

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	26APR2013 17:08:50
Data source version	GOMOS/6.01
Start time of products	03-02-2010 (03FEB2010 00:00:00)
Stop time of products	04-02-2010 (04FEB2010 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	309
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

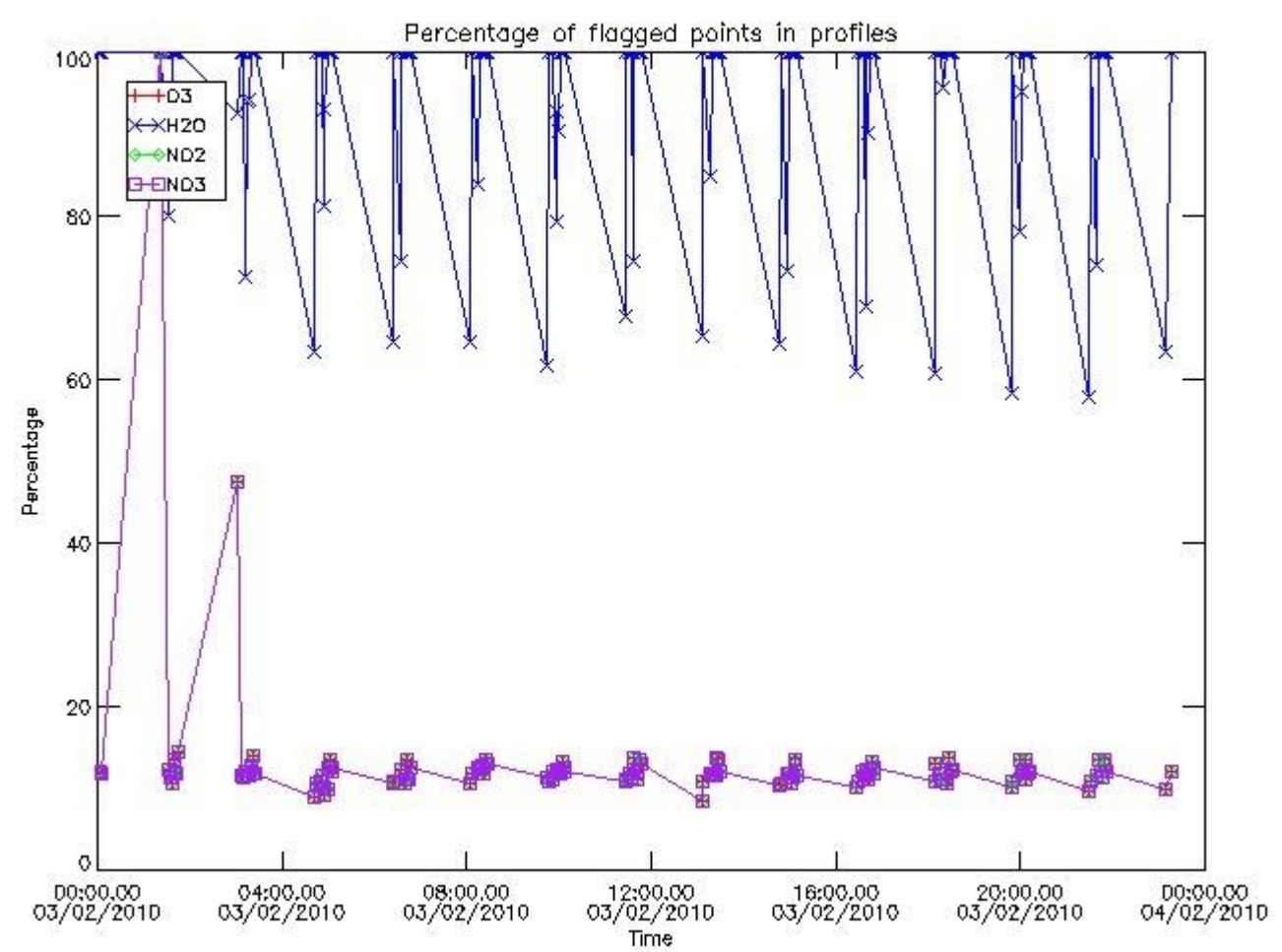
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20100203_000033_00000422086_00317_41453_3240.N1	03-FEB-2010 00:00:33	Dark	42.000	159	Ups Car	2.9200	7200.0	84	41453	No
2	GOM_NL__2PRFIN20100203_000229_00000432086_00317_41453_3241.N1	03-FEB-2010 00:02:29	Dark	42.500	71	lot Car	2.2460	7700.0	85	41453	No
3	GOM_NL__2PRFIN20100203_000412_00000442086_00317_41453_3242.N1	03-FEB-2010 00:04:12	Dark	43.500	46	Del Vel	1.9540	10600.	87	41453	No
4	GOM_NL__2PRFIN20100203_000642_00000432086_00317_41453_3243.N1	03-FEB-2010 00:06:42	Straylight	43.000	34	Gam2Vel	1.7930	23000.	86	41453	No
5	GOM_NL__2PRFIN20100203_000847_00000412086_00317_41453_3244.N1	03-FEB-2010 00:08:47	Straylight	40.500	70	Zet Pup	2.2460	39000.	81	41453	No
6	GOM_NL__2PRFIN20100203_001308_00000422086_00317_41453_3245.N1	03-FEB-2010 00:13:08	Straylight	42.000	132	15Rho Pup	2.8030	6900.0	84	41453	No
7	GOM_NL__2PRFIN20100203_002149_00000462086_00317_41453_3246.N1	03-FEB-2010 00:21:49	Twilight	46.000	8	10Alp CMi	0.40000	6500.0	92	41453	No
8	GOM_NL__2PRFIN20100203_002826_00000412086_00317_41453_3247.N1	03-FEB-2010 00:28:26	Bright	40.500	17	78Bet Gem	1.1610	4500.0	81	41453	No
9	GOM_NL__2PRFIN20100203_004544_00000352086_00317_41453_3248.N1	03-FEB-2010 00:45:44	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	41453	No
10	GOM_NL__2PRFIN20100203_004842_00000442086_00317_41453_3249.N1	03-FEB-2010 00:48:42	Bright	44.000	60	7Bet UMi	2.0810	3950.0	88	41453	No
11	GOM_NL__2PRFIN20100203_005327_00000432086_00317_41453_3250.N1	03-FEB-2010 00:53:27	Bright	43.000	119	14Eta Dra	2.7270	4700.0	86	41453	No
12	GOM_NL__2PRFIN20100203_005642_00000402086_00317_41453_3251.N1	03-FEB-2010 00:56:42	Bright	40.000	130	23Bet Dra	2.7990	5800.0	80	41453	No
13	GOM_NL__2PRFIN20100203_010024_00000352086_00317_41453_3252.N1	03-FEB-2010 01:00:24	Bright	35.000	5	3Alp Lyr	0.033000	11000.	70	41453	No
14	GOM_NL__2PRFIN20100203_010842_00000412086_00317_41453_3253.N1	03-FEB-2010 01:08:42	Bright	40.500	59	55Alp Oph	2.0800	8900.0	81	41453	No
15	GOM_NL__2PRFIN20100203_011050_00000552086_00317_41453_3254.N1	03-FEB-2010 01:10:50	Bright	55.000	126	60Bet Oph	2.7700	4250.0	110	41453	No
16	GOM_NL__2PRFIN20100203_011724_00000452086_00317_41453_3255.N1	03-FEB-2010 01:17:24	Twilight	45.000	86	35Eta Oph	2.4300	10200.	90	41453	No
17	GOM_NL__2PRFIN20100203_012149_00000612086_00317_41453_3256.N1	03-FEB-2010 01:21:49	Dark	61.000	16	21Alp Sco	1.0200	3000.0	122	41453	No
18	GOM_NL__2PRFIN20100203_013242_00000462086_00318_41454_3244.N1	03-FEB-2010 01:32:42	Dark	45.500	4	Alp1Cen	-0.010000	5800.0	91	41454	No
19	GOM_NL__2PRFIN20100203_013356_00000452086_00318_41454_3245.N1	03-FEB-2010 01:33:56	Dark	45.000	10	Bet Cen	0.61000	28000.	90	41454	No
20	GOM_NL__2PRFIN20100203_013718_00000492086_00318_41454_3246.N1	03-FEB-2010 01:37:18	Dark	48.500	12	Alp1Cru	0.77500	30000.	97	41454	No
21	GOM_NL__2PRFIN20100203_013926_00000442086_00318_41454_3247.N1	03-FEB-2010 01:39:26	Dark	43.500	99	Del Cen	2.5750	26000.	87	41454	No
22	GOM_NL__2PRFIN20100203_014109_00000382086_00318_41454_3248.N1	03-FEB-2010 01:41:09	Dark	38.000	159	Ups Car	2.9200	7200.0	76	41454	No
23	GOM_NL__2PRFIN20100203_014304_00000432086_00318_41454_3249.N1	03-FEB-2010 01:43:04	Dark	43.000	71	lot Car	2.2460	7700.0	86	41454	No
24	GOM_NL__2PRFIN20100203_014449_00000392086_00318_41454_3250.N1	03-FEB-2010 01:44:49	Dark	38.500	46	Del Vel	1.9540	10600.	77	41454	No
25	GOM_NL__2PRFIN20100203_014718_00000432086_00318_41454_3251.N1	03-FEB-2010 01:47:18	Straylight	42.500	34	Gam2Vel	1.7930	23000.	85	41454	No
26	GOM_NL__2PRFIN20100203_014923_00000412086_00318_41454_3252.N1	03-FEB-2010 01:49:23	Straylight	41.000	70	Zet Pup	2.2460	39000.	82	41454	No
27	GOM_NL__2PRFIN20100203_015344_00000422086_00318_41454_3253.N1	03-FEB-2010 01:53:44	Straylight	42.000	132	15Rho Pup	2.8030	6900.0	84	41454	No
28	GOM_NL__2PRFIN20100203_020225_00000462086_00318_41454_3254.N1	03-FEB-2010 02:02:25	Twilight	46.000	8	10Alp CMi	0.40000	6500.0	92	41454	No
29	GOM_NL__2PRFIN20100203_020901_00000422086_00318_41454_3255.N1	03-FEB-2010 02:09:01	Bright	42.000	17	78Bet Gem	1.1610	4500.0	84	41454	No
30	GOM_NL__2PRFIN20100203_022620_00000382086_00318_41454_3256.N1	03-FEB-2010 02:26:20	Bright	37.500	49	1Alp UMi	1.9900	6300.0	75	41454	No
31	GOM_NL__2PRFIN20100203_022917_00000412086_00318_41454_3257.N1	03-FEB-2010 02:29:17	Bright	40.500	60	7Bet UMi	2.0810	3950.0	81	41454	No
32	GOM_NL__2PRFIN20100203_023403_00000462086_00318_41454_3258.N1	03-FEB-2010 02:34:03	Bright	46.000	119	14Eta Dra	2.7270	4700.0	92	41454	No
33	GOM_NL__2PRFIN20100203_023718_00000372086_00318_41454_3259.N1	03-FEB-2010 02:37:18	Bright	37.000	130	23Bet Dra	2.7990	5800.0	74	41454	No
34	GOM_NL__2PRFIN20100203_024100_00000372086_00318_41454_3260.N1	03-FEB-2010 02:41:00	Bright	36.500	5	3Alp Lyr	0.033000	11000.	73	41454	No
35	GOM_NL__2PRFIN20100203_024918_00000372086_00318_41454_3261.N1	03-FEB-2010 02:49:18	Bright	37.000	59	55Alp Oph	2.0800	8900.0	74	41454	No
36	GOM_NL__2PRFIN20100203_025127_00000552086_00318_41454_3262.N1	03-FEB-2010 02:51:27	Bright	55.000	126	60Bet Oph	2.7700	4250.0	110	41454	No
37	GOM_NL__2PRFIN20100203_025801_00000472086_00318_41454_3263.N1	03-FEB-2010 02:58:01	Twilight	46.500	86	35Eta Oph	2.4300	10200.	93	41454	No
38	GOM_NL__2PRFIN20100203_030226_00000482086_00318_41454_3264.N1	03-FEB-2010 03:02:26	Dark	48.000	16	21Alp Sco	1.0200	3000.0	96	41454	No
39	GOM_NL__2PRFIN20100203_030816_00000452086_00318_41454_3265.N1	03-FEB-2010 03:08:16	Dark	44.500	131	Gam Lup	2.8000	26000.	89	41454	No
40	GOM_NL__2PRFIN20100203_031033_00000452086_00319_41455_3272.N1	03-FEB-2010 03:10:33	Dark	45.000	109	Bet Lup	2.6770	26000.	90	41455	No
41	GOM_NL__2PRFIN20100203_031319_00000432086_00319_41455_3273.N1	03-FEB-2010 03:13:19	Dark	42.500	4	Alp1Cen	-0.010000	5800.0	85	41455	No
42	GOM_NL__2PRFIN20100203_031432_00000422086_00319_41455_3274.N1	03-FEB-2010 03:14:32	Dark	42.000	10	Bet Cen	0.61000	28000.	84	41455	No

279	GOM_NL__2PRFIN20100203_205550_000000422086_00329_41465_3425.N1	03-FEB-2010 20:55:50	Bright	41.500	60	7Bet UMi	2.0810	3950.0	83	41465	No
280	GOM_NL__2PRFIN20100203_210036_000000392086_00329_41465_3426.N1	03-FEB-2010 21:00:36	Bright	39.000	119	14Eta Dra	2.7270	4700.0	78	41465	No
281	GOM_NL__2PRFIN20100203_210353_000000412086_00329_41465_3427.N1	03-FEB-2010 21:03:53	Bright	40.500	130	23Bet Dra	2.7990	5800.0	81	41465	No
282	GOM_NL__2PRFIN20100203_210737_000000392086_00329_41465_3428.N1	03-FEB-2010 21:07:37	Bright	38.500	5	3Alp Lyr	0.033000	11000.	77	41465	No
283	GOM_NL__2PRFIN20100203_211557_000000392086_00329_41465_3429.N1	03-FEB-2010 21:15:57	Bright	38.500	59	55Alp Oph	2.0800	8900.0	77	41465	No
284	GOM_NL__2PRFIN20100203_211806_000000552086_00329_41465_3430.N1	03-FEB-2010 21:18:06	Bright	54.500	126	60Bet Oph	2.7700	4250.0	109	41465	No
285	GOM_NL__2PRFIN20100203_212443_000000442086_00329_41465_3431.N1	03-FEB-2010 21:24:43	Tw_i_and_stray	43.500	86	35Eta Oph	2.4300	10200.	87	41465	No
286	GOM_NL__2PRFIN20100203_212909_000000532086_00329_41465_3432.N1	03-FEB-2010 21:29:09	Dark	52.500	16	21Alp Sco	1.0200	3000.0	105	41465	No
287	GOM_NL__2PRFIN20100203_213041_000000472086_00329_41465_3433.N1	03-FEB-2010 21:30:41	Dark	47.000	158	6Pi Sco	2.9060	28000.	94	41465	No
288	GOM_NL__2PRFIN20100203_214000_000000452086_00330_41466_3420.N1	03-FEB-2010 21:40:00	Dark	44.500	4	Alp1Cen	-0.010000	5800.0	89	41466	No
289	GOM_NL__2PRFIN20100203_214114_000000452086_00330_41466_3421.N1	03-FEB-2010 21:41:14	Dark	45.000	10	Bet Cen	0.61000	28000.	90	41466	No
290	GOM_NL__2PRFIN20100203_214435_000000432086_00330_41466_3422.N1	03-FEB-2010 21:44:35	Dark	42.500	12	Alp1Cru	0.77500	30000.	85	41466	No
291	GOM_NL__2PRFIN20100203_214646_000000452086_00330_41466_3423.N1	03-FEB-2010 21:46:46	Dark	45.000	99	Del Cen	2.5750	26000.	90	41466	No
292	GOM_NL__2PRFIN20100203_214824_000000382086_00330_41466_3424.N1	03-FEB-2010 21:48:24	Dark	37.500	159	Ups Car	2.9200	7200.0	75	41466	No
293	GOM_NL__2PRFIN20100203_215019_000000402086_00330_41466_3425.N1	03-FEB-2010 21:50:19	Dark	39.500	71	lot Car	2.2460	7700.0	79	41466	No
294	GOM_NL__2PRFIN20100203_215203_000000432086_00330_41466_3426.N1	03-FEB-2010 21:52:03	Dark	42.500	46	Del Vel	1.9540	10600.	85	41466	No
295	GOM_NL__2PRFIN20100203_215437_000000472086_00330_41466_3427.N1	03-FEB-2010 21:54:37	Straylight	46.500	65	Lam Vel	2.2040	4400.0	93	41466	No
296	GOM_NL__2PRFIN20100203_215637_000000402086_00330_41466_3428.N1	03-FEB-2010 21:56:37	Straylight	39.500	70	Zet Pup	2.2460	39000.	79	41466	No
297	GOM_NL__2PRFIN20100203_220058_000000412086_00330_41466_3429.N1	03-FEB-2010 22:00:58	Straylight	40.500	132	15Rho Pup	2.8030	6900.0	81	41466	No
298	GOM_NL__2PRFIN20100203_220937_000000472086_00330_41466_3430.N1	03-FEB-2010 22:09:37	Tw_i_and_stray	47.000	8	10Alp CMi	0.40000	6500.0	94	41466	No
299	GOM_NL__2PRFIN20100203_221611_000000402086_00330_41466_3431.N1	03-FEB-2010 22:16:11	Bright	40.000	17	78Bet Gem	1.1610	4500.0	80	41466	No
300	GOM_NL__2PRFIN20100203_223331_000000352086_00330_41466_3432.N1	03-FEB-2010 22:33:31	Bright	34.500	49	1Alp UMi	1.9900	6300.0	69	41466	No
301	GOM_NL__2PRFIN20100203_223626_000000412086_00330_41466_3433.N1	03-FEB-2010 22:36:26	Bright	41.000	60	7Bet UMi	2.0810	3950.0	82	41466	No
302	GOM_NL__2PRFIN20100203_224111_000000412086_00330_41466_3434.N1	03-FEB-2010 22:41:11	Bright	41.000	119	14Eta Dra	2.7270	4700.0	82	41466	No
303	GOM_NL__2PRFIN20100203_224429_000000412086_00330_41466_3435.N1	03-FEB-2010 22:44:29	Bright	41.000	130	23Bet Dra	2.7990	5800.0	82	41466	No
304	GOM_NL__2PRFIN20100203_224813_000000362086_00330_41466_3436.N1	03-FEB-2010 22:48:13	Bright	36.000	5	3Alp Lyr	0.033000	11000.	72	41466	No
305	GOM_NL__2PRFIN20100203_225633_000000562086_00330_41466_3437.N1	03-FEB-2010 22:56:33	Bright	56.000	59	55Alp Oph	2.0800	8900.0	112	41466	No
306	GOM_NL__2PRFIN20100203_225842_000000552086_00330_41466_3438.N1	03-FEB-2010 22:58:42	Bright	55.000	126	60Bet Oph	2.7700	4250.0	110	41466	No
307	GOM_NL__2PRFIN20100203_230519_000000432086_00330_41466_3439.N1	03-FEB-2010 23:05:19	Tw_i_and_stray	43.000	86	35Eta Oph	2.4300	10200.	86	41466	No
308	GOM_NL__2PRFIN20100203_230946_000000512086_00330_41466_3440.N1	03-FEB-2010 23:09:46	Dark	51.000	16	21Alp Sco	1.0200	3000.0	102	41466	No
309	GOM_NL__2PRFIN20100203_231537_000000432086_00330_41466_3441.N1	03-FEB-2010 23:15:37	Dark	42.500	131	Gam Lup	2.8000	26000.	85	41466	No

3. Quality information per product

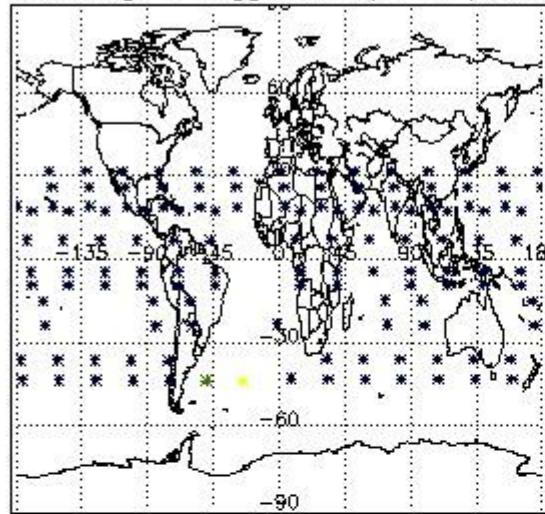
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

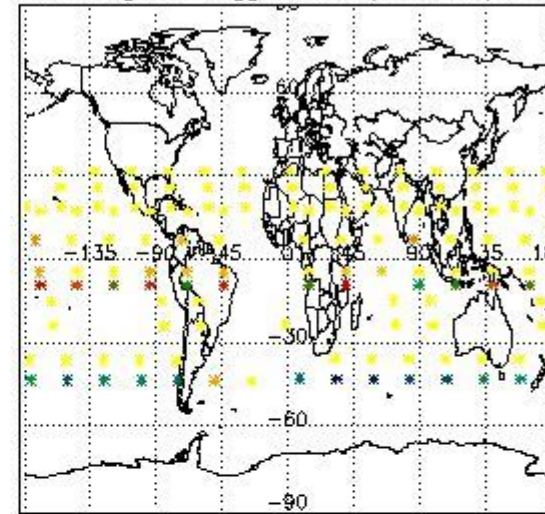


3.2 Plot quality information per product (world map)

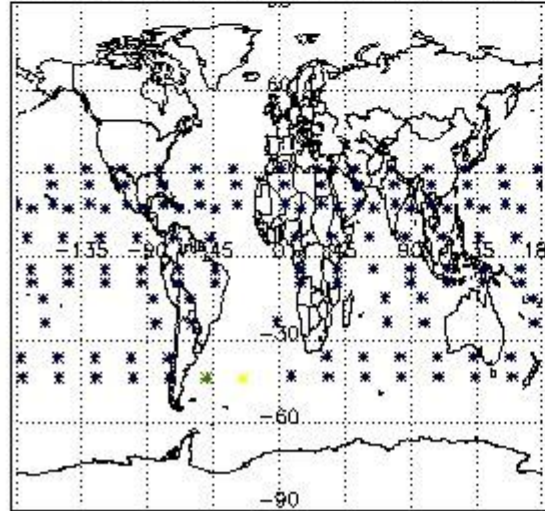
Percentage of flagged data per O3 profile



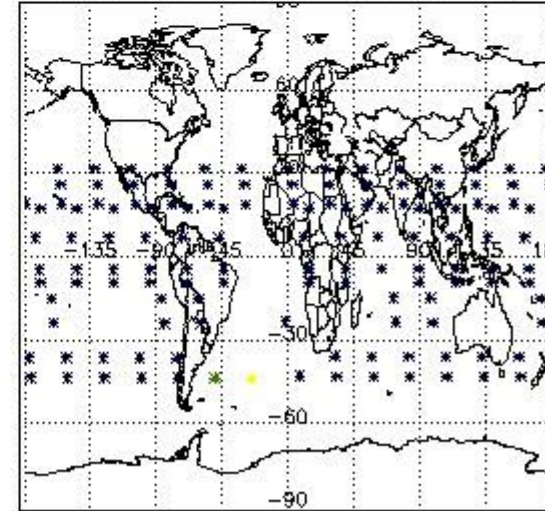
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

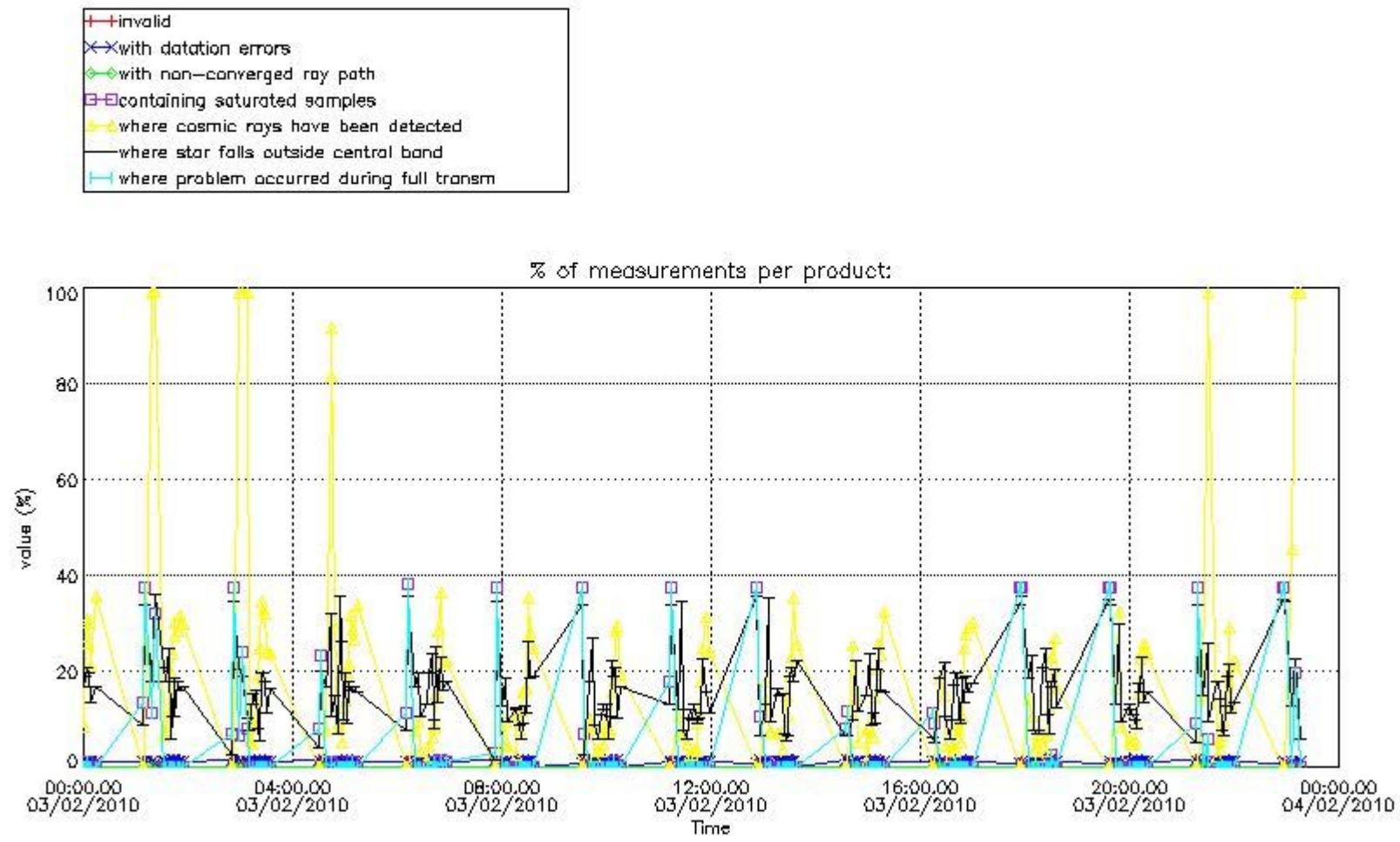


4. Level 1 quality information per product

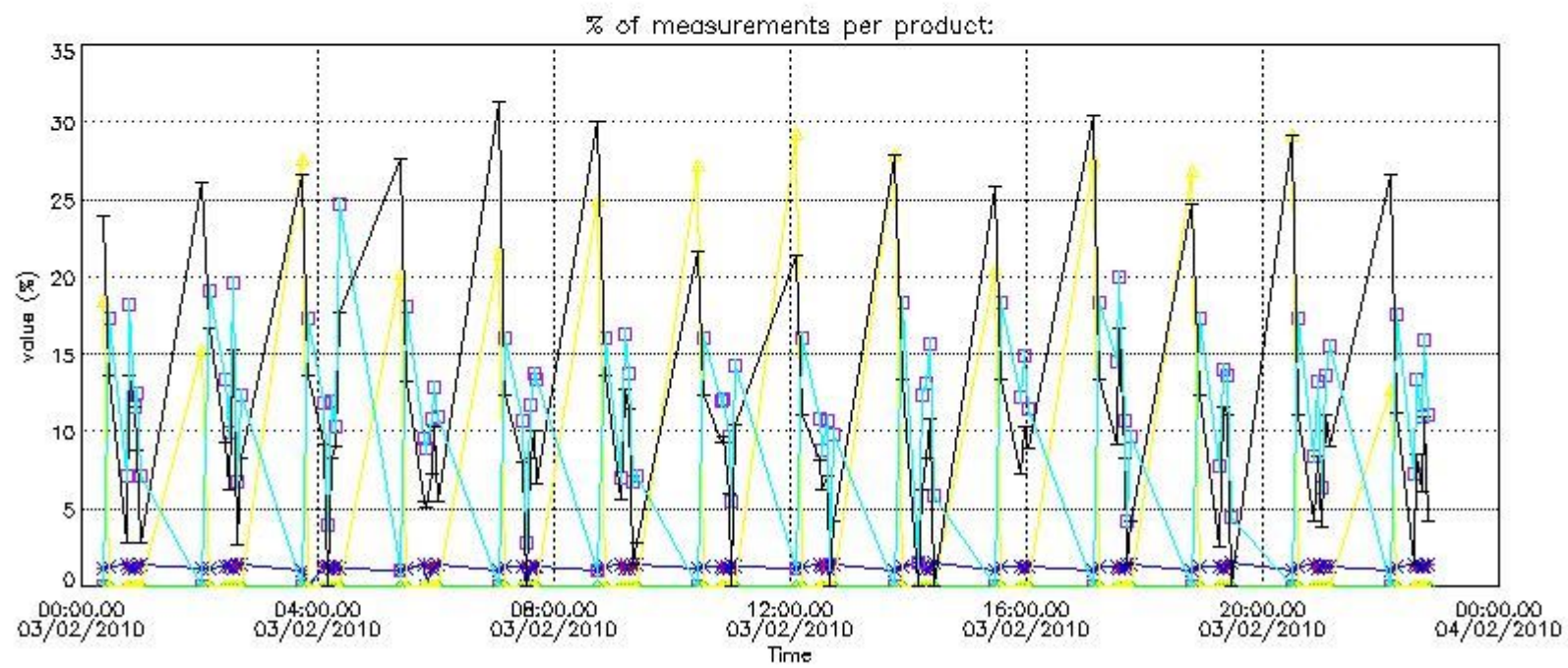
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

