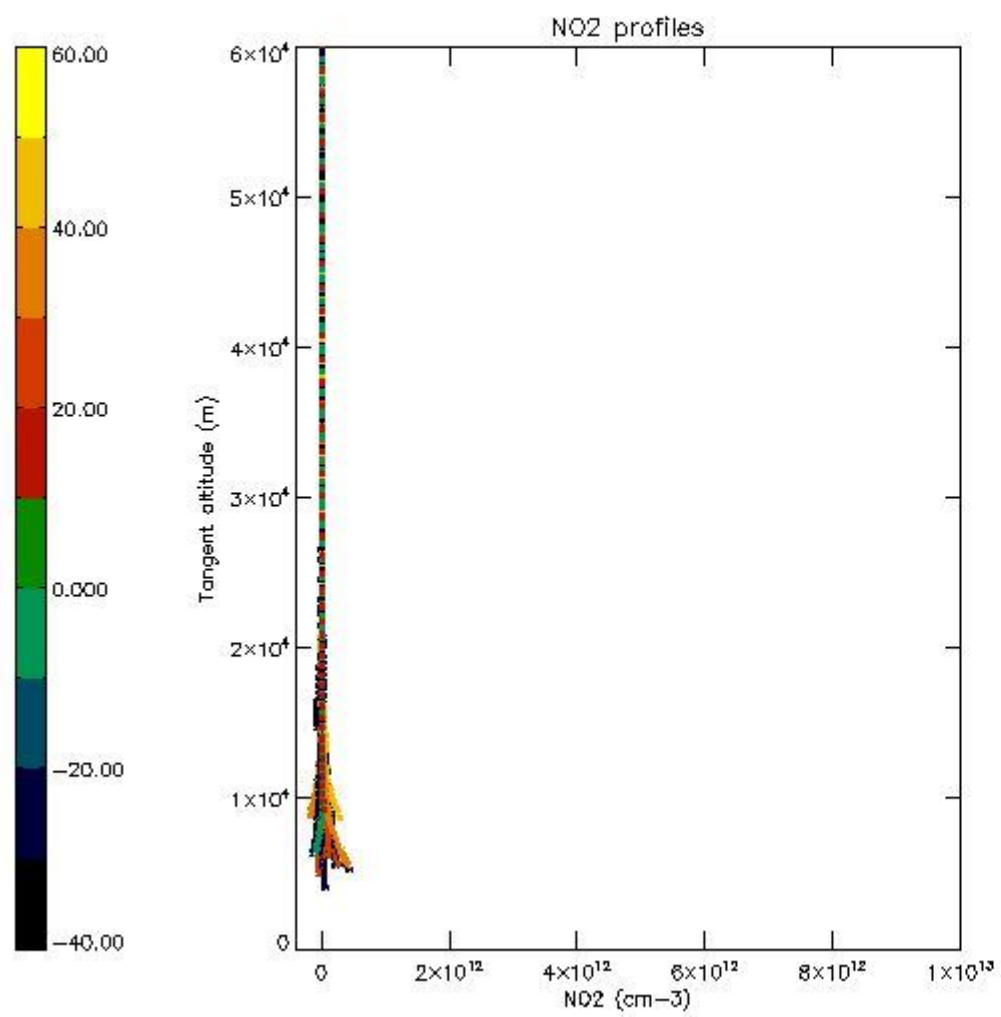
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



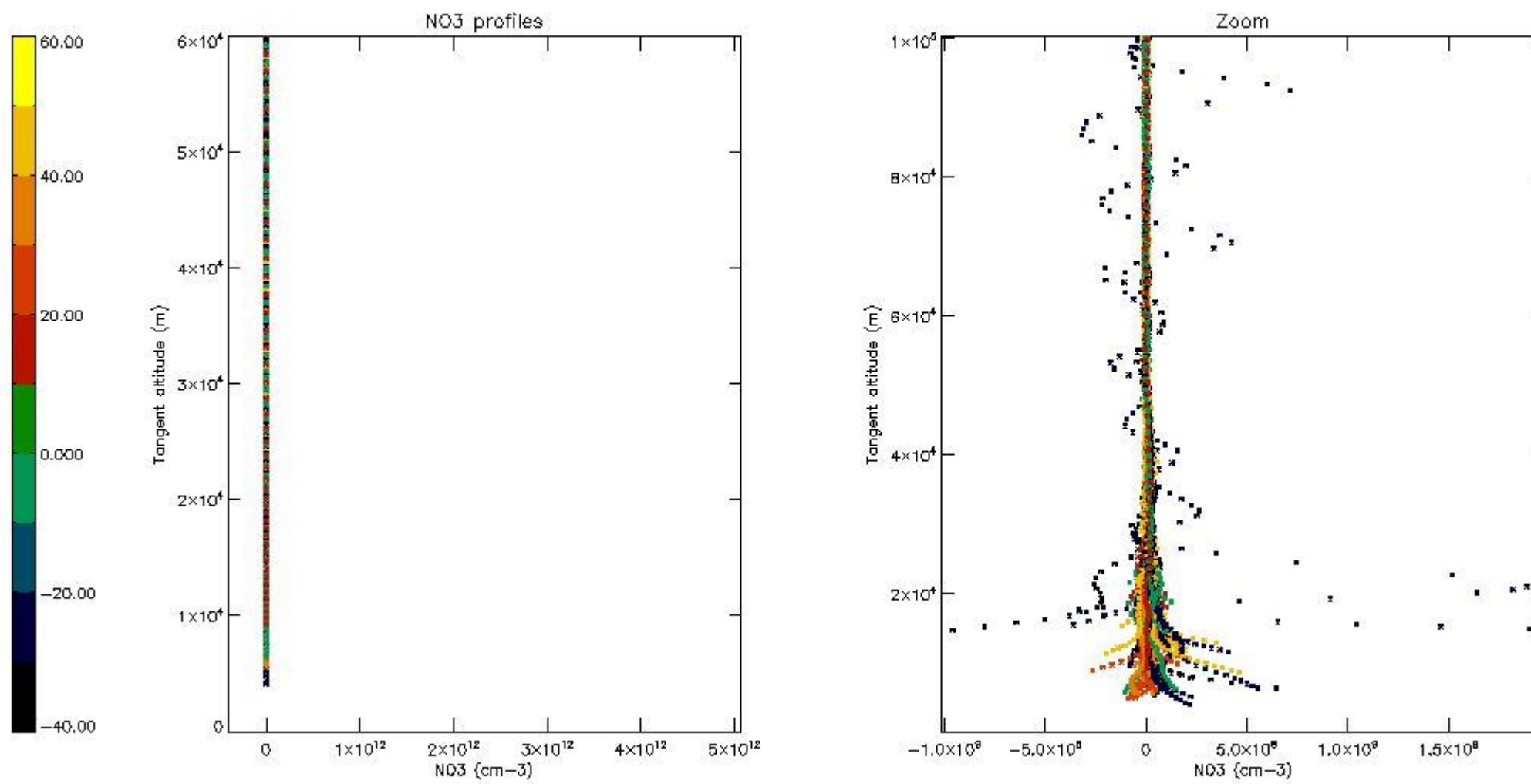
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



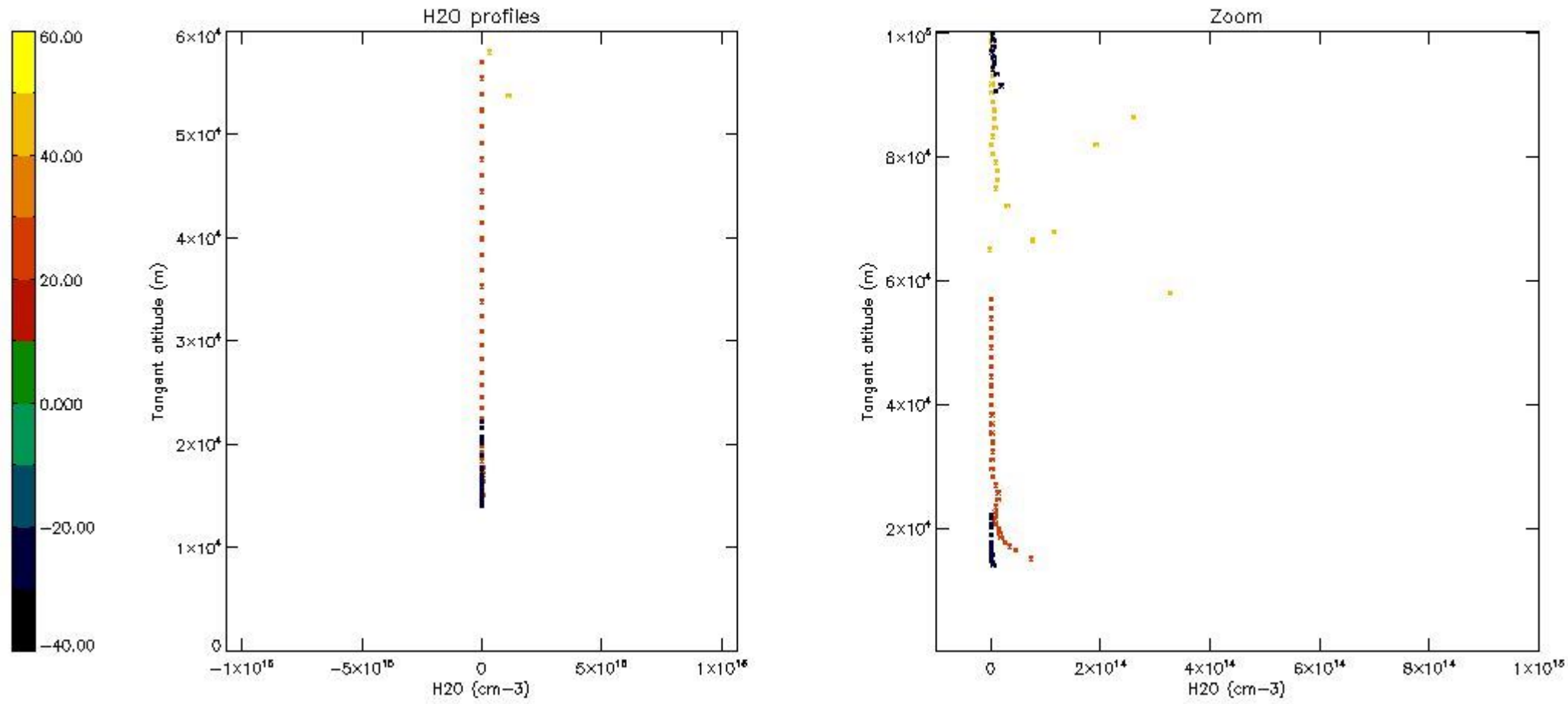
5.7 Plot NO3 profiles for all STD (dark without errors)

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	05-JAN-2005 00:01:17
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	05-JAN-2005 00:01:17
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	05-JAN-2005 00:01:17

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

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

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

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

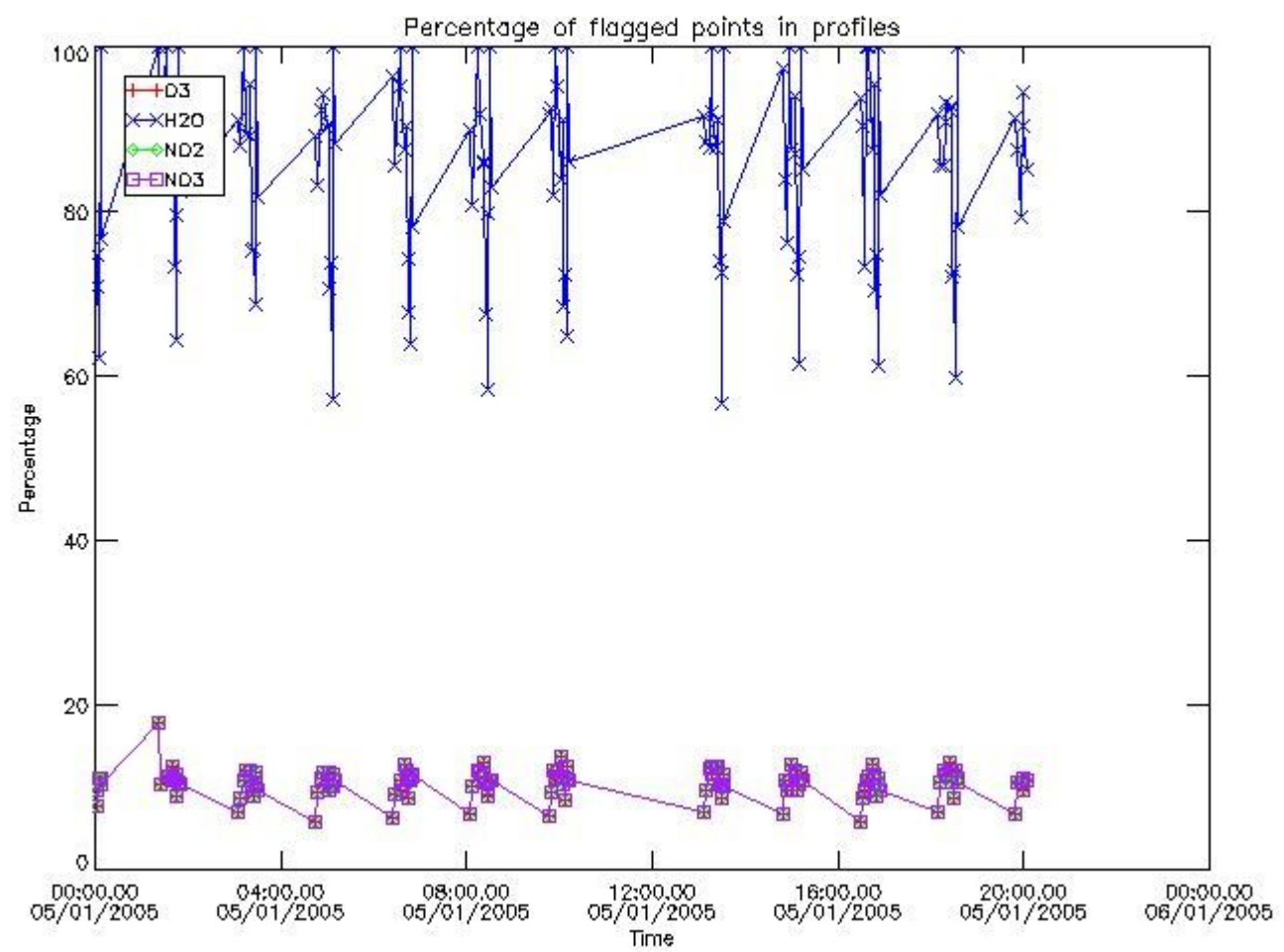
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414	GOM_NL__2PRFIN20050105_195224_000000492033_00328_14911_7564.N1	05-JAN-2005 19:52:24	Dark	48.500	54	5The Cen	2.0550	4500.0	97	14911	No
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3. Quality information per product

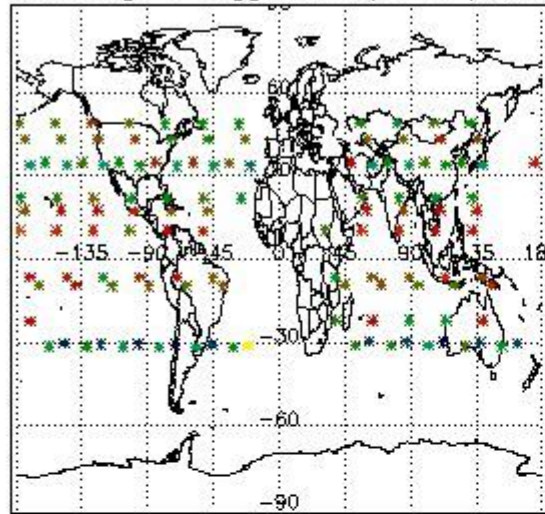
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3.1 Plot quality information per product (time dependant)

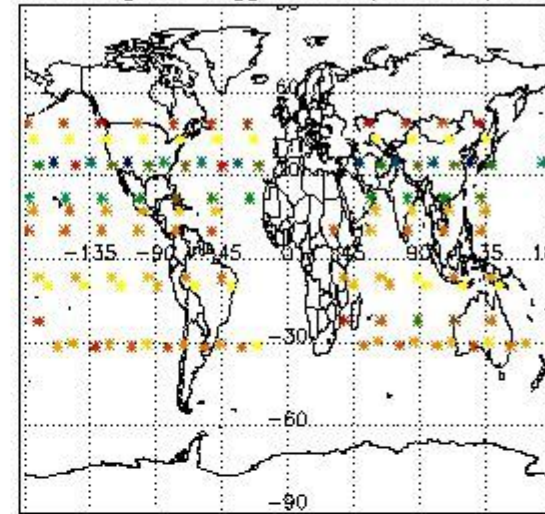


3.2 Plot quality information per product (world map)

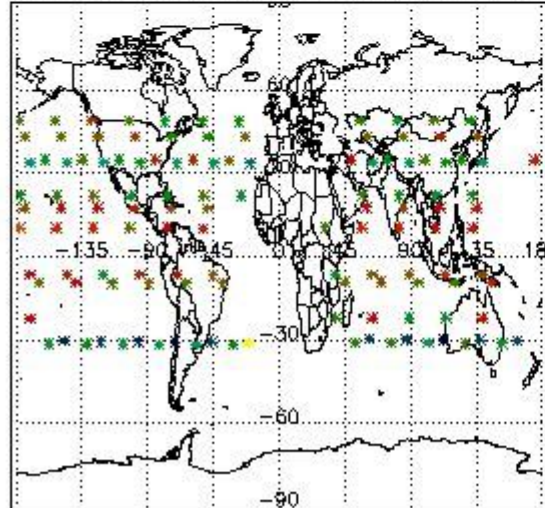
Percentage of flagged data per O3 profile



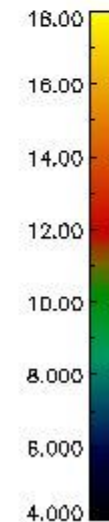
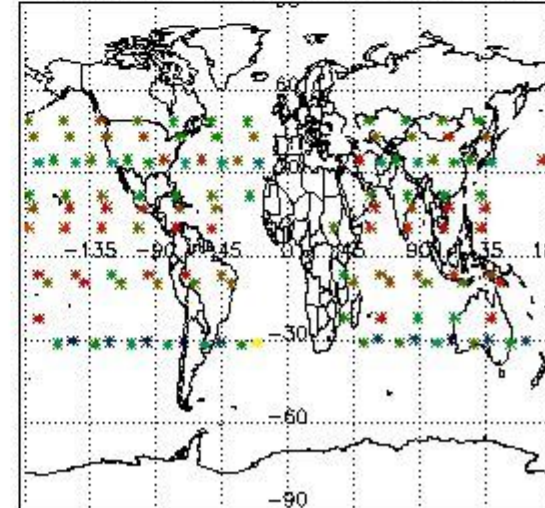
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

