

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	26APR2013 14:26:47
Data source version	GOMOS/6.01
Start time of products	30-11-2009 (30NOV2009 00:00:00)
Stop time of products	01-12-2009 (01DEC2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	342
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

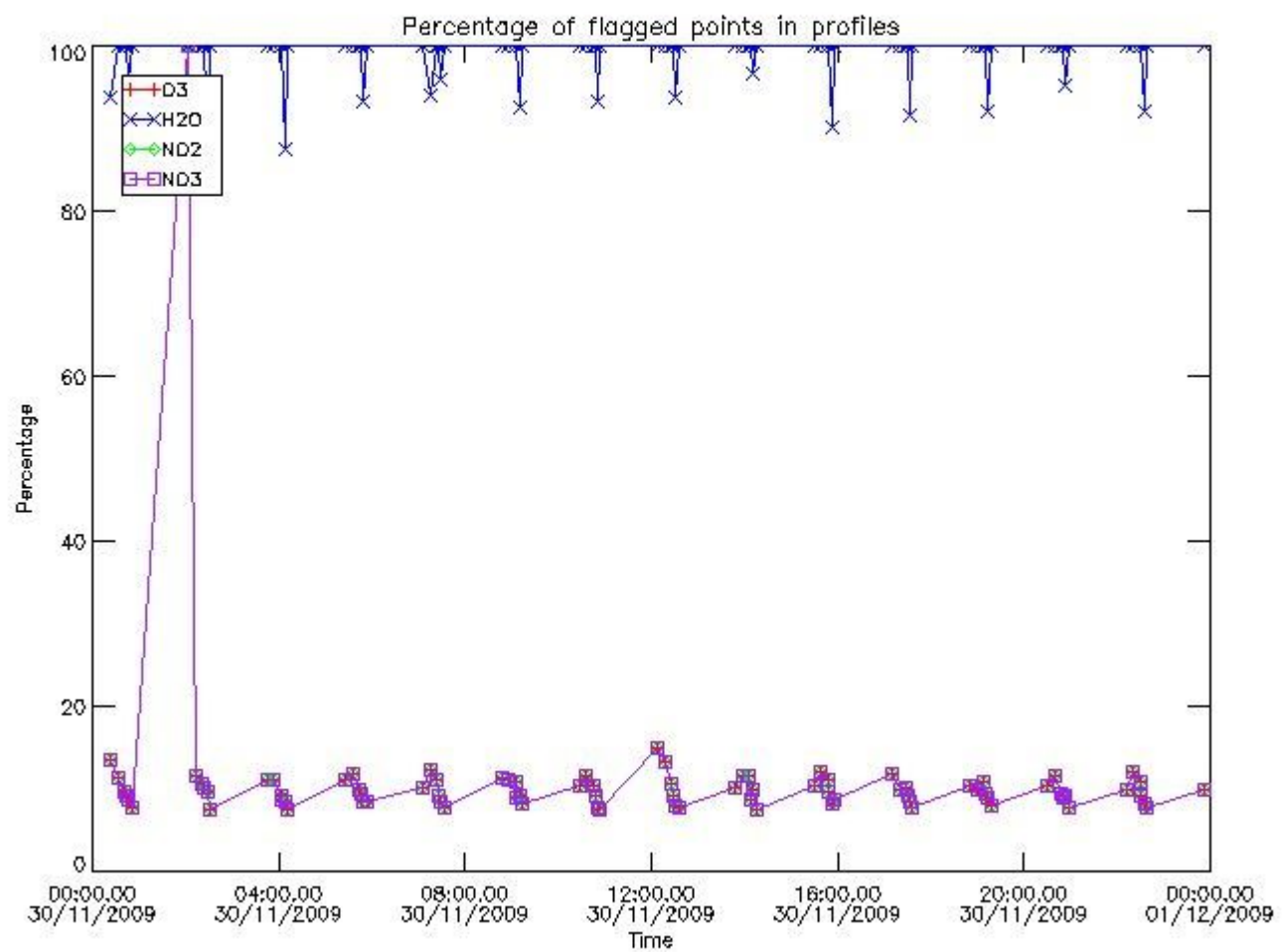
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20091130_000058_00000502084_00388_40522_3582.N1	30-NOV-2009 00:00:58	Bright	50.000	174	52Psi UMa	3.0040	4400.0	100	40522	No
2	GOM_NL__2PRFIN20091130_000334_00000362084_00388_40522_3583.N1	30-NOV-2009 00:03:34	Bright	35.500	152	12Alp2CVn	2.8900	11000.	71	40522	No
3	GOM_NL__2PRFIN20091130_001259_00000682084_00388_40522_3584.N1	30-NOV-2009 00:12:59	Bright	67.500	62	94Bet Leo	2.1360	9700.0	135	40522	No
4	GOM_NL__2PRFIN20091130_001618_00000612084_00388_40522_3585.N1	30-NOV-2009 00:16:18	Bright	60.500	121	29Gam Vir	2.7400	7200.0	121	40522	No
5	GOM_NL__2PRFIN20091130_002155_00000432084_00388_40522_3586.N1	30-NOV-2009 00:21:55	Twilight	43.000	100	4Gam Crv	2.5800	13100.	86	40522	No
6	GOM_NL__2PRFIN20091130_002330_00000492084_00388_40522_3587.N1	30-NOV-2009 00:23:30	Dark	49.000	171	2Eps Crv	3.0010	4250.0	98	40522	No
7	GOM_NL__2PRFIN20091130_003259_00000542084_00389_40523_3573.N1	30-NOV-2009 00:32:59	Dark	53.500	113	Mu Vel	2.6920	5000.0	107	40523	No
8	GOM_NL__2PRFIN20091130_004135_00000532084_00389_40523_3574.N1	30-NOV-2009 00:41:35	Dark	52.500	34	Gam2Vel	1.7930	23000.	105	40523	No
9	GOM_NL__2PRFIN20091130_004318_00000562084_00389_40523_3575.N1	30-NOV-2009 00:43:18	Dark	55.500	70	Zet Pup	2.2460	39000.	111	40523	No
10	GOM_NL__2PRFIN20091130_004649_00000702084_00389_40523_3576.N1	30-NOV-2009 00:46:49	Dark	69.500	117	Pi Pup	2.7060	3800.0	139	40523	No
11	GOM_NL__2PRFIN20091130_005039_00000662084_00389_40523_3577.N1	30-NOV-2009 00:50:39	Dark	66.000	23	21Eps CMa	1.5020	26000.	132	40523	No
12	GOM_NL__2PRFIN20091130_005716_00000562084_00389_40523_3578.N1	30-NOV-2009 00:57:16	Straylight	55.500	101	11Alp Lep	2.5820	7000.0	111	40523	No
13	GOM_NL__2PRFIN20091130_010056_00000592084_00389_40523_3579.N1	30-NOV-2009 01:00:56	Straylight	58.500	7	19Bet Ori	0.10000	14000.	117	40523	No
14	GOM_NL__2PRFIN20091130_010418_00000552084_00389_40523_3580.N1	30-NOV-2009 01:04:18	Twilight	55.000	72	34Del Ori	2.2500	30000.	110	40523	No
15	GOM_NL__2PRFIN20091130_010647_00000632084_00389_40523_3581.N1	30-NOV-2009 01:06:47	Twilight	62.500	27	24Gam Ori	1.6360	26000.	125	40523	No
16	GOM_NL__2PRFIN20091130_010900_00000642084_00389_40523_3582.N1	30-NOV-2009 01:09:00	Bright	64.000	13	87Alp Tau	0.86700	3800.0	128	40523	No
17	GOM_NL__2PRFIN20091130_011033_00000402084_00389_40523_3583.N1	30-NOV-2009 01:10:33	Bright	40.000	146	25Eta Tau	2.8730	15200.	80	40523	No
18	GOM_NL__2PRFIN20091130_011256_00000402084_00389_40523_3584.N1	30-NOV-2009 01:12:56	Bright	40.000	150	44Zet Per	2.8900	28000.	80	40523	No
19	GOM_NL__2PRFIN20091130_011522_00000392084_00389_40523_3585.N1	30-NOV-2009 01:15:22	Bright	38.500	149	45Eps Per	2.8880	30000.	77	40523	No
20	GOM_NL__2PRFIN20091130_011920_00000532084_00389_40523_3586.N1	30-NOV-2009 01:19:20	Bright	53.000	6	13Alp Aur	0.080000	3400.0	106	40523	No
21	GOM_NL__2PRFIN20091130_012114_00000532084_00389_40523_3587.N1	30-NOV-2009 01:21:14	Bright	52.500	42	34Bet Aur	1.9000	10200.	105	40523	No
22	GOM_NL__2PRFIN20091130_013528_00000442084_00389_40523_3588.N1	30-NOV-2009 01:35:28	Bright	44.000	36	50Alp UMa	1.8000	6300.0	88	40523	No
23	GOM_NL__2PRFIN20091130_013705_00000482084_00389_40523_3589.N1	30-NOV-2009 01:37:05	Bright	47.500	82	48Bet UMa	2.3650	10600.	95	40523	No
24	GOM_NL__2PRFIN20091130_013838_00000402084_00389_40523_3590.N1	30-NOV-2009 01:38:38	Bright	39.500	32	77Eps UMa	1.7630	11000.	79	40523	No
25	GOM_NL__2PRFIN20091130_014133_00000522084_00389_40523_3591.N1	30-NOV-2009 01:41:33	Bright	52.000	174	52Psi UMa	3.0040	4400.0	104	40523	No
26	GOM_NL__2PRFIN20091130_014410_00000582084_00389_40523_3592.N1	30-NOV-2009 01:44:10	Bright	58.000	152	12Alp2CVn	2.8900	11000.	116	40523	No
27	GOM_NL__2PRFIN20091130_015336_00000782084_00389_40523_3593.N1	30-NOV-2009 01:53:36	Bright	78.000	62	94Bet Leo	2.1360	9700.0	156	40523	No
28	GOM_NL__2PRFIN20091130_015655_00000382084_00389_40523_3594.N1	30-NOV-2009 01:56:55	Bright	37.500	121	29Gam Vir	2.7400	7200.0	75	40523	No
29	GOM_NL__2PRFIN20091130_020232_00000492084_00389_40523_3595.N1	30-NOV-2009 02:02:32	Twilight	49.000	100	4Gam Crv	2.5800	13100.	98	40523	No
30	GOM_NL__2PRFIN20091130_020407_00000502084_00389_40523_3596.N1	30-NOV-2009 02:04:07	Dark	49.500	171	2Eps Crv	3.0010	4250.0	99	40523	No
31	GOM_NL__2PRFIN20091130_021336_00000452084_00390_40524_3582.N1	30-NOV-2009 02:13:36	Dark	44.500	113	Mu Vel	2.6920	5000.0	89	40524	No
32	GOM_NL__2PRFIN20091130_022212_00000582084_00390_40524_3583.N1	30-NOV-2009 02:22:12	Dark	57.500	34	Gam2Vel	1.7930	23000.	115	40524	No
33	GOM_NL__2PRFIN20091130_022355_00000552084_00390_40524_3584.N1	30-NOV-2009 02:23:55	Dark	55.000	70	Zet Pup	2.2460	39000.	110	40524	No
34	GOM_NL__2PRFIN20091130_022726_00000582084_00390_40524_3585.N1	30-NOV-2009 02:27:26	Dark	58.000	117	Pi Pup	2.7060	3800.0	116	40524	No
35	GOM_NL__2PRFIN20091130_023116_00000682084_00390_40524_3586.N1	30-NOV-2009 02:31:16	Dark	67.500	23	21Eps CMa	1.5020	26000.	135	40524	No
36	GOM_NL__2PRFIN20091130_023752_00000562084_00390_40524_3587.N1	30-NOV-2009 02:37:52	Straylight	56.000	101	11Alp Lep	2.5820	7000.0	112	40524	No
37	GOM_NL__2PRFIN20091130_024132_00000592084_00390_40524_3588.N1	30-NOV-2009 02:41:32	Straylight	58.500	7	19Bet Ori	0.10000	14000.	117	40524	No
38	GOM_NL__2PRFIN20091130_024437_00000252084_00390_40524_3589.N1	30-NOV-2009 02:44:37	Twilight	25.000	30	46Eps Ori	1.6940	30000.	50	40524	No
39	GOM_NL__2PRFIN20091130_024722_00000632084_00390_40524_3590.N1	30-NOV-2009 02:47:22	Twilight	63.000	27	24Gam Ori	1.6360	26000.	126	40524	No
40	GOM_NL__2PRFIN20091130_024935_00000552084_00390_40524_3591.N1	30-NOV-2009 02:49:35	Bright	55.000	13	87Alp Tau	0.86700	3800.0	110	40524	No
41	GOM_NL__2PRFIN20091130_025109_00000402084_00390_40524_3592.N1	30-NOV-2009 02:51:09	Bright	40.000	146	25Eta Tau	2.8730	15200.	80	40524	No
42	GOM_NL__2PRFIN20091130_025332_00000402084_00390_40524_3593.N1	30-NOV-2009 02:53:32	Bright	39.500	150	44Zet Per	2.8900	28000.	79	40524	No

338	GOM_NL__2PRFIN20091130_233157_000000382084_00402_40536_3828.N1	30-NOV-2009 23:31:57	Bright	38.000	152	12Alp2CVn	2.8900	11000.	76	40536	No
339	GOM_NL__2PRFIN20091130_234131_000000802084_00402_40536_3829.N1	30-NOV-2009 23:41:31	Bright	80.000	62	94Bet Leo	2.1360	9700.0	160	40536	No
340	GOM_NL__2PRFIN20091130_234449_000000622084_00402_40536_3830.N1	30-NOV-2009 23:44:49	Bright	61.500	121	29Gam Vir	2.7400	7200.0	123	40536	No
341	GOM_NL__2PRFIN20091130_235029_000000482084_00402_40536_3831.N1	30-NOV-2009 23:50:29	Twilight	47.500	100	4Gam Crv	2.5800	13100.	95	40536	No
342	GOM_NL__2PRFIN20091130_235204_000000522084_00402_40536_3832.N1	30-NOV-2009 23:52:04	Dark	52.000	171	2Eps Crv	3.0010	4250.0	104	40536	No

3. Quality information per product

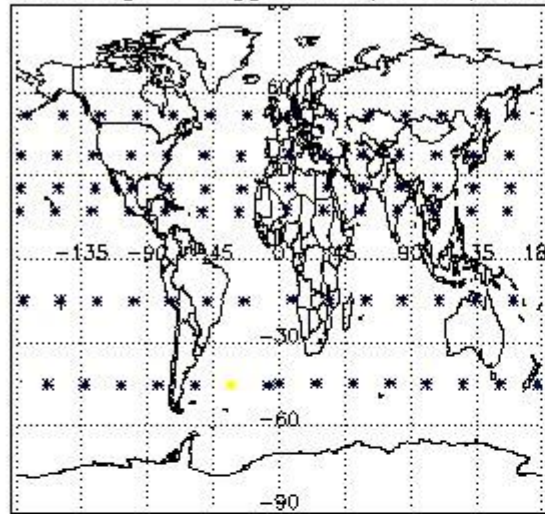
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

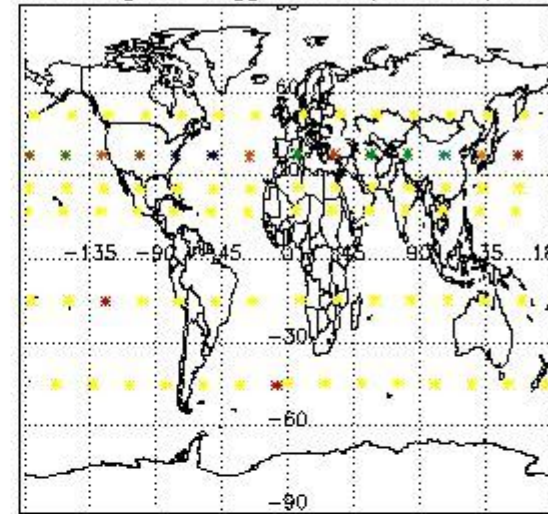


3.2 Plot quality information per product (world map)

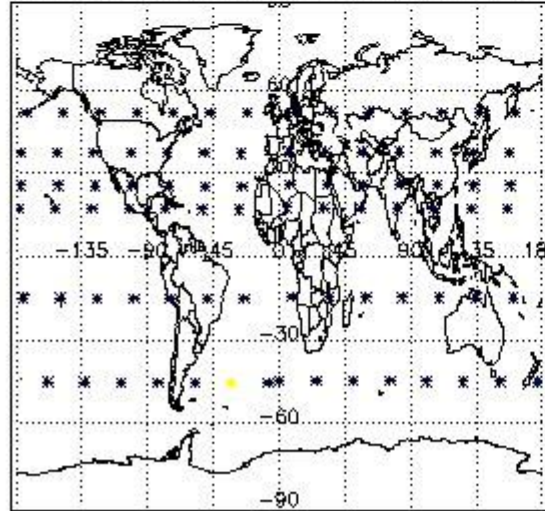
Percentage of flagged data per O3 profile



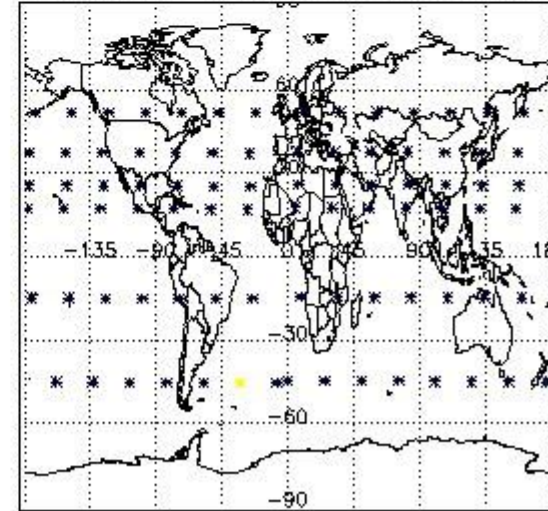
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

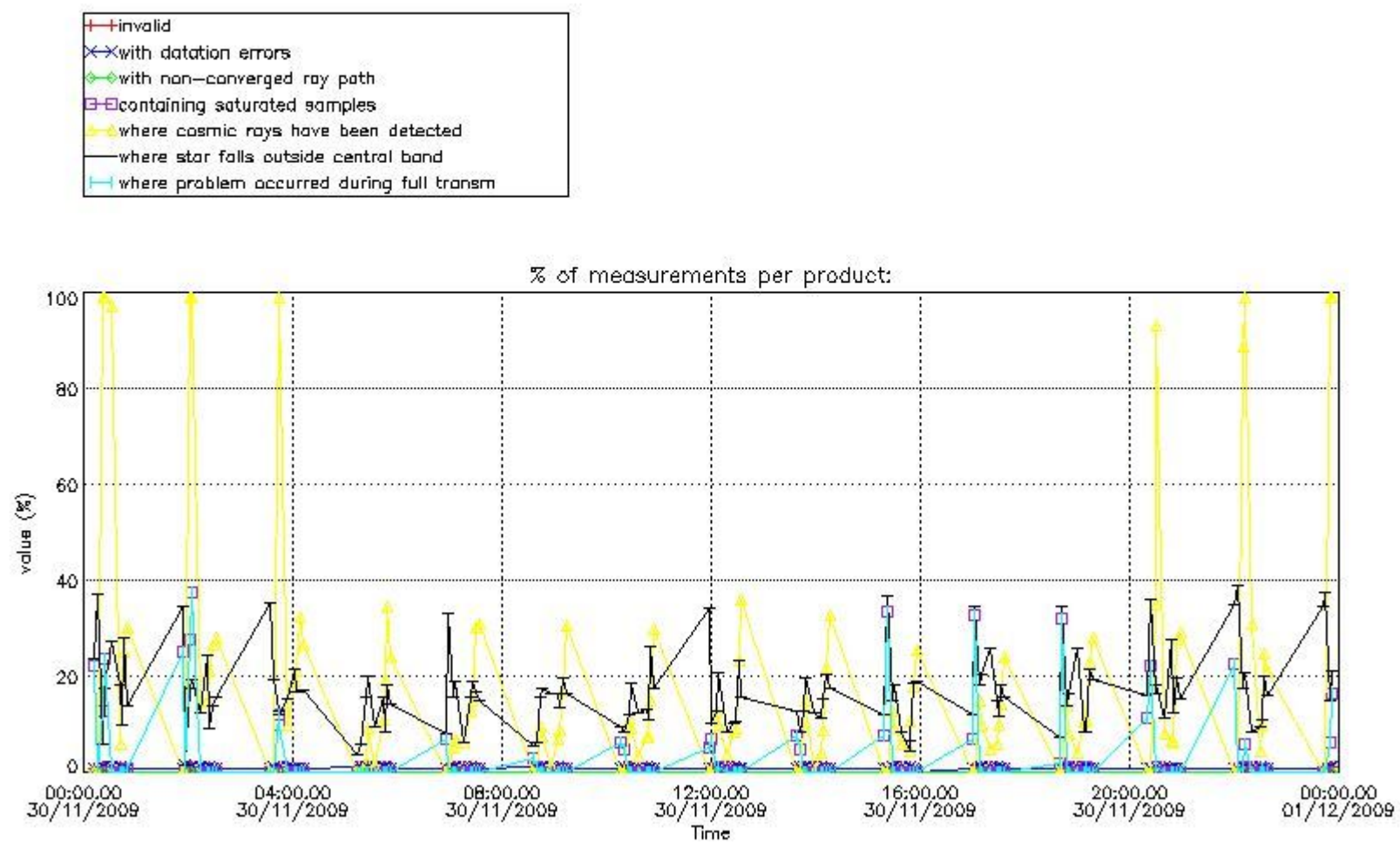


4. Level 1 quality information per product

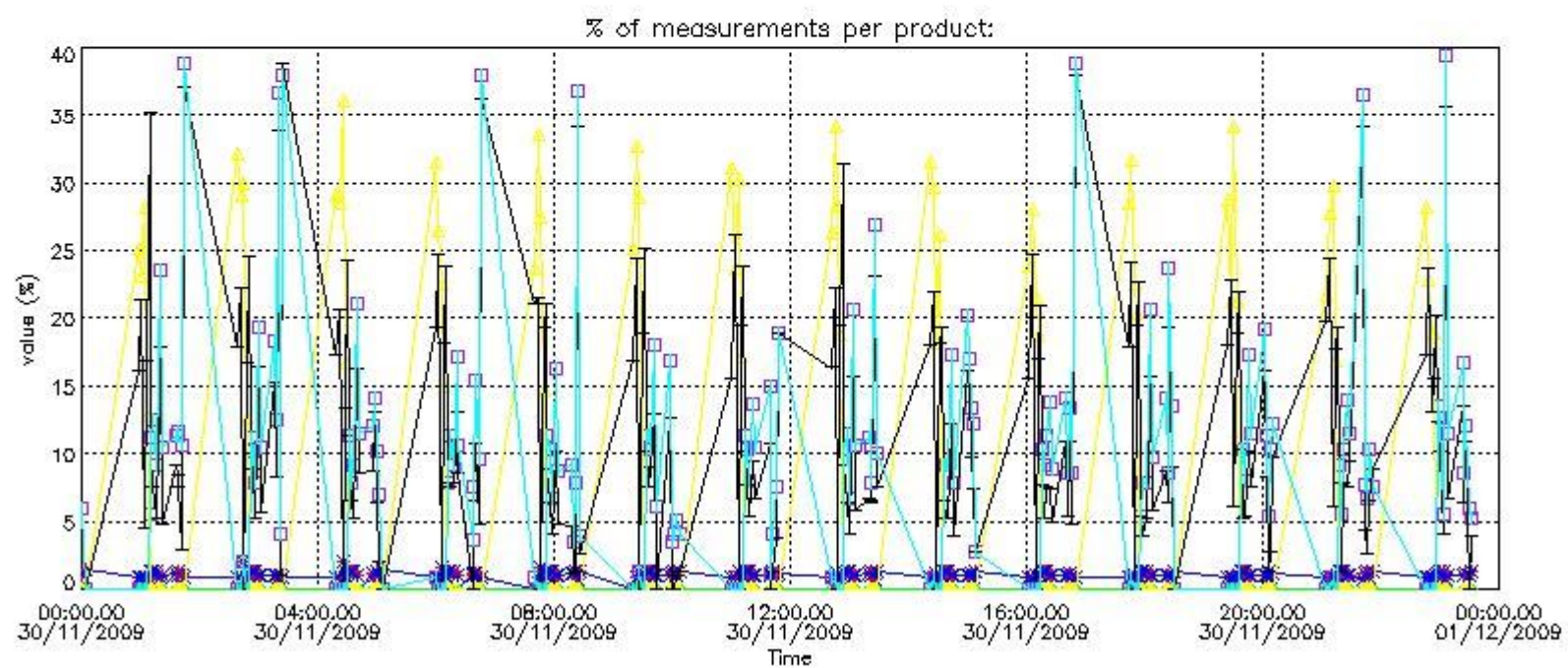
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



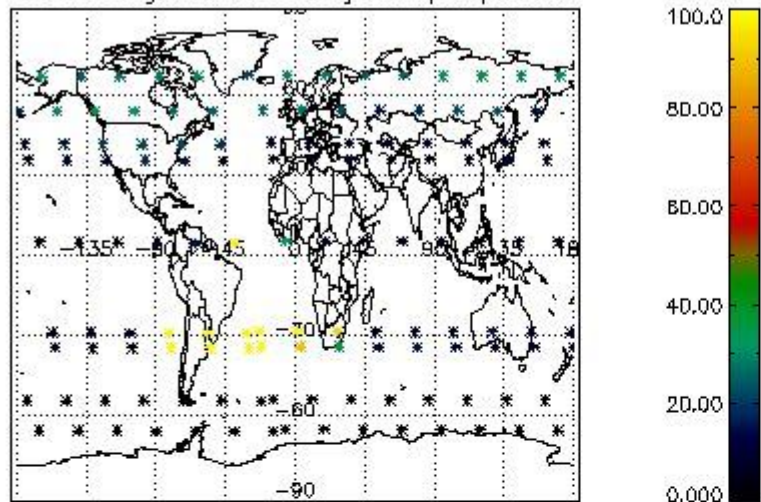
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



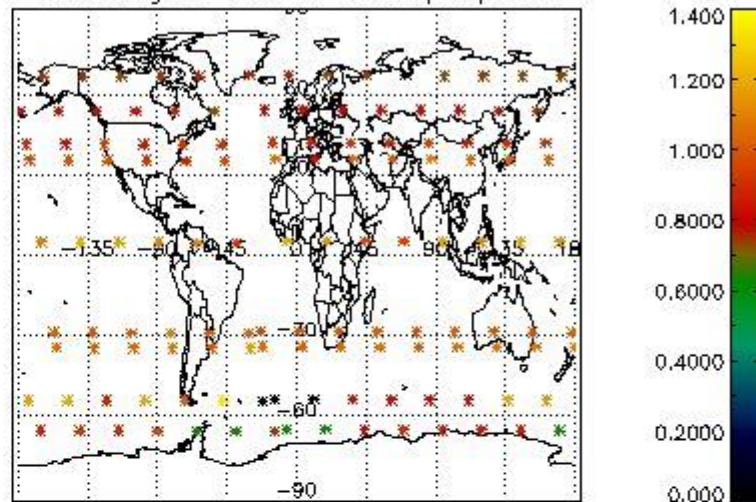
4.2 Plot quality information per product coming from level 1b processing (world map)