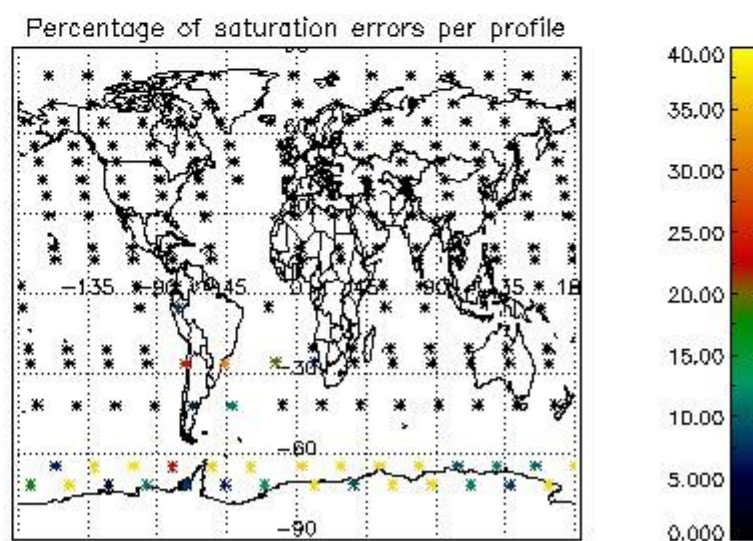
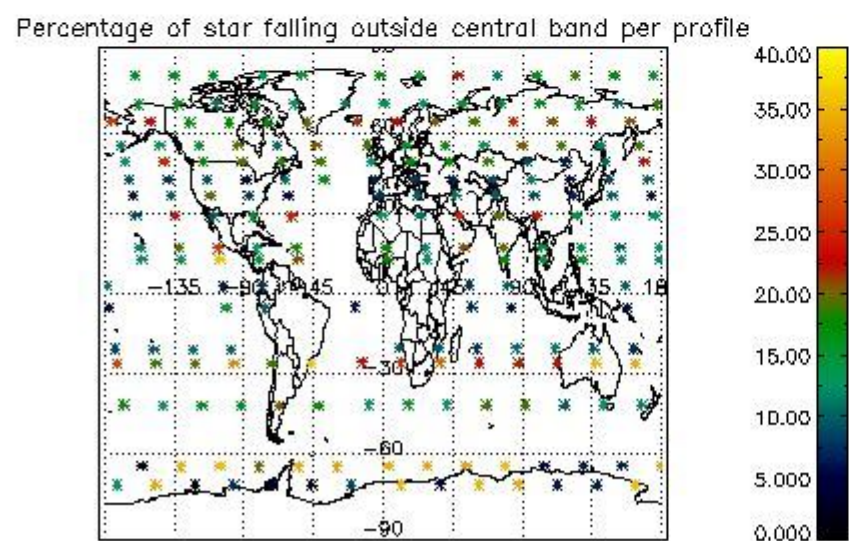
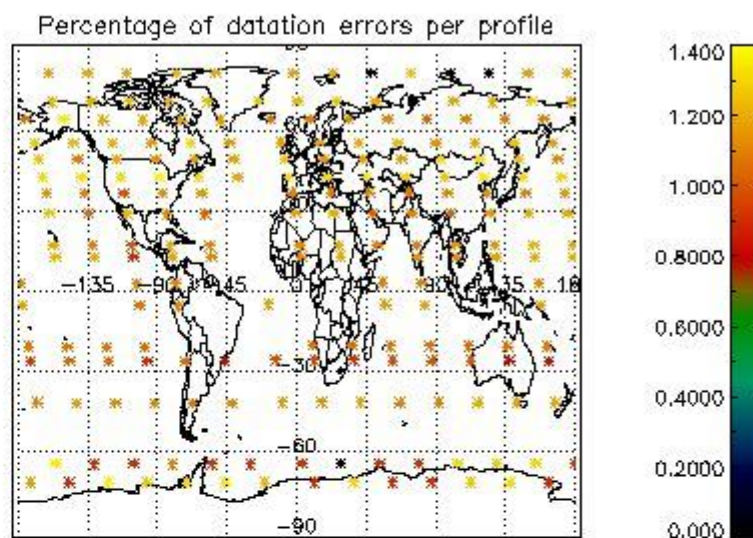
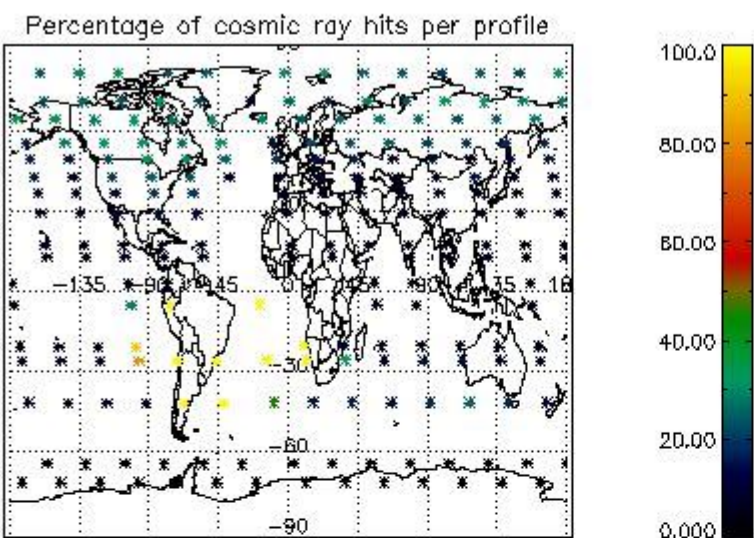


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

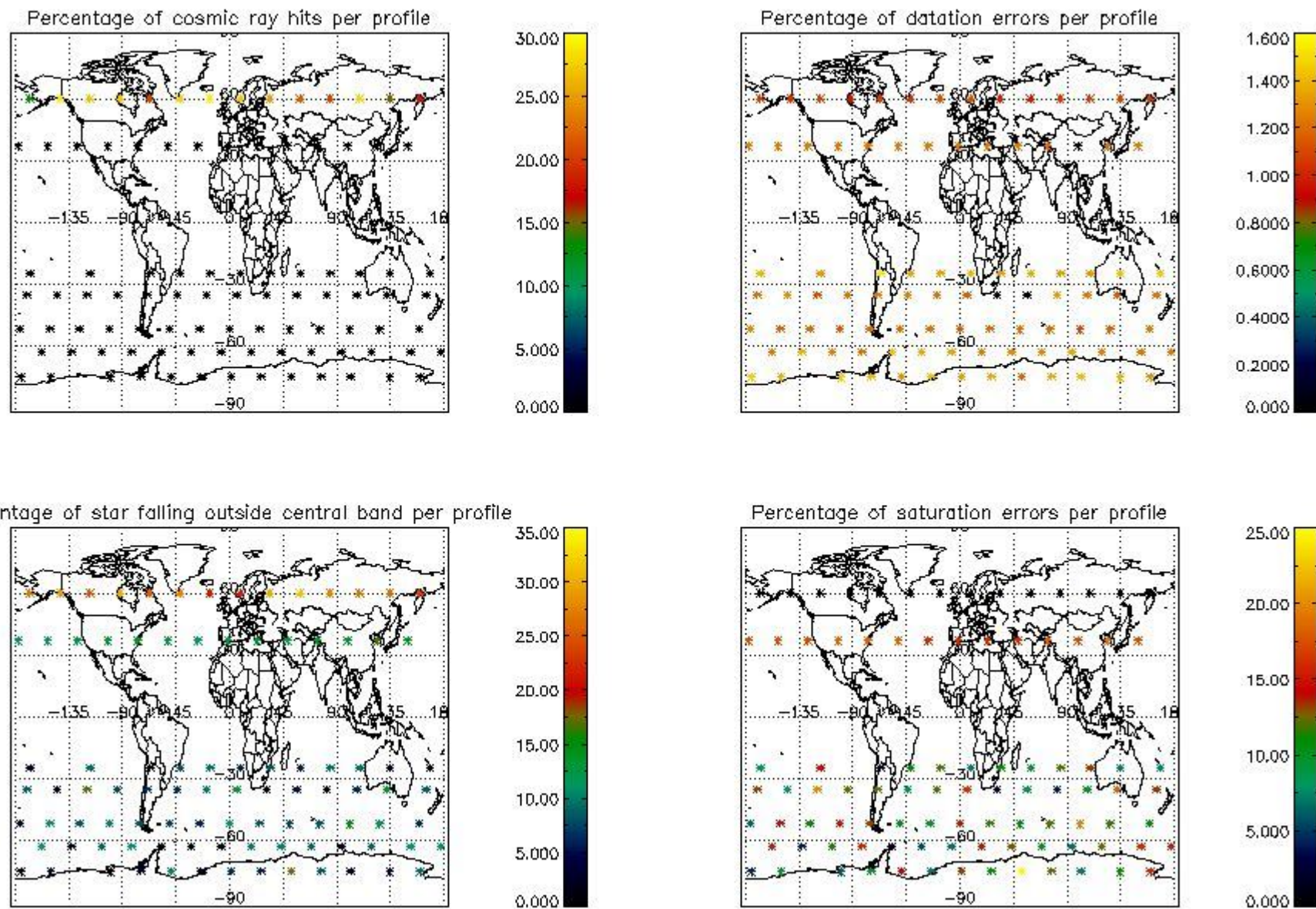


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

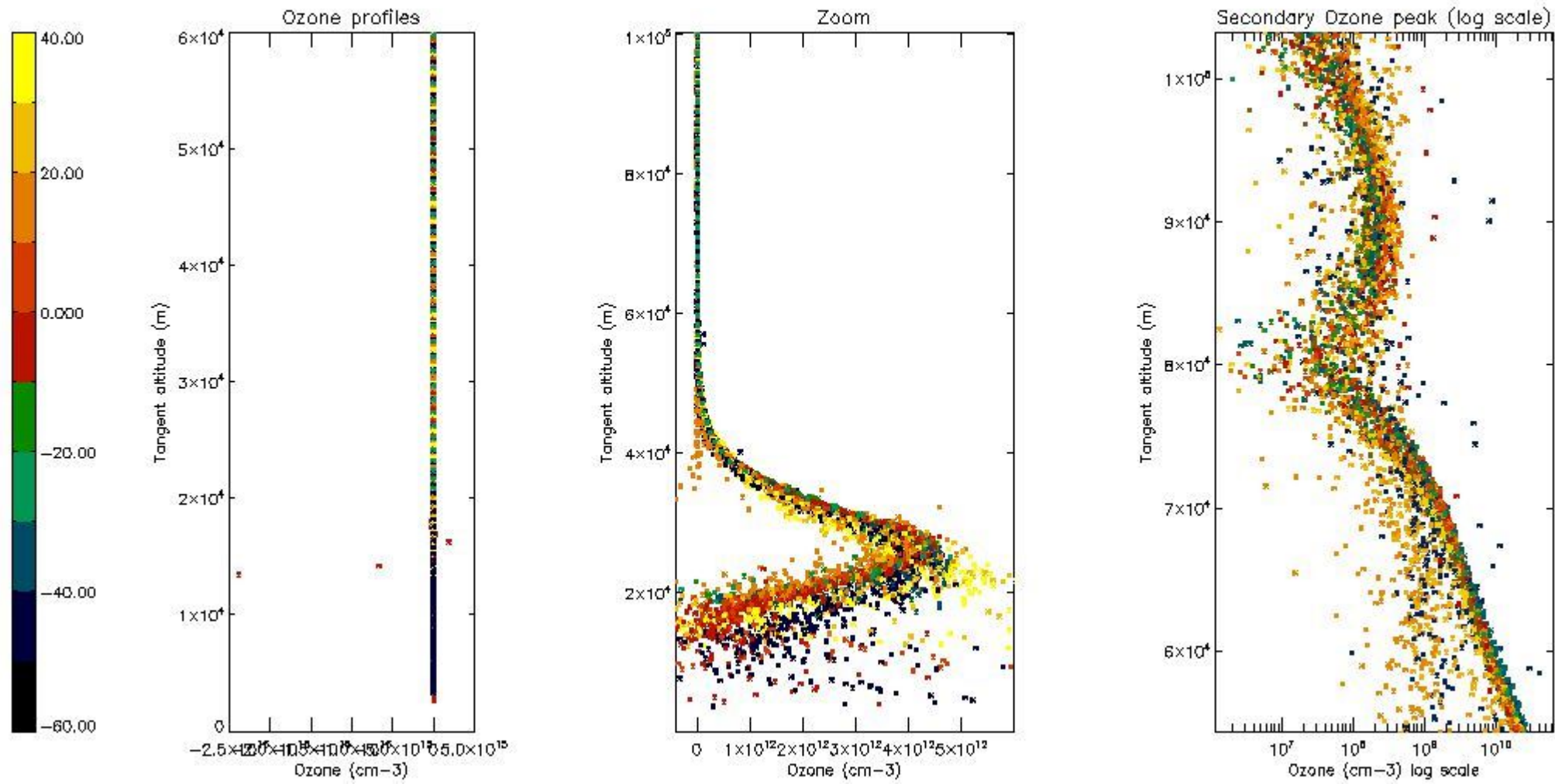
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	44
STD < 20	23

STD < 10	18
STD < 5	12

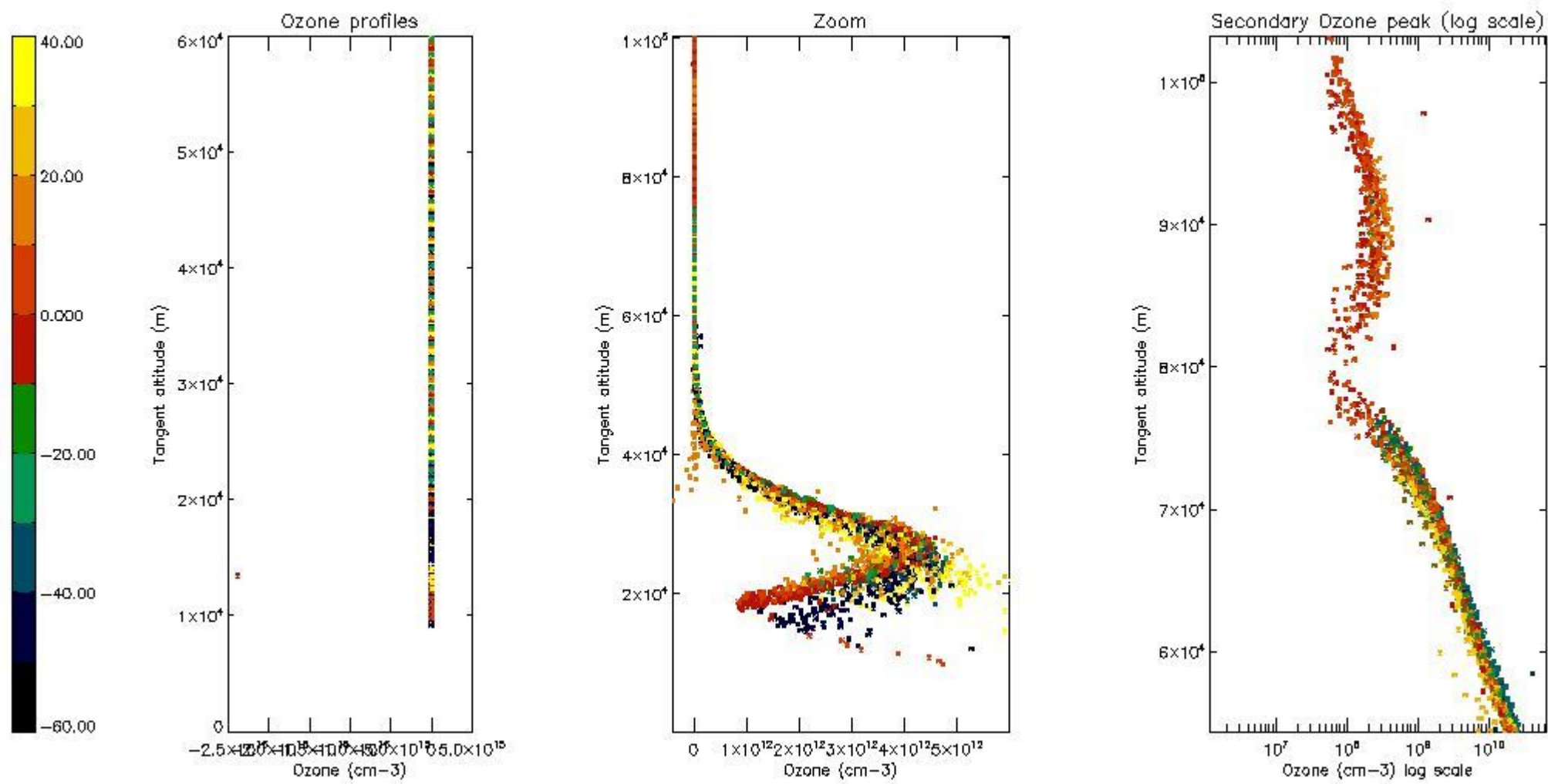
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



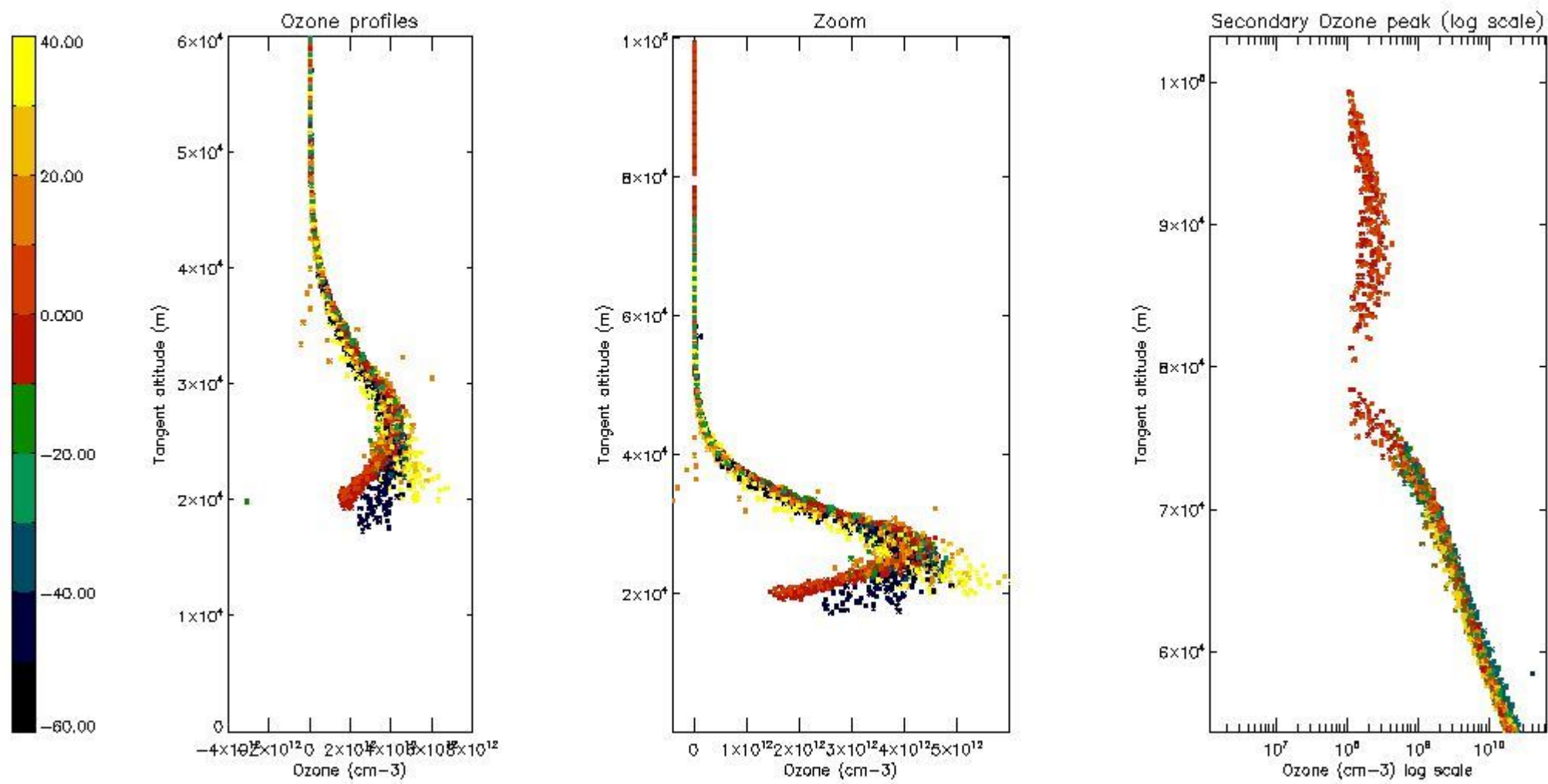
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



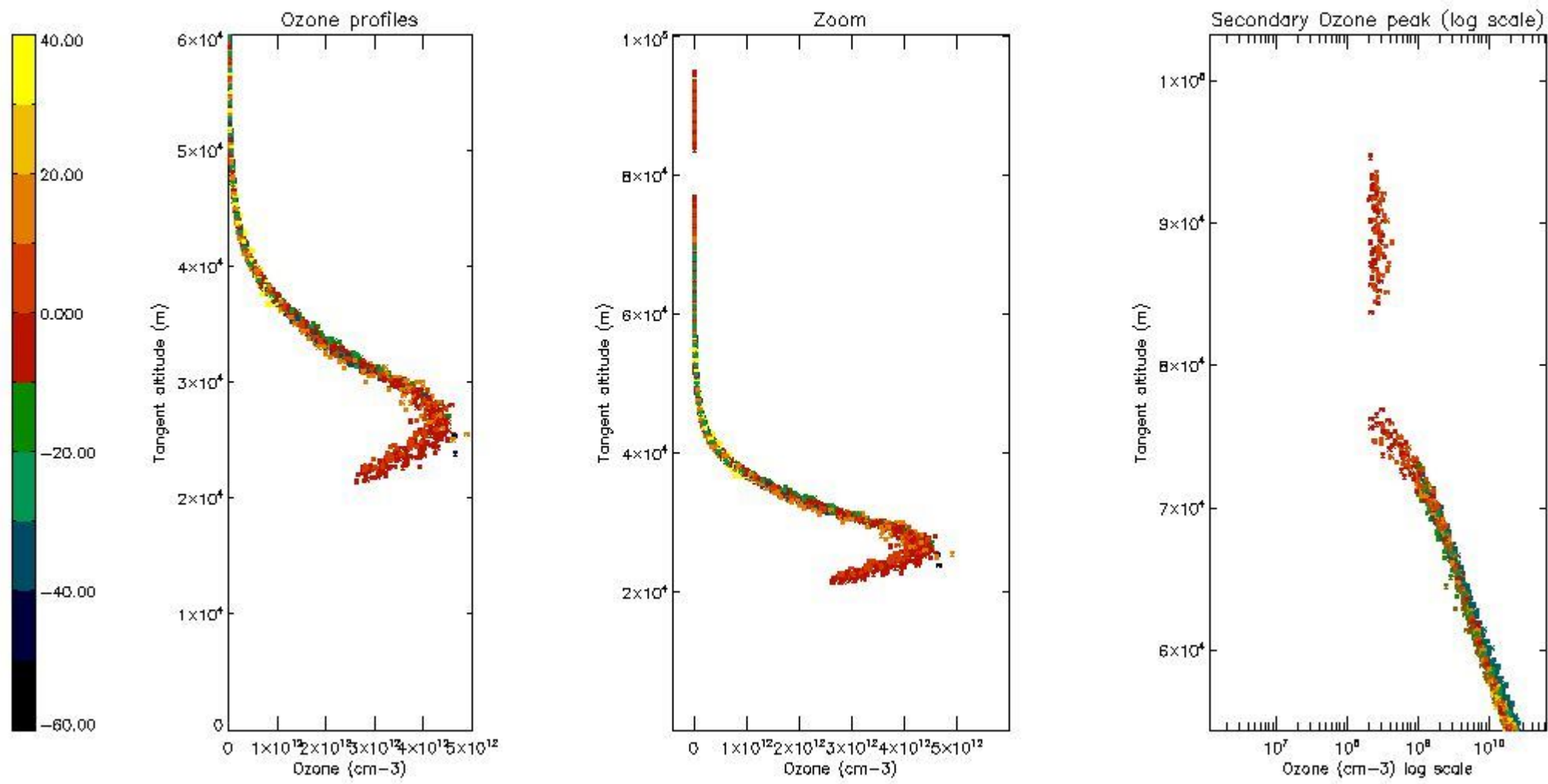
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



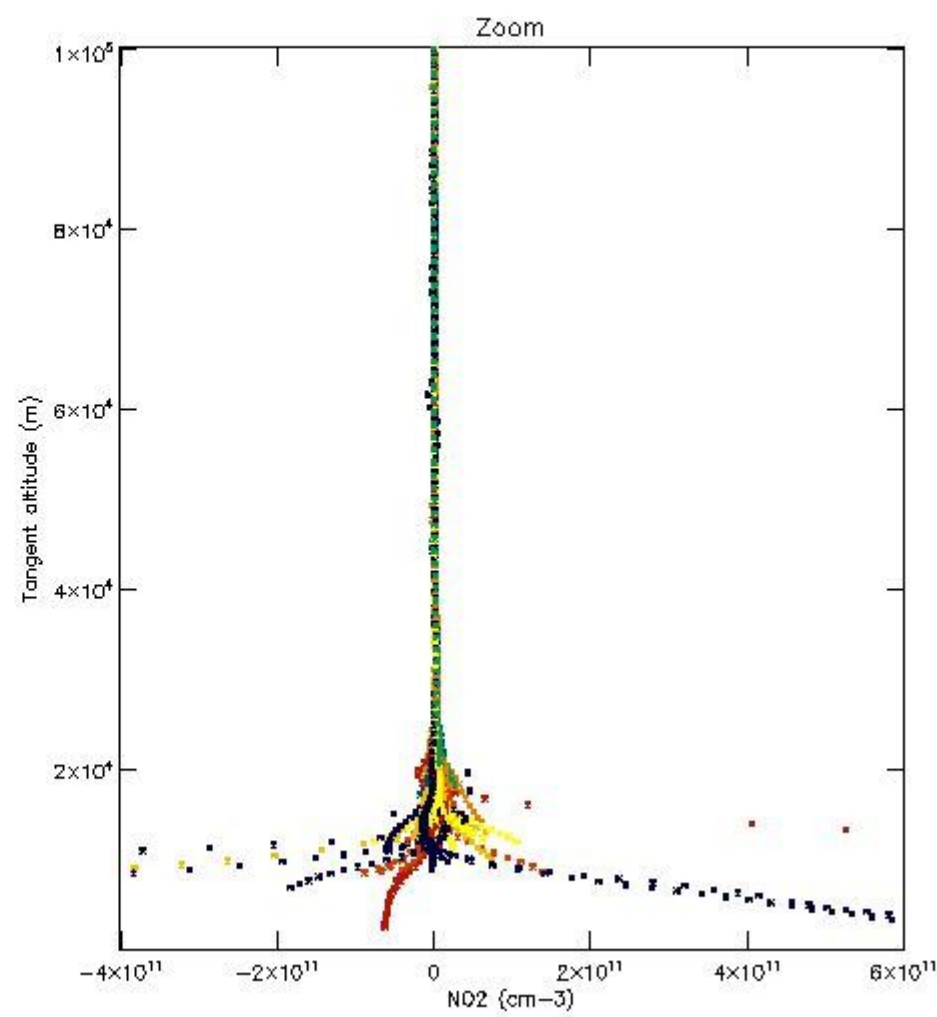
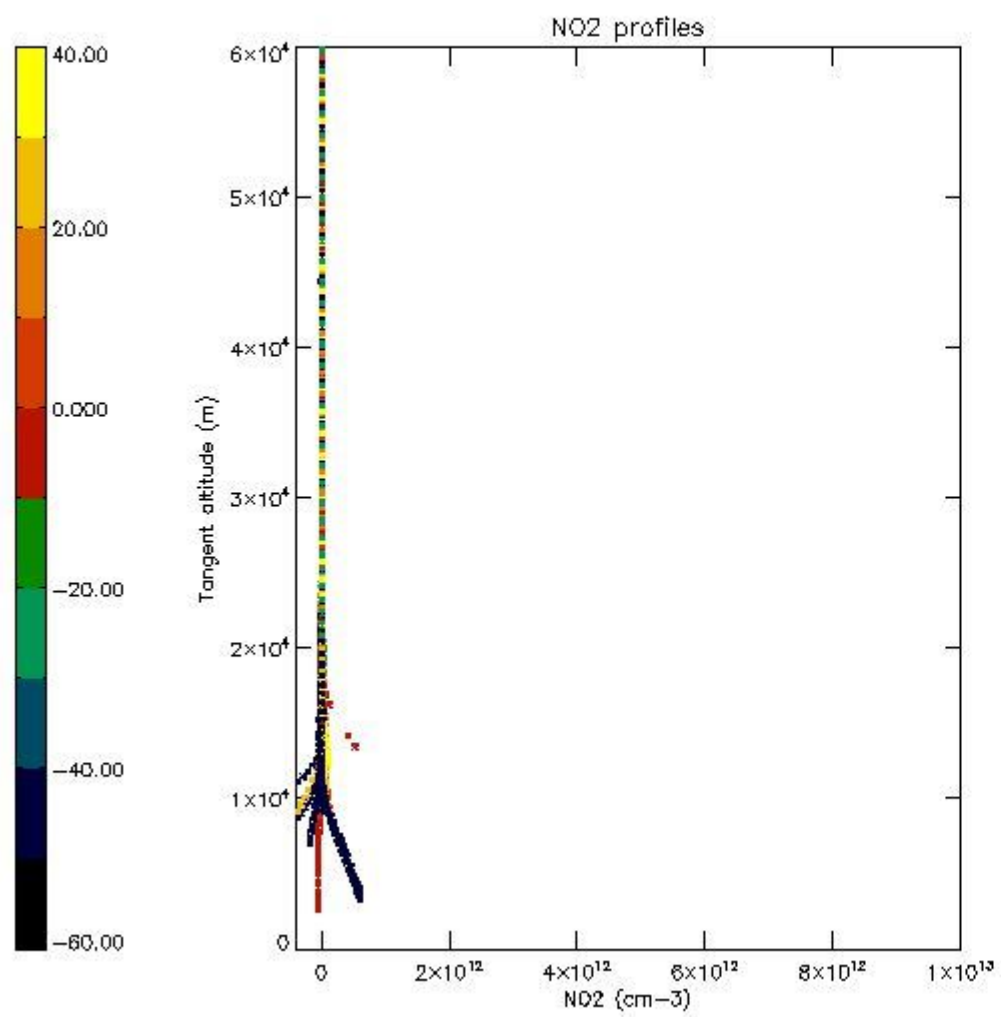
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



