

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	24APR2013 16:48:00
Data source version	GOMOS/6.01
Start time of products	12-08-2011 (12AUG2011 00:00:00)
Stop time of products	13-08-2011 (13AUG2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	282
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

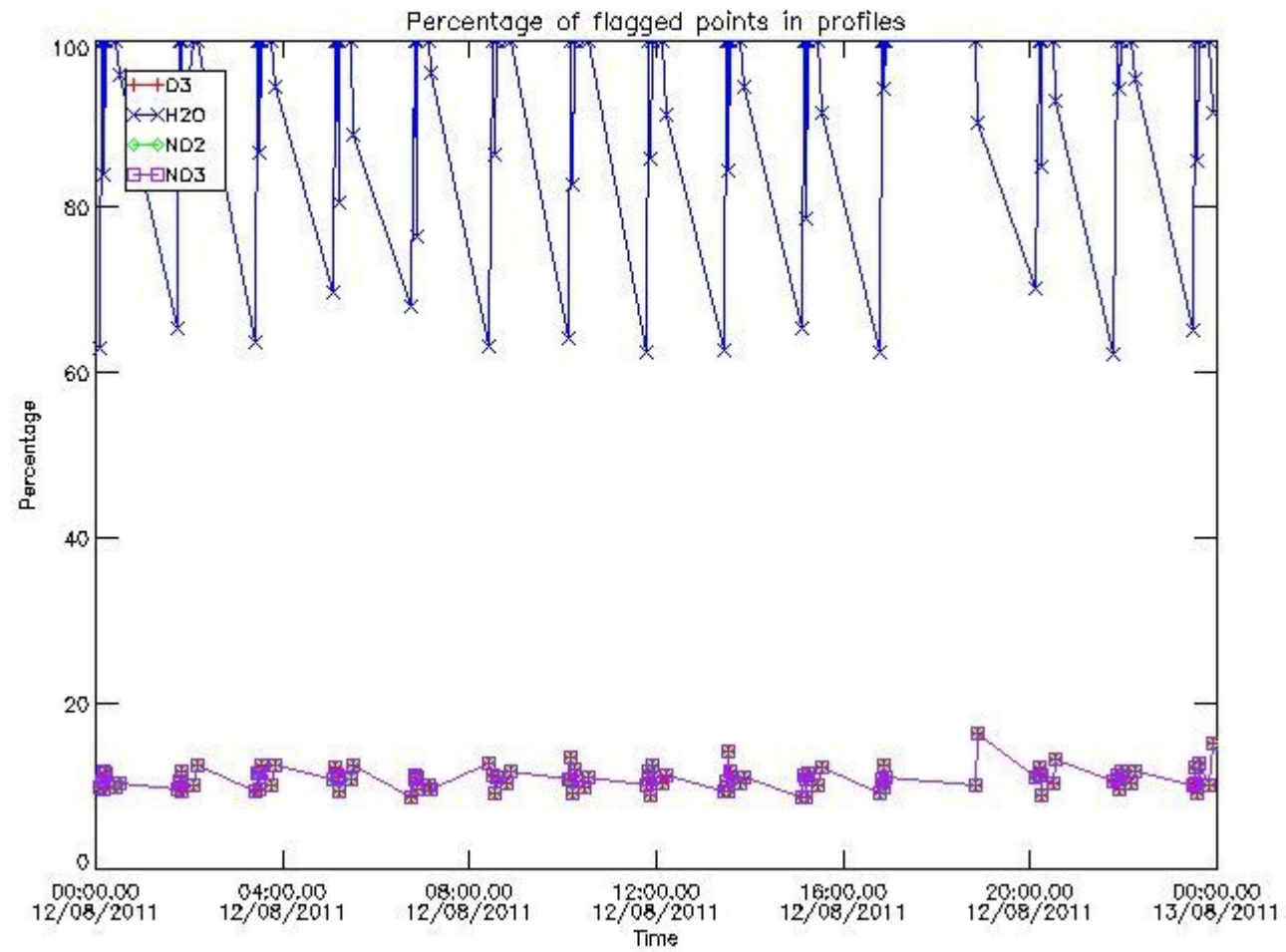
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110812_000059_000000473105_00260_49412_0002.N1	12-AUG-2011 00:00:59	Twilight	46.500	176	23Zet Tau	3.0200	22000.	93	49412	No
2	GOM_NL__2PRFIN20110812_000450_000000523105_00260_49412_0003.N1	12-AUG-2011 00:04:50	Dark	51.500	14	58Alp Ori	0.87000	3000.0	103	49412	No
3	GOM_NL__2PRFIN20110812_000754_000000483105_00260_49412_0004.N1	12-AUG-2011 00:07:54	Dark	48.000	30	46Eps Ori	1.6940	30000.	96	49412	No
4	GOM_NL__2PRFIN20110812_000917_000000443105_00260_49412_0005.N1	12-AUG-2011 00:09:17	Dark	43.500	125	44Iot Ori	2.7700	30000.	87	49412	No
5	GOM_NL__2PRFIN20110812_001044_000000533105_00260_49412_0006.N1	12-AUG-2011 00:10:44	Dark	53.000	7	19Bet Ori	0.10000	14000.	106	49412	No
6	GOM_NL__2PRFIN20110812_001241_000000453105_00260_49412_0007.N1	12-AUG-2011 00:12:41	Dark	44.500	101	11Alp Lep	2.5820	7000.0	89	49412	No
7	GOM_NL__2PRFIN20110812_002604_000000513105_00261_49413_9999.N1	12-AUG-2011 00:26:04	Dark	51.000	157	The1Eri	2.9060	9300.0	102	49413	No
8	GOM_NL__2PRFIN20110812_003033_000000503105_00261_49413_0000.N1	12-AUG-2011 00:30:33	Dark	49.500	9	Alp Eri	0.45300	24000.	99	49413	No
9	GOM_NL__2PRFIN20110812_003607_000000533105_00261_49413_0001.N1	12-AUG-2011 00:36:07	Straylight	52.500	84	Alp Phe	2.3970	4500.0	105	49413	No
10	GOM_NL__2PRFIN20110812_004003_000000453105_00261_49413_0002.N1	12-AUG-2011 00:40:03	Straylight	44.500	31	Alp Gru	1.7340	15200.	89	49413	No
11	GOM_NL__2PRFIN20110812_004356_000000603105_00261_49413_0003.N1	12-AUG-2011 00:43:56	Twilight	59.500	18	24Alp PsA	1.1660	9700.0	119	49413	No
12	GOM_NL__2PRFIN20110812_004951_000000453105_00261_49413_0004.N1	12-AUG-2011 00:49:51	Bright	45.000	142	49Del Cap	2.8500	8900.0	90	49413	No
13	GOM_NL__2PRFIN20110812_005324_000000433105_00261_49413_0005.N1	12-AUG-2011 00:53:24	Bright	43.000	154	22Bet Aqr	2.8990	5700.0	86	49413	No
14	GOM_NL__2PRFIN20110812_005851_000000493105_00261_49413_0006.N1	12-AUG-2011 00:58:51	Bright	49.000	61	8Eps Peg	2.1000	3900.0	98	49413	No
15	GOM_NL__2PRFIN20110812_010513_000000373105_00261_49413_0007.N1	12-AUG-2011 01:05:13	Bright	37.000	92	53Eps Cyg	2.5000	4500.0	74	49413	No
16	GOM_NL__2PRFIN20110812_010644_000000393105_00261_49413_0008.N1	12-AUG-2011 01:06:44	Bright	38.500	66	37Gam Cyg	2.2080	5900.0	77	49413	No
17	GOM_NL__2PRFIN20110812_010825_000000403105_00261_49413_0009.N1	12-AUG-2011 01:08:25	Bright	40.000	19	50Alp Cyg	1.2460	10500.	80	49413	No
18	GOM_NL__2PRFIN20110812_011347_000000393105_00261_49413_0010.N1	12-AUG-2011 01:13:47	Bright	39.000	89	5Alp Cep	2.4510	8000.0	78	49413	No
19	GOM_NL__2PRFIN20110812_013310_000000473105_00261_49413_0011.N1	12-AUG-2011 01:33:10	Bright	47.000	6	13Alp Aur	0.080000	3400.0	94	49413	No
20	GOM_NL__2PRFIN20110812_013556_000000393105_00261_49413_0012.N1	12-AUG-2011 01:35:56	Bright	38.500	107	37The Aur	2.6490	11000.	77	49413	No
21	GOM_NL__2PRFIN20110812_013856_000000513105_00261_49413_0013.N1	12-AUG-2011 01:38:56	Twilight	51.000	28	12Bet Tau	1.6500	15200.	102	49413	No
22	GOM_NL__2PRFIN20110812_014113_000000463105_00261_49413_0014.N1	12-AUG-2011 01:41:13	Twilight	45.500	176	23Zet Tau	3.0200	22000.	91	49413	No
23	GOM_NL__2PRFIN20110812_014505_000000533105_00261_49413_0015.N1	12-AUG-2011 01:45:05	Dark	52.500	14	58Alp Ori	0.87000	3000.0	105	49413	No
24	GOM_NL__2PRFIN20110812_014808_000000483105_00261_49413_0016.N1	12-AUG-2011 01:48:08	Dark	48.000	30	46Eps Ori	1.6940	30000.	96	49413	No
25	GOM_NL__2PRFIN20110812_014932_000000433105_00261_49413_0017.N1	12-AUG-2011 01:49:32	Dark	43.000	125	44Iot Ori	2.7700	30000.	86	49413	No
26	GOM_NL__2PRFIN20110812_015058_000000553105_00261_49413_0018.N1	12-AUG-2011 01:50:58	Dark	54.500	7	19Bet Ori	0.10000	14000.	109	49413	No
27	GOM_NL__2PRFIN20110812_020619_000000503105_00262_49414_0002.N1	12-AUG-2011 02:06:19	Dark	50.000	157	The1Eri	2.9060	9300.0	100	49414	No
28	GOM_NL__2PRFIN20110812_021047_000000453105_00262_49414_0003.N1	12-AUG-2011 02:10:47	Dark	45.000	9	Alp Eri	0.45300	24000.	90	49414	No
29	GOM_NL__2PRFIN20110812_021622_000000533105_00262_49414_0004.N1	12-AUG-2011 02:16:22	Straylight	52.500	84	Alp Phe	2.3970	4500.0	105	49414	No
30	GOM_NL__2PRFIN20110812_022018_000000423105_00262_49414_0005.N1	12-AUG-2011 02:20:18	Straylight	42.000	31	Alp Gru	1.7340	15200.	84	49414	No
31	GOM_NL__2PRFIN20110812_022410_000000583105_00262_49414_0006.N1	12-AUG-2011 02:24:10	Twilight	58.000	18	24Alp PsA	1.1660	9700.0	116	49414	No
32	GOM_NL__2PRFIN20110812_023004_000000503105_00262_49414_0007.N1	12-AUG-2011 02:30:04	Bright	50.000	142	49Del Cap	2.8500	8900.0	100	49414	No
33	GOM_NL__2PRFIN20110812_023339_000000453105_00262_49414_0008.N1	12-AUG-2011 02:33:39	Bright	44.500	154	22Bet Aqr	2.8990	5700.0	89	49414	No
34	GOM_NL__2PRFIN20110812_023905_000000473105_00262_49414_0009.N1	12-AUG-2011 02:39:05	Bright	46.500	61	8Eps Peg	2.1000	3900.0	93	49414	No
35	GOM_NL__2PRFIN20110812_024527_000000413105_00262_49414_0010.N1	12-AUG-2011 02:45:27	Bright	40.500	92	53Eps Cyg	2.5000	4500.0	81	49414	No
36	GOM_NL__2PRFIN20110812_024658_000000363105_00262_49414_0011.N1	12-AUG-2011 02:46:58	Bright	35.500	66	37Gam Cyg	2.2080	5900.0	71	49414	No
37	GOM_NL__2PRFIN20110812_024838_000000403105_00262_49414_0012.N1	12-AUG-2011 02:48:38	Bright	39.500	19	50Alp Cyg	1.2460	10500.	79	49414	No
38	GOM_NL__2PRFIN20110812_025401_000000373105_00262_49414_0013.N1	12-AUG-2011 02:54:01	Bright	36.500	89	5Alp Cep	2.4510	8000.0	73	49414	No
39	GOM_NL__2PRFIN20110812_031324_000000463105_00262_49414_0014.N1	12-AUG-2011 03:13:24	Bright	46.000	6	13Alp Aur	0.080000	3400.0	92	49414	No
40	GOM_NL__2PRFIN20110812_031611_000000573105_00262_49414_0015.N1	12-AUG-2011 03:16:11	Bright	57.000	107	37The Aur	2.6490	11000.	114	49414	No
41	GOM_NL__2PRFIN20110812_031910_000000503105_00262_49414_0016.N1	12-AUG-2011 03:19:10	Twilight	49.500	28	12Bet Tau	1.6500	15200.	99	49414	No
42	GOM_NL__2PRFIN20110812_032127_000000473105_00262_49414_0017.N1	12-AUG-2011 03:21:27	Twilight	46.500	176	23Zet Tau	3.0200	22000.	93	49414	No

279	GOM_NL__2PRFIN20110812_233605_000000443105_00274_49426_0452.N1	12-AUG-2011 23:36:05	Dark	44.000	101	11Alp Lep	2.5820	7000.0	88	49426	No
280	GOM_NL__2PRFIN20110812_234936_000000503105_00275_49427_0470.N1	12-AUG-2011 23:49:36	Dark	50.000	157	The1Eri	2.9060	9300.0	100	49427	No
281	GOM_NL__2PRFIN20110812_235358_000000473105_00275_49427_0471.N1	12-AUG-2011 23:53:58	Dark	46.500	9	Alp Eri	0.45300	24000.	93	49427	No
282	GOM_NL__2PRFIN20110812_235935_000000563105_00275_49427_0472.N1	12-AUG-2011 23:59:35	Straylight	56.000	84	Alp Phe	2.3970	4500.0	112	49427	No

3. Quality information per product

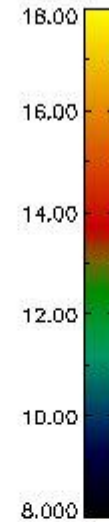
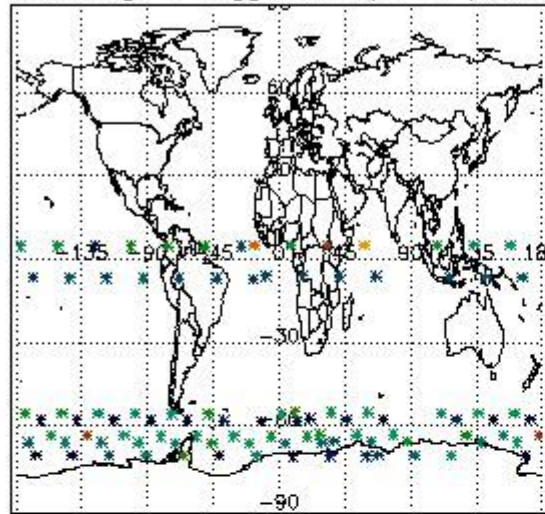
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

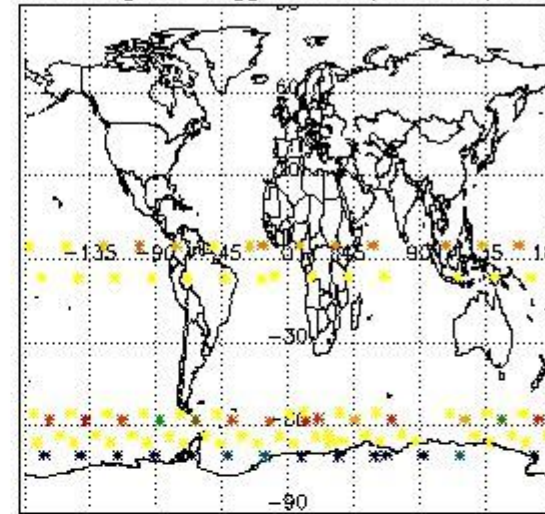


3.2 Plot quality information per product (world map)

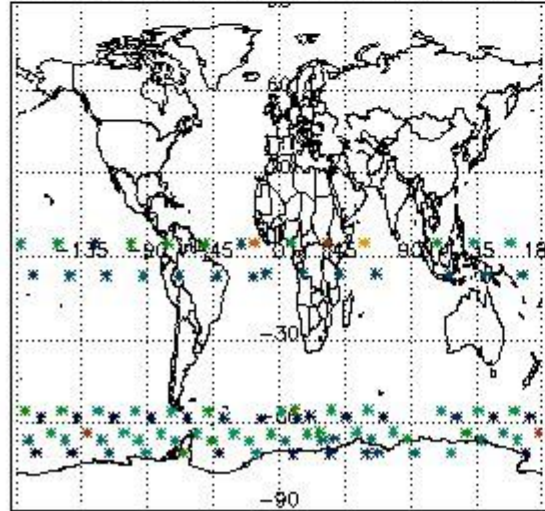
Percentage of flagged data per O3 profile



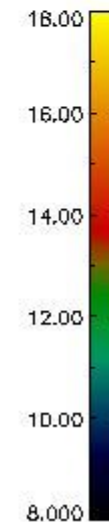
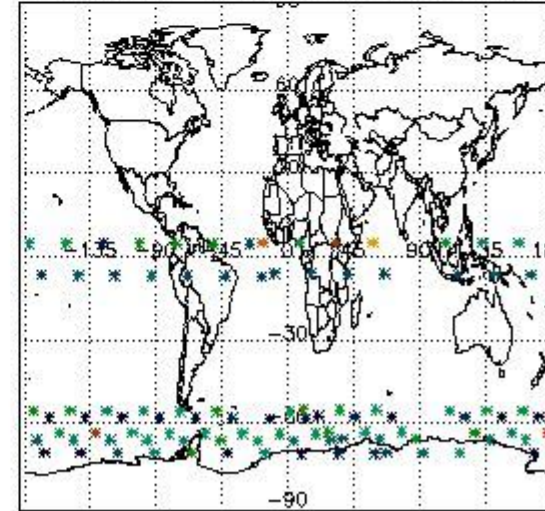
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

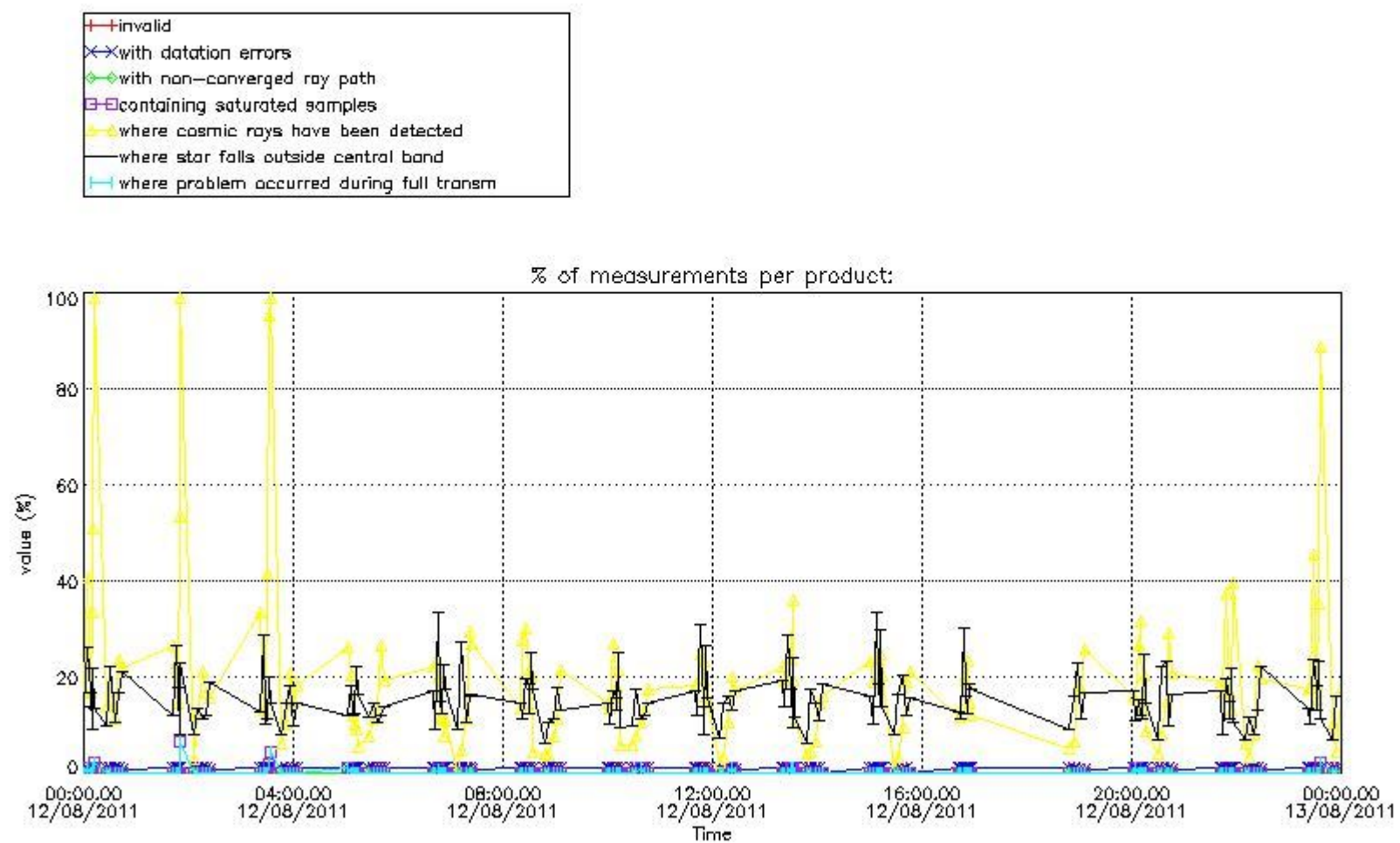


4. Level 1 quality information per product

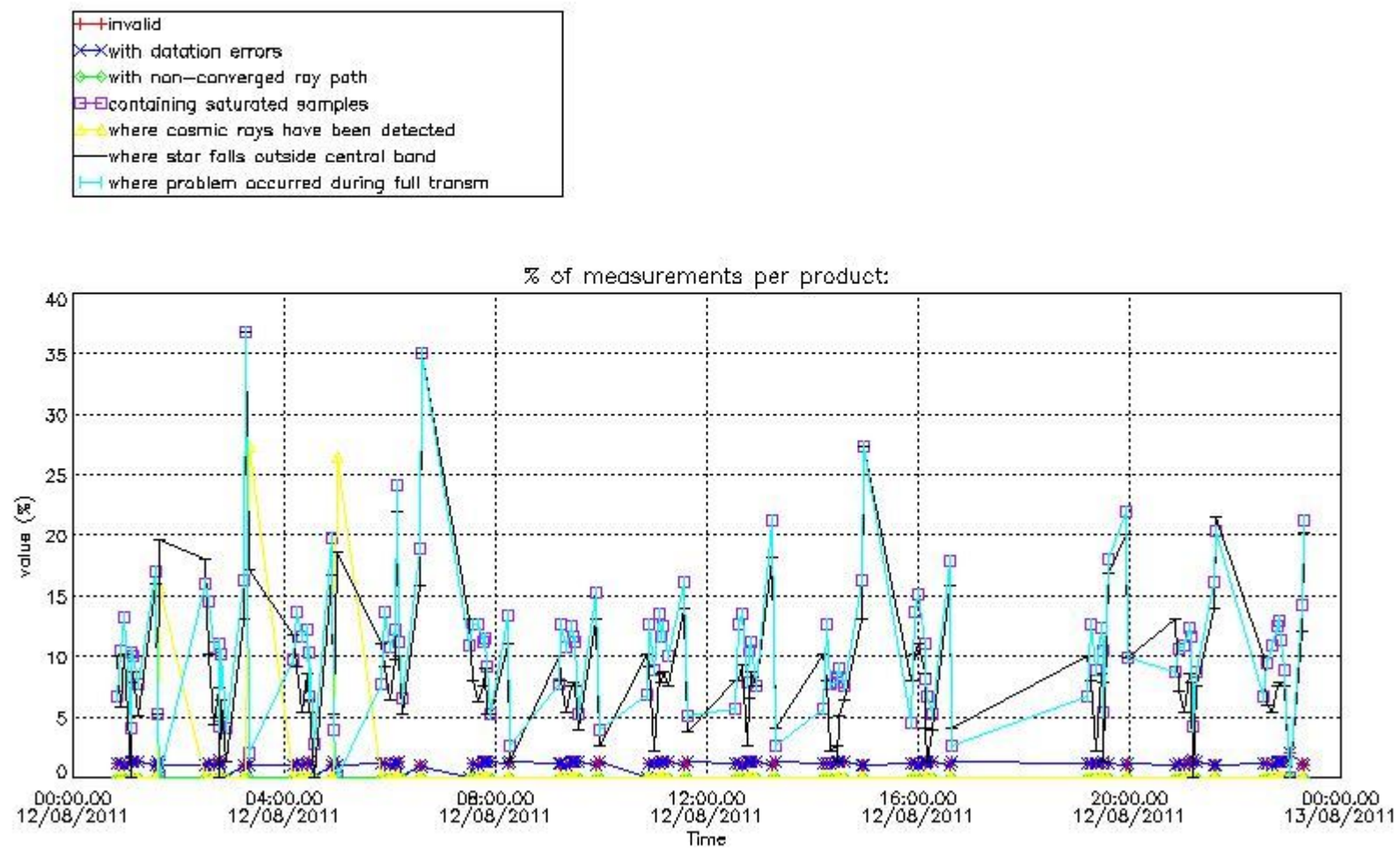
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



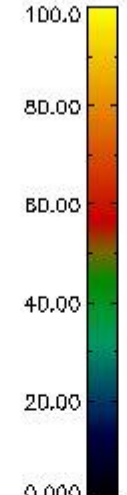
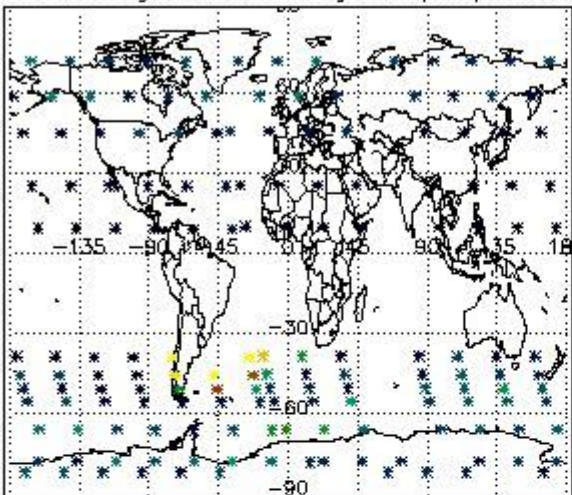
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



