

GOMOS Level 2 Daily Report

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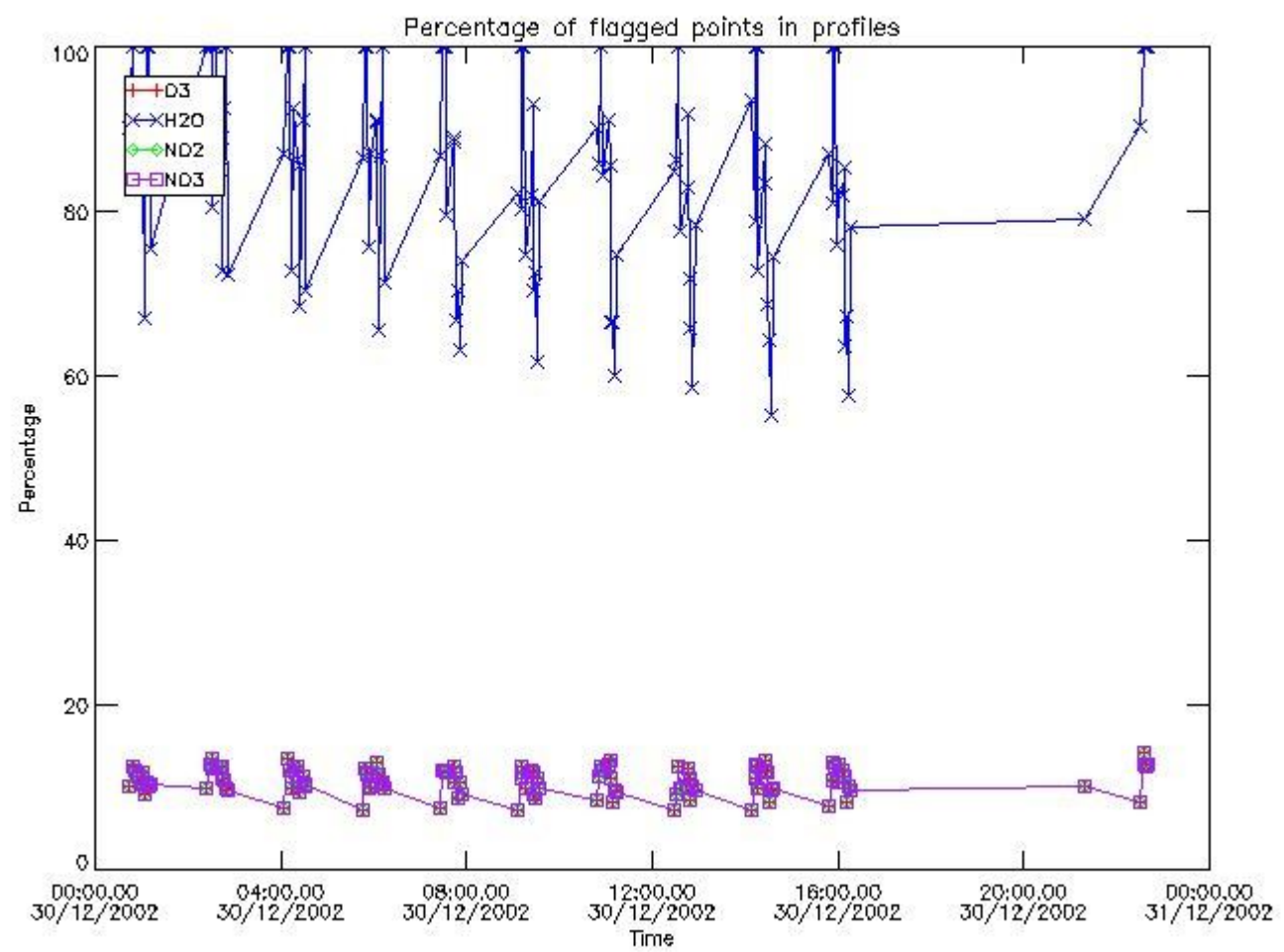
[6. Auxiliary Data Files used for the production reported in section 2](#)

338	GOM_NL__2PRFIN20021230_213046_000000422012_00301_04363_0451.N1	30-DEC-2002 21:30:46	Straylight	41.500	72	34Del Ori	2.2500	30000.	83	4363	No
339	GOM_NL__2PRFIN20021230_213303_000000562012_00301_04363_0452.N1	30-DEC-2002 21:33:03	Tw_i_and_stray	56.000	14	58Alp Ori	0.87000	3000.0	112	4363	No
340	GOM_NL__2PRFIN20021230_213547_000000522012_00301_04363_0453.N1	30-DEC-2002 21:35:47	Bright	52.000	13	87Alp Tau	0.86700	3800.0	104	4363	No
341	GOM_NL__2PRFIN20021230_213803_000000472012_00301_04363_0454.N1	30-DEC-2002 21:38:03	Bright	47.000	151	13Mu Gem	2.8900	3000.0	94	4363	No
342	GOM_NL__2PRFIN20021230_214021_000000402012_00301_04363_0455.N1	30-DEC-2002 21:40:21	Bright	39.500	114	3Iot Aur	2.6930	4600.0	79	4363	No
343	GOM_NL__2PRFIN20021230_214201_000000402012_00301_04363_0456.N1	30-DEC-2002 21:42:01	Bright	39.500	107	37The Aur	2.6490	11000.	79	4363	No
344	GOM_NL__2PRFIN20021230_214403_000000432012_00301_04363_0457.N1	30-DEC-2002 21:44:03	Bright	43.000	6	13Alp Aur	0.080000	3400.0	86	4363	No
345	GOM_NL__2PRFIN20021230_214544_000000392012_00301_04363_0458.N1	30-DEC-2002 21:45:44	Bright	38.500	35	33Alp Per	1.7950	6250.0	77	4363	No
346	GOM_NL__2PRFIN20021230_214700_000000362012_00301_04363_0459.N1	30-DEC-2002 21:47:00	Bright	36.000	160	23Gam Per	2.9300	4700.0	72	4363	No
347	GOM_NL__2PRFIN20021230_215612_000000332012_00301_04363_0460.N1	30-DEC-2002 21:56:12	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	4363	No
348	GOM_NL__2PRFIN20021230_215917_000000512012_00301_04363_0461.N1	30-DEC-2002 21:59:17	Bright	50.500	36	50Alp UMa	1.8000	6300.0	101	4363	No
349	GOM_NL__2PRFIN20021230_220319_000000572012_00301_04363_0462.N1	30-DEC-2002 22:03:19	Bright	56.500	87	64Gam UMa	2.4330	11000.	113	4363	No
350	GOM_NL__2PRFIN20021230_220525_000000482012_00301_04363_0463.N1	30-DEC-2002 22:05:25	Bright	47.500	55	79Zet UMa	2.0600	10200.	95	4363	No
351	GOM_NL__2PRFIN20021230_220741_000000442012_00301_04363_0464.N1	30-DEC-2002 22:07:41	Bright	44.000	39	85Eta UMa	1.8540	24000.	88	4363	No
352	GOM_NL__2PRFIN20021230_221141_000000432012_00301_04363_0465.N1	30-DEC-2002 22:11:41	Bright	43.000	180	27Gam Boo	3.0400	8000.0	86	4363	No
353	GOM_NL__2PRFIN20021230_221518_000000452012_00301_04363_0466.N1	30-DEC-2002 22:15:18	Bright	44.500	83		2.3780	11000.	89	4363	No
354	GOM_NL__2PRFIN20021230_221923_000000552012_00301_04363_0467.N1	30-DEC-2002 22:19:23	Bright	54.500	111	8Eta Boo	2.6800	6000.0	109	4363	No
355	GOM_NL__2PRFIN20021230_222811_000000442012_00301_04363_0468.N1	30-DEC-2002 22:28:11	Tw_i_and_stray	43.500	122	9Alp2Lib	2.7470	9700.0	87	4363	No
356	GOM_NL__2PRFIN20021230_223122_000000622012_00301_04363_0469.N1	30-DEC-2002 22:31:22	Dark	62.000	15	67Alp Vir	0.97600	28000.	124	4363	No
357	GOM_NL__2PRFIN20021230_223456_000000402012_00301_04363_0470.N1	30-DEC-2002 22:34:56	Dark	39.500	109	Bet Lup	2.6770	26000.	79	4363	No
358	GOM_NL__2PRFIN20021230_223624_000000402012_00301_04363_0471.N1	30-DEC-2002 22:36:24	Dark	40.000	78	Alp Lup	2.3040	28000.	80	4363	No
359	GOM_NL__2PRFIN20021230_223750_000000412012_00301_04363_0472.N1	30-DEC-2002 22:37:50	Dark	41.000	95	Zet Cen	2.5450	26000.	82	4363	No
360	GOM_NL__2PRFIN20021230_223935_000000402012_00301_04363_0473.N1	30-DEC-2002 22:39:35	Dark	40.000	77	Eps Cen	2.3030	28000.	80	4363	No

3. Quality information per product

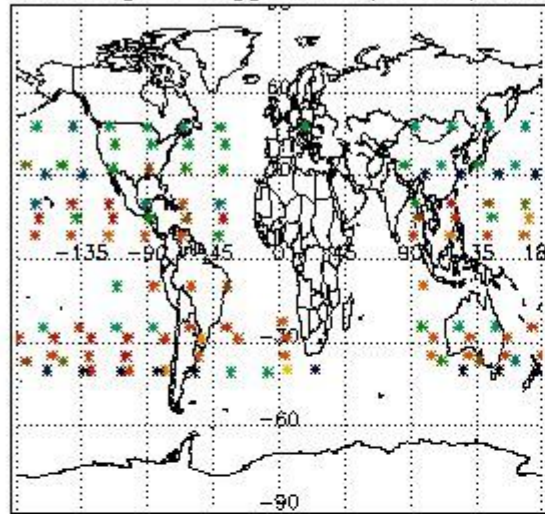
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

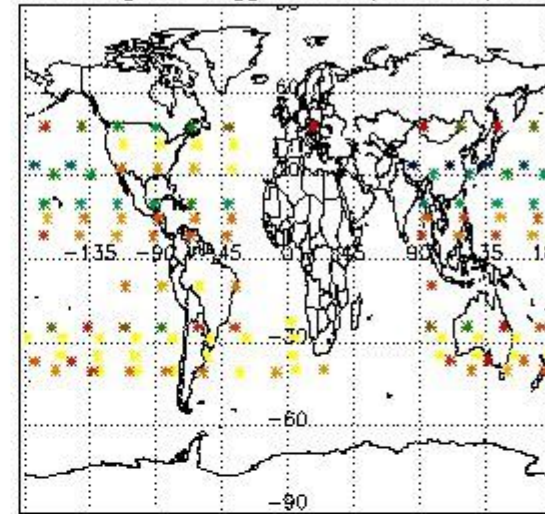


3.2 Plot quality information per product (world map)

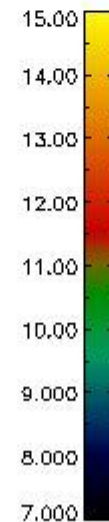
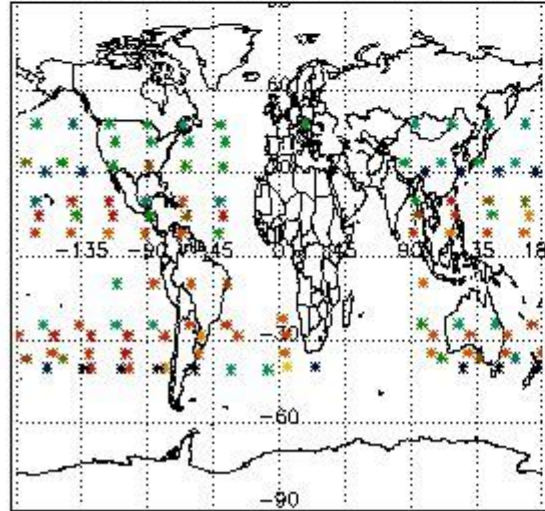
Percentage of flagged data per O3 profile



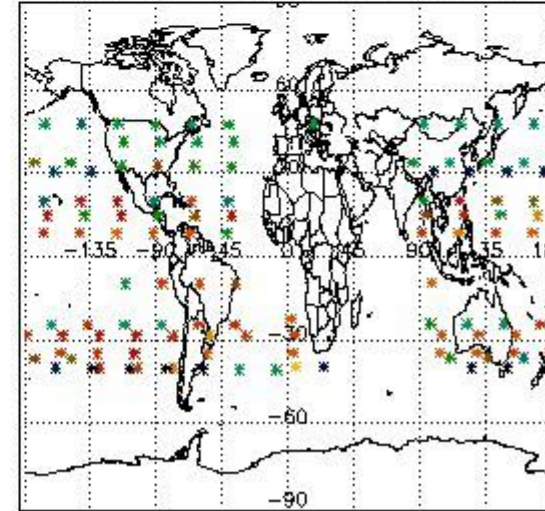
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

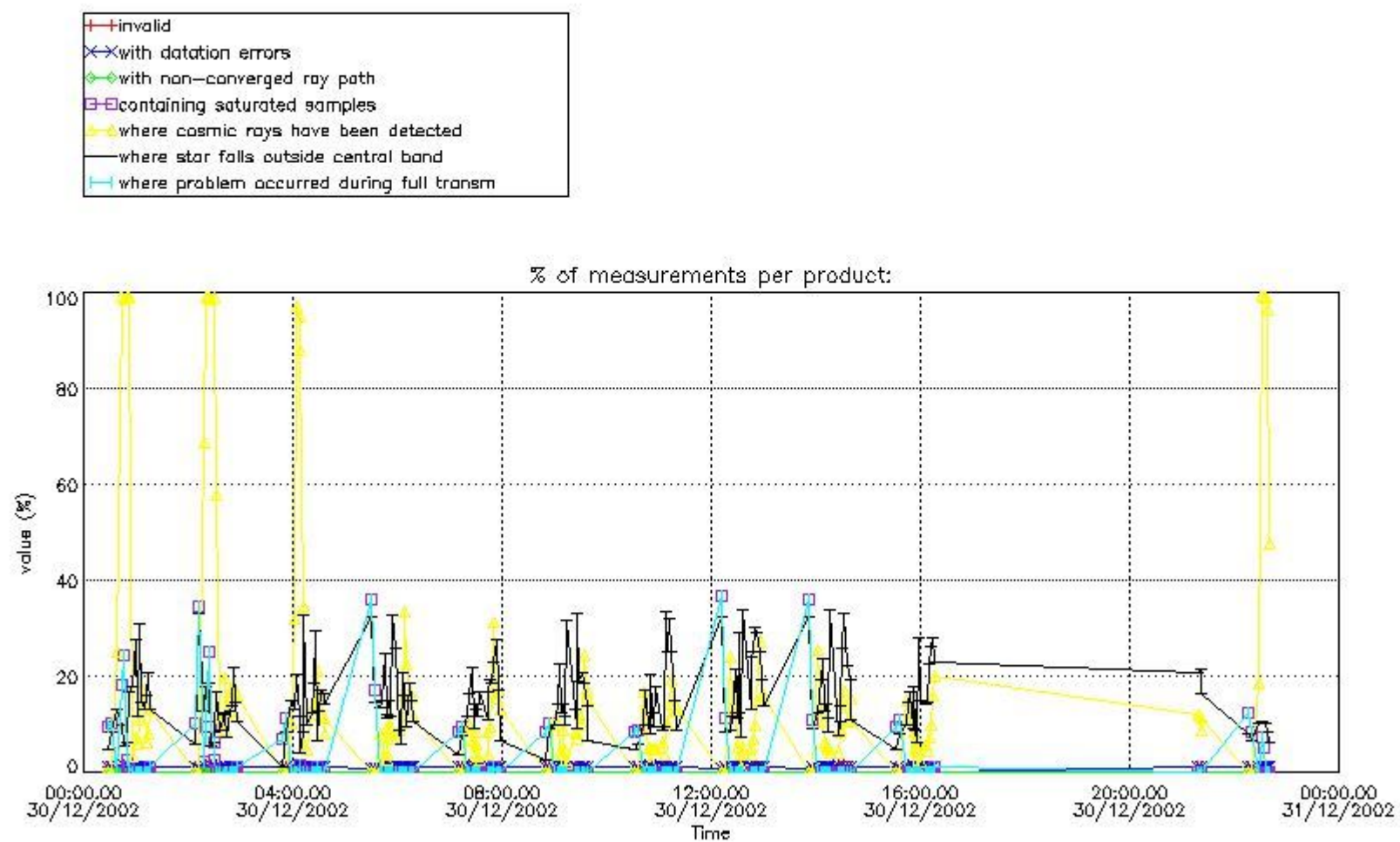


4. Level 1 quality information per product

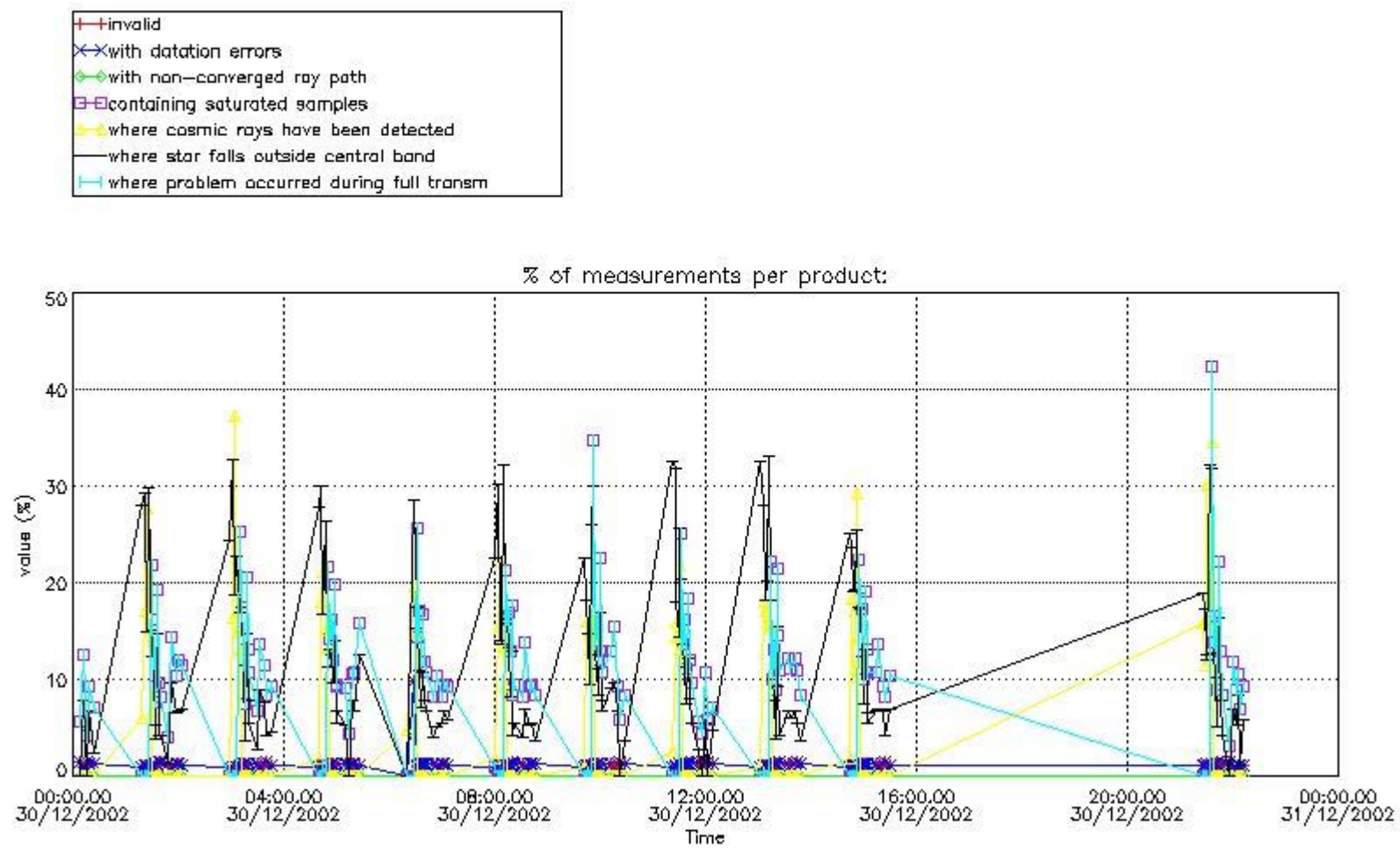
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

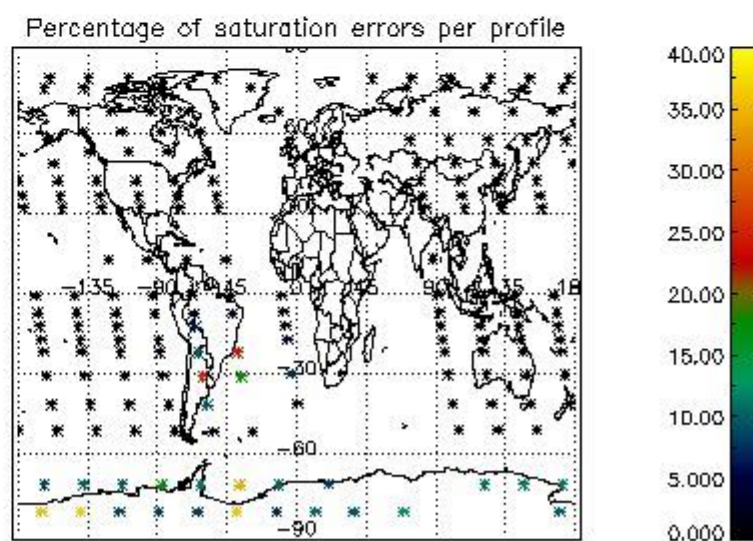
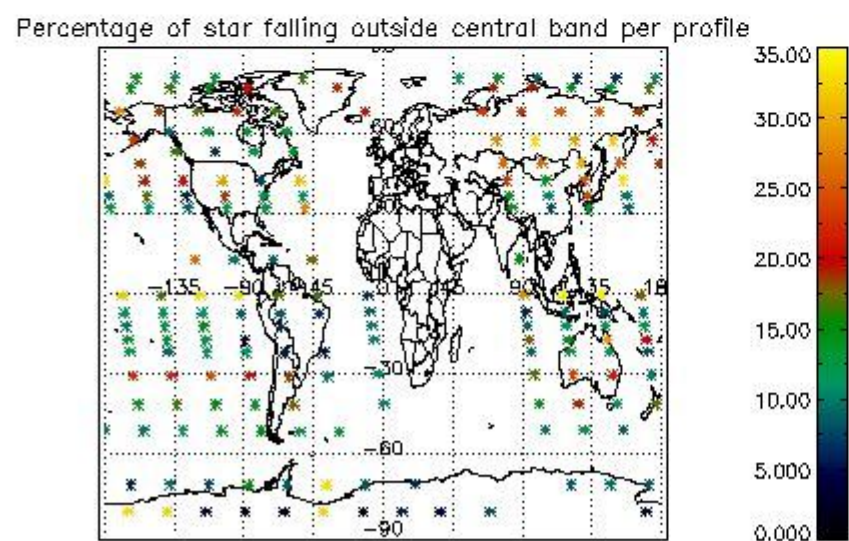
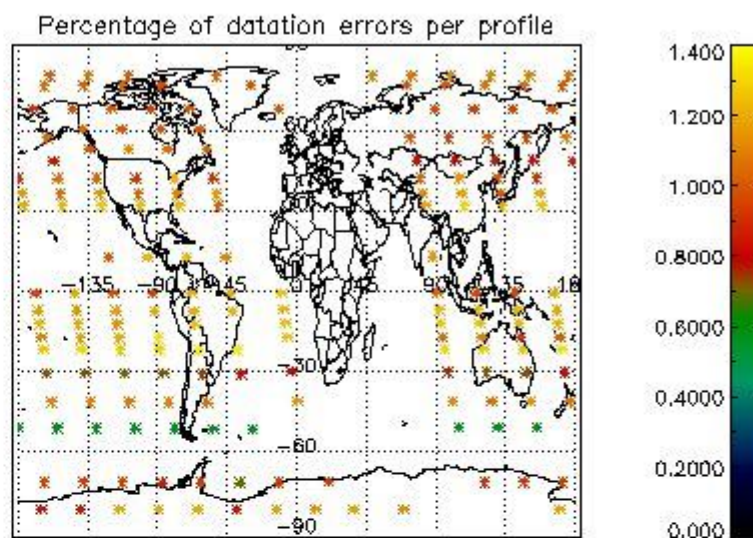
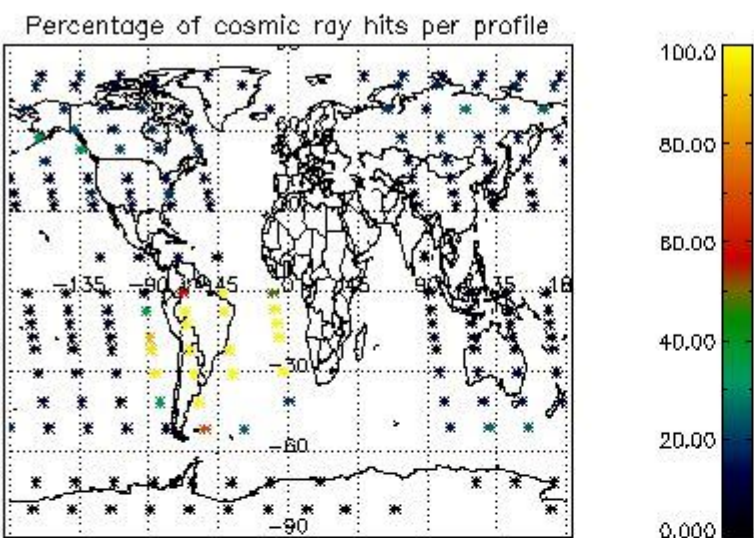


