

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 17:50:52
Data source version	GOMOS/6.01
Start time of products	23-08-2002 (23AUG2002 00:00:00)
Stop time of products	24-08-2002 (24AUG2002 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	68
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

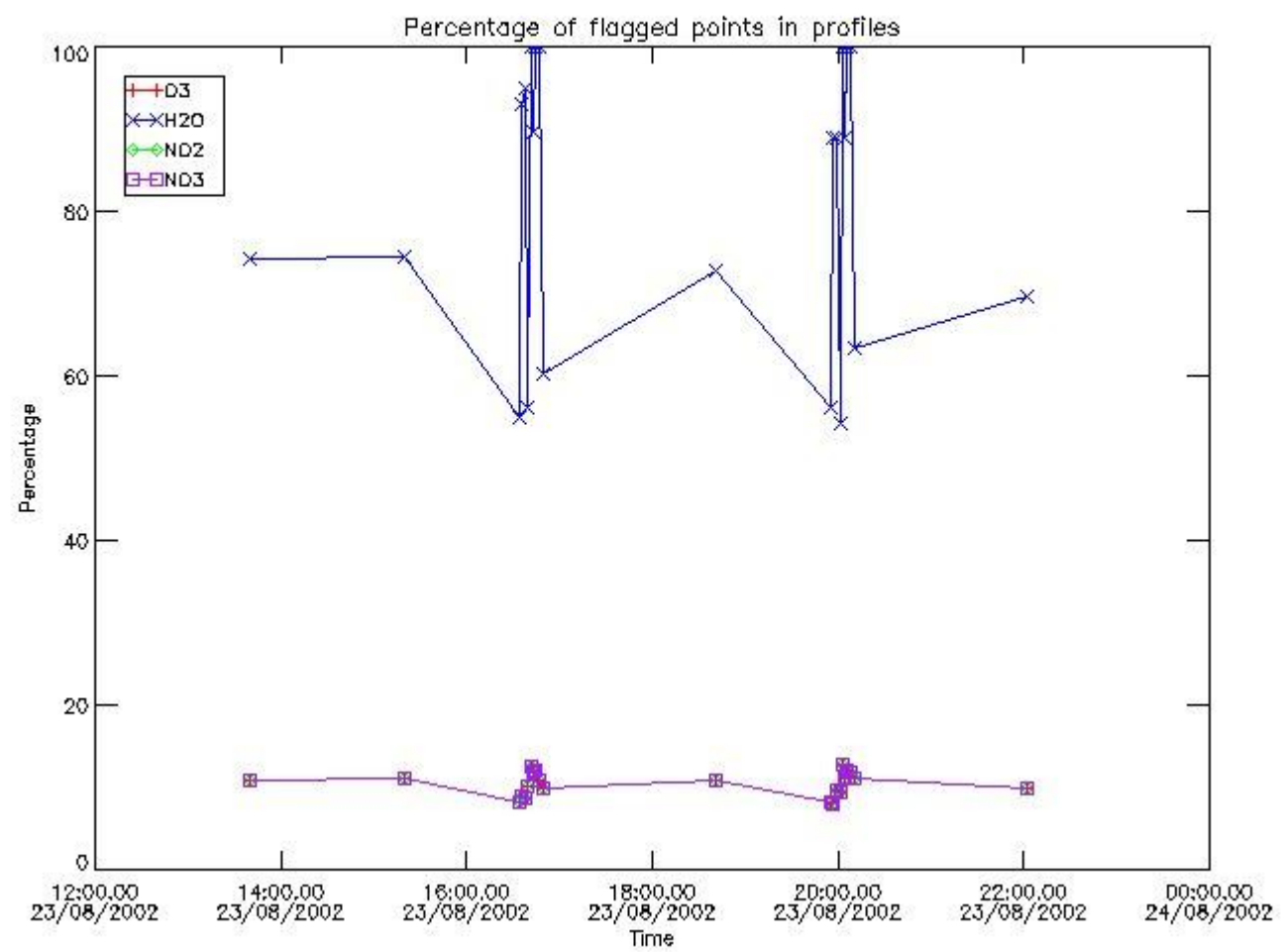
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20020823_133931_000000472008_00454_02512_8361.N1	23-AUG-2002 13:39:31	Dark	47.000	9	Alp Eri	0.45300	24000.	94	2512	No
2	GOM_NL__2PRFIN20020823_134439_000000412008_00454_02512_8362.N1	23-AUG-2002 13:44:39	Straylight	40.500	148	Alp Tuc	2.8780	4100.0	81	2512	No
3	GOM_NL__2PRFIN20020823_134658_000000462008_00454_02512_8363.N1	23-AUG-2002 13:46:58	Straylight	45.500	45	Alp Pav	1.9400	26000.	91	2512	No
4	GOM_NL__2PRFIN20020823_135109_000000412008_00454_02512_8364.N1	23-AUG-2002 13:51:09	Straylight	41.000	172	Gam Gru	3.0030	13100.	82	2512	No
5	GOM_NL__2PRFIN20020823_152008_000000462008_00455_02513_8361.N1	23-AUG-2002 15:20:08	Dark	45.500	9	Alp Eri	0.45300	24000.	91	2513	No
6	GOM_NL__2PRFIN20020823_152515_000000402008_00455_02513_8362.N1	23-AUG-2002 15:25:15	Straylight	40.000	148	Alp Tuc	2.8780	4100.0	80	2513	No
7	GOM_NL__2PRFIN20020823_152734_000000382008_00455_02513_8363.N1	23-AUG-2002 15:27:34	Straylight	37.500	45	Alp Pav	1.9400	26000.	75	2513	No
8	GOM_NL__2PRFIN20020823_152852_000000422008_00455_02513_8364.N1	23-AUG-2002 15:28:52	Straylight	41.500	31	Alp Gru	1.7340	15200.	83	2513	No
9	GOM_NL__2PRFIN20020823_153253_000000542008_00455_02513_8365.N1	23-AUG-2002 15:32:53	Straylight	54.000	18	24Alp PsA	1.1660	9700.0	108	2513	No
10	GOM_NL__2PRFIN20020823_153805_000000442008_00455_02513_8366.N1	23-AUG-2002 15:38:05	Bright	44.000	142	49Del Cap	2.8500	8900.0	88	2513	No
11	GOM_NL__2PRFIN20020823_154121_000000422008_00455_02513_8367.N1	23-AUG-2002 15:41:21	Bright	41.500	154	22Bet Aqr	2.8990	5700.0	83	2513	No
12	GOM_NL__2PRFIN20020823_154304_000000462008_00455_02513_8368.N1	23-AUG-2002 15:43:04	Bright	46.000	162	34Alp Aqr	2.9440	5350.0	92	2513	No
13	GOM_NL__2PRFIN20020823_154604_000000372008_00455_02513_8369.N1	23-AUG-2002 15:46:04	Bright	36.500	11	53Alp Aql	0.76500	8000.0	73	2513	No
14	GOM_NL__2PRFIN20020823_155015_000000612008_00455_02513_8370.N1	23-AUG-2002 15:50:15	Bright	60.500	90	54Alp Peg	2.4870	11000.	121	2513	No
15	GOM_NL__2PRFIN20020823_155250_000000382008_00455_02513_8371.N1	23-AUG-2002 15:52:50	Bright	37.500	92	53Eps Cyg	2.5000	4500.0	75	2513	No
16	GOM_NL__2PRFIN20020823_155528_000000362008_00455_02513_8372.N1	23-AUG-2002 15:55:28	Bright	36.000	5	3Alp Lyr	0.033000	11000.	72	2513	No
17	GOM_NL__2PRFIN20020823_160058_000000852008_00455_02513_8373.N1	23-AUG-2002 16:00:58	Bright	85.000	58	21Alp And	2.0730	11000.	170	2513	No
18	GOM_NL__2PRFIN20020823_160508_000000482008_00455_02513_8374.N1	23-AUG-2002 16:05:08	Bright	47.500	74	11Bet Cas	2.2680	6600.0	95	2513	No
19	GOM_NL__2PRFIN20020823_160722_000000492008_00455_02513_8375.N1	23-AUG-2002 16:07:22	Bright	48.500	76	27Gam Cas	2.3000	30000.	97	2513	No
20	GOM_NL__2PRFIN20020823_161051_000001482008_00455_02513_8376.N1	23-AUG-2002 16:10:51	Bright	148.00	53	43Bet And	2.0480	3300.0	296	2513	No
21	GOM_NL__2PRFIN20020823_161502_000000992008_00455_02513_8377.N1	23-AUG-2002 16:15:02	Bright	98.500	73	57Gam1And	2.2600	13100.	197	2513	No
22	GOM_NL__2PRFIN20020823_161827_000000562008_00455_02513_8378.N1	23-AUG-2002 16:18:27	Bright	56.000	175	39Del Per	3.0100	19400.	112	2513	No
23	GOM_NL__2PRFIN20020823_162202_000002552008_00455_02513_8379.N1	23-AUG-2002 16:22:02	Twilight	255.00	173	4Bet Tri	3.0040	8900.0	510	2513	No
24	GOM_NL__2PRFIN20020823_162737_000000612008_00455_02513_8380.N1	23-AUG-2002 16:27:37	Twilight	61.000	28	12Bet Tau	1.6500	15200.	122	2513	No
25	GOM_NL__2PRFIN20020823_163032_000000482008_00455_02513_8381.N1	23-AUG-2002 16:30:32	Twilight	48.000	44	24Gam Gem	1.9280	11000.	96	2513	No
26	GOM_NL__2PRFIN20020823_163203_000000422008_00455_02513_8382.N1	23-AUG-2002 16:32:03	Twilight	41.500	153	3Bet CMi	2.8940	13100.	83	2513	No
27	GOM_NL__2PRFIN20020823_163426_000000622008_00455_02513_8383.N1	23-AUG-2002 16:34:26	Dark	61.500	14	58Alp Ori	0.87000	3000.0	123	2513	No
28	GOM_NL__2PRFIN20020823_163602_000000582008_00455_02513_8384.N1	23-AUG-2002 16:36:02	Dark	57.500	27	24Gam Ori	1.6360	26000.	115	2513	No
29	GOM_NL__2PRFIN20020823_163759_000000592008_00455_02513_8385.N1	23-AUG-2002 16:37:59	Dark	59.000	30	46Eps Ori	1.6940	30000.	118	2513	No
30	GOM_NL__2PRFIN20020823_163951_000000512008_00455_02513_8386.N1	23-AUG-2002 16:39:51	Dark	50.500	1	9Alp CMa	-1.4400	11000.	101	2513	No
31	GOM_NL__2PRFIN20020823_164120_000000412008_00455_02513_8387.N1	23-AUG-2002 16:41:20	Dark	41.000	179	24Omi2CMa	3.0320	24000.	82	2513	No
32	GOM_NL__2PRFIN20020823_164247_000000442008_00455_02513_8388.N1	23-AUG-2002 16:42:47	Dark	43.500	23	21Eps CMa	1.5020	26000.	87	2513	No
33	GOM_NL__2PRFIN20020823_164456_000000422008_00455_02513_8389.N1	23-AUG-2002 16:44:56	Dark	42.000	70	Zet Pup	2.2460	39000.	84	2513	No
34	GOM_NL__2PRFIN20020823_164636_000000472008_00455_02513_8390.N1	23-AUG-2002 16:46:36	Dark	47.000	108	Alp Col	2.6520	15200.	94	2513	No
35	GOM_NL__2PRFIN20020823_164938_000000522008_00455_02513_8391.N1	23-AUG-2002 16:49:38	Dark	52.000	2	Alp Car	-0.73600	7000.0	104	2513	No
36	GOM_NL__2PRFIN20020823_184121_000000472008_00457_02515_8362.N1	23-AUG-2002 18:41:21	Dark	46.500	9	Alp Eri	0.45300	24000.	93	2515	No
37	GOM_NL__2PRFIN20020823_184627_000000482008_00457_02515_8363.N1	23-AUG-2002 18:46:27	Straylight	47.500	148	Alp Tuc	2.8780	4100.0	95	2515	No
38	GOM_NL__2PRFIN20020823_184846_000000402008_00457_02515_8364.N1	23-AUG-2002 18:48:46	Straylight	39.500	45	Alp Pav	1.9400	26000.	79	2515	No
39	GOM_NL__2PRFIN20020823_185005_000000432008_00457_02515_8365.N1	23-AUG-2002 18:50:05	Straylight	42.500	31	Alp Gru	1.7340	15200.	85	2515	No
40	GOM_NL__2PRFIN20020823_185405_000000512008_00457_02515_8366.N1	23-AUG-2002 18:54:05	Straylight	50.500	18	24Alp PsA	1.1660	9700.0	101	2515	No
41	GOM_NL__2PRFIN20020823_185917_000000512008_00457_02515_8367.N1	23-AUG-2002 18:59:17	Bright	50.500	142	49Del Cap	2.8500	8900.0	101	2515	No
42	GOM_NL__2PRFIN20020823_190233_000000412008_00457_02515_8368.N1	23-AUG-2002 19:02:33	Bright	41.000	154	22Bet Aqr	2.8990	5700.0	82	2515	No

43	GOM_NL__2PRFIN20020823_190416_000000472008_00457_02515_8369.N1	23-AUG-2002 19:04:16	Bright	46.500	162	34Alp Aqr	2.9440	5350.0	93	2515	No
44	GOM_NL__2PRFIN20020823_190716_000000372008_00457_02515_8370.N1	23-AUG-2002 19:07:16	Bright	37.000	11	53Alp Aql	0.76500	8000.0	74	2515	No
45	GOM_NL__2PRFIN20020823_191125_000000612008_00457_02515_8371.N1	23-AUG-2002 19:11:25	Bright	60.500	90	54Alp Peg	2.4870	11000.	121	2515	No
46	GOM_NL__2PRFIN20020823_191401_000000402008_00457_02515_8372.N1	23-AUG-2002 19:14:01	Bright	40.000	92	53Eps Cyg	2.5000	4500.0	80	2515	No
47	GOM_NL__2PRFIN20020823_191641_000000422008_00457_02515_8373.N1	23-AUG-2002 19:16:41	Bright	41.500	5	3Alp Lyr	0.033000	11000.	83	2515	No
48	GOM_NL__2PRFIN20020823_192205_000000892008_00457_02515_8374.N1	23-AUG-2002 19:22:05	Bright	89.000	58	21Alp And	2.0730	11000.	178	2515	No
49	GOM_NL__2PRFIN20020823_192618_000000482008_00457_02515_8375.N1	23-AUG-2002 19:26:18	Bright	47.500	74	11Bet Cas	2.2680	6600.0	95	2515	No
50	GOM_NL__2PRFIN20020823_192831_000000502008_00457_02515_8376.N1	23-AUG-2002 19:28:31	Bright	50.000	76	27Gam Cas	2.3000	30000.	100	2515	No
51	GOM_NL__2PRFIN20020823_193157_000001372008_00457_02515_8377.N1	23-AUG-2002 19:31:57	Bright	137.00	53	43Bet And	2.0480	3300.0	274	2515	No
52	GOM_NL__2PRFIN20020823_193611_000001022008_00457_02515_8378.N1	23-AUG-2002 19:36:11	Bright	101.50	73	57Gam1And	2.2600	13100.	203	2515	No
53	GOM_NL__2PRFIN20020823_193935_000000862008_00457_02515_8379.N1	23-AUG-2002 19:39:35	Bright	86.000	175	39Del Per	3.0100	19400.	172	2515	No
54	GOM_NL__2PRFIN20020823_194310_000002552008_00457_02515_8380.N1	23-AUG-2002 19:43:10	Twilight	255.00	173	4Bet Tri	3.0040	8900.0	510	2515	No
55	GOM_NL__2PRFIN20020823_194849_000000612008_00457_02515_8381.N1	23-AUG-2002 19:48:49	Twilight	61.000	28	12Bet Tau	1.6500	15200.	122	2515	No
56	GOM_NL__2PRFIN20020823_195143_000000502008_00457_02515_8382.N1	23-AUG-2002 19:51:43	Twilight	49.500	44	24Gam Gem	1.9280	11000.	99	2515	No
57	GOM_NL__2PRFIN20020823_195315_000000412008_00457_02515_8383.N1	23-AUG-2002 19:53:15	Twilight	41.000	153	3Bet CMi	2.8940	13100.	82	2515	No
58	GOM_NL__2PRFIN20020823_195538_000000632008_00457_02515_8384.N1	23-AUG-2002 19:55:38	Dark	63.000	14	58Alp Ori	0.87000	3000.0	126	2515	No
59	GOM_NL__2PRFIN20020823_195713_000000642008_00457_02515_8385.N1	23-AUG-2002 19:57:13	Dark	64.000	27	24Gam Ori	1.6360	26000.	128	2515	No
60	GOM_NL__2PRFIN20020823_195912_000000592008_00457_02515_8386.N1	23-AUG-2002 19:59:12	Dark	58.500	30	46Eps Ori	1.6940	30000.	117	2515	No
61	GOM_NL__2PRFIN20020823_200104_000000542008_00457_02515_8387.N1	23-AUG-2002 20:01:04	Dark	54.000	1	9Alp CMa	-1.4400	11000.	108	2515	No
62	GOM_NL__2PRFIN20020823_200233_000000402008_00457_02515_8388.N1	23-AUG-2002 20:02:33	Dark	40.000	179	24Omi2CMa	3.0320	24000.	80	2515	No
63	GOM_NL__2PRFIN20020823_200400_000000462008_00457_02515_8389.N1	23-AUG-2002 20:04:00	Dark	46.000	23	21Eps CMa	1.5020	26000.	92	2515	No
64	GOM_NL__2PRFIN20020823_200608_000000432008_00457_02515_8390.N1	23-AUG-2002 20:06:08	Dark	42.500	70	Zet Pup	2.2460	39000.	85	2515	No
65	GOM_NL__2PRFIN20020823_200750_000000442008_00457_02515_8391.N1	23-AUG-2002 20:07:50	Dark	43.500	108	Alp Col	2.6520	15200.	87	2515	No
66	GOM_NL__2PRFIN20020823_201050_000000462008_00457_02515_8392.N1	23-AUG-2002 20:10:50	Dark	45.500	2	Alp Car	-0.73600	7000.0	91	2515	No
67	GOM_NL__2PRFIN20020823_220233_000000522008_00459_02517_8363.N1	23-AUG-2002 22:02:33	Dark	51.500	9	Alp Eri	0.45300	24000.	103	2517	No
68	GOM_NL__2PRFIN20020823_220739_000000422008_00459_02517_8364.N1	23-AUG-2002 22:07:39	Straylight	42.000	148	Alp Tuc	2.8780	4100.0	84	2517	No

3. Quality information per product

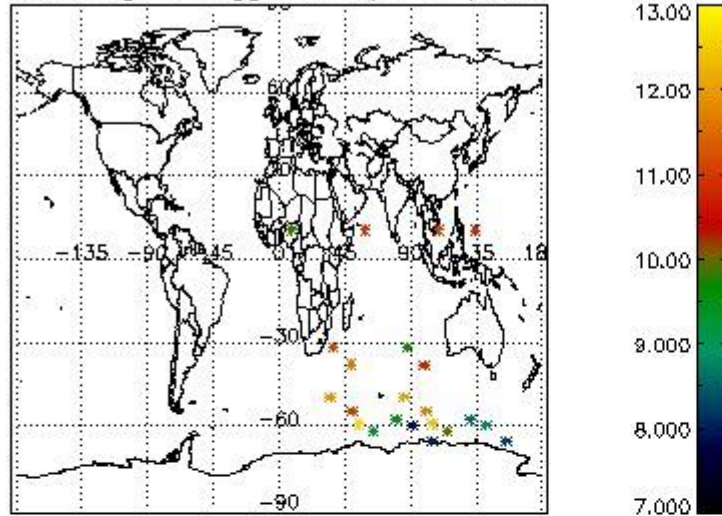
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

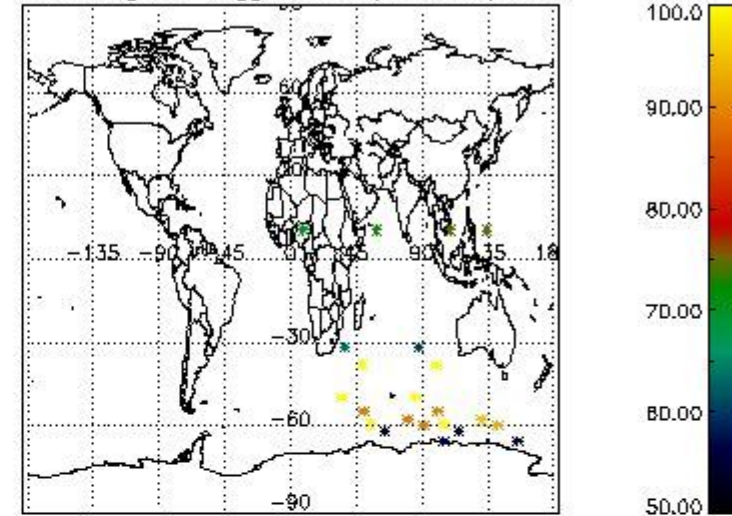


3.2 Plot quality information per product (world map)

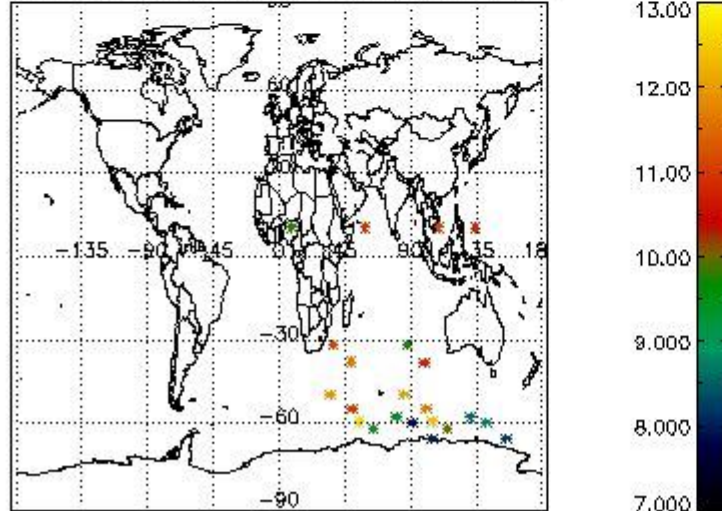
Percentage of flagged data per O3 profile



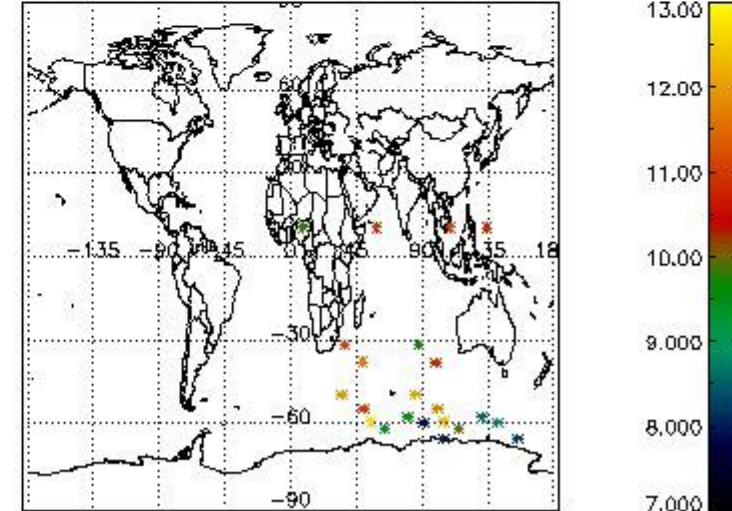
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

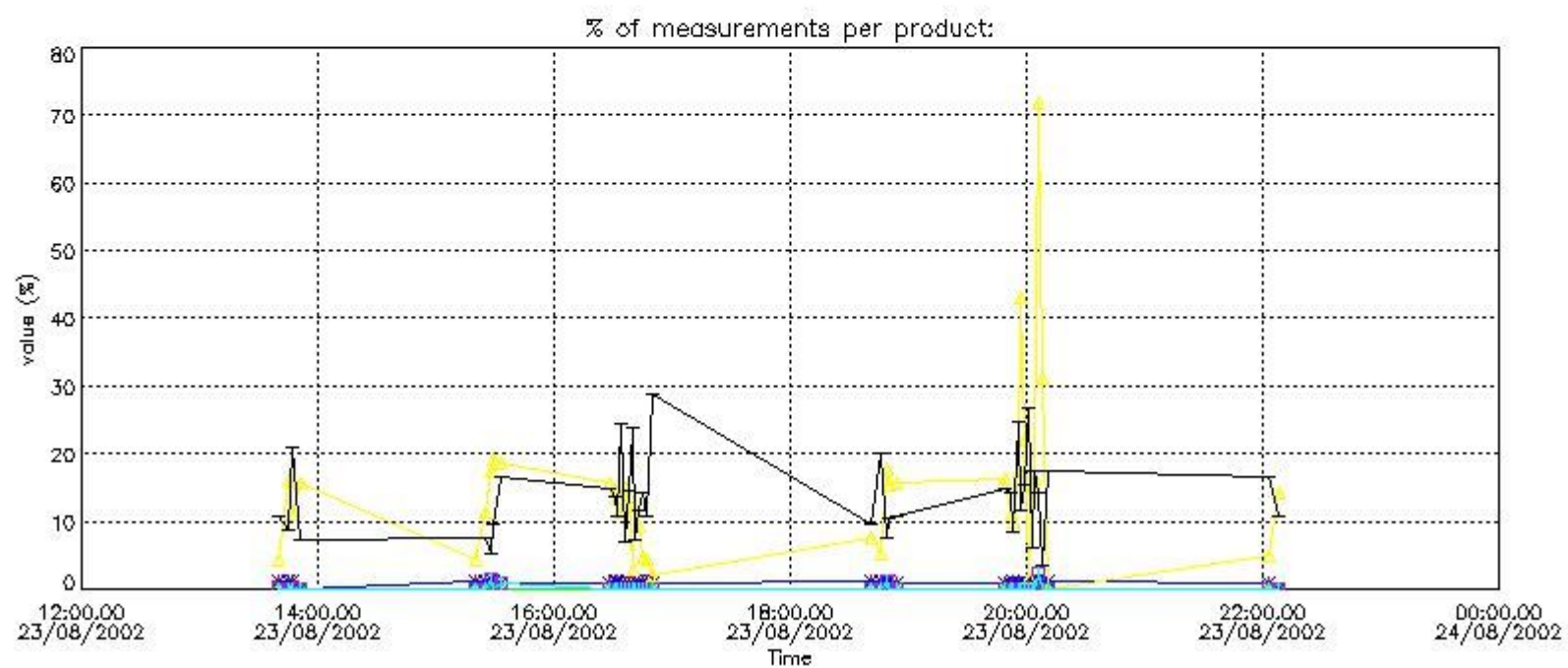
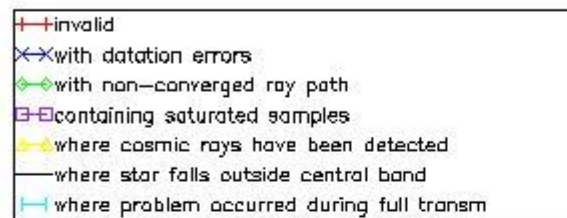