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

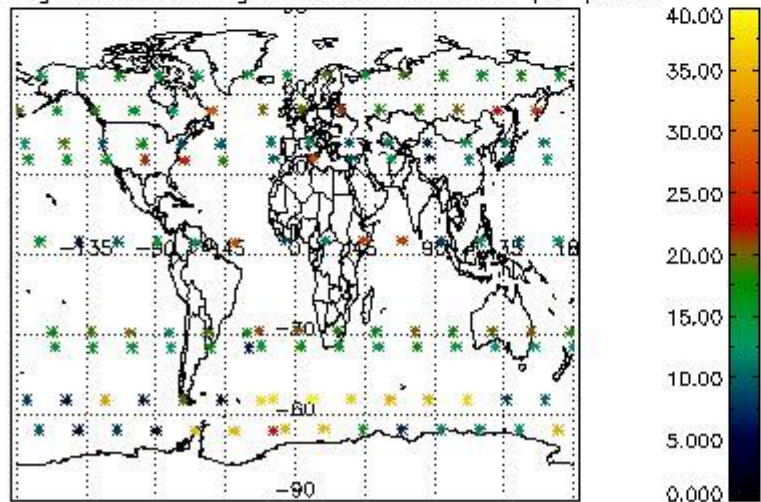
Percentage of cosmic ray hits per profile



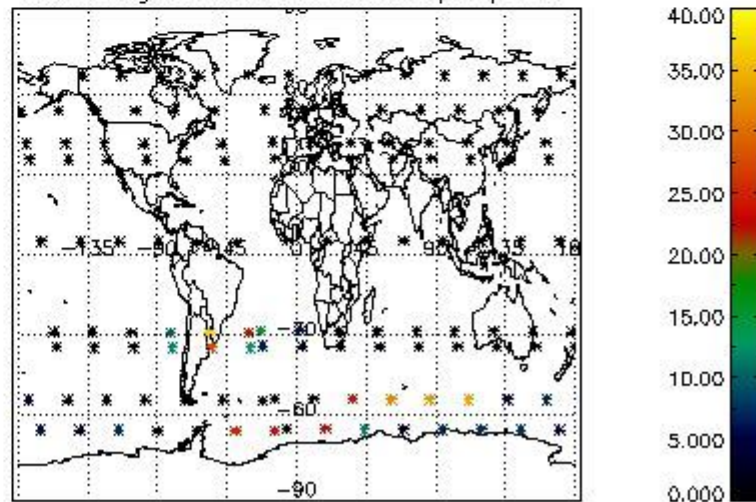
Percentage of datation errors per profile



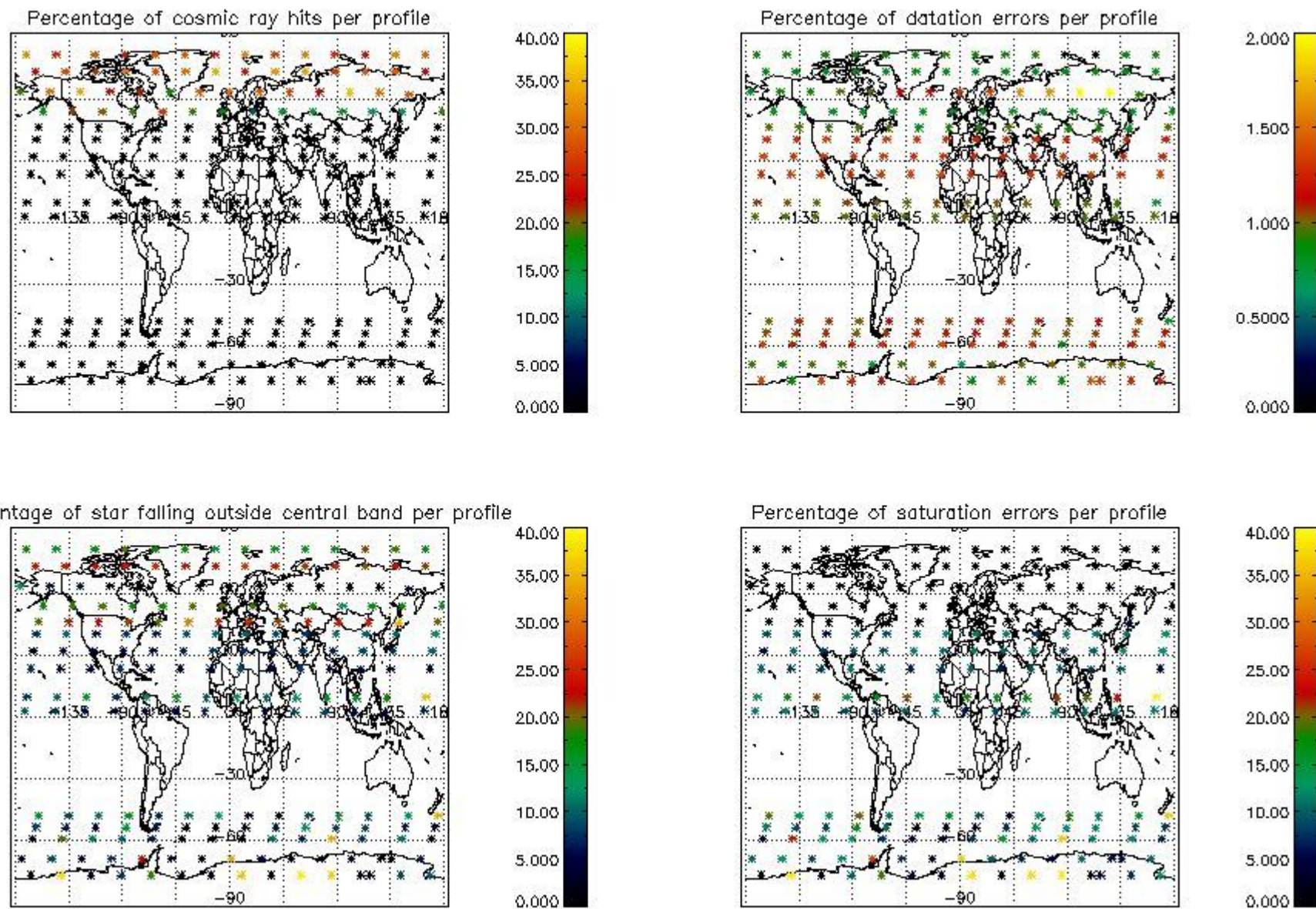
Percentage of star falling outside central band per profile



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

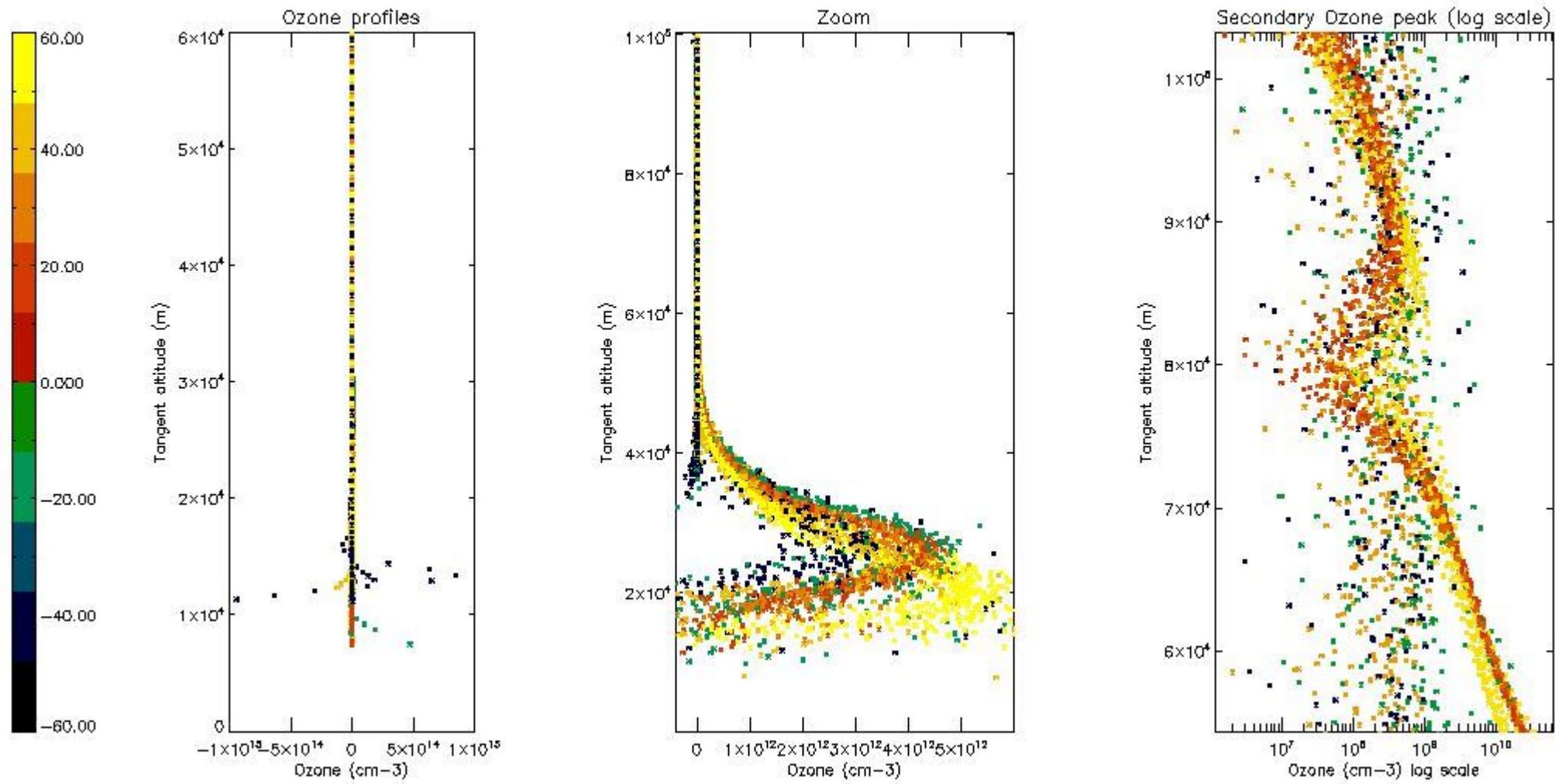
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	27
STD < 20	14

STD < 10	11
STD < 5	8

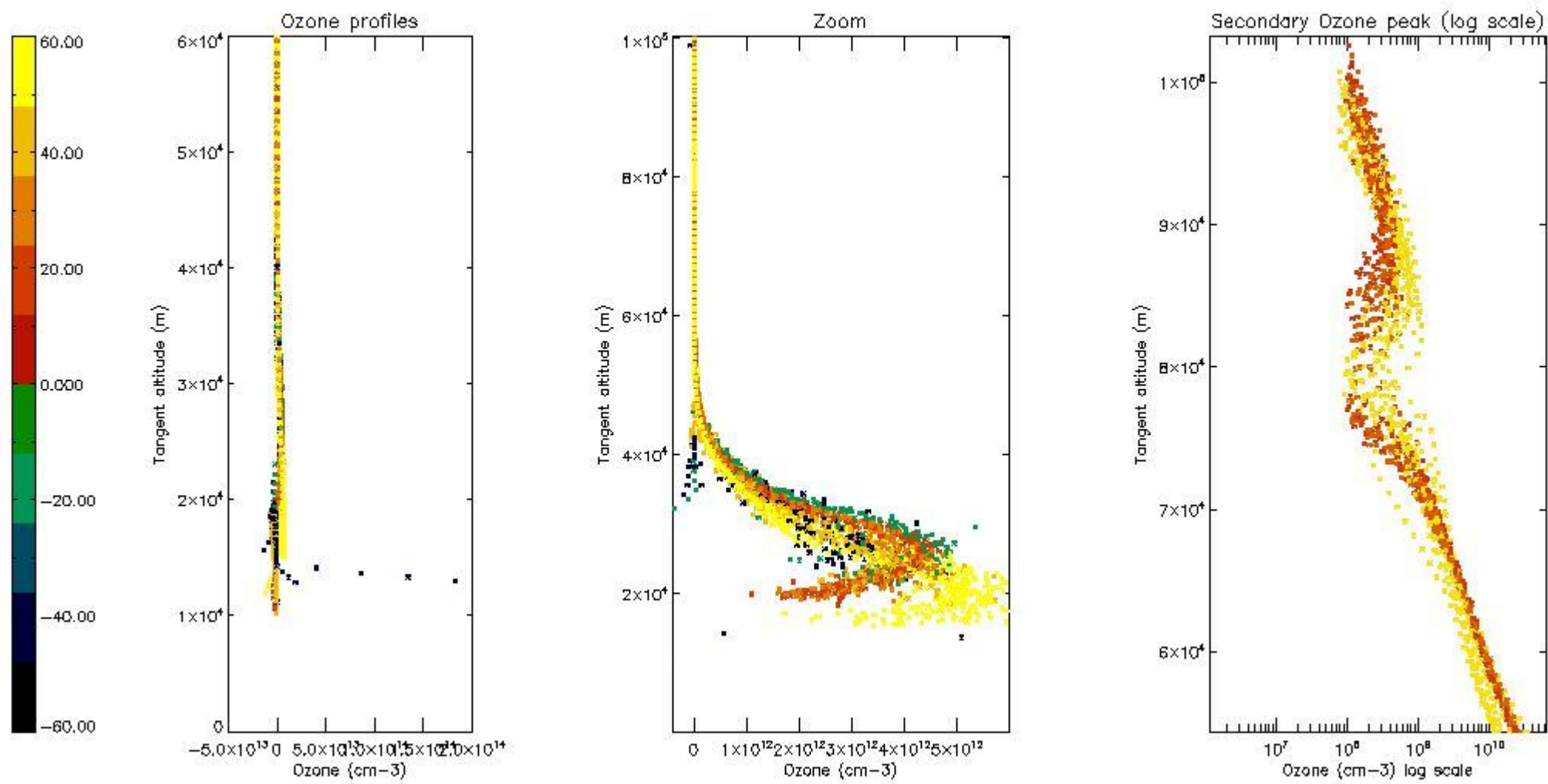
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



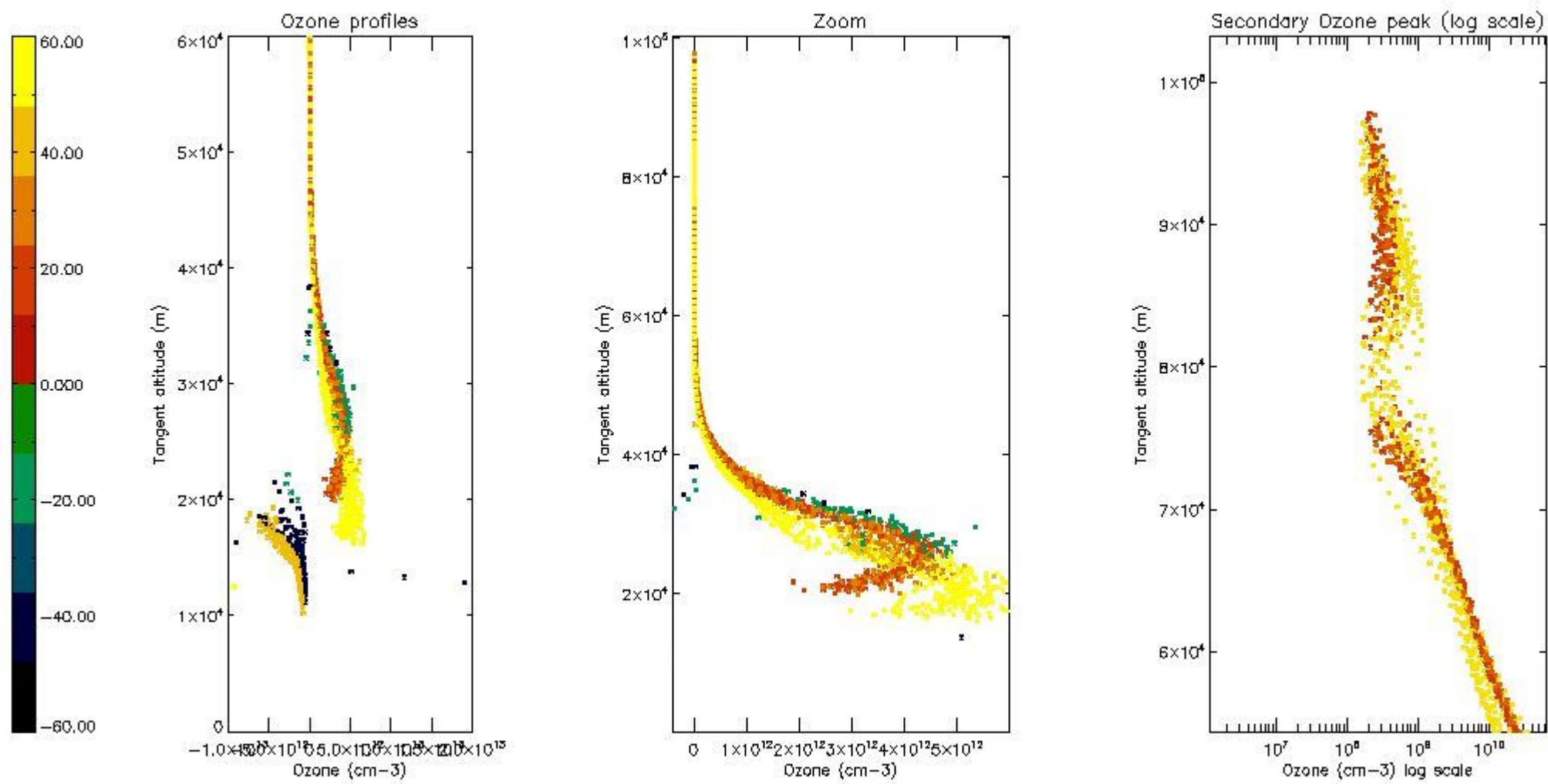
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



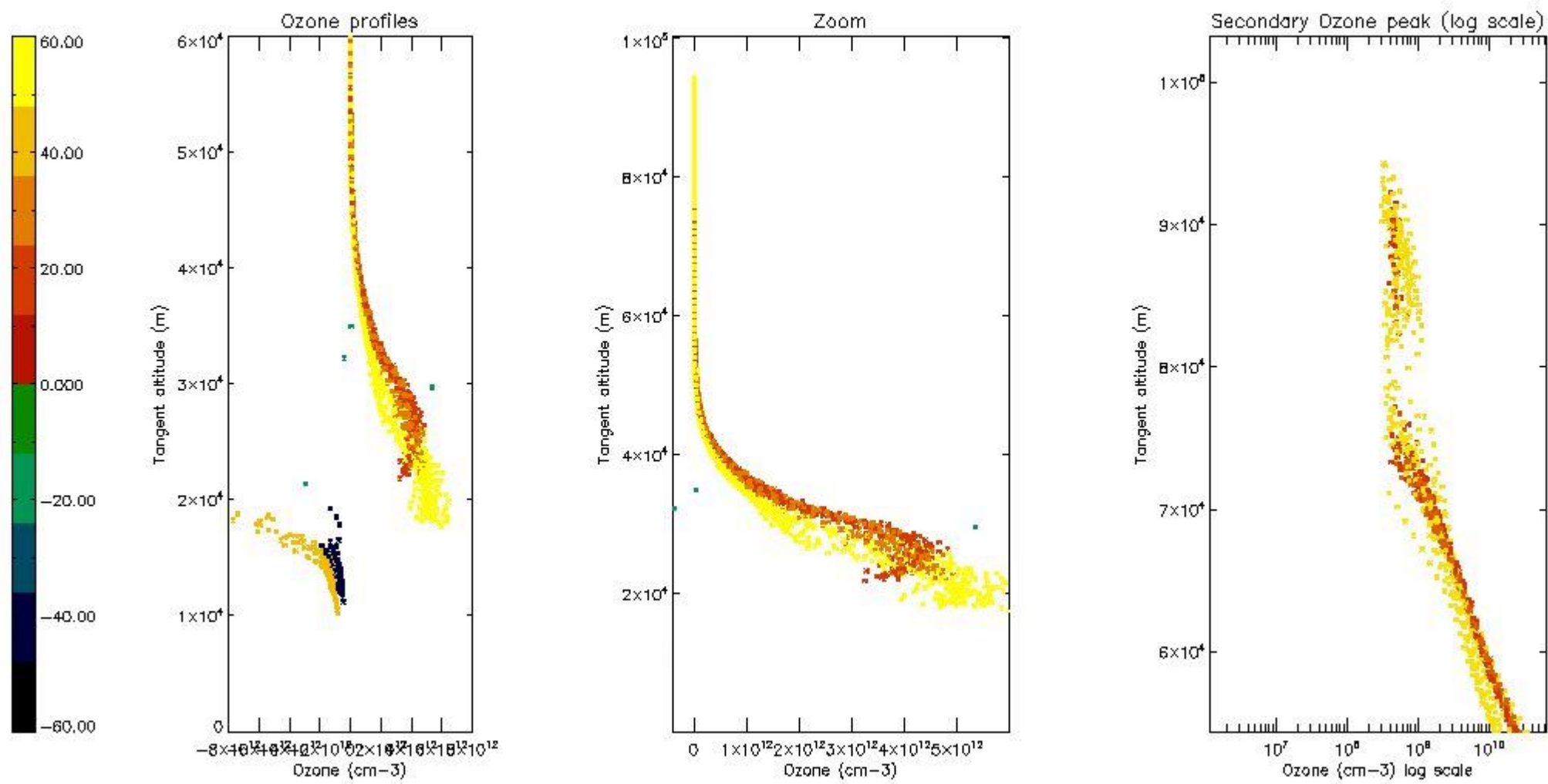
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



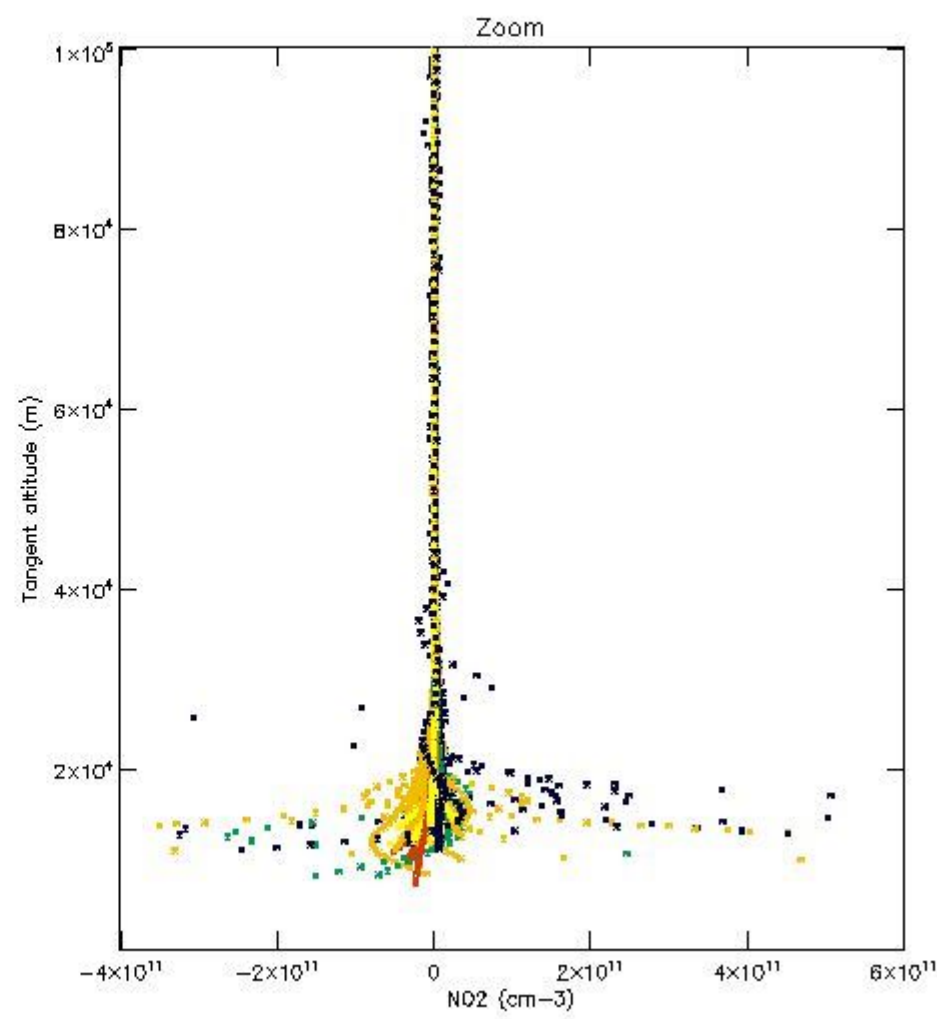
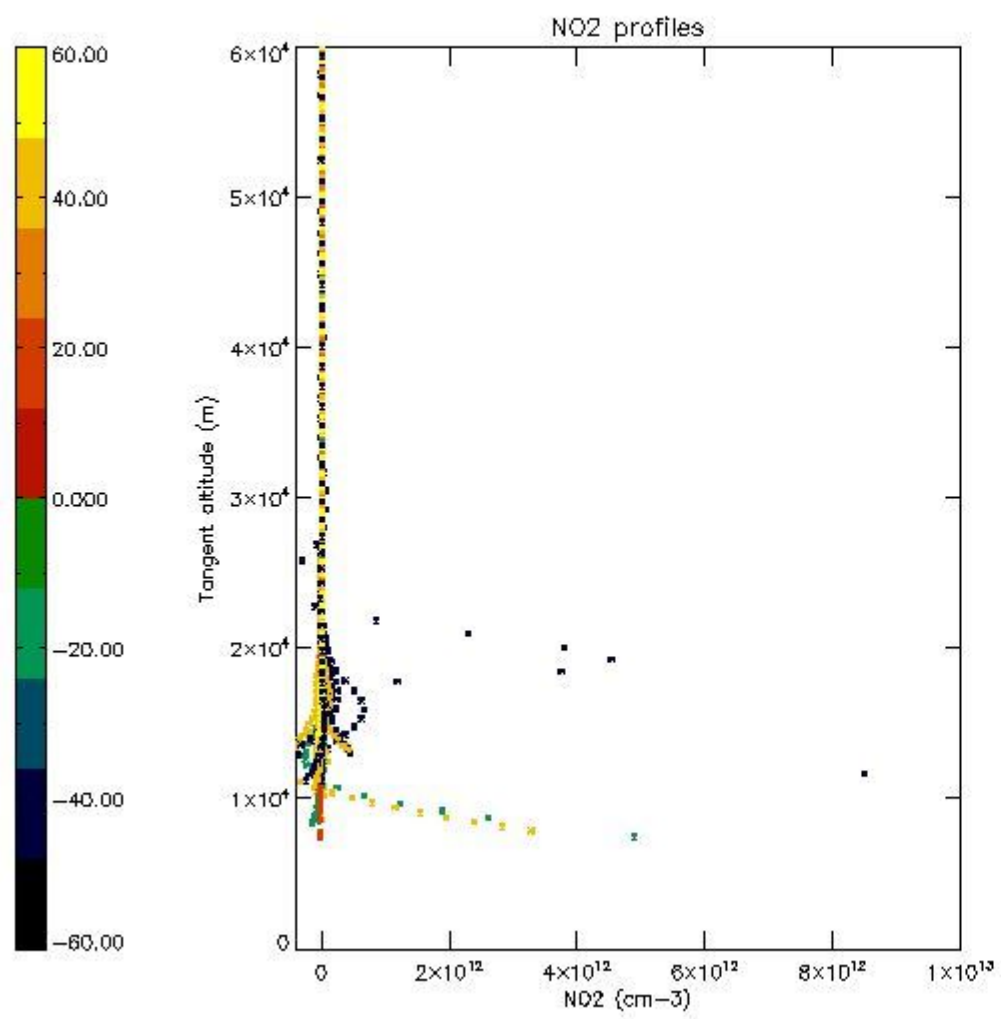
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



