

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 17:37:10
Data source version	GOMOS/6.01
Start time of products	07-09-2011 (07SEP2011 00:00:00)
Stop time of products	08-09-2011 (08SEP2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	70
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

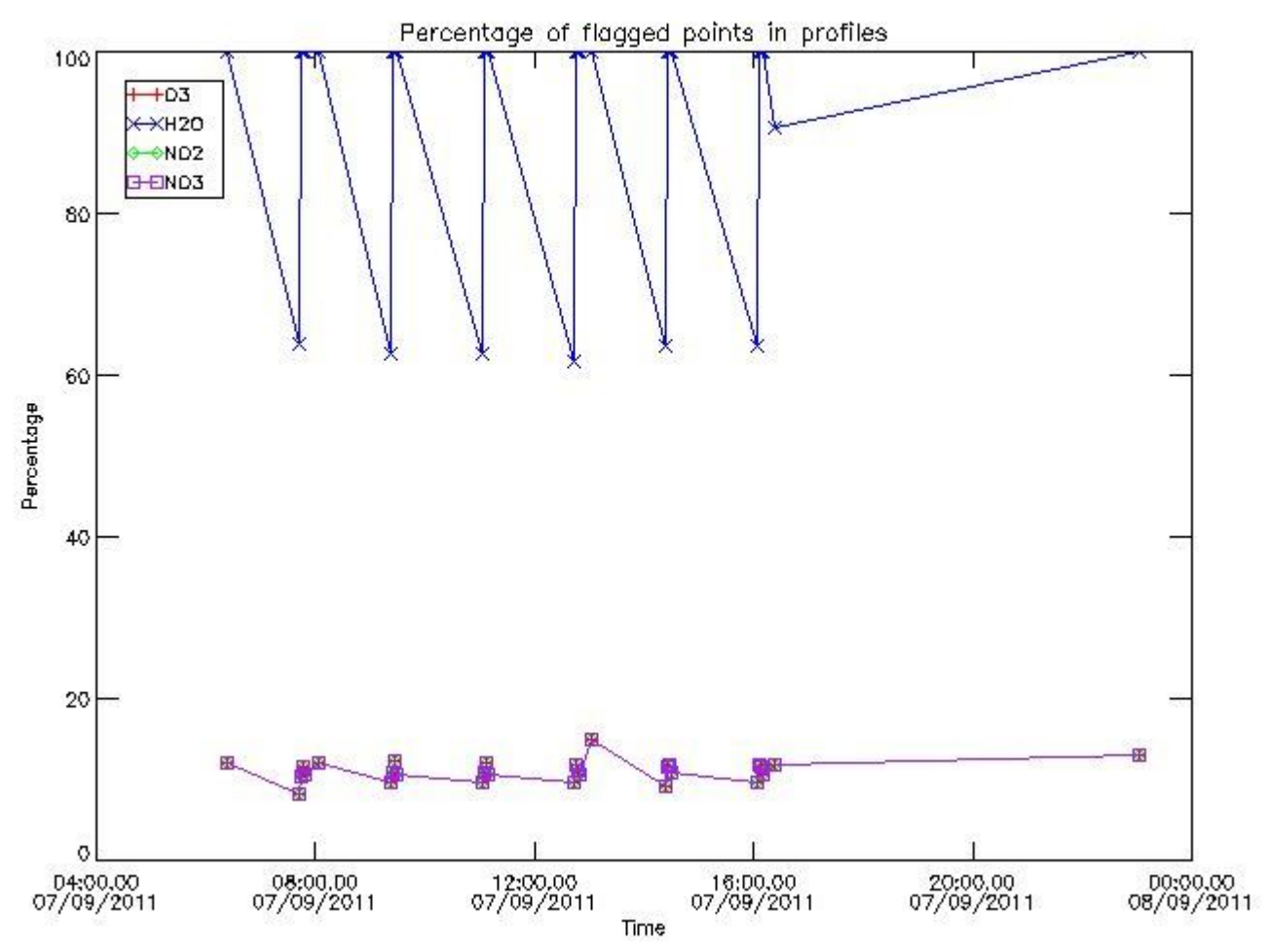
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110907_000701_000000433106_00203_49786_1676.N1	07-SEP-2011 00:07:01	Bright	43.000	90	54Alp Peg	2.4870	11000.	86	49786	No
2	GOM_NL__2PRFIN20110907_001114_000000393106_00203_49786_1677.N1	07-SEP-2011 00:11:14	Bright	38.500	164	44Eta Peg	2.9480	5400.0	77	49786	No
3	GOM_NL__2PRFIN20110907_002134_000000433106_00203_49786_1678.N1	07-SEP-2011 00:21:34	Bright	43.000	74	11Bet Cas	2.2680	6600.0	86	49786	No
4	GOM_NL__2PRFIN20110907_062220_000000433106_00207_49790_1786.N1	07-SEP-2011 06:22:20	Dark	42.500	9	Alp Eri	0.45300	24000.	85	49790	No
5	GOM_NL__2PRFIN20110907_062811_000000493106_00207_49790_1787.N1	07-SEP-2011 06:28:11	Straylight	48.500	84	Alp Phe	2.3970	4500.0	97	49790	No
6	GOM_NL__2PRFIN20110907_063349_000000423106_00207_49790_1788.N1	07-SEP-2011 06:33:49	Straylight	42.000	18	24Alp PsA	1.1660	9700.0	84	49790	No
7	GOM_NL__2PRFIN20110907_064755_000000443106_00207_49790_1789.N1	07-SEP-2011 06:47:55	Bright	43.500	90	54Alp Peg	2.4870	11000.	87	49790	No
8	GOM_NL__2PRFIN20110907_065208_000000423106_00207_49790_1790.N1	07-SEP-2011 06:52:08	Bright	41.500	164	44Eta Peg	2.9480	5400.0	83	49790	No
9	GOM_NL__2PRFIN20110907_070227_000000433106_00207_49790_1791.N1	07-SEP-2011 07:02:27	Bright	43.000	74	11Bet Cas	2.2680	6600.0	86	49790	No
10	GOM_NL__2PRFIN20110907_072527_000000403106_00207_49790_1792.N1	07-SEP-2011 07:25:27	Bright	39.500	24	66Alp Gem	1.5800	10200.	79	49790	No
11	GOM_NL__2PRFIN20110907_074144_000000623106_00207_49790_1793.N1	07-SEP-2011 07:41:44	Dark	61.500	1	9Alp CMa	-1.4400	11000.	123	49790	No
12	GOM_NL__2PRFIN20110907_074417_000000493106_00207_49790_1794.N1	07-SEP-2011 07:44:17	Dark	49.000	23	21Eps CMa	1.5020	26000.	98	49790	No
13	GOM_NL__2PRFIN20110907_074618_000000453106_00207_49790_1795.N1	07-SEP-2011 07:46:18	Dark	44.500	177	1Zet CMa	3.0220	26000.	89	49790	No
14	GOM_NL__2PRFIN20110907_074929_000000483106_00207_49790_1796.N1	07-SEP-2011 07:49:29	Dark	48.000	108	Alp Col	2.6520	15200.	96	49790	No
15	GOM_NL__2PRFIN20110907_080235_000000423106_00208_49791_1819.N1	07-SEP-2011 08:02:35	Dark	42.000	9	Alp Eri	0.45300	24000.	84	49791	No
16	GOM_NL__2PRFIN20110907_080826_000000473106_00208_49791_1820.N1	07-SEP-2011 08:08:26	Straylight	46.500	84	Alp Phe	2.3970	4500.0	93	49791	No
17	GOM_NL__2PRFIN20110907_081403_000000453106_00208_49791_1821.N1	07-SEP-2011 08:14:03	Straylight	45.000	18	24Alp PsA	1.1660	9700.0	90	49791	No
18	GOM_NL__2PRFIN20110907_082809_000000433106_00208_49791_1822.N1	07-SEP-2011 08:28:09	Bright	43.000	90	54Alp Peg	2.4870	11000.	86	49791	No
19	GOM_NL__2PRFIN20110907_083222_000000413106_00208_49791_1823.N1	07-SEP-2011 08:32:22	Bright	40.500	164	44Eta Peg	2.9480	5400.0	81	49791	No
20	GOM_NL__2PRFIN20110907_084241_000000433106_00208_49791_1824.N1	07-SEP-2011 08:42:41	Bright	43.000	74	11Bet Cas	2.2680	6600.0	86	49791	No
21	GOM_NL__2PRFIN20110907_091345_000000473106_00208_49791_1825.N1	07-SEP-2011 09:13:45	Twilight	46.500	8	10Alp CMi	0.40000	6500.0	93	49791	No
22	GOM_NL__2PRFIN20110907_092159_000000533106_00208_49791_1826.N1	07-SEP-2011 09:21:59	Dark	52.500	1	9Alp CMa	-1.4400	11000.	105	49791	No
23	GOM_NL__2PRFIN20110907_092432_000000483106_00208_49791_1827.N1	07-SEP-2011 09:24:32	Dark	47.500	23	21Eps CMa	1.5020	26000.	95	49791	No
24	GOM_NL__2PRFIN20110907_092633_000000463106_00208_49791_1828.N1	07-SEP-2011 09:26:33	Dark	46.000	177	1Zet CMa	3.0220	26000.	92	49791	No
25	GOM_NL__2PRFIN20110907_092944_000000493106_00208_49791_1829.N1	07-SEP-2011 09:29:44	Dark	48.500	108	Alp Col	2.6520	15200.	97	49791	No
26	GOM_NL__2PRFIN20110907_094840_000000483106_00209_49792_1905.N1	07-SEP-2011 09:48:40	Straylight	48.000	84	Alp Phe	2.3970	4500.0	96	49792	No
27	GOM_NL__2PRFIN20110907_095417_000000473106_00209_49792_1906.N1	07-SEP-2011 09:54:17	Straylight	46.500	18	24Alp PsA	1.1660	9700.0	93	49792	No
28	GOM_NL__2PRFIN20110907_100823_000000433106_00209_49792_1907.N1	07-SEP-2011 10:08:23	Bright	42.500	90	54Alp Peg	2.4870	11000.	85	49792	No
29	GOM_NL__2PRFIN20110907_101236_000000403106_00209_49792_1908.N1	07-SEP-2011 10:12:36	Bright	39.500	164	44Eta Peg	2.9480	5400.0	79	49792	No
30	GOM_NL__2PRFIN20110907_102254_000000433106_00209_49792_1909.N1	07-SEP-2011 10:22:54	Bright	42.500	74	11Bet Cas	2.2680	6600.0	85	49792	No
31	GOM_NL__2PRFIN20110907_110214_000000533106_00209_49792_1910.N1	07-SEP-2011 11:02:14	Dark	52.500	1	9Alp CMa	-1.4400	11000.	105	49792	No
32	GOM_NL__2PRFIN20110907_110446_000000473106_00209_49792_1911.N1	07-SEP-2011 11:04:46	Dark	46.500	23	21Eps CMa	1.5020	26000.	93	49792	No
33	GOM_NL__2PRFIN20110907_110648_000000473106_00209_49792_1912.N1	07-SEP-2011 11:06:48	Dark	46.500	177	1Zet CMa	3.0220	26000.	93	49792	No
34	GOM_NL__2PRFIN20110907_110959_000000483106_00209_49792_1913.N1	07-SEP-2011 11:09:59	Dark	48.000	108	Alp Col	2.6520	15200.	96	49792	No
35	GOM_NL__2PRFIN20110907_112855_000000503106_00210_49793_1932.N1	07-SEP-2011 11:28:55	Straylight	49.500	84	Alp Phe	2.3970	4500.0	99	49793	No
36	GOM_NL__2PRFIN20110907_113431_000000423106_00210_49793_1933.N1	07-SEP-2011 11:34:31	Straylight	42.000	18	24Alp PsA	1.1660	9700.0	84	49793	No
37	GOM_NL__2PRFIN20110907_124229_000000533106_00210_49793_1934.N1	07-SEP-2011 12:42:29	Dark	52.500	1	9Alp CMa	-1.4400	11000.	105	49793	No
38	GOM_NL__2PRFIN20110907_124501_000000443106_00210_49793_1935.N1	07-SEP-2011 12:45:01	Dark	43.500	23	21Eps CMa	1.5020	26000.	87	49793	No
39	GOM_NL__2PRFIN20110907_124703_000000463106_00210_49793_1936.N1	07-SEP-2011 12:47:03	Dark	45.500	177	1Zet CMa	3.0220	26000.	91	49793	No
40	GOM_NL__2PRFIN20110907_125014_000000483106_00210_49793_1937.N1	07-SEP-2011 12:50:14	Dark	48.000	108	Alp Col	2.6520	15200.	96	49793	No
41	GOM_NL__2PRFIN20110907_130318_000000443106_00211_49794_1957.N1	07-SEP-2011 13:03:18	Dark	44.000	9	Alp Eri	0.45300	24000.	88	49794	No
42	GOM_NL__2PRFIN20110907_130909_000000443106_00211_49794_1958.N1	07-SEP-2011 13:09:09	Straylight	44.000	84	Alp Phe	2.3970	4500.0	88	49794	No

43	GOM_NL__2PRFIN20110907_131445_000000413106_00211_49794_1959.N1	07-SEP-2011 13:14:45	Straylight	41.000	18	24Alp PsA	1.1660	9700.0	82	49794	No
44	GOM_NL__2PRFIN20110907_134321_000000443106_00211_49794_1960.N1	07-SEP-2011 13:43:21	Bright	43.500	74	11Bet Cas	2.2680	6600.0	87	49794	No
45	GOM_NL__2PRFIN20110907_142243_000000613106_00211_49794_1961.N1	07-SEP-2011 14:22:43	Dark	61.000	1	9Alp CMa	-1.4400	11000.	122	49794	No
46	GOM_NL__2PRFIN20110907_142516_000000453106_00211_49794_1962.N1	07-SEP-2011 14:25:16	Dark	44.500	23	21Eps CMa	1.5020	26000.	89	49794	No
47	GOM_NL__2PRFIN20110907_142718_000000443106_00211_49794_1963.N1	07-SEP-2011 14:27:18	Dark	43.500	177	1Zet CMa	3.0220	26000.	87	49794	No
48	GOM_NL__2PRFIN20110907_143029_000000473106_00211_49794_1964.N1	07-SEP-2011 14:30:29	Dark	46.500	108	Alp Col	2.6520	15200.	93	49794	No
49	GOM_NL__2PRFIN20110907_144924_000000513106_00212_49795_2012.N1	07-SEP-2011 14:49:24	Straylight	50.500	84	Alp Phe	2.3970	4500.0	101	49795	No
50	GOM_NL__2PRFIN20110907_145500_000000443106_00212_49795_2013.N1	07-SEP-2011 14:55:00	Straylight	43.500	18	24Alp PsA	1.1660	9700.0	87	49795	No
51	GOM_NL__2PRFIN20110907_150903_000000433106_00212_49795_2014.N1	07-SEP-2011 15:09:03	Bright	43.000	90	54Alp Peg	2.4870	11000.	86	49795	No
52	GOM_NL__2PRFIN20110907_151316_000000403106_00212_49795_2015.N1	07-SEP-2011 15:13:16	Bright	40.000	164	44Eta Peg	2.9480	5400.0	80	49795	No
53	GOM_NL__2PRFIN20110907_152334_000000403106_00212_49795_2016.N1	07-SEP-2011 15:23:34	Bright	40.000	74	11Bet Cas	2.2680	6600.0	80	49795	No
54	GOM_NL__2PRFIN20110907_155442_000000503106_00212_49795_2017.N1	07-SEP-2011 15:54:42	Twilight	49.500	8	10Alp CMi	0.40000	6500.0	99	49795	No
55	GOM_NL__2PRFIN20110907_160258_000000533106_00212_49795_2018.N1	07-SEP-2011 16:02:58	Dark	52.500	1	9Alp CMa	-1.4400	11000.	105	49795	No
56	GOM_NL__2PRFIN20110907_160530_000000433106_00212_49795_2019.N1	07-SEP-2011 16:05:30	Dark	43.000	23	21Eps CMa	1.5020	26000.	86	49795	No
57	GOM_NL__2PRFIN20110907_160733_000000453106_00212_49795_2020.N1	07-SEP-2011 16:07:33	Dark	44.500	177	1Zet CMa	3.0220	26000.	89	49795	No
58	GOM_NL__2PRFIN20110907_161044_000000483106_00212_49795_2021.N1	07-SEP-2011 16:10:44	Dark	48.000	108	Alp Col	2.6520	15200.	96	49795	No
59	GOM_NL__2PRFIN20110907_162347_000000443106_00213_49796_2047.N1	07-SEP-2011 16:23:47	Dark	43.500	9	Alp Eri	0.45300	24000.	87	49796	No
60	GOM_NL__2PRFIN20110907_162938_000000493106_00213_49796_2048.N1	07-SEP-2011 16:29:38	Straylight	49.000	84	Alp Phe	2.3970	4500.0	98	49796	No
61	GOM_NL__2PRFIN20110907_163514_000000453106_00213_49796_2049.N1	07-SEP-2011 16:35:14	Straylight	45.000	18	24Alp PsA	1.1660	9700.0	90	49796	No
62	GOM_NL__2PRFIN20110907_164917_000000443106_00213_49796_2050.N1	07-SEP-2011 16:49:17	Bright	44.000	90	54Alp Peg	2.4870	11000.	88	49796	No
63	GOM_NL__2PRFIN20110907_165330_000000413106_00213_49796_2051.N1	07-SEP-2011 16:53:30	Bright	40.500	164	44Eta Peg	2.9480	5400.0	81	49796	No
64	GOM_NL__2PRFIN20110907_170348_000000433106_00213_49796_2052.N1	07-SEP-2011 17:03:48	Bright	42.500	74	11Bet Cas	2.2680	6600.0	85	49796	No
65	GOM_NL__2PRFIN20110907_230323_000000403106_00217_49800_2182.N1	07-SEP-2011 23:03:23	Dark	39.500	143	Alp Hyi	2.8570	7200.0	79	49800	No
66	GOM_NL__2PRFIN20110907_231036_000000473106_00217_49800_2183.N1	07-SEP-2011 23:10:36	Straylight	47.000	84	Alp Phe	2.3970	4500.0	94	49800	No
67	GOM_NL__2PRFIN20110907_231611_000000443106_00217_49800_2184.N1	07-SEP-2011 23:16:11	Straylight	43.500	18	24Alp PsA	1.1660	9700.0	87	49800	No
68	GOM_NL__2PRFIN20110907_233012_000000433106_00217_49800_2185.N1	07-SEP-2011 23:30:12	Bright	43.000	90	54Alp Peg	2.4870	11000.	86	49800	No
69	GOM_NL__2PRFIN20110907_233425_000000413106_00217_49800_2186.N1	07-SEP-2011 23:34:25	Bright	41.000	164	44Eta Peg	2.9480	5400.0	82	49800	No
70	GOM_NL__2PRFIN20110907_234441_000000443106_00217_49800_2187.N1	07-SEP-2011 23:44:41	Bright	44.000	74	11Bet Cas	2.2680	6600.0	88	49800	No

3. Quality information per product

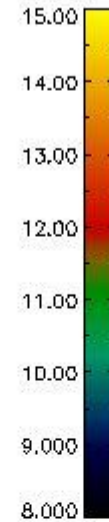
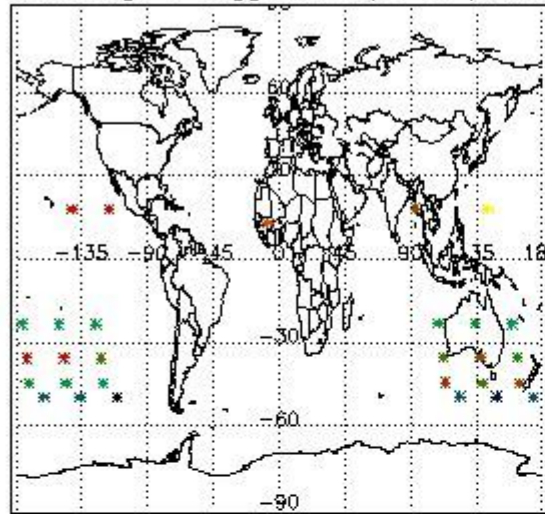
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

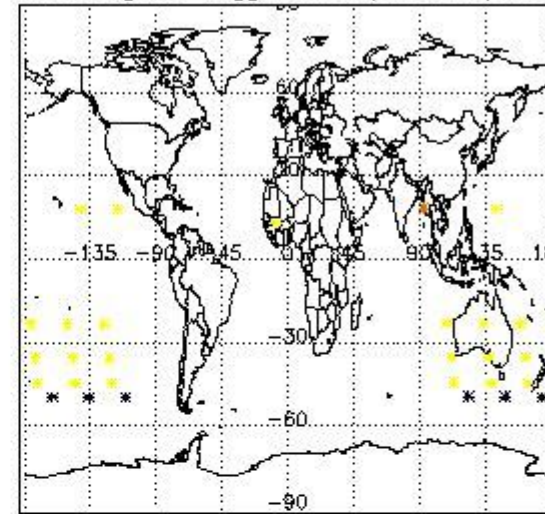


3.2 Plot quality information per product (world map)

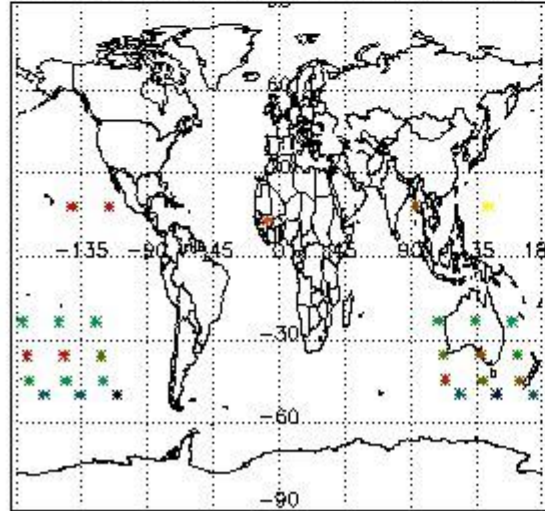
Percentage of flagged data per O3 profile



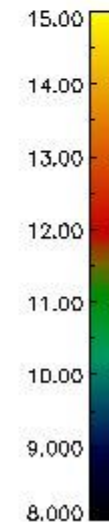
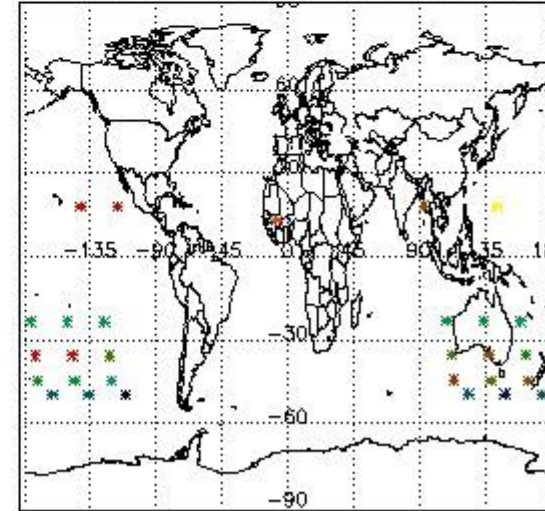
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

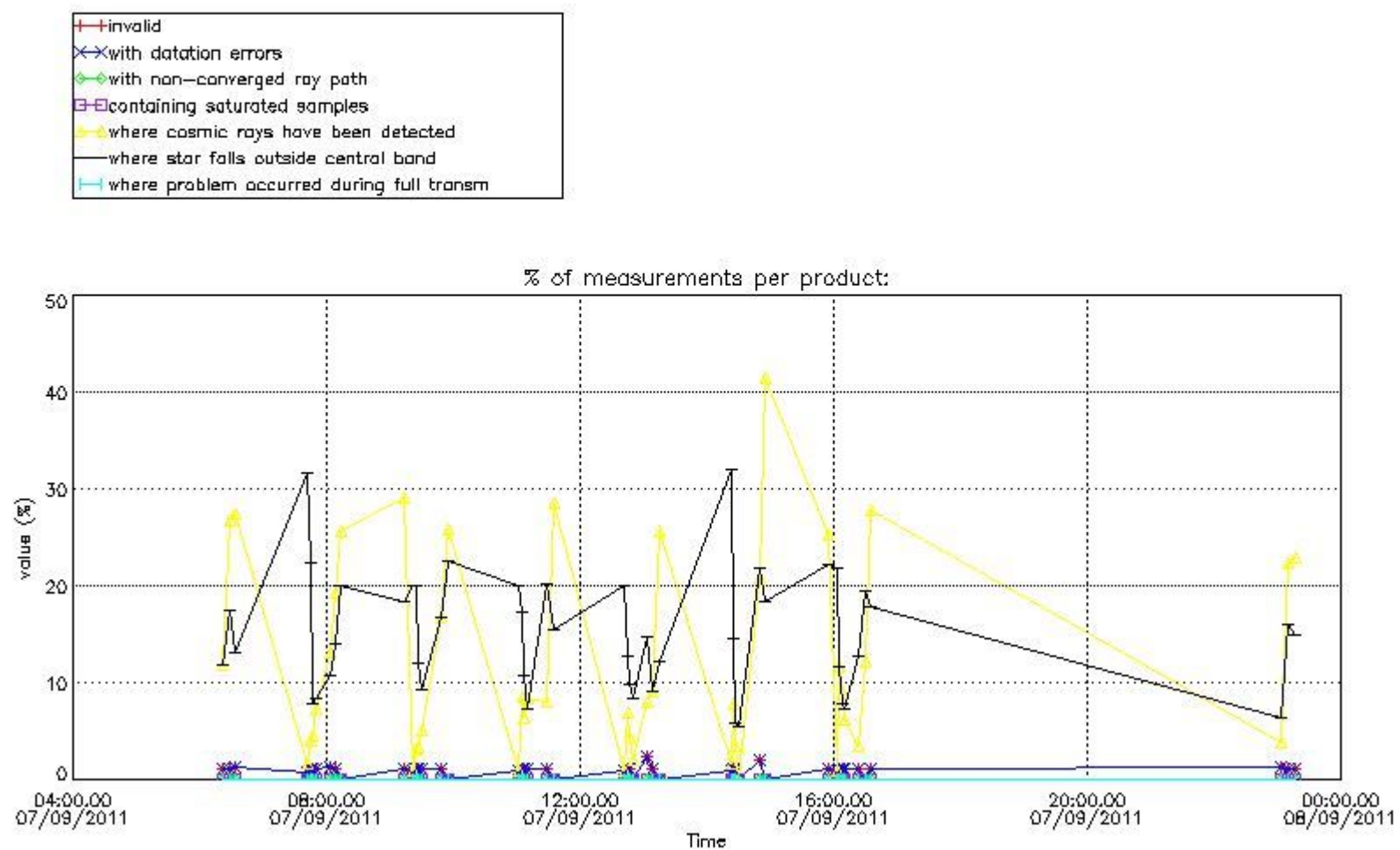


4. Level 1 quality information per product

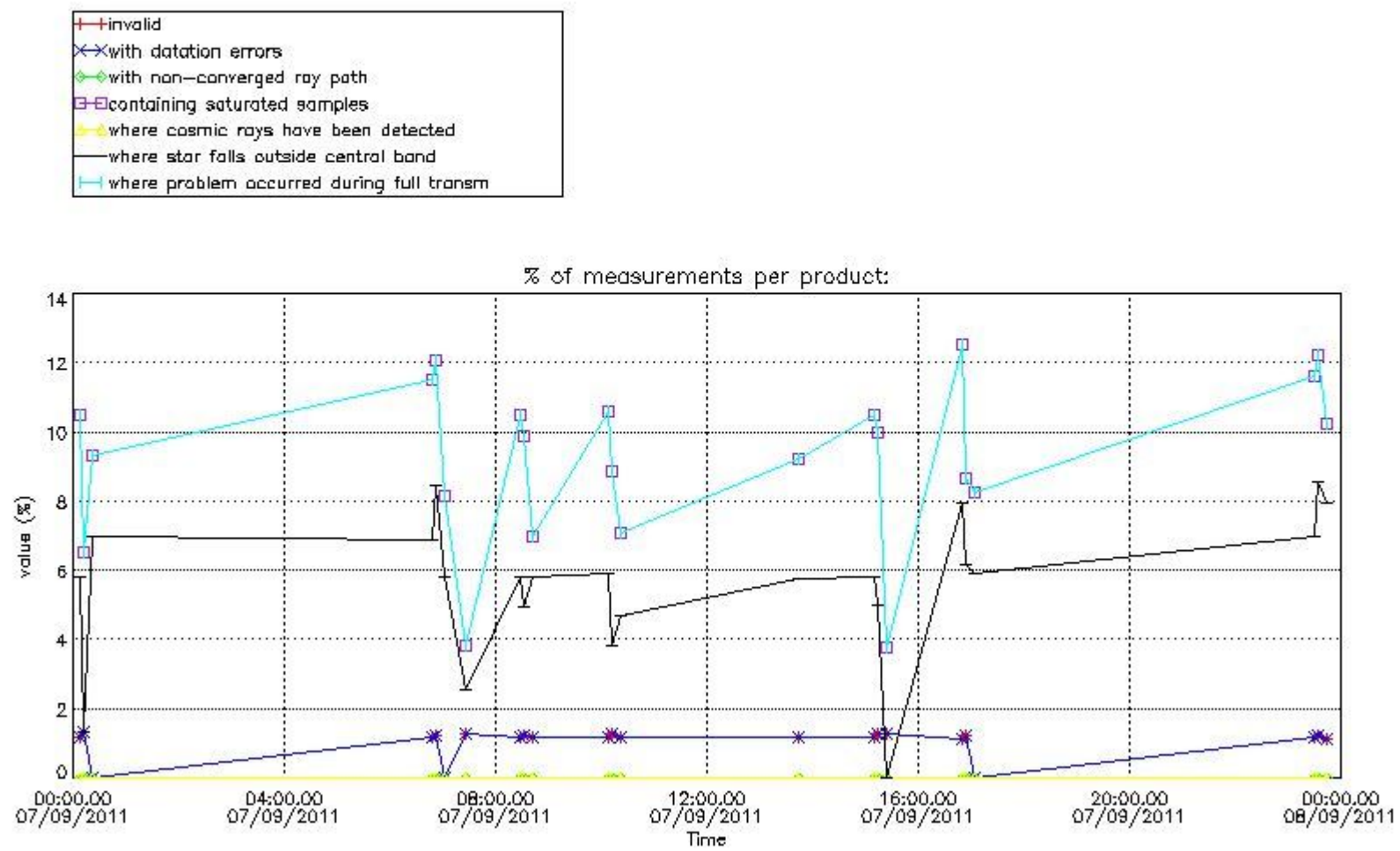
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