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

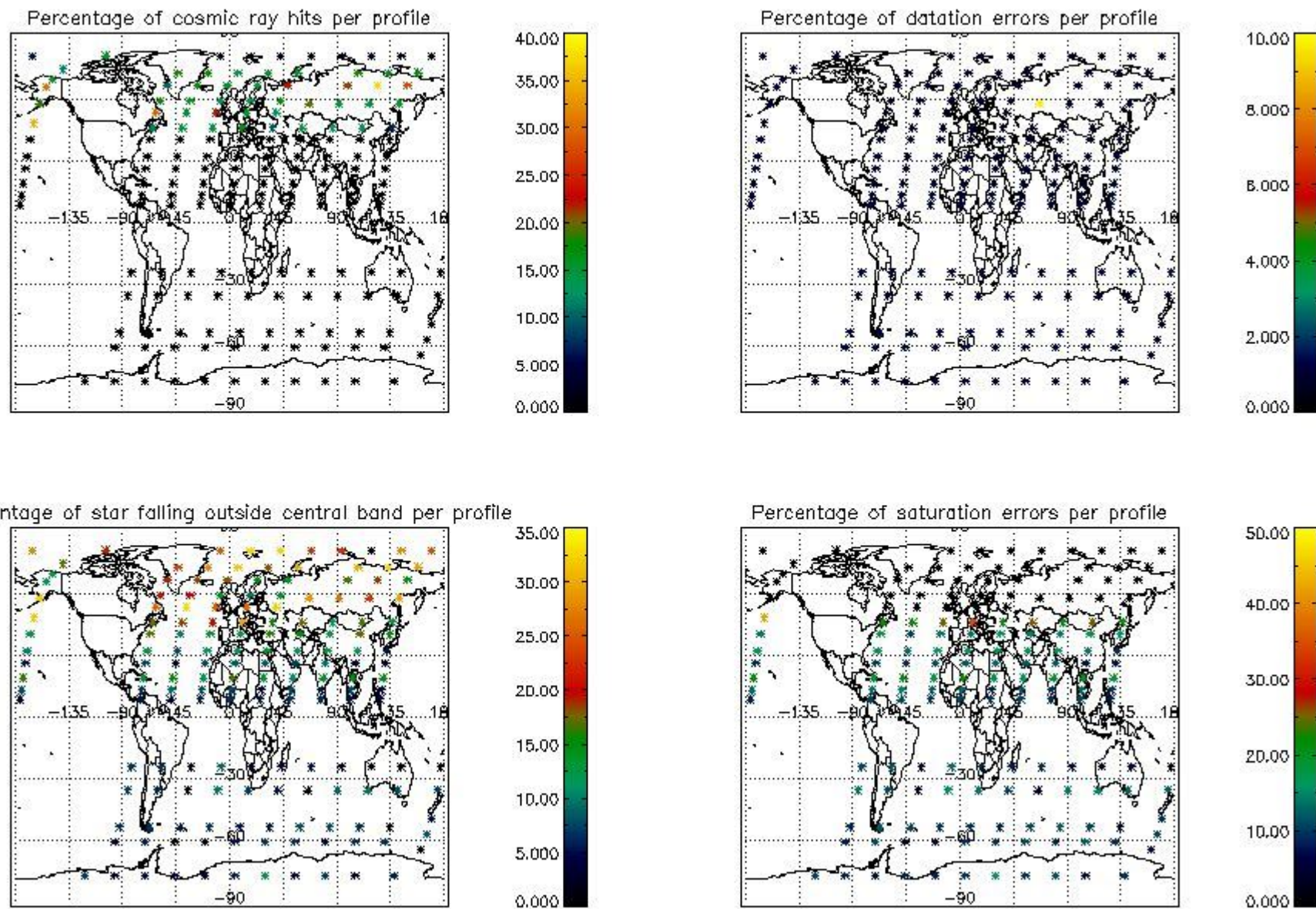


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

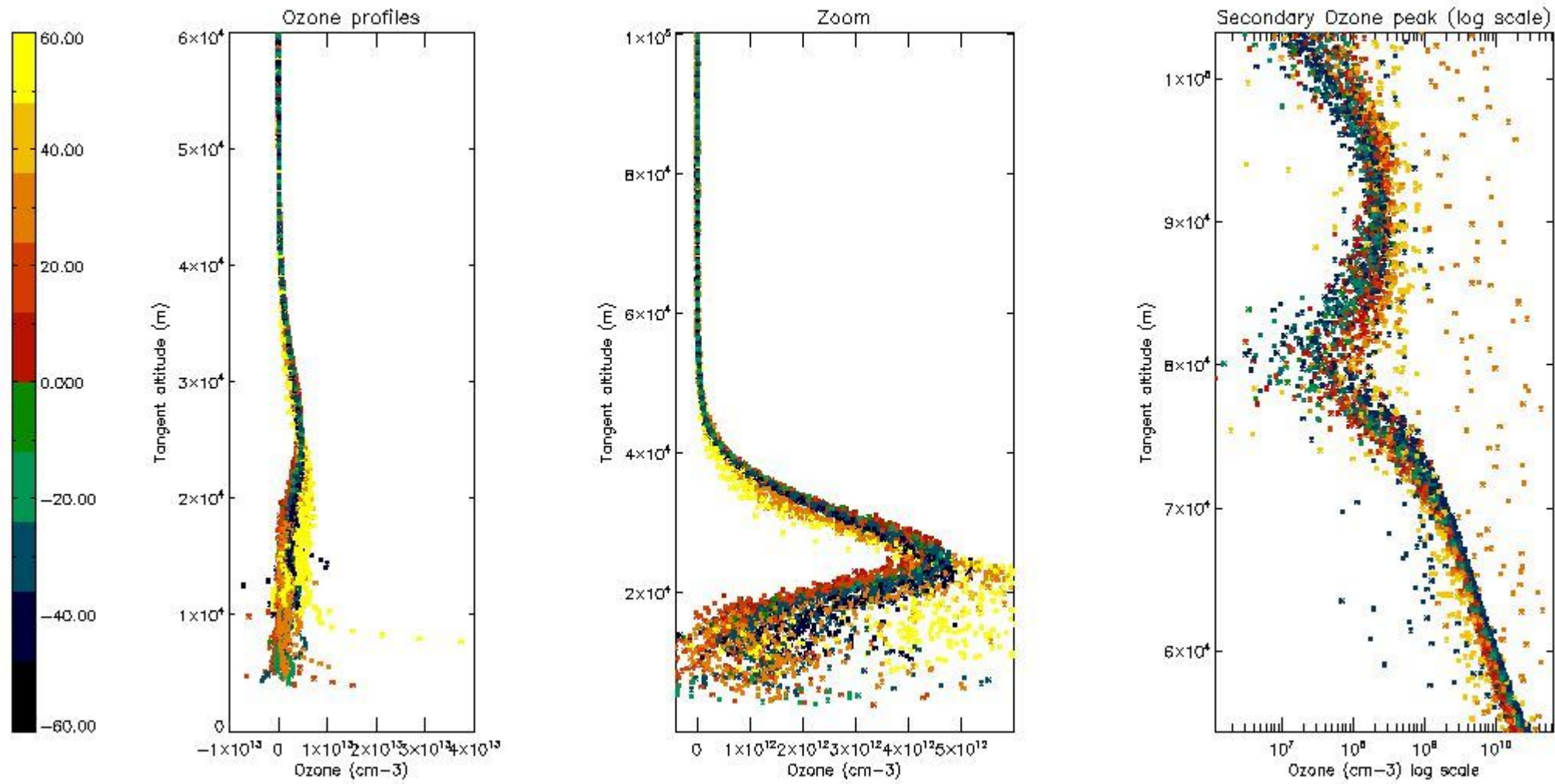
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	34
STD < 20	20

STD < 10	16
STD < 5	12

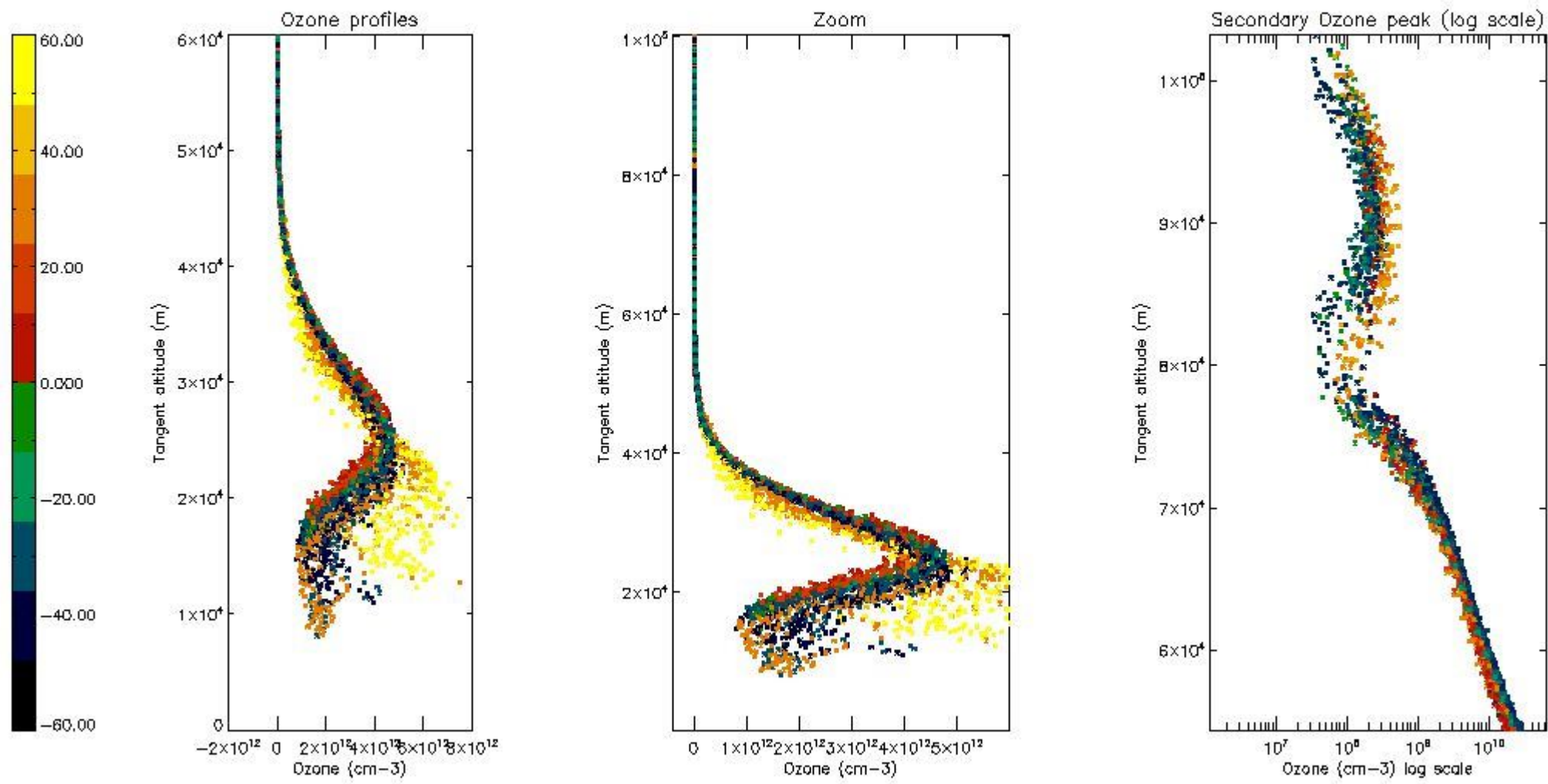
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



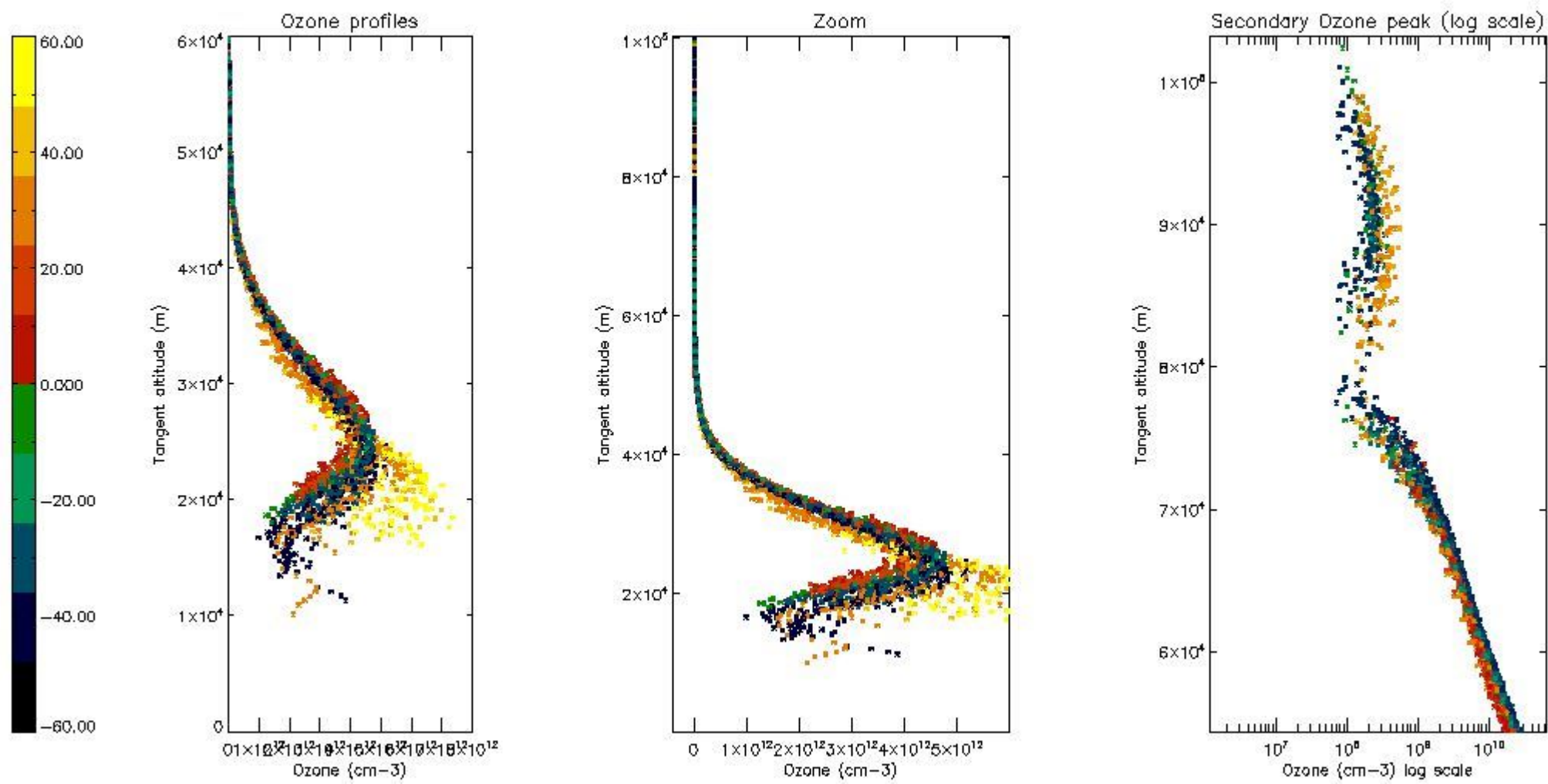
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



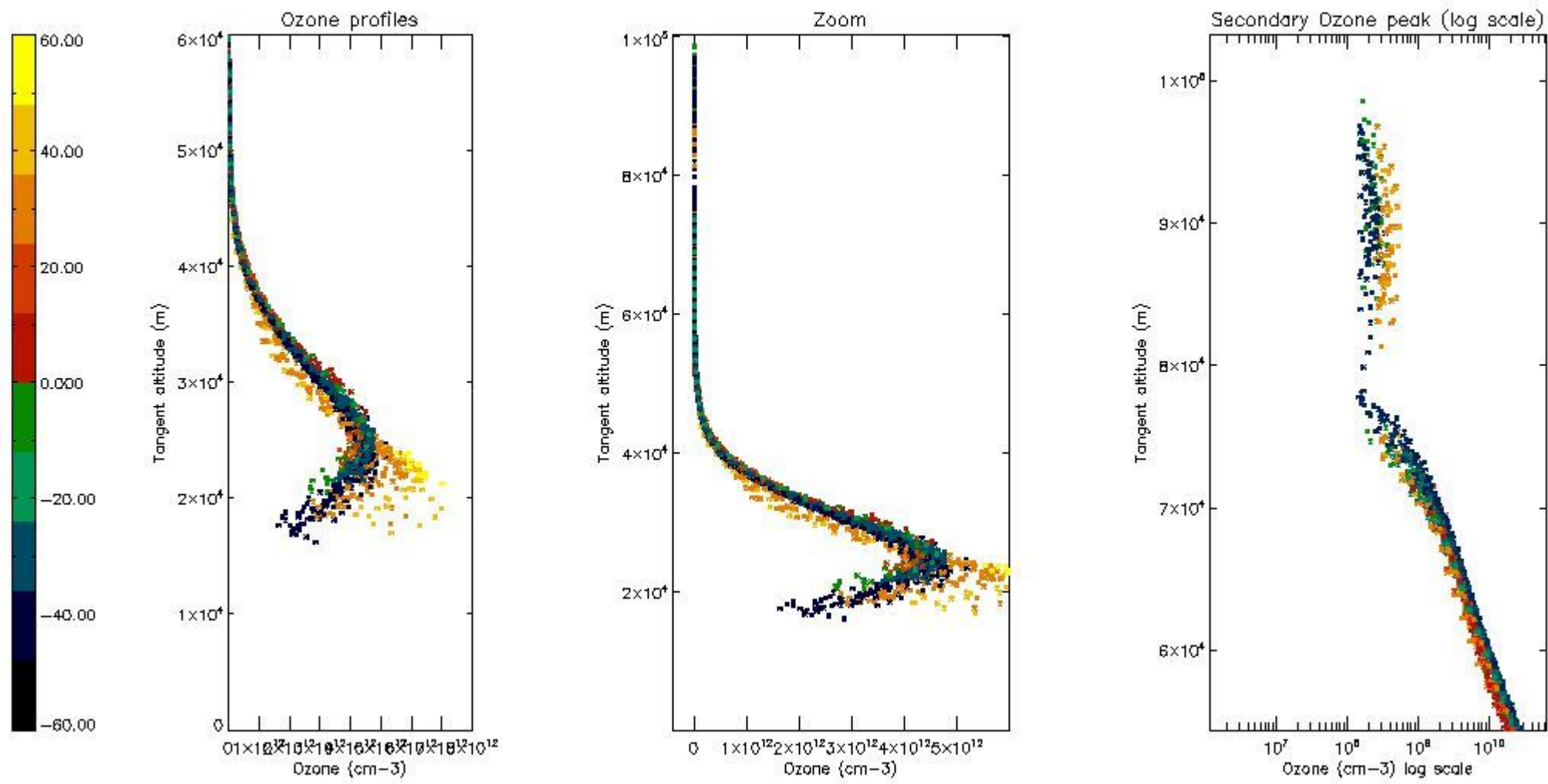
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



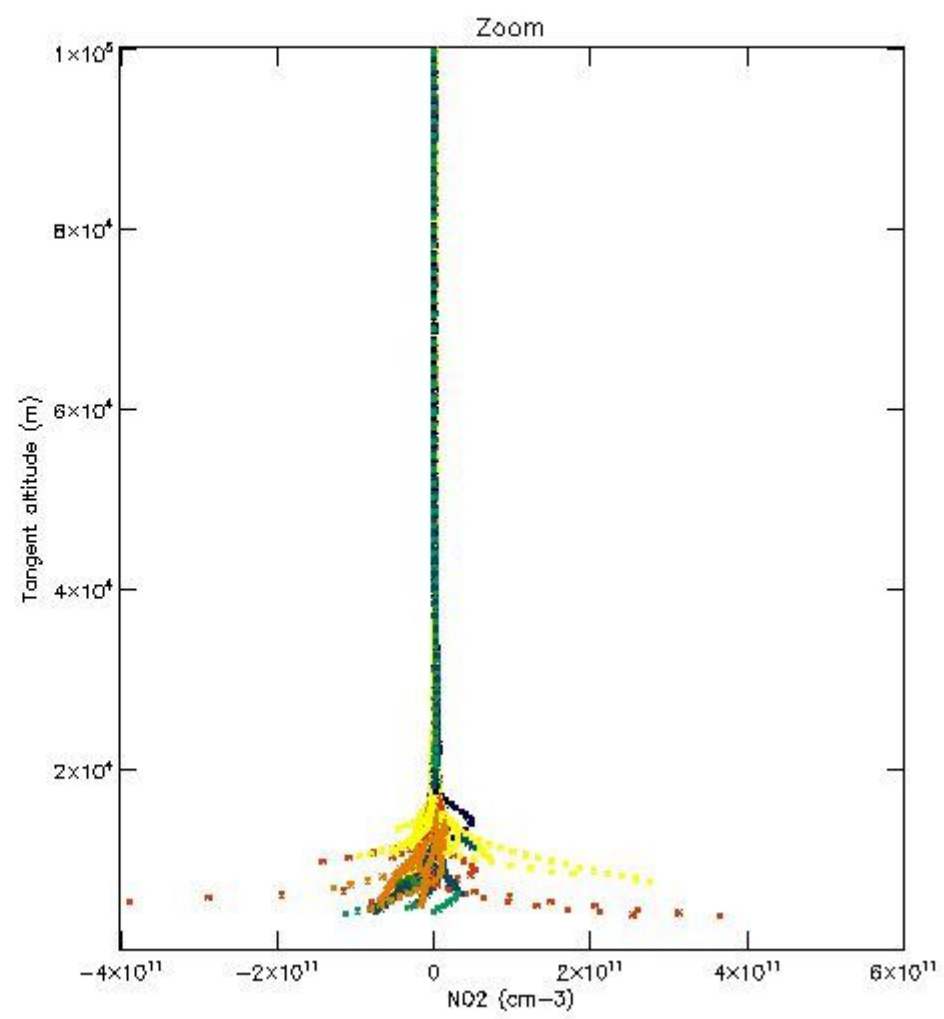
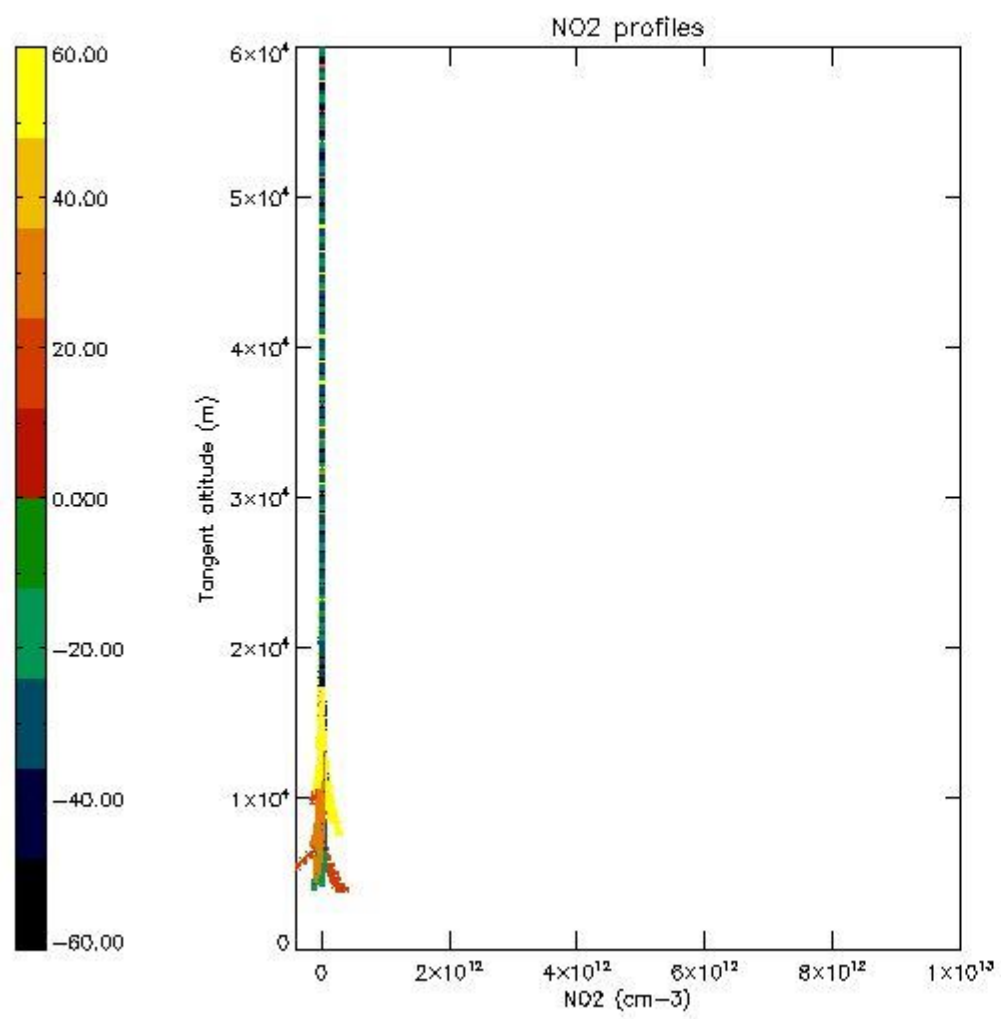
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



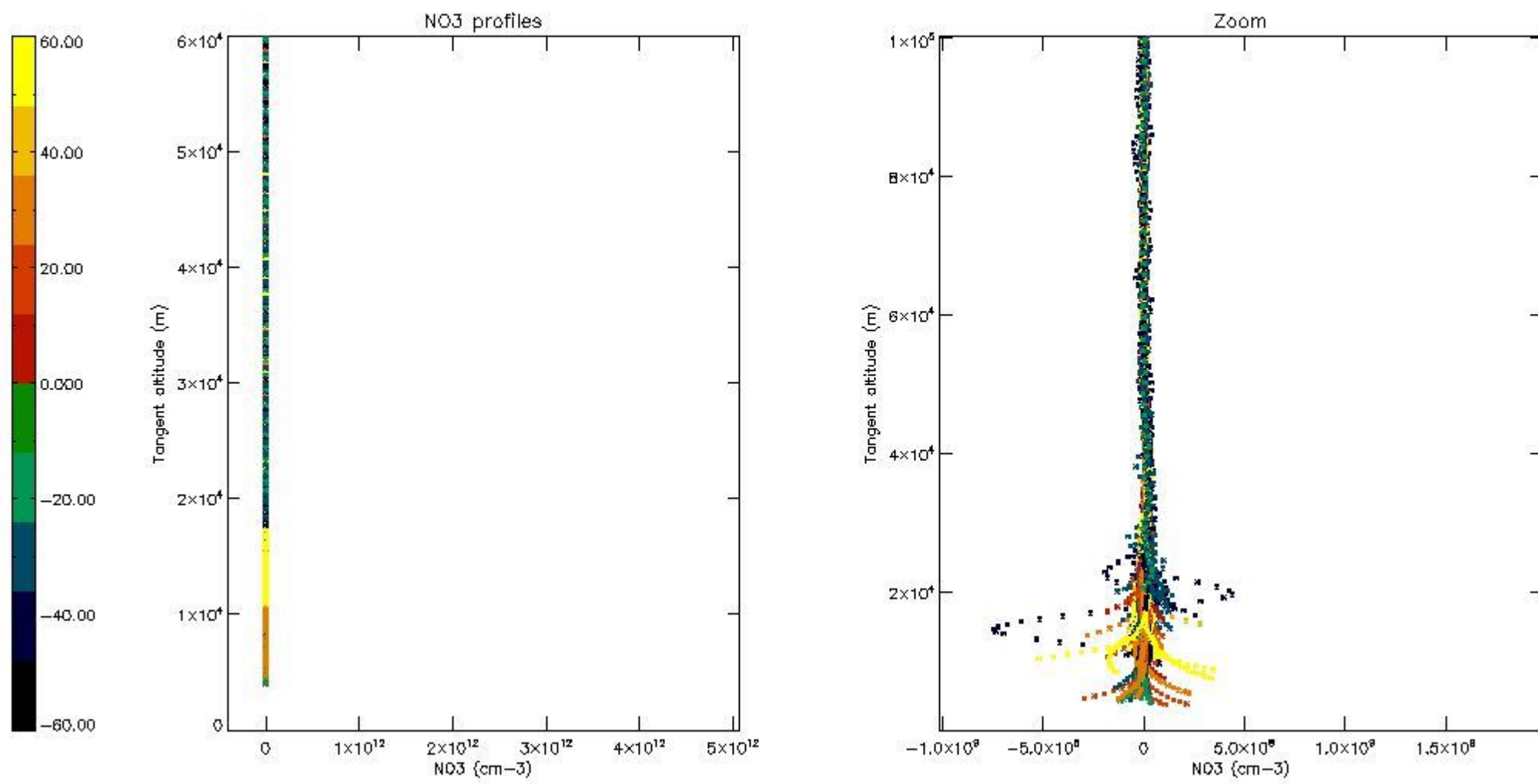
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



