

GOMOS Level 2 Daily Report

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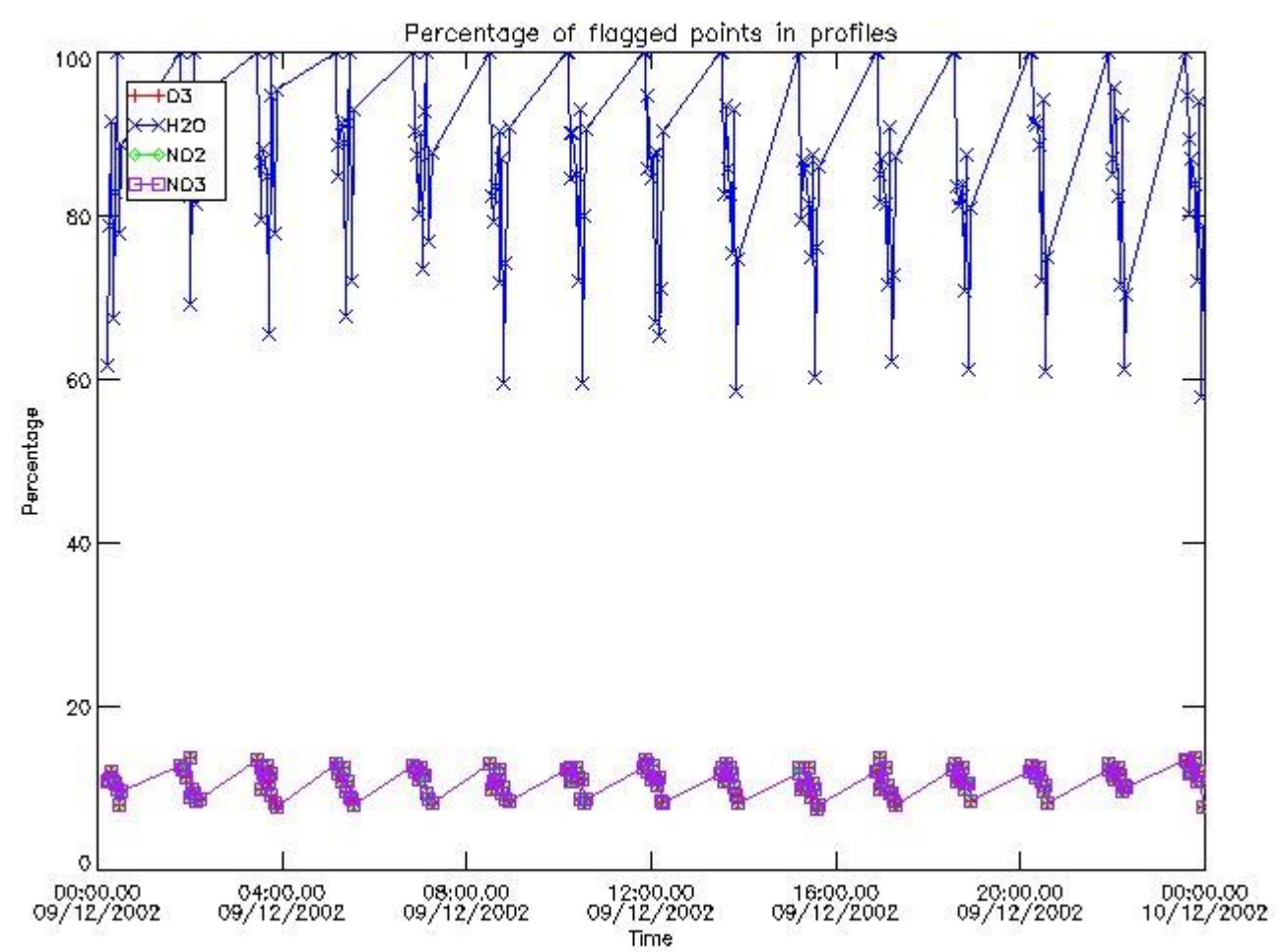
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515	GOM_NL__2PRFIN20021209_230830_000000412012_00001_04063_9781.N1	09-DEC-2002 23:08:30	Bright	40.500	39	85Eta UMa	1.8540	24000.	81	4063	No
516	GOM_NL__2PRFIN20021209_231138_000000392012_00001_04063_9782.N1	09-DEC-2002 23:11:38	Bright	38.500	180	27Gam Boo	3.0400	8000.0	77	4063	No
517	GOM_NL__2PRFIN20021209_231446_000000372012_00001_04063_9783.N1	09-DEC-2002 23:14:46	Bright	36.500	83		2.3780	11000.	73	4063	No
518	GOM_NL__2PRFIN20021209_231752_000000562012_00001_04063_9784.N1	09-DEC-2002 23:17:52	Bright	56.000	111	8Eta Boo	2.6800	6000.0	112	4063	No
519	GOM_NL__2PRFIN20021209_232123_000000522012_00001_04063_9785.N1	09-DEC-2002 23:21:23	Bright	52.000	138	47Eps Vir	2.8280	4700.0	104	4063	No
520	GOM_NL__2PRFIN20021209_232324_000000872012_00001_04063_9786.N1	09-DEC-2002 23:23:24	Twilight	86.500	62	94Bet Leo	2.1360	9700.0	173	4063	No
521	GOM_NL__2PRFIN20021209_232716_000000512012_00001_04063_9787.N1	09-DEC-2002 23:27:16	Bright	51.000	15	67Alp Vir	0.97600	28000.	102	4063	No
522	GOM_NL__2PRFIN20021209_233046_000000472012_00001_04063_9788.N1	09-DEC-2002 23:30:46	Twilight	47.000	169	46Gam Hya	2.9910	4700.0	94	4063	No
523	GOM_NL__2PRFIN20021209_233252_000000472012_00001_04063_9789.N1	09-DEC-2002 23:32:52	Twilight	46.500	54	5The Cen	2.0550	4500.0	93	4063	No
524	GOM_NL__2PRFIN20021209_233408_000000422012_00001_04063_9790.N1	09-DEC-2002 23:34:08	Dark	41.500	123	1ot Cen	2.7500	10200.	83	4063	No
525	GOM_NL__2PRFIN20021209_233556_000000392012_00001_04063_9791.N1	09-DEC-2002 23:35:56	Dark	38.500	95	Zet Cen	2.5450	26000.	77	4063	No
526	GOM_NL__2PRFIN20021209_233900_000000432012_00001_04063_9792.N1	09-DEC-2002 23:39:00	Dark	42.500	4	Alp1Cen	-0.010000	5800.0	85	4063	No
527	GOM_NL__2PRFIN20021209_234020_000000442012_00002_04064_9753.N1	09-DEC-2002 23:40:20	Dark	43.500	20	Bet Cru	1.2530	30000.	87	4064	No
528	GOM_NL__2PRFIN20021209_234317_000000472012_00002_04064_9754.N1	09-DEC-2002 23:43:17	Dark	46.500	113	Mu Vel	2.6920	5000.0	93	4064	No
529	GOM_NL__2PRFIN20021209_234709_000000412012_00002_04064_9755.N1	09-DEC-2002 23:47:09	Dark	41.000	29	Bet Car	1.6720	10200.	82	4064	No
530	GOM_NL__2PRFIN20021209_234927_000000472012_00002_04064_9756.N1	09-DEC-2002 23:49:27	Dark	47.000	41	Eps Car	1.8600	4100.0	94	4064	No
531	GOM_NL__2PRFIN20021209_235156_000000512012_00002_04064_9757.N1	09-DEC-2002 23:51:56	Dark	50.500	34	Gam2Vel	1.7930	23000.	101	4064	No
532	GOM_NL__2PRFIN20021209_235434_000000522012_00002_04064_9758.N1	09-DEC-2002 23:54:34	Dark	51.500	2	Alp Car	-0.73600	7000.0	103	4064	No
533	GOM_NL__2PRFIN20021209_235700_000000672012_00002_04064_9759.N1	09-DEC-2002 23:57:00	Dark	66.500	117	Pi Pup	2.7060	3800.0	133	4064	No

3. Quality information per product

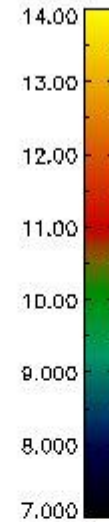
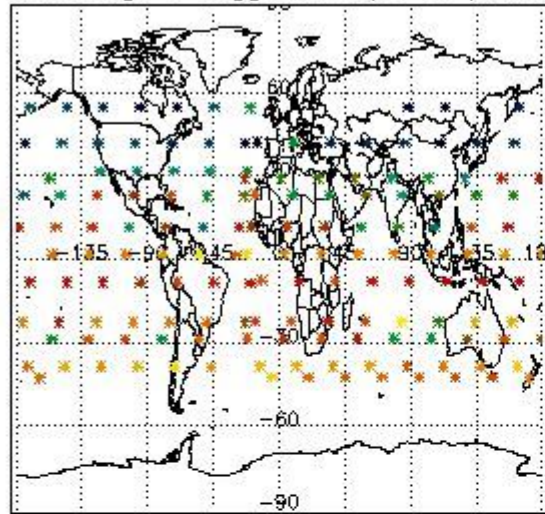
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

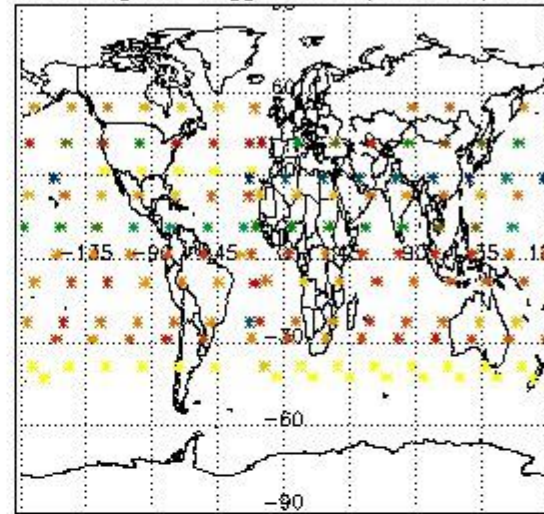


3.2 Plot quality information per product (world map)

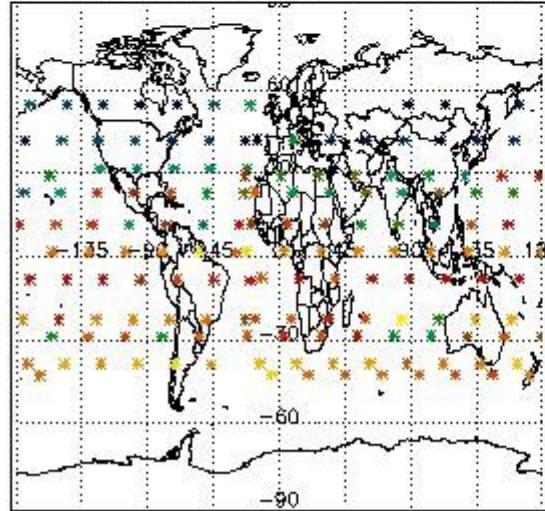
Percentage of flagged data per O3 profile



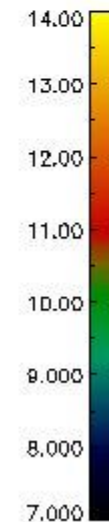
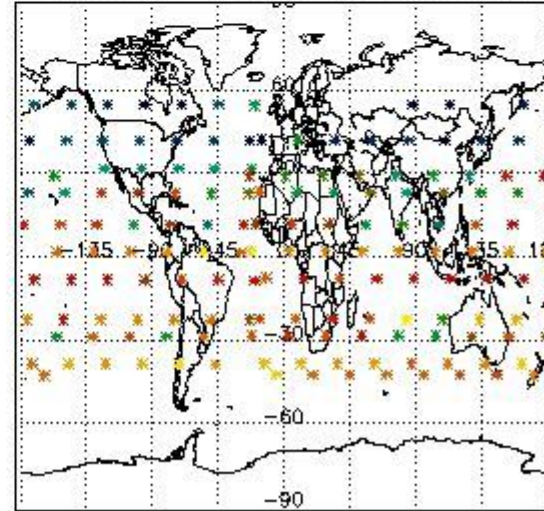
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

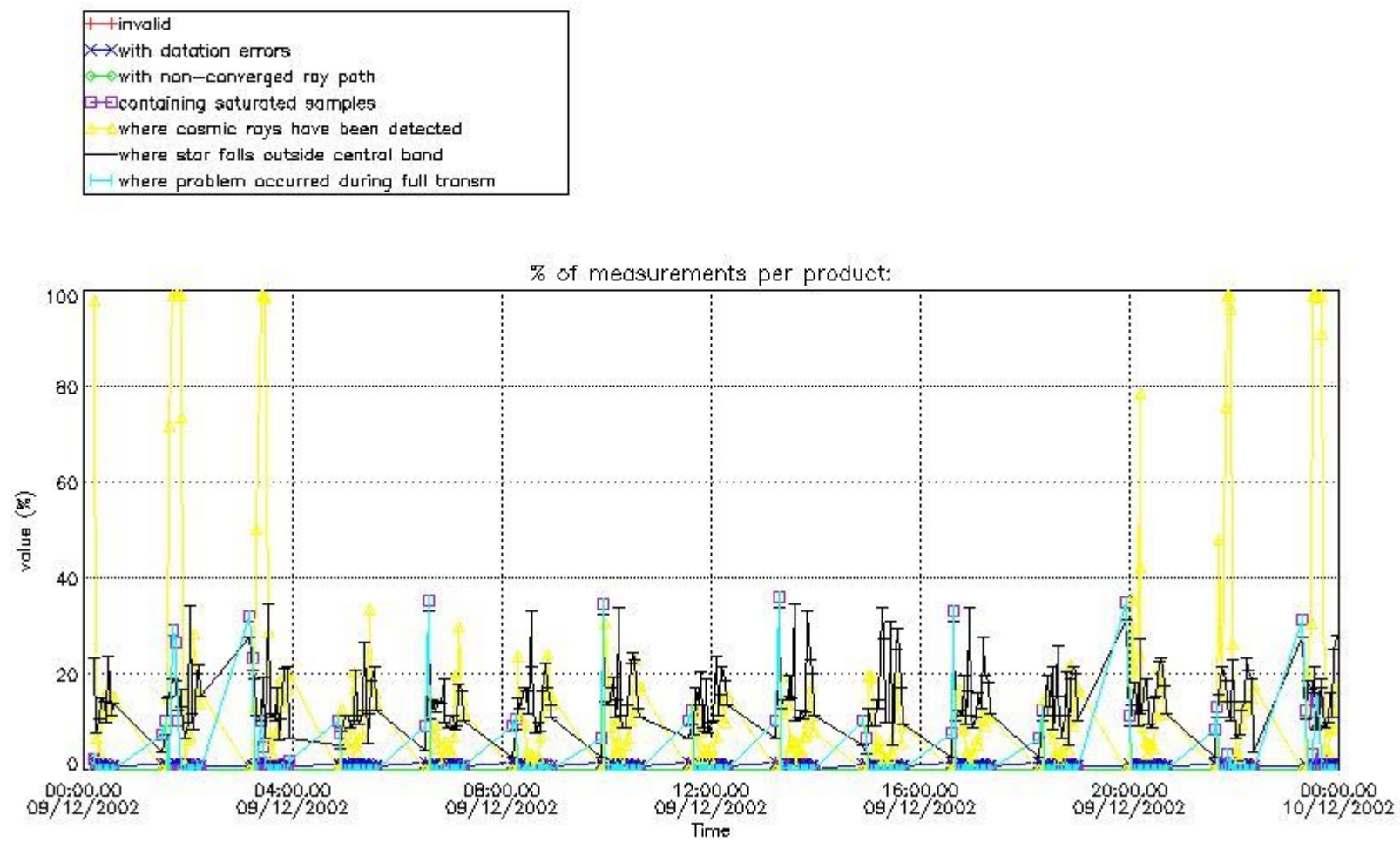


4. Level 1 quality information per product

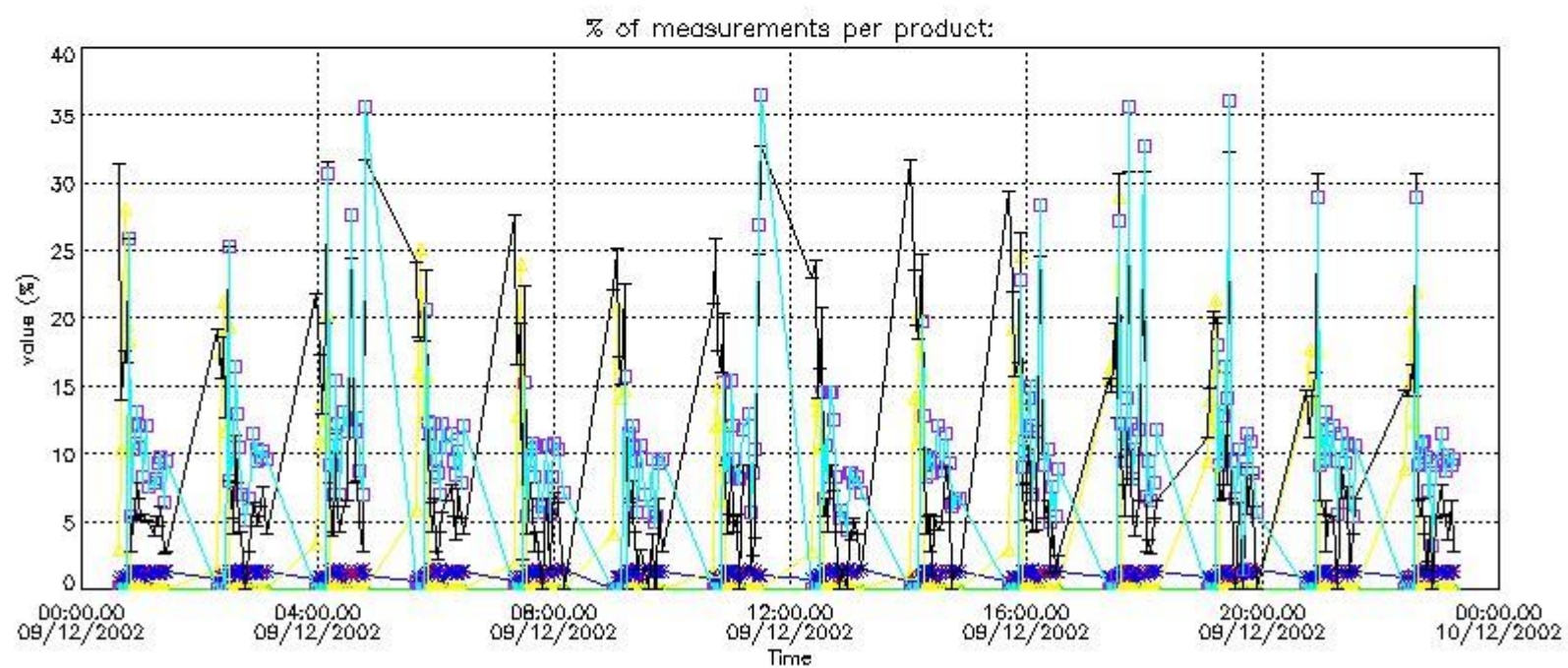
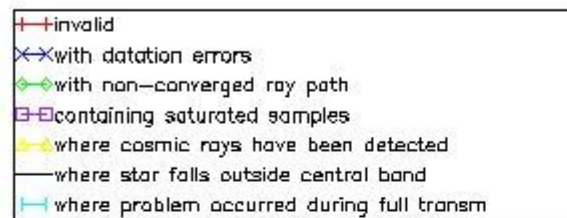
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

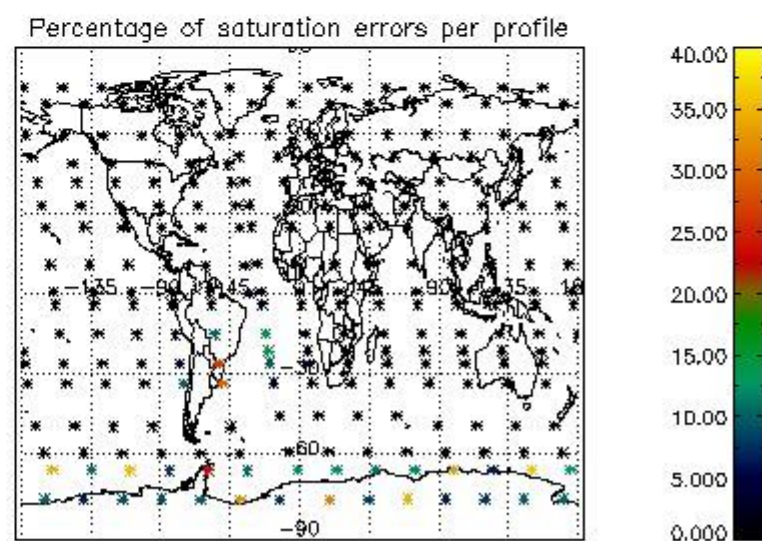
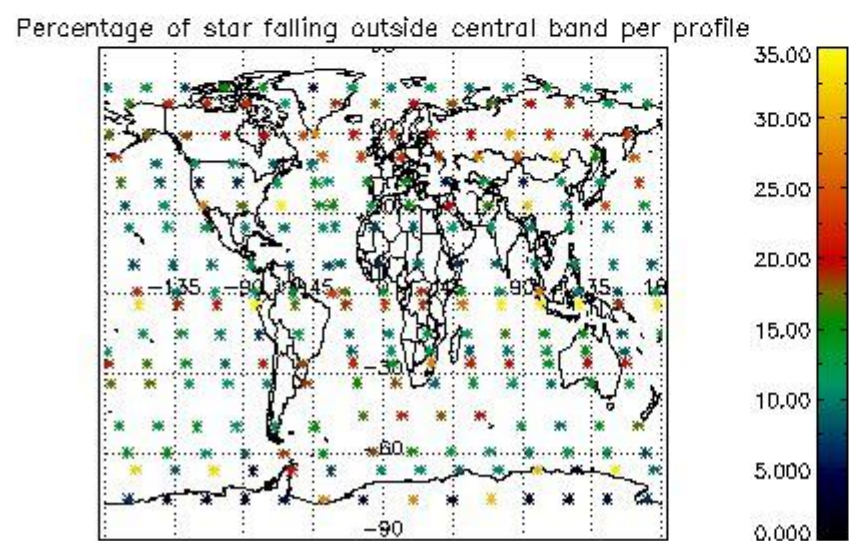
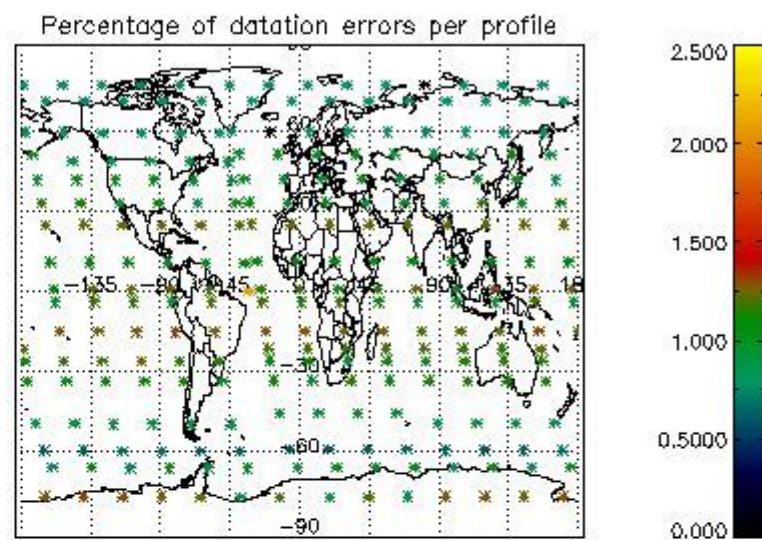
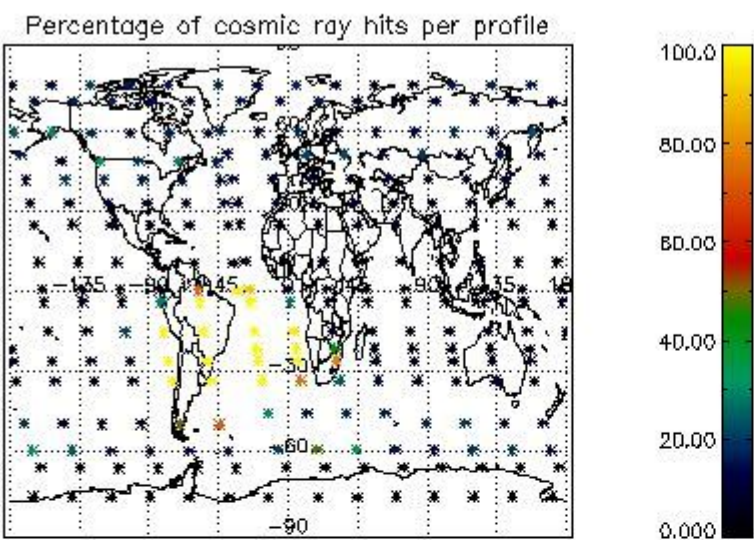


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

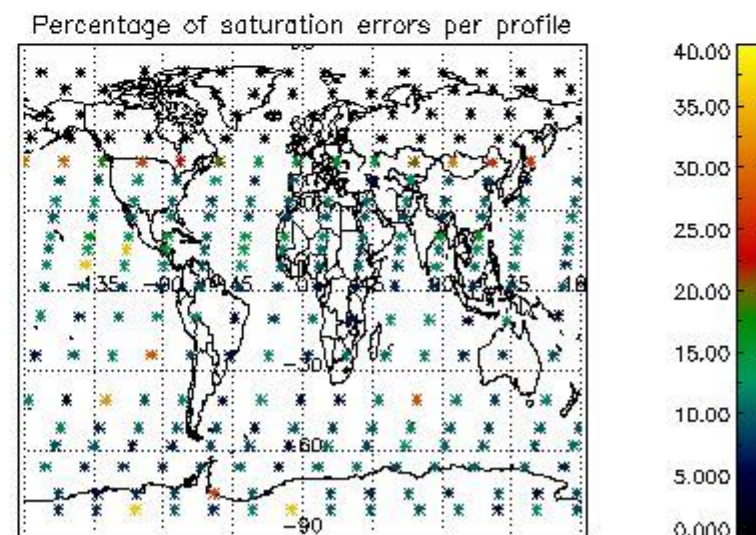
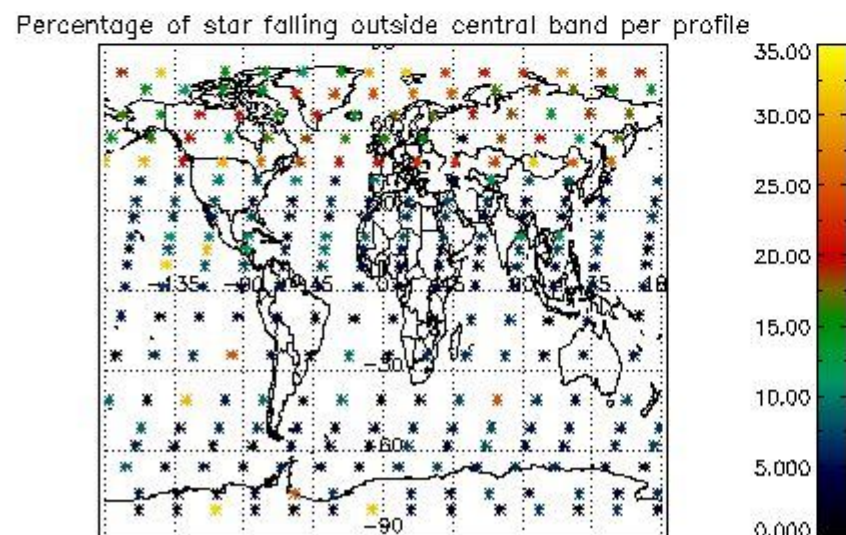
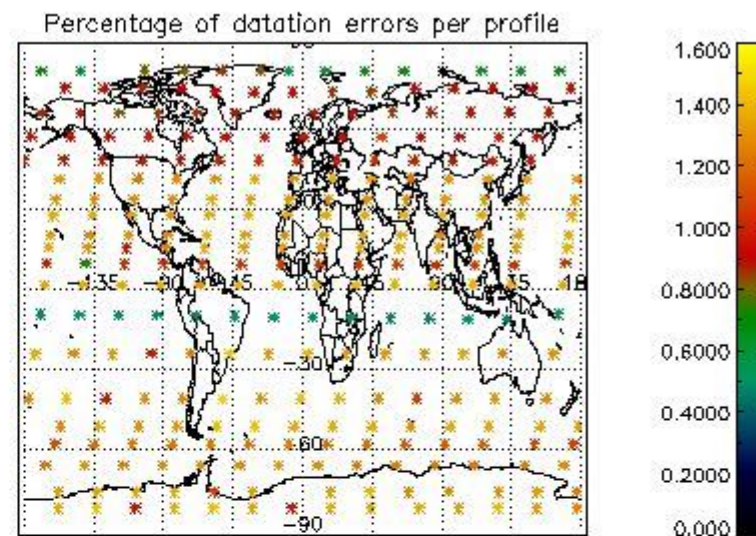
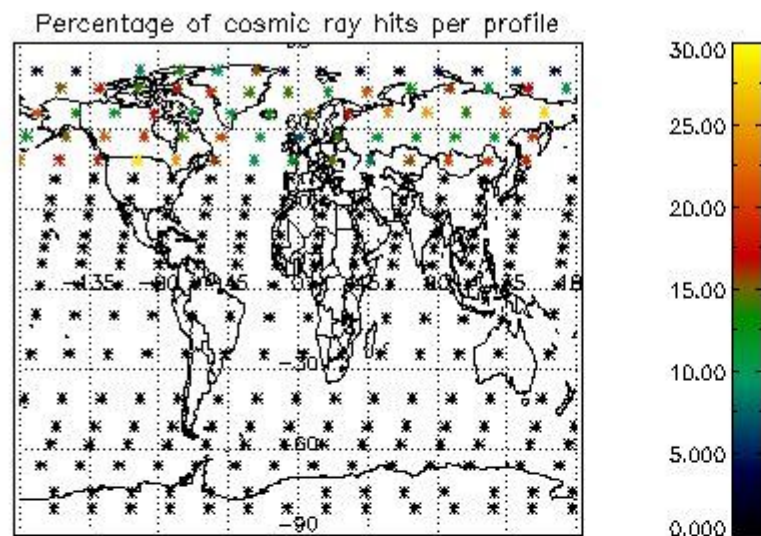


