

GOMOS Level 2 Daily Report

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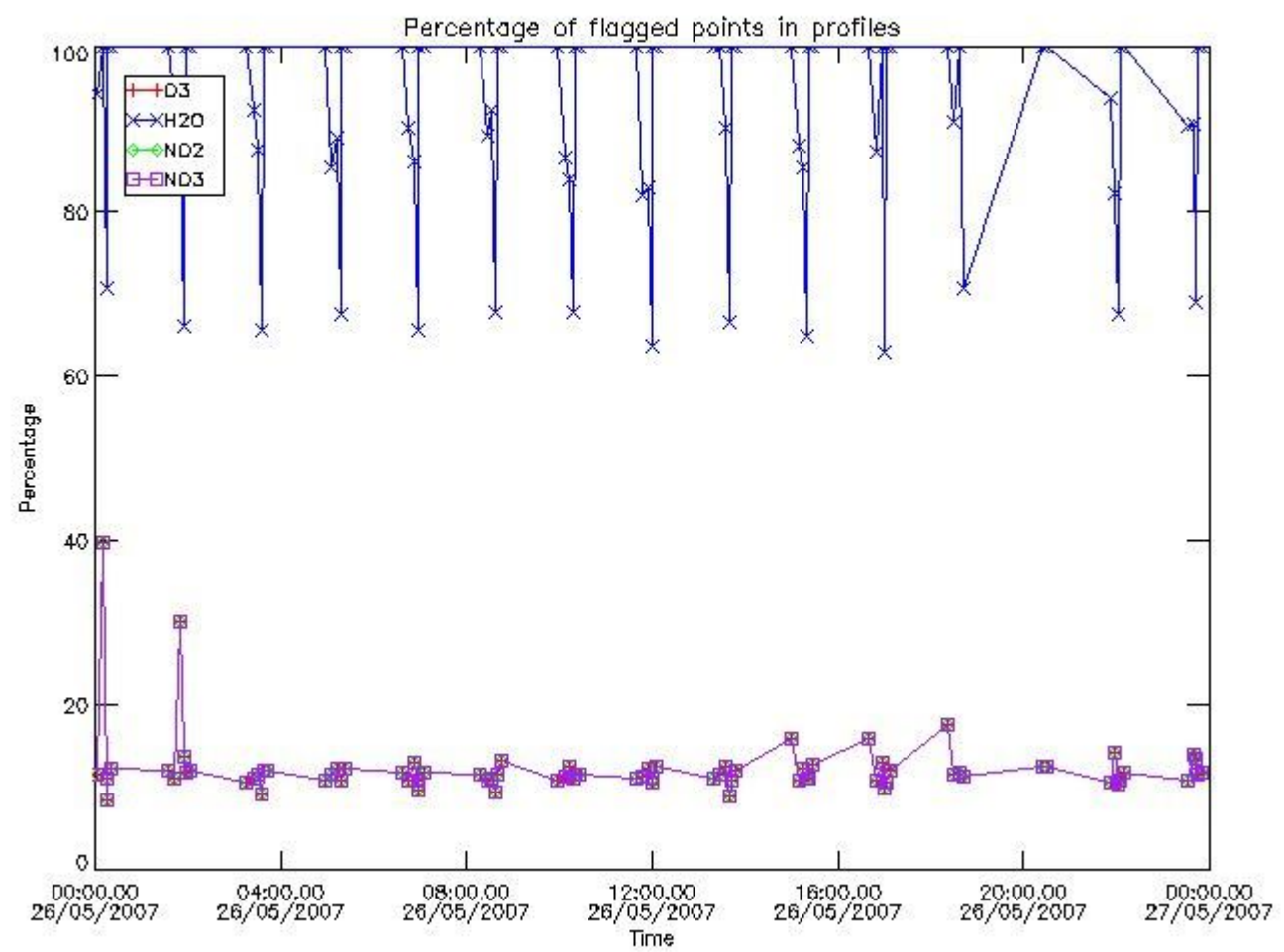
[6. Auxiliary Data Files used for the production reported in section 2](#)

279	GOM_NL__2PRFIN20070526_222253_000000482058_00273_27381_3786.N1	26-MAY-2007 22:22:53	Twilight	47.500	75	26Eps Sco	2.2910	4250.0	95	27381	No
280	GOM_NL__2PRFIN20070526_222501_000000422058_00273_27381_3787.N1	26-MAY-2007 22:25:01	Twilight	42.000	136	23Tau Sco	2.8220	30000.	84	27381	No
281	GOM_NL__2PRFIN20070526_222800_000000392058_00273_27381_3788.N1	26-MAY-2007 22:28:00	Bright	38.500	97	8Bet1Sco	2.5610	30000.	77	27381	No
282	GOM_NL__2PRFIN20070526_223127_000000372058_00273_27381_3789.N1	26-MAY-2007 22:31:27	Bright	37.000	104	27Bet Lib	2.6140	13100.	74	27381	No
283	GOM_NL__2PRFIN20070526_223305_000000422058_00273_27381_3790.N1	26-MAY-2007 22:33:05	Bright	41.500	120	1Del Oph	2.7340	3200.0	83	27381	No
284	GOM_NL__2PRFIN20070526_223608_000000382058_00273_27381_3791.N1	26-MAY-2007 22:36:08	Bright	38.000	102	24Alp Ser	2.6000	4250.0	76	27381	No
285	GOM_NL__2PRFIN20070526_224157_000000382058_00273_27381_3792.N1	26-MAY-2007 22:41:57	Bright	37.500	83		2.3780	11000.	75	27381	No
286	GOM_NL__2PRFIN20070526_224508_000000352058_00273_27381_3793.N1	26-MAY-2007 22:45:08	Bright	34.500	180	27Gam Boo	3.0400	8000.0	69	27381	No
287	GOM_NL__2PRFIN20070526_225259_000000552058_00273_27381_3794.N1	26-MAY-2007 22:52:59	Bright	55.000	119	14Eta Dra	2.7270	4700.0	110	27381	No
288	GOM_NL__2PRFIN20070526_225518_000000382058_00273_27381_3795.N1	26-MAY-2007 22:55:18	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	27381	No
289	GOM_NL__2PRFIN20070526_225955_000000352058_00273_27381_3796.N1	26-MAY-2007 22:59:55	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	27381	No
290	GOM_NL__2PRFIN20070526_231534_000000392058_00273_27381_3797.N1	26-MAY-2007 23:15:34	Bright	39.000	53	43Bet And	2.0480	3300.0	78	27381	No
291	GOM_NL__2PRFIN20070526_233137_000000472058_00273_27381_3798.N1	26-MAY-2007 23:31:37	Dark	47.000	52	16Bet Cet	2.0370	4500.0	94	27381	No
292	GOM_NL__2PRFIN20070526_233823_000000442058_00273_27381_3799.N1	26-MAY-2007 23:38:23	Dark	43.500	84	Alp Phe	2.3970	4500.0	87	27381	No
293	GOM_NL__2PRFIN20070526_234317_000000602058_00274_27382_3791.N1	26-MAY-2007 23:43:17	Dark	60.000	63	Bet Gru	2.1500	2800.0	120	27382	No
294	GOM_NL__2PRFIN20070526_234502_000000452058_00274_27382_3792.N1	26-MAY-2007 23:45:02	Dark	44.500	31	Alp Gru	1.7340	15200.	89	27382	No
295	GOM_NL__2PRFIN20070526_235018_000000432058_00274_27382_3793.N1	26-MAY-2007 23:50:18	Dark	43.000	45	Alp Pav	1.9400	26000.	86	27382	No
296	GOM_NL__2PRFIN20070526_235653_000000432058_00274_27382_3794.N1	26-MAY-2007 23:56:53	Straylight	43.000	141	Bet Ara	2.8400	4600.0	86	27382	No
297	GOM_NL__2PRFIN20070526_235943_000000472058_00274_27382_3795.N1	26-MAY-2007 23:59:43	Straylight	47.000	40	The Sco	1.8590	7100.0	94	27382	No

3. Quality information per product

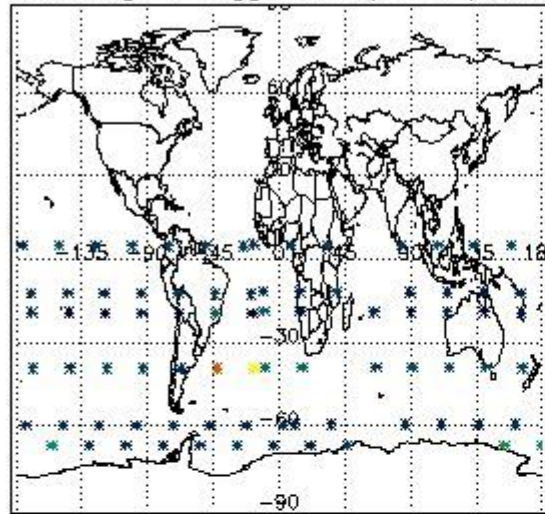
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

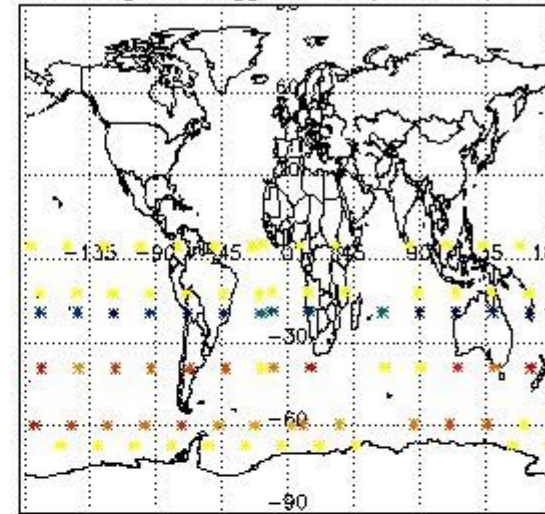


3.2 Plot quality information per product (world map)

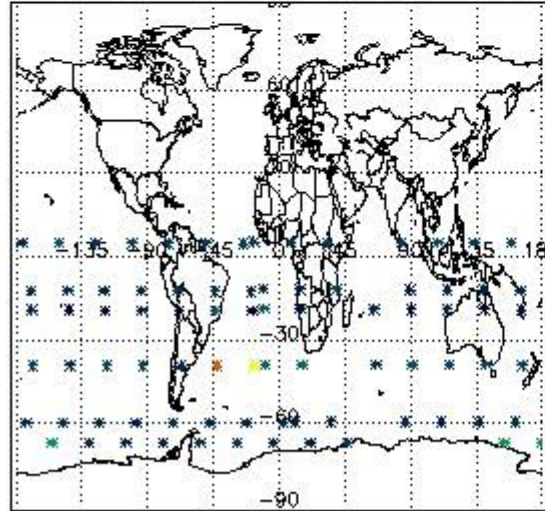
Percentage of flagged data per O3 profile



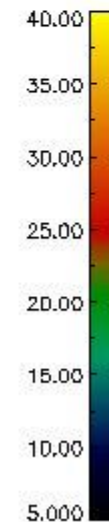
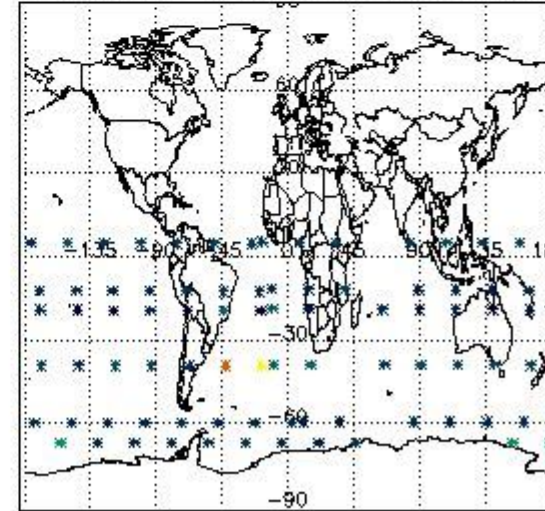
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

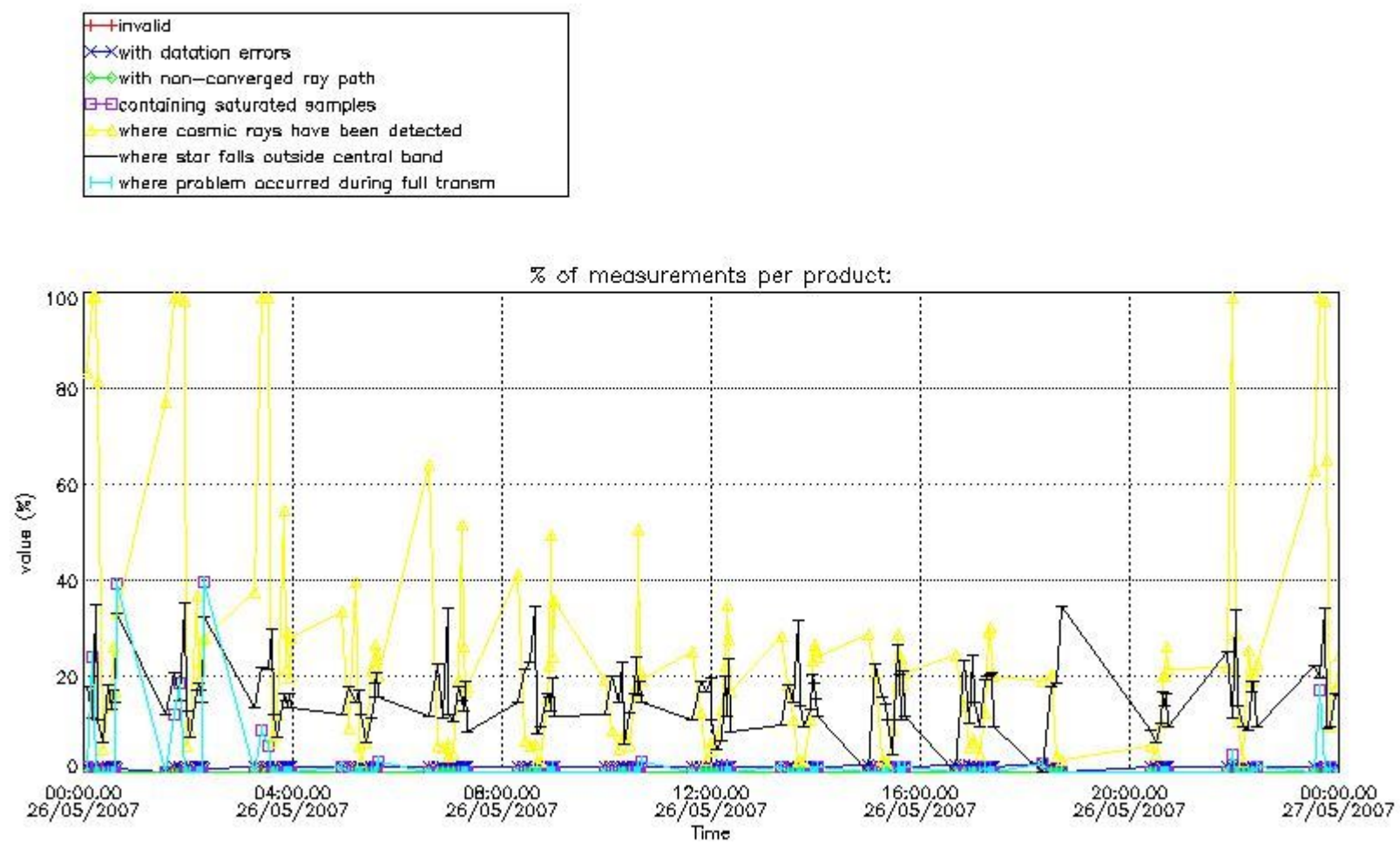


4. Level 1 quality information per product

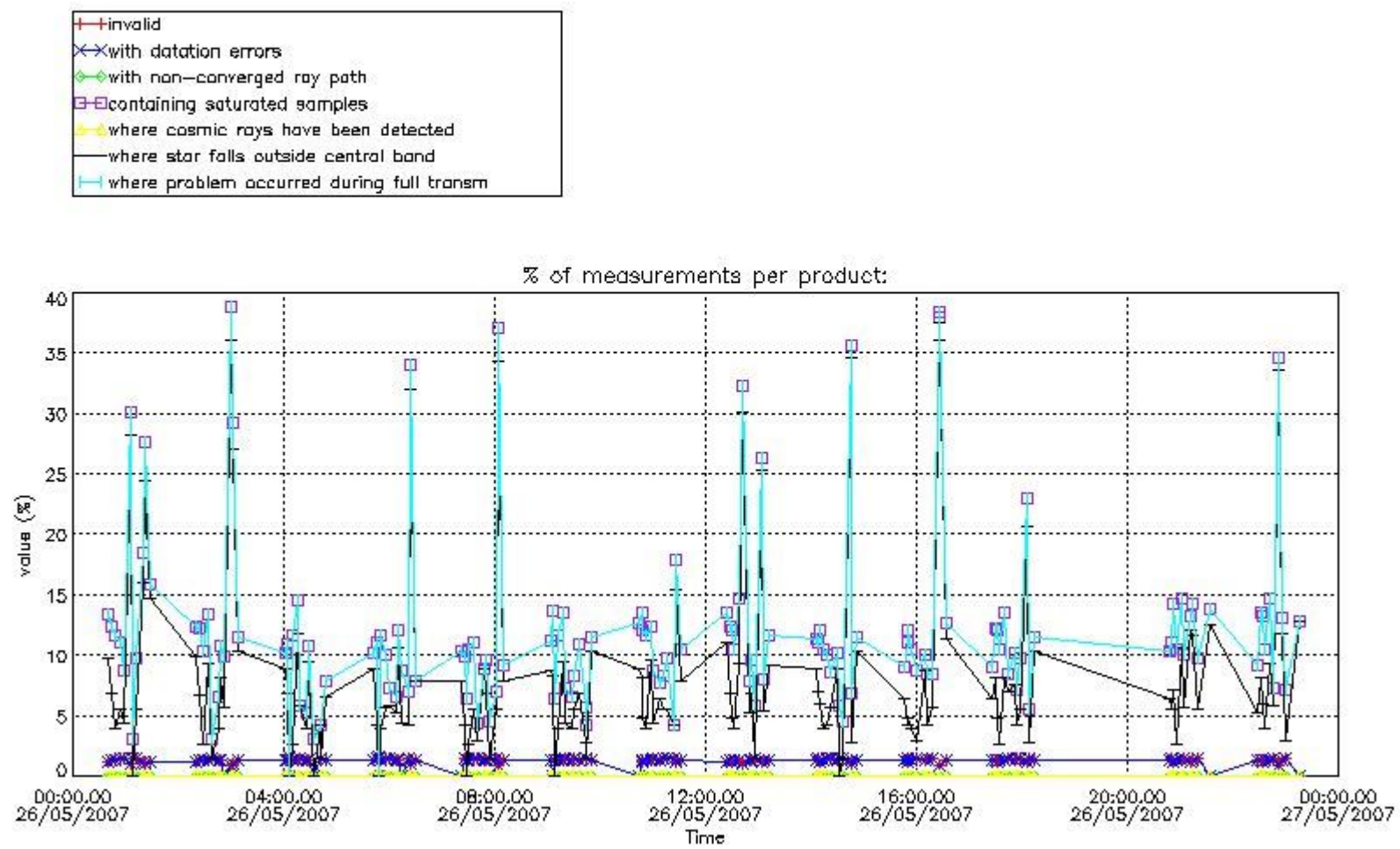
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



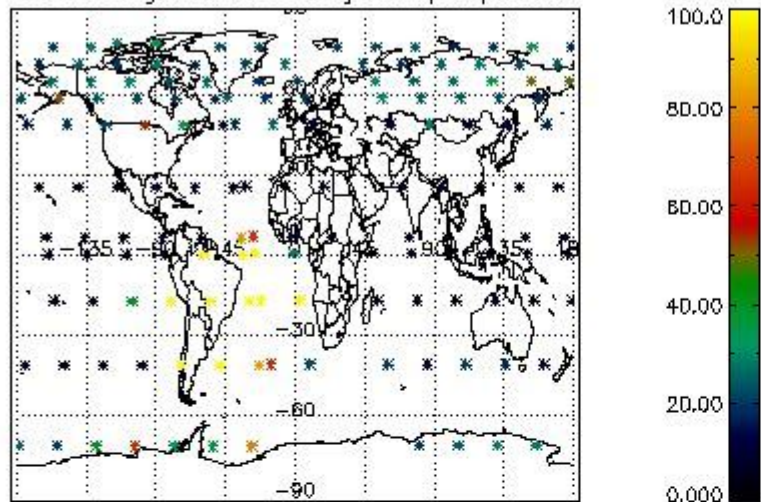
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



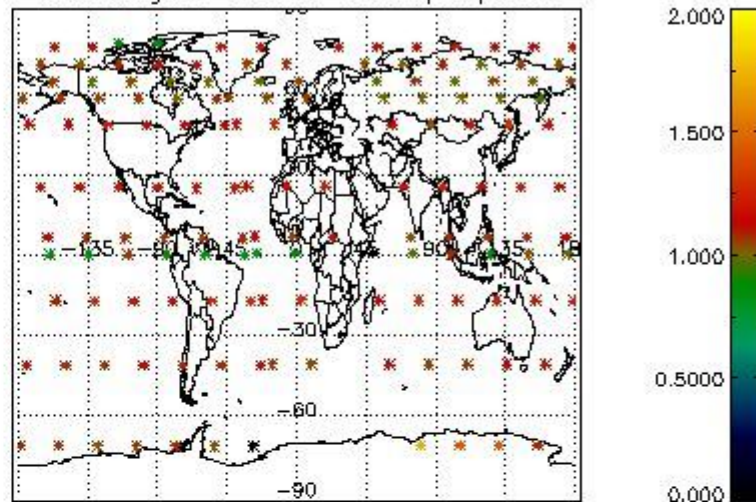
4.2 Plot quality information per product coming from level 1b processing (world map)

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

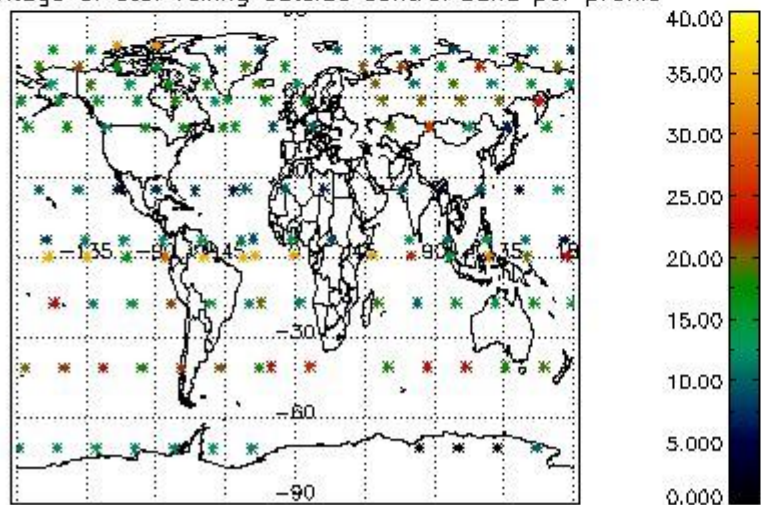
Percentage of cosmic ray hits per profile



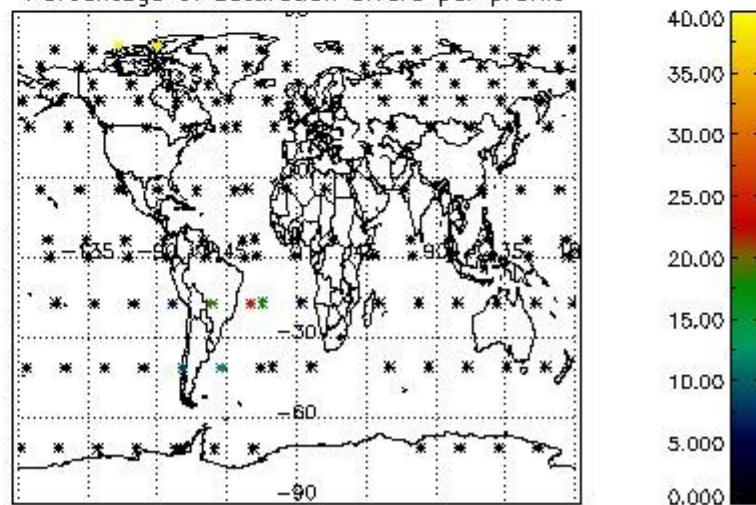
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

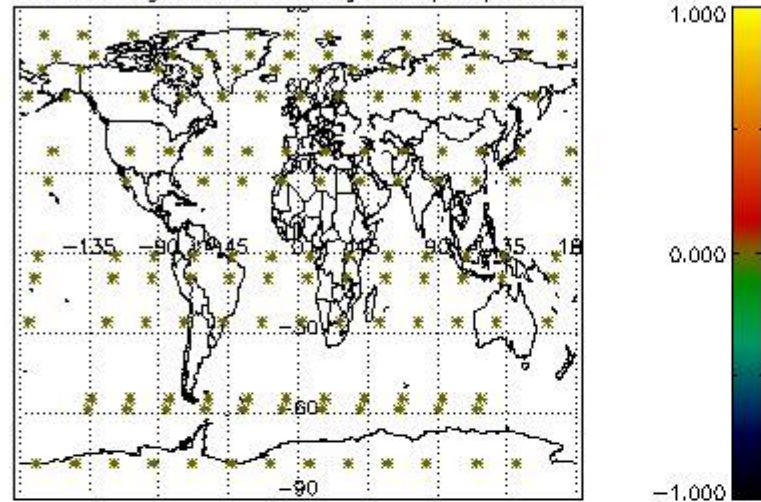


Percentage of saturation errors per profile

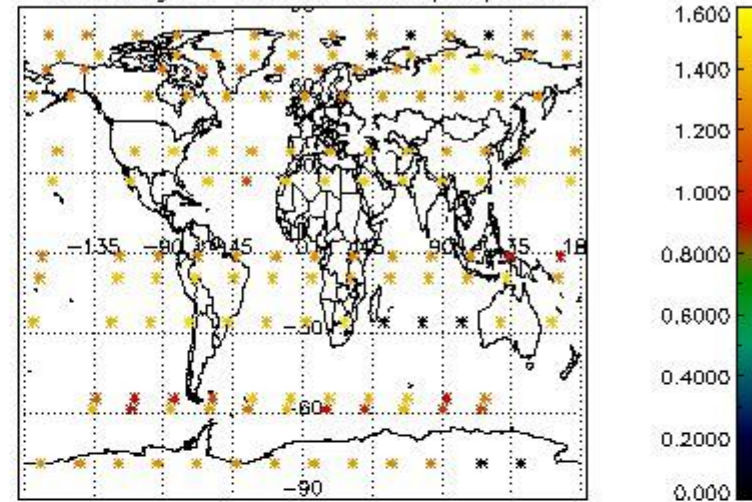


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

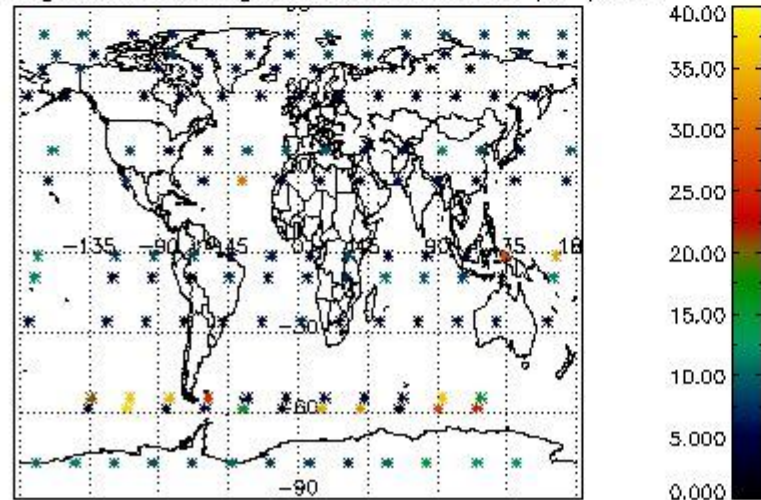
Percentage of cosmic ray hits per profile



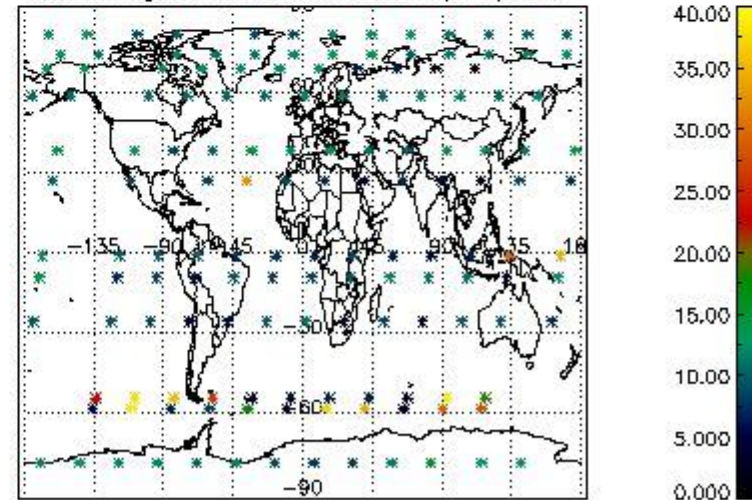
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

