

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 05:20:06
Data source version	GOMOS/6.01
Start time of products	18-09-2007 (18SEP2007 00:00:00)
Stop time of products	19-09-2007 (19SEP2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	184
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

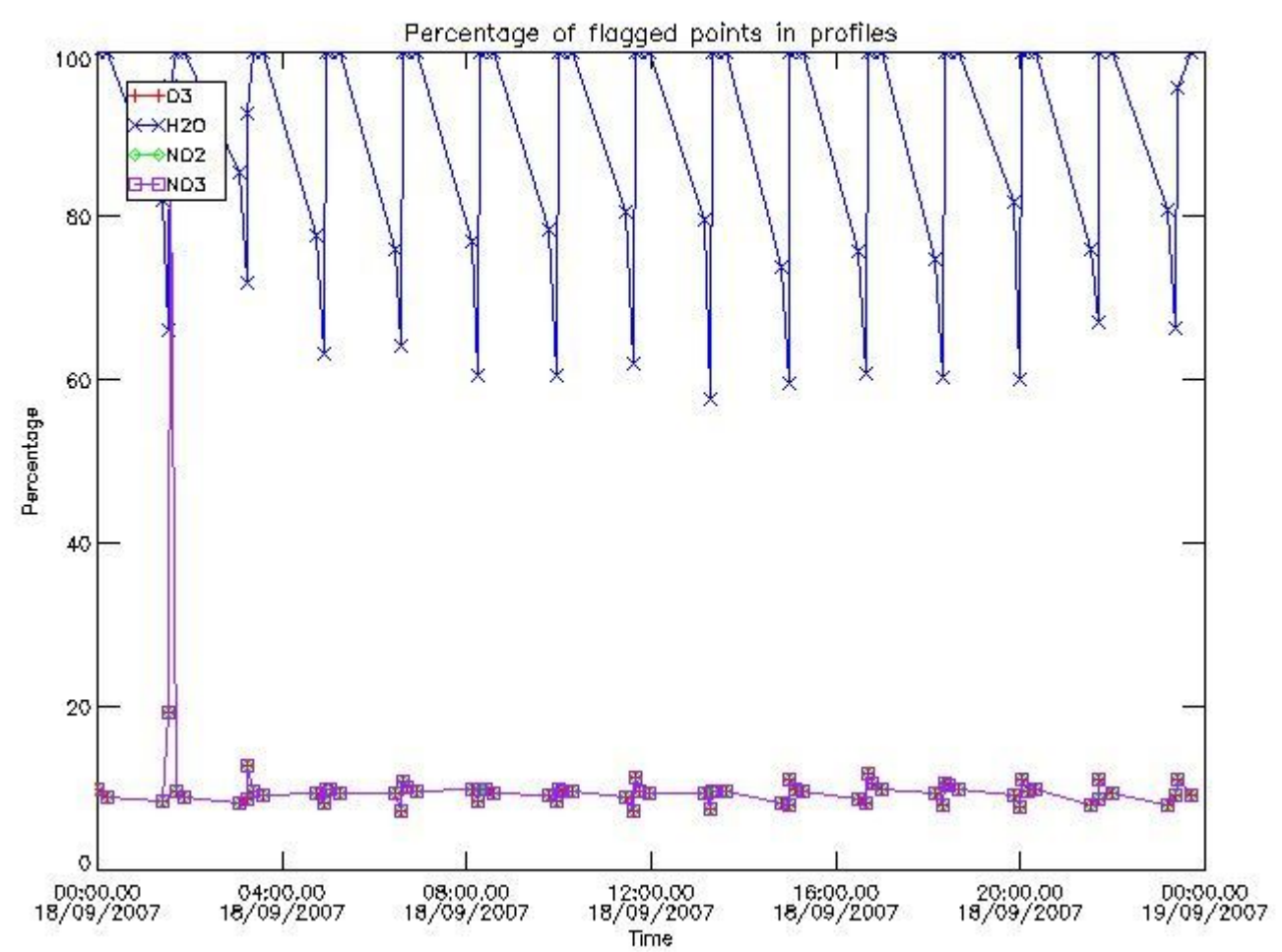
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070918_000050_00000522061_00403_29014_6442.N1	18-SEP-2007 00:00:50	Dark	51.500	108	Alp Col	2.6520	15200.	103	29014	No
2	GOM_NL__2PRFIN20070918_001246_00000572061_00403_29014_6443.N1	18-SEP-2007 00:12:46	Dark	56.500	157	The1Eri	2.9060	9300.0	113	29014	No
3	GOM_NL__2PRFIN20070918_001813_00000442061_00403_29014_6444.N1	18-SEP-2007 00:18:13	Straylight	43.500	84	Alp Phe	2.3970	4500.0	87	29014	No
4	GOM_NL__2PRFIN20070918_002547_00000562061_00403_29014_6445.N1	18-SEP-2007 00:25:47	Twl_and_stray	56.000	52	16Bet Cet	2.0370	4500.0	112	29014	No
5	GOM_NL__2PRFIN20070918_003632_00000382061_00403_29014_6446.N1	18-SEP-2007 00:36:32	Bright	38.000	90	54Alp Peg	2.4870	11000.	76	29014	No
6	GOM_NL__2PRFIN20070918_004023_00000412061_00403_29014_6447.N1	18-SEP-2007 00:40:23	Bright	41.000	93	53Bet Peg	2.5200	3100.0	82	29014	No
7	GOM_NL__2PRFIN20070918_004218_00000452061_00403_29014_6448.N1	18-SEP-2007 00:42:18	Bright	45.000	58	21Alp And	2.0730	11000.	90	29014	No
8	GOM_NL__2PRFIN20070918_005034_00000372061_00403_29014_6449.N1	18-SEP-2007 00:50:34	Bright	36.500	74	11Bet Cas	2.2680	6600.0	73	29014	No
9	GOM_NL__2PRFIN20070918_005219_00000422061_00403_29014_6450.N1	18-SEP-2007 00:52:19	Bright	42.000	76	27Gam Cas	2.3000	30000.	84	29014	No
10	GOM_NL__2PRFIN20070918_011501_00000452061_00403_29014_6451.N1	18-SEP-2007 01:15:01	Bright	44.500	24	66Alp Gem	1.5800	10200.	89	29014	No
11	GOM_NL__2PRFIN20070918_012352_00000612061_00403_29014_6452.N1	18-SEP-2007 01:23:52	Dark	60.500	8	10Alp CMi	0.40000	6500.0	121	29014	No
12	GOM_NL__2PRFIN20070918_013311_00000712061_00403_29014_6453.N1	18-SEP-2007 01:33:11	Dark	71.000	1	9Alp CMa	-1.4400	11000.	142	29014	No
13	GOM_NL__2PRFIN20070918_013519_00000502061_00403_29014_6454.N1	18-SEP-2007 01:35:19	Dark	49.500	23	21Eps CMa	1.5020	26000.	99	29014	No
14	GOM_NL__2PRFIN20070918_014127_00000532061_00404_29015_6449.N1	18-SEP-2007 01:41:27	Dark	52.500	108	Alp Col	2.6520	15200.	105	29015	No
15	GOM_NL__2PRFIN20070918_015323_00000572061_00404_29015_6450.N1	18-SEP-2007 01:53:23	Dark	56.500	157	The1Eri	2.9060	9300.0	113	29015	No
16	GOM_NL__2PRFIN20070918_015849_00000432061_00404_29015_6451.N1	18-SEP-2007 01:58:49	Straylight	42.500	84	Alp Phe	2.3970	4500.0	85	29015	No
17	GOM_NL__2PRFIN20070918_020623_00000582061_00404_29015_6452.N1	18-SEP-2007 02:06:23	Twl_and_stray	58.000	52	16Bet Cet	2.0370	4500.0	116	29015	No
18	GOM_NL__2PRFIN20070918_021708_00000392061_00404_29015_6453.N1	18-SEP-2007 02:17:08	Bright	38.500	90	54Alp Peg	2.4870	11000.	77	29015	No
19	GOM_NL__2PRFIN20070918_022058_00000382061_00404_29015_6454.N1	18-SEP-2007 02:20:58	Bright	38.000	93	53Bet Peg	2.5200	3100.0	76	29015	No
20	GOM_NL__2PRFIN20070918_022253_00000472061_00404_29015_6455.N1	18-SEP-2007 02:22:53	Bright	47.000	58	21Alp And	2.0730	11000.	94	29015	No
21	GOM_NL__2PRFIN20070918_023109_00000392061_00404_29015_6456.N1	18-SEP-2007 02:31:09	Bright	39.000	74	11Bet Cas	2.2680	6600.0	78	29015	No
22	GOM_NL__2PRFIN20070918_023254_00000402061_00404_29015_6457.N1	18-SEP-2007 02:32:54	Bright	40.000	76	27Gam Cas	2.3000	30000.	80	29015	No
23	GOM_NL__2PRFIN20070918_025537_00000622061_00404_29015_6458.N1	18-SEP-2007 02:55:37	Bright	62.000	24	66Alp Gem	1.5800	10200.	124	29015	No
24	GOM_NL__2PRFIN20070918_030428_00000622061_00404_29015_6459.N1	18-SEP-2007 03:04:28	Dark	62.000	8	10Alp CMi	0.40000	6500.0	124	29015	No
25	GOM_NL__2PRFIN20070918_031349_00000592061_00404_29015_6460.N1	18-SEP-2007 03:13:49	Dark	59.000	1	9Alp CMa	-1.4400	11000.	118	29015	No
26	GOM_NL__2PRFIN20070918_031556_00000482061_00404_29015_6461.N1	18-SEP-2007 03:15:56	Dark	47.500	23	21Eps CMa	1.5020	26000.	95	29015	No
27	GOM_NL__2PRFIN20070918_032204_00000532061_00405_29016_6457.N1	18-SEP-2007 03:22:04	Dark	53.000	108	Alp Col	2.6520	15200.	106	29016	No
28	GOM_NL__2PRFIN20070918_033400_00000562061_00405_29016_6458.N1	18-SEP-2007 03:34:00	Dark	56.000	157	The1Eri	2.9060	9300.0	112	29016	No
29	GOM_NL__2PRFIN20070918_033926_00000452061_00405_29016_6459.N1	18-SEP-2007 03:39:26	Straylight	45.000	84	Alp Phe	2.3970	4500.0	90	29016	No
30	GOM_NL__2PRFIN20070918_034659_00000602061_00405_29016_6460.N1	18-SEP-2007 03:46:59	Twl_and_stray	60.000	52	16Bet Cet	2.0370	4500.0	120	29016	No
31	GOM_NL__2PRFIN20070918_035744_00000402061_00405_29016_6461.N1	18-SEP-2007 03:57:44	Bright	39.500	90	54Alp Peg	2.4870	11000.	79	29016	No
32	GOM_NL__2PRFIN20070918_040134_00000402061_00405_29016_6462.N1	18-SEP-2007 04:01:34	Bright	39.500	93	53Bet Peg	2.5200	3100.0	79	29016	No
33	GOM_NL__2PRFIN20070918_040329_00000462061_00405_29016_6463.N1	18-SEP-2007 04:03:29	Bright	45.500	58	21Alp And	2.0730	11000.	91	29016	No
34	GOM_NL__2PRFIN20070918_041145_00000412061_00405_29016_6464.N1	18-SEP-2007 04:11:45	Bright	40.500	74	11Bet Cas	2.2680	6600.0	81	29016	No
35	GOM_NL__2PRFIN20070918_041330_00000382061_00405_29016_6465.N1	18-SEP-2007 04:13:30	Bright	37.500	76	27Gam Cas	2.3000	30000.	75	29016	No
36	GOM_NL__2PRFIN20070918_043613_00000452061_00405_29016_6466.N1	18-SEP-2007 04:36:13	Bright	45.000	24	66Alp Gem	1.5800	10200.	90	29016	No
37	GOM_NL__2PRFIN20070918_044505_00000542061_00405_29016_6467.N1	18-SEP-2007 04:45:05	Dark	54.000	8	10Alp CMi	0.40000	6500.0	108	29016	No
38	GOM_NL__2PRFIN20070918_045426_00000622061_00405_29016_6468.N1	18-SEP-2007 04:54:26	Dark	61.500	1	9Alp CMa	-1.4400	11000.	123	29016	No
39	GOM_NL__2PRFIN20070918_045632_00000522061_00405_29016_6469.N1	18-SEP-2007 04:56:32	Dark	51.500	23	21Eps CMa	1.5020	26000.	103	29016	No
40	GOM_NL__2PRFIN20070918_050241_00000522061_00406_29017_6465.N1	18-SEP-2007 05:02:41	Dark	52.000	108	Alp Col	2.6520	15200.	104	29017	No
41	GOM_NL__2PRFIN20070918_051437_00000552061_00406_29017_6466.N1	18-SEP-2007 05:14:37	Dark	54.500	157	The1Eri	2.9060	9300.0	109	29017	No
42	GOM_NL__2PRFIN20070918_052002_00000492061_00406_29017_6467.N1	18-SEP-2007 05:20:02	Straylight	48.500	84	Alp Phe	2.3970	4500.0	97	29017	No

161	GOM_NL__2PRFIN20070918_204342_000000392061_00415_29026_6640.N1	18-SEP-2007 20:43:42	Bright	38.500	90	54Alp Peg	2.4870	11000.	77	29026	No
162	GOM_NL__2PRFIN20070918_204731_000000382061_00415_29026_6641.N1	18-SEP-2007 20:47:31	Bright	38.000	93	53Bet Peg	2.5200	3100.0	76	29026	No
163	GOM_NL__2PRFIN20070918_204922_000000452061_00415_29026_6642.N1	18-SEP-2007 20:49:22	Bright	44.500	58	21Alp And	2.0730	11000.	89	29026	No
164	GOM_NL__2PRFIN20070918_205740_000000412061_00415_29026_6643.N1	18-SEP-2007 20:57:40	Bright	41.000	74	11Bet Cas	2.2680	6600.0	82	29026	No
165	GOM_NL__2PRFIN20070918_205924_000000422061_00415_29026_6644.N1	18-SEP-2007 20:59:24	Bright	42.000	76	27Gam Cas	2.3000	30000.	84	29026	No
166	GOM_NL__2PRFIN20070918_212214_000000592061_00415_29026_6645.N1	18-SEP-2007 21:22:14	Bright	59.000	24	66Alp Gem	1.5800	10200.	118	29026	No
167	GOM_NL__2PRFIN20070918_213110_000000652061_00415_29026_6646.N1	18-SEP-2007 21:31:10	Dark	64.500	8	10Alp CMi	0.40000	6500.0	129	29026	No
168	GOM_NL__2PRFIN20070918_214036_000000702061_00415_29026_6647.N1	18-SEP-2007 21:40:36	Dark	70.000	1	9Alp CMa	-1.4400	11000.	140	29026	No
169	GOM_NL__2PRFIN20070918_214241_000000462061_00415_29026_6648.N1	18-SEP-2007 21:42:41	Dark	46.000	23	21Eps CMa	1.5020	26000.	92	29026	No
170	GOM_NL__2PRFIN20070918_220046_000000552061_00416_29027_6648.N1	18-SEP-2007 22:00:46	Dark	54.500	157	The1Eri	2.9060	9300.0	109	29027	No
171	GOM_NL__2PRFIN20070918_220605_000000442061_00416_29027_6649.N1	18-SEP-2007 22:06:05	Straylight	43.500	84	Alp Phe	2.3970	4500.0	87	29027	No
172	GOM_NL__2PRFIN20070918_221336_000000582061_00416_29027_6650.N1	18-SEP-2007 22:13:36	Tw_i_and_stray	58.000	52	16Bet Cet	2.0370	4500.0	116	29027	No
173	GOM_NL__2PRFIN20070918_222417_000000392061_00416_29027_6651.N1	18-SEP-2007 22:24:17	Bright	38.500	90	54Alp Peg	2.4870	11000.	77	29027	No
174	GOM_NL__2PRFIN20070918_222807_000000422061_00416_29027_6652.N1	18-SEP-2007 22:28:07	Bright	42.000	93	53Bet Peg	2.5200	3100.0	84	29027	No
175	GOM_NL__2PRFIN20070918_222957_000000482061_00416_29027_6653.N1	18-SEP-2007 22:29:57	Bright	47.500	58	21Alp And	2.0730	11000.	95	29027	No
176	GOM_NL__2PRFIN20070918_223815_000000402061_00416_29027_6654.N1	18-SEP-2007 22:38:15	Bright	40.000	74	11Bet Cas	2.2680	6600.0	80	29027	No
177	GOM_NL__2PRFIN20070918_223959_000000402061_00416_29027_6655.N1	18-SEP-2007 22:39:59	Bright	40.000	76	27Gam Cas	2.3000	30000.	80	29027	No
178	GOM_NL__2PRFIN20070918_230250_000000452061_00416_29027_6656.N1	18-SEP-2007 23:02:50	Bright	44.500	24	66Alp Gem	1.5800	10200.	89	29027	No
179	GOM_NL__2PRFIN20070918_231146_000000652061_00416_29027_6657.N1	18-SEP-2007 23:11:46	Dark	64.500	8	10Alp CMi	0.40000	6500.0	129	29027	No
180	GOM_NL__2PRFIN20070918_232113_000000612061_00416_29027_6658.N1	18-SEP-2007 23:21:13	Dark	61.000	1	9Alp CMa	-1.4400	11000.	122	29027	No
181	GOM_NL__2PRFIN20070918_232317_000000462061_00416_29027_6659.N1	18-SEP-2007 23:23:17	Dark	46.000	23	21Eps CMa	1.5020	26000.	92	29027	No
182	GOM_NL__2PRFIN20070918_234123_000000552061_00417_29028_6686.N1	18-SEP-2007 23:41:23	Dark	55.000	157	The1Eri	2.9060	9300.0	110	29028	No
183	GOM_NL__2PRFIN20070918_234641_000000452061_00417_29028_6687.N1	18-SEP-2007 23:46:41	Straylight	44.500	84	Alp Phe	2.3970	4500.0	89	29028	No
184	GOM_NL__2PRFIN20070918_235412_000000562061_00417_29028_6688.N1	18-SEP-2007 23:54:12	Tw_i_and_stray	56.000	52	16Bet Cet	2.0370	4500.0	112	29028	No

3. Quality information per product

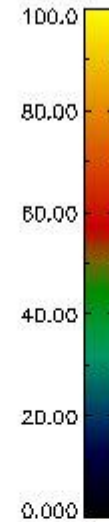
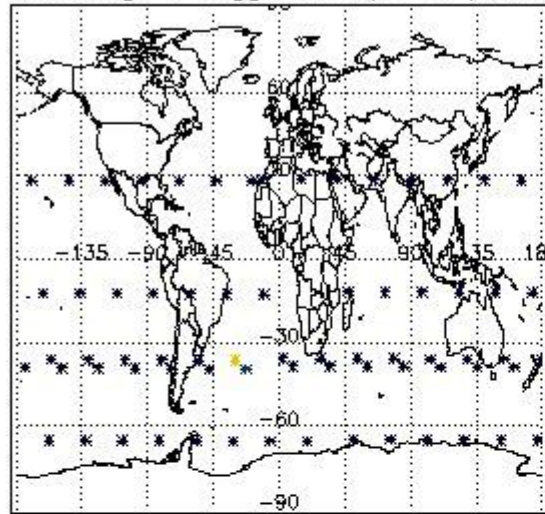
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

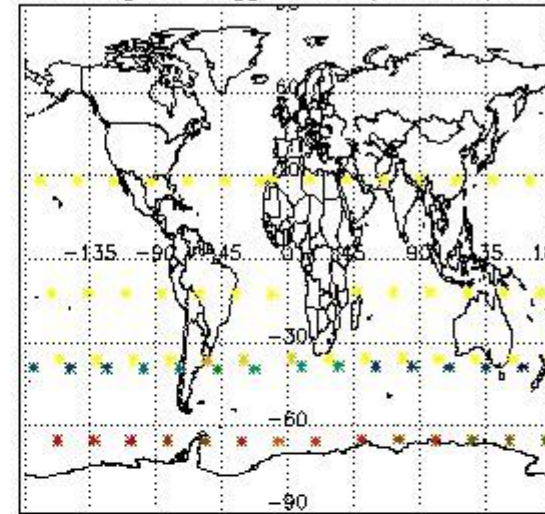


3.2 Plot quality information per product (world map)

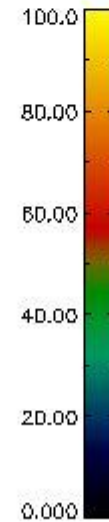
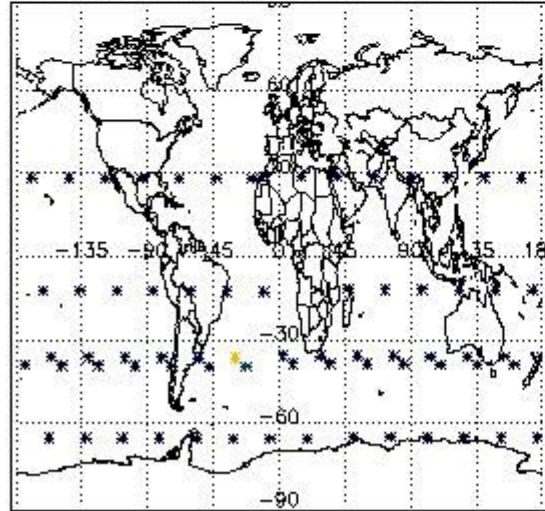
Percentage of flagged data per O3 profile



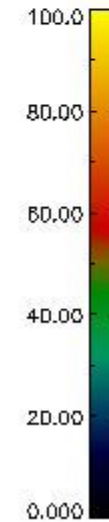
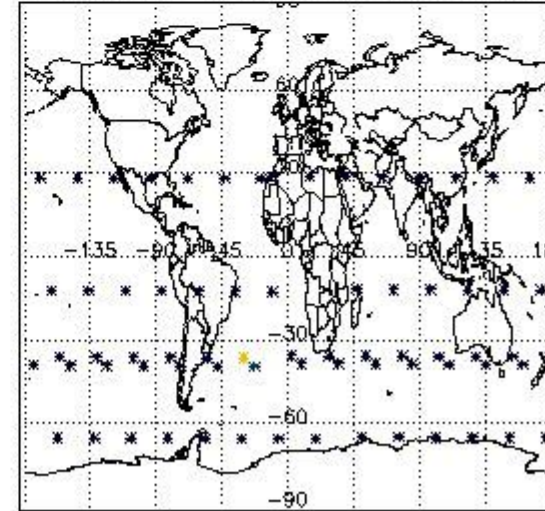
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

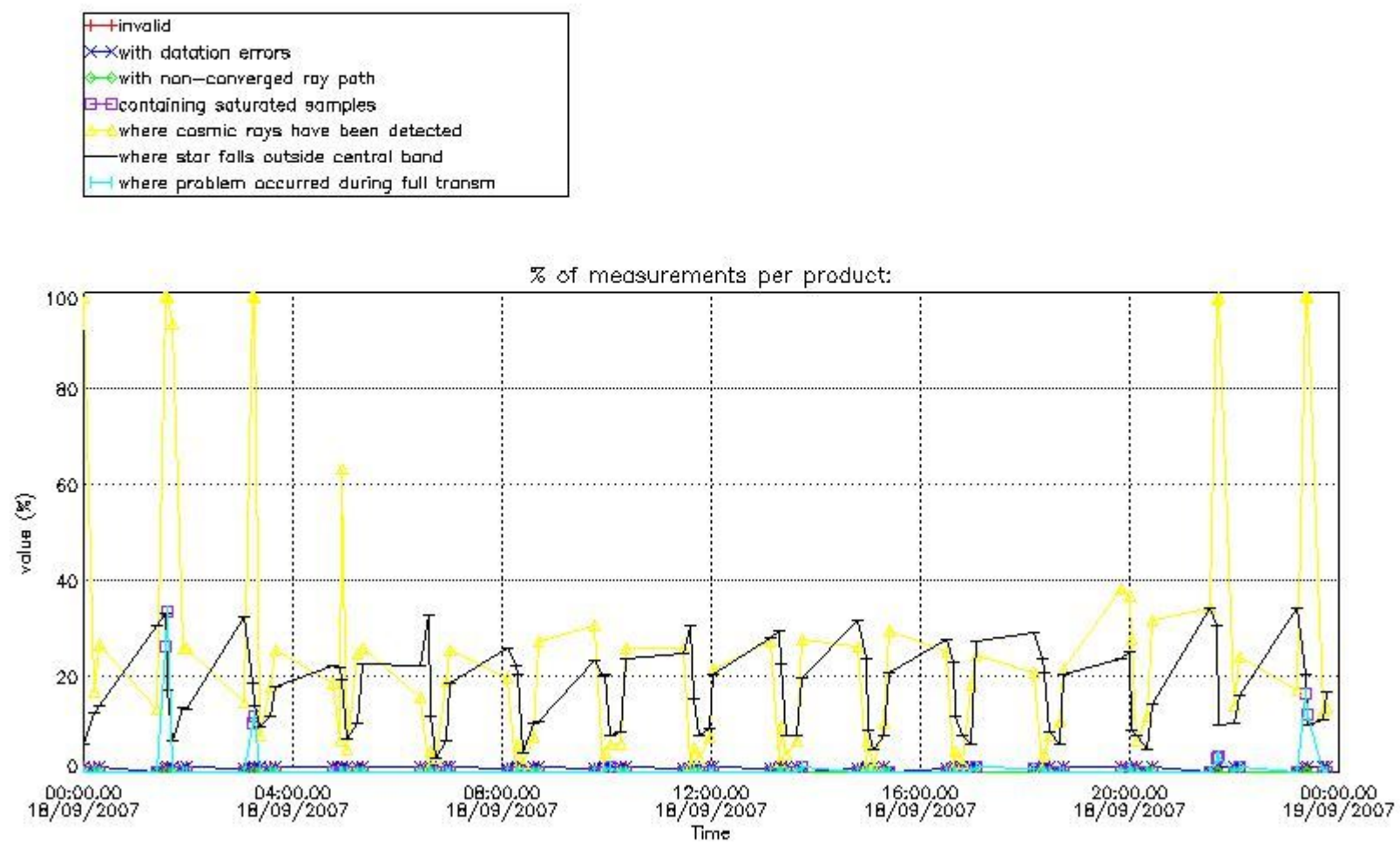


4. Level 1 quality information per product

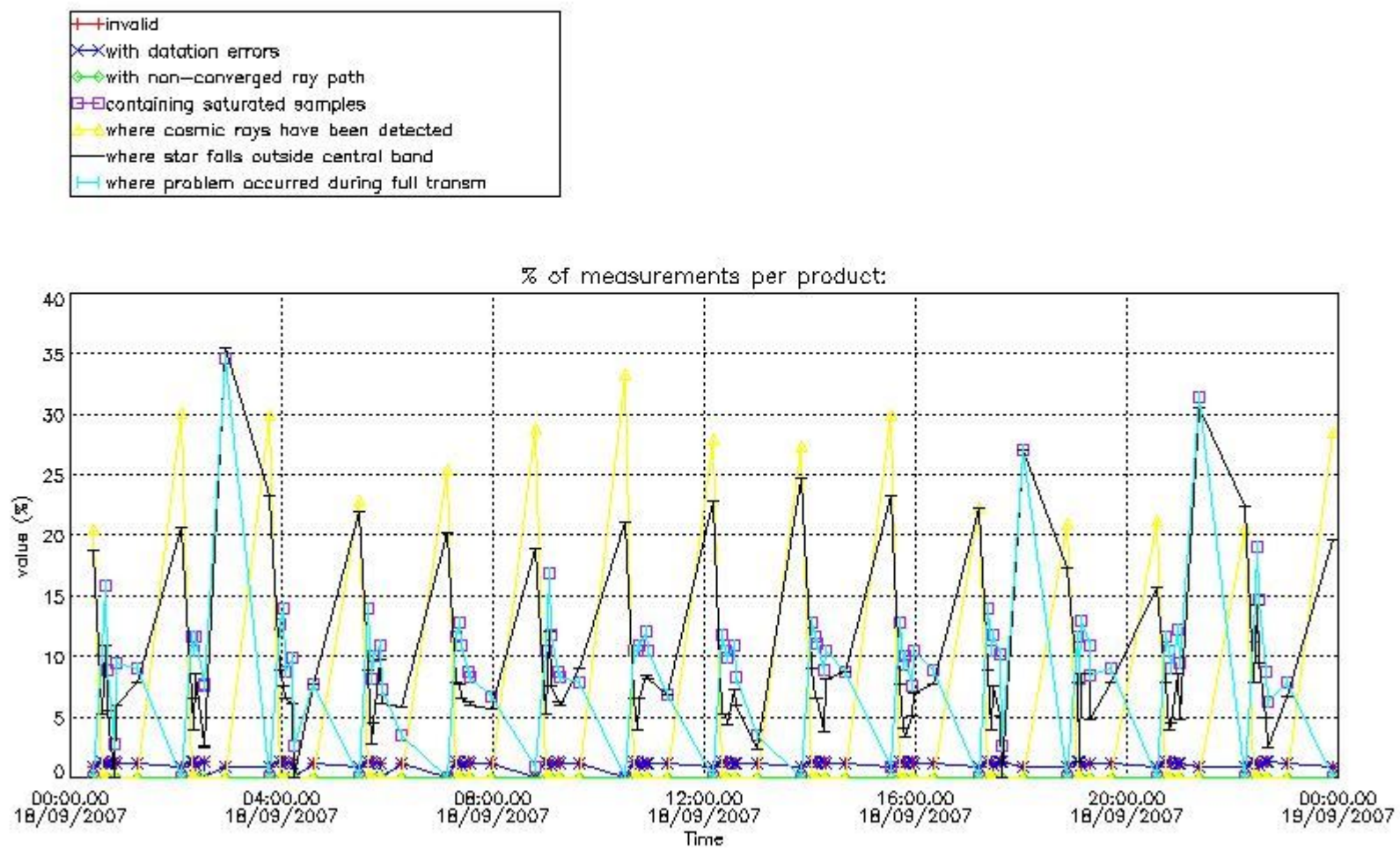
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes



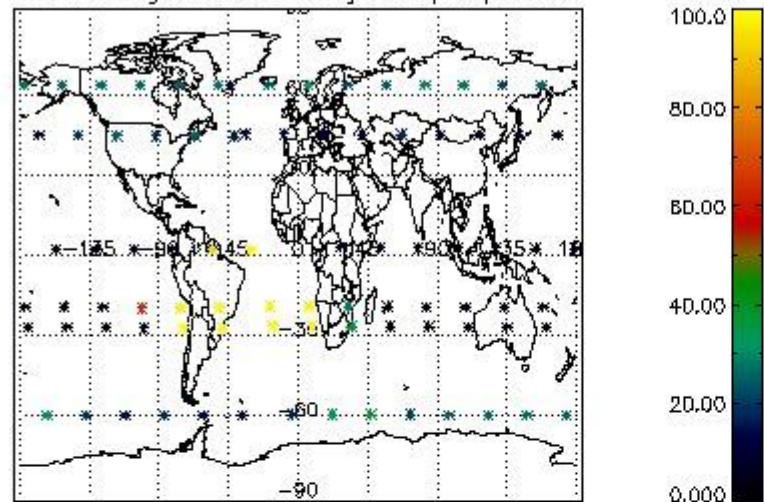
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