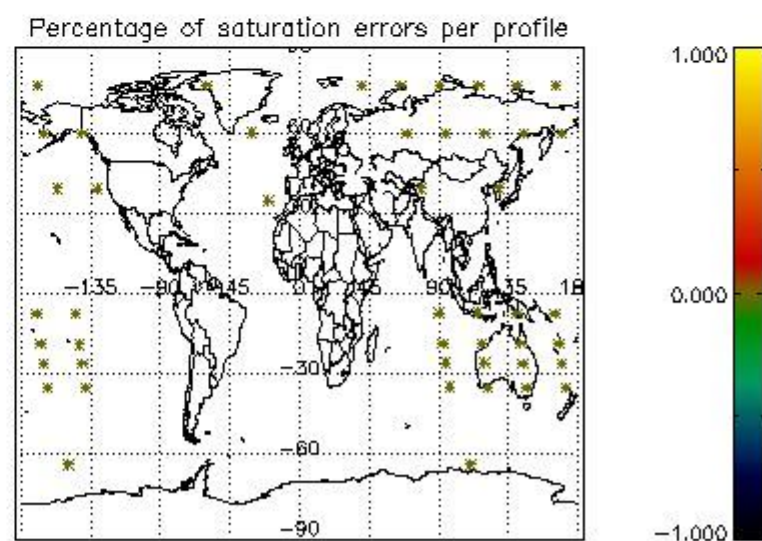
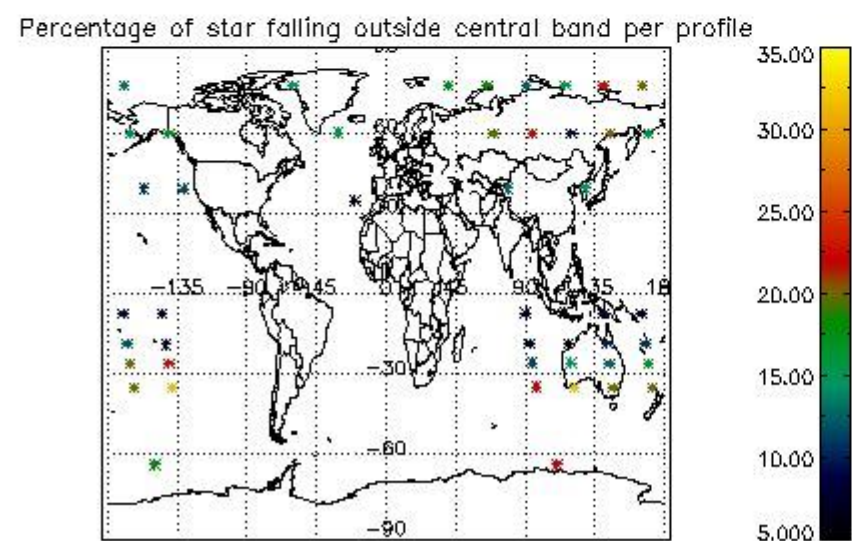
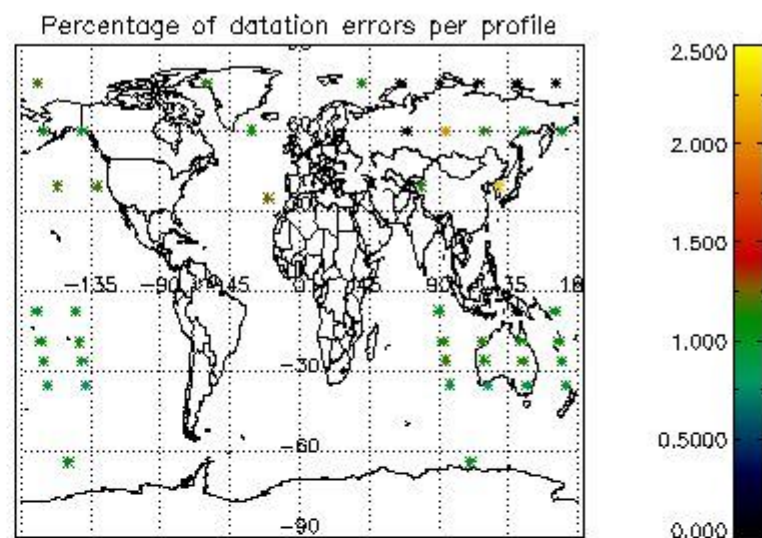
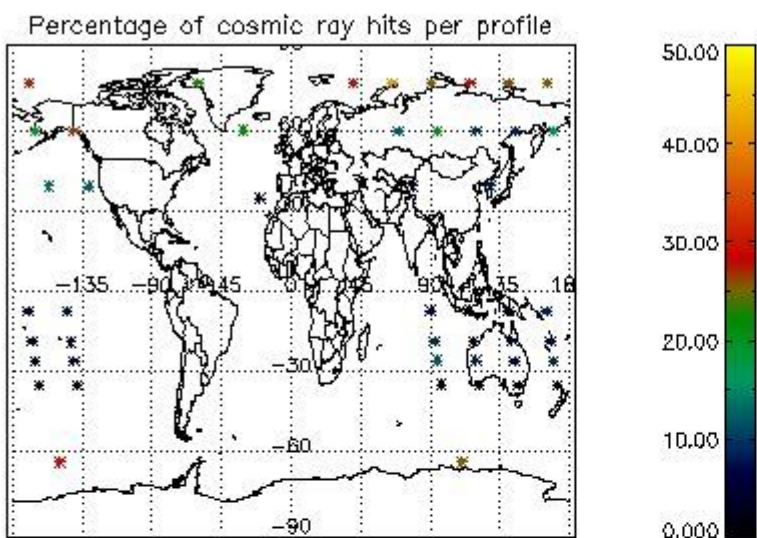


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

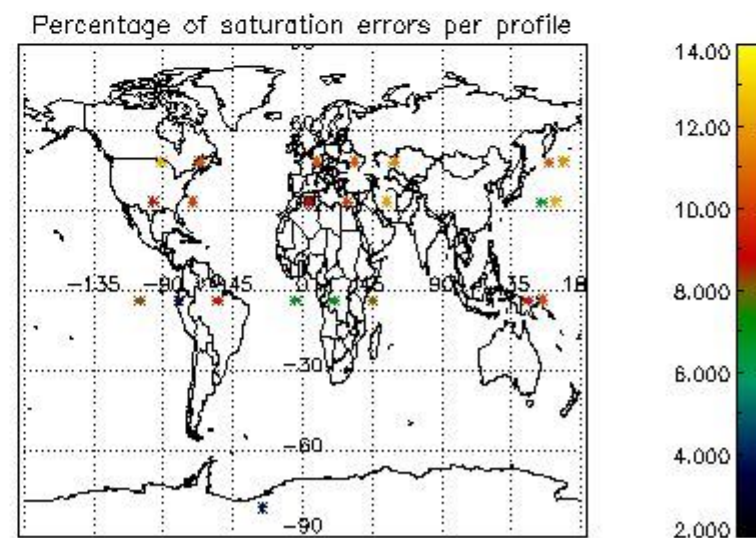
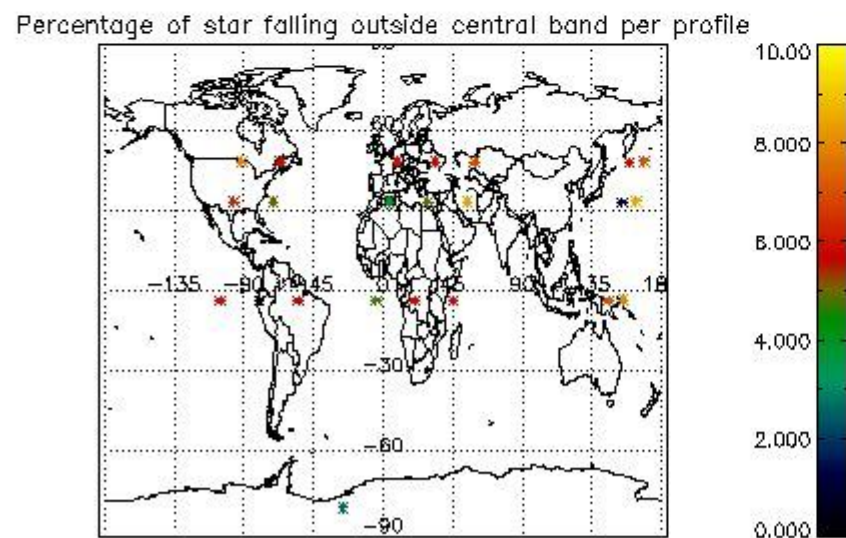
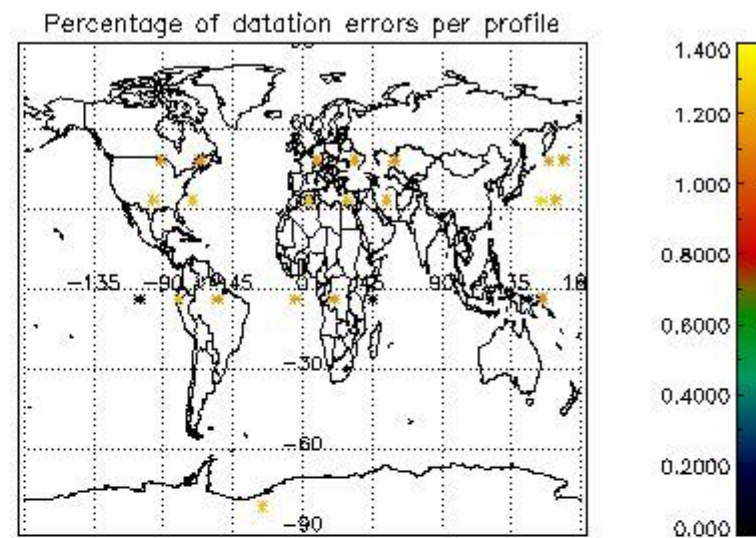
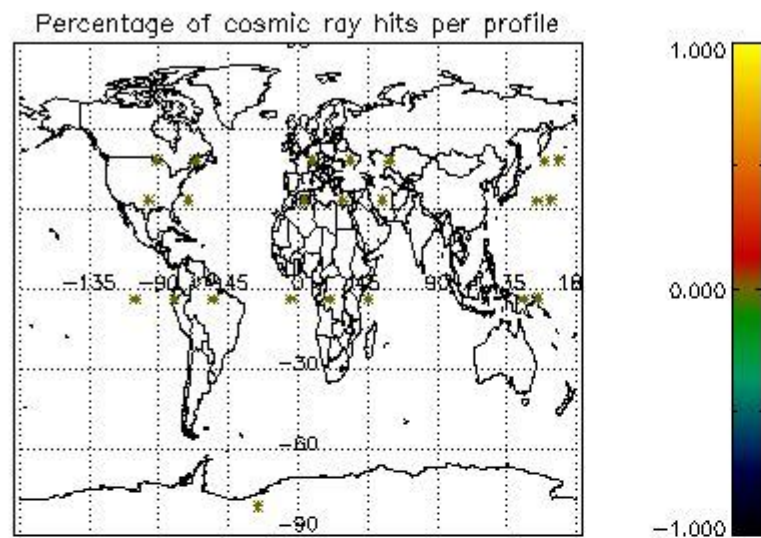


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

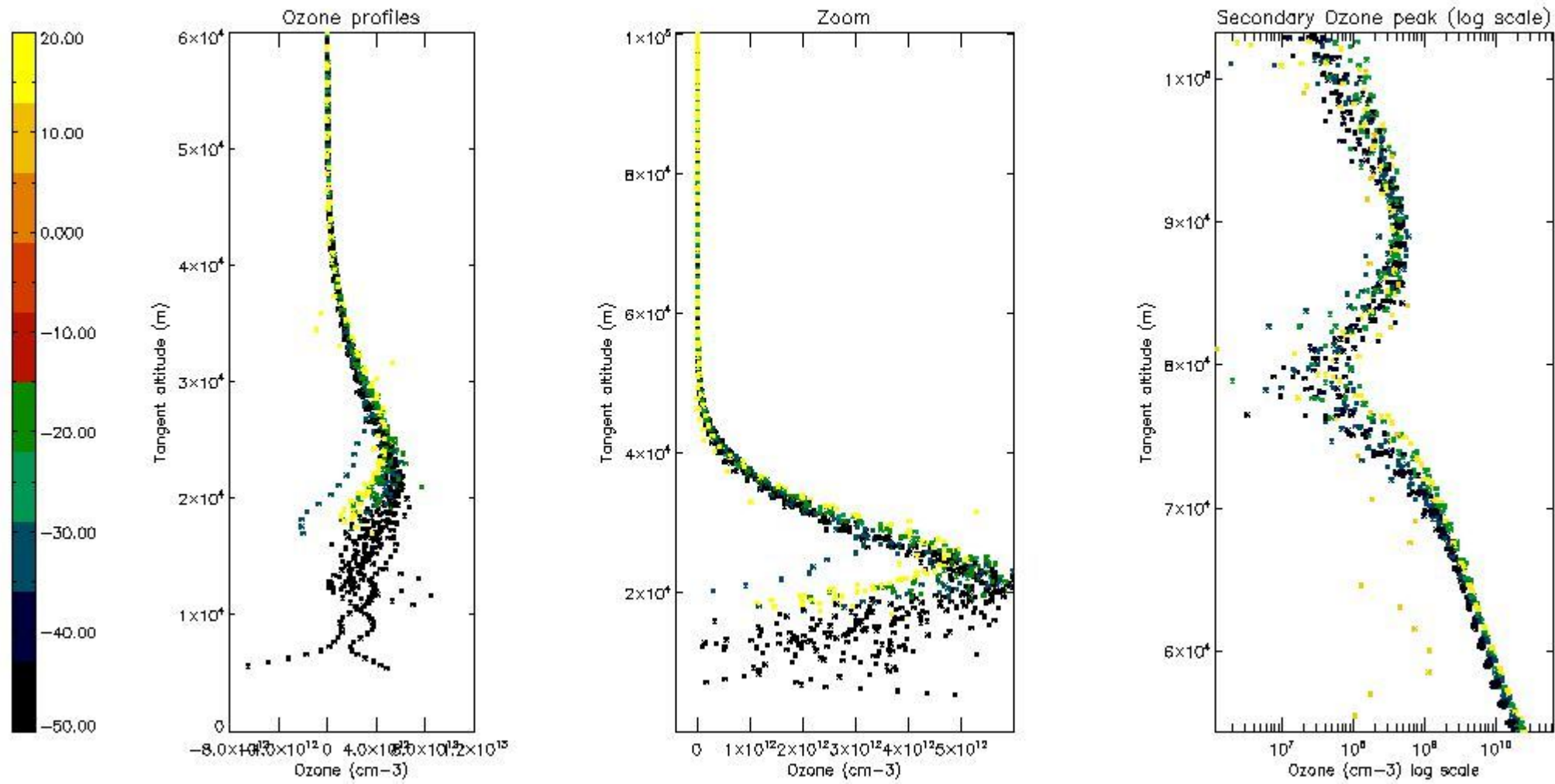
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	44
STD < 20	29

STD < 10	26
STD < 5	19

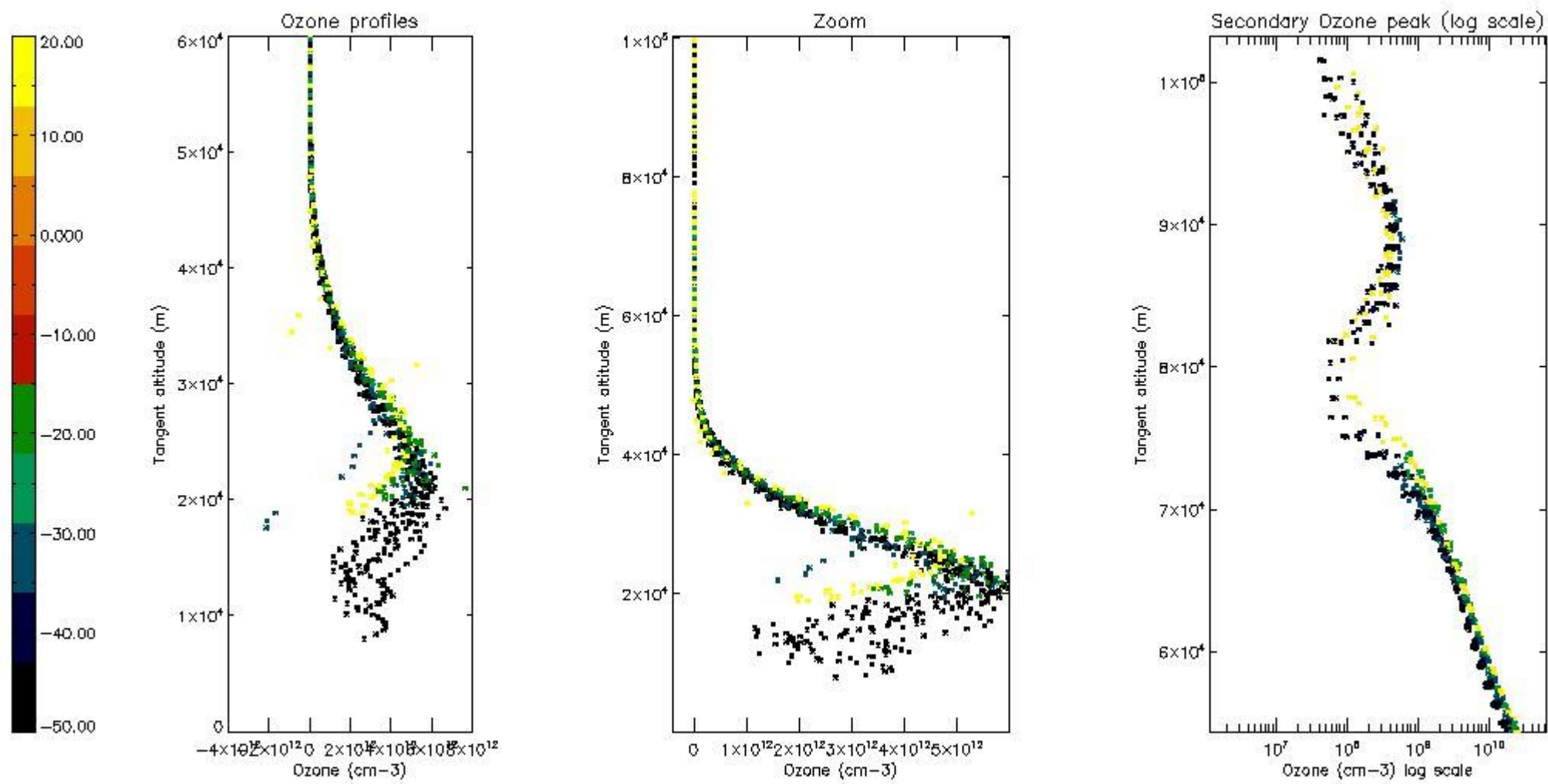
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



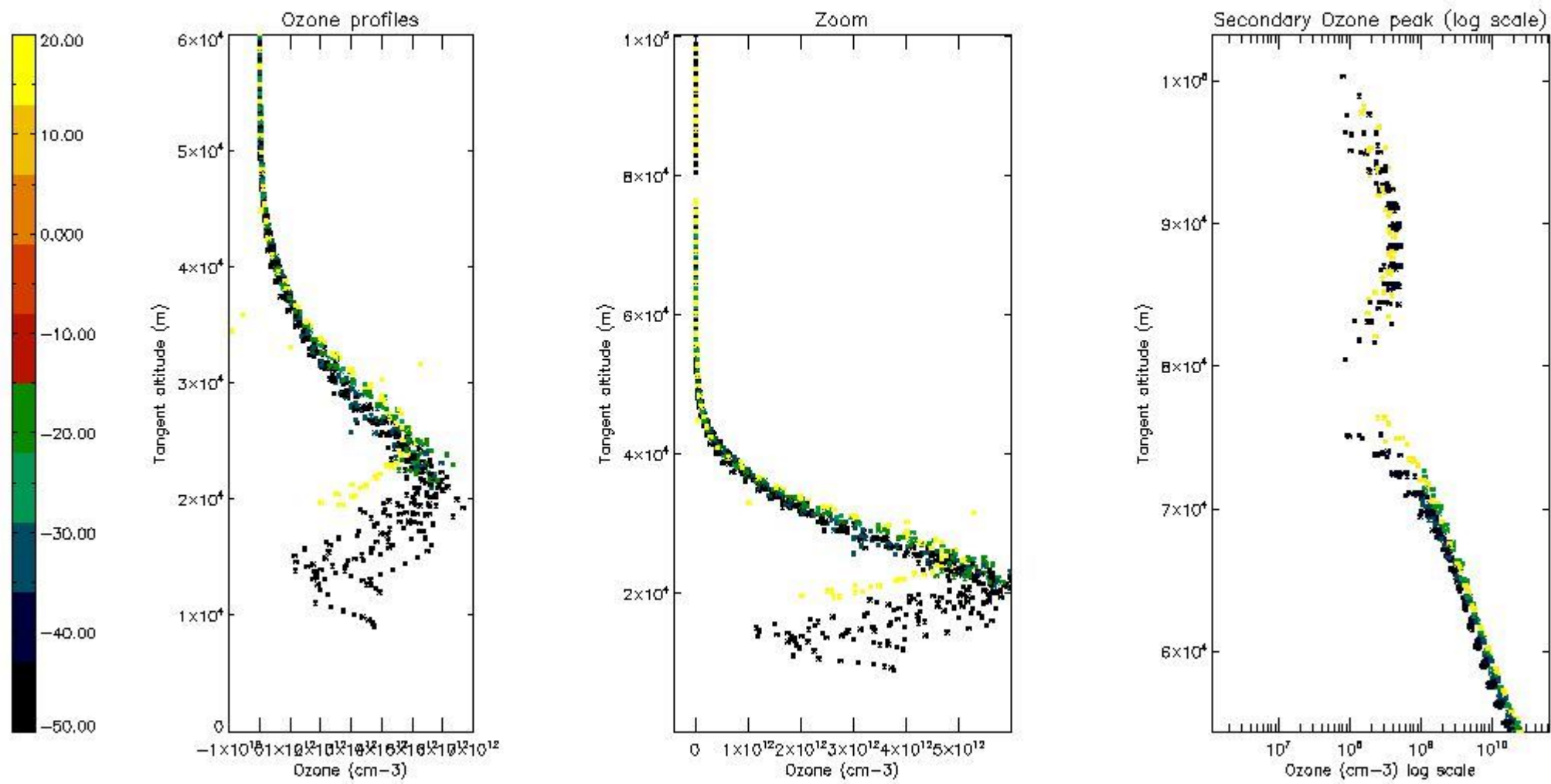
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



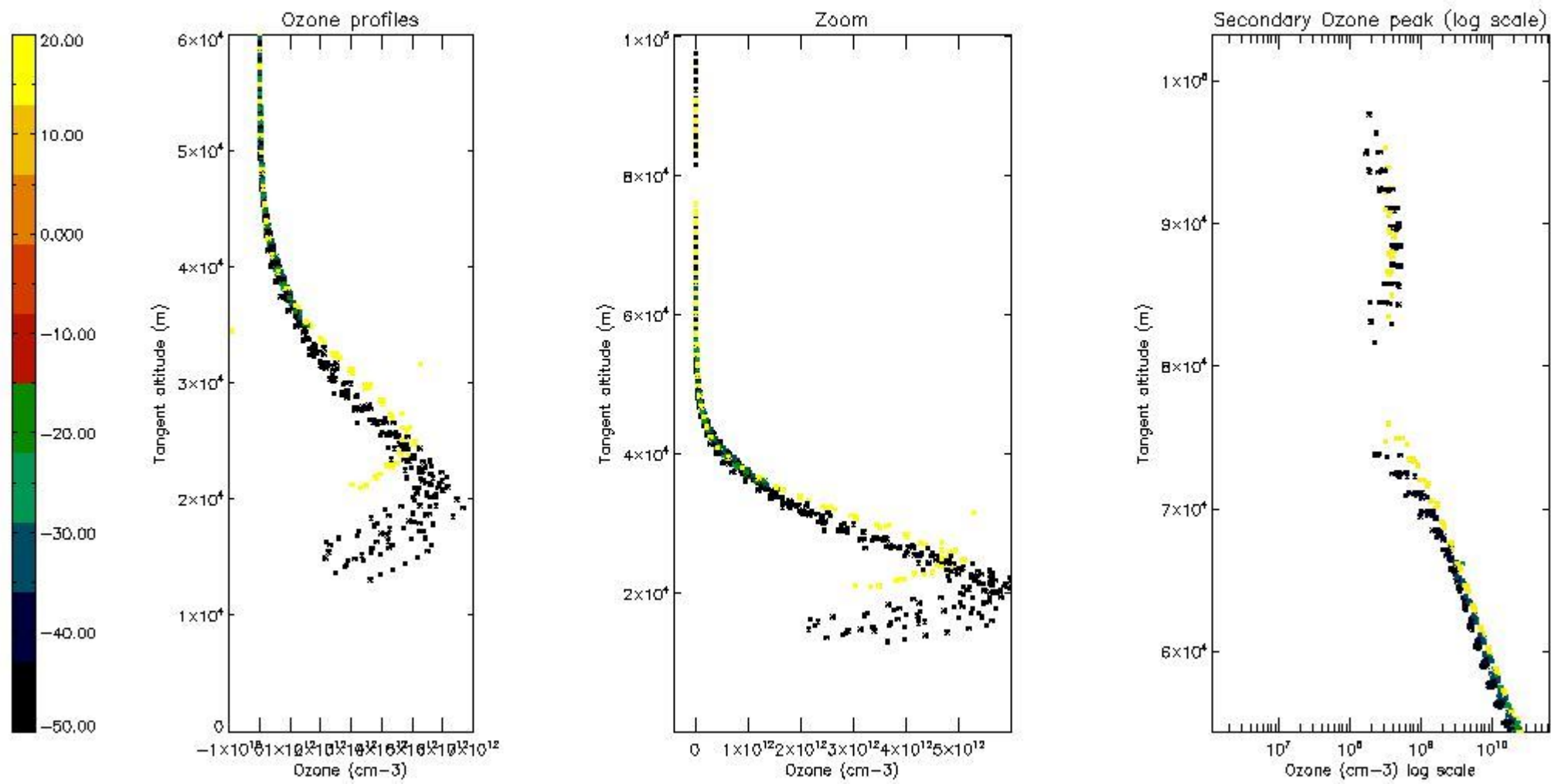
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



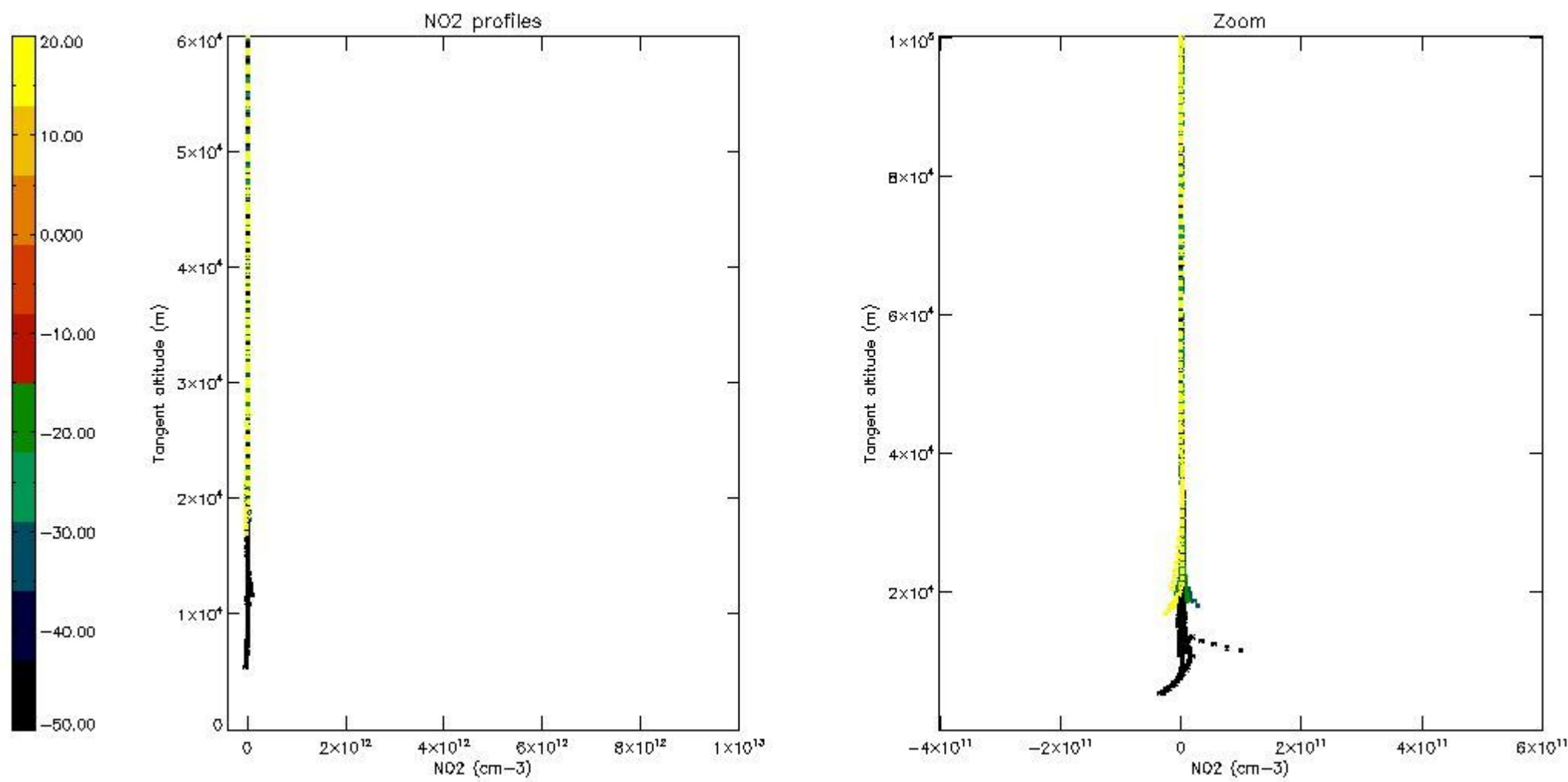
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



