

GOMOS Level 2 Daily Report

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This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also given.

Item	Value
Time of report generation	25APR2013 08:36:30
Data source version	GOMOS/6.01
Start time of products	11-01-2008 (11JAN2008 00:00:00)
Stop time of products	12-01-2008 (12JAN2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	427
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

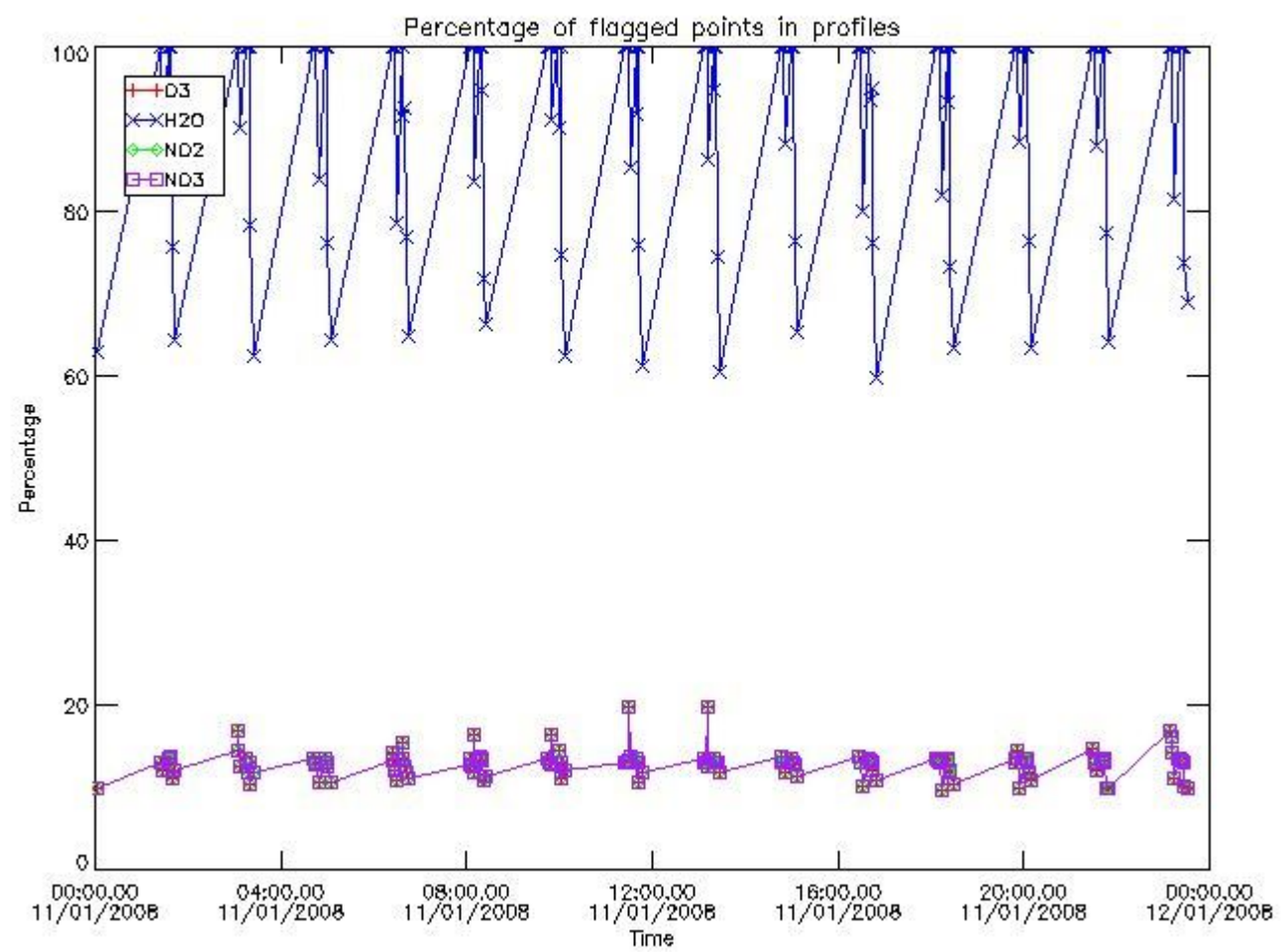
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080111_000242_000000522065_00045_30660_7275.N1	11-JAN-2008 00:02:42	Dark	51.500	2	Alp Car	-0.73600	7000.0	103	30660	No
2	GOM_NL__2PRFIN20080111_000608_000000422065_00045_30660_7276.N1	11-JAN-2008 00:06:08	Straylight	42.000	117	Pi Pup	2.7060	3800.0	84	30660	No
3	GOM_NL__2PRFIN20080111_000846_000000422065_00045_30660_7277.N1	11-JAN-2008 00:08:46	Straylight	42.000	23	21Eps CMa	1.5020	26000.	84	30660	No
4	GOM_NL__2PRFIN20080111_001013_000000432065_00045_30660_7278.N1	11-JAN-2008 00:10:13	Straylight	42.500	179	24Omi2CMa	3.0320	24000.	85	30660	No
5	GOM_NL__2PRFIN20080111_001230_000000482065_00045_30660_7279.N1	11-JAN-2008 00:12:30	Straylight	47.500	1	9Alp CMa	-1.4400	11000.	95	30660	No
6	GOM_NL__2PRFIN20080111_001459_000000402065_00045_30660_7280.N1	11-JAN-2008 00:14:59	Straylight	39.500	56	53Kap Ori	2.0650	30000.	79	30660	No
7	GOM_NL__2PRFIN20080111_001726_000000422065_00045_30660_7281.N1	11-JAN-2008 00:17:26	Twilight_stray	41.500	30	46Eps Ori	1.6940	30000.	83	30660	No
8	GOM_NL__2PRFIN20080111_001944_000000522065_00045_30660_7282.N1	11-JAN-2008 00:19:44	Twilight_stray	52.000	14	58Alp Ori	0.87000	3000.0	104	30660	No
9	GOM_NL__2PRFIN20080111_002341_000000352065_00045_30660_7283.N1	11-JAN-2008 00:23:41	Bright	35.000	176	23Zet Tau	3.0200	22000.	70	30660	No
10	GOM_NL__2PRFIN20080111_002549_000000362065_00045_30660_7284.N1	11-JAN-2008 00:25:49	Bright	35.500	28	12Bet Tau	1.6500	15200.	71	30660	No
11	GOM_NL__2PRFIN20080111_002717_000000352065_00045_30660_7285.N1	11-JAN-2008 00:27:17	Bright	35.000	114	3lot Aur	2.6930	4600.0	70	30660	No
12	GOM_NL__2PRFIN20080111_003028_000000372065_00045_30660_7286.N1	11-JAN-2008 00:30:28	Bright	37.000	42	34Bet Aur	1.9000	10200.	74	30660	No
13	GOM_NL__2PRFIN20080111_004256_000000332065_00045_30660_7287.N1	11-JAN-2008 00:42:56	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	30660	No
14	GOM_NL__2PRFIN20080111_004706_000000392065_00045_30660_7288.N1	11-JAN-2008 00:47:06	Bright	39.000	60	7Bet UMi	2.0810	3950.0	78	30660	No
15	GOM_NL__2PRFIN20080111_005116_000000382065_00045_30660_7289.N1	11-JAN-2008 00:51:16	Bright	37.500	119	14Eta Dra	2.7270	4700.0	75	30660	No
16	GOM_NL__2PRFIN20080111_005340_000000522065_00045_30660_7290.N1	11-JAN-2008 00:53:40	Bright	52.000	130	23Bet Dra	2.7990	5800.0	104	30660	No
17	GOM_NL__2PRFIN20080111_005955_000000532065_00045_30660_7291.N1	11-JAN-2008 00:59:55	Bright	53.000	133	40Zet Her	2.8070	6000.0	106	30660	No
18	GOM_NL__2PRFIN20080111_010256_000000532065_00045_30660_7292.N1	11-JAN-2008 01:02:56	Bright	53.000	127	27Bet Her	2.7810	4700.0	106	30660	No
19	GOM_NL__2PRFIN20080111_011022_000000542065_00045_30660_7293.N1	11-JAN-2008 01:10:22	Bright	54.000	120	1Del Oph	2.7340	3200.0	108	30660	No
20	GOM_NL__2PRFIN20080111_011149_000000362065_00045_30660_7294.N1	11-JAN-2008 01:11:49	Bright	35.500	98	13Zet Oph	2.5710	30000.	71	30660	No
21	GOM_NL__2PRFIN20080111_011459_000000412065_00045_30660_7295.N1	11-JAN-2008 01:14:59	Twilight_stray	40.500	97	8Bet1Sco	2.5610	30000.	81	30660	No
22	GOM_NL__2PRFIN20080111_011615_000000472065_00045_30660_7296.N1	11-JAN-2008 01:16:15	Twilight_stray	46.500	16	21Alp Sco	1.0200	3000.0	93	30660	No
23	GOM_NL__2PRFIN20080111_012426_000000402065_00045_30660_7297.N1	11-JAN-2008 01:24:26	Dark	39.500	78	Alp Lup	2.3040	28000.	79	30660	No
24	GOM_NL__2PRFIN20080111_012715_000000432065_00046_30661_7324.N1	11-JAN-2008 01:27:15	Dark	42.500	4	Alp1Cen	-0.010000	5800.0	85	30661	No
25	GOM_NL__2PRFIN20080111_013448_000000382065_00046_30661_7325.N1	11-JAN-2008 01:34:48	Dark	38.000	124	The Car	2.7640	30000.	76	30661	No
26	GOM_NL__2PRFIN20080111_013622_000000372065_00046_30661_7326.N1	11-JAN-2008 01:36:22	Dark	37.000	29	Bet Car	1.6720	10200.	74	30661	No
27	GOM_NL__2PRFIN20080111_013807_000000382065_00046_30661_7327.N1	11-JAN-2008 01:38:07	Dark	37.500	71	lot Car	2.2460	7700.0	75	30661	No
28	GOM_NL__2PRFIN20080111_013929_000000462065_00046_30661_7328.N1	11-JAN-2008 01:39:29	Dark	45.500	41	Eps Car	1.8600	4100.0	91	30661	No
29	GOM_NL__2PRFIN20080111_014318_000000432065_00046_30661_7329.N1	11-JAN-2008 01:43:18	Dark	42.500	2	Alp Car	-0.73600	7000.0	85	30661	No
30	GOM_NL__2PRFIN20080111_014645_000000462065_00046_30661_7330.N1	11-JAN-2008 01:46:45	Straylight	45.500	117	Pi Pup	2.7060	3800.0	91	30661	No
31	GOM_NL__2PRFIN20080111_014922_000000442065_00046_30661_7331.N1	11-JAN-2008 01:49:22	Straylight	44.000	23	21Eps CMa	1.5020	26000.	88	30661	No
32	GOM_NL__2PRFIN20080111_015049_000000412065_00046_30661_7332.N1	11-JAN-2008 01:50:49	Straylight	41.000	179	24Omi2CMa	3.0320	24000.	82	30661	No
33	GOM_NL__2PRFIN20080111_015306_000000552065_00046_30661_7333.N1	11-JAN-2008 01:53:06	Straylight	55.000	1	9Alp CMa	-1.4400	11000.	110	30661	No
34	GOM_NL__2PRFIN20080111_015535_000000412065_00046_30661_7334.N1	11-JAN-2008 01:55:35	Straylight	41.000	56	53Kap Ori	2.0650	30000.	82	30661	No
35	GOM_NL__2PRFIN20080111_015802_000000442065_00046_30661_7335.N1	11-JAN-2008 01:58:02	Twilight_stray	43.500	30	46Eps Ori	1.6940	30000.	87	30661	No
36	GOM_NL__2PRFIN20080111_020020_000000522065_00046_30661_7336.N1	11-JAN-2008 02:00:20	Twilight_stray	52.000	14	58Alp Ori	0.87000	3000.0	104	30661	No
37	GOM_NL__2PRFIN20080111_020417_000000362065_00046_30661_7337.N1	11-JAN-2008 02:04:17	Bright	35.500	176	23Zet Tau	3.0200	22000.	71	30661	No
38	GOM_NL__2PRFIN20080111_020625_000000382065_00046_30661_7338.N1	11-JAN-2008 02:06:25	Bright	38.000	28	12Bet Tau	1.6500	15200.	76	30661	No
39	GOM_NL__2PRFIN20080111_020753_000000372065_00046_30661_7339.N1	11-JAN-2008 02:07:53	Bright	37.000	114	3lot Aur	2.6930	4600.0	74	30661	No
40	GOM_NL__2PRFIN20080111_021104_000000382065_00046_30661_7340.N1	11-JAN-2008 02:11:04	Bright	37.500	42	34Bet Aur	1.9000	10200.	75	30661	No
41	GOM_NL__2PRFIN20080111_022332_000000362065_00046_30661_7341.N1	11-JAN-2008 02:23:32	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	30661	No
42	GOM_NL__2PRFIN20080111_022741_000000372065_00046_30661_7342.N1	11-JAN-2008 02:27:41	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	30661	No

397	GOM_NL__2PRFIN20080111_221506_000000382065_00058_30673_7504.N1	11-JAN-2008 22:15:06	Bright	37.500	114	3lot Aur	2.6930	4600.0	75	30673	No
398	GOM_NL__2PRFIN20080111_221814_000000372065_00058_30673_7505.N1	11-JAN-2008 22:18:14	Bright	37.000	42	34Bet Aur	1.9000	10200.	74	30673	No
399	GOM_NL__2PRFIN20080111_223043_000000352065_00058_30673_7506.N1	11-JAN-2008 22:30:43	Bright	34.500	49	1Alp UMi	1.9900	6300.0	69	30673	No
400	GOM_NL__2PRFIN20080111_223451_000000382065_00058_30673_7507.N1	11-JAN-2008 22:34:51	Bright	37.500	60	7Bet UMi	2.0810	3950.0	75	30673	No
401	GOM_NL__2PRFIN20080111_223903_000000382065_00058_30673_7508.N1	11-JAN-2008 22:39:03	Bright	38.000	119	14Eta Dra	2.7270	4700.0	76	30673	No
402	GOM_NL__2PRFIN20080111_224129_000000522065_00058_30673_7509.N1	11-JAN-2008 22:41:29	Bright	52.000	130	23Bet Dra	2.7990	5800.0	104	30673	No
403	GOM_NL__2PRFIN20080111_224744_000000532065_00058_30673_7510.N1	11-JAN-2008 22:47:44	Bright	53.000	133	40Zet Her	2.8070	6000.0	106	30673	No
404	GOM_NL__2PRFIN20080111_225046_000000542065_00058_30673_7511.N1	11-JAN-2008 22:50:46	Bright	54.000	127	27Bet Her	2.7810	4700.0	108	30673	No
405	GOM_NL__2PRFIN20080111_225813_000000542065_00058_30673_7512.N1	11-JAN-2008 22:58:13	Bright	54.000	120	1Del Oph	2.7340	3200.0	108	30673	No
406	GOM_NL__2PRFIN20080111_225939_000000522065_00058_30673_7513.N1	11-JAN-2008 22:59:39	Bright	51.500	98	13Zet Oph	2.5710	30000.	103	30673	No
407	GOM_NL__2PRFIN20080111_230406_000000452065_00058_30673_7514.N1	11-JAN-2008 23:04:06	Twilight	45.000	16	21Alp Sco	1.0200	3000.0	90	30673	No
408	GOM_NL__2PRFIN20080111_230913_000000372065_00058_30673_7515.N1	11-JAN-2008 23:09:13	Dark	36.500	131	Gam Lup	2.8000	26000.	73	30673	No
409	GOM_NL__2PRFIN20080111_231050_000000382065_00058_30673_7516.N1	11-JAN-2008 23:10:50	Dark	38.000	109	Bet Lup	2.6770	26000.	76	30673	No
410	GOM_NL__2PRFIN20080111_231221_000000402065_00058_30673_7517.N1	11-JAN-2008 23:12:21	Dark	39.500	78	Alp Lup	2.3040	28000.	79	30673	No
411	GOM_NL__2PRFIN20080111_231508_000000462065_00059_30674_7516.N1	11-JAN-2008 23:15:08	Dark	46.000	4	Alp1Cen	-0.010000	5800.0	92	30674	No
412	GOM_NL__2PRFIN20080111_232241_000000382065_00059_30674_7517.N1	11-JAN-2008 23:22:41	Dark	38.000	124	The Car	2.7640	30000.	76	30674	No
413	GOM_NL__2PRFIN20080111_232413_000000392065_00059_30674_7518.N1	11-JAN-2008 23:24:13	Dark	38.500	29	Bet Car	1.6720	10200.	77	30674	No
414	GOM_NL__2PRFIN20080111_232601_000000402065_00059_30674_7519.N1	11-JAN-2008 23:26:01	Dark	39.500	71	lot Car	2.2460	7700.0	79	30674	No
415	GOM_NL__2PRFIN20080111_232721_000000502065_00059_30674_7520.N1	11-JAN-2008 23:27:21	Dark	50.000	41	Eps Car	1.8600	4100.0	100	30674	No
416	GOM_NL__2PRFIN20080111_233108_000000522065_00059_30674_7521.N1	11-JAN-2008 23:31:08	Dark	52.000	2	Alp Car	-0.73600	7000.0	104	30674	No
417	GOM_NL__2PRFIN20080111_233436_000000432065_00059_30674_7522.N1	11-JAN-2008 23:34:36	Straylight	43.000	117	Pi Pup	2.7060	3800.0	86	30674	No
418	GOM_NL__2PRFIN20080111_233712_000000432065_00059_30674_7523.N1	11-JAN-2008 23:37:12	Straylight	42.500	23	21Eps CMa	1.5020	26000.	85	30674	No
419	GOM_NL__2PRFIN20080111_233839_000000412065_00059_30674_7524.N1	11-JAN-2008 23:38:39	Straylight	40.500	179	24Omi2CMa	3.0320	24000.	81	30674	No
420	GOM_NL__2PRFIN20080111_234055_000000462065_00059_30674_7525.N1	11-JAN-2008 23:40:55	Straylight	46.000	1	9Alp CMa	-1.4400	11000.	92	30674	No
421	GOM_NL__2PRFIN20080111_234323_000000402065_00059_30674_7526.N1	11-JAN-2008 23:43:23	Straylight	39.500	56	53Kap Ori	2.0650	30000.	79	30674	No
422	GOM_NL__2PRFIN20080111_234551_000000422065_00059_30674_7527.N1	11-JAN-2008 23:45:51	Twilight	42.000	30	46Eps Ori	1.6940	30000.	84	30674	No
423	GOM_NL__2PRFIN20080111_234808_000000522065_00059_30674_7528.N1	11-JAN-2008 23:48:08	Twilight	52.000	14	58Alp Ori	0.87000	3000.0	104	30674	No
424	GOM_NL__2PRFIN20080111_235204_000000362065_00059_30674_7529.N1	11-JAN-2008 23:52:04	Bright	35.500	176	23Zet Tau	3.0200	22000.	71	30674	No
425	GOM_NL__2PRFIN20080111_235413_000000352065_00059_30674_7530.N1	11-JAN-2008 23:54:13	Bright	35.000	28	12Bet Tau	1.6500	15200.	70	30674	No
426	GOM_NL__2PRFIN20080111_235542_000000372065_00059_30674_7531.N1	11-JAN-2008 23:55:42	Bright	36.500	114	3lot Aur	2.6930	4600.0	73	30674	No
427	GOM_NL__2PRFIN20080111_235850_000000342065_00059_30674_7532.N1	11-JAN-2008 23:58:50	Bright	34.000	42	34Bet Aur	1.9000	10200.	68	30674	No

3. Quality information per product

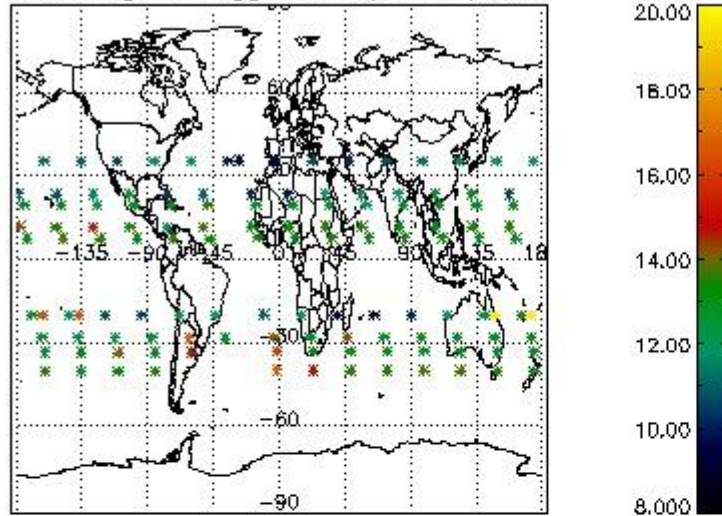
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

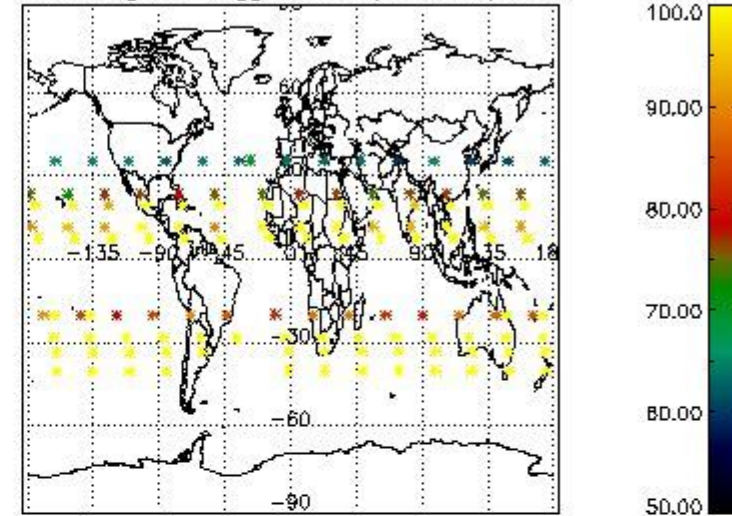


3.2 Plot quality information per product (world map)

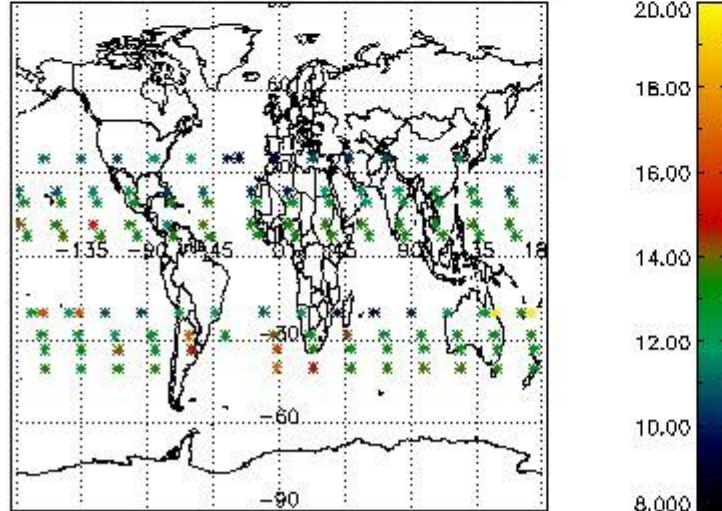
Percentage of flagged data per O3 profile



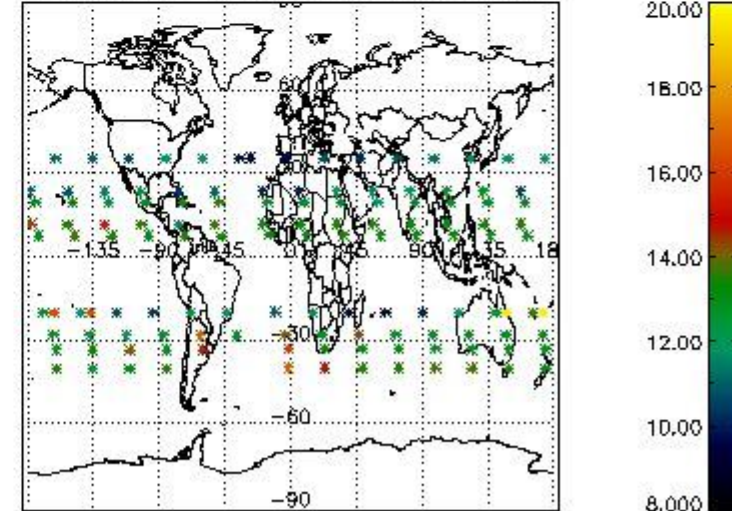
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

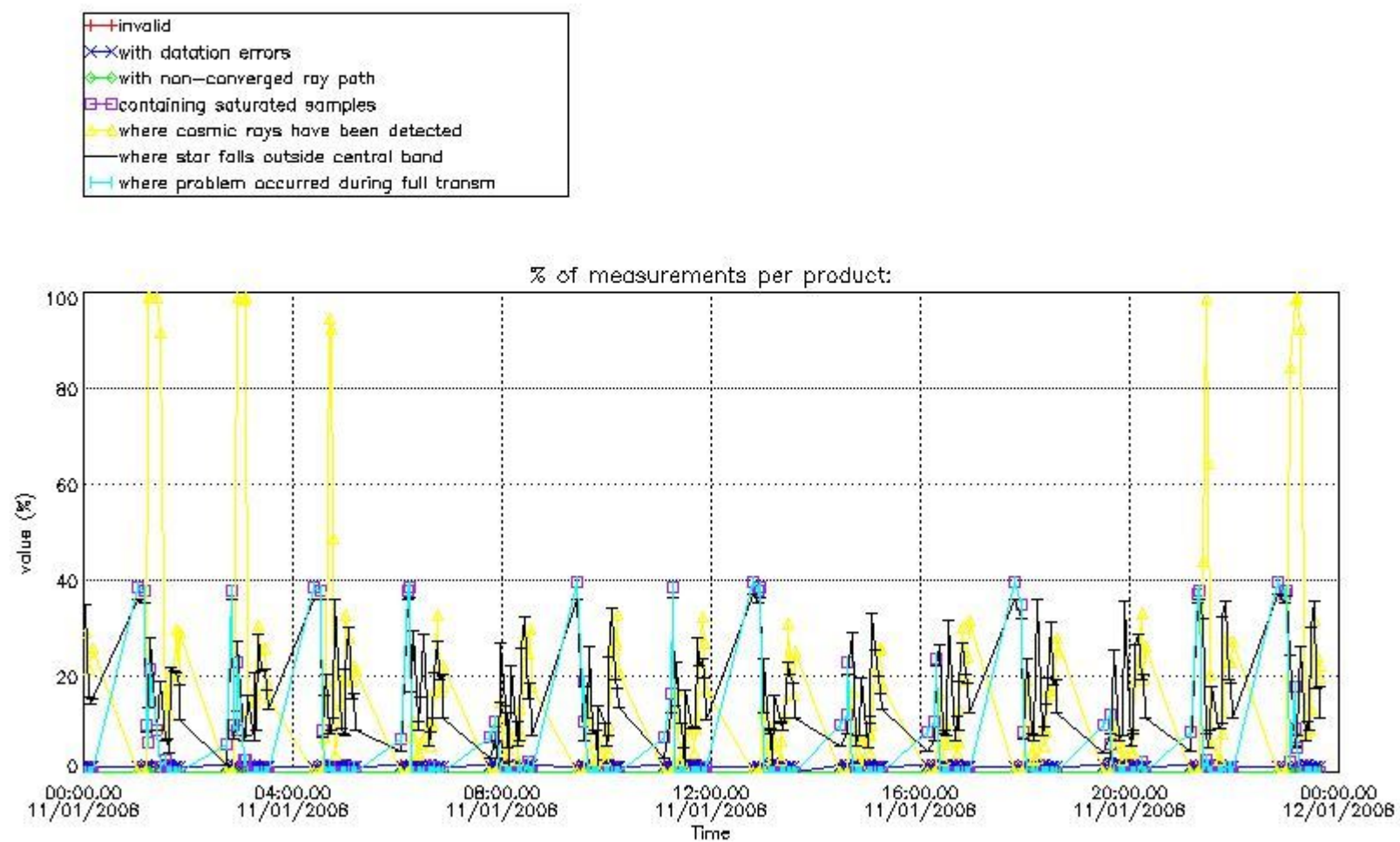


4. Level 1 quality information per product

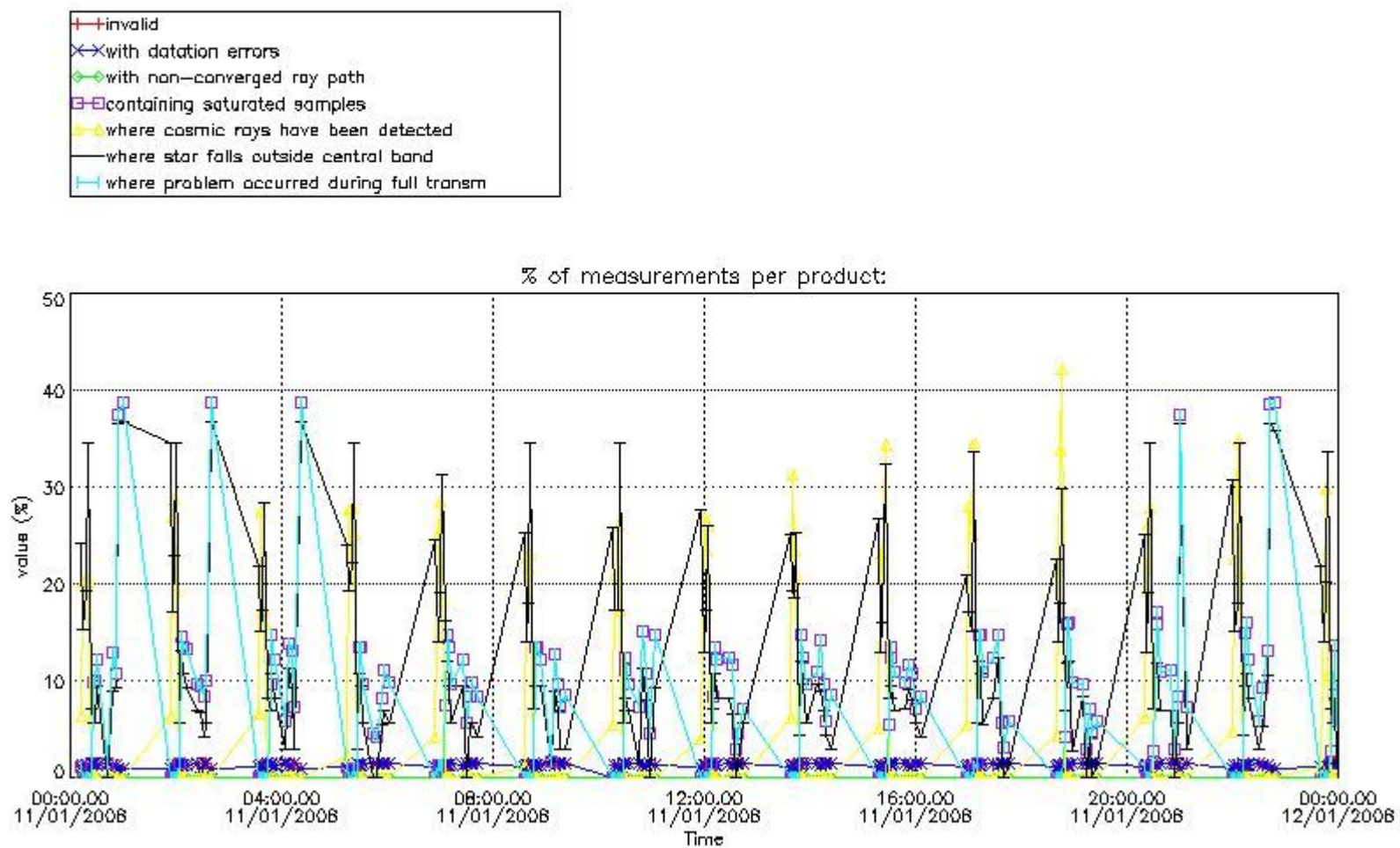
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