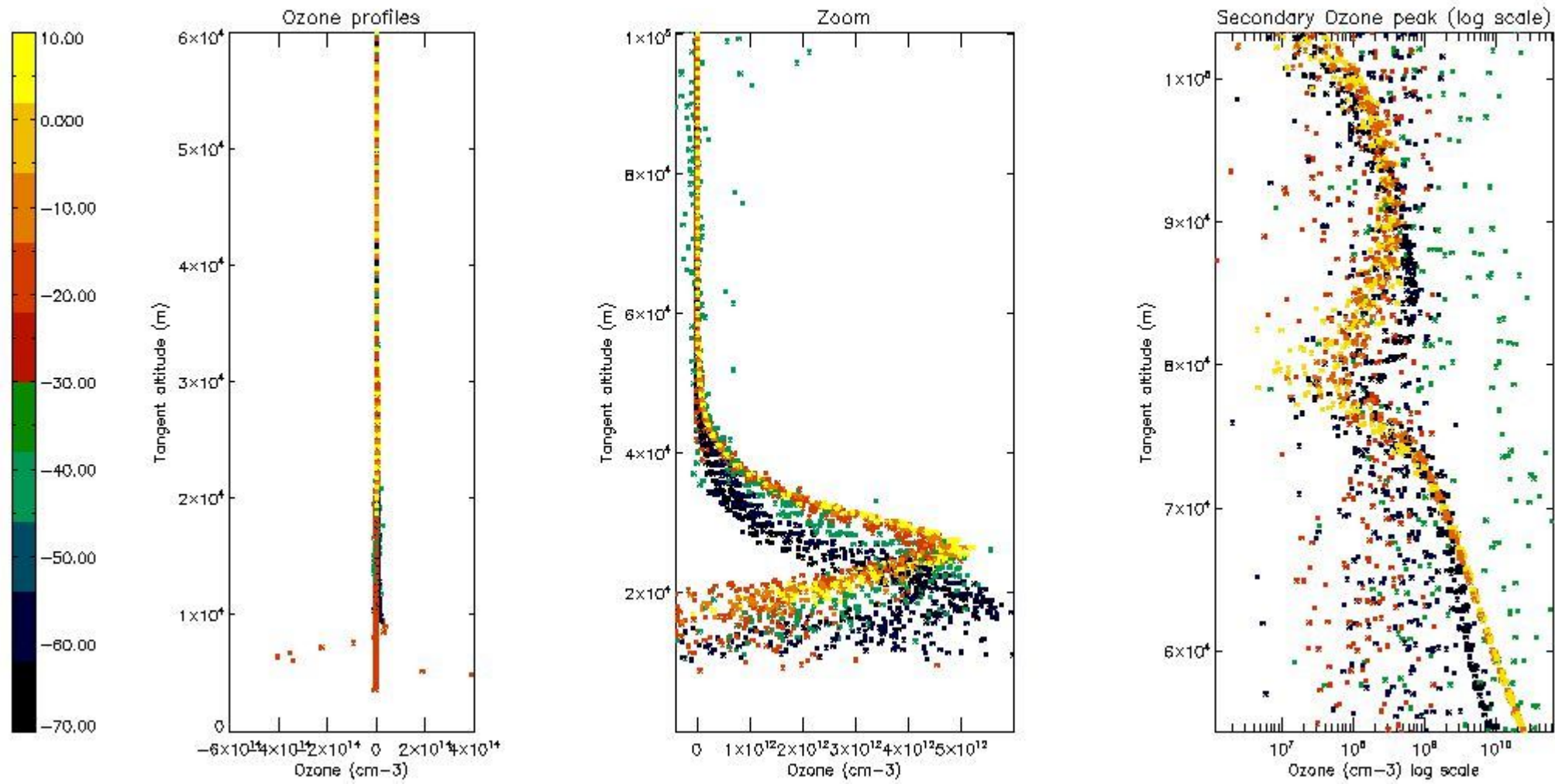
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	30
STD < 20	14

STD < 10	10
STD < 5	6

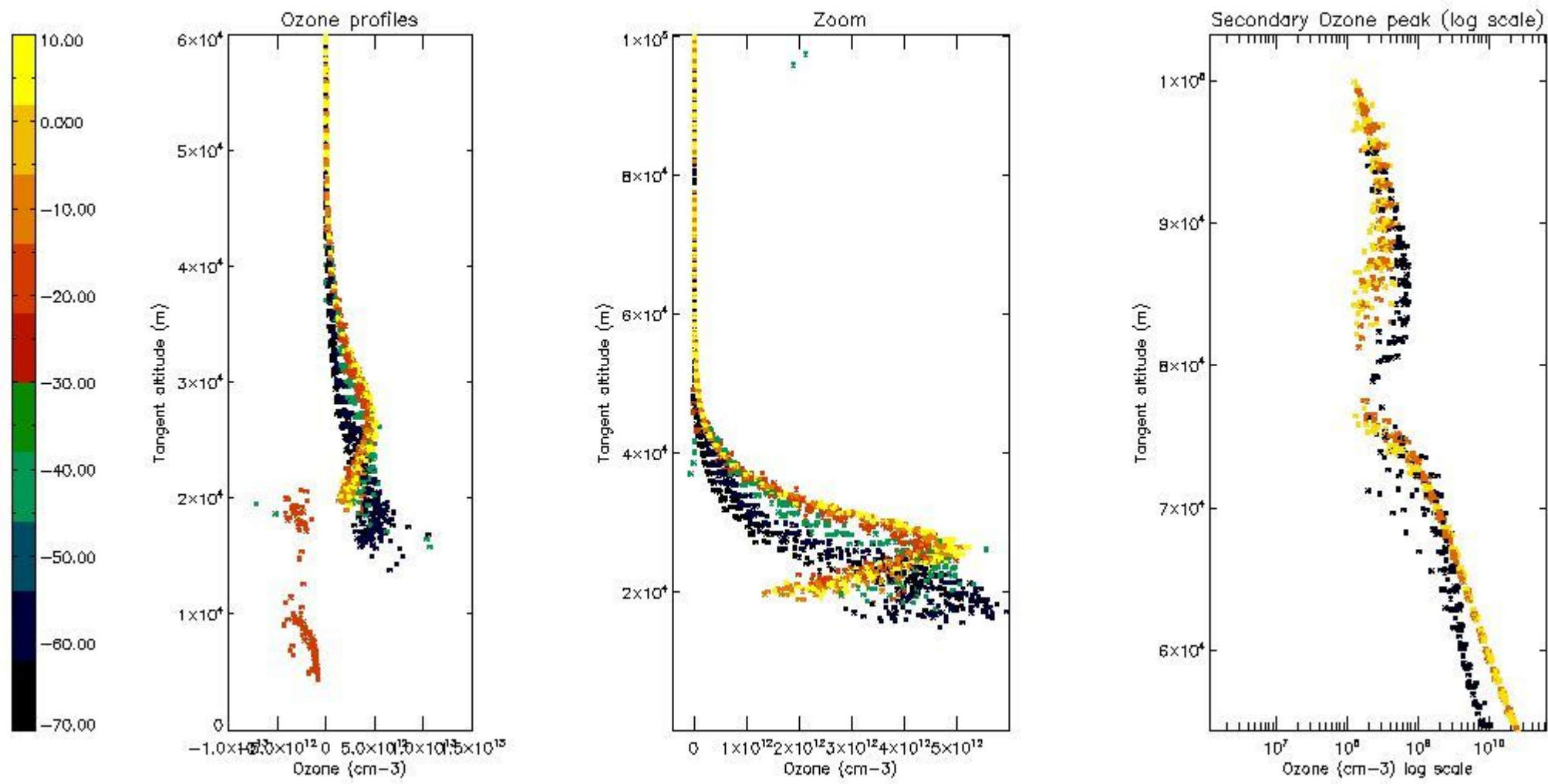
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



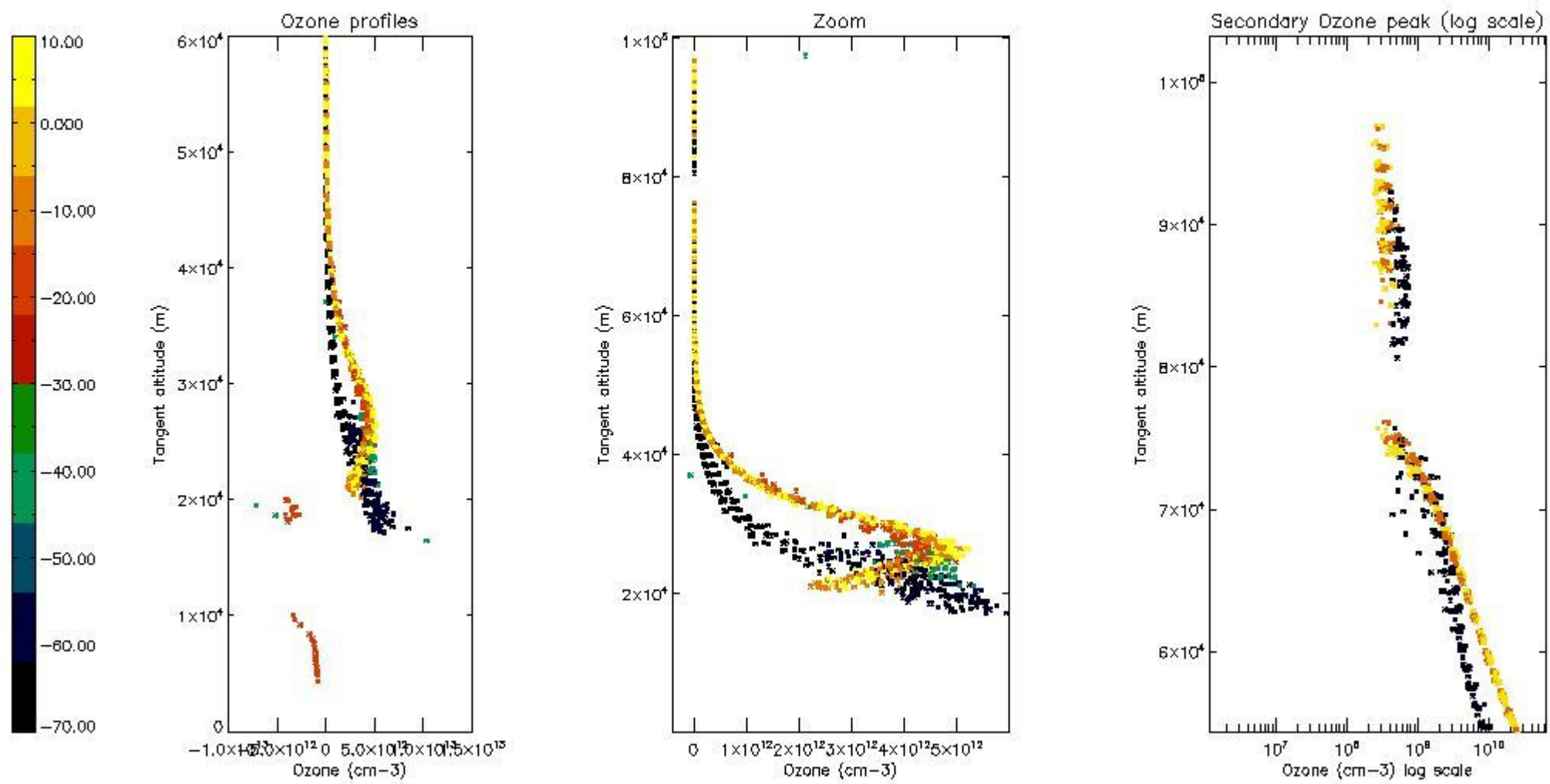
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



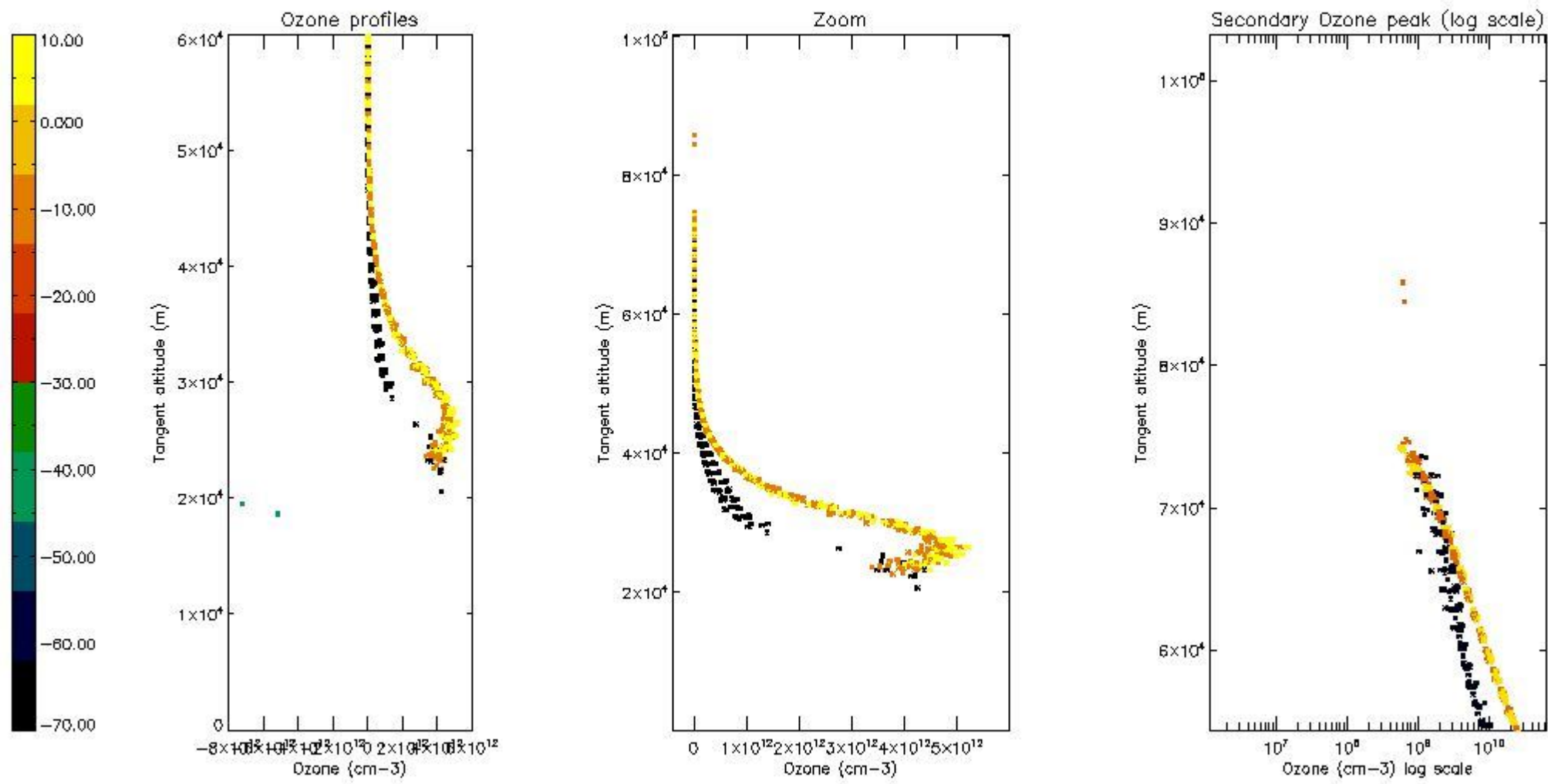
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



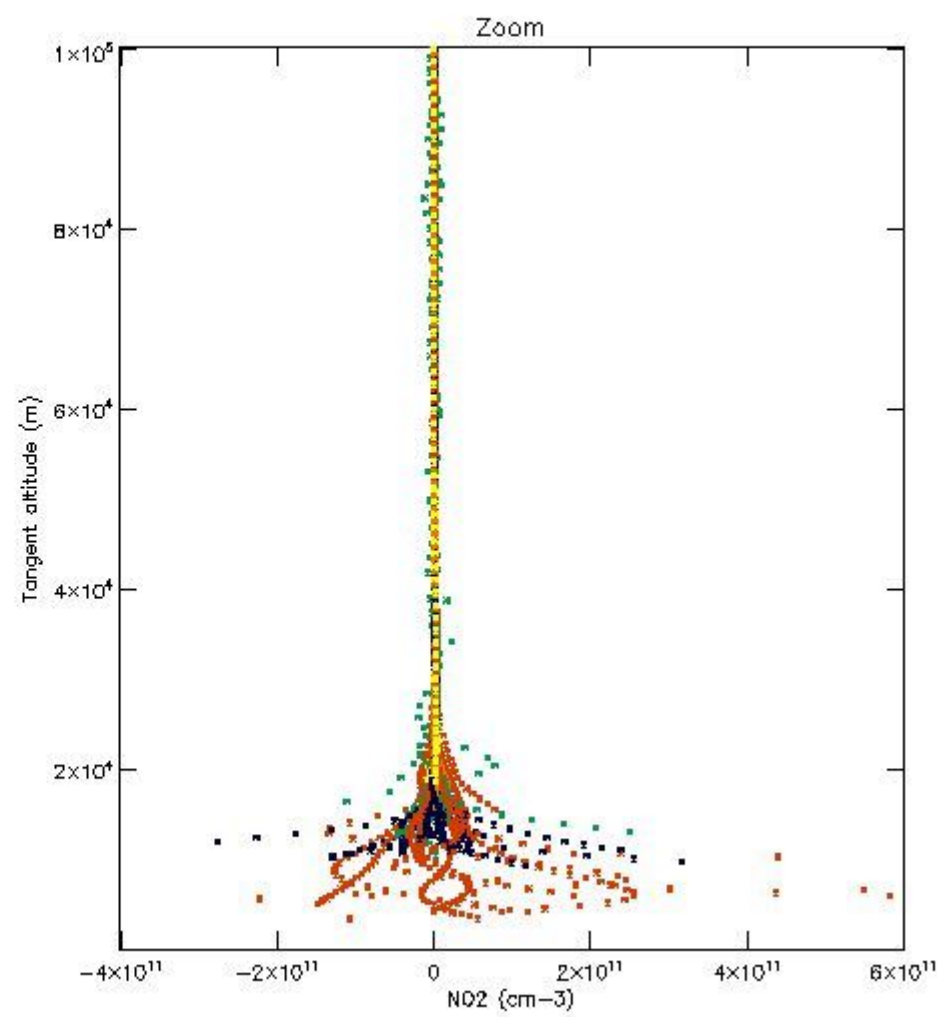
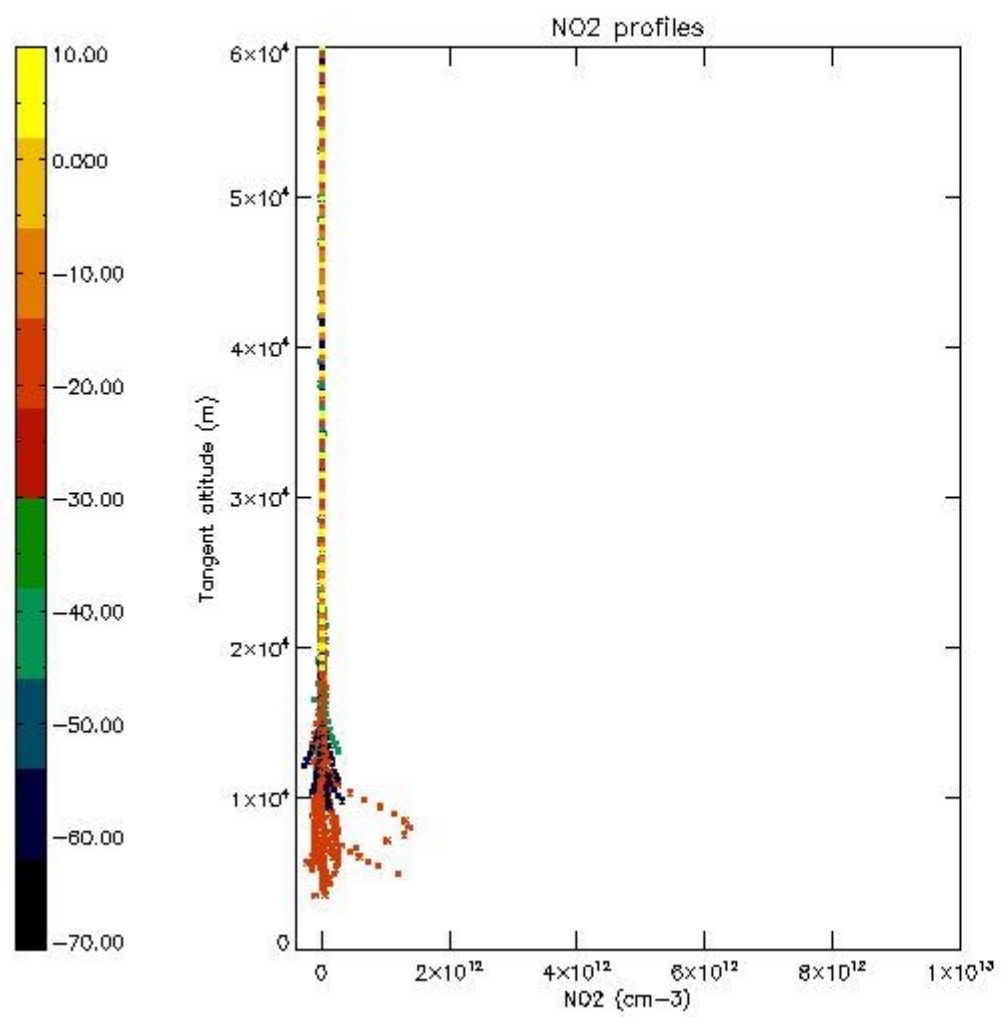
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



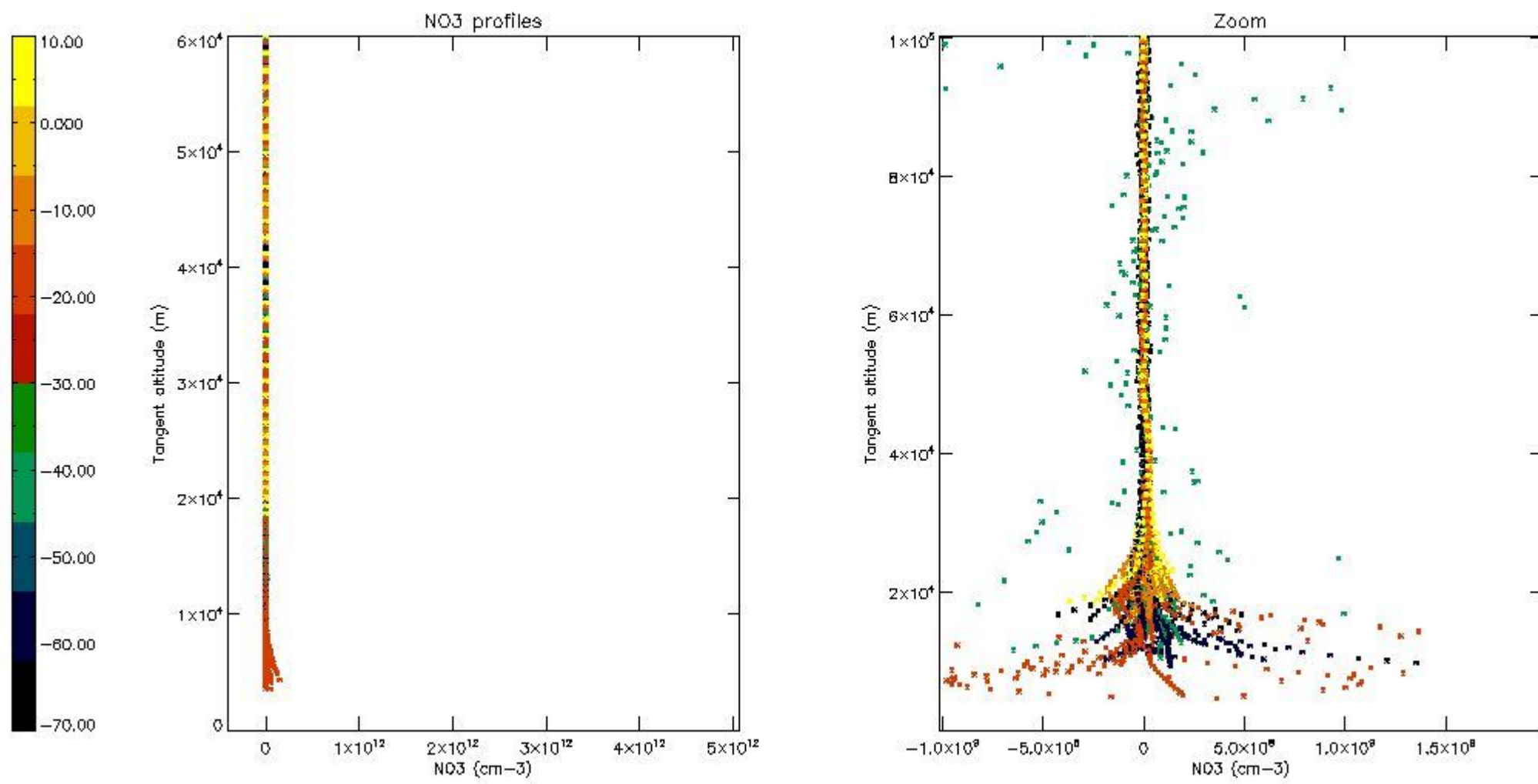
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



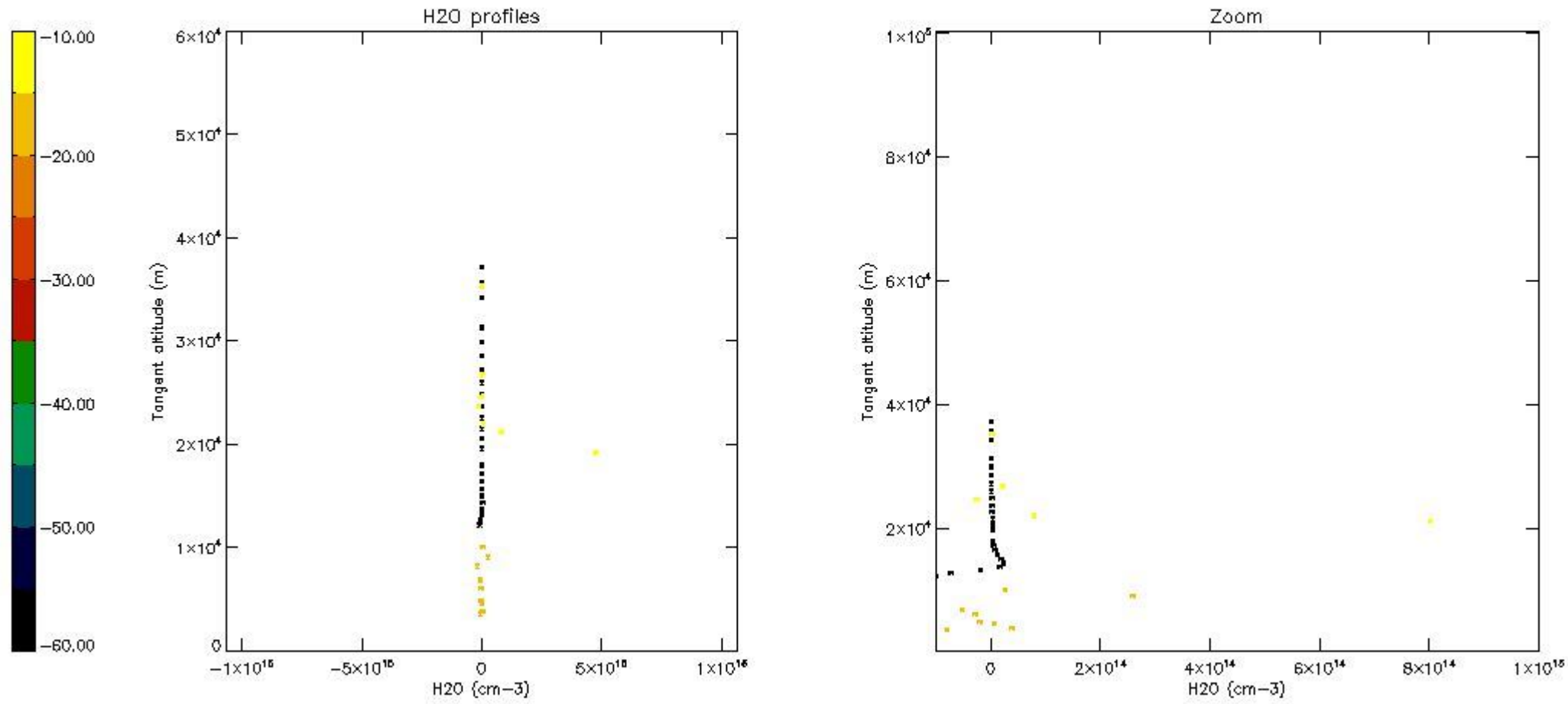
5.7 Plot NO3 profiles for all STD (dark without errors)

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	26-MAY-2007 00:03:07
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	26-MAY-2007 00:03:07
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	26-MAY-2007 00:03:07