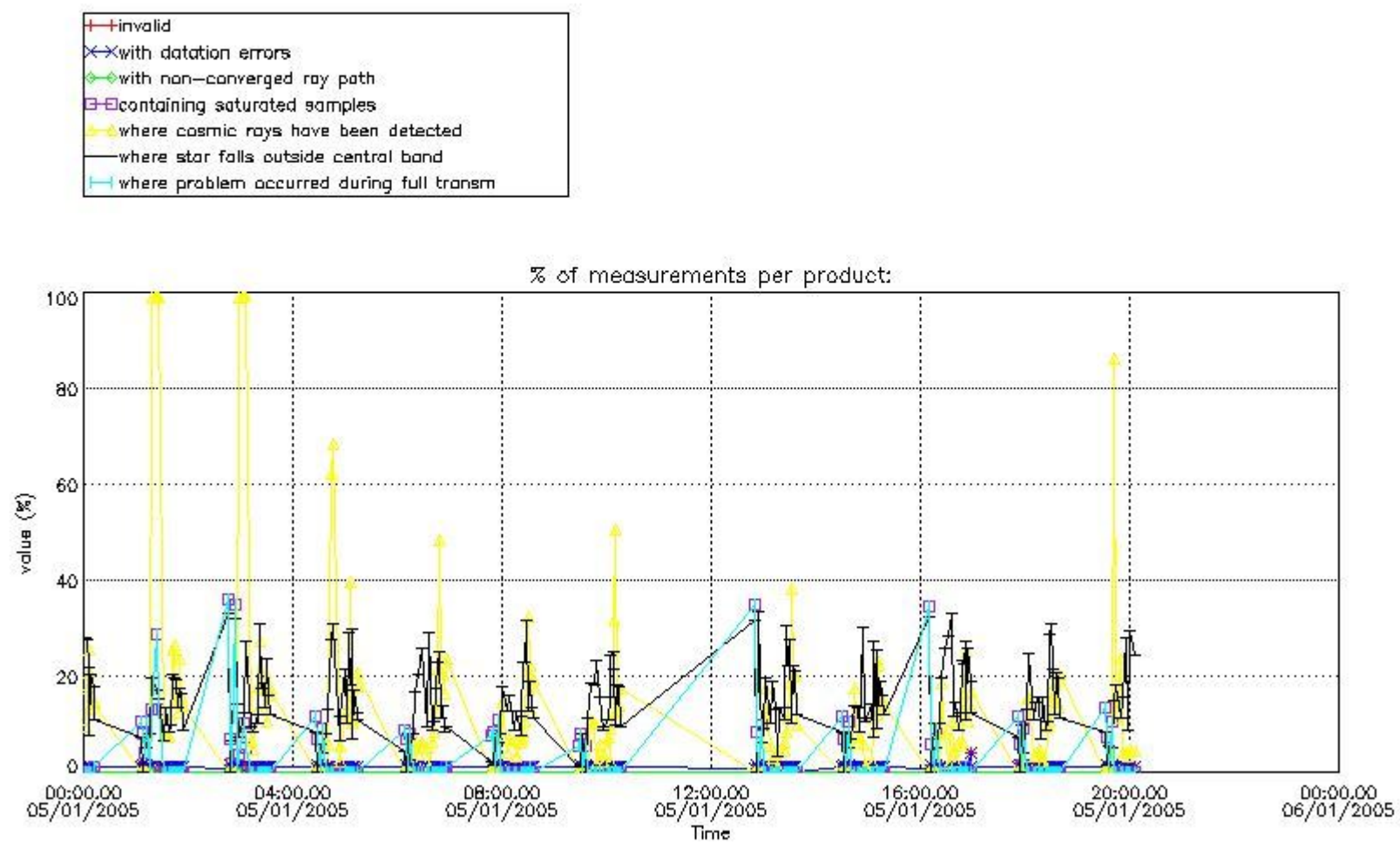


4. Level 1 quality information per product

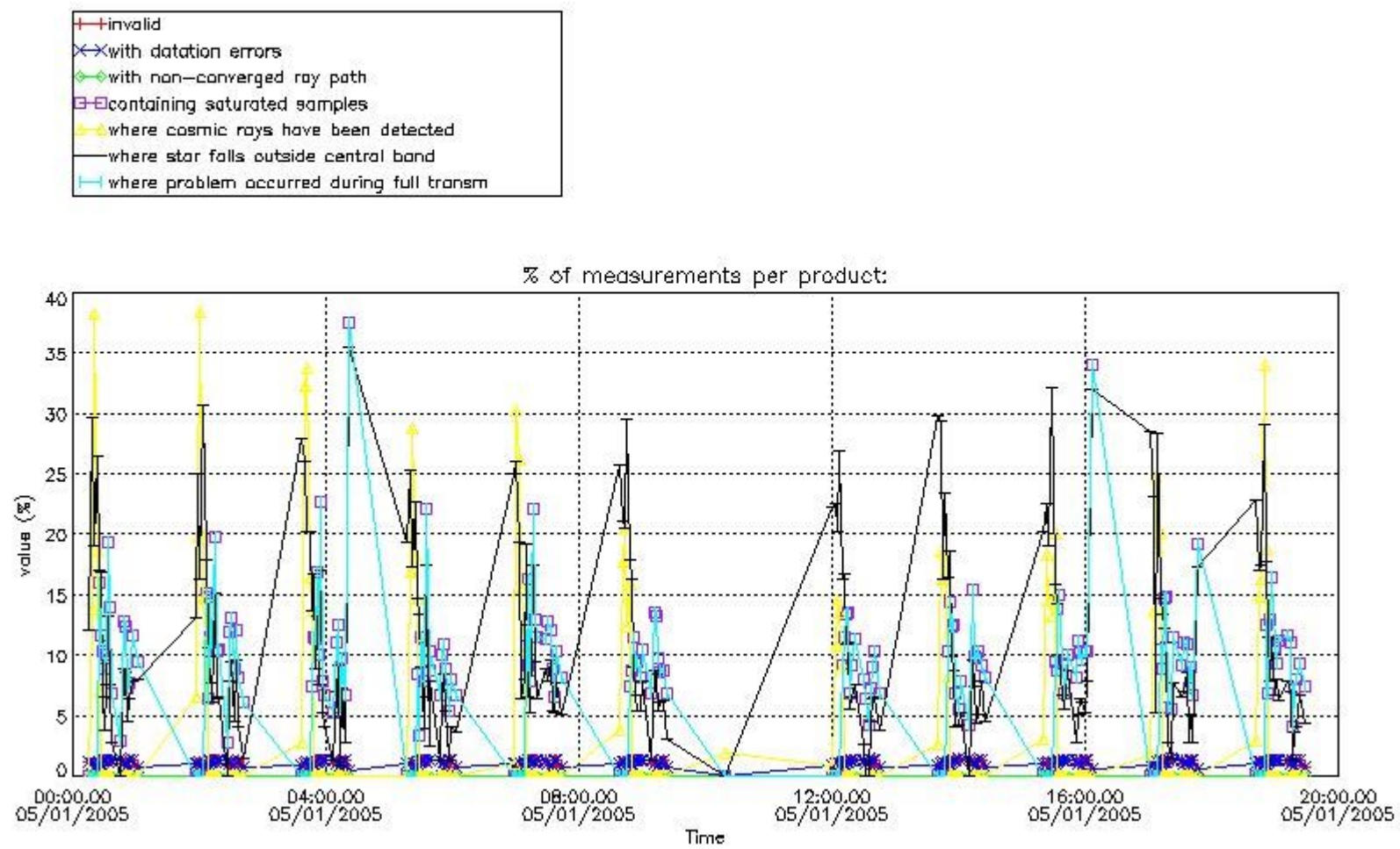
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



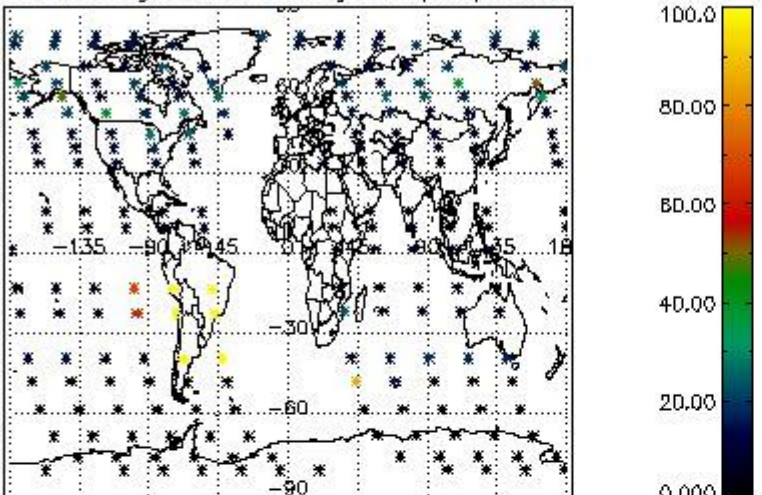
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



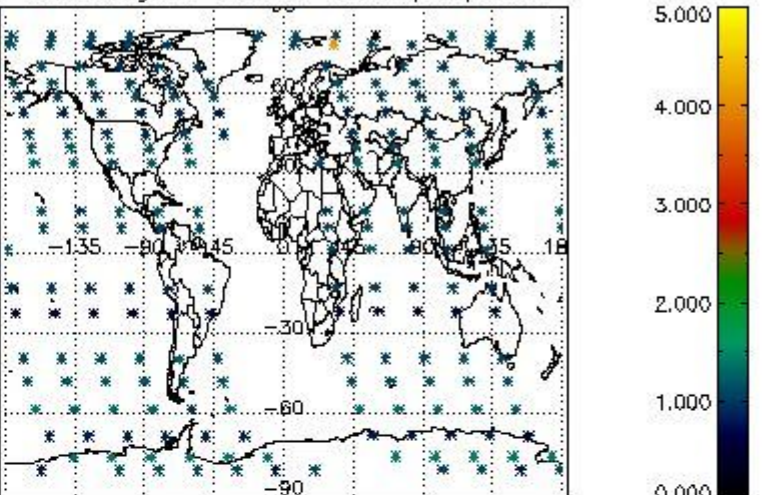
4.2 Plot quality information per product coming from level 1b processing (world map)

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

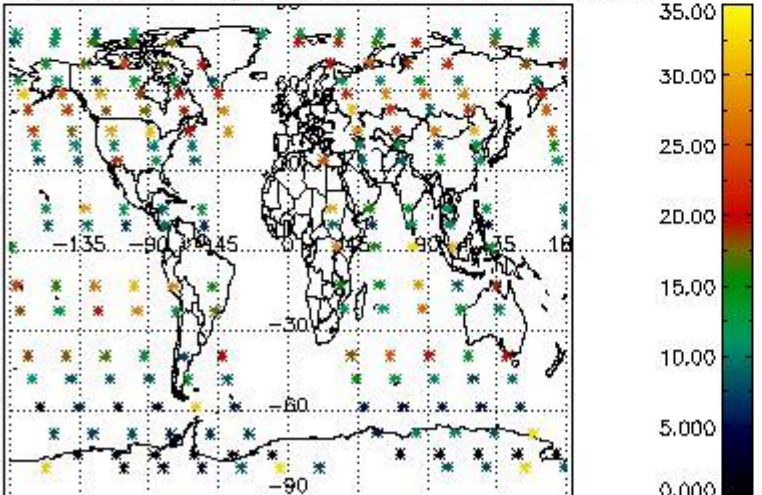
Percentage of cosmic ray hits per profile



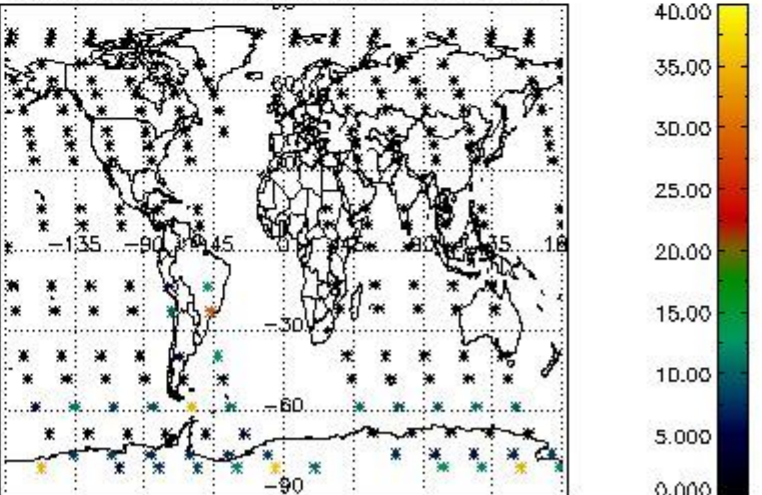
Percentage of datation errors per profile



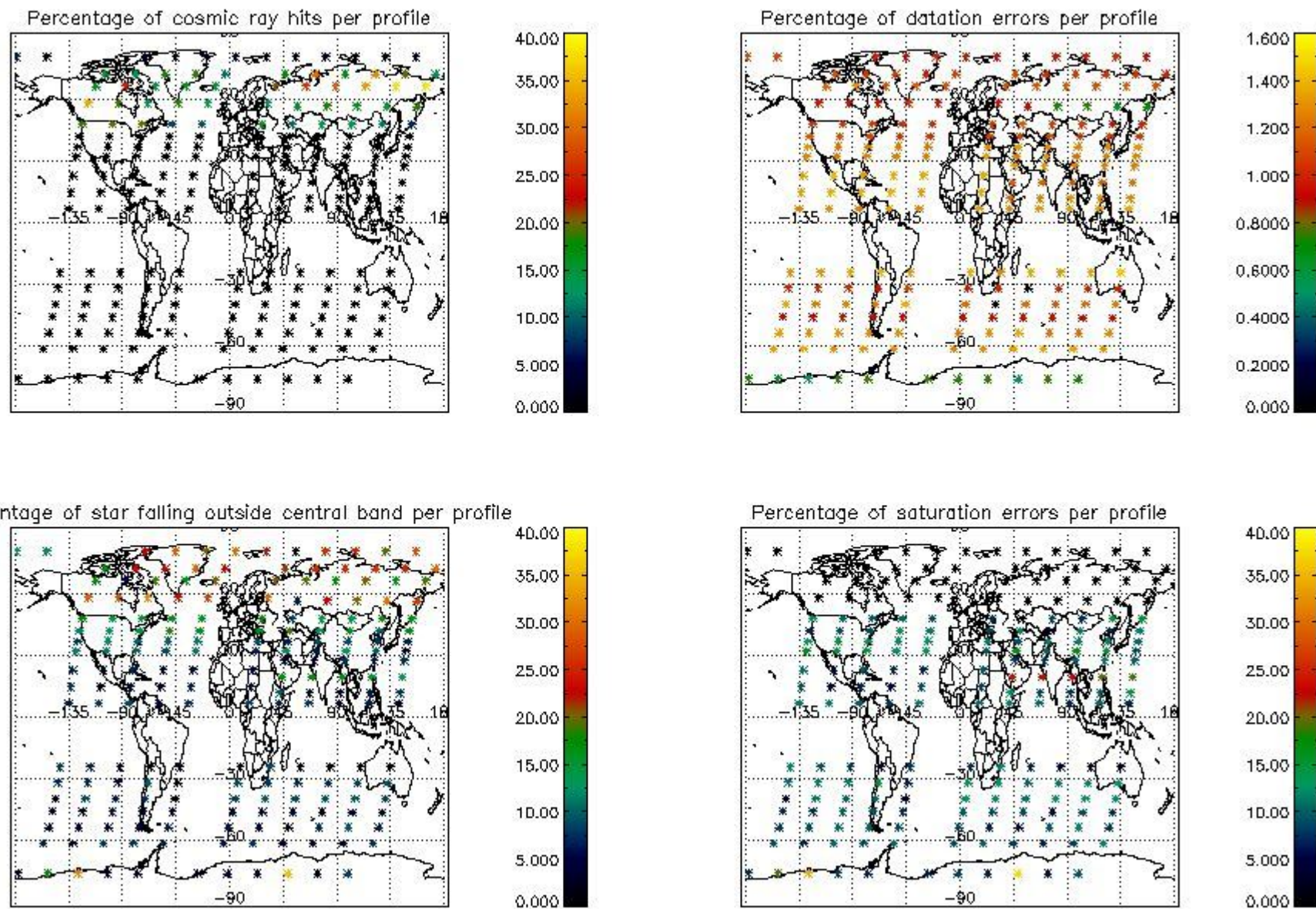
Percentage of star falling outside central band per profile



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

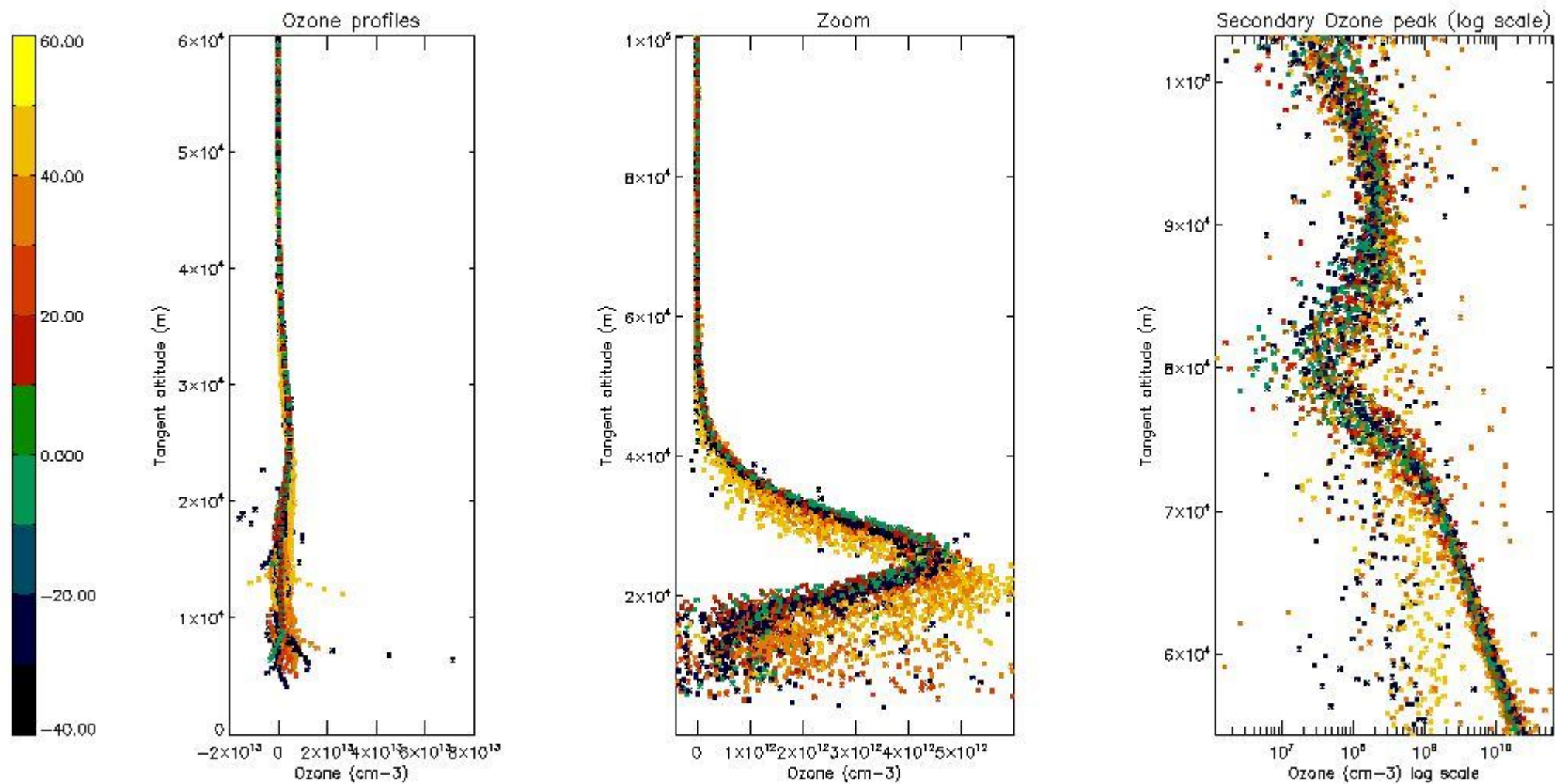
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	33
STD < 20	17

STD < 10	14
STD < 5	10

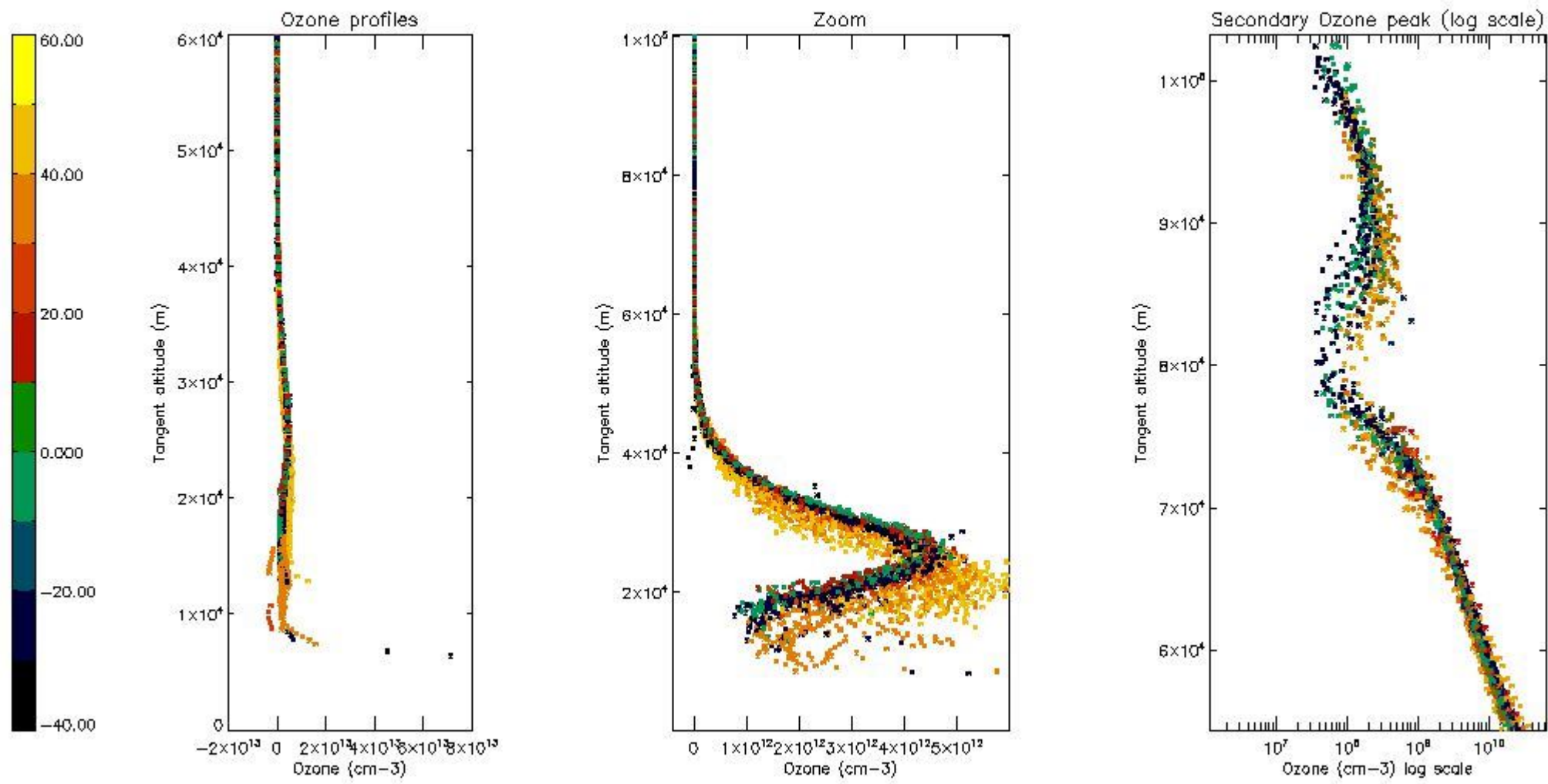
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