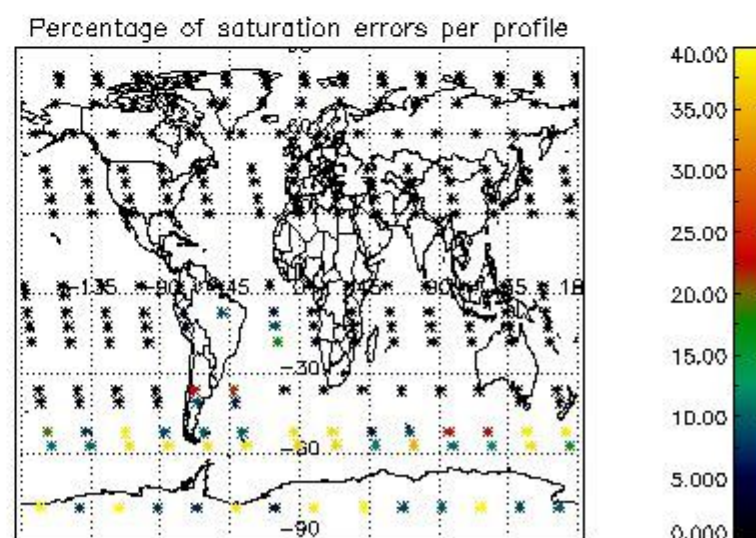
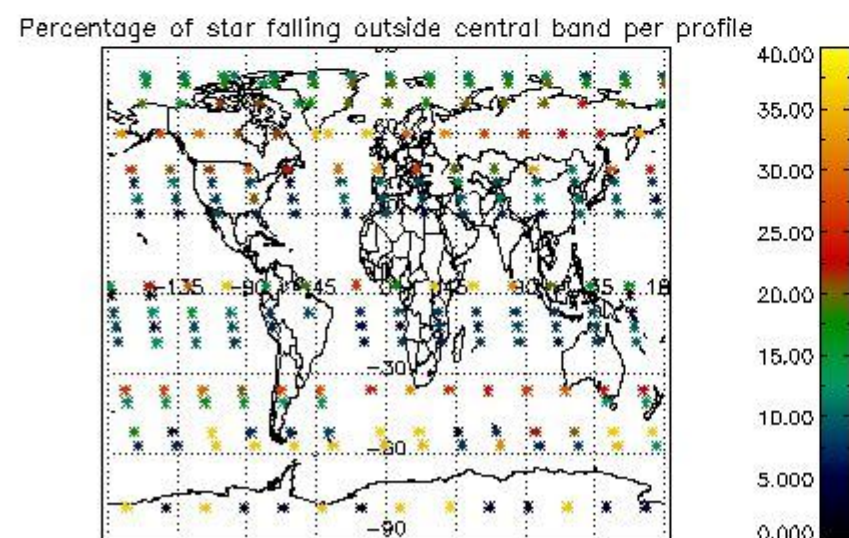
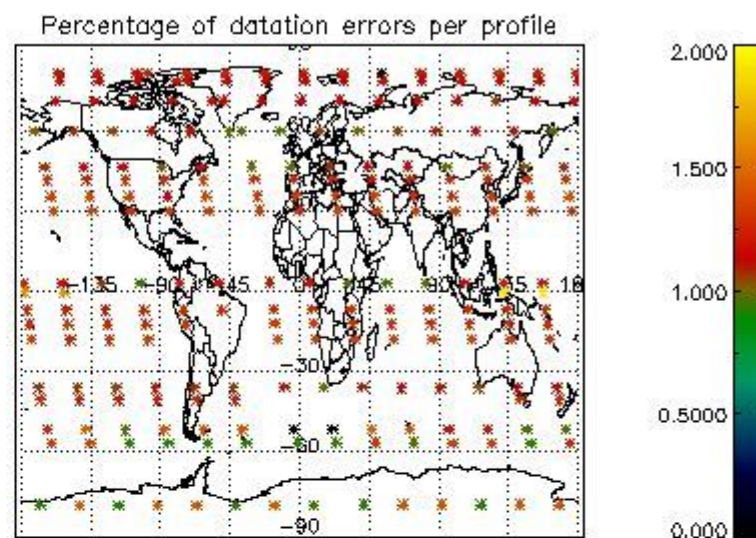
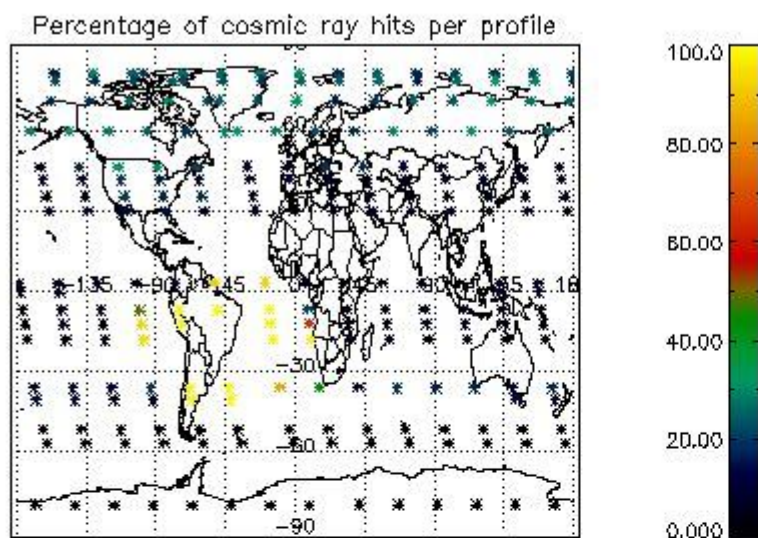


4.1.2 Plot level 1 quality information per product (time dependant): ENVI-SAT DESCENDING passes

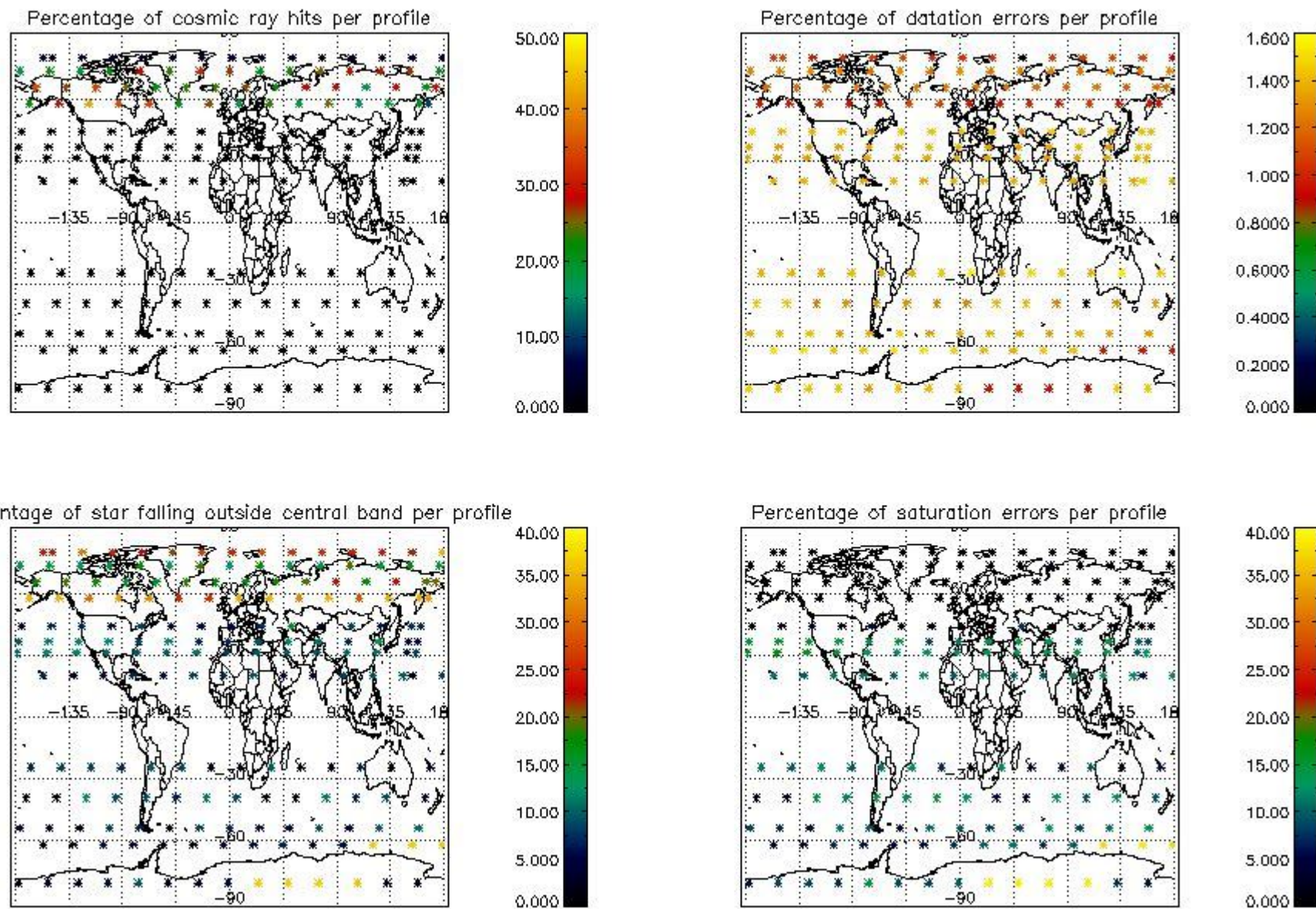


4.2 Plot quality information per product coming from level 1b processing (world map)

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

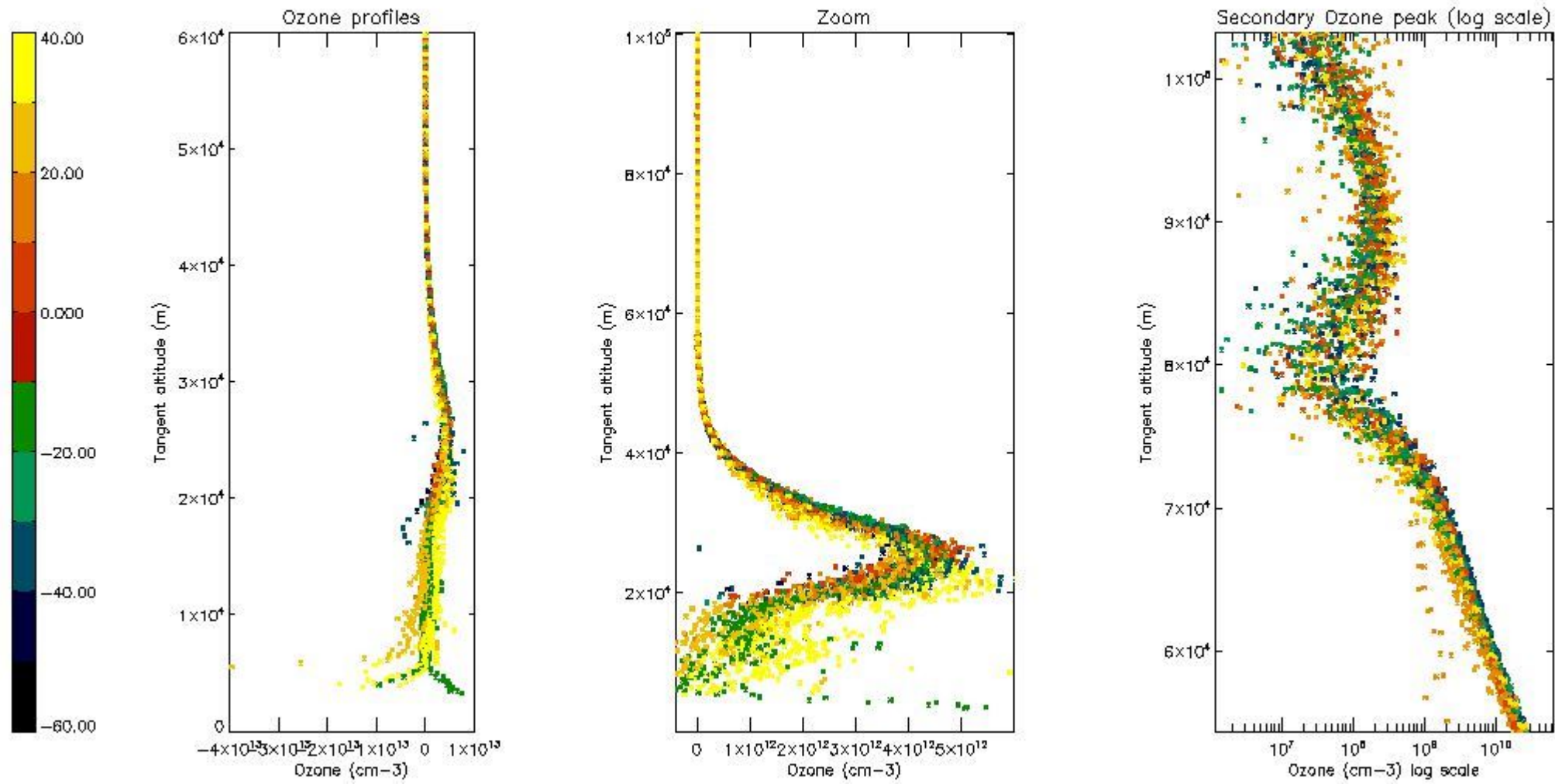
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	31
STD < 20	18

STD < 10	15
STD < 5	10

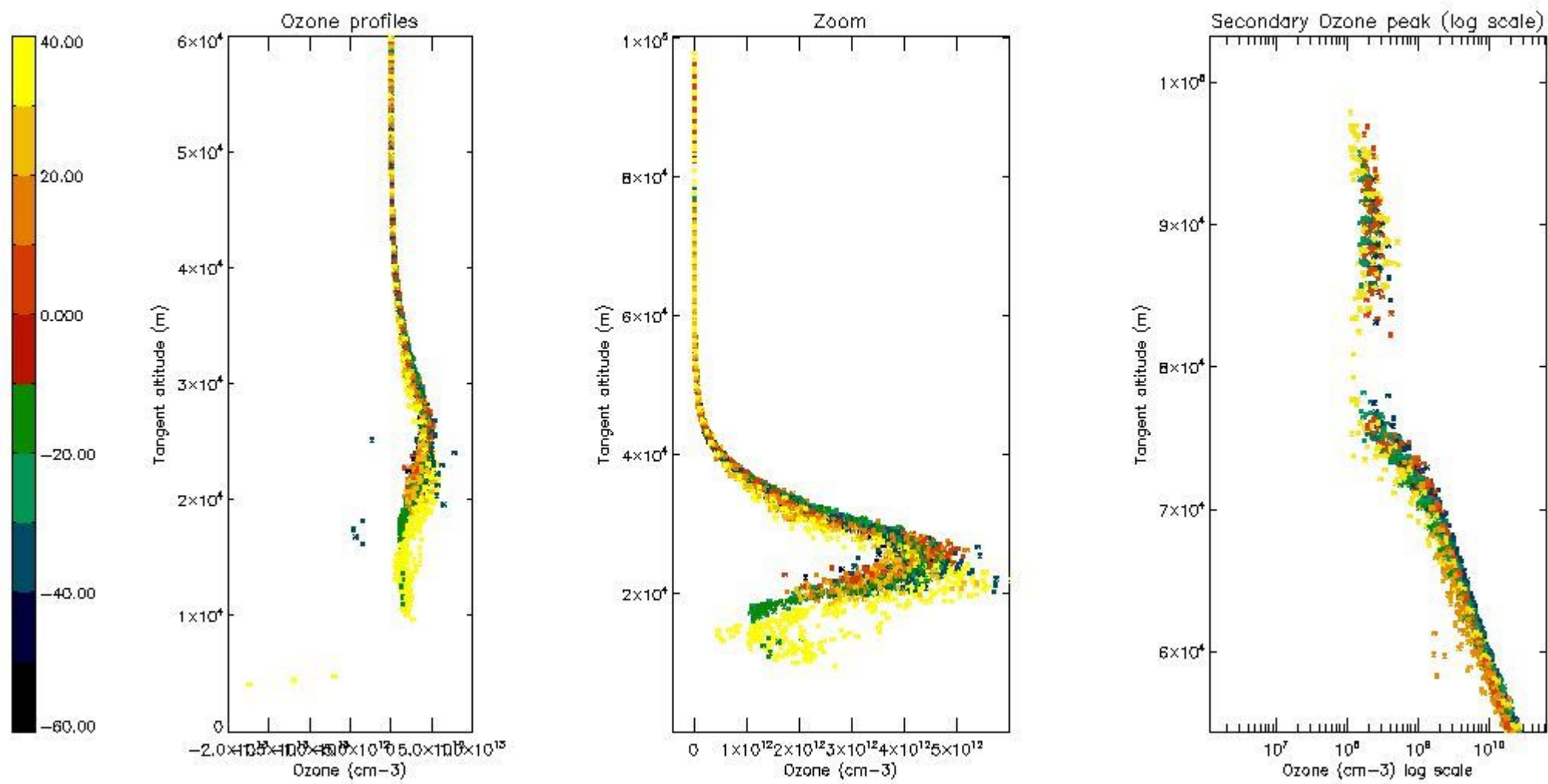
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



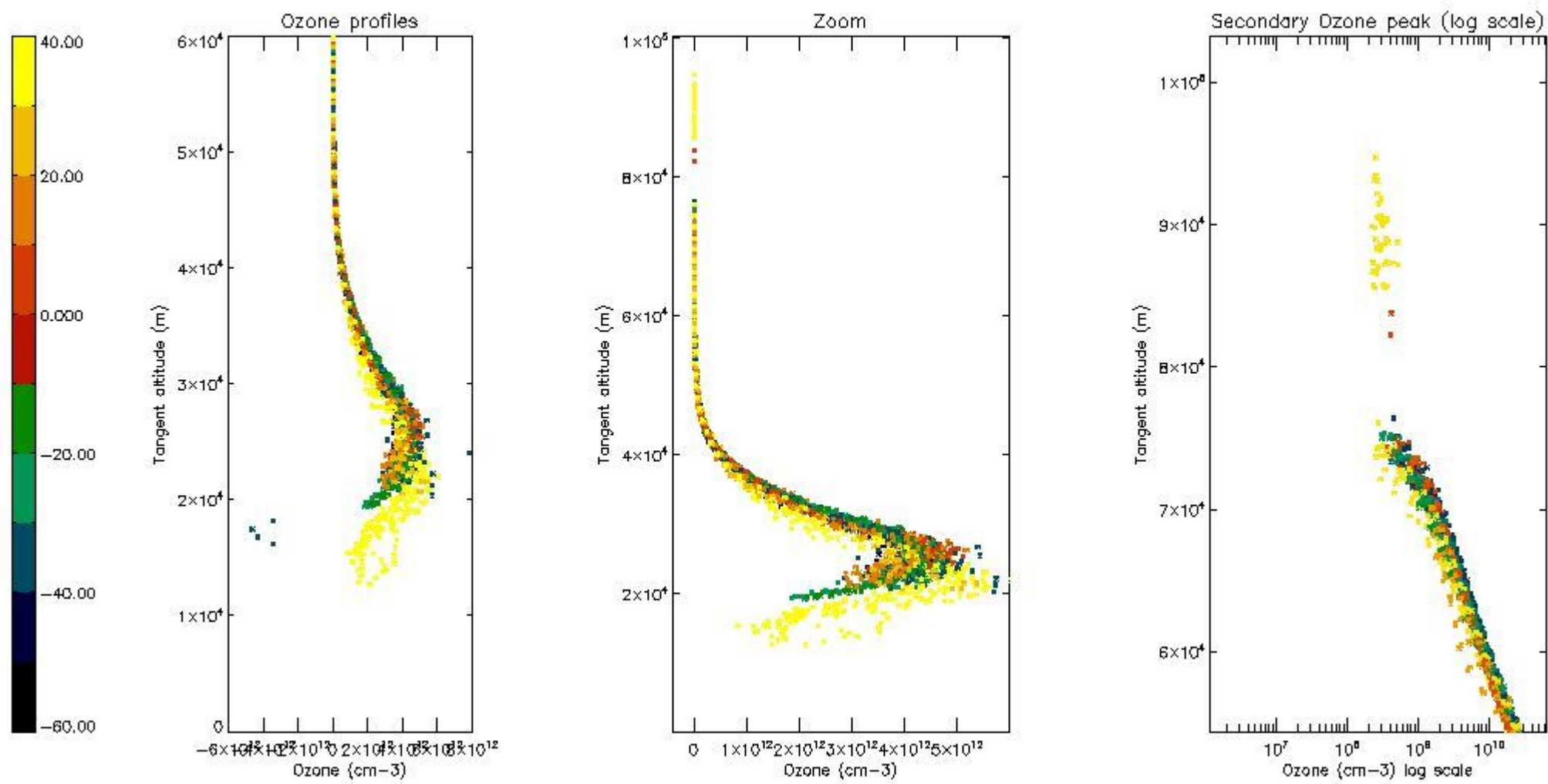
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



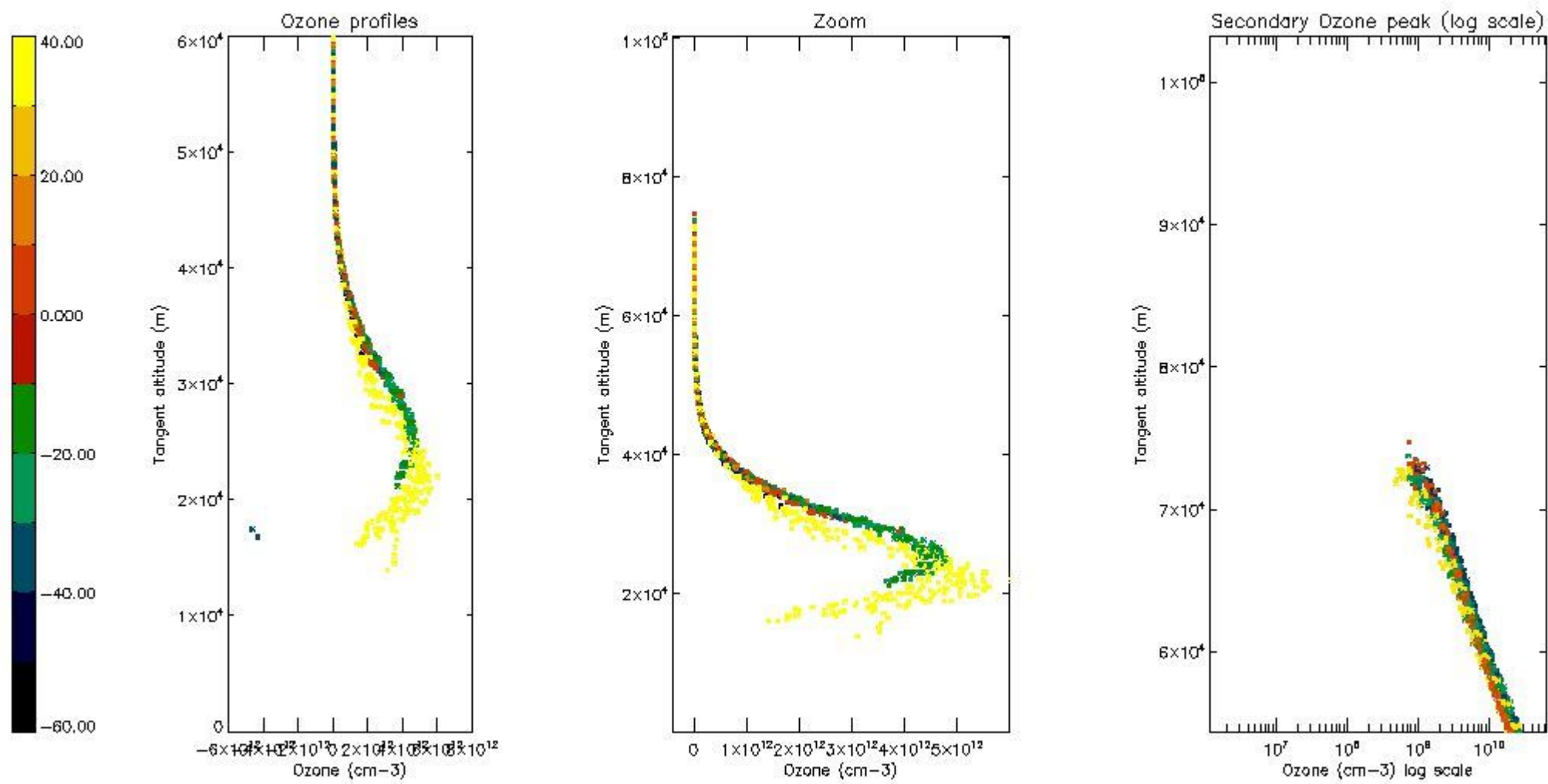
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



