

GOMOS Level 2 Daily Report

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

Item	Value
Time of report generation	25APR2013 18:00:48
Data source version	GOMOS/6.01
Start time of products	16-03-2009 (16MAR2009 00:00:00)
Stop time of products	17-03-2009 (17MAR2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	67
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

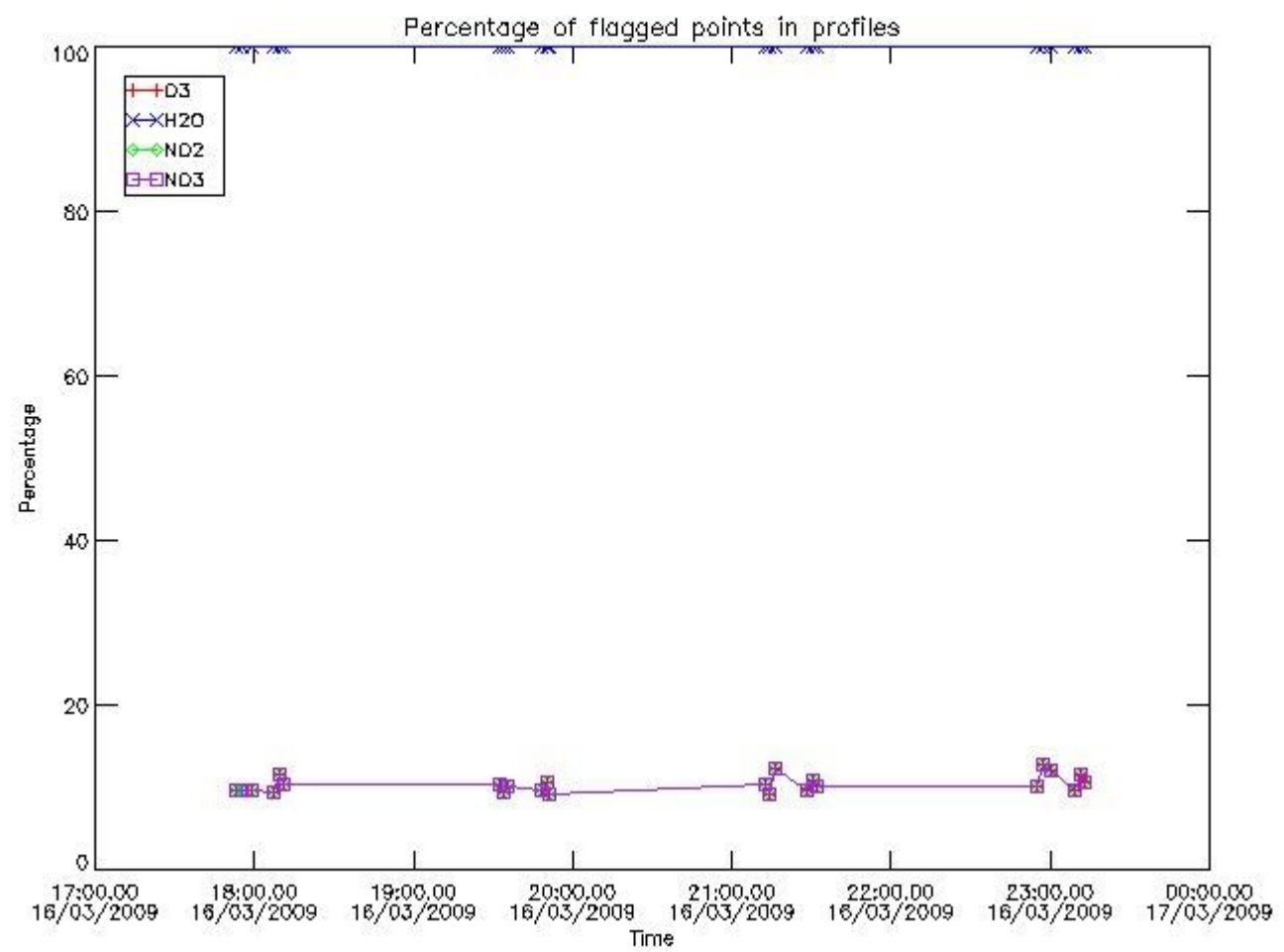
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20090316_175259_000000532077_00198_36825_9624.N1	16-MAR-2009 17:52:59	Dark	52.500	137	22Lam Sgr	2.8240	4400.0	105	36825	No
2	GOM_NL__2PRFIN20090316_175503_000000542077_00198_36825_9625.N1	16-MAR-2009 17:55:03	Dark	53.500	38	20Eps Sgr	1.8360	11000.	107	36825	No
3	GOM_NL__2PRFIN20090316_175843_000000542077_00199_36826_9641.N1	16-MAR-2009 17:58:43	Dark	53.500	25	35Lam Sco	1.6200	28000.	107	36826	No
4	GOM_NL__2PRFIN20090316_180725_000000542077_00199_36826_9642.N1	16-MAR-2009 18:07:25	Dark	54.000	131	Gam Lup	2.8000	26000.	108	36826	No
5	GOM_NL__2PRFIN20090316_180925_000000452077_00199_36826_9643.N1	16-MAR-2009 18:09:25	Dark	44.500	78	Alp Lup	2.3040	28000.	89	36826	No
6	GOM_NL__2PRFIN20090316_181052_000000502077_00199_36826_9644.N1	16-MAR-2009 18:10:52	Dark	49.500	81	Eta Cen	2.3560	28000.	99	36826	No
7	GOM_NL__2PRFIN20090316_181359_000000642077_00199_36826_9645.N1	16-MAR-2009 18:13:59	Straylight	64.000	54	5The Cen	2.0550	4500.0	128	36826	No
8	GOM_NL__2PRFIN20090316_181547_000000472077_00199_36826_9646.N1	16-MAR-2009 18:15:47	Straylight	46.500	123	lot Cen	2.7500	10200.	93	36826	No
9	GOM_NL__2PRFIN20090316_182047_000000252077_00199_36826_9647.N1	16-MAR-2009 18:20:47	Straylight	25.000	169	46Gam Hya	2.9910	4700.0	50	36826	No
10	GOM_NL__2PRFIN20090316_182210_000000532077_00199_36826_9648.N1	16-MAR-2009 18:22:10	Straylight	53.000	171	2Eps Crv	3.0010	4250.0	106	36826	No
11	GOM_NL__2PRFIN20090316_182351_000000512077_00199_36826_9649.N1	16-MAR-2009 18:23:51	Twilight_stray	51.000	100	4Gam Crv	2.5800	13100.	102	36826	No
12	GOM_NL__2PRFIN20090316_183457_000000462077_00199_36826_9650.N1	16-MAR-2009 18:34:57	Bright	46.000	62	94Bet Leo	2.1360	9700.0	92	36826	No
13	GOM_NL__2PRFIN20090316_184646_000000392077_00199_36826_9651.N1	16-MAR-2009 18:46:46	Bright	39.000	87	64Gam UMa	2.4330	11000.	78	36826	No
14	GOM_NL__2PRFIN20090316_184922_000000452077_00199_36826_9652.N1	16-MAR-2009 18:49:22	Bright	45.000	32	77Eps UMa	1.7630	11000.	90	36826	No
15	GOM_NL__2PRFIN20090316_185857_000000452077_00199_36826_9653.N1	16-MAR-2009 18:58:57	Bright	44.500	119	14Eta Dra	2.7270	4700.0	89	36826	No
16	GOM_NL__2PRFIN20090316_190356_000000512077_00199_36826_9654.N1	16-MAR-2009 19:03:56	Bright	51.000	130	23Bet Dra	2.7990	5800.0	102	36826	No
17	GOM_NL__2PRFIN20090316_191023_000000472077_00199_36826_9655.N1	16-MAR-2009 19:10:23	Bright	47.000	5	3Alp Lyr	0.033000	11000.	94	36826	No
18	GOM_NL__2PRFIN20090316_191928_000000422077_00199_36826_9656.N1	16-MAR-2009 19:19:28	Twilight_stray	41.500	118	50Gam Aql	2.7180	4600.0	83	36826	No
19	GOM_NL__2PRFIN20090316_193211_000000502077_00199_36826_9657.N1	16-MAR-2009 19:32:11	Dark	49.500	57	34Sig Sgr	2.0660	26000.	99	36826	No
20	GOM_NL__2PRFIN20090316_193336_000000552077_00199_36826_9658.N1	16-MAR-2009 19:33:36	Dark	54.500	137	22Lam Sgr	2.8240	4400.0	109	36826	No
21	GOM_NL__2PRFIN20090316_193539_000000502077_00199_36826_9659.N1	16-MAR-2009 19:35:39	Dark	50.000	38	20Eps Sgr	1.8360	11000.	100	36826	No
22	GOM_NL__2PRFIN20090316_194802_000000532077_00200_36827_9658.N1	16-MAR-2009 19:48:02	Dark	52.500	131	Gam Lup	2.8000	26000.	105	36827	No
23	GOM_NL__2PRFIN20090316_195001_000000482077_00200_36827_9659.N1	16-MAR-2009 19:50:01	Dark	48.000	78	Alp Lup	2.3040	28000.	96	36827	No
24	GOM_NL__2PRFIN20090316_195129_000000552077_00200_36827_9660.N1	16-MAR-2009 19:51:29	Dark	55.000	81	Eta Cen	2.3560	28000.	110	36827	No
25	GOM_NL__2PRFIN20090316_195436_000000662077_00200_36827_9661.N1	16-MAR-2009 19:54:36	Straylight	65.500	54	5The Cen	2.0550	4500.0	131	36827	No
26	GOM_NL__2PRFIN20090316_195624_000000502077_00200_36827_9662.N1	16-MAR-2009 19:56:24	Straylight	49.500	123	lot Cen	2.7500	10200.	99	36827	No
27	GOM_NL__2PRFIN20090316_200124_000000252077_00200_36827_9663.N1	16-MAR-2009 20:01:24	Straylight	25.000	169	46Gam Hya	2.9910	4700.0	50	36827	No
28	GOM_NL__2PRFIN20090316_200246_000000512077_00200_36827_9664.N1	16-MAR-2009 20:02:46	Straylight	51.000	171	2Eps Crv	3.0010	4250.0	102	36827	No
29	GOM_NL__2PRFIN20090316_200427_000000532077_00200_36827_9665.N1	16-MAR-2009 20:04:27	Twilight_stray	52.500	100	4Gam Crv	2.5800	13100.	105	36827	No
30	GOM_NL__2PRFIN20090316_201532_000000472077_00200_36827_9666.N1	16-MAR-2009 20:15:32	Bright	46.500	62	94Bet Leo	2.1360	9700.0	93	36827	No
31	GOM_NL__2PRFIN20090316_202721_000000412077_00200_36827_9667.N1	16-MAR-2009 20:27:21	Bright	40.500	87	64Gam UMa	2.4330	11000.	81	36827	No
32	GOM_NL__2PRFIN20090316_202957_000000432077_00200_36827_9668.N1	16-MAR-2009 20:29:57	Bright	42.500	32	77Eps UMa	1.7630	11000.	85	36827	No
33	GOM_NL__2PRFIN20090316_203932_000000442077_00200_36827_9669.N1	16-MAR-2009 20:39:32	Bright	44.000	119	14Eta Dra	2.7270	4700.0	88	36827	No
34	GOM_NL__2PRFIN20090316_204431_000000532077_00200_36827_9670.N1	16-MAR-2009 20:44:31	Bright	53.000	130	23Bet Dra	2.7990	5800.0	106	36827	No
35	GOM_NL__2PRFIN20090316_205059_000000502077_00200_36827_9671.N1	16-MAR-2009 20:50:59	Bright	50.000	5	3Alp Lyr	0.033000	11000.	100	36827	No
36	GOM_NL__2PRFIN20090316_210004_000000442077_00200_36827_9672.N1	16-MAR-2009 21:00:04	Twilight_stray	43.500	118	50Gam Aql	2.7180	4600.0	87	36827	No
37	GOM_NL__2PRFIN20090316_211248_000000502077_00200_36827_9673.N1	16-MAR-2009 21:12:48	Dark	49.500	57	34Sig Sgr	2.0660	26000.	99	36827	No
38	GOM_NL__2PRFIN20090316_211413_000000552077_00200_36827_9674.N1	16-MAR-2009 21:14:13	Dark	55.000	137	22Lam Sgr	2.8240	4400.0	110	36827	No
39	GOM_NL__2PRFIN20090316_211616_000000462077_00200_36827_9675.N1	16-MAR-2009 21:16:16	Dark	46.000	38	20Eps Sgr	1.8360	11000.	92	36827	No
40	GOM_NL__2PRFIN20090316_212839_000000532077_00201_36828_9675.N1	16-MAR-2009 21:28:39	Dark	53.000	131	Gam Lup	2.8000	26000.	106	36828	No
41	GOM_NL__2PRFIN20090316_213038_000000482077_00201_36828_9676.N1	16-MAR-2009 21:30:38	Dark	47.500	78	Alp Lup	2.3040	28000.	95	36828	No
42	GOM_NL__2PRFIN20090316_213206_000000502077_00201_36828_9677.N1	16-MAR-2009 21:32:06	Dark	50.000	81	Eta Cen	2.3560	28000.	100	36828	No

43	GOM_NL__2PRFIN20090316_213513_000000632077_00201_36828_9678.N1	16-MAR-2009 21:35:13	Straylight	63.000	54	5The Cen	2.0550	4500.0	126	36828	No
44	GOM_NL__2PRFIN20090316_213700_000000552077_00201_36828_9679.N1	16-MAR-2009 21:37:00	Straylight	54.500	123	lot Cen	2.7500	10200.	109	36828	No
45	GOM_NL__2PRFIN20090316_214159_000000292077_00201_36828_9680.N1	16-MAR-2009 21:41:59	Straylight	29.000	169	46Gam Hya	2.9910	4700.0	58	36828	No
46	GOM_NL__2PRFIN20090316_214322_000000522077_00201_36828_9681.N1	16-MAR-2009 21:43:22	Straylight	51.500	171	2Eps Crv	3.0010	4250.0	103	36828	No
47	GOM_NL__2PRFIN20090316_214503_000000512077_00201_36828_9682.N1	16-MAR-2009 21:45:03	Tw_i_and_stray	51.000	100	4Gam Crv	2.5800	13100.	102	36828	No
48	GOM_NL__2PRFIN20090316_215607_000000462077_00201_36828_9683.N1	16-MAR-2009 21:56:07	Bright	46.000	62	94Bet Leo	2.1360	9700.0	92	36828	No
49	GOM_NL__2PRFIN20090316_220757_000000432077_00201_36828_9684.N1	16-MAR-2009 22:07:57	Bright	43.000	87	64Gam UMa	2.4330	11000.	86	36828	No
50	GOM_NL__2PRFIN20090316_221033_000000452077_00201_36828_9685.N1	16-MAR-2009 22:10:33	Bright	45.000	32	77Eps UMa	1.7630	11000.	90	36828	No
51	GOM_NL__2PRFIN20090316_222007_000000502077_00201_36828_9686.N1	16-MAR-2009 22:20:07	Bright	49.500	119	14Eta Dra	2.7270	4700.0	99	36828	No
52	GOM_NL__2PRFIN20090316_222507_000000522077_00201_36828_9687.N1	16-MAR-2009 22:25:07	Bright	52.000	130	23Bet Dra	2.7990	5800.0	104	36828	No
53	GOM_NL__2PRFIN20090316_223135_000000502077_00201_36828_9688.N1	16-MAR-2009 22:31:35	Bright	50.000	5	3Alp Lyr	0.033000	11000.	100	36828	No
54	GOM_NL__2PRFIN20090316_225450_000000512077_00201_36828_9689.N1	16-MAR-2009 22:54:50	Dark	50.500	137	22Lam Sgr	2.8240	4400.0	101	36828	No
55	GOM_NL__2PRFIN20090316_225653_000000562077_00201_36828_9690.N1	16-MAR-2009 22:56:53	Dark	55.500	38	20Eps Sgr	1.8360	11000.	111	36828	No
56	GOM_NL__2PRFIN20090316_230034_000000512077_00202_36829_9687.N1	16-MAR-2009 23:00:34	Dark	50.500	25	35Lam Sco	1.6200	28000.	101	36829	No
57	GOM_NL__2PRFIN20090316_230915_000000542077_00202_36829_9688.N1	16-MAR-2009 23:09:15	Dark	53.500	131	Gam Lup	2.8000	26000.	107	36829	No
58	GOM_NL__2PRFIN20090316_231115_000000492077_00202_36829_9689.N1	16-MAR-2009 23:11:15	Dark	48.500	78	Alp Lup	2.3040	28000.	97	36829	No
59	GOM_NL__2PRFIN20090316_231242_000000532077_00202_36829_9690.N1	16-MAR-2009 23:12:42	Dark	53.000	81	Eta Cen	2.3560	28000.	106	36829	No
60	GOM_NL__2PRFIN20090316_231549_000000612077_00202_36829_9691.N1	16-MAR-2009 23:15:49	Straylight	60.500	54	5The Cen	2.0550	4500.0	121	36829	No
61	GOM_NL__2PRFIN20090316_231737_000000522077_00202_36829_9692.N1	16-MAR-2009 23:17:37	Straylight	52.000	123	lot Cen	2.7500	10200.	104	36829	No
62	GOM_NL__2PRFIN20090316_232236_000000292077_00202_36829_9693.N1	16-MAR-2009 23:22:36	Straylight	29.000	169	46Gam Hya	2.9910	4700.0	58	36829	No
63	GOM_NL__2PRFIN20090316_232358_000000532077_00202_36829_9694.N1	16-MAR-2009 23:23:58	Straylight	53.000	171	2Eps Crv	3.0010	4250.0	106	36829	No
64	GOM_NL__2PRFIN20090316_232539_000000482077_00202_36829_9695.N1	16-MAR-2009 23:25:39	Tw_i_and_stray	47.500	100	4Gam Crv	2.5800	13100.	95	36829	No
65	GOM_NL__2PRFIN20090316_233643_000000452077_00202_36829_9696.N1	16-MAR-2009 23:36:43	Bright	45.000	62	94Bet Leo	2.1360	9700.0	90	36829	No
66	GOM_NL__2PRFIN20090316_234832_000000392077_00202_36829_9697.N1	16-MAR-2009 23:48:32	Bright	39.000	87	64Gam UMa	2.4330	11000.	78	36829	No
67	GOM_NL__2PRFIN20090316_235108_000000462077_00202_36829_9698.N1	16-MAR-2009 23:51:08	Bright	46.000	32	77Eps UMa	1.7630	11000.	92	36829	No

3. Quality information per product

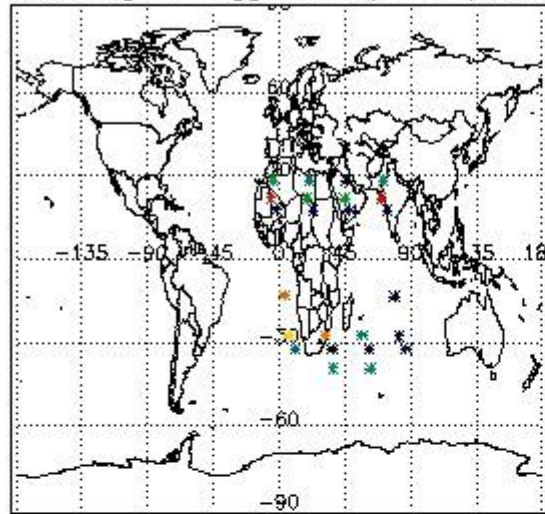
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

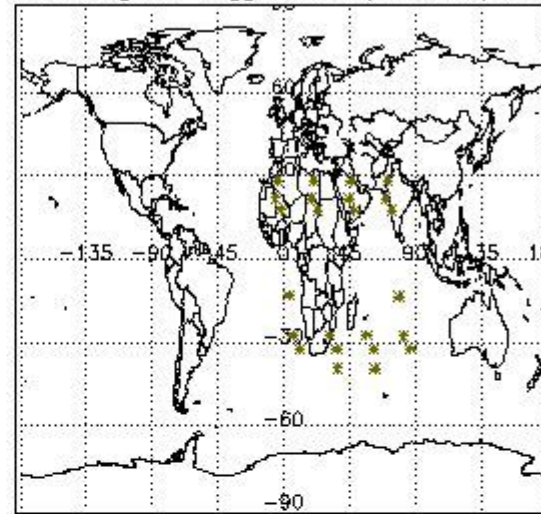


3.2 Plot quality information per product (world map)

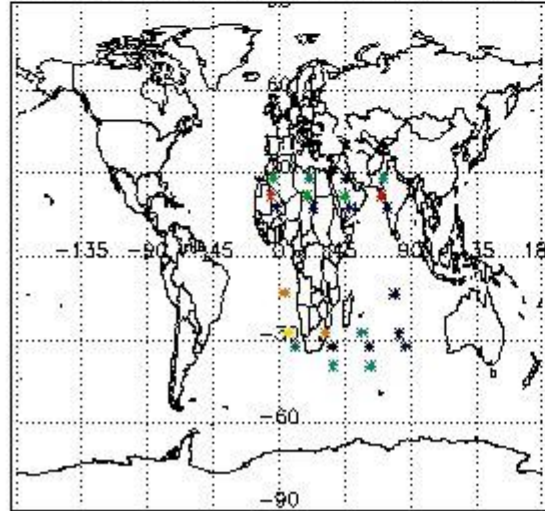
Percentage of flagged data per O3 profile



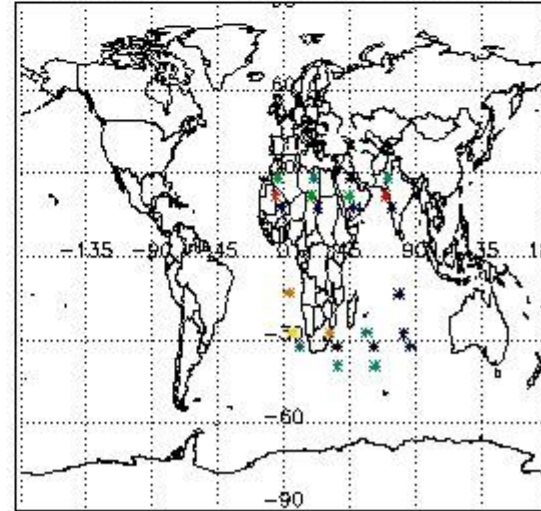
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

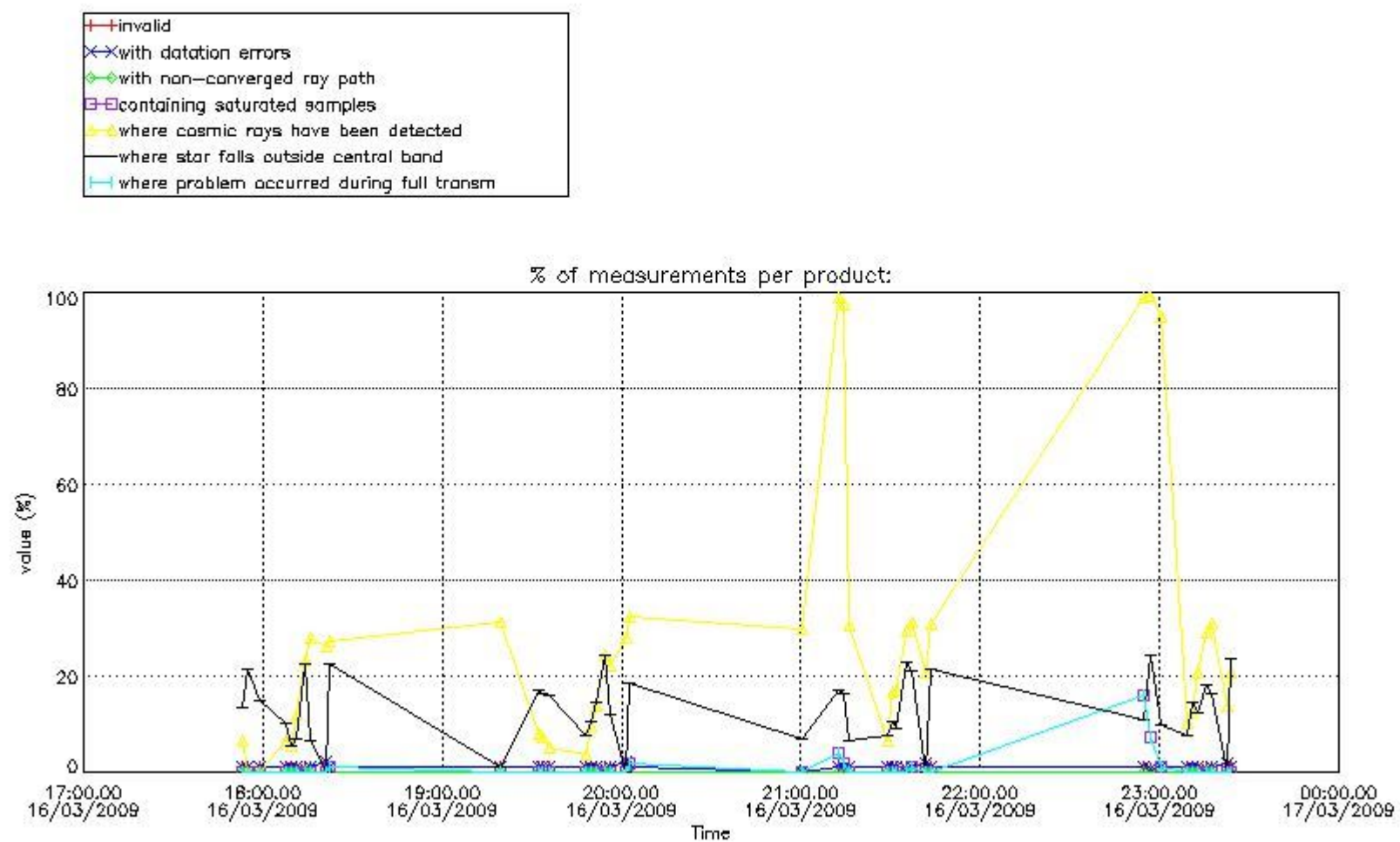


4. Level 1 quality information per product

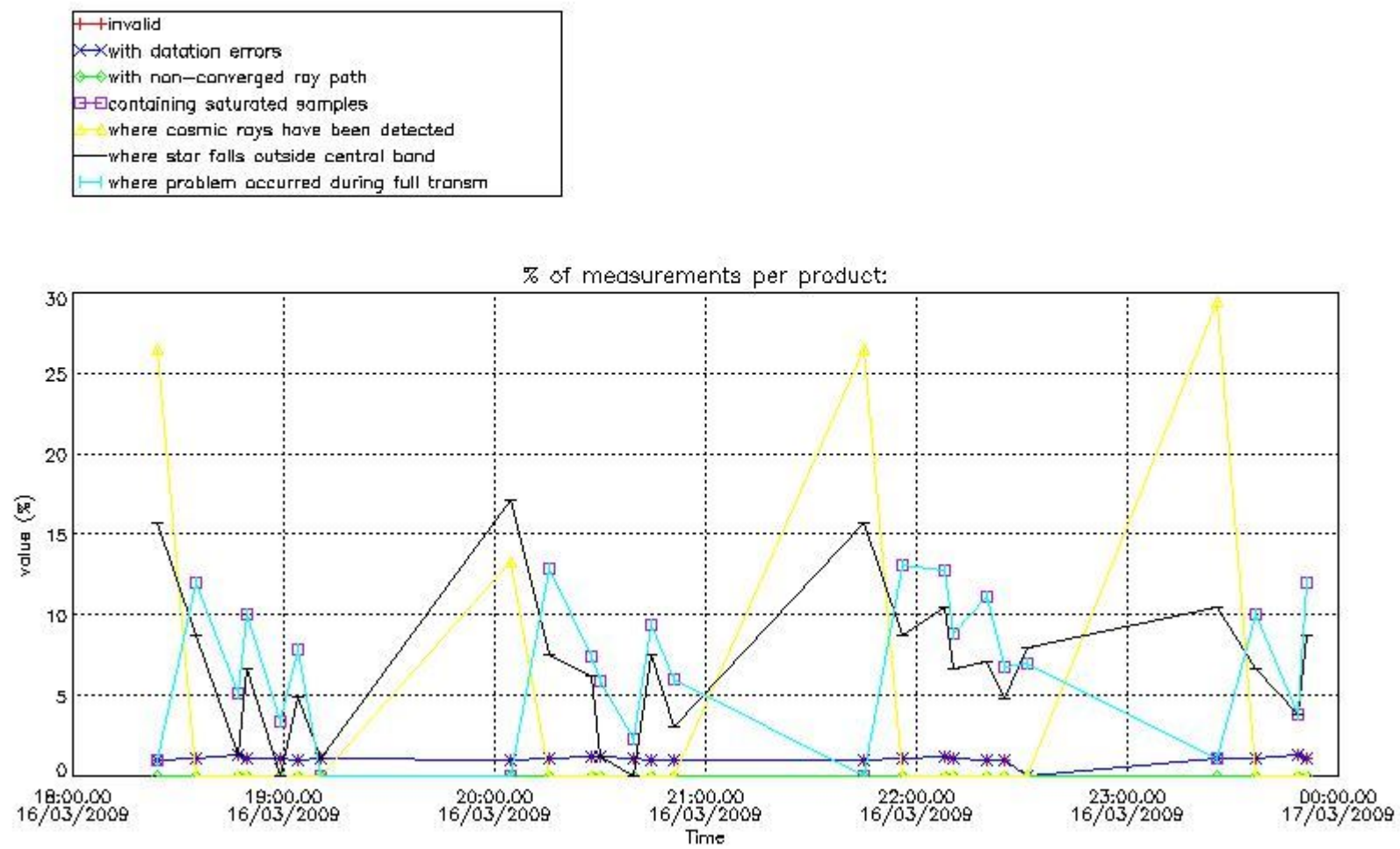
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