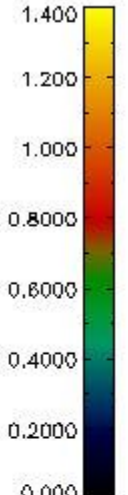
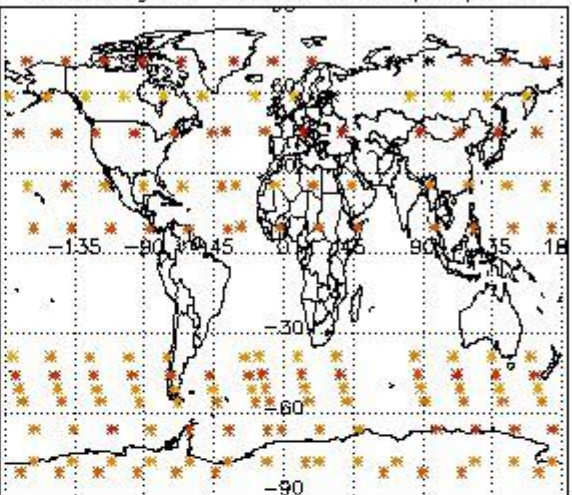
4.2 Plot quality information per product coming from level 1b processing (world map)

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

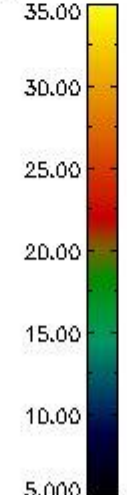
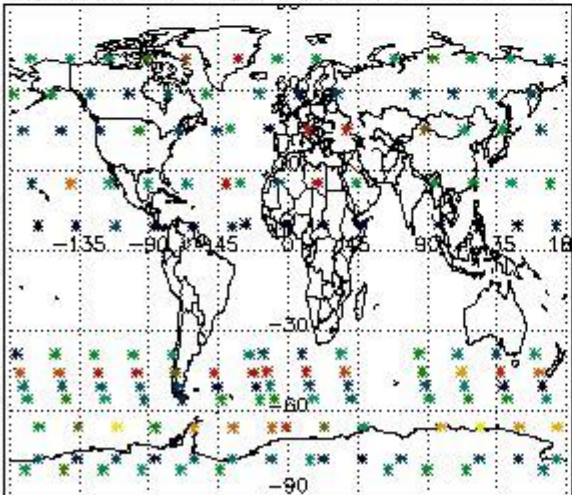
Percentage of cosmic ray hits per profile



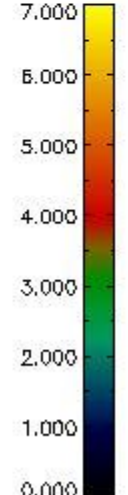
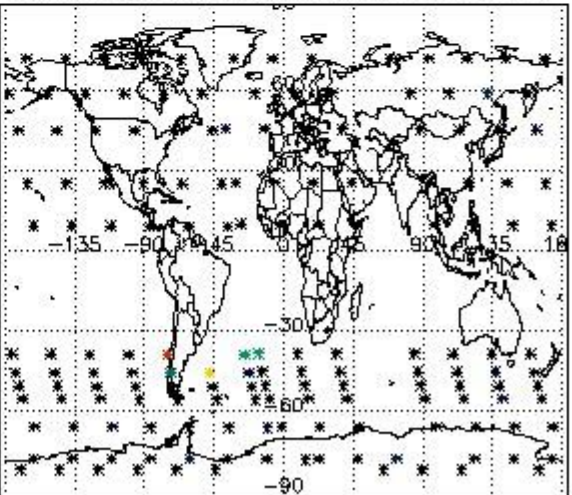
Percentage of datation errors per profile



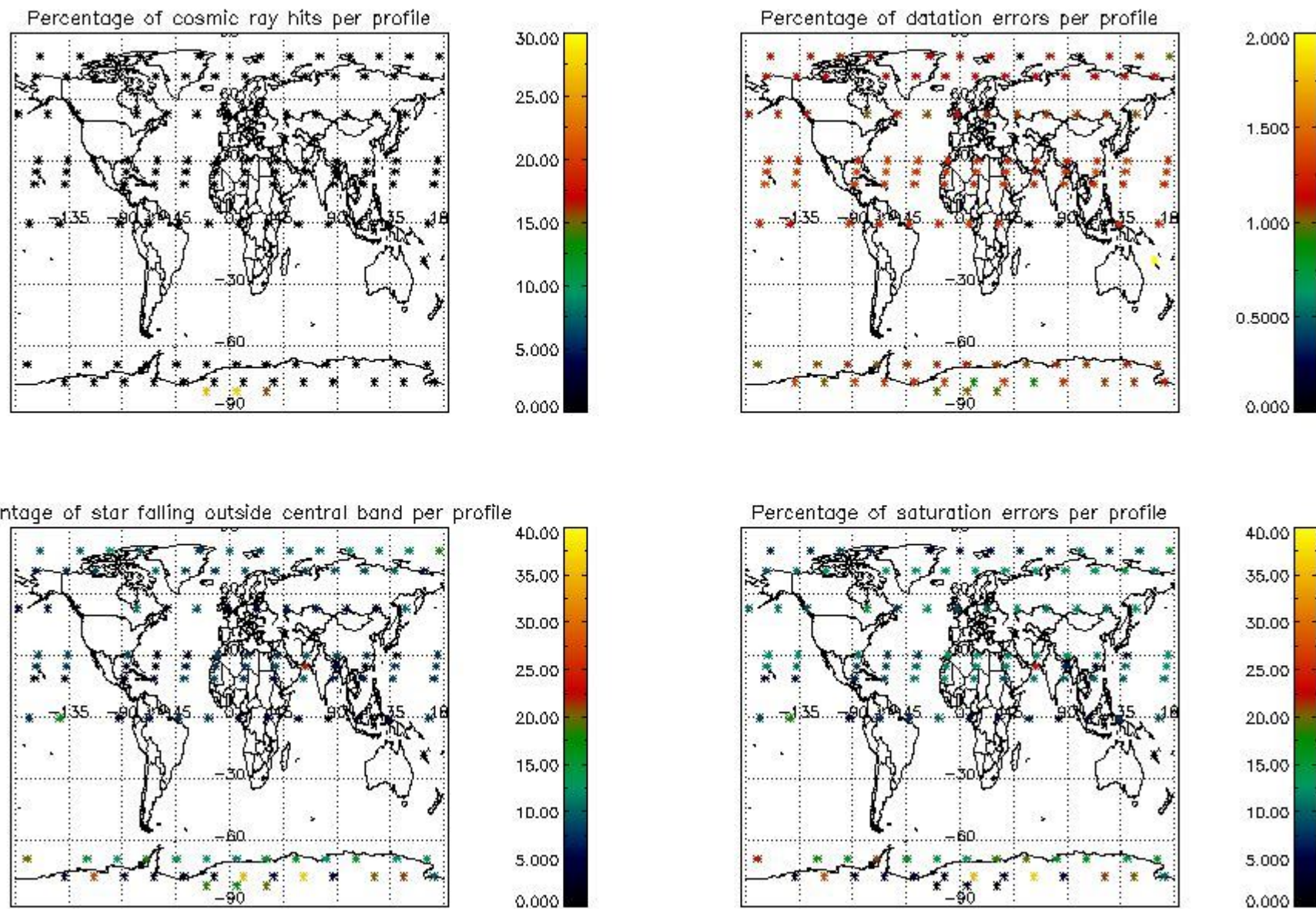
Percentage of star falling outside central band per profile



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

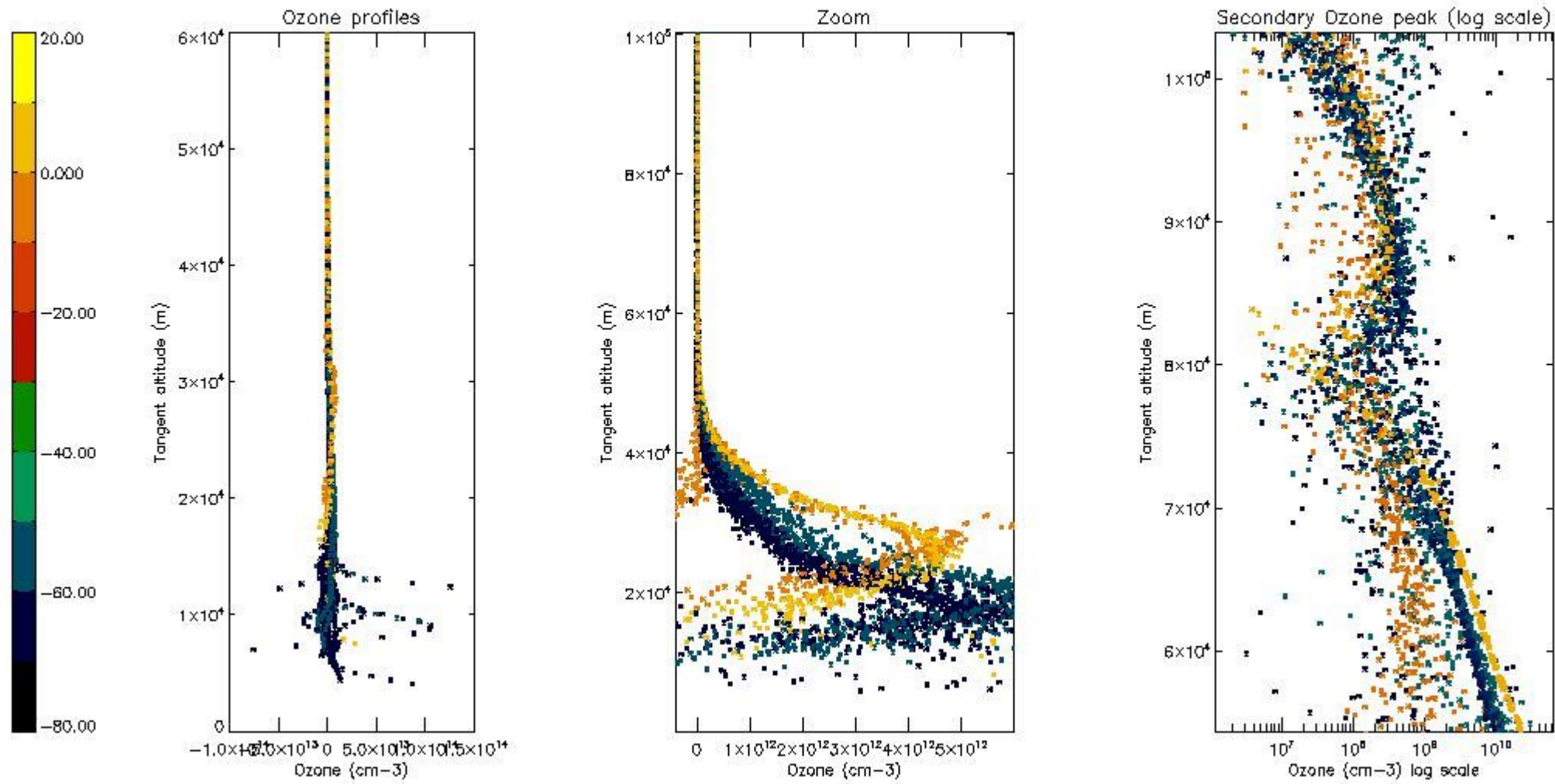
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	20

STD < 10	15
STD < 5	11

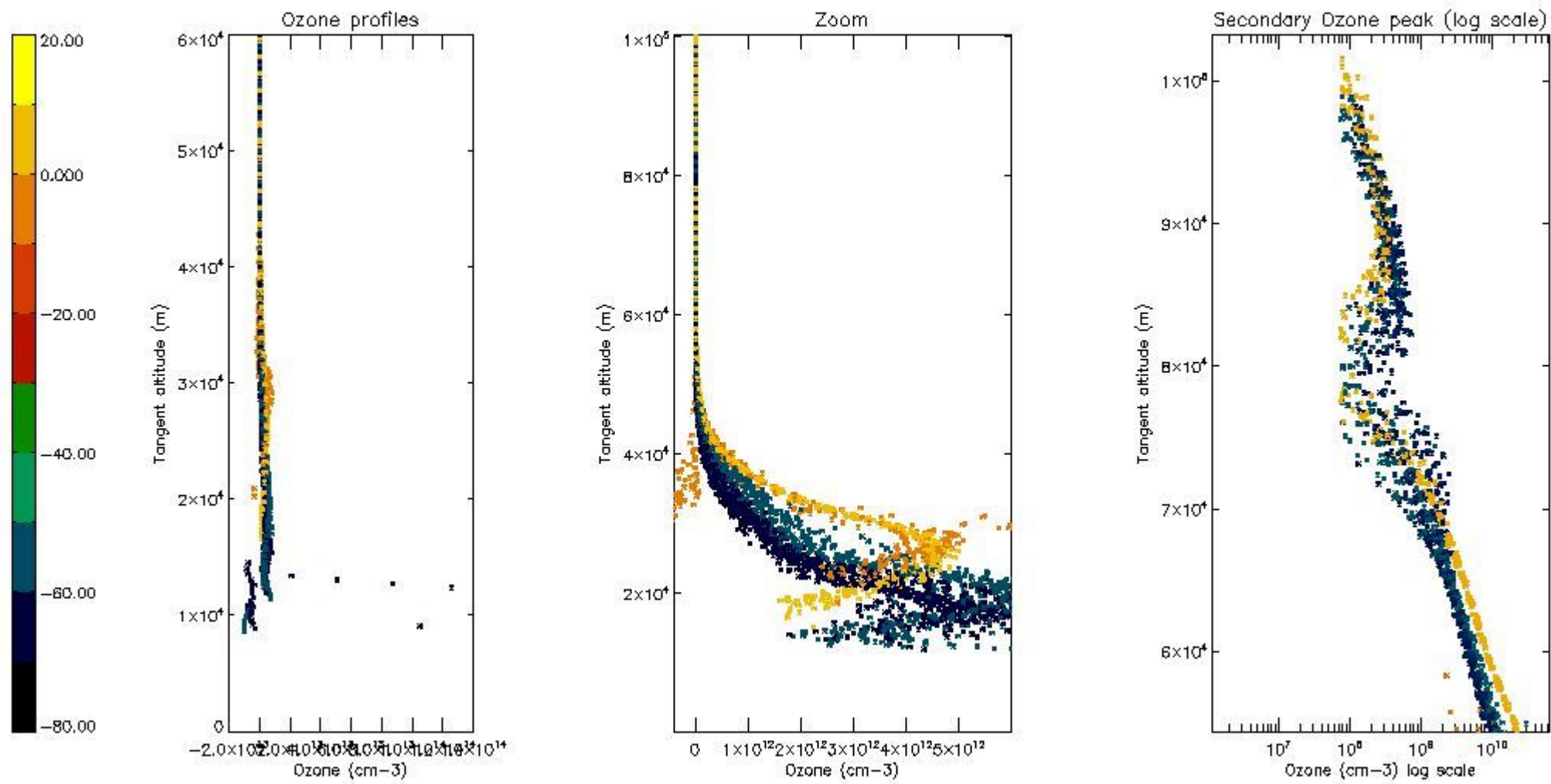
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



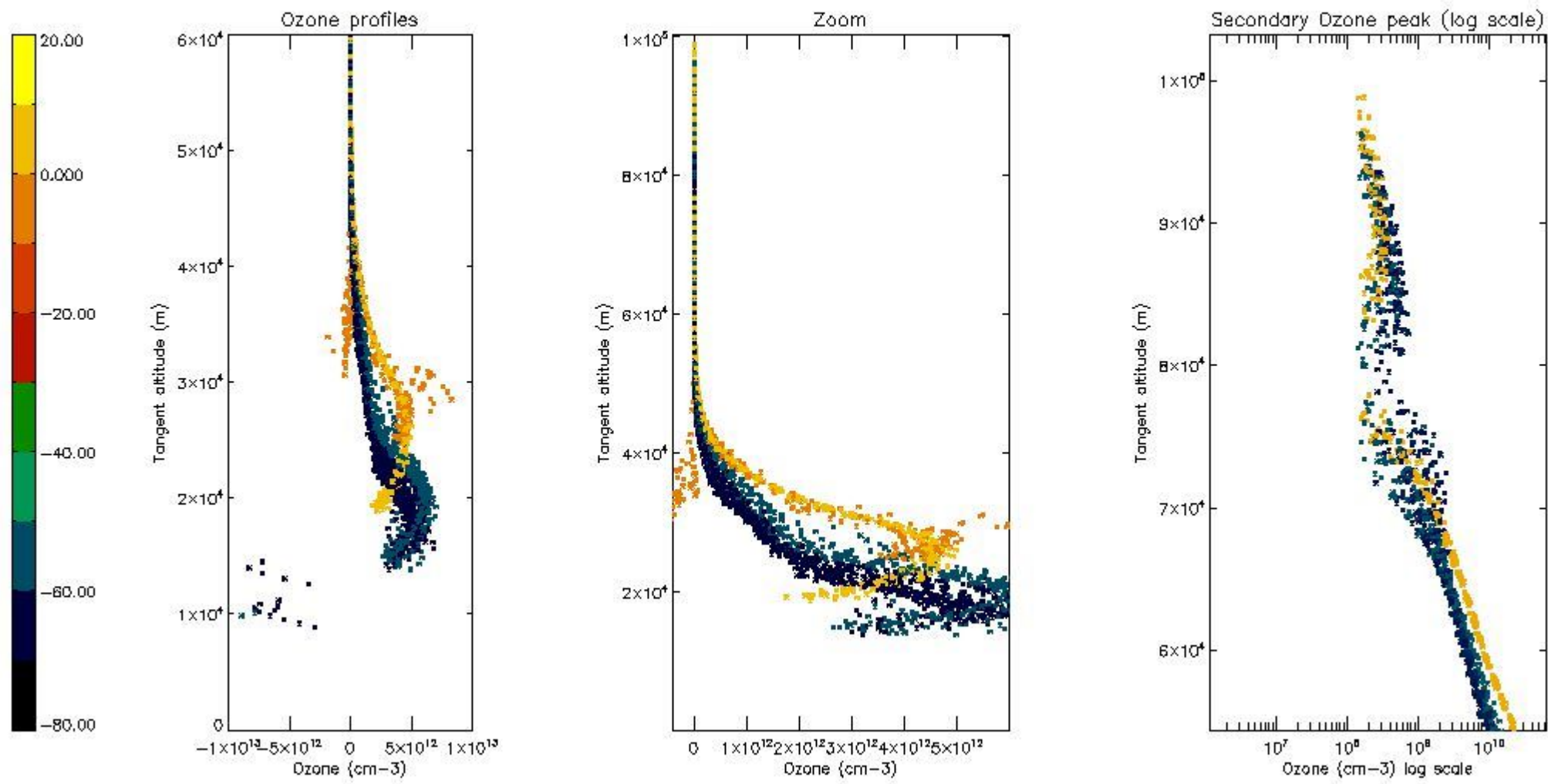
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



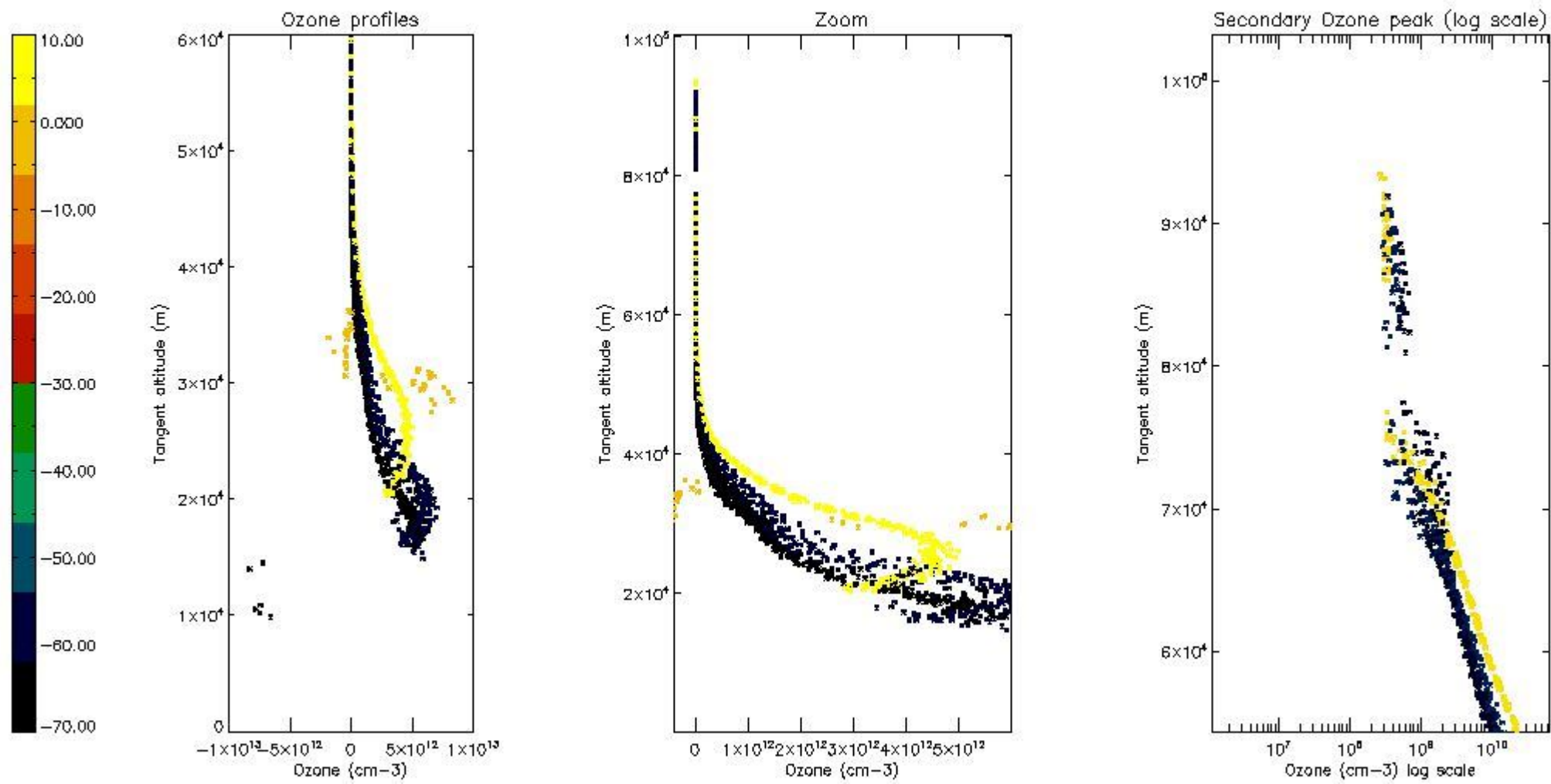
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



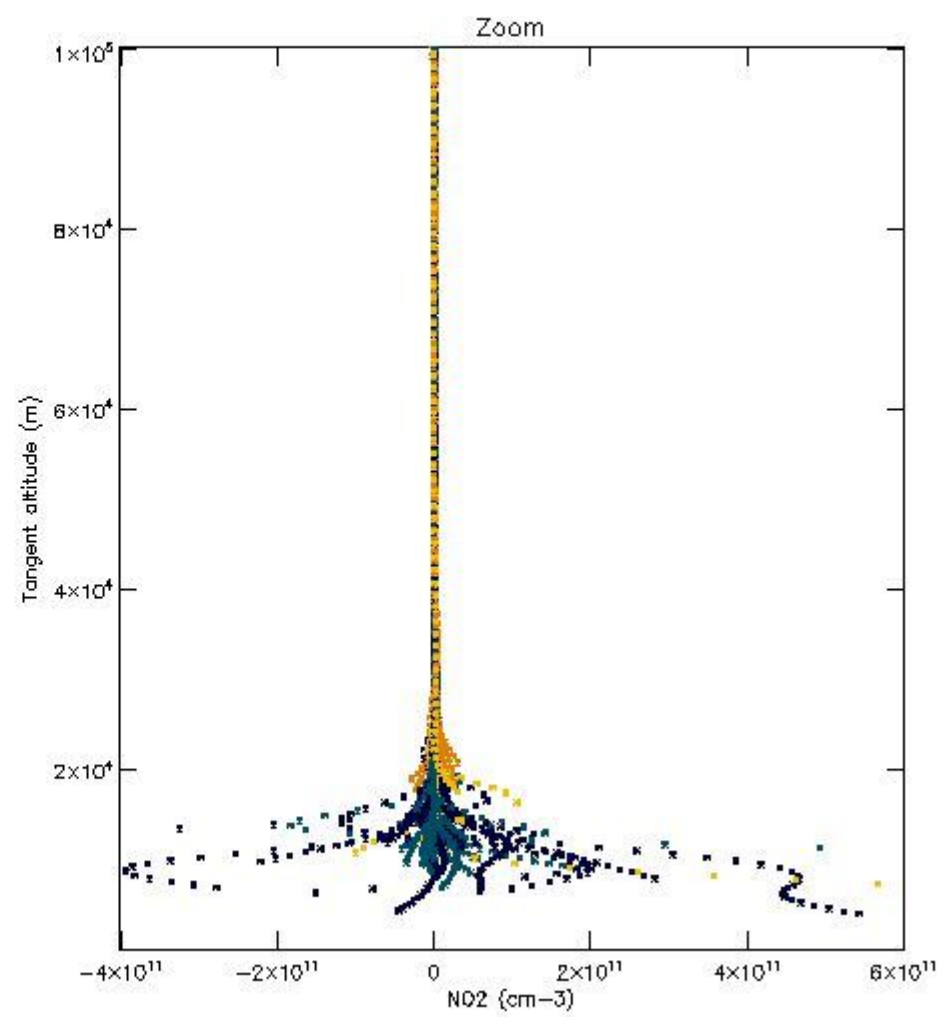
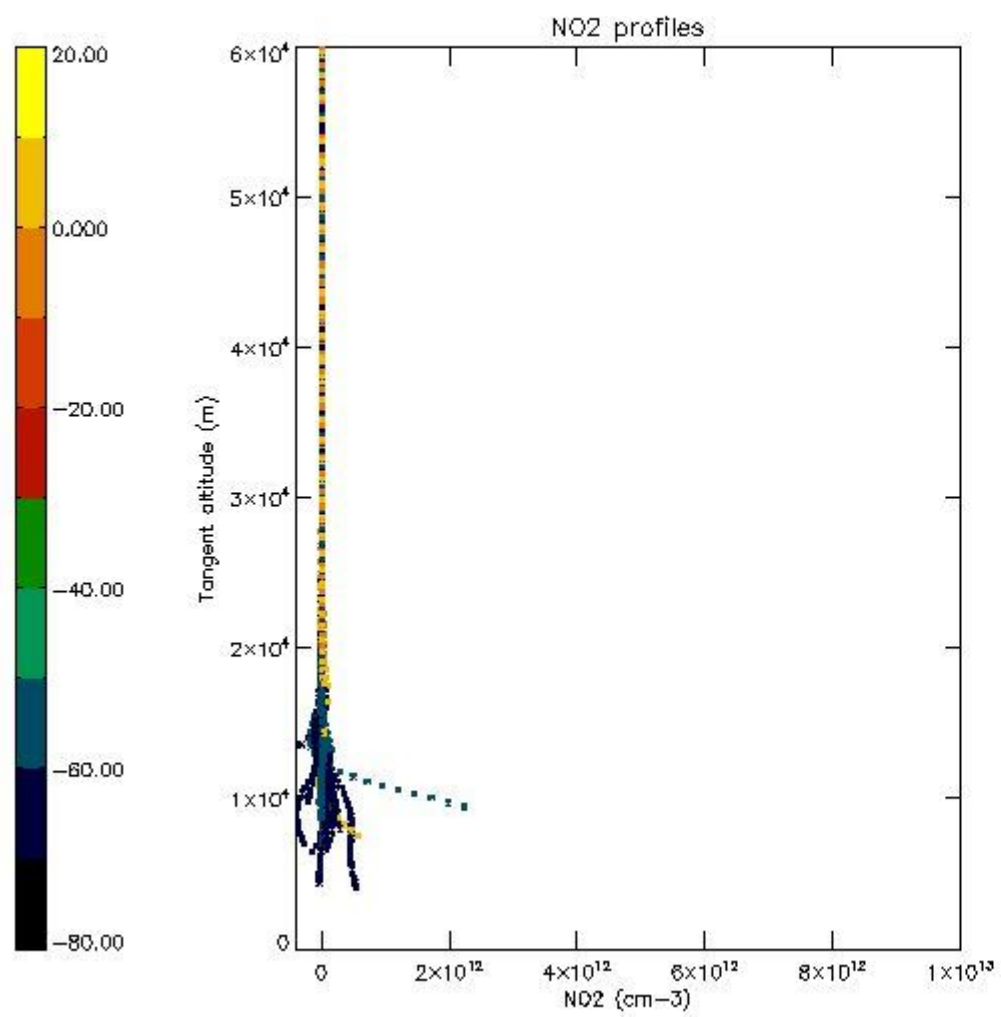
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