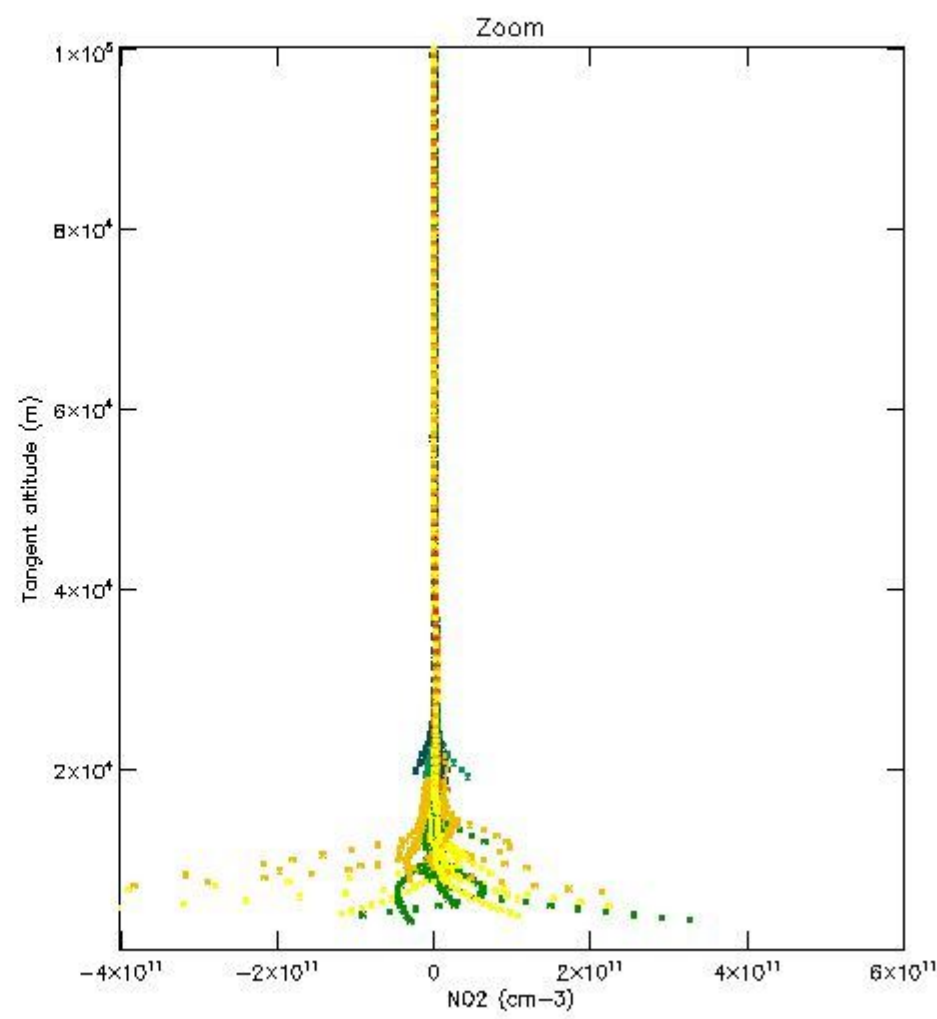
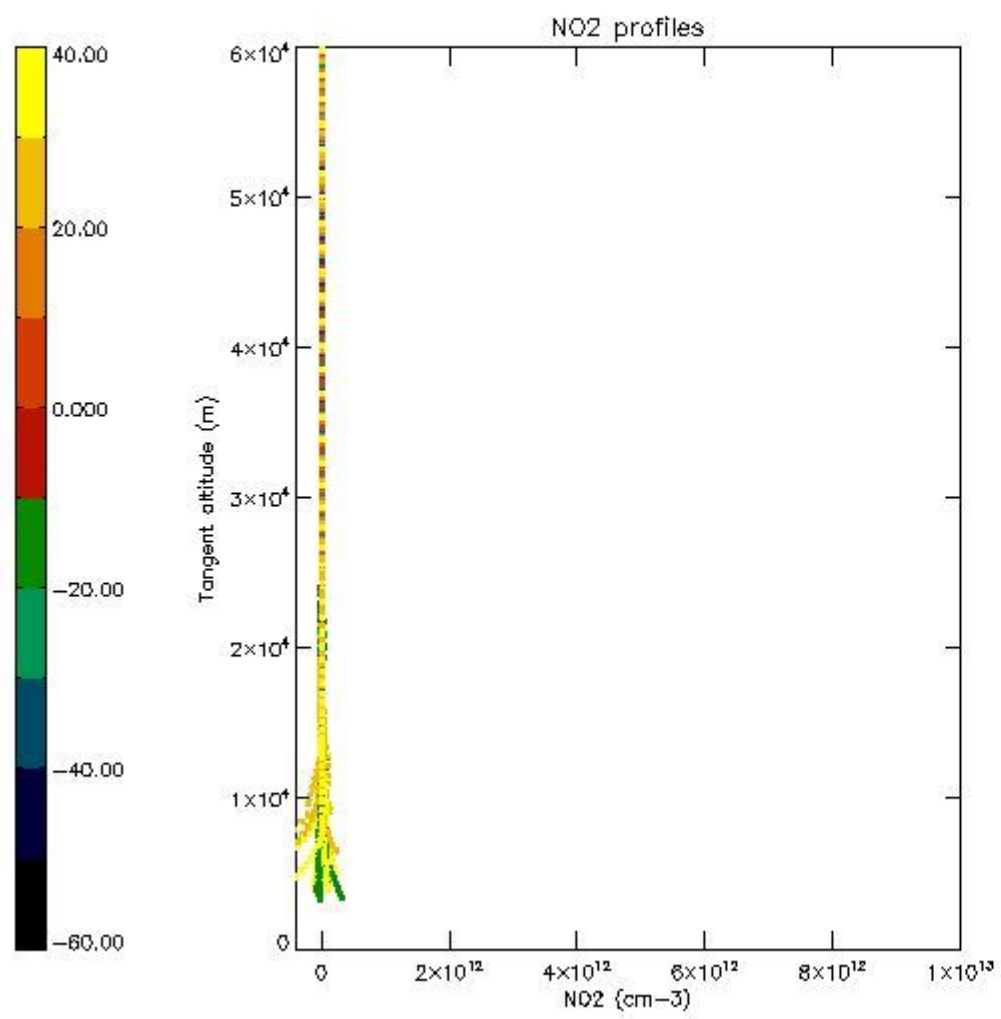
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



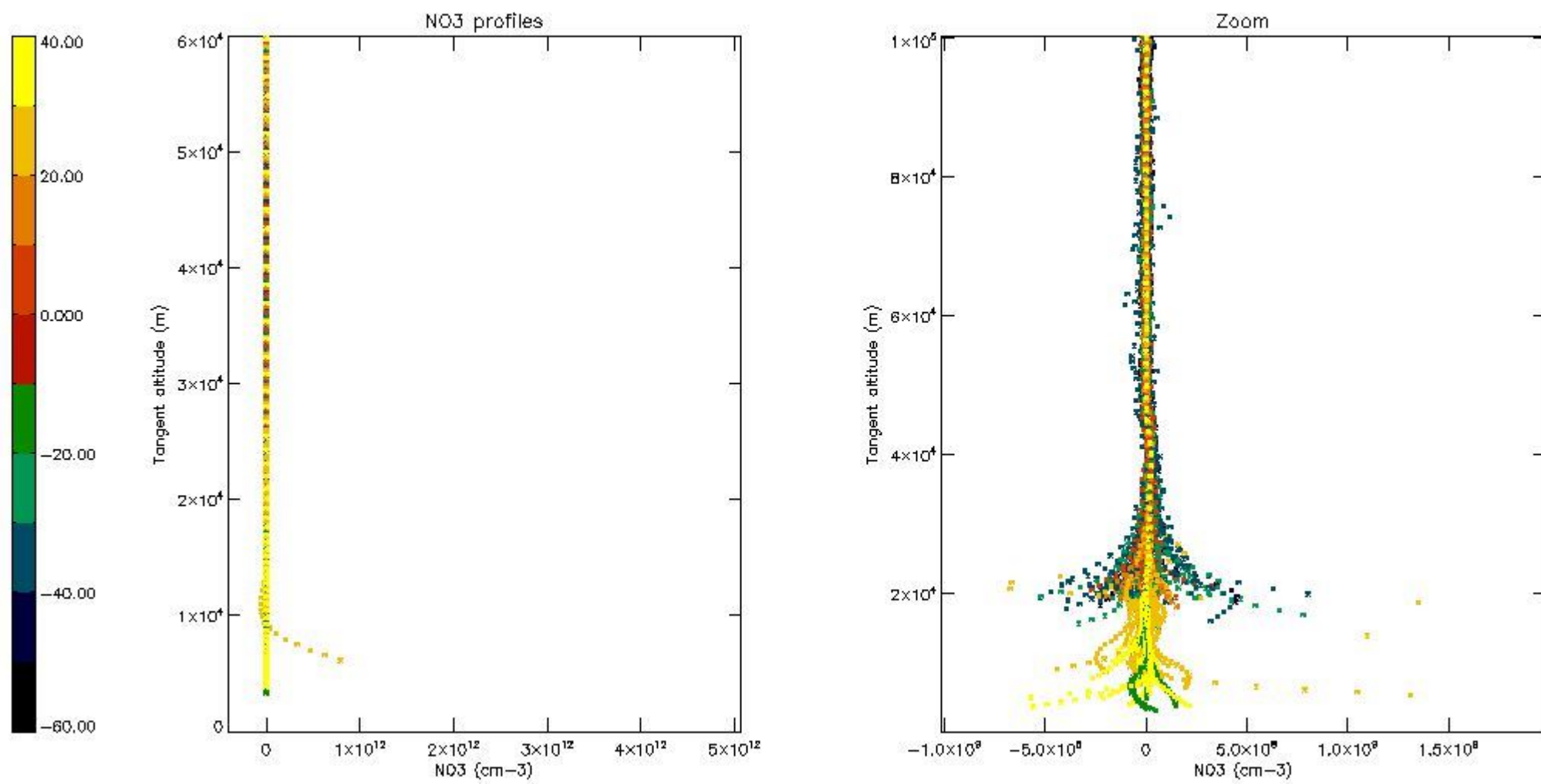
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



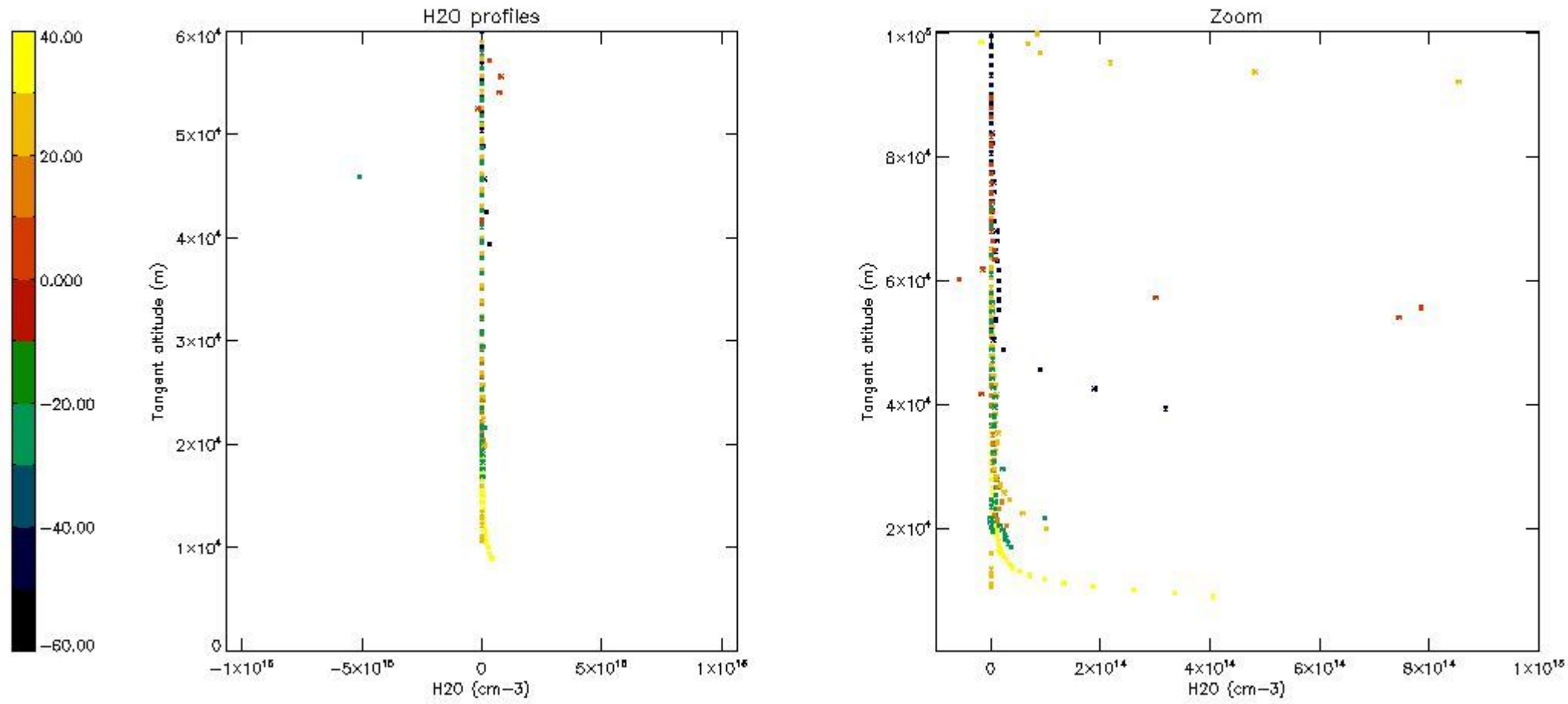
5.7 Plot NO3 profiles for all STD (dark without errors)

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	11-JAN-2008 00:02:42
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	11-JAN-2008 00:02:42
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	11-JAN-2008 00:02:42

GOMOS Level 2 Daily Report

SUMMARY

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

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

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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](#)

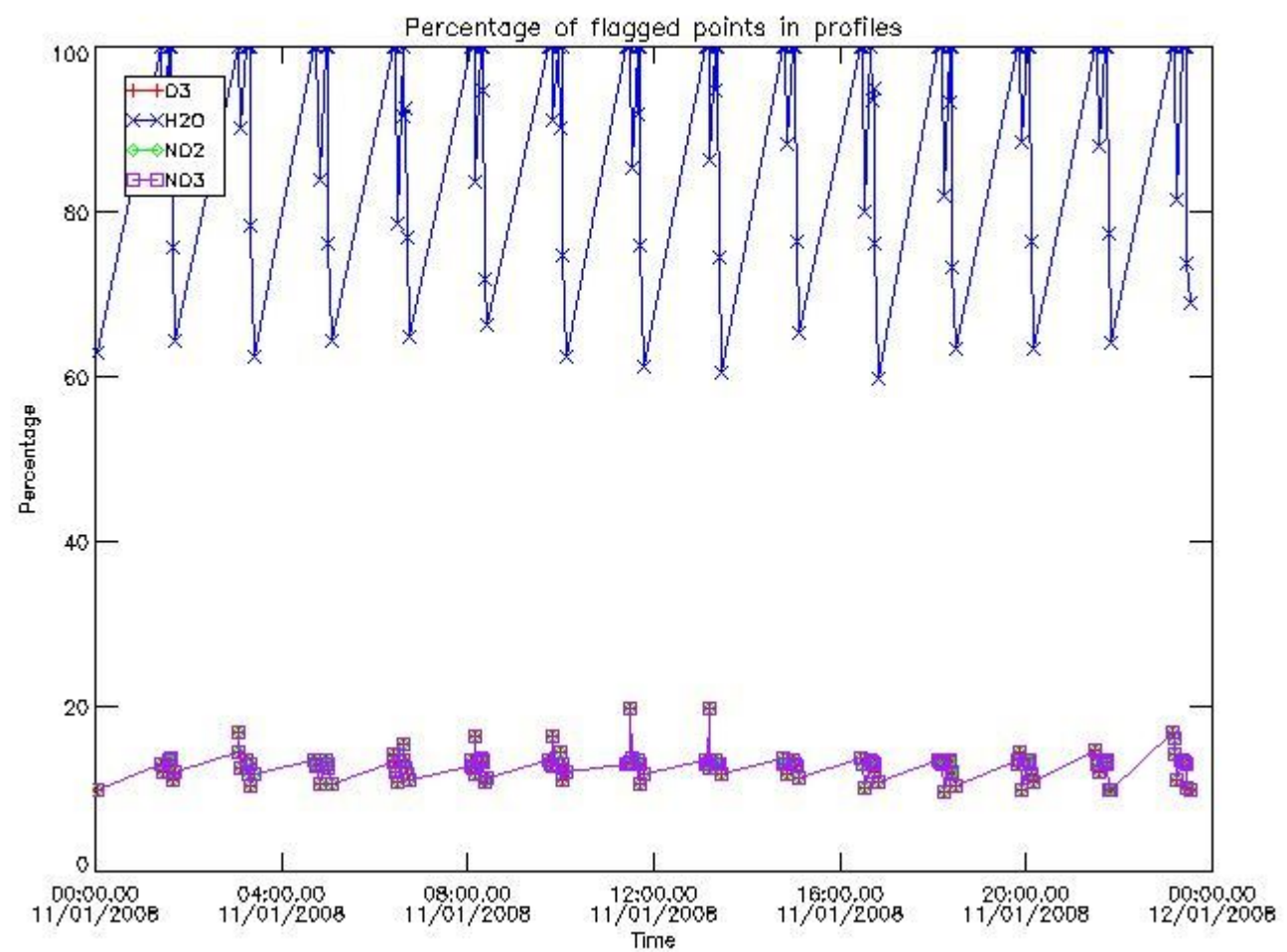
[6. Auxiliary Data Files used for the production reported in section 2](#)

397	GOM_NL__2PRFIN20080111_221506_000000382065_00058_30673_7504.N1	11-JAN-2008 22:15:06	Bright	37.500	114	3lot Aur	2.6930	4600.0	75	30673	No
398	GOM_NL__2PRFIN20080111_221814_000000372065_00058_30673_7505.N1	11-JAN-2008 22:18:14	Bright	37.000	42	34Bet Aur	1.9000	10200.	74	30673	No
399	GOM_NL__2PRFIN20080111_223043_000000352065_00058_30673_7506.N1	11-JAN-2008 22:30:43	Bright	34.500	49	1Alp UMi	1.9900	6300.0	69	30673	No
400	GOM_NL__2PRFIN20080111_223451_000000382065_00058_30673_7507.N1	11-JAN-2008 22:34:51	Bright	37.500	60	7Bet UMi	2.0810	3950.0	75	30673	No
401	GOM_NL__2PRFIN20080111_223903_000000382065_00058_30673_7508.N1	11-JAN-2008 22:39:03	Bright	38.000	119	14Eta Dra	2.7270	4700.0	76	30673	No
402	GOM_NL__2PRFIN20080111_224129_000000522065_00058_30673_7509.N1	11-JAN-2008 22:41:29	Bright	52.000	130	23Bet Dra	2.7990	5800.0	104	30673	No
403	GOM_NL__2PRFIN20080111_224744_000000532065_00058_30673_7510.N1	11-JAN-2008 22:47:44	Bright	53.000	133	40Zet Her	2.8070	6000.0	106	30673	No
404	GOM_NL__2PRFIN20080111_225046_000000542065_00058_30673_7511.N1	11-JAN-2008 22:50:46	Bright	54.000	127	27Bet Her	2.7810	4700.0	108	30673	No
405	GOM_NL__2PRFIN20080111_225813_000000542065_00058_30673_7512.N1	11-JAN-2008 22:58:13	Bright	54.000	120	1Del Oph	2.7340	3200.0	108	30673	No
406	GOM_NL__2PRFIN20080111_225939_000000522065_00058_30673_7513.N1	11-JAN-2008 22:59:39	Bright	51.500	98	13Zet Oph	2.5710	30000.	103	30673	No
407	GOM_NL__2PRFIN20080111_230406_000000452065_00058_30673_7514.N1	11-JAN-2008 23:04:06	Twilight	45.000	16	21Alp Sco	1.0200	3000.0	90	30673	No
408	GOM_NL__2PRFIN20080111_230913_000000372065_00058_30673_7515.N1	11-JAN-2008 23:09:13	Dark	36.500	131	Gam Lup	2.8000	26000.	73	30673	No
409	GOM_NL__2PRFIN20080111_231050_000000382065_00058_30673_7516.N1	11-JAN-2008 23:10:50	Dark	38.000	109	Bet Lup	2.6770	26000.	76	30673	No
410	GOM_NL__2PRFIN20080111_231221_000000402065_00058_30673_7517.N1	11-JAN-2008 23:12:21	Dark	39.500	78	Alp Lup	2.3040	28000.	79	30673	No
411	GOM_NL__2PRFIN20080111_231508_000000462065_00059_30674_7516.N1	11-JAN-2008 23:15:08	Dark	46.000	4	Alp1Cen	-0.010000	5800.0	92	30674	No
412	GOM_NL__2PRFIN20080111_232241_000000382065_00059_30674_7517.N1	11-JAN-2008 23:22:41	Dark	38.000	124	The Car	2.7640	30000.	76	30674	No
413	GOM_NL__2PRFIN20080111_232413_000000392065_00059_30674_7518.N1	11-JAN-2008 23:24:13	Dark	38.500	29	Bet Car	1.6720	10200.	77	30674	No
414	GOM_NL__2PRFIN20080111_232601_000000402065_00059_30674_7519.N1	11-JAN-2008 23:26:01	Dark	39.500	71	lot Car	2.2460	7700.0	79	30674	No
415	GOM_NL__2PRFIN20080111_232721_000000502065_00059_30674_7520.N1	11-JAN-2008 23:27:21	Dark	50.000	41	Eps Car	1.8600	4100.0	100	30674	No
416	GOM_NL__2PRFIN20080111_233108_000000522065_00059_30674_7521.N1	11-JAN-2008 23:31:08	Dark	52.000	2	Alp Car	-0.73600	7000.0	104	30674	No
417	GOM_NL__2PRFIN20080111_233436_000000432065_00059_30674_7522.N1	11-JAN-2008 23:34:36	Straylight	43.000	117	Pi Pup	2.7060	3800.0	86	30674	No
418	GOM_NL__2PRFIN20080111_233712_000000432065_00059_30674_7523.N1	11-JAN-2008 23:37:12	Straylight	42.500	23	21Eps CMa	1.5020	26000.	85	30674	No
419	GOM_NL__2PRFIN20080111_233839_000000412065_00059_30674_7524.N1	11-JAN-2008 23:38:39	Straylight	40.500	179	24Omi2CMa	3.0320	24000.	81	30674	No
420	GOM_NL__2PRFIN20080111_234055_000000462065_00059_30674_7525.N1	11-JAN-2008 23:40:55	Straylight	46.000	1	9Alp CMa	-1.4400	11000.	92	30674	No
421	GOM_NL__2PRFIN20080111_234323_000000402065_00059_30674_7526.N1	11-JAN-2008 23:43:23	Straylight	39.500	56	53Kap Ori	2.0650	30000.	79	30674	No
422	GOM_NL__2PRFIN20080111_234551_000000422065_00059_30674_7527.N1	11-JAN-2008 23:45:51	Twilight	42.000	30	46Eps Ori	1.6940	30000.	84	30674	No
423	GOM_NL__2PRFIN20080111_234808_000000522065_00059_30674_7528.N1	11-JAN-2008 23:48:08	Twilight	52.000	14	58Alp Ori	0.87000	3000.0	104	30674	No
424	GOM_NL__2PRFIN20080111_235204_000000362065_00059_30674_7529.N1	11-JAN-2008 23:52:04	Bright	35.500	176	23Zet Tau	3.0200	22000.	71	30674	No
425	GOM_NL__2PRFIN20080111_235413_000000352065_00059_30674_7530.N1	11-JAN-2008 23:54:13	Bright	35.000	28	12Bet Tau	1.6500	15200.	70	30674	No
426	GOM_NL__2PRFIN20080111_235542_000000372065_00059_30674_7531.N1	11-JAN-2008 23:55:42	Bright	36.500	114	3lot Aur	2.6930	4600.0	73	30674	No
427	GOM_NL__2PRFIN20080111_235850_000000342065_00059_30674_7532.N1	11-JAN-2008 23:58:50	Bright	34.000	42	34Bet Aur	1.9000	10200.	68	30674	No

3. Quality information per product

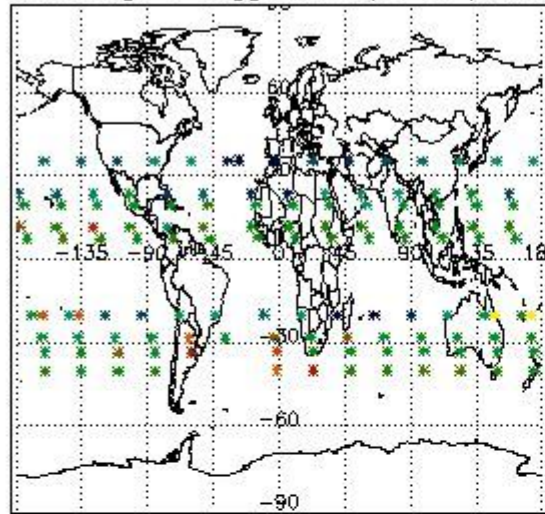
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

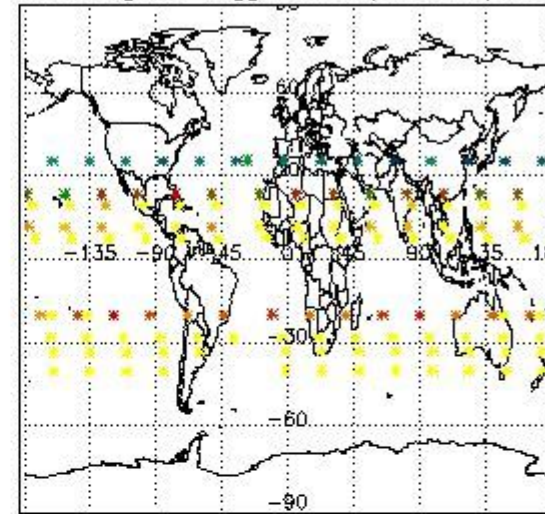


3.2 Plot quality information per product (world map)

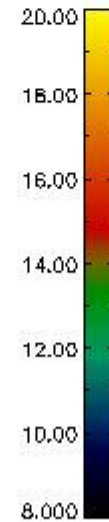
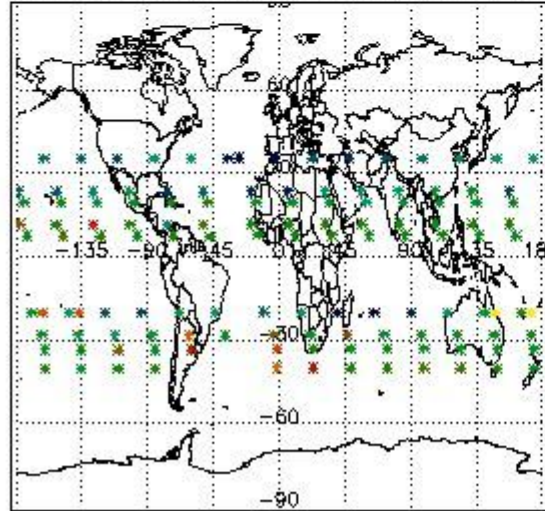
Percentage of flagged data per O3 profile



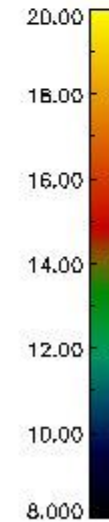
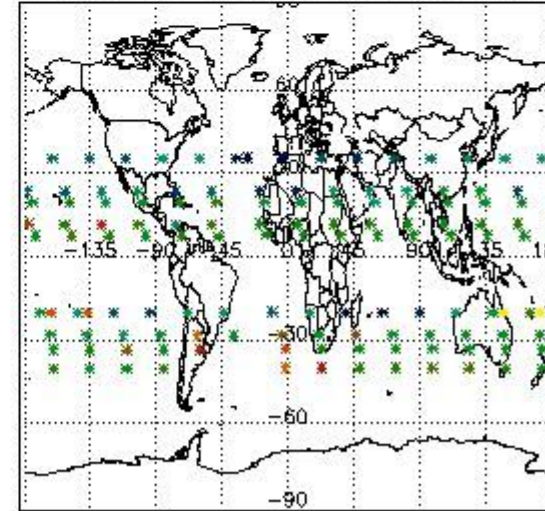
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

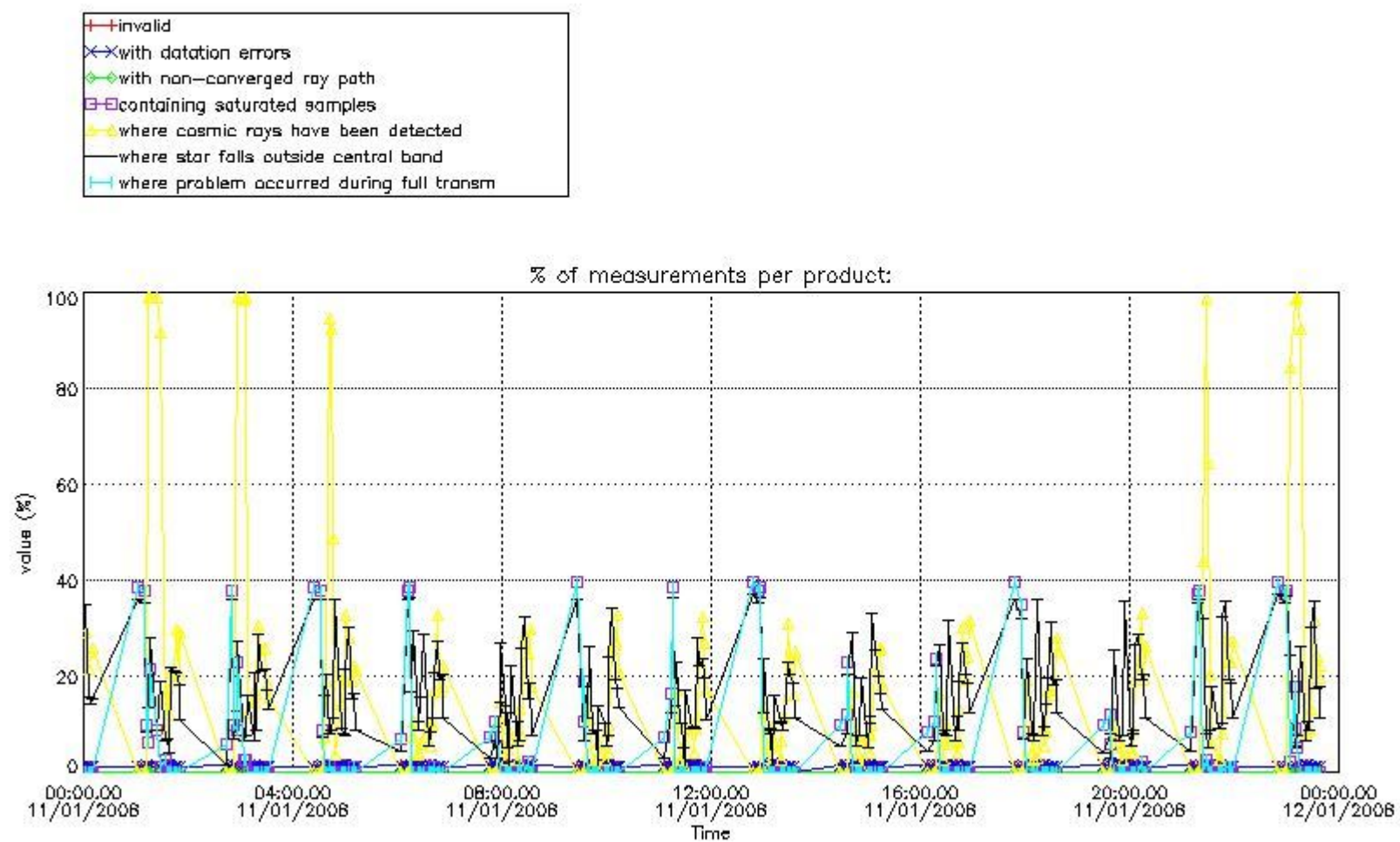


4. Level 1 quality information per product

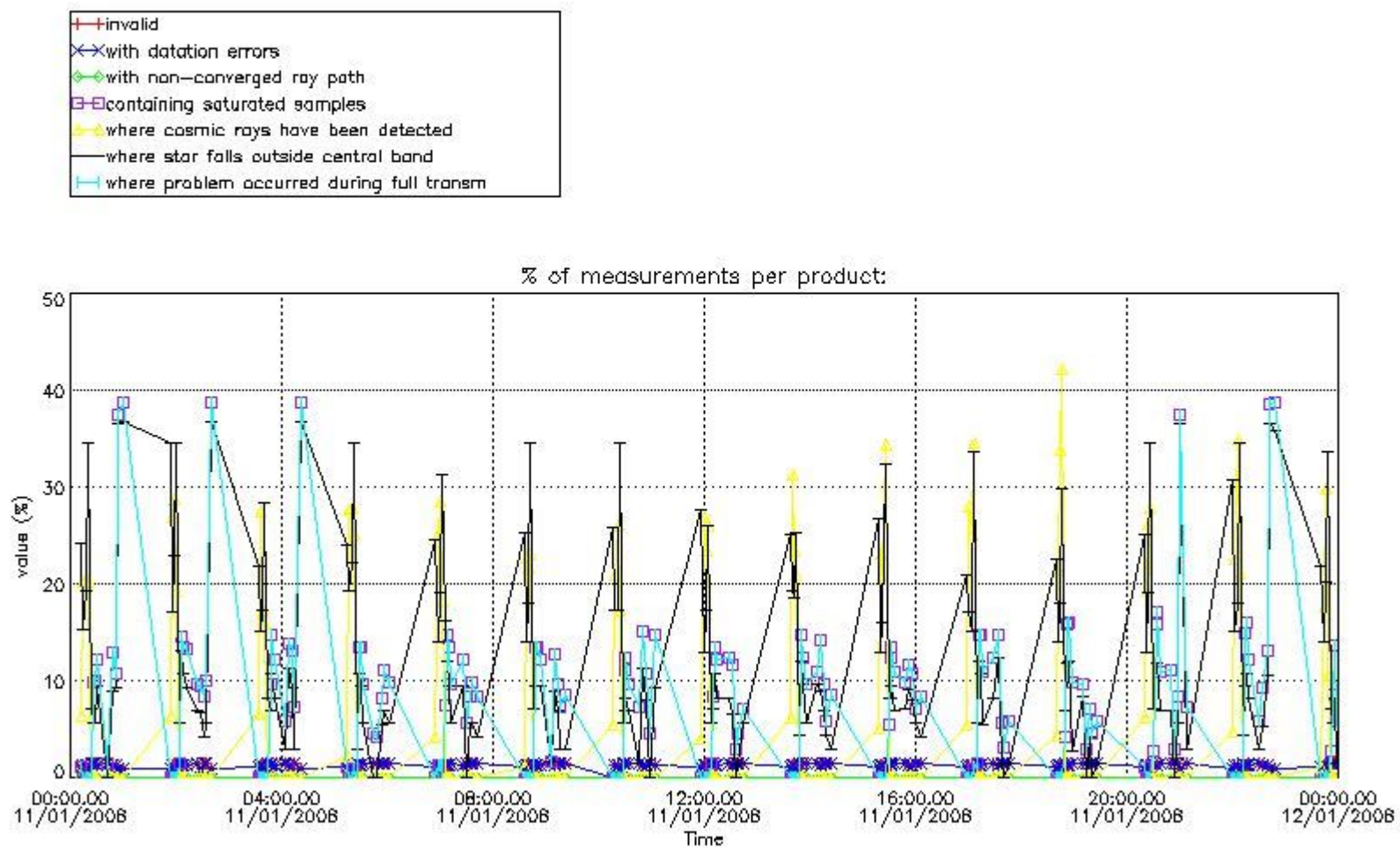
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

