

GOMOS Level 2 Daily Report

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

Item	Value
Time of report generation	17APR2013 17:47:39
Data source version	GOMOS/6.01
Start time of products	02-08-2002 (02AUG2002 00:00:00)
Stop time of products	03-08-2002 (03AUG2002 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	50
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

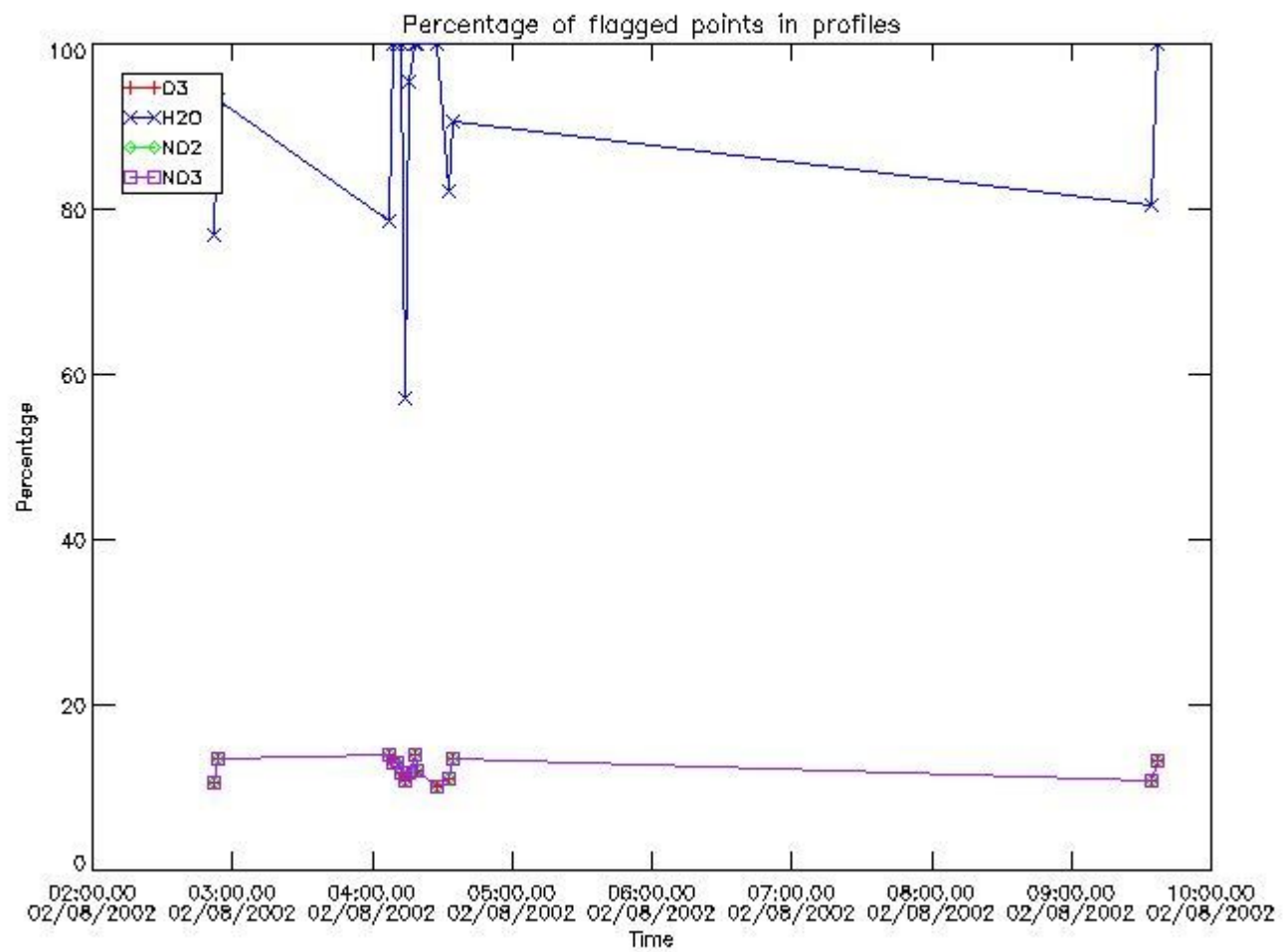
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20020802_025213_000000482008_00147_02205_8571.N1	02-AUG-2002 02:52:13	Dark	48.000	9	Alp Eri	0.45300	24000.	96	2205	No
2	GOM_NL__2PRFIN20020802_025407_000000382008_00147_02205_8572.N1	02-AUG-2002 02:54:07	Dark	38.000	135	Bet Hyi	2.8200	5800.0	76	2205	No
3	GOM_NL__2PRFIN20020802_025702_000000562008_00147_02205_8573.N1	02-AUG-2002 02:57:02	Straylight	55.500	84	Alp Phe	2.3970	4500.0	111	2205	No
4	GOM_NL__2PRFIN20020802_025901_000000452008_00147_02205_8574.N1	02-AUG-2002 02:59:01	Straylight	45.000	148	Alp Tuc	2.8780	4100.0	90	2205	No
5	GOM_NL__2PRFIN20020802_030222_000000452008_00147_02205_8575.N1	02-AUG-2002 03:02:22	Straylight	45.000	31	Alp Gru	1.7340	15200.	90	2205	No
6	GOM_NL__2PRFIN20020802_030555_000000742008_00147_02205_8576.N1	02-AUG-2002 03:05:55	Twilight	73.500	18	24Alp PsA	1.1660	9700.0	147	2205	No
7	GOM_NL__2PRFIN20020802_031137_000000402008_00147_02205_8577.N1	02-AUG-2002 03:11:37	Bright	39.500	57	34Sig Sgr	2.0660	26000.	79	2205	No
8	GOM_NL__2PRFIN20020802_031256_000000382008_00147_02205_8578.N1	02-AUG-2002 03:12:56	Bright	37.500	155	41Pi Sgr	2.9000	6600.0	75	2205	No
9	GOM_NL__2PRFIN20020802_031715_000000562008_00147_02205_8579.N1	02-AUG-2002 03:17:15	Bright	56.000	154	22Bet Aqr	2.8990	5700.0	112	2205	No
10	GOM_NL__2PRFIN20020802_032028_000000692008_00147_02205_8580.N1	02-AUG-2002 03:20:28	Bright	69.000	162	34Alp Aqr	2.9440	5350.0	138	2205	No
11	GOM_NL__2PRFIN20020802_032359_000000642008_00147_02205_8581.N1	02-AUG-2002 03:23:59	Bright	63.500	61	8Eps Peg	2.1000	3900.0	127	2205	No
12	GOM_NL__2PRFIN20020802_032947_000000402008_00147_02205_8582.N1	02-AUG-2002 03:29:47	Bright	39.500	5	3Alp Lyr	0.033000	11000.	79	2205	No
13	GOM_NL__2PRFIN20020802_033257_000000442008_00147_02205_8583.N1	02-AUG-2002 03:32:57	Bright	44.000	19	50Alp Cyg	1.2460	10500.	88	2205	No
14	GOM_NL__2PRFIN20020802_033822_000000422008_00147_02205_8584.N1	02-AUG-2002 03:38:22	Bright	42.000	89	5Alp Cep	2.4510	8000.0	84	2205	No
15	GOM_NL__2PRFIN20020802_034147_000000352008_00147_02205_8585.N1	02-AUG-2002 03:41:47	Bright	34.500	60	7Bet UMi	2.0810	3950.0	69	2205	No
16	GOM_NL__2PRFIN20020802_034417_000000362008_00147_02205_8586.N1	02-AUG-2002 03:44:17	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	2205	No
17	GOM_NL__2PRFIN20020802_034645_000000522008_00147_02205_8587.N1	02-AUG-2002 03:46:45	Bright	51.500	76	27Gam Cas	2.3000	30000.	103	2205	No
18	GOM_NL__2PRFIN20020802_035311_000000512008_00147_02205_8588.N1	02-AUG-2002 03:53:11	Bright	50.500	160	23Gam Per	2.9300	4700.0	101	2205	No
19	GOM_NL__2PRFIN20020802_035606_000000862008_00147_02205_8589.N1	02-AUG-2002 03:56:06	Bright	85.500	73	57Gam1And	2.2600	13100.	171	2205	No
20	GOM_NL__2PRFIN20020802_035853_000000472008_00147_02205_8590.N1	02-AUG-2002 03:58:53	Bright	47.000	149	45Eps Per	2.8880	30000.	94	2205	No
21	GOM_NL__2PRFIN20020802_040200_000000582008_00147_02205_8591.N1	02-AUG-2002 04:02:00	Twilight	57.500	150	44Zet Per	2.8900	28000.	115	2205	No
22	GOM_NL__2PRFIN20020802_040418_000000432008_00147_02205_8592.N1	02-AUG-2002 04:04:18	Twilight	42.500	176	23Zet Tau	3.0200	22000.	85	2205	No
23	GOM_NL__2PRFIN20020802_040652_000000472008_00147_02205_8593.N1	02-AUG-2002 04:06:52	Dark	47.000	13	87Alp Tau	0.86700	3800.0	94	2205	No
24	GOM_NL__2PRFIN20020802_040851_000000392008_00147_02205_8594.N1	02-AUG-2002 04:08:51	Dark	39.000	27	24Gam Ori	1.6360	26000.	78	2205	No
25	GOM_NL__2PRFIN20020802_041045_000000392008_00147_02205_8595.N1	02-AUG-2002 04:10:45	Dark	39.000	30	46Eps Ori	1.6940	30000.	78	2205	No
26	GOM_NL__2PRFIN20020802_041206_000000442008_00147_02205_8596.N1	02-AUG-2002 04:12:06	Dark	43.500	125	44Iot Ori	2.7700	30000.	87	2205	No
27	GOM_NL__2PRFIN20020802_041402_000000472008_00147_02205_8597.N1	02-AUG-2002 04:14:02	Dark	47.000	1	9Alp CMa	-1.4400	11000.	94	2205	No
28	GOM_NL__2PRFIN20020802_041526_000000442008_00147_02205_8598.N1	02-AUG-2002 04:15:26	Dark	43.500	101	11Alp Lep	2.5820	7000.0	87	2205	No
29	GOM_NL__2PRFIN20020802_041757_000000372008_00147_02205_8599.N1	02-AUG-2002 04:17:57	Dark	36.500	177	1Zet CMa	3.0220	26000.	73	2205	No
30	GOM_NL__2PRFIN20020802_041937_000000422008_00147_02205_8600.N1	02-AUG-2002 04:19:37	Dark	42.000	108	Alp Col	2.6520	15200.	84	2205	No
31	GOM_NL__2PRFIN20020802_042722_000000512008_00147_02205_8602.N1	02-AUG-2002 04:27:22	Dark	50.500	157	The1Eri	2.9060	9300.0	101	2205	No
32	GOM_NL__2PRFIN20020802_043249_000000462008_00148_02206_8571.N1	02-AUG-2002 04:32:49	Dark	45.500	9	Alp Eri	0.45300	24000.	91	2206	No
33	GOM_NL__2PRFIN20020802_043443_000000382008_00148_02206_8572.N1	02-AUG-2002 04:34:43	Dark	37.500	135	Bet Hyi	2.8200	5800.0	75	2206	No
34	GOM_NL__2PRFIN20020802_043737_000000612008_00148_02206_8573.N1	02-AUG-2002 04:37:37	Straylight	61.000	84	Alp Phe	2.3970	4500.0	122	2206	No
35	GOM_NL__2PRFIN20020802_043937_000000432008_00148_02206_8574.N1	02-AUG-2002 04:39:37	Straylight	43.000	148	Alp Tuc	2.8780	4100.0	86	2206	No
36	GOM_NL__2PRFIN20020802_044258_000000492008_00148_02206_8575.N1	02-AUG-2002 04:42:58	Straylight	48.500	31	Alp Gru	1.7340	15200.	97	2206	No
37	GOM_NL__2PRFIN20020802_044632_000000732008_00148_02206_8576.N1	02-AUG-2002 04:46:32	Twilight	72.500	18	24Alp PsA	1.1660	9700.0	145	2206	No
38	GOM_NL__2PRFIN20020802_045213_000000392008_00148_02206_8577.N1	02-AUG-2002 04:52:13	Bright	39.000	57	34Sig Sgr	2.0660	26000.	78	2206	No
39	GOM_NL__2PRFIN20020802_045332_000000372008_00148_02206_8578.N1	02-AUG-2002 04:53:32	Bright	36.500	155	41Pi Sgr	2.9000	6600.0	73	2206	No
40	GOM_NL__2PRFIN20020802_045750_000000562008_00148_02206_8579.N1	02-AUG-2002 04:57:50	Bright	56.000	154	22Bet Aqr	2.8990	5700.0	112	2206	No
41	GOM_NL__2PRFIN20020802_050103_000000712008_00148_02206_8580.N1	02-AUG-2002 05:01:03	Bright	70.500	162	34Alp Aqr	2.9440	5350.0	141	2206	No
42	GOM_NL__2PRFIN20020802_050434_000000632008_00148_02206_8581.N1	02-AUG-2002 05:04:34	Bright	63.000	61	8Eps Peg	2.1000	3900.0	126	2206	No

43	GOM_NL__2PRFIN20020802_093439_000000472008_00151_02209_8573.N1	02-AUG-2002 09:34:39	Dark	46.500	9	Alp Eri	0.45300	24000.	93	2209	No
44	GOM_NL__2PRFIN20020802_093631_000000392008_00151_02209_8574.N1	02-AUG-2002 09:36:31	Dark	38.500	135	Bet Hyi	2.8200	5800.0	77	2209	No
45	GOM_NL__2PRFIN20020802_093930_000000632008_00151_02209_8575.N1	02-AUG-2002 09:39:30	Straylight	62.500	84	Alp Phe	2.3970	4500.0	125	2209	No
46	GOM_NL__2PRFIN20020802_094126_000000432008_00151_02209_8576.N1	02-AUG-2002 09:41:26	Straylight	42.500	148	Alp Tuc	2.8780	4100.0	85	2209	No
47	GOM_NL__2PRFIN20020802_094447_000000492008_00151_02209_8577.N1	02-AUG-2002 09:44:47	Straylight	48.500	31	Alp Gru	1.7340	15200.	97	2209	No
48	GOM_NL__2PRFIN20020802_094823_000000722008_00151_02209_8578.N1	02-AUG-2002 09:48:23	Twilight_and_stray	72.000	18	24Alp PsA	1.1660	9700.0	144	2209	No
49	GOM_NL__2PRFIN20020802_095401_000000512008_00151_02209_8579.N1	02-AUG-2002 09:54:01	Bright	51.000	57	34Sig Sgr	2.0660	26000.	102	2209	No
50	GOM_NL__2PRFIN20020802_095520_000000362008_00151_02209_8580.N1	02-AUG-2002 09:55:20	Bright	35.500	155	41Pi Sgr	2.9000	6600.0	71	2209	No

3. Quality information per product

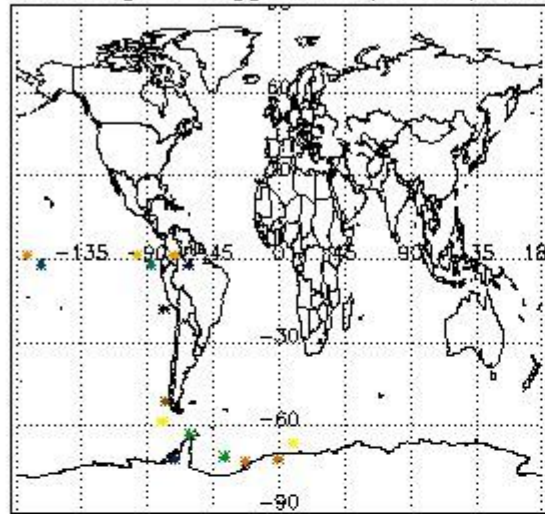
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

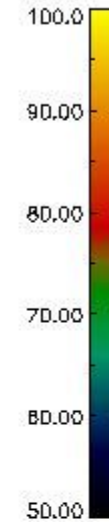
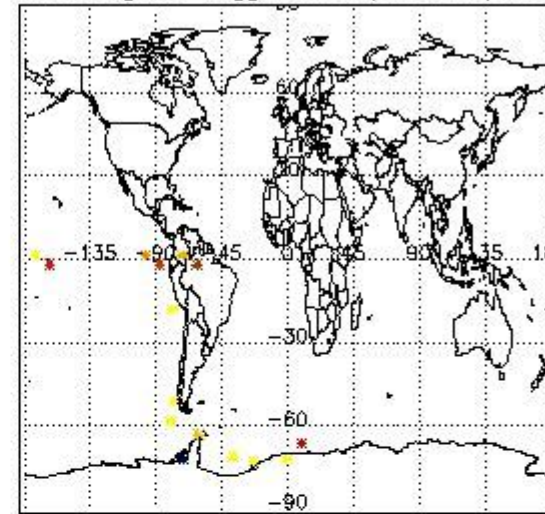


3.2 Plot quality information per product (world map)

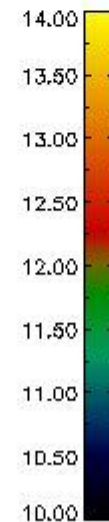
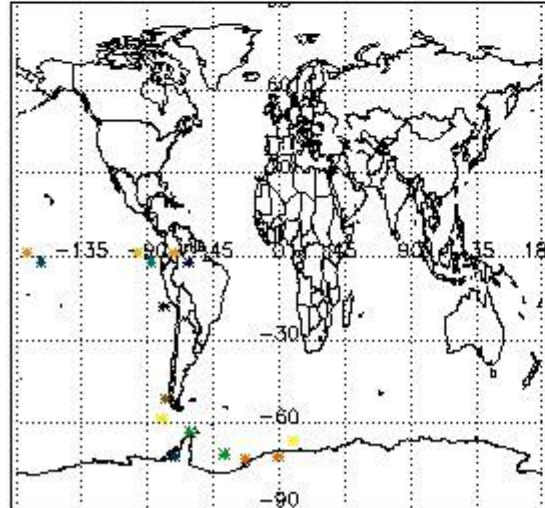
Percentage of flagged data per O3 profile



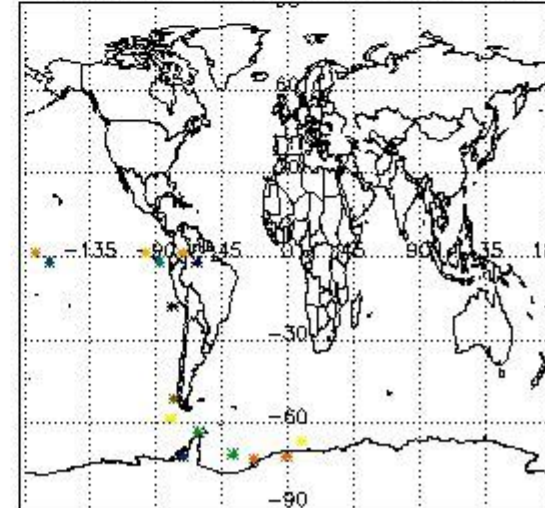
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

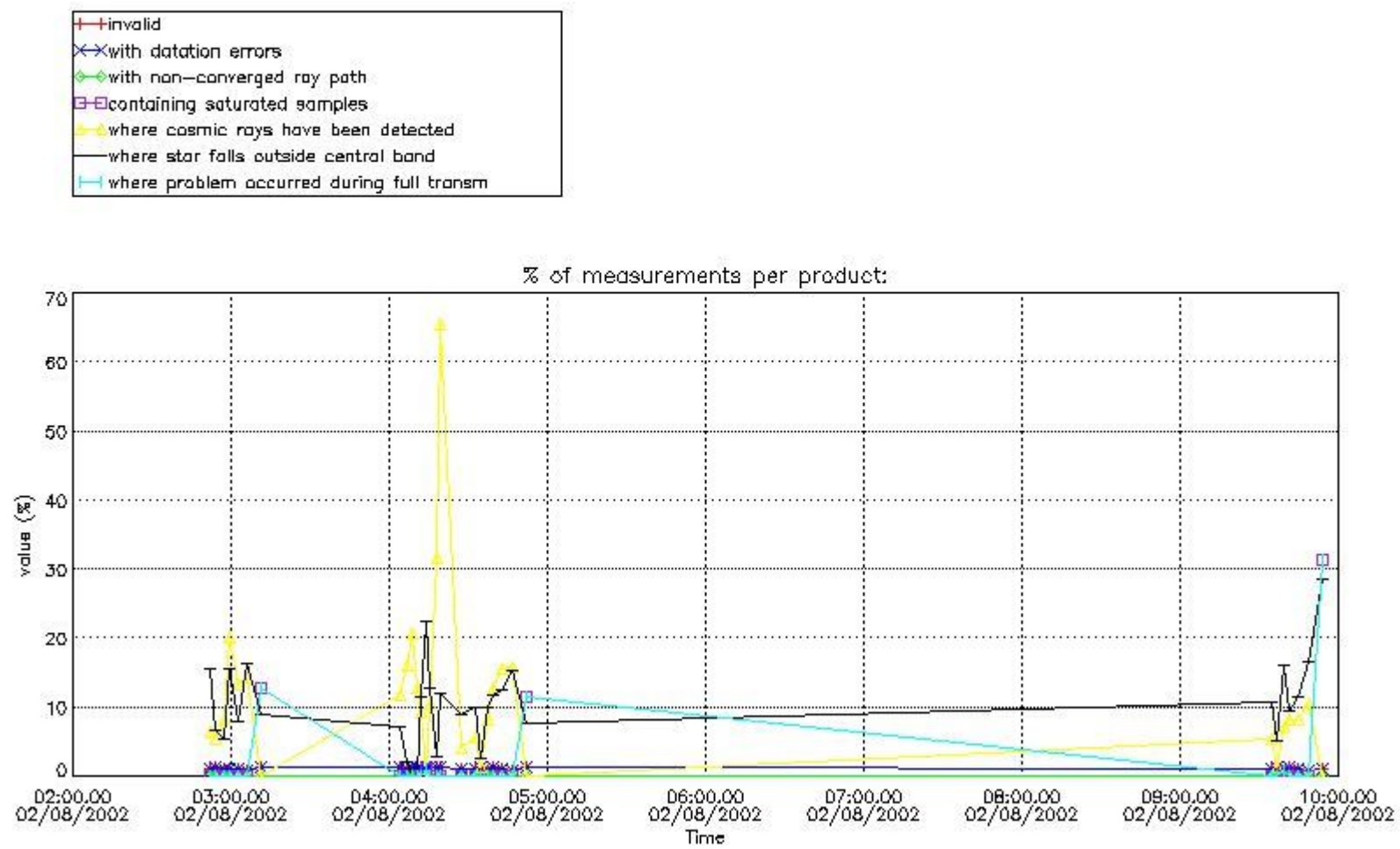


4. Level 1 quality information per product

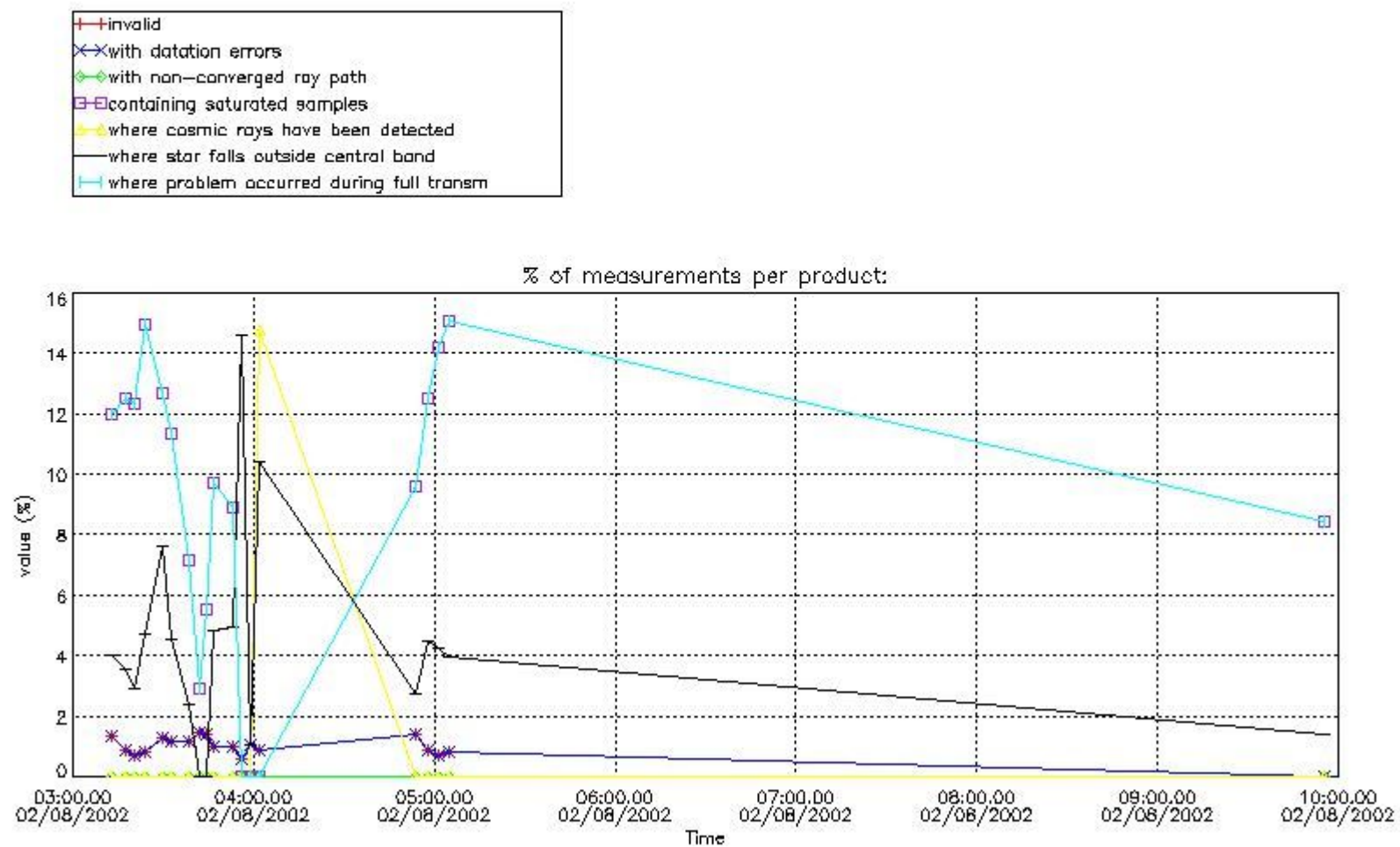
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



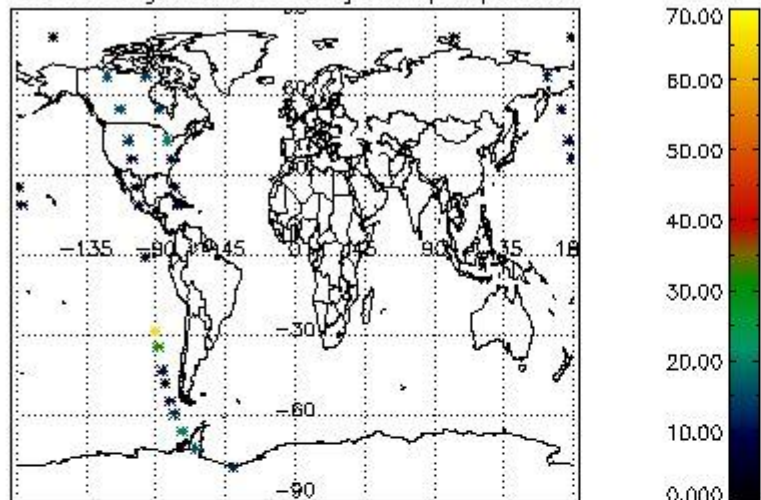
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