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

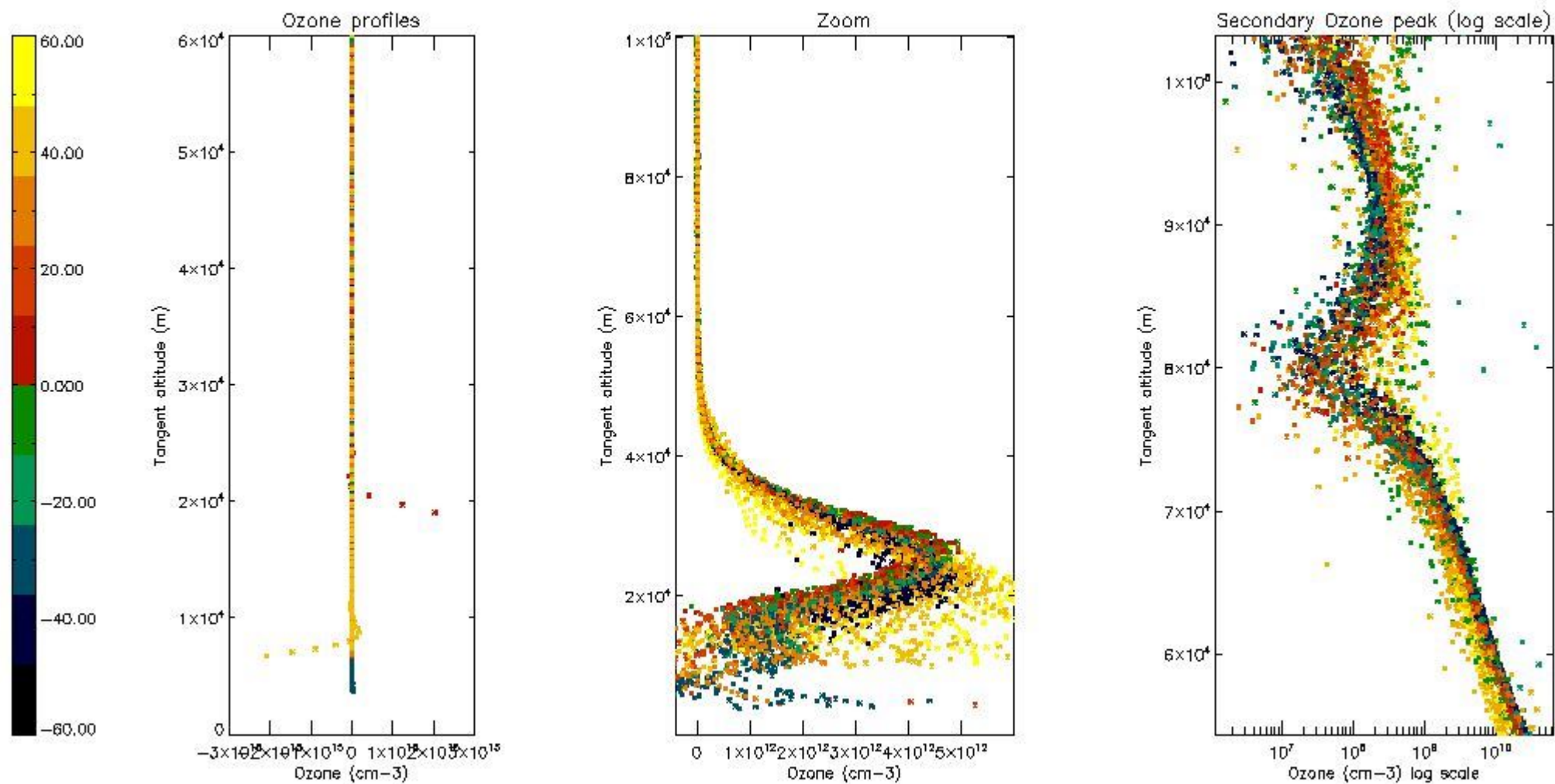
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	29
STD < 20	17

STD < 10	14
STD < 5	11

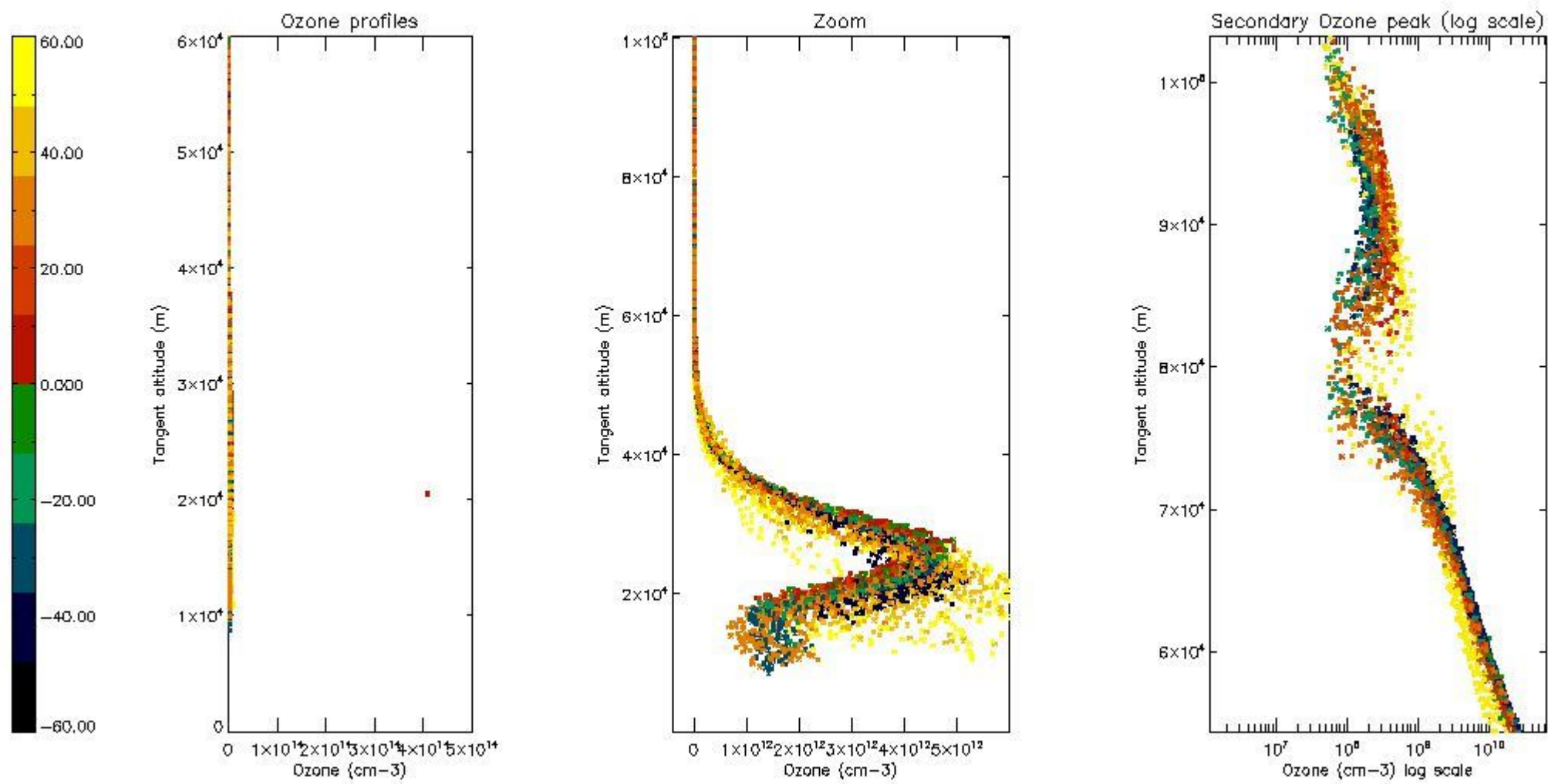
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



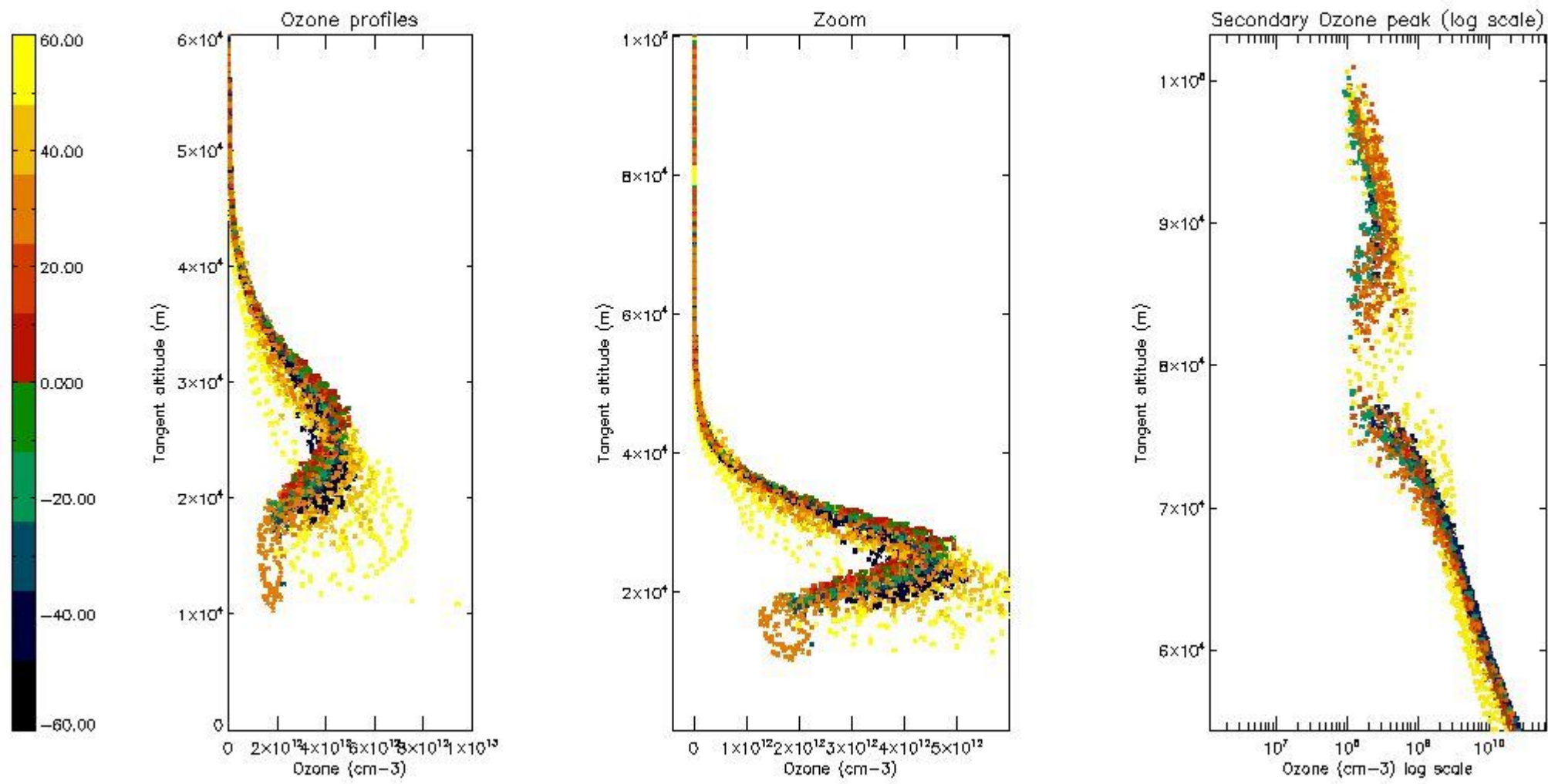
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



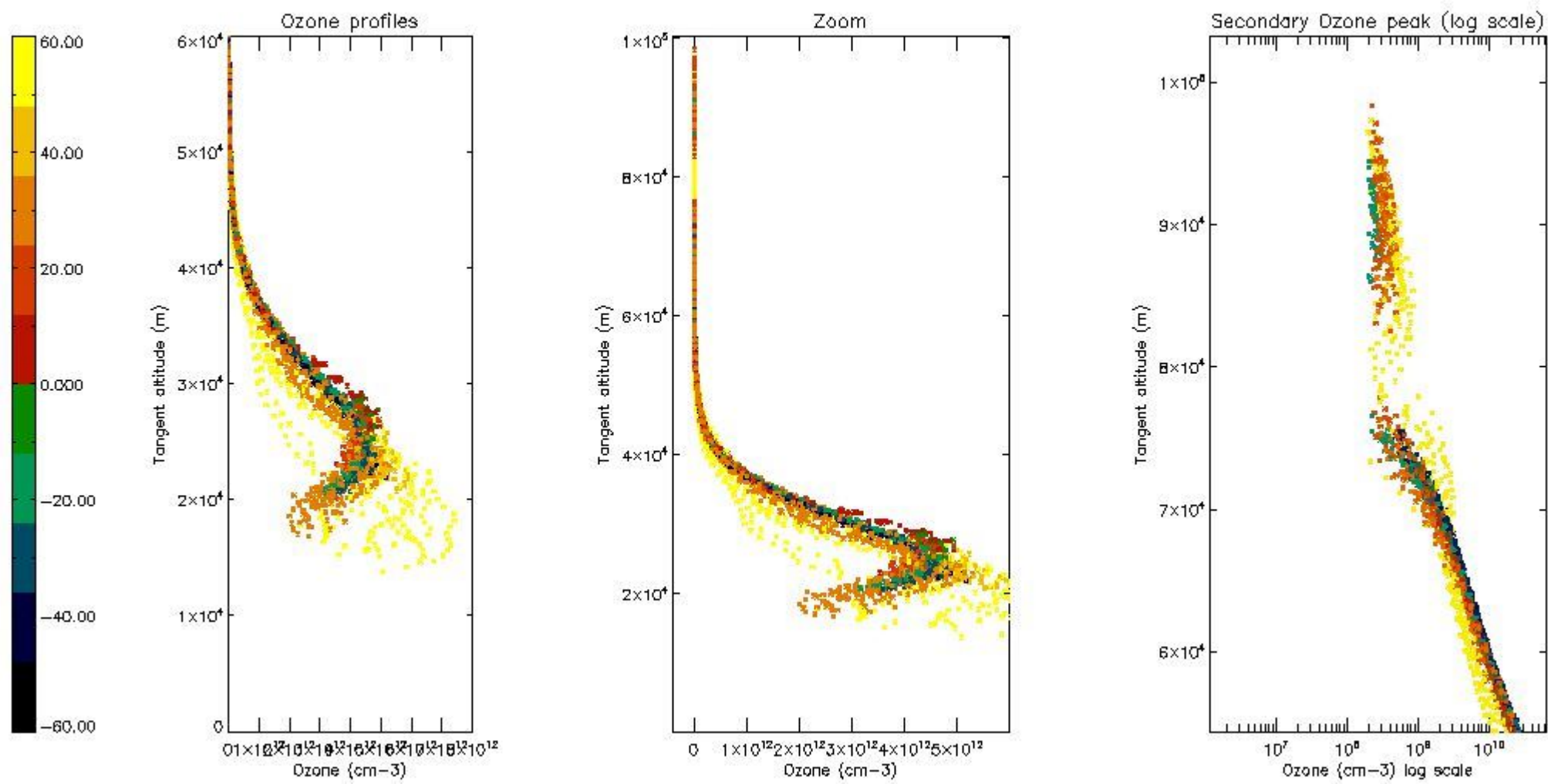
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



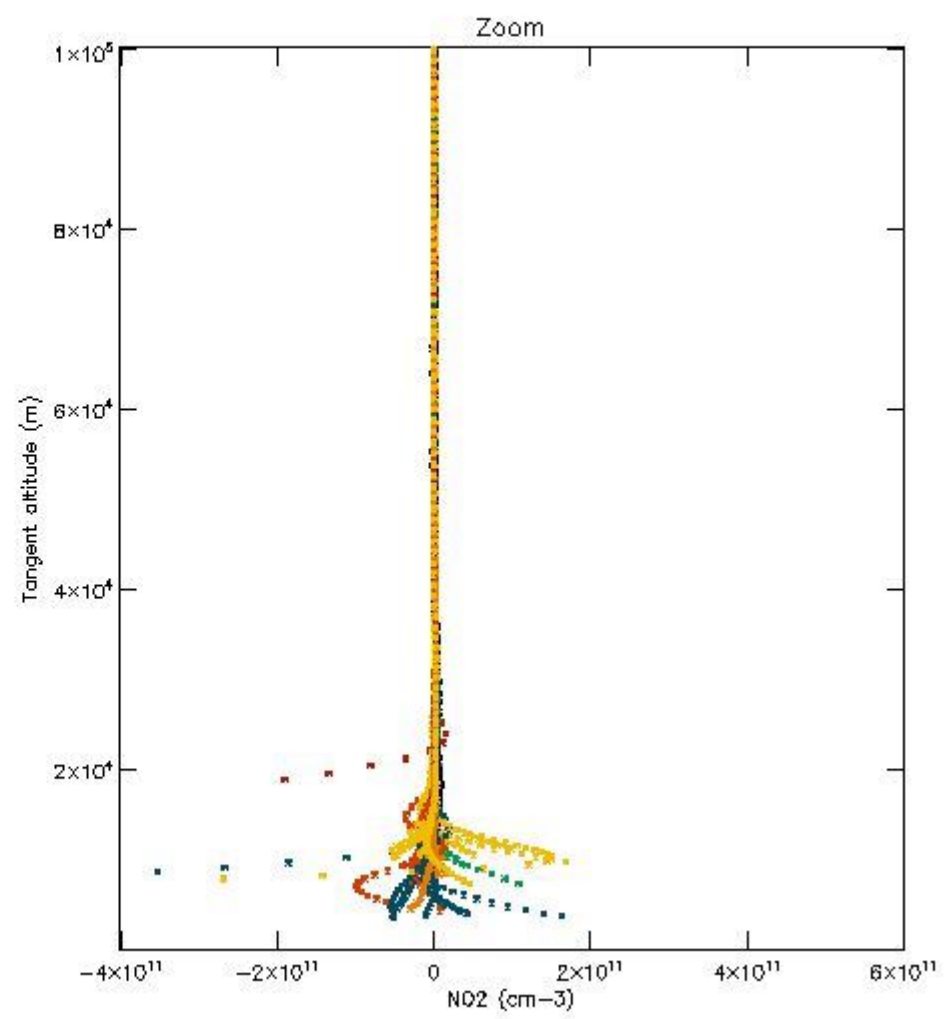
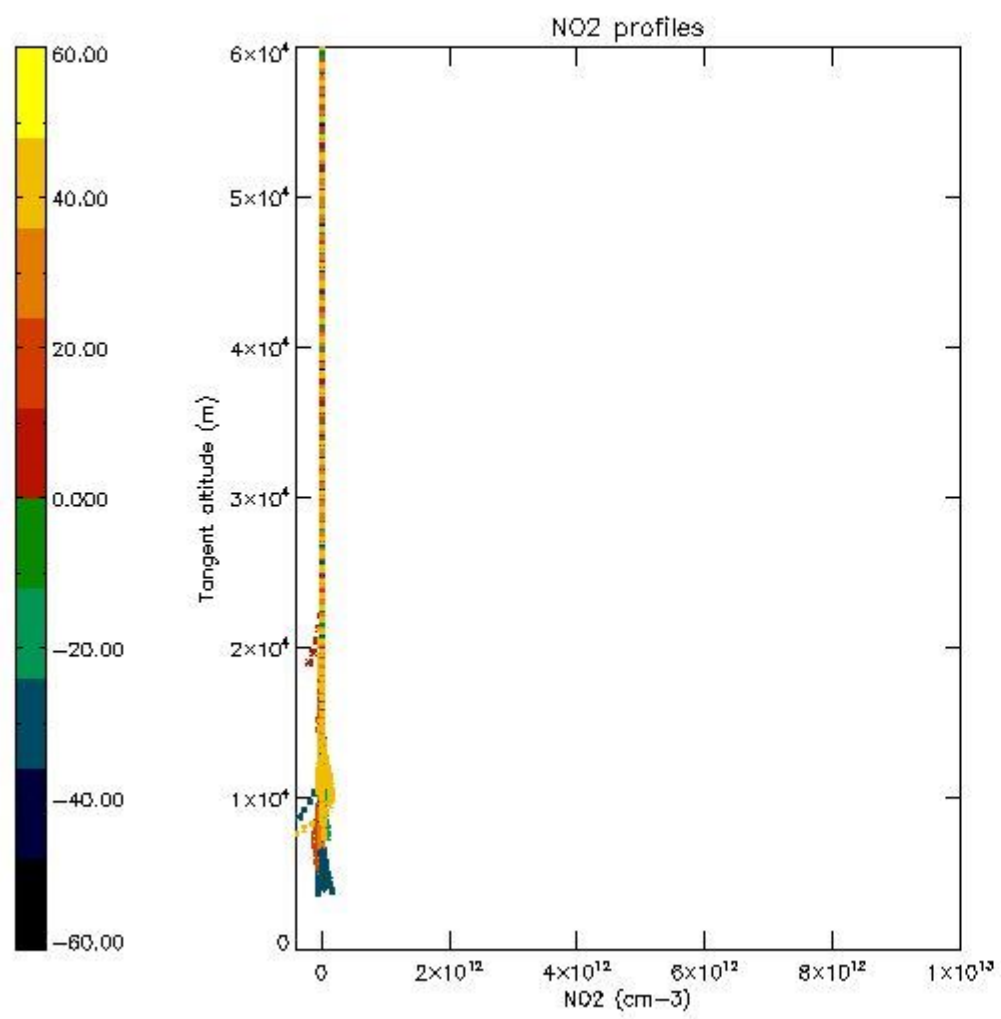
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



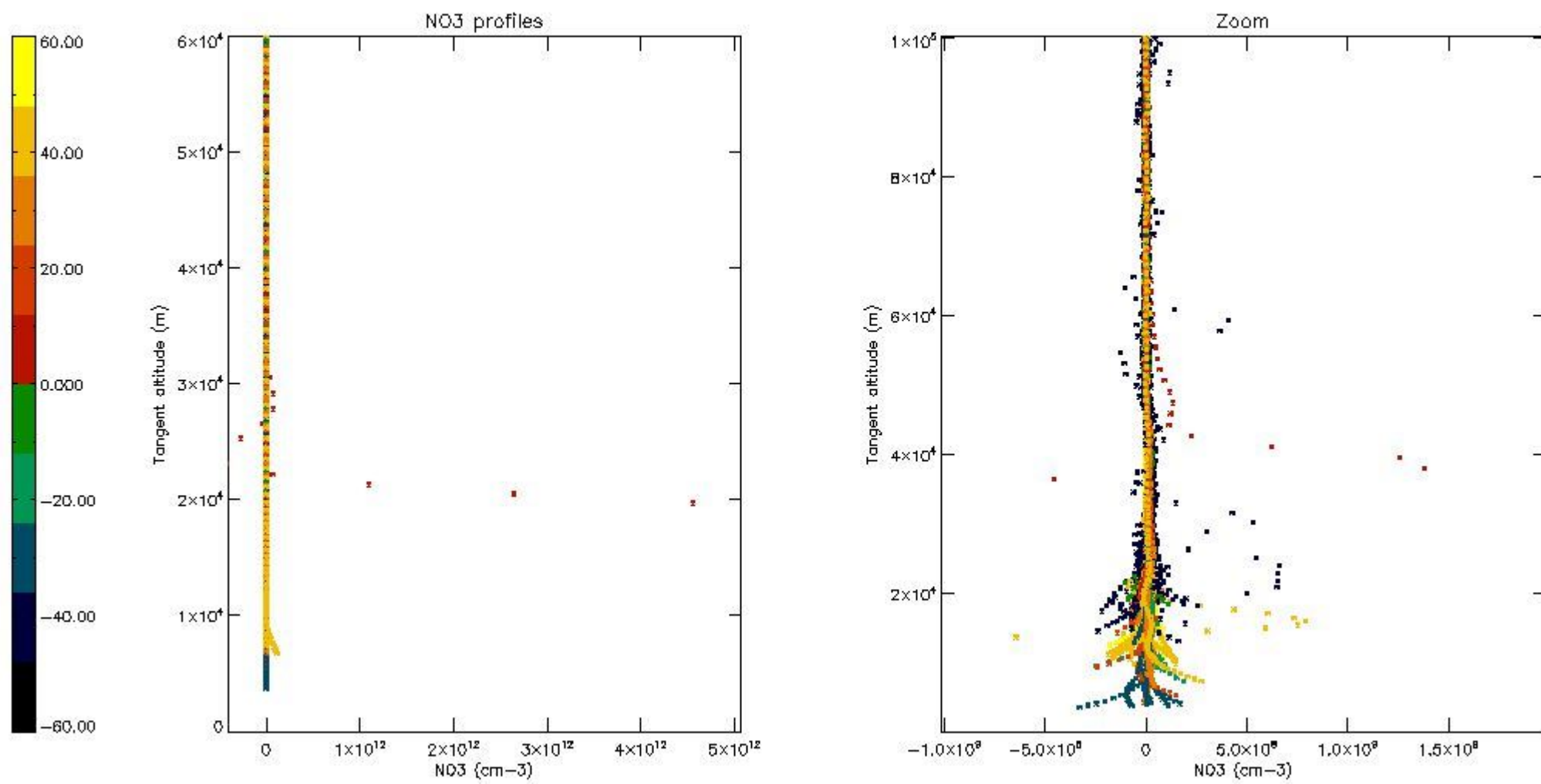
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



