

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

[3. Level 2 Quality information per product](#)

[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

[3.2 Plot of level 2 quality information per product \(world map\)](#)

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

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

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

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

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

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

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

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

[5.1 Ozone statistics based on quality of products](#)

[5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

[5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

[5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

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

[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	19APR2013 11:30:36
Data source version	GOMOS/6.01
Start time of products	21-09-2004 (21SEP2004 00:00:00)
Stop time of products	22-09-2004 (22SEP2004 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	57
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

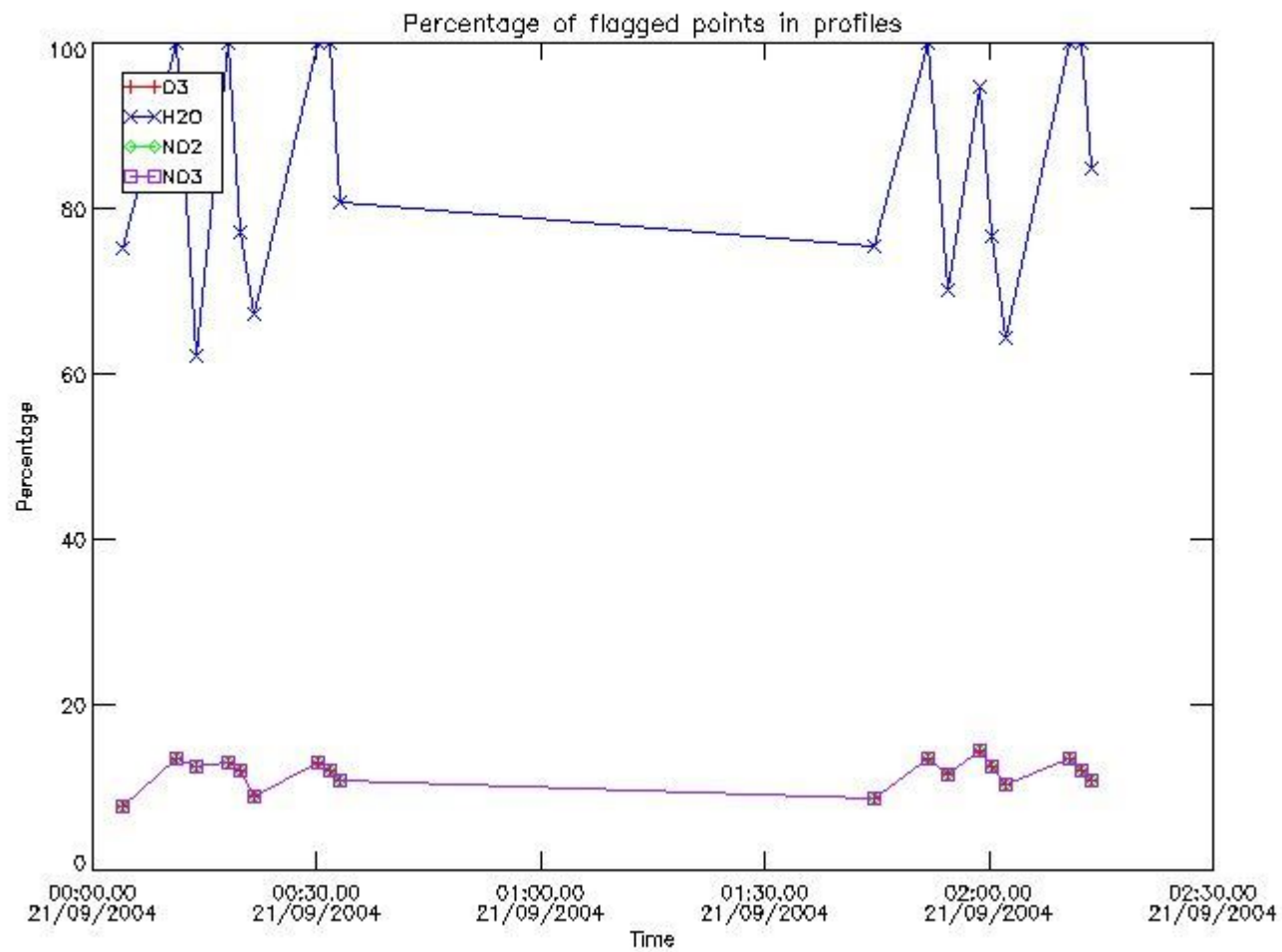
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20040921_000027_000000982030_00302_13382_4305.N1	21-SEP-2004 00:00:27	Straylight	97.500	151	13Mu Gem	2.8900	3000.0	195	13382	No
2	GOM_NL__2PRFIN20040921_000359_000000672030_00302_13382_4306.N1	21-SEP-2004 00:03:59	Dark	66.500	8	10Alp CMi	0.40000	6500.0	133	13382	No
3	GOM_NL__2PRFIN20040921_001120_000000422030_00302_13382_4307.N1	21-SEP-2004 00:11:20	Dark	41.500	132	15Rho Pup	2.8030	6900.0	83	13382	No
4	GOM_NL__2PRFIN20040921_001349_000000772030_00302_13382_4308.N1	21-SEP-2004 00:13:49	Dark	77.000	1	9Alp CMa	-1.4400	11000.	154	13382	No
5	GOM_NL__2PRFIN20040921_001807_000000392030_00302_13382_4309.N1	21-SEP-2004 00:18:07	Dark	39.000	46	Del Vel	1.9540	10600.	78	13382	No
6	GOM_NL__2PRFIN20040921_001940_000000422030_00302_13382_4310.N1	21-SEP-2004 00:19:40	Dark	42.000	41	Eps Car	1.8600	4100.0	84	13382	No
7	GOM_NL__2PRFIN20040921_002138_000000572030_00303_13383_4279.N1	21-SEP-2004 00:21:38	Dark	57.000	2	Alp Car	-0.73600	7000.0	114	13383	No
8	GOM_NL__2PRFIN20040921_003011_000000402030_00303_13383_4280.N1	21-SEP-2004 00:30:11	Dark	39.500	135	Bet Hyi	2.8200	5800.0	79	13383	No
9	GOM_NL__2PRFIN20040921_003139_000000432030_00303_13383_4281.N1	21-SEP-2004 00:31:39	Dark	42.500	143	Alp Hyi	2.8570	7200.0	85	13383	No
10	GOM_NL__2PRFIN20040921_003307_000000472030_00303_13383_4282.N1	21-SEP-2004 00:33:07	Dark	47.000	9	Alp Eri	0.45300	24000.	94	13383	No
11	GOM_NL__2PRFIN20040921_003540_000000412030_00303_13383_4283.N1	21-SEP-2004 00:35:40	Straylight	41.000	148	Alp Tuc	2.8780	4100.0	82	13383	No
12	GOM_NL__2PRFIN20040921_003926_000000442030_00303_13383_4284.N1	21-SEP-2004 00:39:26	Straylight	43.500	31	Alp Gru	1.7340	15200.	87	13383	No
13	GOM_NL__2PRFIN20040921_004214_000000392030_00303_13383_4285.N1	21-SEP-2004 00:42:14	Straylight	38.500	172	Gam Gru	3.0030	13100.	77	13383	No
14	GOM_NL__2PRFIN20040921_004342_000000472030_00303_13383_4286.N1	21-SEP-2004 00:43:42	Straylight	46.500	18	24Alp PsA	1.1660	9700.0	93	13383	No
15	GOM_NL__2PRFIN20040921_004604_000000582030_00303_13383_4287.N1	21-SEP-2004 00:46:04	Tw_i_and_stray	57.500	52	16Bet Cet	2.0370	4500.0	115	13383	No
16	GOM_NL__2PRFIN20040921_004812_000000432030_00303_13383_4288.N1	21-SEP-2004 00:48:12	Tw_i_and_stray	42.500	142	49Del Cap	2.8500	8900.0	85	13383	No
17	GOM_NL__2PRFIN20040921_005222_000000402030_00303_13383_4289.N1	21-SEP-2004 00:52:22	Bright	40.000	162	34Alp Aqr	2.9440	5350.0	80	13383	No
18	GOM_NL__2PRFIN20040921_005524_000000412030_00303_13383_4290.N1	21-SEP-2004 00:55:24	Bright	40.500	61	8Eps Peg	2.1000	3900.0	81	13383	No
19	GOM_NL__2PRFIN20040921_005735_000000472030_00303_13383_4291.N1	21-SEP-2004 00:57:35	Bright	47.000	140	88Gam Peg	2.8340	26000.	94	13383	No
20	GOM_NL__2PRFIN20040921_010022_000000402030_00303_13383_4292.N1	21-SEP-2004 01:00:22	Bright	39.500	93	53Bet Peg	2.5200	3100.0	79	13383	No
21	GOM_NL__2PRFIN20040921_010156_000000482030_00303_13383_4293.N1	21-SEP-2004 01:01:56	Bright	47.500	58	21Alp And	2.0730	11000.	95	13383	No
22	GOM_NL__2PRFIN20040921_010558_000000402030_00303_13383_4294.N1	21-SEP-2004 01:05:58	Bright	40.000	19	50Alp Cyg	1.2460	10500.	80	13383	No
23	GOM_NL__2PRFIN20040921_011004_000000402030_00303_13383_4295.N1	21-SEP-2004 01:10:04	Bright	39.500	89	5Alp Cep	2.4510	8000.0	79	13383	No
24	GOM_NL__2PRFIN20040921_011201_000000432030_00303_13383_4296.N1	21-SEP-2004 01:12:01	Bright	43.000	76	27Gam Cas	2.3000	30000.	86	13383	No
25	GOM_NL__2PRFIN20040921_011736_000000382030_00303_13383_4297.N1	21-SEP-2004 01:17:36	Bright	38.000	49	1Alp UMi	1.9900	6300.0	76	13383	No
26	GOM_NL__2PRFIN20040921_011858_000000402030_00303_13383_4298.N1	21-SEP-2004 01:18:58	Bright	40.000	60	7Bet UMi	2.0810	3950.0	80	13383	No
27	GOM_NL__2PRFIN20040921_012054_000000692030_00303_13383_4299.N1	21-SEP-2004 01:20:54	Bright	69.000	175	39Del Per	3.0100	19400.	138	13383	No
28	GOM_NL__2PRFIN20040921_012510_000000422030_00303_13383_4300.N1	21-SEP-2004 01:25:10	Bright	42.000	36	50Alp UMa	1.8000	6300.0	84	13383	No
29	GOM_NL__2PRFIN20040921_012637_000000392030_00303_13383_4301.N1	21-SEP-2004 01:26:37	Bright	39.000	82	48Bet UMa	2.3650	10600.	78	13383	No
30	GOM_NL__2PRFIN20040921_012926_000000592030_00303_13383_4302.N1	21-SEP-2004 01:29:26	Bright	58.500	42	34Bet Aur	1.9000	10200.	117	13383	No
31	GOM_NL__2PRFIN20040921_013313_000000712030_00303_13383_4303.N1	21-SEP-2004 01:33:13	Bright	70.500	107	37The Aur	2.6490	11000.	141	13383	No
32	GOM_NL__2PRFIN20040921_013611_000002462030_00303_13383_4304.N1	21-SEP-2004 01:36:11	Tw_i_and_stray	246.00	114	3Iot Aur	2.6930	4600.0	492	13383	No
33	GOM_NL__2PRFIN20040921_014104_000000942030_00303_13383_4305.N1	21-SEP-2004 01:41:04	Straylight	94.000	151	13Mu Gem	2.8900	3000.0	188	13383	No
34	GOM_NL__2PRFIN20040921_014436_000000602030_00303_13383_4306.N1	21-SEP-2004 01:44:36	Dark	59.500	8	10Alp CMi	0.40000	6500.0	119	13383	No
35	GOM_NL__2PRFIN20040921_015156_000000452030_00303_13383_4307.N1	21-SEP-2004 01:51:56	Dark	45.000	132	15Rho Pup	2.8030	6900.0	90	13383	No
36	GOM_NL__2PRFIN20040921_015426_000000662030_00303_13383_4308.N1	21-SEP-2004 01:54:26	Dark	65.500	1	9Alp CMa	-1.4400	11000.	131	13383	No
37	GOM_NL__2PRFIN20040921_015844_000000392030_00303_13383_4309.N1	21-SEP-2004 01:58:44	Dark	38.500	46	Del Vel	1.9540	10600.	77	13383	No
38	GOM_NL__2PRFIN20040921_020016_000000412030_00303_13383_4310.N1	21-SEP-2004 02:00:16	Dark	41.000	41	Eps Car	1.8600	4100.0	82	13383	No
39	GOM_NL__2PRFIN20040921_020215_000000502030_00304_13384_4279.N1	21-SEP-2004 02:02:15	Dark	49.500	2	Alp Car	-0.73600	7000.0	99	13384	No
40	GOM_NL__2PRFIN20040921_021047_000000382030_00304_13384_4280.N1	21-SEP-2004 02:10:47	Dark	38.000	135	Bet Hyi	2.8200	5800.0	76	13384	No
41	GOM_NL__2PRFIN20040921_021216_000000432030_00304_13384_4281.N1	21-SEP-2004 02:12:16	Dark	42.500	143	Alp Hyi	2.8570	7200.0	85	13384	No
42	GOM_NL__2PRFIN20040921_021343_000000472030_00304_13384_4282.N1	21-SEP-2004 02:13:43	Dark	46.500	9	Alp Eri	0.45300	24000.	93	13384	No

43	GOM_NL__2PRFIN20040921_021616_000000402030_00304_13384_4283.N1	21-SEP-2004 02:16:16	Straylight	40.000	148	Alp Tuc	2.8780	4100.0	80	13384	No
44	GOM_NL__2PRFIN20040921_022202_000000382030_00304_13384_4284.N1	21-SEP-2004 02:20:02	Straylight	37.500	31	Alp Gru	1.7340	15200.	75	13384	No
45	GOM_NL__2PRFIN20040921_022249_000000392030_00304_13384_4285.N1	21-SEP-2004 02:22:49	Straylight	38.500	172	Gam Gru	3.0030	13100.	77	13384	No
46	GOM_NL__2PRFIN20040921_022416_000000442030_00304_13384_4286.N1	21-SEP-2004 02:24:16	Straylight	43.500	18	24Alp PsA	1.1660	9700.0	87	13384	No
47	GOM_NL__2PRFIN20040921_022640_000000612030_00304_13384_4287.N1	21-SEP-2004 02:26:40	Tw_i_and_stray	60.500	52	16Bet Cet	2.0370	4500.0	121	13384	No
48	GOM_NL__2PRFIN20040921_022848_000000432030_00304_13384_4288.N1	21-SEP-2004 02:28:48	Tw_i_and_stray	43.000	142	49Del Cap	2.8500	8900.0	86	13384	No
49	GOM_NL__2PRFIN20040921_023258_000000402030_00304_13384_4289.N1	21-SEP-2004 02:32:58	Bright	40.000	162	34Alp Aqr	2.9440	5350.0	80	13384	No
50	GOM_NL__2PRFIN20040921_023558_000000432030_00304_13384_4290.N1	21-SEP-2004 02:35:58	Bright	43.000	61	8Eps Peg	2.1000	3900.0	86	13384	No
51	GOM_NL__2PRFIN20040921_023809_000000492030_00304_13384_4291.N1	21-SEP-2004 02:38:09	Bright	49.000	140	88Gam Peg	2.8340	26000.	98	13384	No
52	GOM_NL__2PRFIN20040921_024057_000000402030_00304_13384_4292.N1	21-SEP-2004 02:40:57	Bright	39.500	93	53Bet Peg	2.5200	3100.0	79	13384	No
53	GOM_NL__2PRFIN20040921_024232_000000462030_00304_13384_4293.N1	21-SEP-2004 02:42:32	Bright	46.000	58	21Alp And	2.0730	11000.	92	13384	No
54	GOM_NL__2PRFIN20040921_024634_000000402030_00304_13384_4294.N1	21-SEP-2004 02:46:34	Bright	40.000	19	50Alp Cyg	1.2460	10500.	80	13384	No
55	GOM_NL__2PRFIN20040921_025038_000000382030_00304_13384_4295.N1	21-SEP-2004 02:50:38	Bright	38.000	89	5Alp Cep	2.4510	8000.0	76	13384	No
56	GOM_NL__2PRFIN20040921_025236_000000422030_00304_13384_4296.N1	21-SEP-2004 02:52:36	Bright	42.000	76	27Gam Cas	2.3000	30000.	84	13384	No
57	GOM_NL__2PRFIN20040921_025812_000000062030_00304_13384_4297.N1	21-SEP-2004 02:58:12	Straylight	6.0000	49	1Alp UMi	1.9900	6300.0	12	13384	No

3. Quality information per product

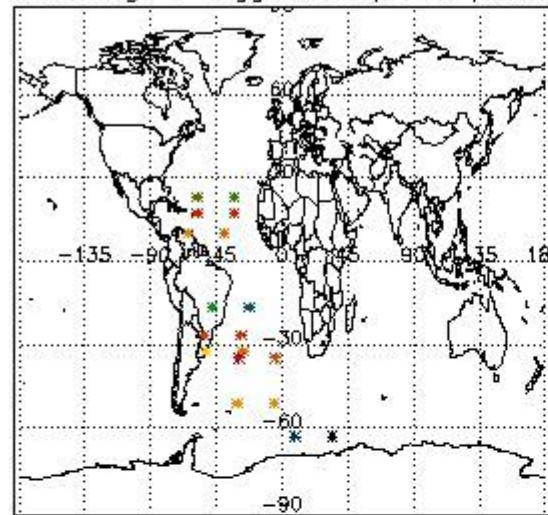
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

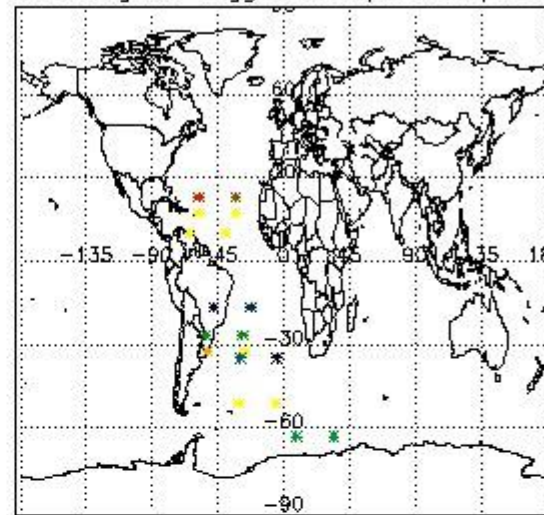


3.2 Plot quality information per product (world map)

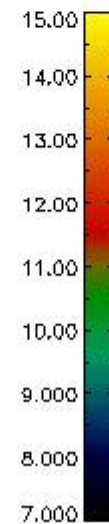
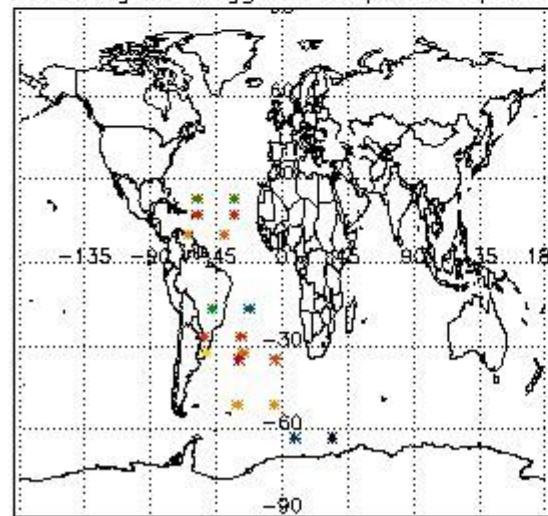
Percentage of flagged data per O3 profile



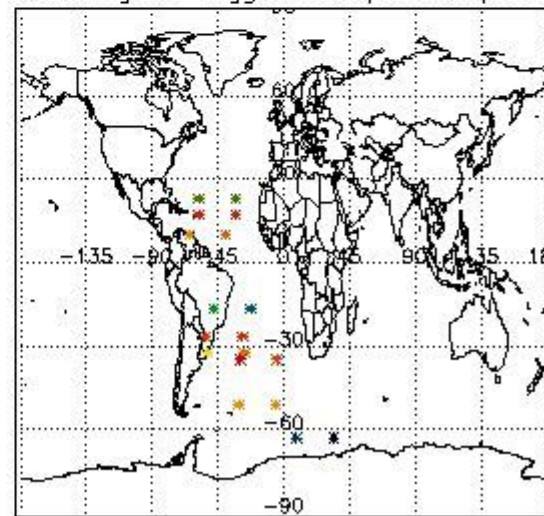
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

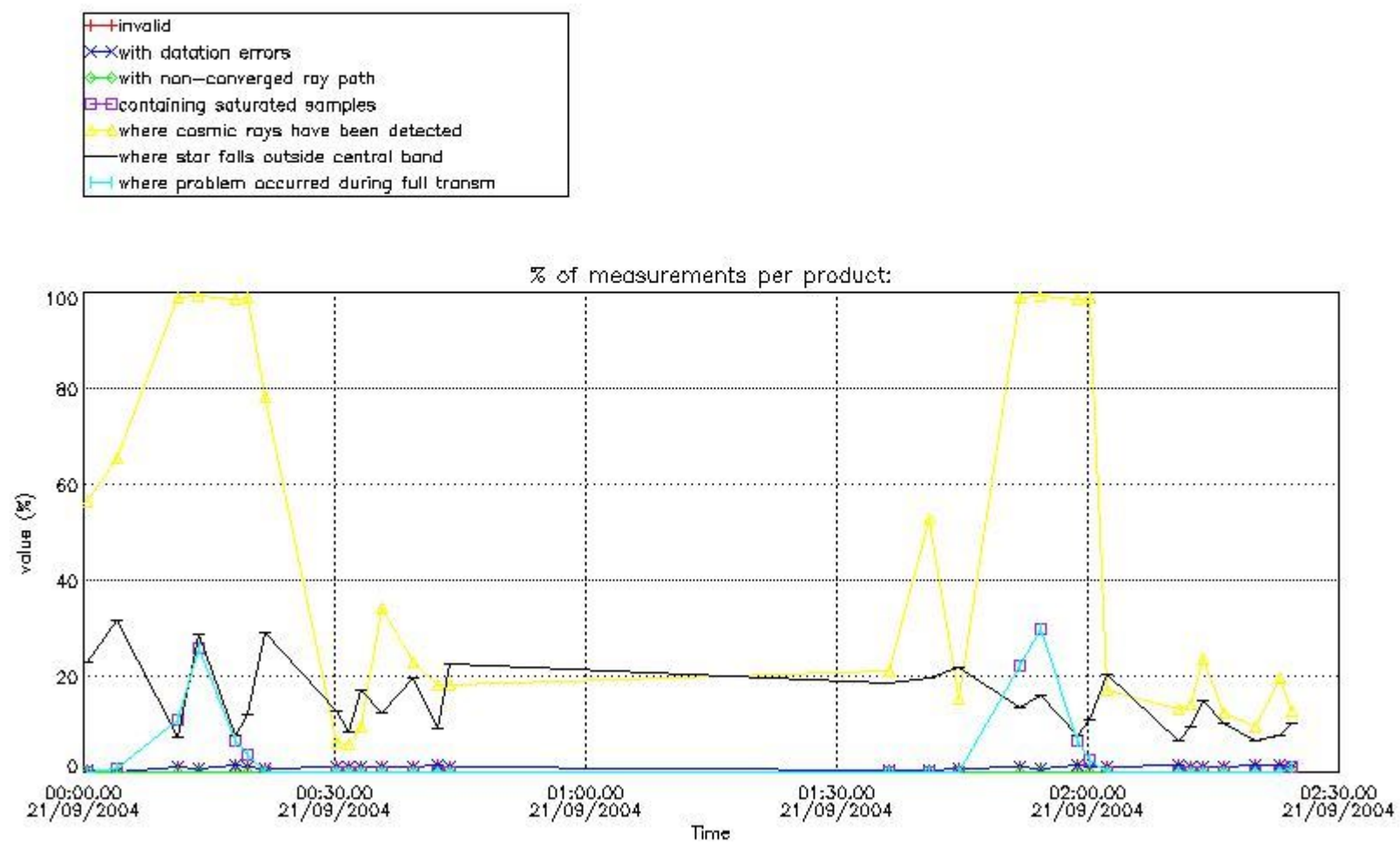


4. Level 1 quality information per product

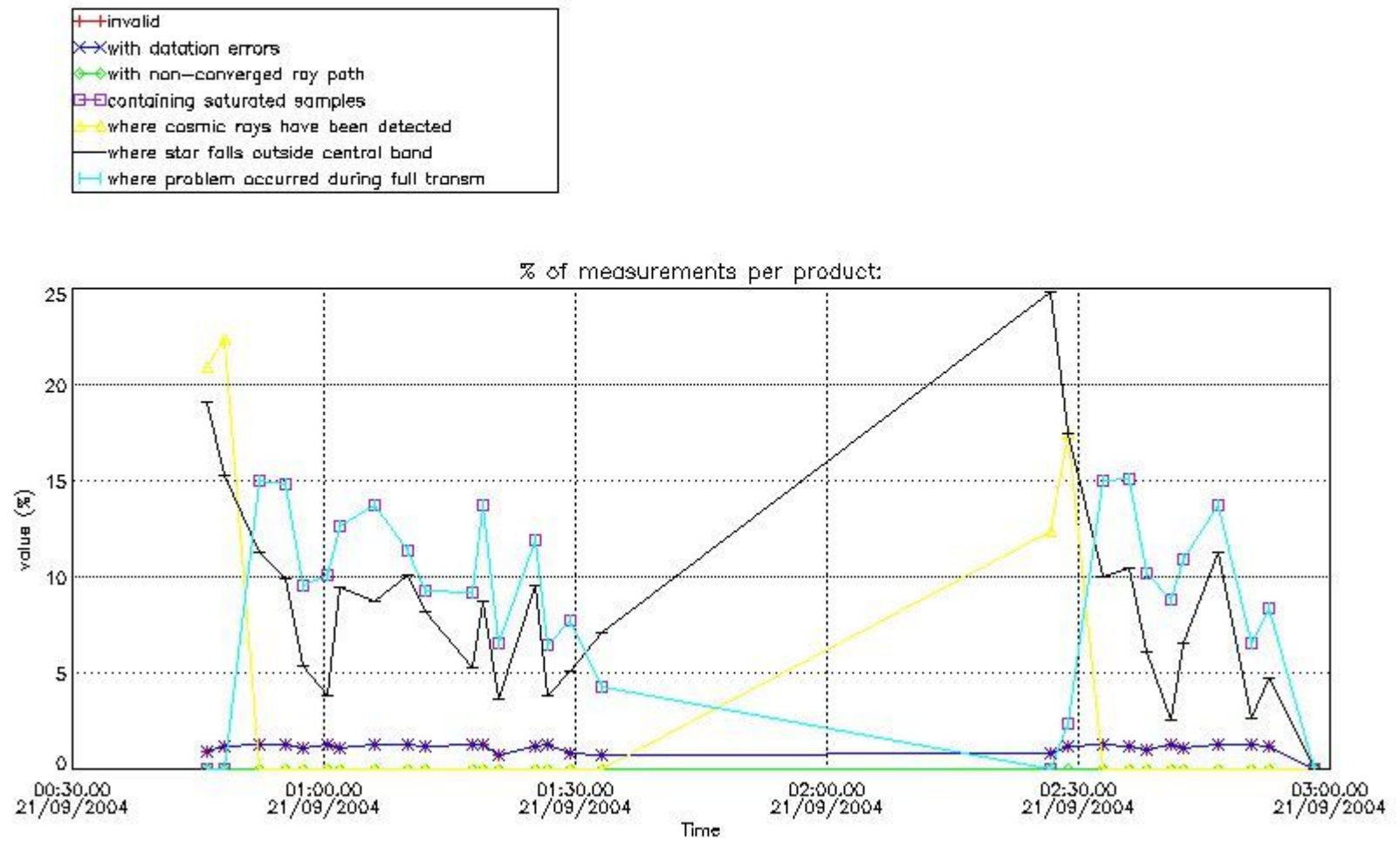
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



