

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	25APR2013 09:36:42
Data source version	GOMOS/6.01
Start time of products	27-01-2008 (27JAN2008 00:00:00)
Stop time of products	28-01-2008 (28JAN2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	379
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

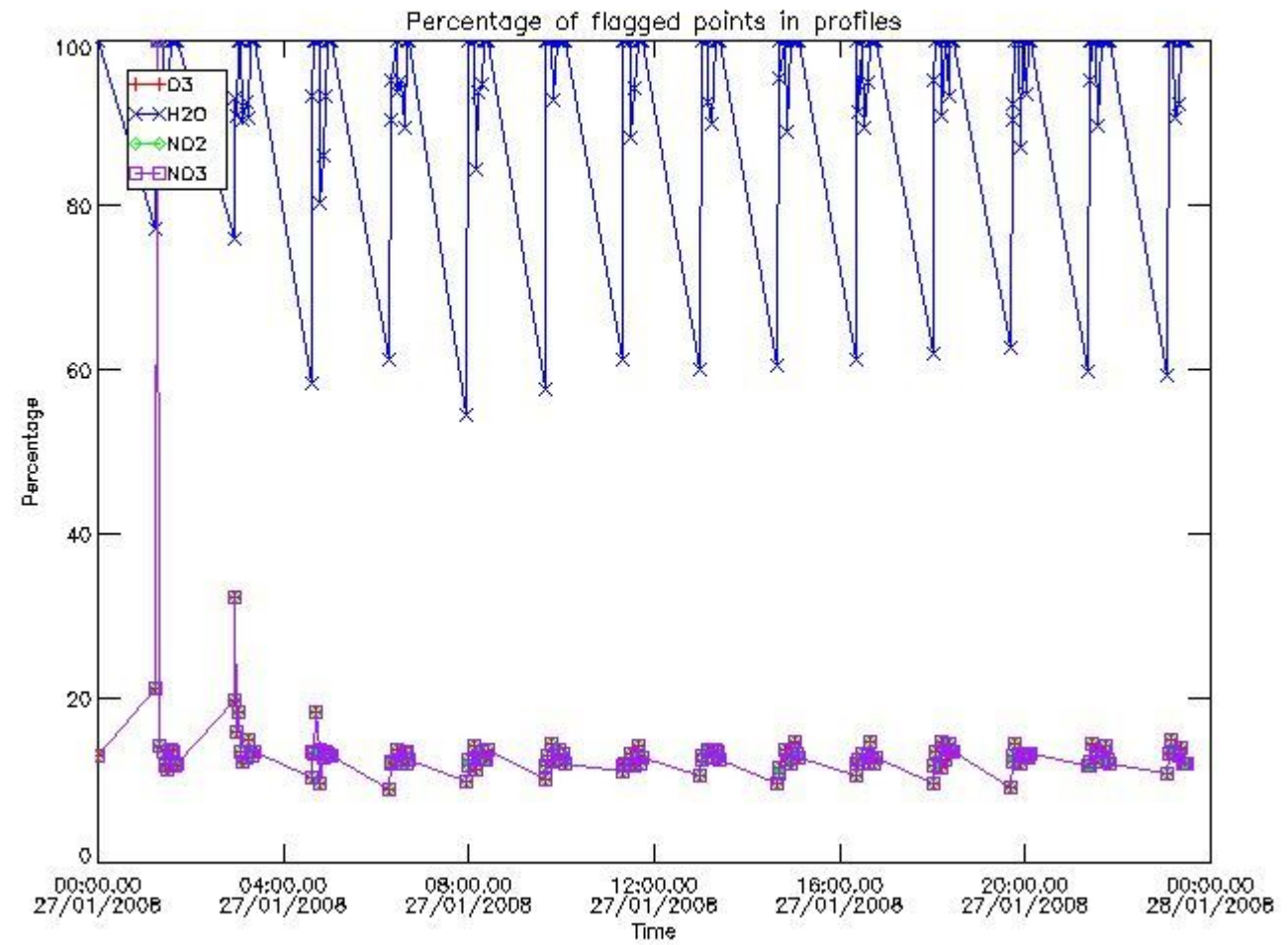
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080127_000037_000000392065_00274_30889_1091.N1	27-JAN-2008 00:00:37	Dark	39.000	34	Gam2Vel	1.7930	23000.	78	30889	No
2	GOM_NL__2PRFIN20080127_000244_000000392065_00274_30889_1092.N1	27-JAN-2008 00:02:44	Straylight	38.500	70	Zet Pup	2.2460	39000.	77	30889	No
3	GOM_NL__2PRFIN20080127_000411_000000432065_00274_30889_1093.N1	27-JAN-2008 00:04:11	Straylight	42.500	117	Pi Pup	2.7060	3800.0	85	30889	No
4	GOM_NL__2PRFIN20080127_000639_000000382065_00274_30889_1094.N1	27-JAN-2008 00:06:39	Straylight	38.000	23	21Eps CMa	1.5020	26000.	76	30889	No
5	GOM_NL__2PRFIN20080127_000802_000000402065_00274_30889_1095.N1	27-JAN-2008 00:08:02	Straylight	39.500	179	24Omi2CMa	3.0320	24000.	79	30889	No
6	GOM_NL__2PRFIN20080127_001011_000000492065_00274_30889_1096.N1	27-JAN-2008 00:10:11	Straylight	48.500	1	9Alp CMa	-1.4400	11000.	97	30889	No
7	GOM_NL__2PRFIN20080127_001706_000000392065_00274_30889_1097.N1	27-JAN-2008 00:17:06	Twilight_stray	39.000	153	3Bet CMi	2.8940	13100.	78	30889	No
8	GOM_NL__2PRFIN20080127_001929_000000382065_00274_30889_1098.N1	27-JAN-2008 00:19:29	Bright	38.000	44	24Gam Gem	1.9280	11000.	76	30889	No
9	GOM_NL__2PRFIN20080127_002116_000000372065_00274_30889_1099.N1	27-JAN-2008 00:21:16	Bright	36.500	151	13Mu Gem	2.8900	3000.0	73	30889	No
10	GOM_NL__2PRFIN20080127_002531_000000362065_00274_30889_1100.N1	27-JAN-2008 00:25:31	Bright	36.000	107	37The Aur	2.6490	11000.	72	30889	No
11	GOM_NL__2PRFIN20080127_002738_000000362065_00274_30889_1101.N1	27-JAN-2008 00:27:38	Bright	35.500	42	34Bet Aur	1.9000	10200.	71	30889	No
12	GOM_NL__2PRFIN20080127_004005_000000362065_00274_30889_1102.N1	27-JAN-2008 00:40:05	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	30889	No
13	GOM_NL__2PRFIN20080127_005105_000000382065_00274_30889_1103.N1	27-JAN-2008 00:51:05	Bright	37.500	130	23Bet Dra	2.7990	5800.0	75	30889	No
14	GOM_NL__2PRFIN20080127_005432_000000362065_00274_30889_1104.N1	27-JAN-2008 00:54:32	Bright	36.000	5	3Alp Lyr	0.033000	11000.	72	30889	No
15	GOM_NL__2PRFIN20080127_010235_000000352065_00274_30889_1105.N1	27-JAN-2008 01:02:35	Bright	34.500	59	55Alp Oph	2.0800	8900.0	69	30889	No
16	GOM_NL__2PRFIN20080127_010441_000000352065_00274_30889_1106.N1	27-JAN-2008 01:04:41	Bright	35.000	126	60Bet Oph	2.7700	4250.0	70	30889	No
17	GOM_NL__2PRFIN20080127_011057_000000402065_00274_30889_1107.N1	27-JAN-2008 01:10:57	Twilight_stray	40.000	86	35Eta Oph	2.4300	10200.	80	30889	No
18	GOM_NL__2PRFIN20080127_011501_000000552065_00274_30889_1108.N1	27-JAN-2008 01:15:01	Dark	55.000	16	21Alp Sco	1.0200	3000.0	110	30889	No
19	GOM_NL__2PRFIN20080127_011623_000000422065_00274_30889_1109.N1	27-JAN-2008 01:16:23	Dark	42.000	75	26Eps Sco	2.2910	4250.0	84	30889	No
20	GOM_NL__2PRFIN20080127_012039_000000362065_00274_30889_1110.N1	27-JAN-2008 01:20:39	Dark	36.000	131	Gam Lup	2.8000	26000.	72	30889	No