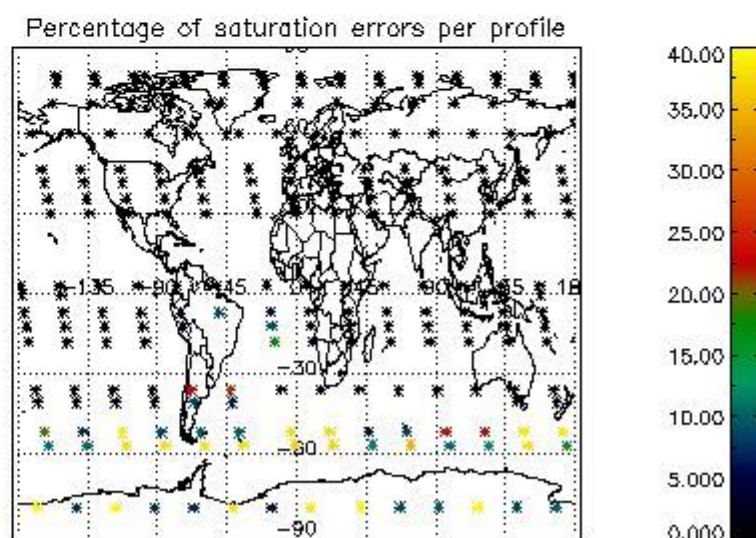
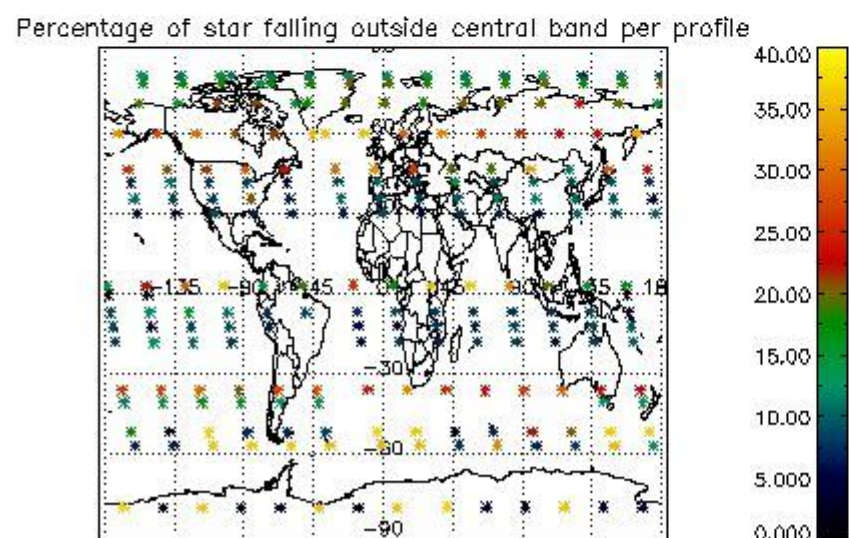
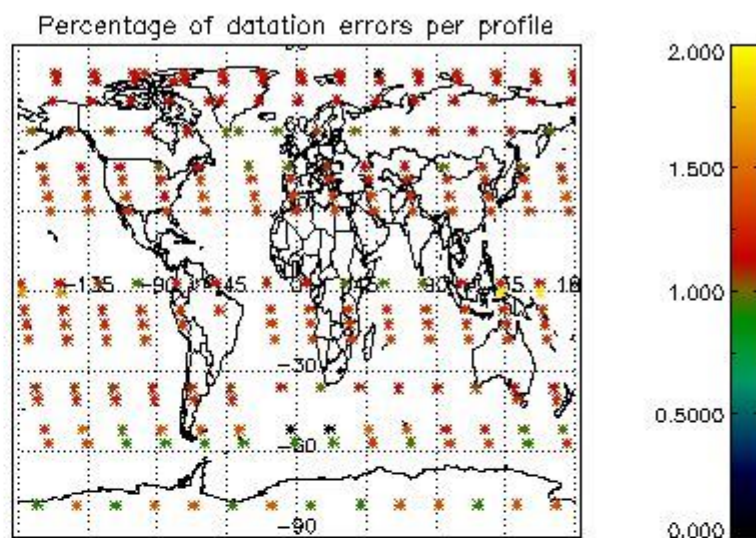
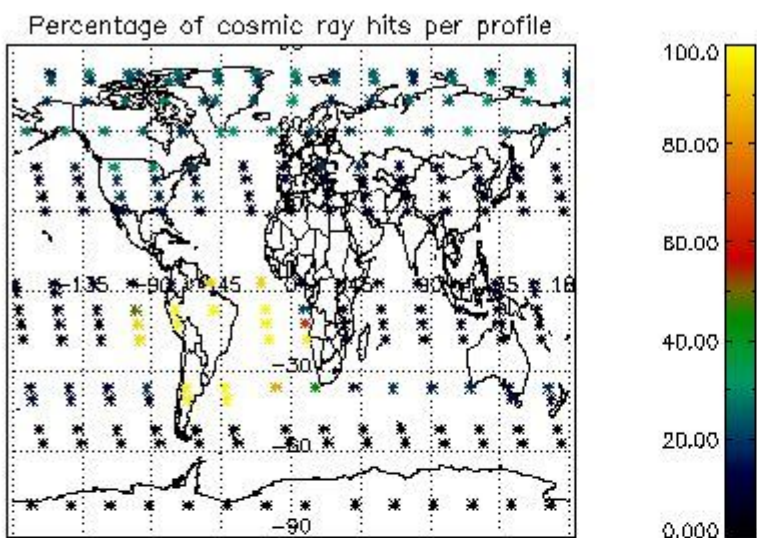


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

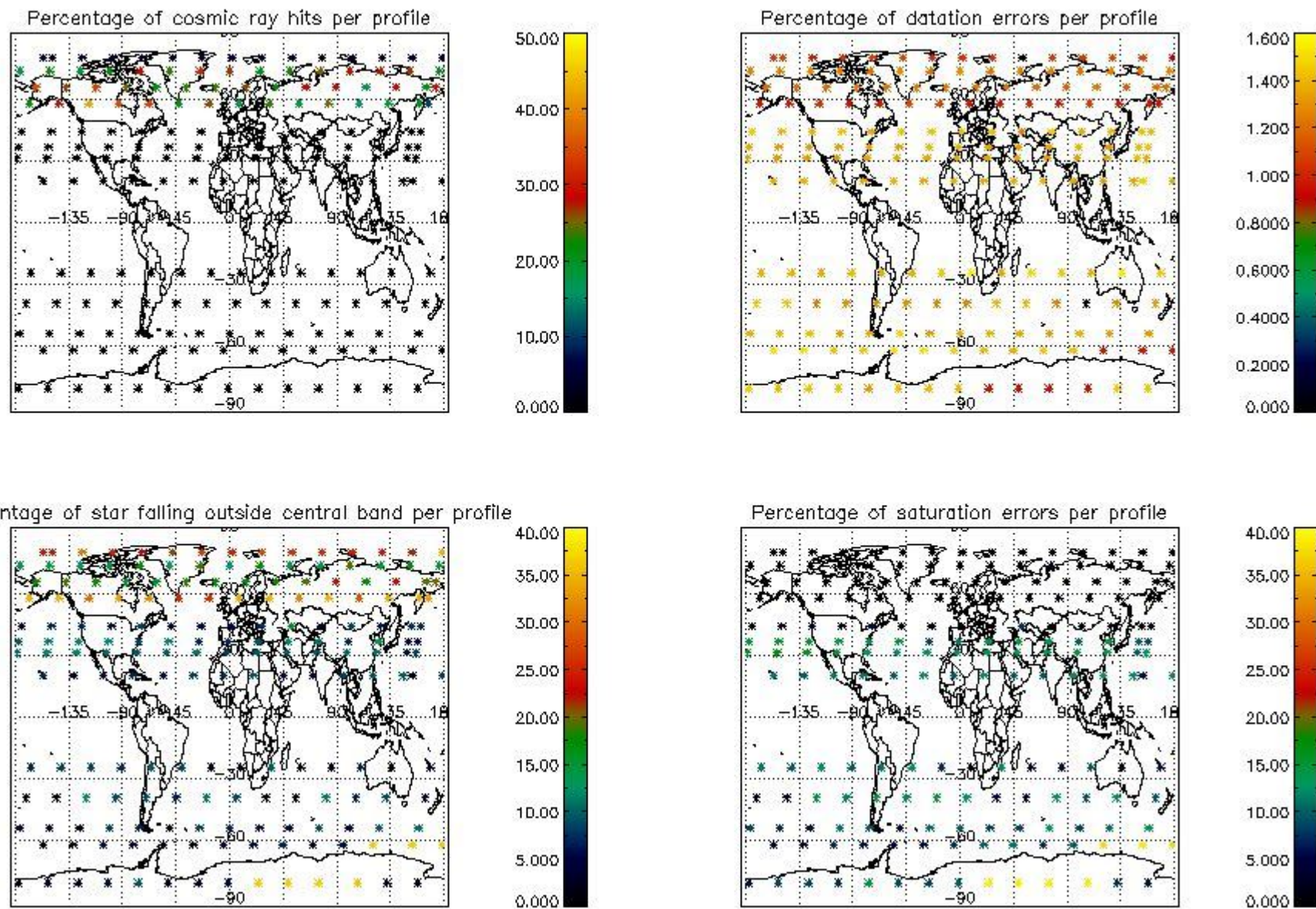


4.2 Plot quality information per product coming from level 1b processing (world map)

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

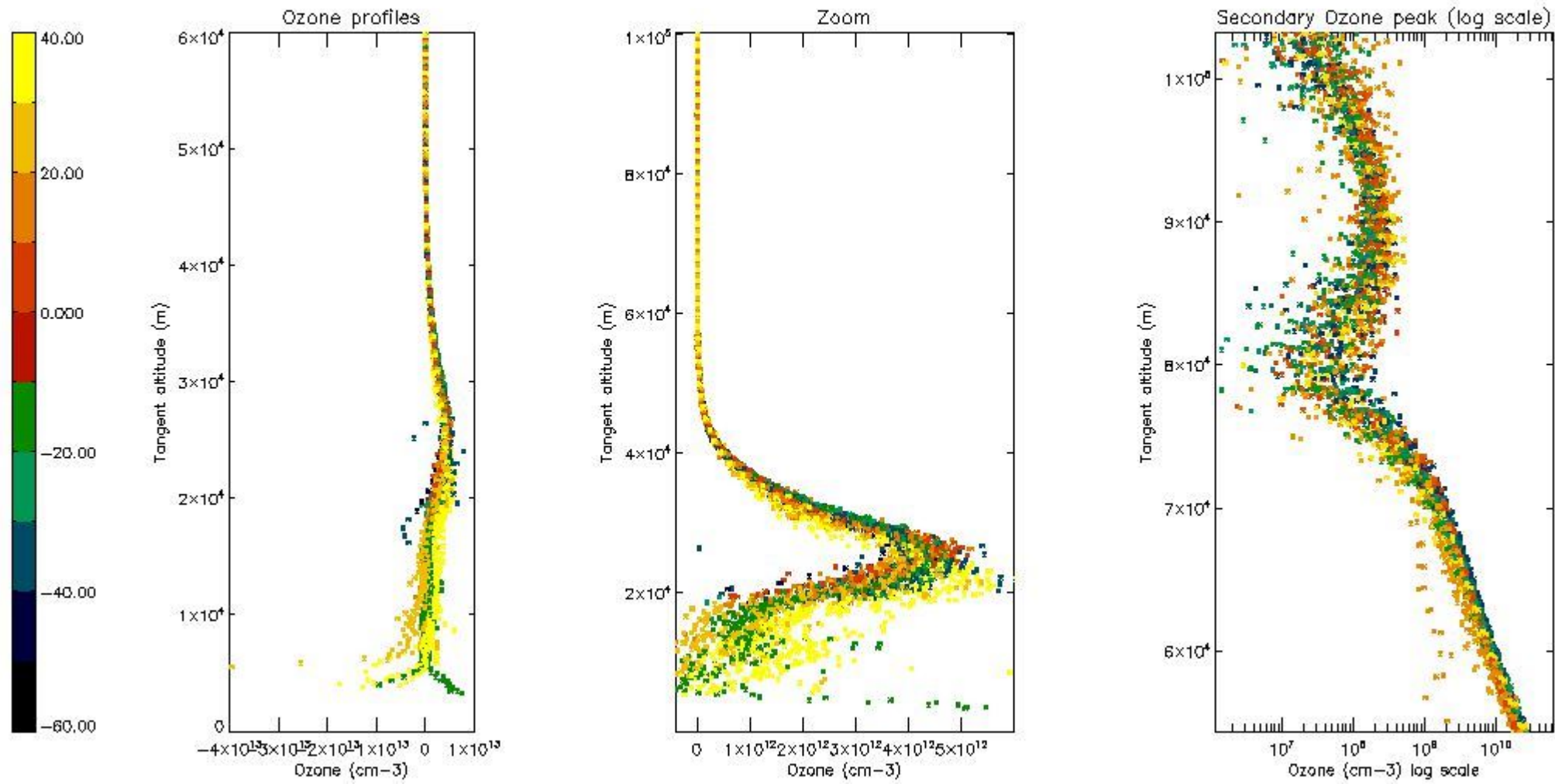
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	31
STD < 20	18

STD < 10	15
STD < 5	10

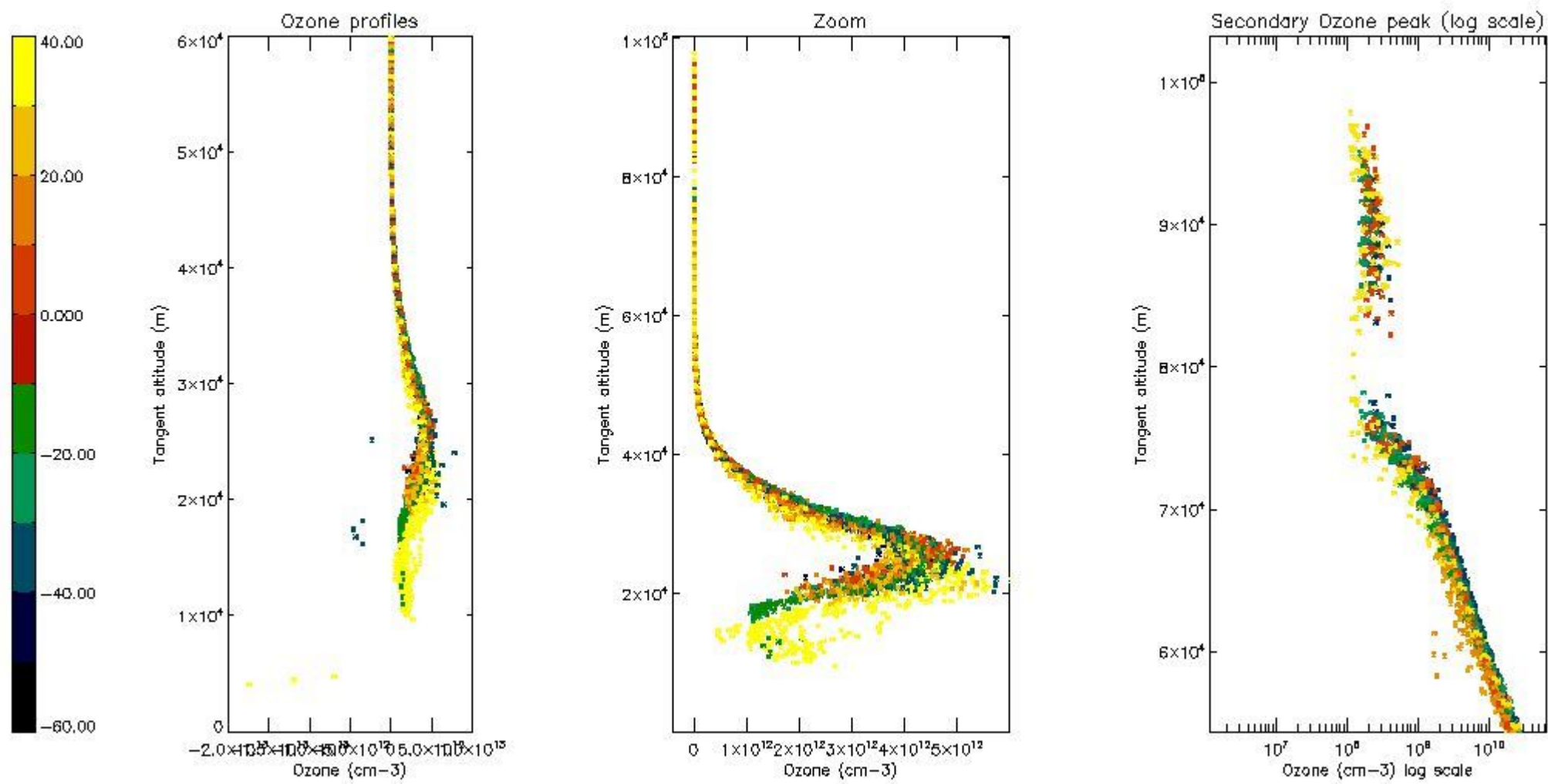
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



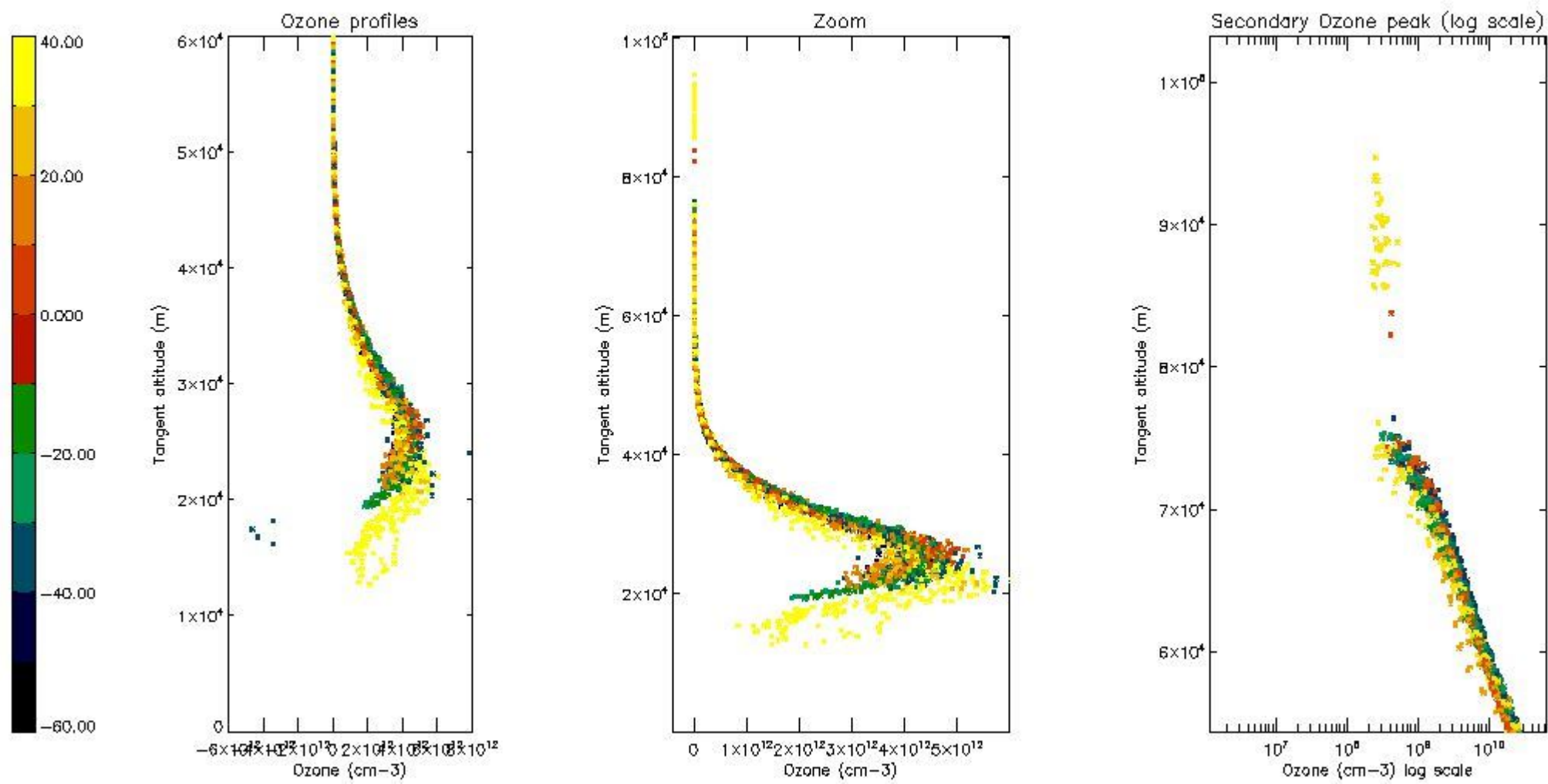
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



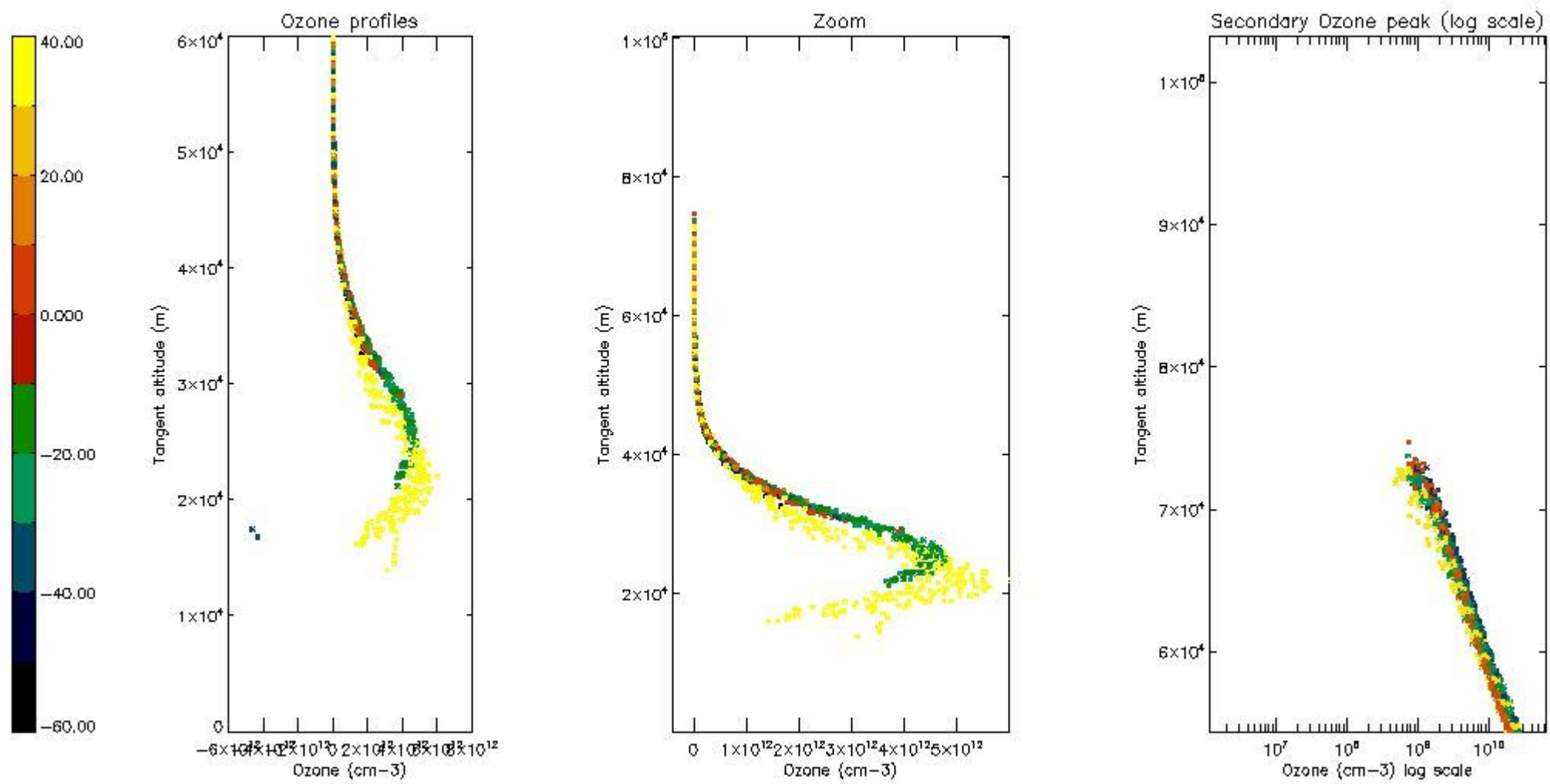
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