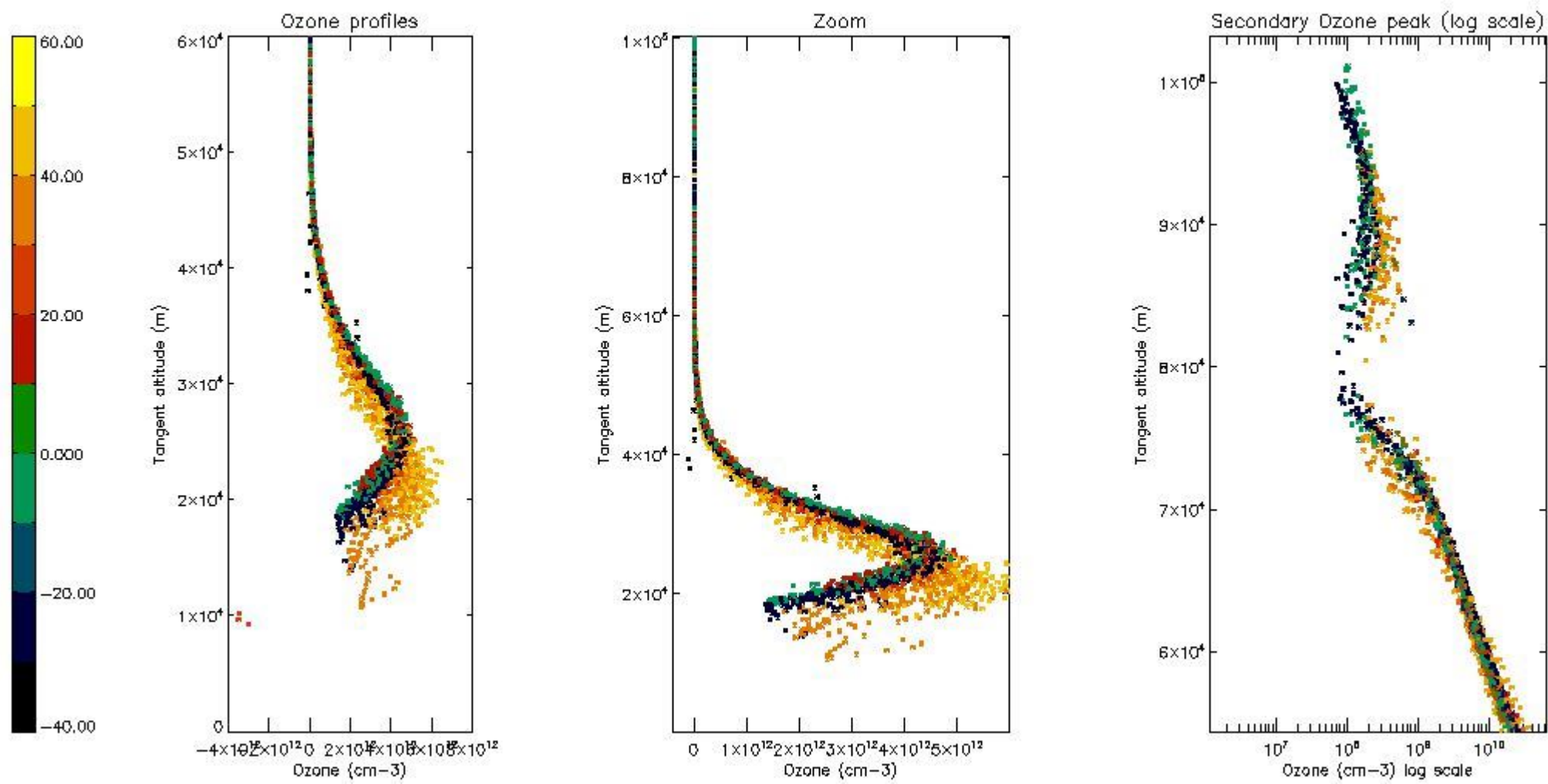
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



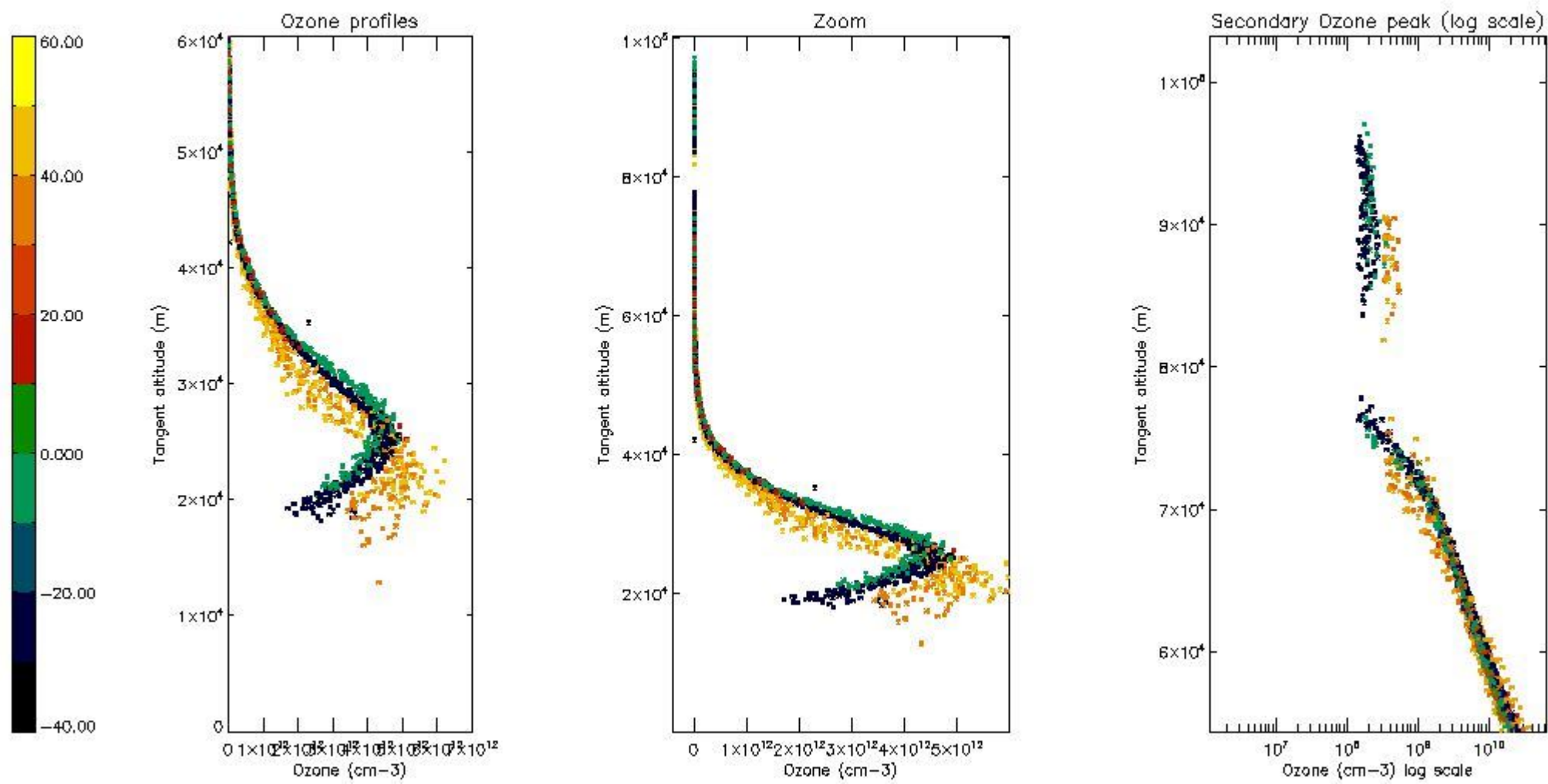
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



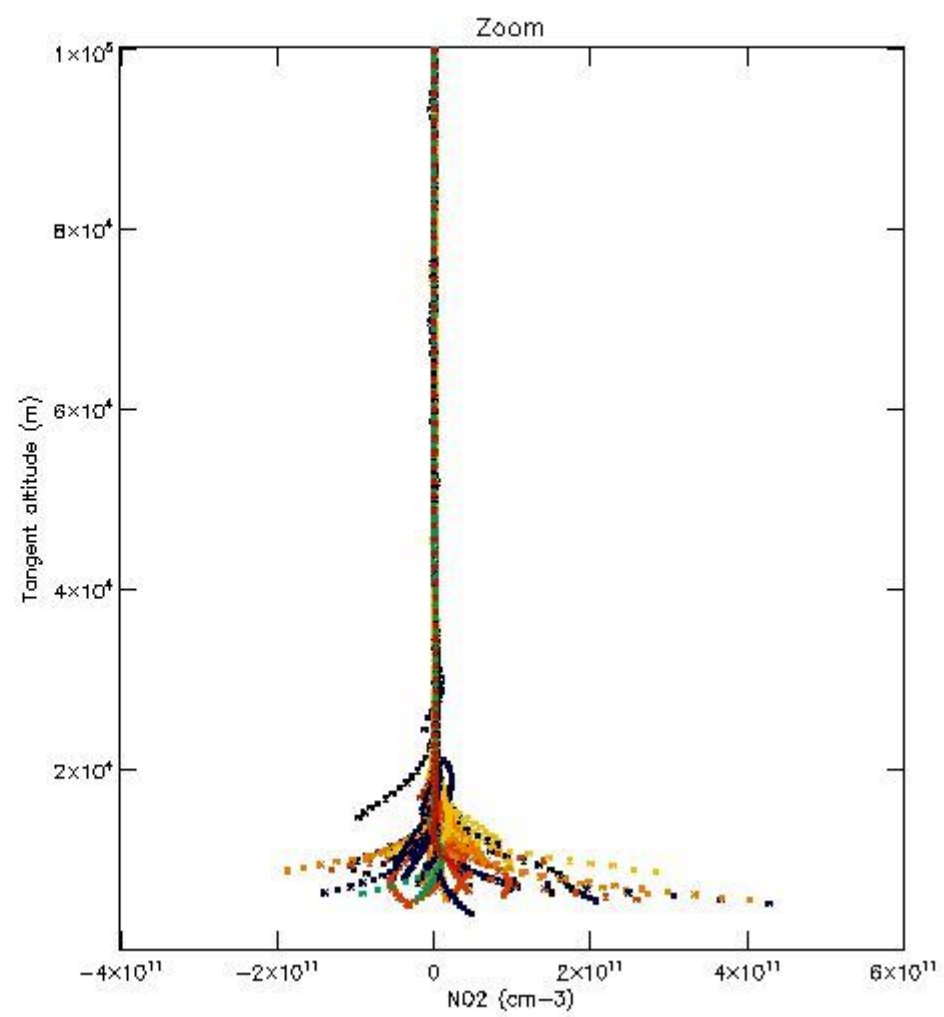
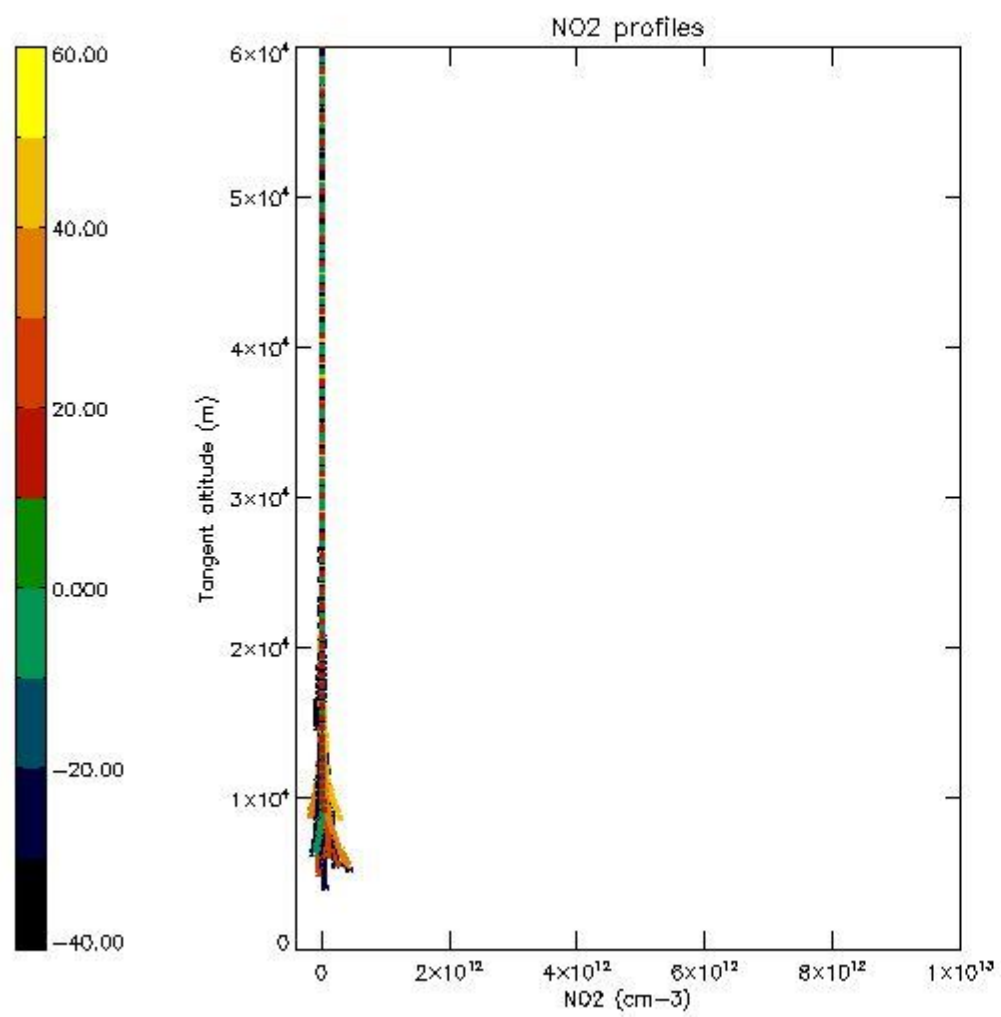
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



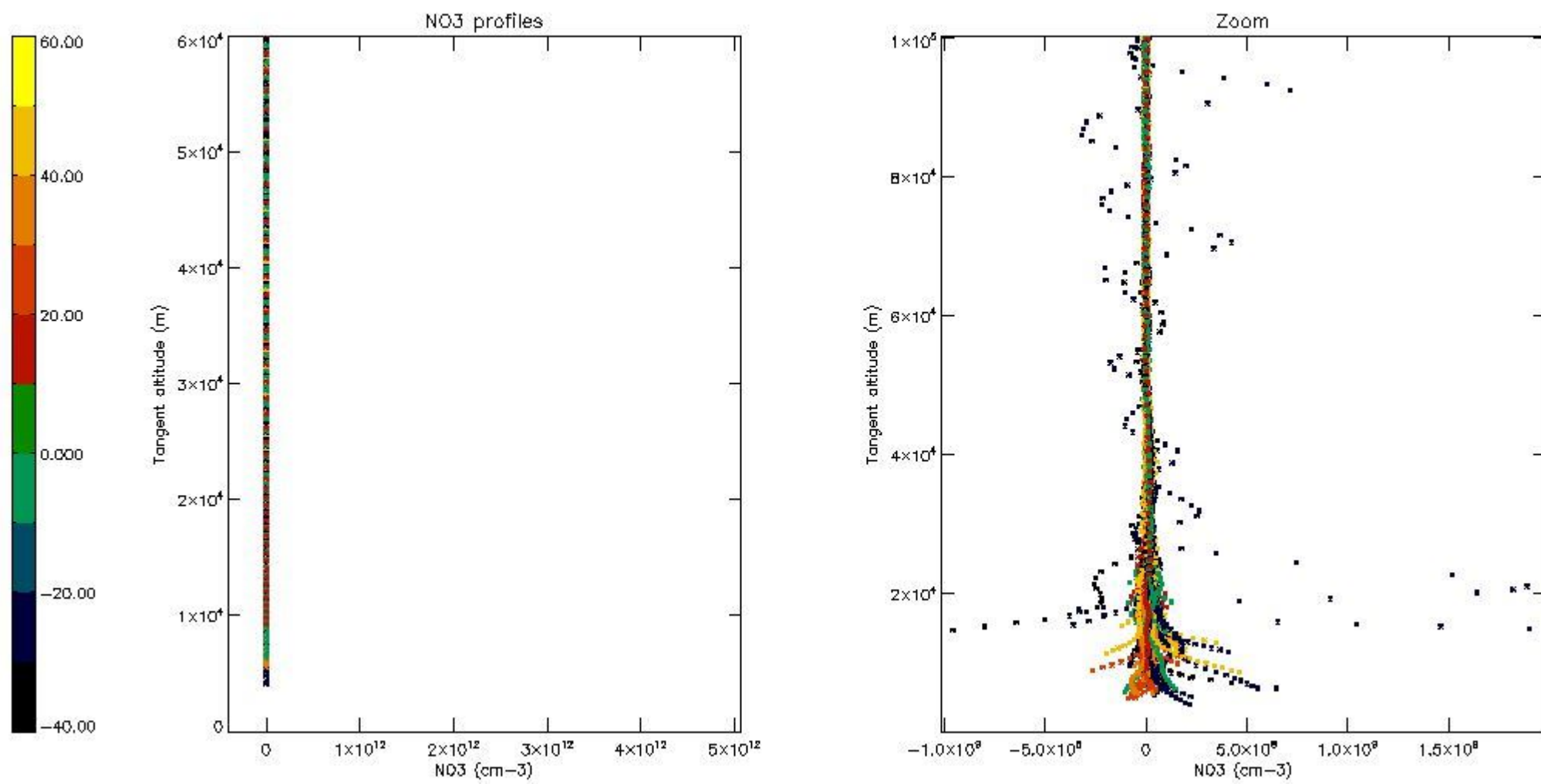
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



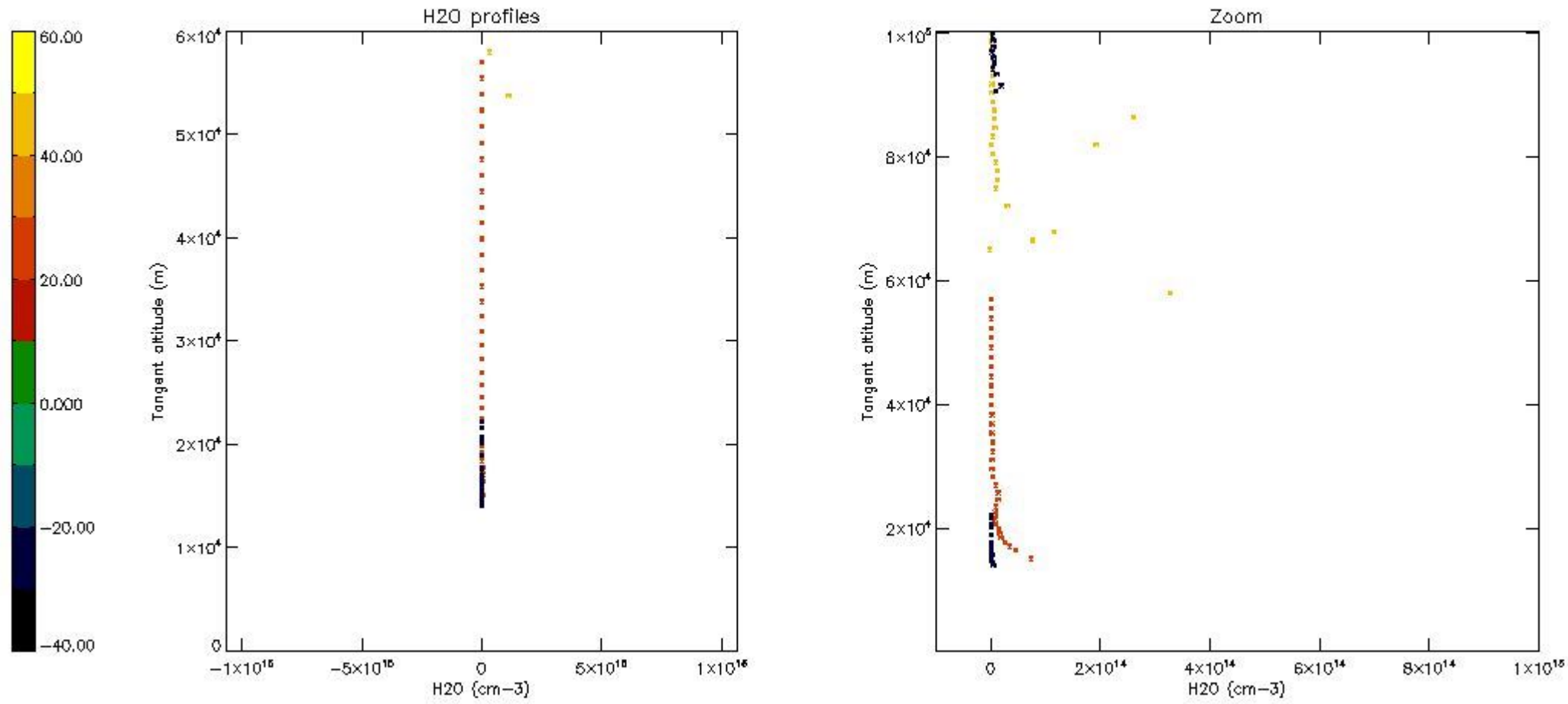
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