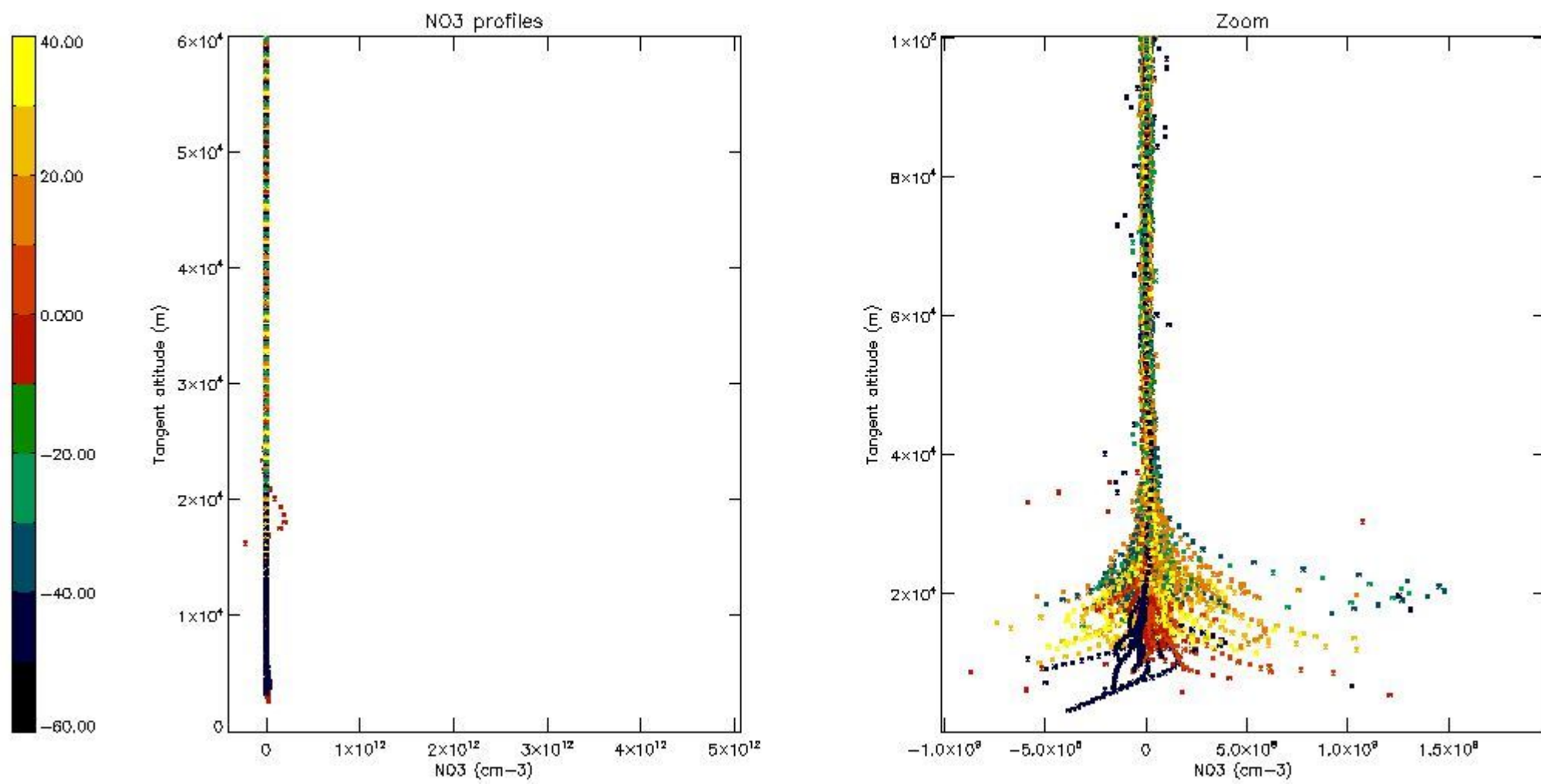
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



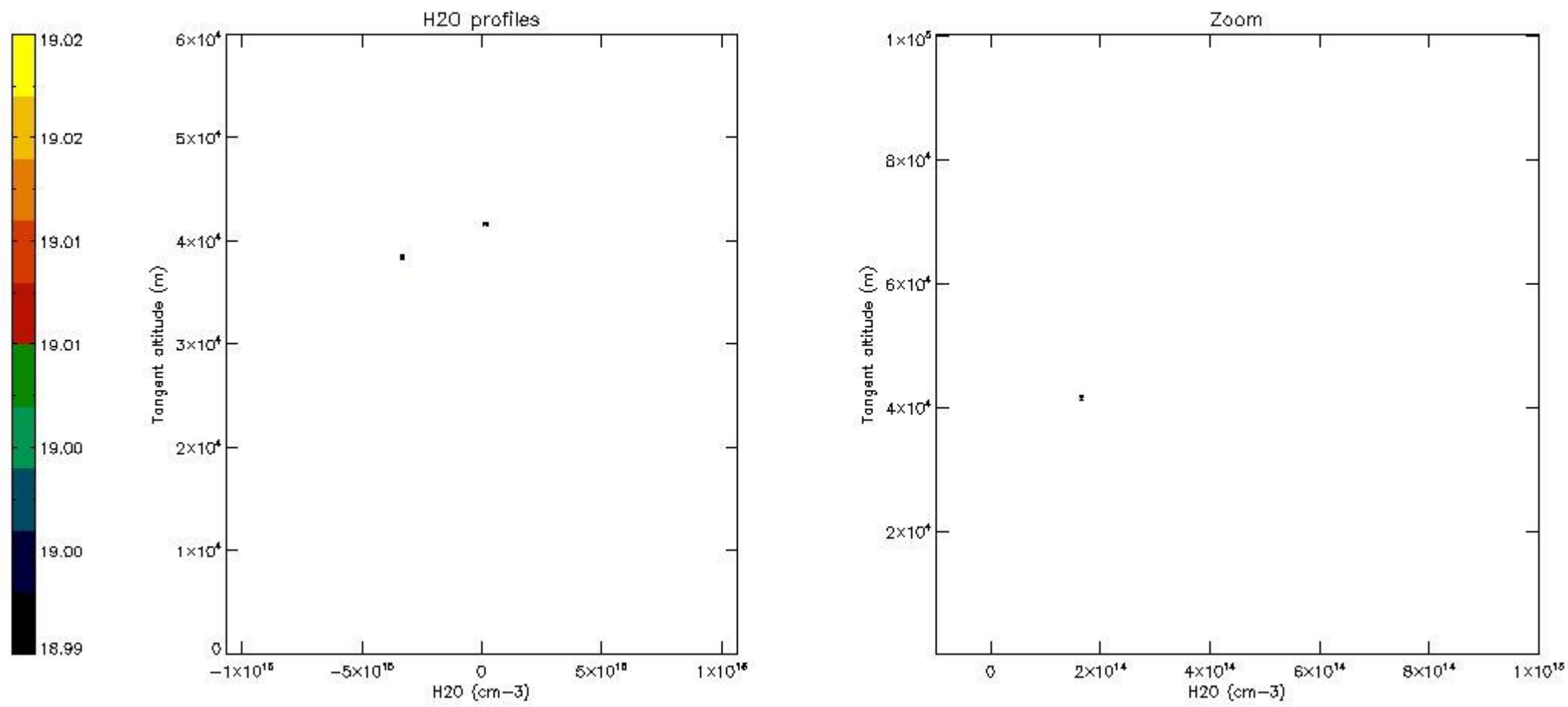
5.7 Plot NO3 profiles for all STD (dark without errors)

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	03-FEB-2010 00:00:33
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	03-FEB-2010 00:00:33
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	03-FEB-2010 00:00:33

GOMOS Level 2 Daily Report

SUMMARY

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

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

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

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

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

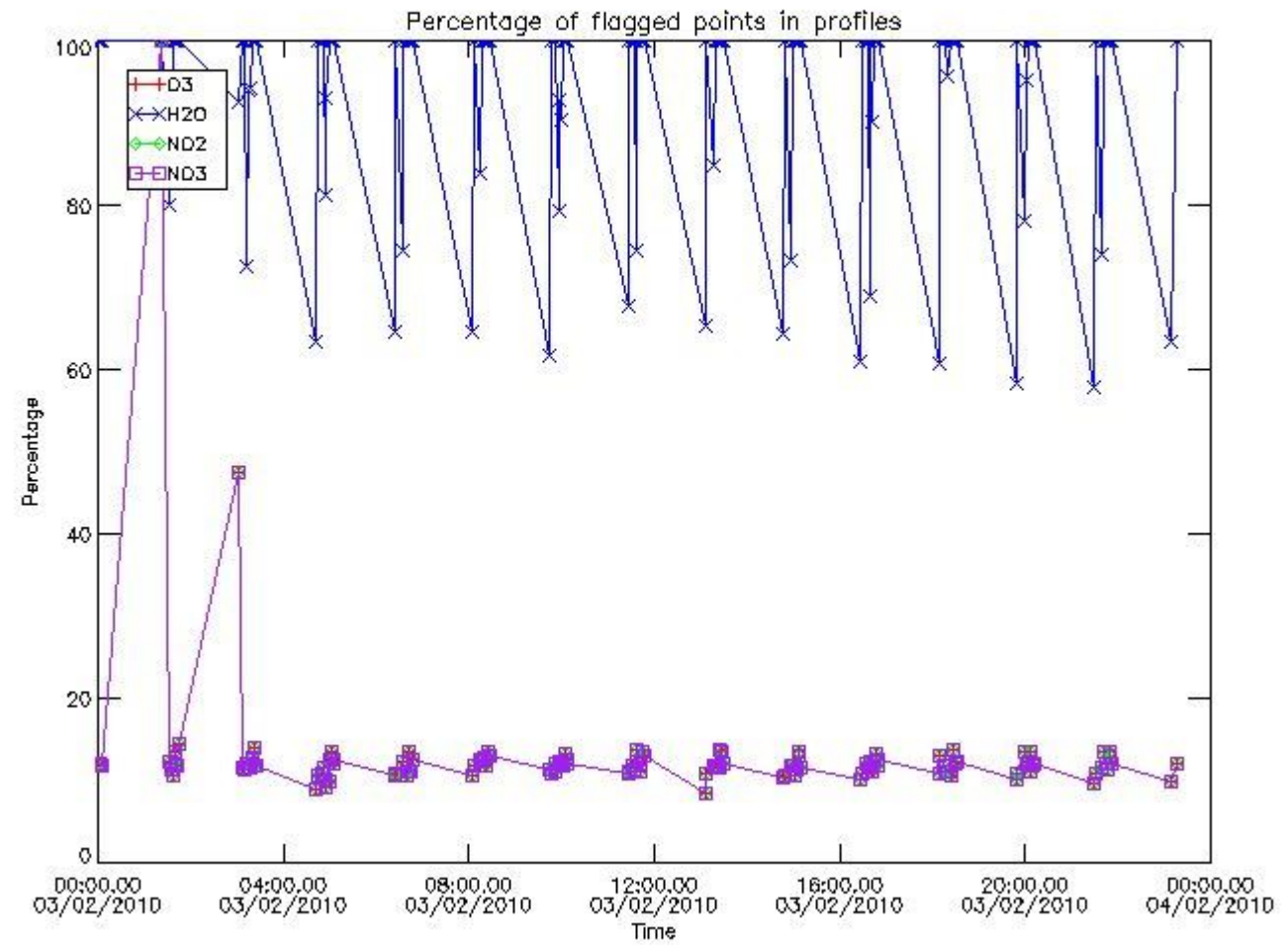
[6. Auxiliary Data Files used for the production reported in section 2](#)

279	GOM_NL__2PRFIN20100203_205550_000000422086_00329_41465_3425.N1	03-FEB-2010 20:55:50	Bright	41.500	60	7Bet UMi	2.0810	3950.0	83	41465	No
280	GOM_NL__2PRFIN20100203_210036_000000392086_00329_41465_3426.N1	03-FEB-2010 21:00:36	Bright	39.000	119	14Eta Dra	2.7270	4700.0	78	41465	No
281	GOM_NL__2PRFIN20100203_210353_000000412086_00329_41465_3427.N1	03-FEB-2010 21:03:53	Bright	40.500	130	23Bet Dra	2.7990	5800.0	81	41465	No
282	GOM_NL__2PRFIN20100203_210737_000000392086_00329_41465_3428.N1	03-FEB-2010 21:07:37	Bright	38.500	5	3Alp Lyr	0.033000	11000.	77	41465	No
283	GOM_NL__2PRFIN20100203_211557_000000392086_00329_41465_3429.N1	03-FEB-2010 21:15:57	Bright	38.500	59	55Alp Oph	2.0800	8900.0	77	41465	No
284	GOM_NL__2PRFIN20100203_211806_000000552086_00329_41465_3430.N1	03-FEB-2010 21:18:06	Bright	54.500	126	60Bet Oph	2.7700	4250.0	109	41465	No
285	GOM_NL__2PRFIN20100203_212443_000000442086_00329_41465_3431.N1	03-FEB-2010 21:24:43	Tw_i_and_stray	43.500	86	35Eta Oph	2.4300	10200.	87	41465	No
286	GOM_NL__2PRFIN20100203_212909_000000532086_00329_41465_3432.N1	03-FEB-2010 21:29:09	Dark	52.500	16	21Alp Sco	1.0200	3000.0	105	41465	No
287	GOM_NL__2PRFIN20100203_213041_000000472086_00329_41465_3433.N1	03-FEB-2010 21:30:41	Dark	47.000	158	6Pi Sco	2.9060	28000.	94	41465	No
288	GOM_NL__2PRFIN20100203_214000_000000452086_00330_41466_3420.N1	03-FEB-2010 21:40:00	Dark	44.500	4	Alp1Cen	-0.010000	5800.0	89	41466	No
289	GOM_NL__2PRFIN20100203_214114_000000452086_00330_41466_3421.N1	03-FEB-2010 21:41:14	Dark	45.000	10	Bet Cen	0.61000	28000.	90	41466	No
290	GOM_NL__2PRFIN20100203_214435_000000432086_00330_41466_3422.N1	03-FEB-2010 21:44:35	Dark	42.500	12	Alp1Cru	0.77500	30000.	85	41466	No
291	GOM_NL__2PRFIN20100203_214646_000000452086_00330_41466_3423.N1	03-FEB-2010 21:46:46	Dark	45.000	99	Del Cen	2.5750	26000.	90	41466	No
292	GOM_NL__2PRFIN20100203_214824_000000382086_00330_41466_3424.N1	03-FEB-2010 21:48:24	Dark	37.500	159	Ups Car	2.9200	7200.0	75	41466	No
293	GOM_NL__2PRFIN20100203_215019_000000402086_00330_41466_3425.N1	03-FEB-2010 21:50:19	Dark	39.500	71	lot Car	2.2460	7700.0	79	41466	No
294	GOM_NL__2PRFIN20100203_215203_000000432086_00330_41466_3426.N1	03-FEB-2010 21:52:03	Dark	42.500	46	Del Vel	1.9540	10600.	85	41466	No
295	GOM_NL__2PRFIN20100203_215437_000000472086_00330_41466_3427.N1	03-FEB-2010 21:54:37	Straylight	46.500	65	Lam Vel	2.2040	4400.0	93	41466	No
296	GOM_NL__2PRFIN20100203_215637_000000402086_00330_41466_3428.N1	03-FEB-2010 21:56:37	Straylight	39.500	70	Zet Pup	2.2460	39000.	79	41466	No
297	GOM_NL__2PRFIN20100203_220058_000000412086_00330_41466_3429.N1	03-FEB-2010 22:00:58	Straylight	40.500	132	15Rho Pup	2.8030	6900.0	81	41466	No
298	GOM_NL__2PRFIN20100203_220937_000000472086_00330_41466_3430.N1	03-FEB-2010 22:09:37	Tw_i_and_stray	47.000	8	10Alp CMi	0.40000	6500.0	94	41466	No
299	GOM_NL__2PRFIN20100203_221611_000000402086_00330_41466_3431.N1	03-FEB-2010 22:16:11	Bright	40.000	17	78Bet Gem	1.1610	4500.0	80	41466	No
300	GOM_NL__2PRFIN20100203_223331_000000352086_00330_41466_3432.N1	03-FEB-2010 22:33:31	Bright	34.500	49	1Alp UMi	1.9900	6300.0	69	41466	No
301	GOM_NL__2PRFIN20100203_223626_000000412086_00330_41466_3433.N1	03-FEB-2010 22:36:26	Bright	41.000	60	7Bet UMi	2.0810	3950.0	82	41466	No
302	GOM_NL__2PRFIN20100203_224111_000000412086_00330_41466_3434.N1	03-FEB-2010 22:41:11	Bright	41.000	119	14Eta Dra	2.7270	4700.0	82	41466	No
303	GOM_NL__2PRFIN20100203_224429_000000412086_00330_41466_3435.N1	03-FEB-2010 22:44:29	Bright	41.000	130	23Bet Dra	2.7990	5800.0	82	41466	No
304	GOM_NL__2PRFIN20100203_224813_000000362086_00330_41466_3436.N1	03-FEB-2010 22:48:13	Bright	36.000	5	3Alp Lyr	0.033000	11000.	72	41466	No
305	GOM_NL__2PRFIN20100203_225633_000000562086_00330_41466_3437.N1	03-FEB-2010 22:56:33	Bright	56.000	59	55Alp Oph	2.0800	8900.0	112	41466	No
306	GOM_NL__2PRFIN20100203_225842_000000552086_00330_41466_3438.N1	03-FEB-2010 22:58:42	Bright	55.000	126	60Bet Oph	2.7700	4250.0	110	41466	No
307	GOM_NL__2PRFIN20100203_230519_000000432086_00330_41466_3439.N1	03-FEB-2010 23:05:19	Tw_i_and_stray	43.000	86	35Eta Oph	2.4300	10200.	86	41466	No
308	GOM_NL__2PRFIN20100203_230946_000000512086_00330_41466_3440.N1	03-FEB-2010 23:09:46	Dark	51.000	16	21Alp Sco	1.0200	3000.0	102	41466	No
309	GOM_NL__2PRFIN20100203_231537_000000432086_00330_41466_3441.N1	03-FEB-2010 23:15:37	Dark	42.500	131	Gam Lup	2.8000	26000.	85	41466	No

3. Quality information per product

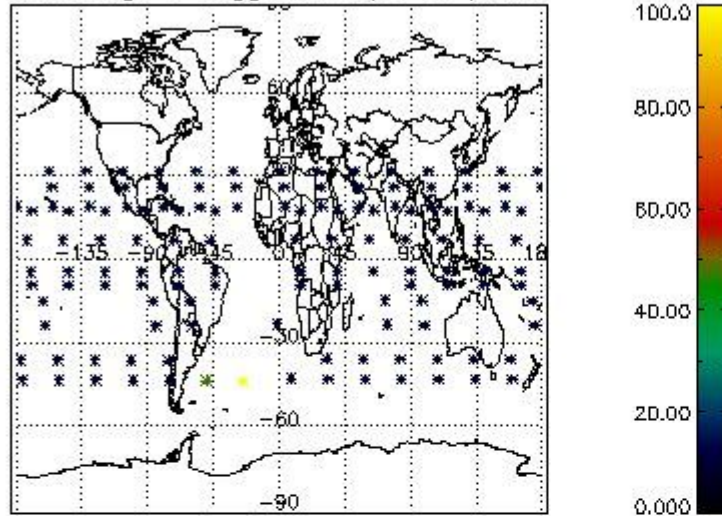
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

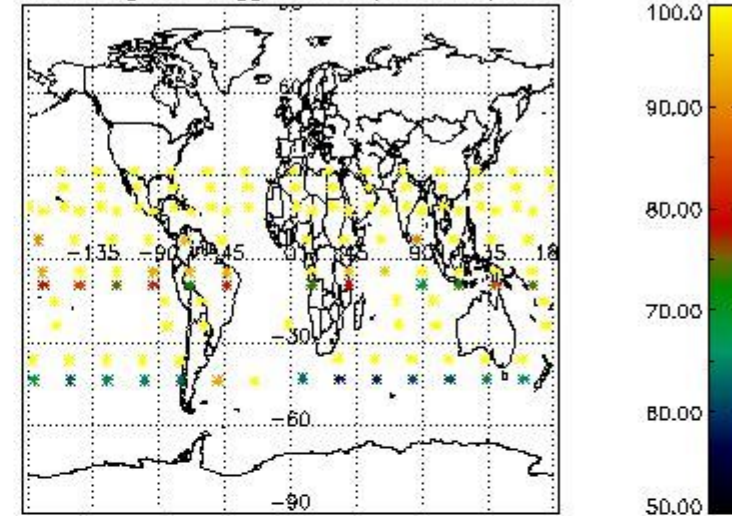


3.2 Plot quality information per product (world map)

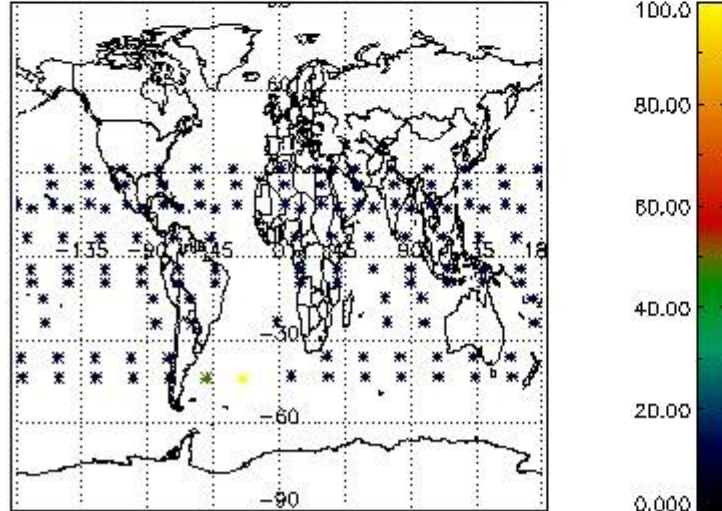
Percentage of flagged data per O3 profile



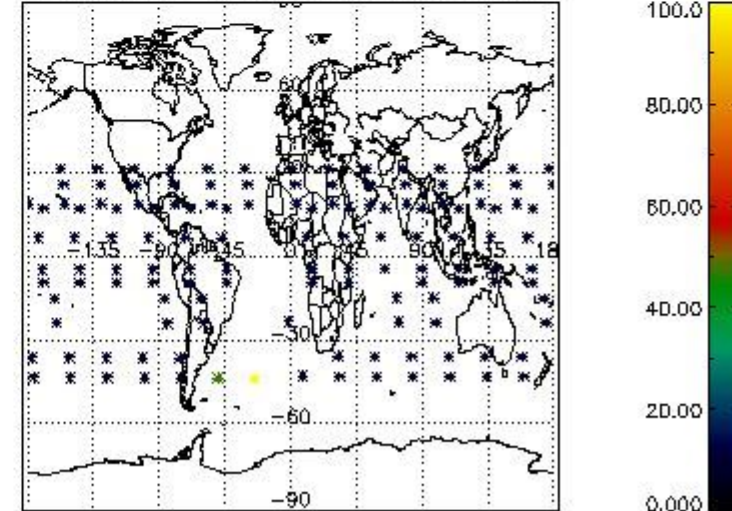
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

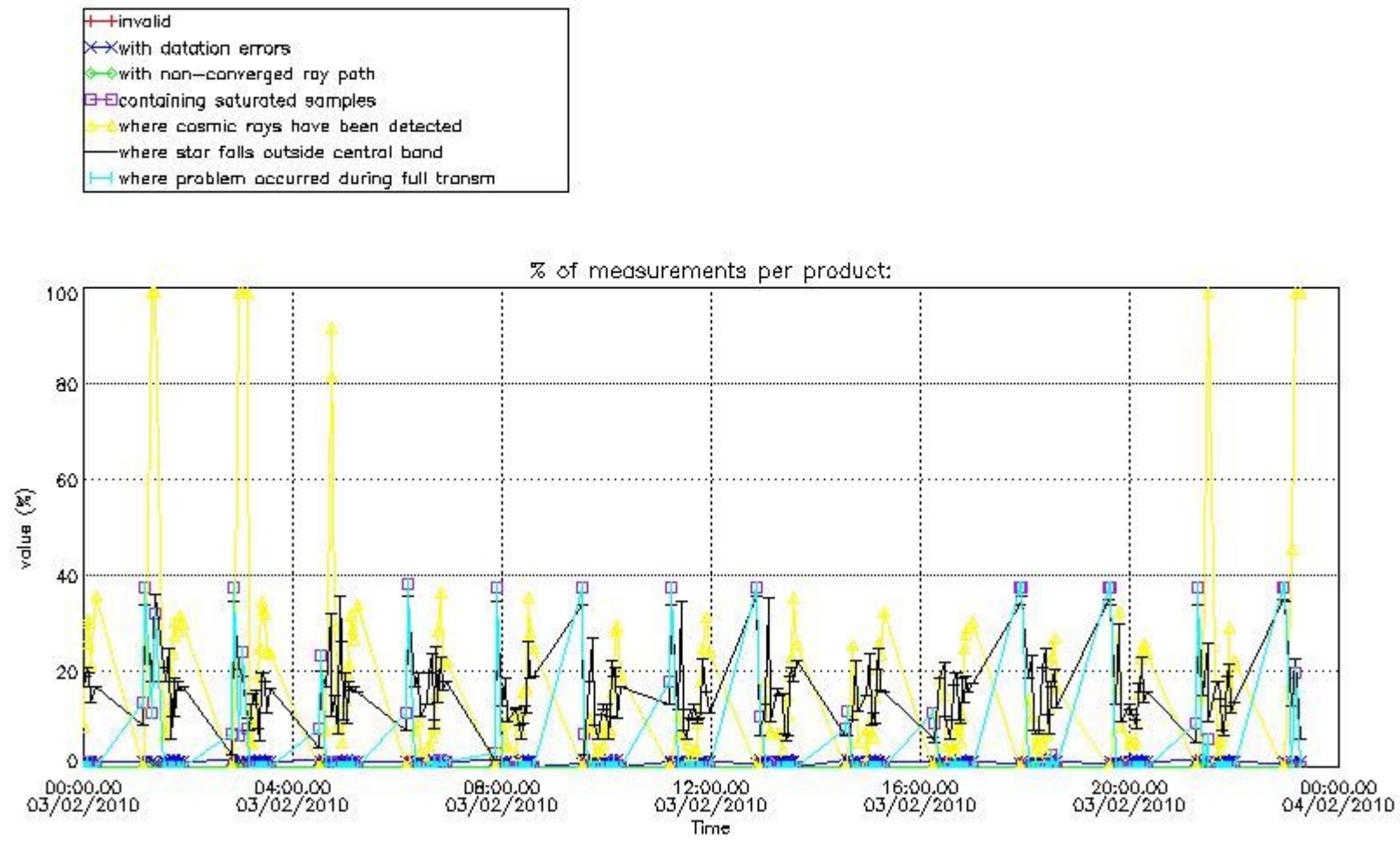


4. Level 1 quality information per product

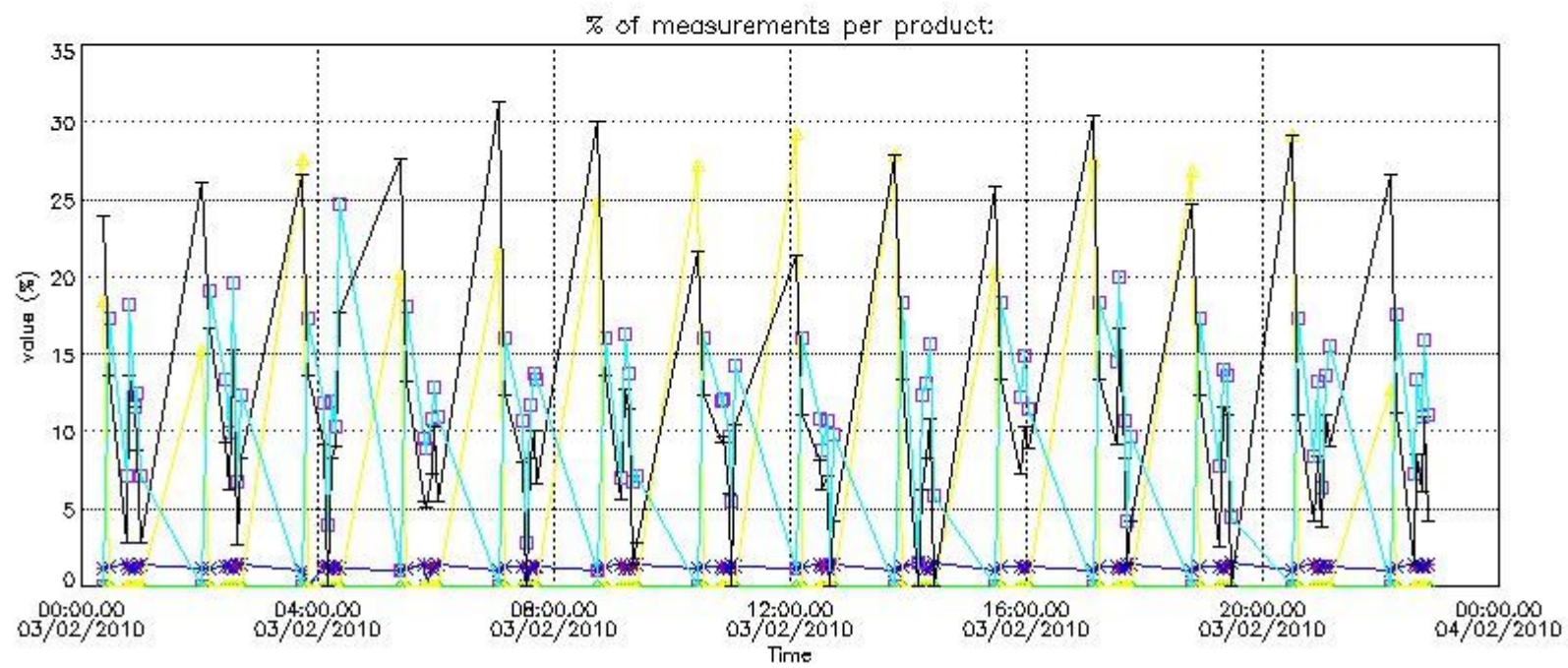
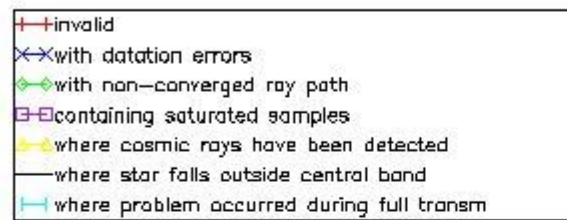
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