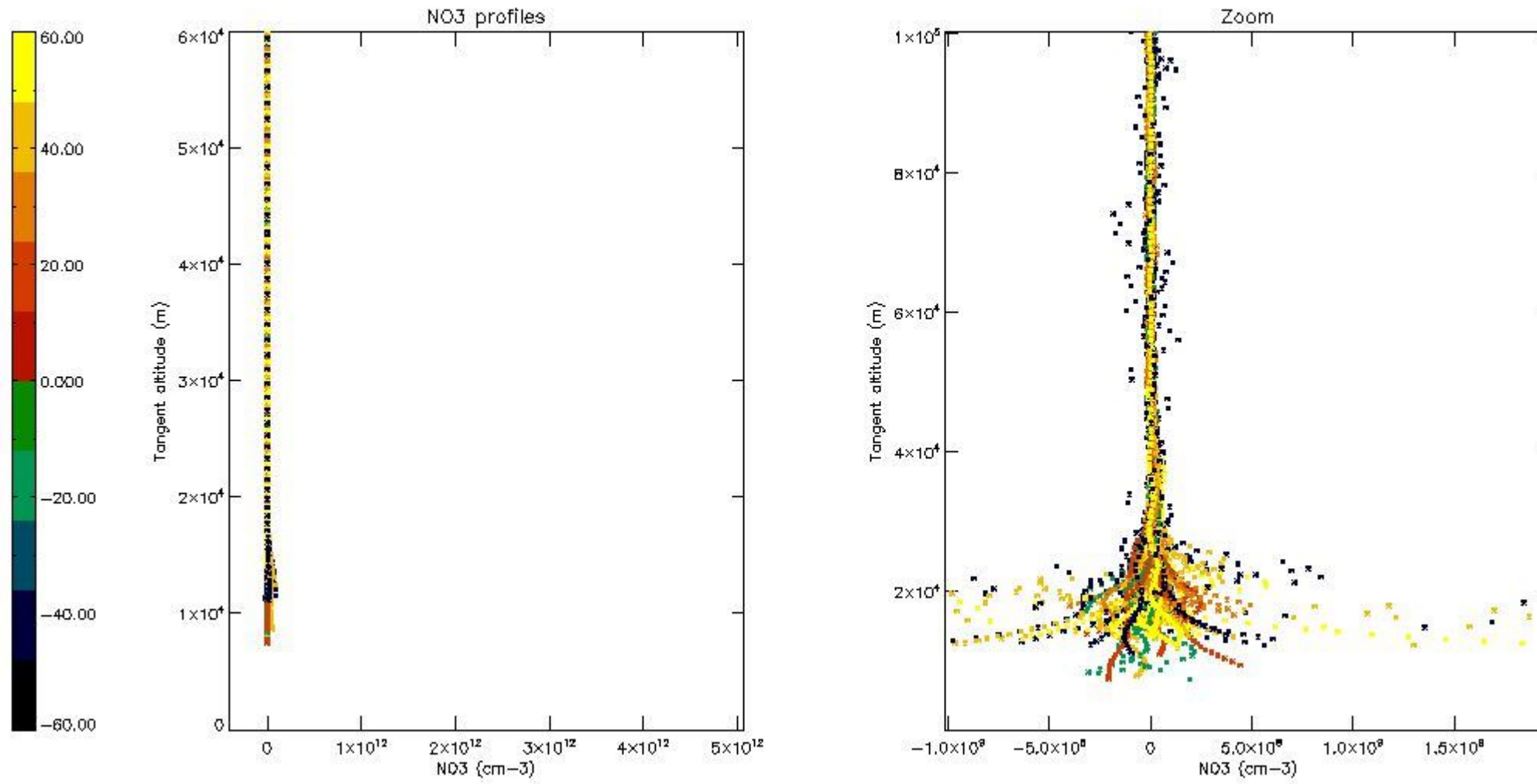
5.6 Plot NO₂ profiles for all STD (dark without errors)

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	30-NOV-2009 00:00:58
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	30-NOV-2009 00:00:58
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	30-NOV-2009 00:00:58

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

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[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](#)

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

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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.

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Time of report generation	26APR2013 14:26:47
Data source version	GOMOS/6.01
Start time of products	30-11-2009 (30NOV2009 00:00:00)
Stop time of products	01-12-2009 (01DEC2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	342
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

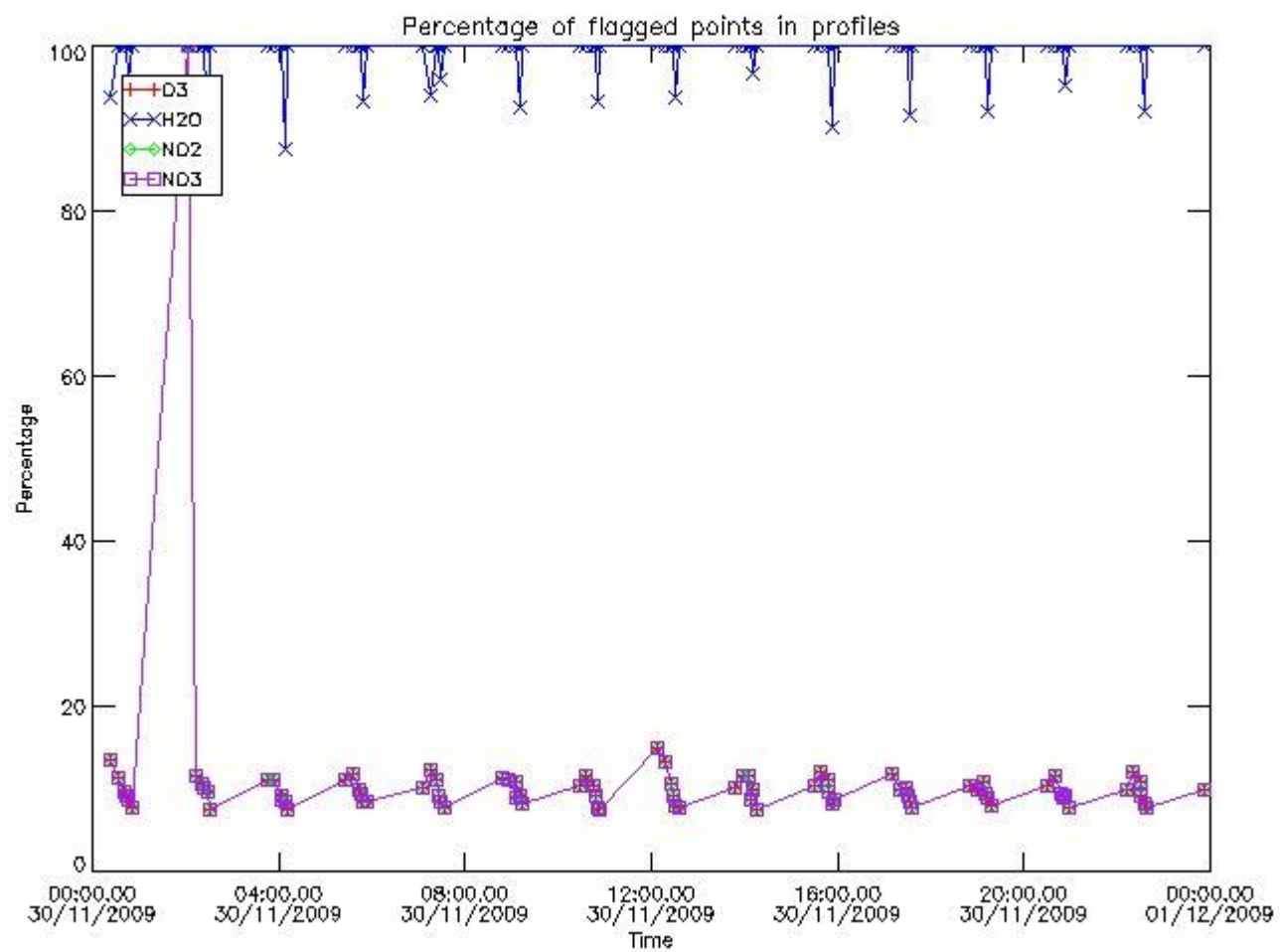
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20091130_000058_00000502084_00388_40522_3582.N1	30-NOV-2009 00:00:58	Bright	50.000	174	52Psi UMa	3.0040	4400.0	100	40522	No
2	GOM_NL__2PRFIN20091130_000334_00000362084_00388_40522_3583.N1	30-NOV-2009 00:03:34	Bright	35.500	152	12Alp2CVn	2.8900	11000.	71	40522	No
3	GOM_NL__2PRFIN20091130_001259_00000682084_00388_40522_3584.N1	30-NOV-2009 00:12:59	Bright	67.500	62	94Bet Leo	2.1360	9700.0	135	40522	No
4	GOM_NL__2PRFIN20091130_001618_00000612084_00388_40522_3585.N1	30-NOV-2009 00:16:18	Bright	60.500	121	29Gam Vir	2.7400	7200.0	121	40522	No
5	GOM_NL__2PRFIN20091130_002155_00000432084_00388_40522_3586.N1	30-NOV-2009 00:21:55	Twilight	43.000	100	4Gam Crv	2.5800	13100.	86	40522	No
6	GOM_NL__2PRFIN20091130_002330_00000492084_00388_40522_3587.N1	30-NOV-2009 00:23:30	Dark	49.000	171	2Eps Crv	3.0010	4250.0	98	40522	No
7	GOM_NL__2PRFIN20091130_003259_00000542084_00389_40523_3573.N1	30-NOV-2009 00:32:59	Dark	53.500	113	Mu Vel	2.6920	5000.0	107	40523	No
8	GOM_NL__2PRFIN20091130_004135_00000532084_00389_40523_3574.N1	30-NOV-2009 00:41:35	Dark	52.500	34	Gam2Vel	1.7930	23000.	105	40523	No
9	GOM_NL__2PRFIN20091130_004318_00000562084_00389_40523_3575.N1	30-NOV-2009 00:43:18	Dark	55.500	70	Zet Pup	2.2460	39000.	111	40523	No
10	GOM_NL__2PRFIN20091130_004649_00000702084_00389_40523_3576.N1	30-NOV-2009 00:46:49	Dark	69.500	117	Pi Pup	2.7060	3800.0	139	40523	No
11	GOM_NL__2PRFIN20091130_005039_00000662084_00389_40523_3577.N1	30-NOV-2009 00:50:39	Dark	66.000	23	21Eps CMa	1.5020	26000.	132	40523	No
12	GOM_NL__2PRFIN20091130_005716_00000562084_00389_40523_3578.N1	30-NOV-2009 00:57:16	Straylight	55.500	101	11Alp Lep	2.5820	7000.0	111	40523	No
13	GOM_NL__2PRFIN20091130_010056_00000592084_00389_40523_3579.N1	30-NOV-2009 01:00:56	Straylight	58.500	7	19Bet Ori	0.10000	14000.	117	40523	No
14	GOM_NL__2PRFIN20091130_010418_00000552084_00389_40523_3580.N1	30-NOV-2009 01:04:18	Twilight	55.000	72	34Del Ori	2.2500	30000.	110	40523	No
15	GOM_NL__2PRFIN20091130_010647_00000632084_00389_40523_3581.N1	30-NOV-2009 01:06:47	Twilight	62.500	27	24Gam Ori	1.6360	26000.	125	40523	No
16	GOM_NL__2PRFIN20091130_010900_00000642084_00389_40523_3582.N1	30-NOV-2009 01:09:00	Bright	64.000	13	87Alp Tau	0.86700	3800.0	128	40523	No
17	GOM_NL__2PRFIN20091130_011033_00000402084_00389_40523_3583.N1	30-NOV-2009 01:10:33	Bright	40.000	146	25Eta Tau	2.8730	15200.	80	40523	No
18	GOM_NL__2PRFIN20091130_011256_00000402084_00389_40523_3584.N1	30-NOV-2009 01:12:56	Bright	40.000	150	44Zet Per	2.8900	28000.	80	40523	No
19	GOM_NL__2PRFIN20091130_011522_00000392084_00389_40523_3585.N1	30-NOV-2009 01:15:22	Bright	38.500	149	45Eps Per	2.8880	30000.	77	40523	No
20	GOM_NL__2PRFIN20091130_011920_00000532084_00389_40523_3586.N1	30-NOV-2009 01:19:20	Bright	53.000	6	13Alp Aur	0.080000	3400.0	106	40523	No
21	GOM_NL__2PRFIN20091130_012114_00000532084_00389_40523_3587.N1	30-NOV-2009 01:21:14	Bright	52.500	42	34Bet Aur	1.9000	10200.	105	40523	No
22	GOM_NL__2PRFIN20091130_013528_00000442084_00389_40523_3588.N1	30-NOV-2009 01:35:28	Bright	44.000	36	50Alp UMa	1.8000	6300.0	88	40523	No
23	GOM_NL__2PRFIN20091130_013705_00000482084_00389_40523_3589.N1	30-NOV-2009 01:37:05	Bright	47.500	82	48Bet UMa	2.3650	10600.	95	40523	No
24	GOM_NL__2PRFIN20091130_013838_00000402084_00389_40523_3590.N1	30-NOV-2009 01:38:38	Bright	39.500	32	77Eps UMa	1.7630	11000.	79	40523	No
25	GOM_NL__2PRFIN20091130_014133_00000522084_00389_40523_3591.N1	30-NOV-2009 01:41:33	Bright	52.000	174	52Psi UMa	3.0040	4400.0	104	40523	No
26	GOM_NL__2PRFIN20091130_014410_00000582084_00389_40523_3592.N1	30-NOV-2009 01:44:10	Bright	58.000	152	12Alp2CVn	2.8900	11000.	116	40523	No
27	GOM_NL__2PRFIN20091130_015336_00000782084_00389_40523_3593.N1	30-NOV-2009 01:53:36	Bright	78.000	62	94Bet Leo	2.1360	9700.0	156	40523	No
28	GOM_NL__2PRFIN20091130_015655_00000382084_00389_40523_3594.N1	30-NOV-2009 01:56:55	Bright	37.500	121	29Gam Vir	2.7400	7200.0	75	40523	No
29	GOM_NL__2PRFIN20091130_020232_00000492084_00389_40523_3595.N1	30-NOV-2009 02:02:32	Twilight	49.000	100	4Gam Crv	2.5800	13100.	98	40523	No
30	GOM_NL__2PRFIN20091130_020407_00000502084_00389_40523_3596.N1	30-NOV-2009 02:04:07	Dark	49.500	171	2Eps Crv	3.0010	4250.0	99	40523	No
31	GOM_NL__2PRFIN20091130_021336_00000452084_00390_40524_3582.N1	30-NOV-2009 02:13:36	Dark	44.500	113	Mu Vel	2.6920	5000.0	89	40524	No
32	GOM_NL__2PRFIN20091130_022212_00000582084_00390_40524_3583.N1	30-NOV-2009 02:22:12	Dark	57.500	34	Gam2Vel	1.7930	23000.	115	40524	No
33	GOM_NL__2PRFIN20091130_022355_00000552084_00390_40524_3584.N1	30-NOV-2009 02:23:55	Dark	55.000	70	Zet Pup	2.2460	39000.	110	40524	No
34	GOM_NL__2PRFIN20091130_022726_00000582084_00390_40524_3585.N1	30-NOV-2009 02:27:26	Dark	58.000	117	Pi Pup	2.7060	3800.0	116	40524	No
35	GOM_NL__2PRFIN20091130_023116_00000682084_00390_40524_3586.N1	30-NOV-2009 02:31:16	Dark	67.500	23	21Eps CMa	1.5020	26000.	135	40524	No
36	GOM_NL__2PRFIN20091130_023752_00000562084_00390_40524_3587.N1	30-NOV-2009 02:37:52	Straylight	56.000	101	11Alp Lep	2.5820	7000.0	112	40524	No
37	GOM_NL__2PRFIN20091130_024132_00000592084_00390_40524_3588.N1	30-NOV-2009 02:41:32	Straylight	58.500	7	19Bet Ori	0.10000	14000.	117	40524	No
38	GOM_NL__2PRFIN20091130_024437_00000252084_00390_40524_3589.N1	30-NOV-2009 02:44:37	Twilight	25.000	30	46Eps Ori	1.6940	30000.	50	40524	No
39	GOM_NL__2PRFIN20091130_024722_00000632084_00390_40524_3590.N1	30-NOV-2009 02:47:22	Twilight	63.000	27	24Gam Ori	1.6360	26000.	126	40524	No
40	GOM_NL__2PRFIN20091130_024935_00000552084_00390_40524_3591.N1	30-NOV-2009 02:49:35	Bright	55.000	13	87Alp Tau	0.86700	3800.0	110	40524	No
41	GOM_NL__2PRFIN20091130_025109_00000402084_00390_40524_3592.N1	30-NOV-2009 02:51:09	Bright	40.000	146	25Eta Tau	2.8730	15200.	80	40524	No
42	GOM_NL__2PRFIN20091130_025332_00000402084_00390_40524_3593.N1	30-NOV-2009 02:53:32	Bright	39.500	150	44Zet Per	2.8900	28000.	79	40524	No

338	GOM_NL__2PRFIN20091130_233157_000000382084_00402_40536_3828.N1	30-NOV-2009 23:31:57	Bright	38.000	152	12Alp2CVn	2.8900	11000.	76	40536	No
339	GOM_NL__2PRFIN20091130_234131_000000802084_00402_40536_3829.N1	30-NOV-2009 23:41:31	Bright	80.000	62	94Bet Leo	2.1360	9700.0	160	40536	No
340	GOM_NL__2PRFIN20091130_234449_000000622084_00402_40536_3830.N1	30-NOV-2009 23:44:49	Bright	61.500	121	29Gam Vir	2.7400	7200.0	123	40536	No
341	GOM_NL__2PRFIN20091130_235029_000000482084_00402_40536_3831.N1	30-NOV-2009 23:50:29	Twilight	47.500	100	4Gam Crv	2.5800	13100.	95	40536	No
342	GOM_NL__2PRFIN20091130_235204_000000522084_00402_40536_3832.N1	30-NOV-2009 23:52:04	Dark	52.000	171	2Eps Crv	3.0010	4250.0	104	40536	No

3. Quality information per product

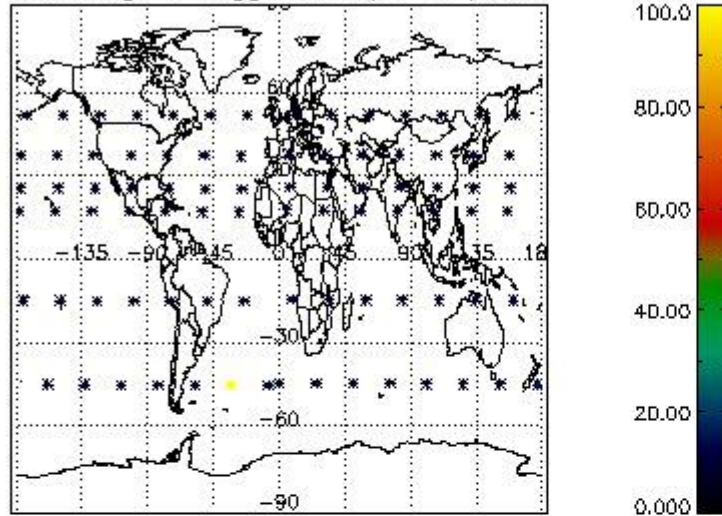
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

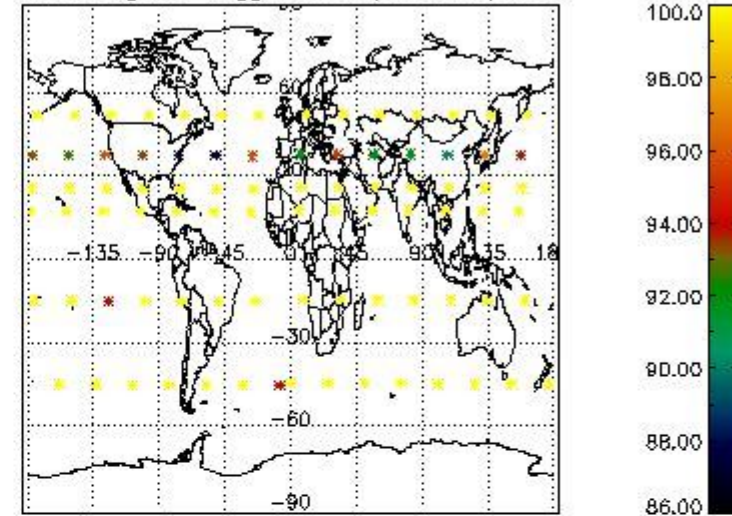


3.2 Plot quality information per product (world map)

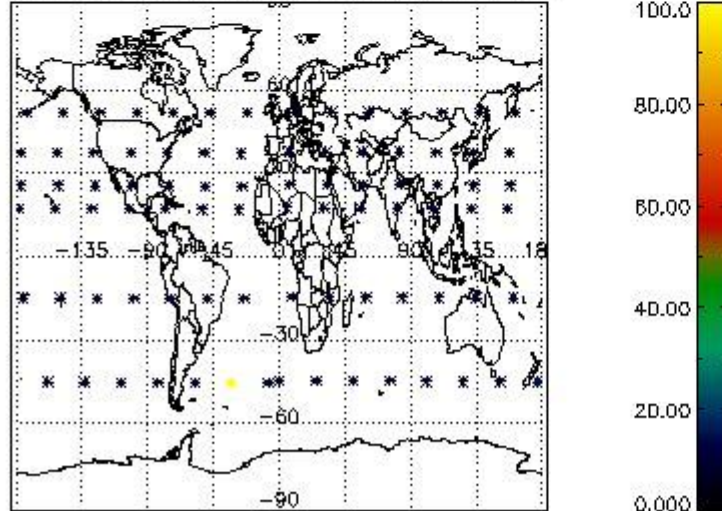
Percentage of flagged data per O3 profile



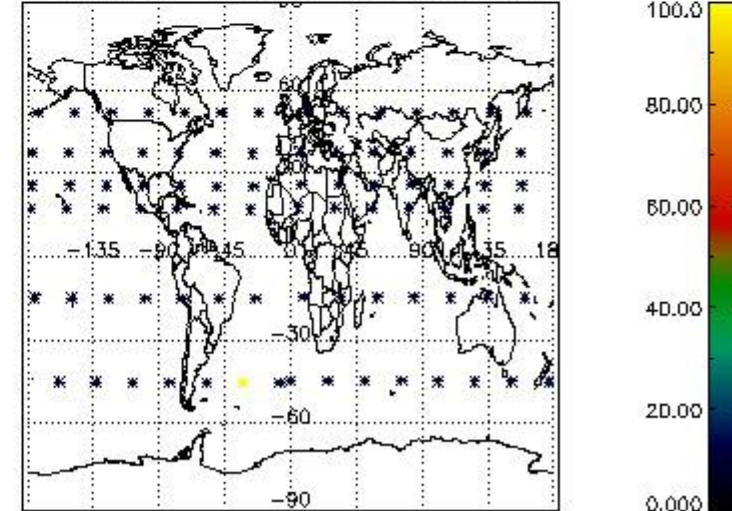
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

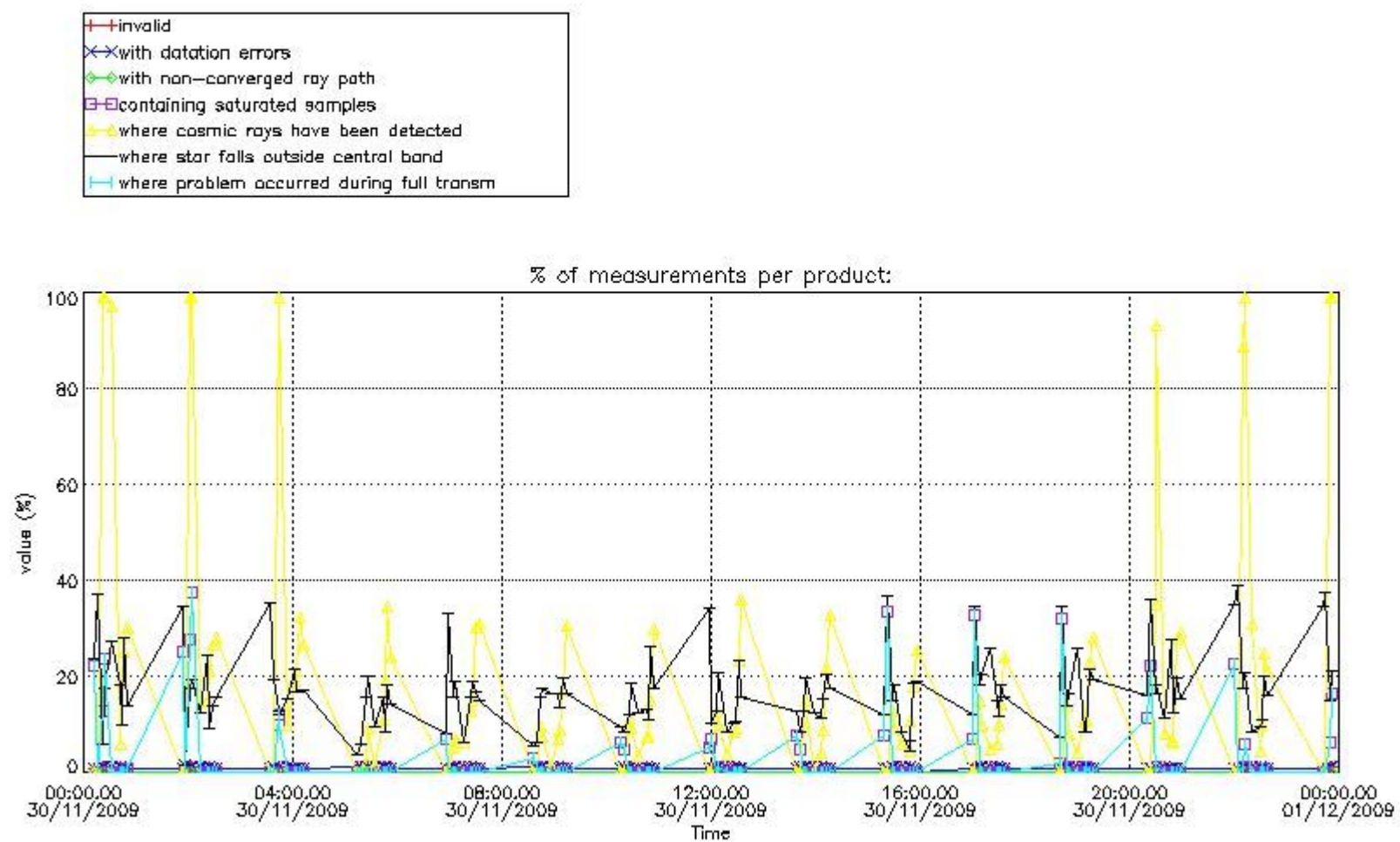


4. Level 1 quality information per product

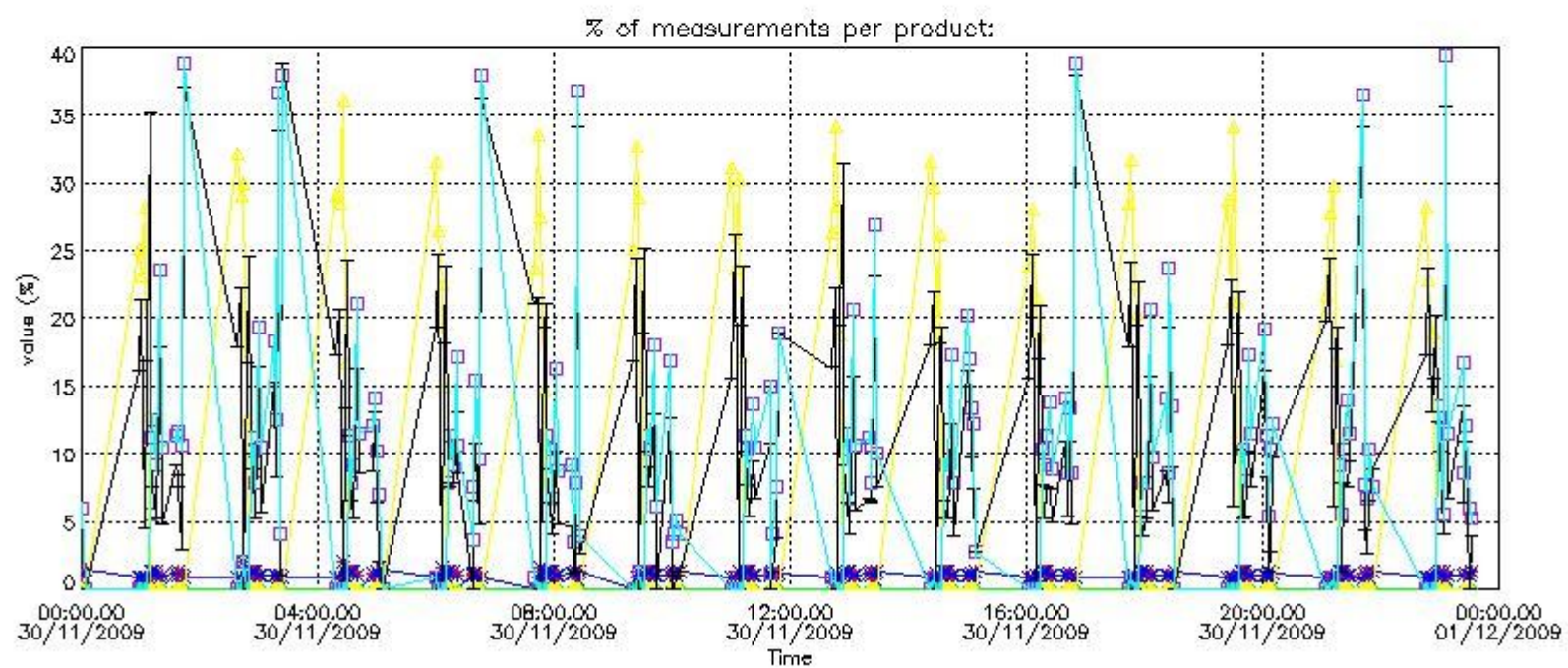
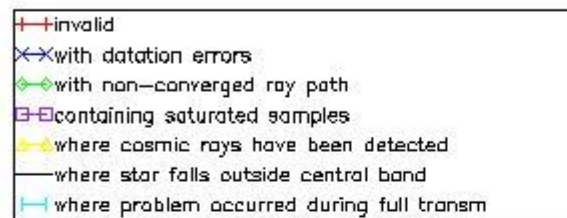
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