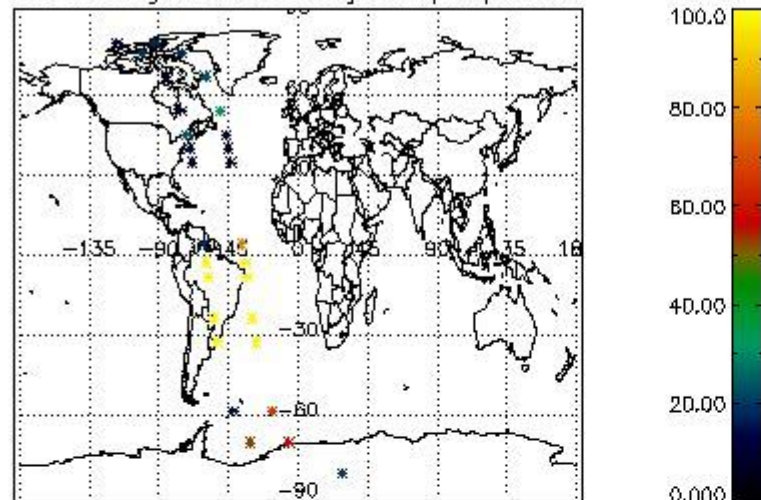
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



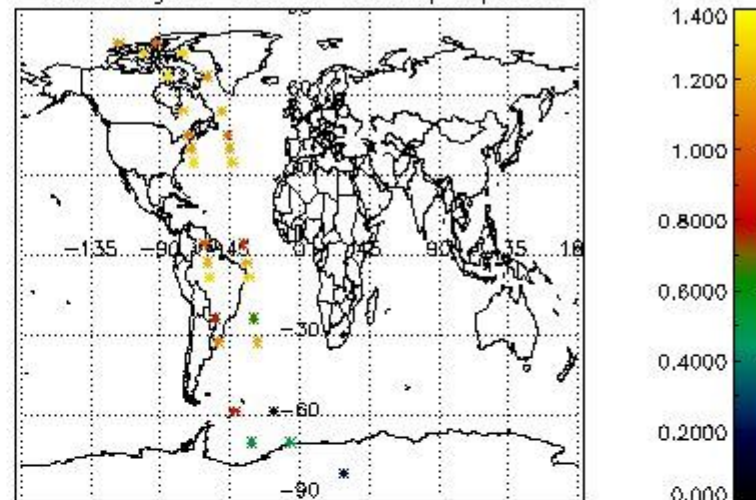
4.2 Plot quality information per product coming from level 1b processing (world map)

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

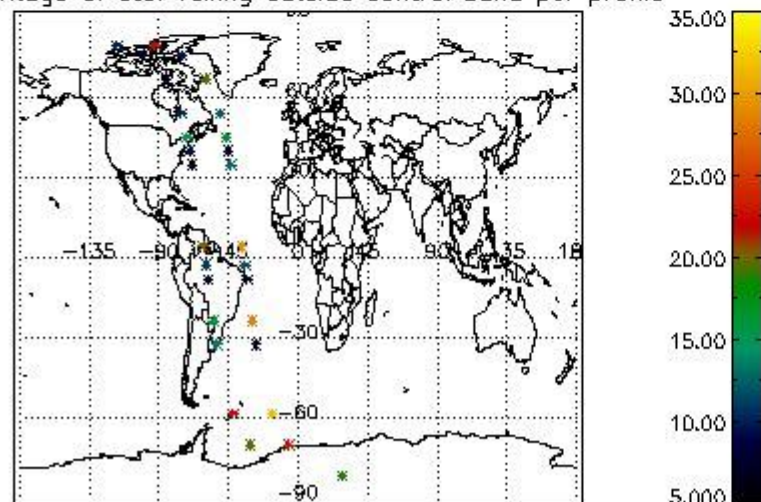
Percentage of cosmic ray hits per profile



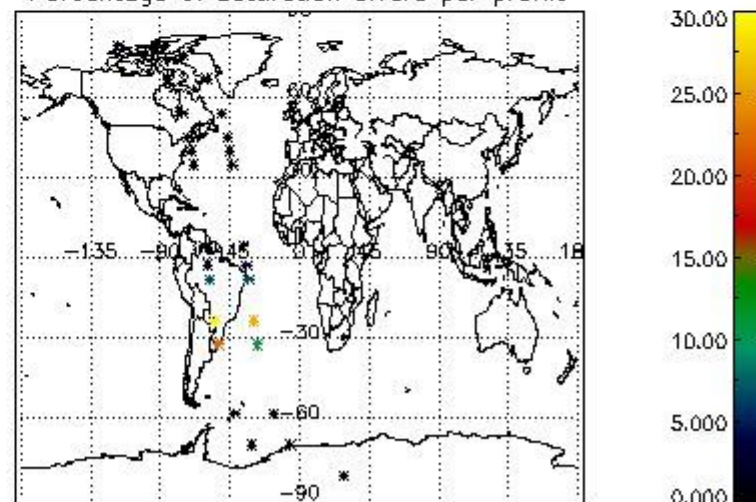
Percentage of datation errors per profile



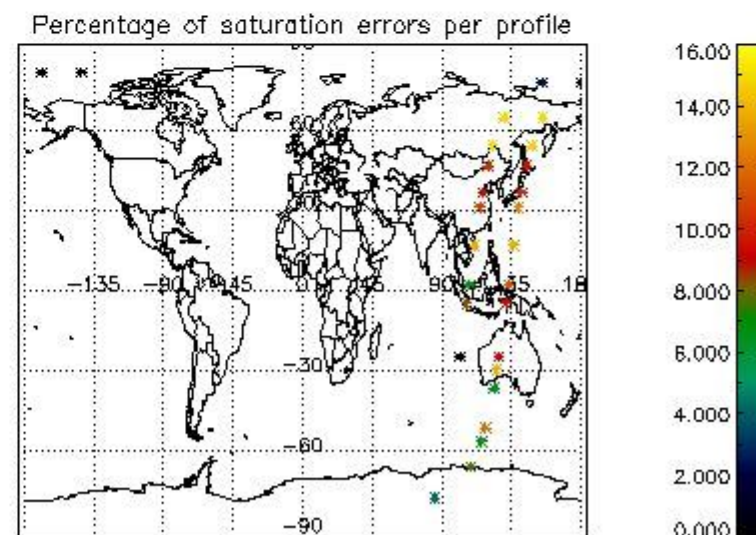
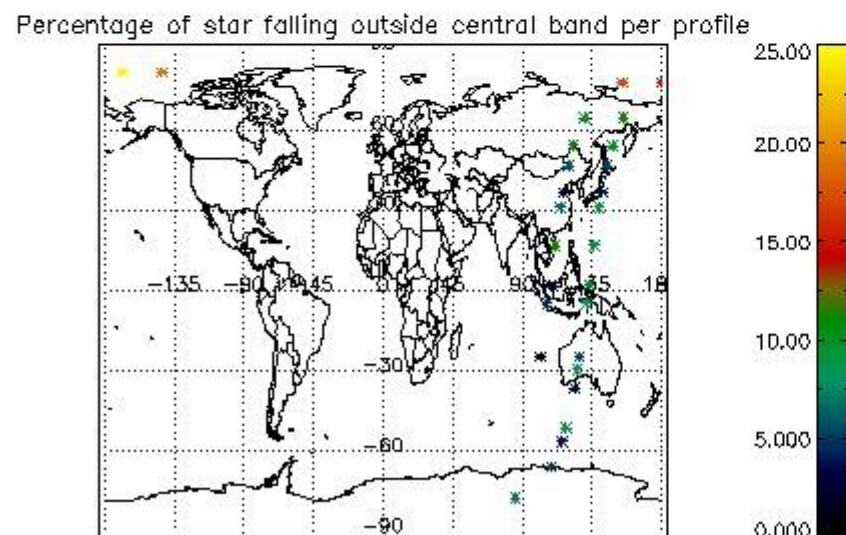
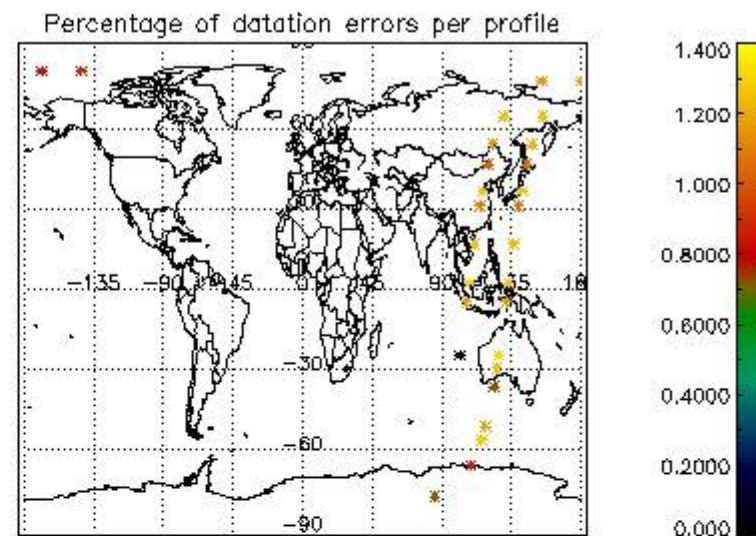
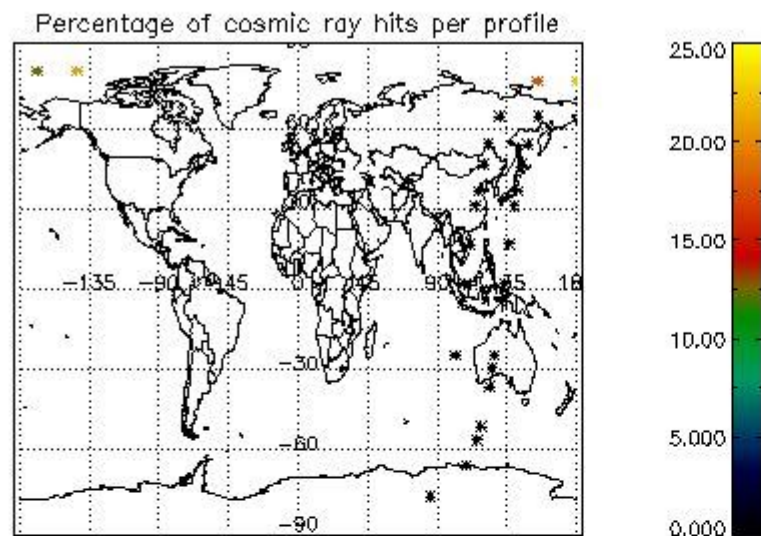
Percentage of star falling outside central band per profile



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

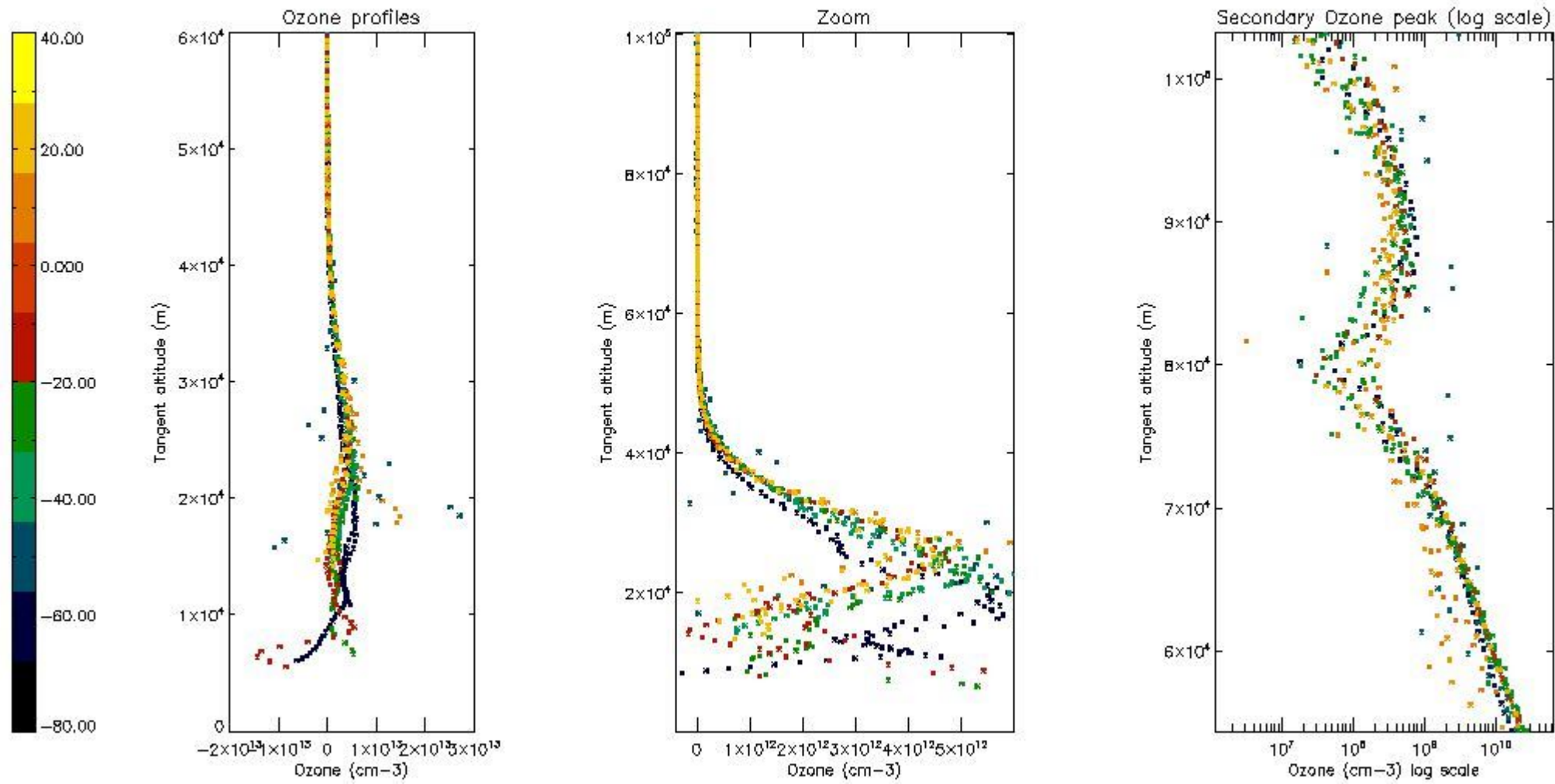
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	30
STD < 20	19

STD < 10	16
STD < 5	10

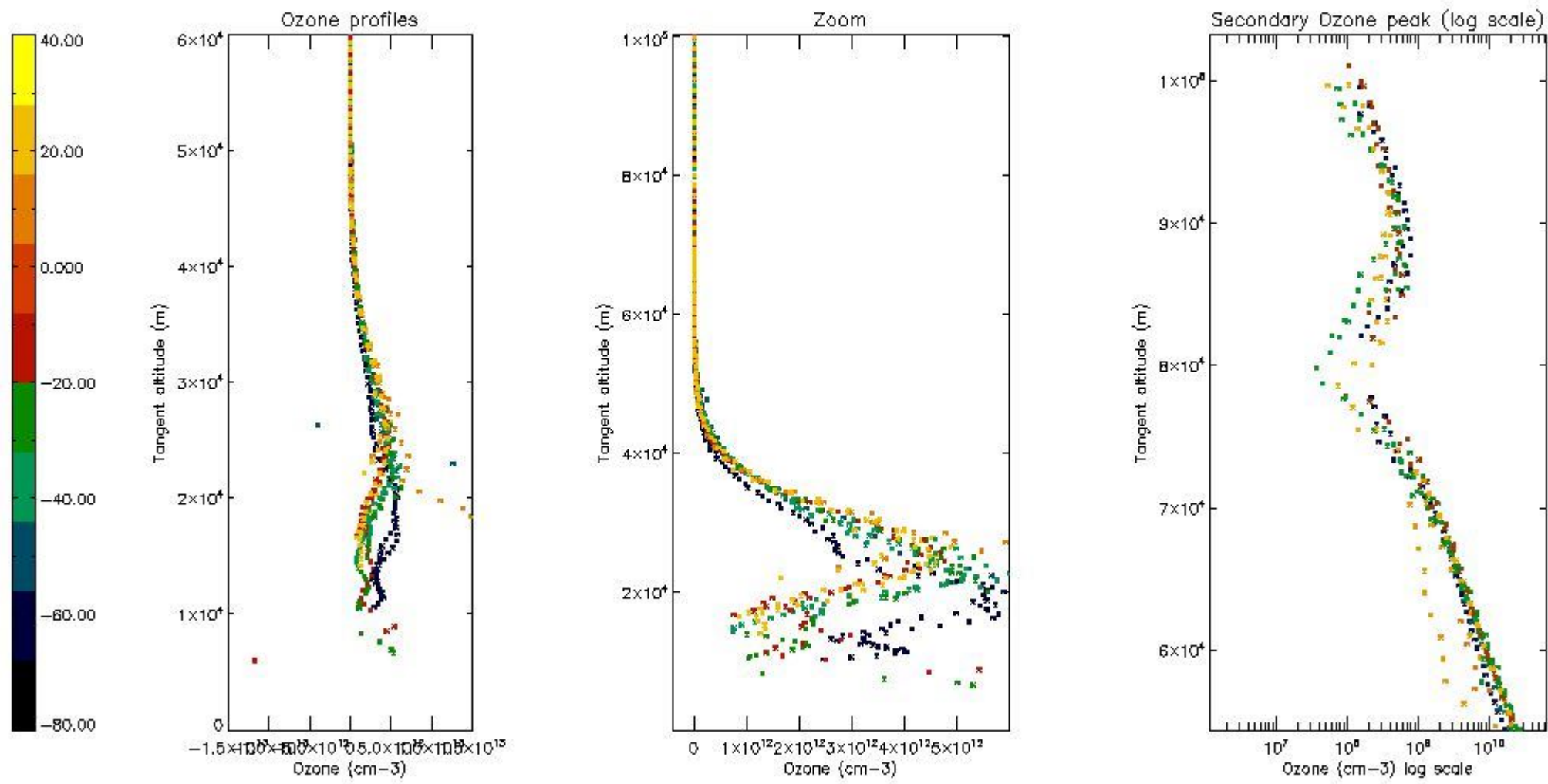
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



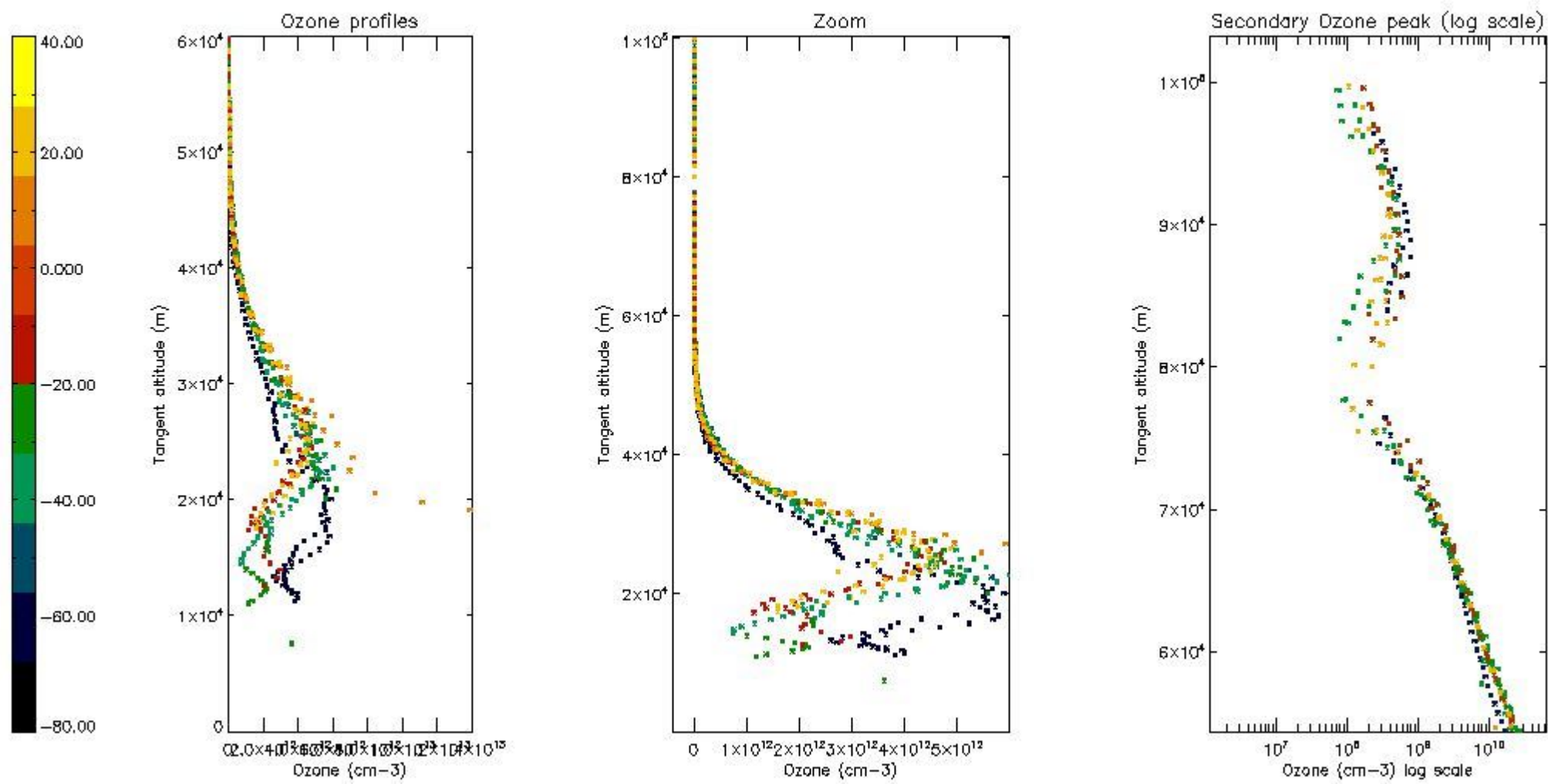
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



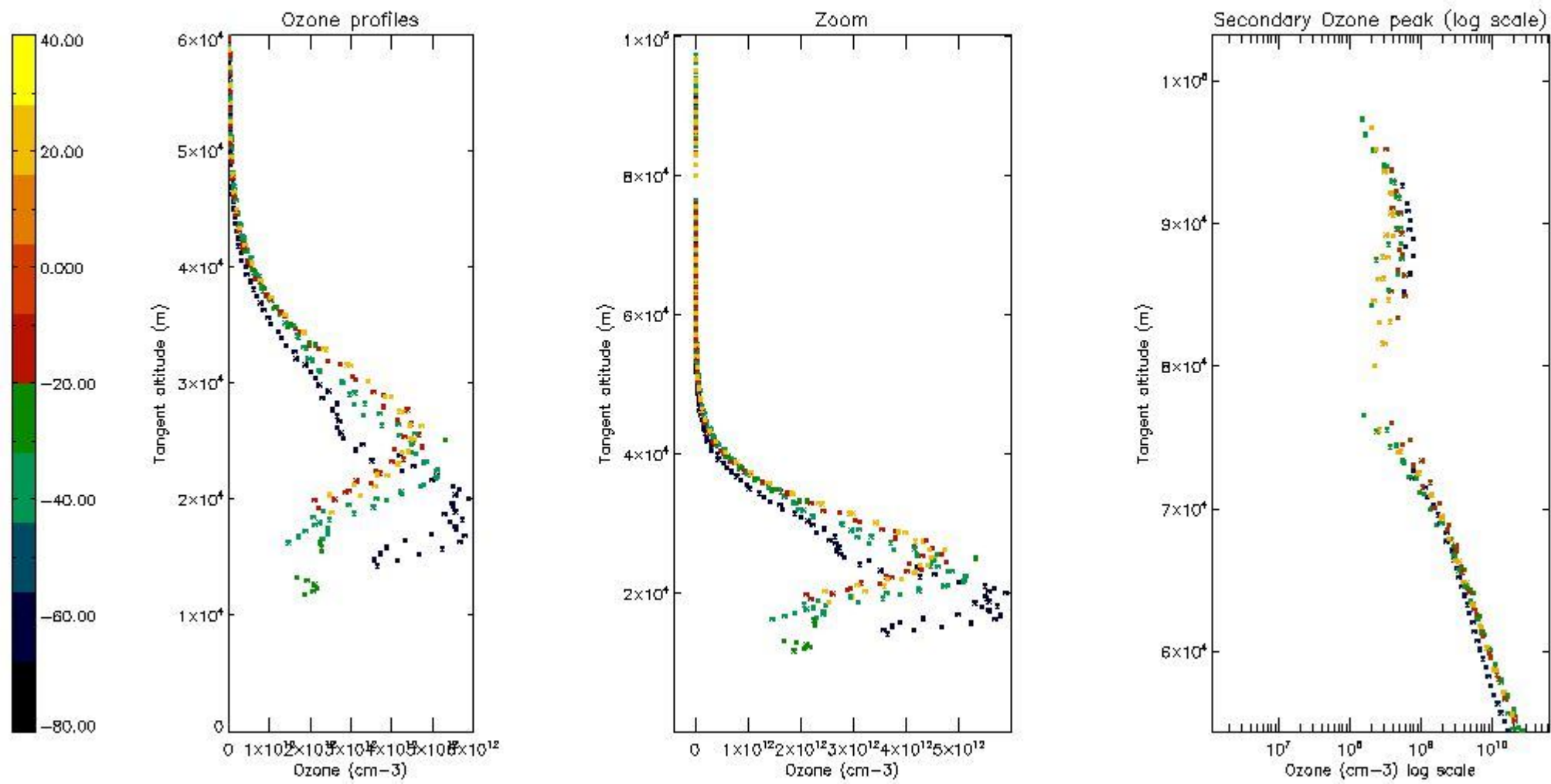
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