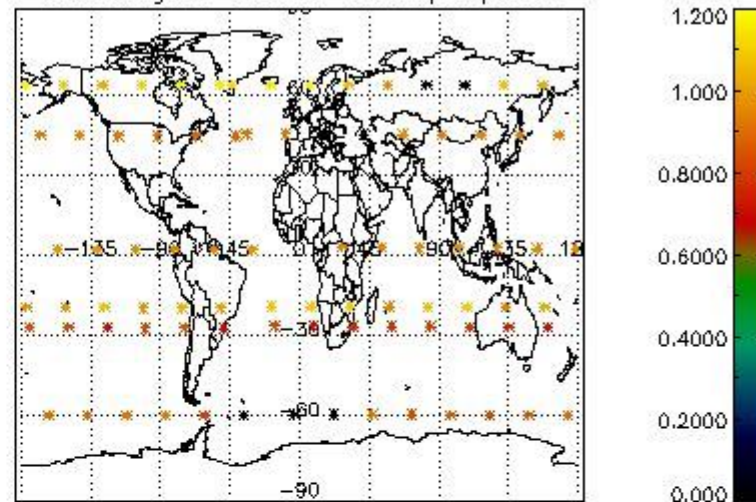
4.2 Plot quality information per product coming from level 1b processing (world map)

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

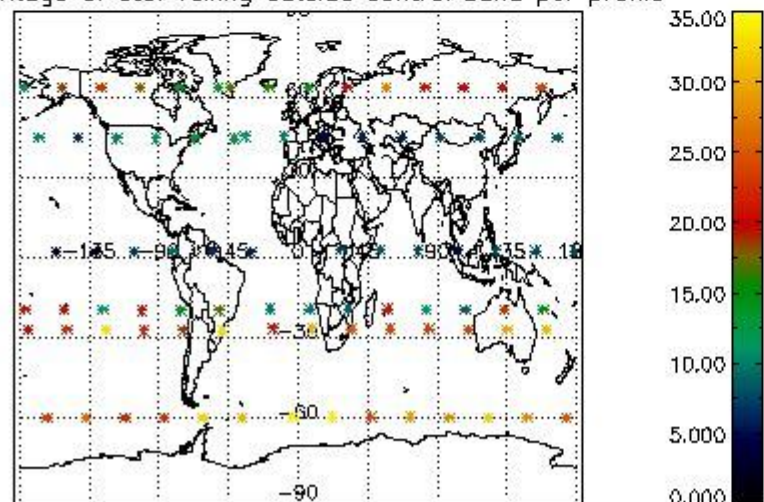
Percentage of cosmic ray hits per profile



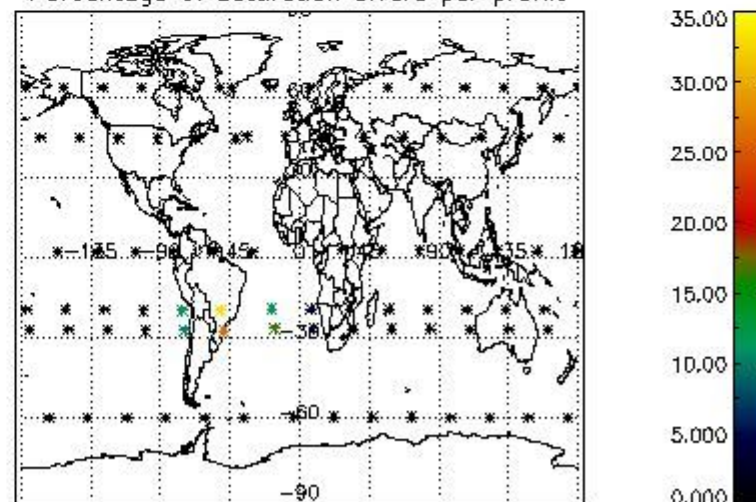
Percentage of datation errors per profile



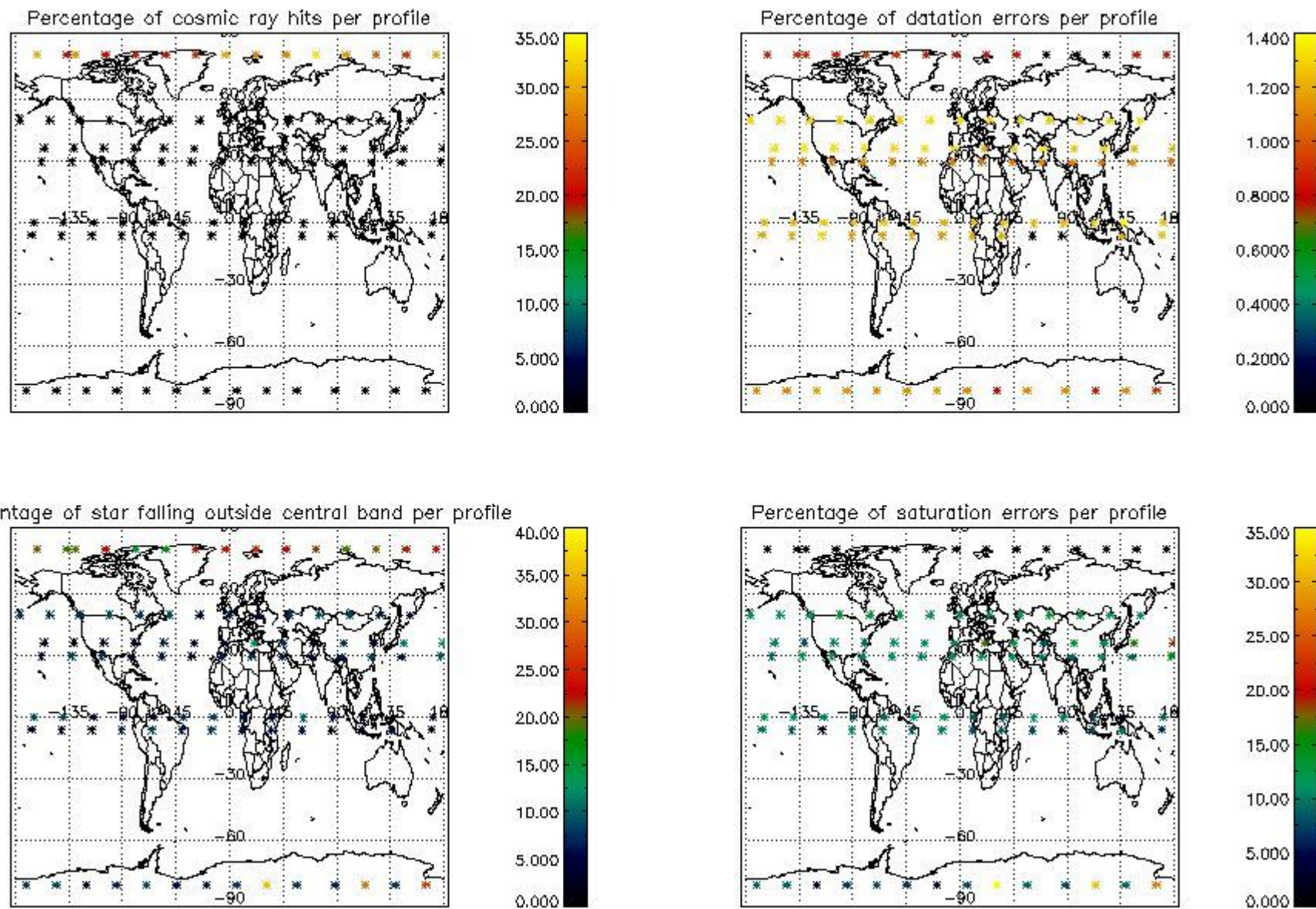
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

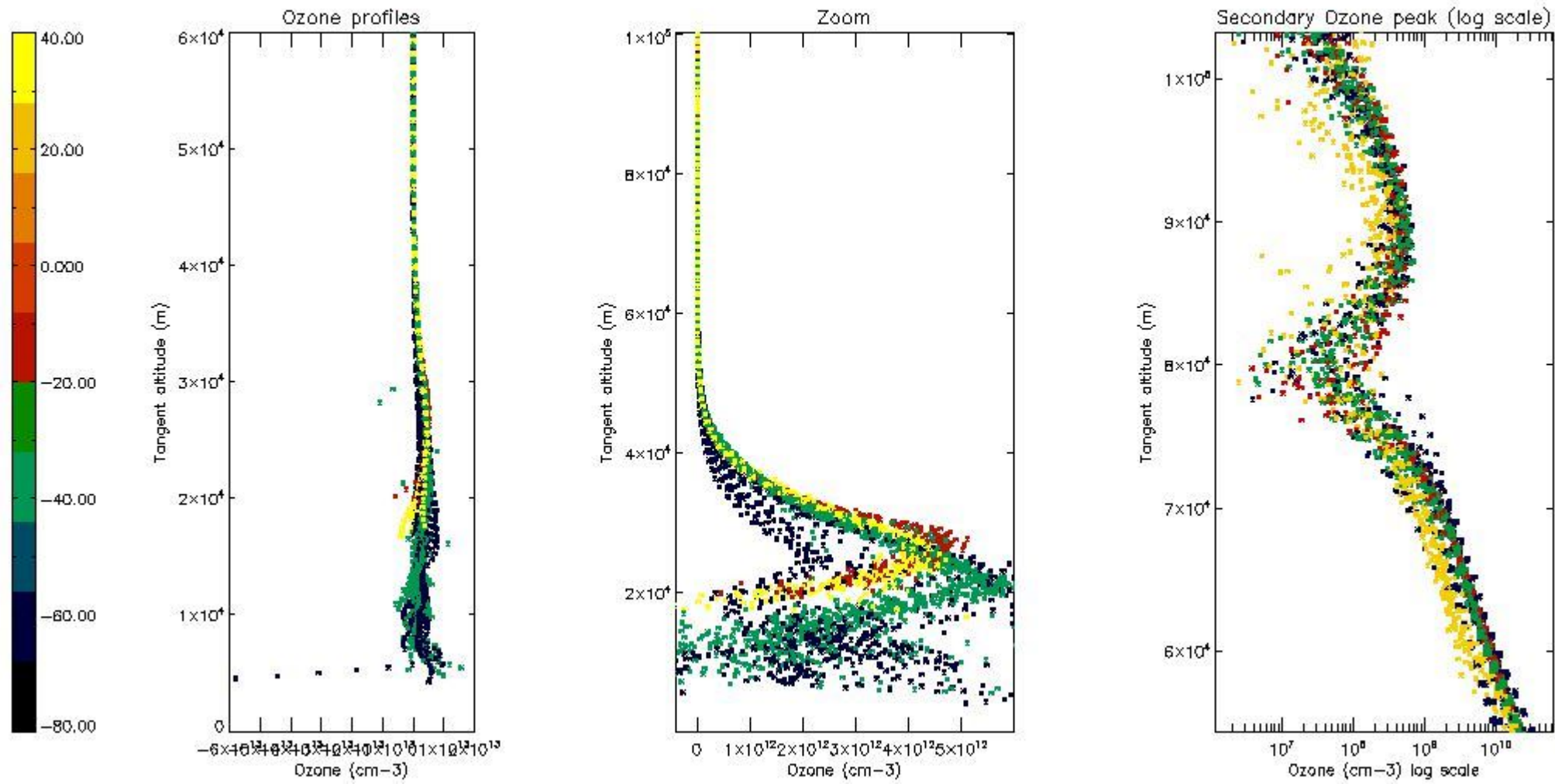
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	45
STD < 20	29

STD < 10	25
STD < 5	18

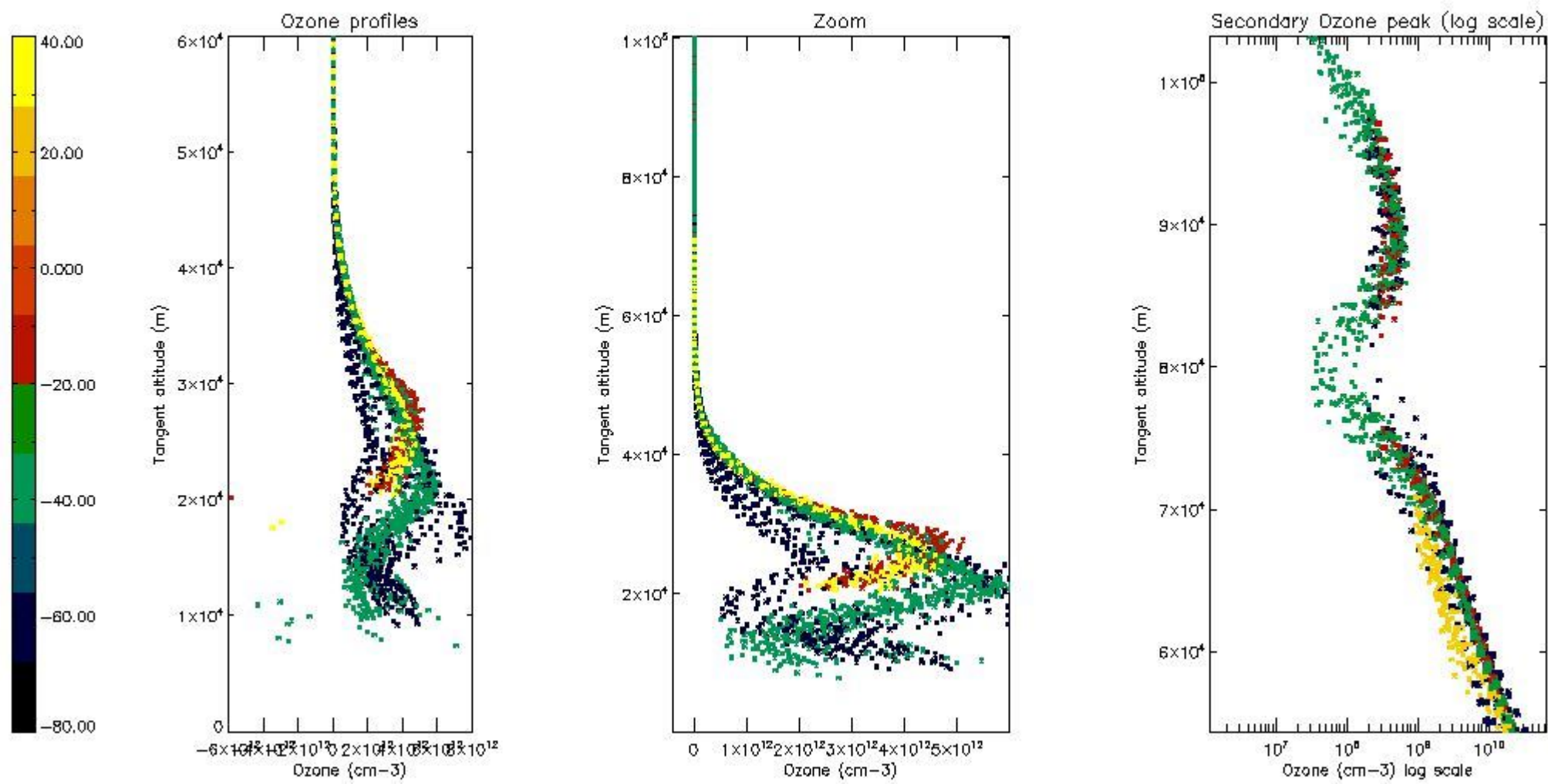
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



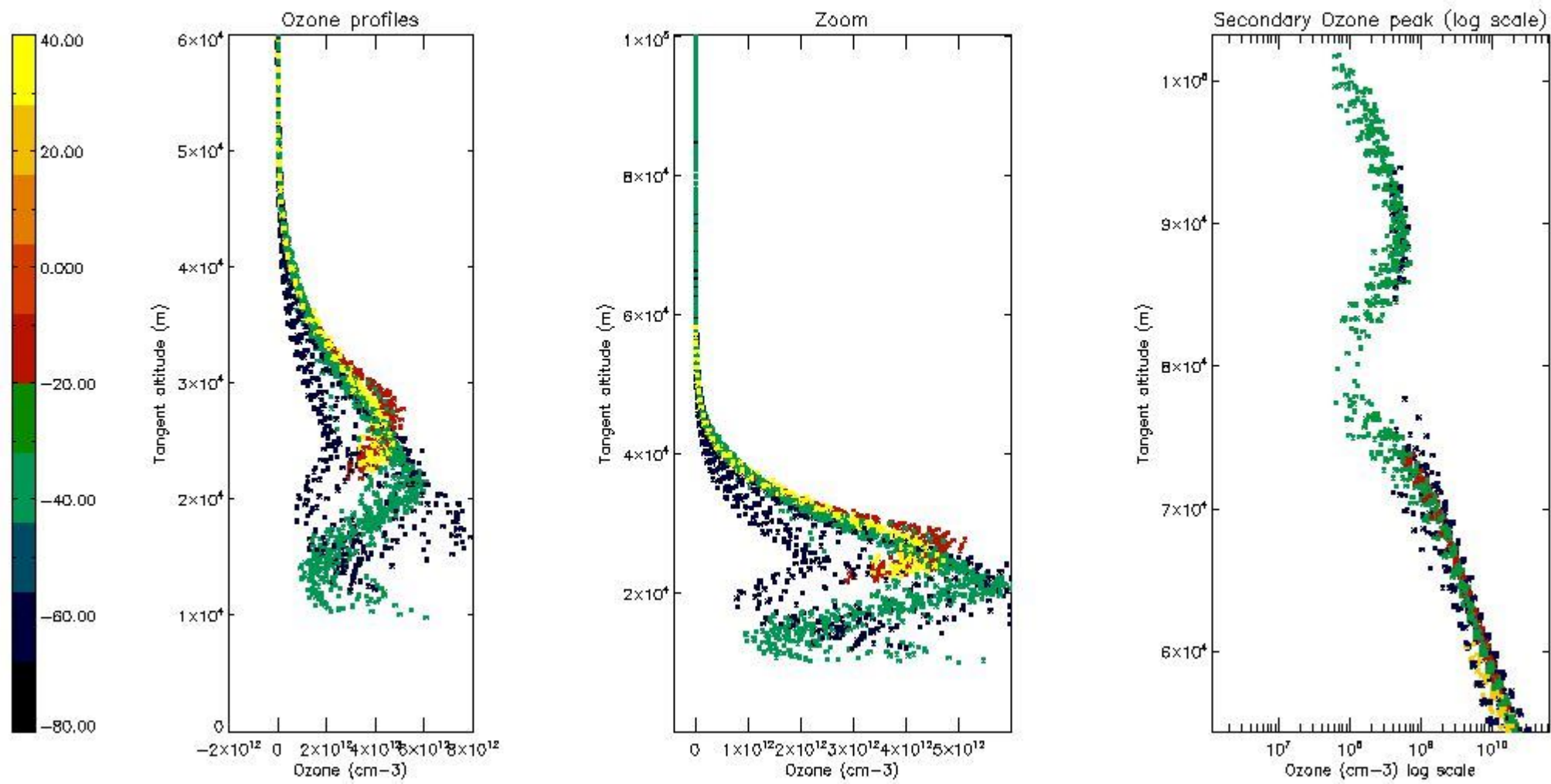
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



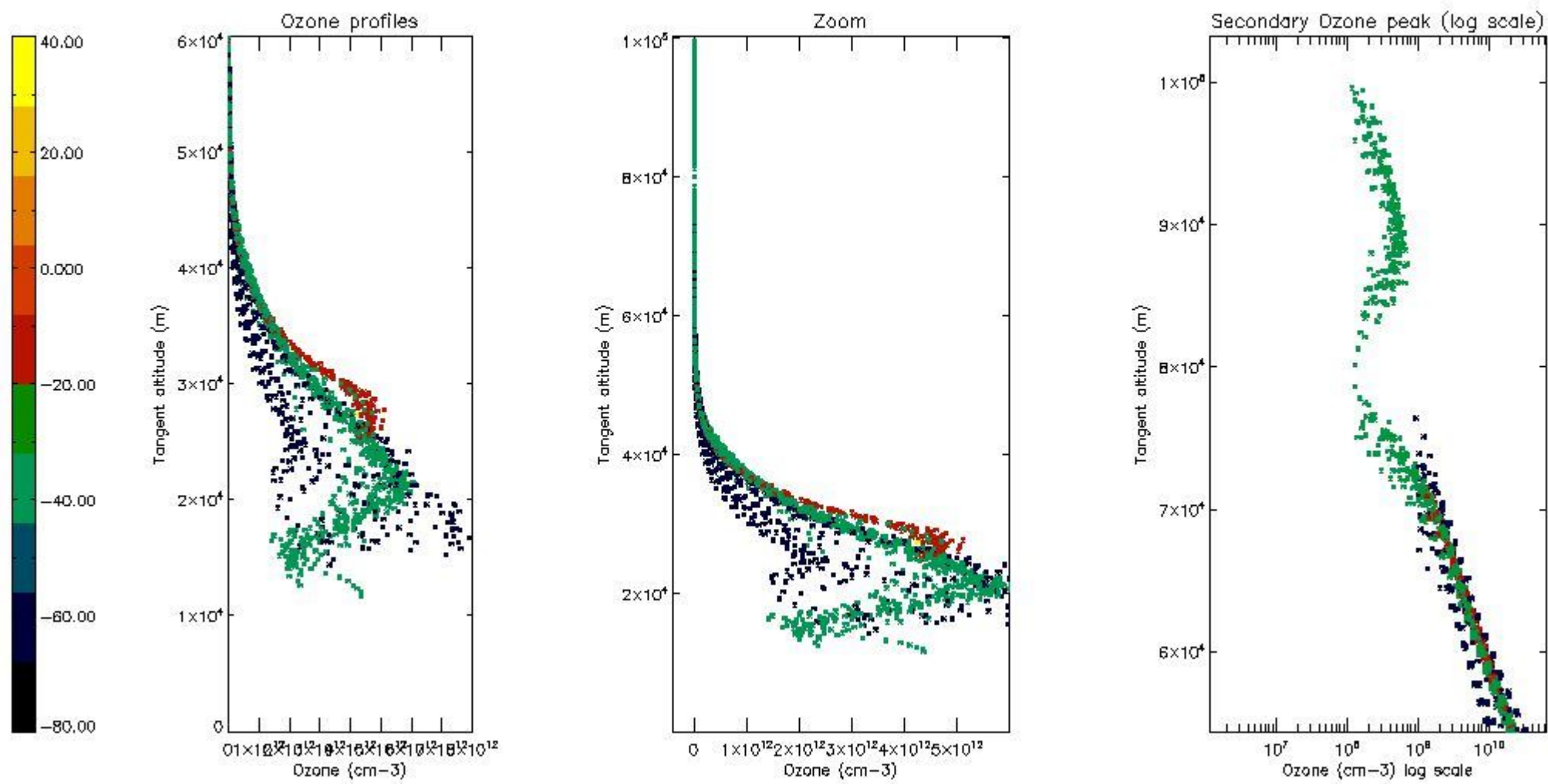
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



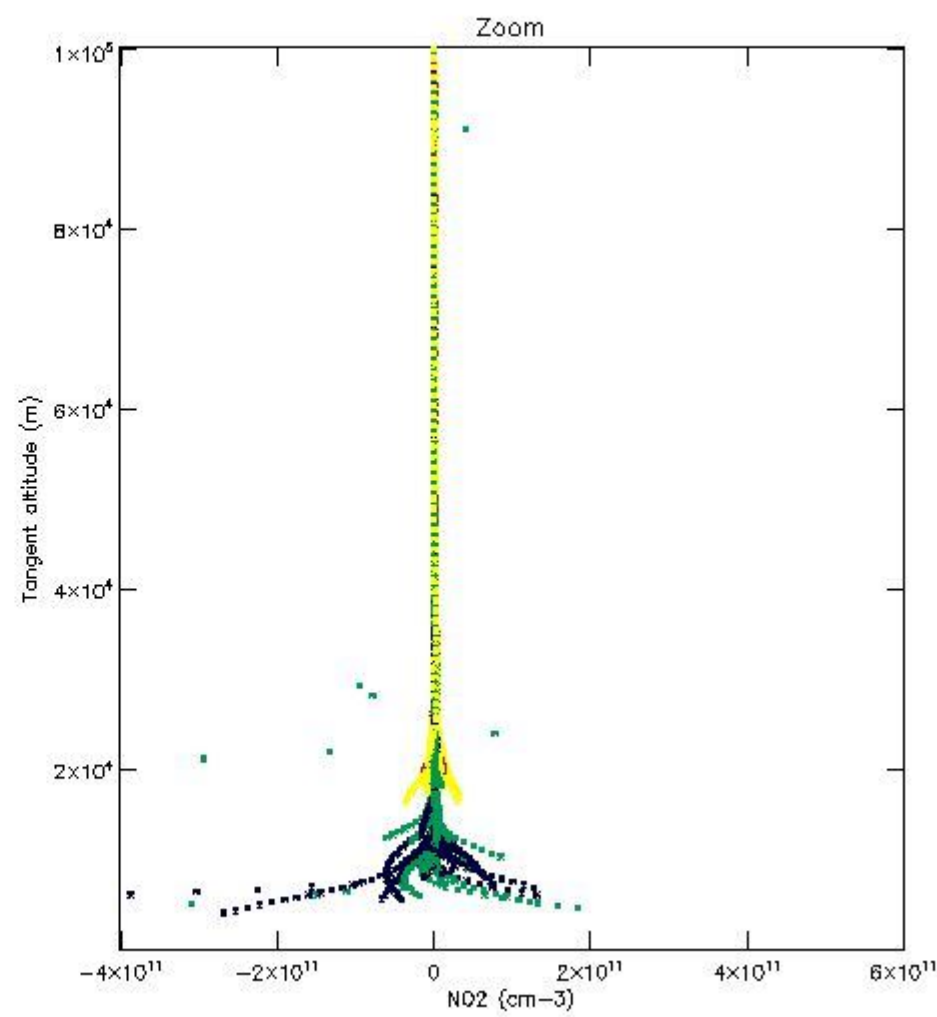
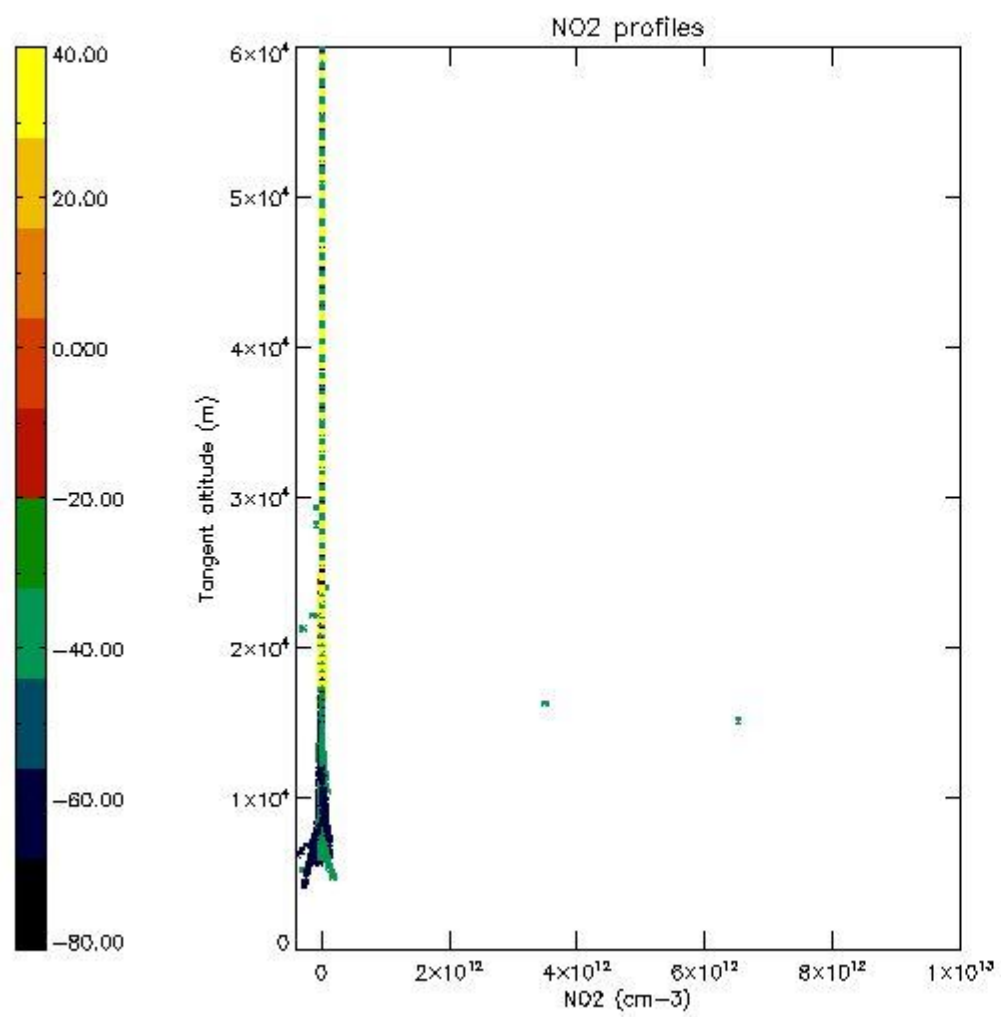
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