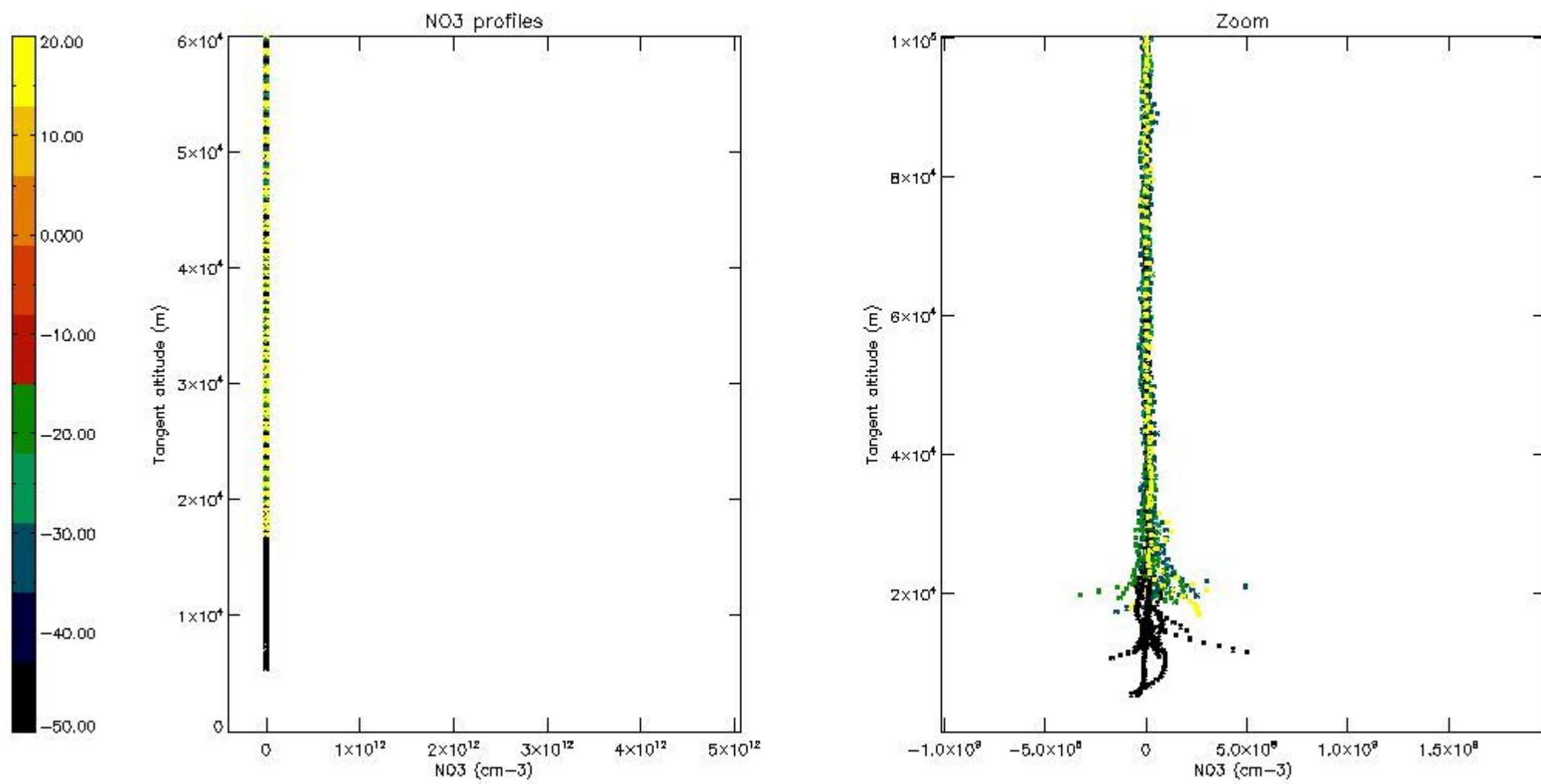
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



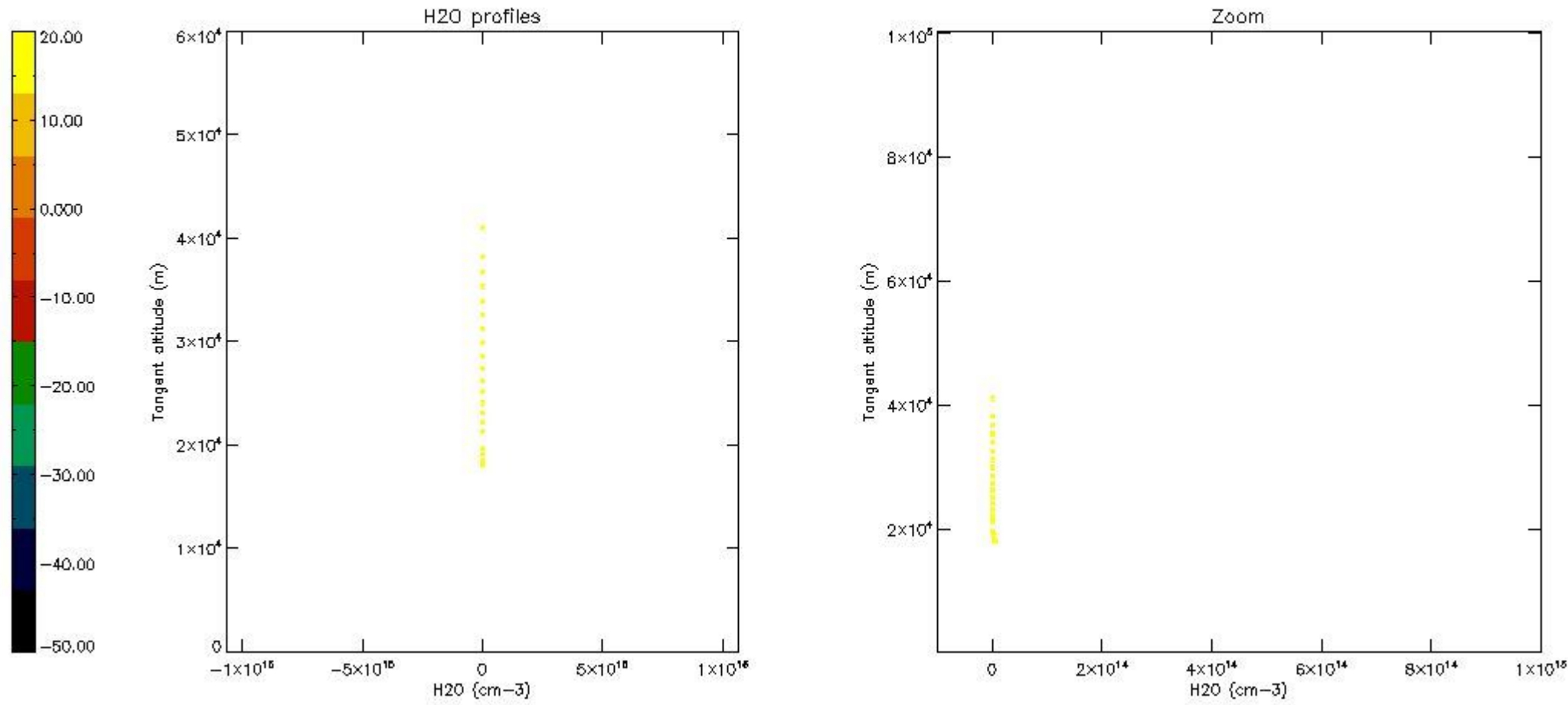
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



5.8 Plot H2O profiles for all STD (only for occultations of stars 1,2,3,4,13,14,16,26,63 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	07-SEP-2011 00:07:01
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	07-SEP-2011 00:07:01
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	07-SEP-2011 00:07:01

GOMOS Level 2 Daily Report

SUMMARY

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

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

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

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

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

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

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

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

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

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

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

[6. Auxiliary Data Files used for the production reported in section 2](#)

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

Item	Value
Time of report generation	24APR2013 17:37:10
Data source version	GOMOS/6.01
Start time of products	07-09-2011 (07SEP2011 00:00:00)
Stop time of products	08-09-2011 (08SEP2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	70
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

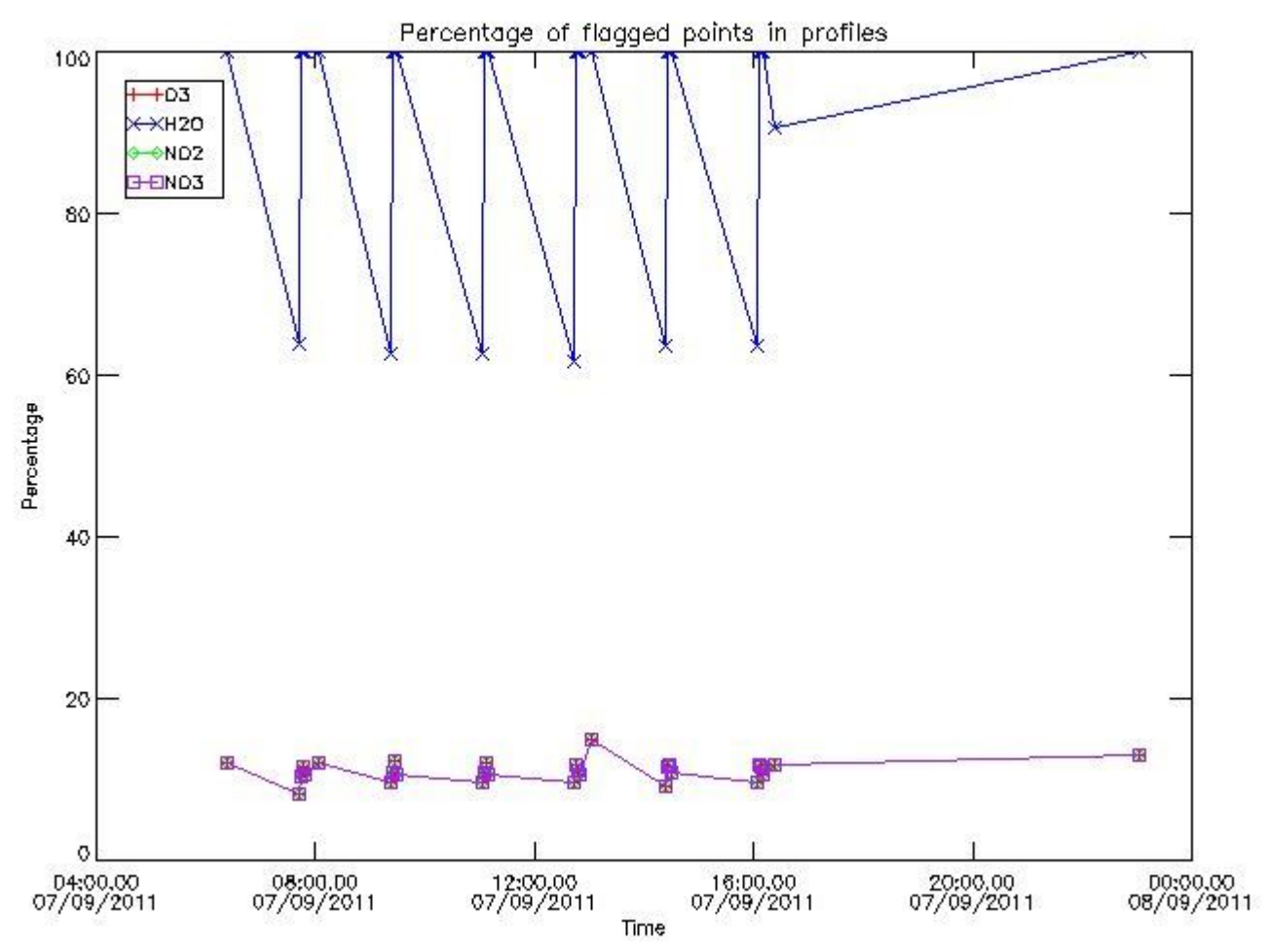
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110907_000701_000000433106_00203_49786_1676.N1	07-SEP-2011 00:07:01	Bright	43.000	90	54Alp Peg	2.4870	11000.	86	49786	No
2	GOM_NL__2PRFIN20110907_001114_000000393106_00203_49786_1677.N1	07-SEP-2011 00:11:14	Bright	38.500	164	44Eta Peg	2.9480	5400.0	77	49786	No
3	GOM_NL__2PRFIN20110907_002134_000000433106_00203_49786_1678.N1	07-SEP-2011 00:21:34	Bright	43.000	74	11Bet Cas	2.2680	6600.0	86	49786	No
4	GOM_NL__2PRFIN20110907_062220_000000433106_00207_49790_1786.N1	07-SEP-2011 06:22:20	Dark	42.500	9	Alp Eri	0.45300	24000.	85	49790	No
5	GOM_NL__2PRFIN20110907_062811_000000493106_00207_49790_1787.N1	07-SEP-2011 06:28:11	Straylight	48.500	84	Alp Phe	2.3970	4500.0	97	49790	No
6	GOM_NL__2PRFIN20110907_063349_000000423106_00207_49790_1788.N1	07-SEP-2011 06:33:49	Straylight	42.000	18	24Alp PsA	1.1660	9700.0	84	49790	No
7	GOM_NL__2PRFIN20110907_064755_000000443106_00207_49790_1789.N1	07-SEP-2011 06:47:55	Bright	43.500	90	54Alp Peg	2.4870	11000.	87	49790	No
8	GOM_NL__2PRFIN20110907_065208_000000423106_00207_49790_1790.N1	07-SEP-2011 06:52:08	Bright	41.500	164	44Eta Peg	2.9480	5400.0	83	49790	No
9	GOM_NL__2PRFIN20110907_070227_000000433106_00207_49790_1791.N1	07-SEP-2011 07:02:27	Bright	43.000	74	11Bet Cas	2.2680	6600.0	86	49790	No
10	GOM_NL__2PRFIN20110907_072527_000000403106_00207_49790_1792.N1	07-SEP-2011 07:25:27	Bright	39.500	24	66Alp Gem	1.5800	10200.	79	49790	No
11	GOM_NL__2PRFIN20110907_074144_000000623106_00207_49790_1793.N1	07-SEP-2011 07:41:44	Dark	61.500	1	9Alp CMa	-1.4400	11000.	123	49790	No
12	GOM_NL__2PRFIN20110907_074417_000000493106_00207_49790_1794.N1	07-SEP-2011 07:44:17	Dark	49.000	23	21Eps CMa	1.5020	26000.	98	49790	No
13	GOM_NL__2PRFIN20110907_074618_000000453106_00207_49790_1795.N1	07-SEP-2011 07:46:18	Dark	44.500	177	1Zet CMa	3.0220	26000.	89	49790	No
14	GOM_NL__2PRFIN20110907_074929_000000483106_00207_49790_1796.N1	07-SEP-2011 07:49:29	Dark	48.000	108	Alp Col	2.6520	15200.	96	49790	No
15	GOM_NL__2PRFIN20110907_080235_000000423106_00208_49791_1819.N1	07-SEP-2011 08:02:35	Dark	42.000	9	Alp Eri	0.45300	24000.	84	49791	No
16	GOM_NL__2PRFIN20110907_080826_000000473106_00208_49791_1820.N1	07-SEP-2011 08:08:26	Straylight	46.500	84	Alp Phe	2.3970	4500.0	93	49791	No
17	GOM_NL__2PRFIN20110907_081403_000000453106_00208_49791_1821.N1	07-SEP-2011 08:14:03	Straylight	45.000	18	24Alp PsA	1.1660	9700.0	90	49791	No
18	GOM_NL__2PRFIN20110907_082809_000000433106_00208_49791_1822.N1	07-SEP-2011 08:28:09	Bright	43.000	90	54Alp Peg	2.4870	11000.	86	49791	No
19	GOM_NL__2PRFIN20110907_083222_000000413106_00208_49791_1823.N1	07-SEP-2011 08:32:22	Bright	40.500	164	44Eta Peg	2.9480	5400.0	81	49791	No
20	GOM_NL__2PRFIN20110907_084241_000000433106_00208_49791_1824.N1	07-SEP-2011 08:42:41	Bright	43.000	74	11Bet Cas	2.2680	6600.0	86	49791	No
21	GOM_NL__2PRFIN20110907_091345_000000473106_00208_49791_1825.N1	07-SEP-2011 09:13:45	Twilight	46.500	8	10Alp CMi	0.40000	6500.0	93	49791	No
22	GOM_NL__2PRFIN20110907_092159_000000533106_00208_49791_1826.N1	07-SEP-2011 09:21:59	Dark	52.500	1	9Alp CMa	-1.4400	11000.	105	49791	No
23	GOM_NL__2PRFIN20110907_092432_000000483106_00208_49791_1827.N1	07-SEP-2011 09:24:32	Dark	47.500	23	21Eps CMa	1.5020	26000.	95	49791	No
24	GOM_NL__2PRFIN20110907_092633_000000463106_00208_49791_1828.N1	07-SEP-2011 09:26:33	Dark	46.000	177	1Zet CMa	3.0220	26000.	92	49791	No
25	GOM_NL__2PRFIN20110907_092944_000000493106_00208_49791_1829.N1	07-SEP-2011 09:29:44	Dark	48.500	108	Alp Col	2.6520	15200.	97	49791	No
26	GOM_NL__2PRFIN20110907_094840_000000483106_00209_49792_1905.N1	07-SEP-2011 09:48:40	Straylight	48.000	84	Alp Phe	2.3970	4500.0	96	49792	No
27	GOM_NL__2PRFIN20110907_095417_000000473106_00209_49792_1906.N1	07-SEP-2011 09:54:17	Straylight	46.500	18	24Alp PsA	1.1660	9700.0	93	49792	No
28	GOM_NL__2PRFIN20110907_100823_000000433106_00209_49792_1907.N1	07-SEP-2011 10:08:23	Bright	42.500	90	54Alp Peg	2.4870	11000.	85	49792	No
29	GOM_NL__2PRFIN20110907_101236_000000403106_00209_49792_1908.N1	07-SEP-2011 10:12:36	Bright	39.500	164	44Eta Peg	2.9480	5400.0	79	49792	No
30	GOM_NL__2PRFIN20110907_102254_000000433106_00209_49792_1909.N1	07-SEP-2011 10:22:54	Bright	42.500	74	11Bet Cas	2.2680	6600.0	85	49792	No
31	GOM_NL__2PRFIN20110907_110214_000000533106_00209_49792_1910.N1	07-SEP-2011 11:02:14	Dark	52.500	1	9Alp CMa	-1.4400	11000.	105	49792	No
32	GOM_NL__2PRFIN20110907_110446_000000473106_00209_49792_1911.N1	07-SEP-2011 11:04:46	Dark	46.500	23	21Eps CMa	1.5020	26000.	93	49792	No
33	GOM_NL__2PRFIN20110907_110648_000000473106_00209_49792_1912.N1	07-SEP-2011 11:06:48	Dark	46.500	177	1Zet CMa	3.0220	26000.	93	49792	No
34	GOM_NL__2PRFIN20110907_110959_000000483106_00209_49792_1913.N1	07-SEP-2011 11:09:59	Dark	48.000	108	Alp Col	2.6520	15200.	96	49792	No
35	GOM_NL__2PRFIN20110907_112855_000000503106_00210_49793_1932.N1	07-SEP-2011 11:28:55	Straylight	49.500	84	Alp Phe	2.3970	4500.0	99	49793	No
36	GOM_NL__2PRFIN20110907_113431_000000423106_00210_49793_1933.N1	07-SEP-2011 11:34:31	Straylight	42.000	18	24Alp PsA	1.1660	9700.0	84	49793	No
37	GOM_NL__2PRFIN20110907_124229_000000533106_00210_49793_1934.N1	07-SEP-2011 12:42:29	Dark	52.500	1	9Alp CMa	-1.4400	11000.	105	49793	No
38	GOM_NL__2PRFIN20110907_124501_000000443106_00210_49793_1935.N1	07-SEP-2011 12:45:01	Dark	43.500	23	21Eps CMa	1.5020	26000.	87	49793	No
39	GOM_NL__2PRFIN20110907_124703_000000463106_00210_49793_1936.N1	07-SEP-2011 12:47:03	Dark	45.500	177	1Zet CMa	3.0220	26000.	91	49793	No
40	GOM_NL__2PRFIN20110907_125014_000000483106_00210_49793_1937.N1	07-SEP-2011 12:50:14	Dark	48.000	108	Alp Col	2.6520	15200.	96	49793	No
41	GOM_NL__2PRFIN20110907_130318_000000443106_00211_49794_1957.N1	07-SEP-2011 13:03:18	Dark	44.000	9	Alp Eri	0.45300	24000.	88	49794	No
42	GOM_NL__2PRFIN20110907_130909_000000443106_00211_49794_1958.N1	07-SEP-2011 13:09:09	Straylight	44.000	84	Alp Phe	2.3970	4500.0	88	49794	No

43	GOM_NL__2PRFIN20110907_131445_000000413106_00211_49794_1959.N1	07-SEP-2011 13:14:45	Straylight	41.000	18	24Alp PsA	1.1660	9700.0	82	49794	No
44	GOM_NL__2PRFIN20110907_134321_000000443106_00211_49794_1960.N1	07-SEP-2011 13:43:21	Bright	43.500	74	11Bet Cas	2.2680	6600.0	87	49794	No
45	GOM_NL__2PRFIN20110907_142243_000000613106_00211_49794_1961.N1	07-SEP-2011 14:22:43	Dark	61.000	1	9Alp CMa	-1.4400	11000.	122	49794	No
46	GOM_NL__2PRFIN20110907_142516_000000453106_00211_49794_1962.N1	07-SEP-2011 14:25:16	Dark	44.500	23	21Eps CMa	1.5020	26000.	89	49794	No
47	GOM_NL__2PRFIN20110907_142718_000000443106_00211_49794_1963.N1	07-SEP-2011 14:27:18	Dark	43.500	177	1Zet CMa	3.0220	26000.	87	49794	No
48	GOM_NL__2PRFIN20110907_143029_000000473106_00211_49794_1964.N1	07-SEP-2011 14:30:29	Dark	46.500	108	Alp Col	2.6520	15200.	93	49794	No
49	GOM_NL__2PRFIN20110907_144924_000000513106_00212_49795_2012.N1	07-SEP-2011 14:49:24	Straylight	50.500	84	Alp Phe	2.3970	4500.0	101	49795	No
50	GOM_NL__2PRFIN20110907_145500_000000443106_00212_49795_2013.N1	07-SEP-2011 14:55:00	Straylight	43.500	18	24Alp PsA	1.1660	9700.0	87	49795	No
51	GOM_NL__2PRFIN20110907_150903_000000433106_00212_49795_2014.N1	07-SEP-2011 15:09:03	Bright	43.000	90	54Alp Peg	2.4870	11000.	86	49795	No
52	GOM_NL__2PRFIN20110907_151316_000000403106_00212_49795_2015.N1	07-SEP-2011 15:13:16	Bright	40.000	164	44Eta Peg	2.9480	5400.0	80	49795	No
53	GOM_NL__2PRFIN20110907_152334_000000403106_00212_49795_2016.N1	07-SEP-2011 15:23:34	Bright	40.000	74	11Bet Cas	2.2680	6600.0	80	49795	No
54	GOM_NL__2PRFIN20110907_155442_000000503106_00212_49795_2017.N1	07-SEP-2011 15:54:42	Twilight	49.500	8	10Alp CMi	0.40000	6500.0	99	49795	No
55	GOM_NL__2PRFIN20110907_160258_000000533106_00212_49795_2018.N1	07-SEP-2011 16:02:58	Dark	52.500	1	9Alp CMa	-1.4400	11000.	105	49795	No
56	GOM_NL__2PRFIN20110907_160530_000000433106_00212_49795_2019.N1	07-SEP-2011 16:05:30	Dark	43.000	23	21Eps CMa	1.5020	26000.	86	49795	No
57	GOM_NL__2PRFIN20110907_160733_000000453106_00212_49795_2020.N1	07-SEP-2011 16:07:33	Dark	44.500	177	1Zet CMa	3.0220	26000.	89	49795	No
58	GOM_NL__2PRFIN20110907_161044_000000483106_00212_49795_2021.N1	07-SEP-2011 16:10:44	Dark	48.000	108	Alp Col	2.6520	15200.	96	49795	No
59	GOM_NL__2PRFIN20110907_162347_000000443106_00213_49796_2047.N1	07-SEP-2011 16:23:47	Dark	43.500	9	Alp Eri	0.45300	24000.	87	49796	No
60	GOM_NL__2PRFIN20110907_162938_000000493106_00213_49796_2048.N1	07-SEP-2011 16:29:38	Straylight	49.000	84	Alp Phe	2.3970	4500.0	98	49796	No
61	GOM_NL__2PRFIN20110907_163514_000000453106_00213_49796_2049.N1	07-SEP-2011 16:35:14	Straylight	45.000	18	24Alp PsA	1.1660	9700.0	90	49796	No
62	GOM_NL__2PRFIN20110907_164917_000000443106_00213_49796_2050.N1	07-SEP-2011 16:49:17	Bright	44.000	90	54Alp Peg	2.4870	11000.	88	49796	No
63	GOM_NL__2PRFIN20110907_165330_000000413106_00213_49796_2051.N1	07-SEP-2011 16:53:30	Bright	40.500	164	44Eta Peg	2.9480	5400.0	81	49796	No
64	GOM_NL__2PRFIN20110907_170348_000000433106_00213_49796_2052.N1	07-SEP-2011 17:03:48	Bright	42.500	74	11Bet Cas	2.2680	6600.0	85	49796	No
65	GOM_NL__2PRFIN20110907_230323_000000403106_00217_49800_2182.N1	07-SEP-2011 23:03:23	Dark	39.500	143	Alp Hyi	2.8570	7200.0	79	49800	No
66	GOM_NL__2PRFIN20110907_231036_000000473106_00217_49800_2183.N1	07-SEP-2011 23:10:36	Straylight	47.000	84	Alp Phe	2.3970	4500.0	94	49800	No
67	GOM_NL__2PRFIN20110907_231611_000000443106_00217_49800_2184.N1	07-SEP-2011 23:16:11	Straylight	43.500	18	24Alp PsA	1.1660	9700.0	87	49800	No
68	GOM_NL__2PRFIN20110907_233012_000000433106_00217_49800_2185.N1	07-SEP-2011 23:30:12	Bright	43.000	90	54Alp Peg	2.4870	11000.	86	49800	No
69	GOM_NL__2PRFIN20110907_233425_000000413106_00217_49800_2186.N1	07-SEP-2011 23:34:25	Bright	41.000	164	44Eta Peg	2.9480	5400.0	82	49800	No
70	GOM_NL__2PRFIN20110907_234441_000000443106_00217_49800_2187.N1	07-SEP-2011 23:44:41	Bright	44.000	74	11Bet Cas	2.2680	6600.0	88	49800	No

3. Quality information per product

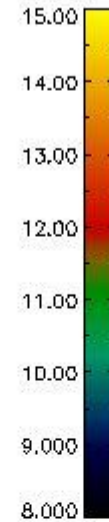
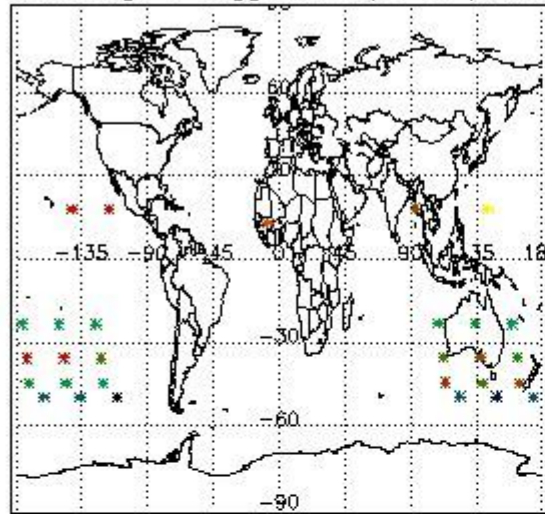
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

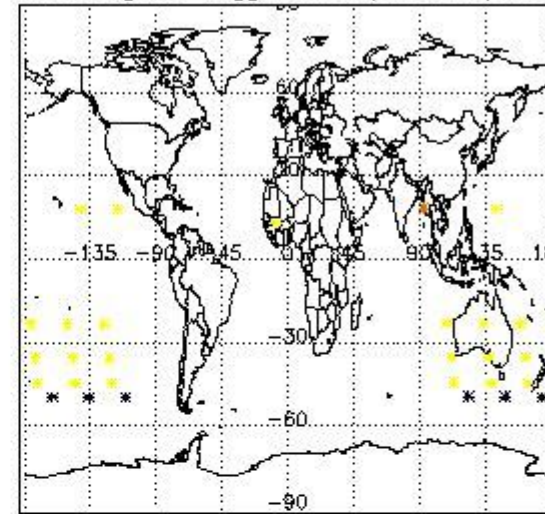


3.2 Plot quality information per product (world map)

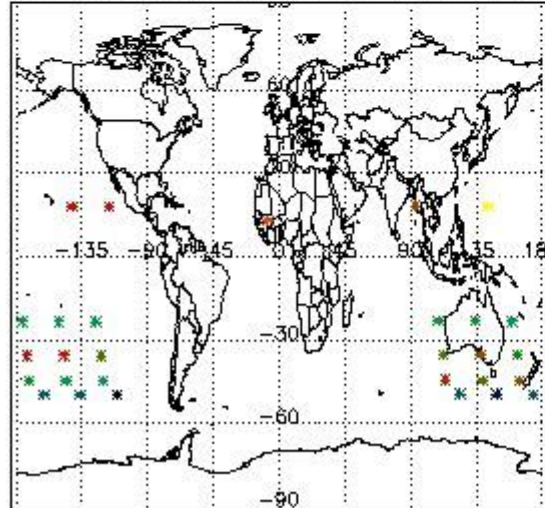
Percentage of flagged data per O3 profile