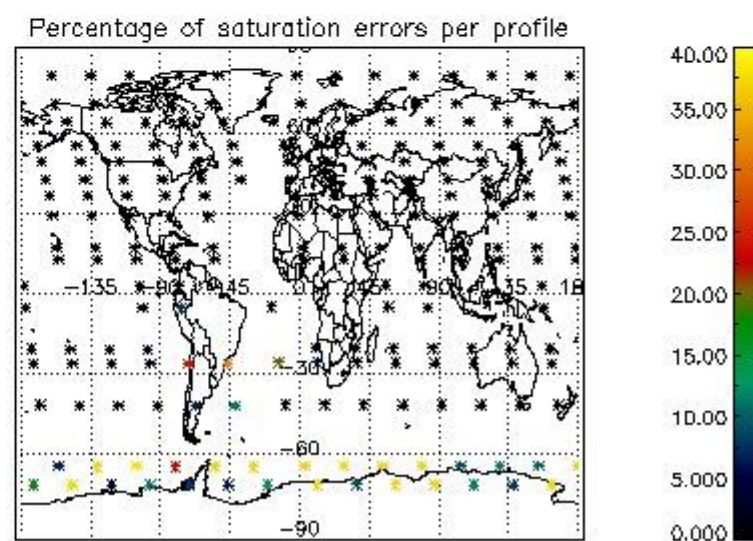
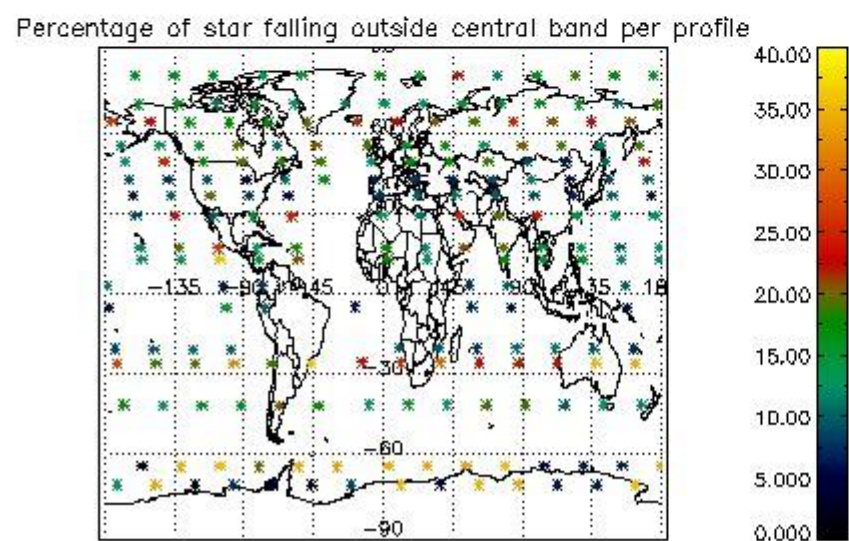
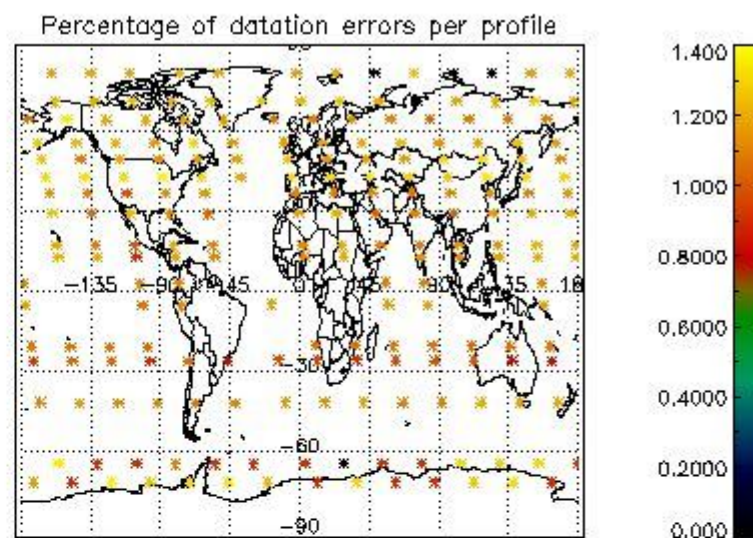
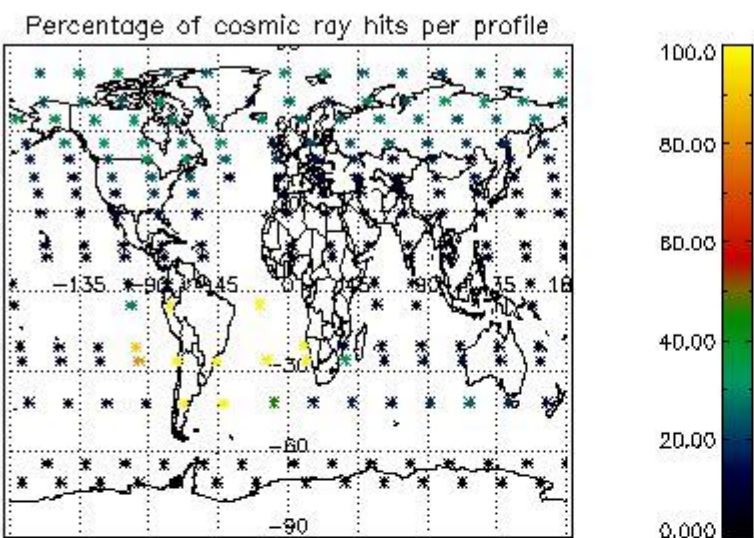


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

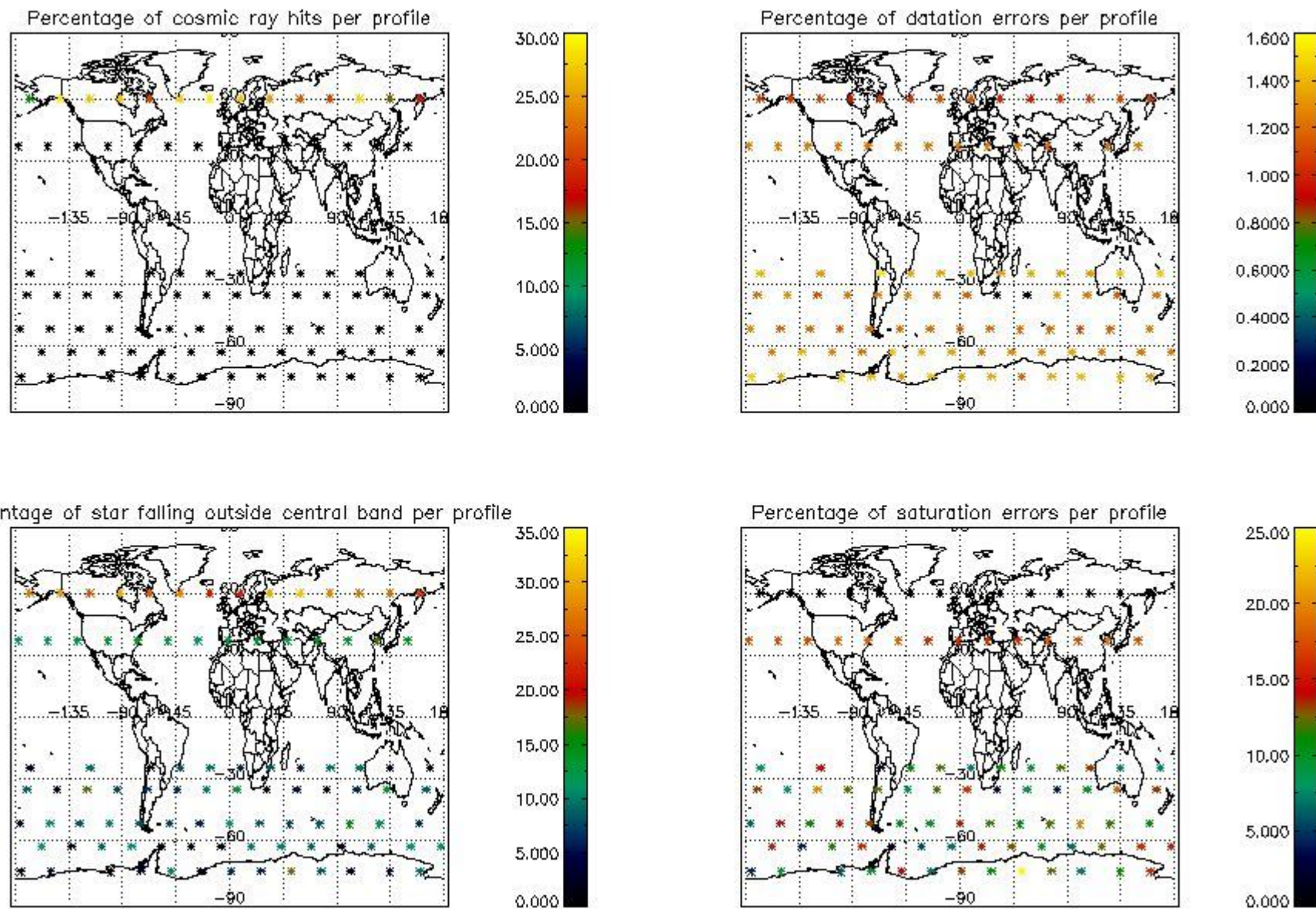


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

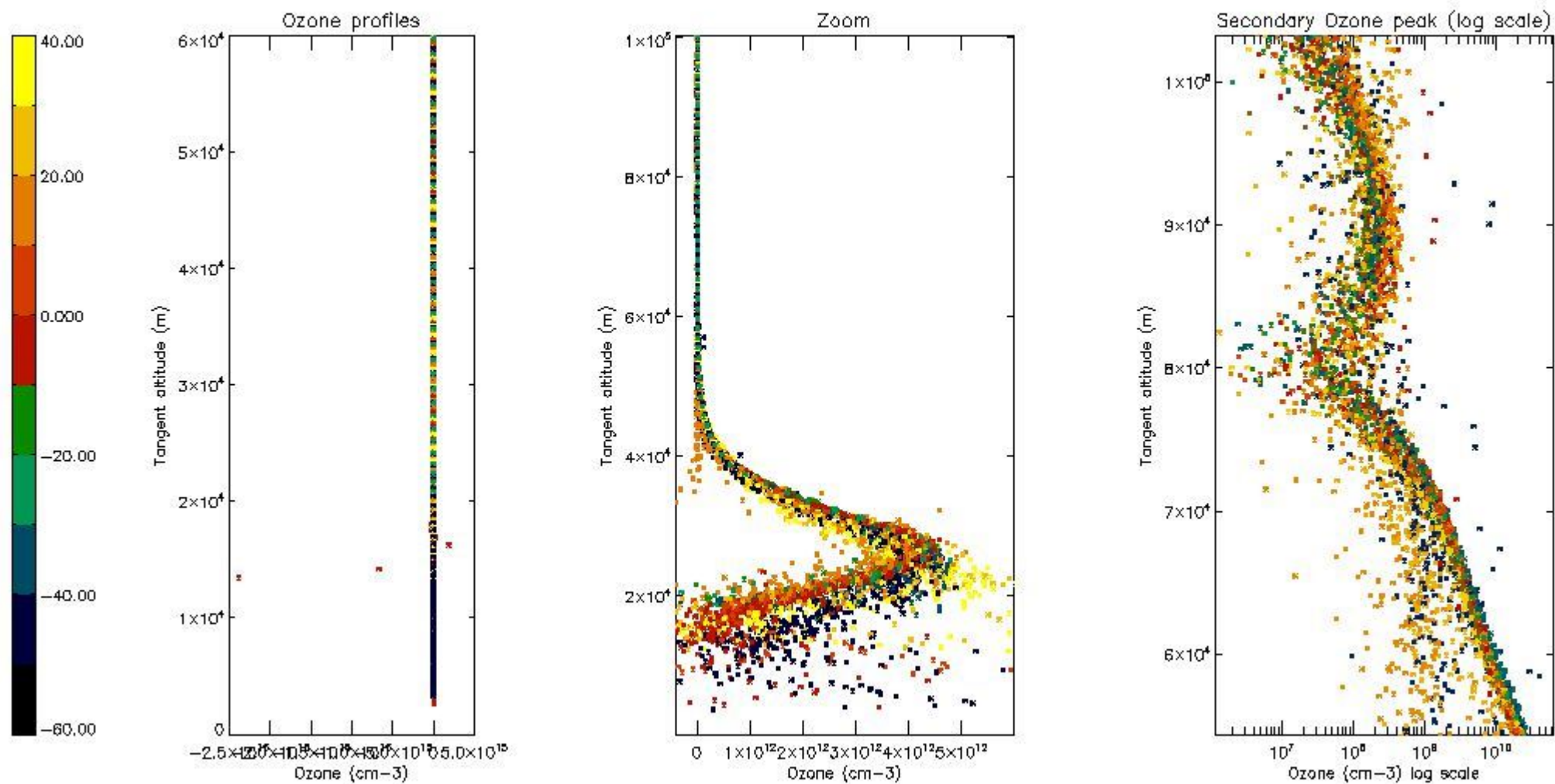
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	44
STD < 20	23

STD < 10	18
STD < 5	12

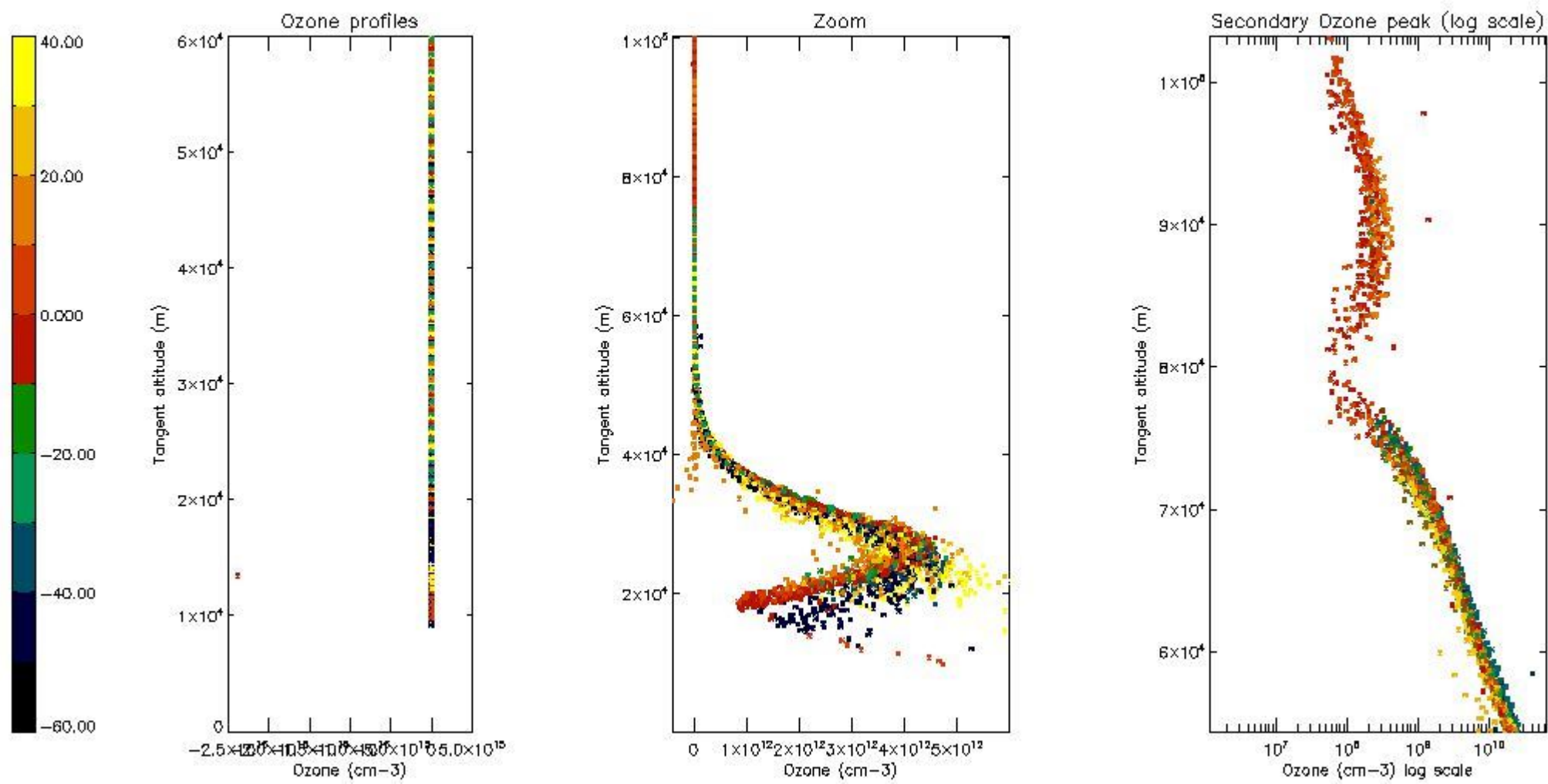
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



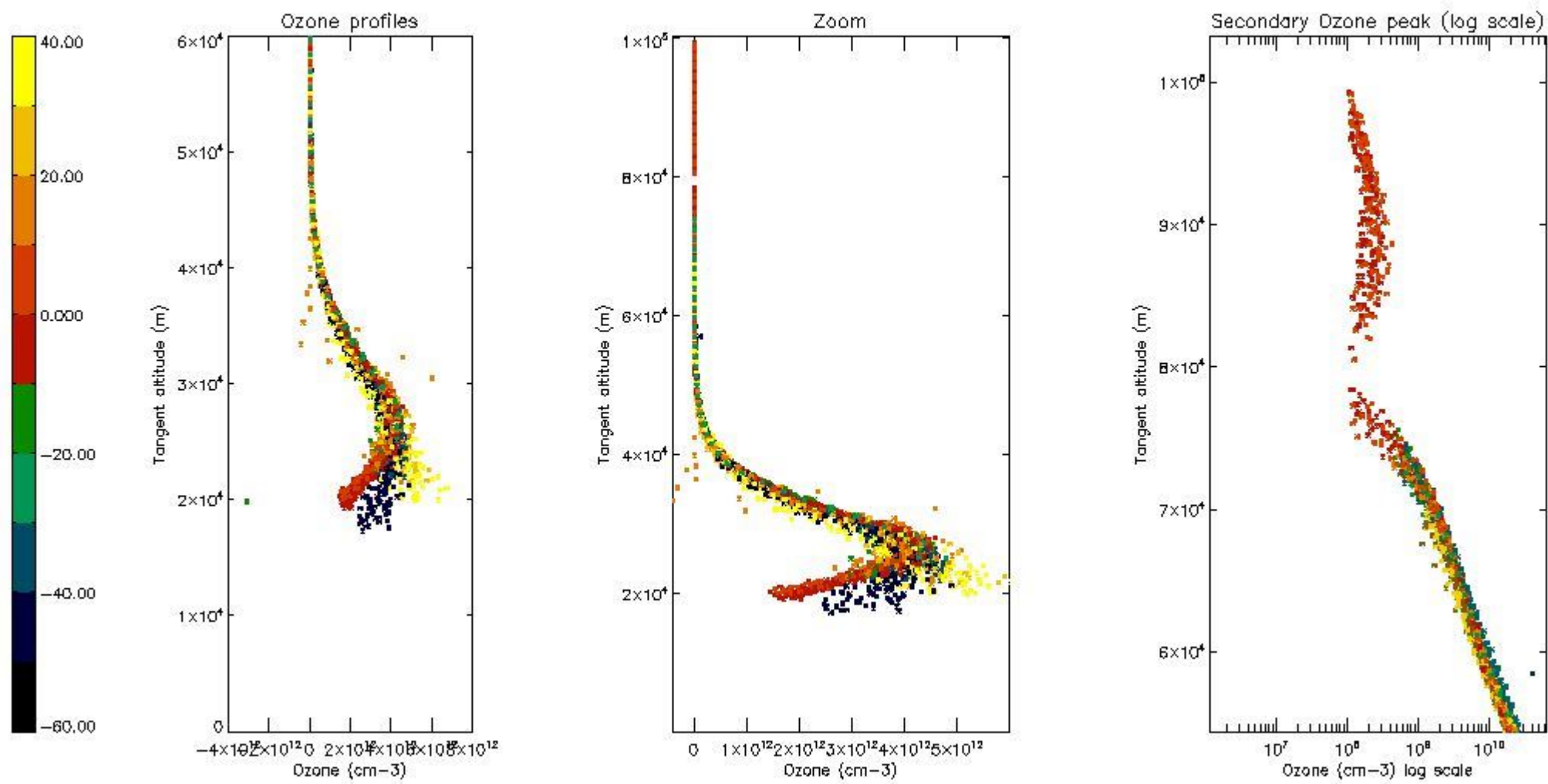
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



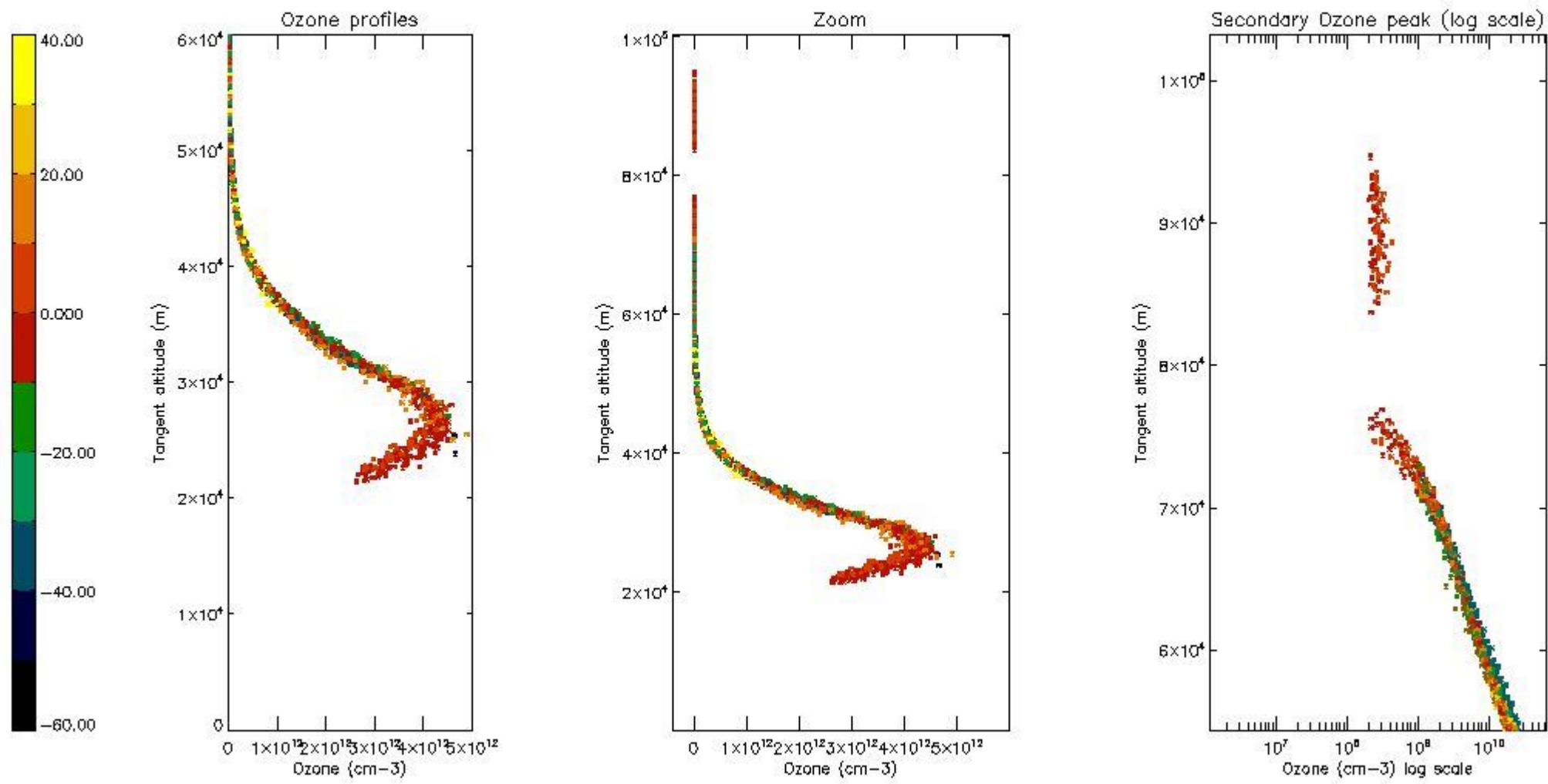
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



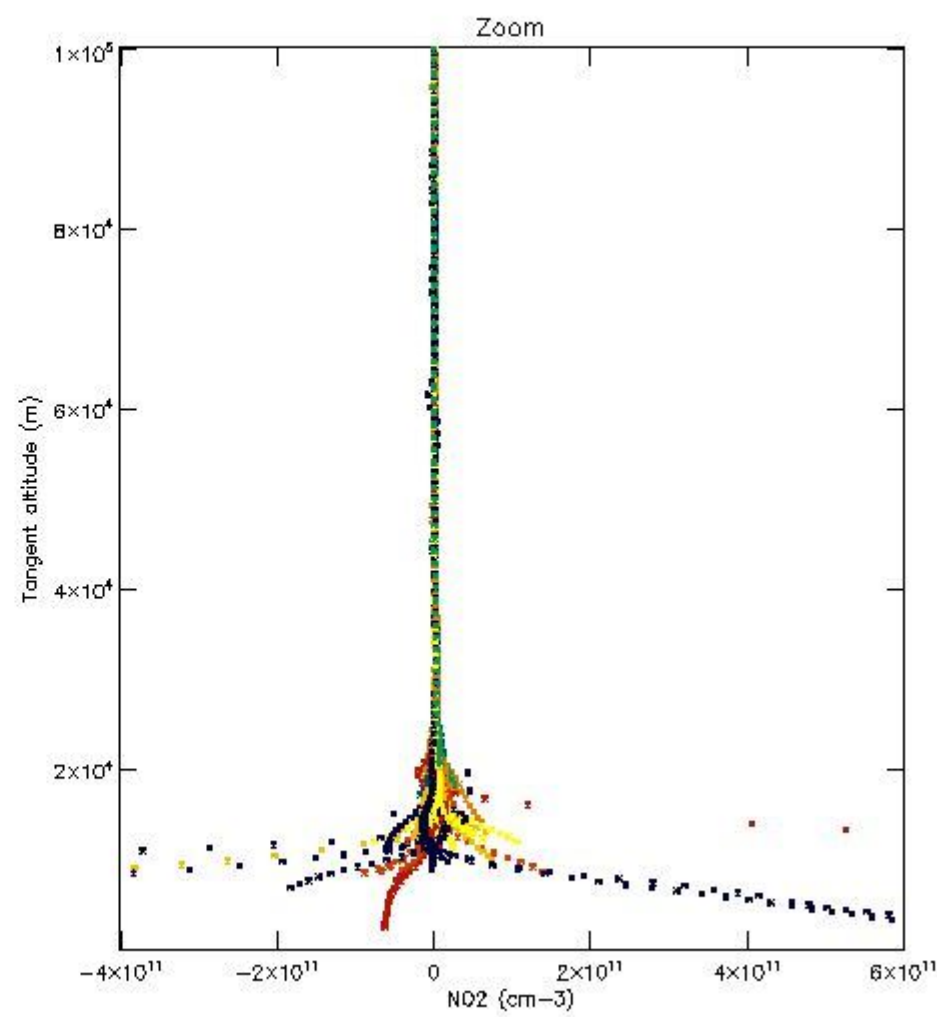
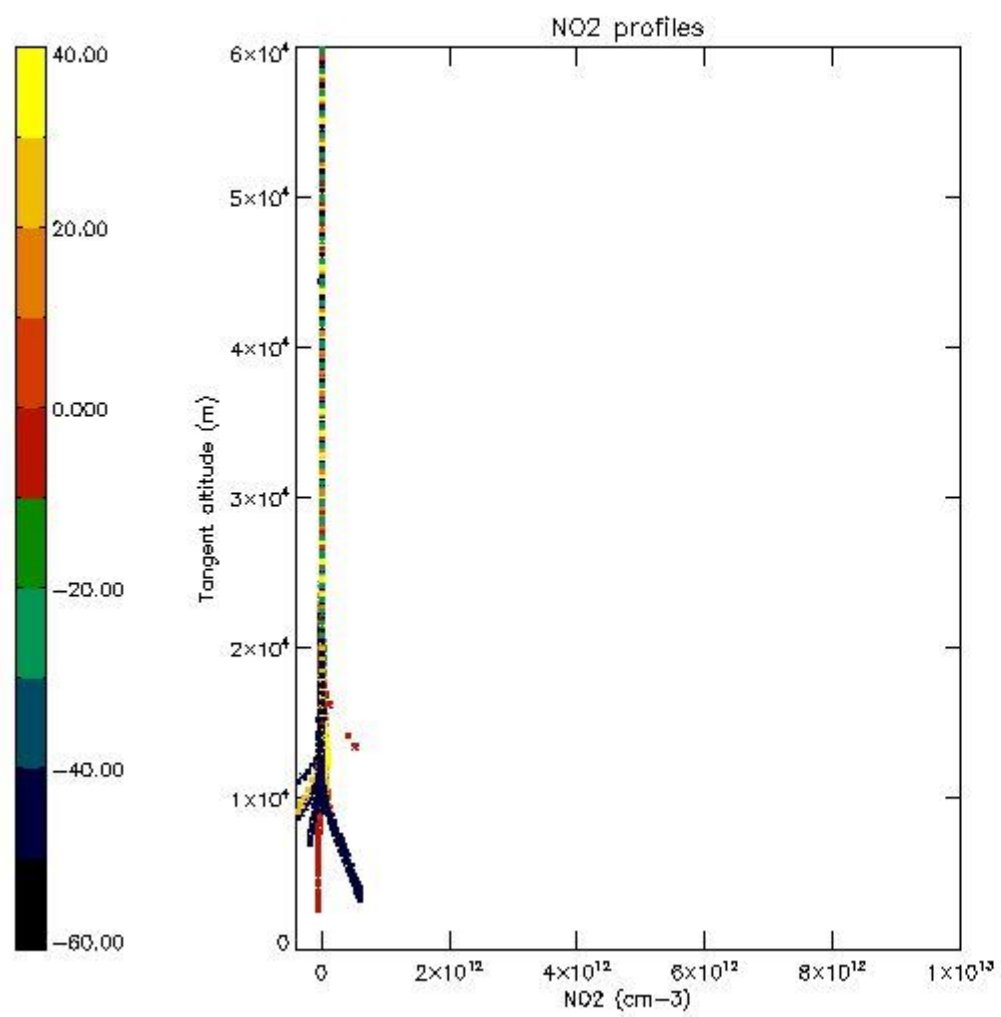
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