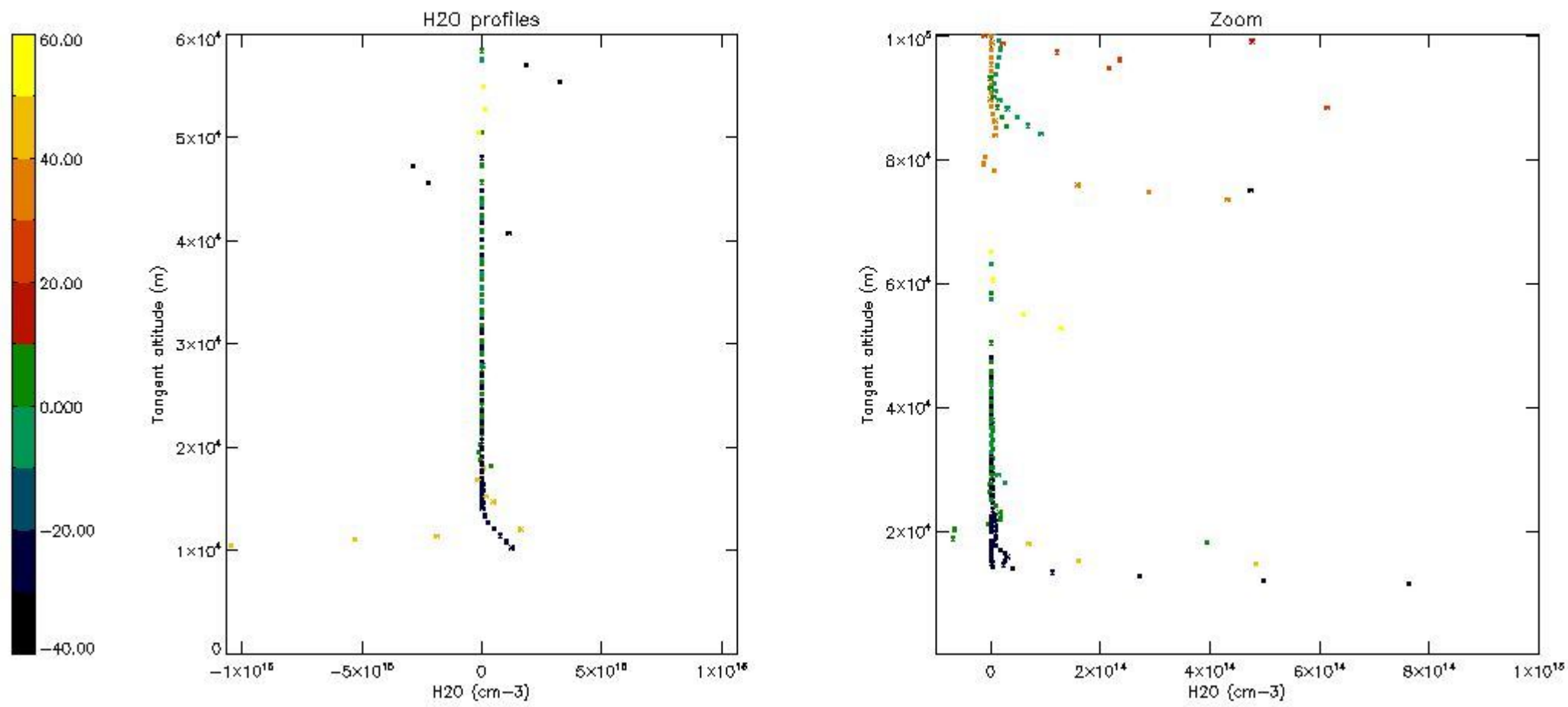
5.7 Plot NO3 profiles for all STD (dark without errors)

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	09-DEC-2002 00:11:45
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	09-DEC-2002 00:11:45
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	09-DEC-2002 00:11:45

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

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[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](#)

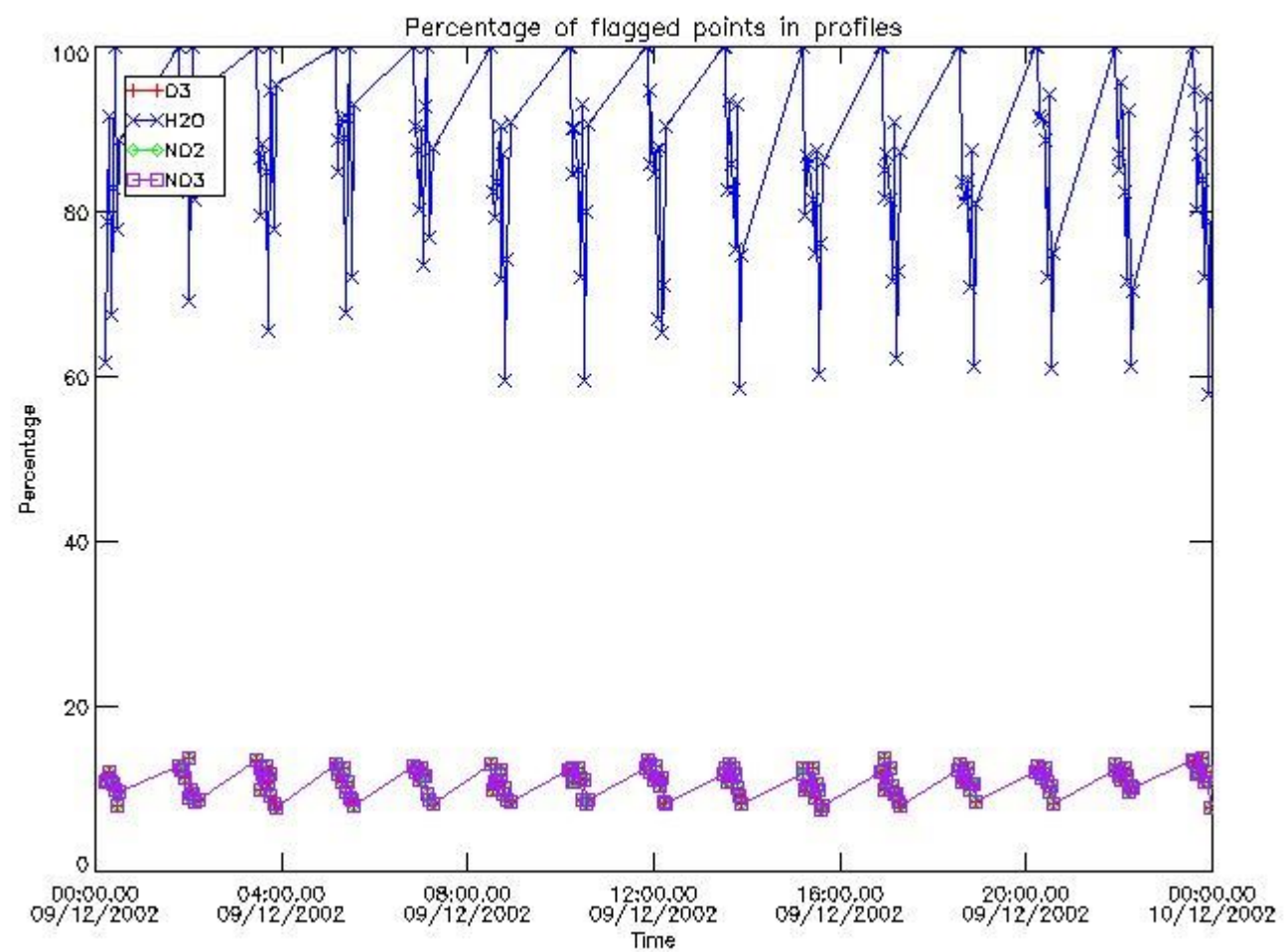
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515	GOM_NL__2PRFIN20021209_230830_000000412012_00001_04063_9781.N1	09-DEC-2002 23:08:30	Bright	40.500	39	85Eta UMa	1.8540	24000.	81	4063	No
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532	GOM_NL__2PRFIN20021209_235434_000000522012_00002_04064_9758.N1	09-DEC-2002 23:54:34	Dark	51.500	2	Alp Car	-0.73600	7000.0	103	4064	No
533	GOM_NL__2PRFIN20021209_235700_000000672012_00002_04064_9759.N1	09-DEC-2002 23:57:00	Dark	66.500	117	Pi Pup	2.7060	3800.0	133	4064	No

3. Quality information per product

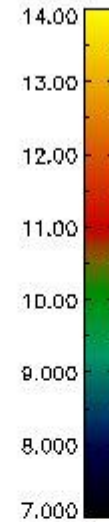
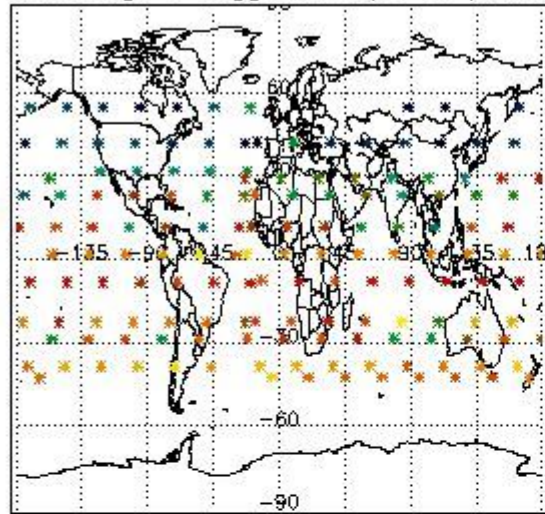
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3.1 Plot quality information per product (time dependant)

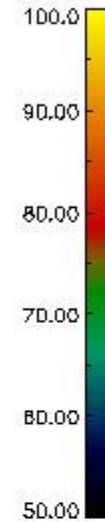
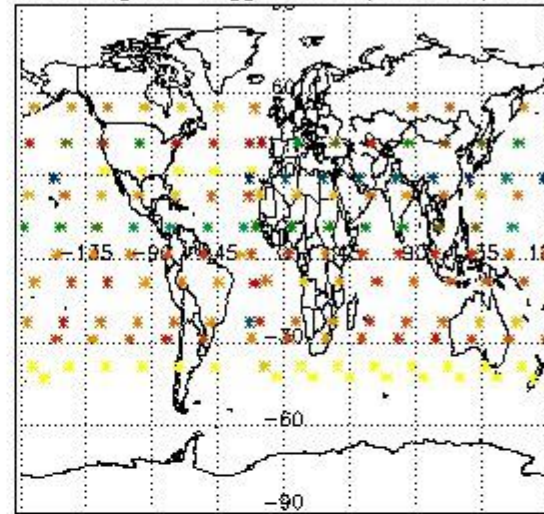


3.2 Plot quality information per product (world map)

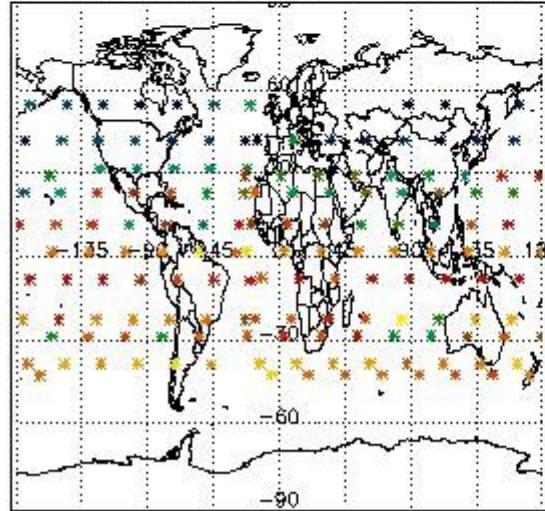
Percentage of flagged data per O3 profile



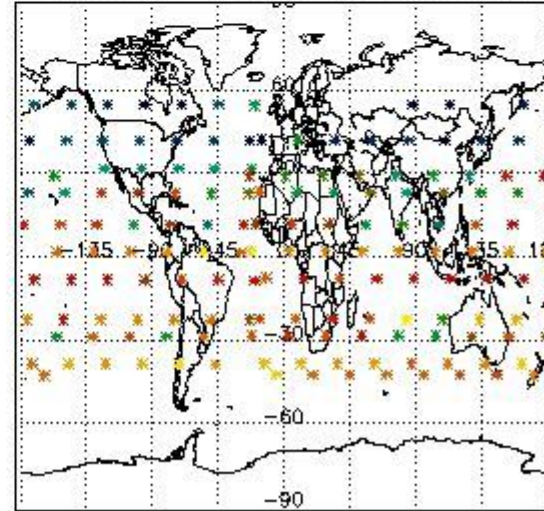
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

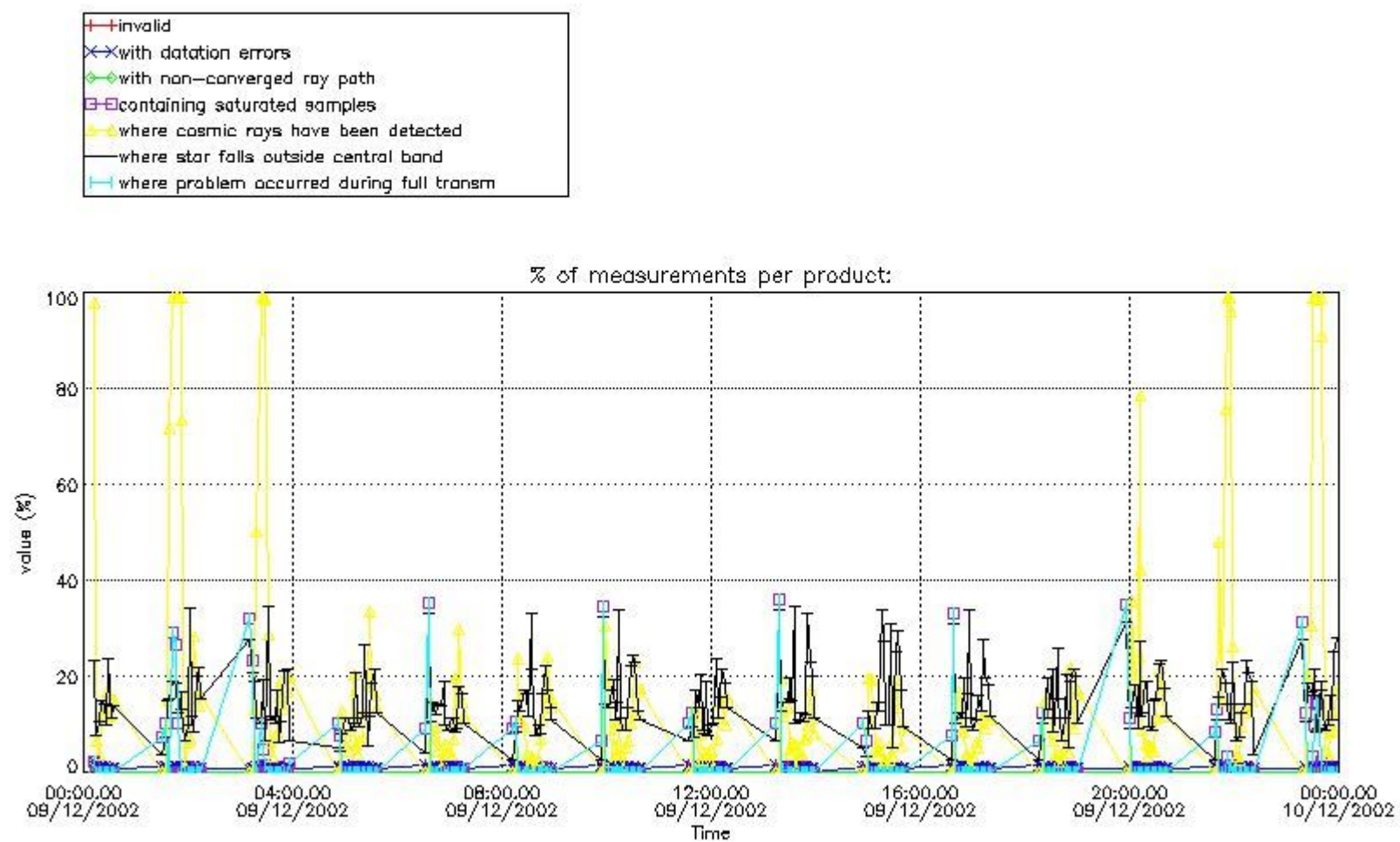


4. Level 1 quality information per product

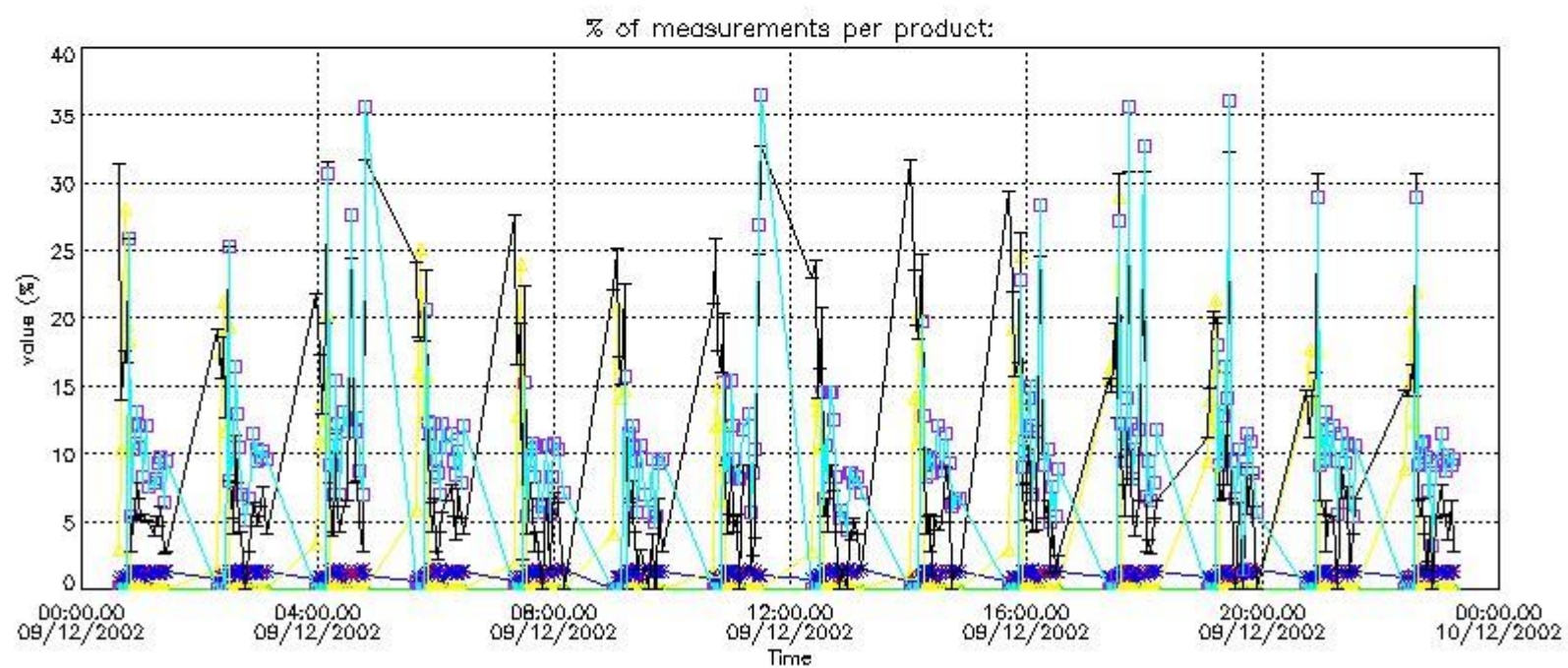
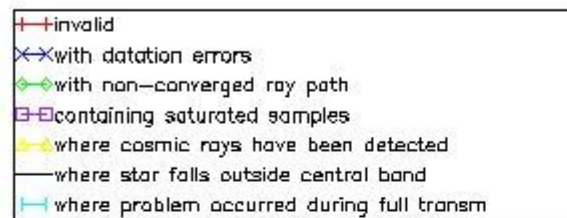
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



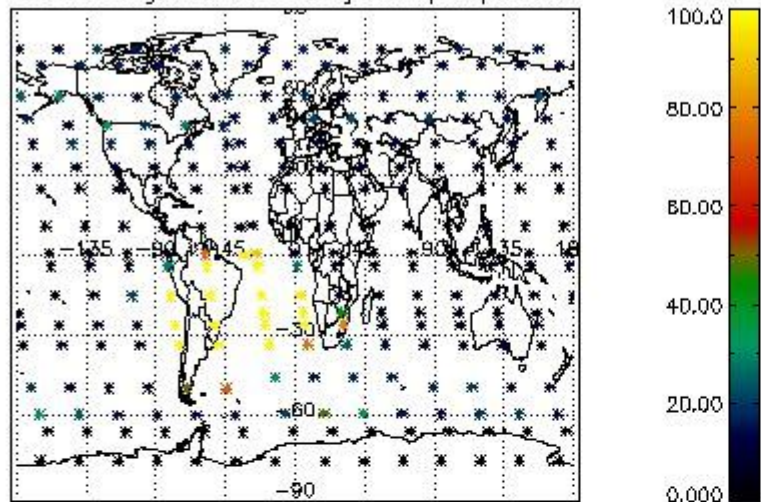
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



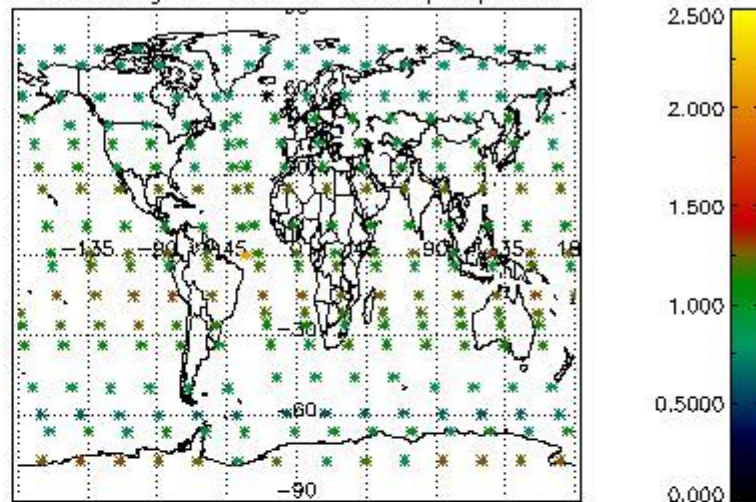
4.2 Plot quality information per product coming from level 1b processing (world map)

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

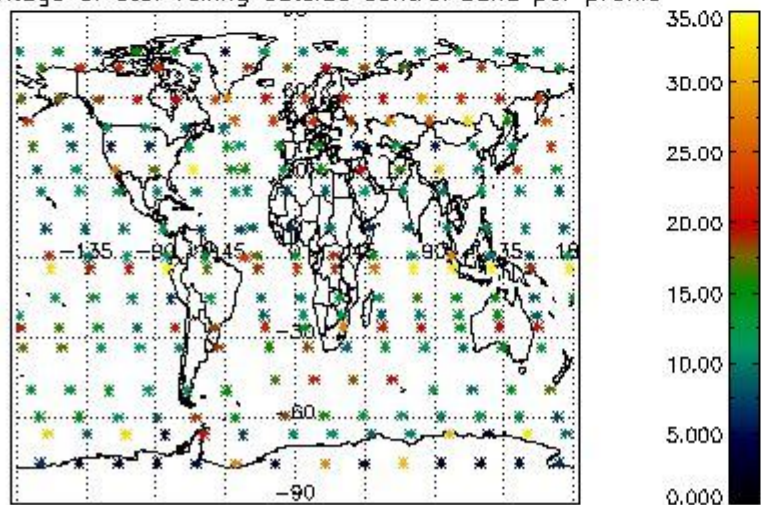
Percentage of cosmic ray hits per profile



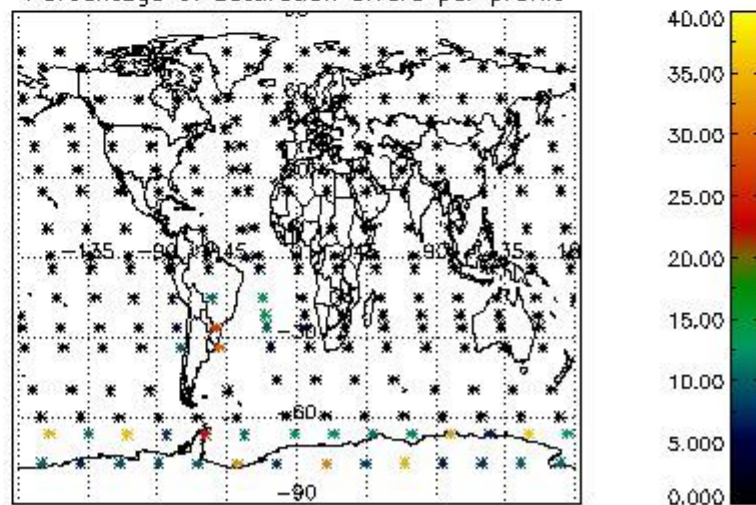
Percentage of datation errors per profile



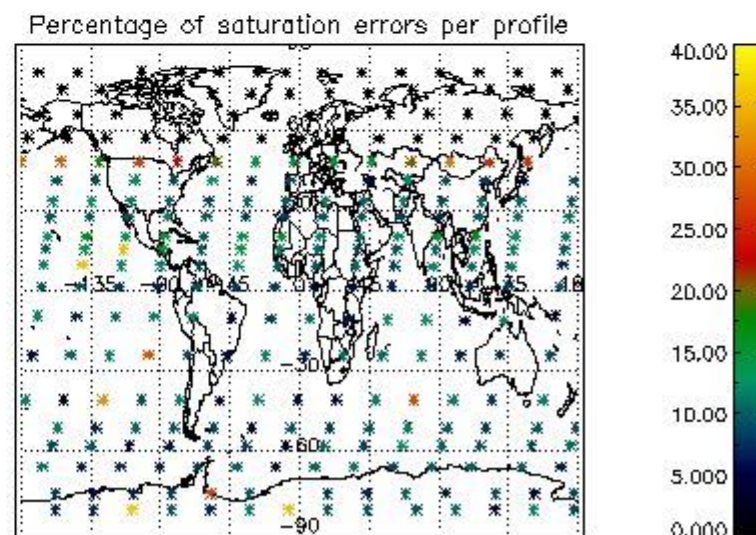
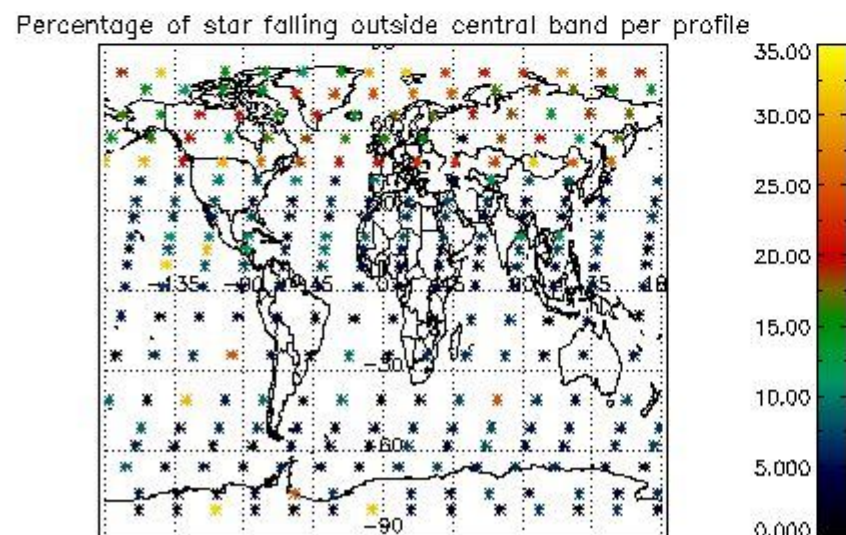
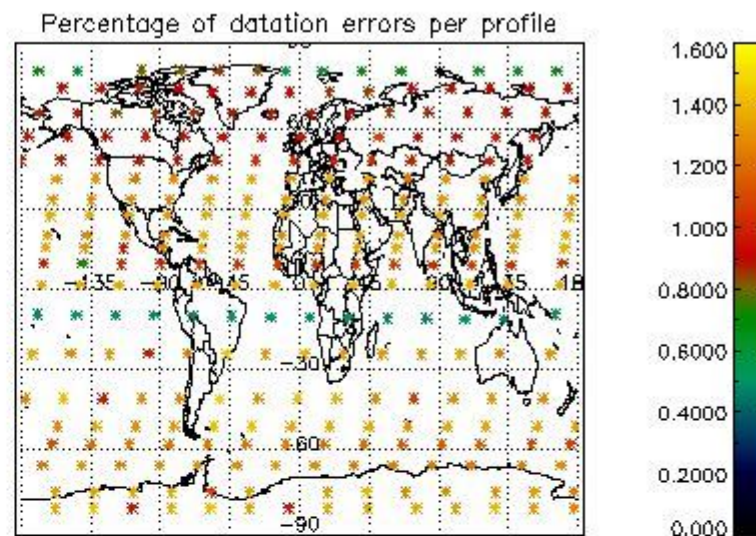
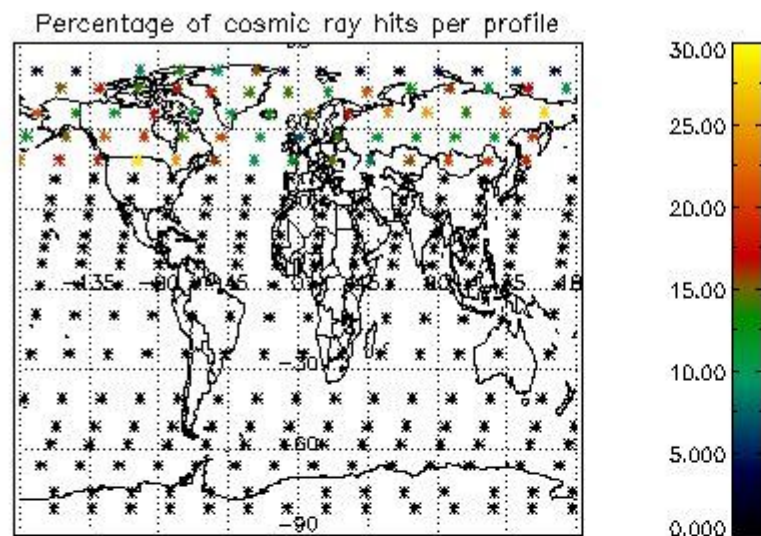
Percentage of star falling outside central band per profile



