

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.

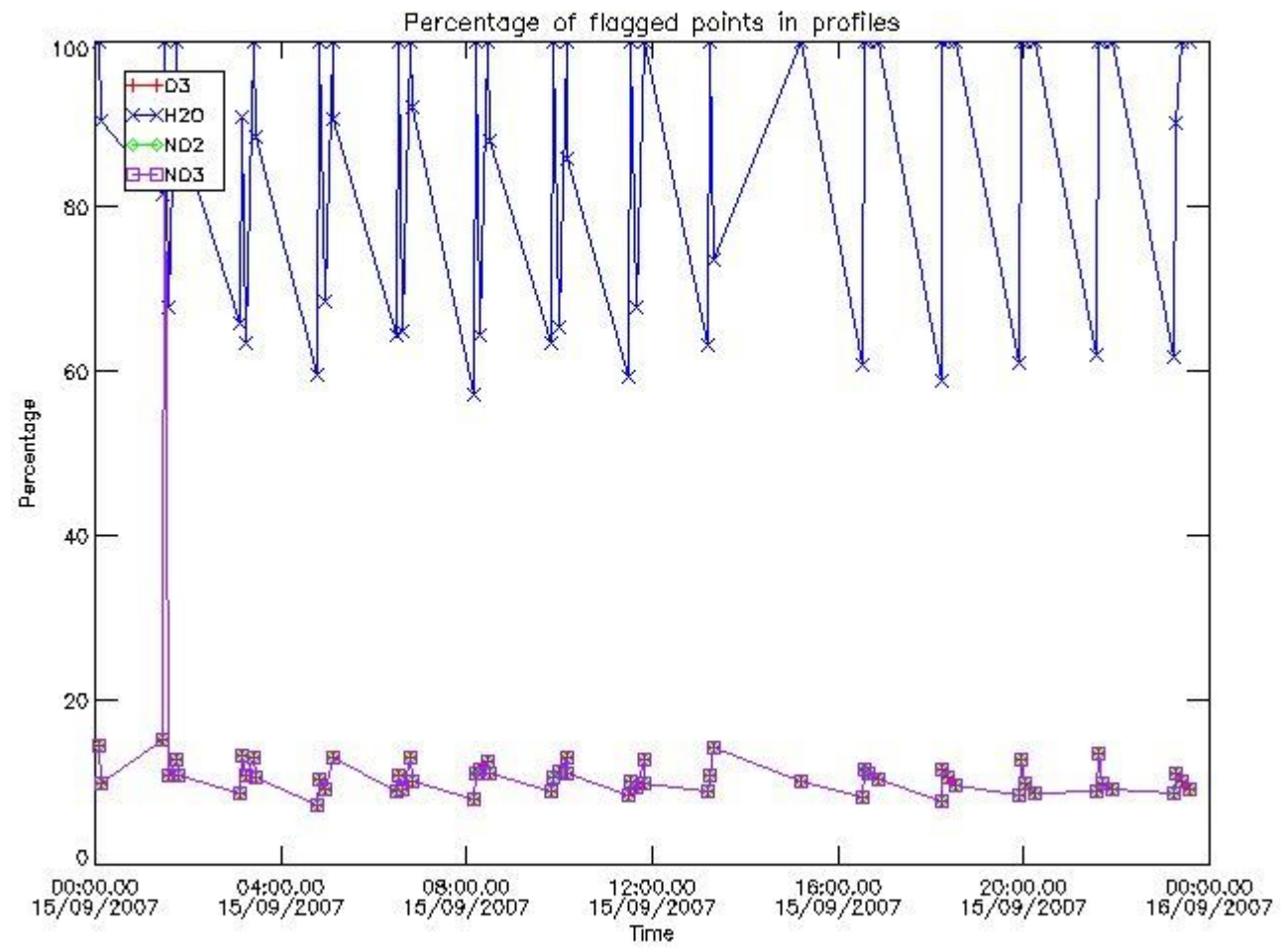
Item	Value
Time of report generation	23APR2013 04:57:45
Data source version	GOMOS/6.01
Start time of products	15-09-2007 (15SEP2007 00:00:00)
Stop time of products	16-09-2007 (16SEP2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	154
Nb of prods with errors	0

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__2PRFIN20070915_000500_000000392061_00360_28971_5707.N1	15-SEP-2007 00:05:00	Dark	39.000	143	Alp Hyi	2.8570	7200.0	78	28971	No
2	GOM_NL__2PRFIN20070915_000625_000000522061_00360_28971_5708.N1	15-SEP-2007 00:06:25	Dark	52.000	9	Alp Eri	0.45300	24000.	104	28971	No
3	GOM_NL__2PRFIN20070915_001211_000000442061_00360_28971_5709.N1	15-SEP-2007 00:12:11	Straylight	44.000	84	Alp Phe	2.3970	4500.0	88	28971	No
4	GOM_NL__2PRFIN20070915_003055_000000412061_00360_28971_5710.N1	15-SEP-2007 00:30:55	Bright	40.500	90	54Alp Peg	2.4870	11000.	81	28971	No
5	GOM_NL__2PRFIN20070915_003449_000000422061_00360_28971_5711.N1	15-SEP-2007 00:34:49	Bright	41.500	93	53Bet Peg	2.5200	3100.0	83	28971	No
6	GOM_NL__2PRFIN20070915_004509_000000412061_00360_28971_5712.N1	15-SEP-2007 00:45:09	Bright	40.500	74	11Bet Cas	2.2680	6600.0	81	28971	No
7	GOM_NL__2PRFIN20070915_004659_000000422061_00360_28971_5713.N1	15-SEP-2007 00:46:59	Bright	41.500	76	27Gam Cas	2.3000	30000.	83	28971	No
8	GOM_NL__2PRFIN20070915_010911_000000442061_00360_28971_5714.N1	15-SEP-2007 01:09:11	Bright	43.500	24	66Alp Gem	1.5800	10200.	87	28971	No
9	GOM_NL__2PRFIN20070915_011744_000000542061_00360_28971_5715.N1	15-SEP-2007 01:17:44	Twilight	54.000	8	10Alp CMi	0.40000	6500.0	108	28971	No
10	GOM_NL__2PRFIN20070915_012641_000000572061_00360_28971_5716.N1	15-SEP-2007 01:26:41	Dark	57.000	1	9Alp CMa	-1.4400	11000.	114	28971	No
11	GOM_NL__2PRFIN20070915_012858_000000462061_00360_28971_5717.N1	15-SEP-2007 01:28:58	Dark	46.000	23	21Eps CMa	1.5020	26000.	92	28971	No
12	GOM_NL__2PRFIN20070915_013519_000000562061_00361_28972_5719.N1	15-SEP-2007 01:35:19	Dark	56.000	2	Alp Car	-0.73600	7000.0	112	28972	No
13	GOM_NL__2PRFIN20070915_014537_000000402061_00361_28972_5720.N1	15-SEP-2007 01:45:37	Dark	40.000	143	Alp Hyi	2.8570	7200.0	80	28972	No
14	GOM_NL__2PRFIN20070915_014702_000000482061_00361_28972_5721.N1	15-SEP-2007 01:47:02	Dark	47.500	9	Alp Eri	0.45300	24000.	95	28972	No
15	GOM_NL__2PRFIN20070915_015247_000000452061_00361_28972_5722.N1	15-SEP-2007 01:52:47	Straylight	44.500	84	Alp Phe	2.3970	4500.0	89	28972	No
16	GOM_NL__2PRFIN20070915_021131_000000412061_00361_28972_5723.N1	15-SEP-2007 02:11:31	Bright	40.500	90	54Alp Peg	2.4870	11000.	81	28972	No
17	GOM_NL__2PRFIN20070915_021525_000000392061_00361_28972_5724.N1	15-SEP-2007 02:15:25	Bright	38.500	93	53Bet Peg	2.5200	3100.0	77	28972	No
18	GOM_NL__2PRFIN20070915_022544_000000392061_00361_28972_5725.N1	15-SEP-2007 02:25:44	Bright	38.500	74	11Bet Cas	2.2680	6600.0	77	28972	No
19	GOM_NL__2PRFIN20070915_022734_000000412061_00361_28972_5726.N1	15-SEP-2007 02:27:34	Bright	41.000	76	27Gam Cas	2.3000	30000.	82	28972	No
20	GOM_NL__2PRFIN20070915_024947_000000432061_00361_28972_5727.N1	15-SEP-2007 02:49:47	Bright	42.500	24	66Alp Gem	1.5800	10200.	85	28972	No
21	GOM_NL__2PRFIN20070915_025821_000000472061_00361_28972_5728.N1	15-SEP-2007 02:58:21	Twilight	46.500	8	10Alp CMi	0.40000	6500.0	93	28972	No
22	GOM_NL__2PRFIN20070915_030718_000000592061_00361_28972_5729.N1	15-SEP-2007 03:07:18	Dark	59.000	1	9Alp CMa	-1.4400	11000.	118	28972	No
23	GOM_NL__2PRFIN20070915_030935_000000502061_00361_28972_5730.N1	15-SEP-2007 03:09:35	Dark	49.500	23	21Eps CMa	1.5020	26000.	99	28972	No
24	GOM_NL__2PRFIN20070915_031555_000000472061_00362_28973_5734.N1	15-SEP-2007 03:15:55	Dark	47.000	2	Alp Car	-0.73600	7000.0	94	28973	No
25	GOM_NL__2PRFIN20070915_032613_000000392061_00362_28973_5735.N1	15-SEP-2007 03:26:13	Dark	39.000	143	Alp Hyi	2.8570	7200.0	78	28973	No
26	GOM_NL__2PRFIN20070915_032738_000000482061_00362_28973_5736.N1	15-SEP-2007 03:27:38	Dark	48.000	9	Alp Eri	0.45300	24000.	96	28973	No
27	GOM_NL__2PRFIN20070915_033324_000000482061_00362_28973_5737.N1	15-SEP-2007 03:33:24	Straylight	47.500	84	Alp Phe	2.3970	4500.0	95	28973	No
28	GOM_NL__2PRFIN20070915_035207_000000412061_00362_28973_5738.N1	15-SEP-2007 03:52:07	Bright	40.500	90	54Alp Peg	2.4870	11000.	81	28973	No
29	GOM_NL__2PRFIN20070915_035601_000000422061_00362_28973_5739.N1	15-SEP-2007 03:56:01	Bright	41.500	93	53Bet Peg	2.5200	3100.0	83	28973	No
30	GOM_NL__2PRFIN20070915_040620_000000402061_00362_28973_5740.N1	15-SEP-2007 04:06:20	Bright	40.000	74	11Bet Cas	2.2680	6600.0	80	28973	No
31	GOM_NL__2PRFIN20070915_040810_000000402061_00362_28973_5741.N1	15-SEP-2007 04:08:10	Bright	39.500	76	27Gam Cas	2.3000	30000.	79	28973	No
32	GOM_NL__2PRFIN20070915_043023_000000452061_00362_28973_5742.N1	15-SEP-2007 04:30:23	Bright	44.500	24	66Alp Gem	1.5800	10200.	89	28973	No
33	GOM_NL__2PRFIN20070915_043857_000000522061_00362_28973_5743.N1	15-SEP-2007 04:38:57	Twilight	51.500	8	10Alp CMi	0.40000	6500.0	103	28973	No
34	GOM_NL__2PRFIN20070915_044755_000000702061_00362_28973_5744.N1	15-SEP-2007 04:47:55	Dark	69.500	1	9Alp CMa	-1.4400	11000.	139	28973	No
35	GOM_NL__2PRFIN20070915_045012_000000502061_00362_28973_5745.N1	15-SEP-2007 04:50:12	Dark	49.500	23	21Eps CMa	1.5020	26000.	99	28973	No
36	GOM_NL__2PRFIN20070915_045632_000000562061_00363_28974_5744.N1	15-SEP-2007 04:56:32	Dark	56.000	2	Alp Car	-0.73600	7000.0	112	28974	No
37	GOM_NL__2PRFIN20070915_050650_000000392061_00363_28974_5745.N1	15-SEP-2007 05:06:50	Dark	39.000	143	Alp Hyi	2.8570	7200.0	78	28974	No
38	GOM_NL__2PRFIN20070915_050815_000000432061_00363_28974_5746.N1	15-SEP-2007 05:08:15	Dark	43.000	9	Alp Eri	0.45300	24000.	86	28974	No
39	GOM_NL__2PRFIN20070915_051400_000000492061_00363_28974_5747.N1	15-SEP-2007 05:14:00	Straylight	48.500	84	Alp Phe	2.3970	4500.0	97	28974	No
40	GOM_NL__2PRFIN20070915_053243_000000402061_00363_28974_5748.N1	15-SEP-2007 05:32:43	Bright	40.000	90	54Alp Peg	2.4870	11000.	80	28974	No
41	GOM_NL__2PRFIN20070915_053636_000000382061_00363_28974_5749.N1	15-SEP-2007 05:36:36	Bright	38.000	93	53Bet Peg	2.5200	3100.0	76	28974	No
42	GOM_NL__2PRFIN20070915_054655_000000422061_00363_28974_5750.N1	15-SEP-2007 05:46:55	Bright	41.500	74	11Bet Cas	2.2680	6600.0	83	28974	No

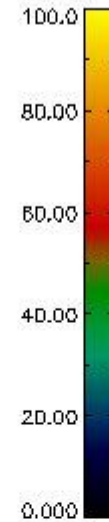
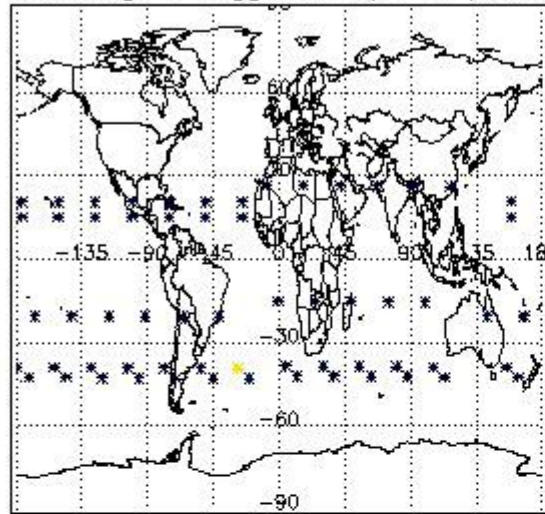
the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

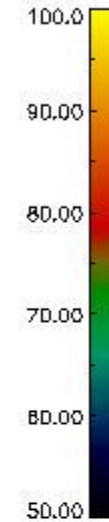
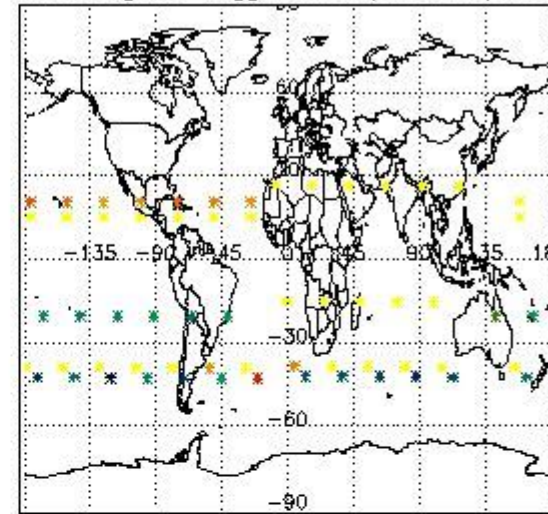


3.2 Plot quality information per product (world map)

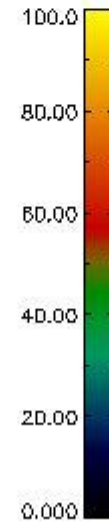
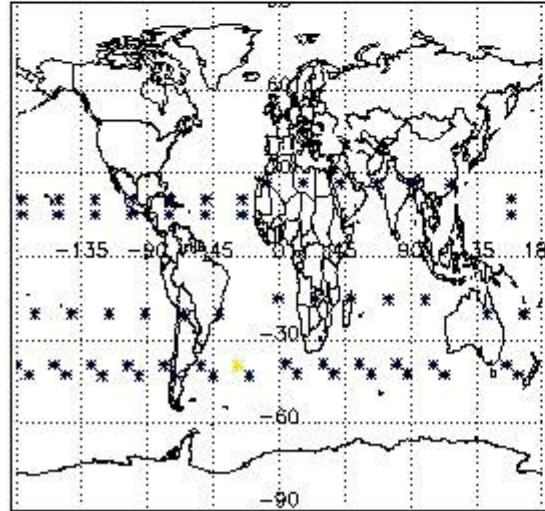
Percentage of flagged data per O3 profile



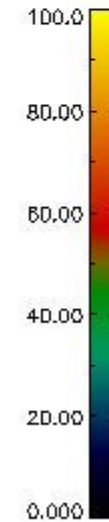
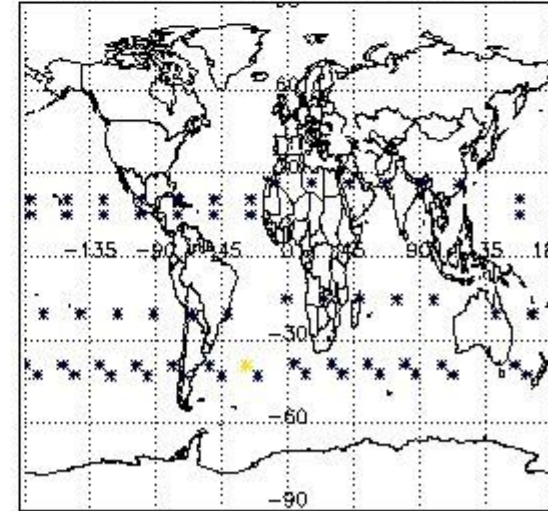
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

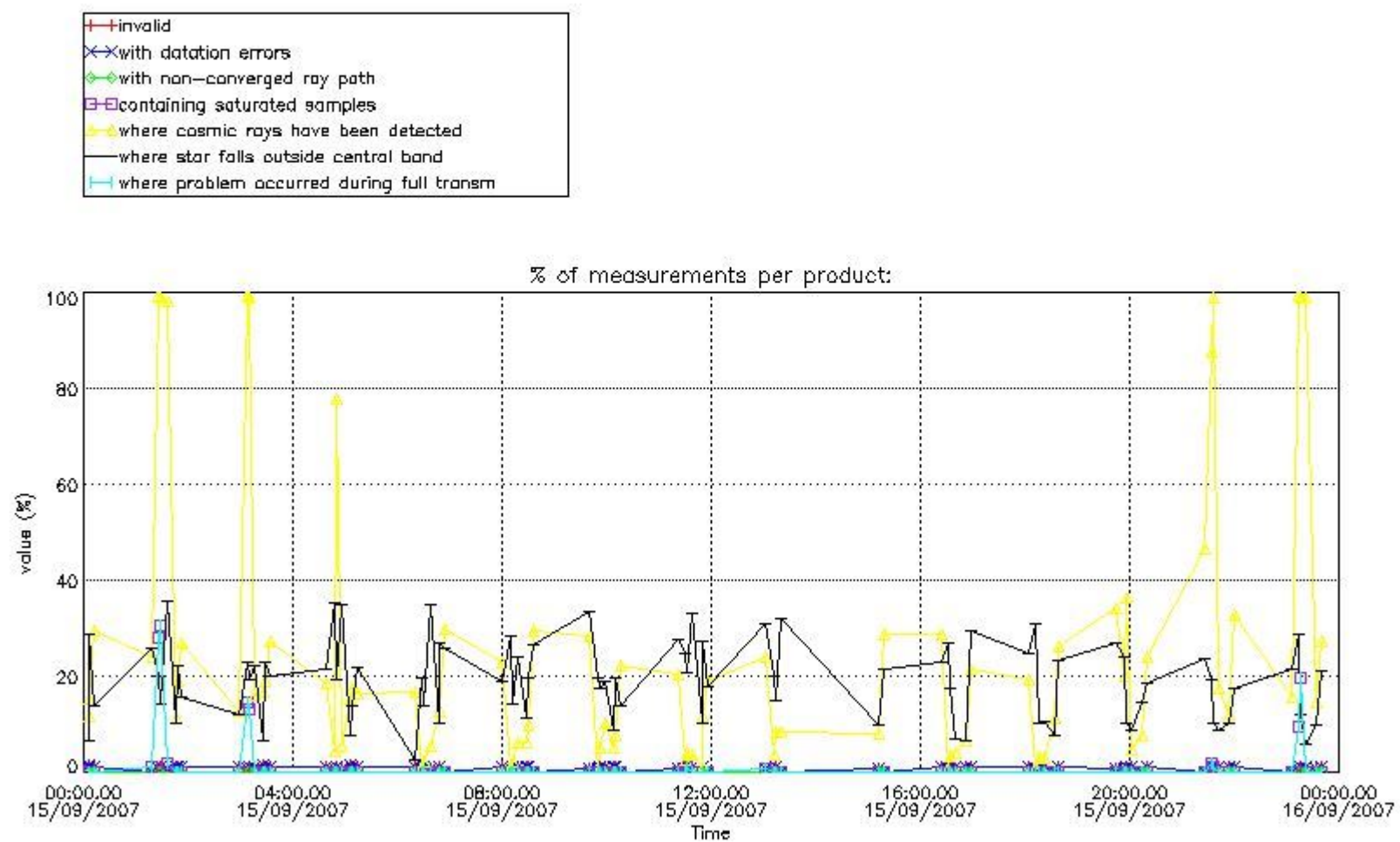


4. Level 1 quality information per product

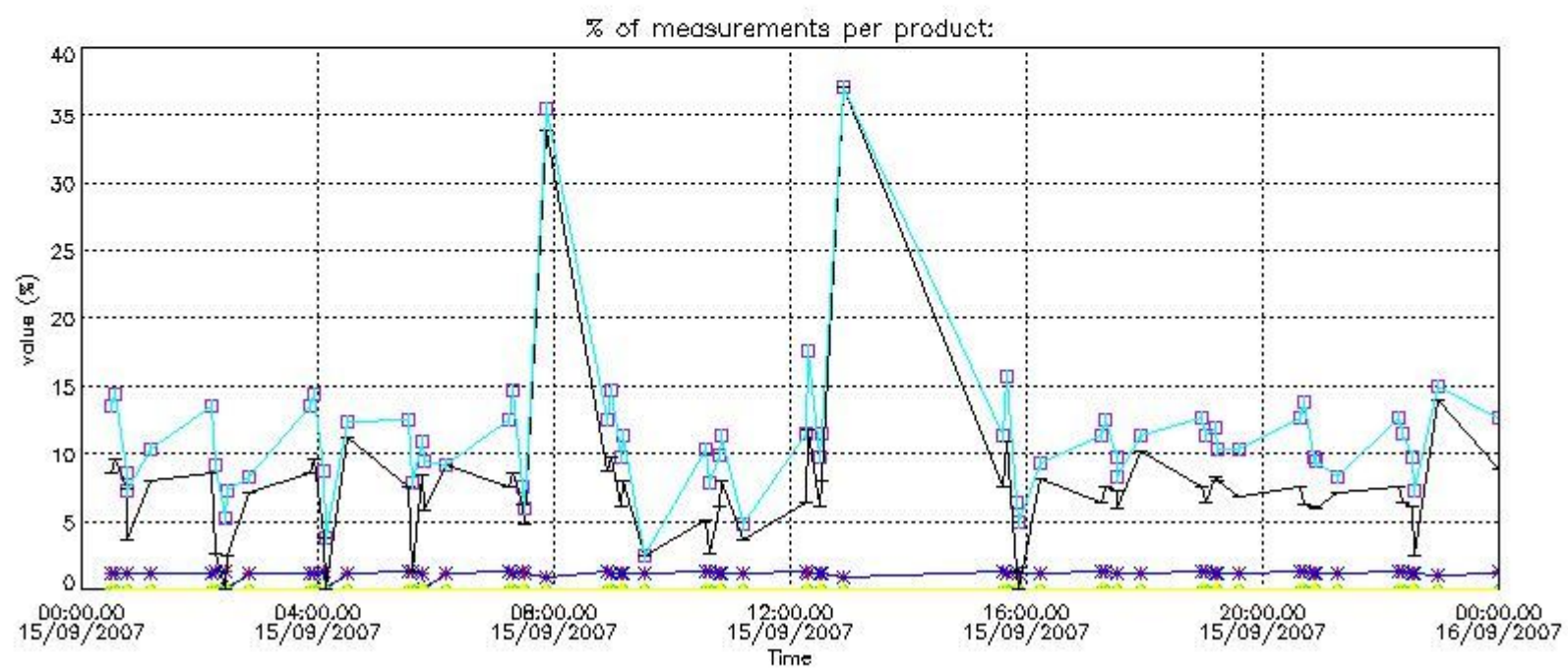
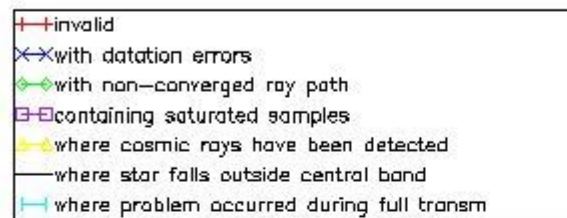
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



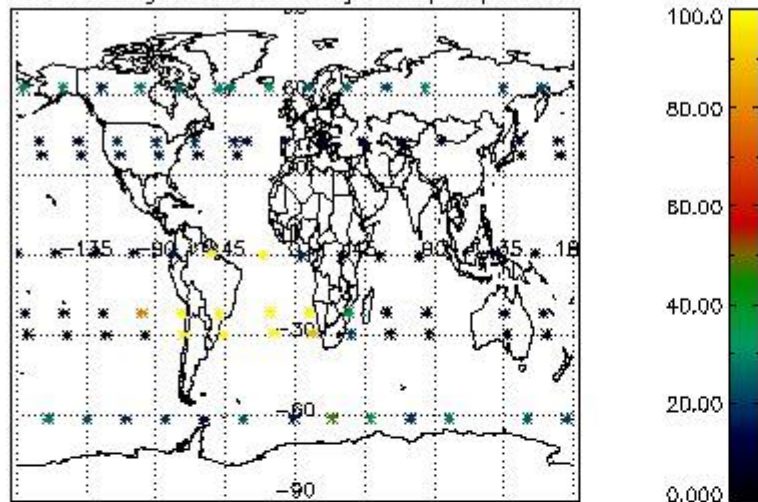
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



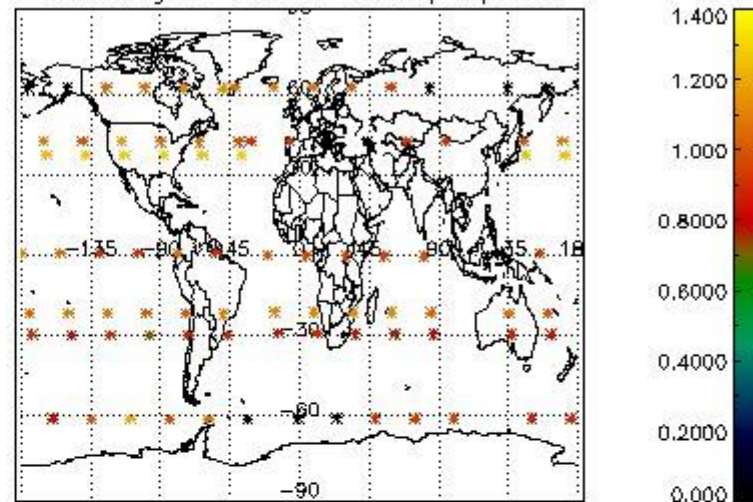
4.2 Plot quality information per product coming from level 1b processing (world map)

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

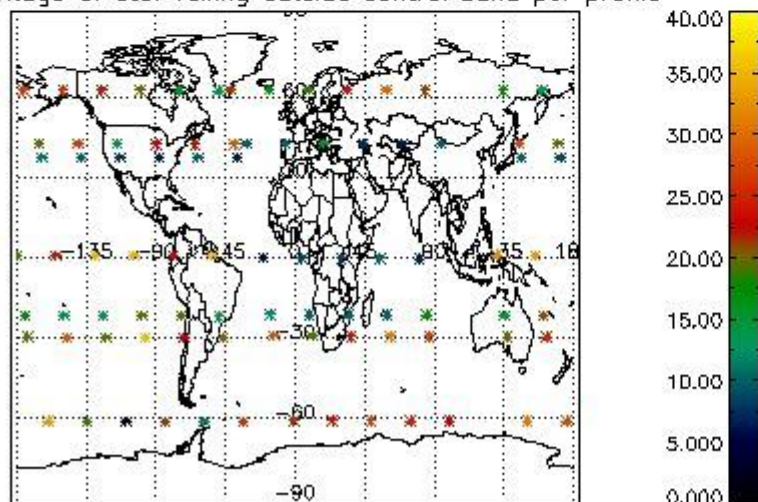
Percentage of cosmic ray hits per profile



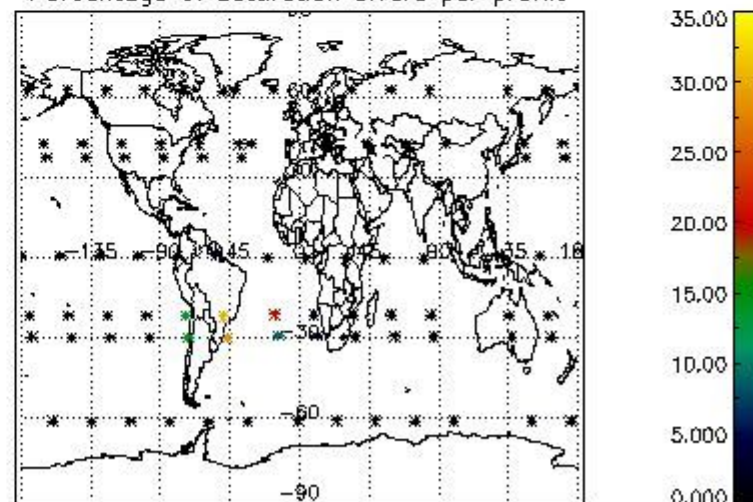
Percentage of datation errors per profile