4. Level 1 quality information per product

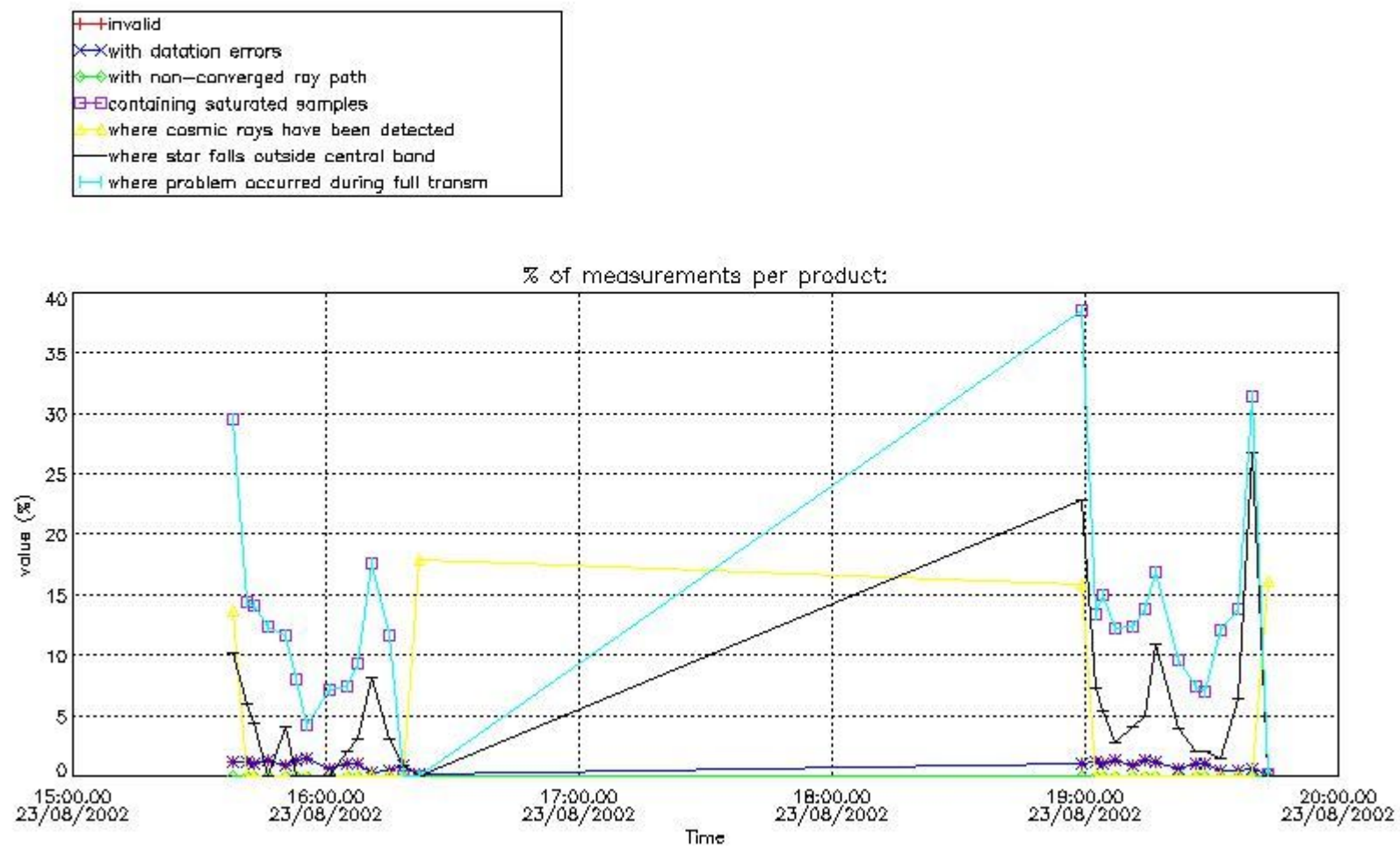
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



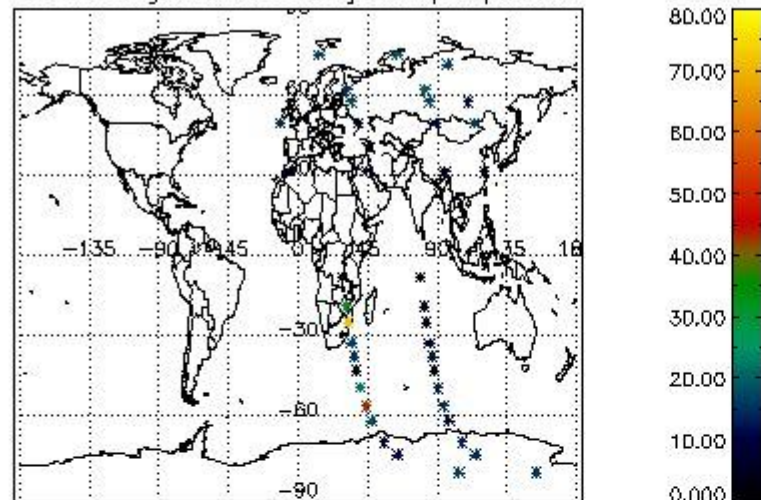
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



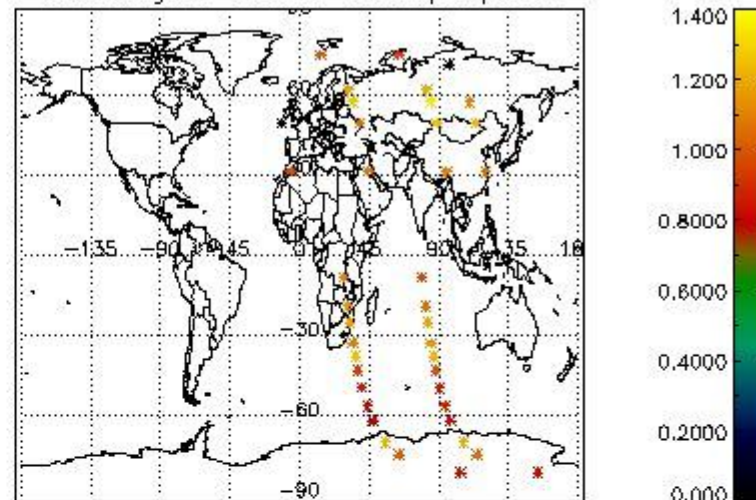
4.2 Plot quality information per product coming from level 1b processing (world map)

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

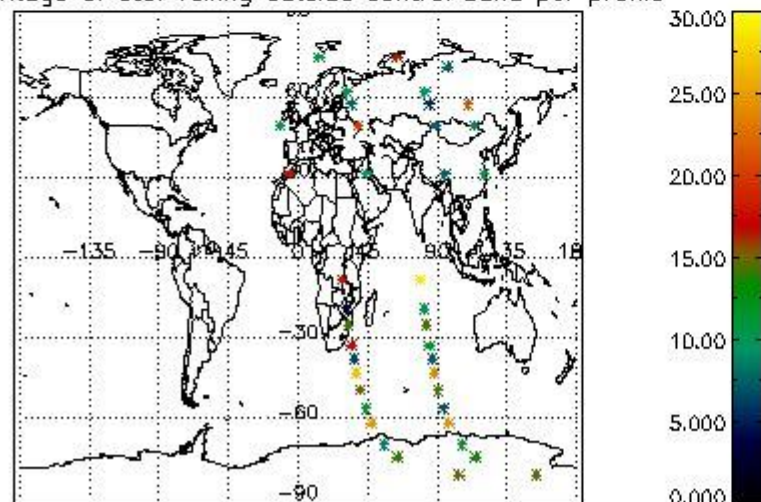
Percentage of cosmic ray hits per profile



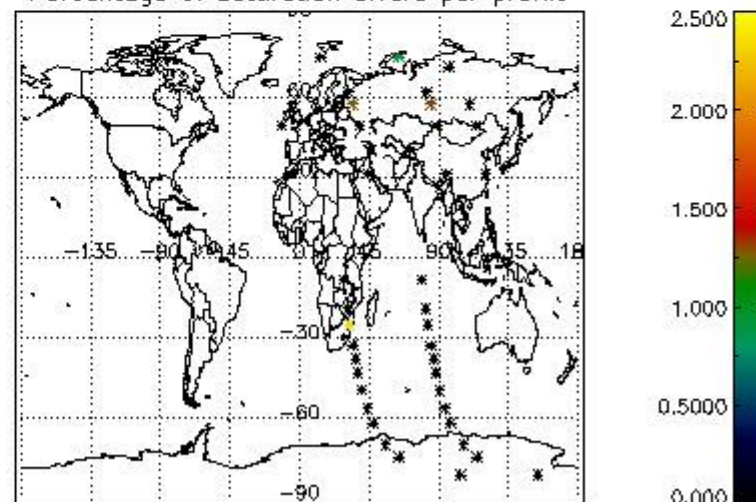
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

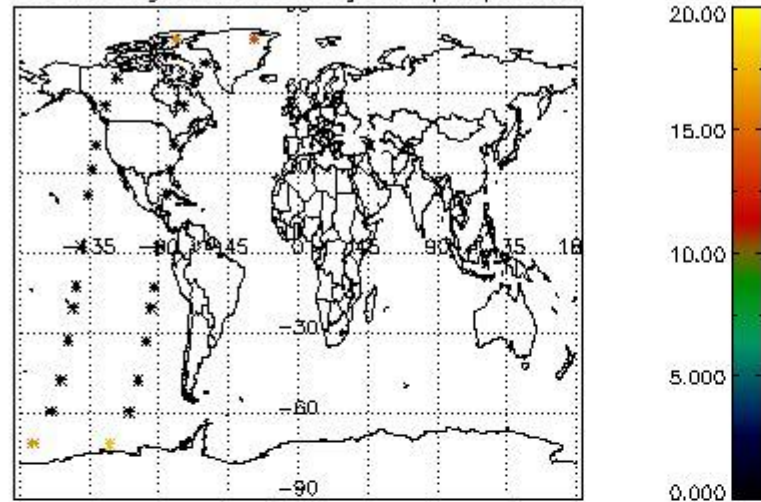


Percentage of saturation errors per profile

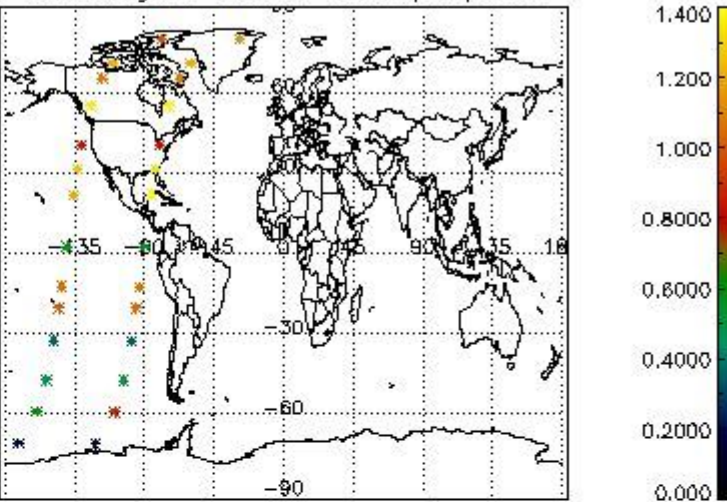


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

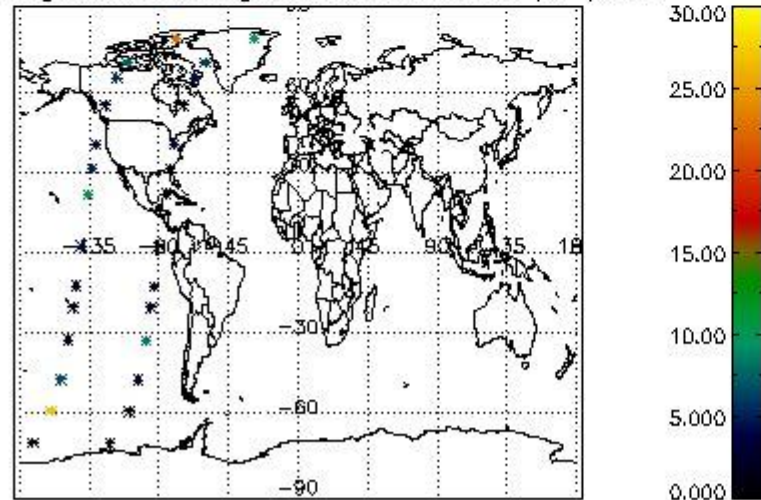
Percentage of cosmic ray hits per profile



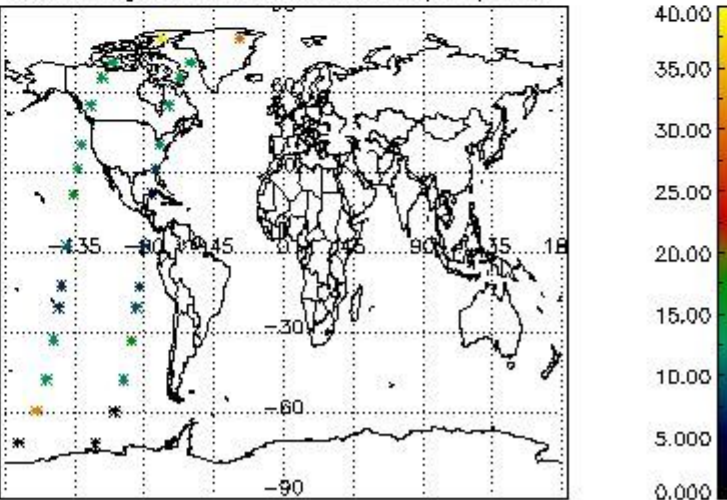
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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

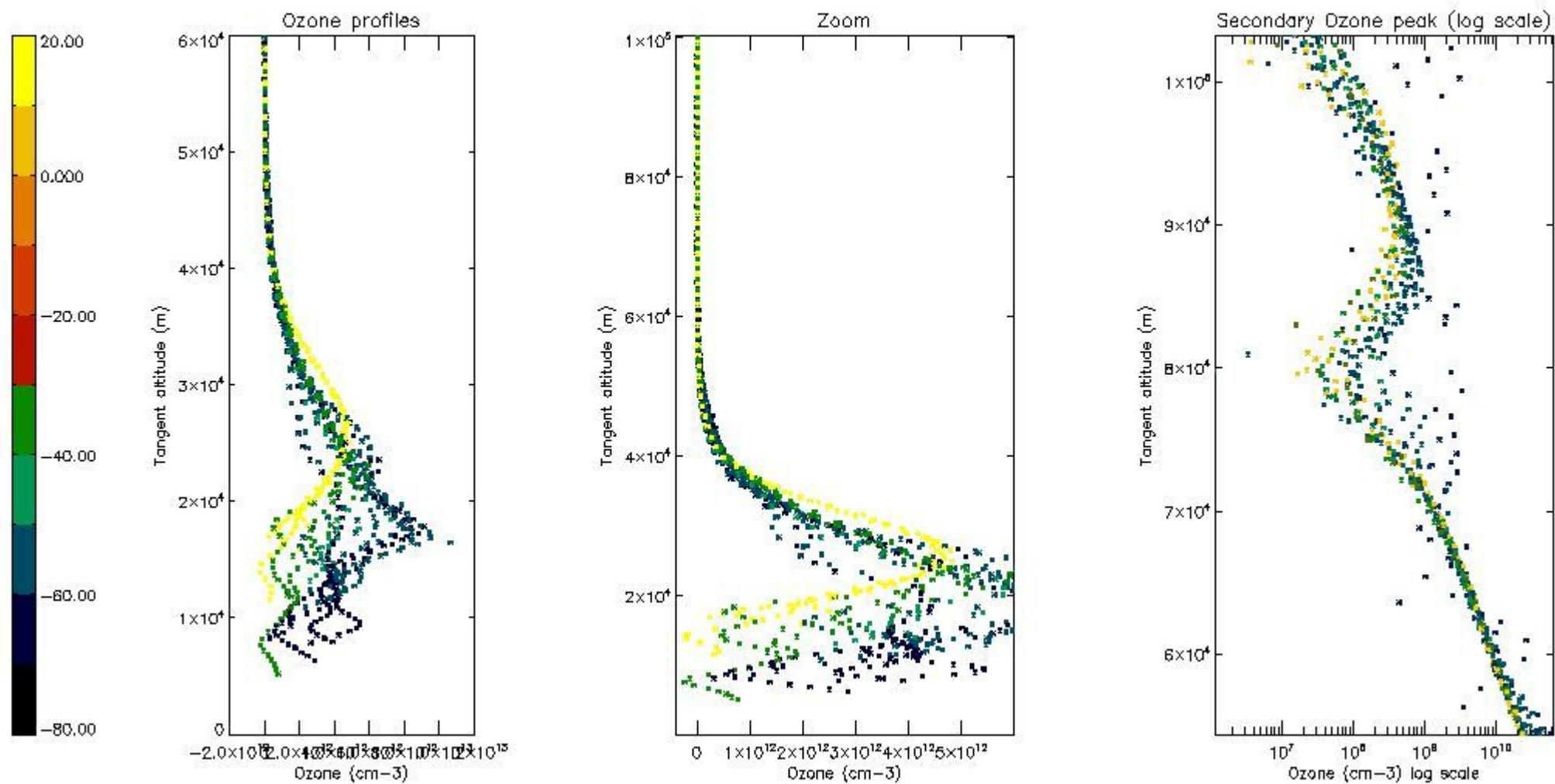
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	27
STD < 20	20

STD < 10	18
STD < 5	15

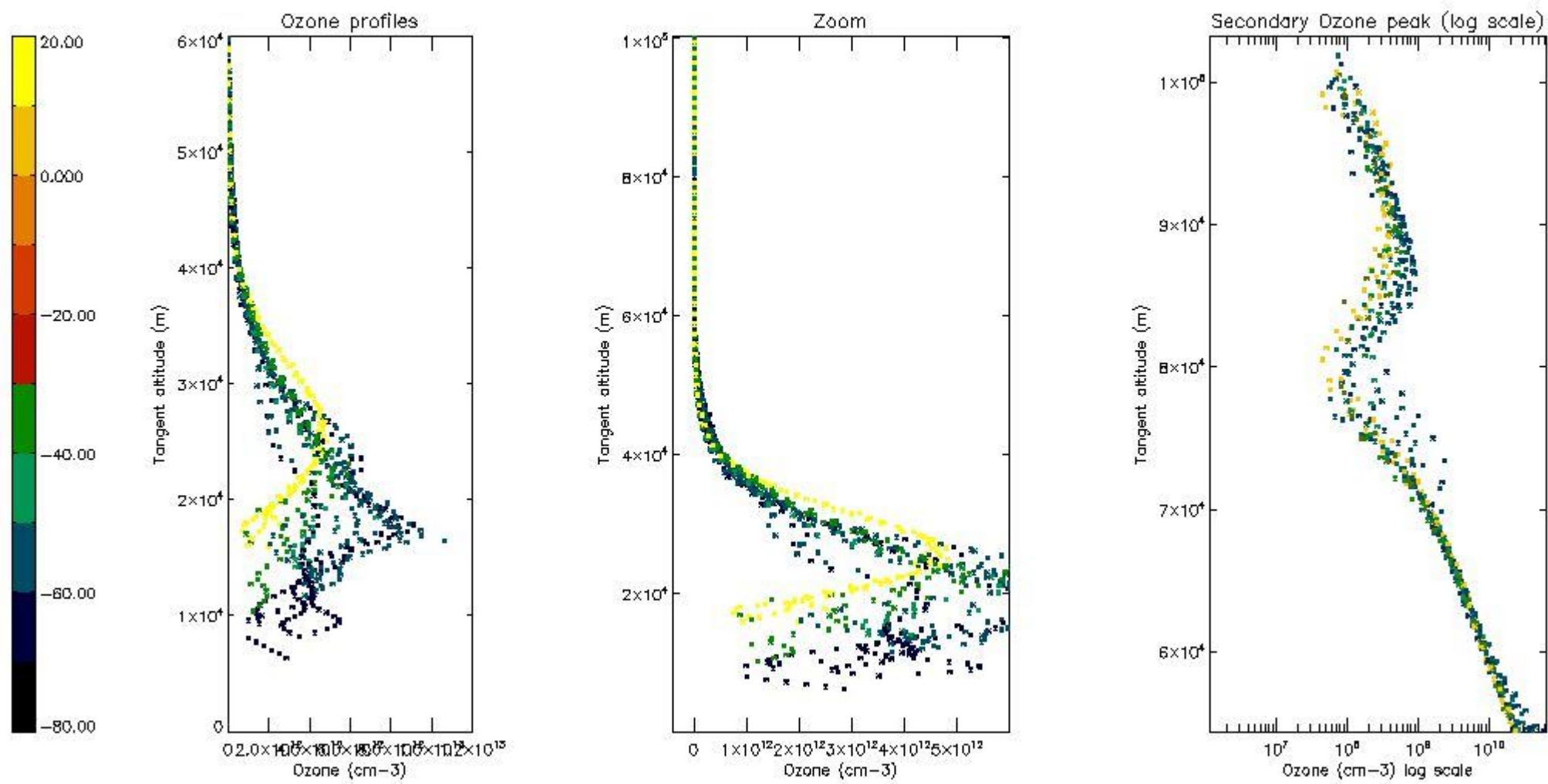
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



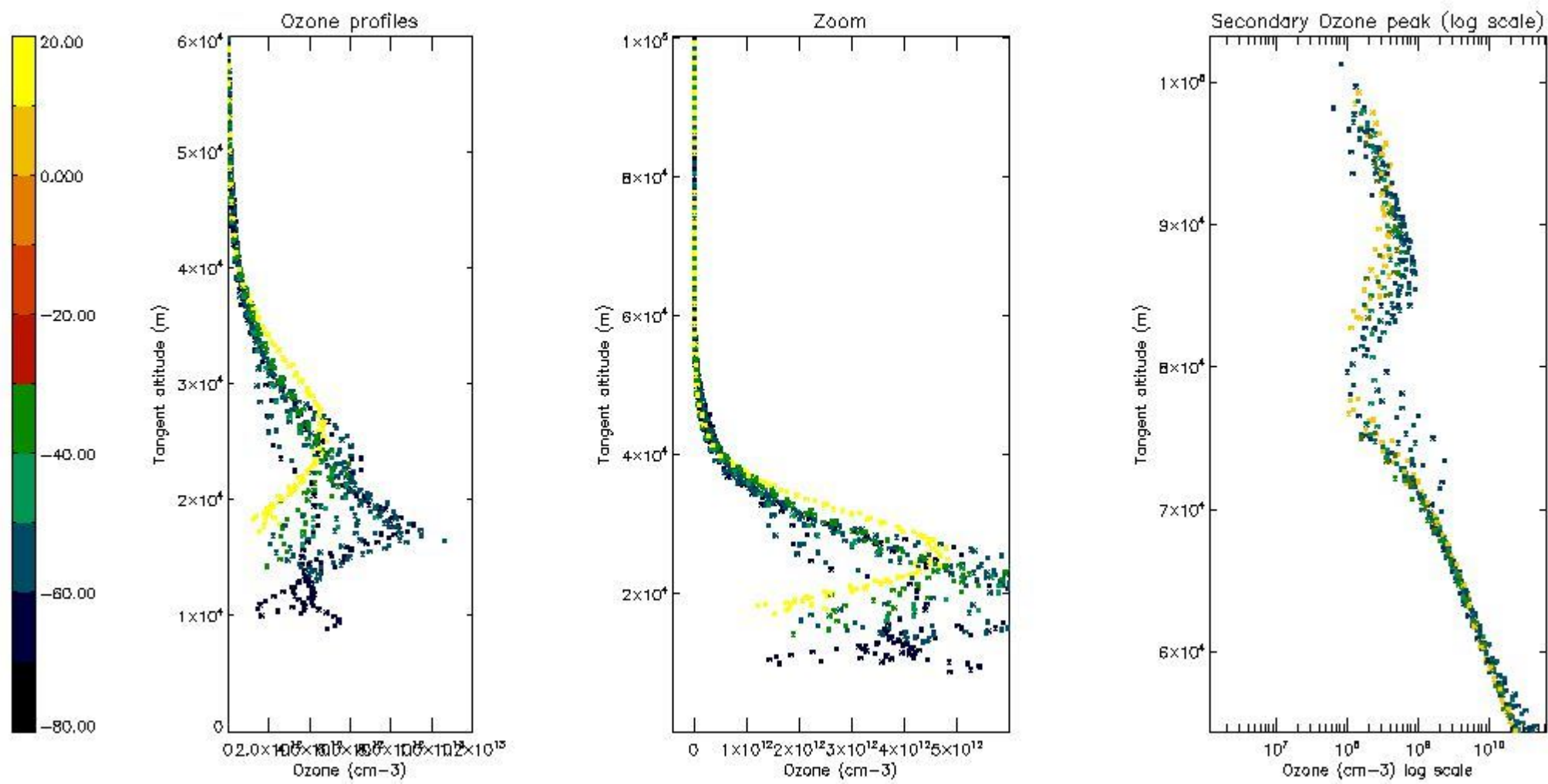
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



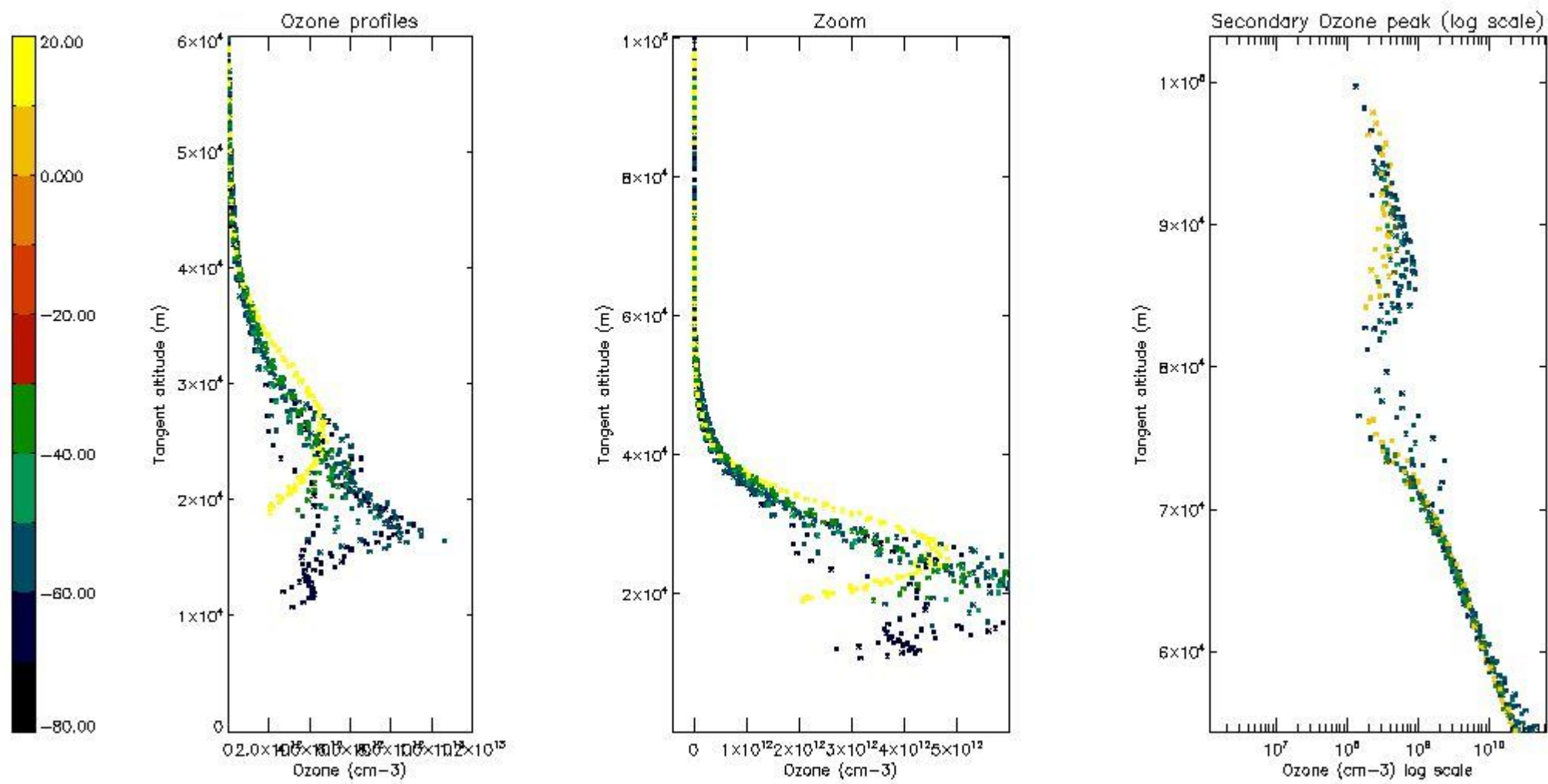
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