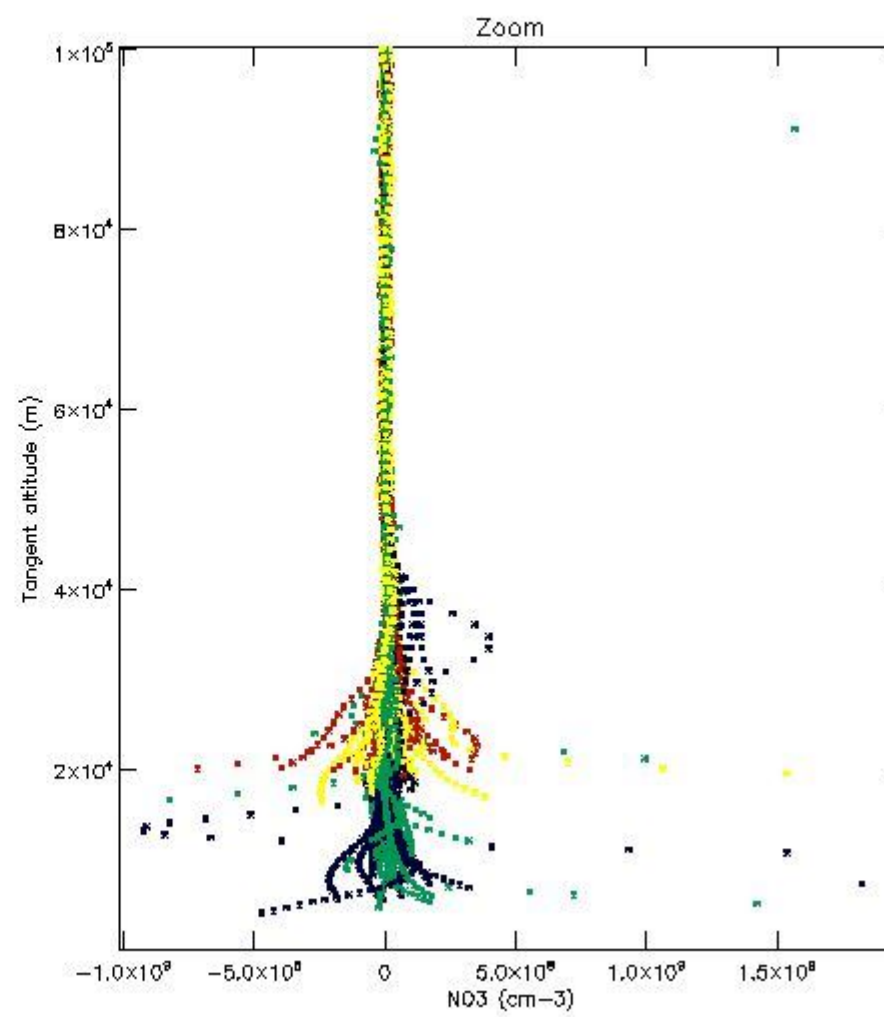
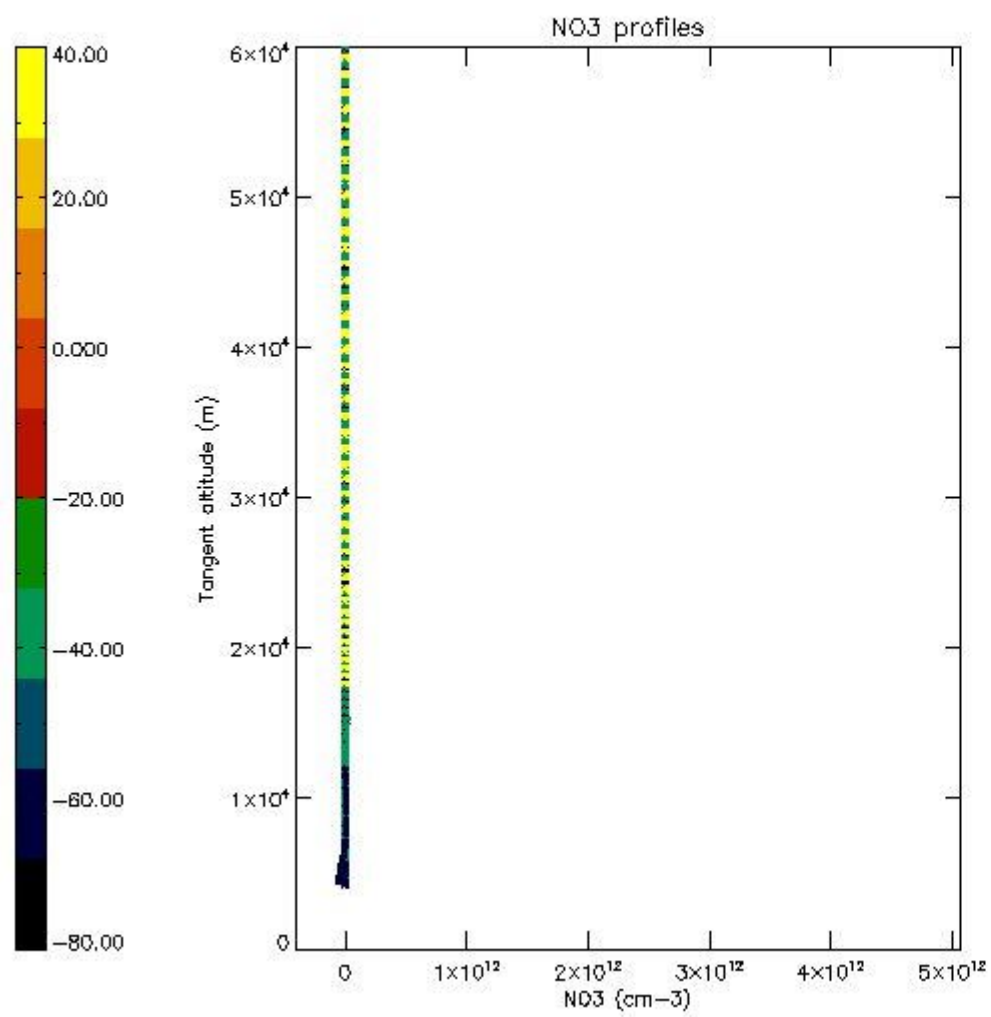
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



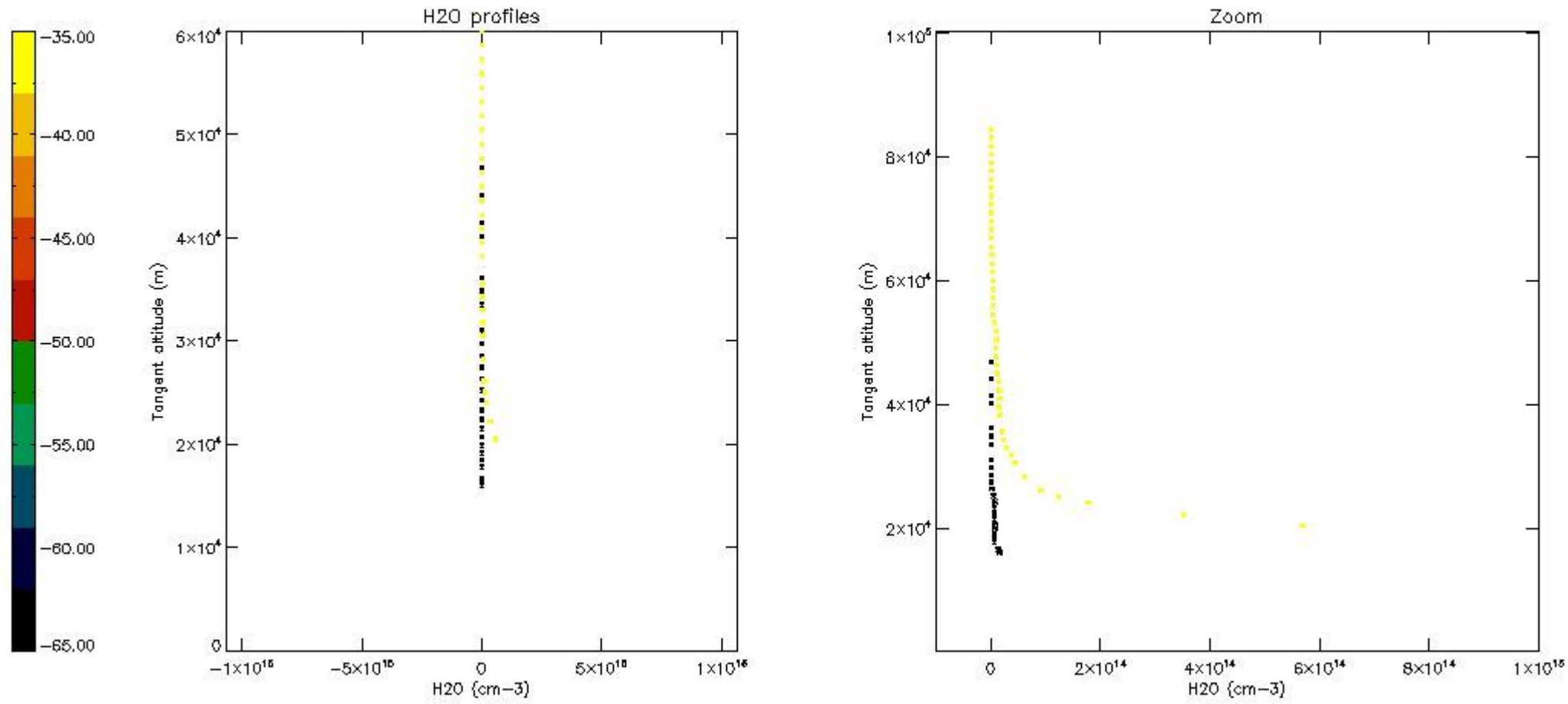
5.7 Plot NO3 profiles for all STD (dark without errors)

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	18-SEP-2007 00:00:50
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	18-SEP-2007 00:00:50
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	18-SEP-2007 00:00:50

GOMOS Level 2 Daily Report

SUMMARY

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

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

Item	Value
Time of report generation	23APR2013 05:20:06
Data source version	GOMOS/6.01
Start time of products	18-09-2007 (18SEP2007 00:00:00)
Stop time of products	19-09-2007 (19SEP2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	184
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

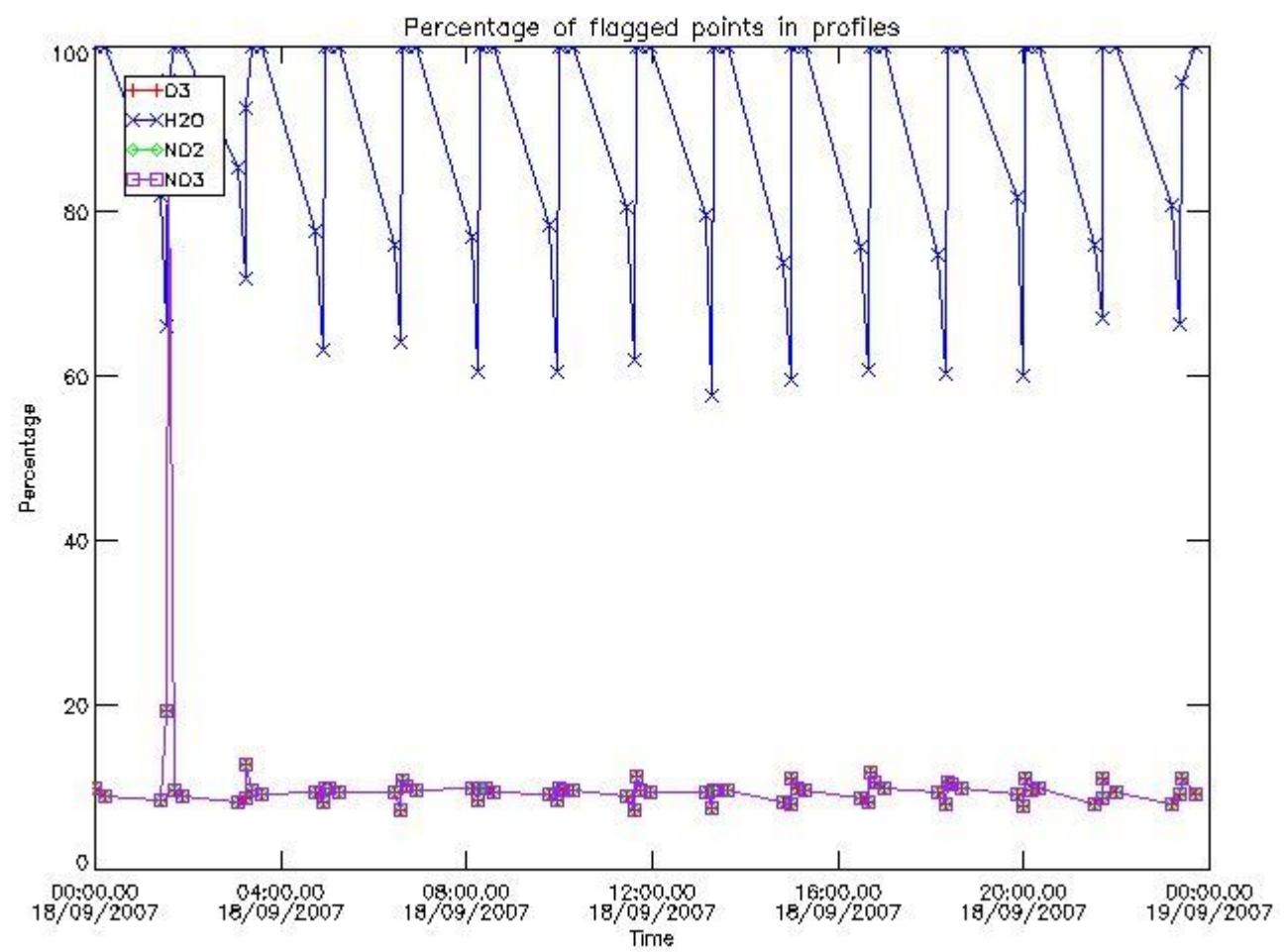
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070918_000050_00000522061_00403_29014_6442.N1	18-SEP-2007 00:00:50	Dark	51.500	108	Alp Col	2.6520	15200.	103	29014	No
2	GOM_NL__2PRFIN20070918_001246_00000572061_00403_29014_6443.N1	18-SEP-2007 00:12:46	Dark	56.500	157	The1Eri	2.9060	9300.0	113	29014	No
3	GOM_NL__2PRFIN20070918_001813_00000442061_00403_29014_6444.N1	18-SEP-2007 00:18:13	Straylight	43.500	84	Alp Phe	2.3970	4500.0	87	29014	No
4	GOM_NL__2PRFIN20070918_002547_00000562061_00403_29014_6445.N1	18-SEP-2007 00:25:47	Twilight	56.000	52	16Bet Cet	2.0370	4500.0	112	29014	No
5	GOM_NL__2PRFIN20070918_003632_00000382061_00403_29014_6446.N1	18-SEP-2007 00:36:32	Bright	38.000	90	54Alp Peg	2.4870	11000.	76	29014	No
6	GOM_NL__2PRFIN20070918_004023_00000412061_00403_29014_6447.N1	18-SEP-2007 00:40:23	Bright	41.000	93	53Bet Peg	2.5200	3100.0	82	29014	No
7	GOM_NL__2PRFIN20070918_004218_00000452061_00403_29014_6448.N1	18-SEP-2007 00:42:18	Bright	45.000	58	21Alp And	2.0730	11000.	90	29014	No
8	GOM_NL__2PRFIN20070918_005034_00000372061_00403_29014_6449.N1	18-SEP-2007 00:50:34	Bright	36.500	74	11Bet Cas	2.2680	6600.0	73	29014	No
9	GOM_NL__2PRFIN20070918_005219_00000422061_00403_29014_6450.N1	18-SEP-2007 00:52:19	Bright	42.000	76	27Gam Cas	2.3000	30000.	84	29014	No
10	GOM_NL__2PRFIN20070918_011501_00000452061_00403_29014_6451.N1	18-SEP-2007 01:15:01	Bright	44.500	24	66Alp Gem	1.5800	10200.	89	29014	No
11	GOM_NL__2PRFIN20070918_012352_00000612061_00403_29014_6452.N1	18-SEP-2007 01:23:52	Dark	60.500	8	10Alp CMi	0.40000	6500.0	121	29014	No
12	GOM_NL__2PRFIN20070918_013311_00000712061_00403_29014_6453.N1	18-SEP-2007 01:33:11	Dark	71.000	1	9Alp CMa	-1.4400	11000.	142	29014	No
13	GOM_NL__2PRFIN20070918_013519_00000502061_00403_29014_6454.N1	18-SEP-2007 01:35:19	Dark	49.500	23	21Eps CMa	1.5020	26000.	99	29014	No
14	GOM_NL__2PRFIN20070918_014127_00000532061_00404_29015_6449.N1	18-SEP-2007 01:41:27	Dark	52.500	108	Alp Col	2.6520	15200.	105	29015	No
15	GOM_NL__2PRFIN20070918_015323_00000572061_00404_29015_6450.N1	18-SEP-2007 01:53:23	Dark	56.500	157	The1Eri	2.9060	9300.0	113	29015	No
16	GOM_NL__2PRFIN20070918_015849_00000432061_00404_29015_6451.N1	18-SEP-2007 01:58:49	Straylight	42.500	84	Alp Phe	2.3970	4500.0	85	29015	No
17	GOM_NL__2PRFIN20070918_020623_00000582061_00404_29015_6452.N1	18-SEP-2007 02:06:23	Twilight	58.000	52	16Bet Cet	2.0370	4500.0	116	29015	No
18	GOM_NL__2PRFIN20070918_021708_00000392061_00404_29015_6453.N1	18-SEP-2007 02:17:08	Bright	38.500	90	54Alp Peg	2.4870	11000.	77	29015	No
19	GOM_NL__2PRFIN20070918_022058_00000382061_00404_29015_6454.N1	18-SEP-2007 02:20:58	Bright	38.000	93	53Bet Peg	2.5200	3100.0	76	29015	No
20	GOM_NL__2PRFIN20070918_022253_00000472061_00404_29015_6455.N1	18-SEP-2007 02:22:53	Bright	47.000	58	21Alp And	2.0730	11000.	94	29015	No
21	GOM_NL__2PRFIN20070918_023109_00000392061_00404_29015_6456.N1	18-SEP-2007 02:31:09	Bright	39.000	74	11Bet Cas	2.2680	6600.0	78	29015	No
22	GOM_NL__2PRFIN20070918_023254_00000402061_00404_29015_6457.N1	18-SEP-2007 02:32:54	Bright	40.000	76	27Gam Cas	2.3000	30000.	80	29015	No
23	GOM_NL__2PRFIN20070918_025537_00000622061_00404_29015_6458.N1	18-SEP-2007 02:55:37	Bright	62.000	24	66Alp Gem	1.5800	10200.	124	29015	No
24	GOM_NL__2PRFIN20070918_030428_00000622061_00404_29015_6459.N1	18-SEP-2007 03:04:28	Dark	62.000	8	10Alp CMi	0.40000	6500.0	124	29015	No
25	GOM_NL__2PRFIN20070918_031349_00000592061_00404_29015_6460.N1	18-SEP-2007 03:13:49	Dark	59.000	1	9Alp CMa	-1.4400	11000.	118	29015	No
26	GOM_NL__2PRFIN20070918_031556_00000482061_00404_29015_6461.N1	18-SEP-2007 03:15:56	Dark	47.500	23	21Eps CMa	1.5020	26000.	95	29015	No
27	GOM_NL__2PRFIN20070918_032204_00000532061_00405_29016_6457.N1	18-SEP-2007 03:22:04	Dark	53.000	108	Alp Col	2.6520	15200.	106	29016	No
28	GOM_NL__2PRFIN20070918_033400_00000562061_00405_29016_6458.N1	18-SEP-2007 03:34:00	Dark	56.000	157	The1Eri	2.9060	9300.0	112	29016	No
29	GOM_NL__2PRFIN20070918_033926_00000452061_00405_29016_6459.N1	18-SEP-2007 03:39:26	Straylight	45.000	84	Alp Phe	2.3970	4500.0	90	29016	No
30	GOM_NL__2PRFIN20070918_034659_00000602061_00405_29016_6460.N1	18-SEP-2007 03:46:59	Twilight	60.000	52	16Bet Cet	2.0370	4500.0	120	29016	No
31	GOM_NL__2PRFIN20070918_035744_00000402061_00405_29016_6461.N1	18-SEP-2007 03:57:44	Bright	39.500	90	54Alp Peg	2.4870	11000.	79	29016	No
32	GOM_NL__2PRFIN20070918_040134_00000402061_00405_29016_6462.N1	18-SEP-2007 04:01:34	Bright	39.500	93	53Bet Peg	2.5200	3100.0	79	29016	No
33	GOM_NL__2PRFIN20070918_040329_00000462061_00405_29016_6463.N1	18-SEP-2007 04:03:29	Bright	45.500	58	21Alp And	2.0730	11000.	91	29016	No
34	GOM_NL__2PRFIN20070918_041145_00000412061_00405_29016_6464.N1	18-SEP-2007 04:11:45	Bright	40.500	74	11Bet Cas	2.2680	6600.0	81	29016	No
35	GOM_NL__2PRFIN20070918_041330_00000382061_00405_29016_6465.N1	18-SEP-2007 04:13:30	Bright	37.500	76	27Gam Cas	2.3000	30000.	75	29016	No
36	GOM_NL__2PRFIN20070918_043613_00000452061_00405_29016_6466.N1	18-SEP-2007 04:36:13	Bright	45.000	24	66Alp Gem	1.5800	10200.	90	29016	No
37	GOM_NL__2PRFIN20070918_044505_00000542061_00405_29016_6467.N1	18-SEP-2007 04:45:05	Dark	54.000	8	10Alp CMi	0.40000	6500.0	108	29016	No
38	GOM_NL__2PRFIN20070918_045426_00000622061_00405_29016_6468.N1	18-SEP-2007 04:54:26	Dark	61.500	1	9Alp CMa	-1.4400	11000.	123	29016	No
39	GOM_NL__2PRFIN20070918_045632_00000522061_00405_29016_6469.N1	18-SEP-2007 04:56:32	Dark	51.500	23	21Eps CMa	1.5020	26000.	103	29016	No
40	GOM_NL__2PRFIN20070918_050241_00000522061_00406_29017_6465.N1	18-SEP-2007 05:02:41	Dark	52.000	108	Alp Col	2.6520	15200.	104	29017	No
41	GOM_NL__2PRFIN20070918_051437_00000552061_00406_29017_6466.N1	18-SEP-2007 05:14:37	Dark	54.500	157	The1Eri	2.9060	9300.0	109	29017	No
42	GOM_NL__2PRFIN20070918_052002_00000492061_00406_29017_6467.N1	18-SEP-2007 05:20:02	Straylight	48.500	84	Alp Phe	2.3970	4500.0	97	29017	No

161	GOM_NL__2PRFIN20070918_204342_000000392061_00415_29026_6640.N1	18-SEP-2007 20:43:42	Bright	38.500	90	54Alp Peg	2.4870	11000.	77	29026	No
162	GOM_NL__2PRFIN20070918_204731_000000382061_00415_29026_6641.N1	18-SEP-2007 20:47:31	Bright	38.000	93	53Bet Peg	2.5200	3100.0	76	29026	No
163	GOM_NL__2PRFIN20070918_204922_000000452061_00415_29026_6642.N1	18-SEP-2007 20:49:22	Bright	44.500	58	21Alp And	2.0730	11000.	89	29026	No
164	GOM_NL__2PRFIN20070918_205740_000000412061_00415_29026_6643.N1	18-SEP-2007 20:57:40	Bright	41.000	74	11Bet Cas	2.2680	6600.0	82	29026	No
165	GOM_NL__2PRFIN20070918_205924_000000422061_00415_29026_6644.N1	18-SEP-2007 20:59:24	Bright	42.000	76	27Gam Cas	2.3000	30000.	84	29026	No
166	GOM_NL__2PRFIN20070918_212214_000000592061_00415_29026_6645.N1	18-SEP-2007 21:22:14	Bright	59.000	24	66Alp Gem	1.5800	10200.	118	29026	No
167	GOM_NL__2PRFIN20070918_213110_000000652061_00415_29026_6646.N1	18-SEP-2007 21:31:10	Dark	64.500	8	10Alp CMi	0.40000	6500.0	129	29026	No
168	GOM_NL__2PRFIN20070918_214036_000000702061_00415_29026_6647.N1	18-SEP-2007 21:40:36	Dark	70.000	1	9Alp CMa	-1.4400	11000.	140	29026	No
169	GOM_NL__2PRFIN20070918_214241_000000462061_00415_29026_6648.N1	18-SEP-2007 21:42:41	Dark	46.000	23	21Eps CMa	1.5020	26000.	92	29026	No
170	GOM_NL__2PRFIN20070918_220046_000000552061_00416_29027_6648.N1	18-SEP-2007 22:00:46	Dark	54.500	157	The1Eri	2.9060	9300.0	109	29027	No
171	GOM_NL__2PRFIN20070918_220605_000000442061_00416_29027_6649.N1	18-SEP-2007 22:06:05	Straylight	43.500	84	Alp Phe	2.3970	4500.0	87	29027	No
172	GOM_NL__2PRFIN20070918_221336_000000582061_00416_29027_6650.N1	18-SEP-2007 22:13:36	Tw_i_and_stray	58.000	52	16Bet Cet	2.0370	4500.0	116	29027	No
173	GOM_NL__2PRFIN20070918_222417_000000392061_00416_29027_6651.N1	18-SEP-2007 22:24:17	Bright	38.500	90	54Alp Peg	2.4870	11000.	77	29027	No
174	GOM_NL__2PRFIN20070918_222807_000000422061_00416_29027_6652.N1	18-SEP-2007 22:28:07	Bright	42.000	93	53Bet Peg	2.5200	3100.0	84	29027	No
175	GOM_NL__2PRFIN20070918_222957_000000482061_00416_29027_6653.N1	18-SEP-2007 22:29:57	Bright	47.500	58	21Alp And	2.0730	11000.	95	29027	No
176	GOM_NL__2PRFIN20070918_223815_000000402061_00416_29027_6654.N1	18-SEP-2007 22:38:15	Bright	40.000	74	11Bet Cas	2.2680	6600.0	80	29027	No
177	GOM_NL__2PRFIN20070918_223959_000000402061_00416_29027_6655.N1	18-SEP-2007 22:39:59	Bright	40.000	76	27Gam Cas	2.3000	30000.	80	29027	No
178	GOM_NL__2PRFIN20070918_230250_000000452061_00416_29027_6656.N1	18-SEP-2007 23:02:50	Bright	44.500	24	66Alp Gem	1.5800	10200.	89	29027	No
179	GOM_NL__2PRFIN20070918_231146_000000652061_00416_29027_6657.N1	18-SEP-2007 23:11:46	Dark	64.500	8	10Alp CMi	0.40000	6500.0	129	29027	No
180	GOM_NL__2PRFIN20070918_232113_000000612061_00416_29027_6658.N1	18-SEP-2007 23:21:13	Dark	61.000	1	9Alp CMa	-1.4400	11000.	122	29027	No
181	GOM_NL__2PRFIN20070918_232317_000000462061_00416_29027_6659.N1	18-SEP-2007 23:23:17	Dark	46.000	23	21Eps CMa	1.5020	26000.	92	29027	No
182	GOM_NL__2PRFIN20070918_234123_000000552061_00417_29028_6686.N1	18-SEP-2007 23:41:23	Dark	55.000	157	The1Eri	2.9060	9300.0	110	29028	No
183	GOM_NL__2PRFIN20070918_234641_000000452061_00417_29028_6687.N1	18-SEP-2007 23:46:41	Straylight	44.500	84	Alp Phe	2.3970	4500.0	89	29028	No
184	GOM_NL__2PRFIN20070918_235412_000000562061_00417_29028_6688.N1	18-SEP-2007 23:54:12	Tw_i_and_stray	56.000	52	16Bet Cet	2.0370	4500.0	112	29028	No

3. Quality information per product

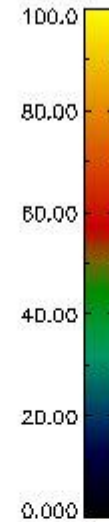
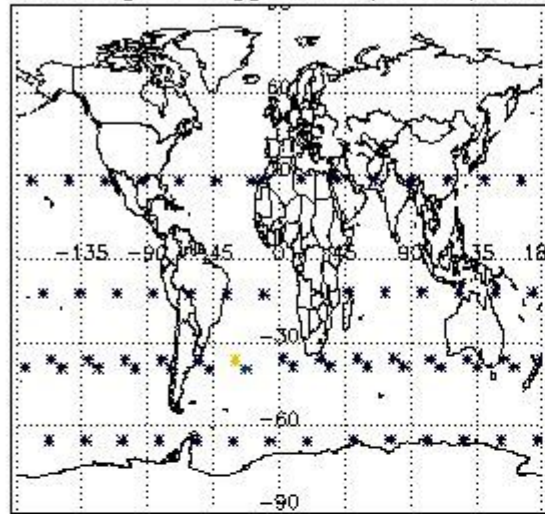
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

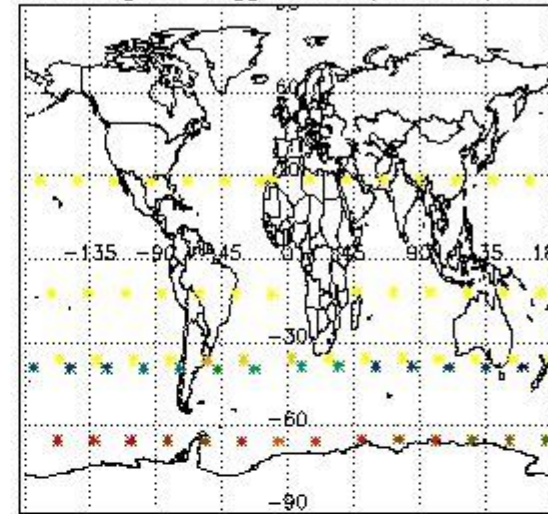


3.2 Plot quality information per product (world map)

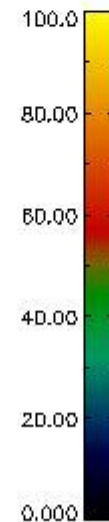
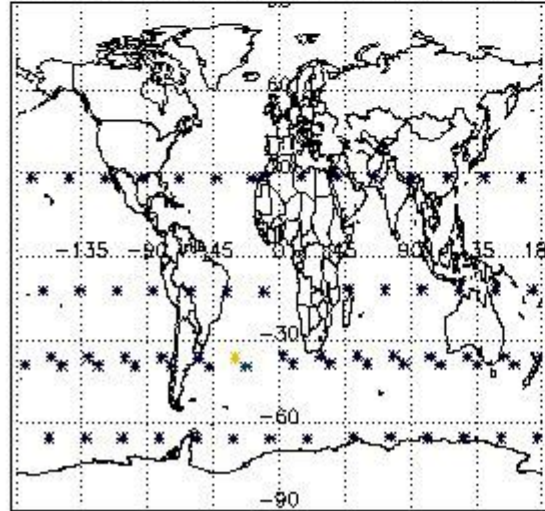
Percentage of flagged data per O3 profile



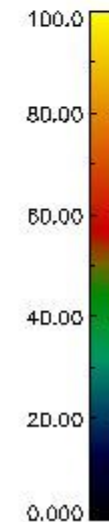
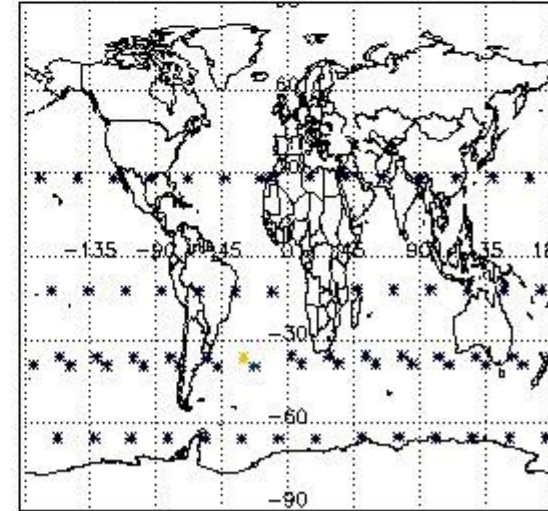
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