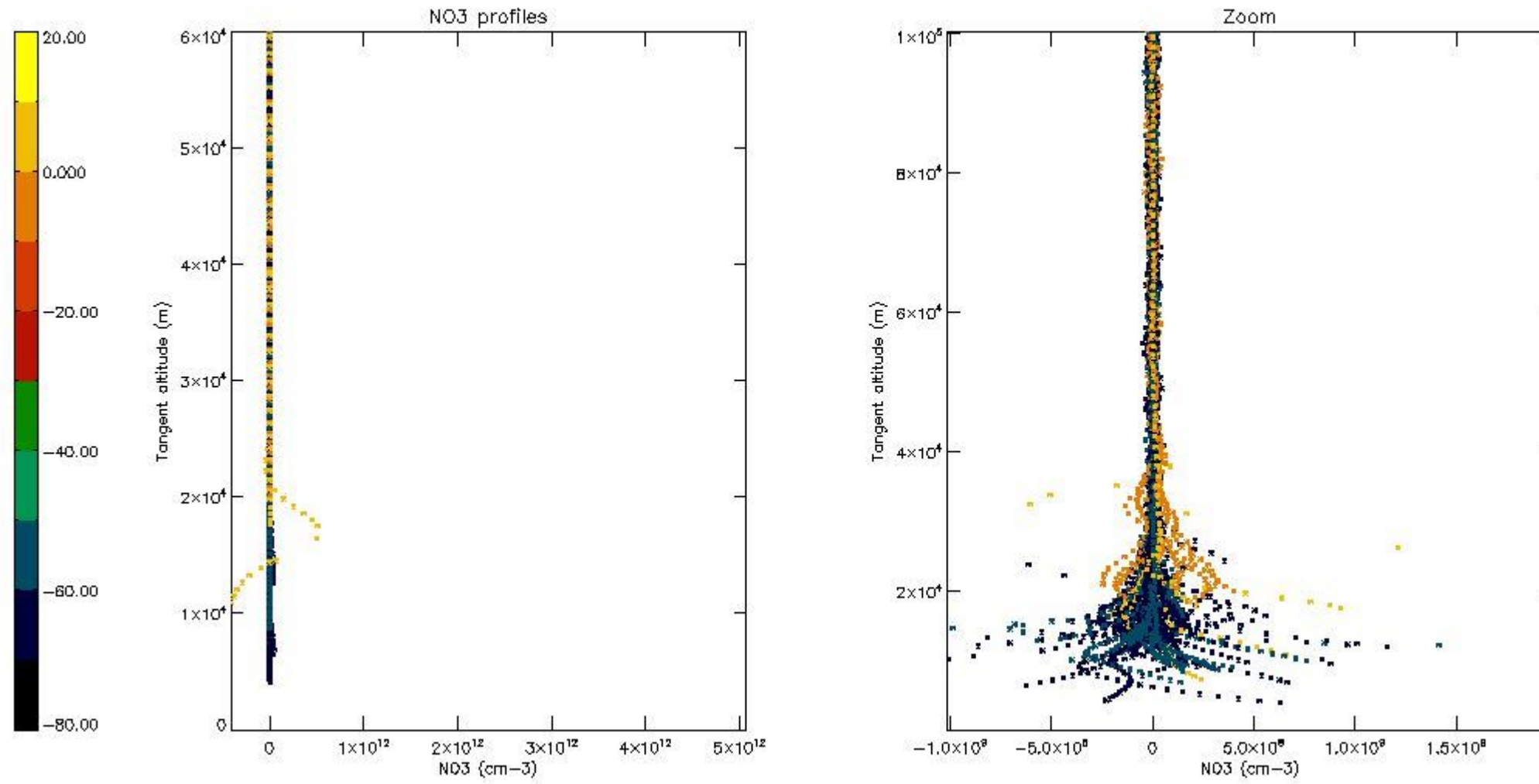
5.6 Plot NO₂ profiles for all STD (dark without errors)

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_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	12-AUG-2011 00:00:59
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	12-AUG-2011 00:00:59
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	12-AUG-2011 00:00:59

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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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Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

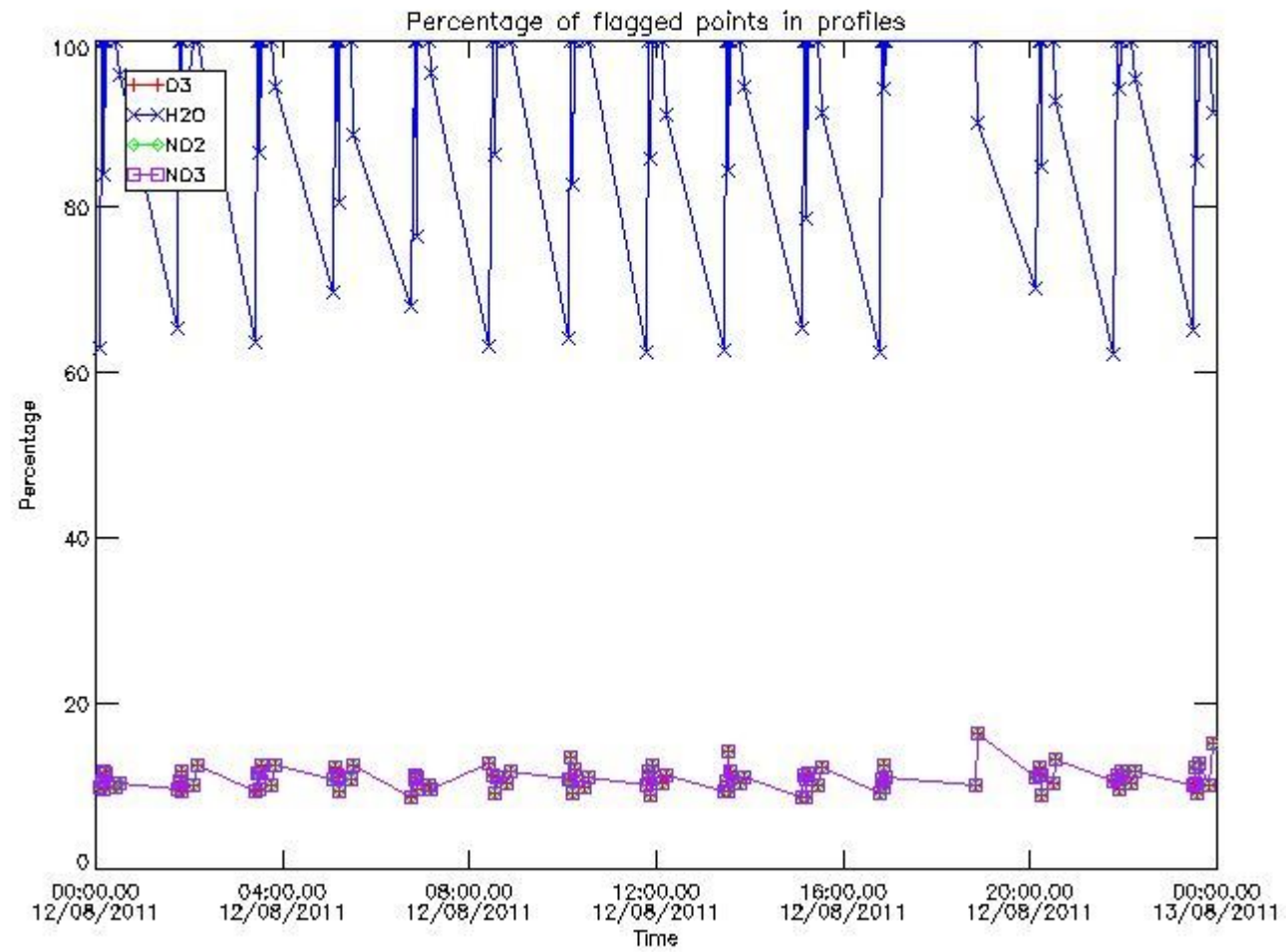
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110812_000059_000000473105_00260_49412_0002.N1	12-AUG-2011 00:00:59	Twilight	46.500	176	23Zet Tau	3.0200	22000.	93	49412	No
2	GOM_NL__2PRFIN20110812_000450_000000523105_00260_49412_0003.N1	12-AUG-2011 00:04:50	Dark	51.500	14	58Alp Ori	0.87000	3000.0	103	49412	No
3	GOM_NL__2PRFIN20110812_000754_000000483105_00260_49412_0004.N1	12-AUG-2011 00:07:54	Dark	48.000	30	46Eps Ori	1.6940	30000.	96	49412	No
4	GOM_NL__2PRFIN20110812_000917_000000443105_00260_49412_0005.N1	12-AUG-2011 00:09:17	Dark	43.500	125	44Iot Ori	2.7700	30000.	87	49412	No
5	GOM_NL__2PRFIN20110812_001044_000000533105_00260_49412_0006.N1	12-AUG-2011 00:10:44	Dark	53.000	7	19Bet Ori	0.10000	14000.	106	49412	No
6	GOM_NL__2PRFIN20110812_001241_000000453105_00260_49412_0007.N1	12-AUG-2011 00:12:41	Dark	44.500	101	11Alp Lep	2.5820	7000.0	89	49412	No
7	GOM_NL__2PRFIN20110812_002604_000000513105_00261_49413_9999.N1	12-AUG-2011 00:26:04	Dark	51.000	157	The1Eri	2.9060	9300.0	102	49413	No
8	GOM_NL__2PRFIN20110812_003033_000000503105_00261_49413_0000.N1	12-AUG-2011 00:30:33	Dark	49.500	9	Alp Eri	0.45300	24000.	99	49413	No
9	GOM_NL__2PRFIN20110812_003607_000000533105_00261_49413_0001.N1	12-AUG-2011 00:36:07	Straylight	52.500	84	Alp Phe	2.3970	4500.0	105	49413	No
10	GOM_NL__2PRFIN20110812_004003_000000453105_00261_49413_0002.N1	12-AUG-2011 00:40:03	Straylight	44.500	31	Alp Gru	1.7340	15200.	89	49413	No
11	GOM_NL__2PRFIN20110812_004356_000000603105_00261_49413_0003.N1	12-AUG-2011 00:43:56	Twilight	59.500	18	24Alp PsA	1.1660	9700.0	119	49413	No
12	GOM_NL__2PRFIN20110812_004951_000000453105_00261_49413_0004.N1	12-AUG-2011 00:49:51	Bright	45.000	142	49Del Cap	2.8500	8900.0	90	49413	No
13	GOM_NL__2PRFIN20110812_005324_000000433105_00261_49413_0005.N1	12-AUG-2011 00:53:24	Bright	43.000	154	22Bet Aqr	2.8990	5700.0	86	49413	No
14	GOM_NL__2PRFIN20110812_005851_000000493105_00261_49413_0006.N1	12-AUG-2011 00:58:51	Bright	49.000	61	8Eps Peg	2.1000	3900.0	98	49413	No
15	GOM_NL__2PRFIN20110812_010513_000000373105_00261_49413_0007.N1	12-AUG-2011 01:05:13	Bright	37.000	92	53Eps Cyg	2.5000	4500.0	74	49413	No
16	GOM_NL__2PRFIN20110812_010644_000000393105_00261_49413_0008.N1	12-AUG-2011 01:06:44	Bright	38.500	66	37Gam Cyg	2.2080	5900.0	77	49413	No
17	GOM_NL__2PRFIN20110812_010825_000000403105_00261_49413_0009.N1	12-AUG-2011 01:08:25	Bright	40.000	19	50Alp Cyg	1.2460	10500.	80	49413	No
18	GOM_NL__2PRFIN20110812_011347_000000393105_00261_49413_0010.N1	12-AUG-2011 01:13:47	Bright	39.000	89	5Alp Cep	2.4510	8000.0	78	49413	No
19	GOM_NL__2PRFIN20110812_013310_000000473105_00261_49413_0011.N1	12-AUG-2011 01:33:10	Bright	47.000	6	13Alp Aur	0.080000	3400.0	94	49413	No
20	GOM_NL__2PRFIN20110812_013556_000000393105_00261_49413_0012.N1	12-AUG-2011 01:35:56	Bright	38.500	107	37The Aur	2.6490	11000.	77	49413	No
21	GOM_NL__2PRFIN20110812_013856_000000513105_00261_49413_0013.N1	12-AUG-2011 01:38:56	Twilight	51.000	28	12Bet Tau	1.6500	15200.	102	49413	No
22	GOM_NL__2PRFIN20110812_014113_000000463105_00261_49413_0014.N1	12-AUG-2011 01:41:13	Twilight	45.500	176	23Zet Tau	3.0200	22000.	91	49413	No
23	GOM_NL__2PRFIN20110812_014505_000000533105_00261_49413_0015.N1	12-AUG-2011 01:45:05	Dark	52.500	14	58Alp Ori	0.87000	3000.0	105	49413	No
24	GOM_NL__2PRFIN20110812_014808_000000483105_00261_49413_0016.N1	12-AUG-2011 01:48:08	Dark	48.000	30	46Eps Ori	1.6940	30000.	96	49413	No
25	GOM_NL__2PRFIN20110812_014932_000000433105_00261_49413_0017.N1	12-AUG-2011 01:49:32	Dark	43.000	125	44Iot Ori	2.7700	30000.	86	49413	No
26	GOM_NL__2PRFIN20110812_015058_000000553105_00261_49413_0018.N1	12-AUG-2011 01:50:58	Dark	54.500	7	19Bet Ori	0.10000	14000.	109	49413	No
27	GOM_NL__2PRFIN20110812_020619_000000503105_00262_49414_0002.N1	12-AUG-2011 02:06:19	Dark	50.000	157	The1Eri	2.9060	9300.0	100	49414	No
28	GOM_NL__2PRFIN20110812_021047_000000453105_00262_49414_0003.N1	12-AUG-2011 02:10:47	Dark	45.000	9	Alp Eri	0.45300	24000.	90	49414	No
29	GOM_NL__2PRFIN20110812_021622_000000533105_00262_49414_0004.N1	12-AUG-2011 02:16:22	Straylight	52.500	84	Alp Phe	2.3970	4500.0	105	49414	No
30	GOM_NL__2PRFIN20110812_022018_000000423105_00262_49414_0005.N1	12-AUG-2011 02:20:18	Straylight	42.000	31	Alp Gru	1.7340	15200.	84	49414	No
31	GOM_NL__2PRFIN20110812_022410_000000583105_00262_49414_0006.N1	12-AUG-2011 02:24:10	Twilight	58.000	18	24Alp PsA	1.1660	9700.0	116	49414	No
32	GOM_NL__2PRFIN20110812_023004_000000503105_00262_49414_0007.N1	12-AUG-2011 02:30:04	Bright	50.000	142	49Del Cap	2.8500	8900.0	100	49414	No
33	GOM_NL__2PRFIN20110812_023339_000000453105_00262_49414_0008.N1	12-AUG-2011 02:33:39	Bright	44.500	154	22Bet Aqr	2.8990	5700.0	89	49414	No
34	GOM_NL__2PRFIN20110812_023905_000000473105_00262_49414_0009.N1	12-AUG-2011 02:39:05	Bright	46.500	61	8Eps Peg	2.1000	3900.0	93	49414	No
35	GOM_NL__2PRFIN20110812_024527_000000413105_00262_49414_0010.N1	12-AUG-2011 02:45:27	Bright	40.500	92	53Eps Cyg	2.5000	4500.0	81	49414	No
36	GOM_NL__2PRFIN20110812_024658_000000363105_00262_49414_0011.N1	12-AUG-2011 02:46:58	Bright	35.500	66	37Gam Cyg	2.2080	5900.0	71	49414	No
37	GOM_NL__2PRFIN20110812_024838_000000403105_00262_49414_0012.N1	12-AUG-2011 02:48:38	Bright	39.500	19	50Alp Cyg	1.2460	10500.	79	49414	No
38	GOM_NL__2PRFIN20110812_025401_000000373105_00262_49414_0013.N1	12-AUG-2011 02:54:01	Bright	36.500	89	5Alp Cep	2.4510	8000.0	73	49414	No
39	GOM_NL__2PRFIN20110812_031324_000000463105_00262_49414_0014.N1	12-AUG-2011 03:13:24	Bright	46.000	6	13Alp Aur	0.080000	3400.0	92	49414	No
40	GOM_NL__2PRFIN20110812_031611_000000573105_00262_49414_0015.N1	12-AUG-2011 03:16:11	Bright	57.000	107	37The Aur	2.6490	11000.	114	49414	No
41	GOM_NL__2PRFIN20110812_031910_000000503105_00262_49414_0016.N1	12-AUG-2011 03:19:10	Twilight	49.500	28	12Bet Tau	1.6500	15200.	99	49414	No
42	GOM_NL__2PRFIN20110812_032127_000000473105_00262_49414_0017.N1	12-AUG-2011 03:21:27	Twilight	46.500	176	23Zet Tau	3.0200	22000.	93	49414	No

279	GOM_NL__2PRFIN20110812_233605_000000443105_00274_49426_0452.N1	12-AUG-2011 23:36:05	Dark	44.000	101	11Alp Lep	2.5820	7000.0	88	49426	No
280	GOM_NL__2PRFIN20110812_234936_000000503105_00275_49427_0470.N1	12-AUG-2011 23:49:36	Dark	50.000	157	The1Eri	2.9060	9300.0	100	49427	No
281	GOM_NL__2PRFIN20110812_235358_000000473105_00275_49427_0471.N1	12-AUG-2011 23:53:58	Dark	46.500	9	Alp Eri	0.45300	24000.	93	49427	No
282	GOM_NL__2PRFIN20110812_235935_000000563105_00275_49427_0472.N1	12-AUG-2011 23:59:35	Straylight	56.000	84	Alp Phe	2.3970	4500.0	112	49427	No

3. Quality information per product

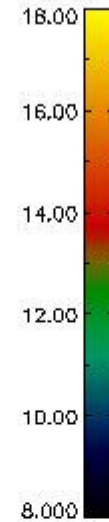
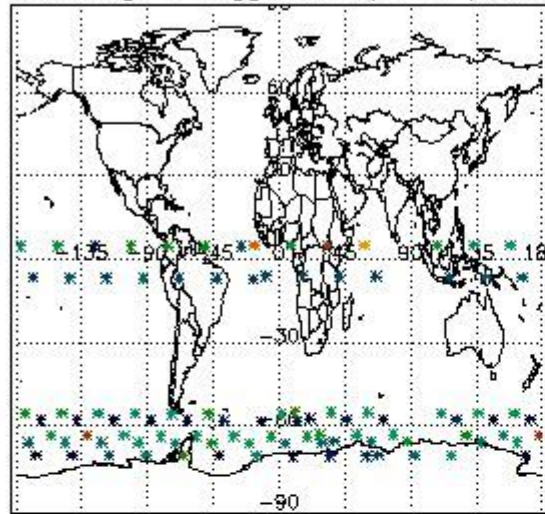
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

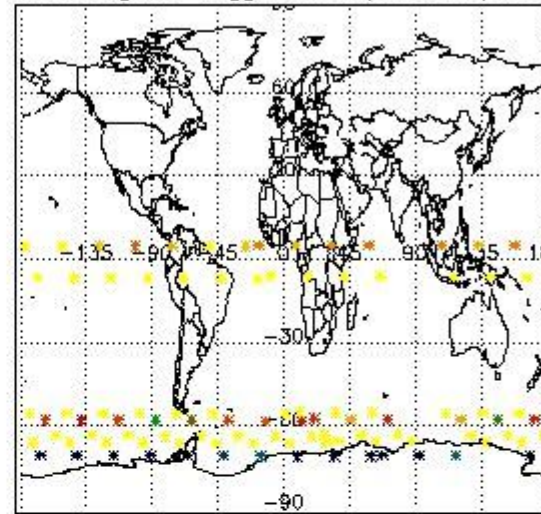


3.2 Plot quality information per product (world map)

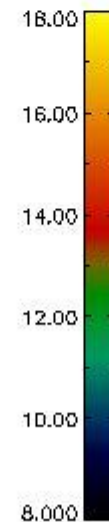
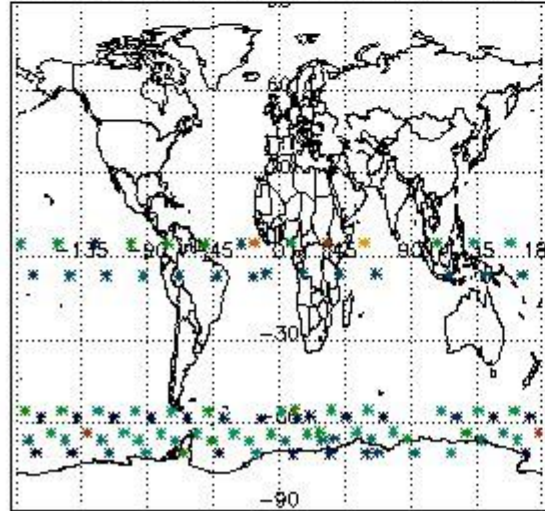
Percentage of flagged data per O3 profile



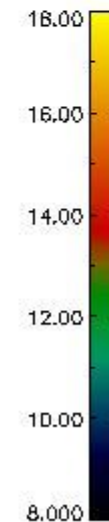
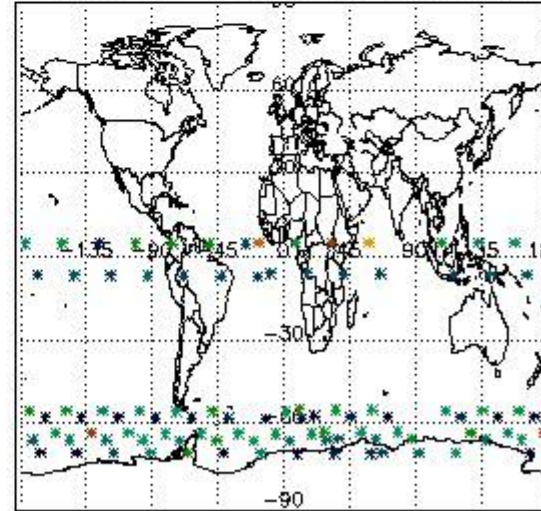
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

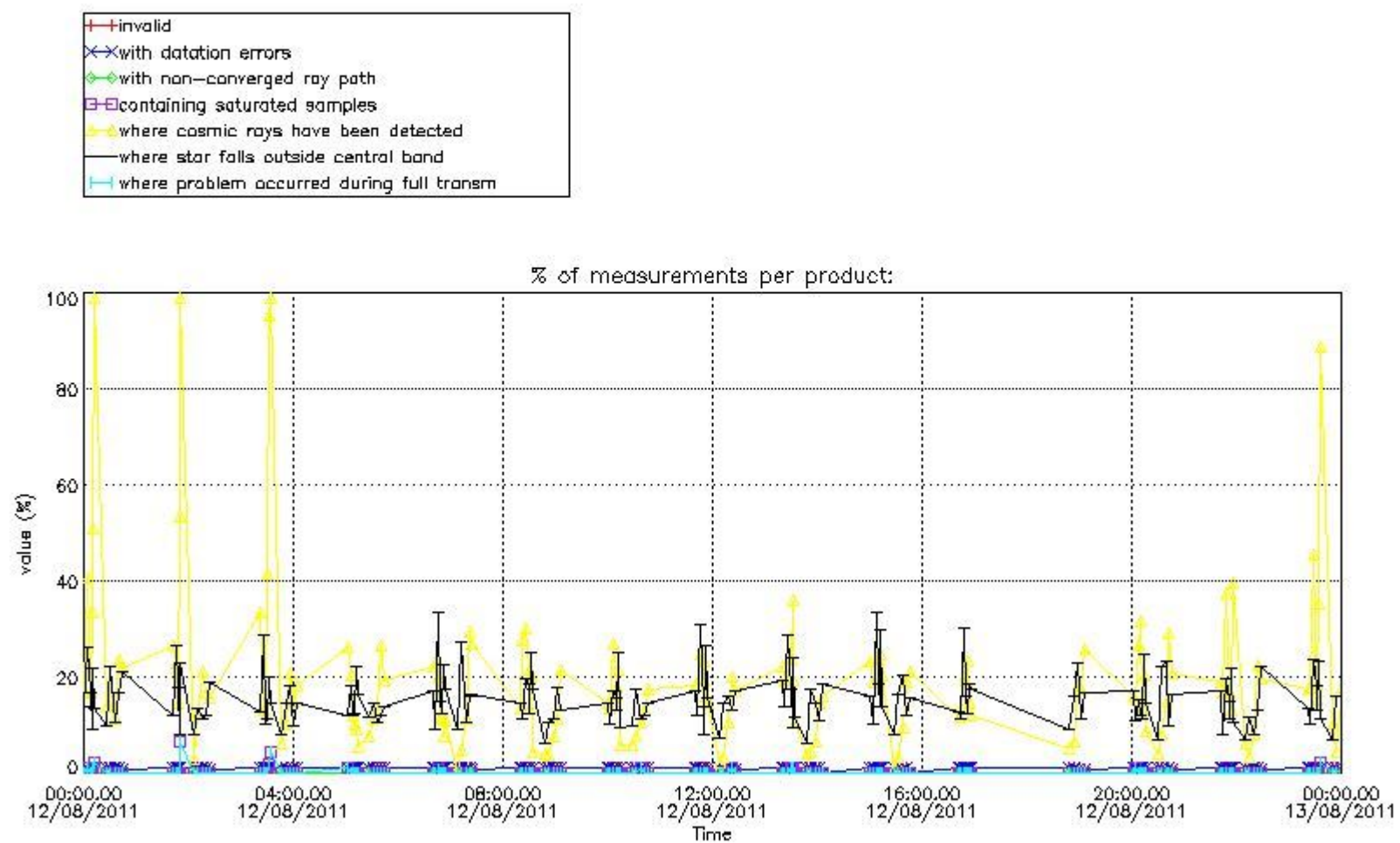


4. Level 1 quality information per product

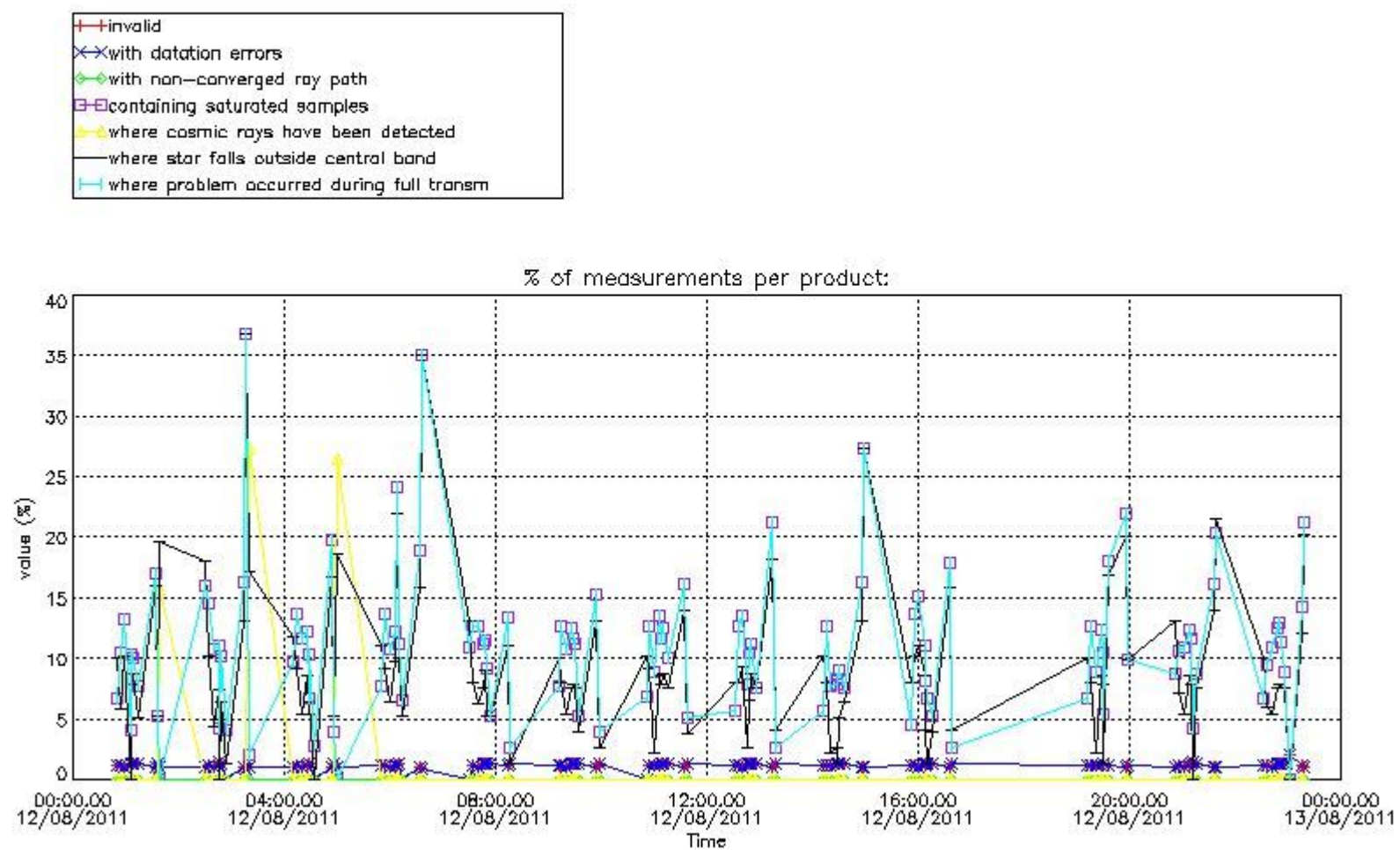
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