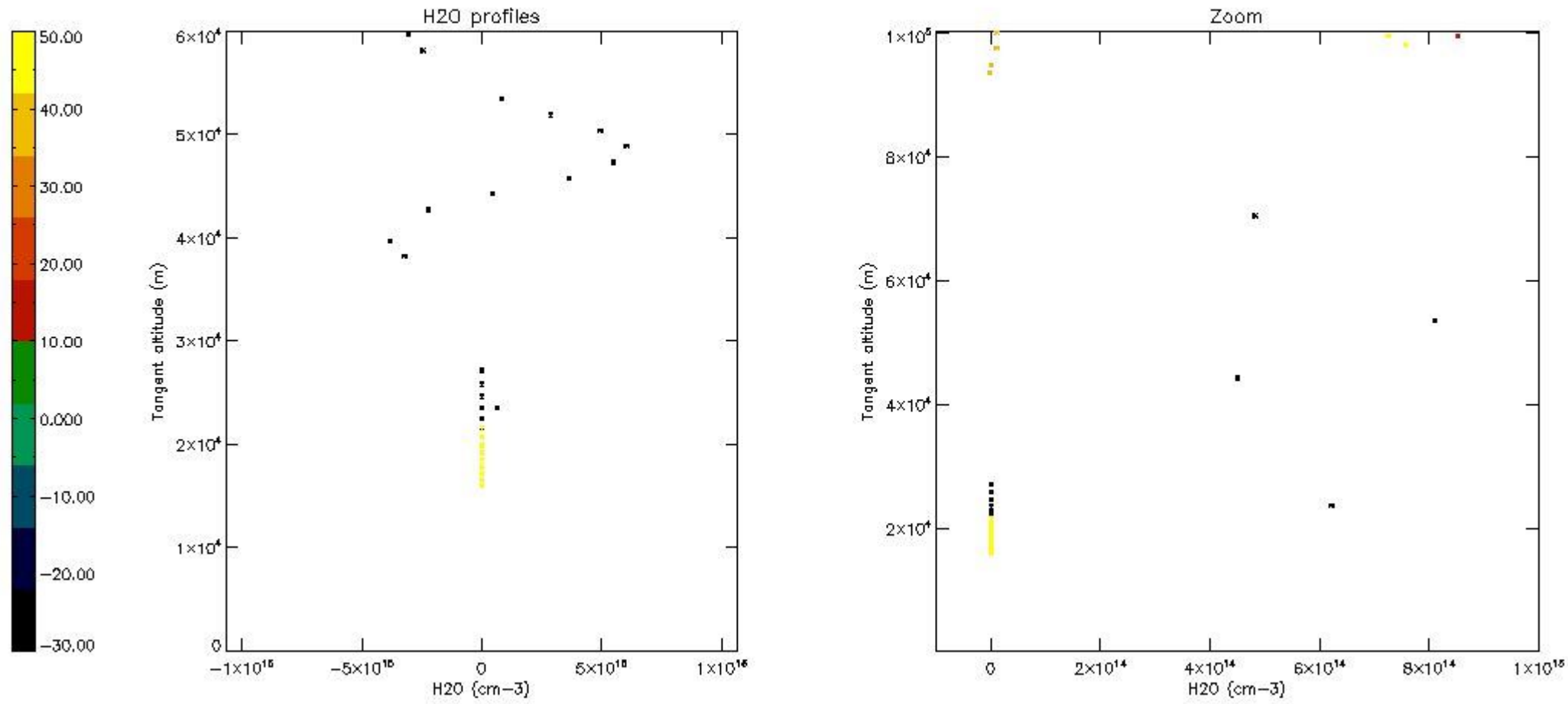
5.7 Plot NO₃ profiles for all STD (dark without errors)

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	30-DEC-2002 00:08:24
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	30-DEC-2002 00:08:24
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	30-DEC-2002 00:08:24

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

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

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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](#)

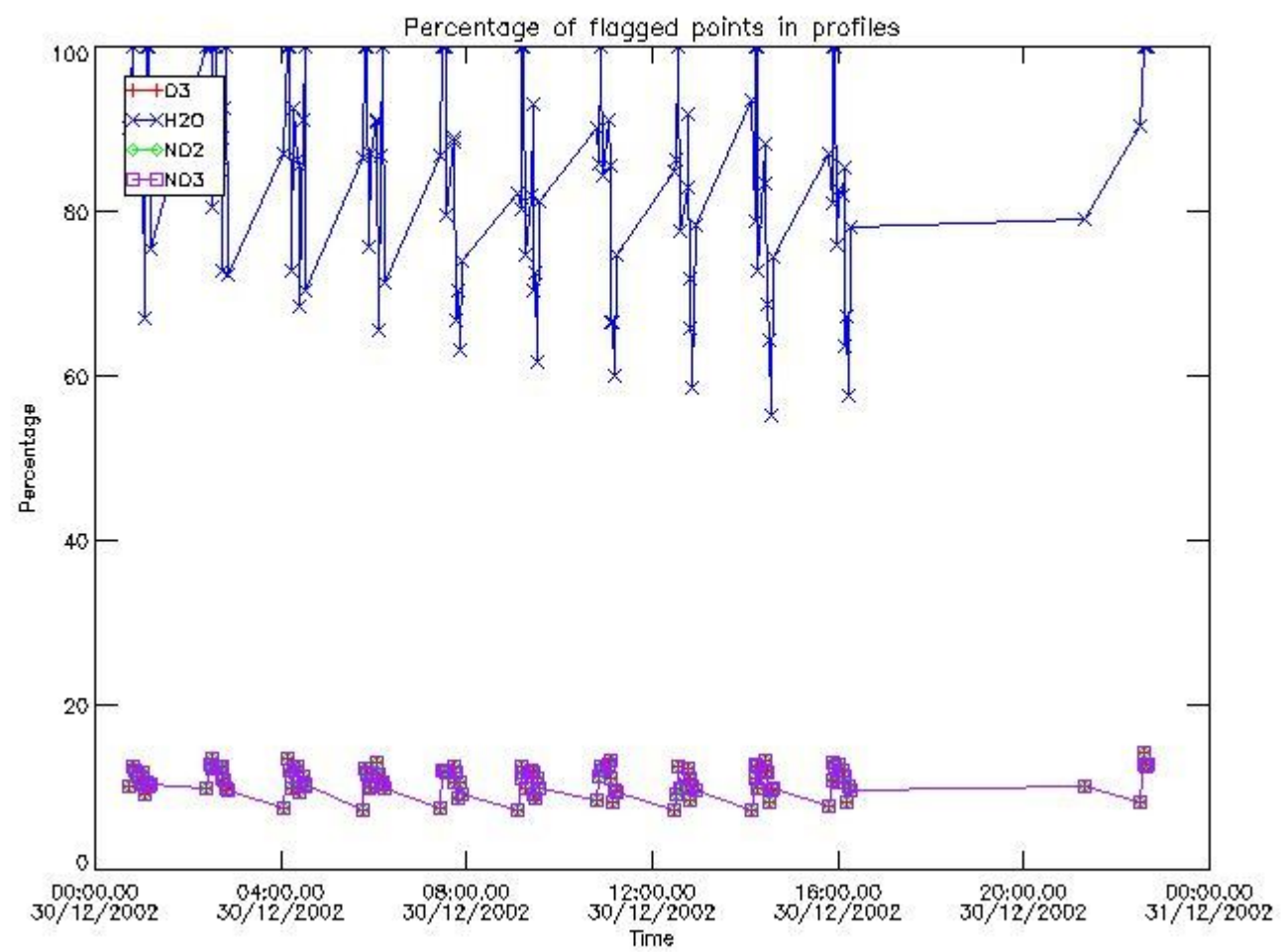
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3. Quality information per product

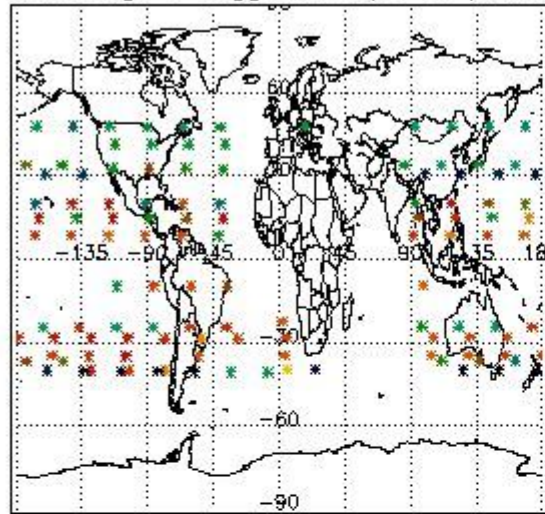
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

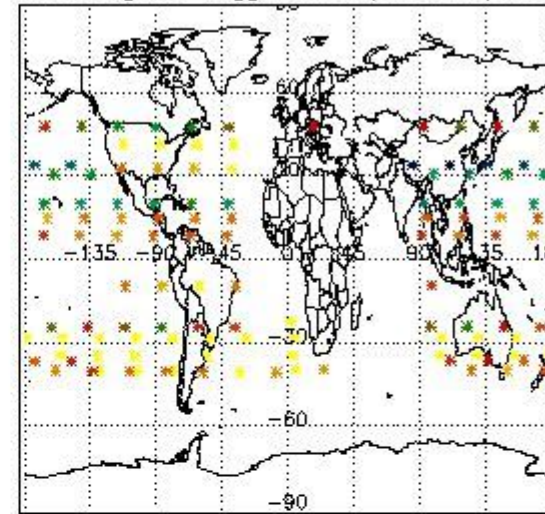


3.2 Plot quality information per product (world map)

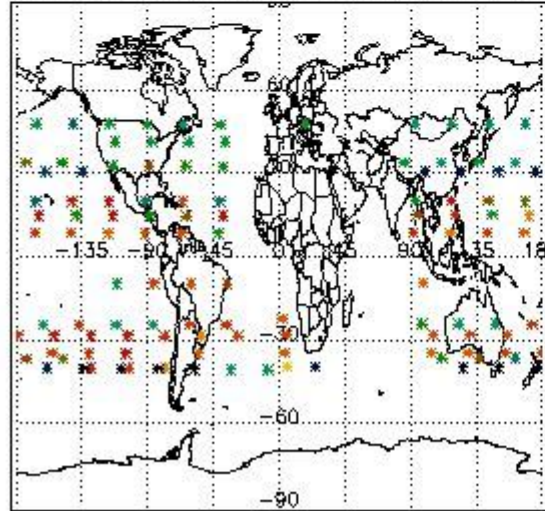
Percentage of flagged data per O3 profile



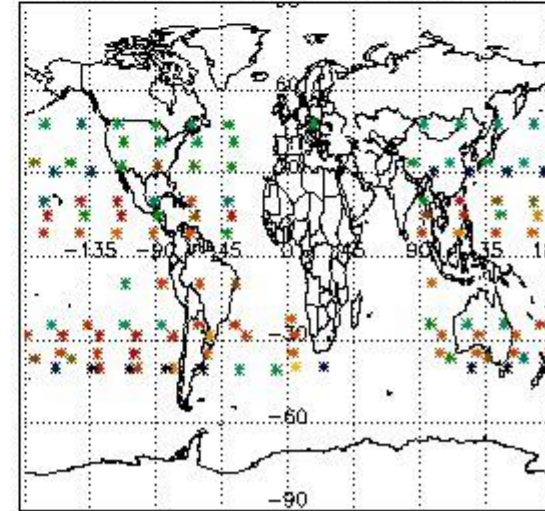
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

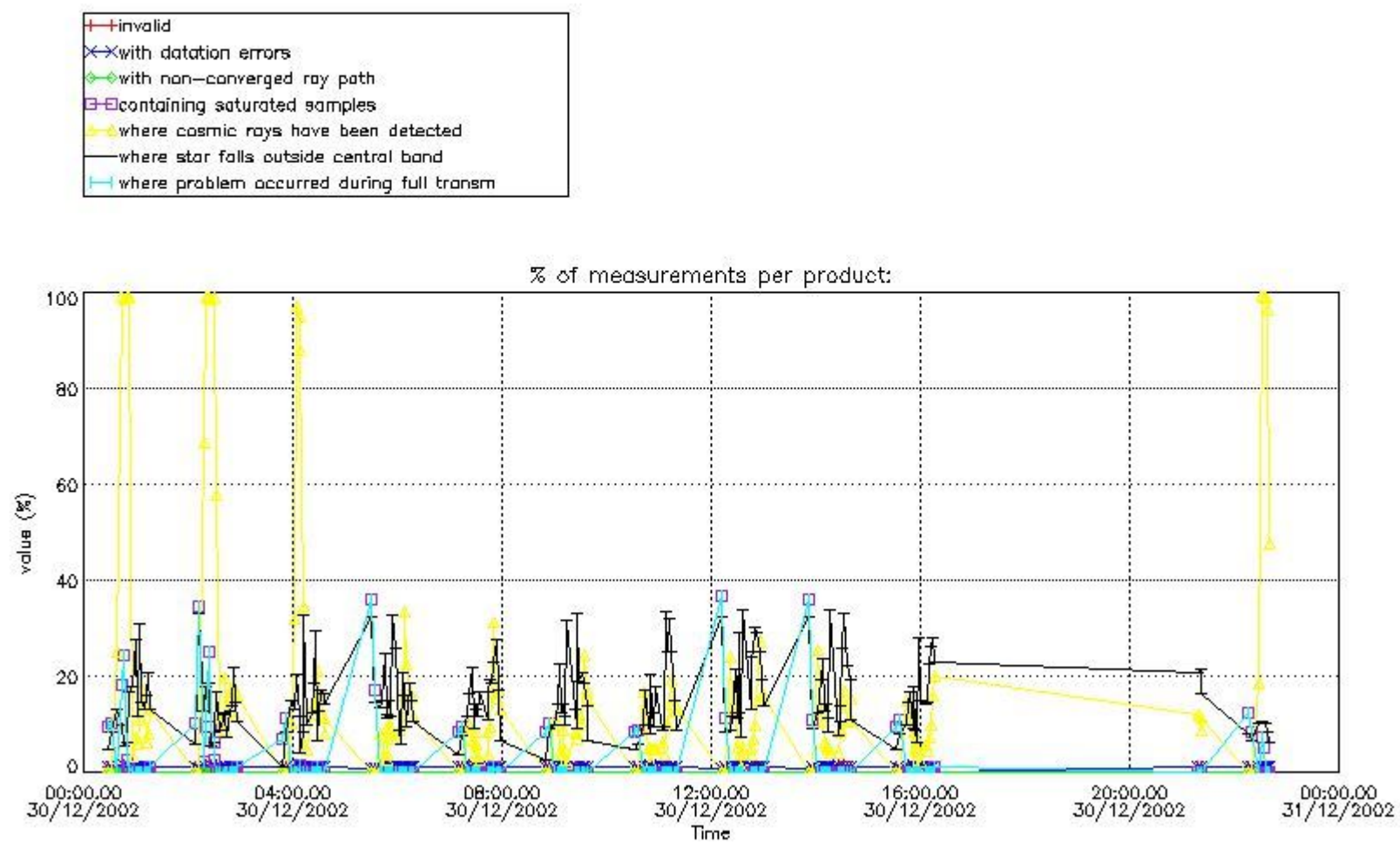


4. Level 1 quality information per product

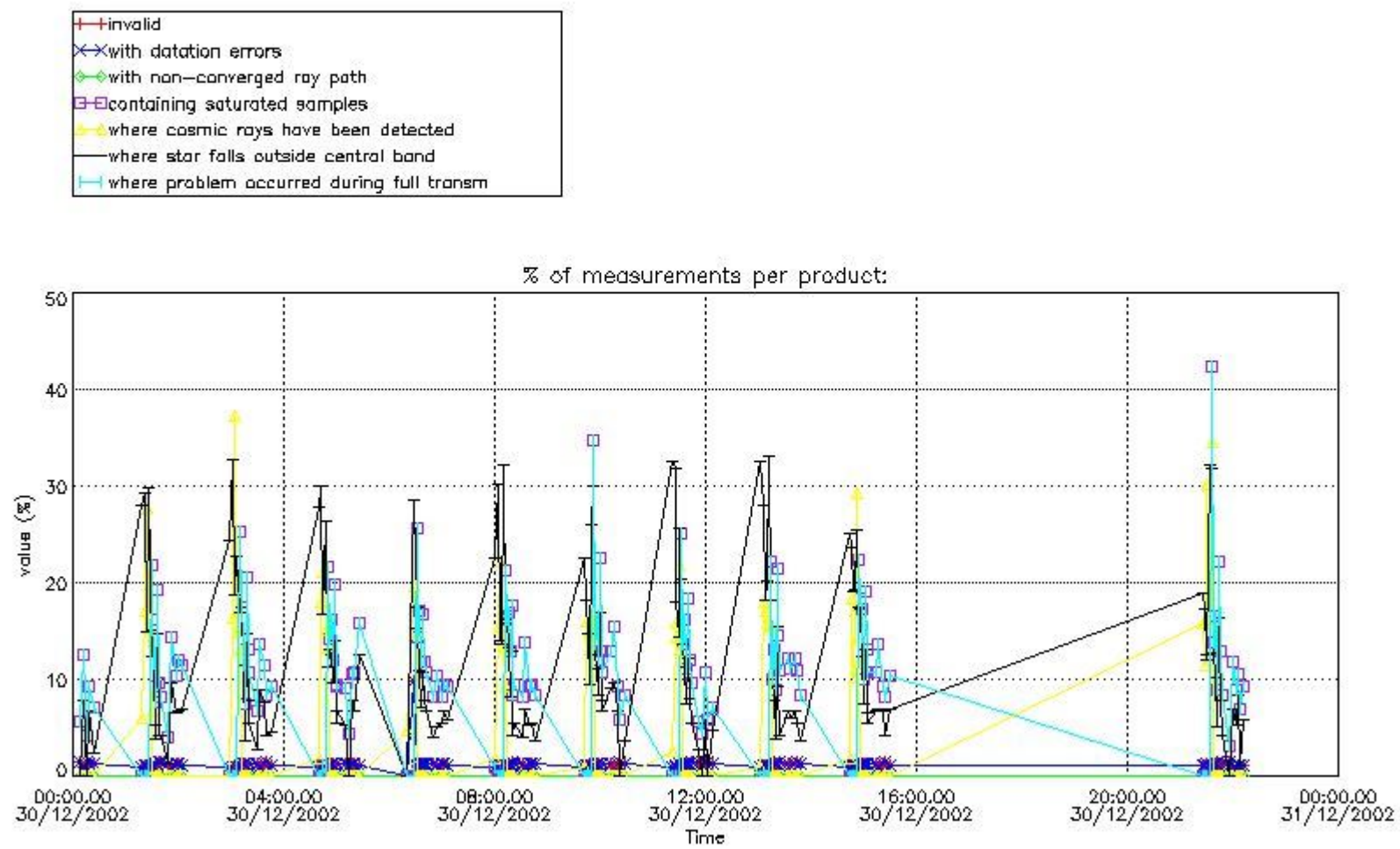
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

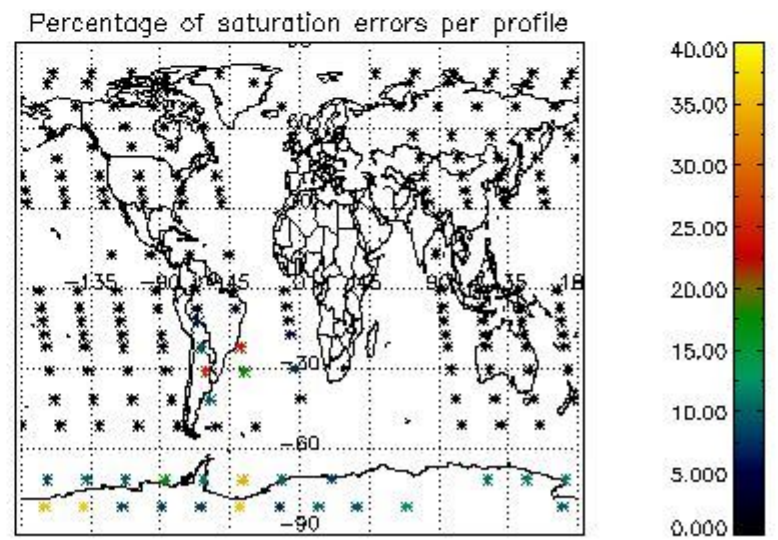
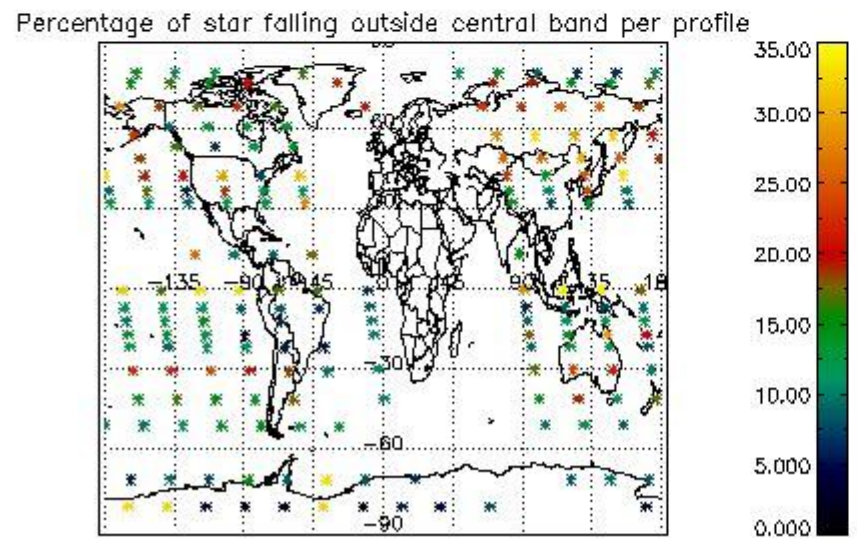
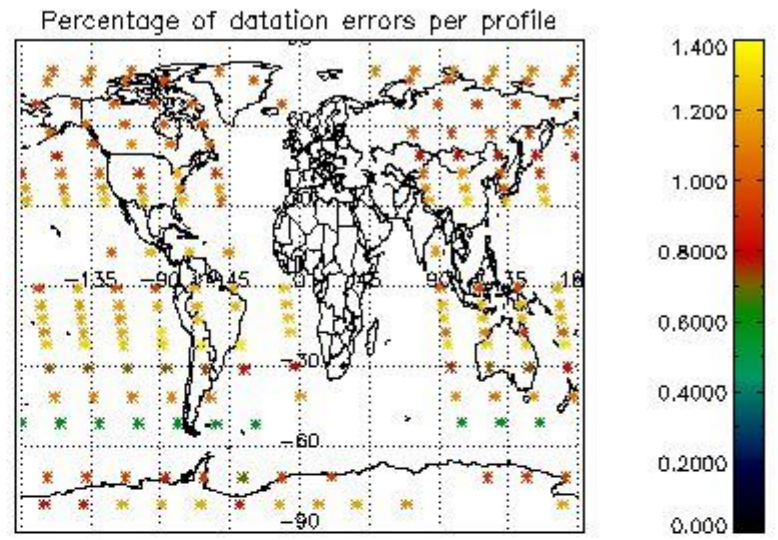
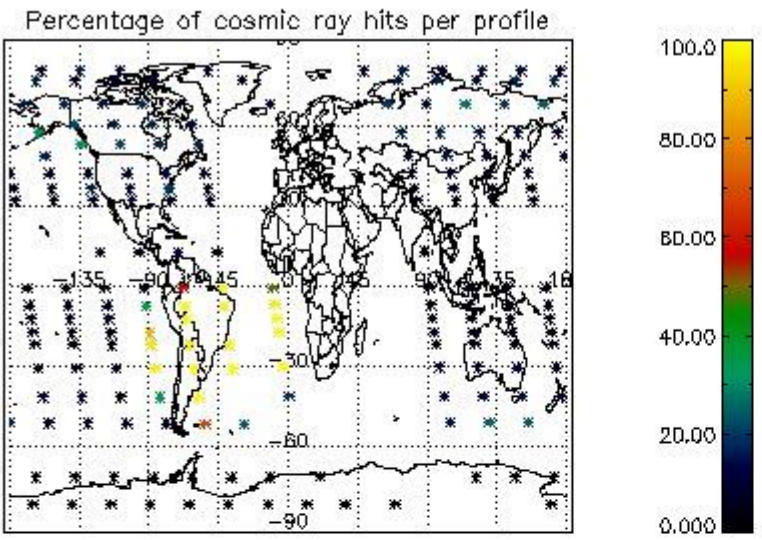