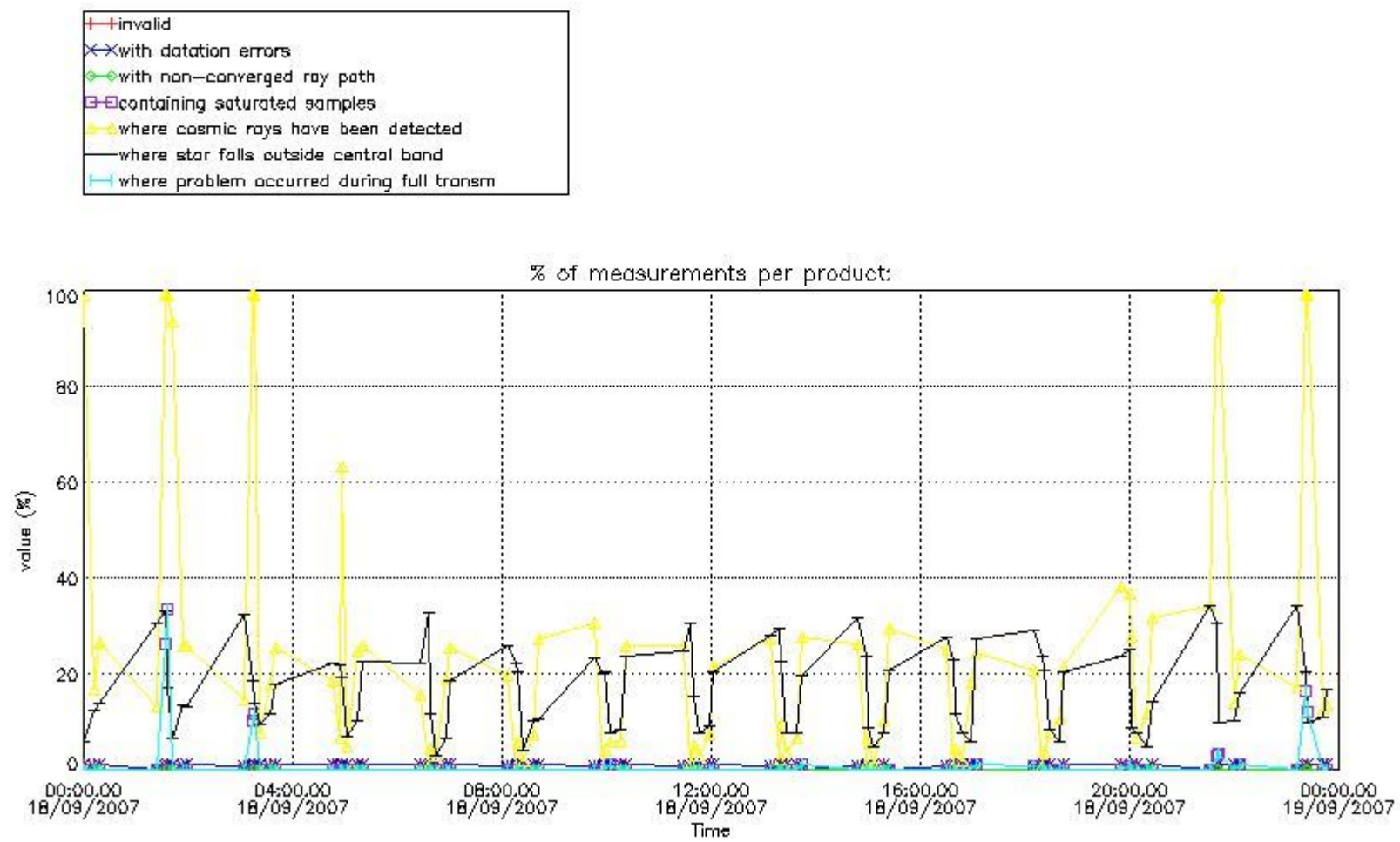


4. Level 1 quality information per product

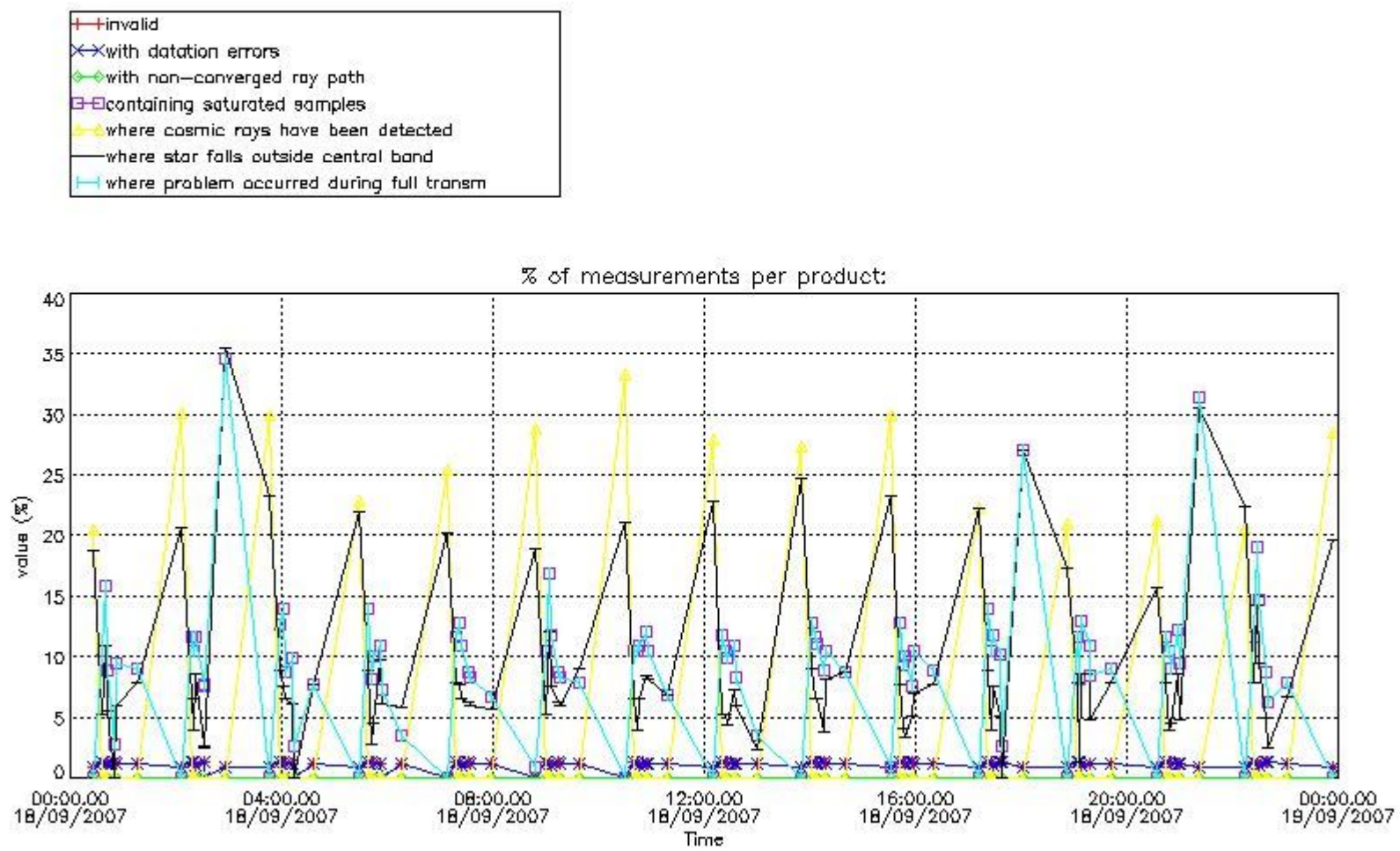
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes



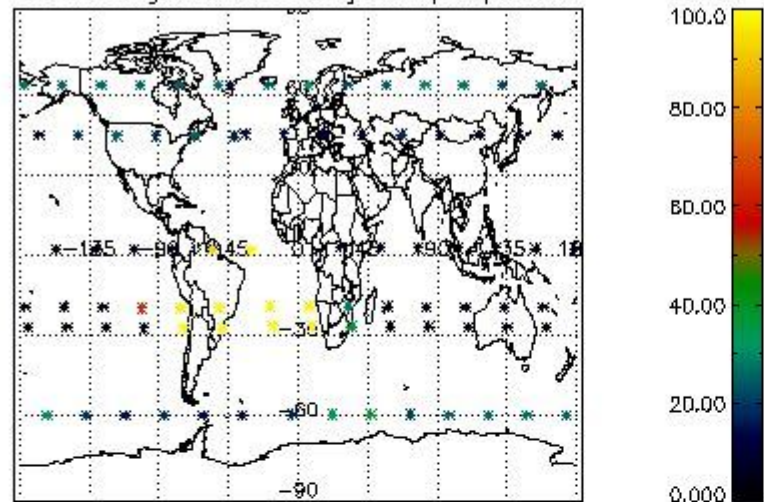
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



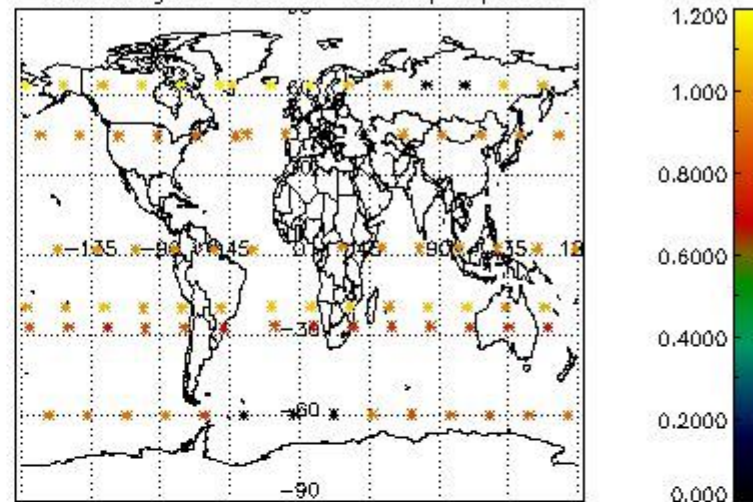
4.2 Plot quality information per product coming from level 1b processing (world map)

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

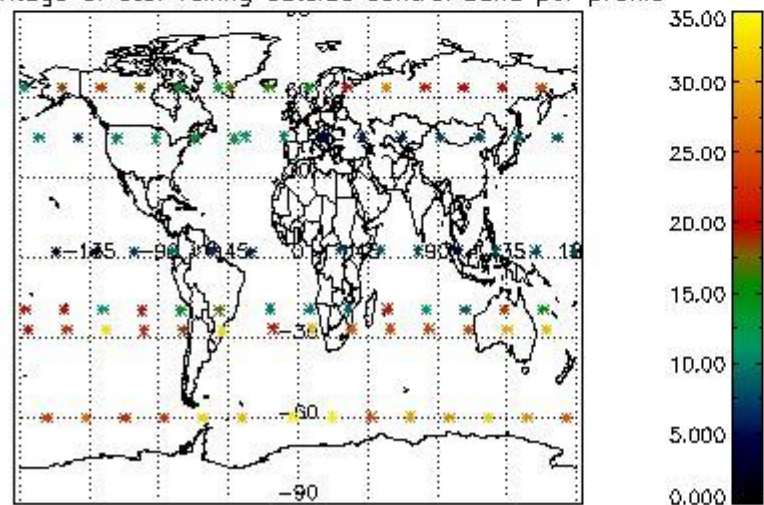
Percentage of cosmic ray hits per profile



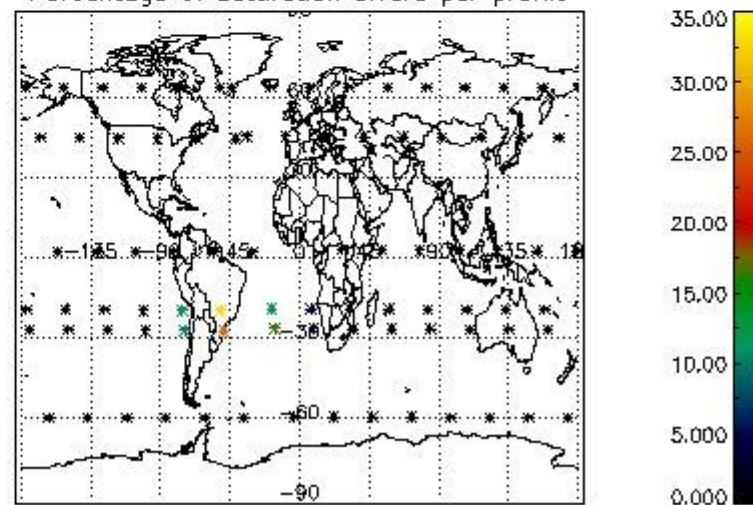
Percentage of datation errors per profile



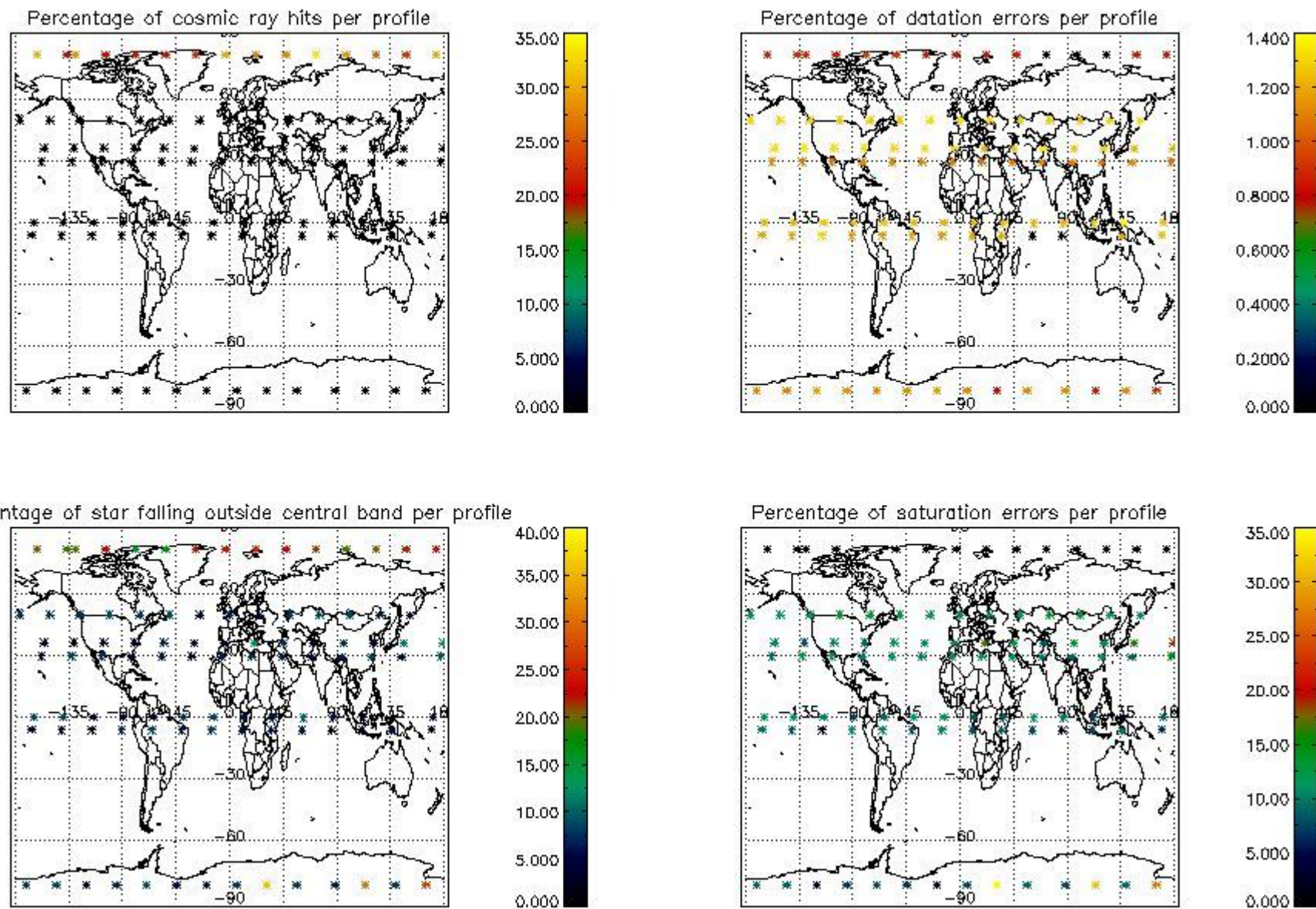
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

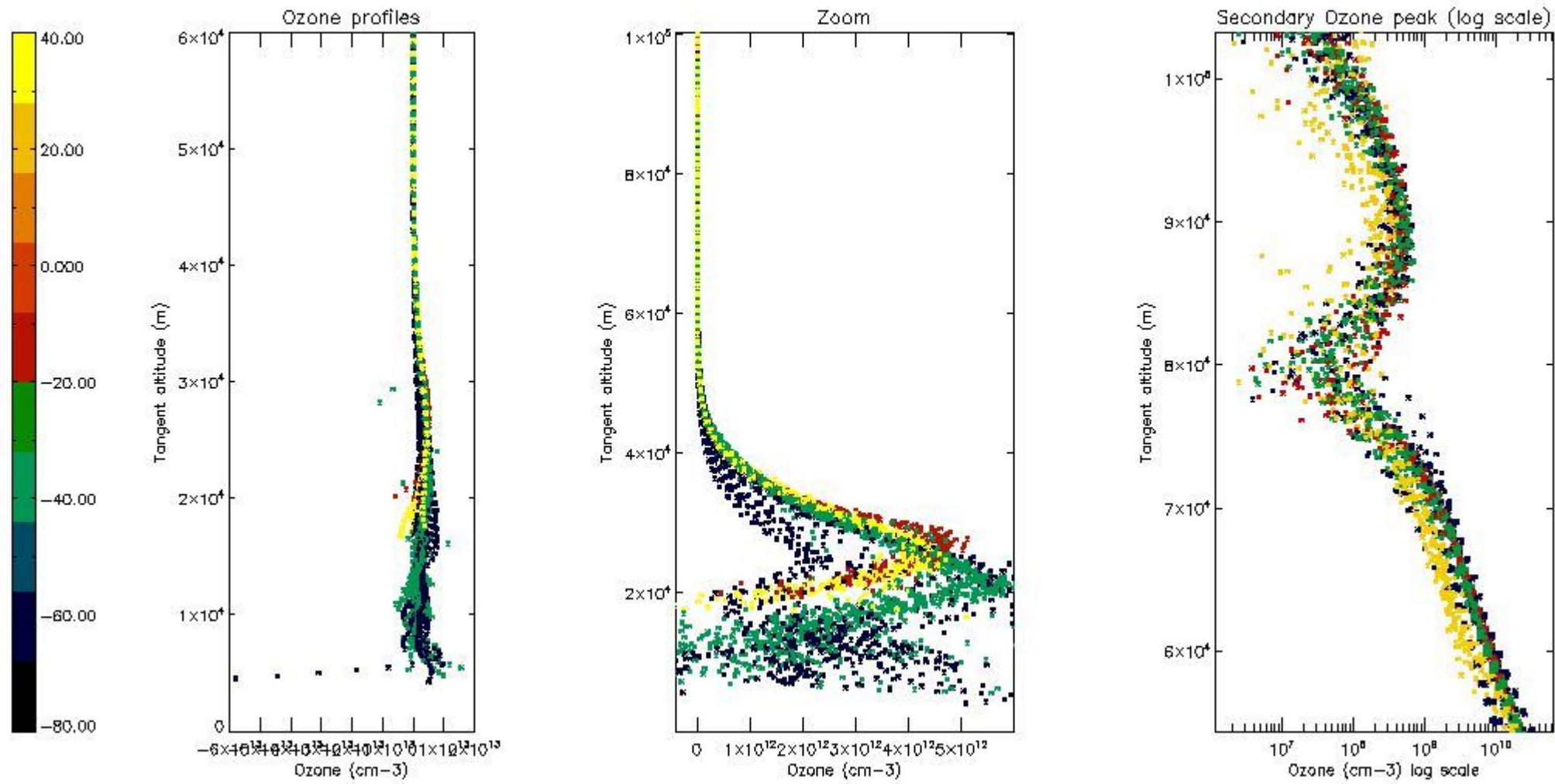
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	45
STD < 20	29

STD < 10	25
STD < 5	18

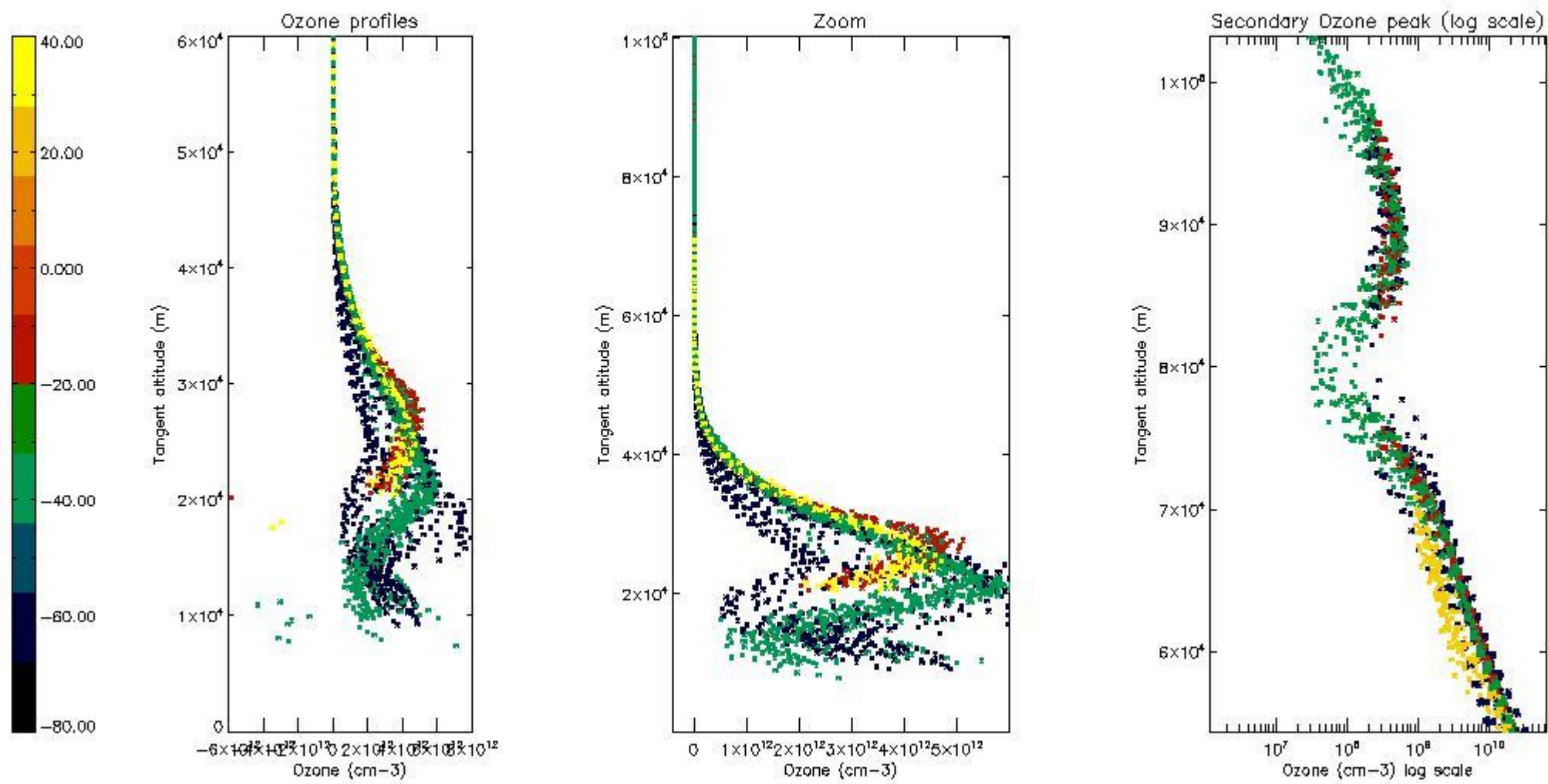
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



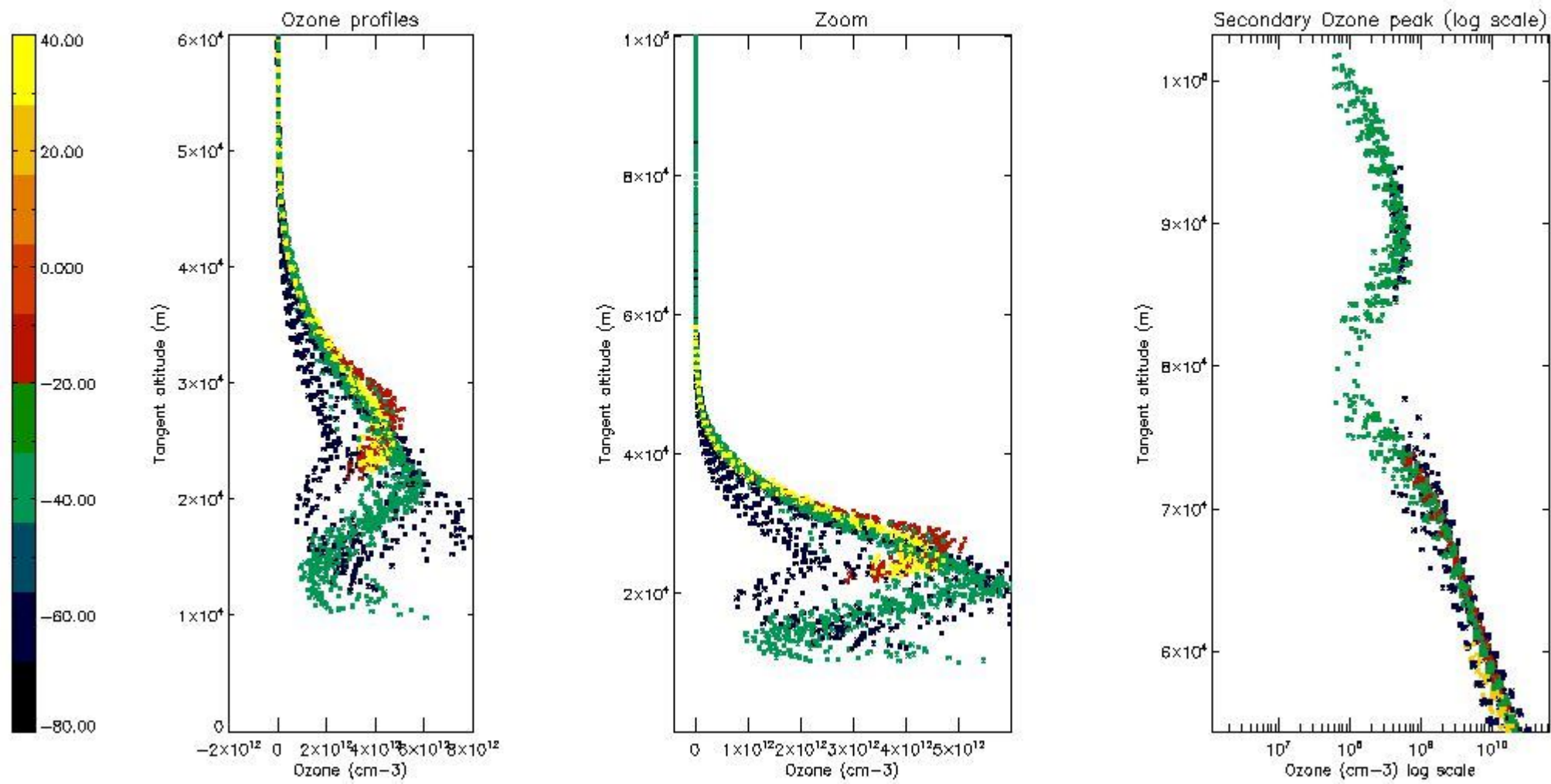
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



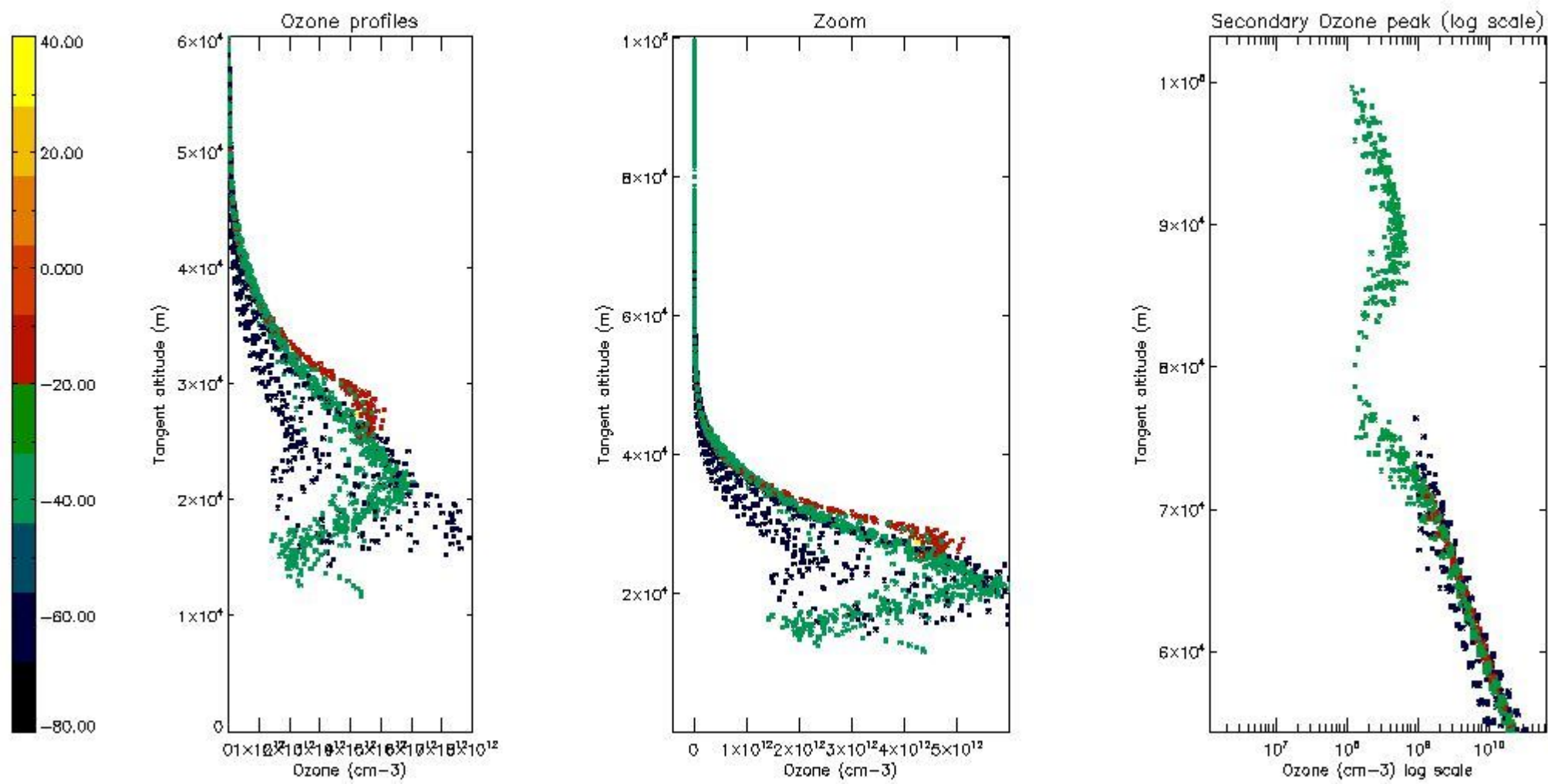
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