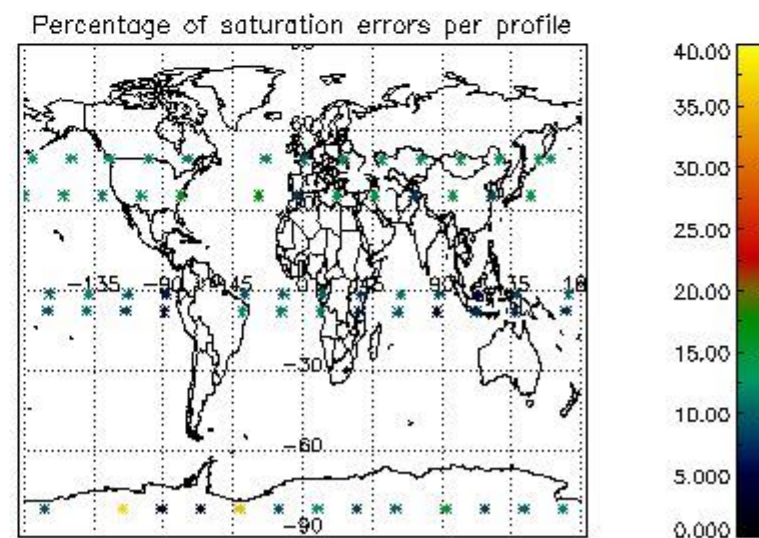
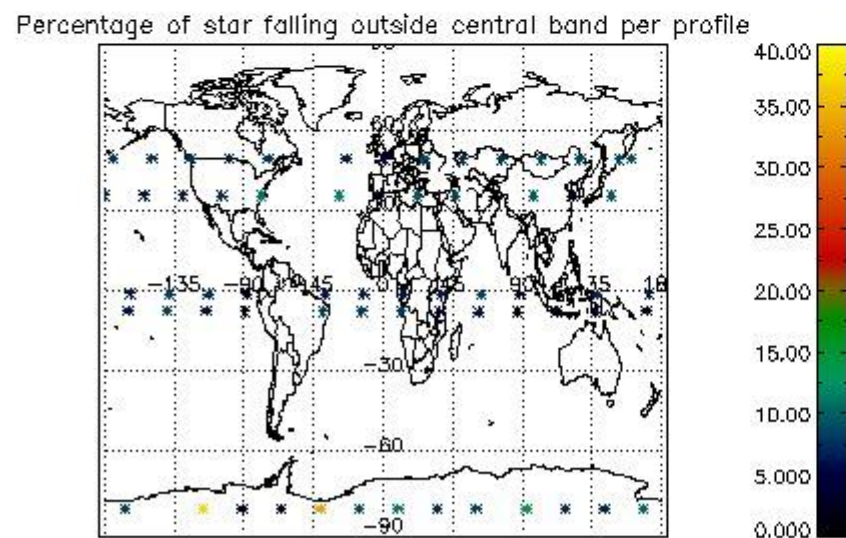
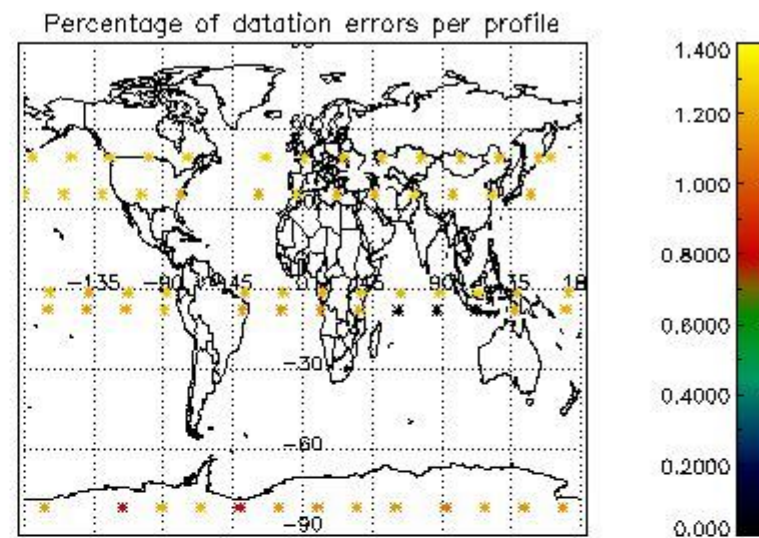
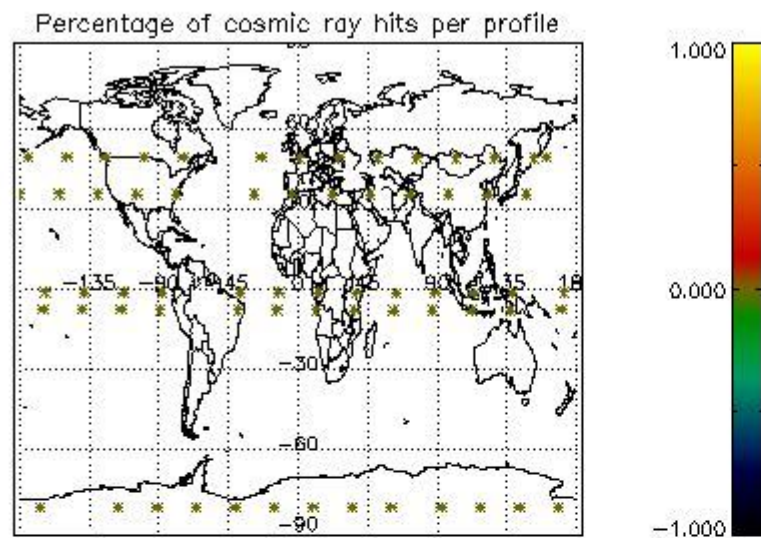
Percentage of star falling outside central band per profile



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

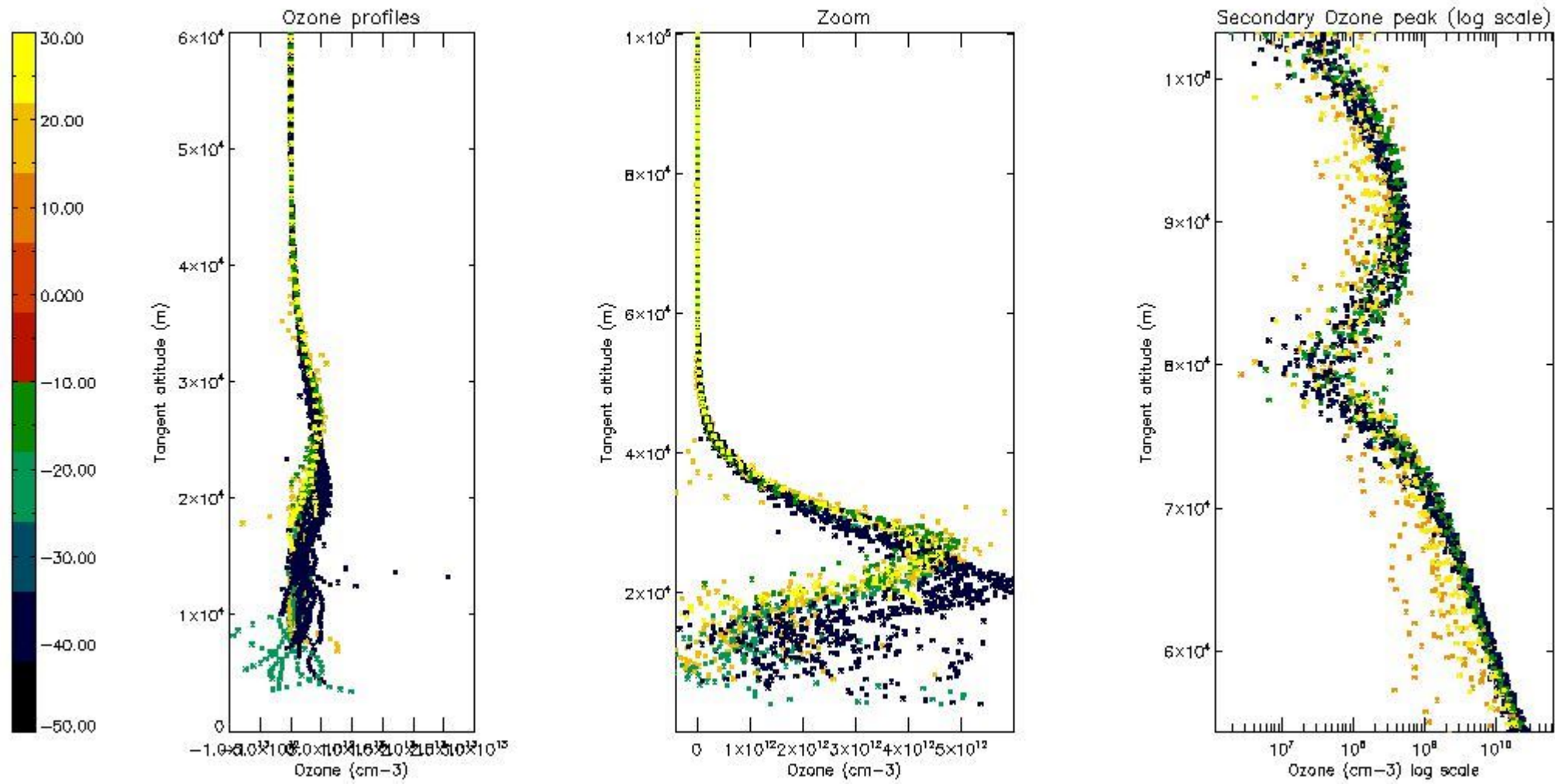
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

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

STD < 10	25
STD < 5	19

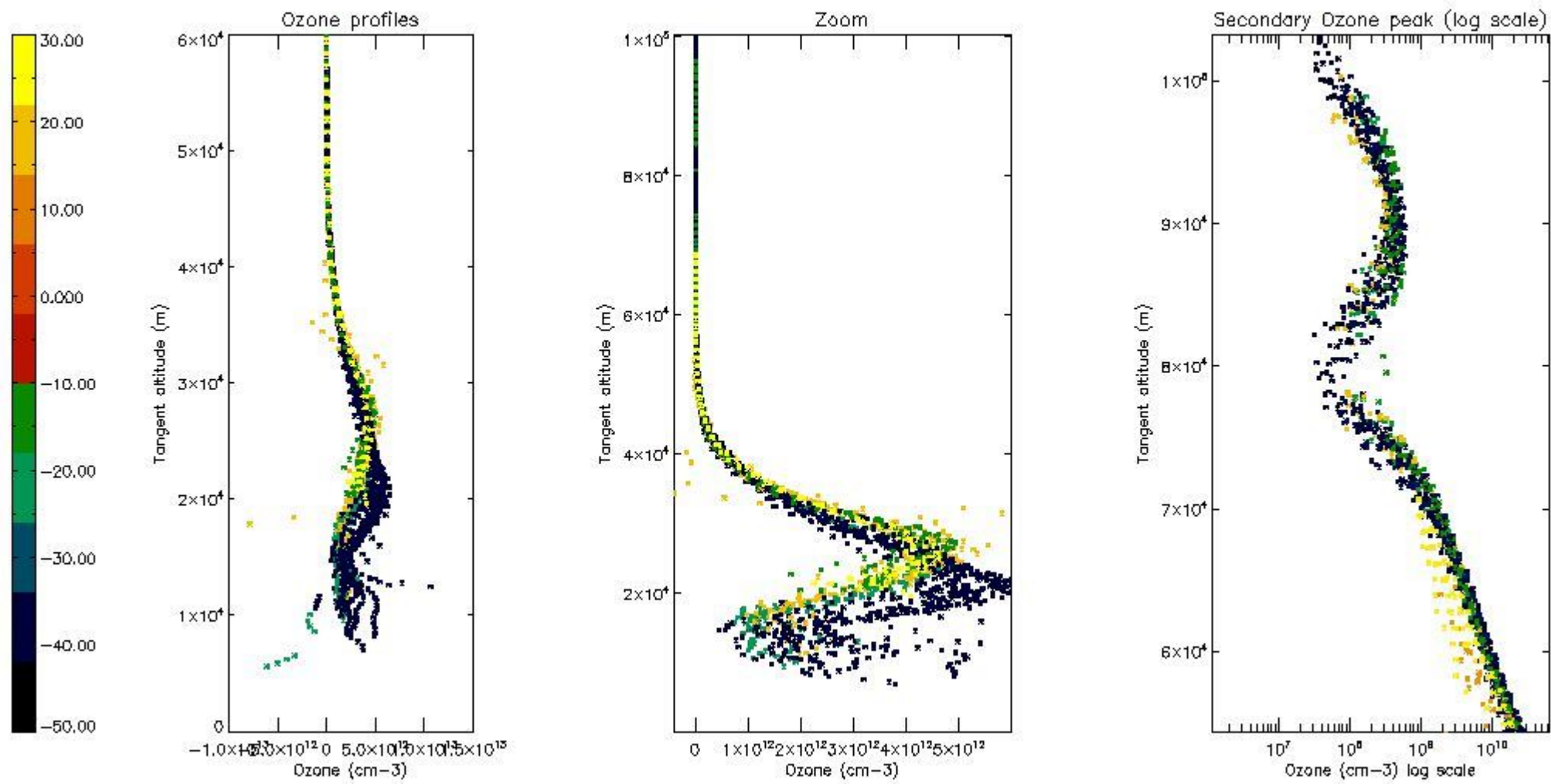
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



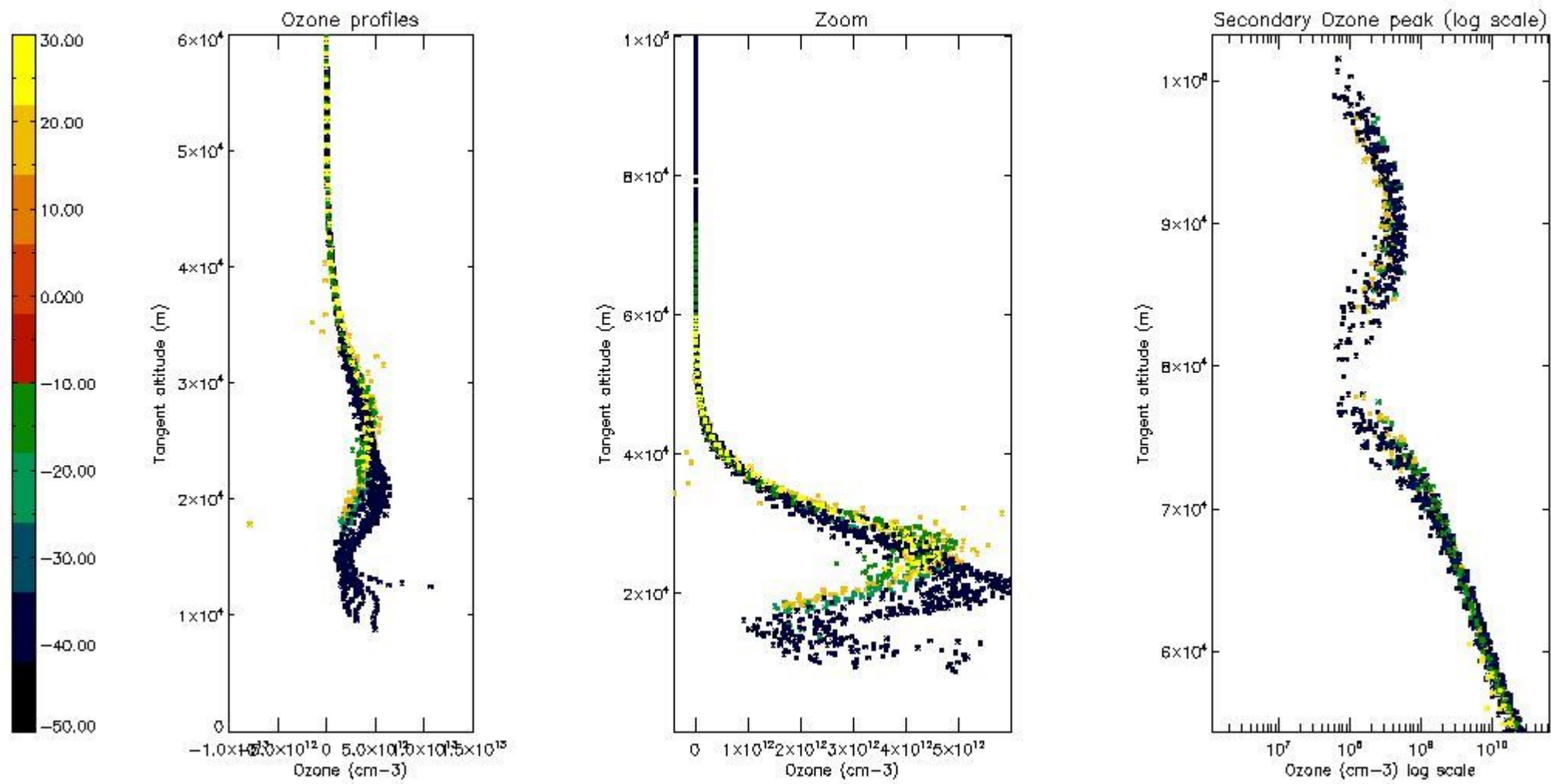
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



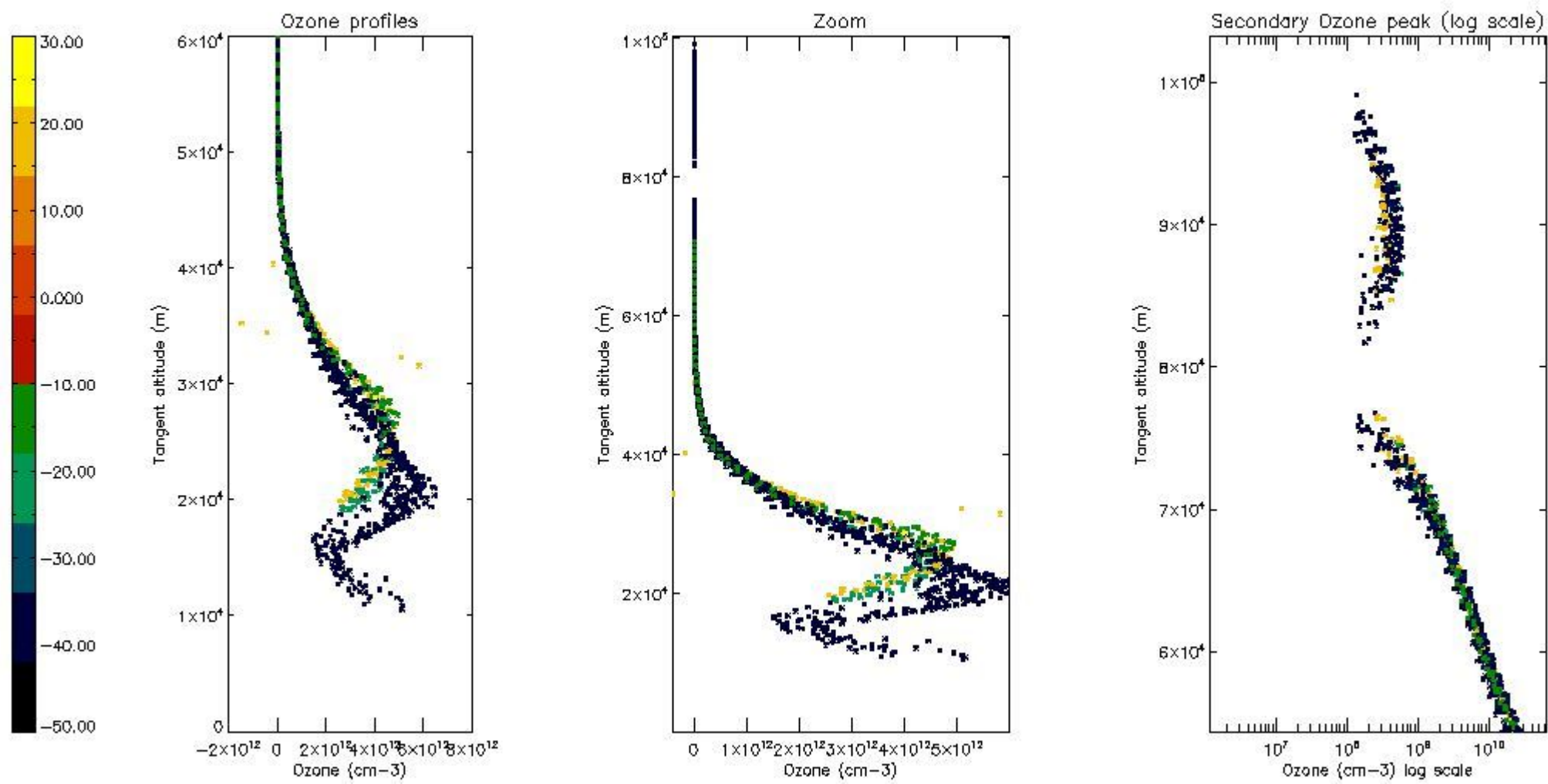
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



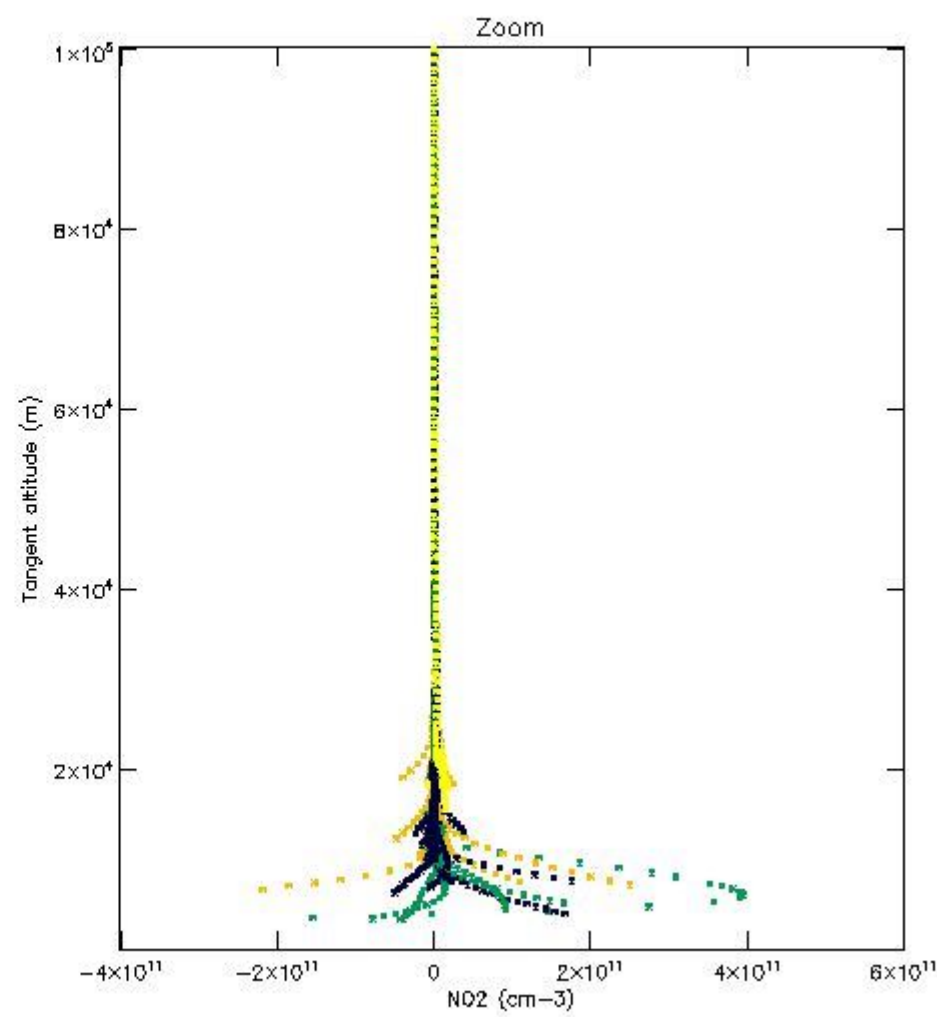
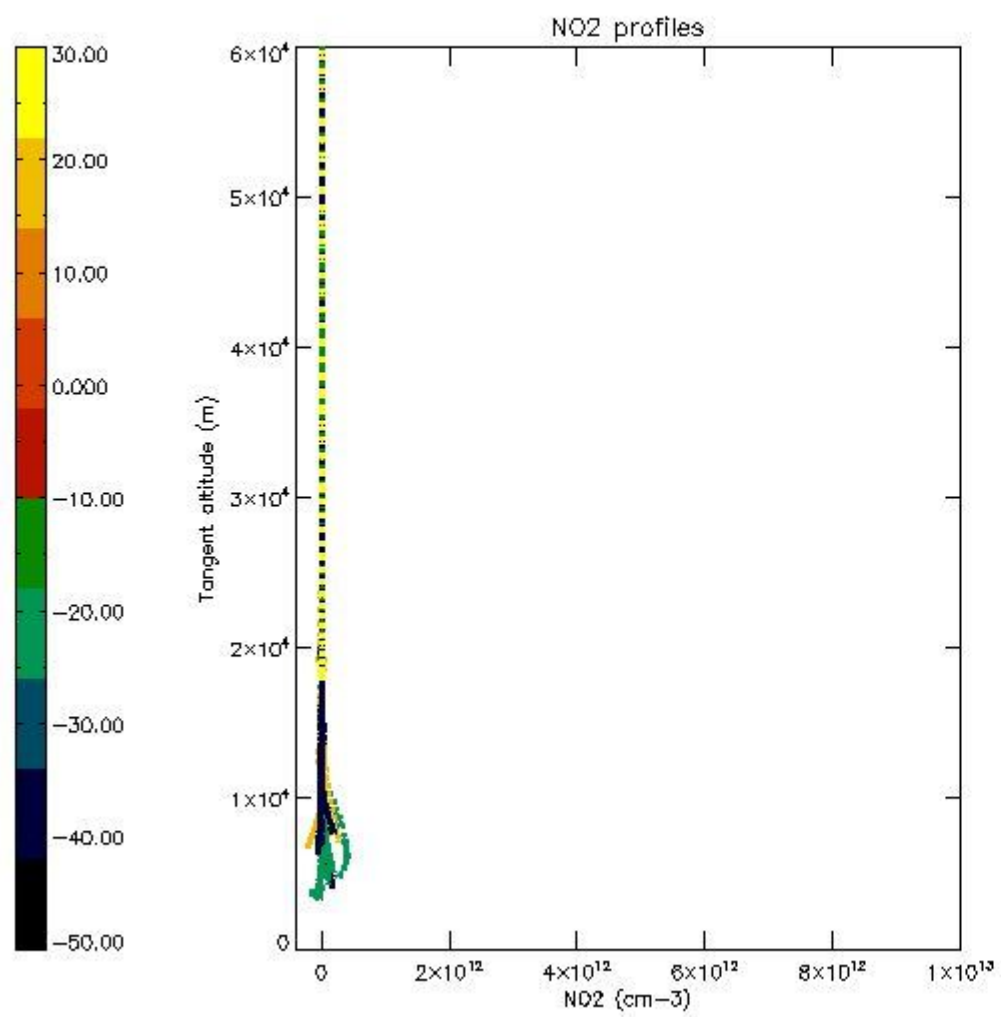
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