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

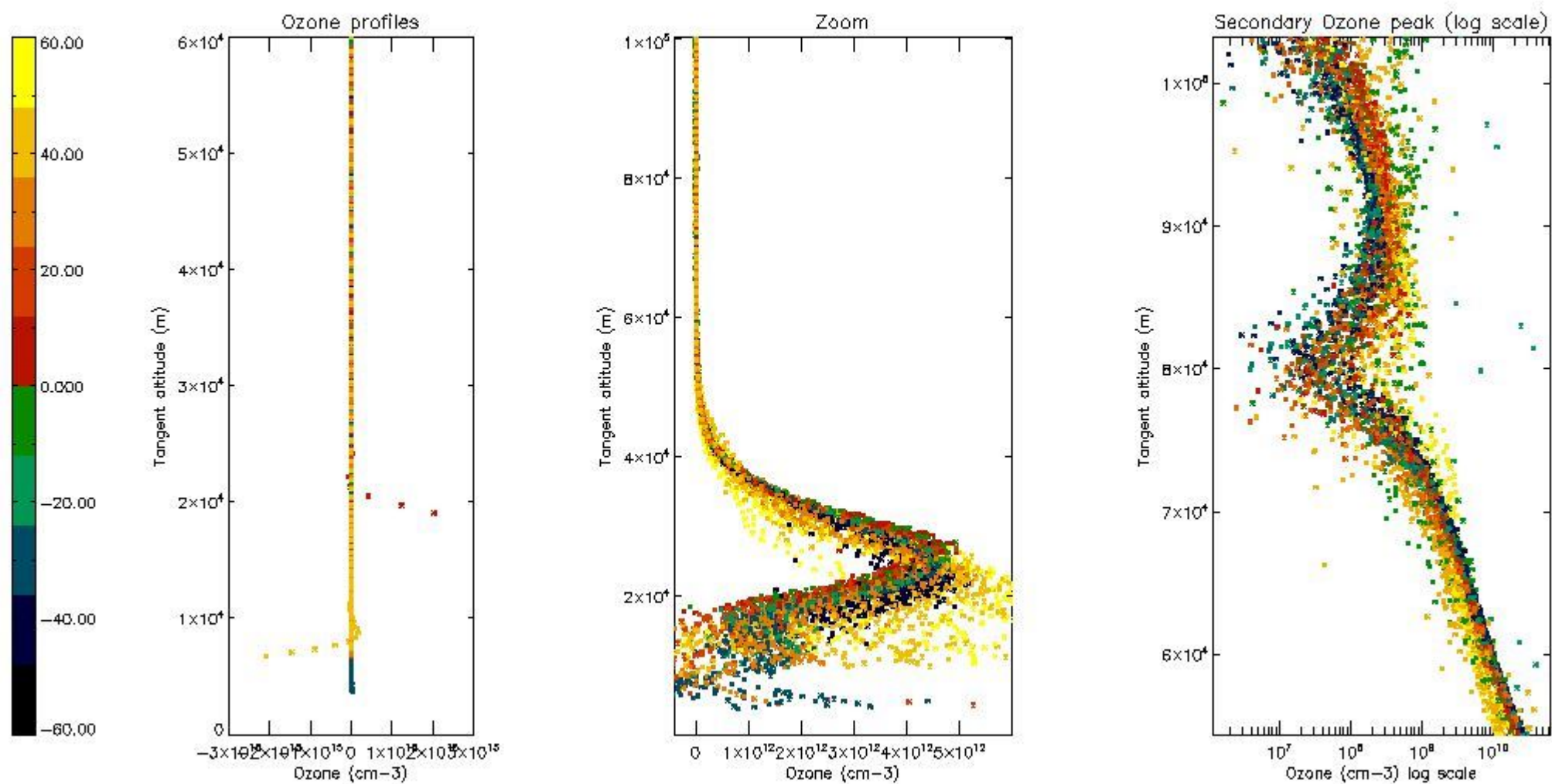
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	29
STD < 20	17

STD < 10	14
STD < 5	11

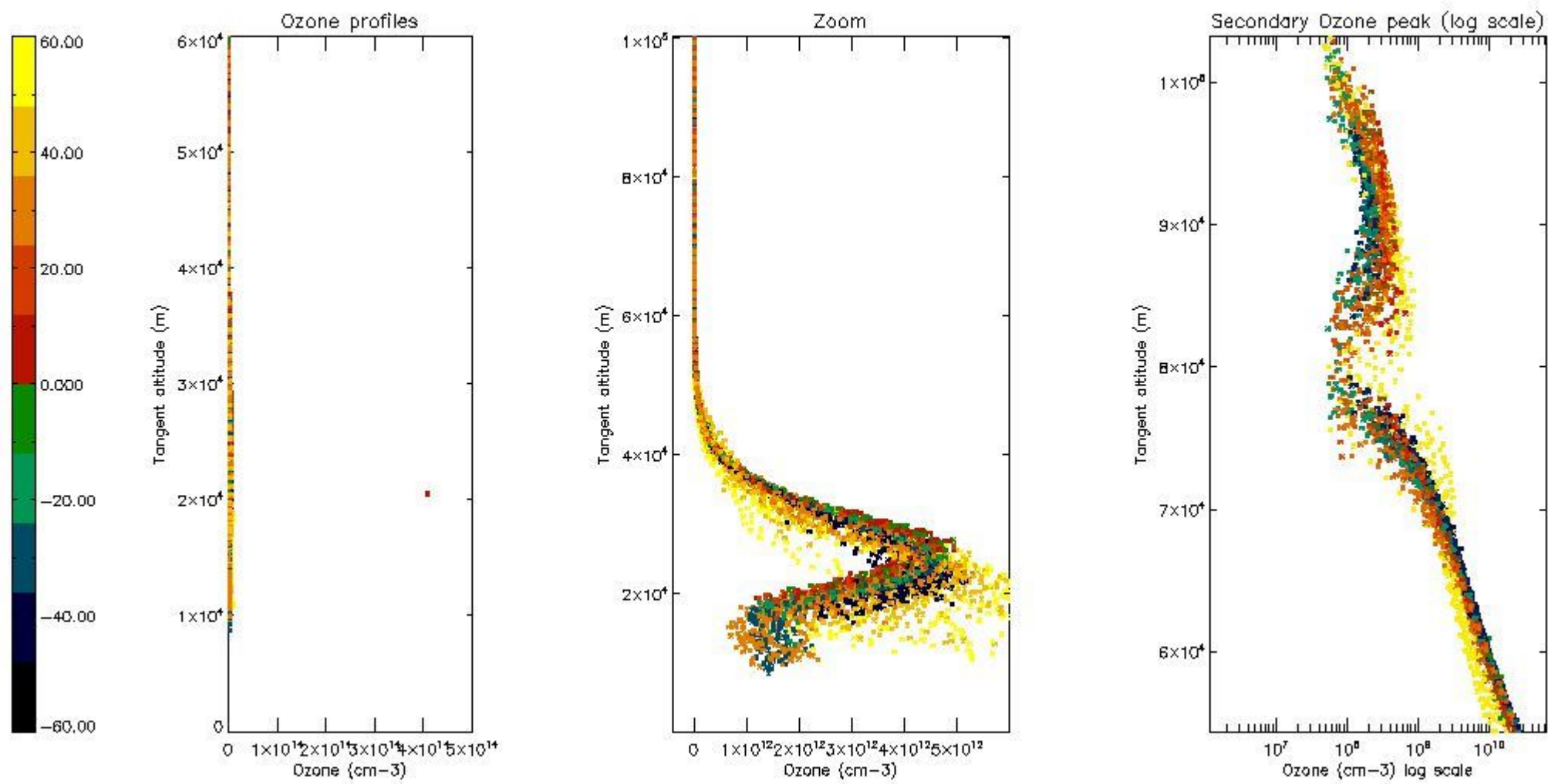
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



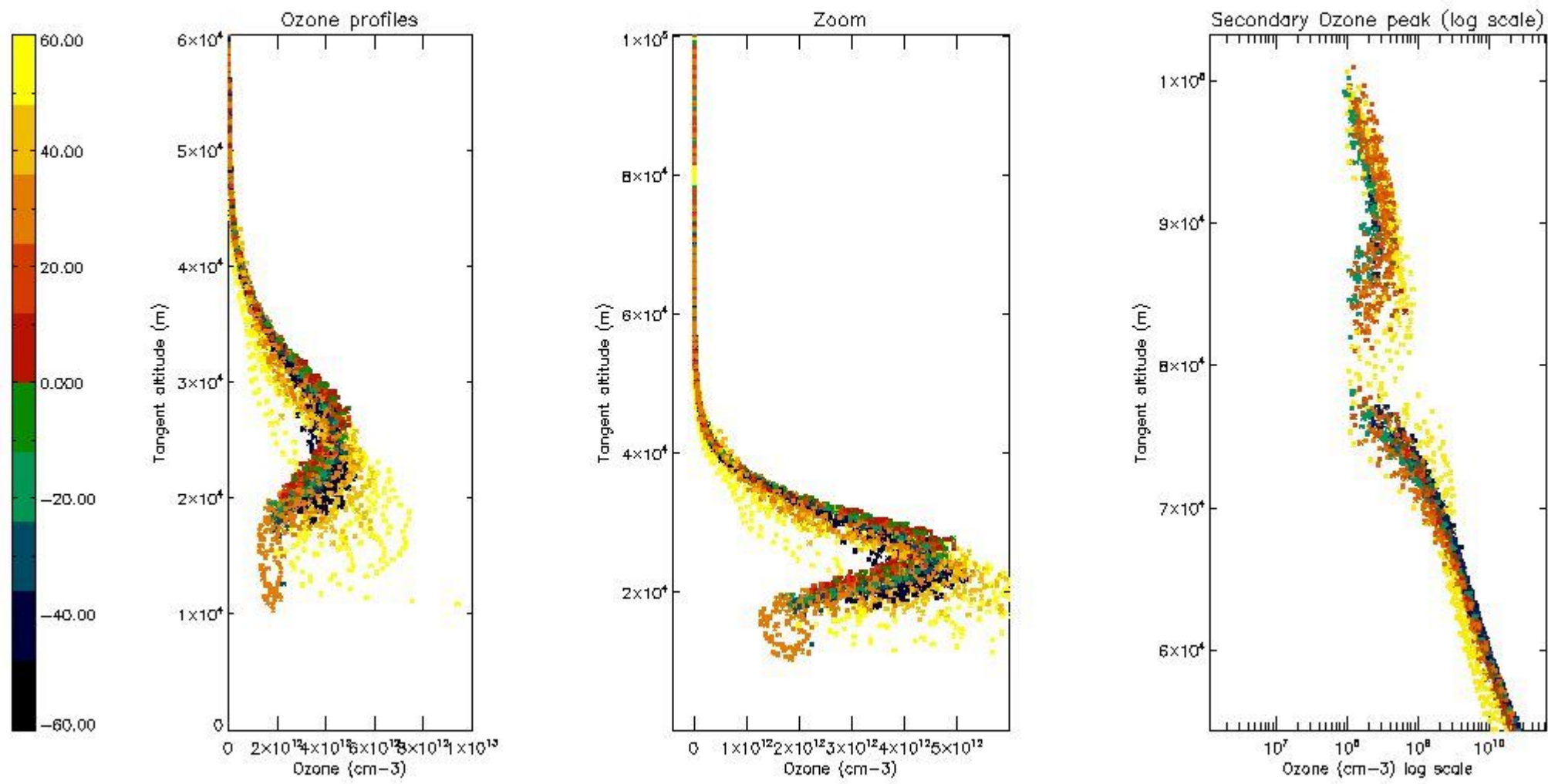
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



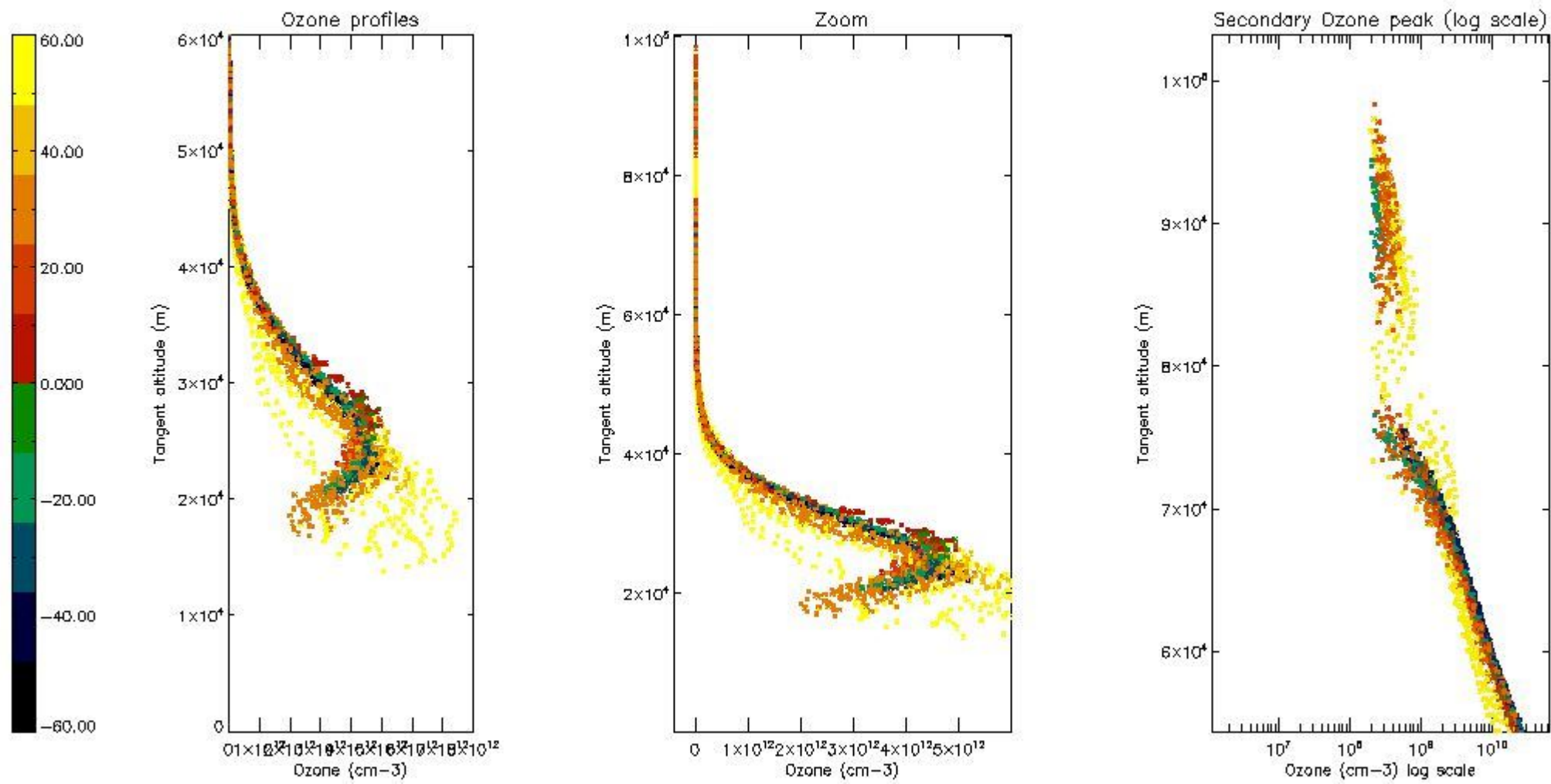
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



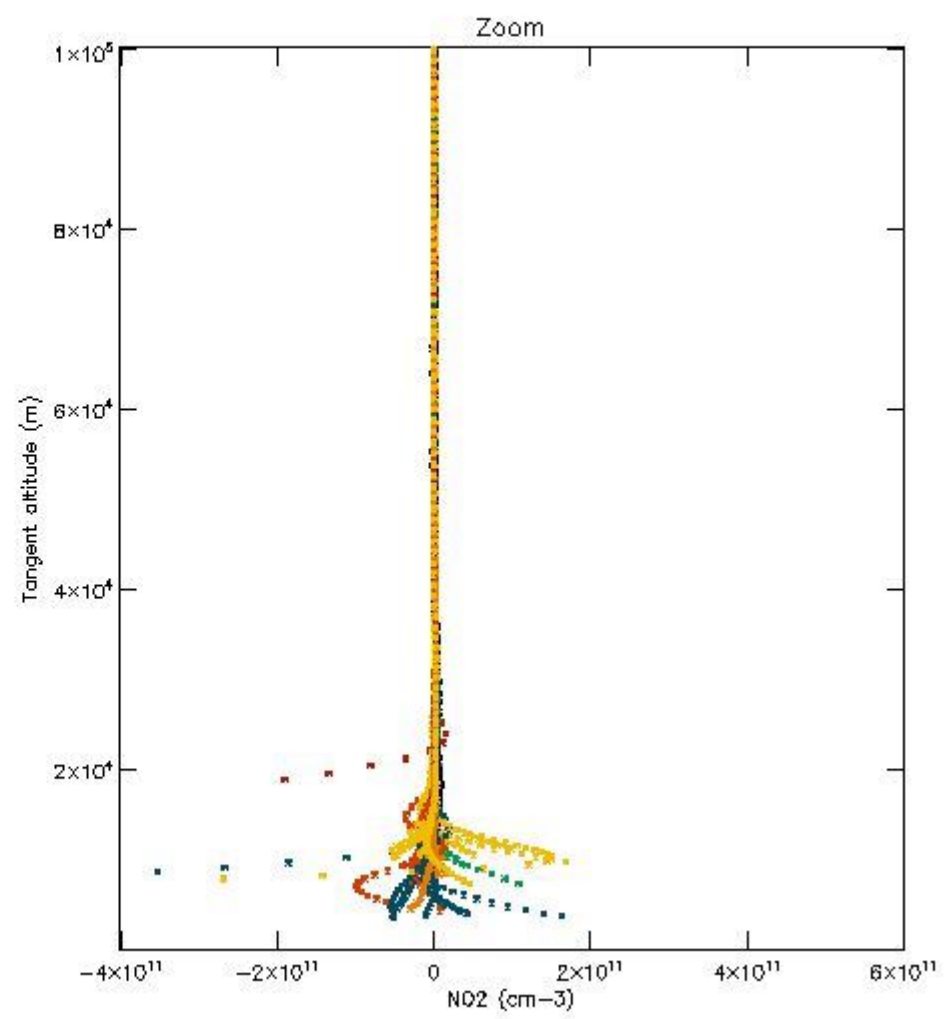
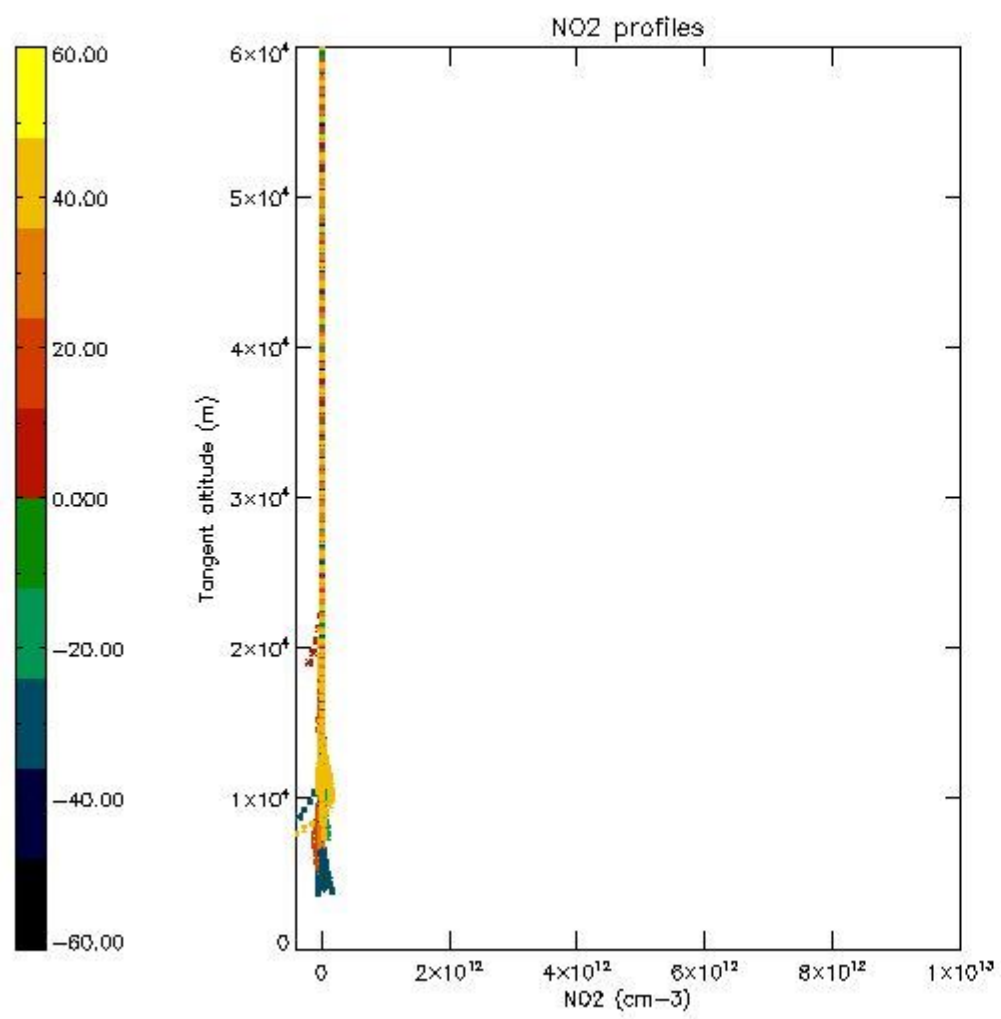
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



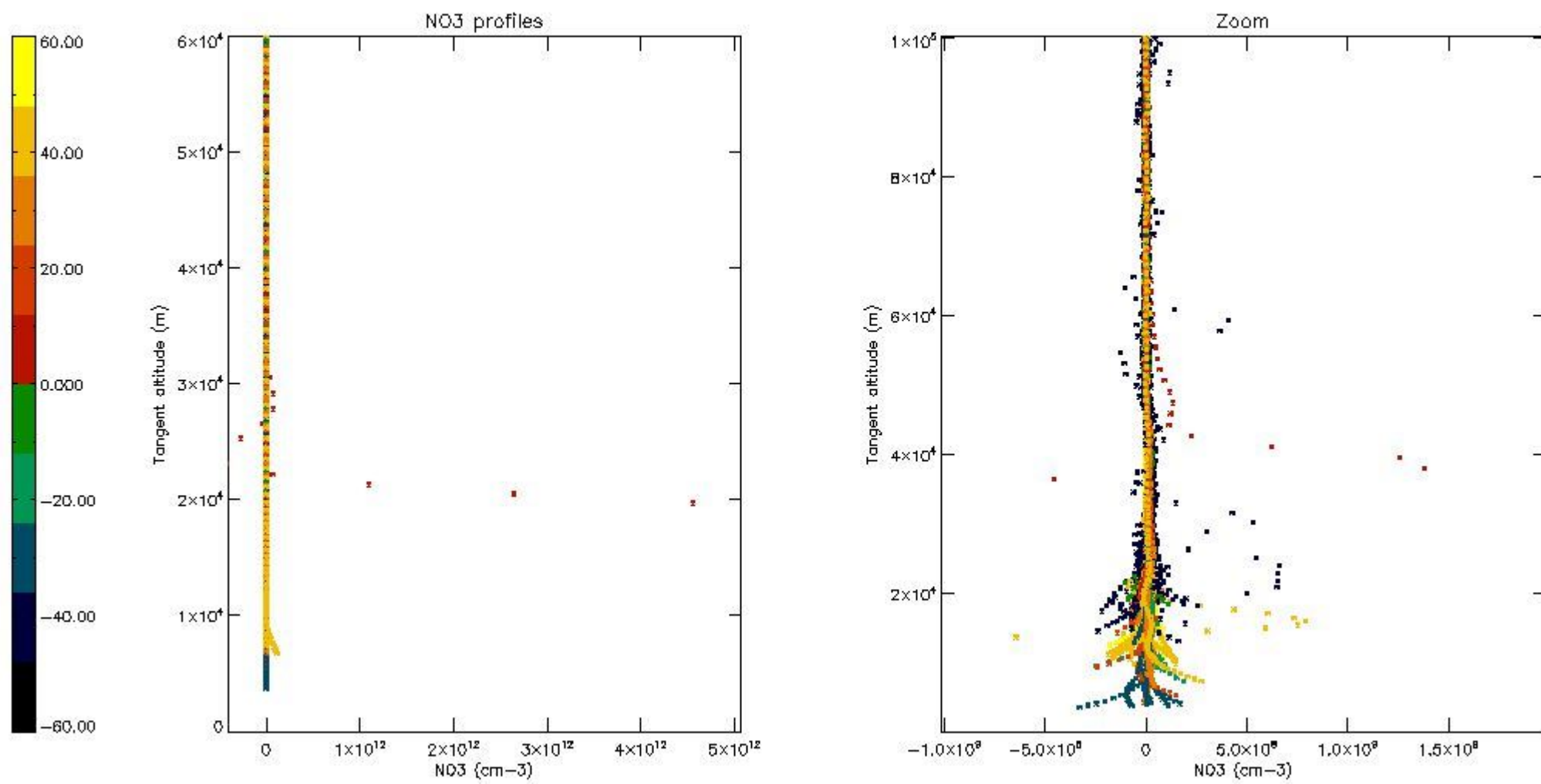
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



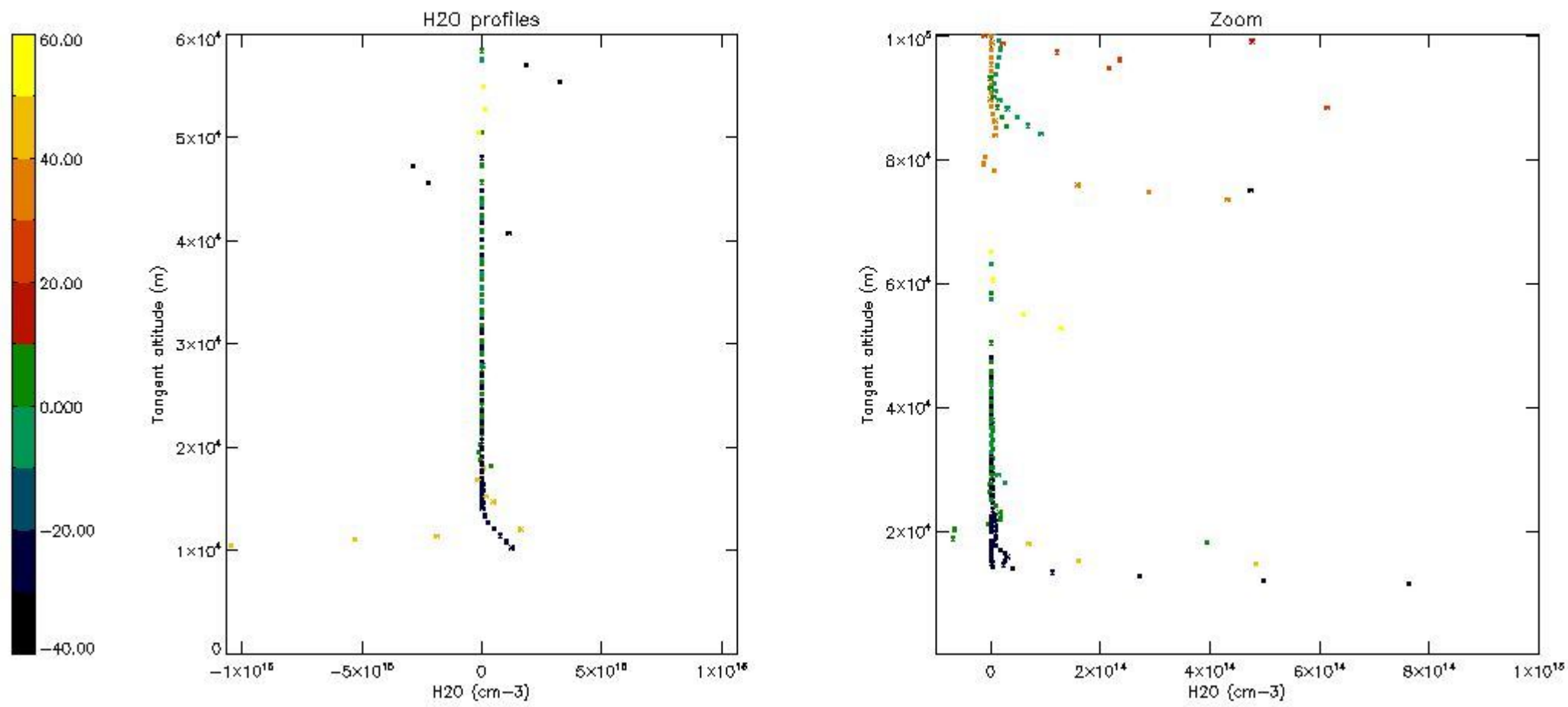
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

