

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	17APR2013 21:14:06
Data source version	GOMOS/6.01
Start time of products	12-12-2002 (12DEC2002 00:00:00)
Stop time of products	13-12-2002 (13DEC2002 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	538
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

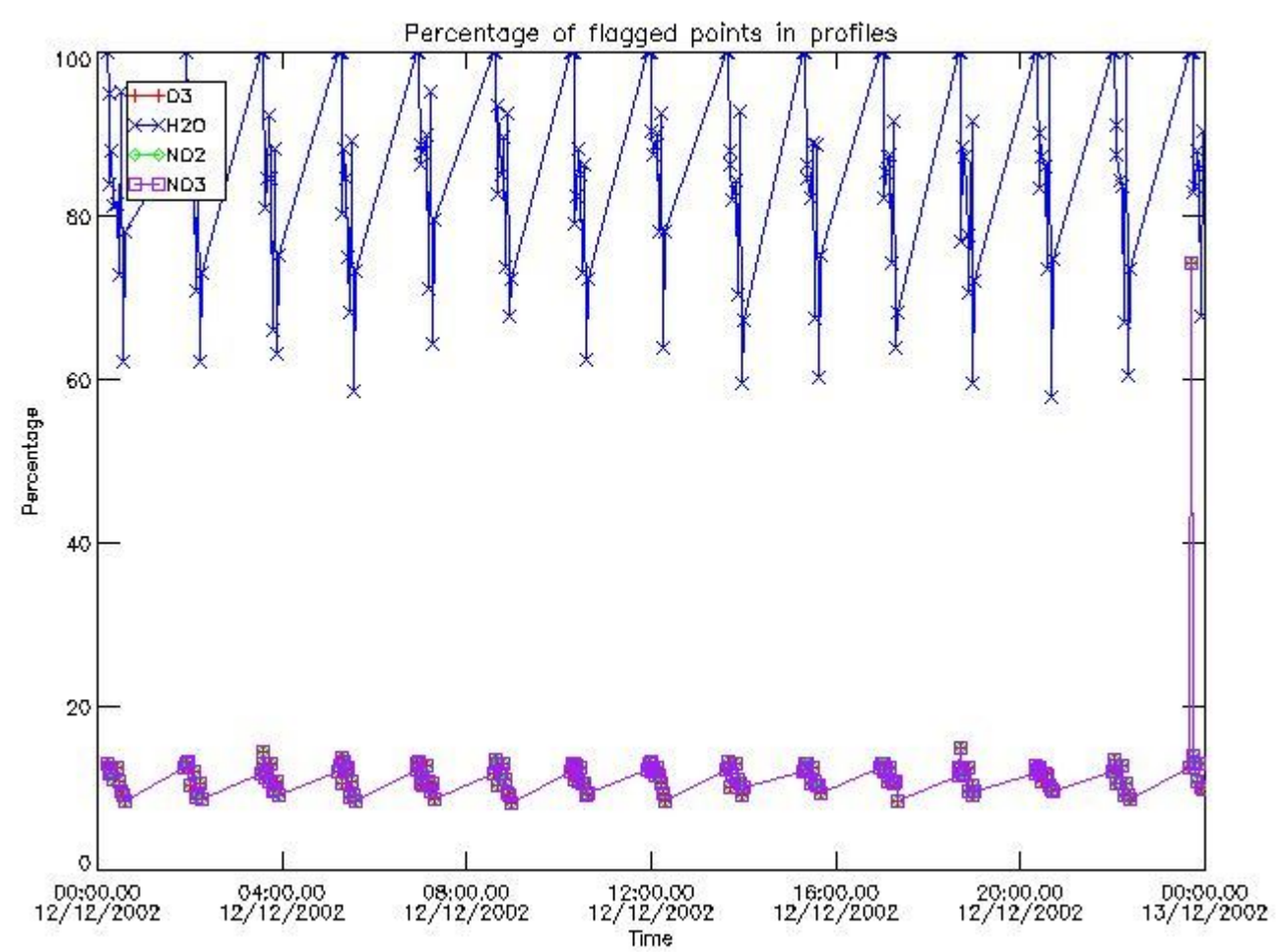
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20021212_000121_000000912012_00030_04092_0295.N1	12-DEC-2002 00:01:21	Twilight	90.500	62	94Bet Leo	2.1360	9700.0	181	4092	No
2	GOM_NL__2PRFIN20021212_000456_000000502012_00030_04092_0296.N1	12-DEC-2002 00:04:56	Twilight	50.000	15	67Alp Vir	0.97600	28000.	100	4092	No
3	GOM_NL__2PRFIN20021212_000824_000000462012_00030_04092_0297.N1	12-DEC-2002 00:08:24	Twilight	45.500	169	46Gam Hya	2.9910	4700.0	91	4092	No
4	GOM_NL__2PRFIN20021212_001023_000000512012_00030_04092_0298.N1	12-DEC-2002 00:10:23	Twilight	50.500	54	5The Cen	2.0550	4500.0	101	4092	No
5	GOM_NL__2PRFIN20021212_001145_000000432012_00030_04092_0299.N1	12-DEC-2002 00:11:45	Dark	43.000	123	1ot Cen	2.7500	10200.	86	4092	No
6	GOM_NL__2PRFIN20021212_001518_000000412012_00030_04092_0300.N1	12-DEC-2002 00:15:18	Dark	40.500	77	Eps Cen	2.3030	28000.	81	4092	No
7	GOM_NL__2PRFIN20021212_001638_000000442012_00030_04092_0301.N1	12-DEC-2002 00:16:38	Dark	43.500	10	Bet Cen	0.61000	28000.	87	4092	No
8	GOM_NL__2PRFIN20021212_001753_000000422012_00031_04093_0208.N1	12-DEC-2002 00:17:53	Dark	42.000	20	Bet Cru	1.2530	30000.	84	4093	No
9	GOM_NL__2PRFIN20021212_002104_000000462012_00031_04093_0209.N1	12-DEC-2002 00:21:04	Dark	45.500	113	Mu Vel	2.6920	5000.0	91	4093	No
10	GOM_NL__2PRFIN20021212_002442_000000412012_00031_04093_0210.N1	12-DEC-2002 00:24:42	Dark	41.000	29	Bet Car	1.6720	10200.	82	4093	No
11	GOM_NL__2PRFIN20021212_002705_000000472012_00031_04093_0211.N1	12-DEC-2002 00:27:05	Dark	46.500	41	Eps Car	1.8600	4100.0	93	4093	No
12	GOM_NL__2PRFIN20021212_002940_000000532012_00031_04093_0212.N1	12-DEC-2002 00:29:40	Dark	53.000	34	Gam2Vel	1.7930	23000.	106	4093	No
13	GOM_NL__2PRFIN20021212_003208_000000562012_00031_04093_0213.N1	12-DEC-2002 00:32:08	Dark	56.000	2	Alp Car	-0.73600	7000.0	112	4093	No
14	GOM_NL__2PRFIN20021212_003440_000000602012_00031_04093_0214.N1	12-DEC-2002 00:34:40	Dark	60.000	117	Pi Pup	2.7060	3800.0	120	4093	No
15	GOM_NL__2PRFIN20021212_003804_000000562012_00031_04093_0215.N1	12-DEC-2002 00:38:04	Straylight	55.500	23	21Eps CMa	1.5020	26000.	111	4093	No
16	GOM_NL__2PRFIN20021212_003958_000000582012_00031_04093_0216.N1	12-DEC-2002 00:39:58	Straylight	58.000	179	24Omi2CMa	3.0320	24000.	116	4093	No
17	GOM_NL__2PRFIN20021212_004256_000000582012_00031_04093_0217.N1	12-DEC-2002 00:42:56	Straylight	58.000	47	2Bet CMa	1.9760	28000.	116	4093	No
18	GOM_NL__2PRFIN20021212_004606_000000502012_00031_04093_0218.N1	12-DEC-2002 00:46:06	Straylight	49.500	56	53Kap Ori	2.0650	30000.	99	4093	No
19	GOM_NL__2PRFIN20021212_004735_000000442012_00031_04093_0219.N1	12-DEC-2002 00:47:35	Straylight	43.500	128	67Bet Eri	2.7840	9700.0	87	4093	No
20	GOM_NL__2PRFIN20021212_004900_000000532012_00031_04093_0220.N1	12-DEC-2002 00:49:00	Straylight	52.500	30	46Eps Ori	1.6940	30000.	105	4093	No
21	GOM_NL__2PRFIN20021212_005126_000000512012_00031_04093_0221.N1	12-DEC-2002 00:51:26	Twilight	51.000	27	24Gam Ori	1.6360	26000.	102	4093	No
22	GOM_NL__2PRFIN20021212_005403_000000562012_00031_04093_0222.N1	12-DEC-2002 00:54:03	Twilight	56.000	13	87Alp Tau	0.86700	3800.0	112	4093	No
23	GOM_NL__2PRFIN20021212_005640_000000482012_00031_04093_0223.N1	12-DEC-2002 00:56:40	Bright	48.000	176	23Zet Tau	3.0200	22000.	96	4093	No
24	GOM_NL__2PRFIN20021212_005842_000000472012_00031_04093_0224.N1	12-DEC-2002 00:58:42	Bright	46.500	28	12Bet Tau	1.6500	15200.	93	4093	No
25	GOM_NL__2PRFIN20021212_010038_000000382012_00031_04093_0225.N1	12-DEC-2002 01:00:38	Bright	38.000	149	45Eps Per	2.8880	30000.	76	4093	No
26	GOM_NL__2PRFIN20021212_010213_000000392012_00031_04093_0226.N1	12-DEC-2002 01:02:13	Bright	39.000	73	57Gam1And	2.2600	13100.	78	4093	No
27	GOM_NL__2PRFIN20021212_010426_000000372012_00031_04093_0227.N1	12-DEC-2002 01:04:26	Bright	37.000	160	23Gam Per	2.9300	4700.0	74	4093	No
28	GOM_NL__2PRFIN20021212_010726_000000352012_00031_04093_0228.N1	12-DEC-2002 01:07:26	Bright	35.000	110	37Del Cas	2.6780	8900.0	70	4093	No
29	GOM_NL__2PRFIN20021212_011428_000000392012_00031_04093_0229.N1	12-DEC-2002 01:14:28	Bright	39.000	49	1Alp UMi	1.9900	6300.0	78	4093	No
30	GOM_NL__2PRFIN20021212_011912_000000402012_00031_04093_0230.N1	12-DEC-2002 01:19:12	Bright	39.500	60	7Bet UMi	2.0810	3950.0	79	4093	No
31	GOM_NL__2PRFIN20021212_012218_000000382012_00031_04093_0231.N1	12-DEC-2002 01:22:18	Bright	38.000	119	14Eta Dra	2.7270	4700.0	76	4093	No
32	GOM_NL__2PRFIN20021212_012359_000000472012_00031_04093_0232.N1	12-DEC-2002 01:23:59	Bright	46.500	32	77Eps UMa	1.7630	11000.	93	4093	No
33	GOM_NL__2PRFIN20021212_012626_000000412012_00031_04093_0233.N1	12-DEC-2002 01:26:26	Bright	40.500	39	85Eta UMa	1.8540	24000.	81	4093	No
34	GOM_NL__2PRFIN20021212_012938_000000402012_00031_04093_0234.N1	12-DEC-2002 01:29:38	Bright	39.500	180	27Gam Boo	3.0400	8000.0	79	4093	No
35	GOM_NL__2PRFIN20021212_013247_000000392012_00031_04093_0235.N1	12-DEC-2002 01:32:47	Bright	38.500	83		2.3780	11000.	77	4093	No
36	GOM_NL__2PRFIN20021212_013559_000000412012_00031_04093_0236.N1	12-DEC-2002 01:35:59	Bright	40.500	111	8Eta Boo	2.6800	6000.0	81	4093	No
37	GOM_NL__2PRFIN20021212_013938_000000512012_00031_04093_0237.N1	12-DEC-2002 01:39:38	Bright	51.000	138	47Eps Vir	2.8280	4700.0	102	4093	No
38	GOM_NL__2PRFIN20021212_014159_000000902012_00031_04093_0238.N1	12-DEC-2002 01:41:59	Twilight	90.000	62	94Bet Leo	2.1360	9700.0	180	4093	No
39	GOM_NL__2PRFIN20021212_014533_000000482012_00031_04093_0239.N1	12-DEC-2002 01:45:33	Twilight	48.000	15	67Alp Vir	0.97600	28000.	96	4093	No
40	GOM_NL__2PRFIN20021212_014901_000000462012_00031_04093_0240.N1	12-DEC-2002 01:49:01	Twilight	46.000	169	46Gam Hya	2.9910	4700.0	92	4093	No
41	GOM_NL__2PRFIN20021212_015100_000000432012_00031_04093_0241.N1	12-DEC-2002 01:51:00	Twilight	42.500	54	5The Cen	2.0550	4500.0	85	4093	No
42	GOM_NL__2PRFIN20021212_015221_000000452012_00031_04093_0242.N1	12-DEC-2002 01:52:21	Dark	44.500	123	1ot Cen	2.7500	10200.	89	4093	No

515	GOM_NL__2PRFIN20021212_225517_000000362012_00044_04106_0286.N1	12-DEC-2002 22:55:17	Bright	36.000	110	37Del Cas	2.6780	8900.0	72	4106	No
516	GOM_NL__2PRFIN20021212_225738_000001202012_00044_04106_0287.N1	12-DEC-2002 22:57:38	Bright	120.00	17	78Bet Gem	1.1610	4500.0	240	4106	No
517	GOM_NL__2PRFIN20021212_230215_000000392012_00044_04106_0288.N1	12-DEC-2002 23:02:15	Bright	38.500	49	1Alp UMi	1.9900	6300.0	77	4106	No
518	GOM_NL__2PRFIN20021212_230659_000000392012_00044_04106_0289.N1	12-DEC-2002 23:06:59	Bright	39.000	60	7Bet UMi	2.0810	3950.0	78	4106	No
519	GOM_NL__2PRFIN20021212_230915_000000512012_00044_04106_0290.N1	12-DEC-2002 23:09:15	Bright	51.000	82	48Bet UMa	2.3650	10600.	102	4106	No
520	GOM_NL__2PRFIN20021212_231143_000000462012_00044_04106_0291.N1	12-DEC-2002 23:11:43	Bright	45.500	32	77Eps UMa	1.7630	11000.	91	4106	No
521	GOM_NL__2PRFIN20021212_231413_000000422012_00044_04106_0292.N1	12-DEC-2002 23:14:13	Bright	42.000	39	85Eta UMa	1.8540	24000.	84	4106	No
522	GOM_NL__2PRFIN20021212_231725_000000542012_00044_04106_0293.N1	12-DEC-2002 23:17:25	Bright	54.000	180	27Gam Boo	3.0400	8000.0	108	4106	No
523	GOM_NL__2PRFIN20021212_232037_000000372012_00044_04106_0294.N1	12-DEC-2002 23:20:37	Bright	37.000	83		2.3780	11000.	74	4106	No
524	GOM_NL__2PRFIN20021212_232350_000000422012_00044_04106_0295.N1	12-DEC-2002 23:23:50	Bright	41.500	111	8Eta Boo	2.6800	6000.0	83	4106	No
525	GOM_NL__2PRFIN20021212_232733_000000512012_00044_04106_0296.N1	12-DEC-2002 23:27:33	Bright	51.000	138	47Eps Vir	2.8280	4700.0	102	4106	No
526	GOM_NL__2PRFIN20021212_233004_000000912012_00044_04106_0297.N1	12-DEC-2002 23:30:04	Twilight	91.000	62	94Bet Leo	2.1360	9700.0	182	4106	No
527	GOM_NL__2PRFIN20021212_233327_000000532012_00044_04106_0298.N1	12-DEC-2002 23:33:27	Twilight	53.000	15	67Alp Vir	0.97600	28000.	106	4106	No
528	GOM_NL__2PRFIN20021212_233656_000000512012_00044_04106_0299.N1	12-DEC-2002 23:36:56	Twilight	50.500	169	46Gam Hya	2.9910	4700.0	101	4106	No
529	GOM_NL__2PRFIN20021212_233851_000000432012_00044_04106_0300.N1	12-DEC-2002 23:38:51	Twilight	43.000	54	5The Cen	2.0550	4500.0	86	4106	No
530	GOM_NL__2PRFIN20021212_234015_000000452012_00044_04106_0301.N1	12-DEC-2002 23:40:15	Dark	44.500	123	1ot Cen	2.7500	10200.	89	4106	No
531	GOM_NL__2PRFIN20021212_234154_000000412012_00044_04106_0302.N1	12-DEC-2002 23:41:54	Dark	41.000	95	Zet Cen	2.5450	26000.	82	4106	No
532	GOM_NL__2PRFIN20021212_234345_000000392012_00044_04106_0303.N1	12-DEC-2002 23:43:45	Dark	38.500	77	Eps Cen	2.3030	28000.	77	4106	No
533	GOM_NL__2PRFIN20021212_234504_000000442012_00044_04106_0304.N1	12-DEC-2002 23:45:04	Dark	44.000	10	Bet Cen	0.61000	28000.	88	4106	No
534	GOM_NL__2PRFIN20021212_234621_000000432012_00045_04107_0425.N1	12-DEC-2002 23:46:21	Dark	43.000	20	Bet Cru	1.2530	30000.	86	4107	No
535	GOM_NL__2PRFIN20021212_234938_000000472012_00045_04107_0426.N1	12-DEC-2002 23:49:38	Dark	46.500	113	Mu Vel	2.6920	5000.0	93	4107	No
536	GOM_NL__2PRFIN20021212_235310_000000392012_00045_04107_0427.N1	12-DEC-2002 23:53:10	Dark	39.000	29	Bet Car	1.6720	10200.	78	4107	No
537	GOM_NL__2PRFIN20021212_235535_000000502012_00045_04107_0428.N1	12-DEC-2002 23:55:35	Dark	50.000	41	Eps Car	1.8600	4100.0	100	4107	No
538	GOM_NL__2PRFIN20021212_235812_000000522012_00045_04107_0429.N1	12-DEC-2002 23:58:12	Dark	52.000	34	Gam2Vel	1.7930	23000.	104	4107	No

3. Quality information per product

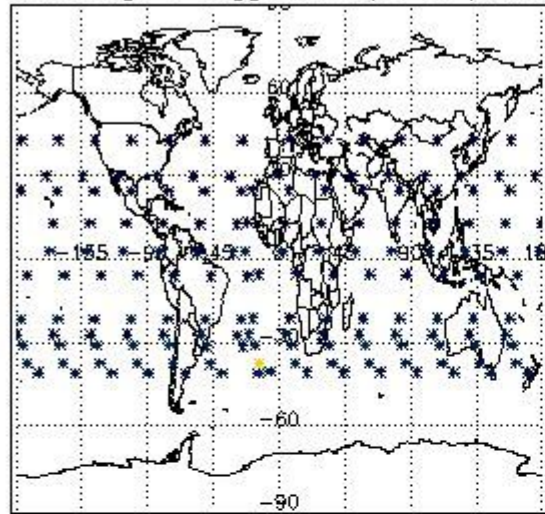
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

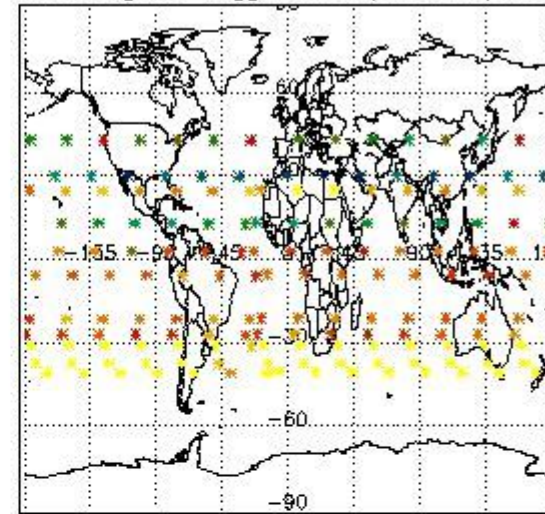


3.2 Plot quality information per product (world map)

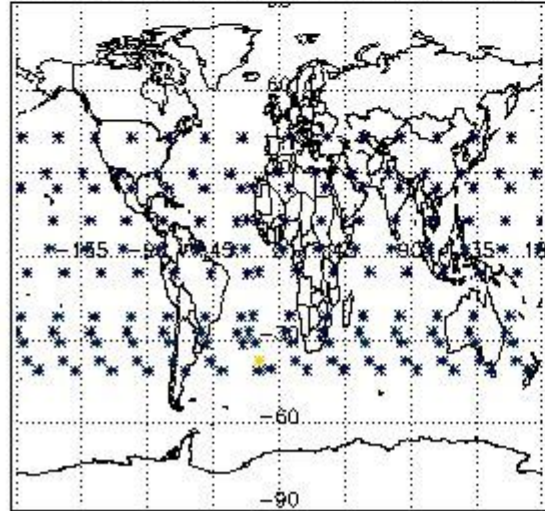
Percentage of flagged data per O3 profile



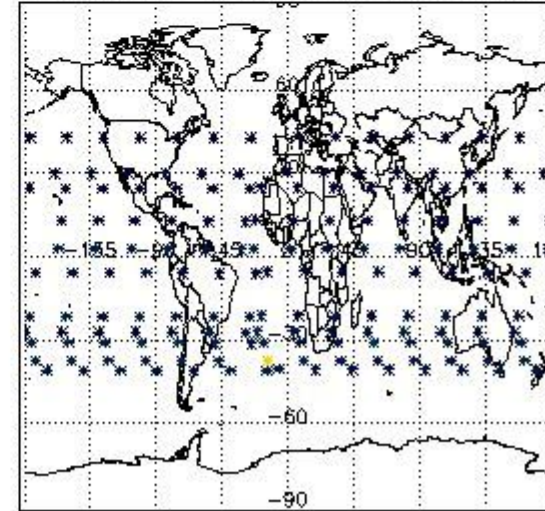
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

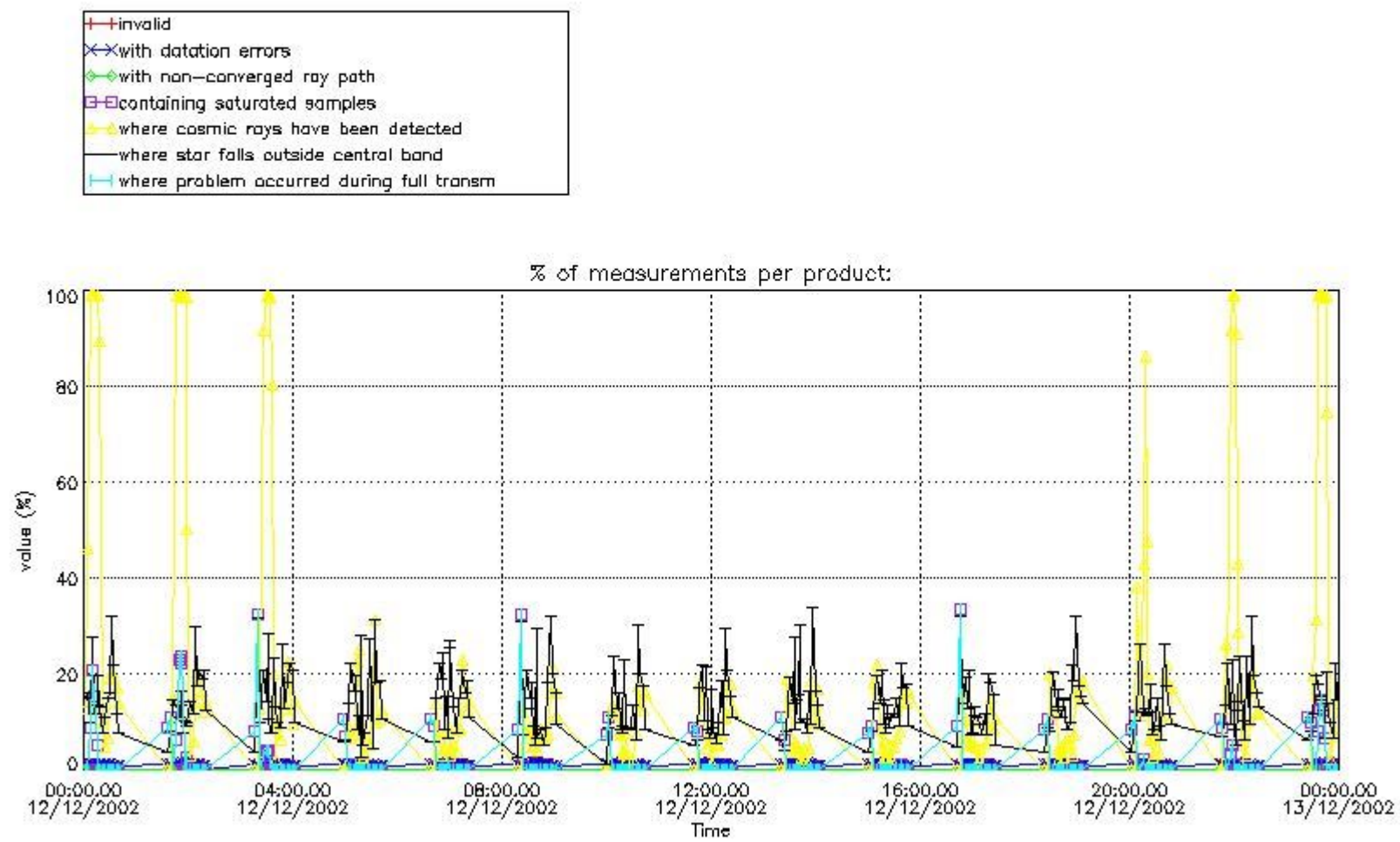


4. Level 1 quality information per product

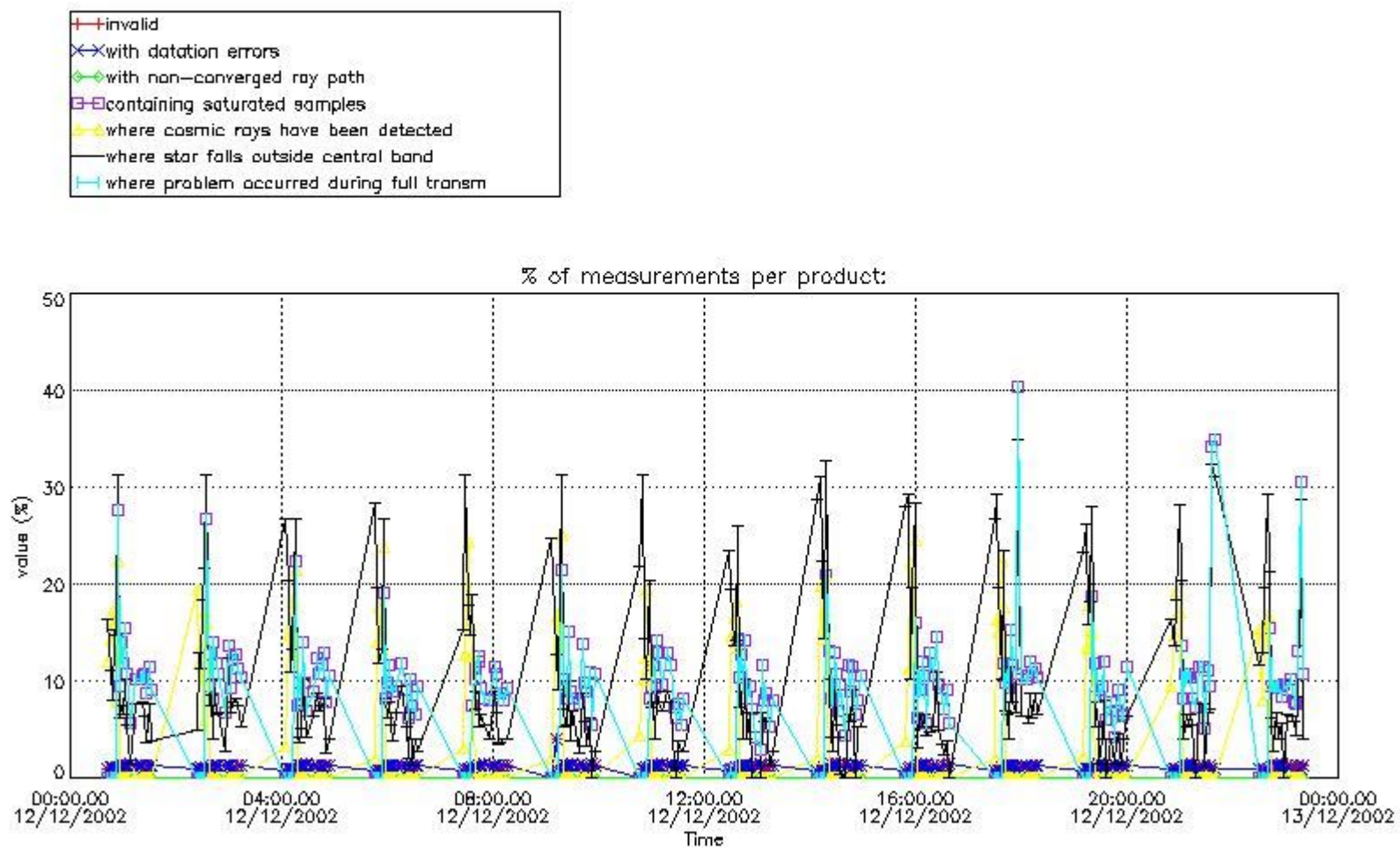
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