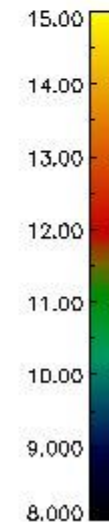
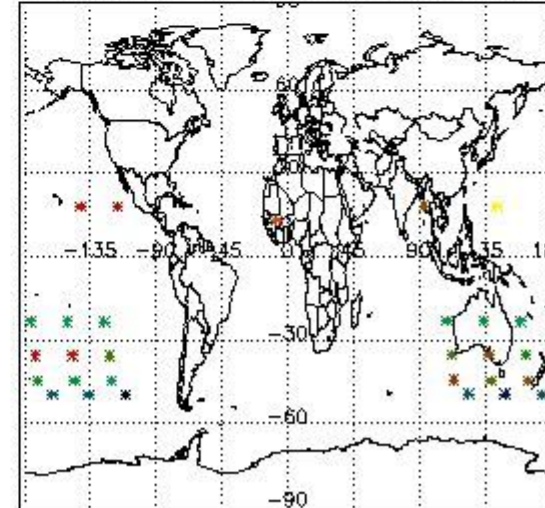
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

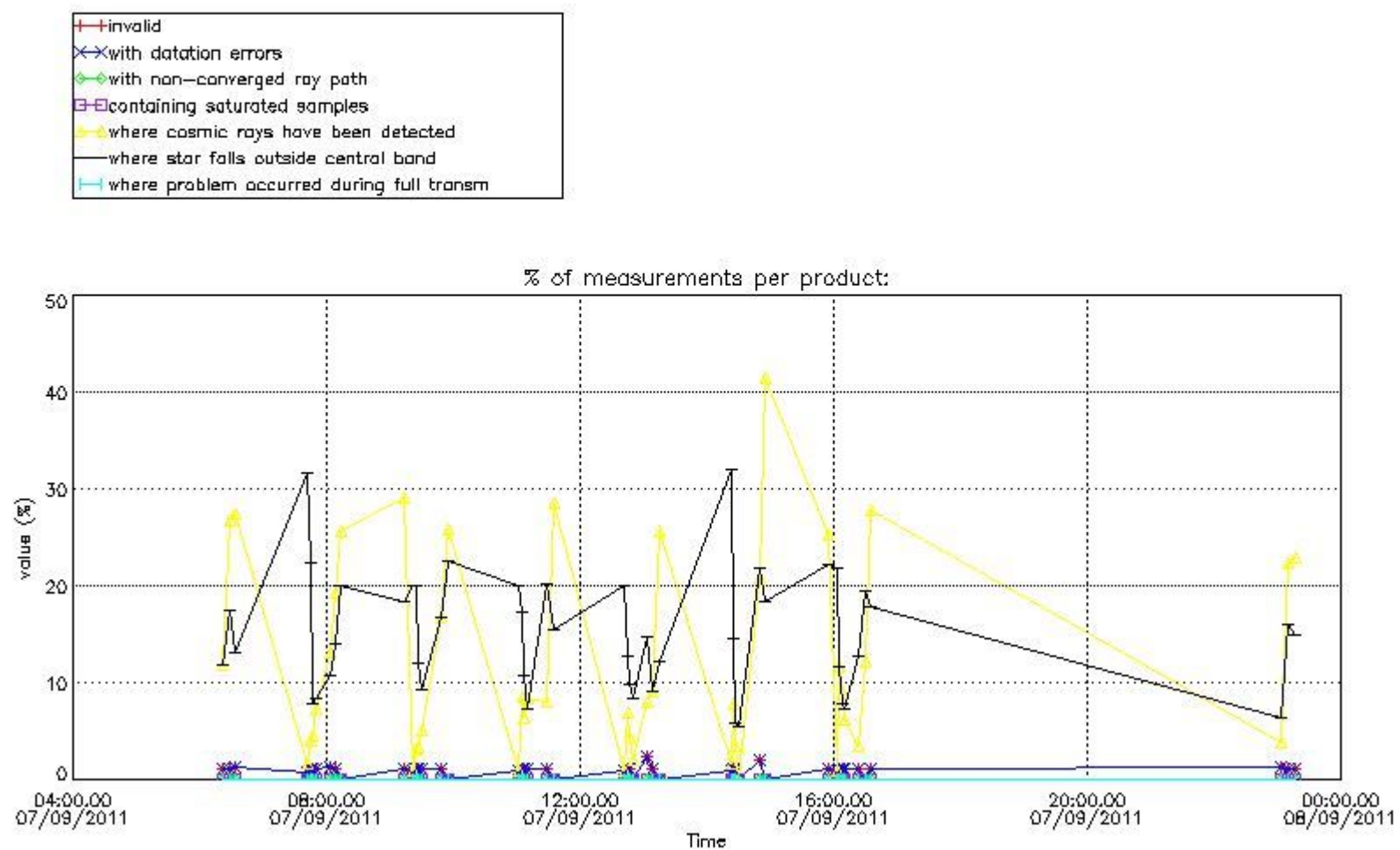


4. Level 1 quality information per product

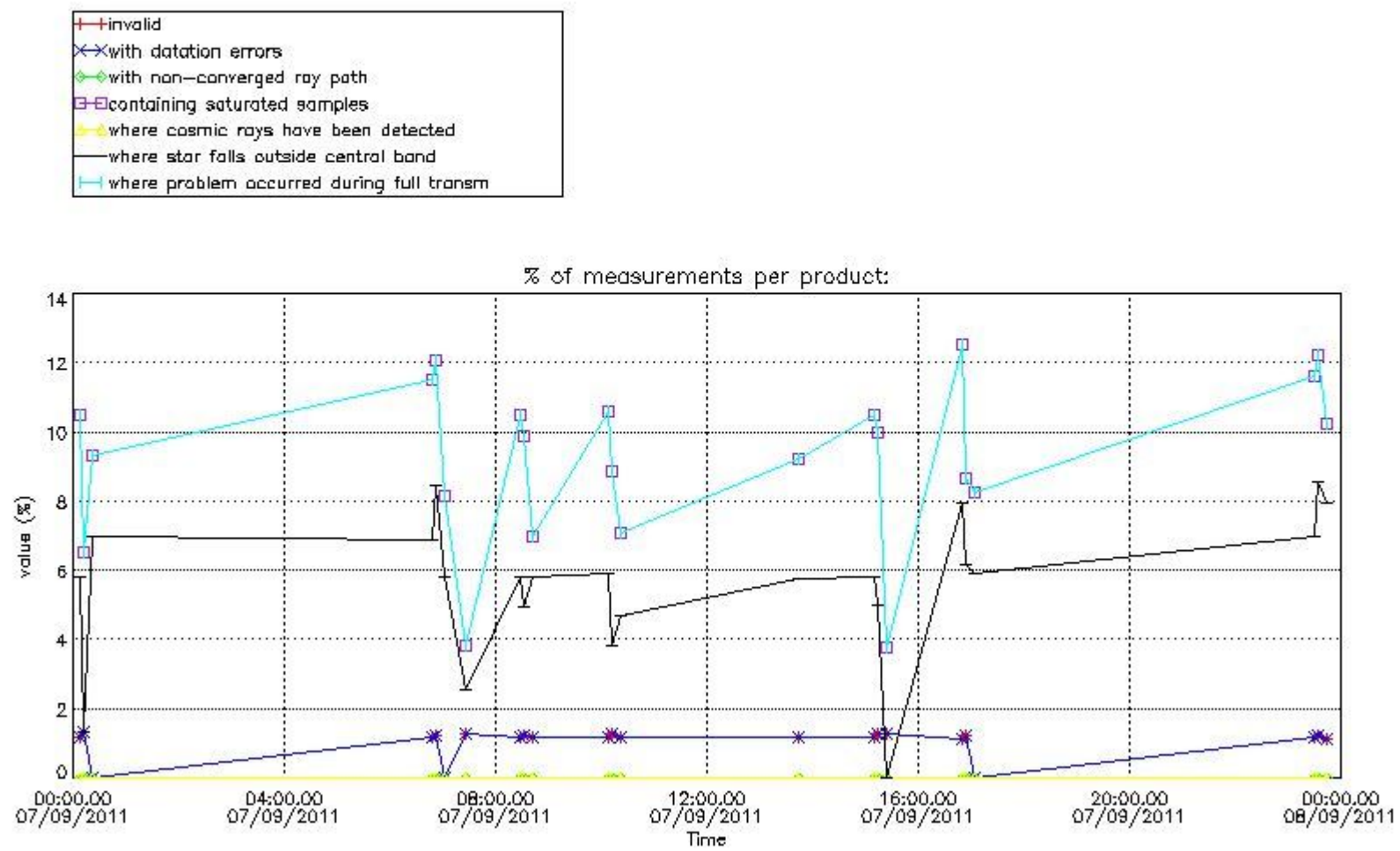
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

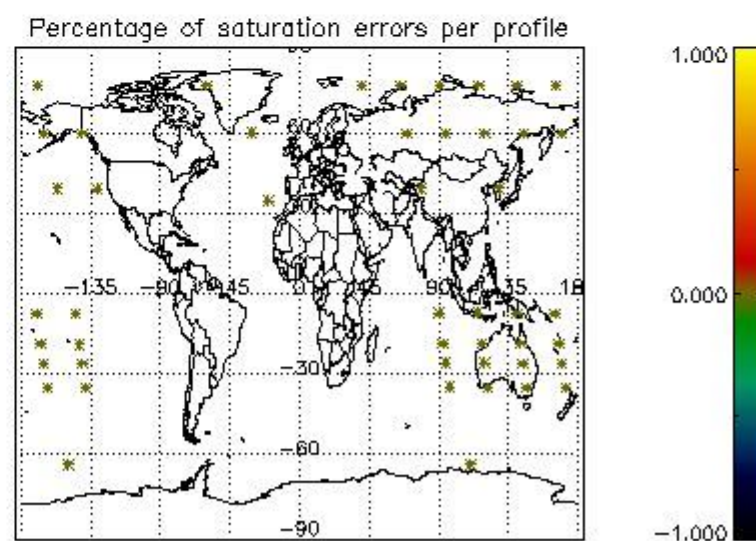
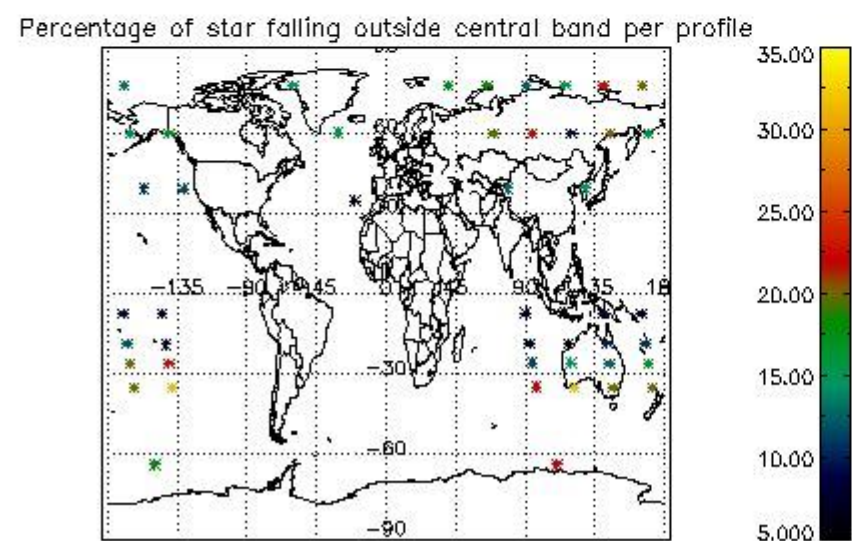
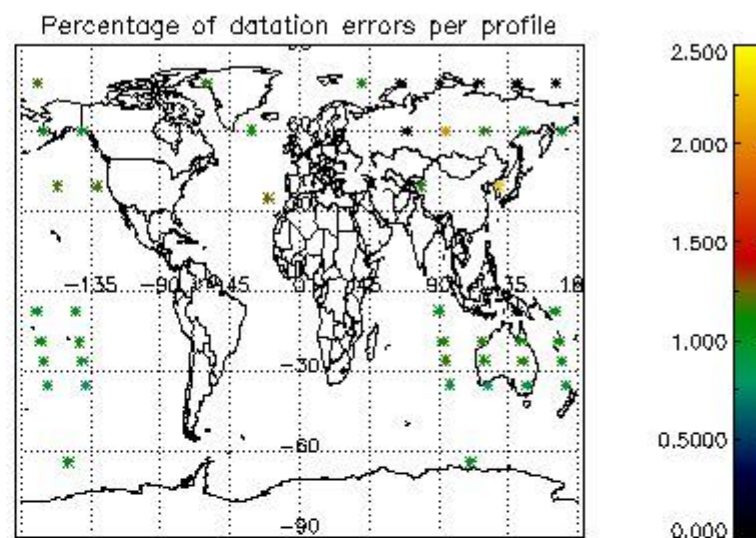
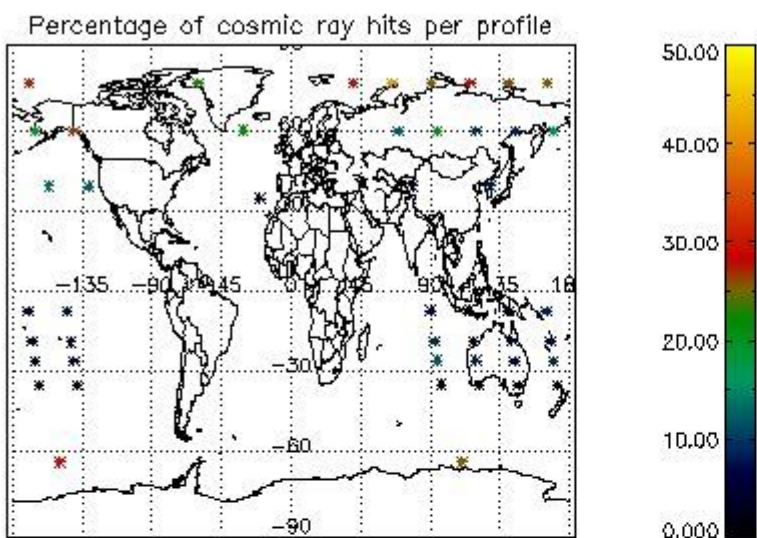


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

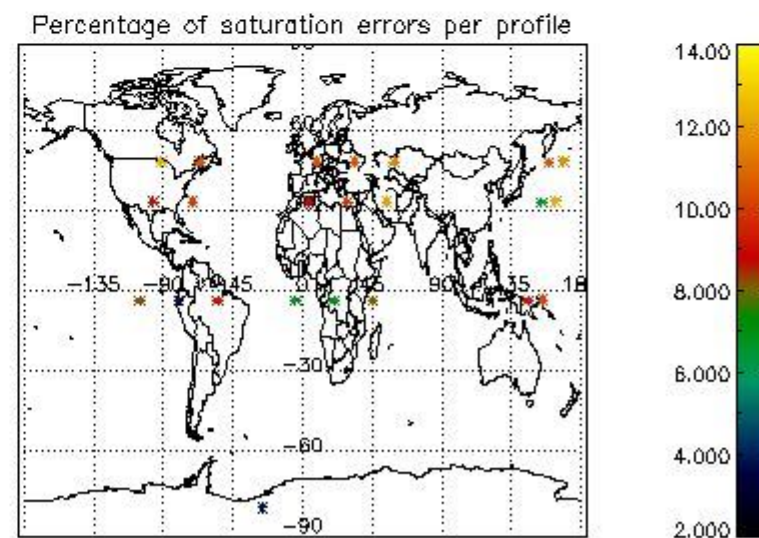
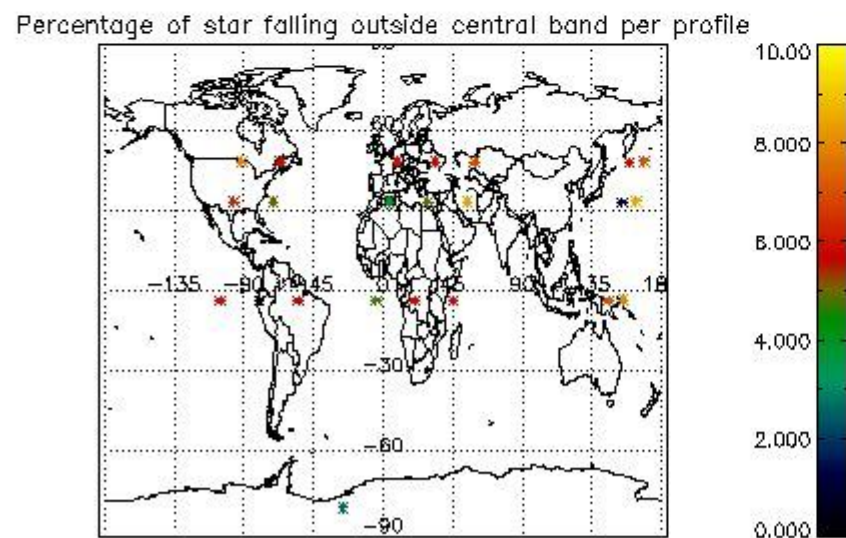
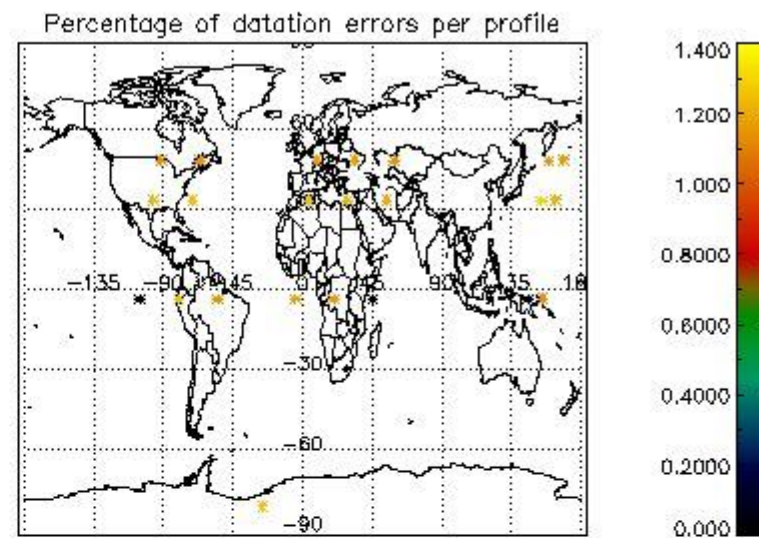
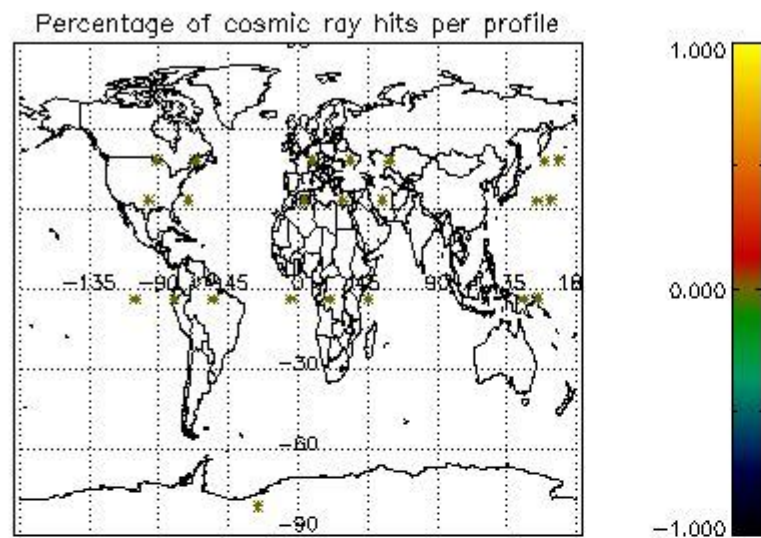


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

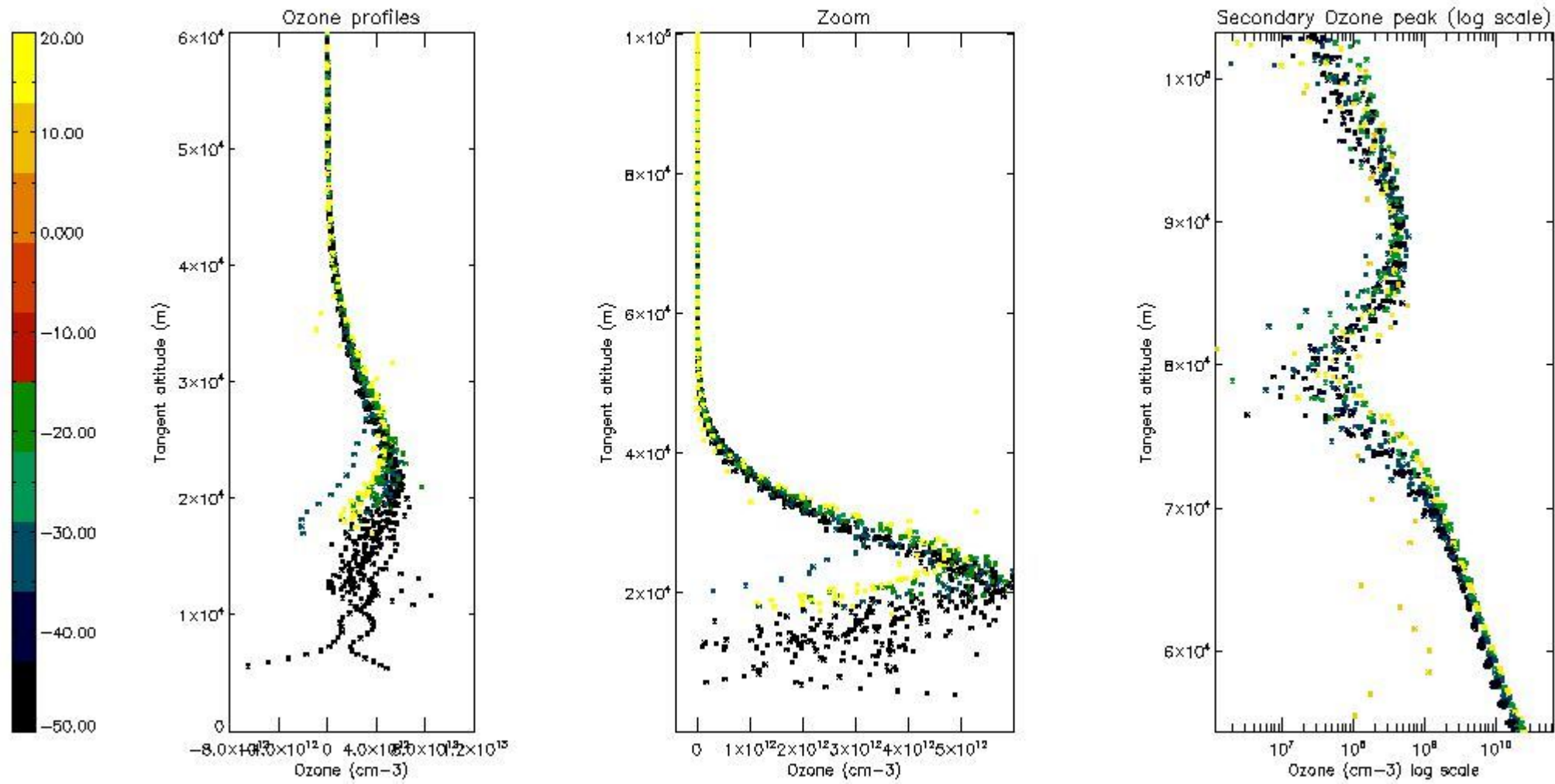
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	44
STD < 20	29

STD < 10	26
STD < 5	19

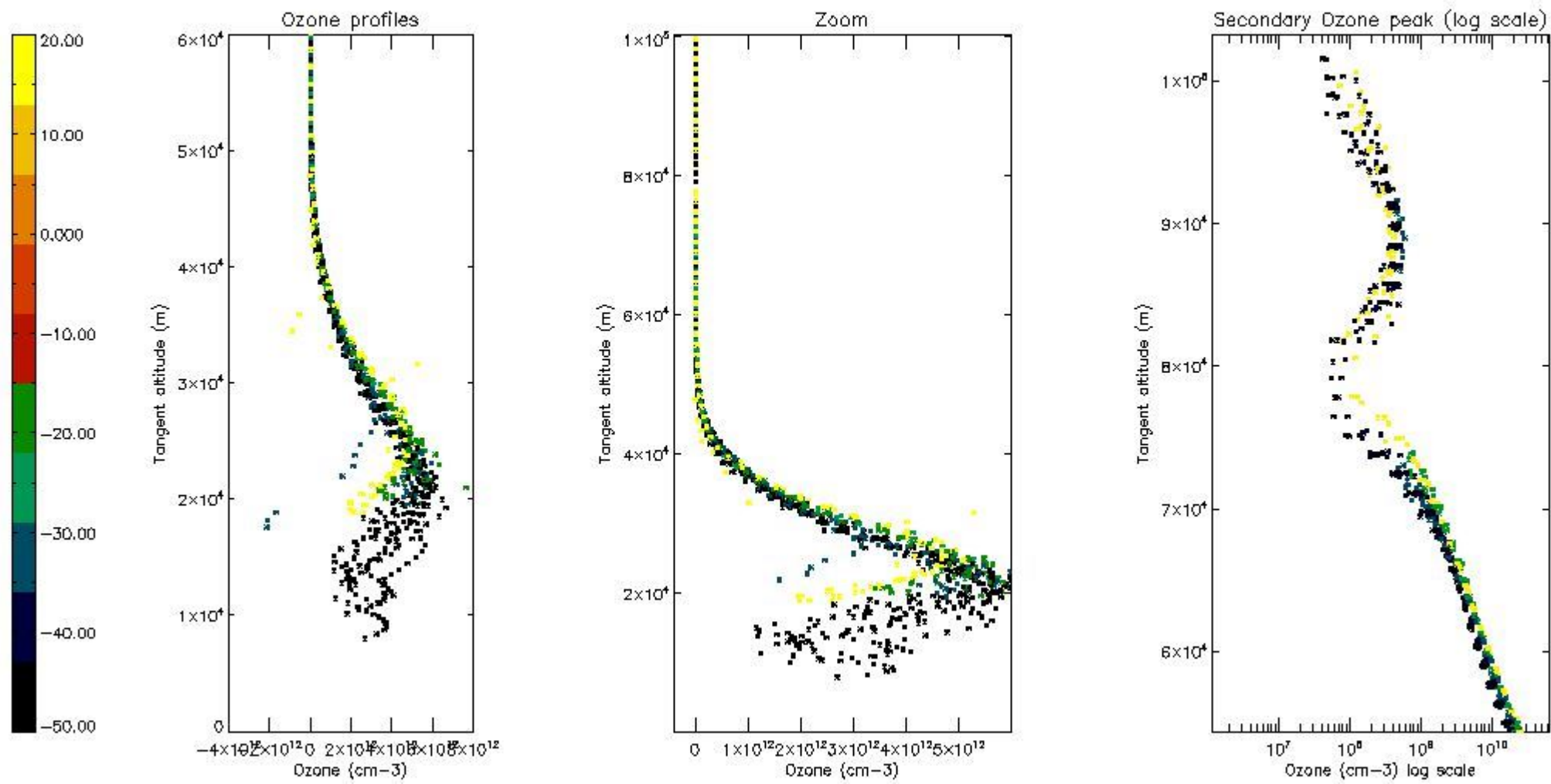
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



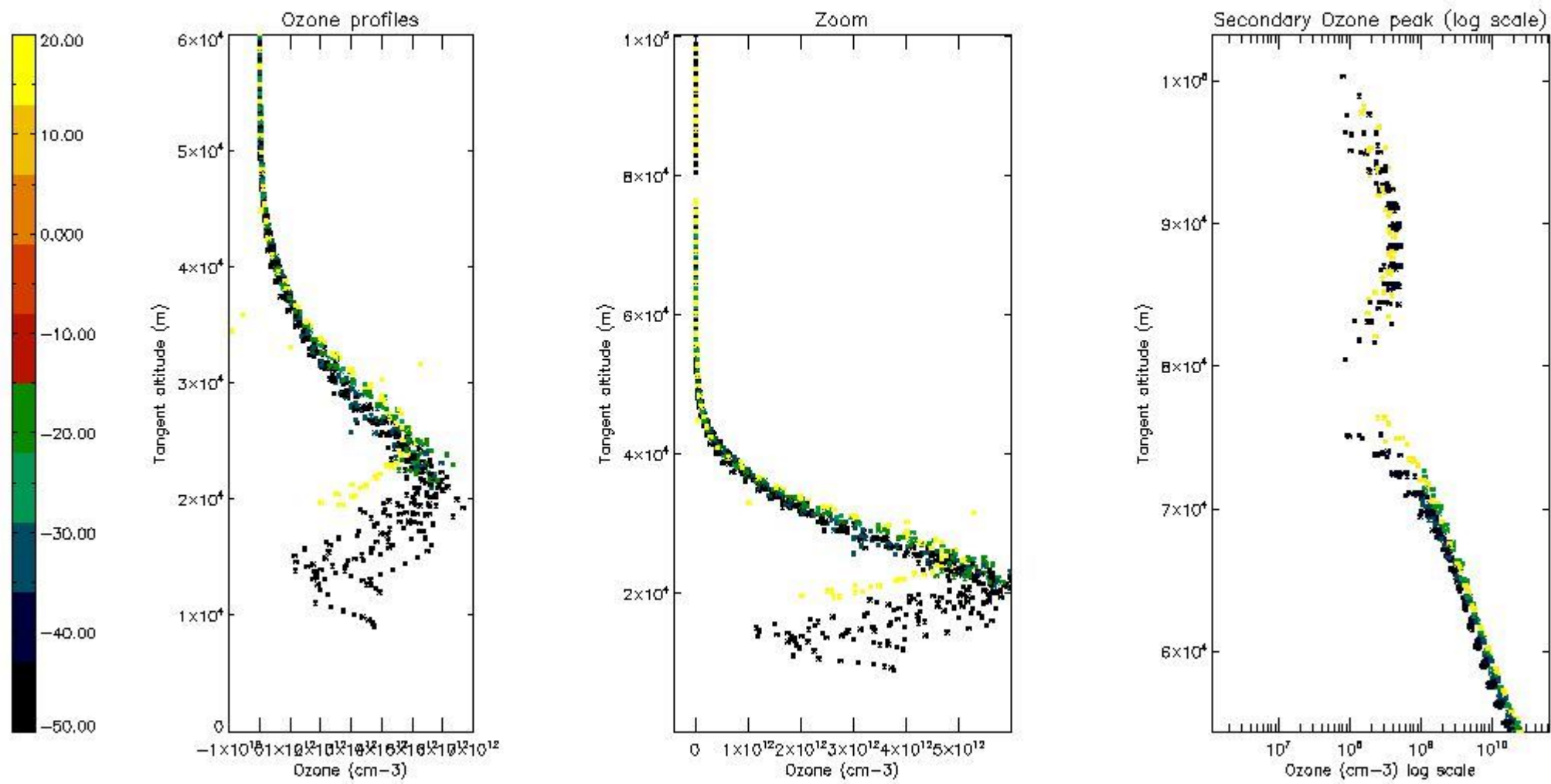
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