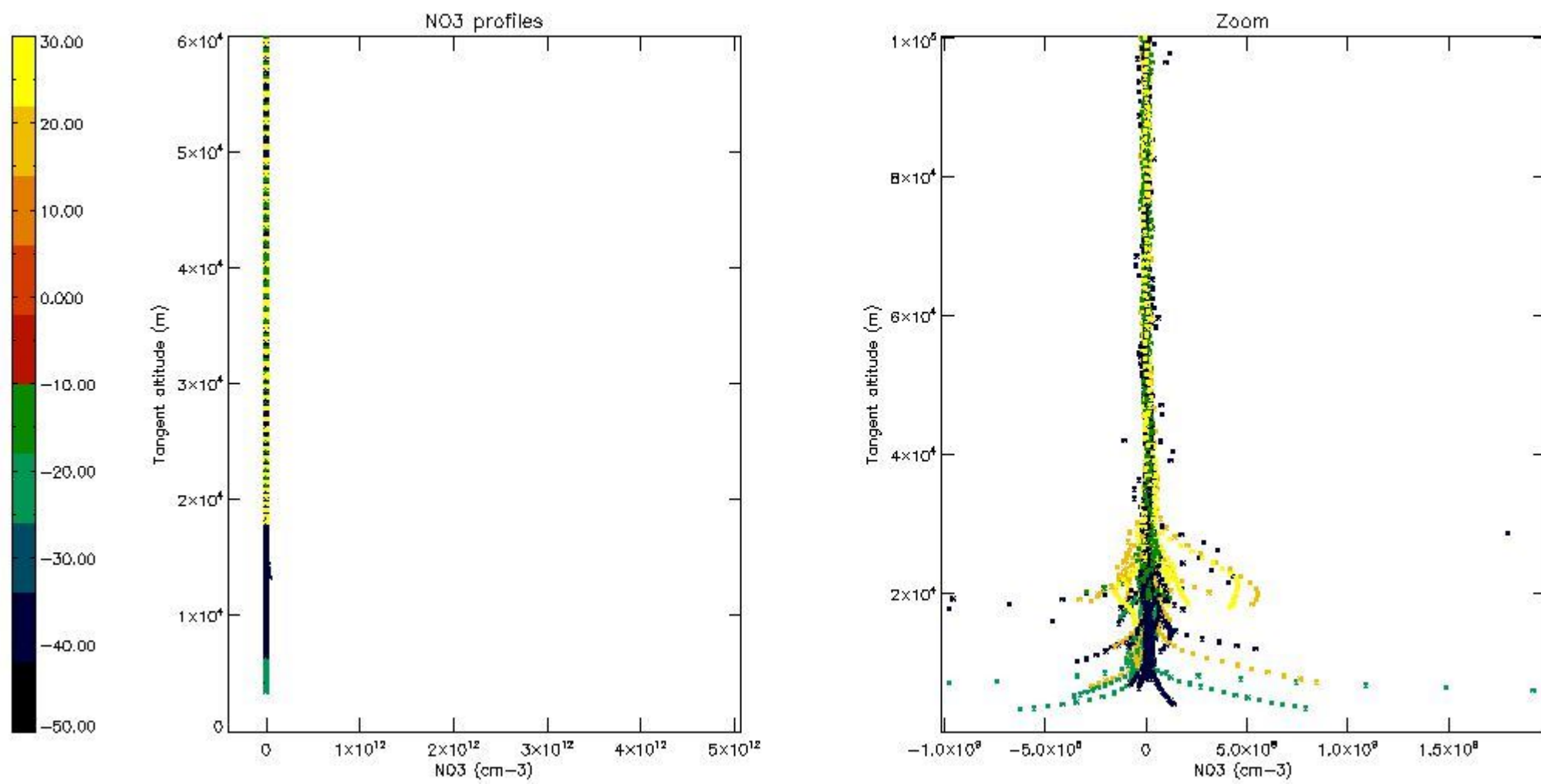
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



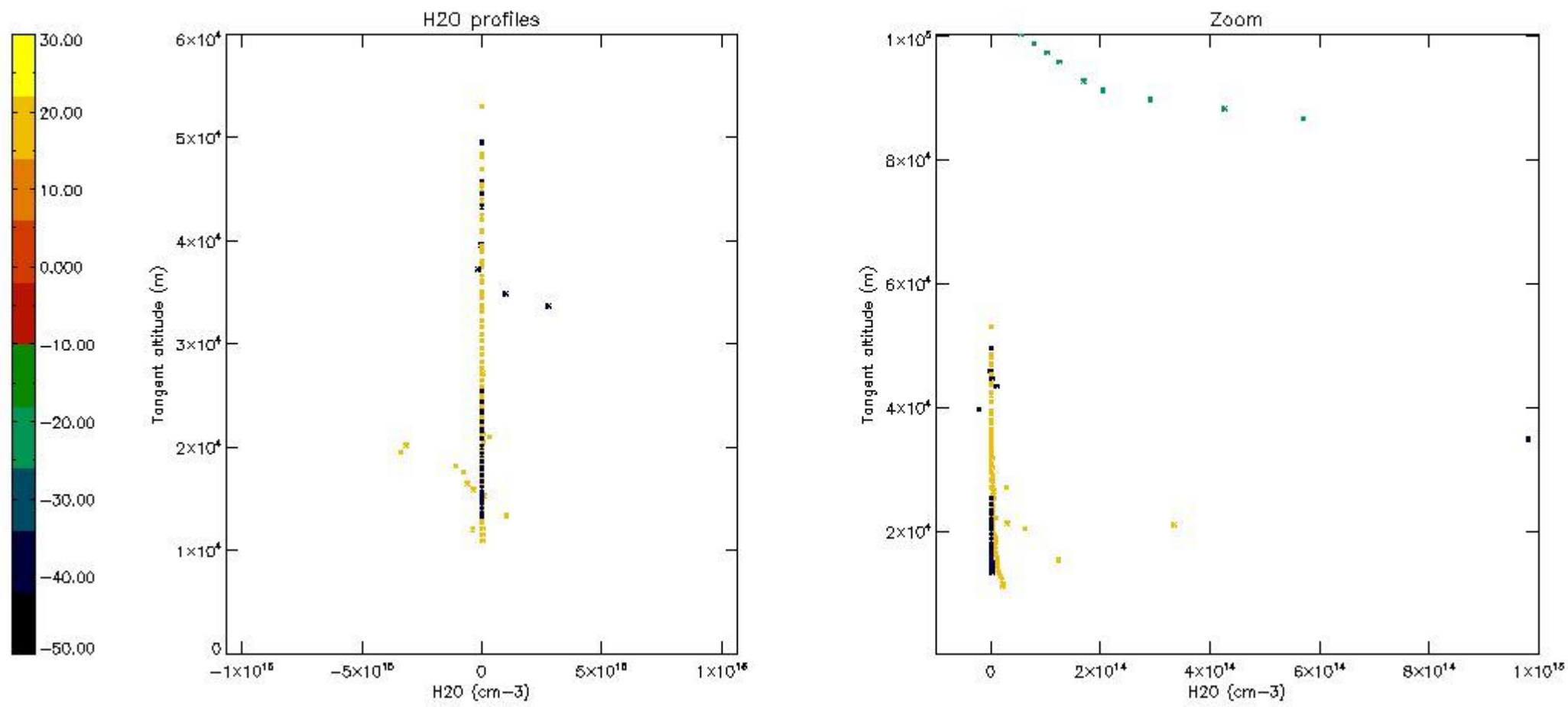
5.7 Plot NO3 profiles for all STD (dark without errors)

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	15-SEP-2007 00:05:00
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	15-SEP-2007 00:05:00
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	15-SEP-2007 00:05:00

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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.

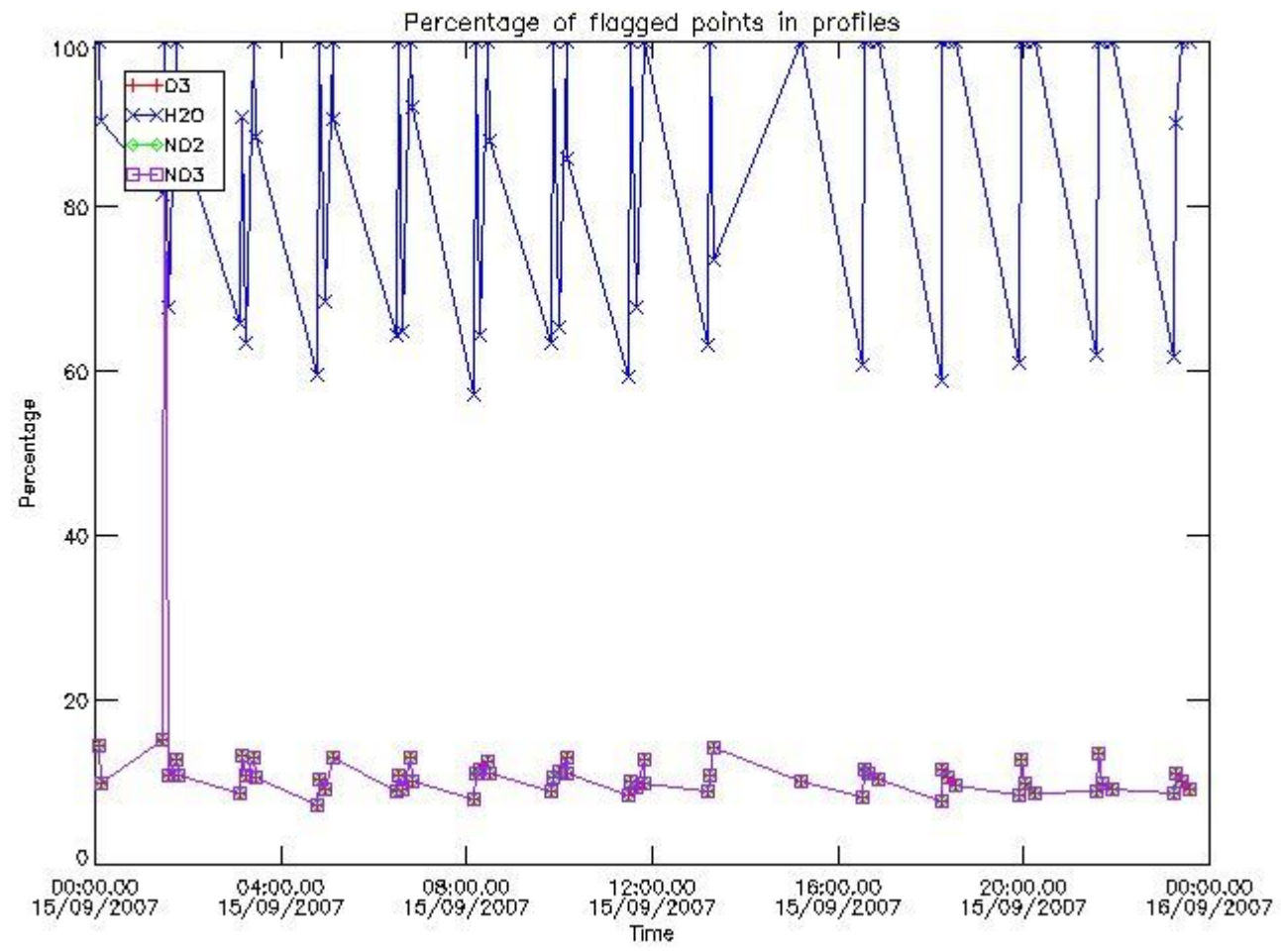
Item	Value
Time of report generation	23APR2013 04:57:45
Data source version	GOMOS/6.01
Start time of products	15-09-2007 (15SEP2007 00:00:00)
Stop time of products	16-09-2007 (16SEP2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	154
Nb of prods with errors	0

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__2PRFIN20070915_000500_000000392061_00360_28971_5707.N1	15-SEP-2007 00:05:00	Dark	39.000	143	Alp Hyi	2.8570	7200.0	78	28971	No
2	GOM_NL__2PRFIN20070915_000625_000000522061_00360_28971_5708.N1	15-SEP-2007 00:06:25	Dark	52.000	9	Alp Eri	0.45300	24000.	104	28971	No
3	GOM_NL__2PRFIN20070915_001211_000000442061_00360_28971_5709.N1	15-SEP-2007 00:12:11	Straylight	44.000	84	Alp Phe	2.3970	4500.0	88	28971	No
4	GOM_NL__2PRFIN20070915_003055_000000412061_00360_28971_5710.N1	15-SEP-2007 00:30:55	Bright	40.500	90	54Alp Peg	2.4870	11000.	81	28971	No
5	GOM_NL__2PRFIN20070915_003449_000000422061_00360_28971_5711.N1	15-SEP-2007 00:34:49	Bright	41.500	93	53Bet Peg	2.5200	3100.0	83	28971	No
6	GOM_NL__2PRFIN20070915_004509_000000412061_00360_28971_5712.N1	15-SEP-2007 00:45:09	Bright	40.500	74	11Bet Cas	2.2680	6600.0	81	28971	No
7	GOM_NL__2PRFIN20070915_004659_000000422061_00360_28971_5713.N1	15-SEP-2007 00:46:59	Bright	41.500	76	27Gam Cas	2.3000	30000.	83	28971	No
8	GOM_NL__2PRFIN20070915_010911_000000442061_00360_28971_5714.N1	15-SEP-2007 01:09:11	Bright	43.500	24	66Alp Gem	1.5800	10200.	87	28971	No
9	GOM_NL__2PRFIN20070915_011744_000000542061_00360_28971_5715.N1	15-SEP-2007 01:17:44	Twilight	54.000	8	10Alp CMi	0.40000	6500.0	108	28971	No
10	GOM_NL__2PRFIN20070915_012641_000000572061_00360_28971_5716.N1	15-SEP-2007 01:26:41	Dark	57.000	1	9Alp CMa	-1.4400	11000.	114	28971	No
11	GOM_NL__2PRFIN20070915_012858_000000462061_00360_28971_5717.N1	15-SEP-2007 01:28:58	Dark	46.000	23	21Eps CMa	1.5020	26000.	92	28971	No
12	GOM_NL__2PRFIN20070915_013519_000000562061_00361_28972_5719.N1	15-SEP-2007 01:35:19	Dark	56.000	2	Alp Car	-0.73600	7000.0	112	28972	No
13	GOM_NL__2PRFIN20070915_014537_000000402061_00361_28972_5720.N1	15-SEP-2007 01:45:37	Dark	40.000	143	Alp Hyi	2.8570	7200.0	80	28972	No
14	GOM_NL__2PRFIN20070915_014702_000000482061_00361_28972_5721.N1	15-SEP-2007 01:47:02	Dark	47.500	9	Alp Eri	0.45300	24000.	95	28972	No
15	GOM_NL__2PRFIN20070915_015247_000000452061_00361_28972_5722.N1	15-SEP-2007 01:52:47	Straylight	44.500	84	Alp Phe	2.3970	4500.0	89	28972	No
16	GOM_NL__2PRFIN20070915_021131_000000412061_00361_28972_5723.N1	15-SEP-2007 02:11:31	Bright	40.500	90	54Alp Peg	2.4870	11000.	81	28972	No
17	GOM_NL__2PRFIN20070915_021525_000000392061_00361_28972_5724.N1	15-SEP-2007 02:15:25	Bright	38.500	93	53Bet Peg	2.5200	3100.0	77	28972	No
18	GOM_NL__2PRFIN20070915_022544_000000392061_00361_28972_5725.N1	15-SEP-2007 02:25:44	Bright	38.500	74	11Bet Cas	2.2680	6600.0	77	28972	No
19	GOM_NL__2PRFIN20070915_022734_000000412061_00361_28972_5726.N1	15-SEP-2007 02:27:34	Bright	41.000	76	27Gam Cas	2.3000	30000.	82	28972	No
20	GOM_NL__2PRFIN20070915_024947_000000432061_00361_28972_5727.N1	15-SEP-2007 02:49:47	Bright	42.500	24	66Alp Gem	1.5800	10200.	85	28972	No
21	GOM_NL__2PRFIN20070915_025821_000000472061_00361_28972_5728.N1	15-SEP-2007 02:58:21	Twilight	46.500	8	10Alp CMi	0.40000	6500.0	93	28972	No
22	GOM_NL__2PRFIN20070915_030718_000000592061_00361_28972_5729.N1	15-SEP-2007 03:07:18	Dark	59.000	1	9Alp CMa	-1.4400	11000.	118	28972	No
23	GOM_NL__2PRFIN20070915_030935_000000502061_00361_28972_5730.N1	15-SEP-2007 03:09:35	Dark	49.500	23	21Eps CMa	1.5020	26000.	99	28972	No
24	GOM_NL__2PRFIN20070915_031555_000000472061_00362_28973_5734.N1	15-SEP-2007 03:15:55	Dark	47.000	2	Alp Car	-0.73600	7000.0	94	28973	No
25	GOM_NL__2PRFIN20070915_032613_000000392061_00362_28973_5735.N1	15-SEP-2007 03:26:13	Dark	39.000	143	Alp Hyi	2.8570	7200.0	78	28973	No
26	GOM_NL__2PRFIN20070915_032738_000000482061_00362_28973_5736.N1	15-SEP-2007 03:27:38	Dark	48.000	9	Alp Eri	0.45300	24000.	96	28973	No
27	GOM_NL__2PRFIN20070915_033324_000000482061_00362_28973_5737.N1	15-SEP-2007 03:33:24	Straylight	47.500	84	Alp Phe	2.3970	4500.0	95	28973	No
28	GOM_NL__2PRFIN20070915_035207_000000412061_00362_28973_5738.N1	15-SEP-2007 03:52:07	Bright	40.500	90	54Alp Peg	2.4870	11000.	81	28973	No
29	GOM_NL__2PRFIN20070915_035601_000000422061_00362_28973_5739.N1	15-SEP-2007 03:56:01	Bright	41.500	93	53Bet Peg	2.5200	3100.0	83	28973	No
30	GOM_NL__2PRFIN20070915_040620_000000402061_00362_28973_5740.N1	15-SEP-2007 04:06:20	Bright	40.000	74	11Bet Cas	2.2680	6600.0	80	28973	No
31	GOM_NL__2PRFIN20070915_040810_000000402061_00362_28973_5741.N1	15-SEP-2007 04:08:10	Bright	39.500	76	27Gam Cas	2.3000	30000.	79	28973	No
32	GOM_NL__2PRFIN20070915_043023_000000452061_00362_28973_5742.N1	15-SEP-2007 04:30:23	Bright	44.500	24	66Alp Gem	1.5800	10200.	89	28973	No
33	GOM_NL__2PRFIN20070915_043857_000000522061_00362_28973_5743.N1	15-SEP-2007 04:38:57	Twilight	51.500	8	10Alp CMi	0.40000	6500.0	103	28973	No
34	GOM_NL__2PRFIN20070915_044755_000000702061_00362_28973_5744.N1	15-SEP-2007 04:47:55	Dark	69.500	1	9Alp CMa	-1.4400	11000.	139	28973	No
35	GOM_NL__2PRFIN20070915_045012_000000502061_00362_28973_5745.N1	15-SEP-2007 04:50:12	Dark	49.500	23	21Eps CMa	1.5020	26000.	99	28973	No
36	GOM_NL__2PRFIN20070915_045632_000000562061_00363_28974_5744.N1	15-SEP-2007 04:56:32	Dark	56.000	2	Alp Car	-0.73600	7000.0	112	28974	No
37	GOM_NL__2PRFIN20070915_050650_000000392061_00363_28974_5745.N1	15-SEP-2007 05:06:50	Dark	39.000	143	Alp Hyi	2.8570	7200.0	78	28974	No
38	GOM_NL__2PRFIN20070915_050815_000000432061_00363_28974_5746.N1	15-SEP-2007 05:08:15	Dark	43.000	9	Alp Eri	0.45300	24000.	86	28974	No
39	GOM_NL__2PRFIN20070915_051400_000000492061_00363_28974_5747.N1	15-SEP-2007 05:14:00	Straylight	48.500	84	Alp Phe	2.3970	4500.0	97	28974	No
40	GOM_NL__2PRFIN20070915_053243_000000402061_00363_28974_5748.N1	15-SEP-2007 05:32:43	Bright	40.000	90	54Alp Peg	2.4870	11000.	80	28974	No
41	GOM_NL__2PRFIN20070915_053636_000000382061_00363_28974_5749.N1	15-SEP-2007 05:36:36	Bright	38.000	93	53Bet Peg	2.5200	3100.0	76	28974	No
42	GOM_NL__2PRFIN20070915_054655_000000422061_00363_28974_5750.N1	15-SEP-2007 05:46:55	Bright	41.500	74	11Bet Cas	2.2680	6600.0	83	28974	No

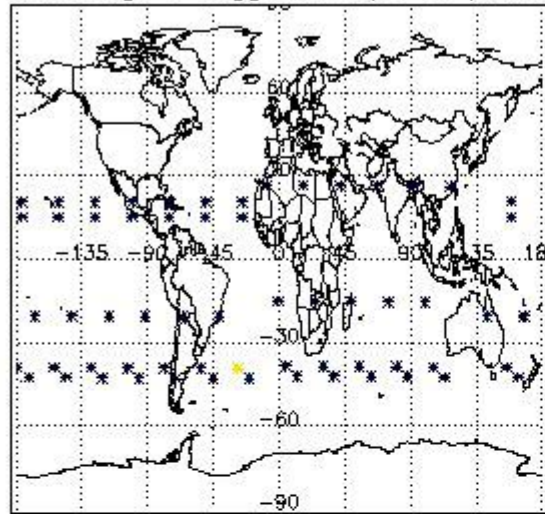
the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

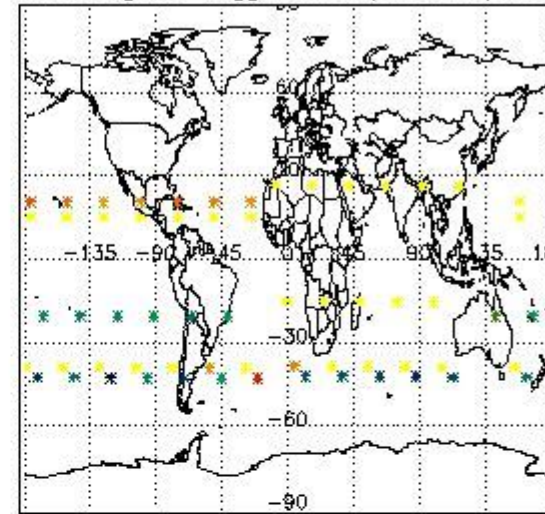


3.2 Plot quality information per product (world map)

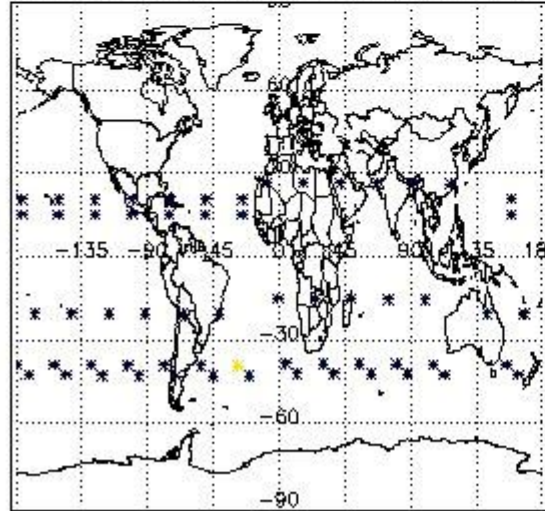
Percentage of flagged data per O3 profile



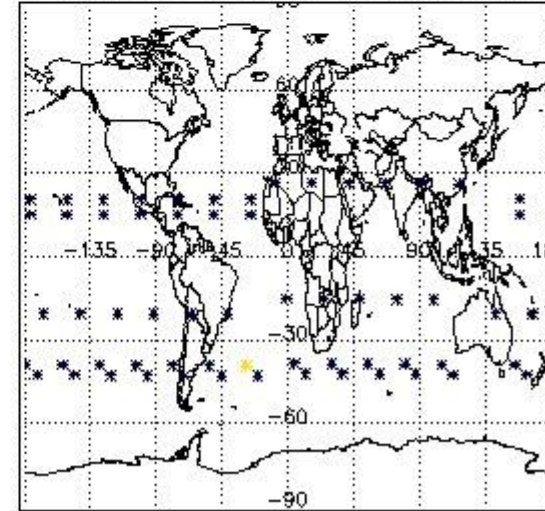
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

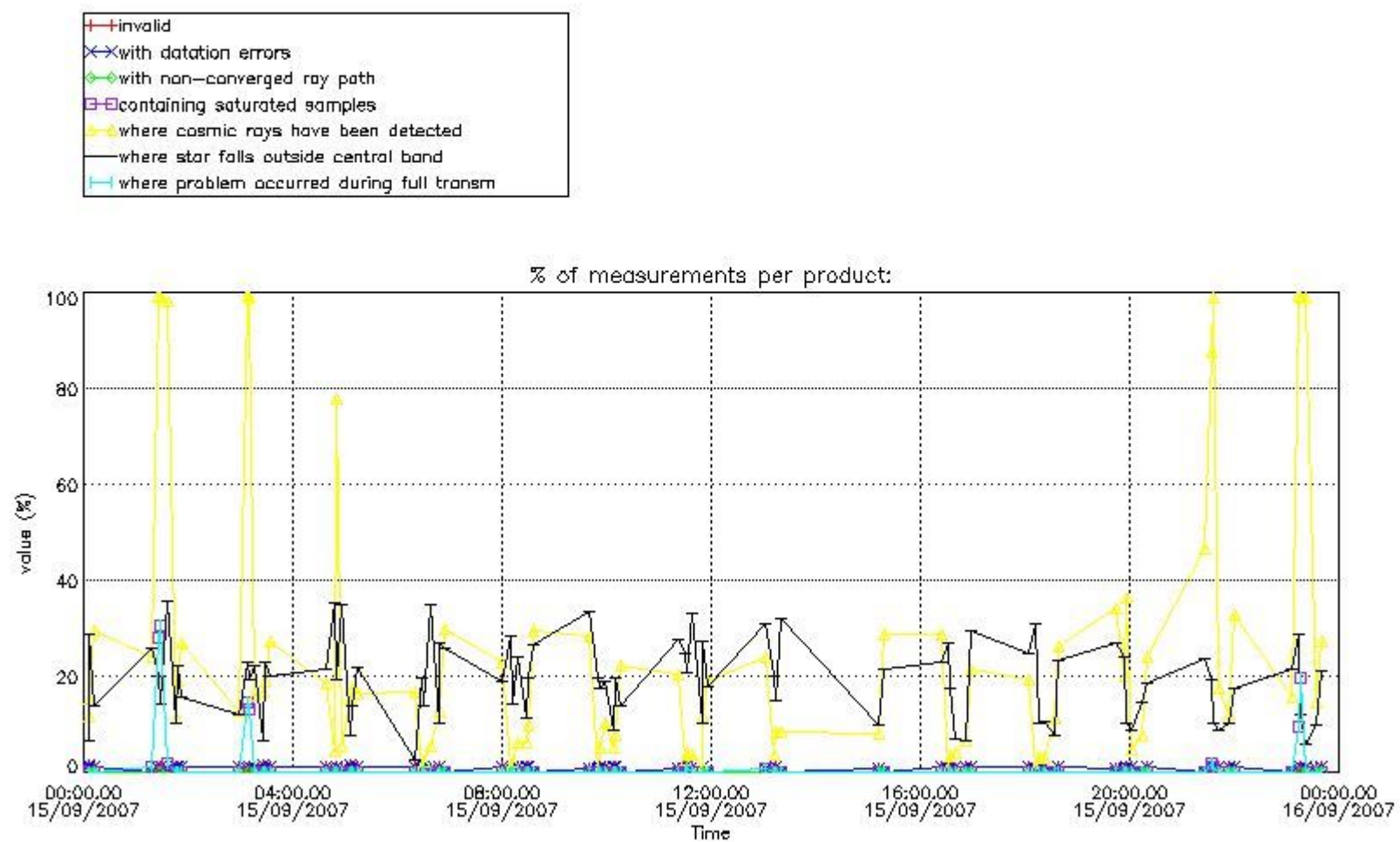


4. Level 1 quality information per product

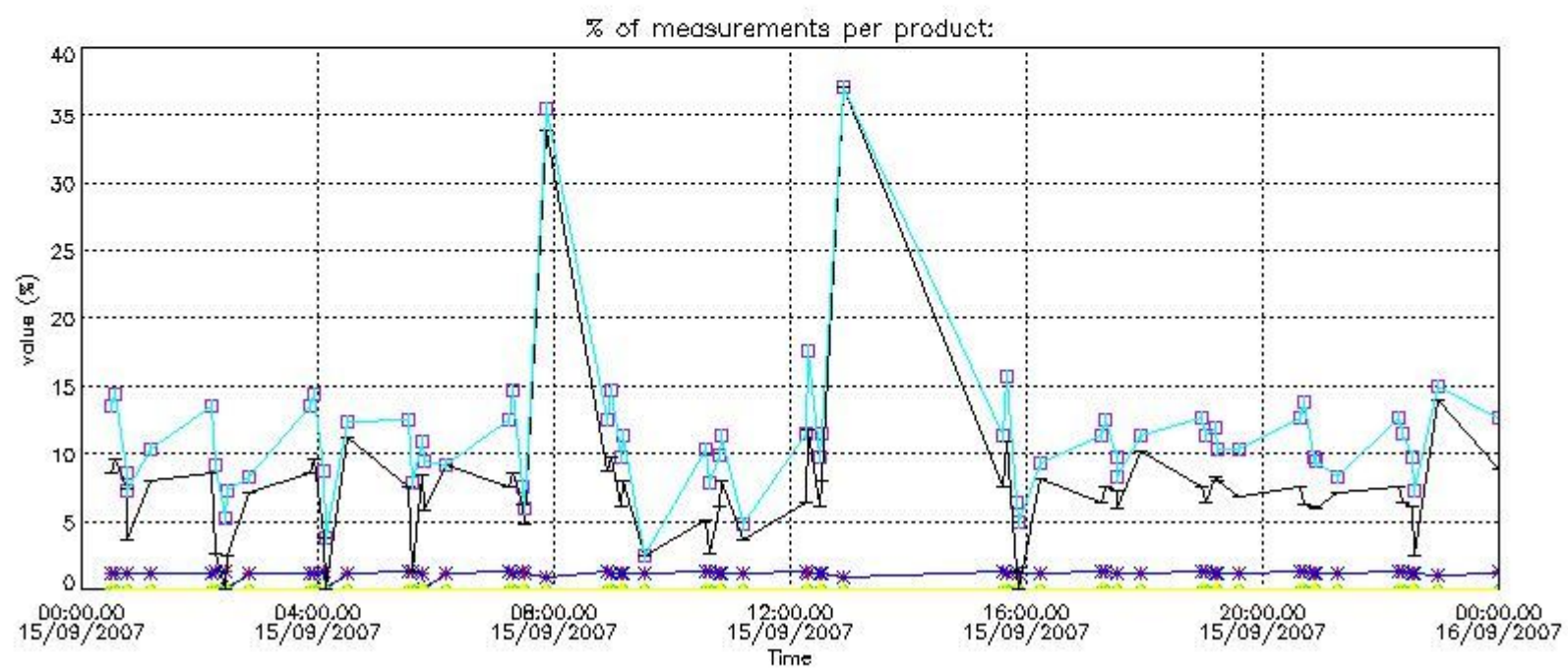
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