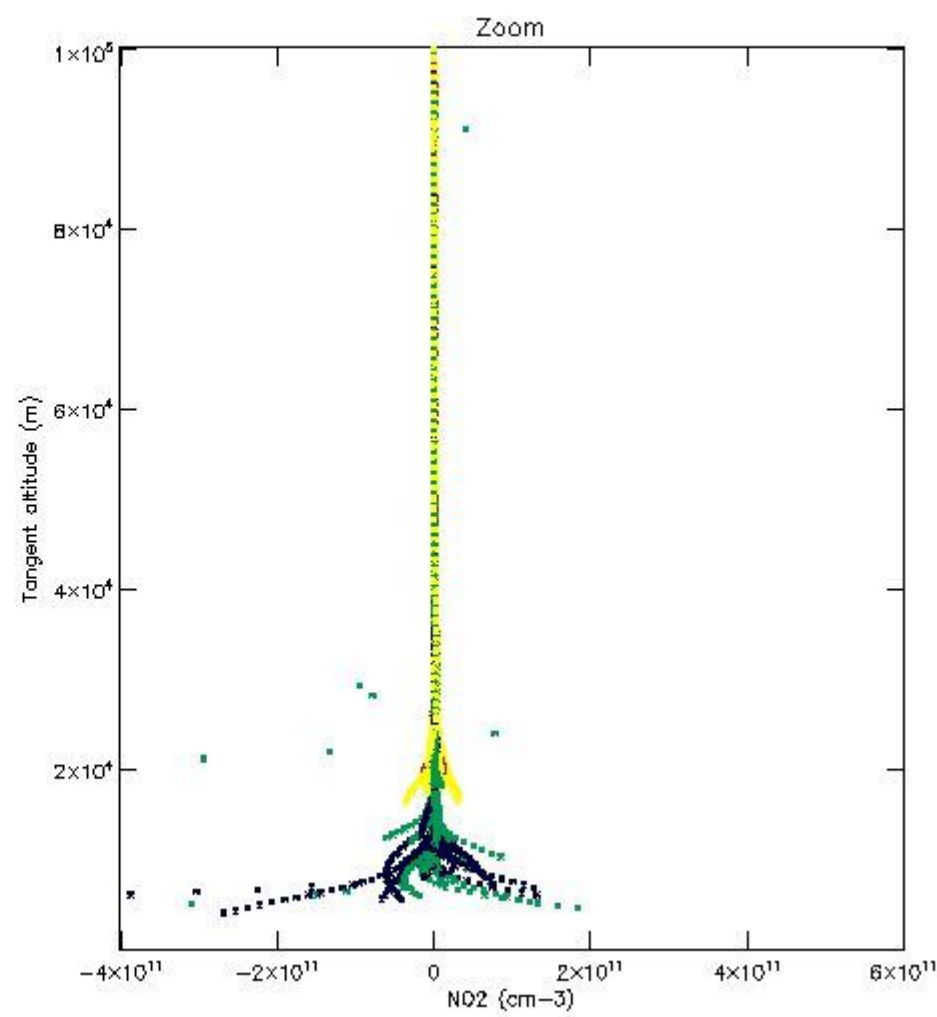
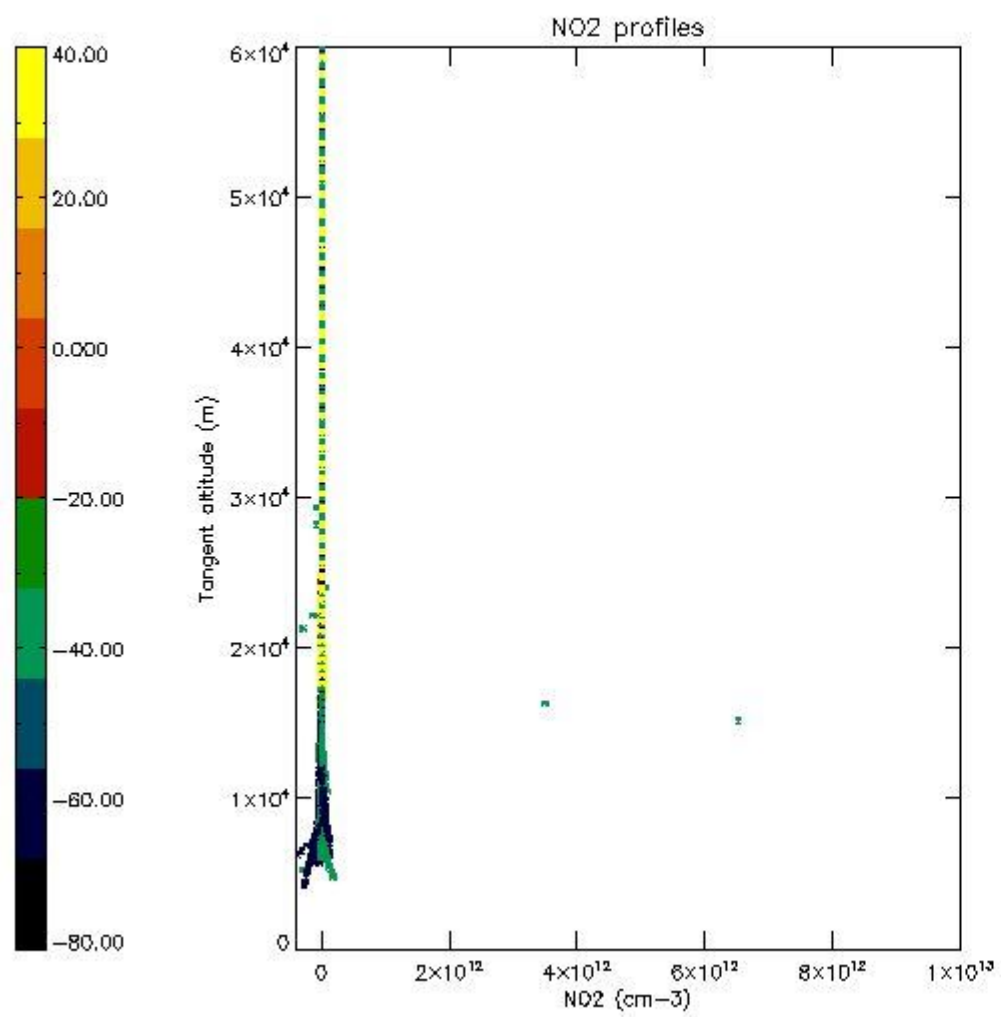
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



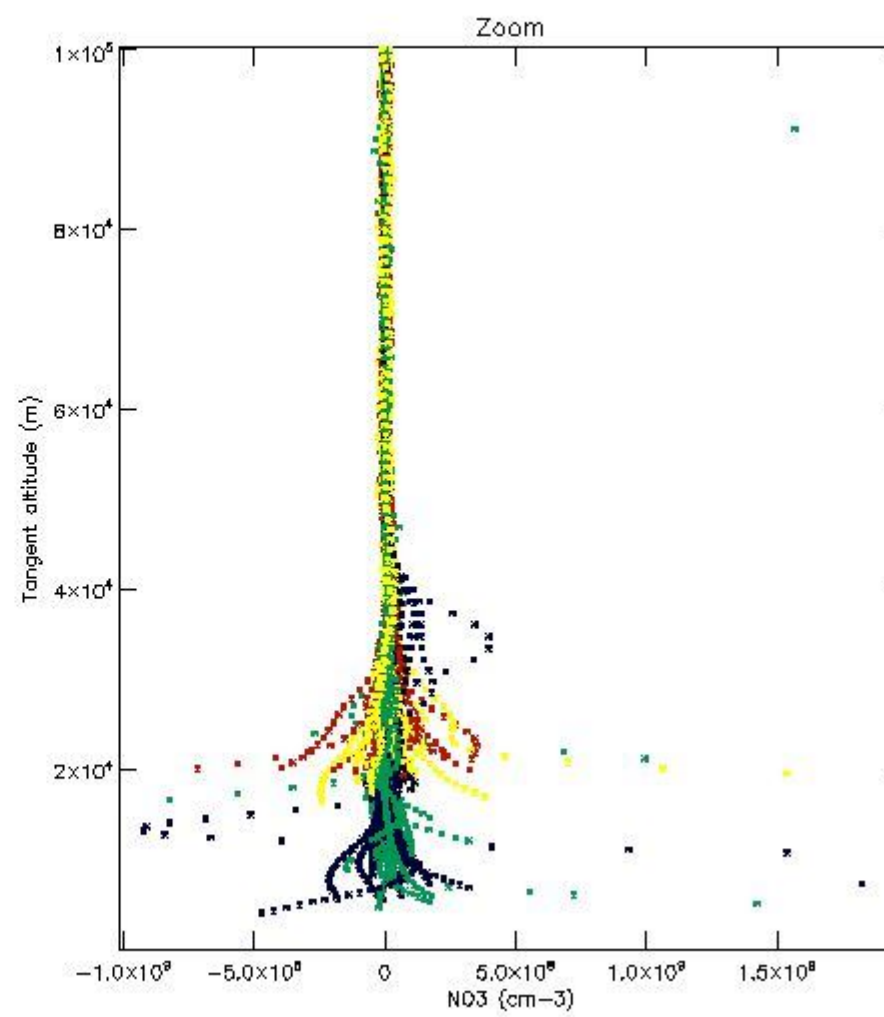
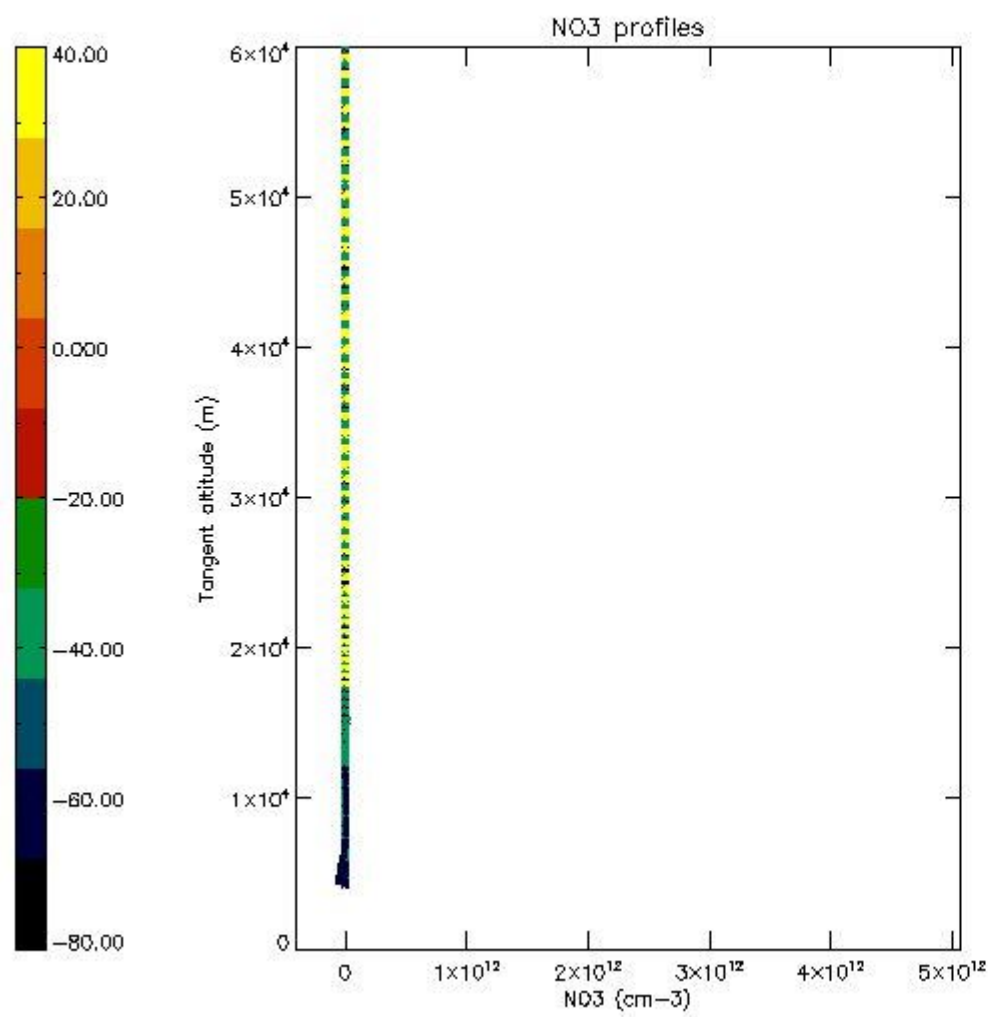
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



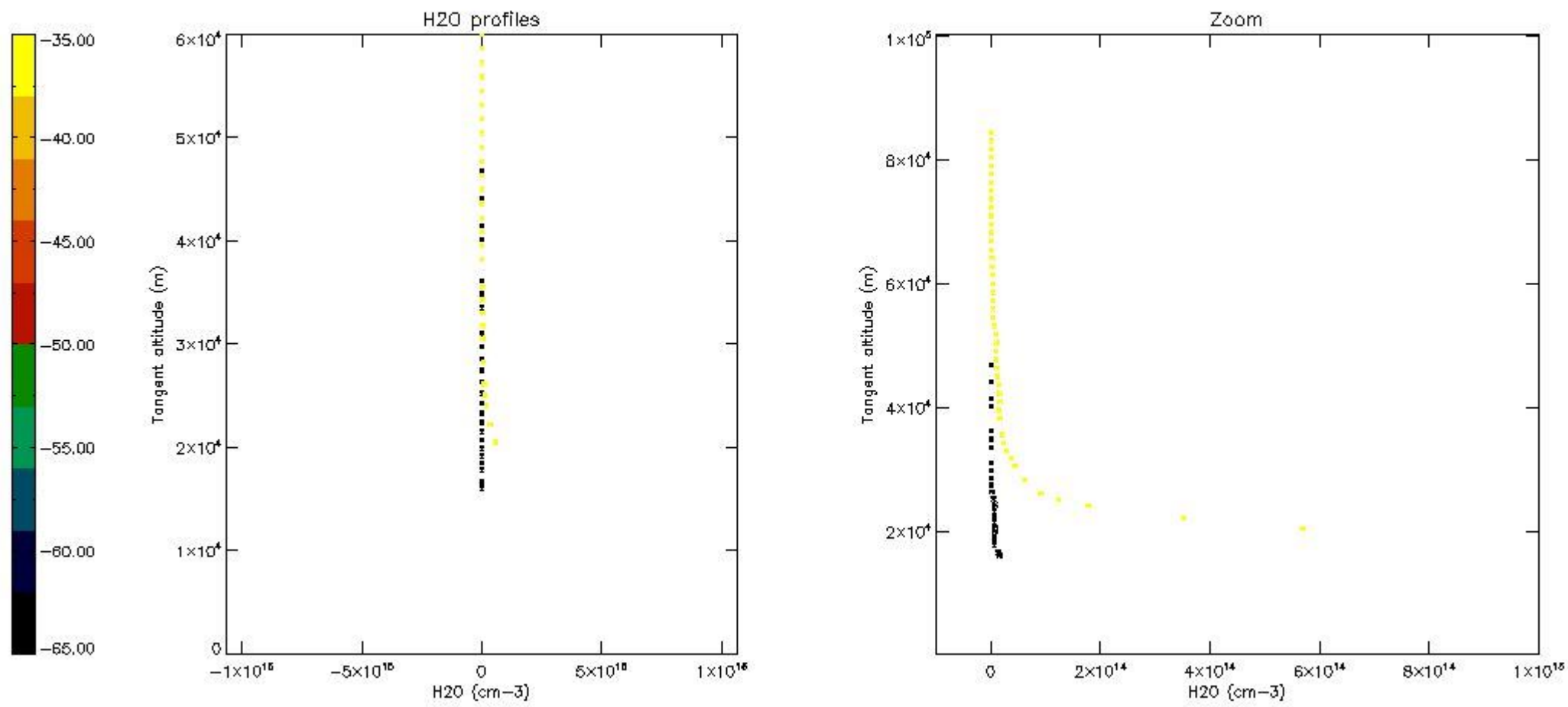
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

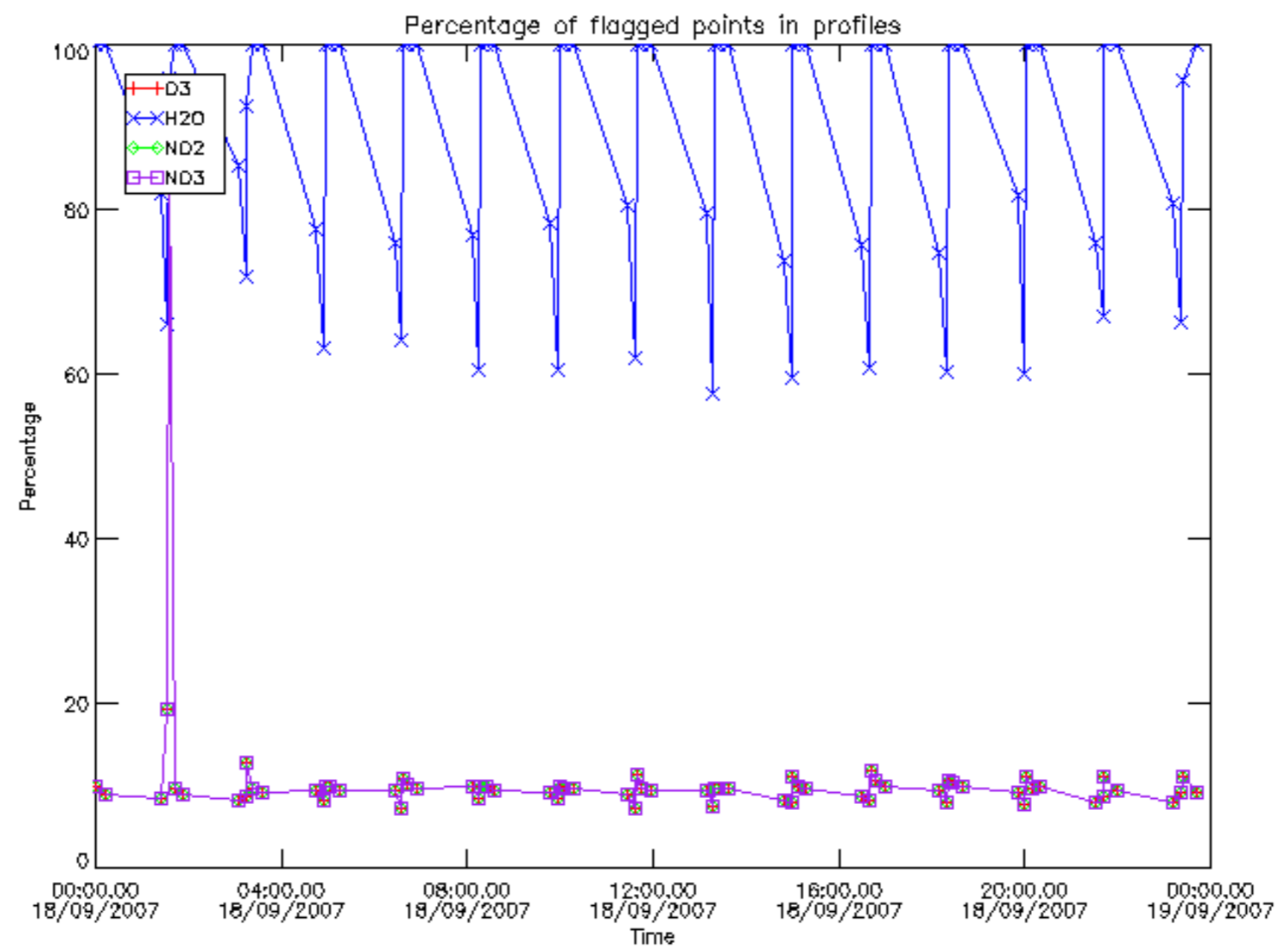
The colorbar represents the latitude.



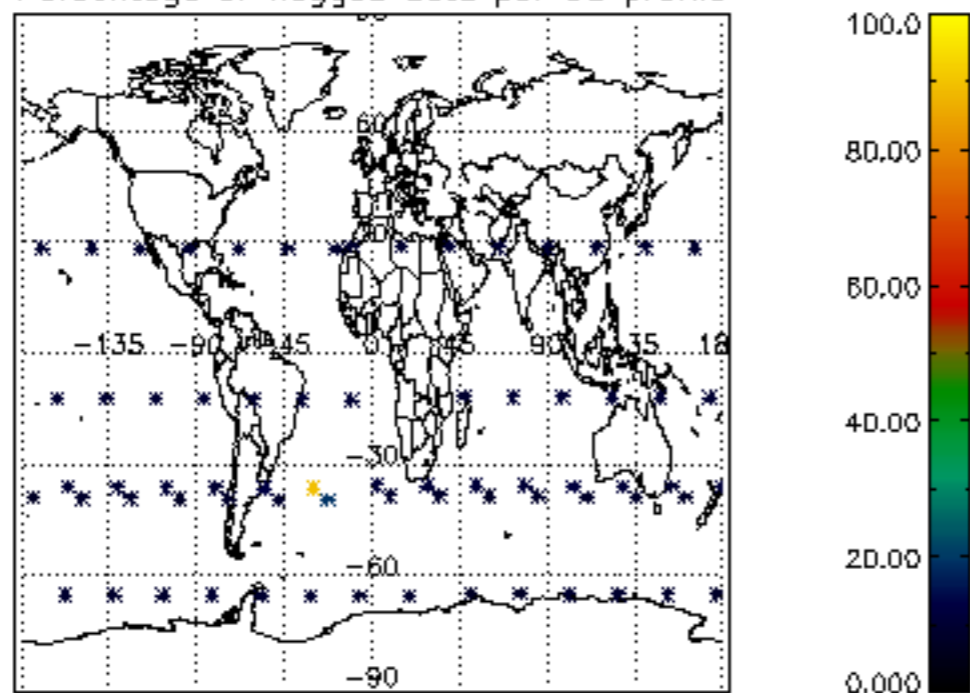
6. Auxiliary Data Files used for the production reported in section 2

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.

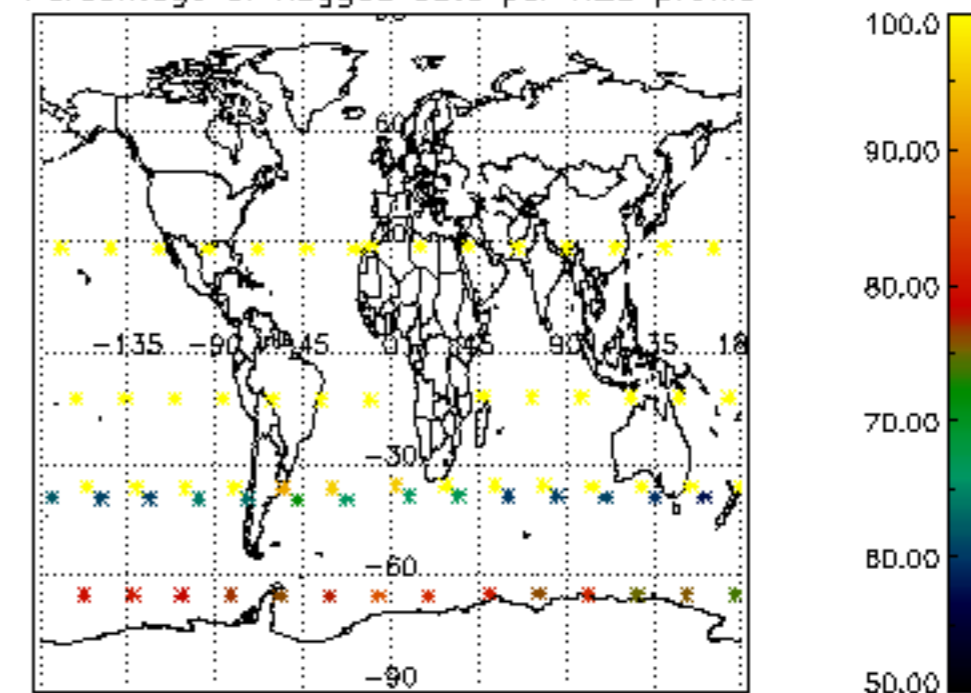
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	18-SEP-2007 00:00:50
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	18-SEP-2007 00:00:50
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	18-SEP-2007 00:00:50



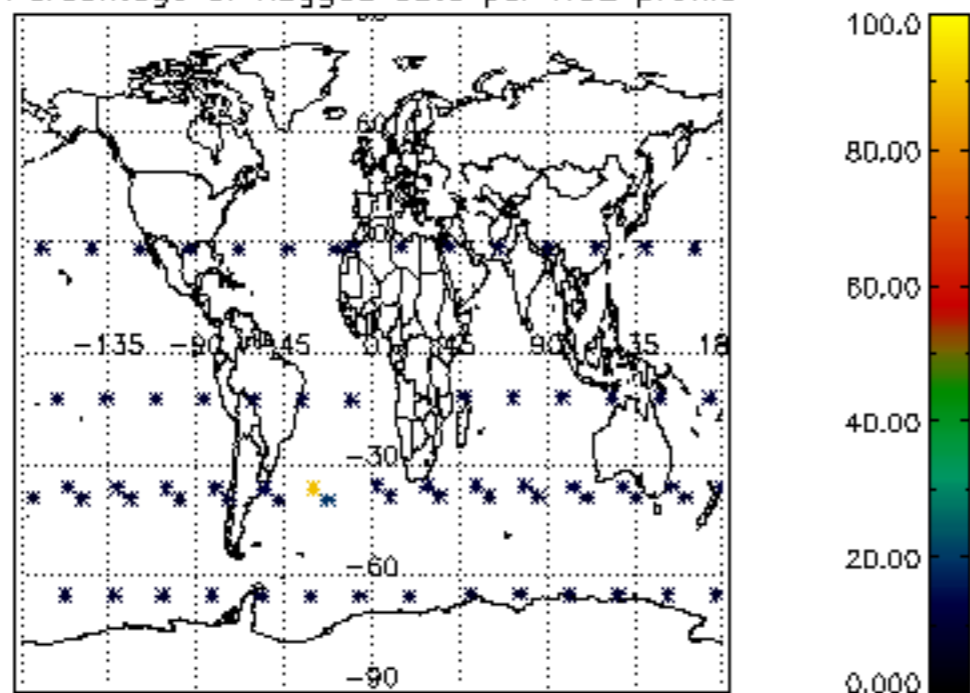
Percentage of flagged data per D3 profile



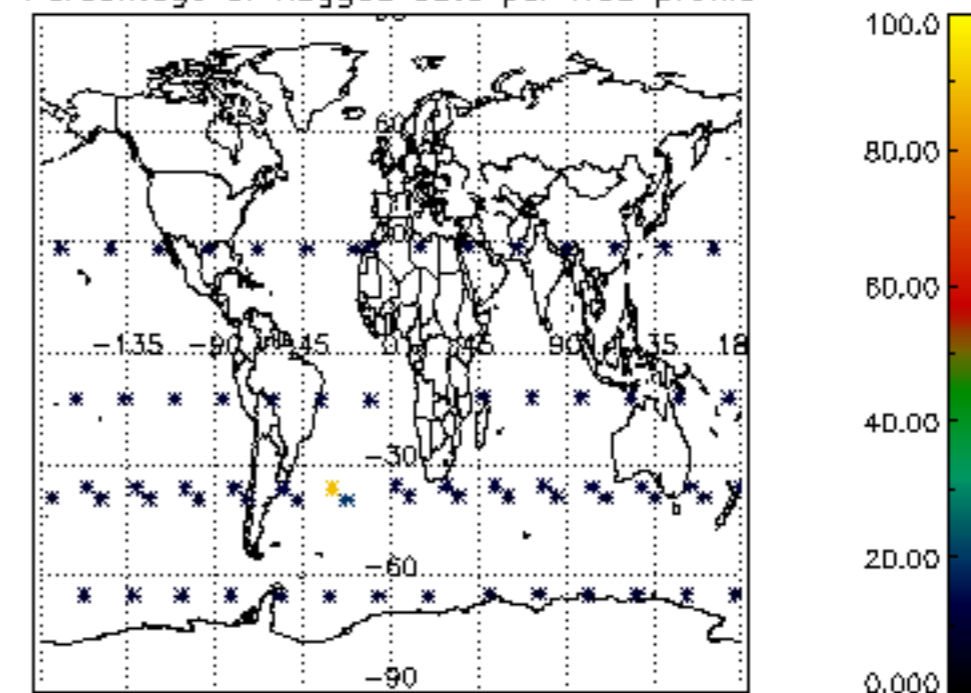
Percentage of flagged data per H2O profile