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

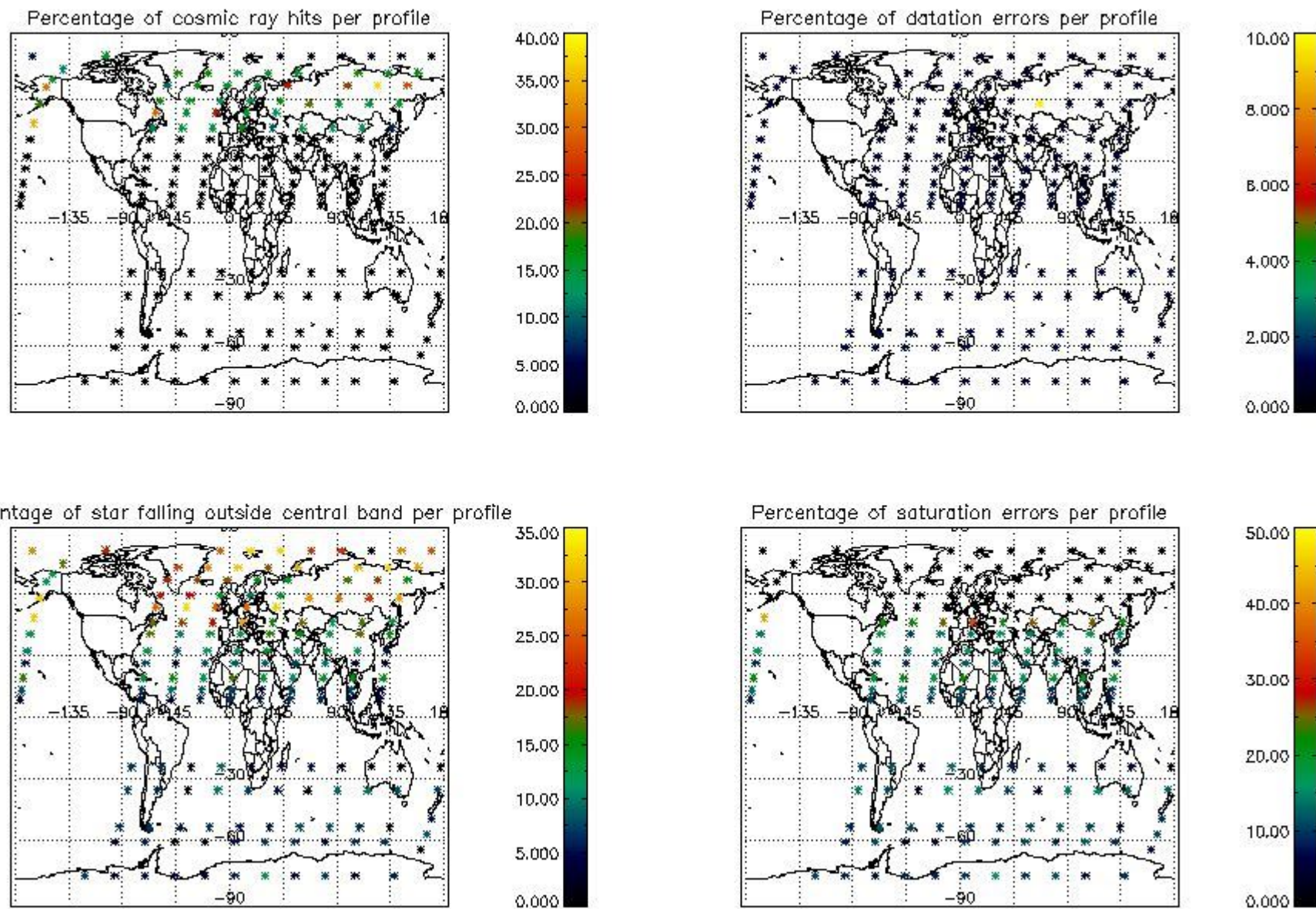


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

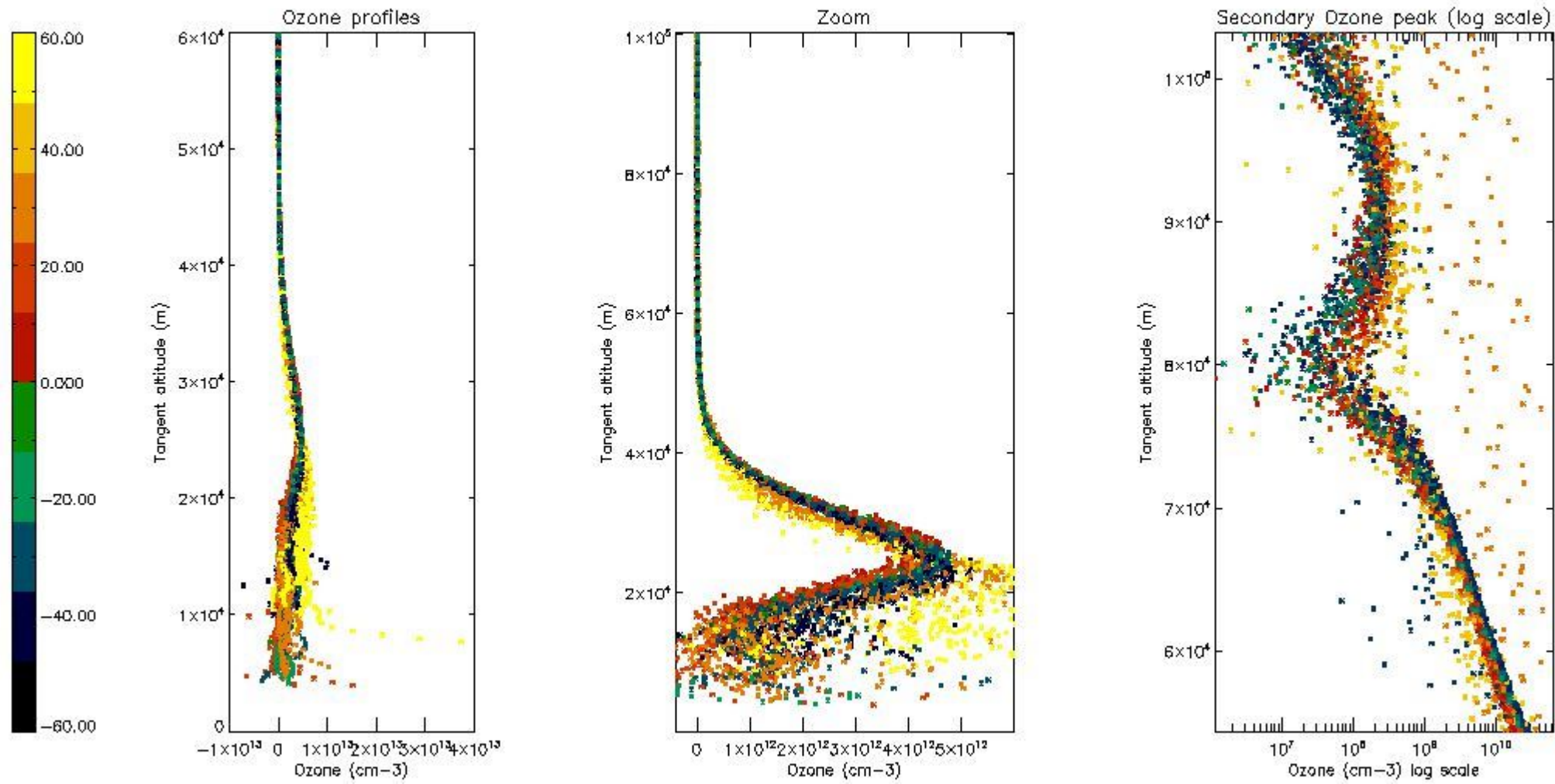
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	34
STD < 20	20

STD < 10	16
STD < 5	12

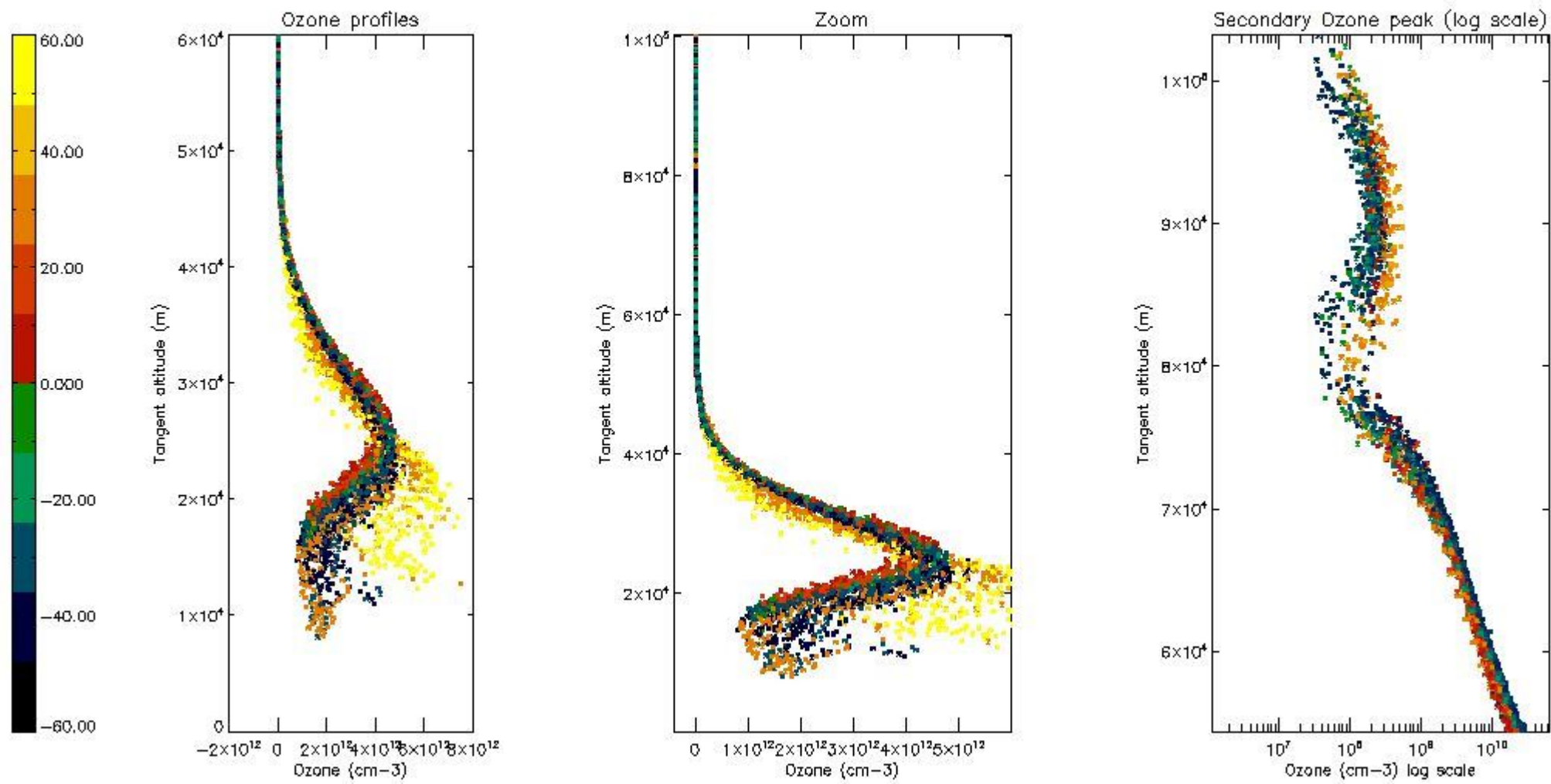
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



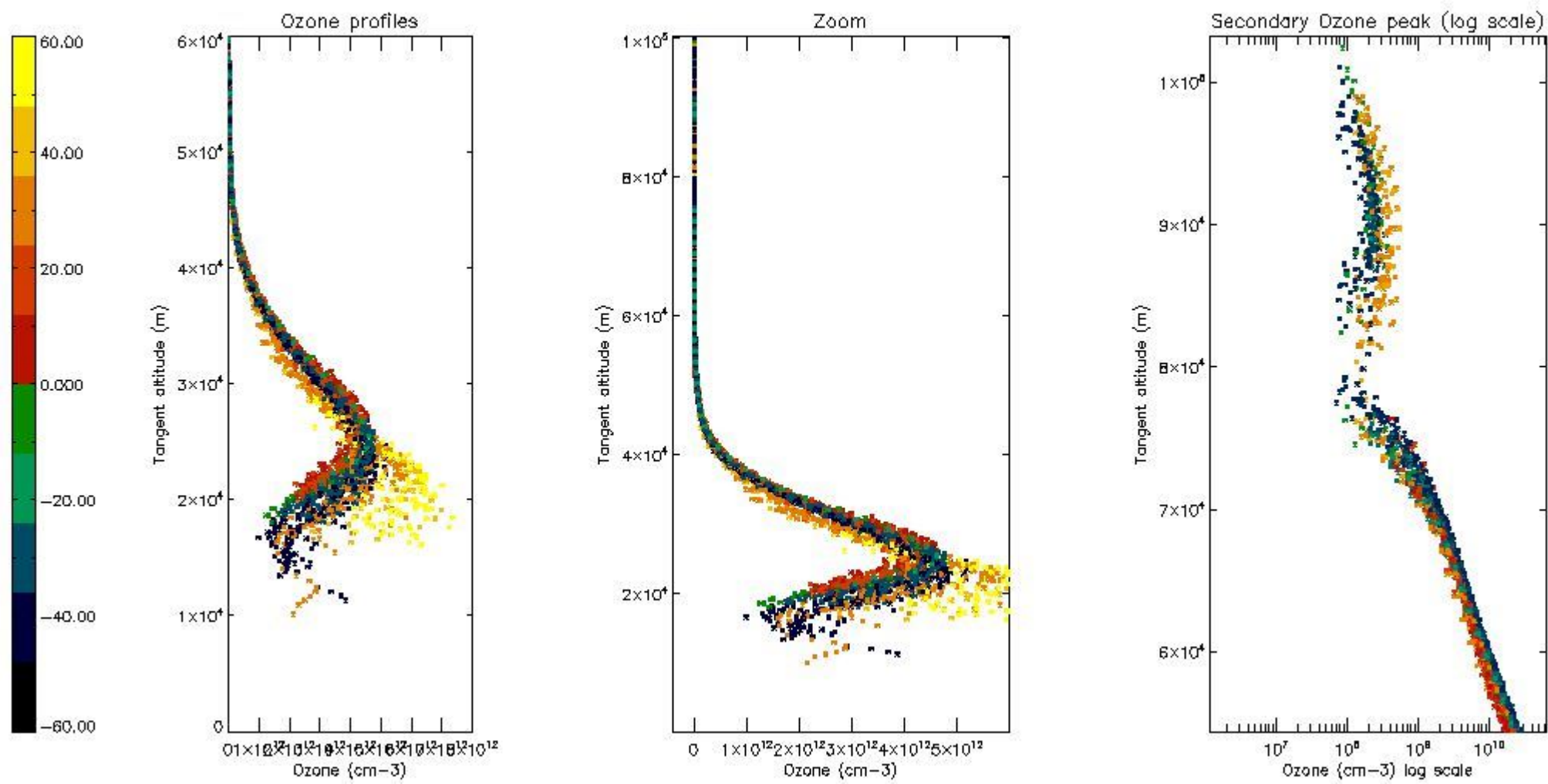
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



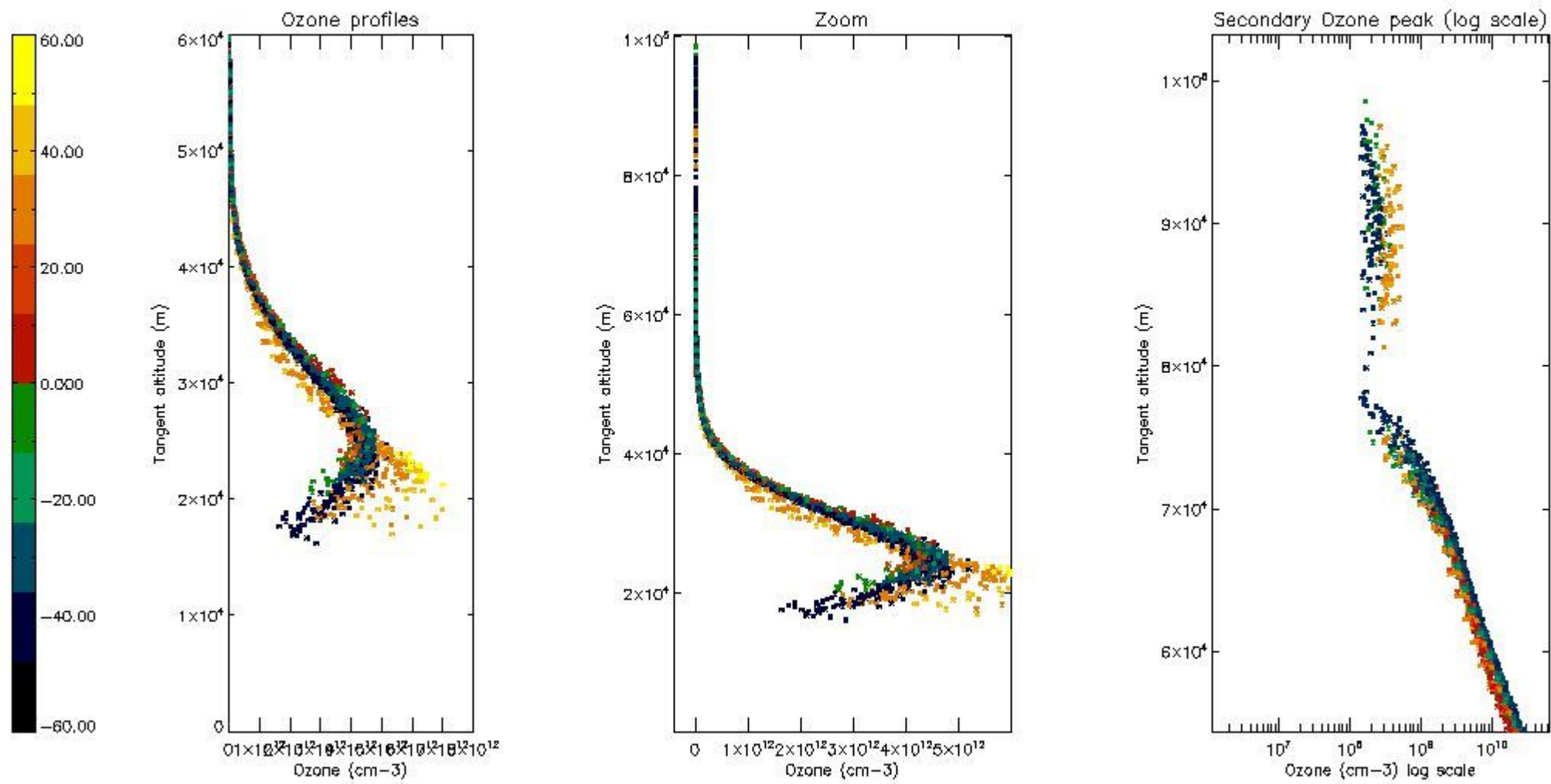
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



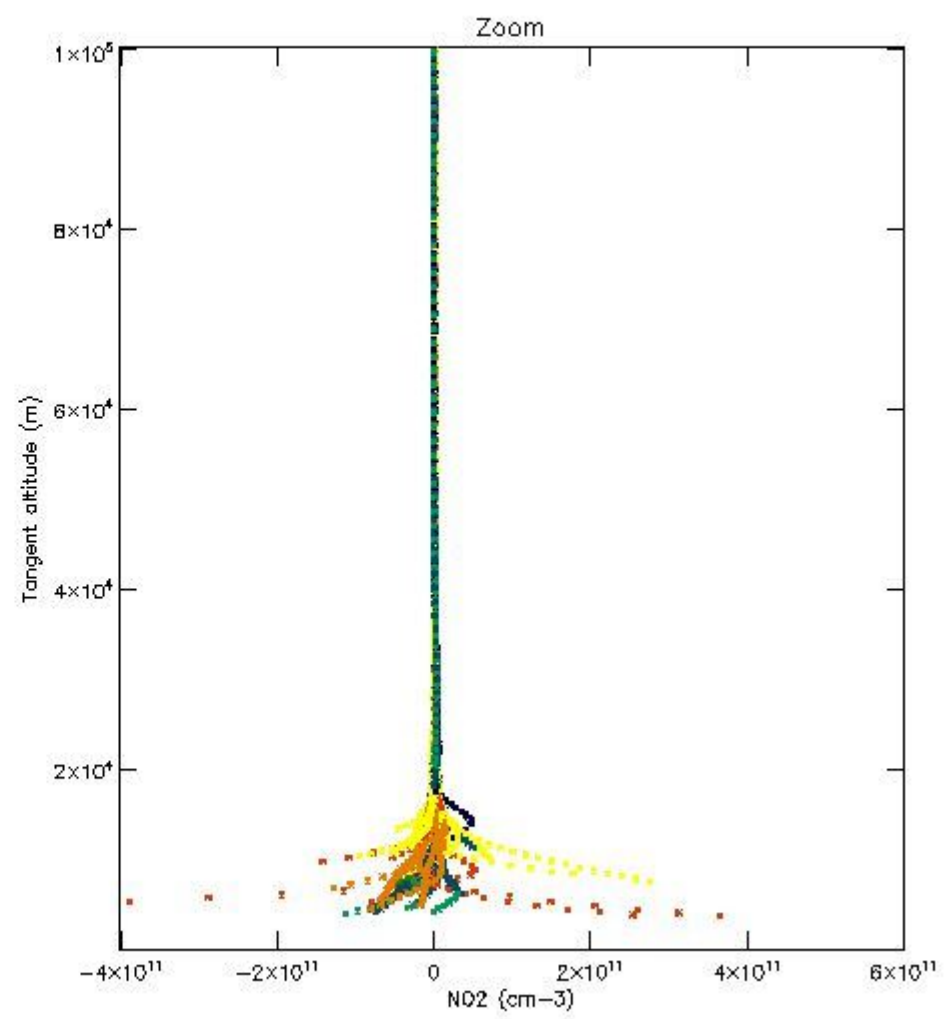
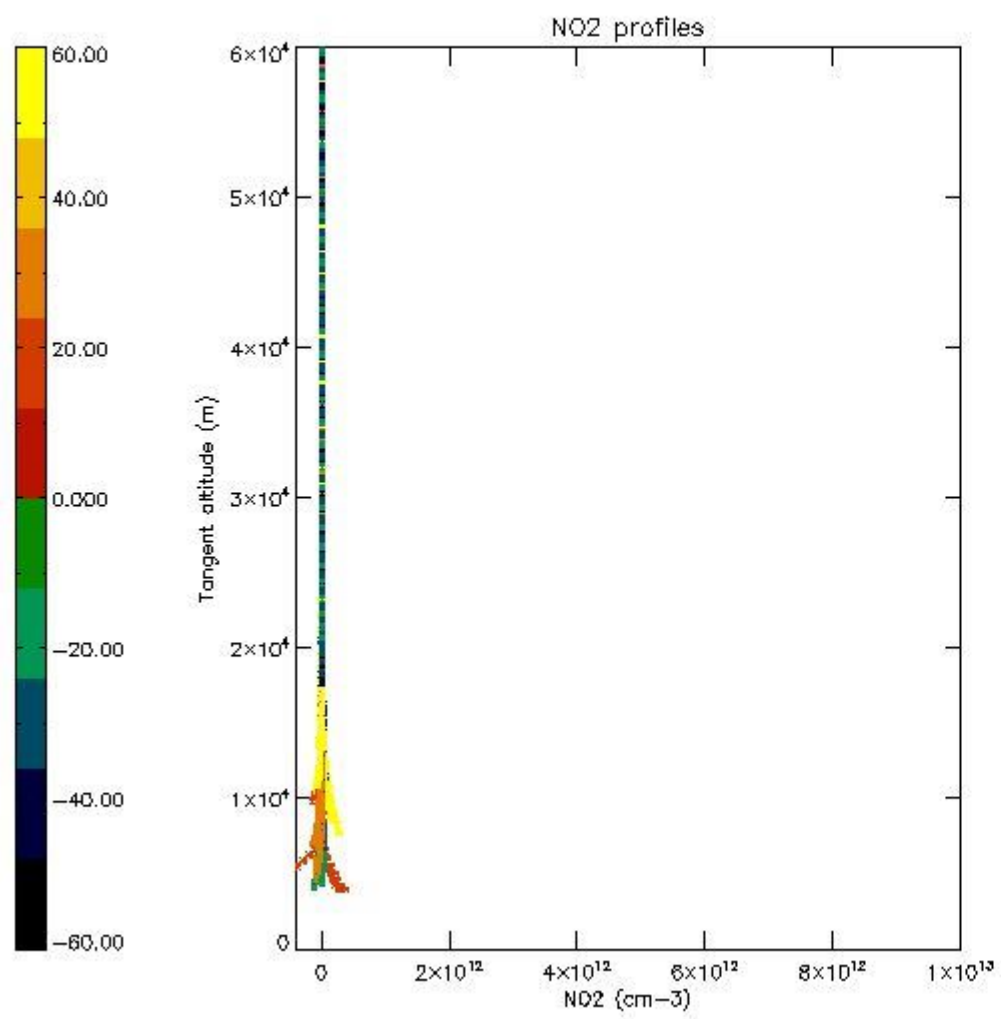
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



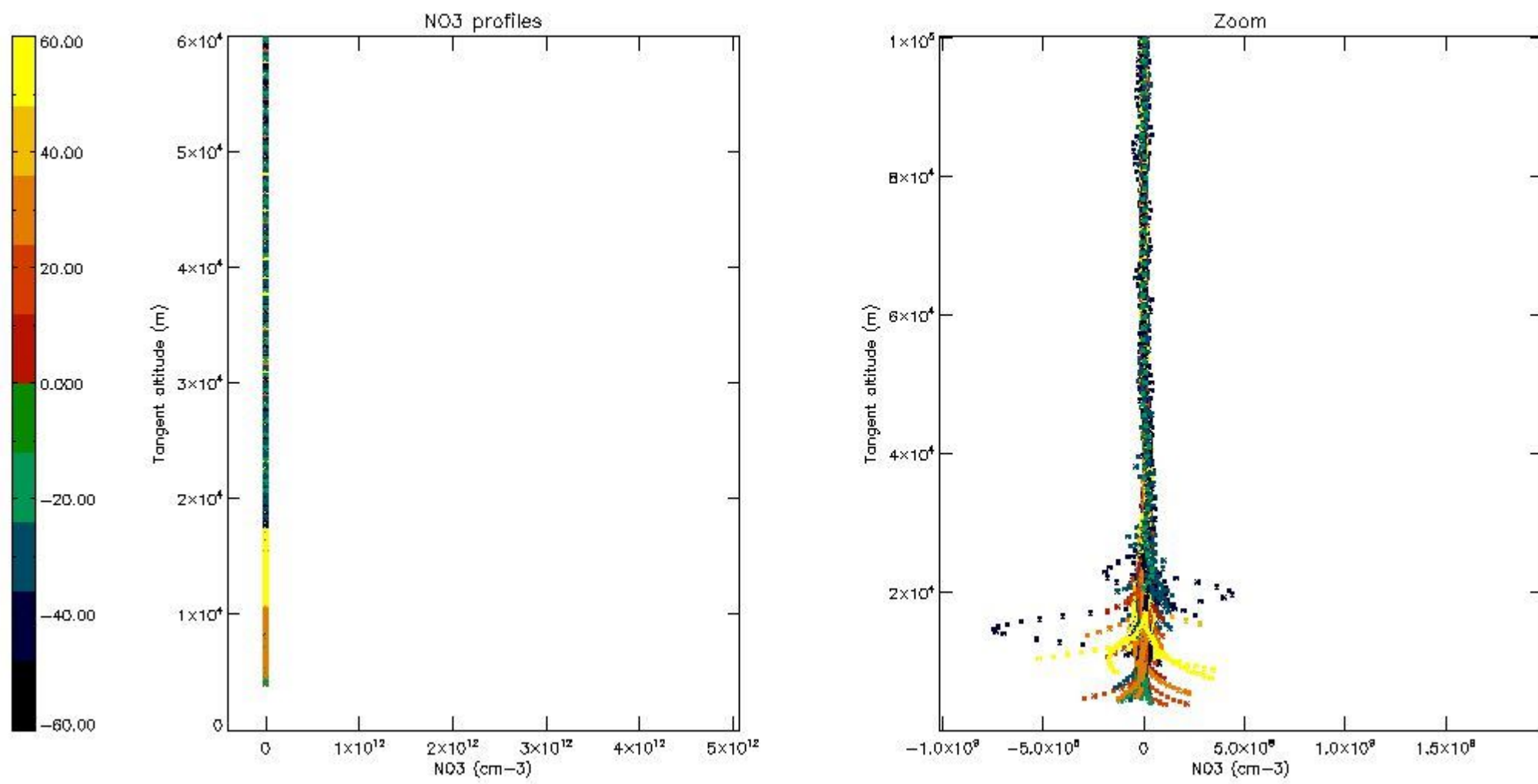
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