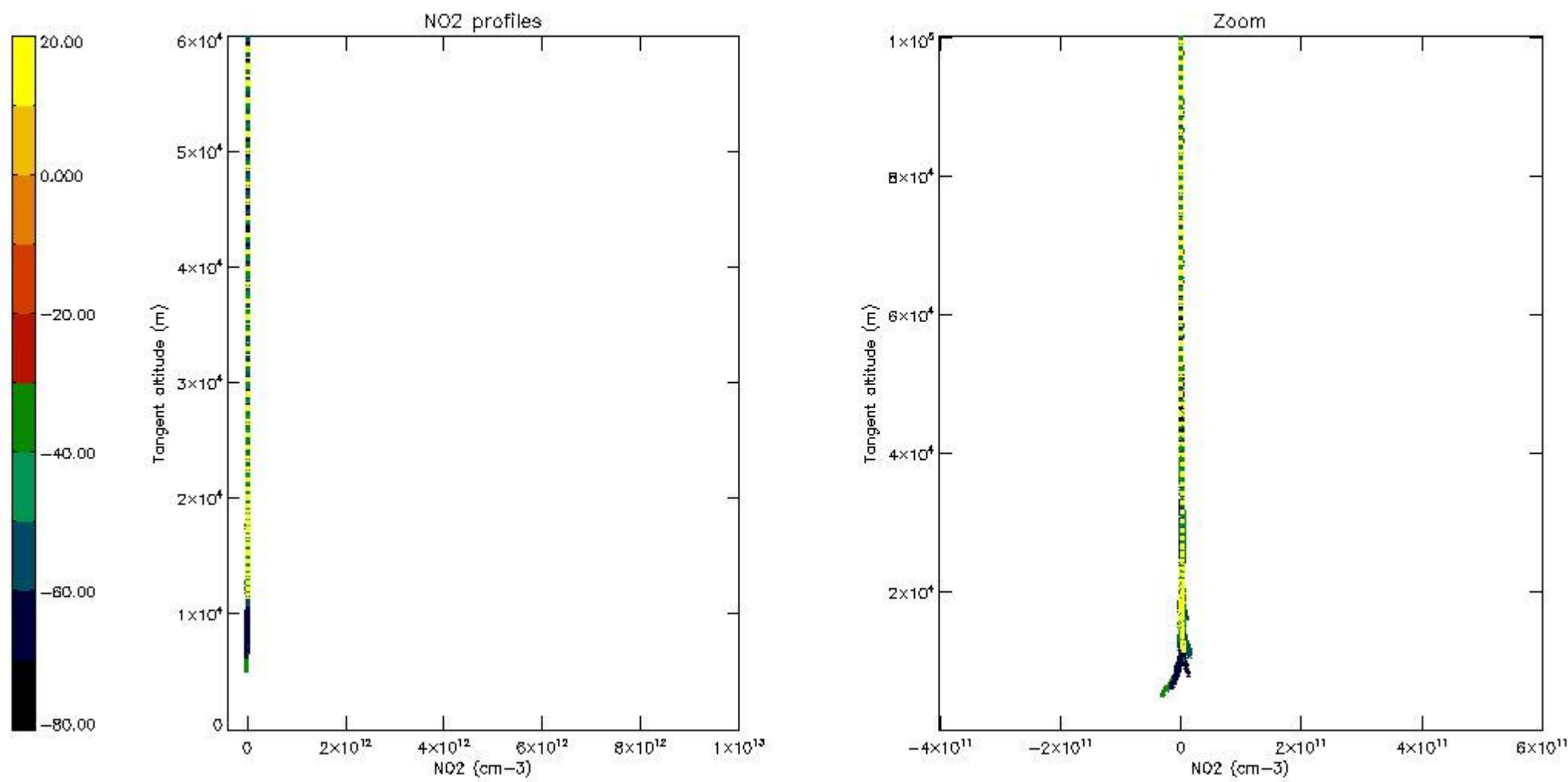
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



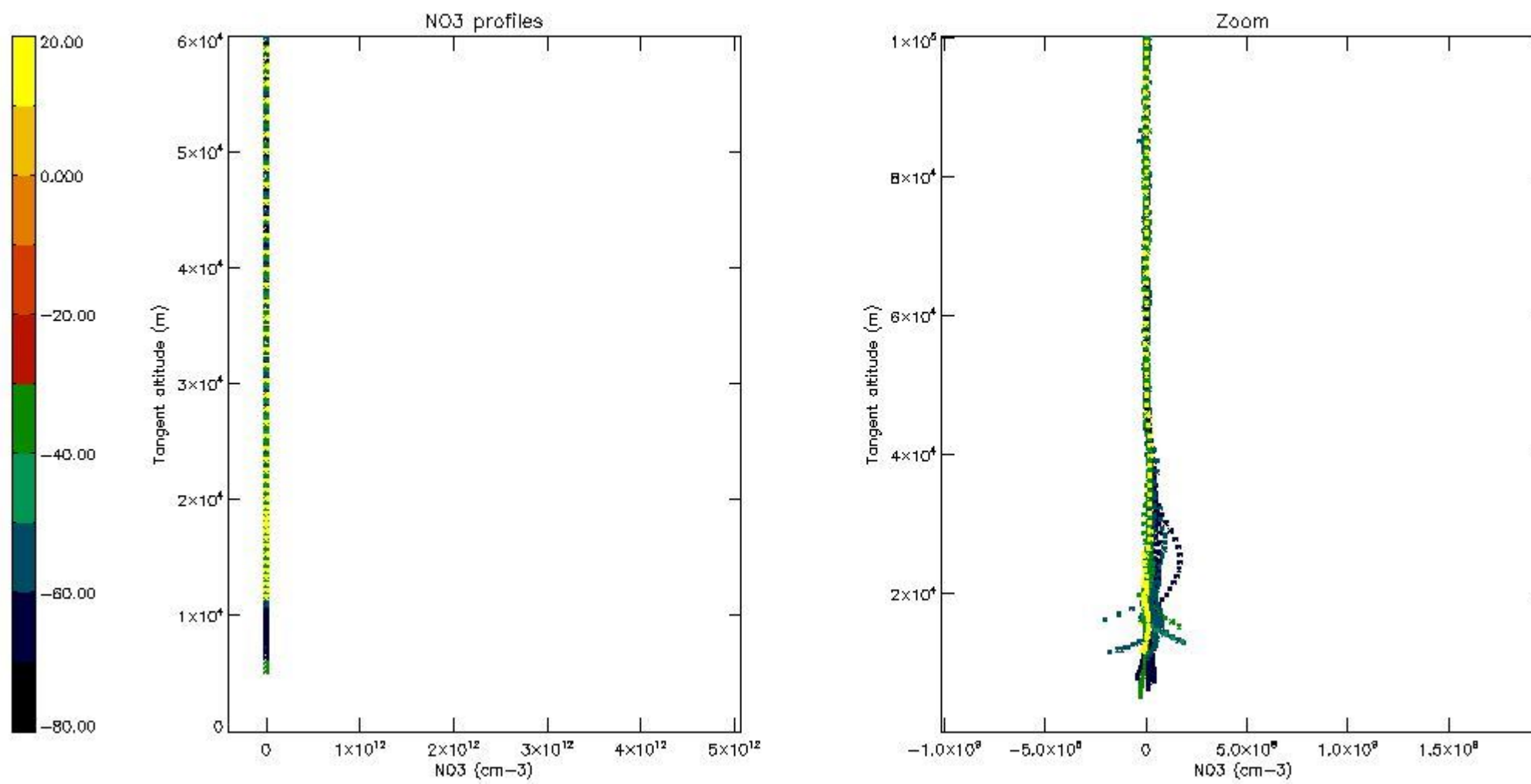
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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	23-AUG-2002 13:39:31
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	23-AUG-2002 13:39:31
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	23-AUG-2002 13:39:31

GOMOS Level 2 Daily Report

SUMMARY

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[5. Ozone profiles based on quality statistics and other trace gas profiles](#)

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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 \(dark without errors\)](#)

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

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 17:50:52
Data source version	GOMOS/6.01
Start time of products	23-08-2002 (23AUG2002 00:00:00)
Stop time of products	24-08-2002 (24AUG2002 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	68
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

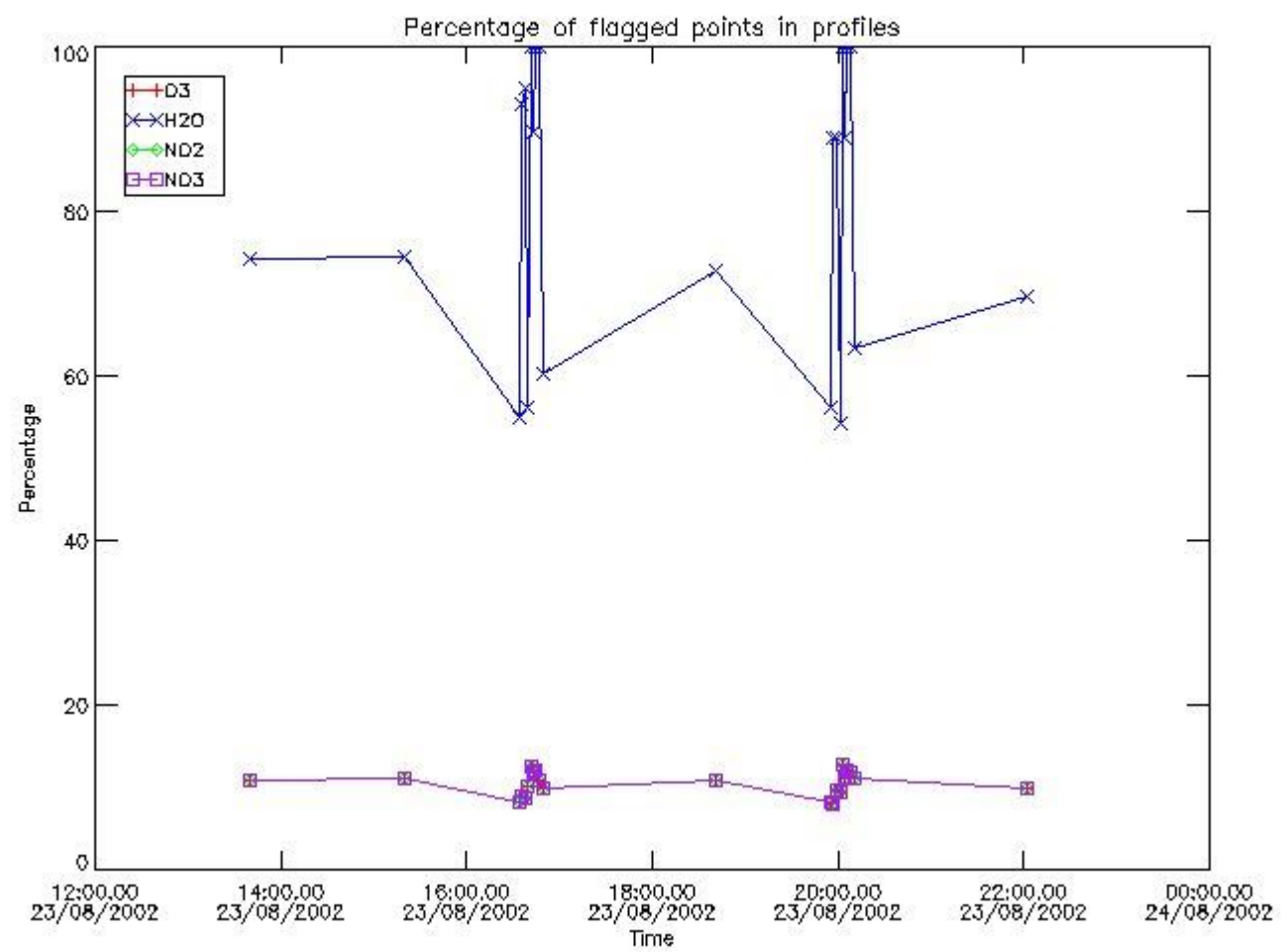
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20020823_133931_000000472008_00454_02512_8361.N1	23-AUG-2002 13:39:31	Dark	47.000	9	Alp Eri	0.45300	24000.	94	2512	No
2	GOM_NL__2PRFIN20020823_134439_000000412008_00454_02512_8362.N1	23-AUG-2002 13:44:39	Straylight	40.500	148	Alp Tuc	2.8780	4100.0	81	2512	No
3	GOM_NL__2PRFIN20020823_134658_000000462008_00454_02512_8363.N1	23-AUG-2002 13:46:58	Straylight	45.500	45	Alp Pav	1.9400	26000.	91	2512	No
4	GOM_NL__2PRFIN20020823_135109_000000412008_00454_02512_8364.N1	23-AUG-2002 13:51:09	Straylight	41.000	172	Gam Gru	3.0030	13100.	82	2512	No
5	GOM_NL__2PRFIN20020823_152008_000000462008_00455_02513_8361.N1	23-AUG-2002 15:20:08	Dark	45.500	9	Alp Eri	0.45300	24000.	91	2513	No
6	GOM_NL__2PRFIN20020823_152515_000000402008_00455_02513_8362.N1	23-AUG-2002 15:25:15	Straylight	40.000	148	Alp Tuc	2.8780	4100.0	80	2513	No
7	GOM_NL__2PRFIN20020823_152734_000000382008_00455_02513_8363.N1	23-AUG-2002 15:27:34	Straylight	37.500	45	Alp Pav	1.9400	26000.	75	2513	No
8	GOM_NL__2PRFIN20020823_152852_000000422008_00455_02513_8364.N1	23-AUG-2002 15:28:52	Straylight	41.500	31	Alp Gru	1.7340	15200.	83	2513	No
9	GOM_NL__2PRFIN20020823_153253_000000542008_00455_02513_8365.N1	23-AUG-2002 15:32:53	Straylight	54.000	18	24Alp PsA	1.1660	9700.0	108	2513	No
10	GOM_NL__2PRFIN20020823_153805_000000442008_00455_02513_8366.N1	23-AUG-2002 15:38:05	Bright	44.000	142	49Del Cap	2.8500	8900.0	88	2513	No
11	GOM_NL__2PRFIN20020823_154121_000000422008_00455_02513_8367.N1	23-AUG-2002 15:41:21	Bright	41.500	154	22Bet Aqr	2.8990	5700.0	83	2513	No
12	GOM_NL__2PRFIN20020823_154304_000000462008_00455_02513_8368.N1	23-AUG-2002 15:43:04	Bright	46.000	162	34Alp Aqr	2.9440	5350.0	92	2513	No
13	GOM_NL__2PRFIN20020823_154604_000000372008_00455_02513_8369.N1	23-AUG-2002 15:46:04	Bright	36.500	11	53Alp Aql	0.76500	8000.0	73	2513	No
14	GOM_NL__2PRFIN20020823_155015_000000612008_00455_02513_8370.N1	23-AUG-2002 15:50:15	Bright	60.500	90	54Alp Peg	2.4870	11000.	121	2513	No
15	GOM_NL__2PRFIN20020823_155250_000000382008_00455_02513_8371.N1	23-AUG-2002 15:52:50	Bright	37.500	92	53Eps Cyg	2.5000	4500.0	75	2513	No
16	GOM_NL__2PRFIN20020823_155528_000000362008_00455_02513_8372.N1	23-AUG-2002 15:55:28	Bright	36.000	5	3Alp Lyr	0.033000	11000.	72	2513	No
17	GOM_NL__2PRFIN20020823_160058_000000852008_00455_02513_8373.N1	23-AUG-2002 16:00:58	Bright	85.000	58	21Alp And	2.0730	11000.	170	2513	No
18	GOM_NL__2PRFIN20020823_160508_000000482008_00455_02513_8374.N1	23-AUG-2002 16:05:08	Bright	47.500	74	11Bet Cas	2.2680	6600.0	95	2513	No
19	GOM_NL__2PRFIN20020823_160722_000000492008_00455_02513_8375.N1	23-AUG-2002 16:07:22	Bright	48.500	76	27Gam Cas	2.3000	30000.	97	2513	No
20	GOM_NL__2PRFIN20020823_161051_000001482008_00455_02513_8376.N1	23-AUG-2002 16:10:51	Bright	148.00	53	43Bet And	2.0480	3300.0	296	2513	No
21	GOM_NL__2PRFIN20020823_161502_000000992008_00455_02513_8377.N1	23-AUG-2002 16:15:02	Bright	98.500	73	57Gam1And	2.2600	13100.	197	2513	No
22	GOM_NL__2PRFIN20020823_161827_000000562008_00455_02513_8378.N1	23-AUG-2002 16:18:27	Bright	56.000	175	39Del Per	3.0100	19400.	112	2513	No
23	GOM_NL__2PRFIN20020823_162202_000002552008_00455_02513_8379.N1	23-AUG-2002 16:22:02	Twilight	255.00	173	4Bet Tri	3.0040	8900.0	510	2513	No
24	GOM_NL__2PRFIN20020823_162737_000000612008_00455_02513_8380.N1	23-AUG-2002 16:27:37	Twilight	61.000	28	12Bet Tau	1.6500	15200.	122	2513	No
25	GOM_NL__2PRFIN20020823_163032_000000482008_00455_02513_8381.N1	23-AUG-2002 16:30:32	Twilight	48.000	44	24Gam Gem	1.9280	11000.	96	2513	No
26	GOM_NL__2PRFIN20020823_163203_000000422008_00455_02513_8382.N1	23-AUG-2002 16:32:03	Twilight	41.500	153	3Bet CMi	2.8940	13100.	83	2513	No
27	GOM_NL__2PRFIN20020823_163426_000000622008_00455_02513_8383.N1	23-AUG-2002 16:34:26	Dark	61.500	14	58Alp Ori	0.87000	3000.0	123	2513	No
28	GOM_NL__2PRFIN20020823_163602_000000582008_00455_02513_8384.N1	23-AUG-2002 16:36:02	Dark	57.500	27	24Gam Ori	1.6360	26000.	115	2513	No
29	GOM_NL__2PRFIN20020823_163759_000000592008_00455_02513_8385.N1	23-AUG-2002 16:37:59	Dark	59.000	30	46Eps Ori	1.6940	30000.	118	2513	No
30	GOM_NL__2PRFIN20020823_163951_000000512008_00455_02513_8386.N1	23-AUG-2002 16:39:51	Dark	50.500	1	9Alp CMa	-1.4400	11000.	101	2513	No
31	GOM_NL__2PRFIN20020823_164120_000000412008_00455_02513_8387.N1	23-AUG-2002 16:41:20	Dark	41.000	179	24Omi2CMa	3.0320	24000.	82	2513	No
32	GOM_NL__2PRFIN20020823_164247_000000442008_00455_02513_8388.N1	23-AUG-2002 16:42:47	Dark	43.500	23	21Eps CMa	1.5020	26000.	87	2513	No
33	GOM_NL__2PRFIN20020823_164456_000000422008_00455_02513_8389.N1	23-AUG-2002 16:44:56	Dark	42.000	70	Zet Pup	2.2460	39000.	84	2513	No
34	GOM_NL__2PRFIN20020823_164636_000000472008_00455_02513_8390.N1	23-AUG-2002 16:46:36	Dark	47.000	108	Alp Col	2.6520	15200.	94	2513	No
35	GOM_NL__2PRFIN20020823_164938_000000522008_00455_02513_8391.N1	23-AUG-2002 16:49:38	Dark	52.000	2	Alp Car	-0.73600	7000.0	104	2513	No
36	GOM_NL__2PRFIN20020823_184121_000000472008_00457_02515_8362.N1	23-AUG-2002 18:41:21	Dark	46.500	9	Alp Eri	0.45300	24000.	93	2515	No
37	GOM_NL__2PRFIN20020823_184627_000000482008_00457_02515_8363.N1	23-AUG-2002 18:46:27	Straylight	47.500	148	Alp Tuc	2.8780	4100.0	95	2515	No
38	GOM_NL__2PRFIN20020823_184846_000000402008_00457_02515_8364.N1	23-AUG-2002 18:48:46	Straylight	39.500	45	Alp Pav	1.9400	26000.	79	2515	No
39	GOM_NL__2PRFIN20020823_185005_000000432008_00457_02515_8365.N1	23-AUG-2002 18:50:05	Straylight	42.500	31	Alp Gru	1.7340	15200.	85	2515	No
40	GOM_NL__2PRFIN20020823_185405_000000512008_00457_02515_8366.N1	23-AUG-2002 18:54:05	Straylight	50.500	18	24Alp PsA	1.1660	9700.0	101	2515	No
41	GOM_NL__2PRFIN20020823_185917_000000512008_00457_02515_8367.N1	23-AUG-2002 18:59:17	Bright	50.500	142	49Del Cap	2.8500	8900.0	101	2515	No
42	GOM_NL__2PRFIN20020823_190233_000000412008_00457_02515_8368.N1	23-AUG-2002 19:02:33	Bright	41.000	154	22Bet Aqr	2.8990	5700.0	82	2515	No

43	GOM_NL__2PRFIN20020823_190416_000000472008_00457_02515_8369.N1	23-AUG-2002 19:04:16	Bright	46.500	162	34Alp Aqr	2.9440	5350.0	93	2515	No
44	GOM_NL__2PRFIN20020823_190716_000000372008_00457_02515_8370.N1	23-AUG-2002 19:07:16	Bright	37.000	11	53Alp Aql	0.76500	8000.0	74	2515	No
45	GOM_NL__2PRFIN20020823_191125_000000612008_00457_02515_8371.N1	23-AUG-2002 19:11:25	Bright	60.500	90	54Alp Peg	2.4870	11000.	121	2515	No
46	GOM_NL__2PRFIN20020823_191401_000000402008_00457_02515_8372.N1	23-AUG-2002 19:14:01	Bright	40.000	92	53Eps Cyg	2.5000	4500.0	80	2515	No
47	GOM_NL__2PRFIN20020823_191641_000000422008_00457_02515_8373.N1	23-AUG-2002 19:16:41	Bright	41.500	5	3Alp Lyr	0.033000	11000.	83	2515	No
48	GOM_NL__2PRFIN20020823_192205_000000892008_00457_02515_8374.N1	23-AUG-2002 19:22:05	Bright	89.000	58	21Alp And	2.0730	11000.	178	2515	No
49	GOM_NL__2PRFIN20020823_192618_000000482008_00457_02515_8375.N1	23-AUG-2002 19:26:18	Bright	47.500	74	11Bet Cas	2.2680	6600.0	95	2515	No
50	GOM_NL__2PRFIN20020823_192831_000000502008_00457_02515_8376.N1	23-AUG-2002 19:28:31	Bright	50.000	76	27Gam Cas	2.3000	30000.	100	2515	No
51	GOM_NL__2PRFIN20020823_193157_000001372008_00457_02515_8377.N1	23-AUG-2002 19:31:57	Bright	137.00	53	43Bet And	2.0480	3300.0	274	2515	No
52	GOM_NL__2PRFIN20020823_193611_000001022008_00457_02515_8378.N1	23-AUG-2002 19:36:11	Bright	101.50	73	57Gam1And	2.2600	13100.	203	2515	No
53	GOM_NL__2PRFIN20020823_193935_000000862008_00457_02515_8379.N1	23-AUG-2002 19:39:35	Bright	86.000	175	39Del Per	3.0100	19400.	172	2515	No
54	GOM_NL__2PRFIN20020823_194310_000002552008_00457_02515_8380.N1	23-AUG-2002 19:43:10	Twilight	255.00	173	4Bet Tri	3.0040	8900.0	510	2515	No
55	GOM_NL__2PRFIN20020823_194849_000000612008_00457_02515_8381.N1	23-AUG-2002 19:48:49	Twilight	61.000	28	12Bet Tau	1.6500	15200.	122	2515	No
56	GOM_NL__2PRFIN20020823_195143_000000502008_00457_02515_8382.N1	23-AUG-2002 19:51:43	Twilight	49.500	44	24Gam Gem	1.9280	11000.	99	2515	No
57	GOM_NL__2PRFIN20020823_195315_000000412008_00457_02515_8383.N1	23-AUG-2002 19:53:15	Twilight	41.000	153	3Bet CMi	2.8940	13100.	82	2515	No
58	GOM_NL__2PRFIN20020823_195538_000000632008_00457_02515_8384.N1	23-AUG-2002 19:55:38	Dark	63.000	14	58Alp Ori	0.87000	3000.0	126	2515	No
59	GOM_NL__2PRFIN20020823_195713_000000642008_00457_02515_8385.N1	23-AUG-2002 19:57:13	Dark	64.000	27	24Gam Ori	1.6360	26000.	128	2515	No
60	GOM_NL__2PRFIN20020823_195912_000000592008_00457_02515_8386.N1	23-AUG-2002 19:59:12	Dark	58.500	30	46Eps Ori	1.6940	30000.	117	2515	No
61	GOM_NL__2PRFIN20020823_200104_000000542008_00457_02515_8387.N1	23-AUG-2002 20:01:04	Dark	54.000	1	9Alp CMa	-1.4400	11000.	108	2515	No
62	GOM_NL__2PRFIN20020823_200233_000000402008_00457_02515_8388.N1	23-AUG-2002 20:02:33	Dark	40.000	179	24Omi2CMa	3.0320	24000.	80	2515	No
63	GOM_NL__2PRFIN20020823_200400_000000462008_00457_02515_8389.N1	23-AUG-2002 20:04:00	Dark	46.000	23	21Eps CMa	1.5020	26000.	92	2515	No
64	GOM_NL__2PRFIN20020823_200608_000000432008_00457_02515_8390.N1	23-AUG-2002 20:06:08	Dark	42.500	70	Zet Pup	2.2460	39000.	85	2515	No
65	GOM_NL__2PRFIN20020823_200750_000000442008_00457_02515_8391.N1	23-AUG-2002 20:07:50	Dark	43.500	108	Alp Col	2.6520	15200.	87	2515	No
66	GOM_NL__2PRFIN20020823_201050_000000462008_00457_02515_8392.N1	23-AUG-2002 20:10:50	Dark	45.500	2	Alp Car	-0.73600	7000.0	91	2515	No
67	GOM_NL__2PRFIN20020823_220233_000000522008_00459_02517_8363.N1	23-AUG-2002 22:02:33	Dark	51.500	9	Alp Eri	0.45300	24000.	103	2517	No
68	GOM_NL__2PRFIN20020823_220739_000000422008_00459_02517_8364.N1	23-AUG-2002 22:07:39	Straylight	42.000	148	Alp Tuc	2.8780	4100.0	84	2517	No

3. Quality information per product

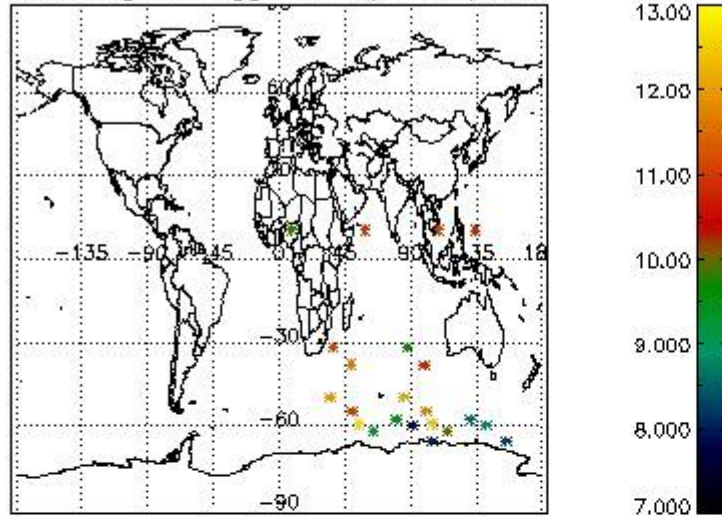
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