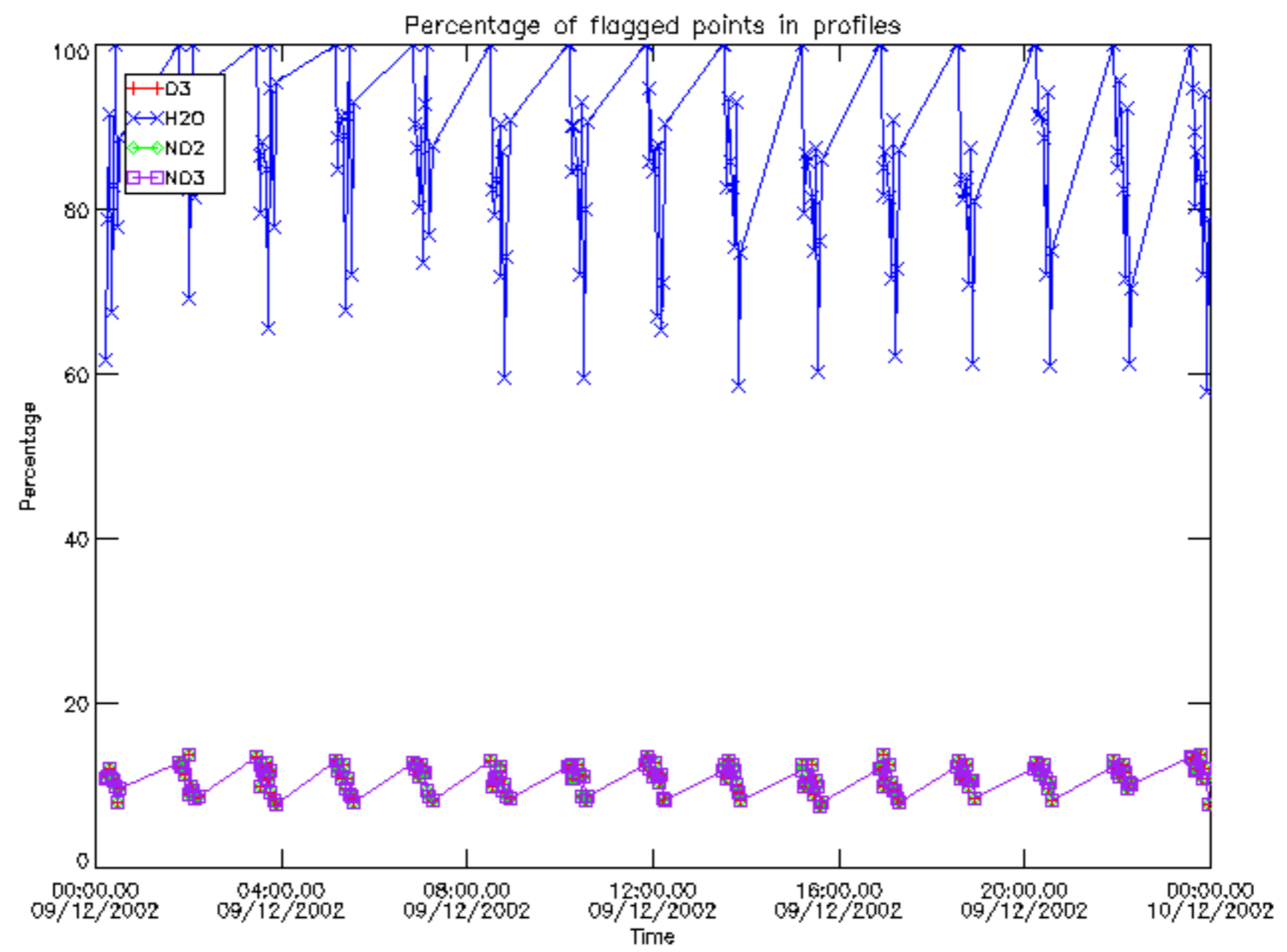
The colorbar represents the latitude.



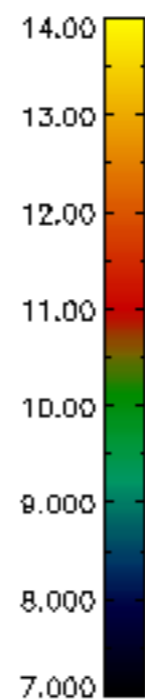
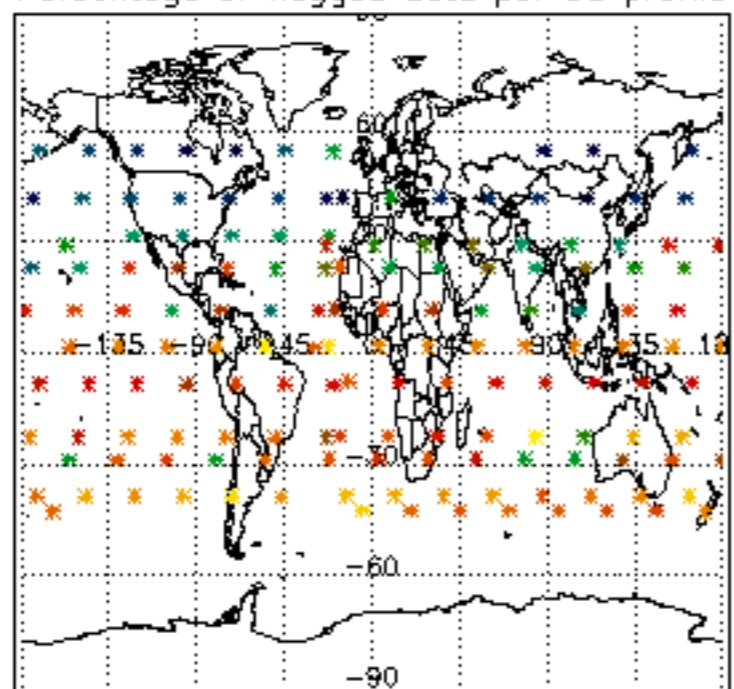
6. Auxiliary Data Files used for the production reported in section 2

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.

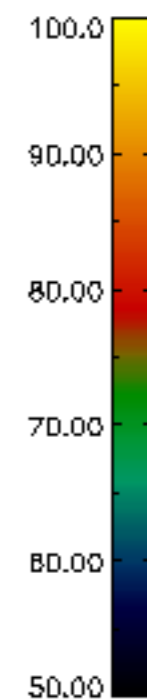
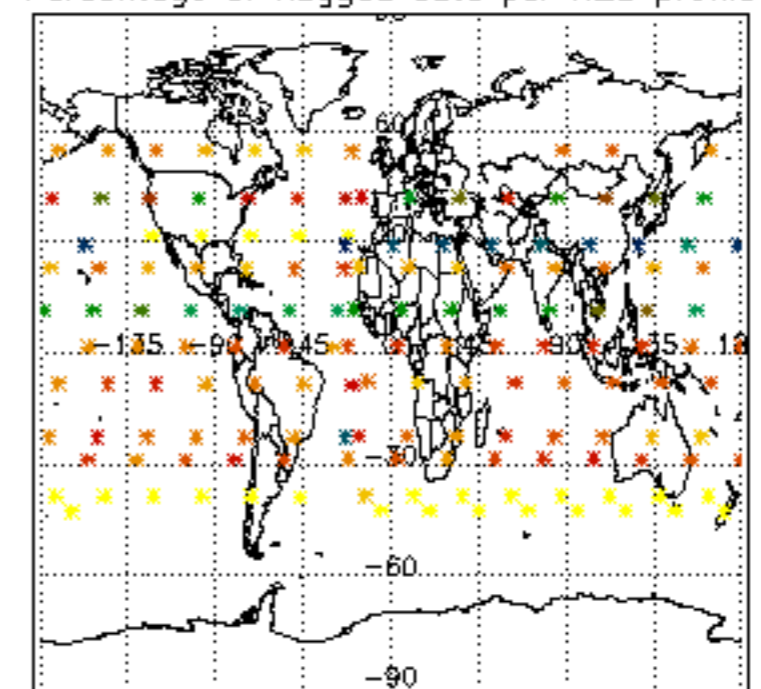
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	09-DEC-2002 00:11:45
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	09-DEC-2002 00:11:45
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	09-DEC-2002 00:11:45



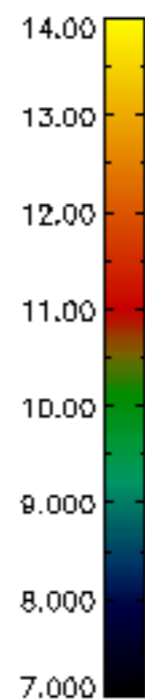
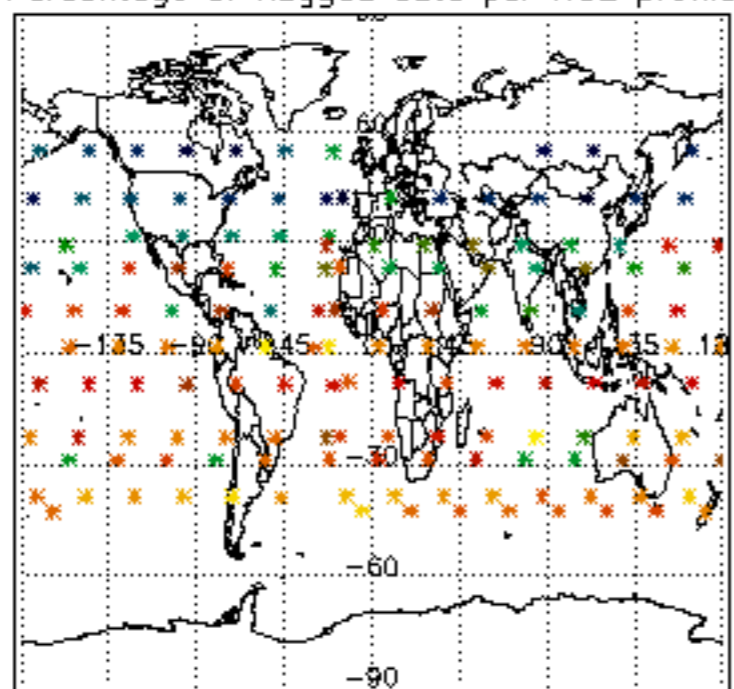
Percentage of flagged data per D3 profile



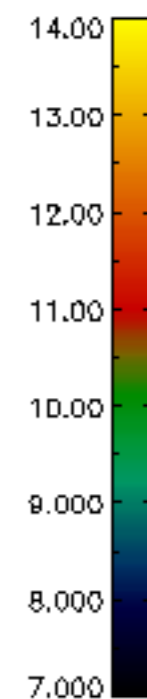
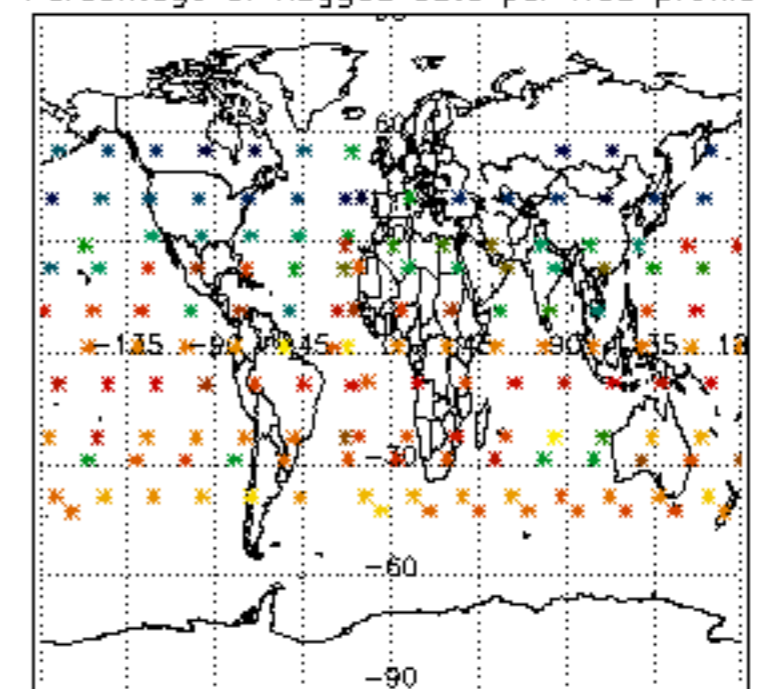
Percentage of flagged data per H2O profile

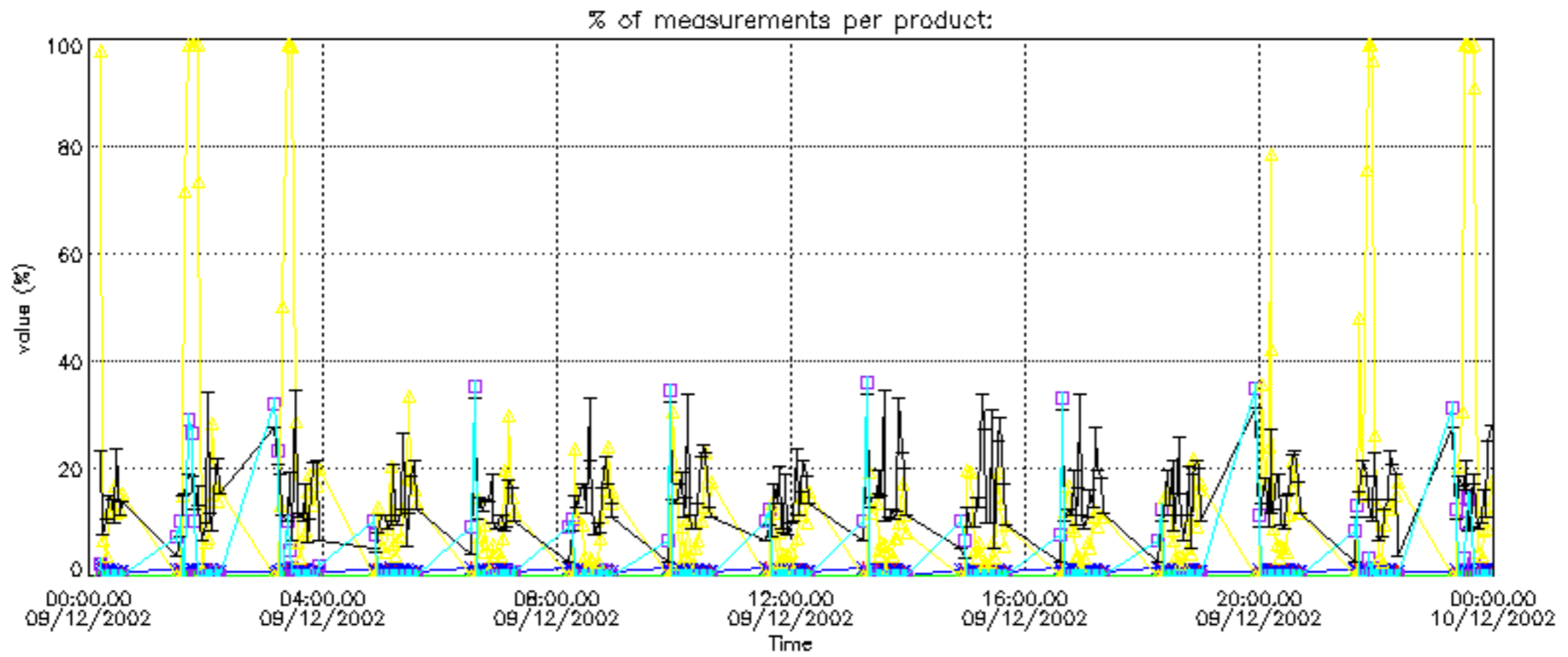


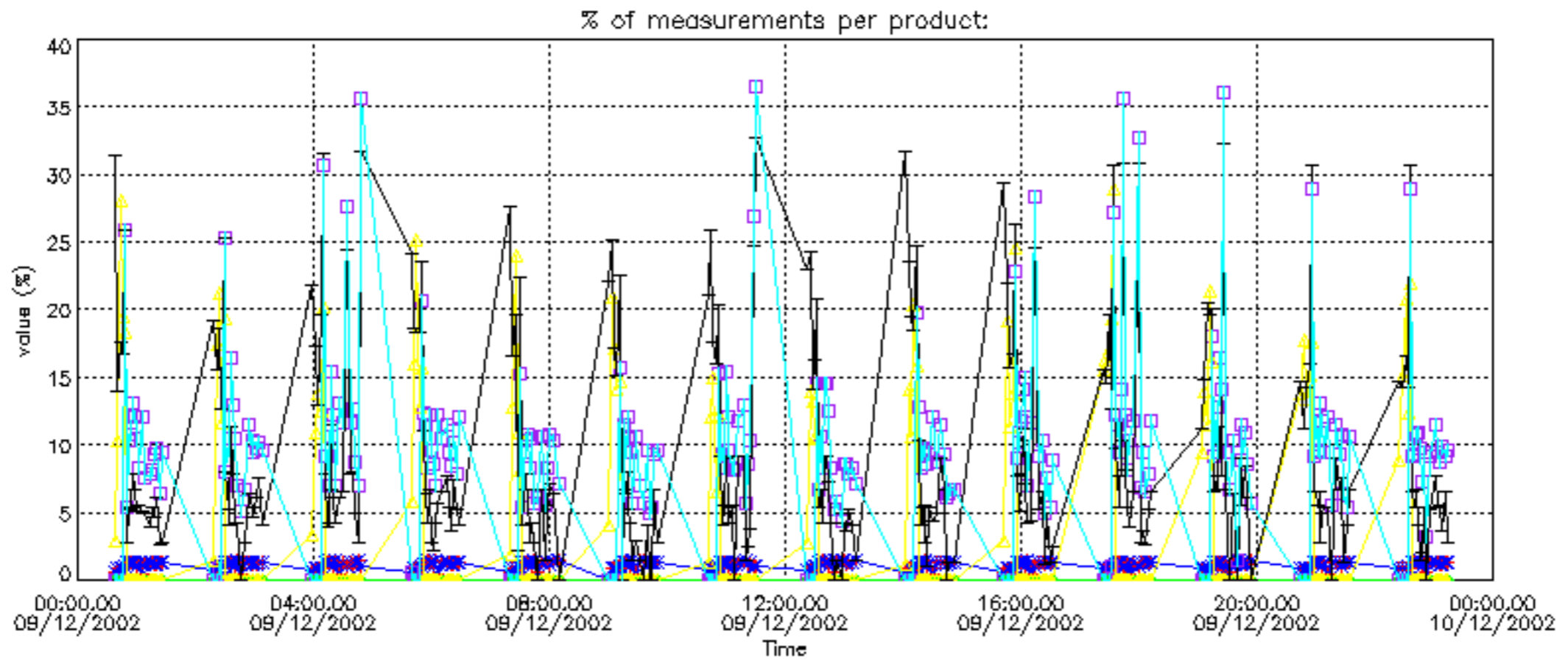
Percentage of flagged data per NO2 profile



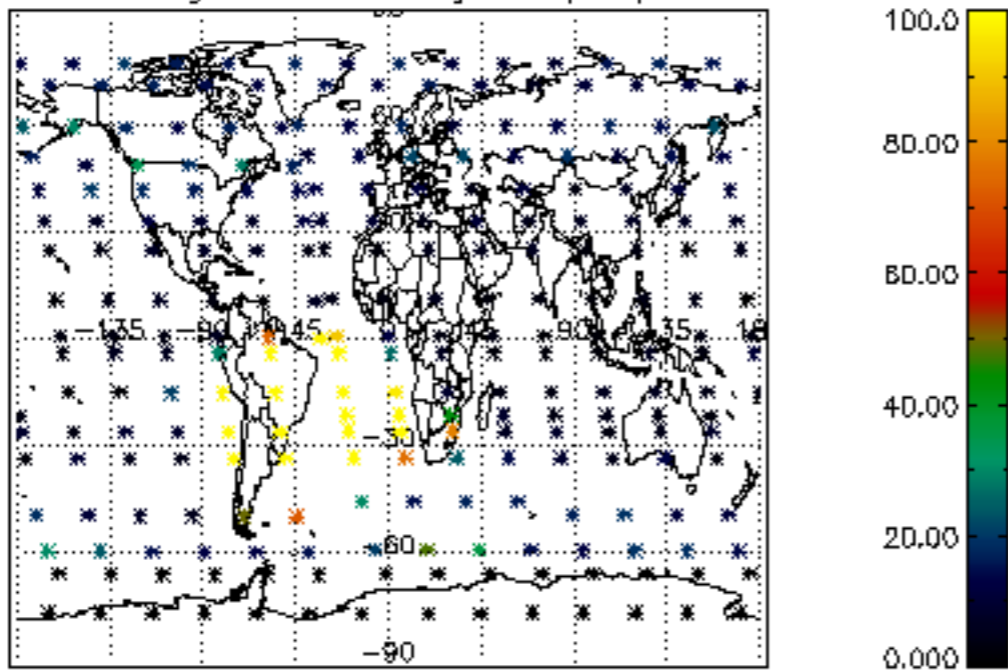
Percentage of flagged data per NO3 profile



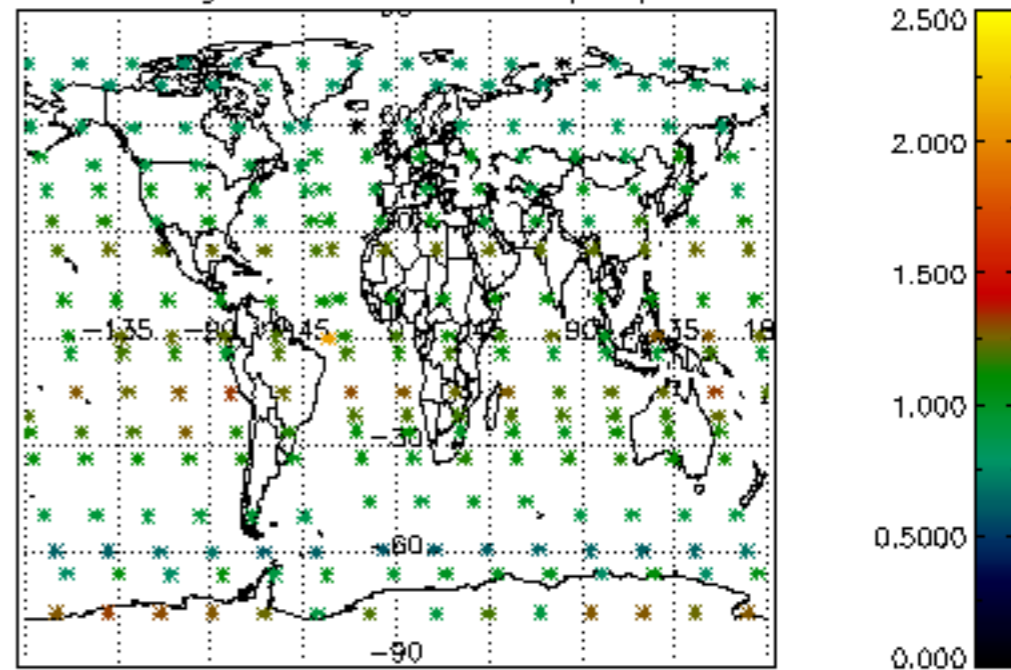




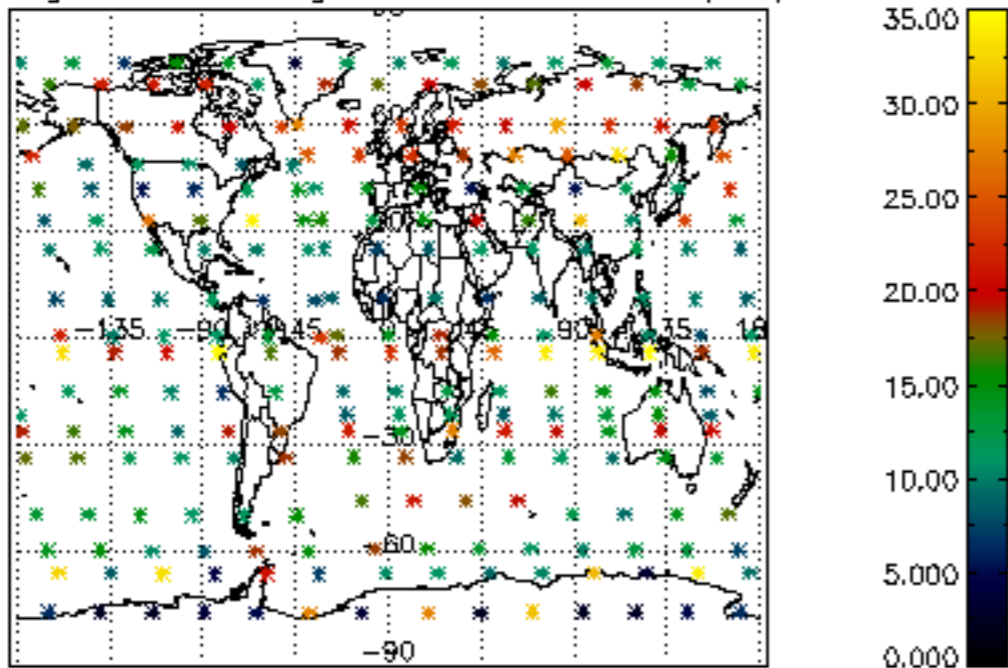
Percentage of cosmic ray hits per profile



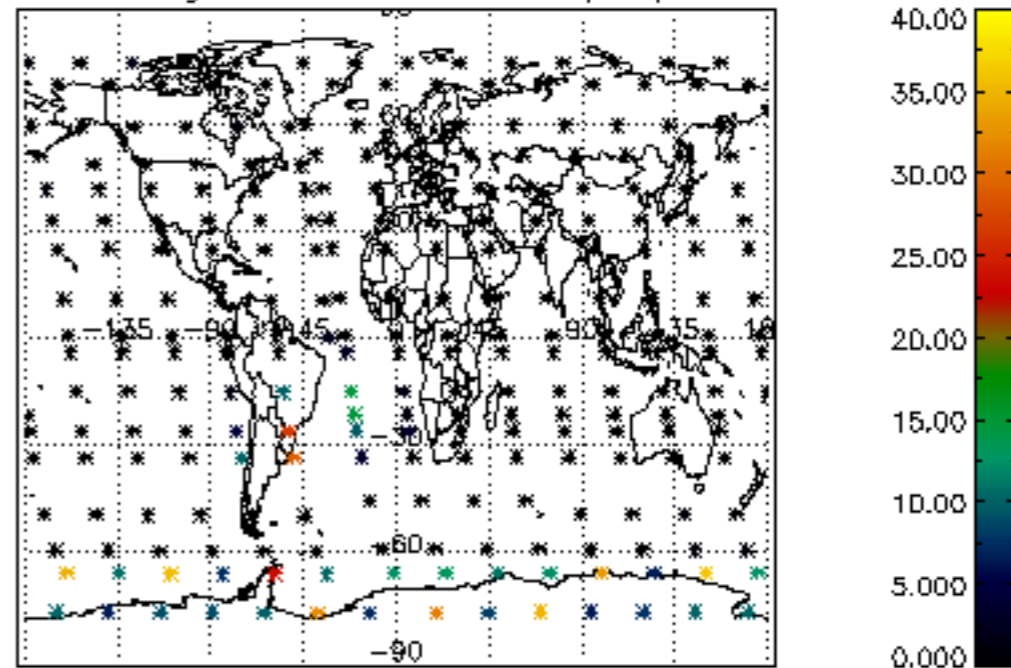
Percentage of datation errors per profile