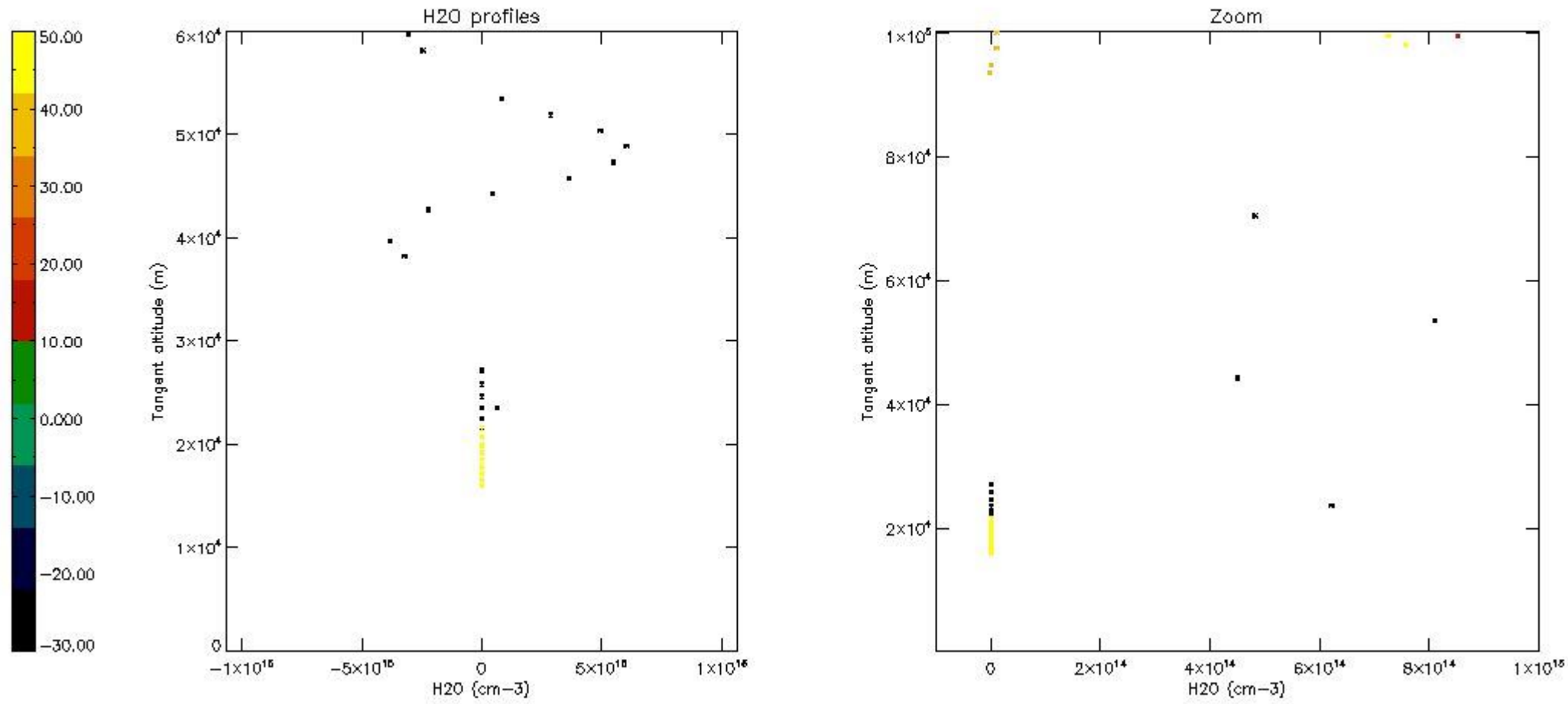
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

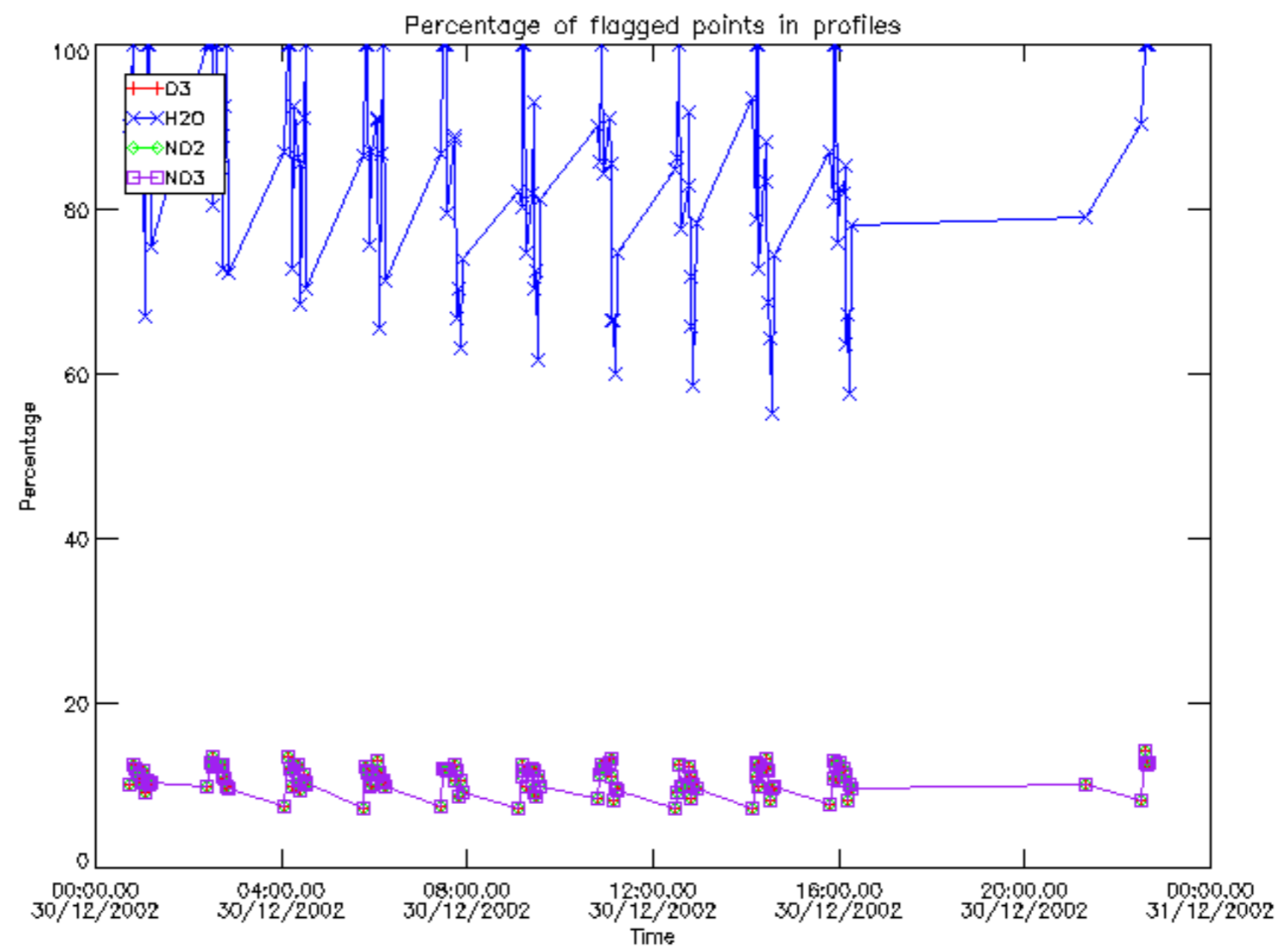
The colorbar represents the latitude.



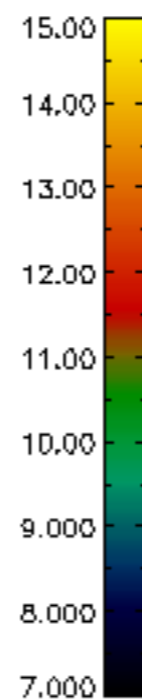
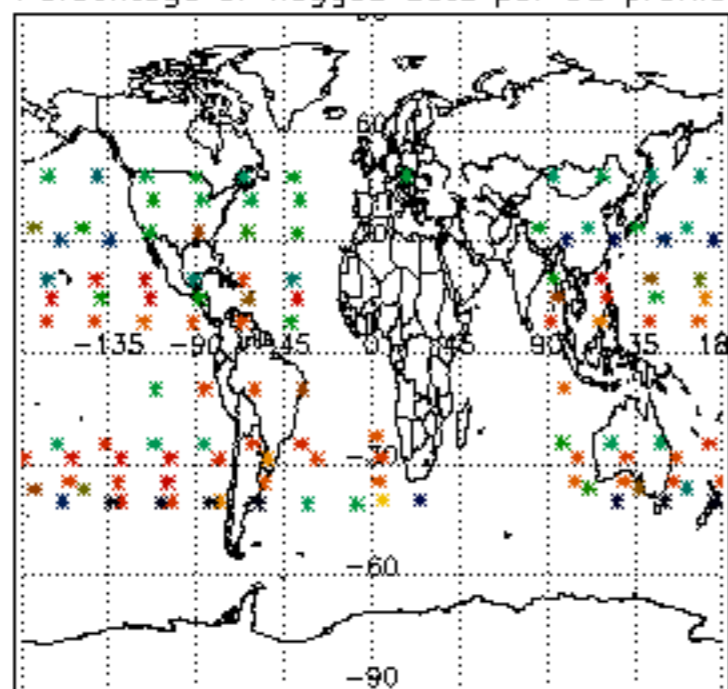
6. Auxiliary Data Files used for the production reported in section 2

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.

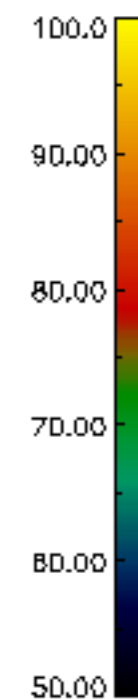
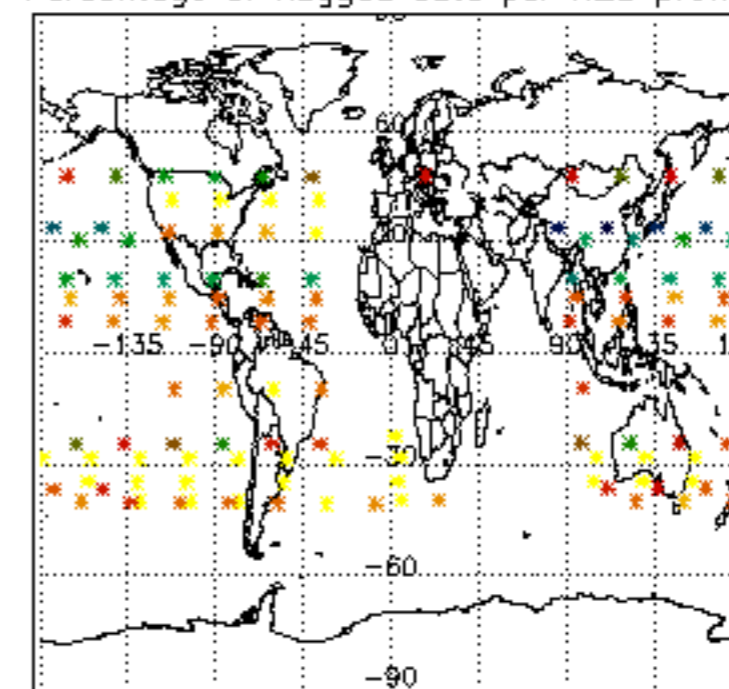
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	30-DEC-2002 00:08:24
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	30-DEC-2002 00:08:24
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	30-DEC-2002 00:08:24



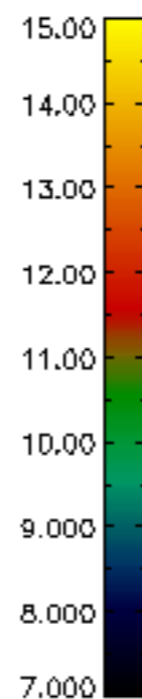
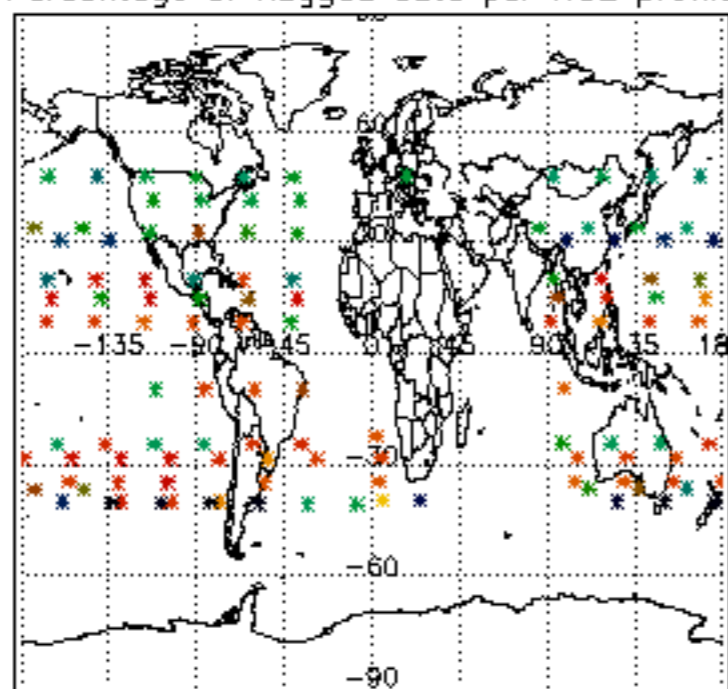
Percentage of flagged data per D3 profile



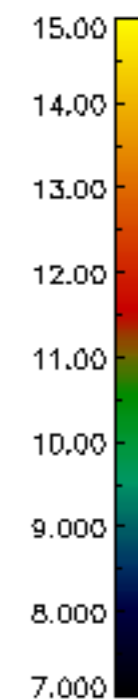
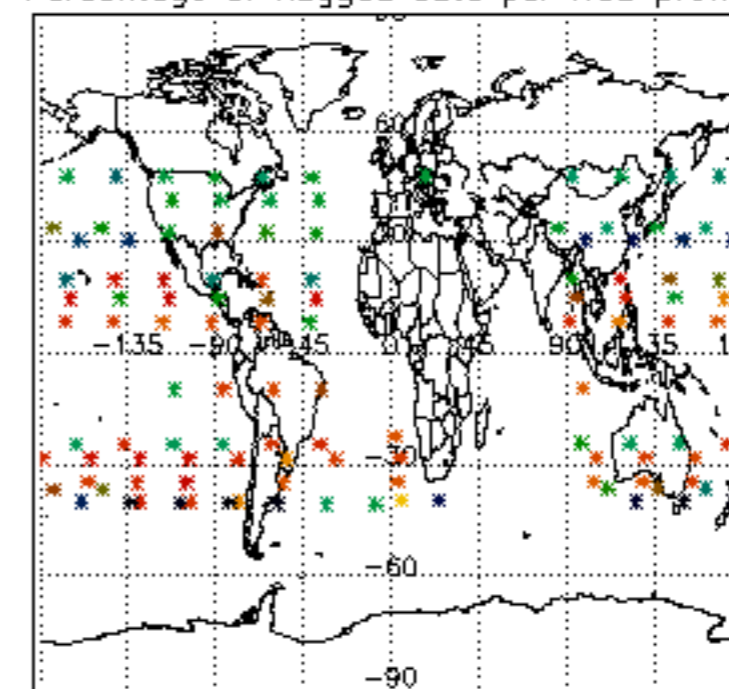
Percentage of flagged data per H2O profile

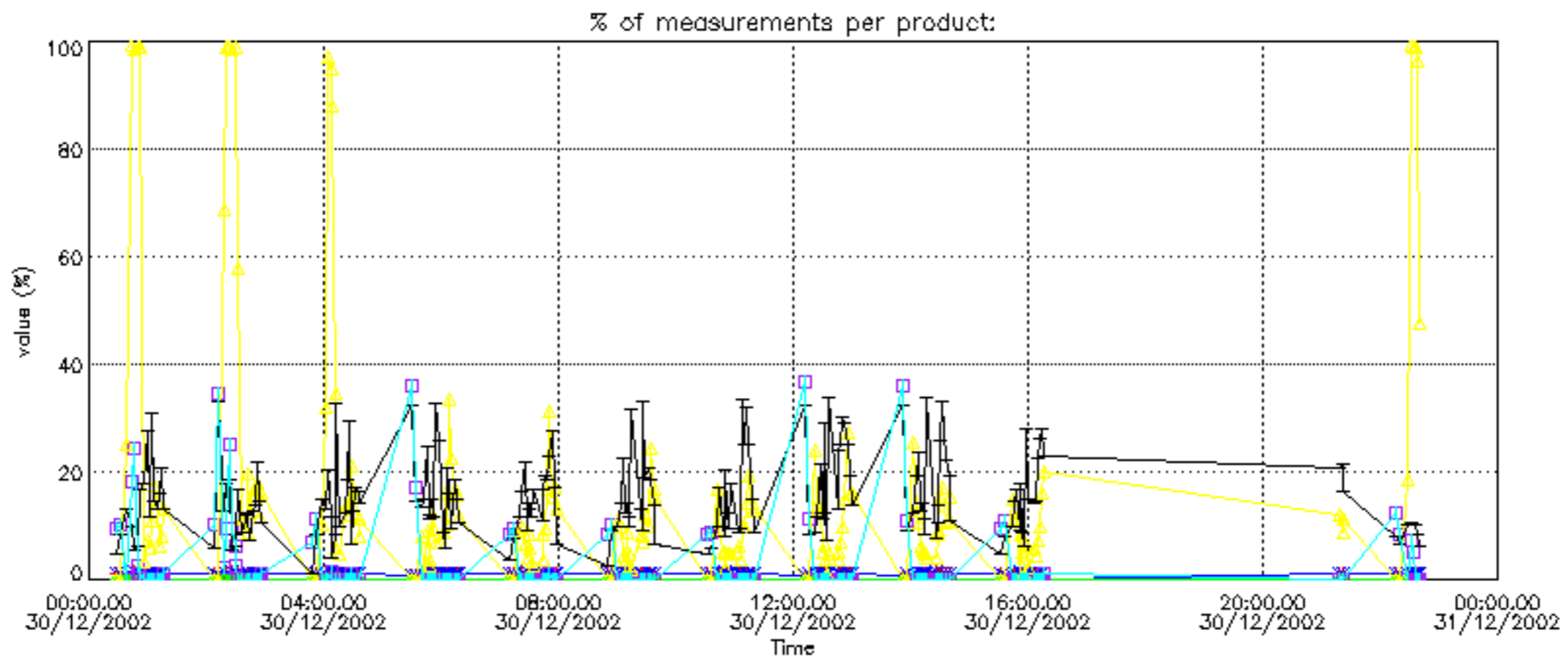


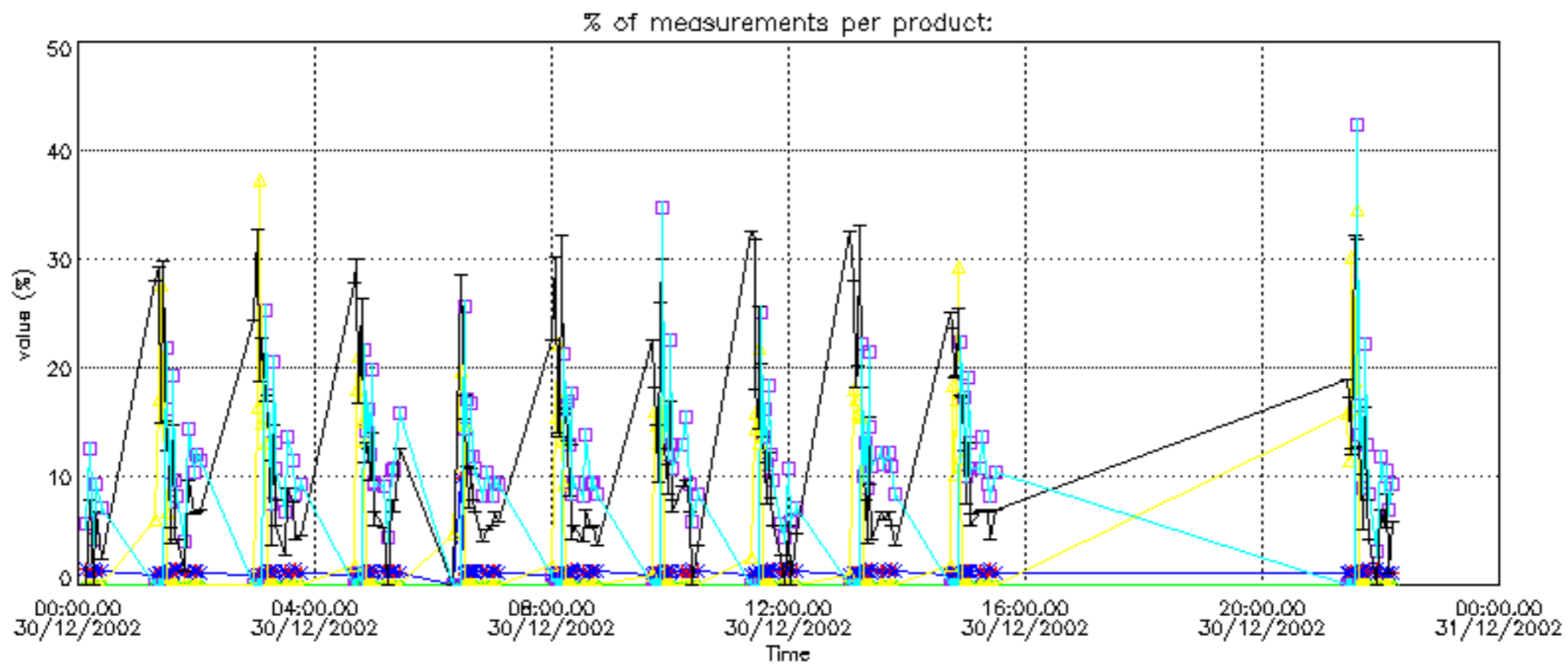
Percentage of flagged data per NO2 profile



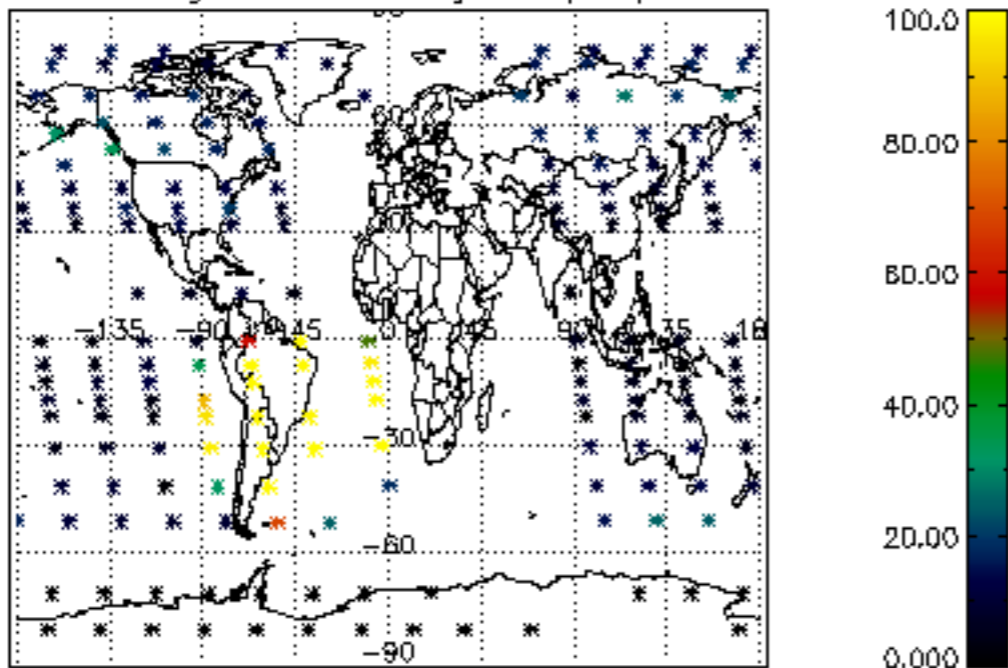
Percentage of flagged data per NO3 profile



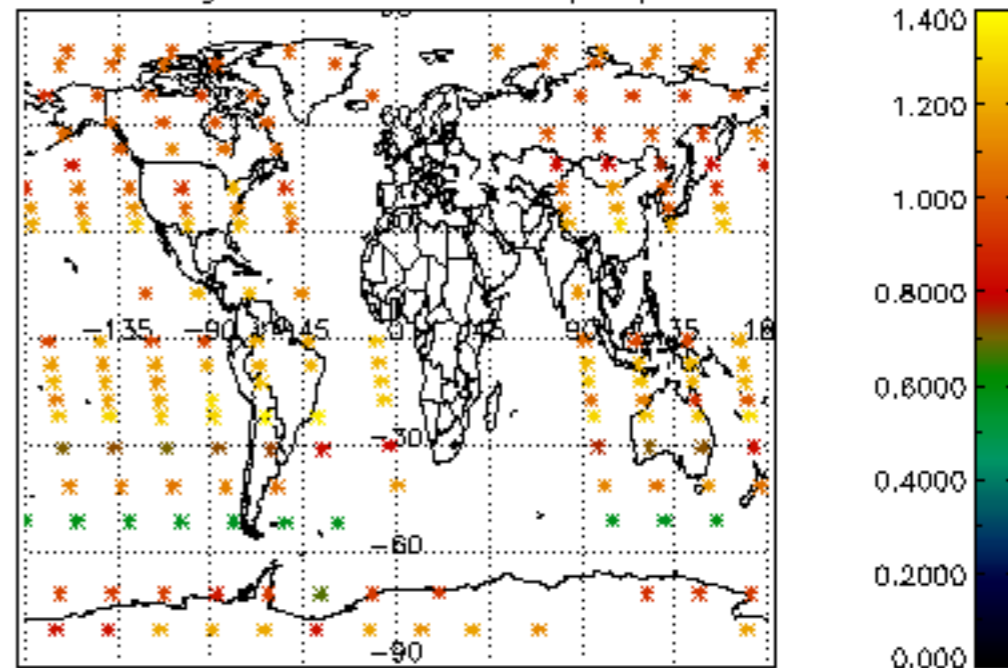




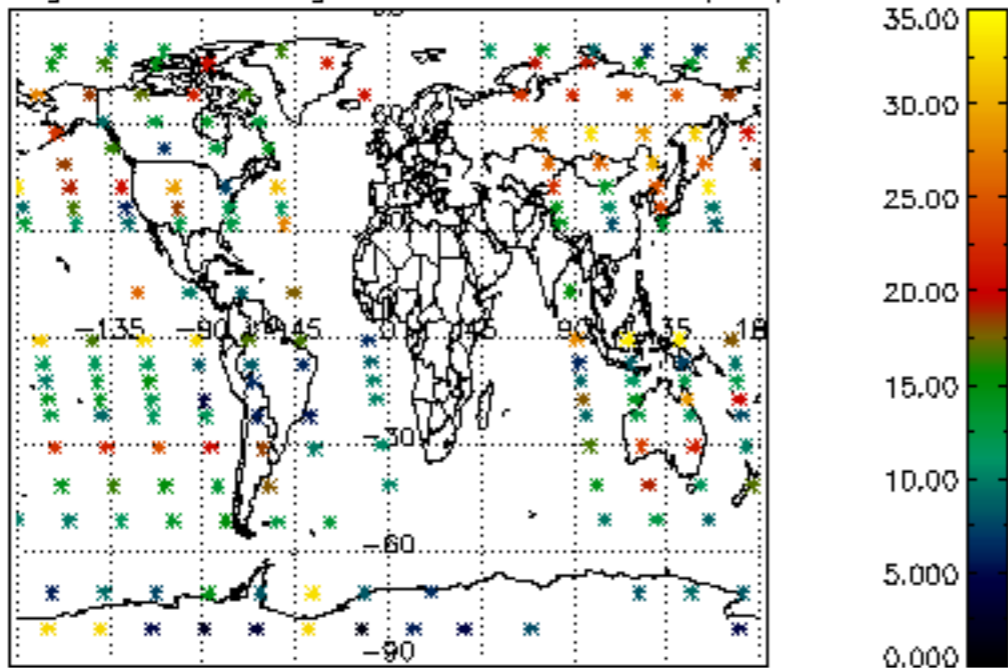
Percentage of cosmic ray hits per profile