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

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

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

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

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

Item	Value
Time of report generation	22APR2013 20:01:04
Data source version	GOMOS/6.01
Start time of products	26-05-2007 (26MAY2007 00:00:00)
Stop time of products	27-05-2007 (27MAY2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	297
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__2PRFIN20070526_000307_000000452058_00259_27367_3557.N1	26-MAY-2007 00:03:07	Dark	44.500	52	16Bet Cet	2.0370	4500.0	89	27367	No
2	GOM_NL__2PRFIN20070526_000953_000000402058_00259_27367_3558.N1	26-MAY-2007 00:09:53	Dark	39.500	84	Alp Phe	2.3970	4500.0	79	27367	No
3	GOM_NL__2PRFIN20070526_001443_000000602058_00260_27368_3563.N1	26-MAY-2007 00:14:43	Dark	60.000	63	Bet Gru	2.1500	2800.0	120	27368	No
4	GOM_NL__2PRFIN20070526_001627_000000462058_00260_27368_3564.N1	26-MAY-2007 00:16:27	Dark	46.000	31	Alp Gru	1.7340	15200.	92	27368	No
5	GOM_NL__2PRFIN20070526_002145_000000422058_00260_27368_3565.N1	26-MAY-2007 00:21:45	Dark	41.500	45	Alp Pav	1.9400	26000.	83	27368	No
6	GOM_NL__2PRFIN20070526_002824_000000442058_00260_27368_3566.N1	26-MAY-2007 00:28:24	Straylight	44.000	141	Bet Ara	2.8400	4600.0	88	27368	No
7	GOM_NL__2PRFIN20070526_003113_000000462058_00260_27368_3567.N1	26-MAY-2007 00:31:13	Straylight	46.000	40	The Sco	1.8590	7100.0	92	27368	No
8	GOM_NL__2PRFIN20070526_003303_000000502058_00260_27368_3568.N1	26-MAY-2007 00:33:03	Straylight	50.000	25	35Lam Sco	1.6200	28000.	100	27368	No
9	GOM_NL__2PRFIN20070526_003501_000000452058_00260_27368_3569.N1	26-MAY-2007 00:35:01	Twilight_and_stray	45.000	75	26Eps Sco	2.2910	4250.0	90	27368	No
10	GOM_NL__2PRFIN20070526_003750_000000582058_00260_27368_3570.N1	26-MAY-2007 00:37:50	Bright	57.500	16	21Alp Sco	1.0200	3000.0	115	27368	No
11	GOM_NL__2PRFIN20070526_004011_000000412058_00260_27368_3571.N1	26-MAY-2007 00:40:11	Bright	41.000	97	8Bet1Sco	2.5610	30000.	82	27368	No
12	GOM_NL__2PRFIN20070526_004338_000000372058_00260_27368_3572.N1	26-MAY-2007 00:43:38	Bright	36.500	104	27Bet Lib	2.6140	13100.	73	27368	No
13	GOM_NL__2PRFIN20070526_004822_000000392058_00260_27368_3573.N1	26-MAY-2007 00:48:22	Bright	38.500	102	24Alp Ser	2.6000	4250.0	77	27368	No
14	GOM_NL__2PRFIN20070526_005410_000000362058_00260_27368_3574.N1	26-MAY-2007 00:54:10	Bright	36.000	83		2.3780	11000.	72	27368	No
15	GOM_NL__2PRFIN20070526_005721_000000352058_00260_27368_3575.N1	26-MAY-2007 00:57:21	Bright	34.500	180	27Gam Boo	3.0400	8000.0	69	27368	No
16	GOM_NL__2PRFIN20070526_010516_000000522058_00260_27368_3576.N1	26-MAY-2007 01:05:16	Bright	51.500	119	14Eta Dra	2.7270	4700.0	103	27368	No
17	GOM_NL__2PRFIN20070526_010731_000000342058_00260_27368_3577.N1	26-MAY-2007 01:07:31	Bright	33.500	60	7Bet UMi	2.0810	3950.0	67	27368	No
18	GOM_NL__2PRFIN20070526_011208_000000362058_00260_27368_3578.N1	26-MAY-2007 01:12:08	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	27368	No
19	GOM_NL__2PRFIN20070526_012017_000000412058_00260_27368_3579.N1	26-MAY-2007 01:20:17	Bright	40.500	76	27Gam Cas	2.3000	30000.	81	27368	No
20	GOM_NL__2PRFIN20070526_012129_000000472058_00260_27368_3580.N1	26-MAY-2007 01:21:29	Bright	47.000	68	18Alp Cas	2.2250	4500.0	94	27368	No
21	GOM_NL__2PRFIN20070526_012746_000000412058_00260_27368_3581.N1	26-MAY-2007 01:27:46	Bright	41.000	53	43Bet And	2.0480	3300.0	82	27368	No
22	GOM_NL__2PRFIN20070526_013452_000000462058_00260_27368_3582.N1	26-MAY-2007 01:34:52	Dark	46.000	140	88Gam Peg	2.8340	26000.	92	27368	No
23	GOM_NL__2PRFIN20070526_014343_000000462058_00260_27368_3583.N1	26-MAY-2007 01:43:43	Dark	46.000	52	16Bet Cet	2.0370	4500.0	92	27368	No
24	GOM_NL__2PRFIN20070526_015029_000000412058_00260_27368_3584.N1	26-MAY-2007 01:50:29	Dark	40.500	84	Alp Phe	2.3970	4500.0	81	27368	No
25	GOM_NL__2PRFIN20070526_015520_000000602058_00261_27369_3574.N1	26-MAY-2007 01:55:20	Dark	59.500	63	Bet Gru	2.1500	2800.0	119	27369	No
26	GOM_NL__2PRFIN20070526_015704_000000472058_00261_27369_3575.N1	26-MAY-2007 01:57:04	Dark	47.000	31	Alp Gru	1.7340	15200.	94	27369	No
27	GOM_NL__2PRFIN20070526_020222_000000422058_00261_27369_3576.N1	26-MAY-2007 02:02:22	Dark	42.000	45	Alp Pav	1.9400	26000.	84	27369	No
28	GOM_NL__2PRFIN20070526_020900_000000442058_00261_27369_3577.N1	26-MAY-2007 02:09:00	Straylight	43.500	141	Bet Ara	2.8400	4600.0	87	27369	No
29	GOM_NL__2PRFIN20070526_021149_000000492058_00261_27369_3578.N1	26-MAY-2007 02:11:49	Straylight	49.000	40	The Sco	1.8590	7100.0	98	27369	No
30	GOM_NL__2PRFIN20070526_021339_000000502058_00261_27369_3579.N1	26-MAY-2007 02:13:39	Straylight	50.000	25	35Lam Sco	1.6200	28000.	100	27369	No
31	GOM_NL__2PRFIN20070526_021538_000000452058_00261_27369_3580.N1	26-MAY-2007 02:15:38	Twilight_and_stray	45.000	75	26Eps Sco	2.2910	4250.0	90	27369	No
32	GOM_NL__2PRFIN20070526_021826_000000572058_00261_27369_3581.N1	26-MAY-2007 02:18:26	Bright	57.000	16	21Alp Sco	1.0200	3000.0	114	27369	No
33	GOM_NL__2PRFIN20070526_022047_000000412058_00261_27369_3582.N1	26-MAY-2007 02:20:47	Bright	40.500	97	8Bet1Sco	2.5610	30000.	81	27369	No
34	GOM_NL__2PRFIN20070526_022414_000000372058_00261_27369_3583.N1	26-MAY-2007 02:24:14	Bright	37.000	104	27Bet Lib	2.6140	13100.	74	27369	No
35	GOM_NL__2PRFIN20070526_022858_000000392058_00261_27369_3584.N1	26-MAY-2007 02:28:58	Bright	38.500	102	24Alp Ser	2.6000	4250.0	77	27369	No
36	GOM_NL__2PRFIN20070526_023446_000000382058_00261_27369_3585.N1	26-MAY-2007 02:34:46	Bright	37.500	83		2.3780	11000.	75	27369	No
37	GOM_NL__2PRFIN20070526_023756_000000342058_00261_27369_3586.N1	26-MAY-2007 02:37:56	Bright	33.500	180	27Gam Boo	3.0400	8000.0	67	27369	No
38	GOM_NL__2PRFIN20070526_024551_000000392058_00261_27369_3587.N1	26-MAY-2007 02:45:51	Bright	38.500	119	14Eta Dra	2.7270	4700.0	77	27369	No
39	GOM_NL__2PRFIN20070526_024807_000000372058_00261_27369_3588.N1	26-MAY-2007 02:48:07	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	27369	No
40	GOM_NL__2PRFIN20070526_025243_000000362058_00261_27369_3589.N1	26-MAY-2007 02:52:43	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	27369	No
41	GOM_NL__2PRFIN20070526_030053_000000542058_00261_27369_3590.N1	26-MAY-2007 03:00:53	Bright	54.000	76	27Gam Cas	2.3000	30000.	108	27369	No
42	GOM_NL__2PRFIN20070526_030204_000000482058_00261_27369_3591.N1	26-MAY-2007 03:02:04	Bright	48.000	68	18Alp Cas	2.2250	4500.0	96	27369	No

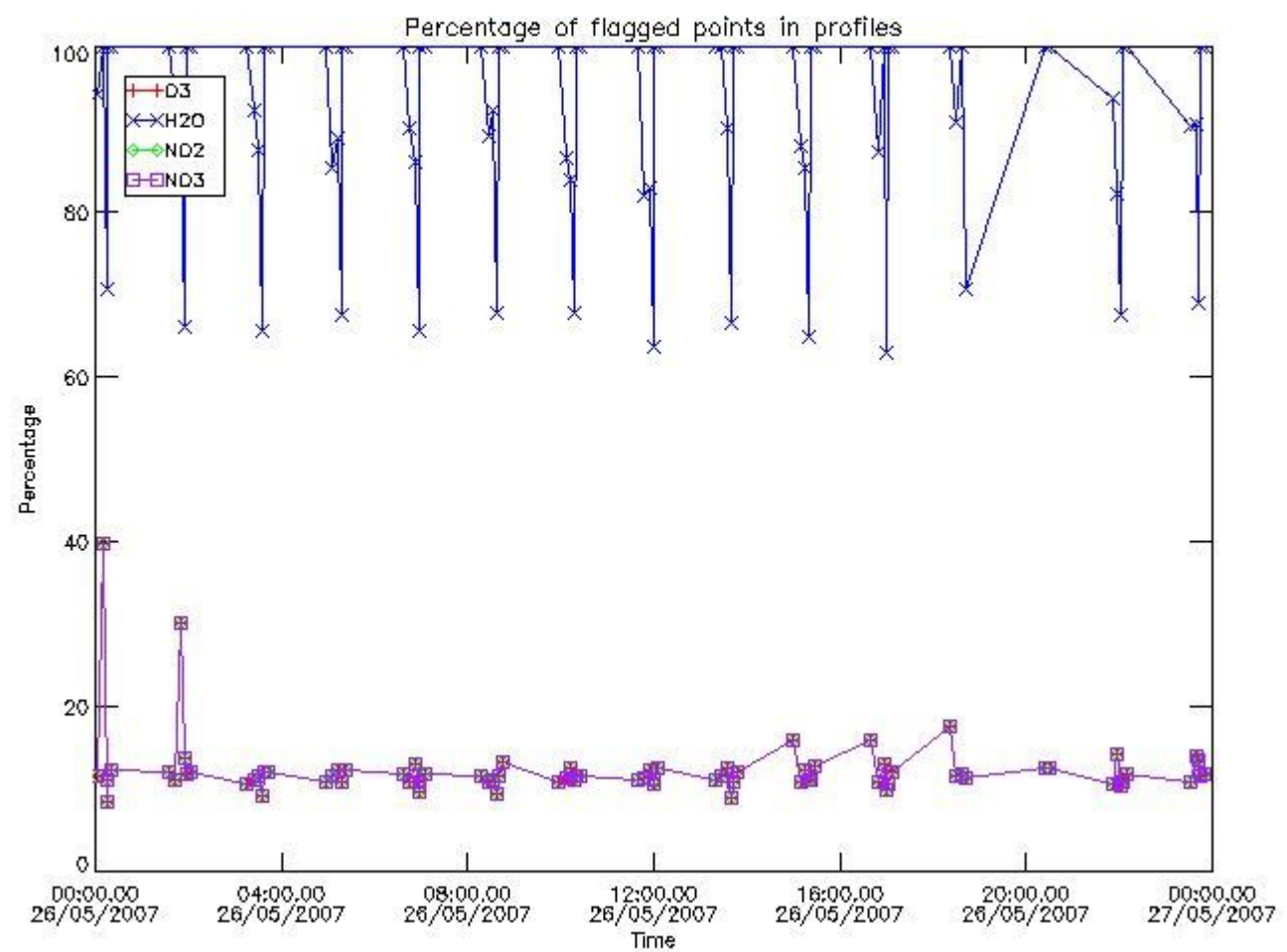
161	GOM_NL__2PRFIN20070526_115408_000000422058_00266_27374_3677.N1	26-MAY-2007 11:54:08	Dark	41.500	84	Alp Phe	2.3970	4500.0	83	27374	No
162	GOM_NL__2PRFIN20070526_115900_000000492058_00267_27375_3671.N1	26-MAY-2007 11:59:00	Dark	48.500	63	Bet Gru	2.1500	2800.0	97	27375	No
163	GOM_NL__2PRFIN20070526_120045_000000462058_00267_27375_3672.N1	26-MAY-2007 12:00:45	Dark	46.000	31	Alp Gru	1.7340	15200.	92	27375	No
164	GOM_NL__2PRFIN20070526_120602_000000412058_00267_27375_3673.N1	26-MAY-2007 12:06:02	Dark	41.000	45	Alp Pav	1.9400	26000.	82	27375	No
165	GOM_NL__2PRFIN20070526_121239_000000392058_00267_27375_3674.N1	26-MAY-2007 12:12:39	Straylight	38.500	141	Bet Ara	2.8400	4600.0	77	27375	No
166	GOM_NL__2PRFIN20070526_121528_000000502058_00267_27375_3675.N1	26-MAY-2007 12:15:28	Straylight	50.000	40	The Sco	1.8590	7100.0	100	27375	No
167	GOM_NL__2PRFIN20070526_121718_000000482058_00267_27375_3676.N1	26-MAY-2007 12:17:18	Straylight	47.500	25	35Lam Sco	1.6200	28000.	95	27375	No
168	GOM_NL__2PRFIN20070526_121916_000000512058_00267_27375_3677.N1	26-MAY-2007 12:19:16	Twi_and_stray	50.500	75	26Eps Sco	2.2910	4250.0	101	27375	No
169	GOM_NL__2PRFIN20070526_122124_000000422058_00267_27375_3678.N1	26-MAY-2007 12:21:24	Twi_and_stray	41.500	136	23Tau Sco	2.8220	30000.	83	27375	No
170	GOM_NL__2PRFIN20070526_122423_000000412058_00267_27375_3679.N1	26-MAY-2007 12:24:23	Bright	40.500	97	8Bet1Sco	2.5610	30000.	81	27375	No
171	GOM_NL__2PRFIN20070526_122750_000000372058_00267_27375_3680.N1	26-MAY-2007 12:27:50	Bright	36.500	104	27Bet Lib	2.6140	13100.	73	27375	No
172	GOM_NL__2PRFIN20070526_122930_000000422058_00267_27375_3681.N1	26-MAY-2007 12:29:30	Bright	41.500	120	1Del Oph	2.7340	3200.0	83	27375	No
173	GOM_NL__2PRFIN20070526_123233_000000382058_00267_27375_3682.N1	26-MAY-2007 12:32:33	Bright	38.000	102	24Alp Ser	2.6000	4250.0	76	27375	No
174	GOM_NL__2PRFIN20070526_123822_000000382058_00267_27375_3683.N1	26-MAY-2007 12:38:22	Bright	37.500	83		2.3780	11000.	75	27375	No
175	GOM_NL__2PRFIN20070526_124132_000000472058_00267_27375_3684.N1	26-MAY-2007 12:41:32	Bright	46.500	180	27Gam Boo	3.0400	8000.0	93	27375	No
176	GOM_NL__2PRFIN20070526_124925_000000392058_00267_27375_3685.N1	26-MAY-2007 12:49:25	Bright	38.500	119	14Eta Dra	2.7270	4700.0	77	27375	No
177	GOM_NL__2PRFIN20070526_125142_000000372058_00267_27375_3686.N1	26-MAY-2007 12:51:42	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	27375	No
178	GOM_NL__2PRFIN20070526_125619_000000352058_00267_27375_3687.N1	26-MAY-2007 12:56:19	Bright	34.500	49	1Alp UMi	1.9900	6300.0	69	27375	No
179	GOM_NL__2PRFIN20070526_130428_000000462058_00267_27375_3688.N1	26-MAY-2007 13:04:28	Bright	45.500	76	27Gam Cas	2.3000	30000.	91	27375	No
180	GOM_NL__2PRFIN20070526_130540_000000382058_00267_27375_3689.N1	26-MAY-2007 13:05:40	Bright	37.500	68	18Alp Cas	2.2250	4500.0	75	27375	No
181	GOM_NL__2PRFIN20070526_131158_000000392058_00267_27375_3690.N1	26-MAY-2007 13:11:58	Bright	38.500	53	43Bet And	2.0480	3300.0	77	27375	No
182	GOM_NL__2PRFIN20070526_131907_000000462058_00267_27375_3691.N1	26-MAY-2007 13:19:07	Dark	46.000	140	88Gam Peg	2.8340	26000.	92	27375	No
183	GOM_NL__2PRFIN20070526_132758_000000442058_00267_27375_3692.N1	26-MAY-2007 13:27:58	Dark	44.000	52	16Bet Cet	2.0370	4500.0	88	27375	No
184	GOM_NL__2PRFIN20070526_133444_000000412058_00267_27375_3693.N1	26-MAY-2007 13:34:44	Dark	41.000	84	Alp Phe	2.3970	4500.0	82	27375	No
185	GOM_NL__2PRFIN20070526_133937_000000572058_00268_27376_3691.N1	26-MAY-2007 13:39:37	Dark	57.000	63	Bet Gru	2.1500	2800.0	114	27376	No
186	GOM_NL__2PRFIN20070526_134122_000000472058_00268_27376_3692.N1	26-MAY-2007 13:41:22	Dark	47.000	31	Alp Gru	1.7340	15200.	94	27376	No
187	GOM_NL__2PRFIN20070526_134638_000000432058_00268_27376_3693.N1	26-MAY-2007 13:46:38	Dark	42.500	45	Alp Pav	1.9400	26000.	85	27376	No
188	GOM_NL__2PRFIN20070526_135315_000000422058_00268_27376_3694.N1	26-MAY-2007 13:53:15	Straylight	41.500	141	Bet Ara	2.8400	4600.0	83	27376	No
189	GOM_NL__2PRFIN20070526_135605_000000502058_00268_27376_3695.N1	26-MAY-2007 13:56:05	Straylight	49.500	40	The Sco	1.8590	7100.0	99	27376	No
190	GOM_NL__2PRFIN20070526_135755_000000512058_00268_27376_3696.N1	26-MAY-2007 13:57:55	Straylight	51.000	25	35Lam Sco	1.6200	28000.	102	27376	No
191	GOM_NL__2PRFIN20070526_135952_000000462058_00268_27376_3697.N1	26-MAY-2007 13:59:52	Twi_and_stray	45.500	75	26Eps Sco	2.2910	4250.0	91	27376	No
192	GOM_NL__2PRFIN20070526_140200_000000442058_00268_27376_3698.N1	26-MAY-2007 14:02:00	Twi_and_stray	43.500	136	23Tau Sco	2.8220	30000.	87	27376	No
193	GOM_NL__2PRFIN20070526_140500_000000402058_00268_27376_3699.N1	26-MAY-2007 14:05:00	Bright	39.500	97	8Bet1Sco	2.5610	30000.	79	27376	No
194	GOM_NL__2PRFIN20070526_140826_000000362058_00268_27376_3700.N1	26-MAY-2007 14:08:26	Bright	36.000	104	27Bet Lib	2.6140	13100.	72	27376	No
195	GOM_NL__2PRFIN20070526_141006_000000422058_00268_27376_3701.N1	26-MAY-2007 14:10:06	Bright	41.500	120	1Del Oph	2.7340	3200.0	83	27376	No
196	GOM_NL__2PRFIN20070526_141309_000000382058_00268_27376_3702.N1	26-MAY-2007 14:13:09	Bright	38.000	102	24Alp Ser	2.6000	4250.0	76	27376	No
197	GOM_NL__2PRFIN20070526_141858_000000352058_00268_27376_3703.N1	26-MAY-2007 14:18:58	Bright	35.000	83		2.3780	11000.	70	27376	No
198	GOM_NL__2PRFIN20070526_142208_000000352058_00268_27376_3704.N1	26-MAY-2007 14:22:08	Bright	35.000	180	27Gam Boo	3.0400	8000.0	70	27376	No
199	GOM_NL__2PRFIN20070526_143001_000000402058_00268_27376_3705.N1	26-MAY-2007 14:30:01	Bright	39.500	119	14Eta Dra	2.7270	4700.0	79	27376	No
200	GOM_NL__2PRFIN20070526_143218_000000342058_00268_27376_3706.N1	26-MAY-2007 14:32:18	Bright	34.000	60	7Bet UMi	2.0810	3950.0	68	27376	No
201	GOM_NL__2PRFIN20070526_143655_000000332058_00268_27376_3707.N1	26-MAY-2007 14:36:55	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	27376	No
202	GOM_NL__2PRFIN20070526_144504_000000522058_00268_27376_3708.N1	26-MAY-2007 14:45:04	Bright	52.000	76	27Gam Cas	2.3000	30000.	104	27376	No
203	GOM_NL__2PRFIN20070526_144616_000000372058_00268_27376_3709.N1	26-MAY-2007 14:46:16	Bright	36.500	68	18Alp Cas	2.2250	4500.0	73	27376	No
204	GOM_NL__2PRFIN20070526_145234_000000392058_00268_27376_3710.N1	26-MAY-2007 14:52:34	Bright	39.000	53	43Bet And	2.0480	3300.0	78	27376	No
205	GOM_NL__2PRFIN20070526_145943_000000352058_00268_27376_3711.N1	26-MAY-2007 14:59:43	Dark	35.000	140	88Gam Peg	2.8340	26000.	70	27376	No
206	GOM_NL__2PRFIN20070526_150835_000000472058_00268_27376_3712.N1	26-MAY-2007 15:08:35	Dark	46.500	52	16Bet Cet	2.0370	4500.0	93	27376	No
207	GOM_NL__2PRFIN20070526_151521_000000422058_00268_27376_3713.N1	26-MAY-2007 15:15:21	Dark	41.500	84	Alp Phe	2.3970	4500.0	83	27376	No
208	GOM_NL__2PRFIN20070526_152014_000000462058_00269_27377_3703.N1	26-MAY-2007 15:20:14	Dark	46.000	63	Bet Gru	2.1500	2800.0	92	27377	No
209	GOM_NL__2PRFIN20070526_152158_000000462058_00269_27377_3704.N1	26-MAY-2007 15:21:58	Dark	46.000	31	Alp Gru	1.7340	15200.	92	27377	No
210	GOM_NL__2PRFIN20070526_152715_000000402058_00269_27377_3705.N1	26-MAY-2007 15:27:15	Dark	40.000	45	Alp Pav	1.9400	26000.	80	27377	No
211	GOM_NL__2PRFIN20070526_153351_000000492058_00269_27377_3706.N1	26-MAY-2007 15:33:51	Straylight	49.000	141	Bet Ara	2.8400	4600.0	98	27377	No
212	GOM_NL__2PRFIN20070526_153641_000000502058_00269_27377_3707.N1	26-MAY-2007 15:36:41	Straylight	49.500	40	The Sco	1.8590	7100.0	99	27377	No
213	GOM_NL__2PRFIN20070526_153831_000000472058_00269_27377_3708.N1	26-MAY-2007 15:38:31	Straylight	46.500	25	35Lam Sco	1.6200	28000.	93	27377	No
214	GOM_NL__2PRFIN20070526_154028_000000502058_00269_27377_3709.N1	26-MAY-2007 15:40:28	Twi_and_stray	49.500	75	26Eps Sco	2.2910	4250.0	99	27377	No
215	GOM_NL__2PRFIN20070526_154236_000000442058_00269_27377_3710.N1	26-MAY-2007 15:42:36	Twi_and_stray	43.500	136	23Tau Sco	2.8220	30000.	87	27377	No
216	GOM_NL__2PRFIN20070526_154536_000000392058_00269_27377_3711.N1	26-MAY-2007 15:45:36	Bright	39.000	97	8Bet1Sco	2.5610	30000.	78	27377	No
217	GOM_NL__2PRFIN20070526_154902_000000362058_00269_27377_3712.N1	26-MAY-2007 15:49:02	Bright	36.000	104	27Bet Lib	2.6140	13100.	72	27377	No
218	GOM_NL__2PRFIN20070526_155042_000000422058_00269_27377_3713.N1	26-MAY-2007 15:50:42	Bright	41.500	120	1Del Oph	2.7340	3200.0	83	27377	No
219	GOM_NL__2PRFIN20070526_155345_000000382058_00269_27377_3714.N1	26-MAY-2007 15:53:45	Bright	38.000	102	24Alp Ser	2.6000	4250.0	76	27377	No

279	GOM_NL__2PRFIN20070526_222253_000000482058_00273_27381_3786.N1	26-MAY-2007 22:22:53	Twilight	47.500	75	26Eps Sco	2.2910	4250.0	95	27381	No
280	GOM_NL__2PRFIN20070526_222501_000000422058_00273_27381_3787.N1	26-MAY-2007 22:25:01	Twilight	42.000	136	23Tau Sco	2.8220	30000.	84	27381	No
281	GOM_NL__2PRFIN20070526_222800_000000392058_00273_27381_3788.N1	26-MAY-2007 22:28:00	Bright	38.500	97	8Bet1Sco	2.5610	30000.	77	27381	No
282	GOM_NL__2PRFIN20070526_223127_000000372058_00273_27381_3789.N1	26-MAY-2007 22:31:27	Bright	37.000	104	27Bet Lib	2.6140	13100.	74	27381	No
283	GOM_NL__2PRFIN20070526_223305_000000422058_00273_27381_3790.N1	26-MAY-2007 22:33:05	Bright	41.500	120	1Del Oph	2.7340	3200.0	83	27381	No
284	GOM_NL__2PRFIN20070526_223608_000000382058_00273_27381_3791.N1	26-MAY-2007 22:36:08	Bright	38.000	102	24Alp Ser	2.6000	4250.0	76	27381	No
285	GOM_NL__2PRFIN20070526_224157_000000382058_00273_27381_3792.N1	26-MAY-2007 22:41:57	Bright	37.500	83		2.3780	11000.	75	27381	No
286	GOM_NL__2PRFIN20070526_224508_000000352058_00273_27381_3793.N1	26-MAY-2007 22:45:08	Bright	34.500	180	27Gam Boo	3.0400	8000.0	69	27381	No
287	GOM_NL__2PRFIN20070526_225259_000000552058_00273_27381_3794.N1	26-MAY-2007 22:52:59	Bright	55.000	119	14Eta Dra	2.7270	4700.0	110	27381	No
288	GOM_NL__2PRFIN20070526_225518_000000382058_00273_27381_3795.N1	26-MAY-2007 22:55:18	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	27381	No
289	GOM_NL__2PRFIN20070526_225955_000000352058_00273_27381_3796.N1	26-MAY-2007 22:59:55	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	27381	No
290	GOM_NL__2PRFIN20070526_231534_000000392058_00273_27381_3797.N1	26-MAY-2007 23:15:34	Bright	39.000	53	43Bet And	2.0480	3300.0	78	27381	No
291	GOM_NL__2PRFIN20070526_233137_000000472058_00273_27381_3798.N1	26-MAY-2007 23:31:37	Dark	47.000	52	16Bet Cet	2.0370	4500.0	94	27381	No
292	GOM_NL__2PRFIN20070526_233823_000000442058_00273_27381_3799.N1	26-MAY-2007 23:38:23	Dark	43.500	84	Alp Phe	2.3970	4500.0	87	27381	No
293	GOM_NL__2PRFIN20070526_234317_000000602058_00274_27382_3791.N1	26-MAY-2007 23:43:17	Dark	60.000	63	Bet Gru	2.1500	2800.0	120	27382	No
294	GOM_NL__2PRFIN20070526_234502_000000452058_00274_27382_3792.N1	26-MAY-2007 23:45:02	Dark	44.500	31	Alp Gru	1.7340	15200.	89	27382	No
295	GOM_NL__2PRFIN20070526_235018_000000432058_00274_27382_3793.N1	26-MAY-2007 23:50:18	Dark	43.000	45	Alp Pav	1.9400	26000.	86	27382	No
296	GOM_NL__2PRFIN20070526_235653_000000432058_00274_27382_3794.N1	26-MAY-2007 23:56:53	Straylight	43.000	141	Bet Ara	2.8400	4600.0	86	27382	No
297	GOM_NL__2PRFIN20070526_235943_000000472058_00274_27382_3795.N1	26-MAY-2007 23:59:43	Straylight	47.000	40	The Sco	1.8590	7100.0	94	27382	No

3. Quality information per product

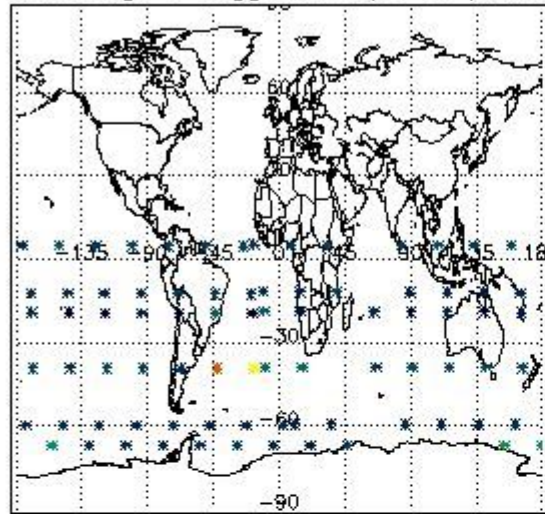
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

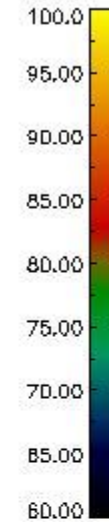
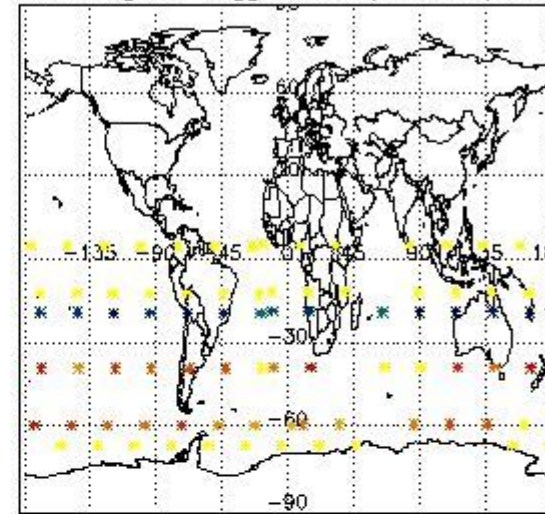


3.2 Plot quality information per product (world map)

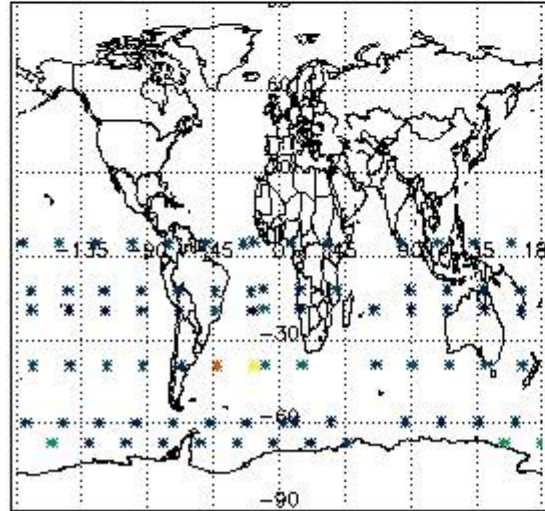
Percentage of flagged data per O3 profile



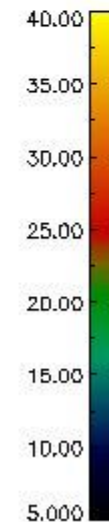
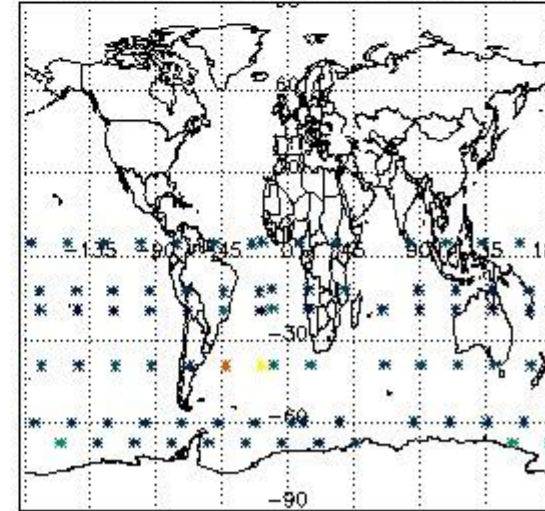
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