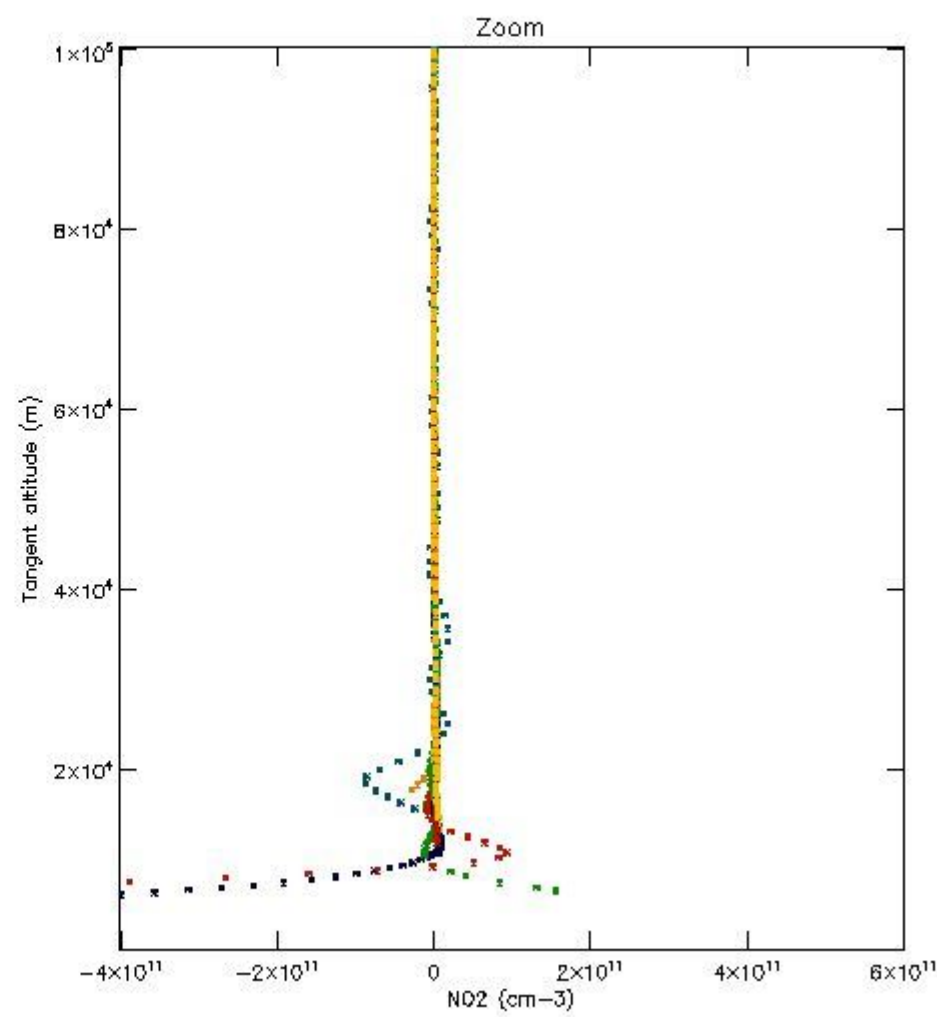
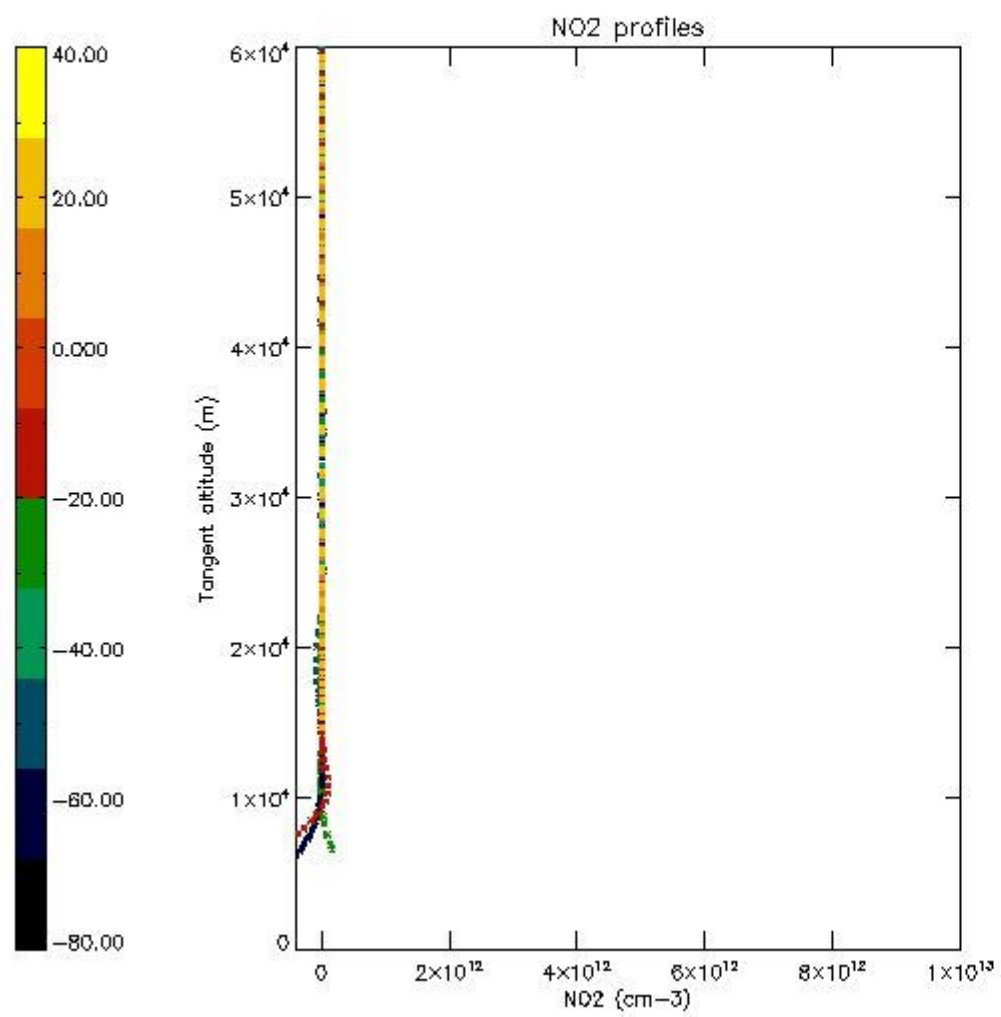
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



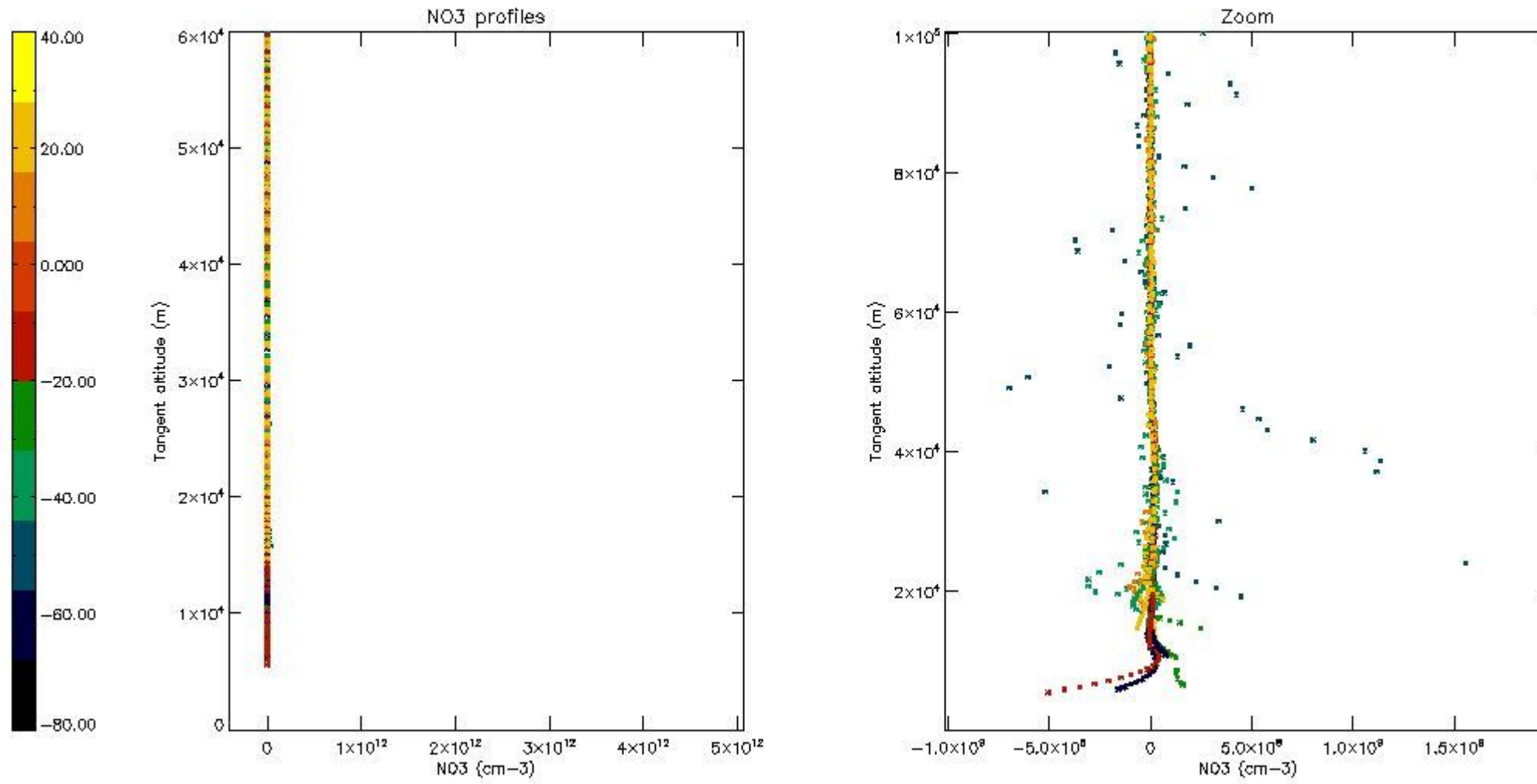
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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	21-SEP-2004 00:00:27
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	21-SEP-2004 00:00:27
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	21-SEP-2004 00:00:27

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

[3. Level 2 Quality information per product](#)

[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

[3.2 Plot of level 2 quality information per product \(world map\)](#)

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

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

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

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

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

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

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

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

[5.1 Ozone statistics based on quality of products](#)

[5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

[5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

[5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

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

[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	19APR2013 11:30:36
Data source version	GOMOS/6.01
Start time of products	21-09-2004 (21SEP2004 00:00:00)
Stop time of products	22-09-2004 (22SEP2004 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	57
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

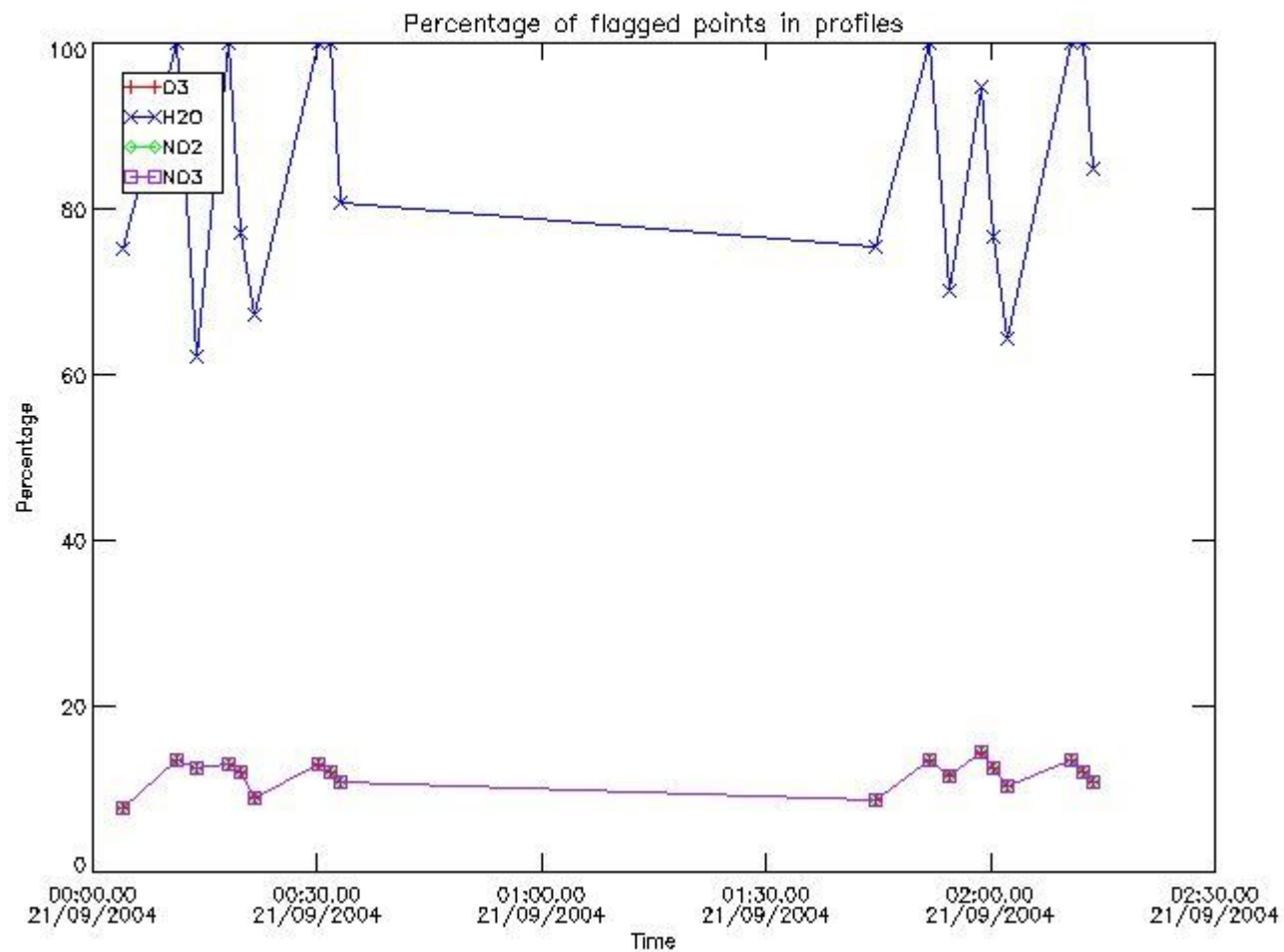
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20040921_000027_000000982030_00302_13382_4305.N1	21-SEP-2004 00:00:27	Straylight	97.500	151	13Mu Gem	2.8900	3000.0	195	13382	No
2	GOM_NL__2PRFIN20040921_000359_000000672030_00302_13382_4306.N1	21-SEP-2004 00:03:59	Dark	66.500	8	10Alp CMi	0.40000	6500.0	133	13382	No
3	GOM_NL__2PRFIN20040921_001120_000000422030_00302_13382_4307.N1	21-SEP-2004 00:11:20	Dark	41.500	132	15Rho Pup	2.8030	6900.0	83	13382	No
4	GOM_NL__2PRFIN20040921_001349_000000772030_00302_13382_4308.N1	21-SEP-2004 00:13:49	Dark	77.000	1	9Alp CMa	-1.4400	11000.	154	13382	No
5	GOM_NL__2PRFIN20040921_001807_000000392030_00302_13382_4309.N1	21-SEP-2004 00:18:07	Dark	39.000	46	Del Vel	1.9540	10600.	78	13382	No
6	GOM_NL__2PRFIN20040921_001940_000000422030_00302_13382_4310.N1	21-SEP-2004 00:19:40	Dark	42.000	41	Eps Car	1.8600	4100.0	84	13382	No
7	GOM_NL__2PRFIN20040921_002138_000000572030_00303_13383_4279.N1	21-SEP-2004 00:21:38	Dark	57.000	2	Alp Car	-0.73600	7000.0	114	13383	No
8	GOM_NL__2PRFIN20040921_003011_000000402030_00303_13383_4280.N1	21-SEP-2004 00:30:11	Dark	39.500	135	Bet Hyi	2.8200	5800.0	79	13383	No
9	GOM_NL__2PRFIN20040921_003139_000000432030_00303_13383_4281.N1	21-SEP-2004 00:31:39	Dark	42.500	143	Alp Hyi	2.8570	7200.0	85	13383	No
10	GOM_NL__2PRFIN20040921_003307_000000472030_00303_13383_4282.N1	21-SEP-2004 00:33:07	Dark	47.000	9	Alp Eri	0.45300	24000.	94	13383	No
11	GOM_NL__2PRFIN20040921_003540_000000412030_00303_13383_4283.N1	21-SEP-2004 00:35:40	Straylight	41.000	148	Alp Tuc	2.8780	4100.0	82	13383	No
12	GOM_NL__2PRFIN20040921_003926_000000442030_00303_13383_4284.N1	21-SEP-2004 00:39:26	Straylight	43.500	31	Alp Gru	1.7340	15200.	87	13383	No
13	GOM_NL__2PRFIN20040921_004214_000000392030_00303_13383_4285.N1	21-SEP-2004 00:42:14	Straylight	38.500	172	Gam Gru	3.0030	13100.	77	13383	No
14	GOM_NL__2PRFIN20040921_004342_000000472030_00303_13383_4286.N1	21-SEP-2004 00:43:42	Straylight	46.500	18	24Alp PsA	1.1660	9700.0	93	13383	No
15	GOM_NL__2PRFIN20040921_004604_000000582030_00303_13383_4287.N1	21-SEP-2004 00:46:04	Tw_i_and_stray	57.500	52	16Bet Cet	2.0370	4500.0	115	13383	No
16	GOM_NL__2PRFIN20040921_004812_000000432030_00303_13383_4288.N1	21-SEP-2004 00:48:12	Tw_i_and_stray	42.500	142	49Del Cap	2.8500	8900.0	85	13383	No
17	GOM_NL__2PRFIN20040921_005222_000000402030_00303_13383_4289.N1	21-SEP-2004 00:52:22	Bright	40.000	162	34Alp Aqr	2.9440	5350.0	80	13383	No
18	GOM_NL__2PRFIN20040921_005524_000000412030_00303_13383_4290.N1	21-SEP-2004 00:55:24	Bright	40.500	61	8Eps Peg	2.1000	3900.0	81	13383	No
19	GOM_NL__2PRFIN20040921_005735_000000472030_00303_13383_4291.N1	21-SEP-2004 00:57:35	Bright	47.000	140	88Gam Peg	2.8340	26000.	94	13383	No
20	GOM_NL__2PRFIN20040921_010022_000000402030_00303_13383_4292.N1	21-SEP-2004 01:00:22	Bright	39.500	93	53Bet Peg	2.5200	3100.0	79	13383	No
21	GOM_NL__2PRFIN20040921_010156_000000482030_00303_13383_4293.N1	21-SEP-2004 01:01:56	Bright	47.500	58	21Alp And	2.0730	11000.	95	13383	No
22	GOM_NL__2PRFIN20040921_010558_000000402030_00303_13383_4294.N1	21-SEP-2004 01:05:58	Bright	40.000	19	50Alp Cyg	1.2460	10500.	80	13383	No
23	GOM_NL__2PRFIN20040921_011004_000000402030_00303_13383_4295.N1	21-SEP-2004 01:10:04	Bright	39.500	89	5Alp Cep	2.4510	8000.0	79	13383	No
24	GOM_NL__2PRFIN20040921_011201_000000432030_00303_13383_4296.N1	21-SEP-2004 01:12:01	Bright	43.000	76	27Gam Cas	2.3000	30000.	86	13383	No
25	GOM_NL__2PRFIN20040921_011736_000000382030_00303_13383_4297.N1	21-SEP-2004 01:17:36	Bright	38.000	49	1Alp UMi	1.9900	6300.0	76	13383	No
26	GOM_NL__2PRFIN20040921_011858_000000402030_00303_13383_4298.N1	21-SEP-2004 01:18:58	Bright	40.000	60	7Bet UMi	2.0810	3950.0	80	13383	No
27	GOM_NL__2PRFIN20040921_012054_000000692030_00303_13383_4299.N1	21-SEP-2004 01:20:54	Bright	69.000	175	39Del Per	3.0100	19400.	138	13383	No
28	GOM_NL__2PRFIN20040921_012510_000000422030_00303_13383_4300.N1	21-SEP-2004 01:25:10	Bright	42.000	36	50Alp UMa	1.8000	6300.0	84	13383	No
29	GOM_NL__2PRFIN20040921_012637_000000392030_00303_13383_4301.N1	21-SEP-2004 01:26:37	Bright	39.000	82	48Bet UMa	2.3650	10600.	78	13383	No
30	GOM_NL__2PRFIN20040921_012926_000000592030_00303_13383_4302.N1	21-SEP-2004 01:29:26	Bright	58.500	42	34Bet Aur	1.9000	10200.	117	13383	No
31	GOM_NL__2PRFIN20040921_013313_000000712030_00303_13383_4303.N1	21-SEP-2004 01:33:13	Bright	70.500	107	37The Aur	2.6490	11000.	141	13383	No
32	GOM_NL__2PRFIN20040921_013611_000002462030_00303_13383_4304.N1	21-SEP-2004 01:36:11	Tw_i_and_stray	246.00	114	3Iot Aur	2.6930	4600.0	492	13383	No
33	GOM_NL__2PRFIN20040921_014104_000000942030_00303_13383_4305.N1	21-SEP-2004 01:41:04	Straylight	94.000	151	13Mu Gem	2.8900	3000.0	188	13383	No
34	GOM_NL__2PRFIN20040921_014436_000000602030_00303_13383_4306.N1	21-SEP-2004 01:44:36	Dark	59.500	8	10Alp CMi	0.40000	6500.0	119	13383	No
35	GOM_NL__2PRFIN20040921_015156_000000452030_00303_13383_4307.N1	21-SEP-2004 01:51:56	Dark	45.000	132	15Rho Pup	2.8030	6900.0	90	13383	No
36	GOM_NL__2PRFIN20040921_015426_000000662030_00303_13383_4308.N1	21-SEP-2004 01:54:26	Dark	65.500	1	9Alp CMa	-1.4400	11000.	131	13383	No
37	GOM_NL__2PRFIN20040921_015844_000000392030_00303_13383_4309.N1	21-SEP-2004 01:58:44	Dark	38.500	46	Del Vel	1.9540	10600.	77	13383	No
38	GOM_NL__2PRFIN20040921_020016_000000412030_00303_13383_4310.N1	21-SEP-2004 02:00:16	Dark	41.000	41	Eps Car	1.8600	4100.0	82	13383	No
39	GOM_NL__2PRFIN20040921_020215_000000502030_00304_13384_4279.N1	21-SEP-2004 02:02:15	Dark	49.500	2	Alp Car	-0.73600	7000.0	99	13384	No
40	GOM_NL__2PRFIN20040921_021047_000000382030_00304_13384_4280.N1	21-SEP-2004 02:10:47	Dark	38.000	135	Bet Hyi	2.8200	5800.0	76	13384	No
41	GOM_NL__2PRFIN20040921_021216_000000432030_00304_13384_4281.N1	21-SEP-2004 02:12:16	Dark	42.500	143	Alp Hyi	2.8570	7200.0	85	13384	No
42	GOM_NL__2PRFIN20040921_021343_000000472030_00304_13384_4282.N1	21-SEP-2004 02:13:43	Dark	46.500	9	Alp Eri	0.45300	24000.	93	13384	No

43	GOM_NL__2PRFIN20040921_021616_000000402030_00304_13384_4283.N1	21-SEP-2004 02:16:16	Straylight	40.000	148	Alp Tuc	2.8780	4100.0	80	13384	No
44	GOM_NL__2PRFIN20040921_022202_000000382030_00304_13384_4284.N1	21-SEP-2004 02:20:02	Straylight	37.500	31	Alp Gru	1.7340	15200.	75	13384	No
45	GOM_NL__2PRFIN20040921_022249_000000392030_00304_13384_4285.N1	21-SEP-2004 02:22:49	Straylight	38.500	172	Gam Gru	3.0030	13100.	77	13384	No
46	GOM_NL__2PRFIN20040921_022416_000000442030_00304_13384_4286.N1	21-SEP-2004 02:24:16	Straylight	43.500	18	24Alp PsA	1.1660	9700.0	87	13384	No
47	GOM_NL__2PRFIN20040921_022640_000000612030_00304_13384_4287.N1	21-SEP-2004 02:26:40	Tw_i_and_stray	60.500	52	16Bet Cet	2.0370	4500.0	121	13384	No
48	GOM_NL__2PRFIN20040921_022848_000000432030_00304_13384_4288.N1	21-SEP-2004 02:28:48	Tw_i_and_stray	43.000	142	49Del Cap	2.8500	8900.0	86	13384	No
49	GOM_NL__2PRFIN20040921_023258_000000402030_00304_13384_4289.N1	21-SEP-2004 02:32:58	Bright	40.000	162	34Alp Aqr	2.9440	5350.0	80	13384	No
50	GOM_NL__2PRFIN20040921_023558_000000432030_00304_13384_4290.N1	21-SEP-2004 02:35:58	Bright	43.000	61	8Eps Peg	2.1000	3900.0	86	13384	No
51	GOM_NL__2PRFIN20040921_023809_000000492030_00304_13384_4291.N1	21-SEP-2004 02:38:09	Bright	49.000	140	88Gam Peg	2.8340	26000.	98	13384	No
52	GOM_NL__2PRFIN20040921_024057_000000402030_00304_13384_4292.N1	21-SEP-2004 02:40:57	Bright	39.500	93	53Bet Peg	2.5200	3100.0	79	13384	No
53	GOM_NL__2PRFIN20040921_024232_000000462030_00304_13384_4293.N1	21-SEP-2004 02:42:32	Bright	46.000	58	21Alp And	2.0730	11000.	92	13384	No
54	GOM_NL__2PRFIN20040921_024634_000000402030_00304_13384_4294.N1	21-SEP-2004 02:46:34	Bright	40.000	19	50Alp Cyg	1.2460	10500.	80	13384	No
55	GOM_NL__2PRFIN20040921_025038_000000382030_00304_13384_4295.N1	21-SEP-2004 02:50:38	Bright	38.000	89	5Alp Cep	2.4510	8000.0	76	13384	No
56	GOM_NL__2PRFIN20040921_025236_000000422030_00304_13384_4296.N1	21-SEP-2004 02:52:36	Bright	42.000	76	27Gam Cas	2.3000	30000.	84	13384	No
57	GOM_NL__2PRFIN20040921_025812_000000062030_00304_13384_4297.N1	21-SEP-2004 02:58:12	Straylight	6.0000	49	1Alp UMi	1.9900	6300.0	12	13384	No

3. Quality information per product

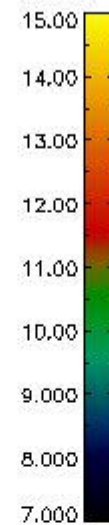
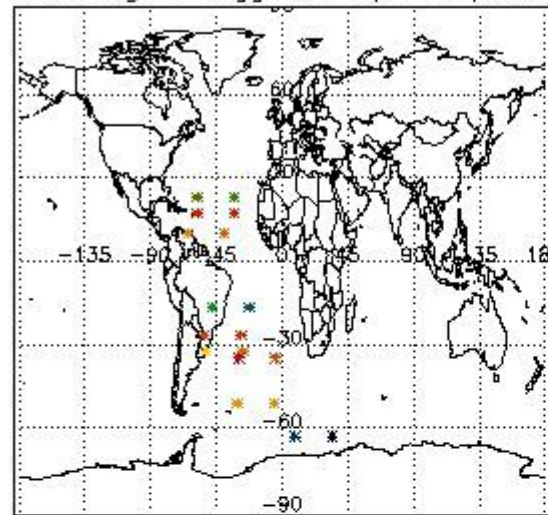
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

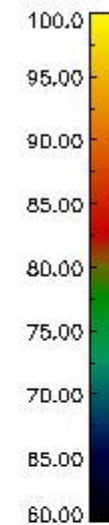
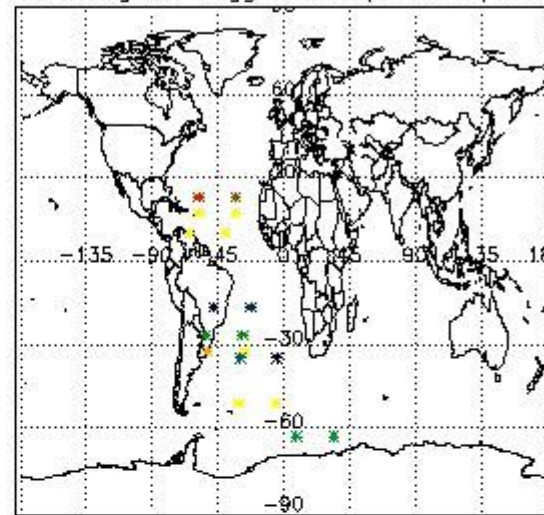


3.2 Plot quality information per product (world map)

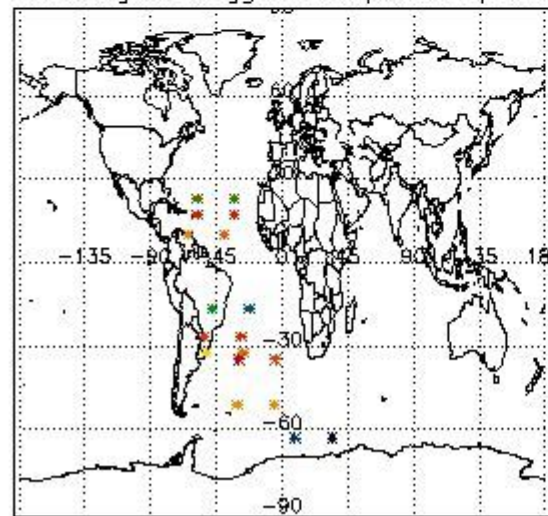
Percentage of flagged data per O3 profile



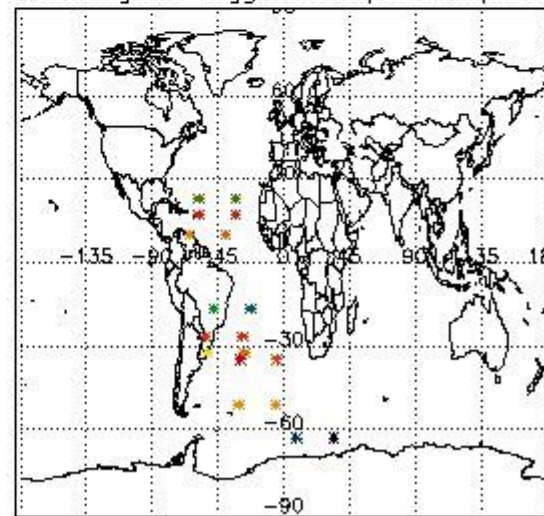
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