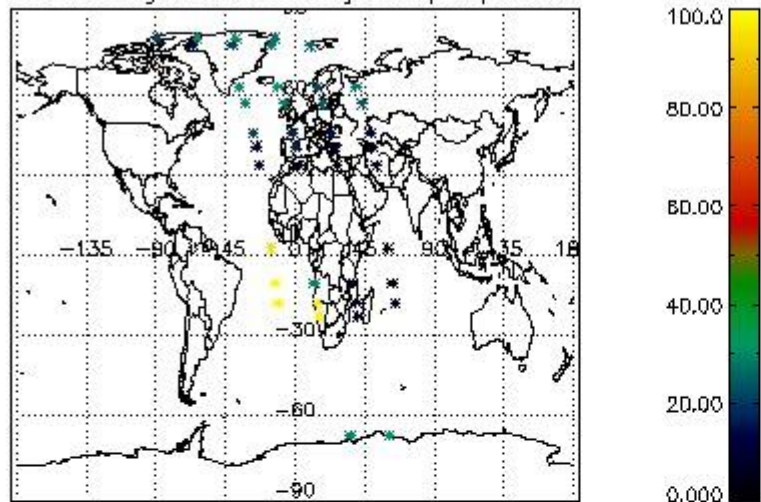
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



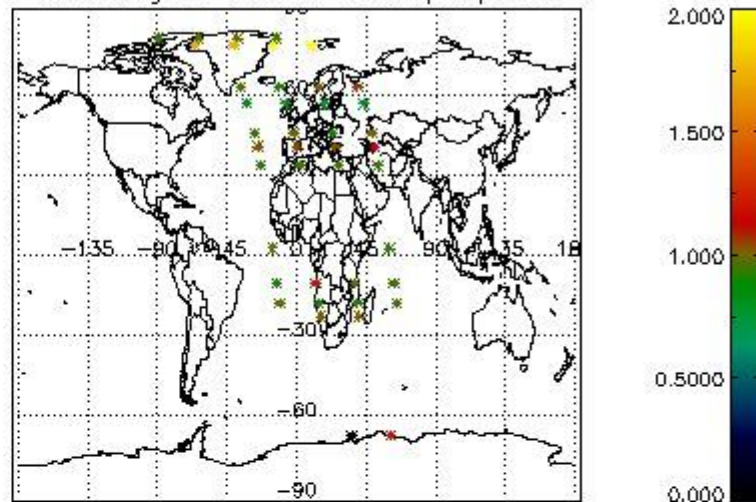
4.2 Plot quality information per product coming from level 1b processing (world map)

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

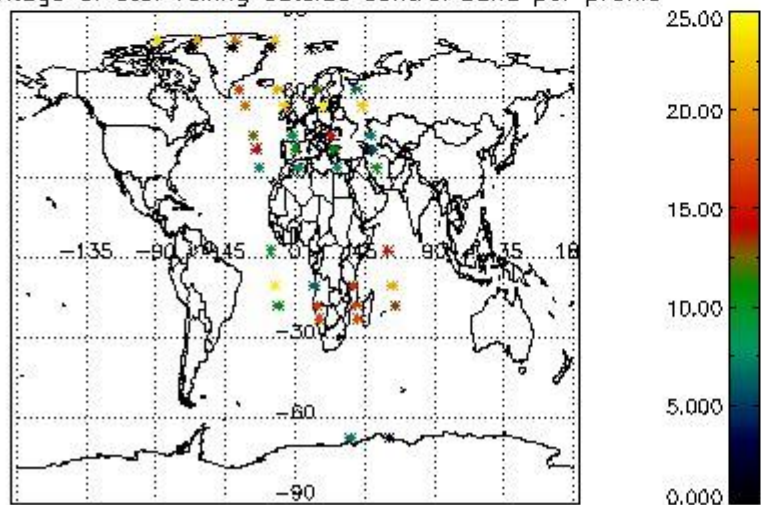
Percentage of cosmic ray hits per profile



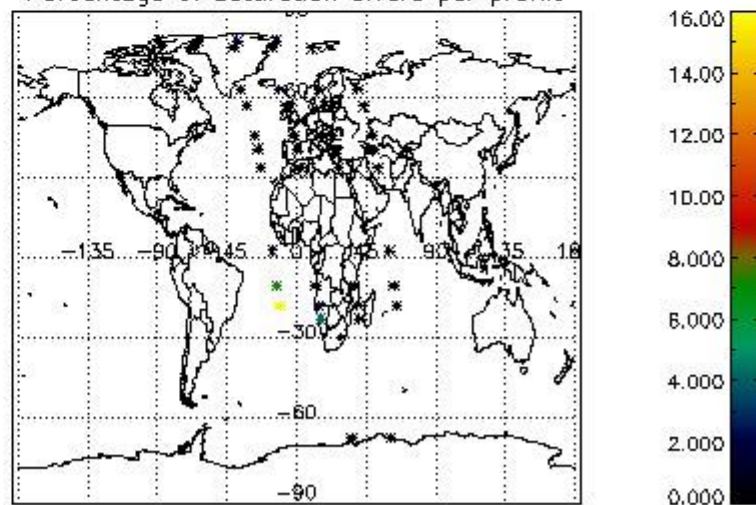
Percentage of datation errors per profile



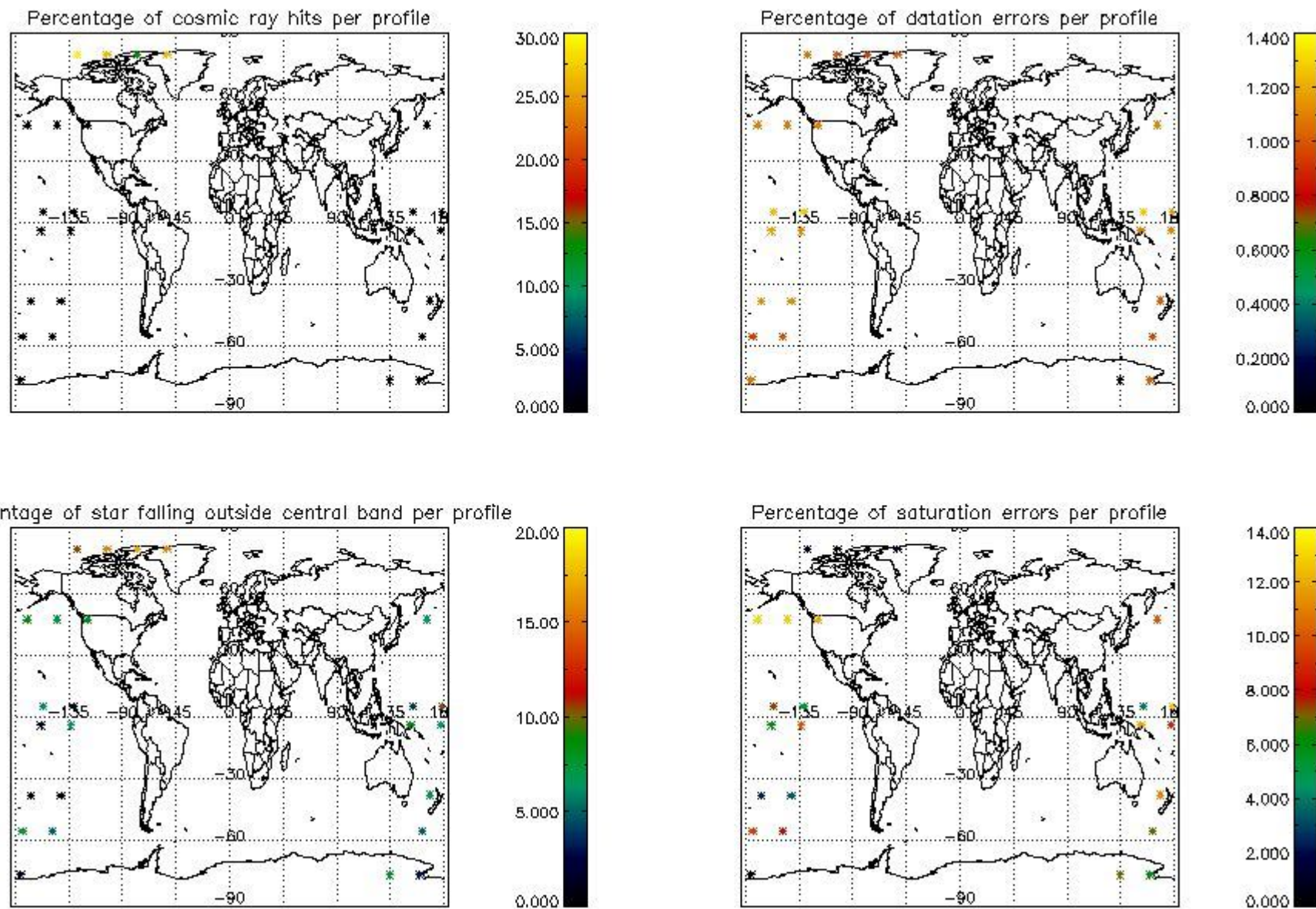
Percentage of star falling outside central band per profile



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

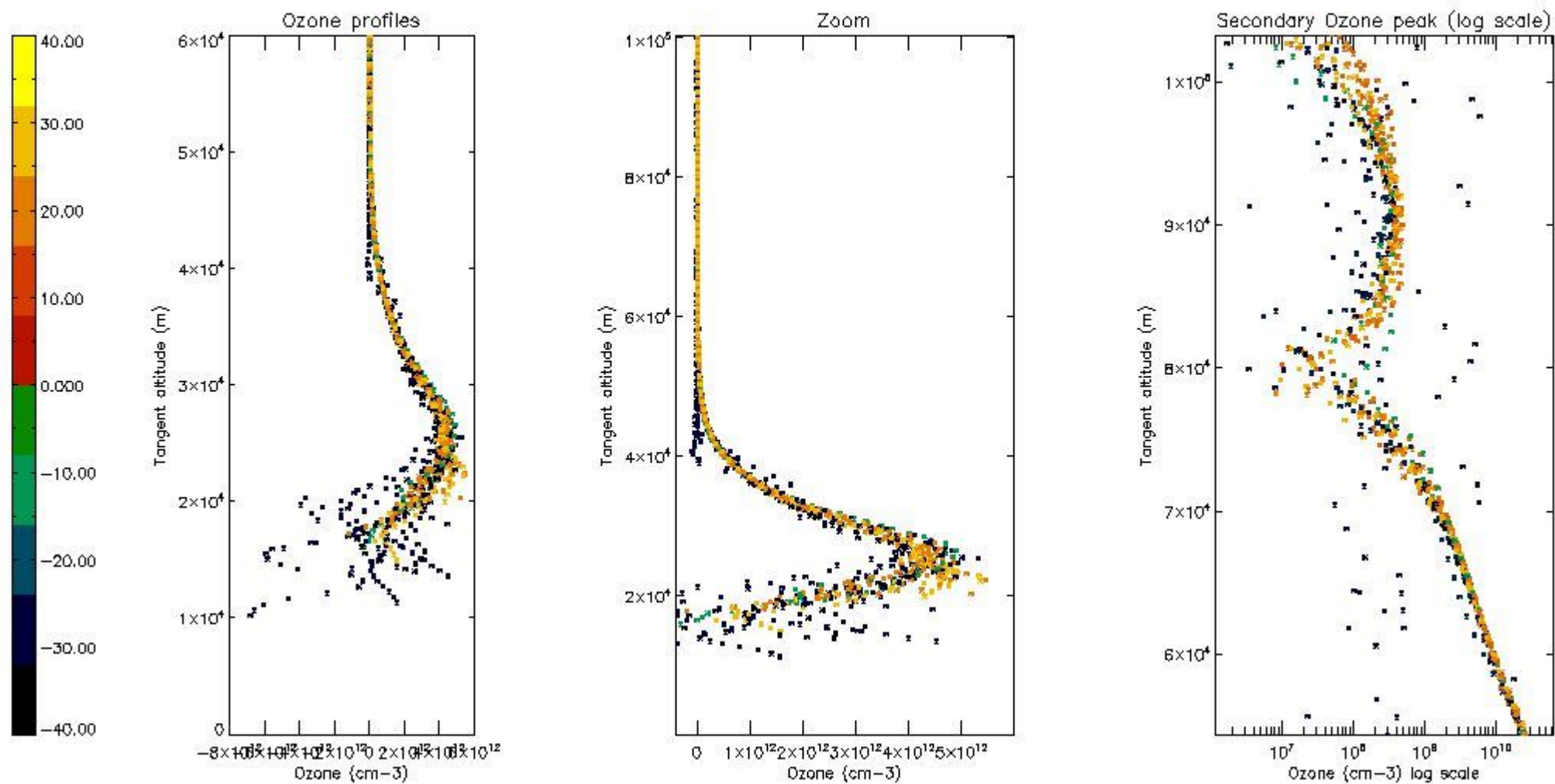
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	38
STD < 20	22

STD < 10	18
STD < 5	14

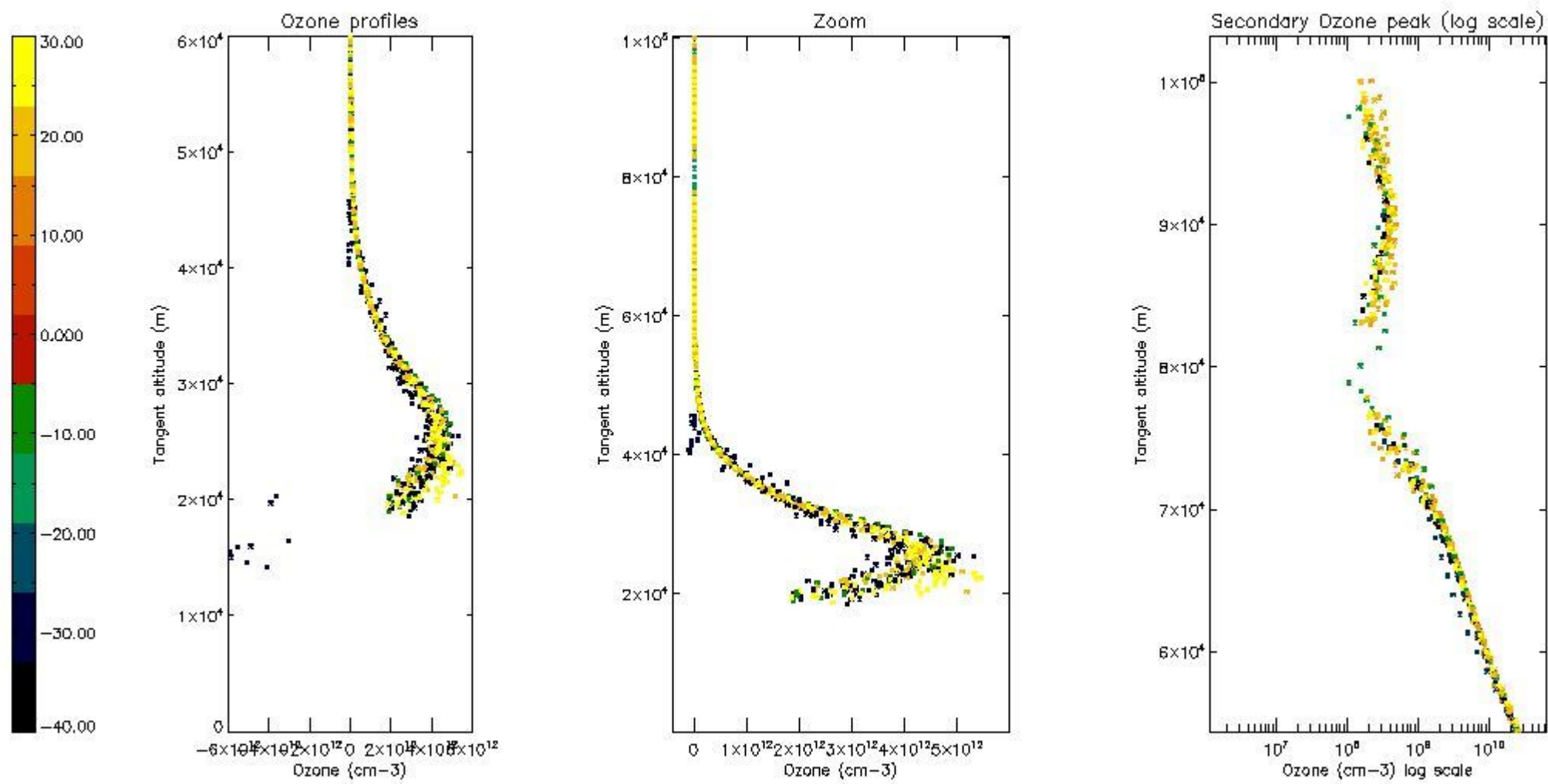
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



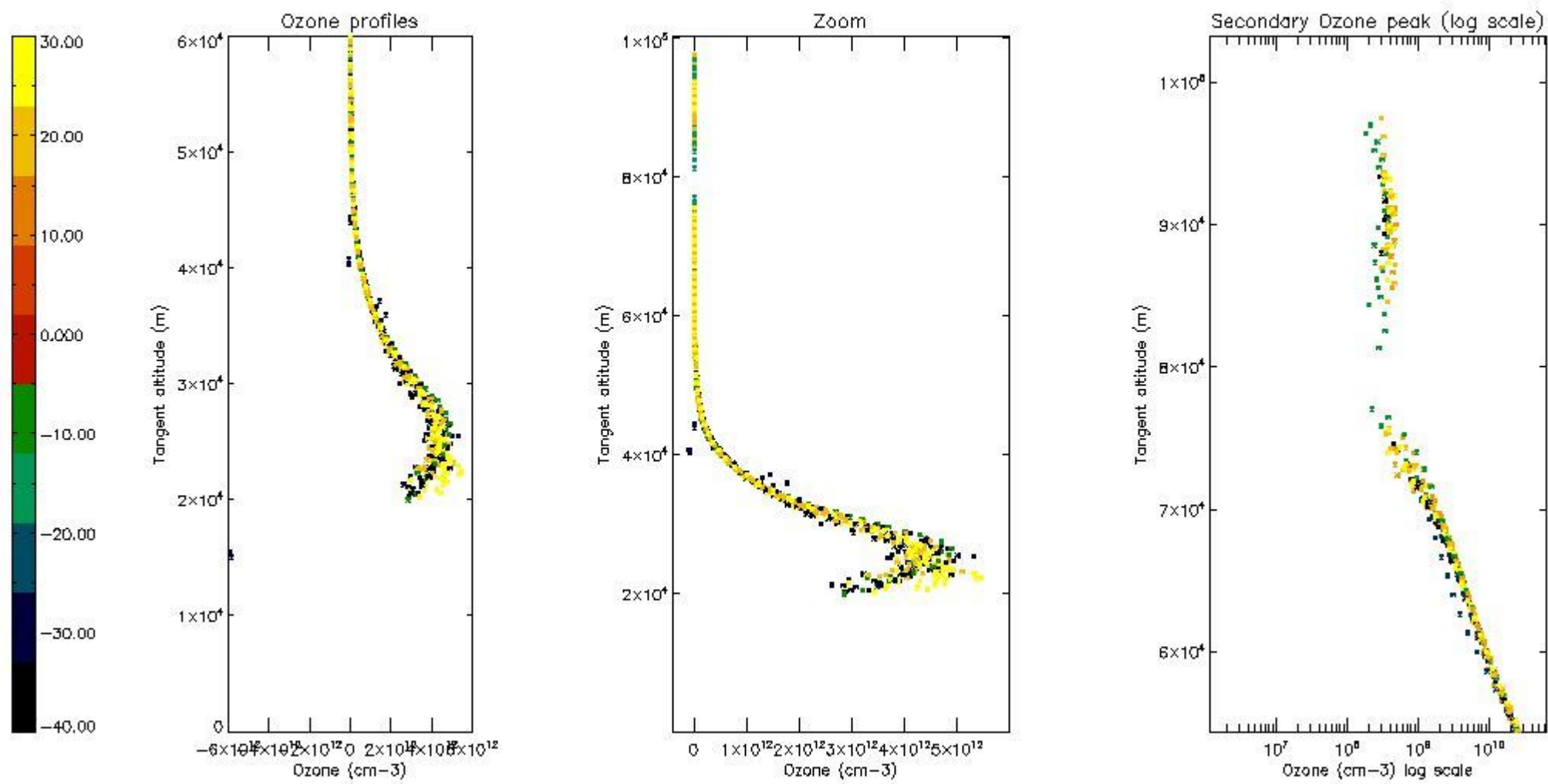
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



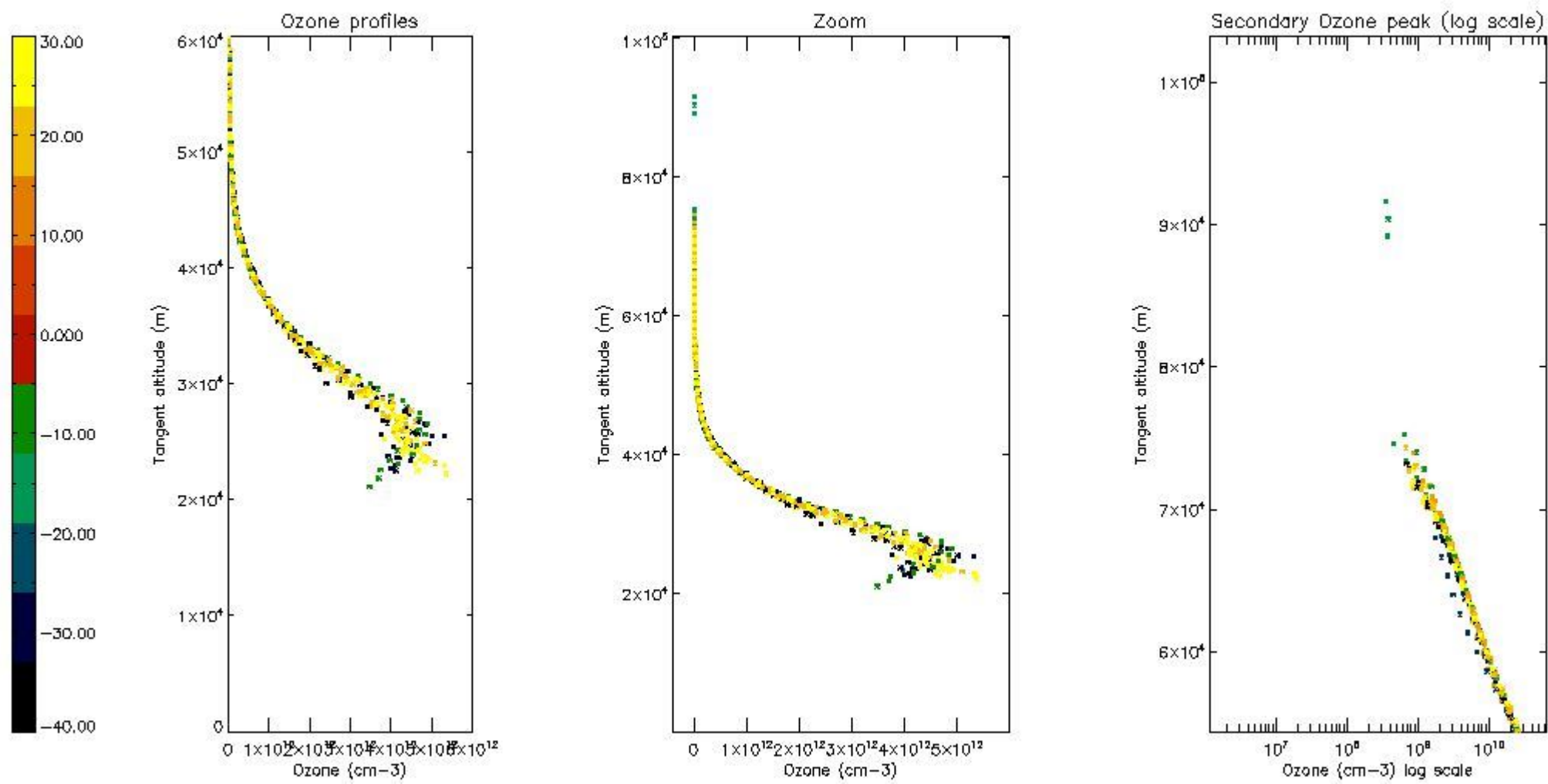
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



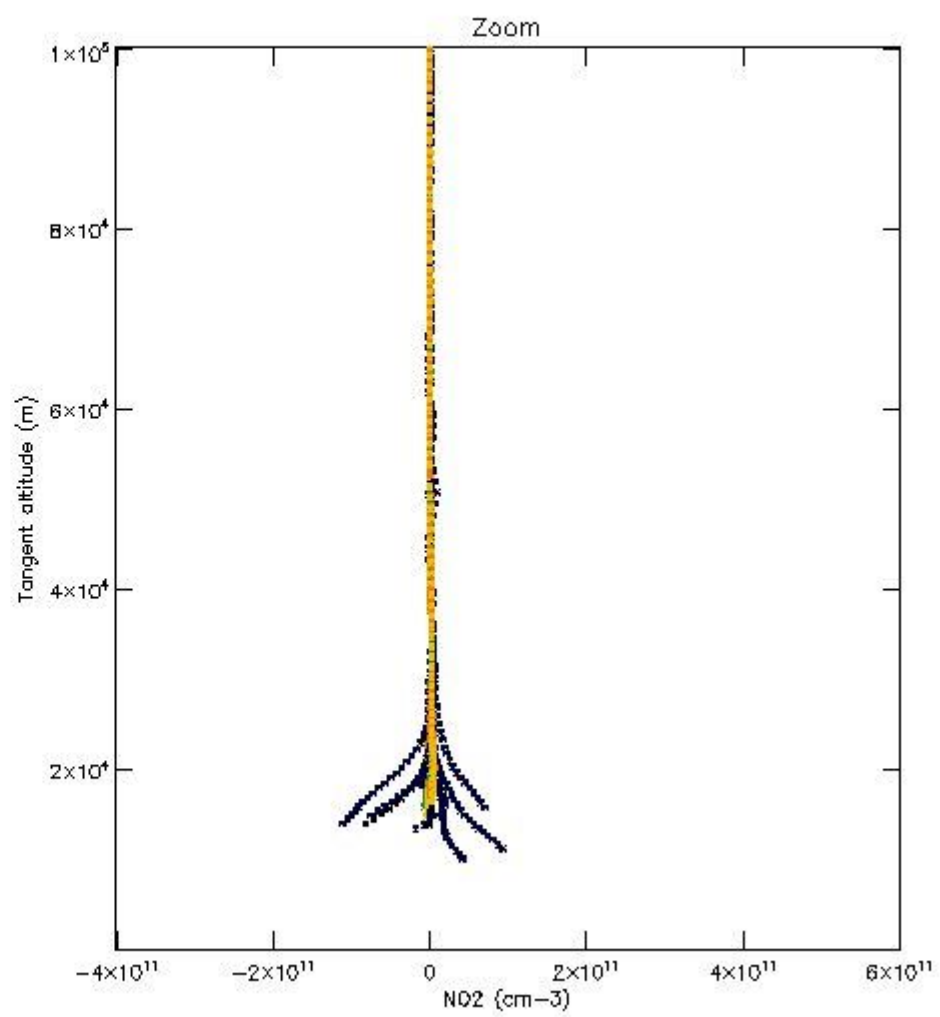
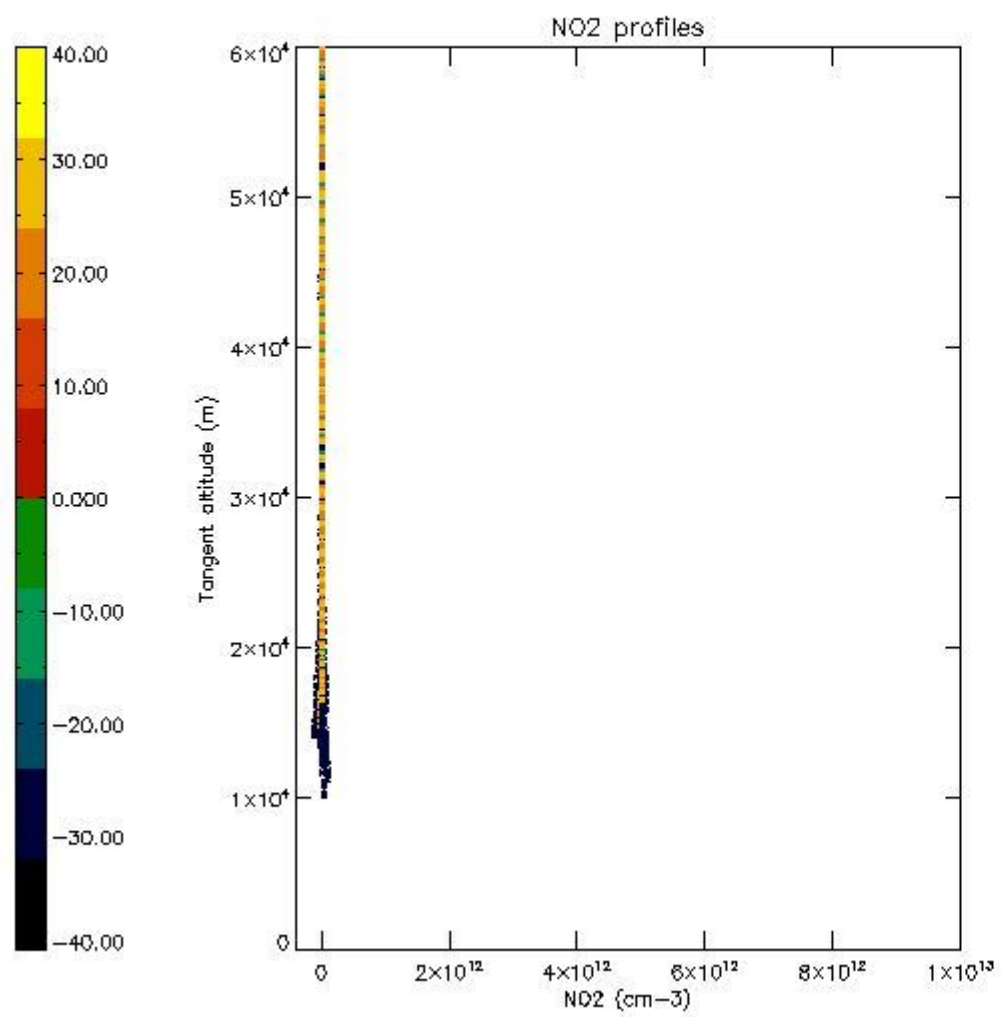
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