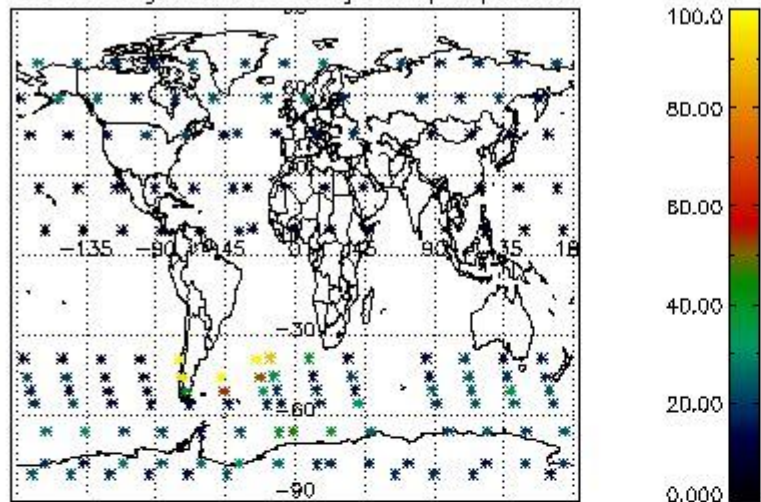
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



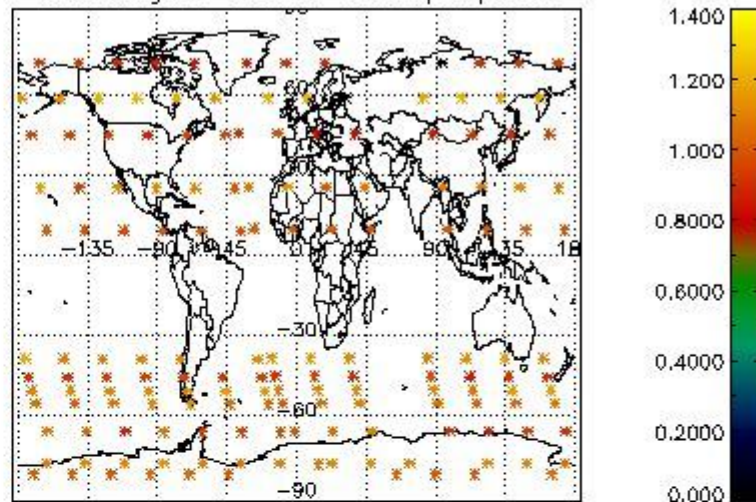
4.2 Plot quality information per product coming from level 1b processing (world map)

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

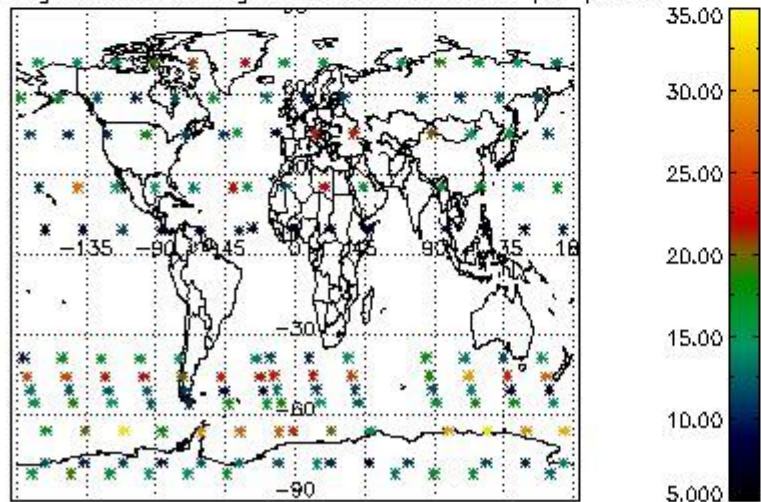
Percentage of cosmic ray hits per profile



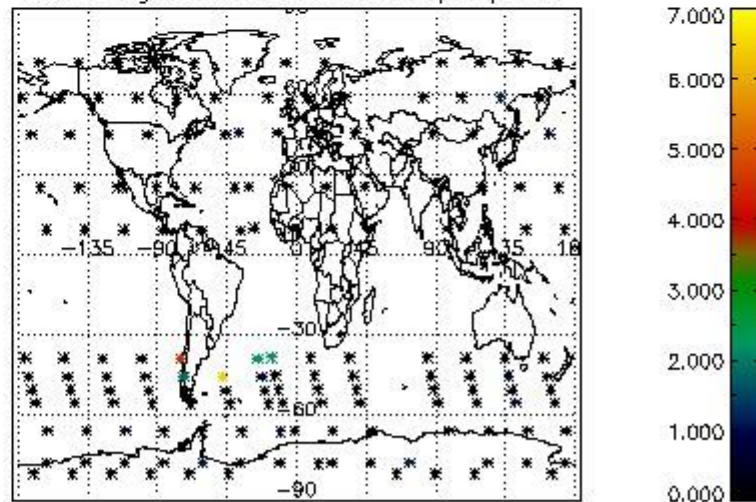
Percentage of datation errors per profile



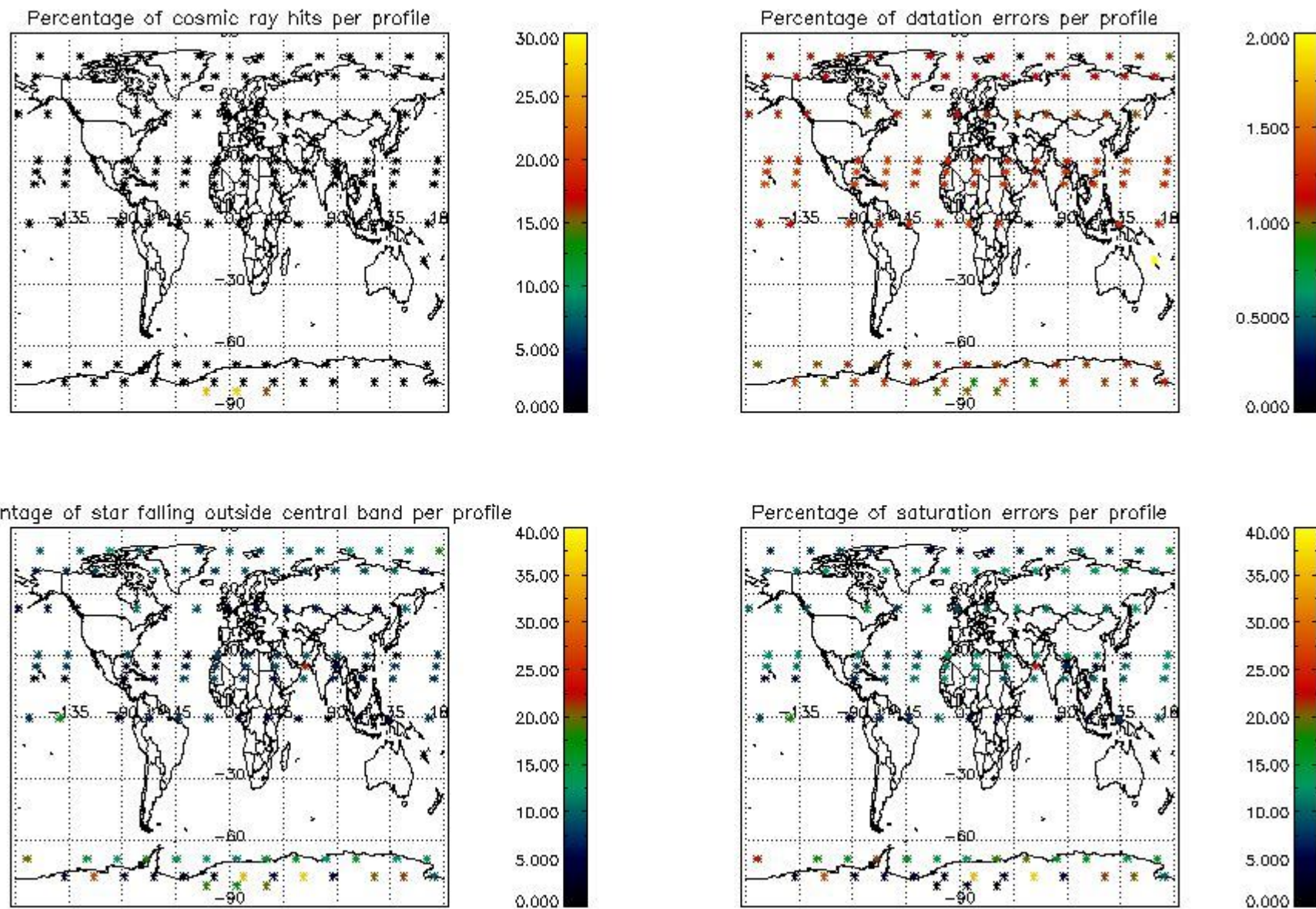
Percentage of star falling outside central band per profile



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

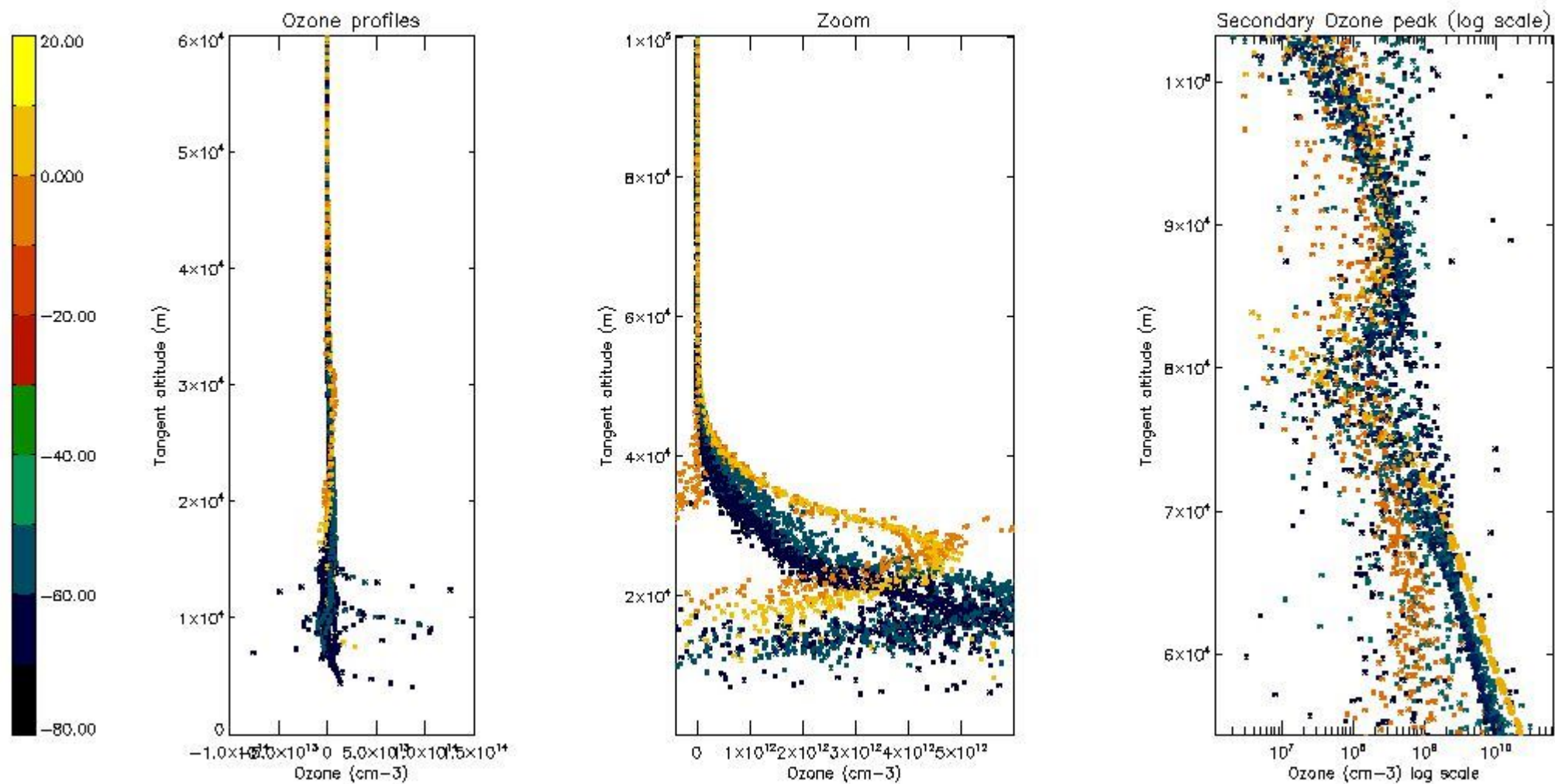
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	37
STD < 20	20

STD < 10	15
STD < 5	11

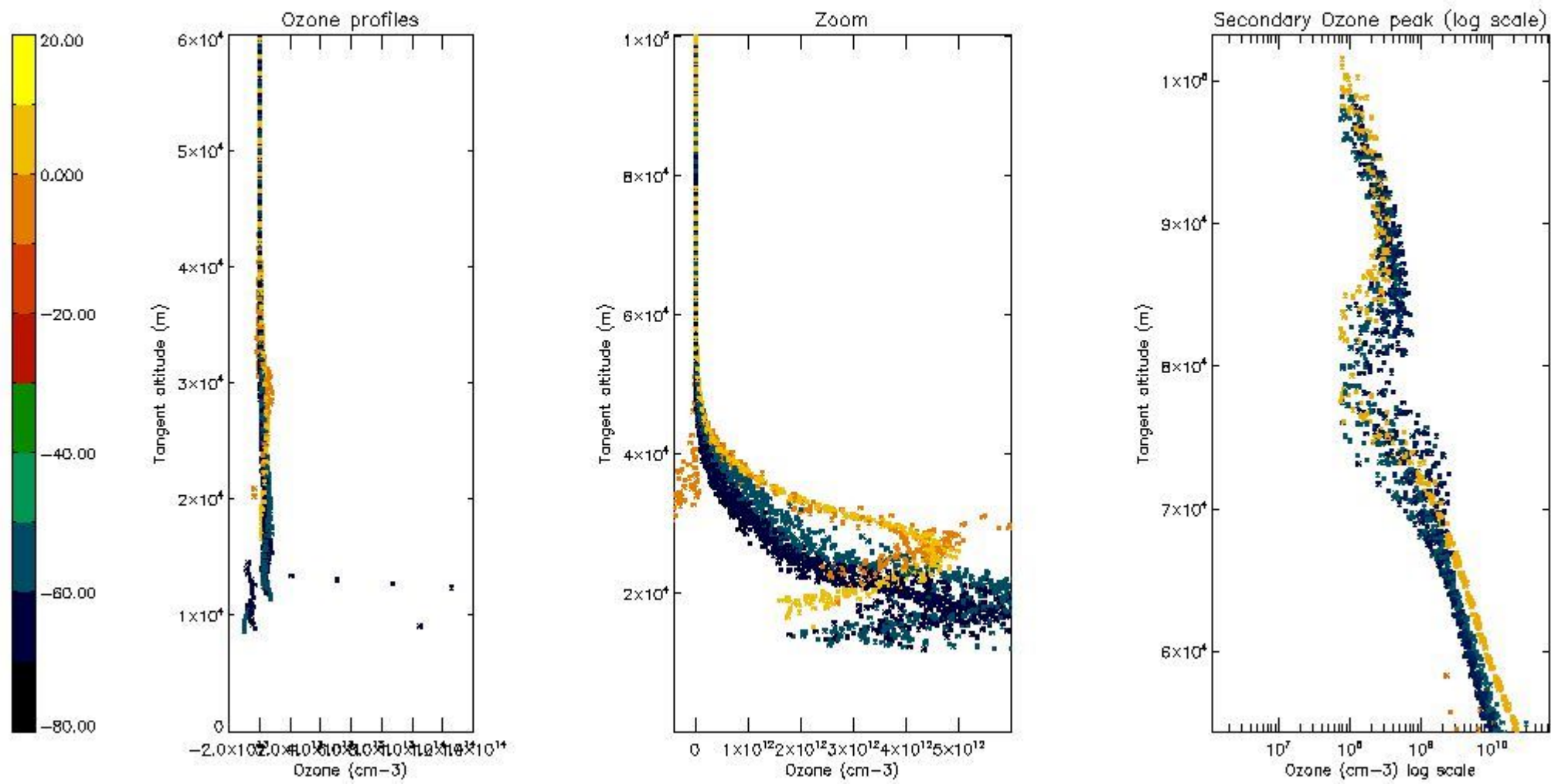
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



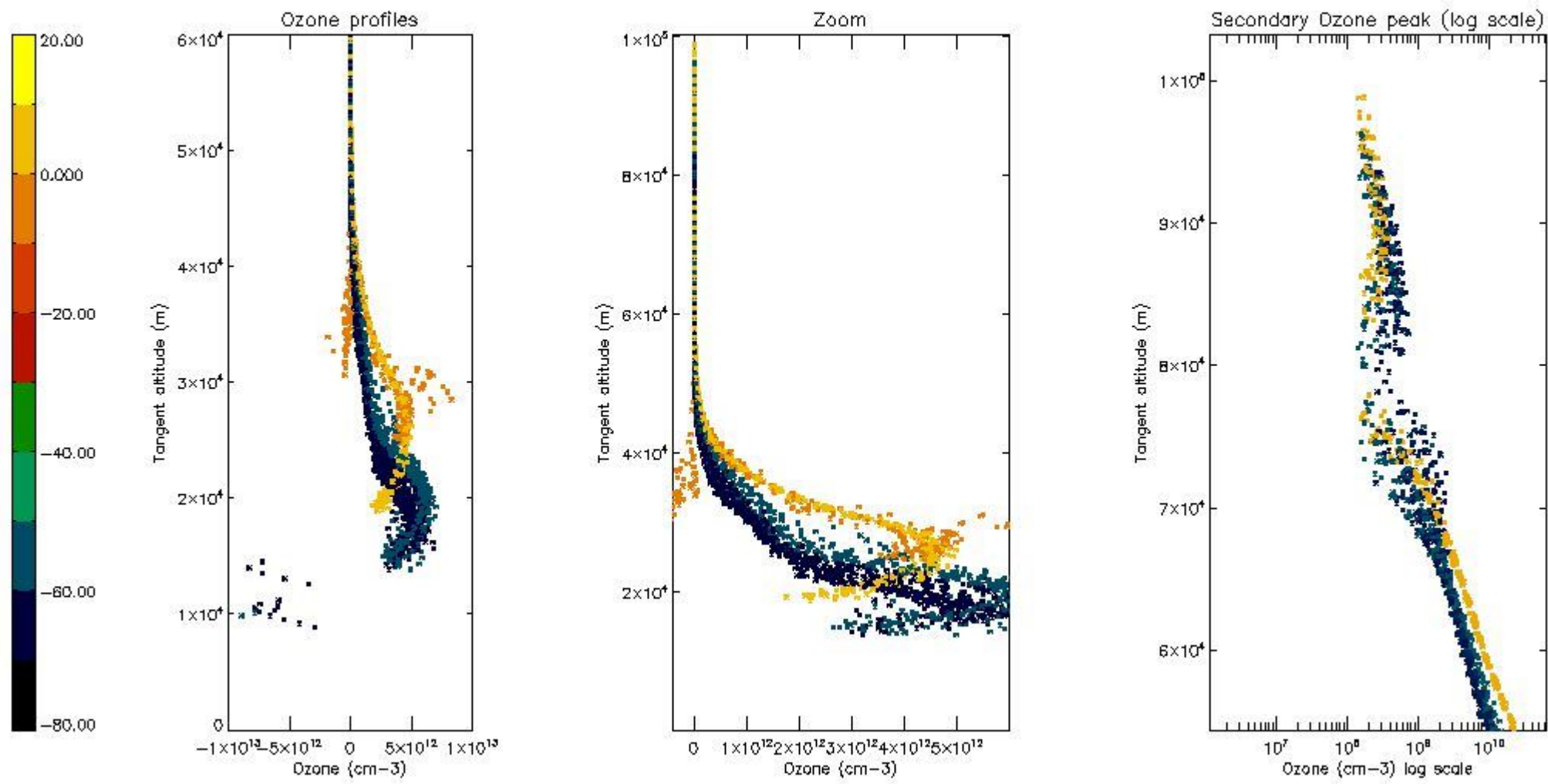
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



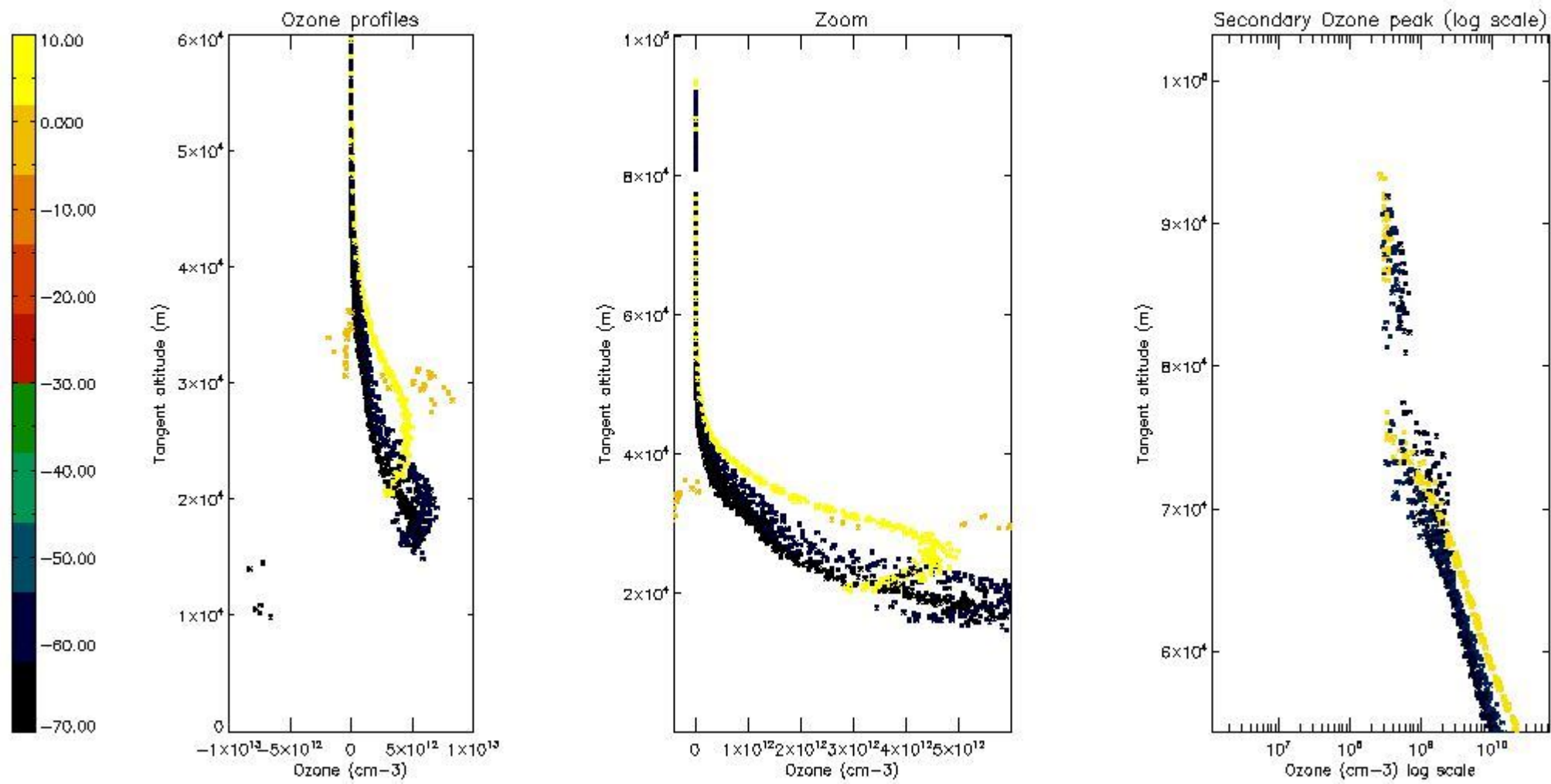
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