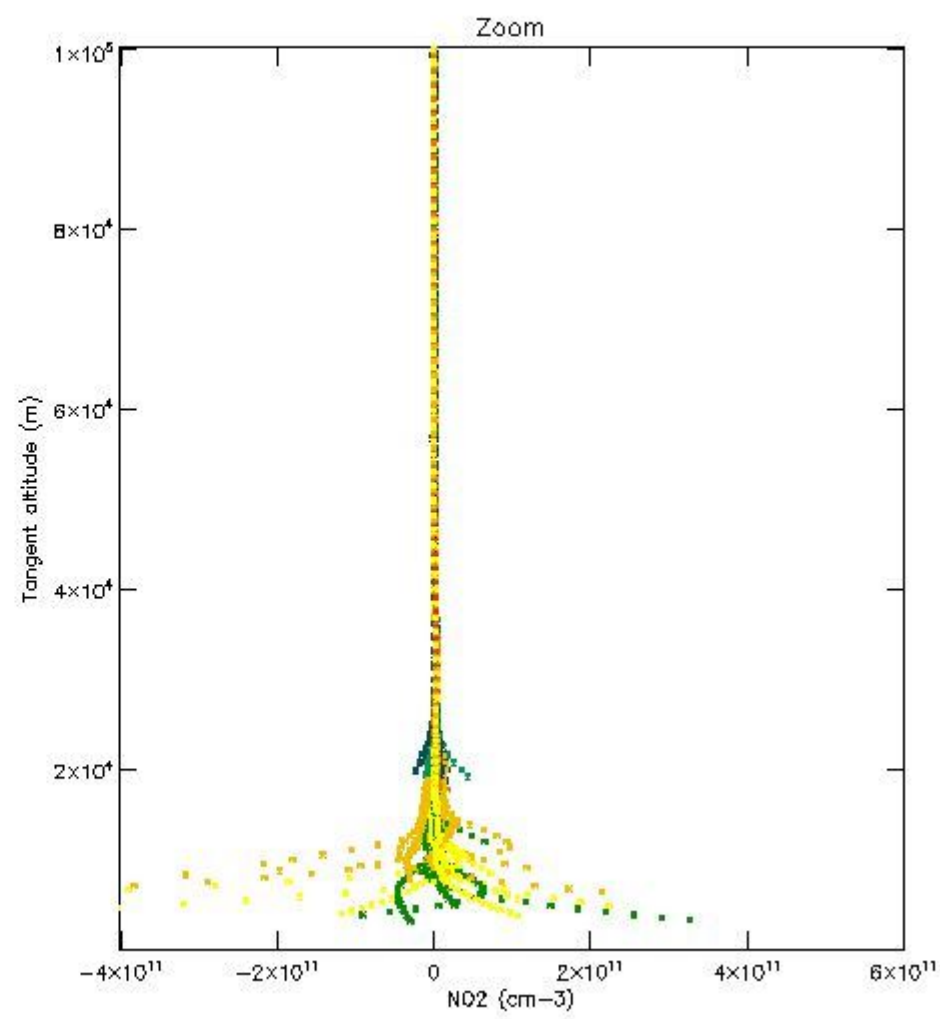
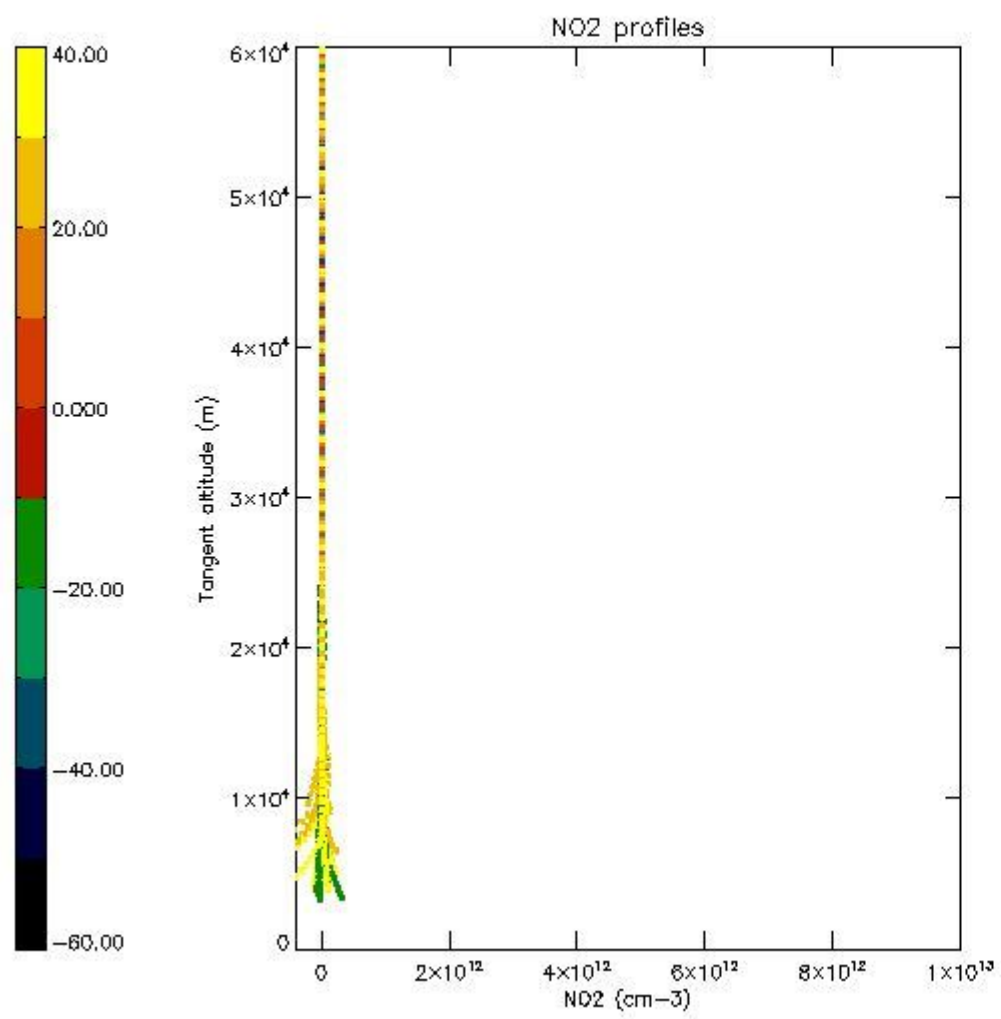
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



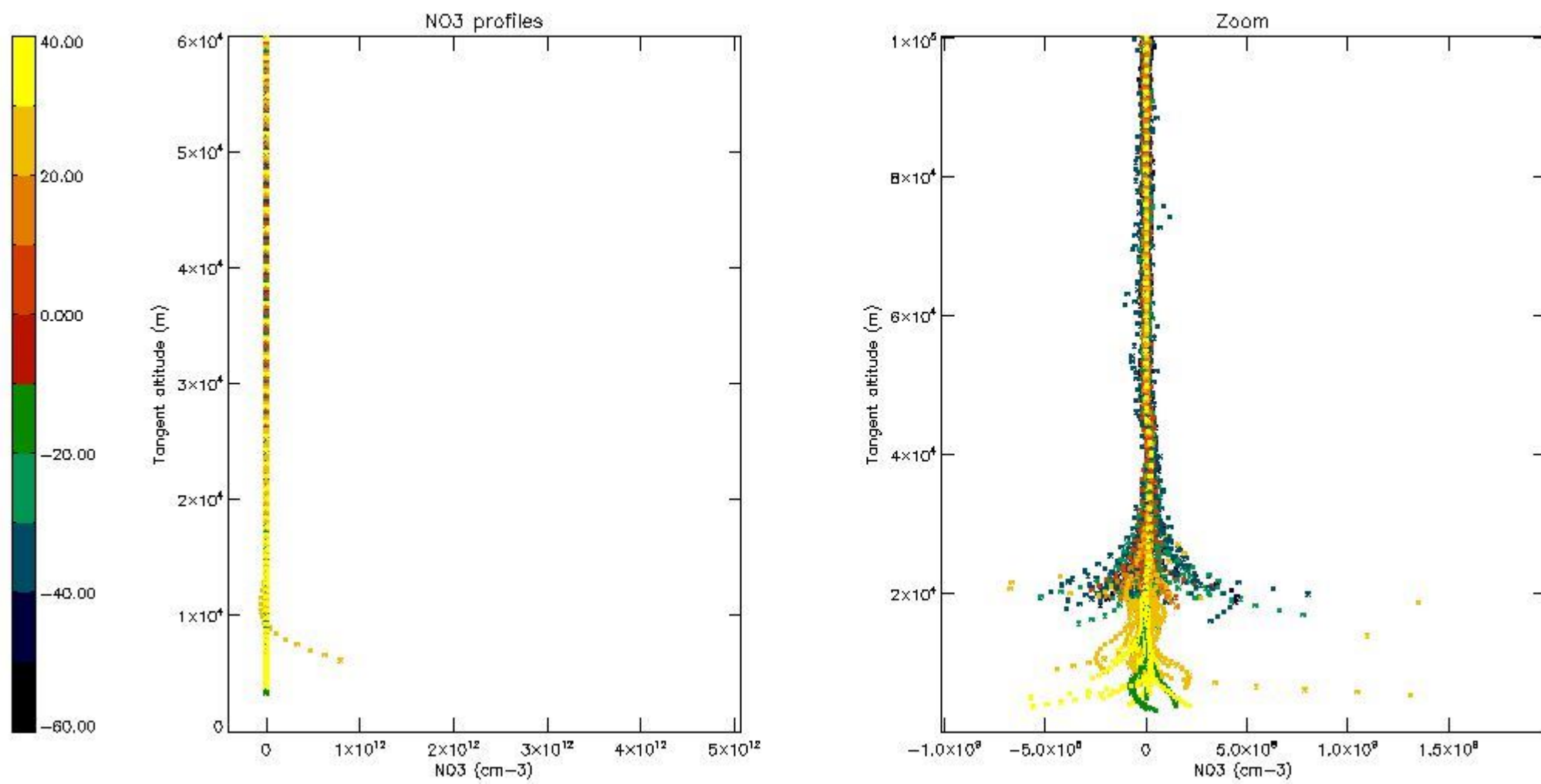
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



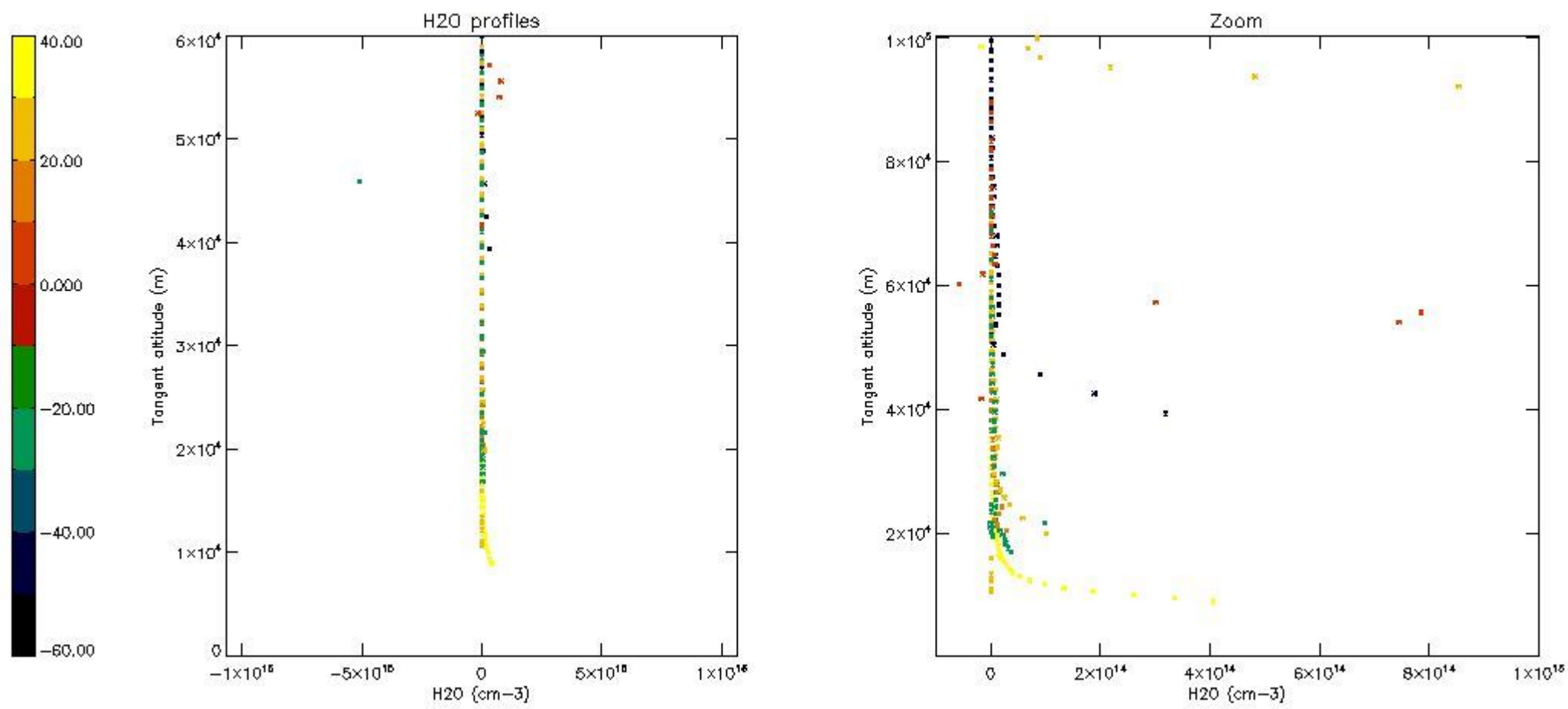
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

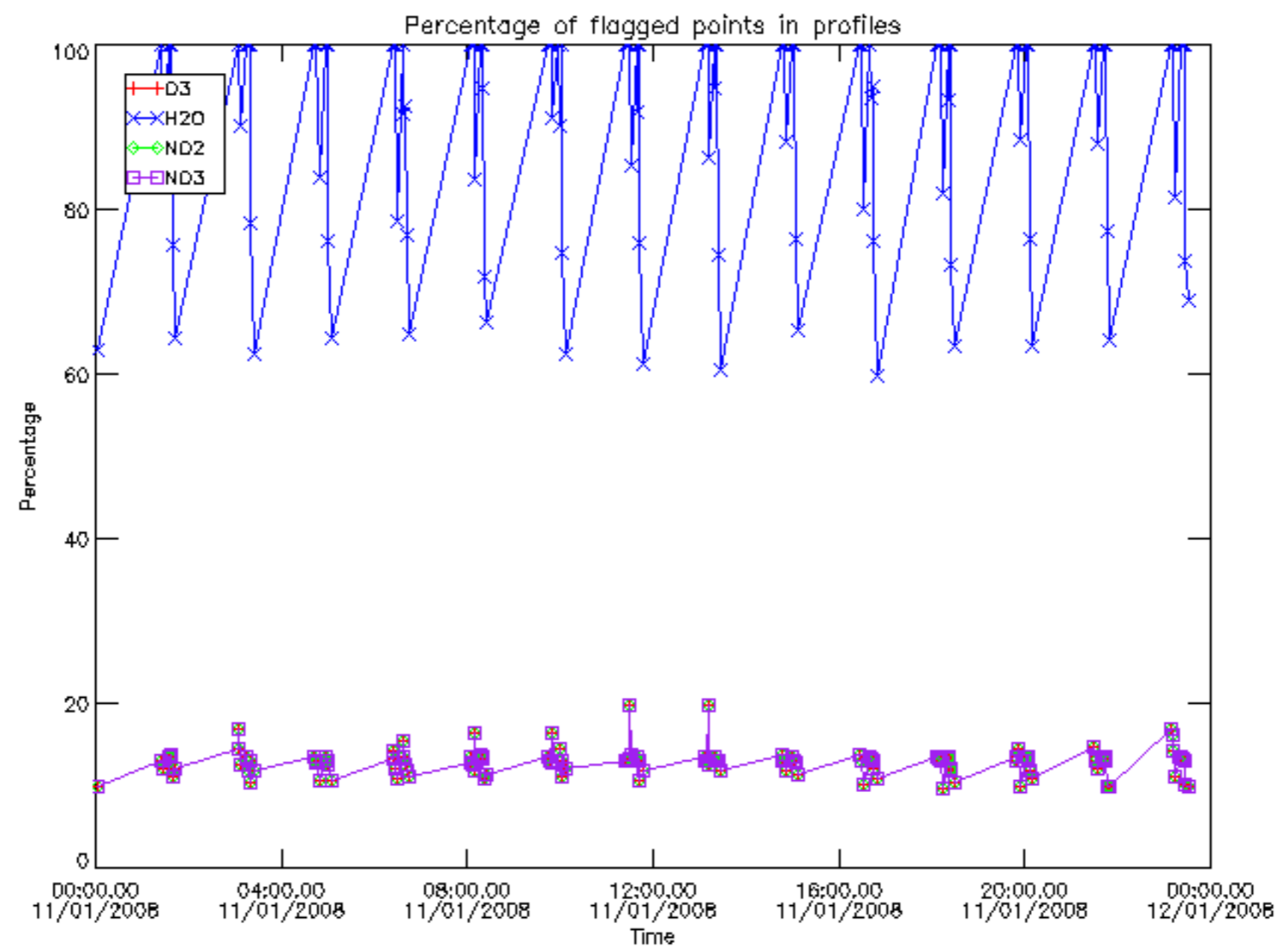
The colorbar represents the latitude.



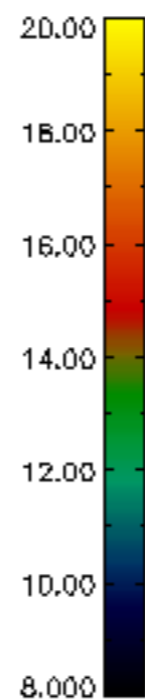
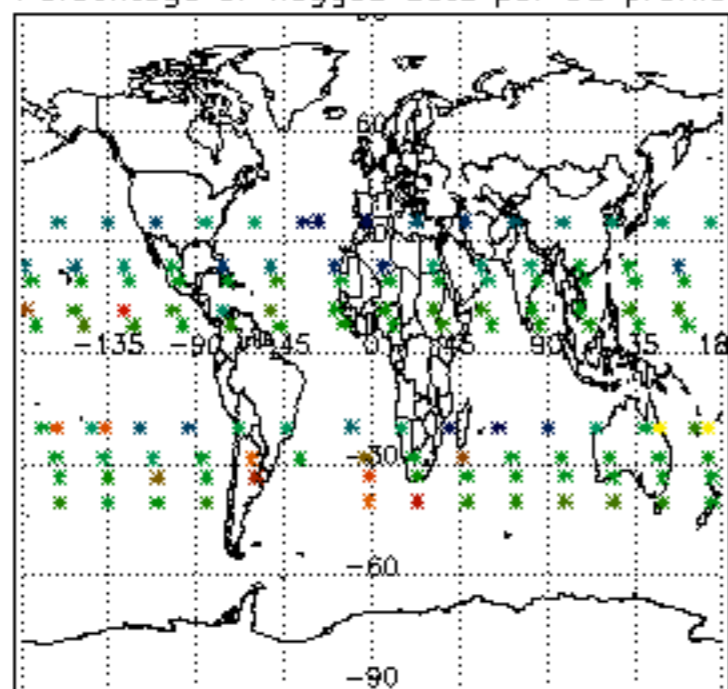
6. Auxiliary Data Files used for the production reported in section 2

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.

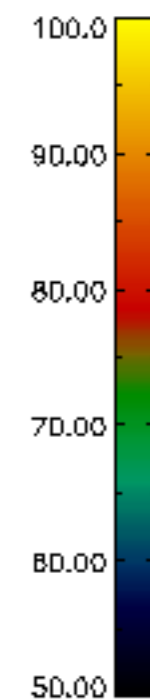
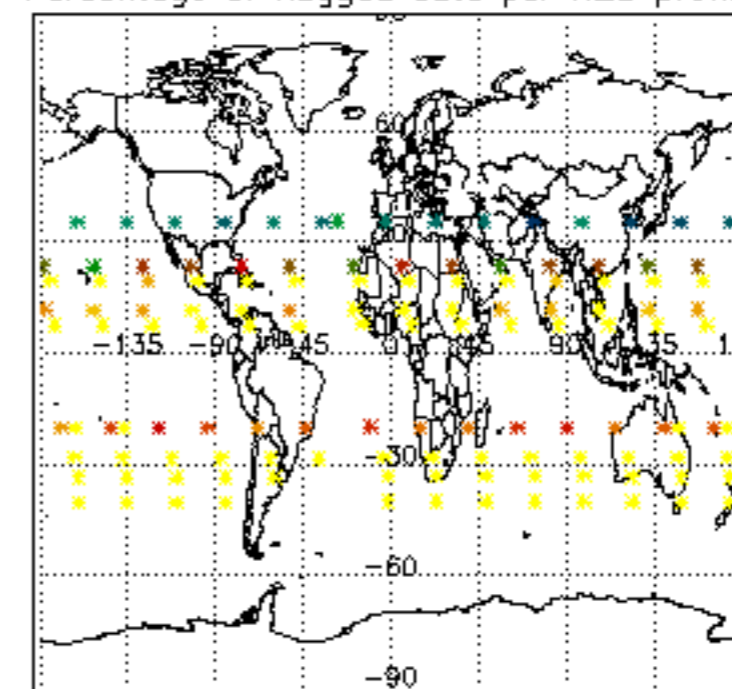
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	11-JAN-2008 00:02:42
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	11-JAN-2008 00:02:42
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	11-JAN-2008 00:02:42



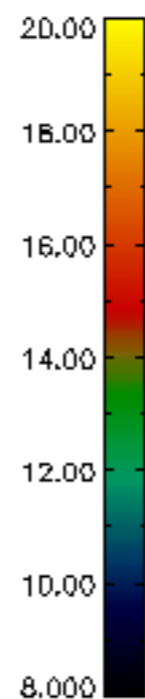
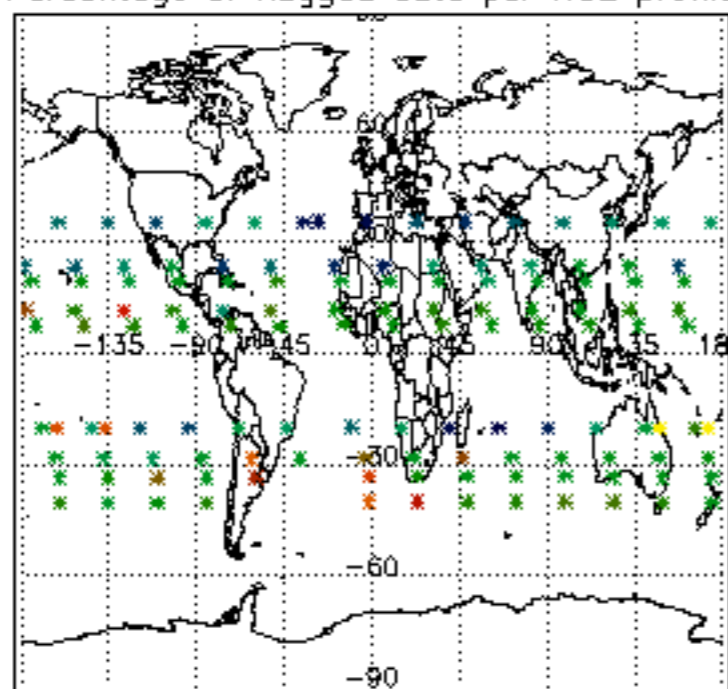
Percentage of flagged data per D3 profile



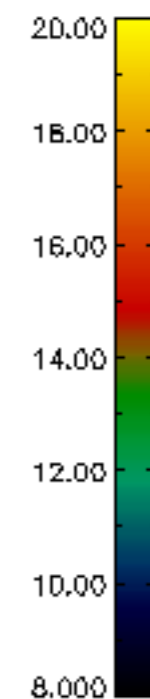
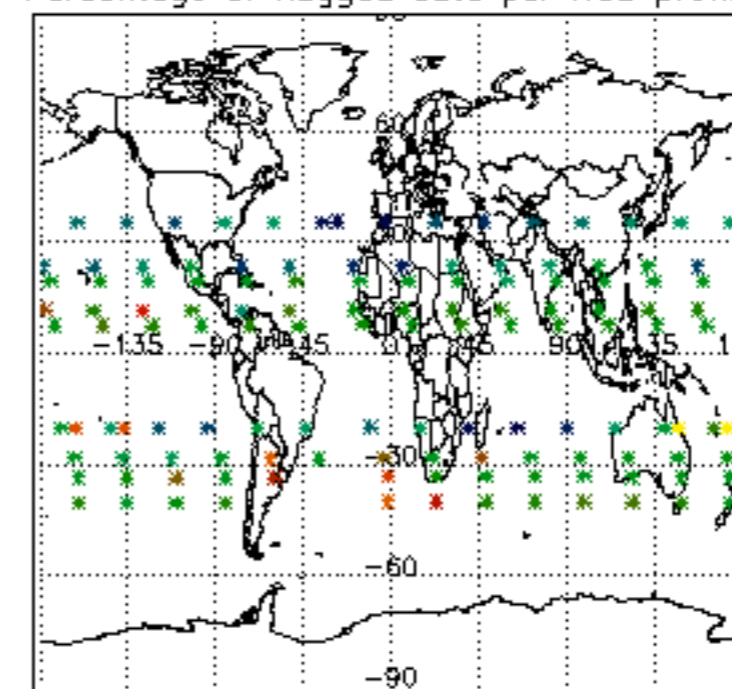
Percentage of flagged data per H2O profile

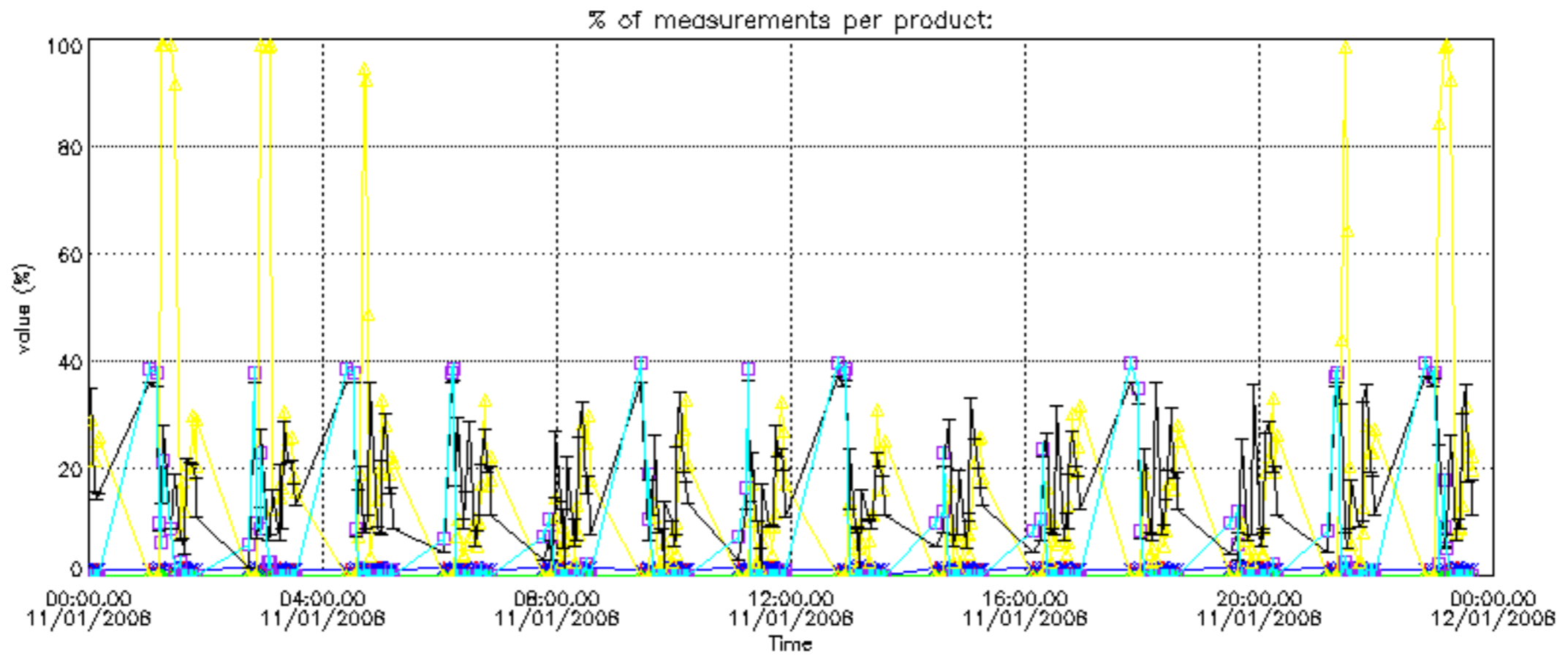


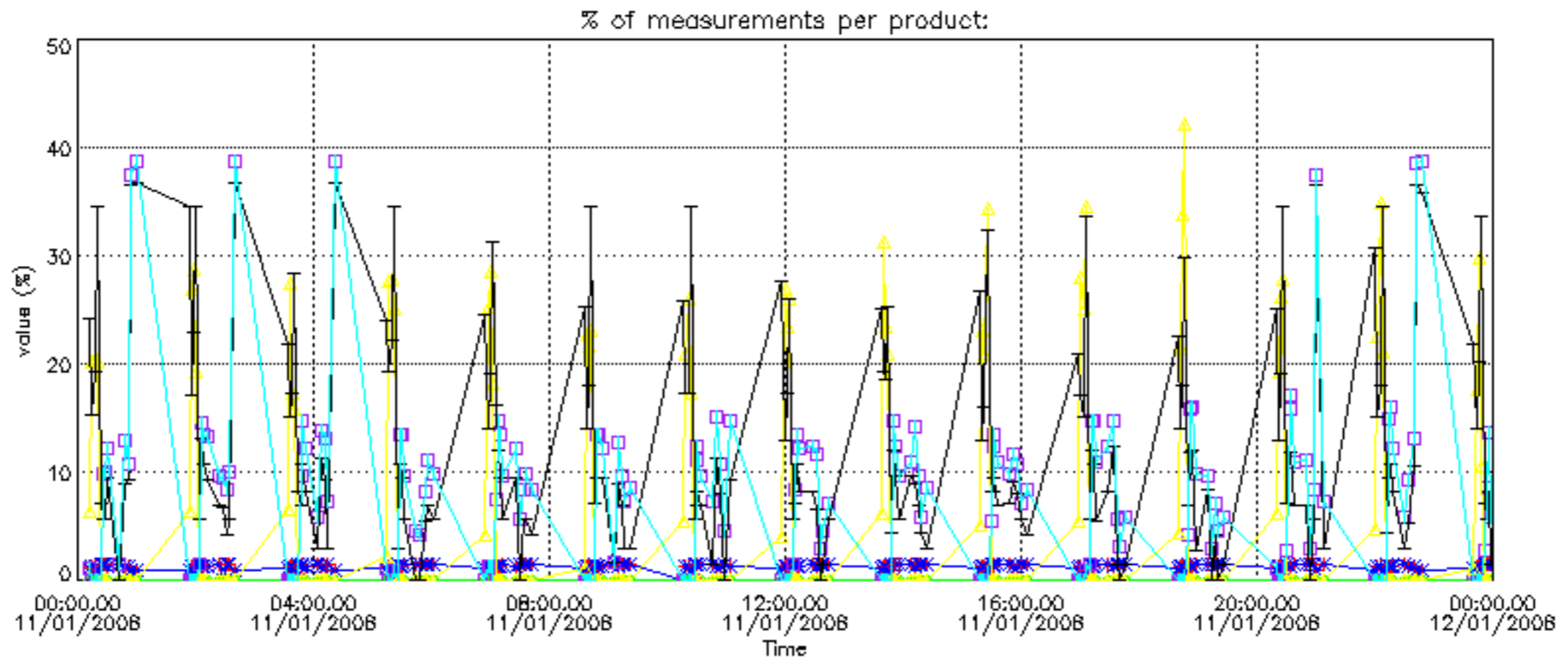
Percentage of flagged data per NO2 profile