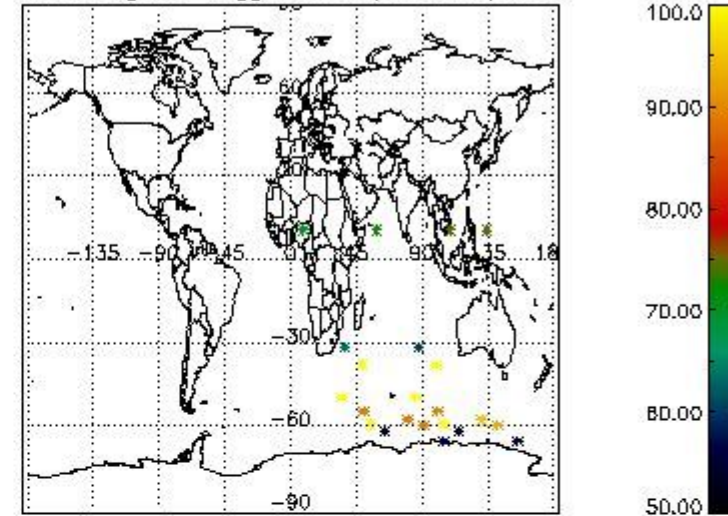


3.2 Plot quality information per product (world map)

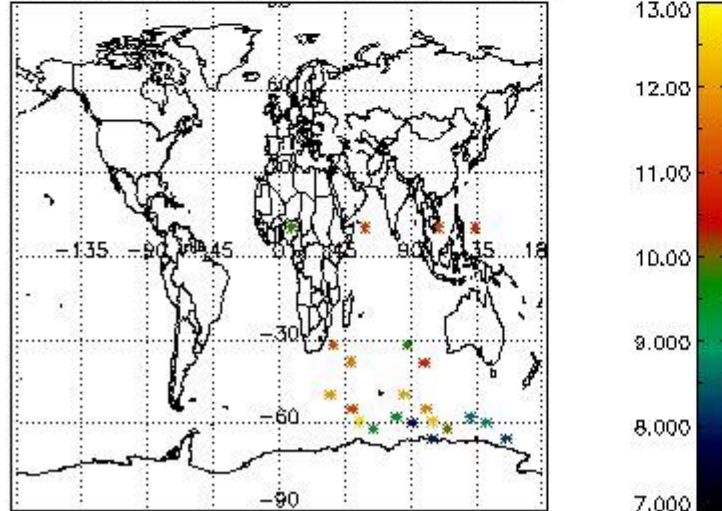
Percentage of flagged data per O3 profile



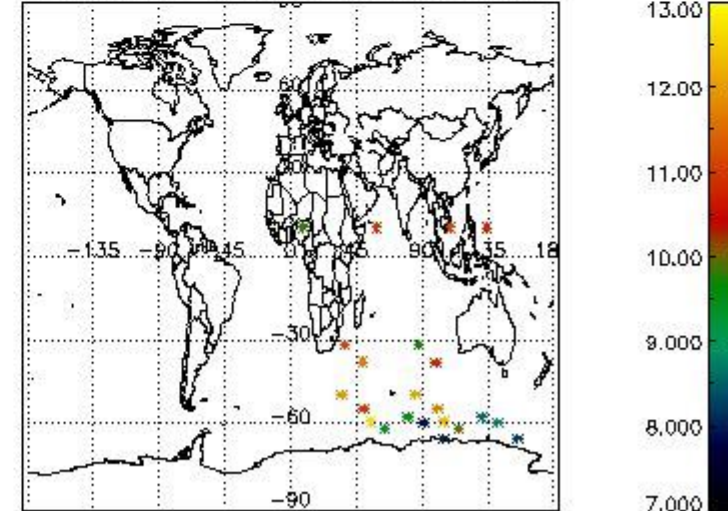
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

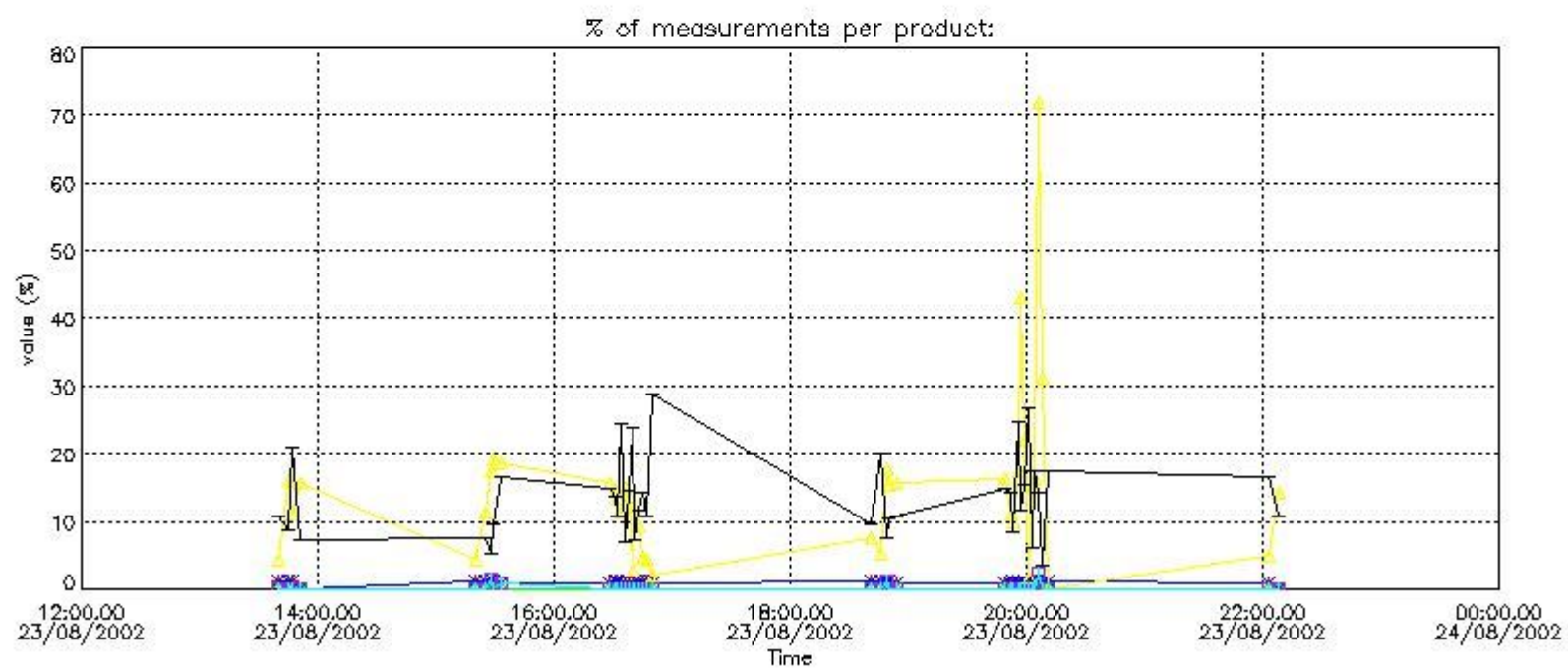


4. Level 1 quality information per product

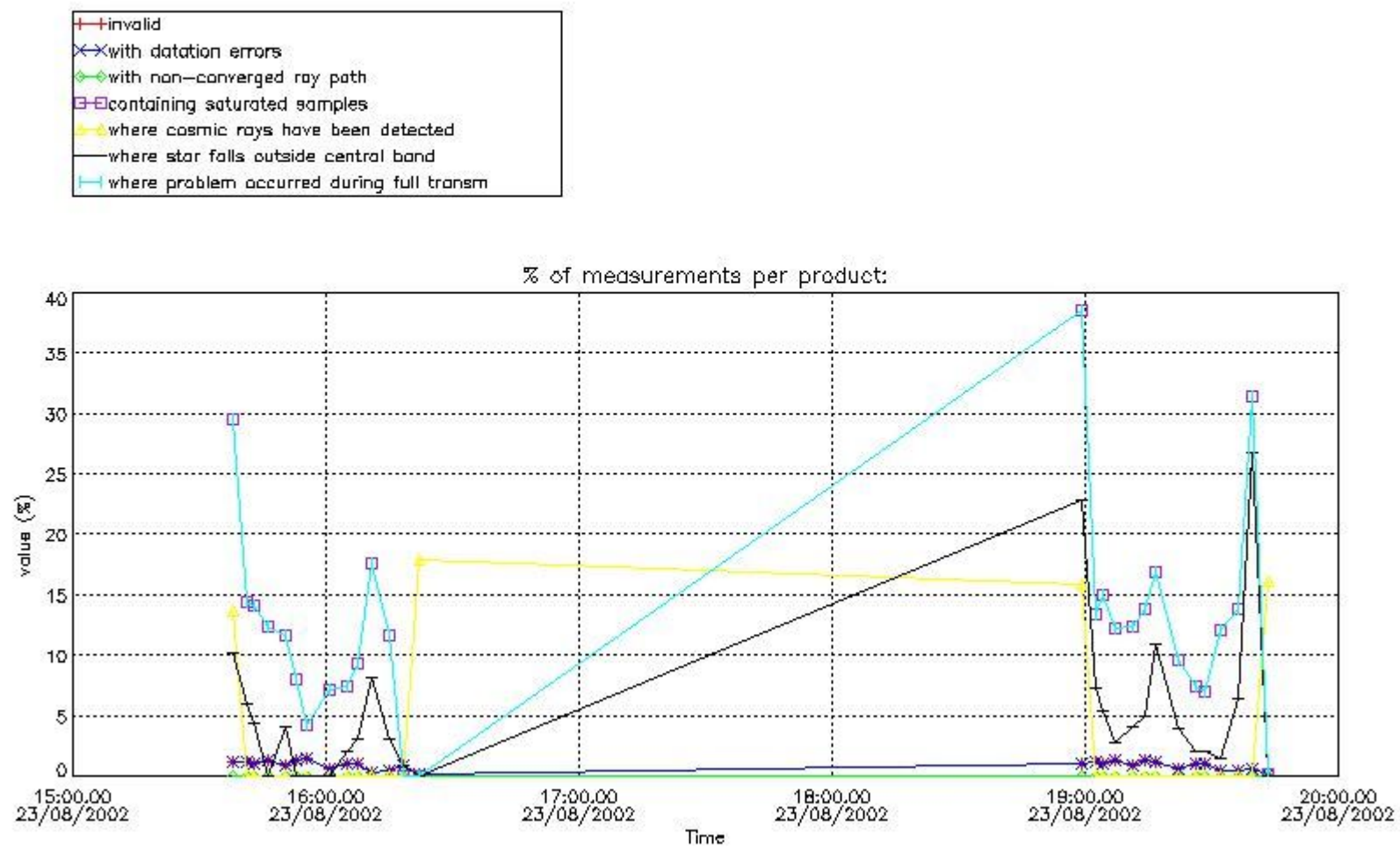
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



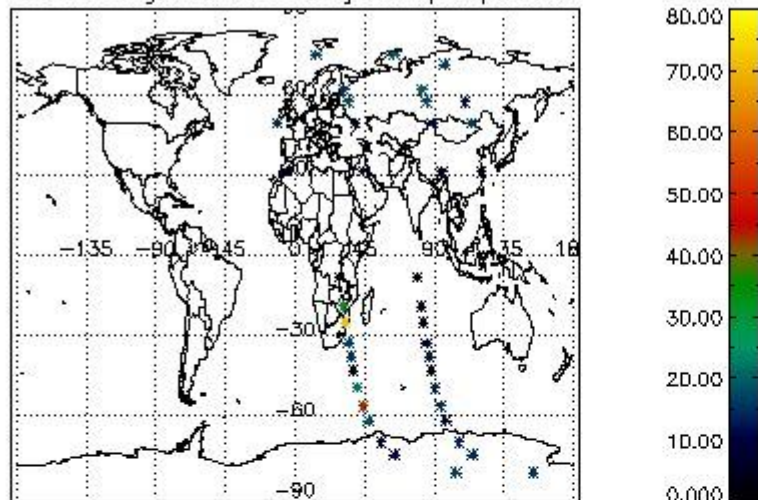
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



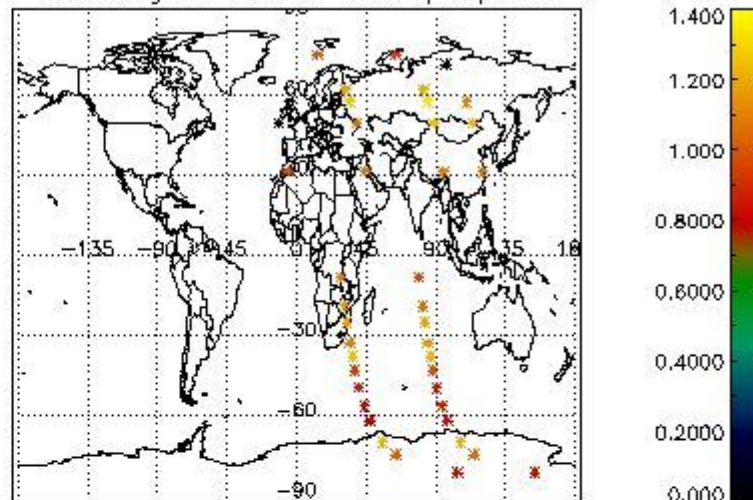
4.2 Plot quality information per product coming from level 1b processing (world map)

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

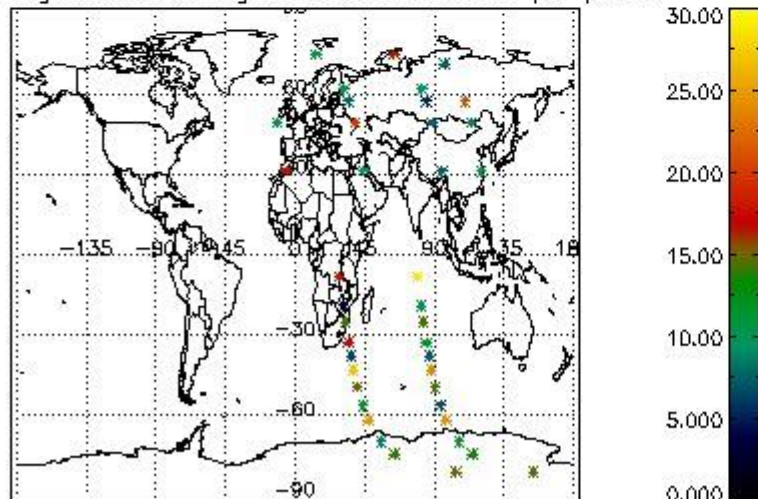
Percentage of cosmic ray hits per profile



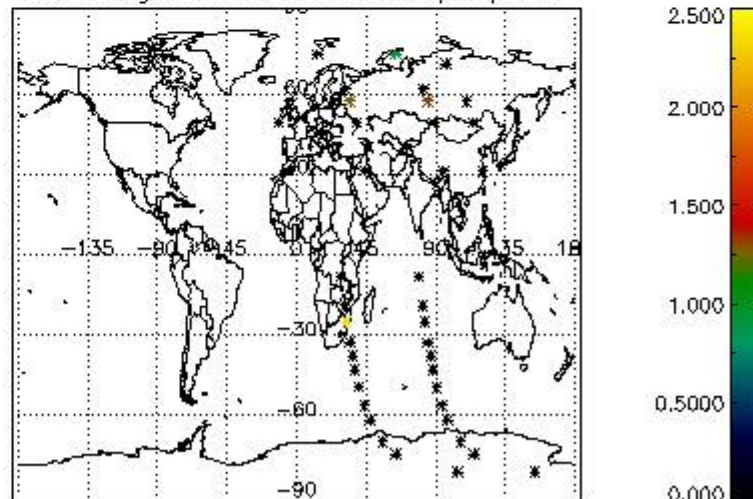
Percentage of datation errors per profile



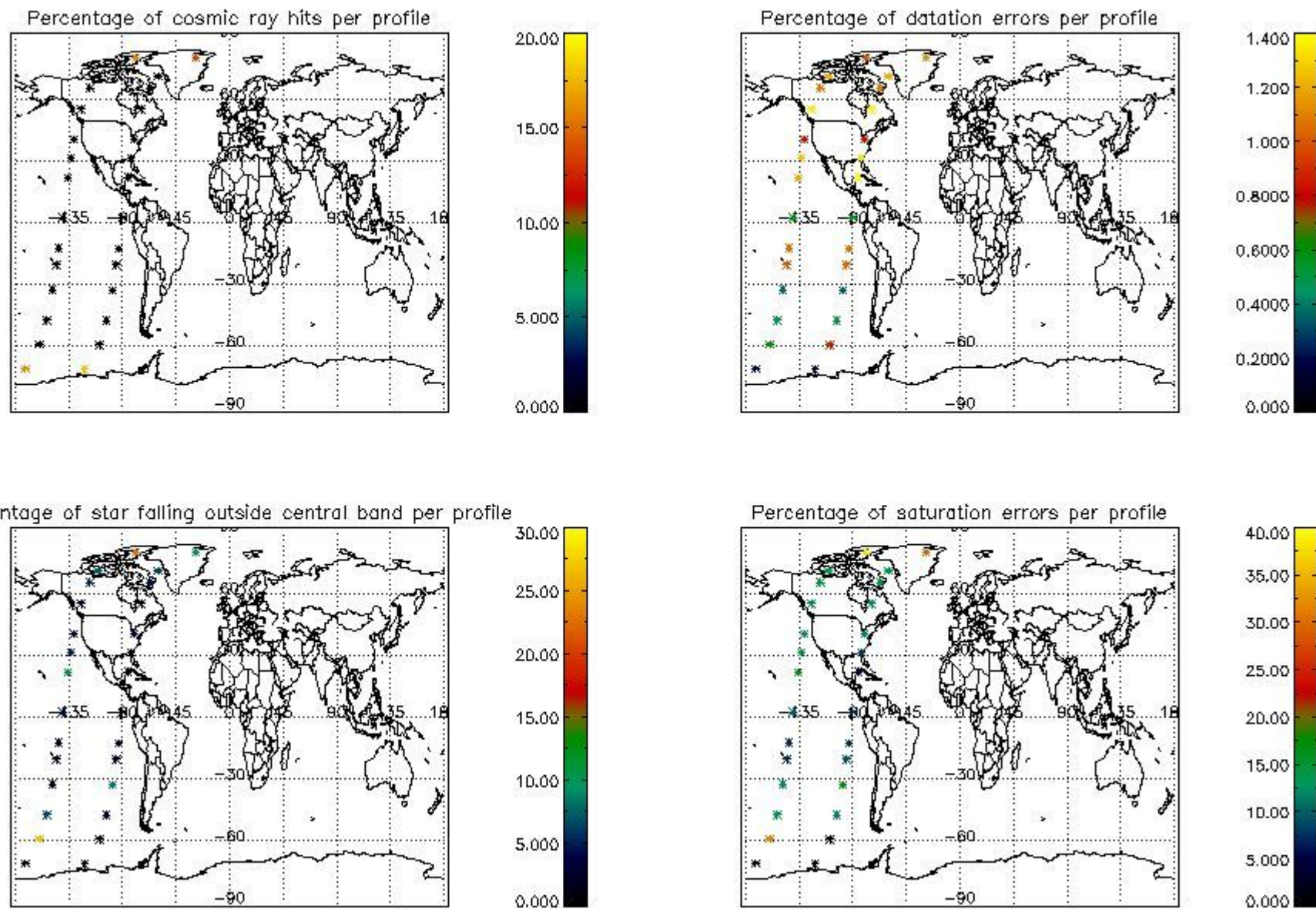
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

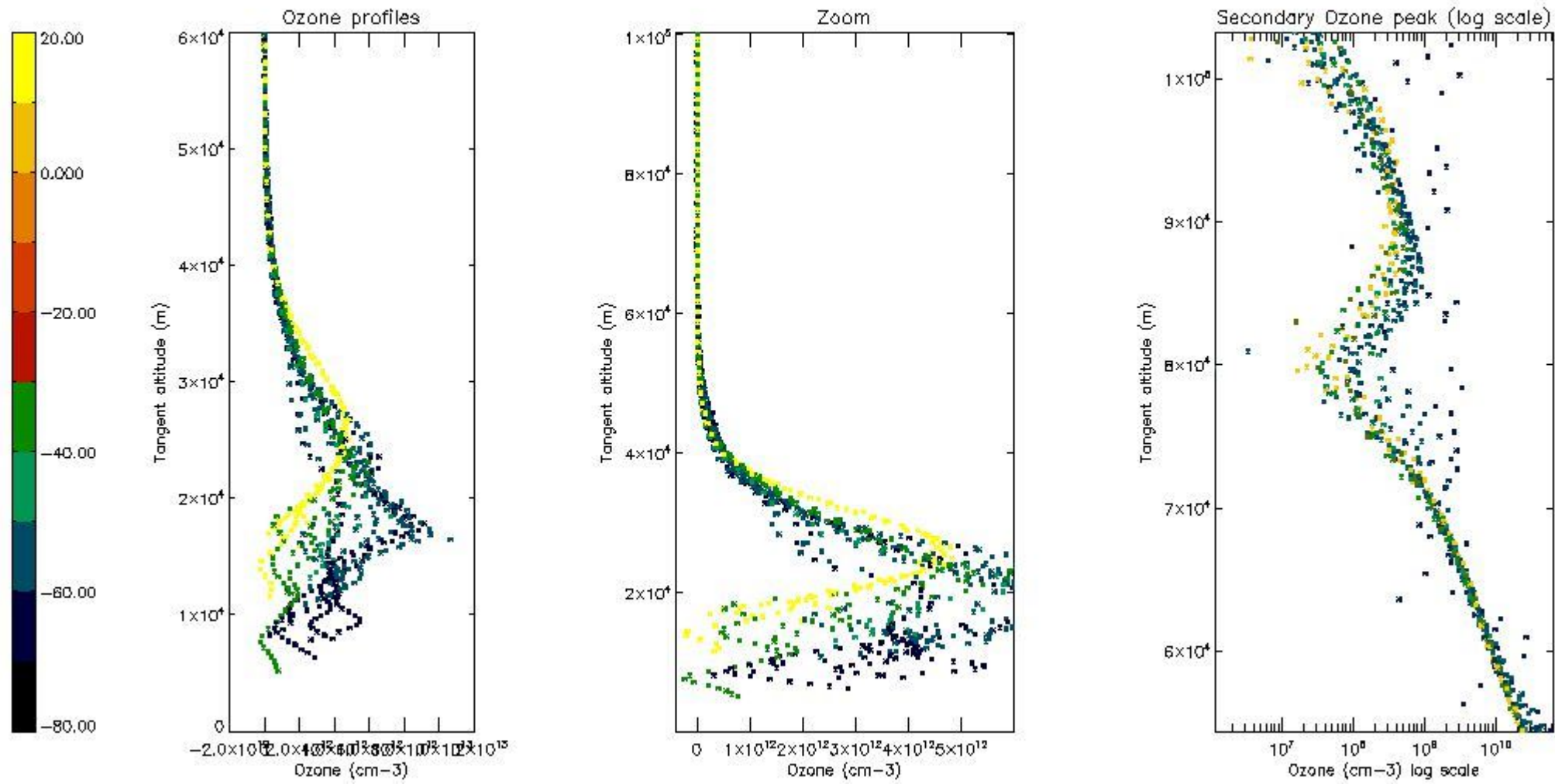
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	27
STD < 20	20

STD < 10	18
STD < 5	15

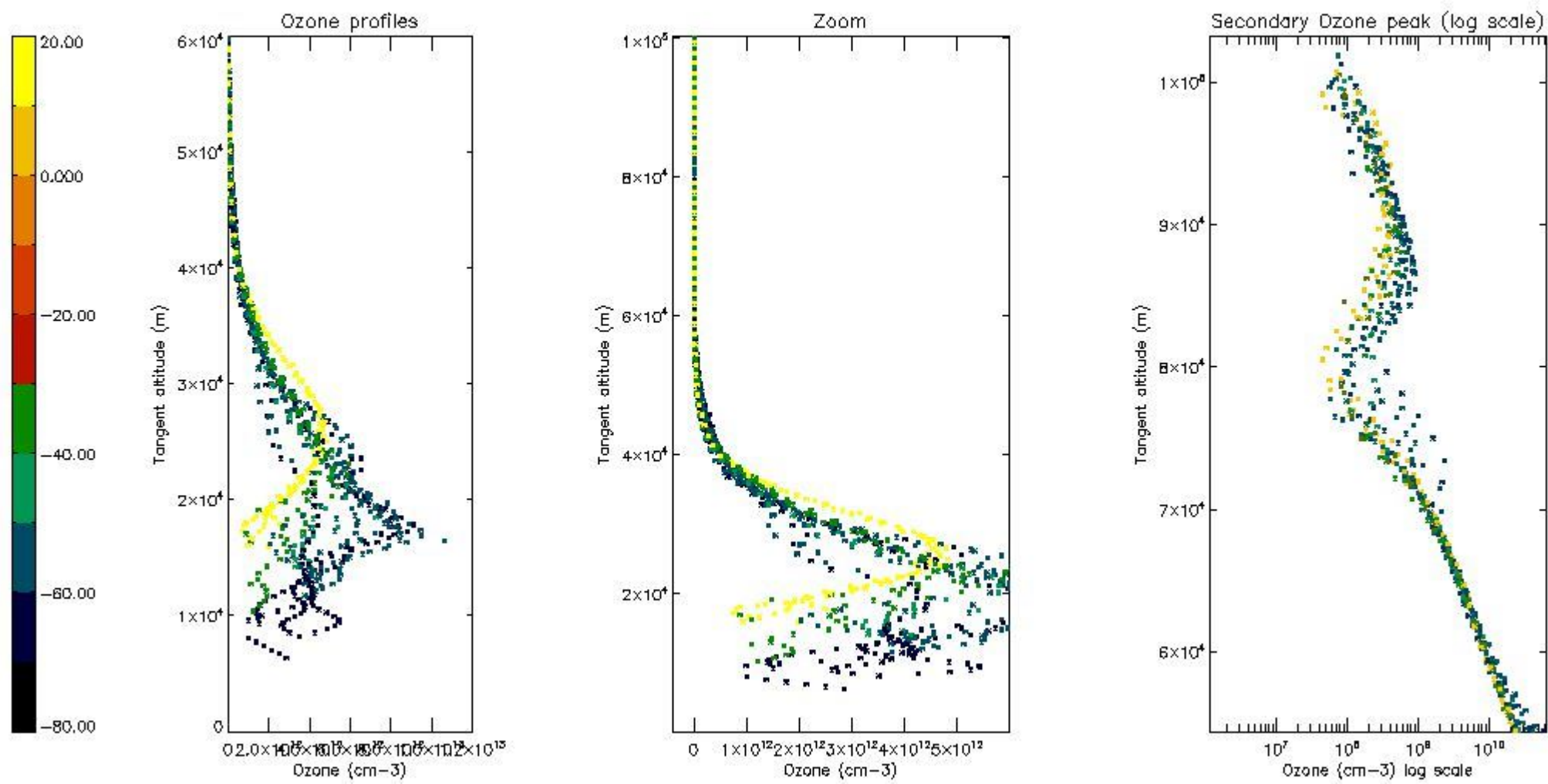
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



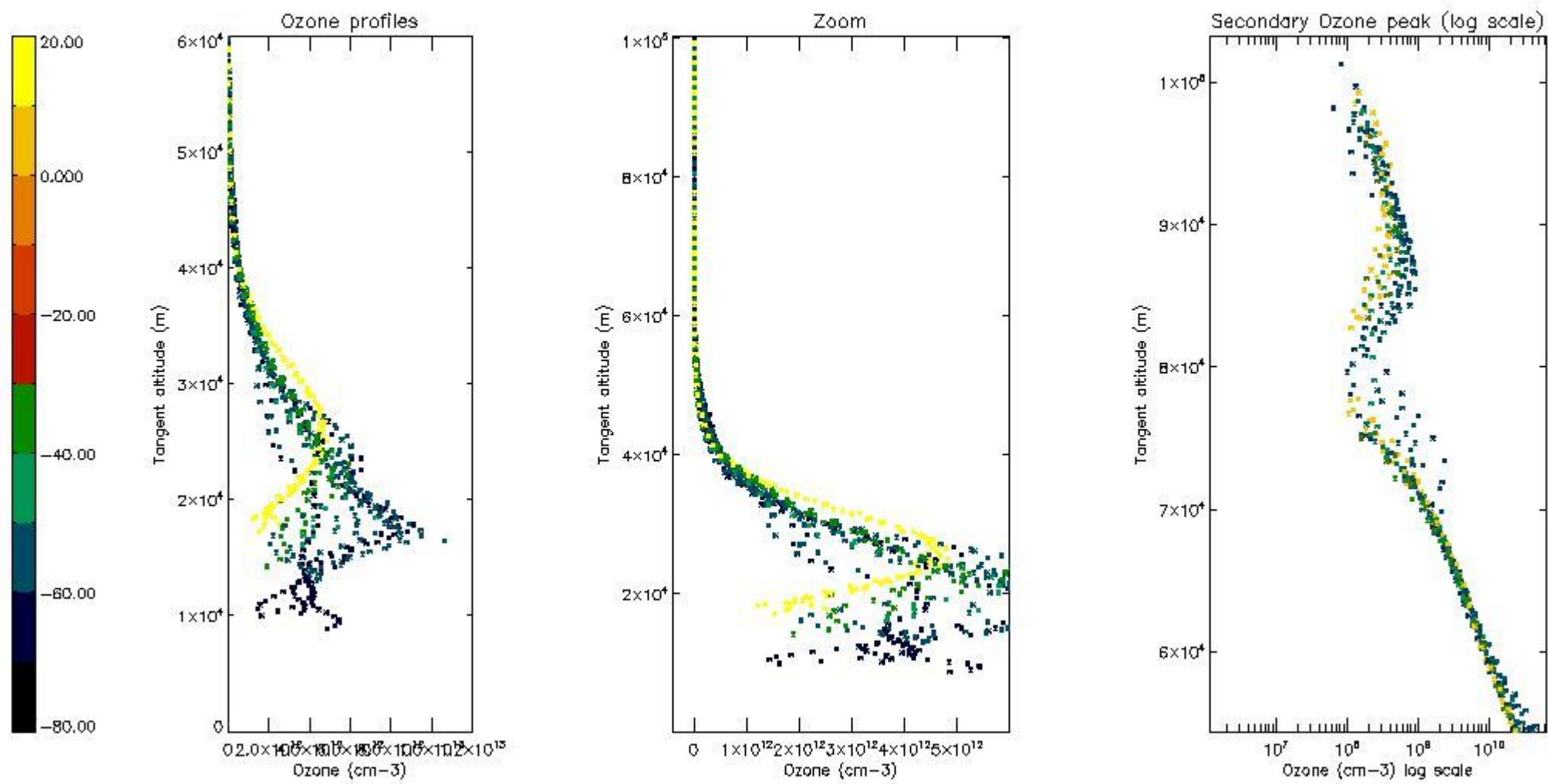
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