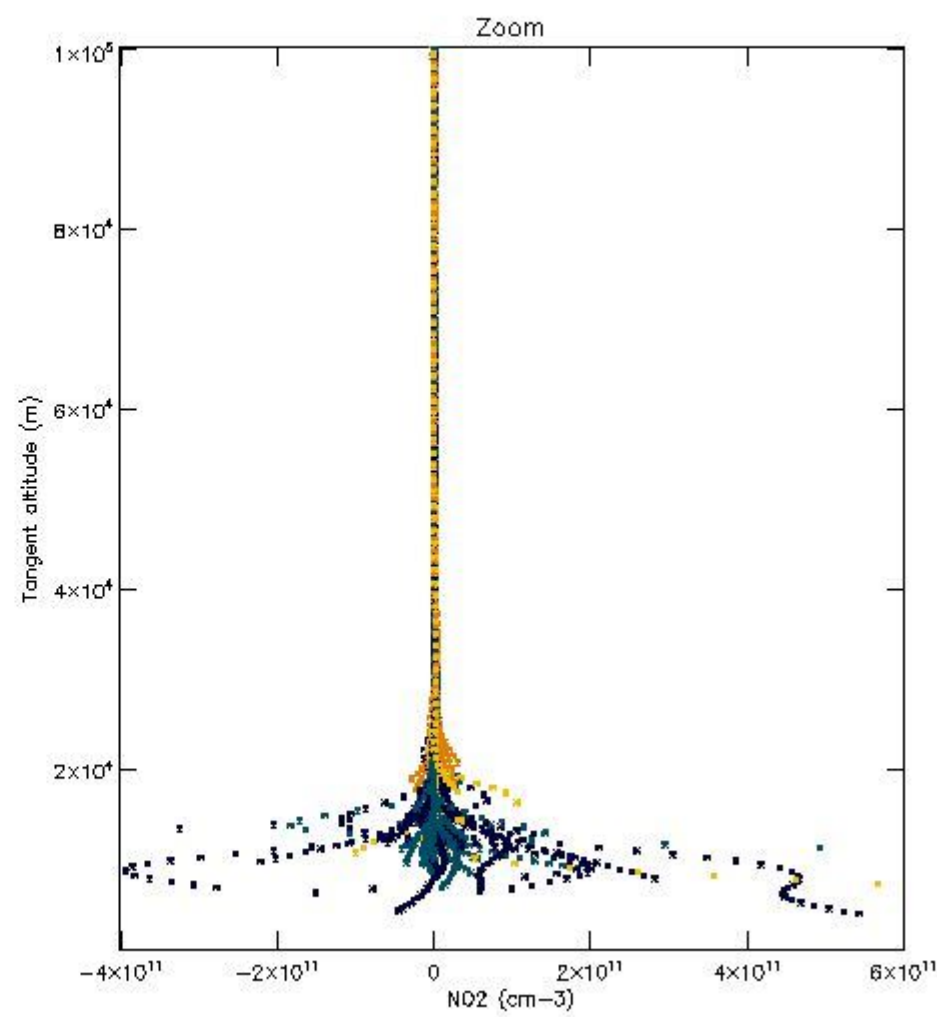
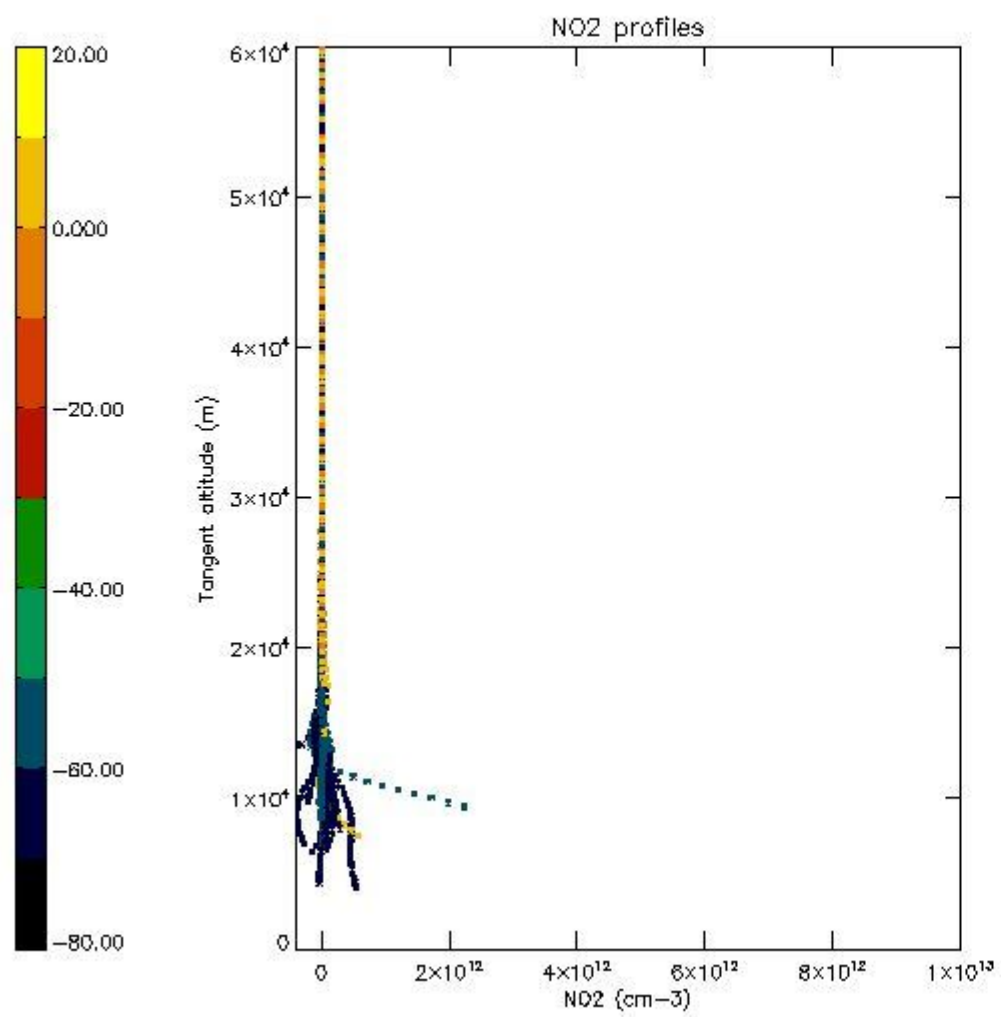
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



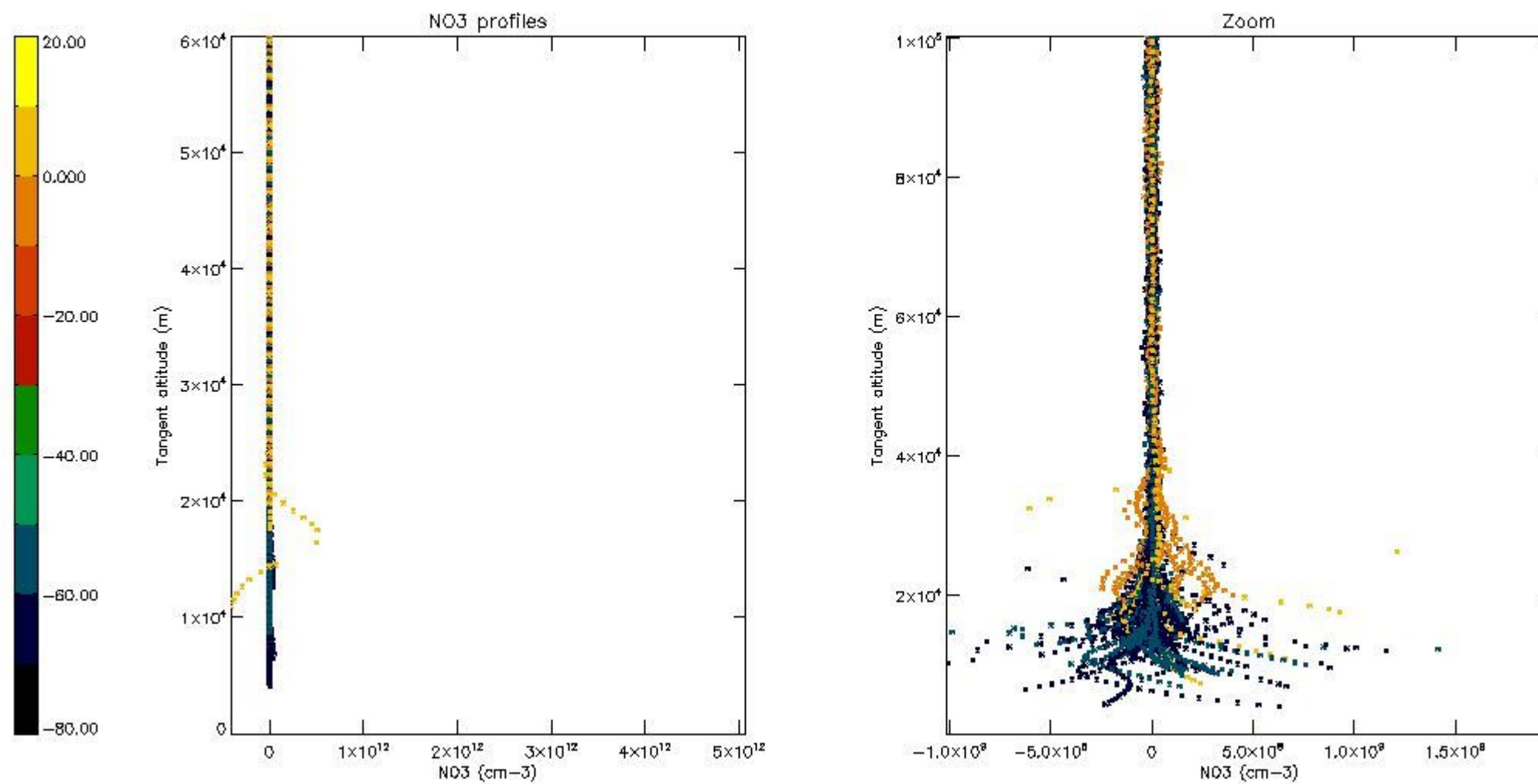
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

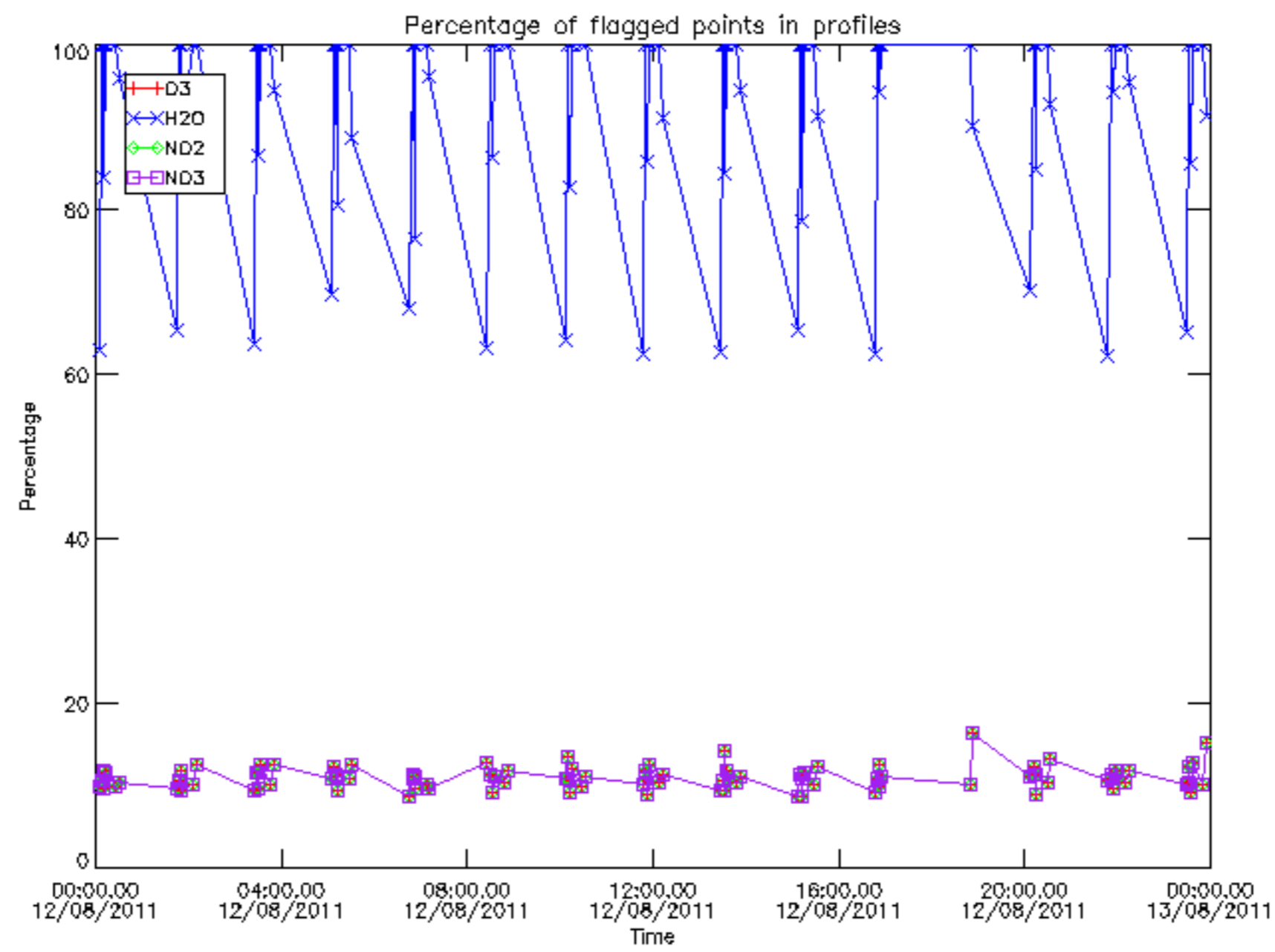
The colorbar represents the latitude.



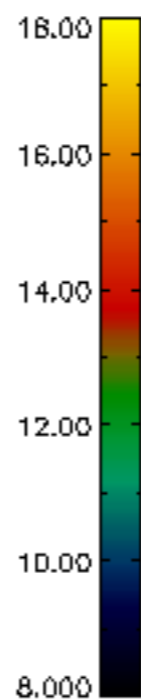
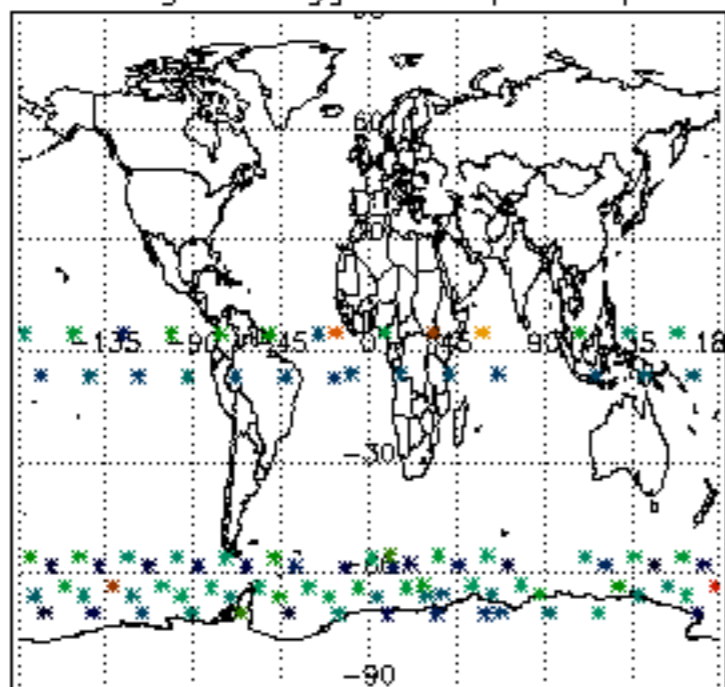
6. Auxiliary Data Files used for the production reported in section 2

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.

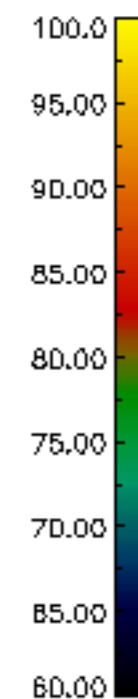
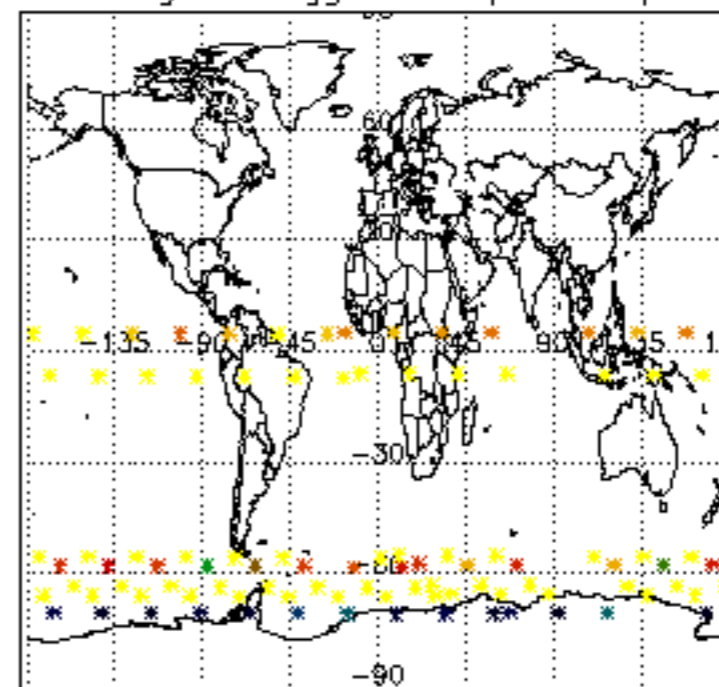
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	12-AUG-2011 00:00:59
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	12-AUG-2011 00:00:59
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	12-AUG-2011 00:00:59



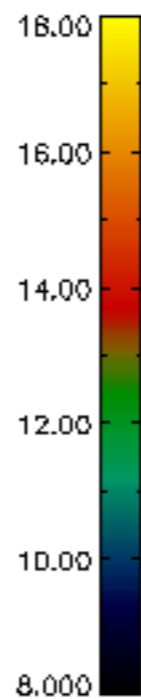
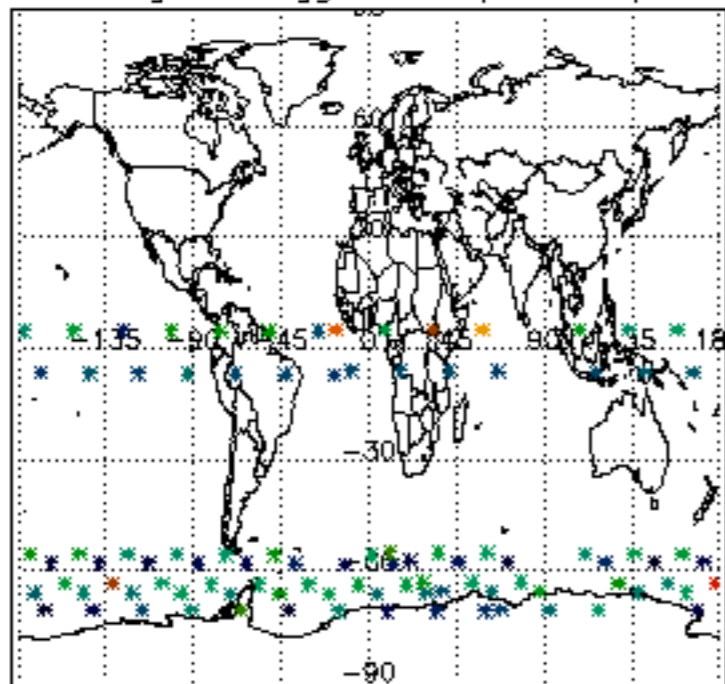
Percentage of flagged data per D3 profile



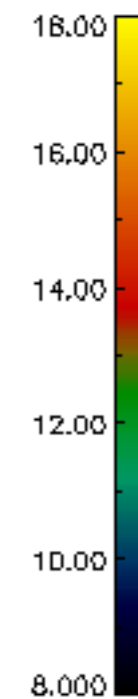
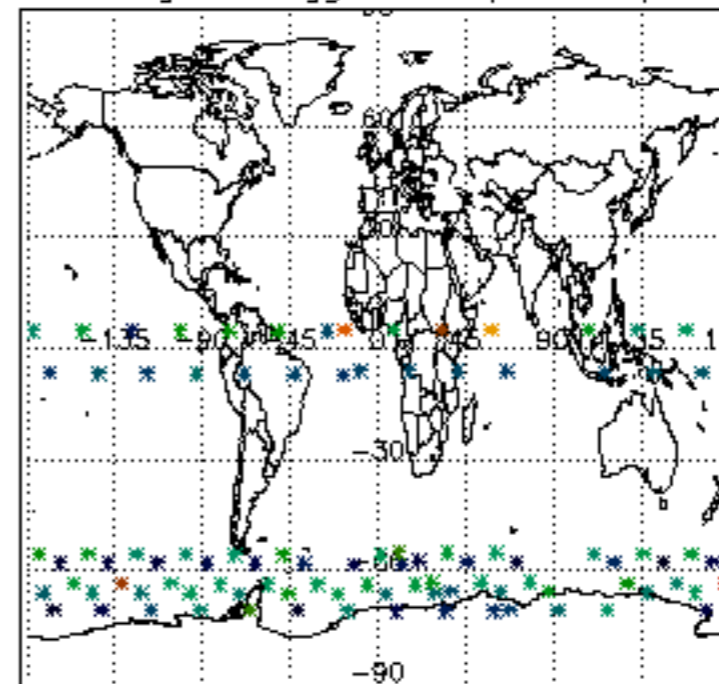
Percentage of flagged data per H2O profile

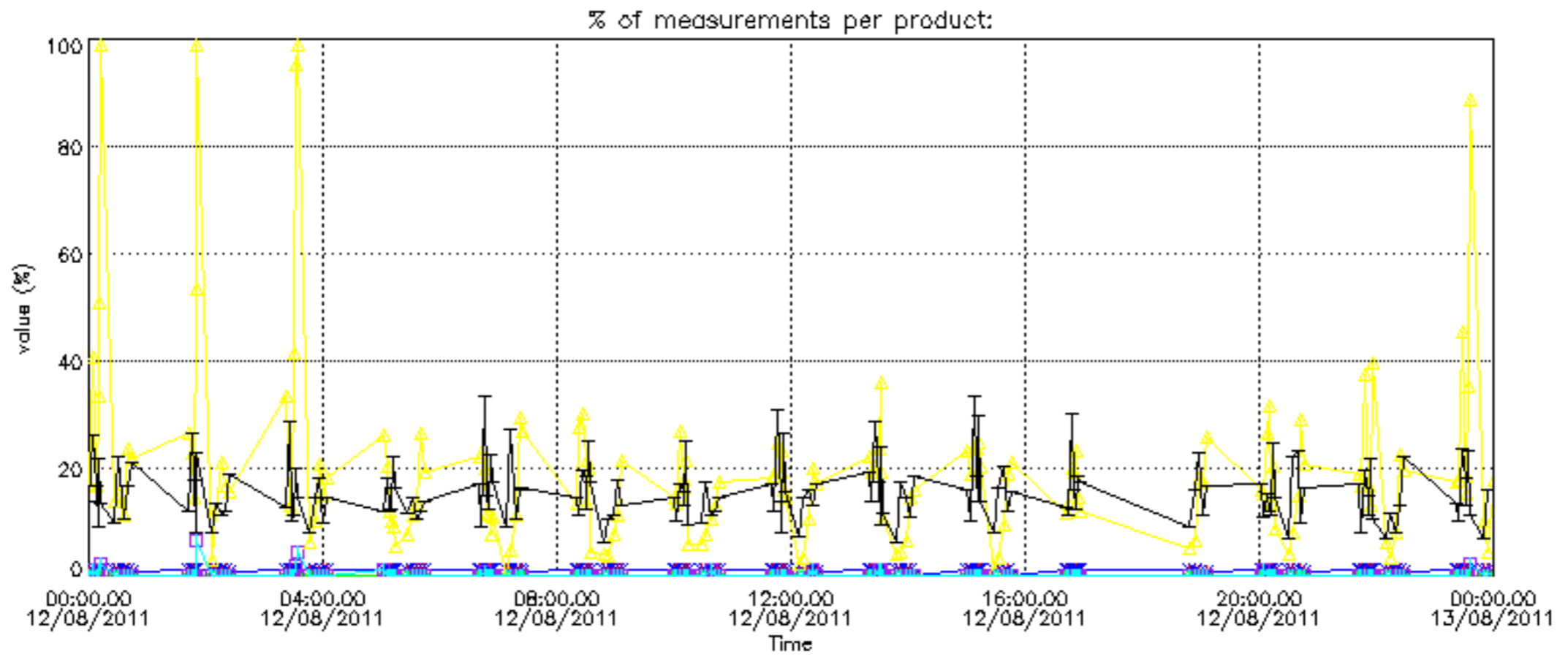


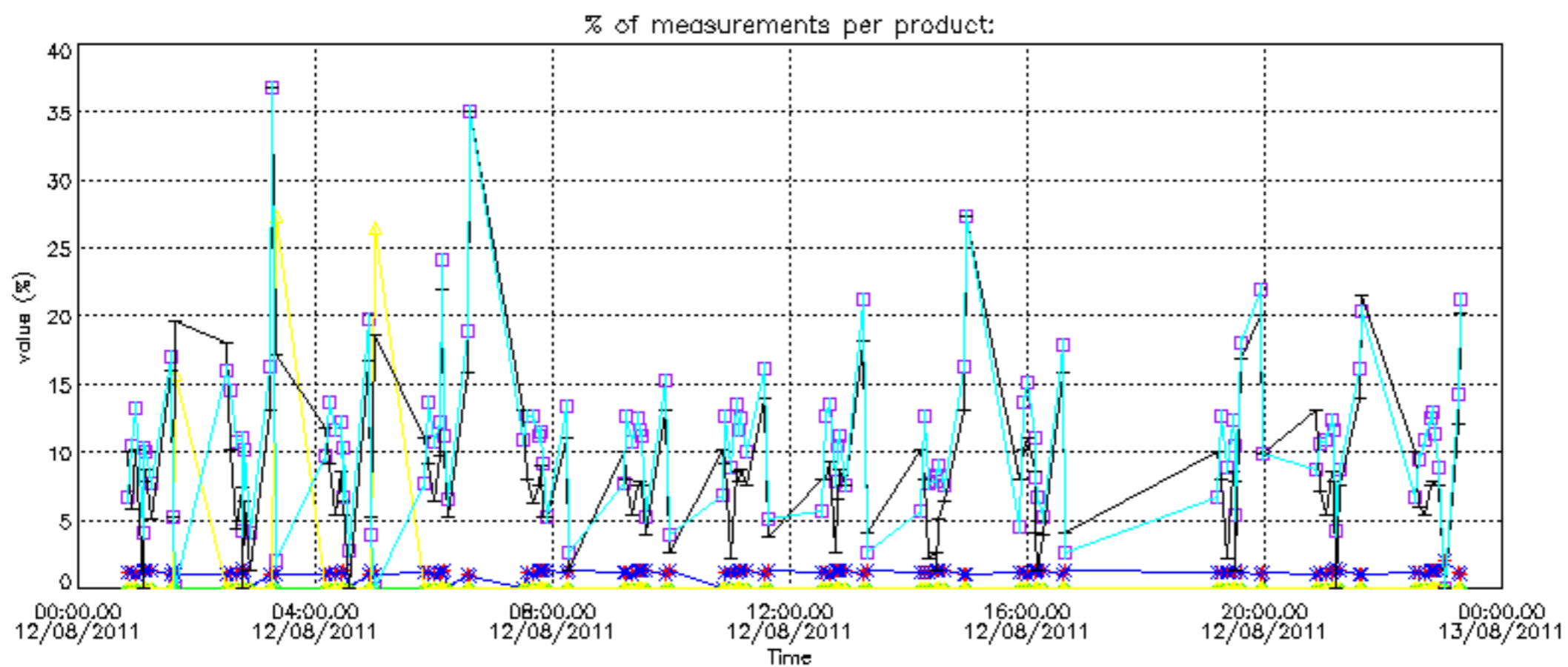
Percentage of flagged data per NO2 profile