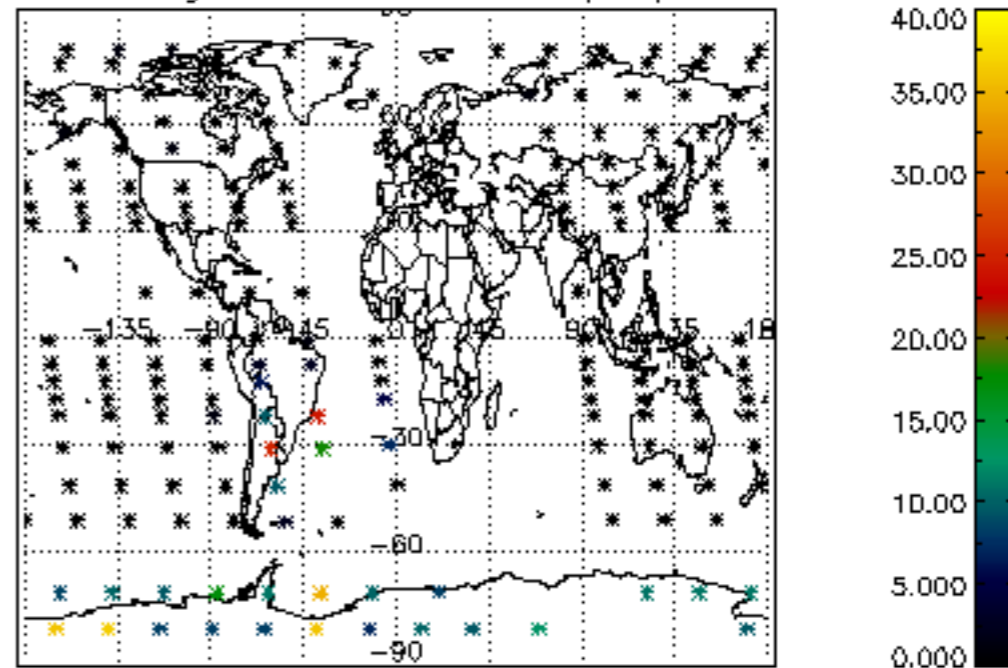
Percentage of datation errors per profile



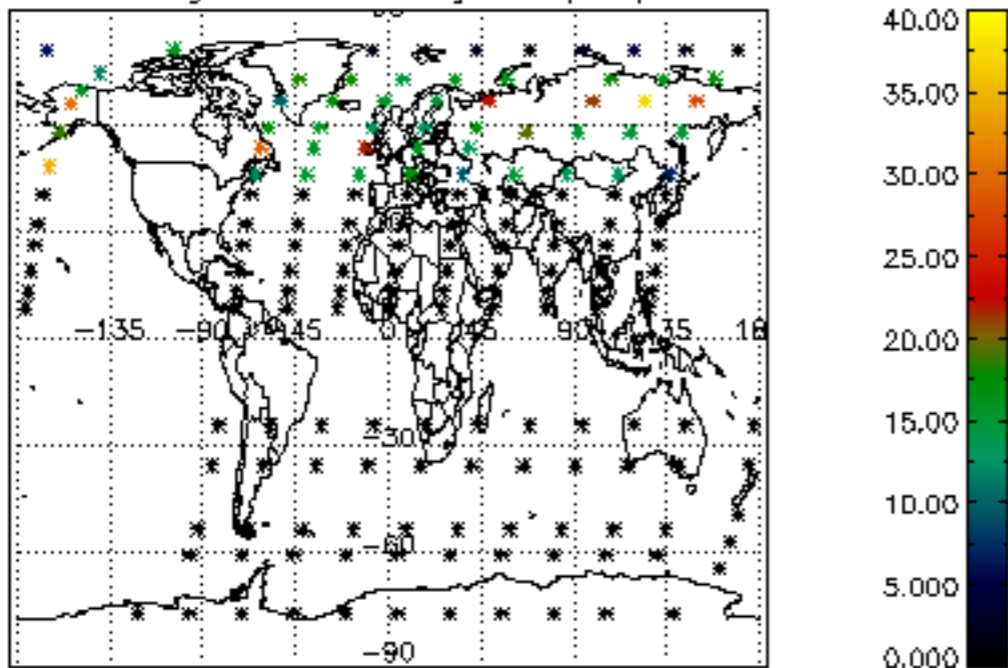
Percentage of star falling outside central band per profile



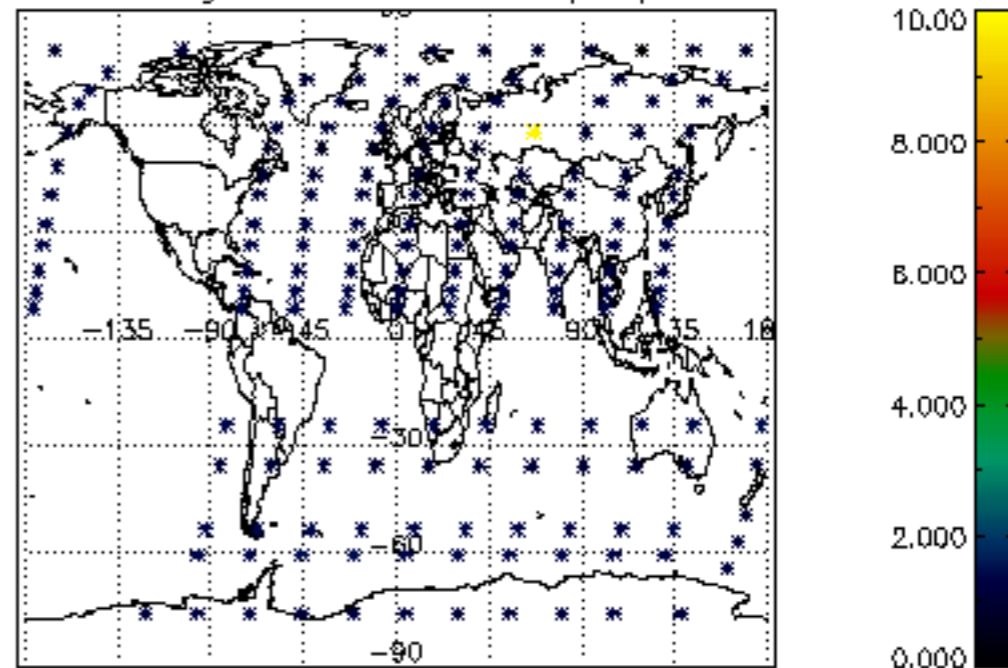
Percentage of saturation errors per profile



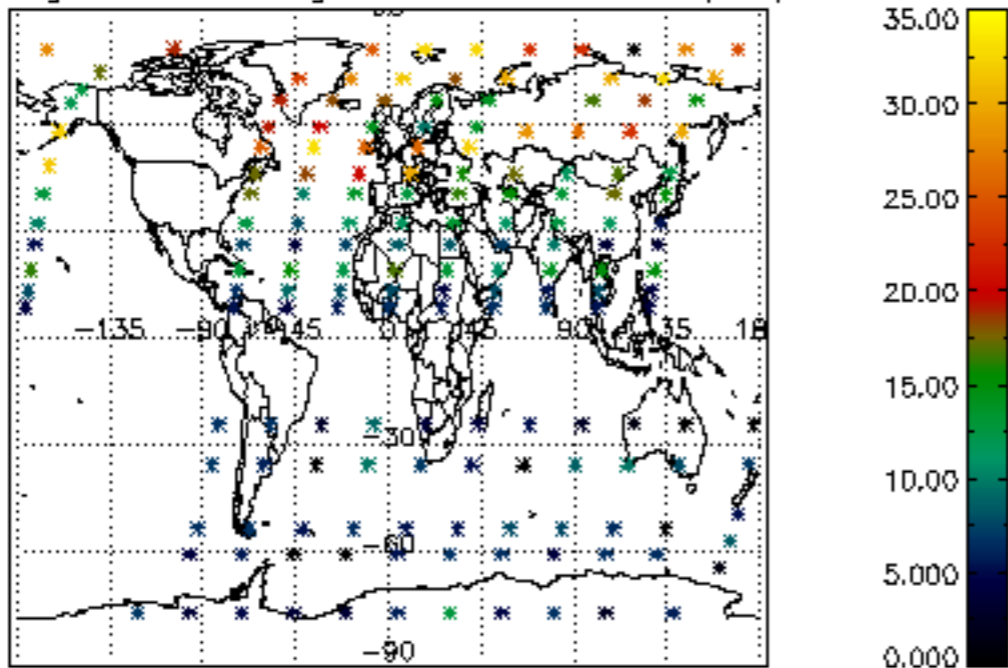
Percentage of cosmic ray hits per profile



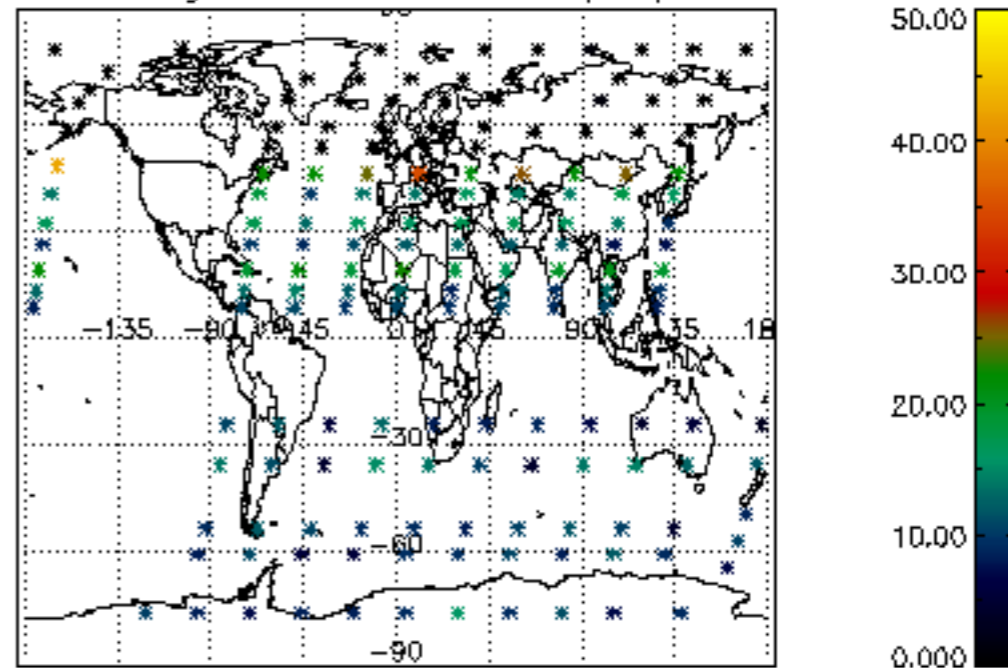
Percentage of datation errors per profile

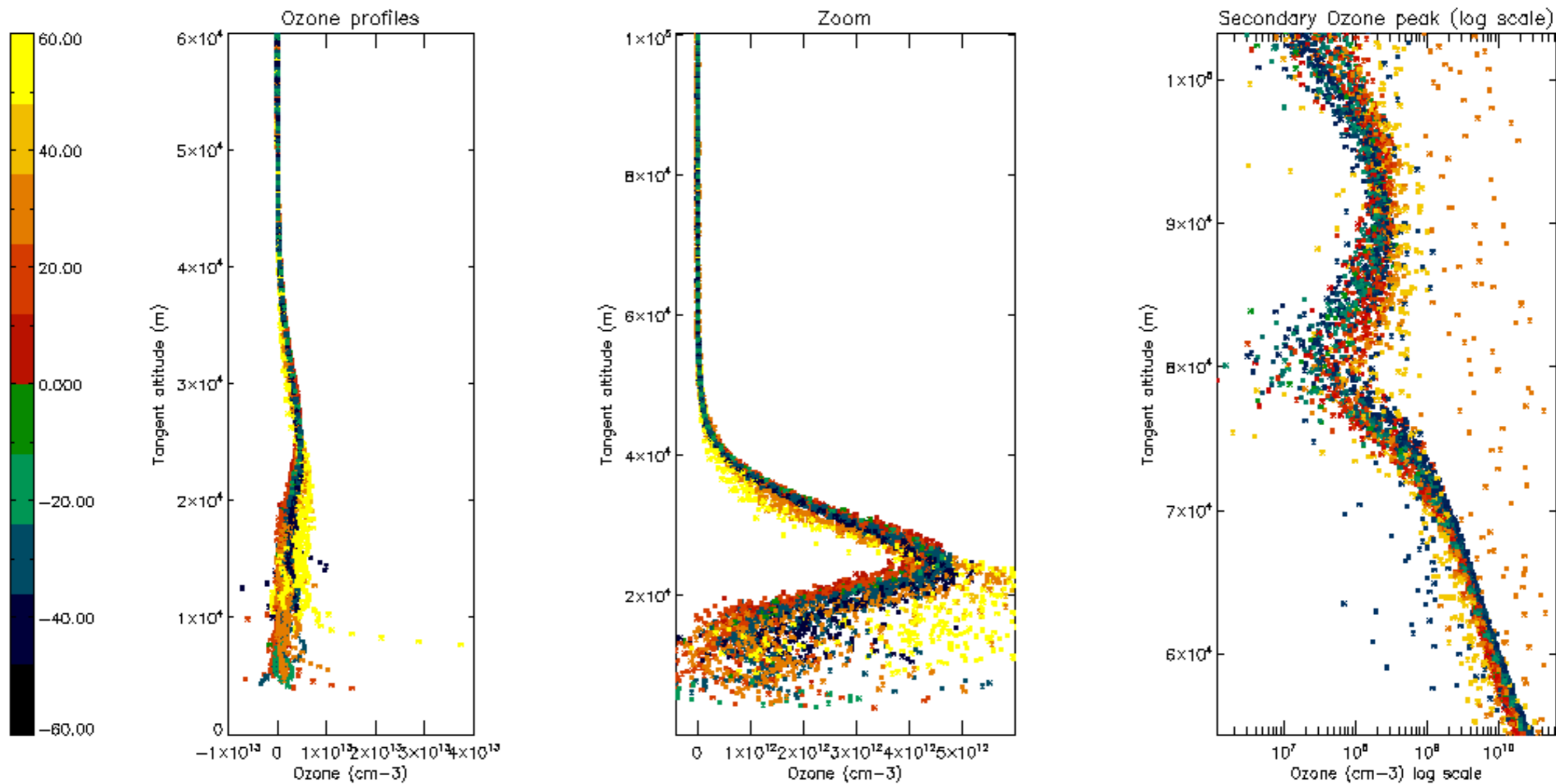


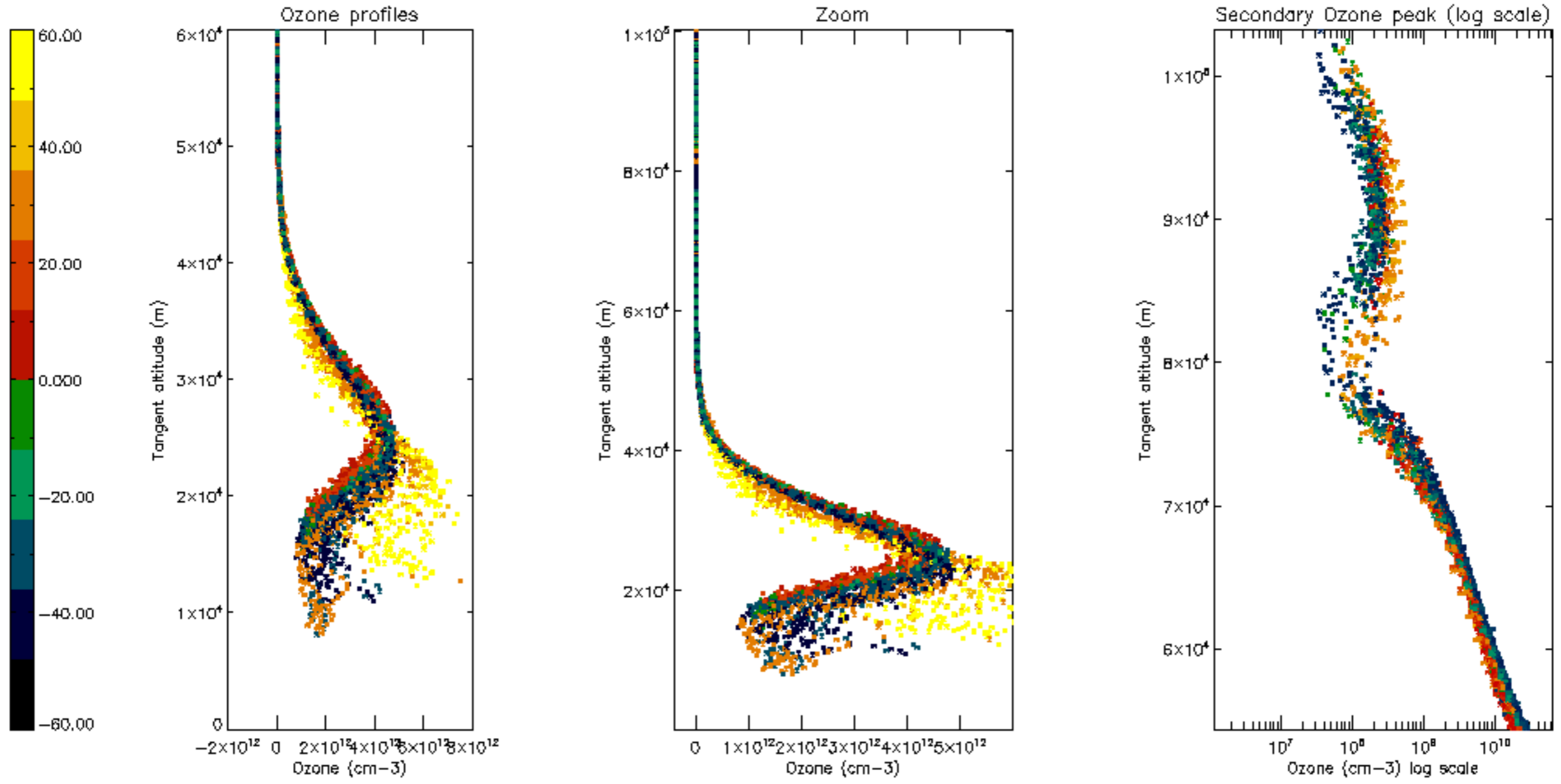
Percentage of star falling outside central band per profile

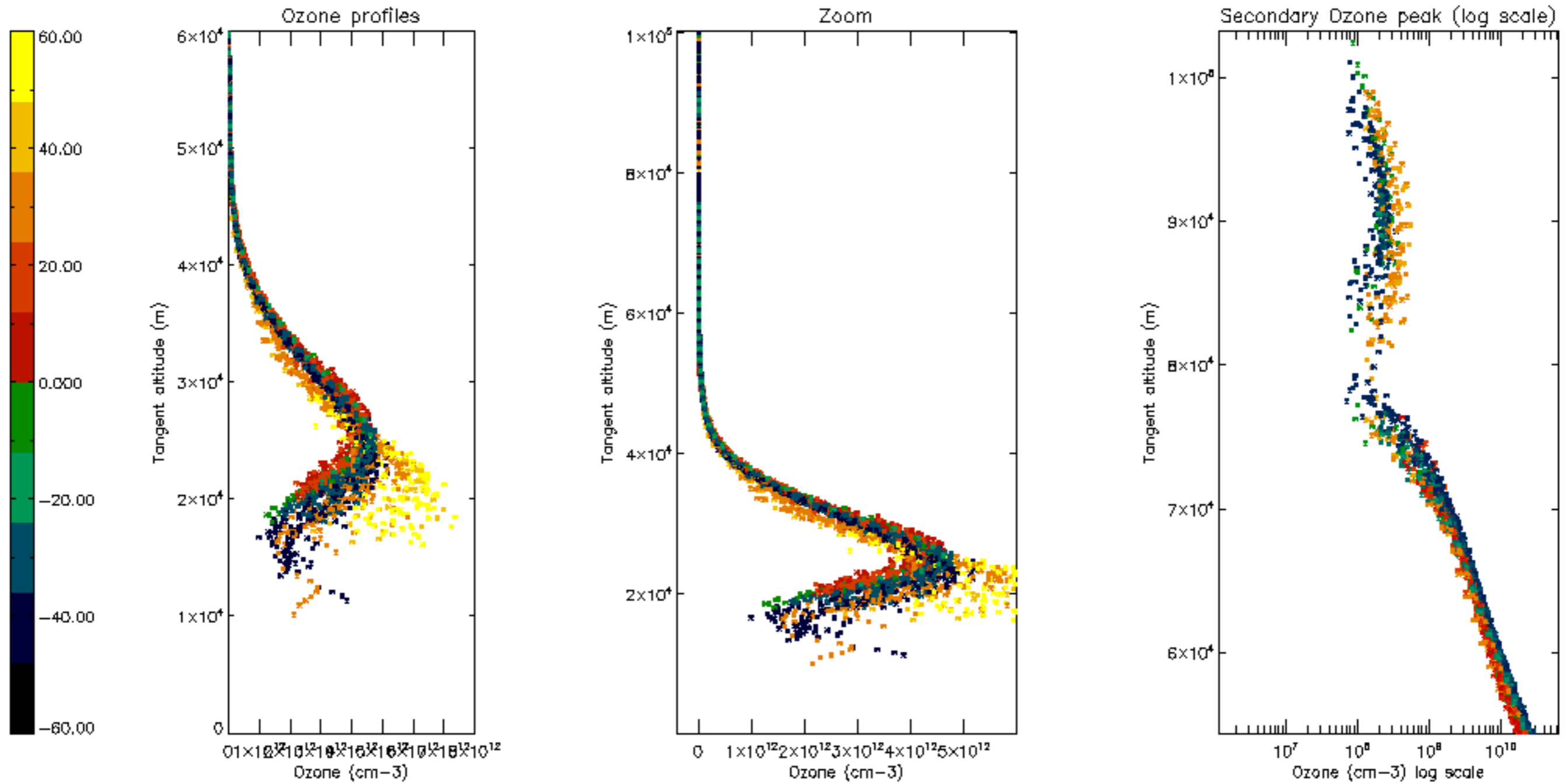


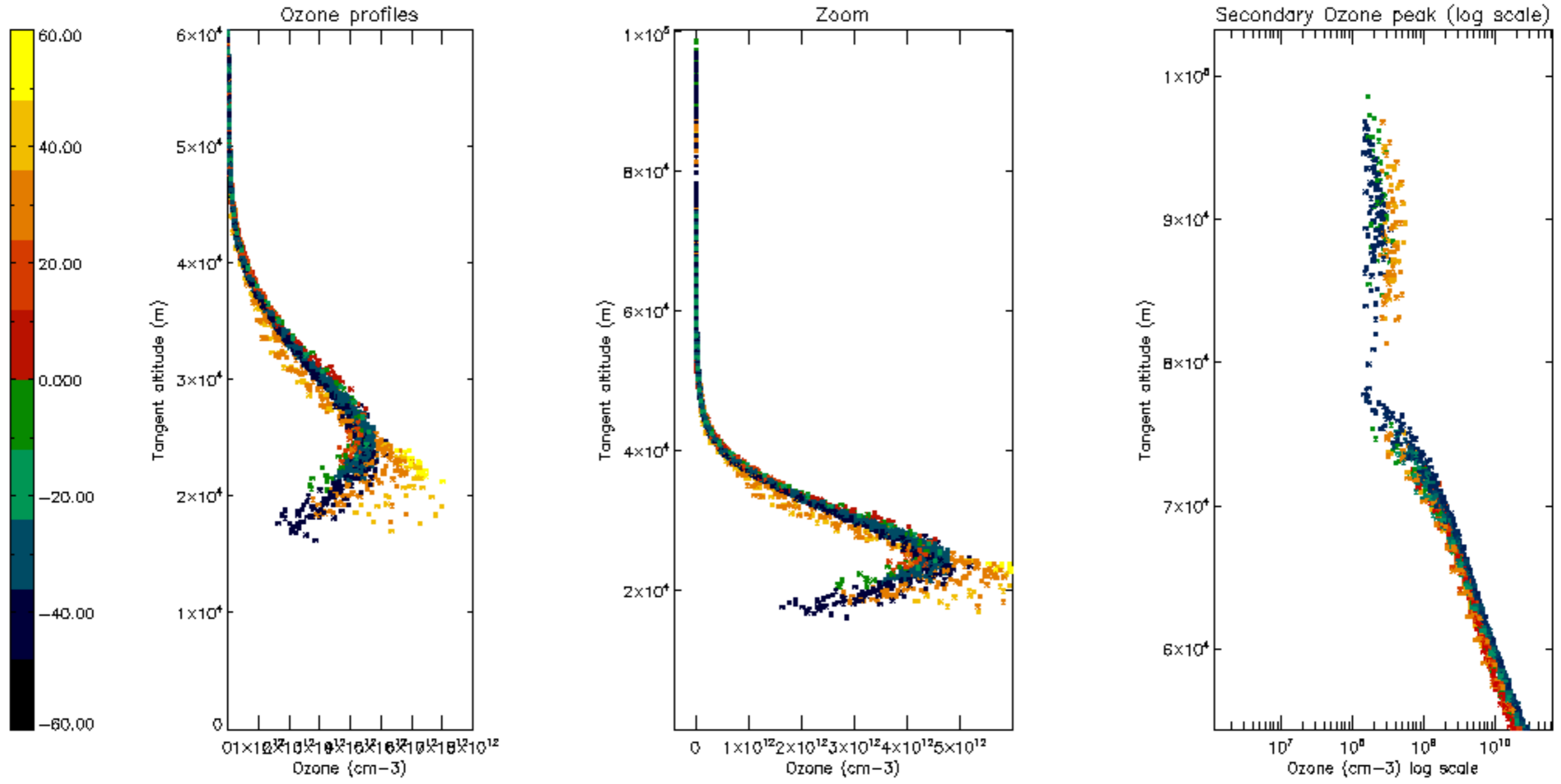
Percentage of saturation errors per profile