21	GOM_NL__2PRFIN20080127_012438_000000382065_00275_30890_1135.N1	27-JAN-2008 01:24:38	Dark	38.000	134	Bet TrA	2.8100	6600.0	76	30890	No
22	GOM_NL__2PRFIN20080127_012608_000000432065_00275_30890_1136.N1	27-JAN-2008 01:26:08	Dark	43.000	4	Alp1Cen	-0.010000	5800.0	86	30890	No
23	GOM_NL__2PRFIN20080127_013042_000000452065_00275_30890_1137.N1	27-JAN-2008 01:30:42	Dark	45.000	12	Alp1Cru	0.77500	30000.	90	30890	No
24	GOM_NL__2PRFIN20080127_013437_000000372065_00275_30890_1138.N1	27-JAN-2008 01:34:37	Dark	37.000	29	Bet Car	1.6720	10200.	74	30890	No
25	GOM_NL__2PRFIN20080127_013651_000000382065_00275_30890_1139.N1	27-JAN-2008 01:36:51	Dark	37.500	71	lot Car	2.2460	7700.0	75	30890	No
26	GOM_NL__2PRFIN20080127_013839_000000442065_00275_30890_1140.N1	27-JAN-2008 01:38:39	Dark	43.500	46	Del Vel	1.9540	10600.	87	30890	No
27	GOM_NL__2PRFIN20080127_014114_000000422065_00275_30890_1141.N1	27-JAN-2008 01:41:14	Dark	42.000	34	Gam2Vel	1.7930	23000.	84	30890	No
28	GOM_NL__2PRFIN20080127_014320_000000432065_00275_30890_1142.N1	27-JAN-2008 01:43:20	Straylight	42.500	70	Zet Pup	2.2460	39000.	85	30890	No
29	GOM_NL__2PRFIN20080127_014447_000000452065_00275_30890_1143.N1	27-JAN-2008 01:44:47	Straylight	45.000	117	Pi Pup	2.7060	3800.0	90	30890	No
30	GOM_NL__2PRFIN20080127_014715_000000422065_00275_30890_1144.N1	27-JAN-2008 01:47:15	Straylight	42.000	23	21Eps CMa	1.5020	26000.	84	30890	No
31	GOM_NL__2PRFIN20080127_014838_000000392065_00275_30890_1145.N1	27-JAN-2008 01:48:38	Straylight	39.000	179	24Omi2CMa	3.0320	24000.	78	30890	No
32	GOM_NL__2PRFIN20080127_015047_000000452065_00275_30890_1146.N1	27-JAN-2008 01:50:47	Straylight	44.500	1	9Alp CMa	-1.4400	11000.	89	30890	No
33	GOM_NL__2PRFIN20080127_015742_000000402065_00275_30890_1147.N1	27-JAN-2008 01:57:42	Twilight_stray	40.000	153	3Bet CMi	2.8940	13100.	80	30890	No
34	GOM_NL__2PRFIN20080127_020004_000000412065_00275_30890_1148.N1	27-JAN-2008 02:00:04	Bright	40.500	44	24Gam Gem	1.9280	11000.	81	30890	No
35	GOM_NL__2PRFIN20080127_020152_000000392065_00275_30890_1149.N1	27-JAN-2008 02:01:52	Bright	39.000	151	13Mu Gem	2.8900	3000.0	78	30890	No
36	GOM_NL__2PRFIN20080127_020607_000000362065_00275_30890_1150.N1	27-JAN-2008 02:06:07	Bright	35.500	107	37The Aur	2.6490	11000.	71	30890	No
37	GOM_NL__2PRFIN20080127_020814_000000362065_00275_30890_1151.N1	27-JAN-2008 02:08:14	Bright	36.000	42	34Bet Aur	1.9000	10200.	72	30890	No
38	GOM_NL__2PRFIN20080127_022041_000000322065_00275_30890_1152.N1	27-JAN-2008 02:20:41	Bright	31.500	49	1Alp UMi	1.9900	6300.0	63	30890	No
39	GOM_NL__2PRFIN20080127_023141_000000362065_00275_30890_1153.N1	27-JAN-2008 02:31:41	Bright	35.500	130	23Bet Dra	2.7990	5800.0	71	30890	No
40	GOM_NL__2PRFIN20080127_023508_000000372065_00275_30890_1154.N1	27-JAN-2008 02:35:08	Bright	36.500	5	3Alp Lyr	0.033000	11000.	73	30890	No
41	GOM_NL__2PRFIN20080127_024311_000000532065_00275_30890_1155.N1	27-JAN-2008 02:43:11	Bright	53.000	59	55Alp Oph	2.0800	8900.0	106	30890	No
42	GOM_NL__2PRFIN20080127_024518_000000352065_00275_30890_1156.N1	27-JAN-2008 02:45:18	Bright	34.500	126	60Bet Oph	2.7700	4250.0	69	30890	No