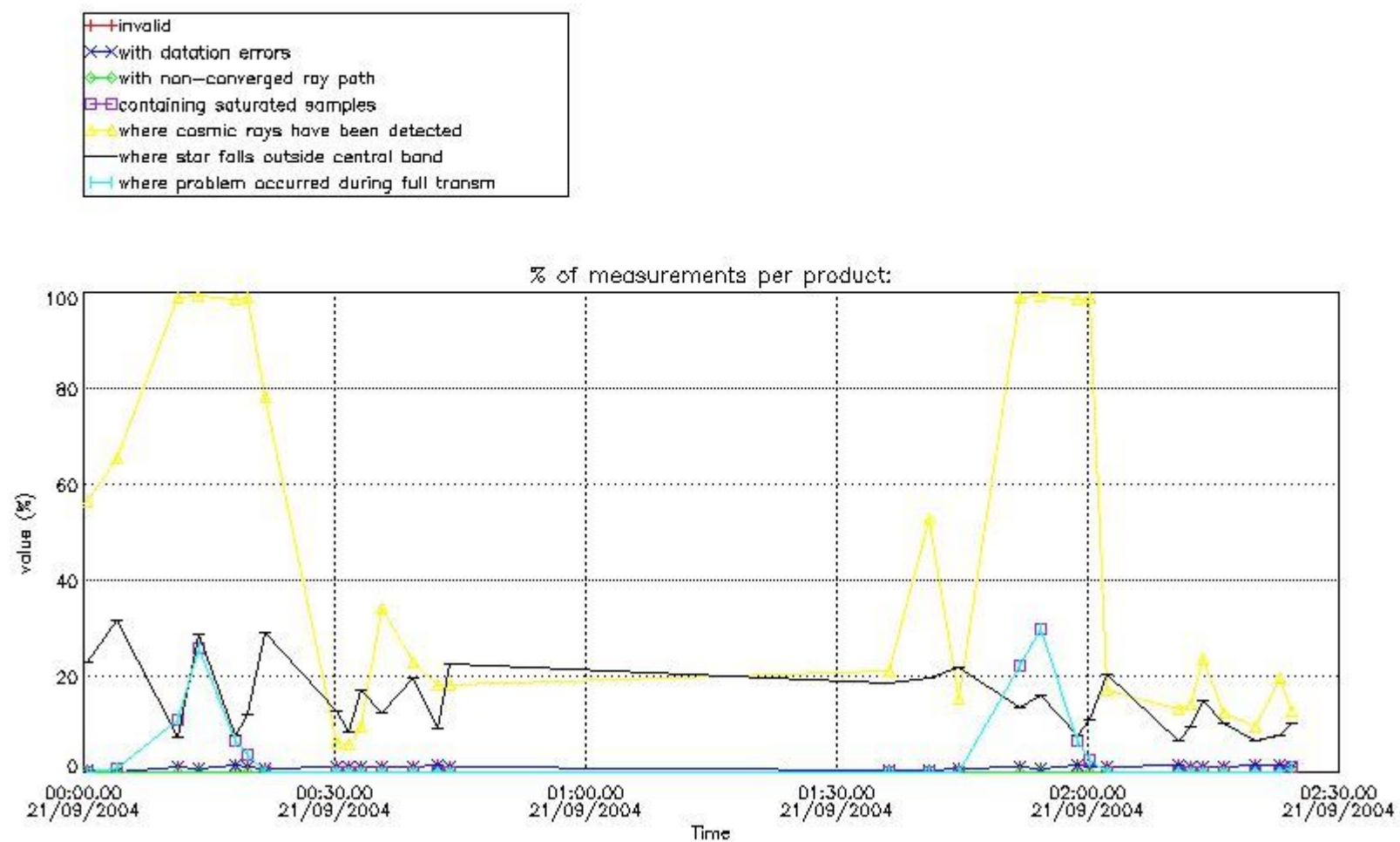


4. Level 1 quality information per product

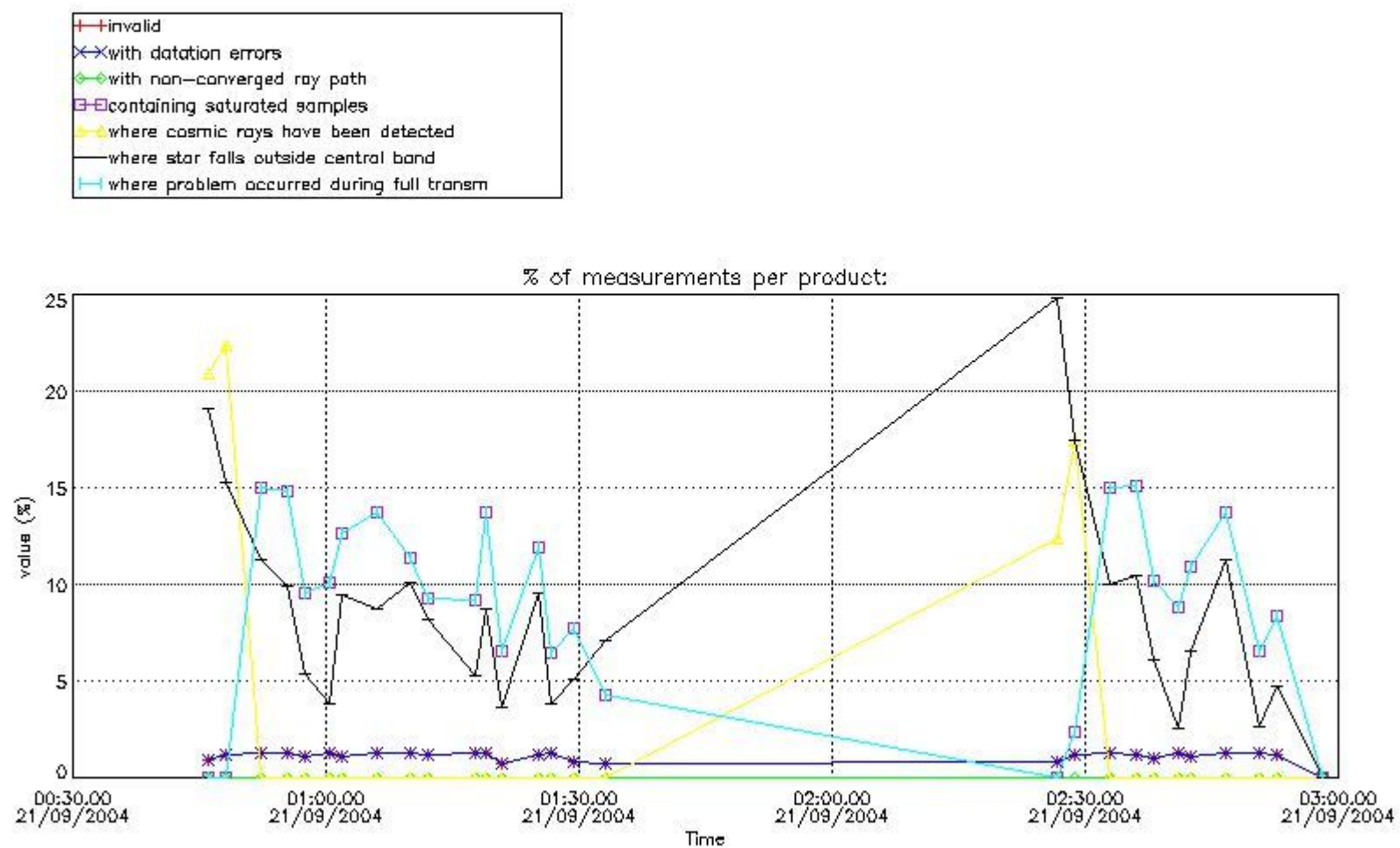
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

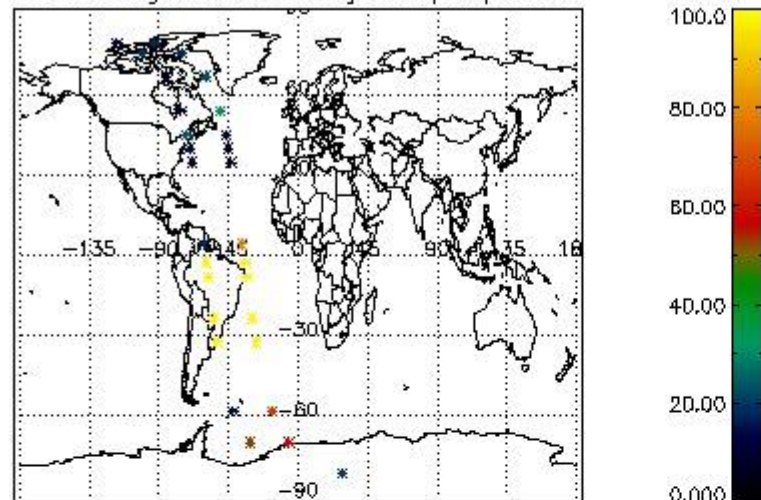


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

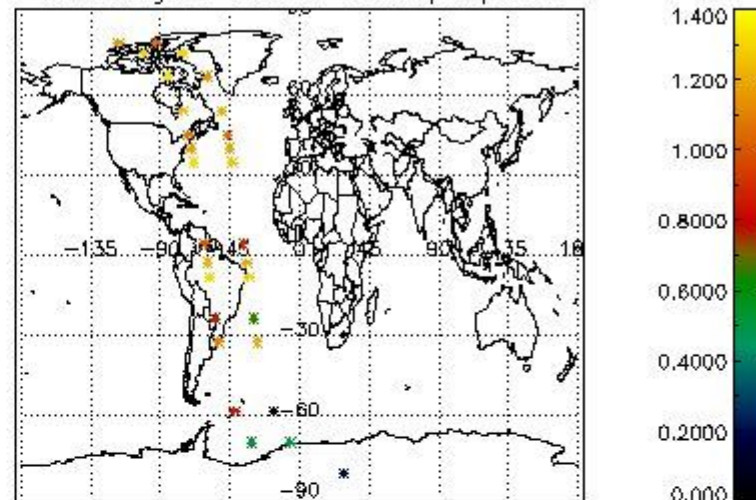


4.2 Plot quality information per product coming from level 1b processing (world map)
 4.2.1 Plot level 1 quality information per product (world map): ENVISAT ASCENDING passes

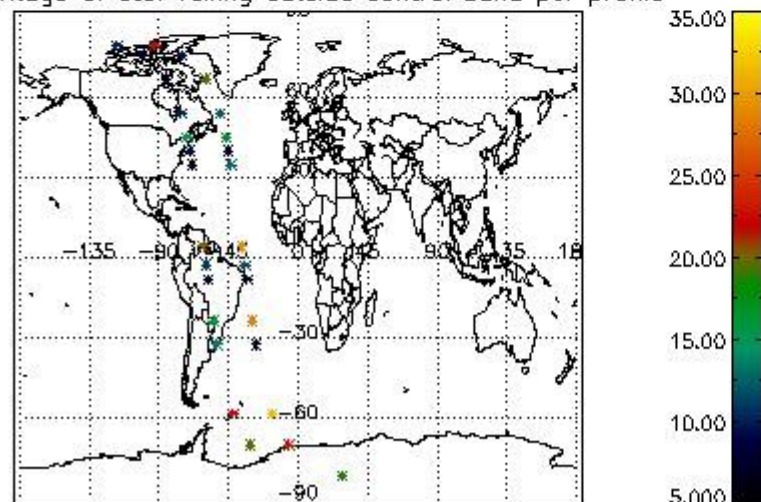
Percentage of cosmic ray hits per profile



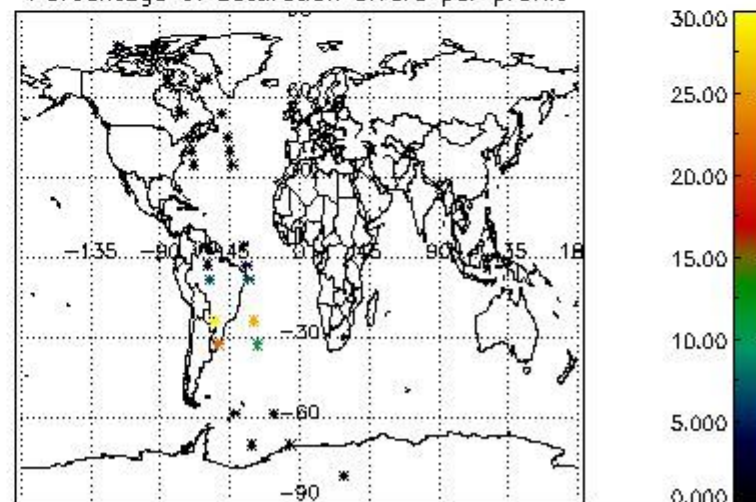
Percentage of datation errors per profile



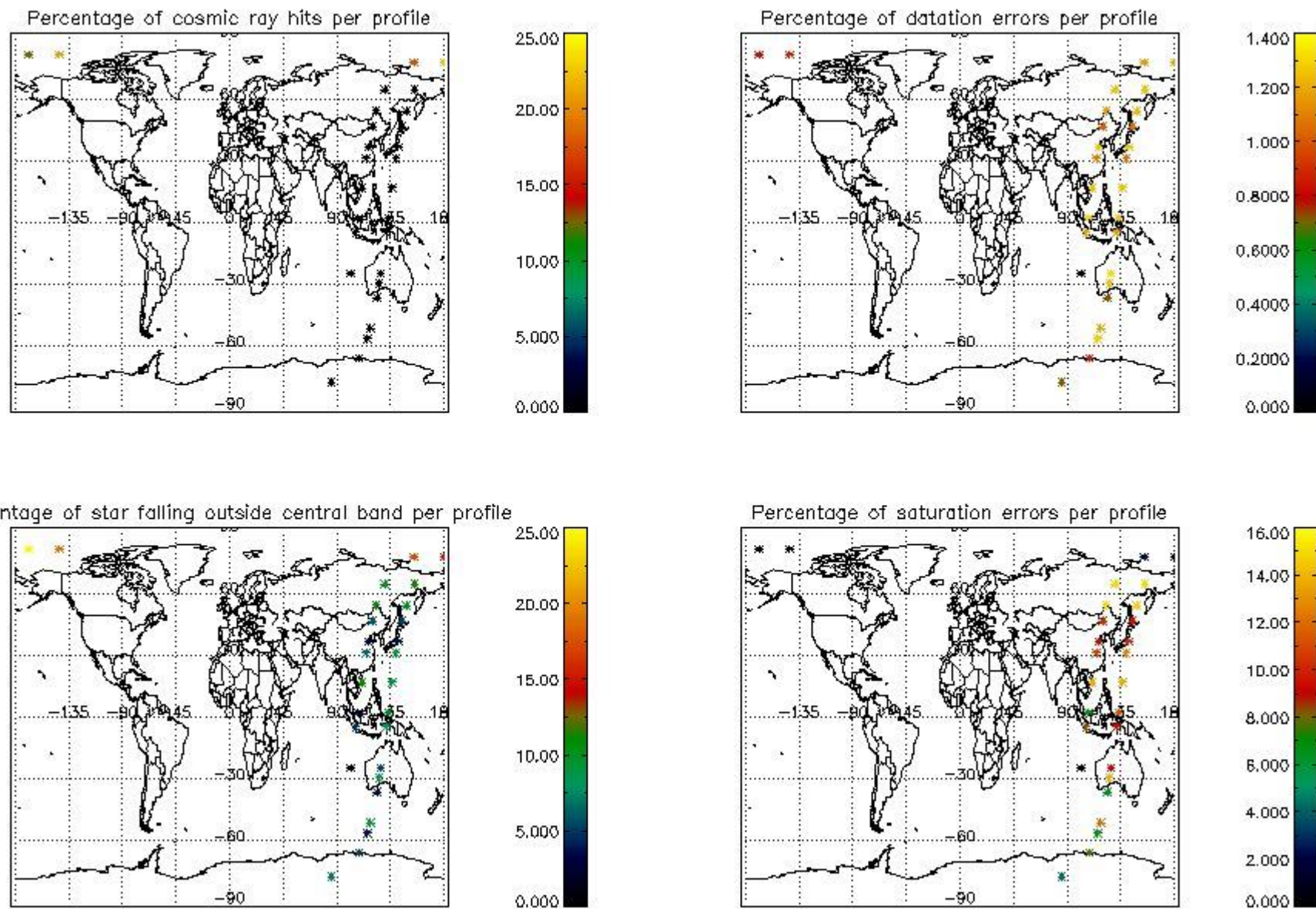
Percentage of star falling outside central band per profile



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

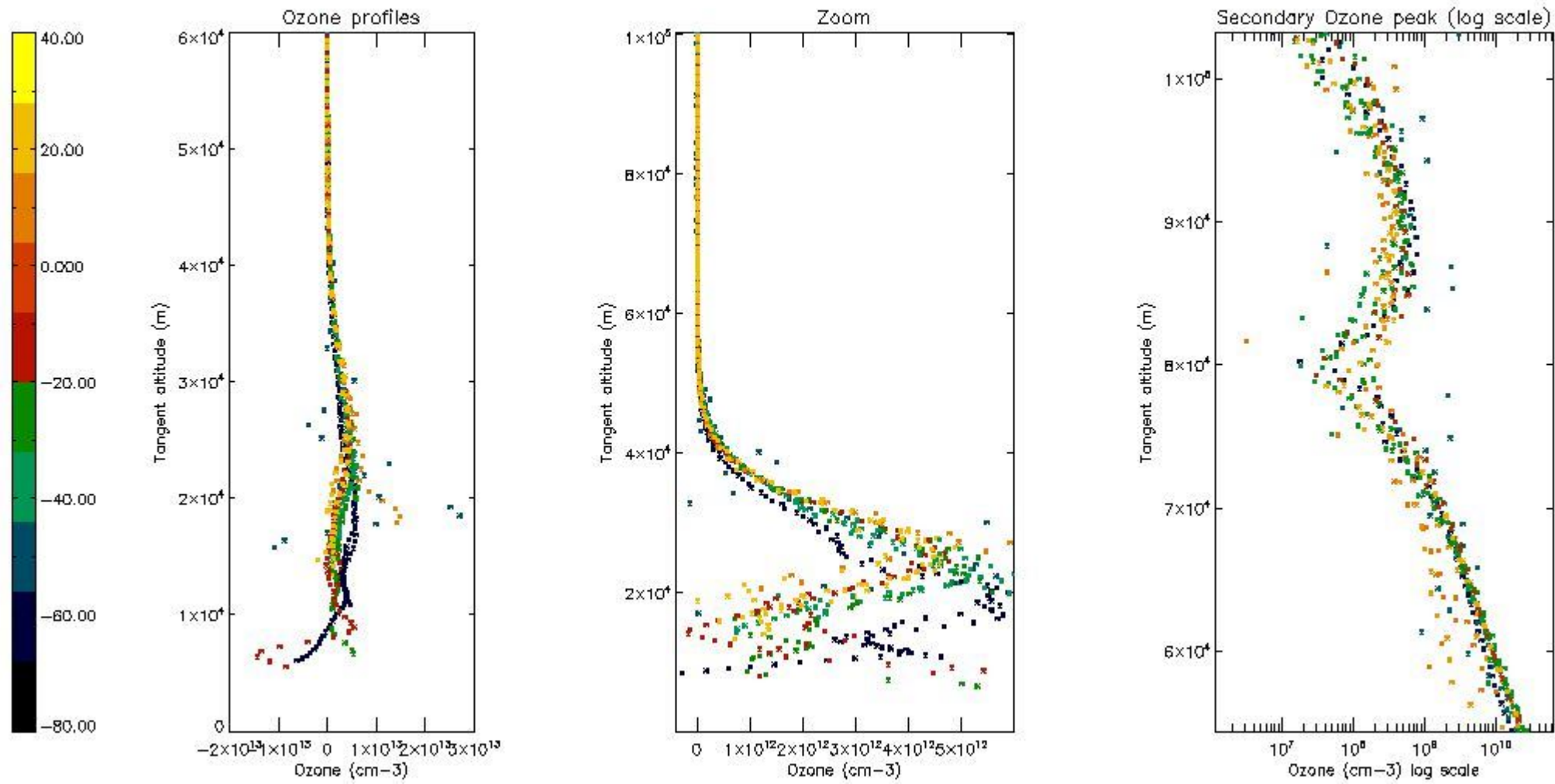
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	30
STD < 20	19

STD < 10	16
STD < 5	10

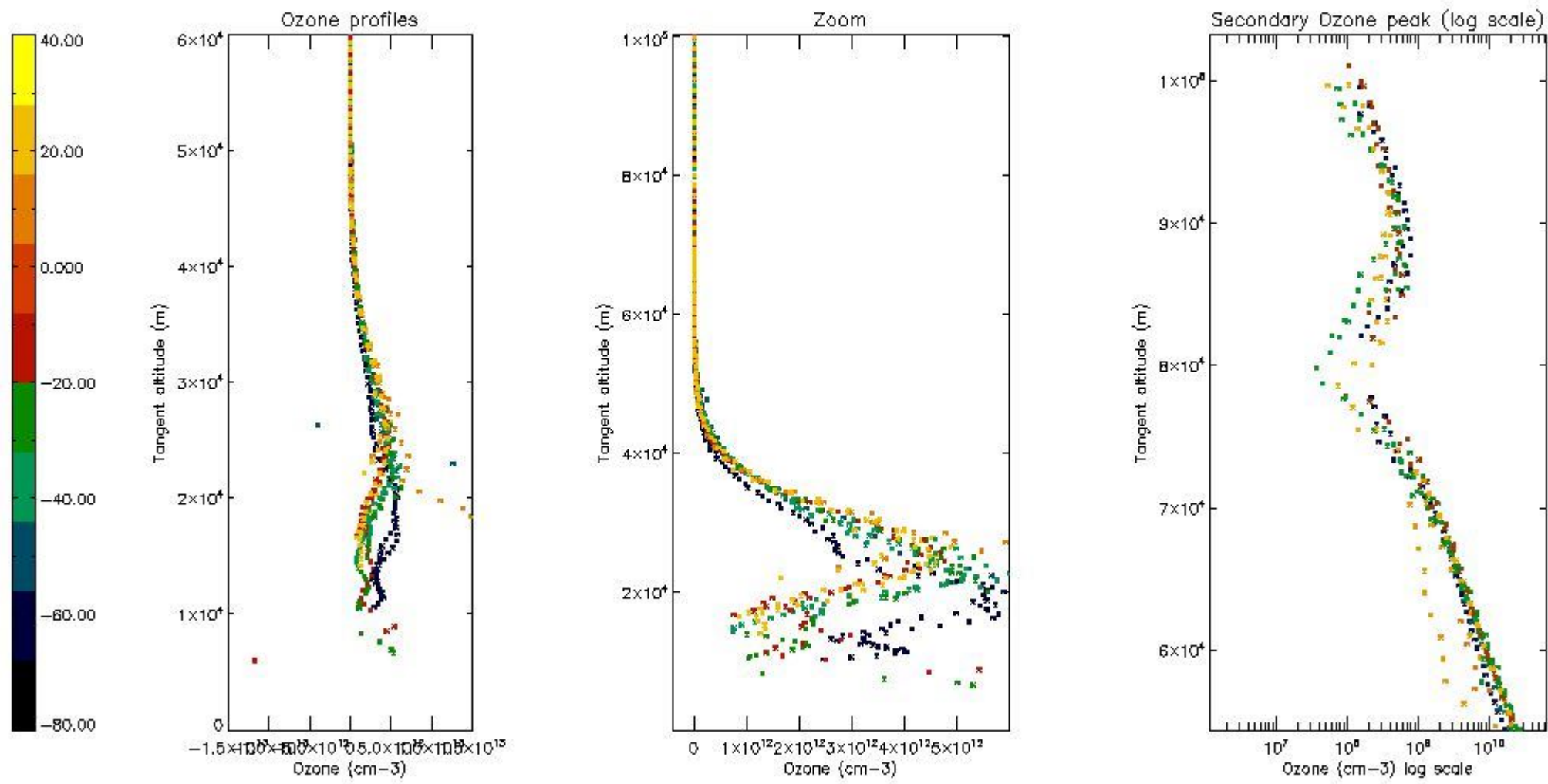
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



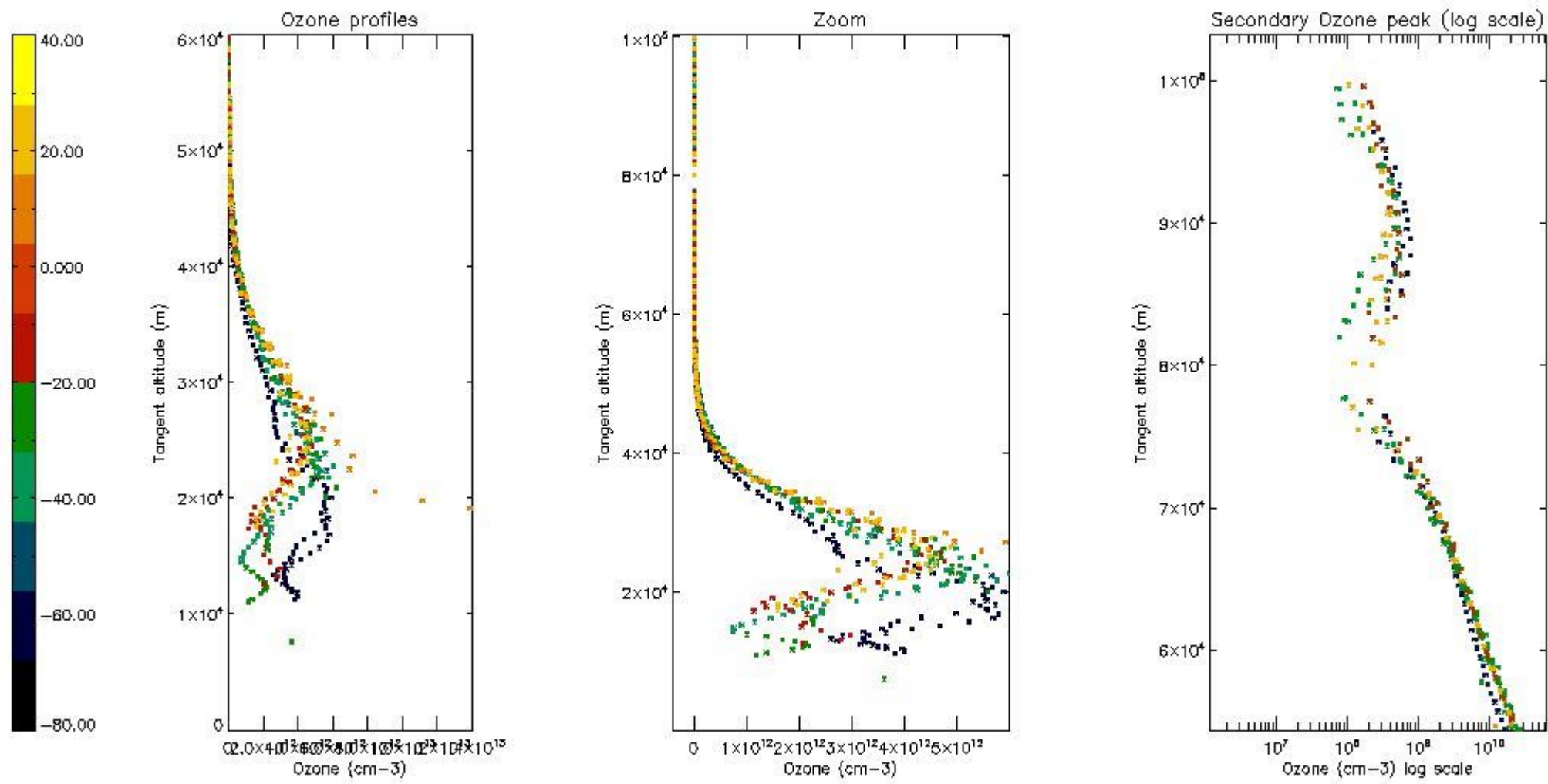
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