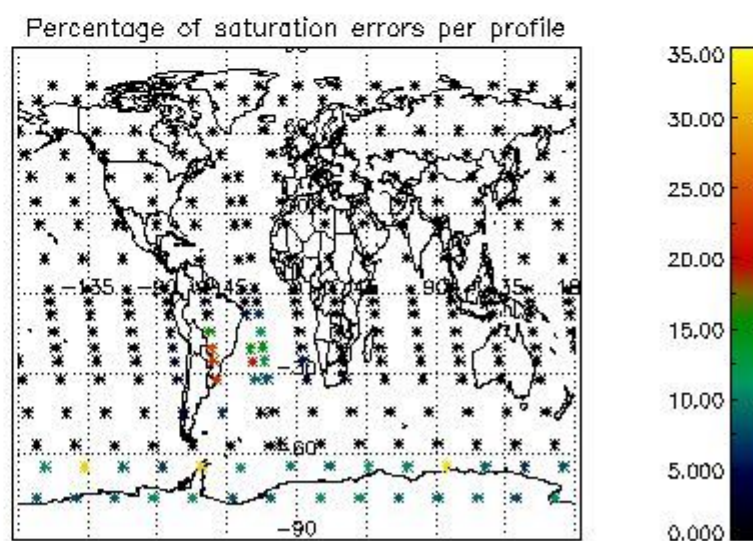
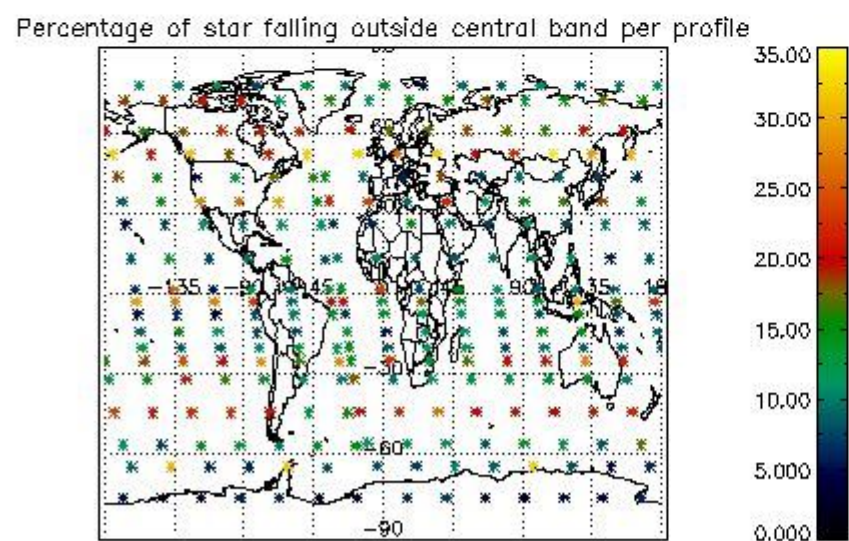
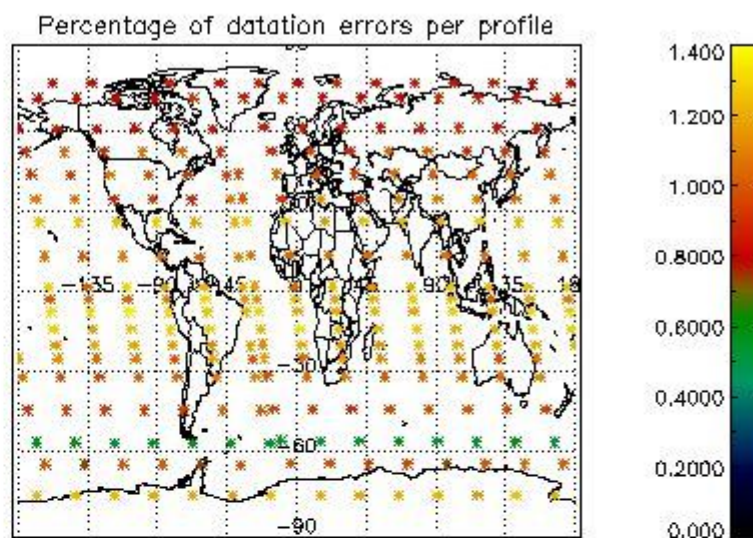
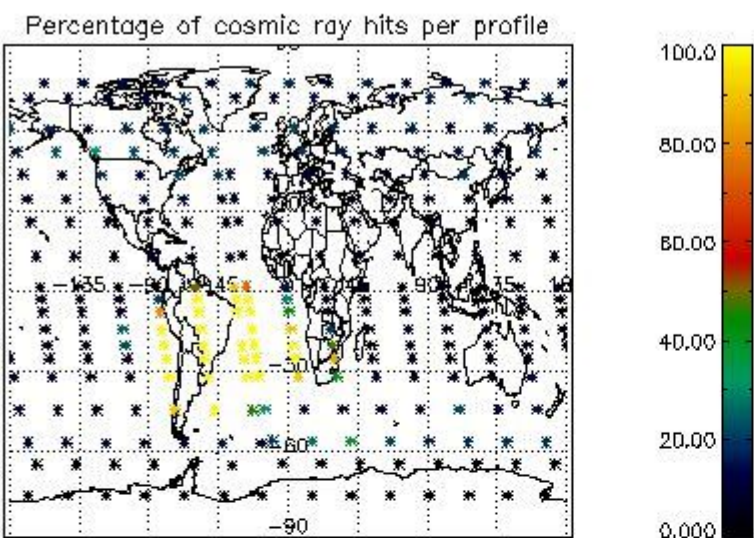


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

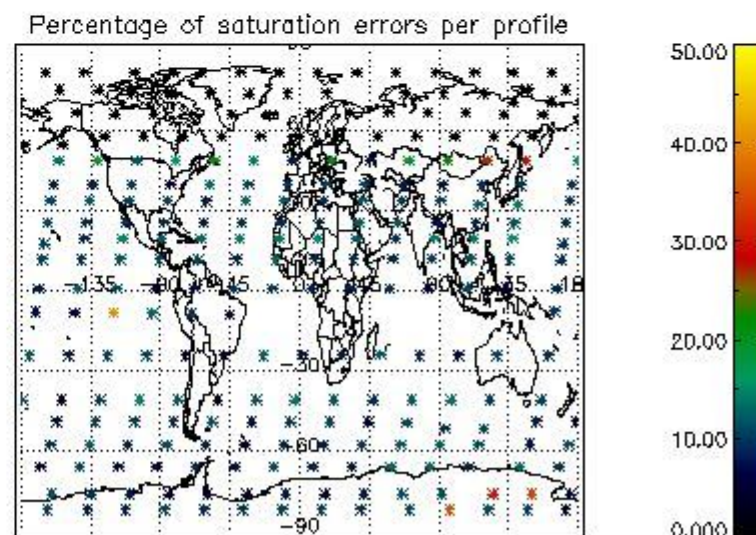
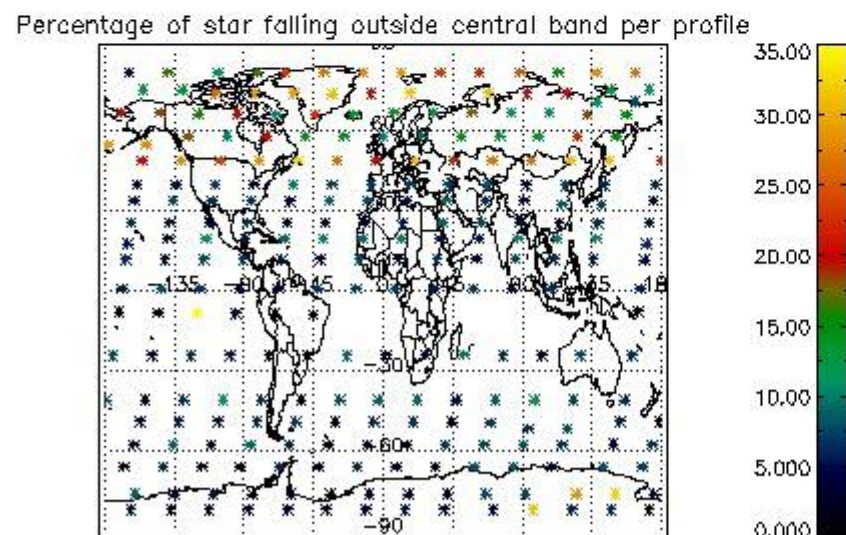
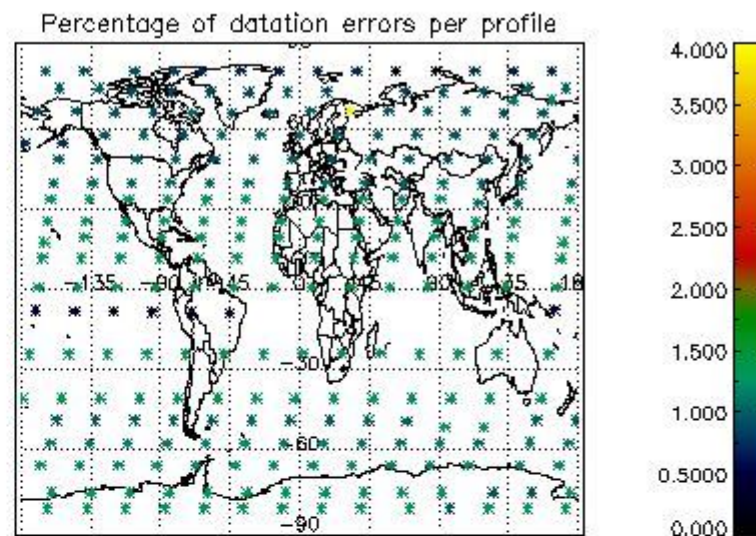
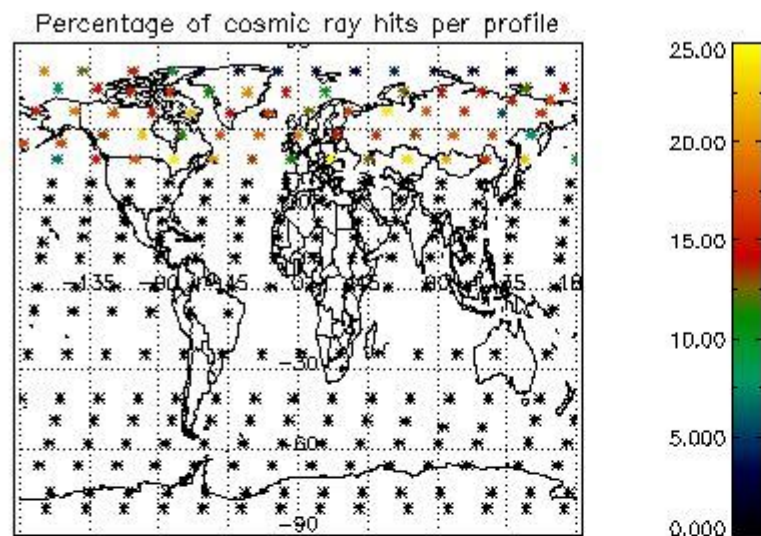


4.2 Plot quality information per product coming from level 1b processing (world map)

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

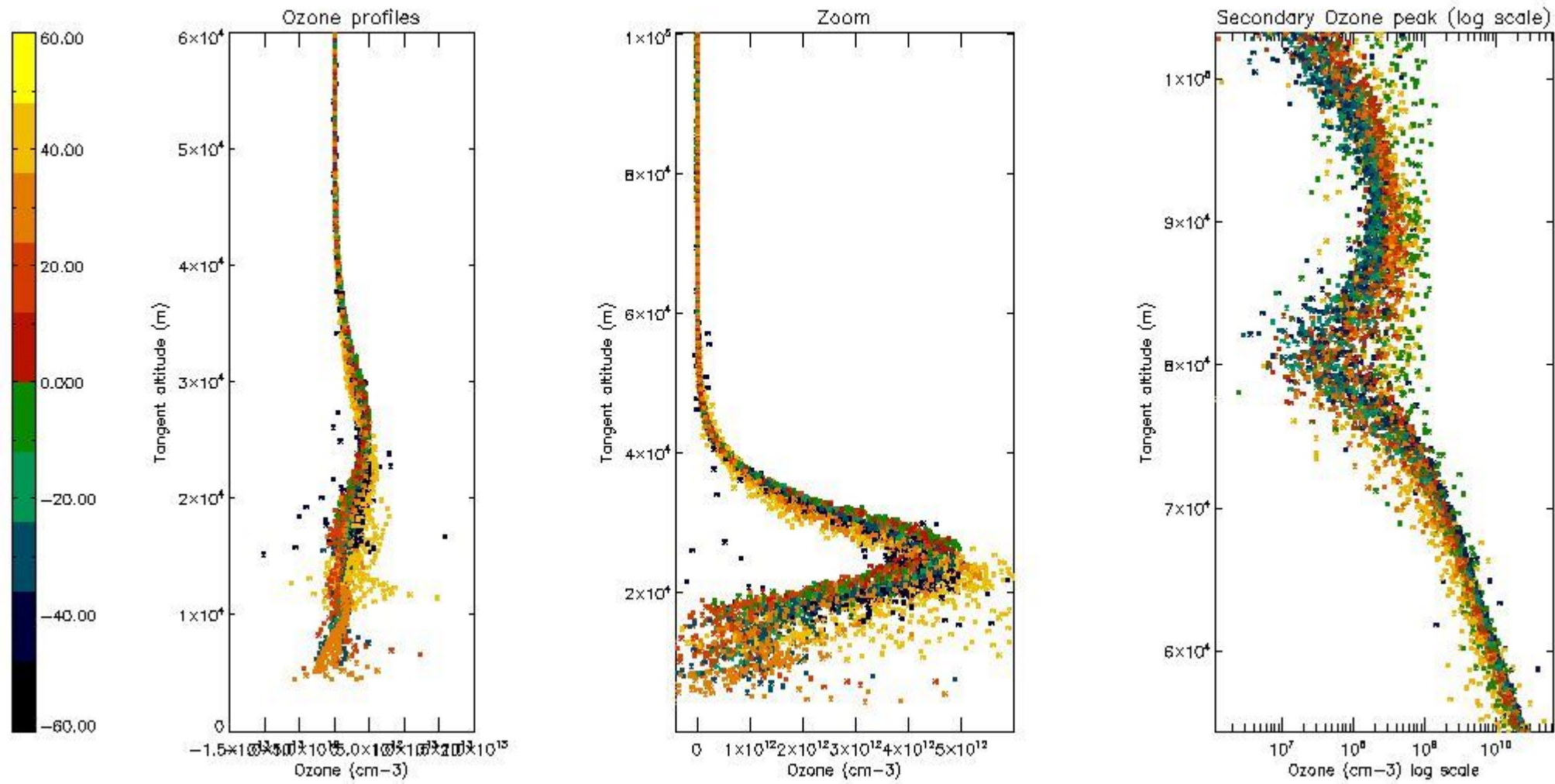
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	28
STD < 20	17

STD < 10	14
STD < 5	10

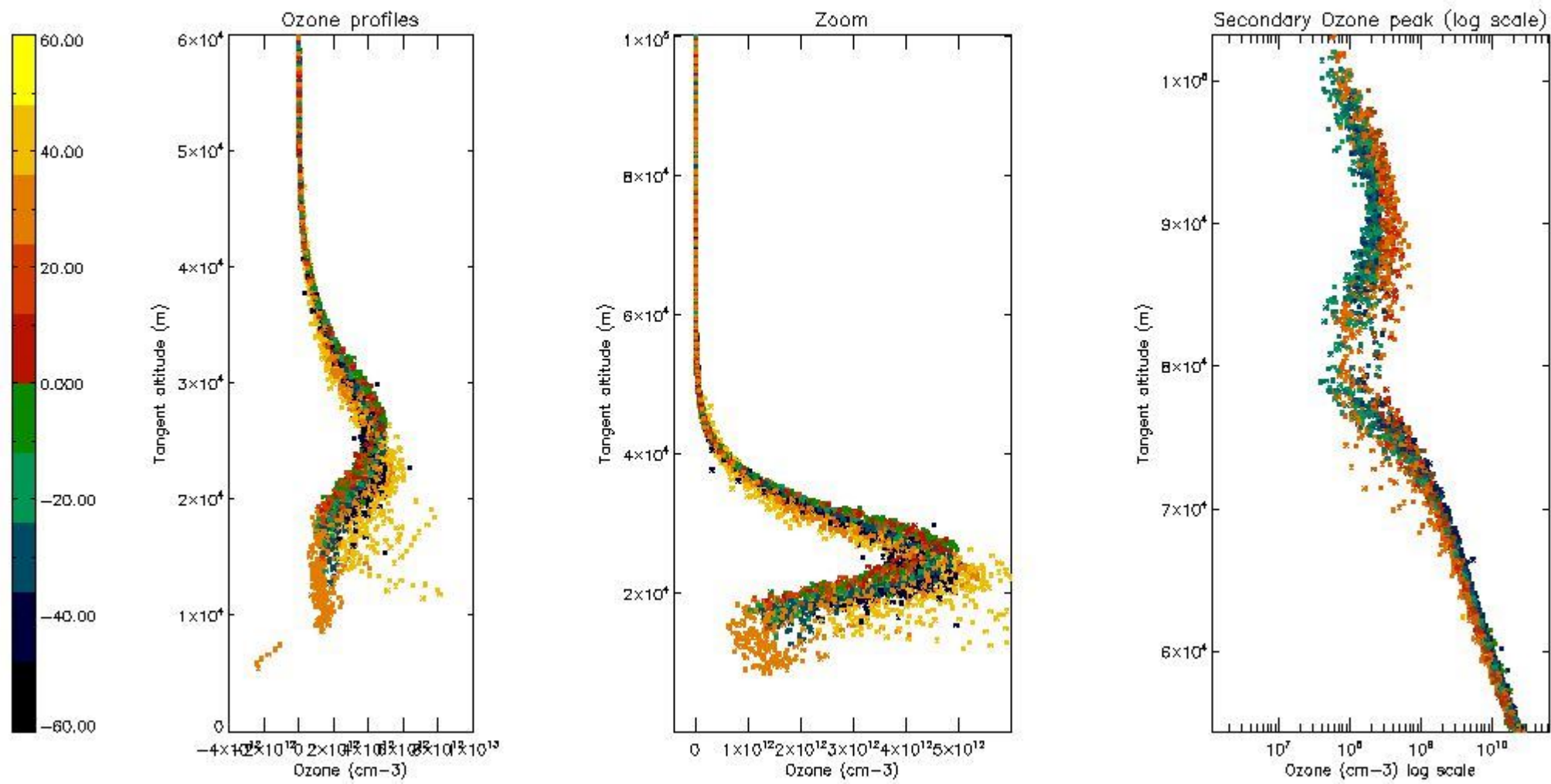
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



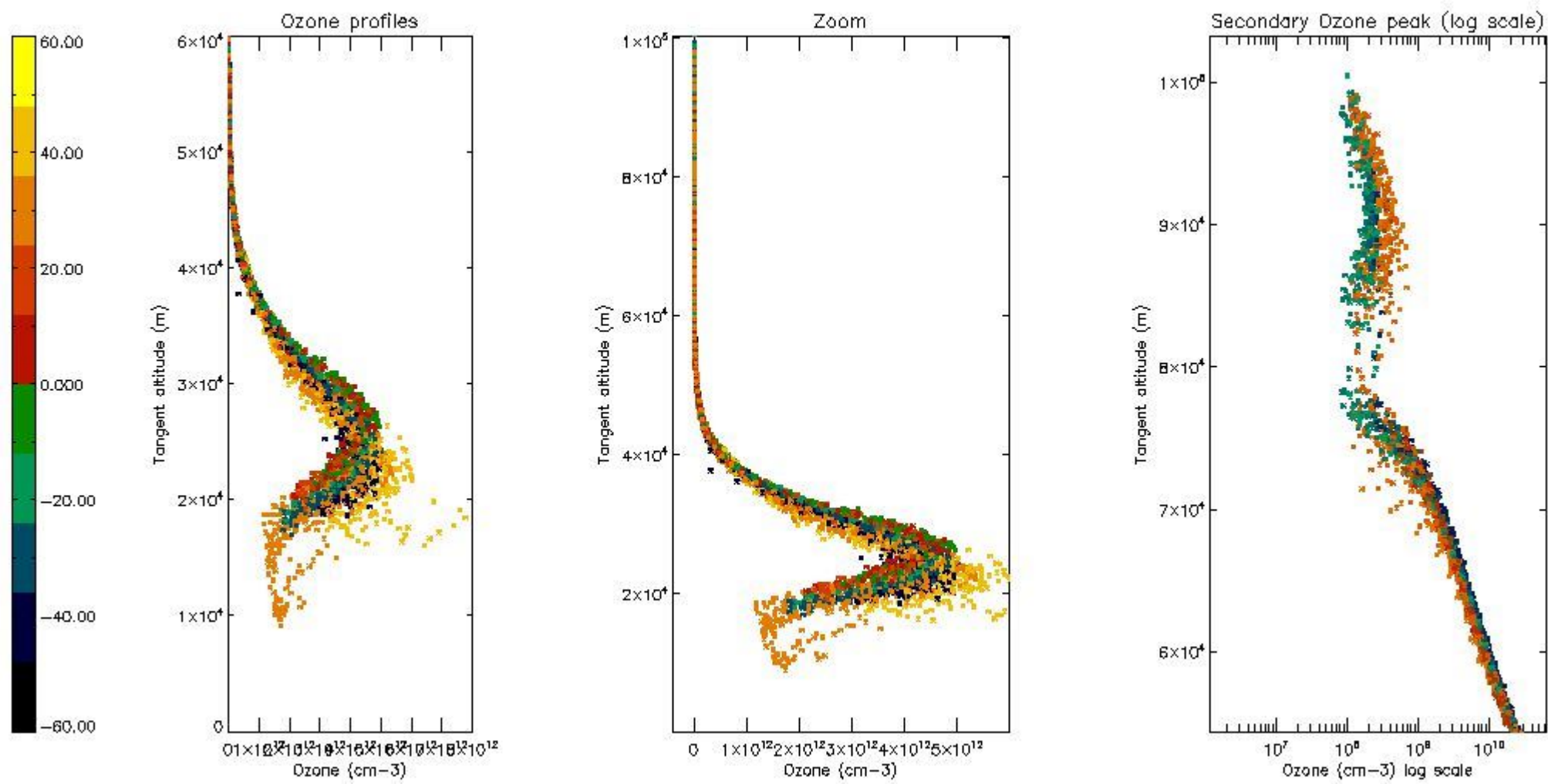
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



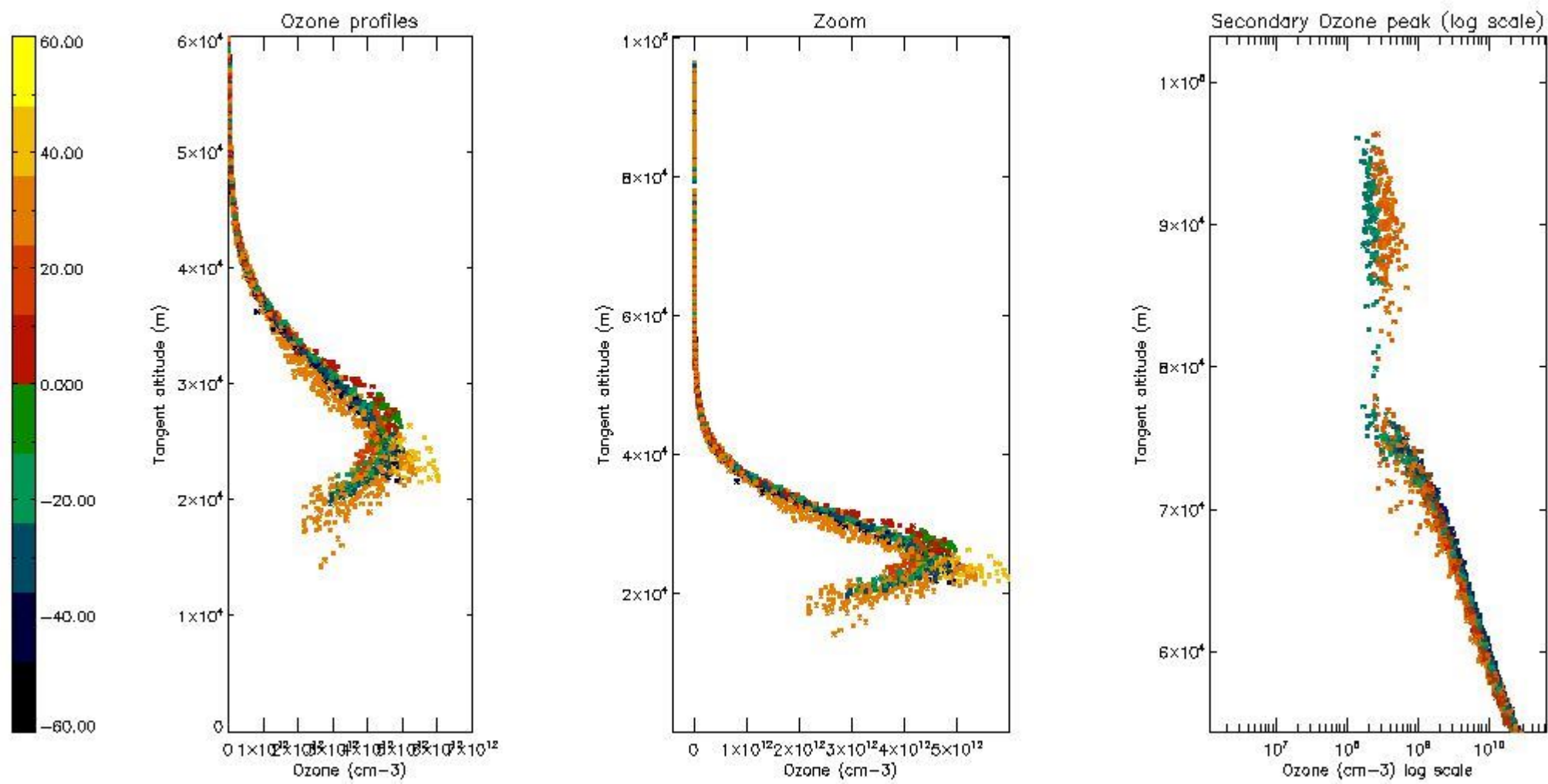
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



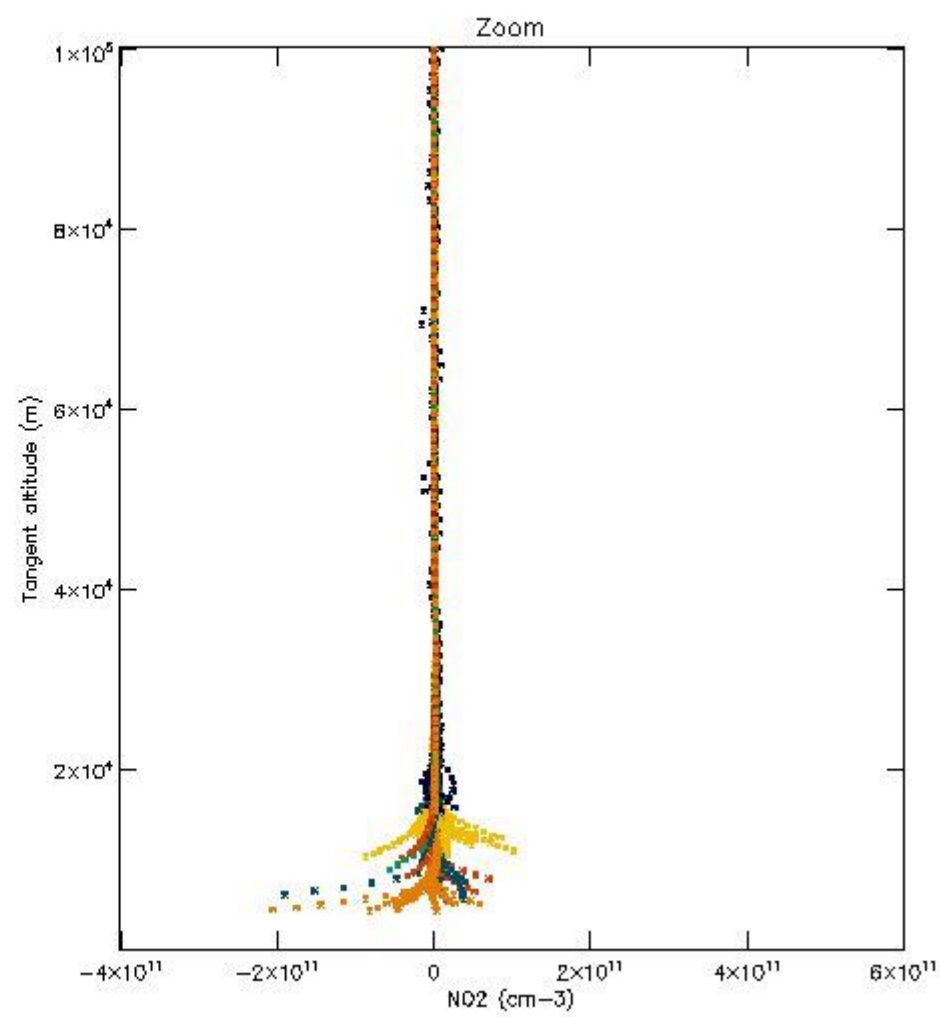
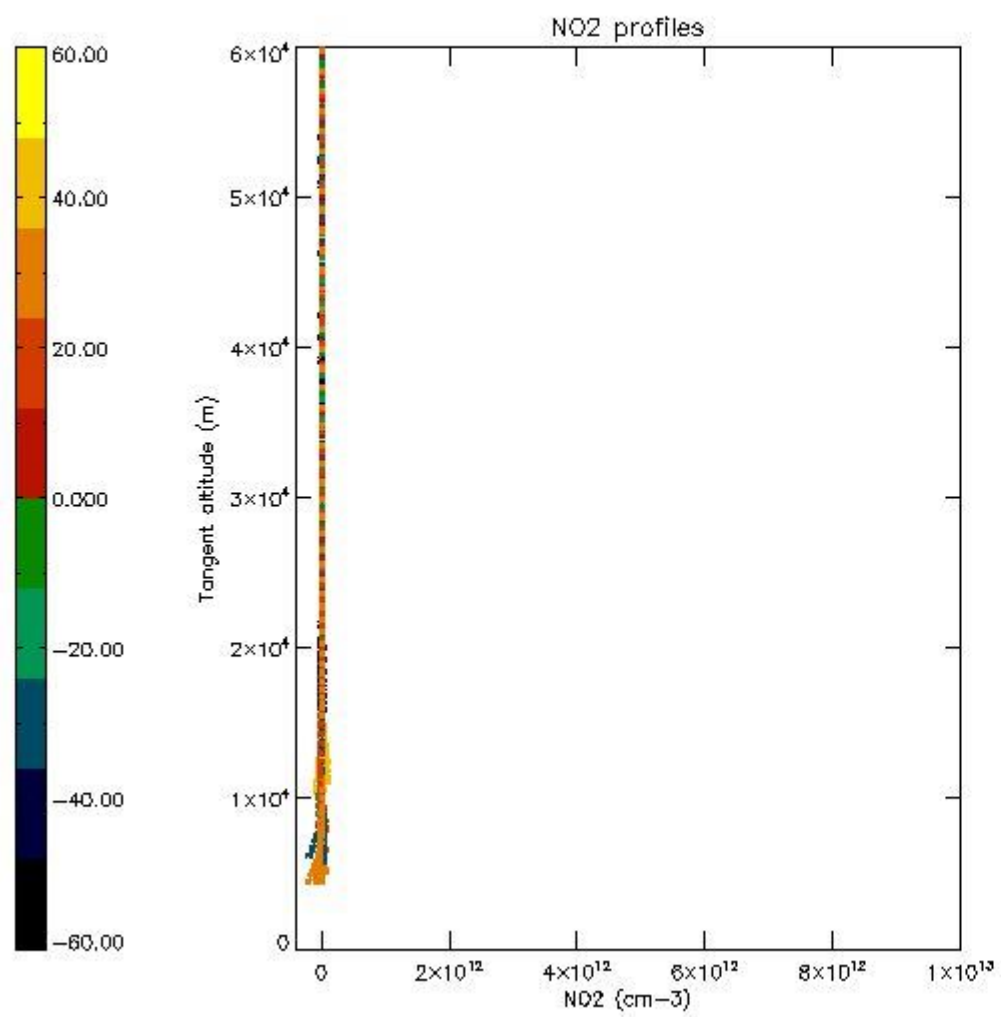
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