338	GOM_NL__2PRFIN20080127_213325_000000442065_00287_30902_1311.N1	27-JAN-2008 21:33:25	Dark	43.500	4	Alp1Cen	-0.010000	5800.0	87	30902	No
339	GOM_NL__2PRFIN20080127_213800_000000422065_00287_30902_1312.N1	27-JAN-2008 21:38:00	Dark	41.500	12	Alp1Cru	0.77500	30000.	83	30902	No
340	GOM_NL__2PRFIN20080127_214152_000000382065_00287_30902_1313.N1	27-JAN-2008 21:41:52	Dark	37.500	29	Bet Car	1.6720	10200.	75	30902	No
341	GOM_NL__2PRFIN20080127_214407_000000402065_00287_30902_1314.N1	27-JAN-2008 21:44:07	Dark	39.500	71	lot Car	2.2460	7700.0	79	30902	No
342	GOM_NL__2PRFIN20080127_214554_000000412065_00287_30902_1315.N1	27-JAN-2008 21:45:54	Dark	40.500	46	Del Vel	1.9540	10600.	81	30902	No
343	GOM_NL__2PRFIN20080127_214828_000000422065_00287_30902_1316.N1	27-JAN-2008 21:48:28	Dark	42.000	34	Gam2Vel	1.7930	23000.	84	30902	No
344	GOM_NL__2PRFIN20080127_215034_000000382065_00287_30902_1317.N1	27-JAN-2008 21:50:34	Straylight	38.000	70	Zet Pup	2.2460	39000.	76	30902	No
345	GOM_NL__2PRFIN20080127_215201_000000432065_00287_30902_1318.N1	27-JAN-2008 21:52:01	Straylight	42.500	117	Pi Pup	2.7060	3800.0	85	30902	No
346	GOM_NL__2PRFIN20080127_215428_000000392065_00287_30902_1319.N1	27-JAN-2008 21:54:28	Straylight	38.500	23	21Eps CMa	1.5020	26000.	77	30902	No
347	GOM_NL__2PRFIN20080127_215551_000000322065_00287_30902_1320.N1	27-JAN-2008 21:55:51	Straylight	32.000	179	24Omi2CMa	3.0320	24000.	64	30902	No
348	GOM_NL__2PRFIN20080127_215800_000000452065_00287_30902_1321.N1	27-JAN-2008 21:58:00	Straylight	45.000	1	9Alp CMa	-1.4400	11000.	90	30902	No
349	GOM_NL__2PRFIN20080127_220453_000000382065_00287_30902_1322.N1	27-JAN-2008 22:04:53	Twilight_stray	38.000	153	3Bet CMi	2.8940	13100.	76	30902	No
350	GOM_NL__2PRFIN20080127_220717_000000382065_00287_30902_1323.N1	27-JAN-2008 22:07:17	Bright	38.000	44	24Gam Gem	1.9280	11000.	76	30902	No
351	GOM_NL__2PRFIN20080127_220905_000000382065_00287_30902_1324.N1	27-JAN-2008 22:09:05	Bright	37.500	151	13Mu Gem	2.8900	3000.0	75	30902	No
352	GOM_NL__2PRFIN20080127_221320_000000352065_00287_30902_1325.N1	27-JAN-2008 22:13:20	Bright	34.500	107	37The Aur	2.6490	11000.	69	30902	No
353	GOM_NL__2PRFIN20080127_221527_000000372065_00287_30902_1326.N1	27-JAN-2008 22:15:27	Bright	37.000	42	34Bet Aur	1.9000	10200.	74	30902	No
354	GOM_NL__2PRFIN20080127_222753_000000372065_00287_30902_1327.N1	27-JAN-2008 22:27:53	Bright	37.000	49	1Alp UMi	1.9900	6300.0	74	30902	No
355	GOM_NL__2PRFIN20080127_223852_000000372065_00287_30902_1328.N1	27-JAN-2008 22:38:52	Bright	37.000	130	23Bet Dra	2.7990	5800.0	74	30902	No
356	GOM_NL__2PRFIN20080127_224221_000000372065_00287_30902_1329.N1	27-JAN-2008 22:42:21	Bright	37.000	5	3Alp Lyr	0.033000	11000.	74	30902	No
357	GOM_NL__2PRFIN20080127_225025_000000532065_00287_30902_1330.N1	27-JAN-2008 22:50:25	Bright	53.000	59	55Alp Oph	2.0800	8900.0	106	30902	No
358	GOM_NL__2PRFIN20080127_225232_000000352065_00287_30902_1331.N1	27-JAN-2008 22:52:32	Bright	34.500	126	60Bet Oph	2.7700	4250.0	69	30902	No
359	GOM_NL__2PRFIN20080127_225850_000000442065_00287_30902_1332.N1	27-JAN-2008 22:58:50	Twilight_stray	43.500	86	35Eta Oph	2.4300	10200.	87	30902	No
360	GOM_NL__2PRFIN20080127_230256_000000522065_00287_30902_1333.N1	27-JAN-2008 23:02:56	Dark	52.000	16	21Alp Sco	1.0200	3000.0	104	30902	No
361	GOM_NL__2PRFIN20080127_230534_000000392065_00287_30902_1334.N1	27-JAN-2008 23:05:34	Dark	38.500	40	The Sco	1.8590	7100.0	77	30902	No
362	GOM_NL__2PRFIN20080127_230728_000000382065_00287_30902_1335.N1	27-JAN-2008 23:07:28	Dark	37.500	147	Alp Ara	2.8770	26000.	75	30902	No
363	GOM_NL__2PRFIN20080127_231230_000000382065_00288_30903_1324.N1	27-JAN-2008 23:12:30	Dark	37.500	134	Bet TrA	2.8100	6600.0	75	30903	No
364	GOM_NL__2PRFIN20080127_231402_000000432065_00288_30903_1325.N1	27-JAN-2008 23:14:02	Dark	42.500	4	Alp1Cen	-0.010000	5800.0	85	30903	No
365	GOM_NL__2PRFIN20080127_231837_000000402065_00288_30903_1326.N1	27-JAN-2008 23:18:37	Dark	39.500	12	Alp1Cru	0.77500	30000.	79	30903	No
366	GOM_NL__2PRFIN20080127_232228_000000372065_00288_30903_1327.N1	27-JAN-2008 23:22:28	Dark	36.500	29	Bet Car	1.6720	10200.	73	30903	No
367	GOM_NL__2PRFIN20080127_232443_000000432065_00288_30903_1328.N1	27-JAN-2008 23:24:43	Dark	42.500	71	lot Car	2.2460	7700.0	85	30903	No
368	GOM_NL__2PRFIN20080127_232630_000000422065_00288_30903_1329.N1	27-JAN-2008 23:26:30	Dark	42.000	46	Del Vel	1.9540	10600.	84	30903	No
369	GOM_NL__2PRFIN20080127_232904_000000422065_00288_30903_1330.N1	27-JAN-2008 23:29:04	Dark	42.000	34	Gam2Vel	1.7930	23000.	84	30903	No
370	GOM_NL__2PRFIN20080127_233110_000000392065_00288_30903_1331.N1	27-JAN-2008 23:31:10	Straylight	38.500	70	Zet Pup	2.2460	39000.	77	30903	No
371	GOM_NL__2PRFIN20080127_233237_000000432065_00288_30903_1332.N1	27-JAN-2008 23:32:37	Straylight	42.500	117	Pi Pup	2.7060	3800.0	85	30903	No
372	GOM_NL__2PRFIN20080127_233504_000000412065_00288_30903_1333.N1	27-JAN-2008 23:35:04	Straylight	41.000	23	21Eps CMa	1.5020	26000.	82	30903	No
373	GOM_NL__2PRFIN20080127_233627_000000392065_00288_30903_1334.N1	27-JAN-2008 23:36:27	Straylight	38.500	179	24Omi2CMa	3.0320	24000.	77	30903	No
374	GOM_NL__2PRFIN20080127_233836_000000482065_00288_30903_1335.N1	27-JAN-2008 23:38:36	Straylight	48.000	1	9Alp CMa	-1.4400	11000.	96	30903	No
375	GOM_NL__2PRFIN20080127_234528_000000402065_00288_30903_1336.N1	27-JAN-2008 23:45:28	Twilight_stray	40.000	153	3Bet CMi	2.8940	13100.	80	30903	No
376	GOM_NL__2PRFIN20080127_234753_000000382065_00288_30903_1337.N1	27-JAN-2008 23:47:53	Bright	37.500	44	24Gam Gem	1.9280	11000.	75	30903	No
377	GOM_NL__2PRFIN20080127_234941_000000382065_00288_30903_1338.N1	27-JAN-2008 23:49:41	Bright	38.000	151	13Mu Gem	2.8900	3000.0	76	30903	No
378	GOM_NL__2PRFIN20080127_235356_000000352065_00288_30903_1339.N1	27-JAN-2008 23:53:56	Bright	35.000	107	37The Aur	2.6490	11000.	70	30903	No
379	GOM_NL__2PRFIN20080127_235603_000000362065_00288_30903_1340.N1	27-JAN-2008 23:56:03	Bright	35.500	42	34Bet Aur	1.9000	10200.	71	30903	No