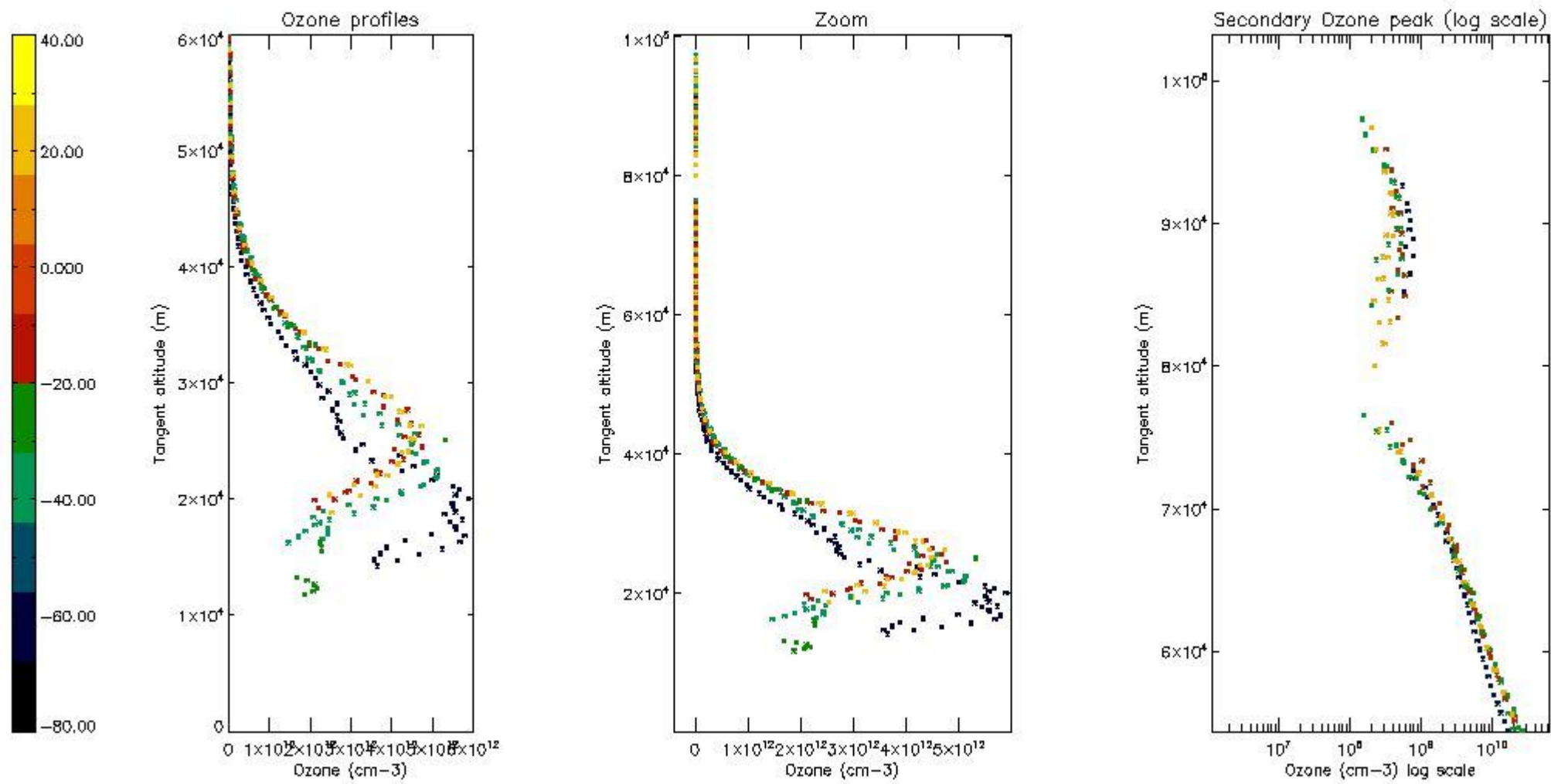
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



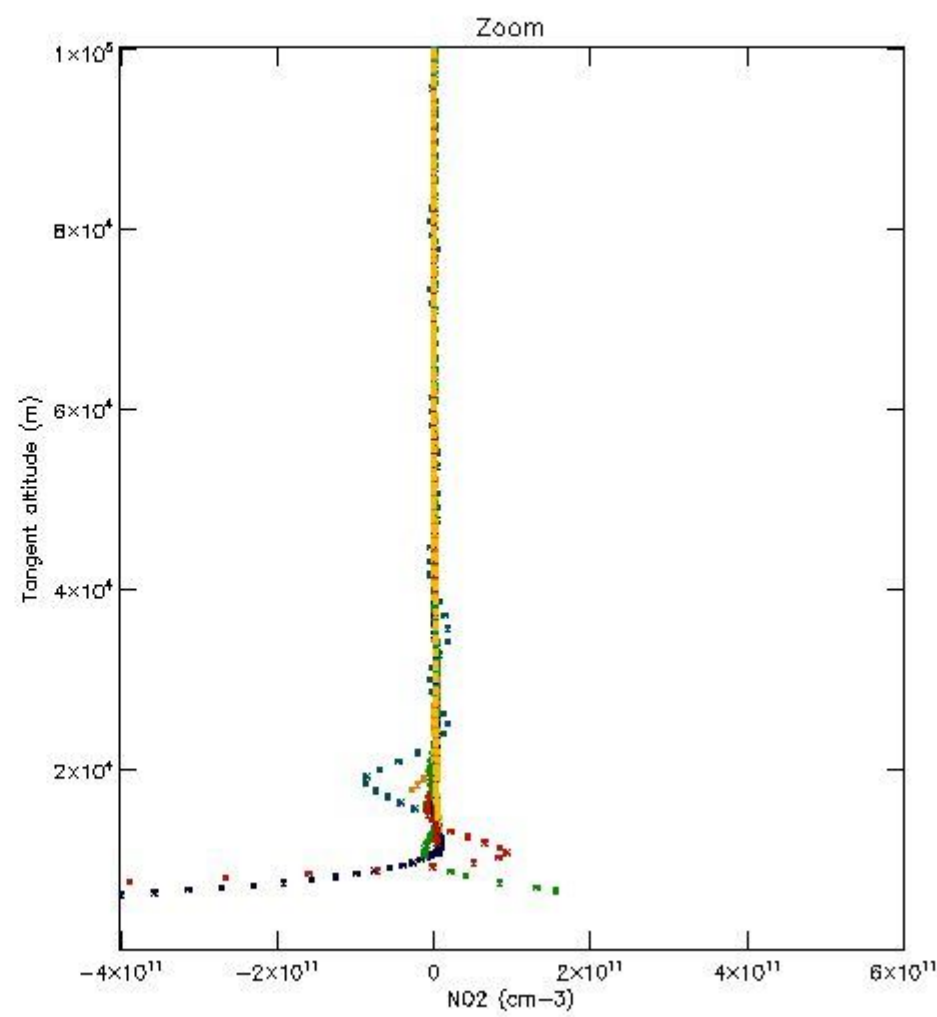
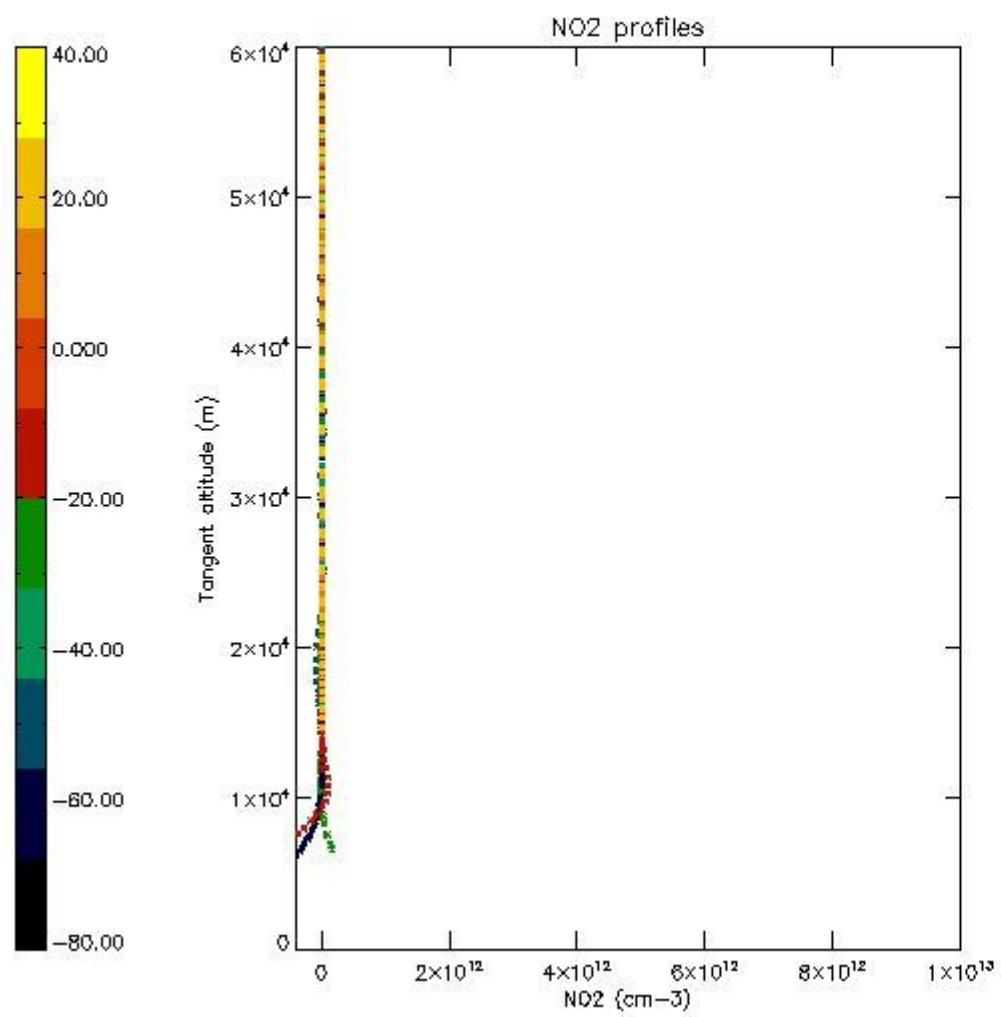
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



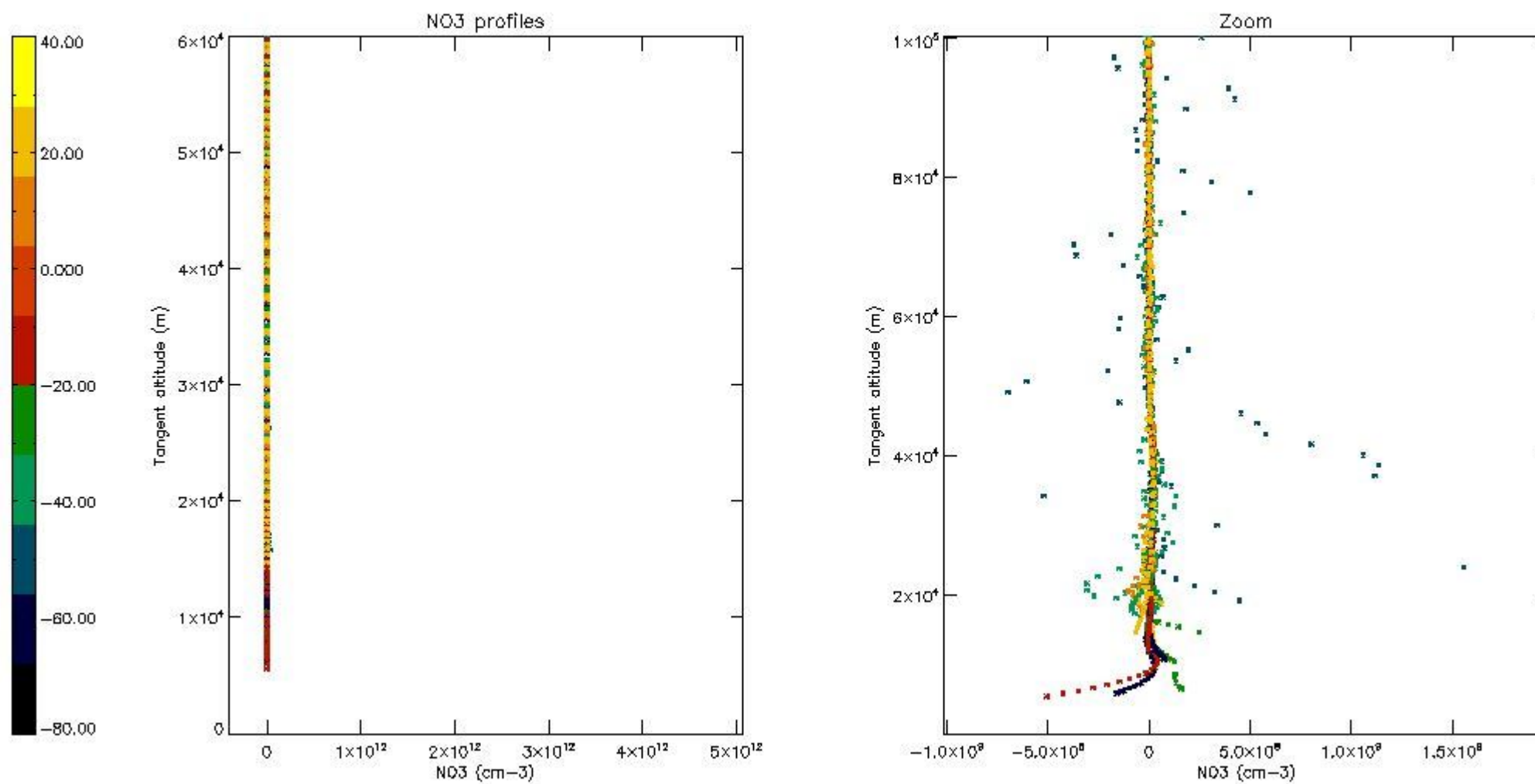
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

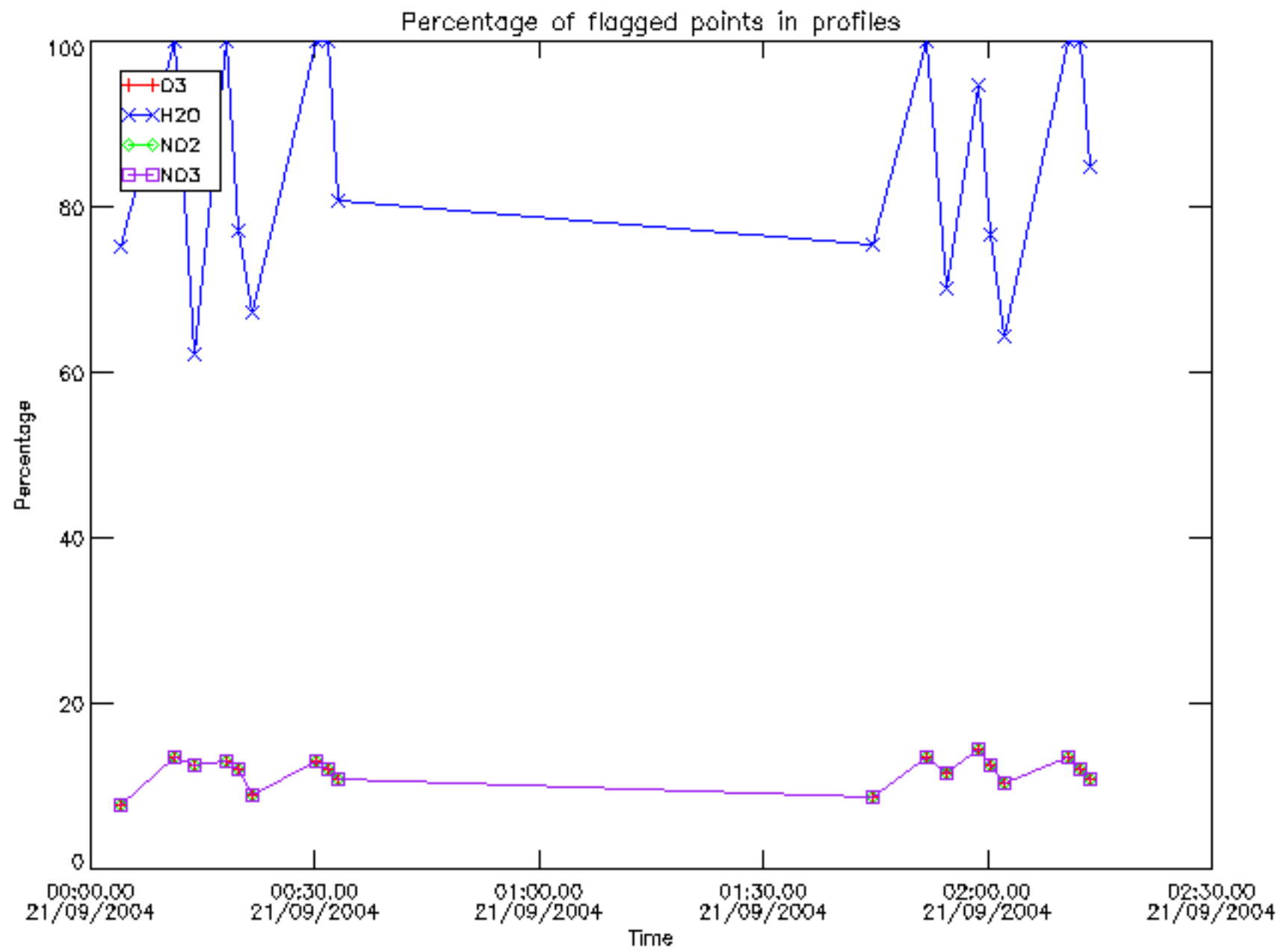
The colorbar represents the latitude.



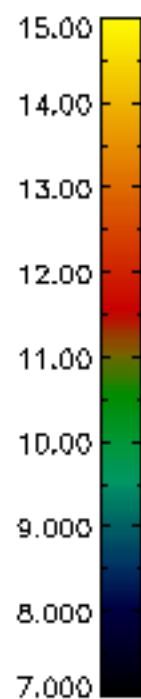
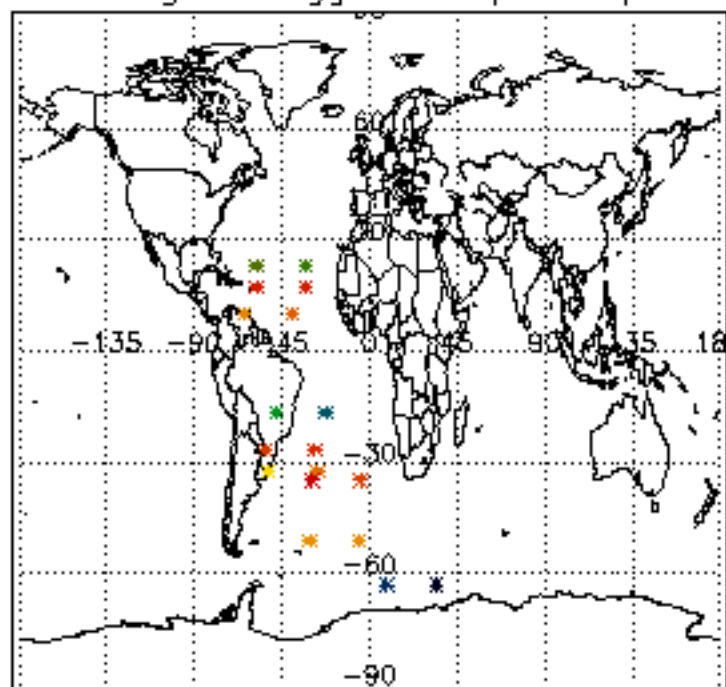
6. Auxiliary Data Files used for the production reported in section 2

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.

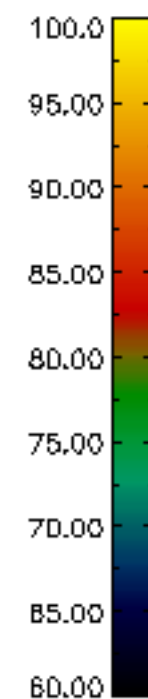
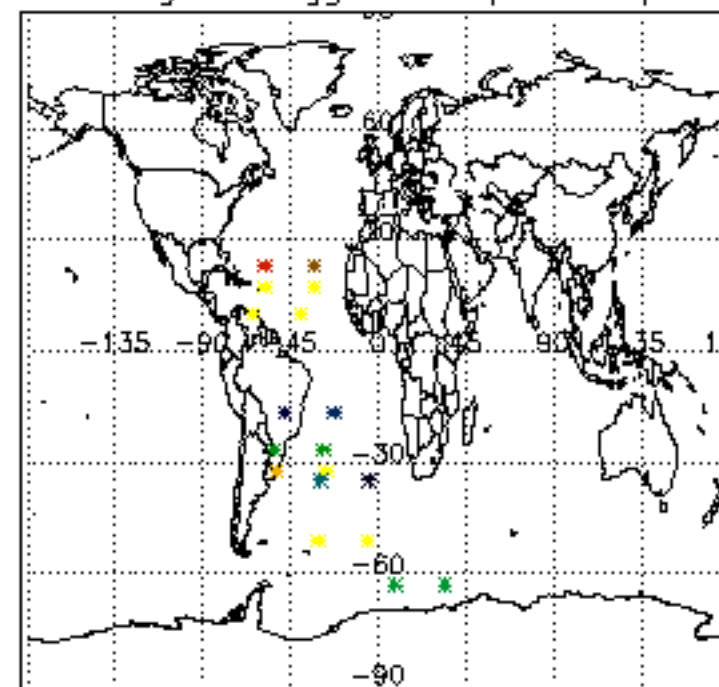
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	21-SEP-2004 00:00:27
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	21-SEP-2004 00:00:27
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	21-SEP-2004 00:00:27



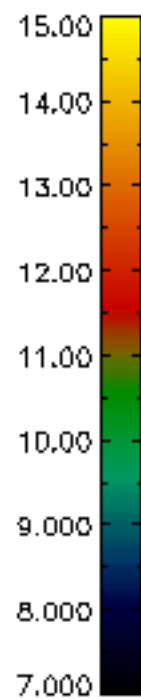
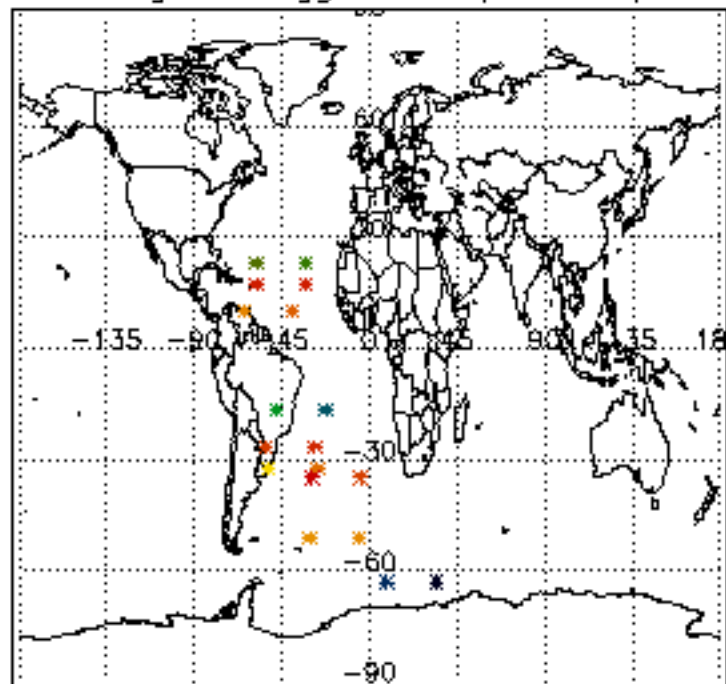
Percentage of flagged data per D3 profile



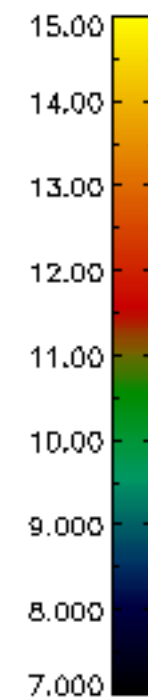
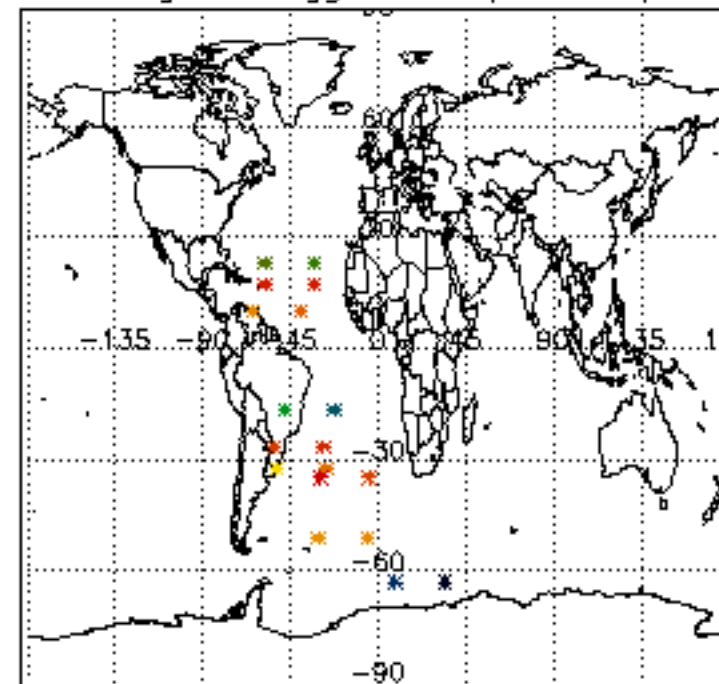
Percentage of flagged data per H2O profile