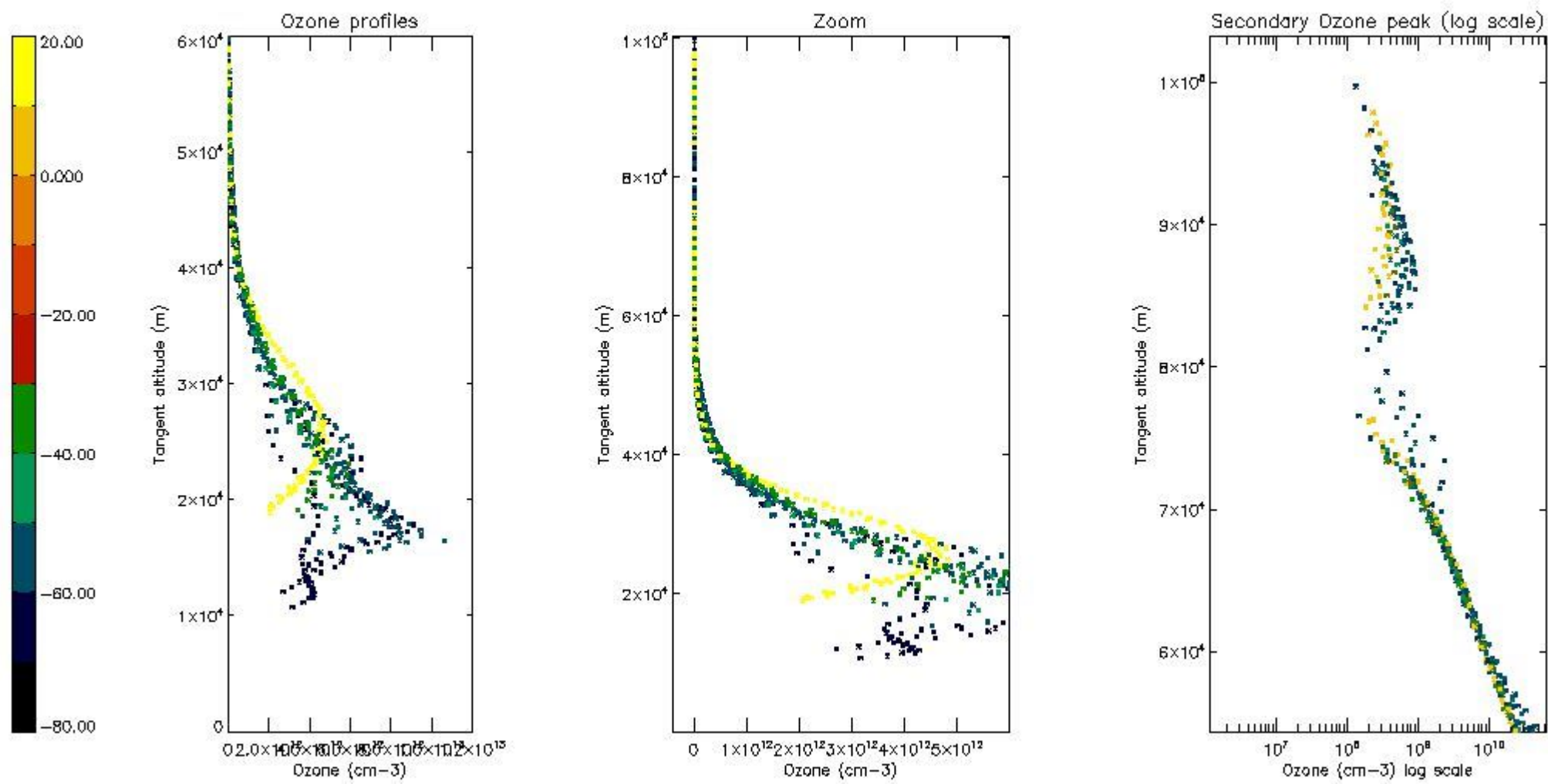
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



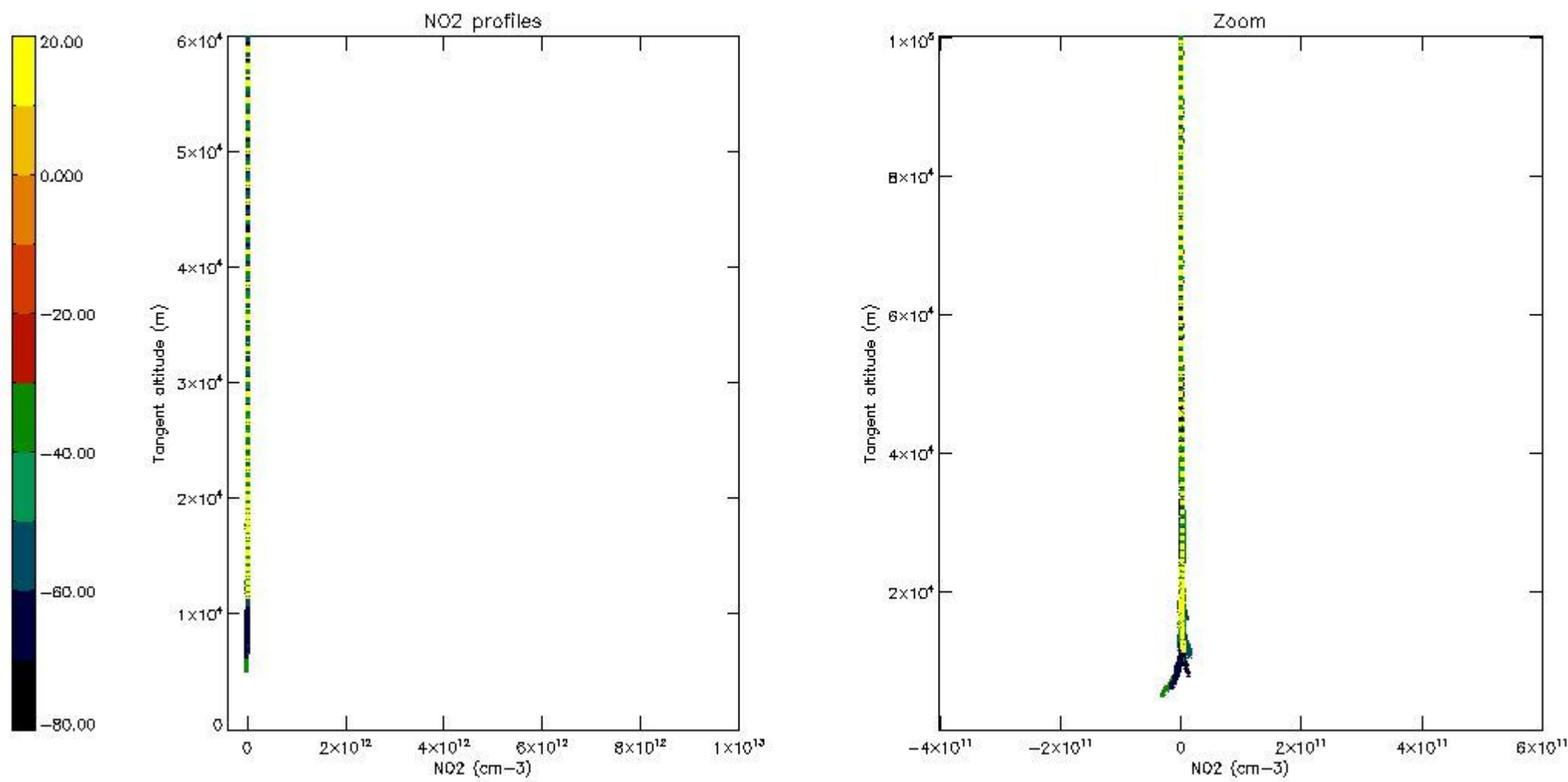
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



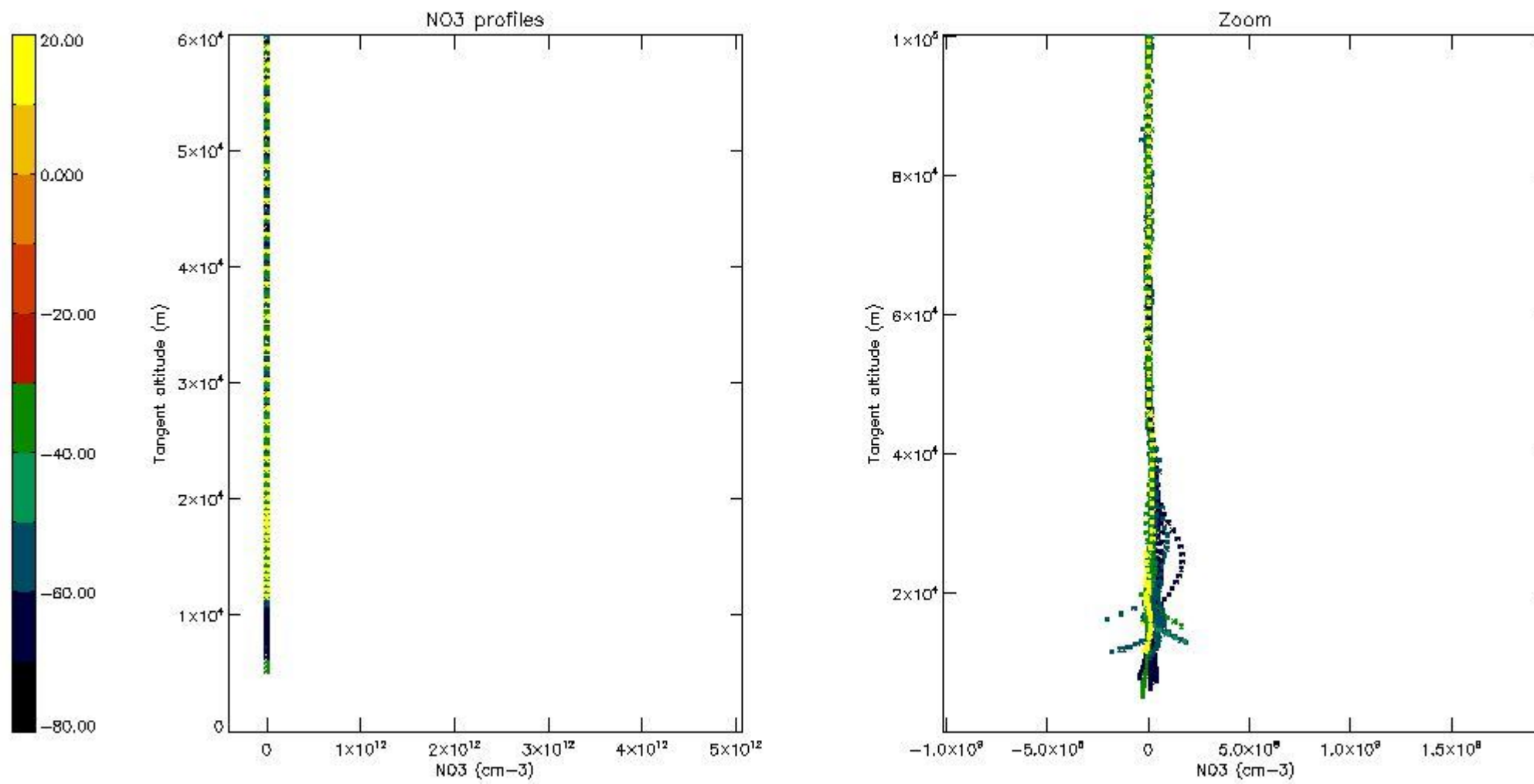
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

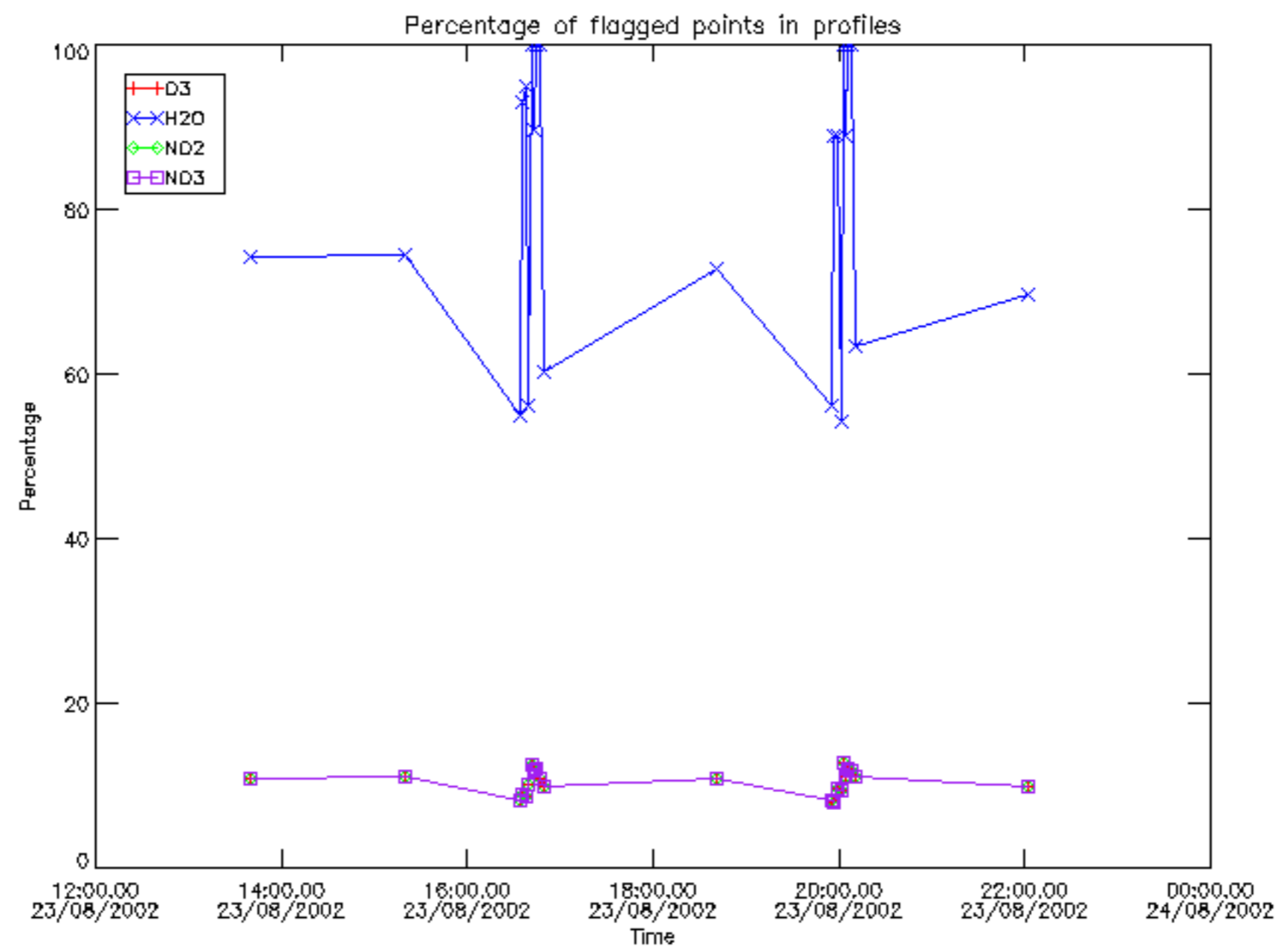
The colorbar represents the latitude.



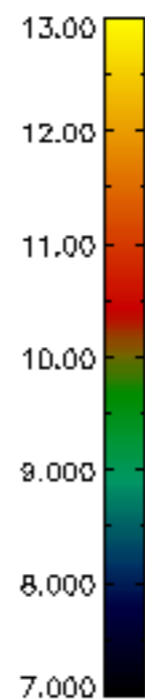
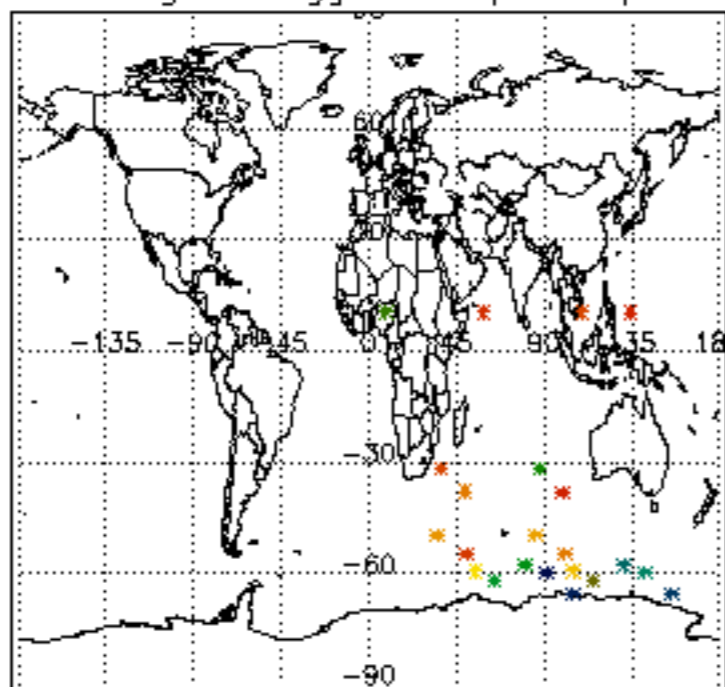
6. Auxiliary Data Files used for the production reported in section 2

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.

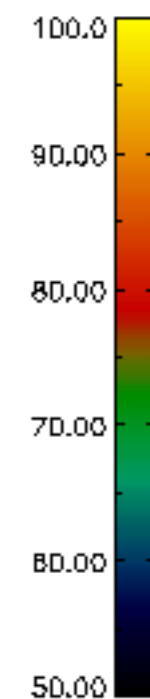
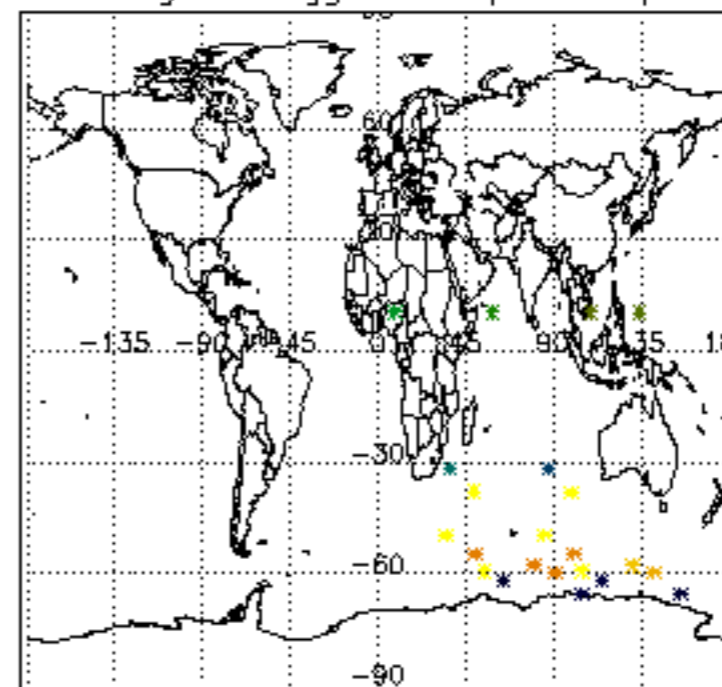
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	23-AUG-2002 13:39:31
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	23-AUG-2002 13:39:31
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	23-AUG-2002 13:39:31



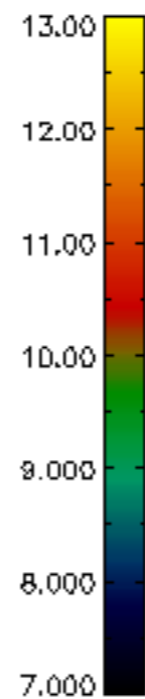
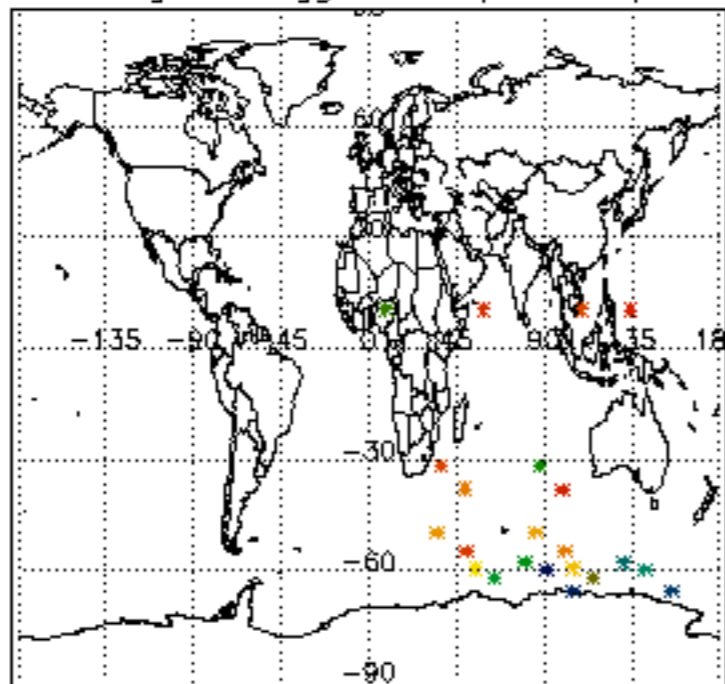
Percentage of flagged data per D3 profile



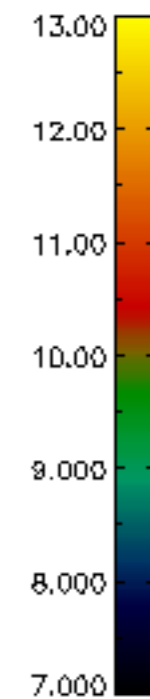
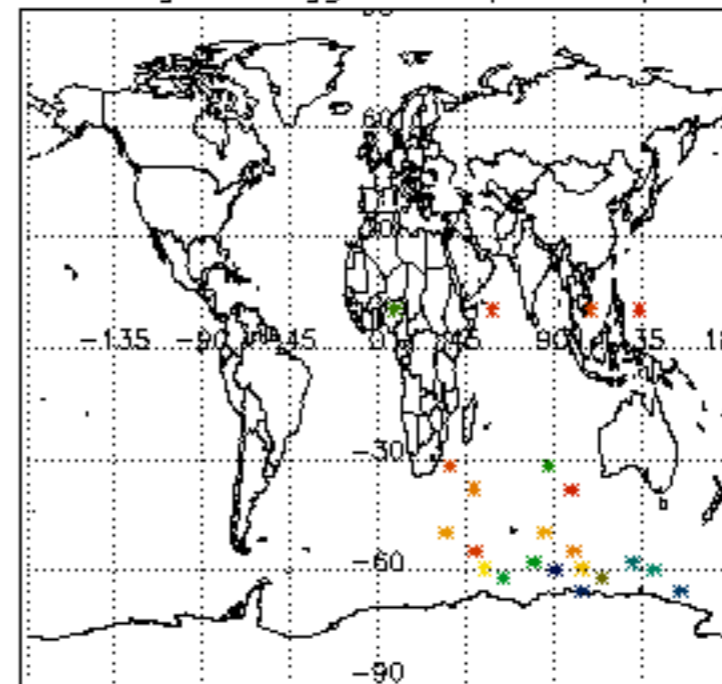
Percentage of flagged data per H2O profile

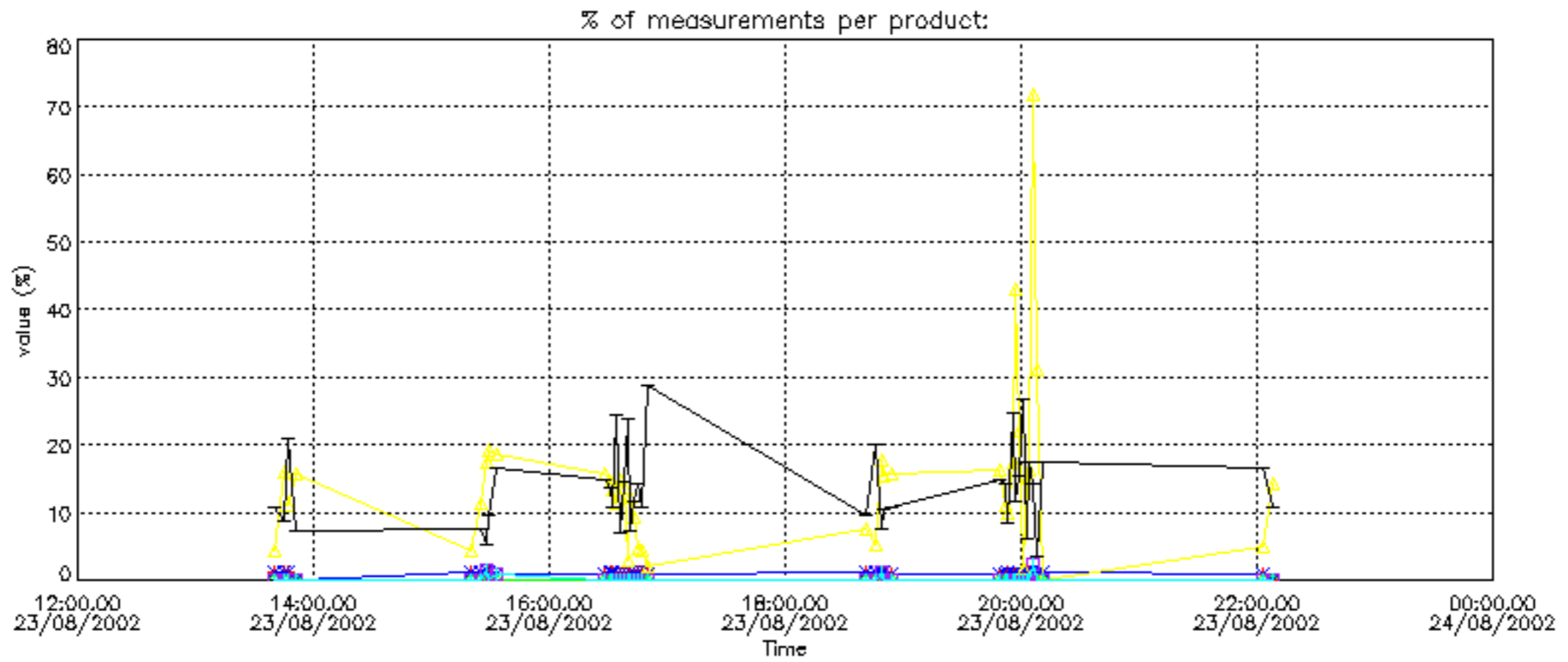


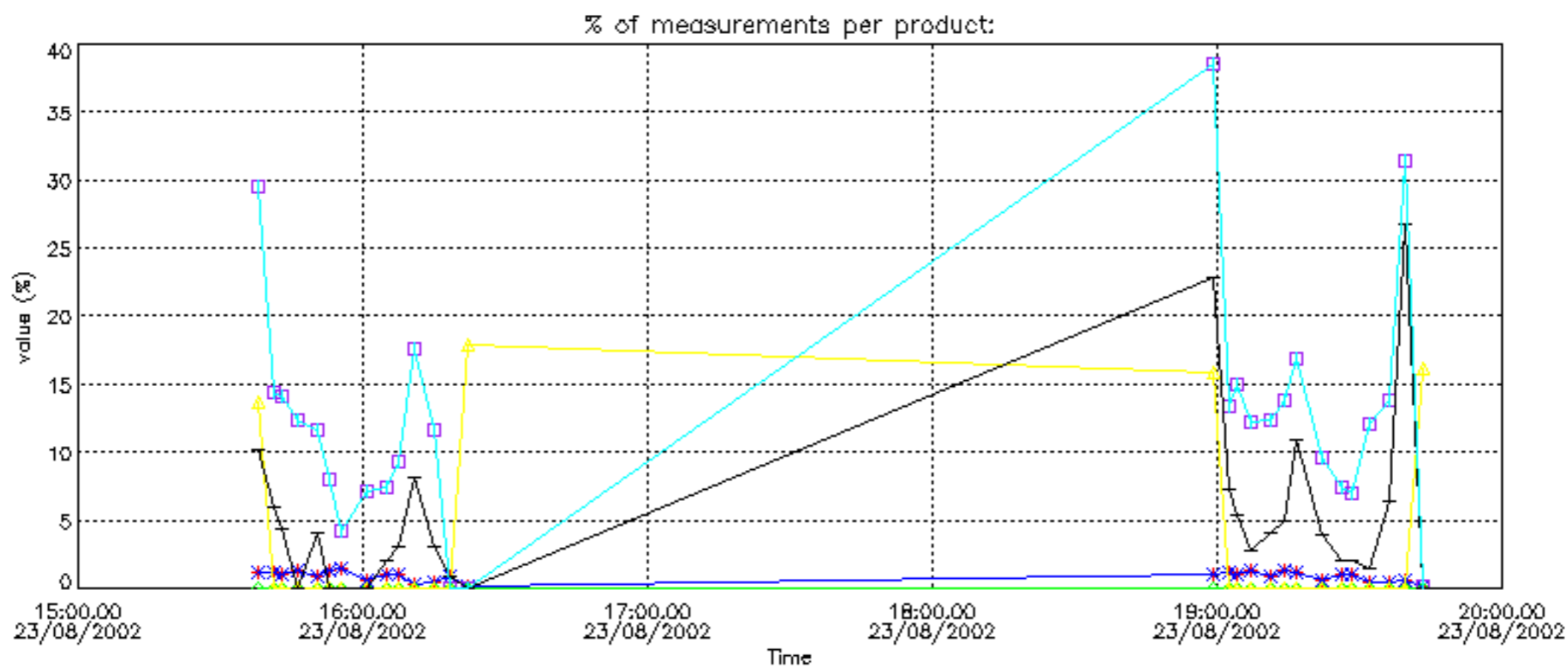
Percentage of flagged data per NO2 profile