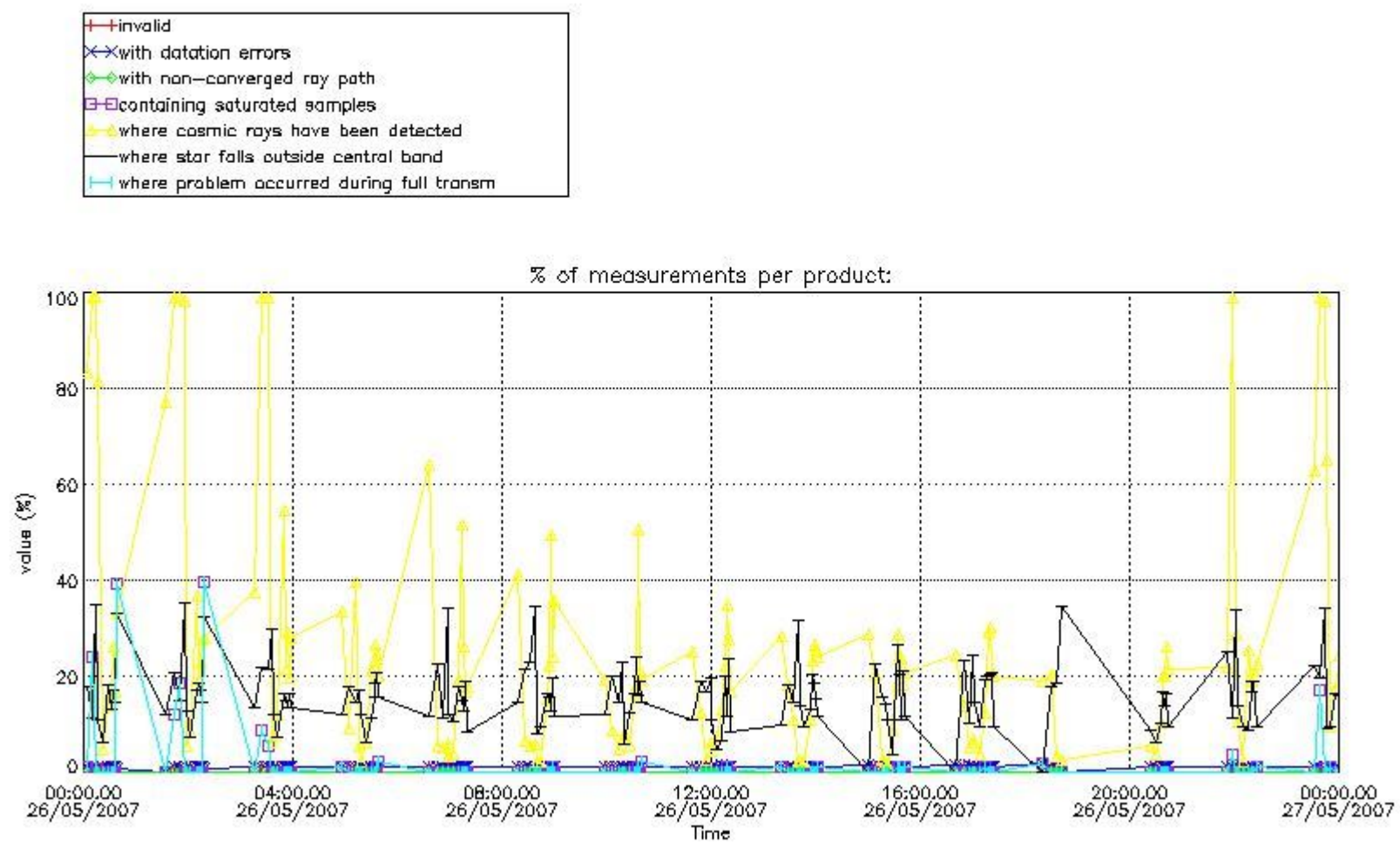


4. Level 1 quality information per product

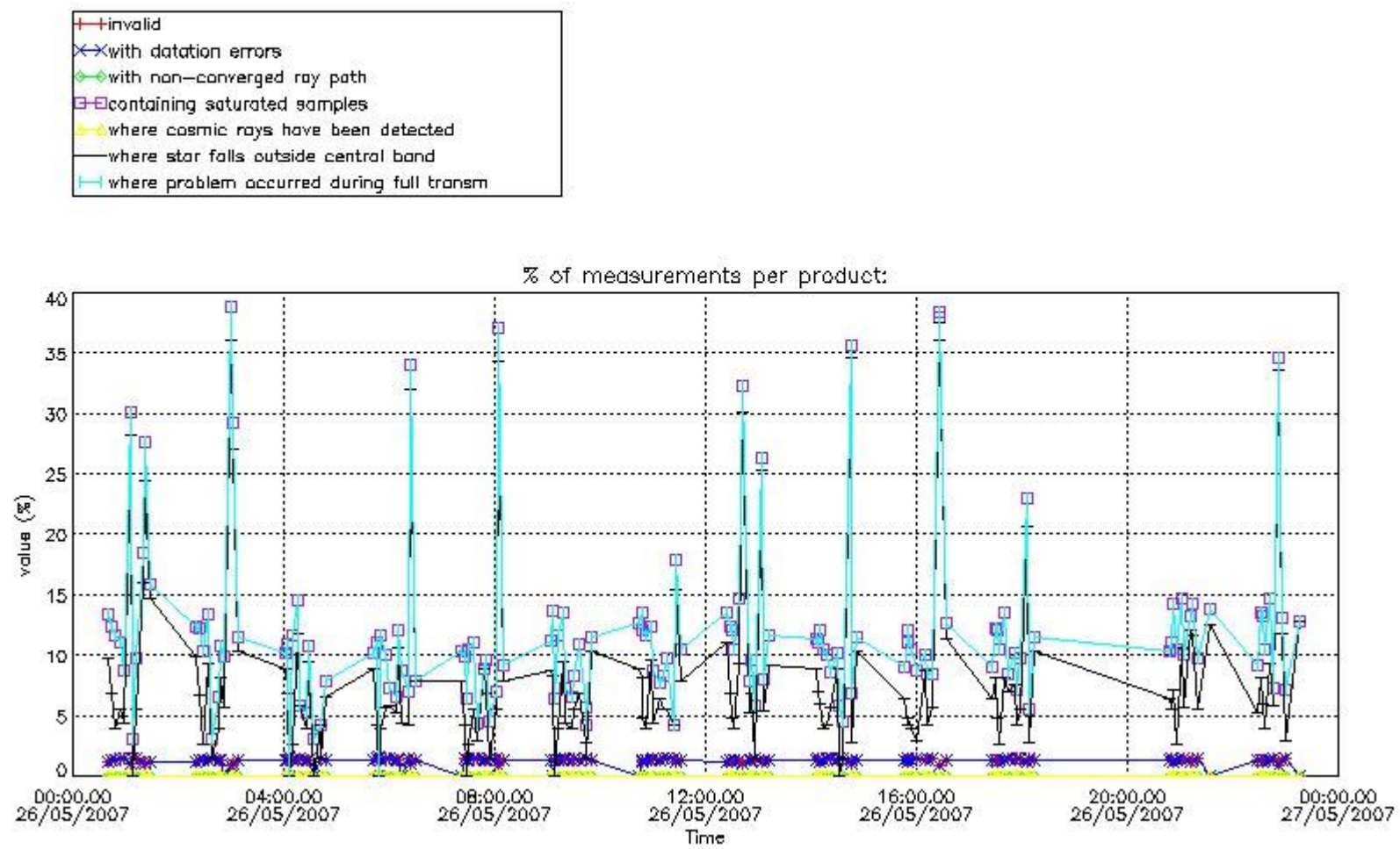
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



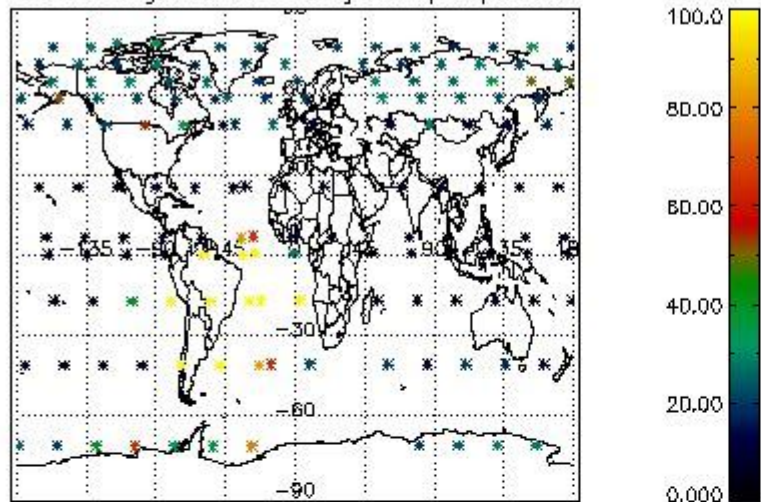
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



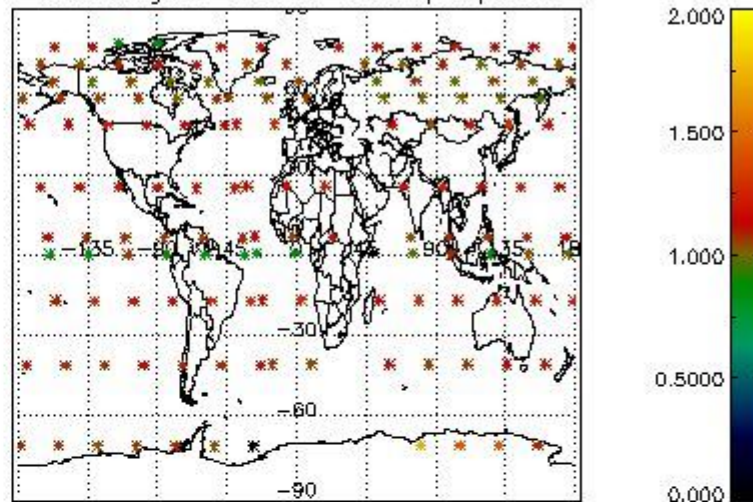
4.2 Plot quality information per product coming from level 1b processing (world map)

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

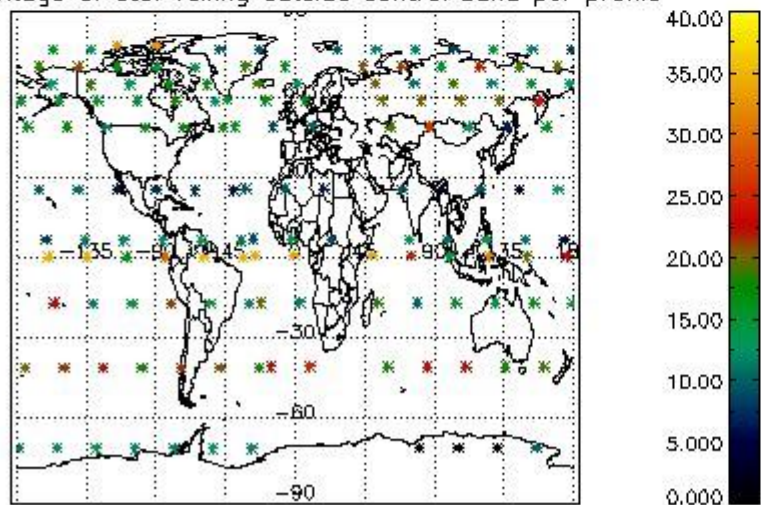
Percentage of cosmic ray hits per profile



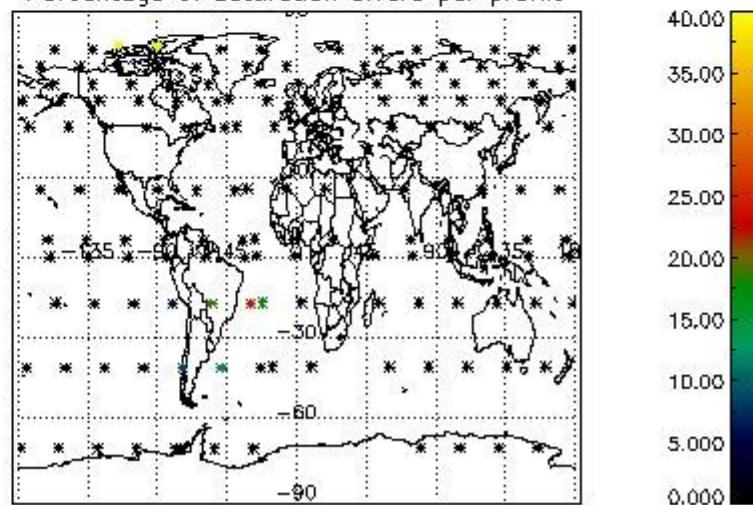
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

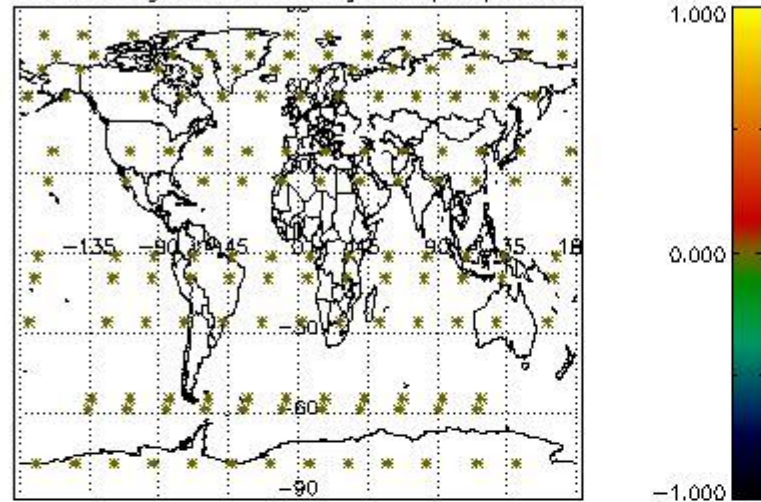


Percentage of saturation errors per profile

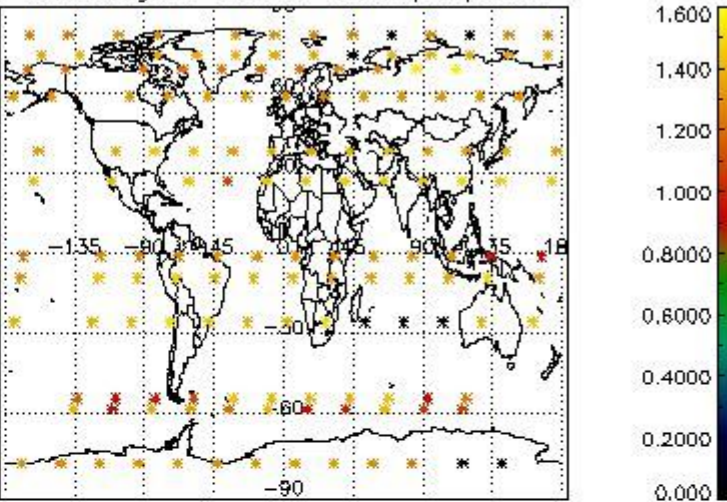


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

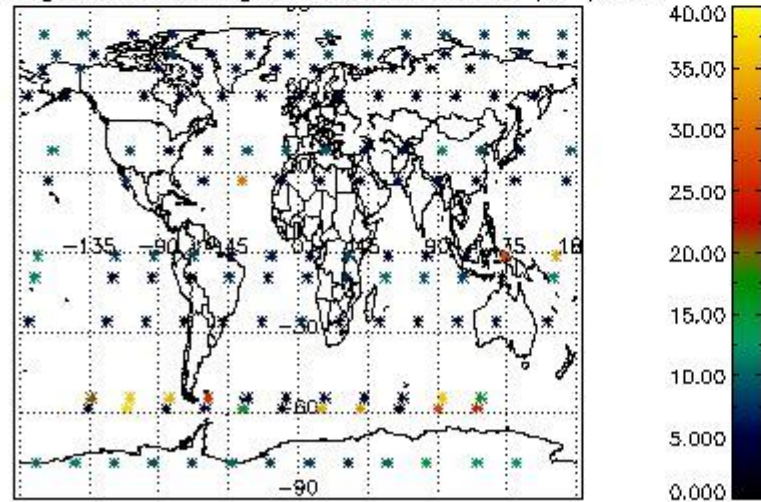
Percentage of cosmic ray hits per profile



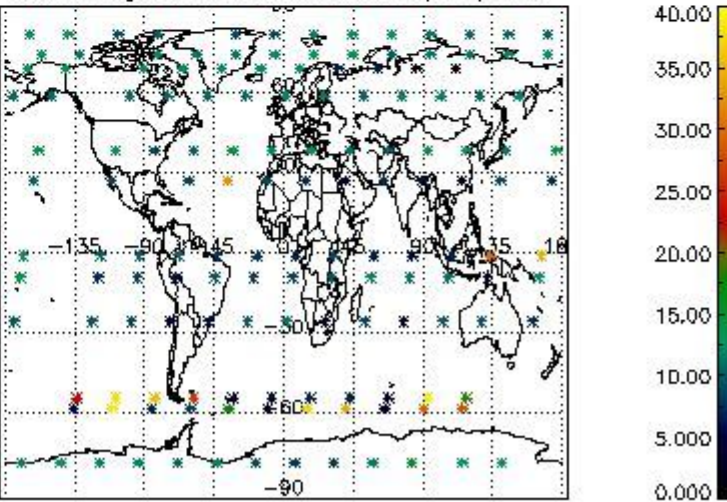
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

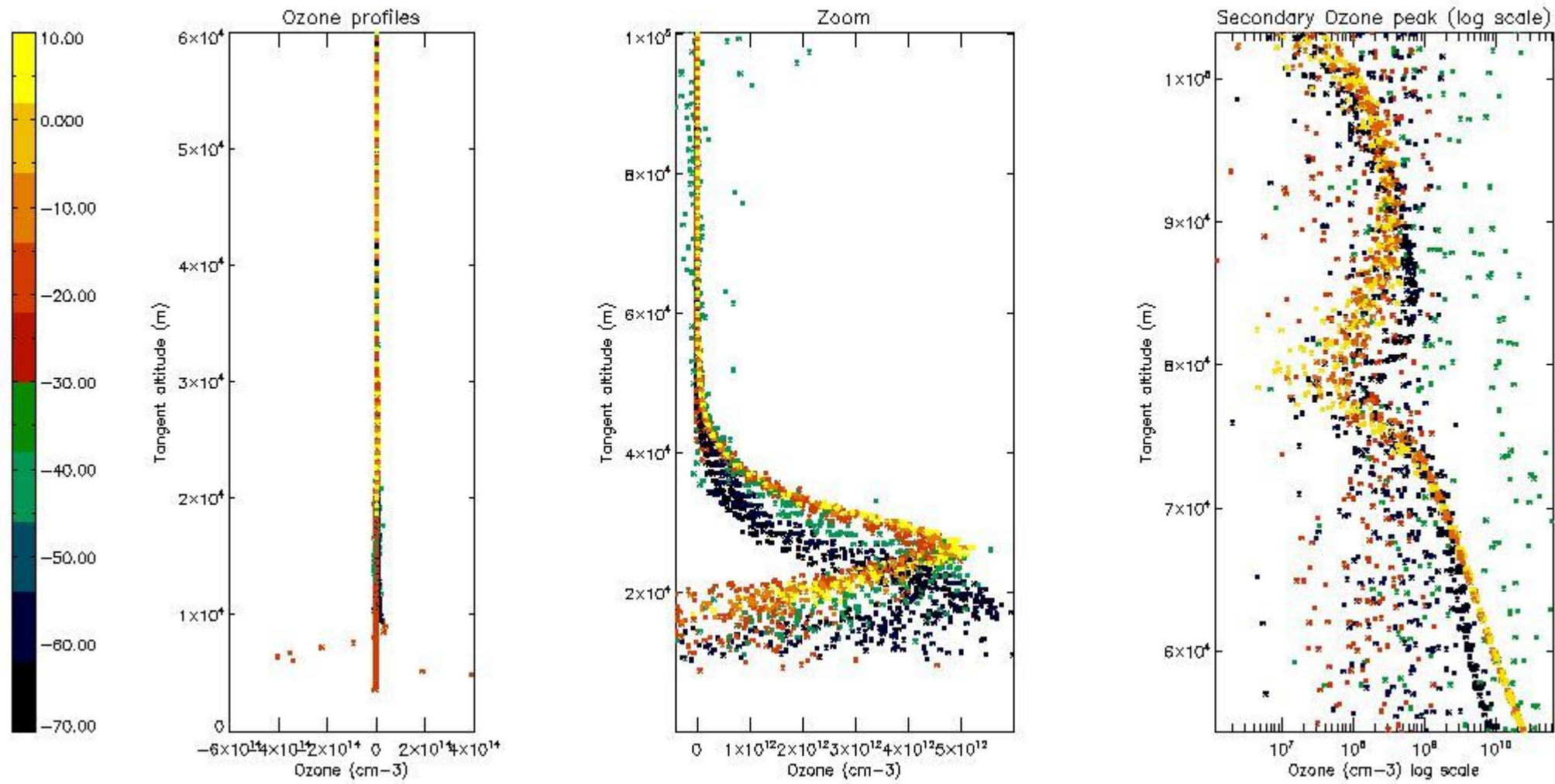
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	30
STD < 20	14

STD < 10	10
STD < 5	6

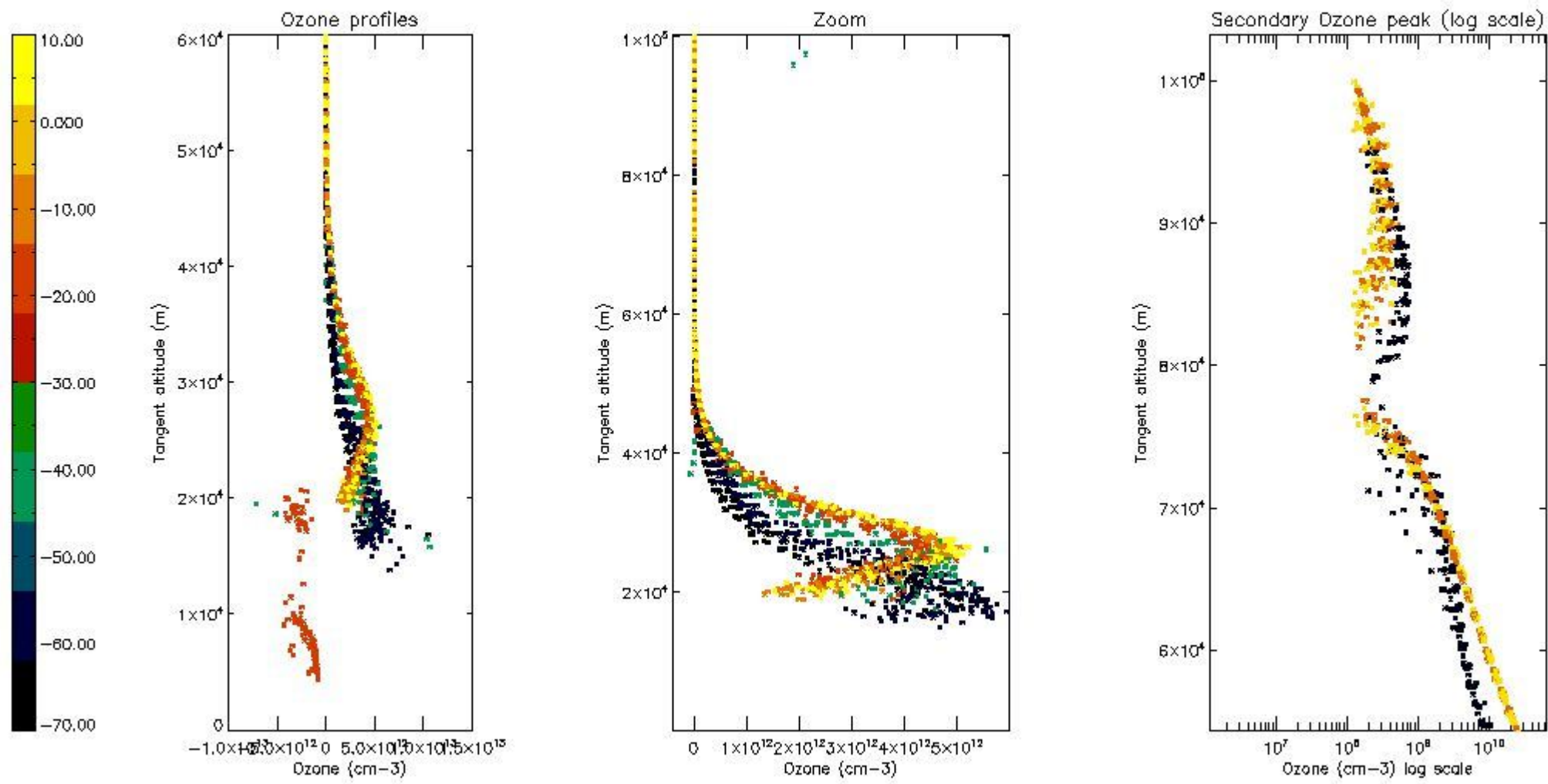
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



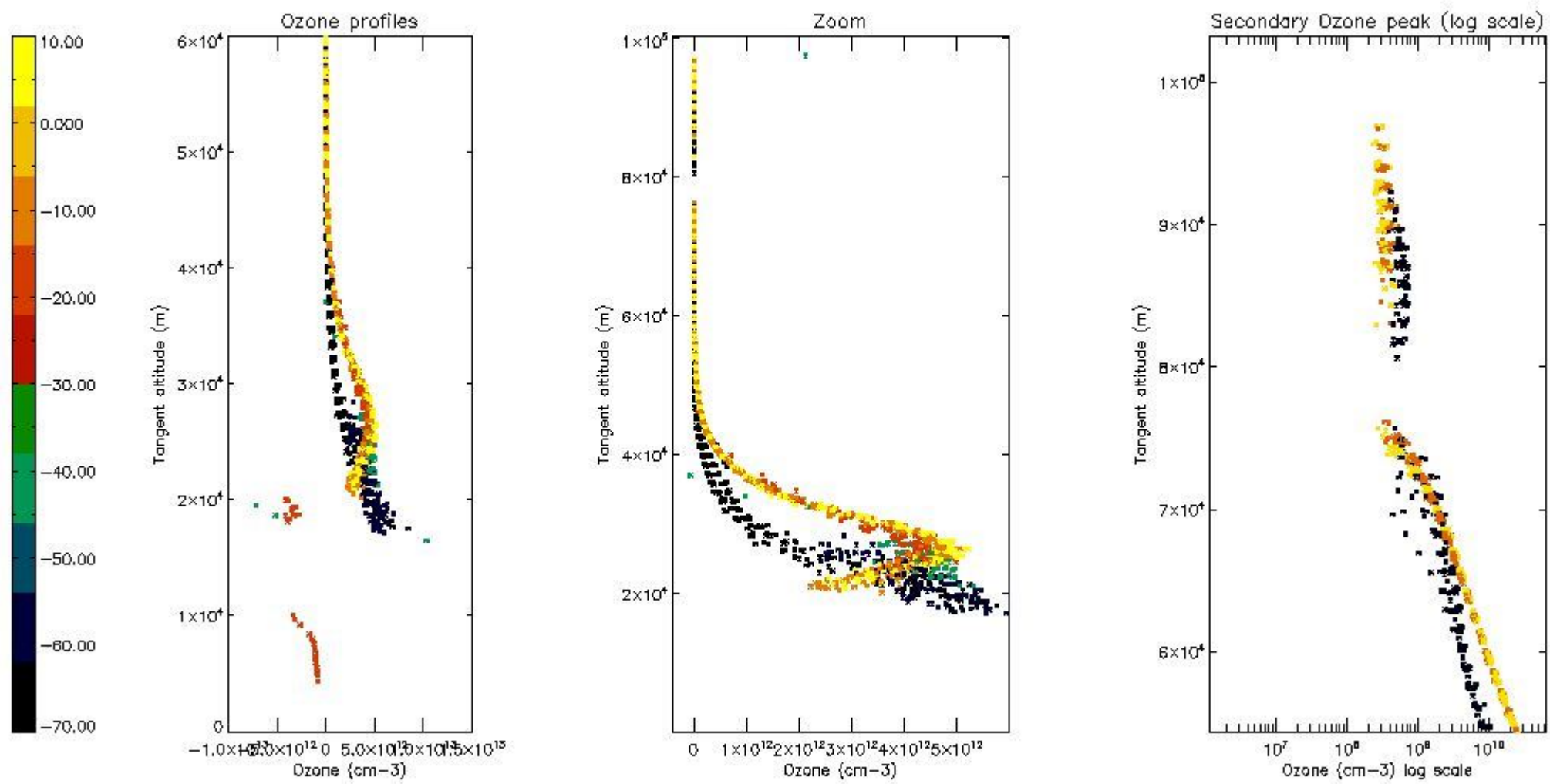
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



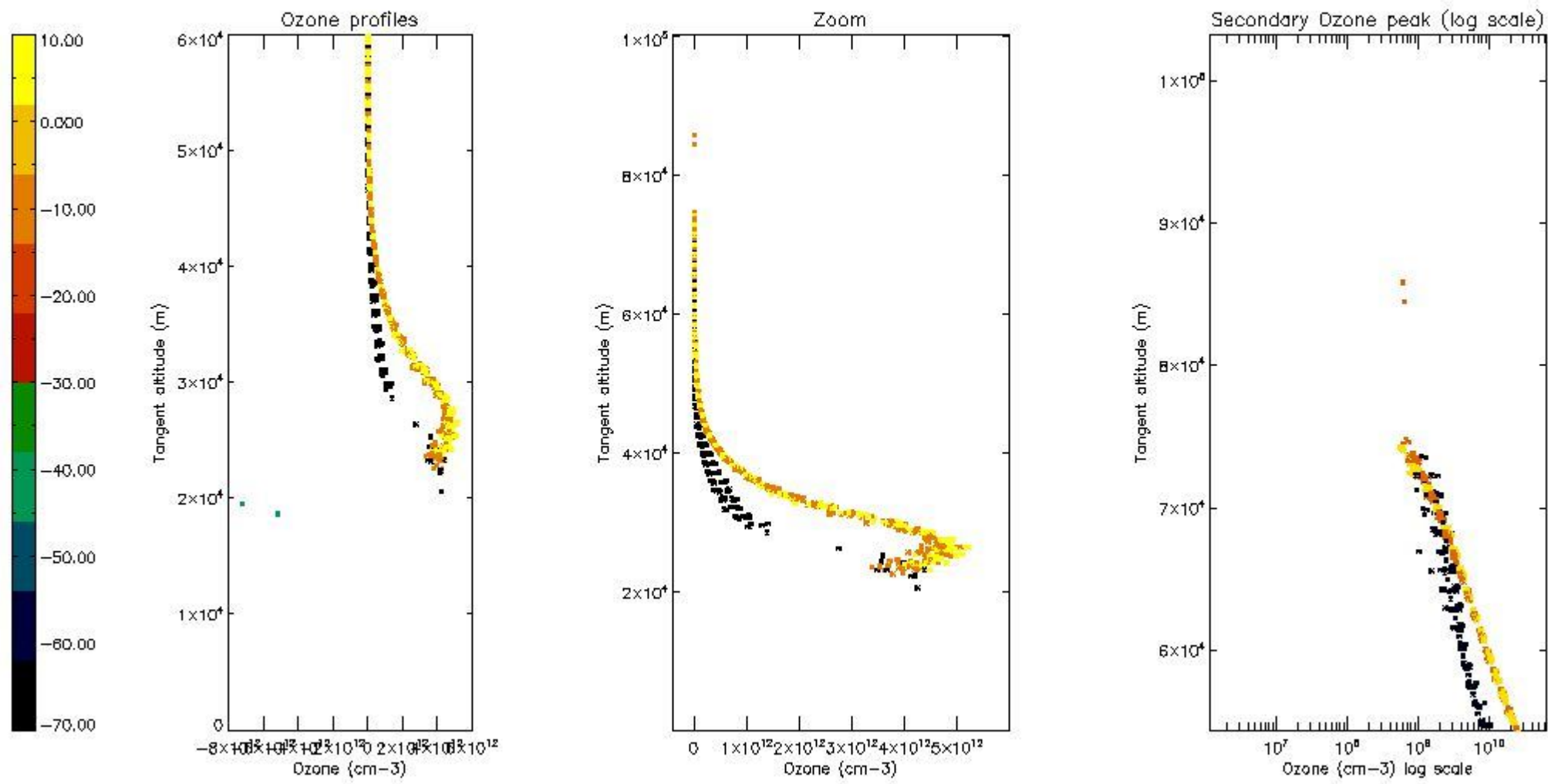
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