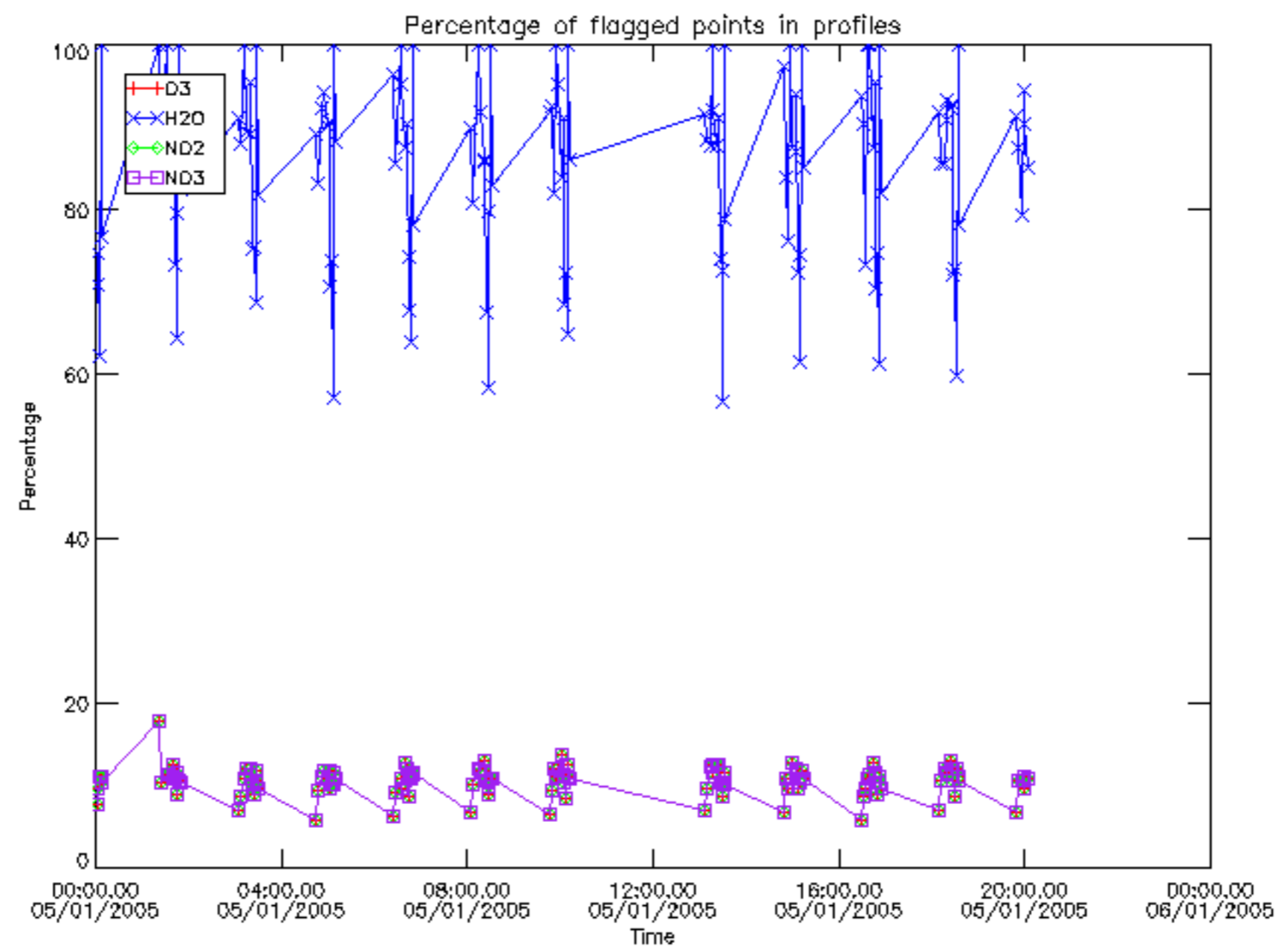
The colorbar represents the latitude.



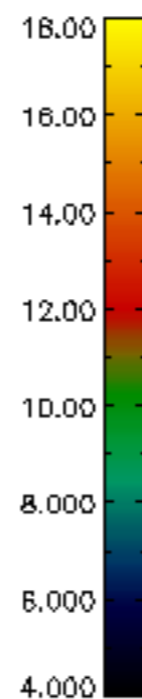
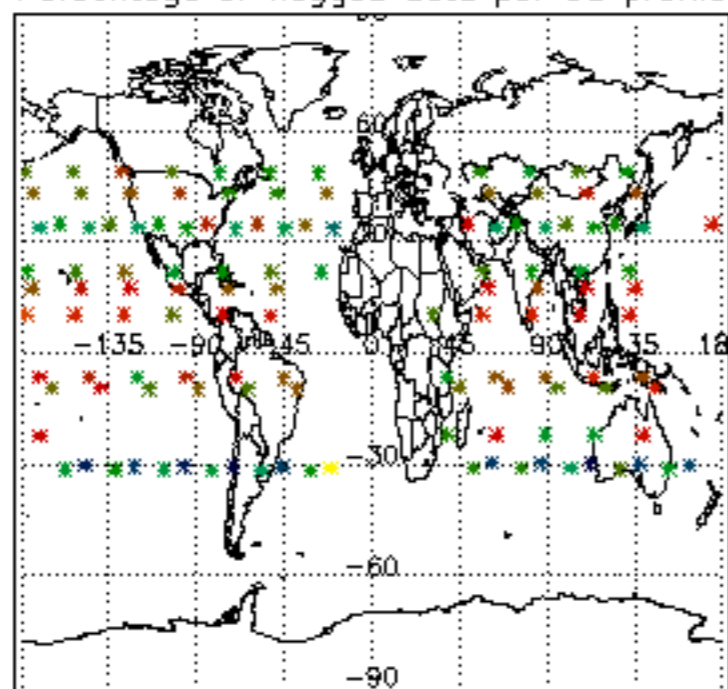
6. Auxiliary Data Files used for the production reported in section 2

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.

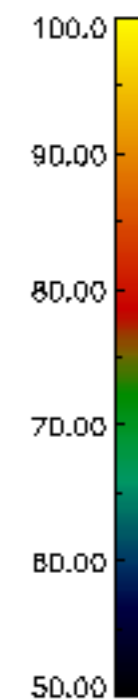
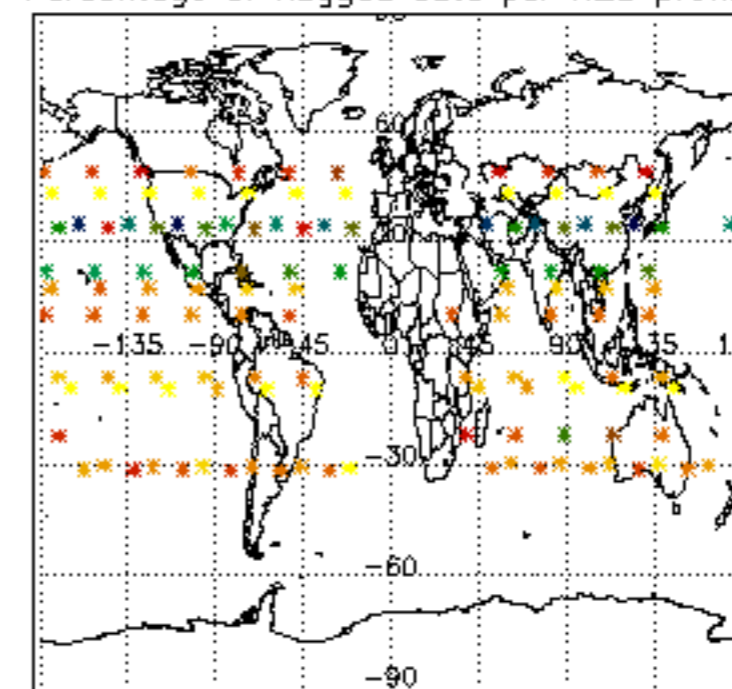
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	05-JAN-2005 00:01:17
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	05-JAN-2005 00:01:17
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	05-JAN-2005 00:01:17



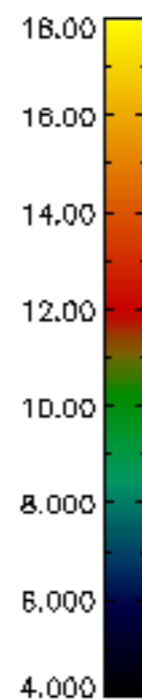
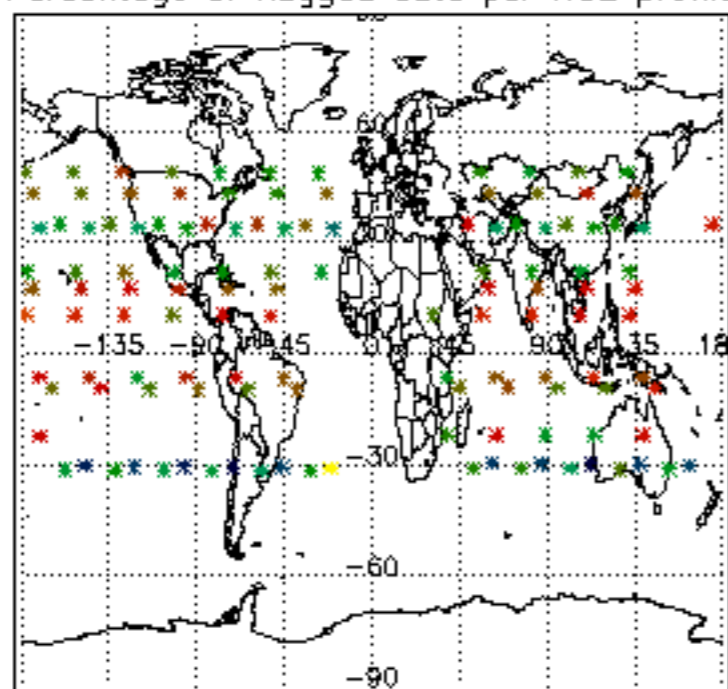
Percentage of flagged data per D3 profile



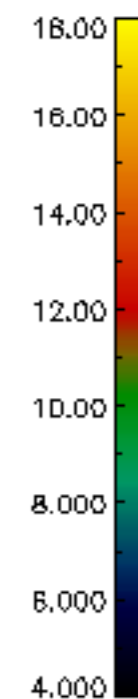
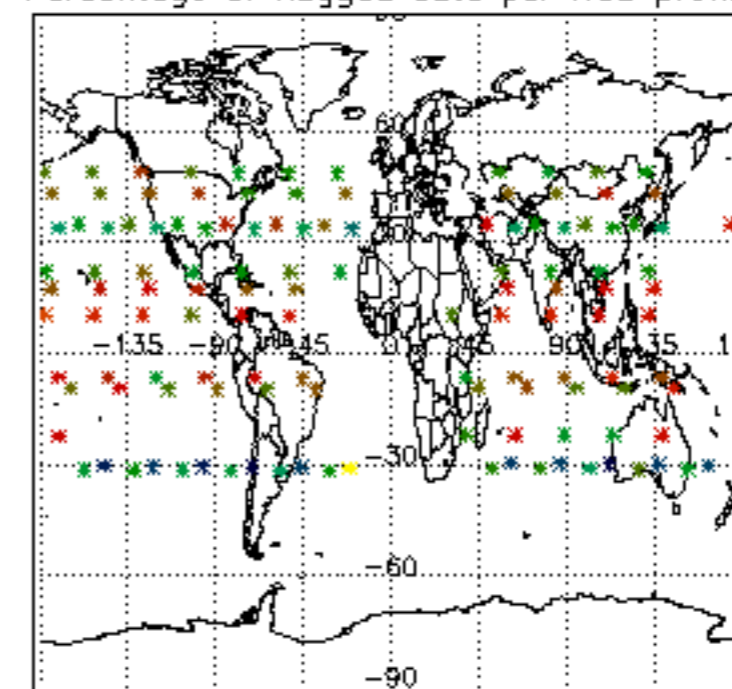
Percentage of flagged data per H2O profile

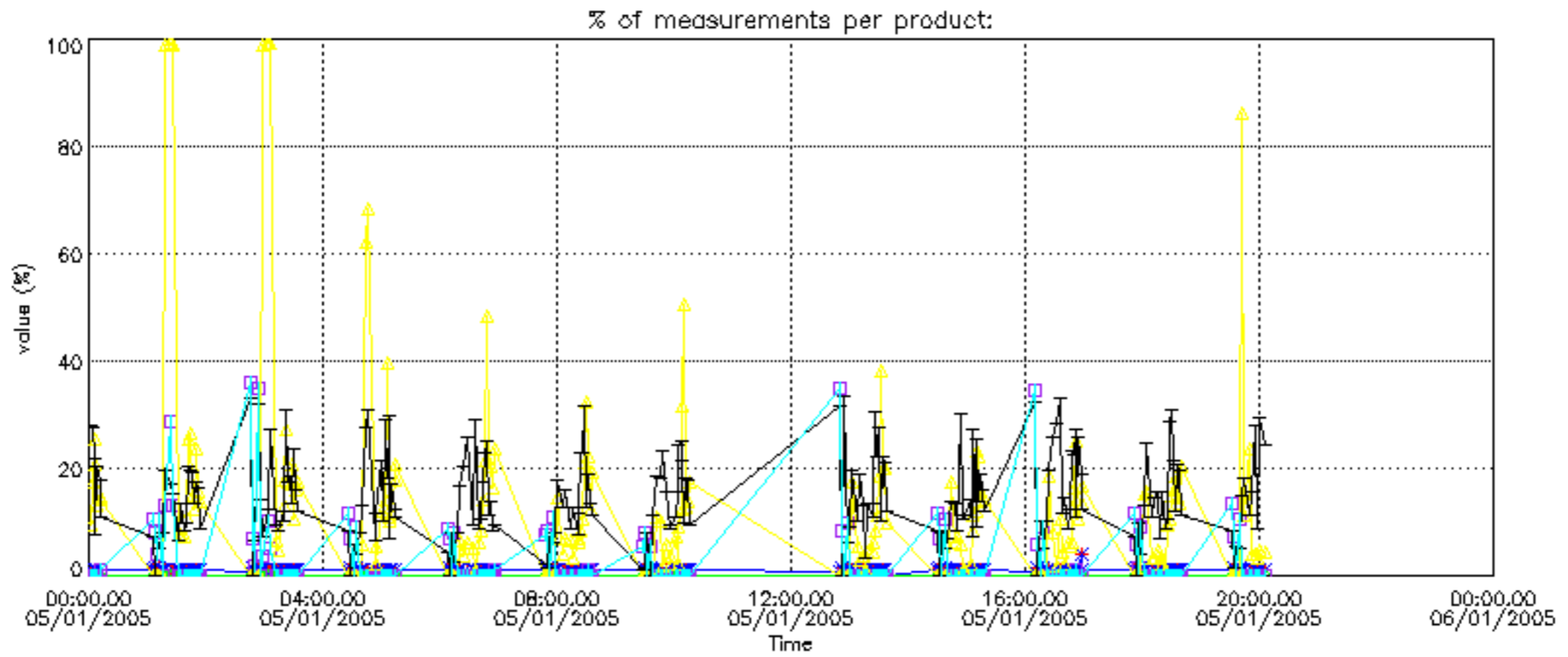


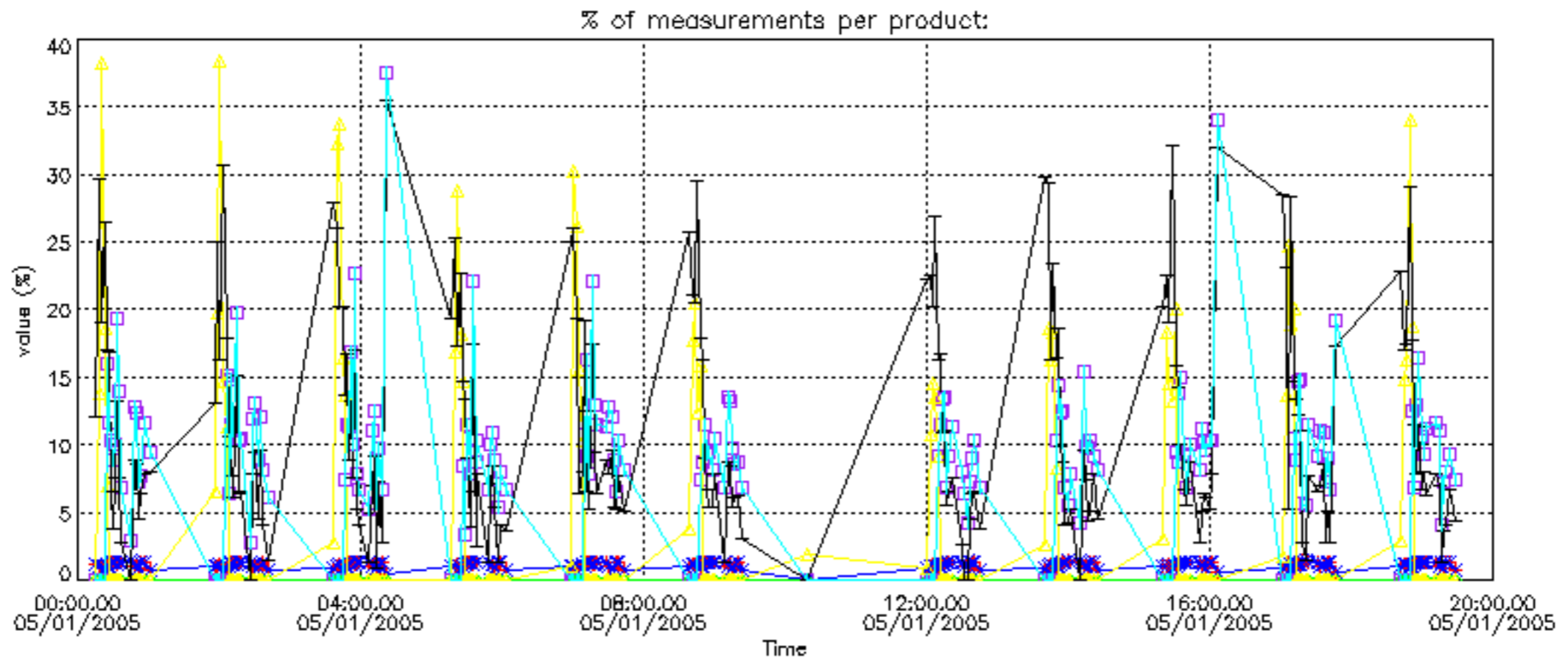
Percentage of flagged data per NO2 profile



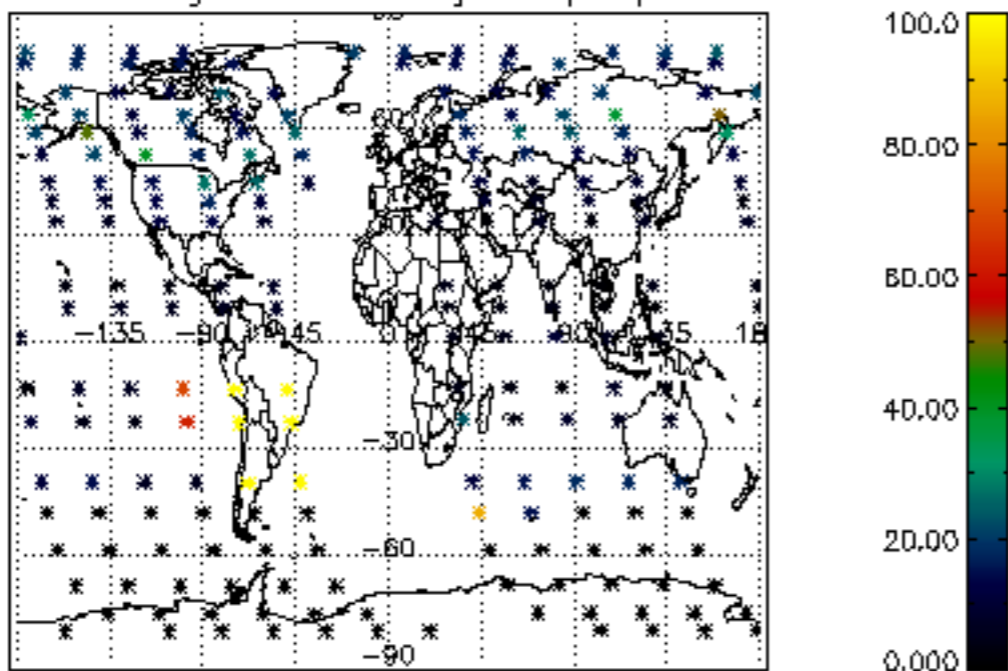
Percentage of flagged data per NO3 profile