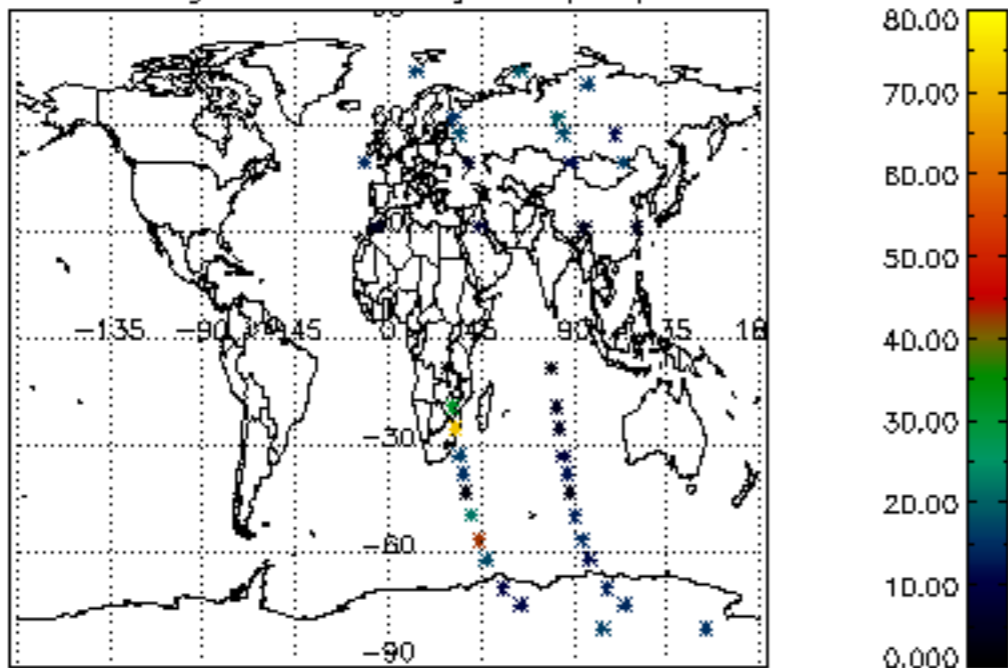
Percentage of flagged data per NO3 profile



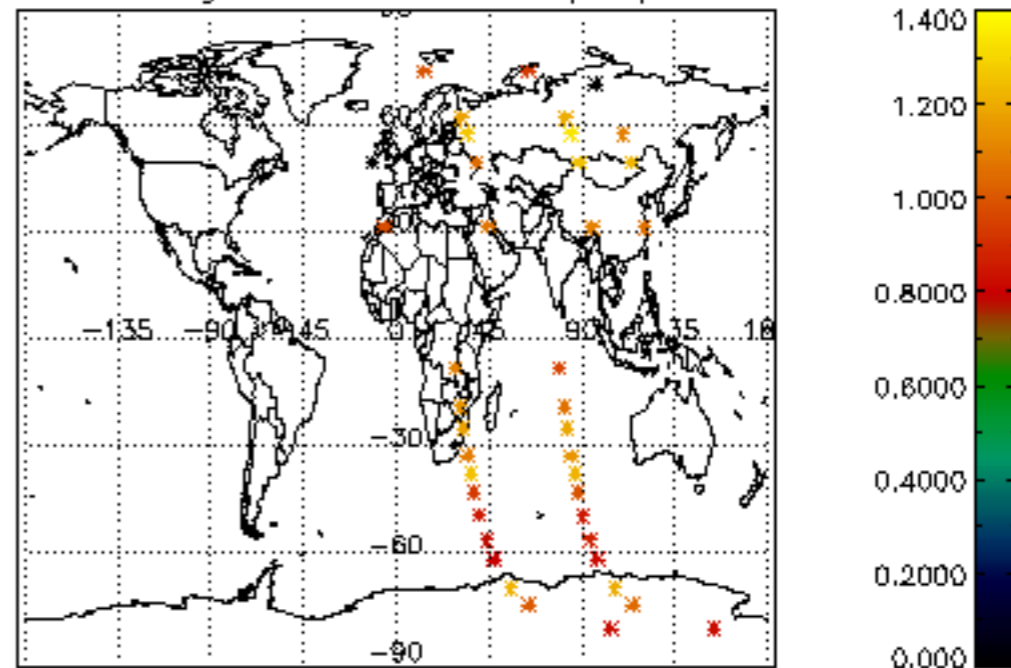




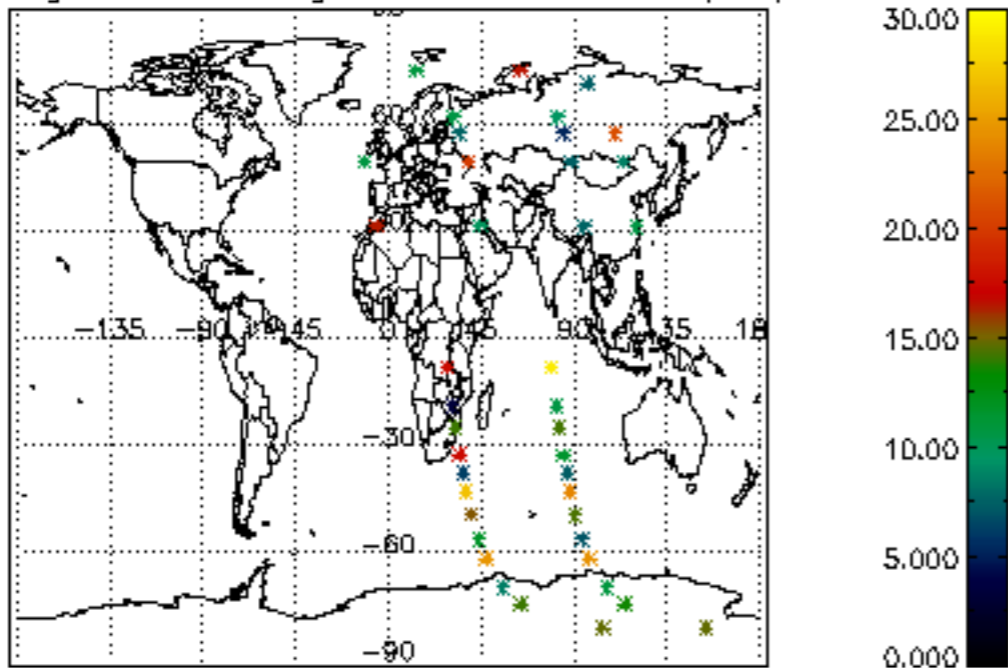
Percentage of cosmic ray hits per profile



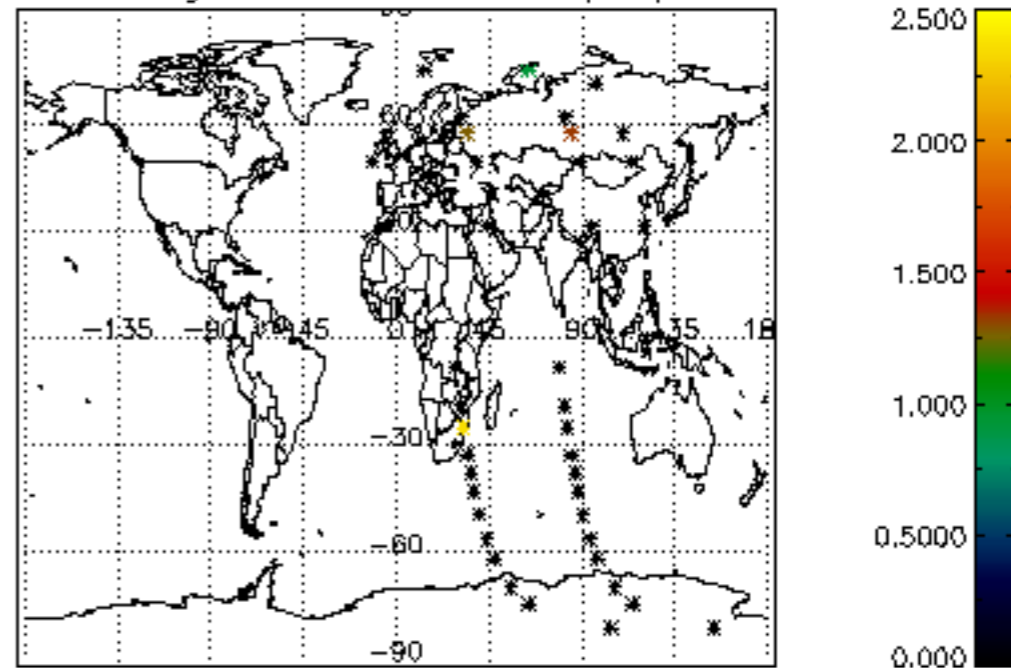
Percentage of datation errors per profile



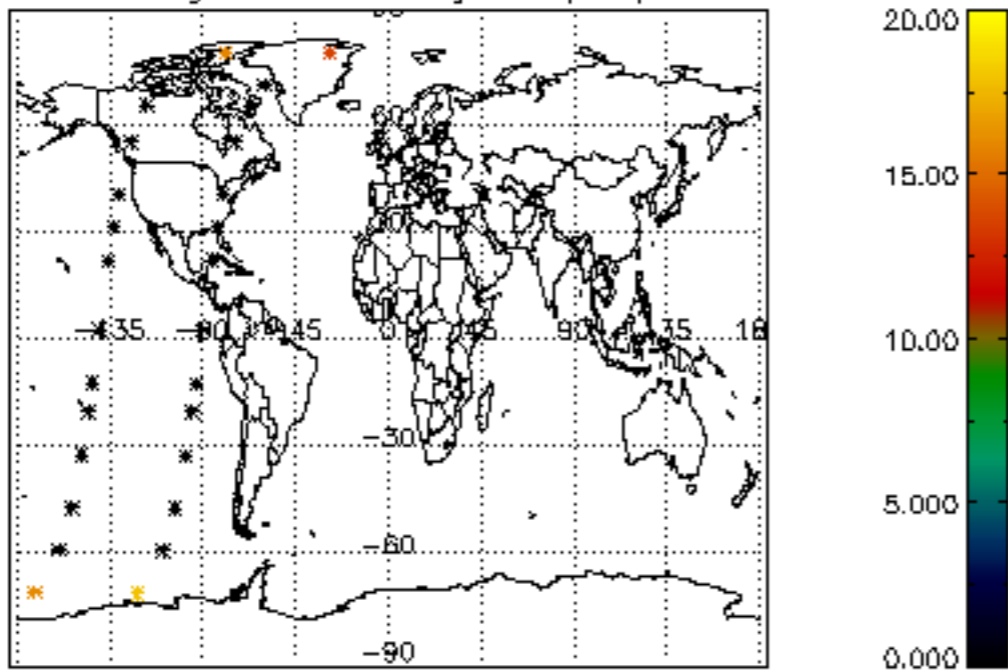
Percentage of star falling outside central band per profile



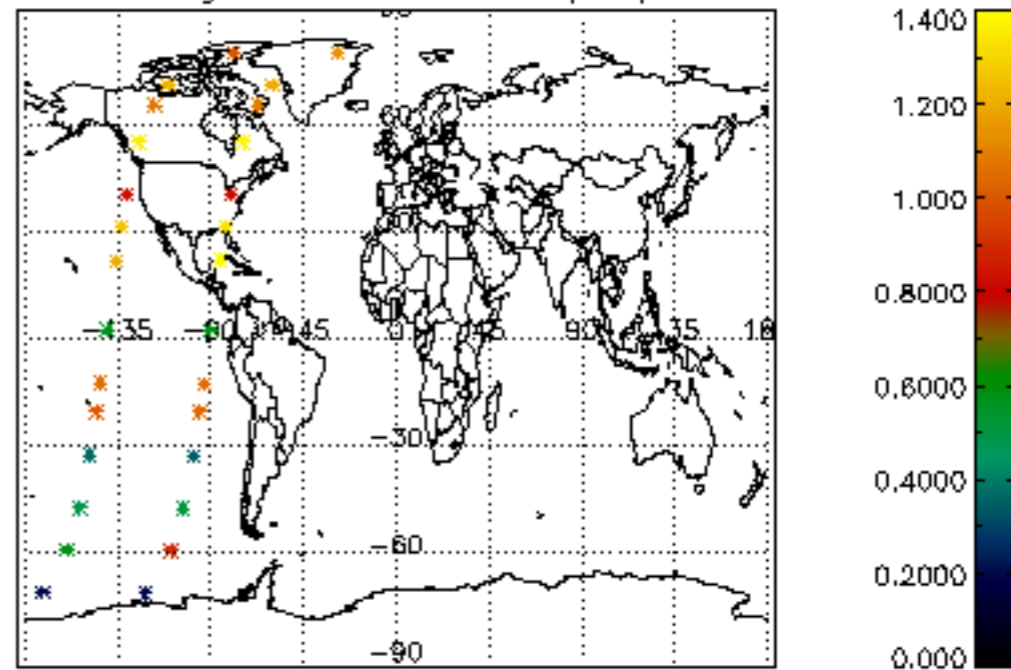
Percentage of saturation errors per profile



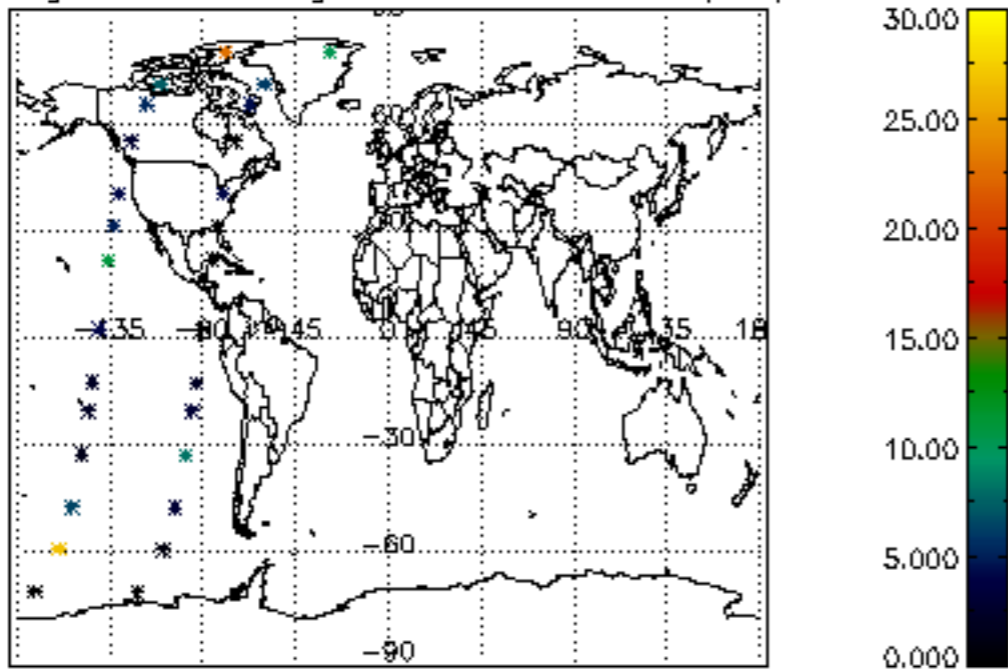
Percentage of cosmic ray hits per profile



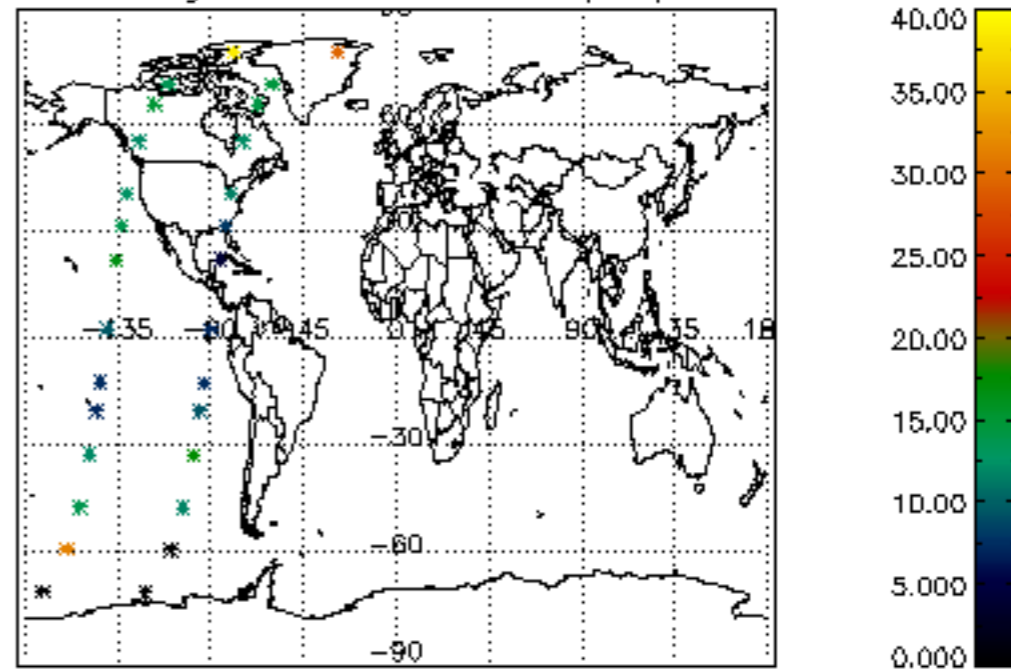
Percentage of datation errors per profile

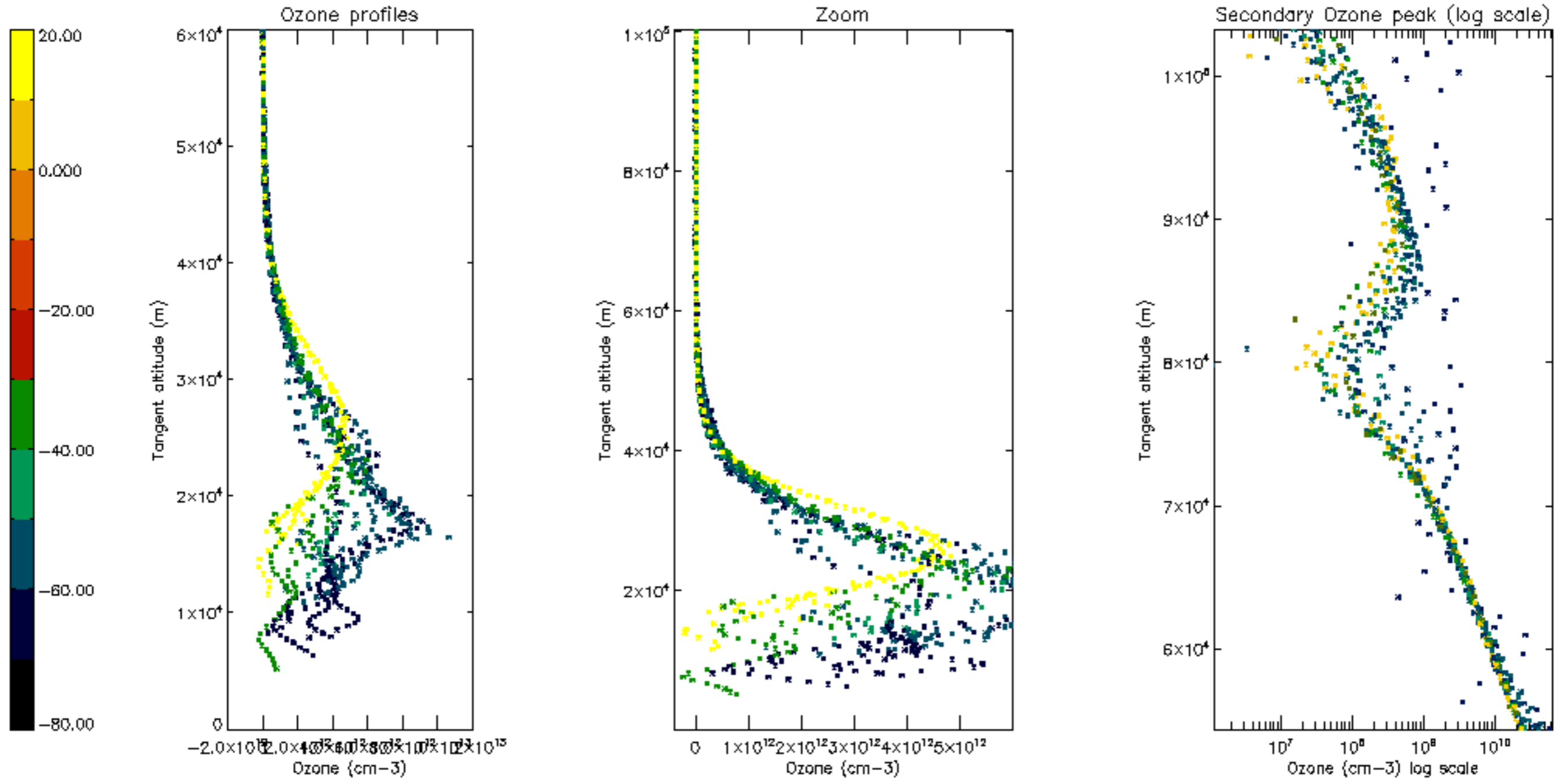


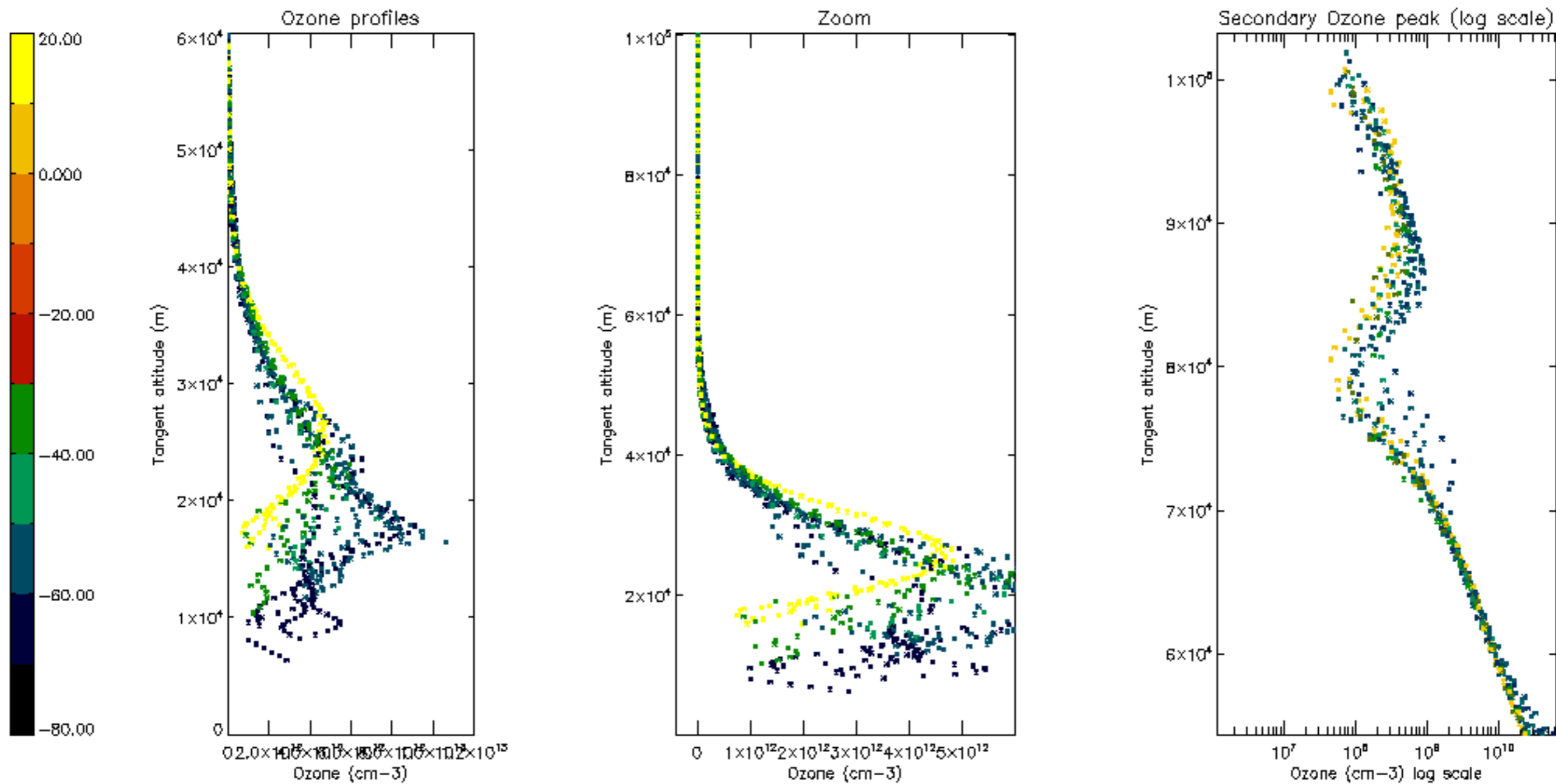
Percentage of star falling outside central band per profile