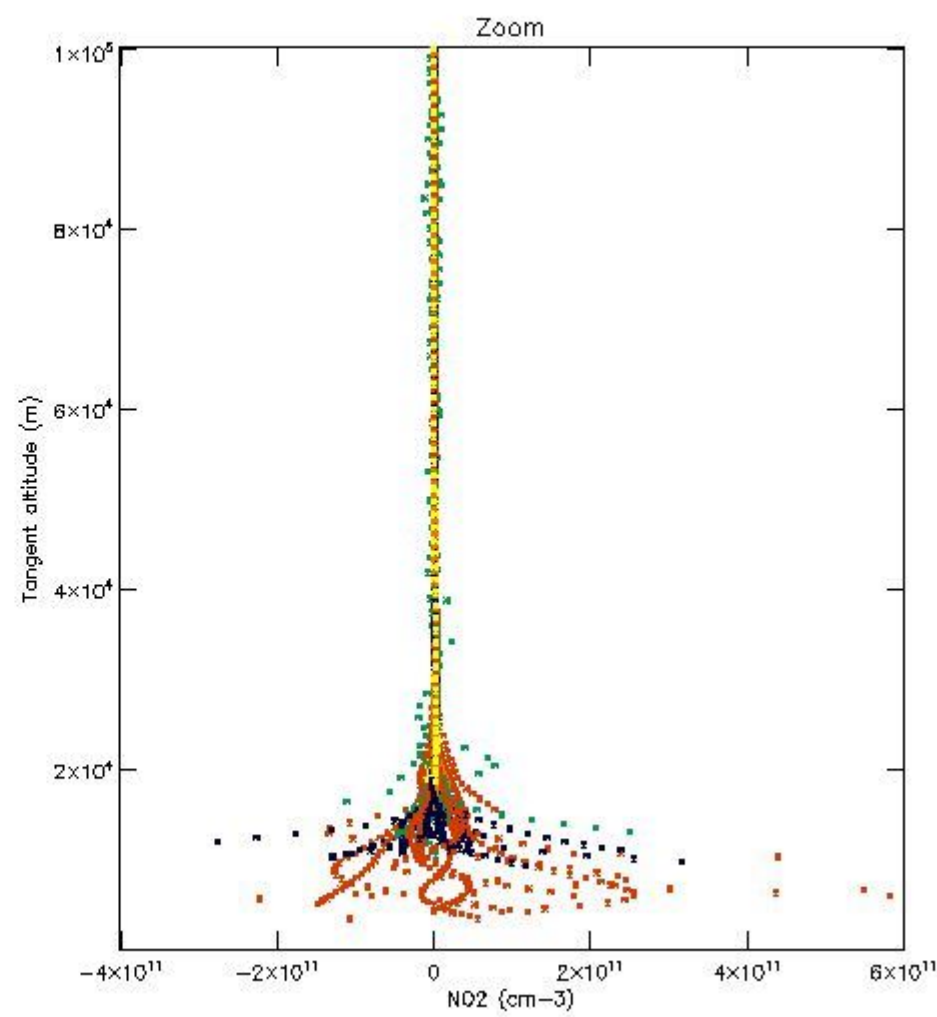
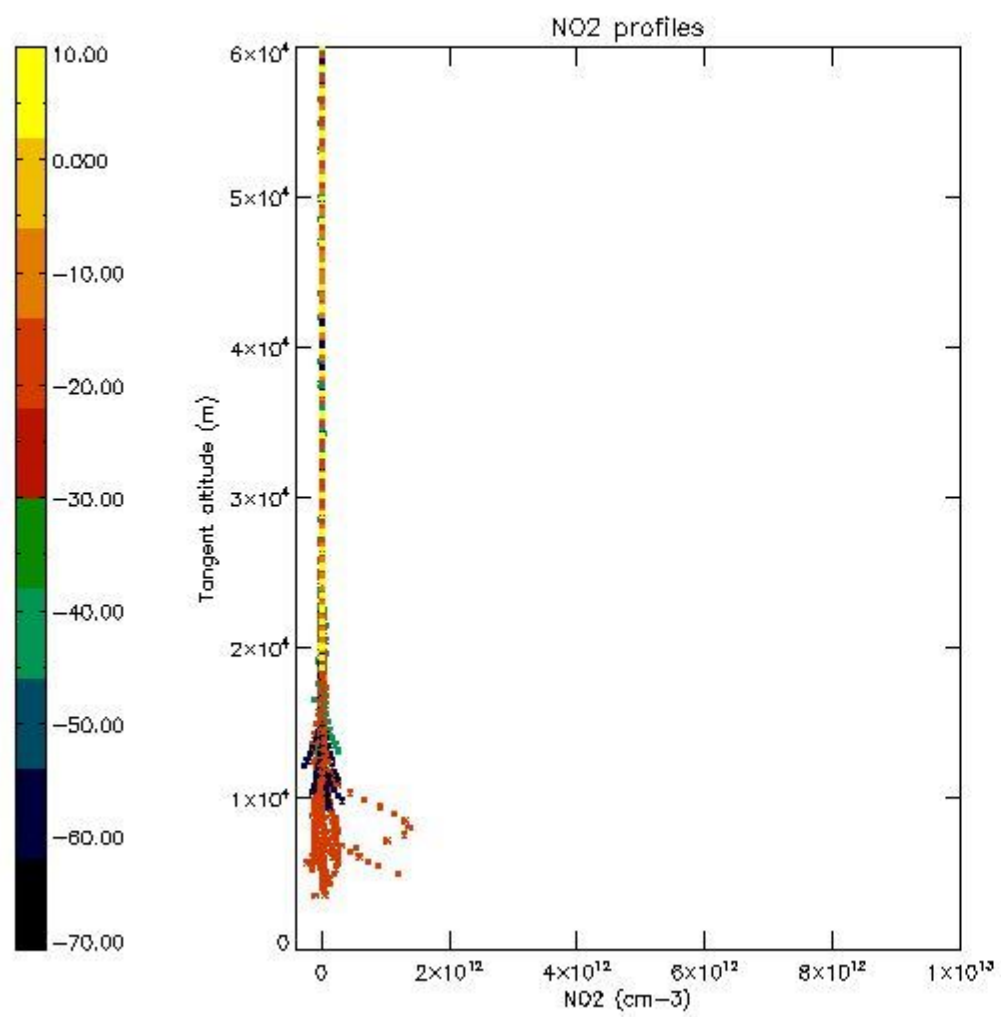
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



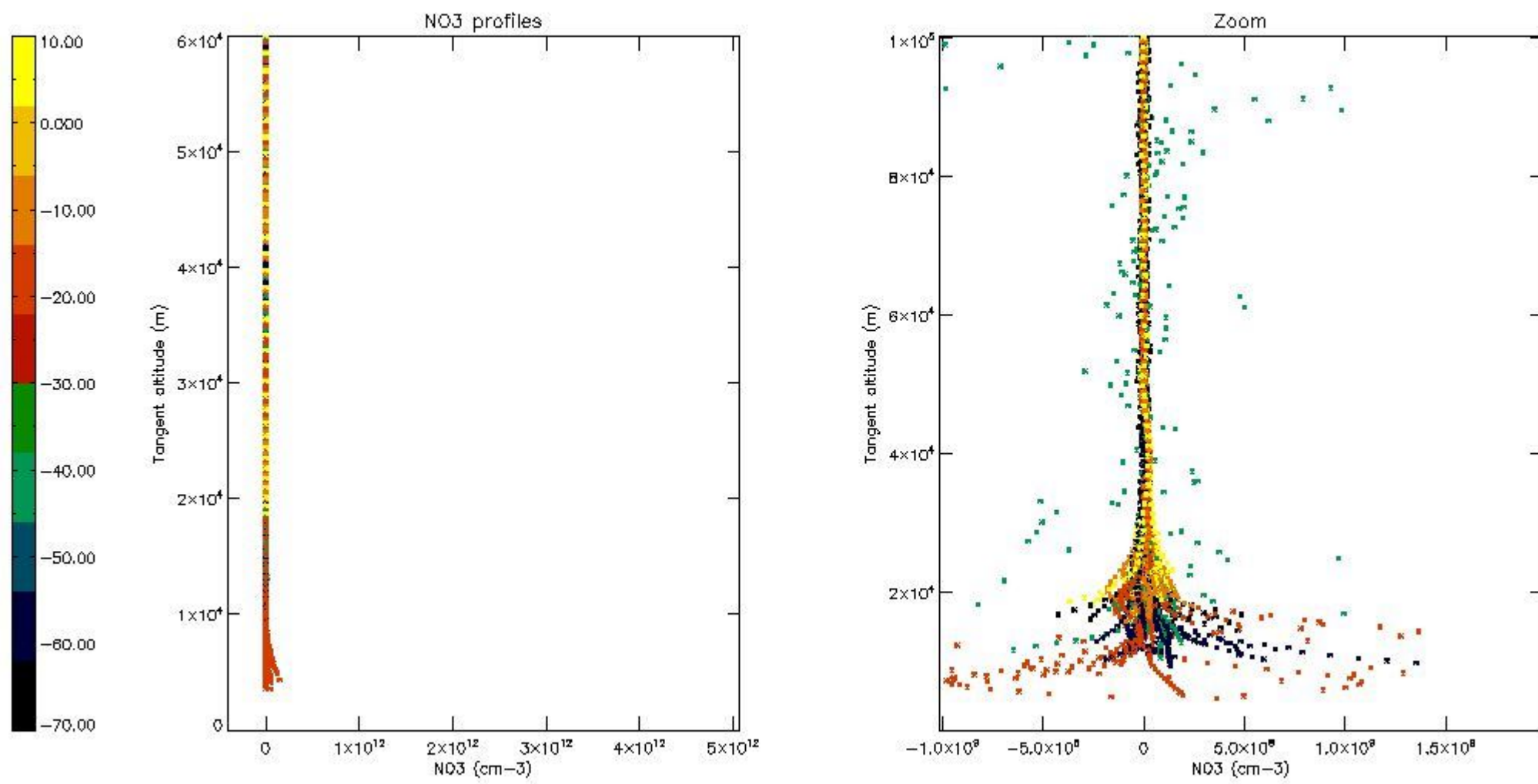
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



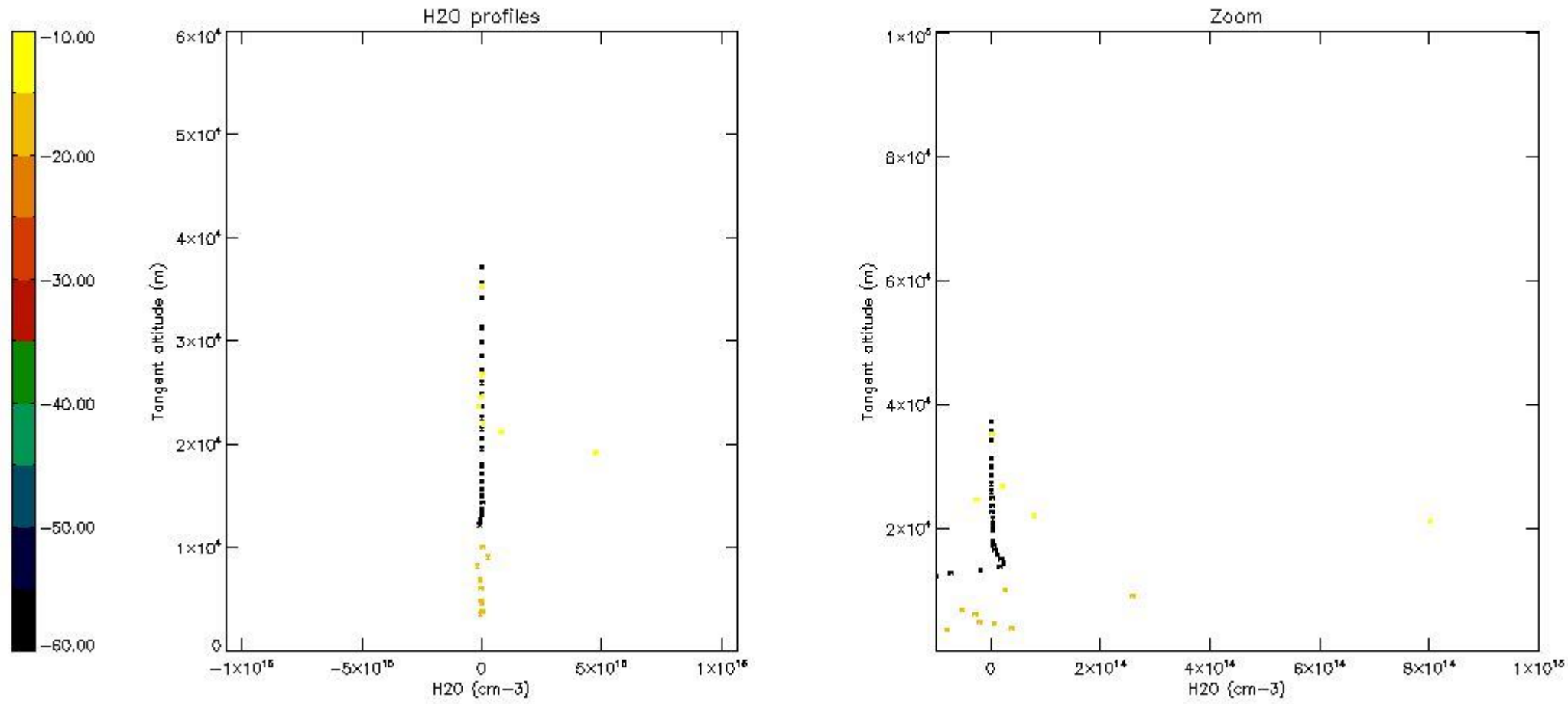
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

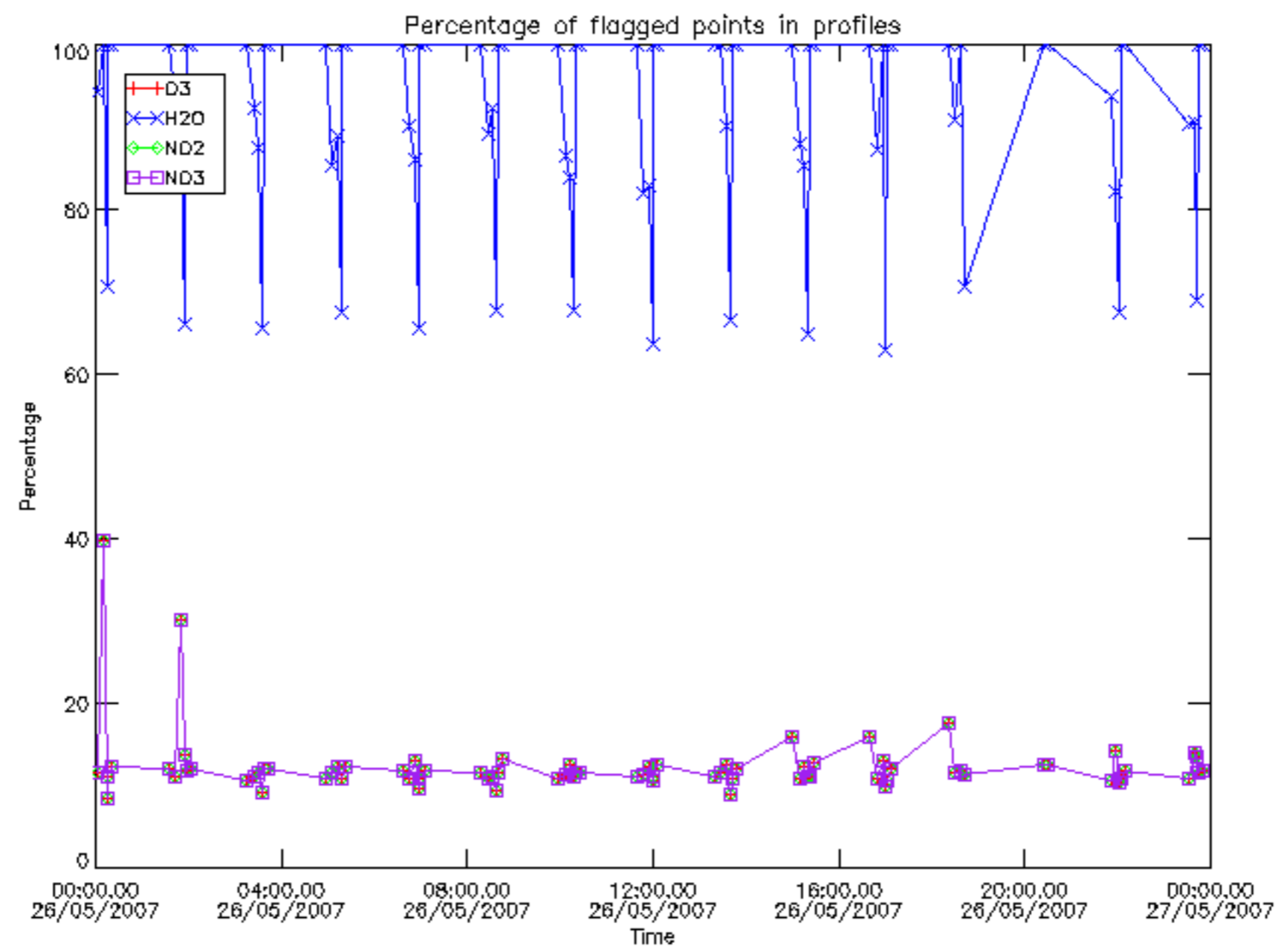
The colorbar represents the latitude.



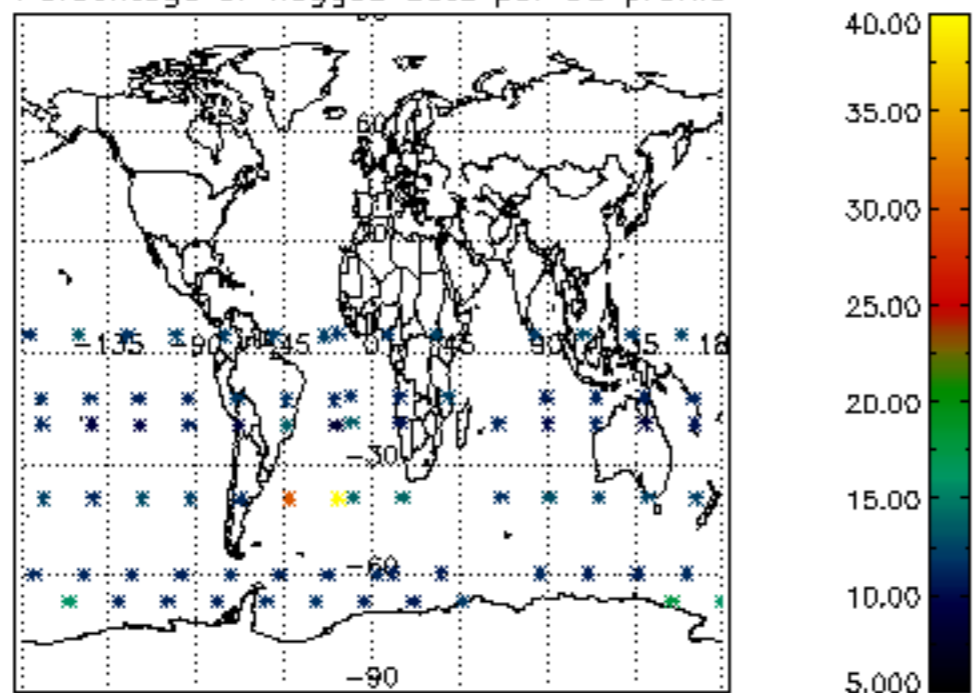
6. Auxiliary Data Files used for the production reported in section 2

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.

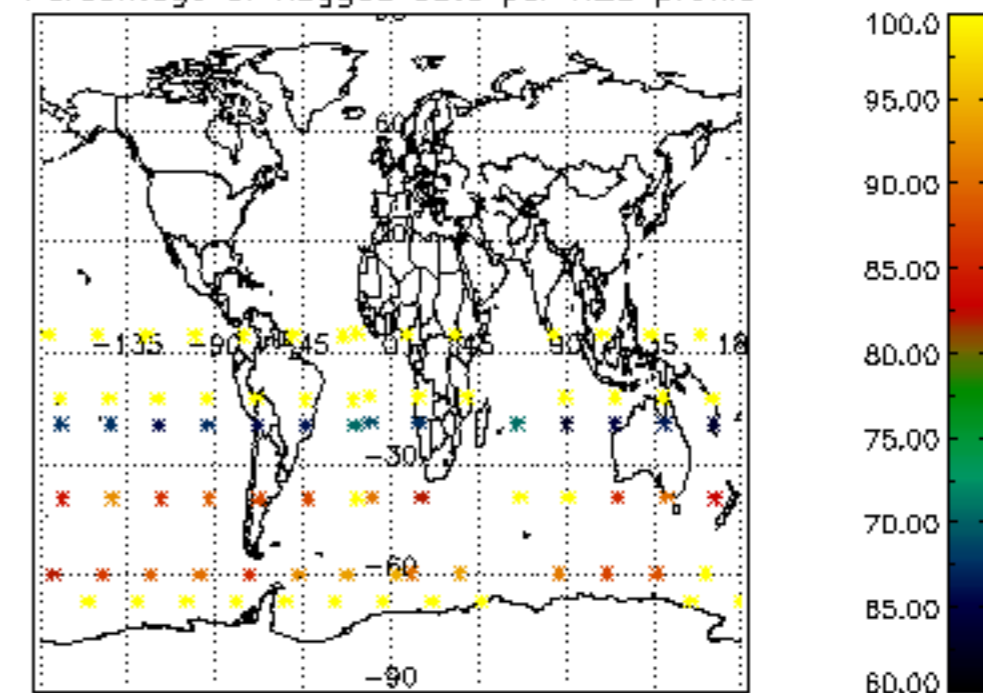
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	26-MAY-2007 00:03:07
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	26-MAY-2007 00:03:07
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	26-MAY-2007 00:03:07



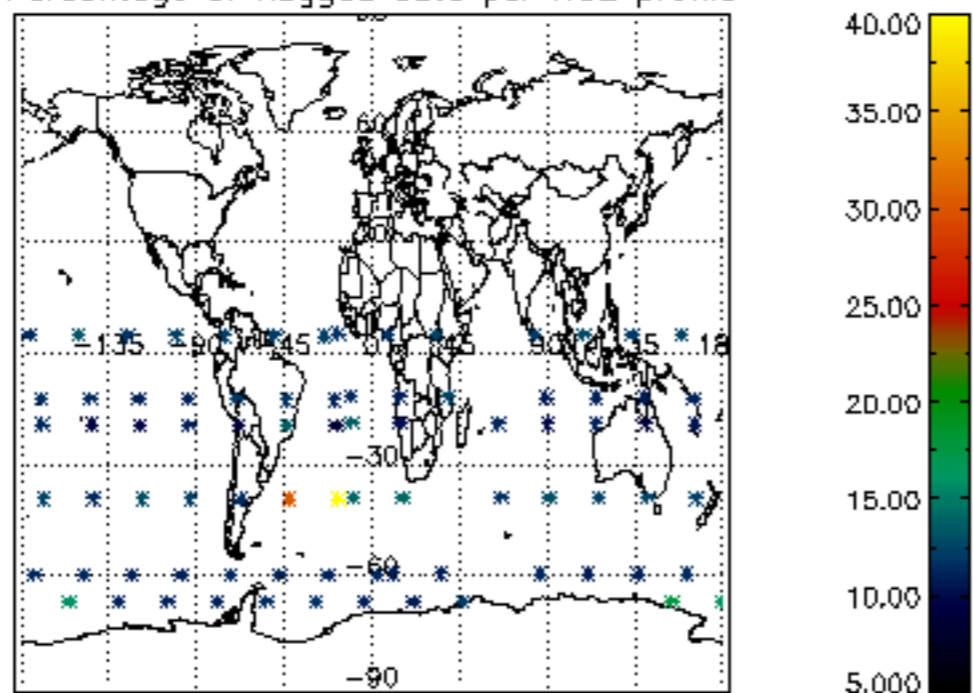
Percentage of flagged data per D3 profile



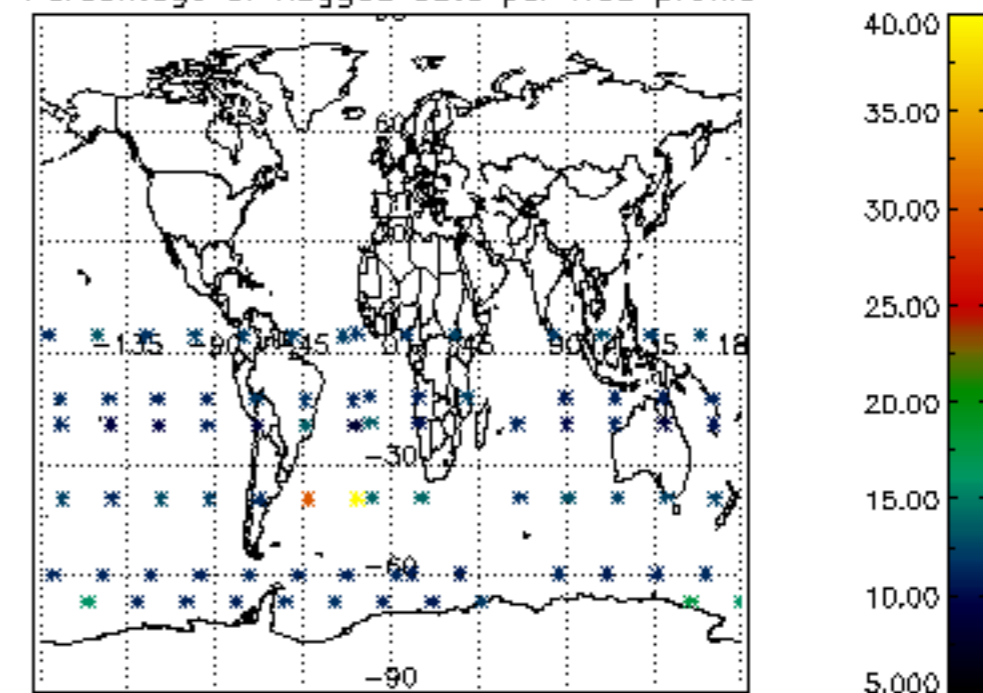
Percentage of flagged data per H2O profile