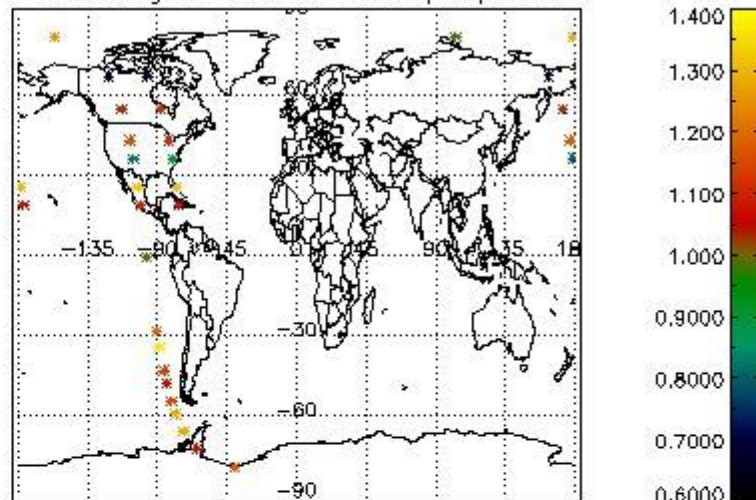
4.2 Plot quality information per product coming from level 1b processing (world map)

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

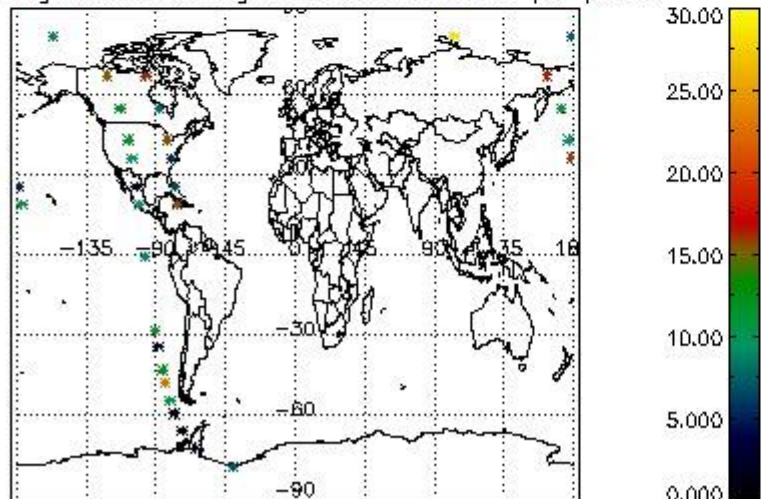
Percentage of cosmic ray hits per profile



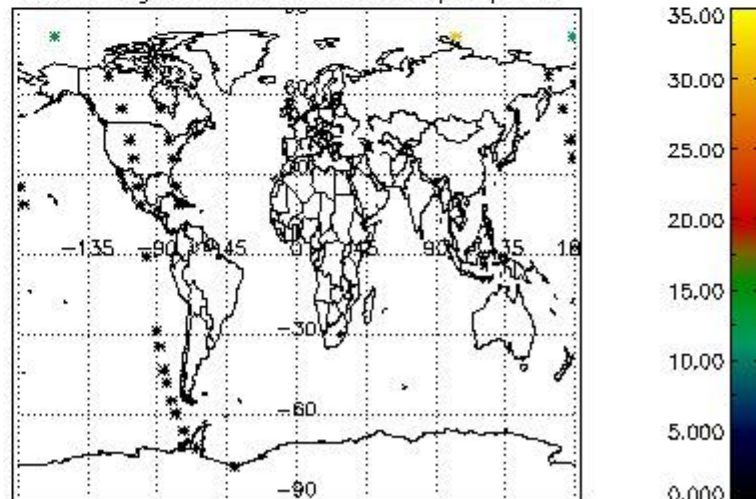
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

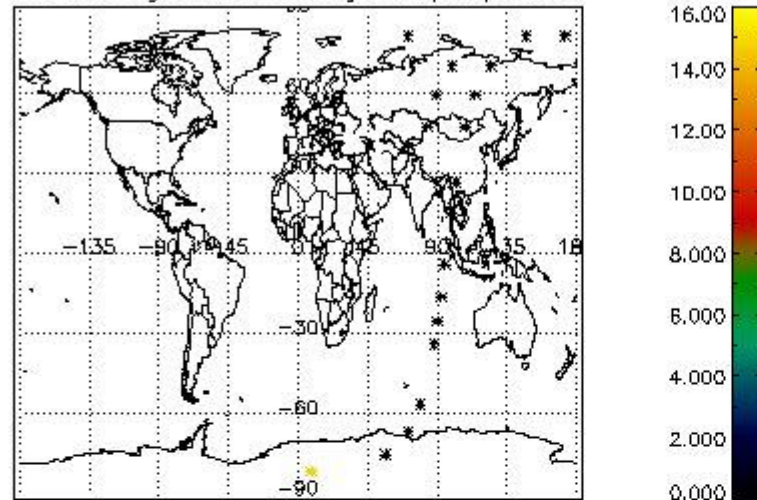


Percentage of saturation errors per profile

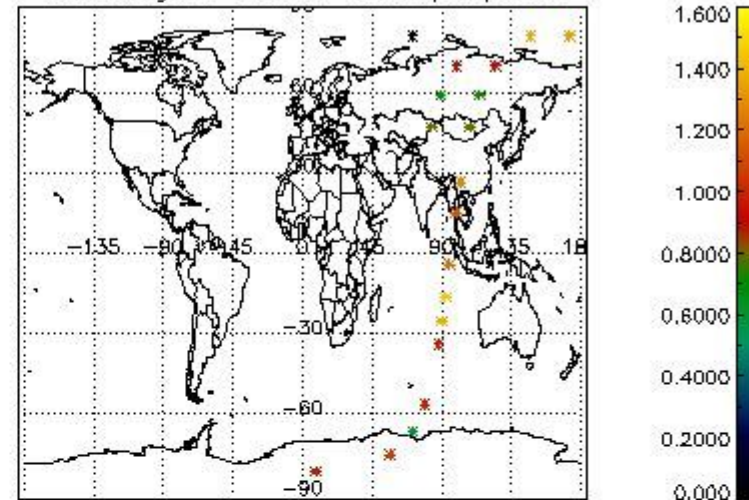


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

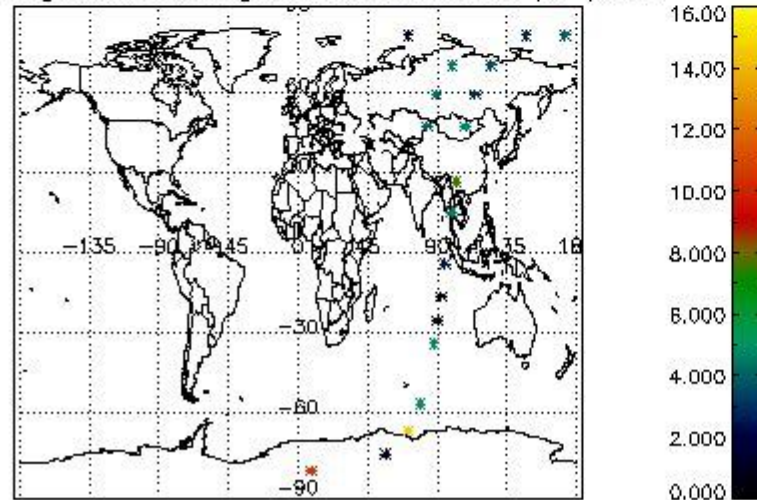
Percentage of cosmic ray hits per profile



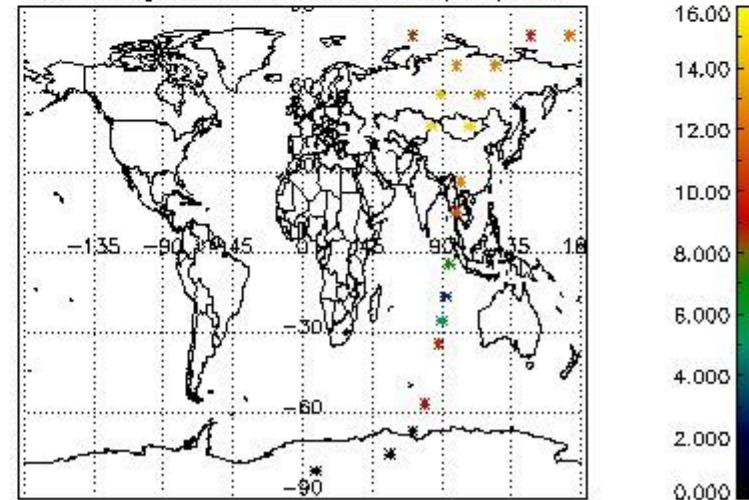
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

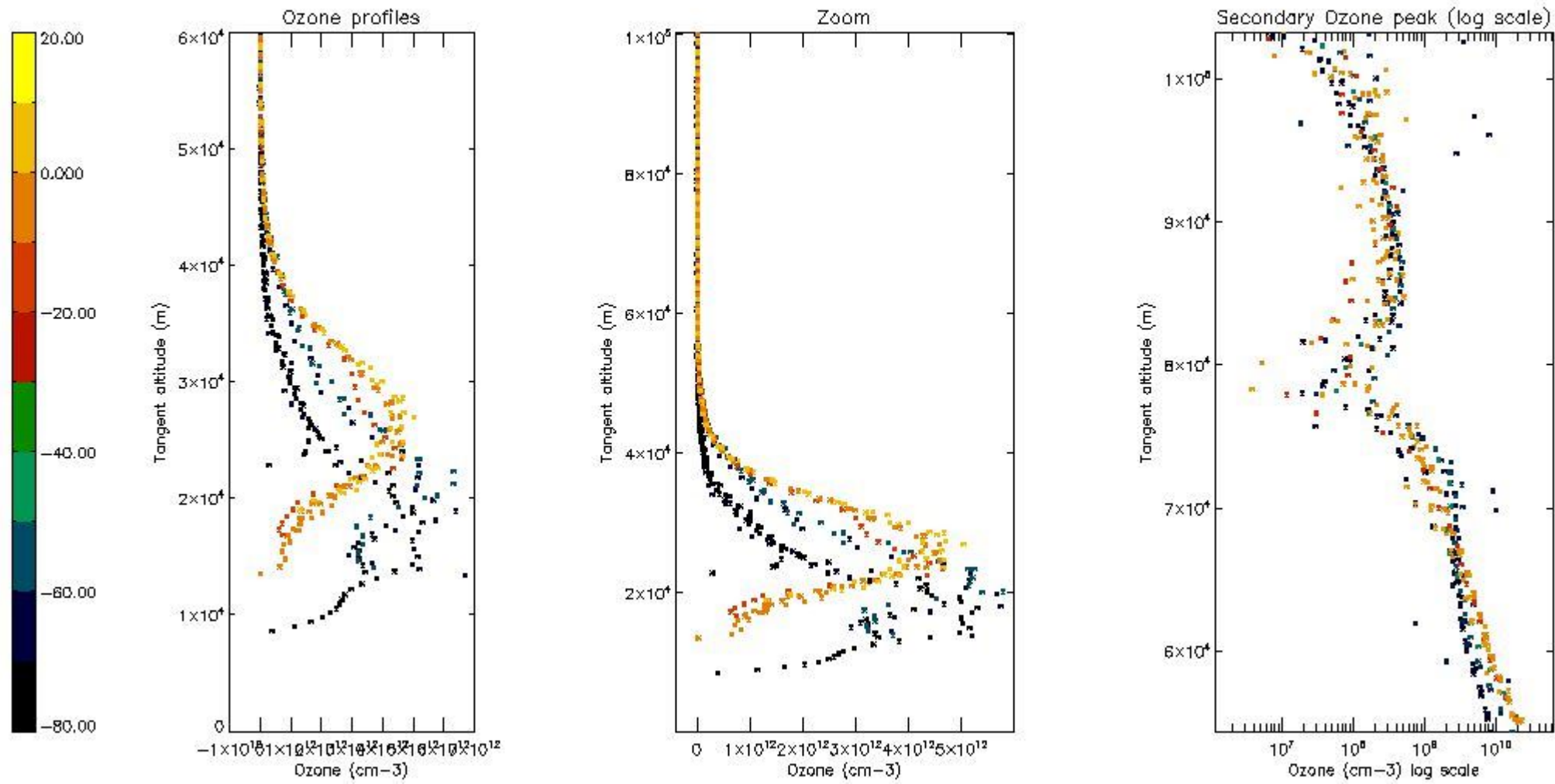
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	17

STD < 10	14
STD < 5	11

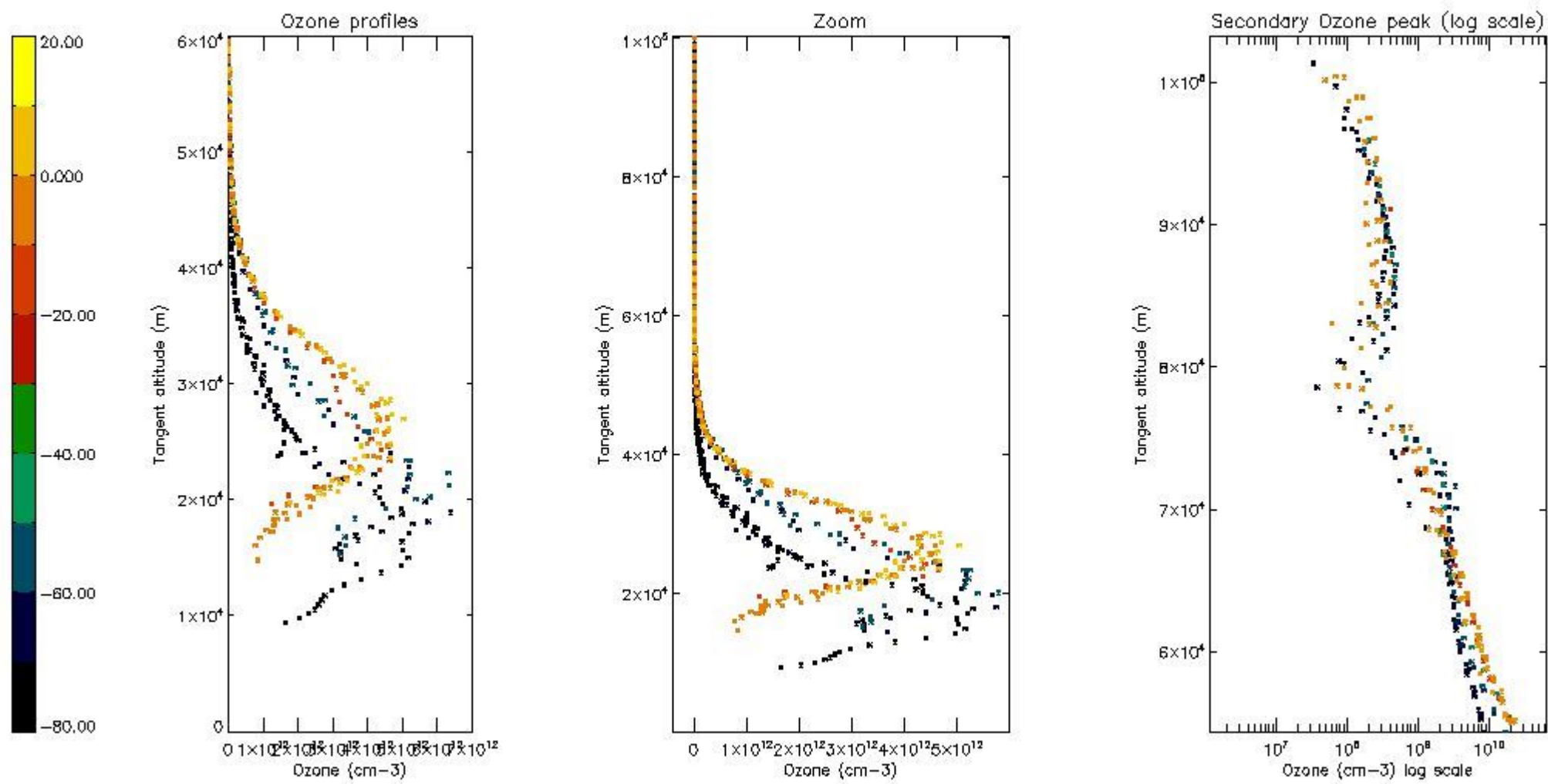
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



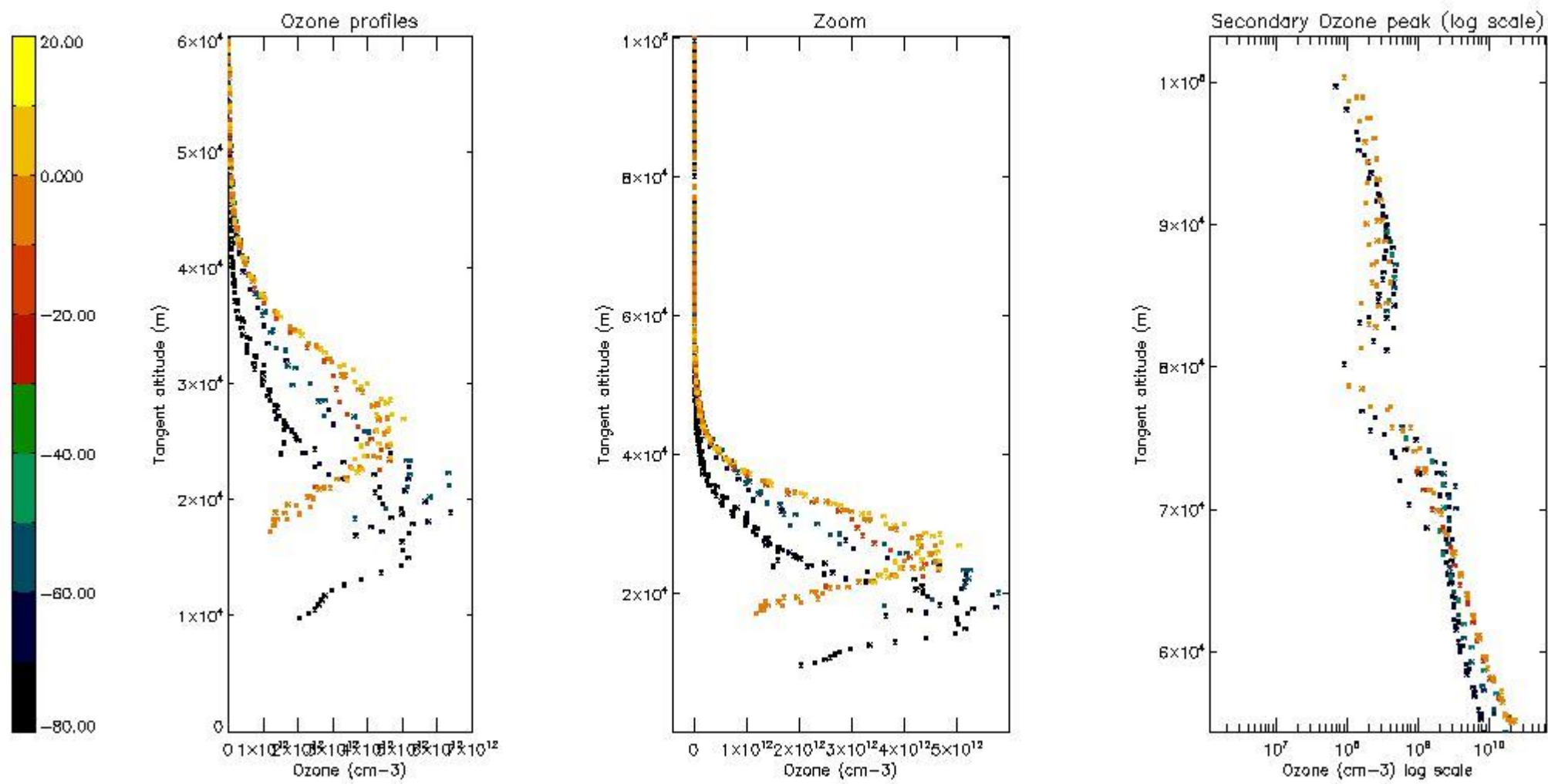
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



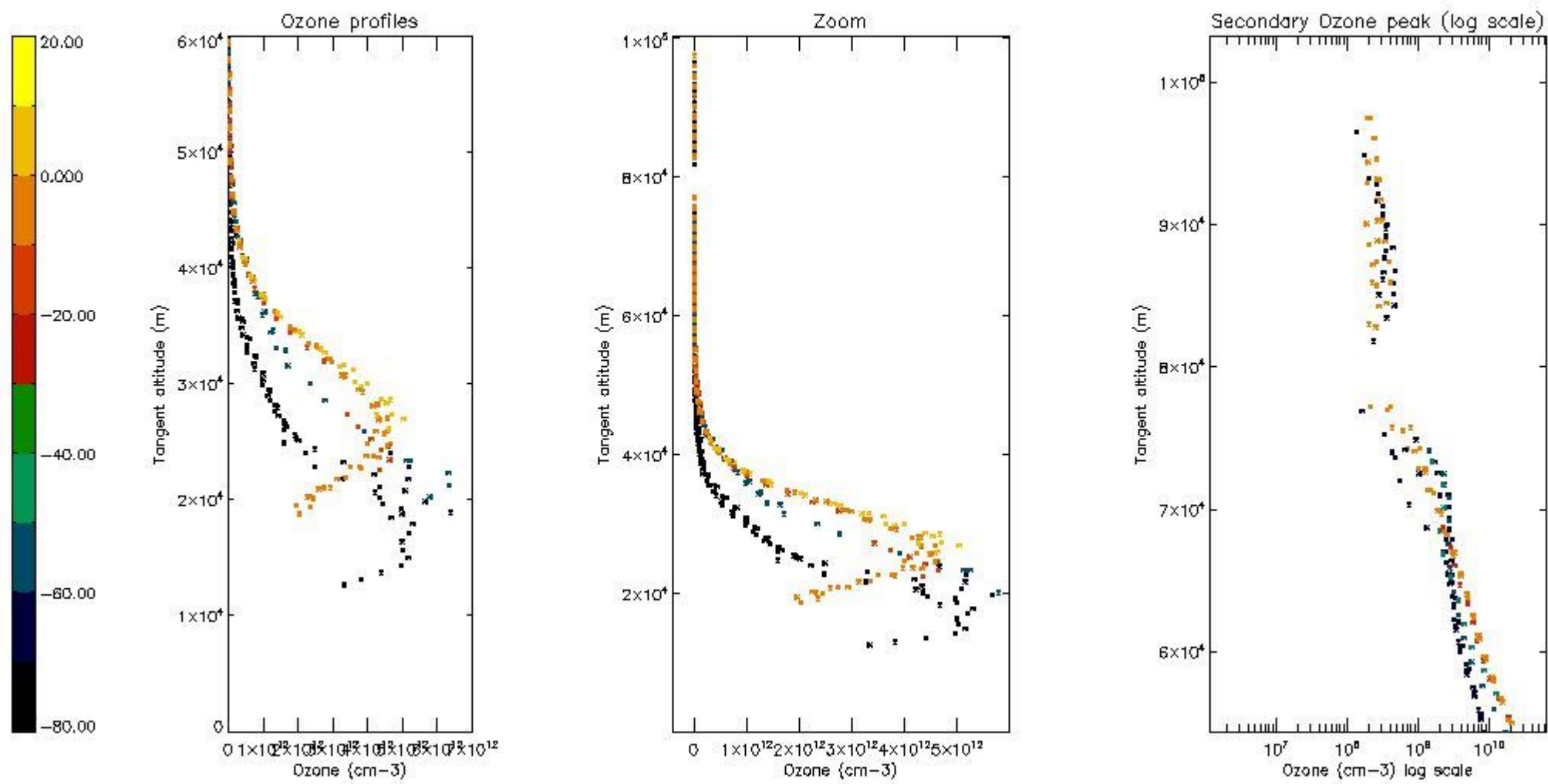
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



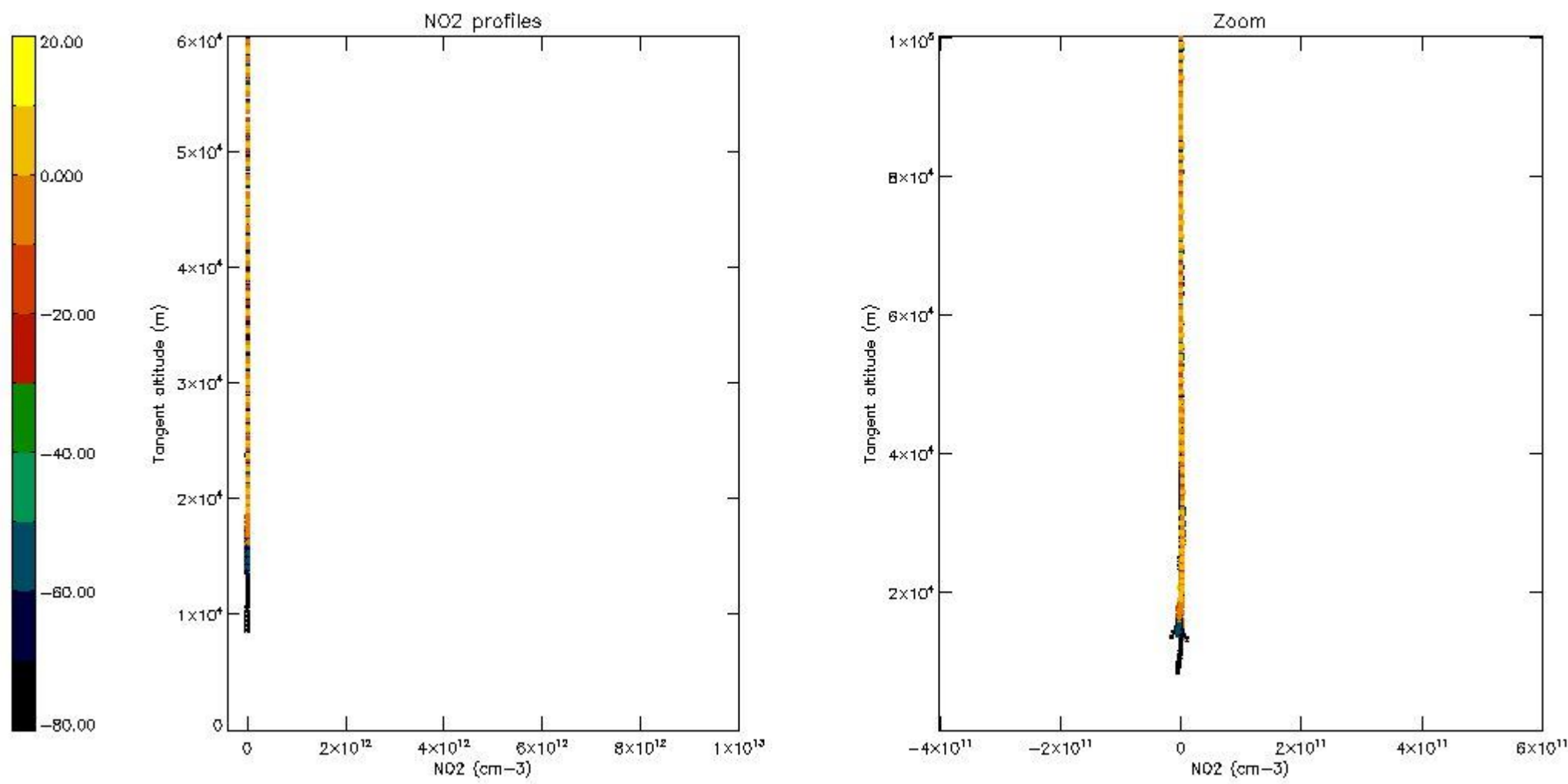
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