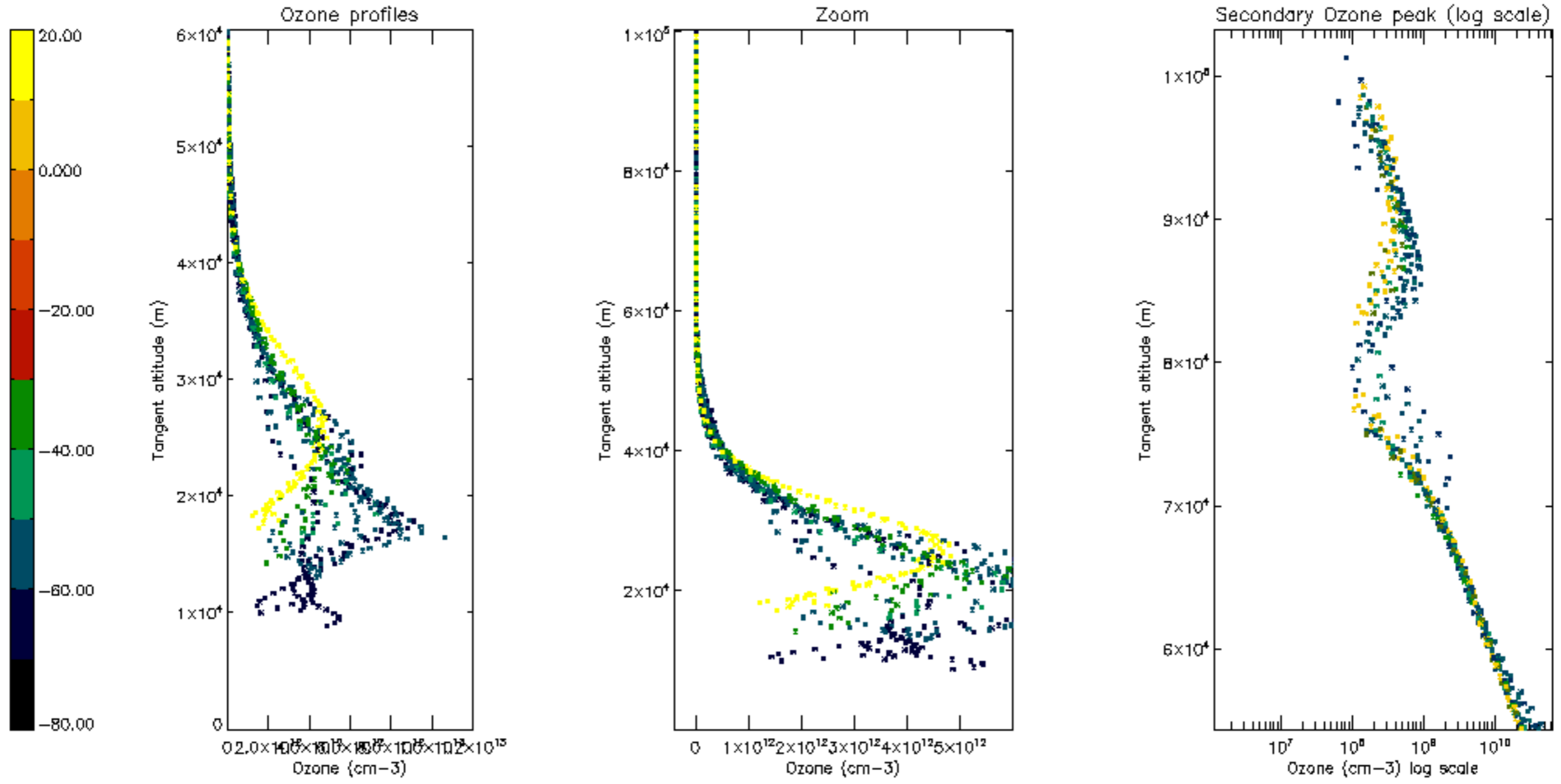


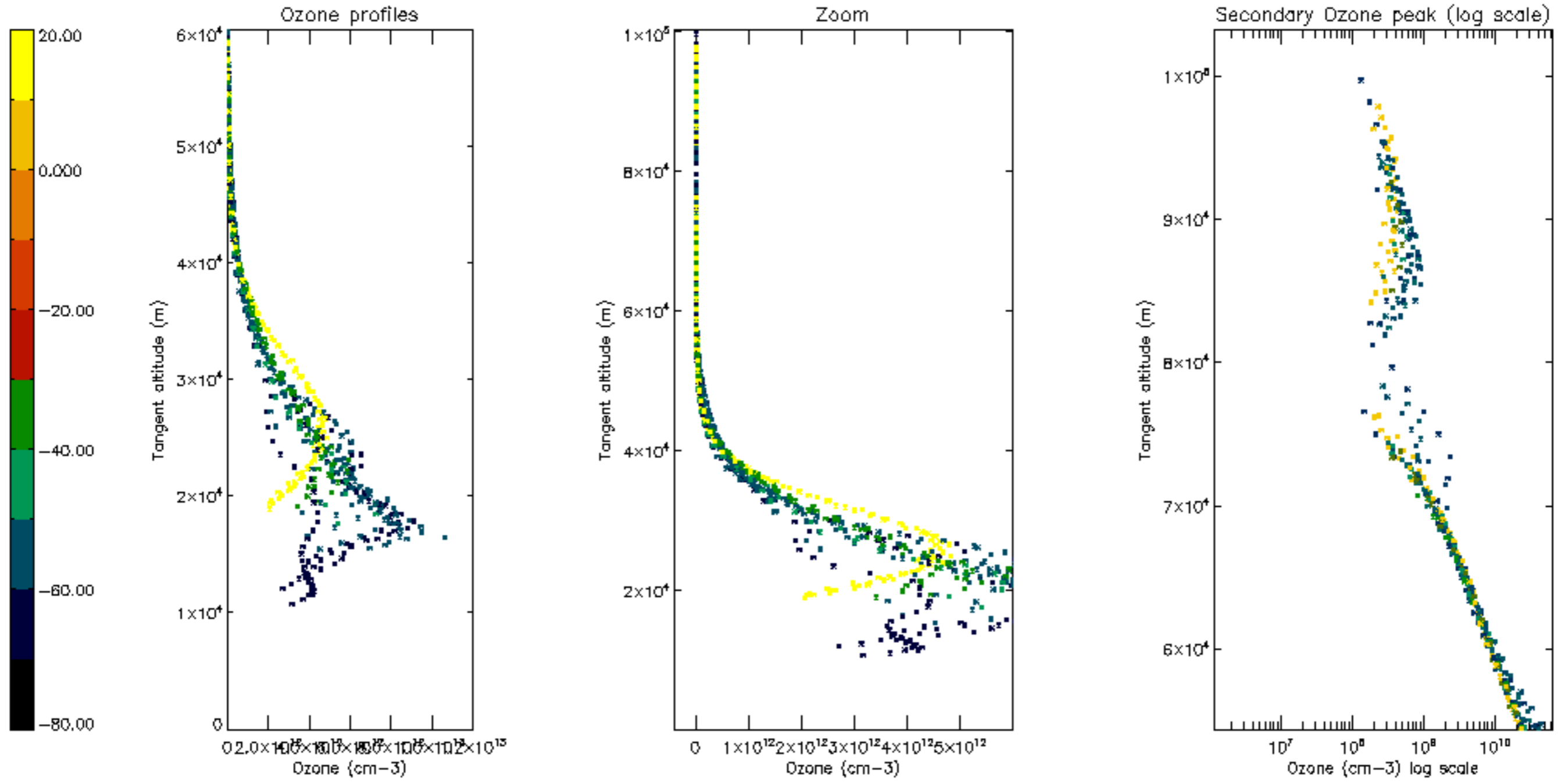
Percentage of saturation errors per profile

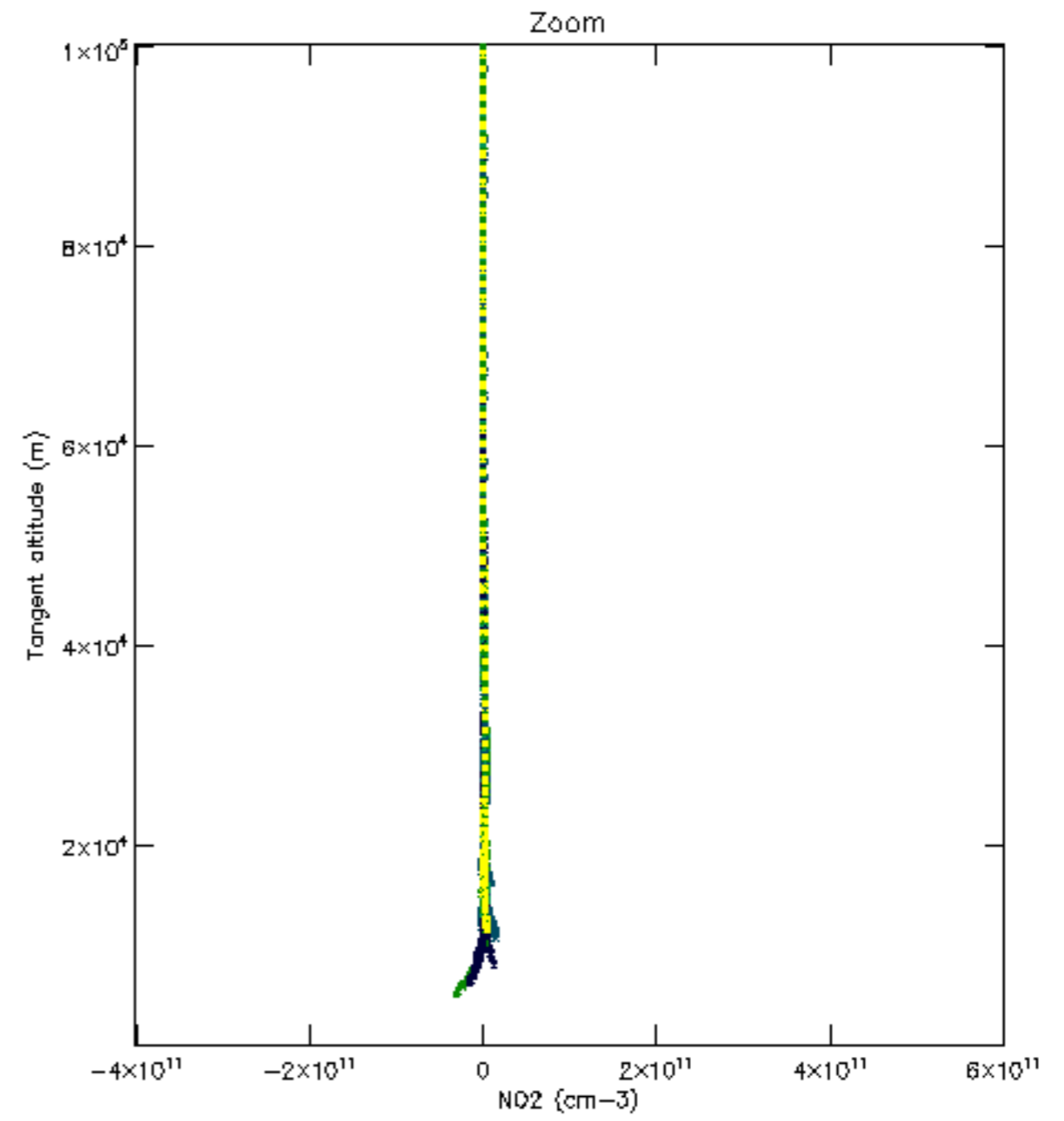
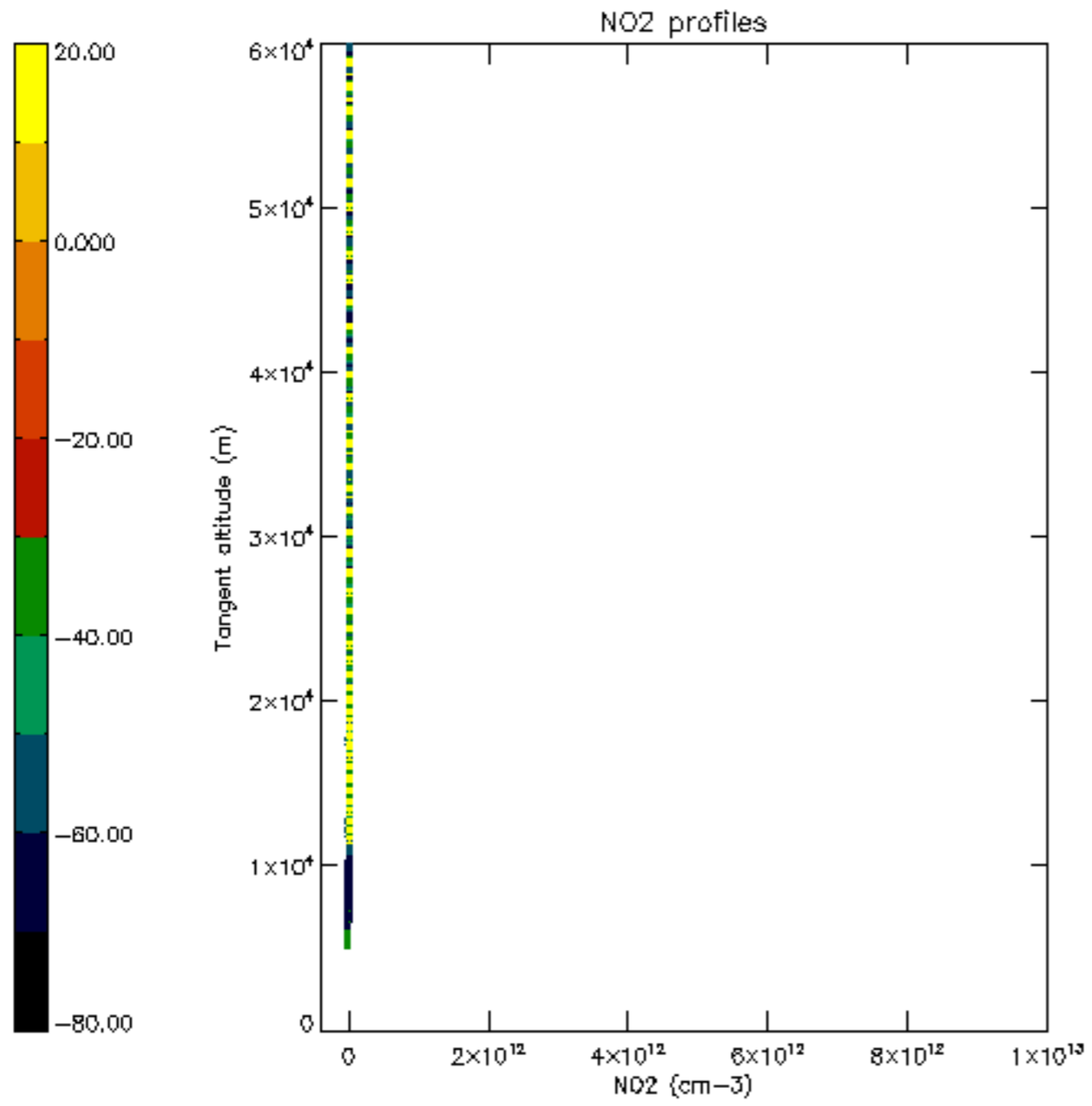


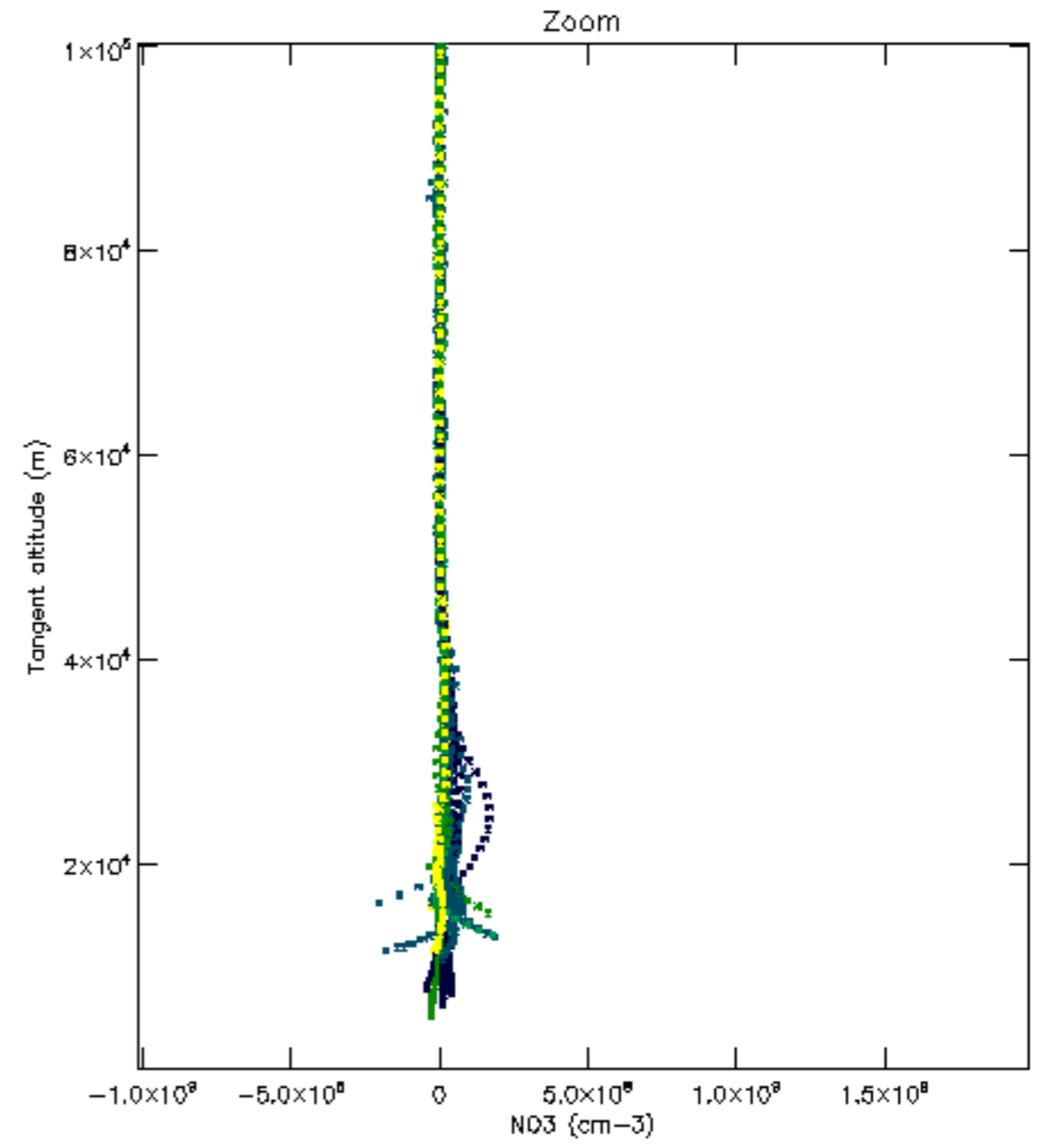
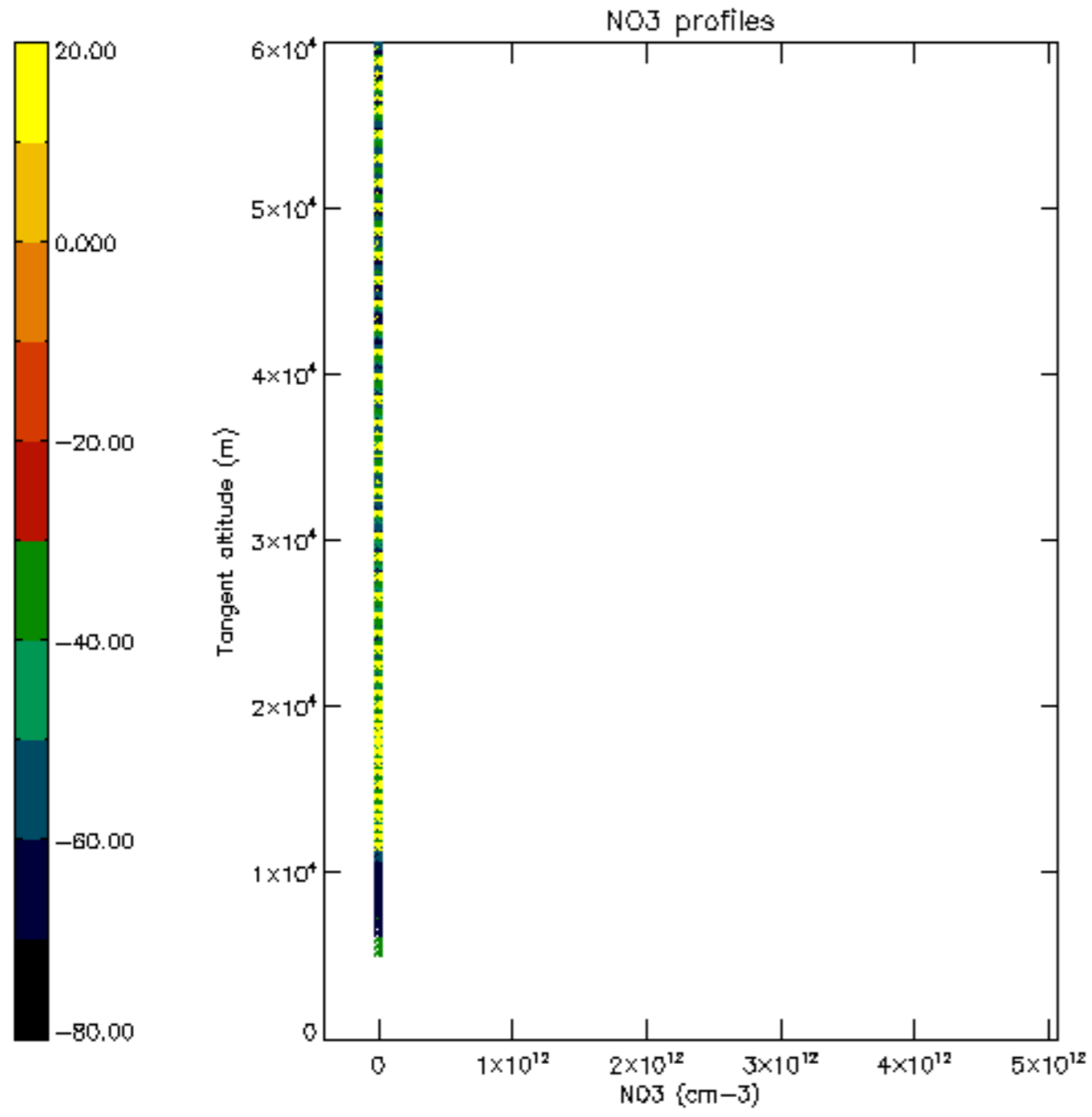