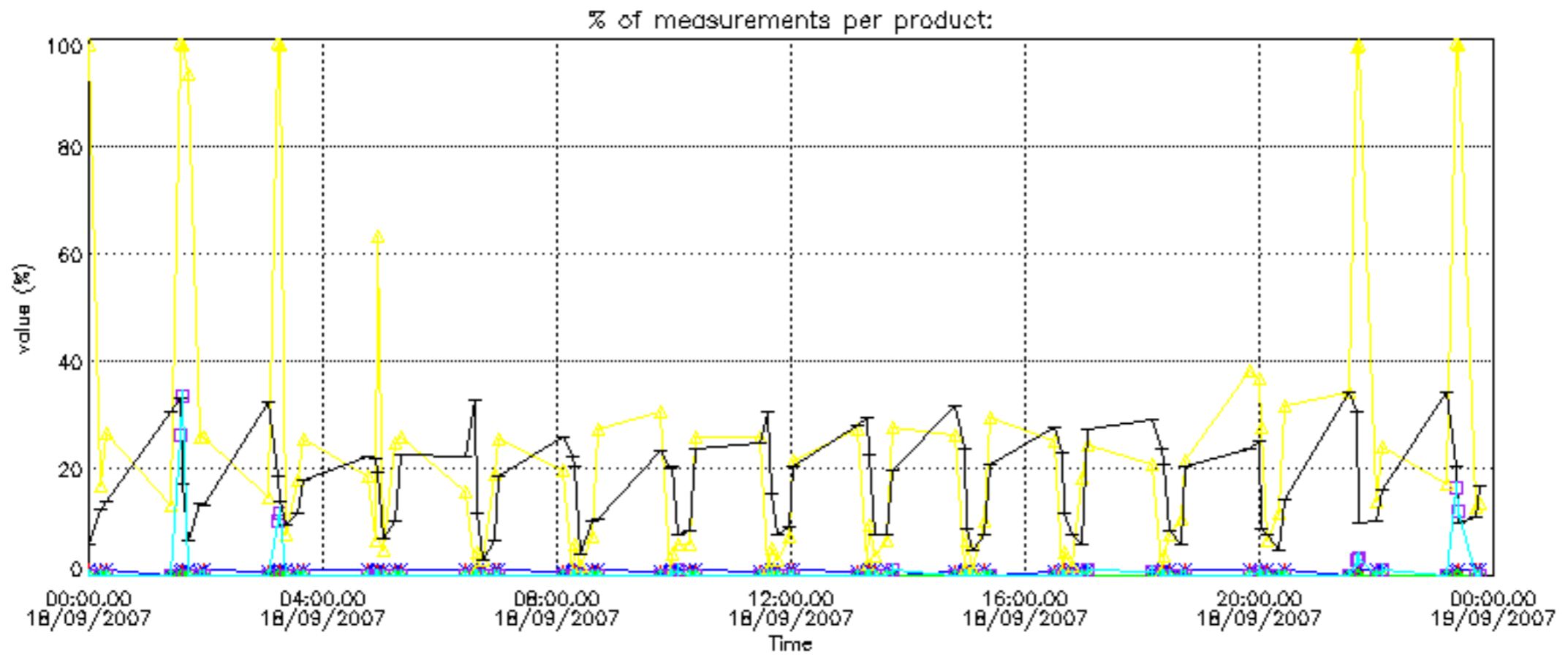


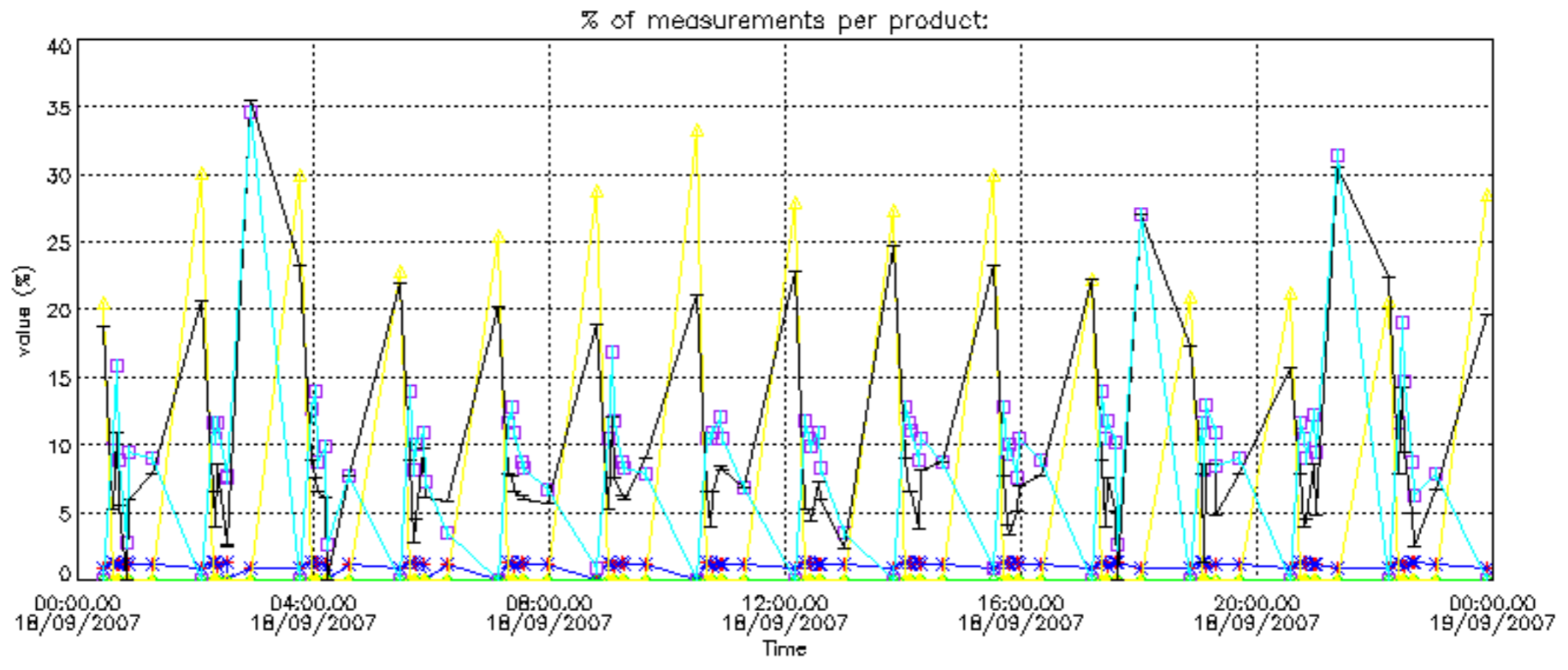
Percentage of flagged data per NO2 profile



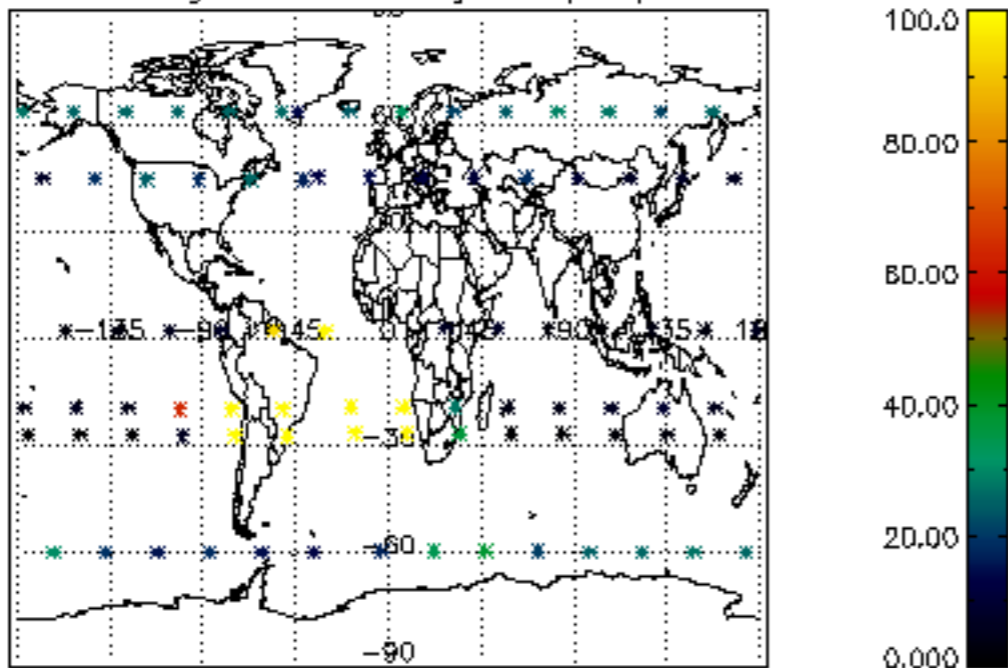
Percentage of flagged data per NO3 profile



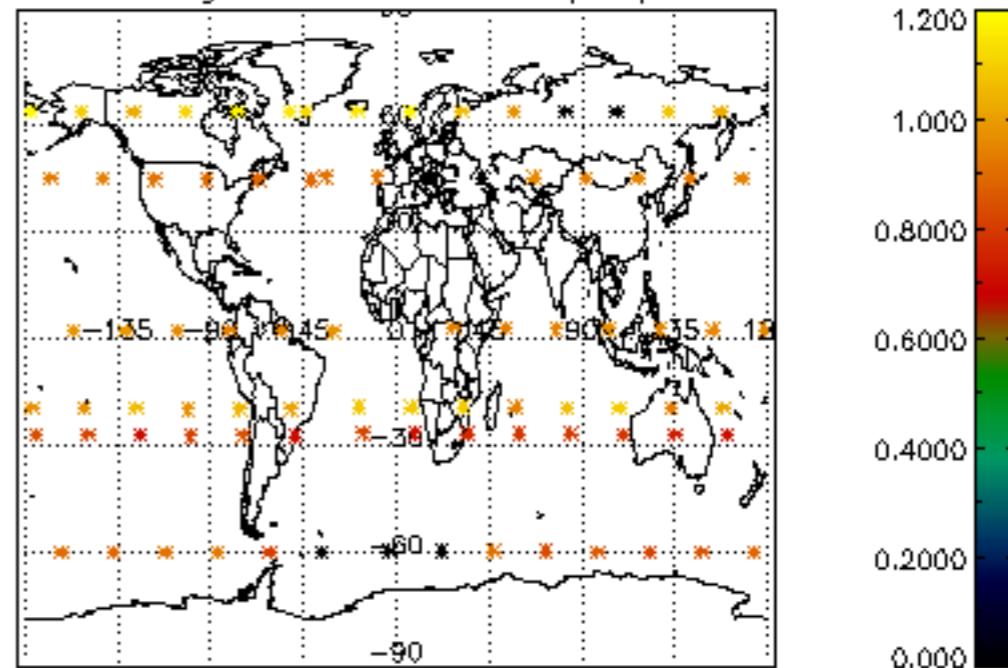




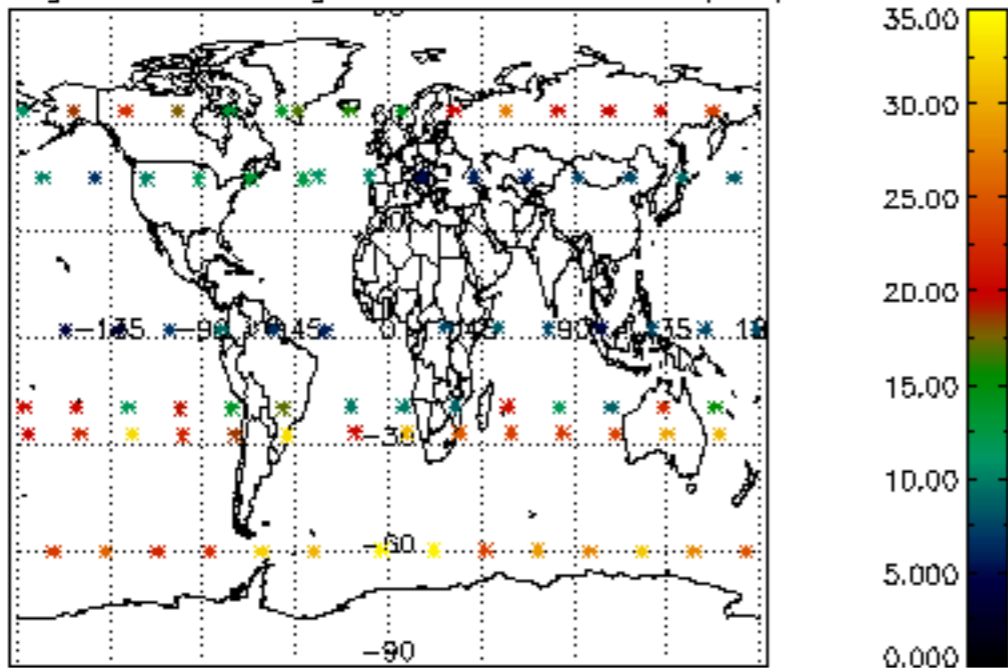
Percentage of cosmic ray hits per profile



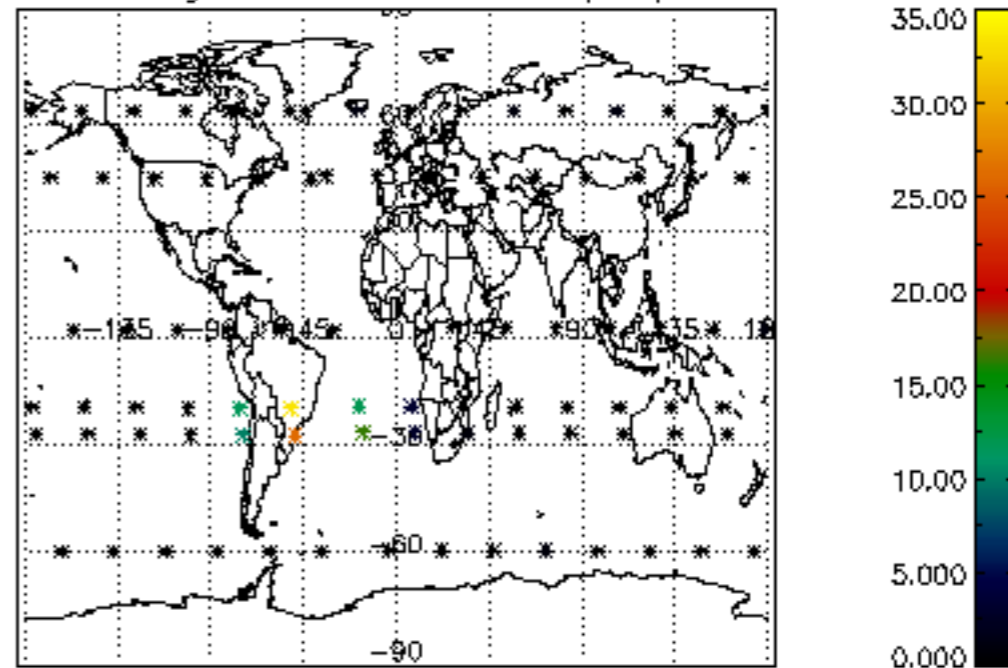
Percentage of datation errors per profile



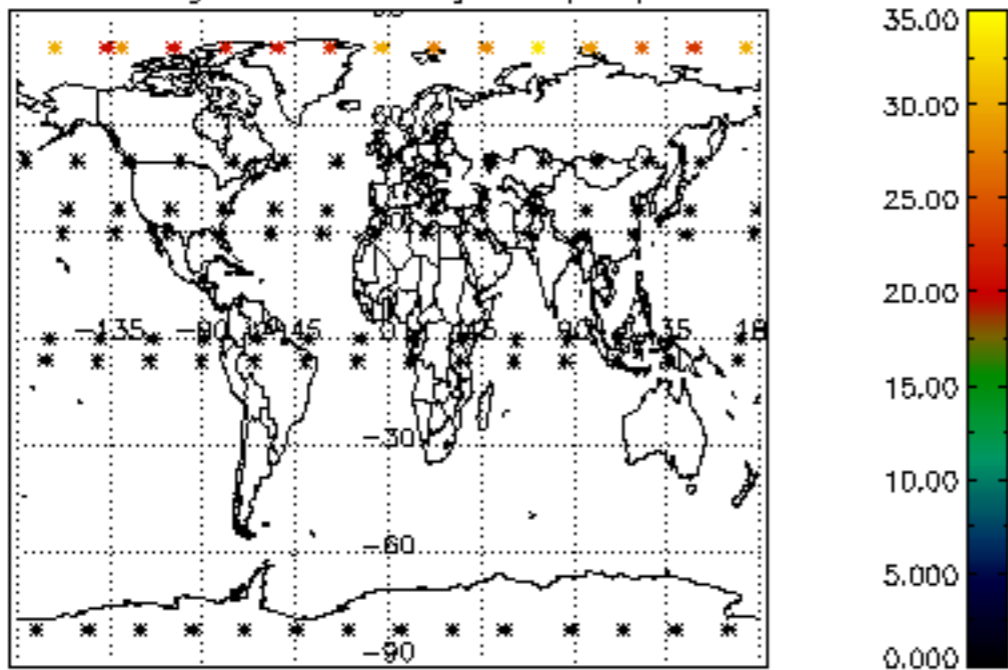
Percentage of star falling outside central band per profile



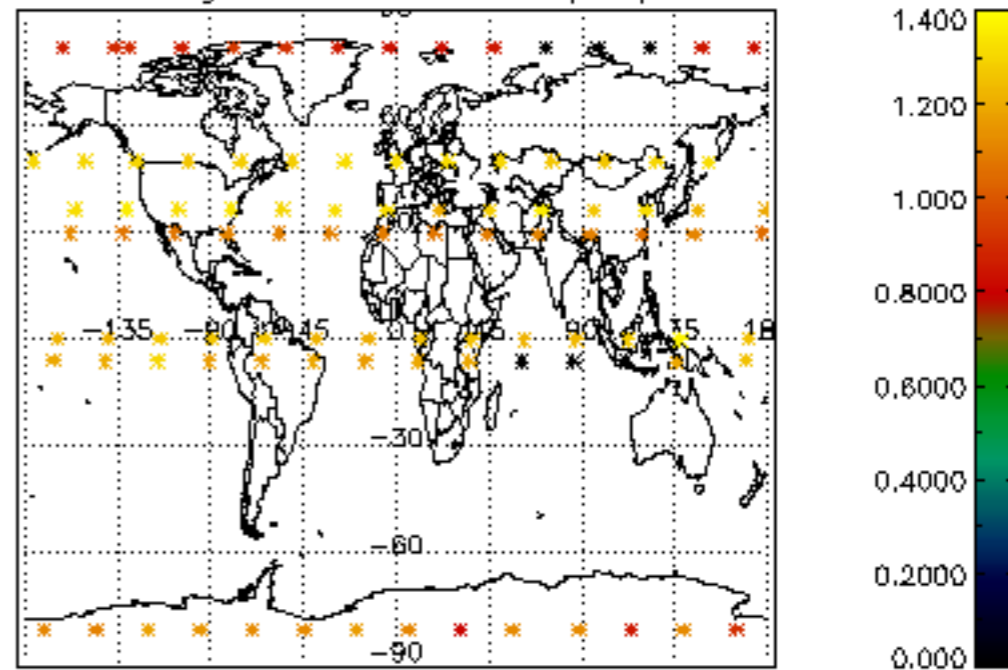
Percentage of saturation errors per profile



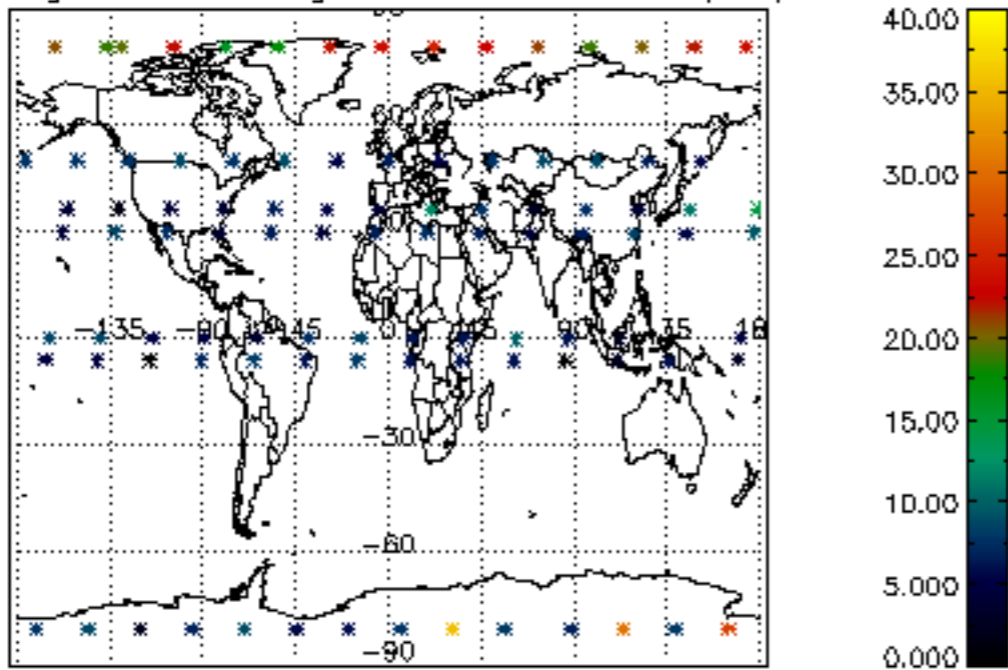
Percentage of cosmic ray hits per profile



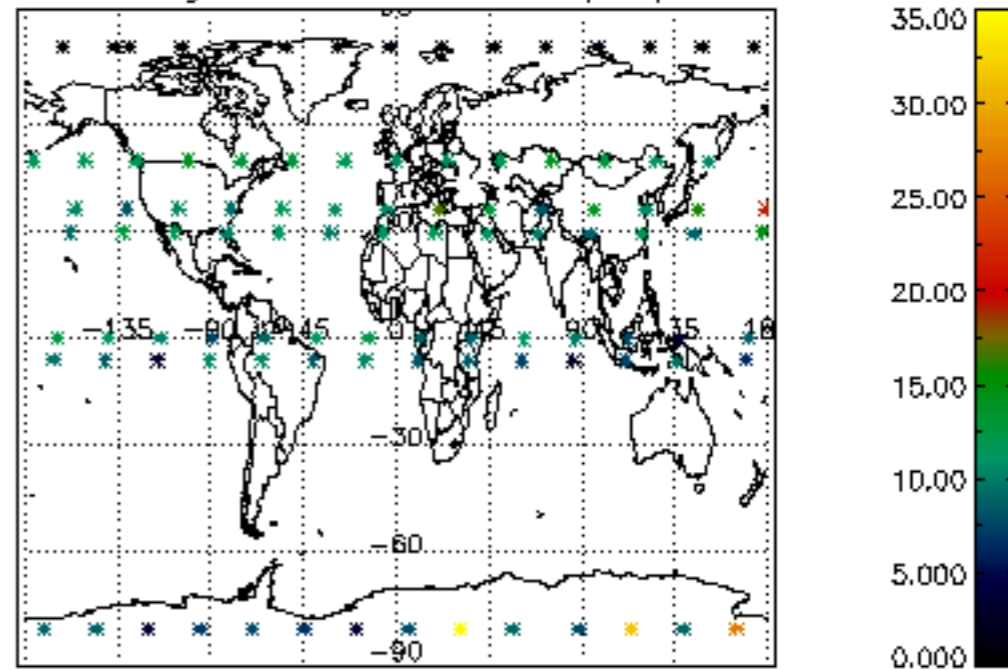
Percentage of datation errors per profile

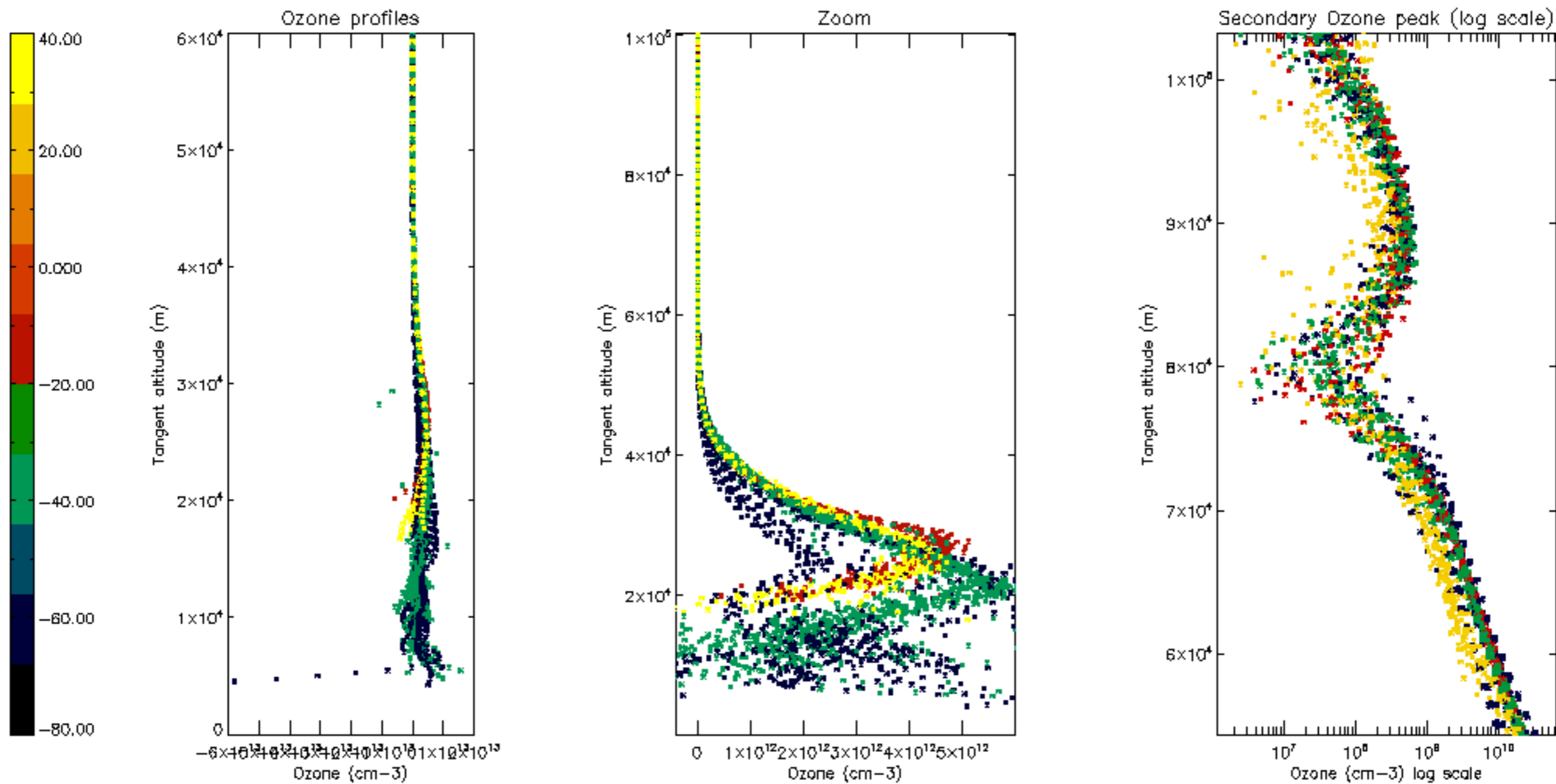


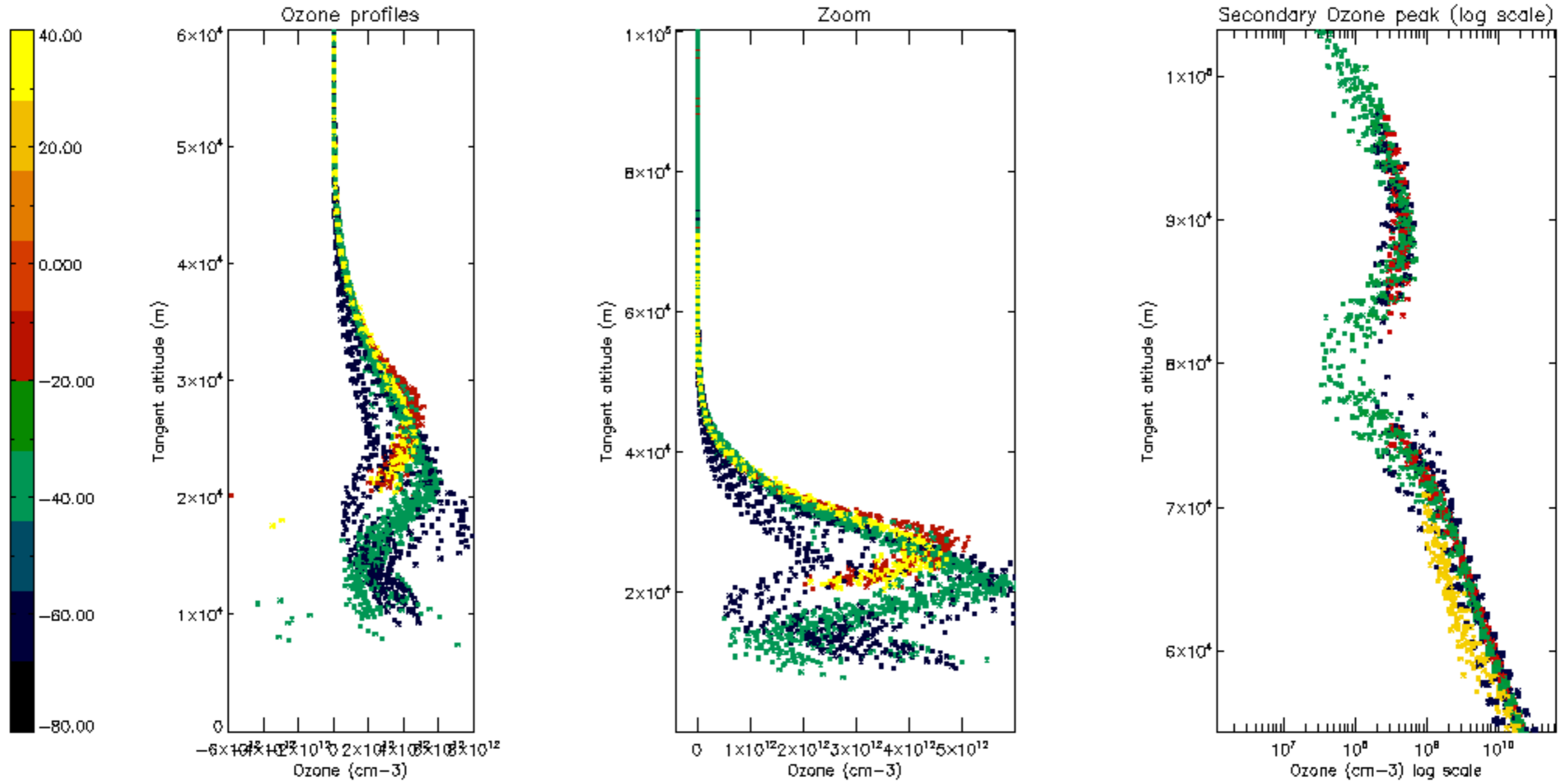
Percentage of star falling outside central band per profile