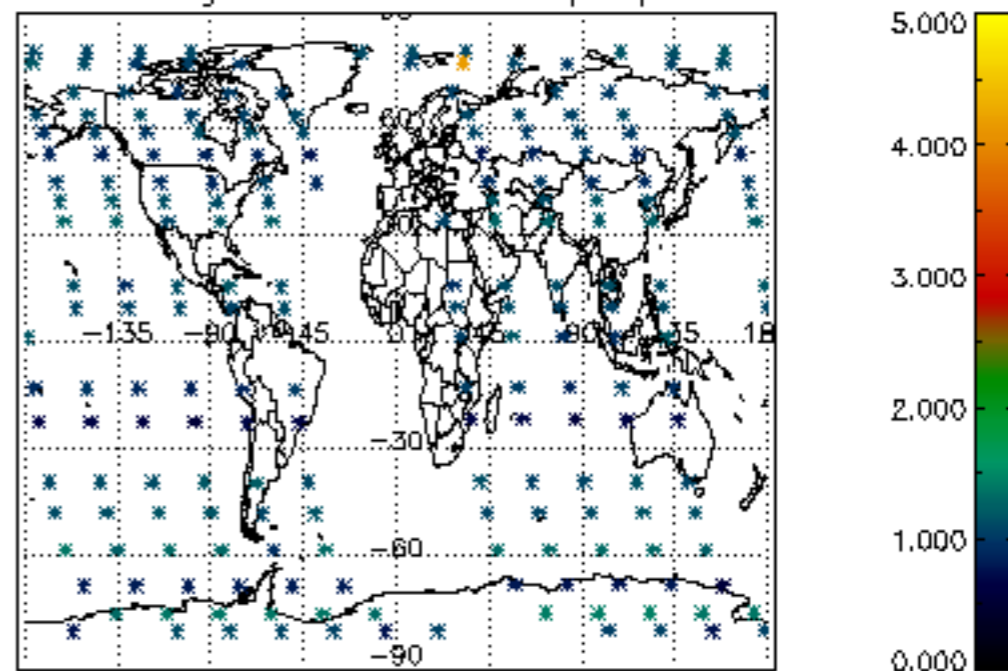




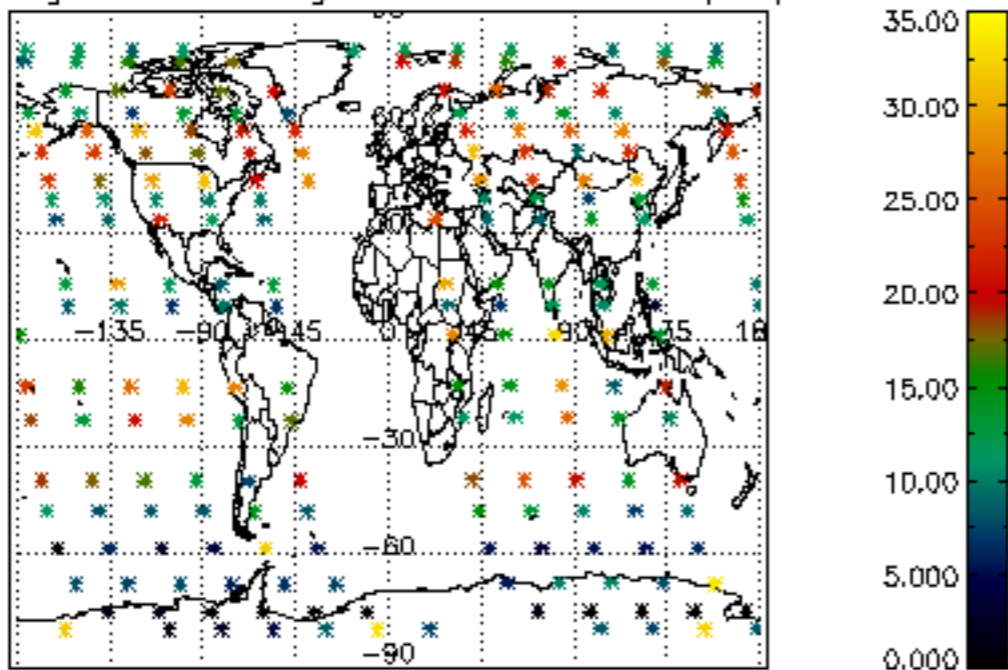
Percentage of cosmic ray hits per profile



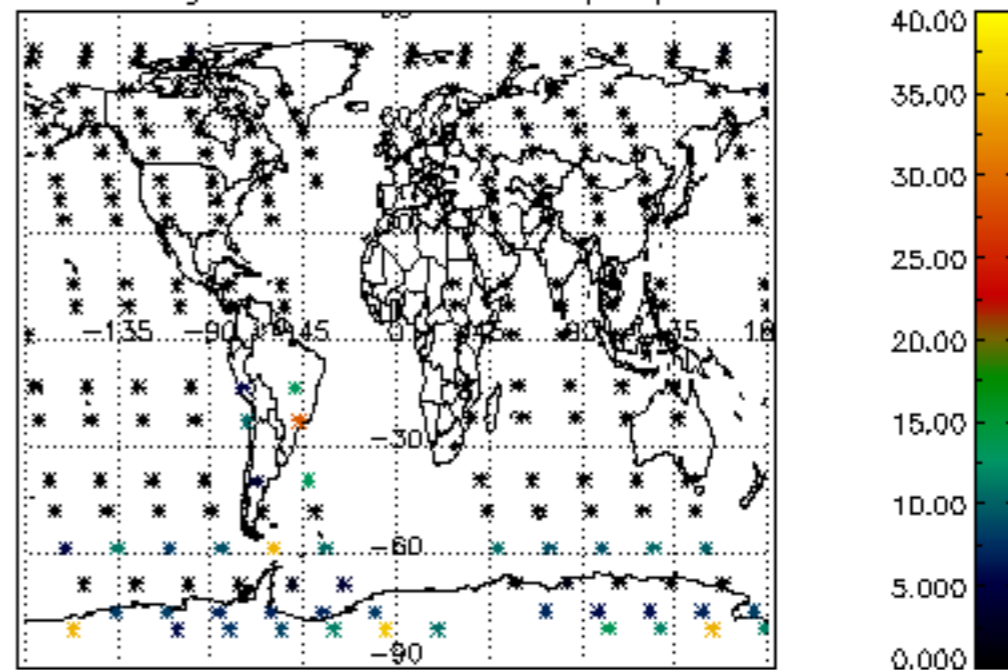
Percentage of datation errors per profile



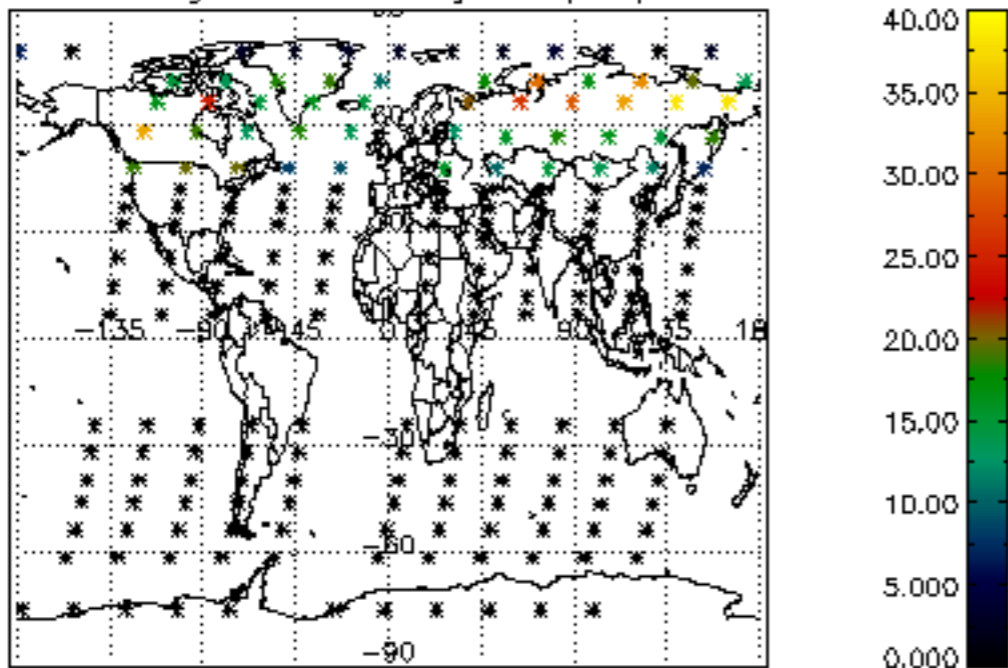
Percentage of star falling outside central band per profile



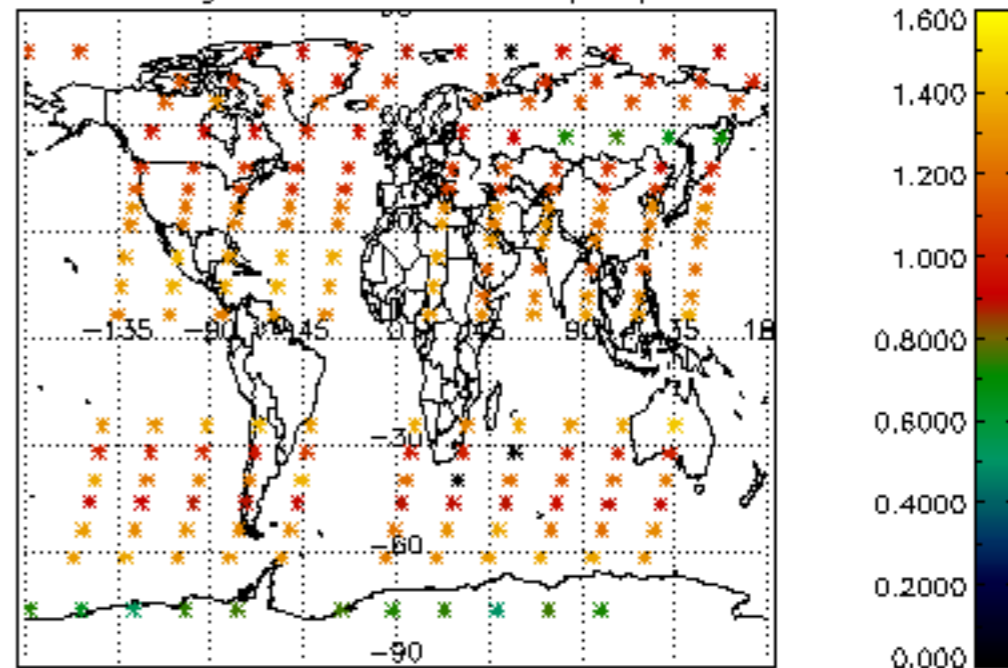
Percentage of saturation errors per profile



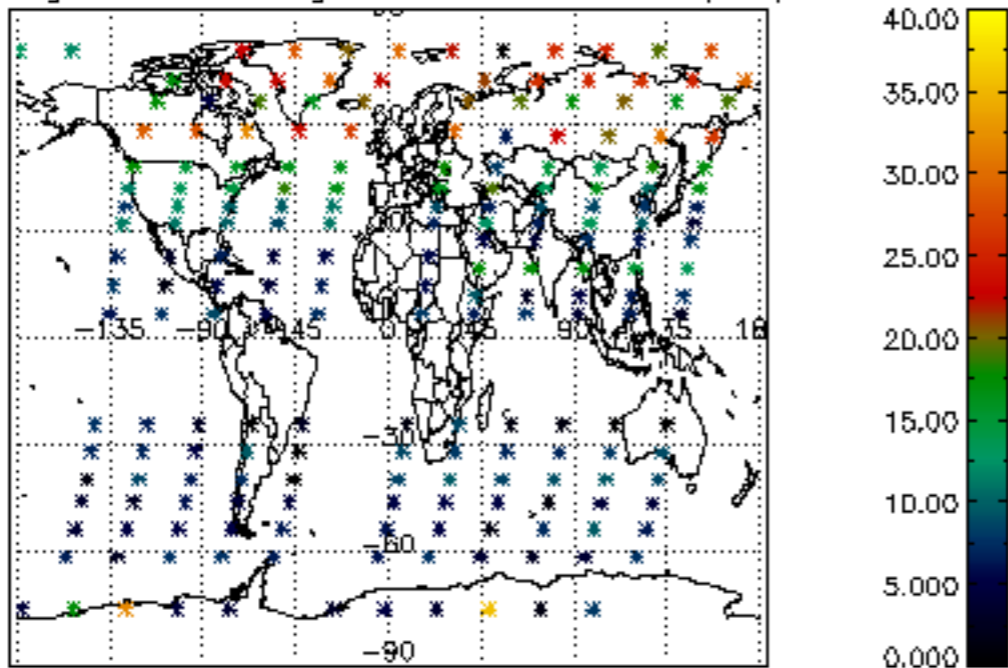
Percentage of cosmic ray hits per profile



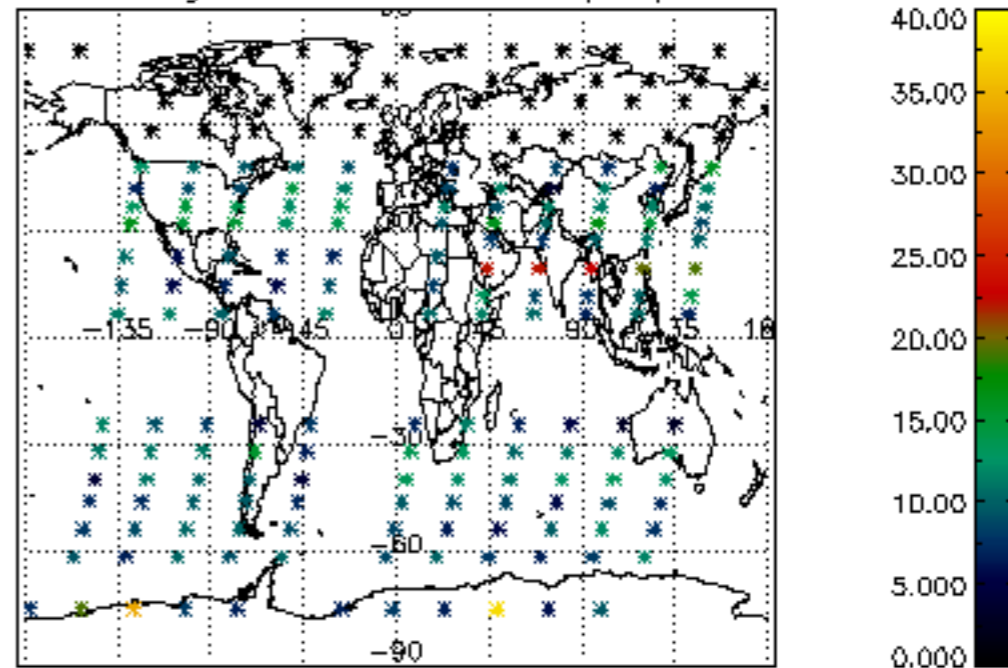
Percentage of datation errors per profile

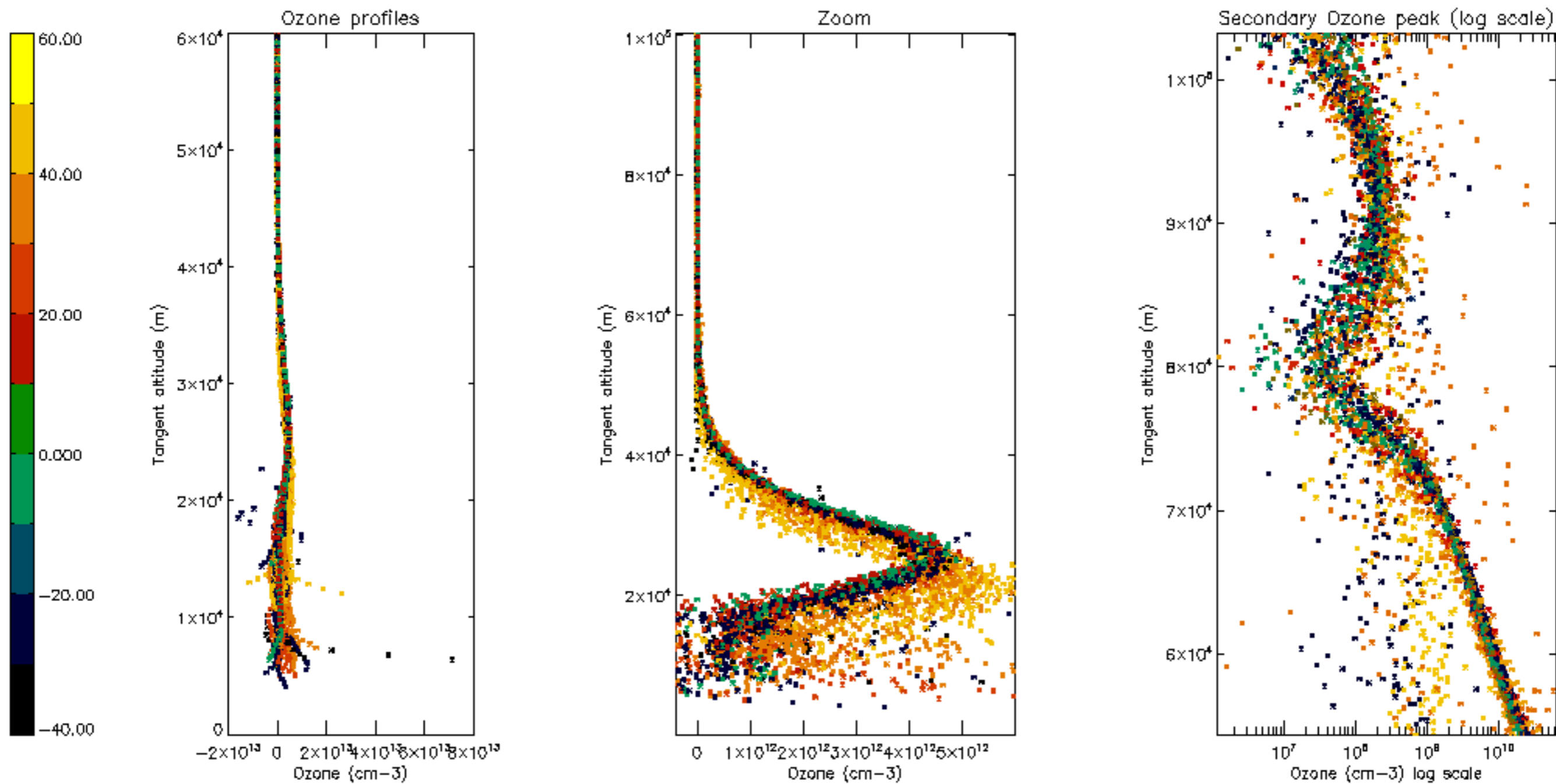


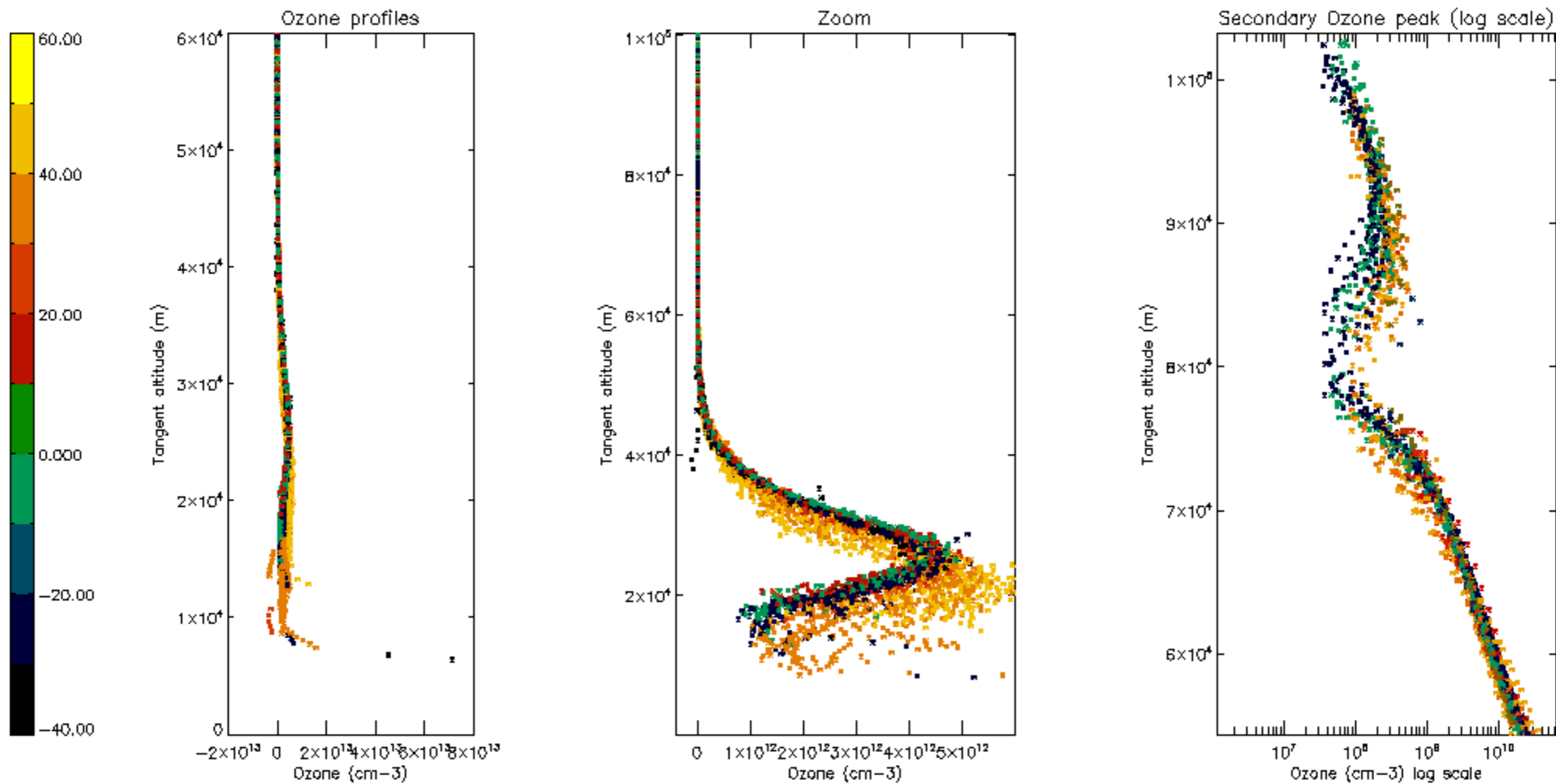
Percentage of star falling outside central band per profile