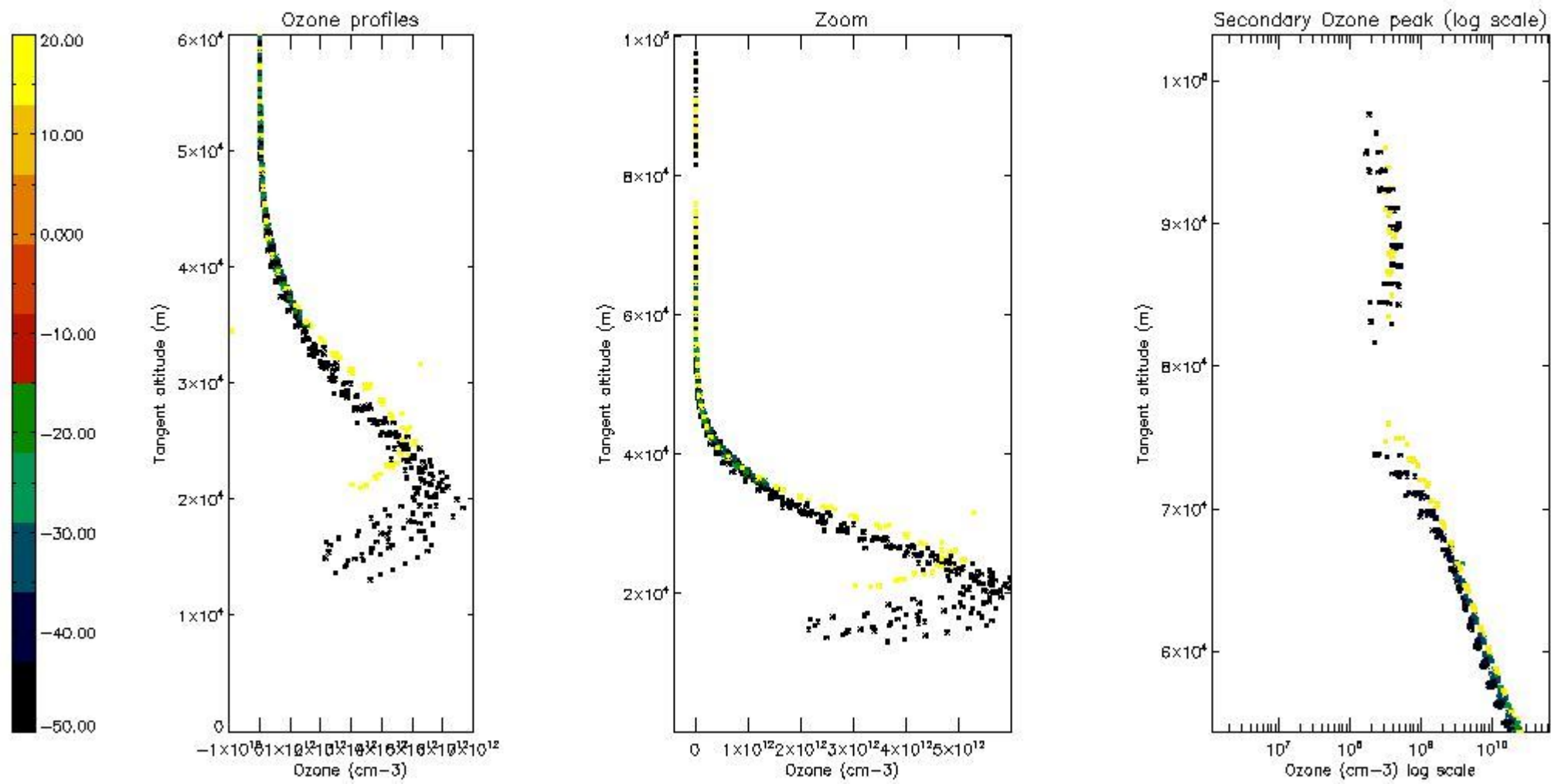
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



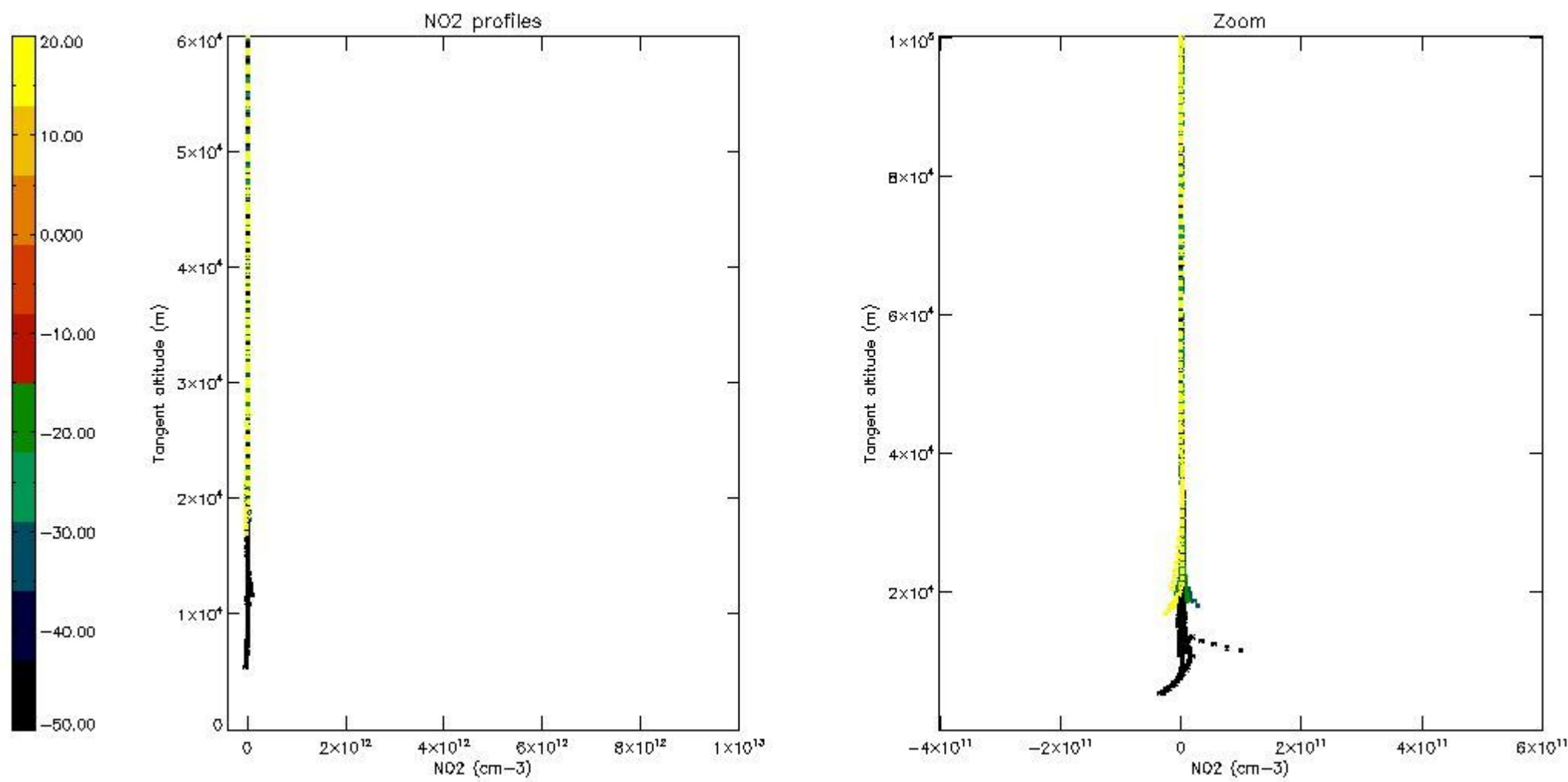
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



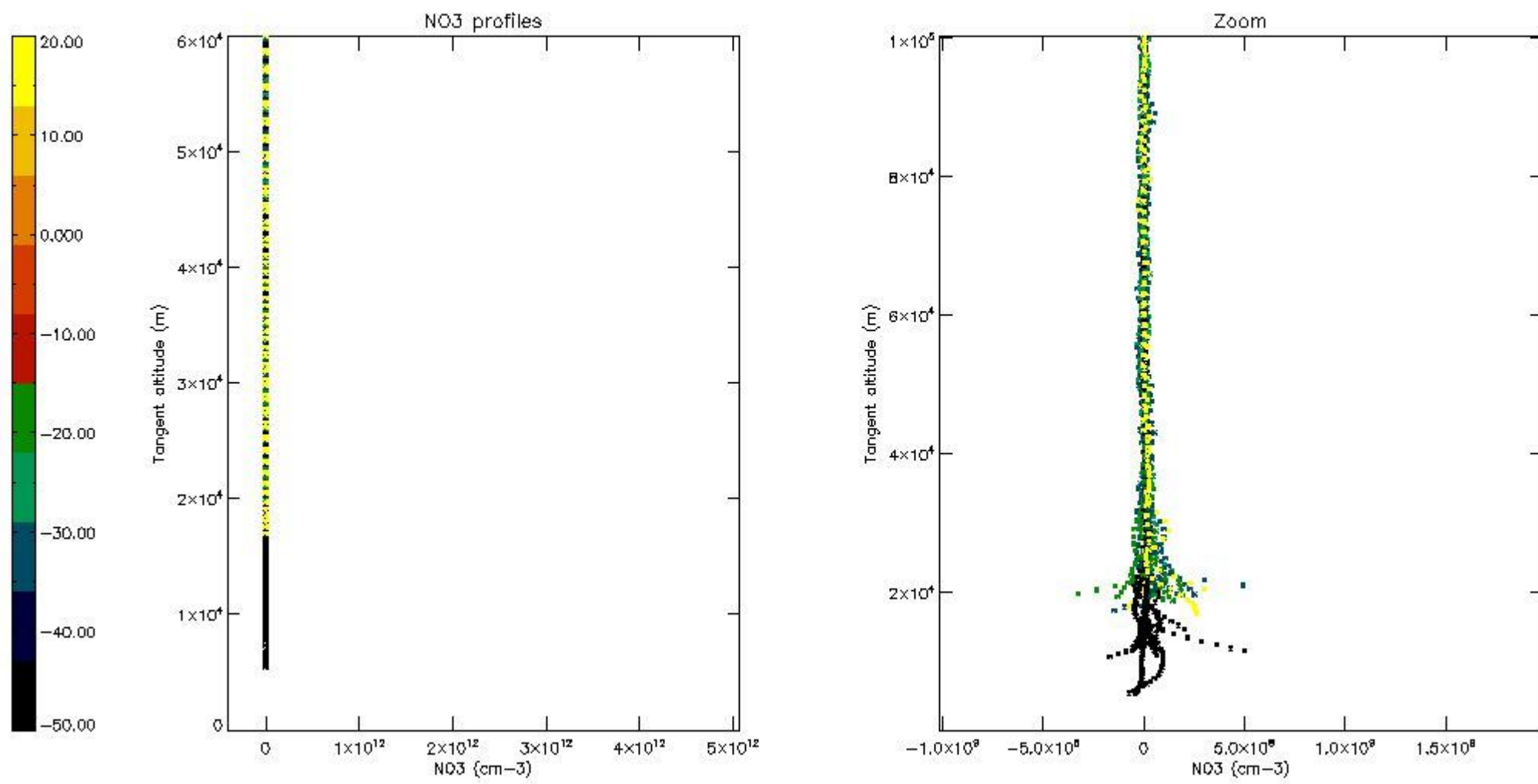
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



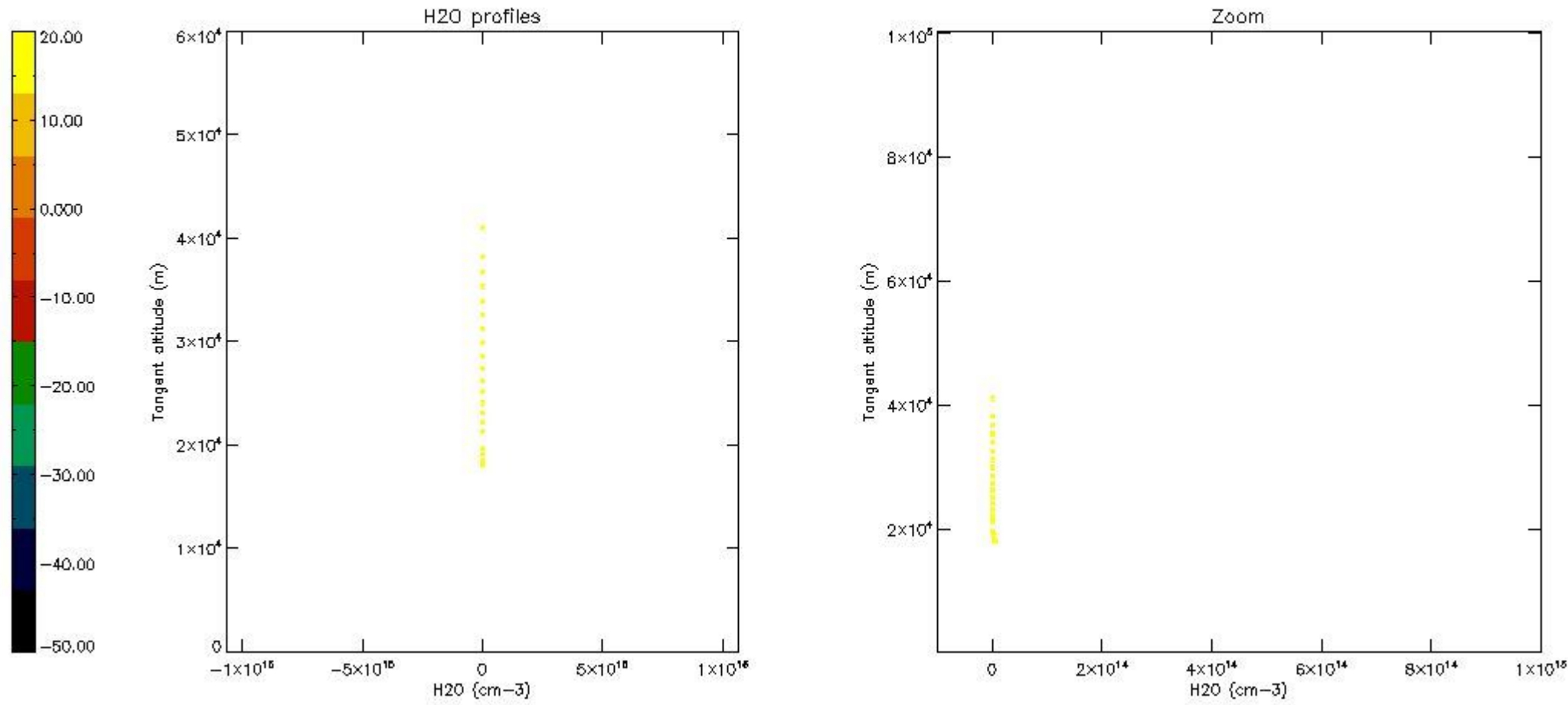
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

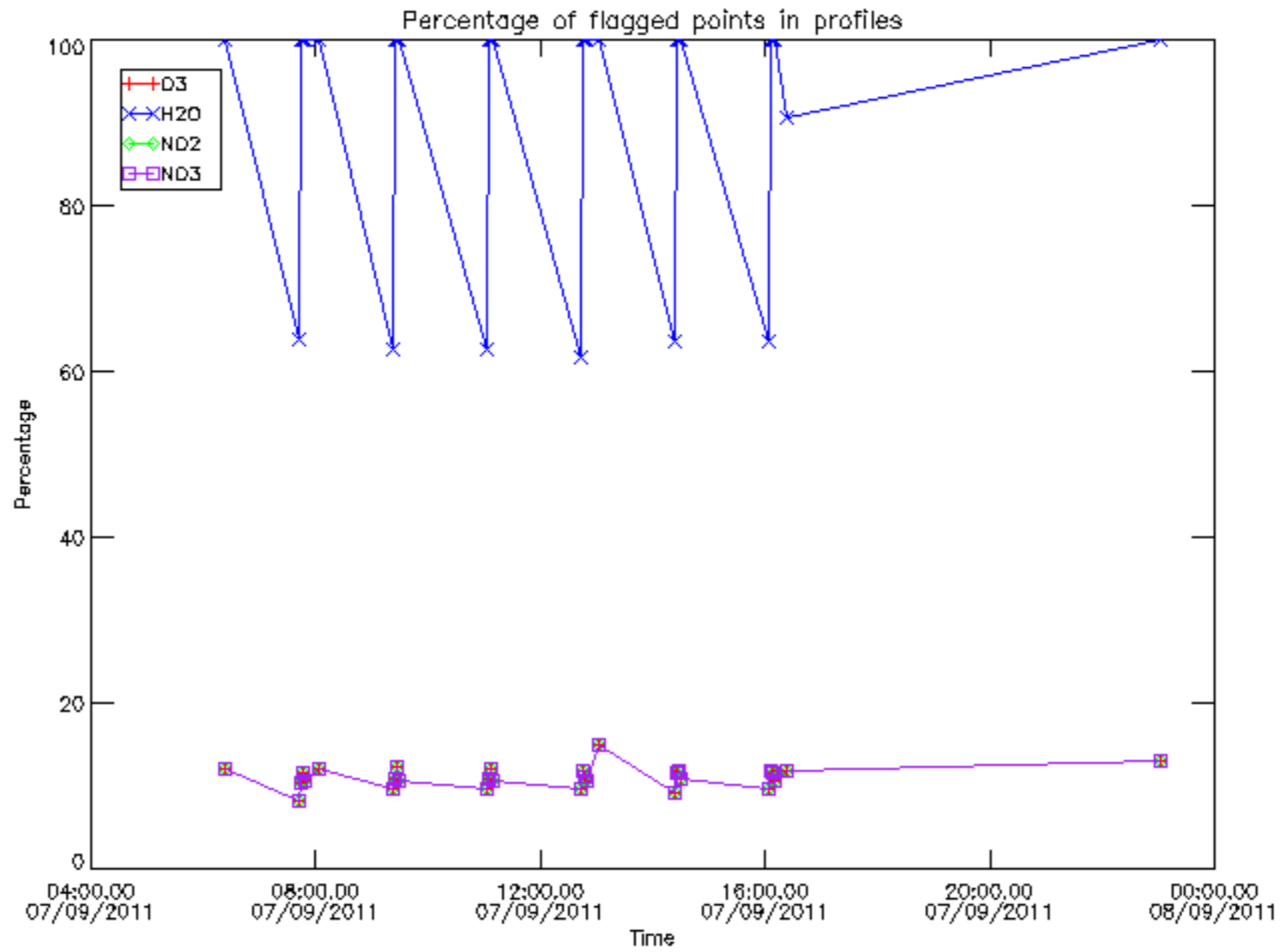
The colorbar represents the latitude.



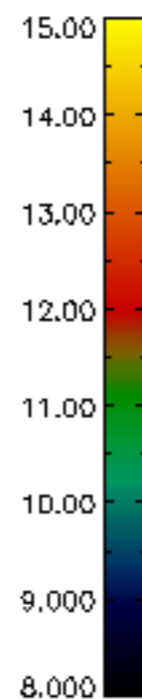
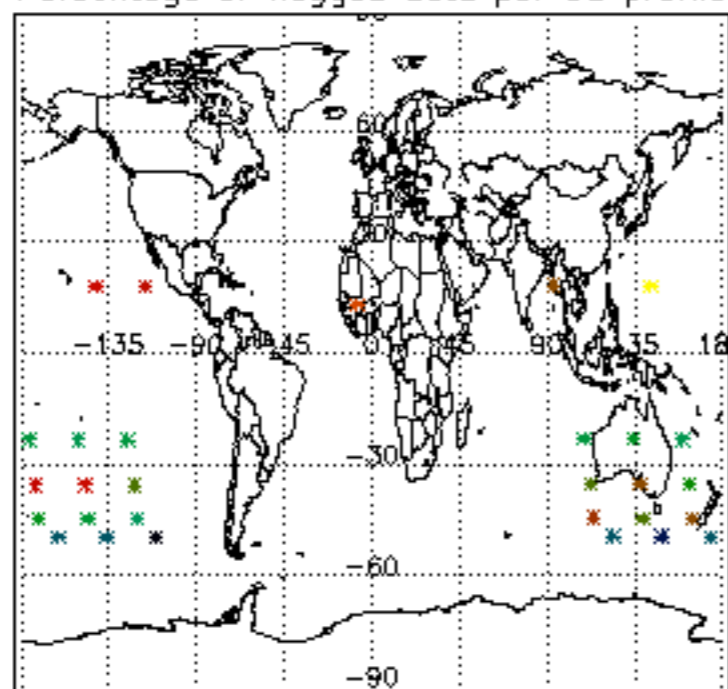
6. Auxiliary Data Files used for the production reported in section 2

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.

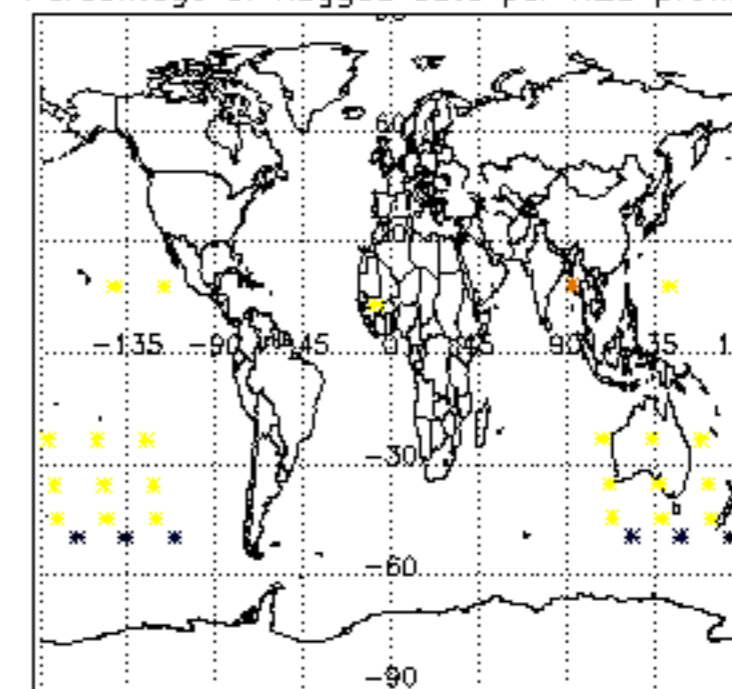
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	07-SEP-2011 00:07:01
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	07-SEP-2011 00:07:01
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	07-SEP-2011 00:07:01



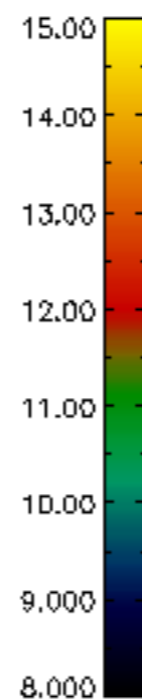
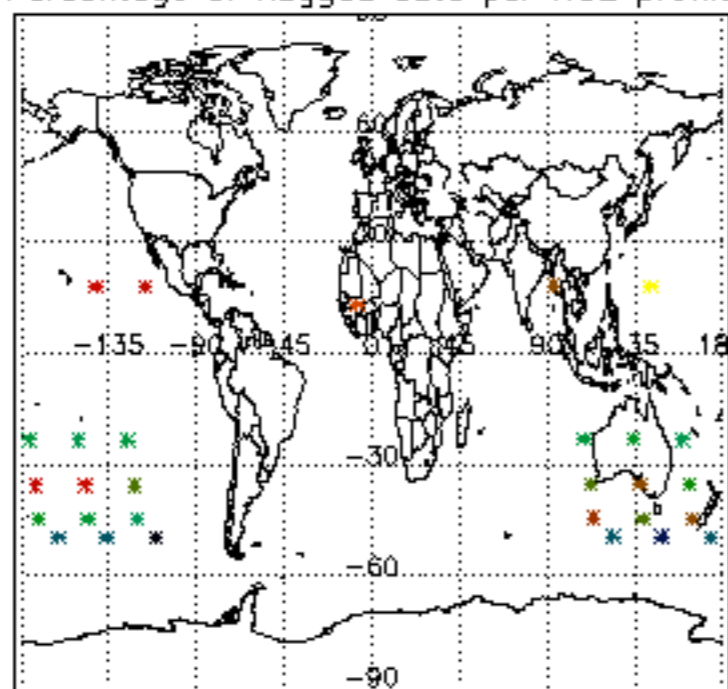
Percentage of flagged data per D3 profile



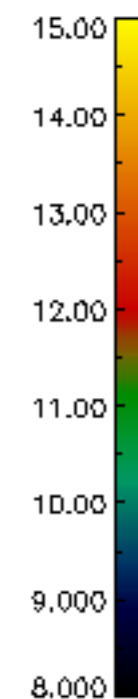
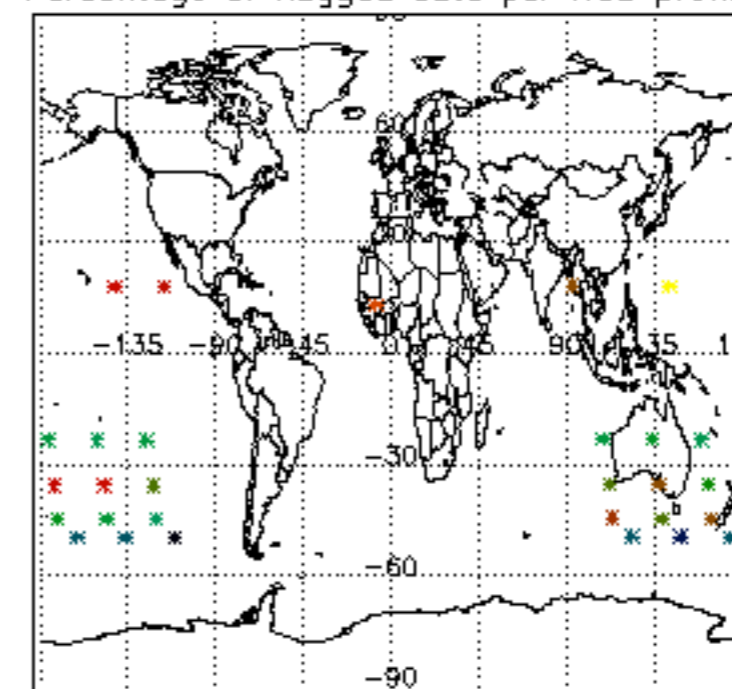
Percentage of flagged data per H2O profile