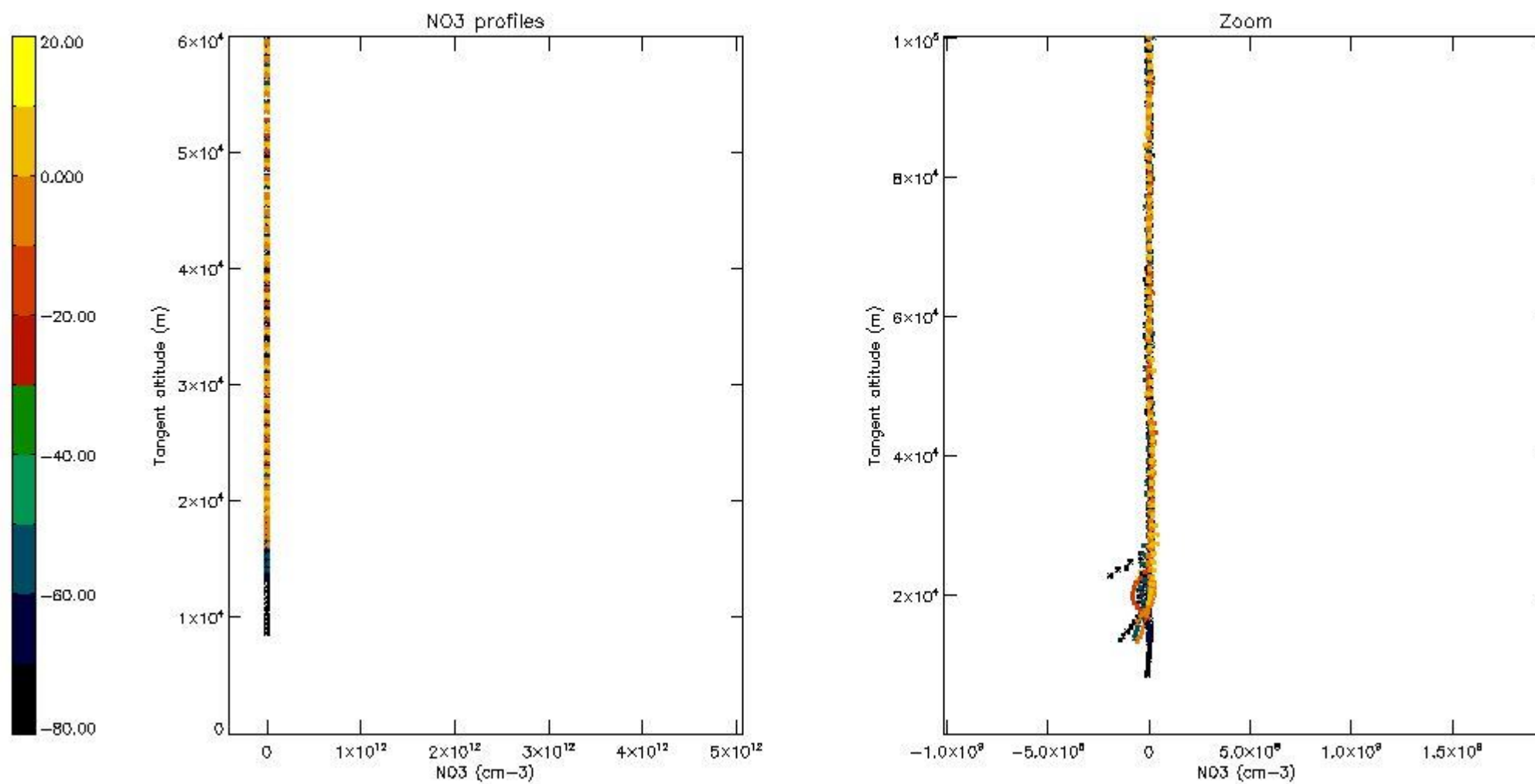
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

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

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	02-AUG-2002 02:52:13
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	02-AUG-2002 02:52:13
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	02-AUG-2002 02:52:13

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

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

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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](#)

[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 \(dark without errors\)](#)

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[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	17APR2013 17:47:39
Data source version	GOMOS/6.01
Start time of products	02-08-2002 (02AUG2002 00:00:00)
Stop time of products	03-08-2002 (03AUG2002 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	50
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

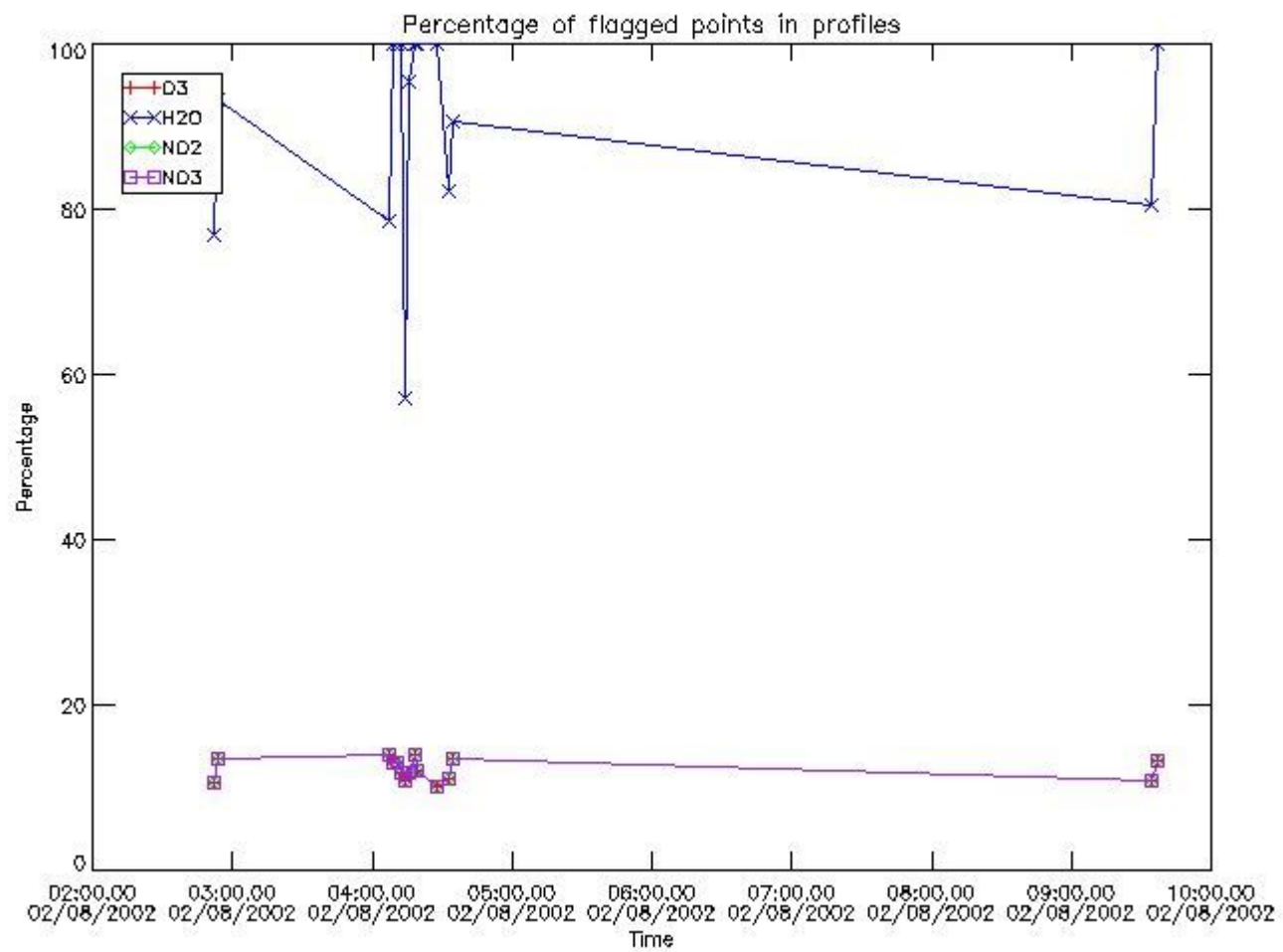
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20020802_025213_000000482008_00147_02205_8571.N1	02-AUG-2002 02:52:13	Dark	48.000	9	Alp Eri	0.45300	24000.	96	2205	No
2	GOM_NL__2PRFIN20020802_025407_000000382008_00147_02205_8572.N1	02-AUG-2002 02:54:07	Dark	38.000	135	Bet Hyi	2.8200	5800.0	76	2205	No
3	GOM_NL__2PRFIN20020802_025702_000000562008_00147_02205_8573.N1	02-AUG-2002 02:57:02	Straylight	55.500	84	Alp Phe	2.3970	4500.0	111	2205	No
4	GOM_NL__2PRFIN20020802_025901_000000452008_00147_02205_8574.N1	02-AUG-2002 02:59:01	Straylight	45.000	148	Alp Tuc	2.8780	4100.0	90	2205	No
5	GOM_NL__2PRFIN20020802_030222_000000452008_00147_02205_8575.N1	02-AUG-2002 03:02:22	Straylight	45.000	31	Alp Gru	1.7340	15200.	90	2205	No
6	GOM_NL__2PRFIN20020802_030555_000000742008_00147_02205_8576.N1	02-AUG-2002 03:05:55	Twi_and_stray	73.500	18	24Alp PsA	1.1660	9700.0	147	2205	No
7	GOM_NL__2PRFIN20020802_031137_000000402008_00147_02205_8577.N1	02-AUG-2002 03:11:37	Bright	39.500	57	34Sig Sgr	2.0660	26000.	79	2205	No
8	GOM_NL__2PRFIN20020802_031256_000000382008_00147_02205_8578.N1	02-AUG-2002 03:12:56	Bright	37.500	155	41Pi Sgr	2.9000	6600.0	75	2205	No
9	GOM_NL__2PRFIN20020802_031715_000000562008_00147_02205_8579.N1	02-AUG-2002 03:17:15	Bright	56.000	154	22Bet Aqr	2.8990	5700.0	112	2205	No
10	GOM_NL__2PRFIN20020802_032028_000000692008_00147_02205_8580.N1	02-AUG-2002 03:20:28	Bright	69.000	162	34Alp Aqr	2.9440	5350.0	138	2205	No
11	GOM_NL__2PRFIN20020802_032359_000000642008_00147_02205_8581.N1	02-AUG-2002 03:23:59	Bright	63.500	61	8Eps Peg	2.1000	3900.0	127	2205	No
12	GOM_NL__2PRFIN20020802_032947_000000402008_00147_02205_8582.N1	02-AUG-2002 03:29:47	Bright	39.500	5	3Alp Lyr	0.033000	11000.	79	2205	No
13	GOM_NL__2PRFIN20020802_033257_000000442008_00147_02205_8583.N1	02-AUG-2002 03:32:57	Bright	44.000	19	50Alp Cyg	1.2460	10500.	88	2205	No
14	GOM_NL__2PRFIN20020802_033822_000000422008_00147_02205_8584.N1	02-AUG-2002 03:38:22	Bright	42.000	89	5Alp Cep	2.4510	8000.0	84	2205	No
15	GOM_NL__2PRFIN20020802_034147_000000352008_00147_02205_8585.N1	02-AUG-2002 03:41:47	Bright	34.500	60	7Bet UMi	2.0810	3950.0	69	2205	No
16	GOM_NL__2PRFIN20020802_034417_000000362008_00147_02205_8586.N1	02-AUG-2002 03:44:17	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	2205	No
17	GOM_NL__2PRFIN20020802_034645_000000522008_00147_02205_8587.N1	02-AUG-2002 03:46:45	Bright	51.500	76	27Gam Cas	2.3000	30000.	103	2205	No
18	GOM_NL__2PRFIN20020802_035311_000000512008_00147_02205_8588.N1	02-AUG-2002 03:53:11	Bright	50.500	160	23Gam Per	2.9300	4700.0	101	2205	No
19	GOM_NL__2PRFIN20020802_035606_000000862008_00147_02205_8589.N1	02-AUG-2002 03:56:06	Bright	85.500	73	57Gam1And	2.2600	13100.	171	2205	No
20	GOM_NL__2PRFIN20020802_035853_000000472008_00147_02205_8590.N1	02-AUG-2002 03:58:53	Bright	47.000	149	45Eps Per	2.8880	30000.	94	2205	No
21	GOM_NL__2PRFIN20020802_040200_000000582008_00147_02205_8591.N1	02-AUG-2002 04:02:00	Twi_and_stray	57.500	150	44Zet Per	2.8900	28000.	115	2205	No
22	GOM_NL__2PRFIN20020802_040418_000000432008_00147_02205_8592.N1	02-AUG-2002 04:04:18	Twi_and_stray	42.500	176	23Zet Tau	3.0200	22000.	85	2205	No
23	GOM_NL__2PRFIN20020802_040652_000000472008_00147_02205_8593.N1	02-AUG-2002 04:06:52	Dark	47.000	13	87Alp Tau	0.86700	3800.0	94	2205	No
24	GOM_NL__2PRFIN20020802_040851_000000392008_00147_02205_8594.N1	02-AUG-2002 04:08:51	Dark	39.000	27	24Gam Ori	1.6360	26000.	78	2205	No
25	GOM_NL__2PRFIN20020802_041045_000000392008_00147_02205_8595.N1	02-AUG-2002 04:10:45	Dark	39.000	30	46Eps Ori	1.6940	30000.	78	2205	No
26	GOM_NL__2PRFIN20020802_041206_000000442008_00147_02205_8596.N1	02-AUG-2002 04:12:06	Dark	43.500	125	44Iot Ori	2.7700	30000.	87	2205	No
27	GOM_NL__2PRFIN20020802_041402_000000472008_00147_02205_8597.N1	02-AUG-2002 04:14:02	Dark	47.000	1	9Alp CMa	-1.4400	11000.	94	2205	No
28	GOM_NL__2PRFIN20020802_041526_000000442008_00147_02205_8598.N1	02-AUG-2002 04:15:26	Dark	43.500	101	11Alp Lep	2.5820	7000.0	87	2205	No
29	GOM_NL__2PRFIN20020802_041757_000000372008_00147_02205_8599.N1	02-AUG-2002 04:17:57	Dark	36.500	177	1Zet CMa	3.0220	26000.	73	2205	No
30	GOM_NL__2PRFIN20020802_041937_000000422008_00147_02205_8600.N1	02-AUG-2002 04:19:37	Dark	42.000	108	Alp Col	2.6520	15200.	84	2205	No
31	GOM_NL__2PRFIN20020802_042722_000000512008_00147_02205_8602.N1	02-AUG-2002 04:27:22	Dark	50.500	157	The1Eri	2.9060	9300.0	101	2205	No
32	GOM_NL__2PRFIN20020802_043249_000000462008_00148_02206_8571.N1	02-AUG-2002 04:32:49	Dark	45.500	9	Alp Eri	0.45300	24000.	91	2206	No
33	GOM_NL__2PRFIN20020802_043443_000000382008_00148_02206_8572.N1	02-AUG-2002 04:34:43	Dark	37.500	135	Bet Hyi	2.8200	5800.0	75	2206	No
34	GOM_NL__2PRFIN20020802_043737_000000612008_00148_02206_8573.N1	02-AUG-2002 04:37:37	Straylight	61.000	84	Alp Phe	2.3970	4500.0	122	2206	No
35	GOM_NL__2PRFIN20020802_043937_000000432008_00148_02206_8574.N1	02-AUG-2002 04:39:37	Straylight	43.000	148	Alp Tuc	2.8780	4100.0	86	2206	No
36	GOM_NL__2PRFIN20020802_044258_000000492008_00148_02206_8575.N1	02-AUG-2002 04:42:58	Straylight	48.500	31	Alp Gru	1.7340	15200.	97	2206	No
37	GOM_NL__2PRFIN20020802_044632_000000732008_00148_02206_8576.N1	02-AUG-2002 04:46:32	Twi_and_stray	72.500	18	24Alp PsA	1.1660	9700.0	145	2206	No
38	GOM_NL__2PRFIN20020802_045213_000000392008_00148_02206_8577.N1	02-AUG-2002 04:52:13	Bright	39.000	57	34Sig Sgr	2.0660	26000.	78	2206	No
39	GOM_NL__2PRFIN20020802_045332_000000372008_00148_02206_8578.N1	02-AUG-2002 04:53:32	Bright	36.500	155	41Pi Sgr	2.9000	6600.0	73	2206	No
40	GOM_NL__2PRFIN20020802_045750_000000562008_00148_02206_8579.N1	02-AUG-2002 04:57:50	Bright	56.000	154	22Bet Aqr	2.8990	5700.0	112	2206	No
41	GOM_NL__2PRFIN20020802_050103_000000712008_00148_02206_8580.N1	02-AUG-2002 05:01:03	Bright	70.500	162	34Alp Aqr	2.9440	5350.0	141	2206	No
42	GOM_NL__2PRFIN20020802_050434_000000632008_00148_02206_8581.N1	02-AUG-2002 05:04:34	Bright	63.000	61	8Eps Peg	2.1000	3900.0	126	2206	No

43	GOM_NL__2PRFIN20020802_093439_000000472008_00151_02209_8573.N1	02-AUG-2002 09:34:39	Dark	46.500	9	Alp Eri	0.45300	24000.	93	2209	No
44	GOM_NL__2PRFIN20020802_093631_000000392008_00151_02209_8574.N1	02-AUG-2002 09:36:31	Dark	38.500	135	Bet Hyi	2.8200	5800.0	77	2209	No
45	GOM_NL__2PRFIN20020802_093930_000000632008_00151_02209_8575.N1	02-AUG-2002 09:39:30	Straylight	62.500	84	Alp Phe	2.3970	4500.0	125	2209	No
46	GOM_NL__2PRFIN20020802_094126_000000432008_00151_02209_8576.N1	02-AUG-2002 09:41:26	Straylight	42.500	148	Alp Tuc	2.8780	4100.0	85	2209	No
47	GOM_NL__2PRFIN20020802_094447_000000492008_00151_02209_8577.N1	02-AUG-2002 09:44:47	Straylight	48.500	31	Alp Gru	1.7340	15200.	97	2209	No
48	GOM_NL__2PRFIN20020802_094823_000000722008_00151_02209_8578.N1	02-AUG-2002 09:48:23	Twilight_stray	72.000	18	24Alp PsA	1.1660	9700.0	144	2209	No
49	GOM_NL__2PRFIN20020802_095401_000000512008_00151_02209_8579.N1	02-AUG-2002 09:54:01	Bright	51.000	57	34Sig Sgr	2.0660	26000.	102	2209	No
50	GOM_NL__2PRFIN20020802_095520_000000362008_00151_02209_8580.N1	02-AUG-2002 09:55:20	Bright	35.500	155	41Pi Sgr	2.9000	6600.0	71	2209	No

3. Quality information per product

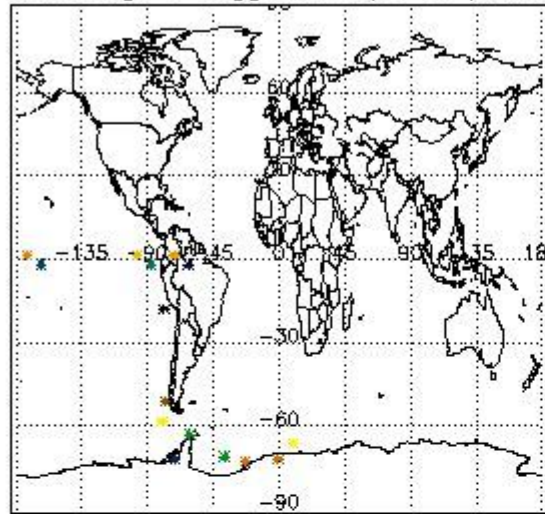
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

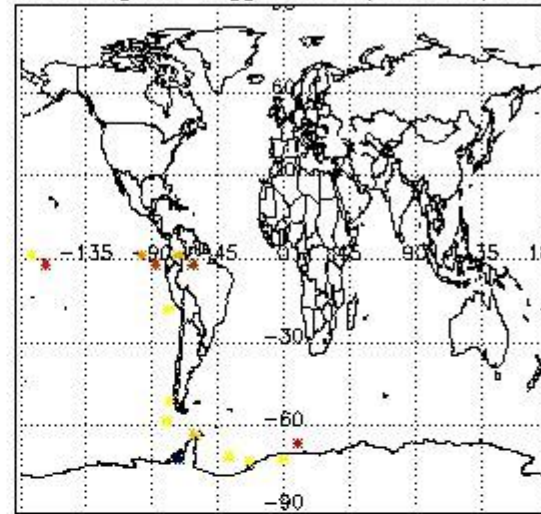


3.2 Plot quality information per product (world map)

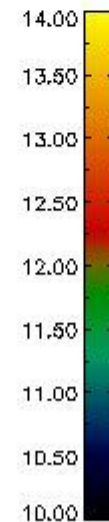
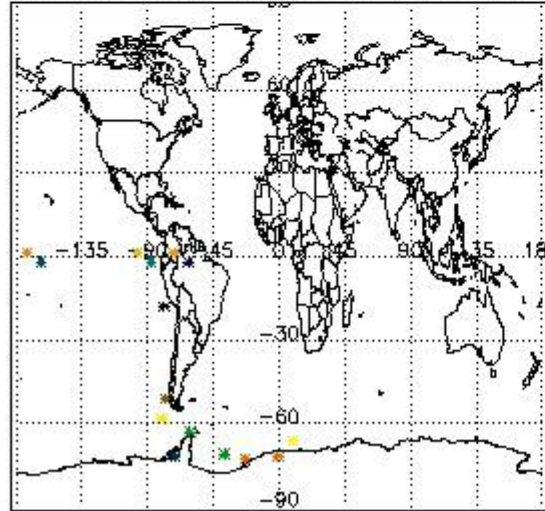
Percentage of flagged data per O3 profile



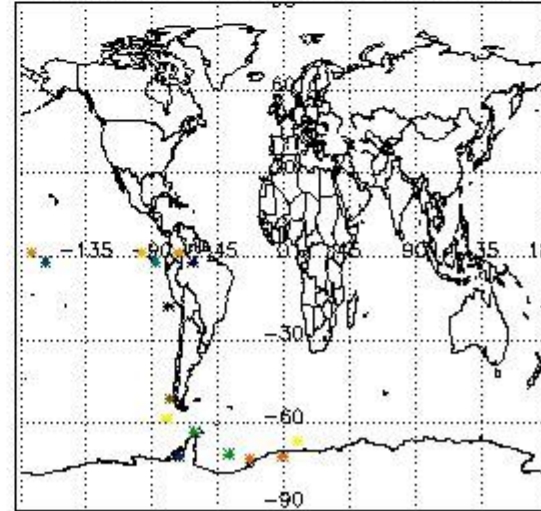
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