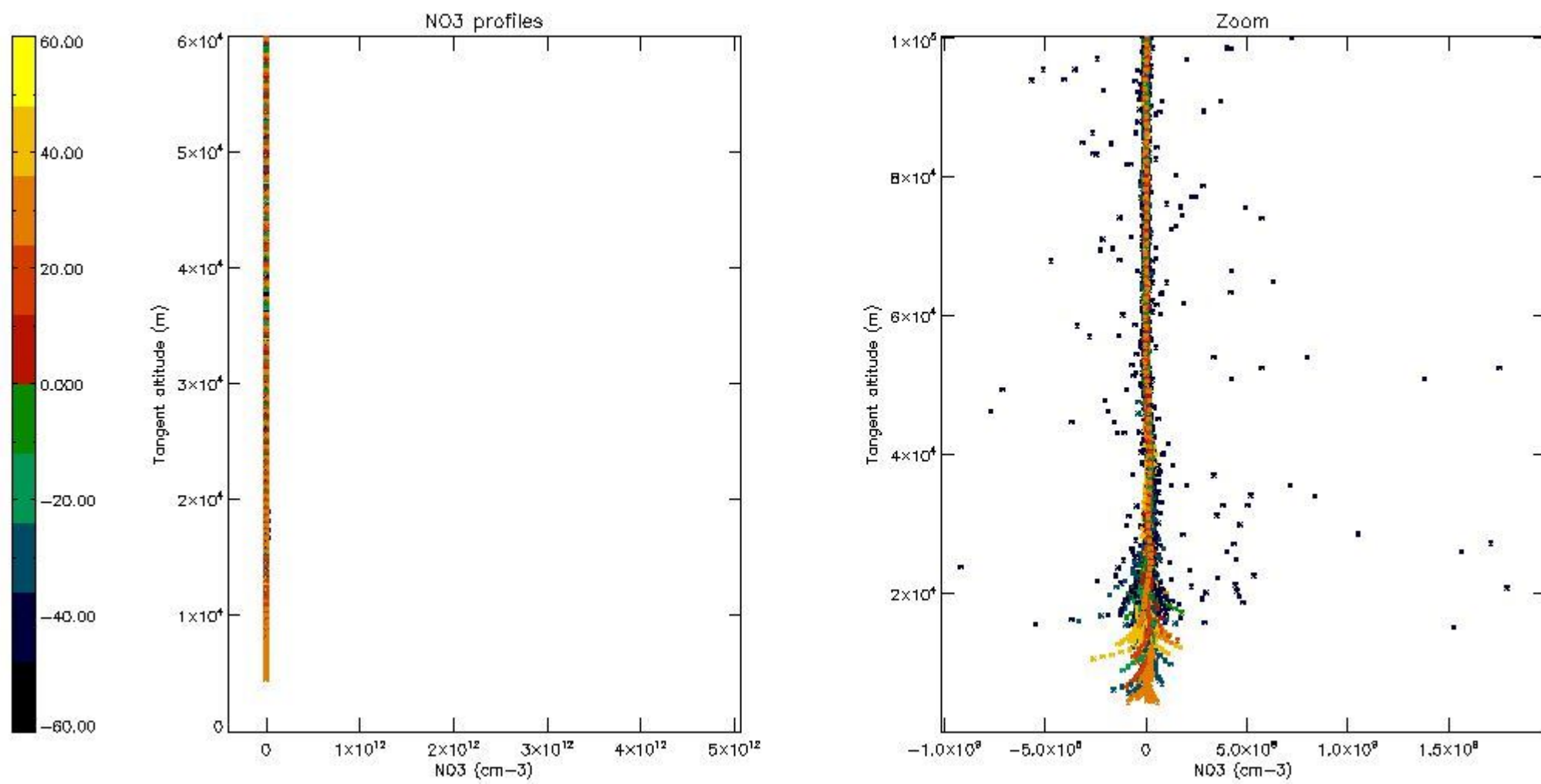
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



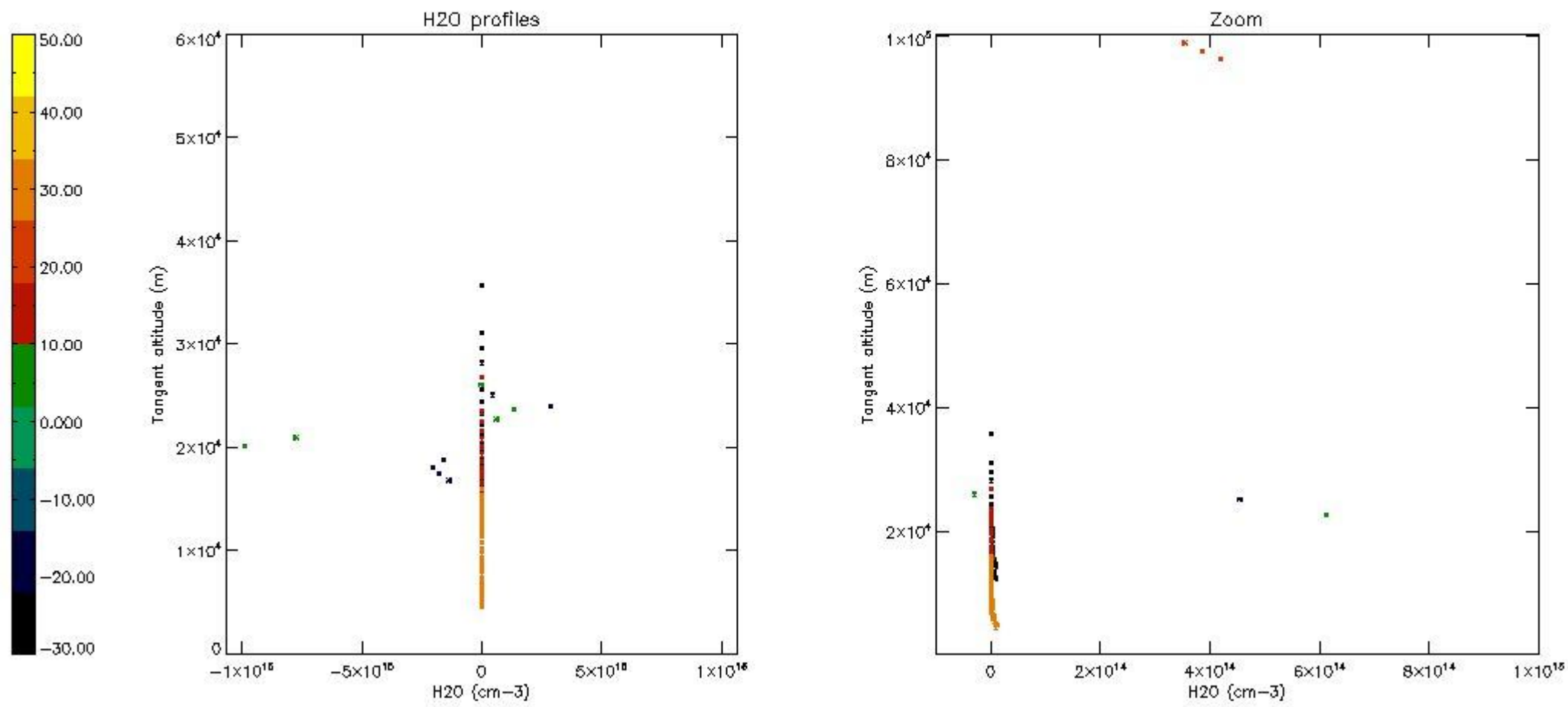
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

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

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	12-DEC-2002 00:01:21
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	12-DEC-2002 00:01:21
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	12-DEC-2002 00:01:21

GOMOS Level 2 Daily Report

SUMMARY

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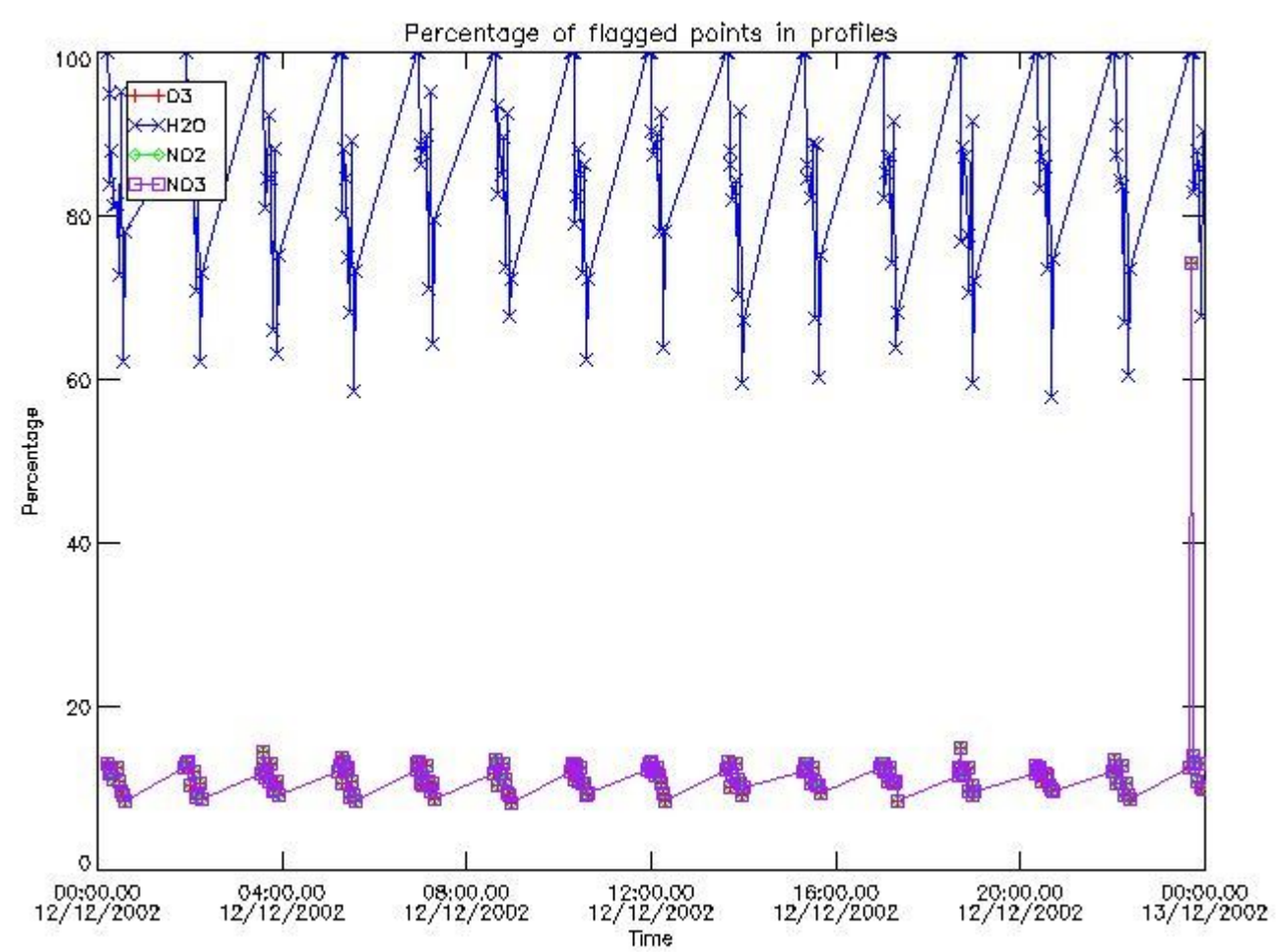
[6. Auxiliary Data Files used for the production reported in section 2](#)

515	GOM_NL__2PRFIN20021212_225517_000000362012_00044_04106_0286.N1	12-DEC-2002 22:55:17	Bright	36.000	110	37Del Cas	2.6780	8900.0	72	4106	No
516	GOM_NL__2PRFIN20021212_225738_000001202012_00044_04106_0287.N1	12-DEC-2002 22:57:38	Bright	120.00	17	78Bet Gem	1.1610	4500.0	240	4106	No
517	GOM_NL__2PRFIN20021212_230215_000000392012_00044_04106_0288.N1	12-DEC-2002 23:02:15	Bright	38.500	49	1Alp UMi	1.9900	6300.0	77	4106	No
518	GOM_NL__2PRFIN20021212_230659_000000392012_00044_04106_0289.N1	12-DEC-2002 23:06:59	Bright	39.000	60	7Bet UMi	2.0810	3950.0	78	4106	No
519	GOM_NL__2PRFIN20021212_230915_000000512012_00044_04106_0290.N1	12-DEC-2002 23:09:15	Bright	51.000	82	48Bet UMa	2.3650	10600.	102	4106	No
520	GOM_NL__2PRFIN20021212_231143_000000462012_00044_04106_0291.N1	12-DEC-2002 23:11:43	Bright	45.500	32	77Eps UMa	1.7630	11000.	91	4106	No
521	GOM_NL__2PRFIN20021212_231413_000000422012_00044_04106_0292.N1	12-DEC-2002 23:14:13	Bright	42.000	39	85Eta UMa	1.8540	24000.	84	4106	No
522	GOM_NL__2PRFIN20021212_231725_000000542012_00044_04106_0293.N1	12-DEC-2002 23:17:25	Bright	54.000	180	27Gam Boo	3.0400	8000.0	108	4106	No
523	GOM_NL__2PRFIN20021212_232037_000000372012_00044_04106_0294.N1	12-DEC-2002 23:20:37	Bright	37.000	83		2.3780	11000.	74	4106	No
524	GOM_NL__2PRFIN20021212_232350_000000422012_00044_04106_0295.N1	12-DEC-2002 23:23:50	Bright	41.500	111	8Eta Boo	2.6800	6000.0	83	4106	No
525	GOM_NL__2PRFIN20021212_232733_000000512012_00044_04106_0296.N1	12-DEC-2002 23:27:33	Bright	51.000	138	47Eps Vir	2.8280	4700.0	102	4106	No
526	GOM_NL__2PRFIN20021212_233004_000000912012_00044_04106_0297.N1	12-DEC-2002 23:30:04	Twilight	91.000	62	94Bet Leo	2.1360	9700.0	182	4106	No
527	GOM_NL__2PRFIN20021212_233327_000000532012_00044_04106_0298.N1	12-DEC-2002 23:33:27	Twilight	53.000	15	67Alp Vir	0.97600	28000.	106	4106	No
528	GOM_NL__2PRFIN20021212_233656_000000512012_00044_04106_0299.N1	12-DEC-2002 23:36:56	Twilight	50.500	169	46Gam Hya	2.9910	4700.0	101	4106	No
529	GOM_NL__2PRFIN20021212_233851_000000432012_00044_04106_0300.N1	12-DEC-2002 23:38:51	Twilight	43.000	54	5The Cen	2.0550	4500.0	86	4106	No
530	GOM_NL__2PRFIN20021212_234015_000000452012_00044_04106_0301.N1	12-DEC-2002 23:40:15	Dark	44.500	123	1ot Cen	2.7500	10200.	89	4106	No
531	GOM_NL__2PRFIN20021212_234154_000000412012_00044_04106_0302.N1	12-DEC-2002 23:41:54	Dark	41.000	95	Zet Cen	2.5450	26000.	82	4106	No
532	GOM_NL__2PRFIN20021212_234345_000000392012_00044_04106_0303.N1	12-DEC-2002 23:43:45	Dark	38.500	77	Eps Cen	2.3030	28000.	77	4106	No
533	GOM_NL__2PRFIN20021212_234504_000000442012_00044_04106_0304.N1	12-DEC-2002 23:45:04	Dark	44.000	10	Bet Cen	0.61000	28000.	88	4106	No
534	GOM_NL__2PRFIN20021212_234621_000000432012_00045_04107_0425.N1	12-DEC-2002 23:46:21	Dark	43.000	20	Bet Cru	1.2530	30000.	86	4107	No
535	GOM_NL__2PRFIN20021212_234938_000000472012_00045_04107_0426.N1	12-DEC-2002 23:49:38	Dark	46.500	113	Mu Vel	2.6920	5000.0	93	4107	No
536	GOM_NL__2PRFIN20021212_235310_000000392012_00045_04107_0427.N1	12-DEC-2002 23:53:10	Dark	39.000	29	Bet Car	1.6720	10200.	78	4107	No
537	GOM_NL__2PRFIN20021212_235535_000000502012_00045_04107_0428.N1	12-DEC-2002 23:55:35	Dark	50.000	41	Eps Car	1.8600	4100.0	100	4107	No
538	GOM_NL__2PRFIN20021212_235812_000000522012_00045_04107_0429.N1	12-DEC-2002 23:58:12	Dark	52.000	34	Gam2Vel	1.7930	23000.	104	4107	No

3. Quality information per product

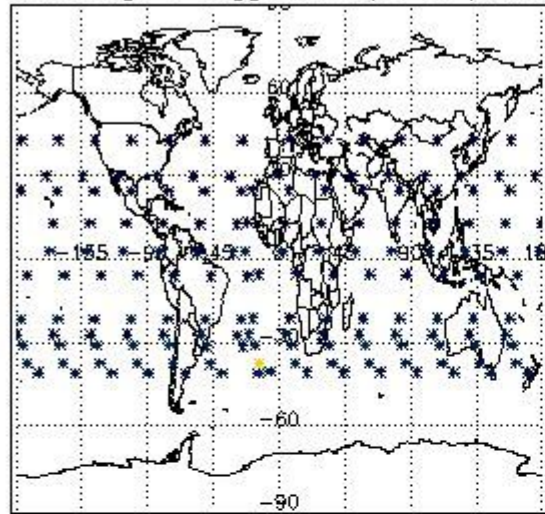
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

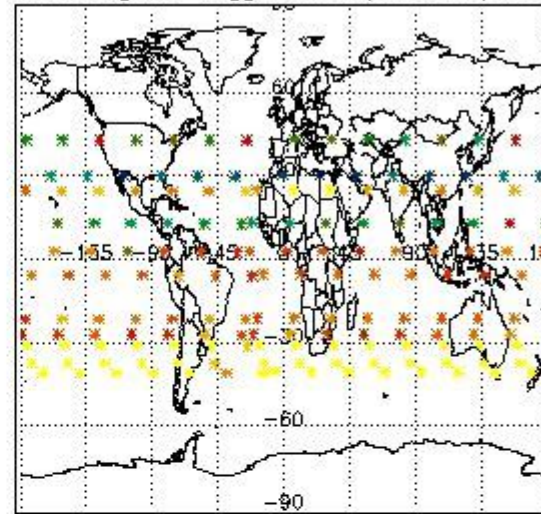


3.2 Plot quality information per product (world map)

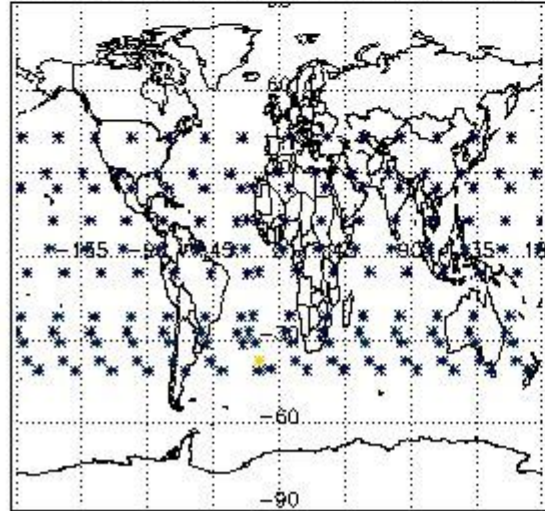
Percentage of flagged data per O3 profile



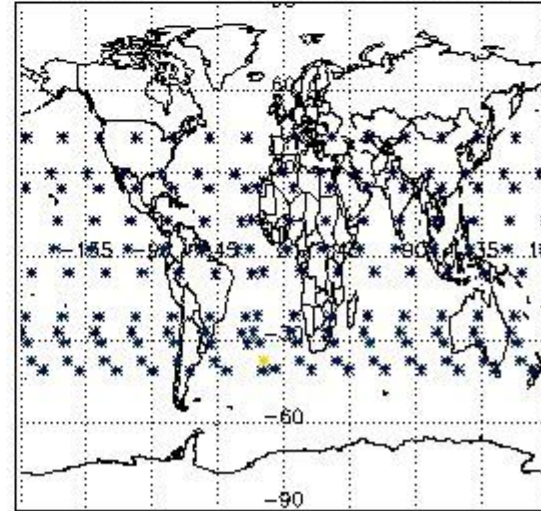
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

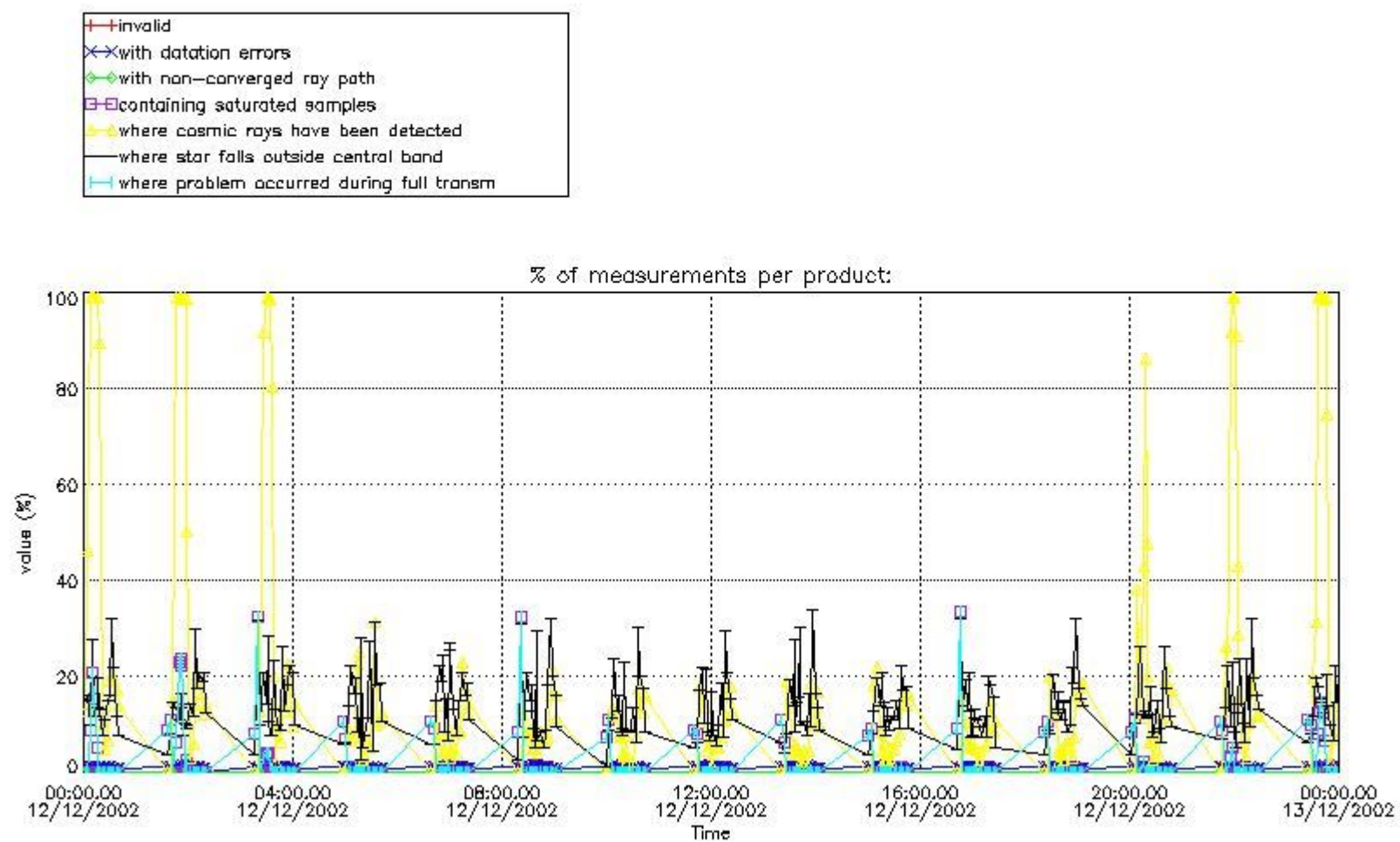


4. Level 1 quality information per product

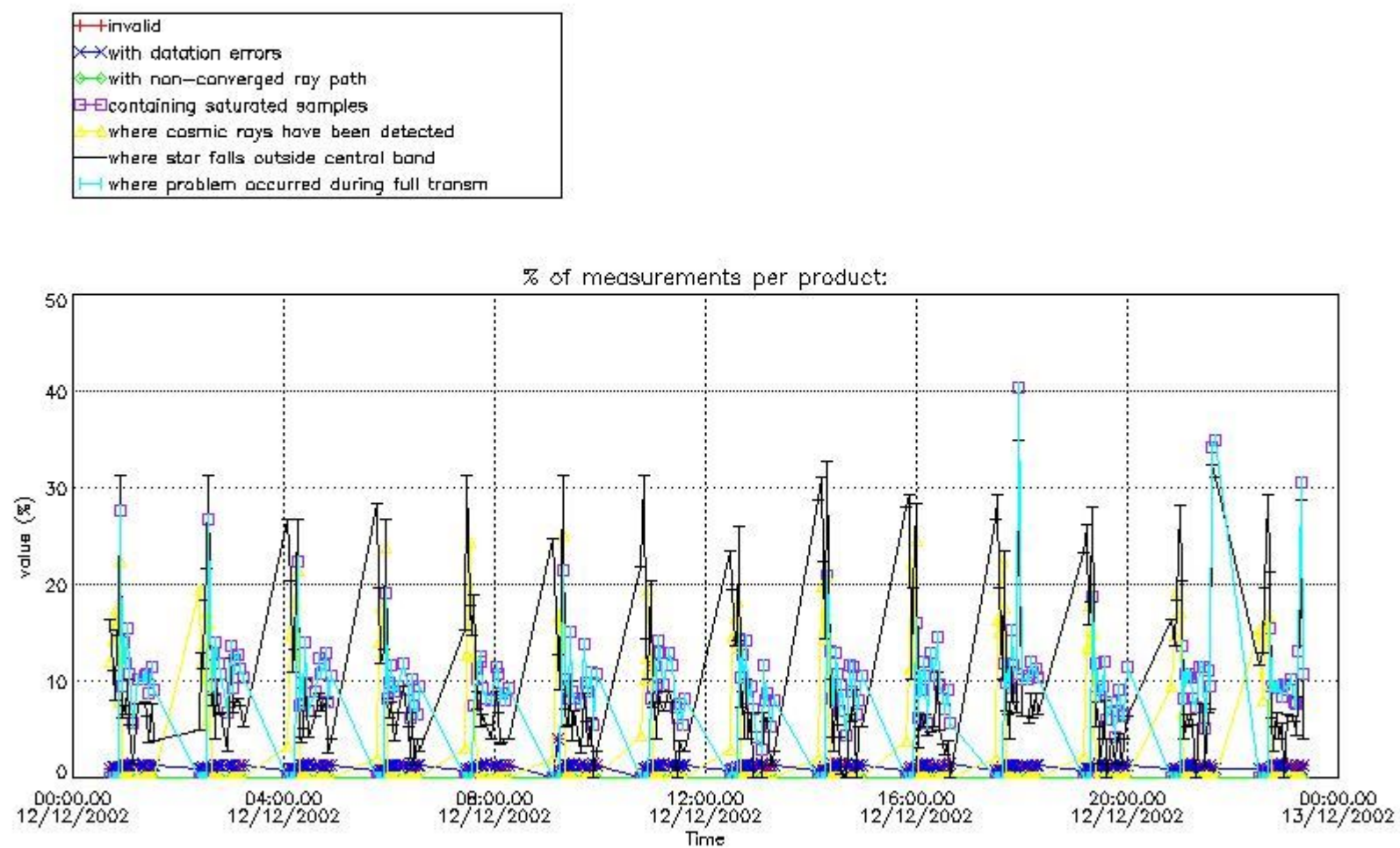
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