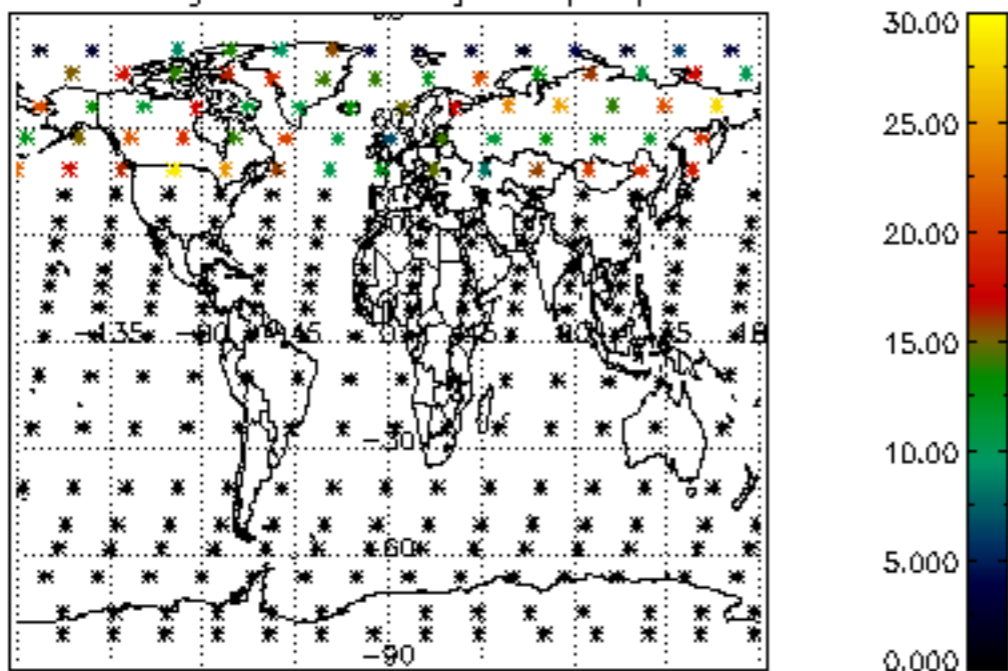
Percentage of star falling outside central band per profile



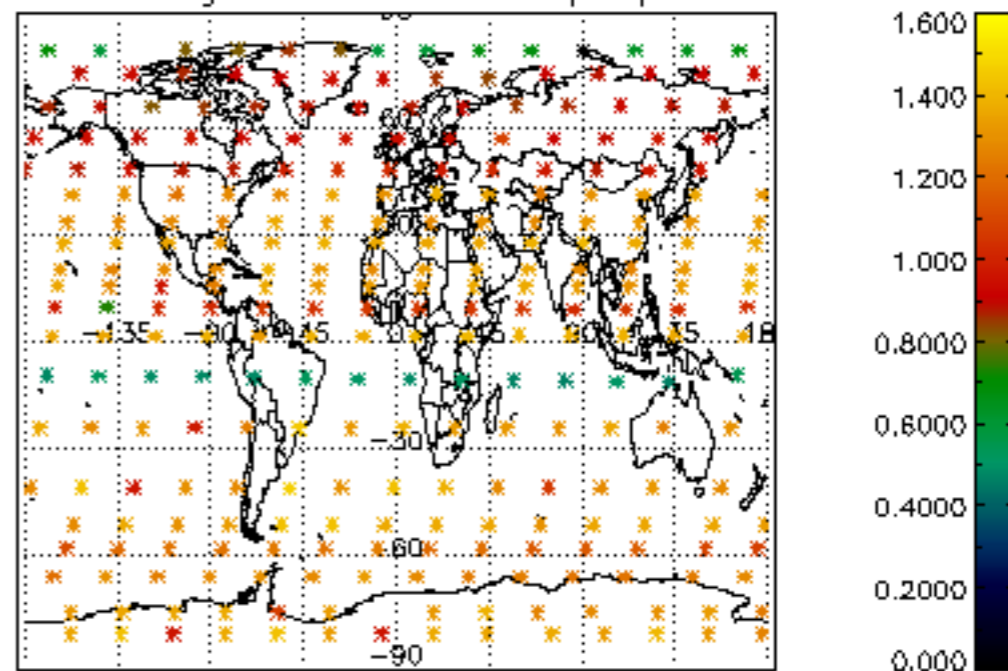
Percentage of saturation errors per profile



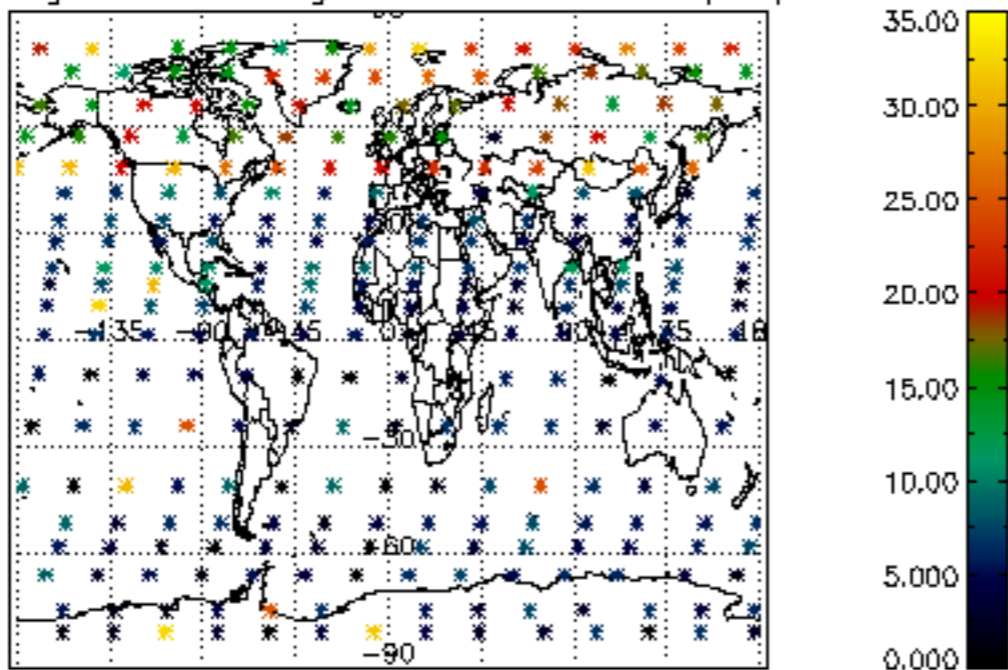
Percentage of cosmic ray hits per profile



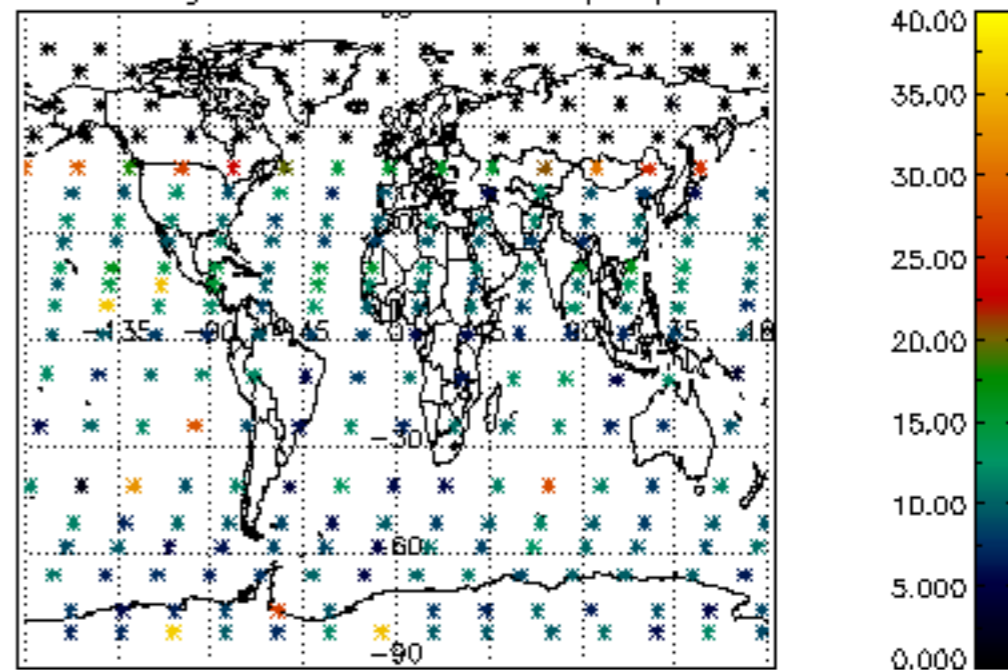
Percentage of datation errors per profile

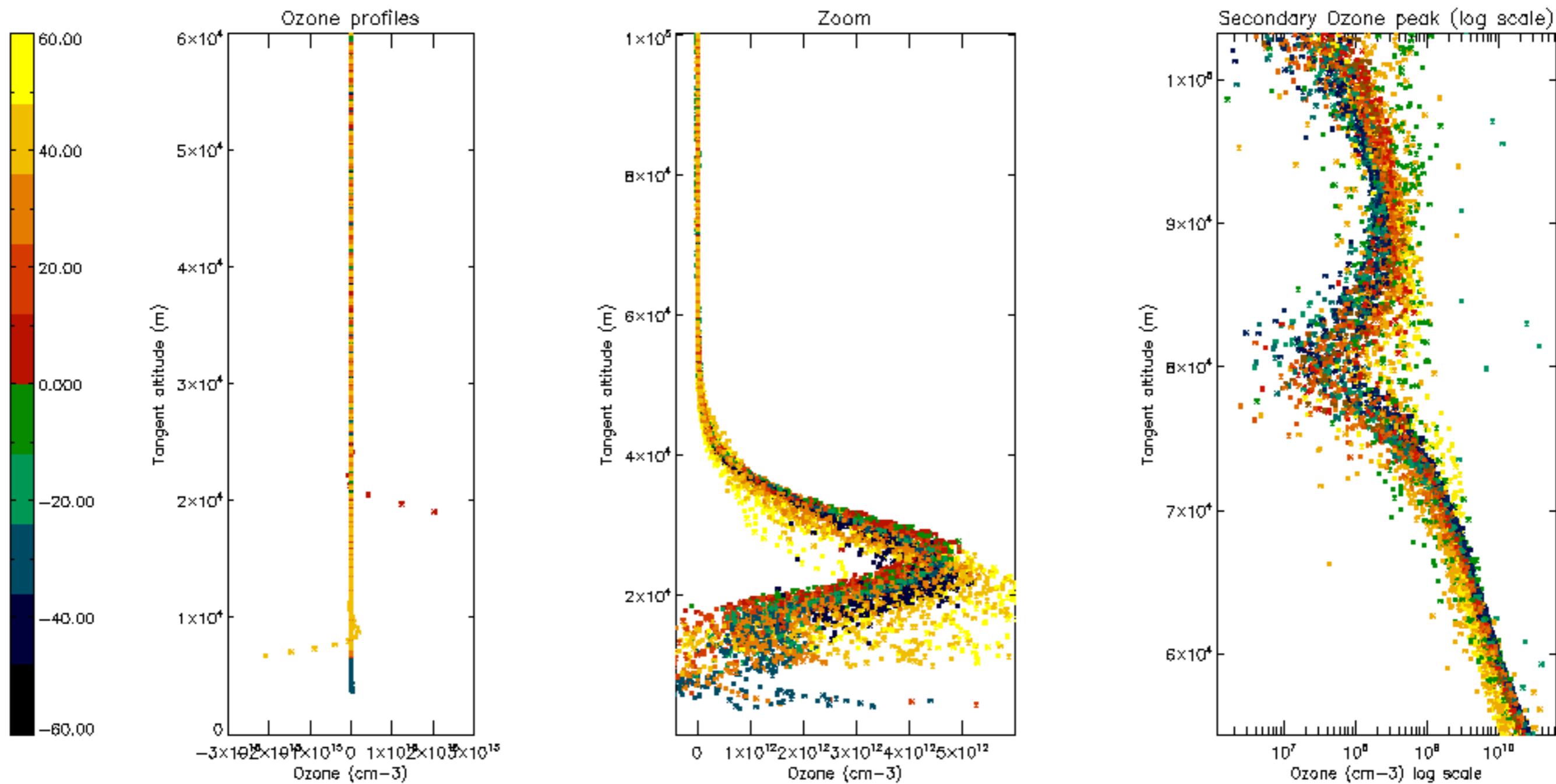


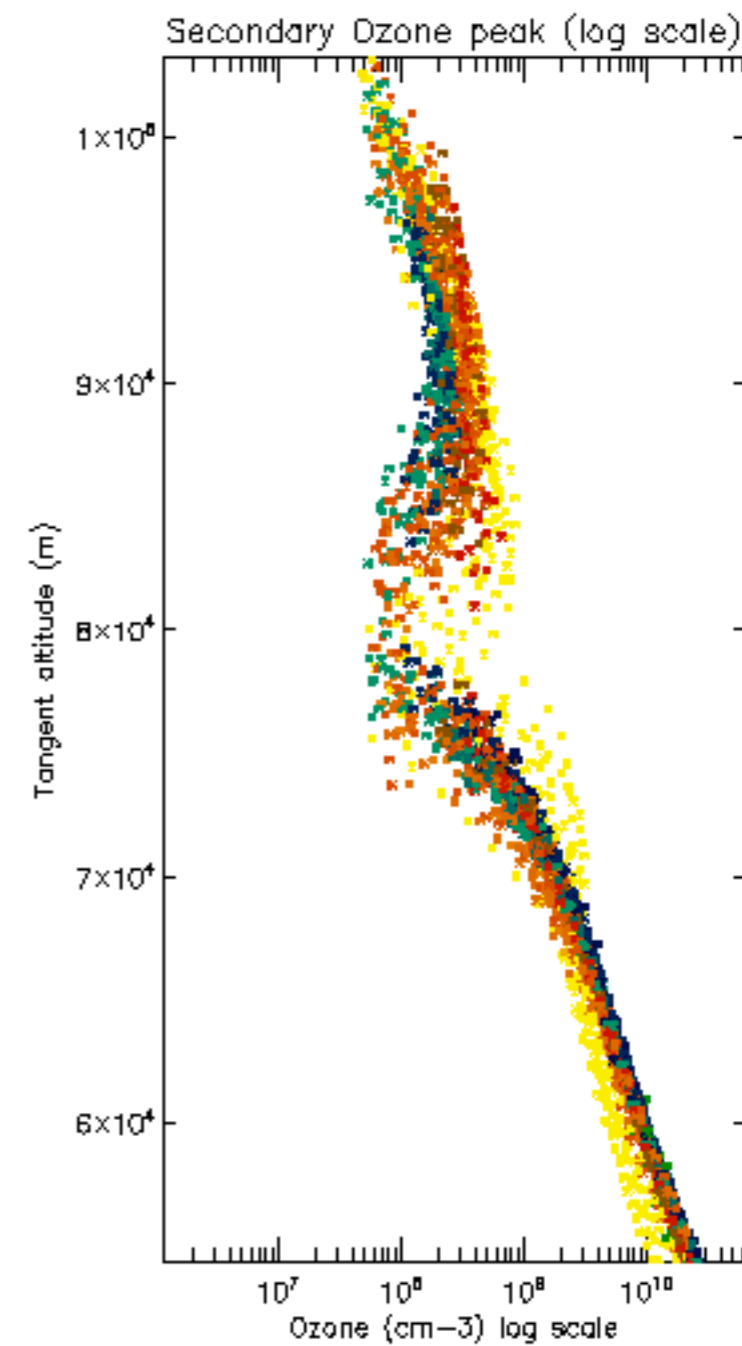
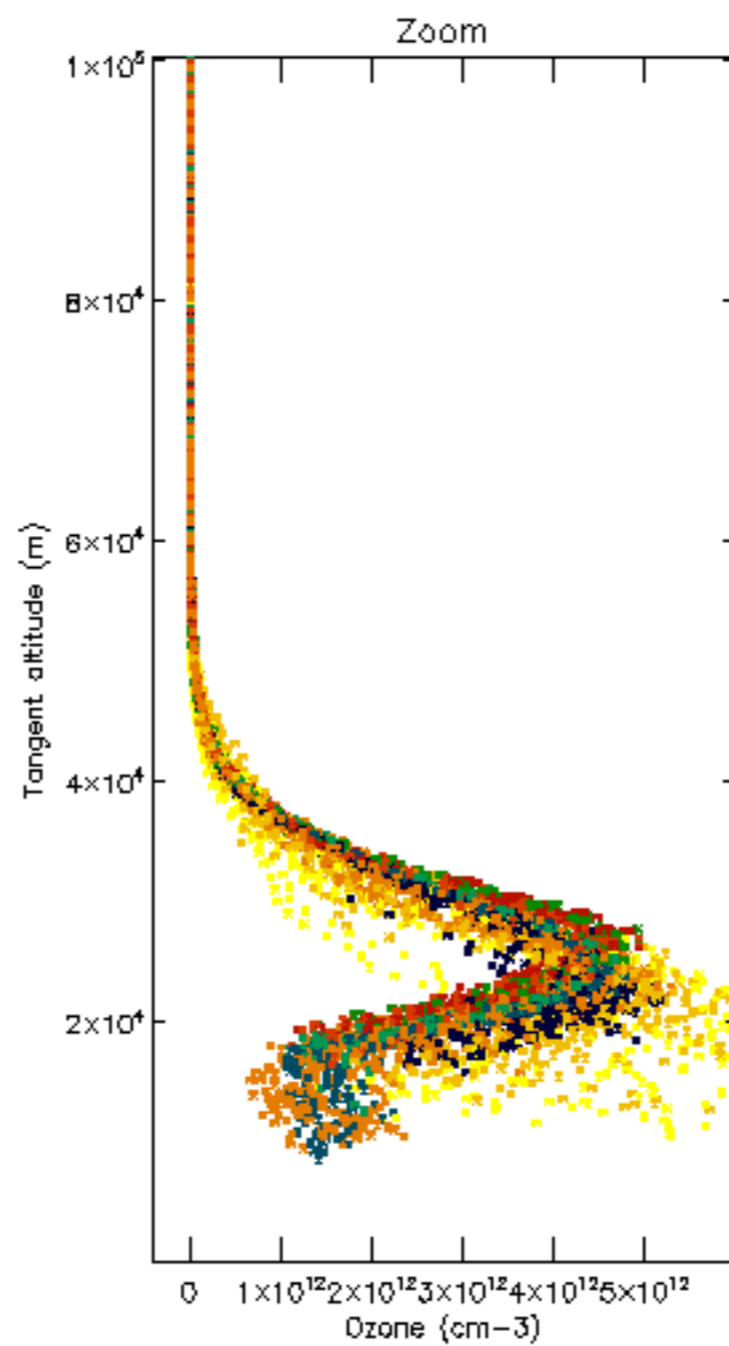
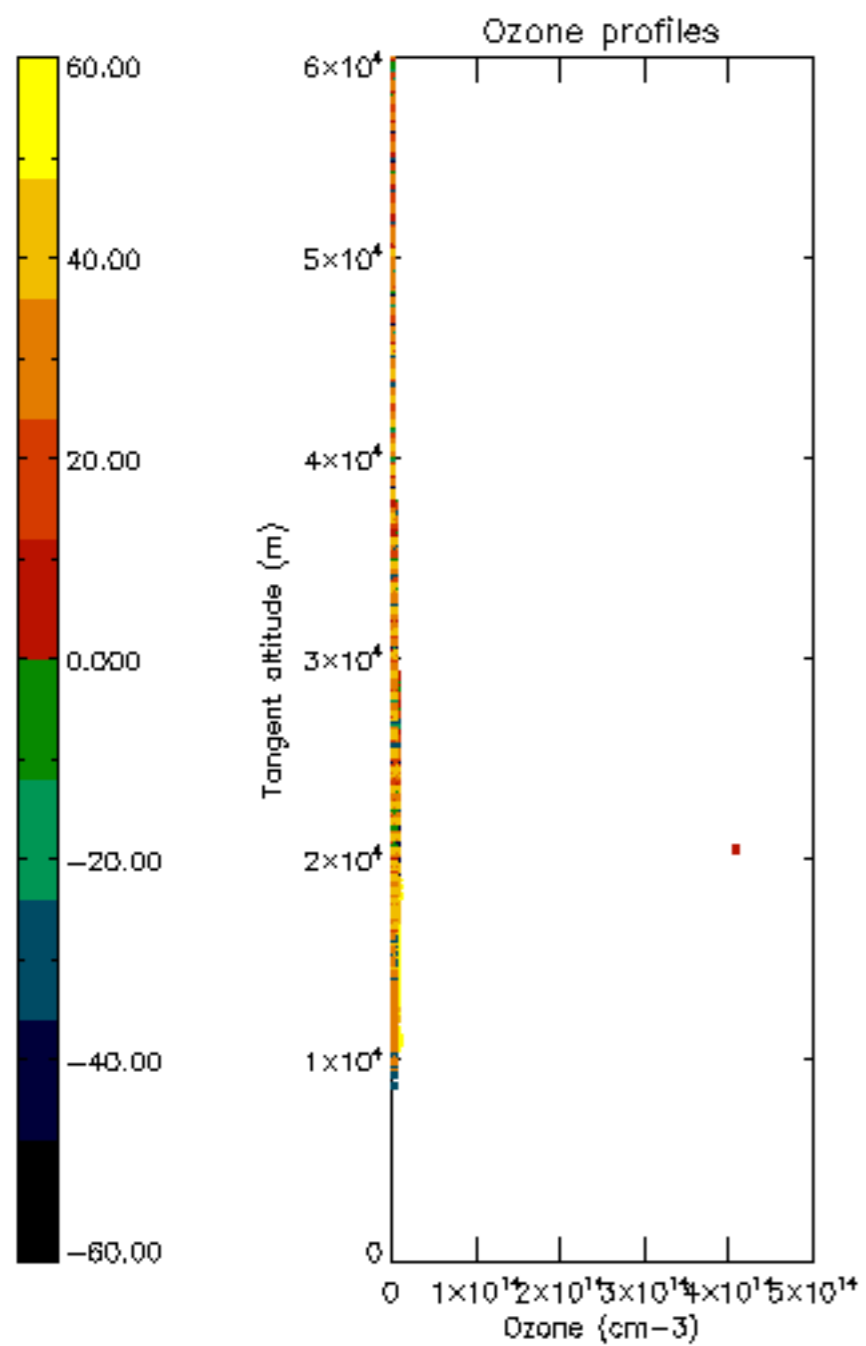
Percentage of star falling outside central band per profile

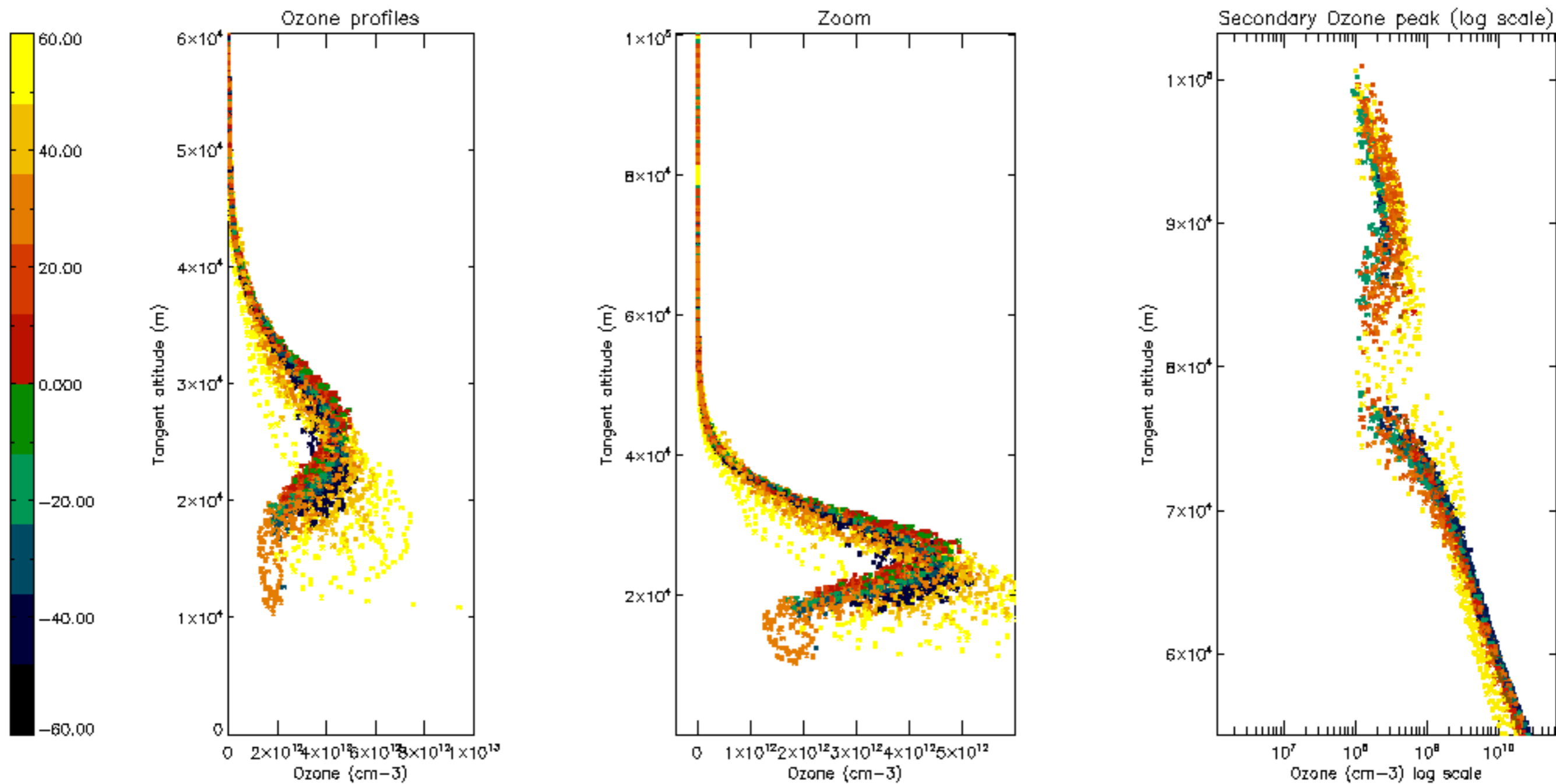


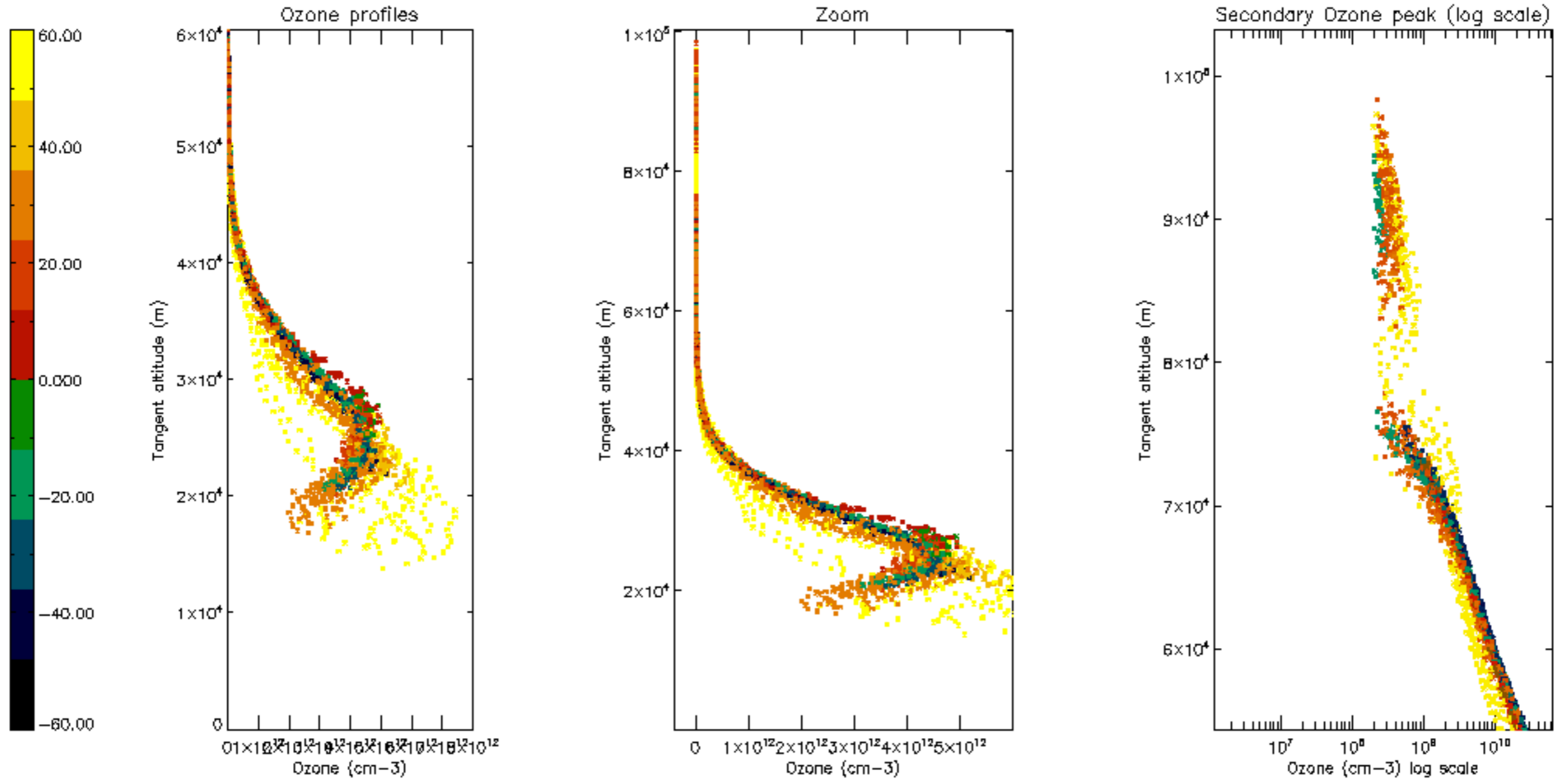
Percentage of saturation errors per profile