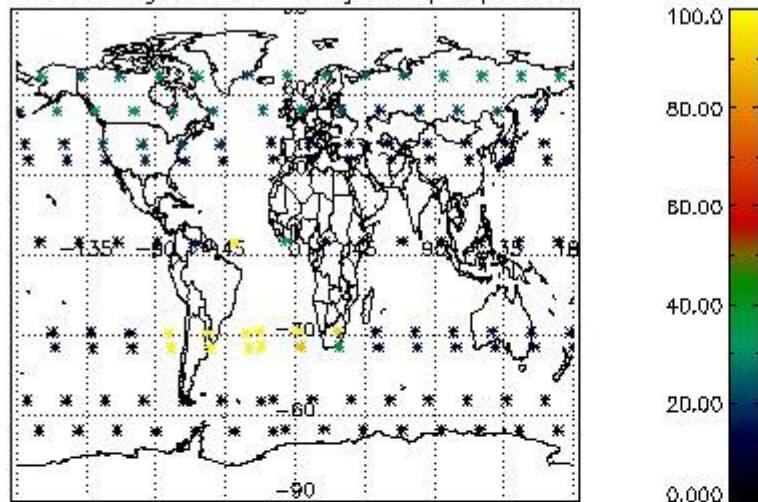
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



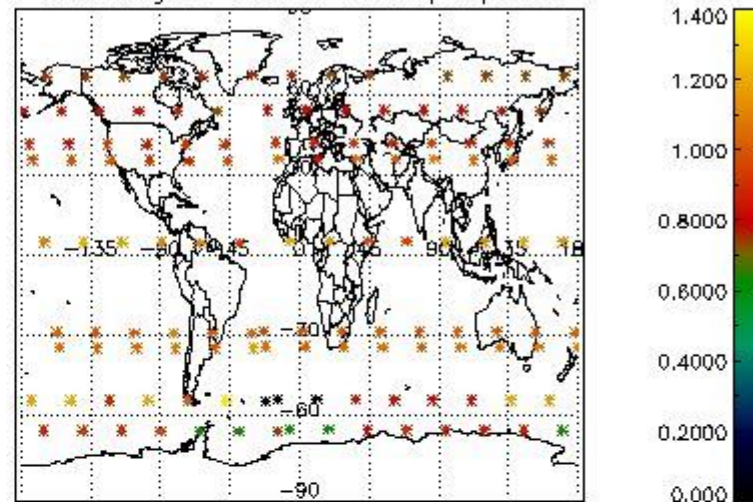
4.2 Plot quality information per product coming from level 1b processing (world map)

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

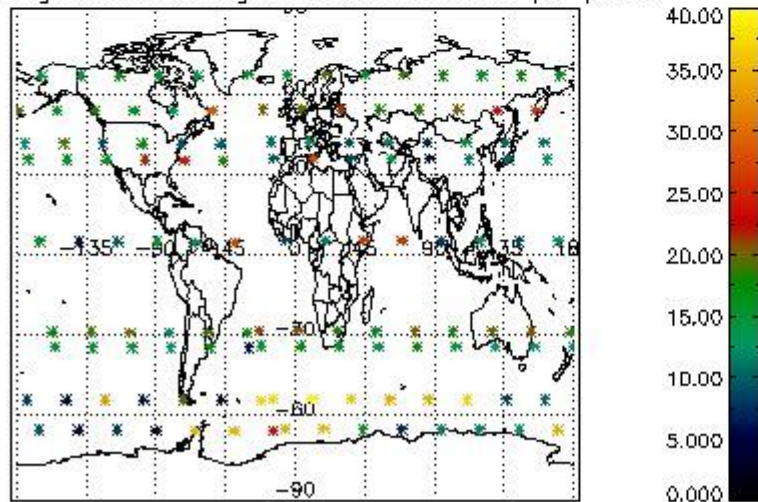
Percentage of cosmic ray hits per profile



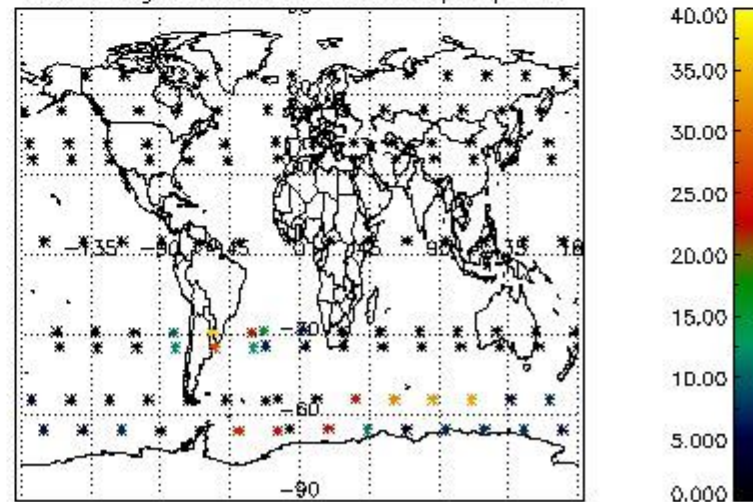
Percentage of datation errors per profile



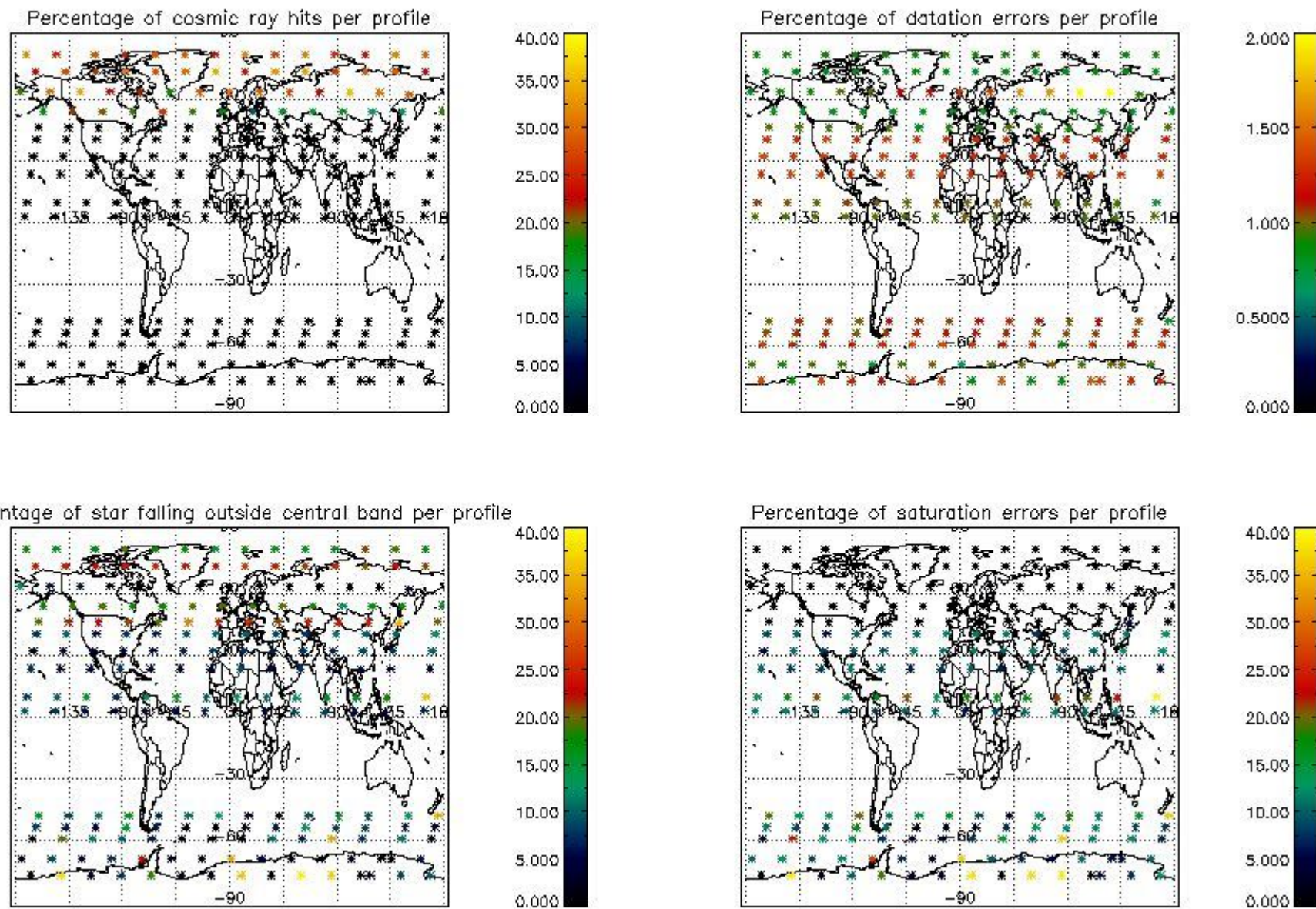
Percentage of star falling outside central band per profile



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

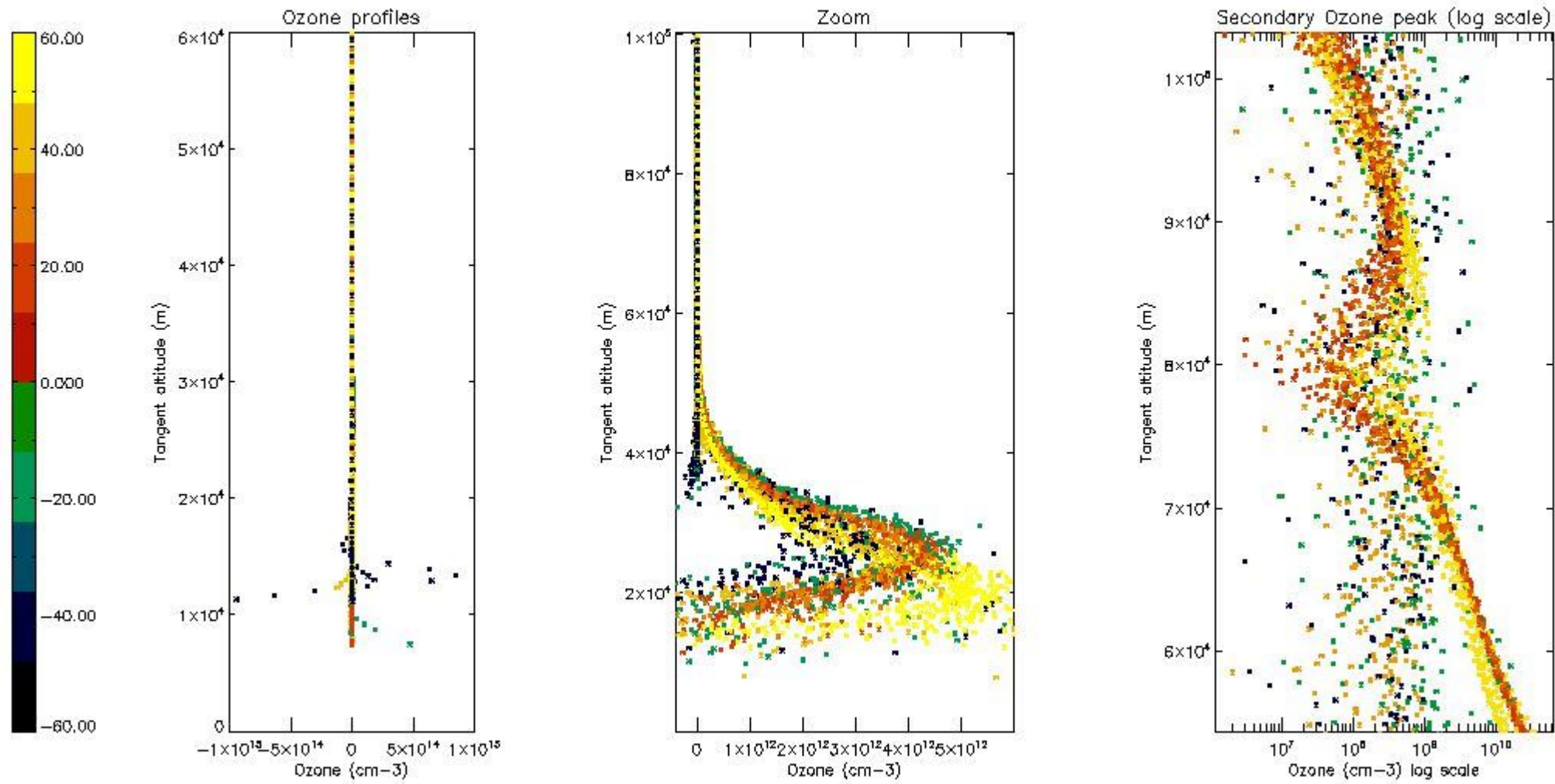
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	27
STD < 20	14

STD < 10	11
STD < 5	8

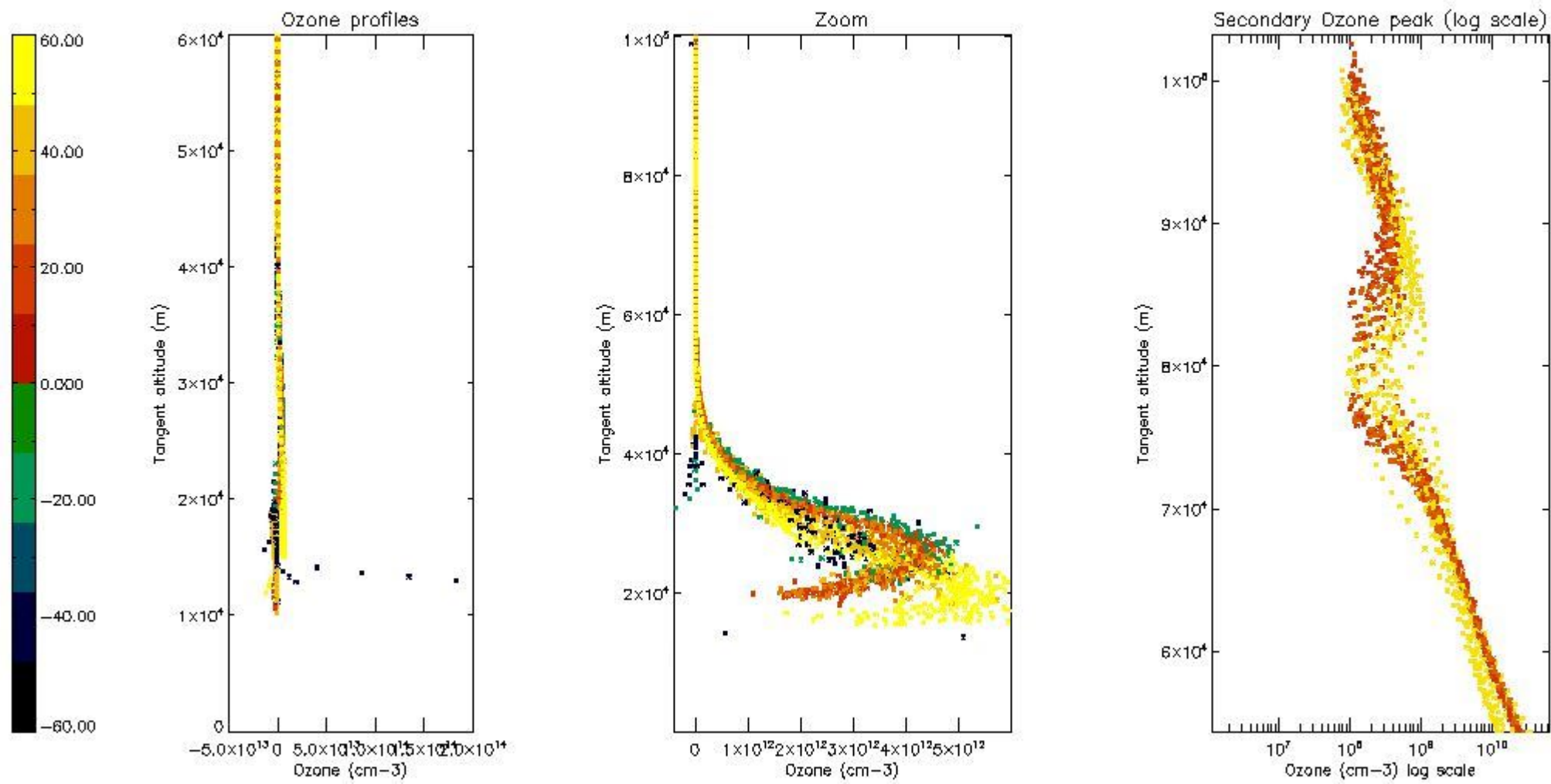
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



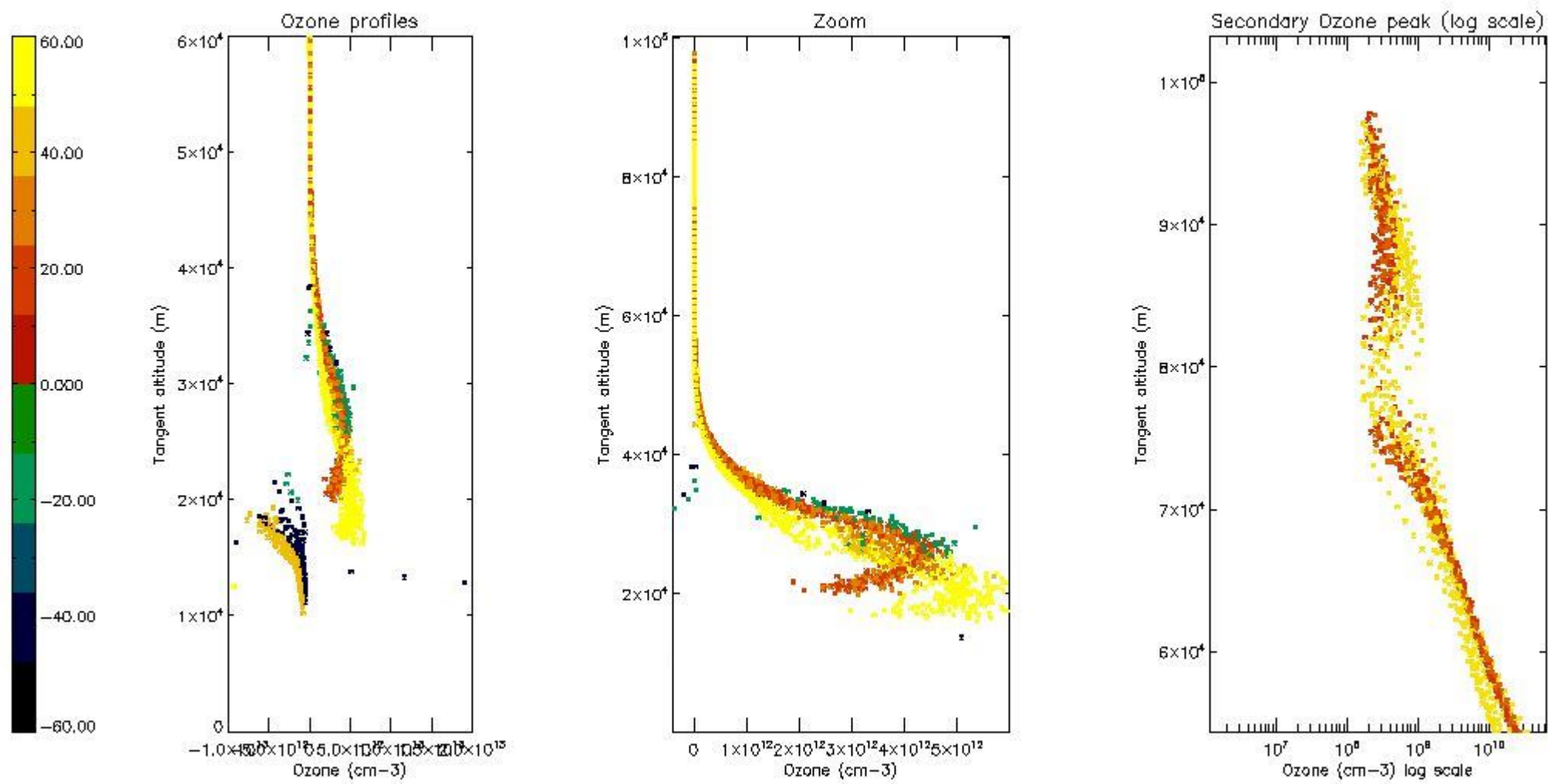
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



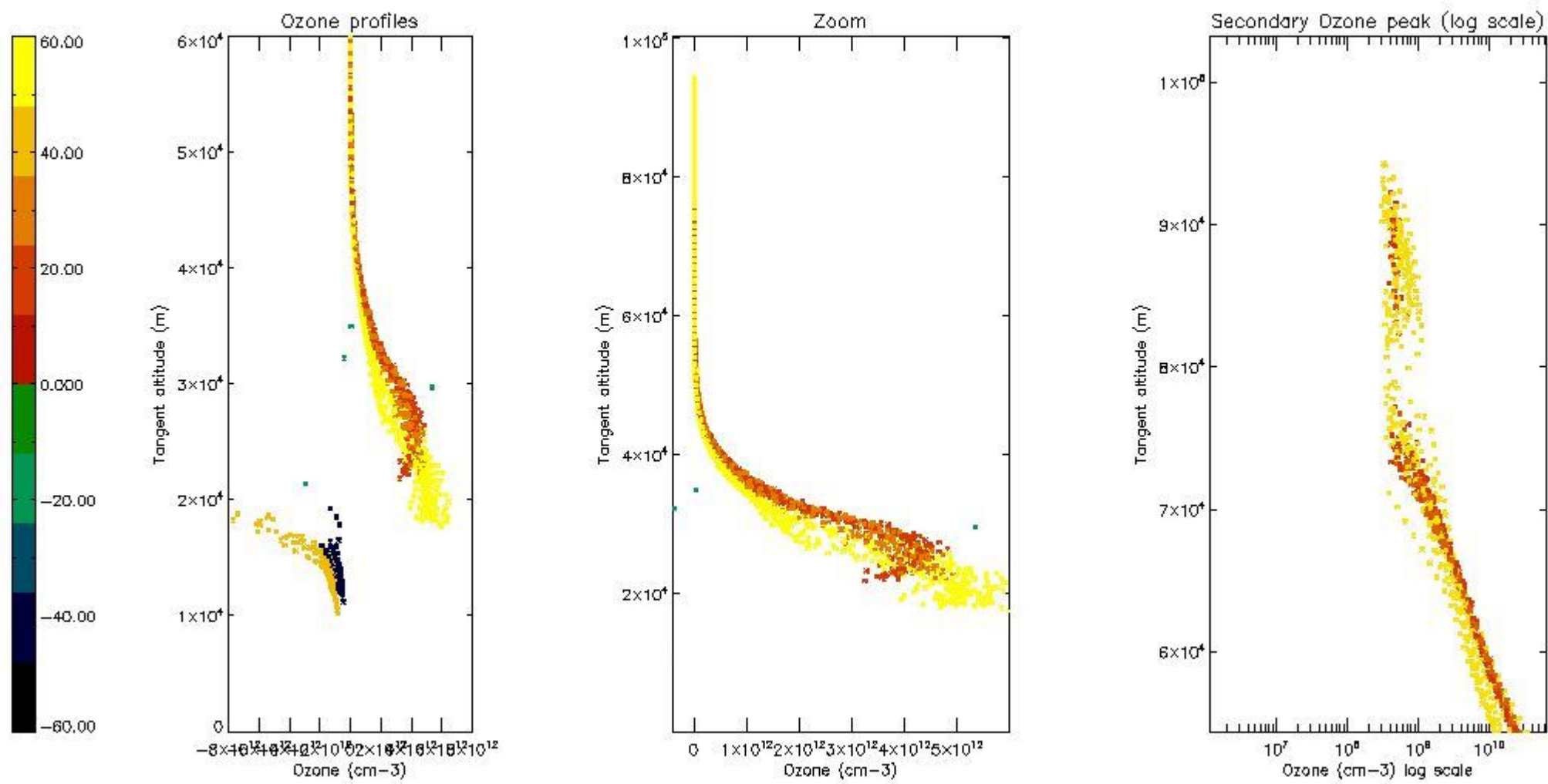
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