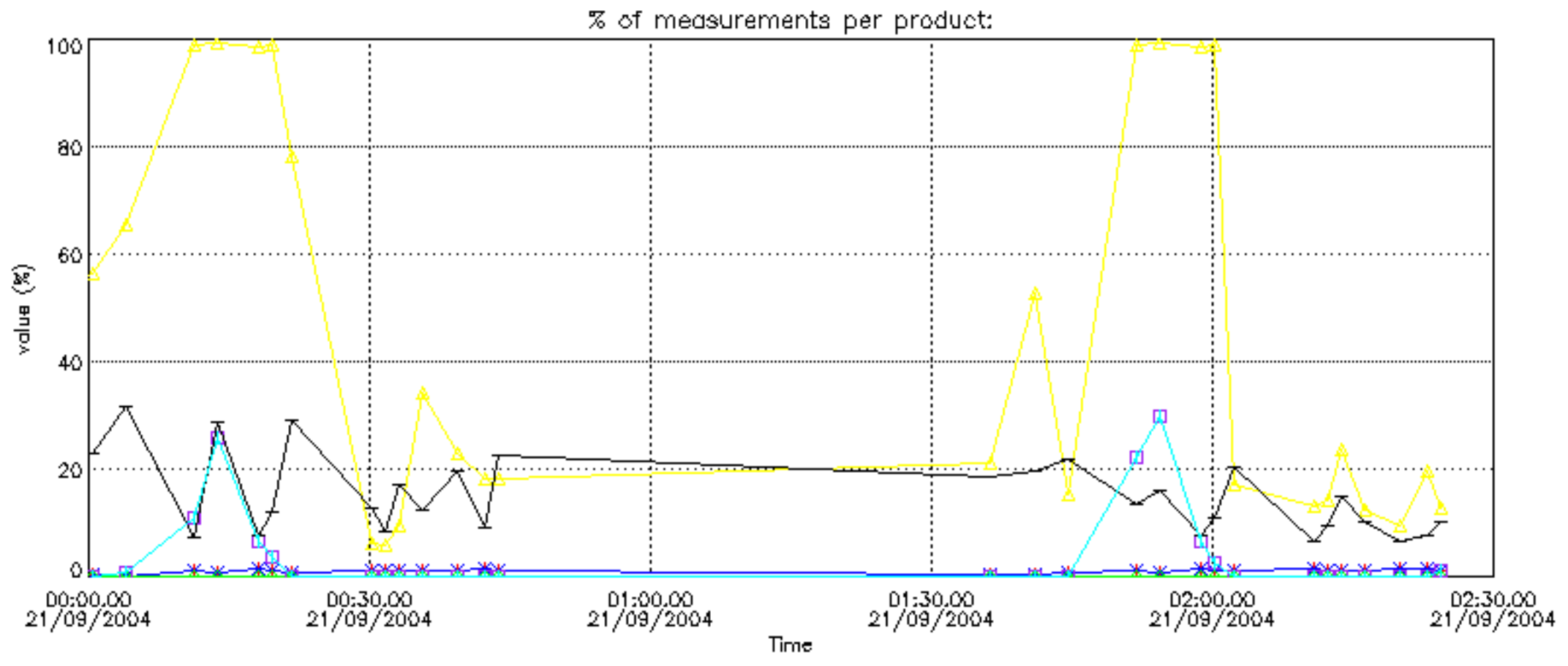


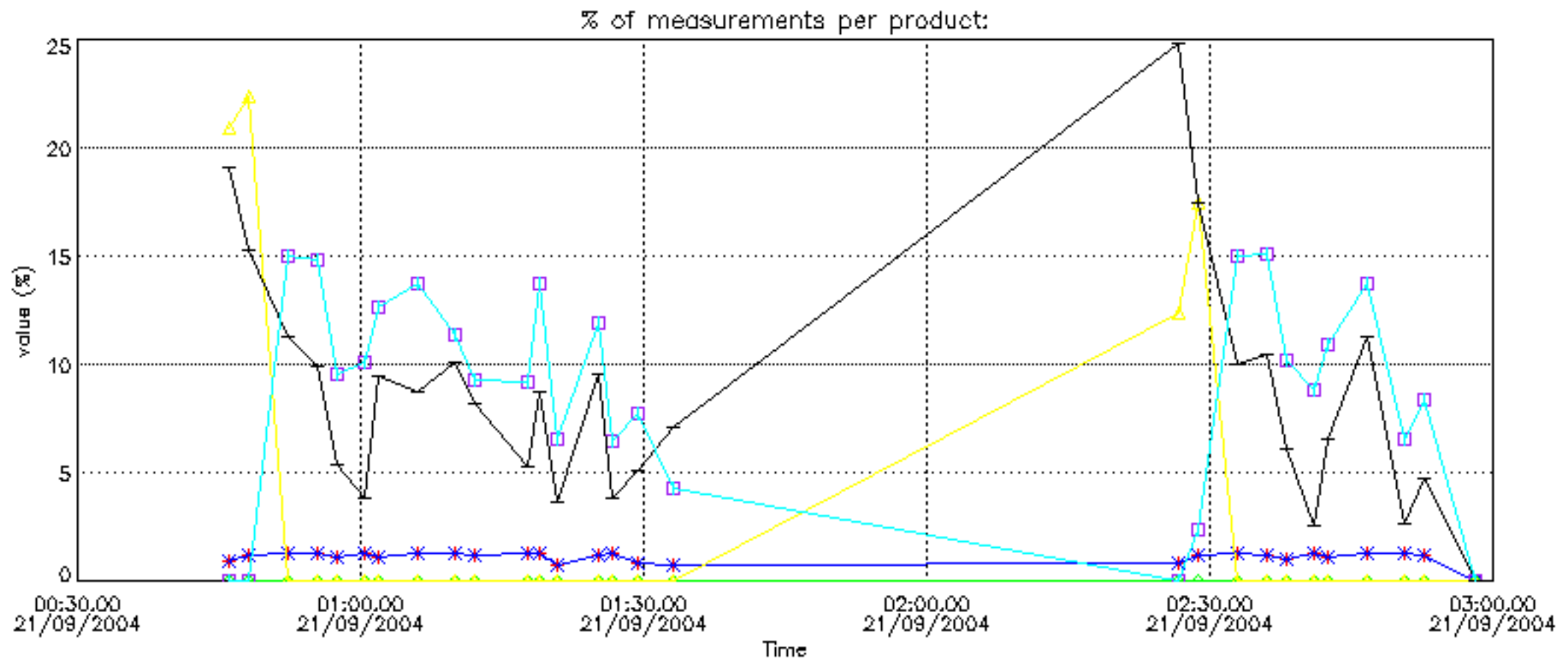
Percentage of flagged data per NO2 profile



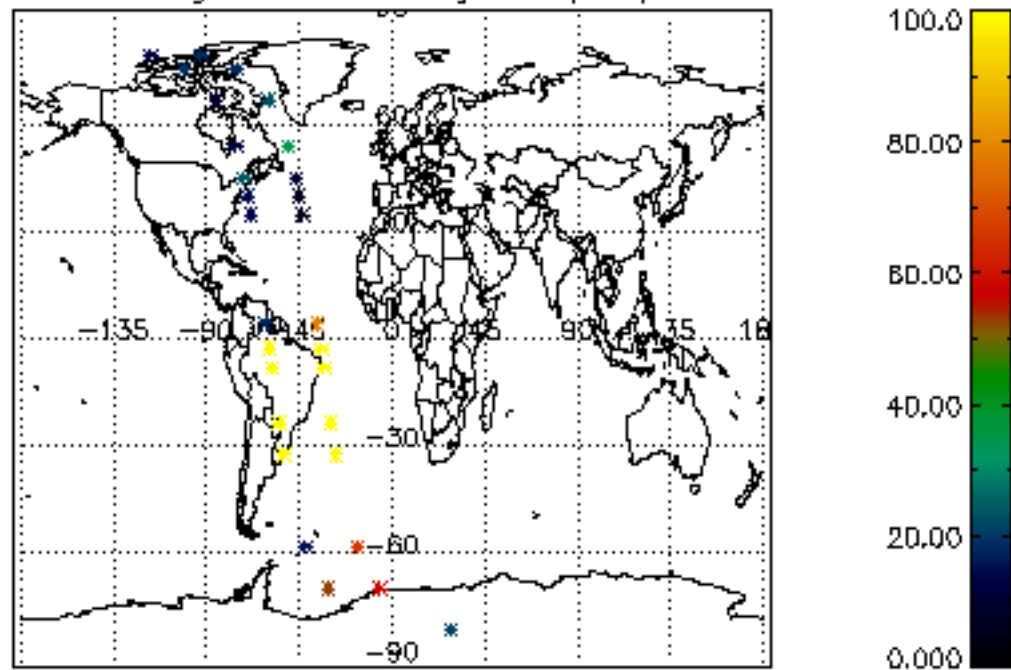
Percentage of flagged data per NO3 profile



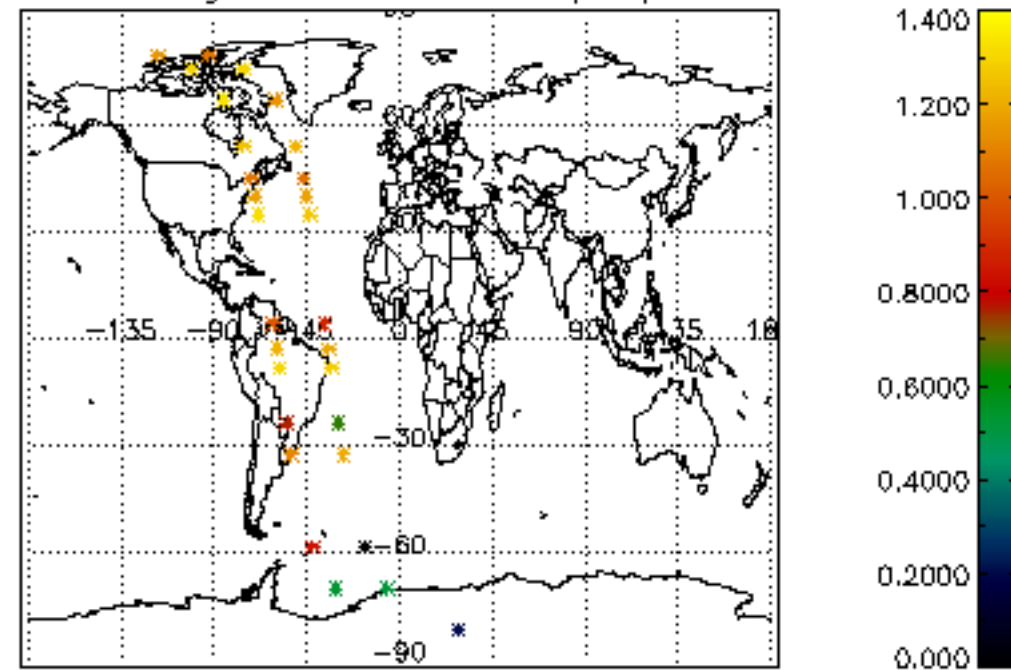




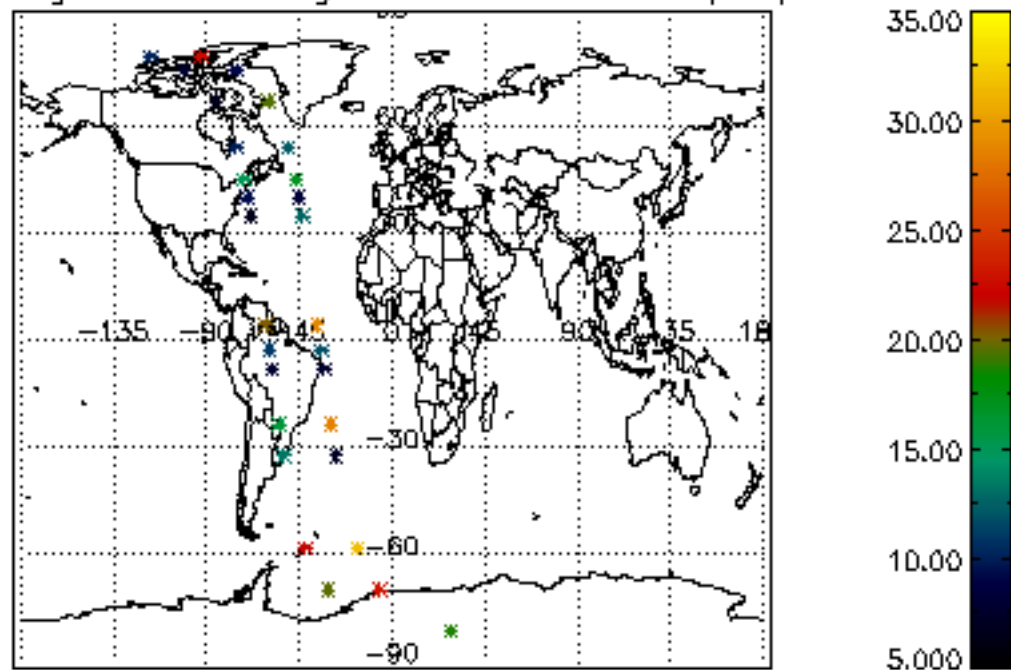
Percentage of cosmic ray hits per profile



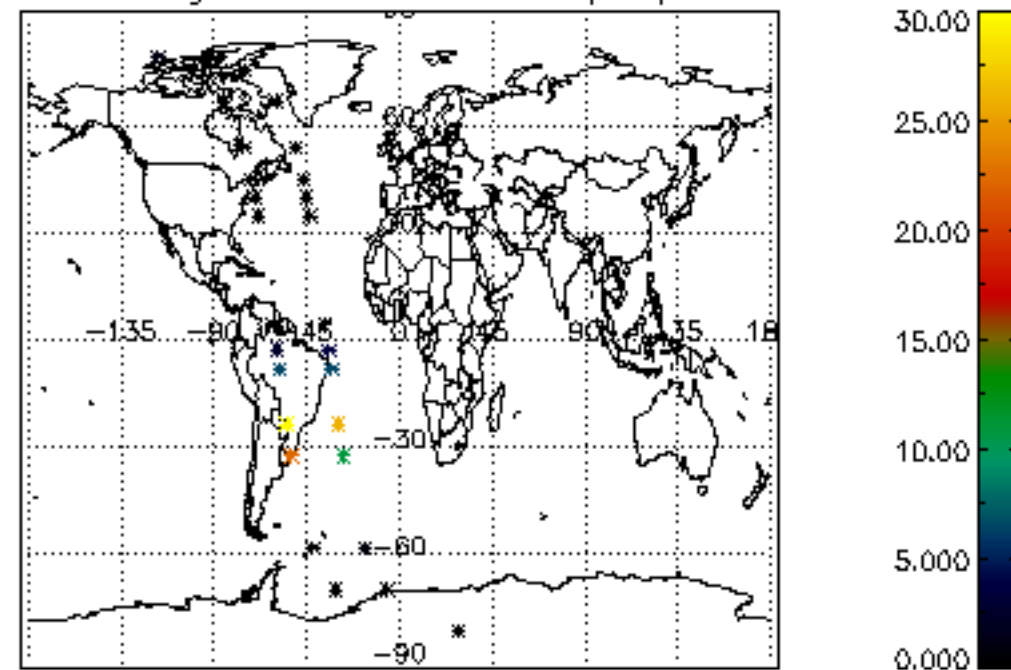
Percentage of datation errors per profile



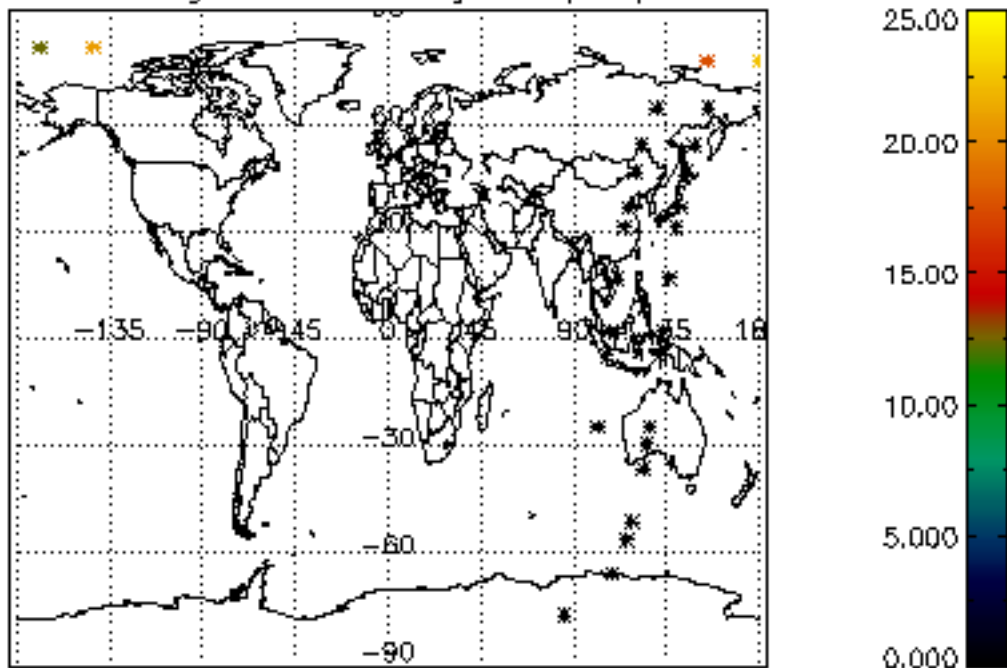
Percentage of star falling outside central band per profile



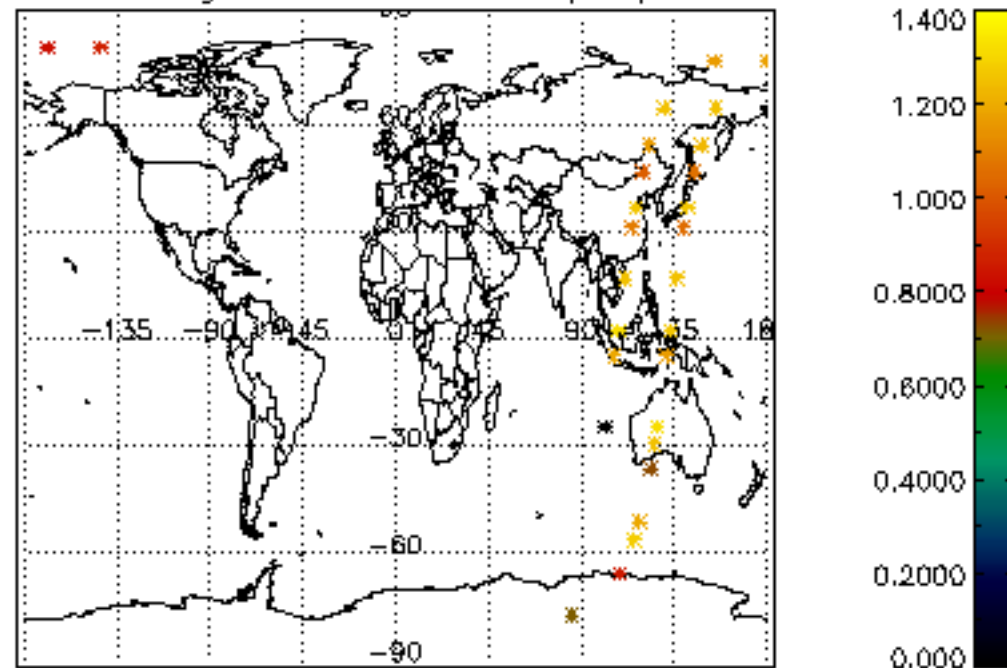
Percentage of saturation errors per profile



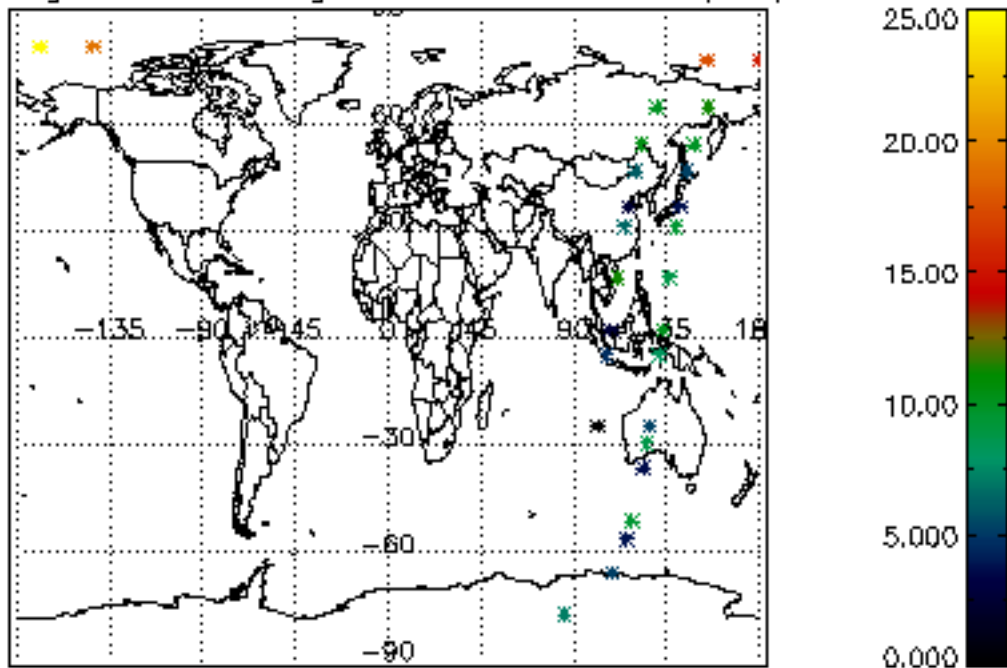
Percentage of cosmic ray hits per profile



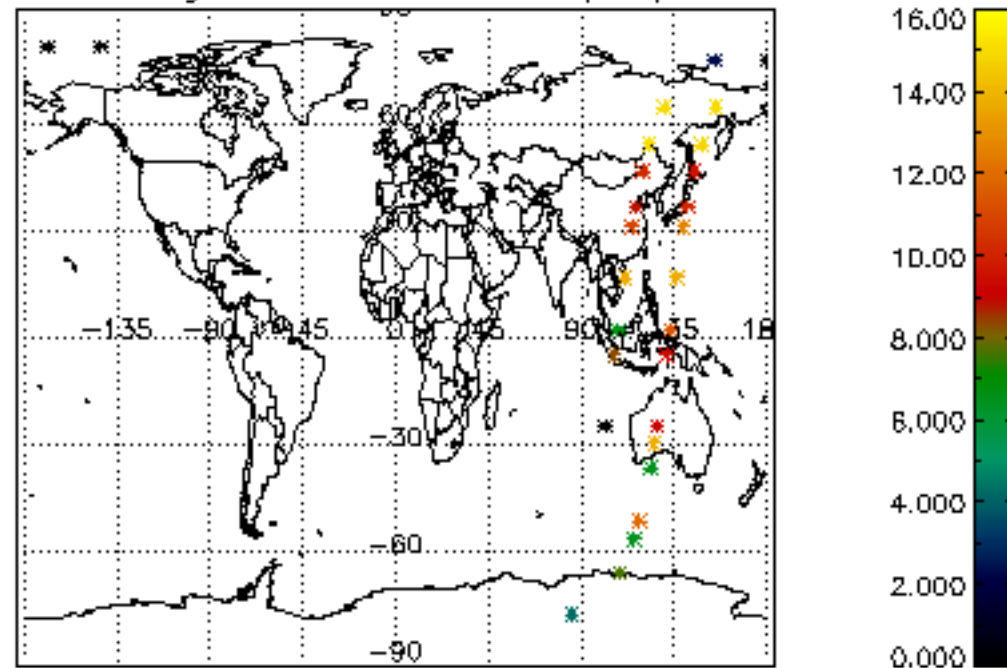
Percentage of datation errors per profile

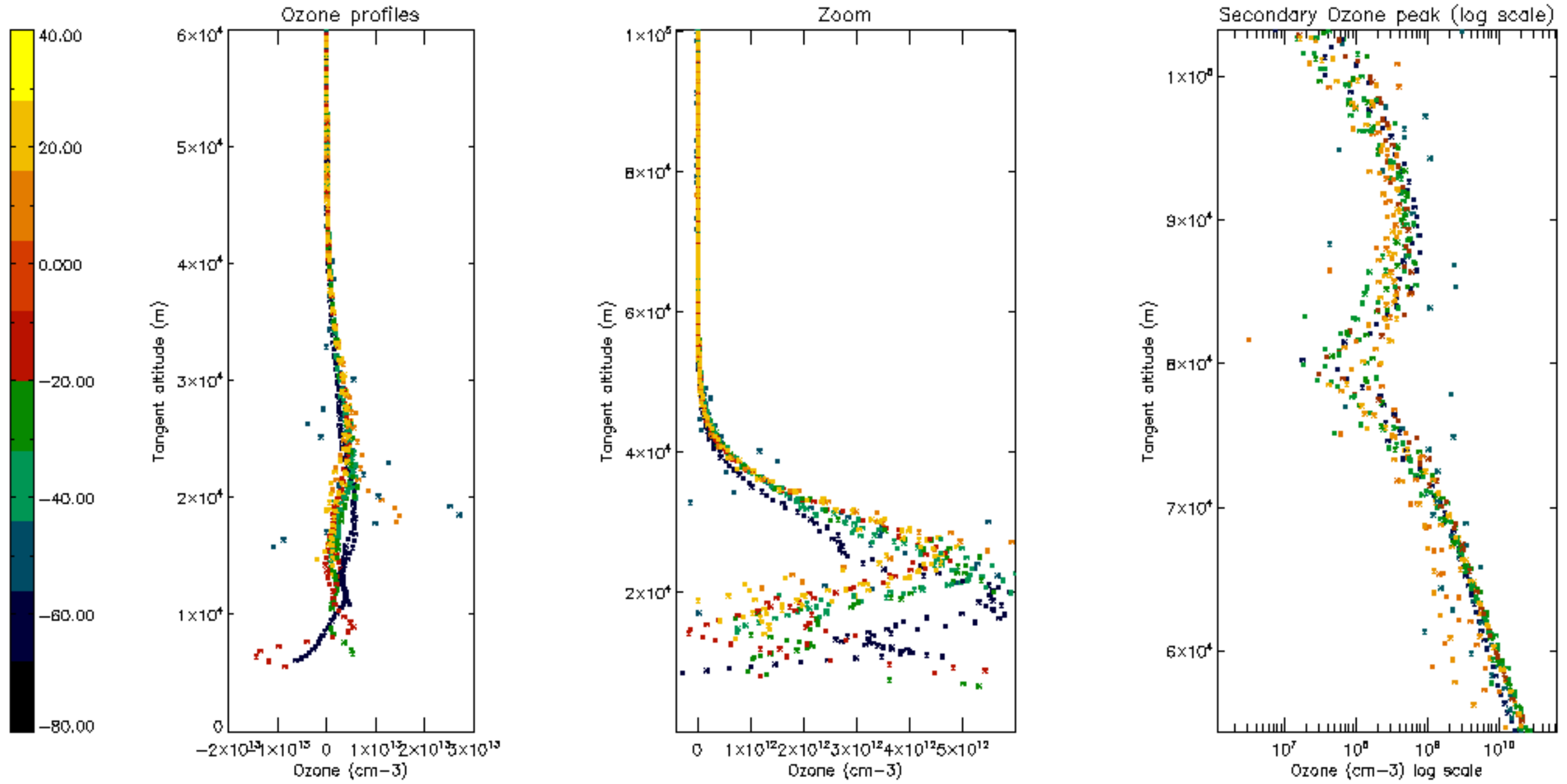


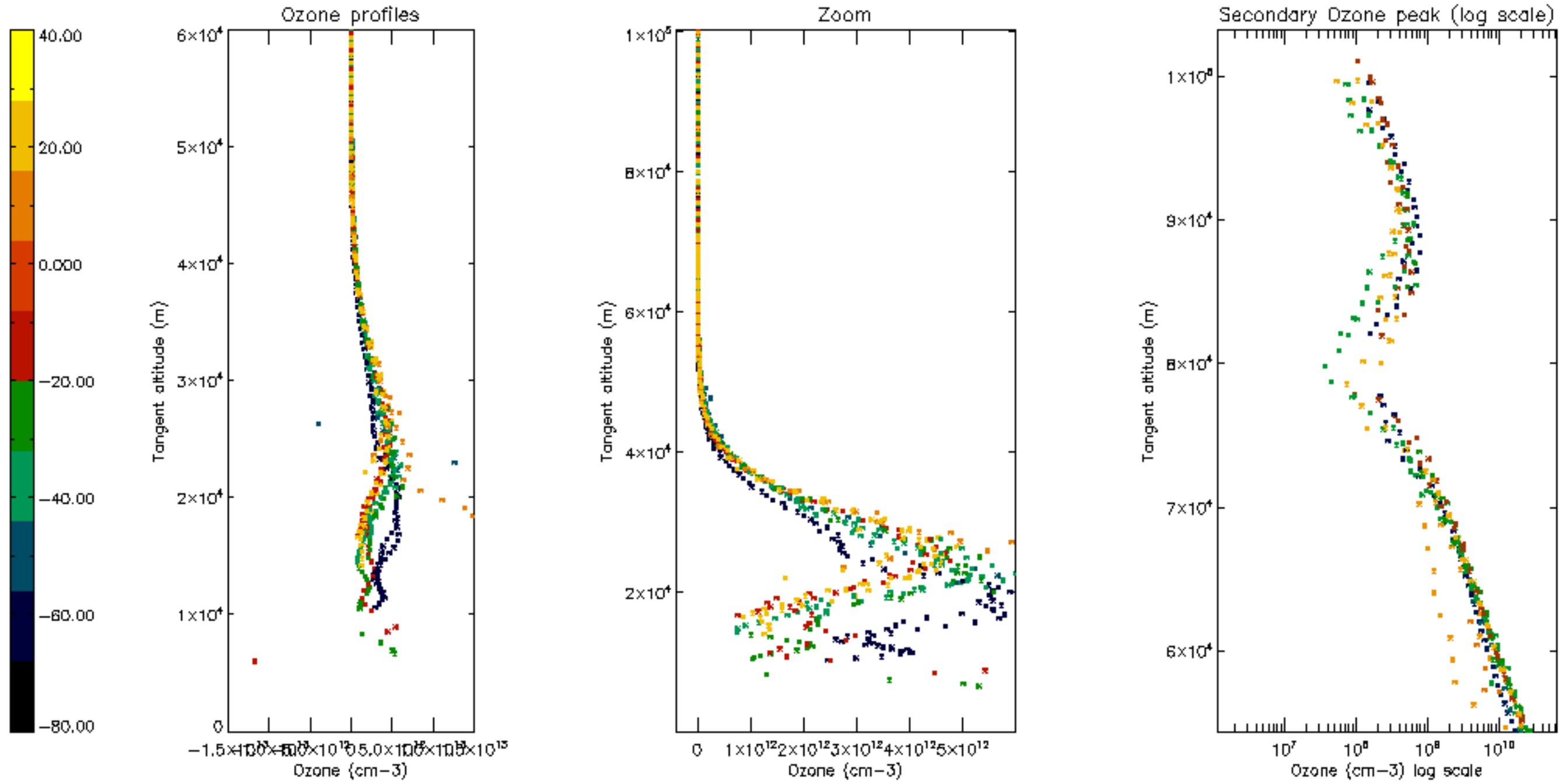
Percentage of star falling outside central band per profile