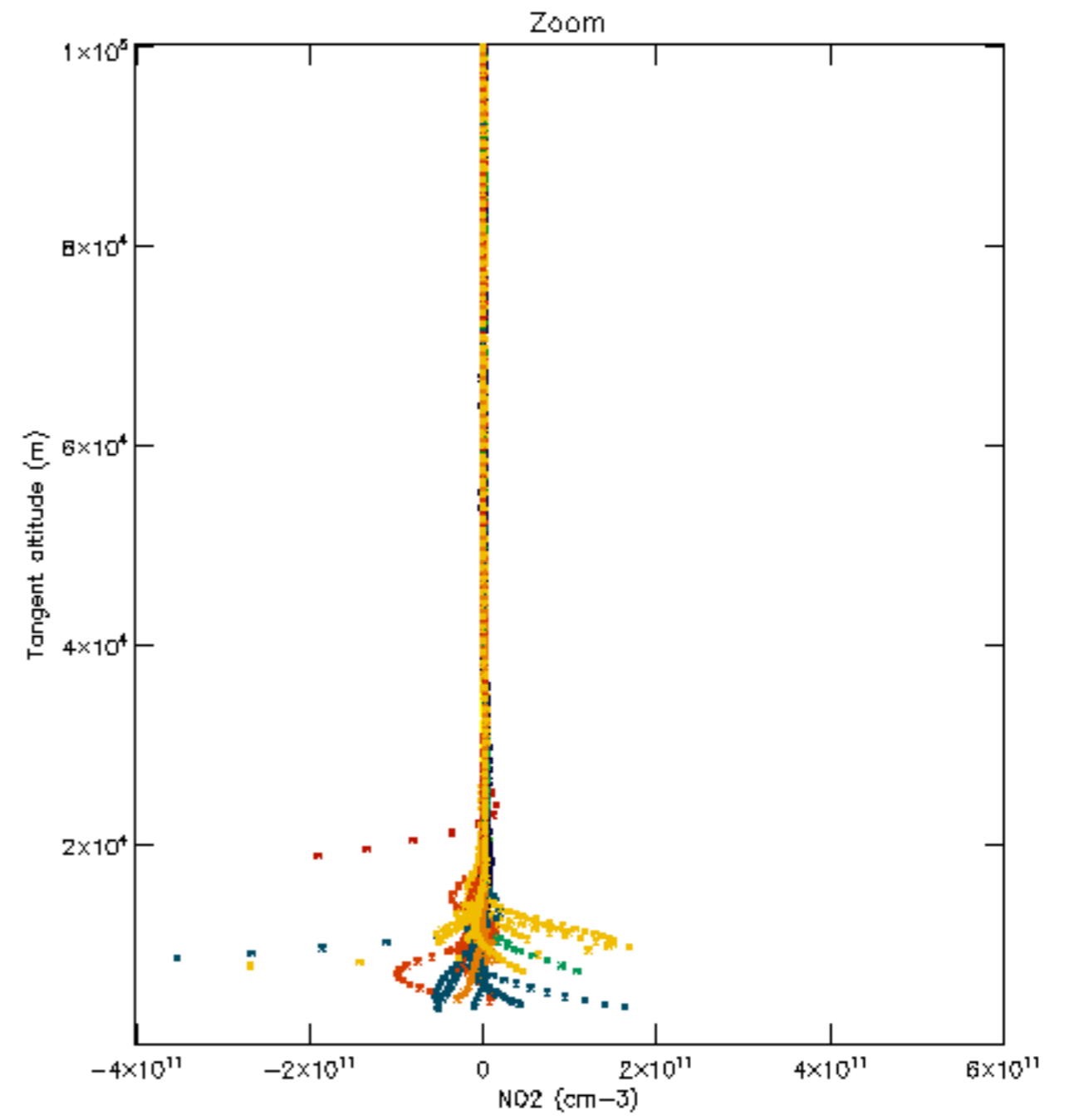
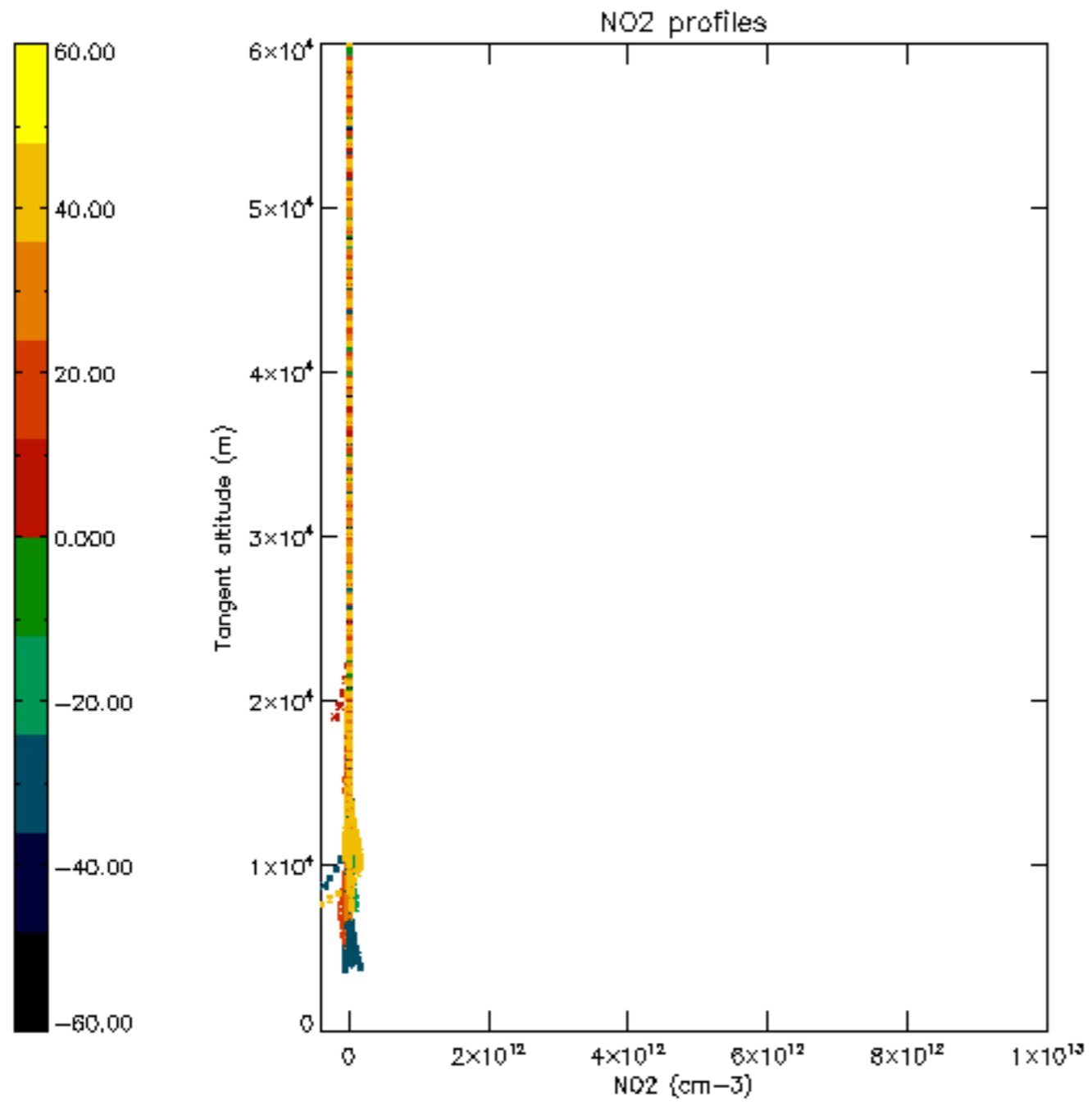


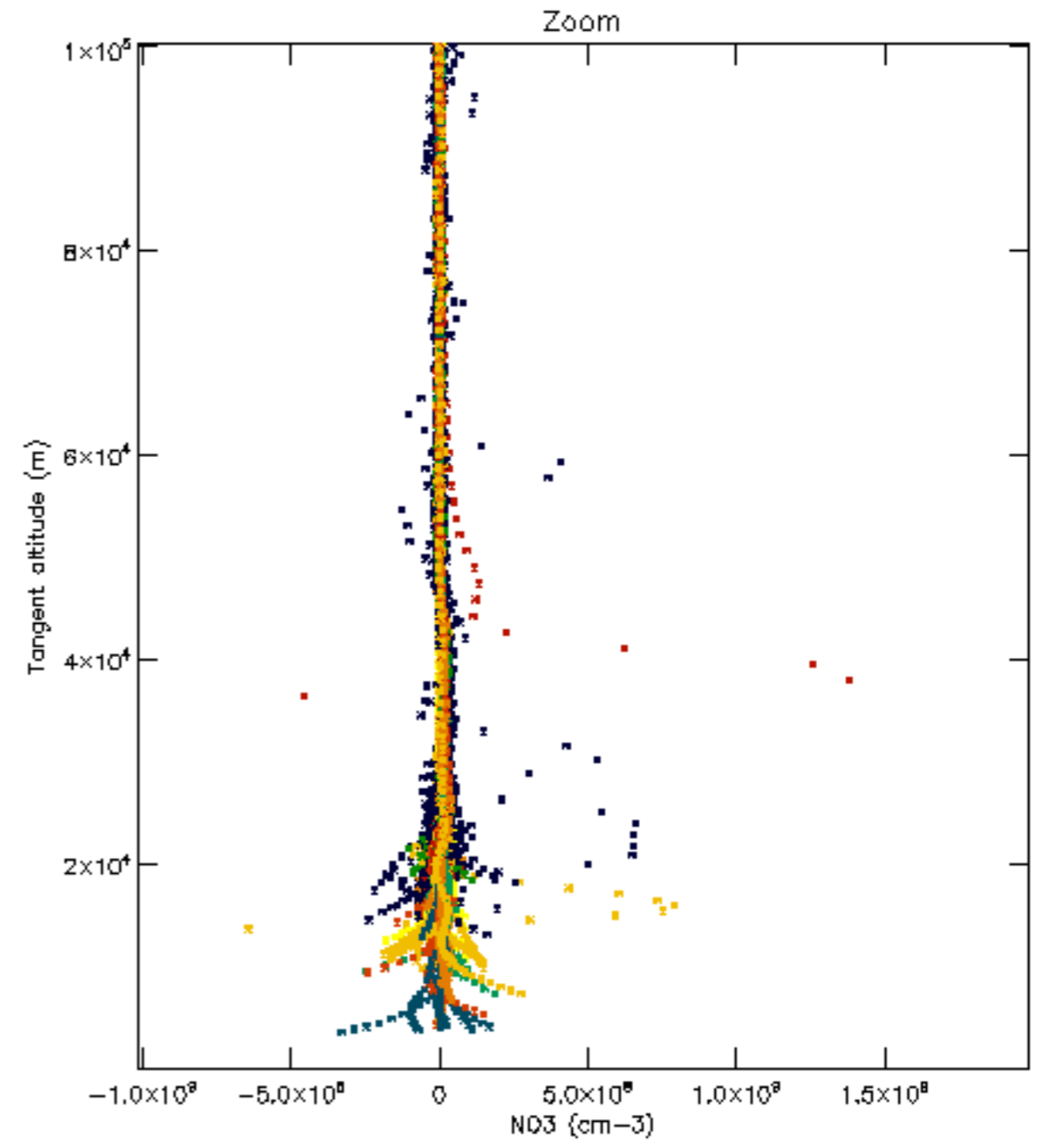
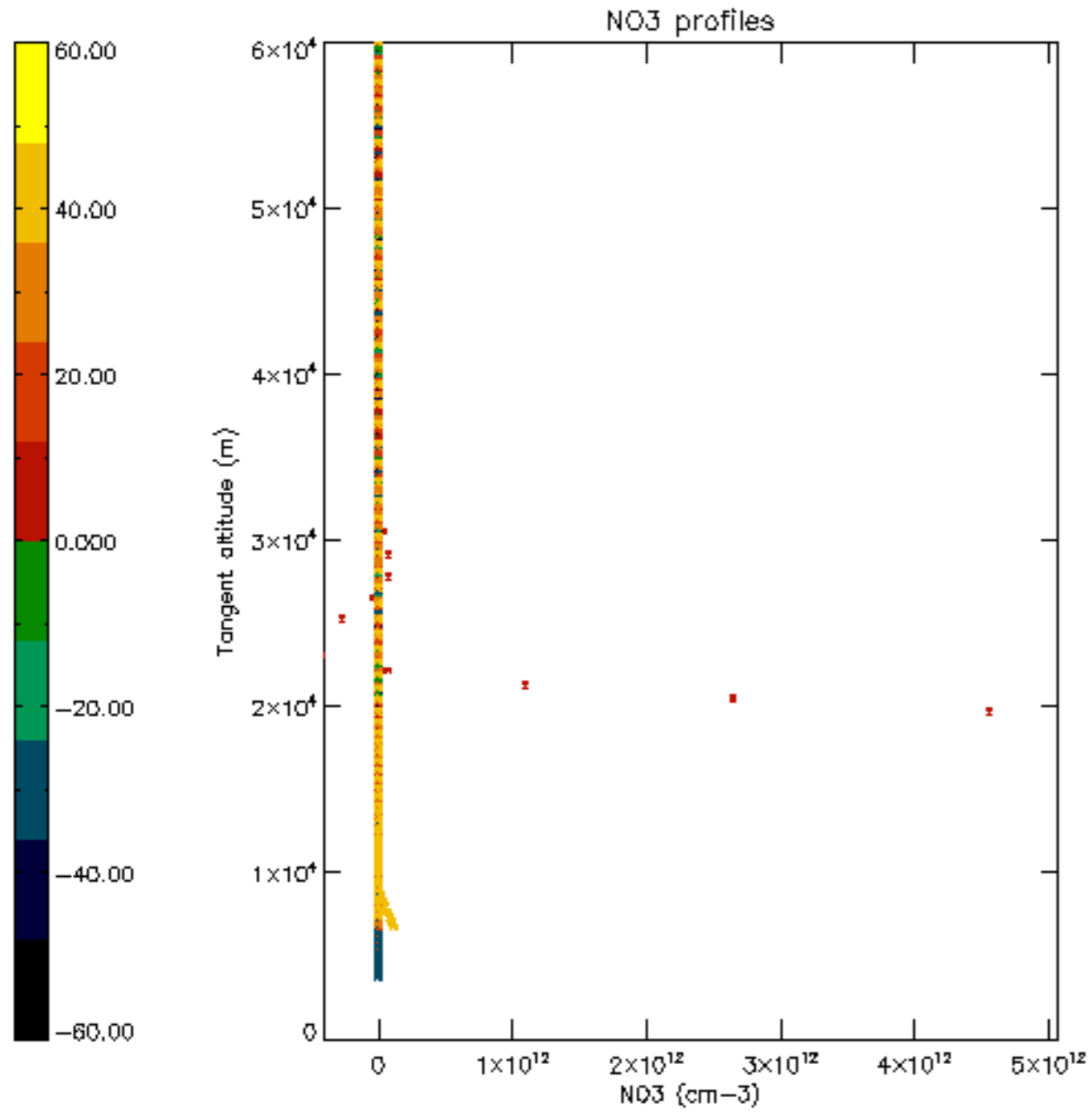


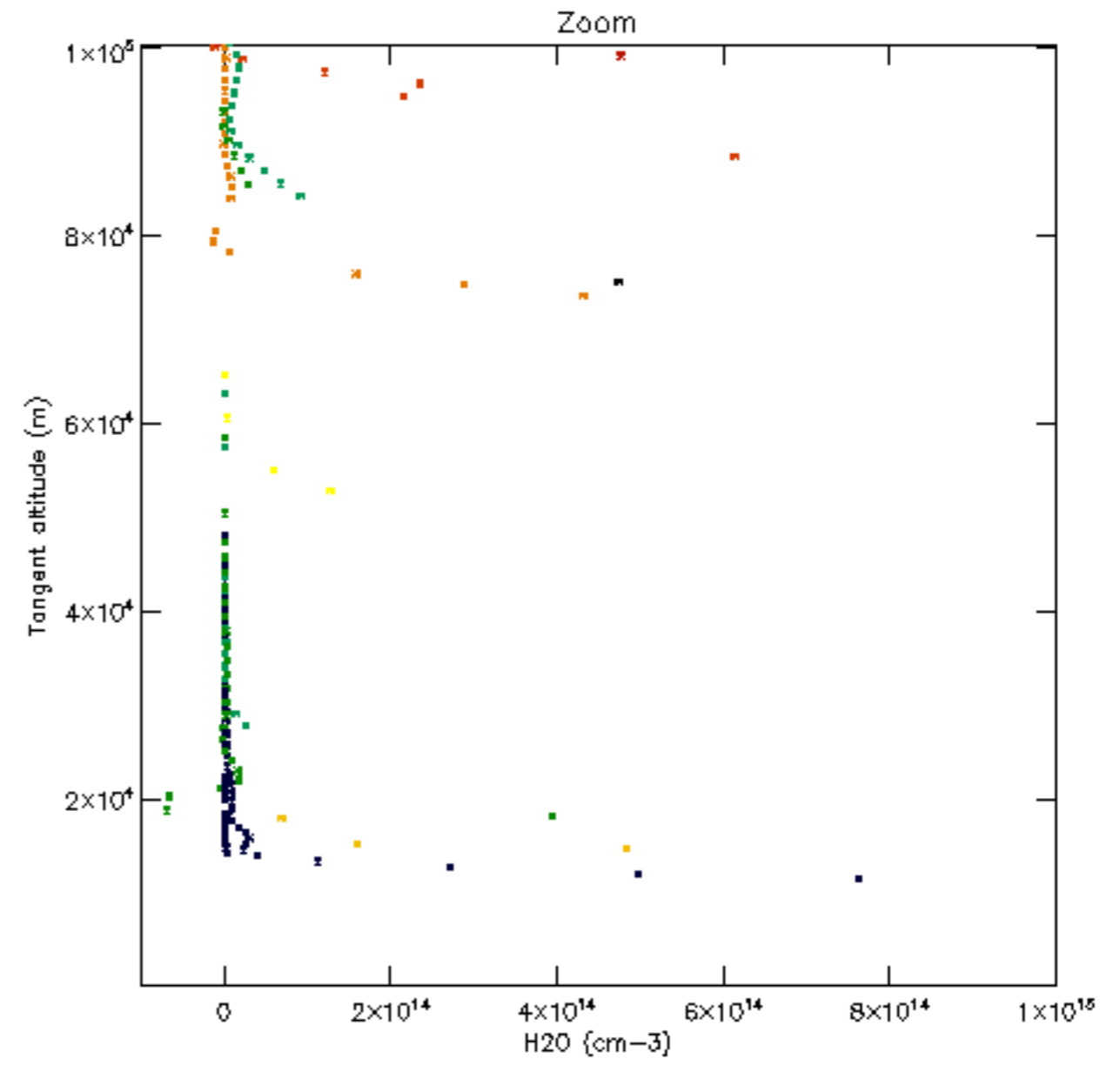
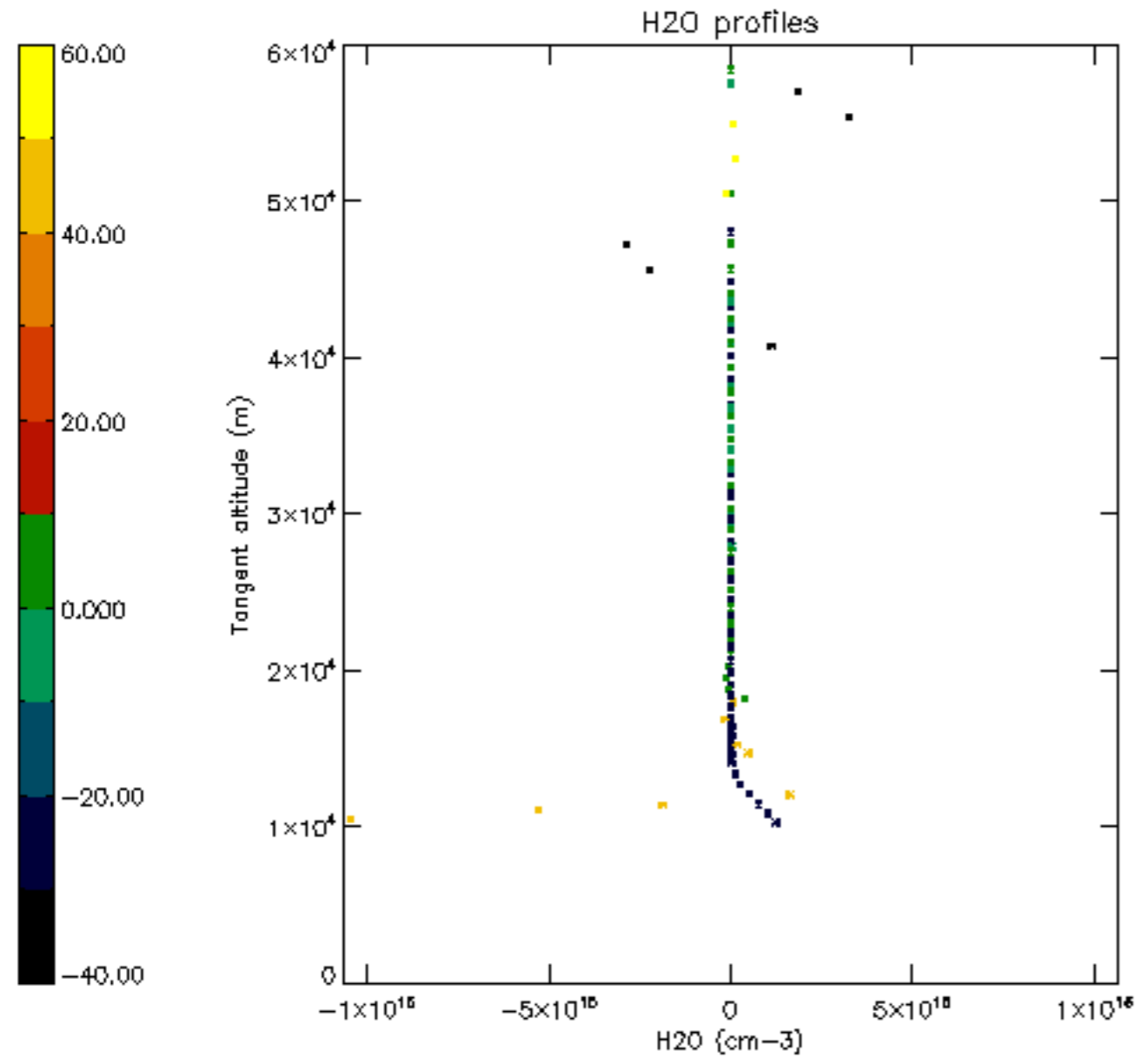


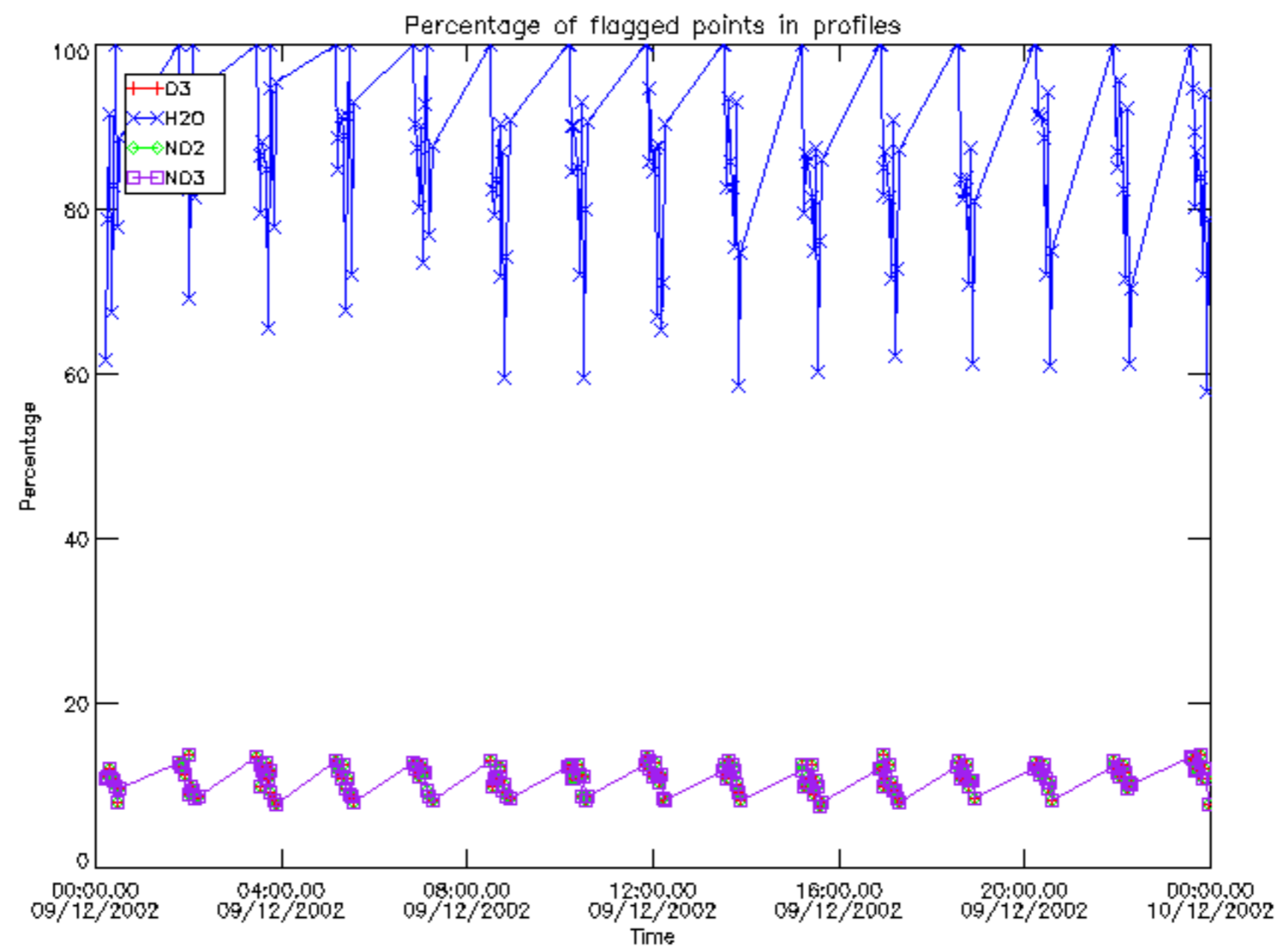




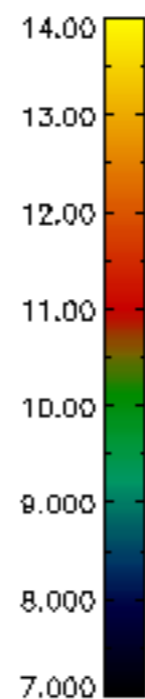
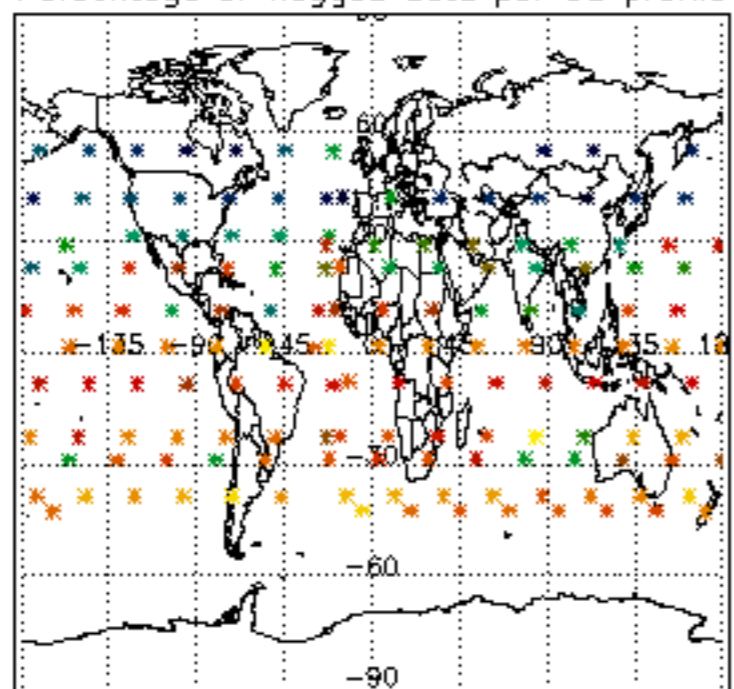