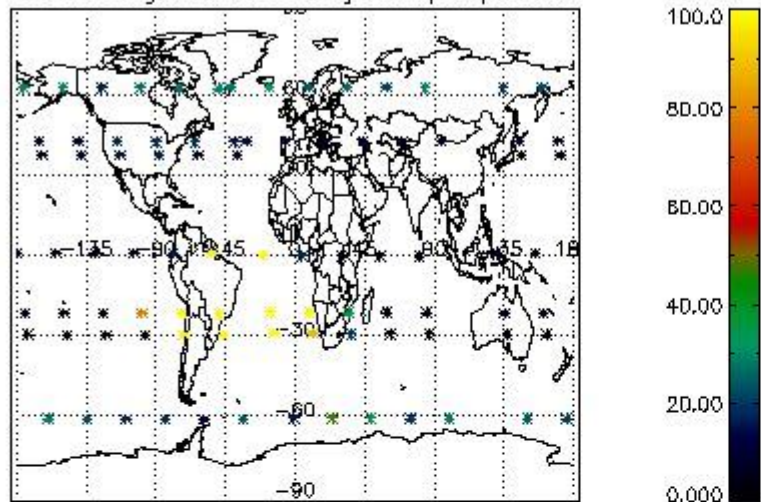
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



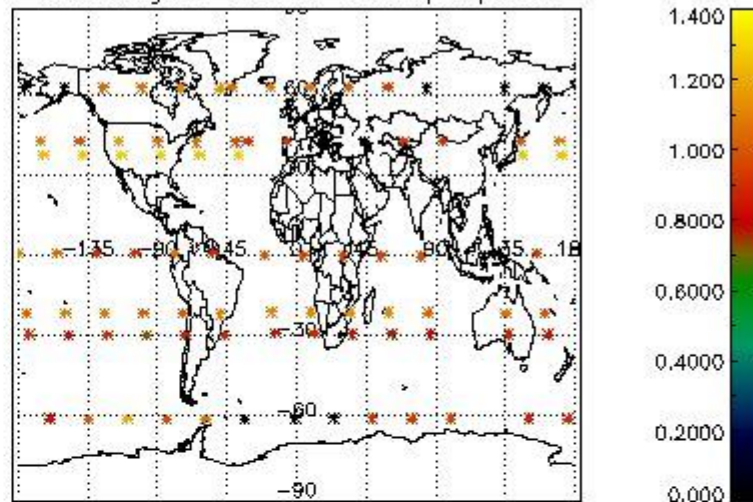
4.2 Plot quality information per product coming from level 1b processing (world map)

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

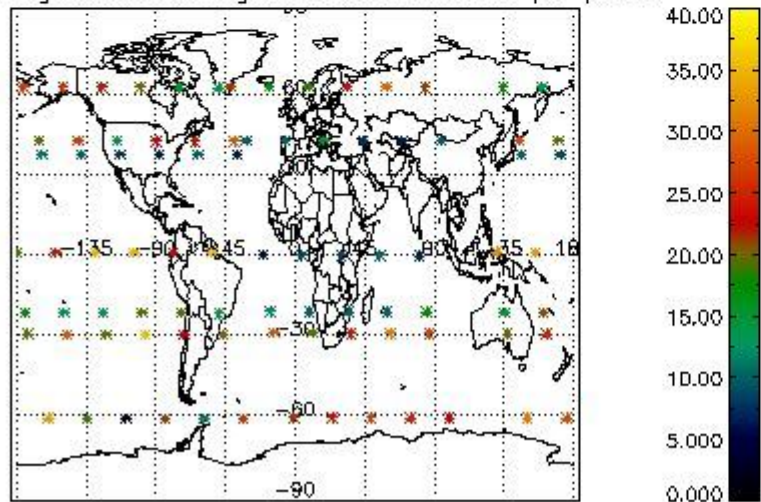
Percentage of cosmic ray hits per profile



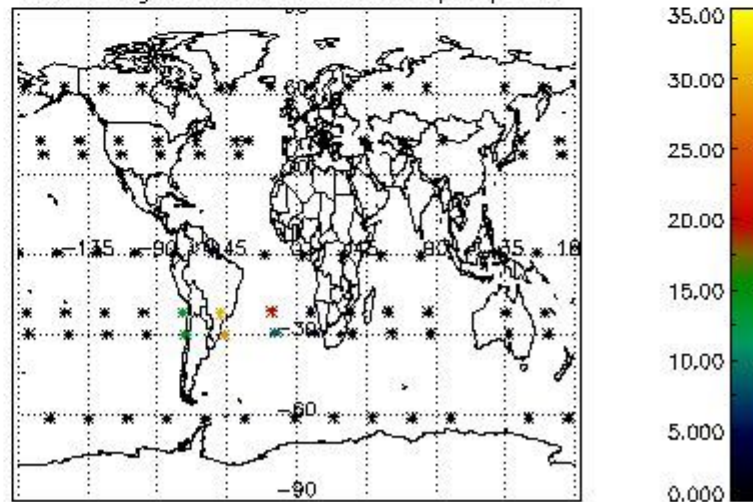
Percentage of datation errors per profile



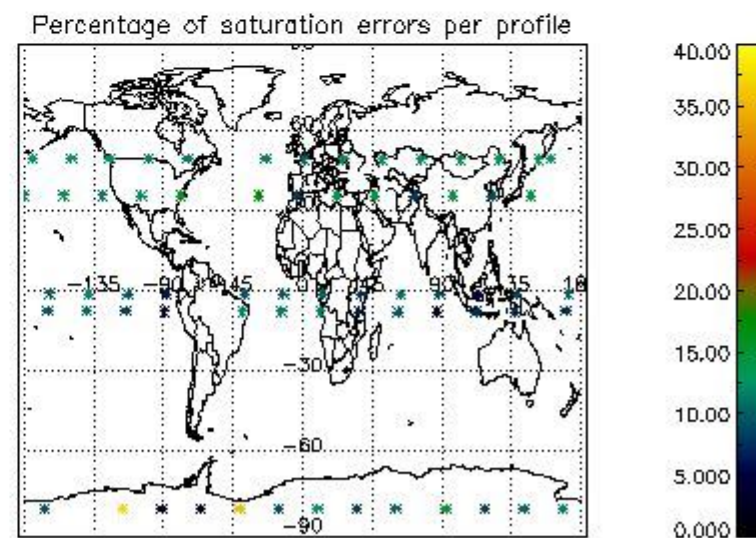
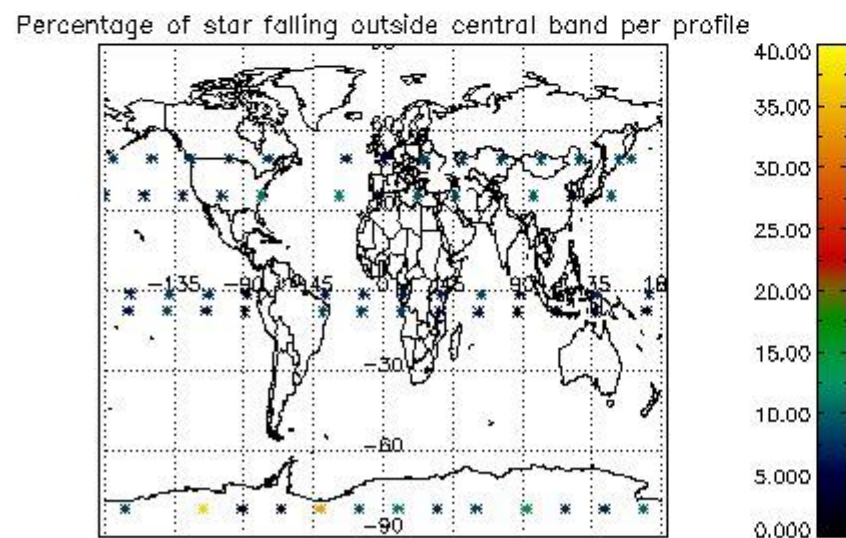
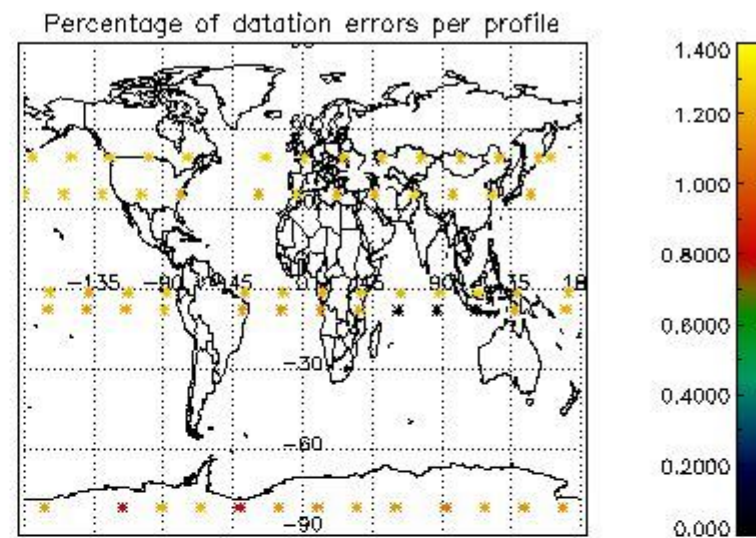
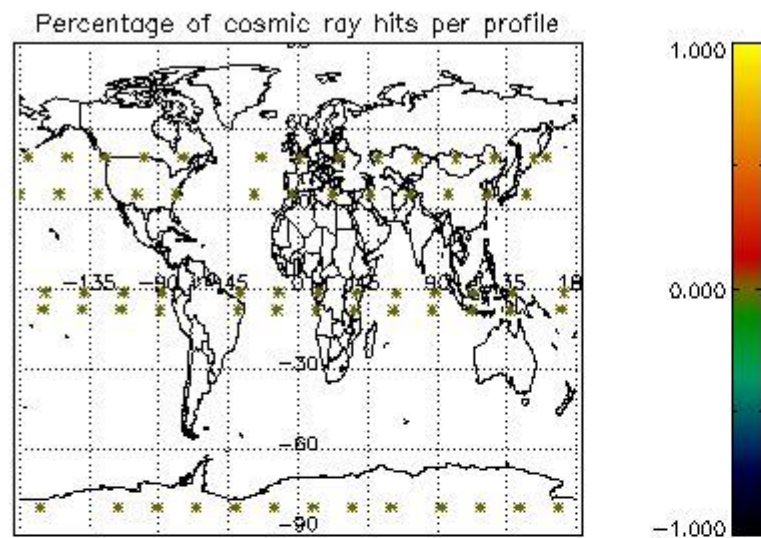
Percentage of star falling outside central band per profile



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

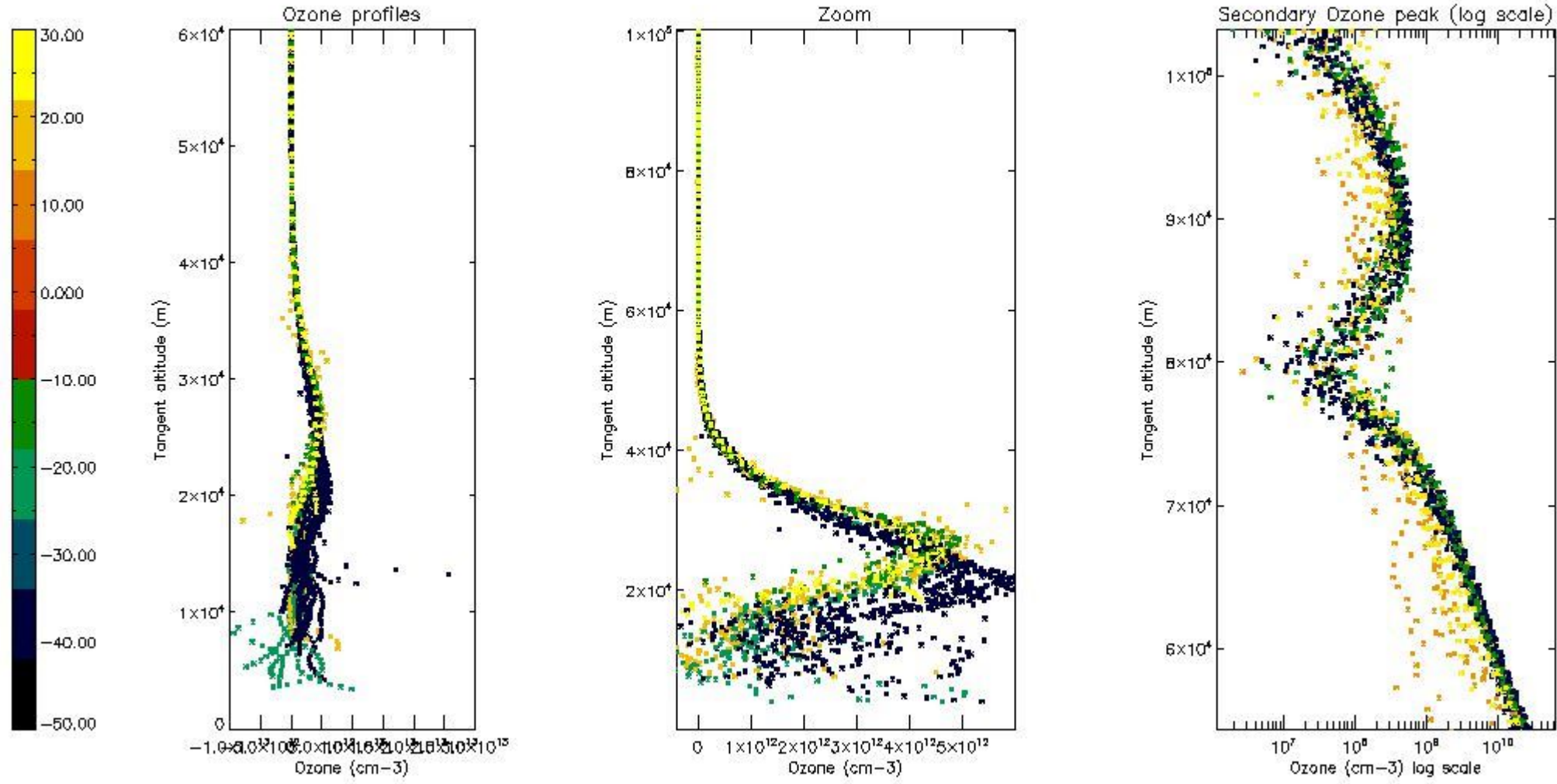
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

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

STD < 10	25
STD < 5	19

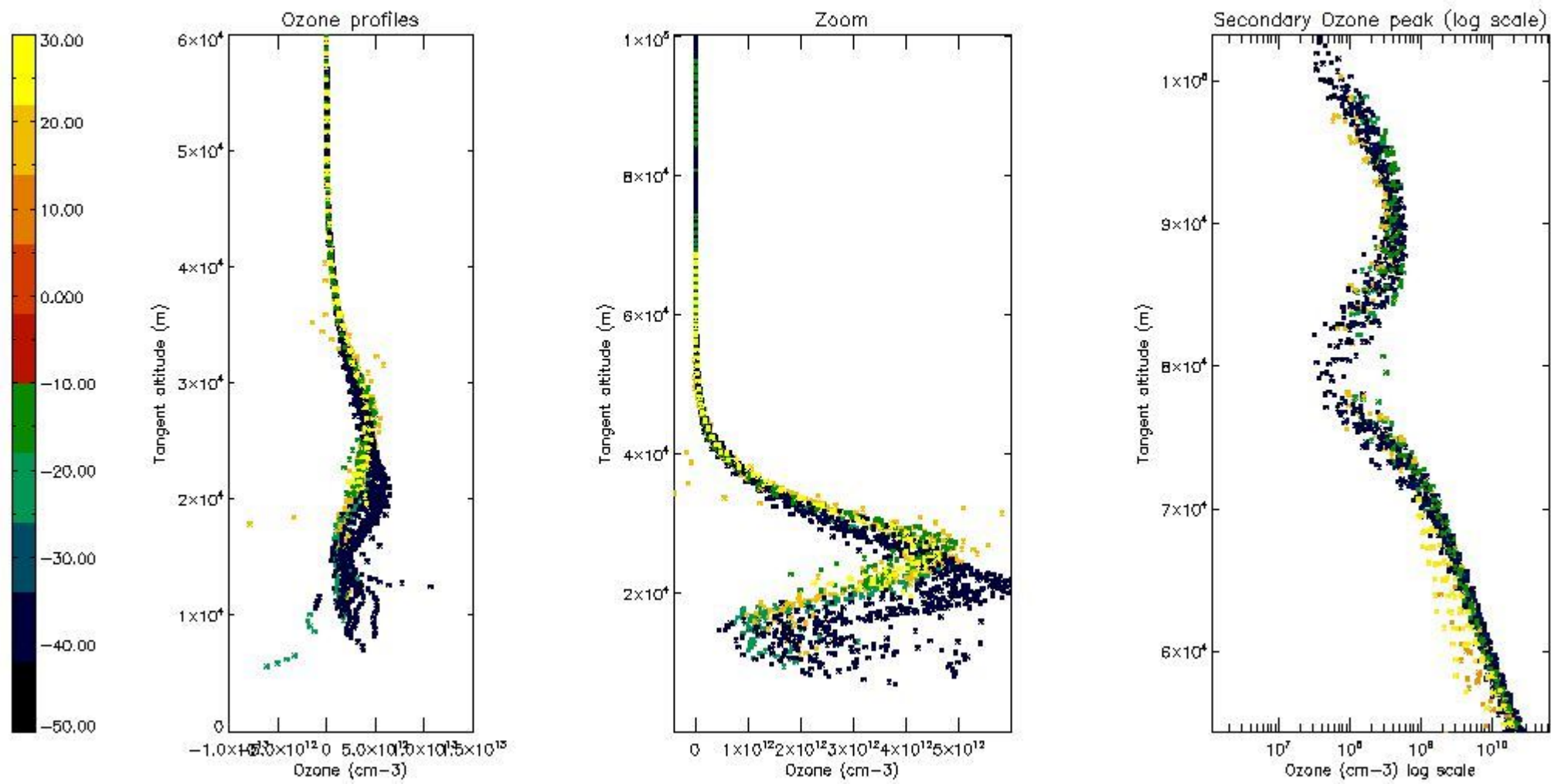
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



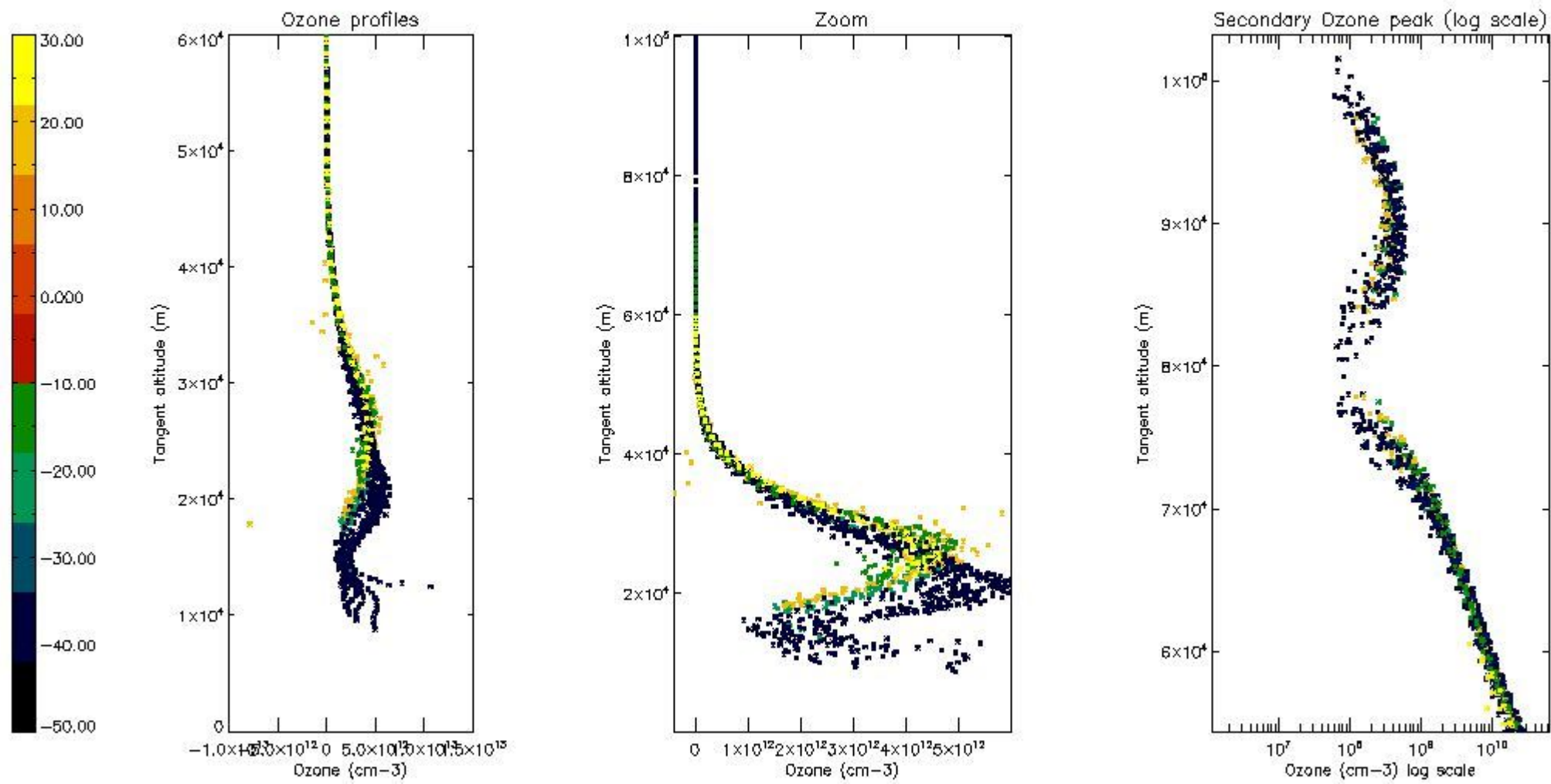
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



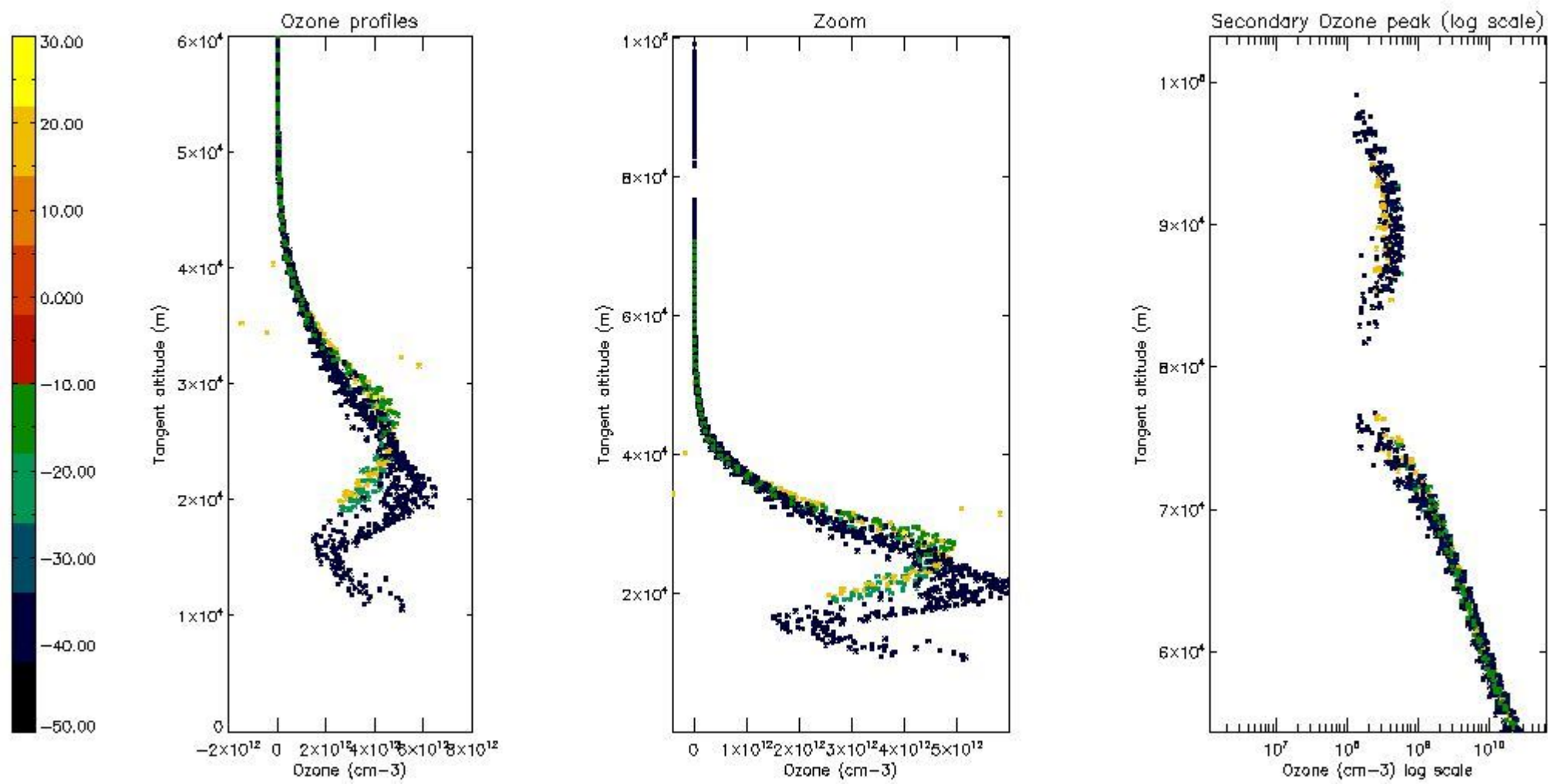
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



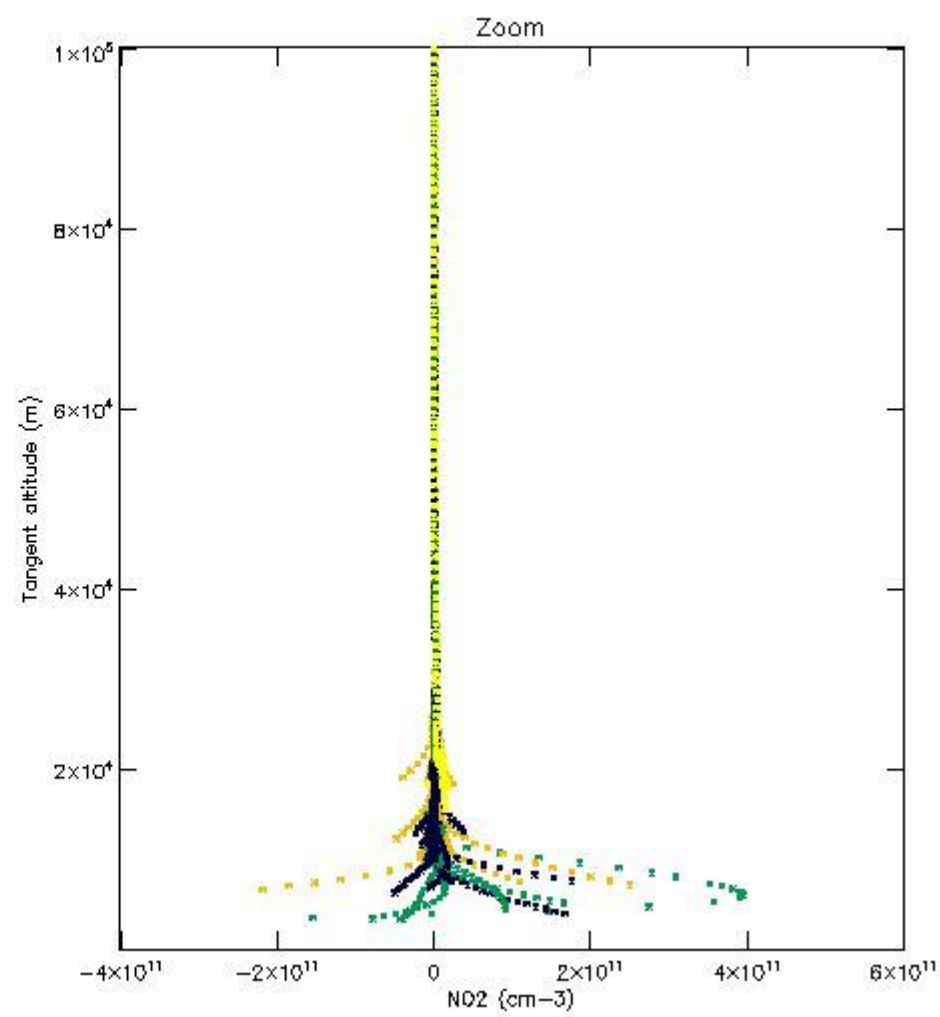
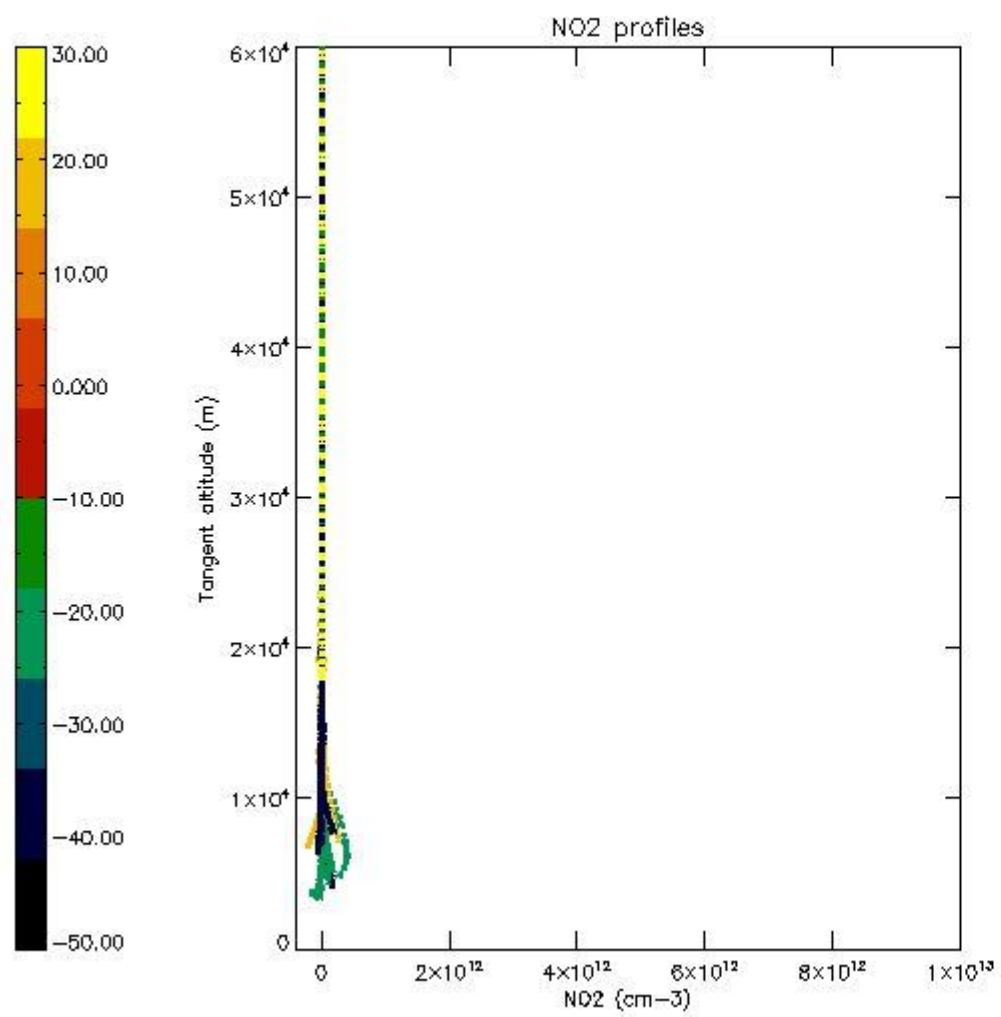
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