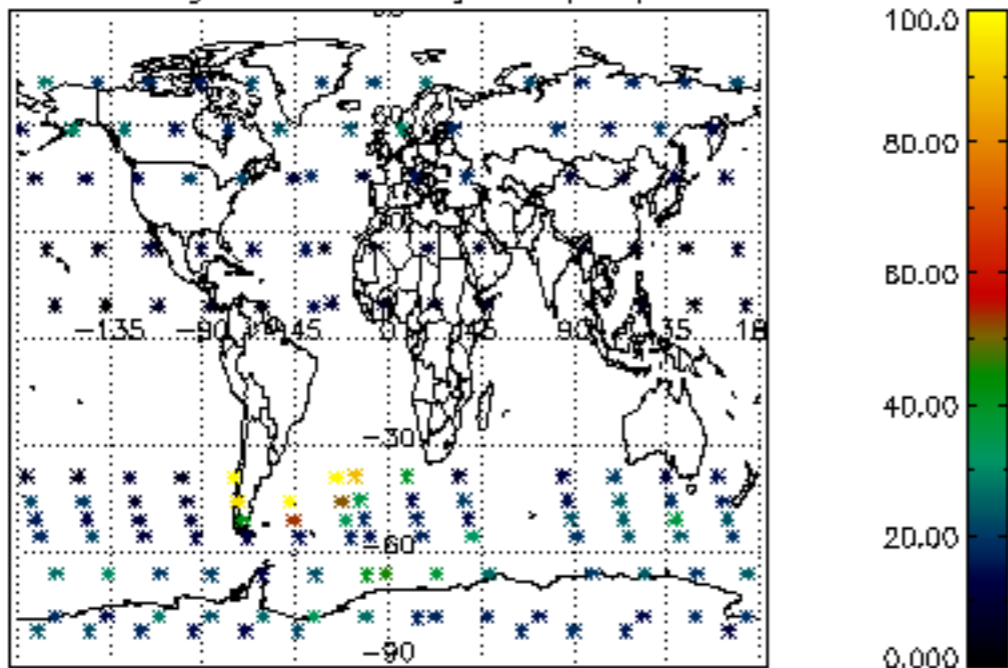
Percentage of flagged data per NO3 profile



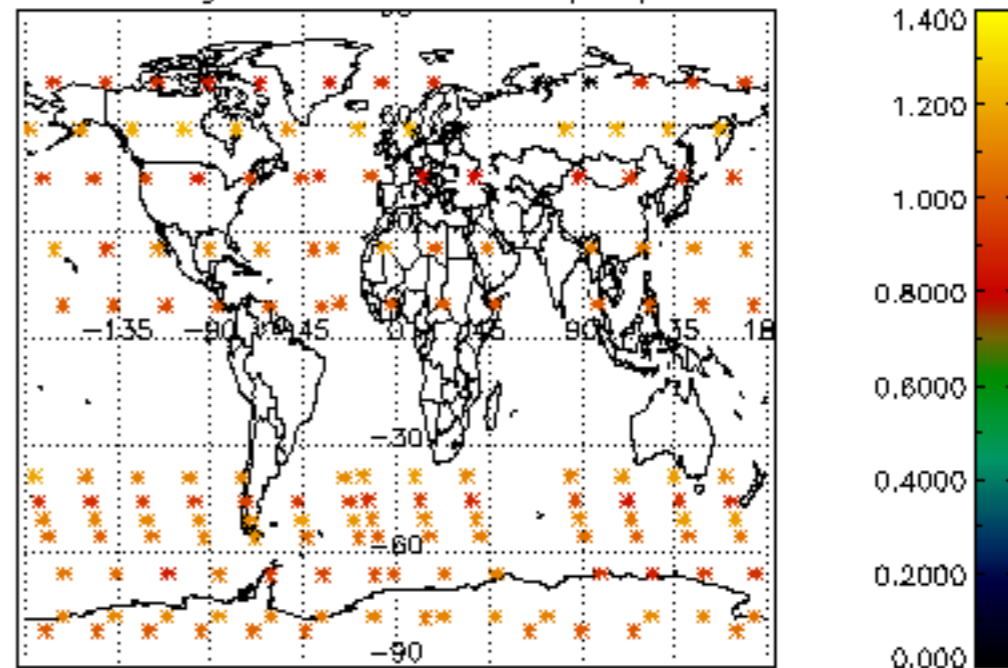




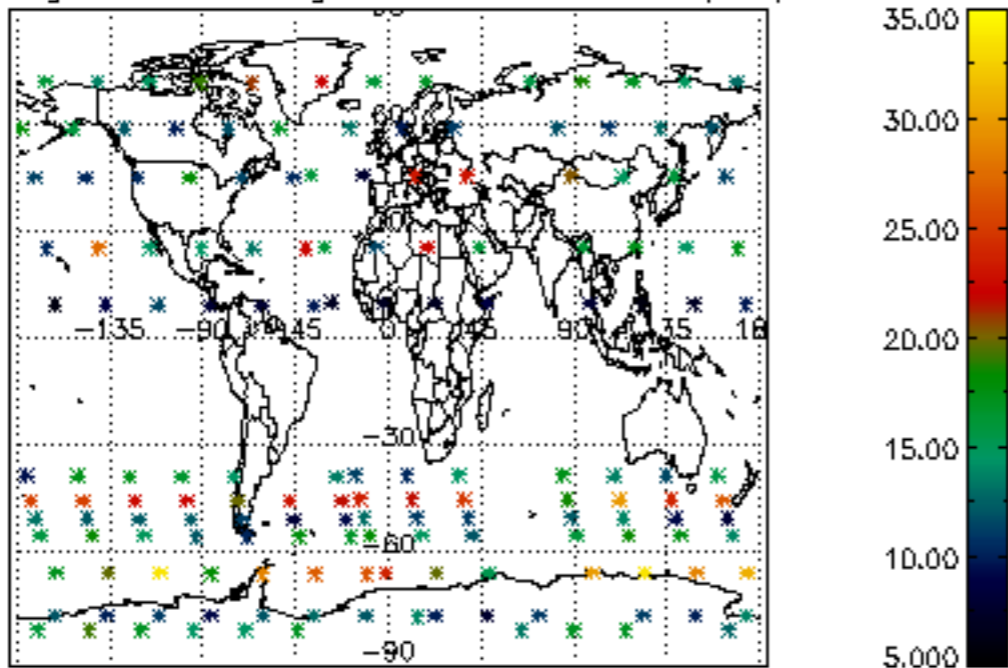
Percentage of cosmic ray hits per profile



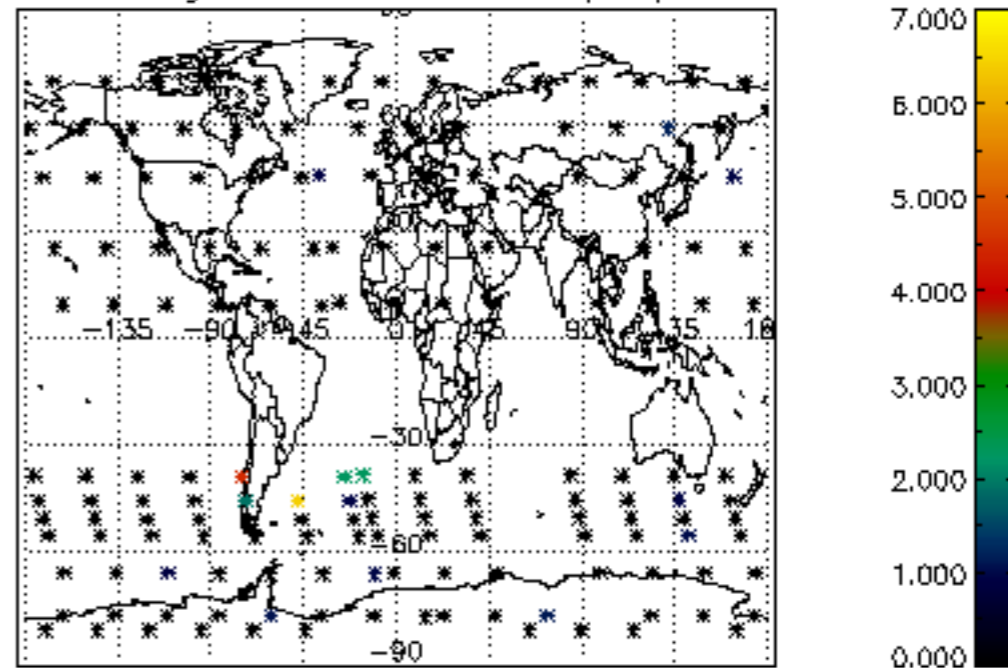
Percentage of datation errors per profile



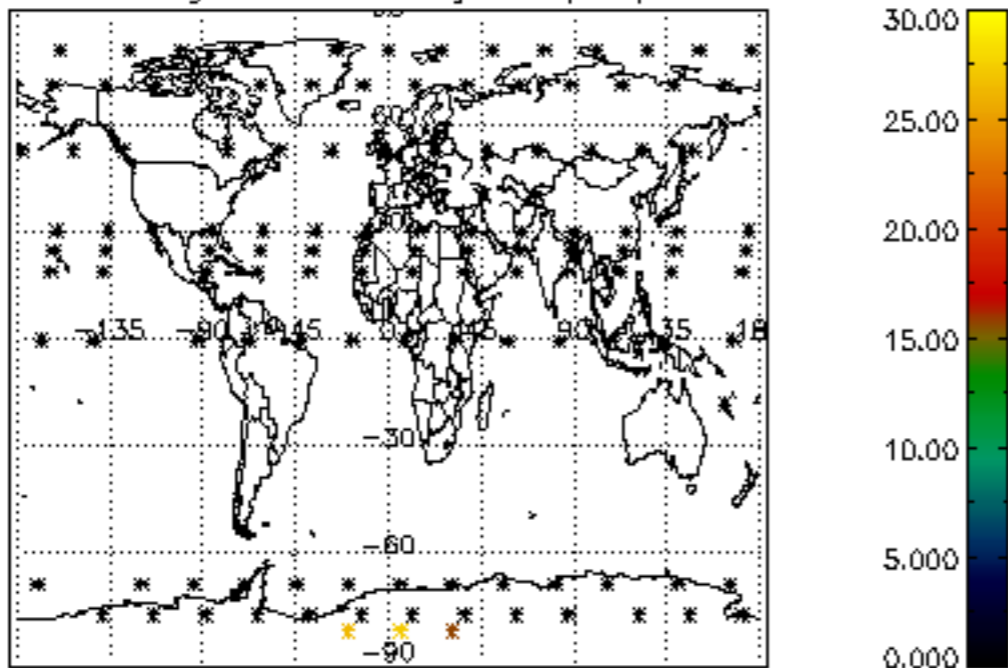
Percentage of star falling outside central band per profile



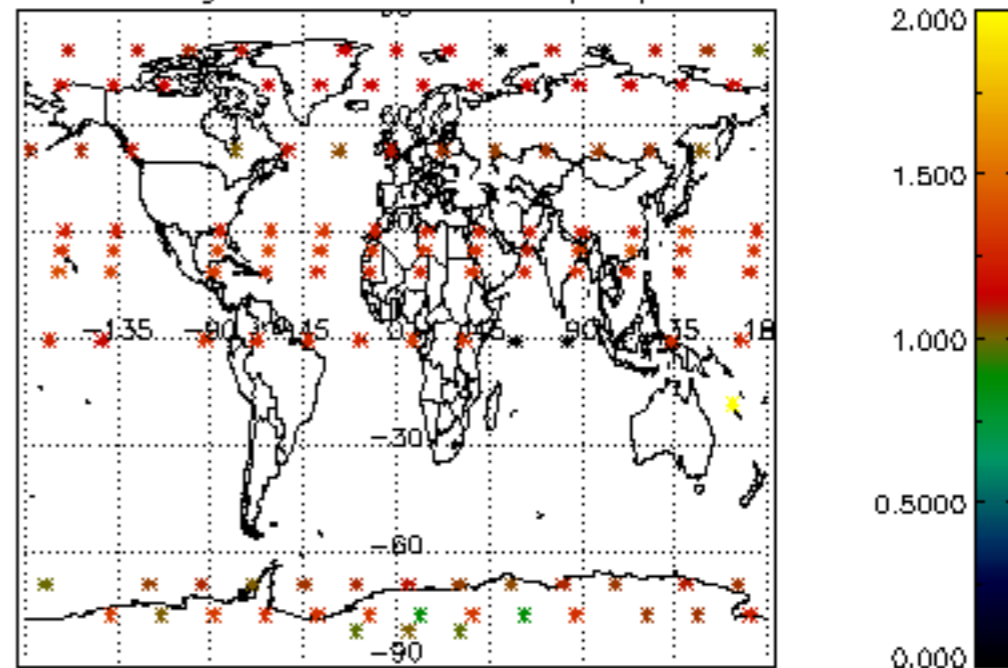
Percentage of saturation errors per profile



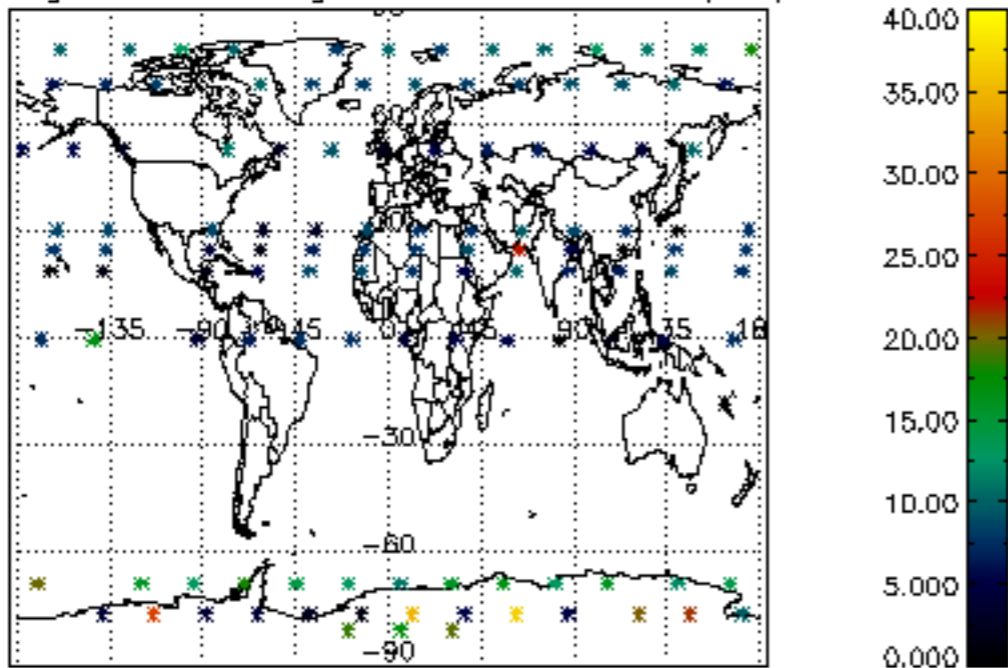
Percentage of cosmic ray hits per profile



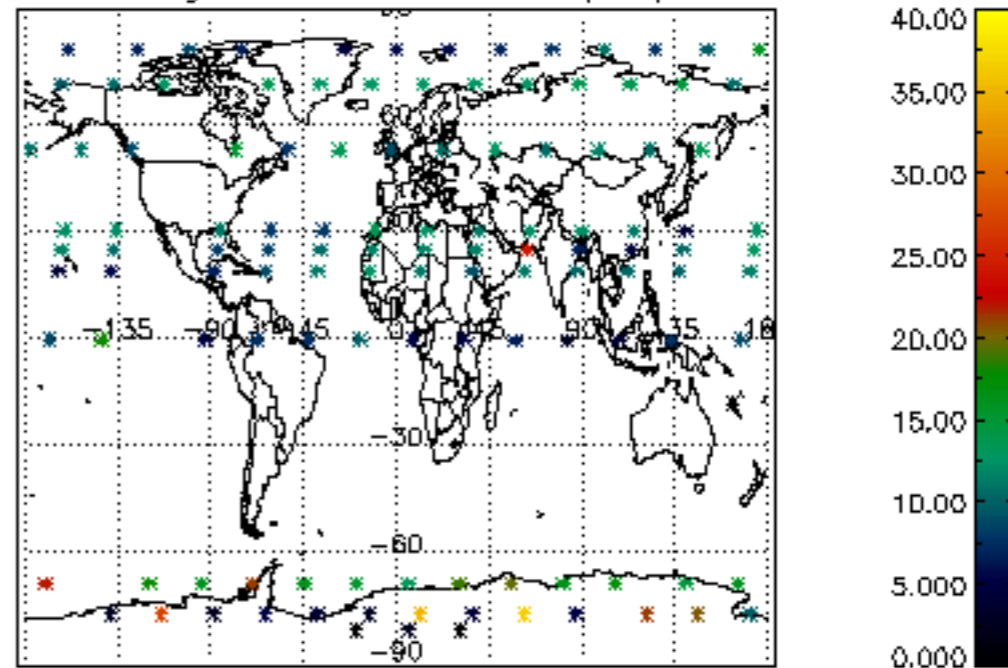
Percentage of datation errors per profile

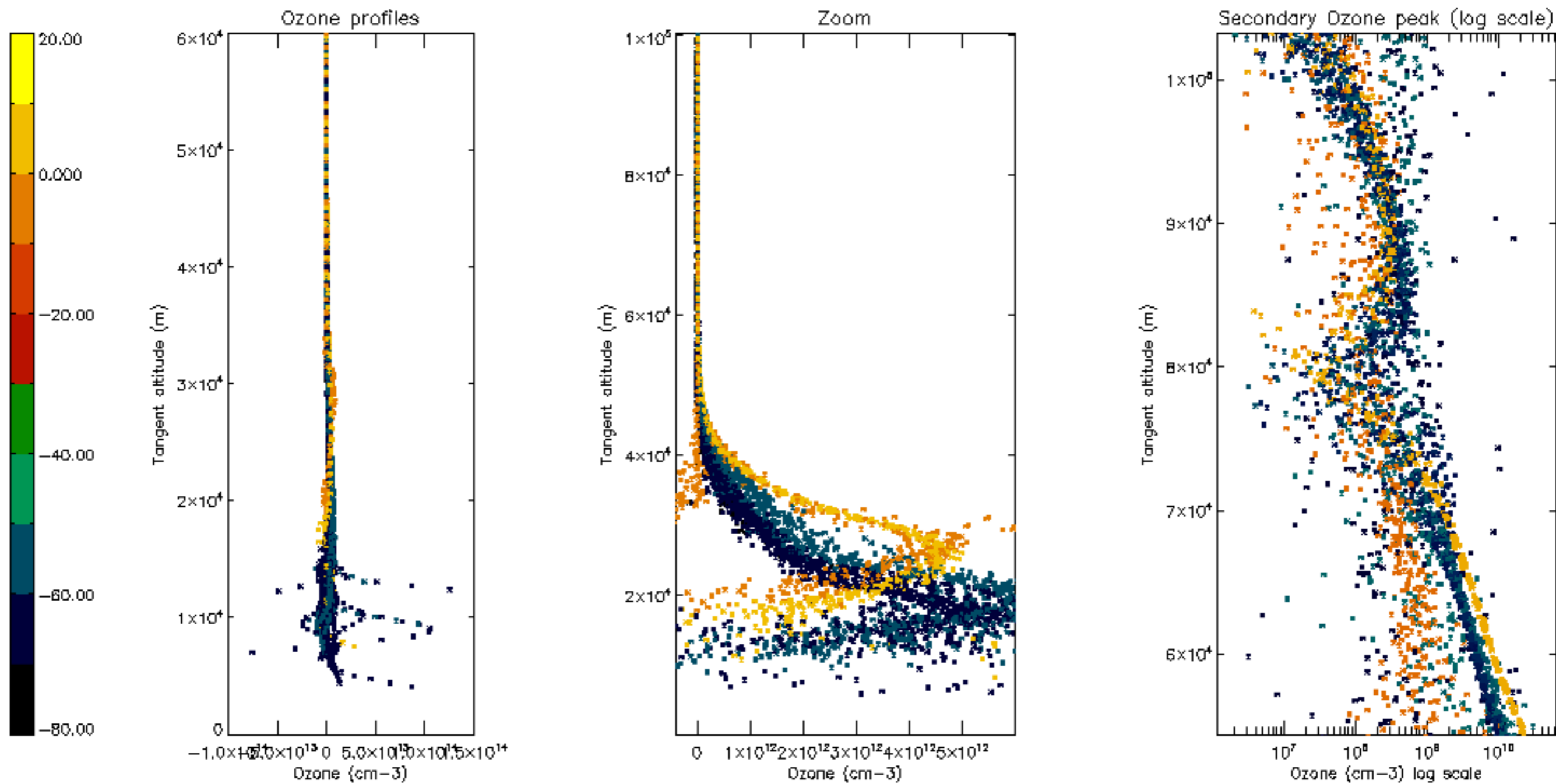


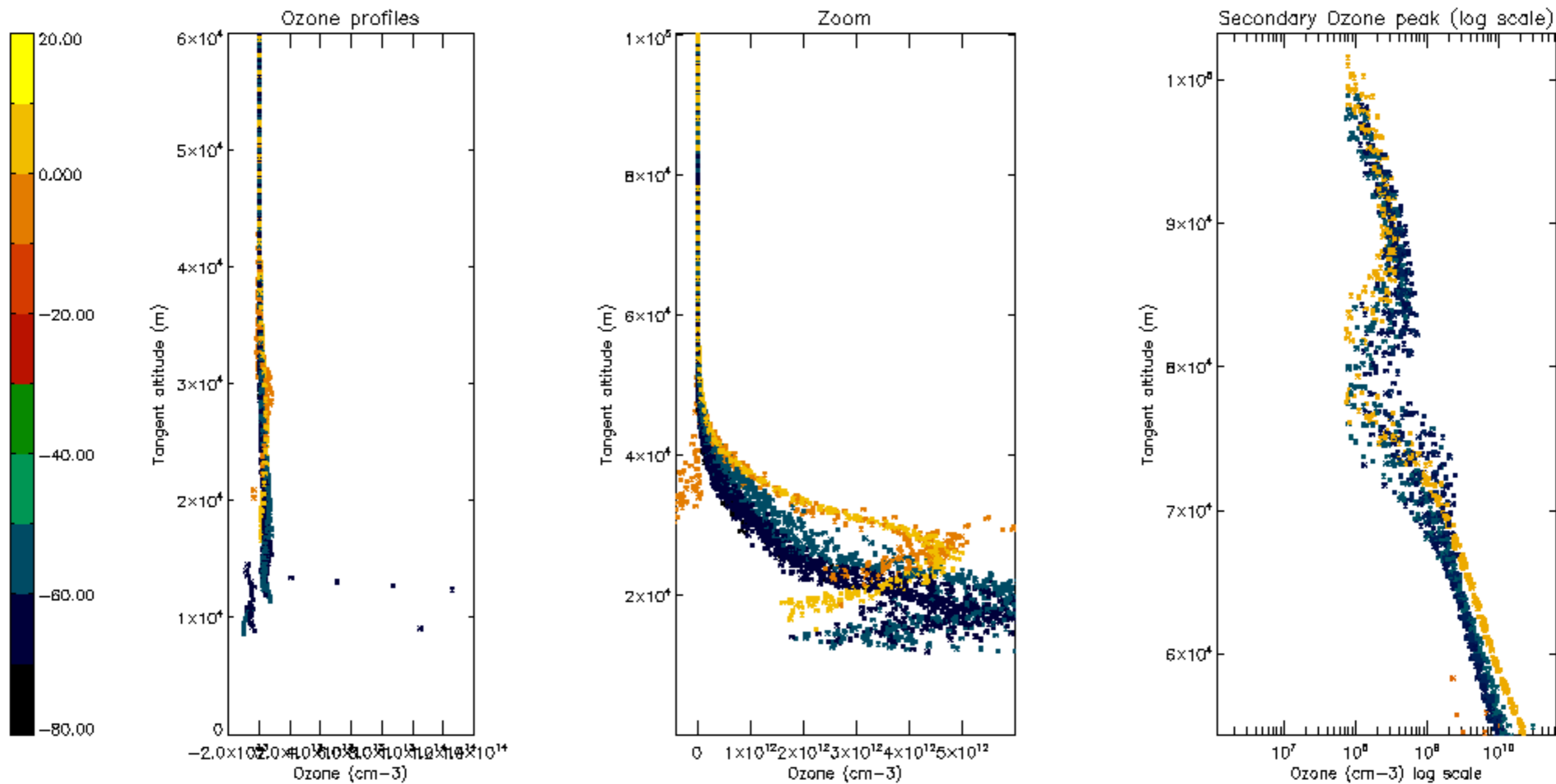
Percentage of star falling outside central band per profile