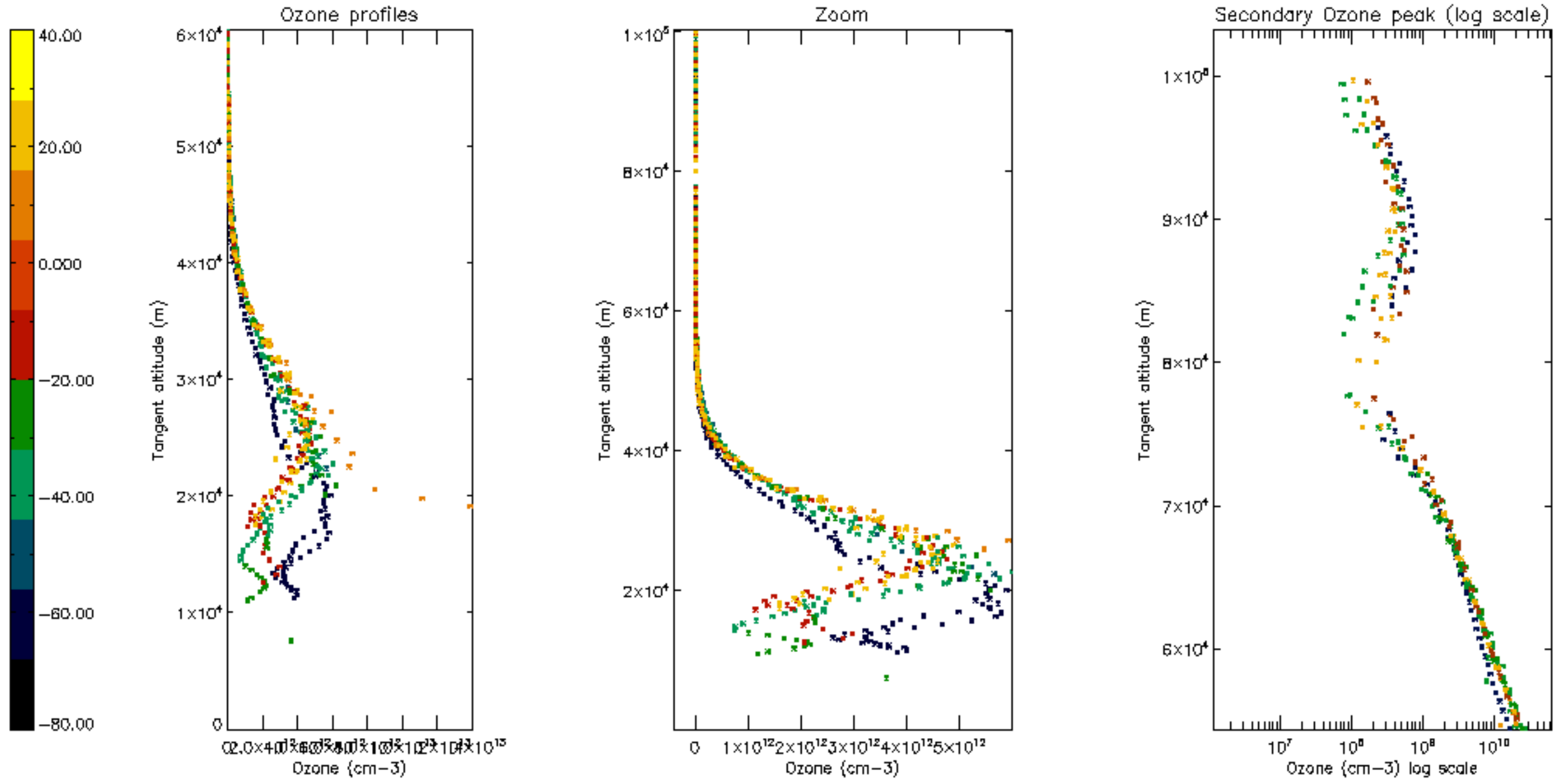


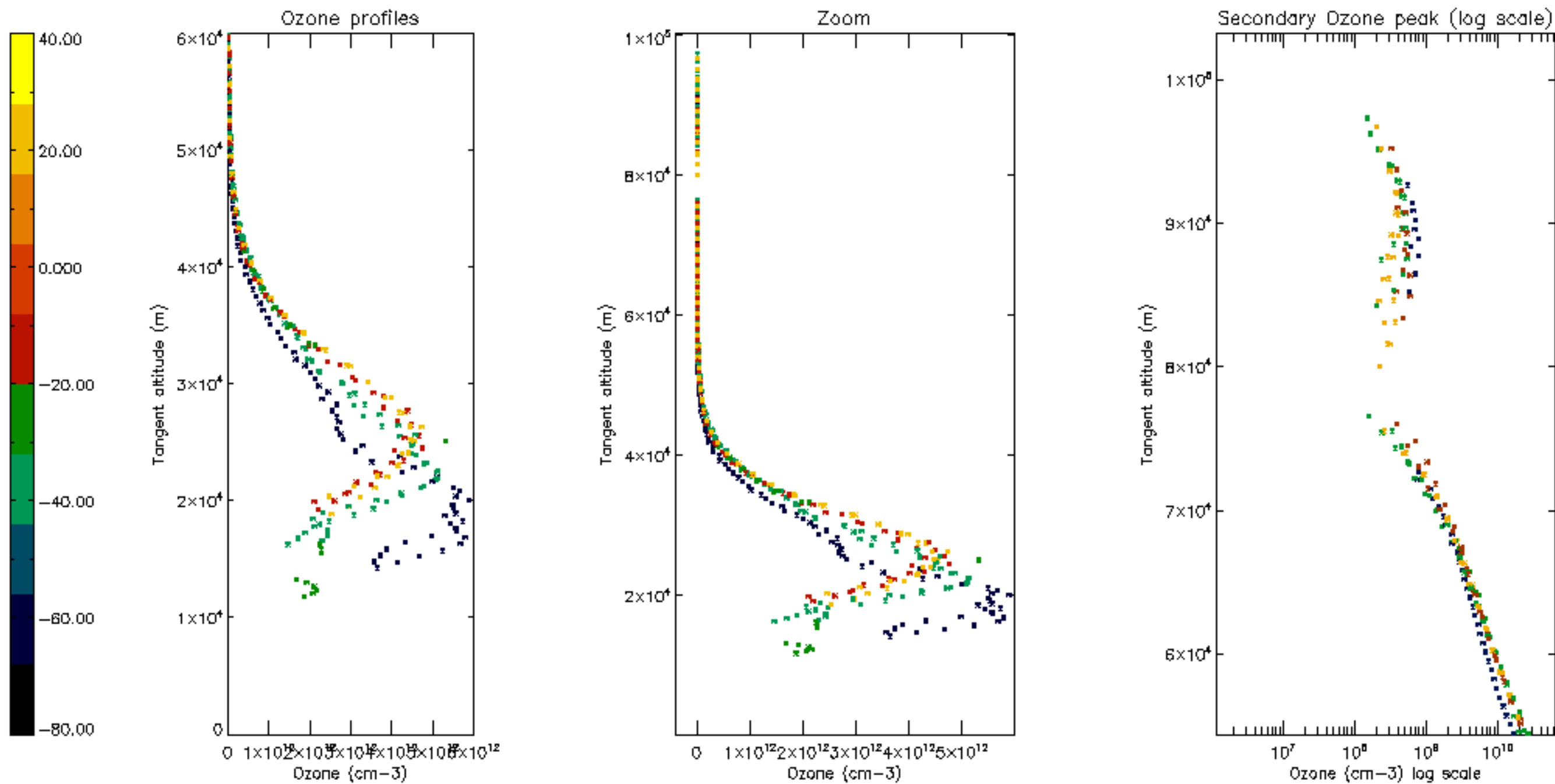
Percentage of saturation errors per profile

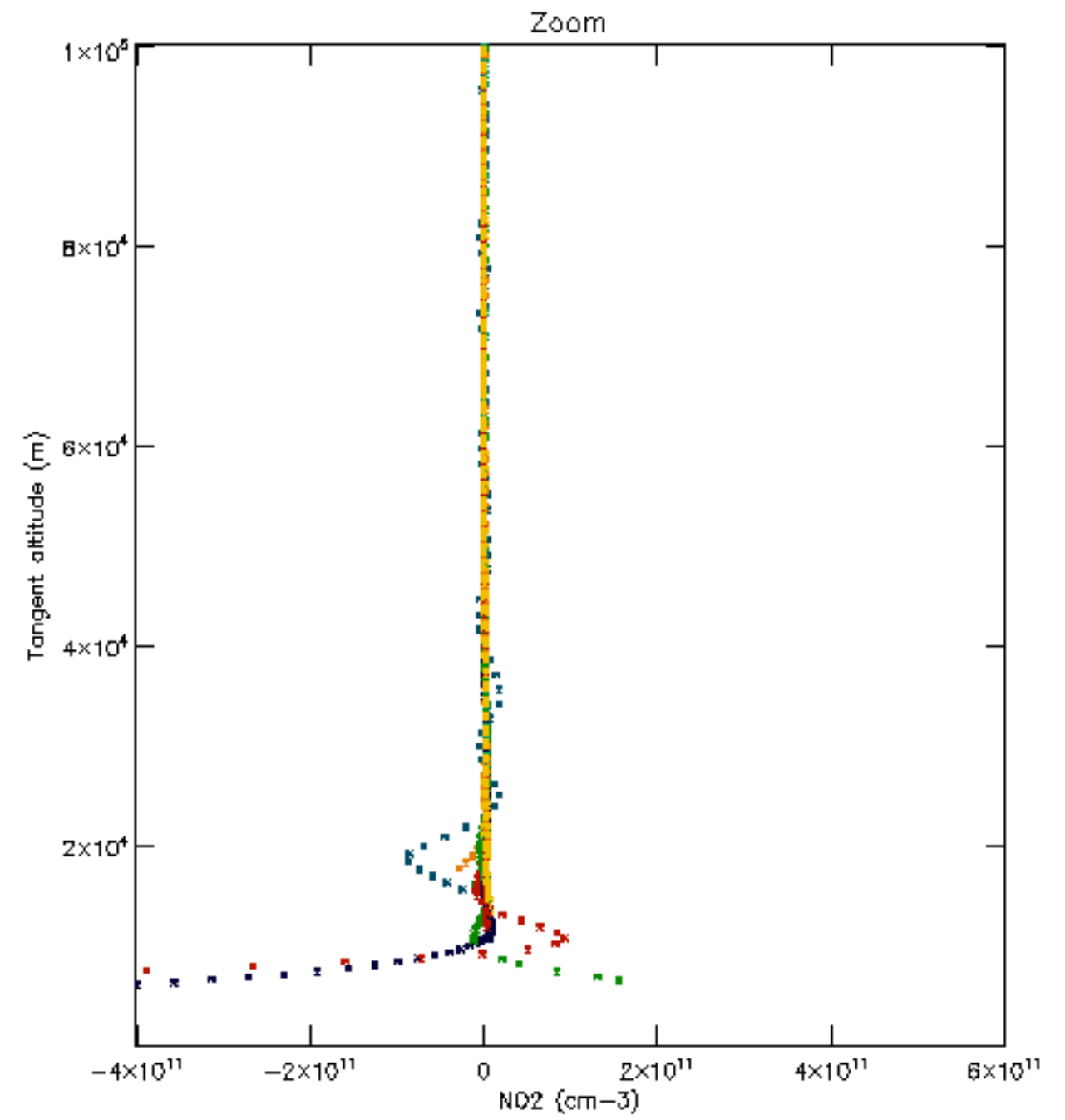
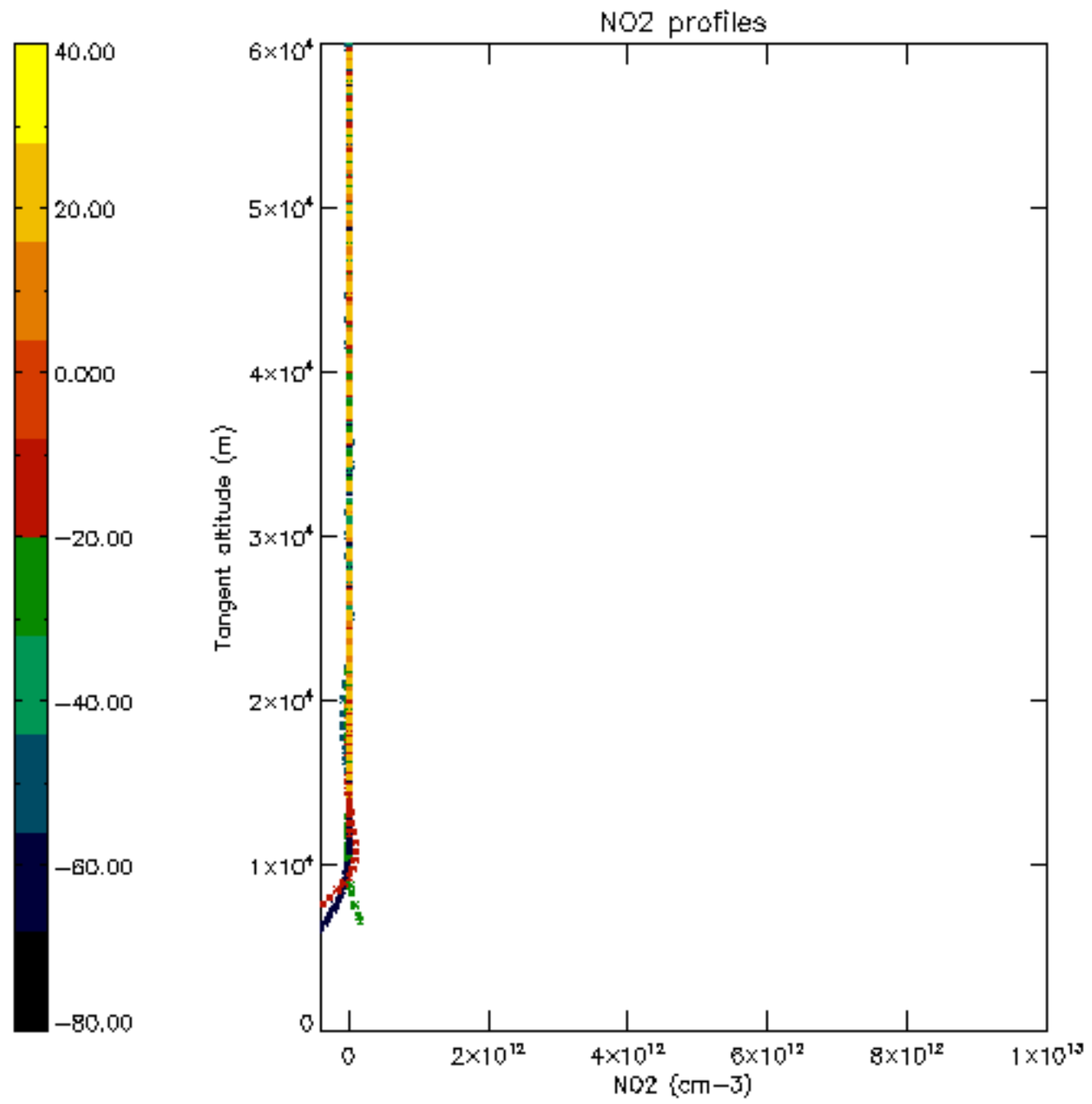


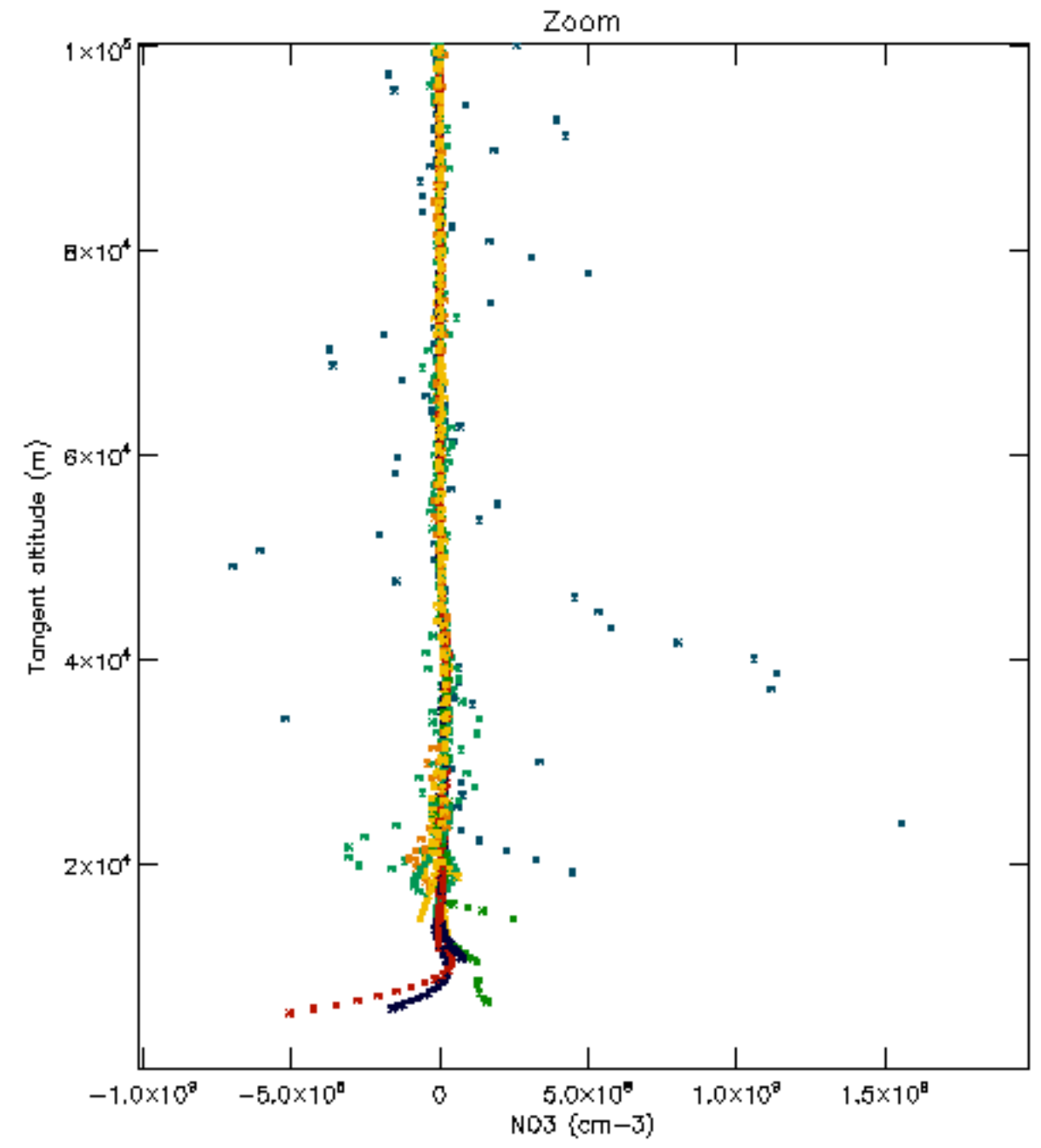
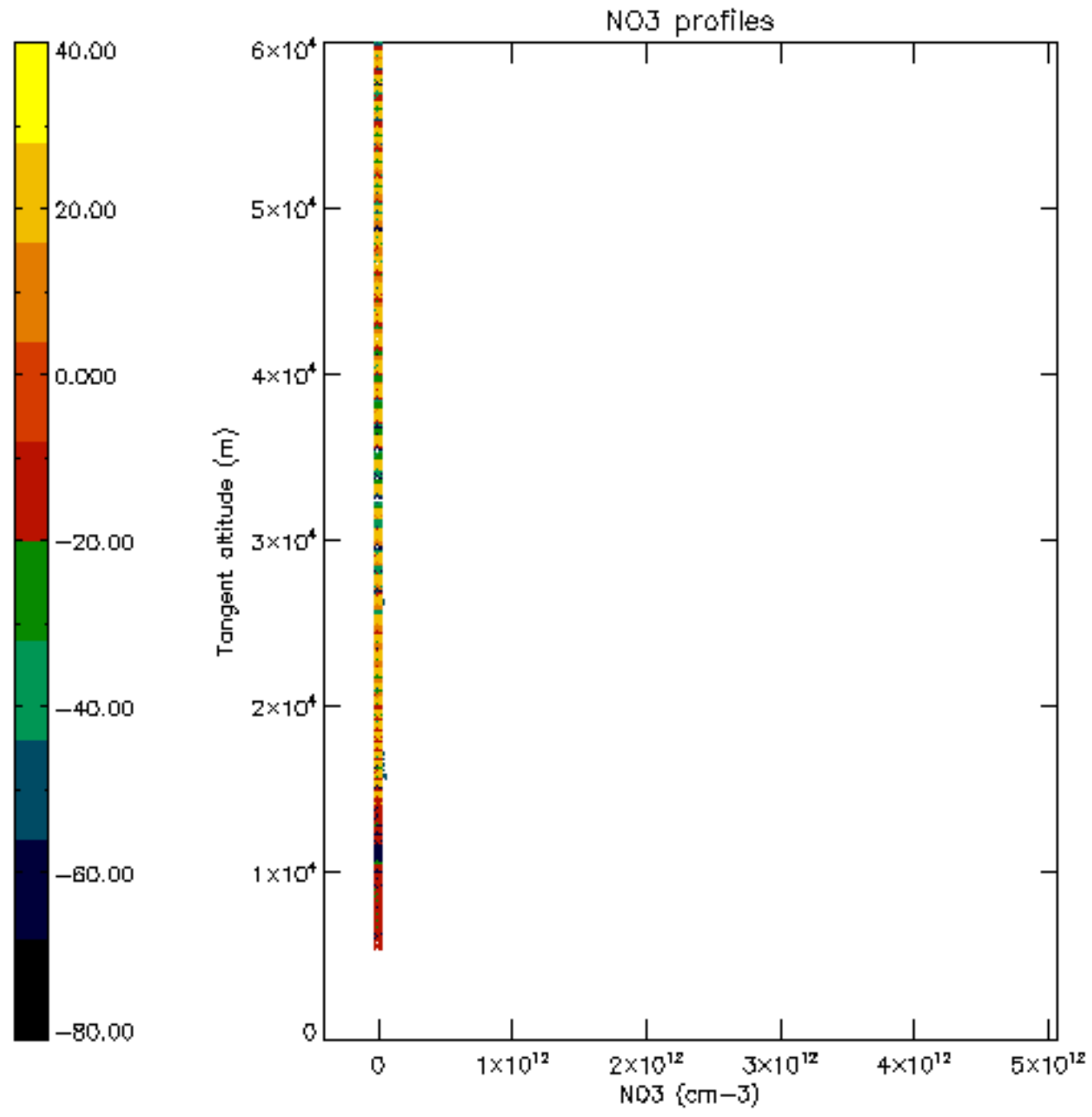


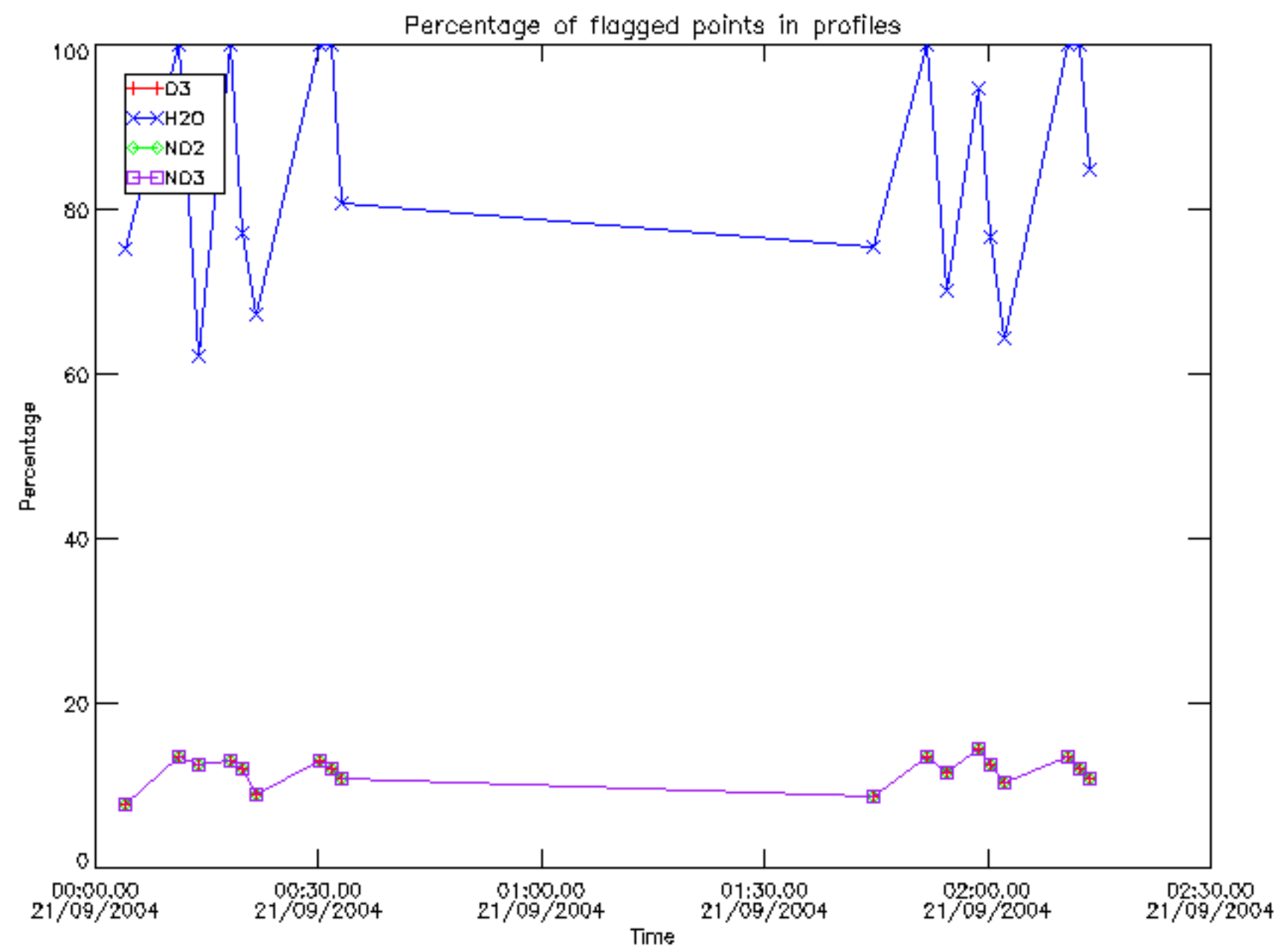




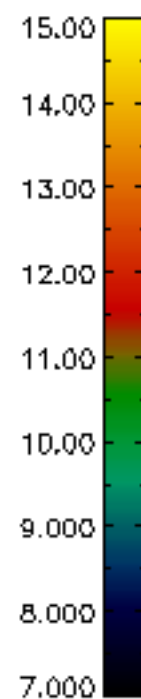
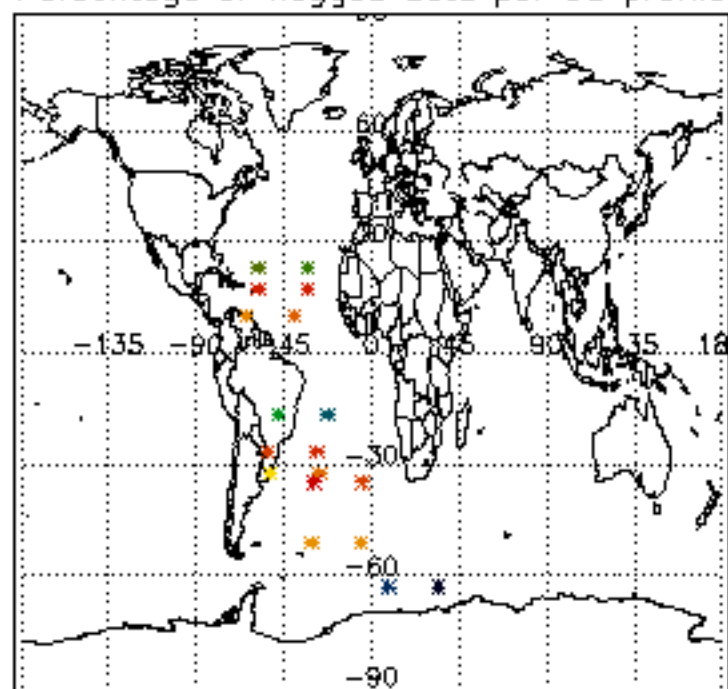