3. Quality information per product

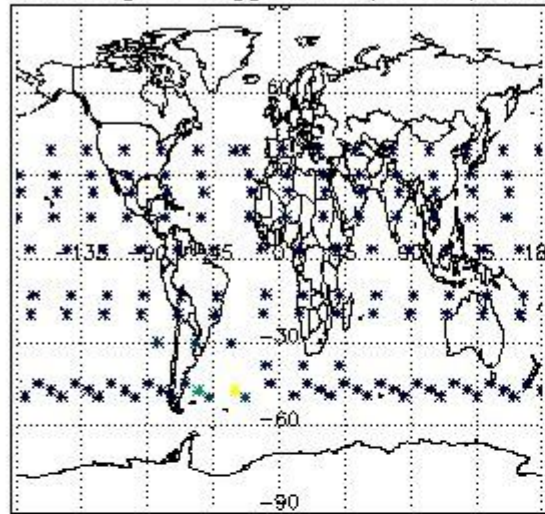
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

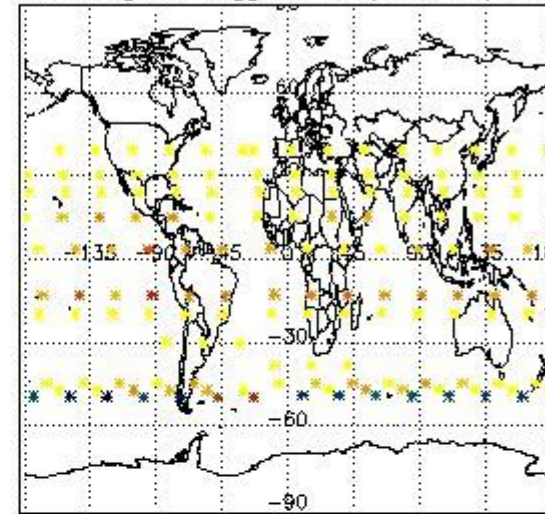


3.2 Plot quality information per product (world map)

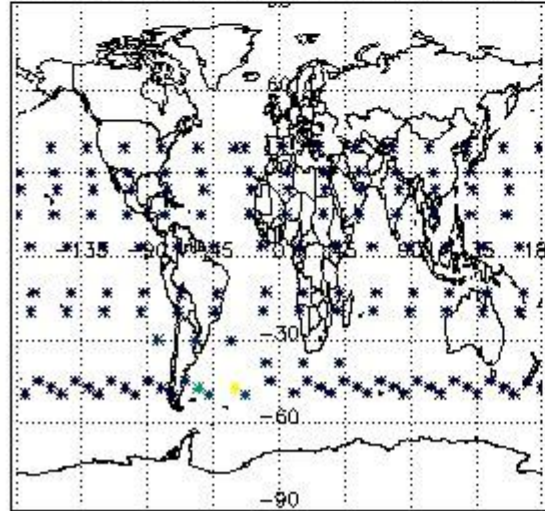
Percentage of flagged data per O3 profile



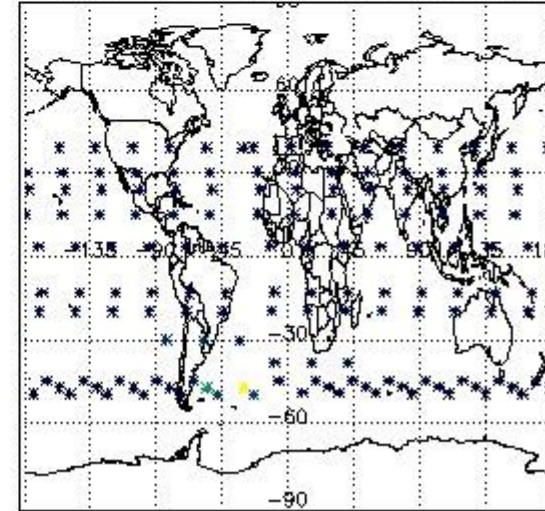
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