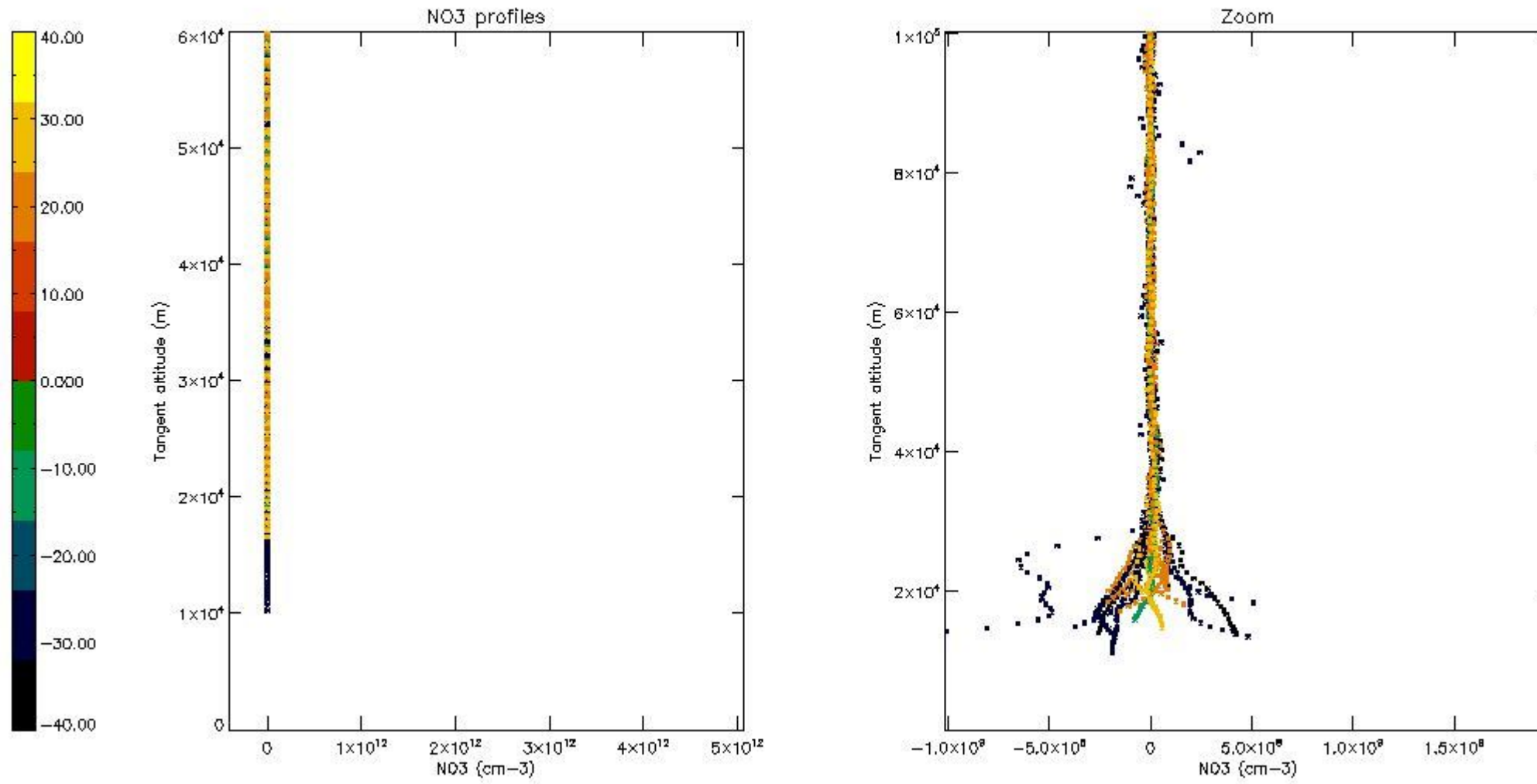
5.6 Plot NO₂ profiles for all STD (dark without errors)

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	16-MAR-2009 17:52:59
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	16-MAR-2009 17:52:59
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	16-MAR-2009 17:52:59

GOMOS Level 2 Daily Report

SUMMARY

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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	25APR2013 18:00:48
Data source version	GOMOS/6.01
Start time of products	16-03-2009 (16MAR2009 00:00:00)
Stop time of products	17-03-2009 (17MAR2009 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	67
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

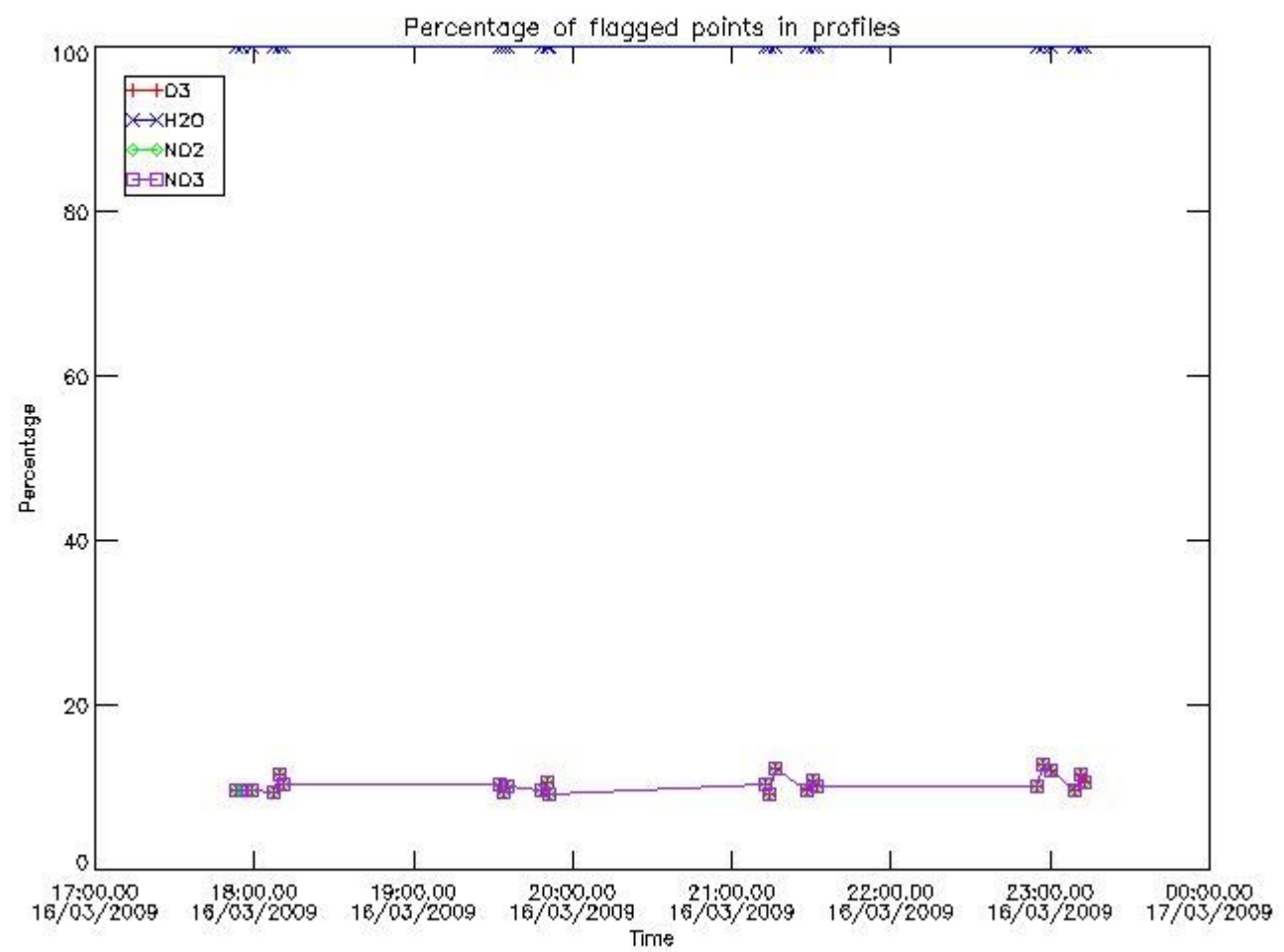
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20090316_175259_000000532077_00198_36825_9624.N1	16-MAR-2009 17:52:59	Dark	52.500	137	22Lam Sgr	2.8240	4400.0	105	36825	No
2	GOM_NL__2PRFIN20090316_175503_000000542077_00198_36825_9625.N1	16-MAR-2009 17:55:03	Dark	53.500	38	20Eps Sgr	1.8360	11000.	107	36825	No
3	GOM_NL__2PRFIN20090316_175843_000000542077_00199_36826_9641.N1	16-MAR-2009 17:58:43	Dark	53.500	25	35Lam Sco	1.6200	28000.	107	36826	No
4	GOM_NL__2PRFIN20090316_180725_000000542077_00199_36826_9642.N1	16-MAR-2009 18:07:25	Dark	54.000	131	Gam Lup	2.8000	26000.	108	36826	No
5	GOM_NL__2PRFIN20090316_180925_000000452077_00199_36826_9643.N1	16-MAR-2009 18:09:25	Dark	44.500	78	Alp Lup	2.3040	28000.	89	36826	No
6	GOM_NL__2PRFIN20090316_181052_000000502077_00199_36826_9644.N1	16-MAR-2009 18:10:52	Dark	49.500	81	Eta Cen	2.3560	28000.	99	36826	No
7	GOM_NL__2PRFIN20090316_181359_000000642077_00199_36826_9645.N1	16-MAR-2009 18:13:59	Straylight	64.000	54	5The Cen	2.0550	4500.0	128	36826	No
8	GOM_NL__2PRFIN20090316_181547_000000472077_00199_36826_9646.N1	16-MAR-2009 18:15:47	Straylight	46.500	123	lot Cen	2.7500	10200.	93	36826	No
9	GOM_NL__2PRFIN20090316_182047_000000252077_00199_36826_9647.N1	16-MAR-2009 18:20:47	Straylight	25.000	169	46Gam Hya	2.9910	4700.0	50	36826	No
10	GOM_NL__2PRFIN20090316_182210_000000532077_00199_36826_9648.N1	16-MAR-2009 18:22:10	Straylight	53.000	171	2Eps Crv	3.0010	4250.0	106	36826	No
11	GOM_NL__2PRFIN20090316_182351_000000512077_00199_36826_9649.N1	16-MAR-2009 18:23:51	Twilight_and_stray	51.000	100	4Gam Crv	2.5800	13100.	102	36826	No
12	GOM_NL__2PRFIN20090316_183457_000000462077_00199_36826_9650.N1	16-MAR-2009 18:34:57	Bright	46.000	62	94Bet Leo	2.1360	9700.0	92	36826	No
13	GOM_NL__2PRFIN20090316_184646_000000392077_00199_36826_9651.N1	16-MAR-2009 18:46:46	Bright	39.000	87	64Gam UMa	2.4330	11000.	78	36826	No
14	GOM_NL__2PRFIN20090316_184922_000000452077_00199_36826_9652.N1	16-MAR-2009 18:49:22	Bright	45.000	32	77Eps UMa	1.7630	11000.	90	36826	No
15	GOM_NL__2PRFIN20090316_185857_000000452077_00199_36826_9653.N1	16-MAR-2009 18:58:57	Bright	44.500	119	14Eta Dra	2.7270	4700.0	89	36826	No
16	GOM_NL__2PRFIN20090316_190356_000000512077_00199_36826_9654.N1	16-MAR-2009 19:03:56	Bright	51.000	130	23Bet Dra	2.7990	5800.0	102	36826	No
17	GOM_NL__2PRFIN20090316_191023_000000472077_00199_36826_9655.N1	16-MAR-2009 19:10:23	Bright	47.000	5	3Alp Lyr	0.033000	11000.	94	36826	No
18	GOM_NL__2PRFIN20090316_191928_000000422077_00199_36826_9656.N1	16-MAR-2009 19:19:28	Twilight_and_stray	41.500	118	50Gam Aql	2.7180	4600.0	83	36826	No
19	GOM_NL__2PRFIN20090316_193211_000000502077_00199_36826_9657.N1	16-MAR-2009 19:32:11	Dark	49.500	57	34Sig Sgr	2.0660	26000.	99	36826	No
20	GOM_NL__2PRFIN20090316_193336_000000552077_00199_36826_9658.N1	16-MAR-2009 19:33:36	Dark	54.500	137	22Lam Sgr	2.8240	4400.0	109	36826	No
21	GOM_NL__2PRFIN20090316_193539_000000502077_00199_36826_9659.N1	16-MAR-2009 19:35:39	Dark	50.000	38	20Eps Sgr	1.8360	11000.	100	36826	No
22	GOM_NL__2PRFIN20090316_194802_000000532077_00200_36827_9658.N1	16-MAR-2009 19:48:02	Dark	52.500	131	Gam Lup	2.8000	26000.	105	36827	No
23	GOM_NL__2PRFIN20090316_195001_000000482077_00200_36827_9659.N1	16-MAR-2009 19:50:01	Dark	48.000	78	Alp Lup	2.3040	28000.	96	36827	No
24	GOM_NL__2PRFIN20090316_195129_000000552077_00200_36827_9660.N1	16-MAR-2009 19:51:29	Dark	55.000	81	Eta Cen	2.3560	28000.	110	36827	No
25	GOM_NL__2PRFIN20090316_195436_000000662077_00200_36827_9661.N1	16-MAR-2009 19:54:36	Straylight	65.500	54	5The Cen	2.0550	4500.0	131	36827	No
26	GOM_NL__2PRFIN20090316_195624_000000502077_00200_36827_9662.N1	16-MAR-2009 19:56:24	Straylight	49.500	123	lot Cen	2.7500	10200.	99	36827	No
27	GOM_NL__2PRFIN20090316_200124_000000252077_00200_36827_9663.N1	16-MAR-2009 20:01:24	Straylight	25.000	169	46Gam Hya	2.9910	4700.0	50	36827	No
28	GOM_NL__2PRFIN20090316_200246_000000512077_00200_36827_9664.N1	16-MAR-2009 20:02:46	Straylight	51.000	171	2Eps Crv	3.0010	4250.0	102	36827	No
29	GOM_NL__2PRFIN20090316_200427_000000532077_00200_36827_9665.N1	16-MAR-2009 20:04:27	Twilight_and_stray	52.500	100	4Gam Crv	2.5800	13100.	105	36827	No
30	GOM_NL__2PRFIN20090316_201532_000000472077_00200_36827_9666.N1	16-MAR-2009 20:15:32	Bright	46.500	62	94Bet Leo	2.1360	9700.0	93	36827	No
31	GOM_NL__2PRFIN20090316_202721_000000412077_00200_36827_9667.N1	16-MAR-2009 20:27:21	Bright	40.500	87	64Gam UMa	2.4330	11000.	81	36827	No
32	GOM_NL__2PRFIN20090316_202957_000000432077_00200_36827_9668.N1	16-MAR-2009 20:29:57	Bright	42.500	32	77Eps UMa	1.7630	11000.	85	36827	No
33	GOM_NL__2PRFIN20090316_203932_000000442077_00200_36827_9669.N1	16-MAR-2009 20:39:32	Bright	44.000	119	14Eta Dra	2.7270	4700.0	88	36827	No
34	GOM_NL__2PRFIN20090316_204431_000000532077_00200_36827_9670.N1	16-MAR-2009 20:44:31	Bright	53.000	130	23Bet Dra	2.7990	5800.0	106	36827	No
35	GOM_NL__2PRFIN20090316_205059_000000502077_00200_36827_9671.N1	16-MAR-2009 20:50:59	Bright	50.000	5	3Alp Lyr	0.033000	11000.	100	36827	No
36	GOM_NL__2PRFIN20090316_210004_000000442077_00200_36827_9672.N1	16-MAR-2009 21:00:04	Twilight_and_stray	43.500	118	50Gam Aql	2.7180	4600.0	87	36827	No
37	GOM_NL__2PRFIN20090316_211248_000000502077_00200_36827_9673.N1	16-MAR-2009 21:12:48	Dark	49.500	57	34Sig Sgr	2.0660	26000.	99	36827	No
38	GOM_NL__2PRFIN20090316_211413_000000552077_00200_36827_9674.N1	16-MAR-2009 21:14:13	Dark	55.000	137	22Lam Sgr	2.8240	4400.0	110	36827	No
39	GOM_NL__2PRFIN20090316_211616_000000462077_00200_36827_9675.N1	16-MAR-2009 21:16:16	Dark	46.000	38	20Eps Sgr	1.8360	11000.	92	36827	No
40	GOM_NL__2PRFIN20090316_212839_000000532077_00201_36828_9675.N1	16-MAR-2009 21:28:39	Dark	53.000	131	Gam Lup	2.8000	26000.	106	36828	No
41	GOM_NL__2PRFIN20090316_213038_000000482077_00201_36828_9676.N1	16-MAR-2009 21:30:38	Dark	47.500	78	Alp Lup	2.3040	28000.	95	36828	No
42	GOM_NL__2PRFIN20090316_213206_000000502077_00201_36828_9677.N1	16-MAR-2009 21:32:06	Dark	50.000	81	Eta Cen	2.3560	28000.	100	36828	No

43	GOM_NL__2PRFIN20090316_213513_000000632077_00201_36828_9678.N1	16-MAR-2009 21:35:13	Straylight	63.000	54	5The Cen	2.0550	4500.0	126	36828	No
44	GOM_NL__2PRFIN20090316_213700_000000552077_00201_36828_9679.N1	16-MAR-2009 21:37:00	Straylight	54.500	123	lot Cen	2.7500	10200.	109	36828	No
45	GOM_NL__2PRFIN20090316_214159_000000292077_00201_36828_9680.N1	16-MAR-2009 21:41:59	Straylight	29.000	169	46Gam Hya	2.9910	4700.0	58	36828	No
46	GOM_NL__2PRFIN20090316_214322_000000522077_00201_36828_9681.N1	16-MAR-2009 21:43:22	Straylight	51.500	171	2Eps Crv	3.0010	4250.0	103	36828	No
47	GOM_NL__2PRFIN20090316_214503_000000512077_00201_36828_9682.N1	16-MAR-2009 21:45:03	Tw_i_and_stray	51.000	100	4Gam Crv	2.5800	13100.	102	36828	No
48	GOM_NL__2PRFIN20090316_215607_000000462077_00201_36828_9683.N1	16-MAR-2009 21:56:07	Bright	46.000	62	94Bet Leo	2.1360	9700.0	92	36828	No
49	GOM_NL__2PRFIN20090316_220757_000000432077_00201_36828_9684.N1	16-MAR-2009 22:07:57	Bright	43.000	87	64Gam UMa	2.4330	11000.	86	36828	No
50	GOM_NL__2PRFIN20090316_221033_000000452077_00201_36828_9685.N1	16-MAR-2009 22:10:33	Bright	45.000	32	77Eps UMa	1.7630	11000.	90	36828	No
51	GOM_NL__2PRFIN20090316_222007_000000502077_00201_36828_9686.N1	16-MAR-2009 22:20:07	Bright	49.500	119	14Eta Dra	2.7270	4700.0	99	36828	No
52	GOM_NL__2PRFIN20090316_222507_000000522077_00201_36828_9687.N1	16-MAR-2009 22:25:07	Bright	52.000	130	23Bet Dra	2.7990	5800.0	104	36828	No
53	GOM_NL__2PRFIN20090316_223135_000000502077_00201_36828_9688.N1	16-MAR-2009 22:31:35	Bright	50.000	5	3Alp Lyr	0.033000	11000.	100	36828	No
54	GOM_NL__2PRFIN20090316_225450_000000512077_00201_36828_9689.N1	16-MAR-2009 22:54:50	Dark	50.500	137	22Lam Sgr	2.8240	4400.0	101	36828	No
55	GOM_NL__2PRFIN20090316_225653_000000562077_00201_36828_9690.N1	16-MAR-2009 22:56:53	Dark	55.500	38	20Eps Sgr	1.8360	11000.	111	36828	No
56	GOM_NL__2PRFIN20090316_230034_000000512077_00202_36829_9687.N1	16-MAR-2009 23:00:34	Dark	50.500	25	35Lam Sco	1.6200	28000.	101	36829	No
57	GOM_NL__2PRFIN20090316_230915_000000542077_00202_36829_9688.N1	16-MAR-2009 23:09:15	Dark	53.500	131	Gam Lup	2.8000	26000.	107	36829	No
58	GOM_NL__2PRFIN20090316_231115_000000492077_00202_36829_9689.N1	16-MAR-2009 23:11:15	Dark	48.500	78	Alp Lup	2.3040	28000.	97	36829	No
59	GOM_NL__2PRFIN20090316_231242_000000532077_00202_36829_9690.N1	16-MAR-2009 23:12:42	Dark	53.000	81	Eta Cen	2.3560	28000.	106	36829	No
60	GOM_NL__2PRFIN20090316_231549_000000612077_00202_36829_9691.N1	16-MAR-2009 23:15:49	Straylight	60.500	54	5The Cen	2.0550	4500.0	121	36829	No
61	GOM_NL__2PRFIN20090316_231737_000000522077_00202_36829_9692.N1	16-MAR-2009 23:17:37	Straylight	52.000	123	lot Cen	2.7500	10200.	104	36829	No
62	GOM_NL__2PRFIN20090316_232236_000000292077_00202_36829_9693.N1	16-MAR-2009 23:22:36	Straylight	29.000	169	46Gam Hya	2.9910	4700.0	58	36829	No
63	GOM_NL__2PRFIN20090316_232358_000000532077_00202_36829_9694.N1	16-MAR-2009 23:23:58	Straylight	53.000	171	2Eps Crv	3.0010	4250.0	106	36829	No
64	GOM_NL__2PRFIN20090316_232539_000000482077_00202_36829_9695.N1	16-MAR-2009 23:25:39	Tw_i_and_stray	47.500	100	4Gam Crv	2.5800	13100.	95	36829	No
65	GOM_NL__2PRFIN20090316_233643_000000452077_00202_36829_9696.N1	16-MAR-2009 23:36:43	Bright	45.000	62	94Bet Leo	2.1360	9700.0	90	36829	No
66	GOM_NL__2PRFIN20090316_234832_000000392077_00202_36829_9697.N1	16-MAR-2009 23:48:32	Bright	39.000	87	64Gam UMa	2.4330	11000.	78	36829	No
67	GOM_NL__2PRFIN20090316_235108_000000462077_00202_36829_9698.N1	16-MAR-2009 23:51:08	Bright	46.000	32	77Eps UMa	1.7630	11000.	92	36829	No

3. Quality information per product

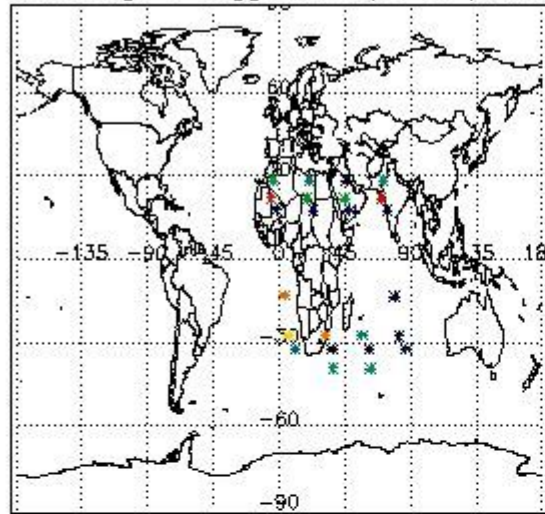
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

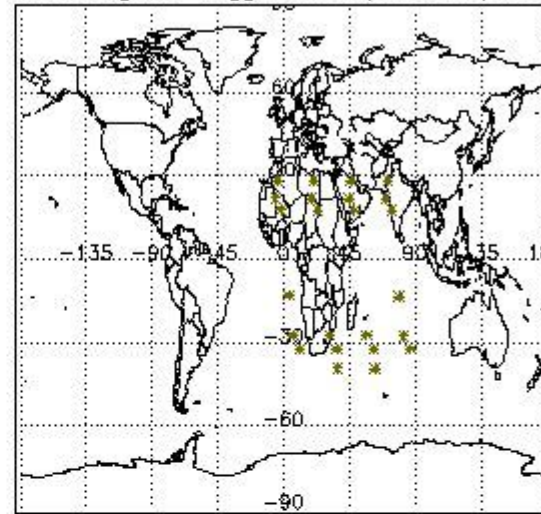


3.2 Plot quality information per product (world map)

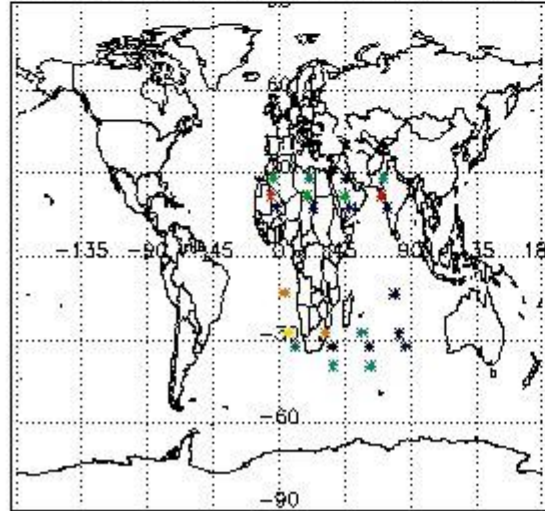
Percentage of flagged data per O3 profile