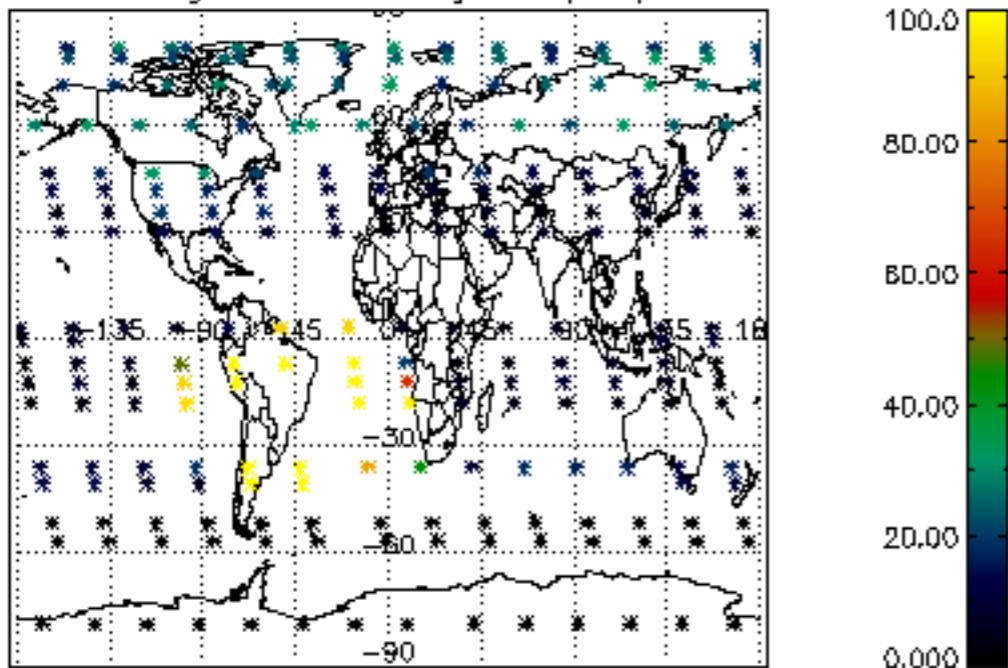
Percentage of flagged data per NO3 profile



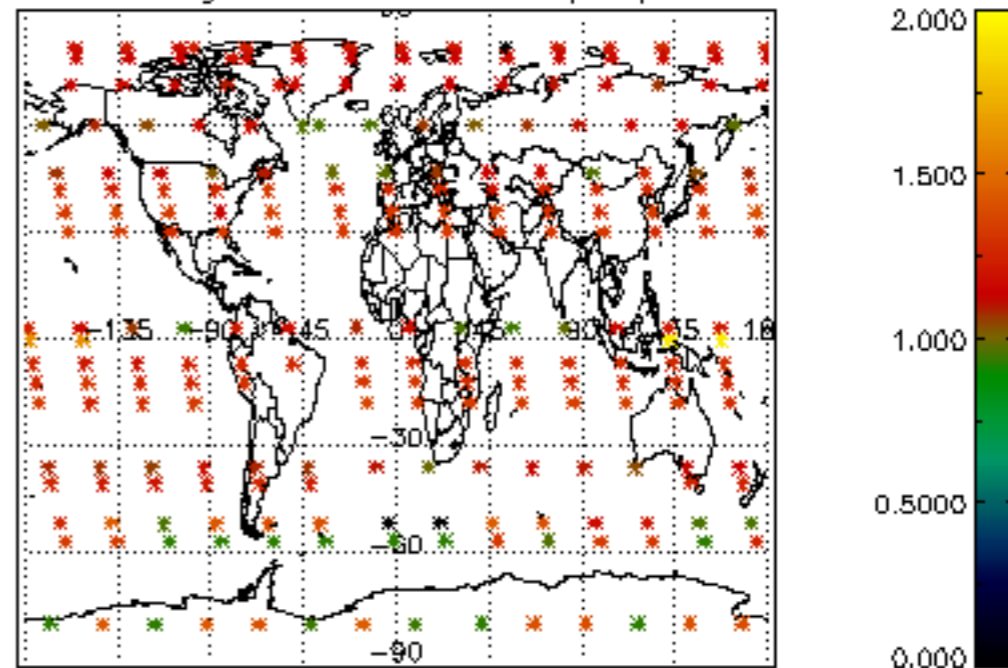




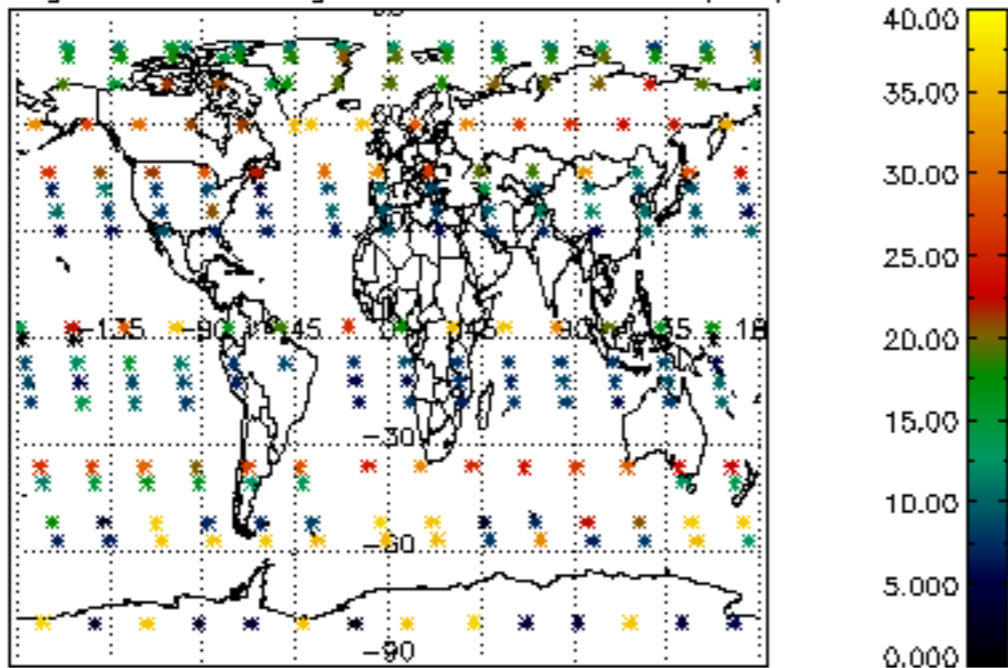
Percentage of cosmic ray hits per profile



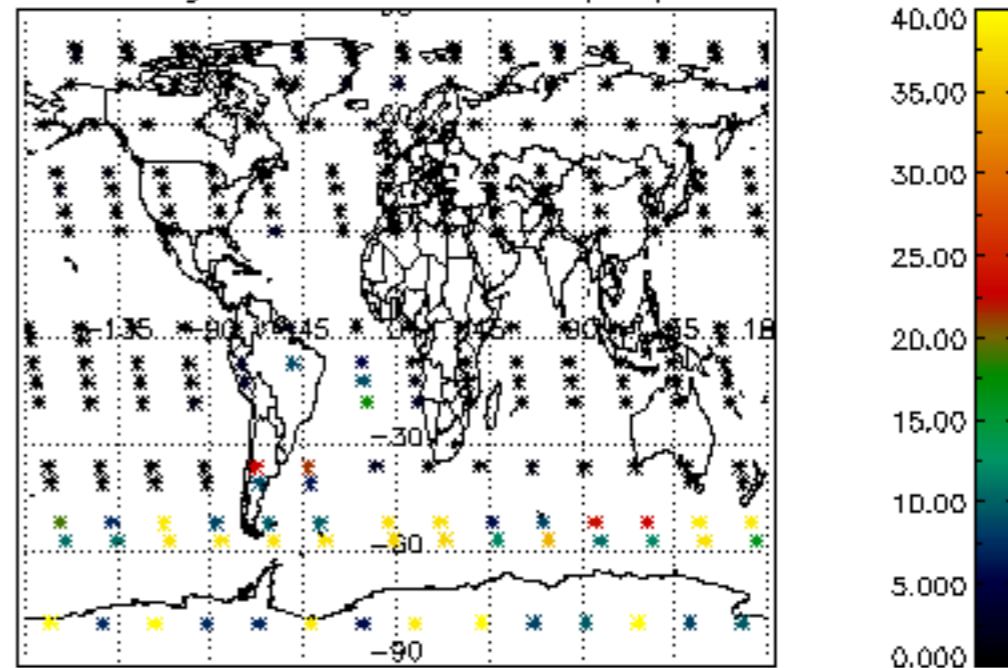
Percentage of datation errors per profile



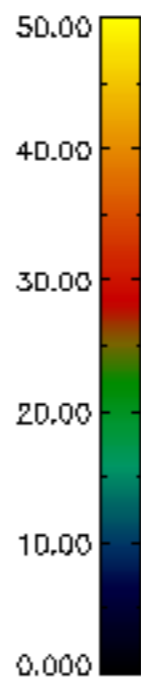
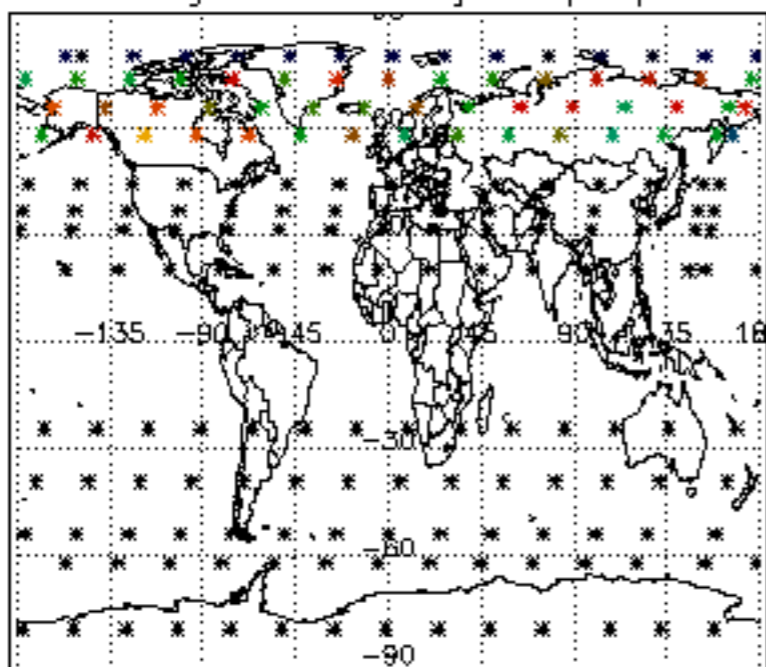
Percentage of star falling outside central band per profile



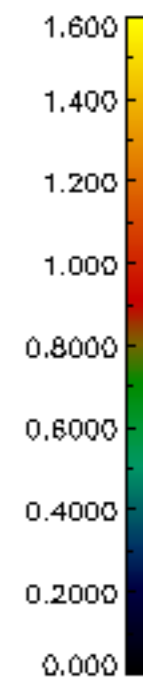
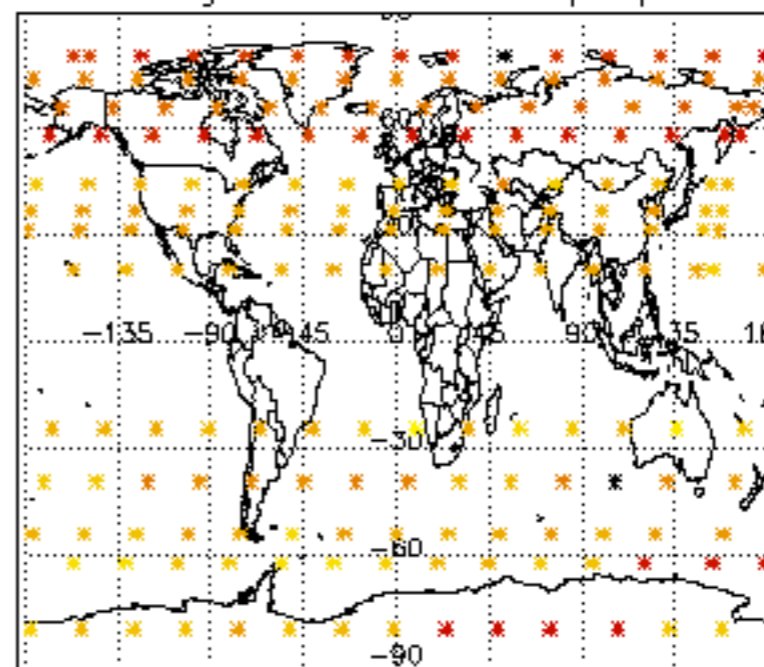
Percentage of saturation errors per profile



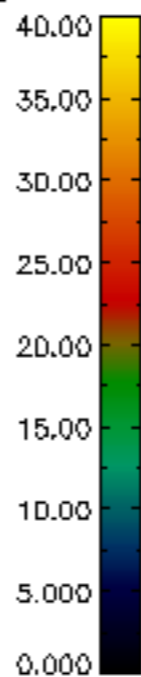
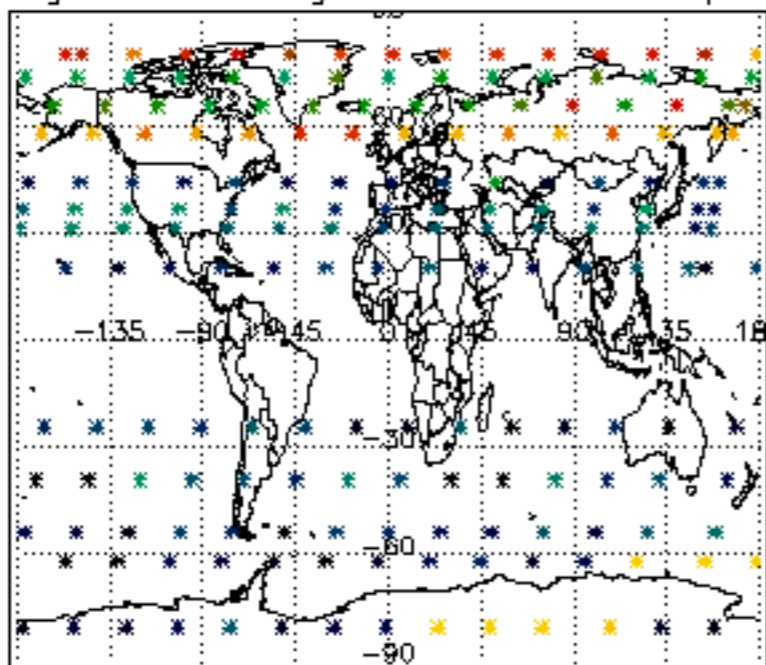
Percentage of cosmic ray hits per profile



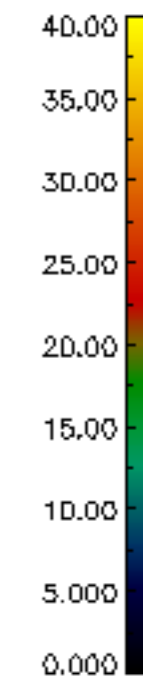
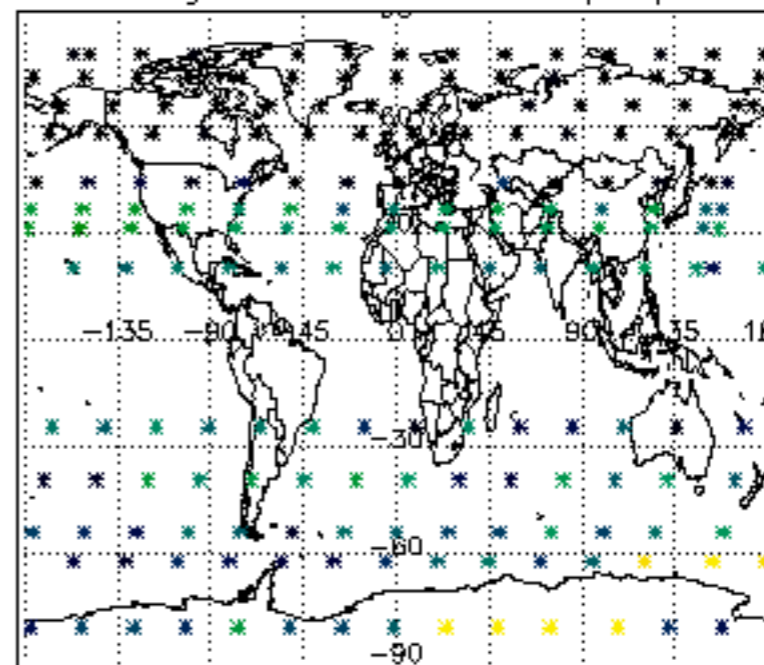
Percentage of datation errors per profile

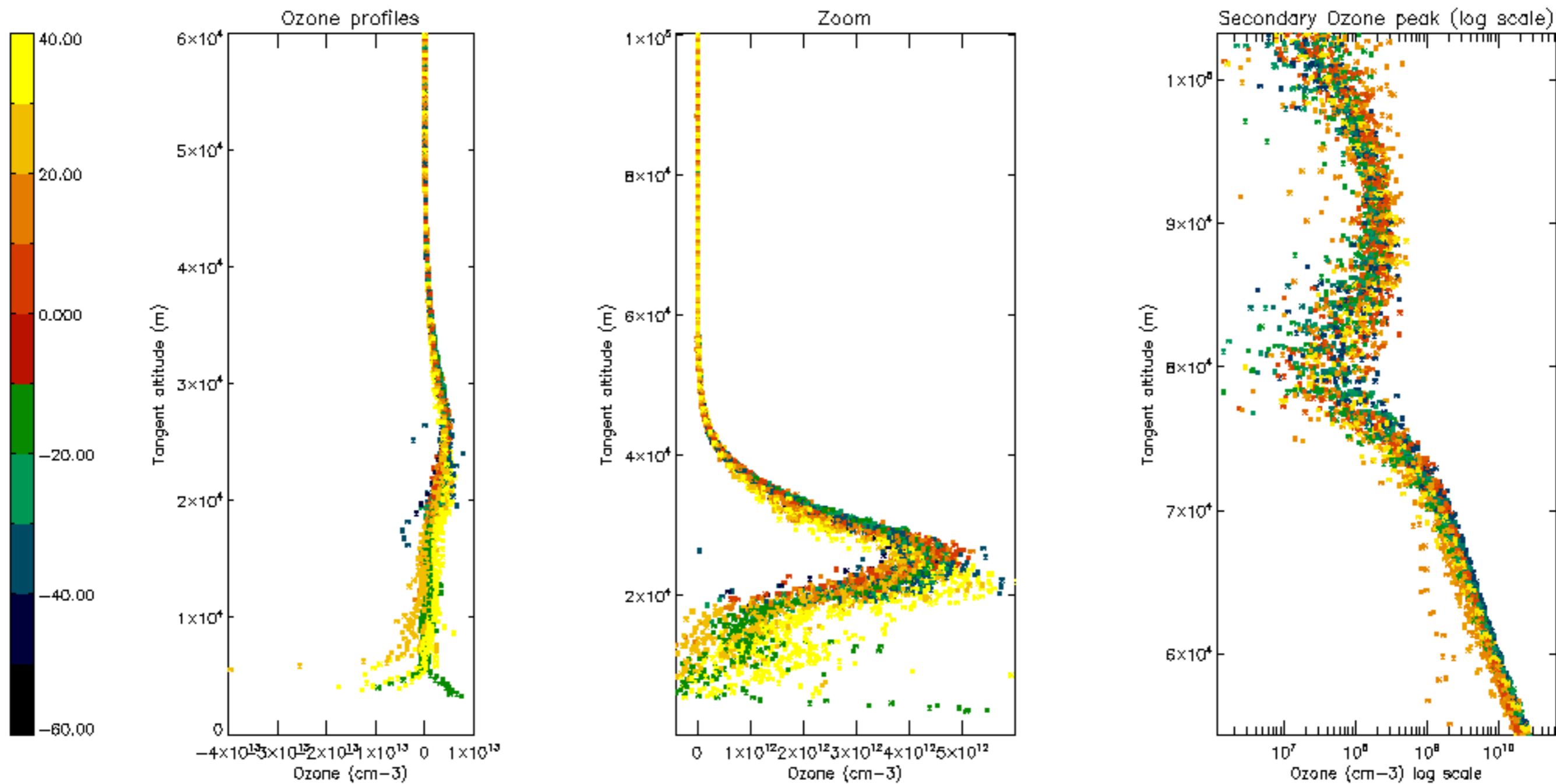


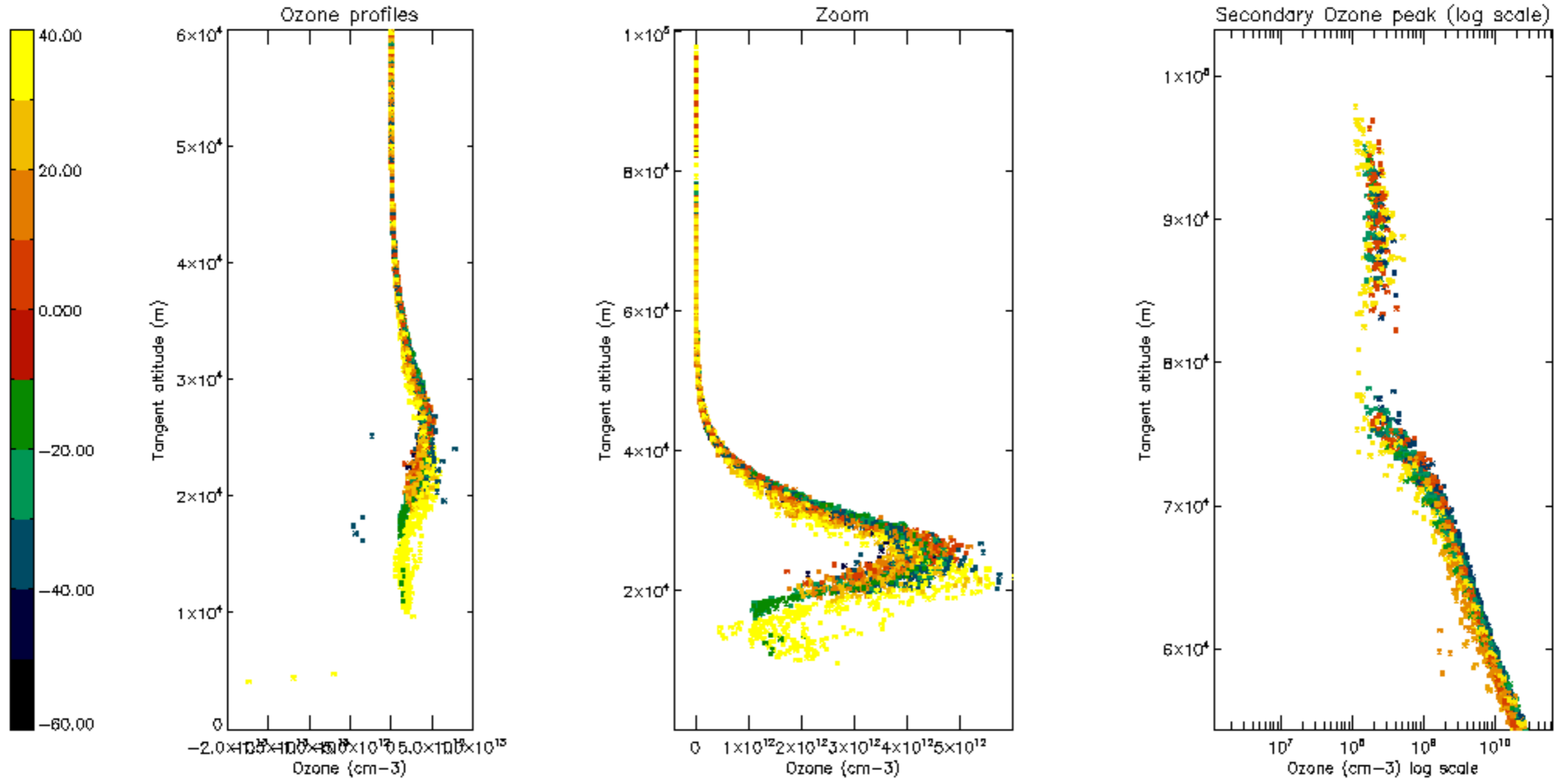
Percentage of star falling outside central band per profile

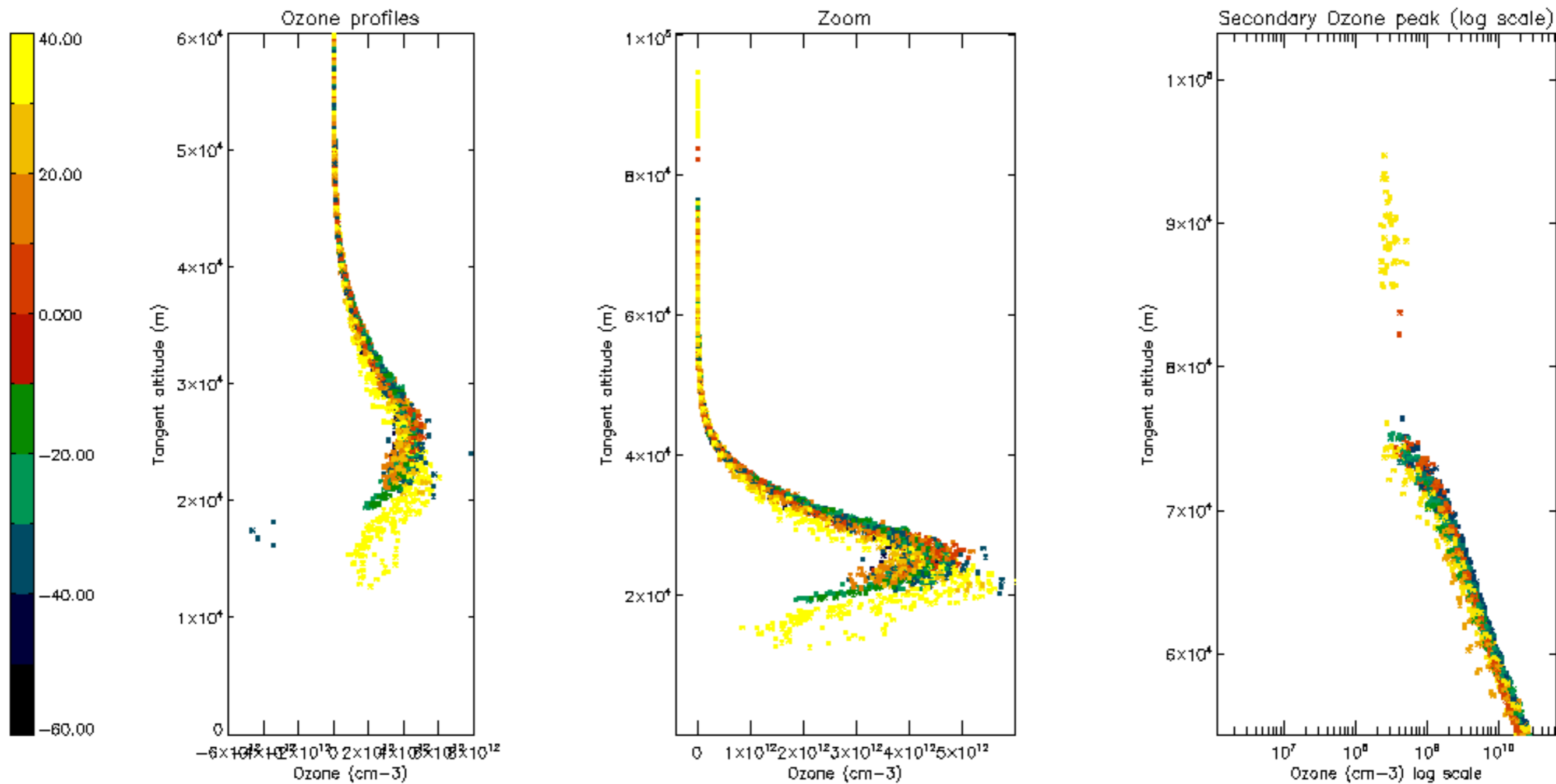


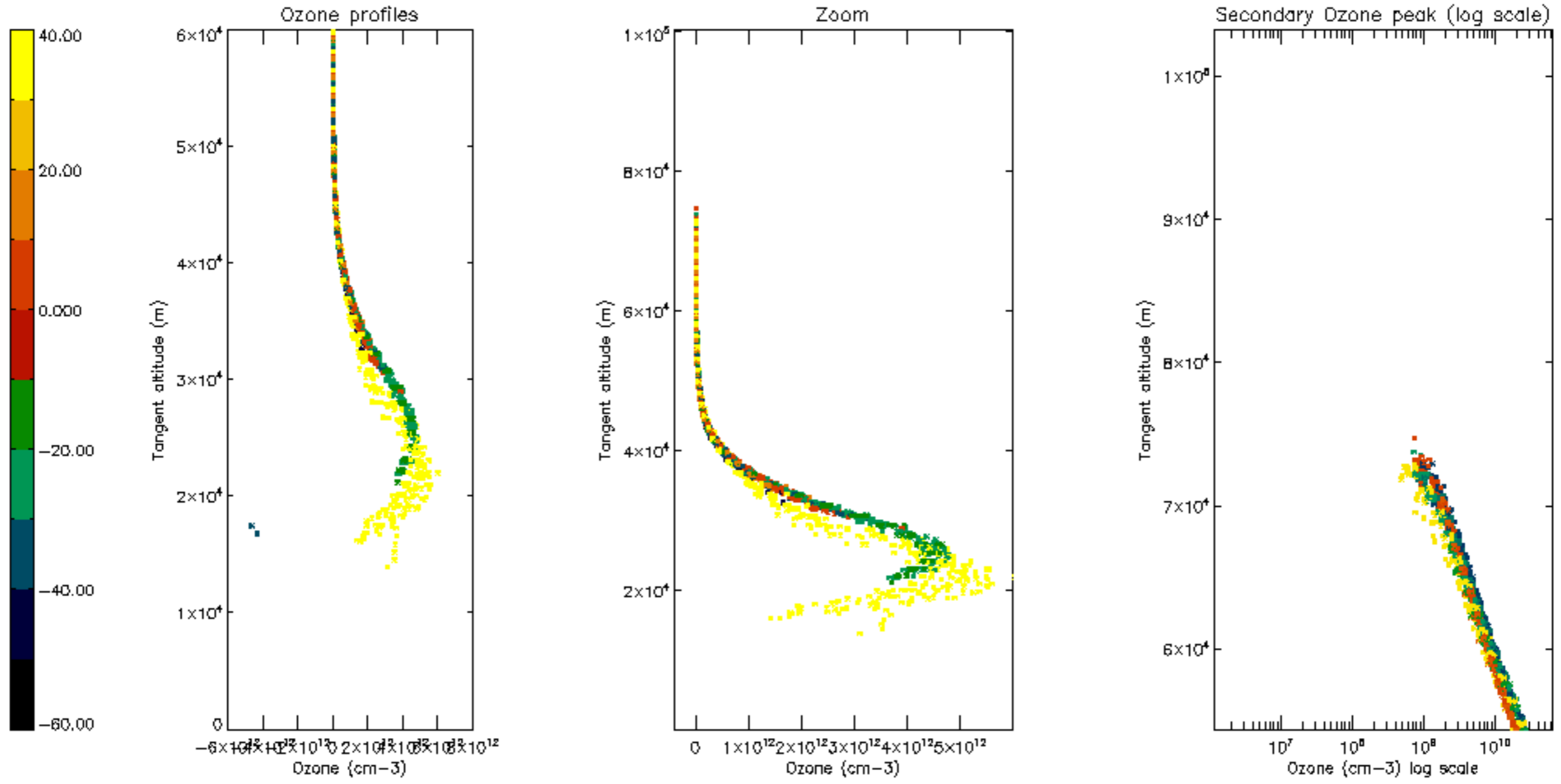
Percentage of saturation errors per profile