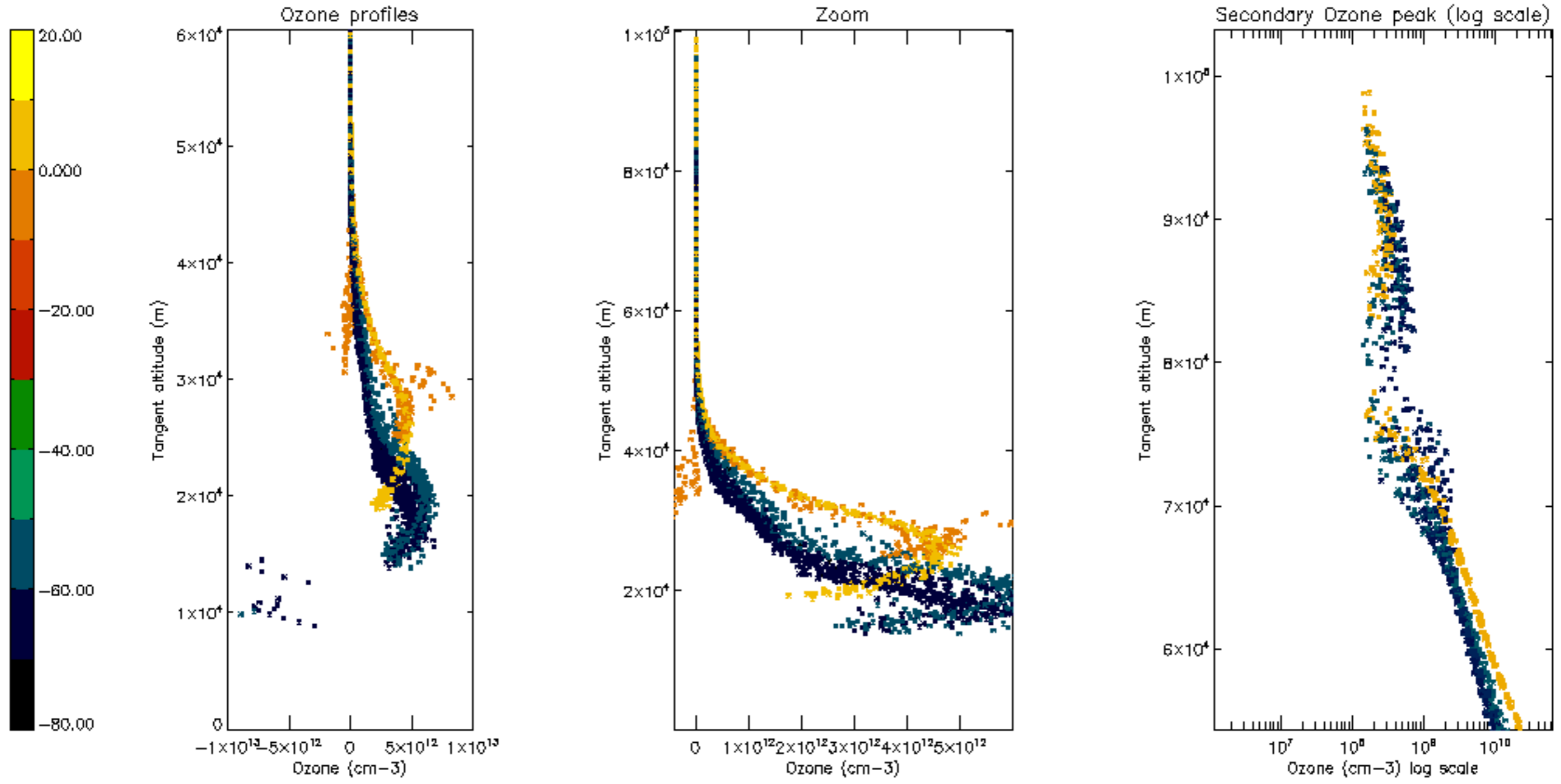


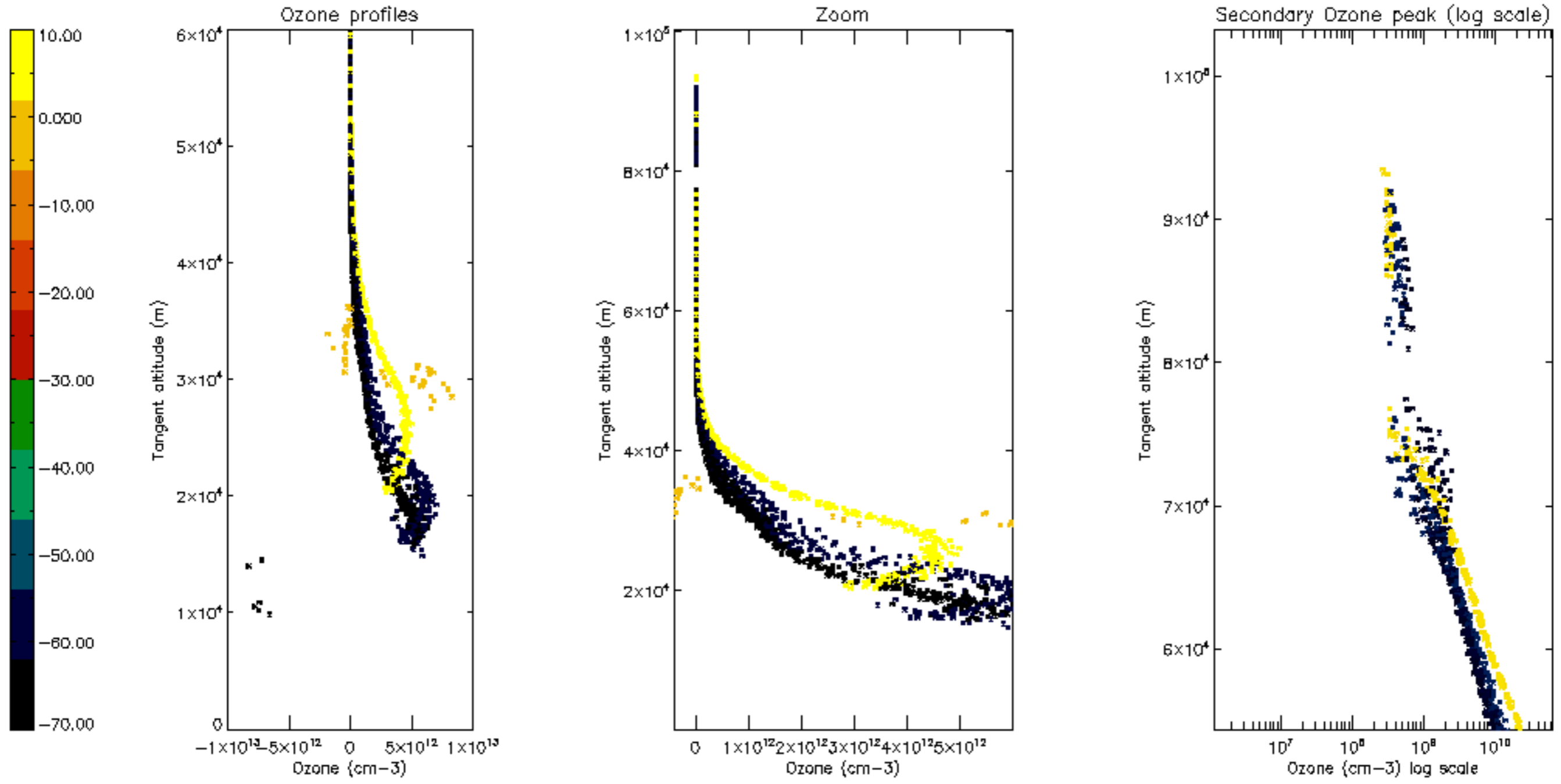
Percentage of saturation errors per profile

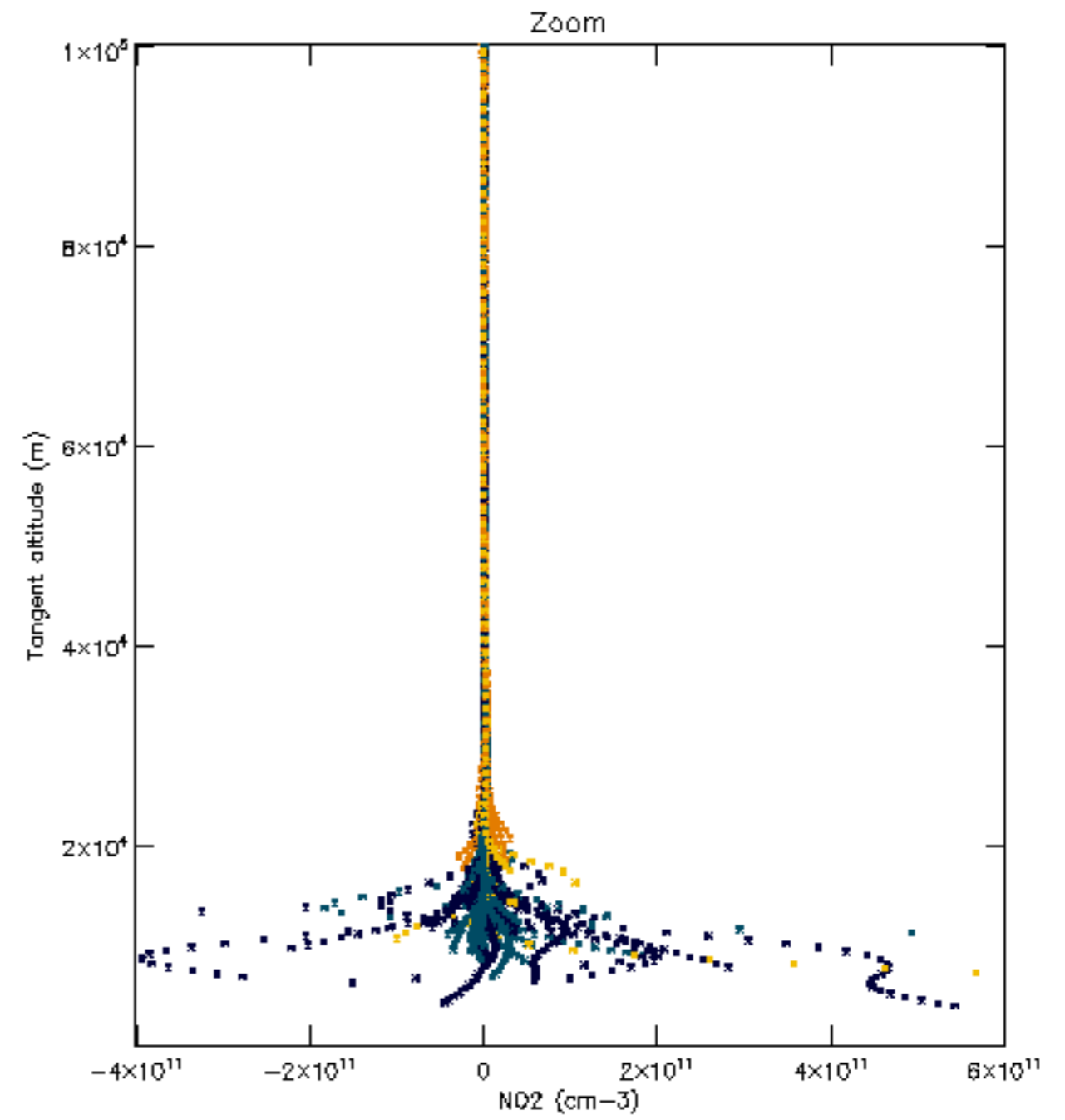
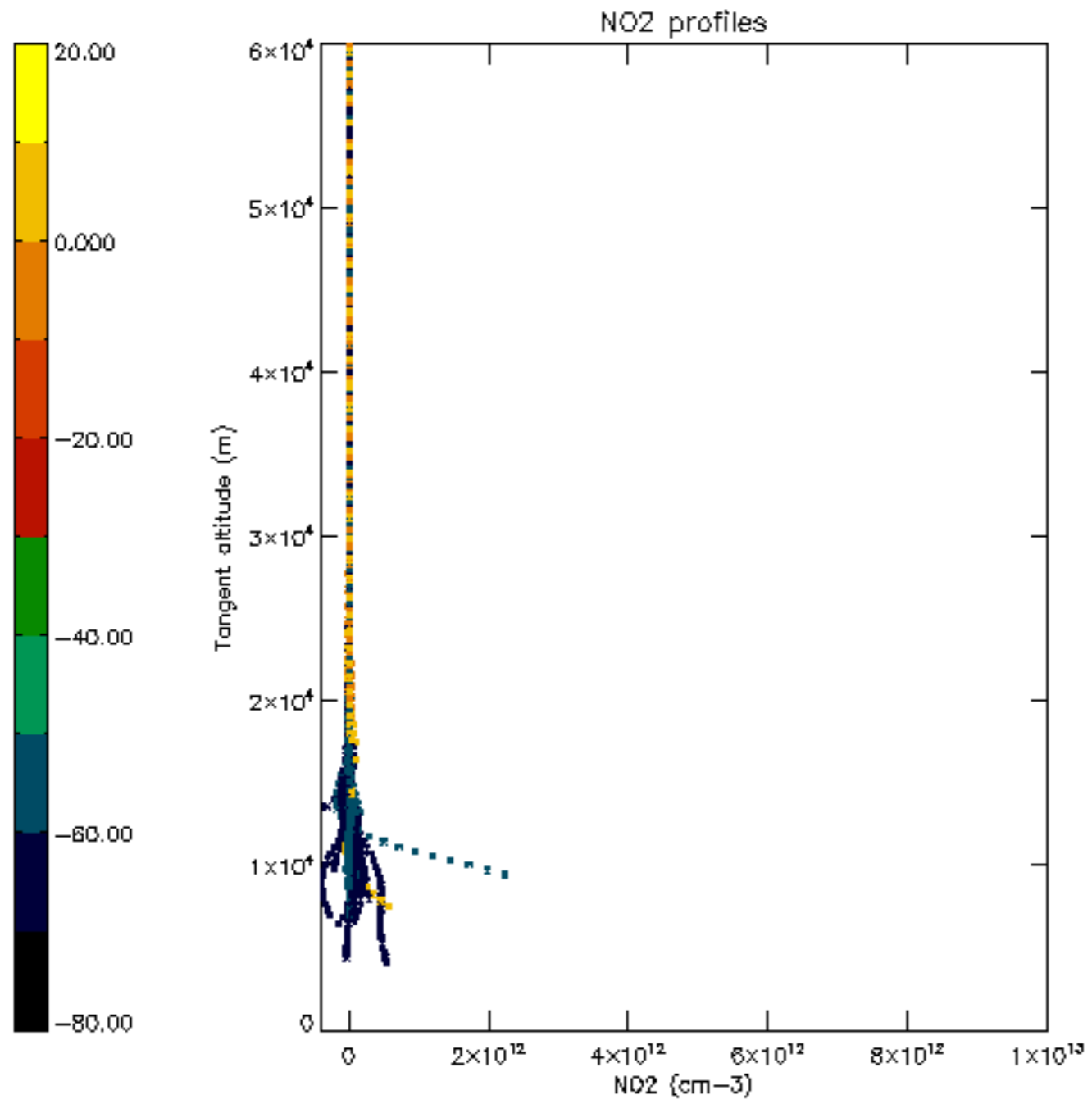


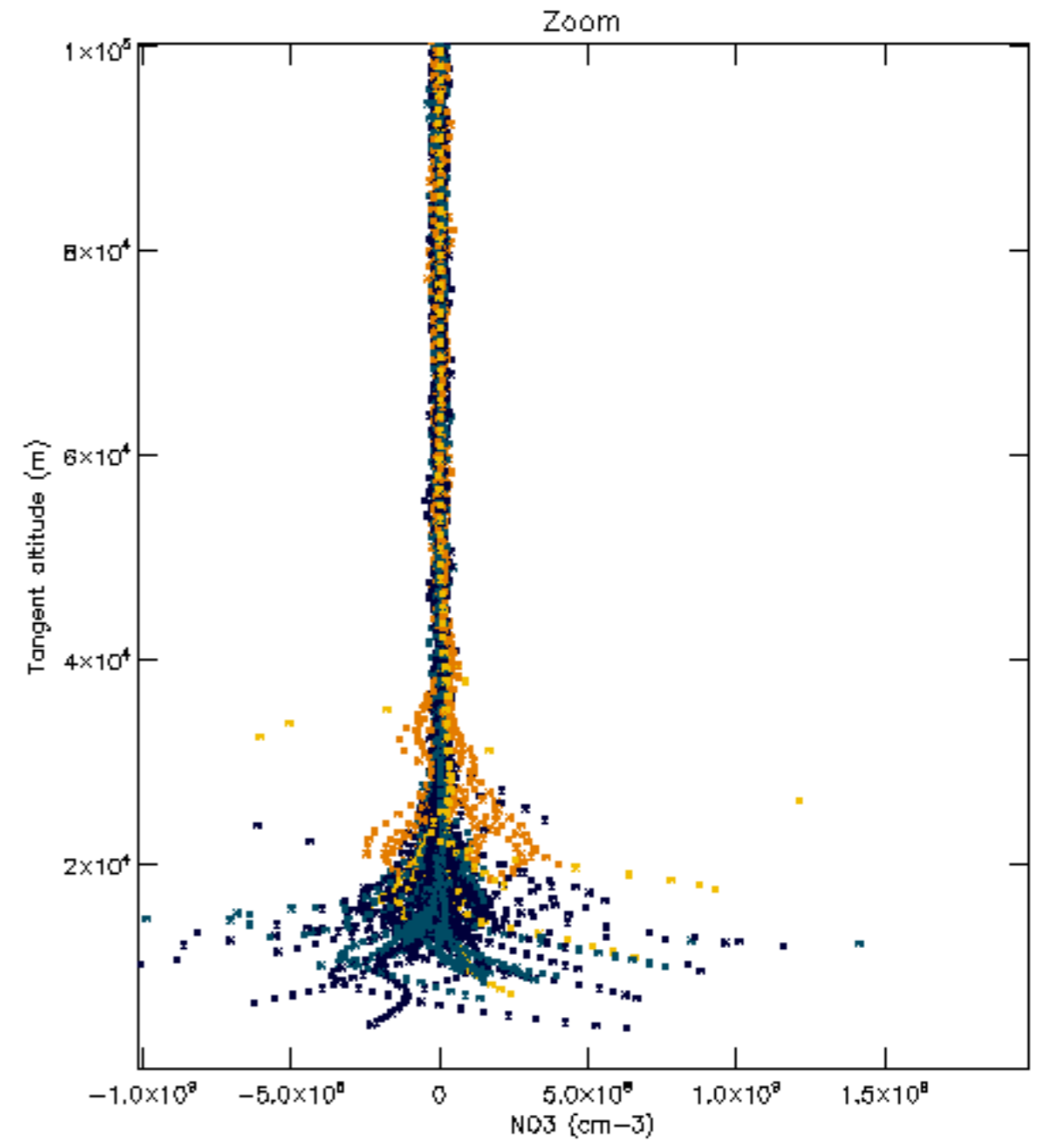
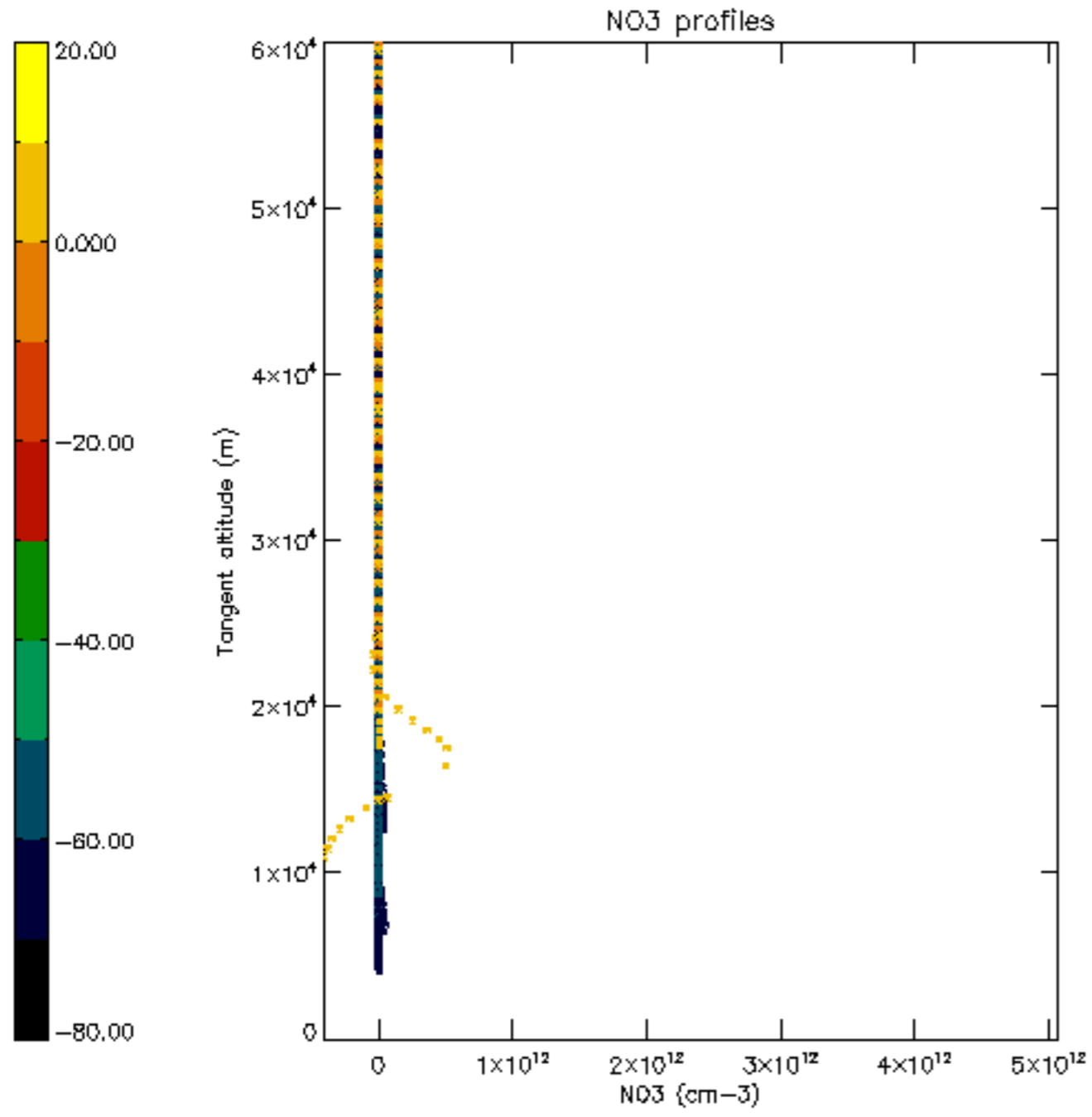


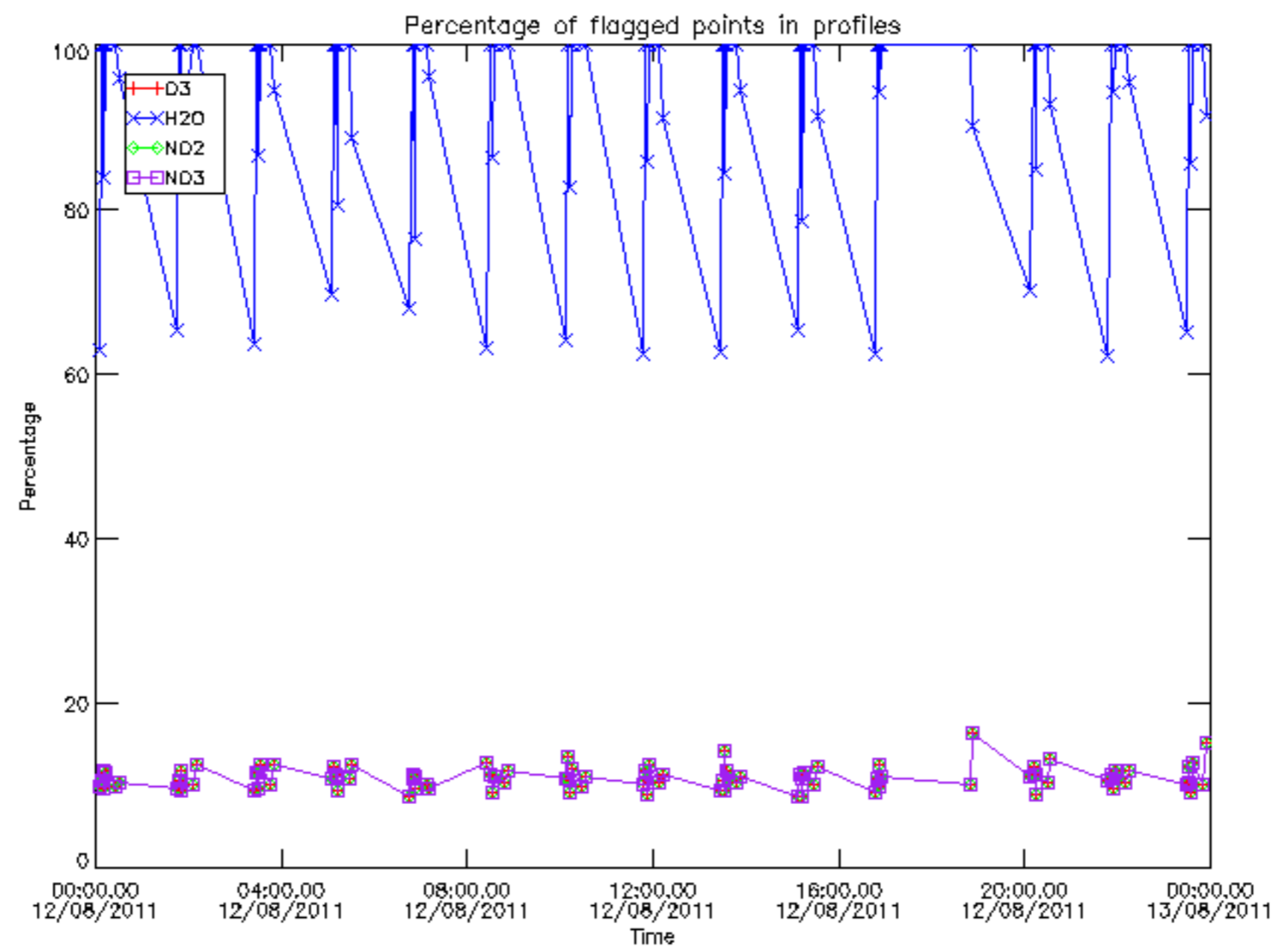




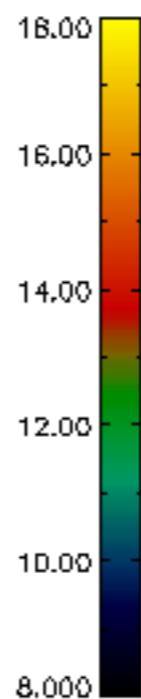
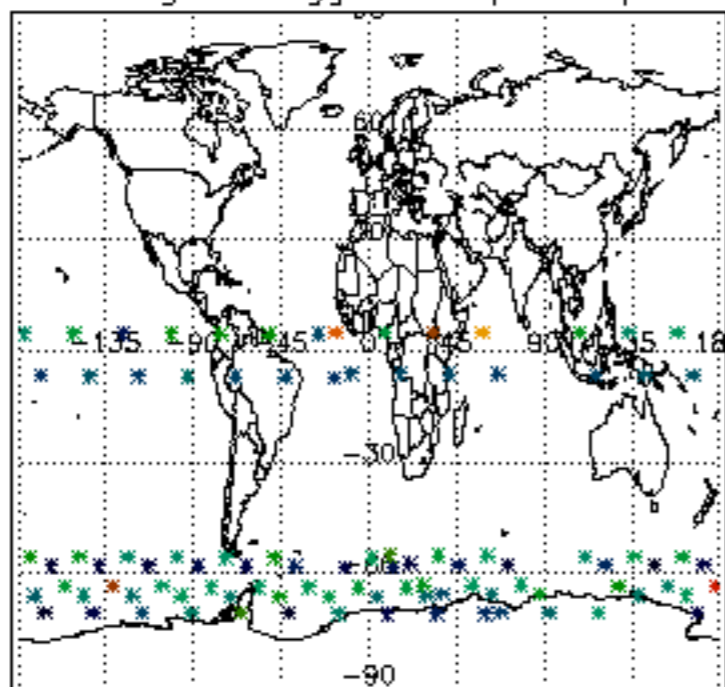