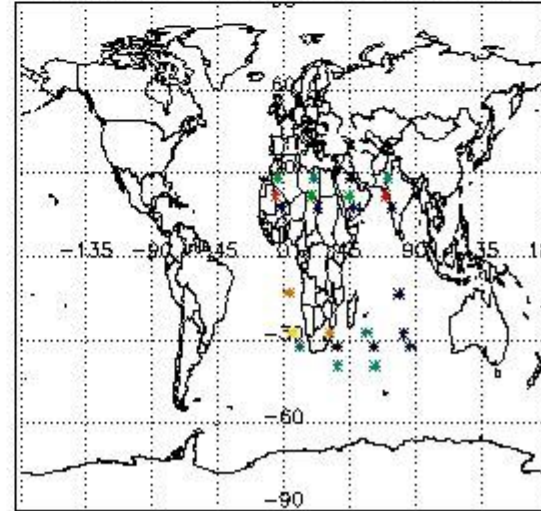
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

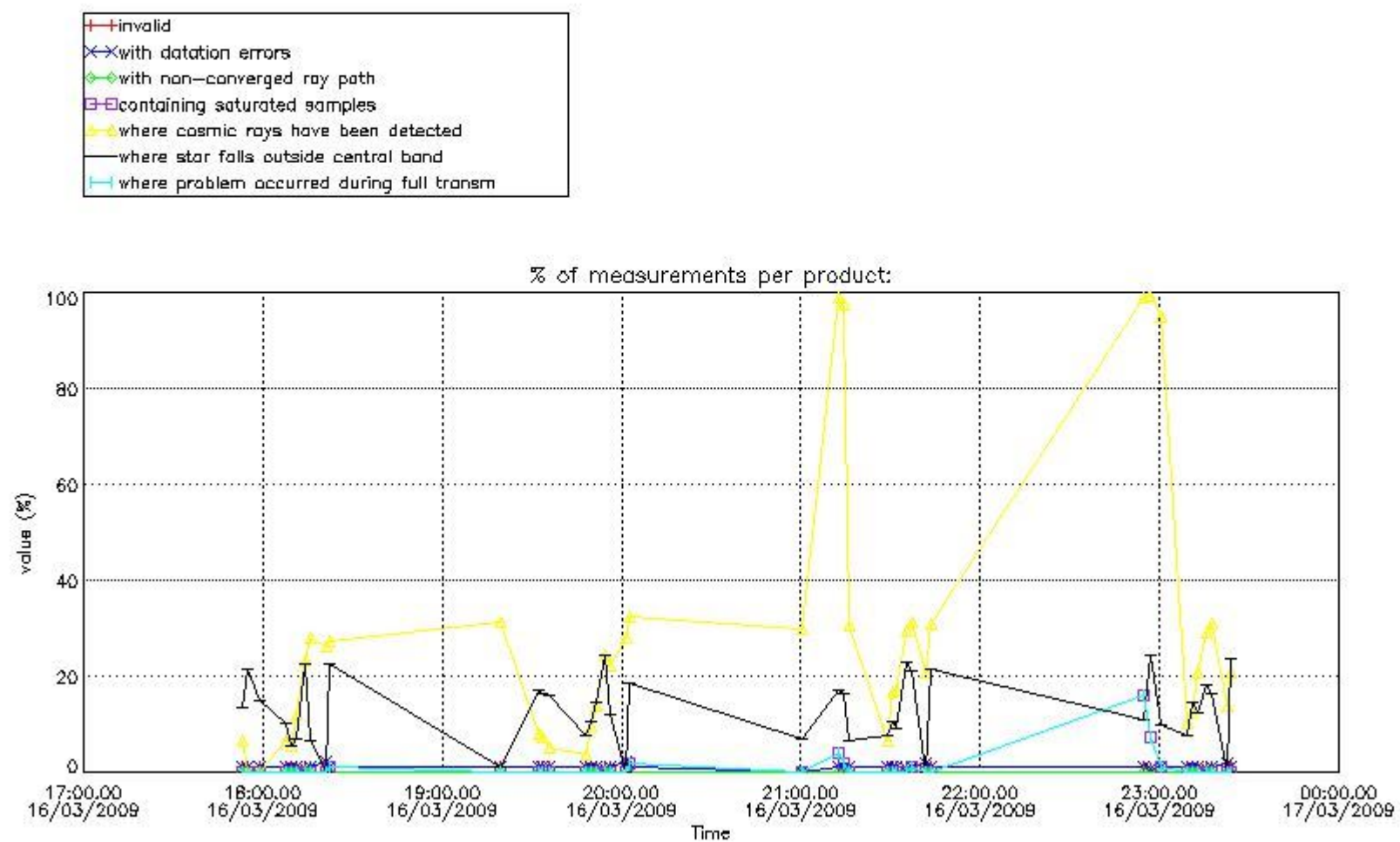


4. Level 1 quality information per product

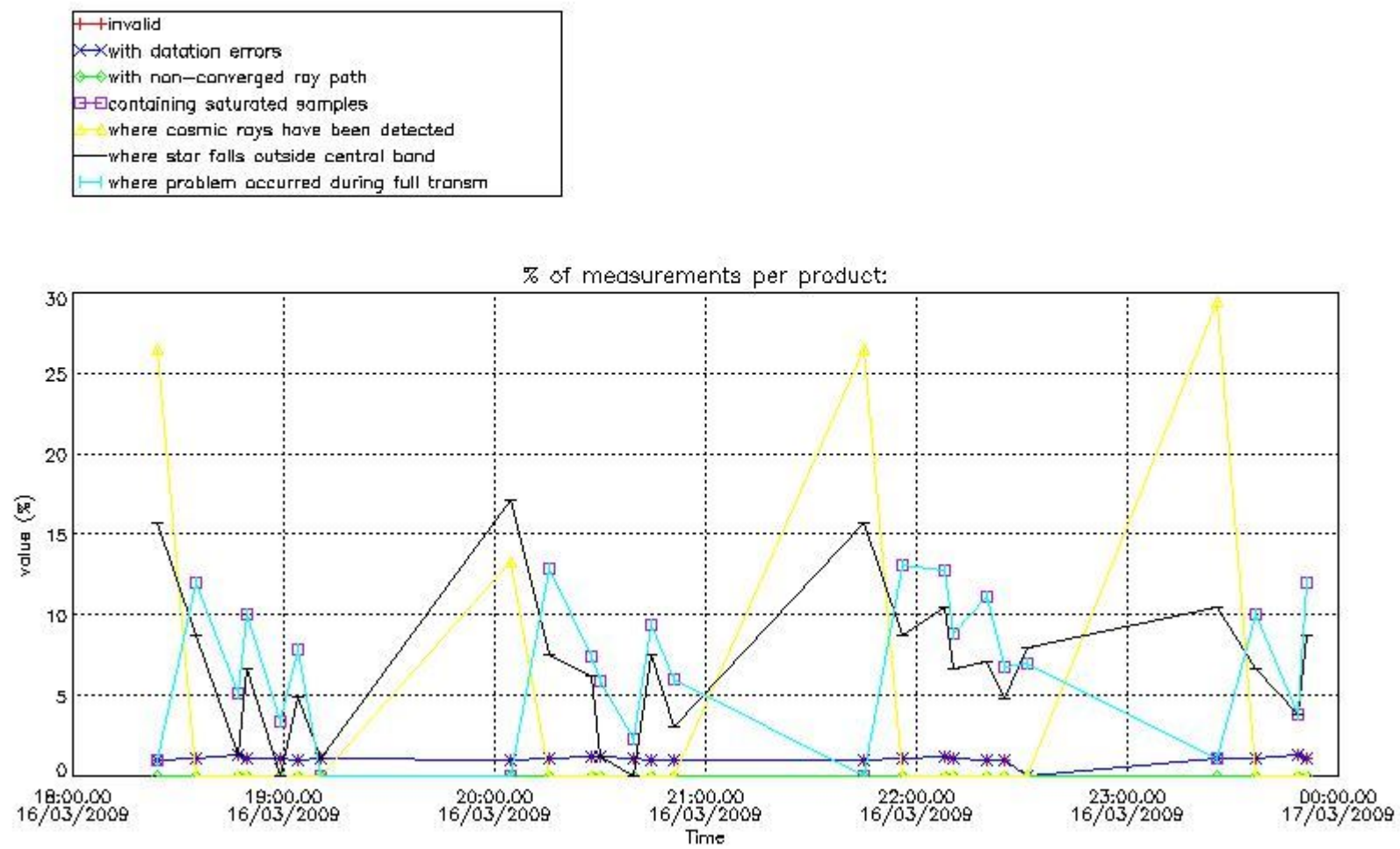
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



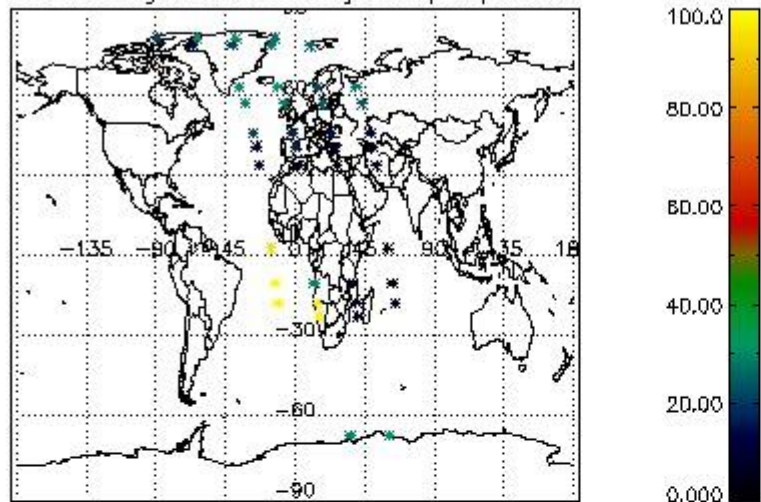
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



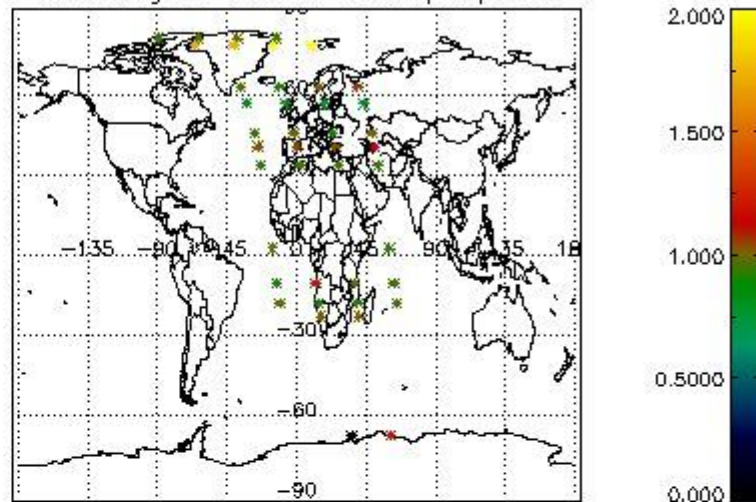
4.2 Plot quality information per product coming from level 1b processing (world map)

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

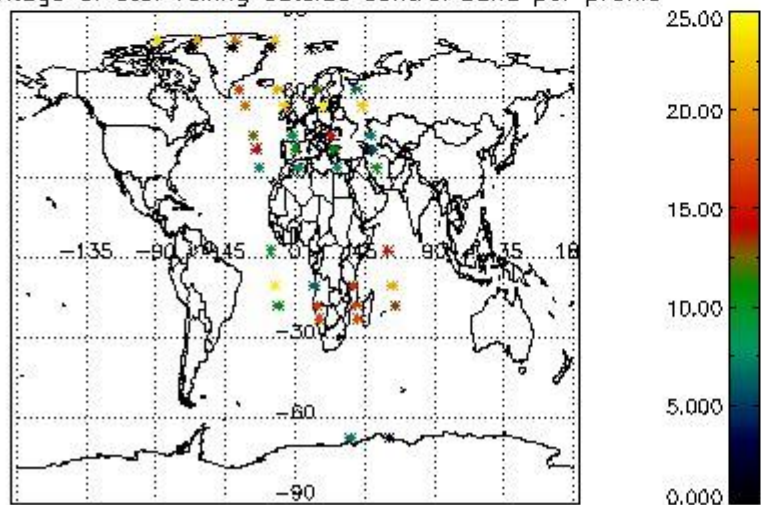
Percentage of cosmic ray hits per profile



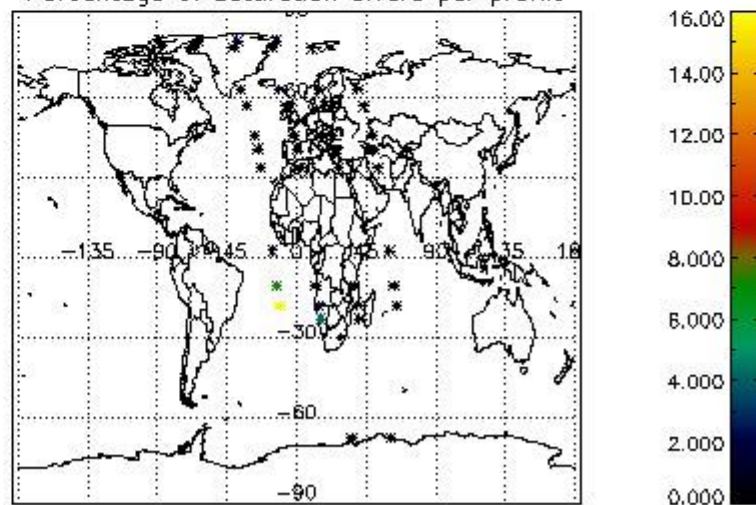
Percentage of datation errors per profile



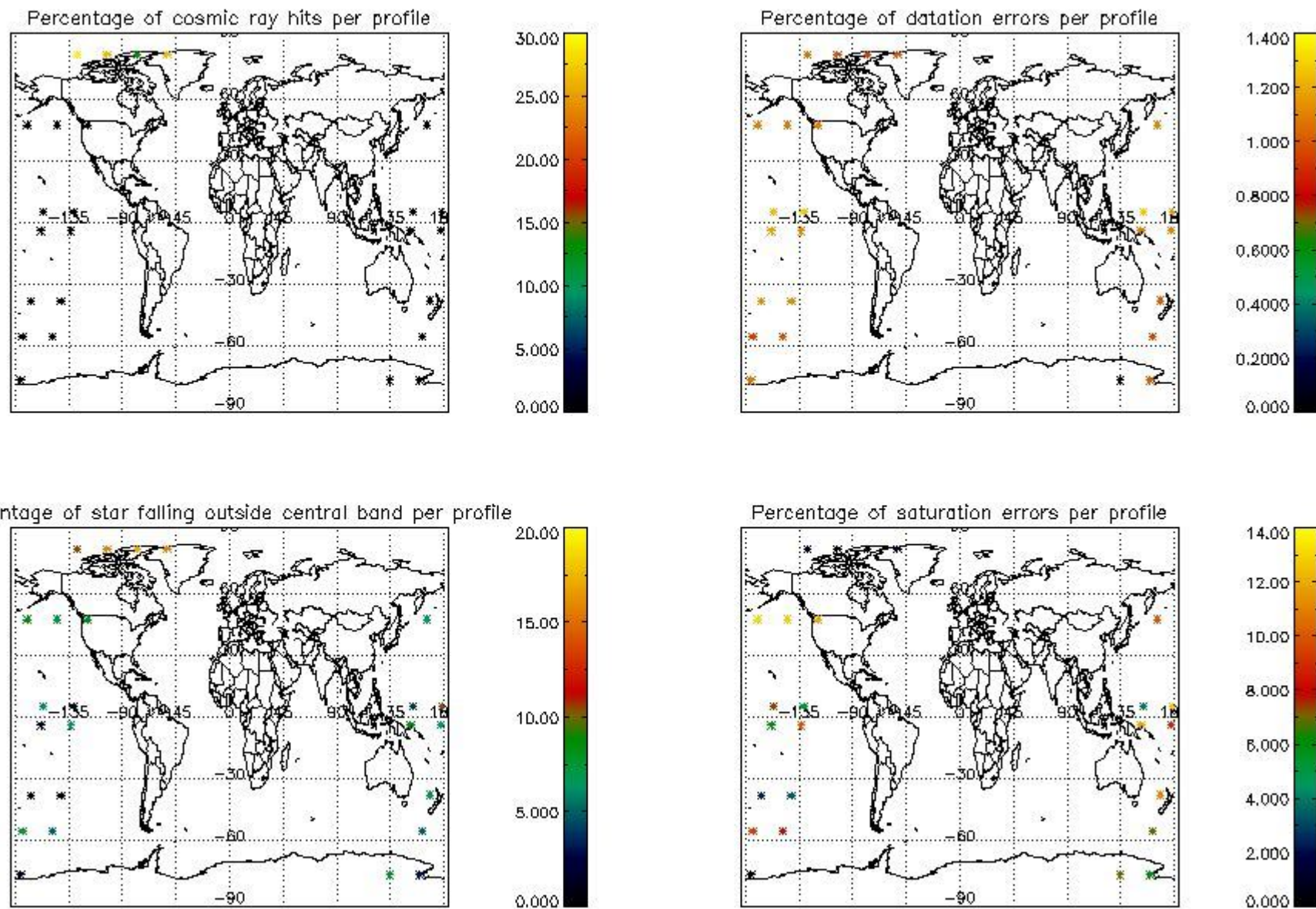
Percentage of star falling outside central band per profile



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

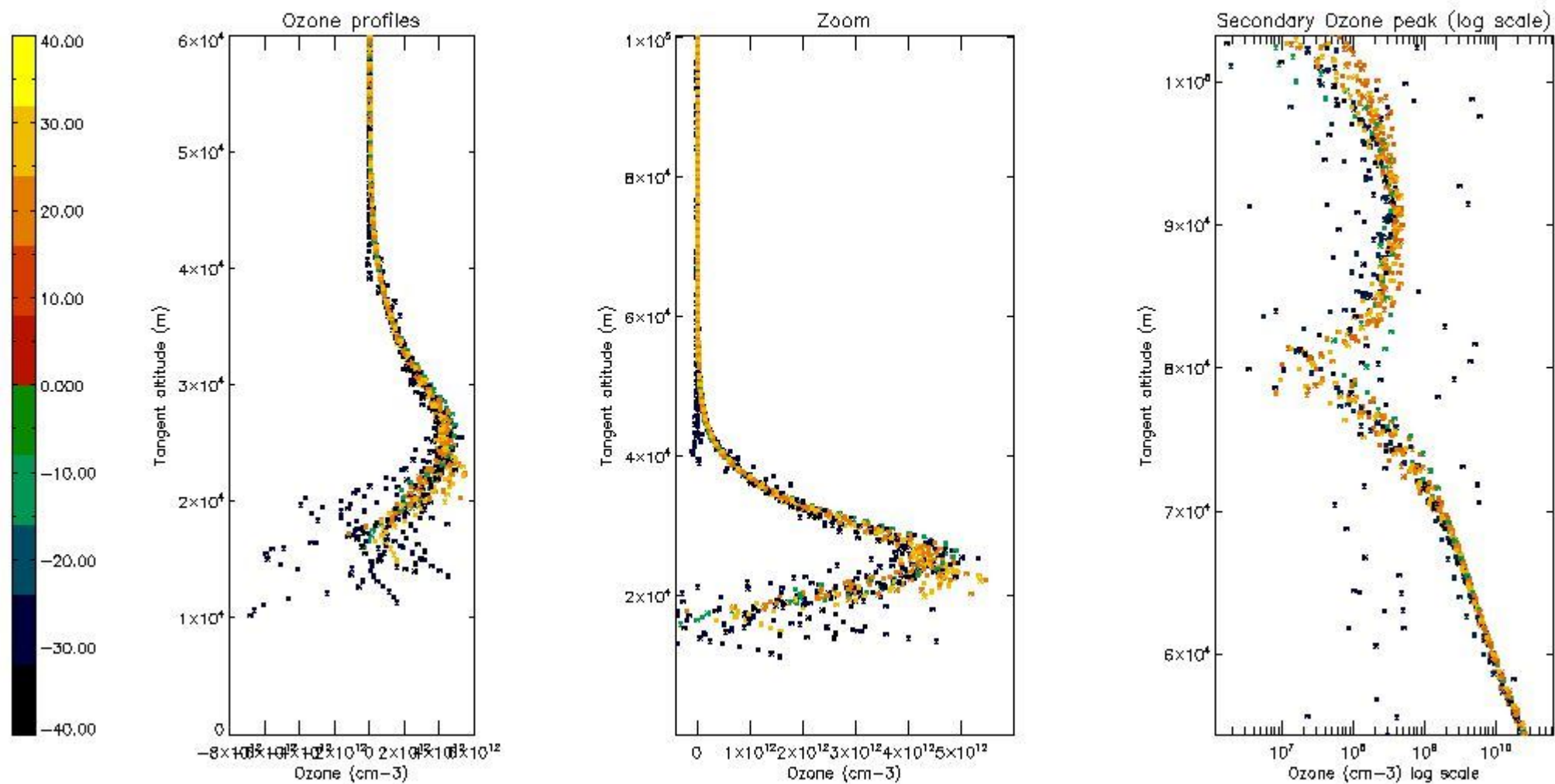
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	38
STD < 20	22

STD < 10	18
STD < 5	14

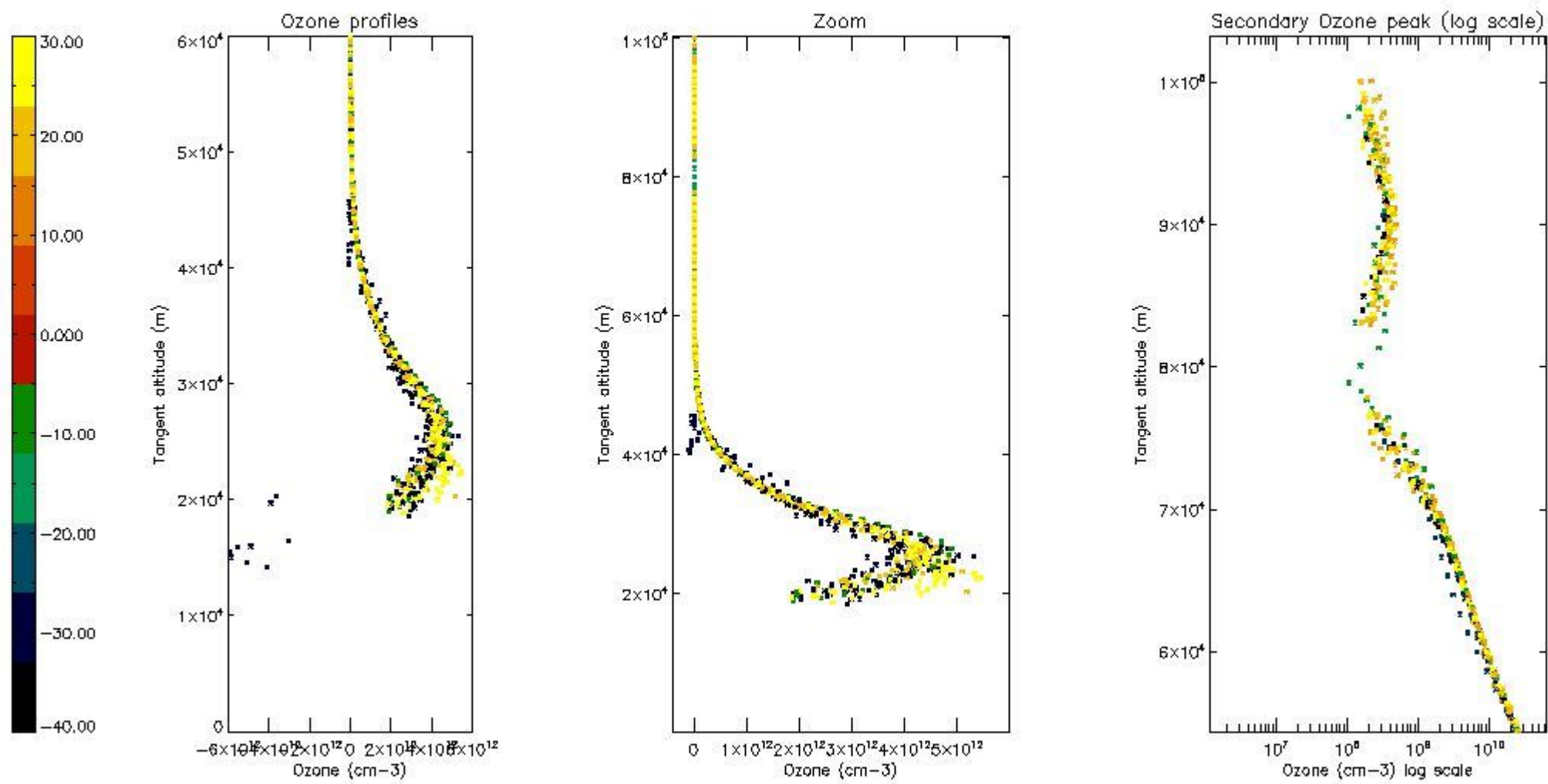
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



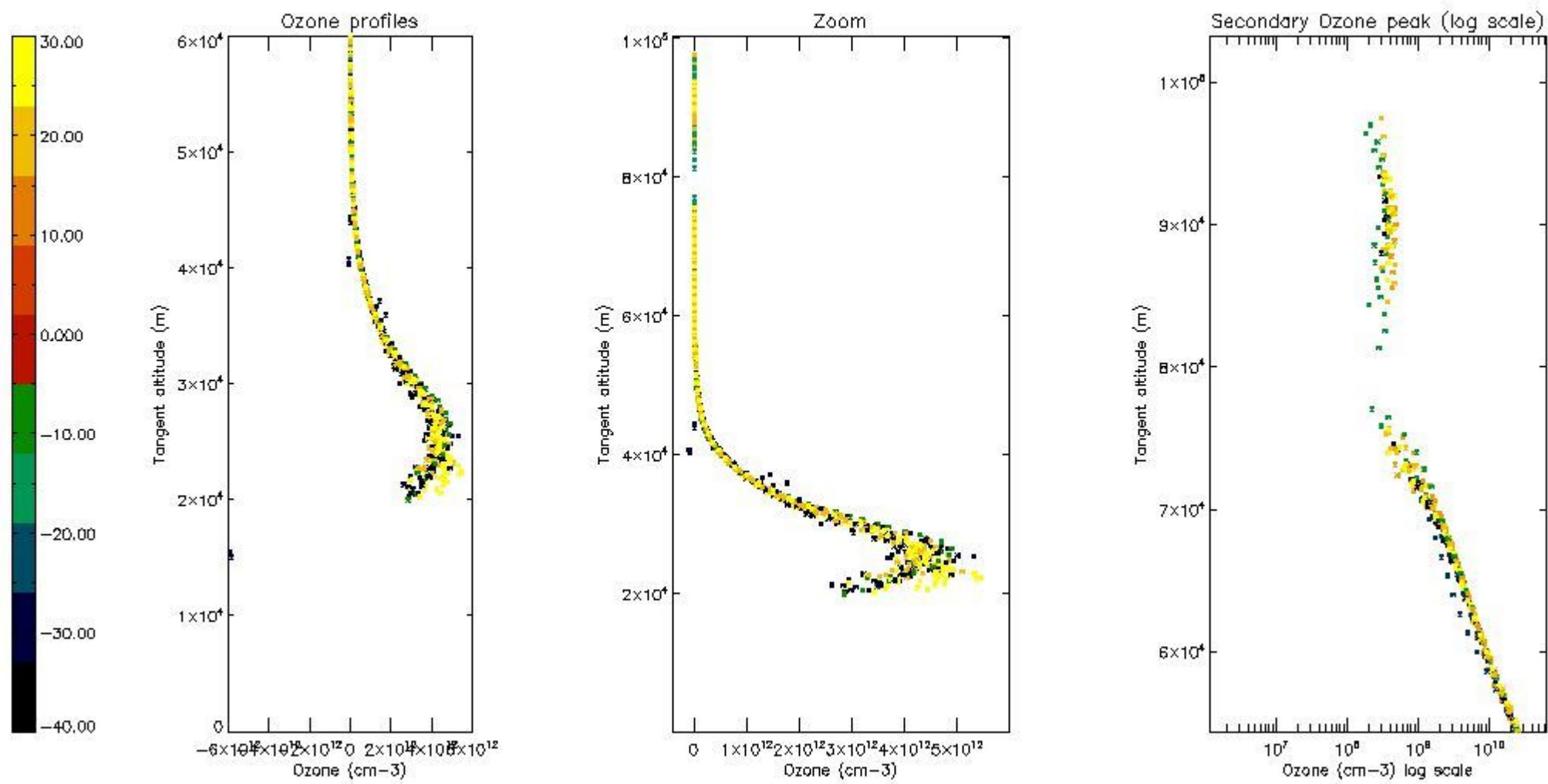
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