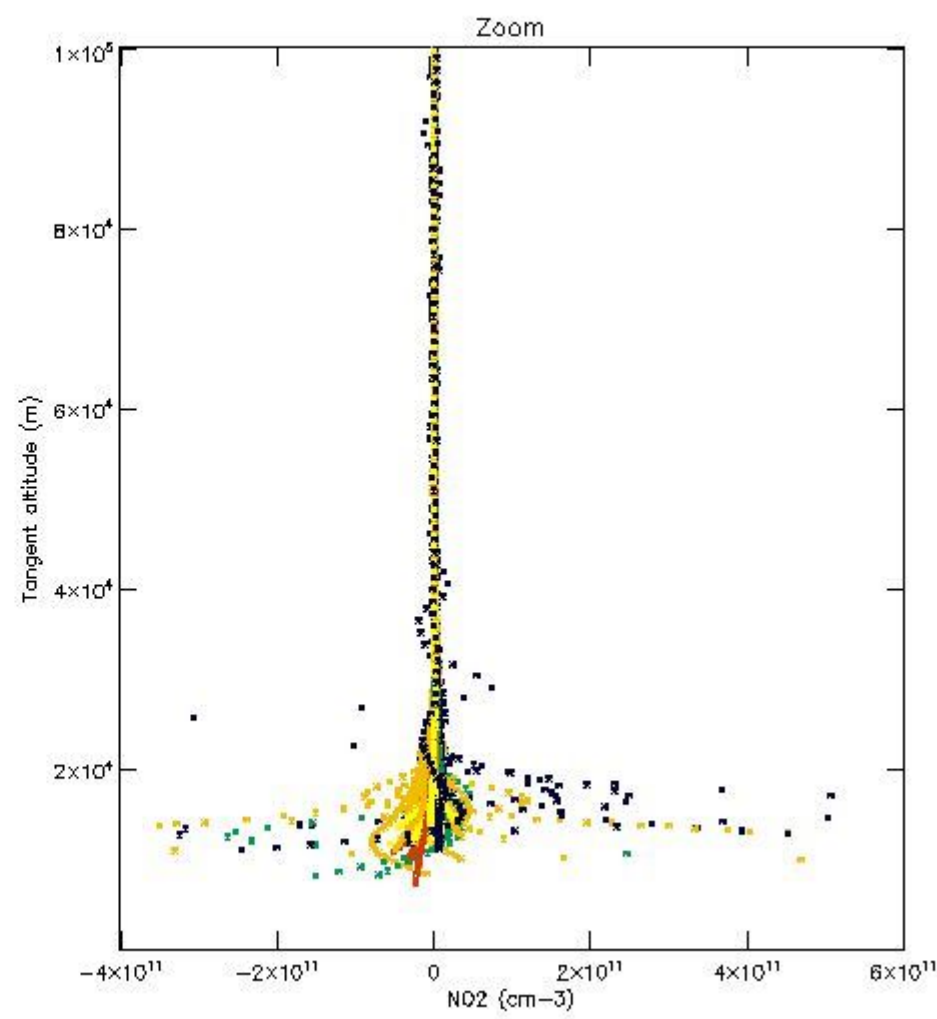
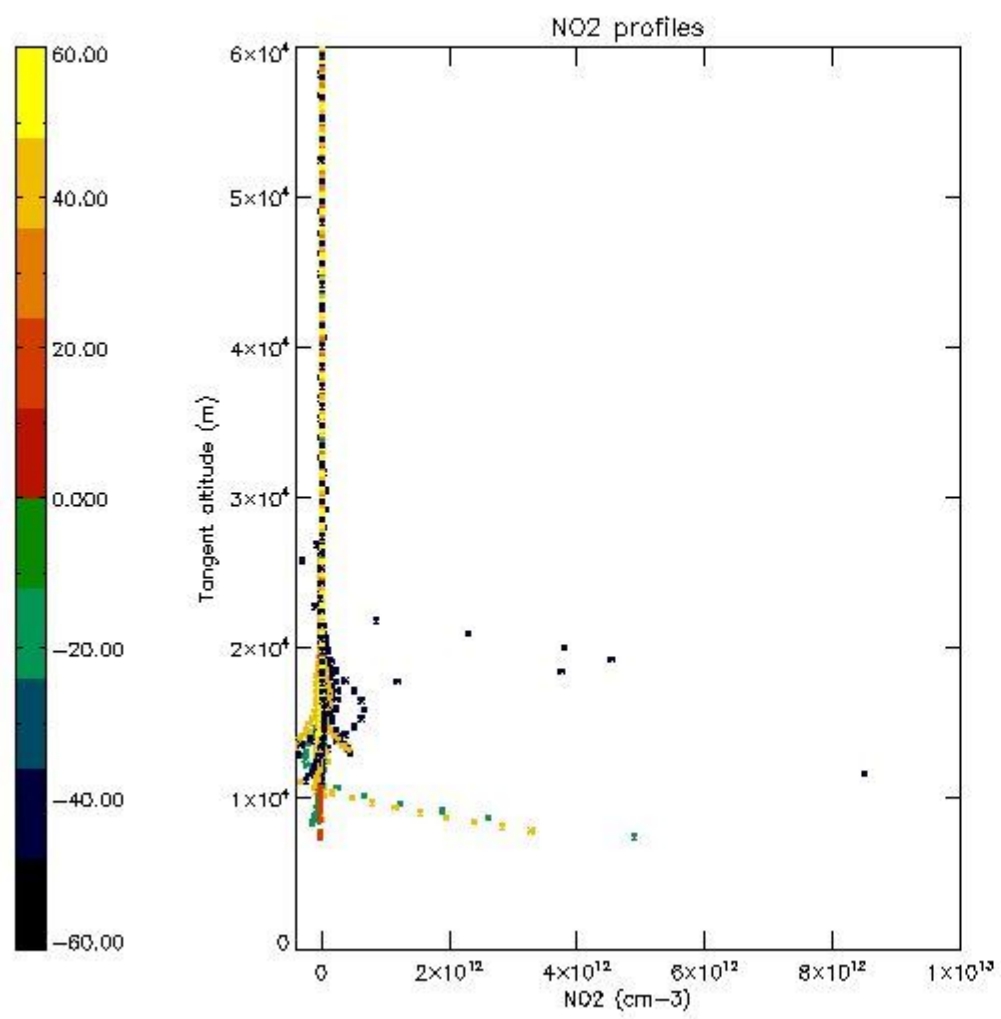
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



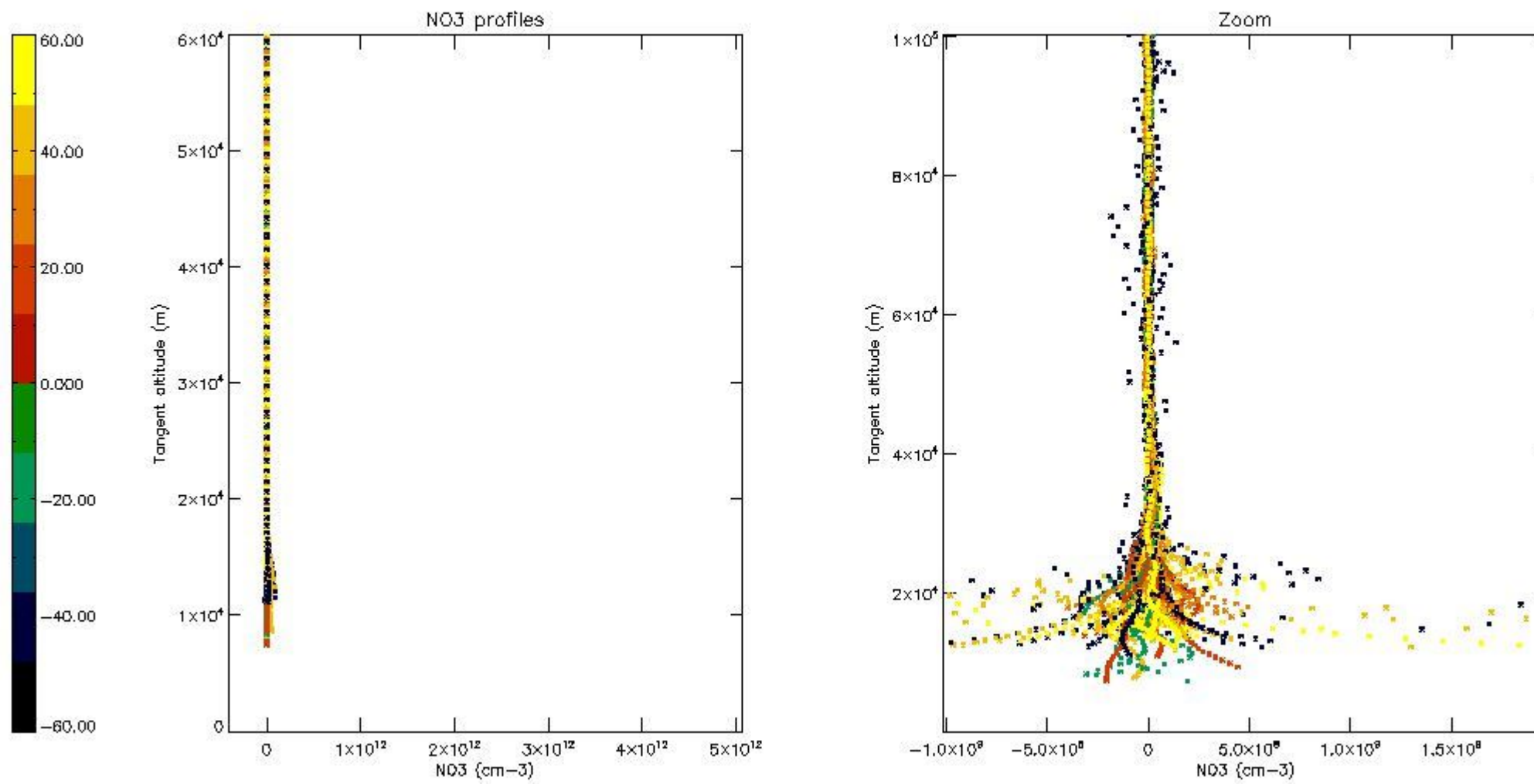
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

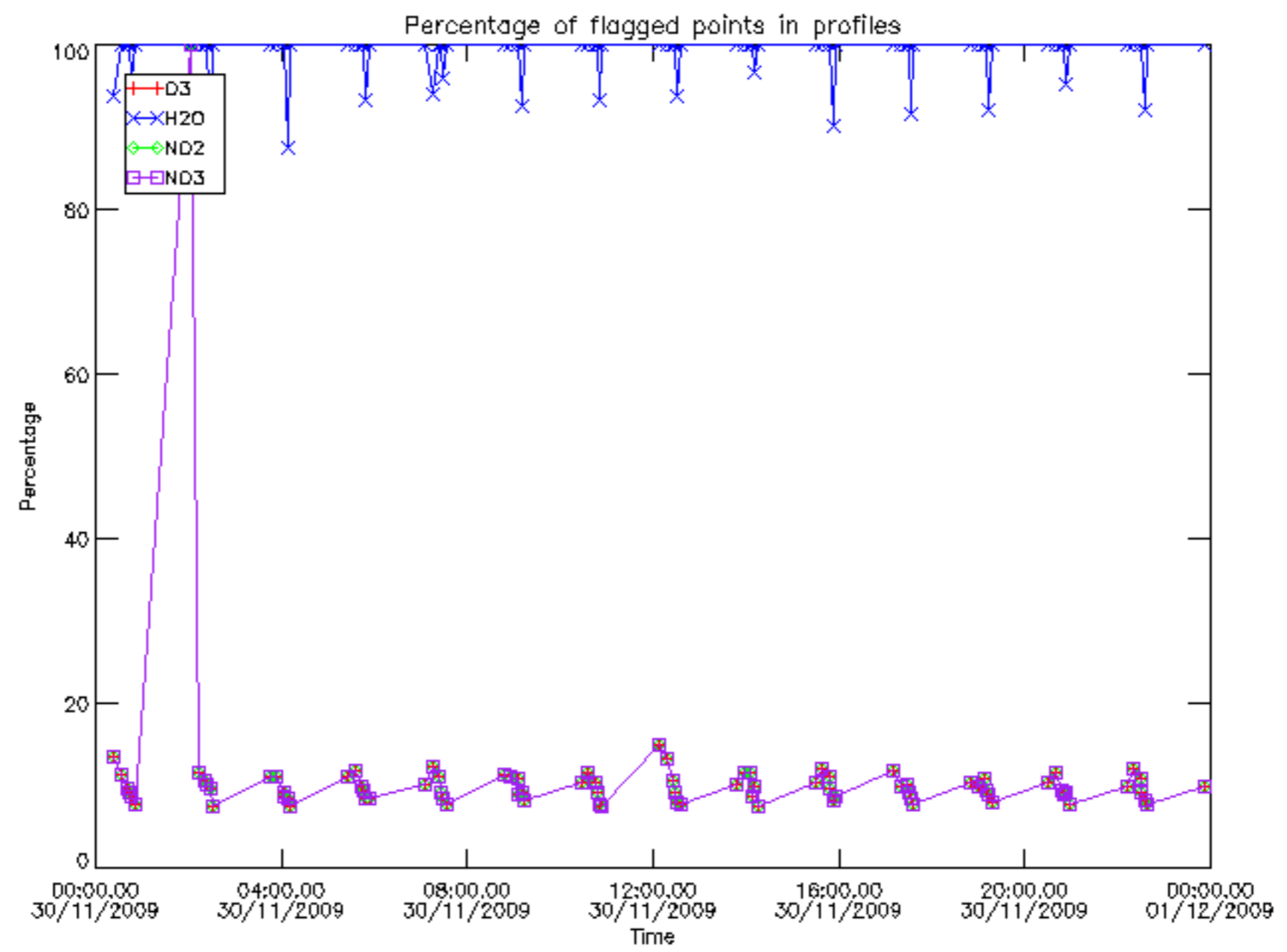
The colorbar represents the latitude.



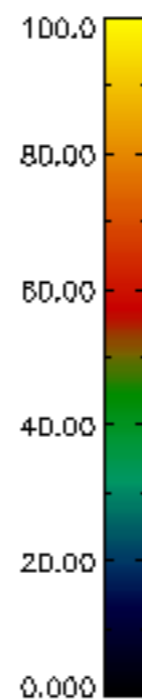
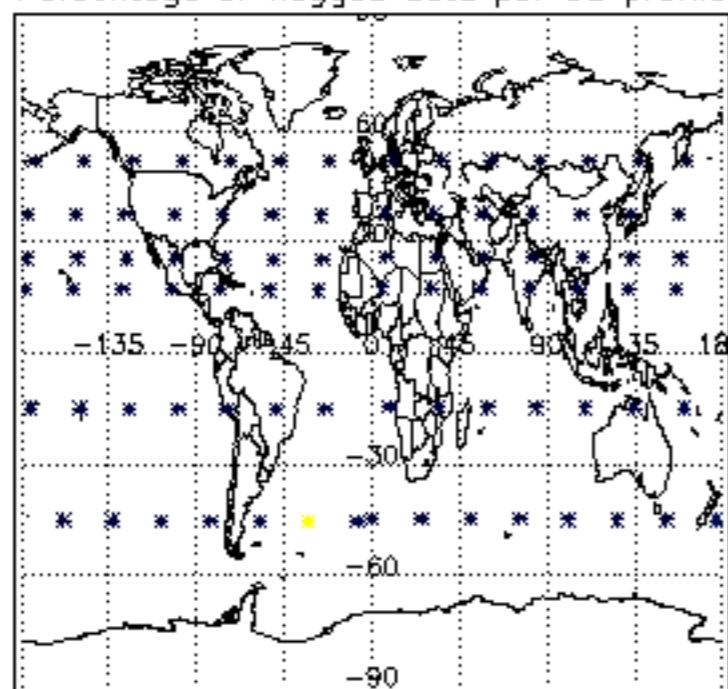
6. Auxiliary Data Files used for the production reported in section 2

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.

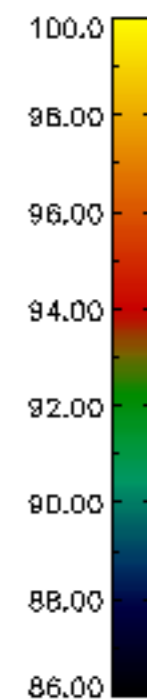
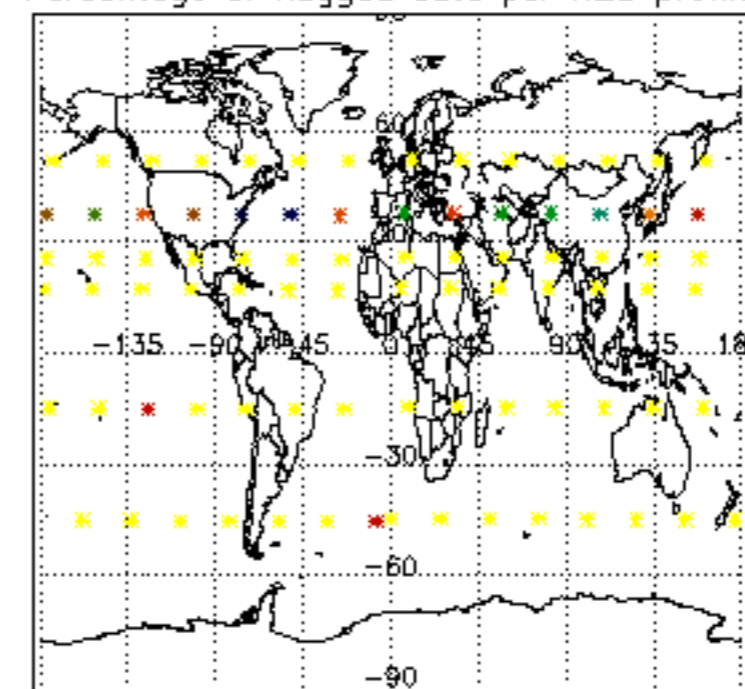
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	30-NOV-2009 00:00:58
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	30-NOV-2009 00:00:58
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	30-NOV-2009 00:00:58



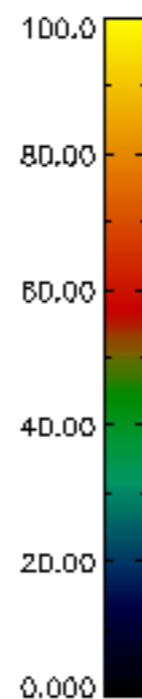
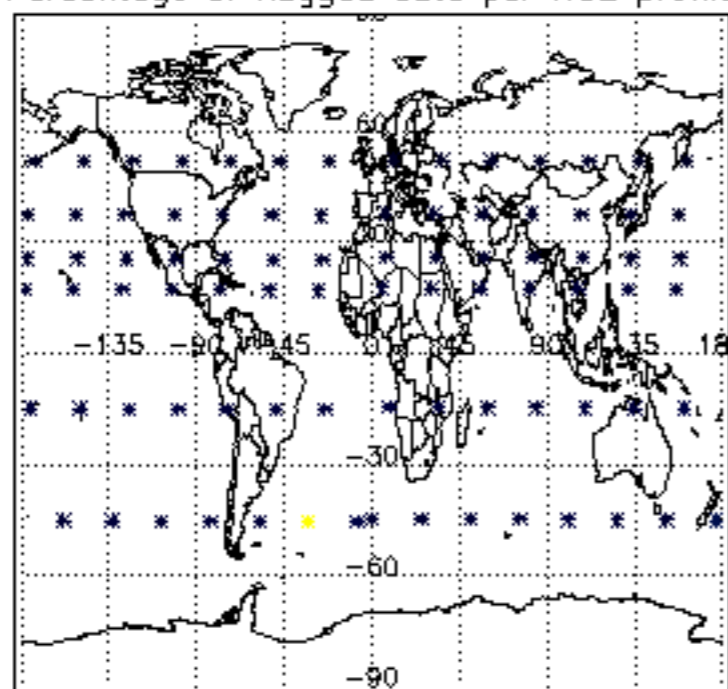
Percentage of flagged data per D3 profile



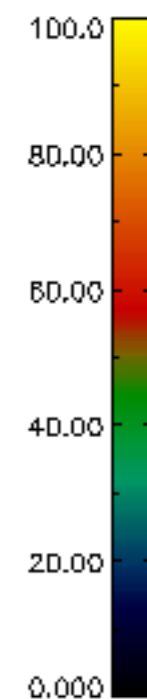
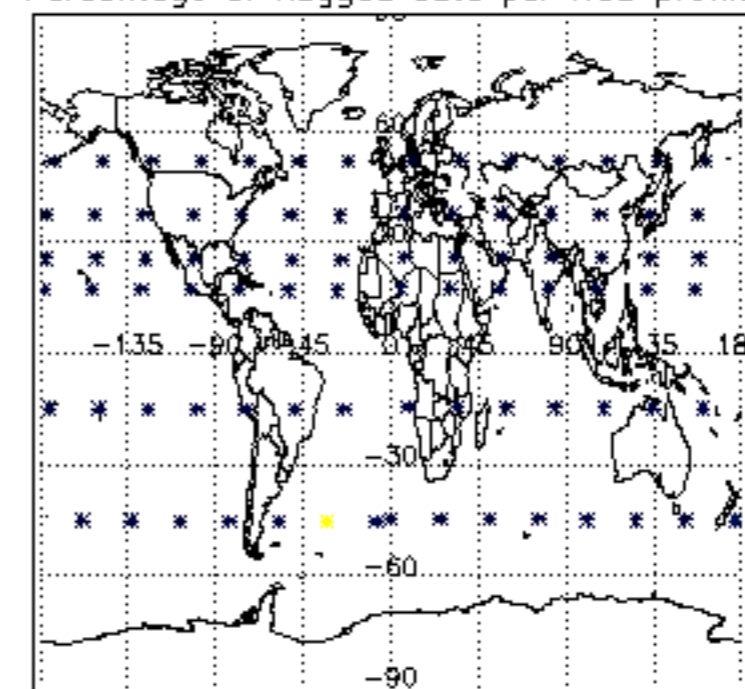
Percentage of flagged data per H2O profile

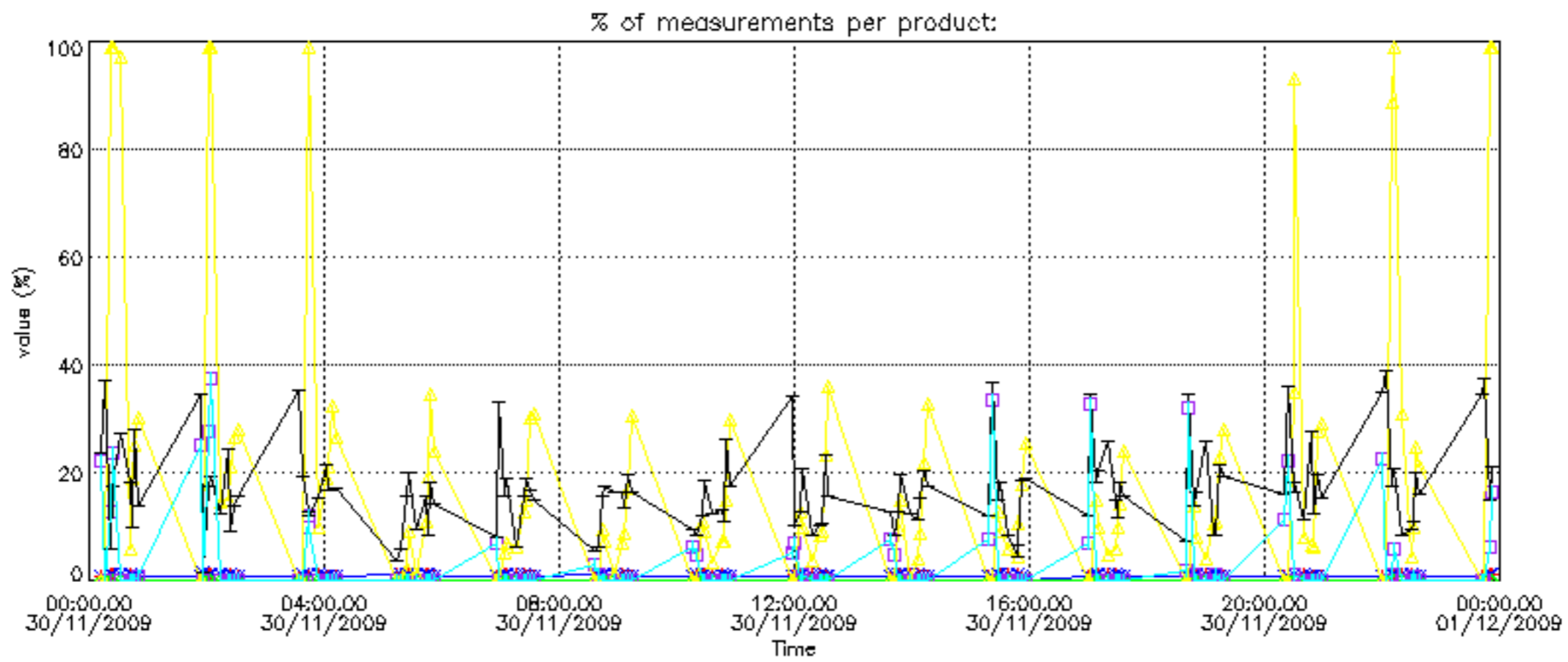


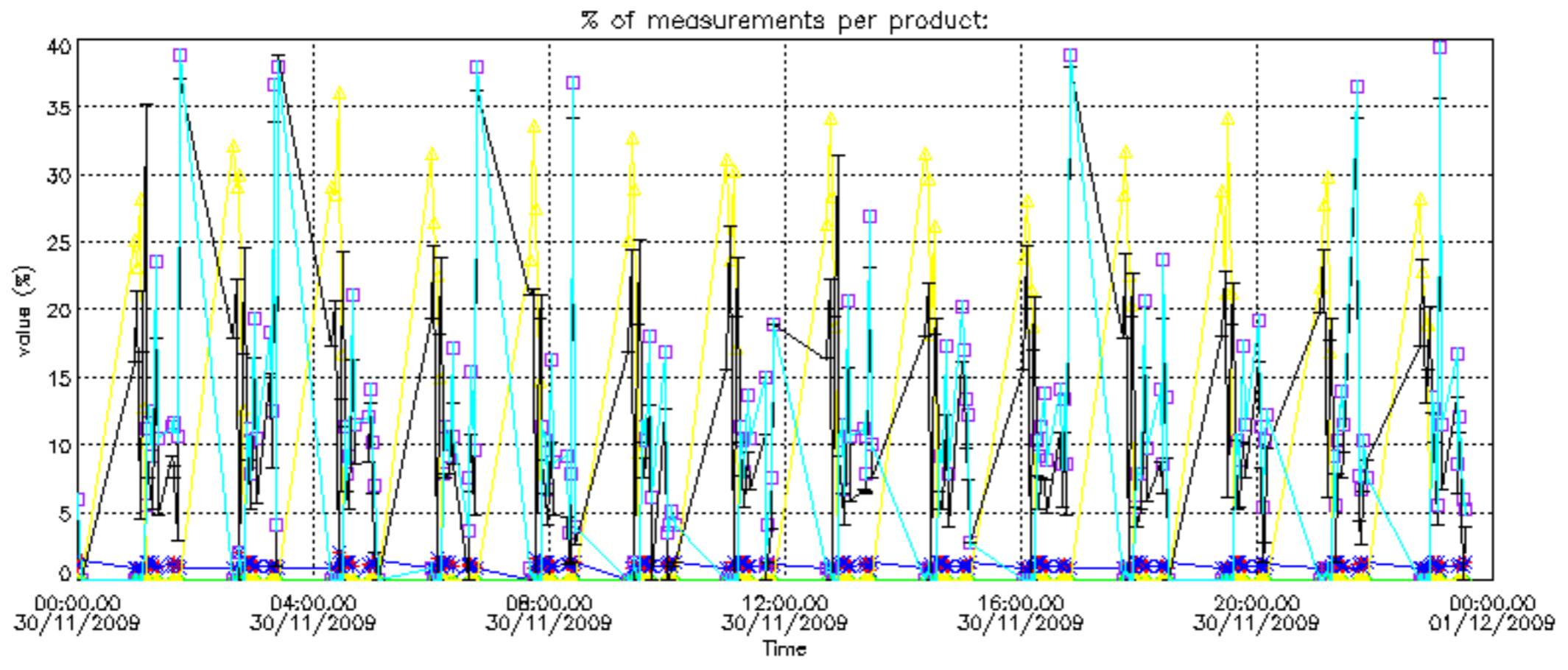
Percentage of flagged data per NO2 profile