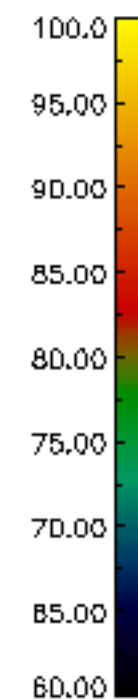
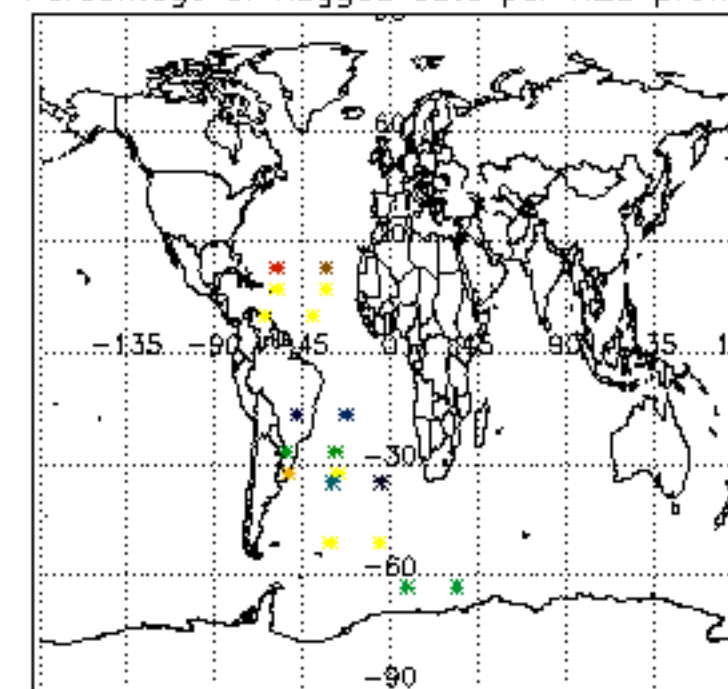




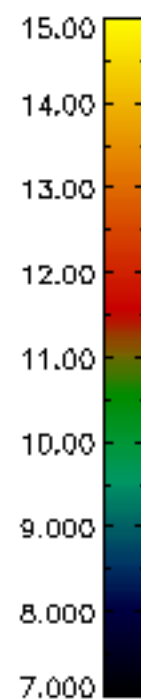
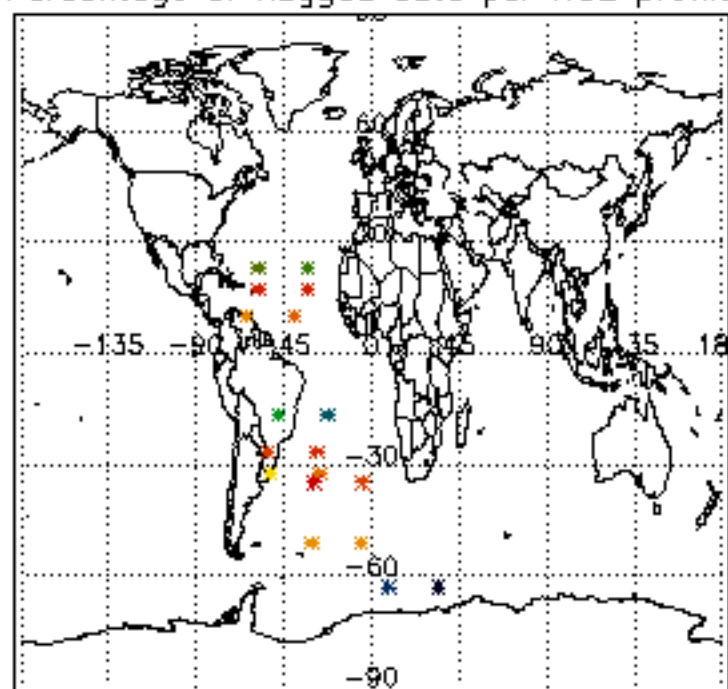
Percentage of flagged data per D3 profile



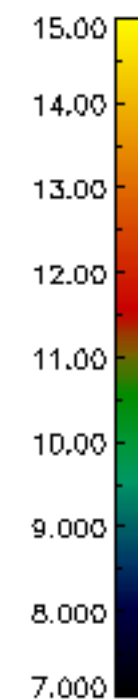
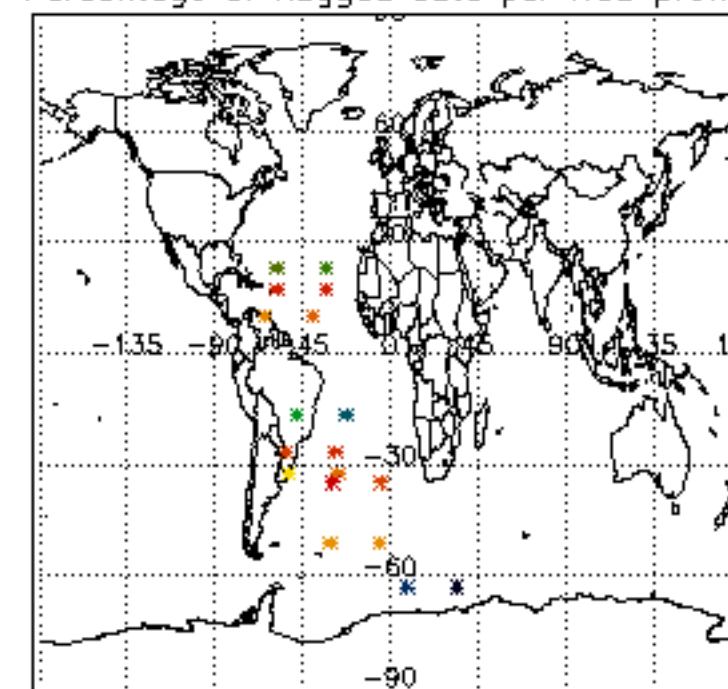
Percentage of flagged data per H2O profile

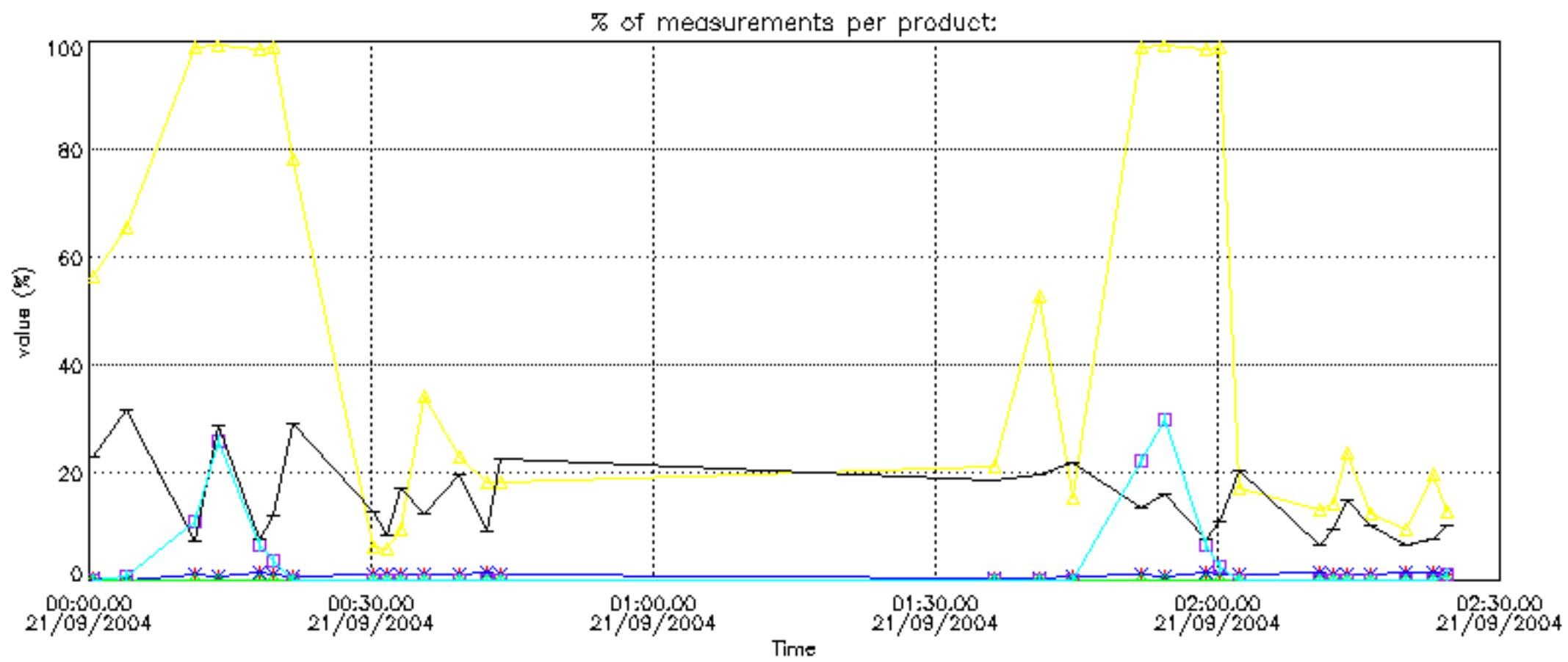


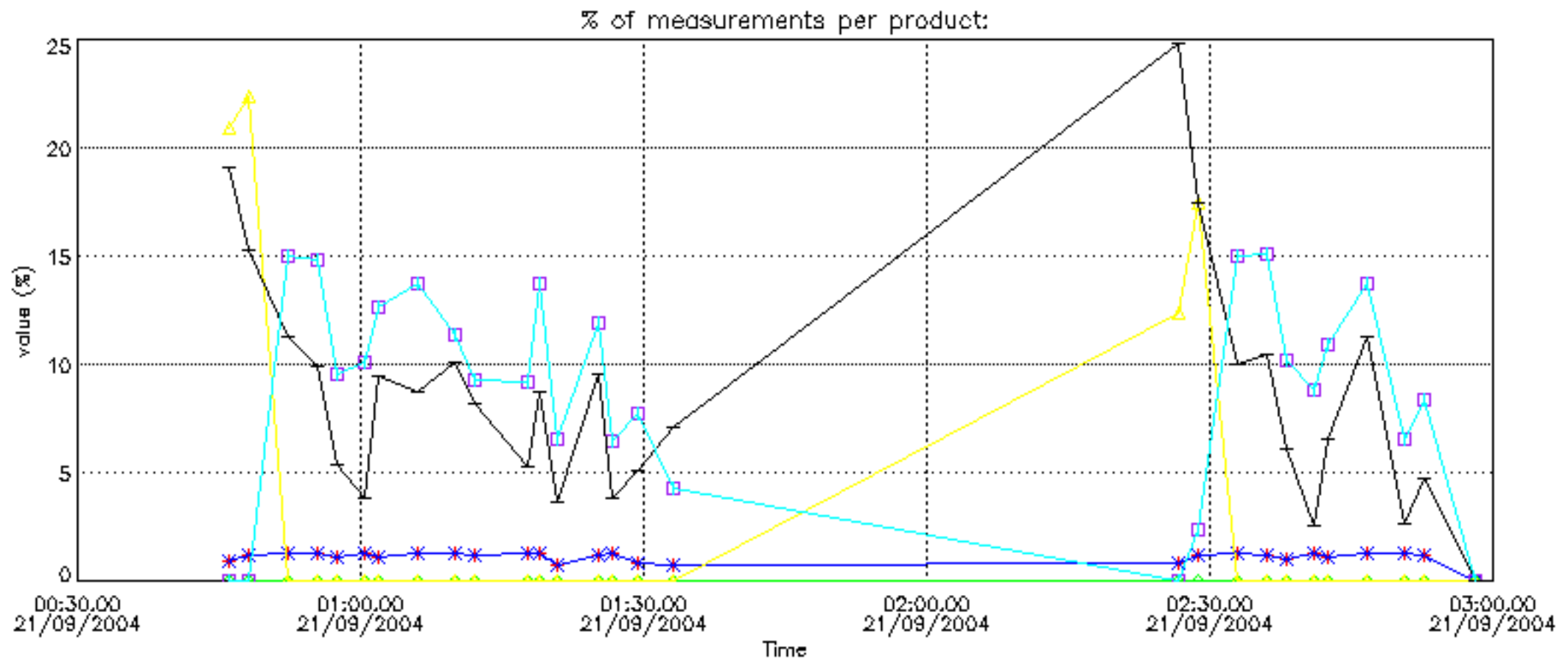
Percentage of flagged data per NO2 profile



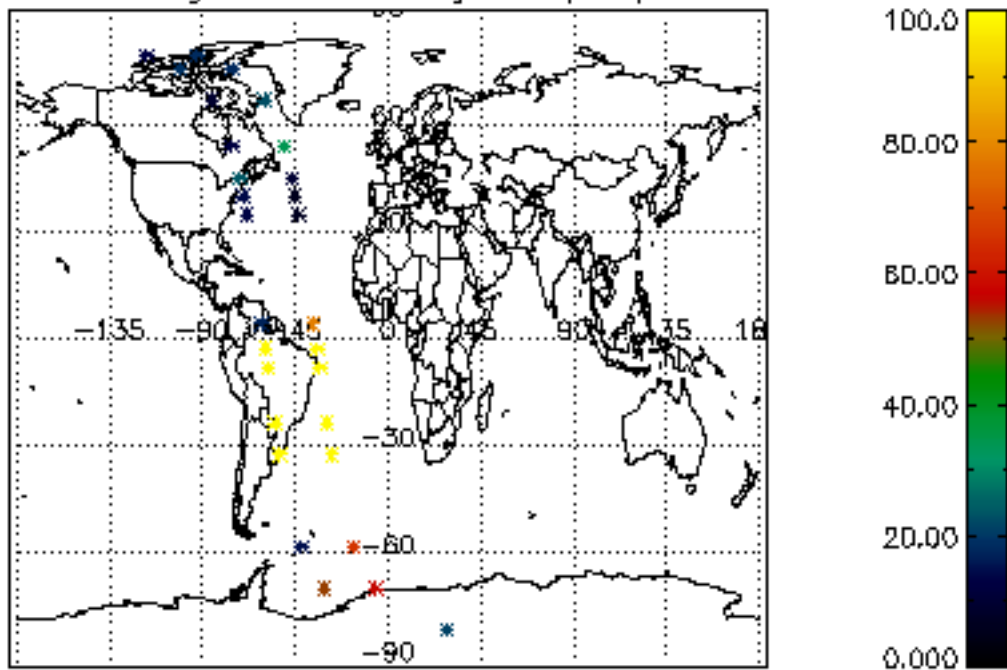
Percentage of flagged data per NO3 profile



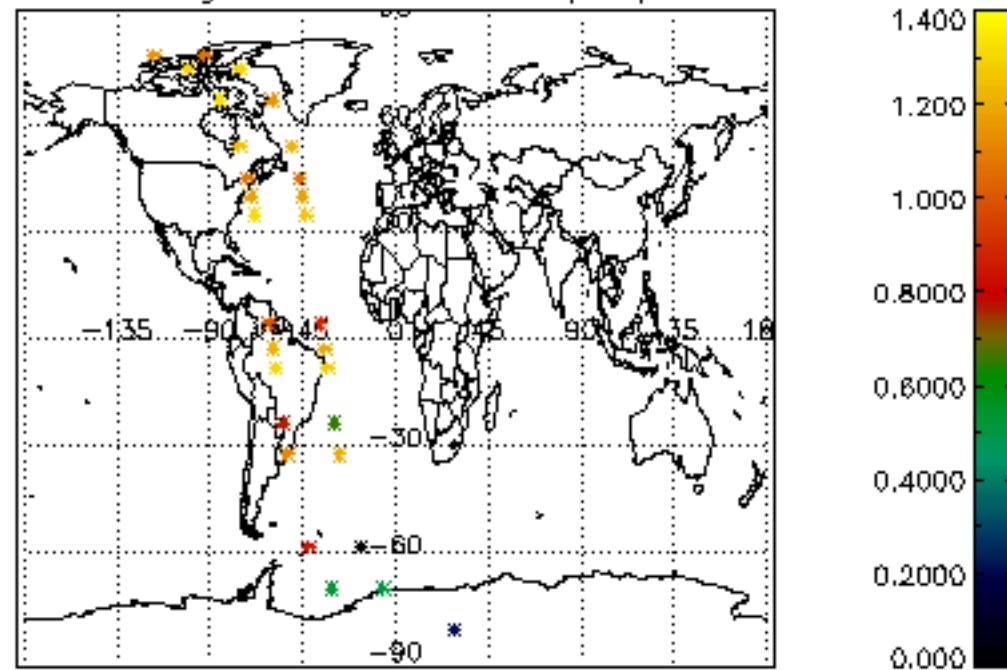




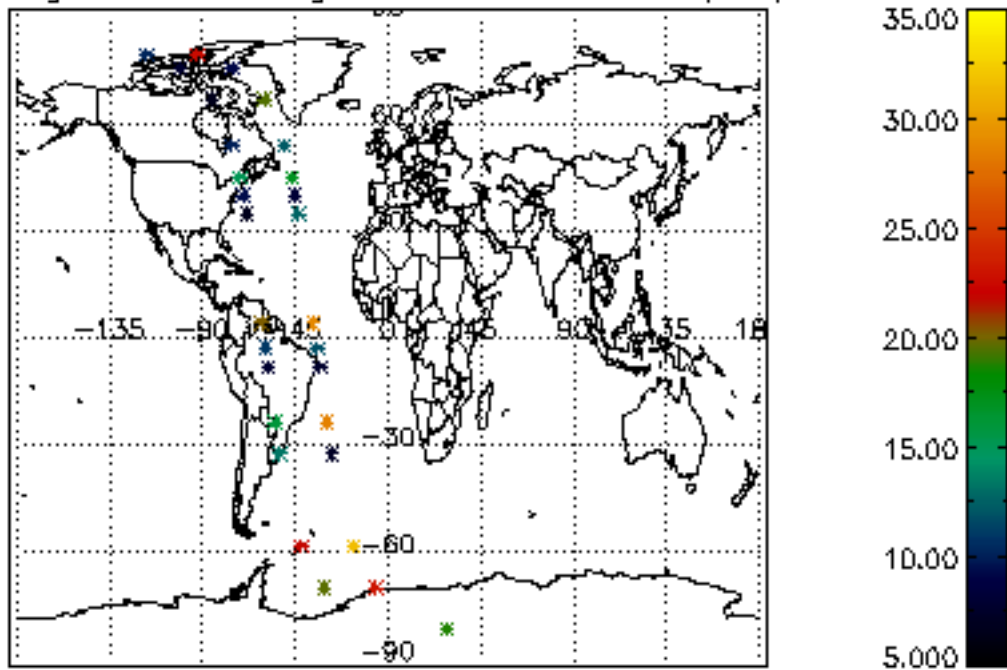
Percentage of cosmic ray hits per profile



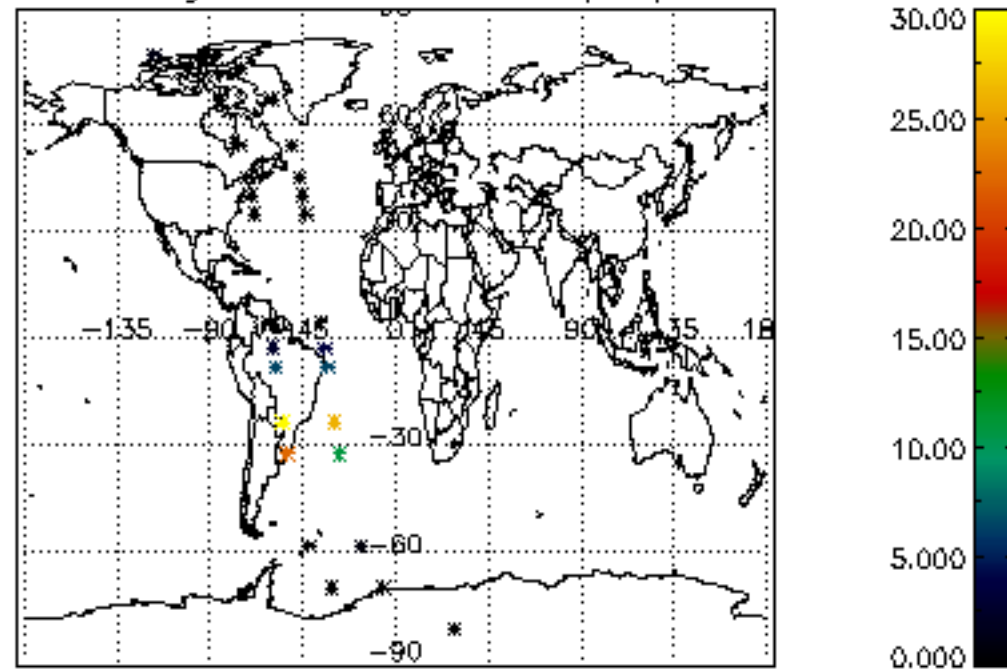
Percentage of datation errors per profile



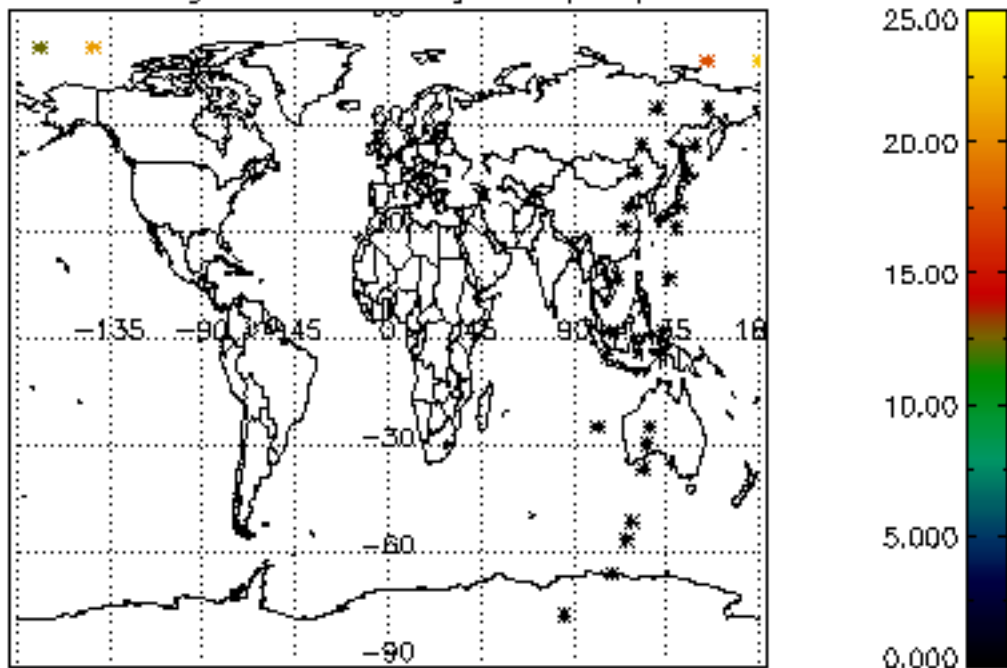
Percentage of star falling outside central band per profile



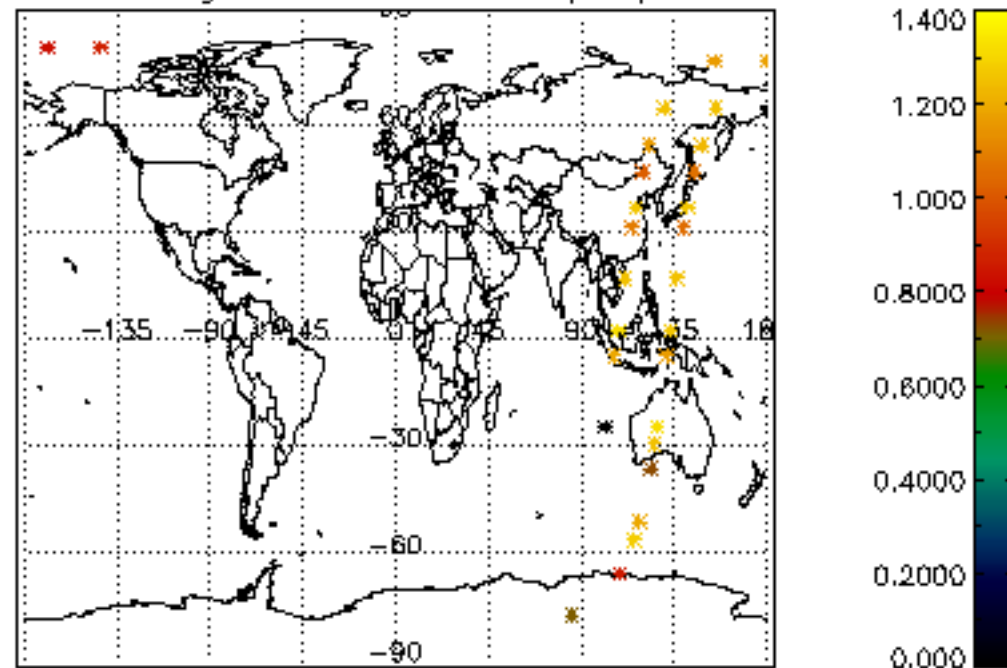
Percentage of saturation errors per profile



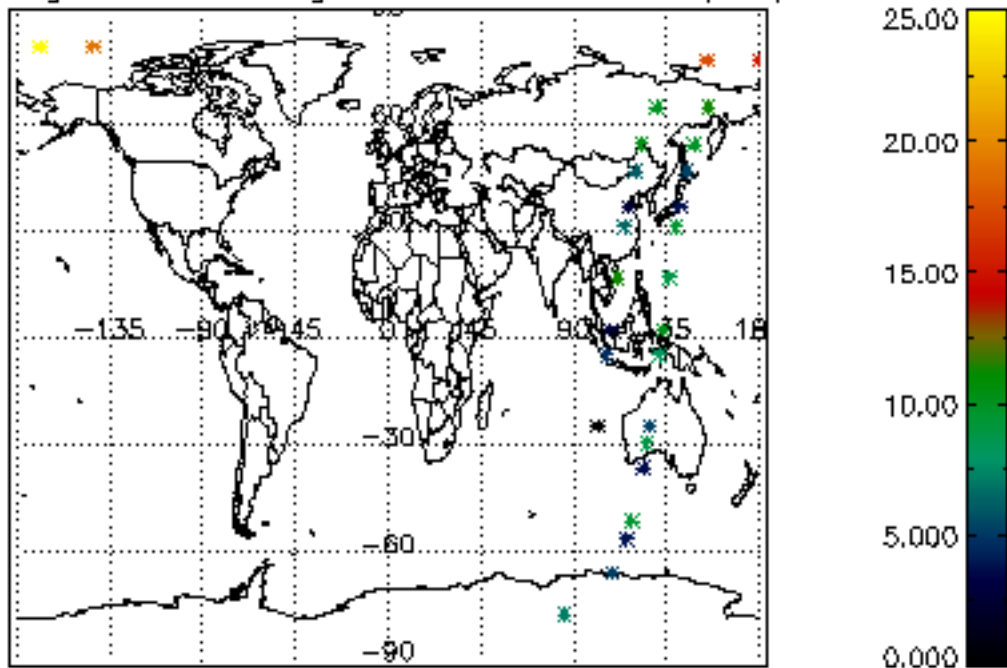
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