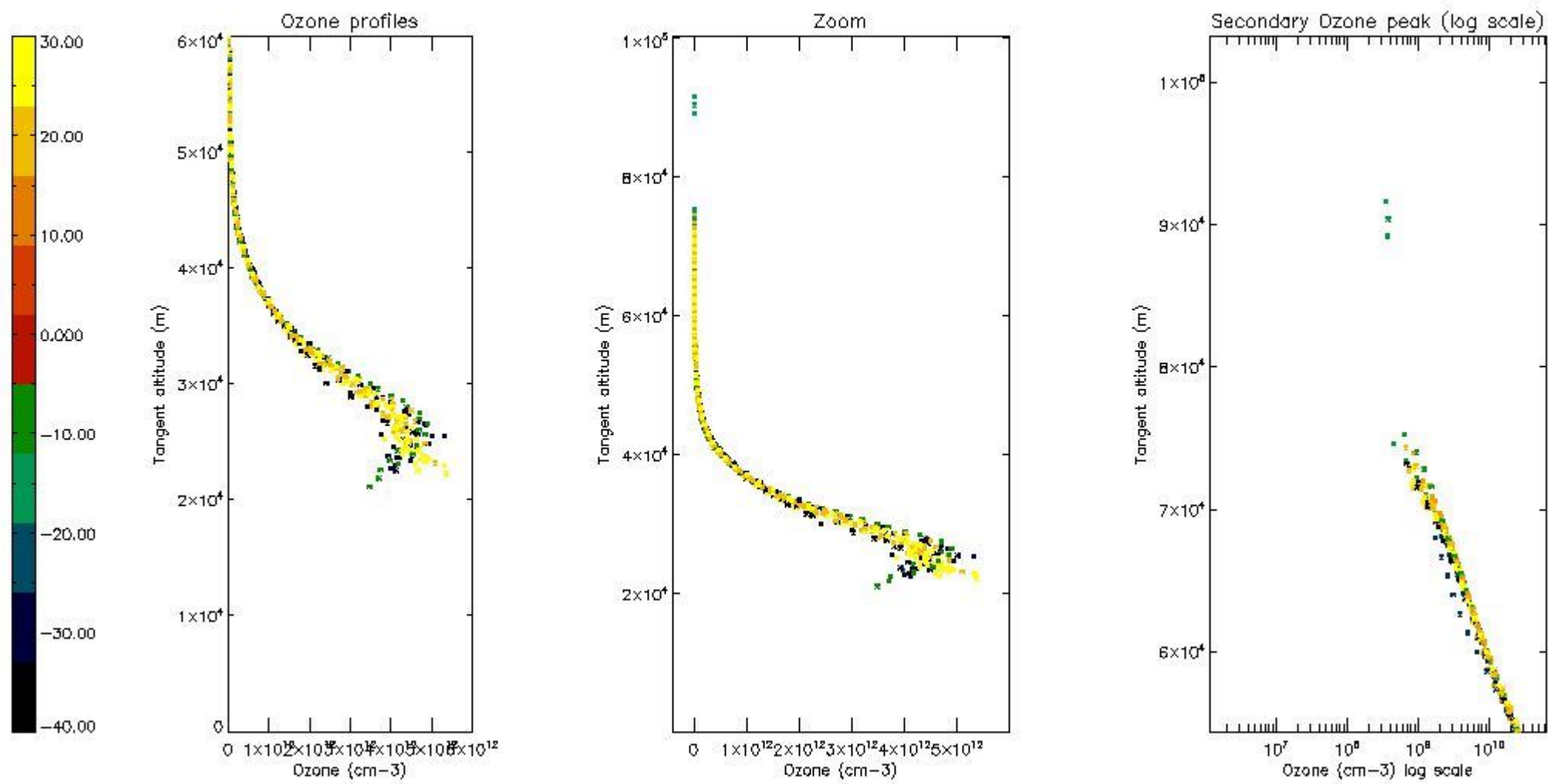
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



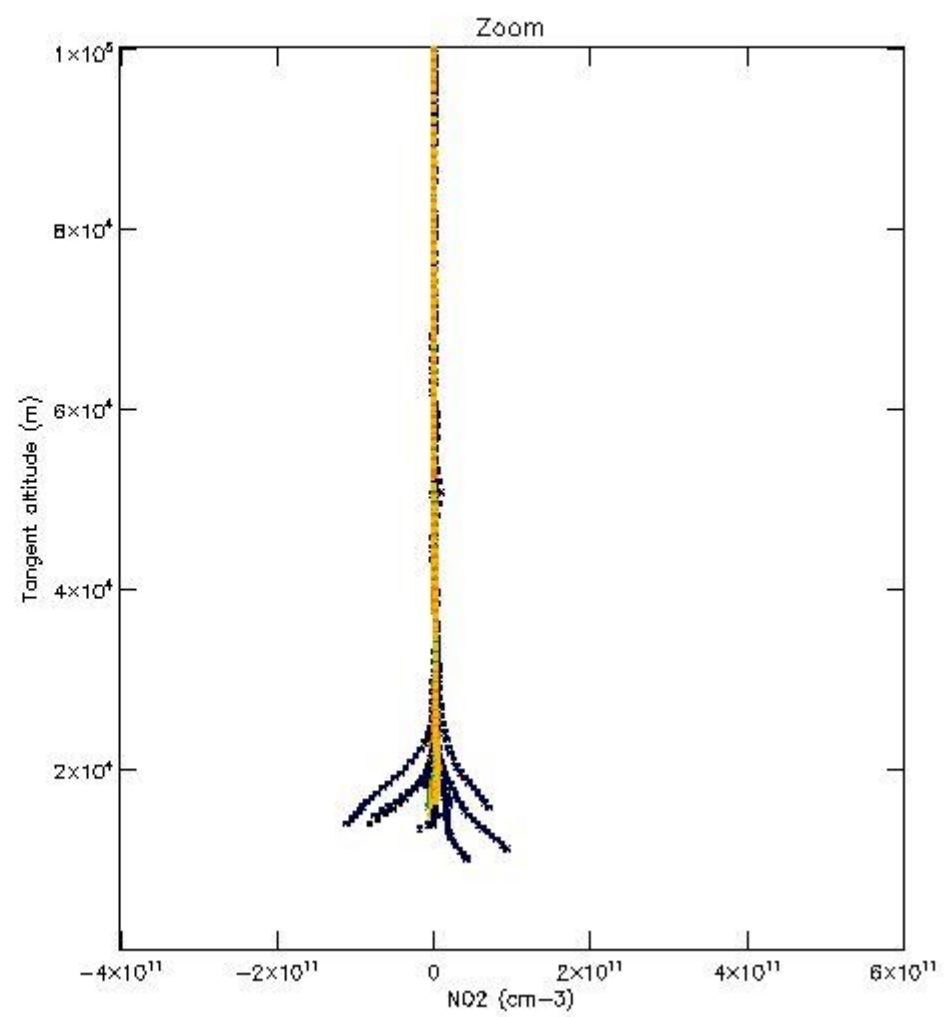
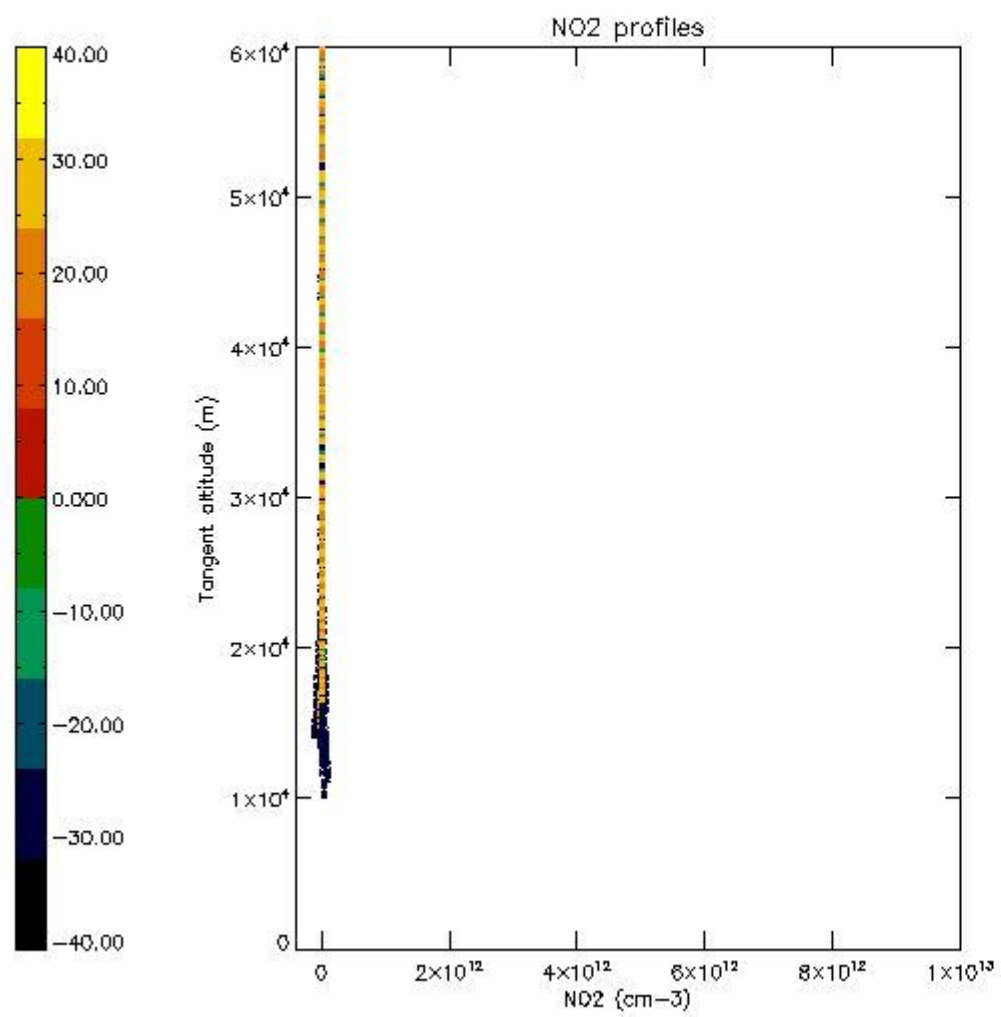
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



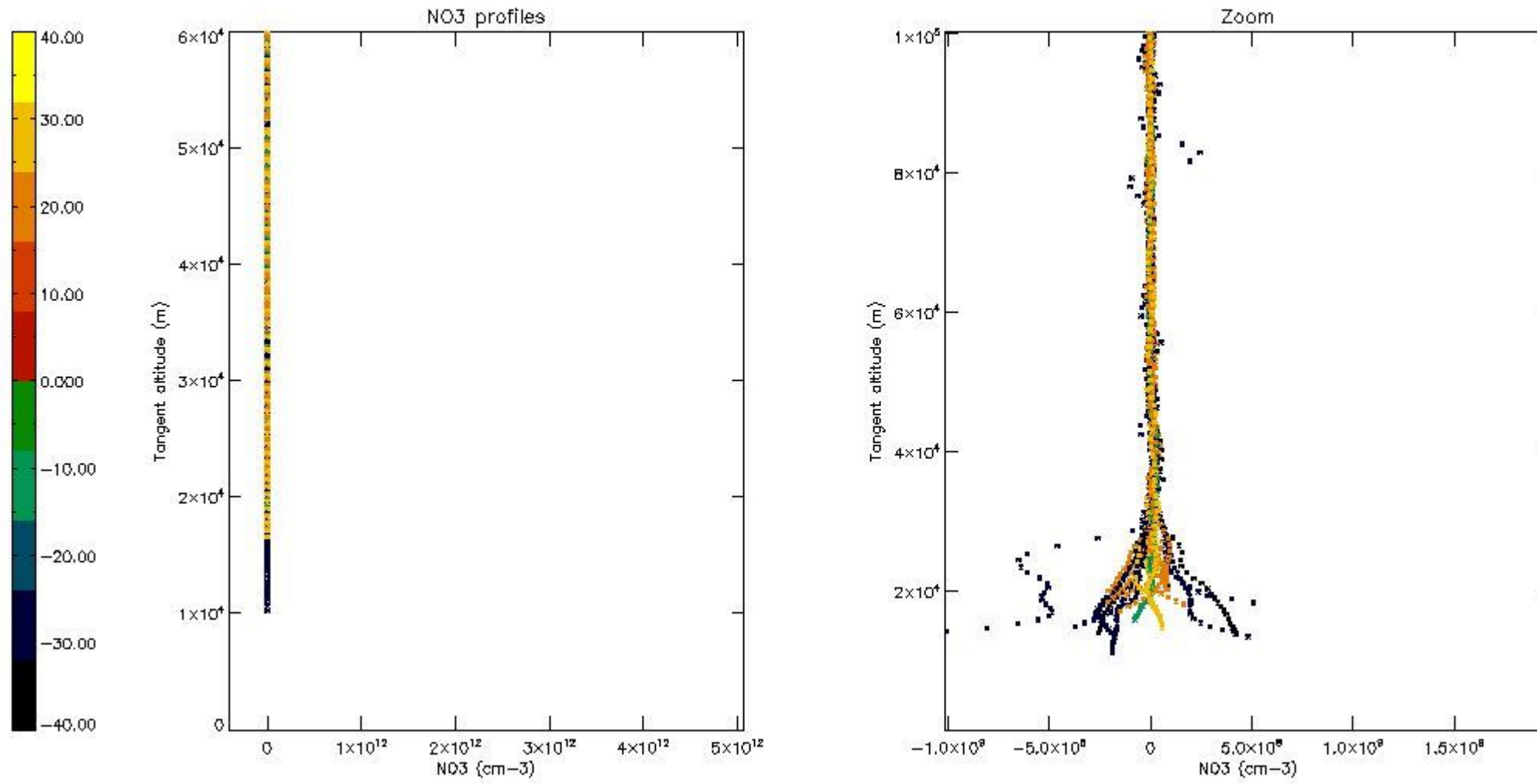
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

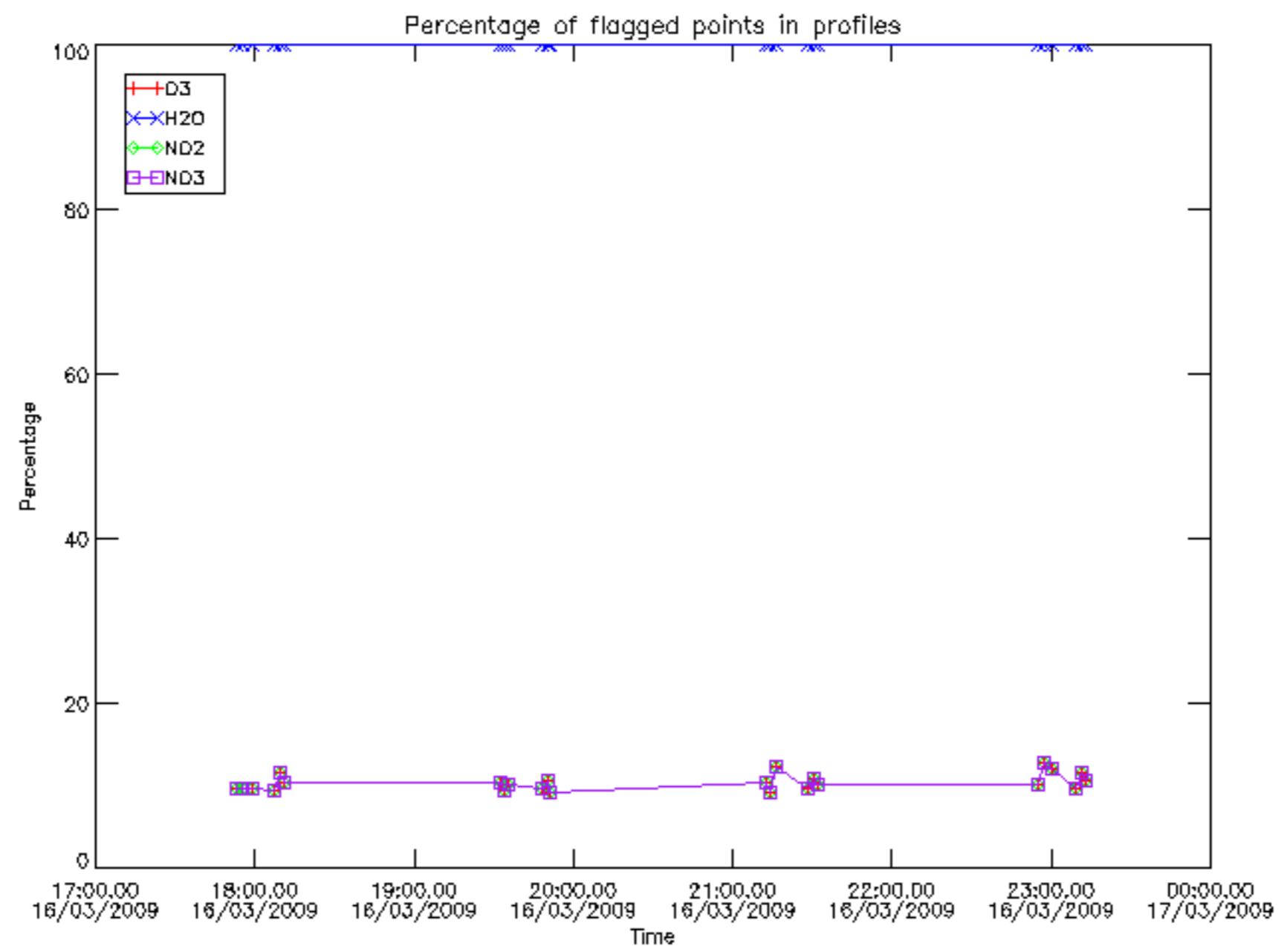
The colorbar represents the latitude.



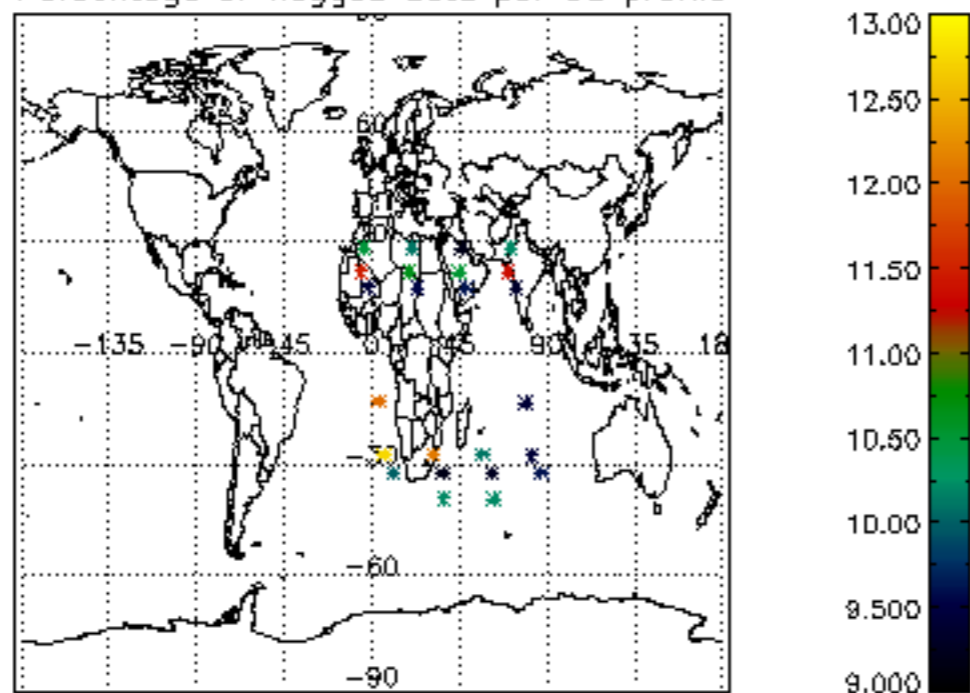
6. Auxiliary Data Files used for the production reported in section 2

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.

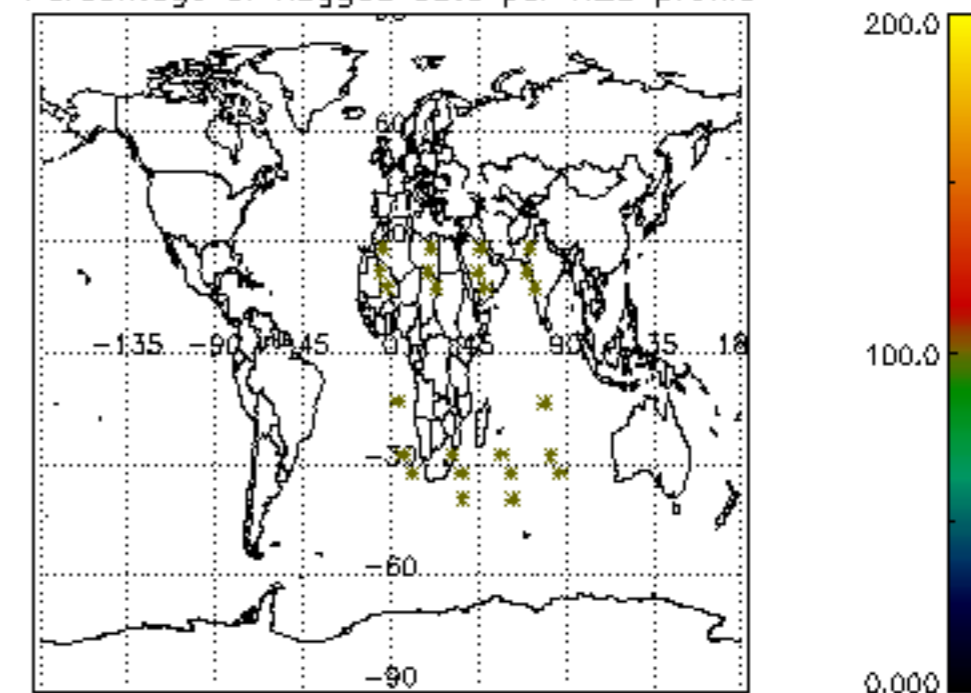
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	16-MAR-2009 17:52:59
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	16-MAR-2009 17:52:59
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	16-MAR-2009 17:52:59



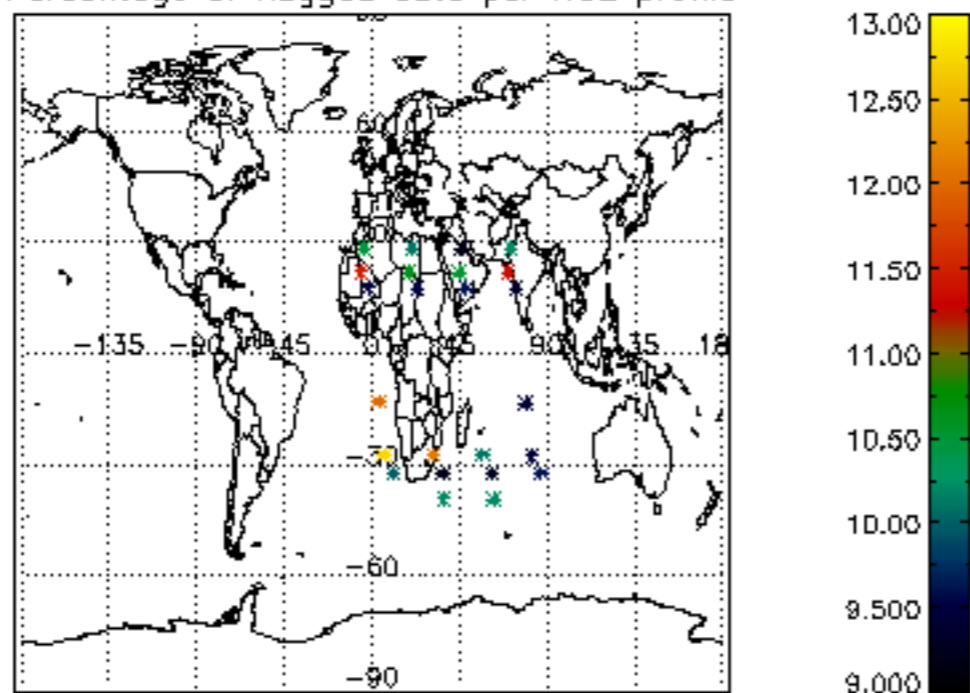
Percentage of flagged data per D3 profile



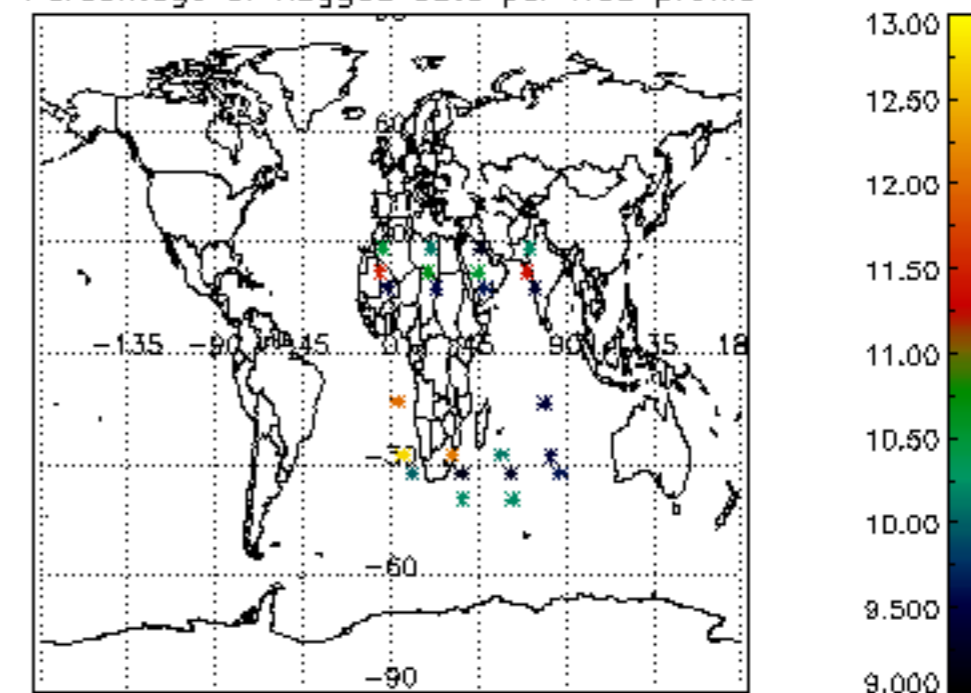
Percentage of flagged data per H2O profile