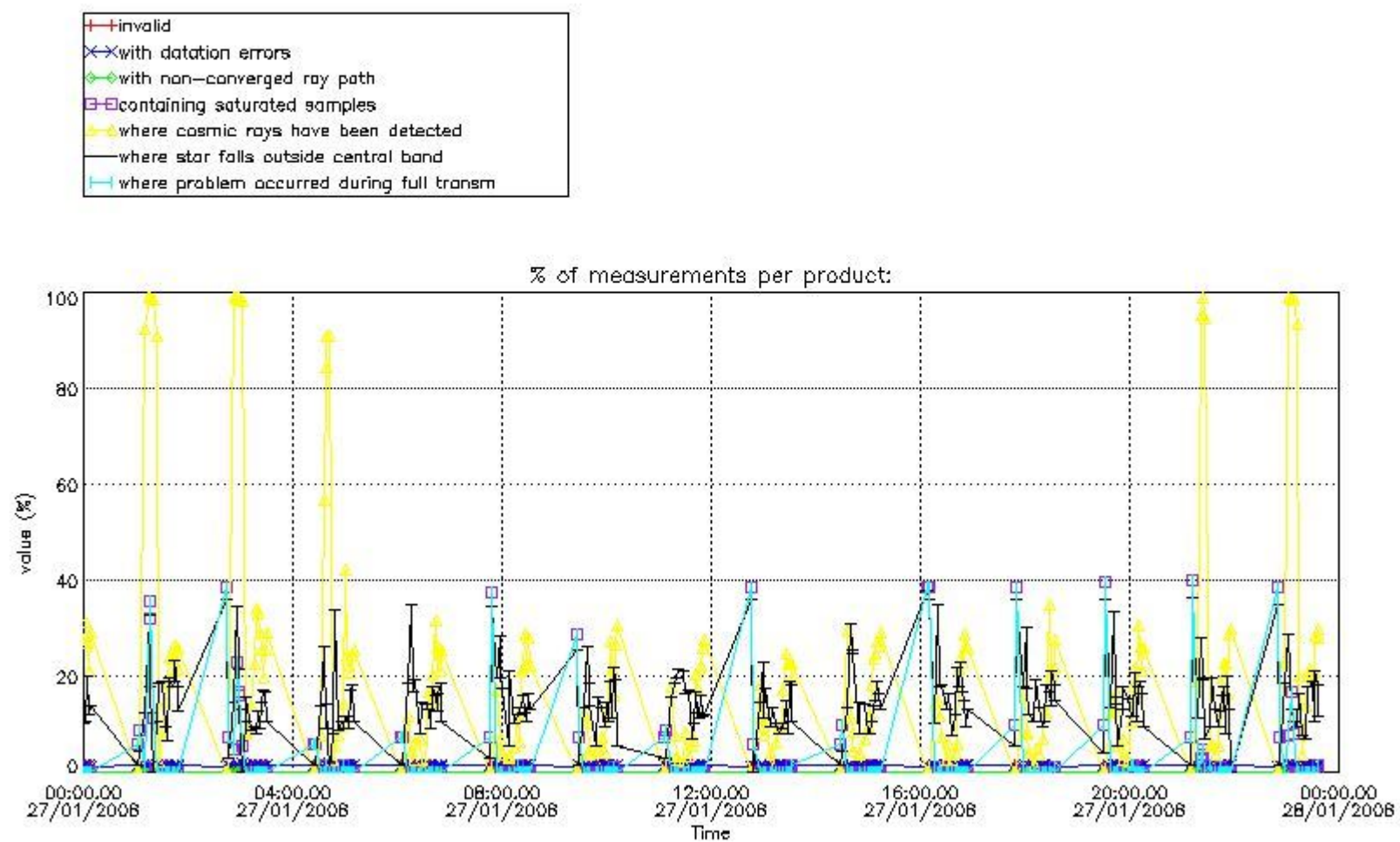


4. Level 1 quality information per product

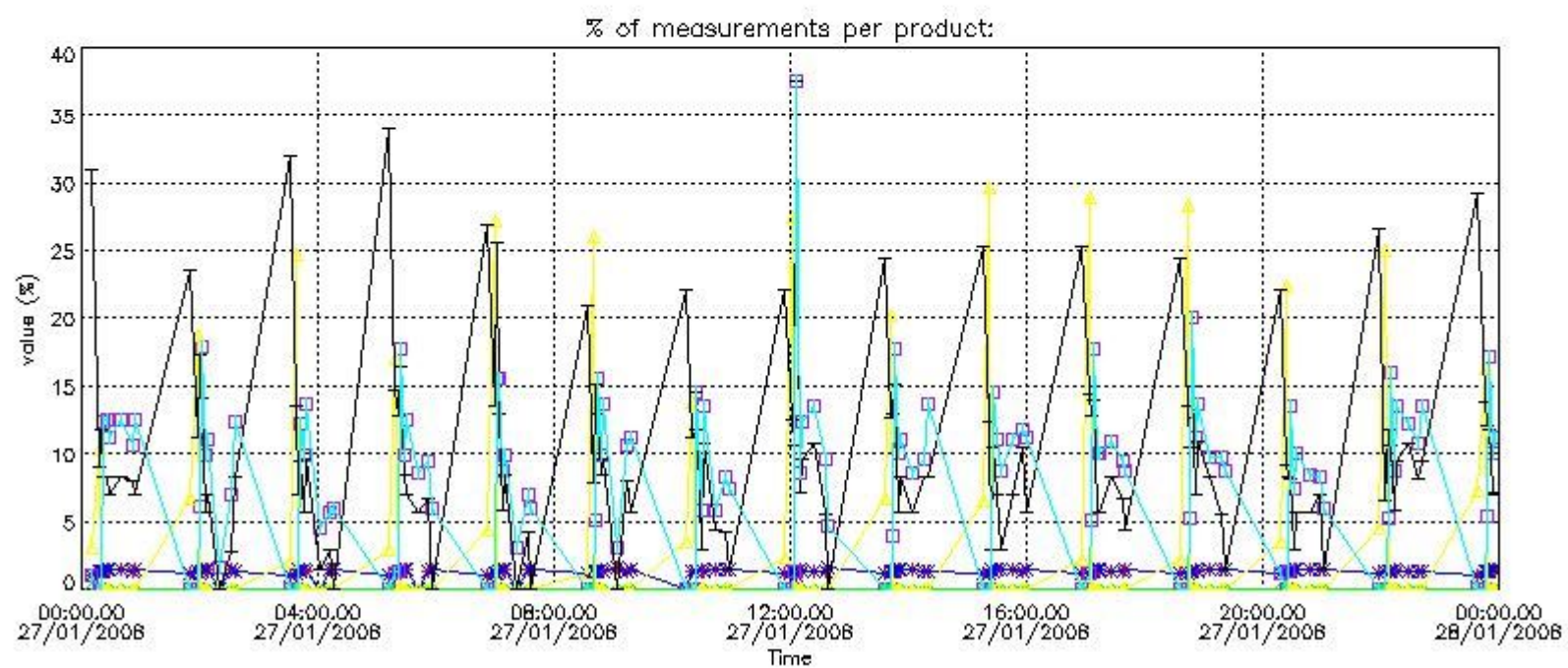
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