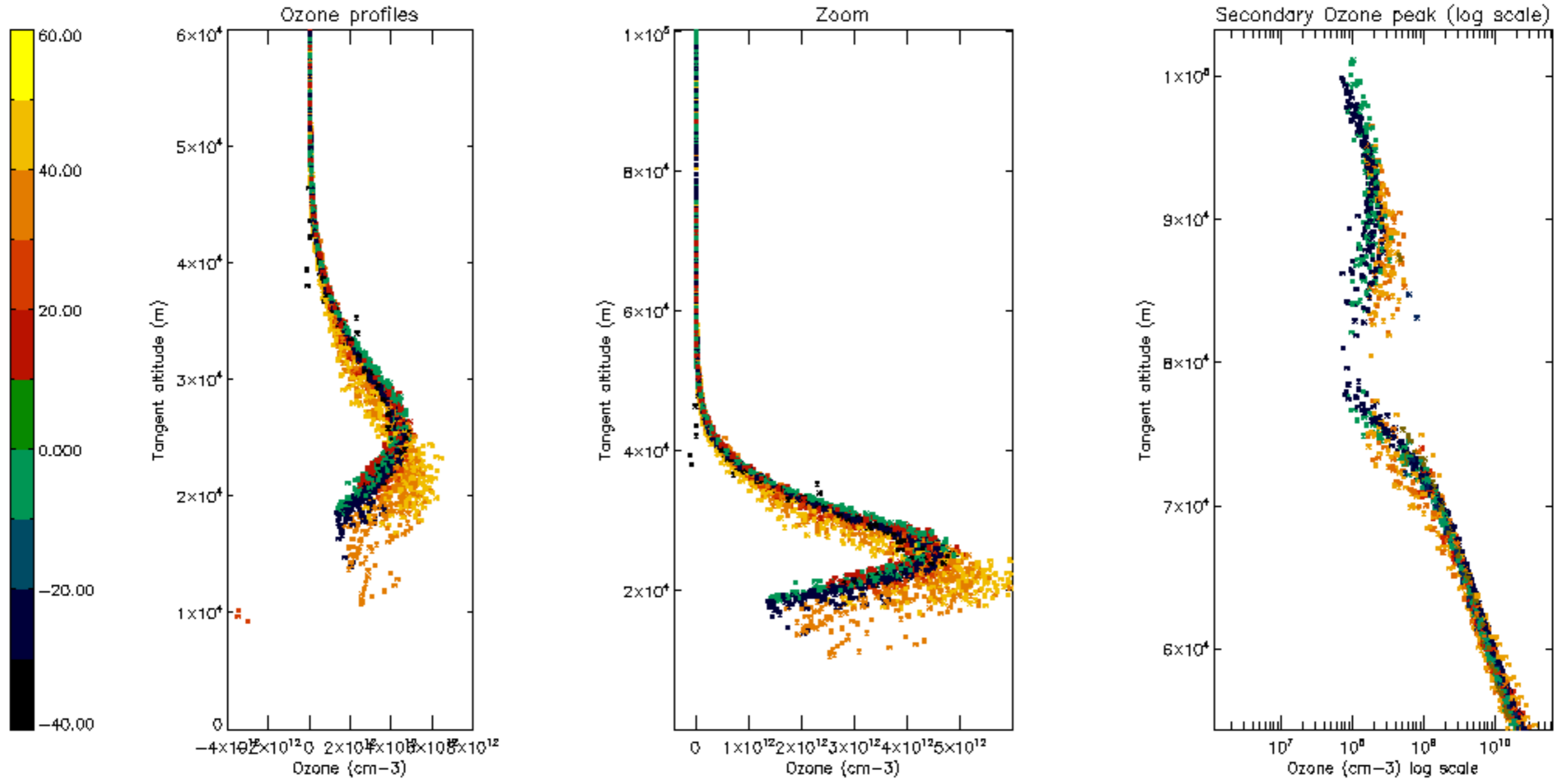


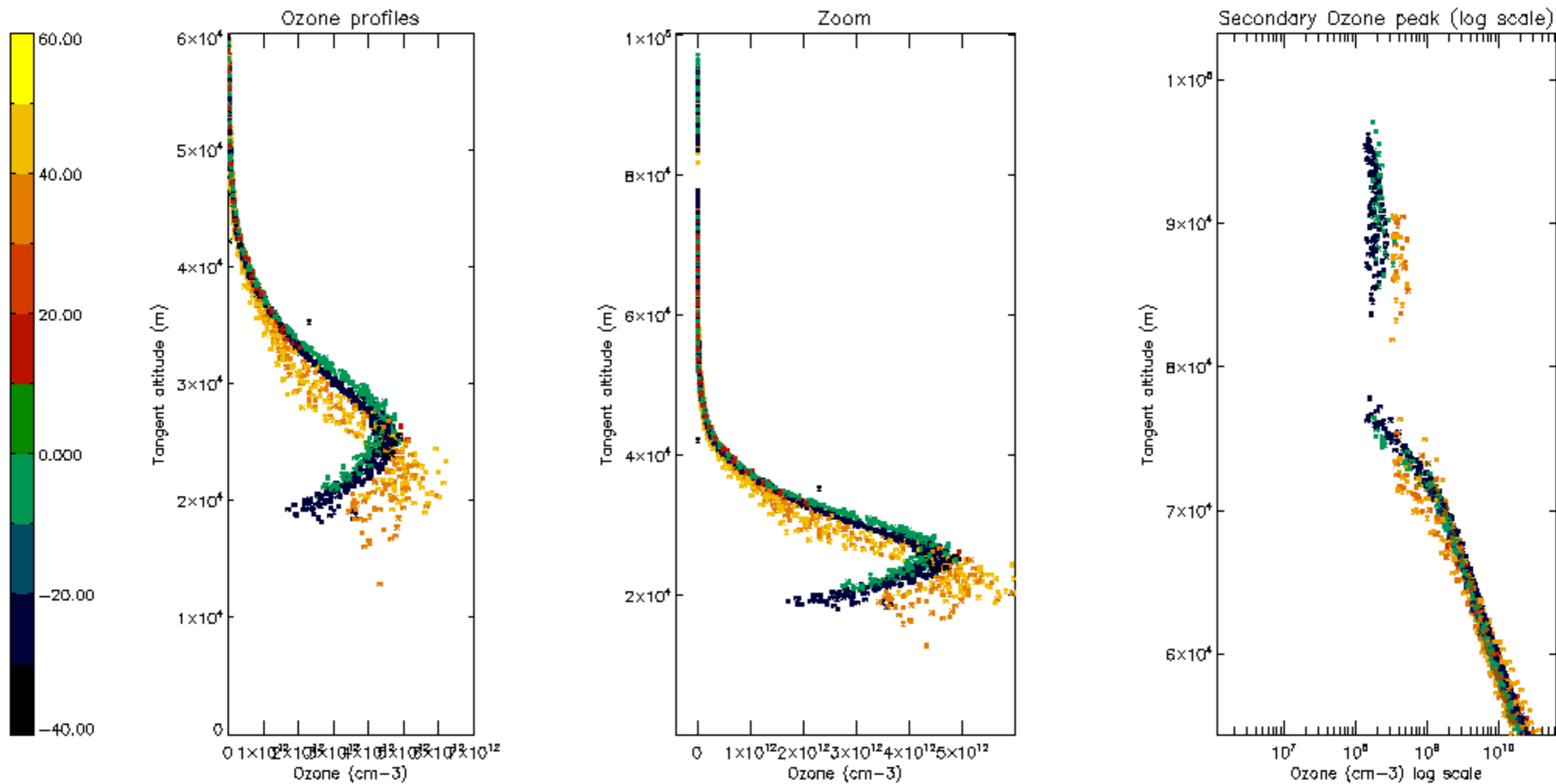
Percentage of saturation errors per profile

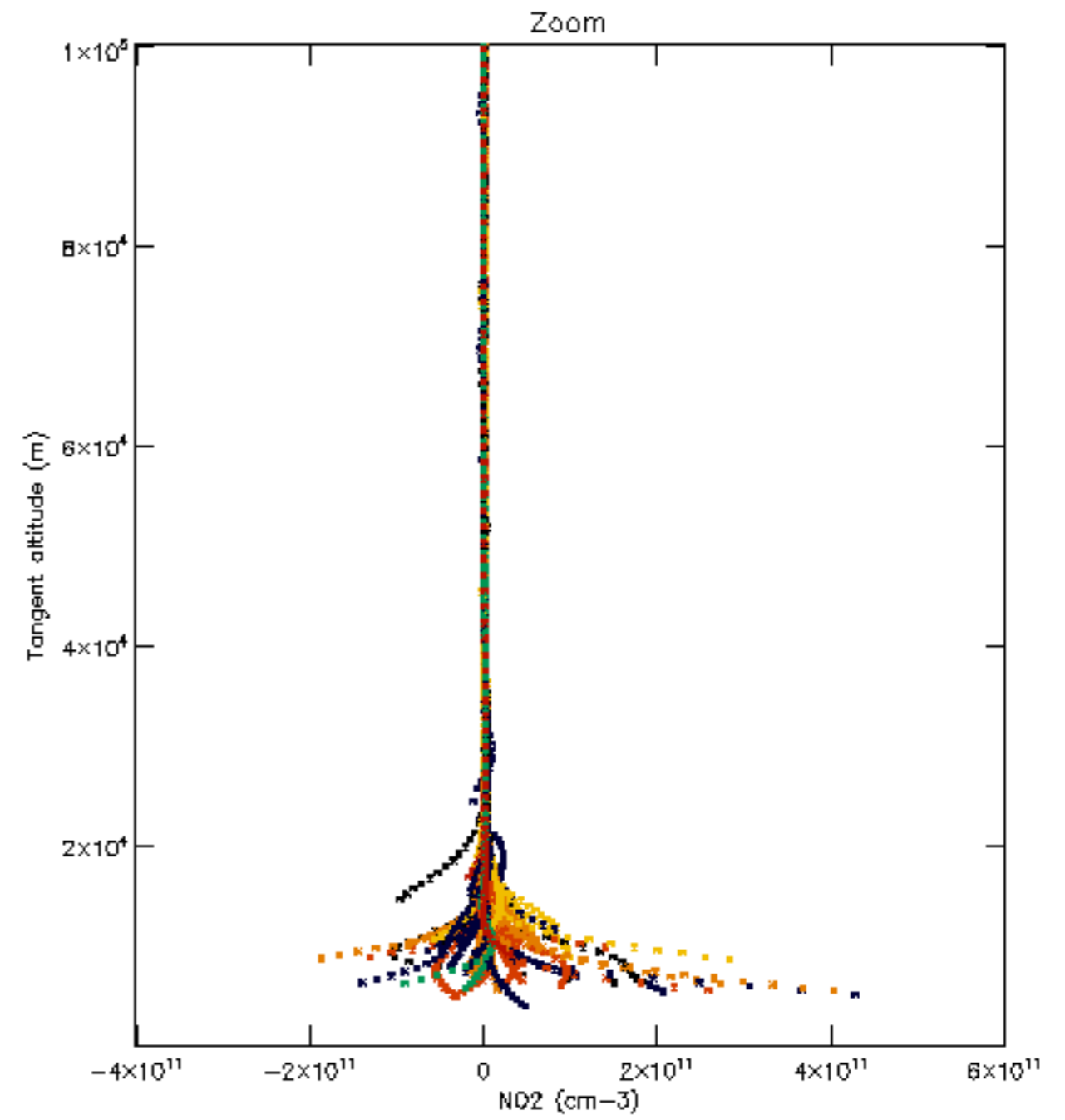
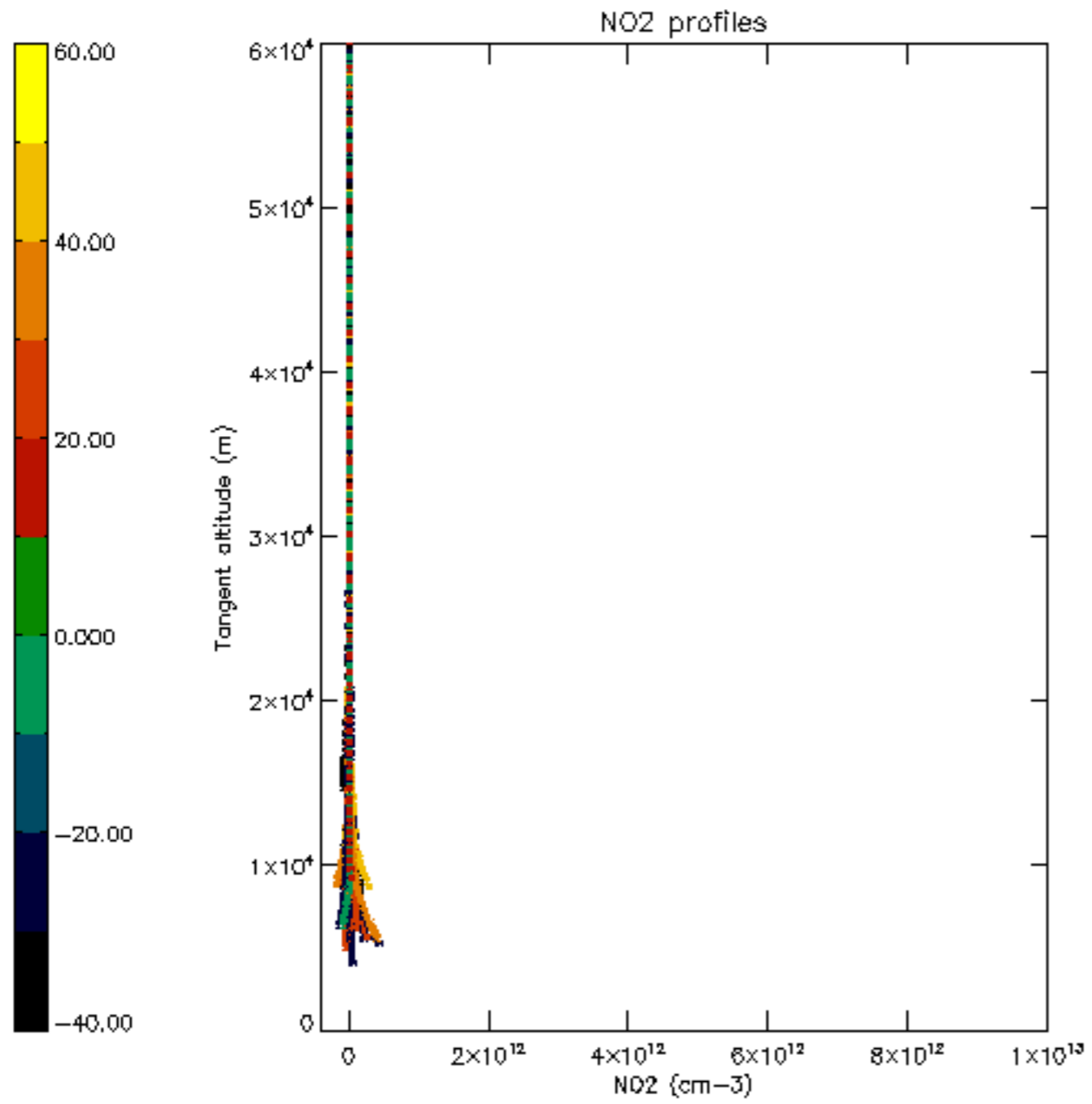


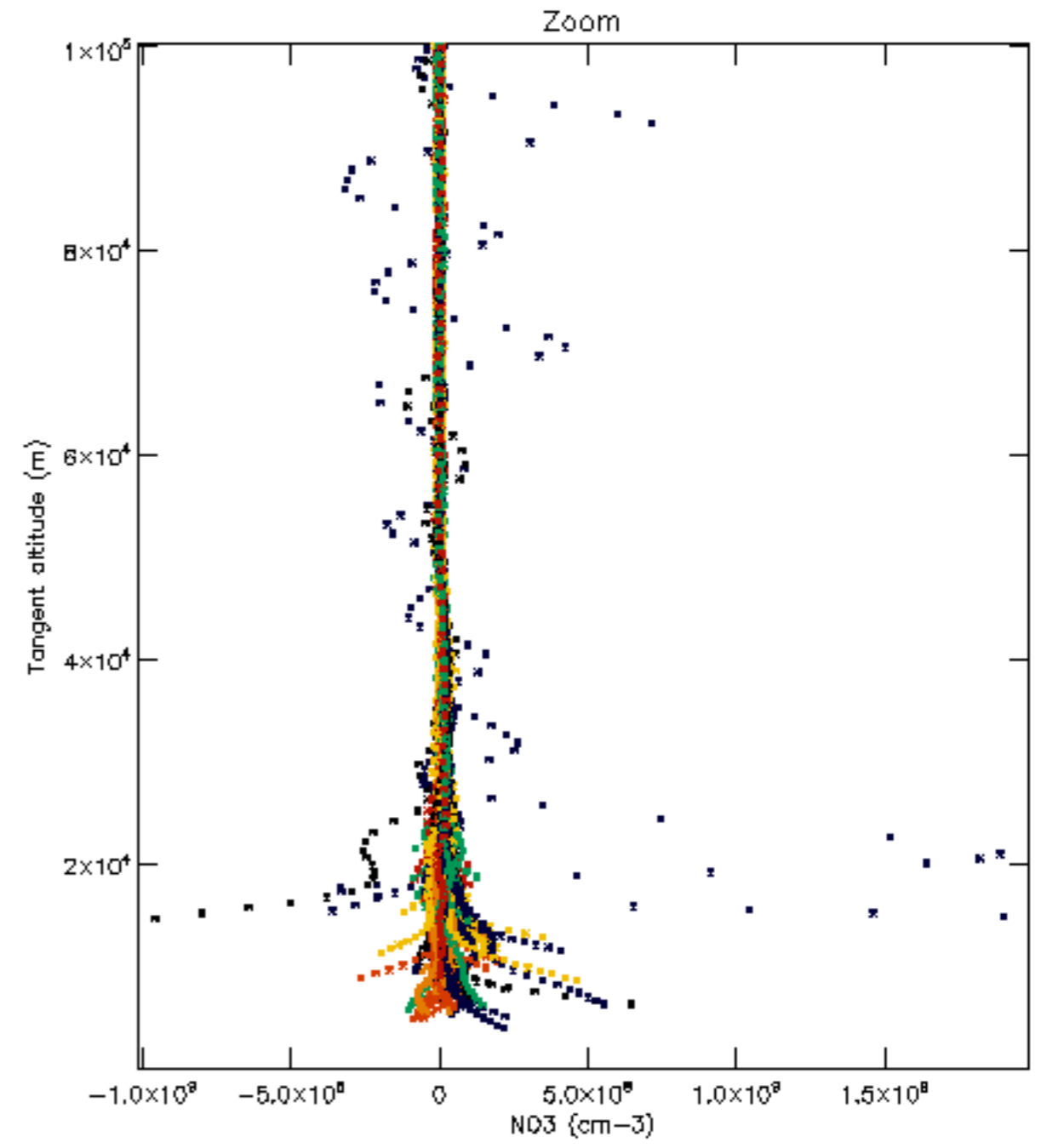
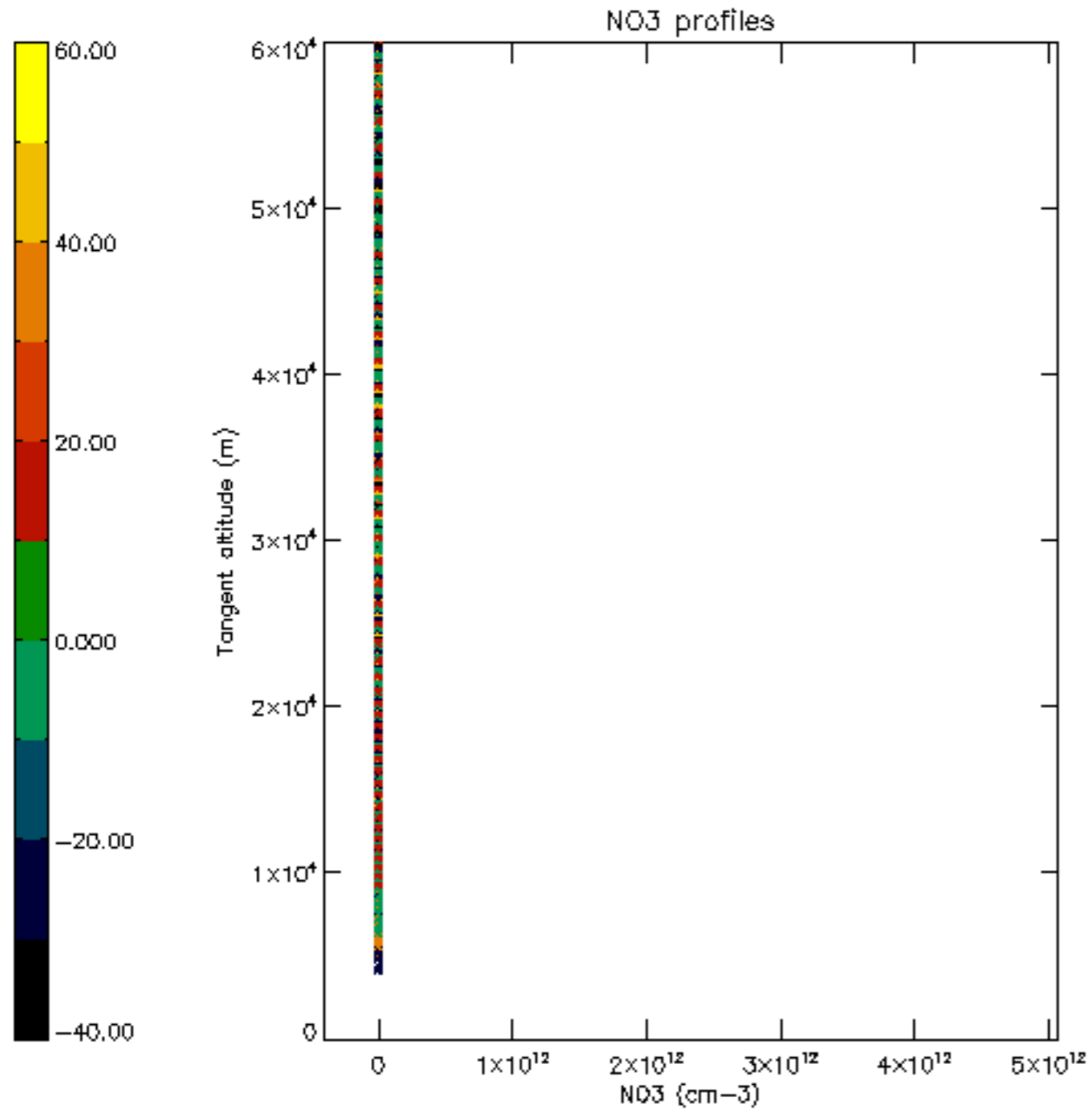