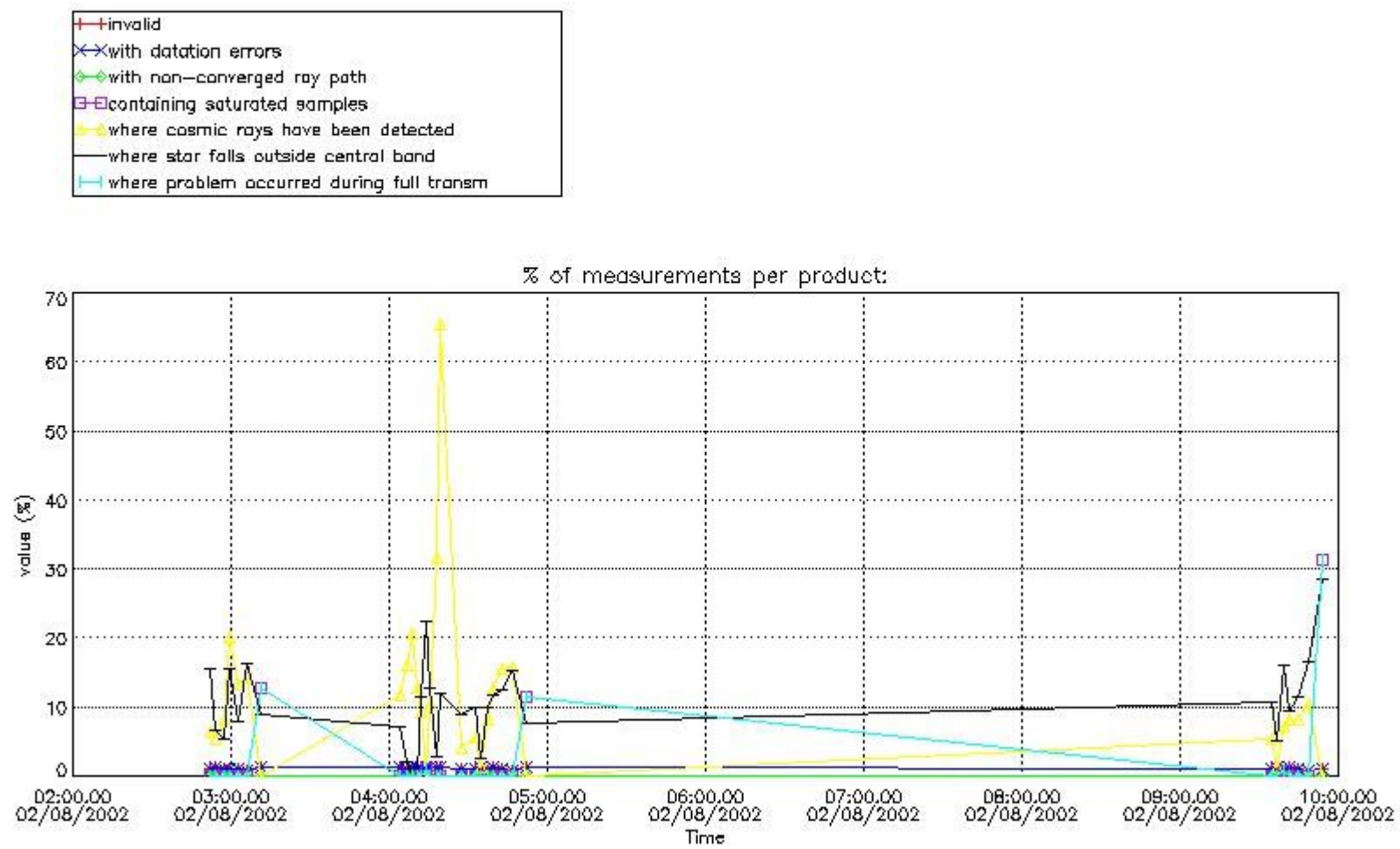


4. Level 1 quality information per product

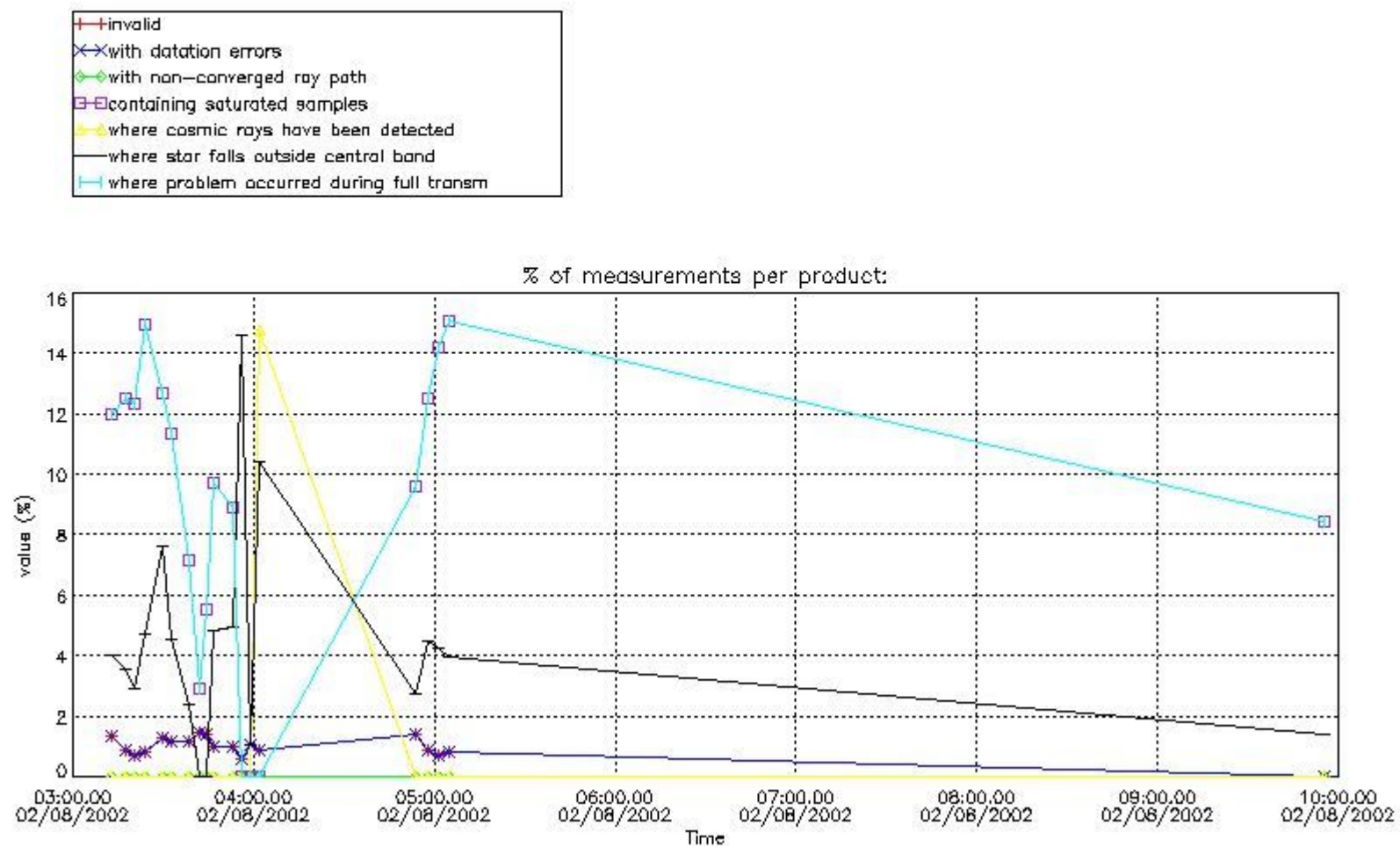
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



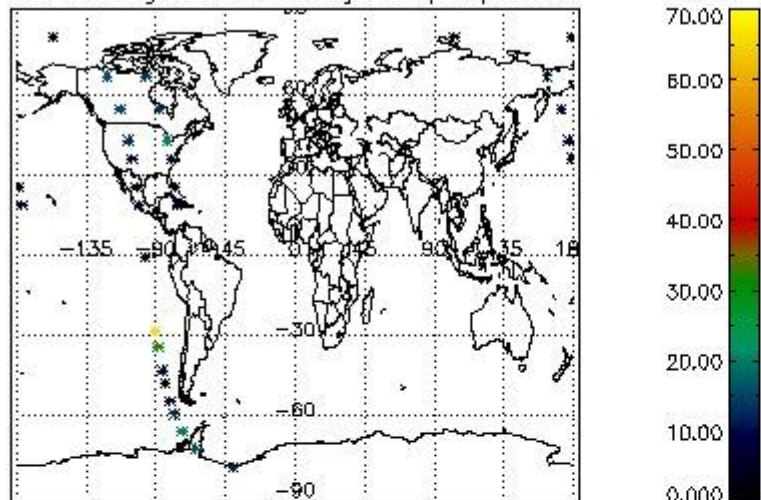
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



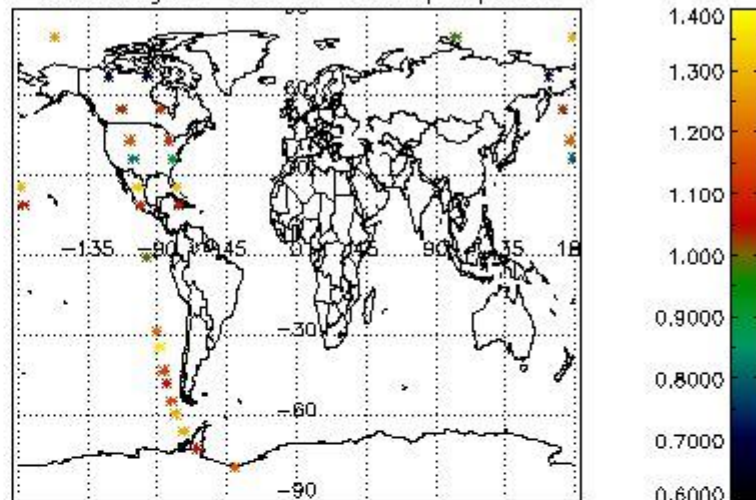
4.2 Plot quality information per product coming from level 1b processing (world map)

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

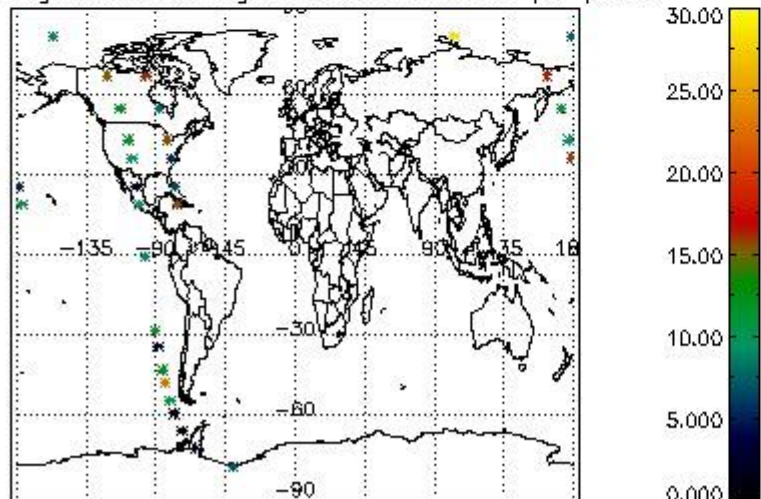
Percentage of cosmic ray hits per profile



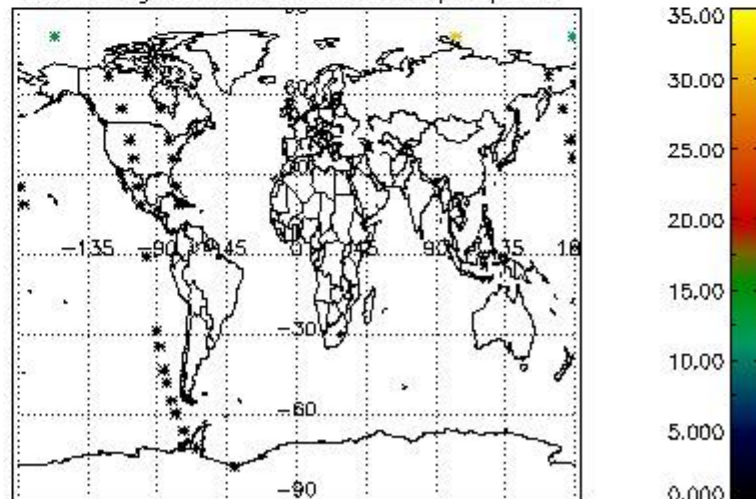
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

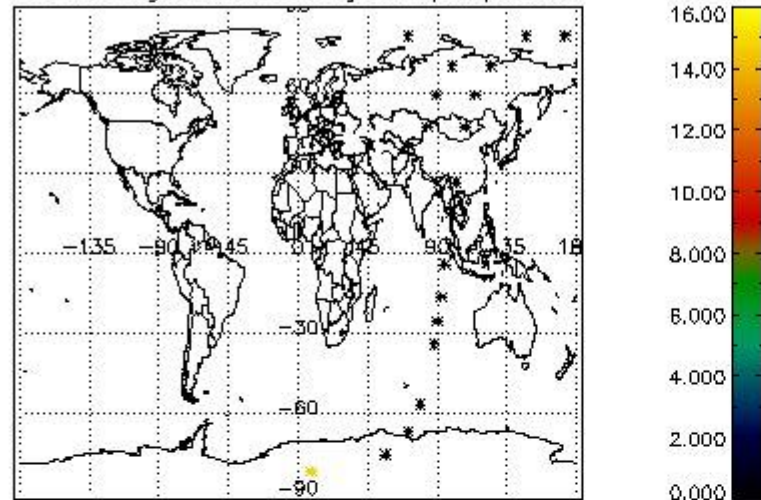


Percentage of saturation errors per profile

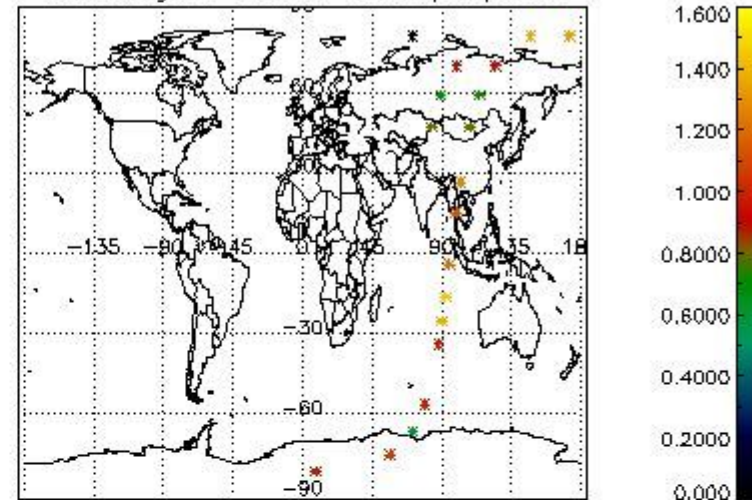


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

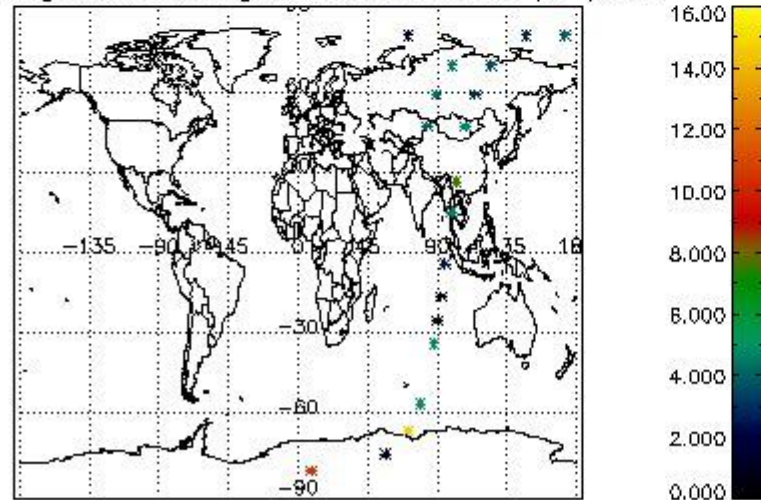
Percentage of cosmic ray hits per profile



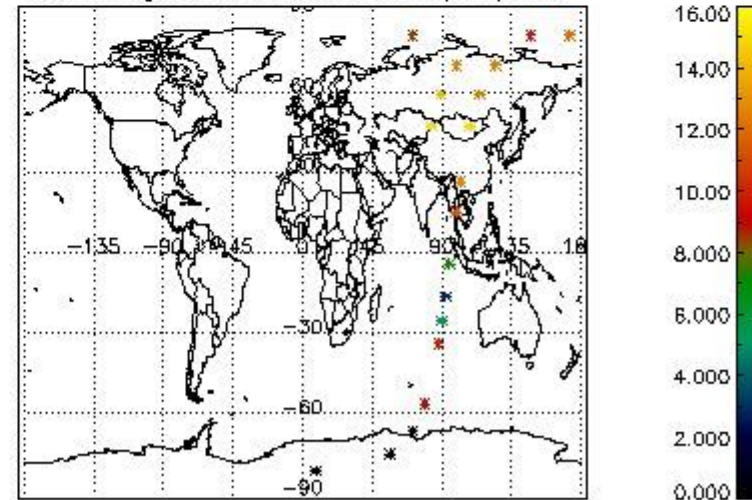
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

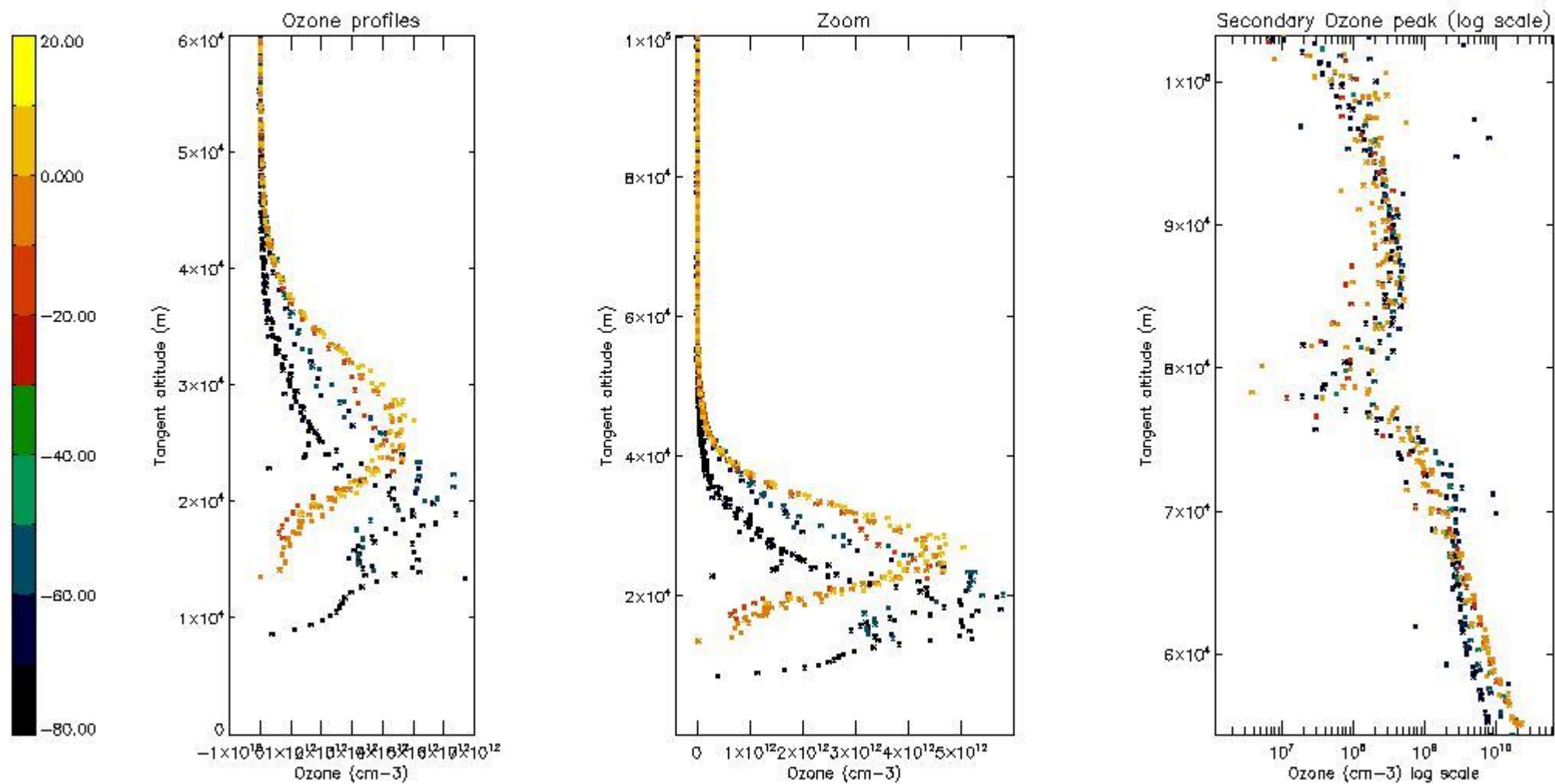
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	17

STD < 10	14
STD < 5	11

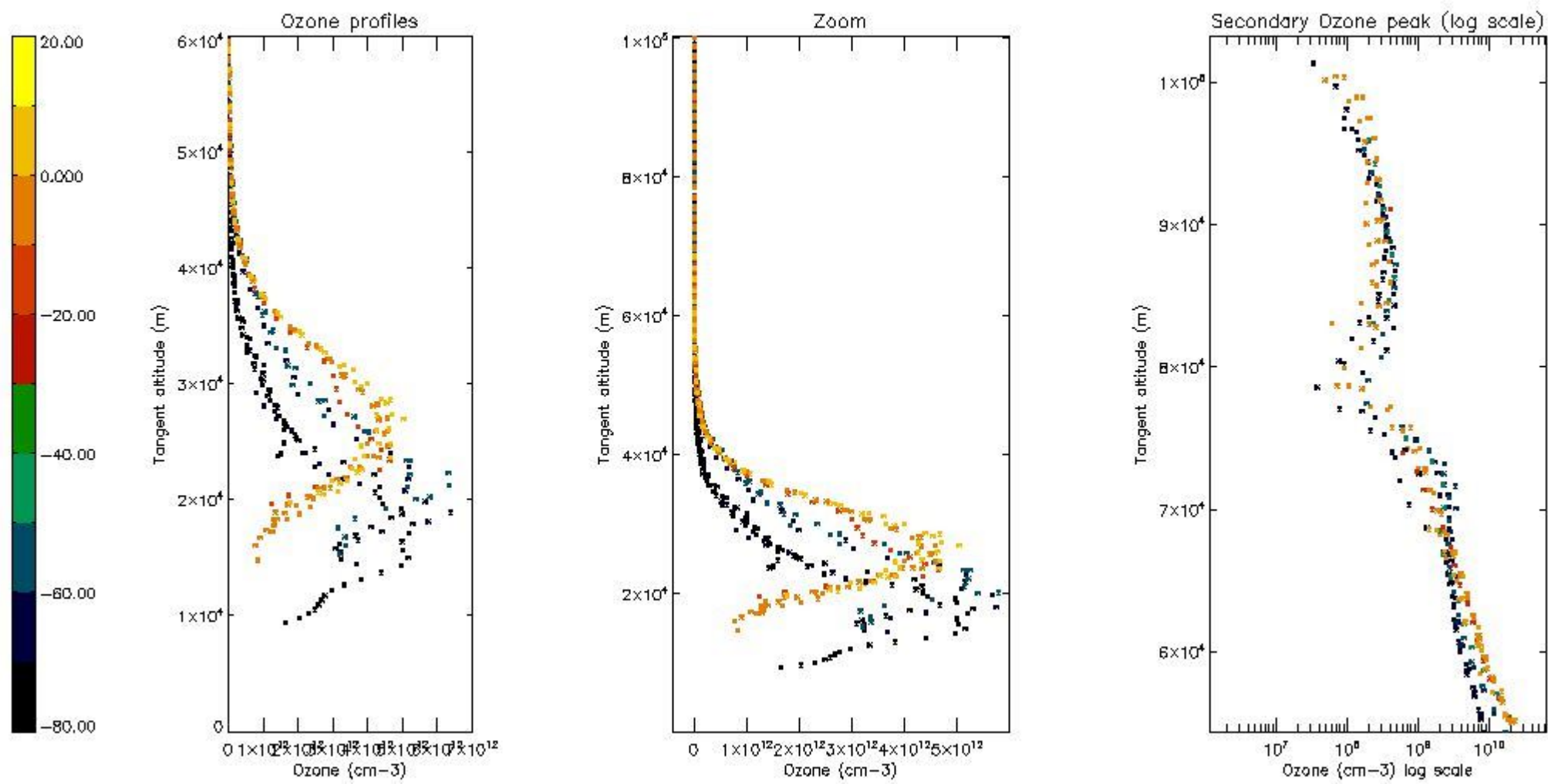
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



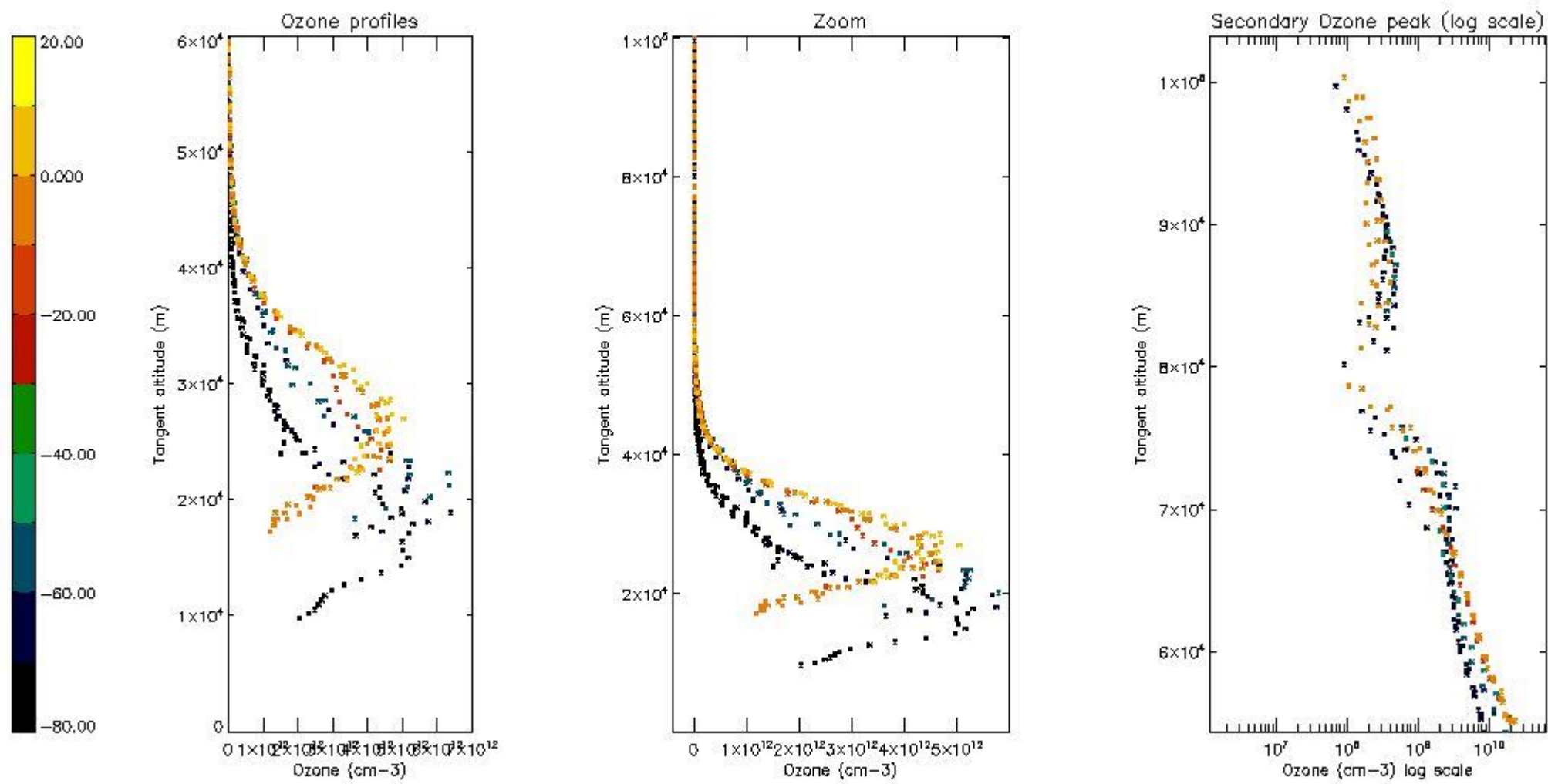
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



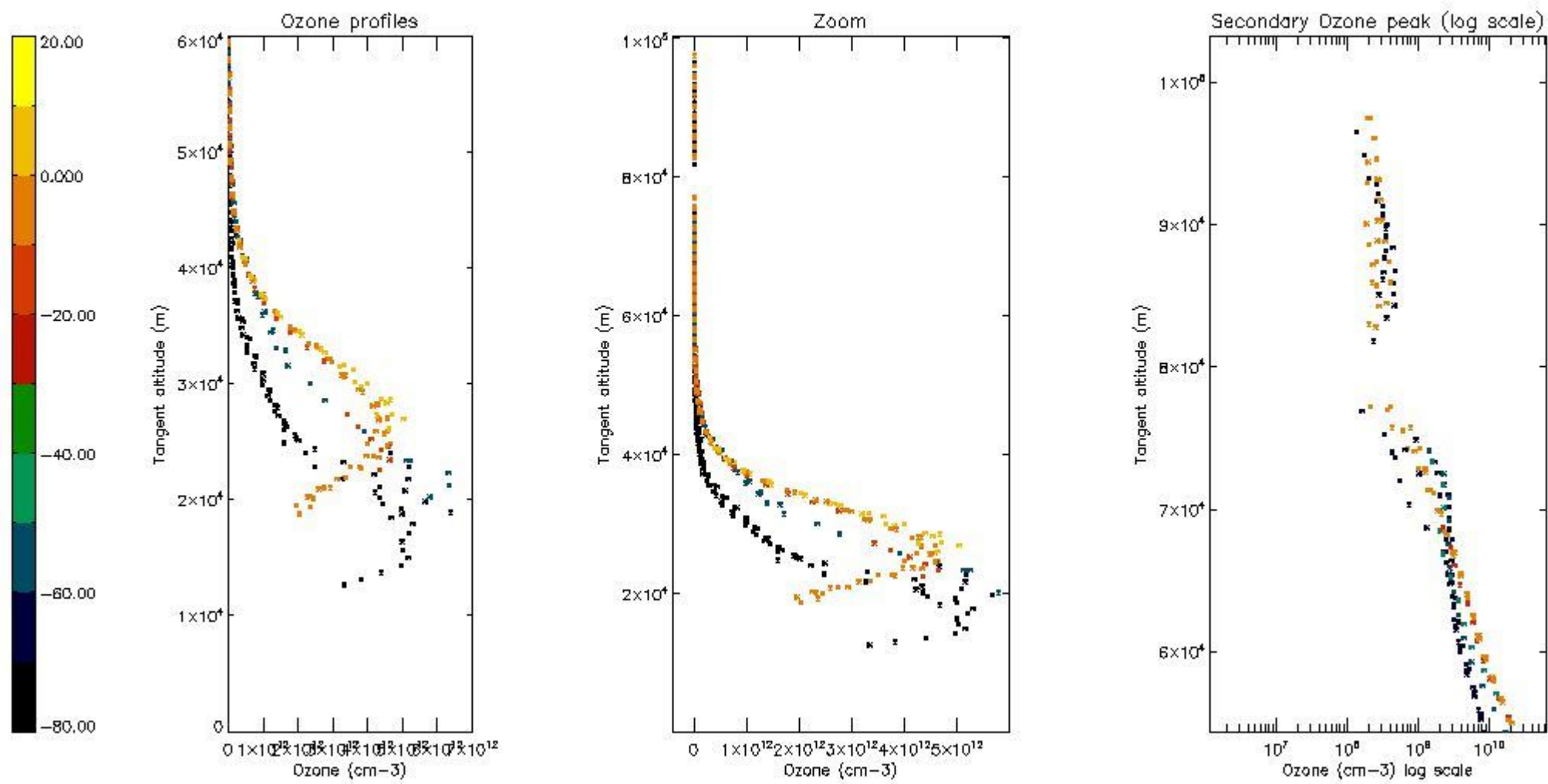
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