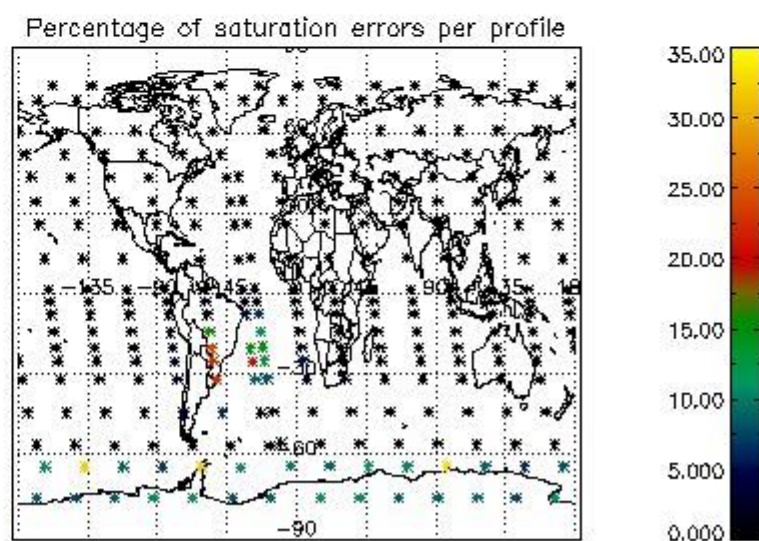
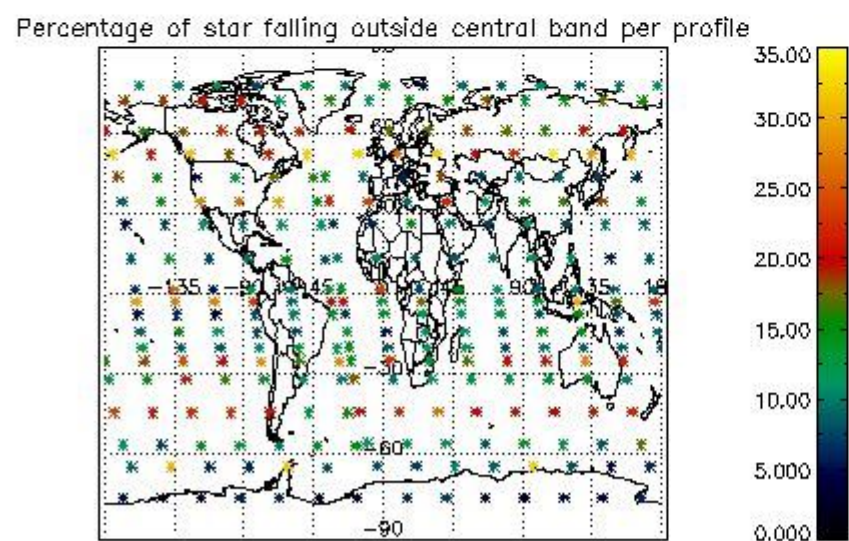
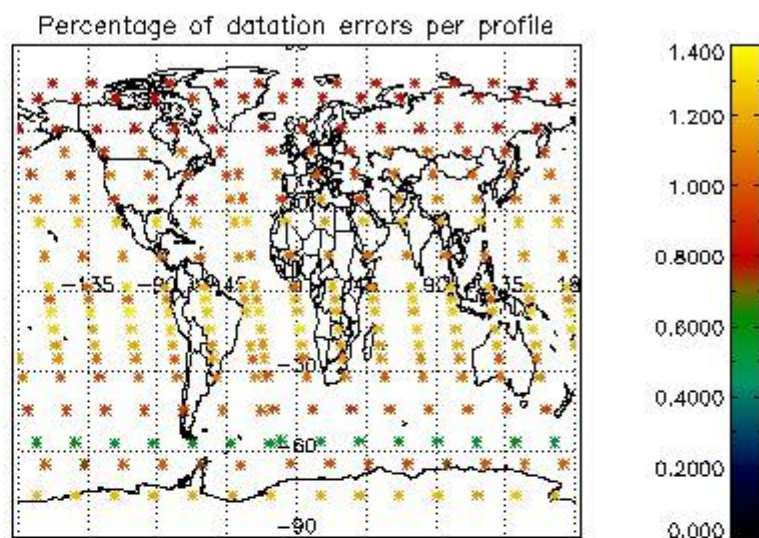
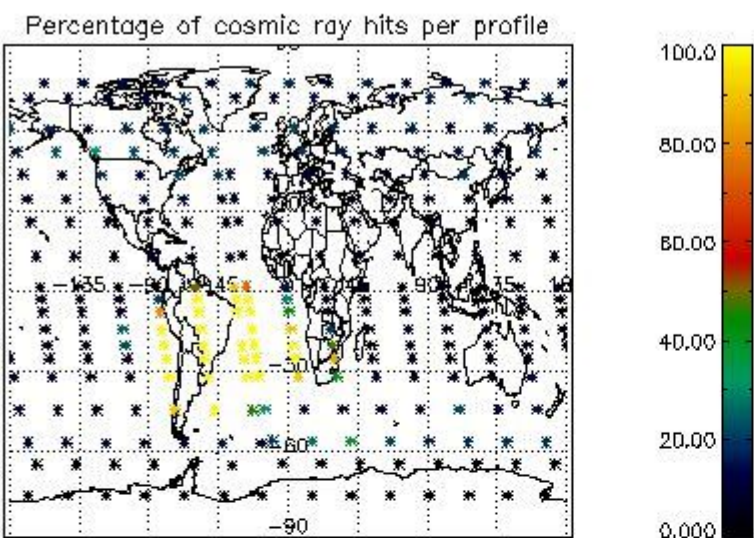


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

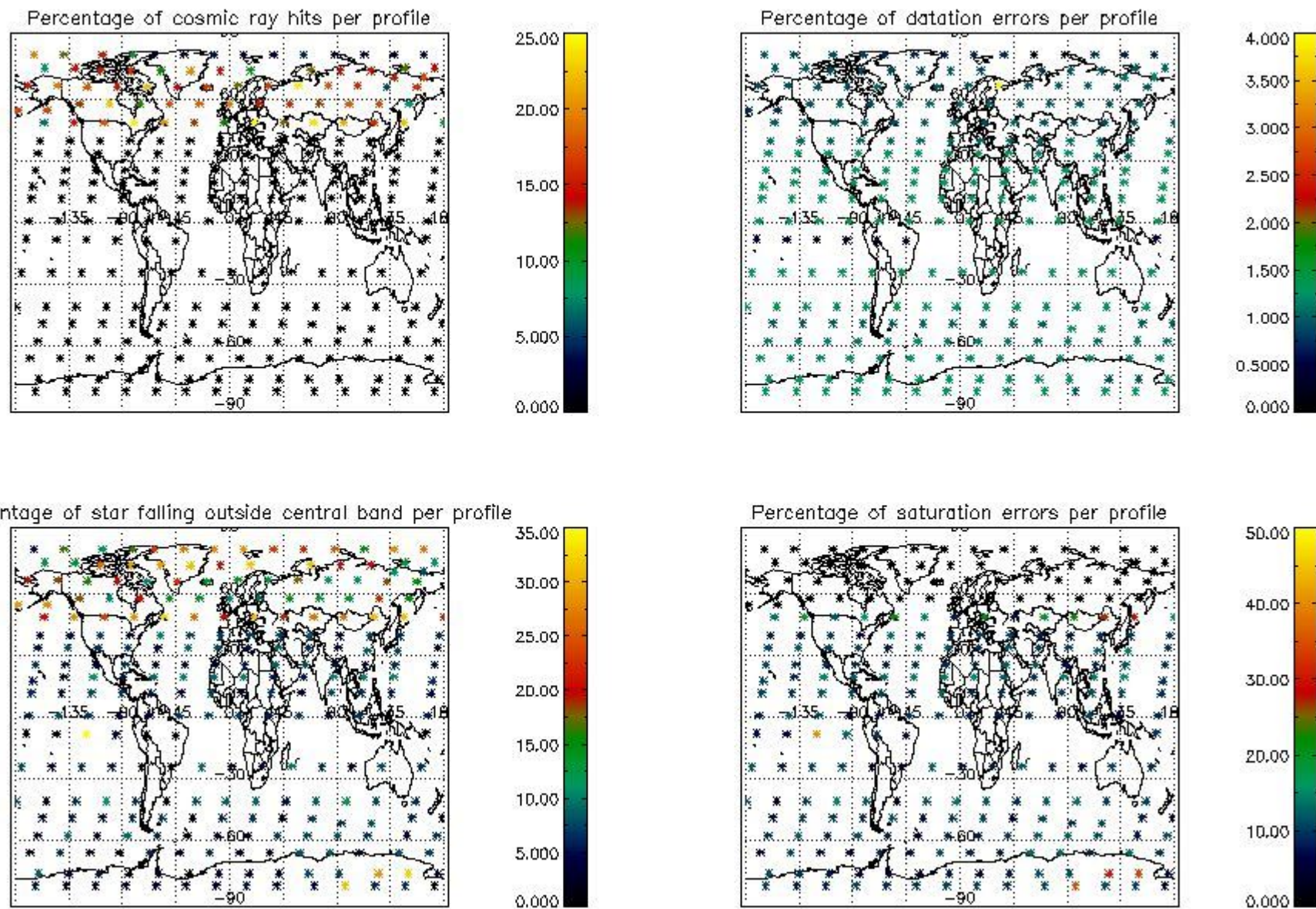


4.2 Plot quality information per product coming from level 1b processing (world map)

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

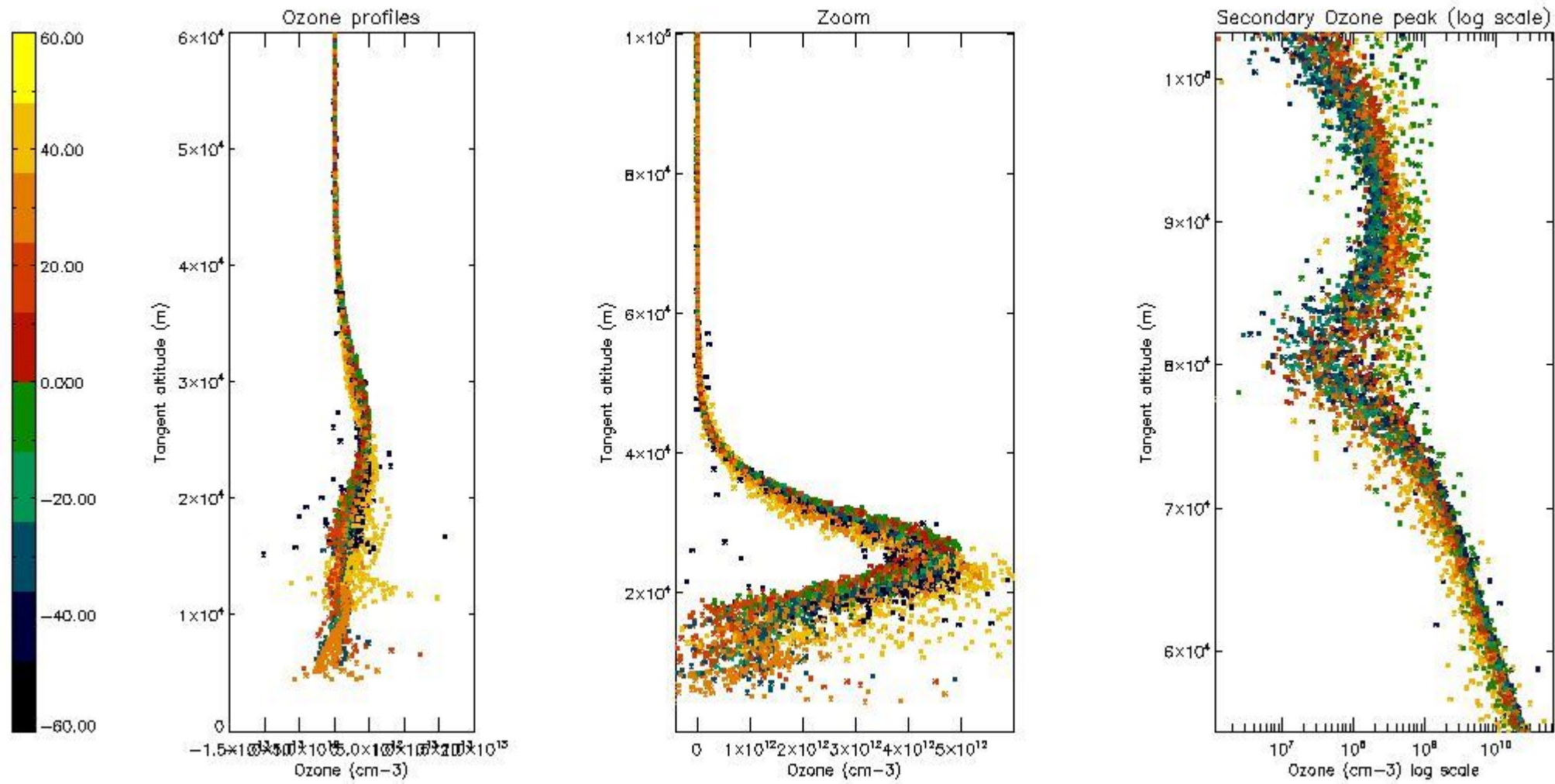
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	28
STD < 20	17

STD < 10	14
STD < 5	10

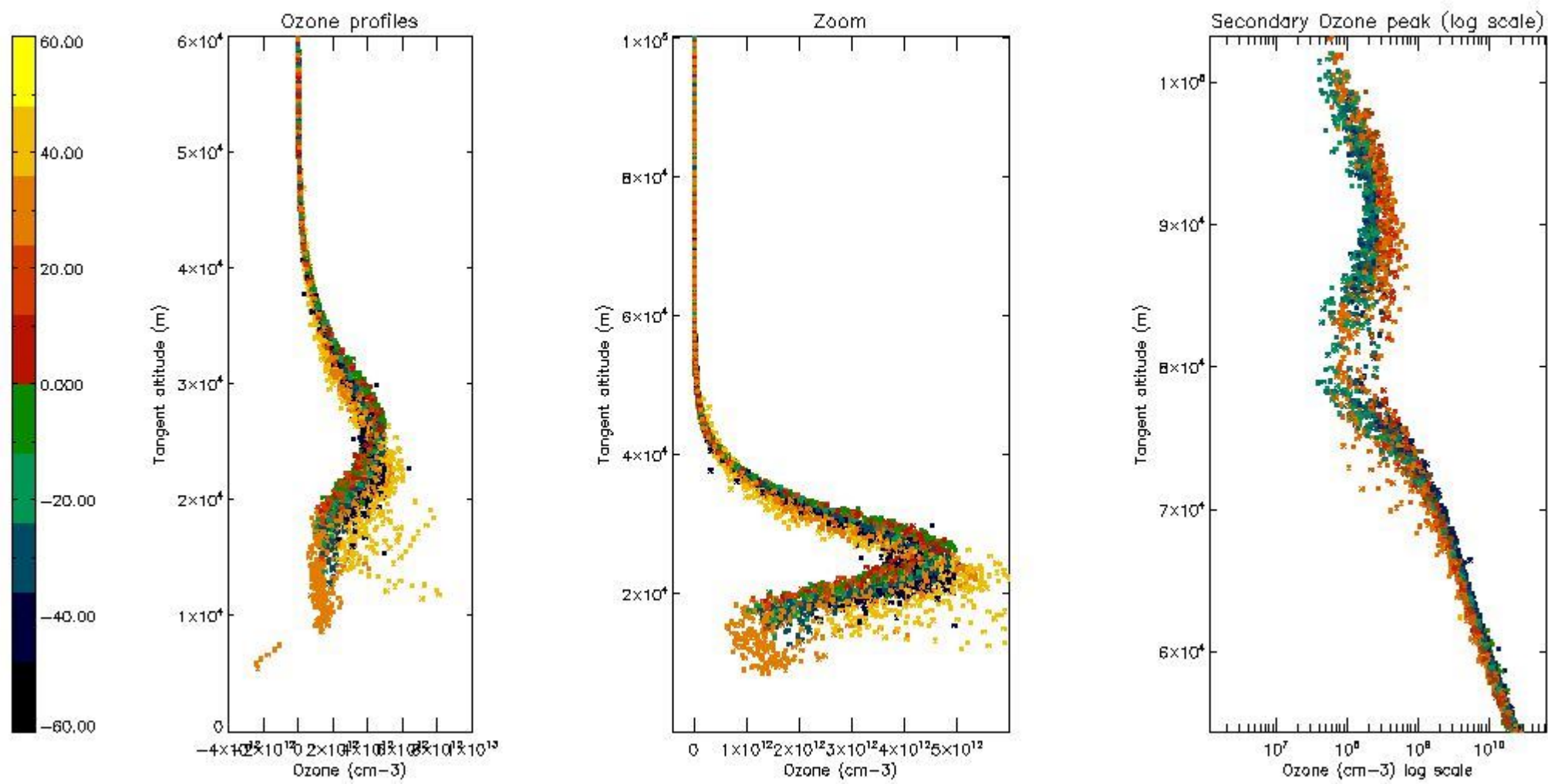
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



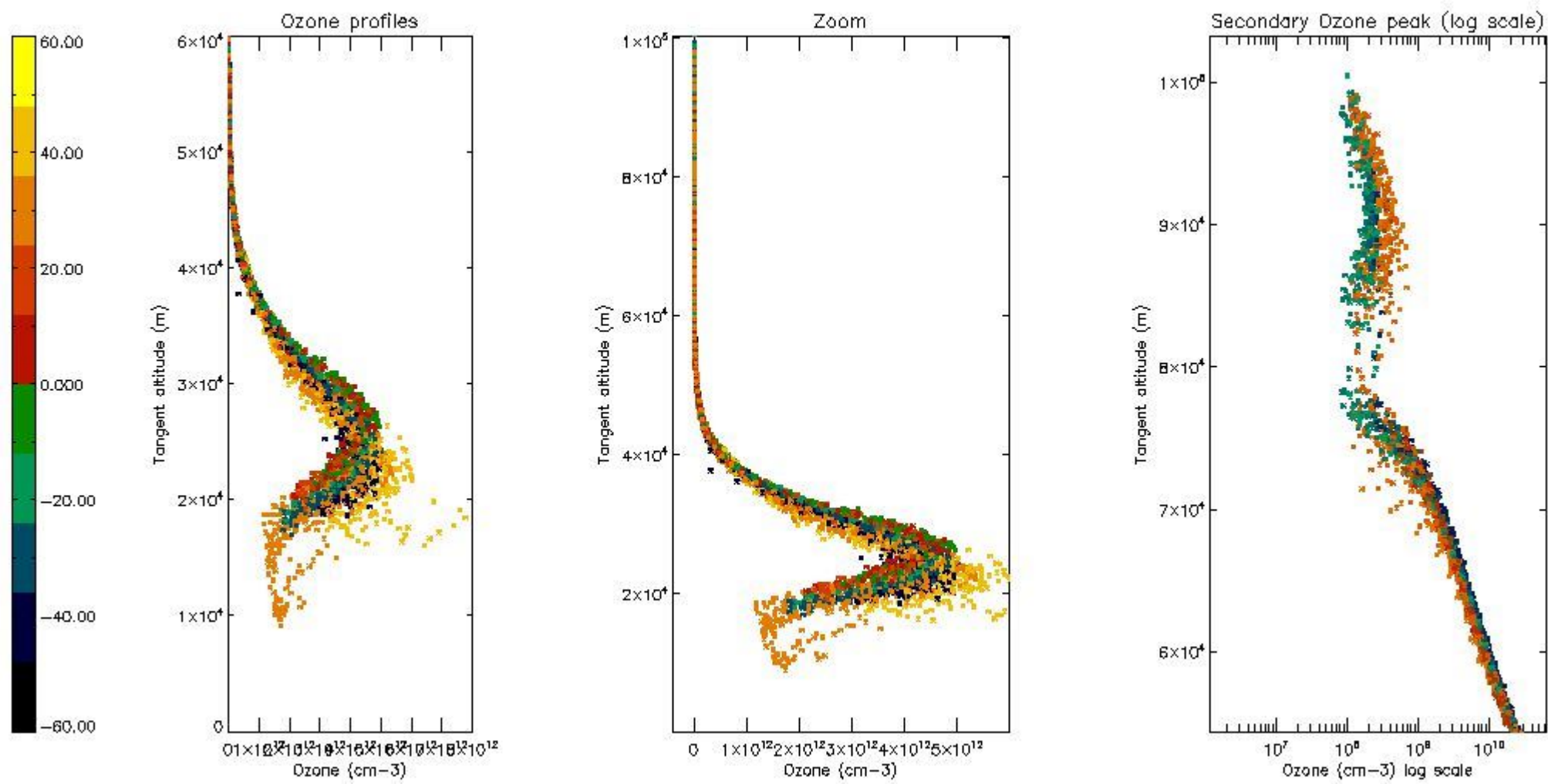
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



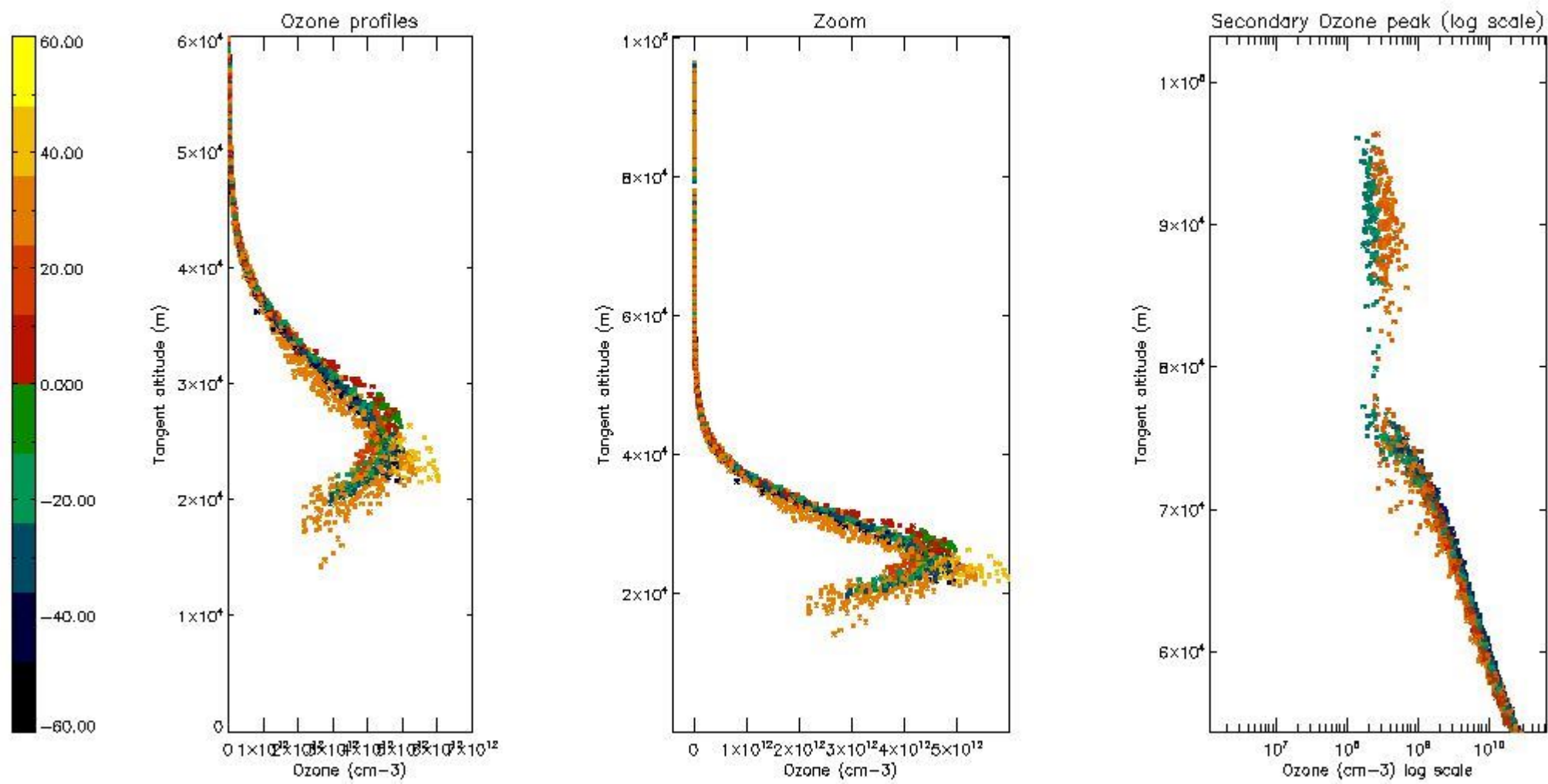
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



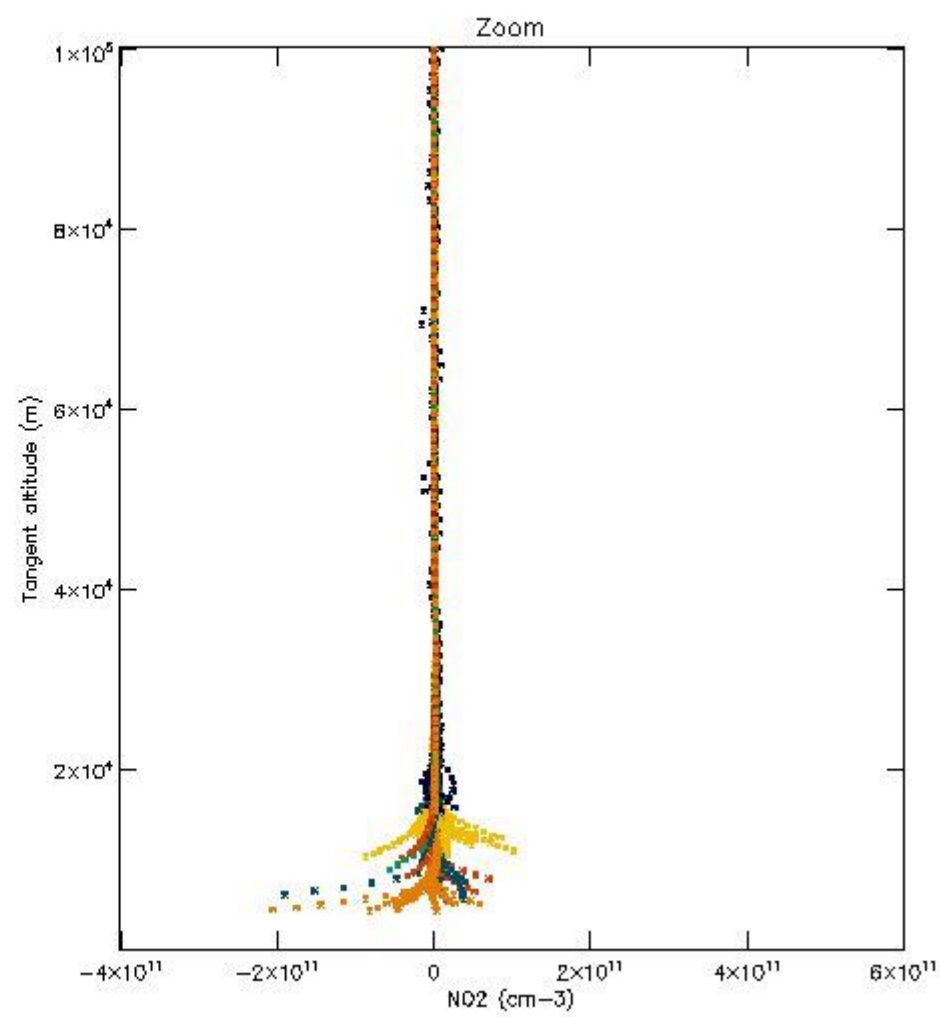
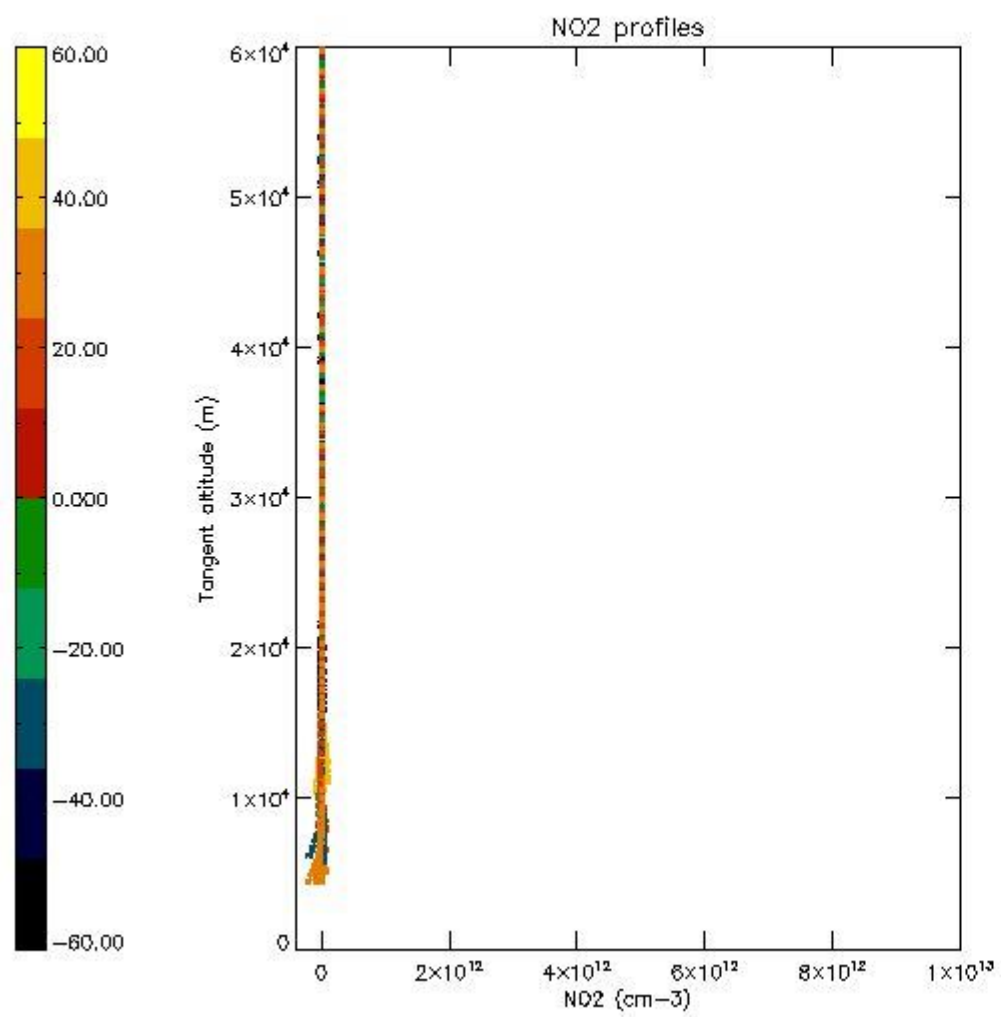
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