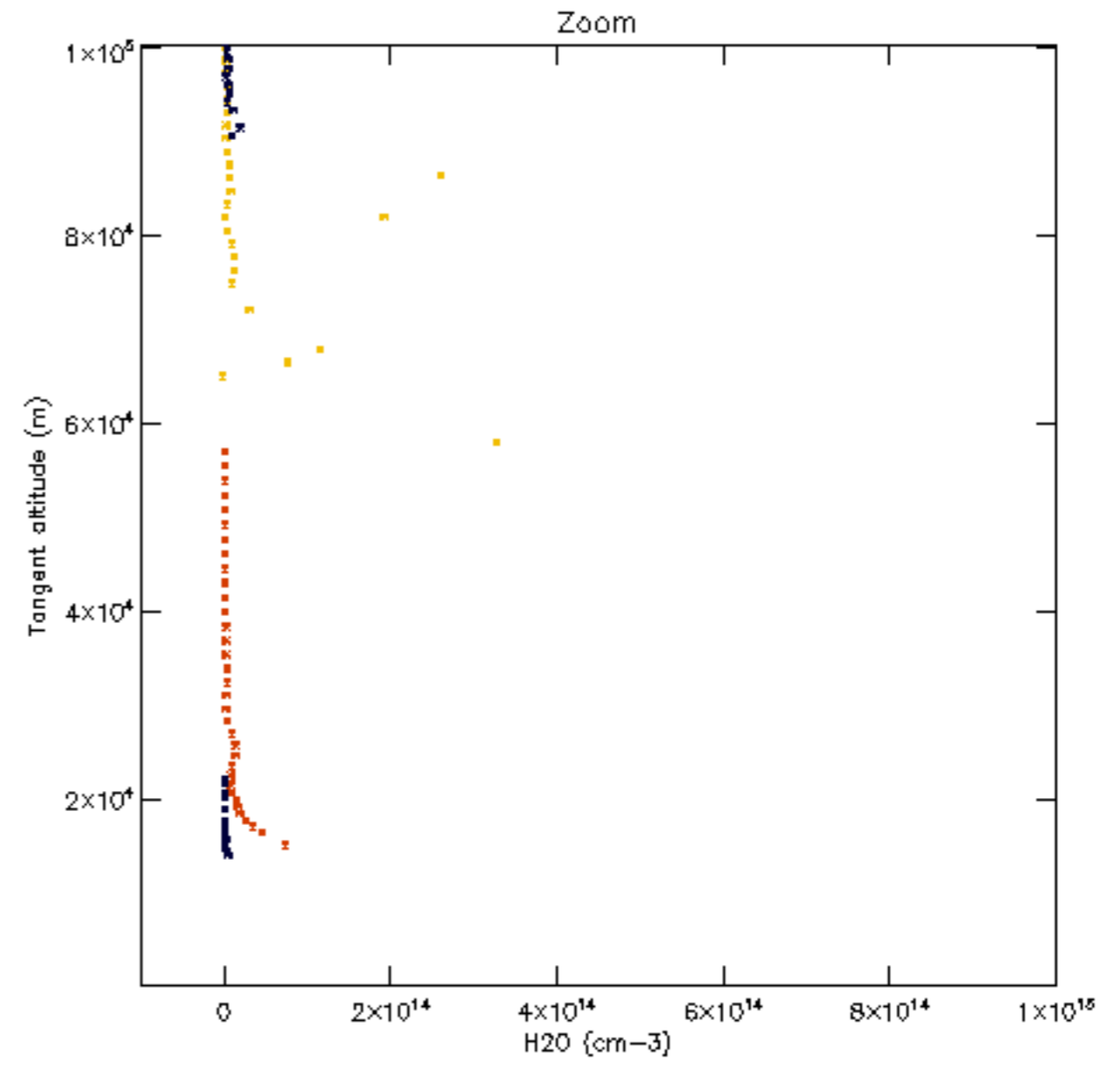
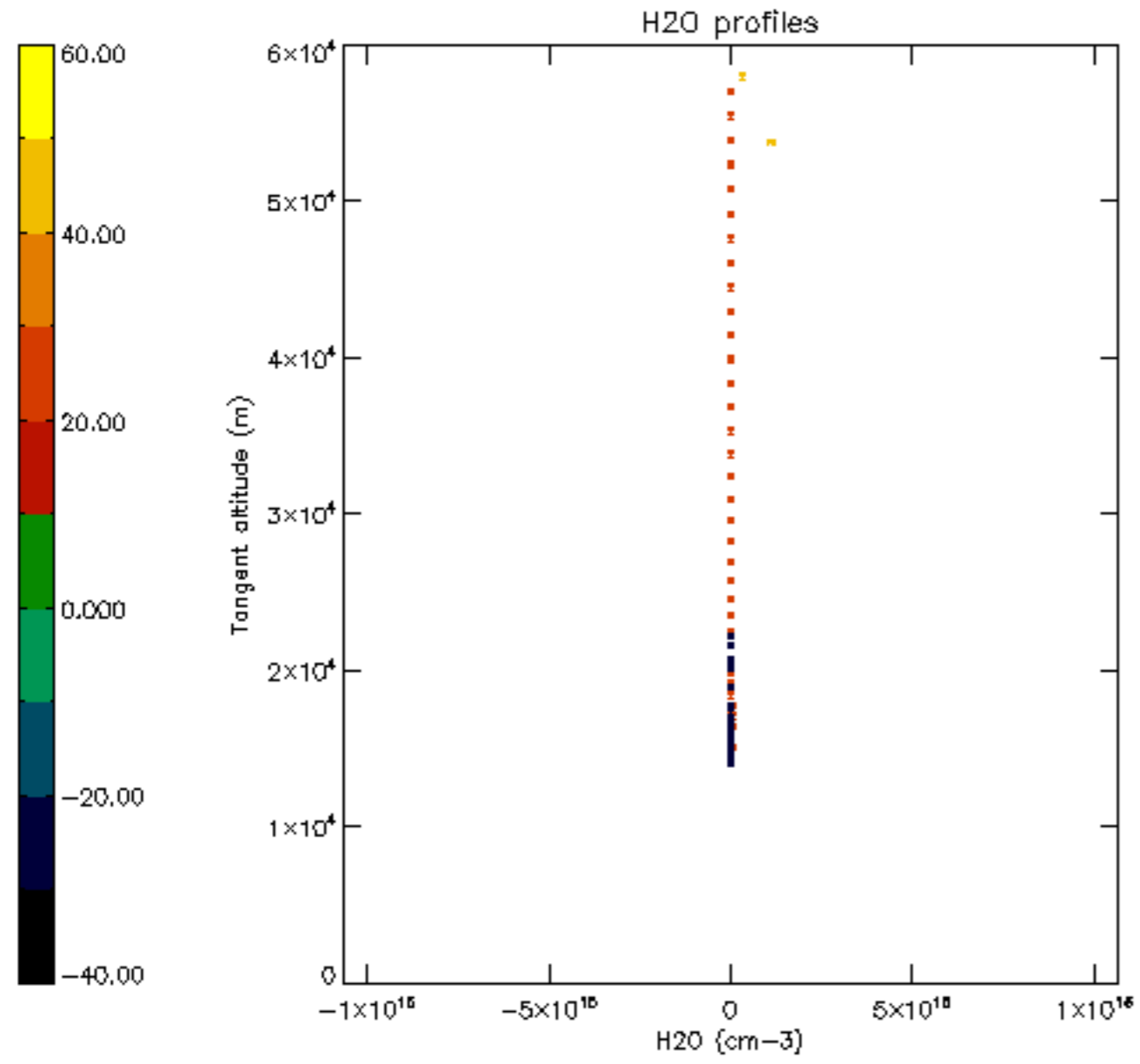


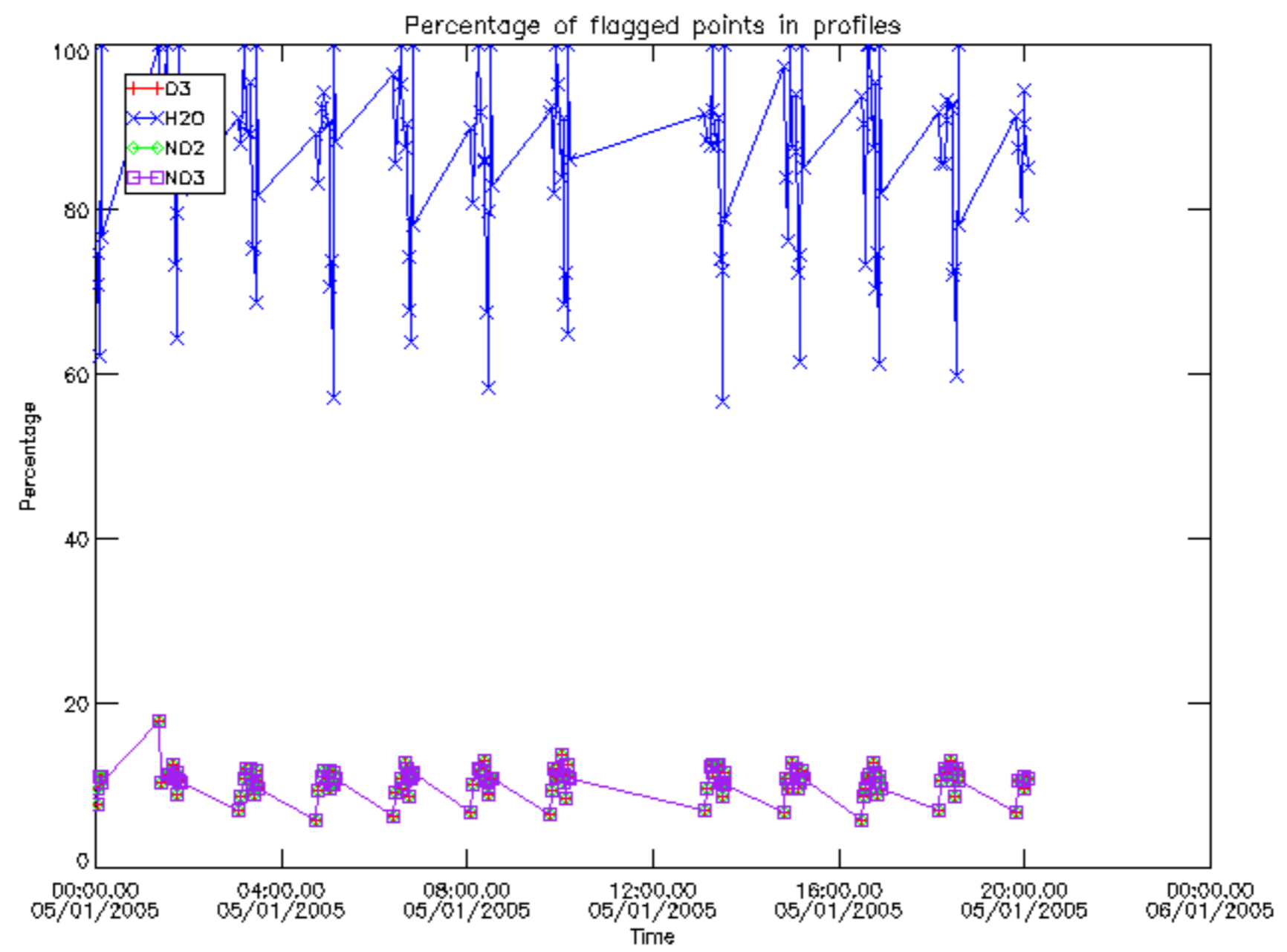




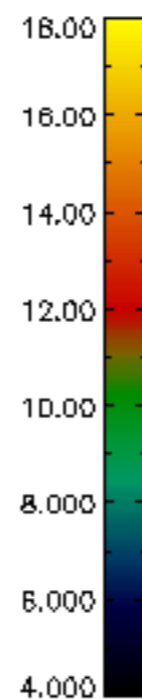
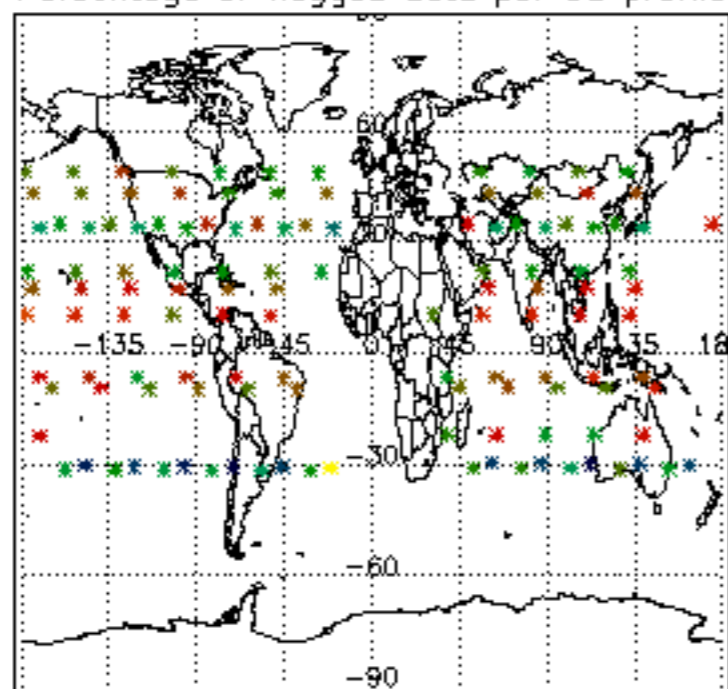




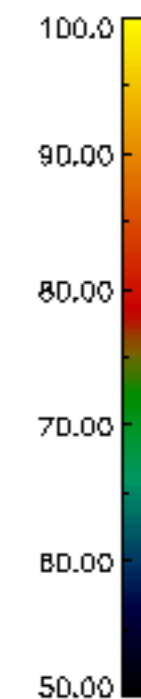
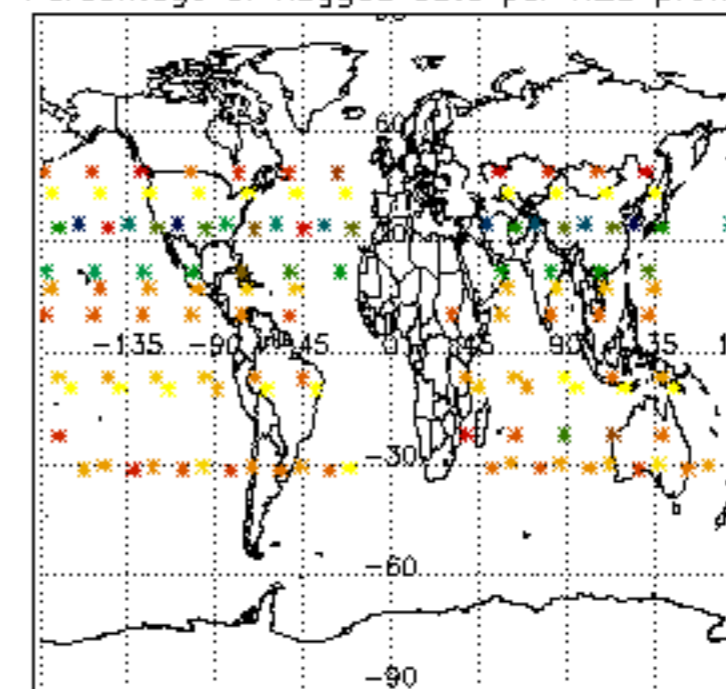




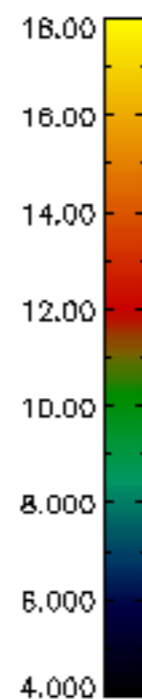
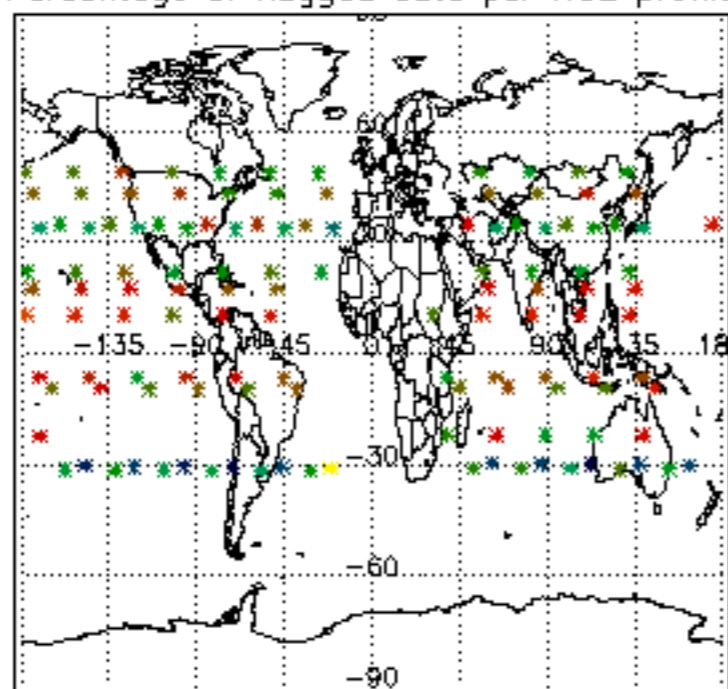
Percentage of flagged data per D3 profile



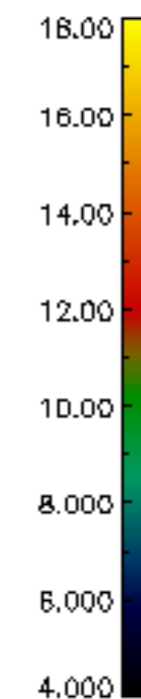
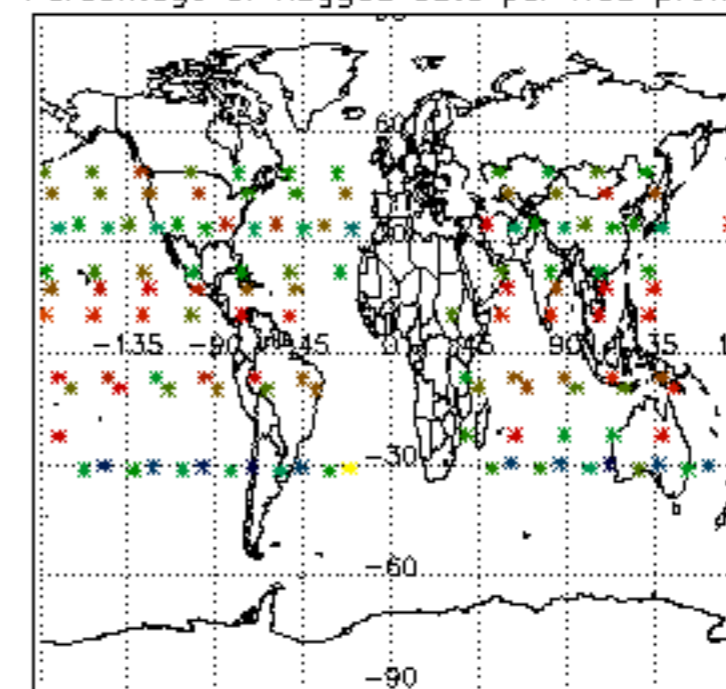
Percentage of flagged data per H2O profile