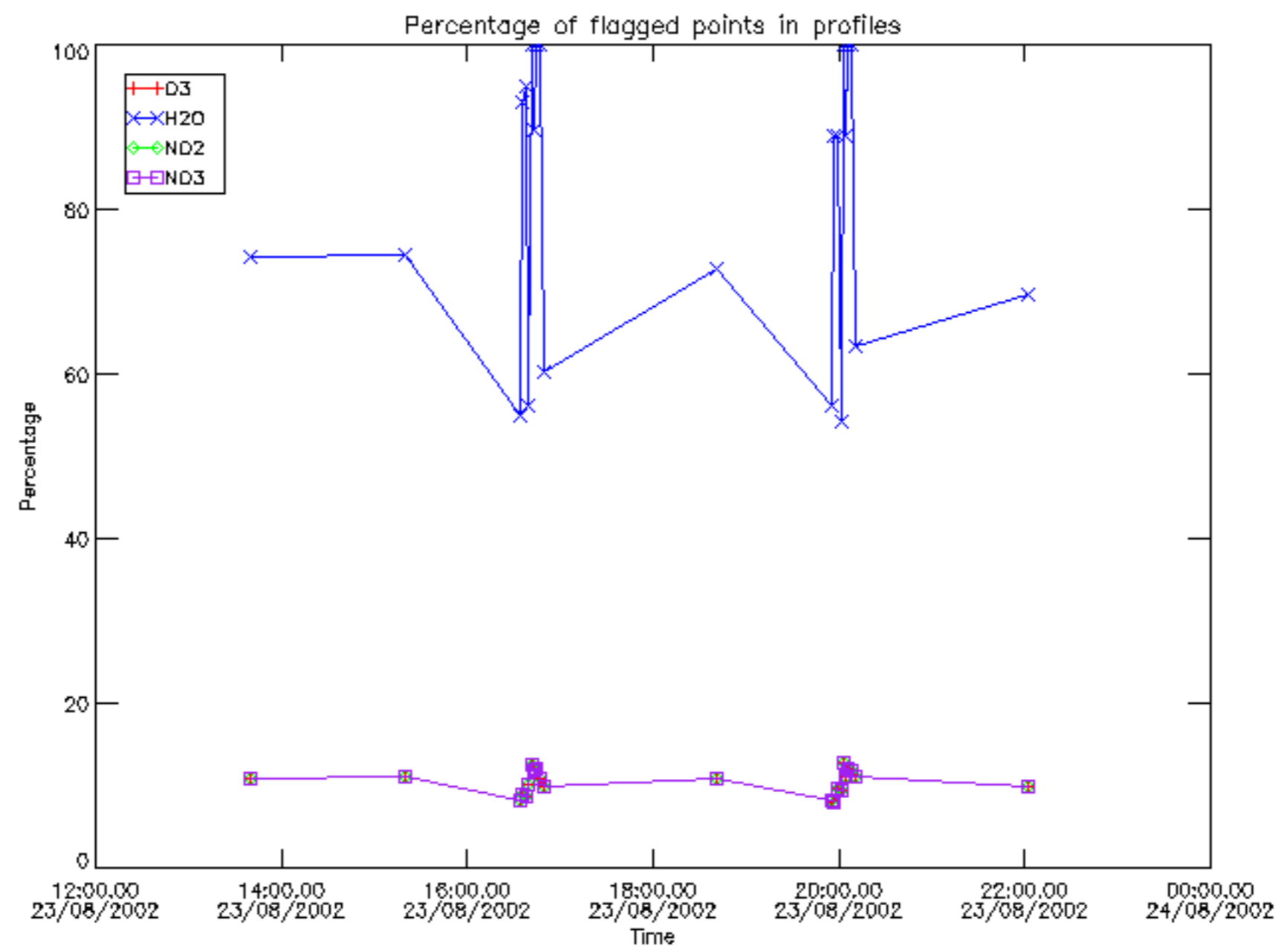




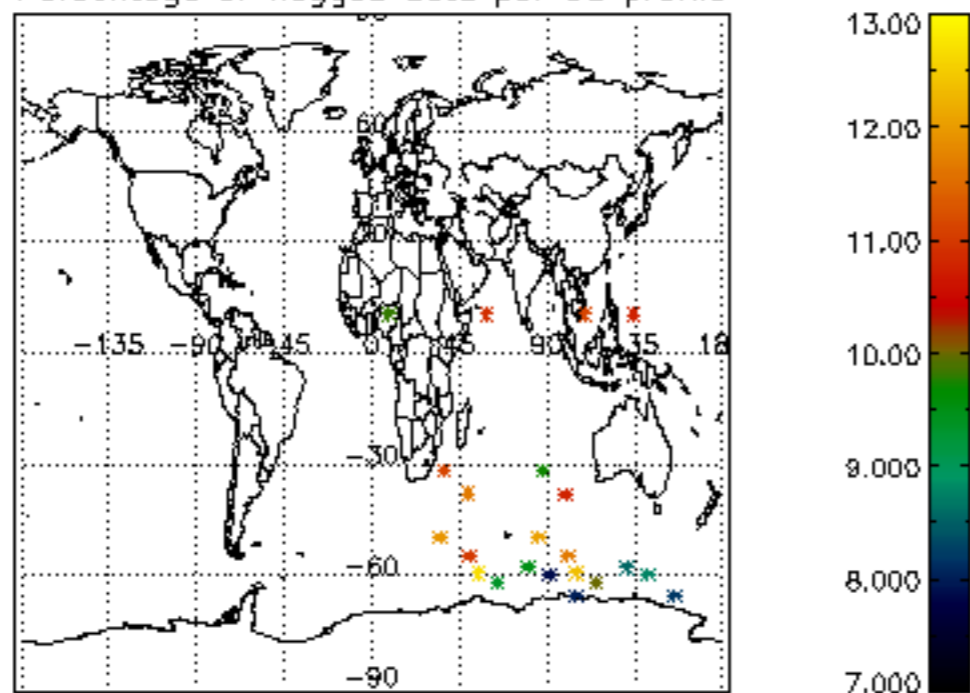




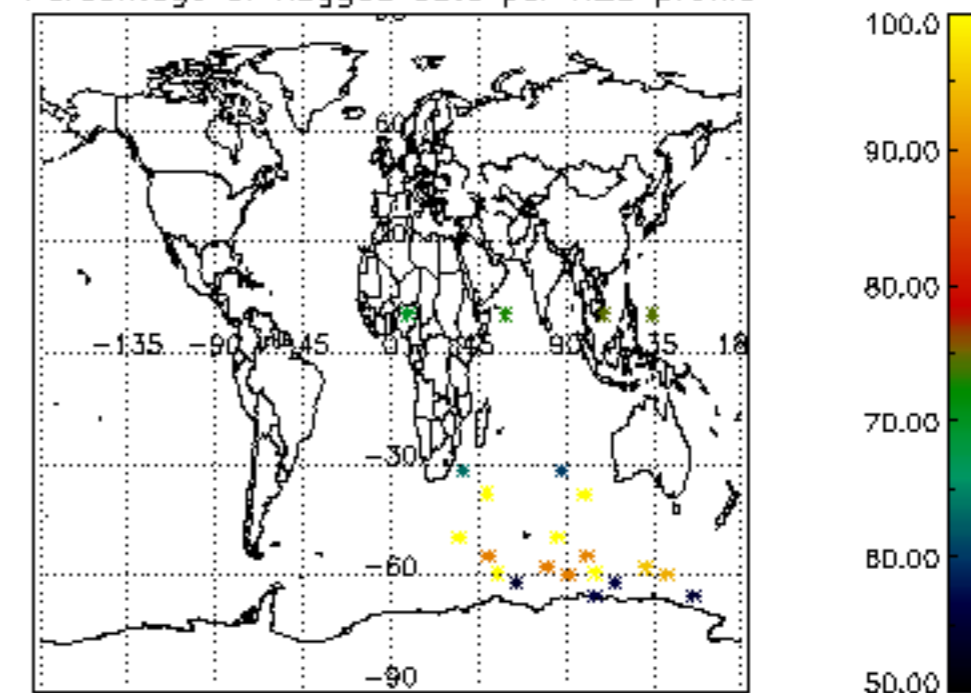




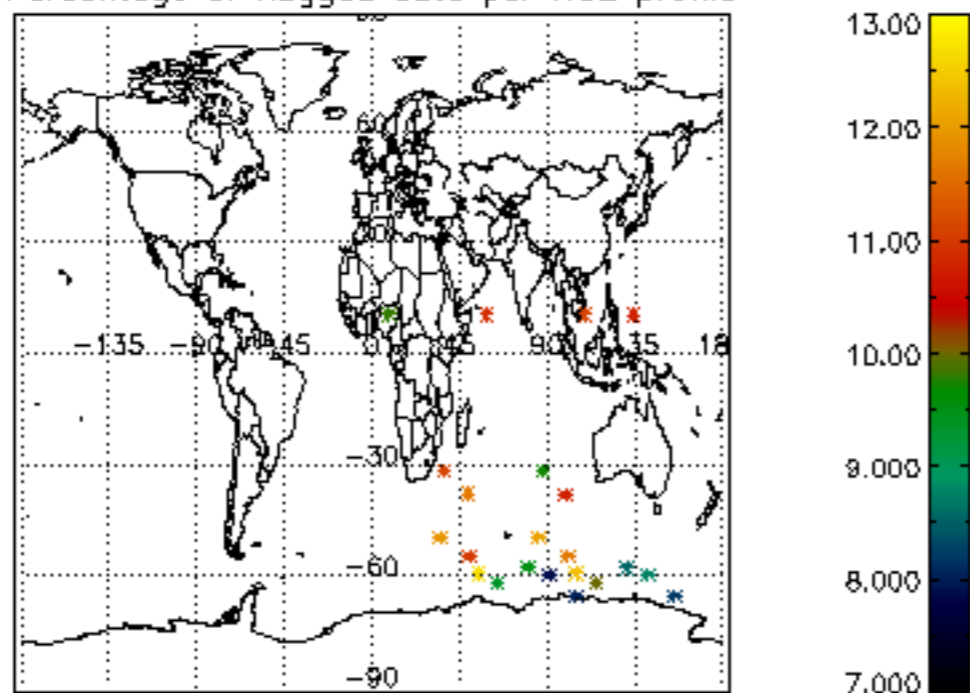
Percentage of flagged data per D3 profile



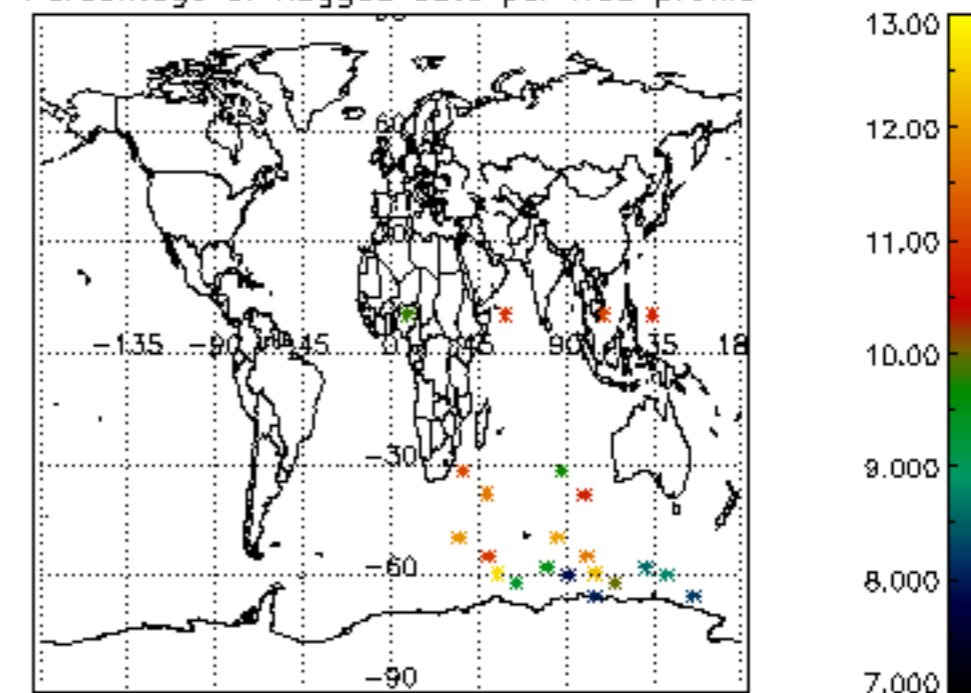
Percentage of flagged data per H2O profile

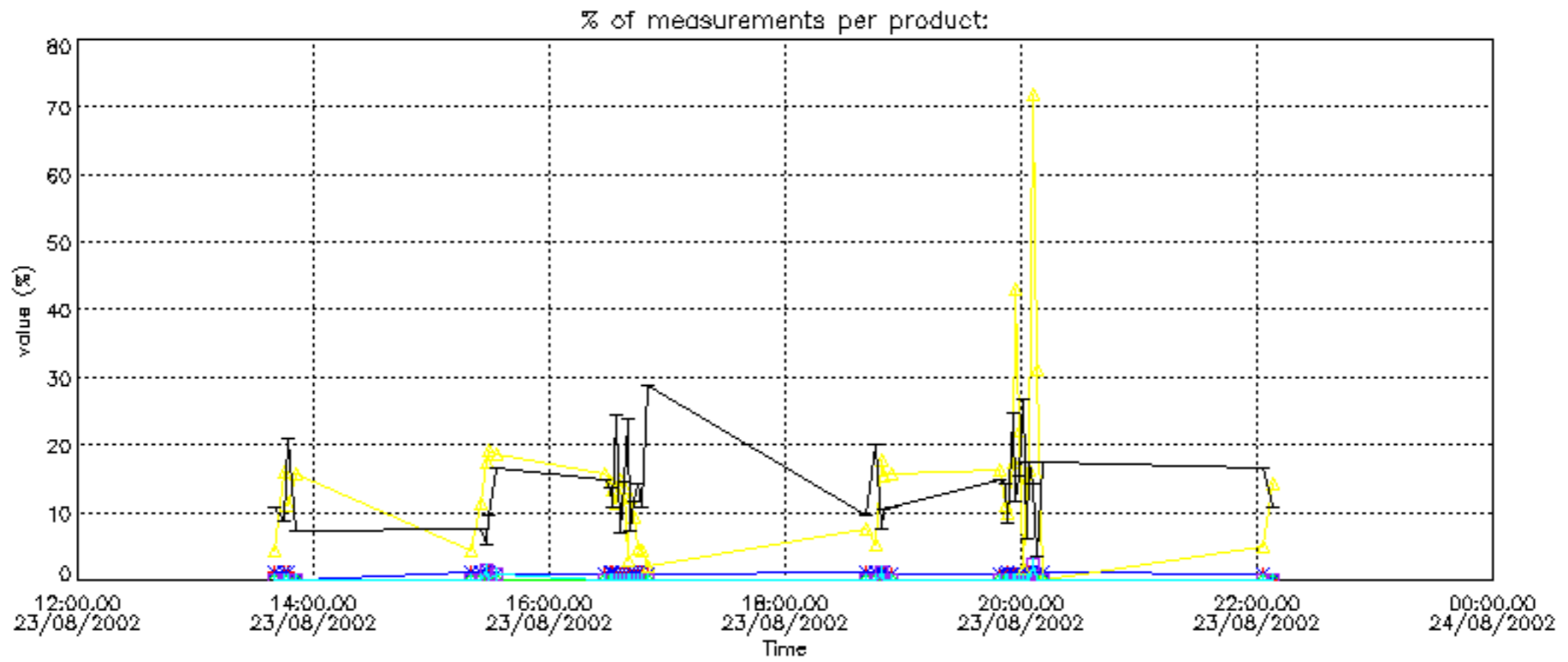


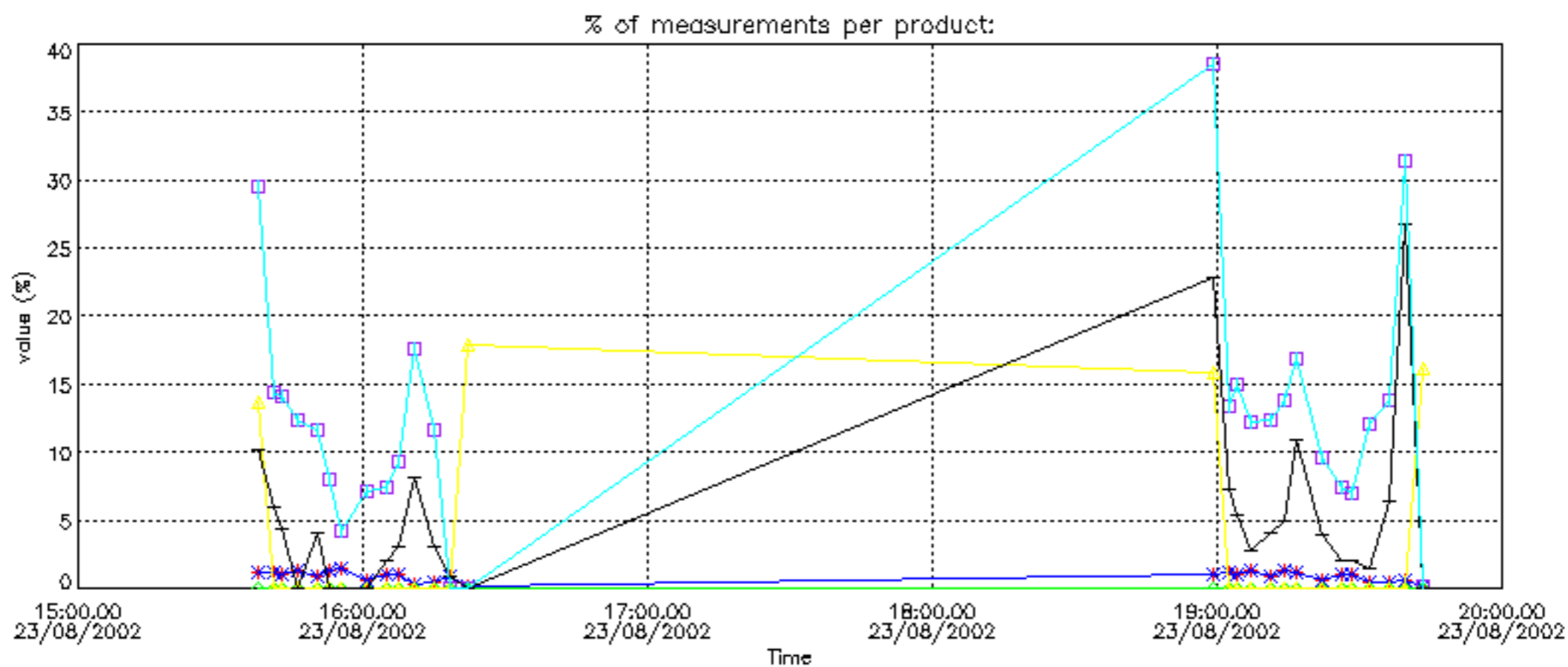
Percentage of flagged data per NO2 profile



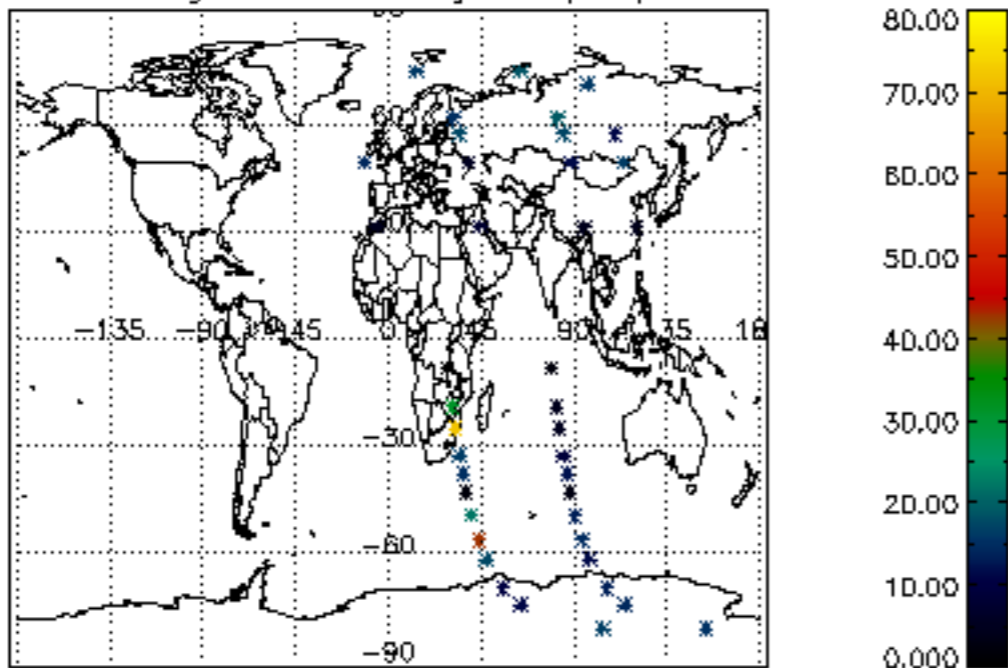
Percentage of flagged data per NO3 profile



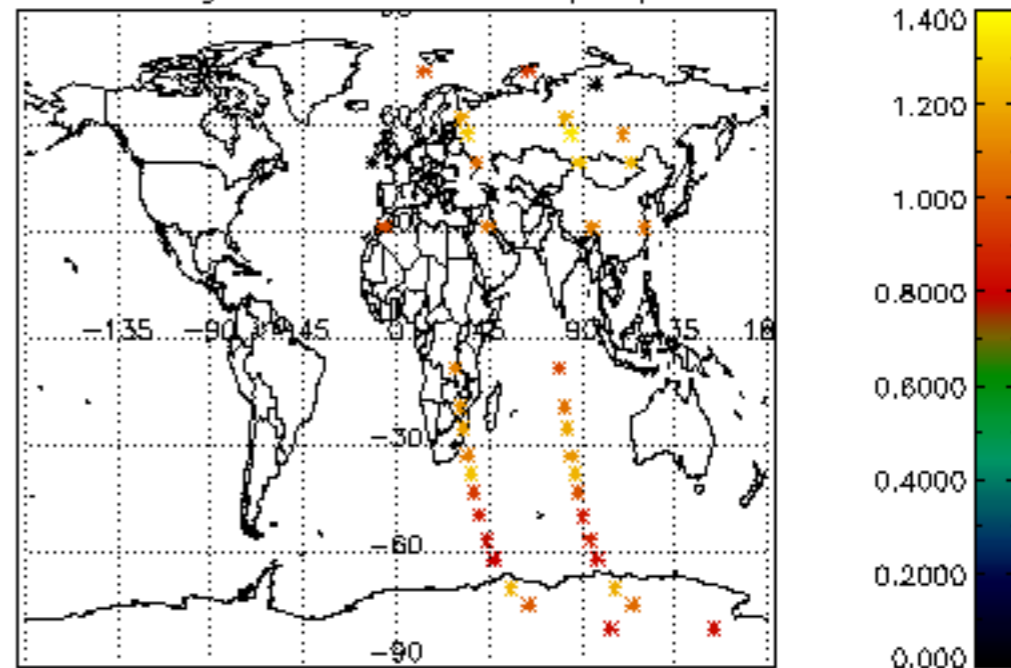




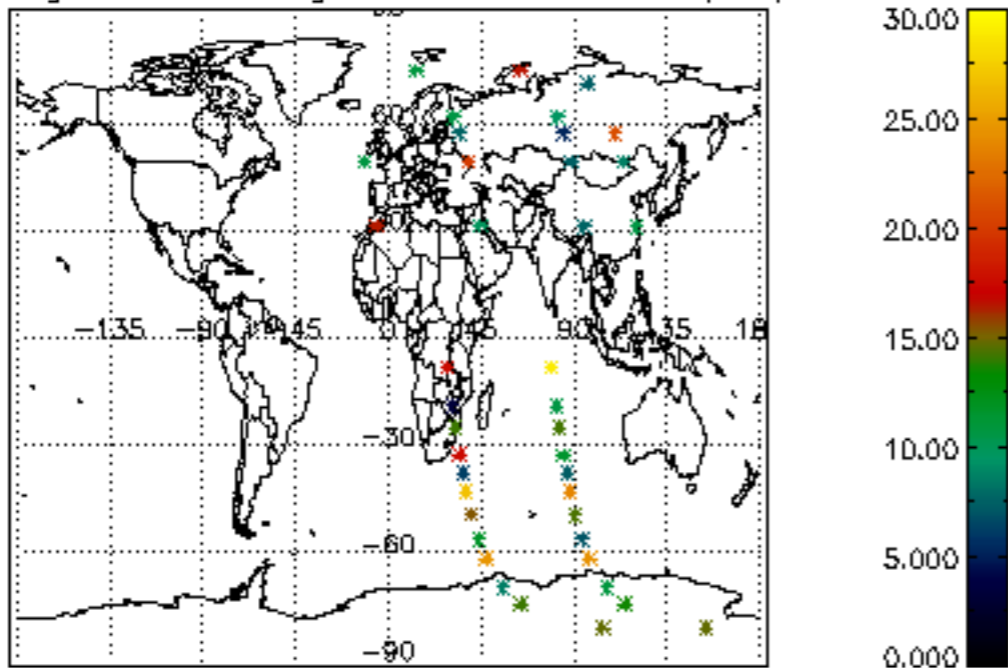
Percentage of cosmic ray hits per profile



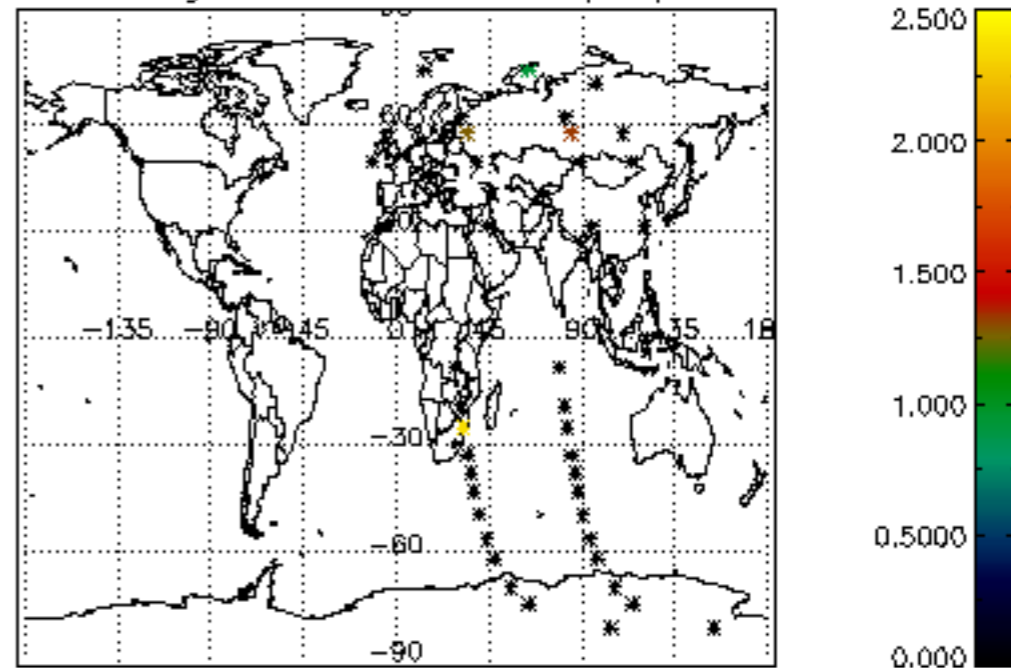
Percentage of datation errors per profile



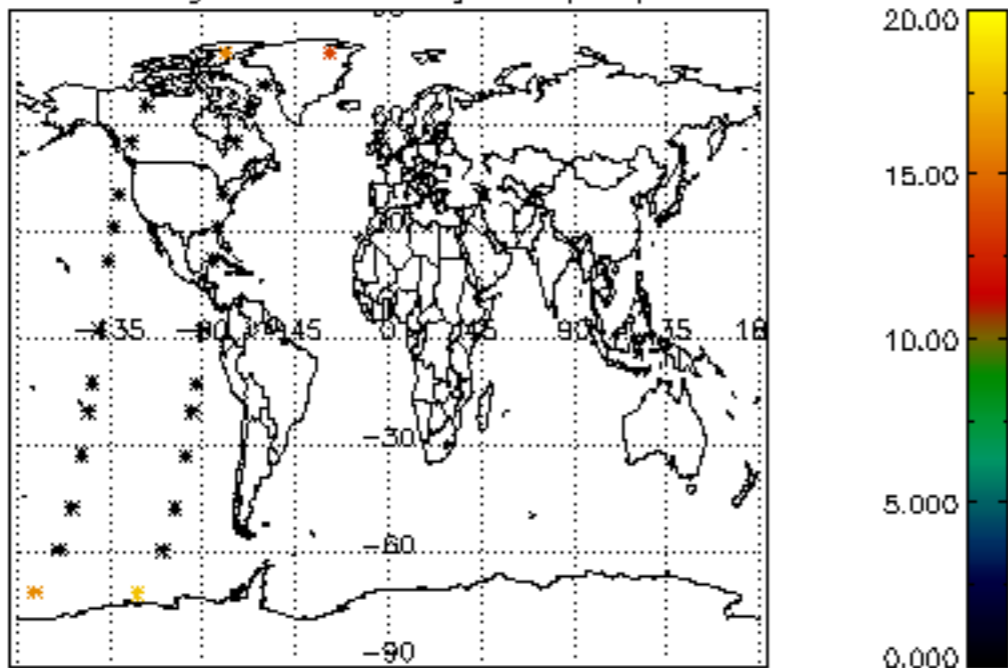
Percentage of star falling outside central band per profile



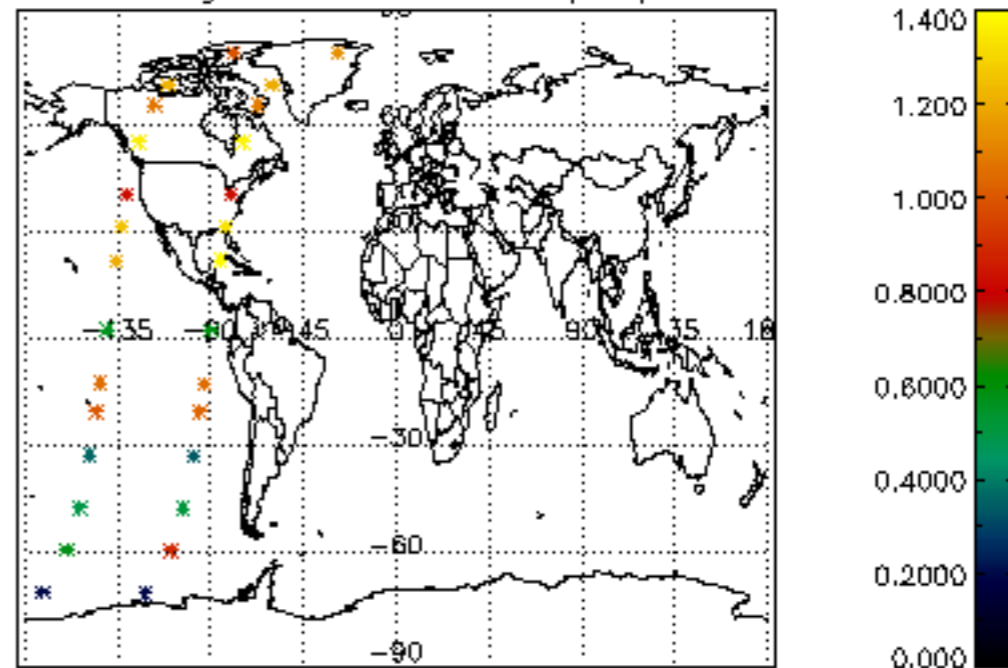
Percentage of saturation errors per profile



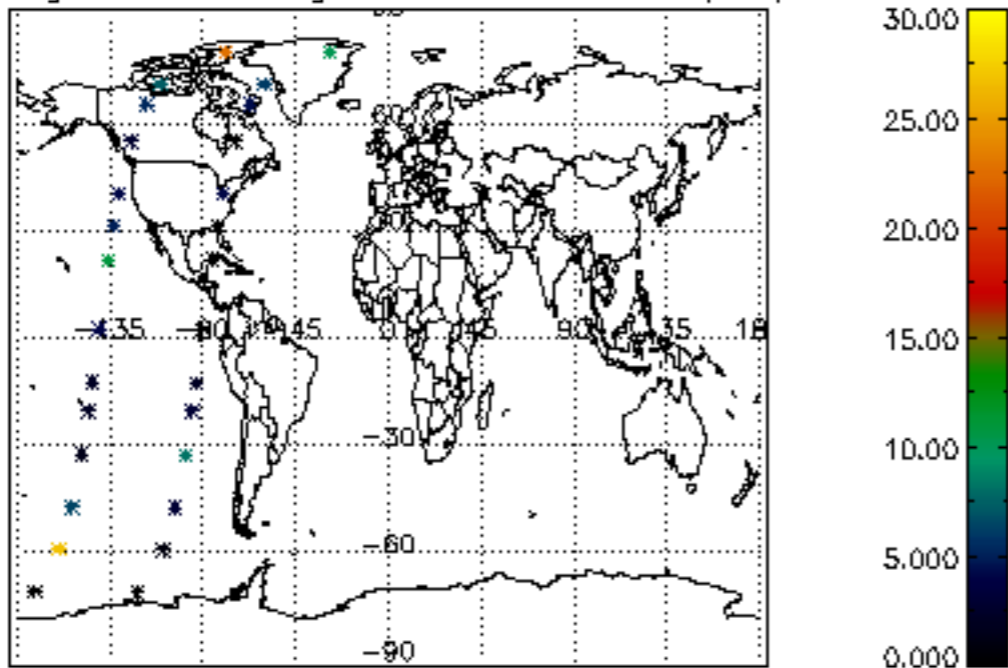
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