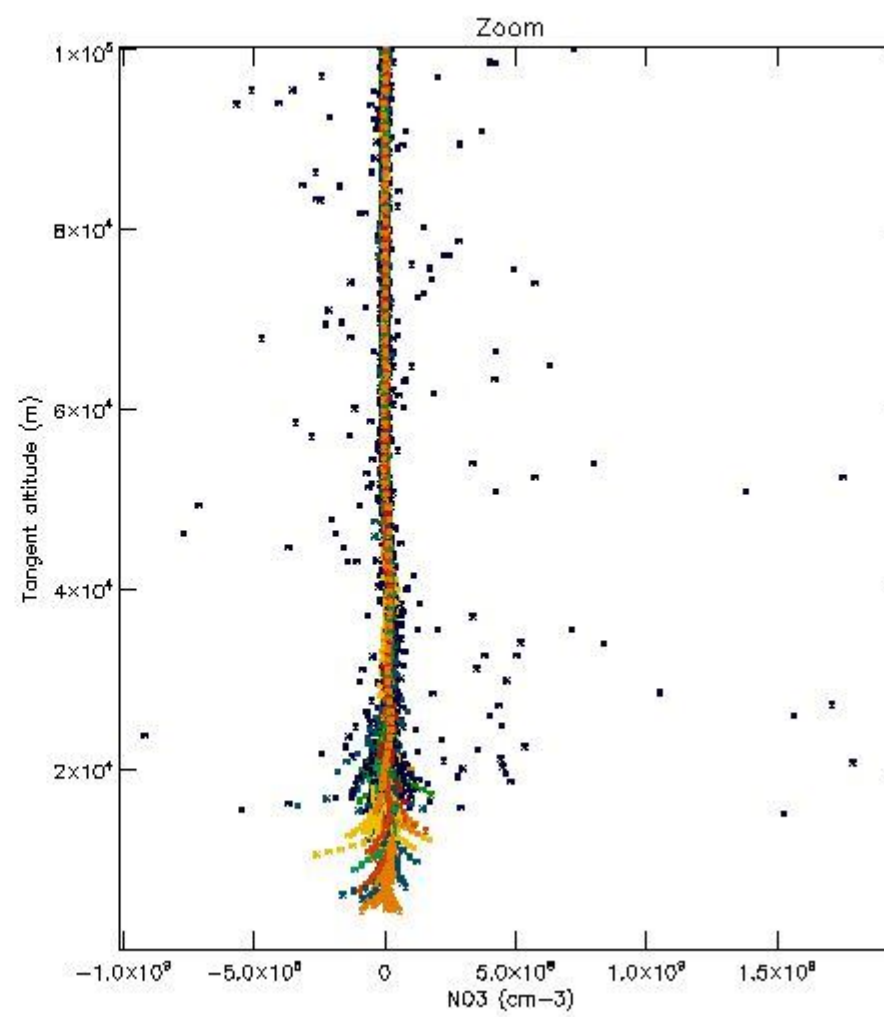
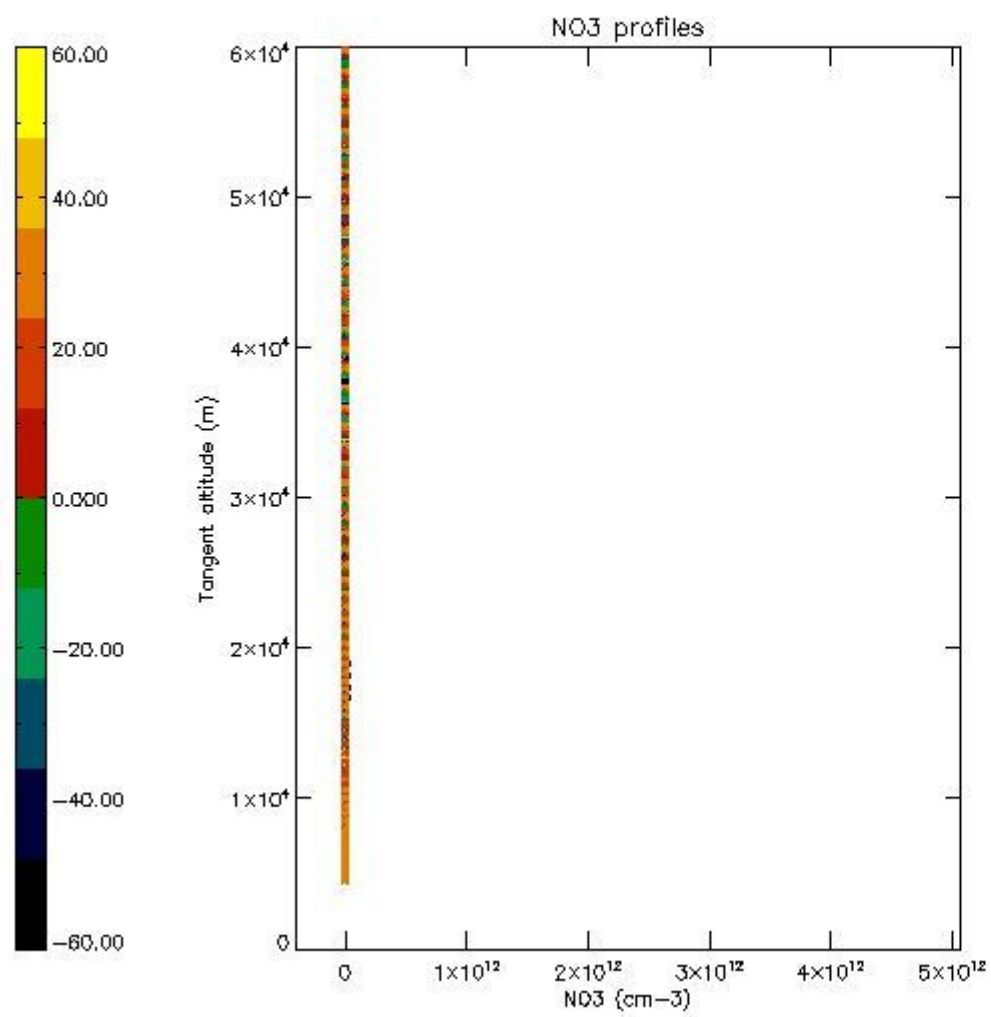
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



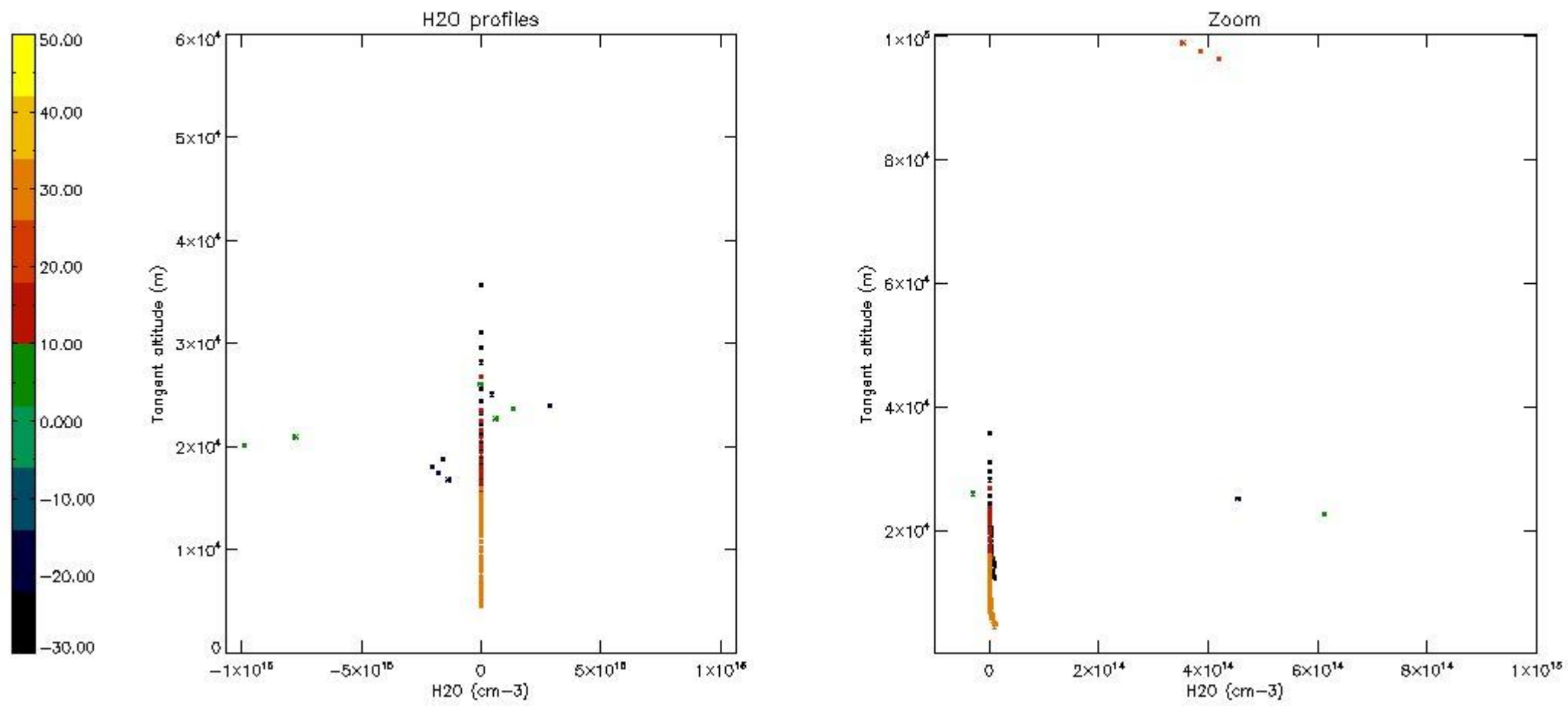
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

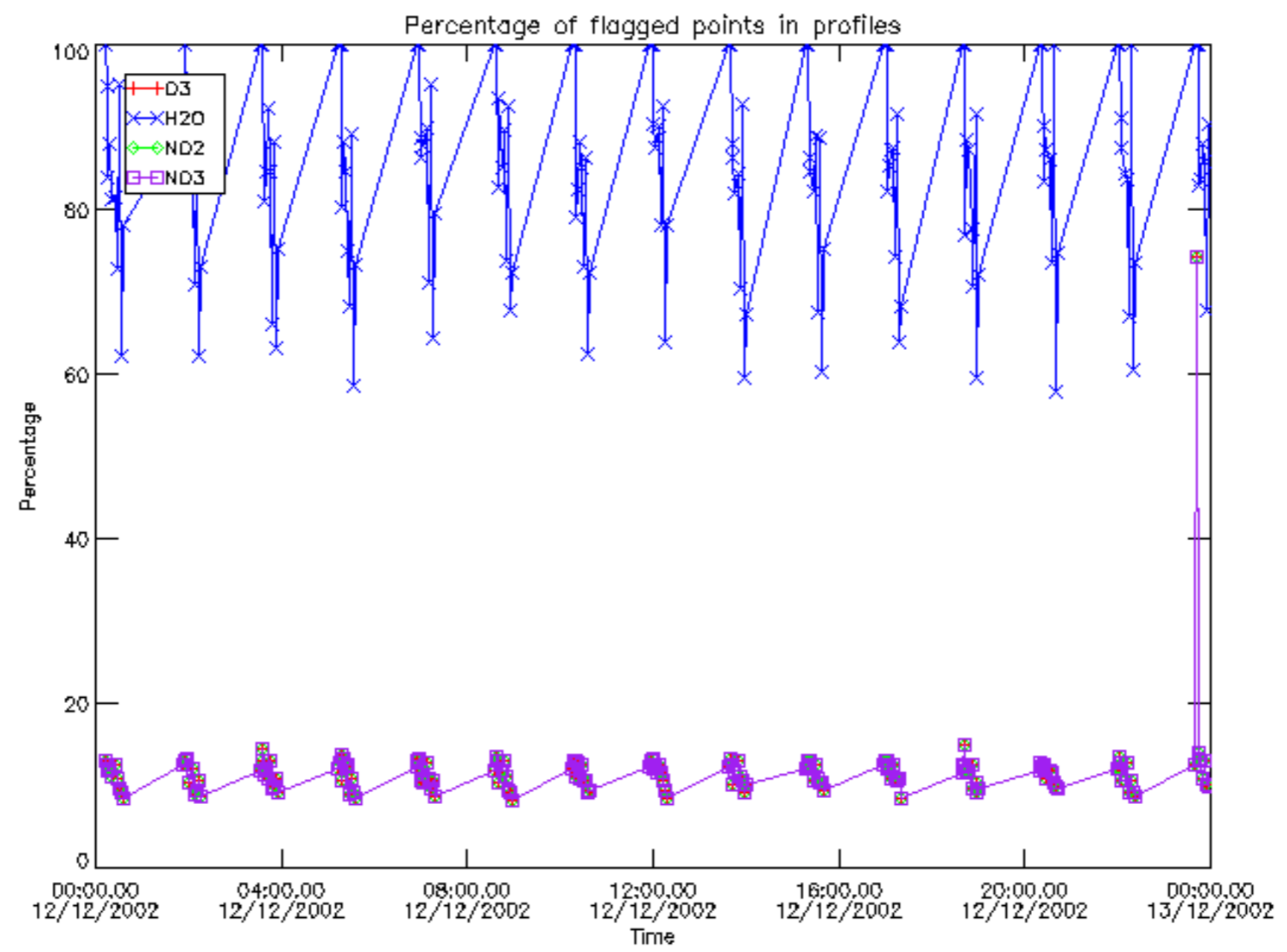
The colorbar represents the latitude.



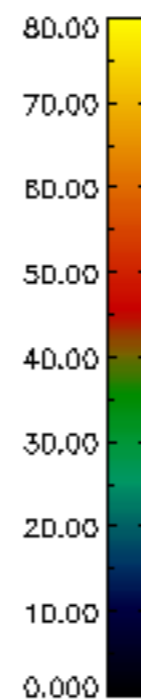
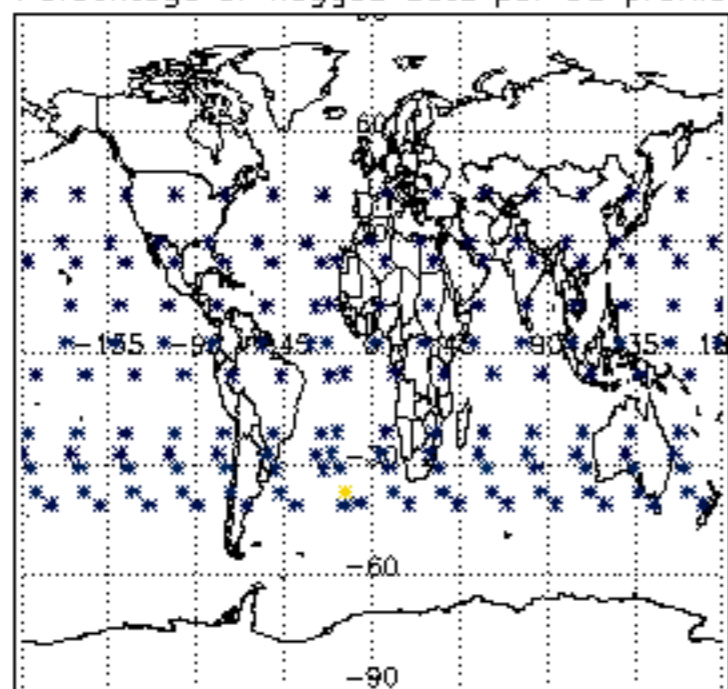
6. Auxiliary Data Files used for the production reported in section 2

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

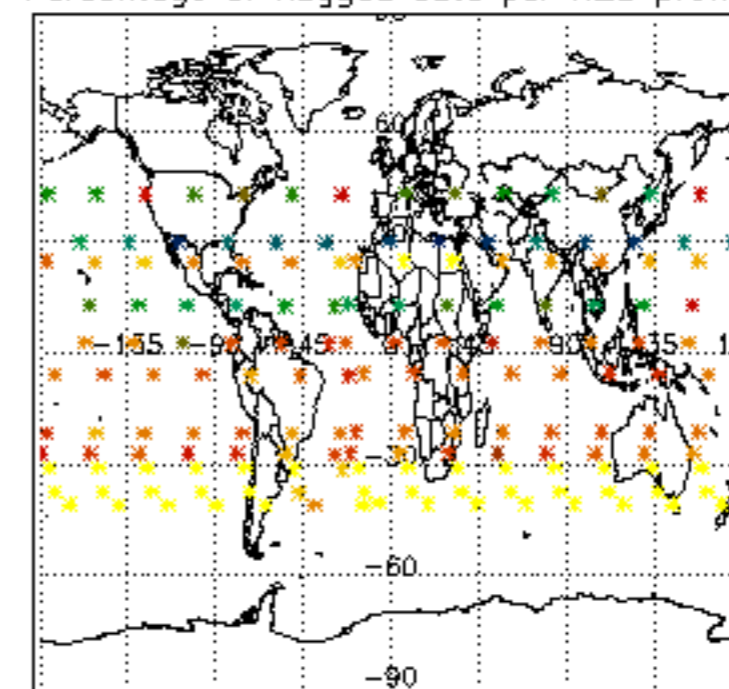
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	12-DEC-2002 00:01:21
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	12-DEC-2002 00:01:21
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	12-DEC-2002 00:01:21



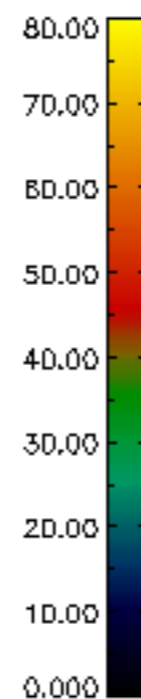
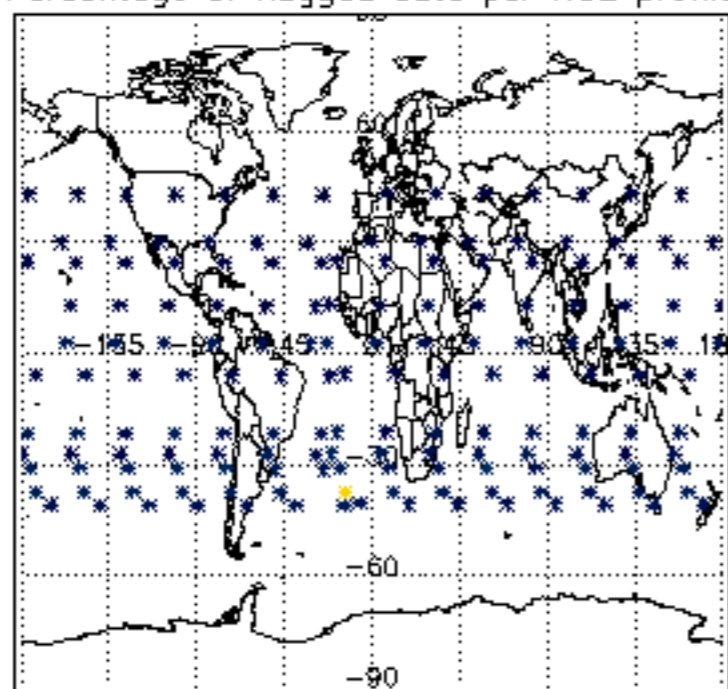
Percentage of flagged data per D3 profile



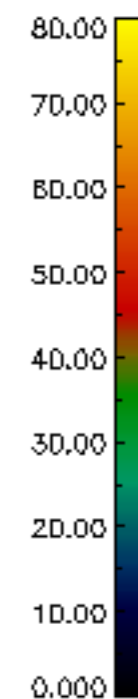
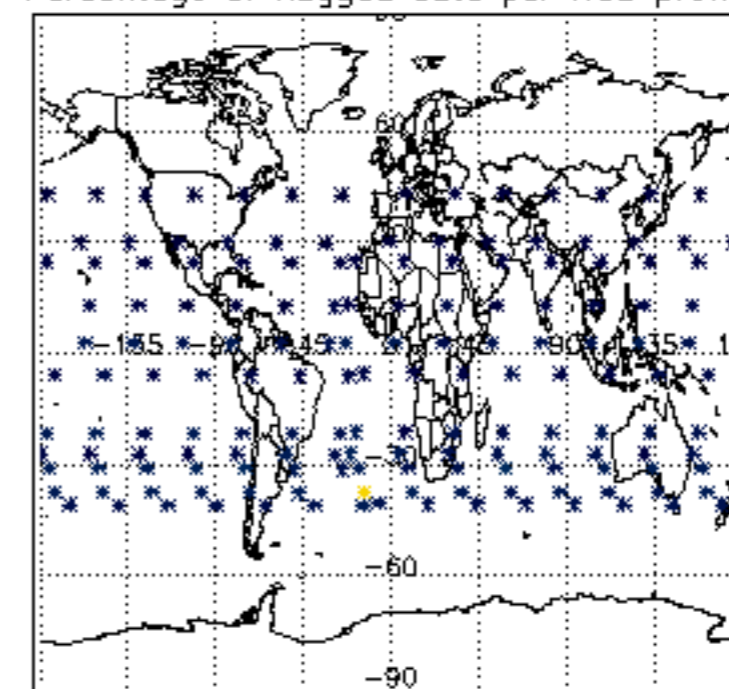
Percentage of flagged data per H2O profile

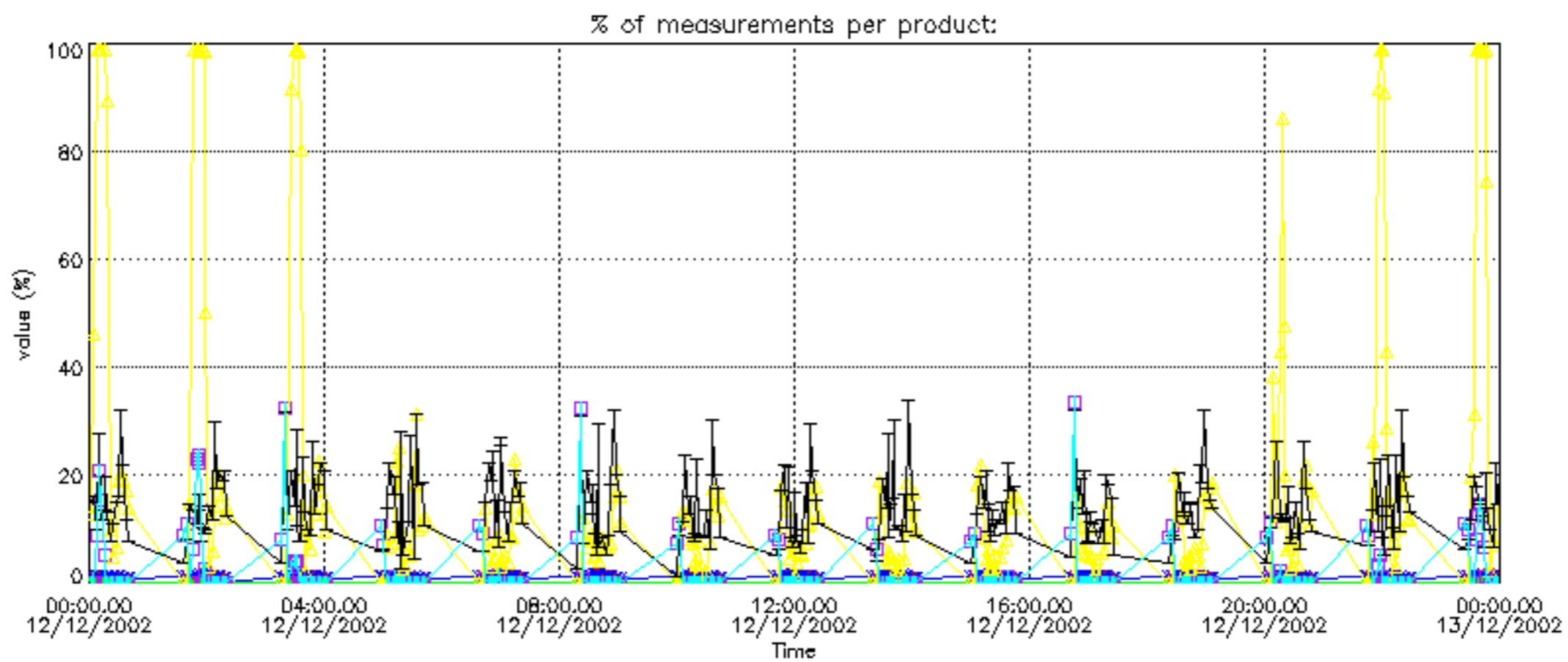


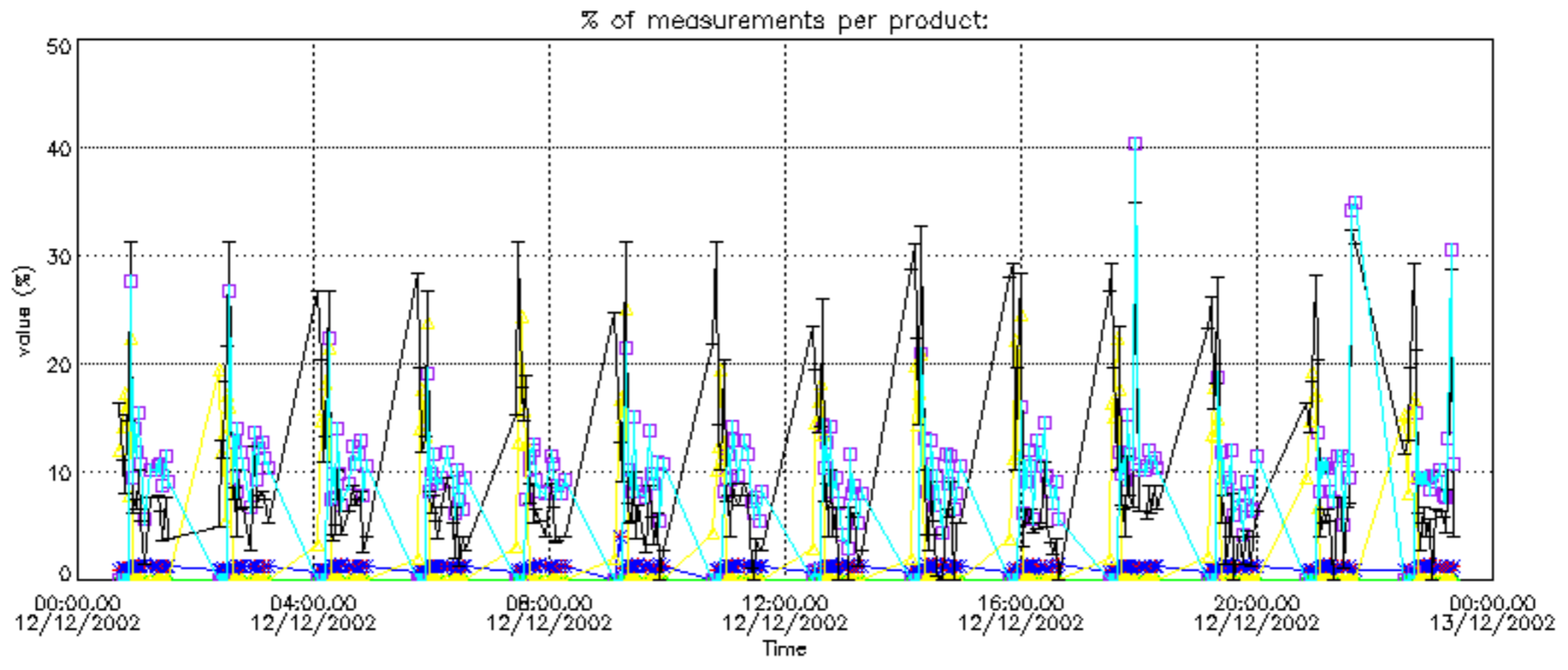
Percentage of flagged data per NO2 profile