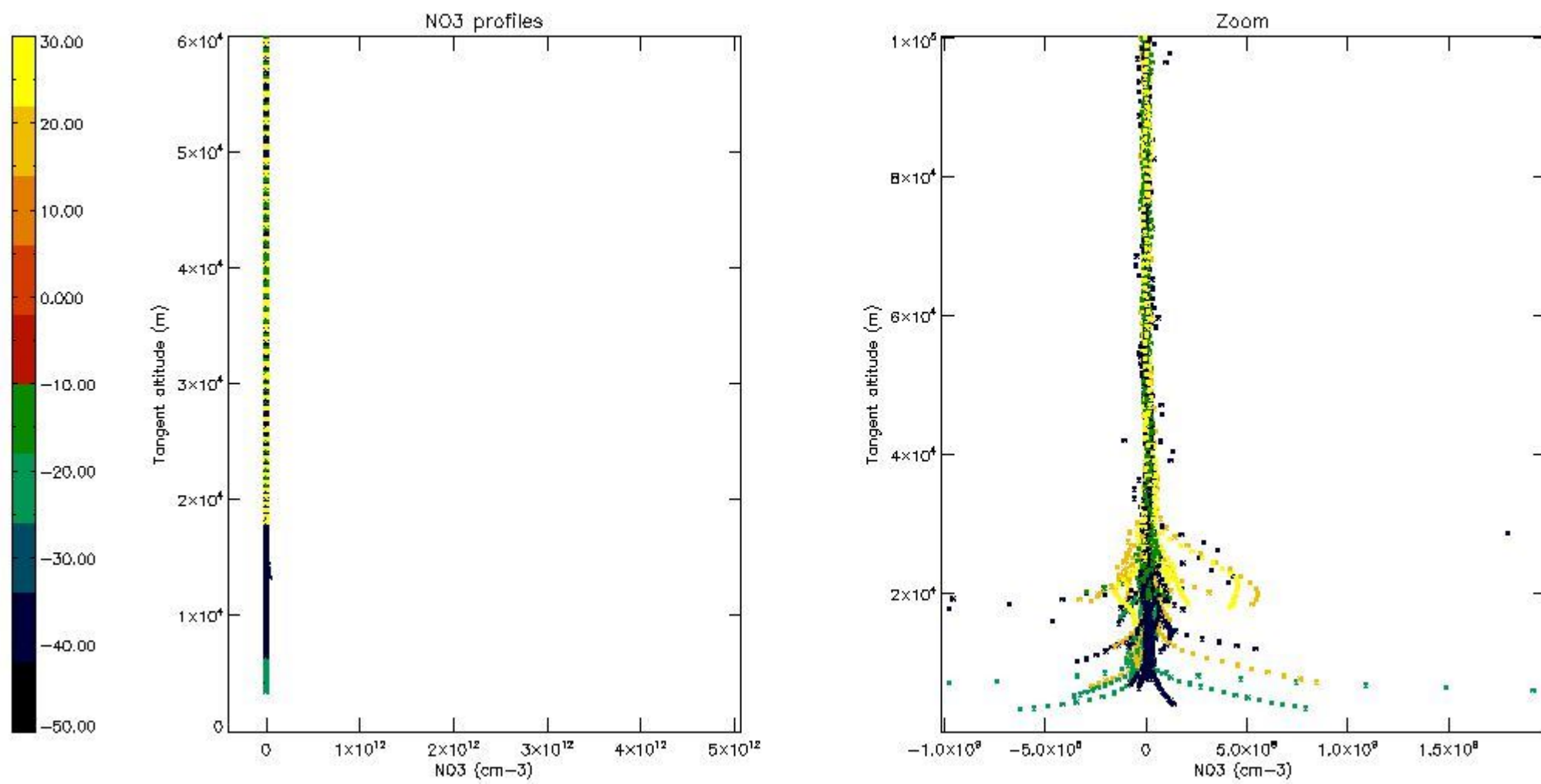
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



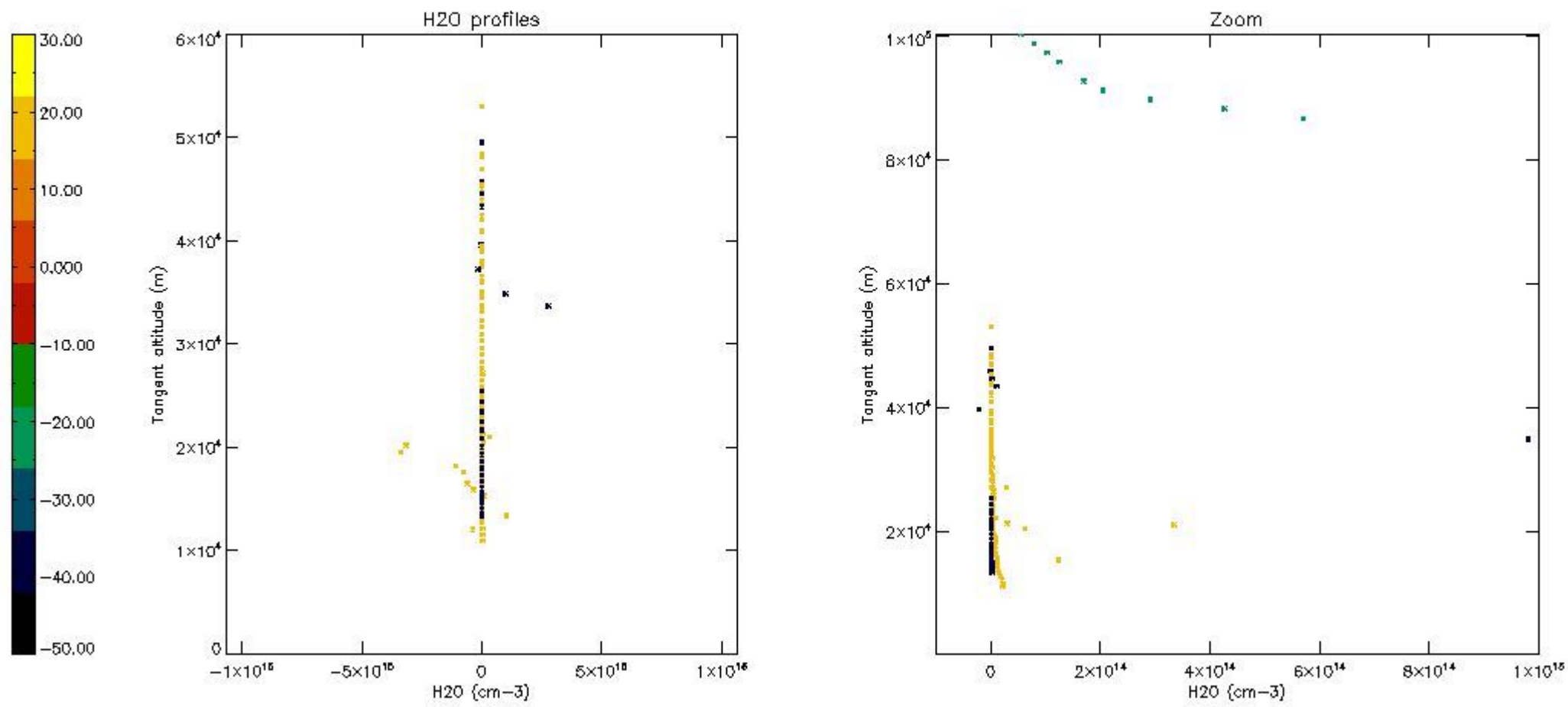
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

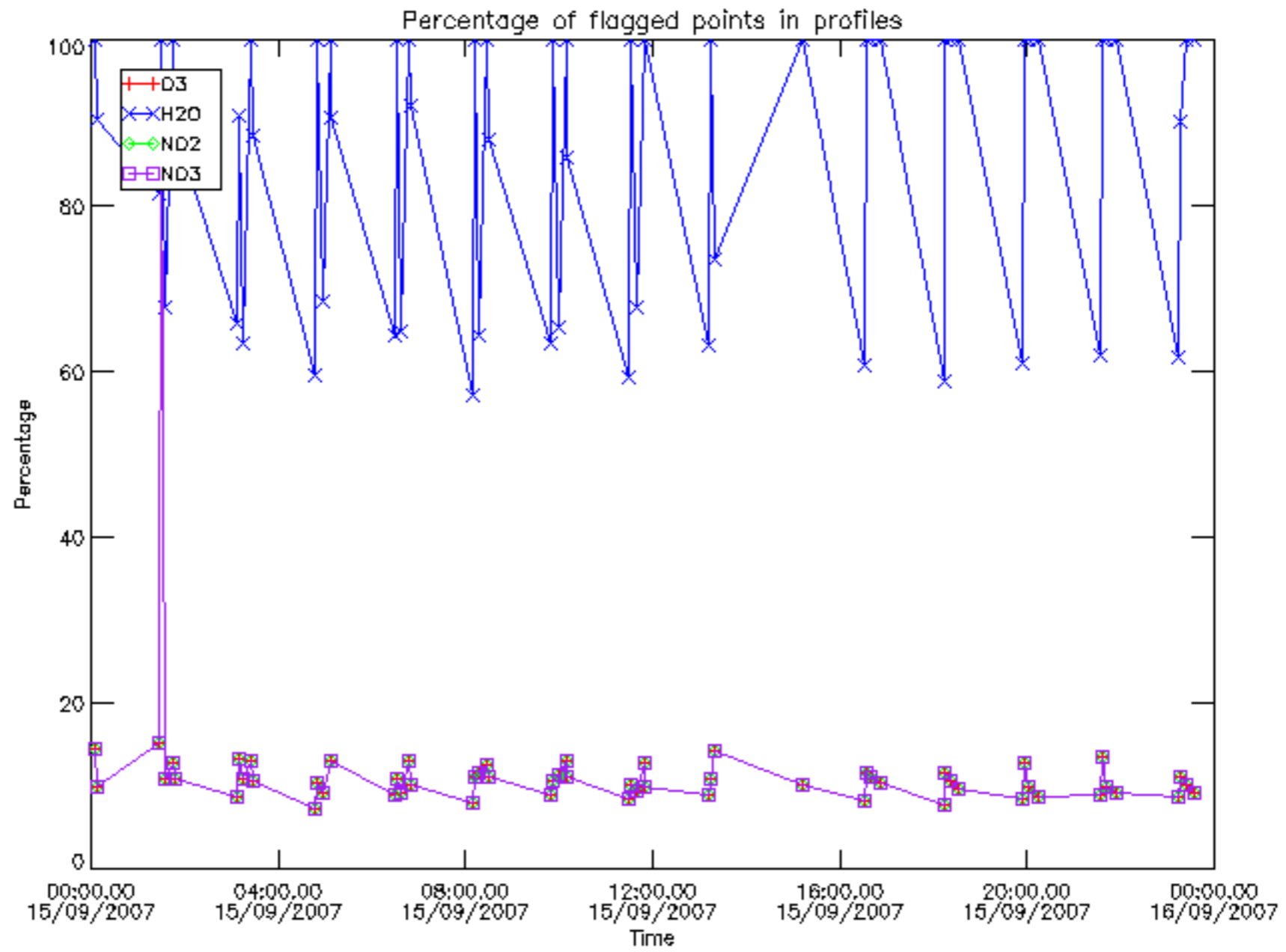
The colorbar represents the latitude.



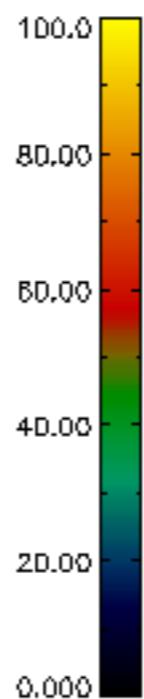
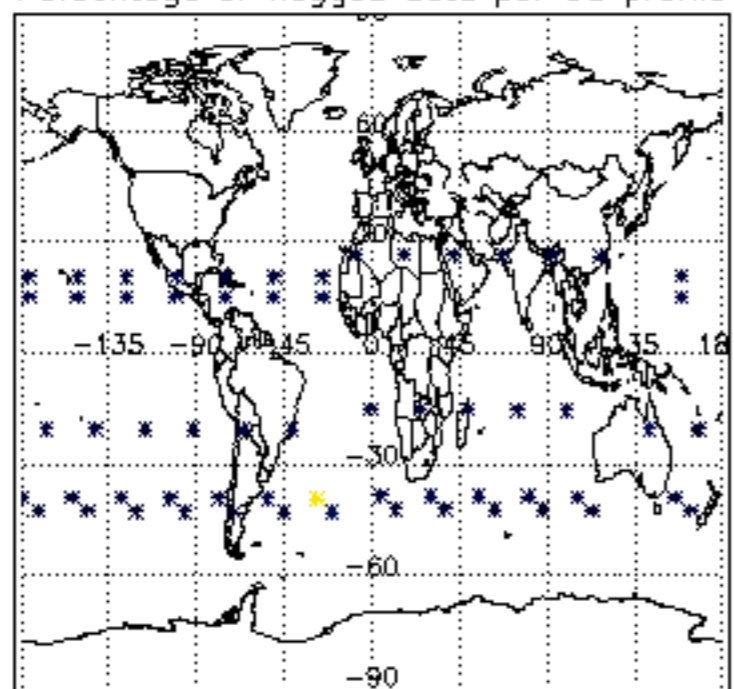
6. Auxiliary Data Files used for the production reported in section 2

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.

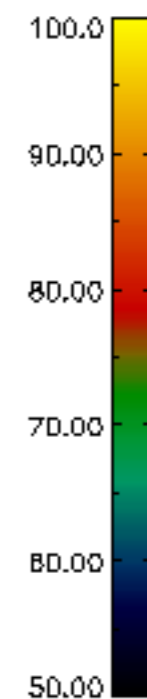
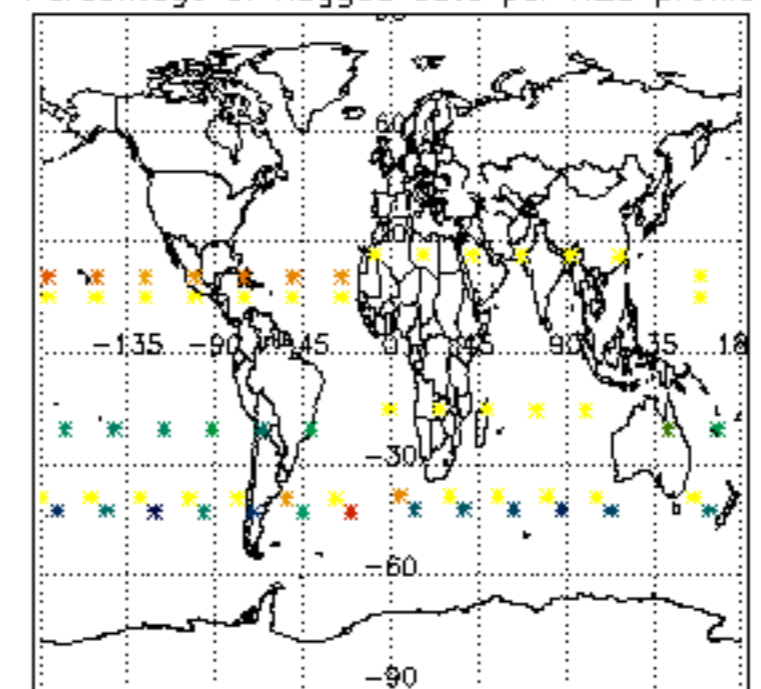
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	15-SEP-2007 00:05:00
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	15-SEP-2007 00:05:00
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	15-SEP-2007 00:05:00



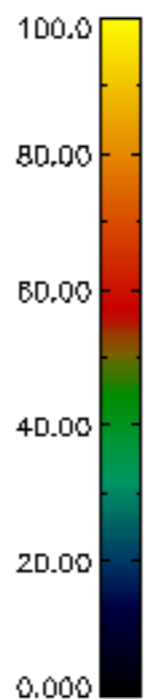
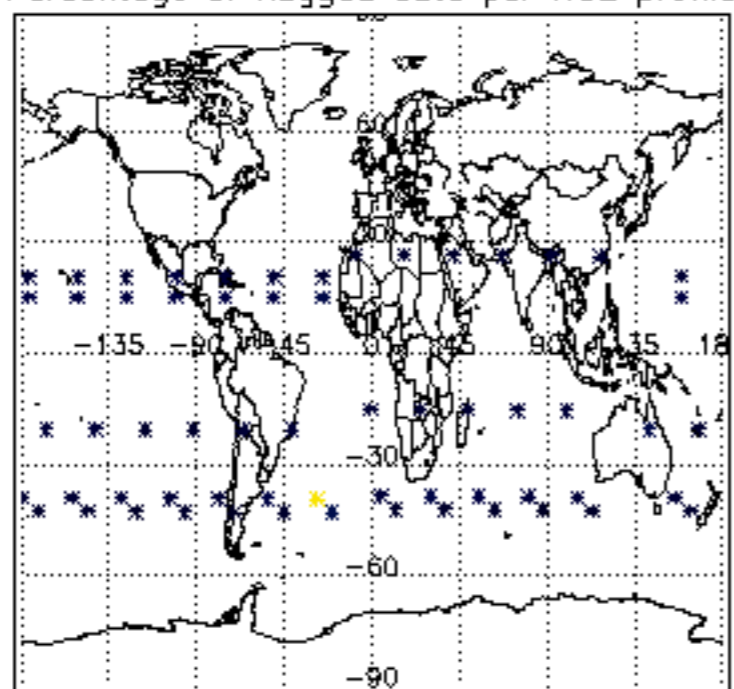
Percentage of flagged data per D3 profile



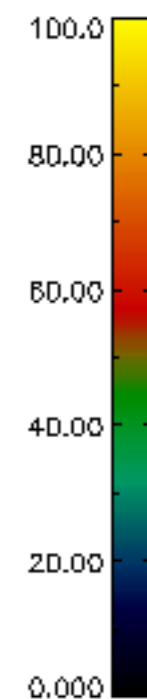
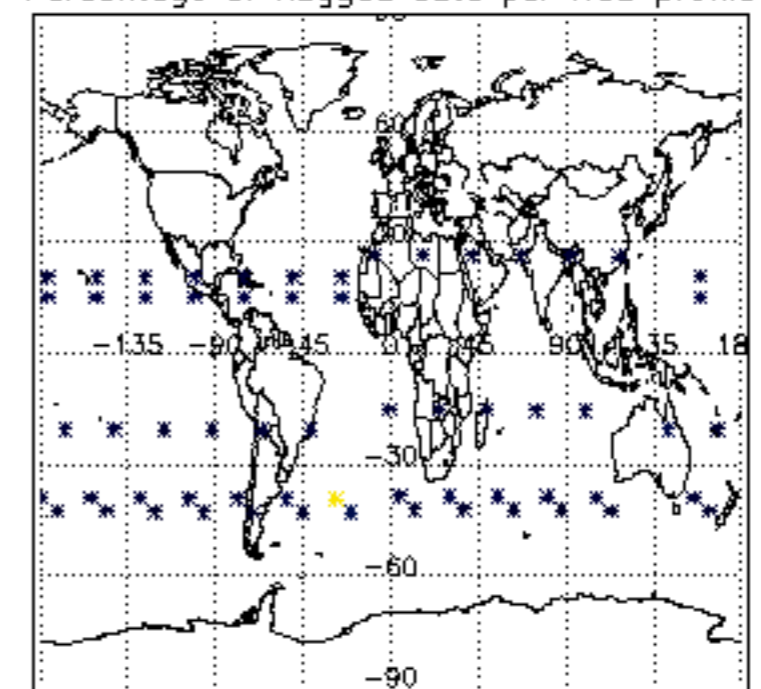
Percentage of flagged data per H2O profile

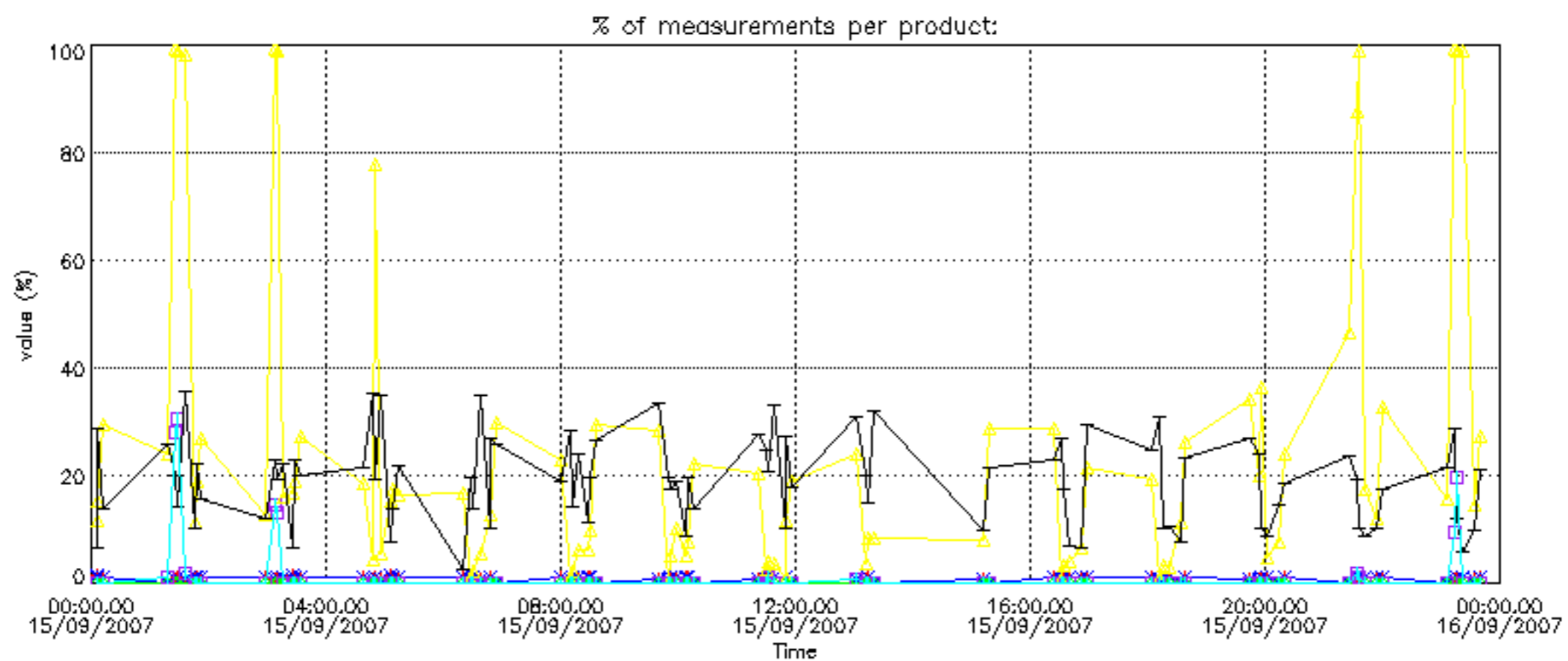
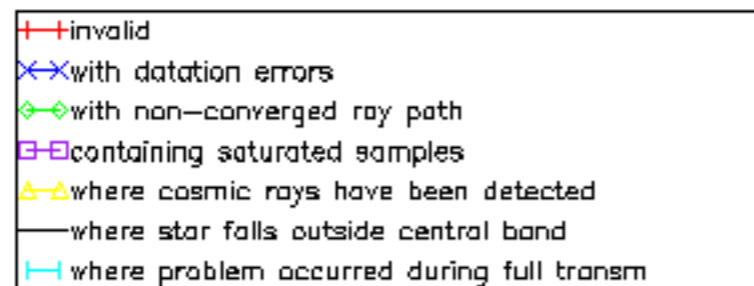


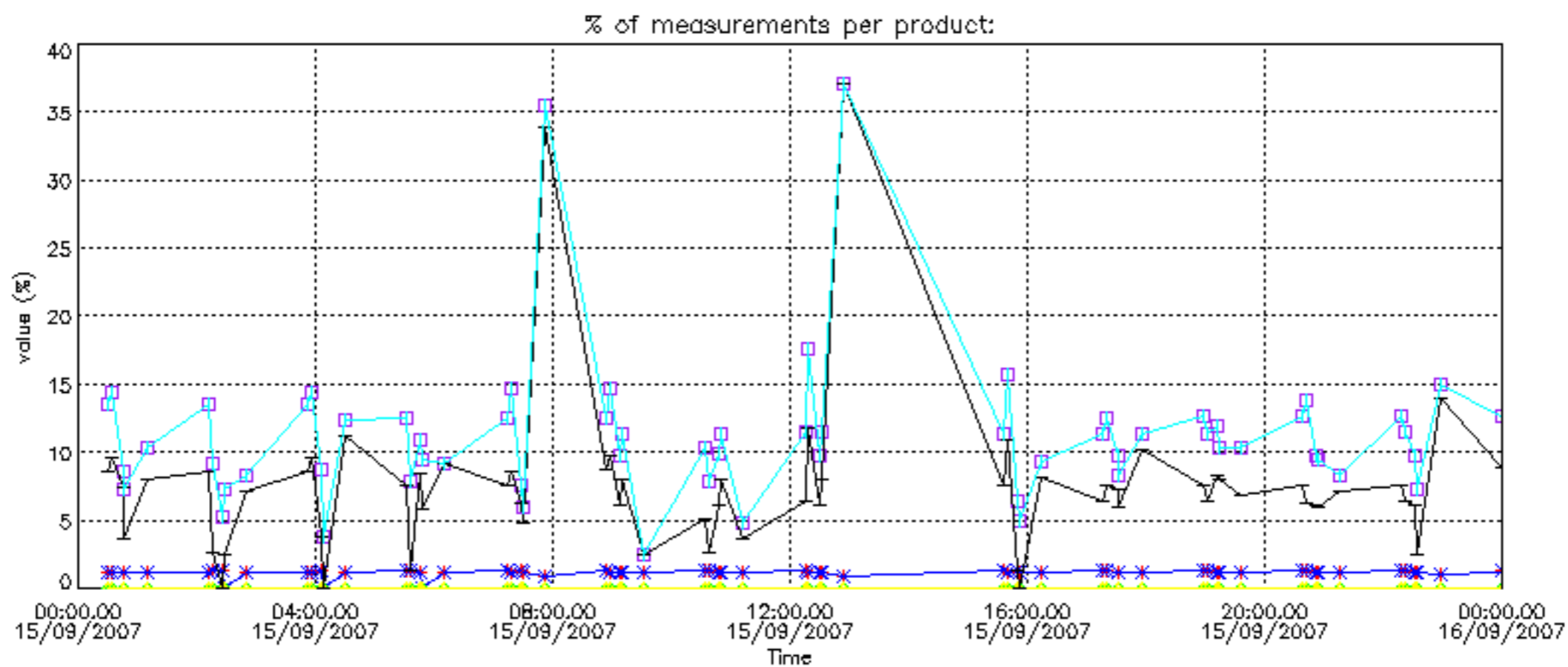
Percentage of flagged data per NO2 profile