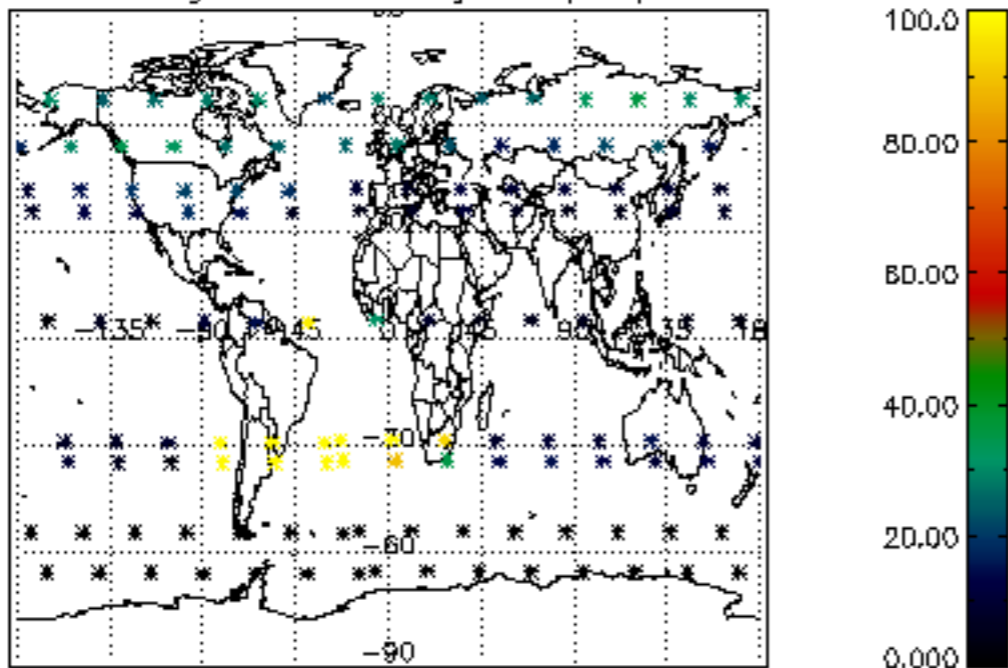
Percentage of flagged data per NO3 profile



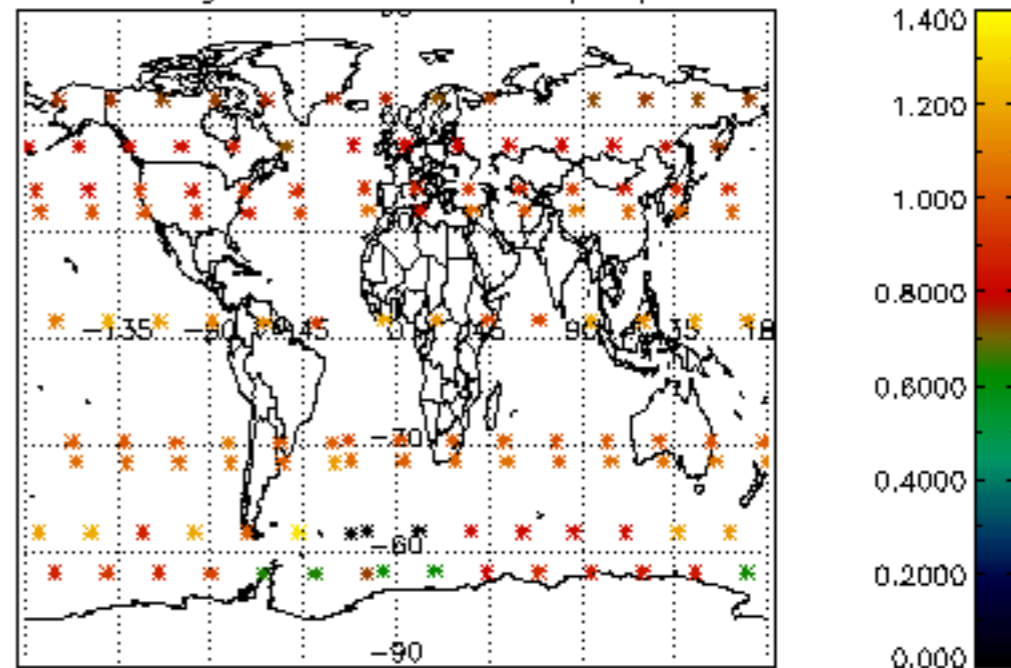




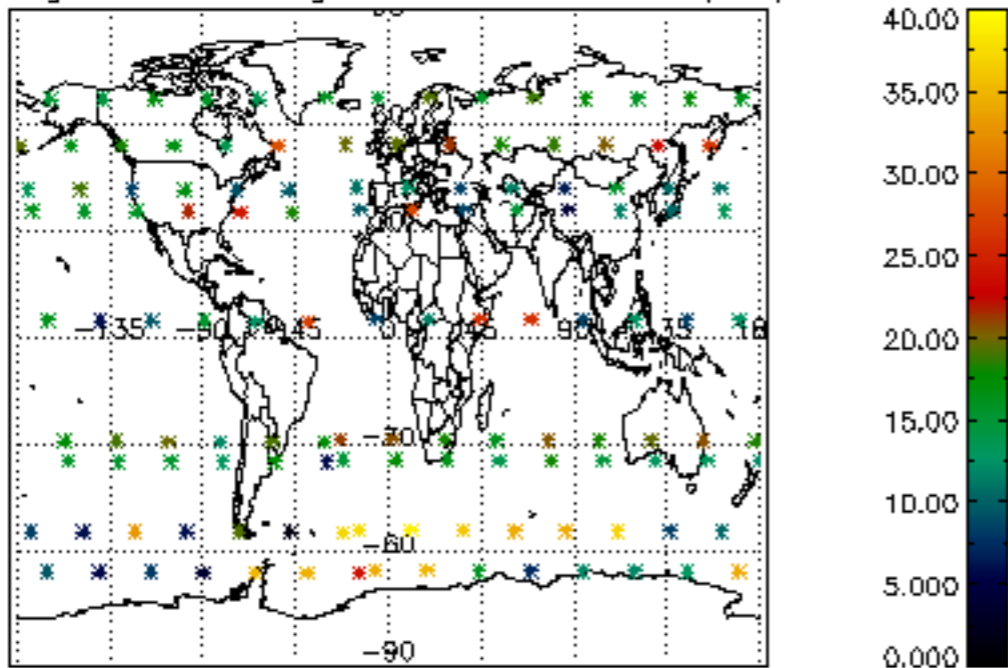
Percentage of cosmic ray hits per profile



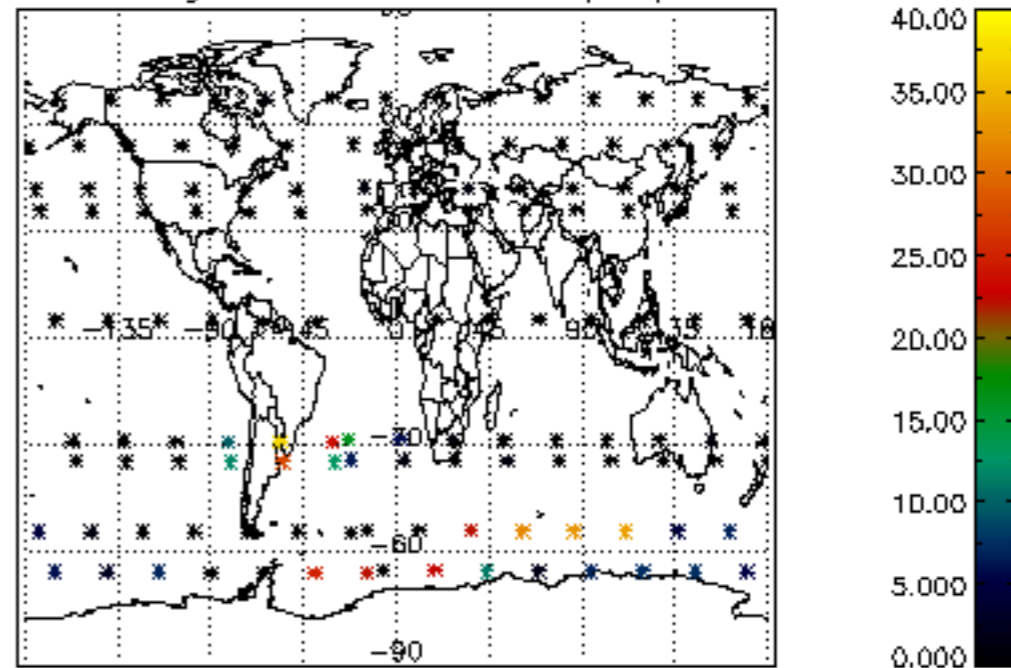
Percentage of datation errors per profile



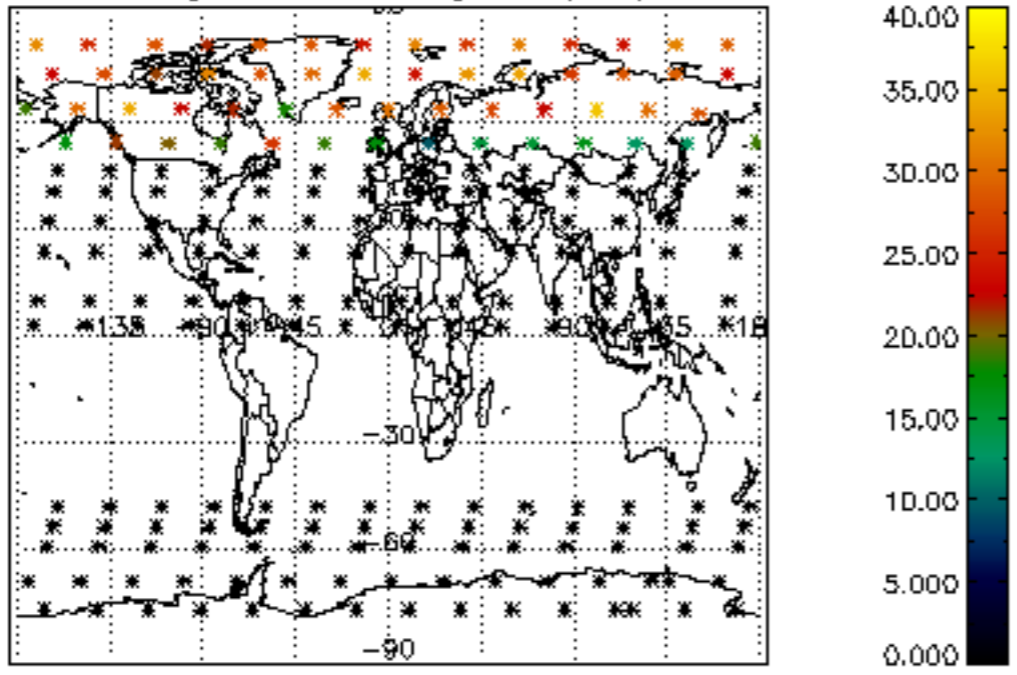
Percentage of star falling outside central band per profile



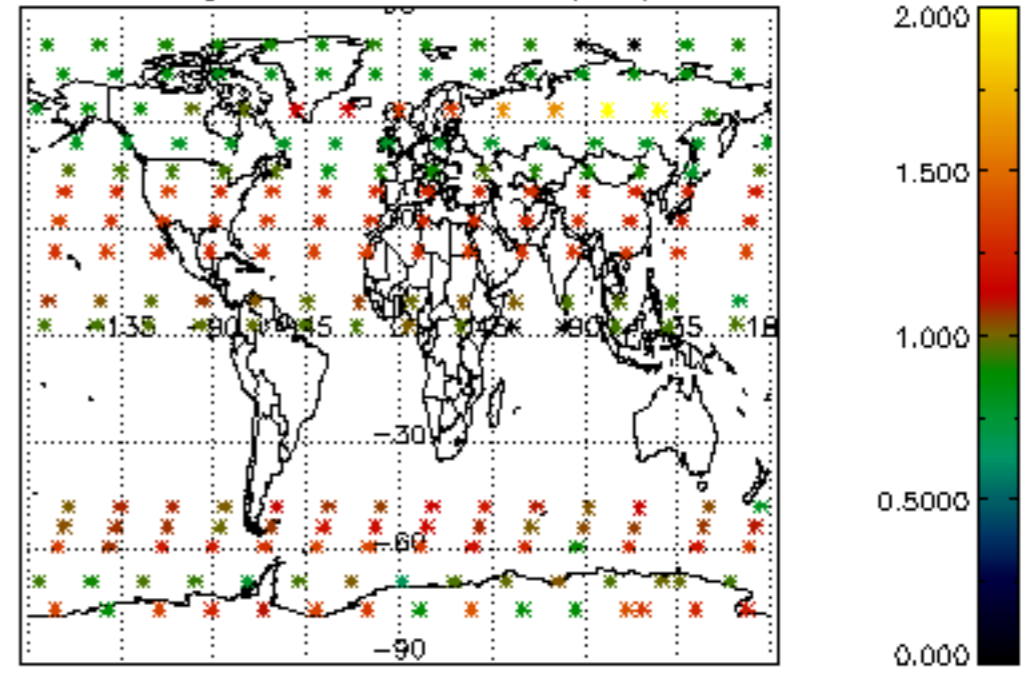
Percentage of saturation errors per profile



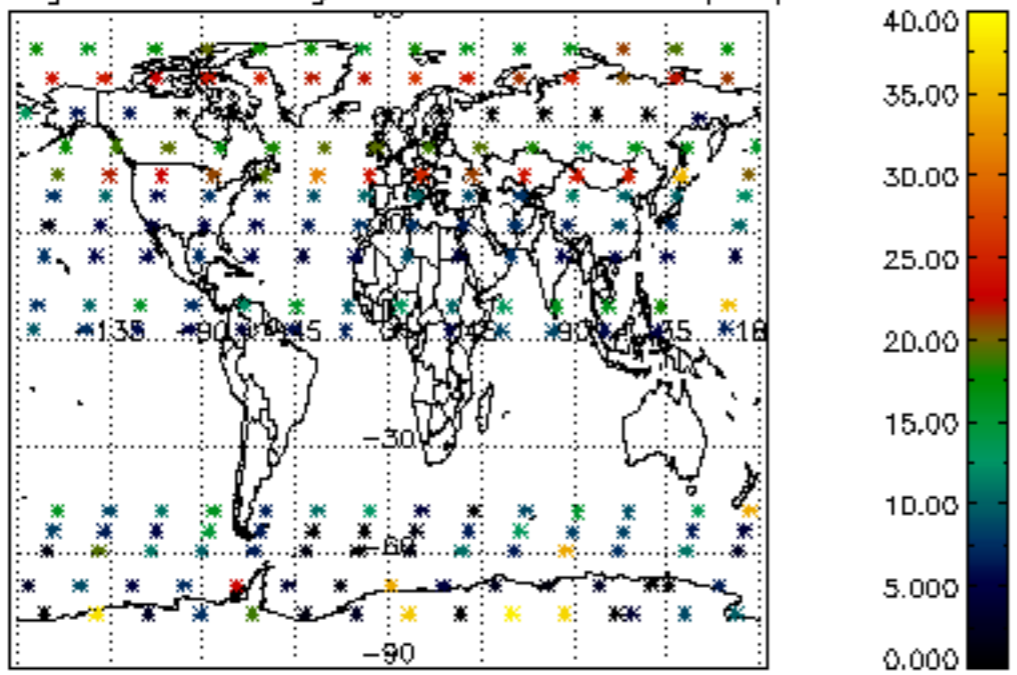
Percentage of cosmic ray hits per profile



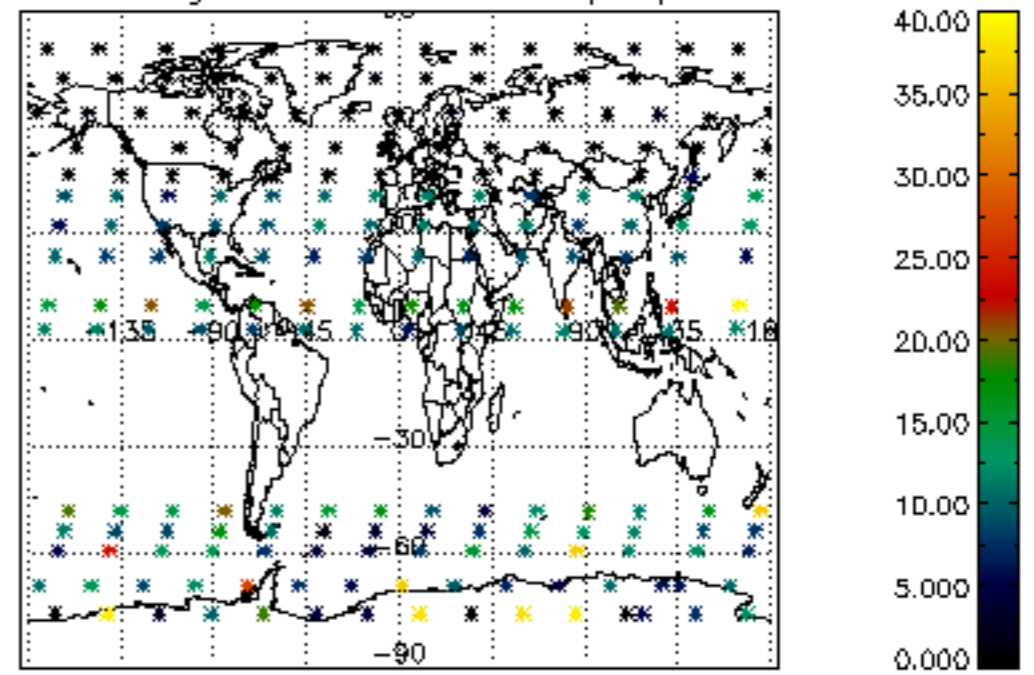
Percentage of datation errors per profile

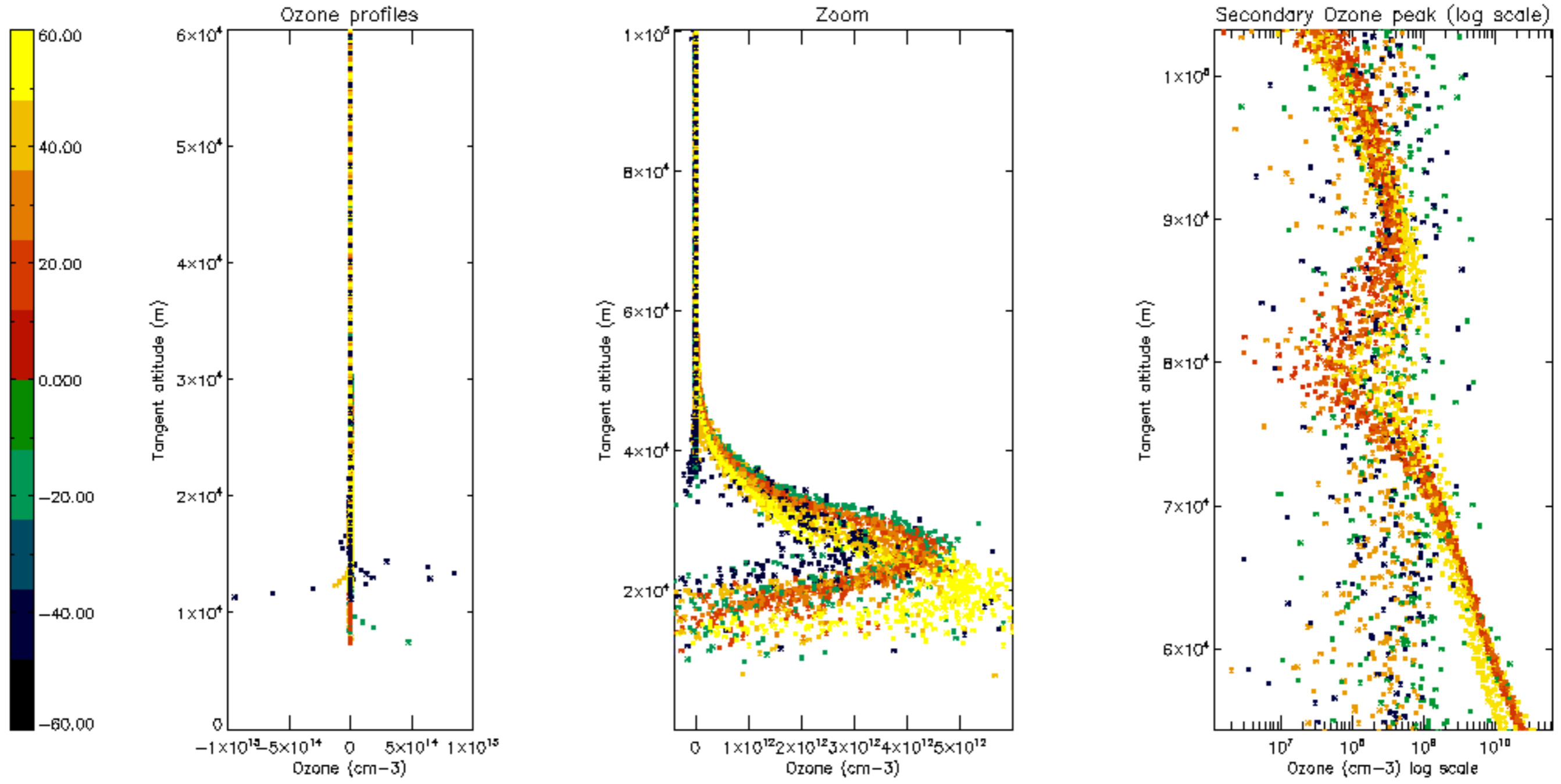


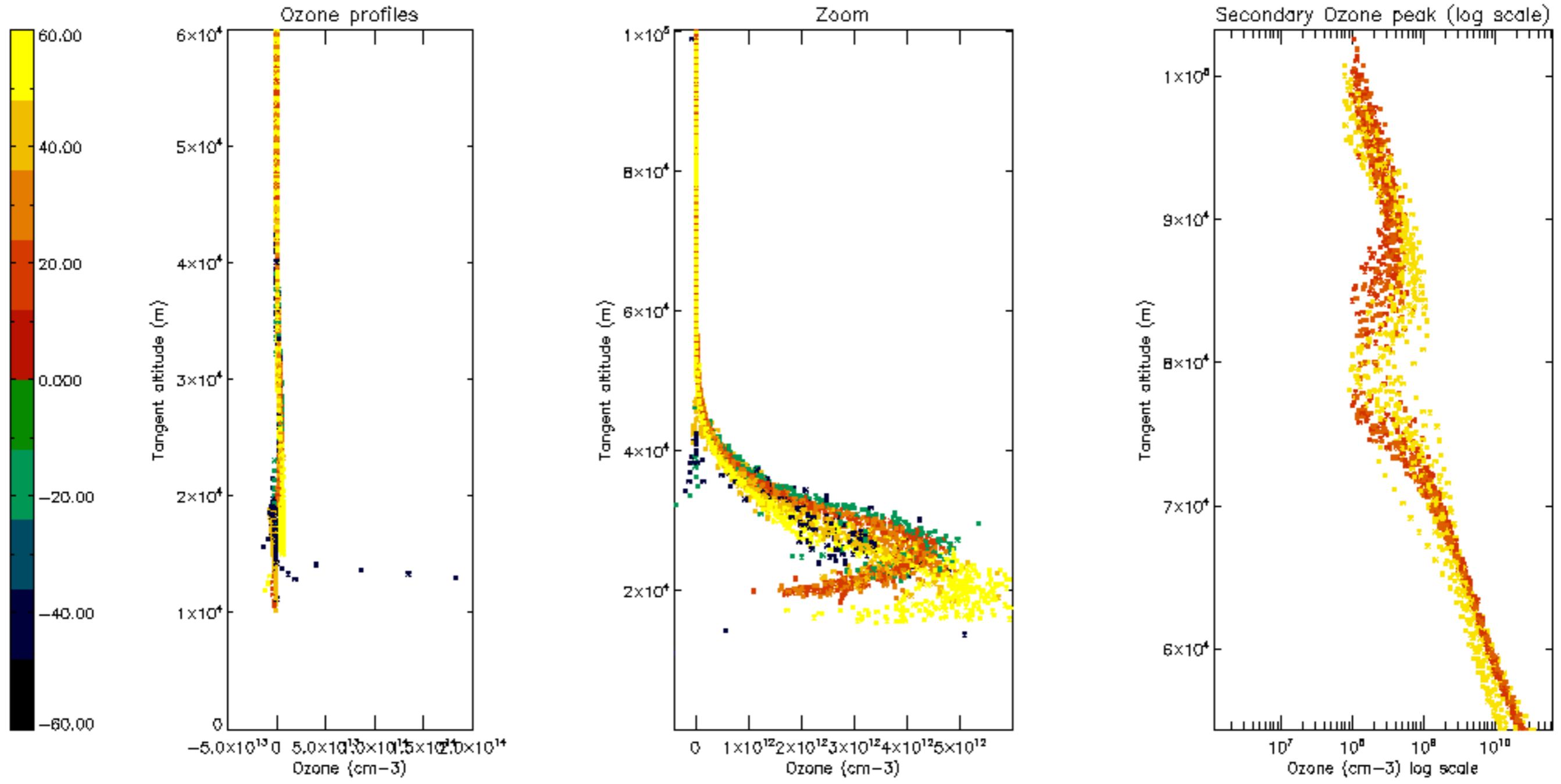
Percentage of star falling outside central band per profile