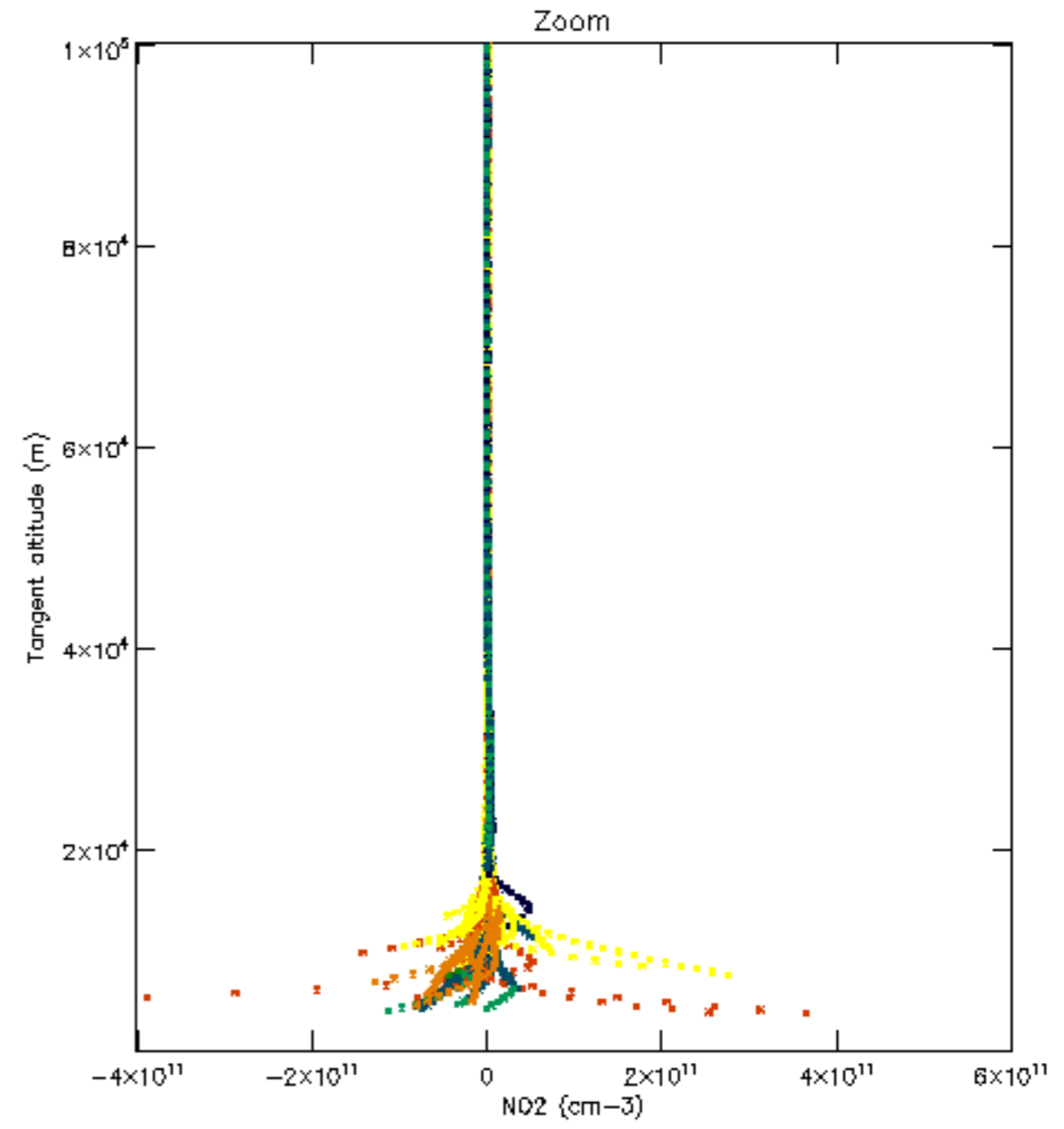
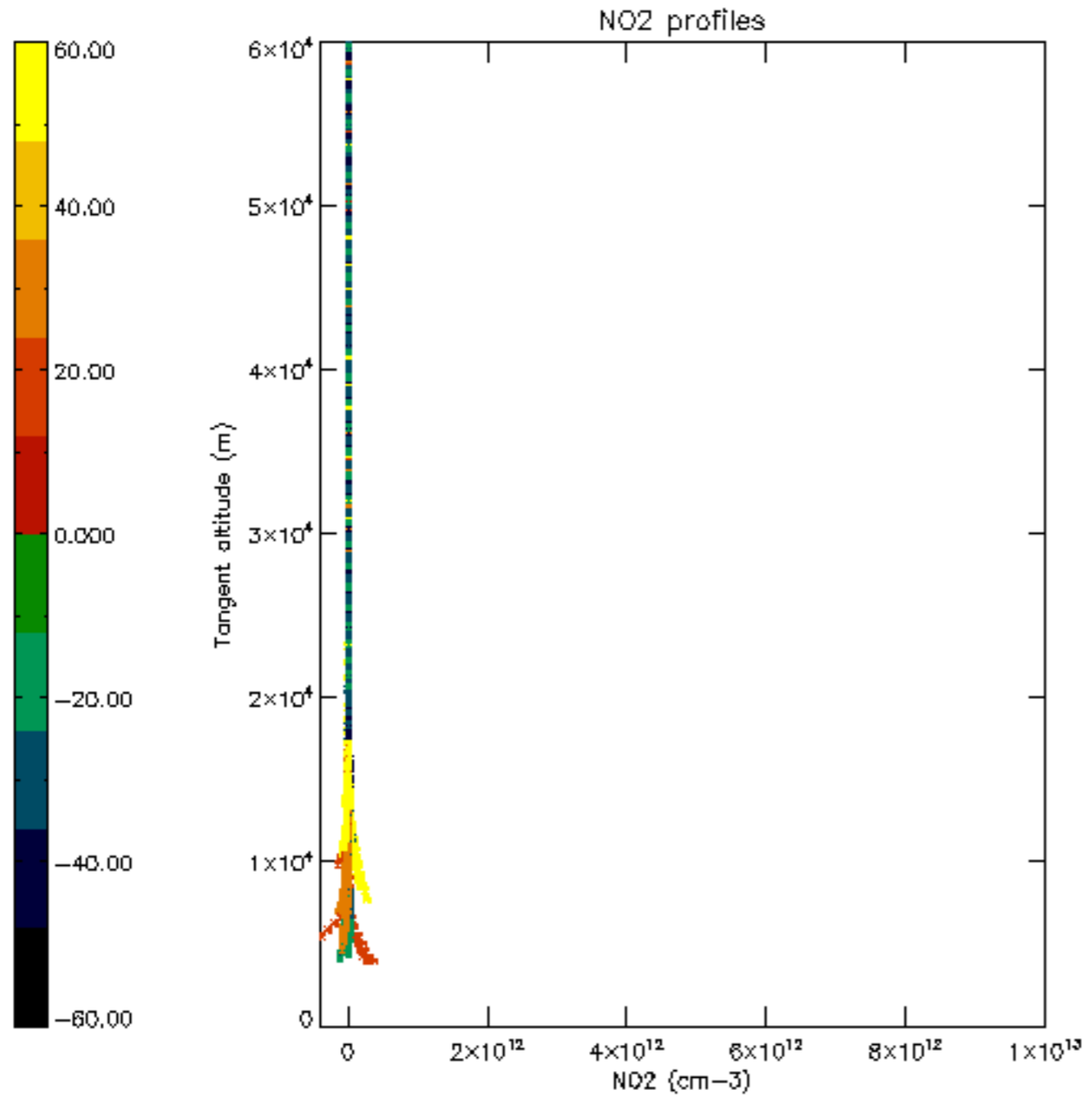


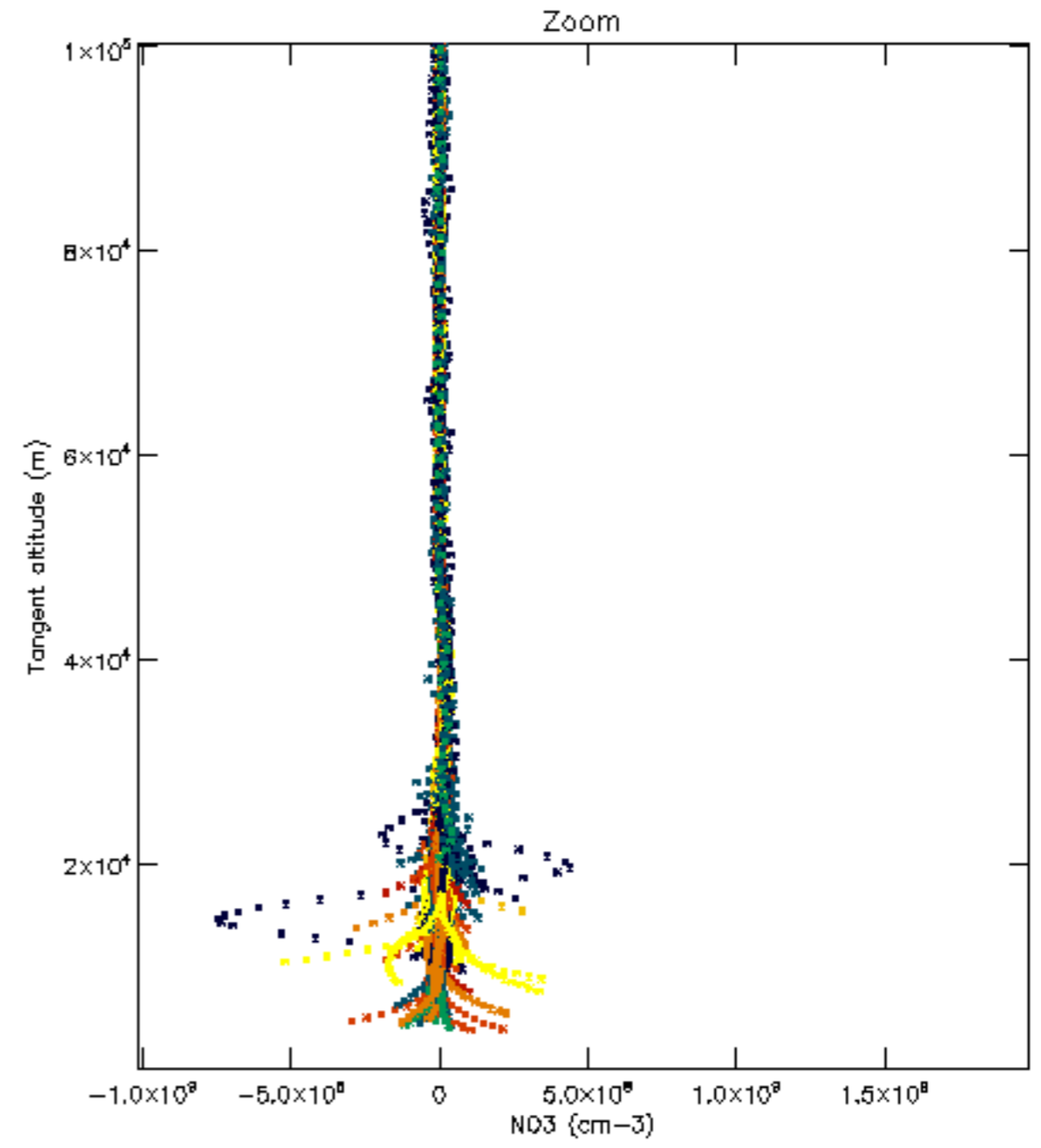
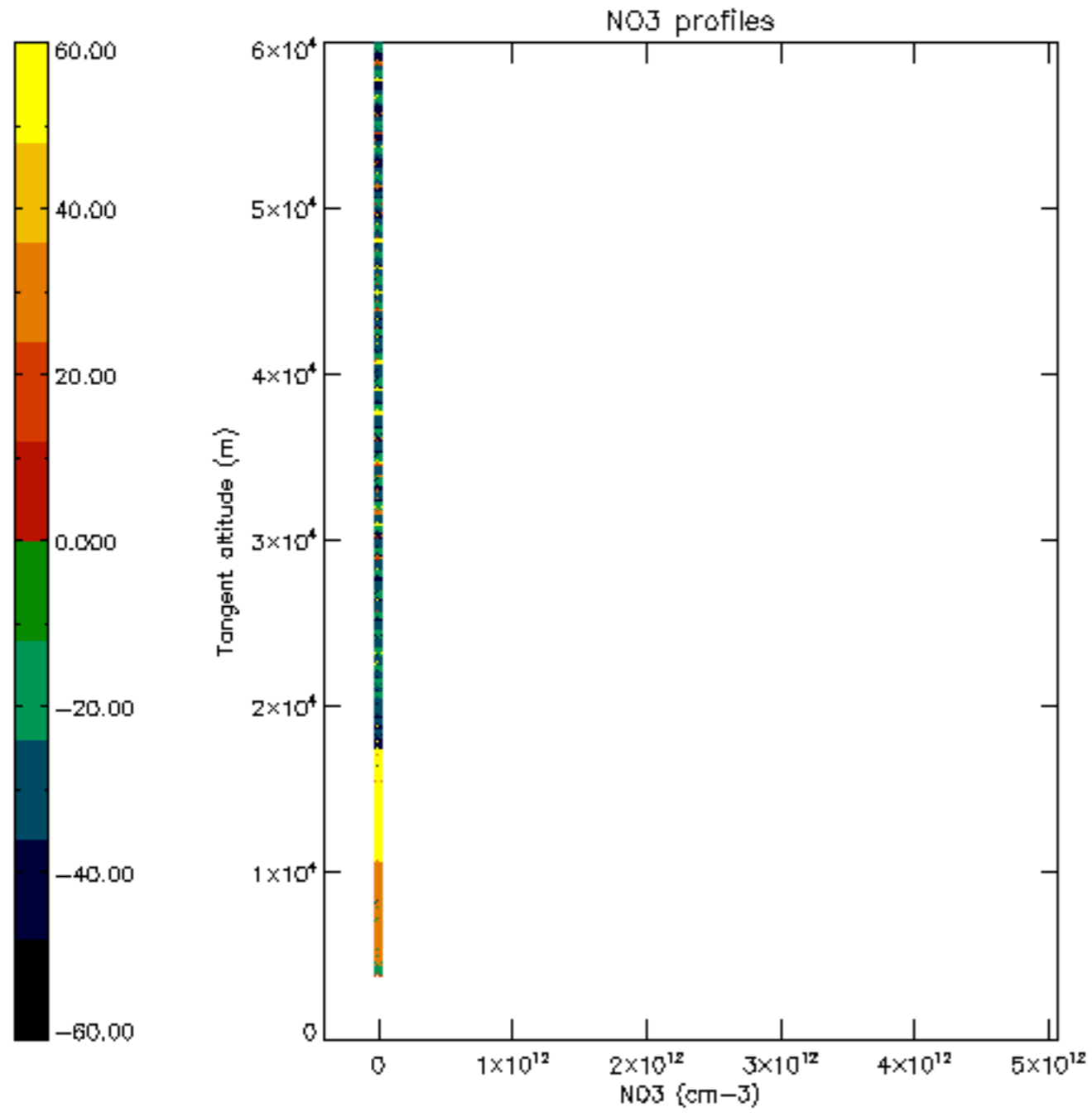


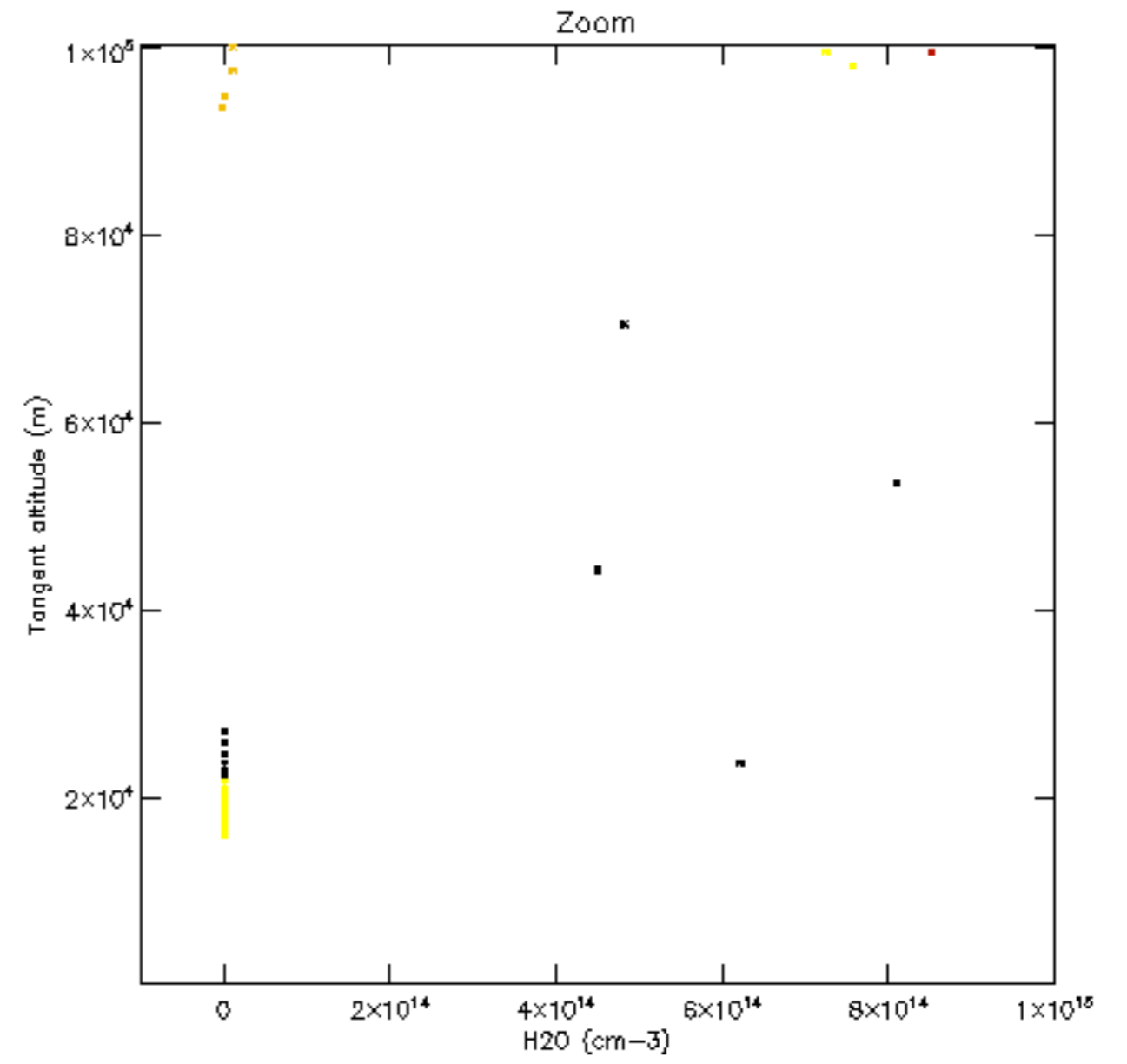
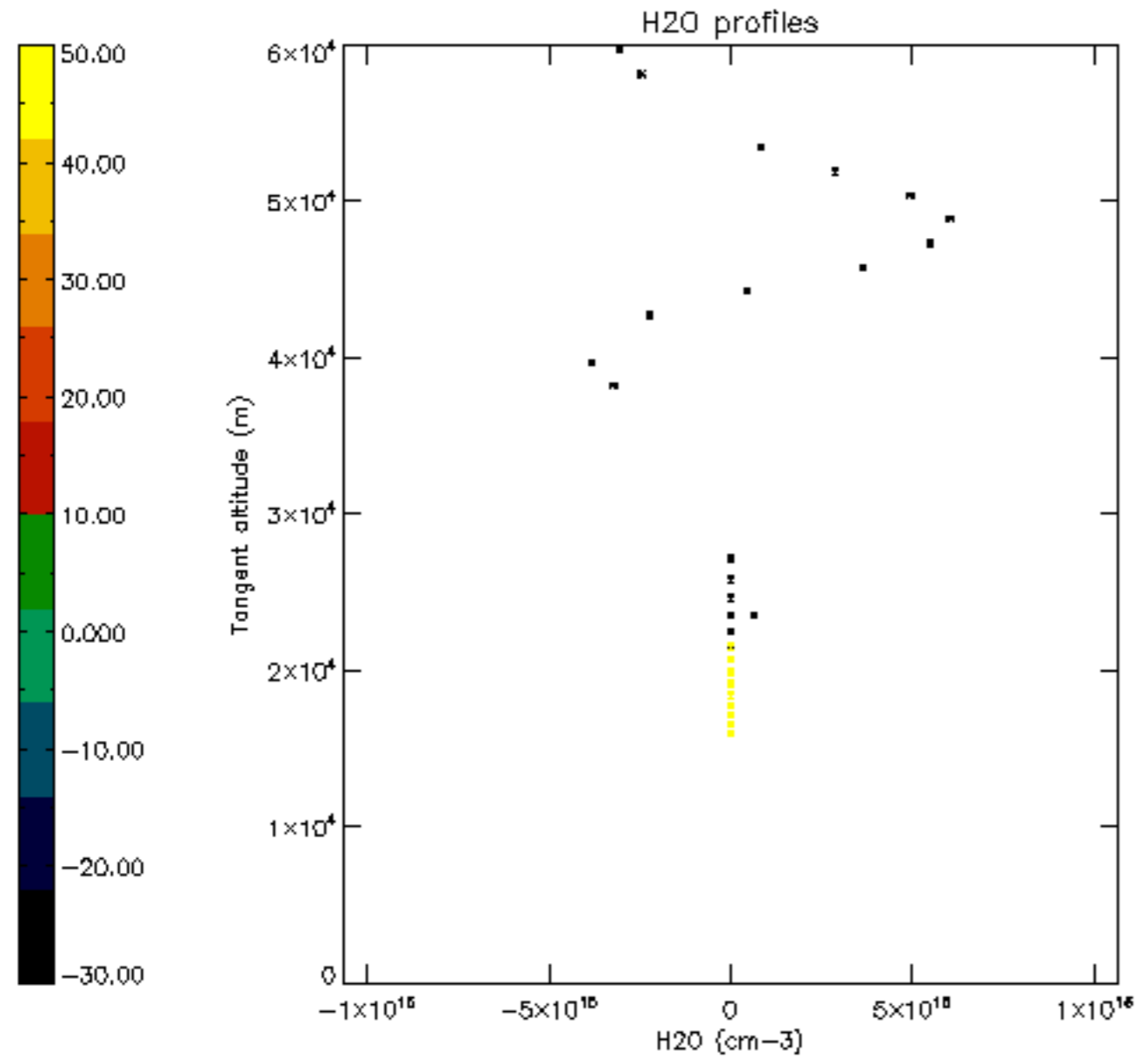


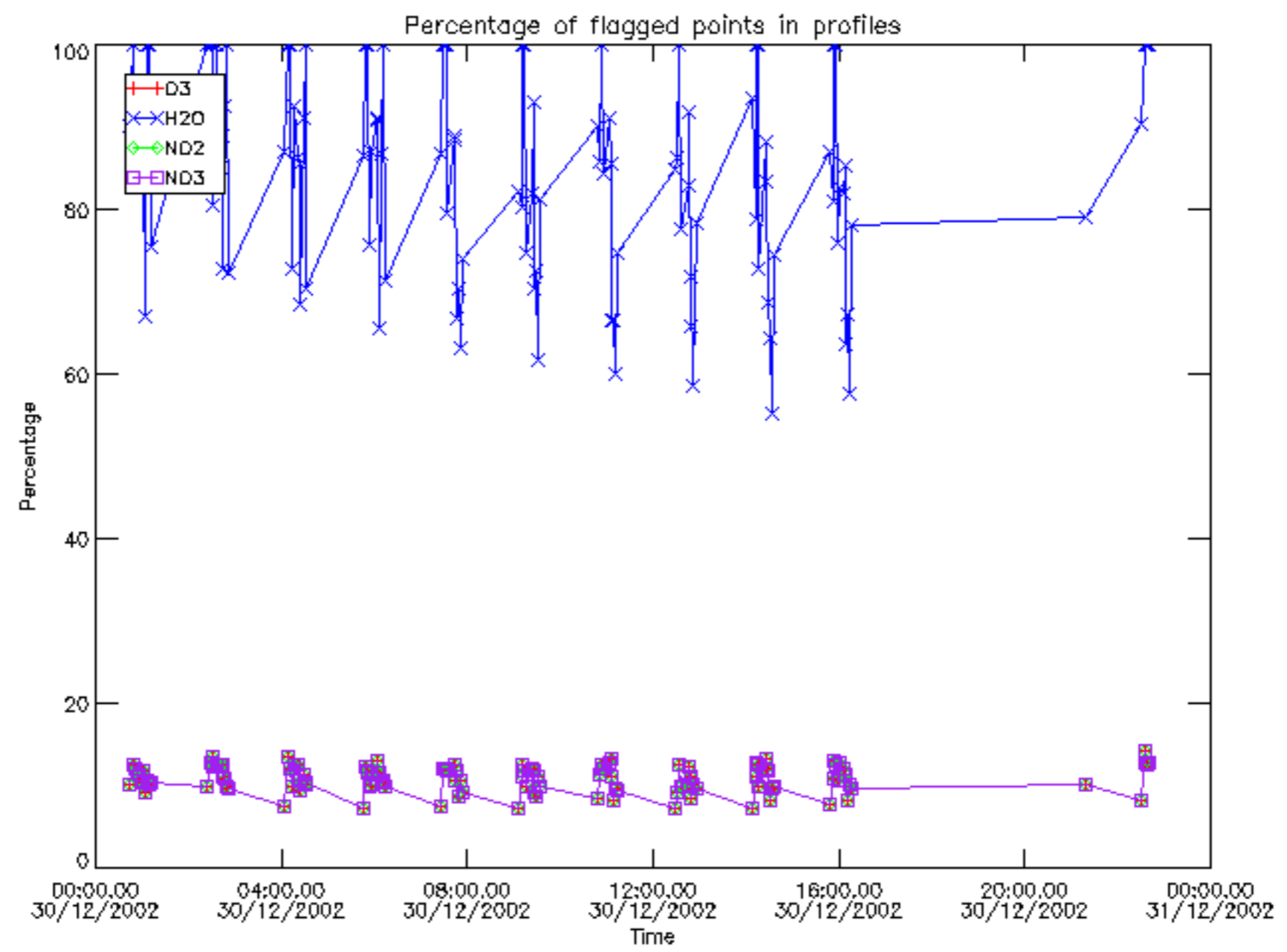




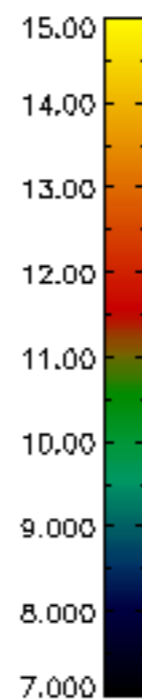
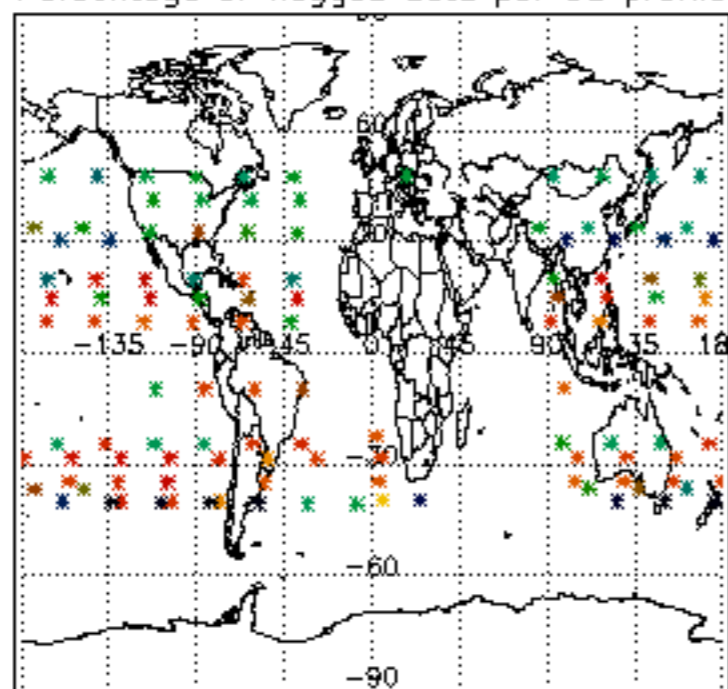