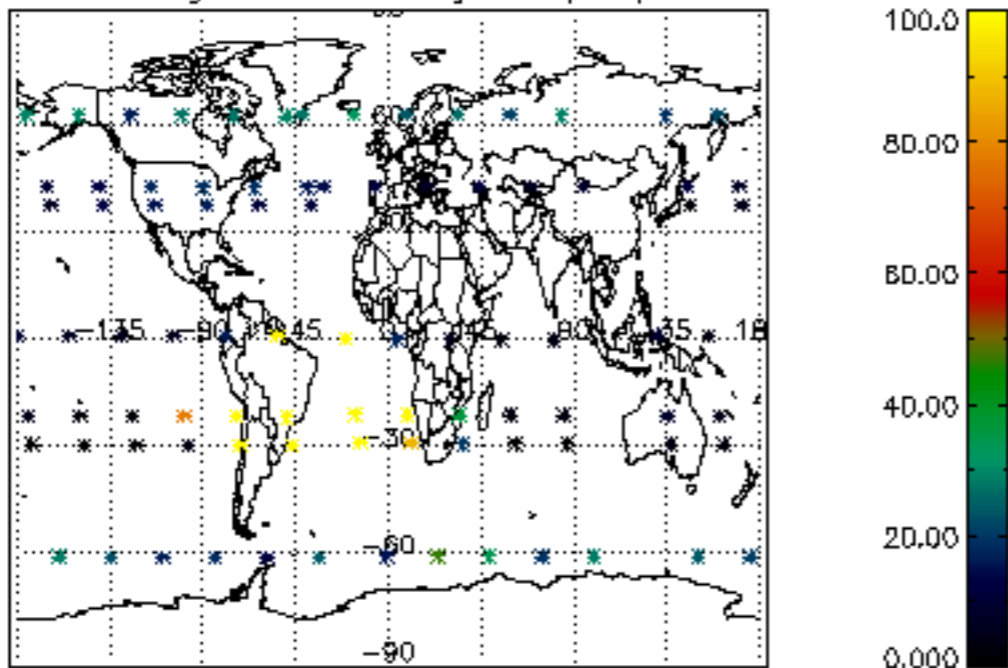
Percentage of flagged data per NO3 profile



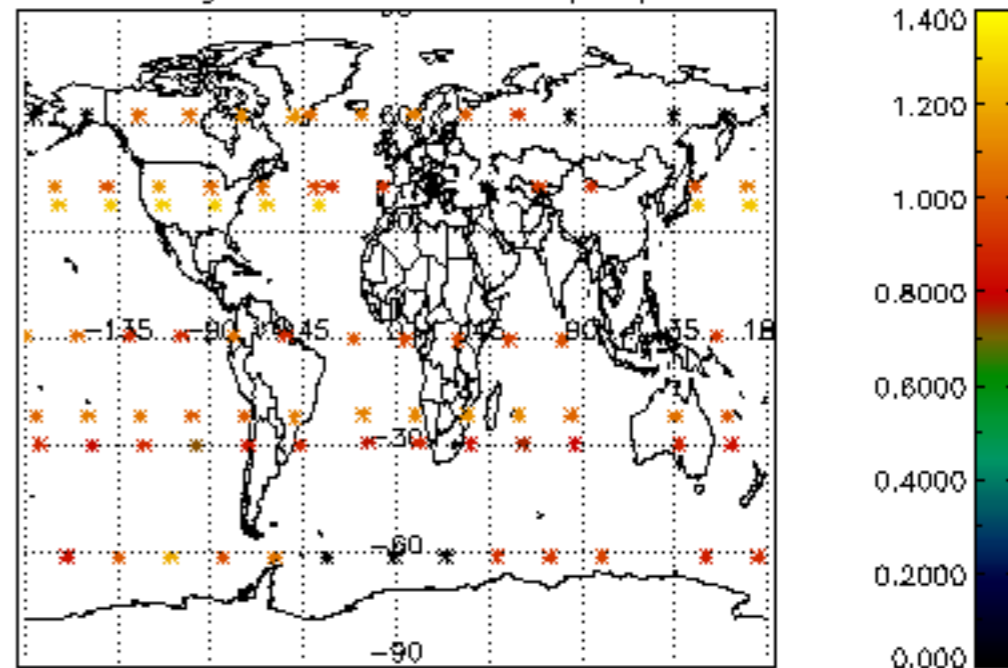




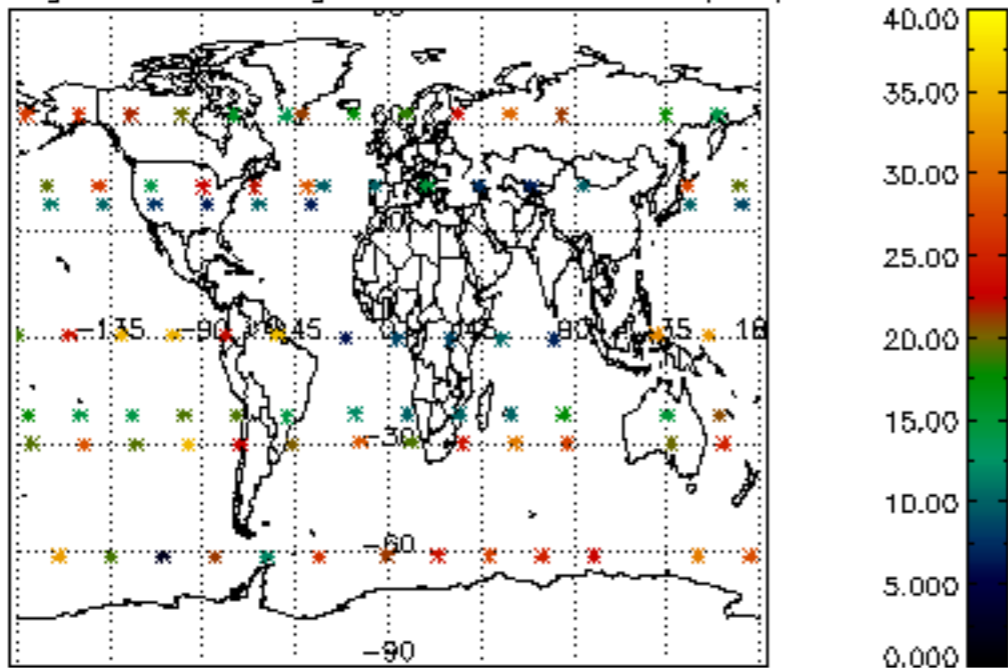
Percentage of cosmic ray hits per profile



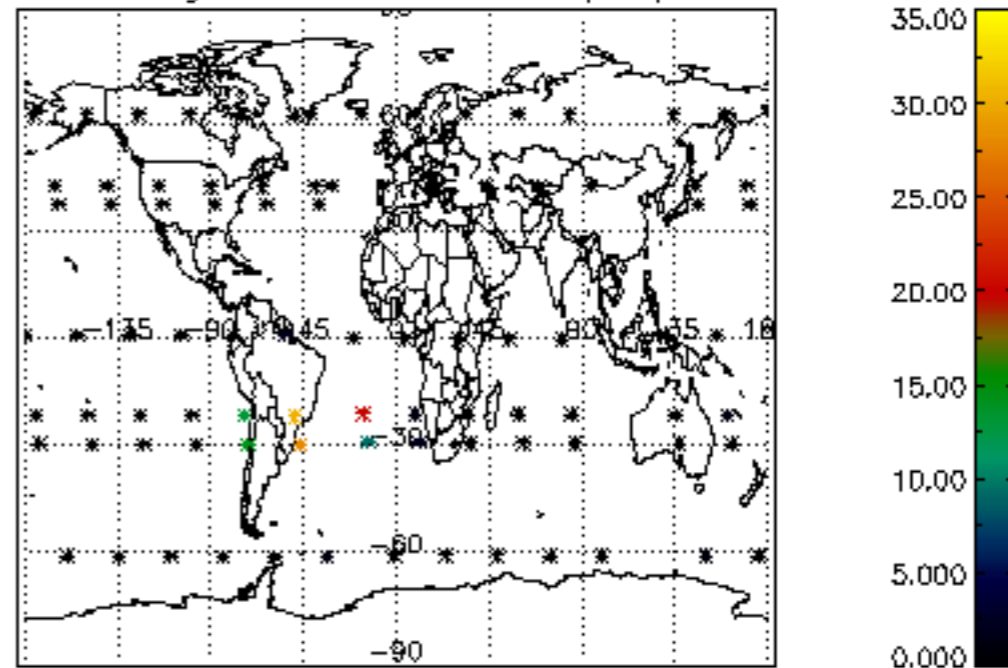
Percentage of datation errors per profile



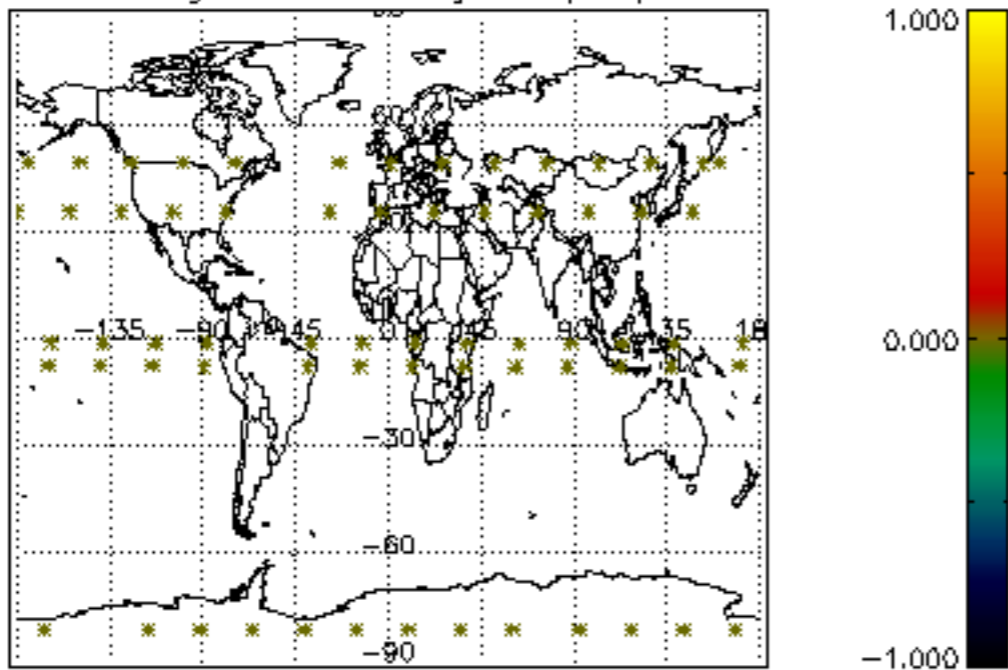
Percentage of star falling outside central band per profile



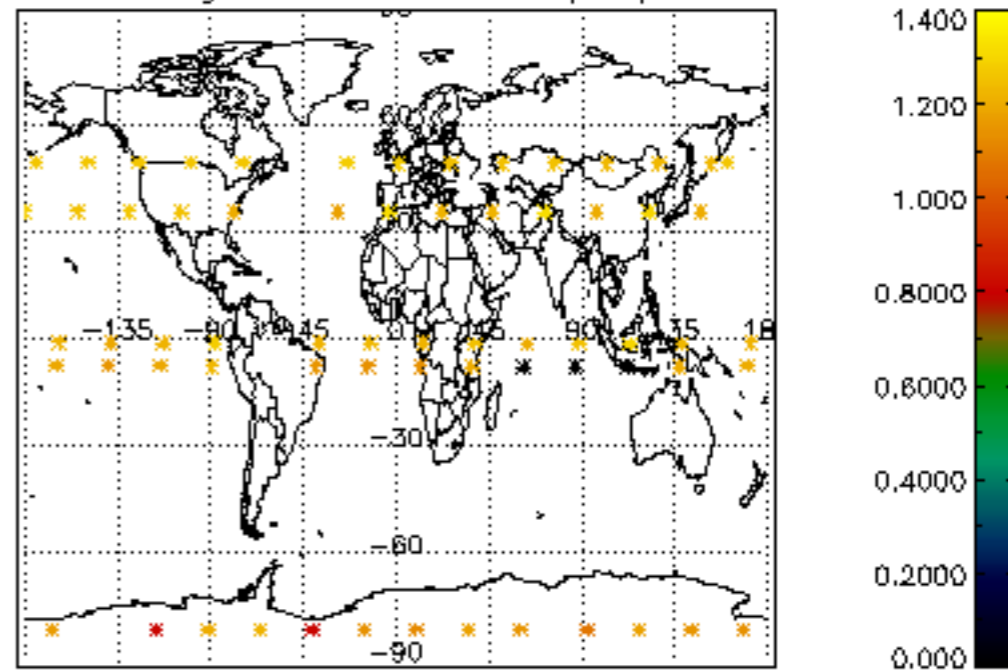
Percentage of saturation errors per profile



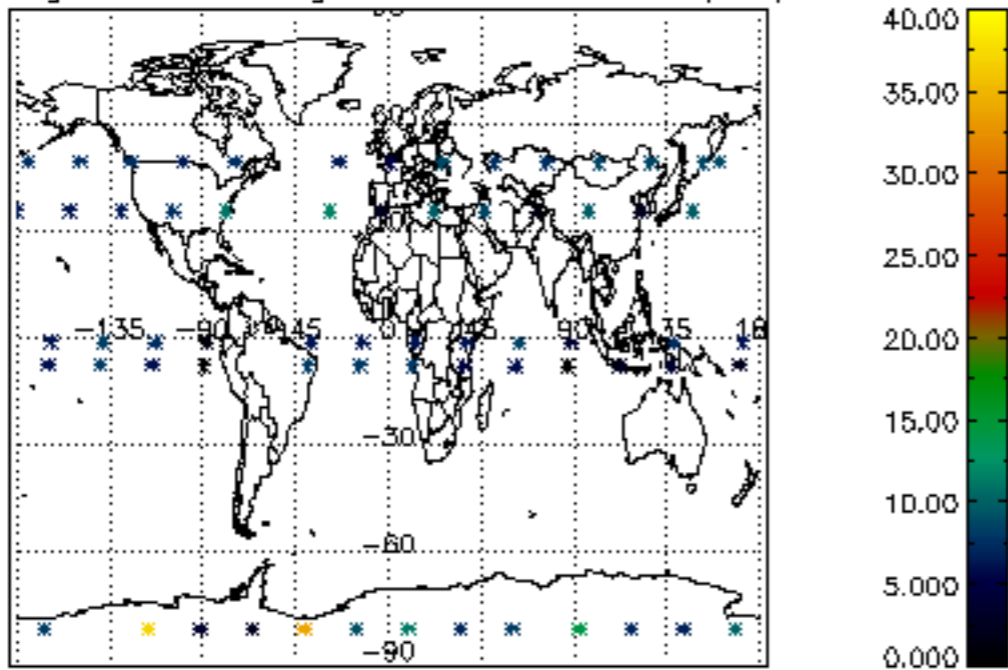
Percentage of cosmic ray hits per profile



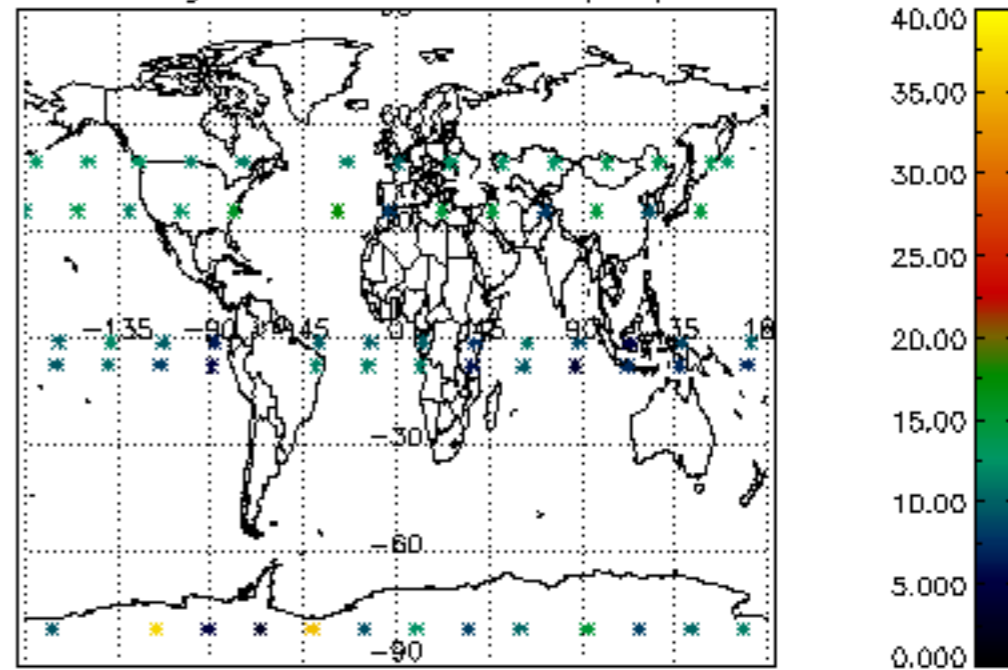
Percentage of datation errors per profile

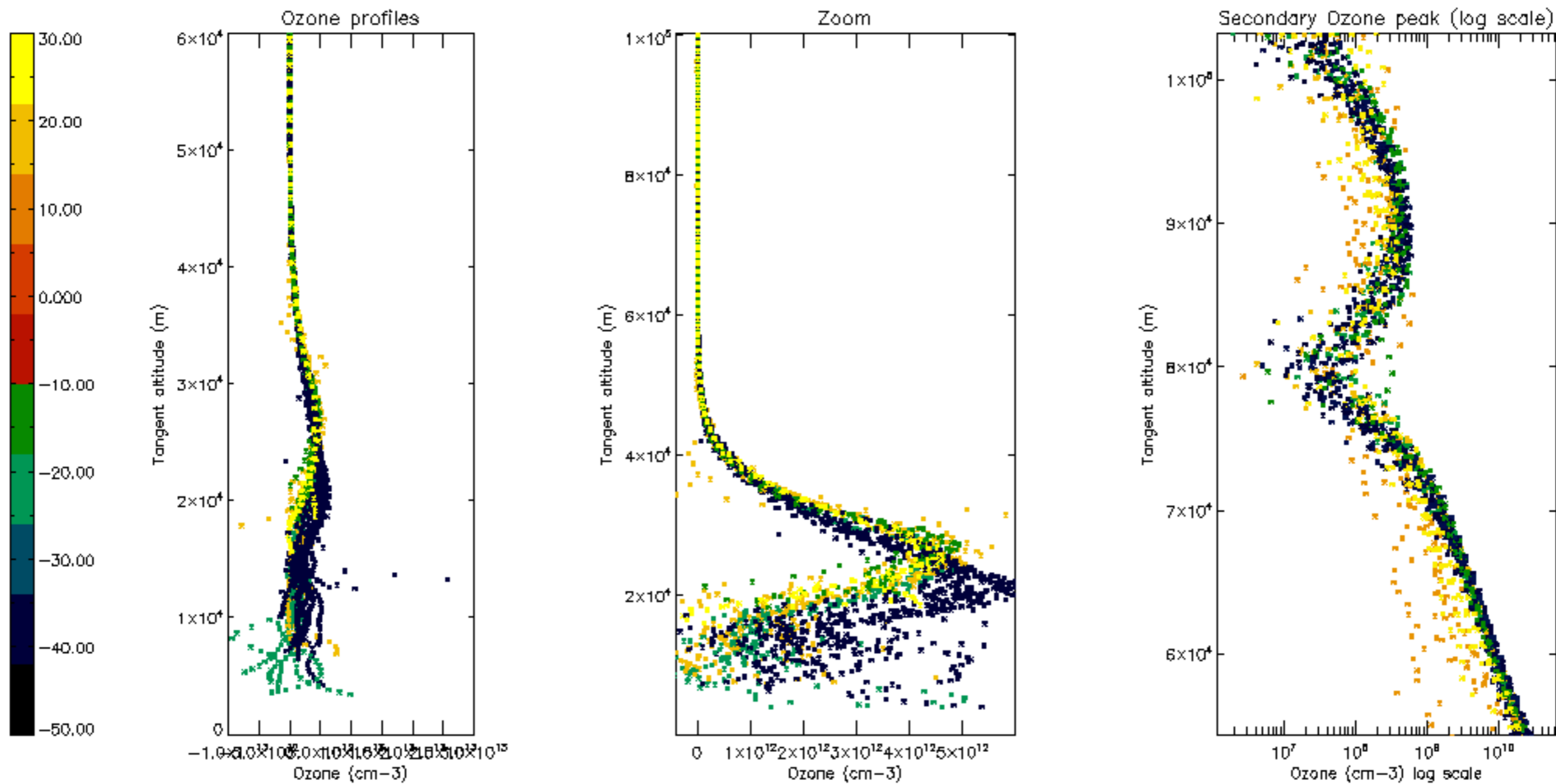


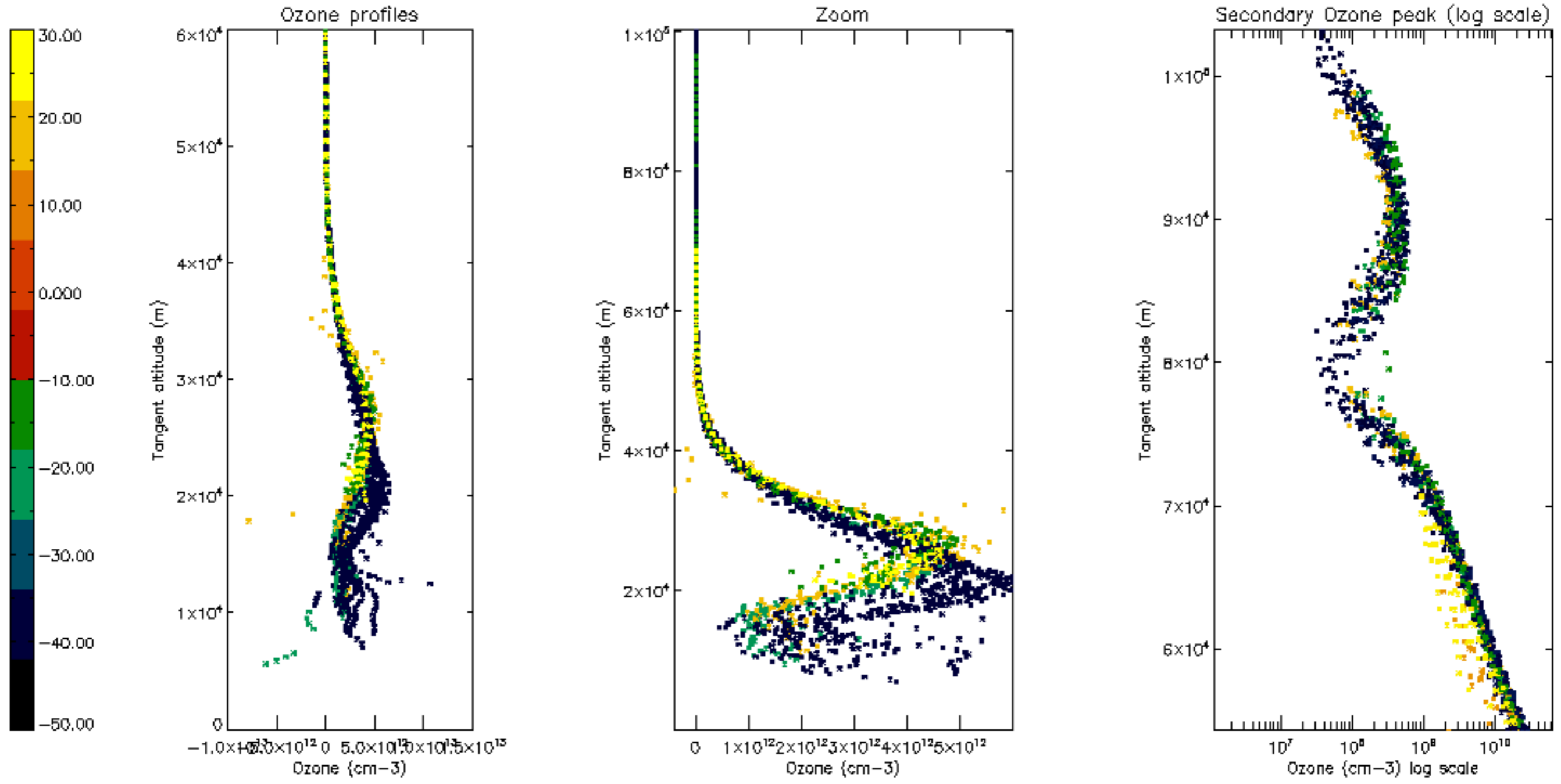
Percentage of star falling outside central band per profile

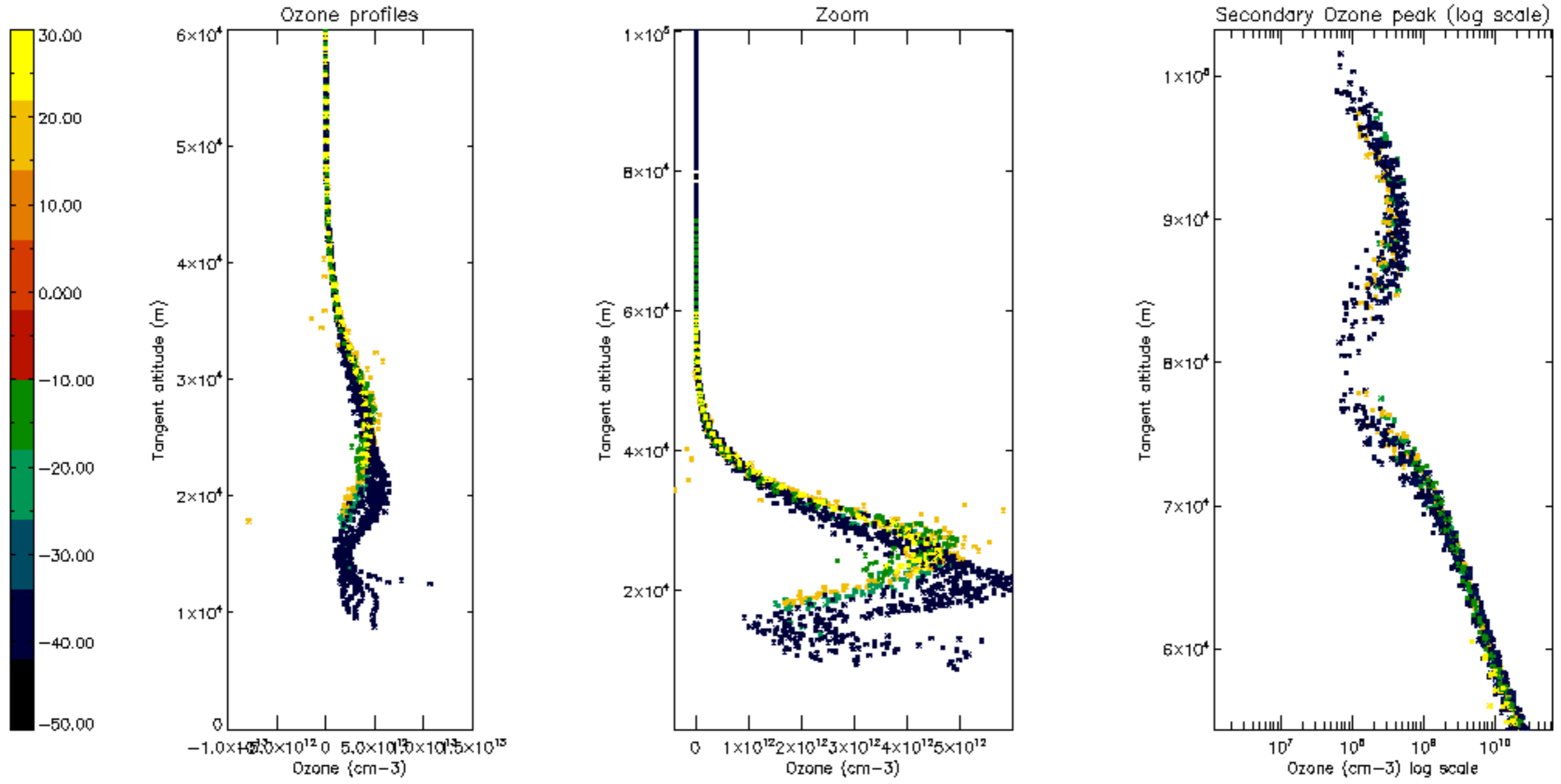


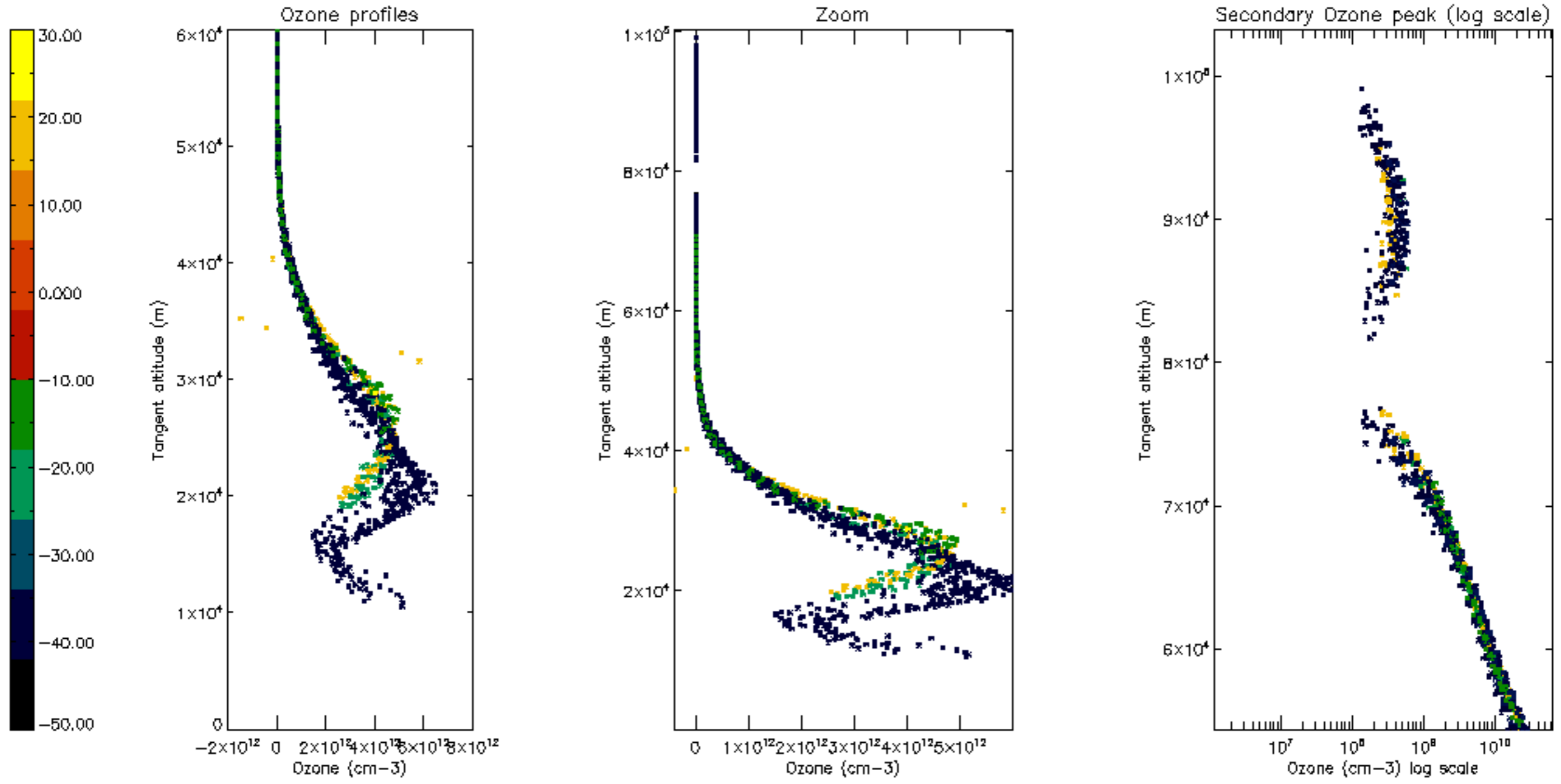
Percentage of saturation errors per profile