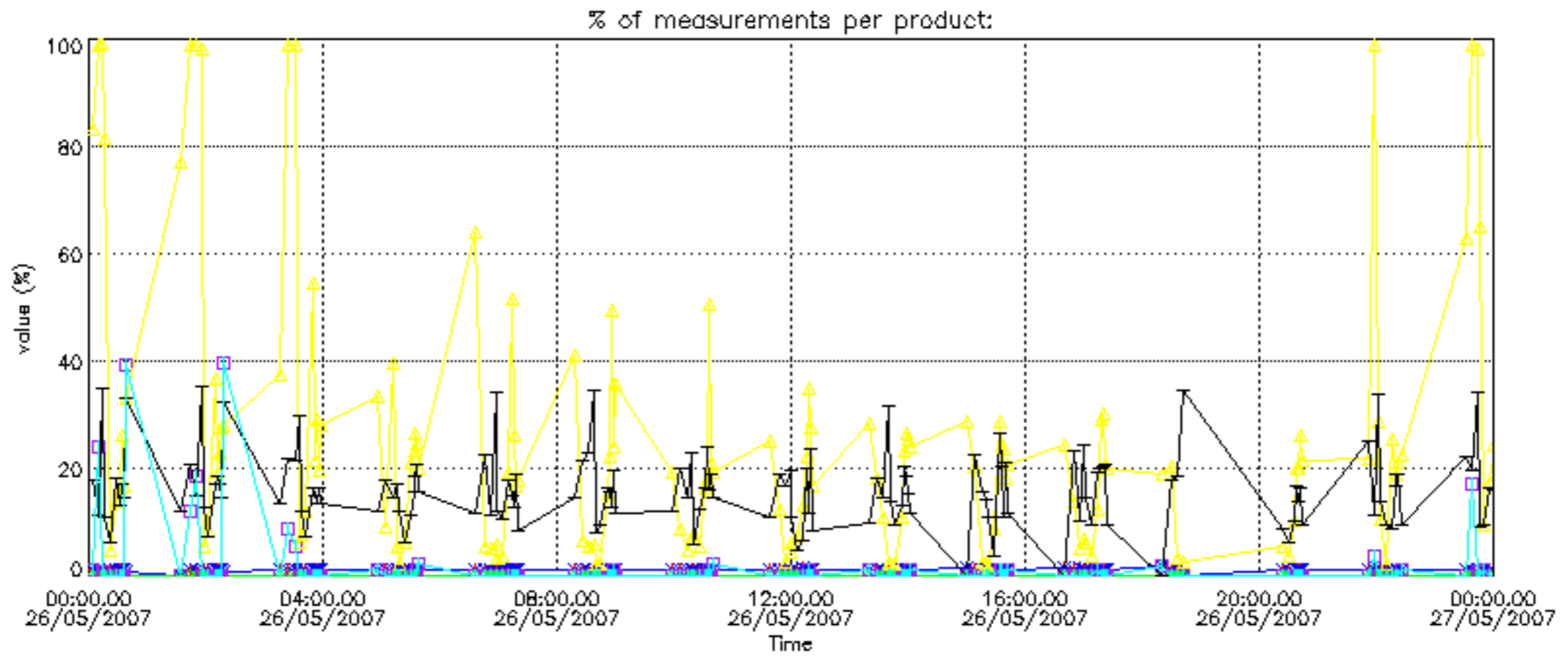


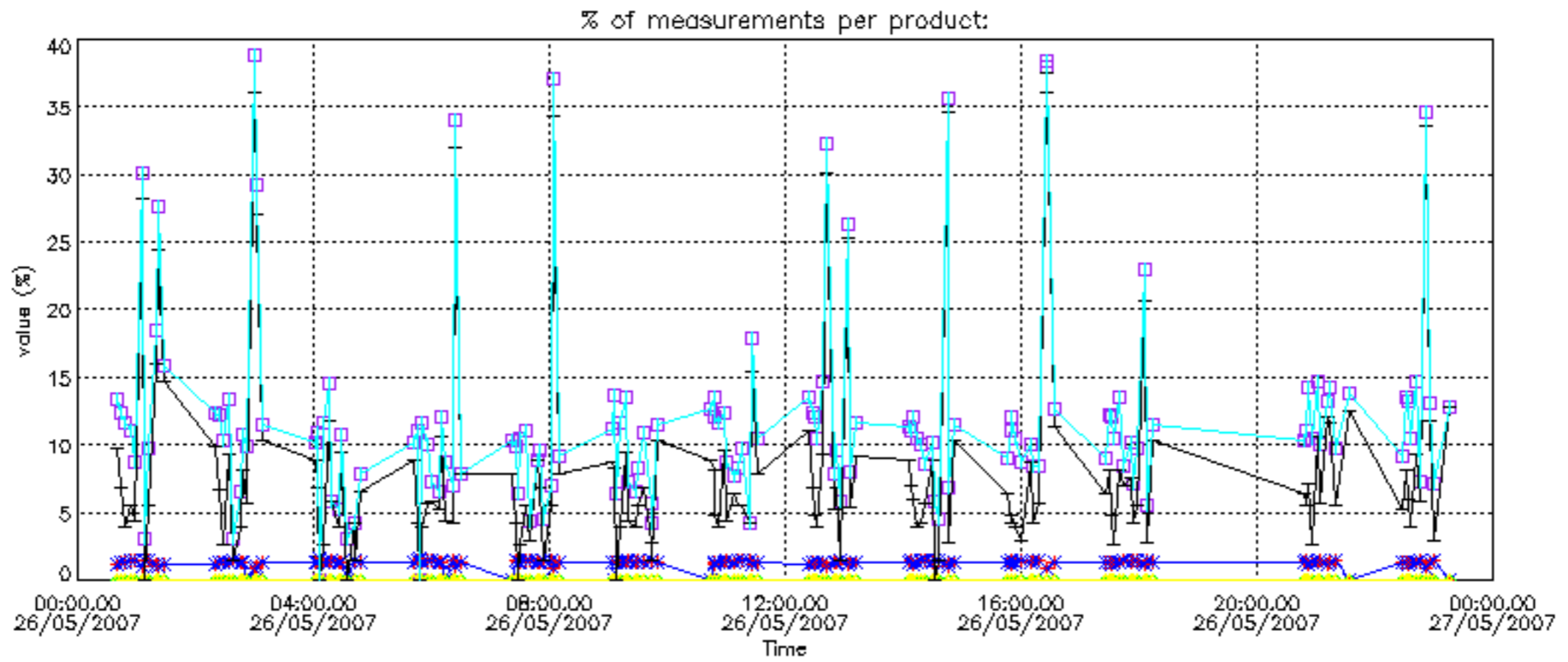
Percentage of flagged data per NO2 profile



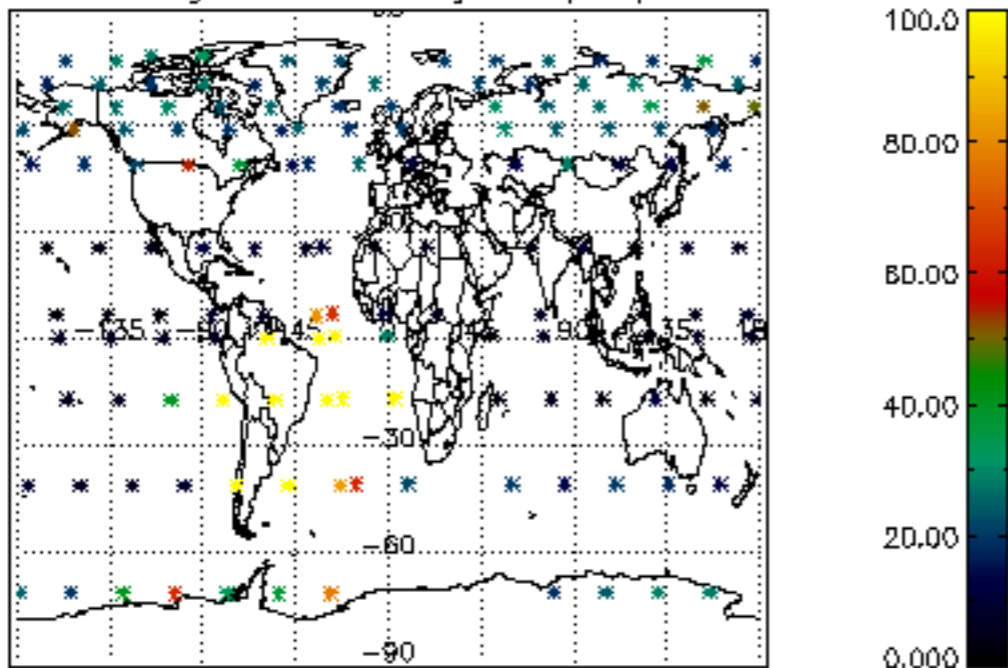
Percentage of flagged data per NO3 profile



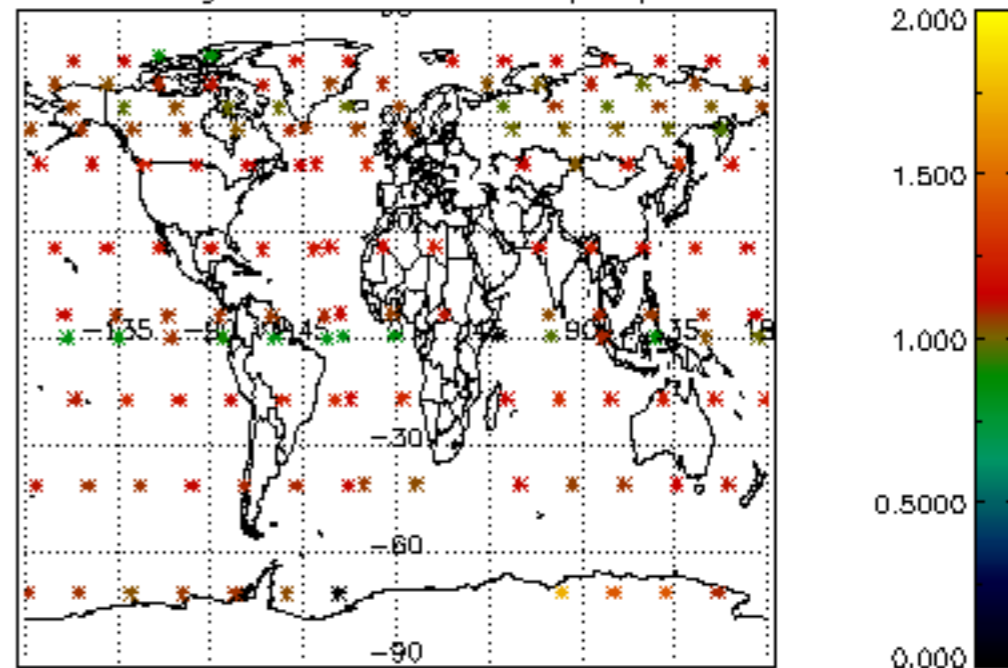




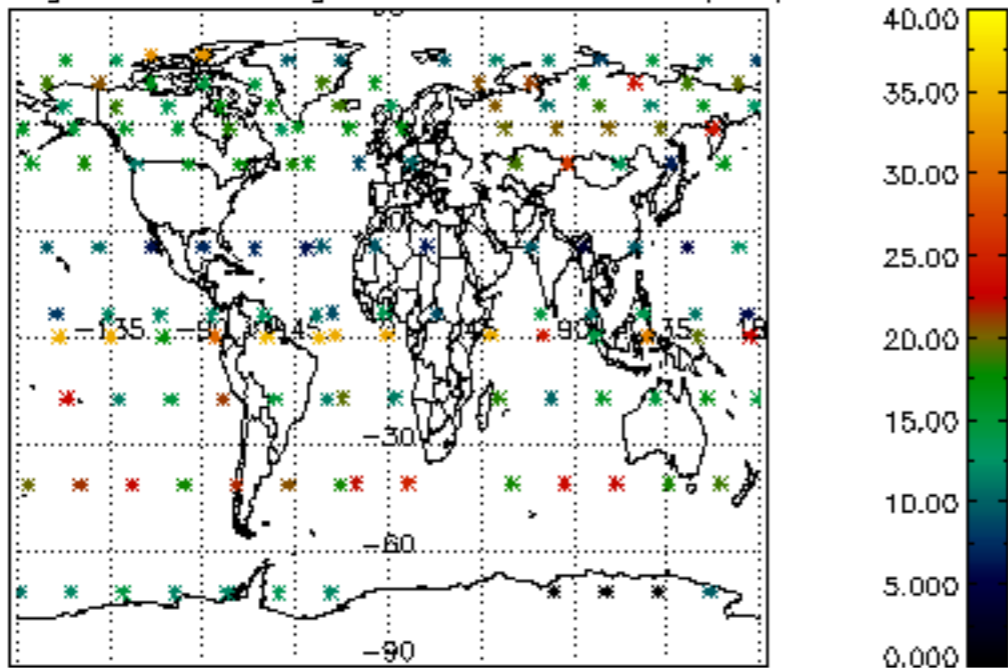
Percentage of cosmic ray hits per profile



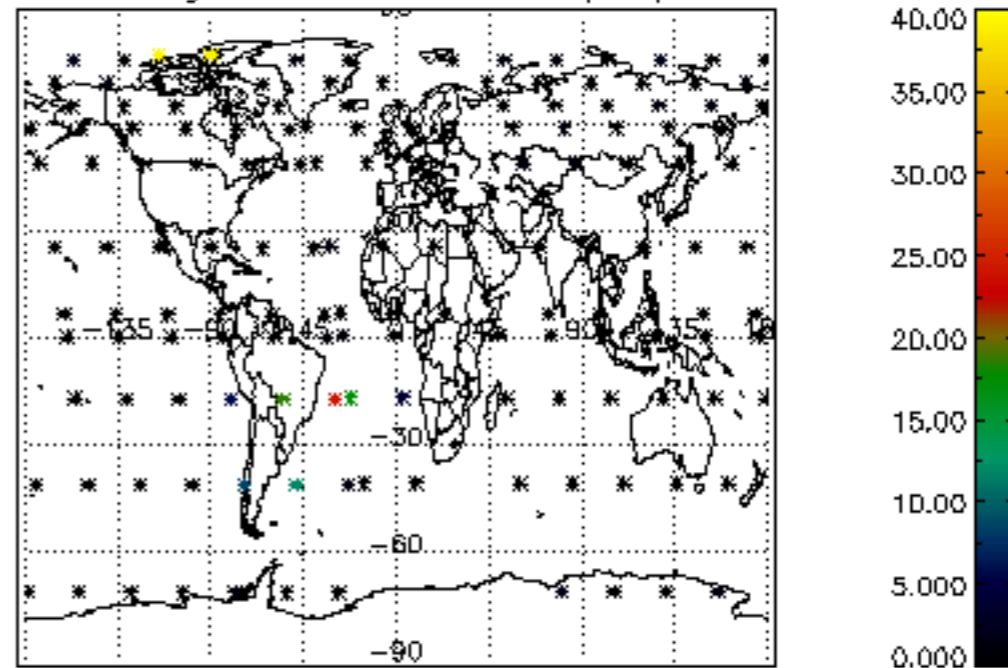
Percentage of datation errors per profile



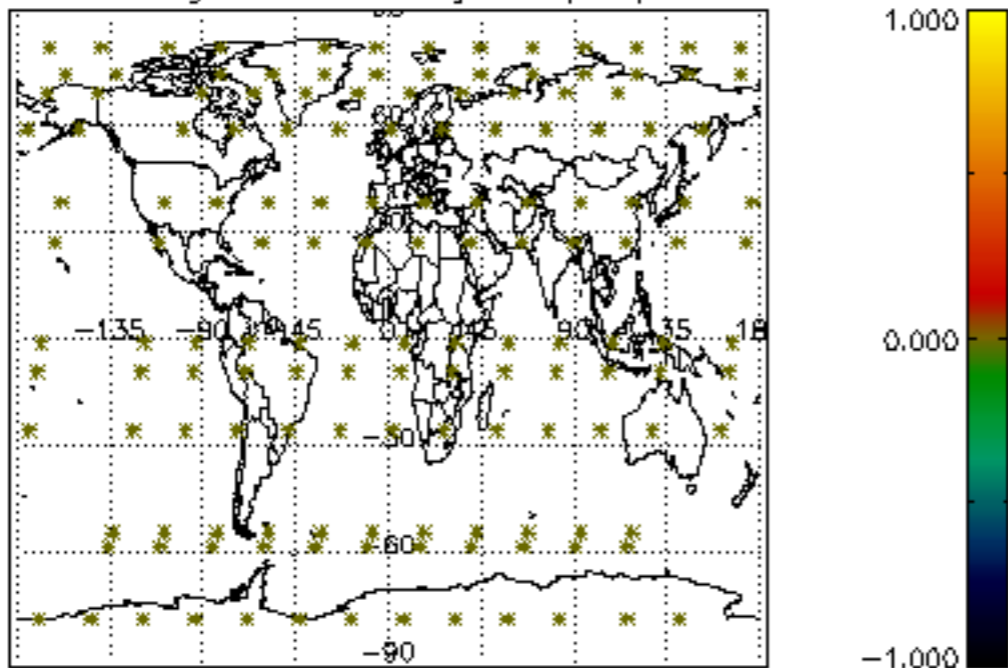
Percentage of star falling outside central band per profile



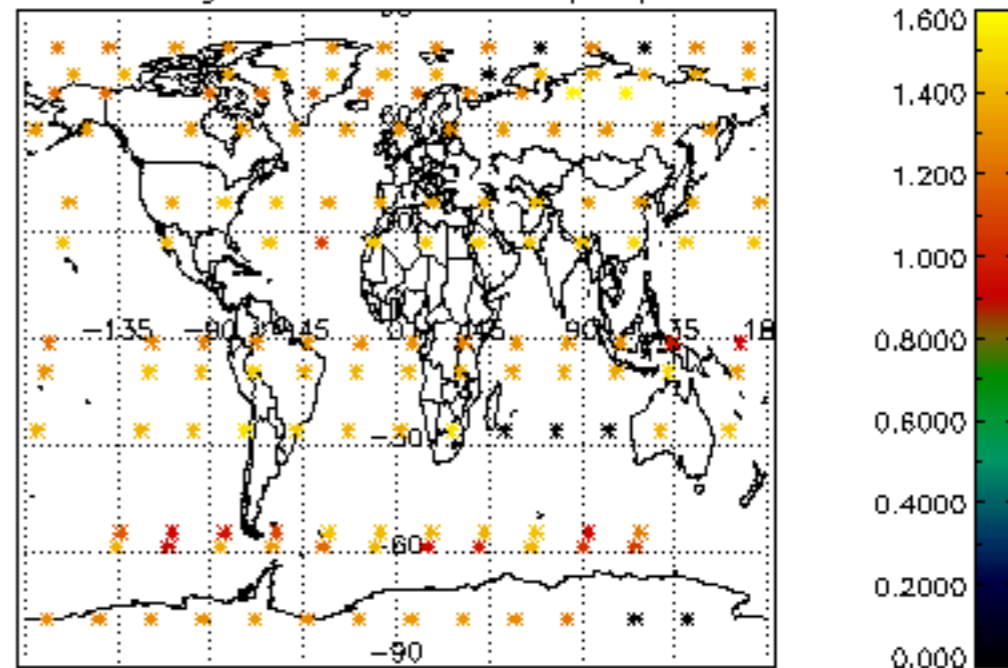
Percentage of saturation errors per profile



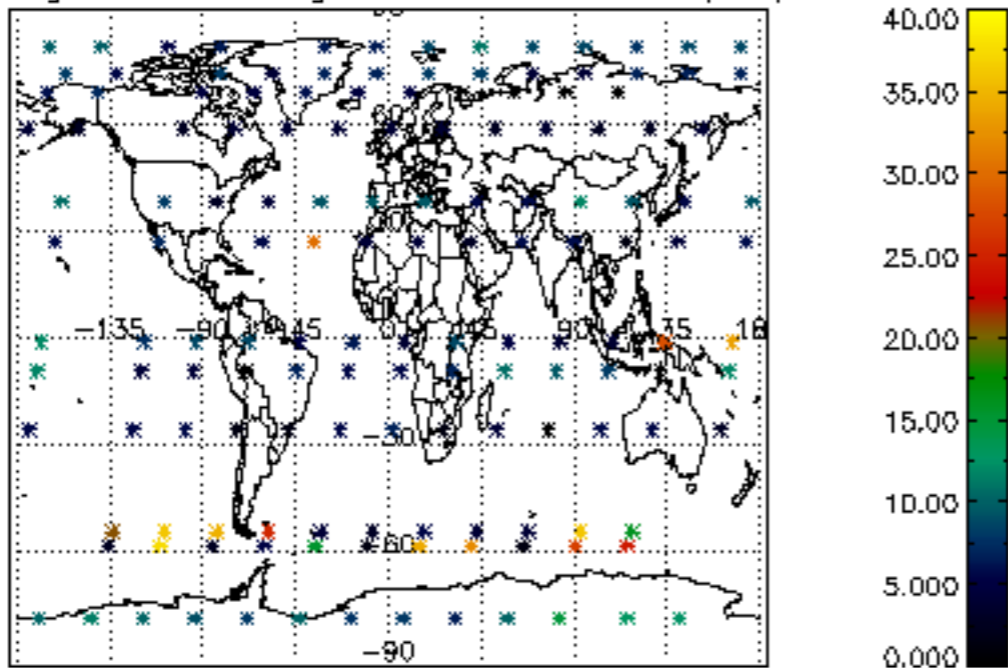
Percentage of cosmic ray hits per profile



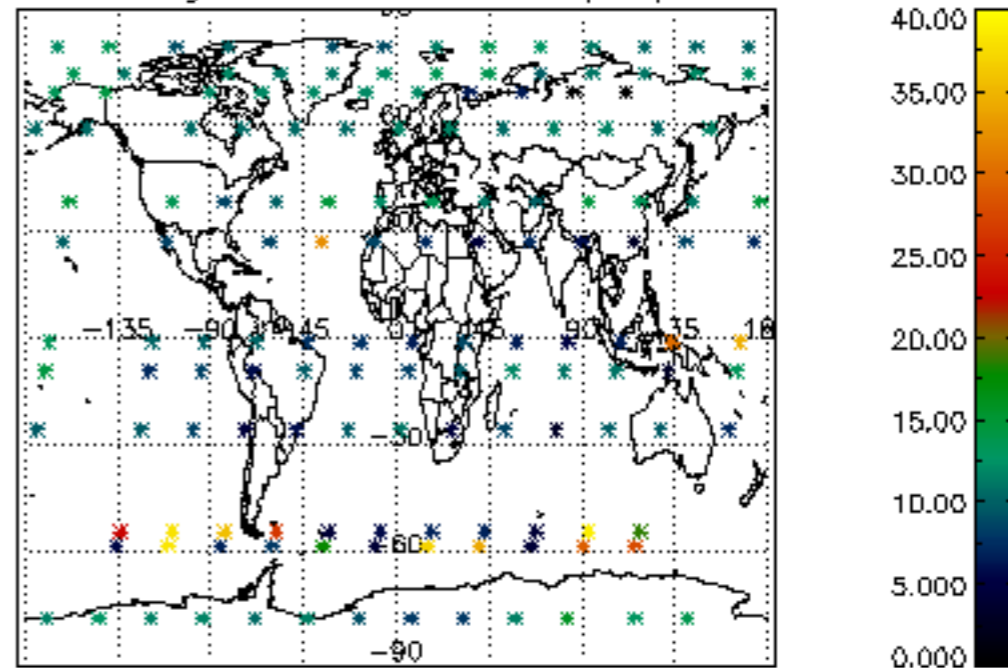
Percentage of datation errors per profile

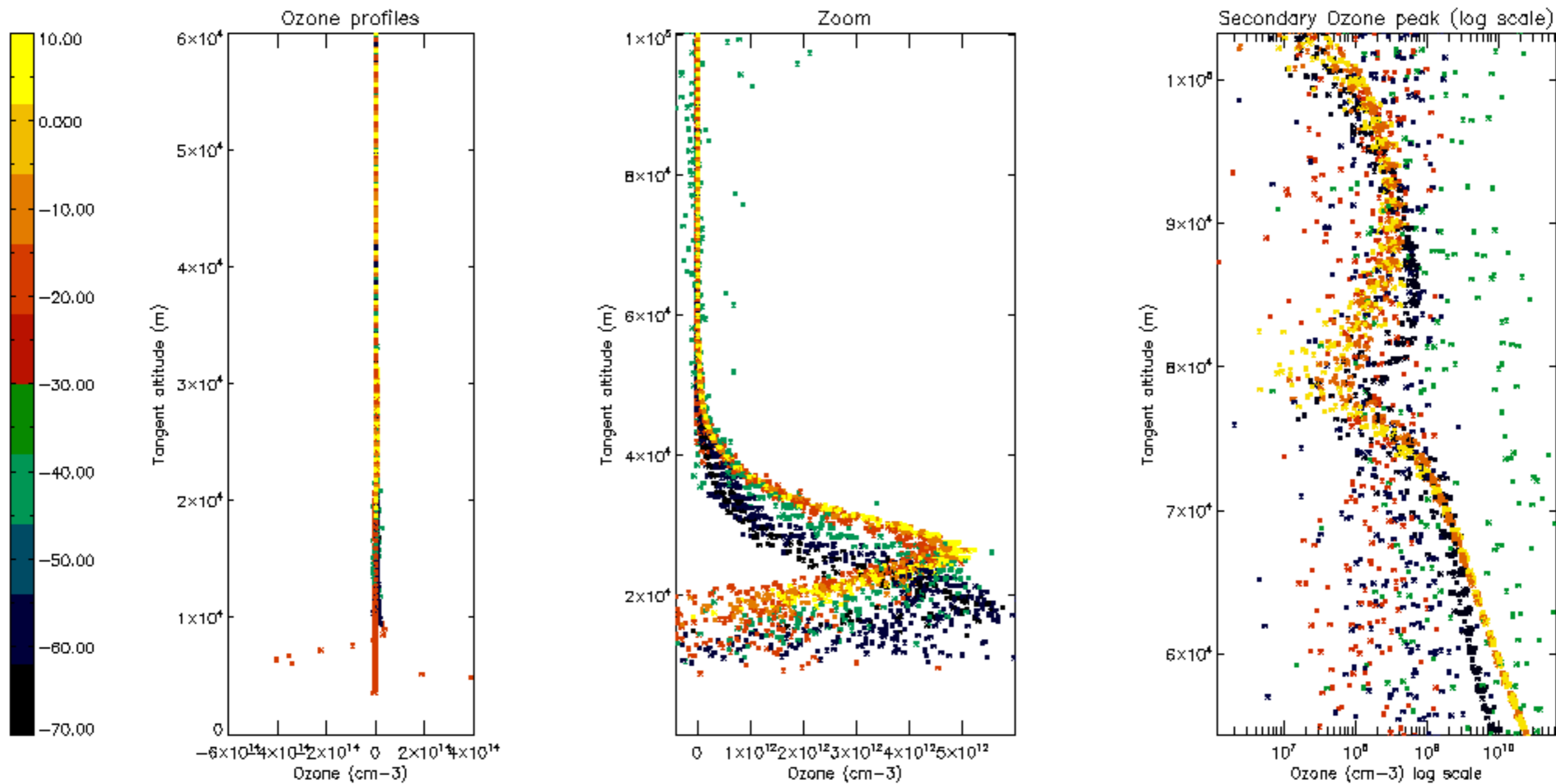


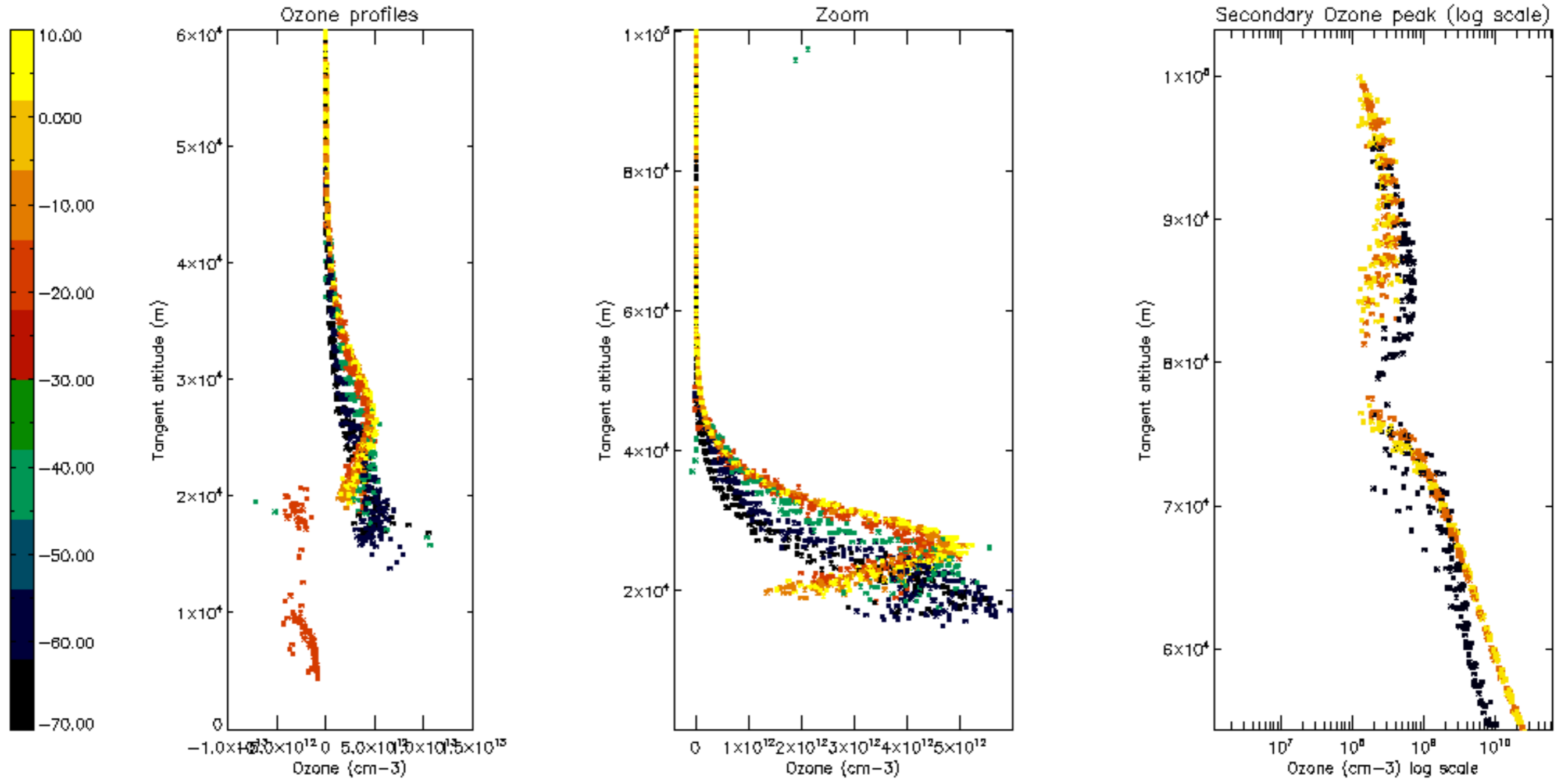
Percentage of star falling outside central band per profile