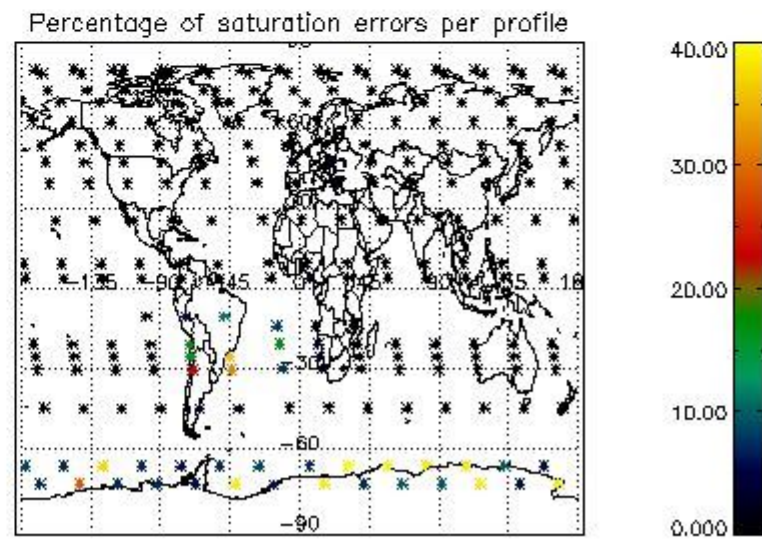
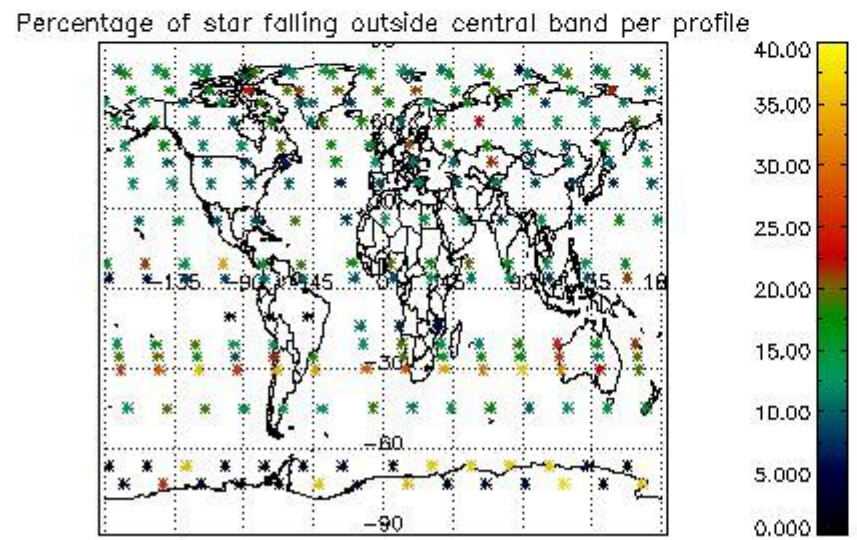
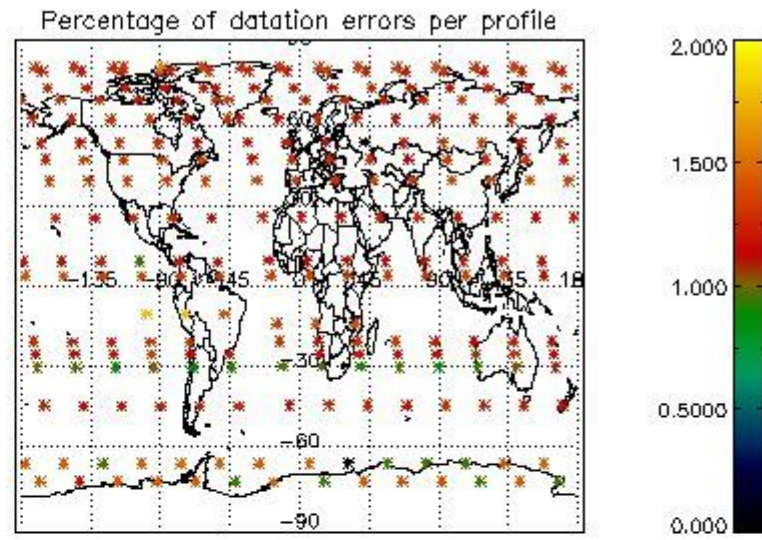
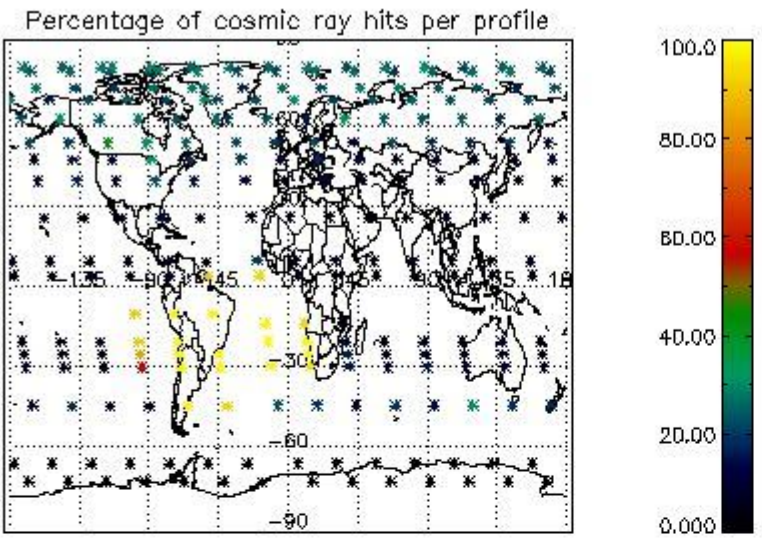