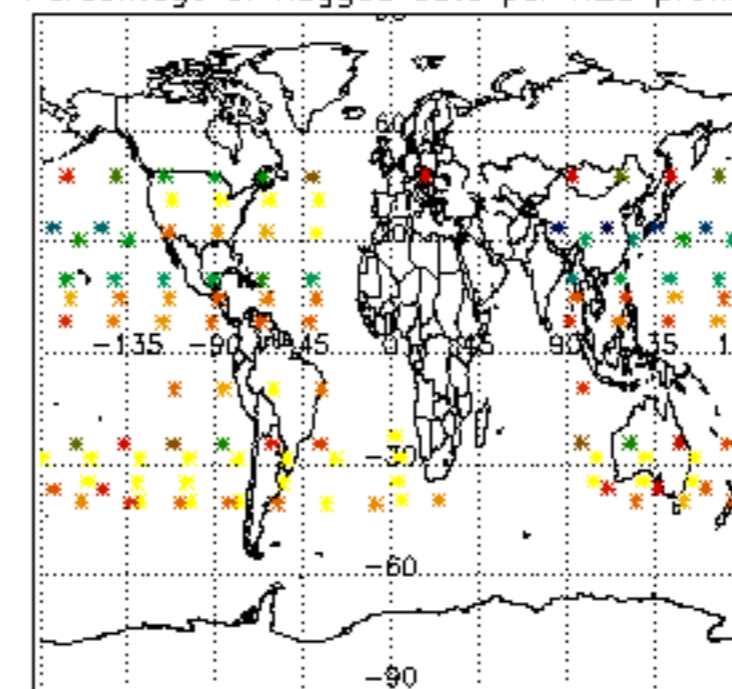




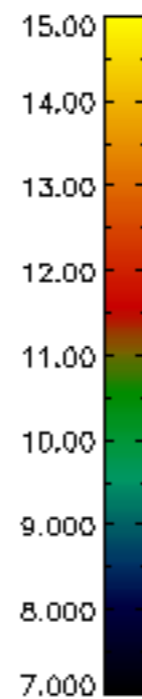
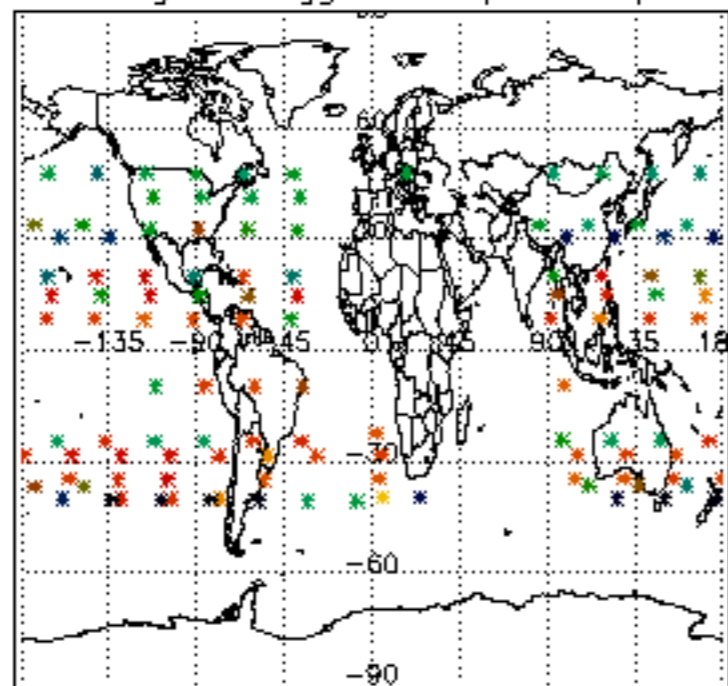
Percentage of flagged data per D3 profile



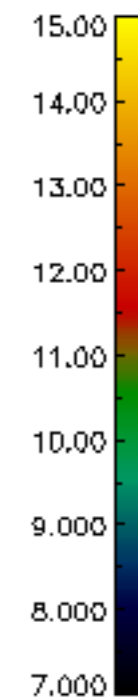
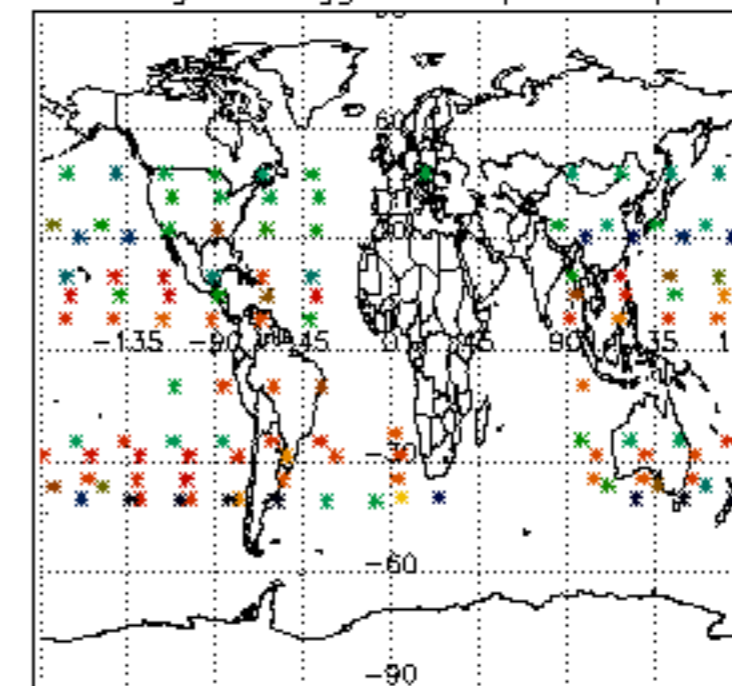
Percentage of flagged data per H2O profile

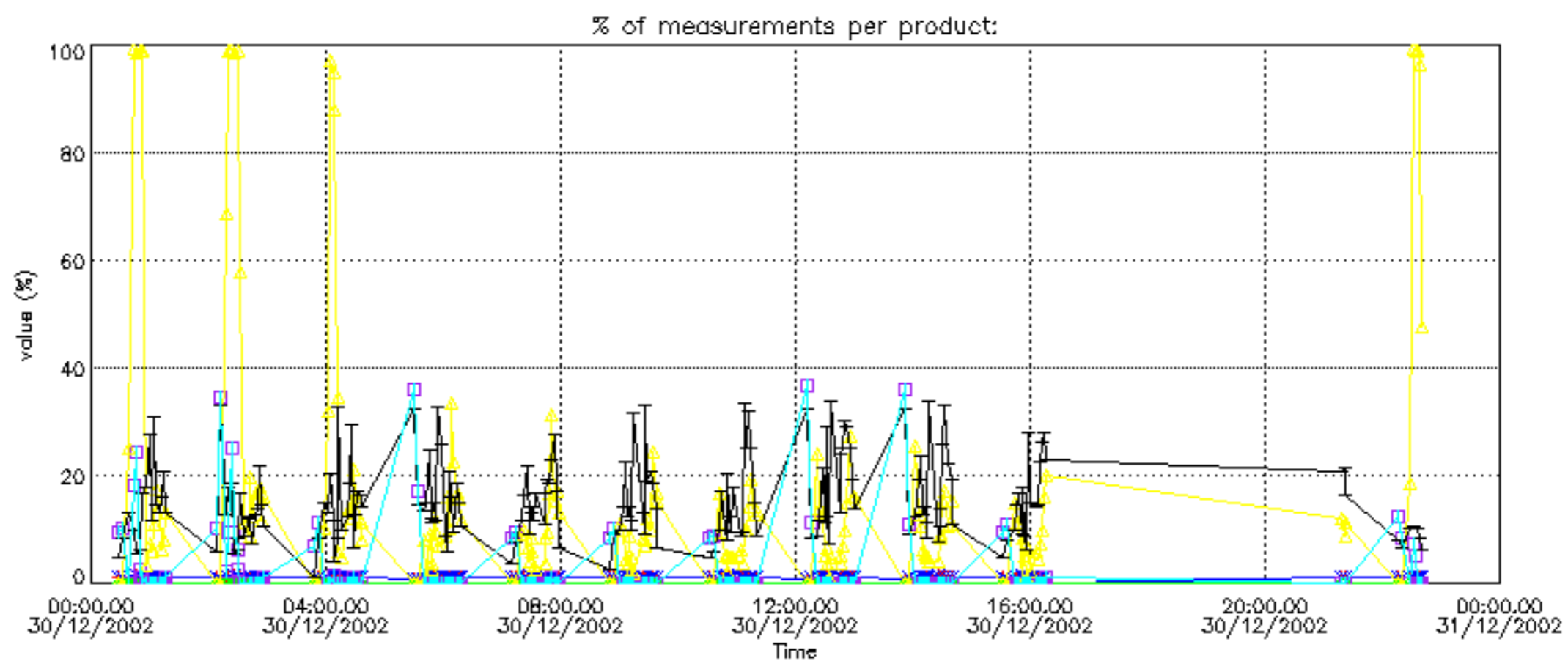


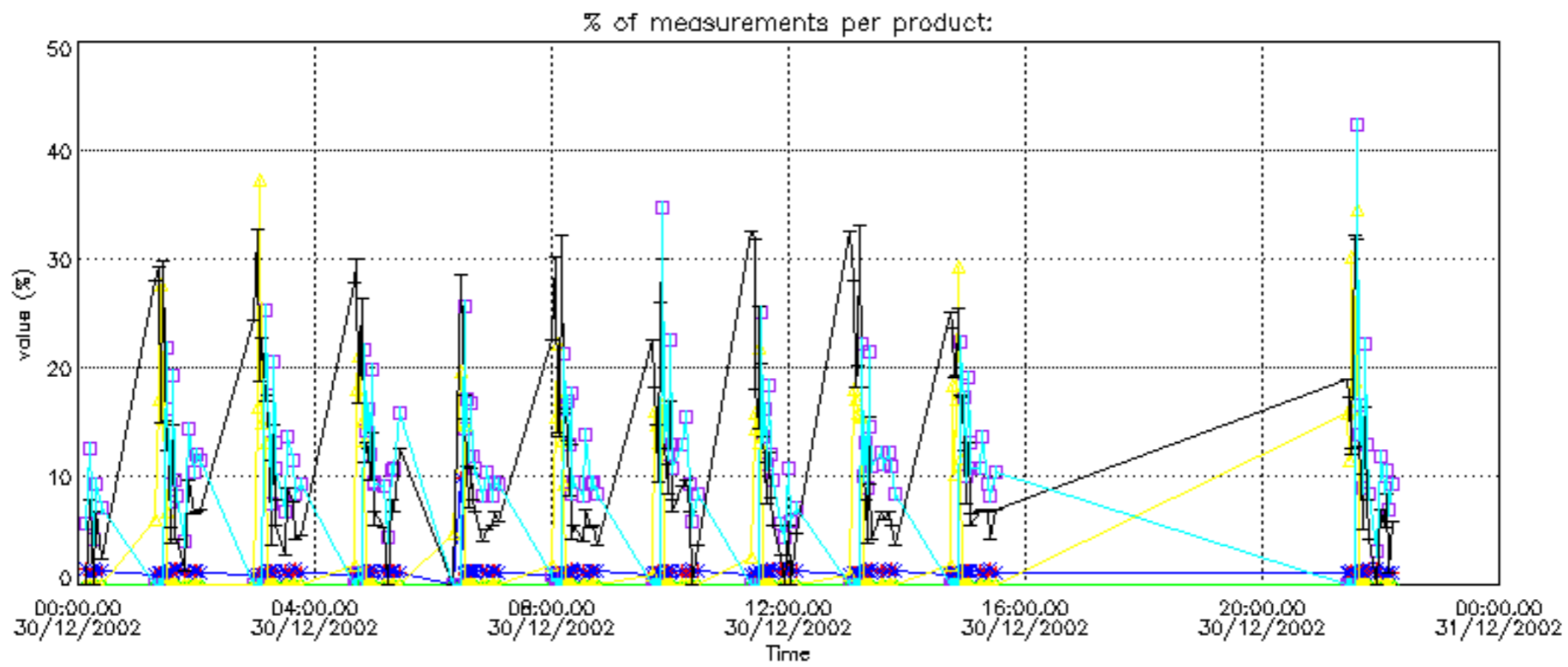
Percentage of flagged data per NO2 profile



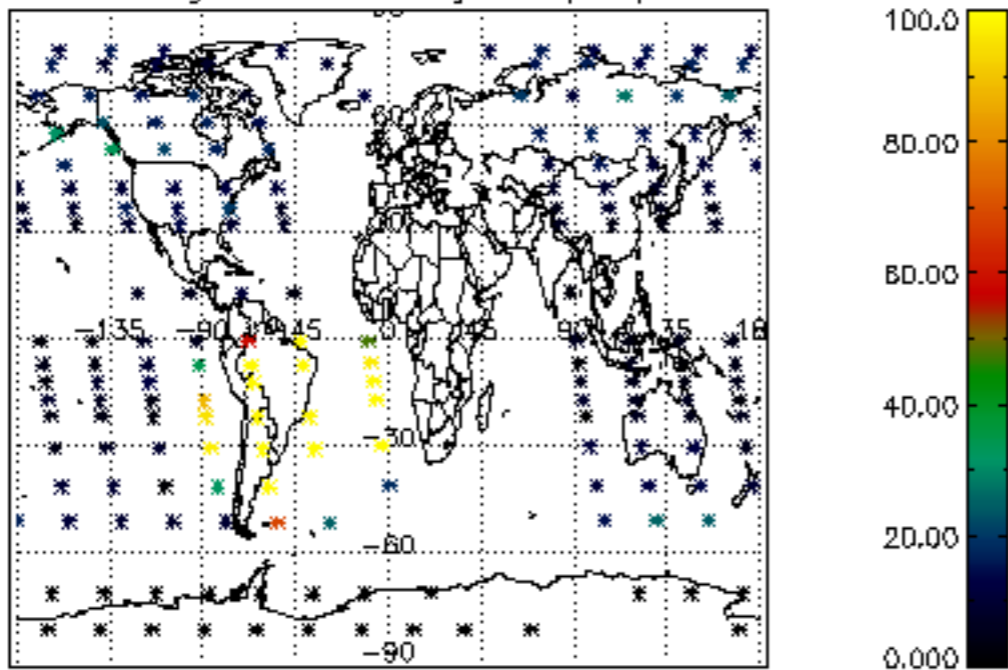
Percentage of flagged data per NO3 profile



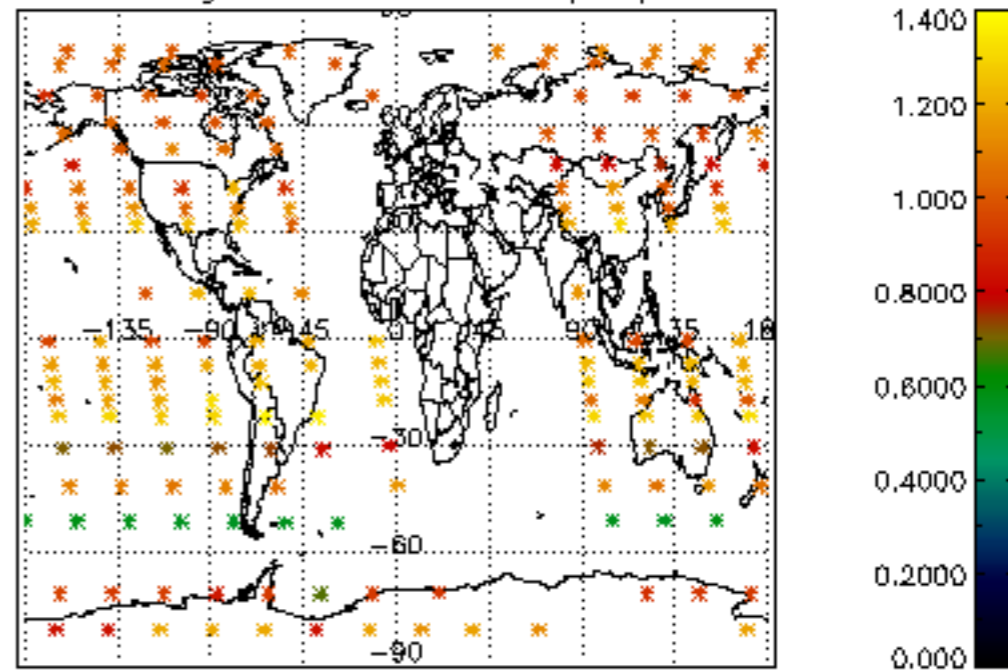




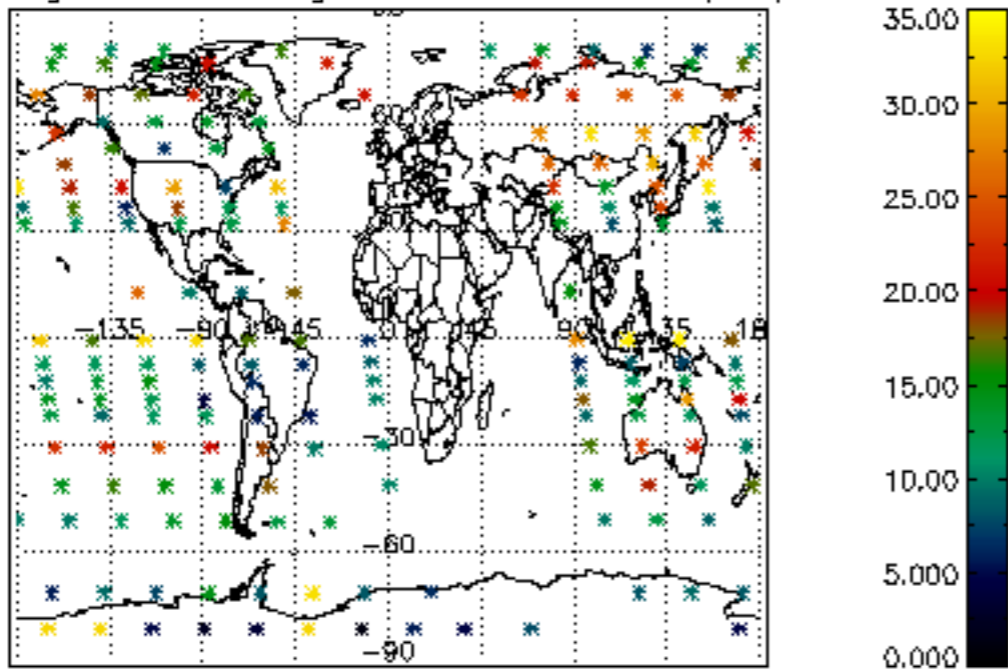
Percentage of cosmic ray hits per profile



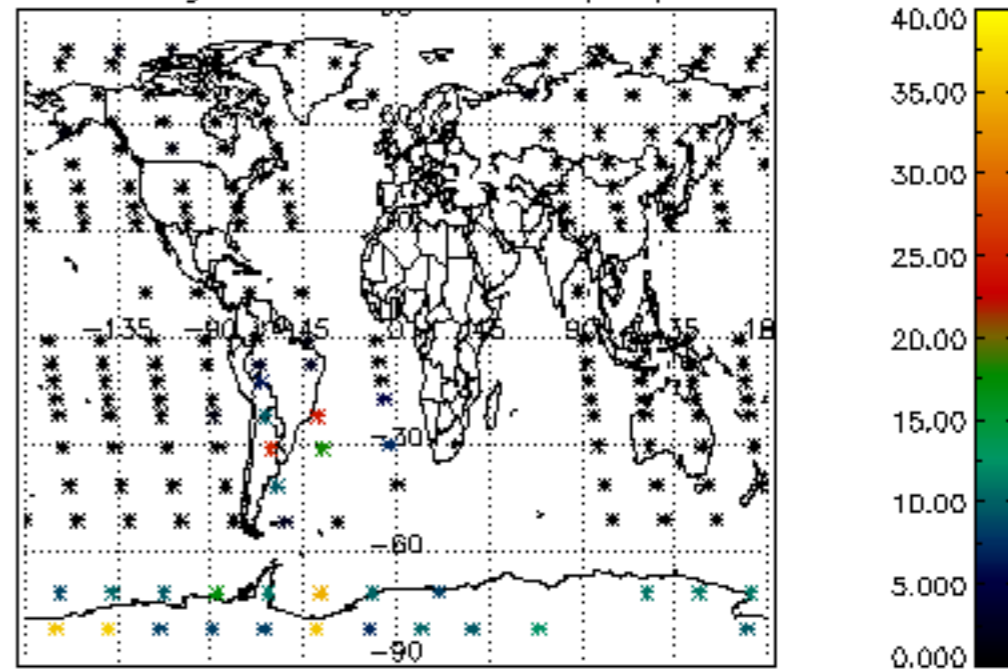
Percentage of datation errors per profile



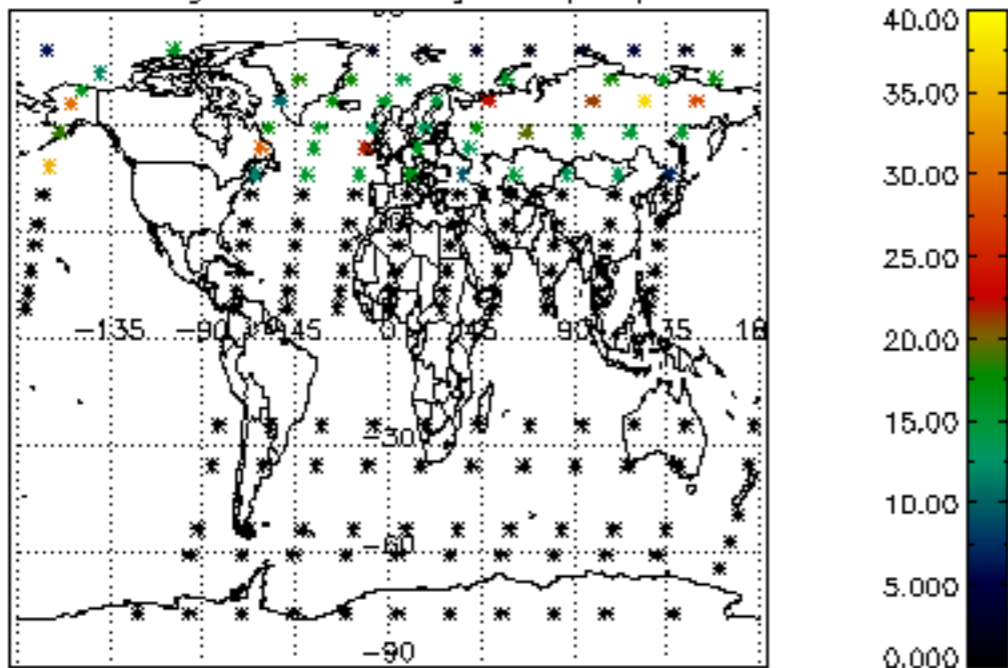
Percentage of star falling outside central band per profile



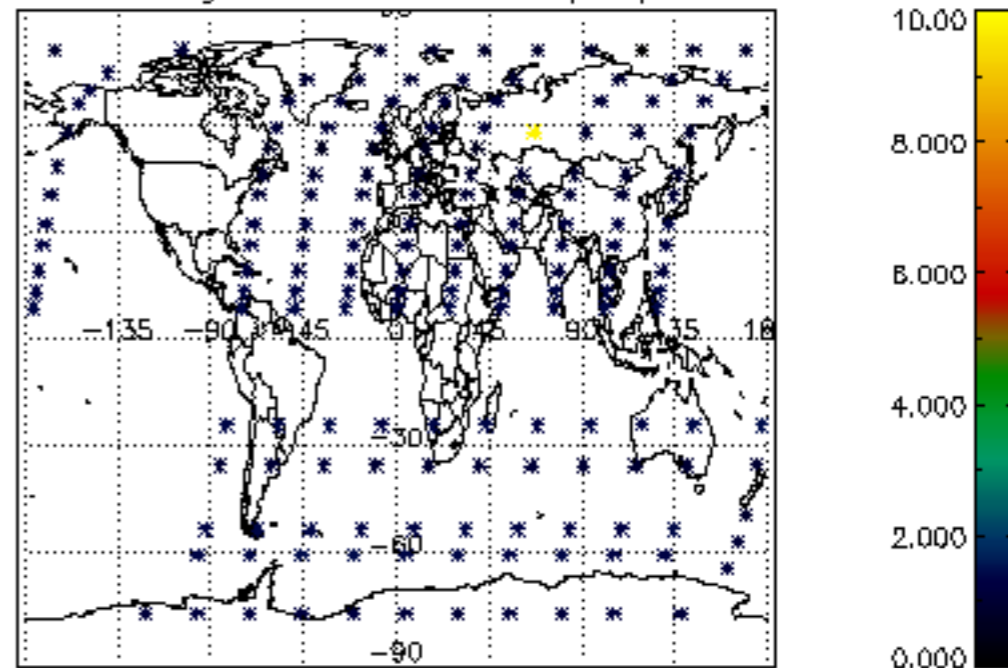
Percentage of saturation errors per profile



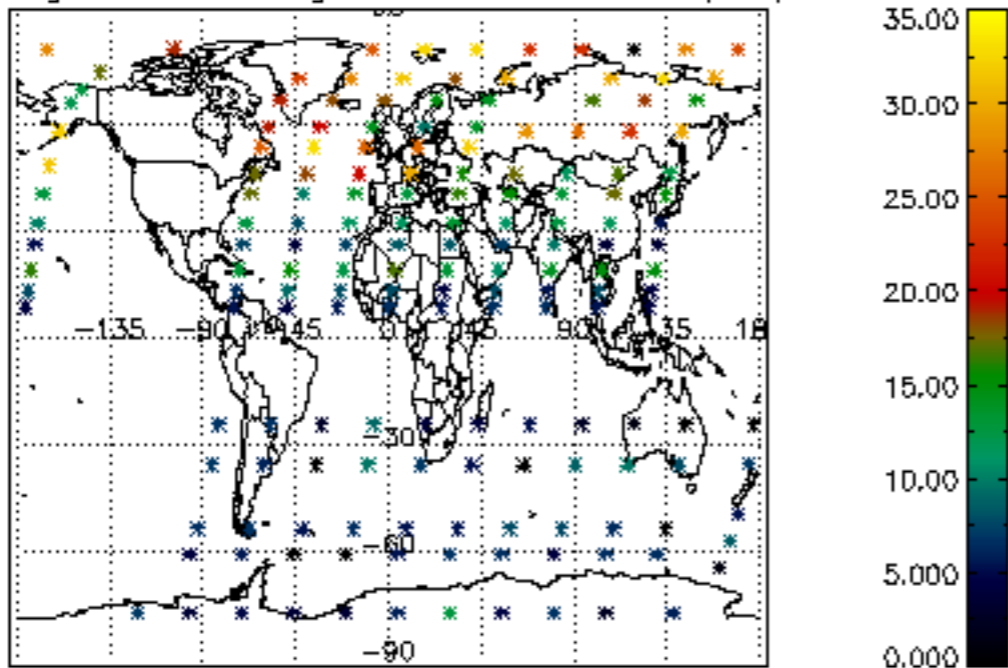
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