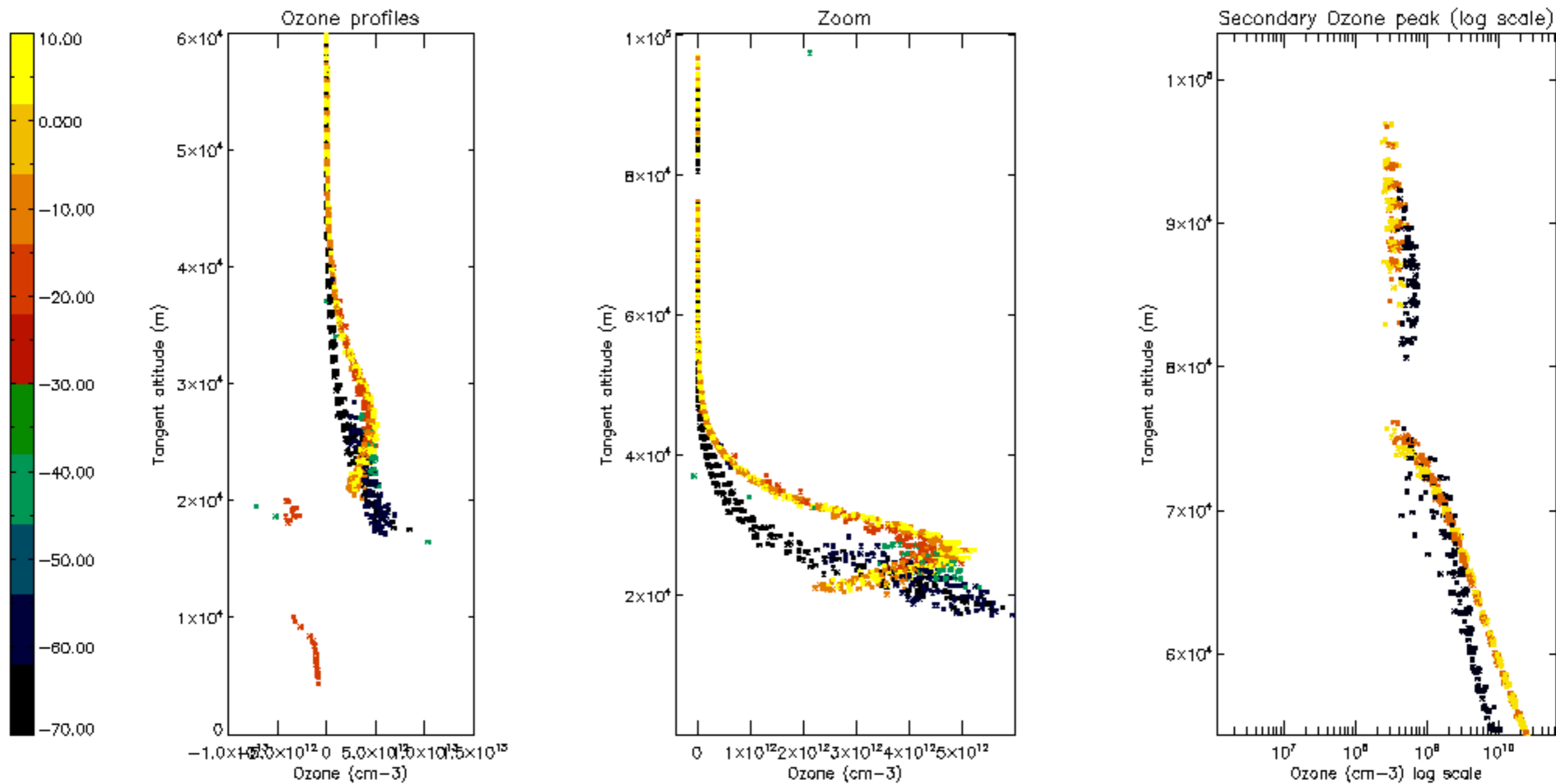


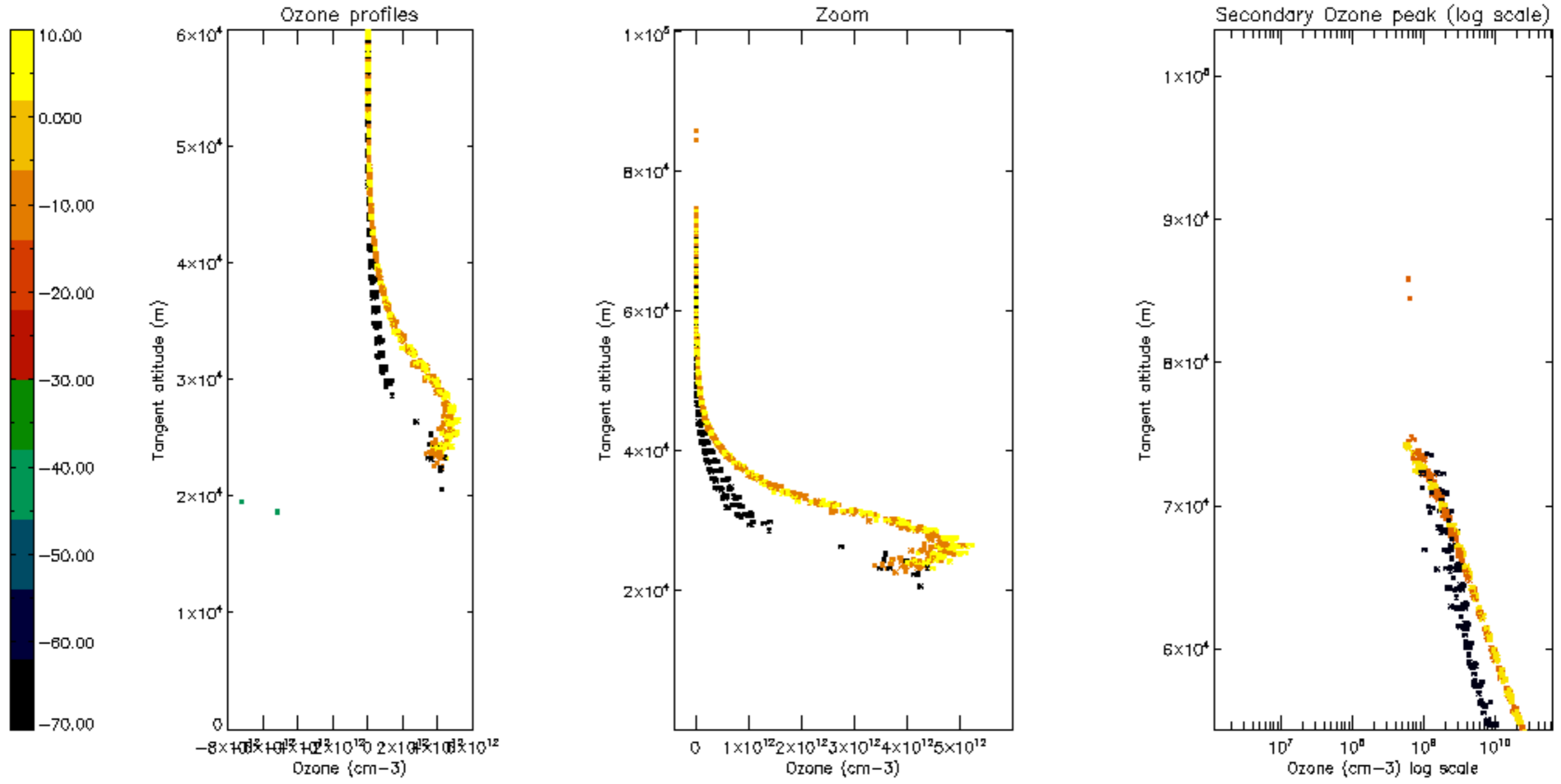
Percentage of saturation errors per profile

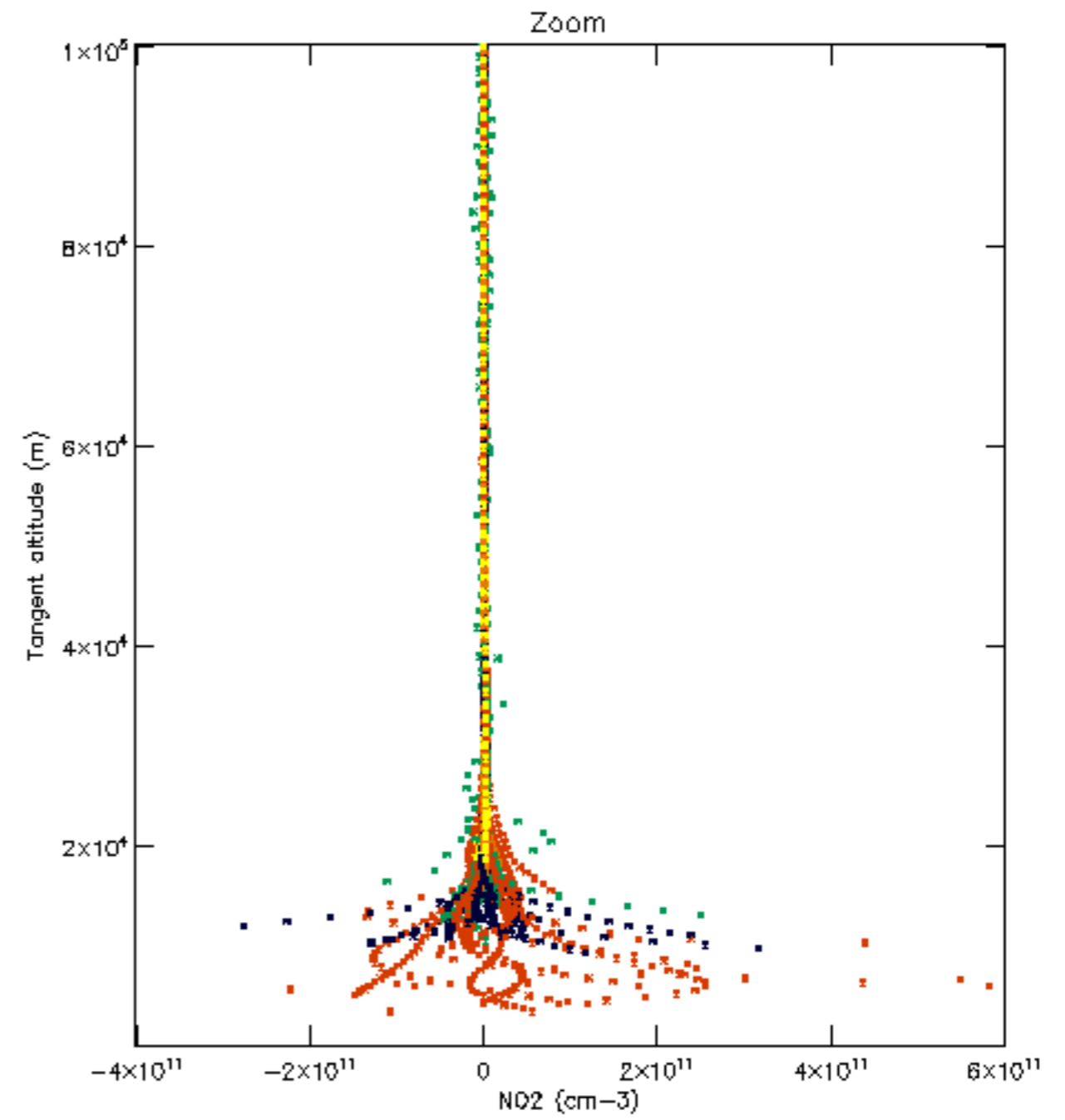
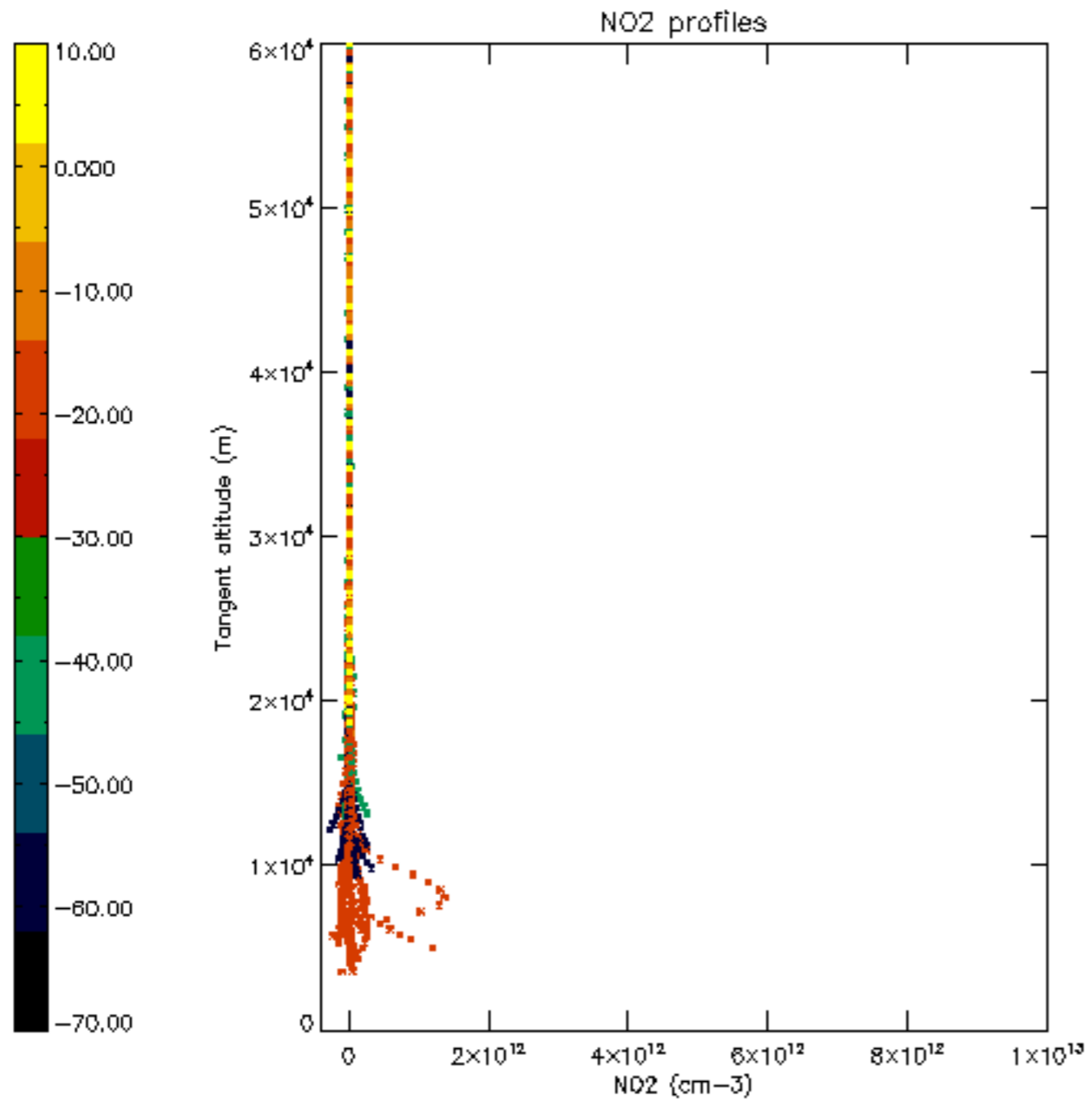


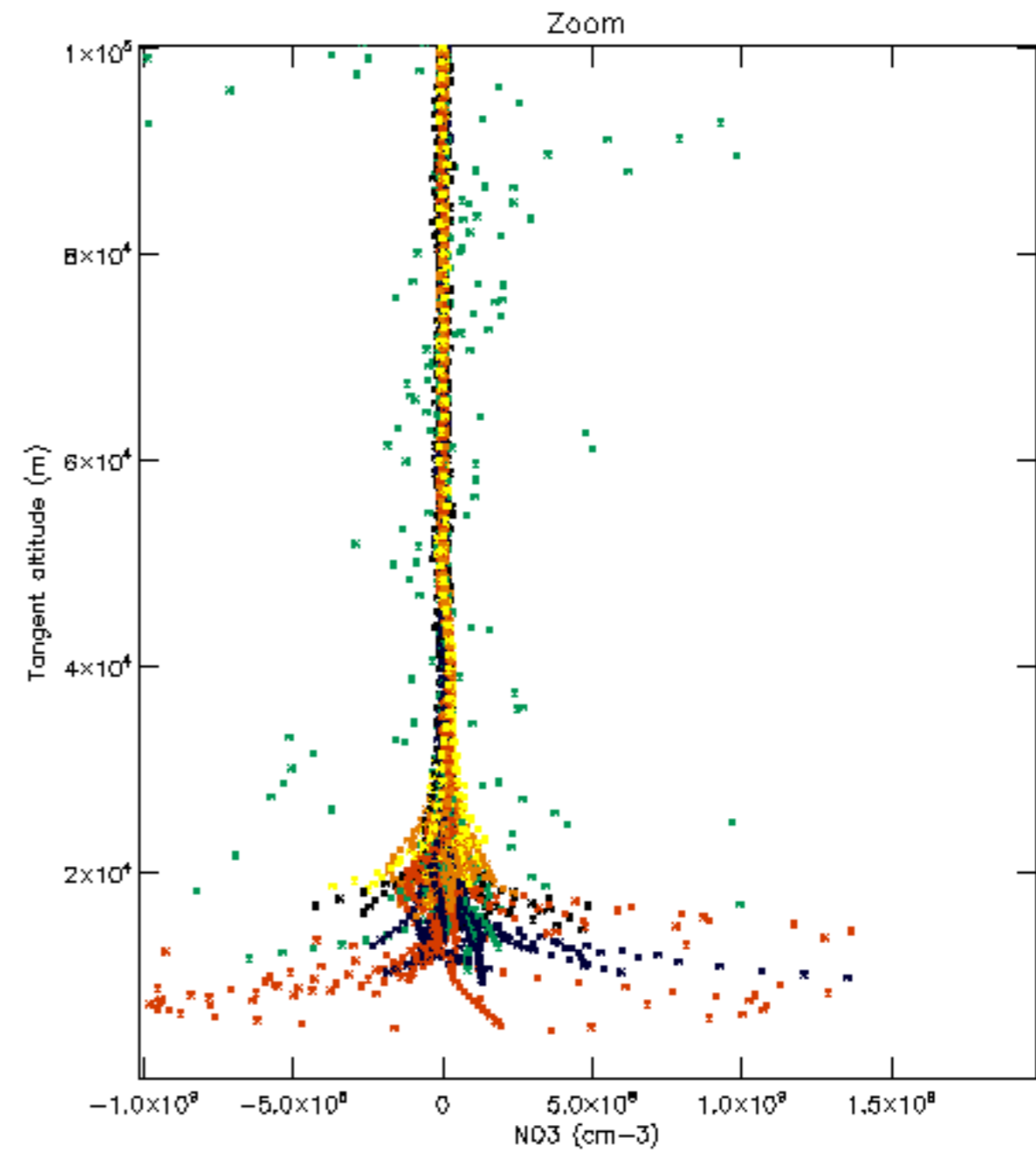
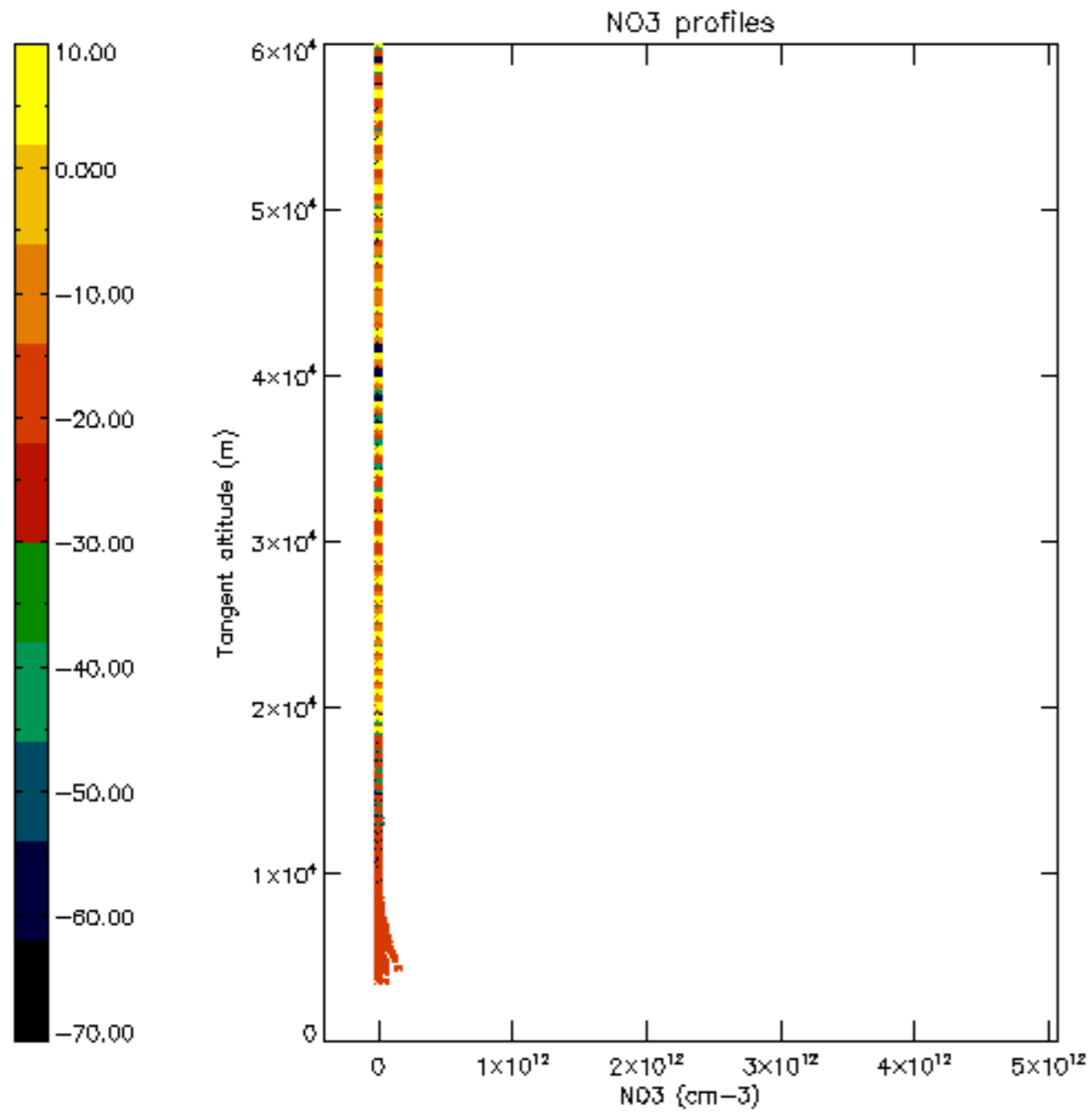


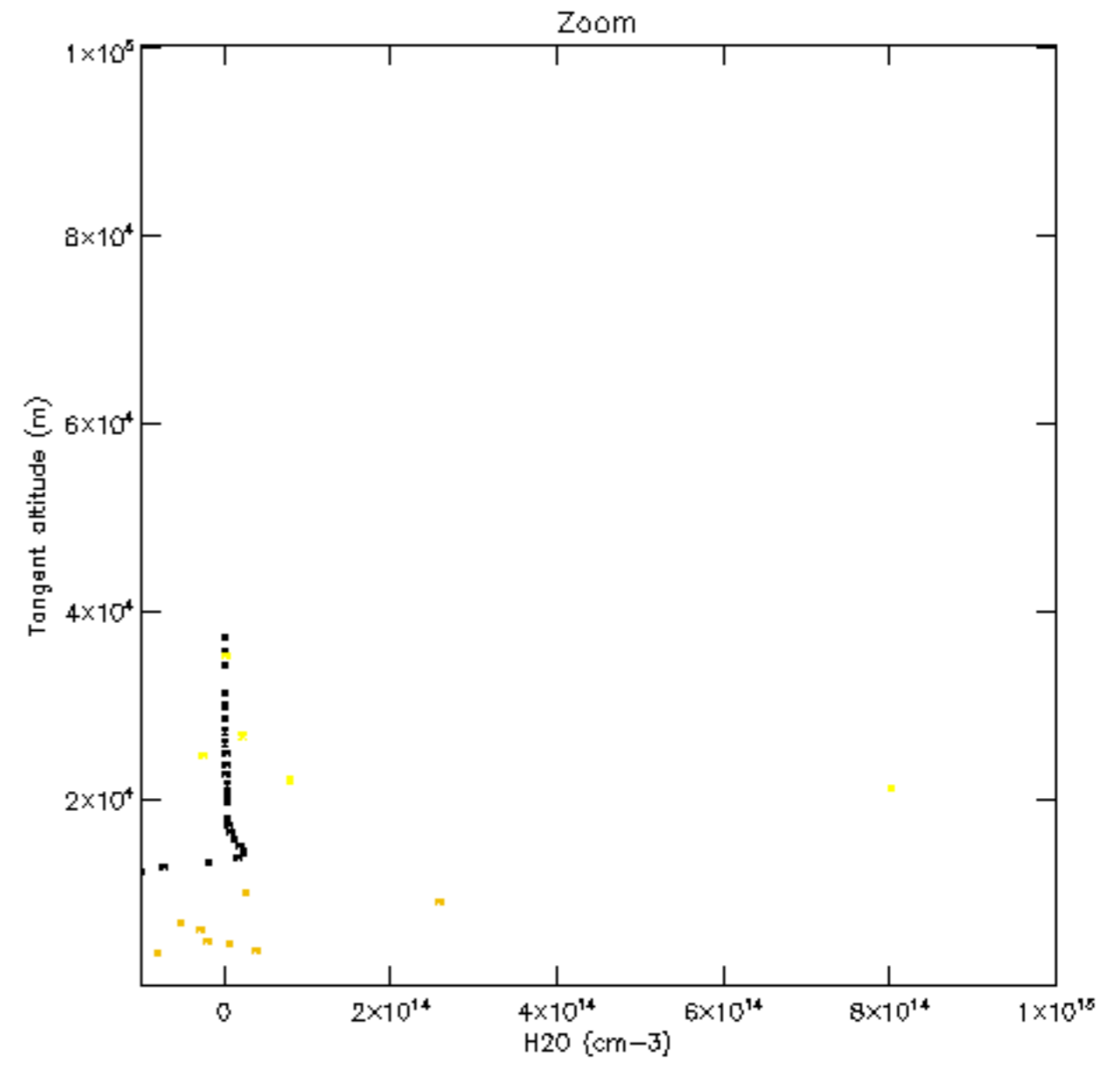
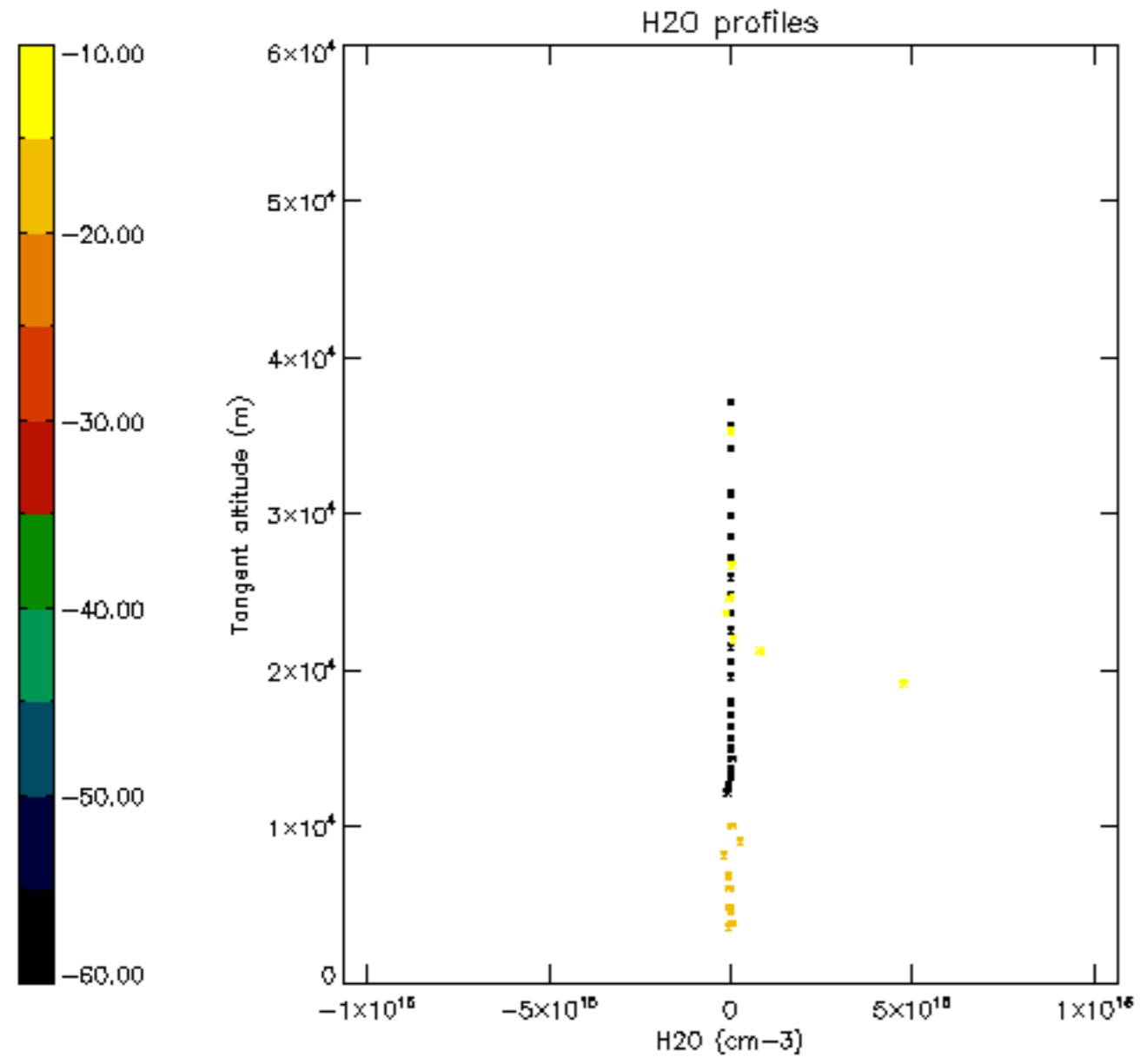