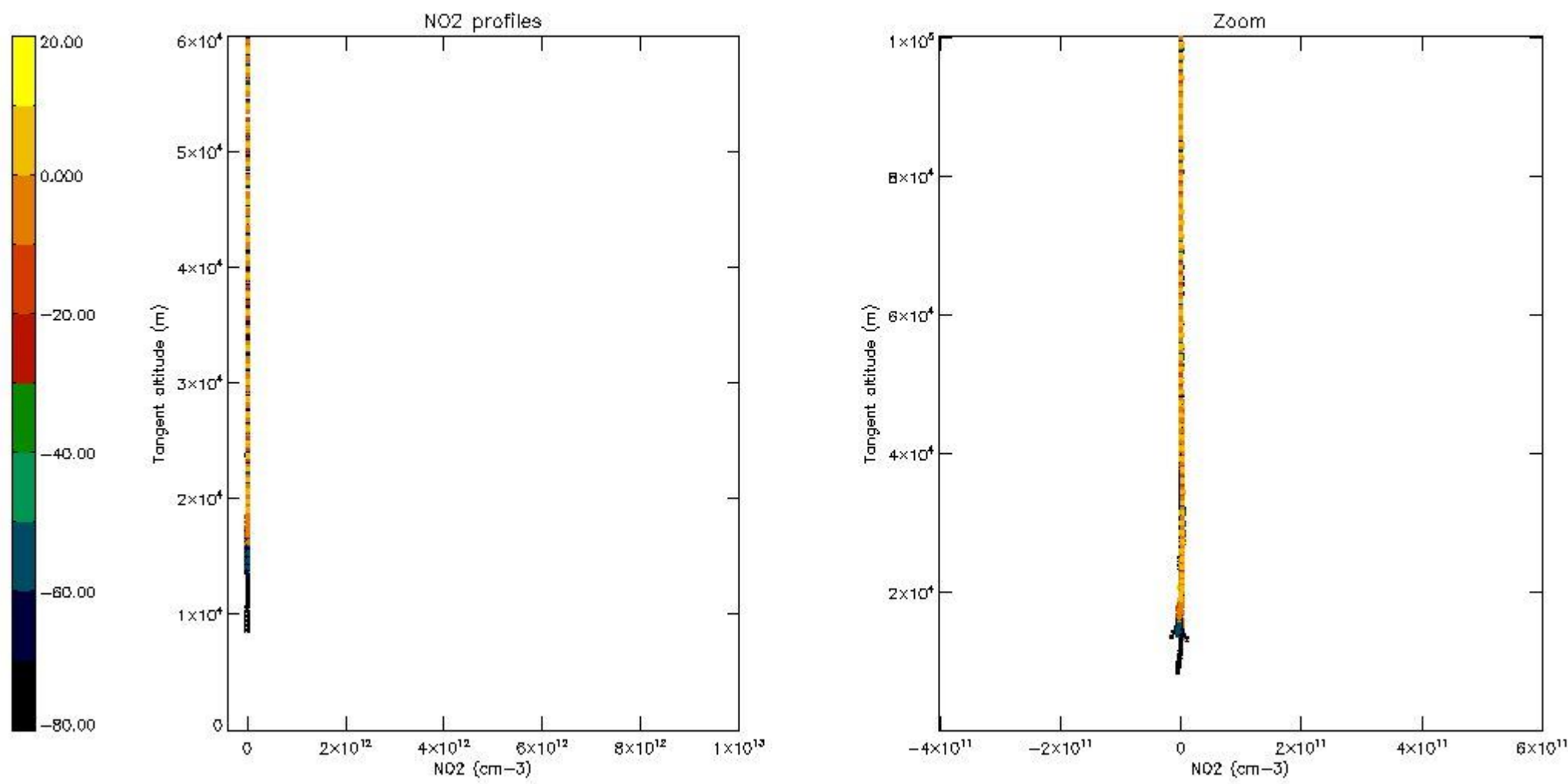
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



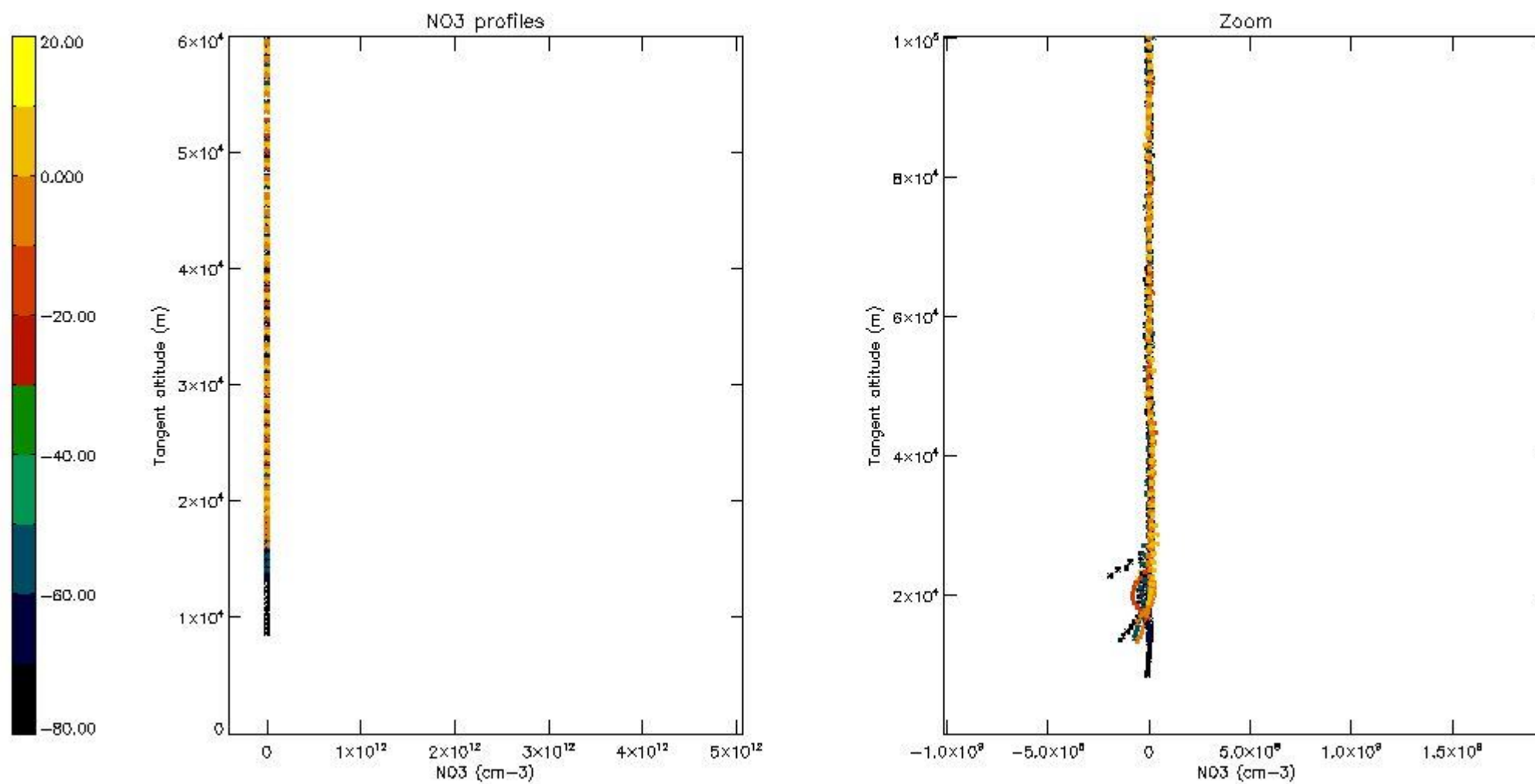
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

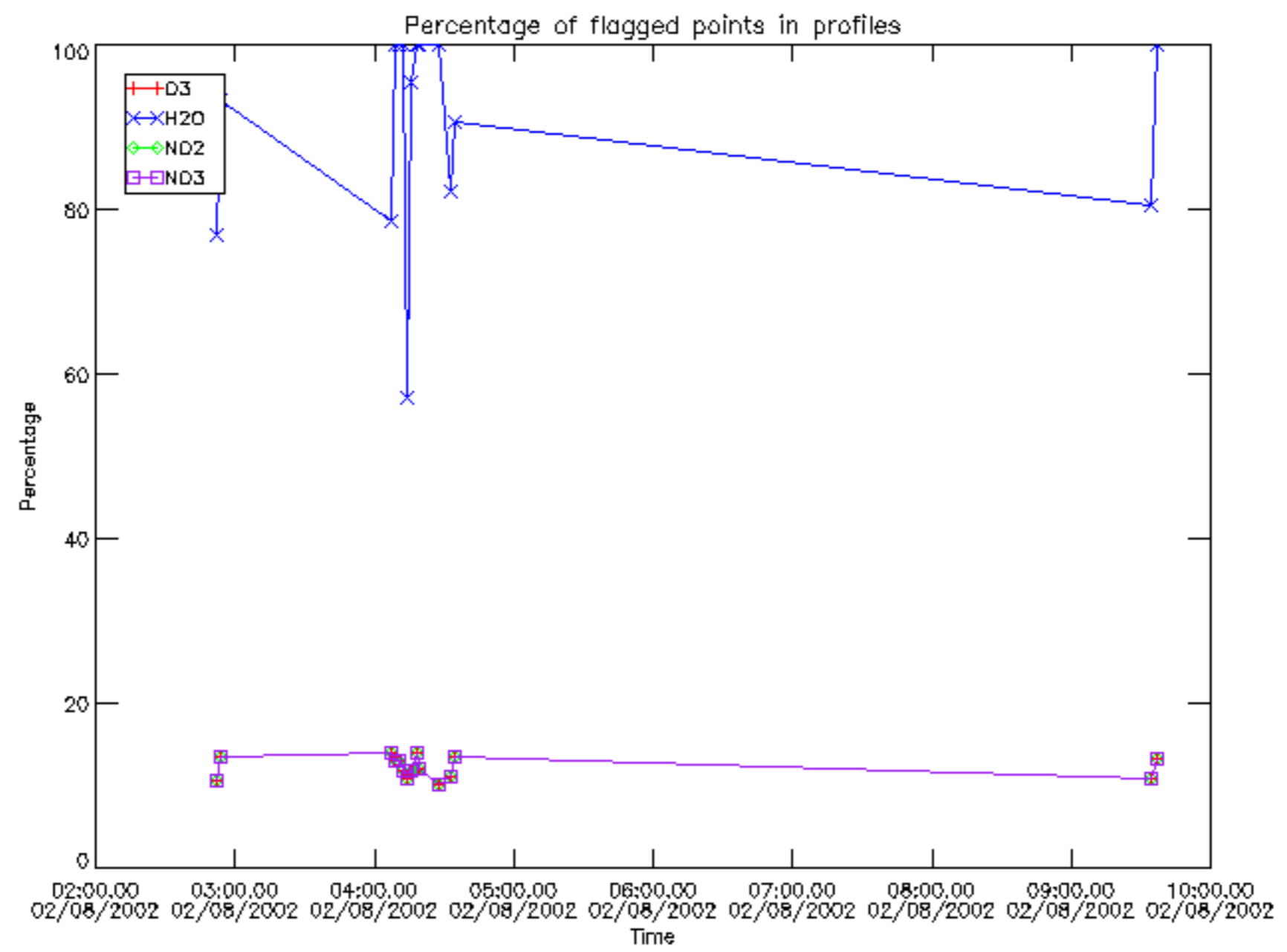
The colorbar represents the latitude.



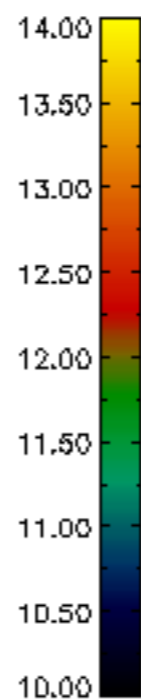
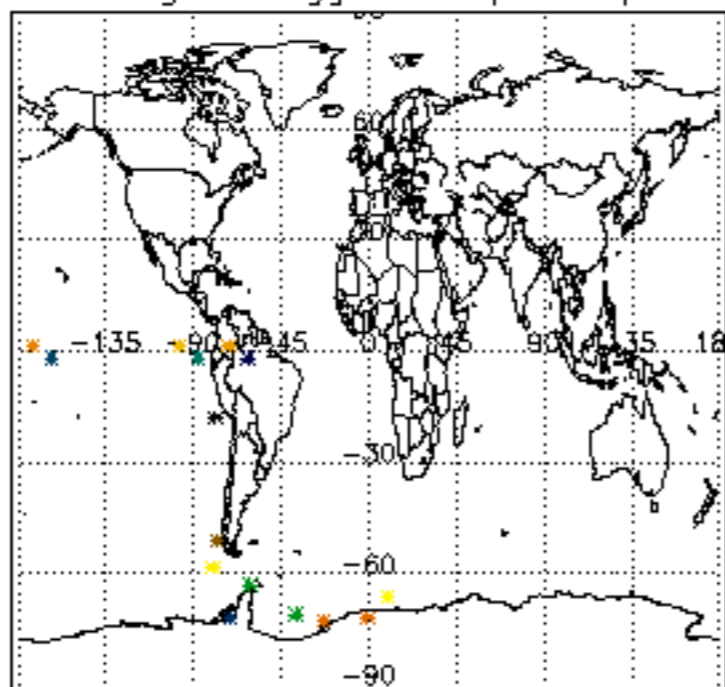
6. Auxiliary Data Files used for the production reported in section 2

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

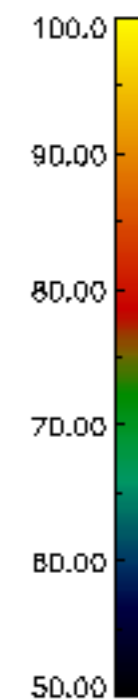
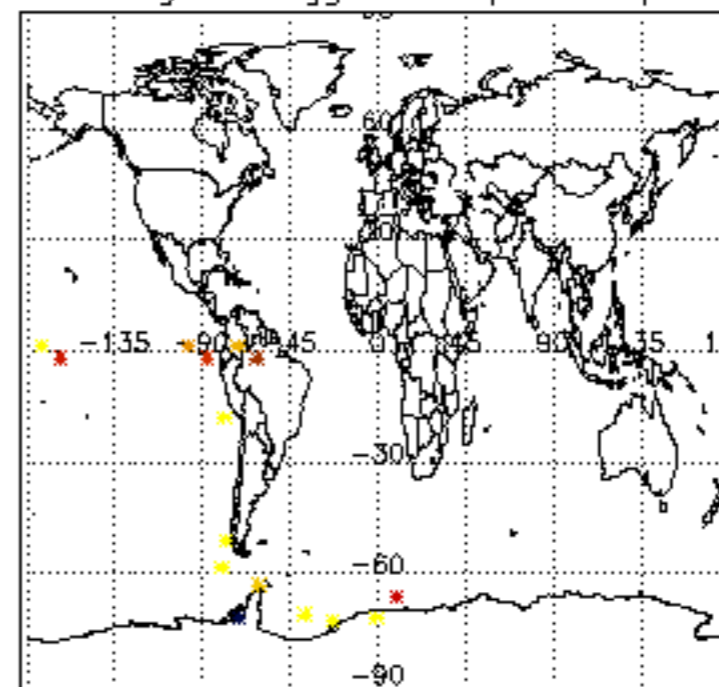
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	02-AUG-2002 02:52:13
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	02-AUG-2002 02:52:13
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	02-AUG-2002 02:52:13



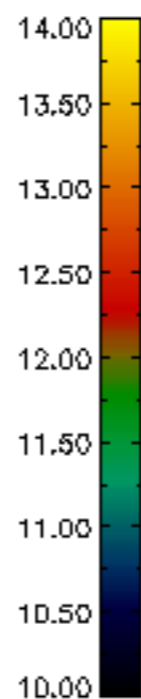
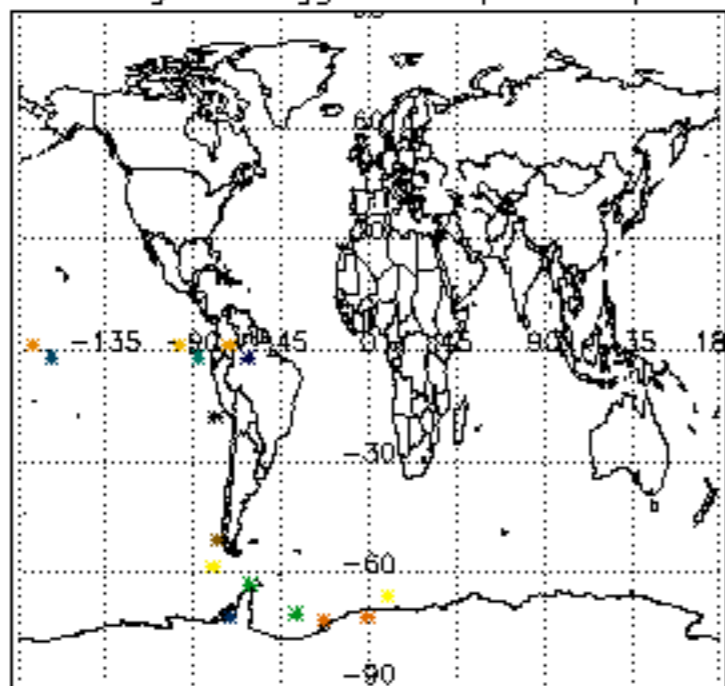
Percentage of flagged data per D3 profile



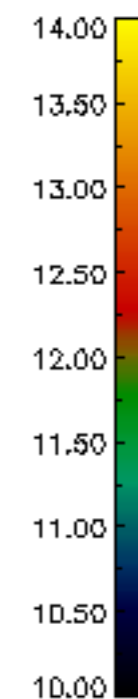
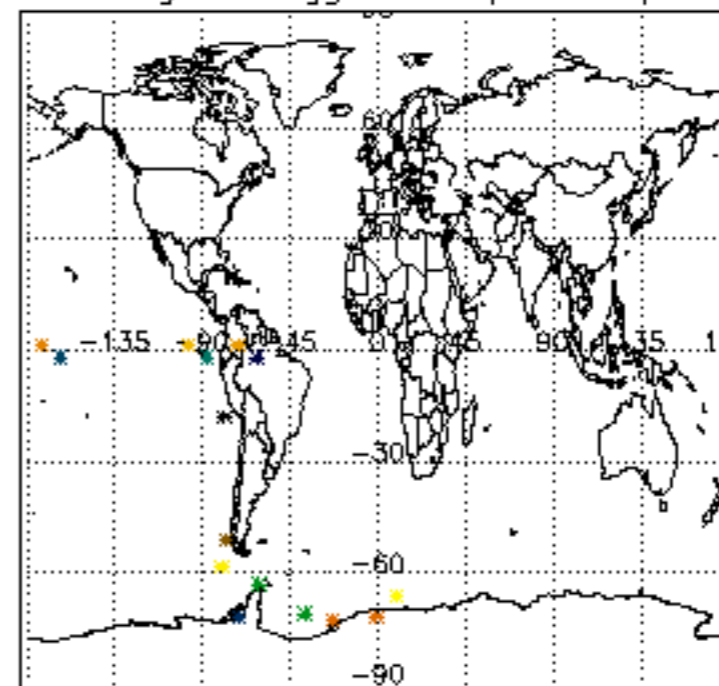
Percentage of flagged data per H2O profile

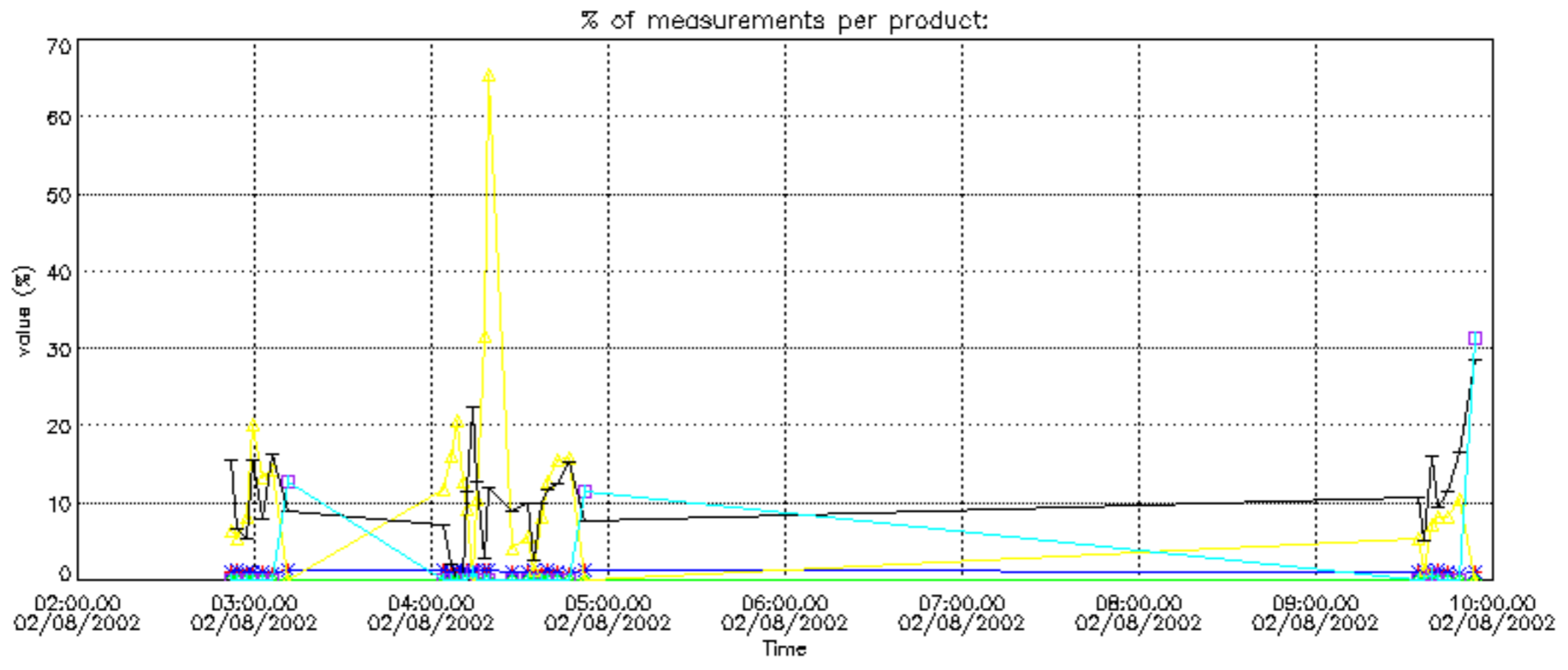


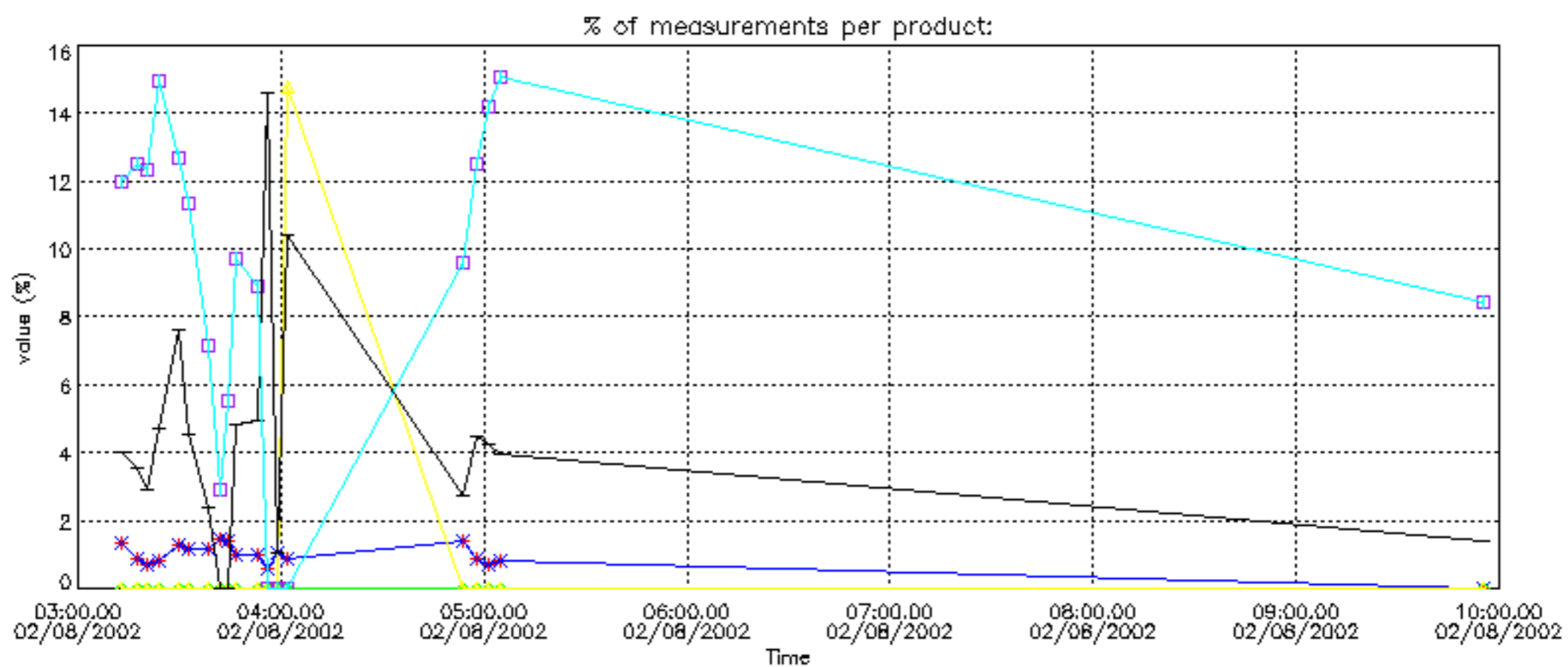
Percentage of flagged data per NO2 profile