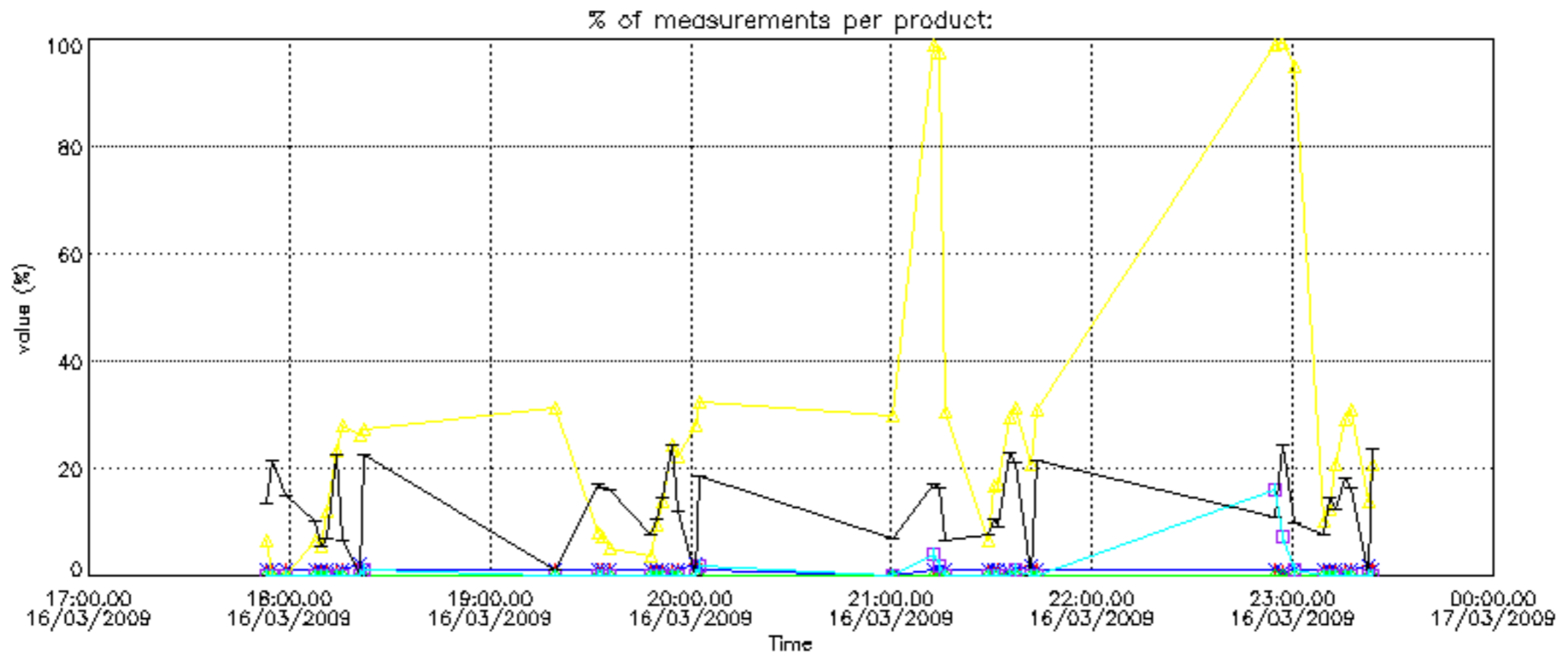


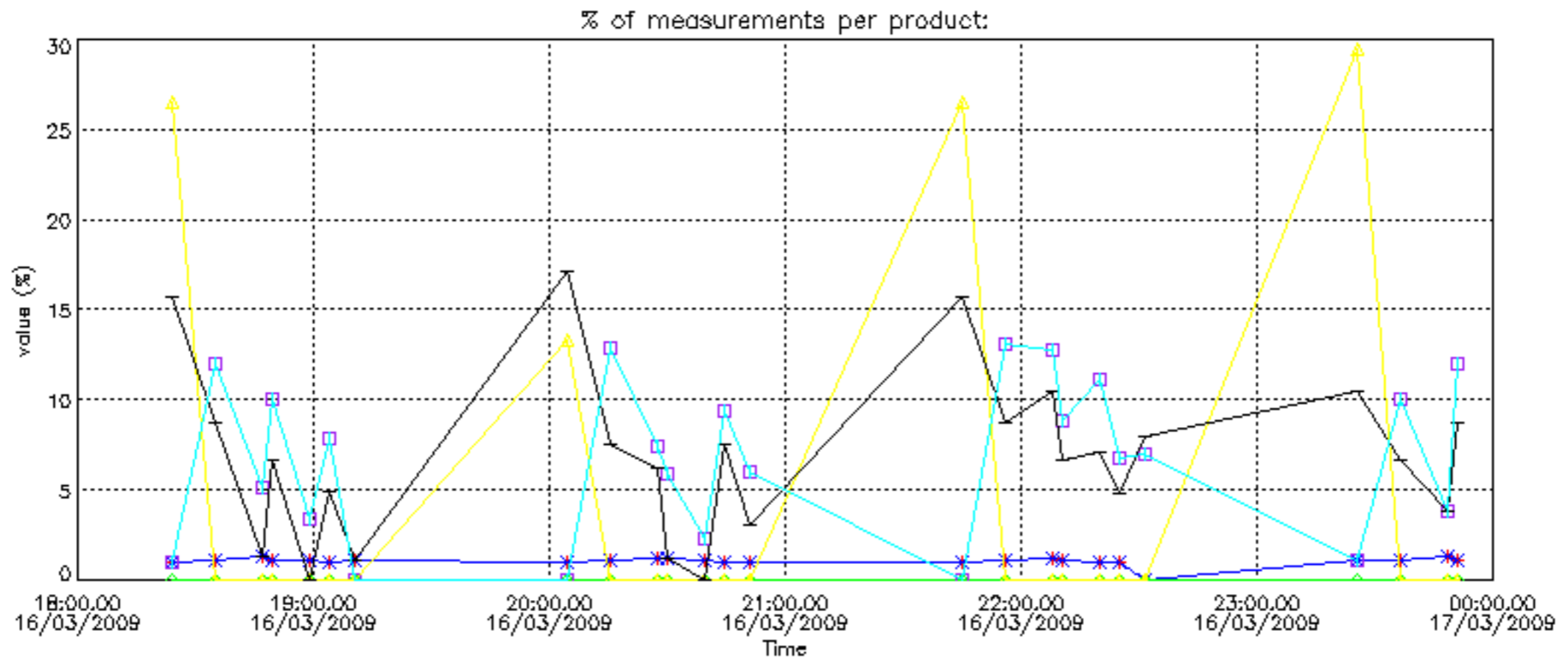
Percentage of flagged data per NO2 profile



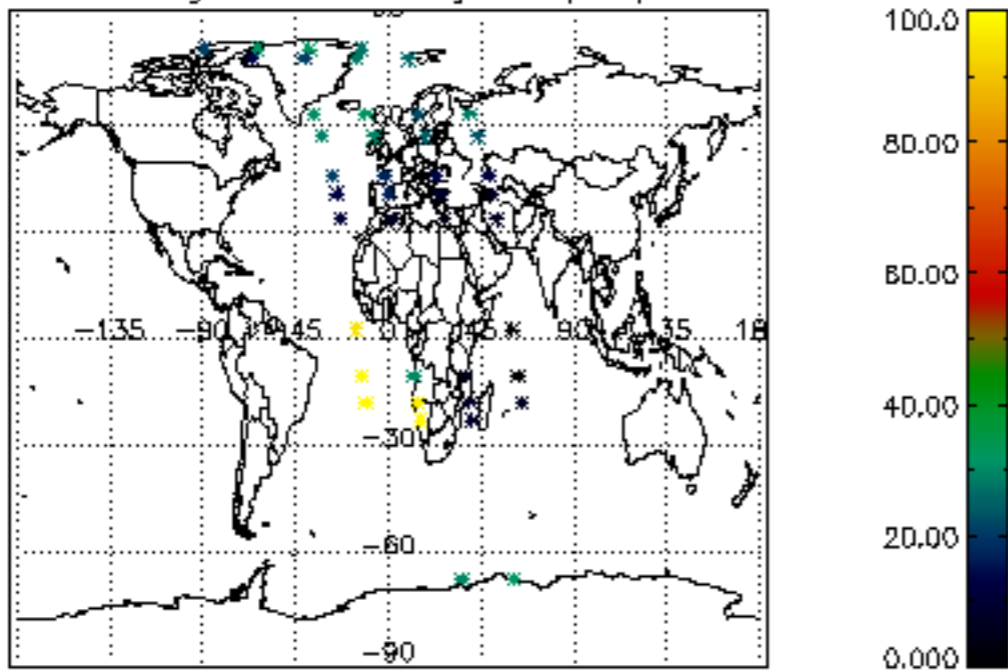
Percentage of flagged data per NO3 profile



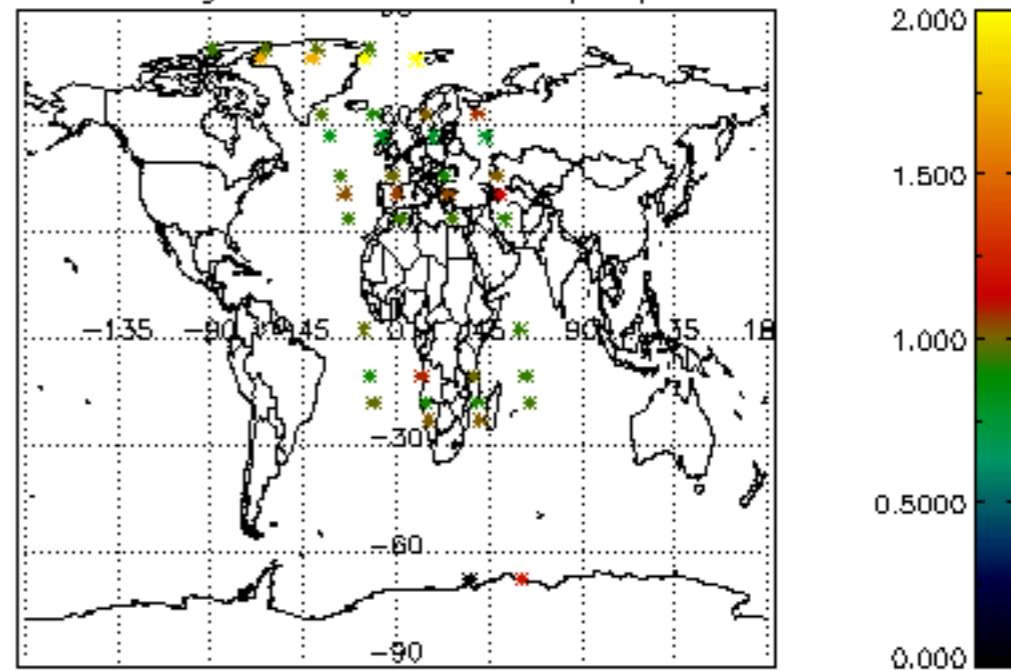




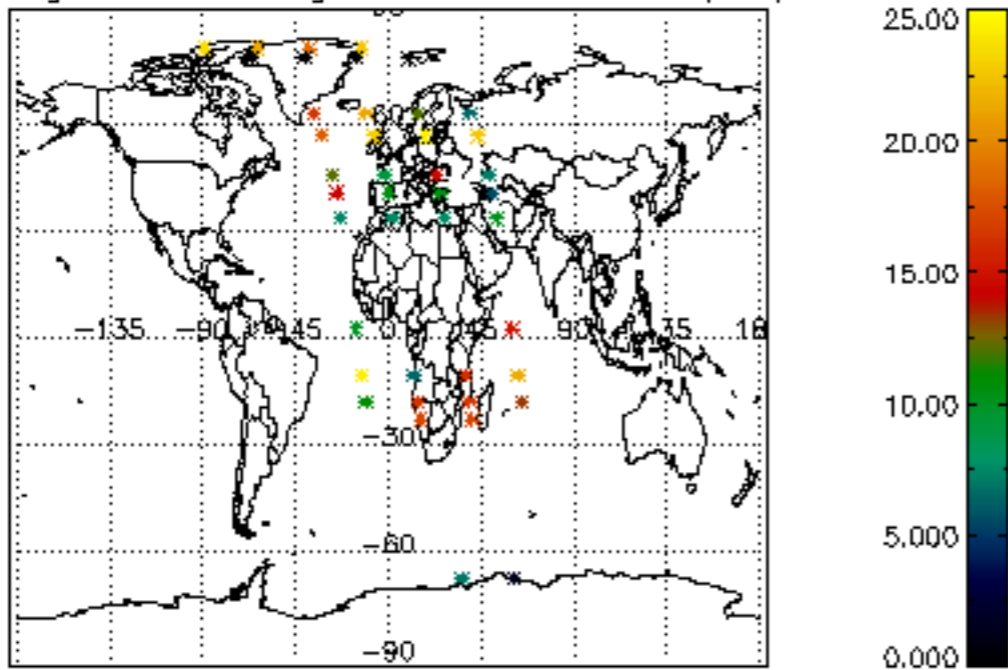
Percentage of cosmic ray hits per profile



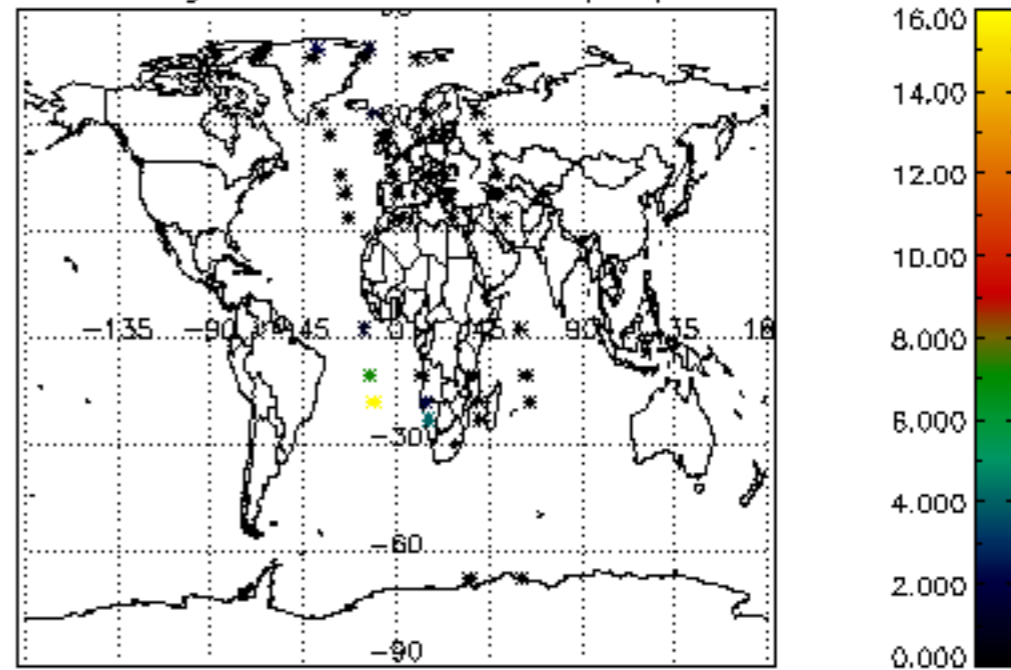
Percentage of datation errors per profile



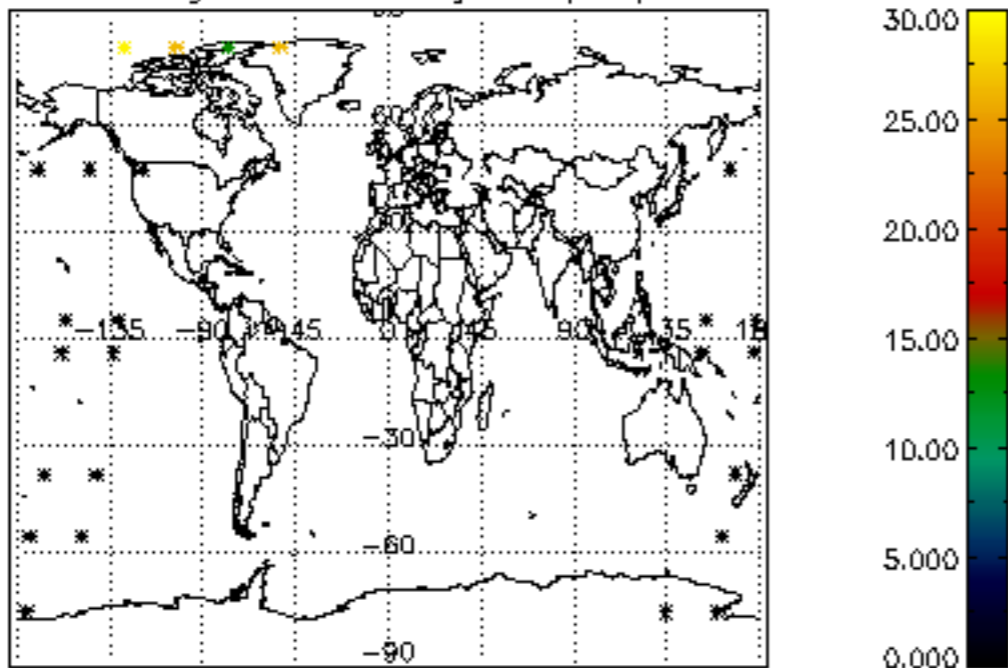
Percentage of star falling outside central band per profile



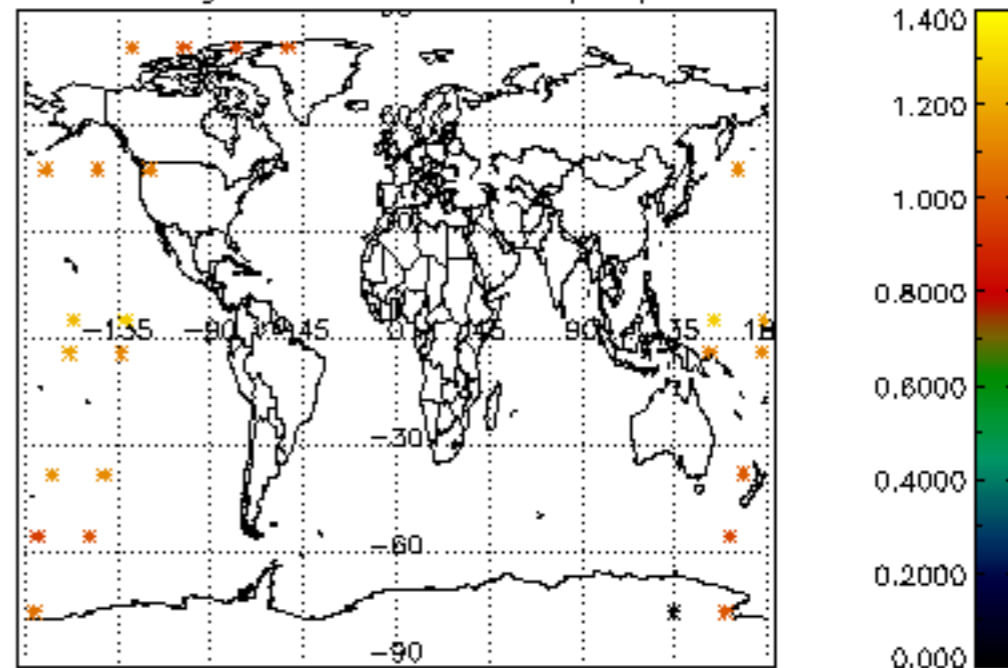
Percentage of saturation errors per profile



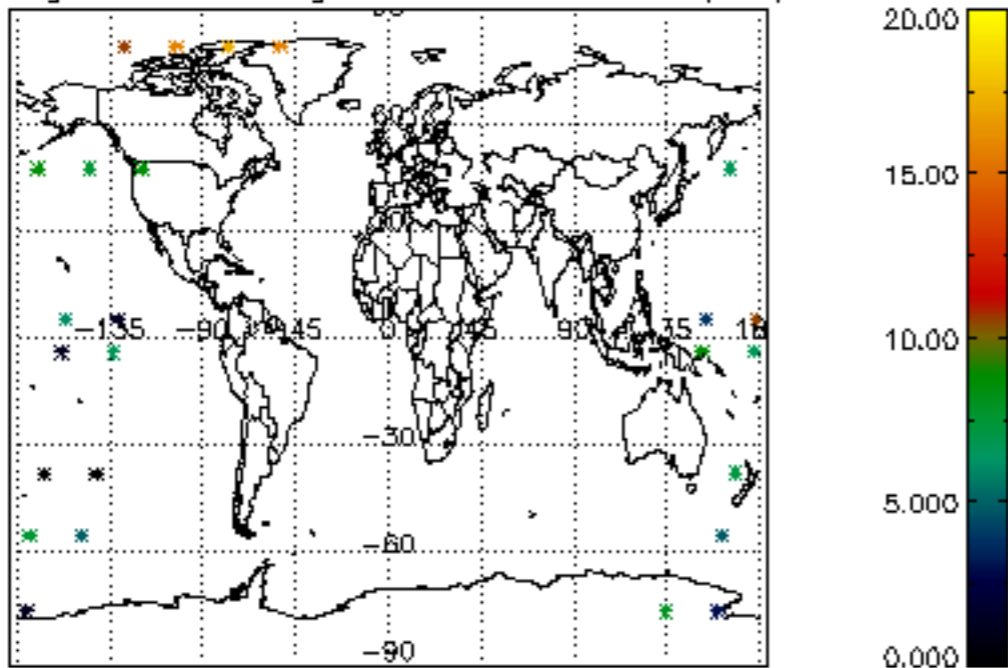
Percentage of cosmic ray hits per profile



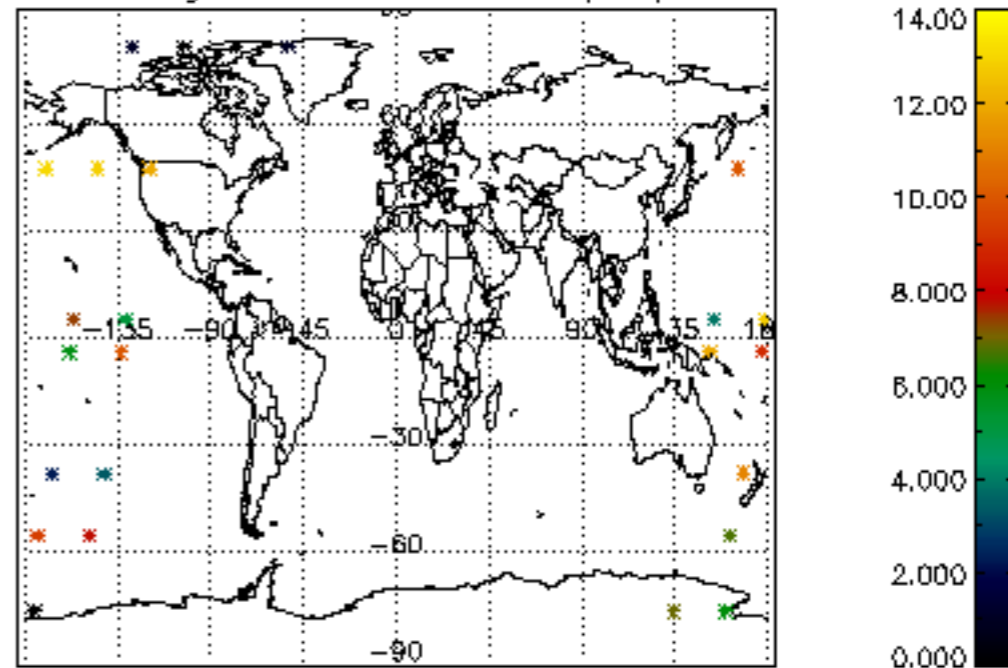
Percentage of datation errors per profile

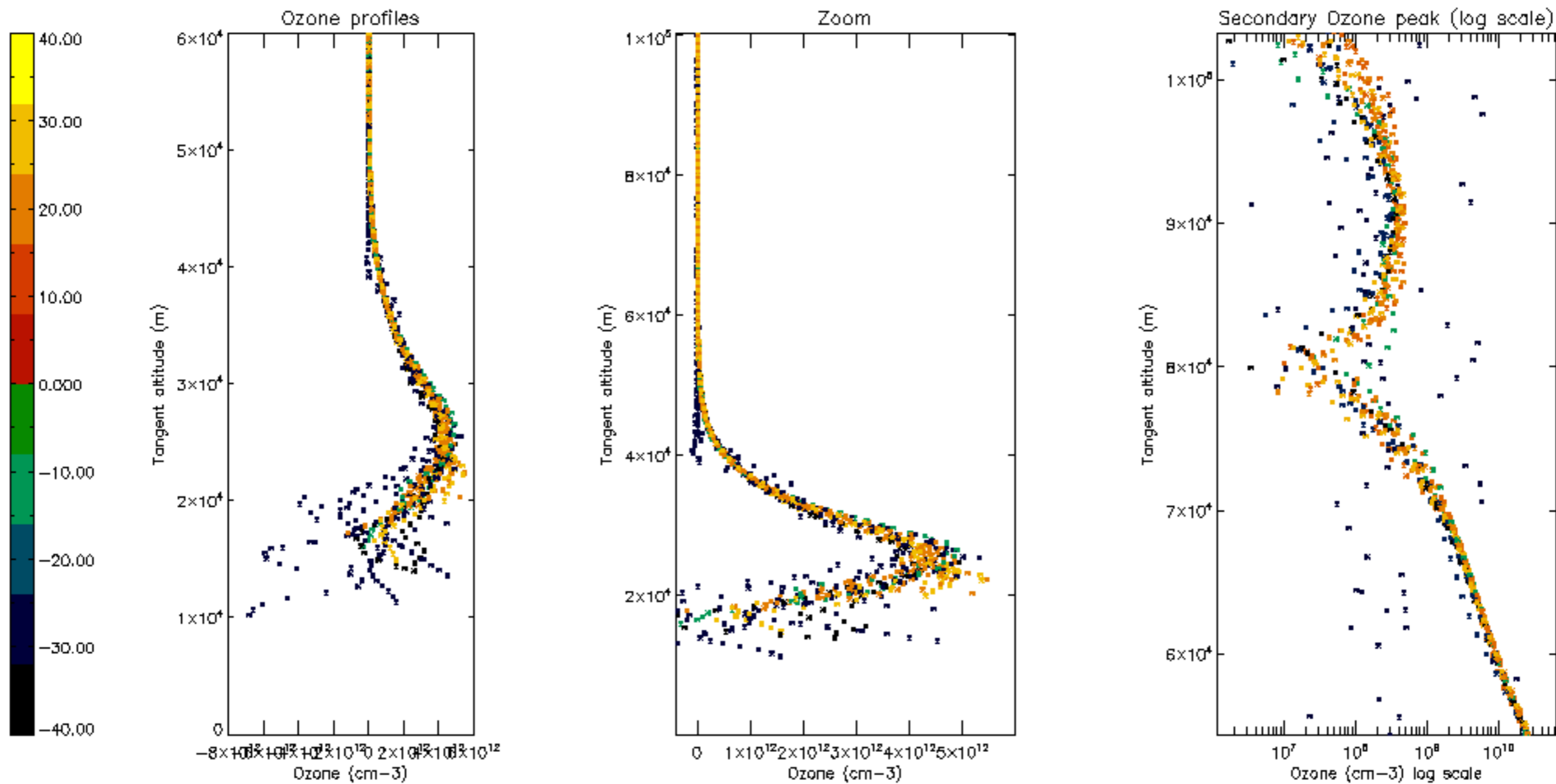


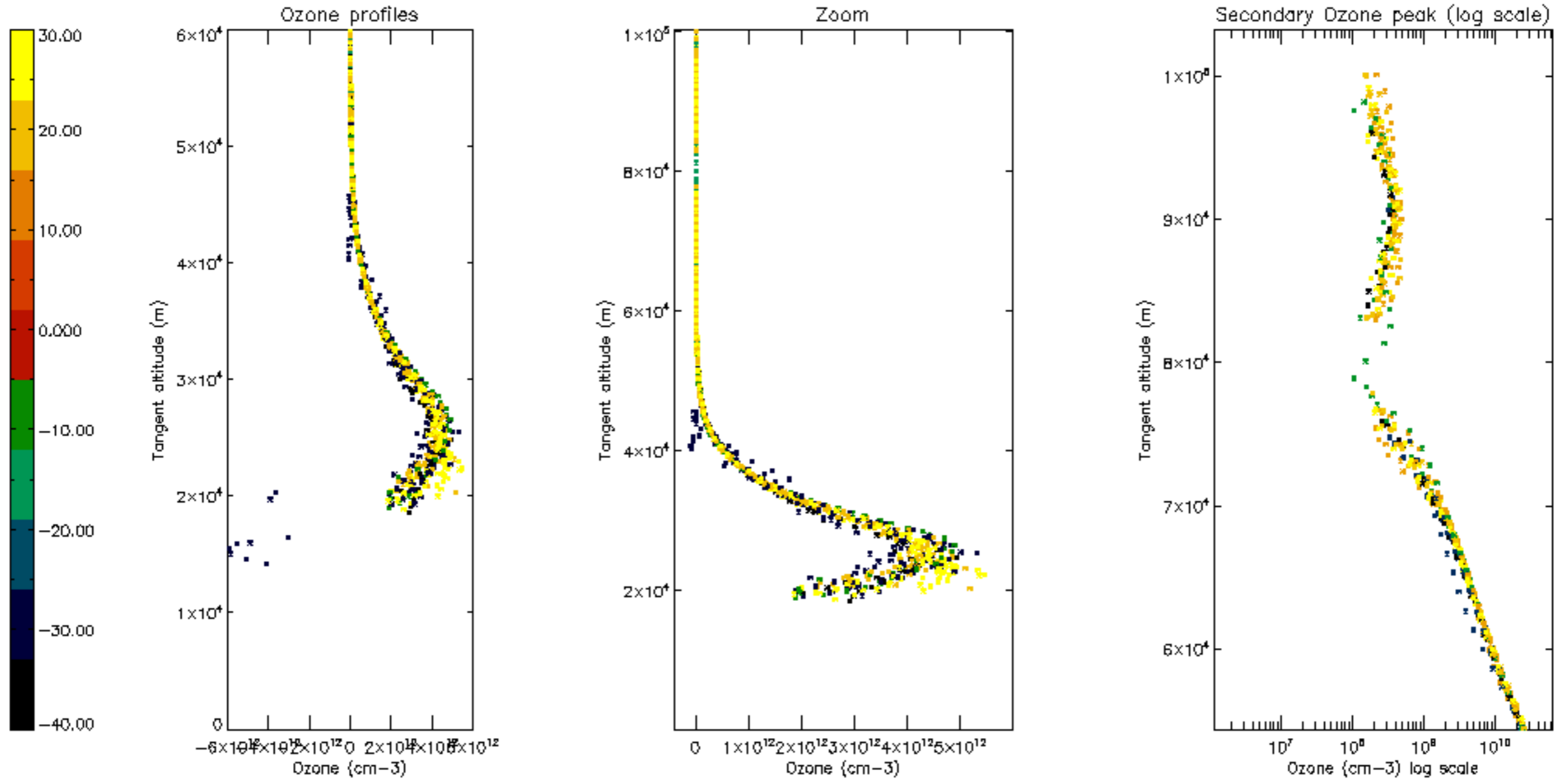
Percentage of star falling outside central band per profile