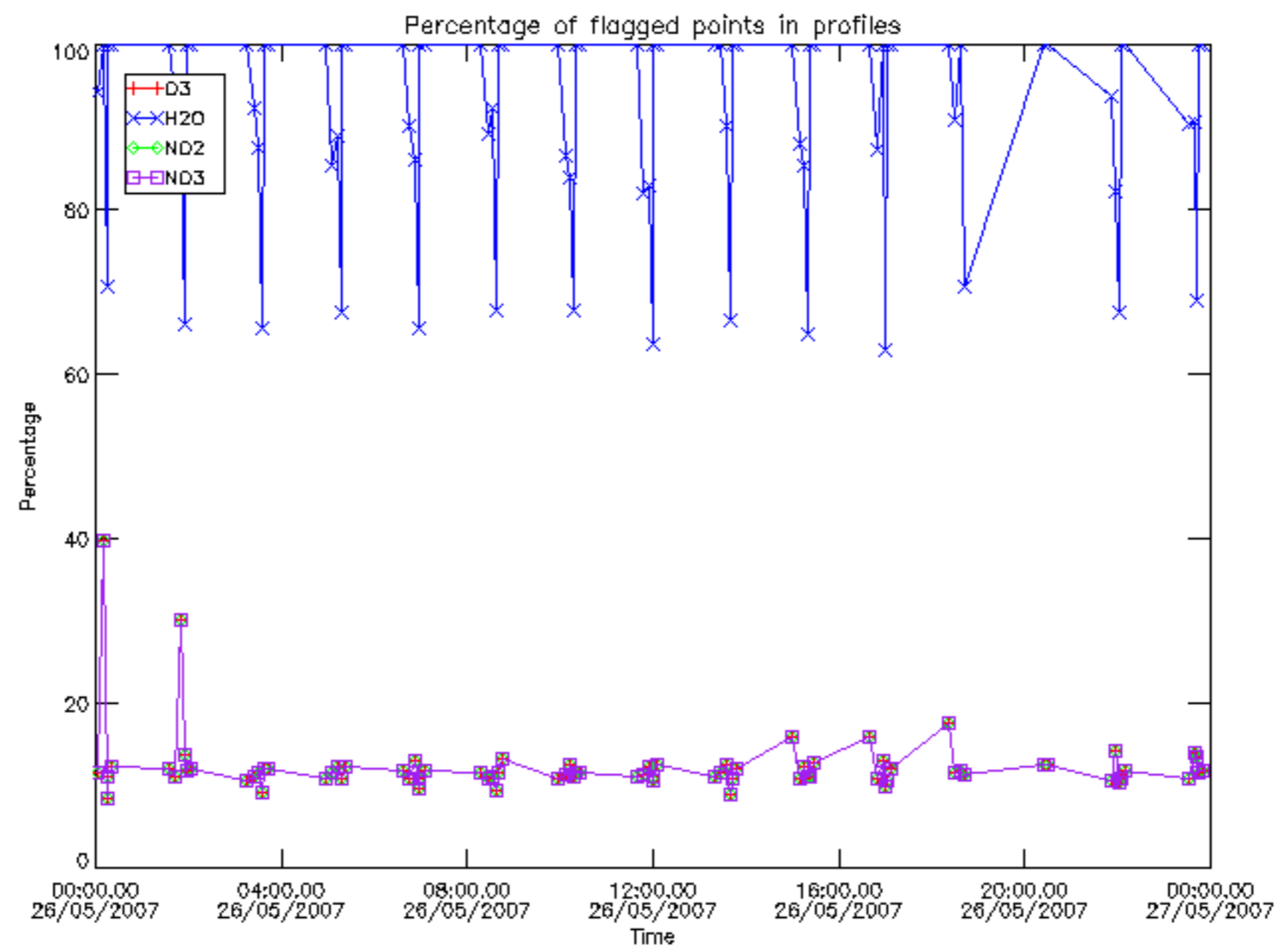




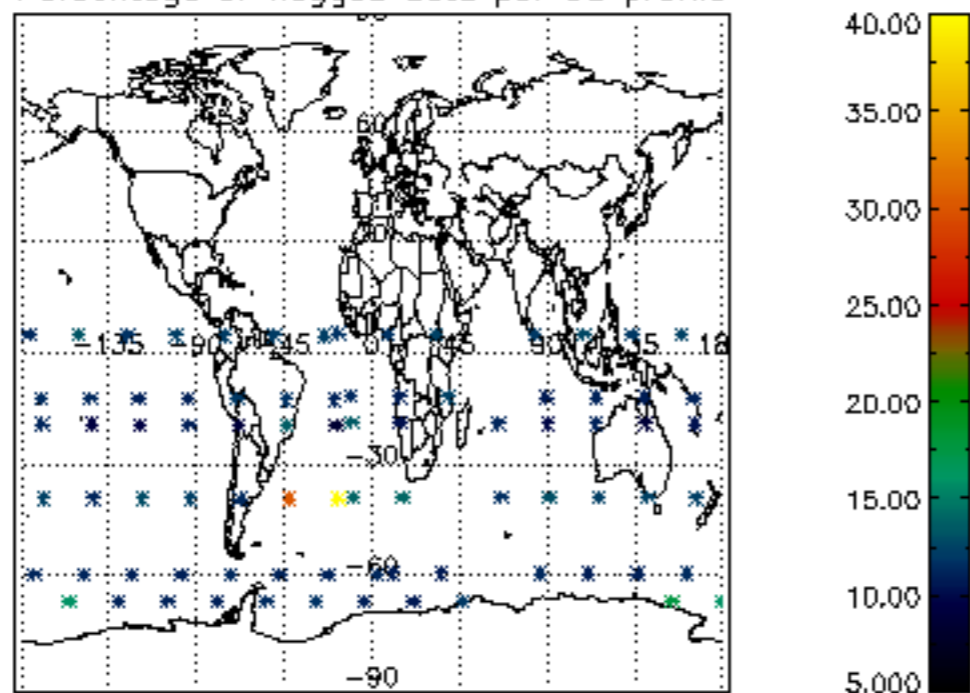




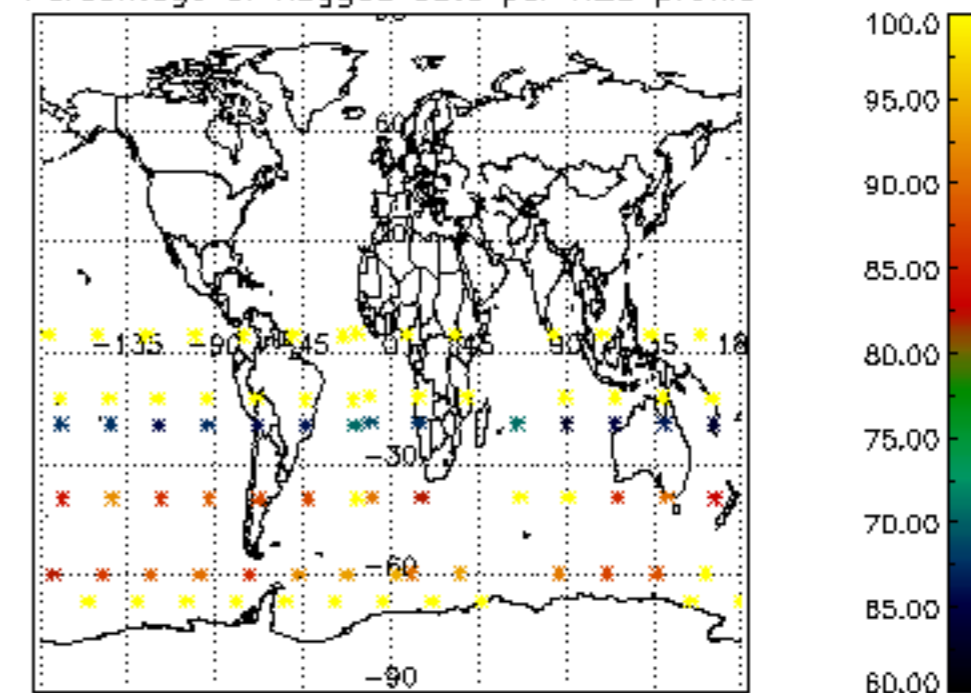




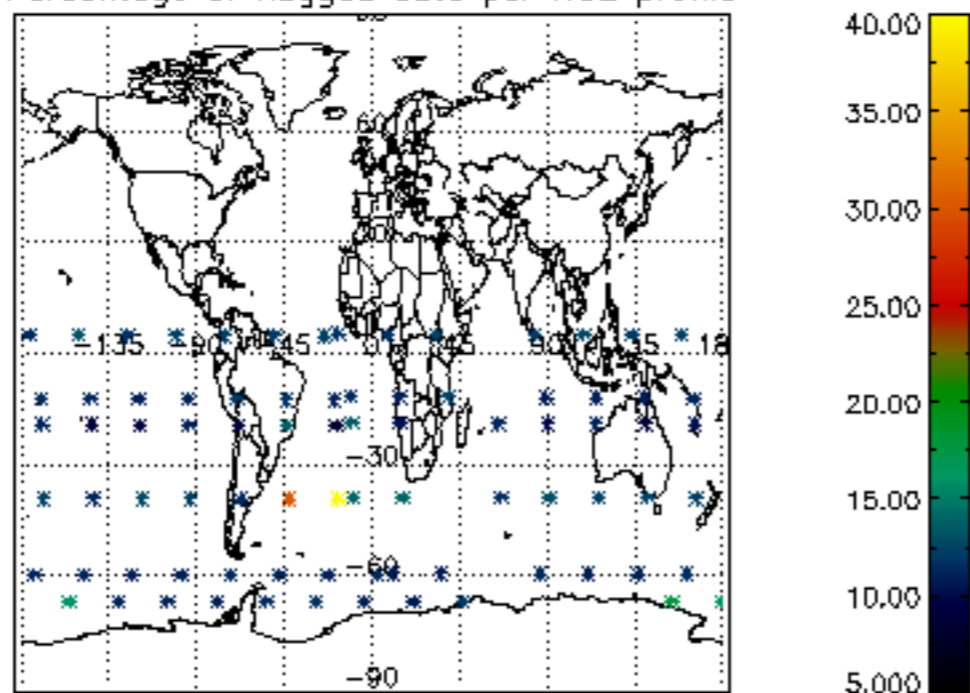
Percentage of flagged data per D3 profile



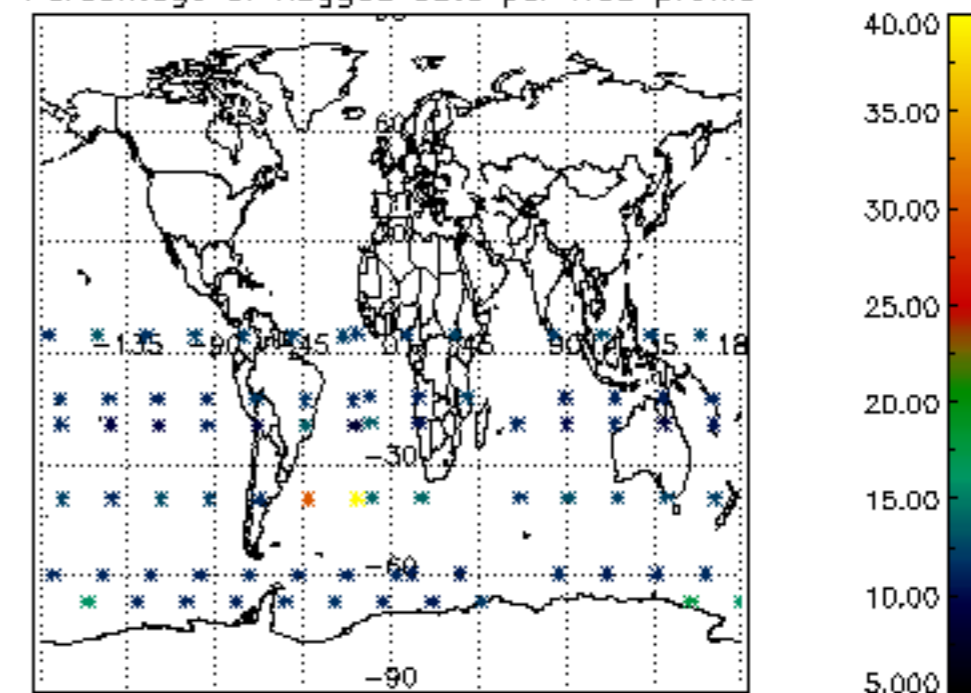
Percentage of flagged data per H2O profile

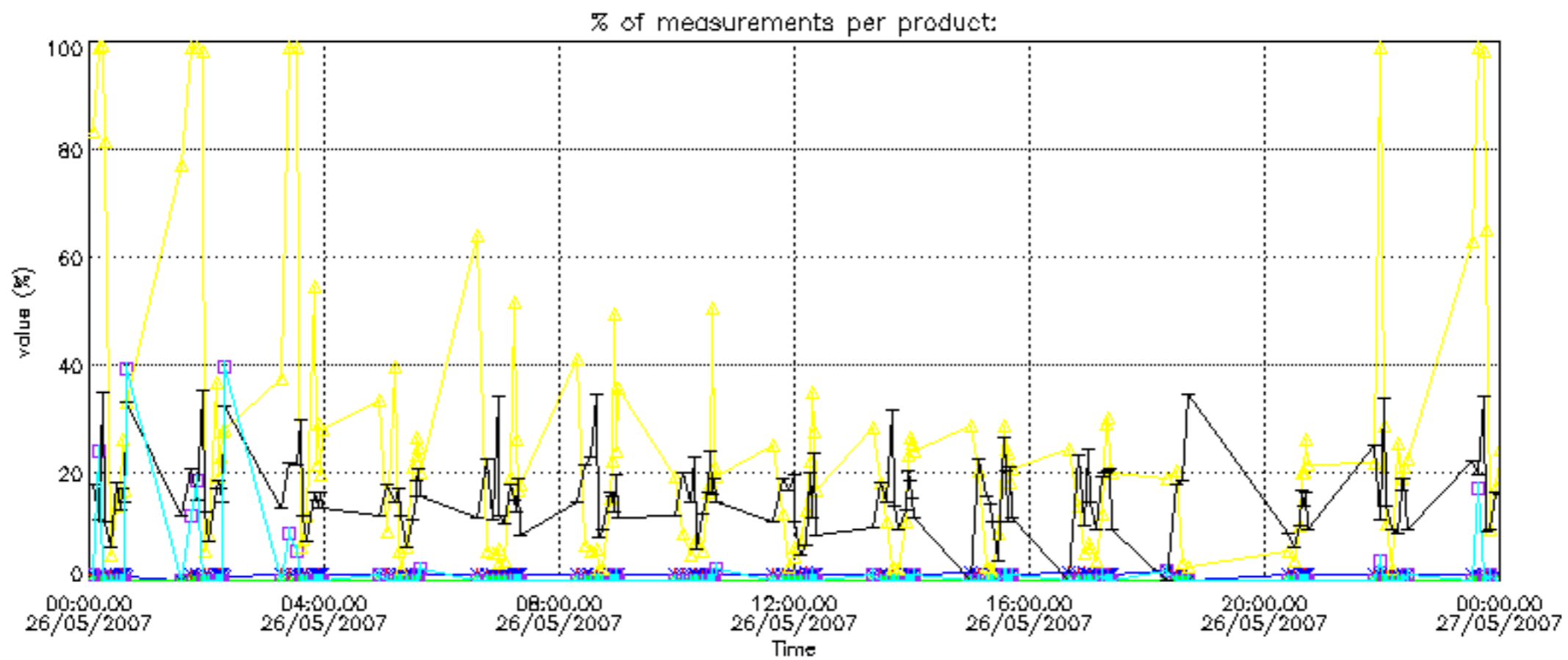


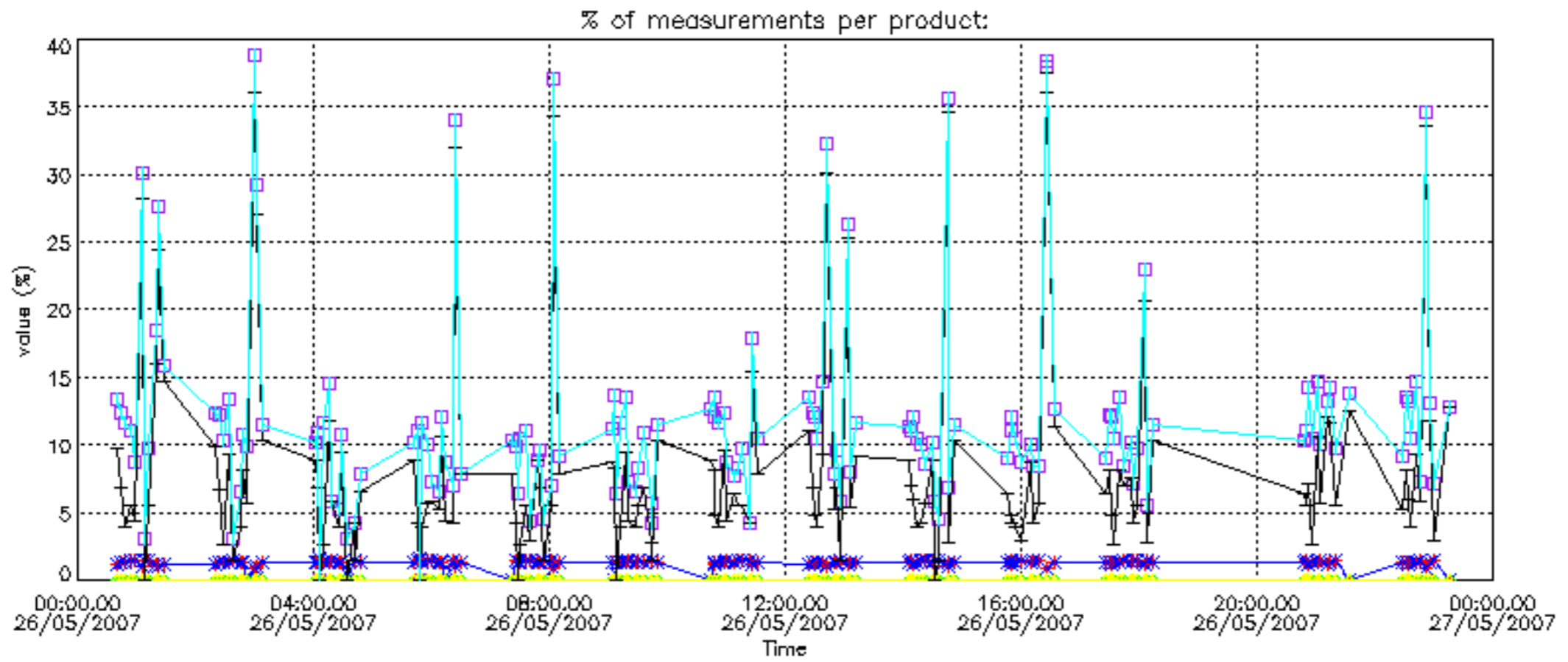
Percentage of flagged data per NO2 profile



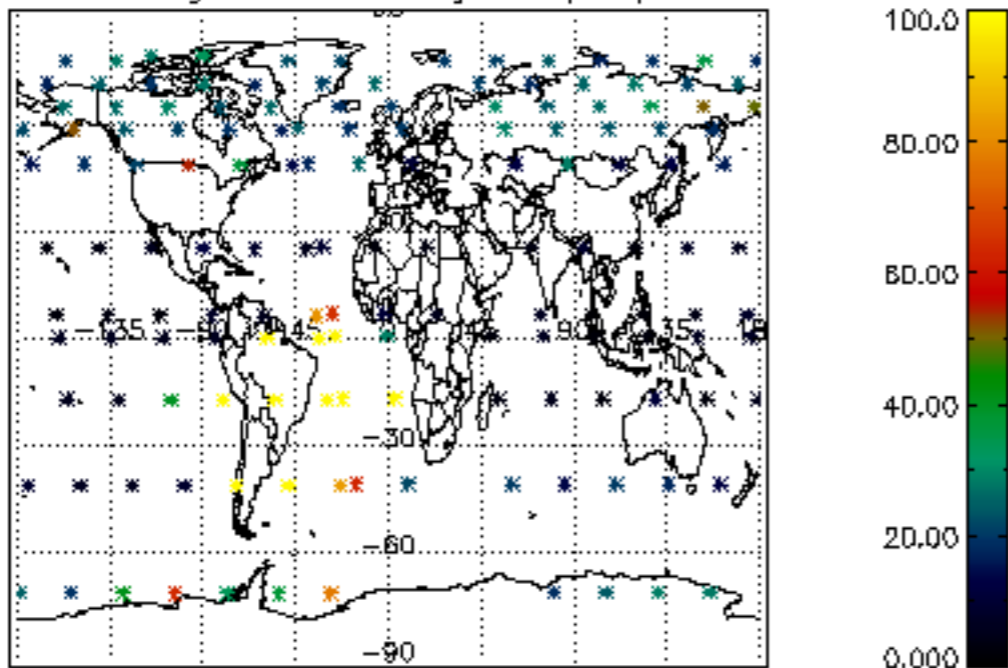
Percentage of flagged data per NO3 profile



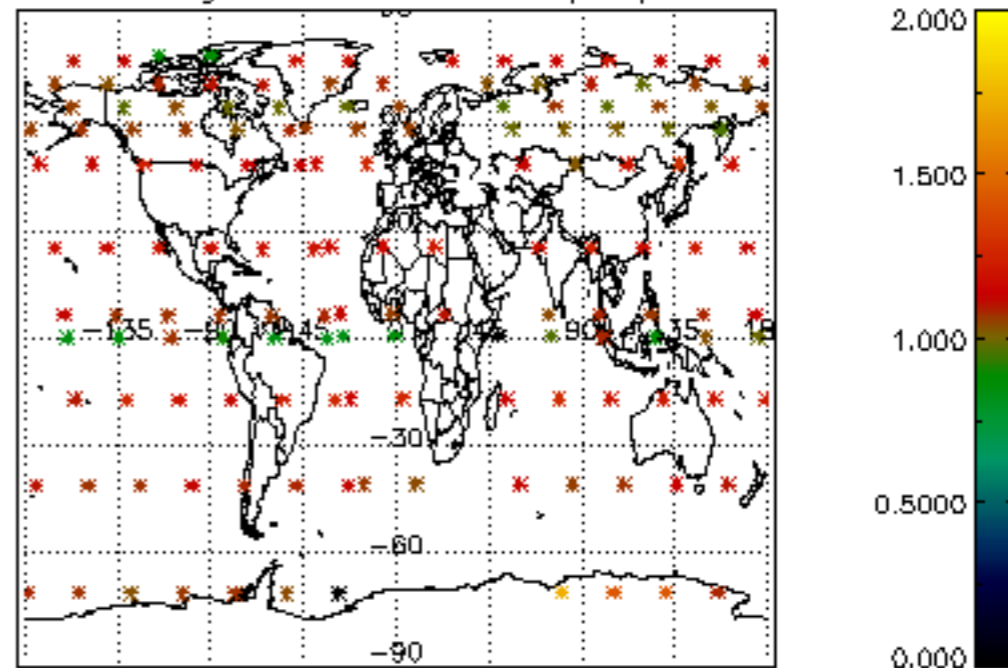




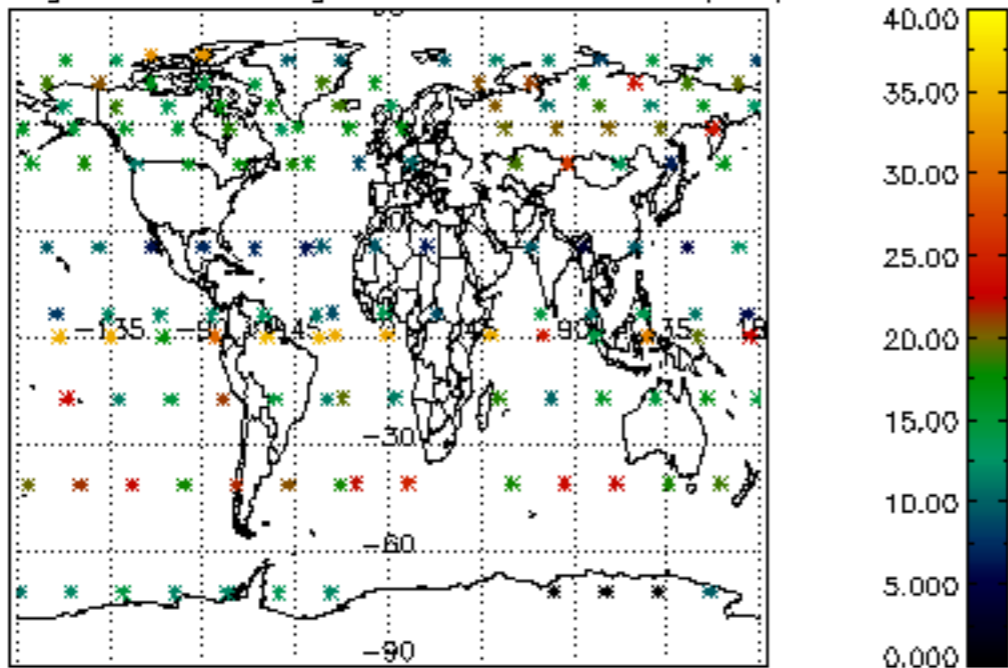
Percentage of cosmic ray hits per profile



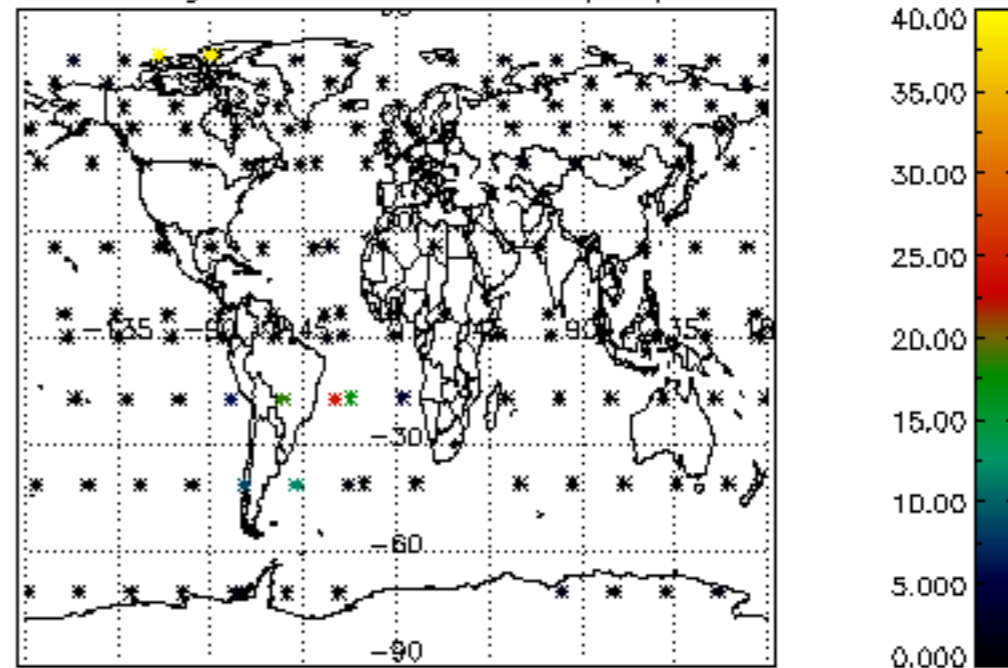
Percentage of datation errors per profile



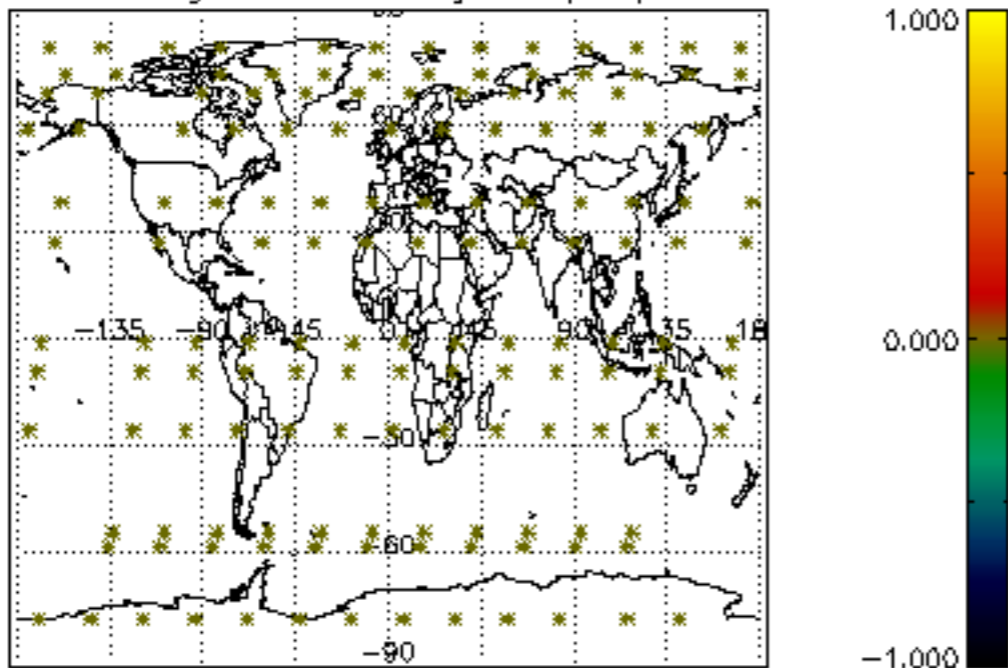
Percentage of star falling outside central band per profile



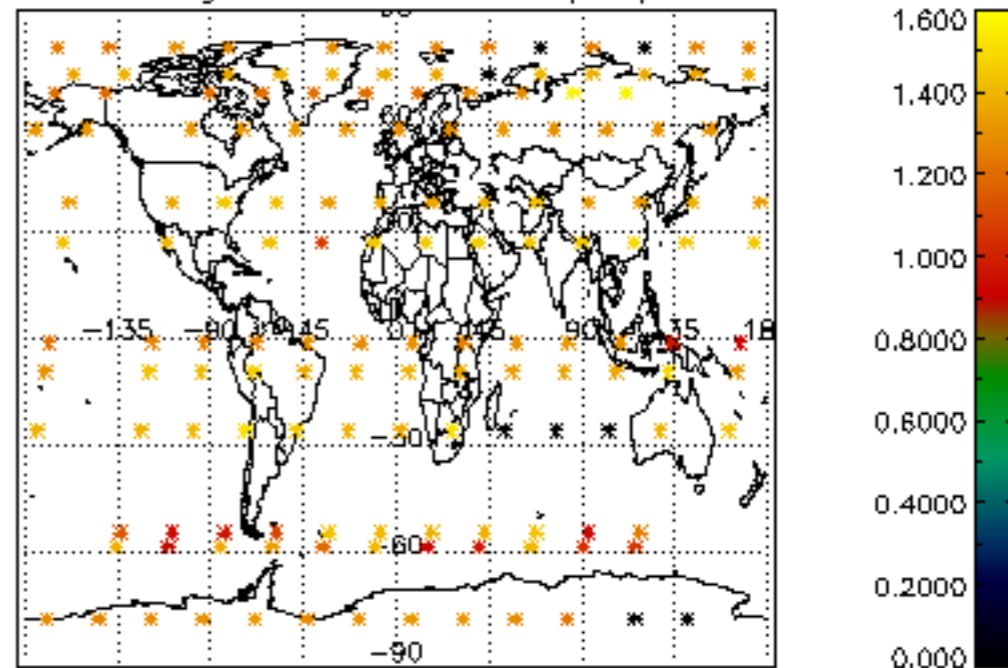
Percentage of saturation errors per profile



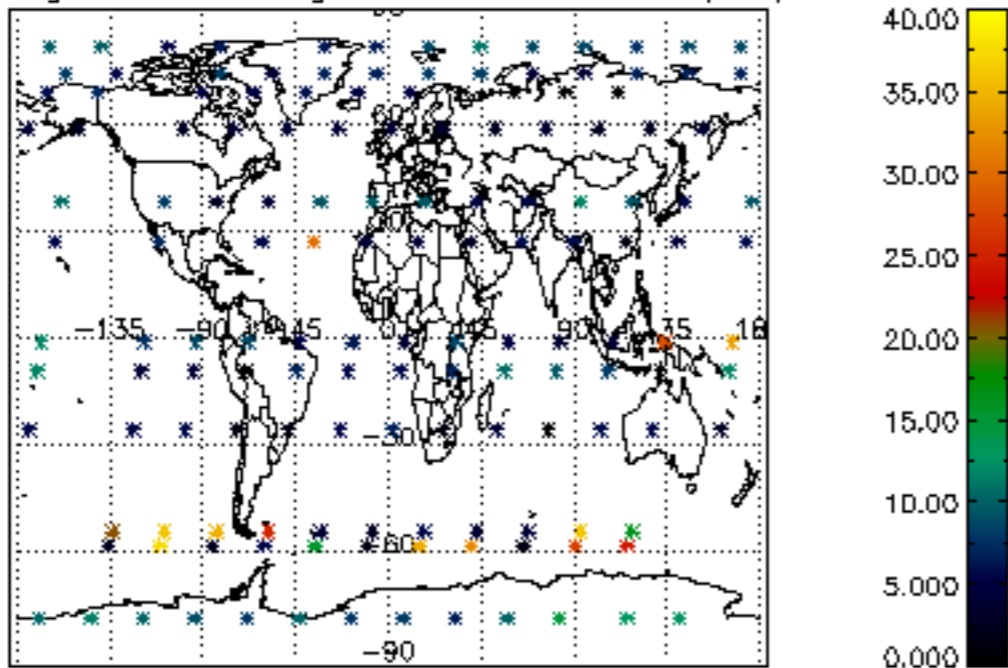
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