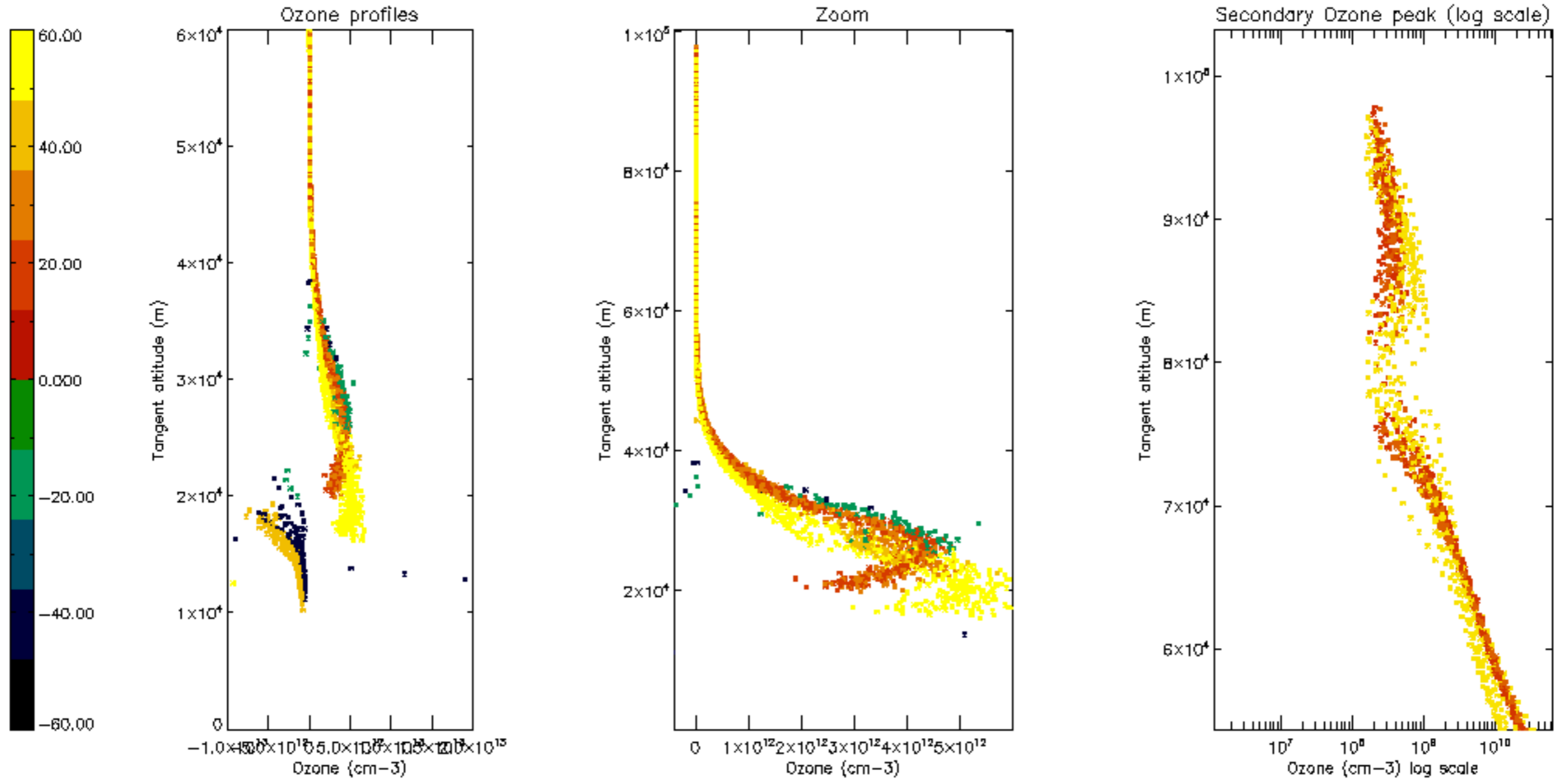


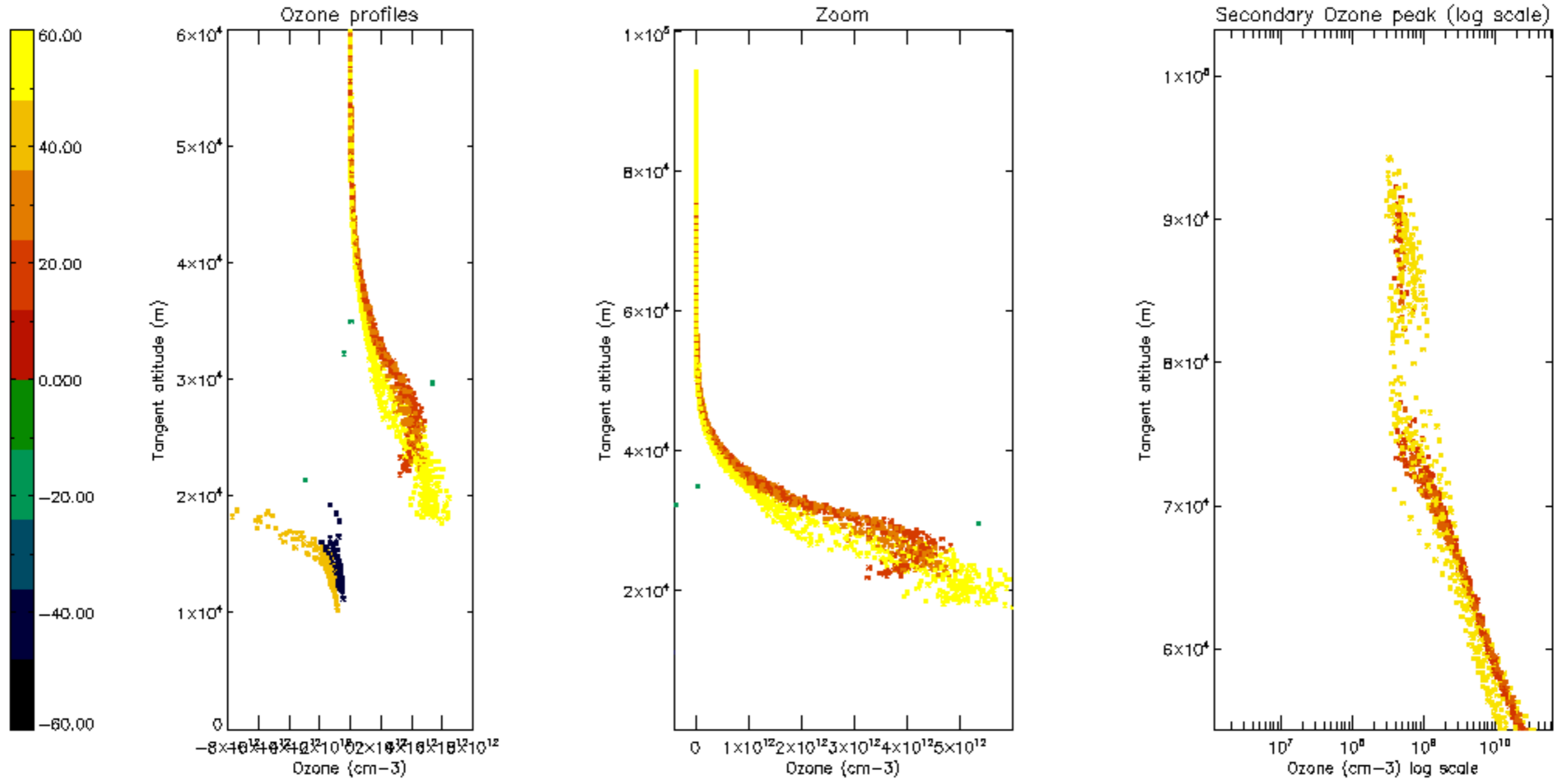
Percentage of saturation errors per profile

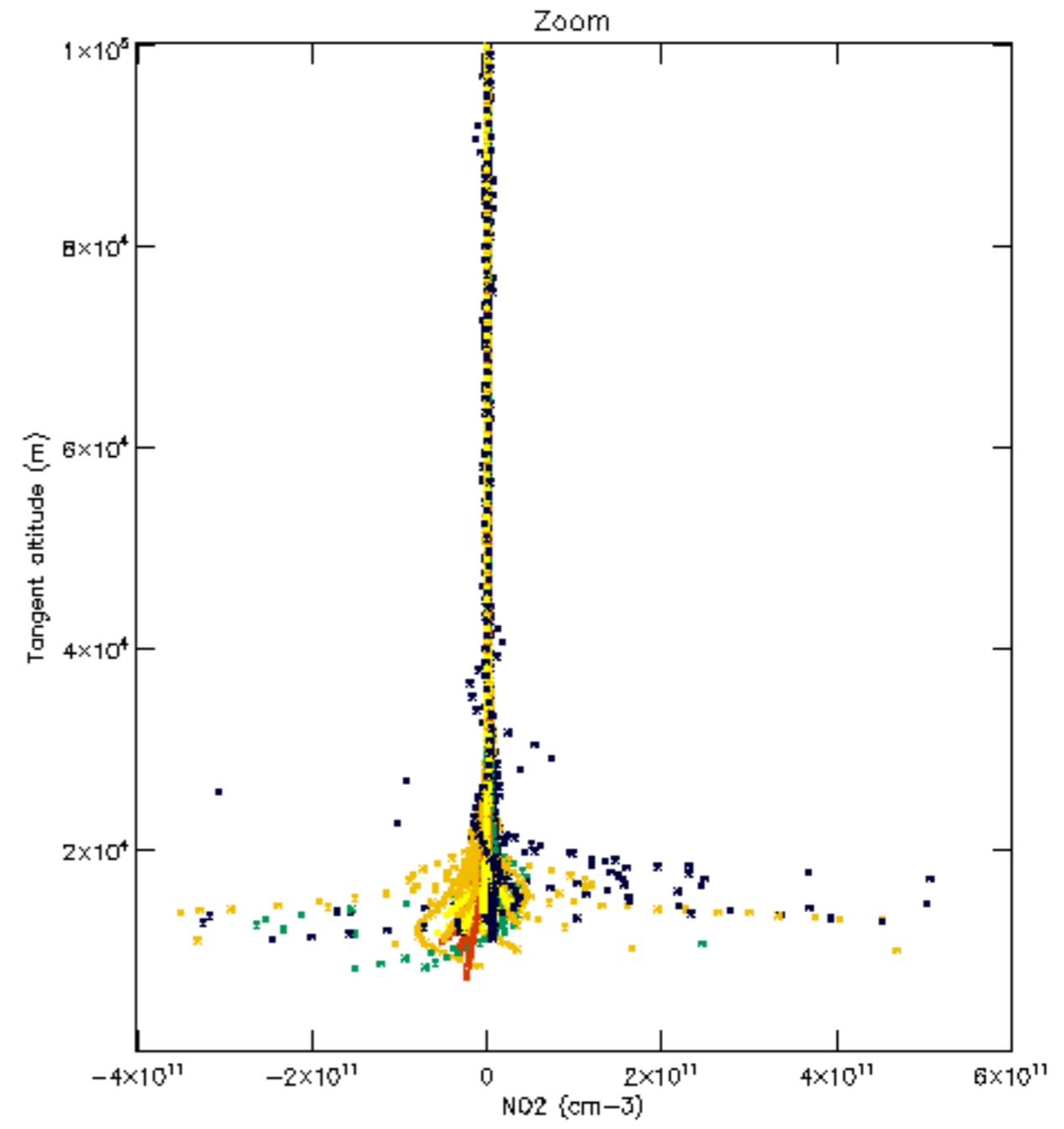
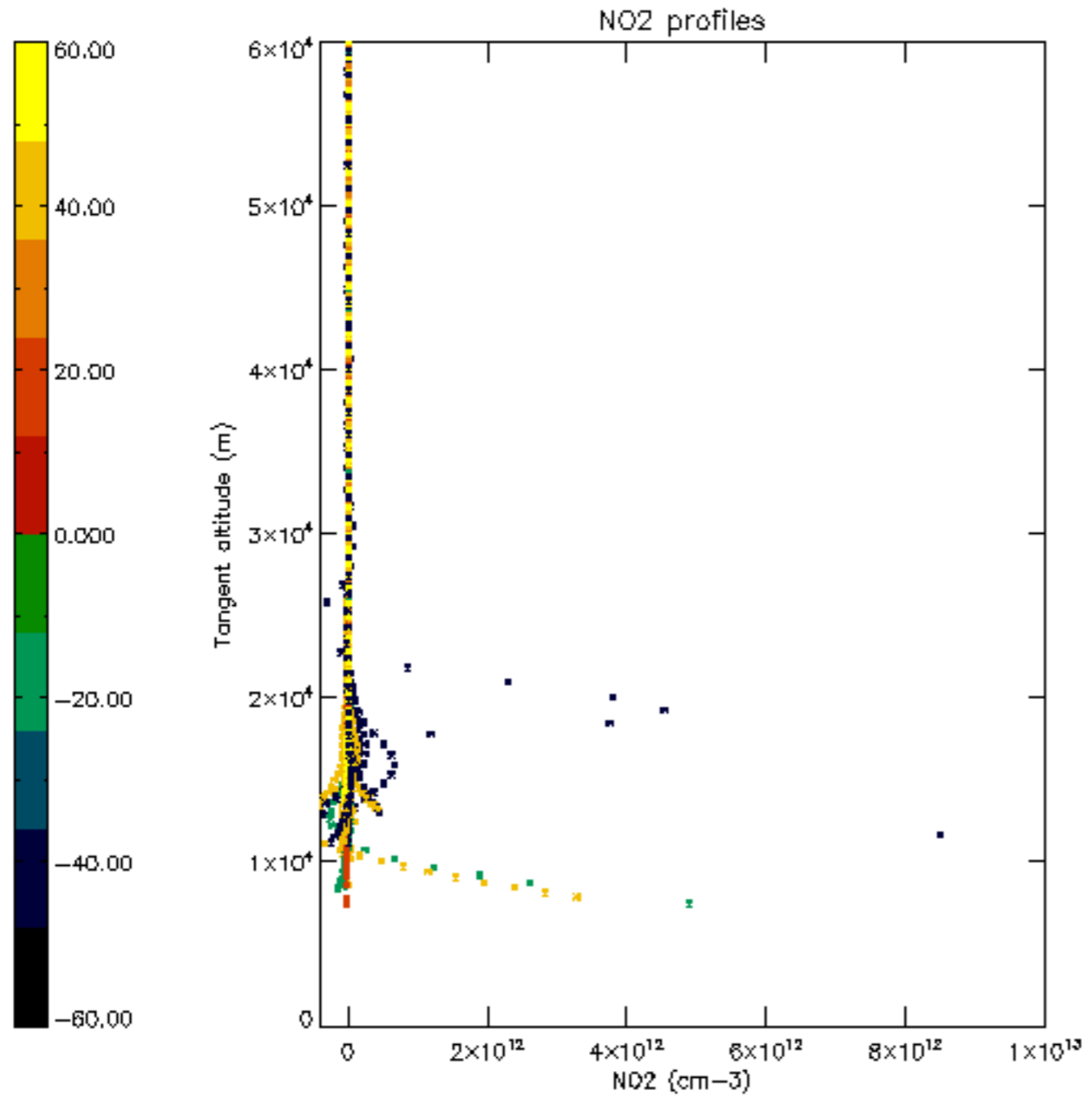


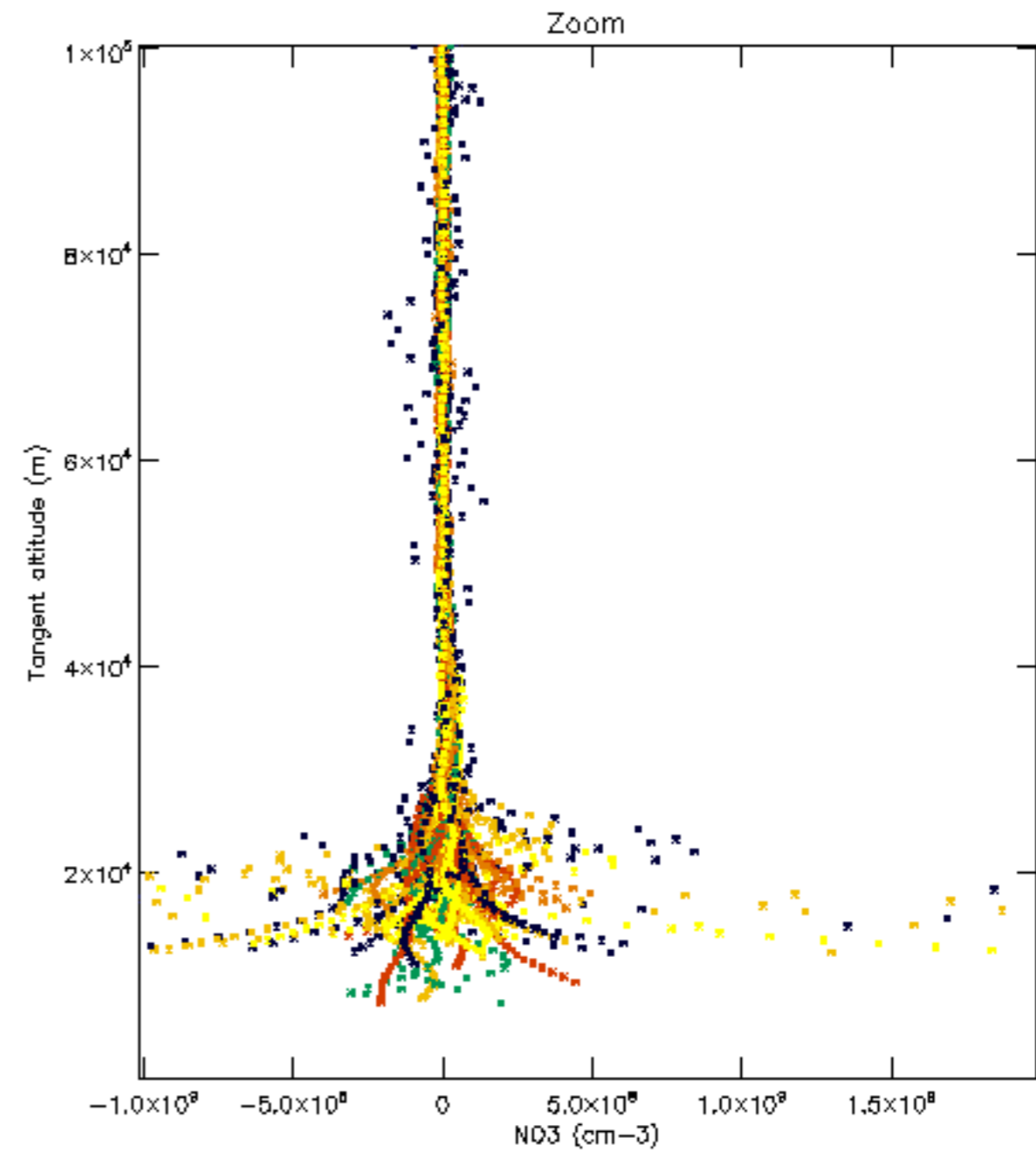
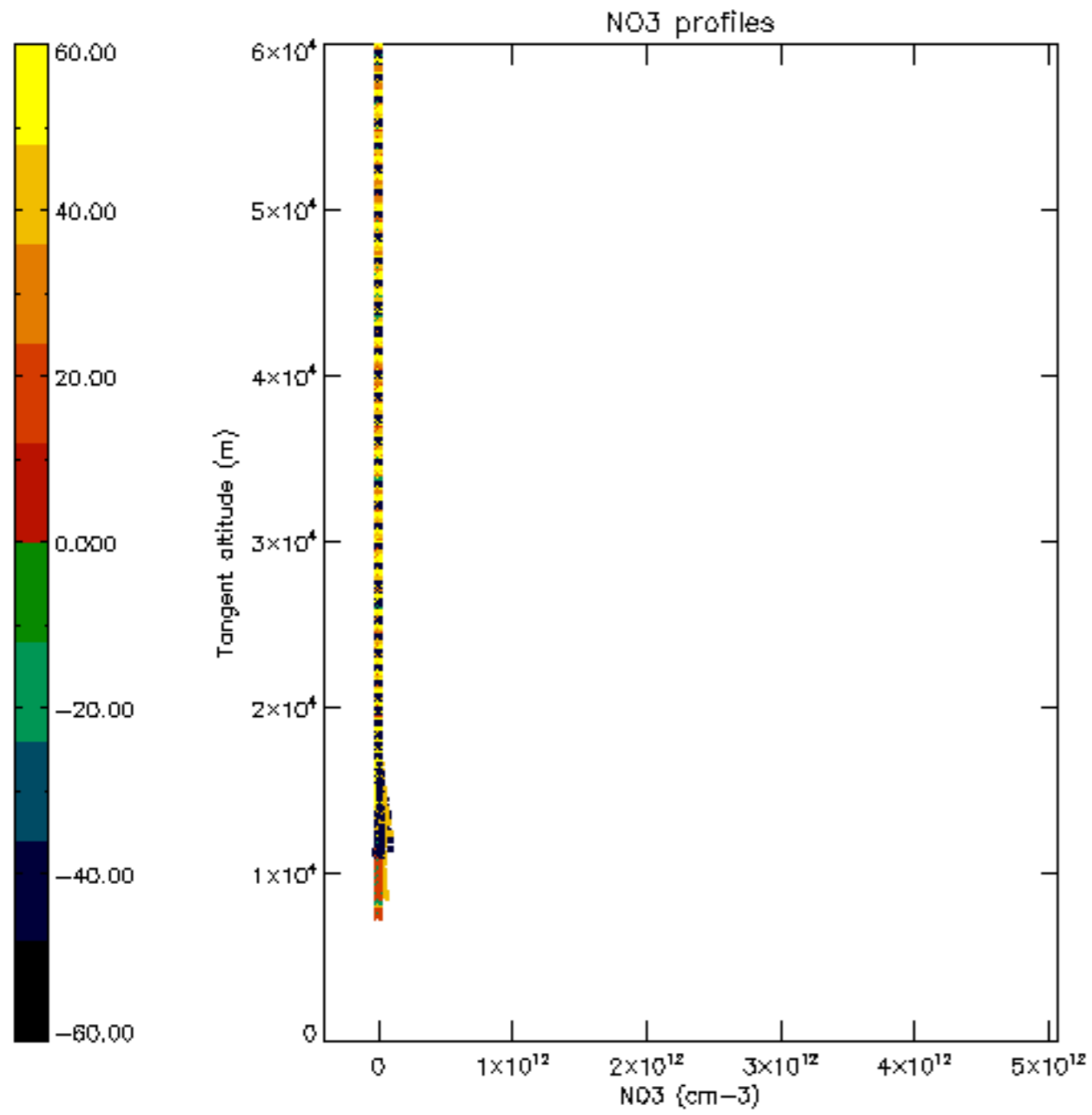


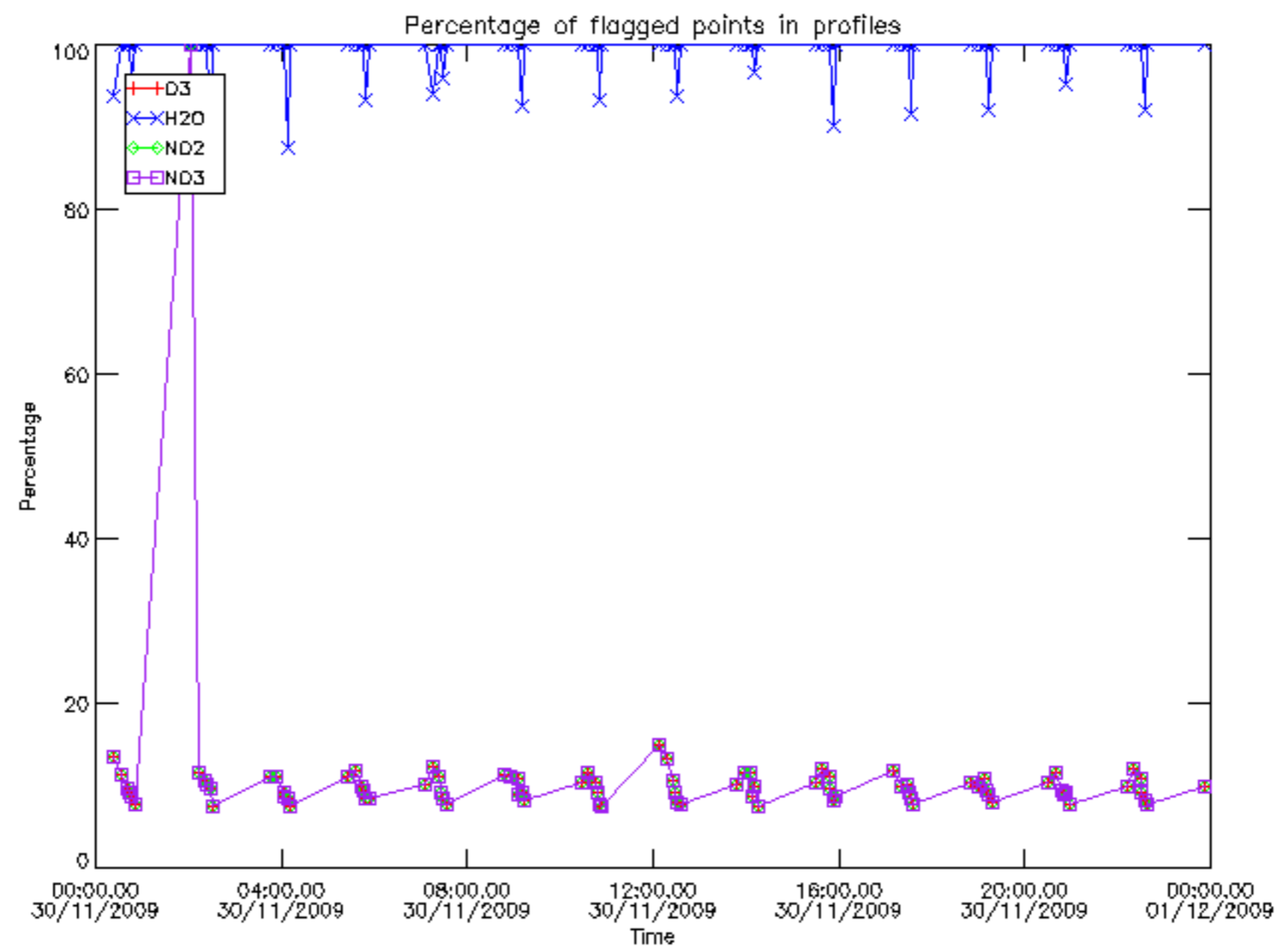




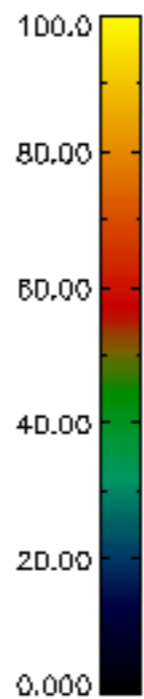
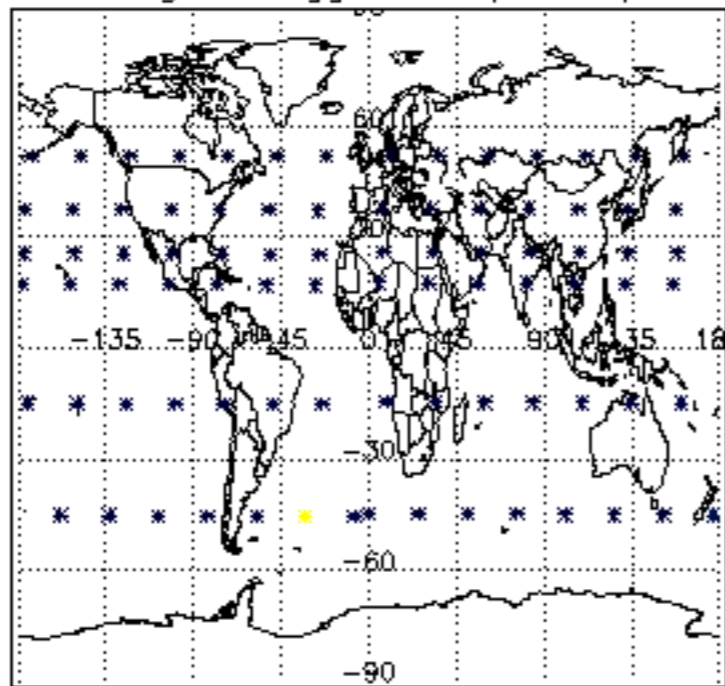