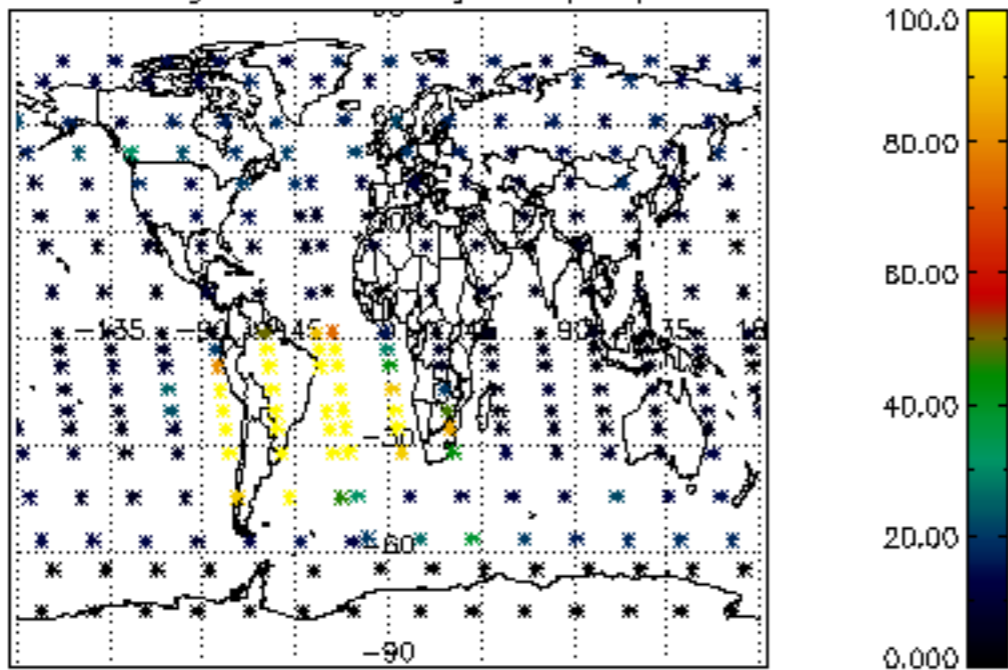
Percentage of flagged data per NO3 profile



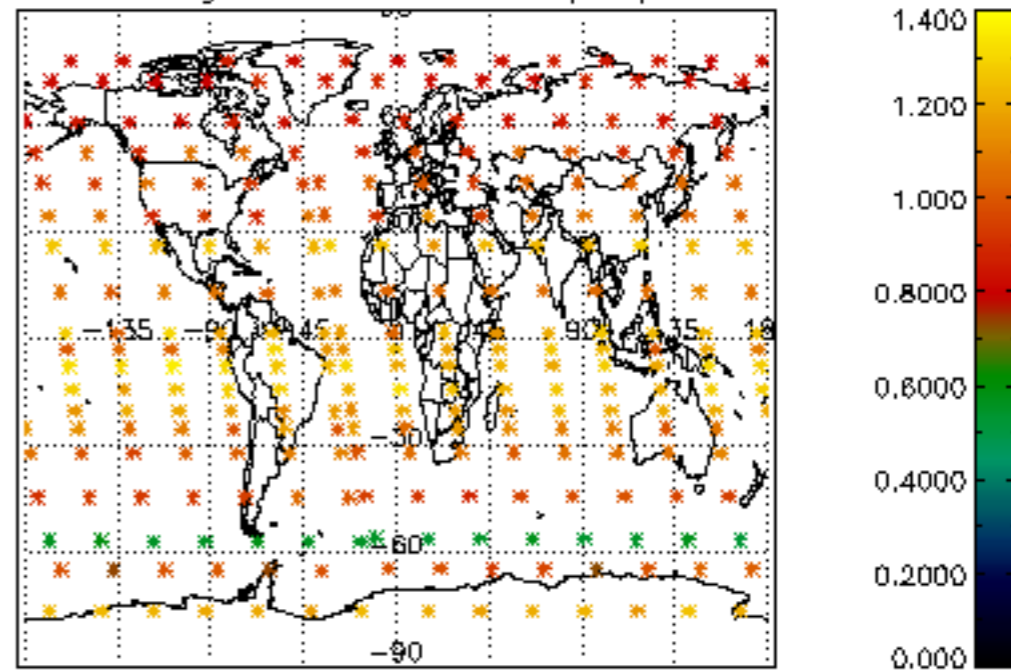




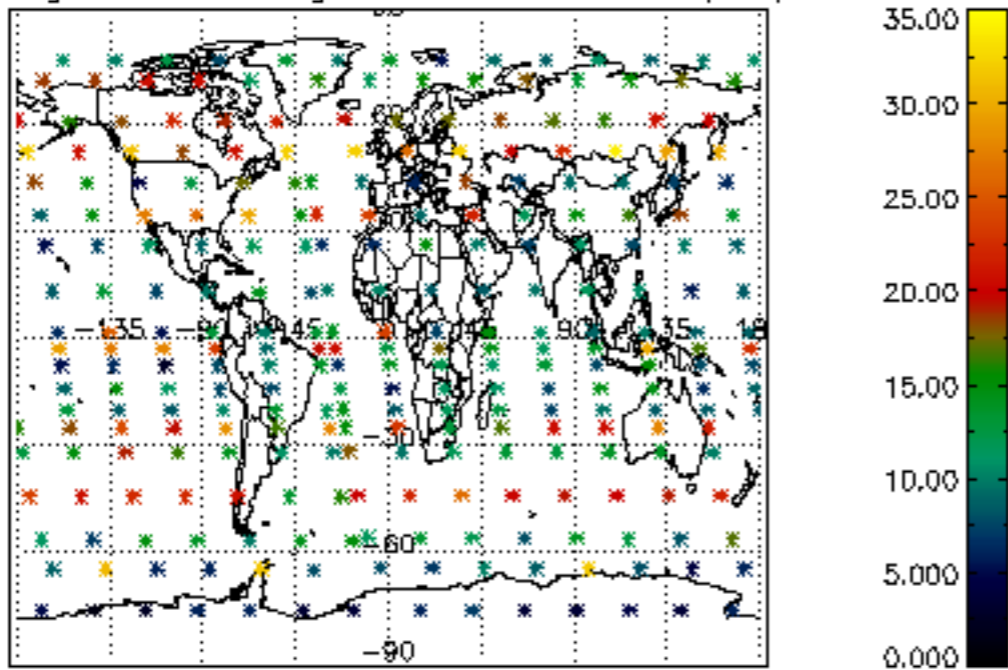
Percentage of cosmic ray hits per profile



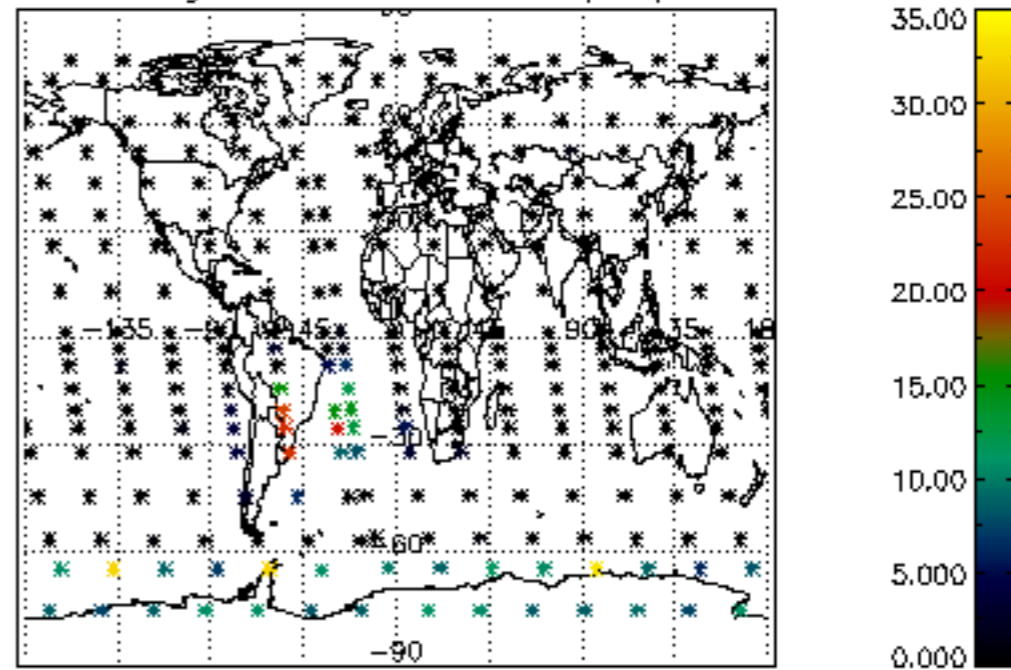
Percentage of datation errors per profile



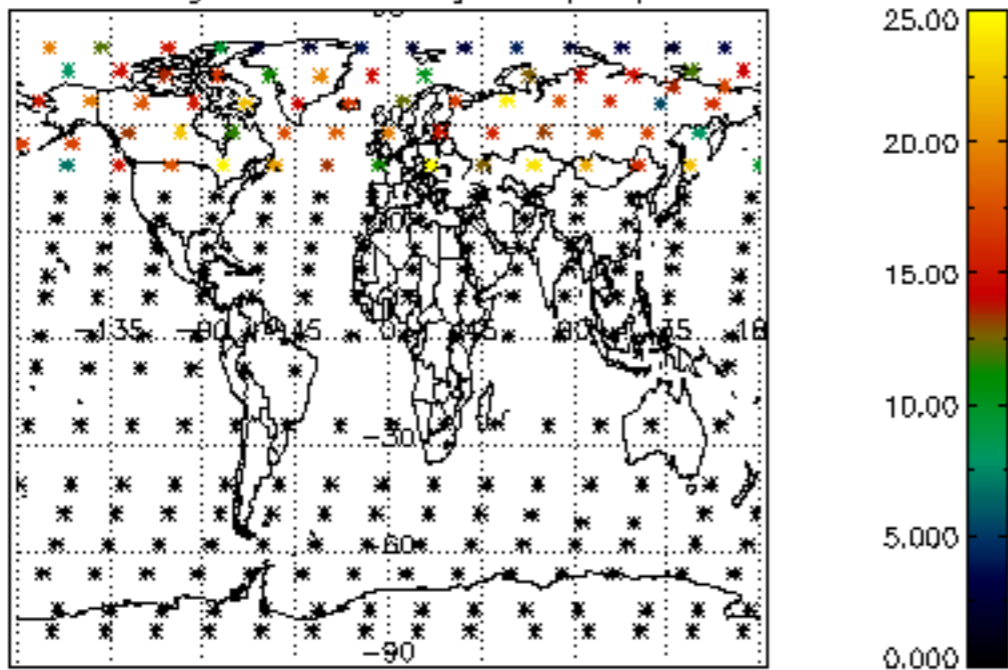
Percentage of star falling outside central band per profile



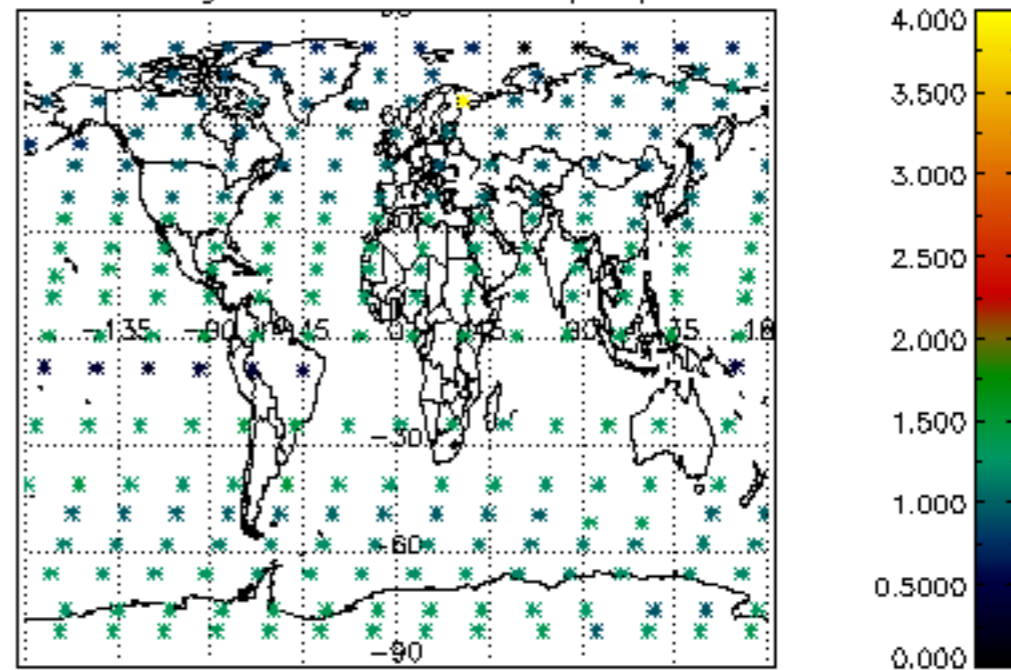
Percentage of saturation errors per profile



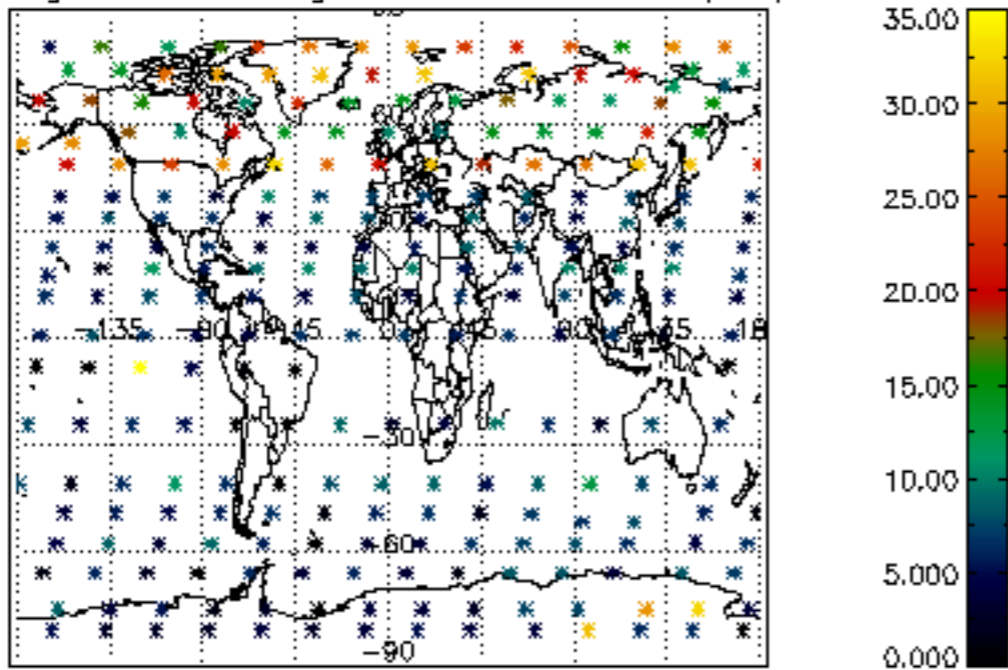
Percentage of cosmic ray hits per profile



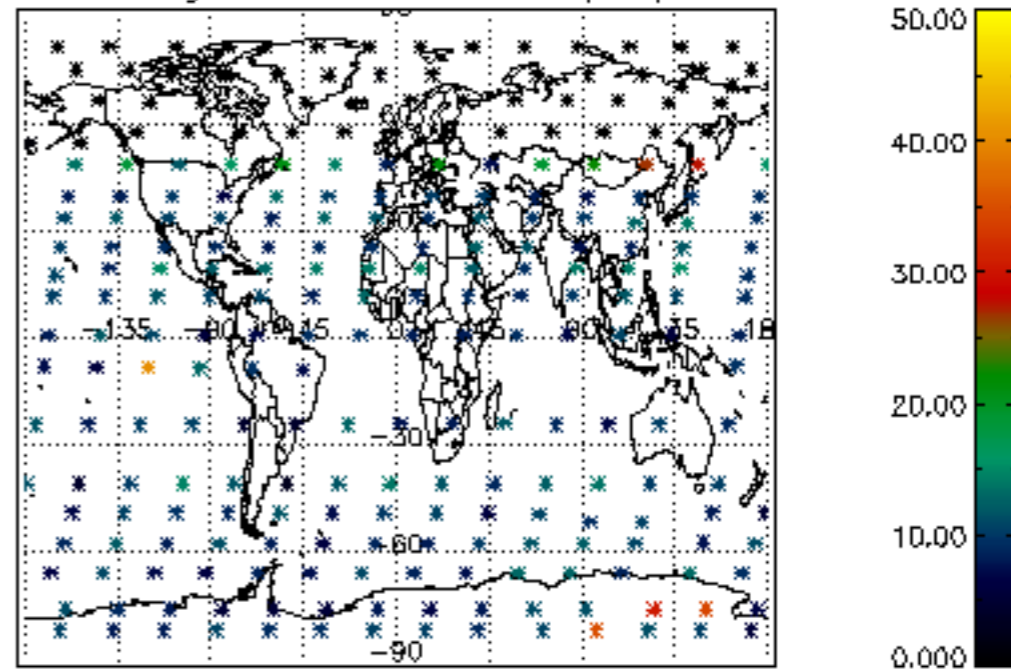
Percentage of datation errors per profile

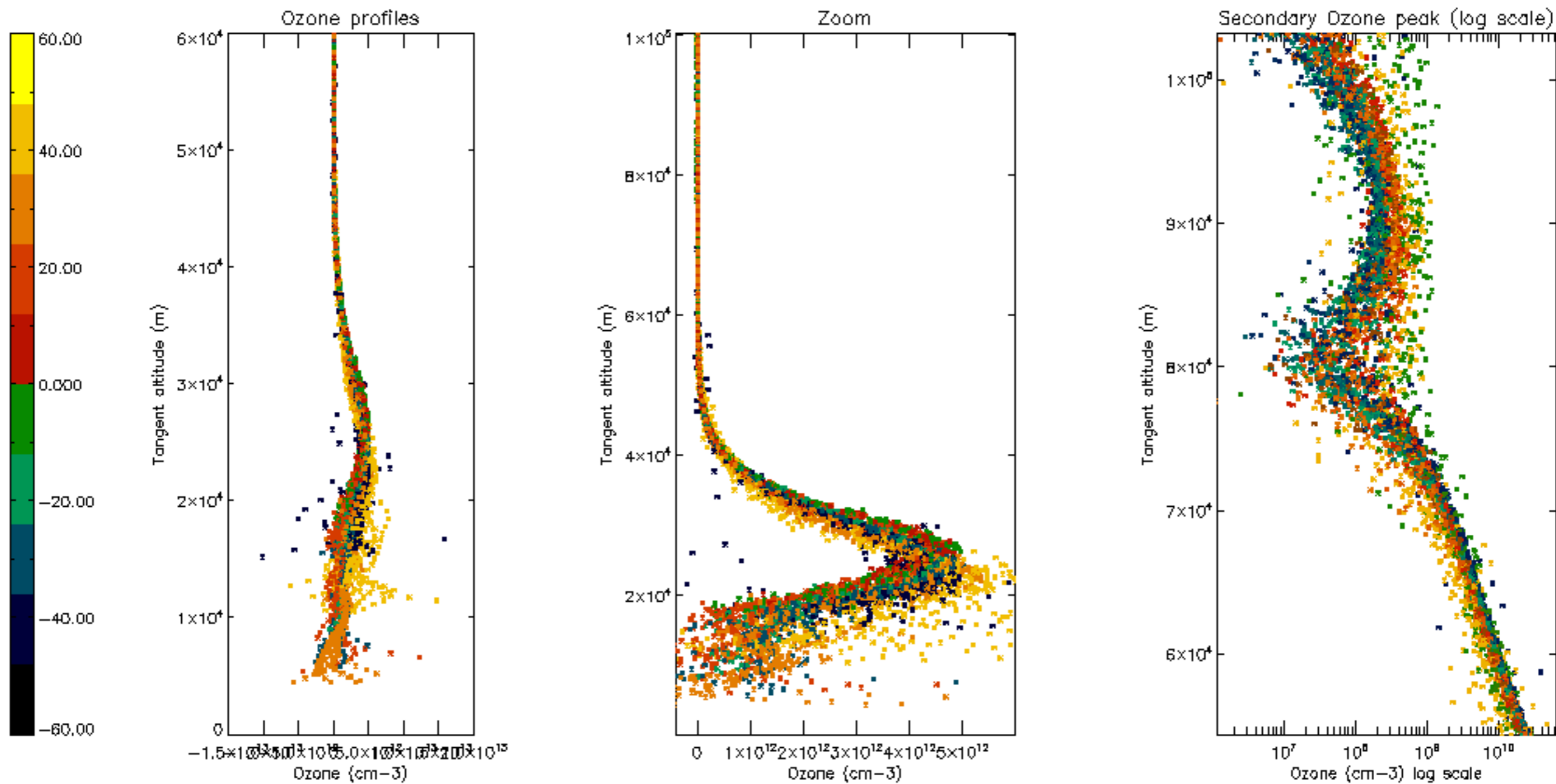


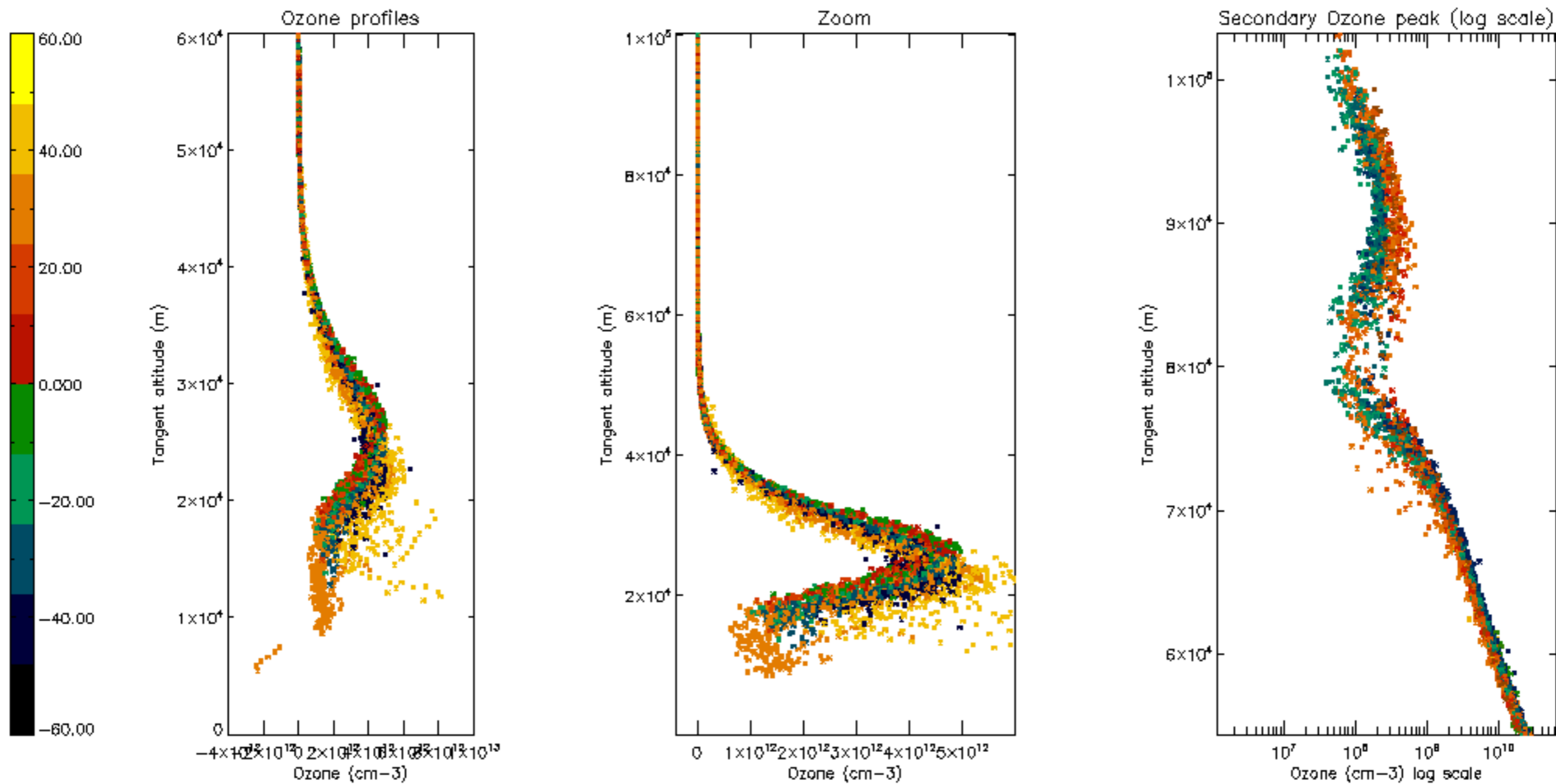
Percentage of star falling outside central band per profile

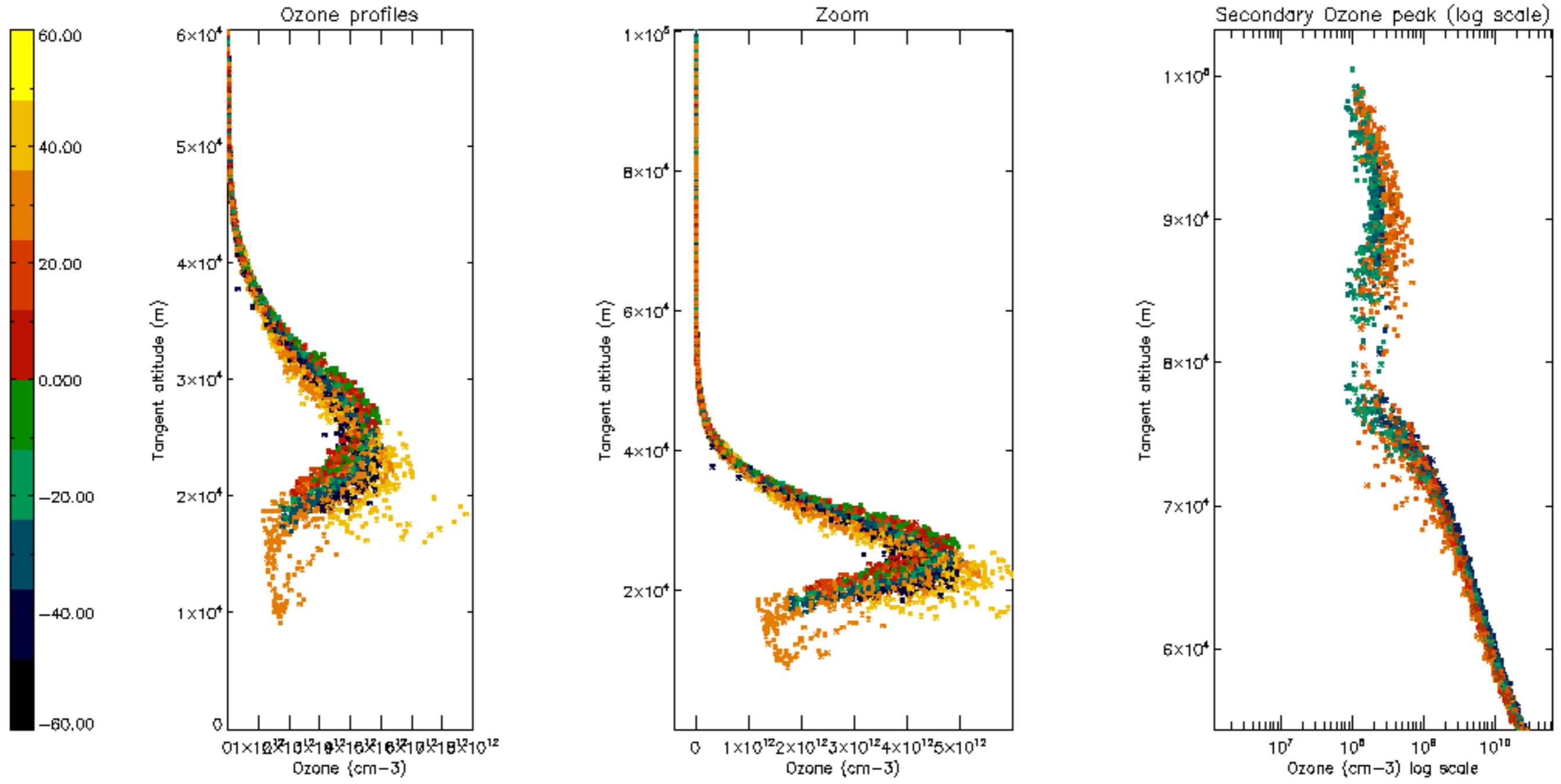


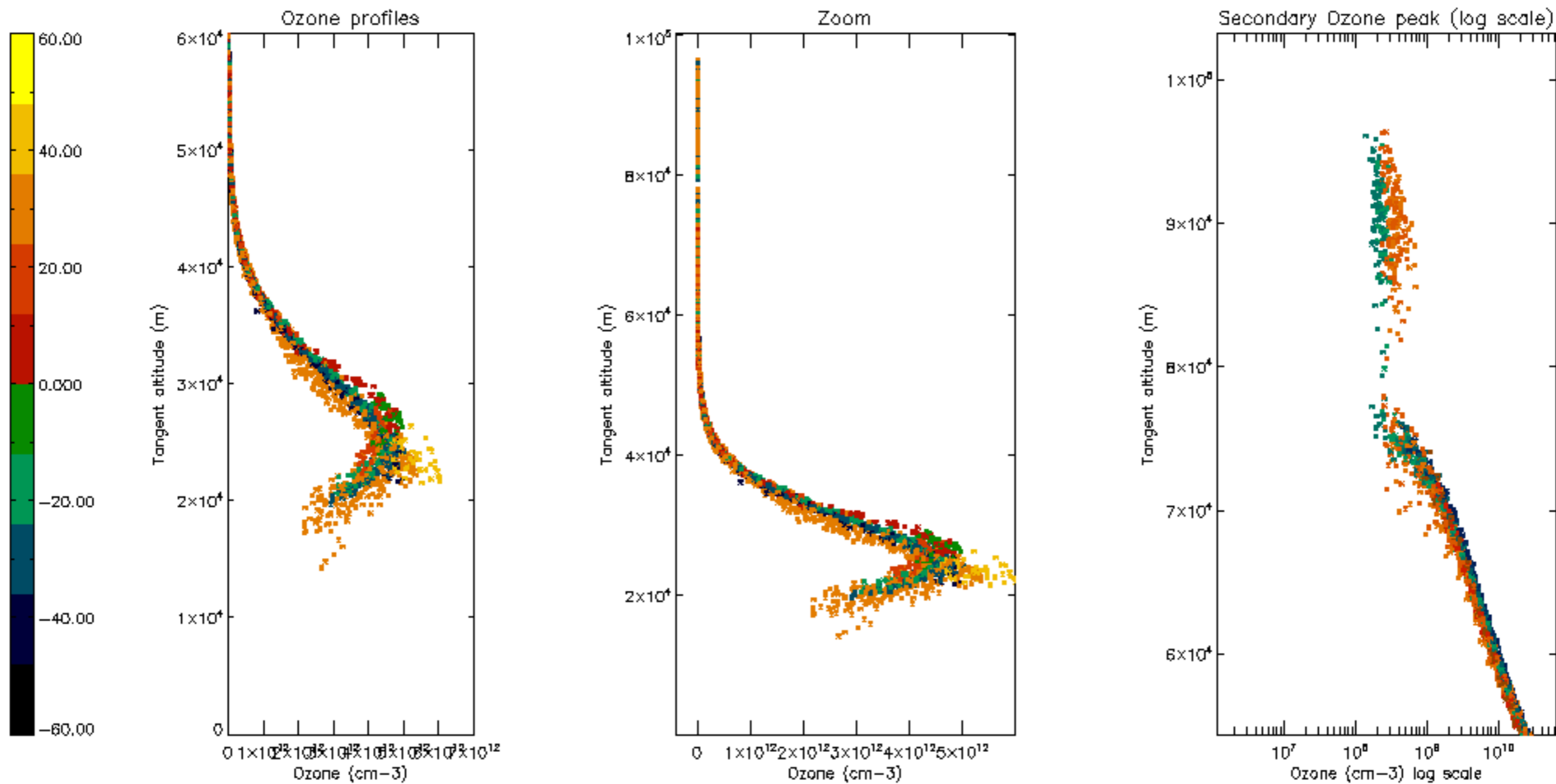
Percentage of saturation errors per profile