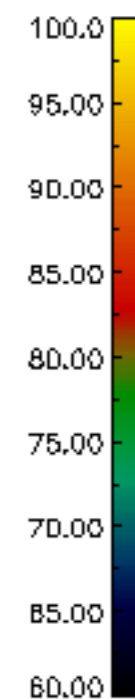
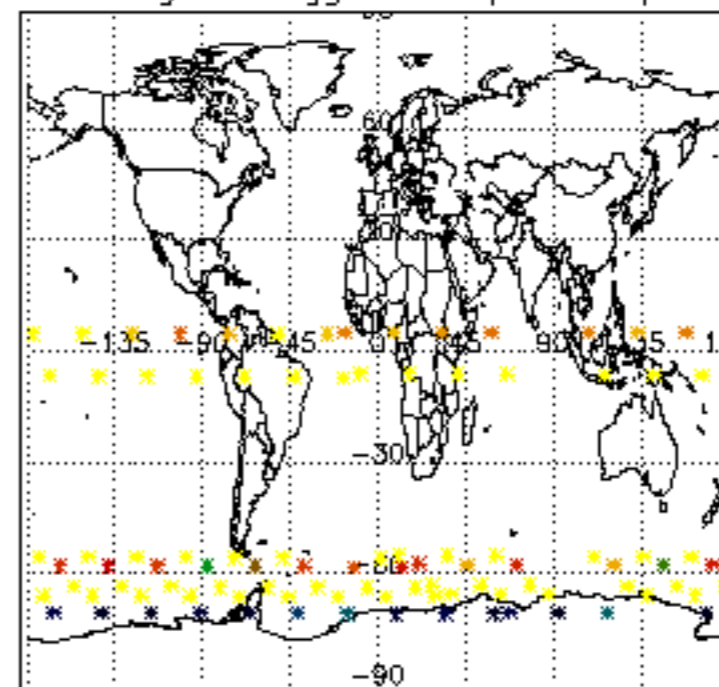




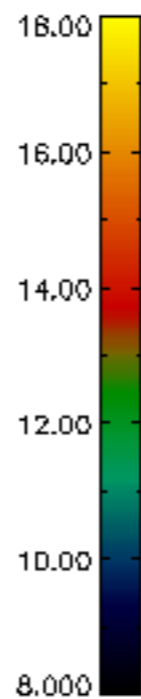
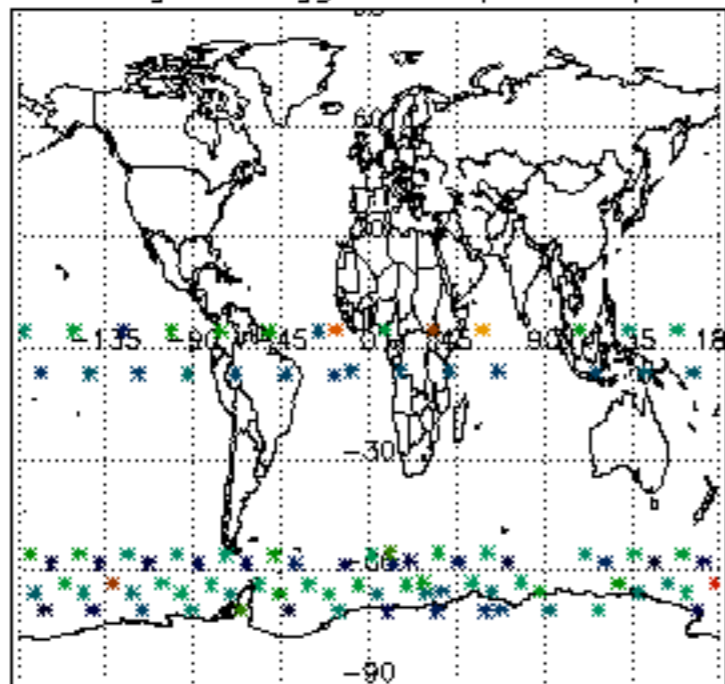
Percentage of flagged data per D3 profile



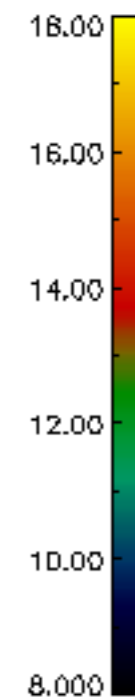
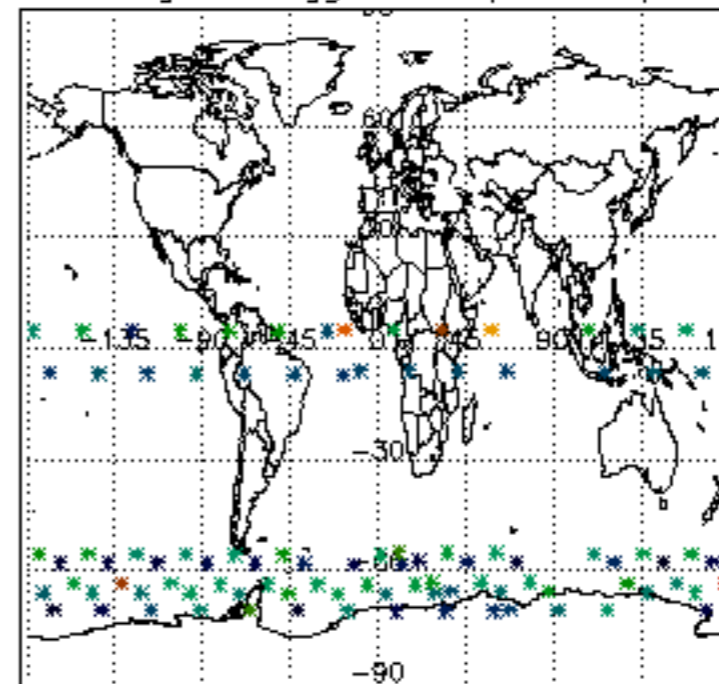
Percentage of flagged data per H2O profile

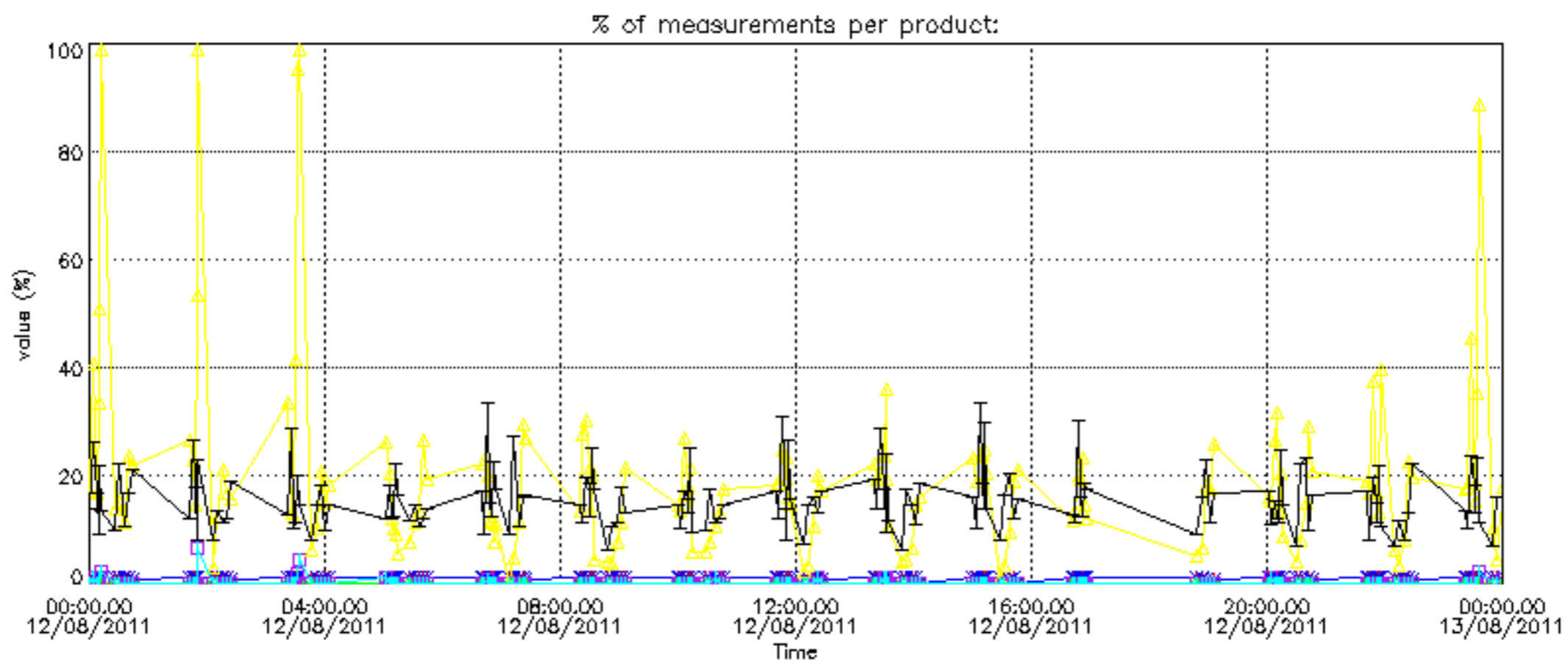


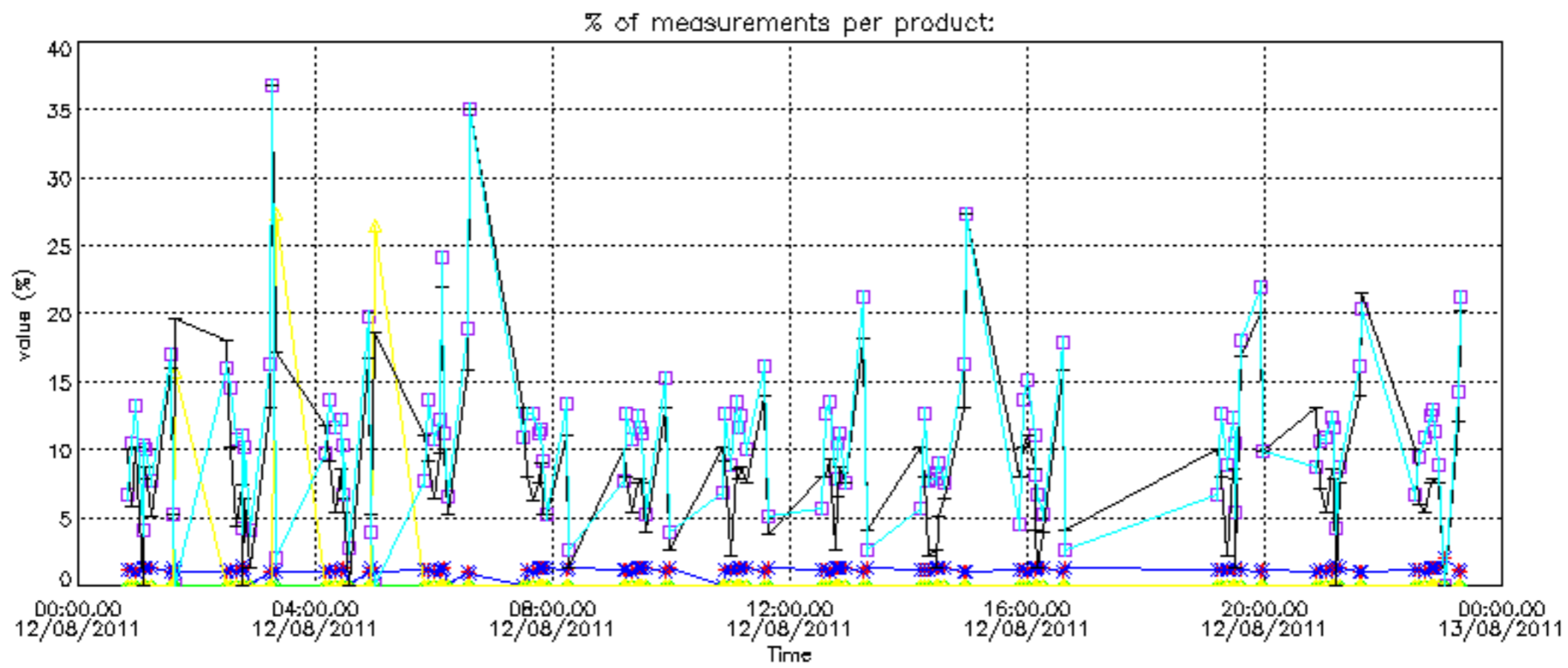
Percentage of flagged data per NO2 profile



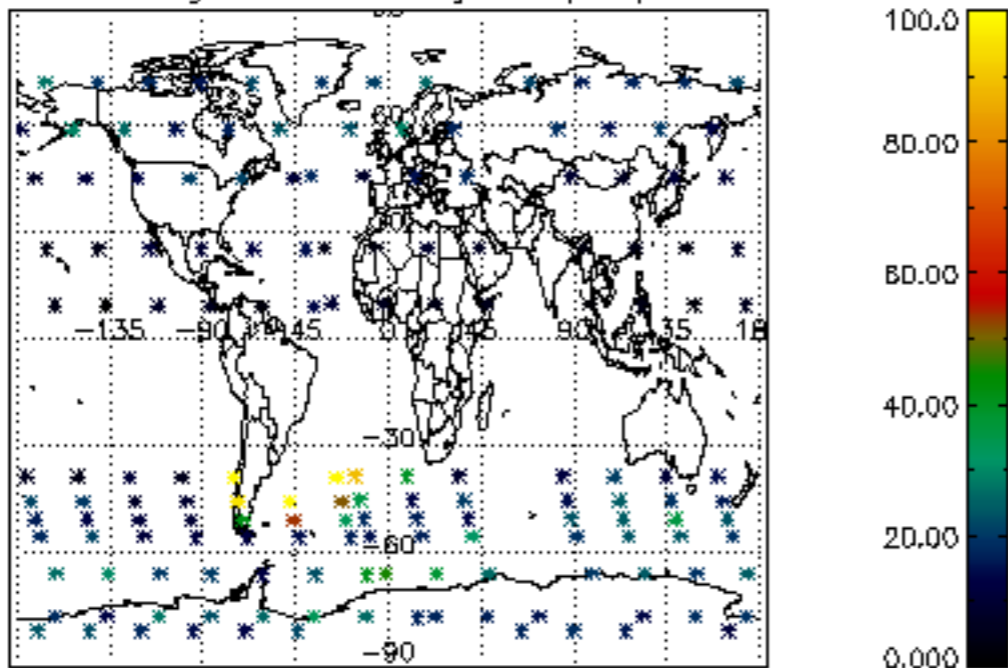
Percentage of flagged data per NO3 profile



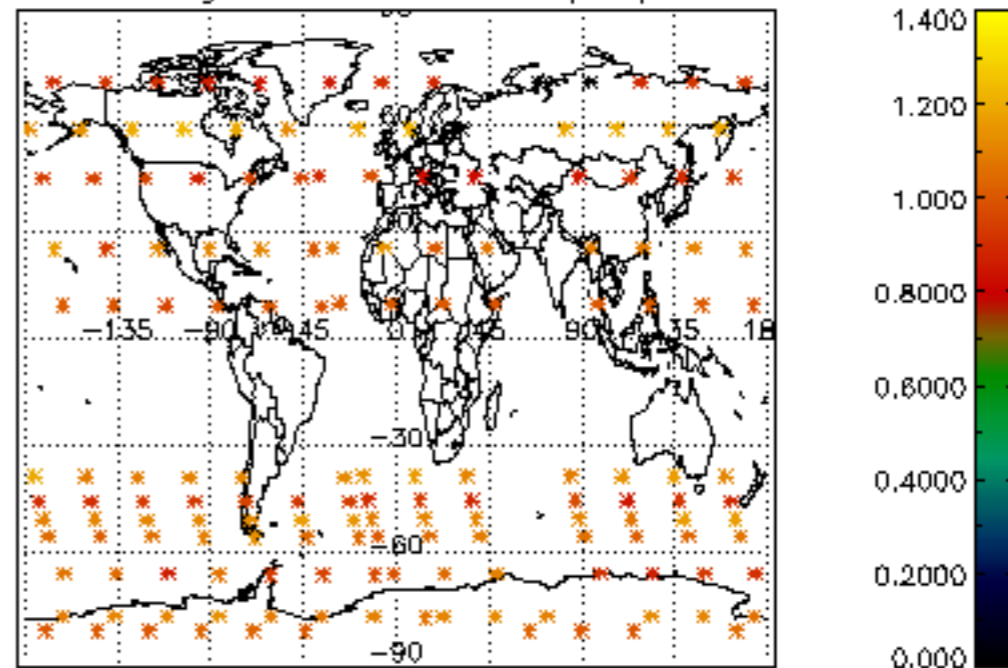




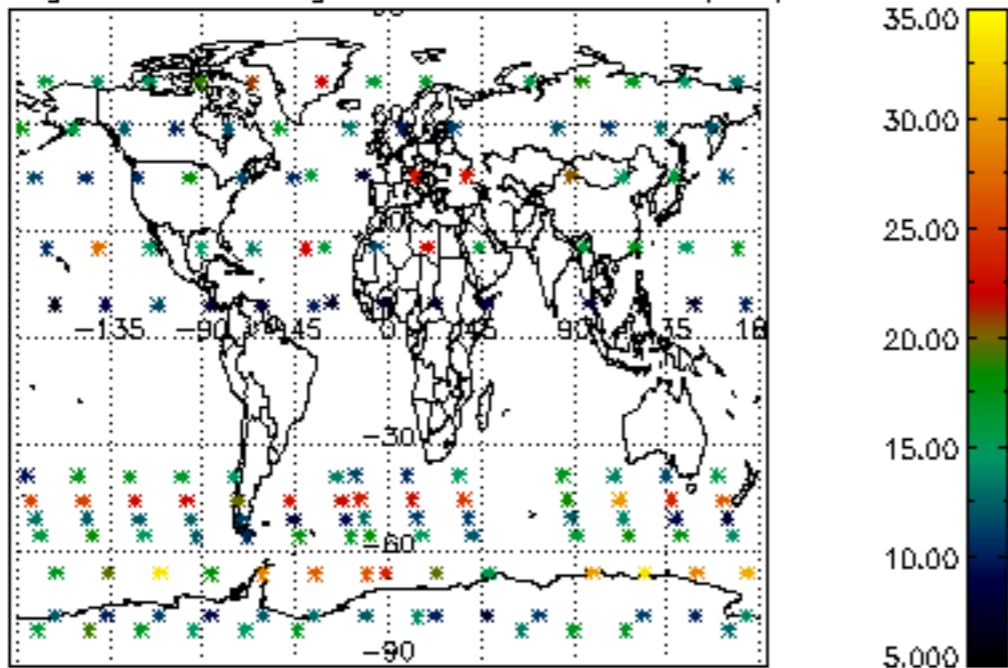
Percentage of cosmic ray hits per profile



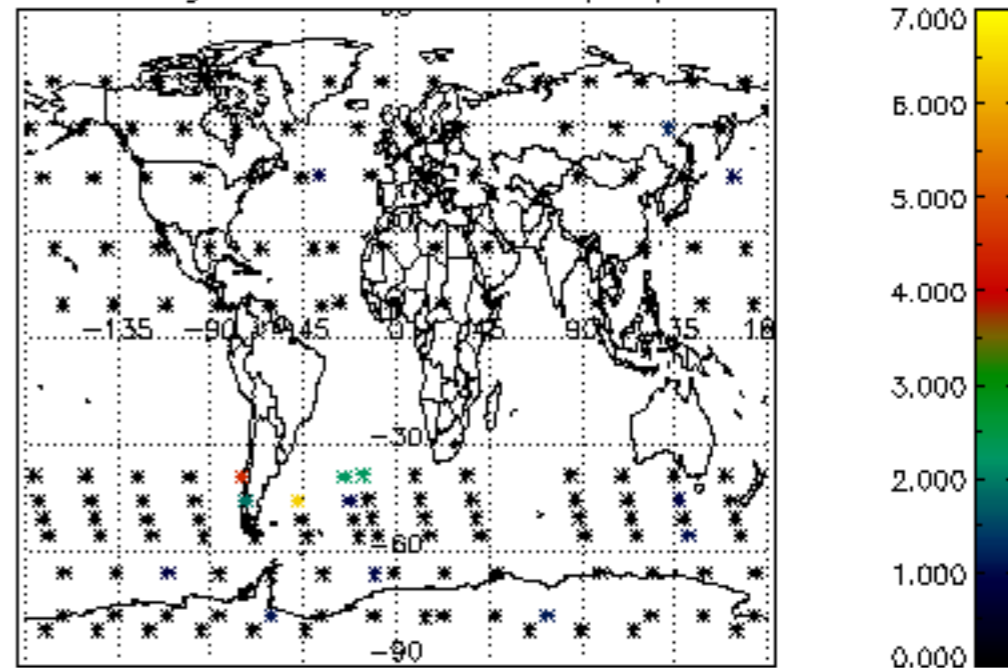
Percentage of datation errors per profile



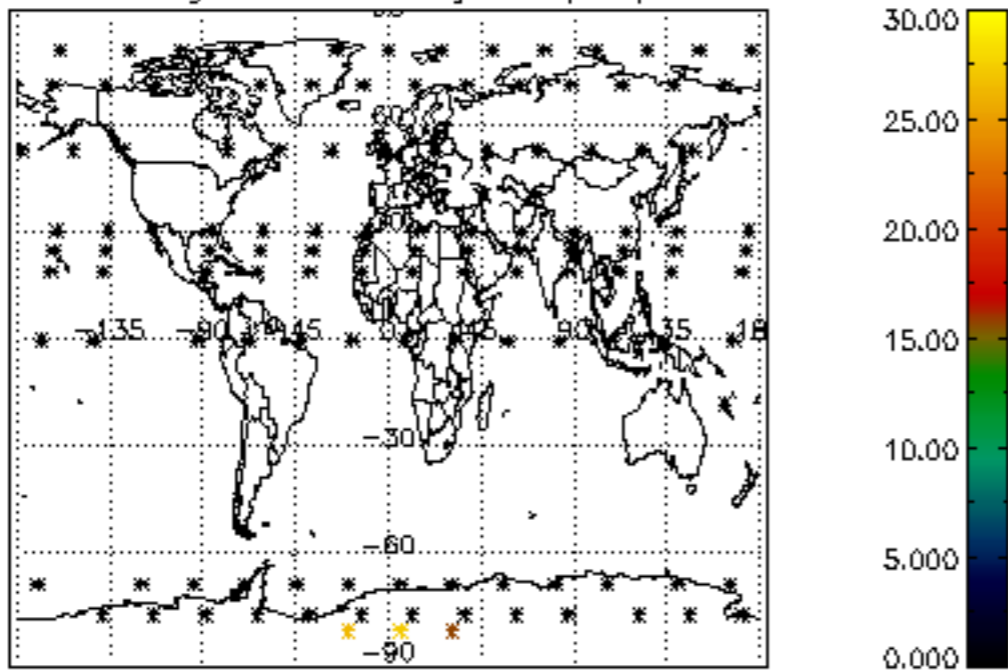
Percentage of star falling outside central band per profile



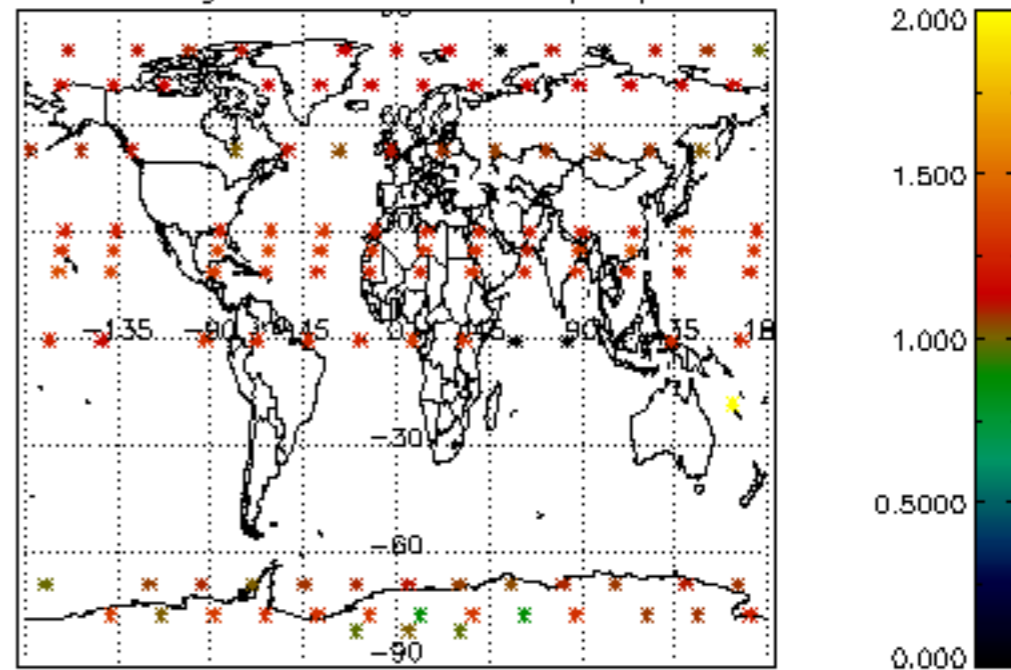
Percentage of saturation errors per profile



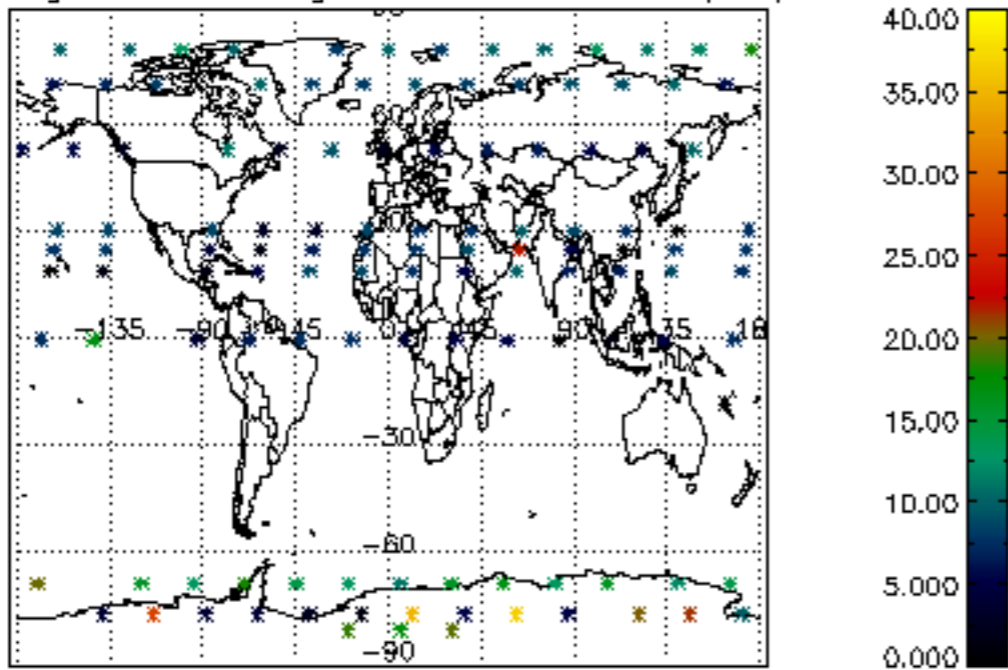
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