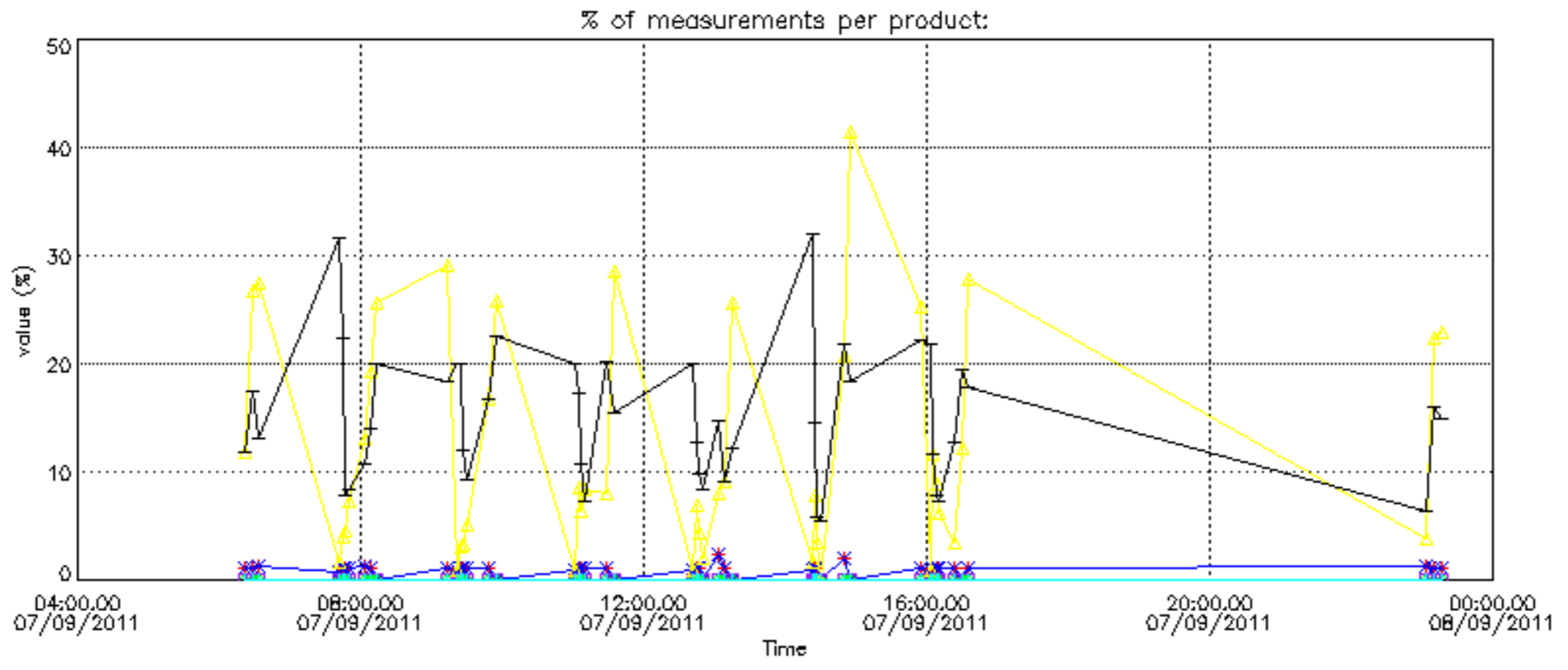


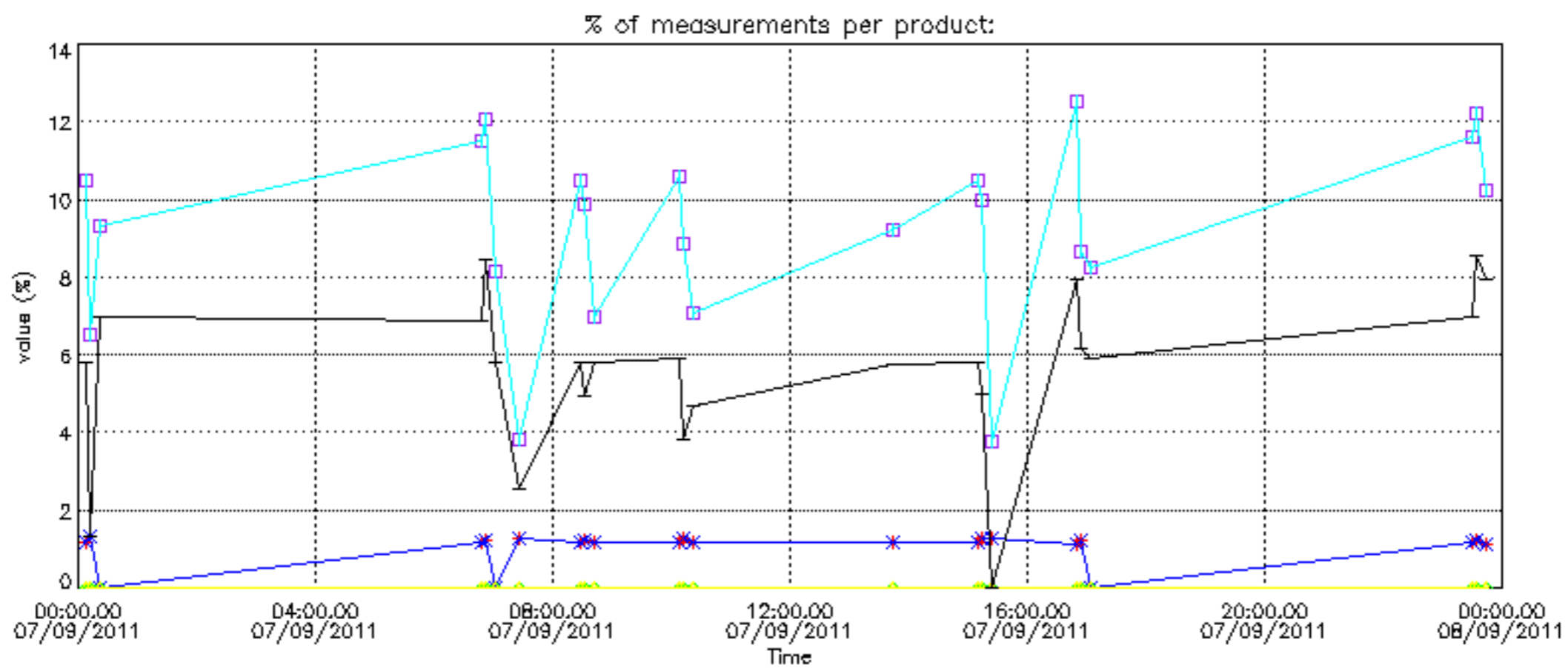
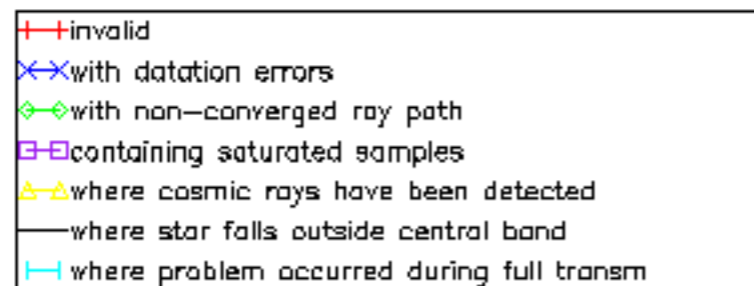
Percentage of flagged data per NO2 profile



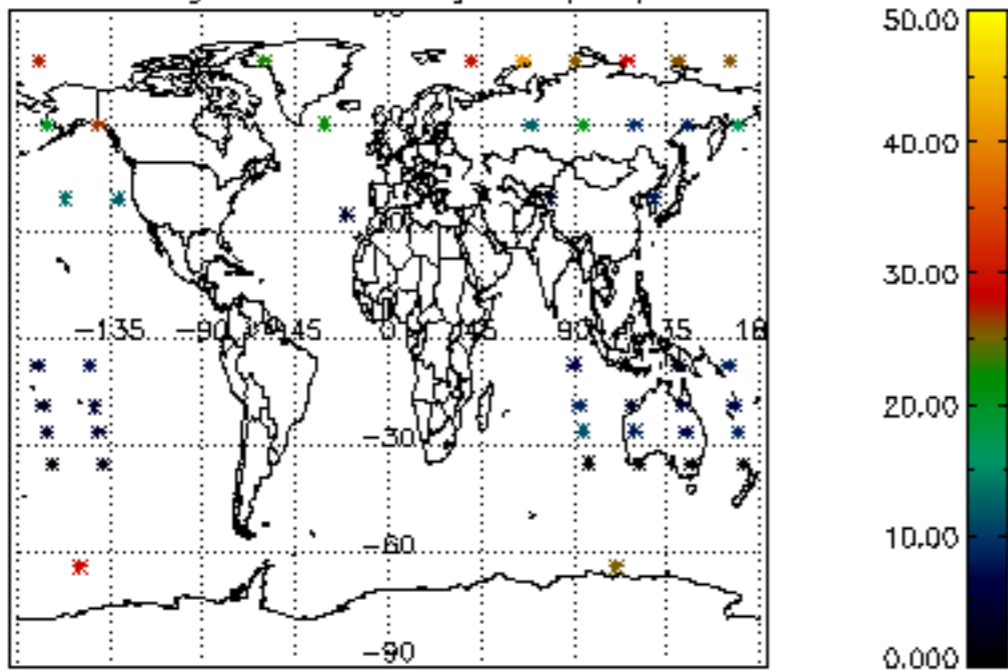
Percentage of flagged data per NO3 profile



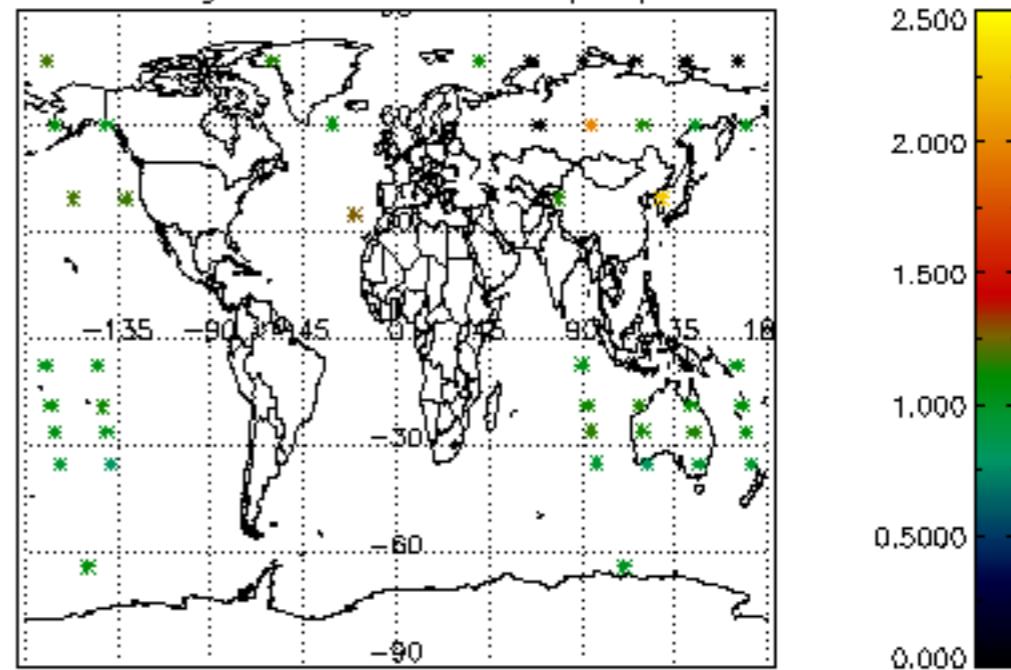




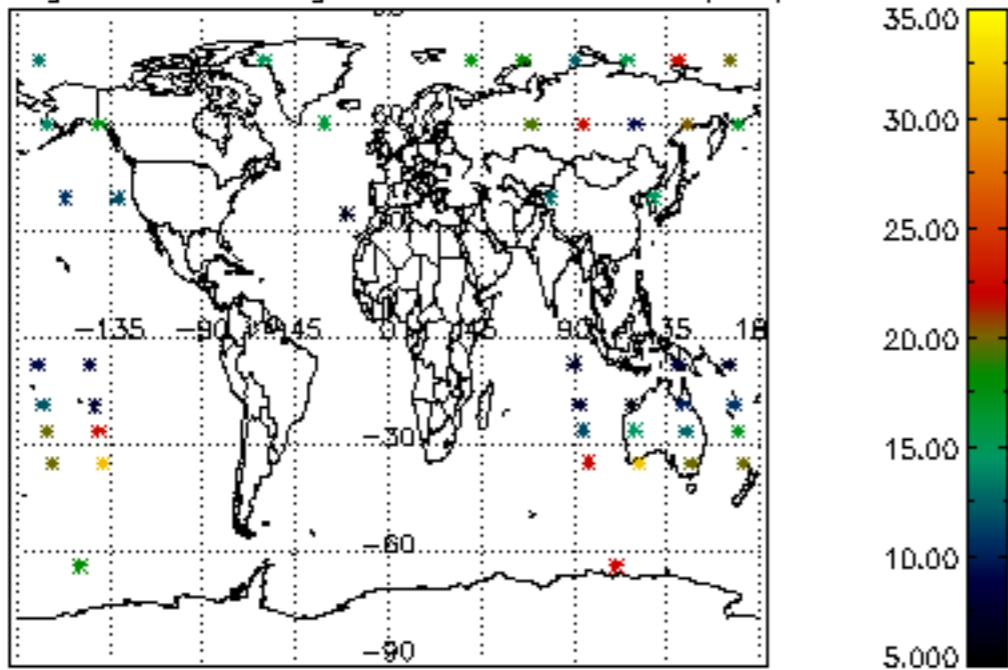
Percentage of cosmic ray hits per profile



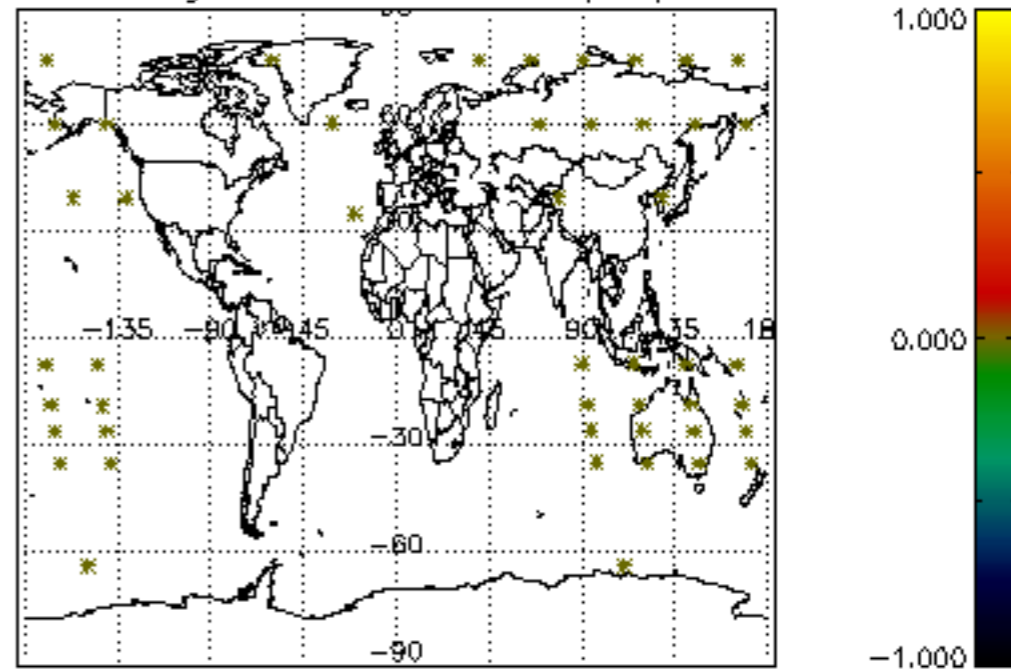
Percentage of datation errors per profile



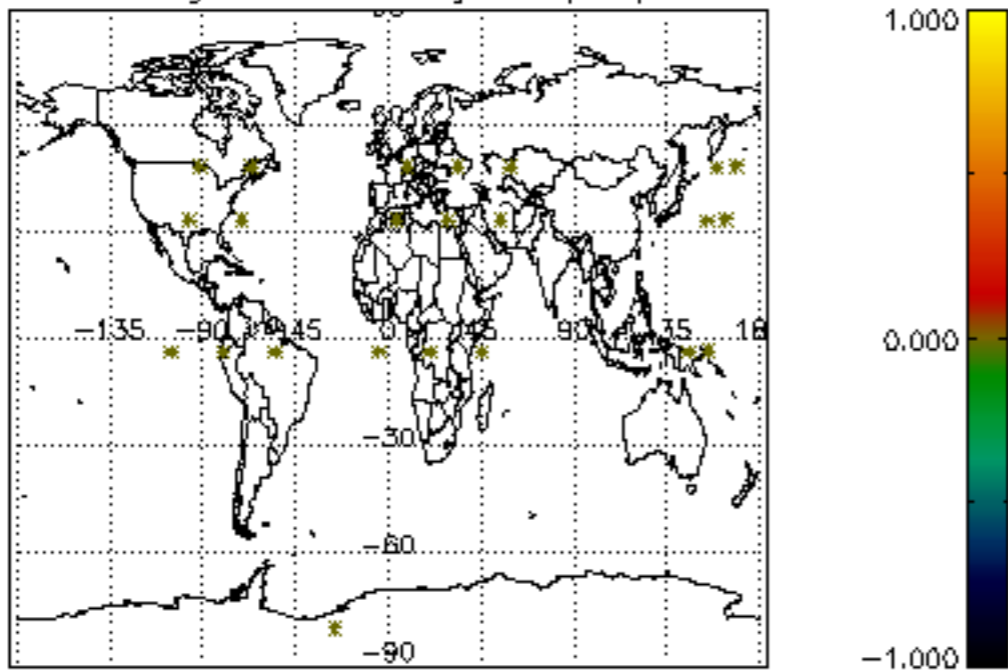
Percentage of star falling outside central band per profile



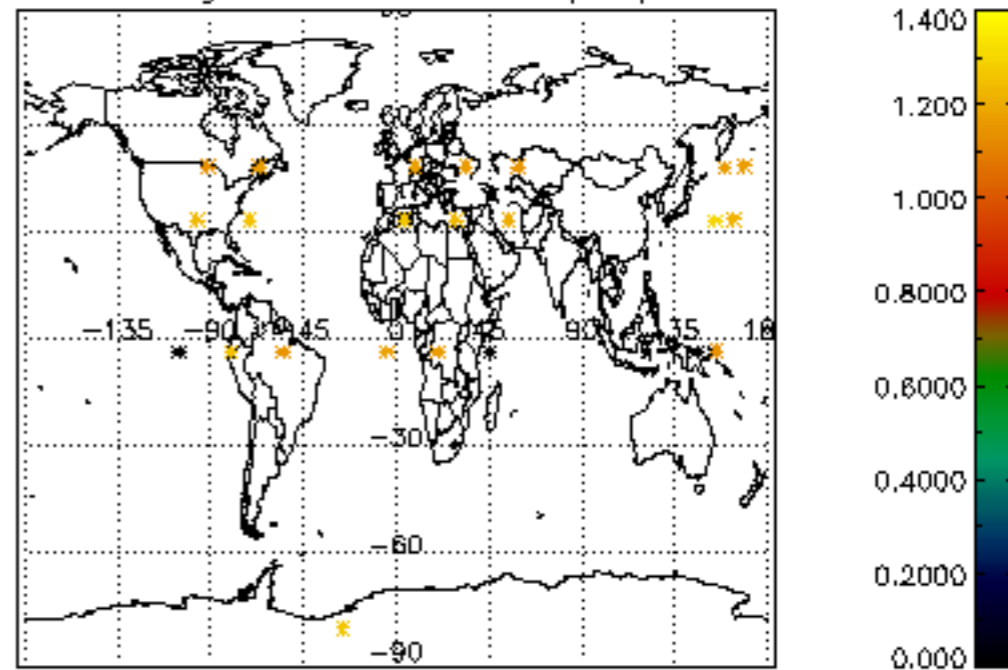
Percentage of saturation errors per profile



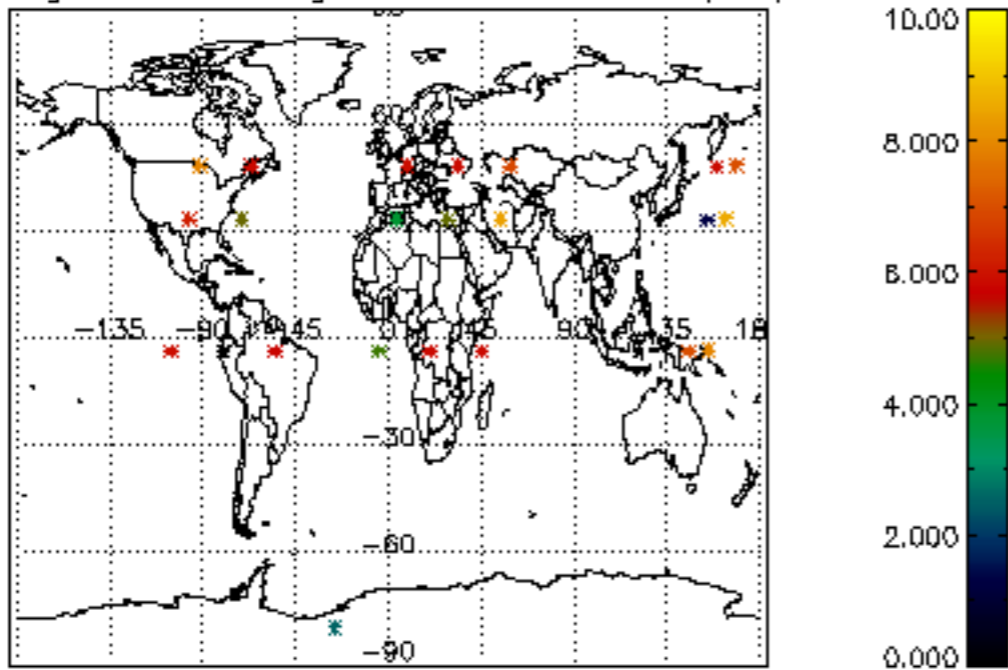
Percentage of cosmic ray hits per profile



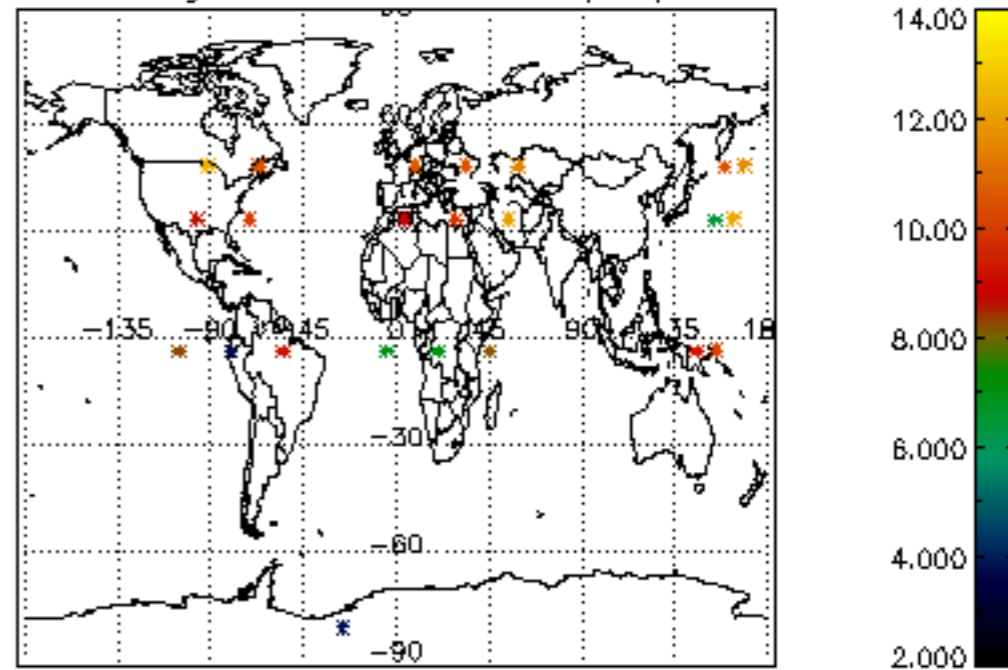
Percentage of datation errors per profile

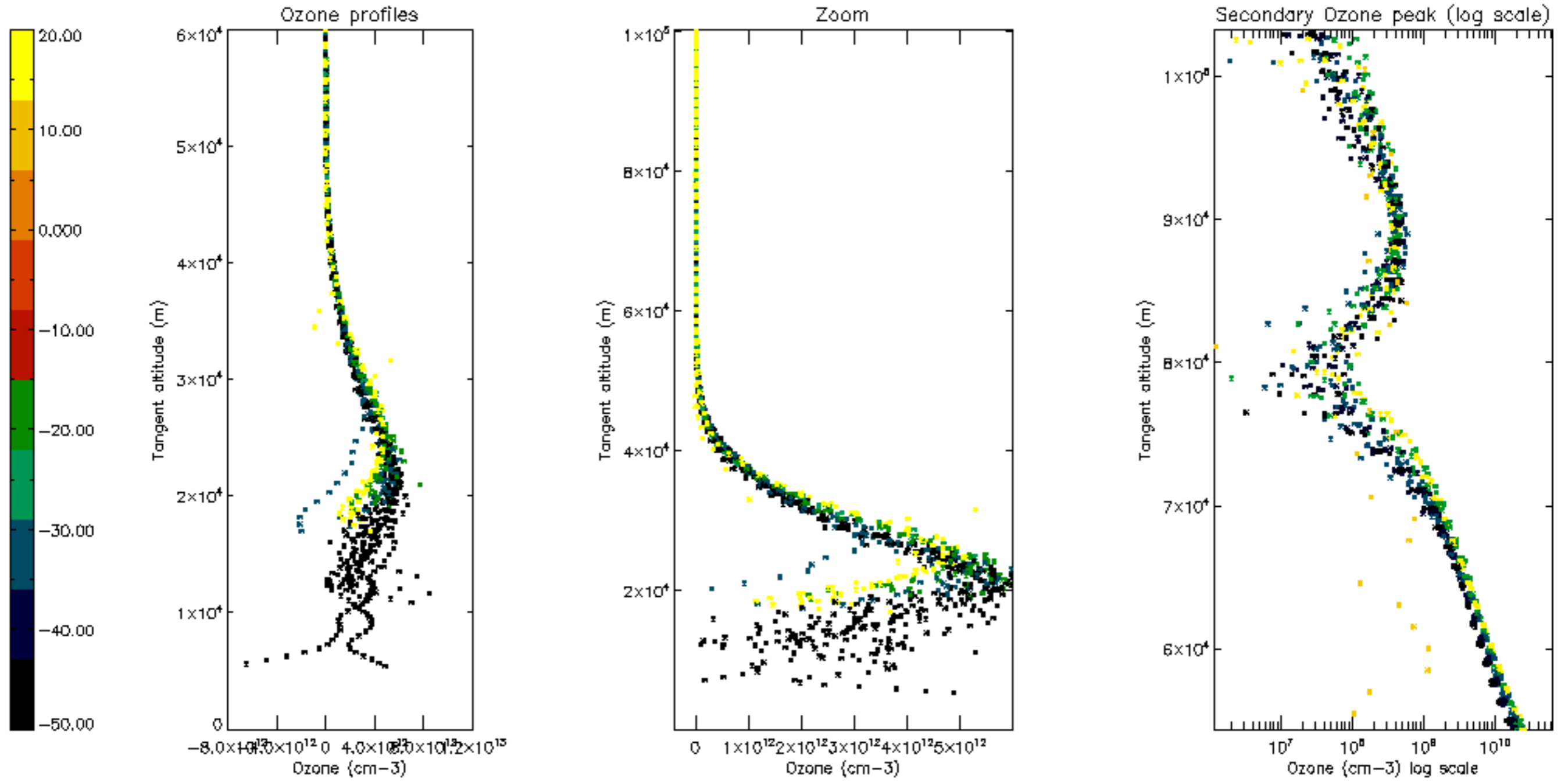


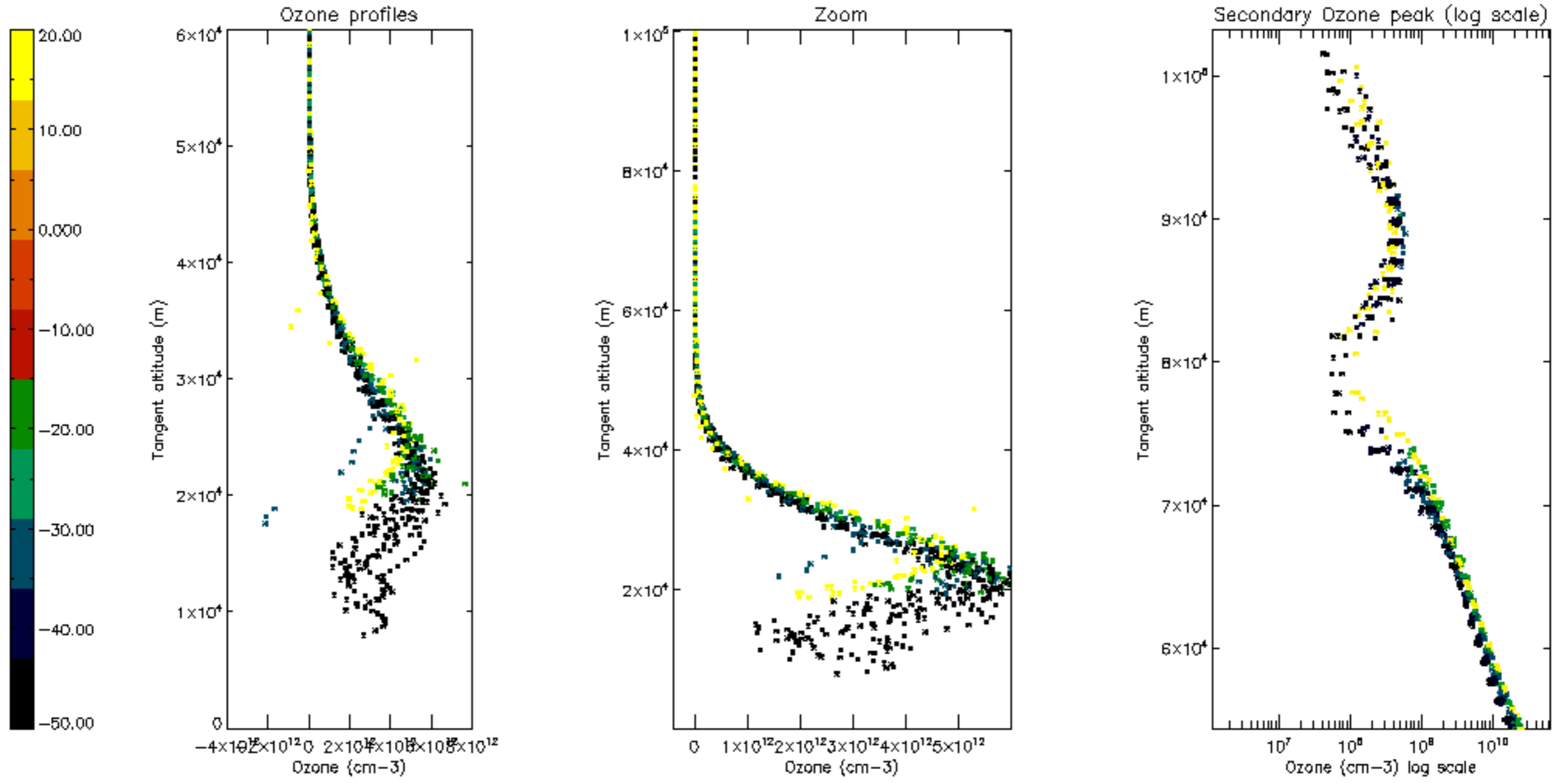
Percentage of star falling outside central band per profile