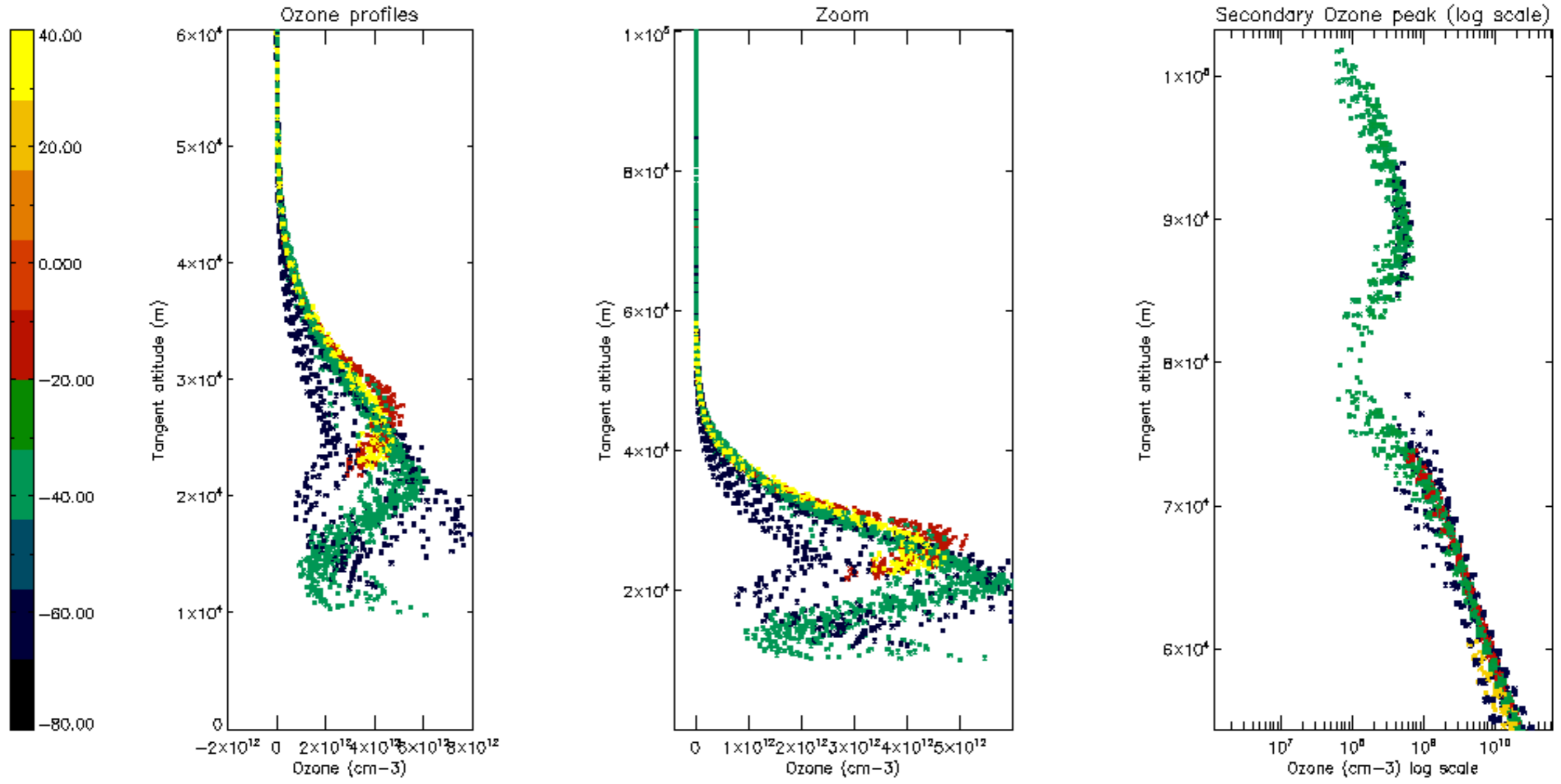


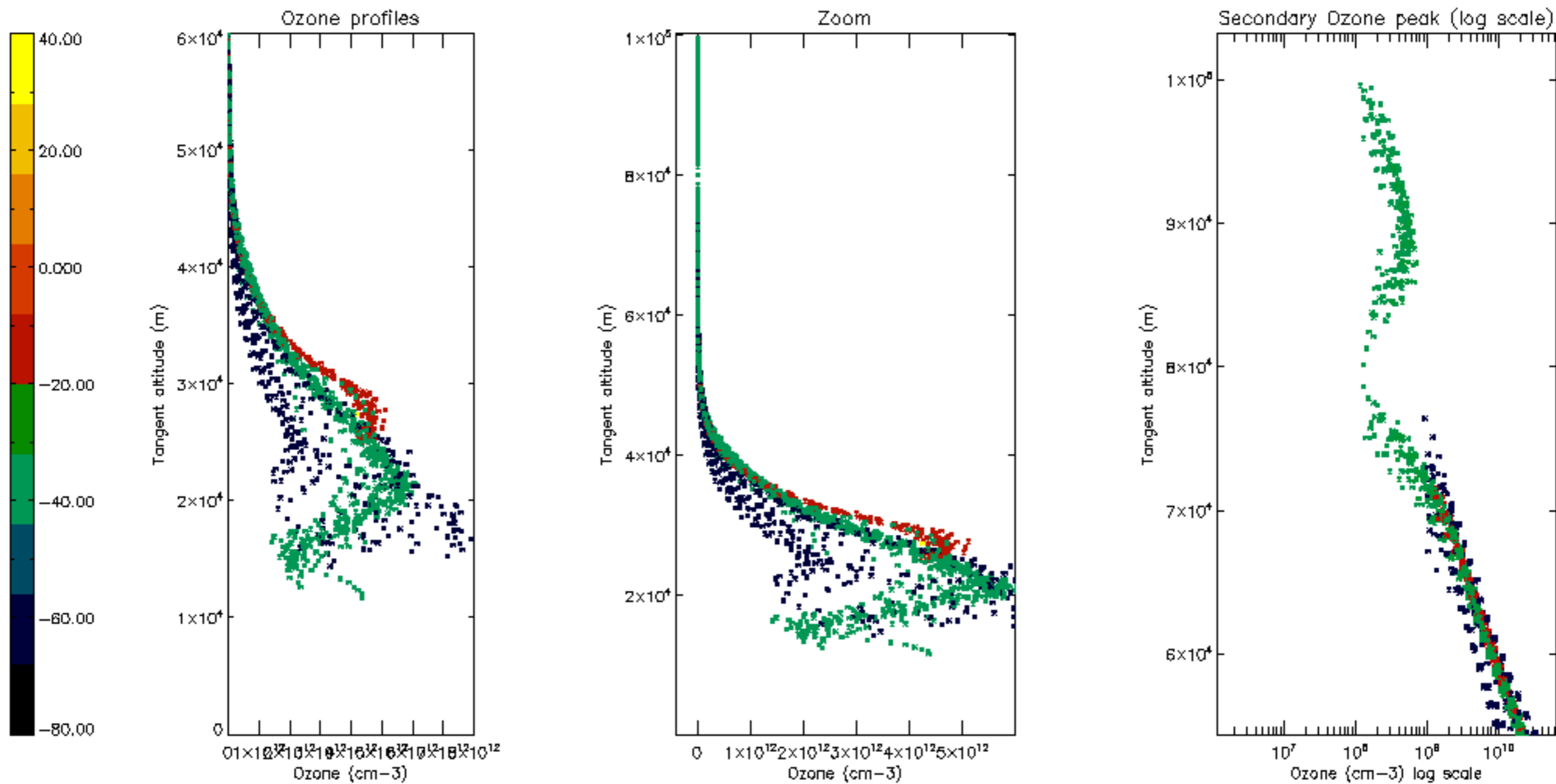
Percentage of saturation errors per profile

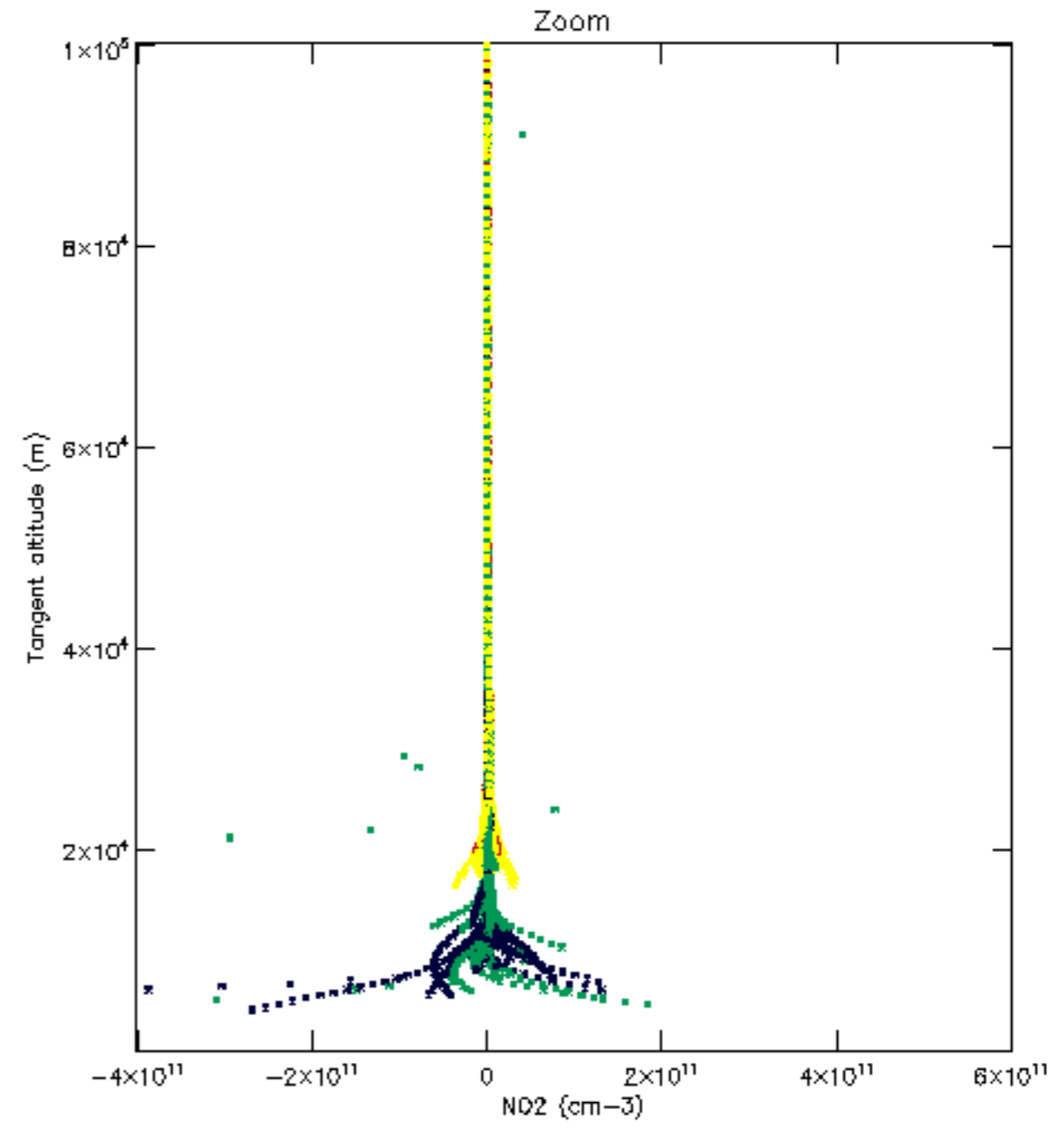
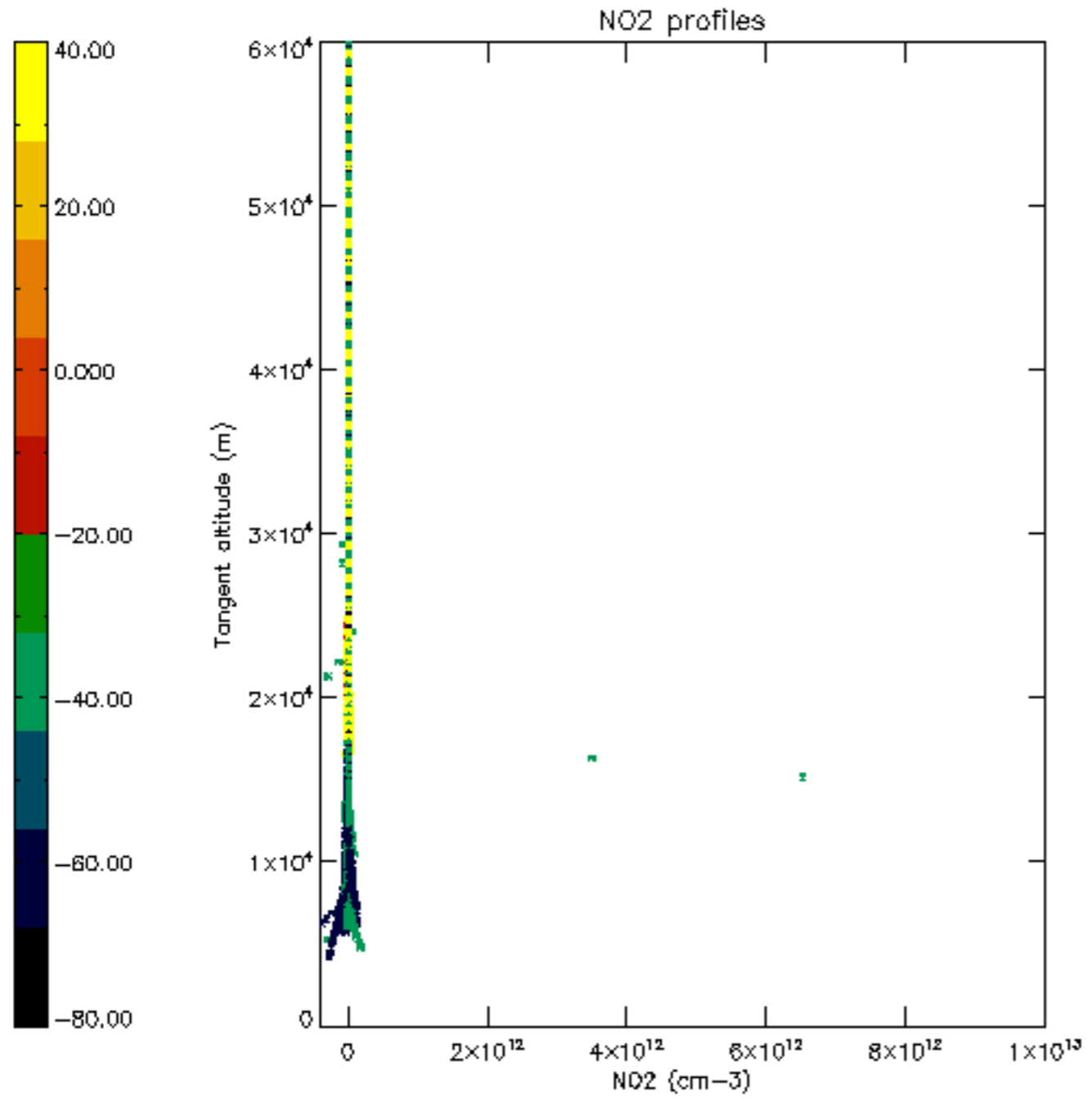


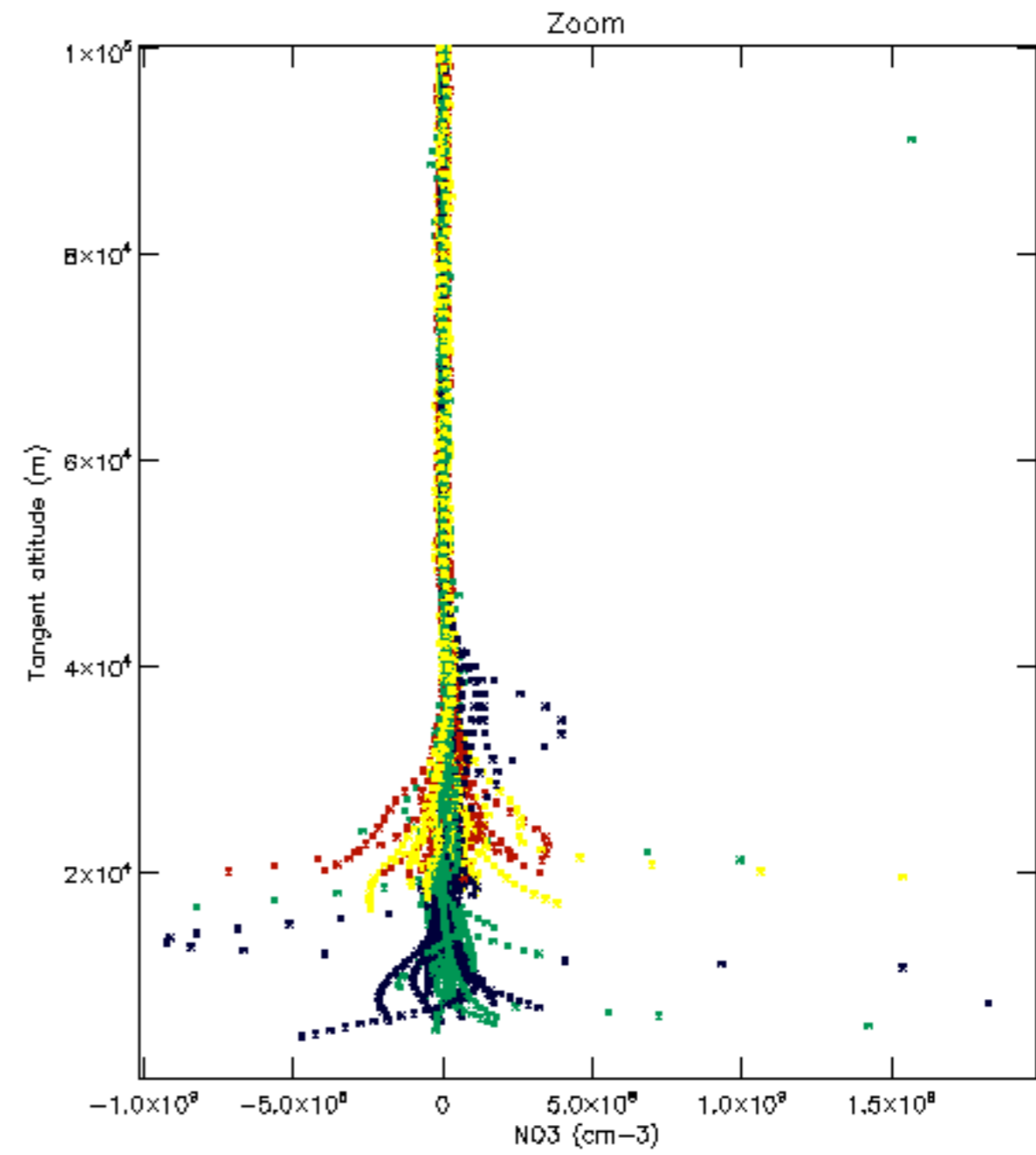
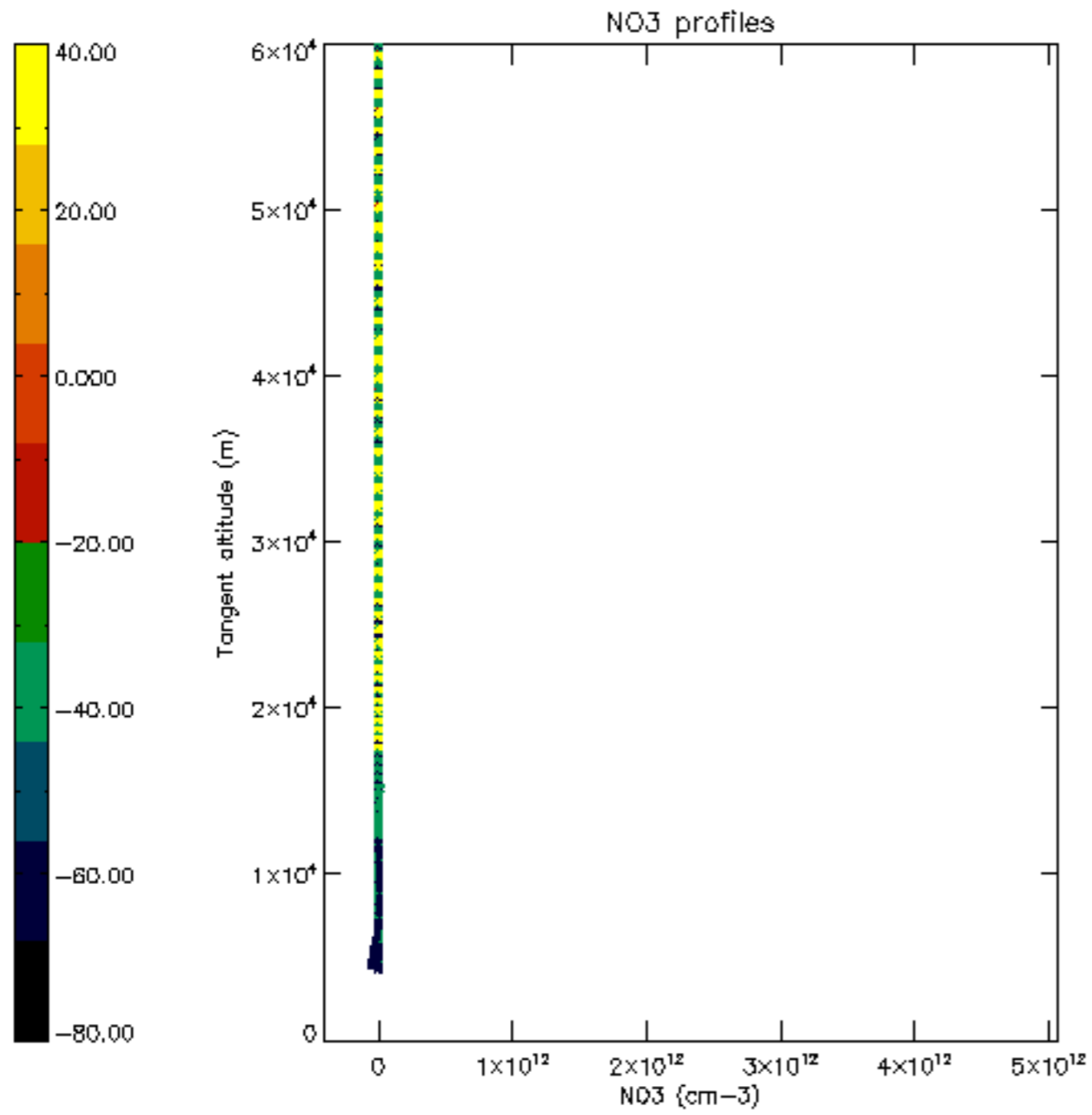


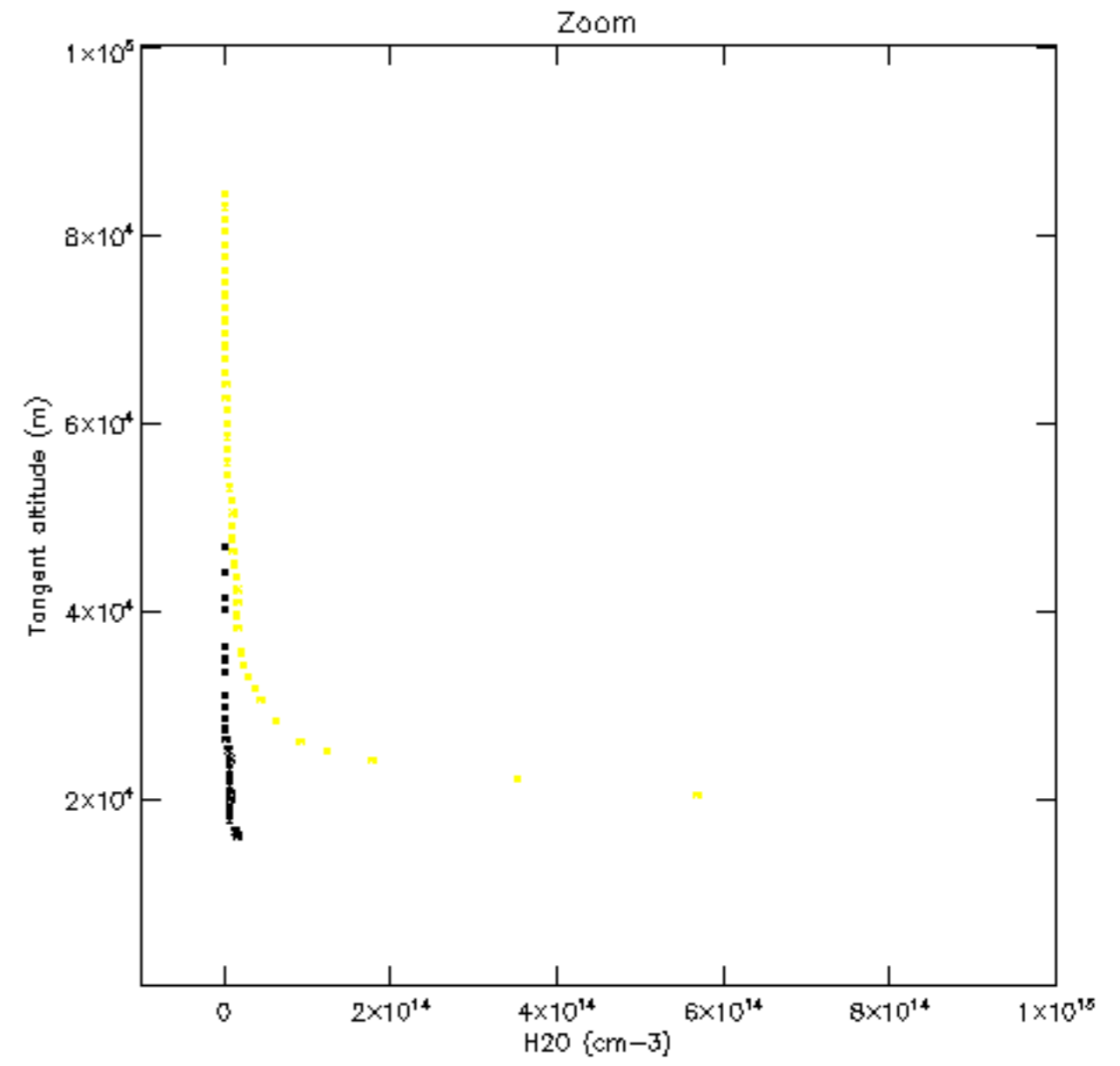
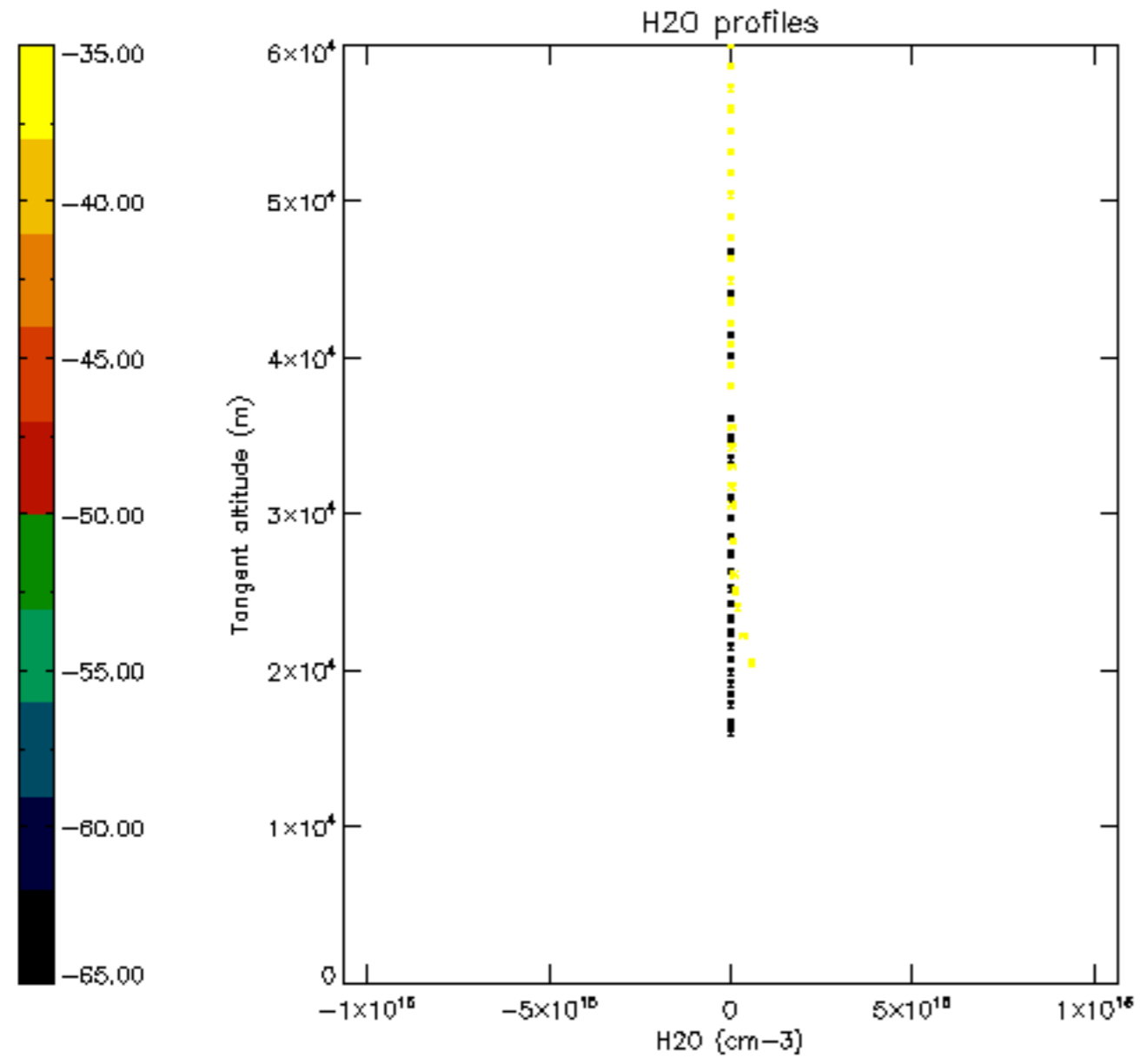