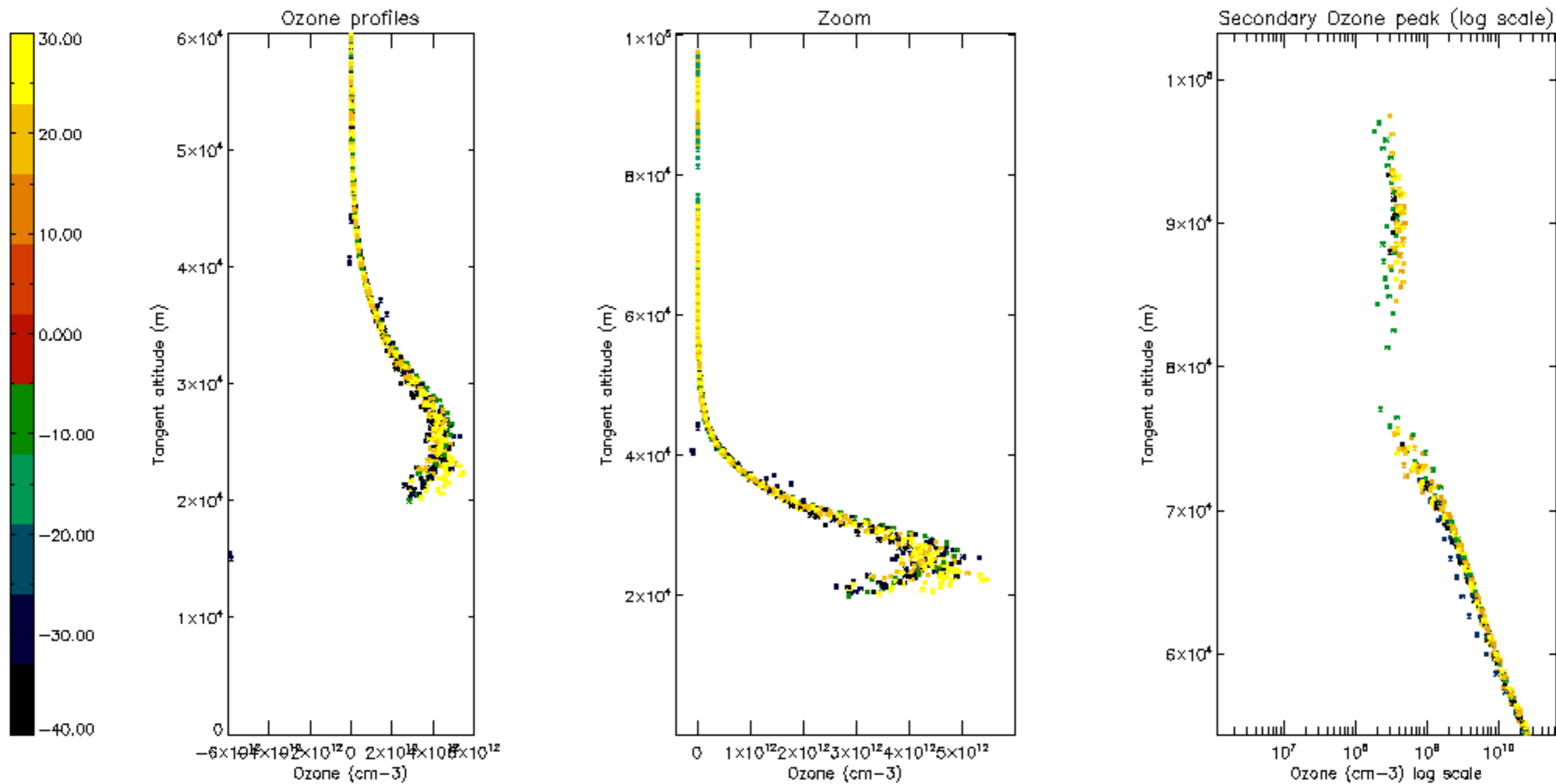


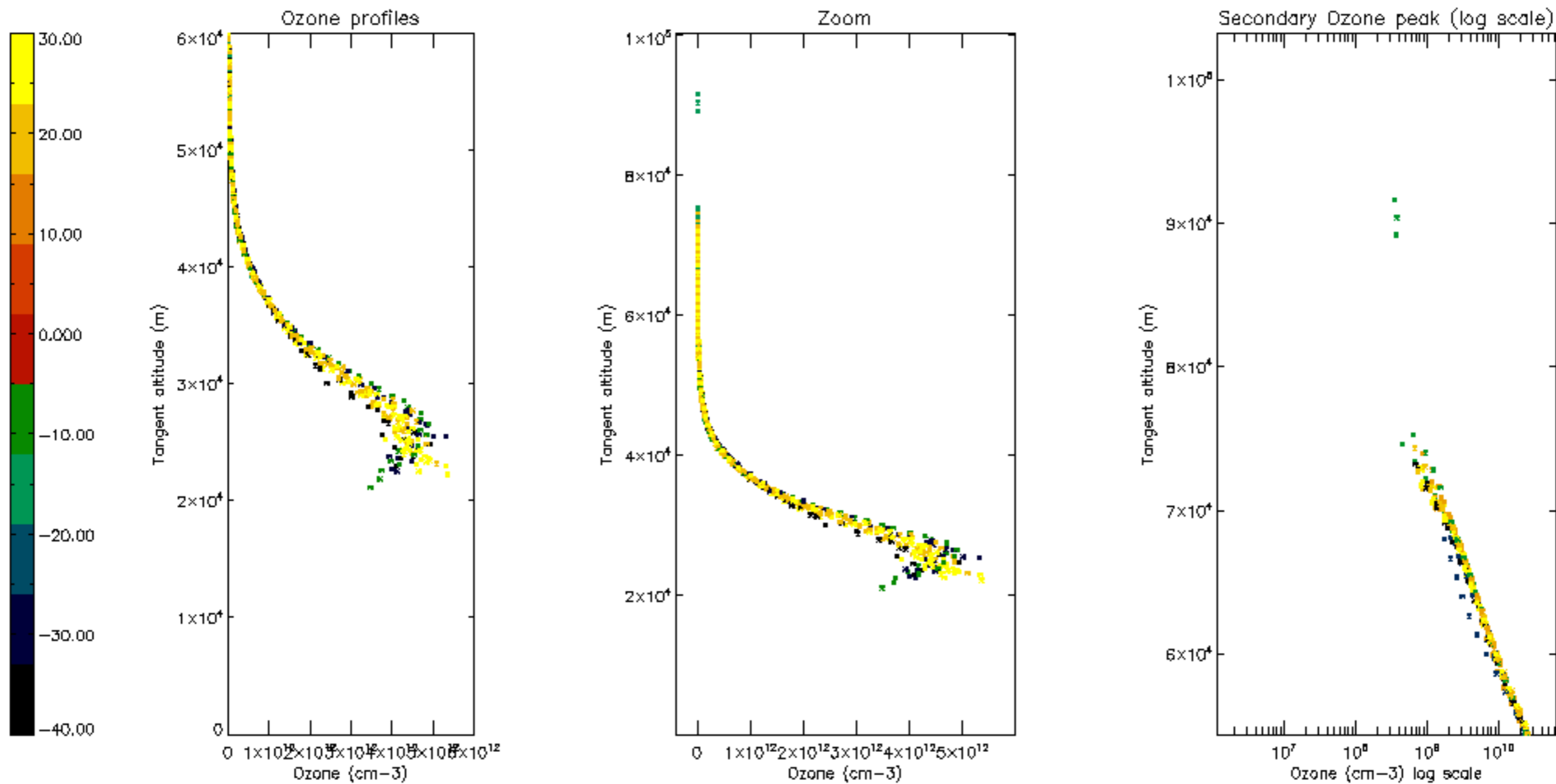
Percentage of saturation errors per profile

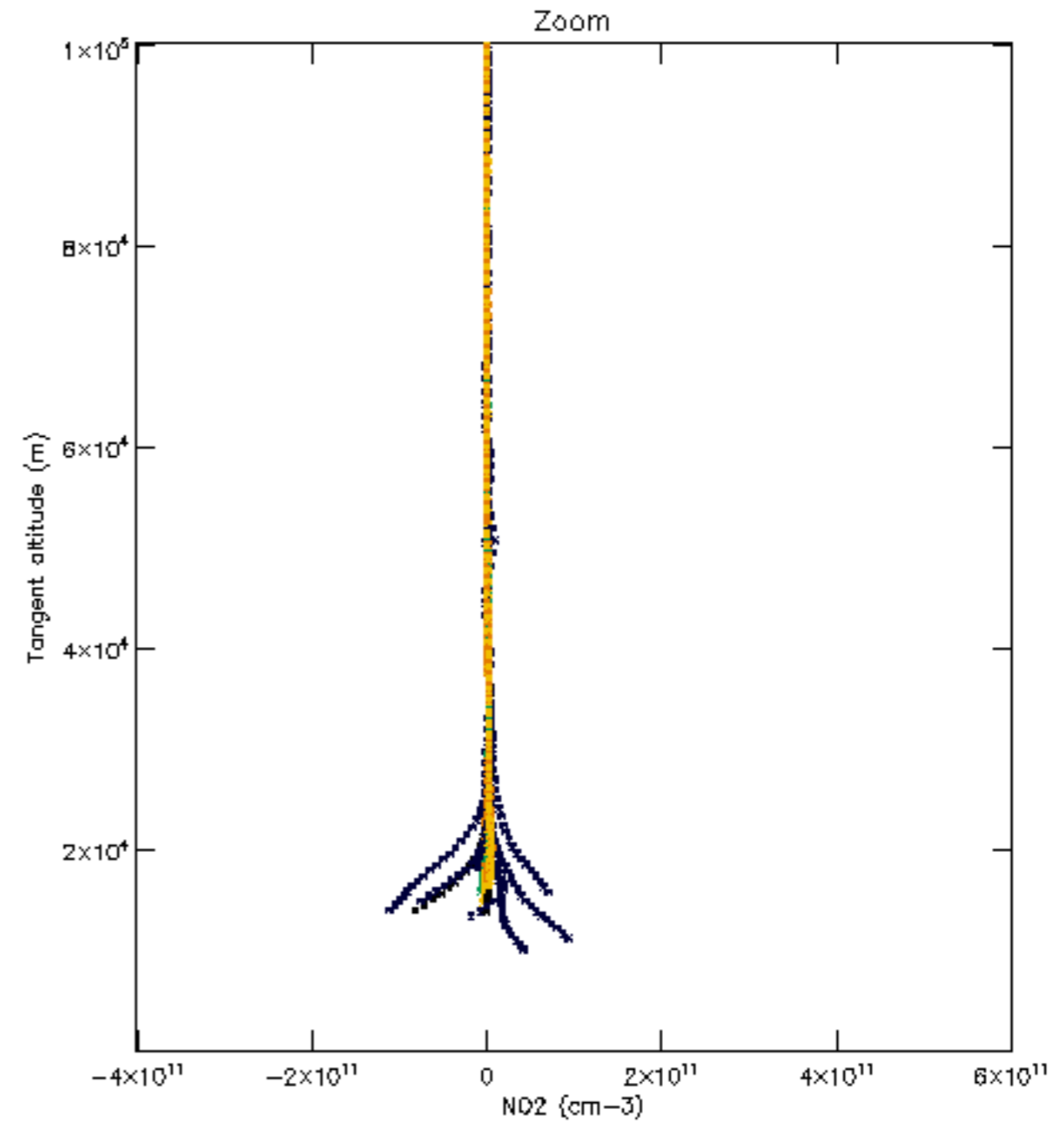
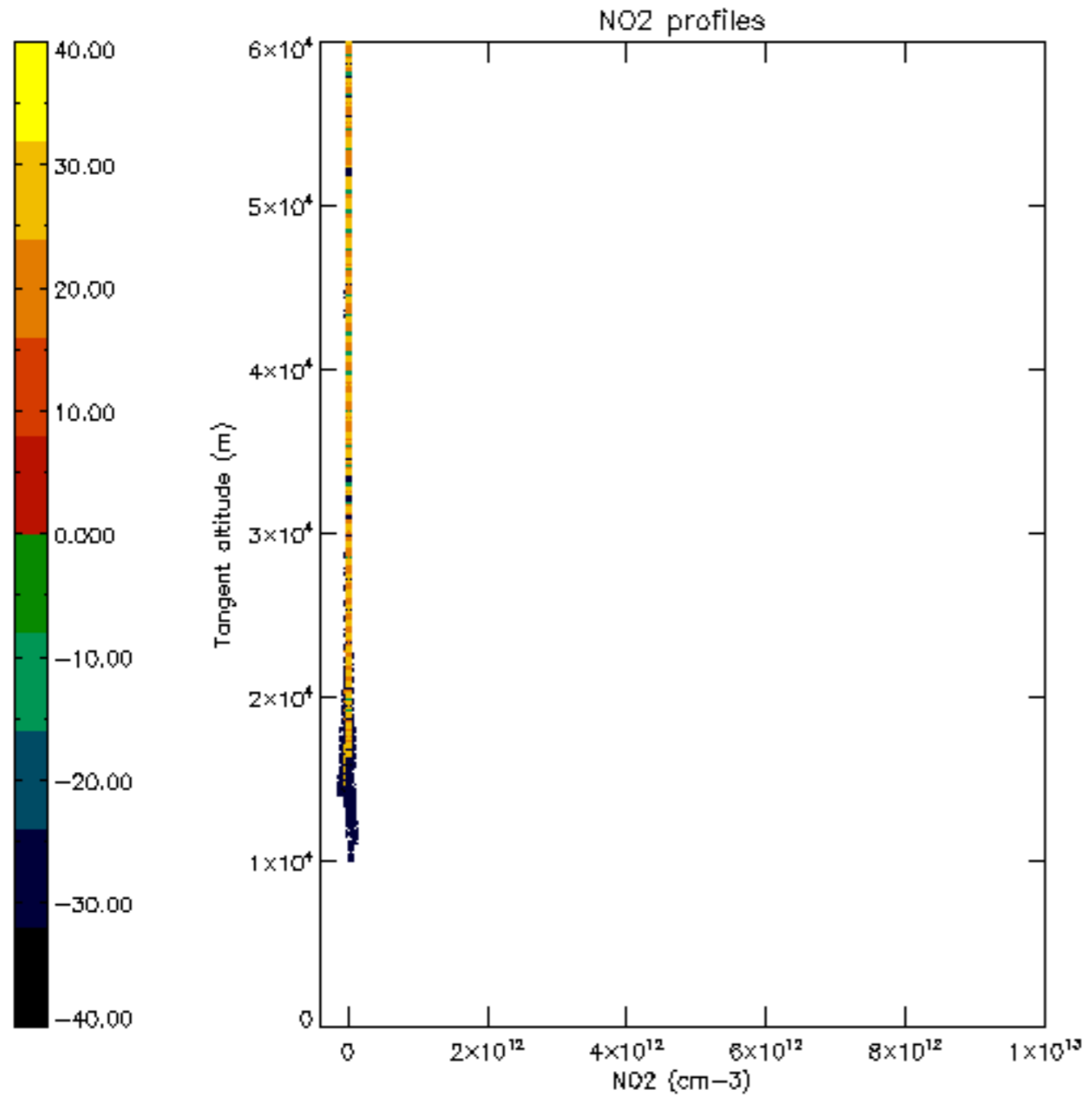


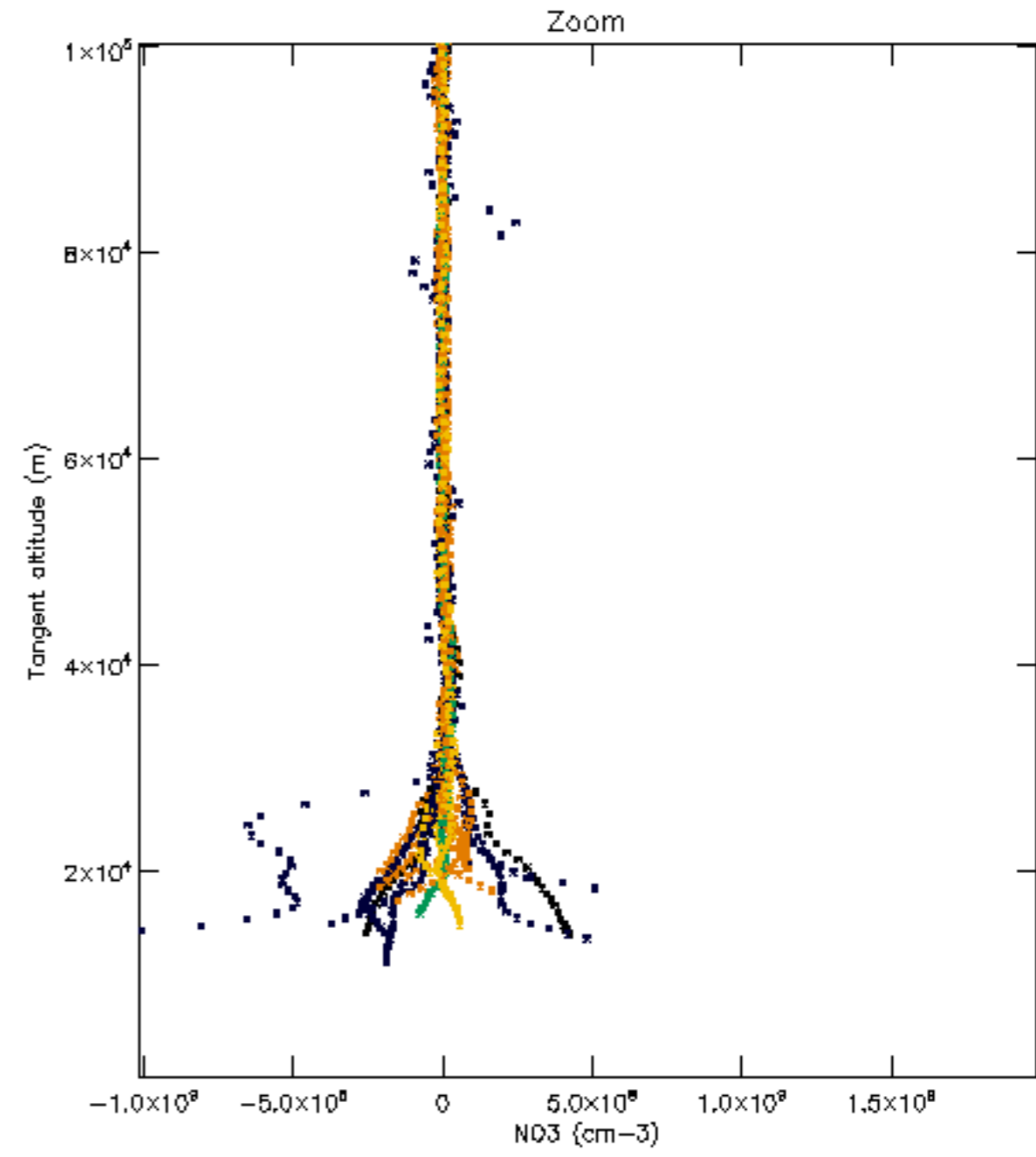
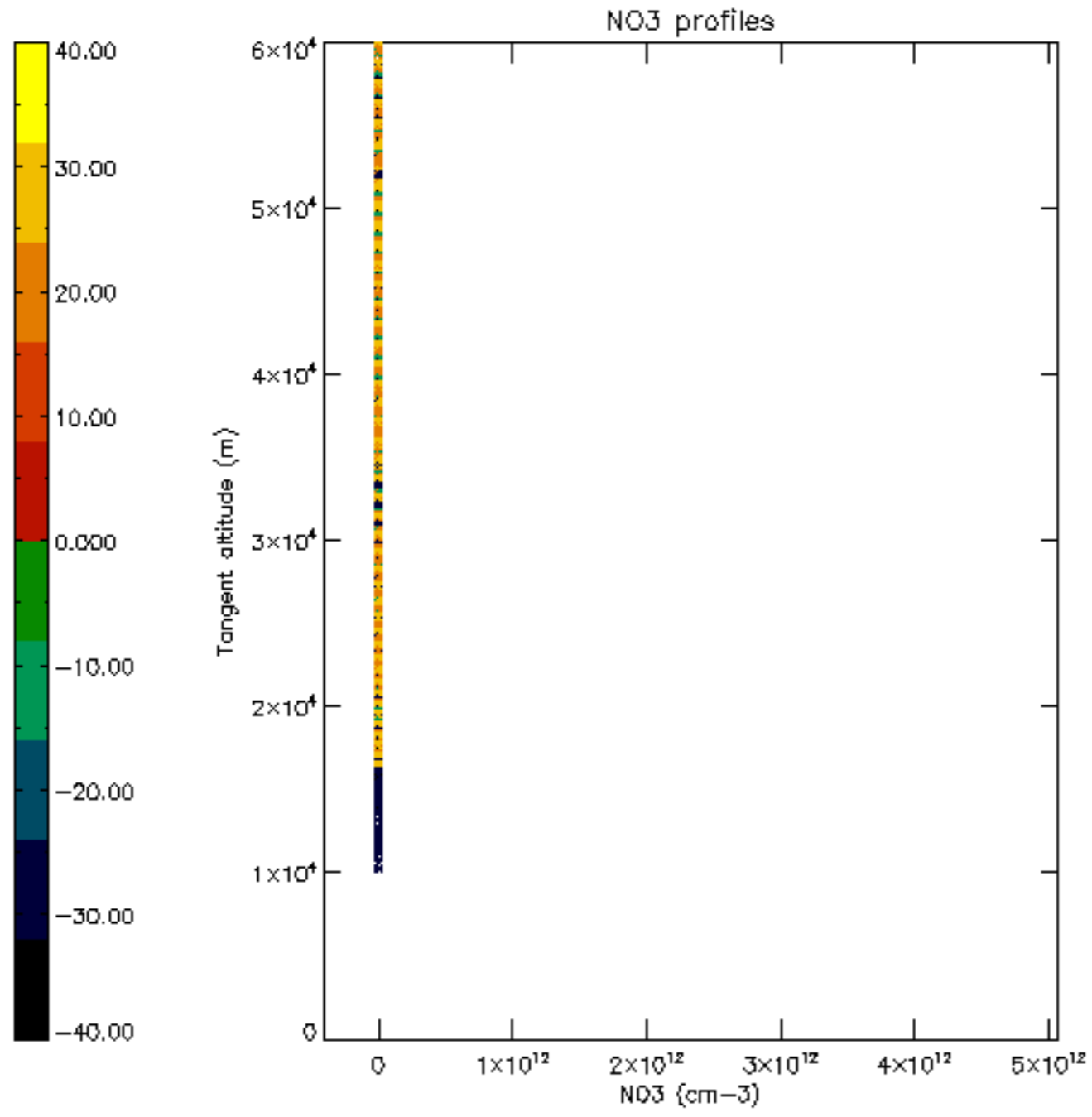