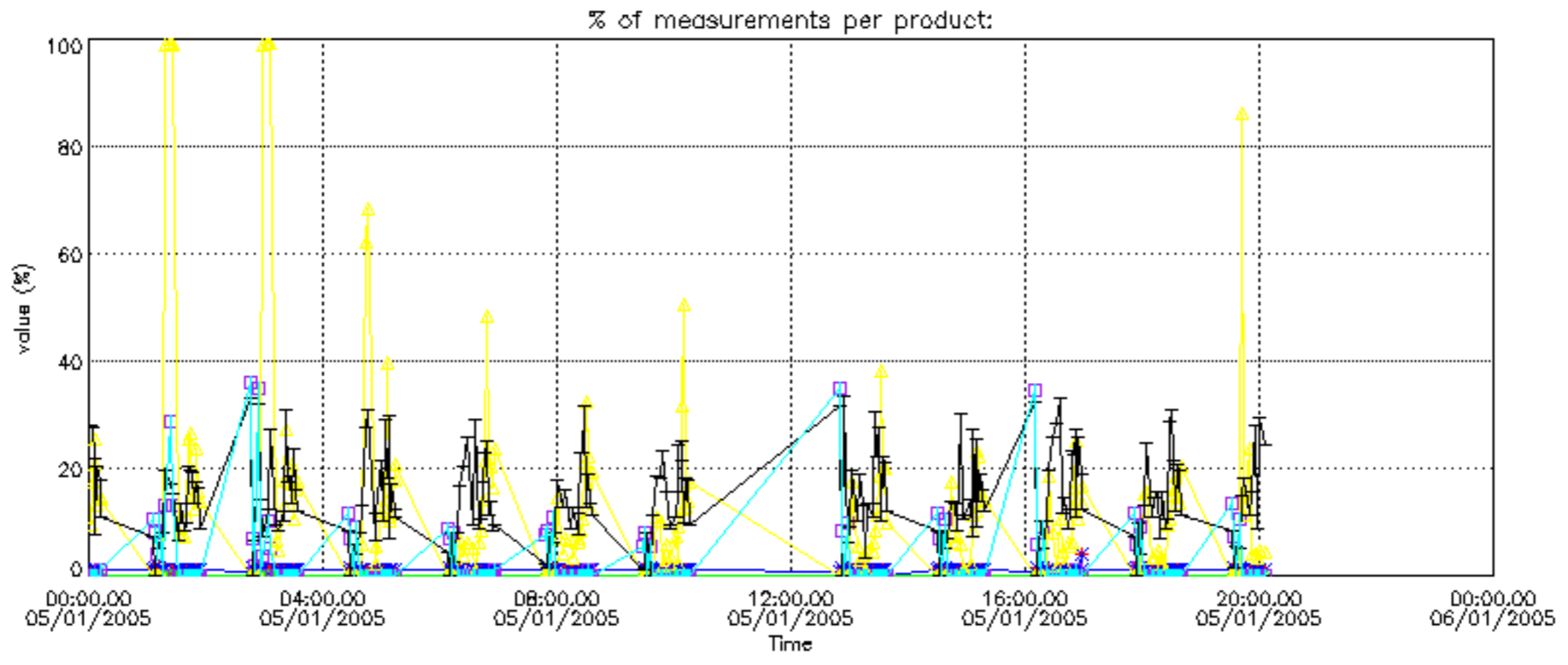


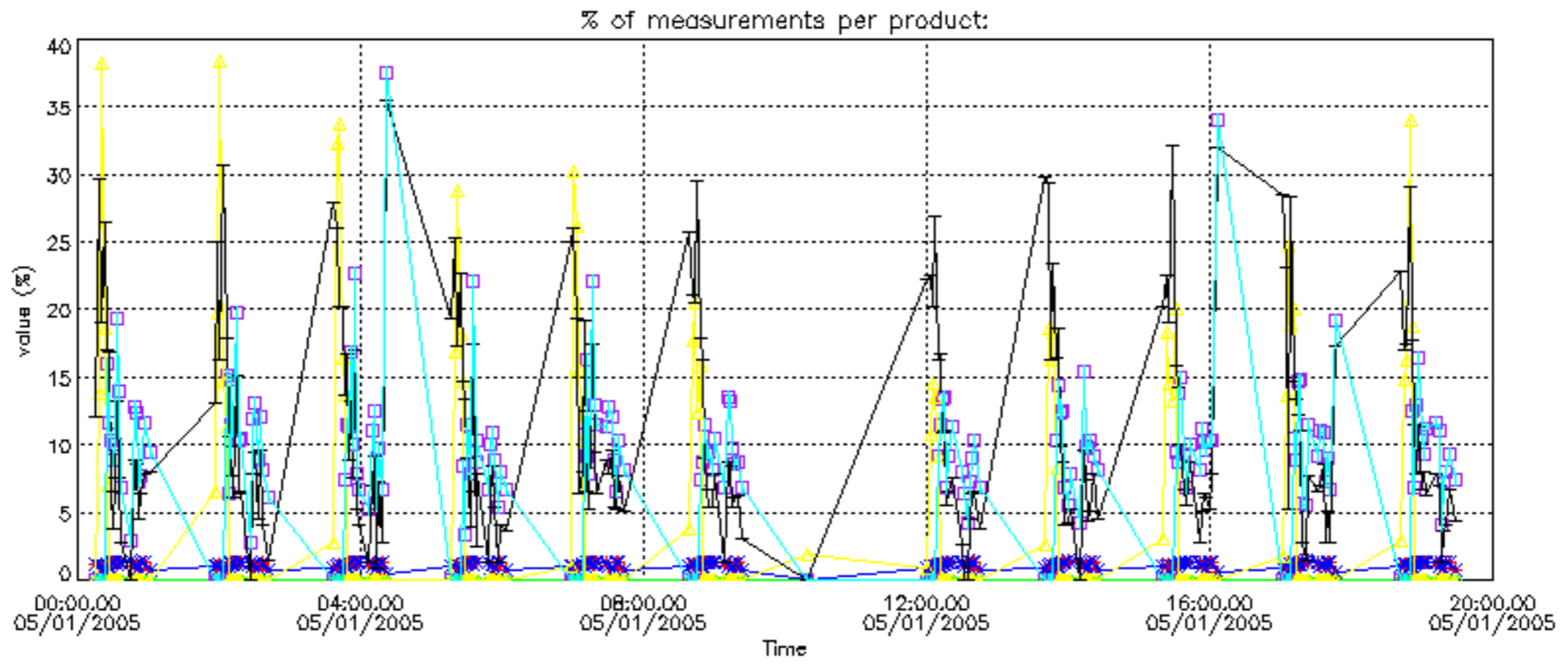
Percentage of flagged data per NO2 profile



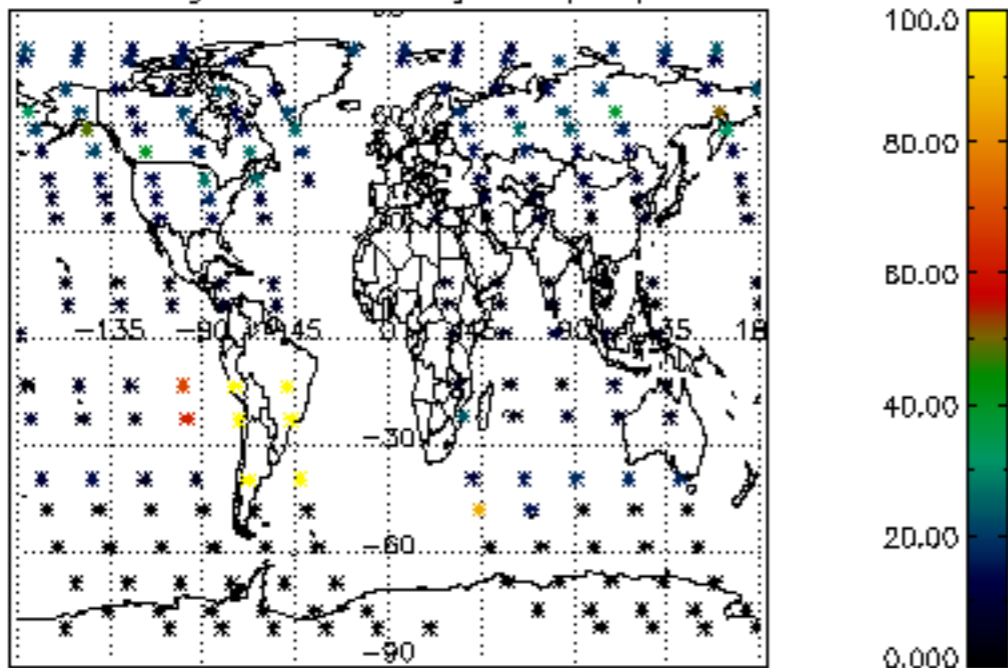
Percentage of flagged data per NO3 profile



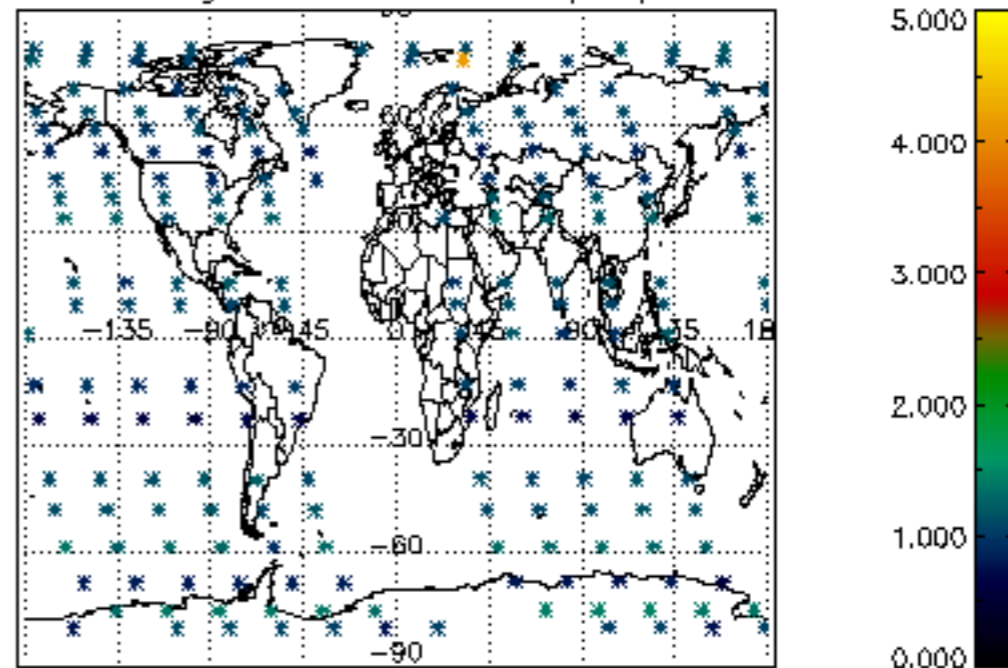




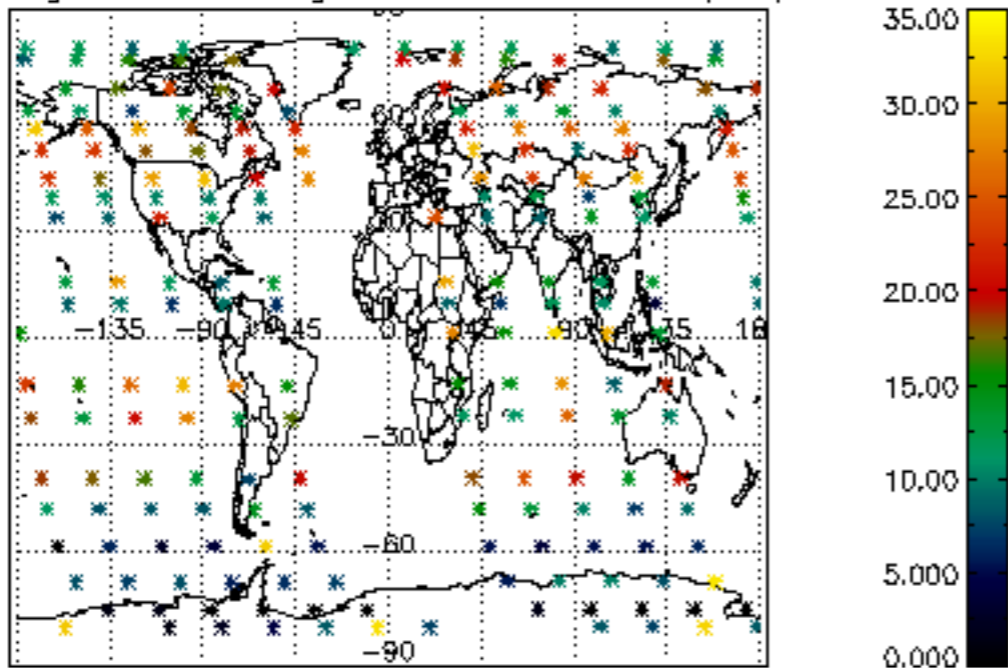
Percentage of cosmic ray hits per profile



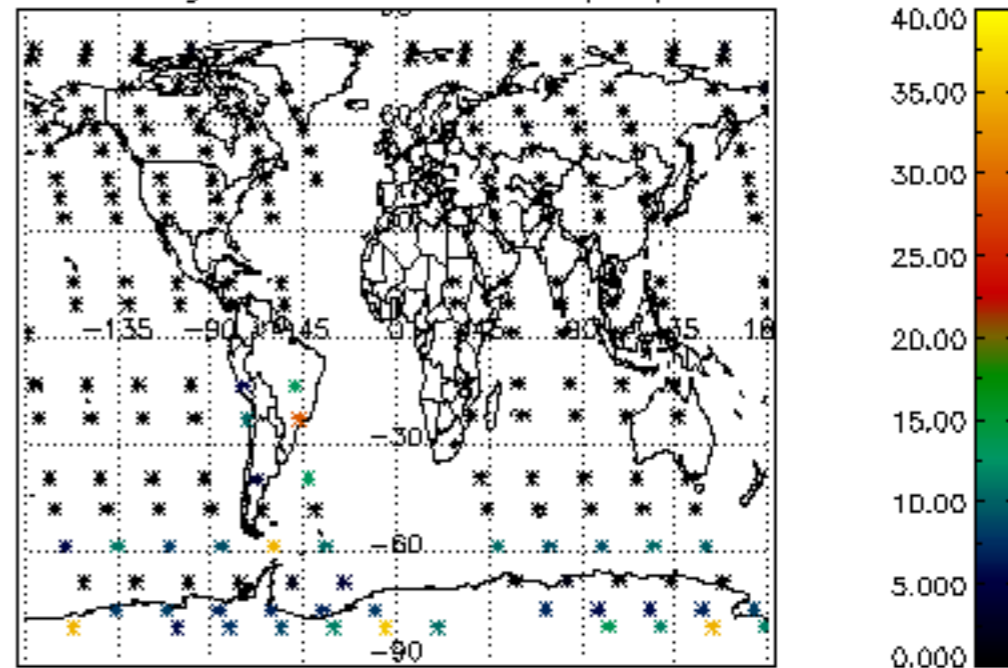
Percentage of datation errors per profile



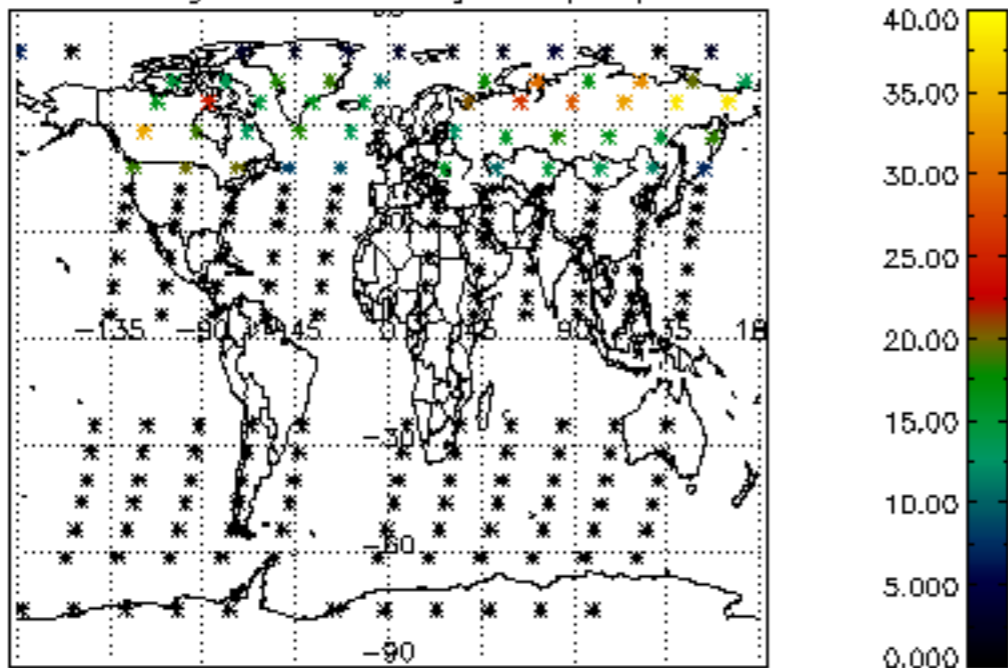
Percentage of star falling outside central band per profile



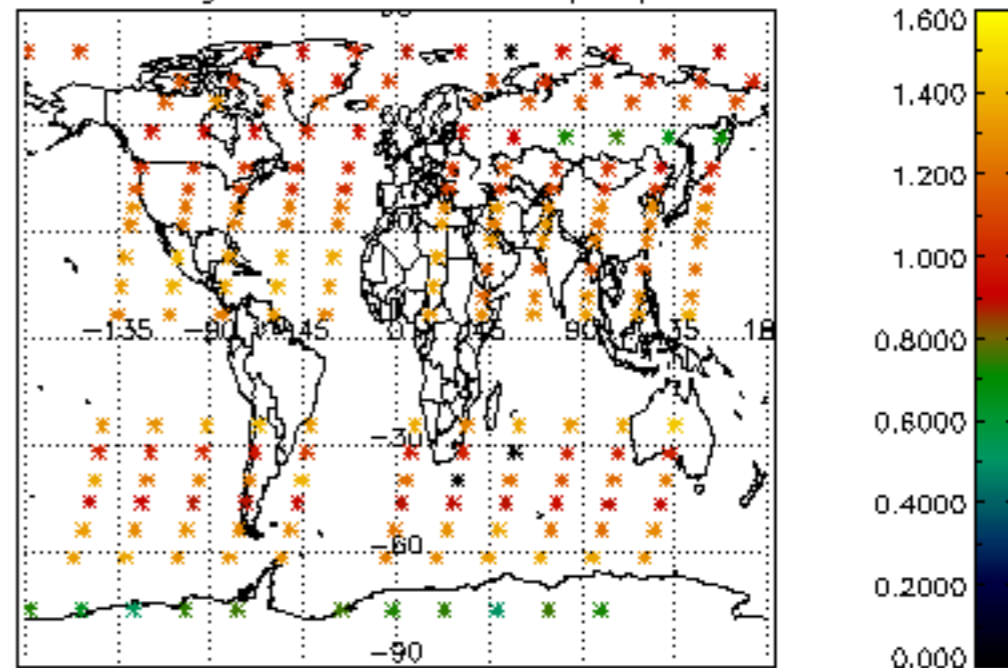
Percentage of saturation errors per profile



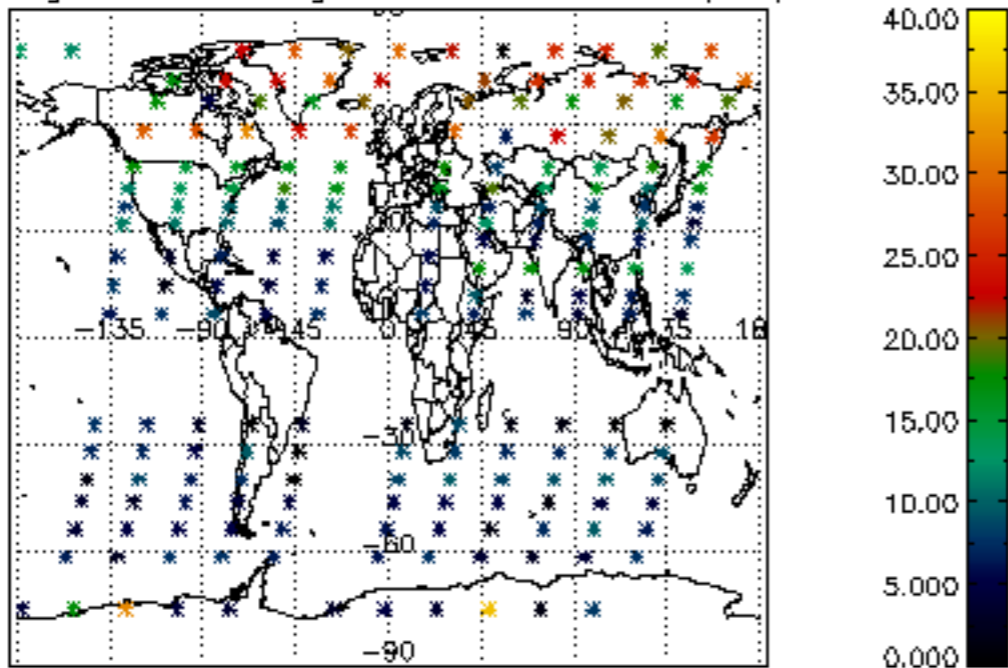
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