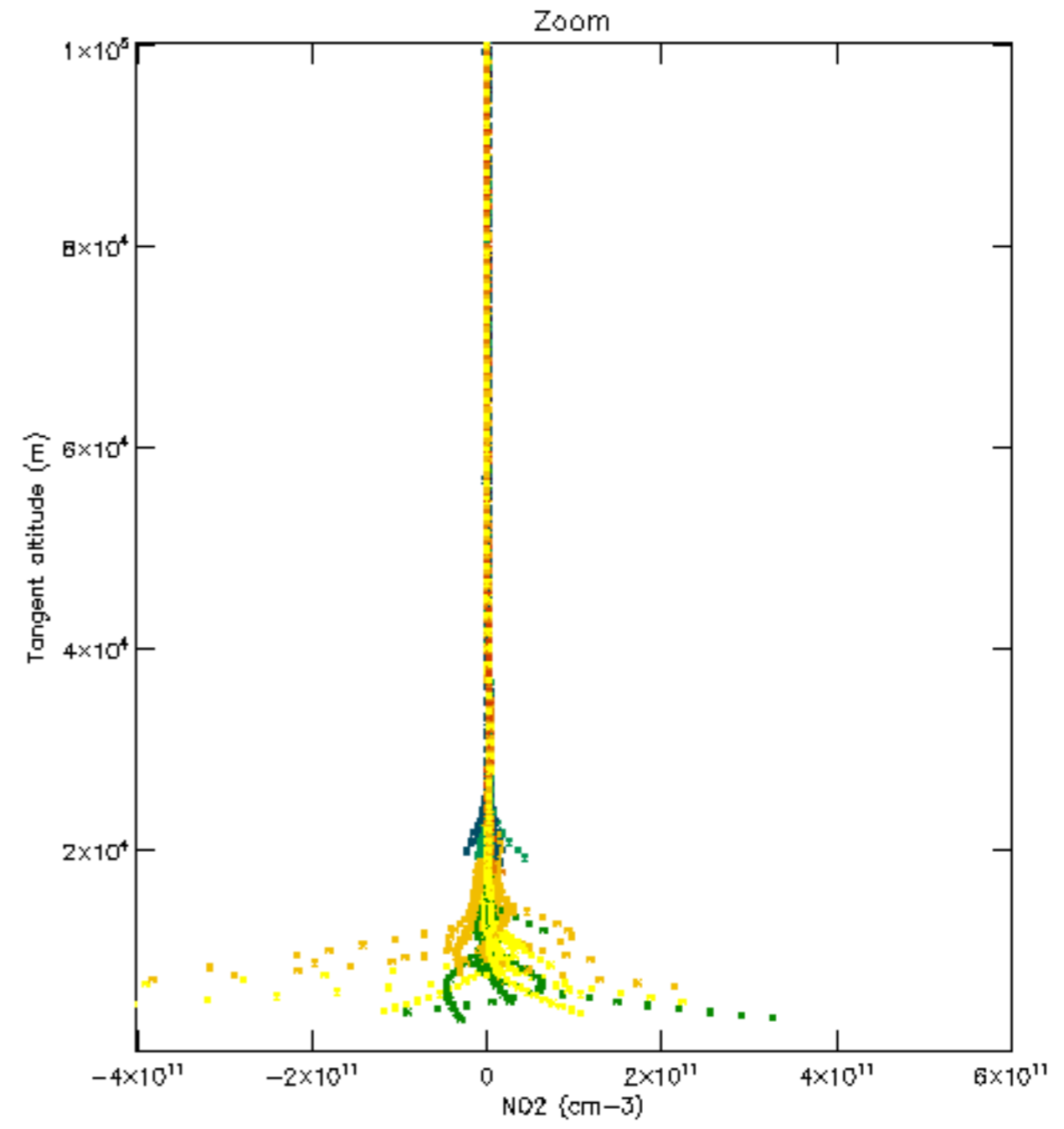
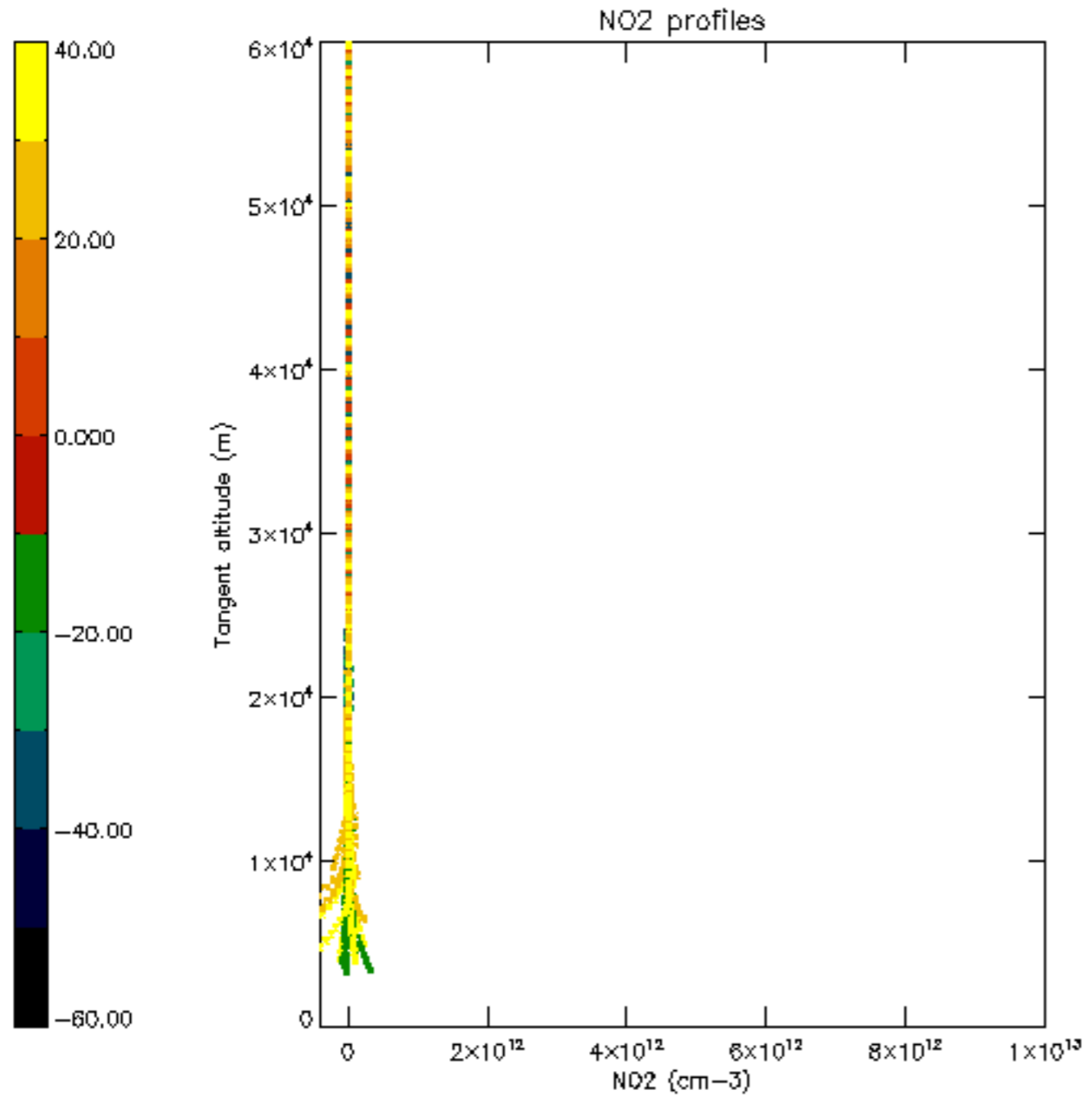


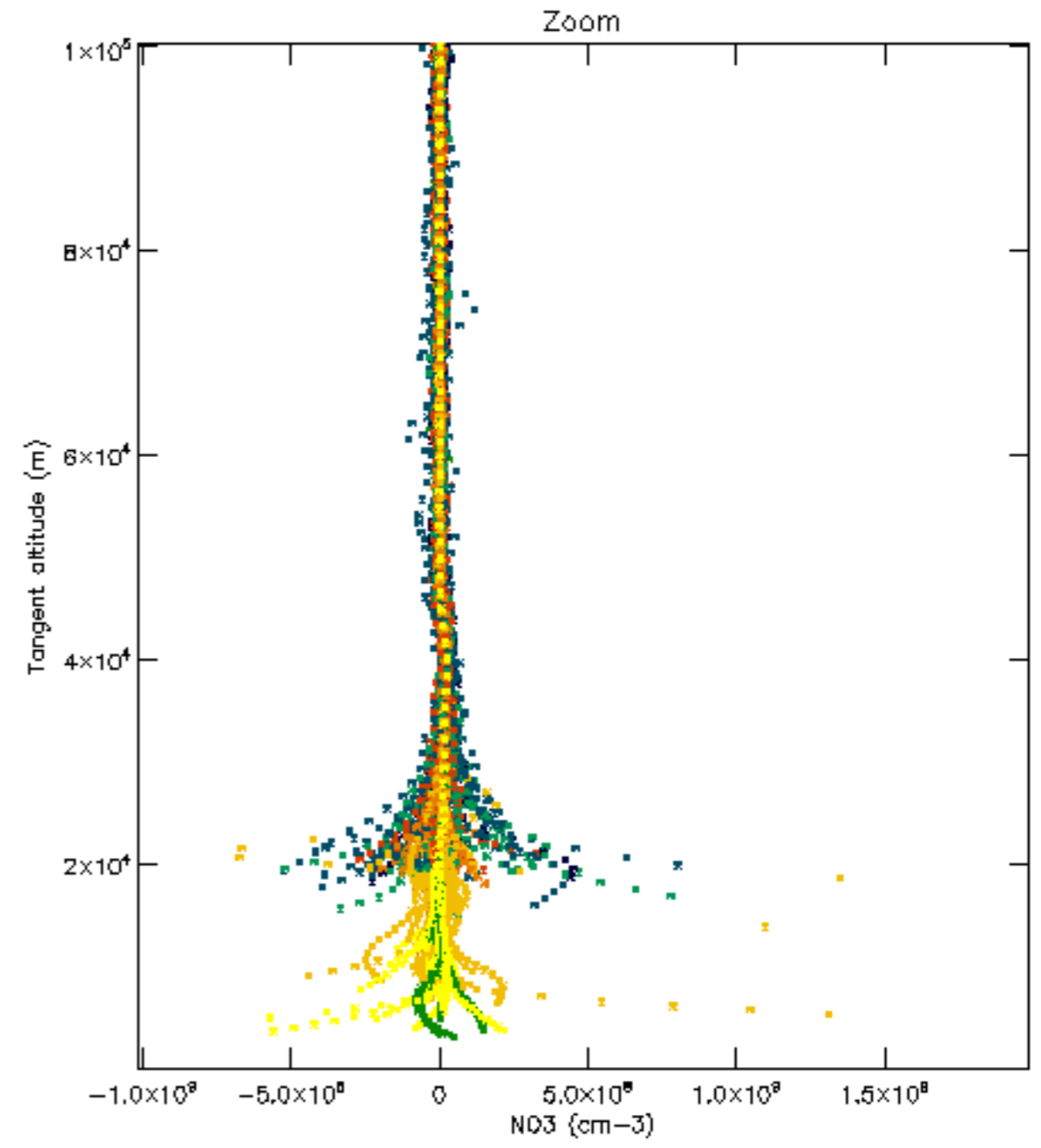
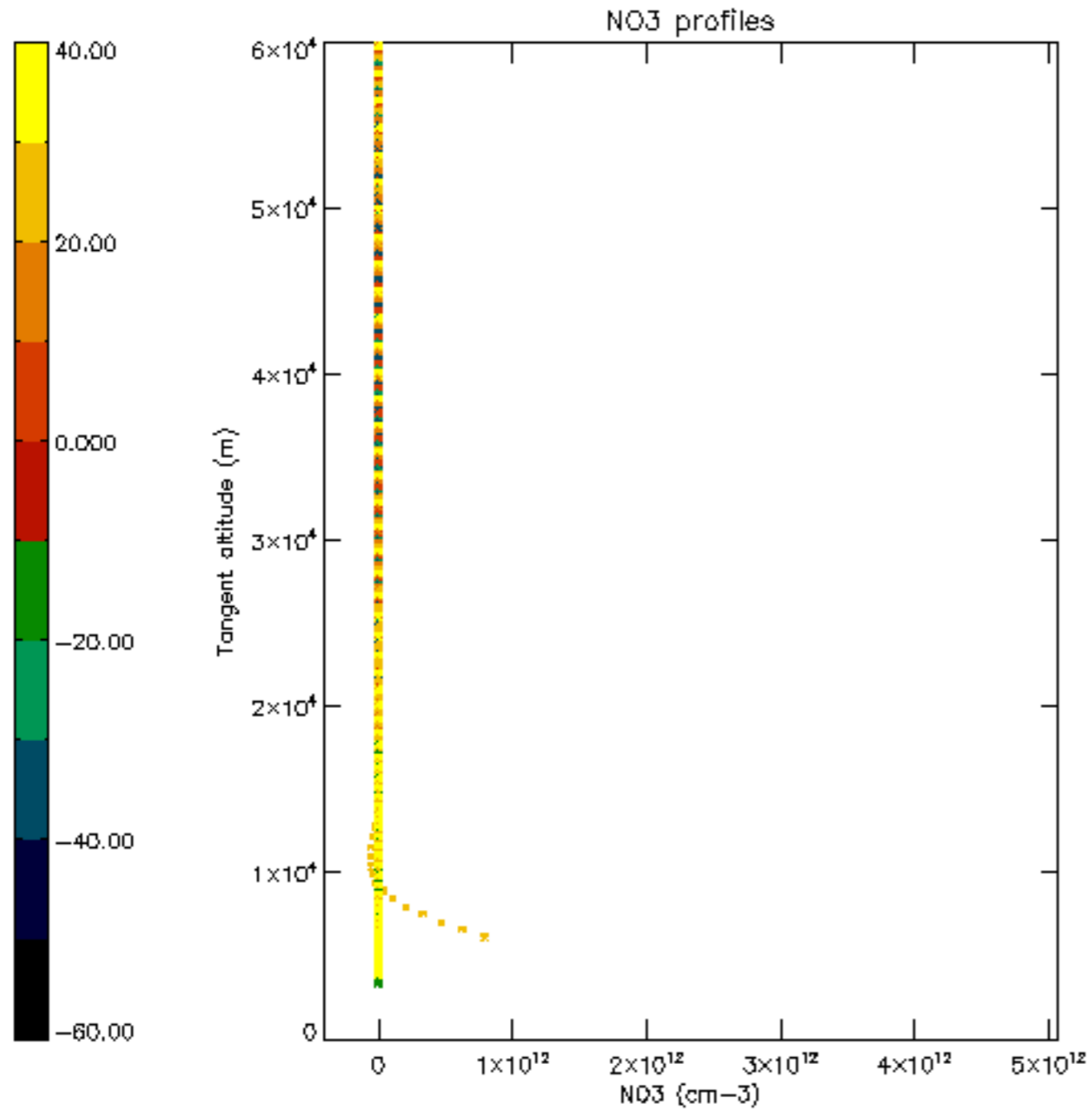


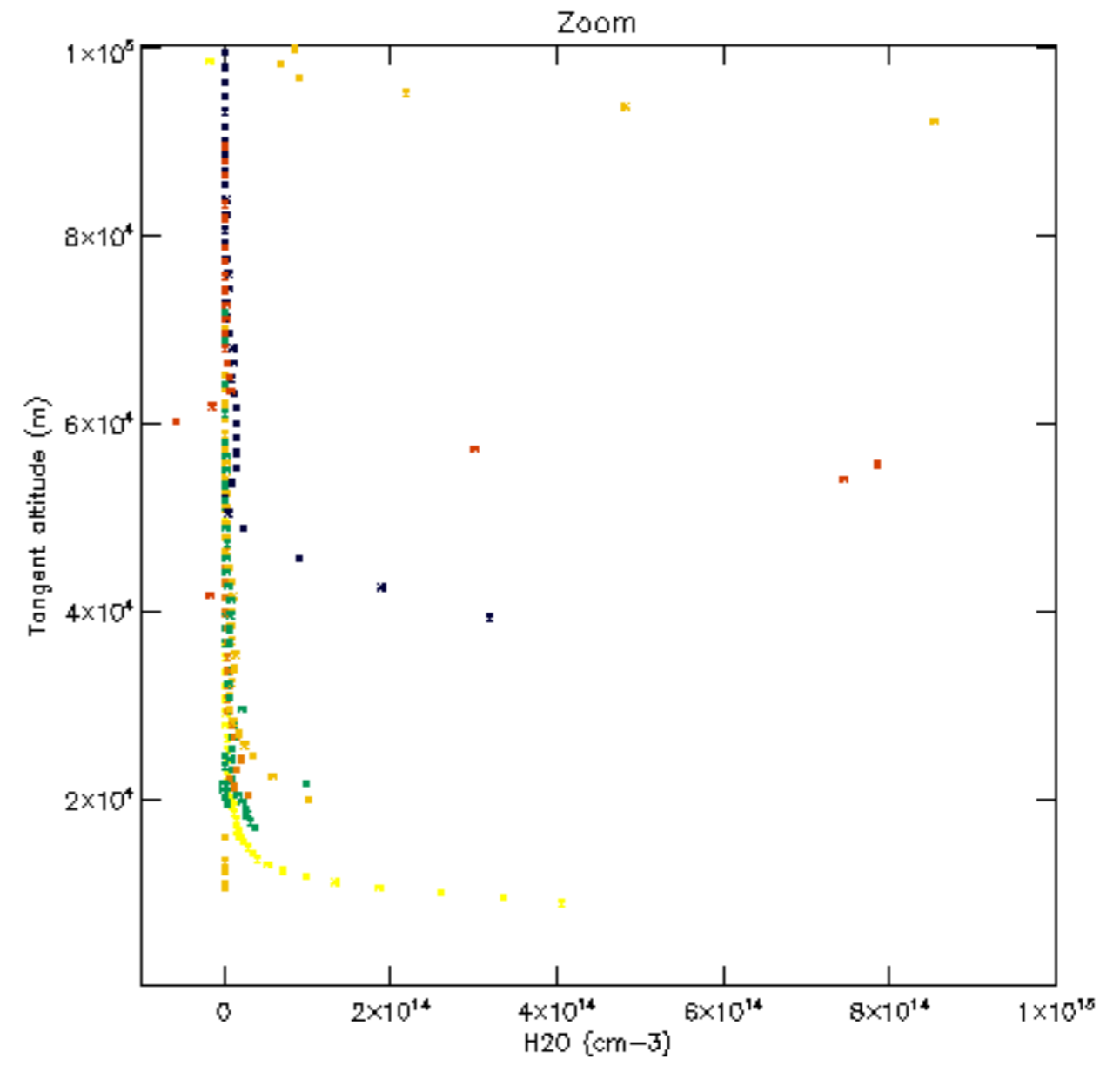
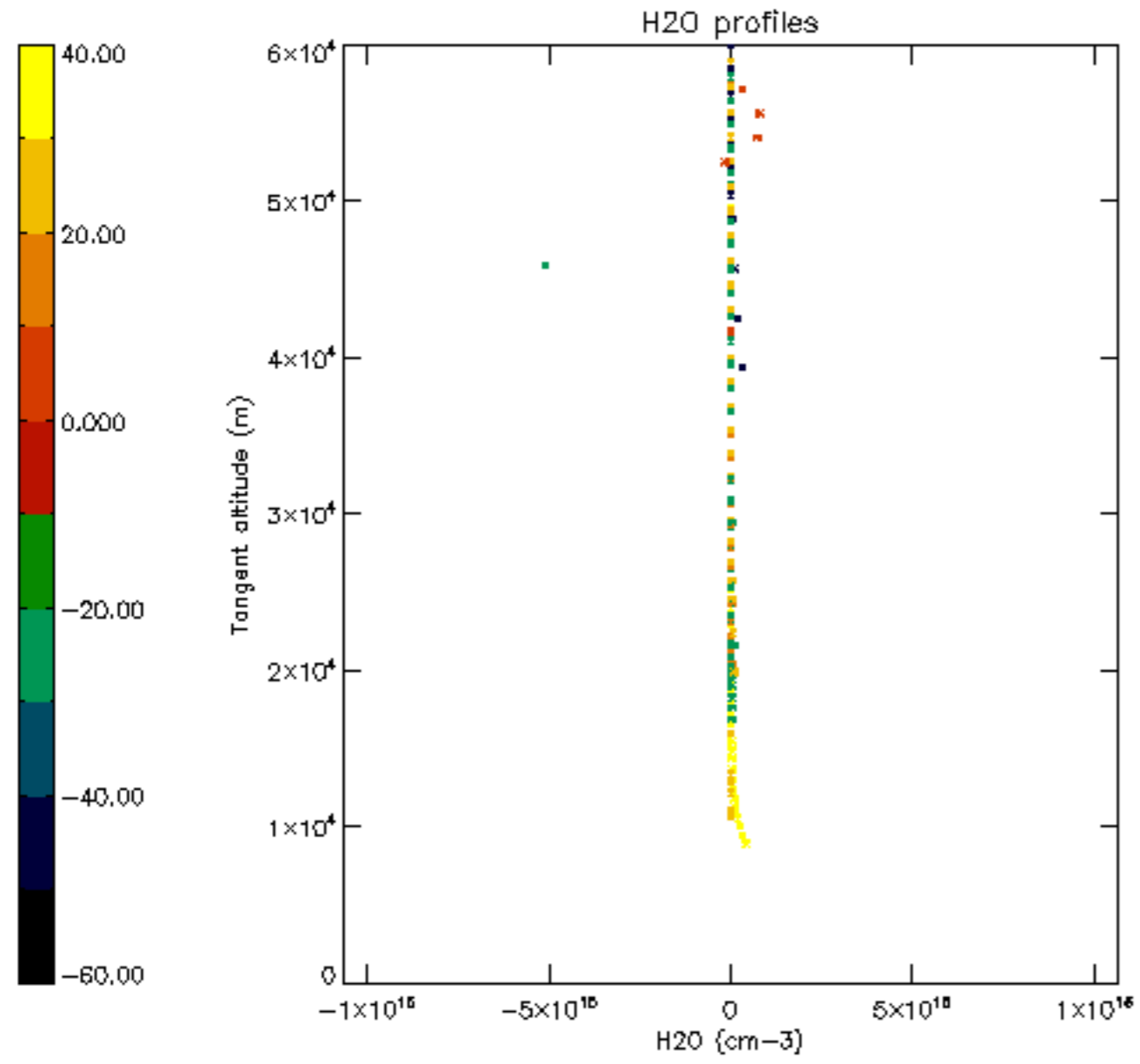