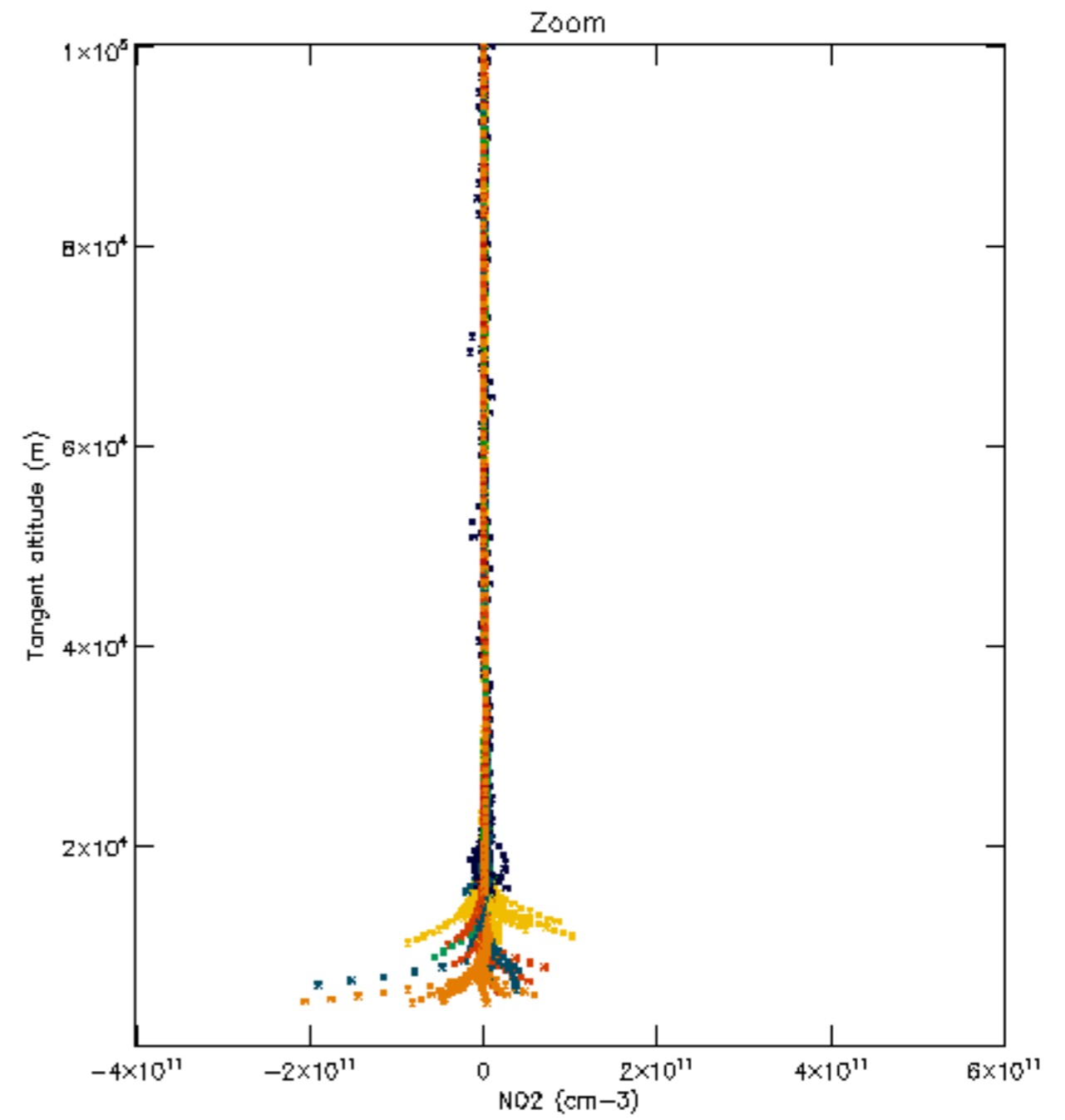
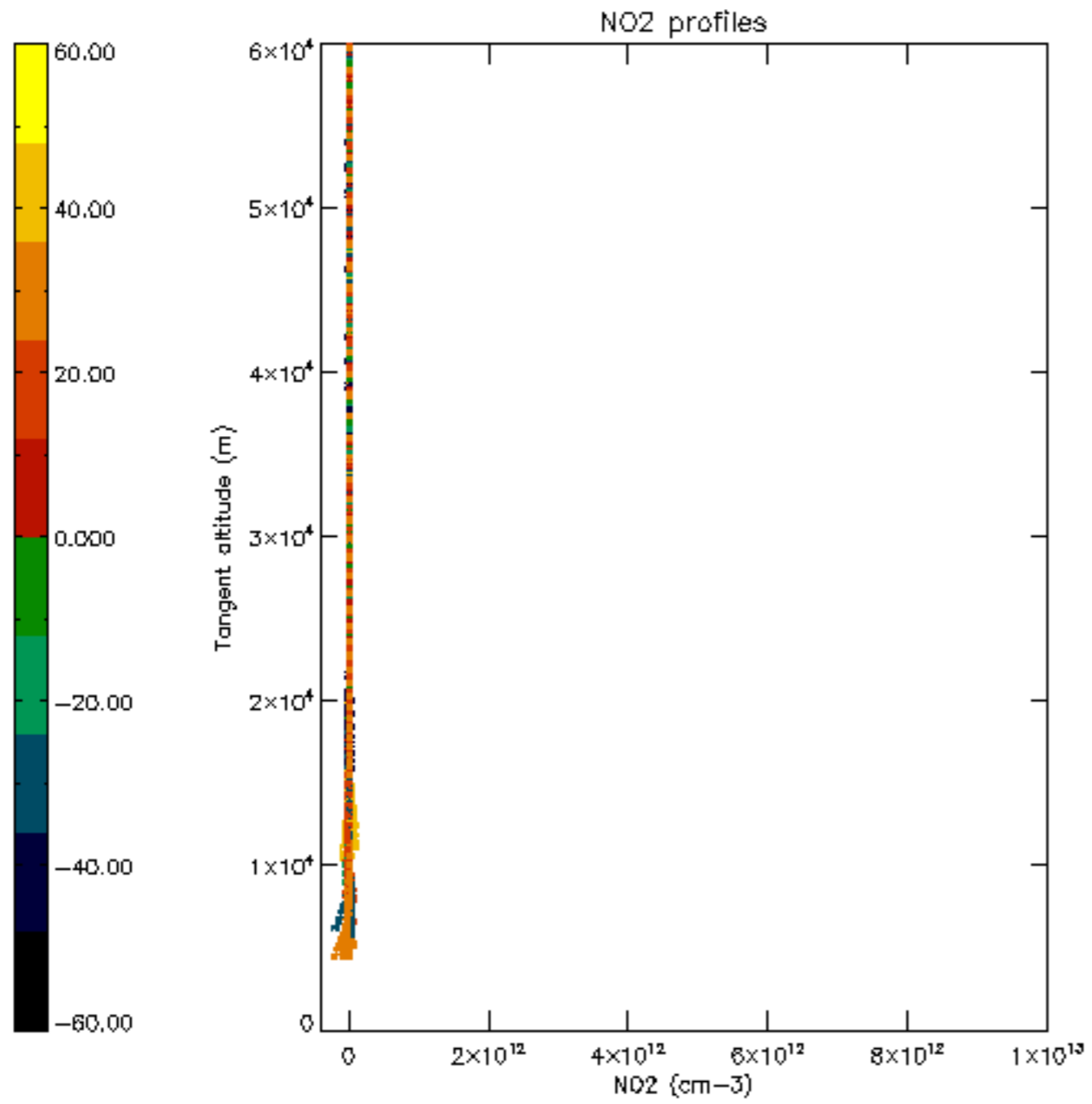


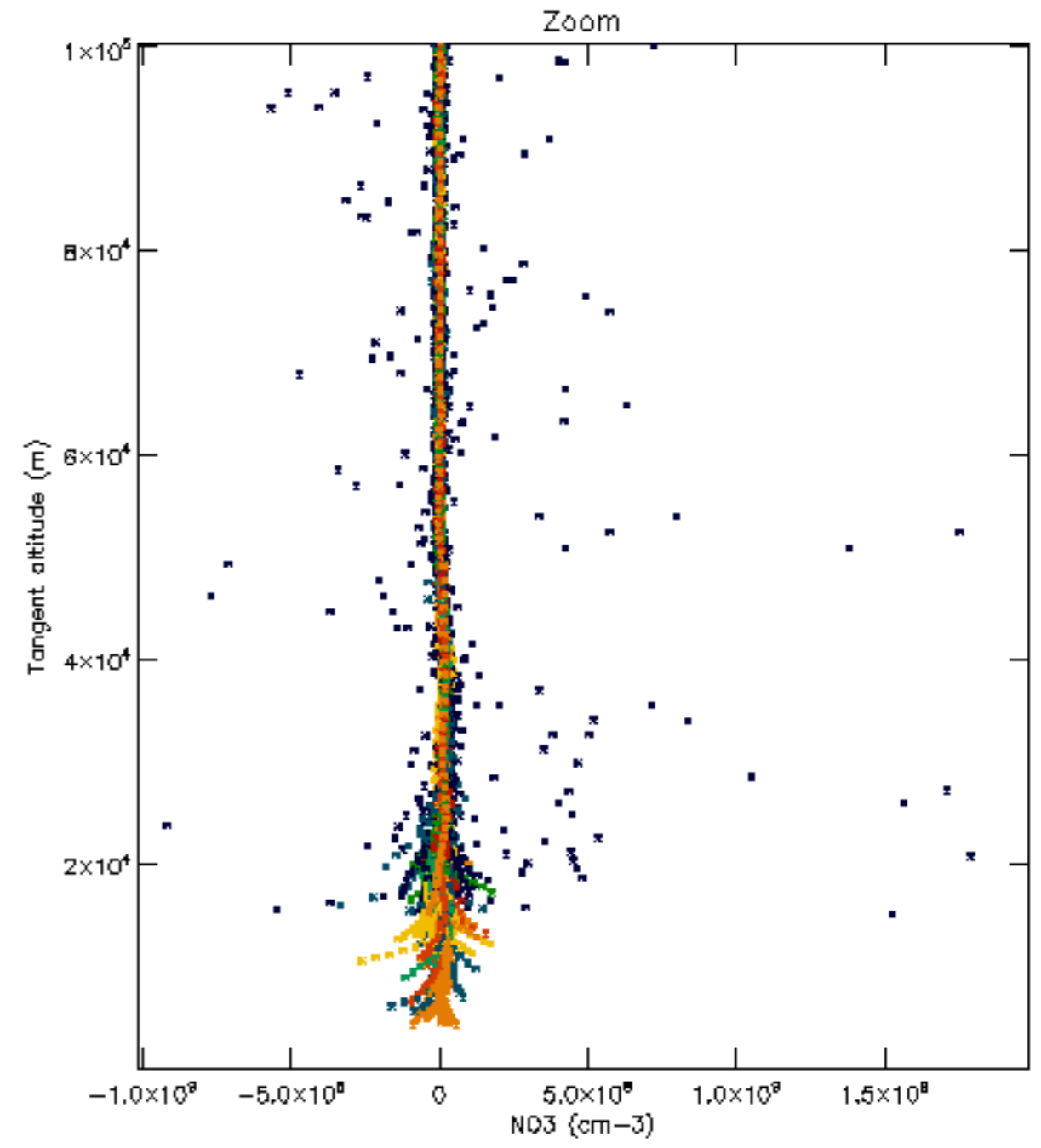
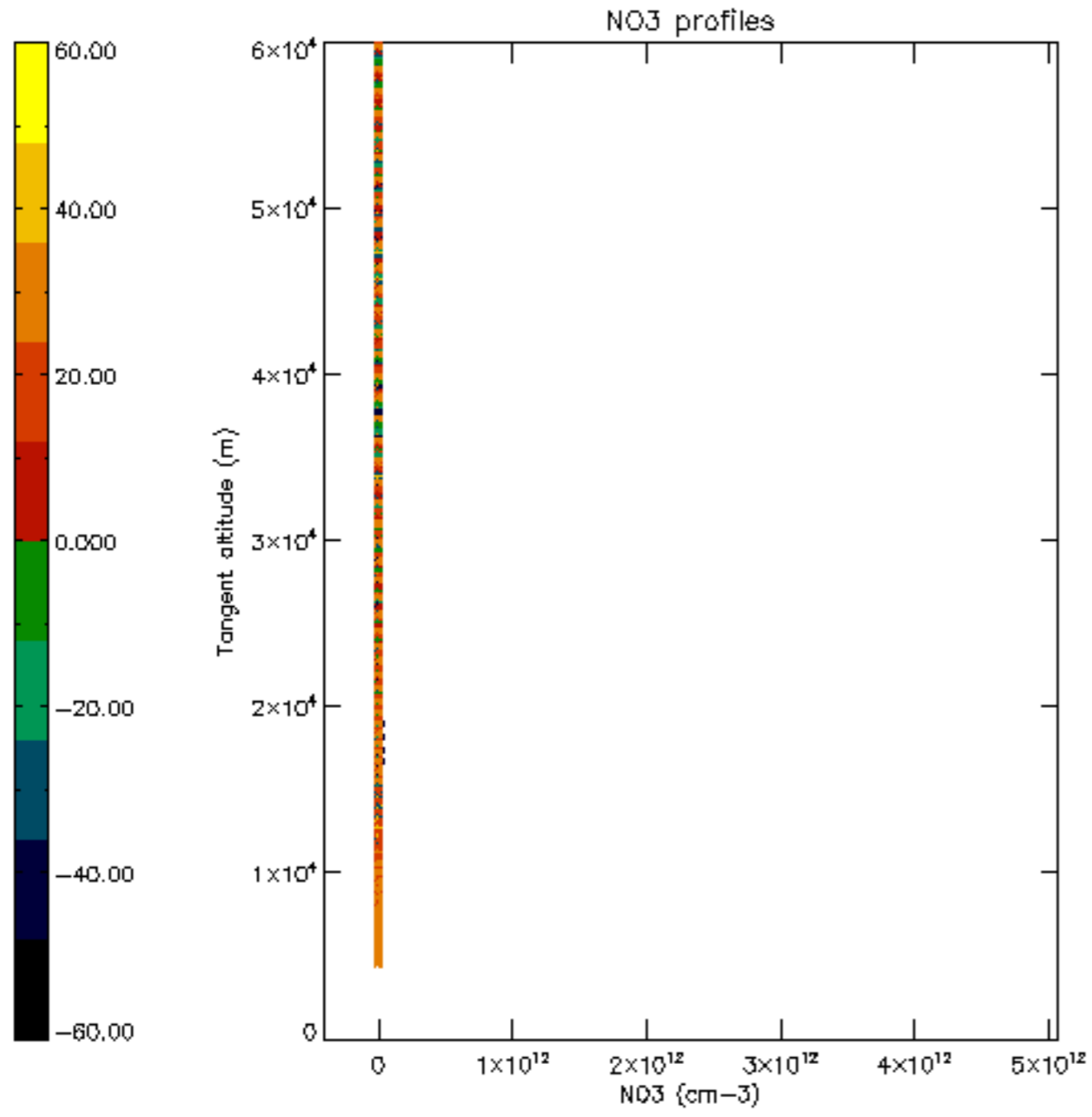


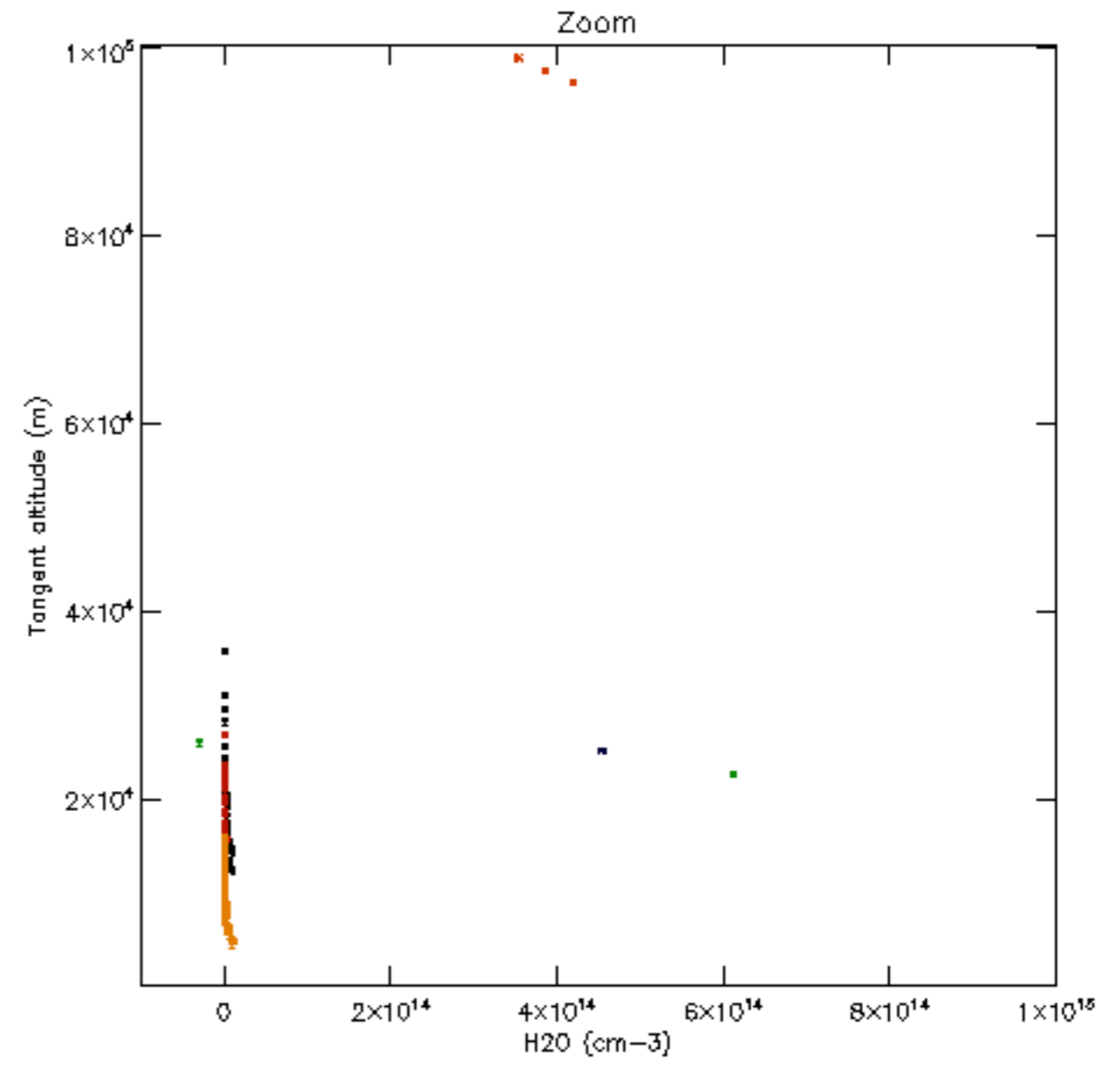
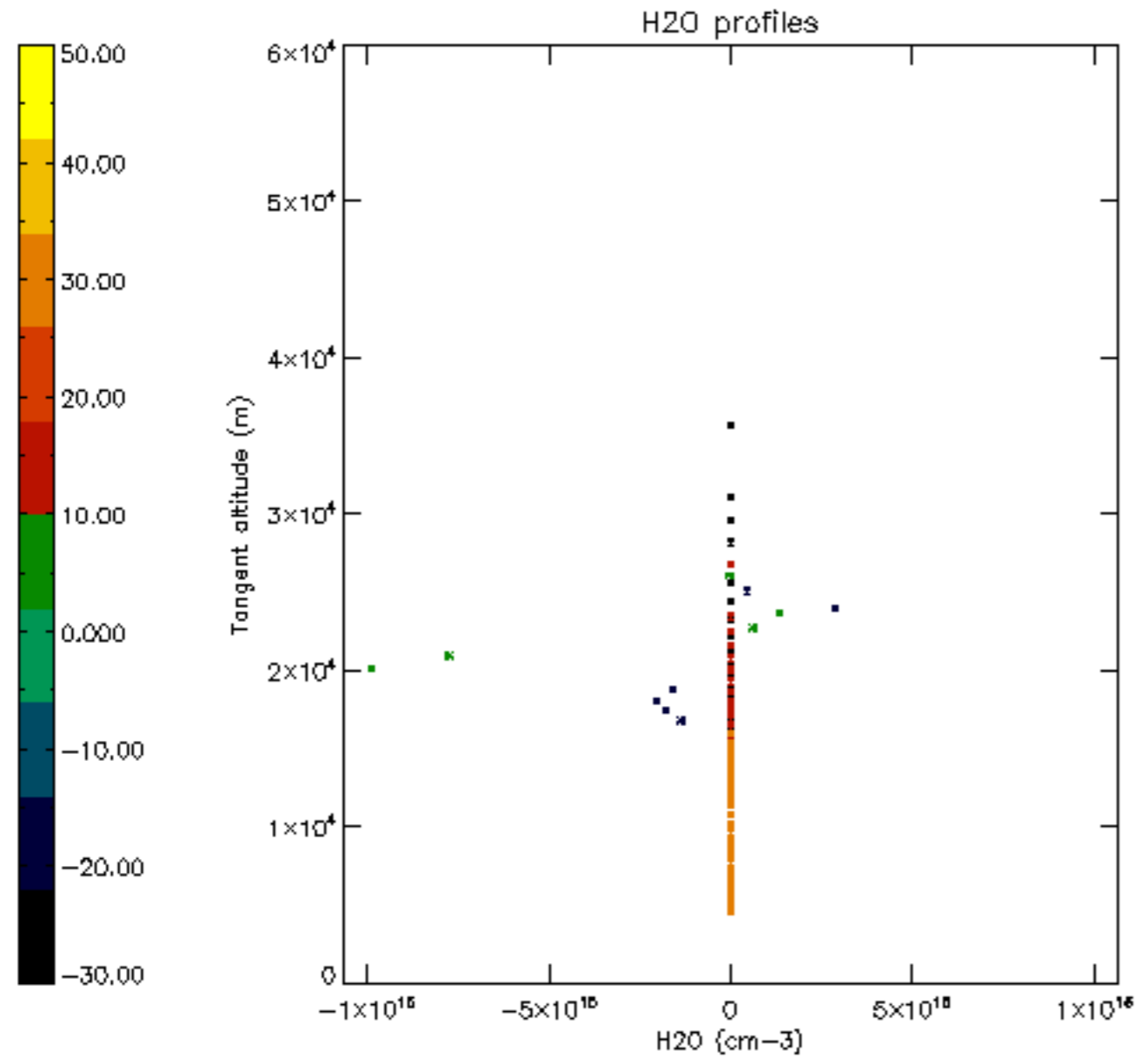


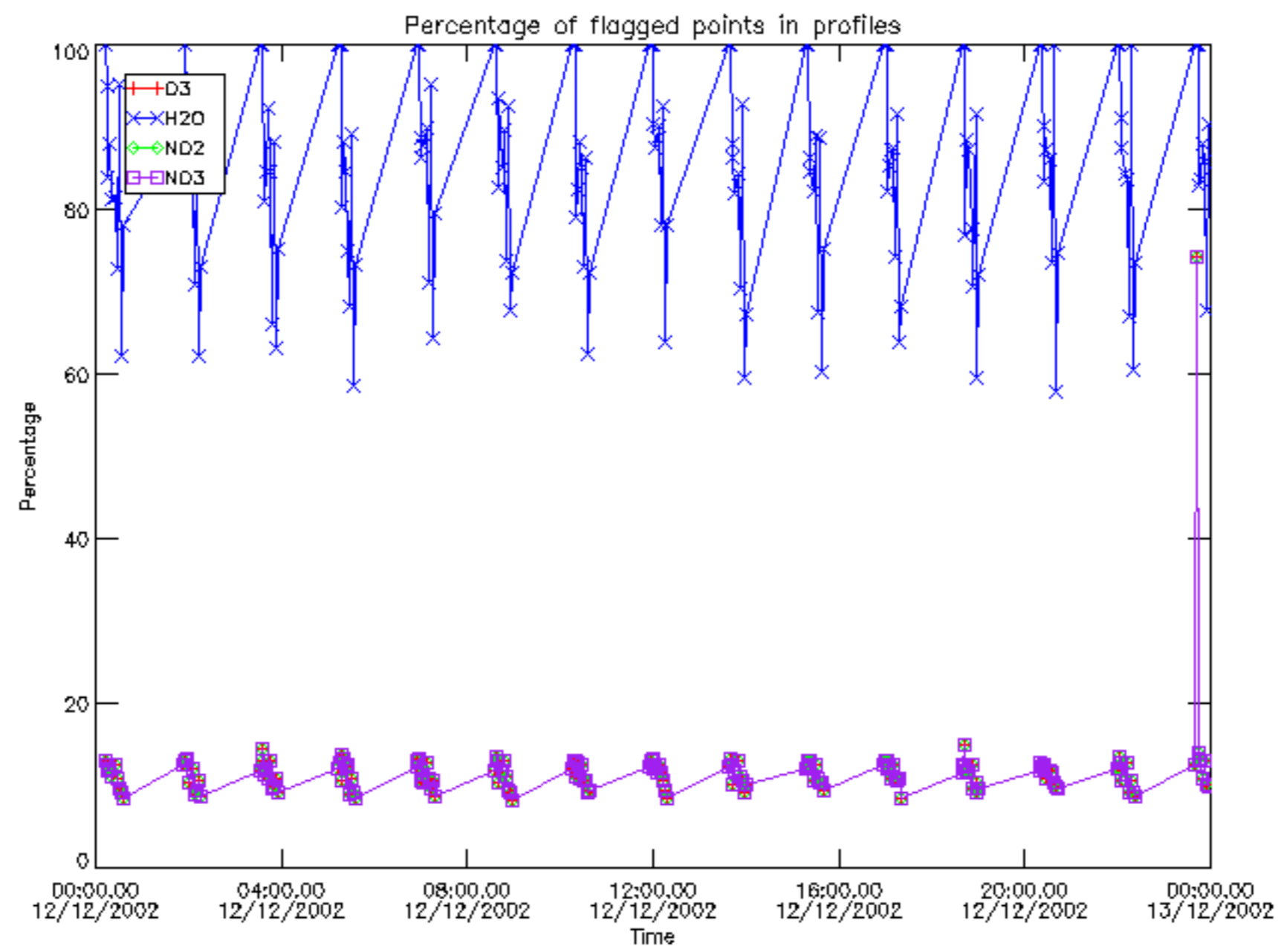




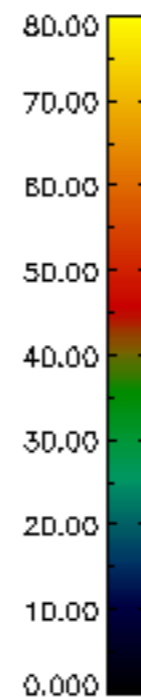
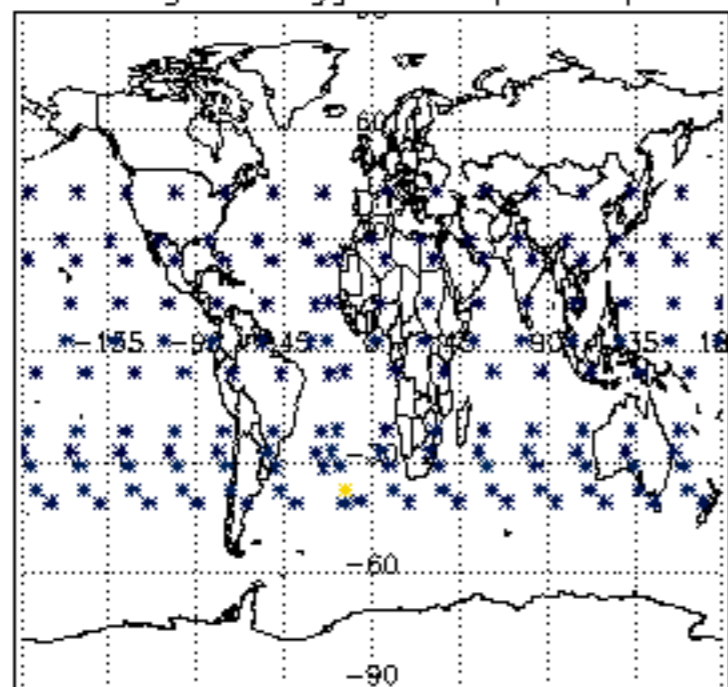