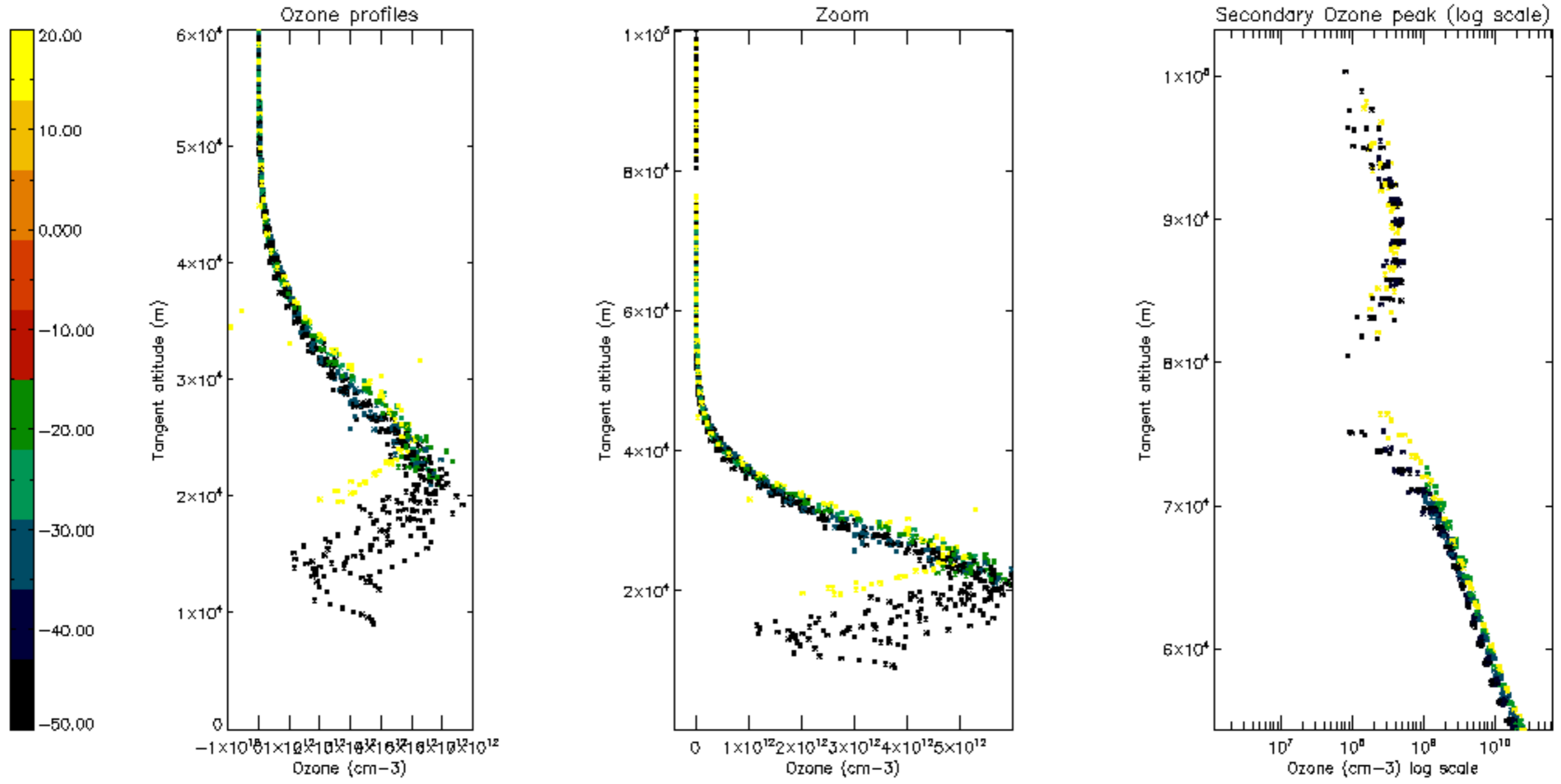


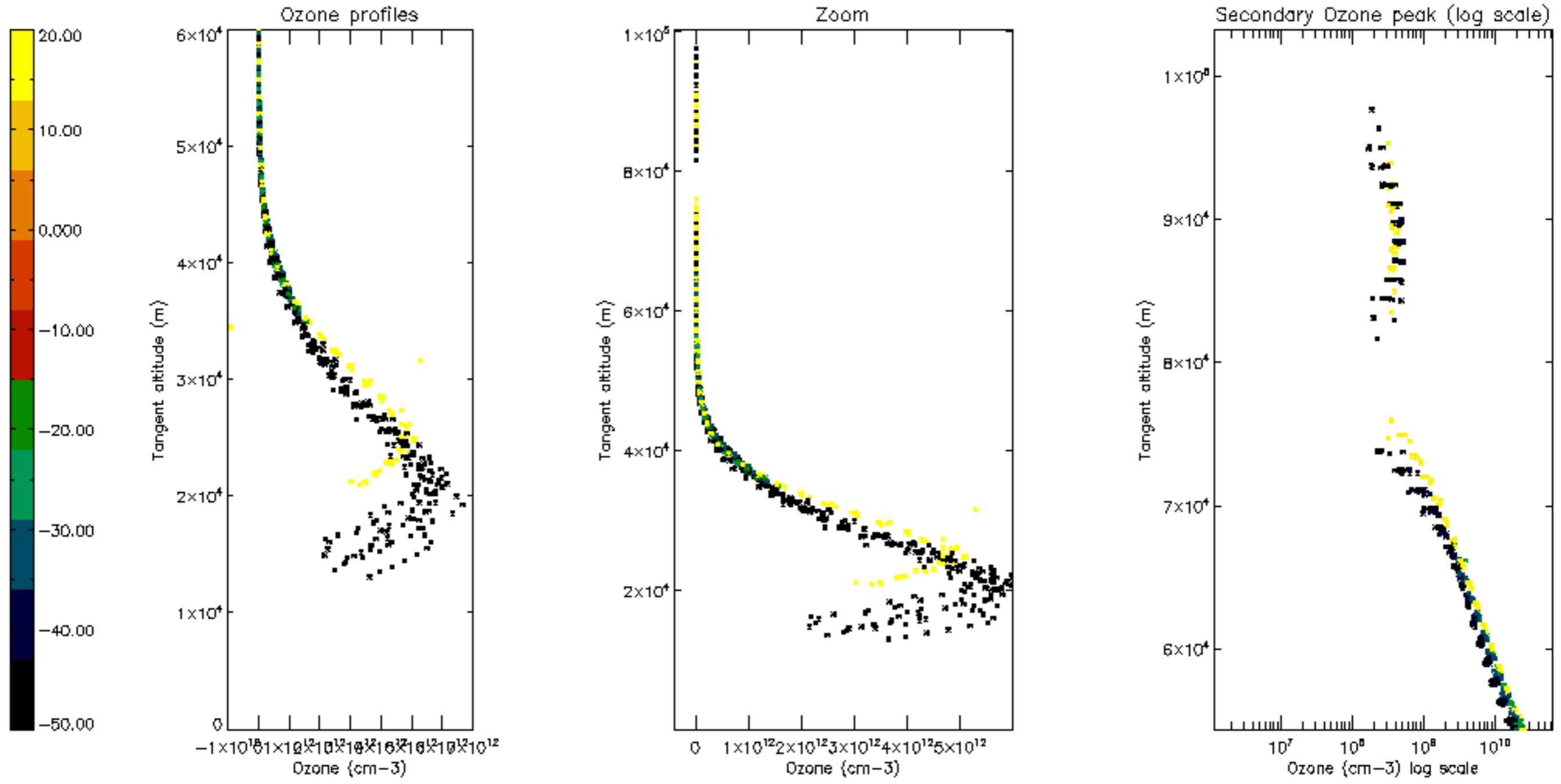
Percentage of saturation errors per profile

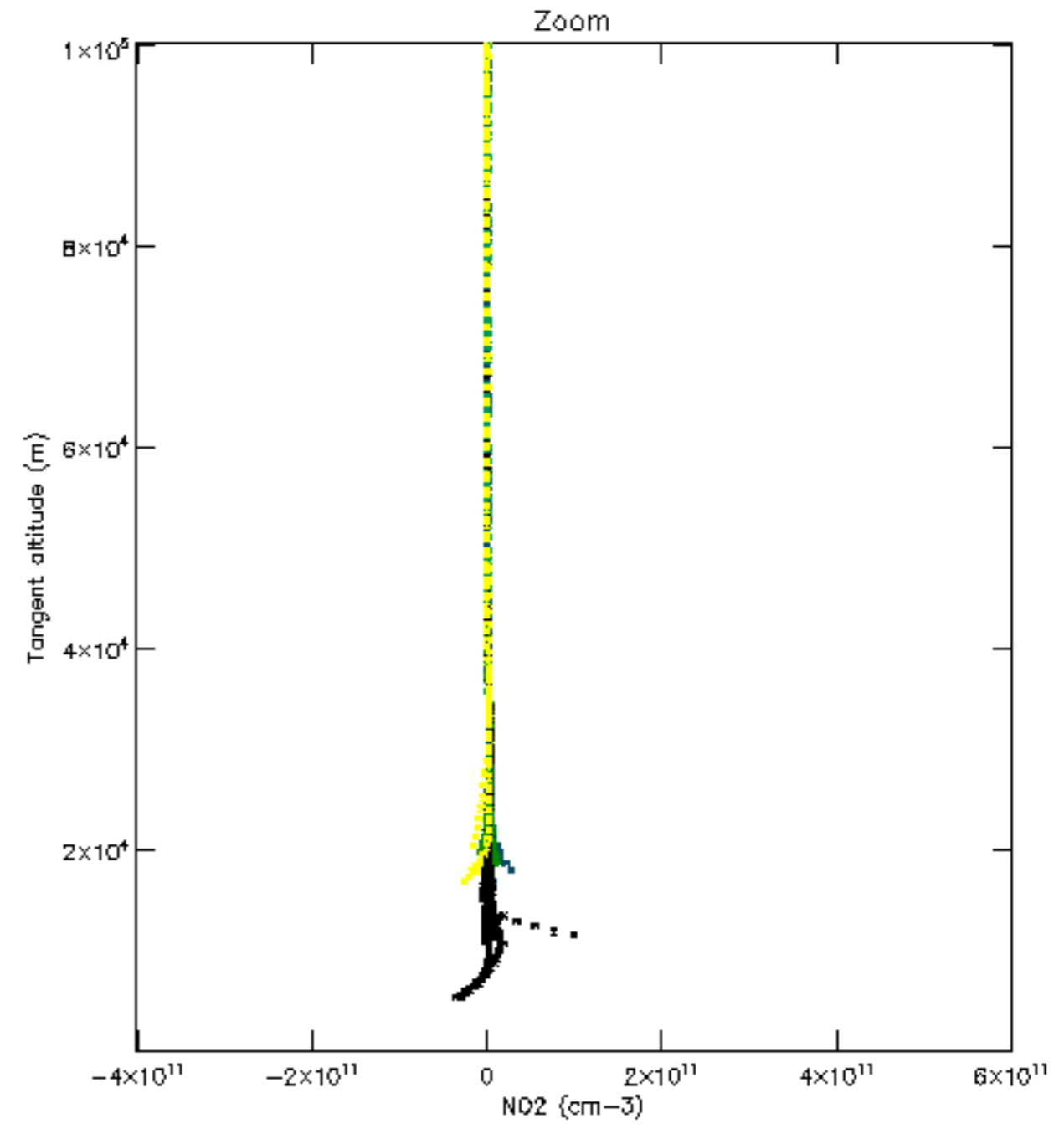
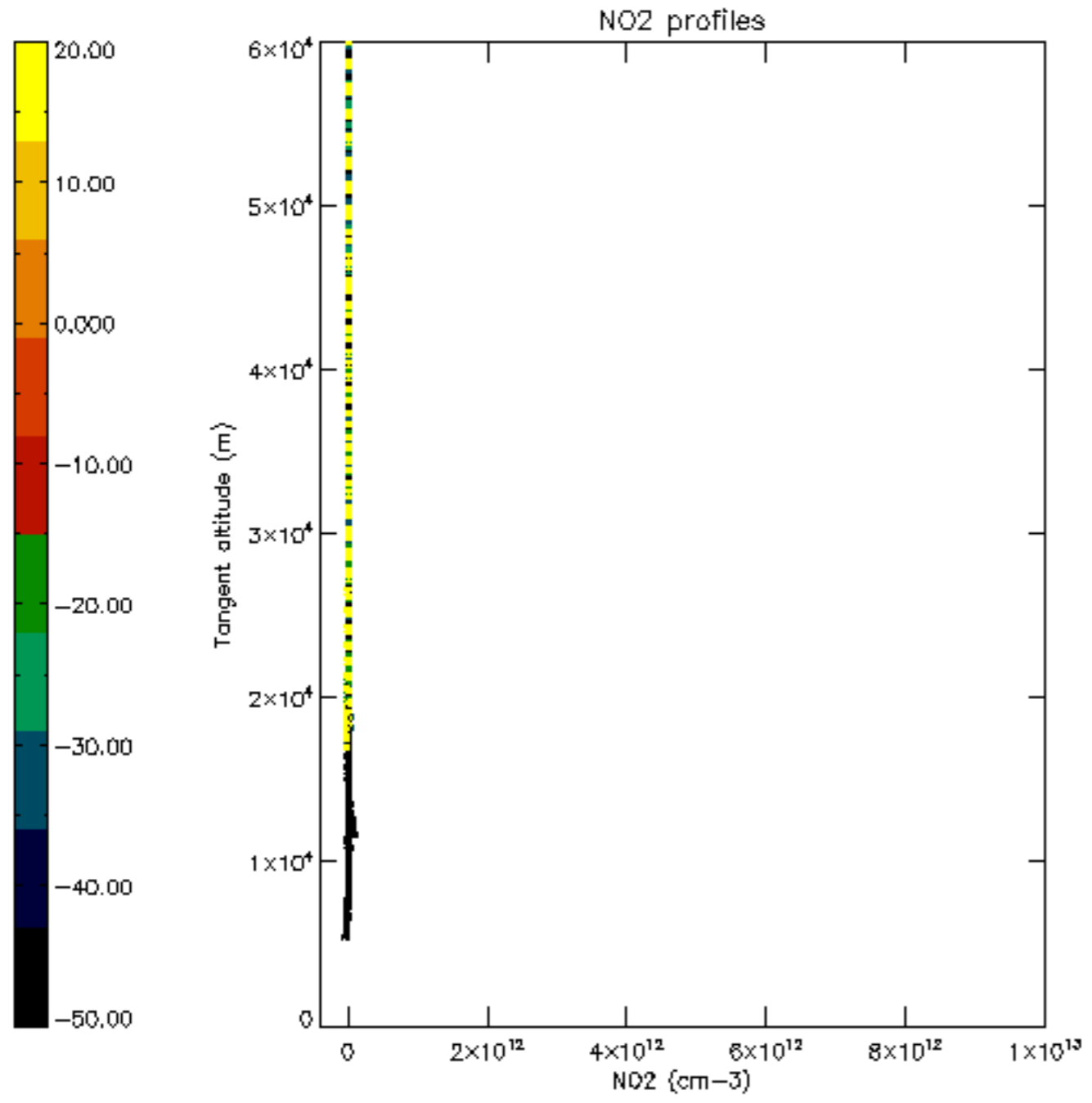


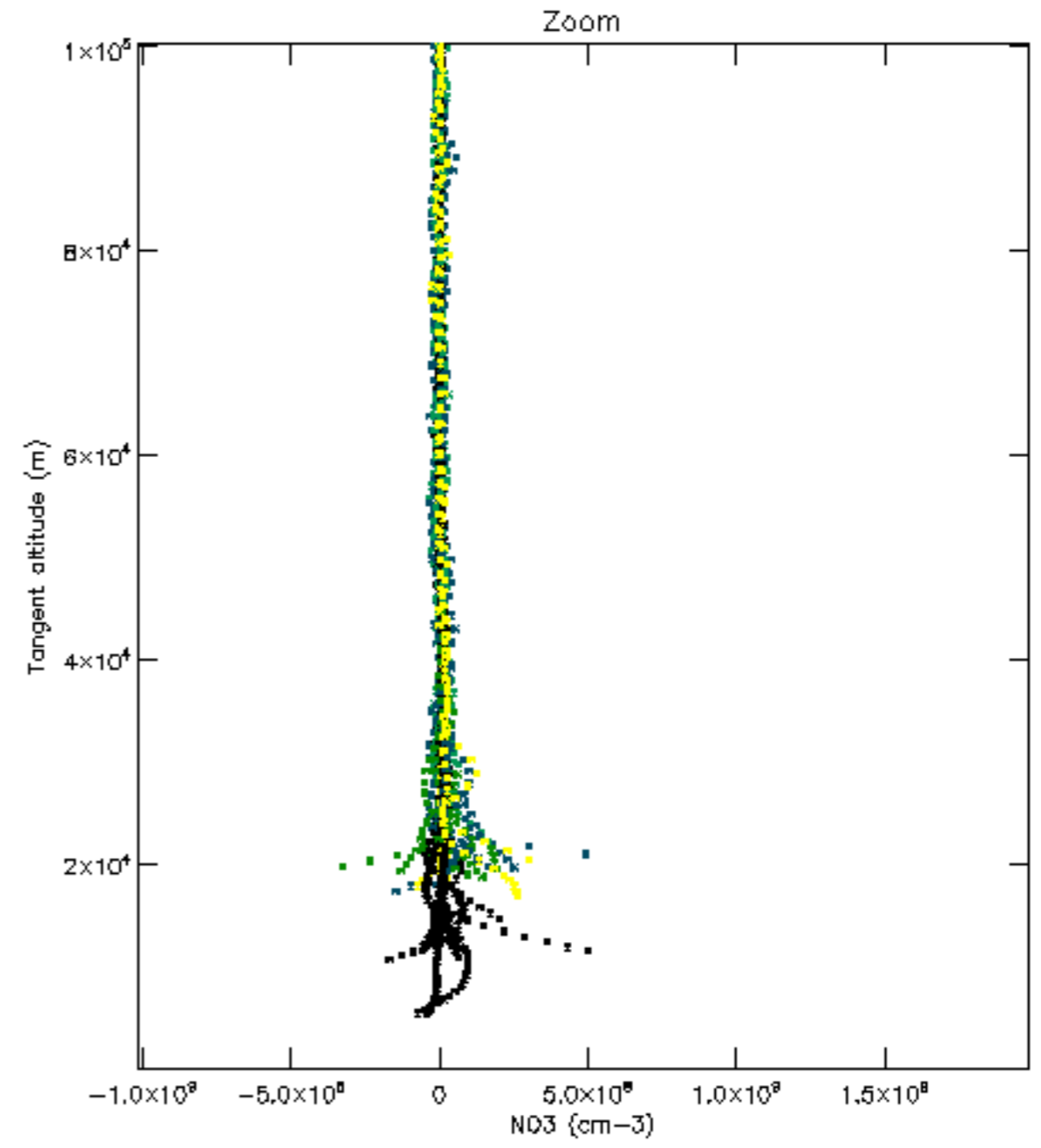
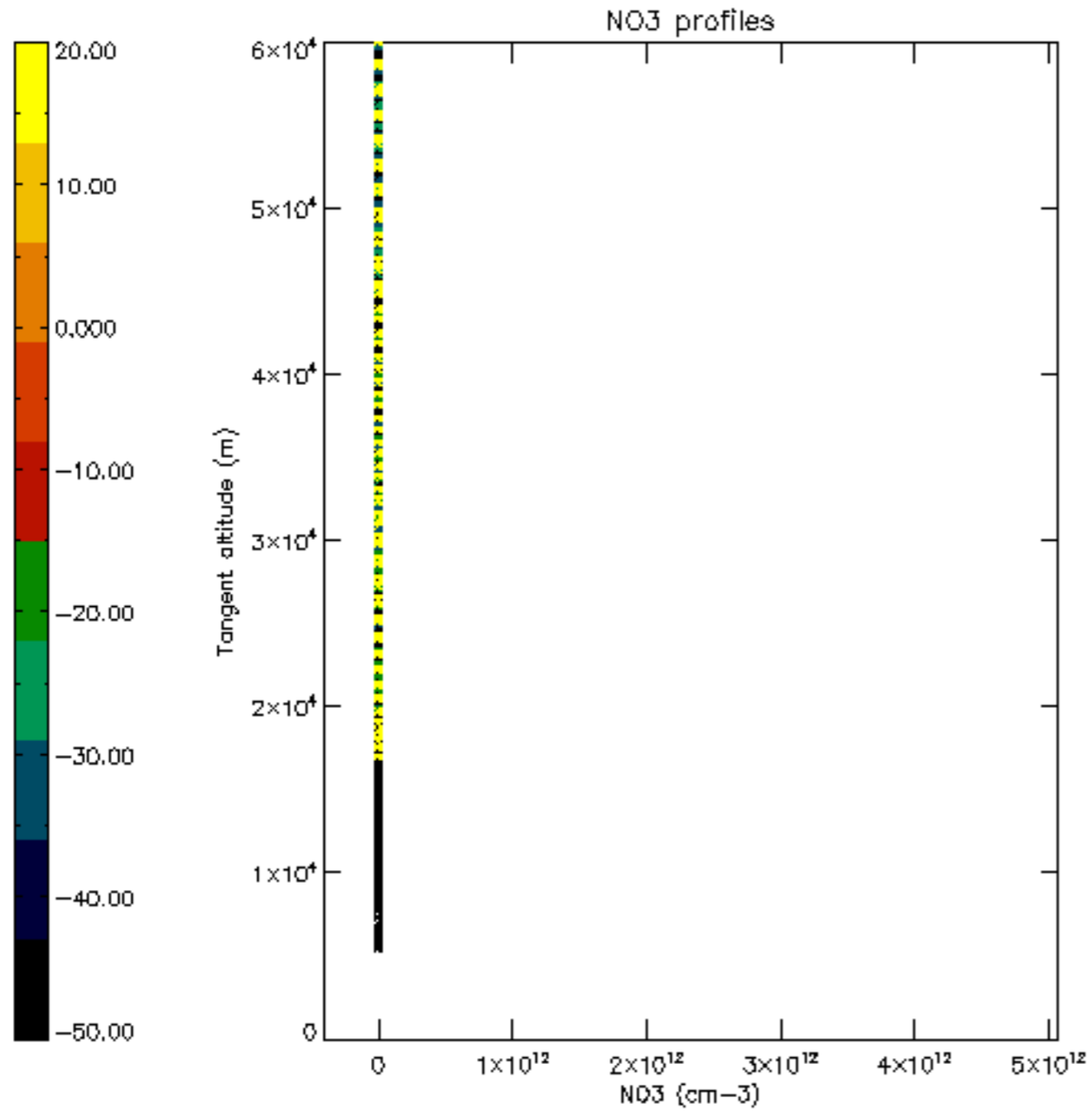


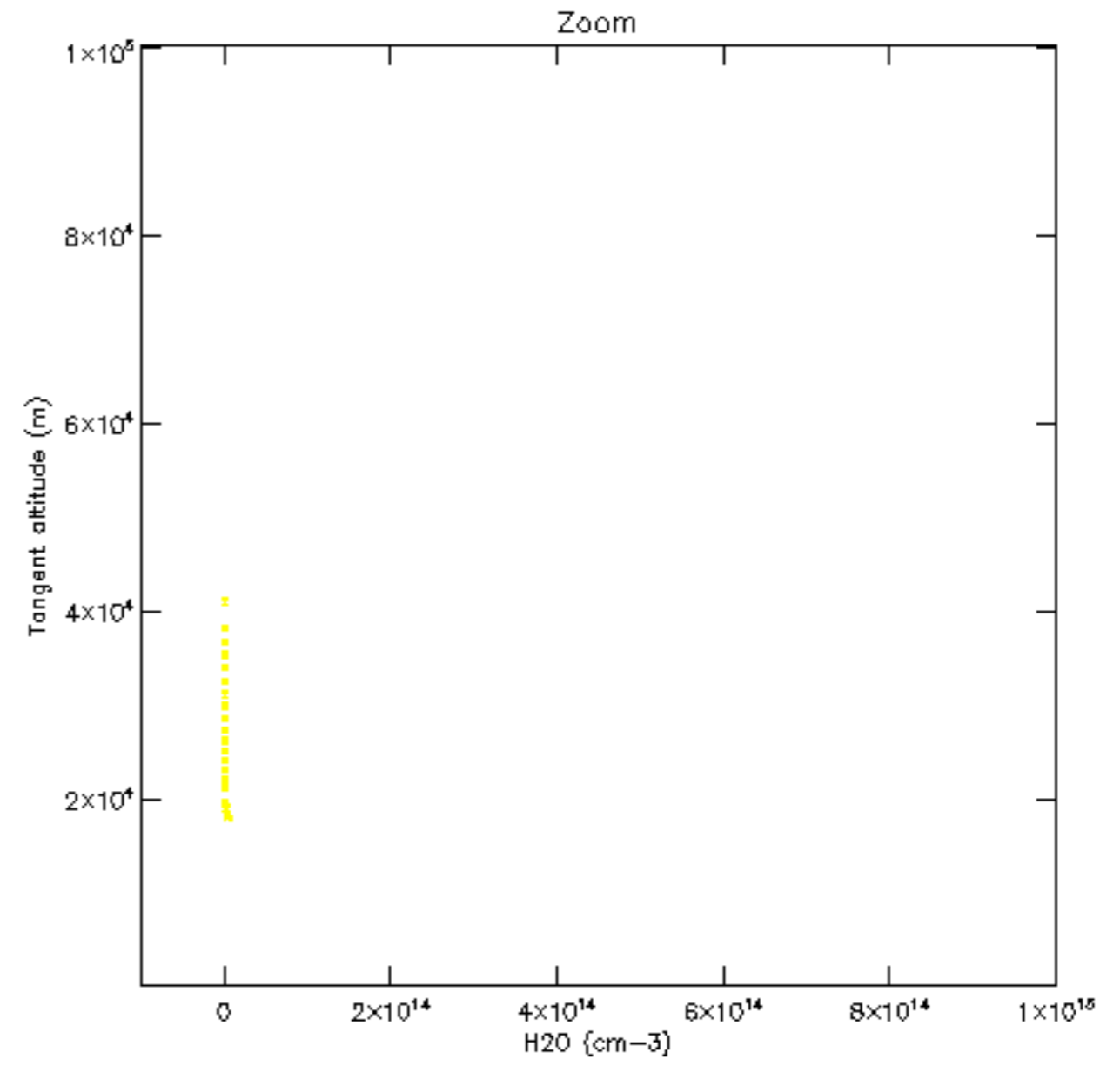
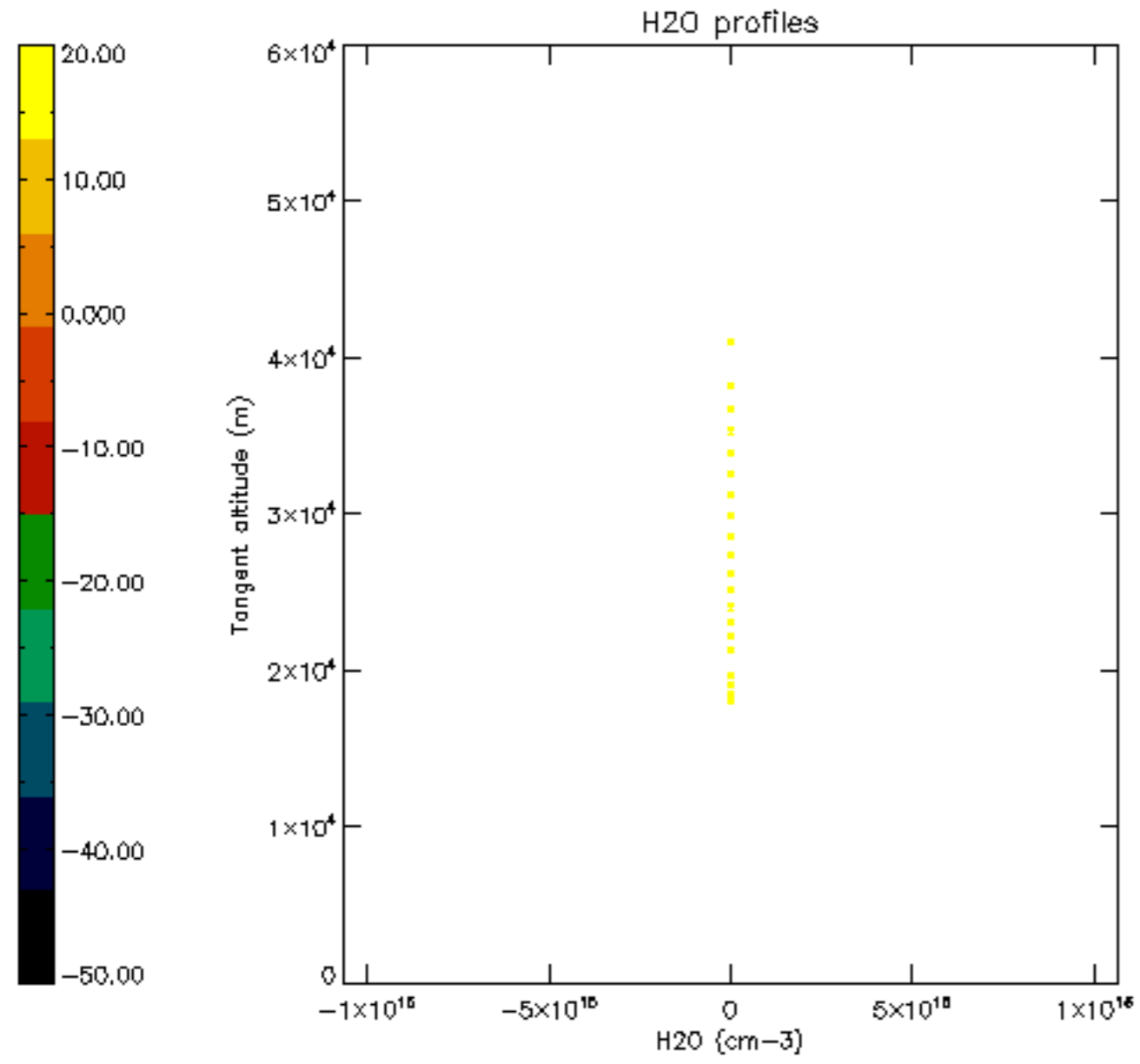