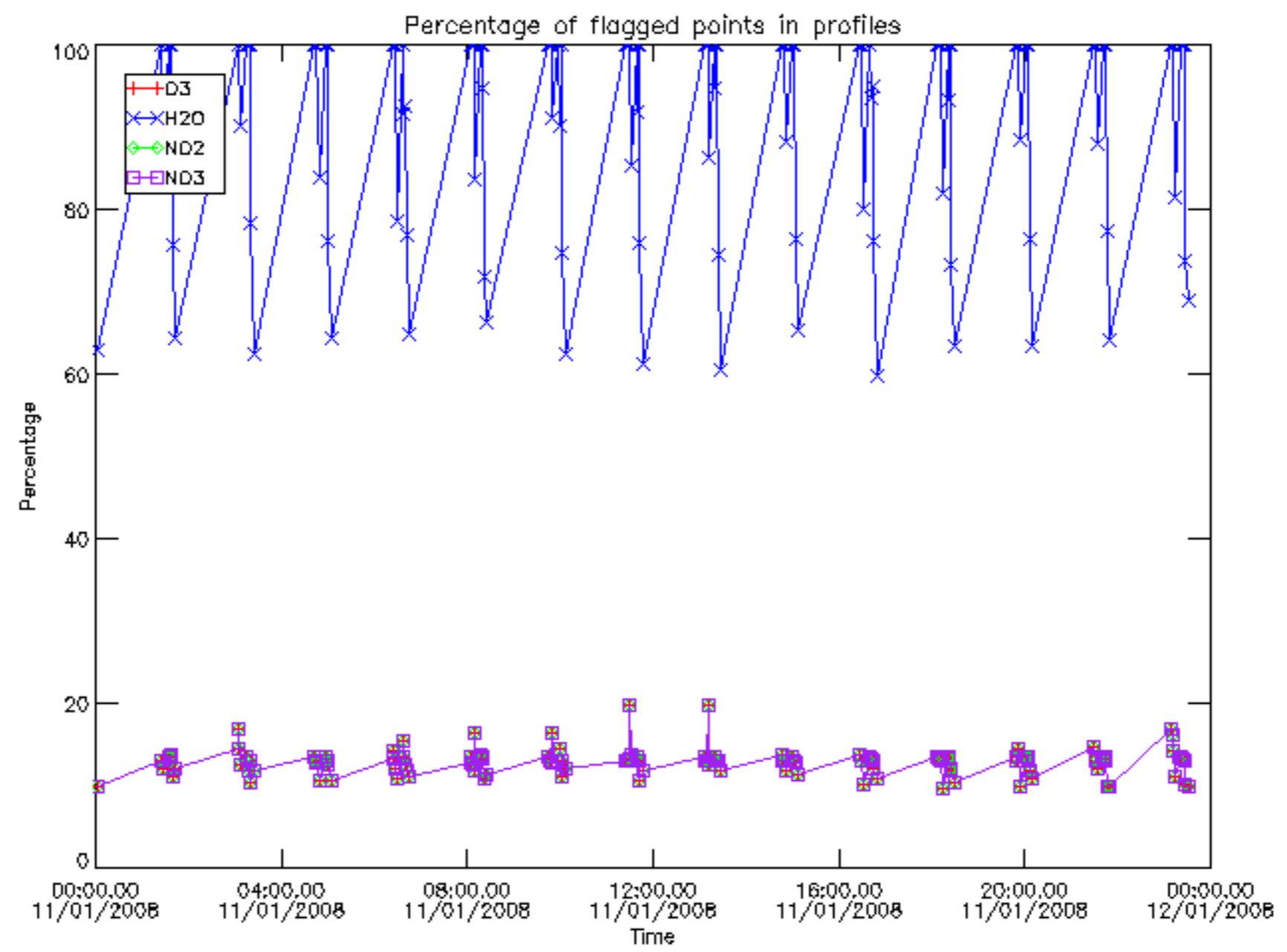




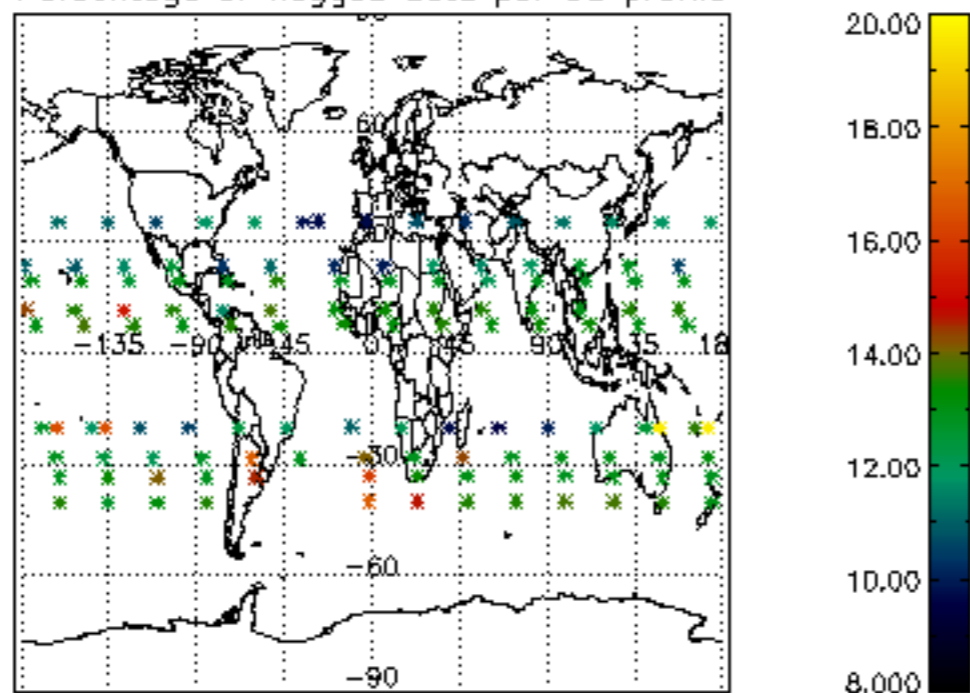




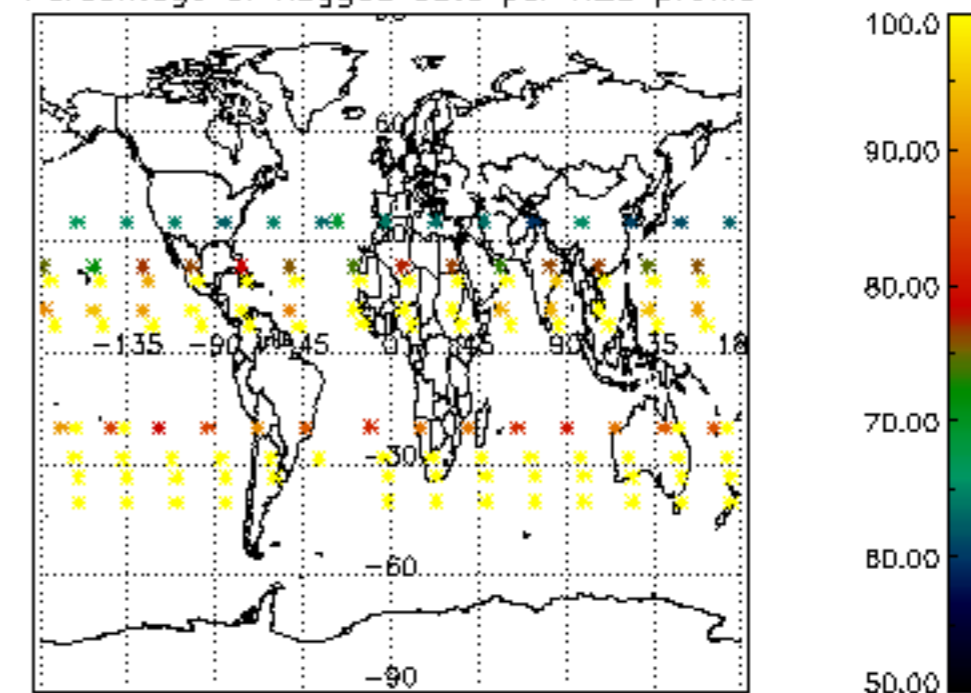




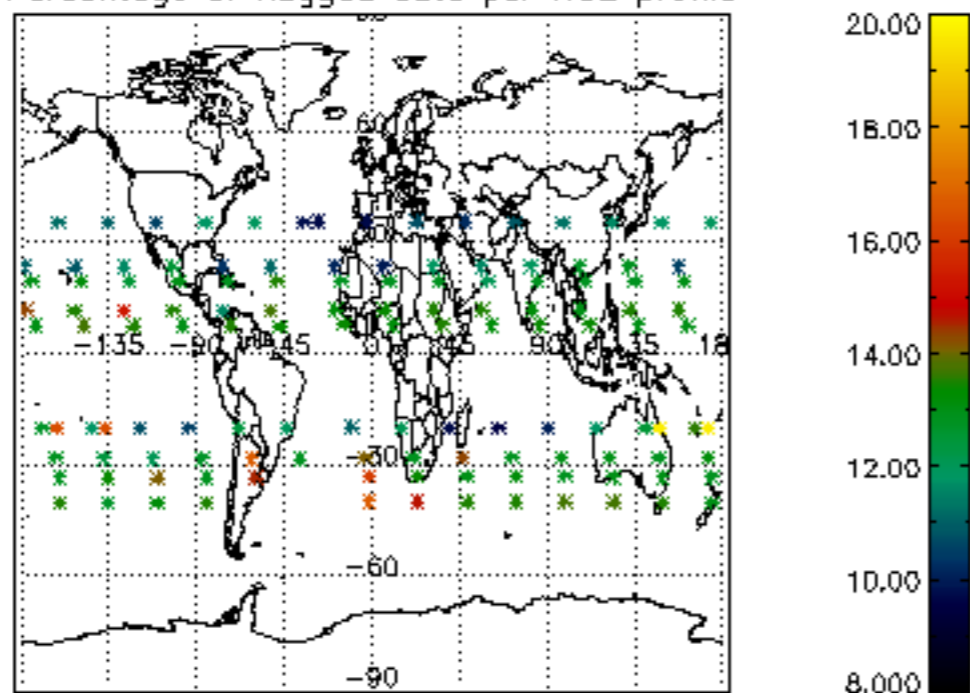
Percentage of flagged data per D3 profile



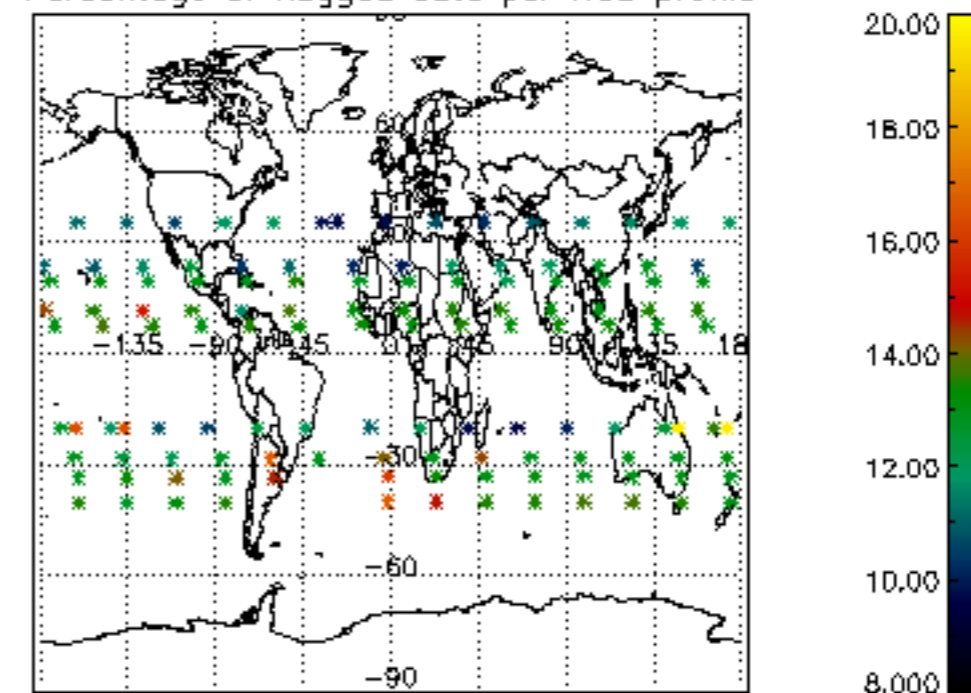
Percentage of flagged data per H2O profile

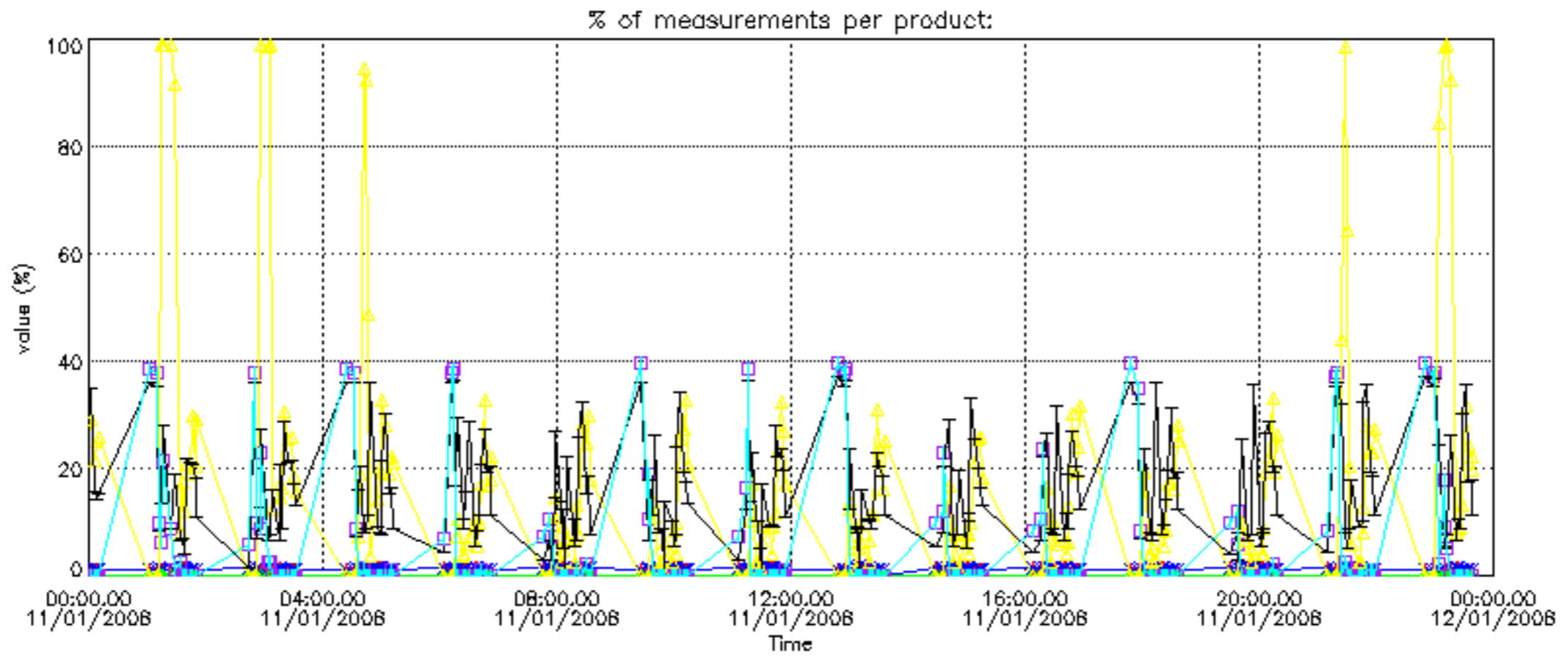


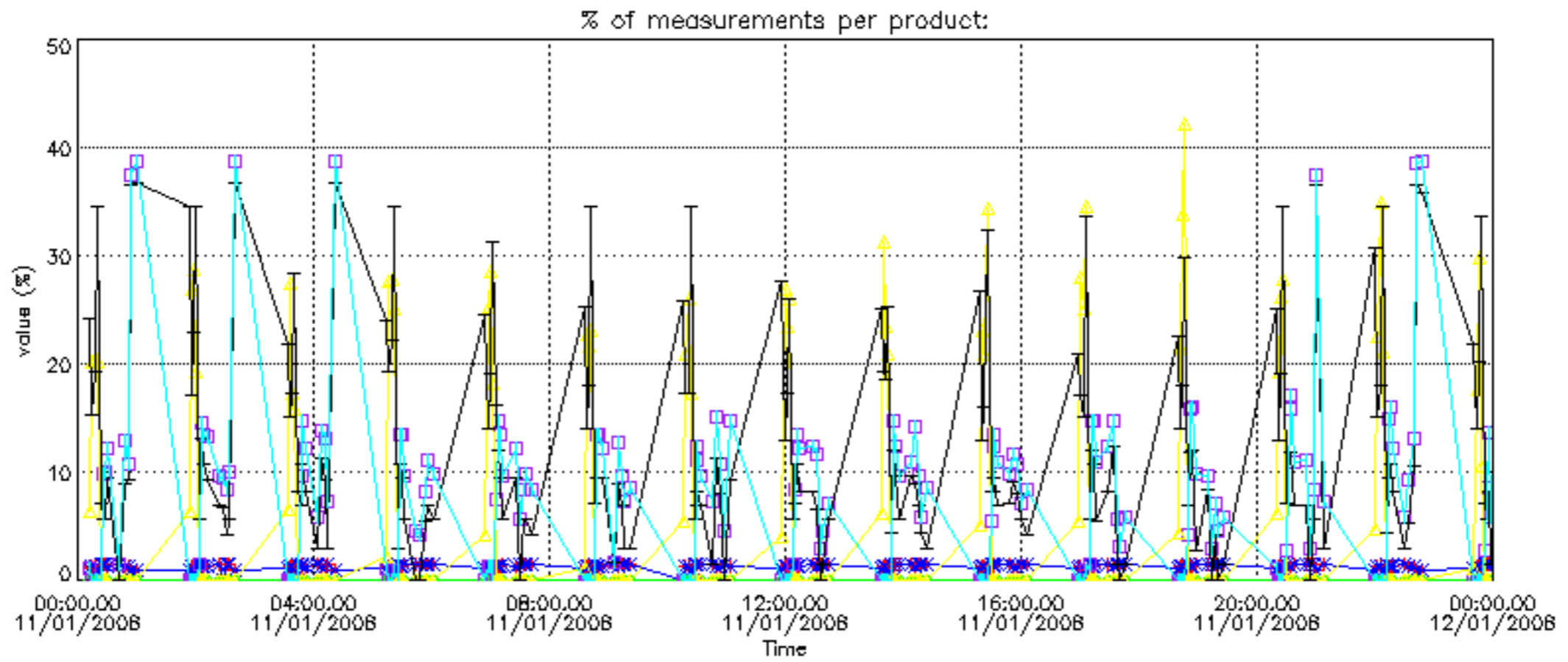
Percentage of flagged data per NO2 profile



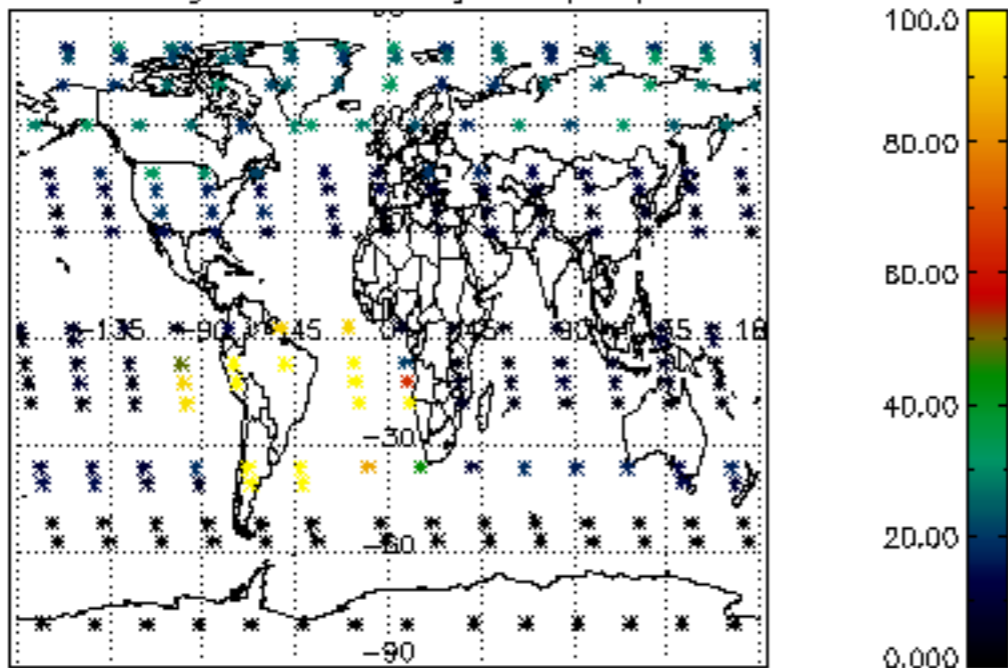
Percentage of flagged data per NO3 profile



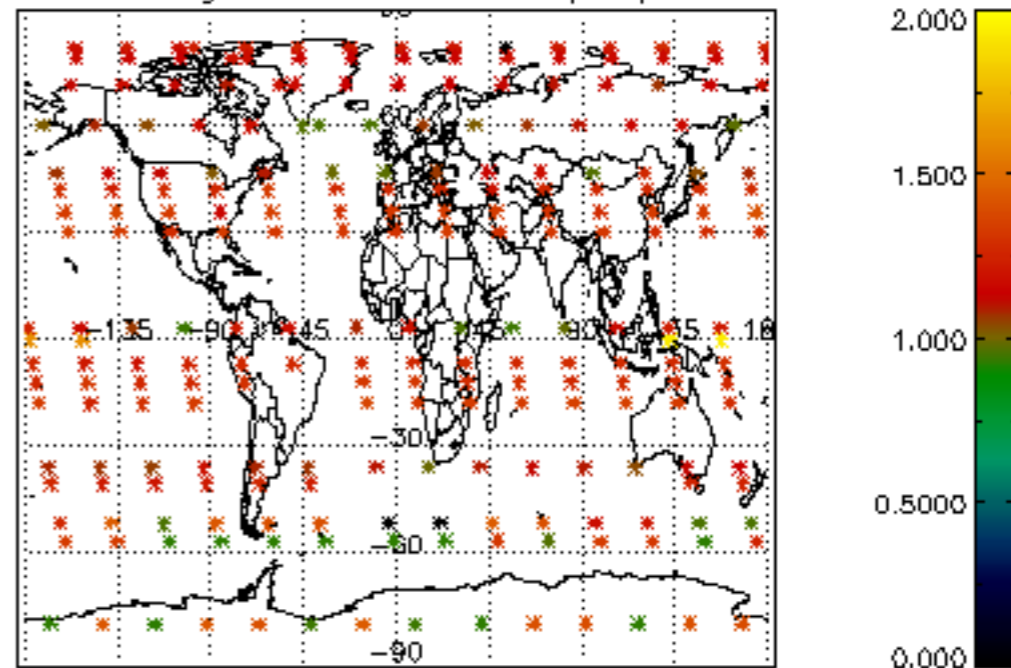




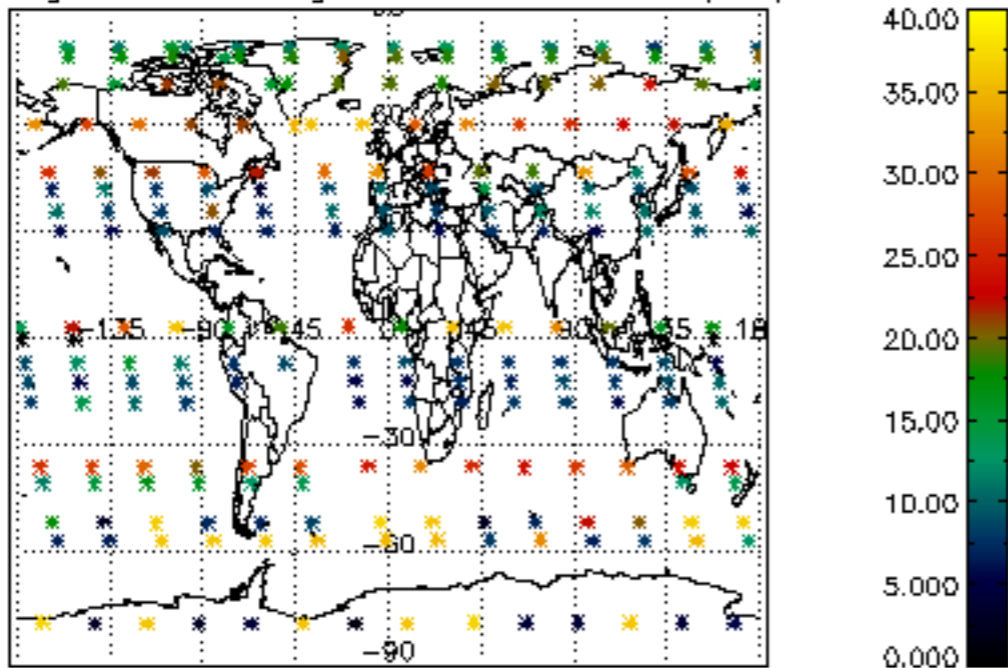
Percentage of cosmic ray hits per profile



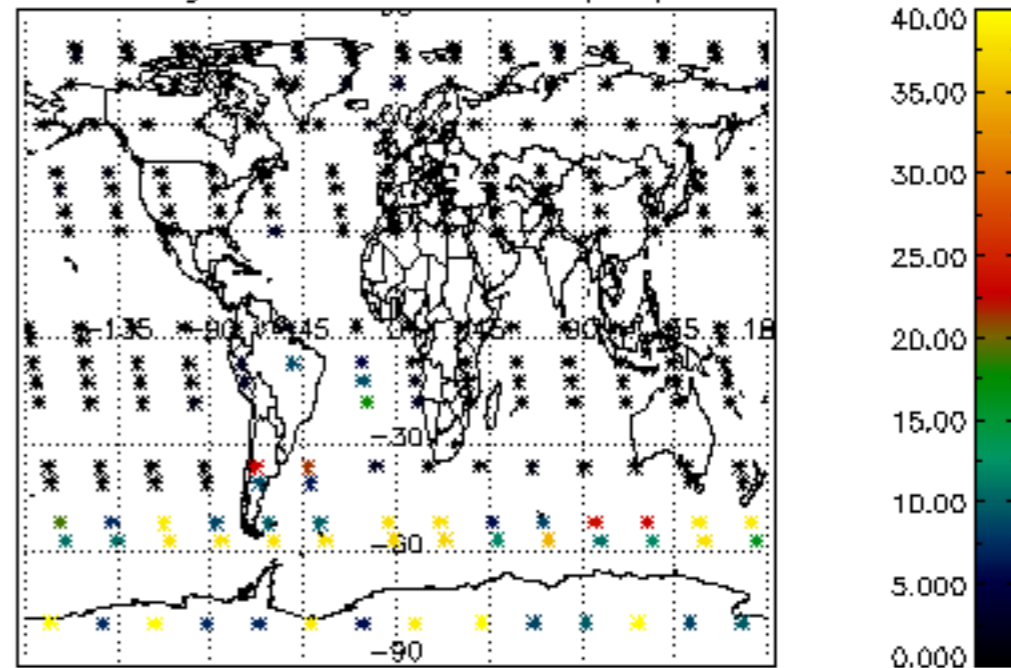
Percentage of datation errors per profile



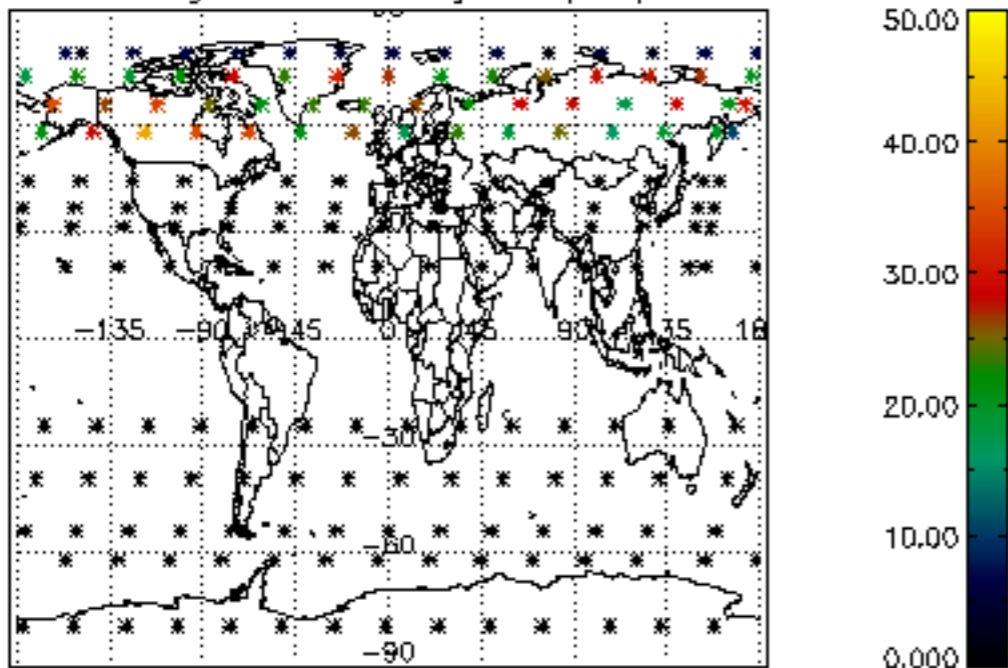
Percentage of star falling outside central band per profile



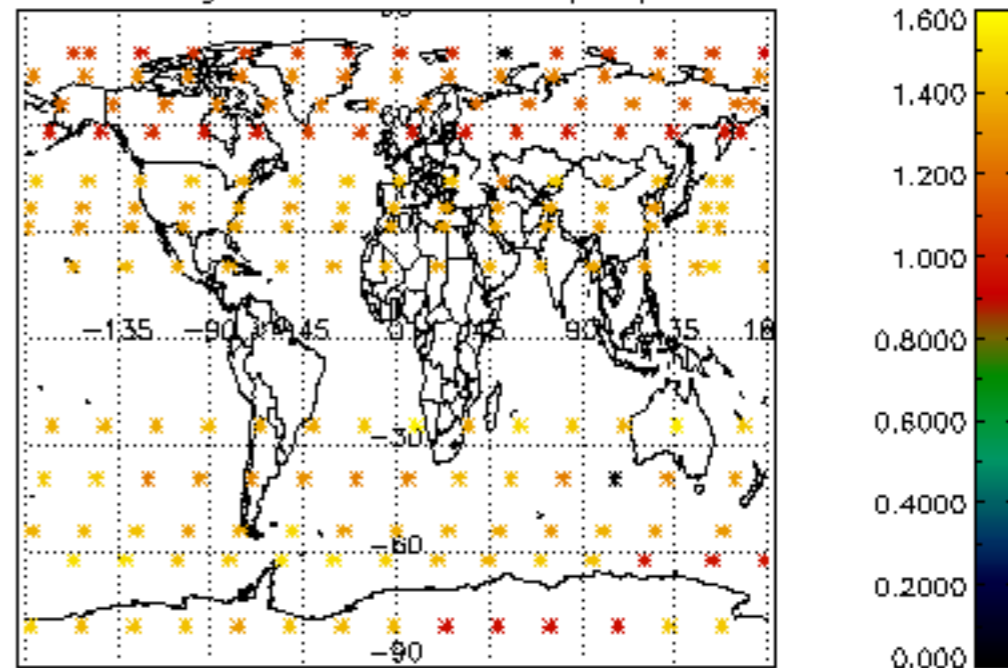
Percentage of saturation errors per profile



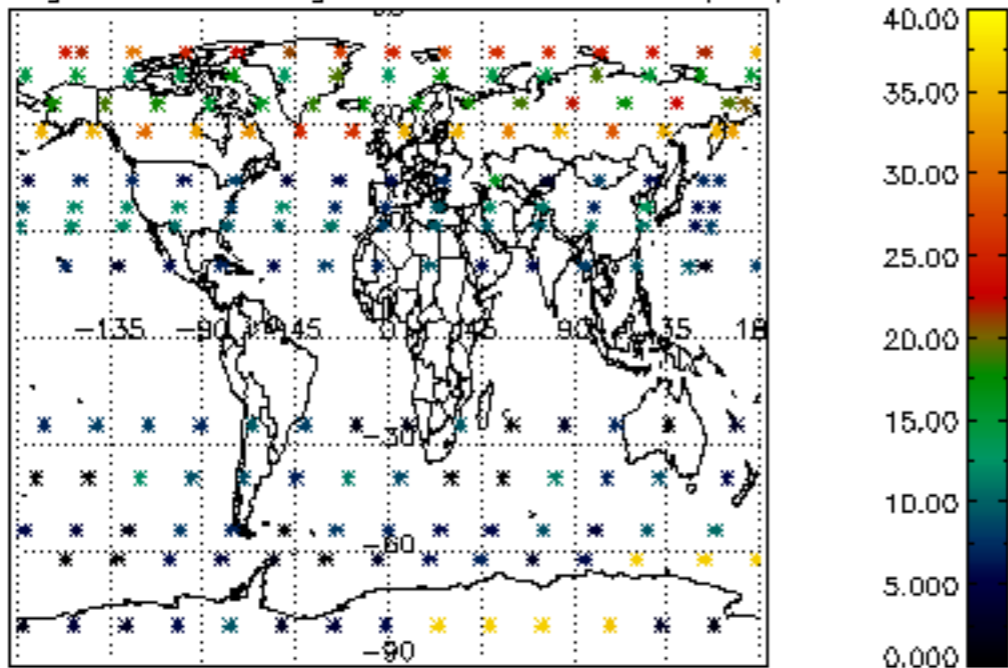
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