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

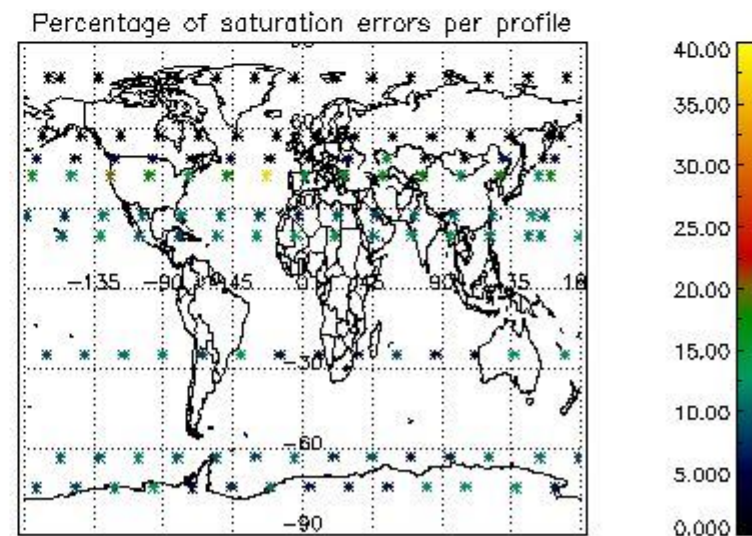
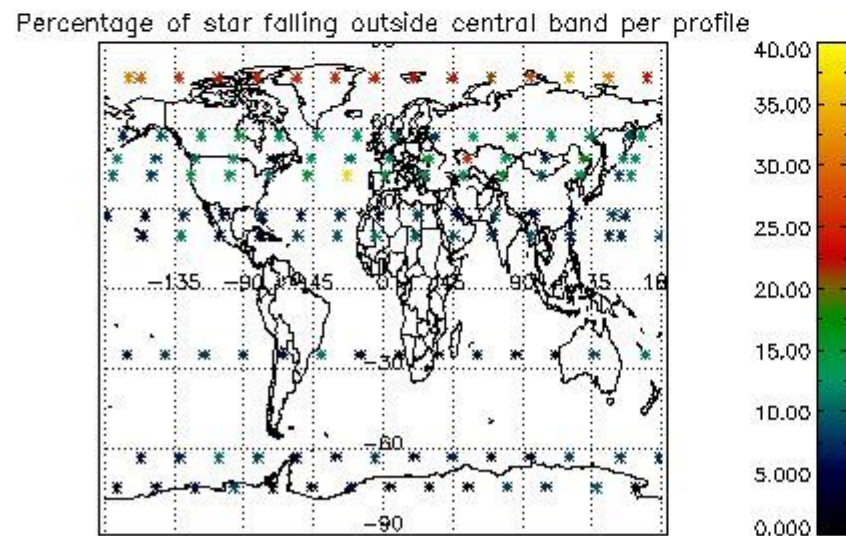
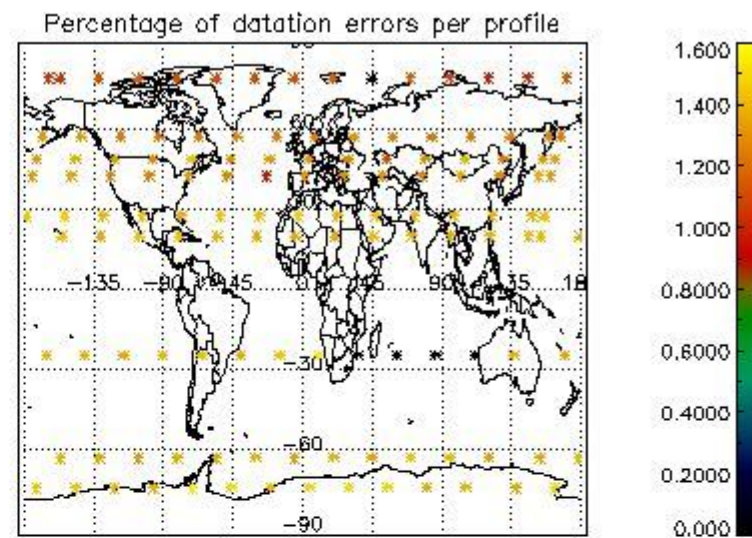
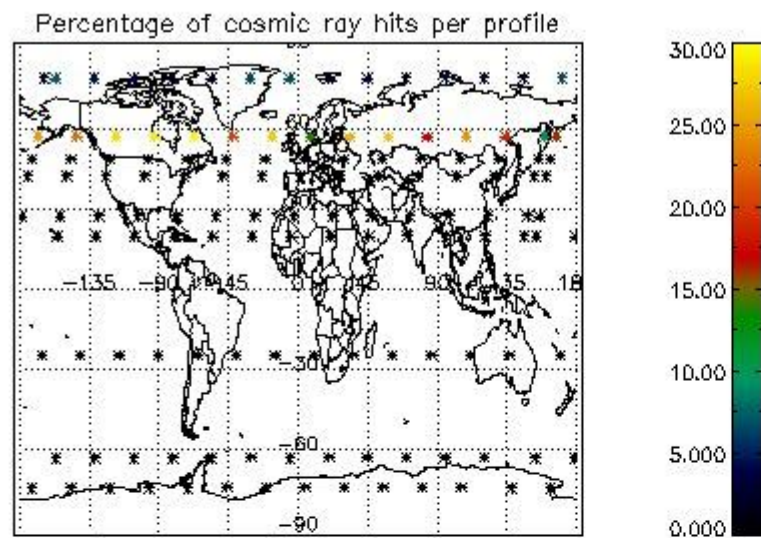