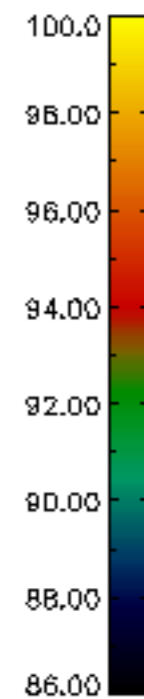
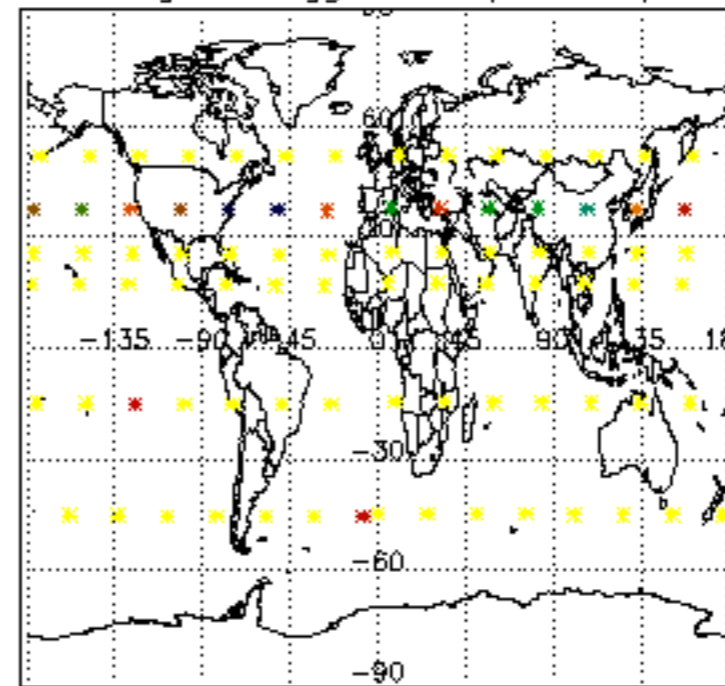




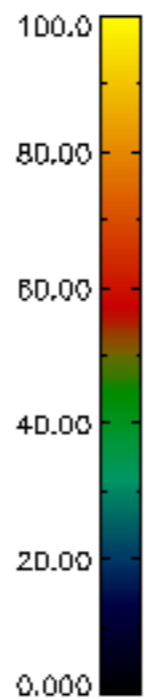
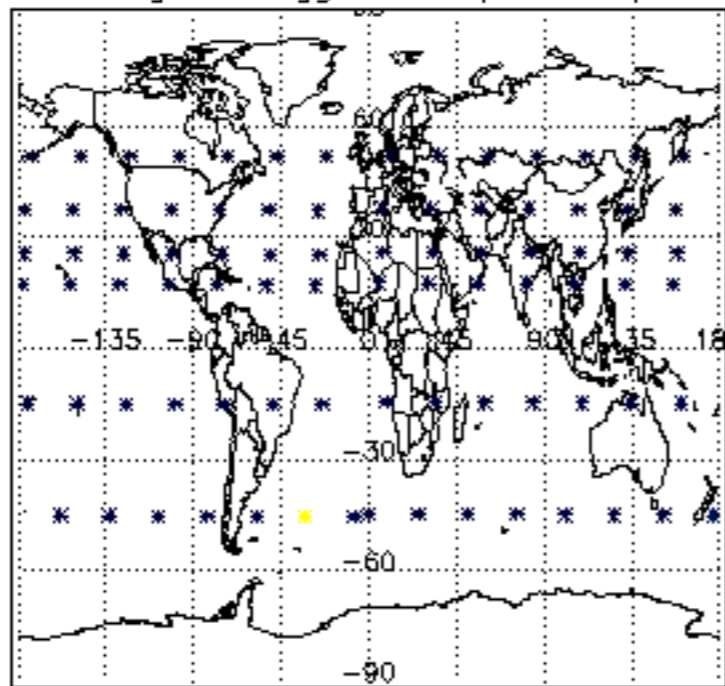
Percentage of flagged data per D3 profile



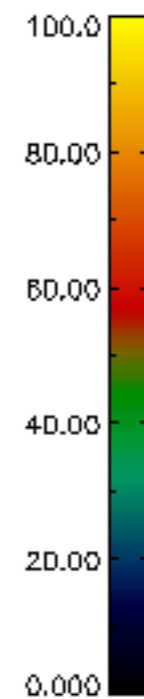
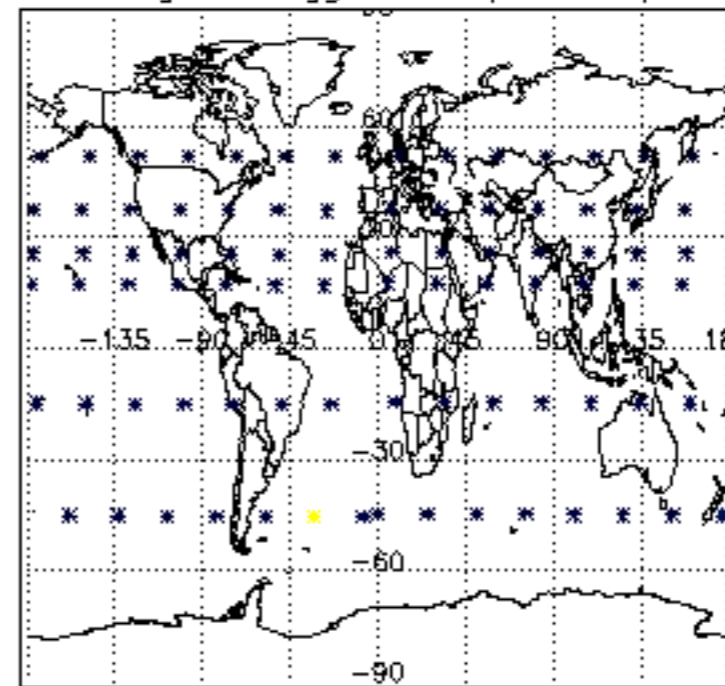
Percentage of flagged data per H2O profile

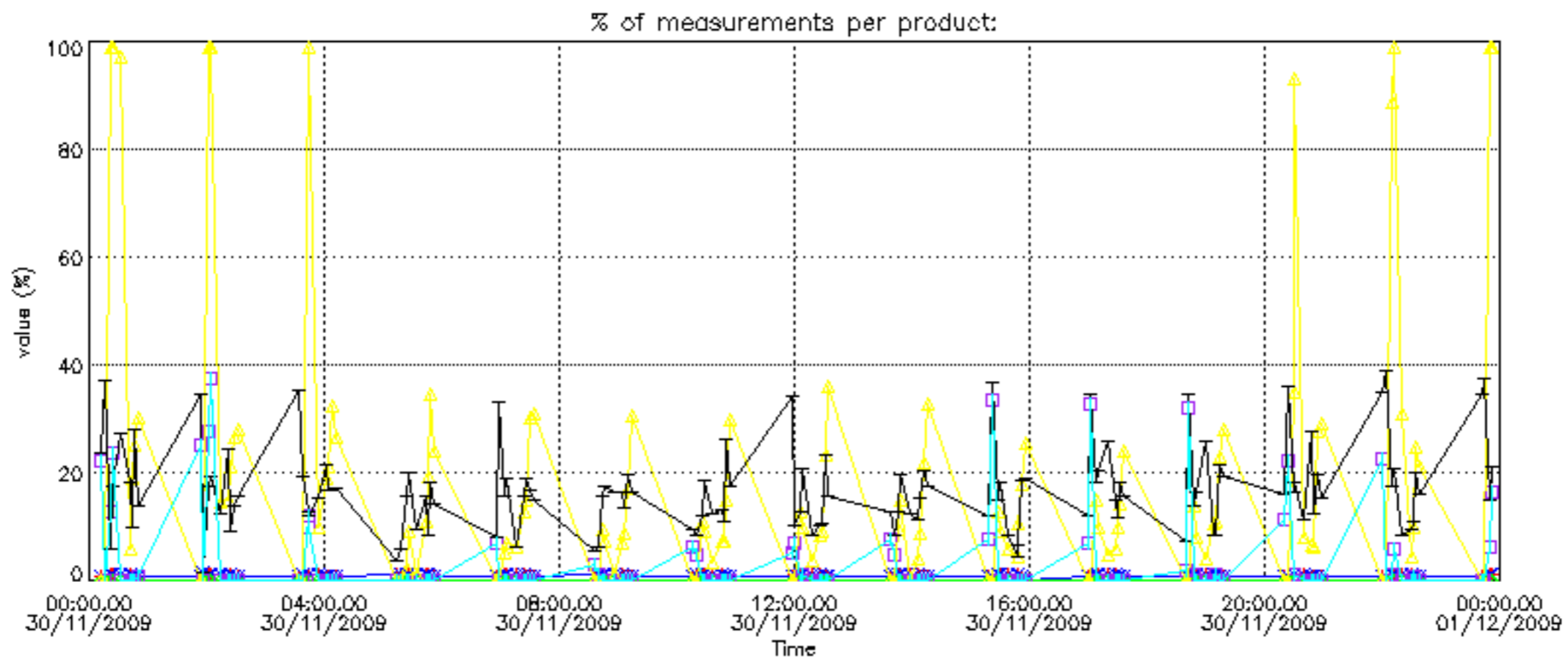


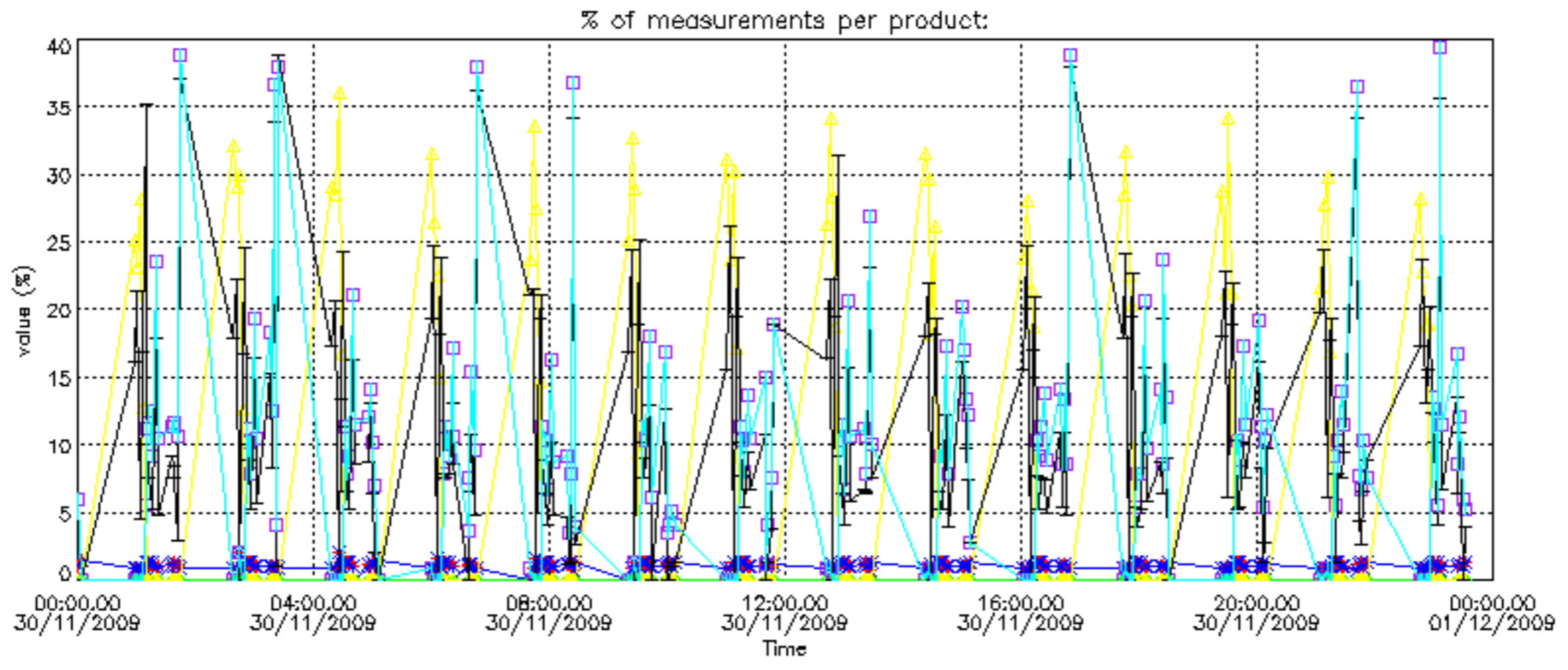
Percentage of flagged data per NO2 profile



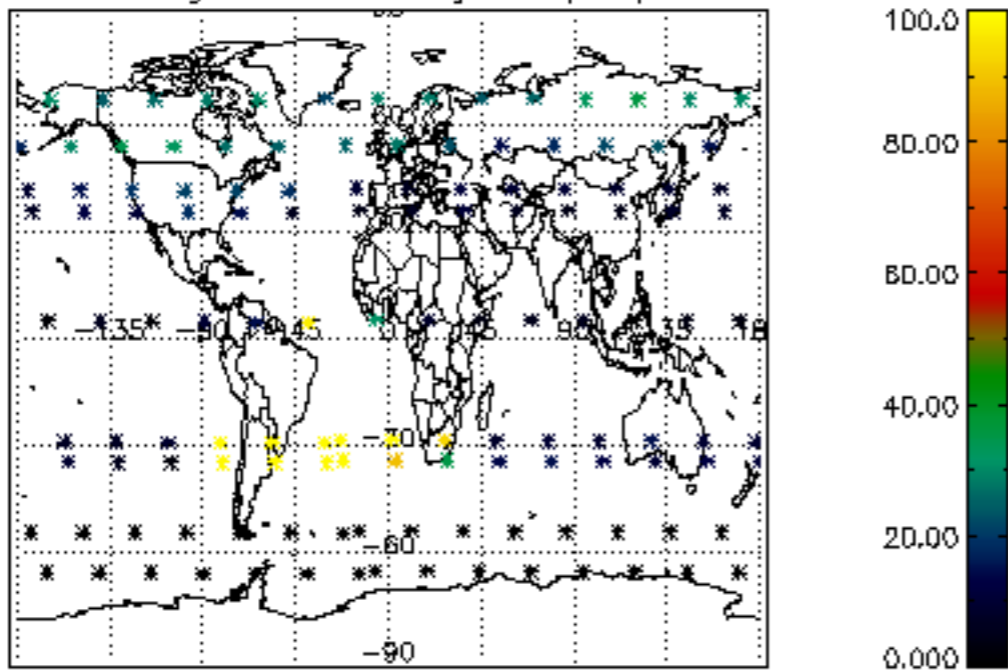
Percentage of flagged data per NO3 profile



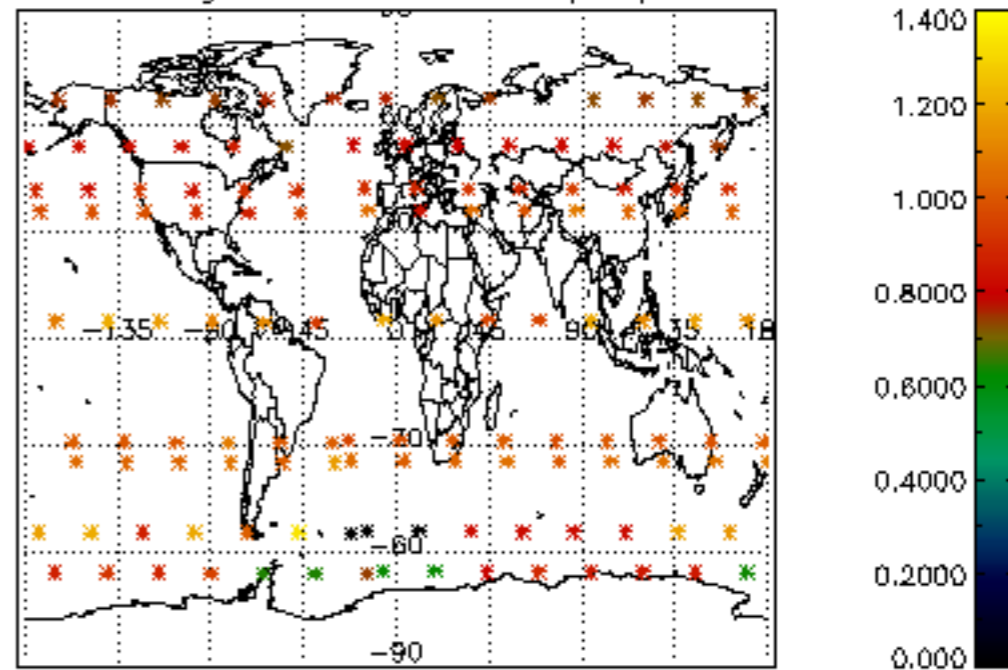




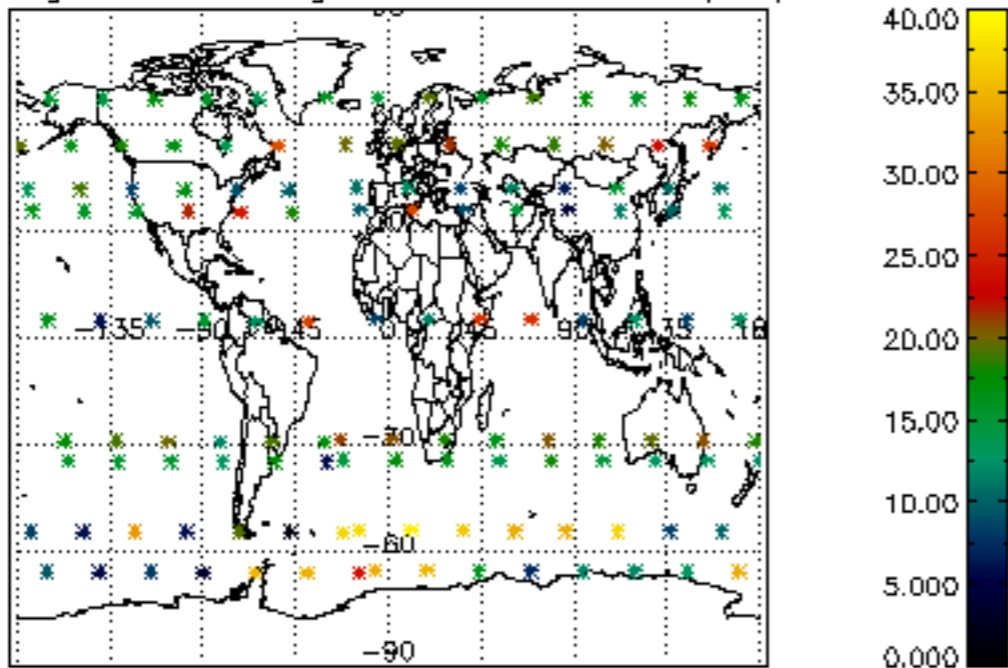
Percentage of cosmic ray hits per profile



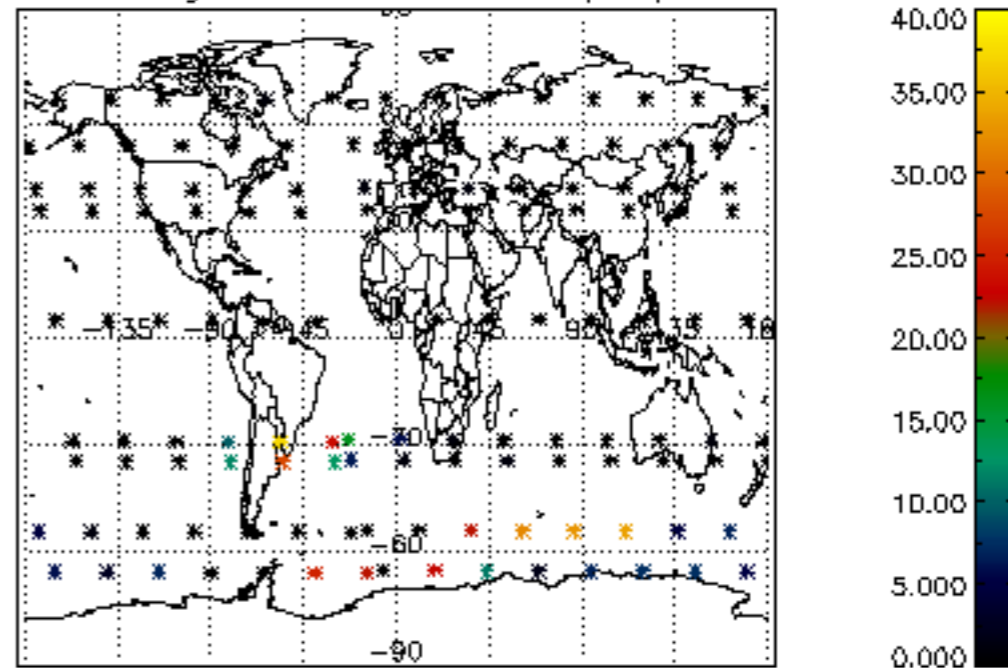
Percentage of datation errors per profile



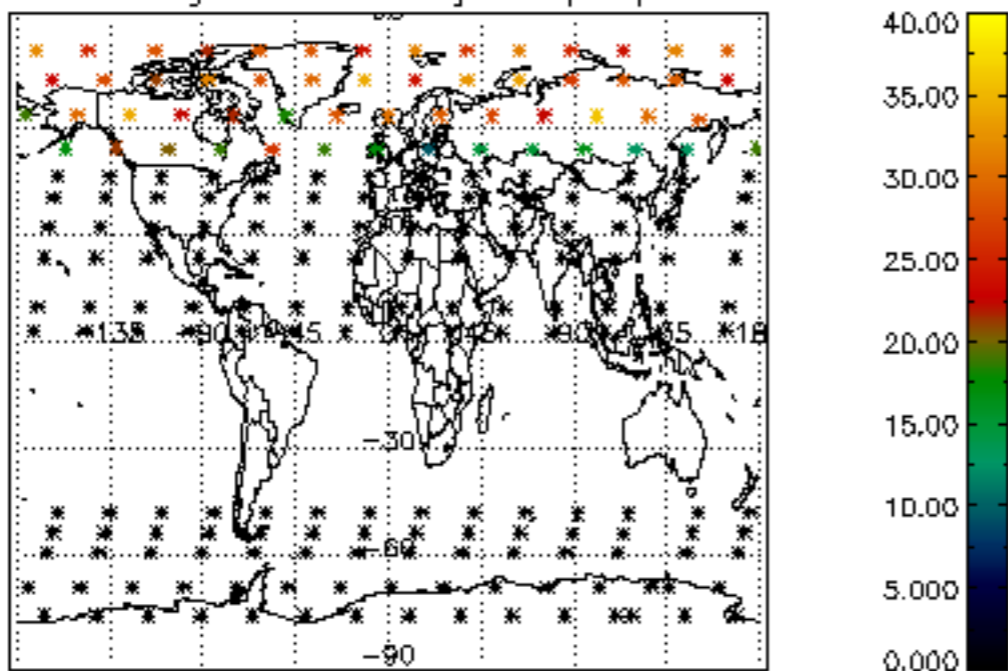
Percentage of star falling outside central band per profile



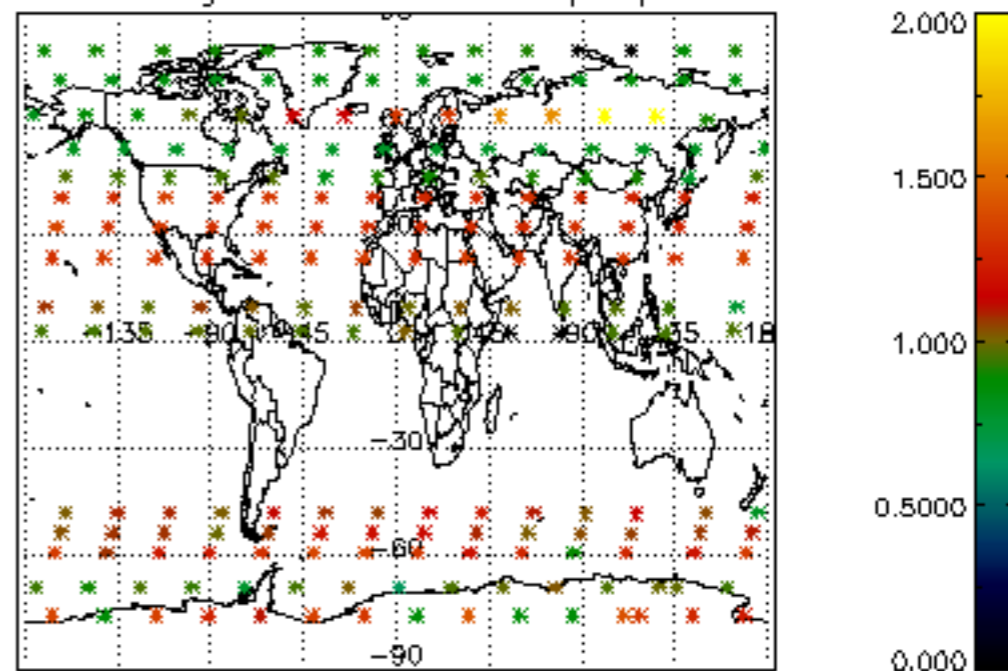
Percentage of saturation errors per profile



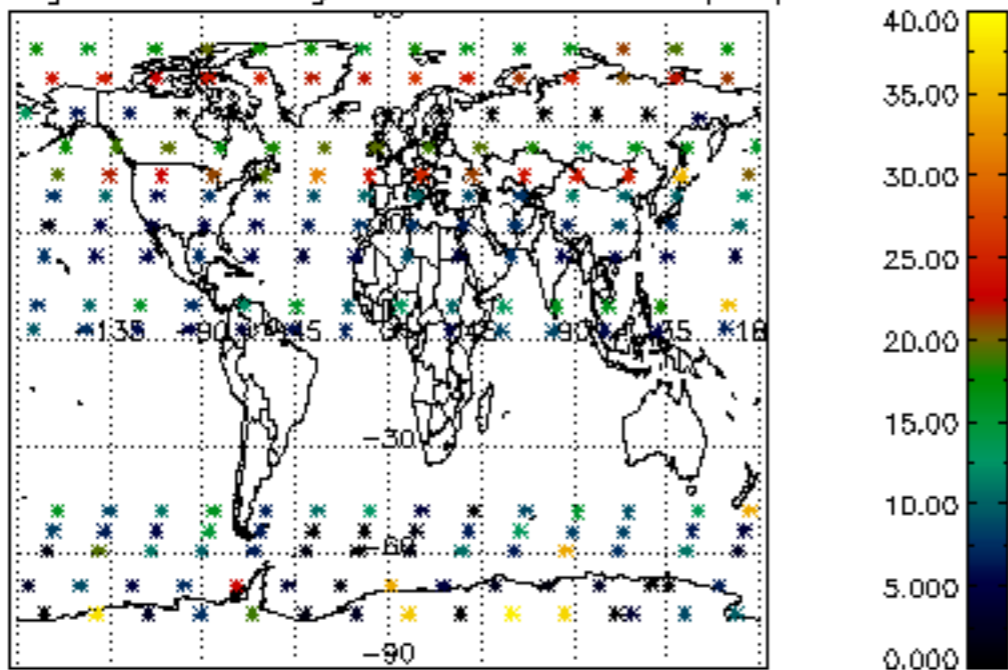
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