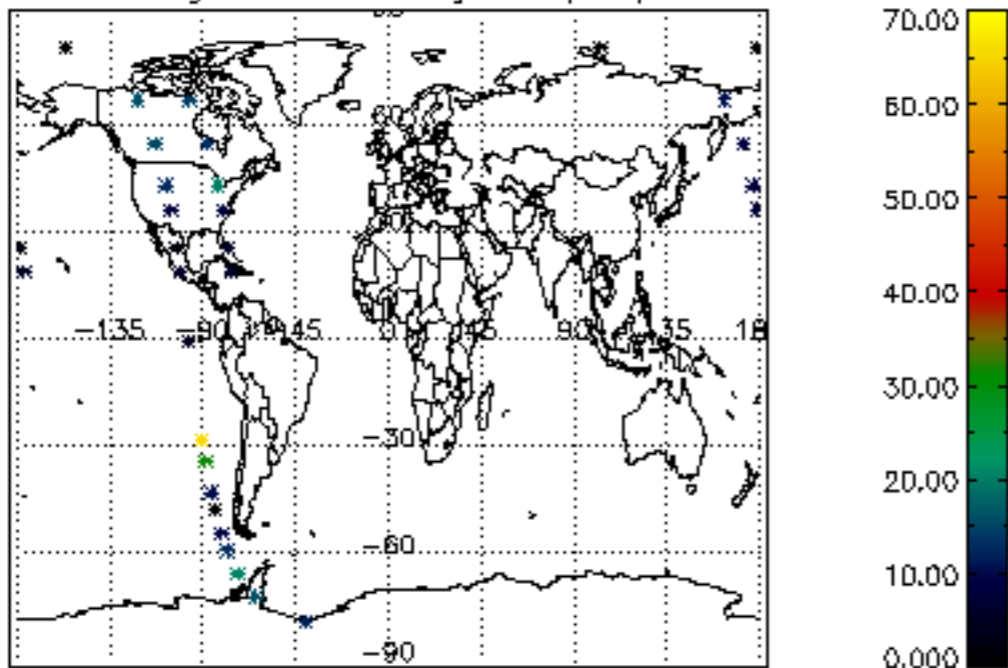
Percentage of flagged data per NO3 profile



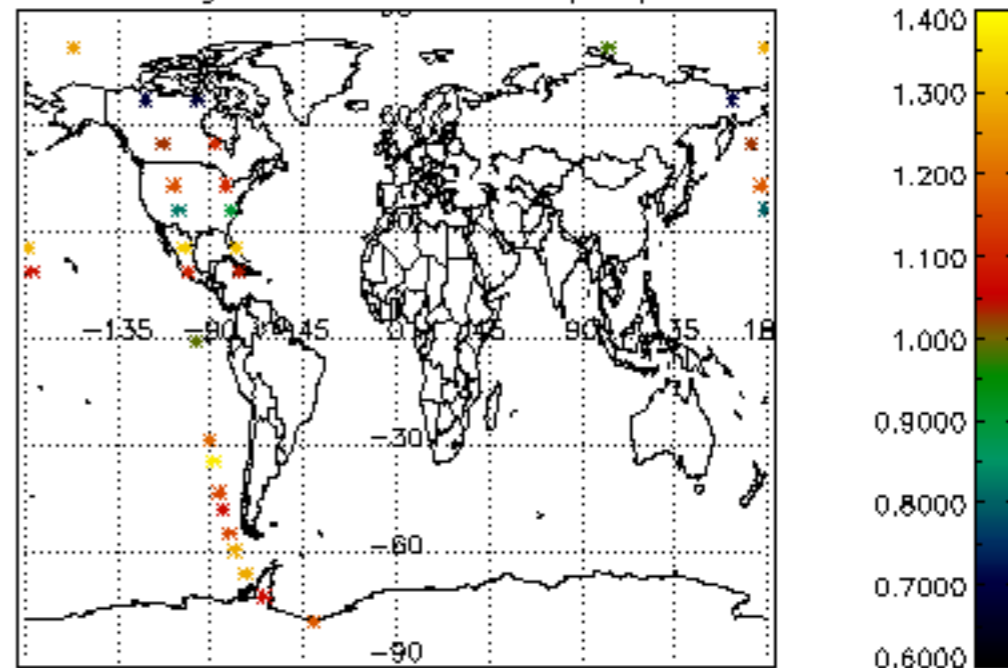




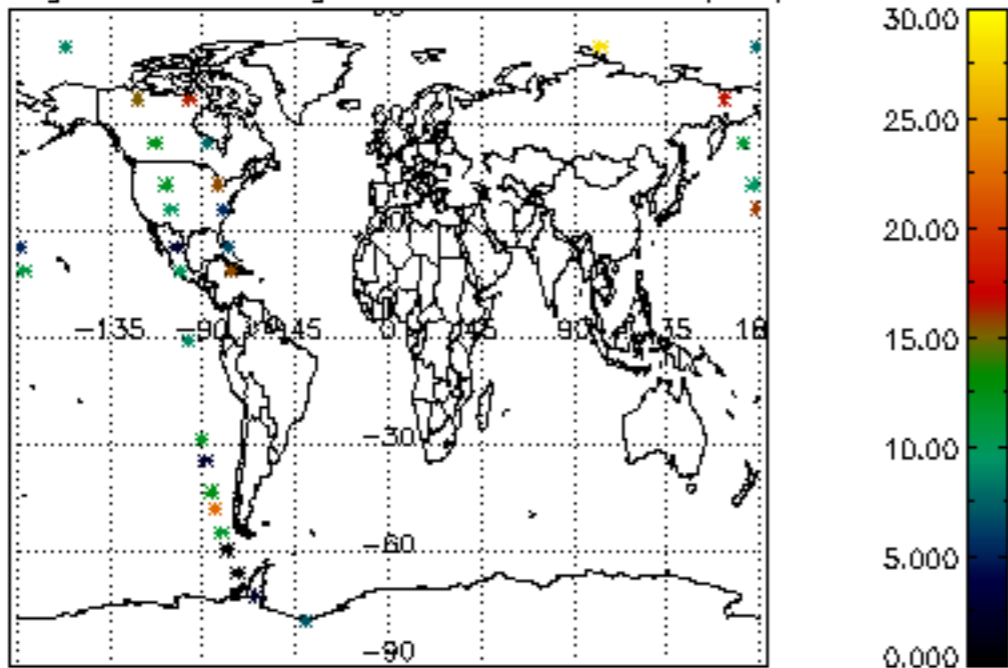
Percentage of cosmic ray hits per profile



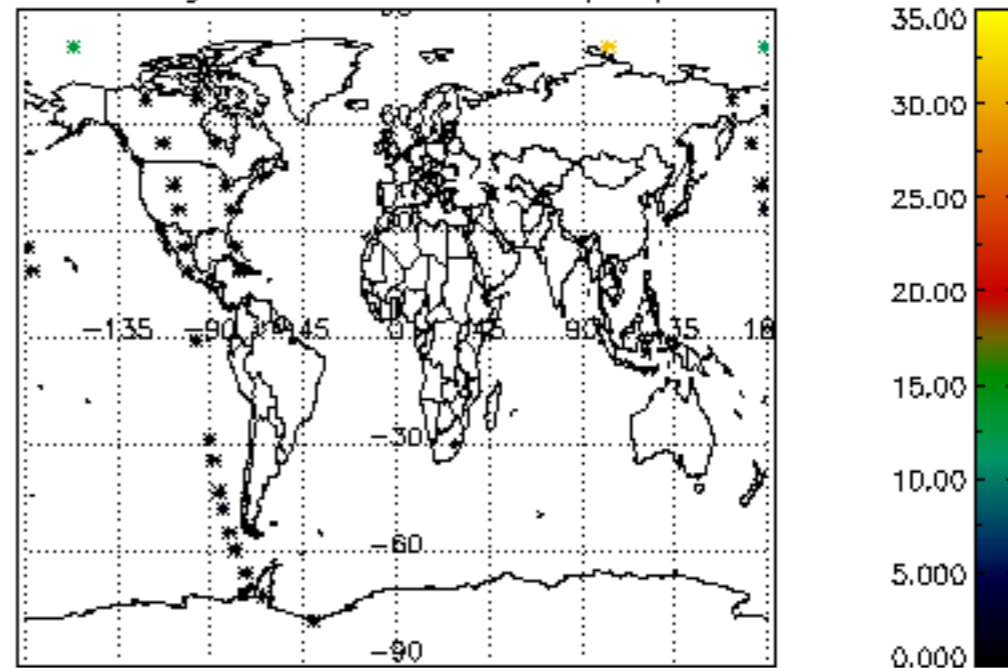
Percentage of datation errors per profile



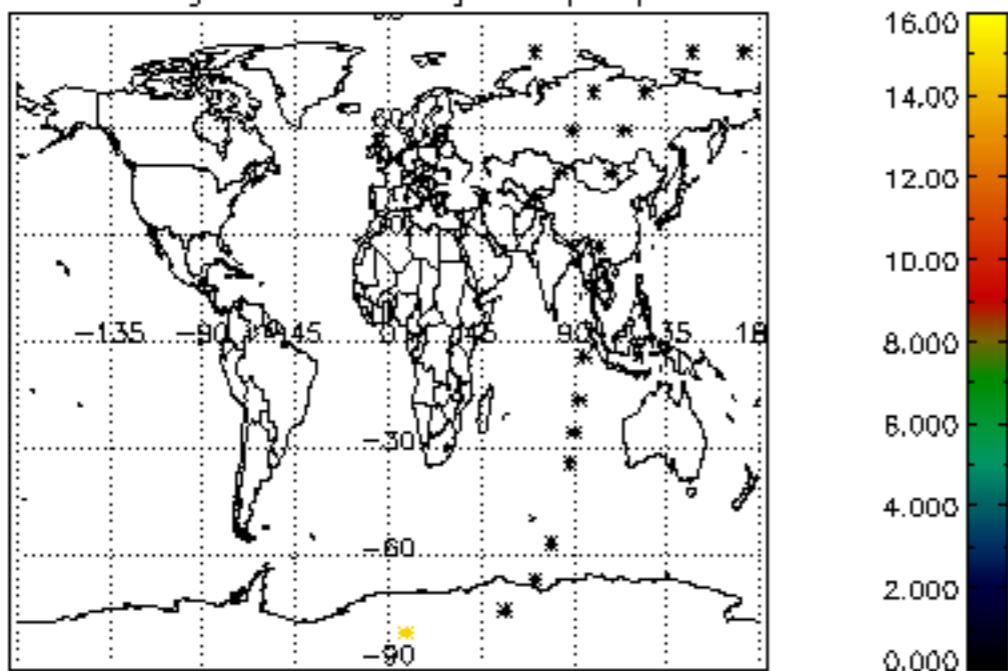
Percentage of star falling outside central band per profile



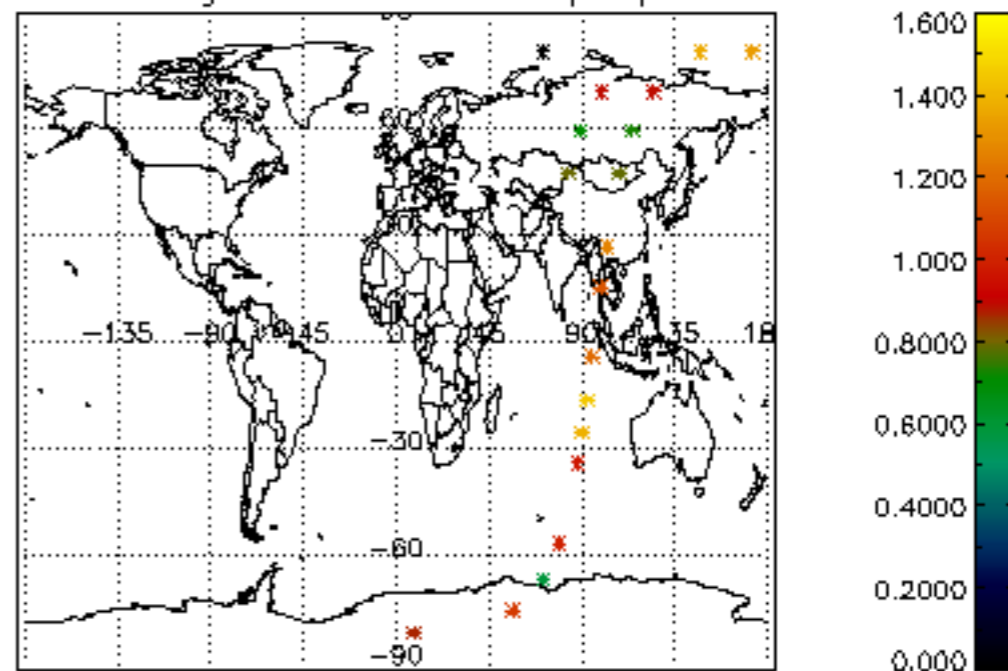
Percentage of saturation errors per profile



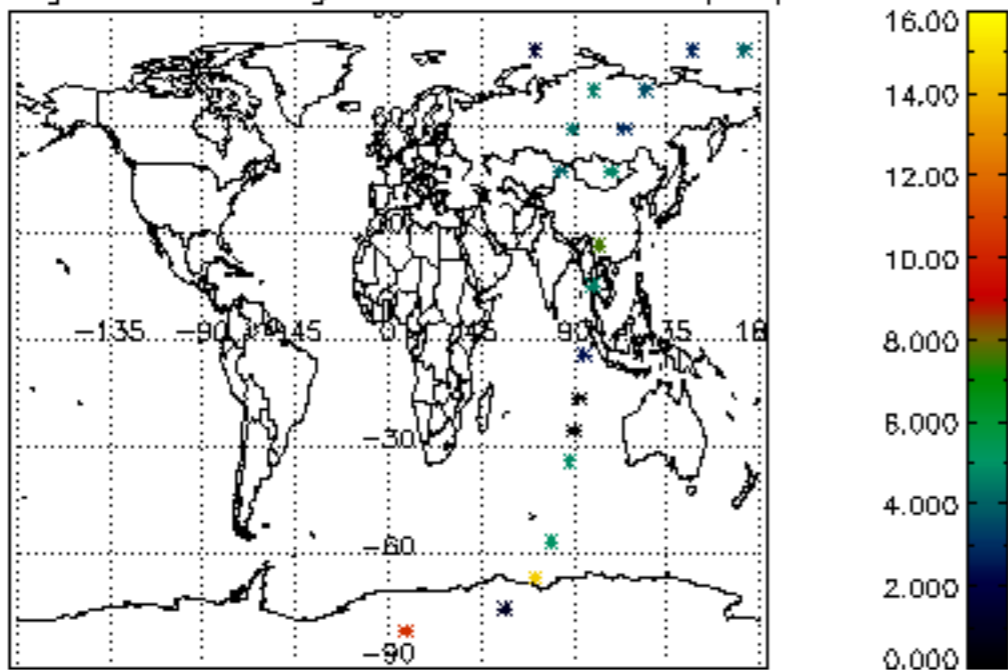
Percentage of cosmic ray hits per profile



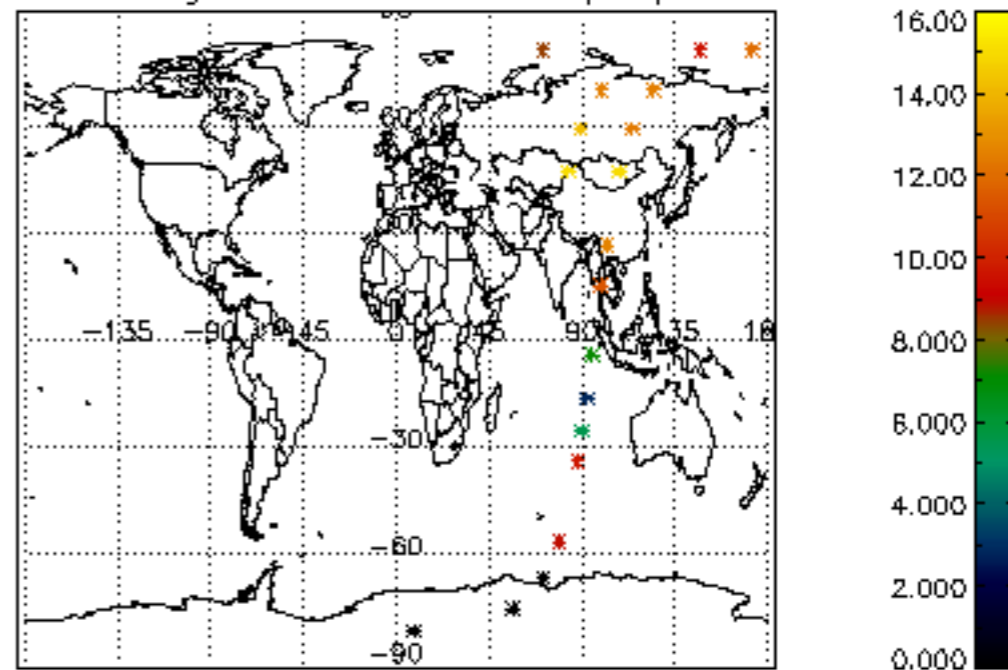
Percentage of datation errors per profile

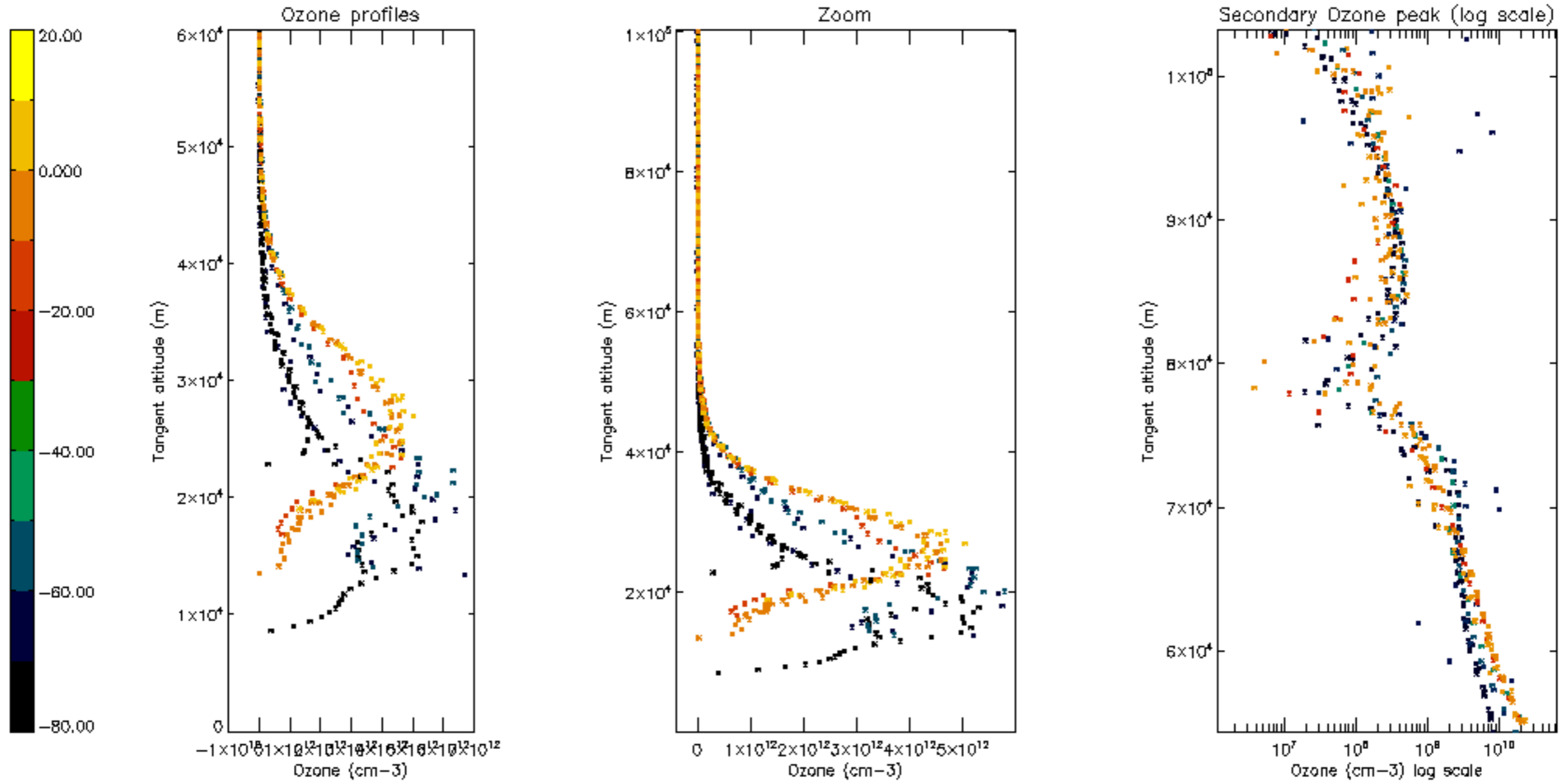


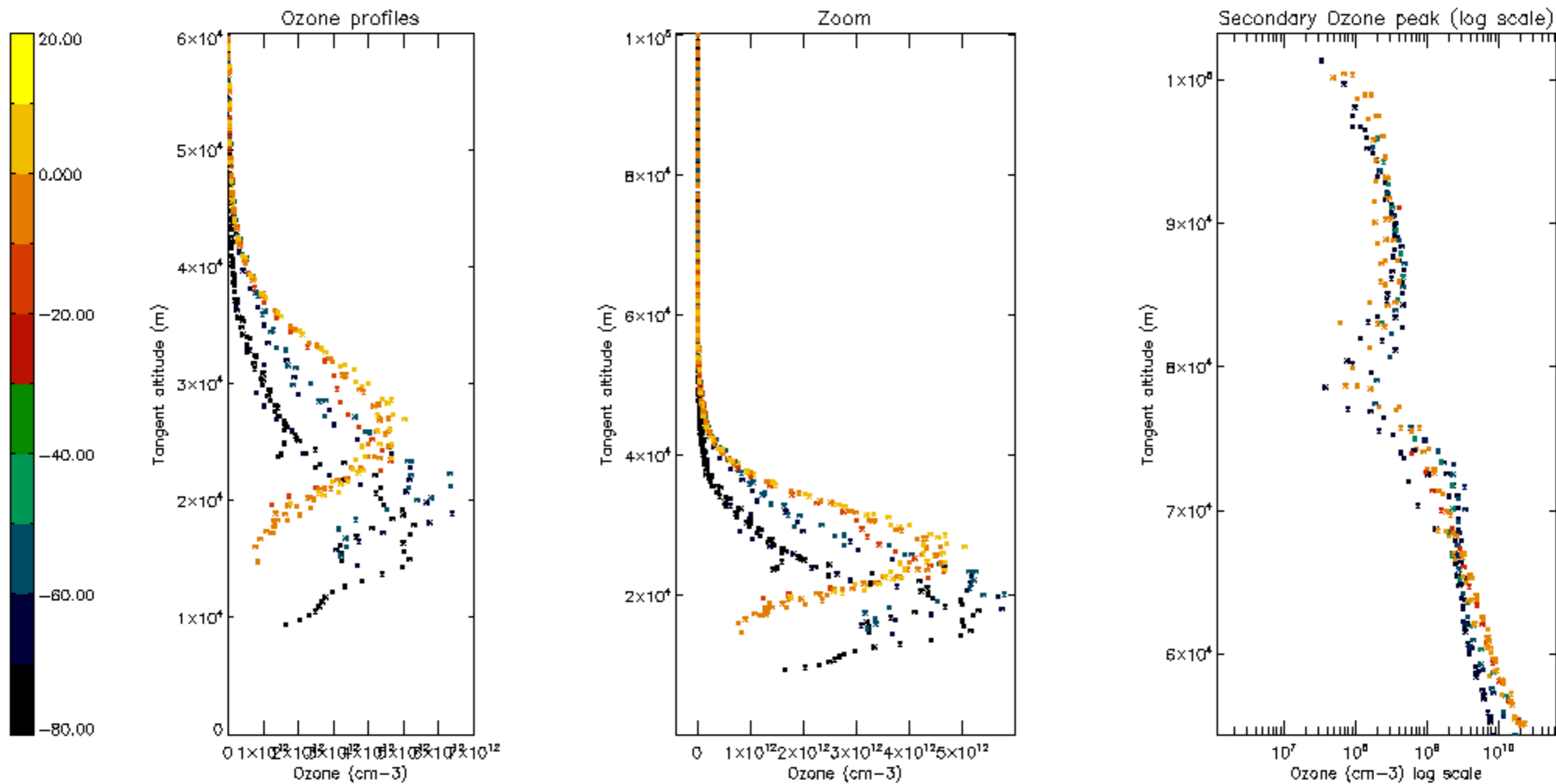
Percentage of star falling outside central band per profile