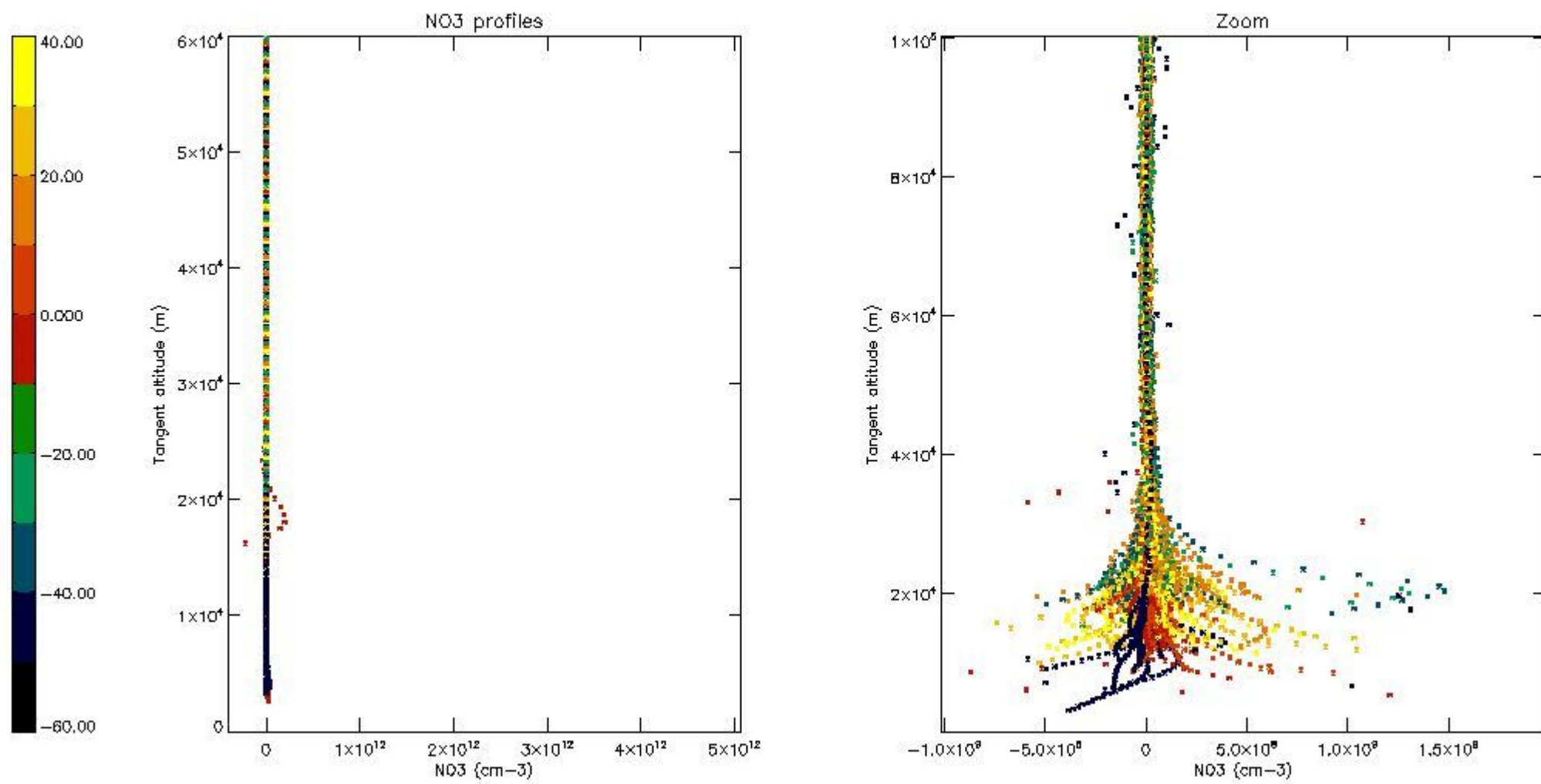
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



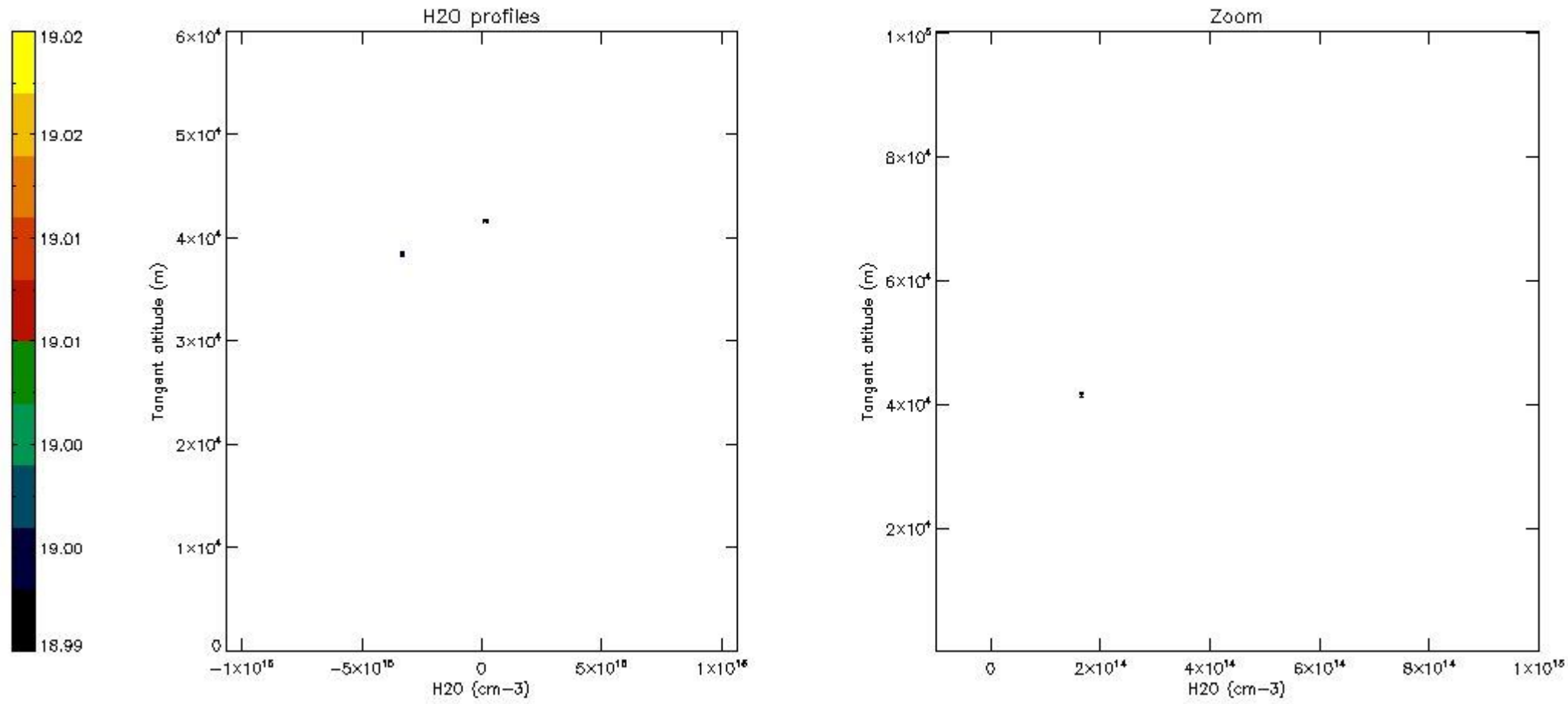
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

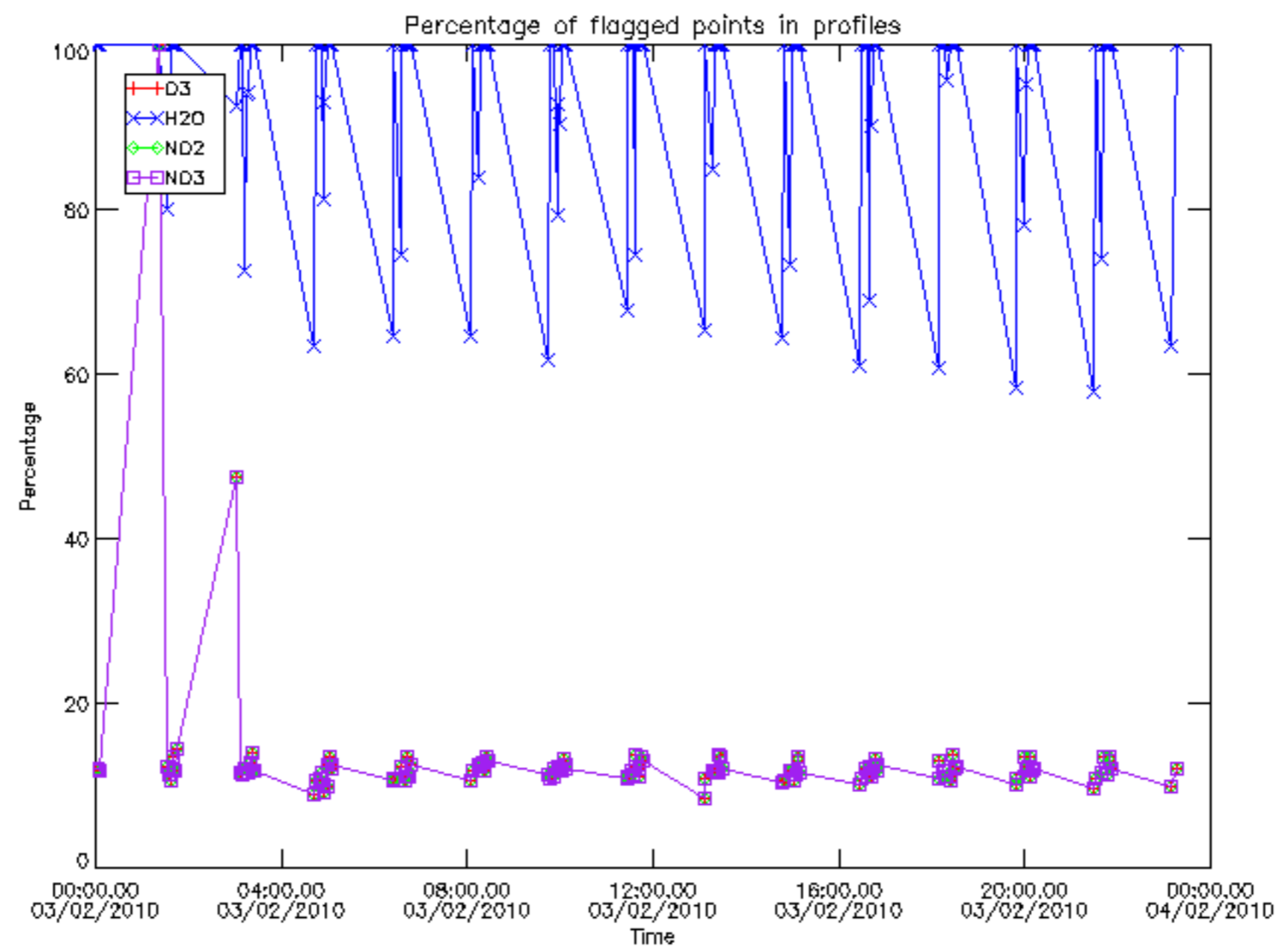
The colorbar represents the latitude.



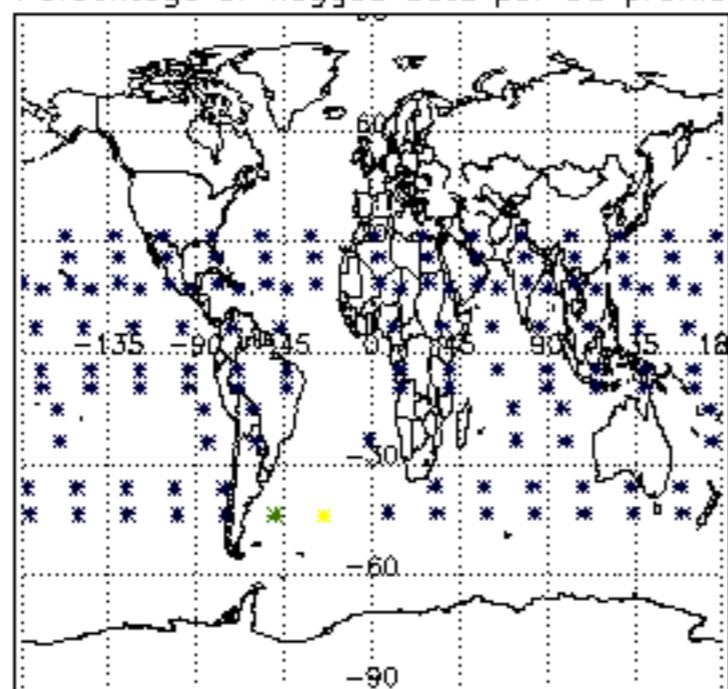
6. Auxiliary Data Files used for the production reported in section 2

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.

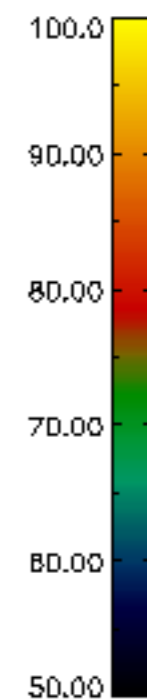
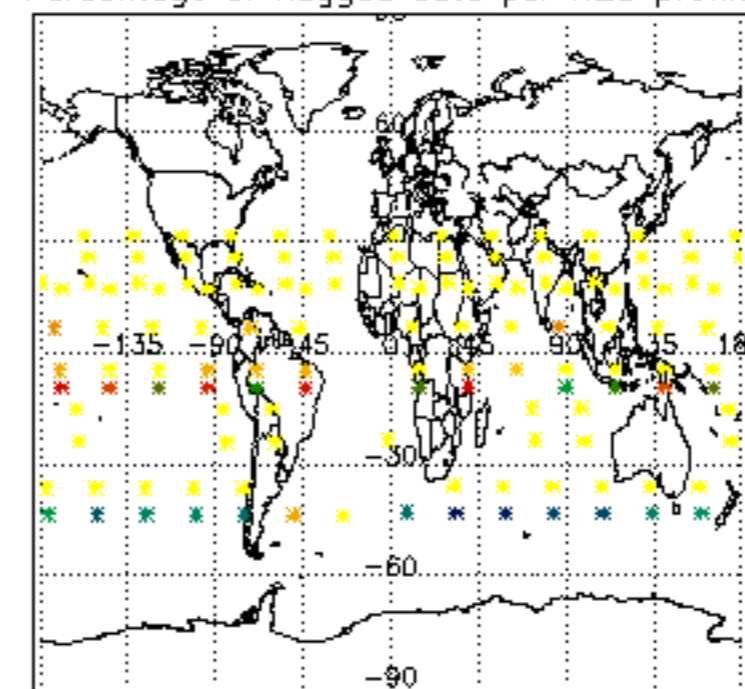
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	03-FEB-2010 00:00:33
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	03-FEB-2010 00:00:33
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	03-FEB-2010 00:00:33



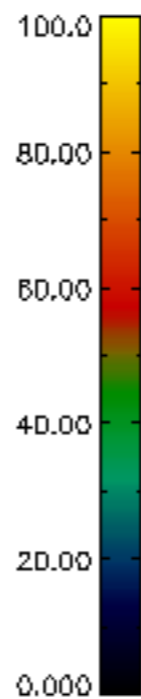
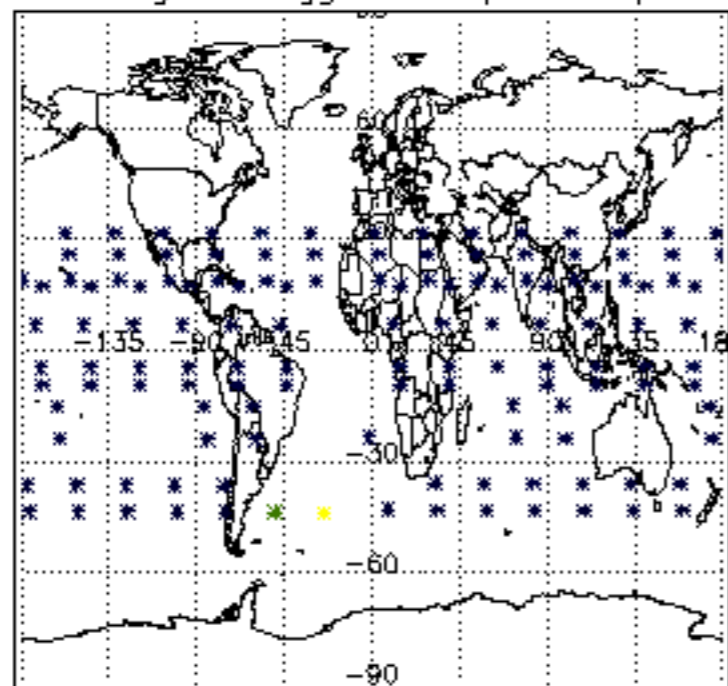
Percentage of flagged data per D3 profile



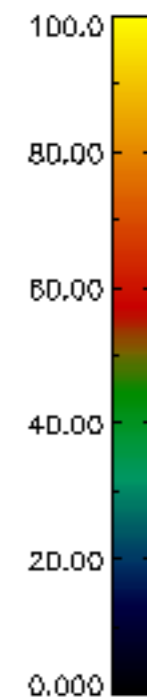
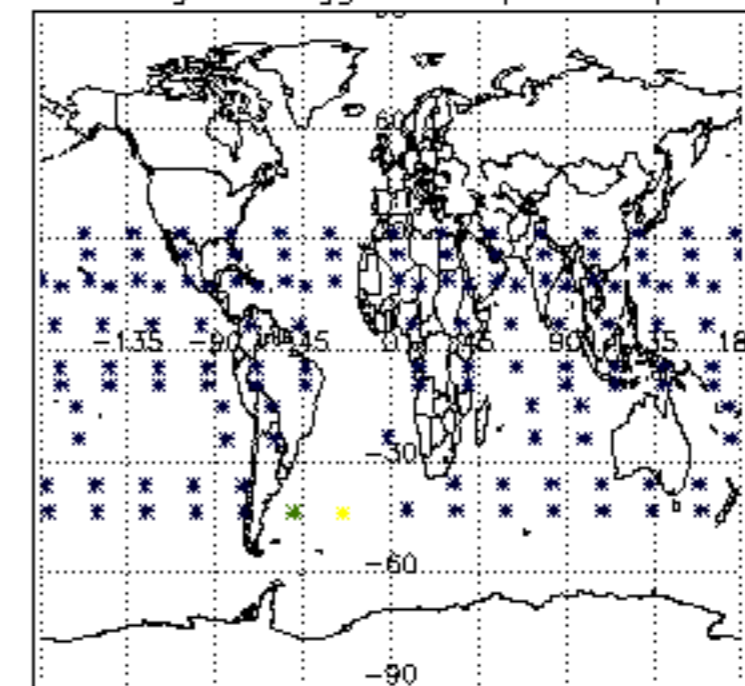
Percentage of flagged data per H2O profile

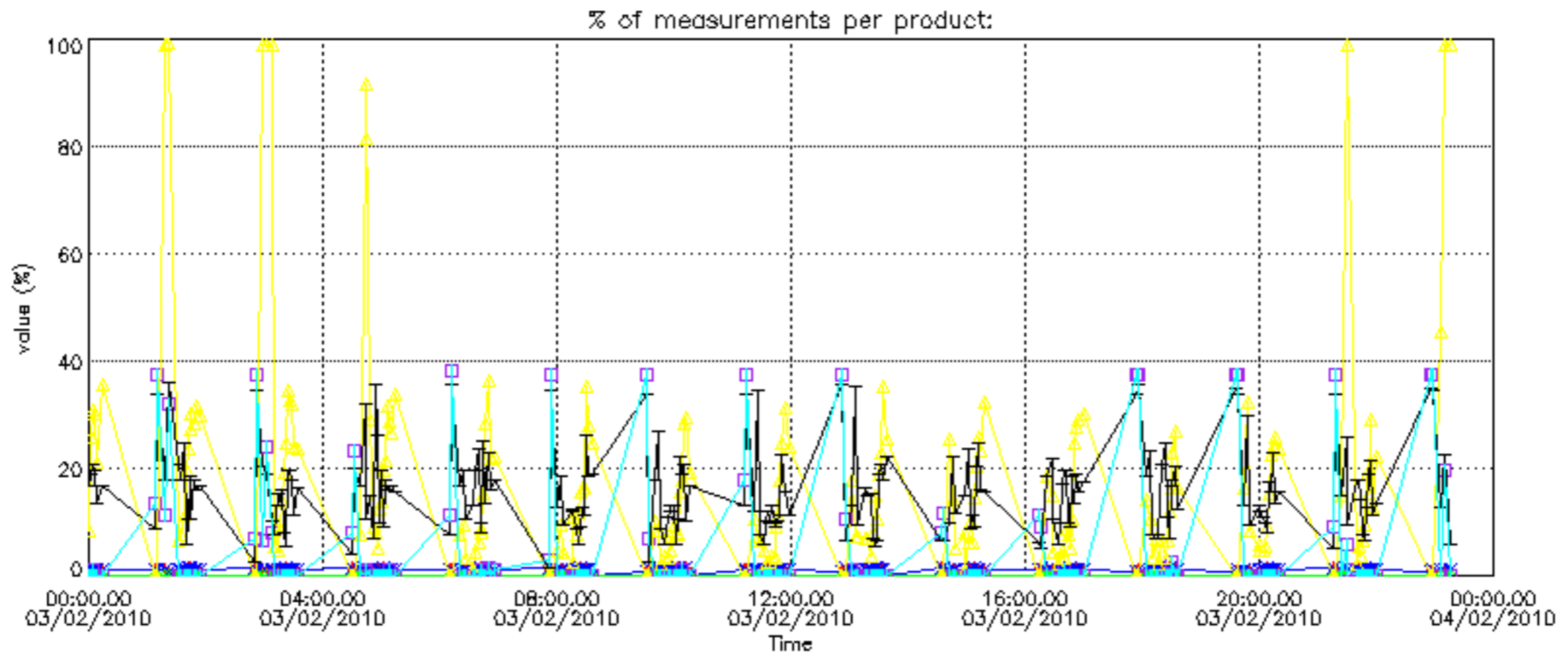


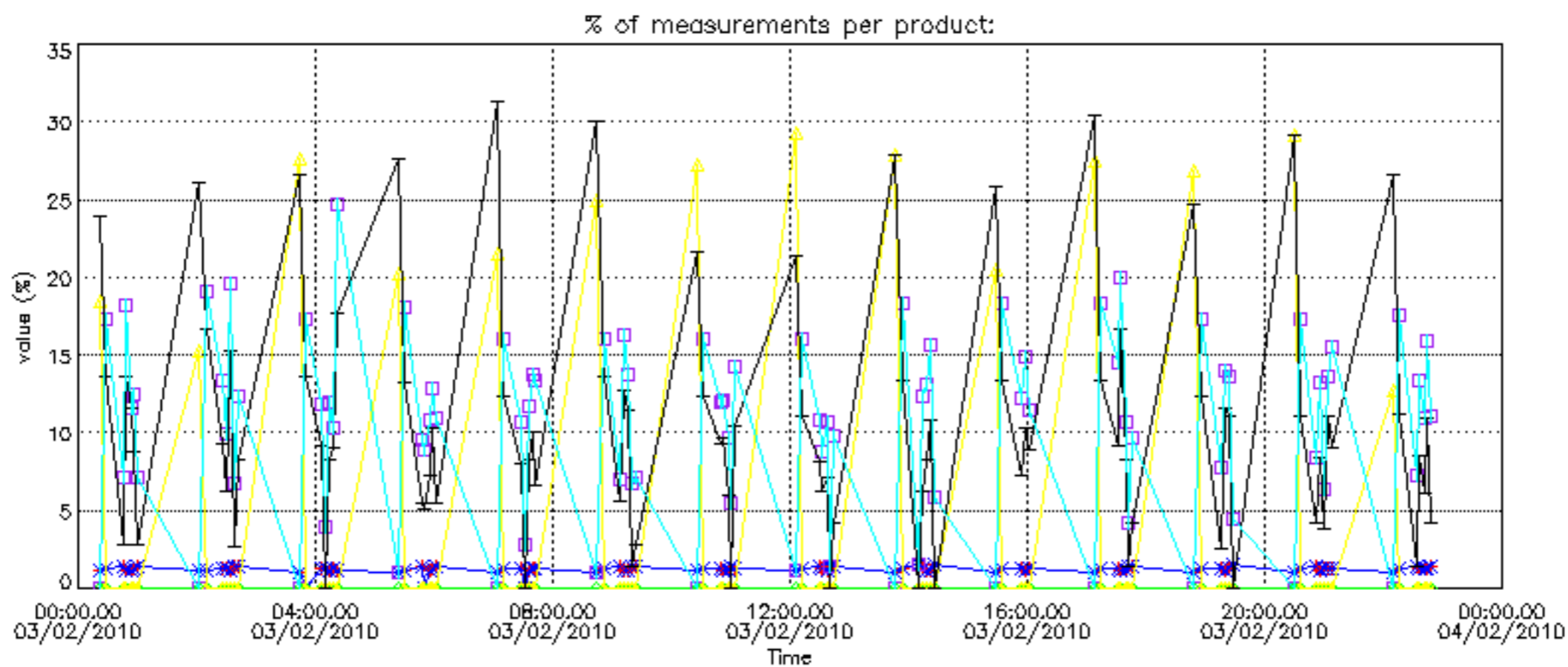
Percentage of flagged data per NO2 profile



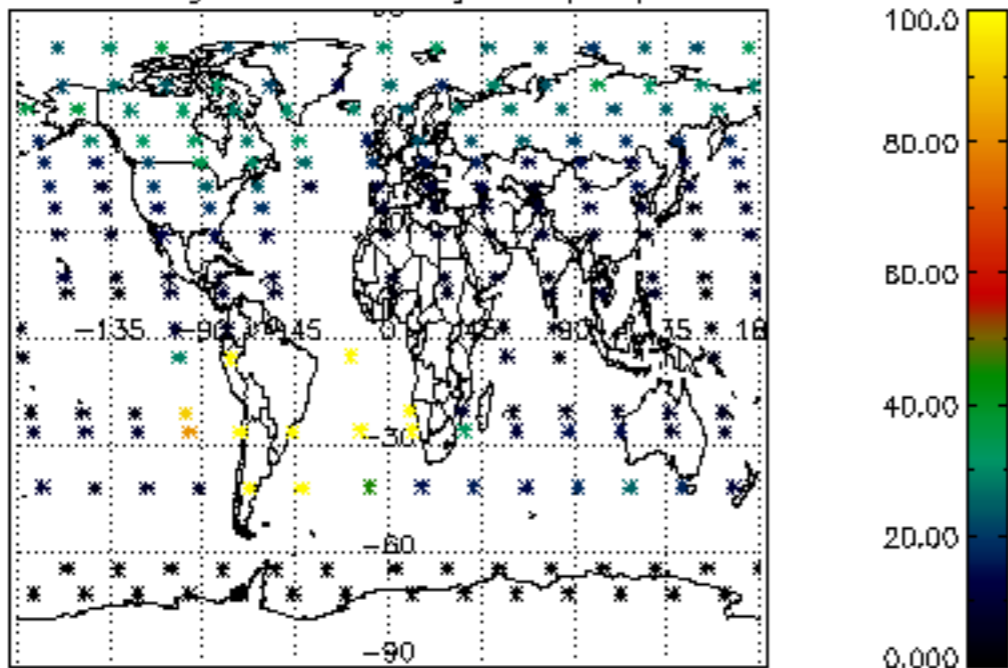
Percentage of flagged data per NO3 profile