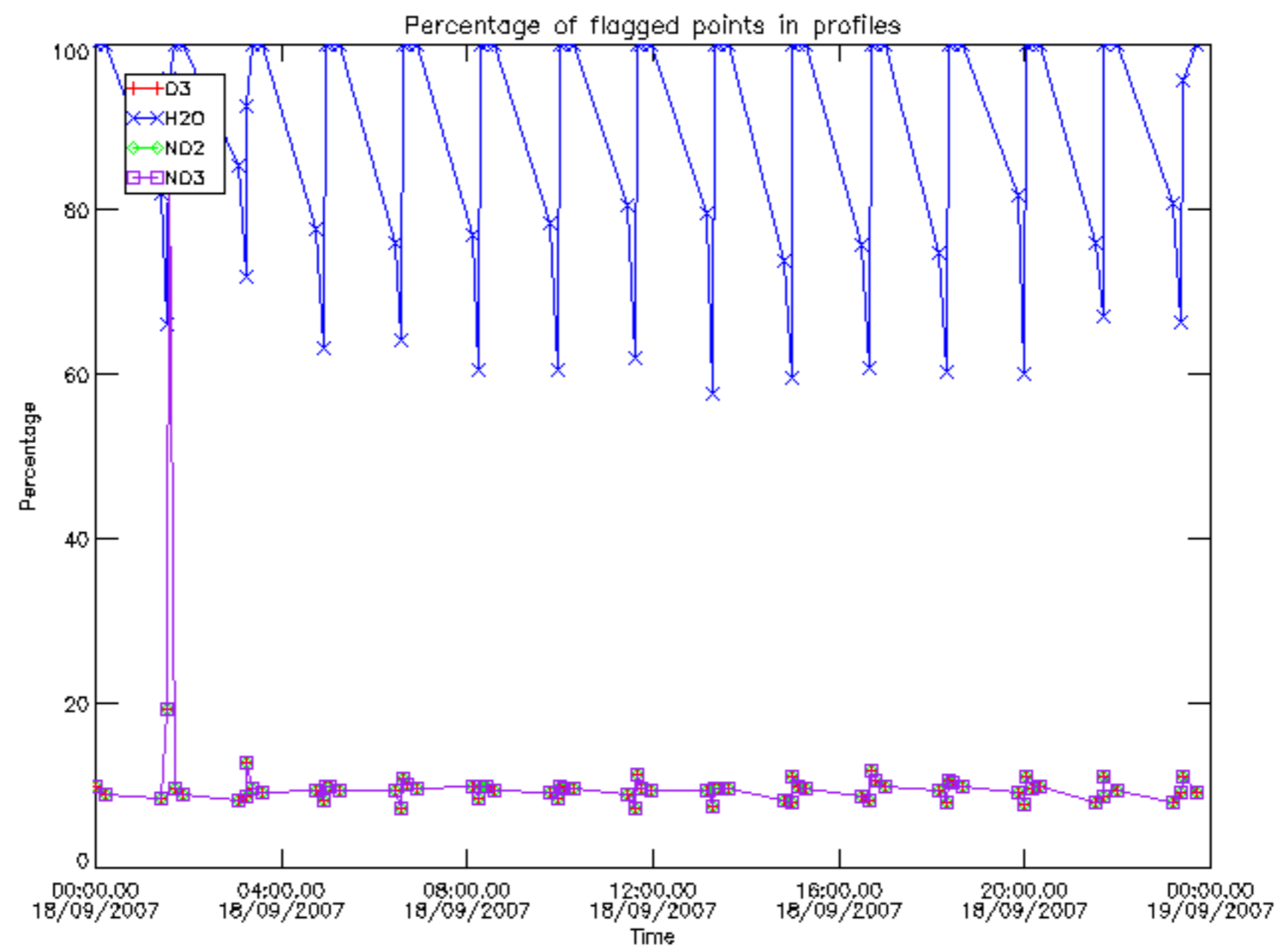




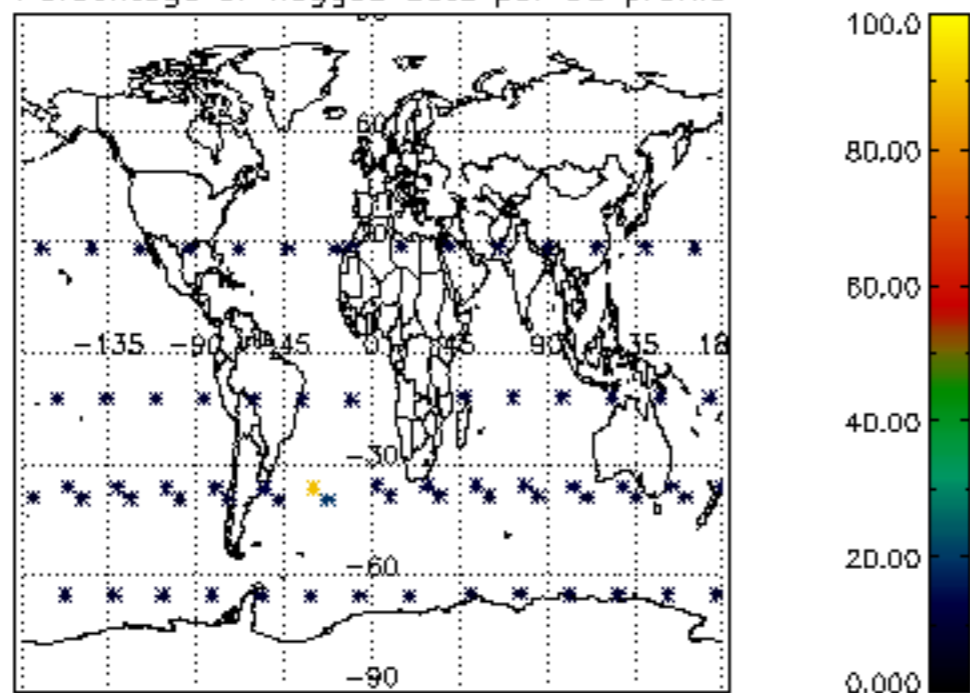




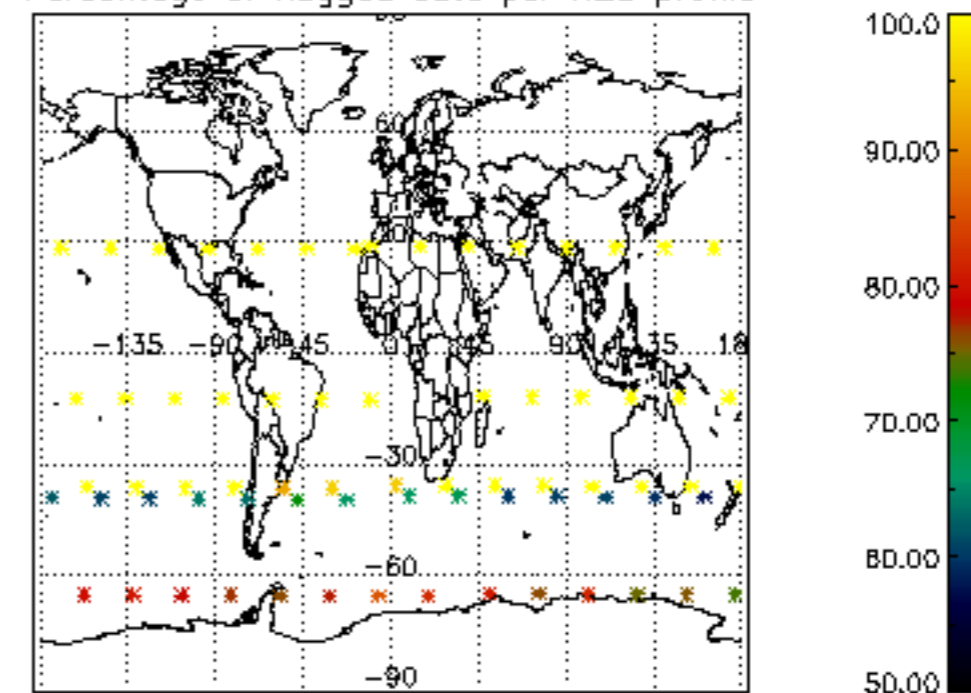




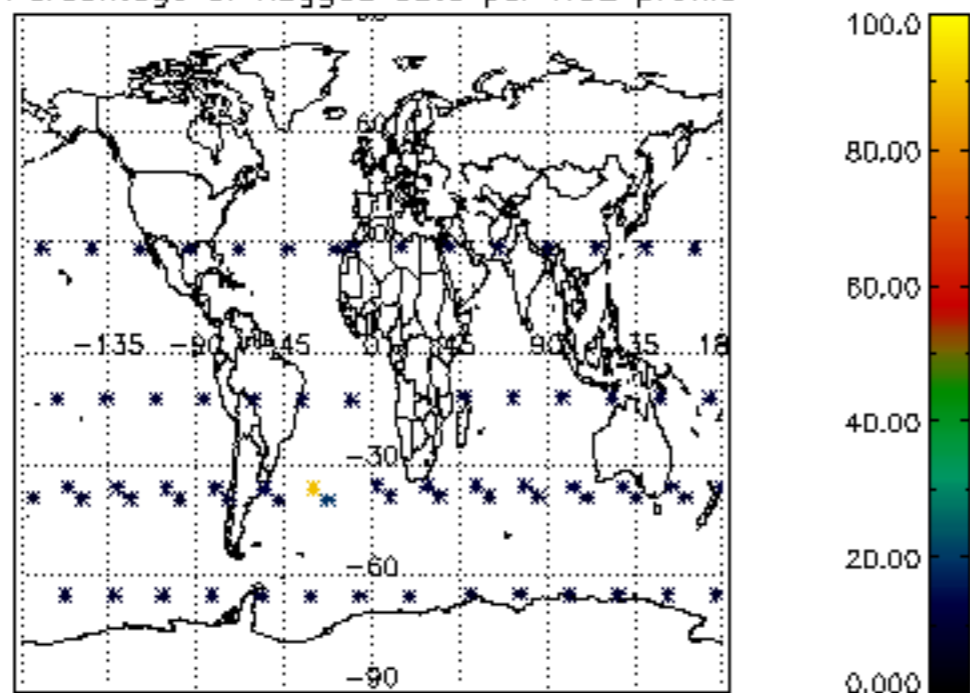
Percentage of flagged data per D3 profile



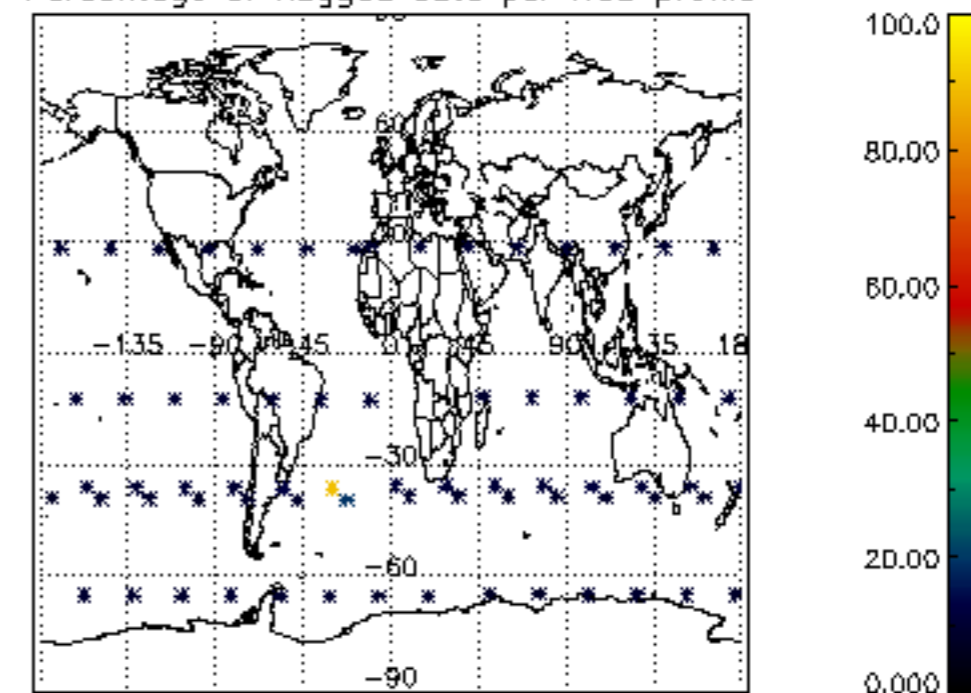
Percentage of flagged data per H2O profile

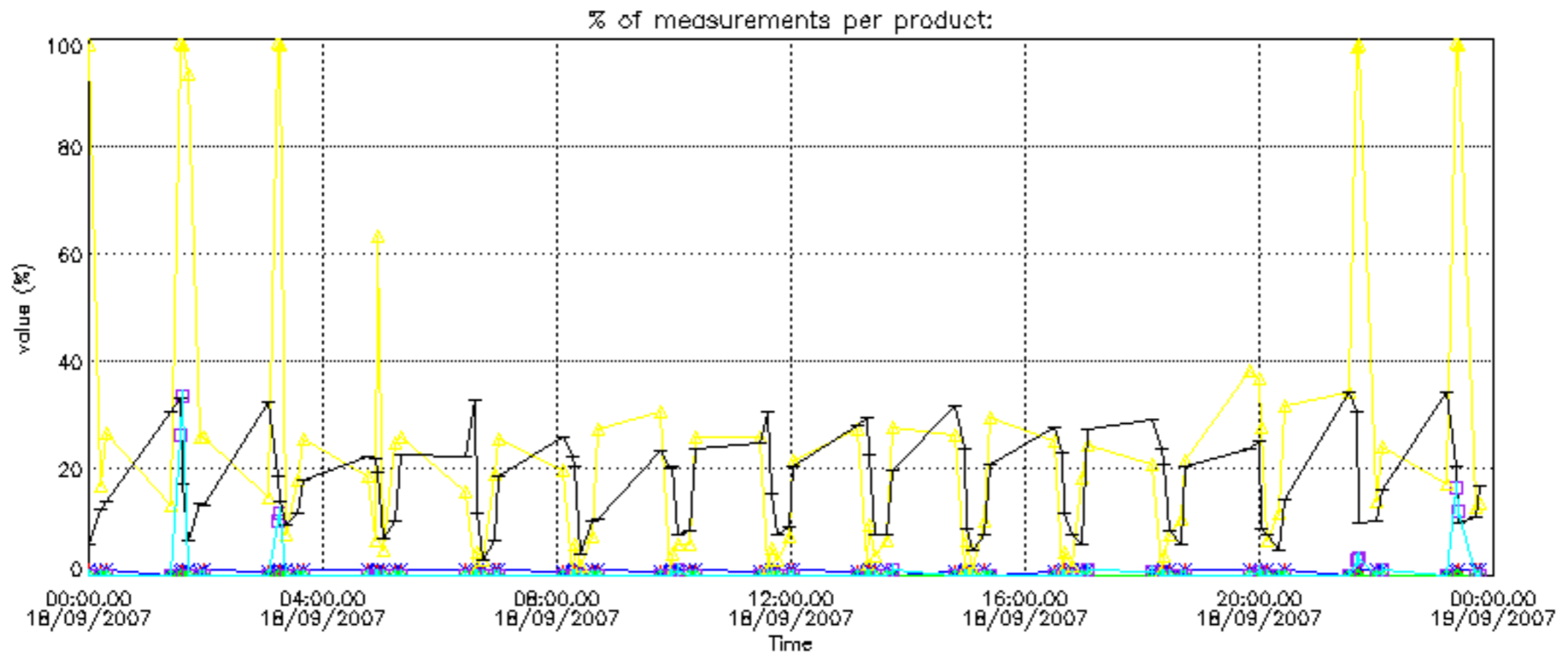


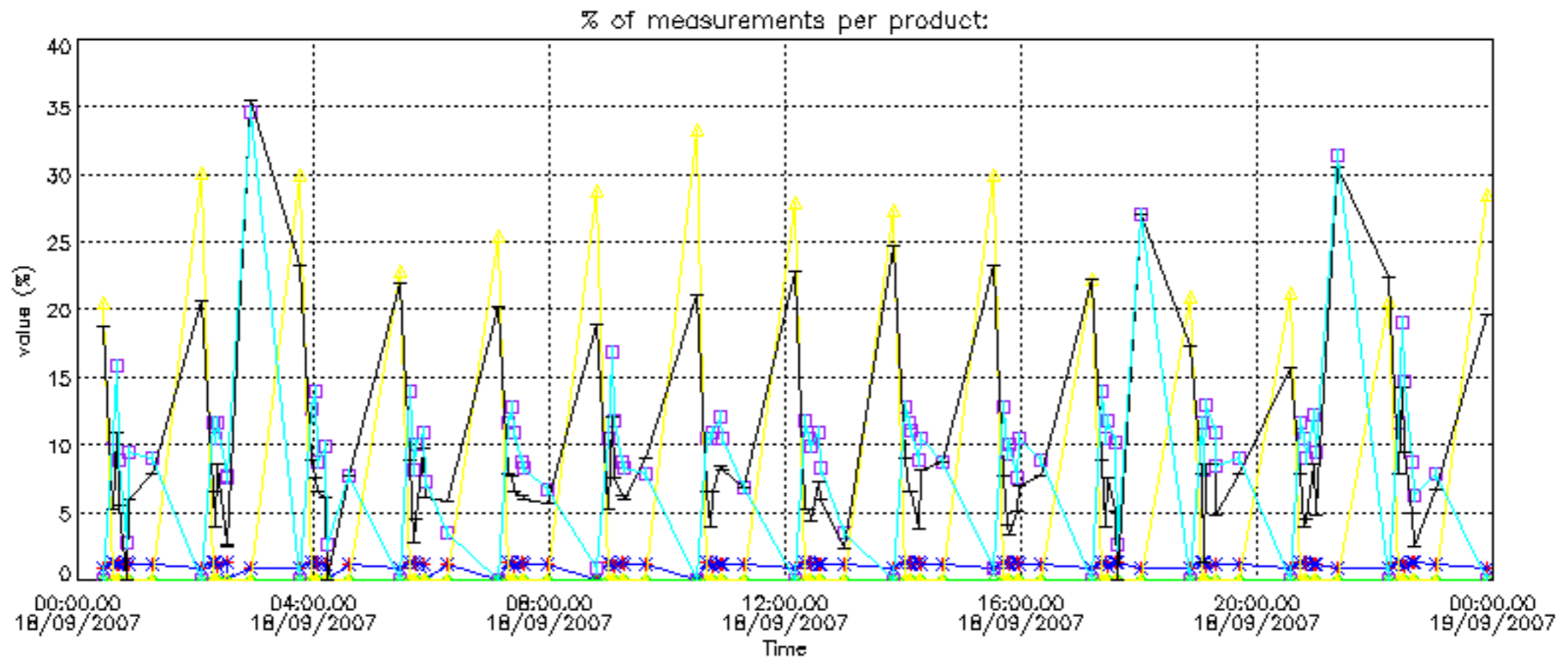
Percentage of flagged data per NO2 profile



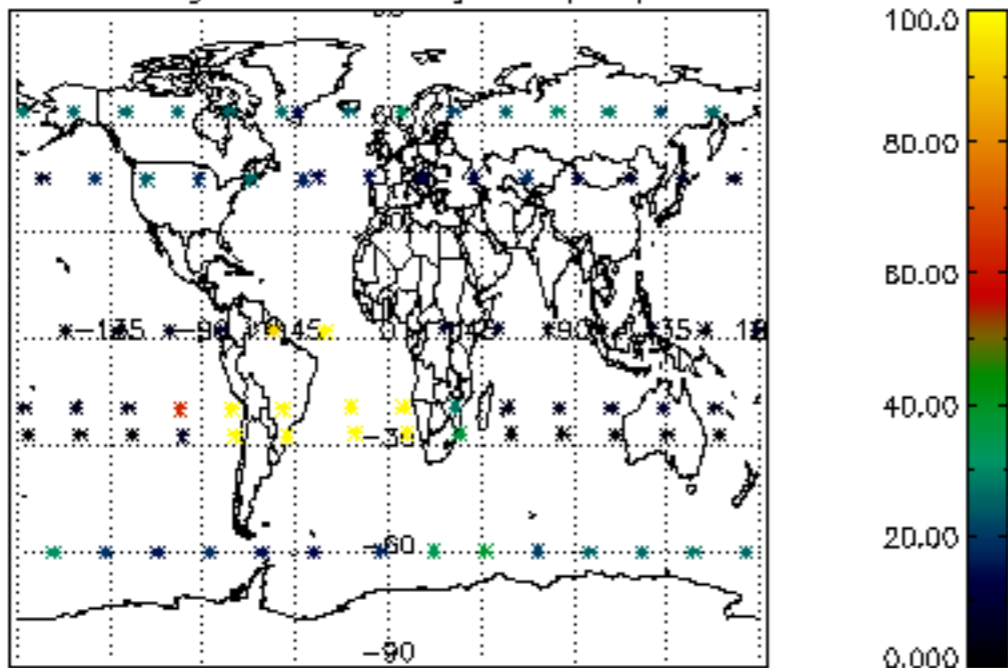
Percentage of flagged data per NO3 profile



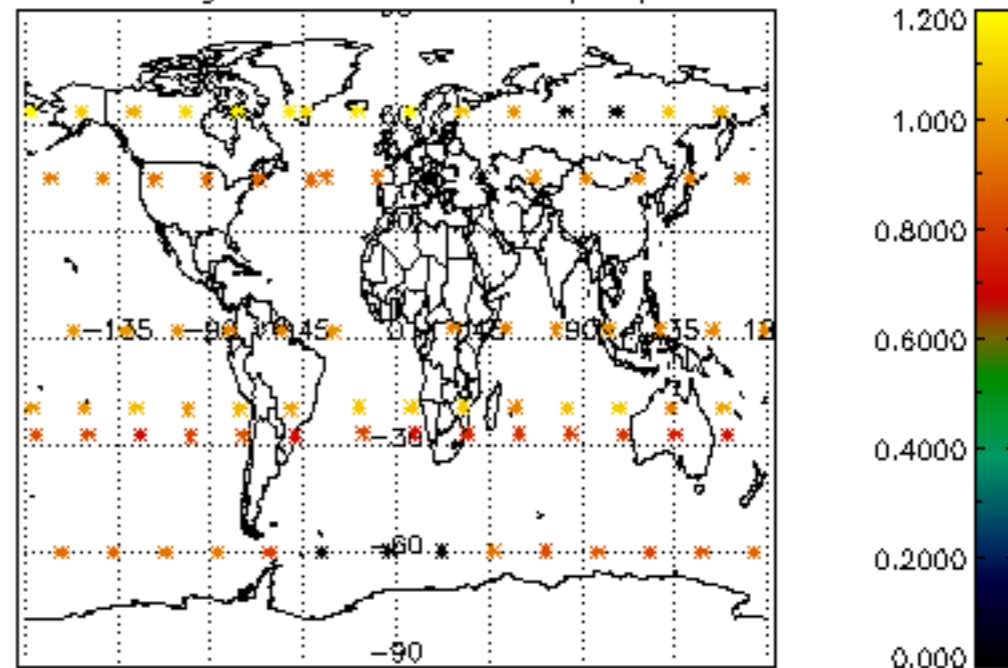




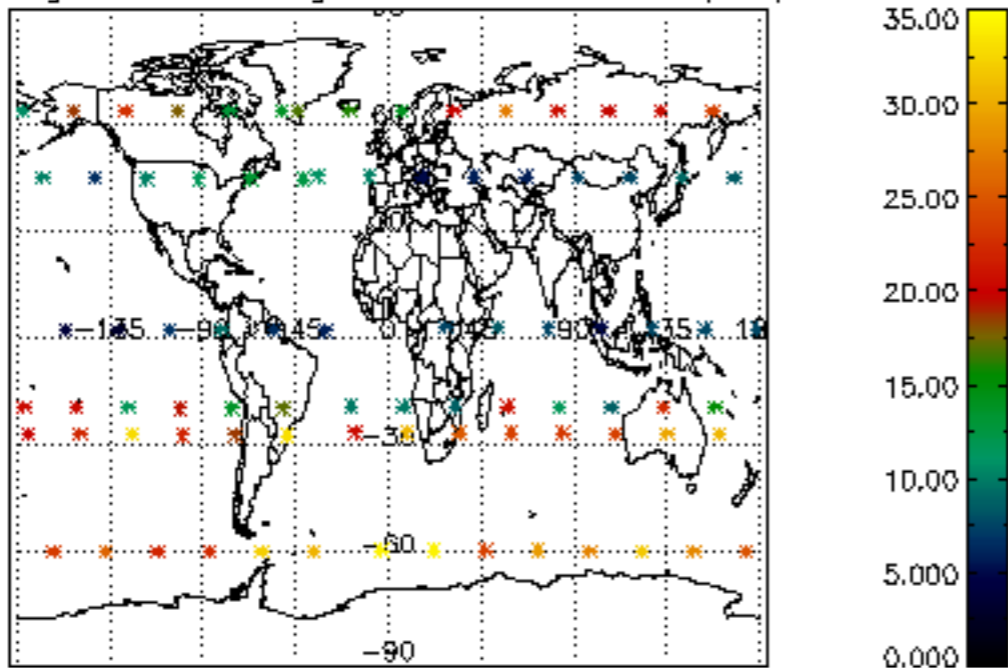
Percentage of cosmic ray hits per profile



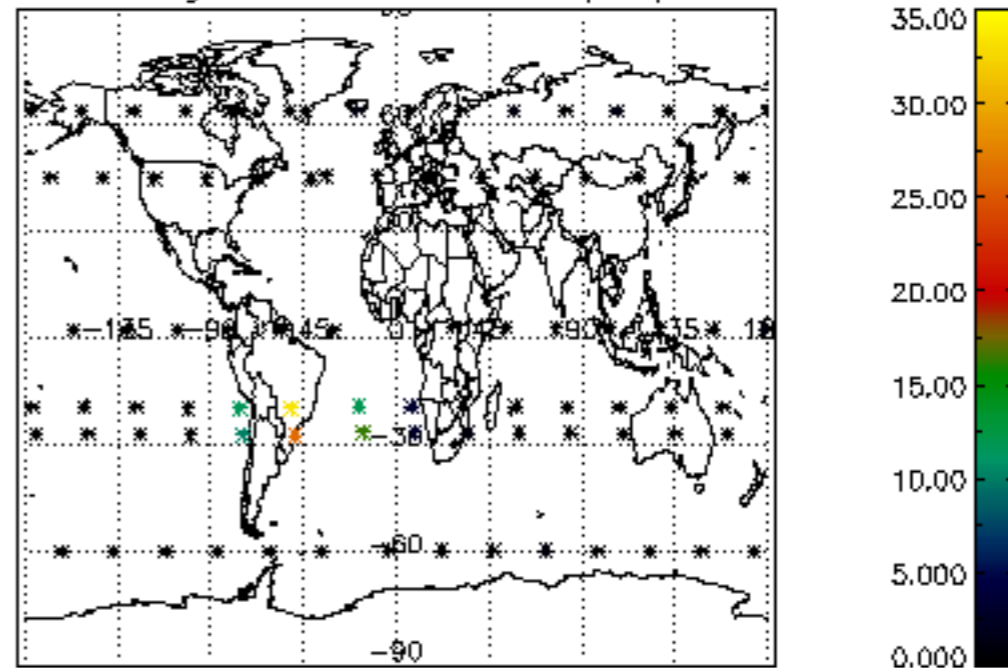
Percentage of datation errors per profile



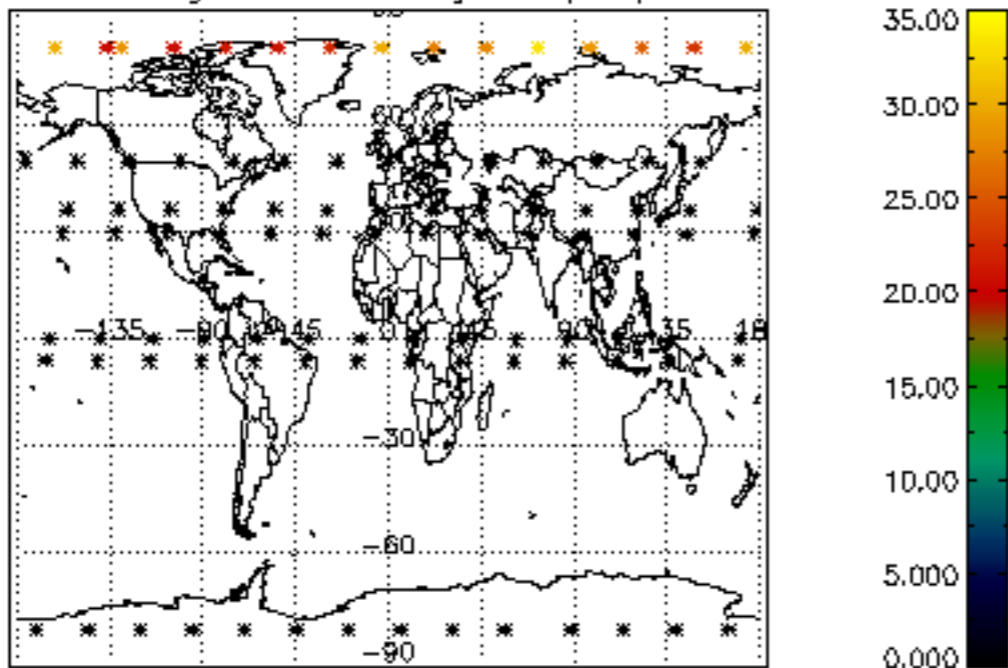
Percentage of star falling outside central band per profile



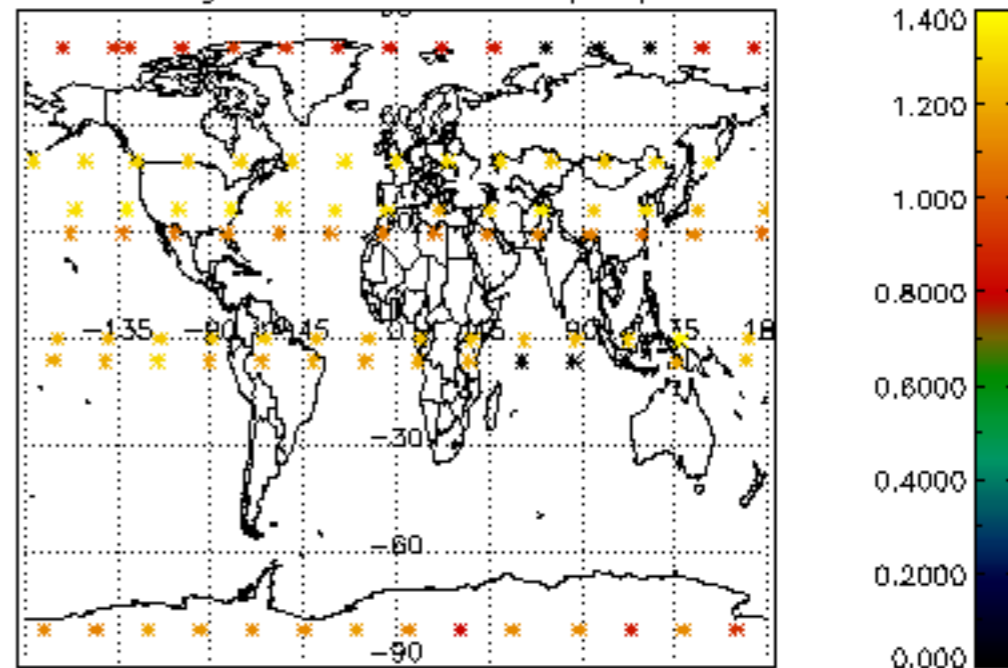
Percentage of saturation errors per profile



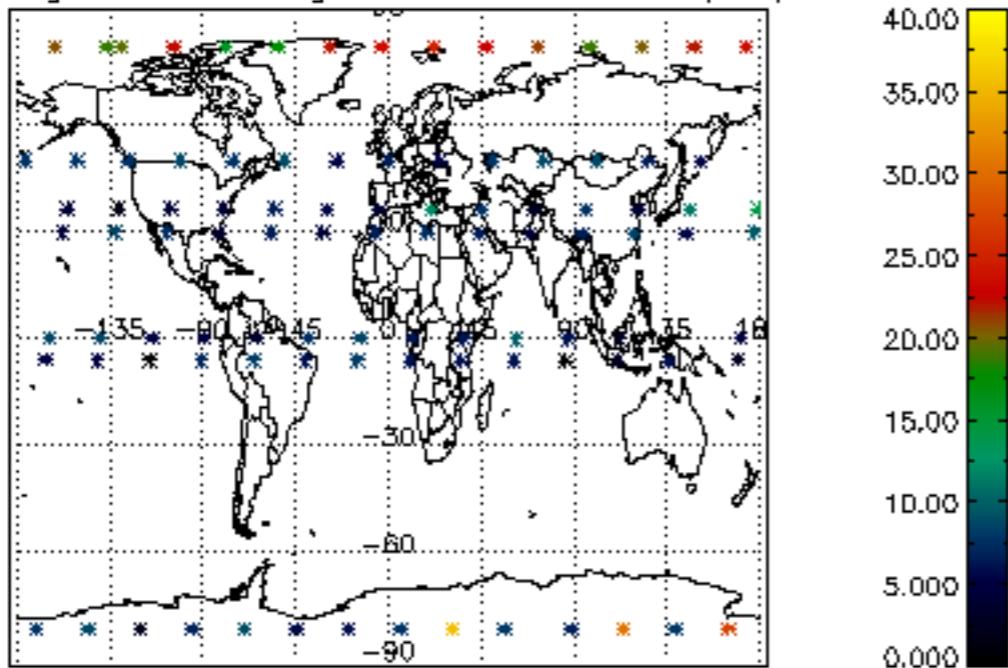
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