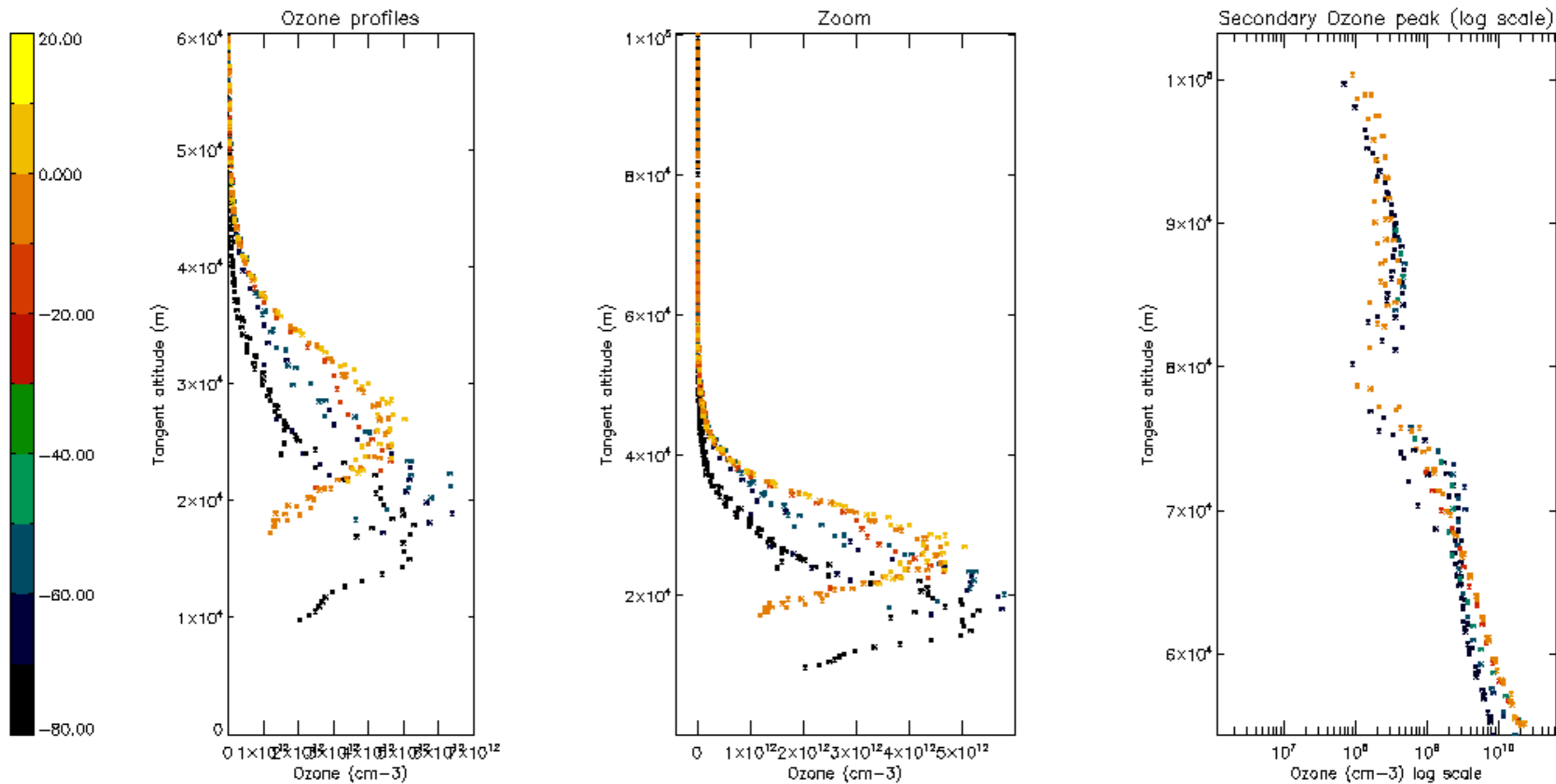


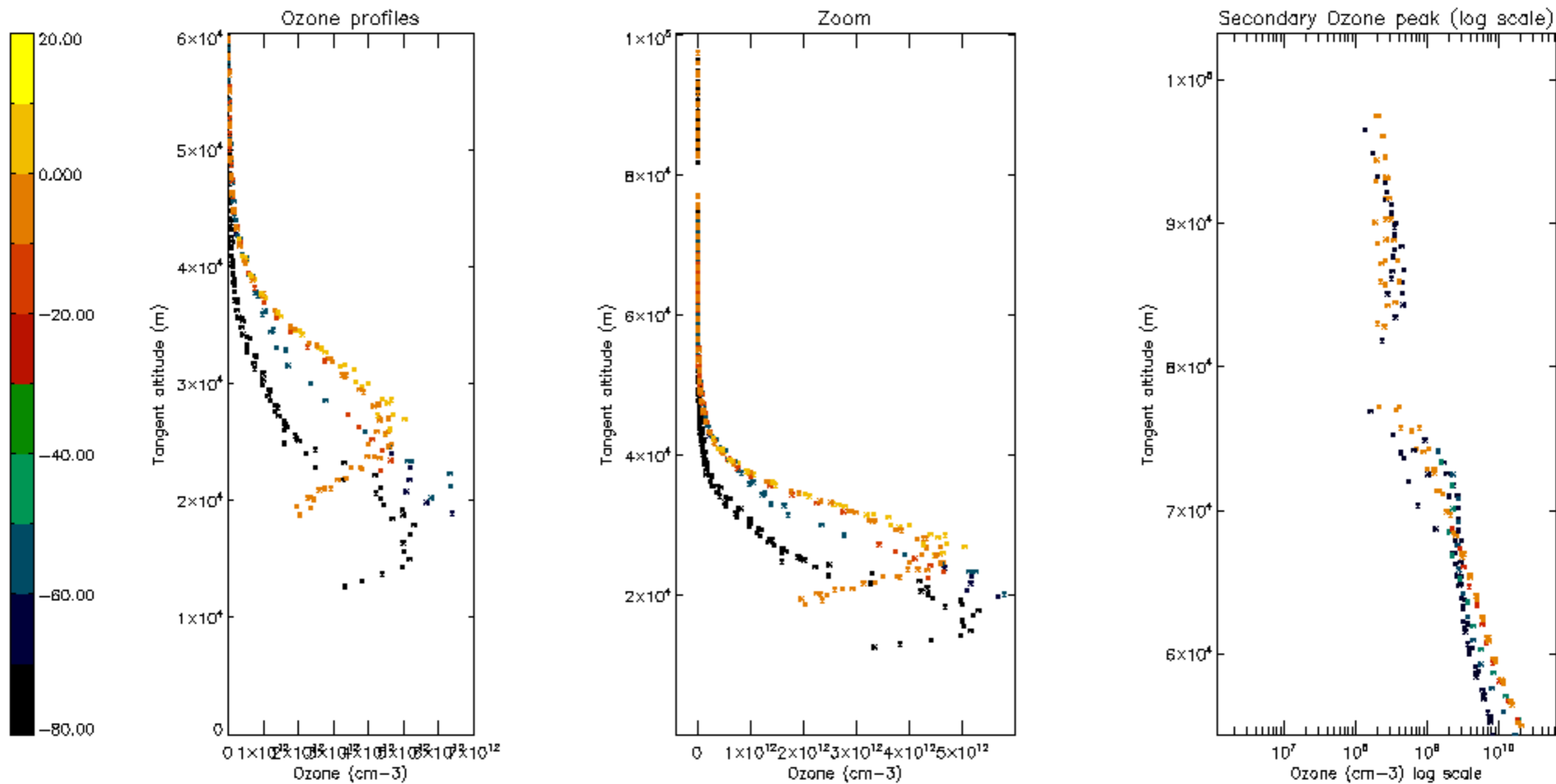
Percentage of saturation errors per profile

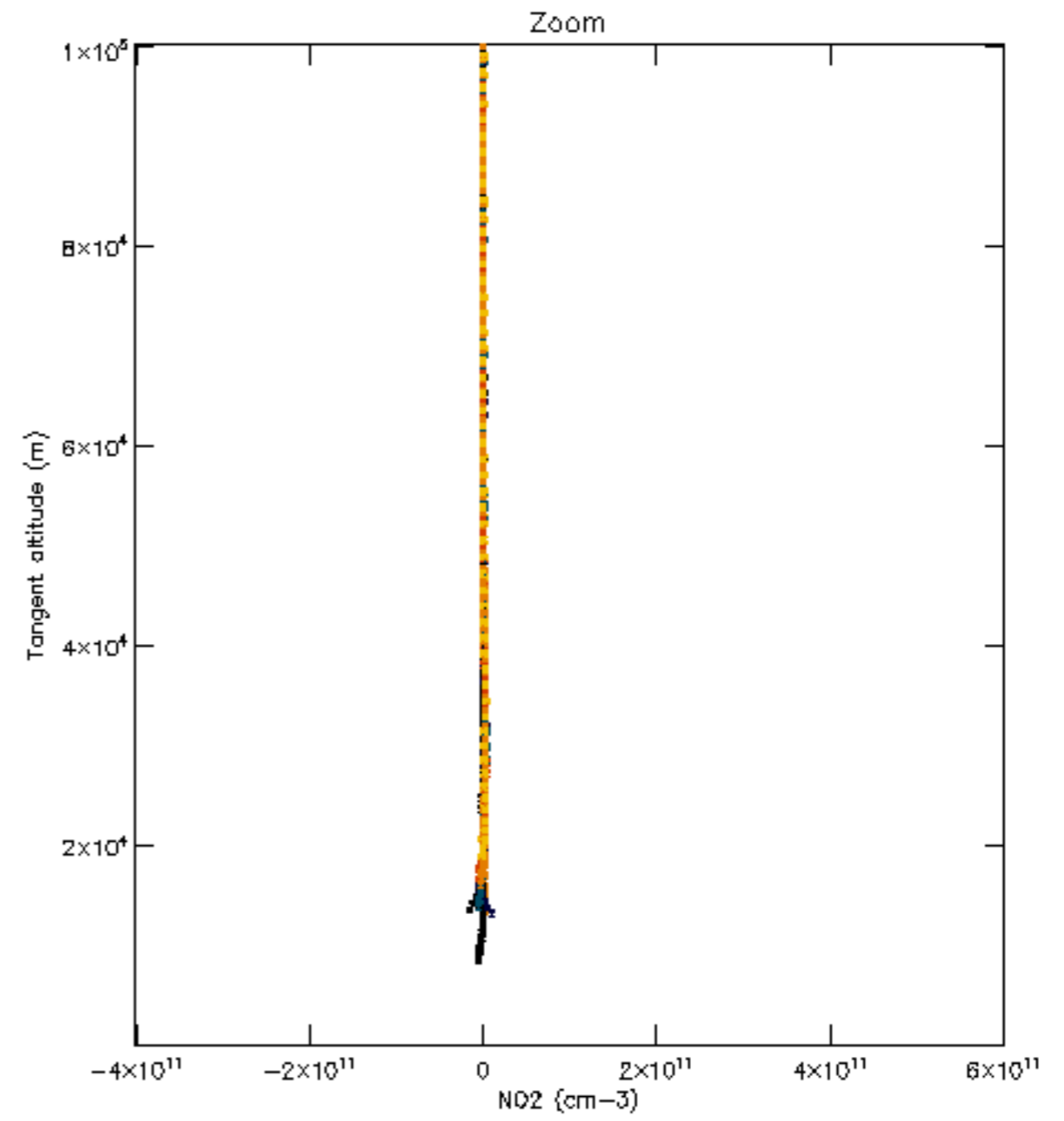
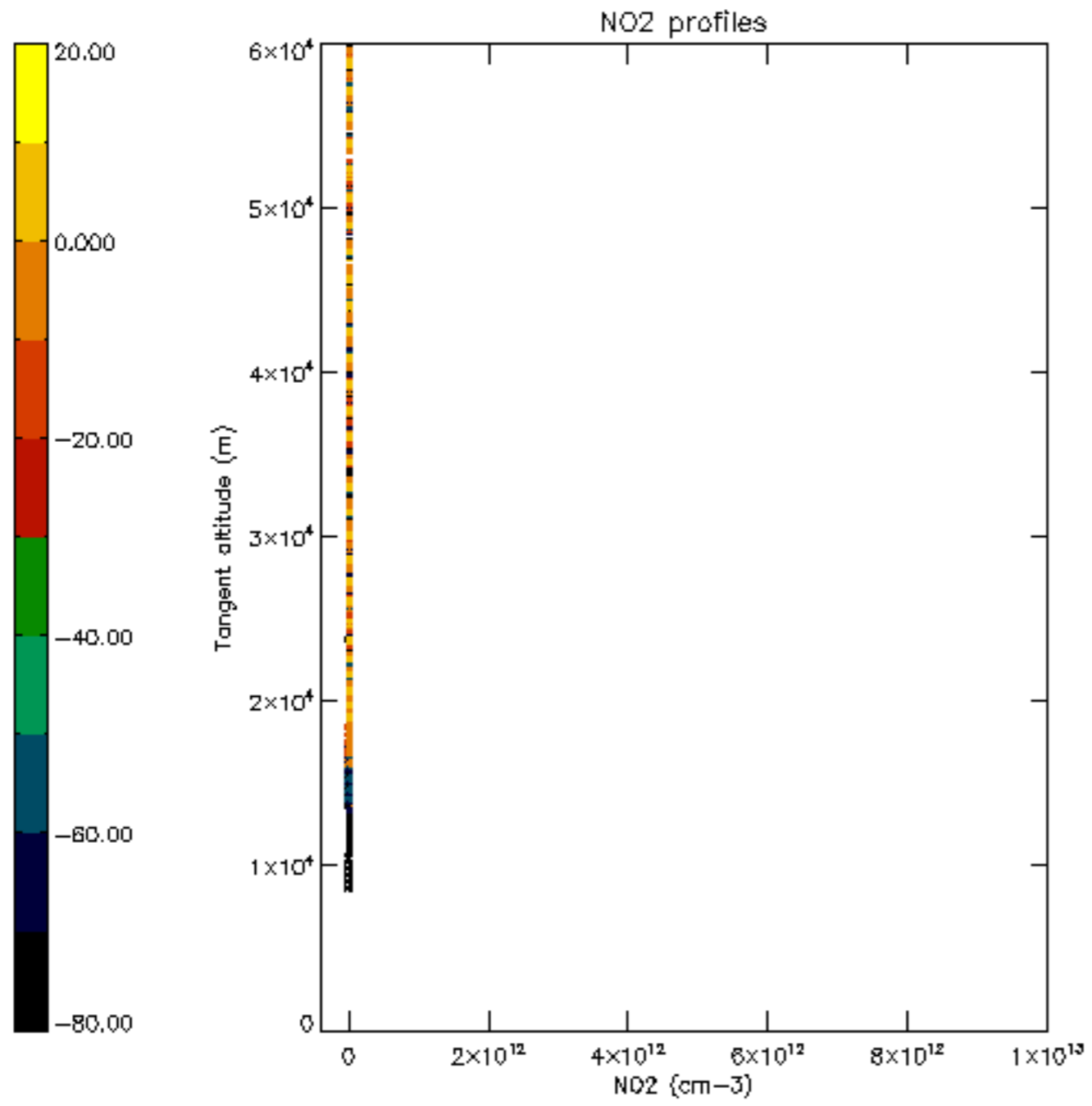


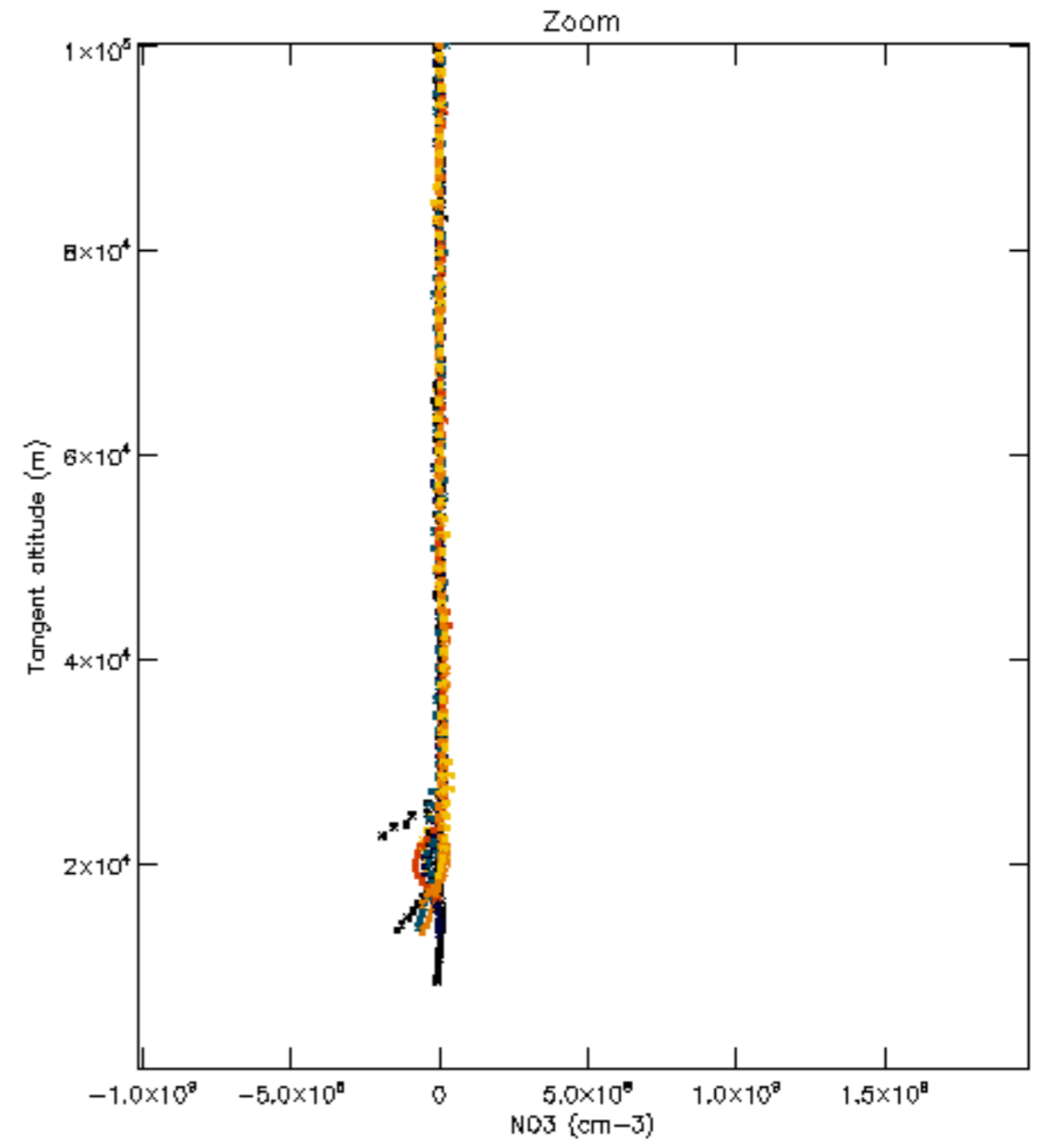
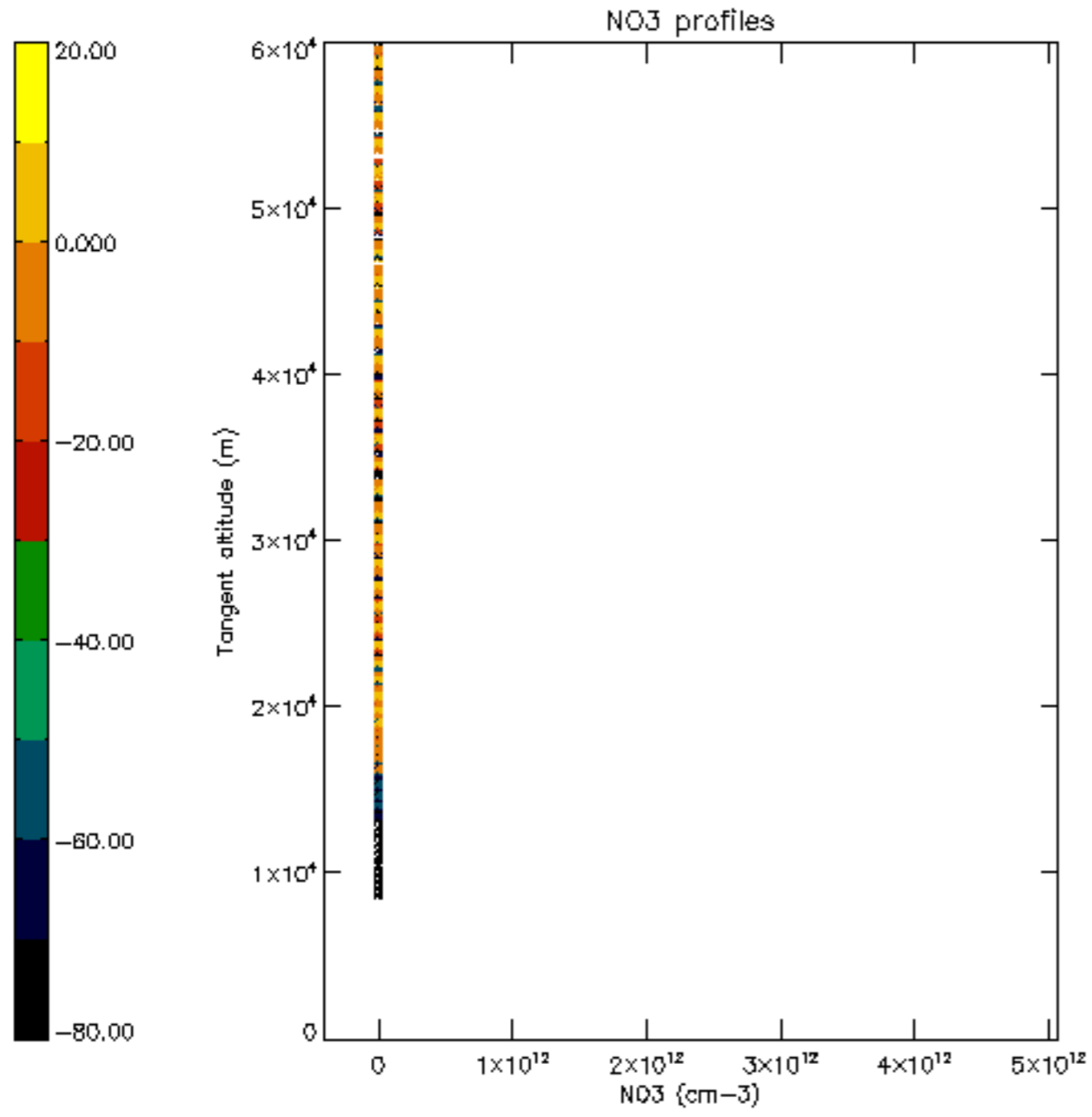


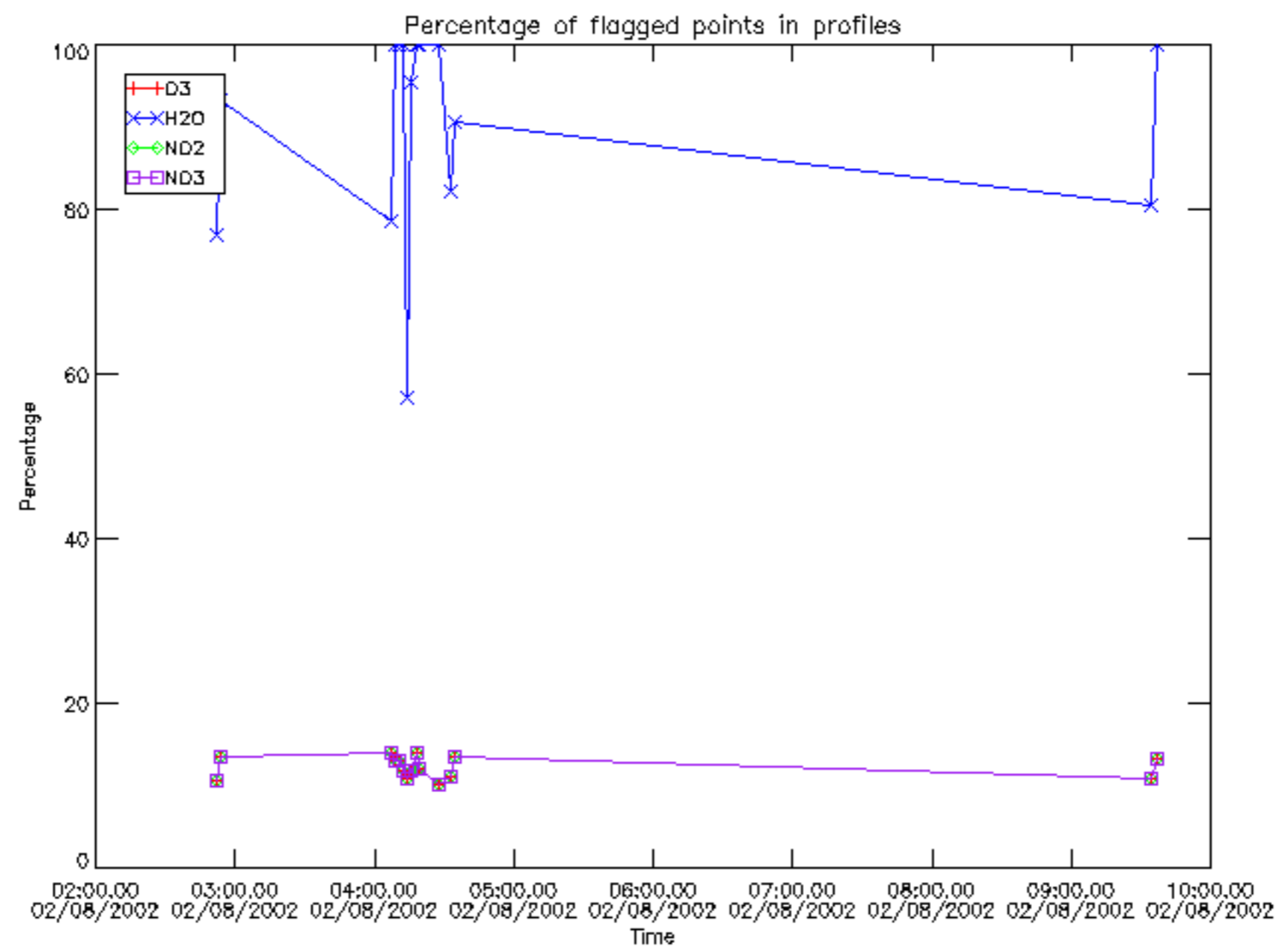




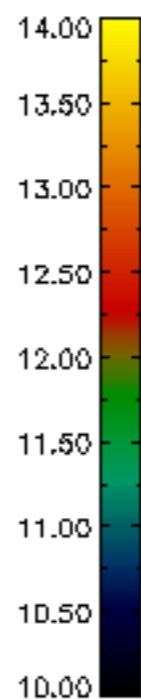
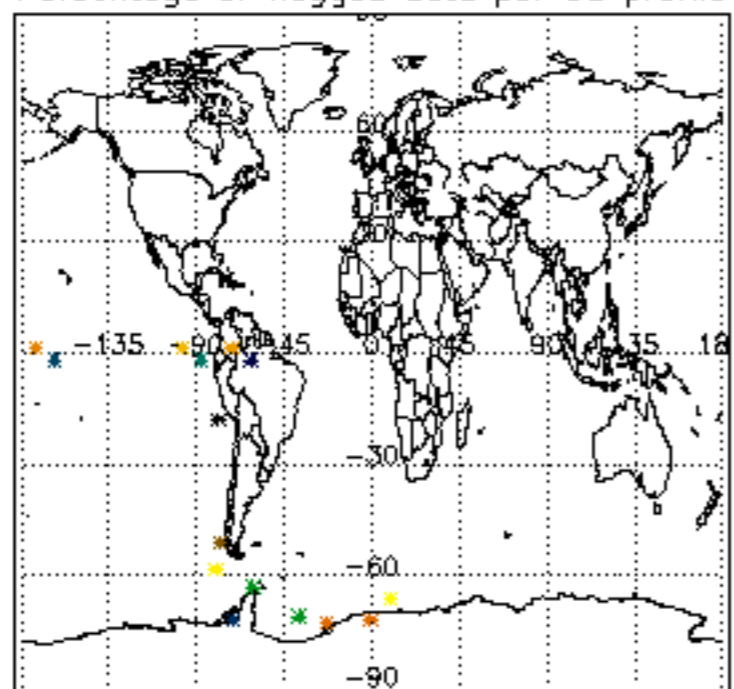