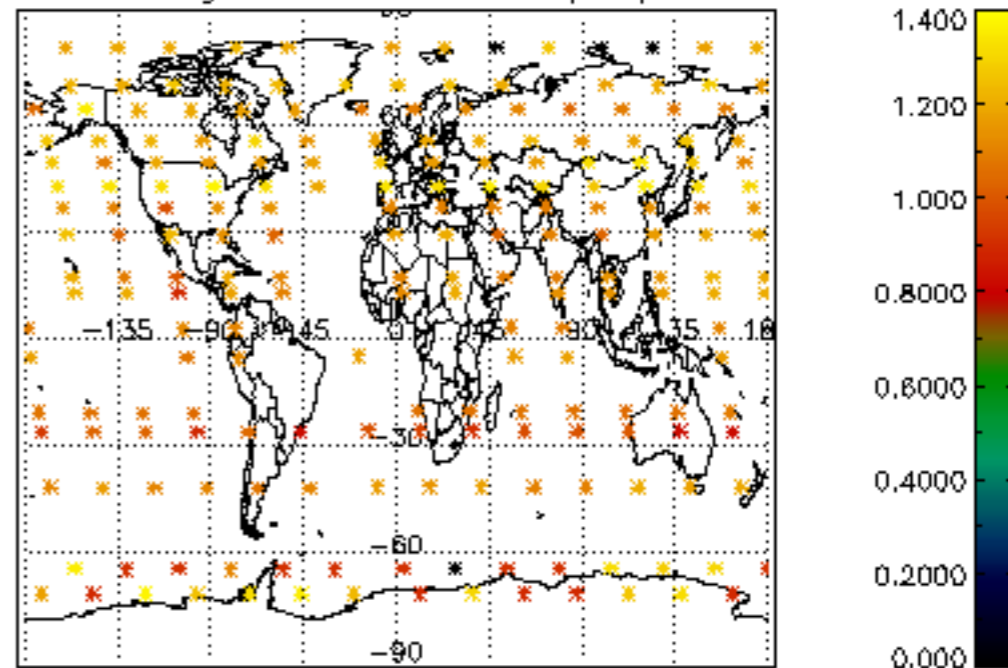




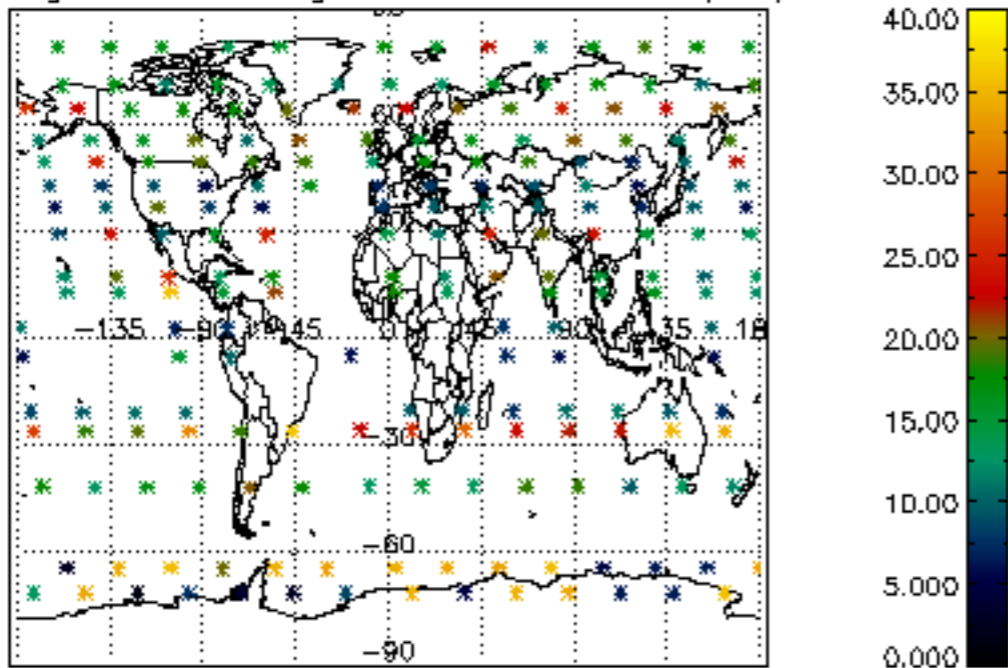
Percentage of cosmic ray hits per profile



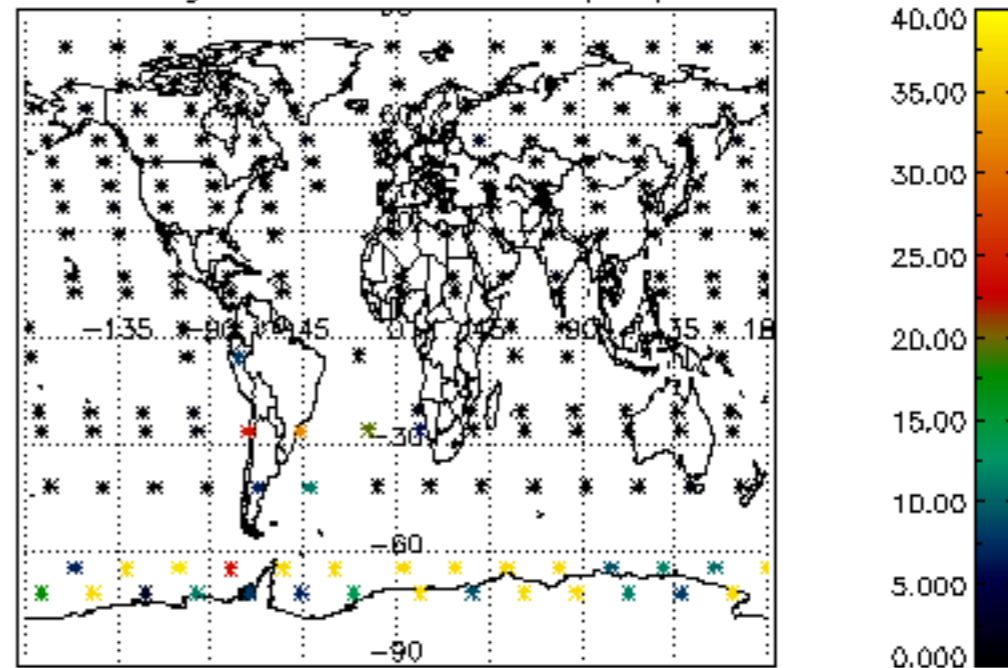
Percentage of datation errors per profile



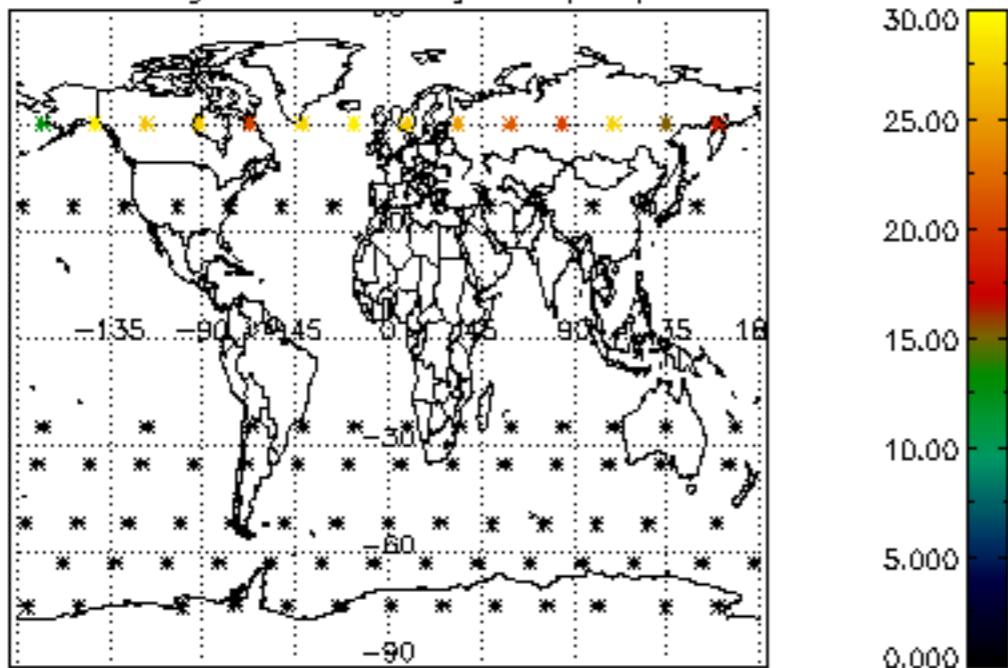
Percentage of star falling outside central band per profile



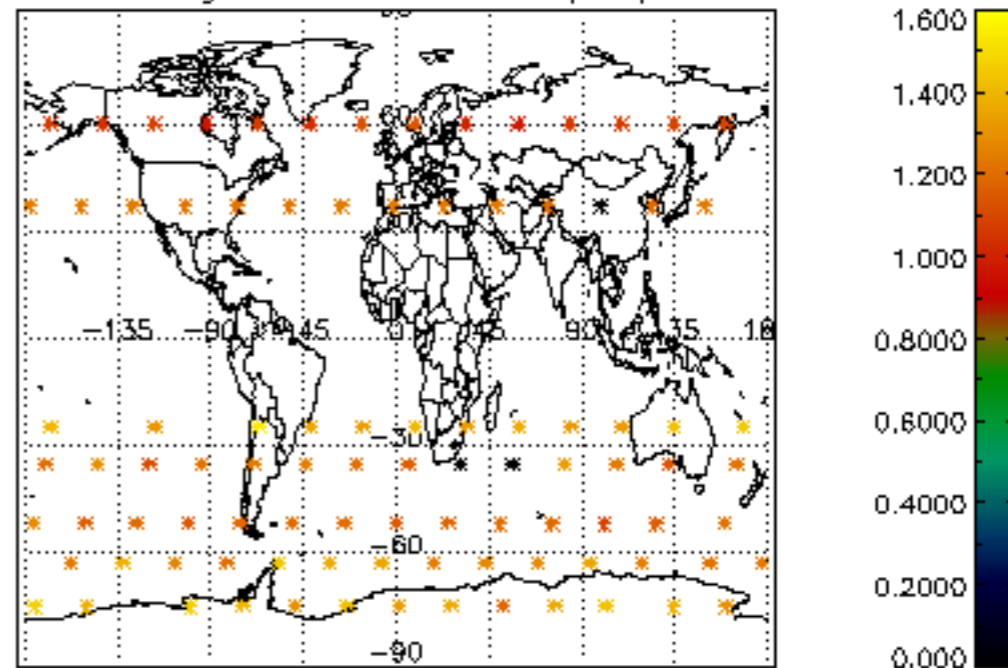
Percentage of saturation errors per profile



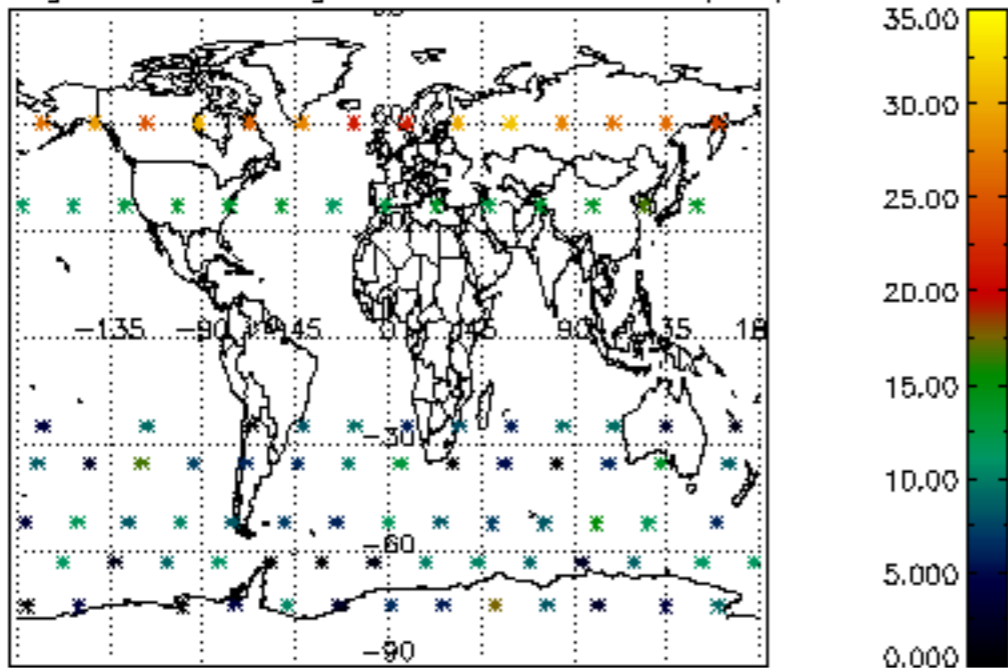
Percentage of cosmic ray hits per profile



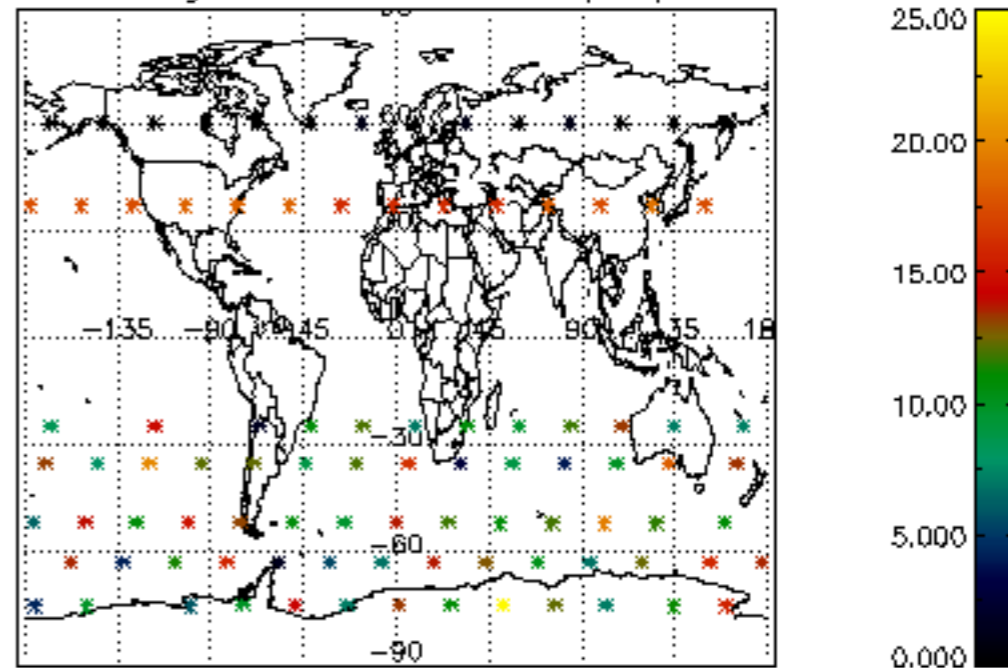
Percentage of datation errors per profile

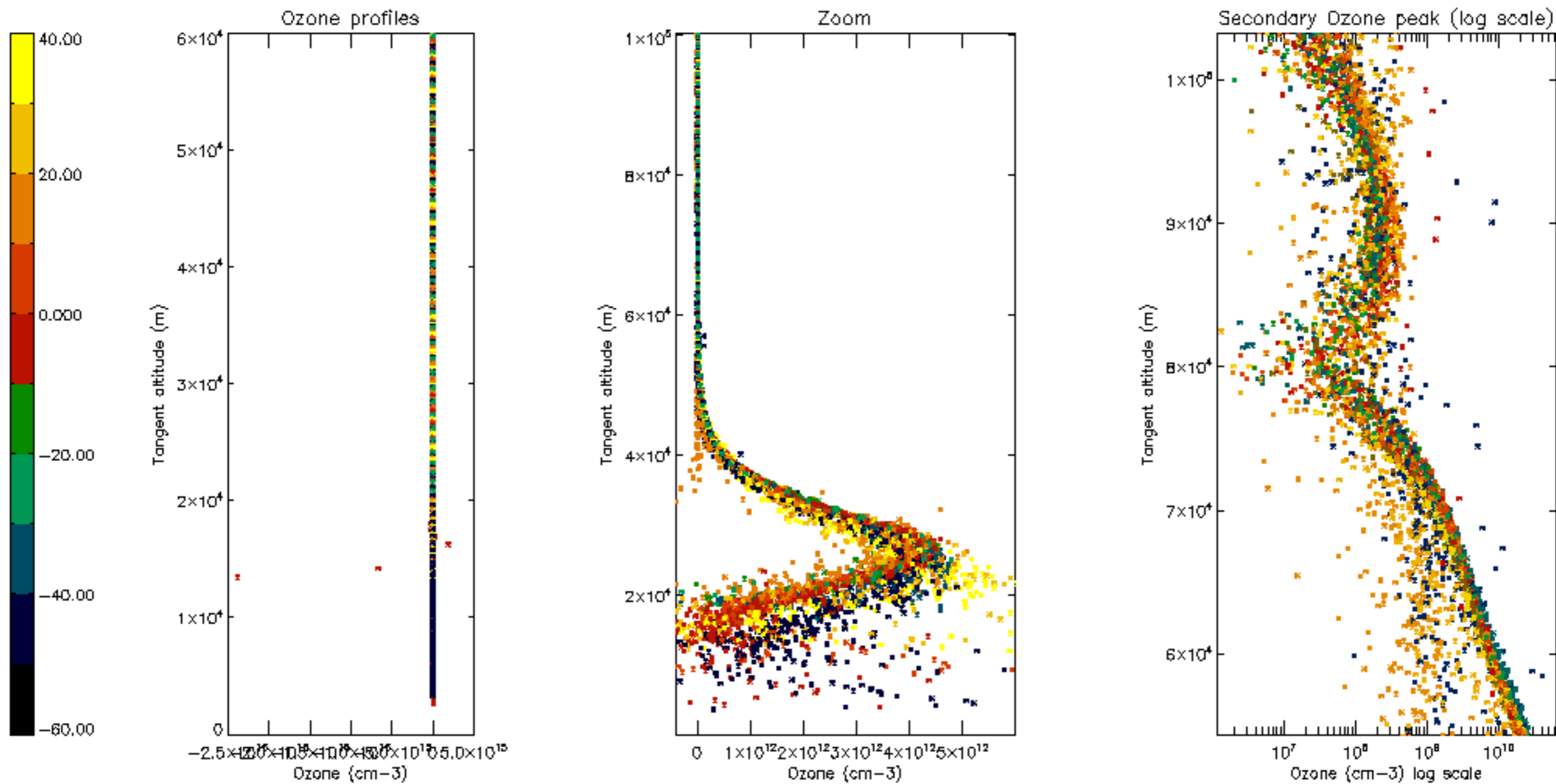


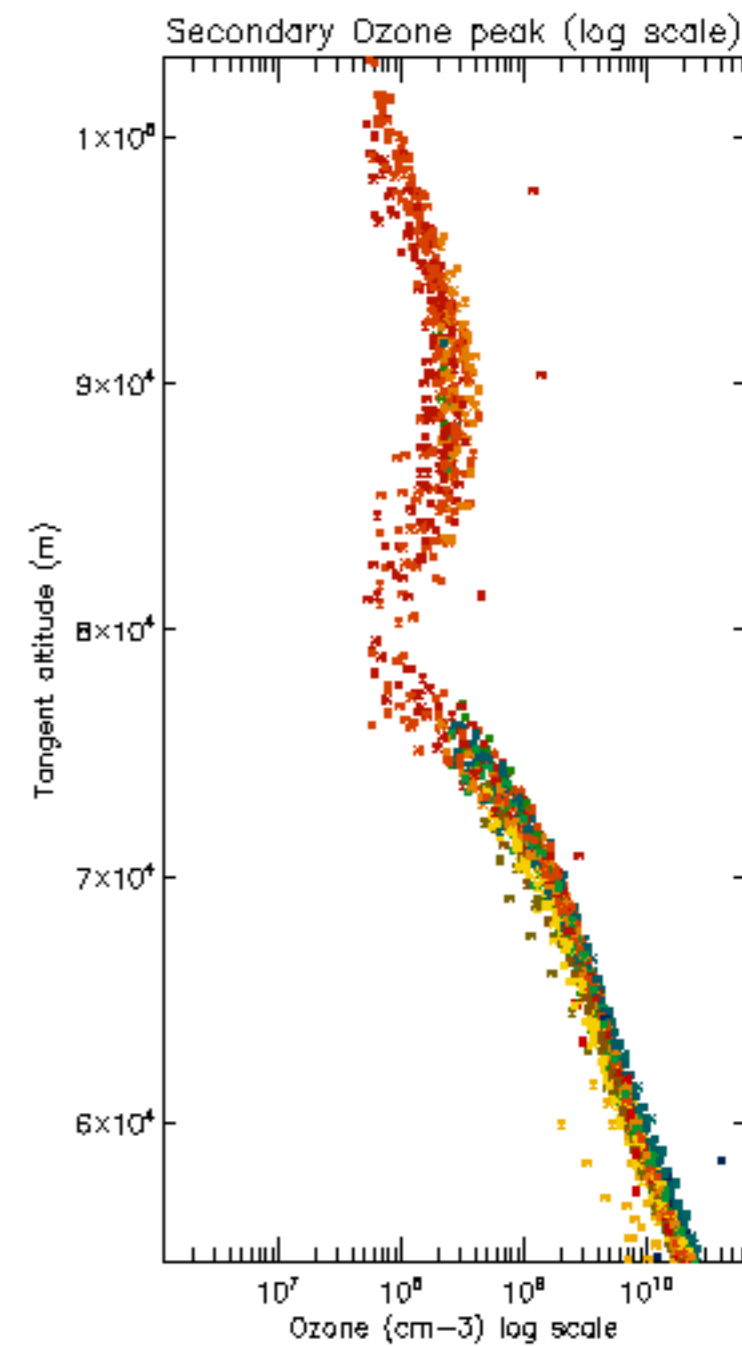
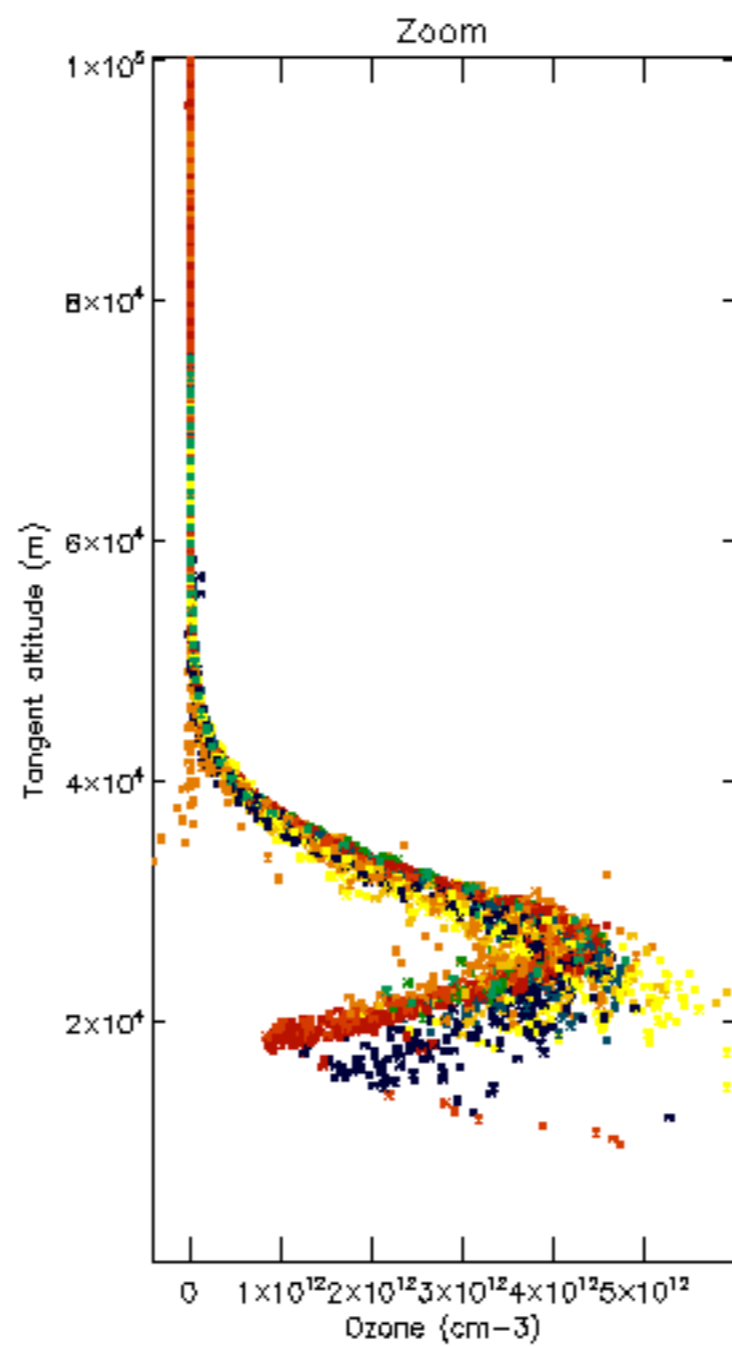
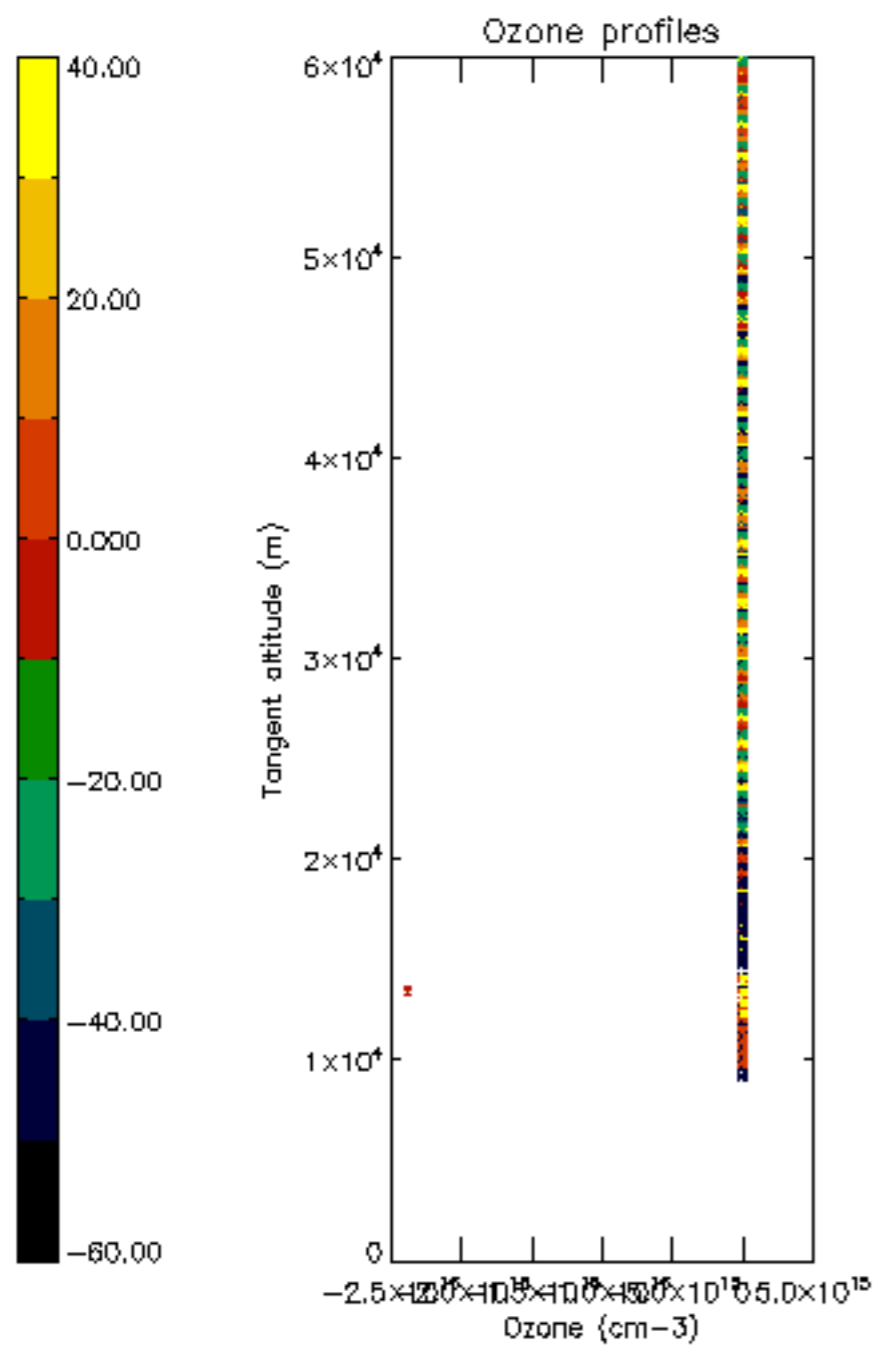
Percentage of star falling outside central band per profile