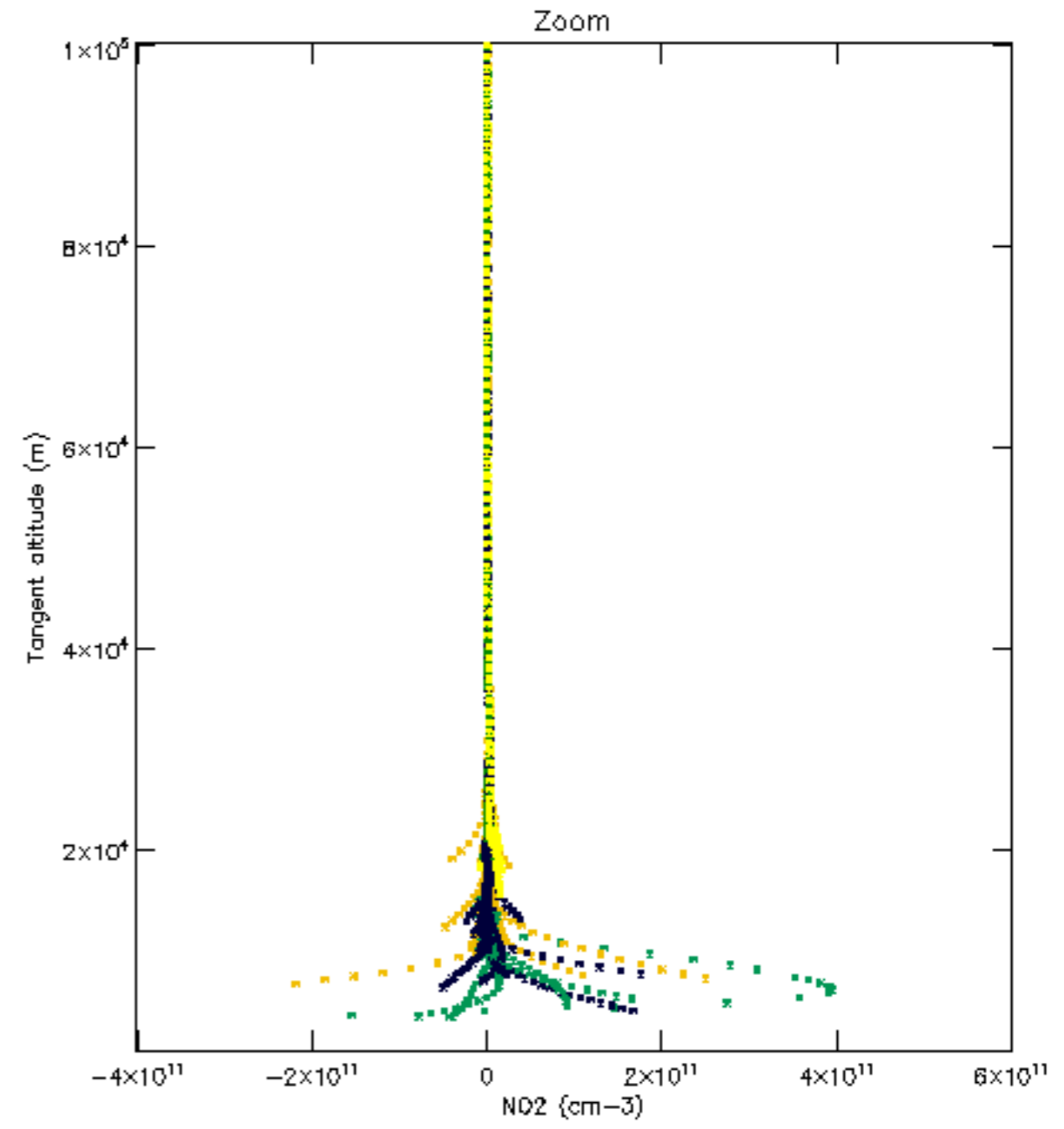
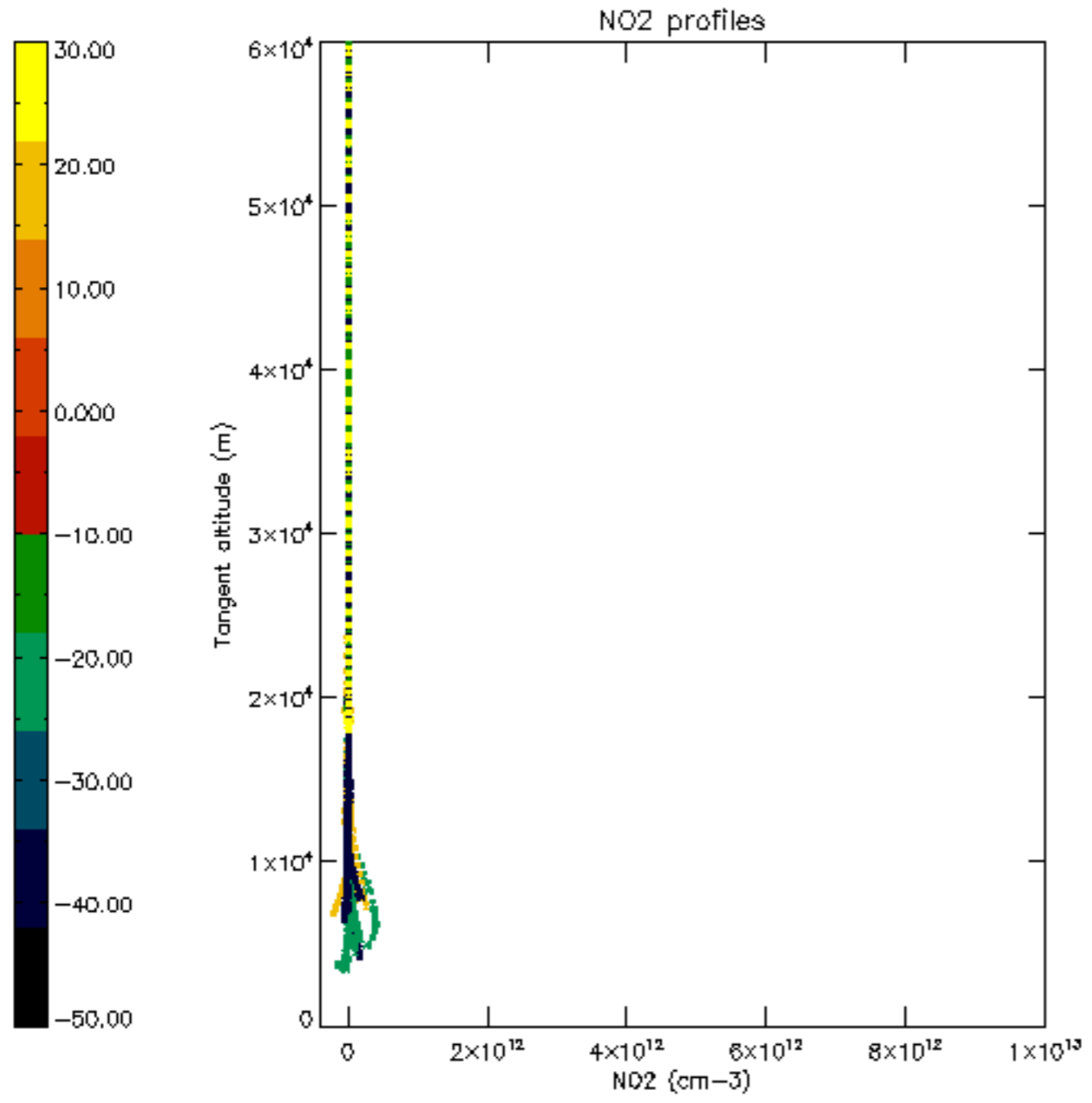


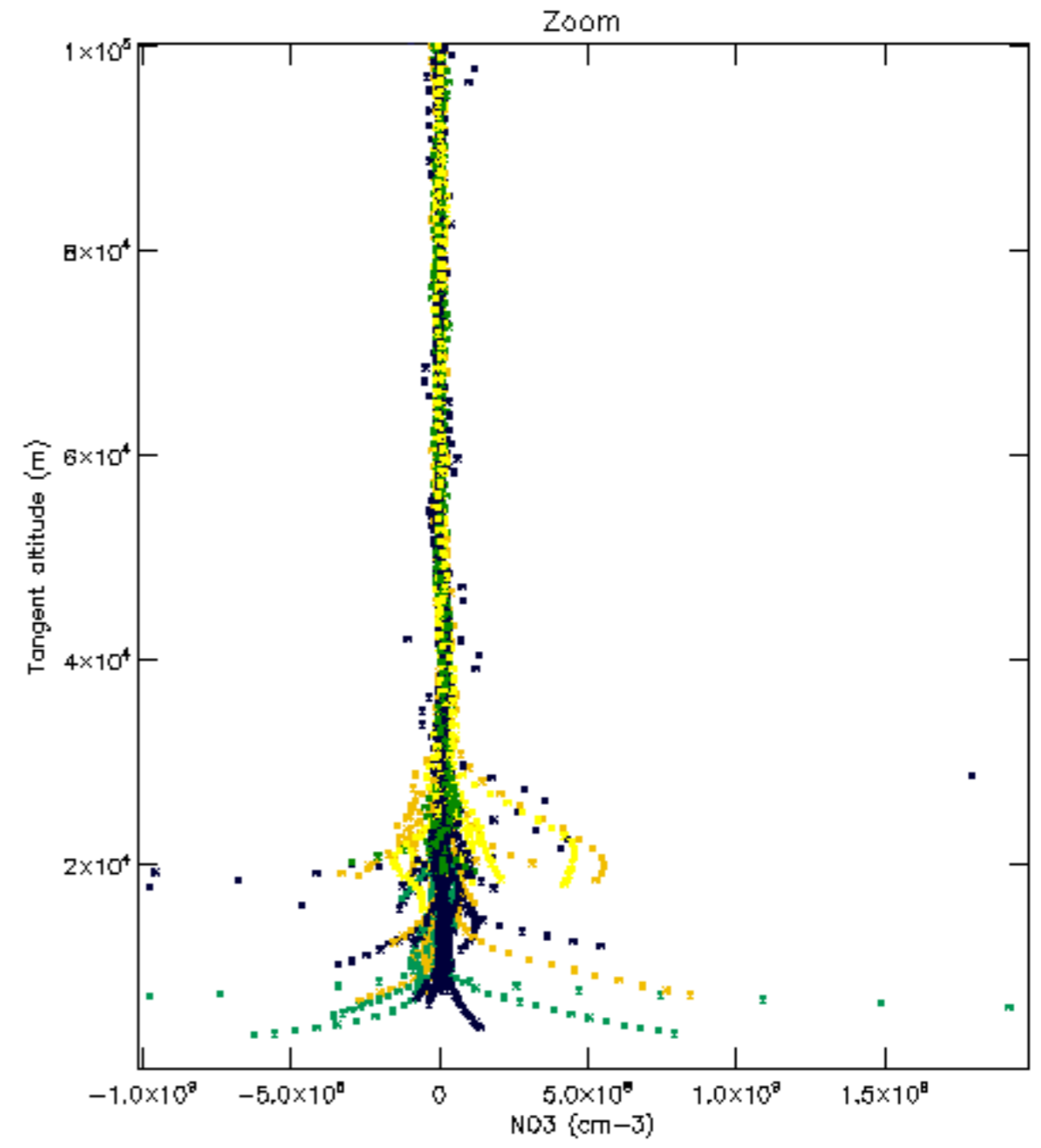
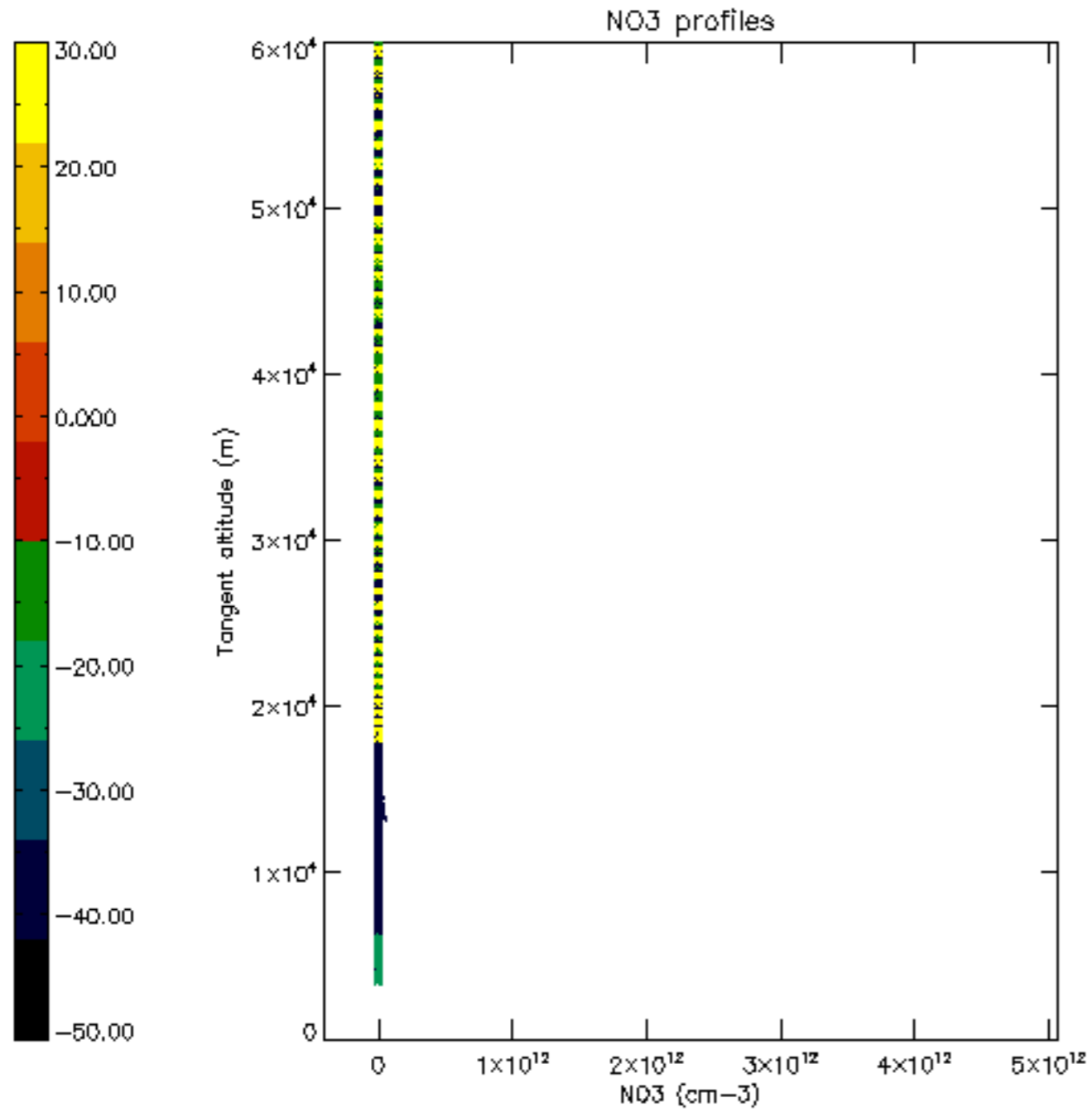


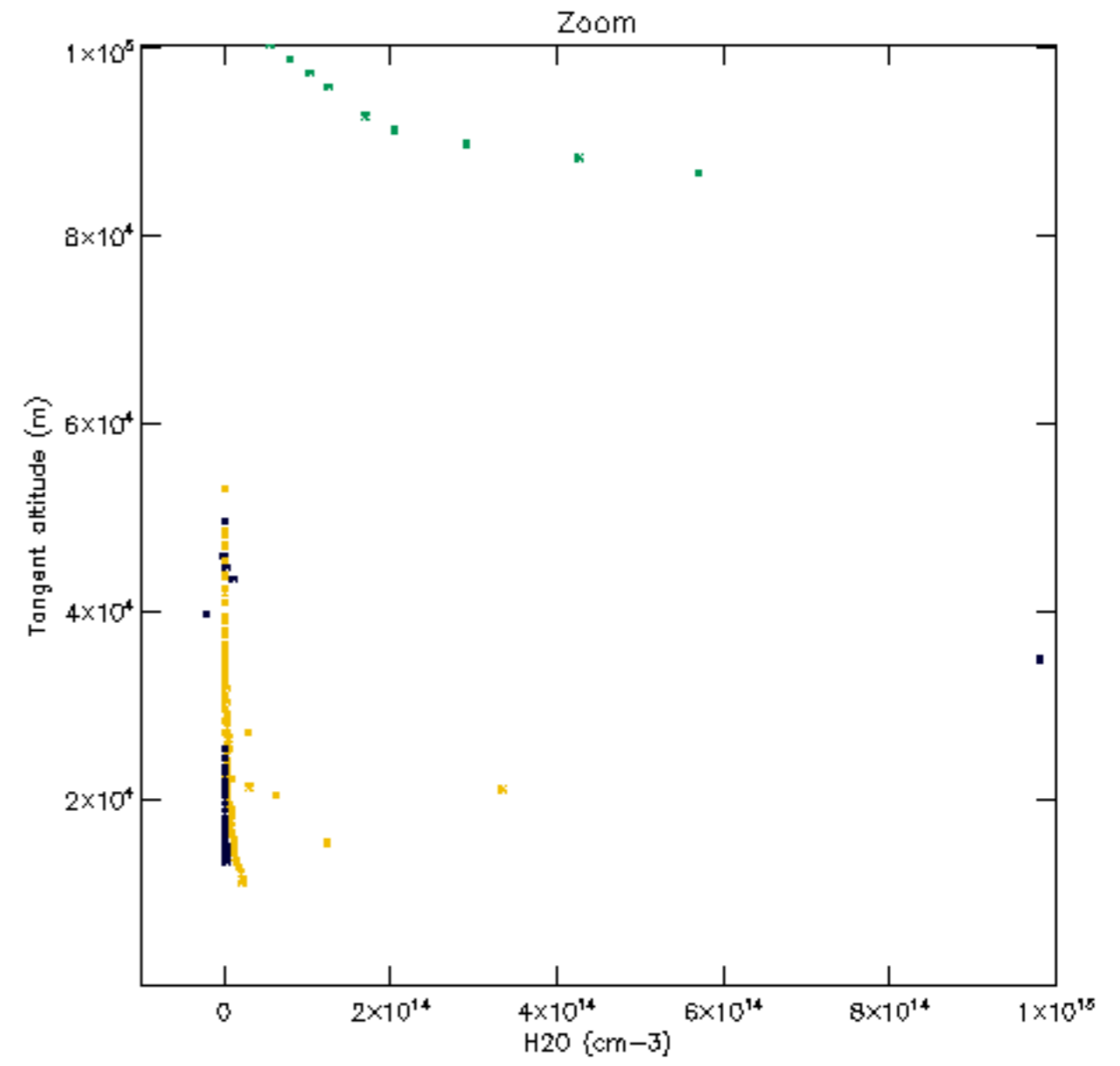
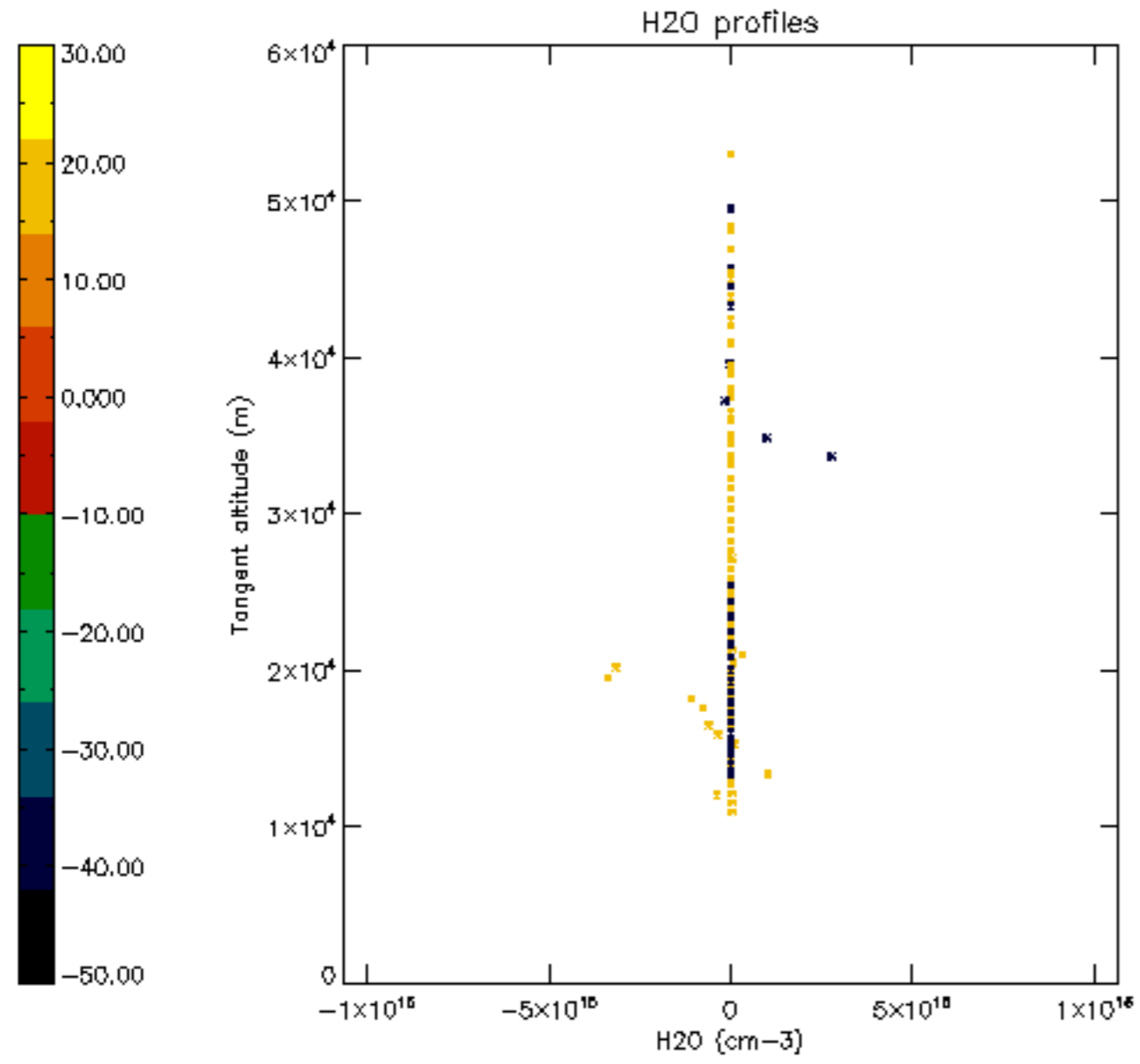


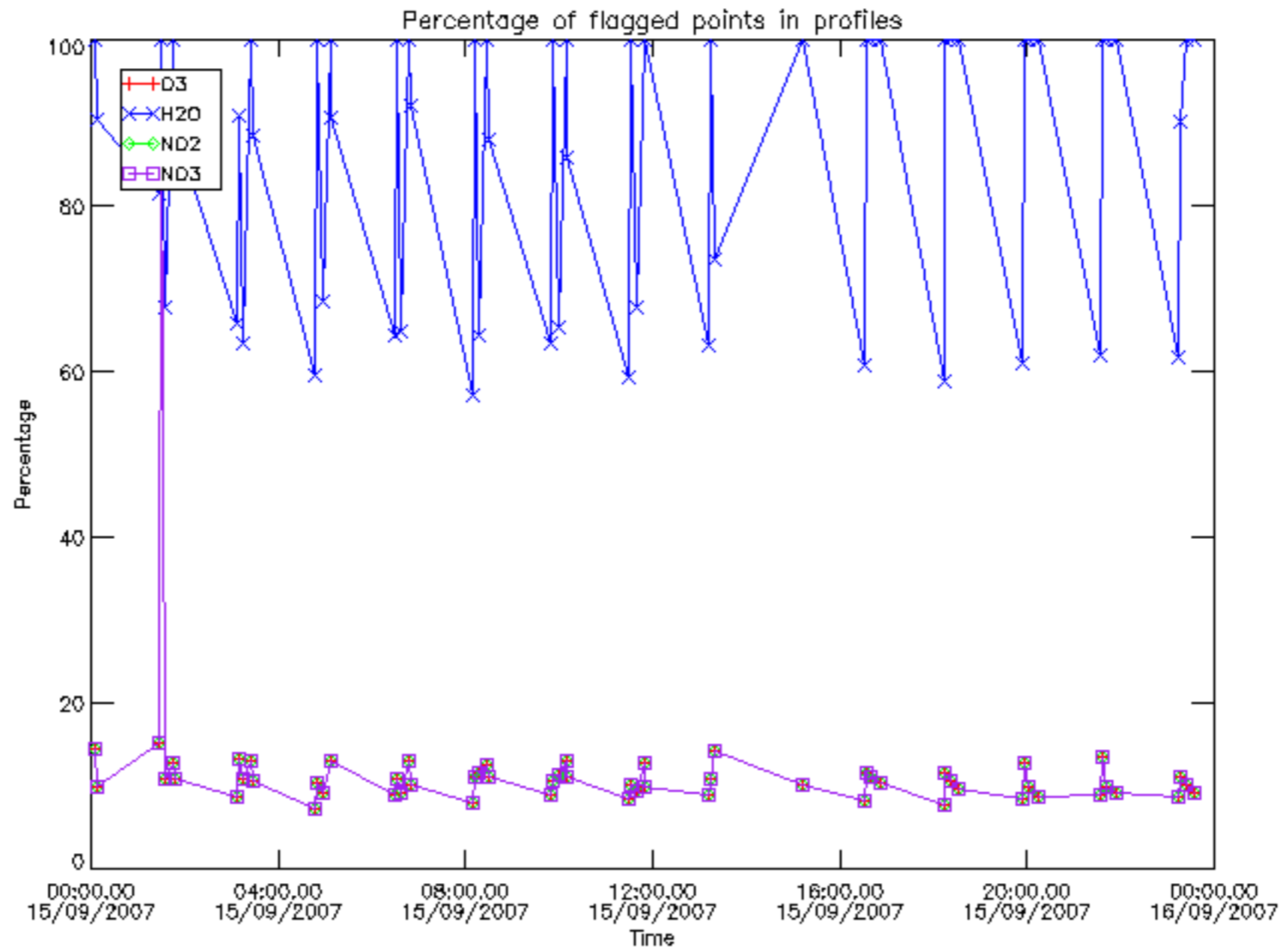




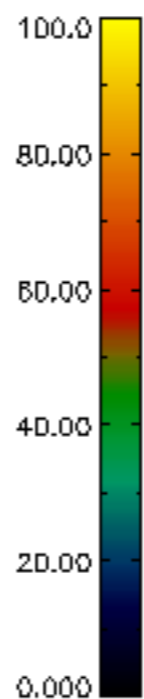
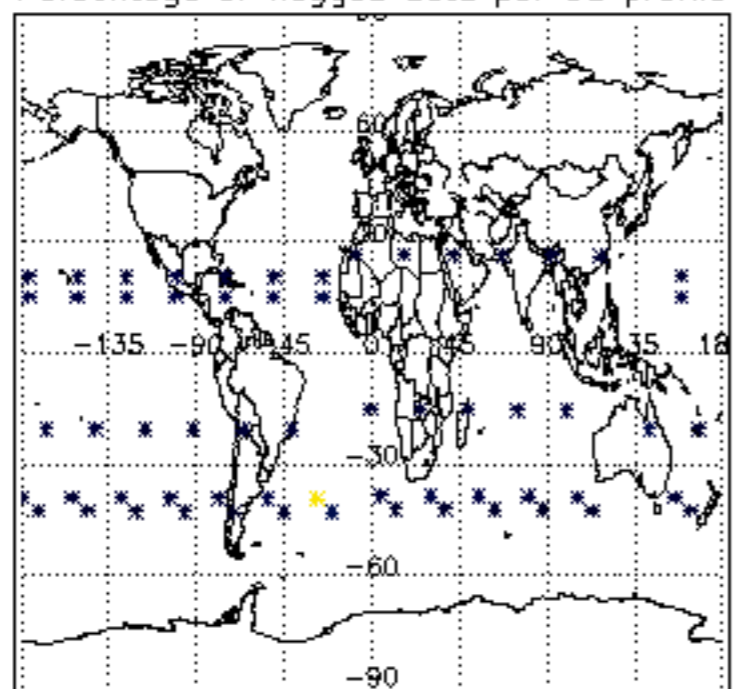