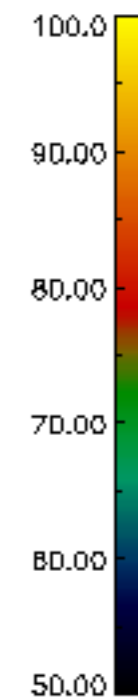
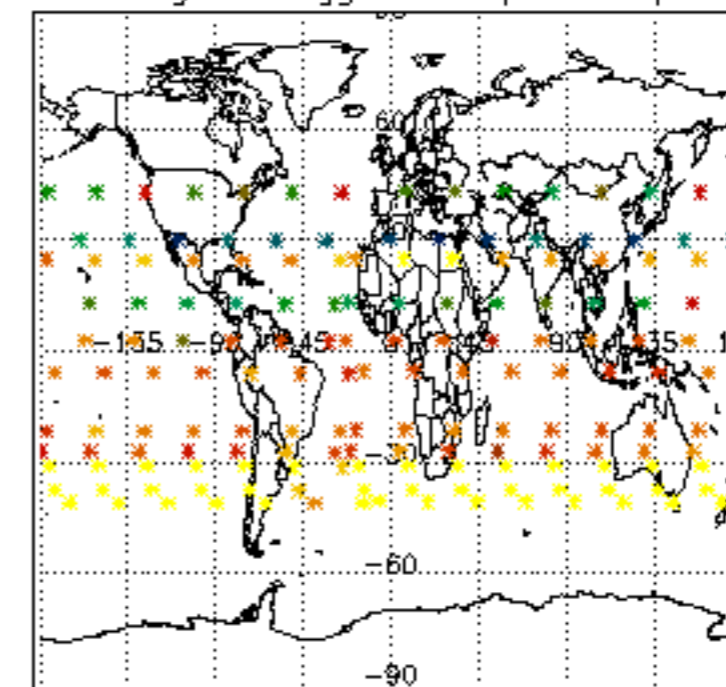




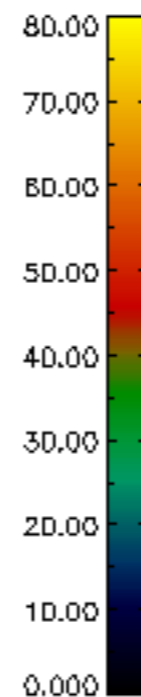
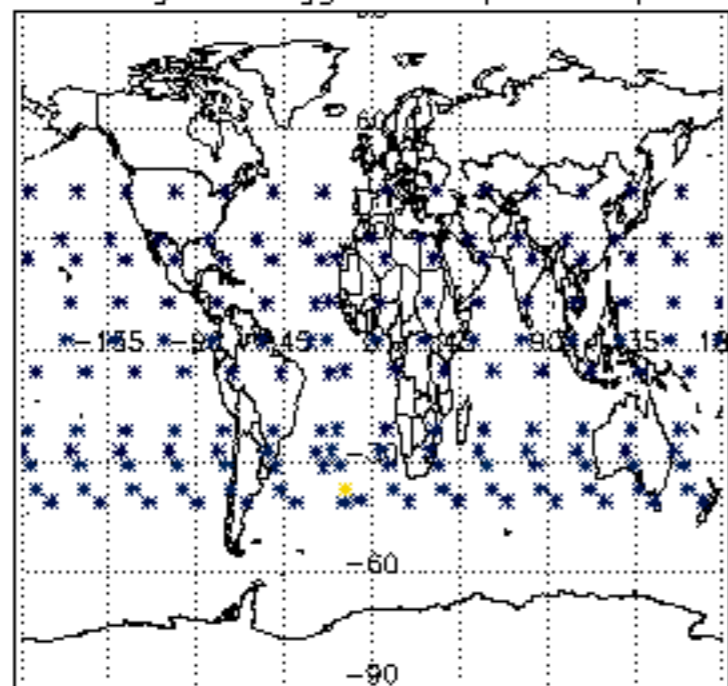
Percentage of flagged data per D3 profile



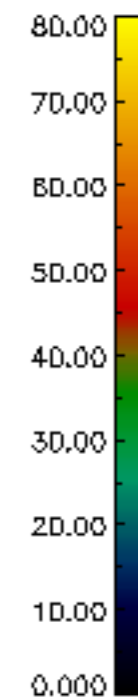
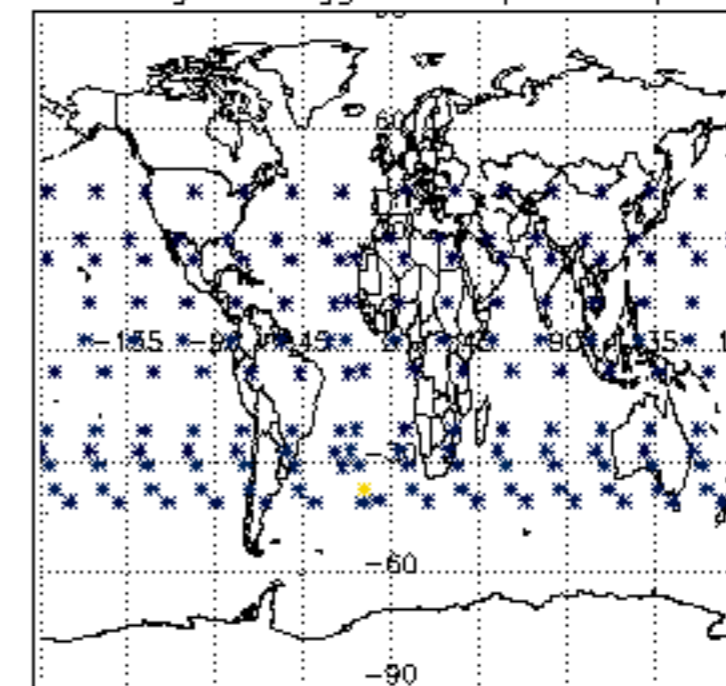
Percentage of flagged data per H2O profile

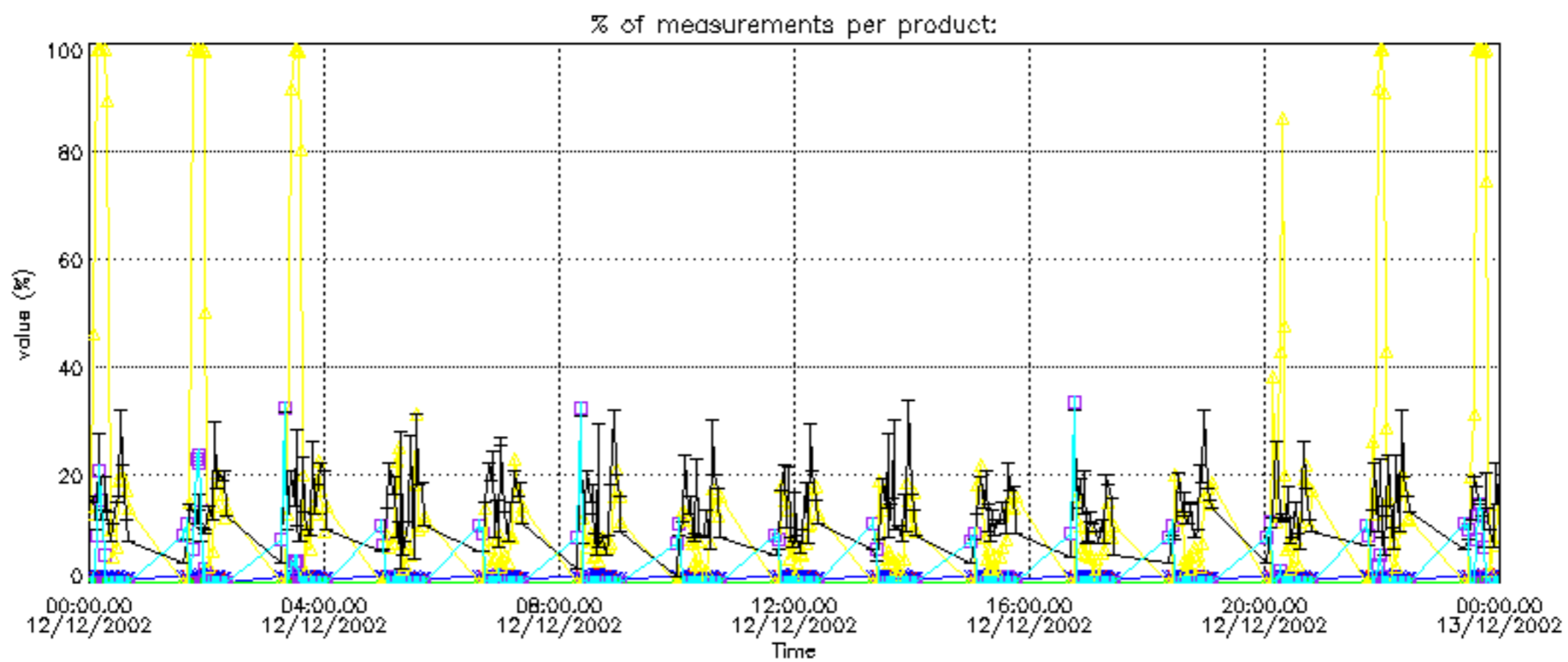


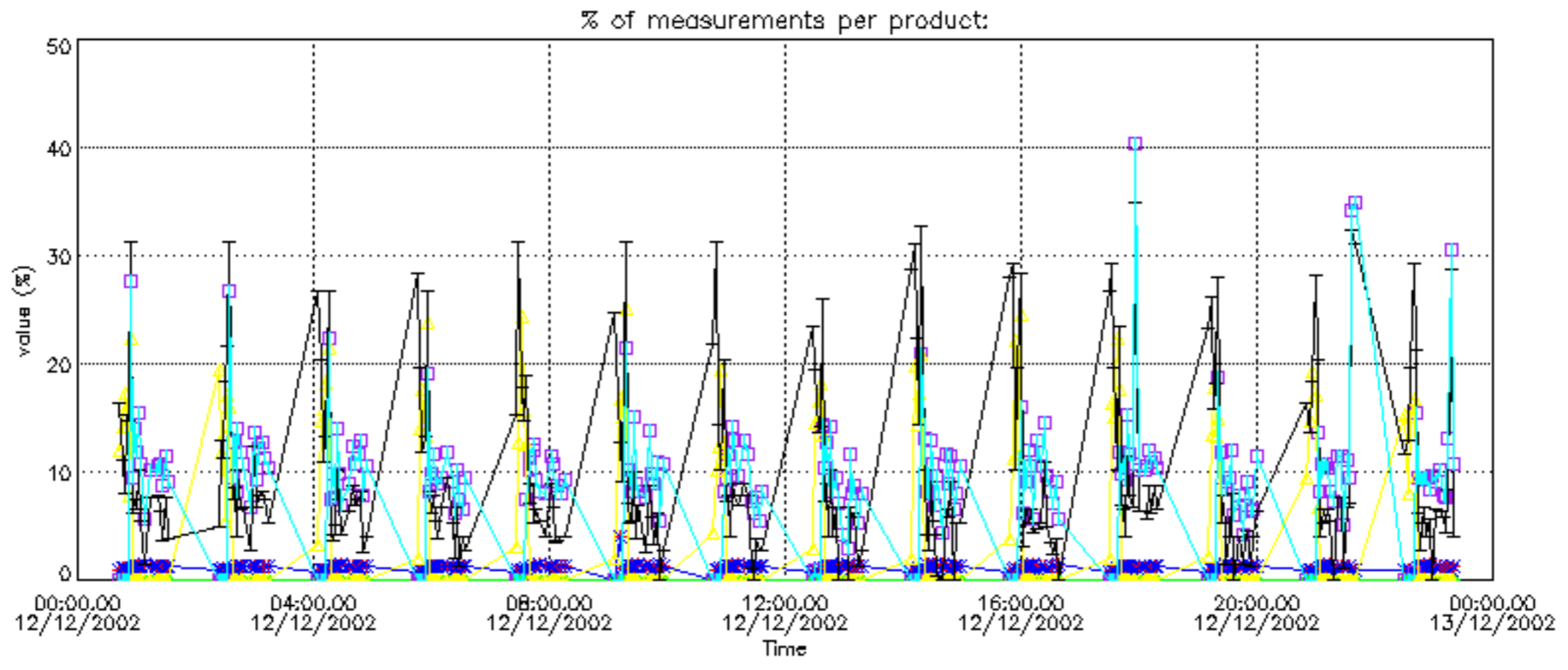
Percentage of flagged data per NO2 profile



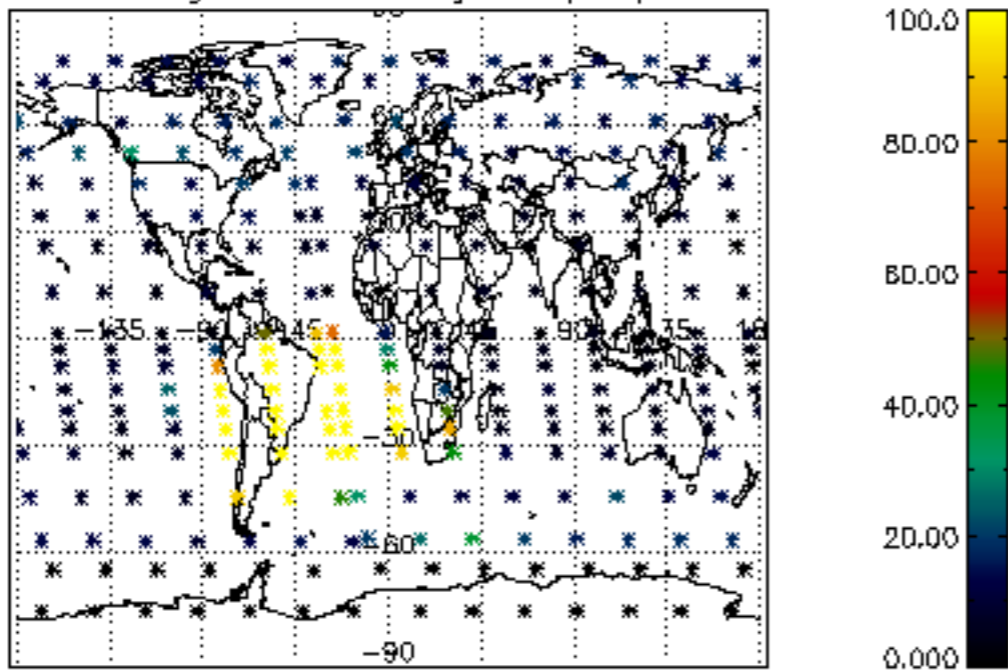
Percentage of flagged data per NO3 profile



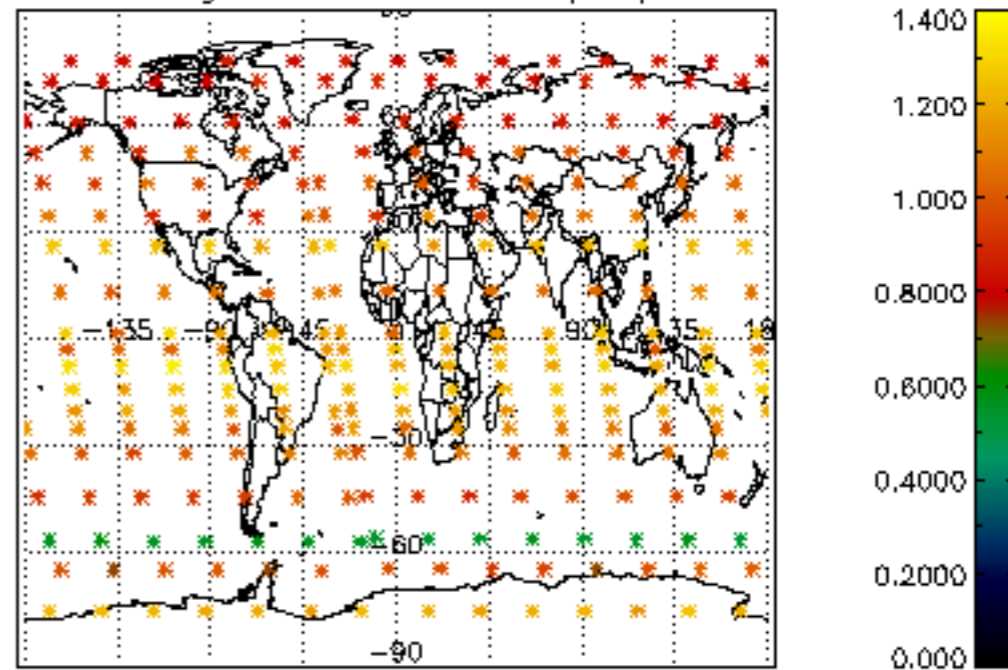




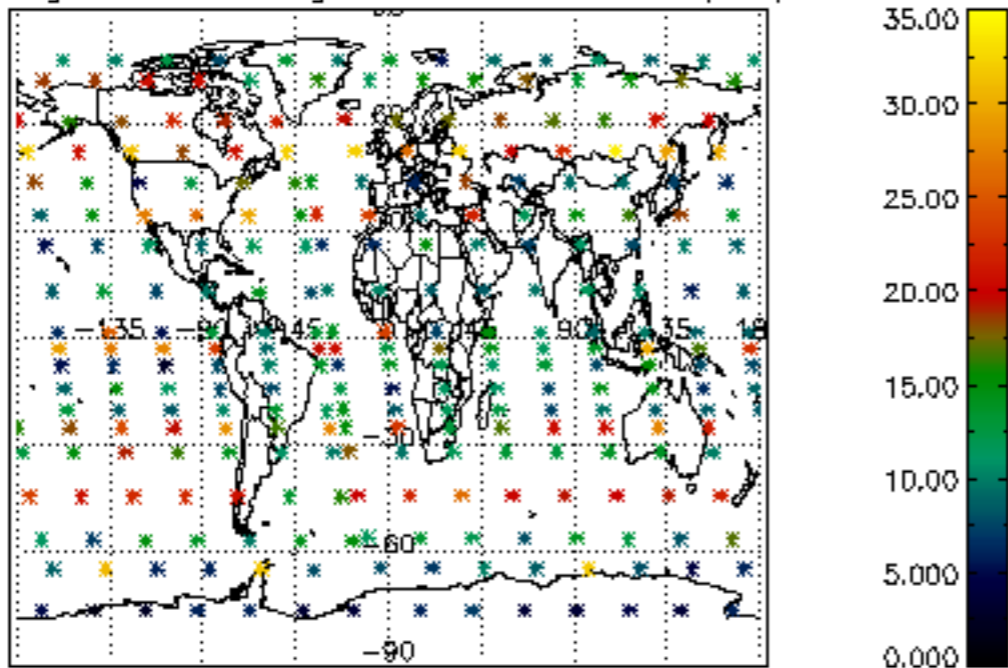
Percentage of cosmic ray hits per profile



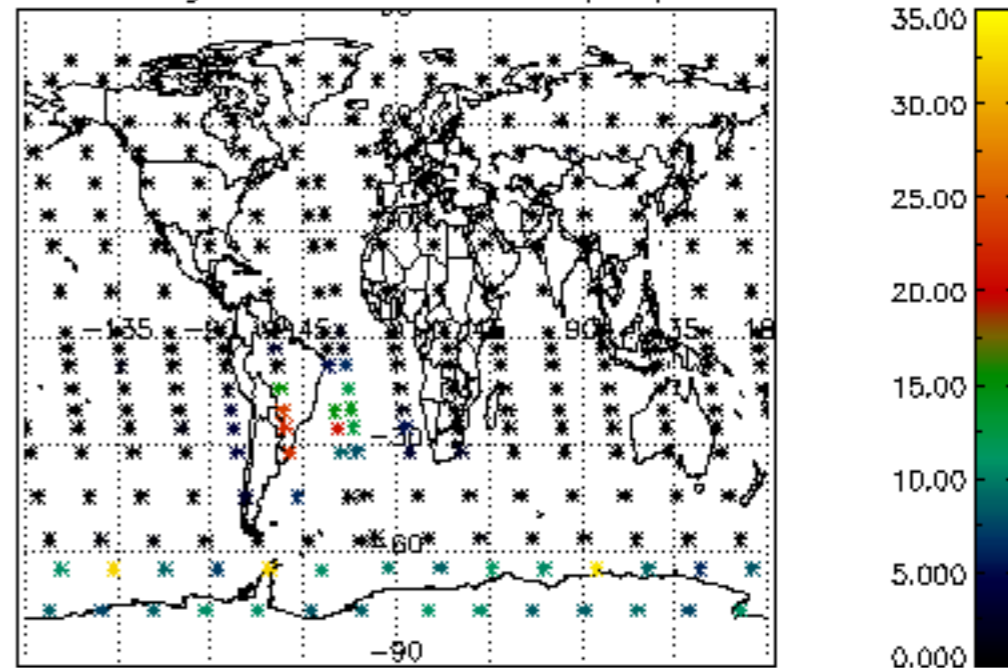
Percentage of datation errors per profile



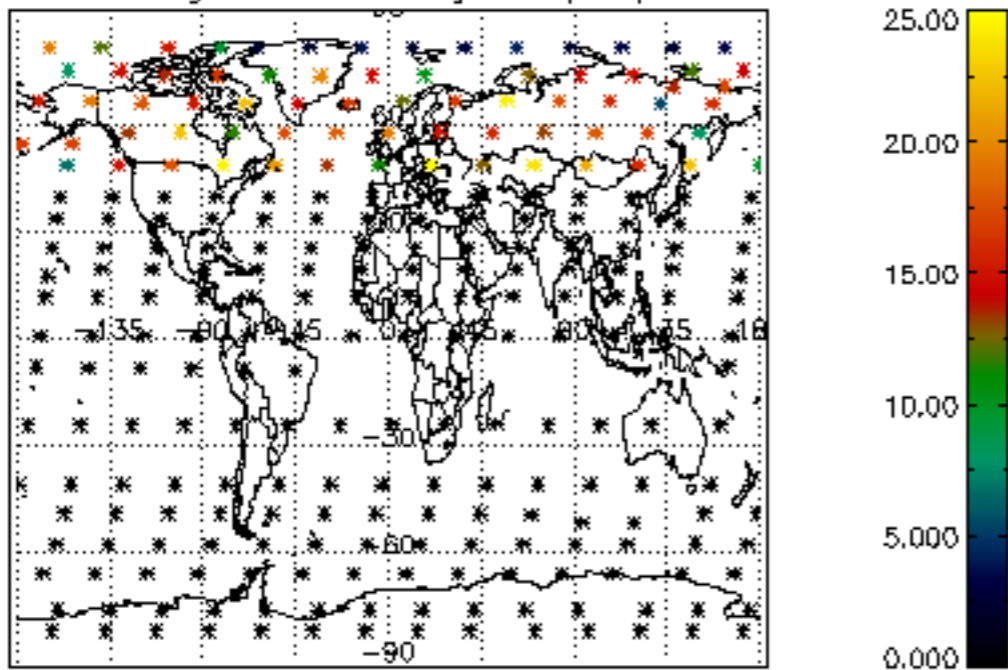
Percentage of star falling outside central band per profile



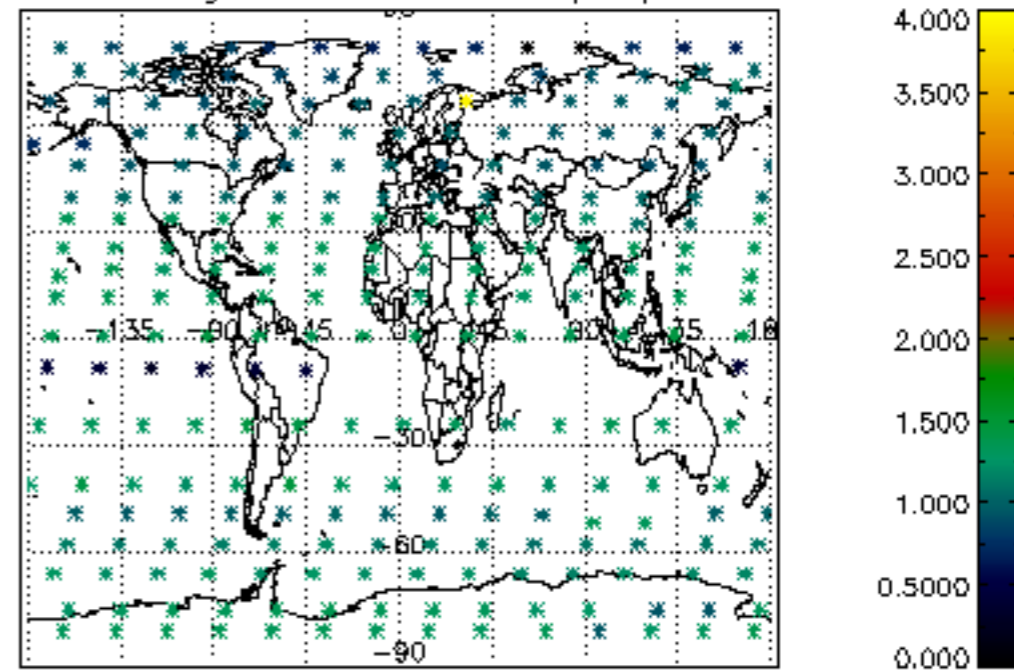
Percentage of saturation errors per profile



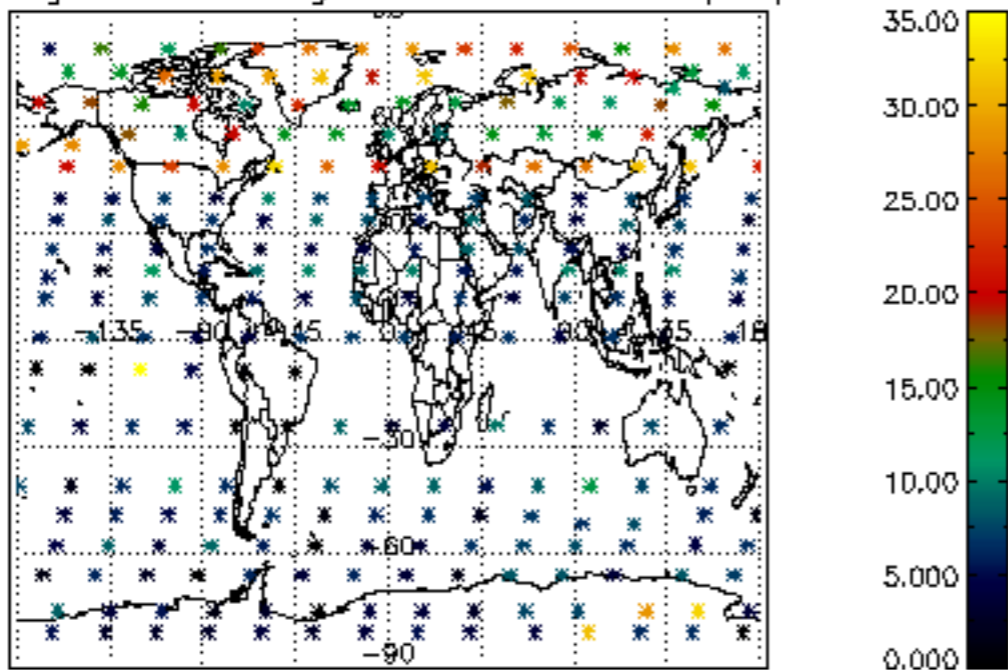
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