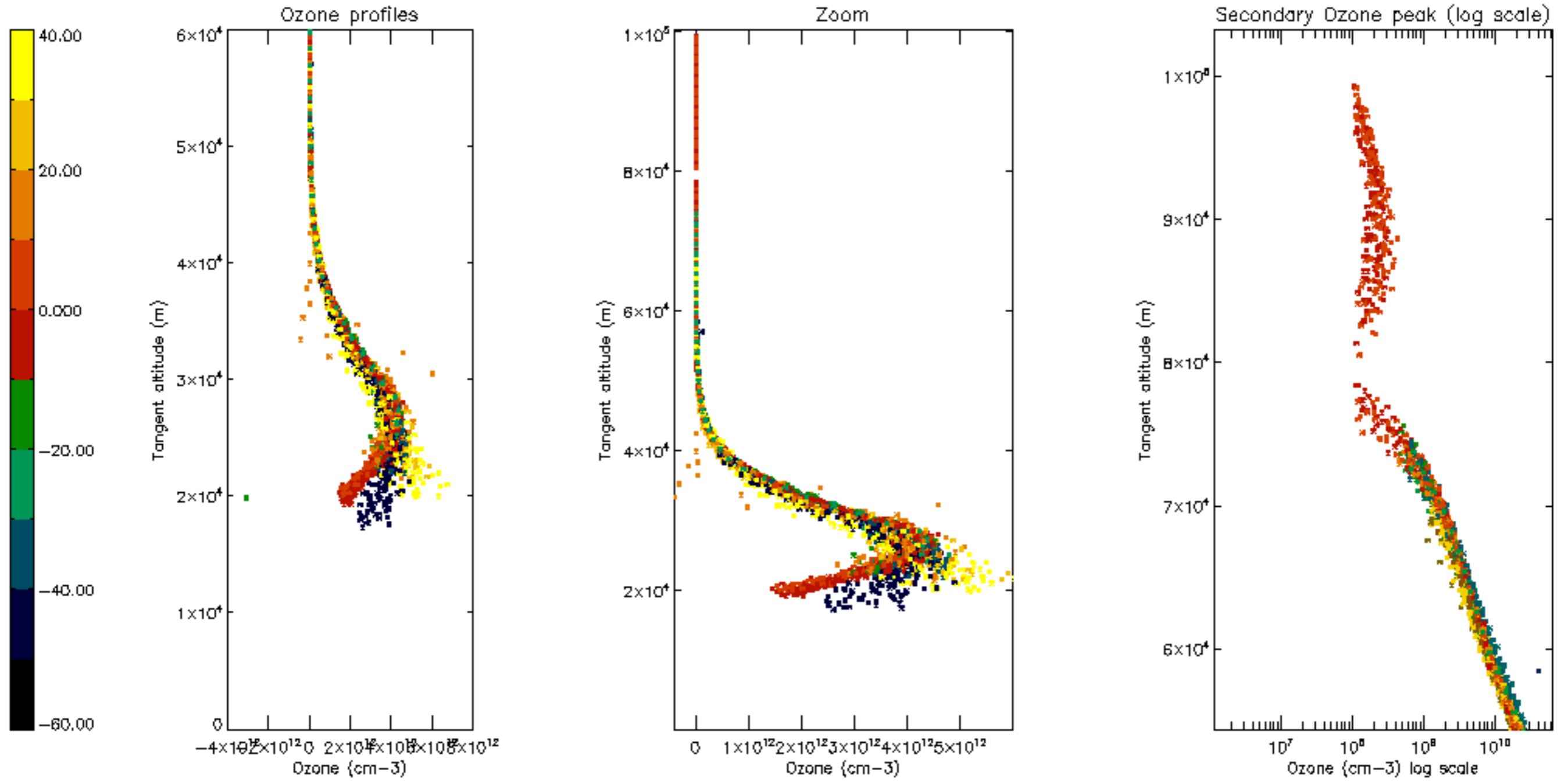


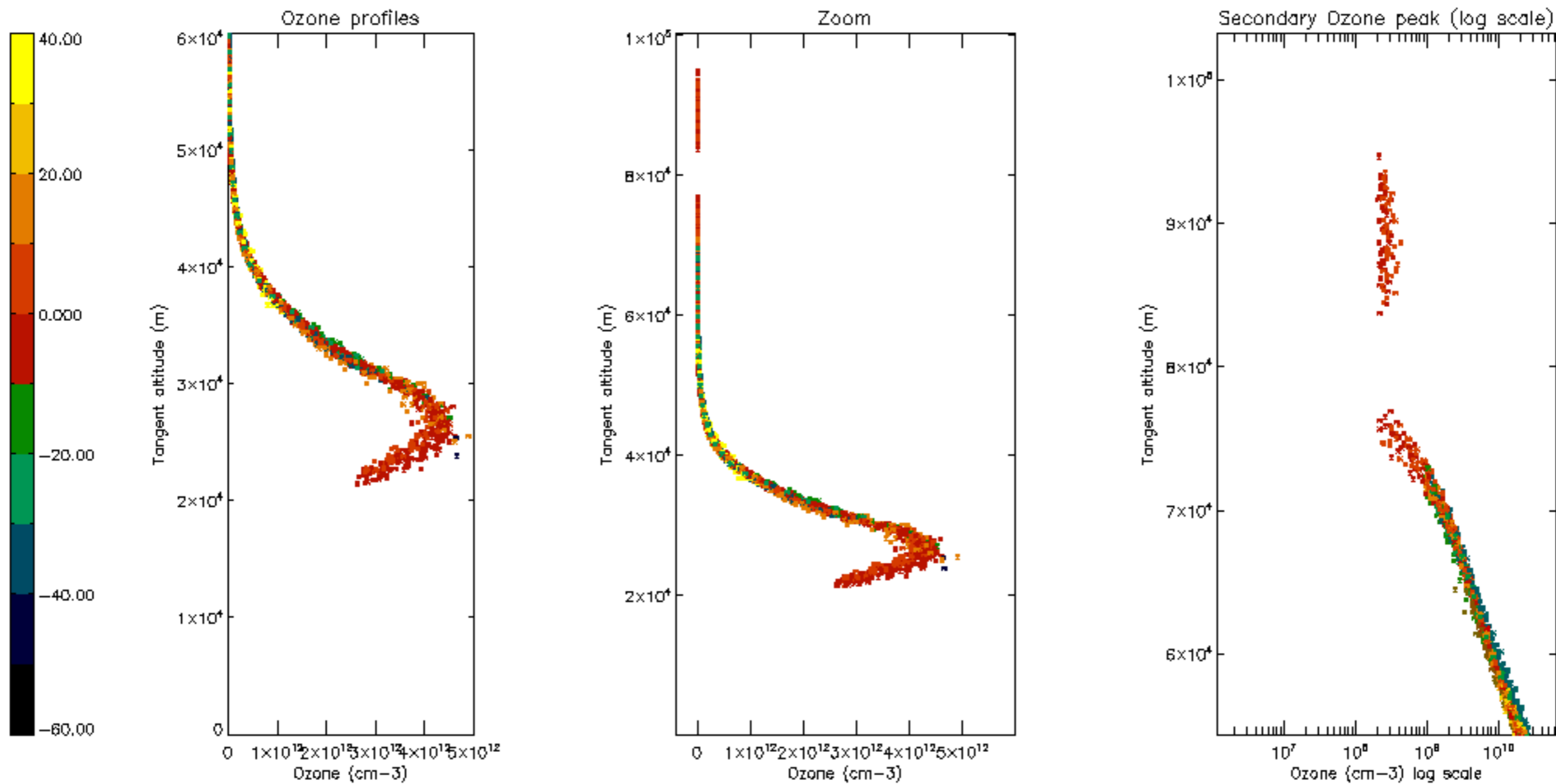
Percentage of saturation errors per profile

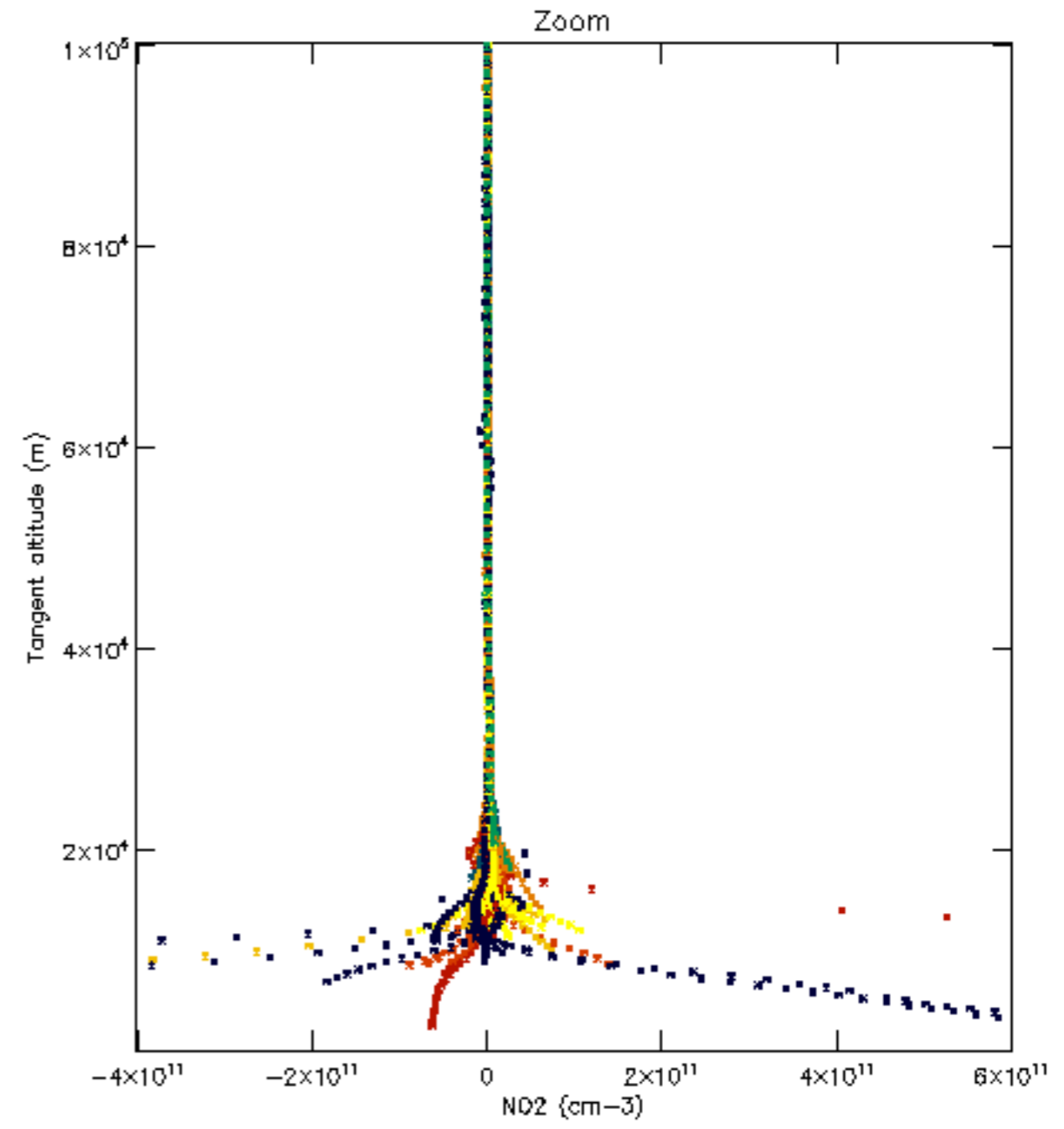
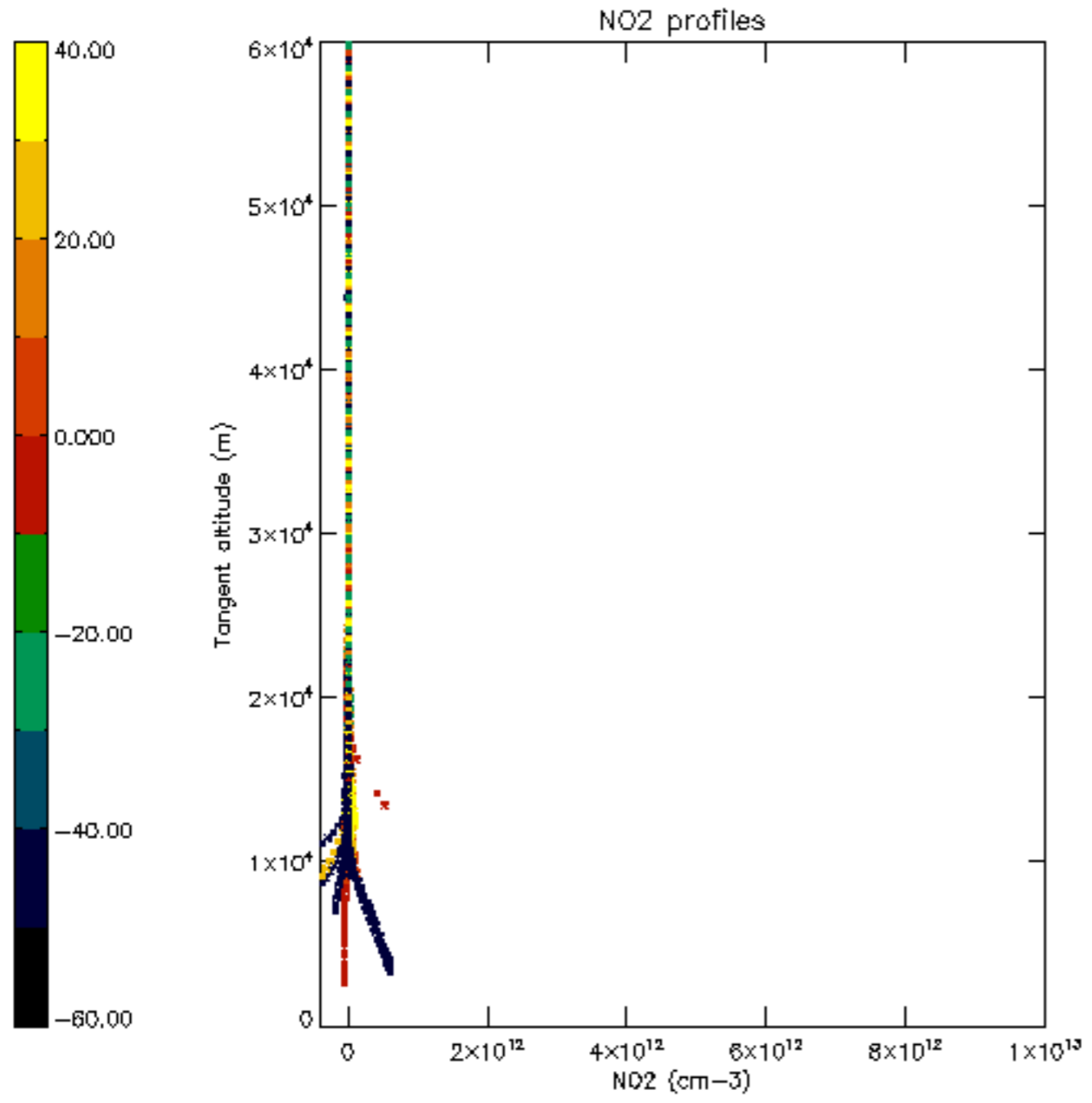


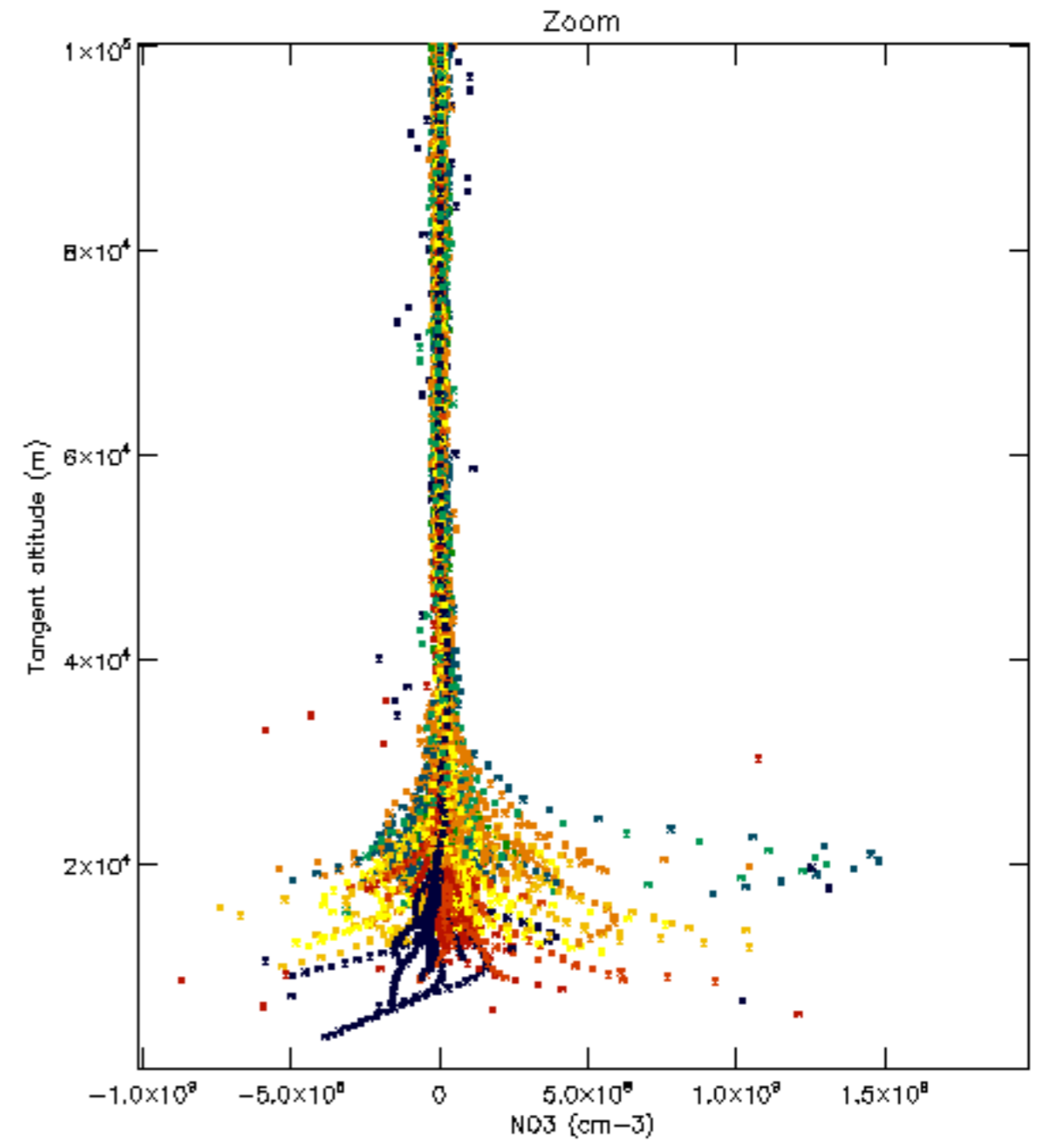
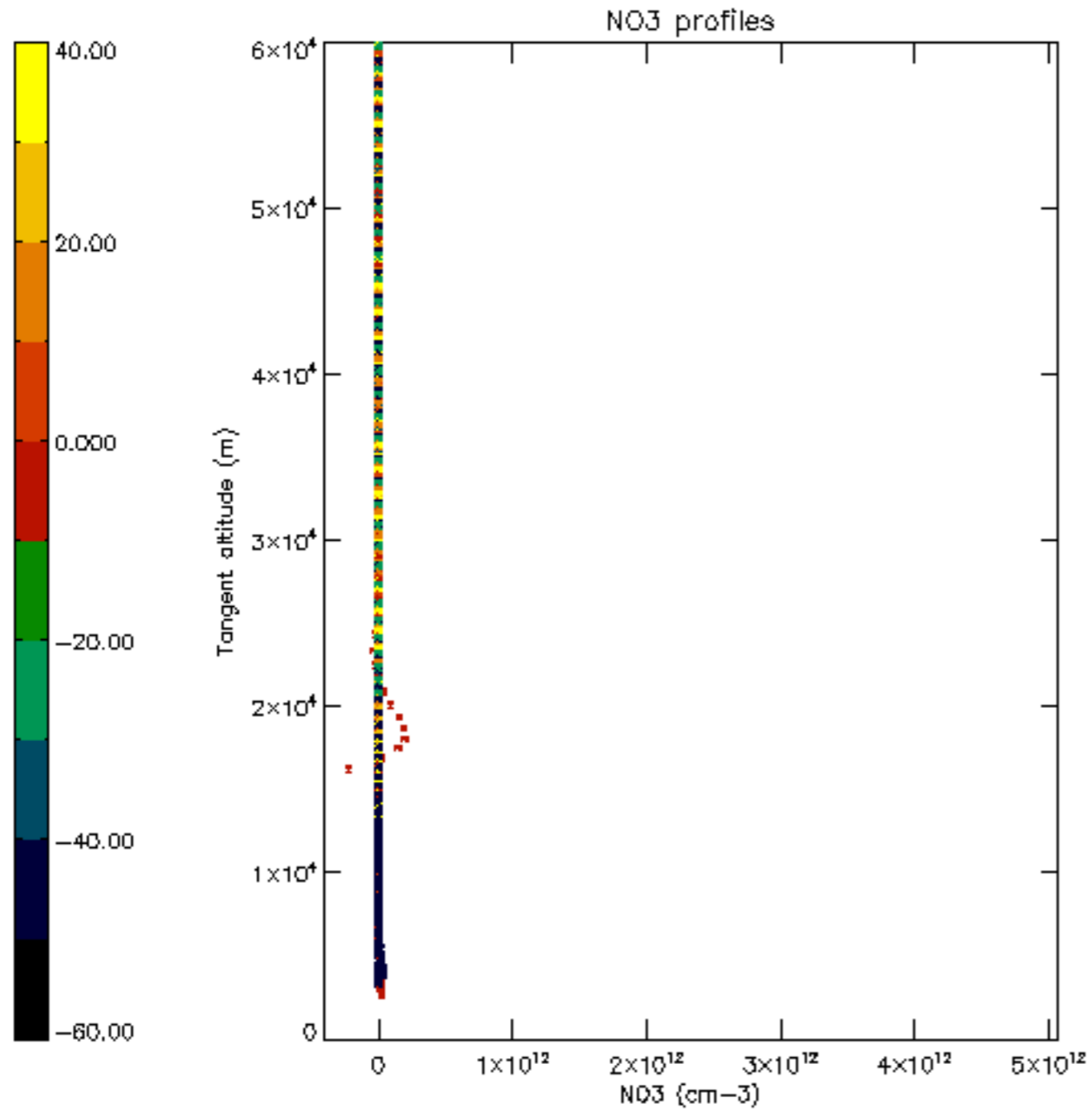


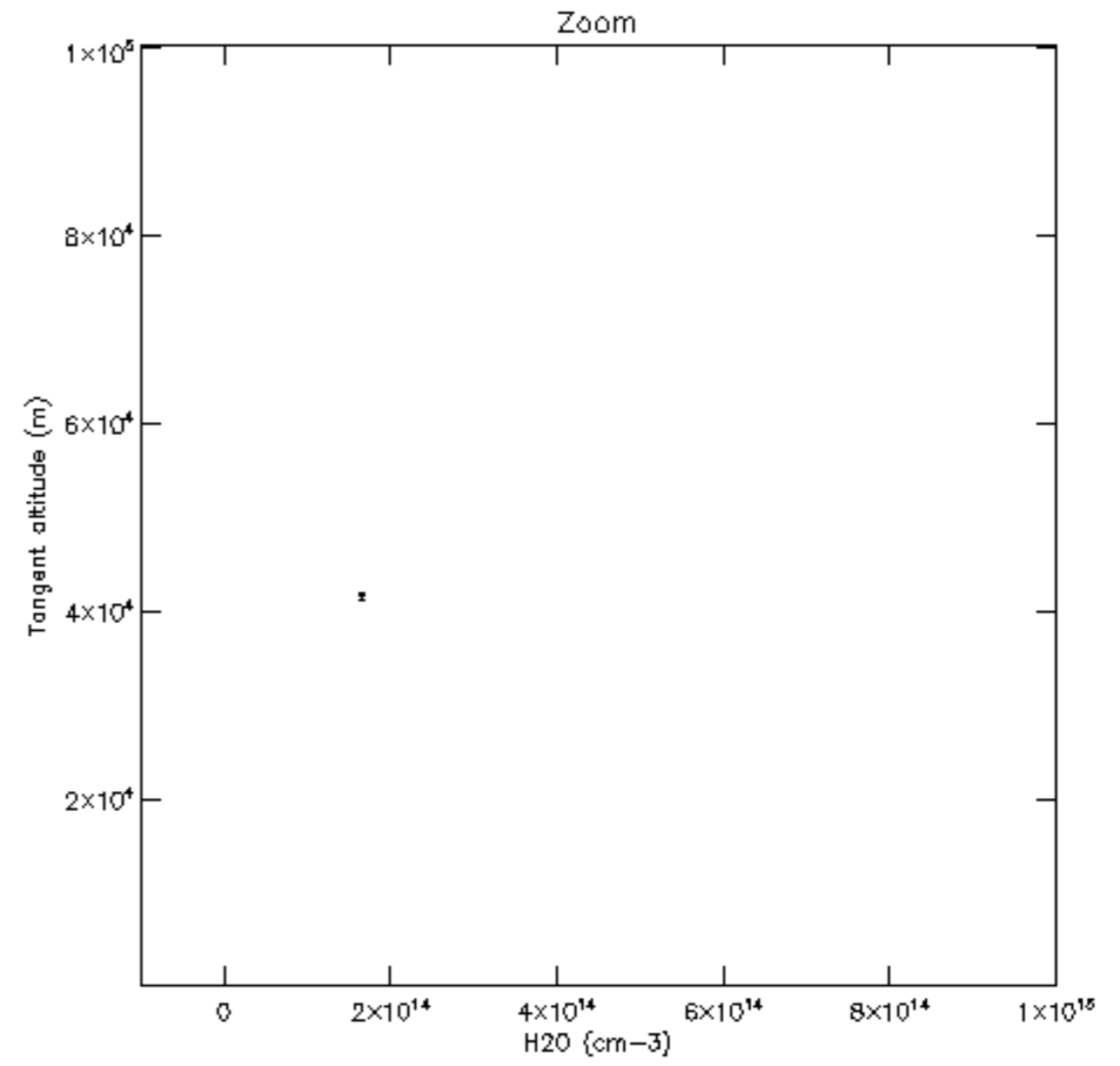
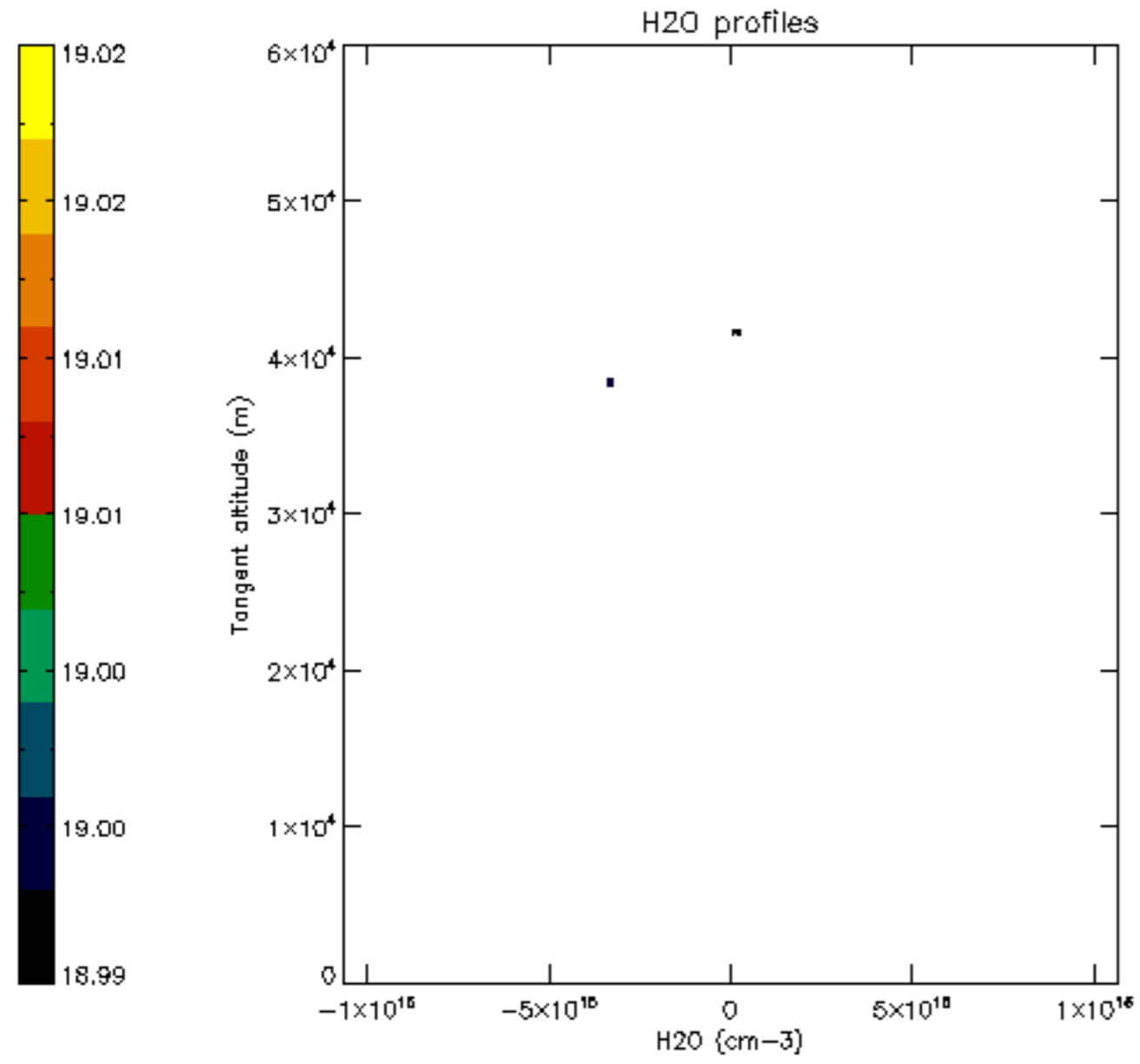


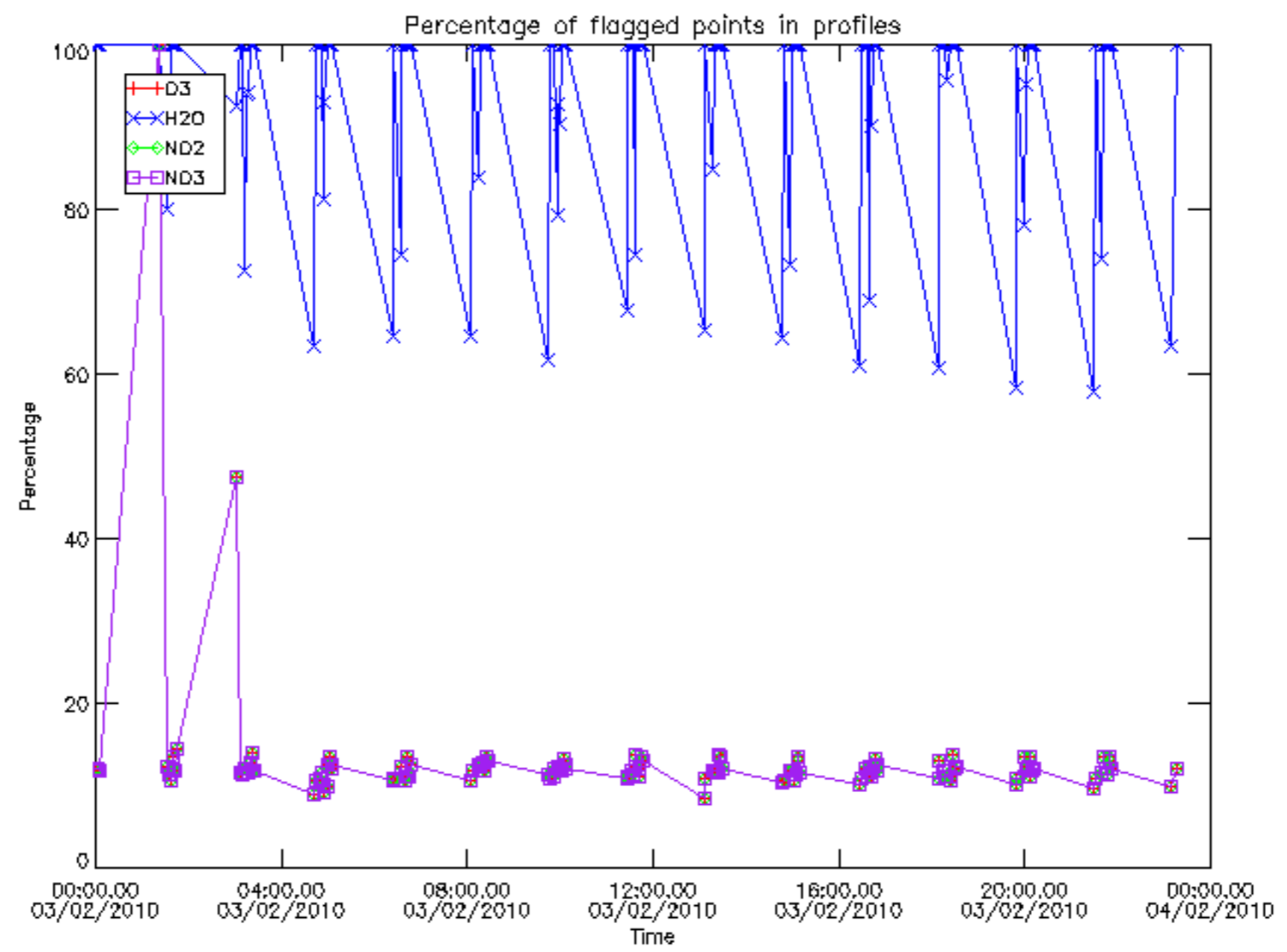




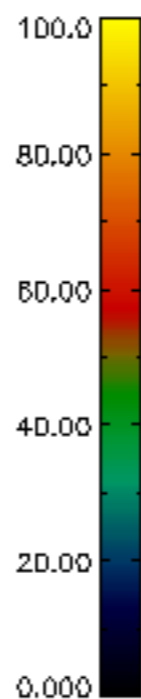
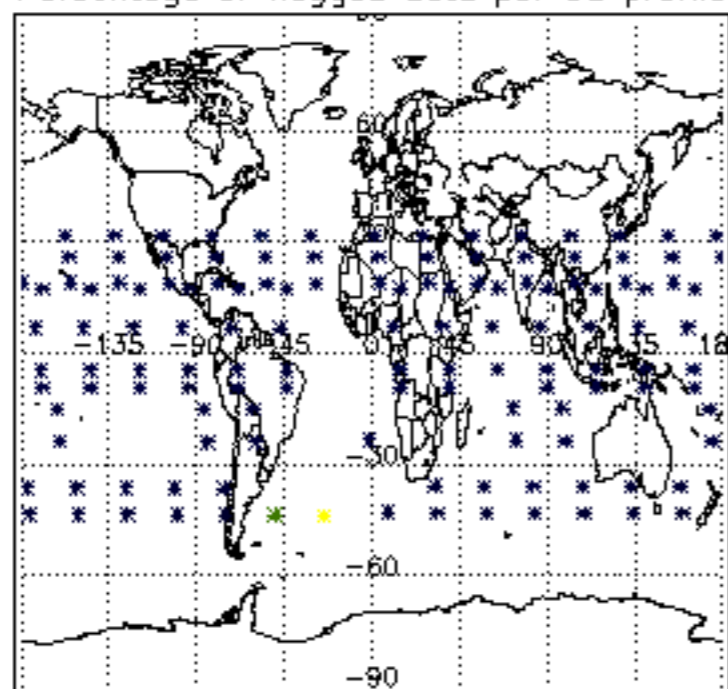