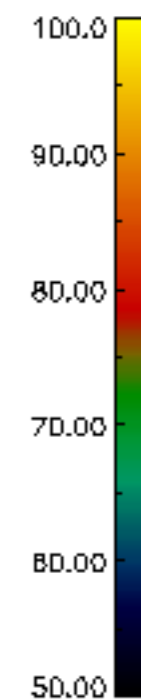
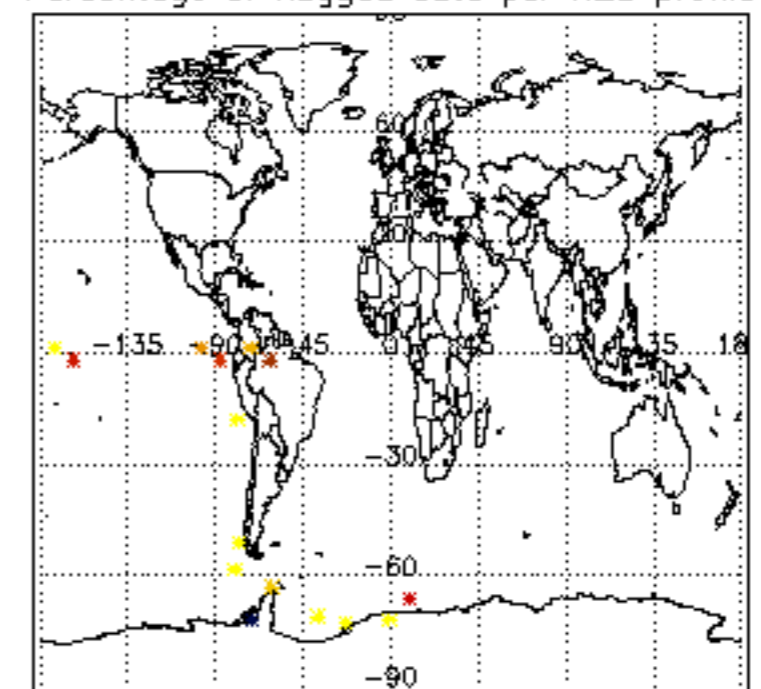




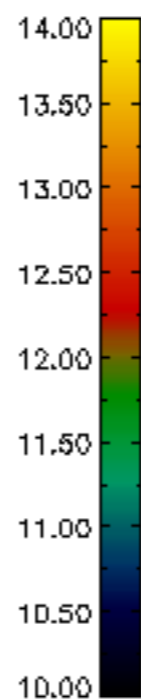
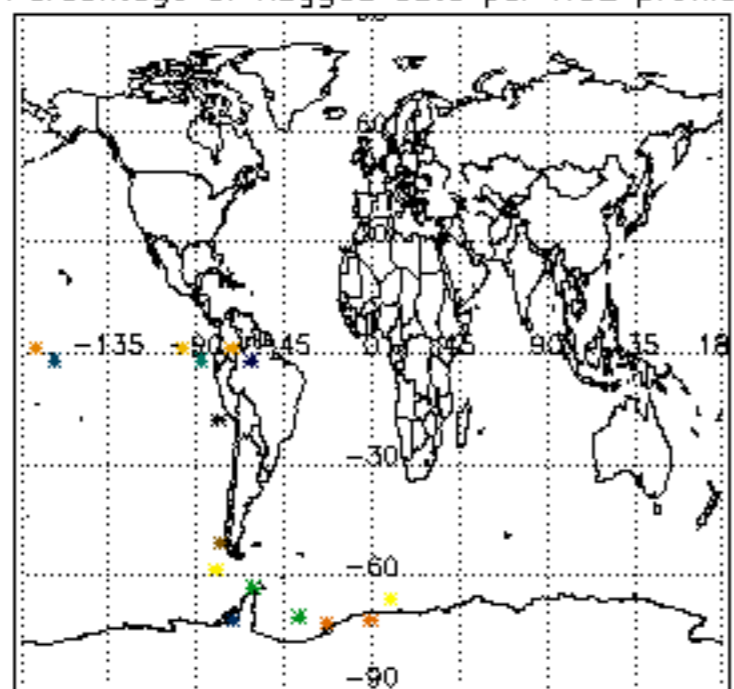
Percentage of flagged data per D3 profile



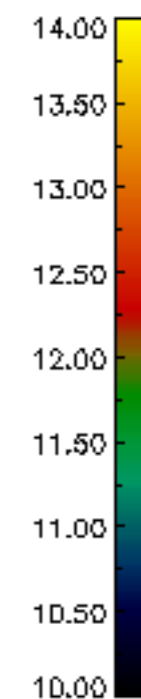
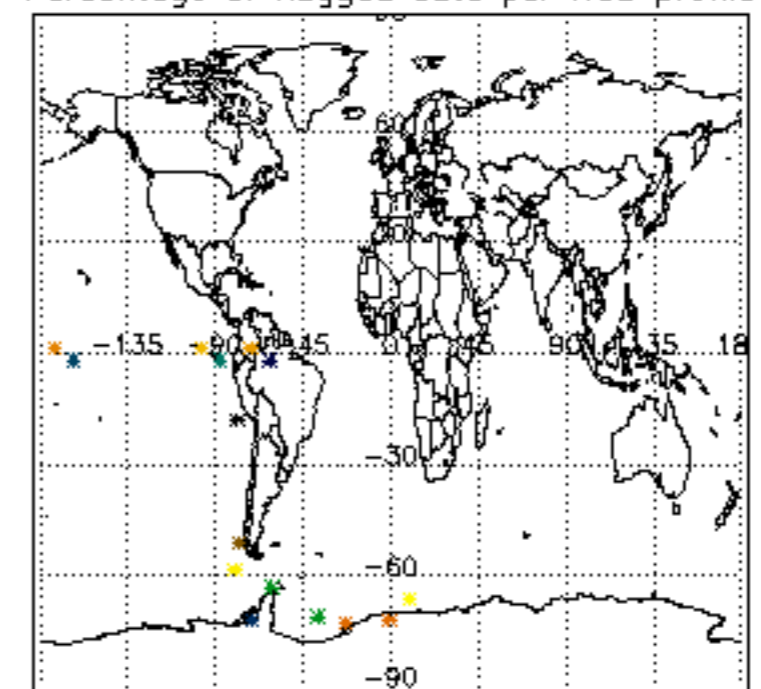
Percentage of flagged data per H2O profile

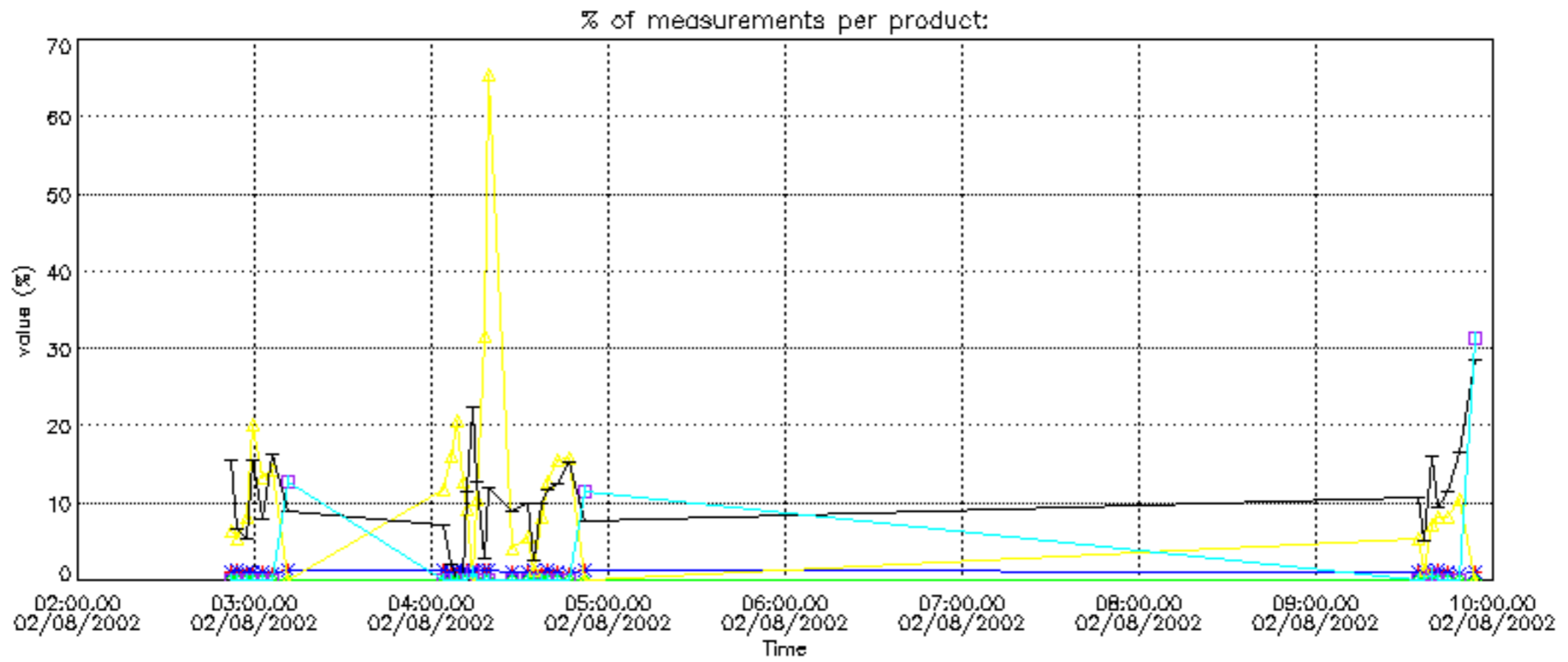


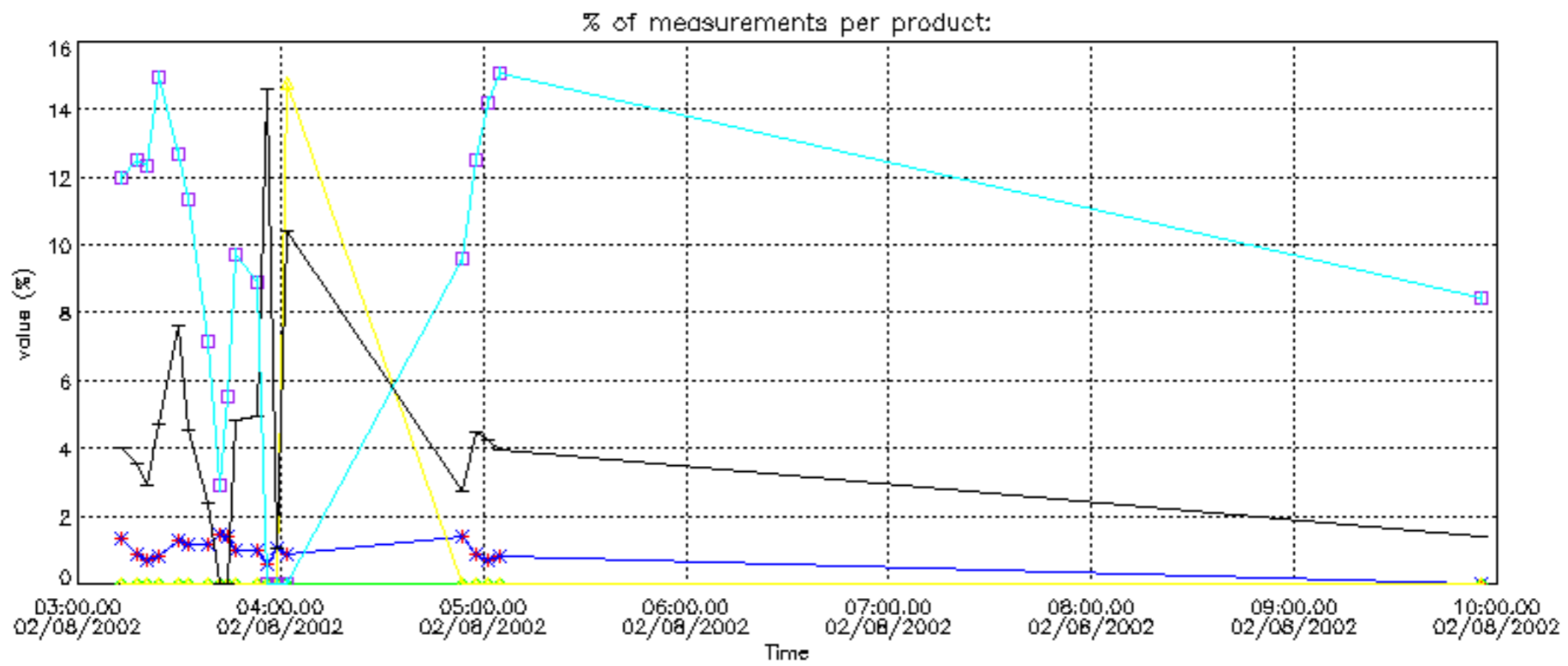
Percentage of flagged data per NO2 profile



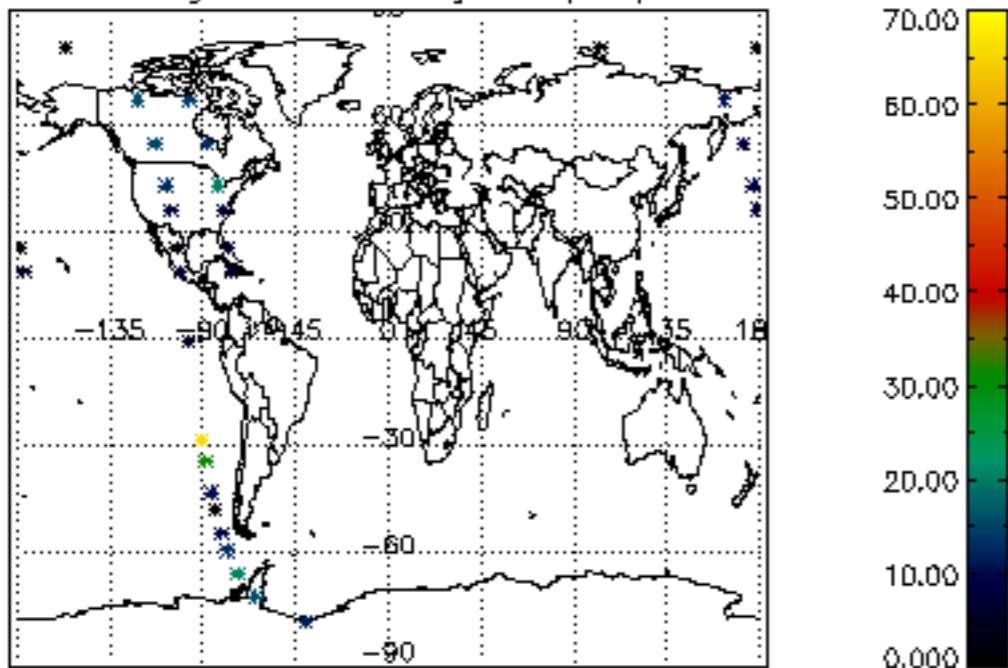
Percentage of flagged data per NO3 profile



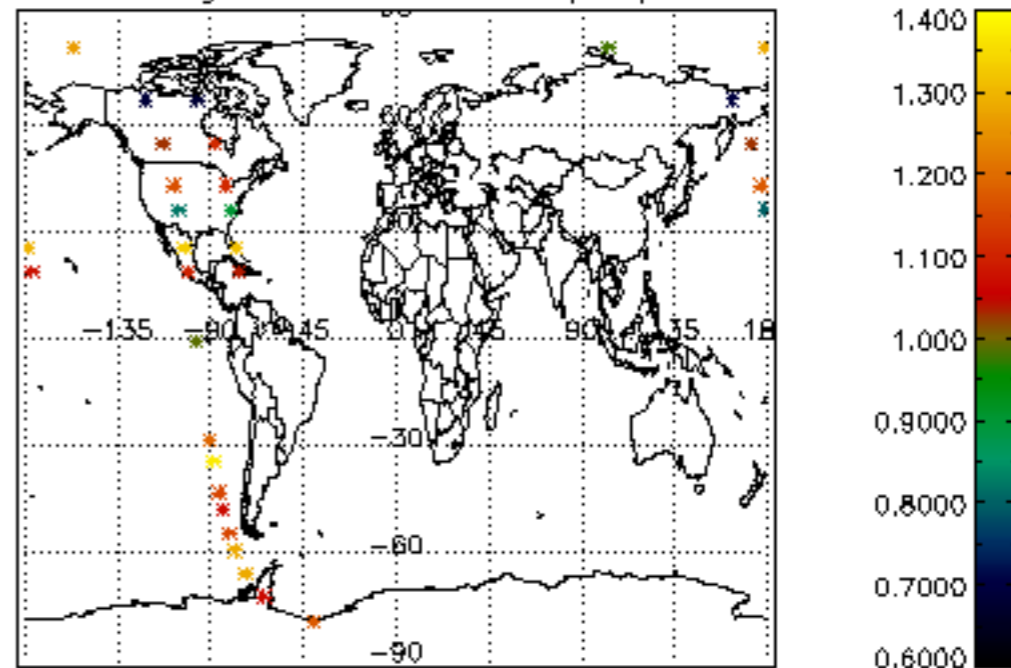




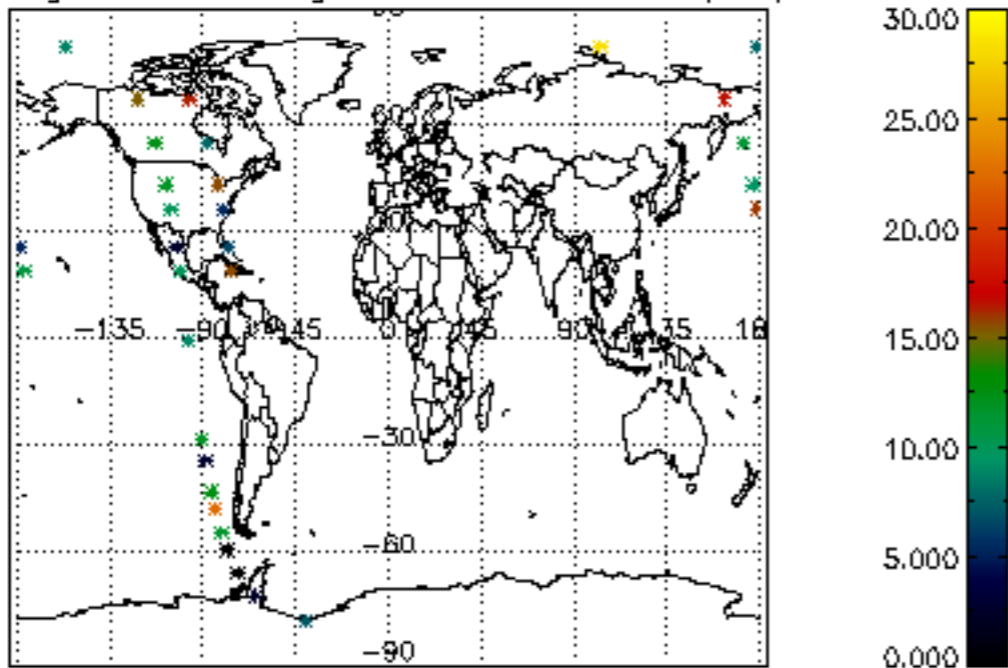
Percentage of cosmic ray hits per profile



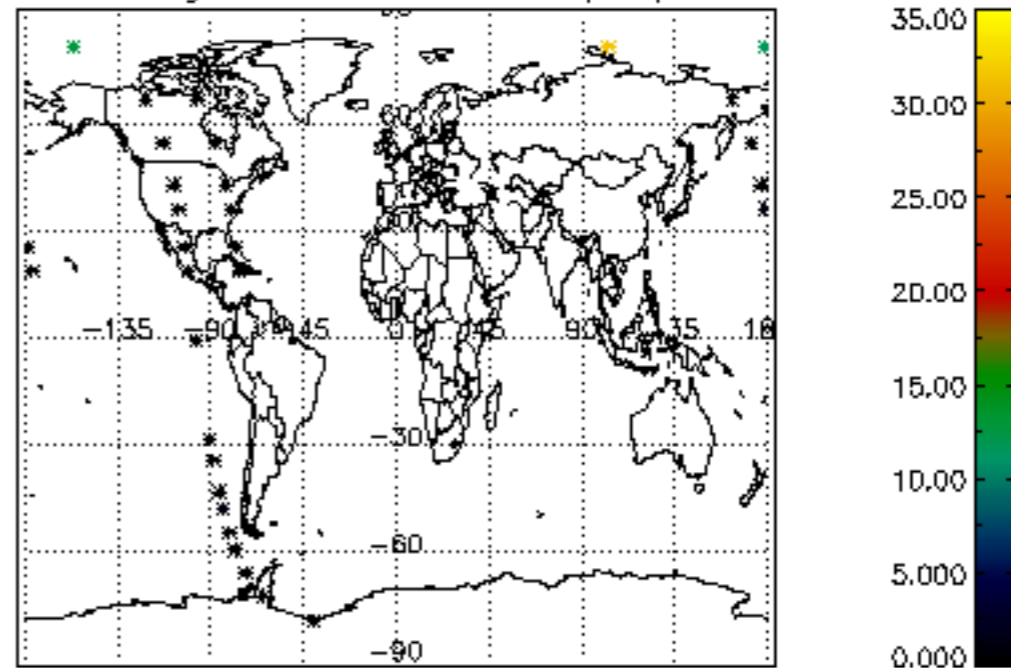
Percentage of datation errors per profile



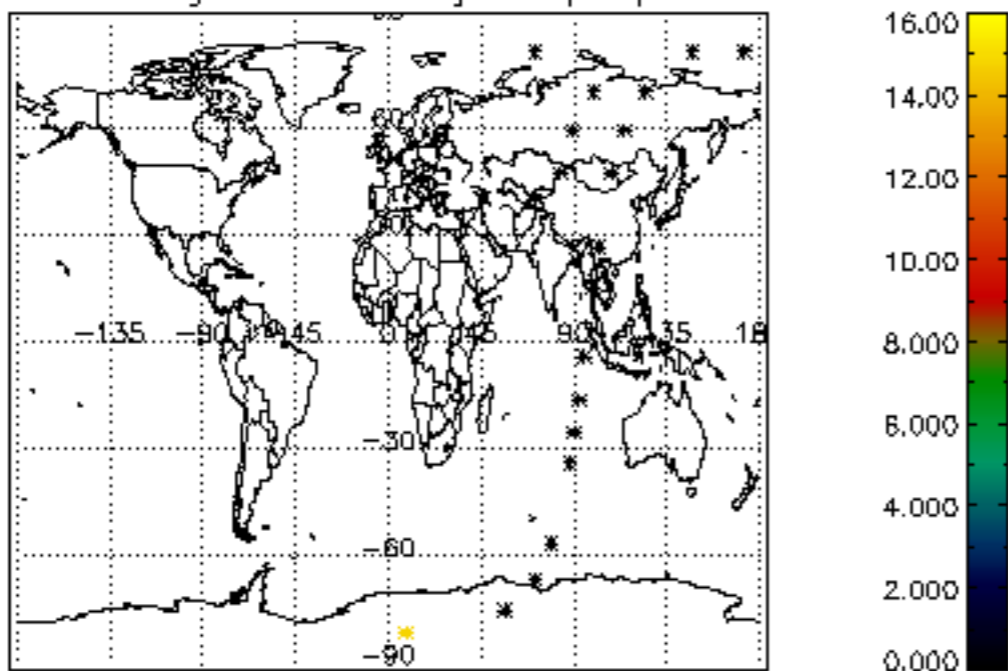
Percentage of star falling outside central band per profile



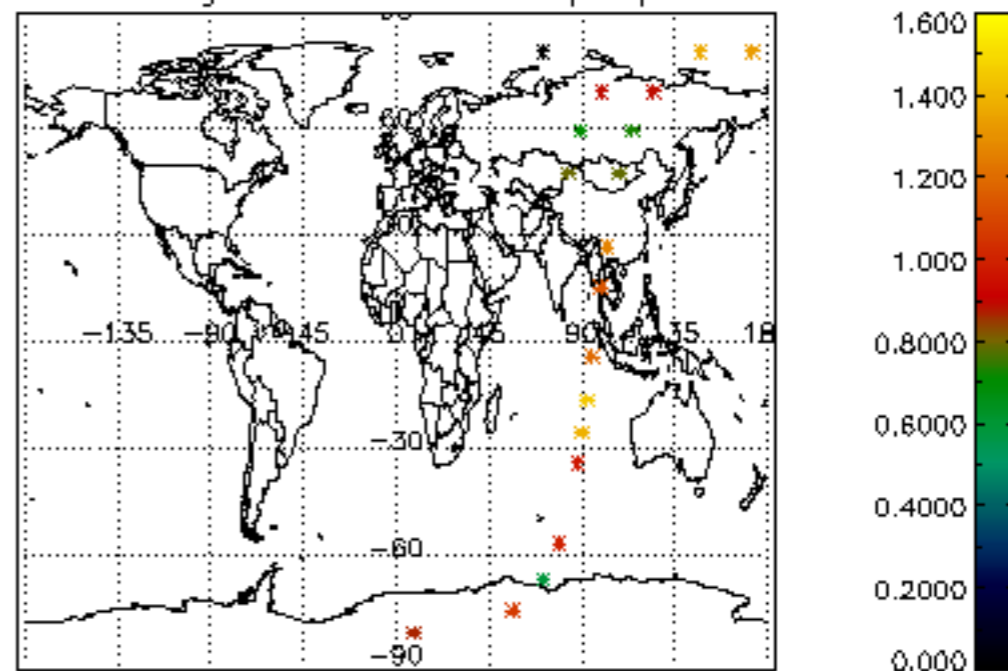
Percentage of saturation errors per profile



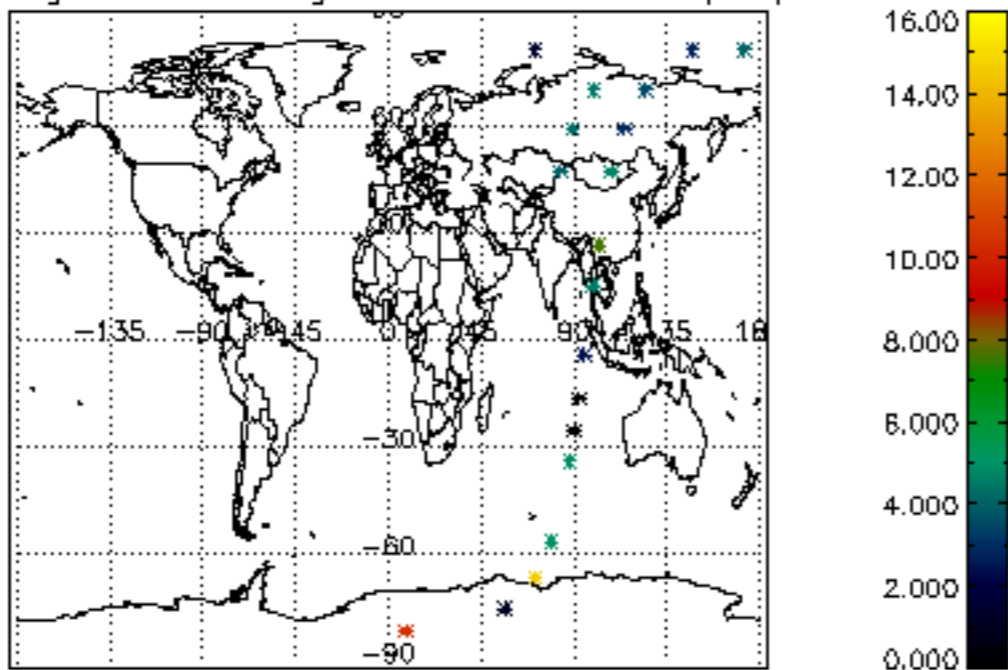
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