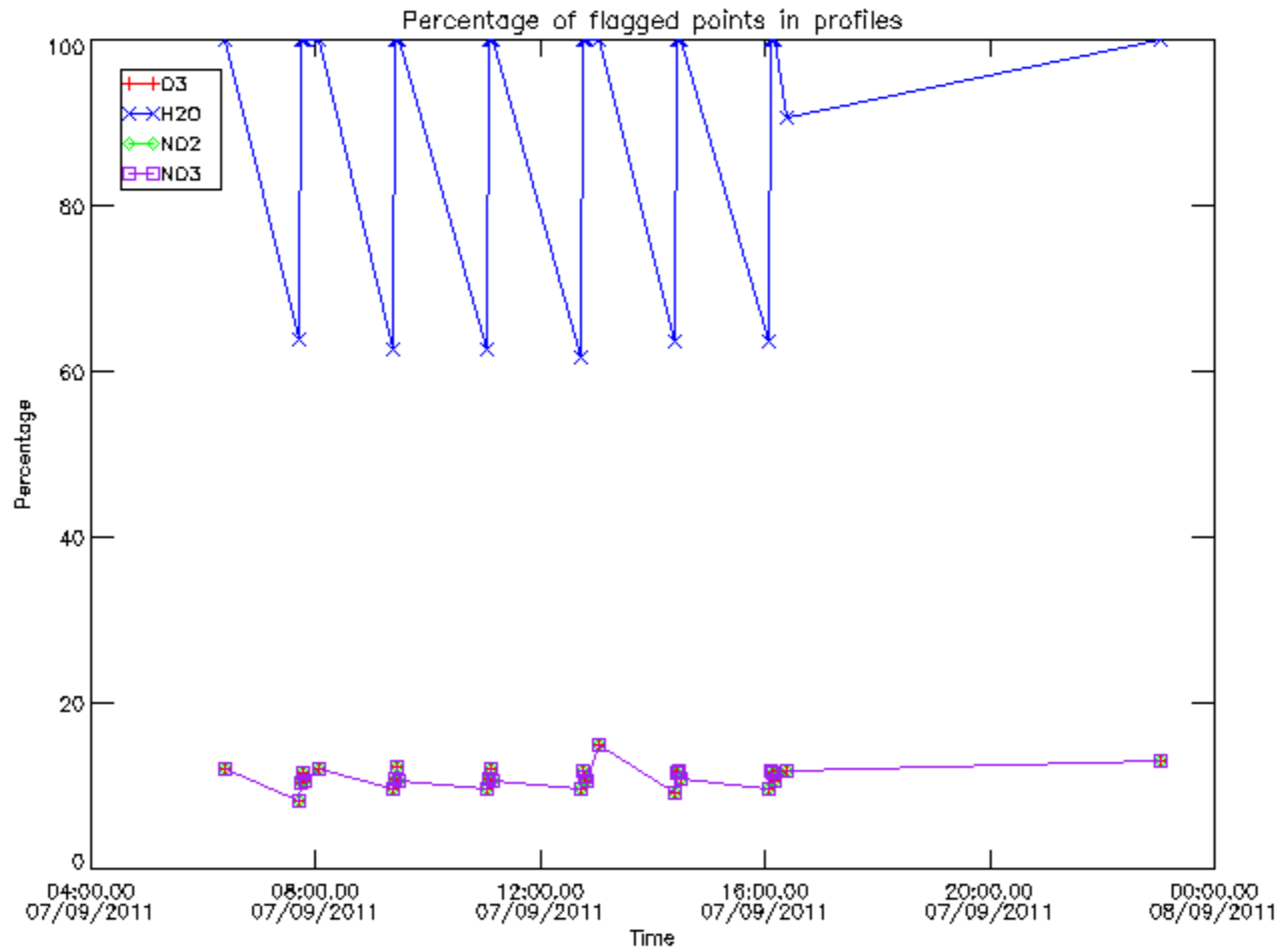




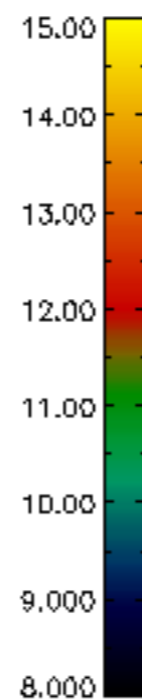
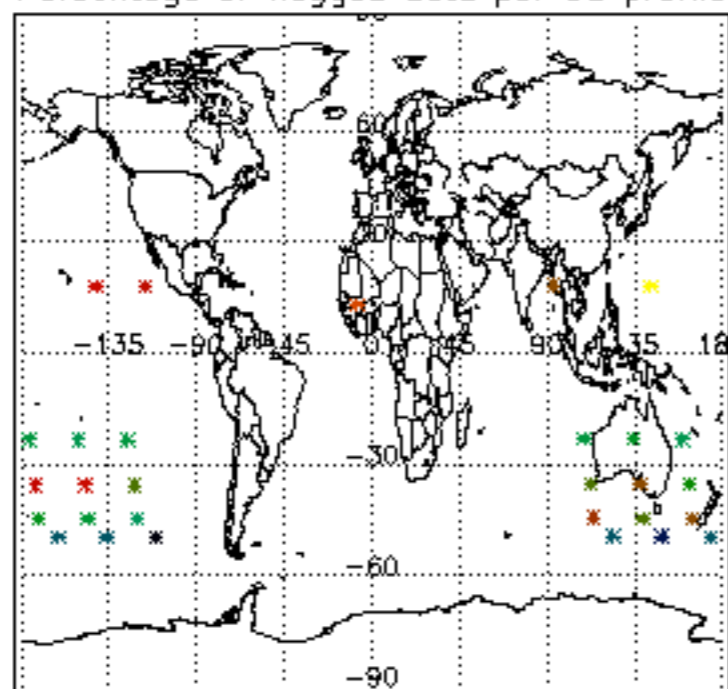




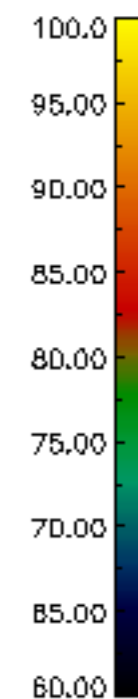
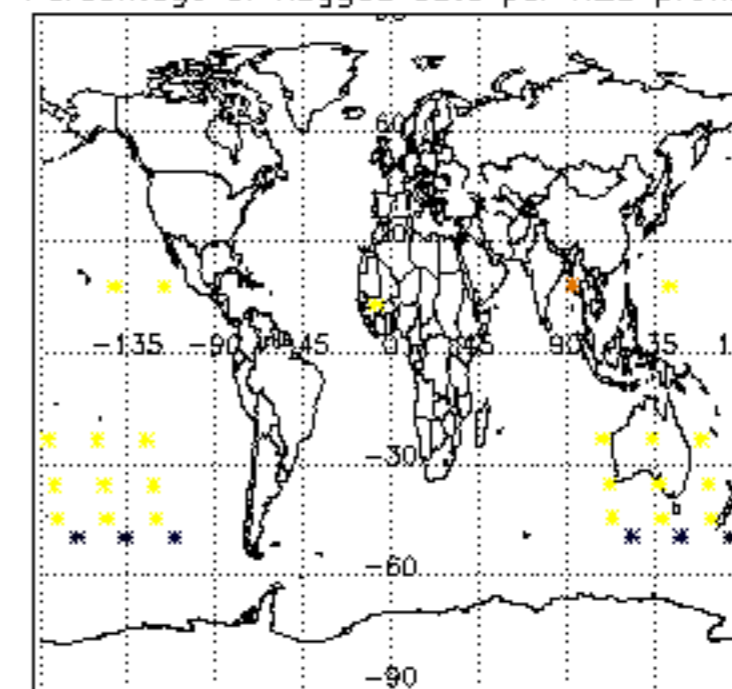




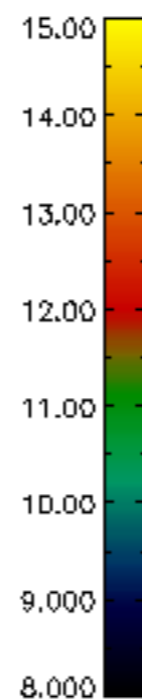
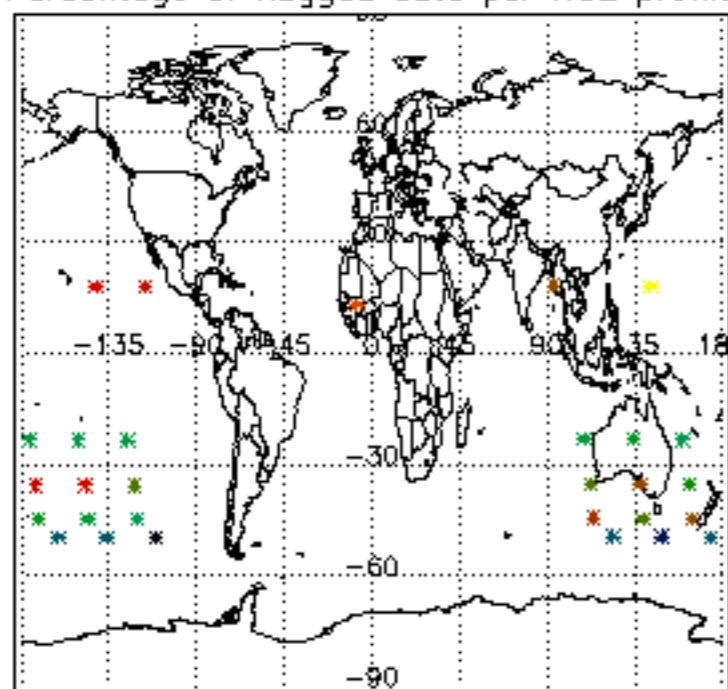
Percentage of flagged data per D3 profile



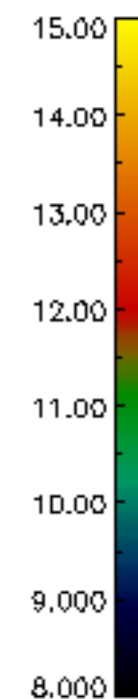
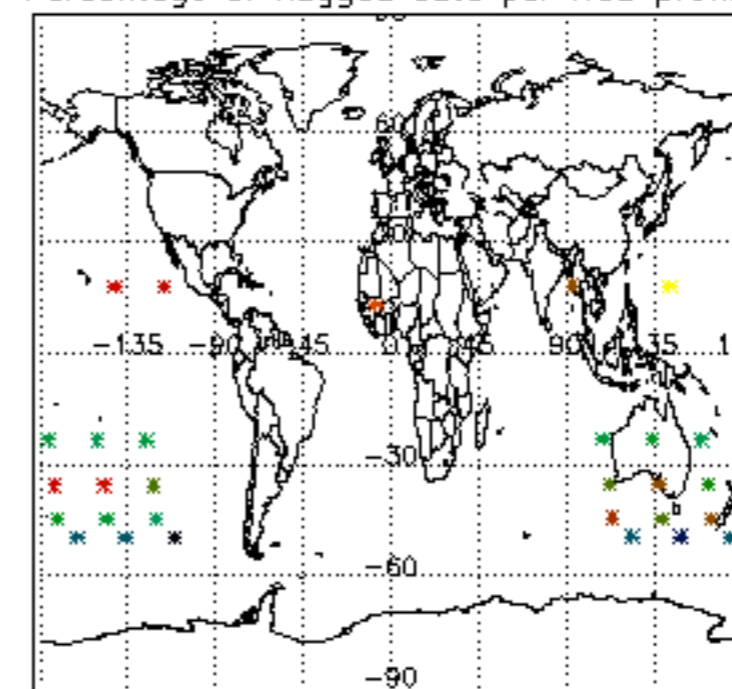
Percentage of flagged data per H2O profile

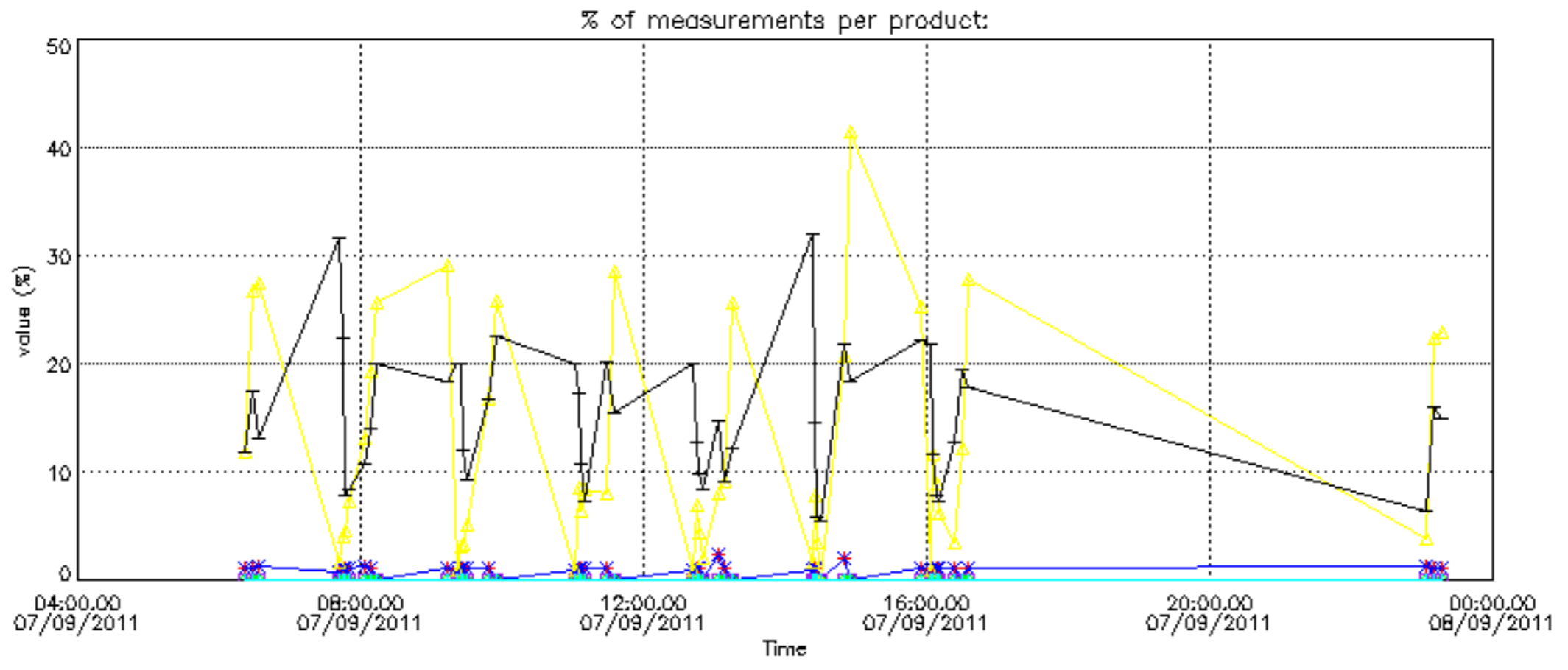


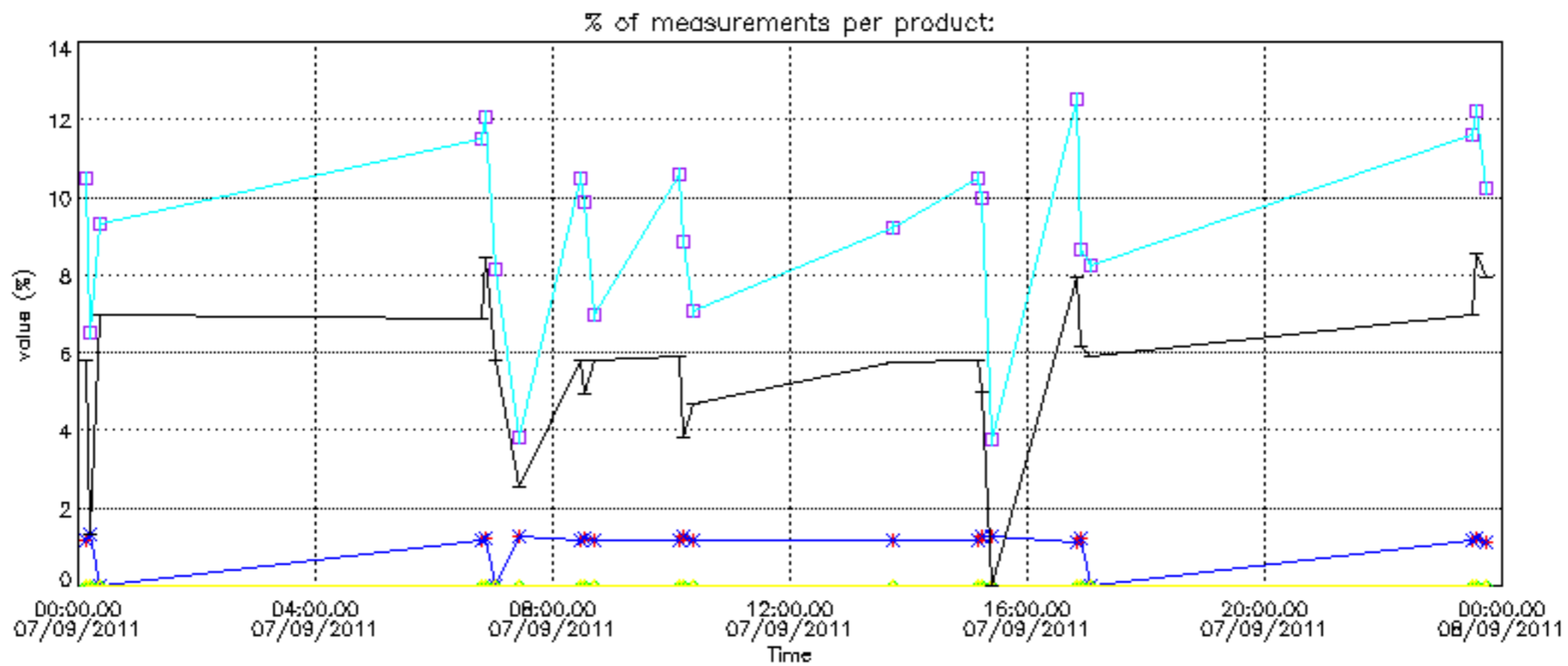
Percentage of flagged data per NO2 profile



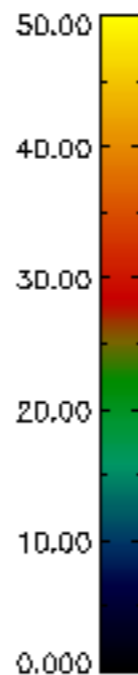
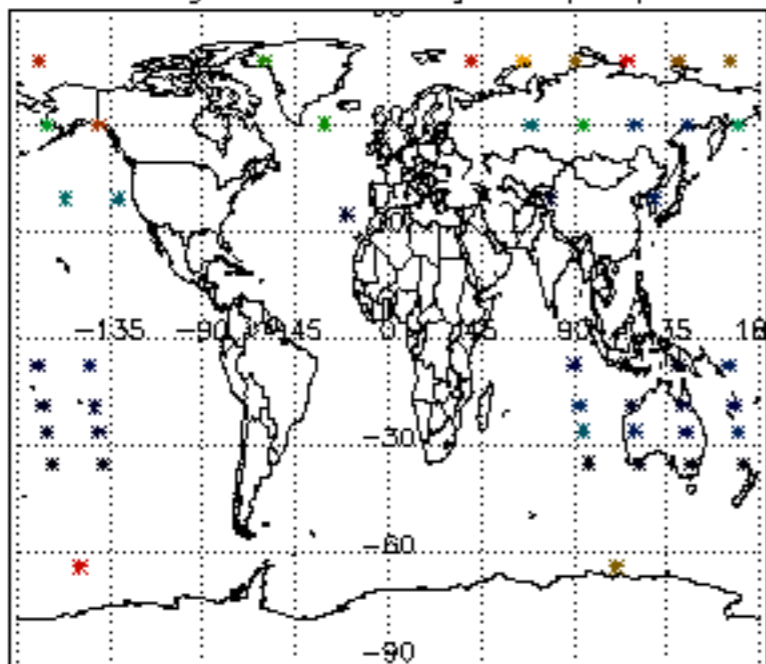
Percentage of flagged data per NO3 profile



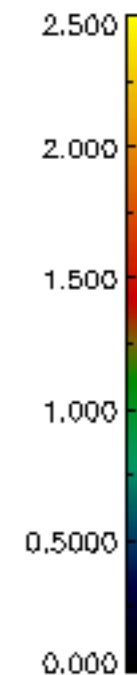
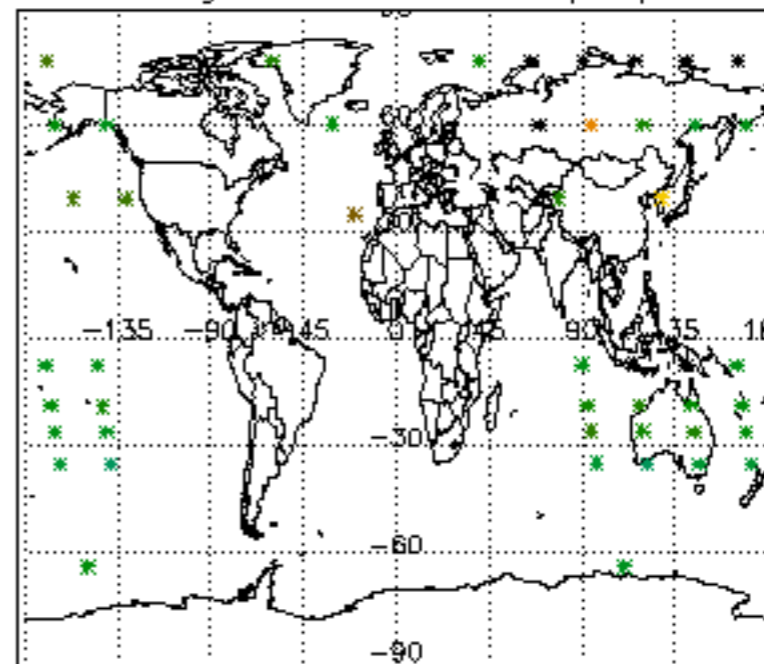




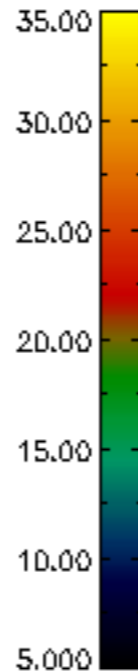
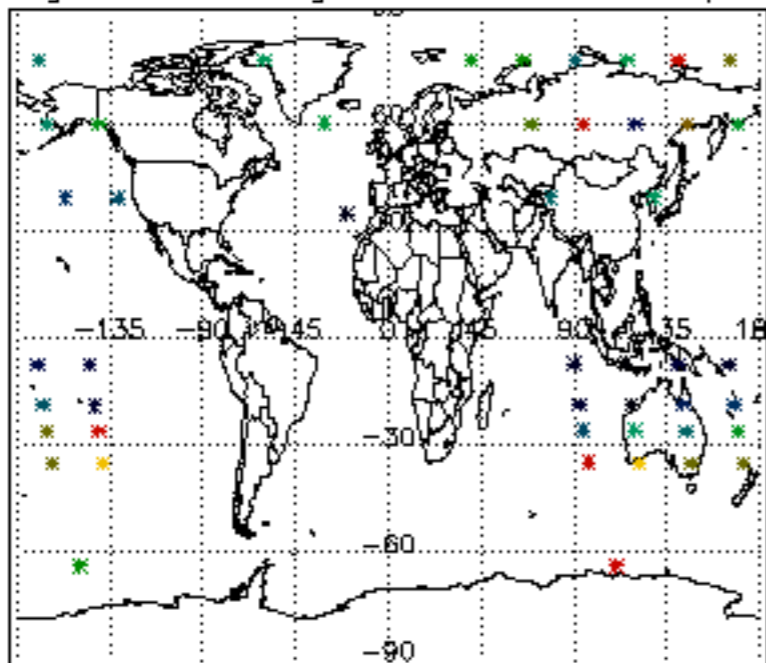
Percentage of cosmic ray hits per profile



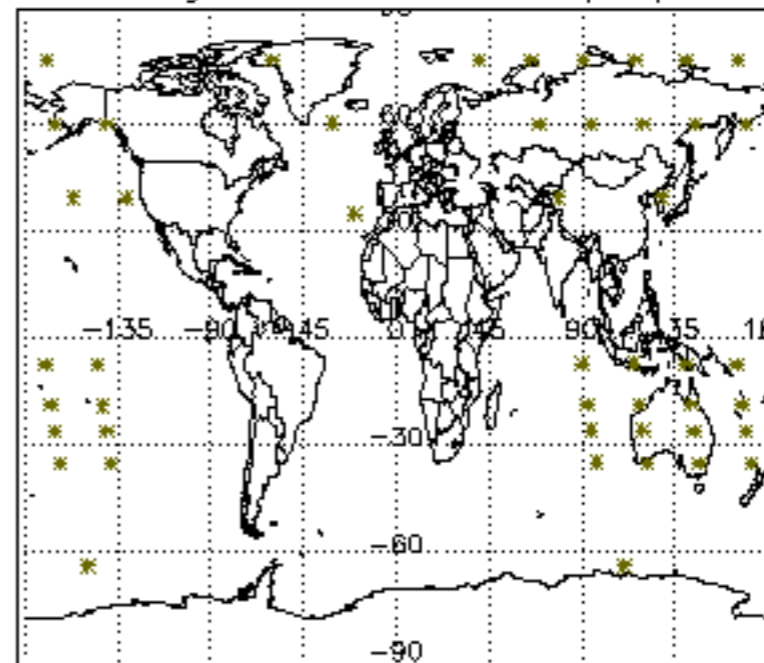
Percentage of datation errors per profile



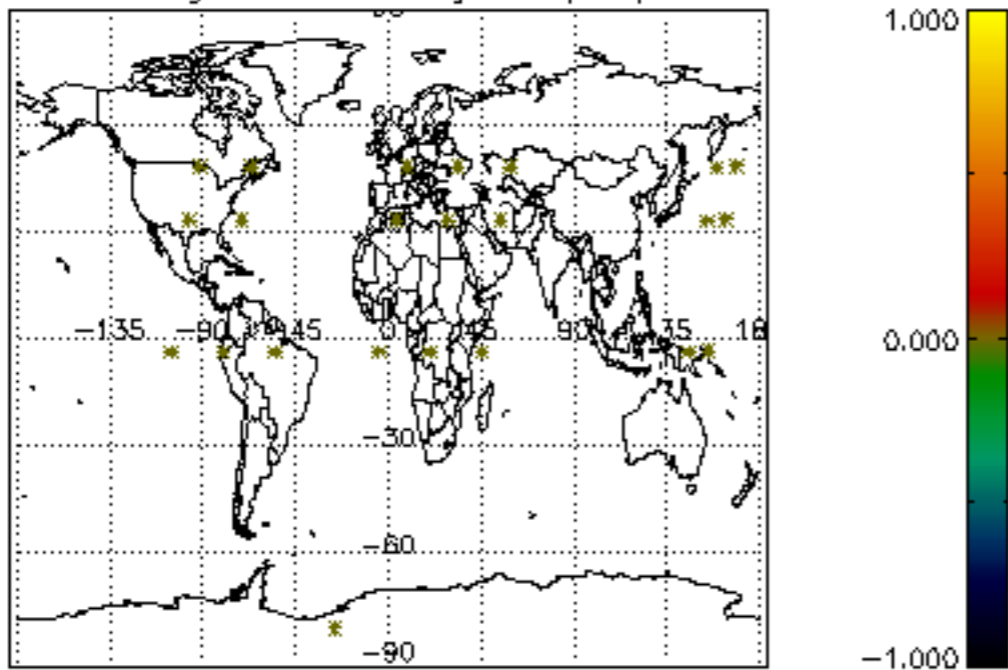
Percentage of star falling outside central band per profile



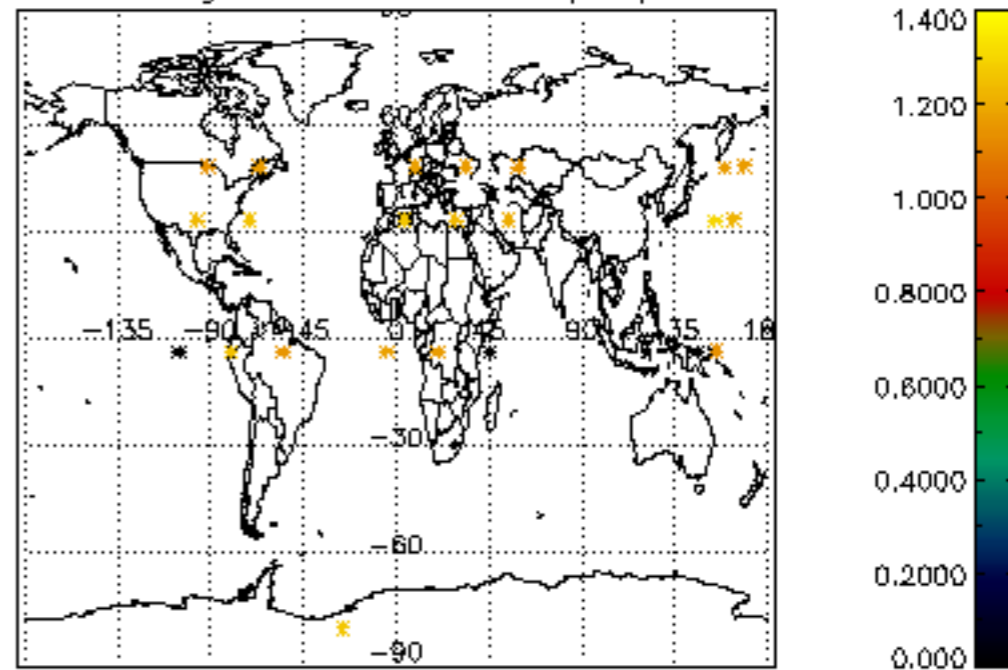
Percentage of saturation errors per profile



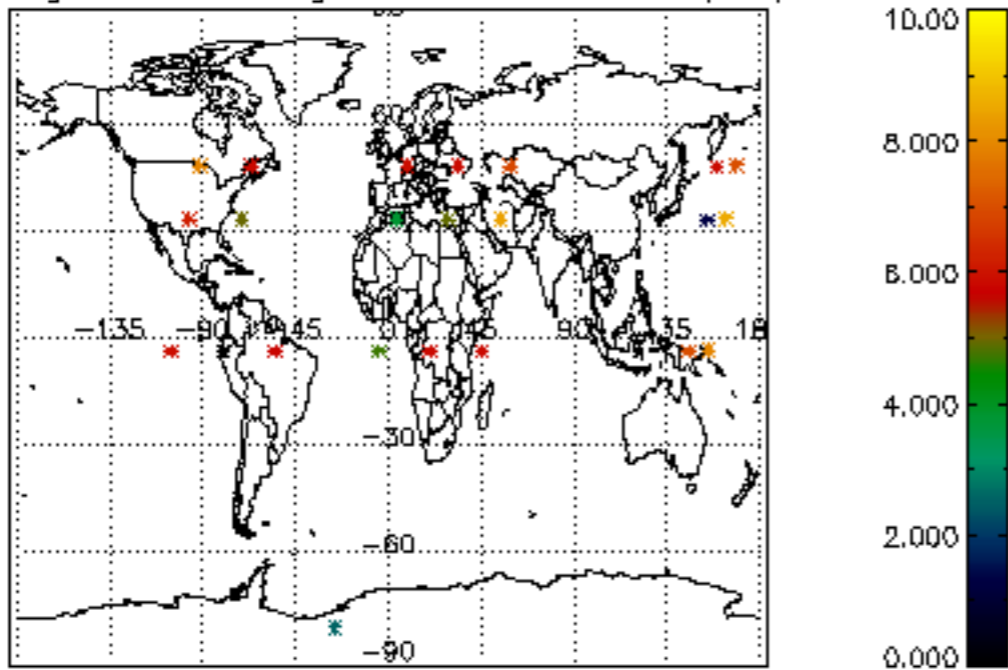
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