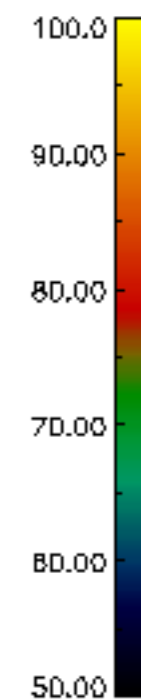
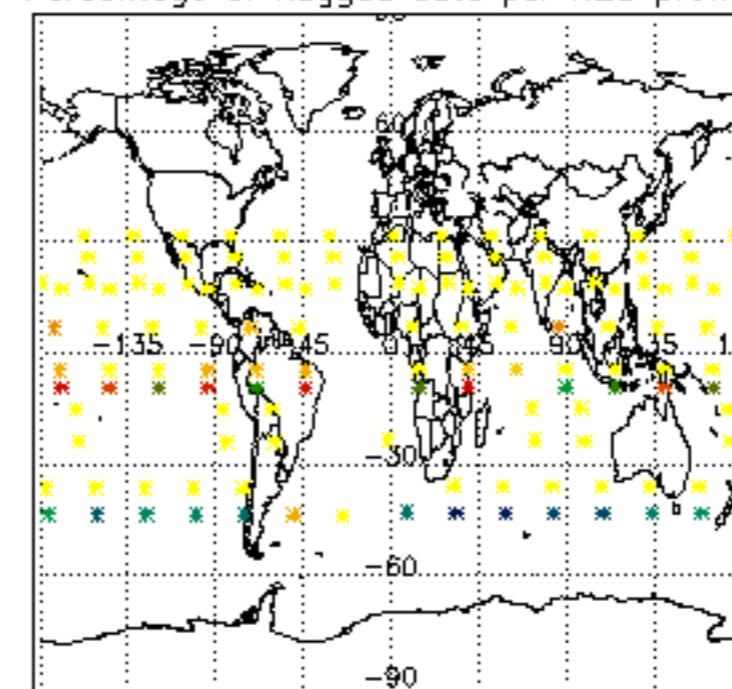




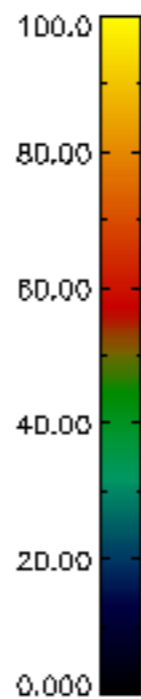
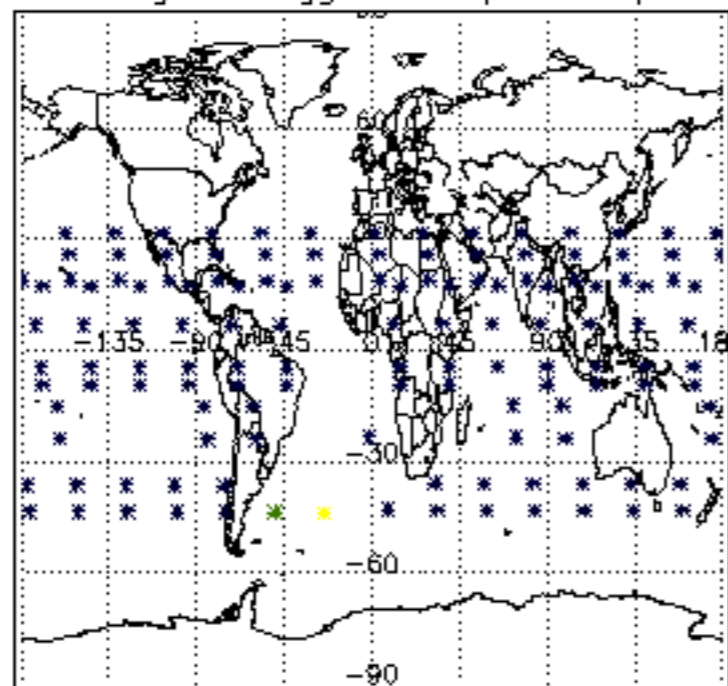
Percentage of flagged data per D3 profile



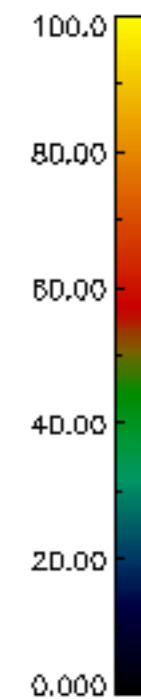
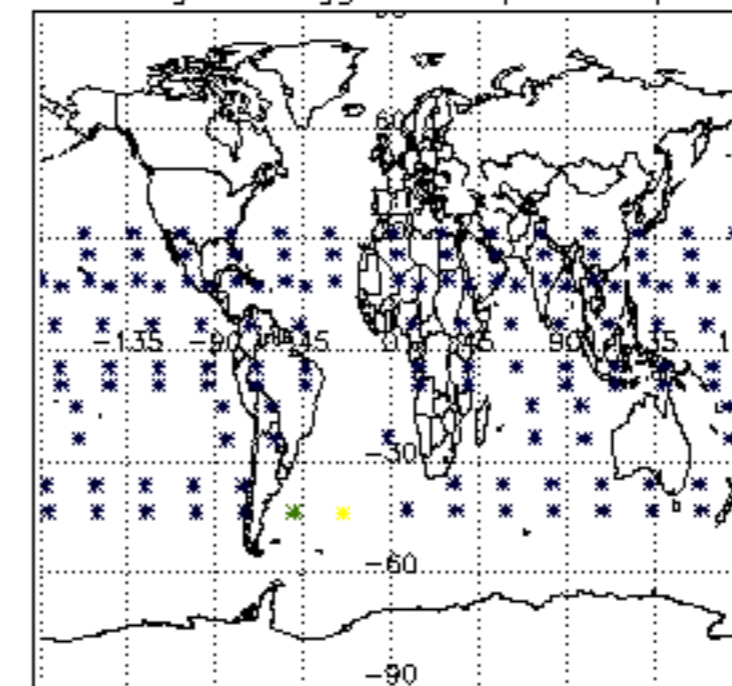
Percentage of flagged data per H2O profile

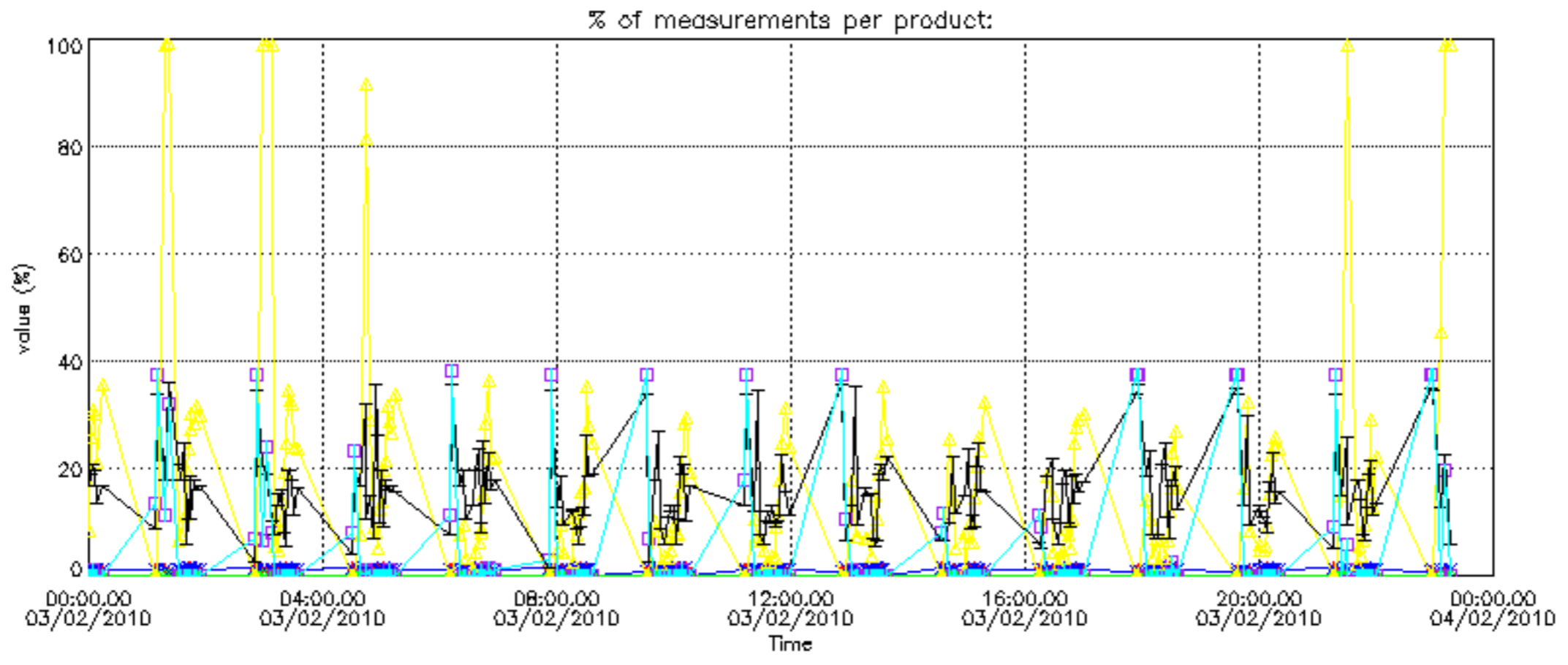


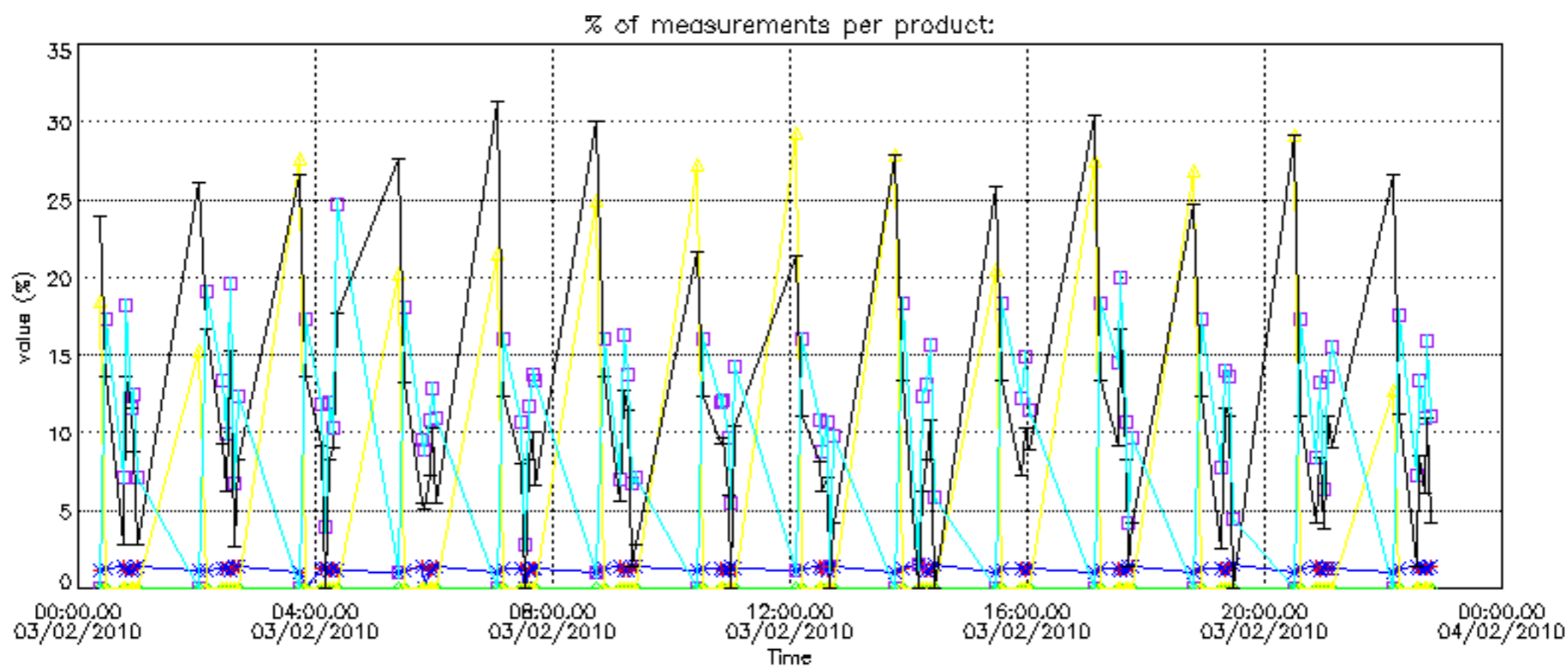
Percentage of flagged data per NO2 profile



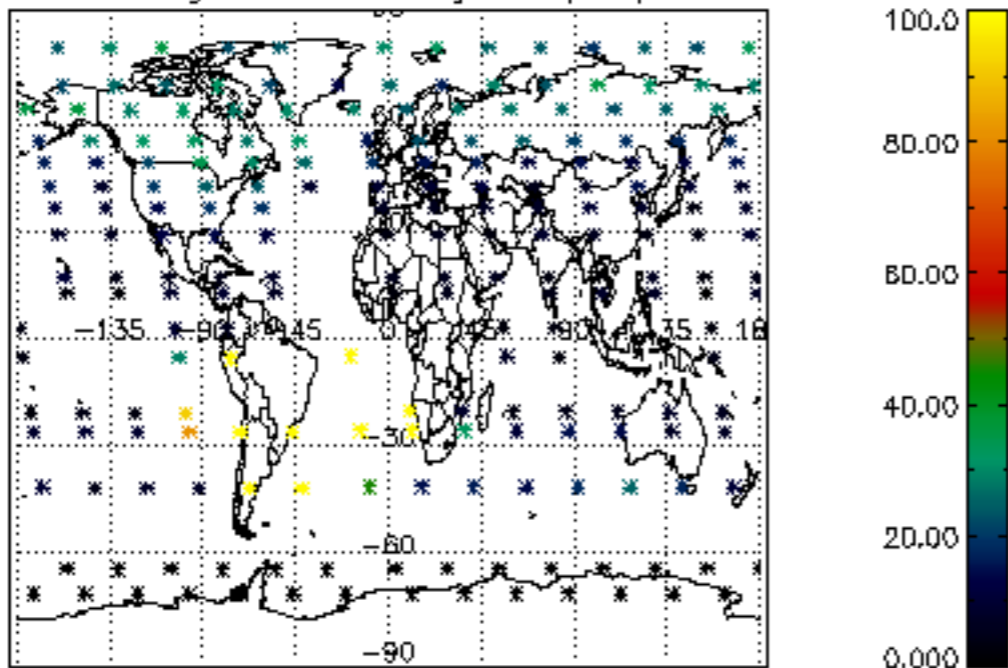
Percentage of flagged data per NO3 profile



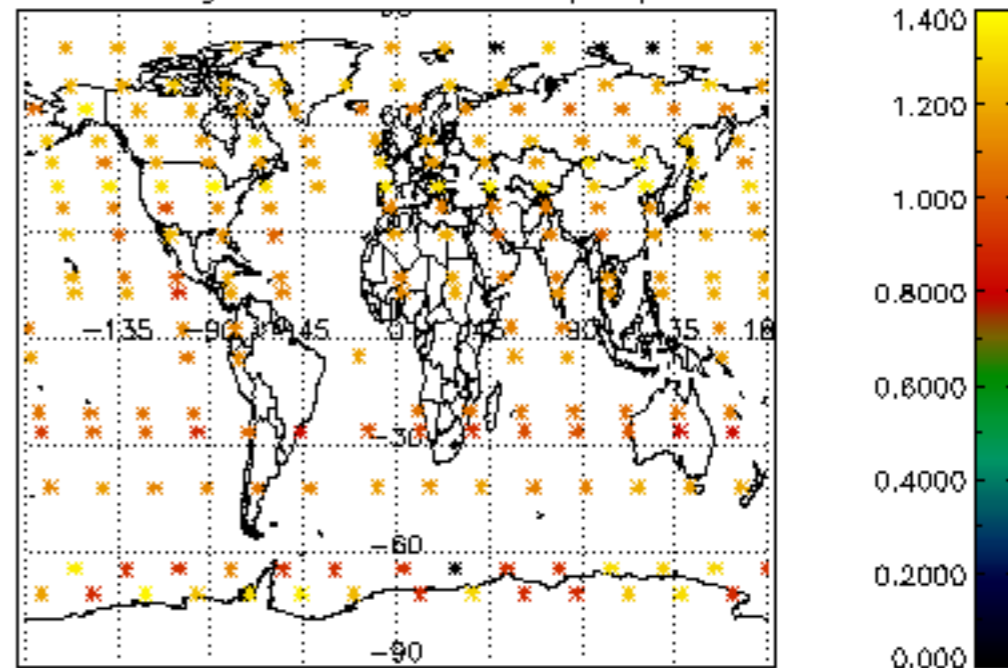




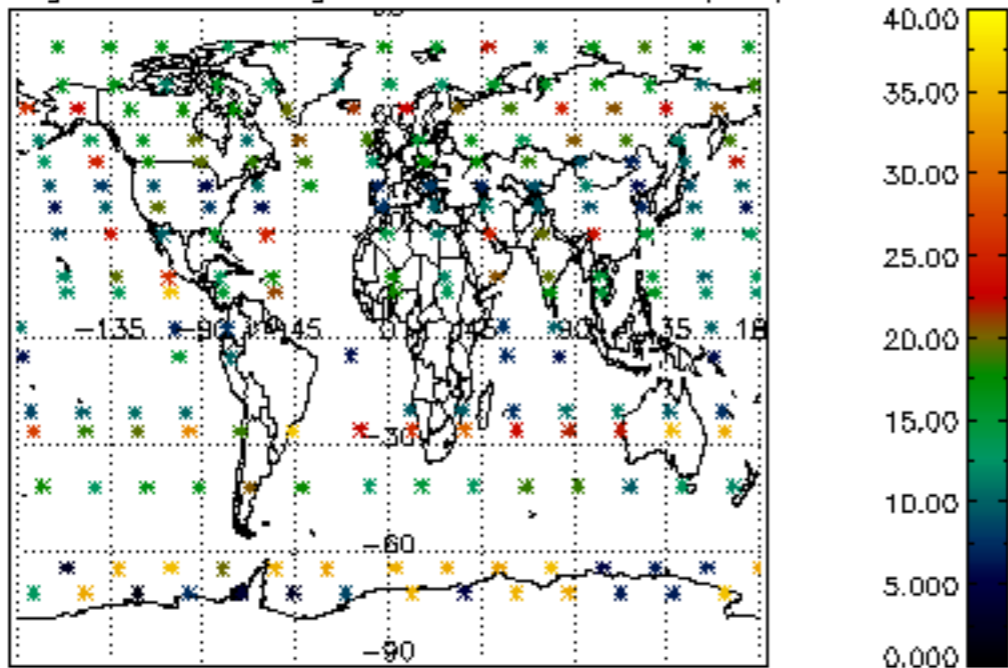
Percentage of cosmic ray hits per profile



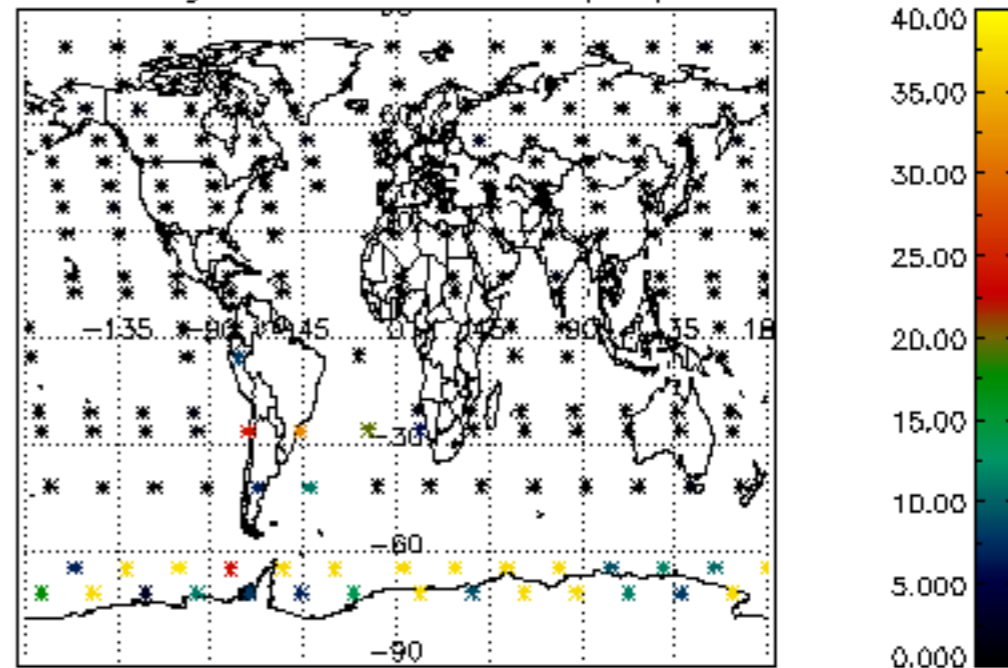
Percentage of datation errors per profile



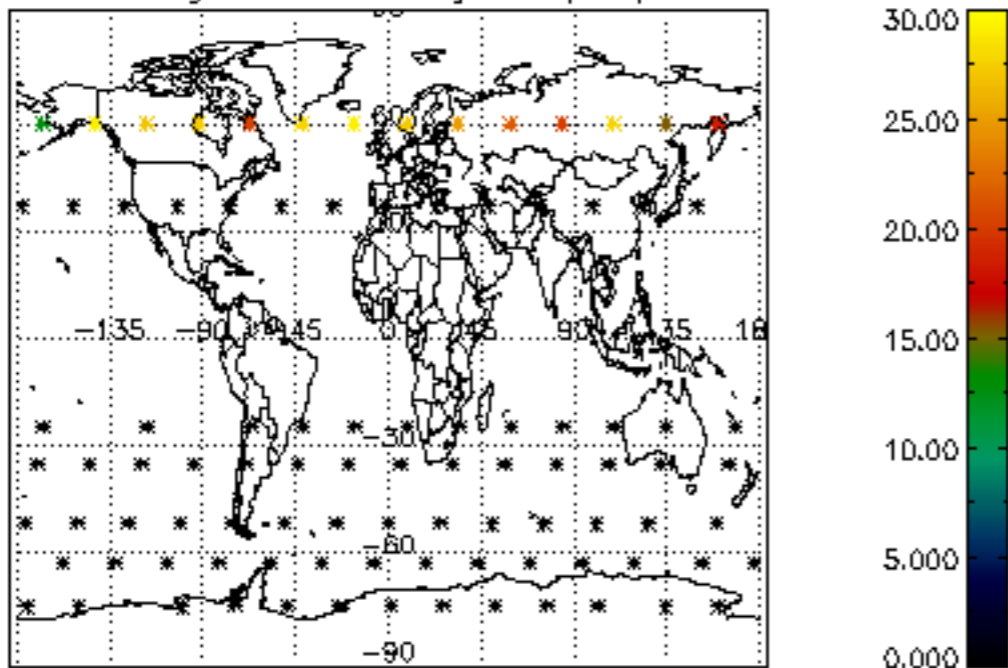
Percentage of star falling outside central band per profile



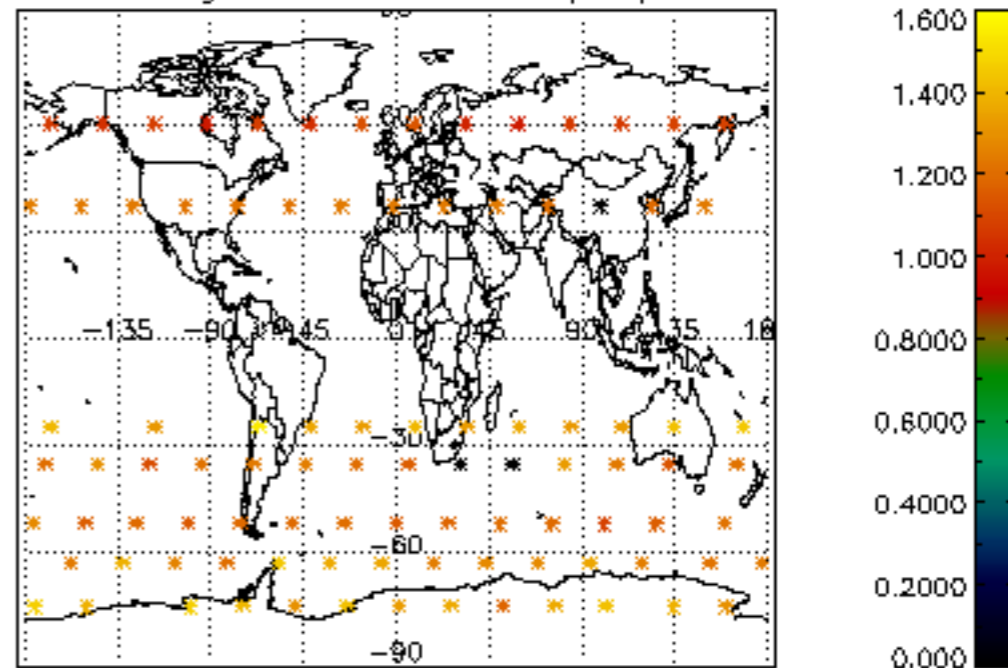
Percentage of saturation errors per profile



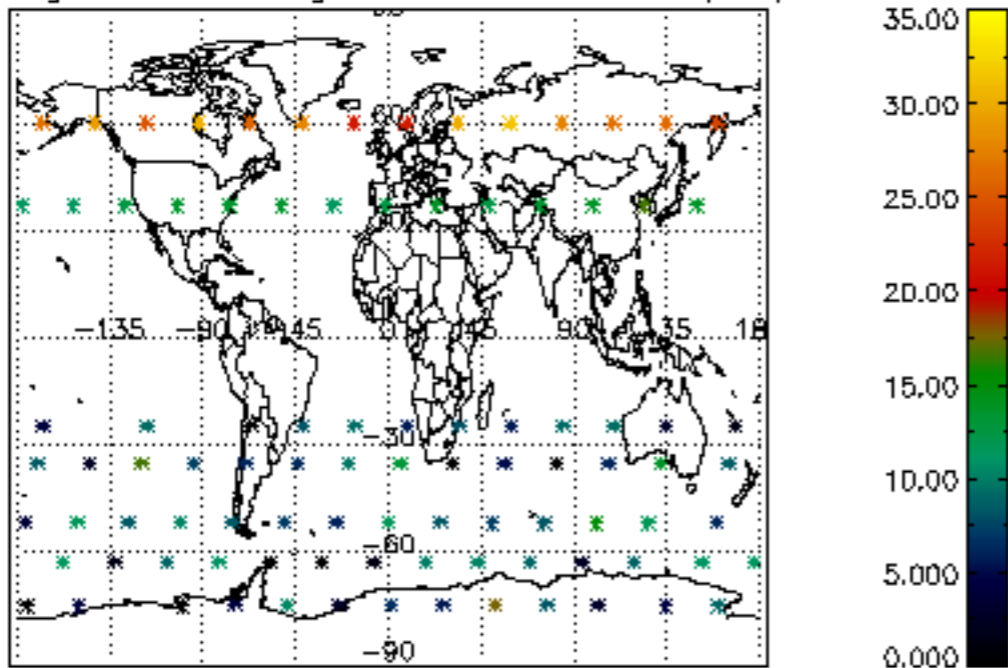
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