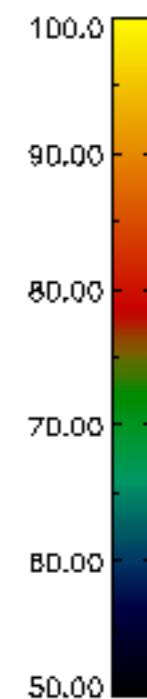
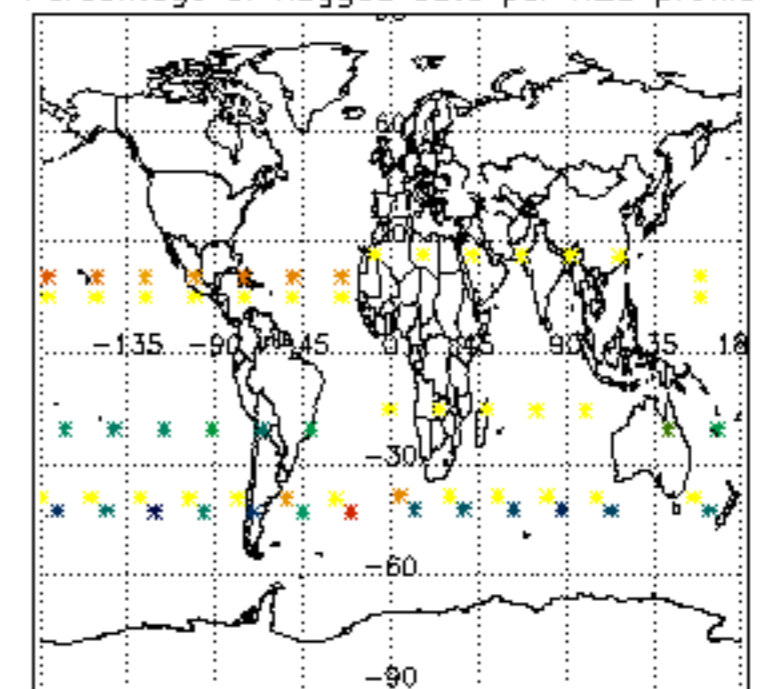




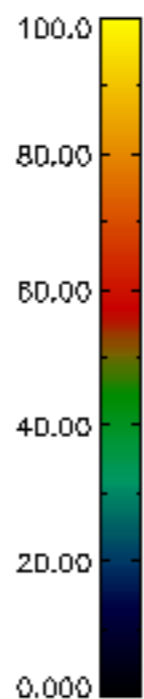
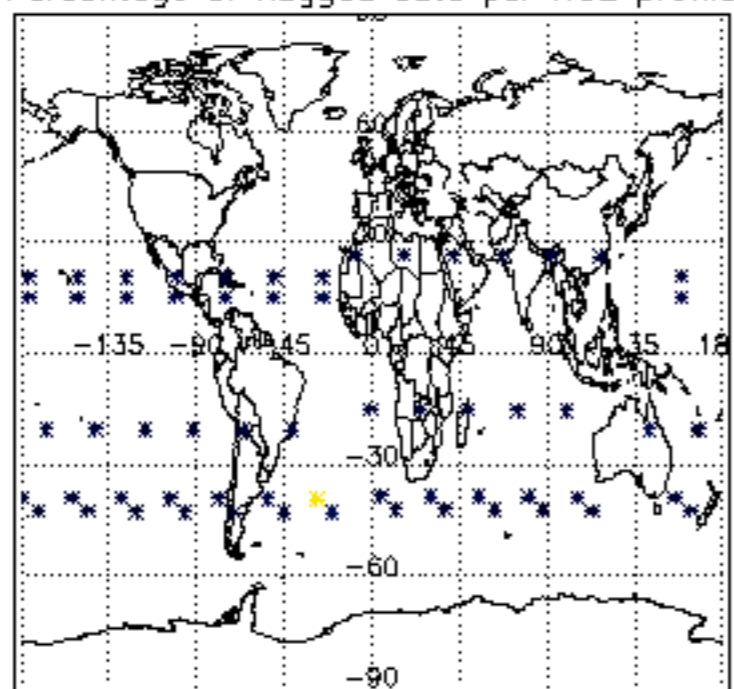
Percentage of flagged data per D3 profile



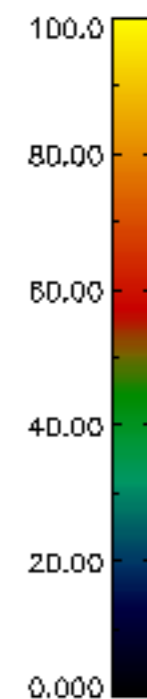
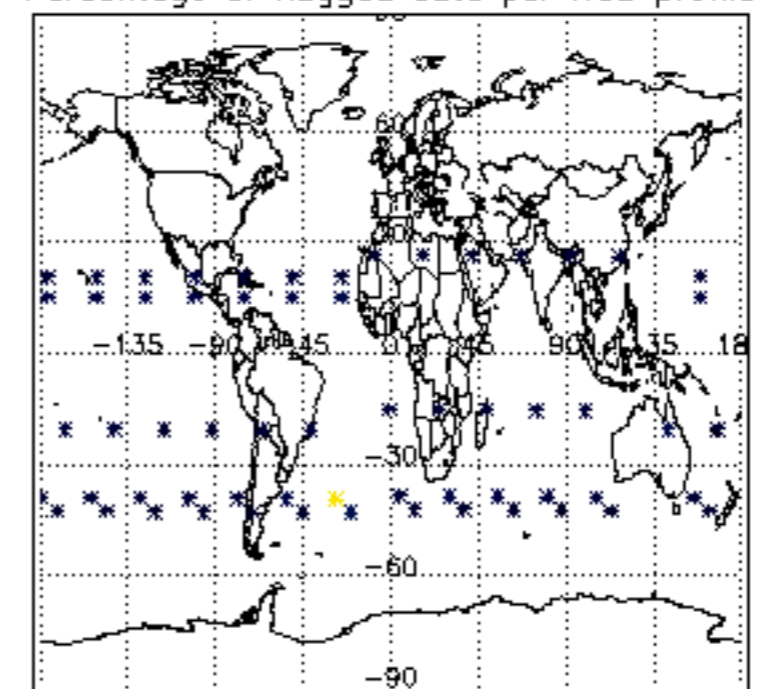
Percentage of flagged data per H2O profile

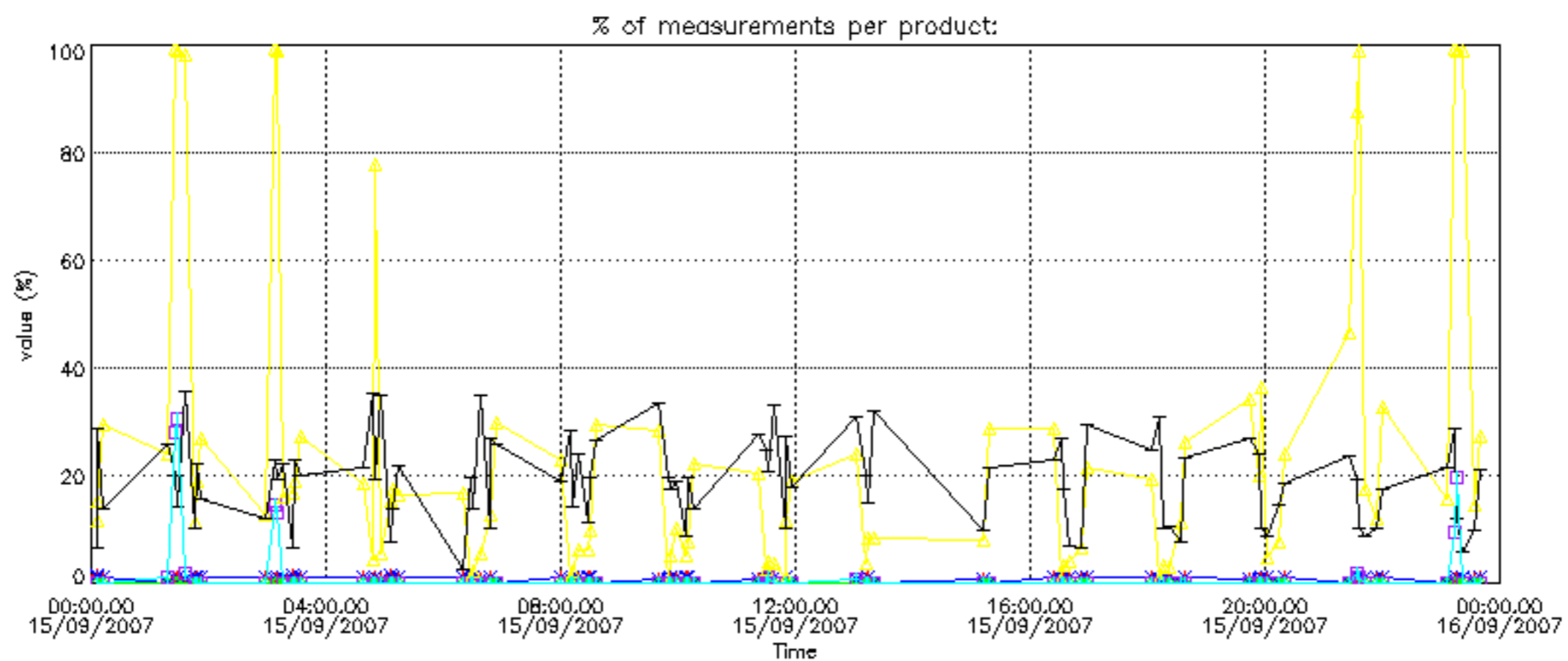


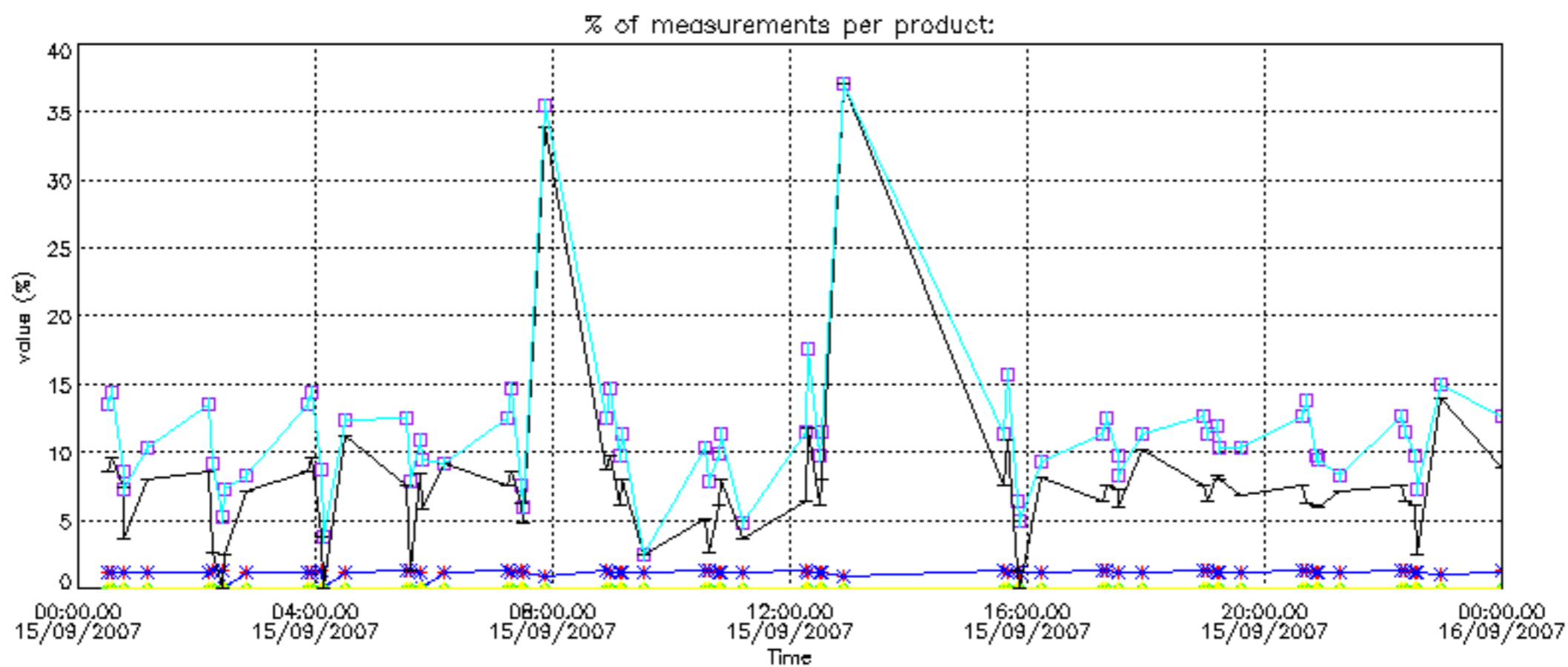
Percentage of flagged data per NO2 profile



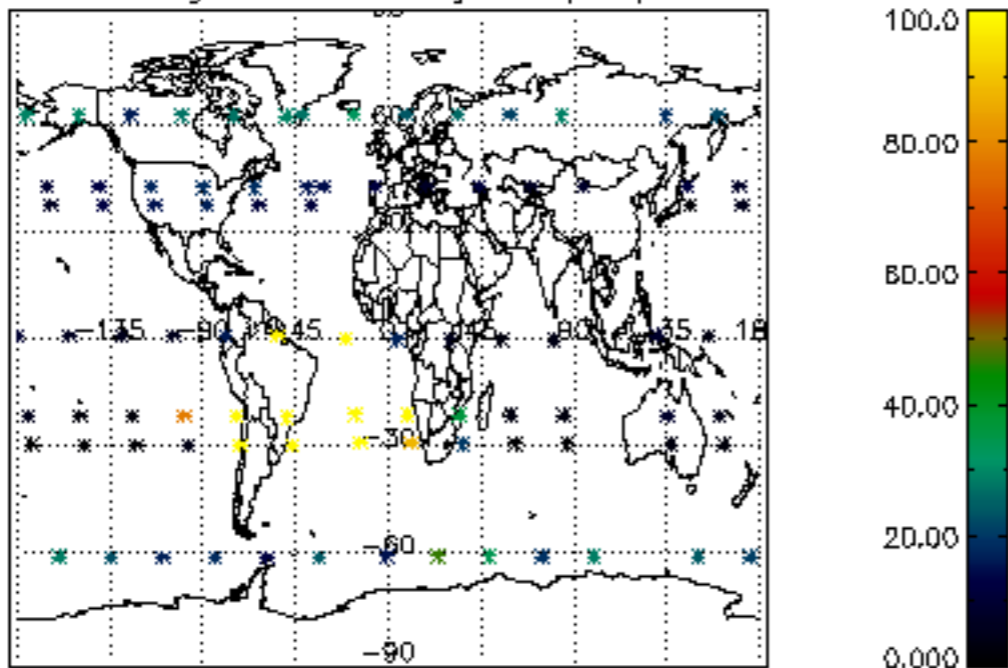
Percentage of flagged data per NO3 profile



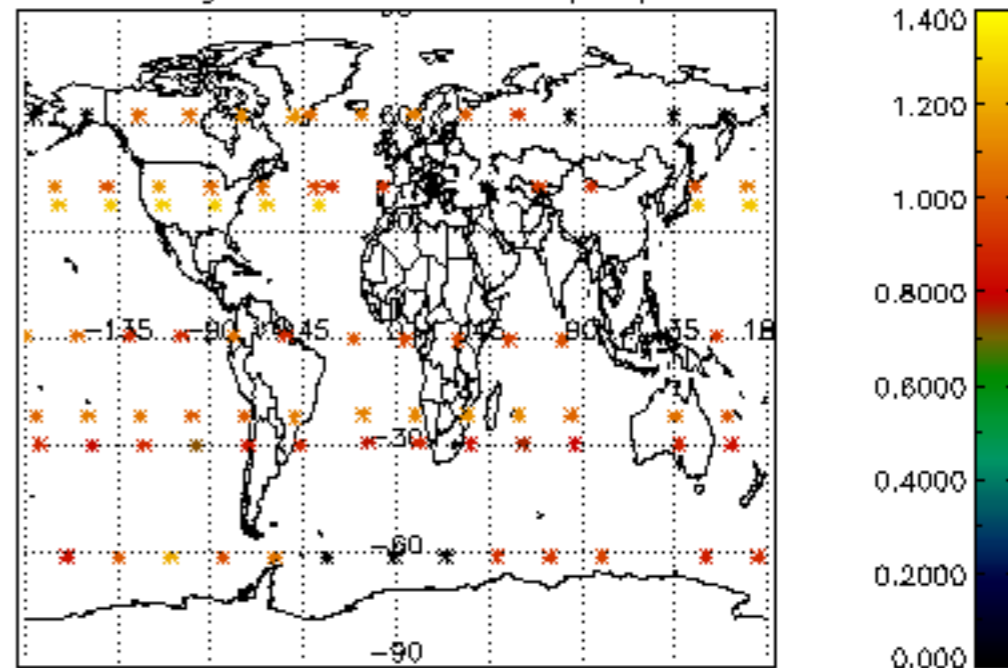




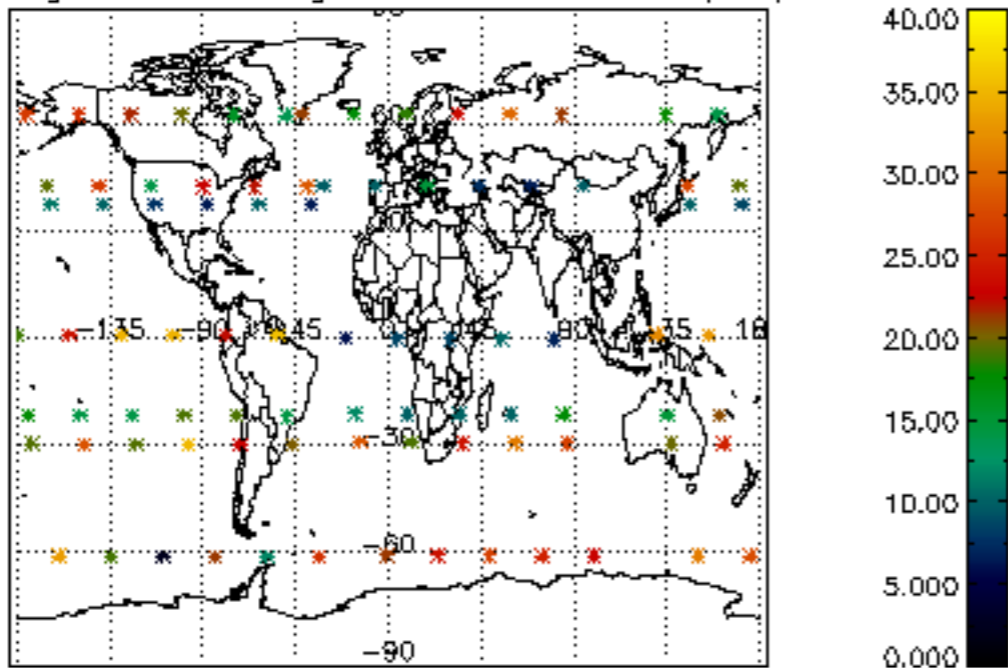
Percentage of cosmic ray hits per profile



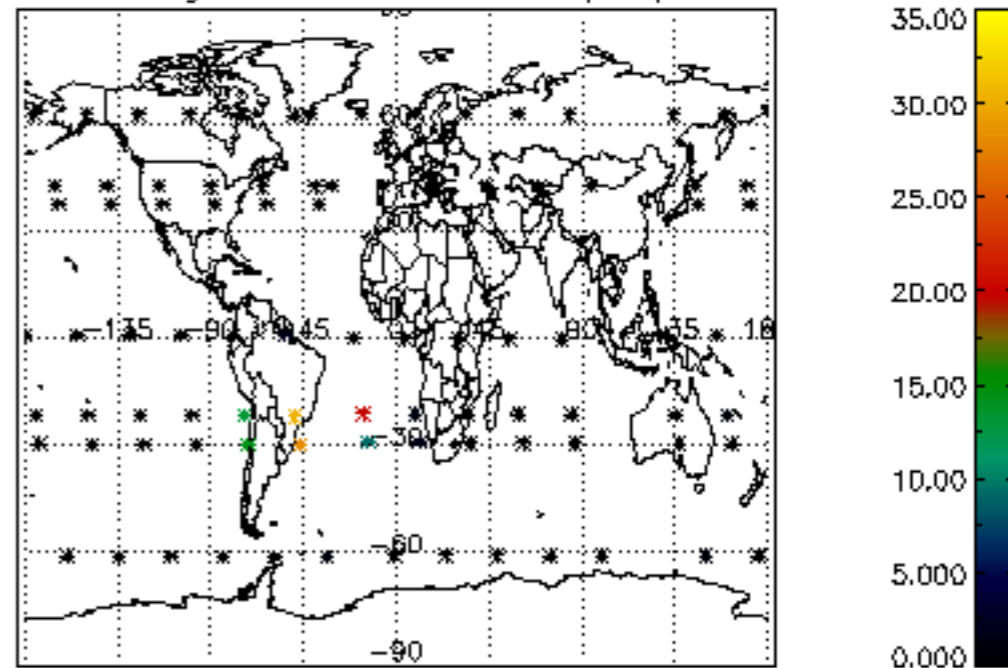
Percentage of datation errors per profile



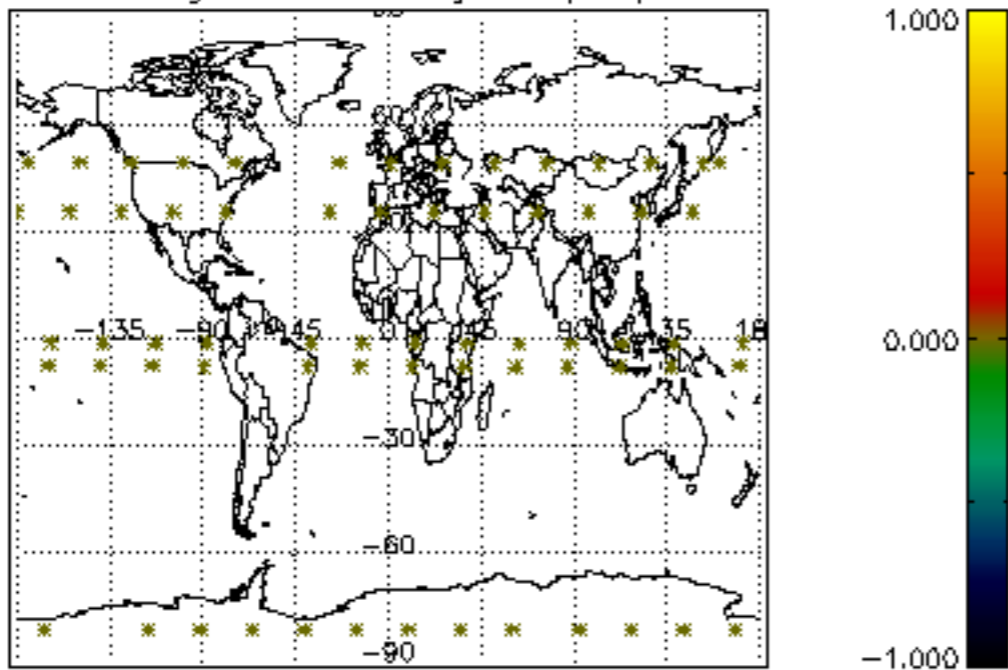
Percentage of star falling outside central band per profile



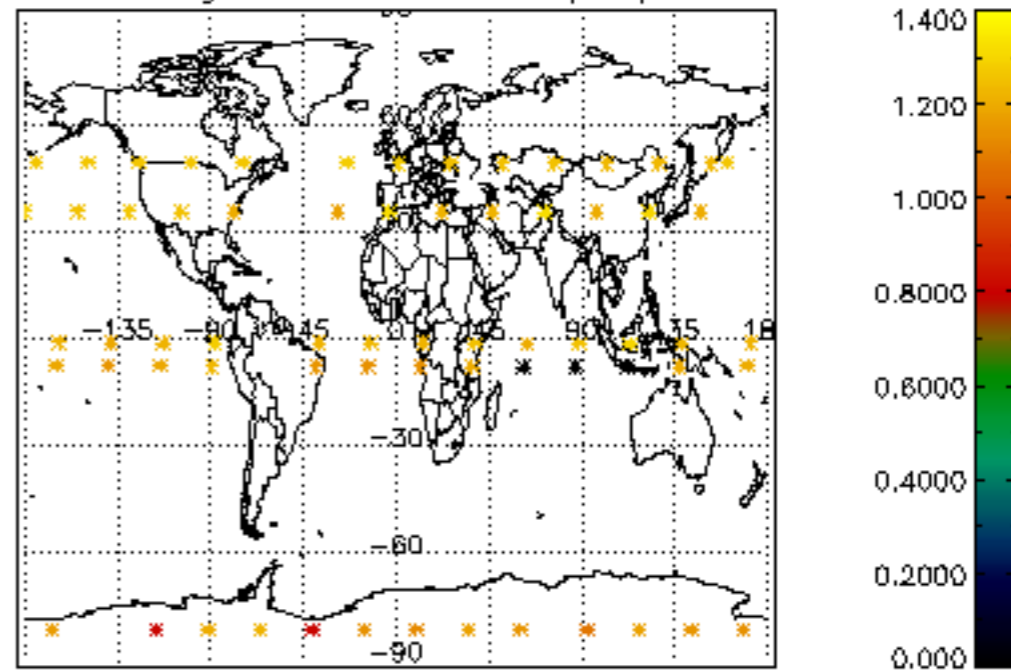
Percentage of saturation errors per profile



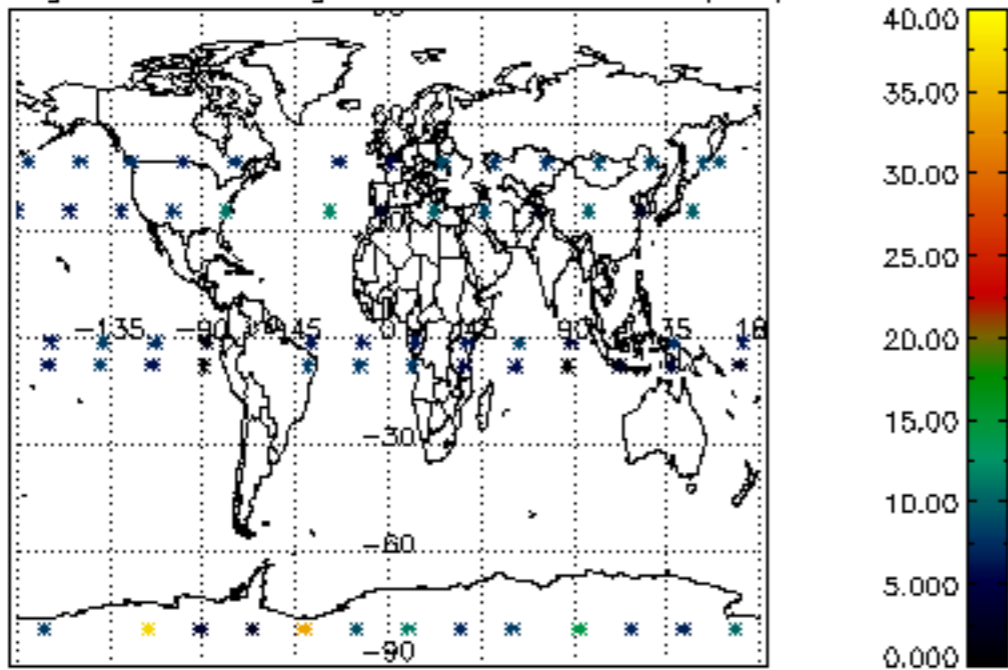
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