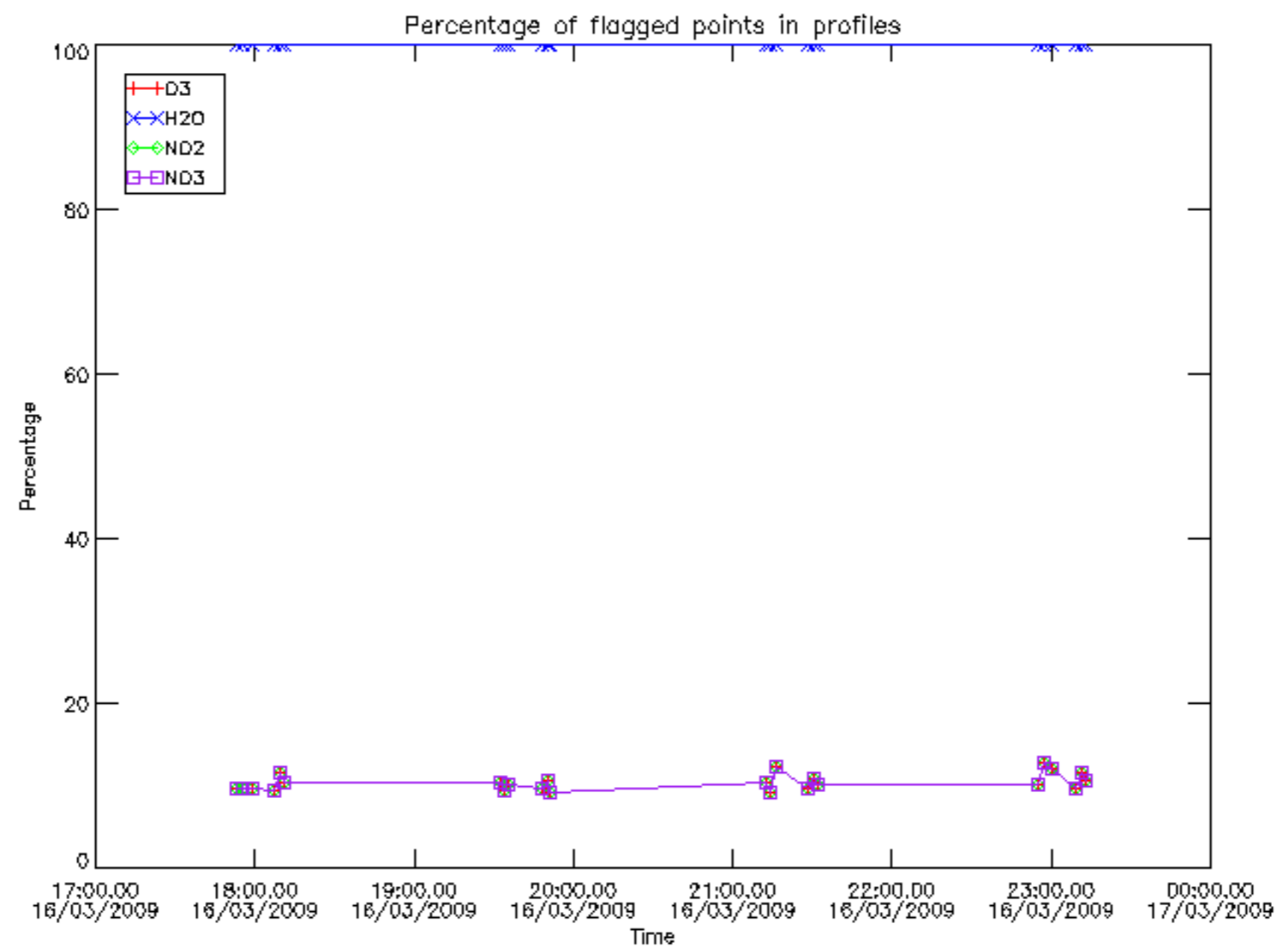




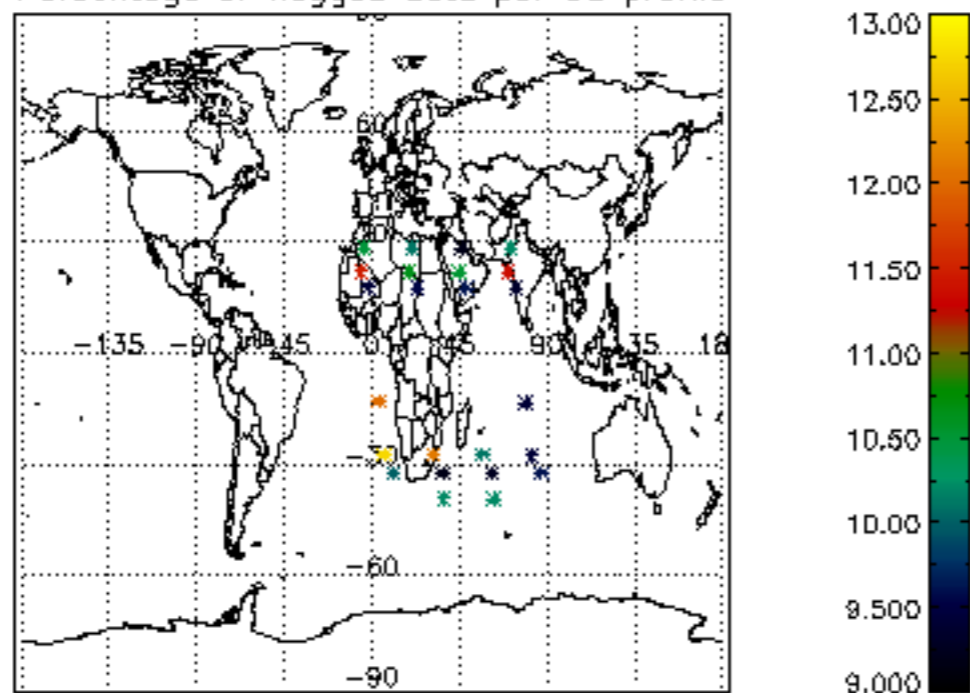




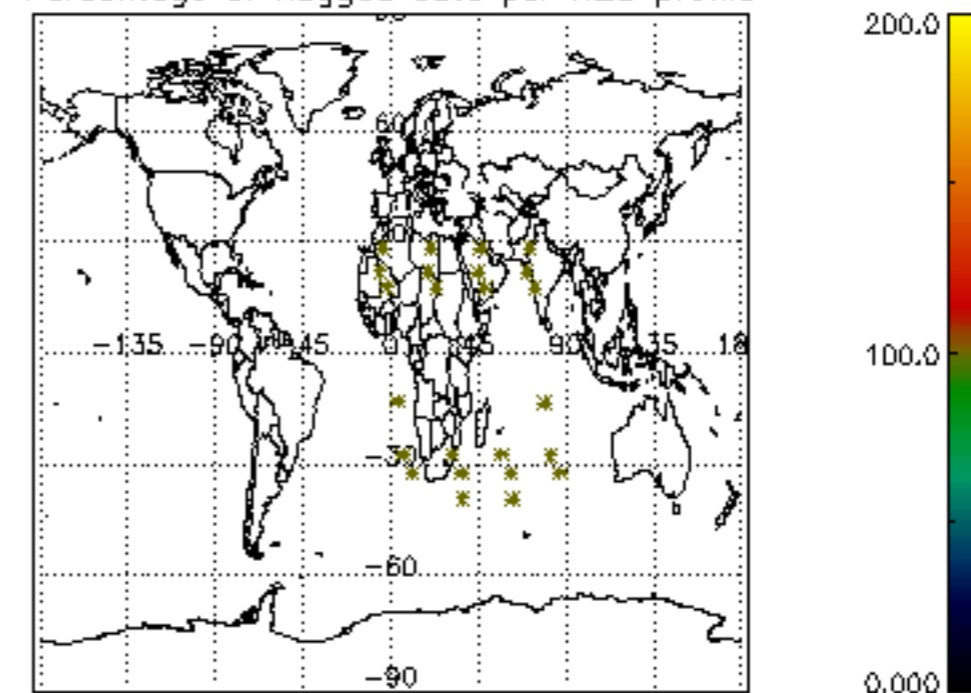




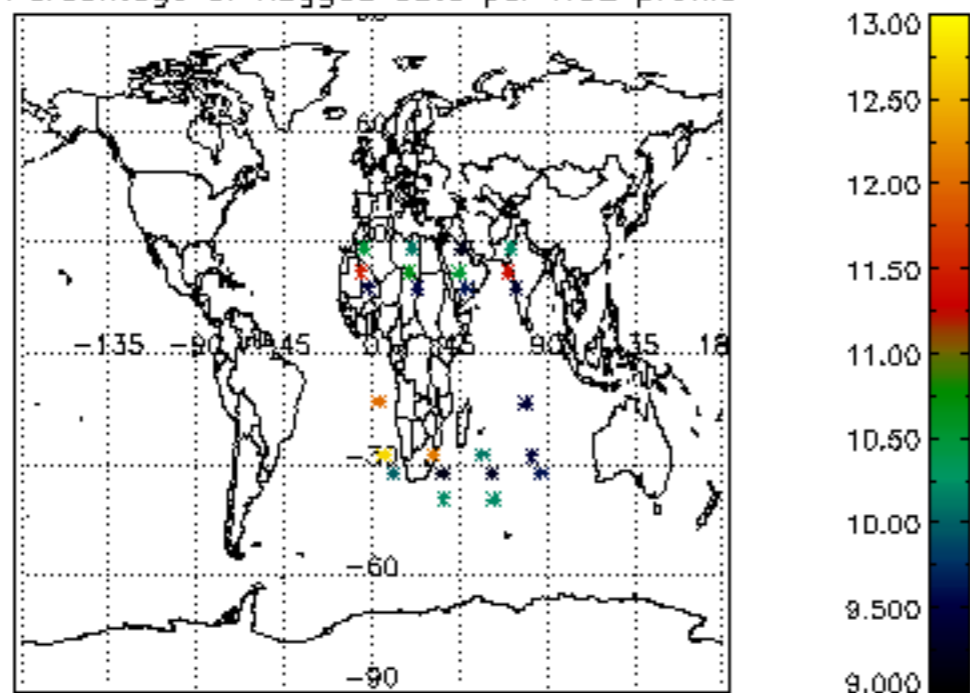
Percentage of flagged data per D3 profile



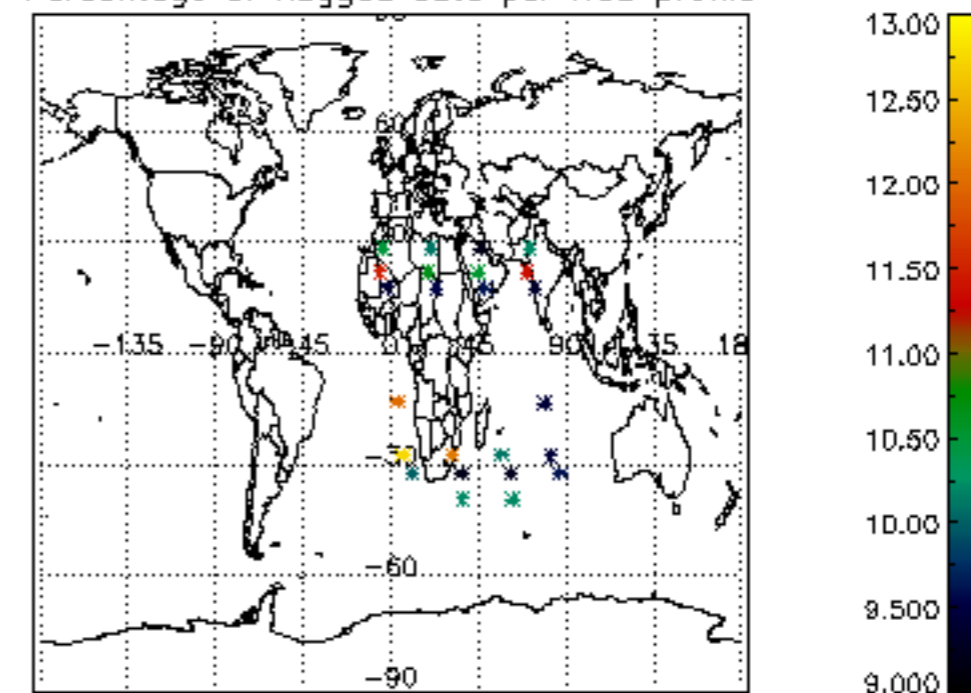
Percentage of flagged data per H2O profile

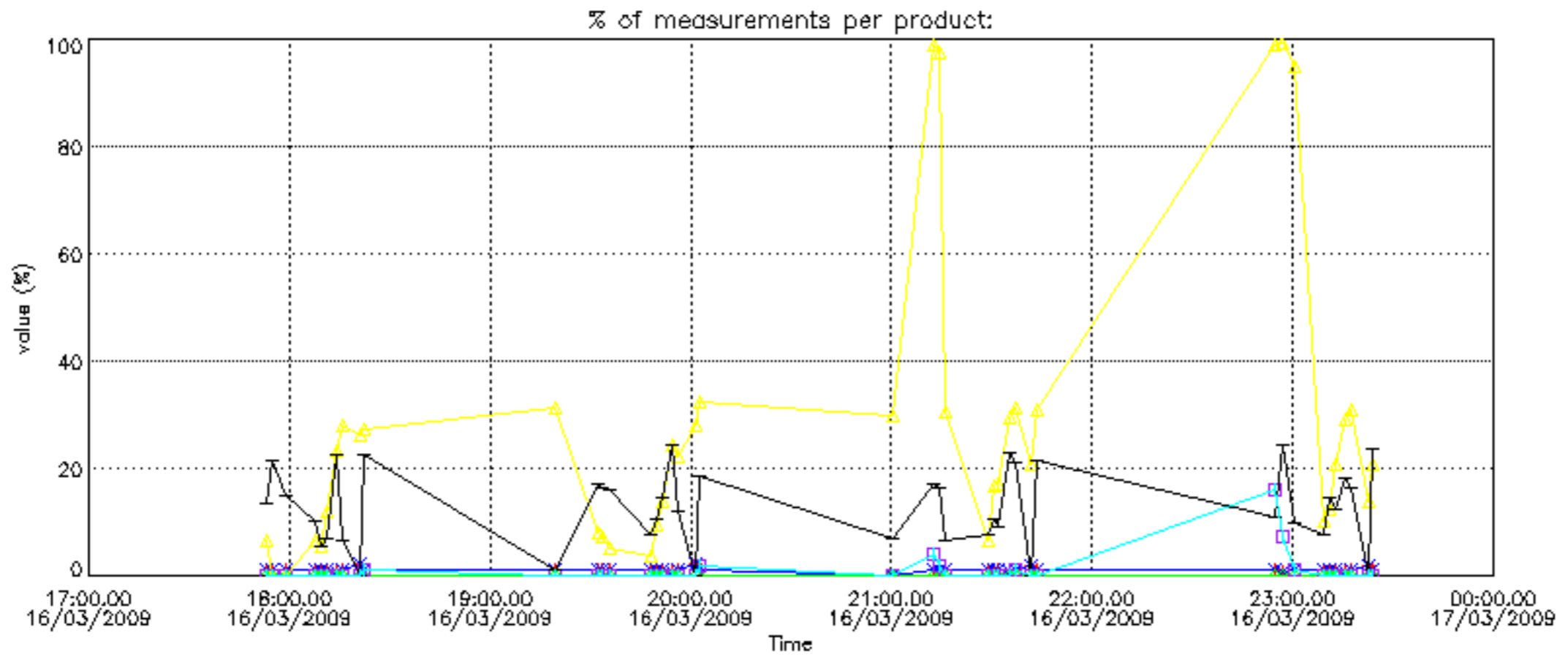


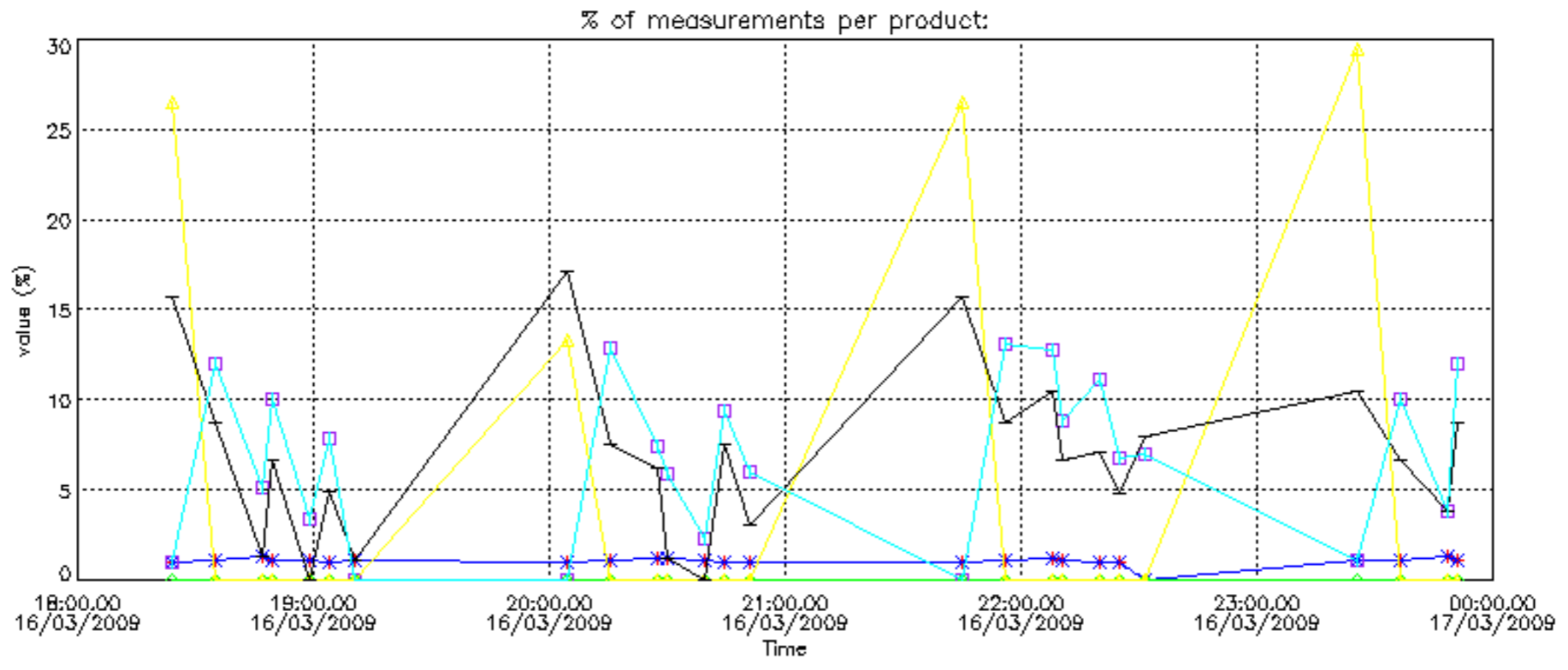
Percentage of flagged data per NO2 profile



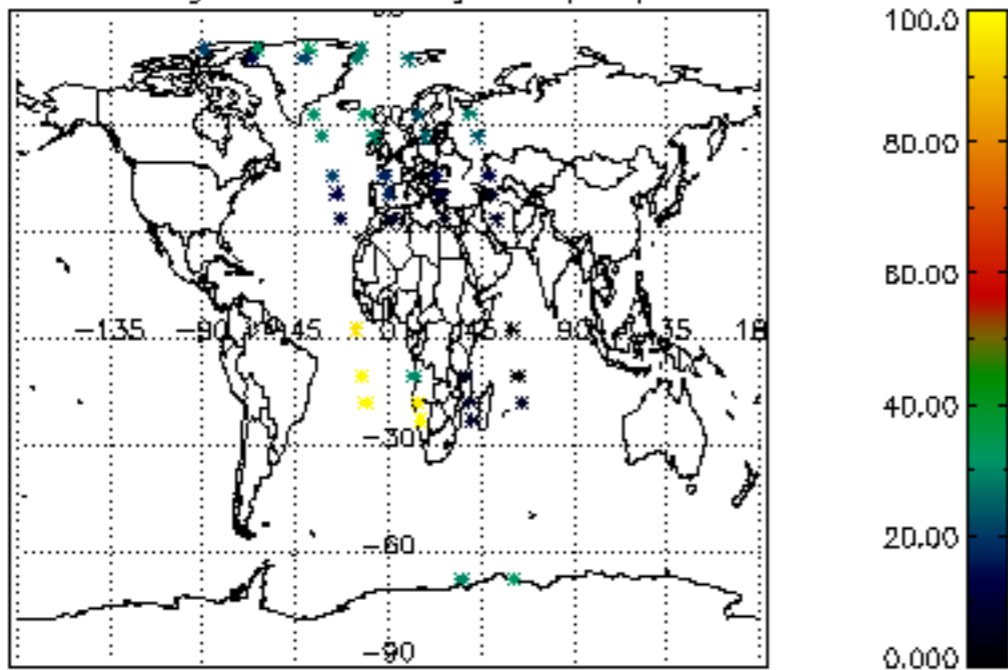
Percentage of flagged data per NO3 profile



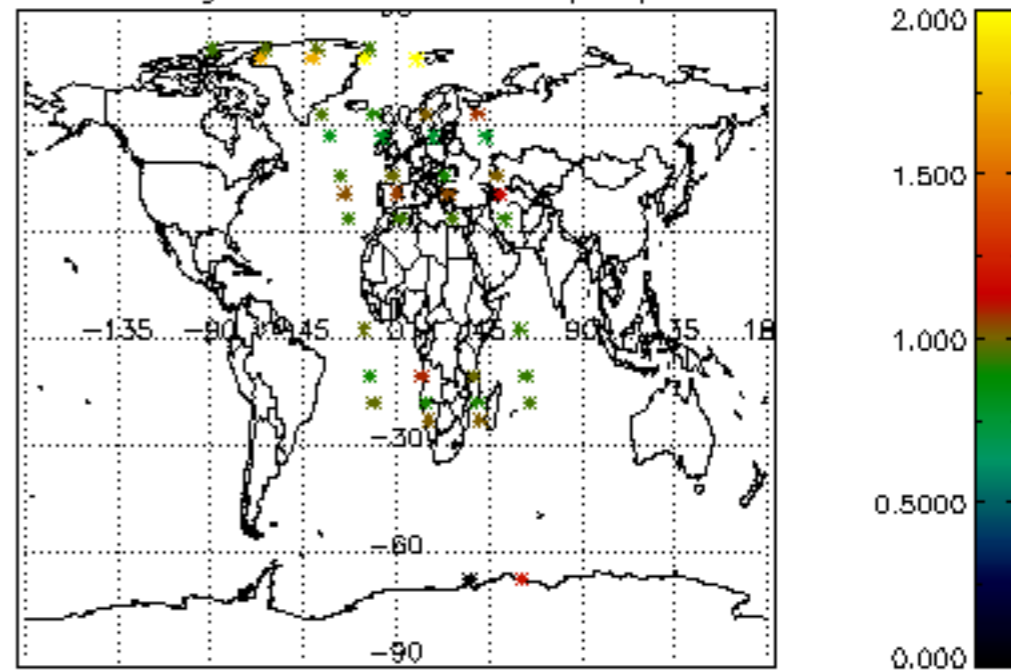




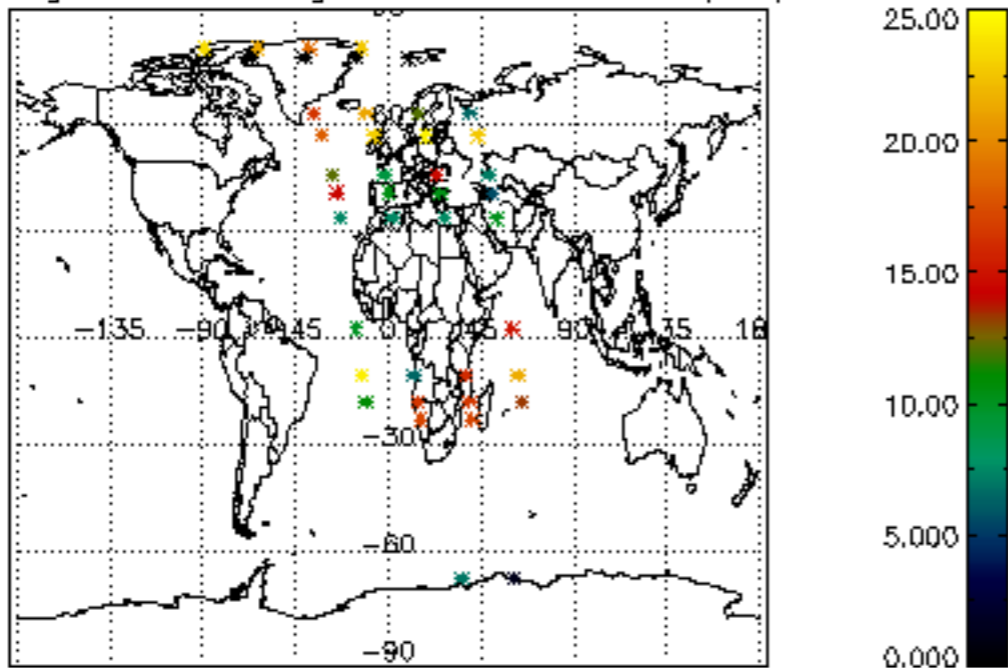
Percentage of cosmic ray hits per profile



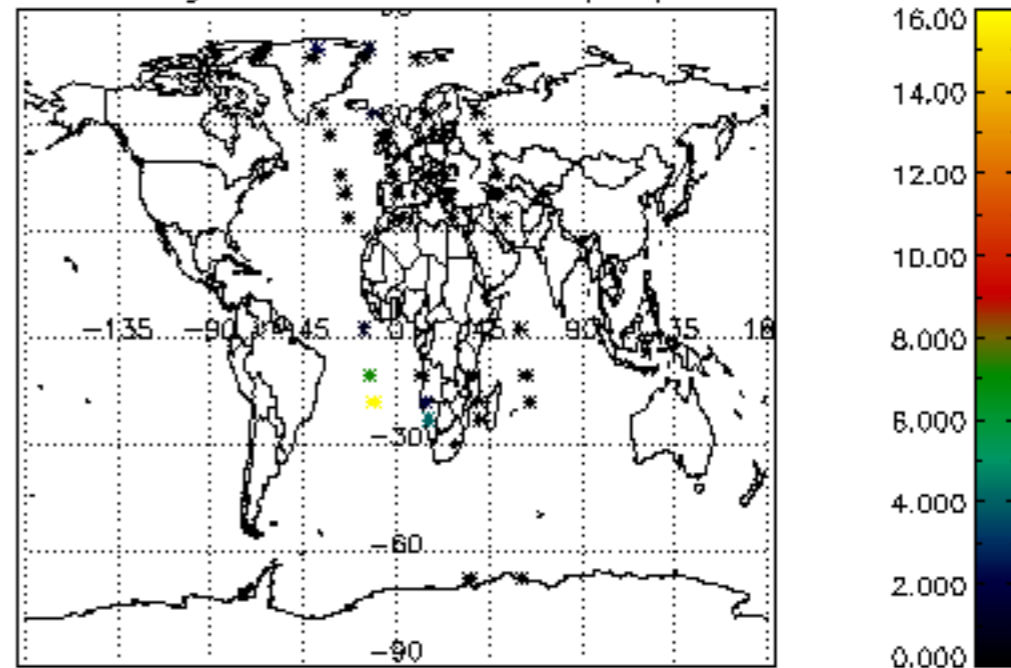
Percentage of datation errors per profile



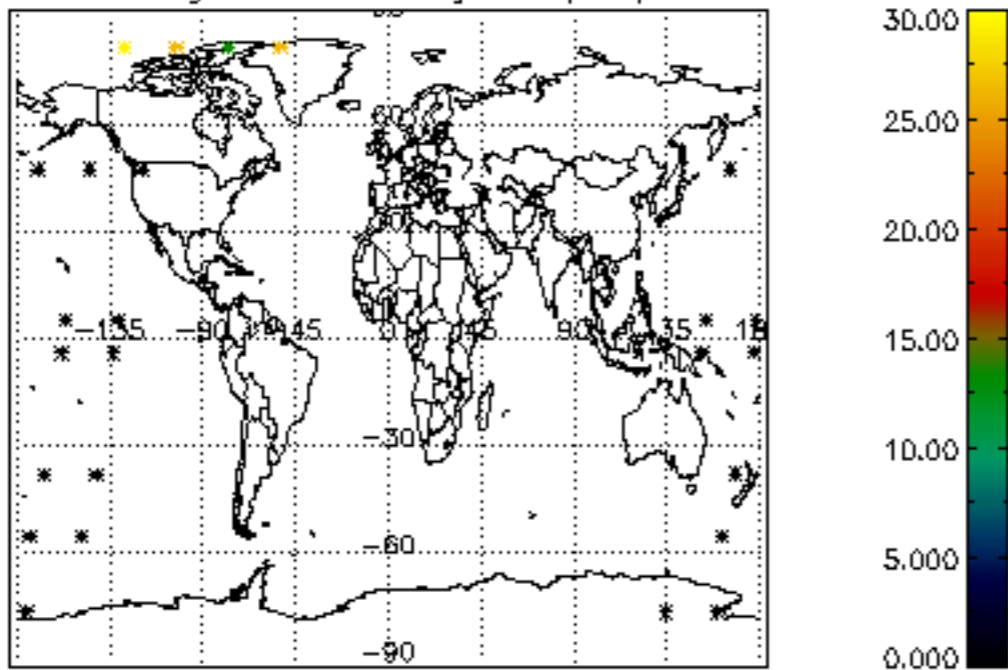
Percentage of star falling outside central band per profile



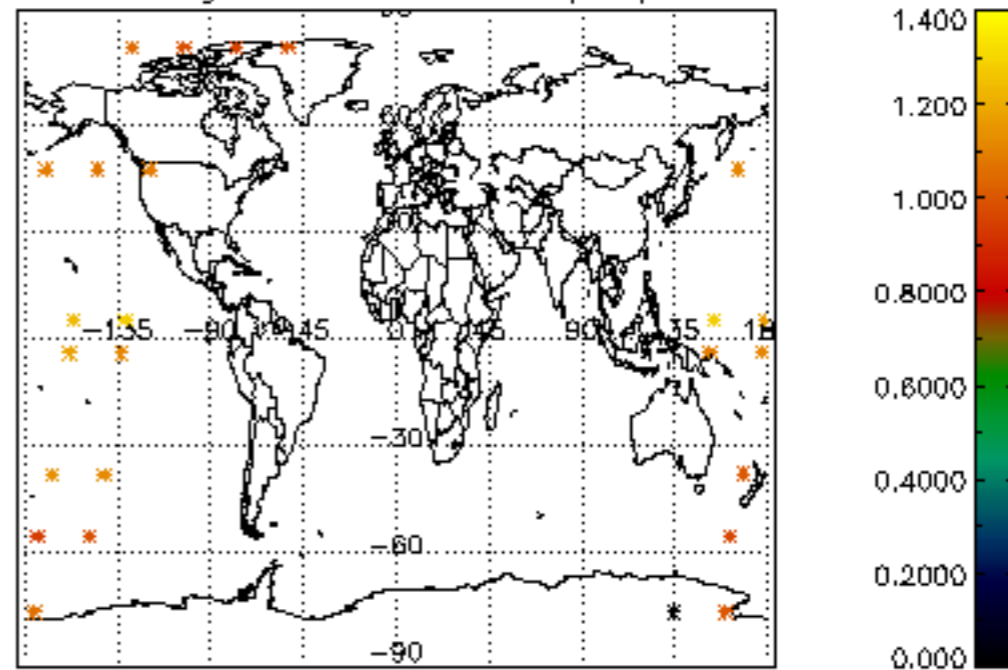
Percentage of saturation errors per profile



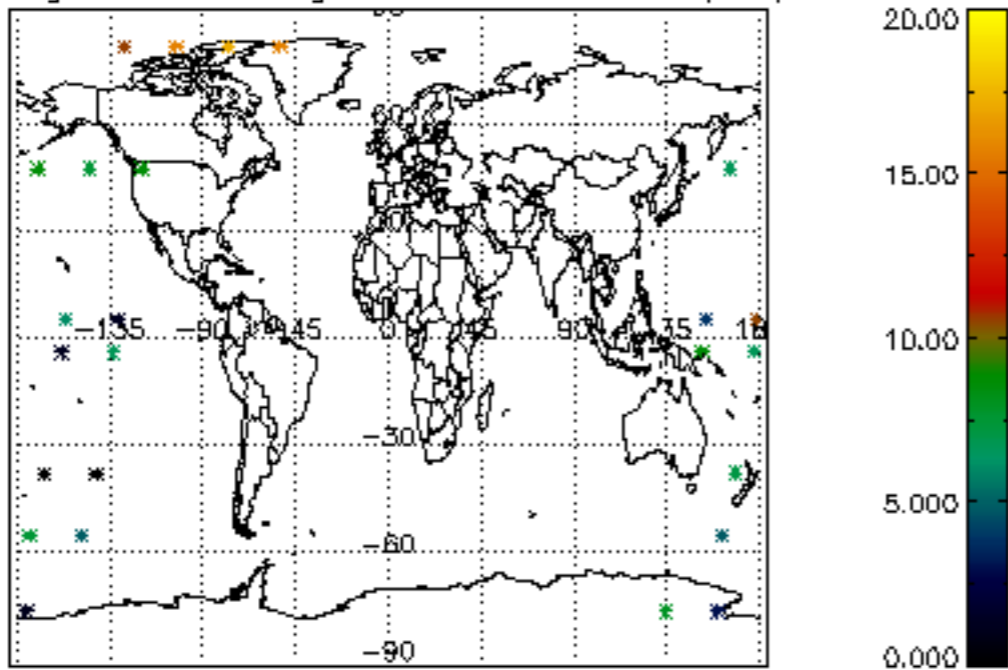
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