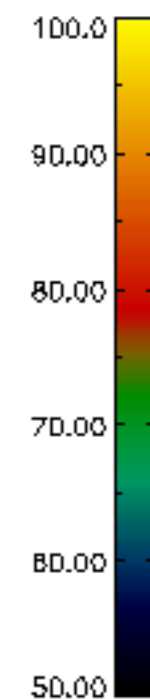
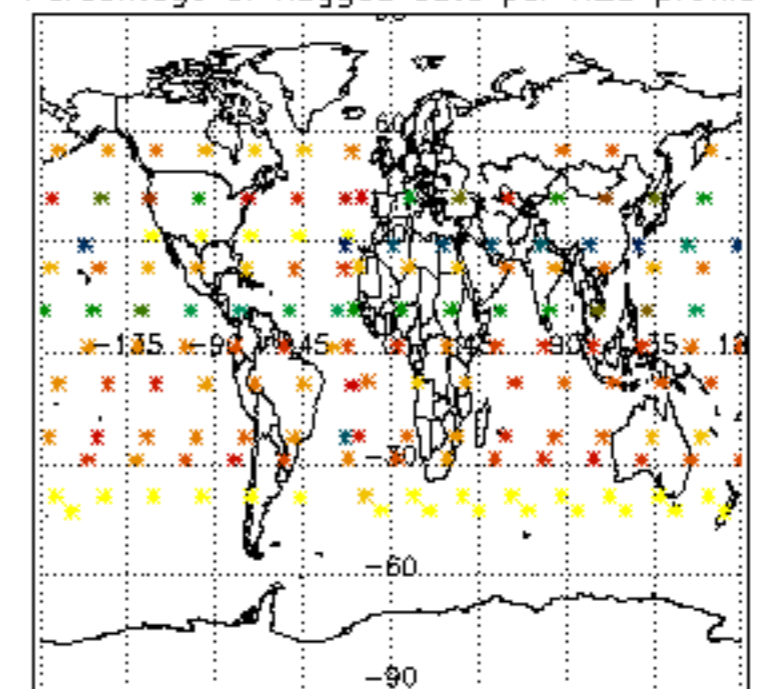




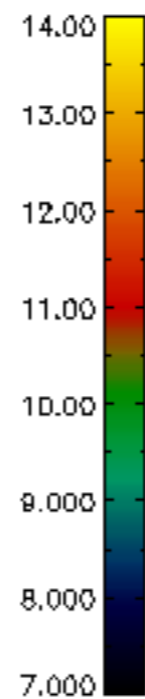
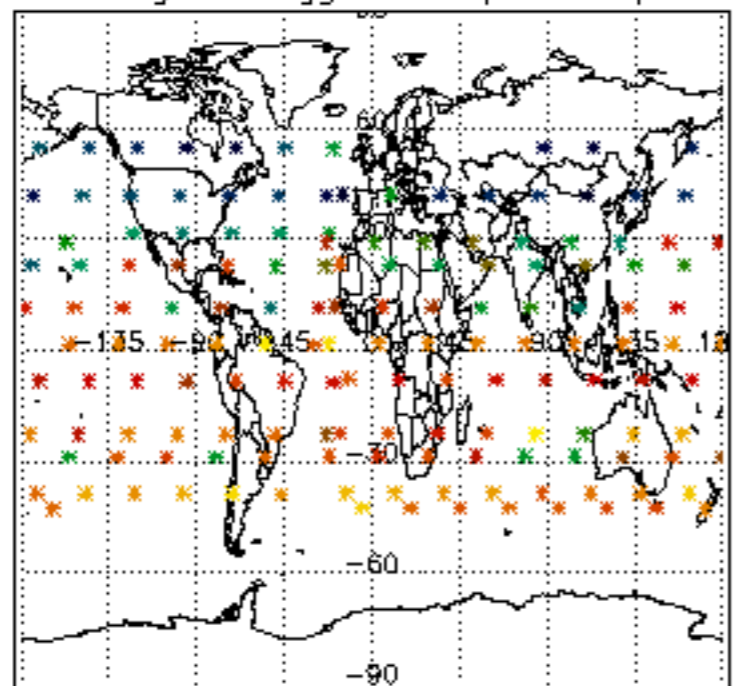
Percentage of flagged data per D3 profile



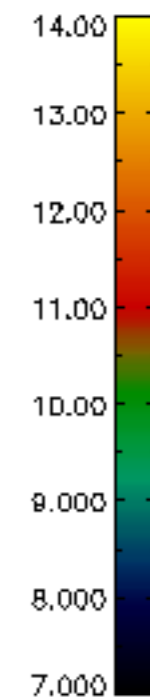
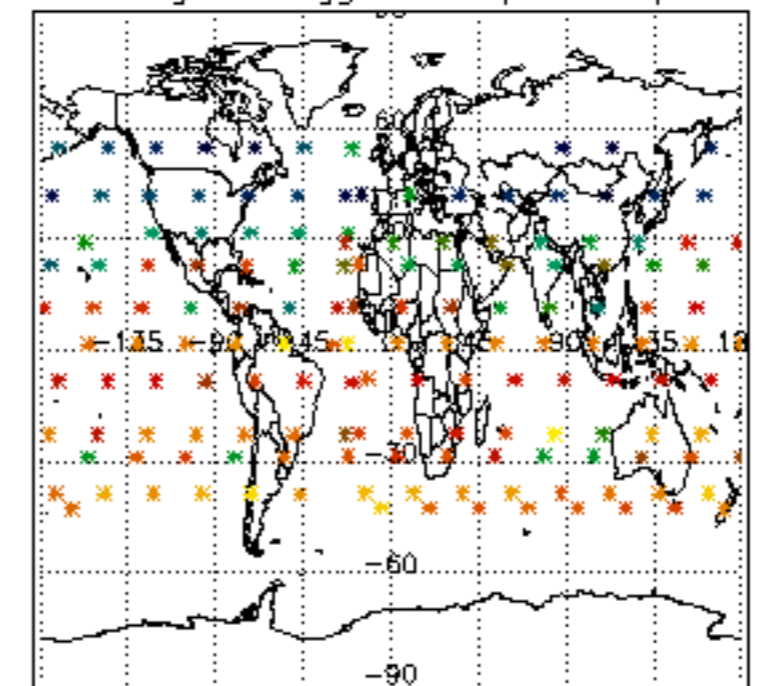
Percentage of flagged data per H2O profile

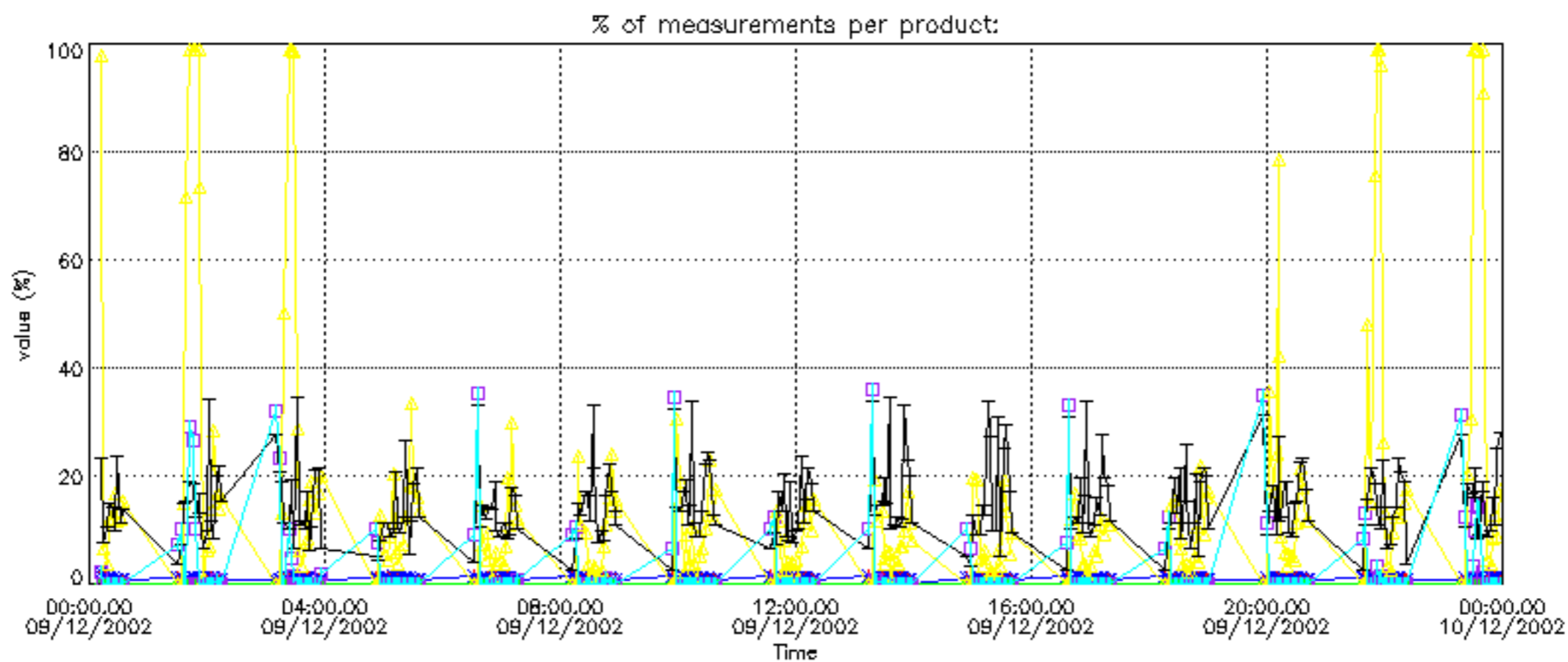


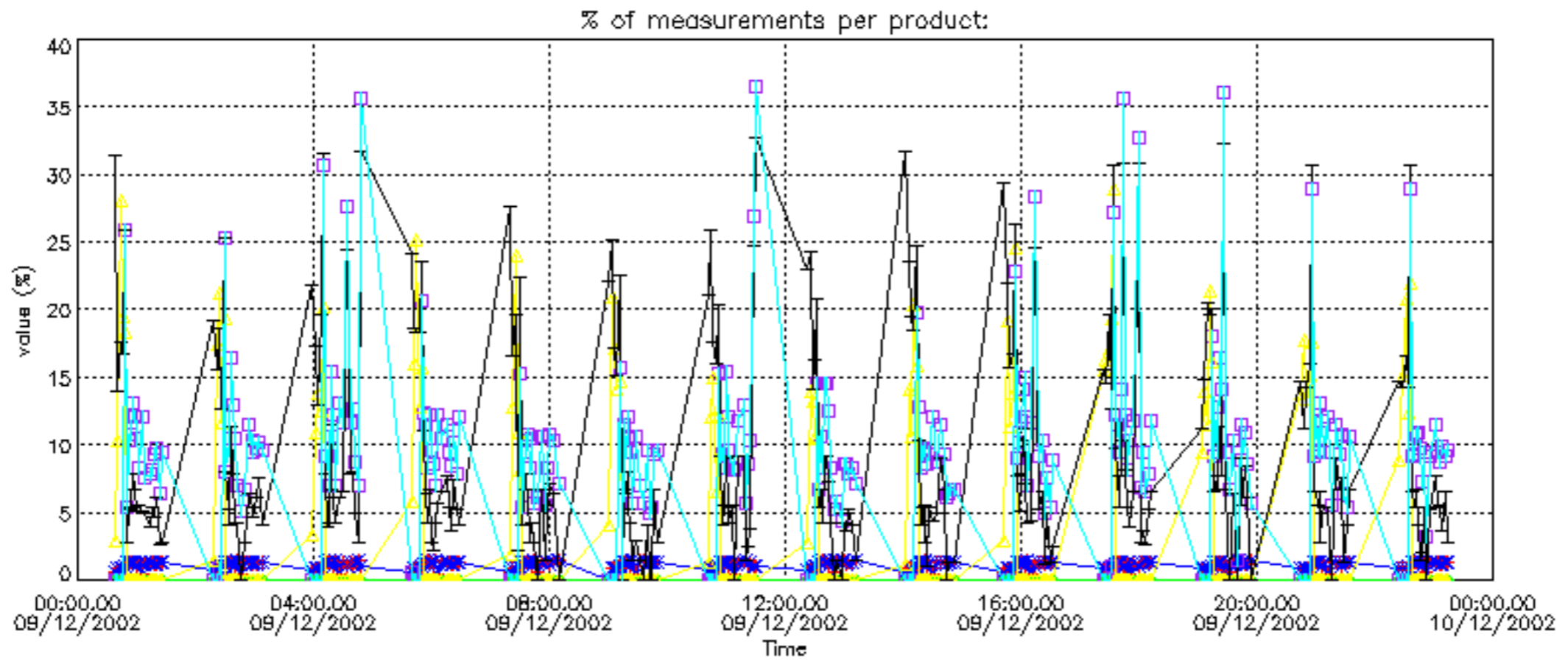
Percentage of flagged data per NO2 profile



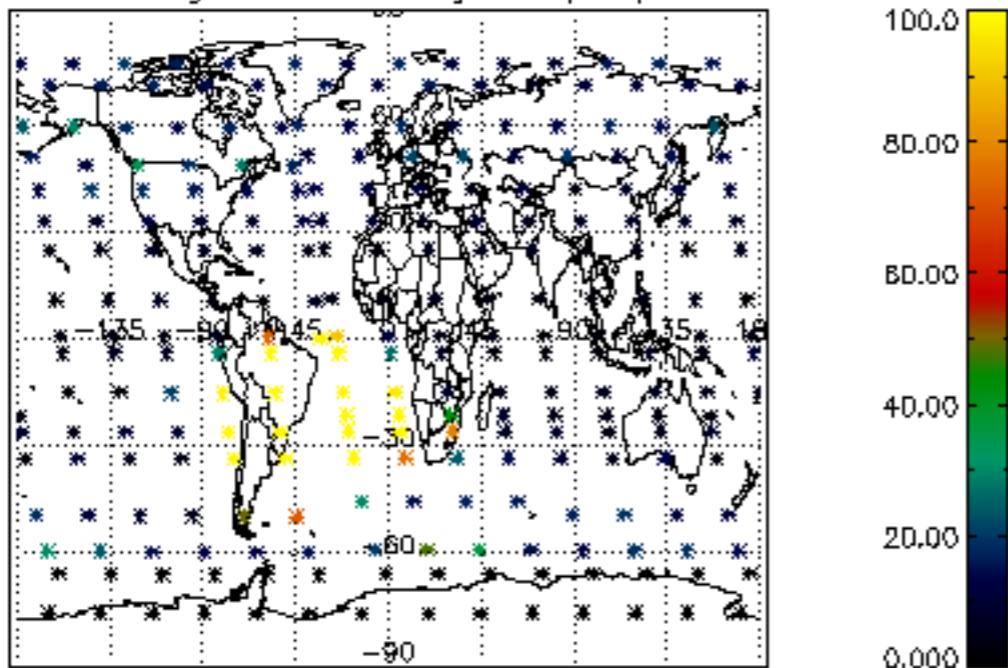
Percentage of flagged data per NO3 profile



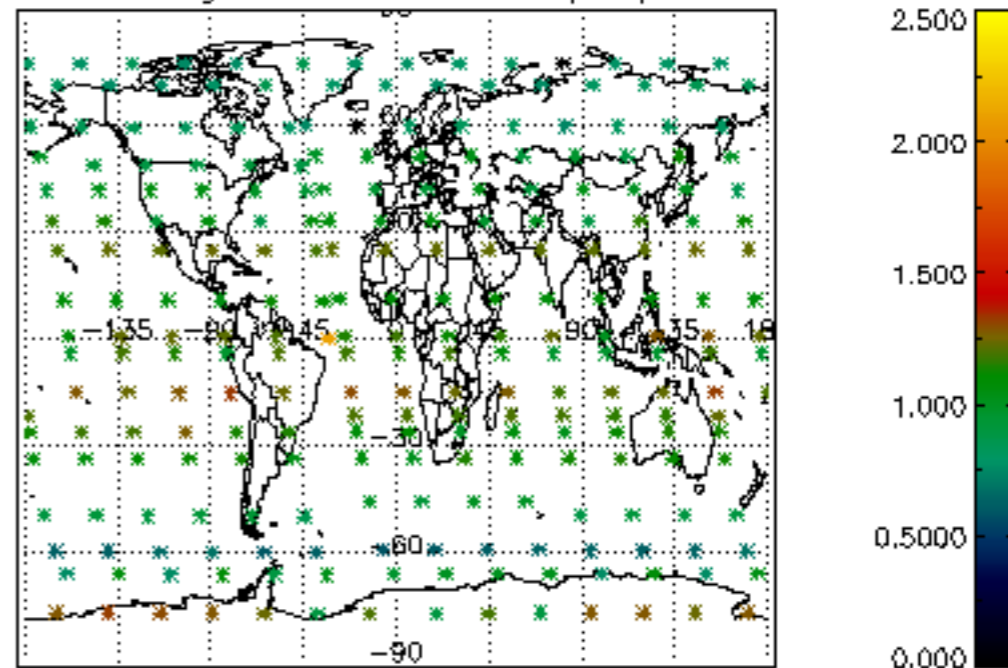




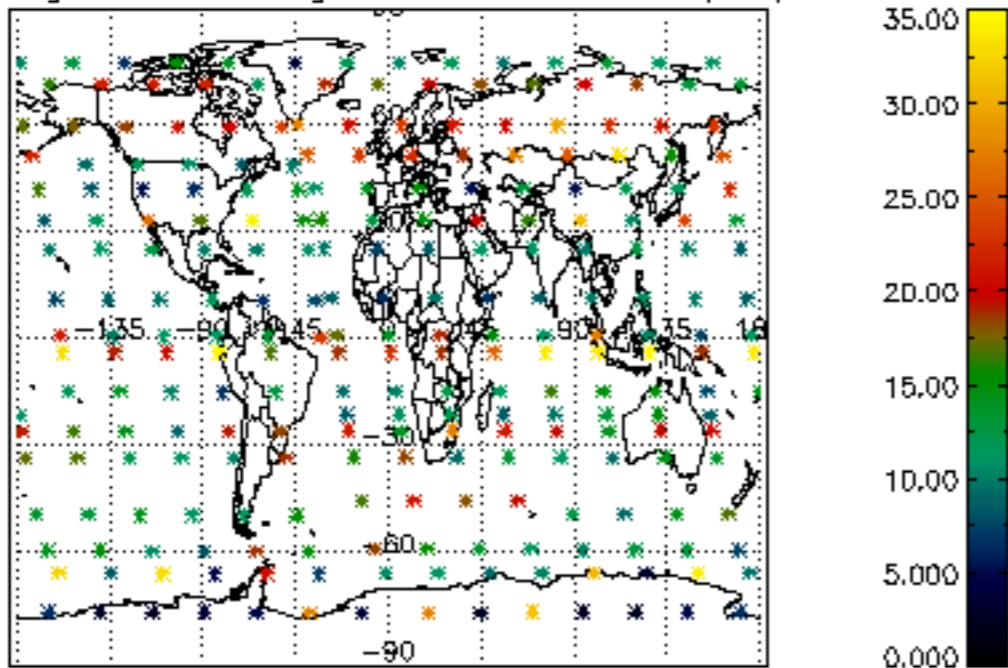
Percentage of cosmic ray hits per profile



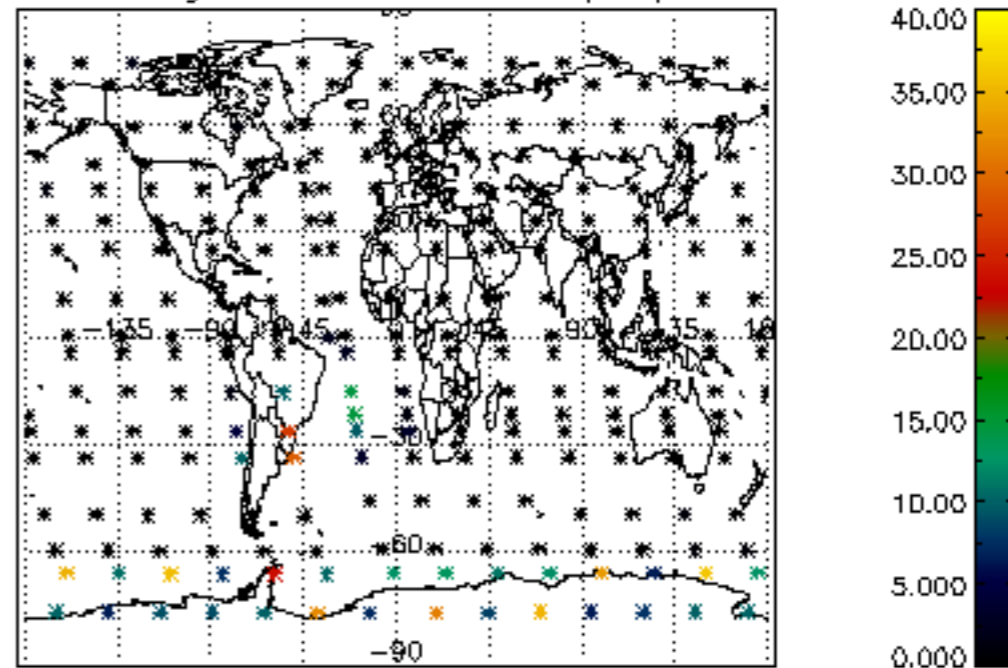
Percentage of datation errors per profile



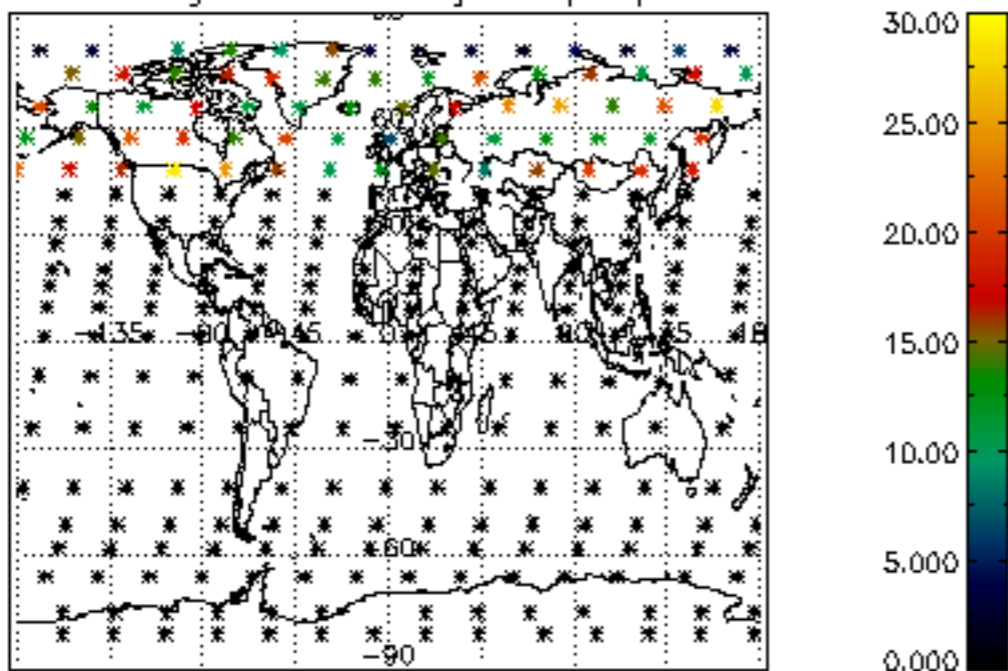
Percentage of star falling outside central band per profile



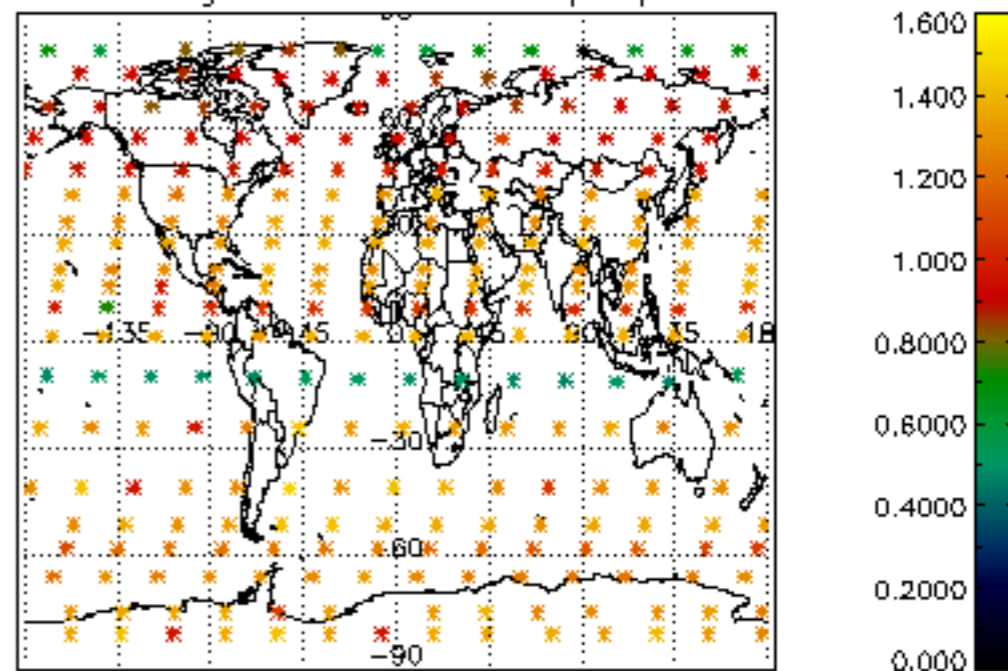
Percentage of saturation errors per profile



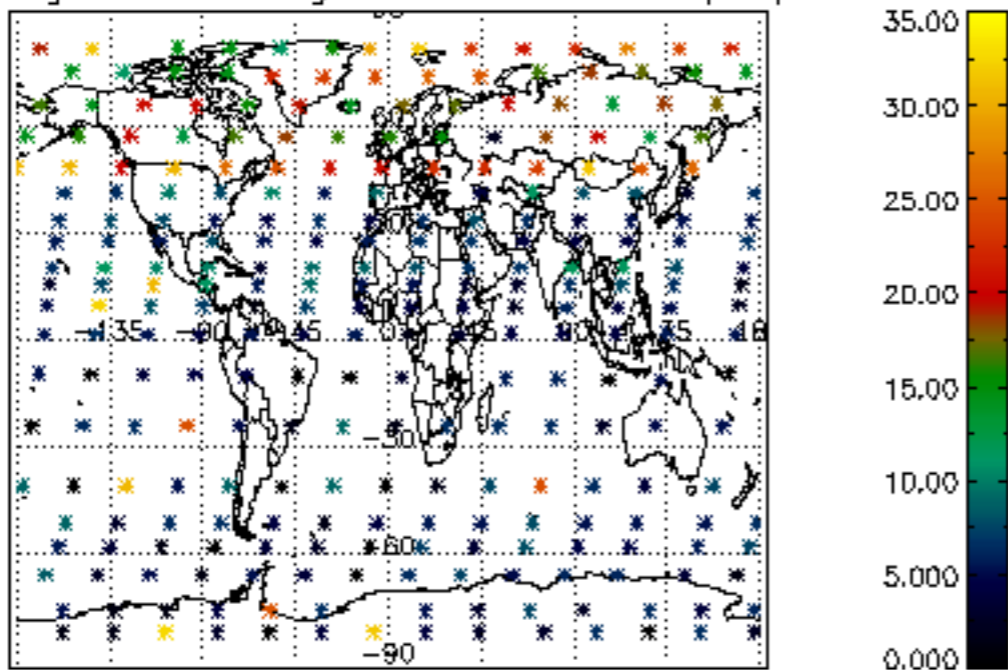
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