4.2 Plot quality information per product coming from level 1b processing (world map)

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

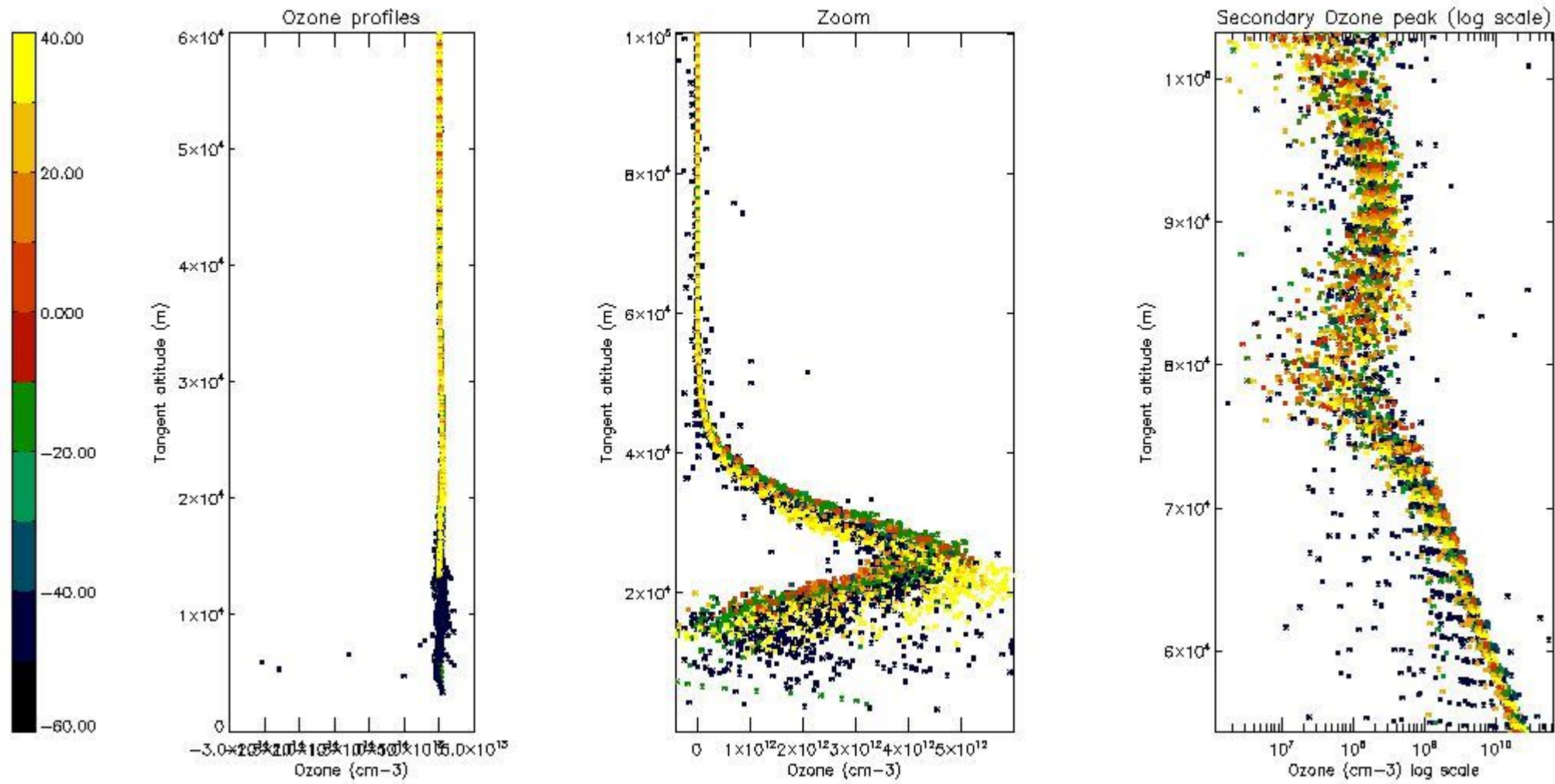
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	40
STD < 20	21

STD < 10	16
STD < 5	10

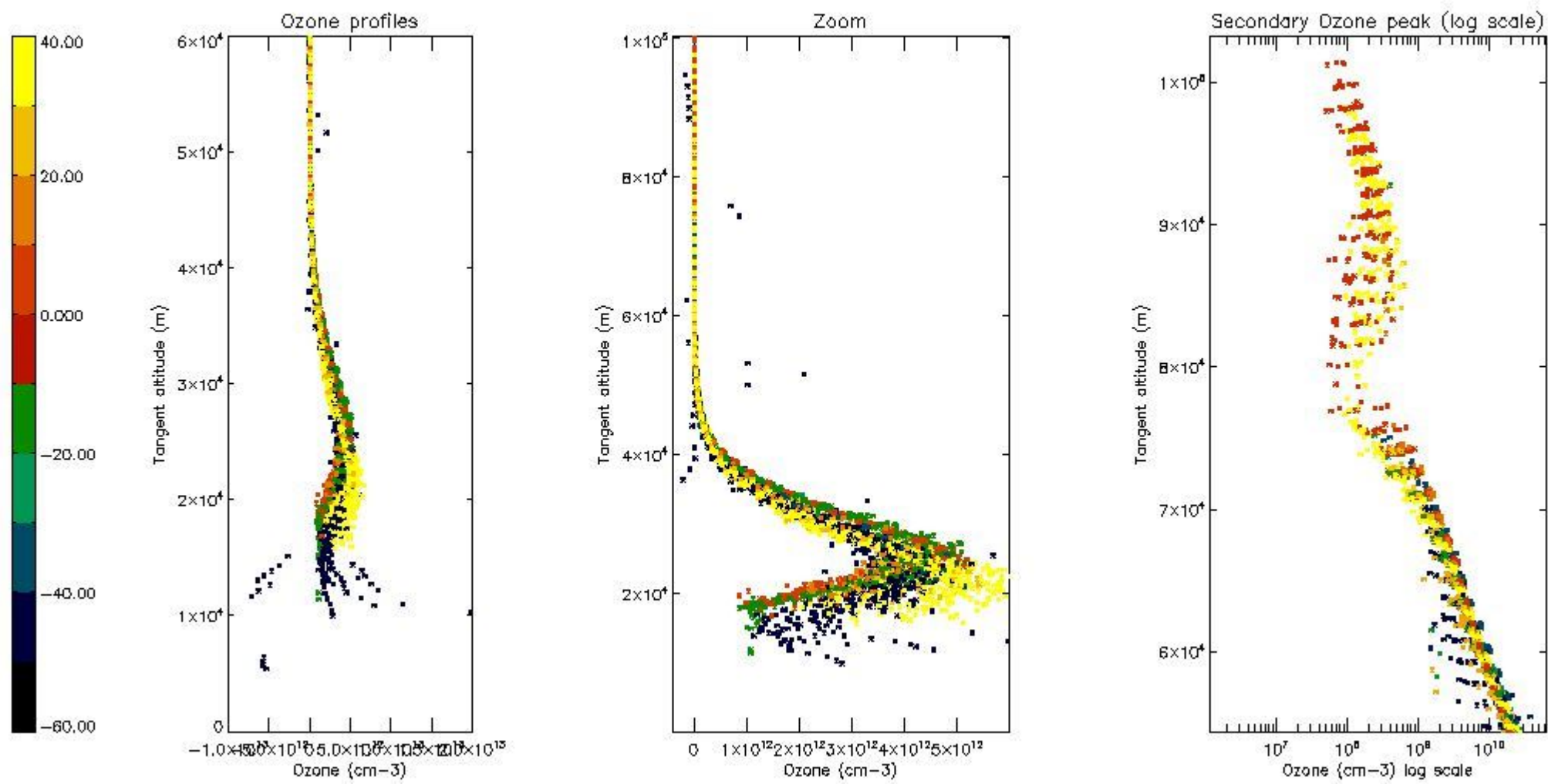
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



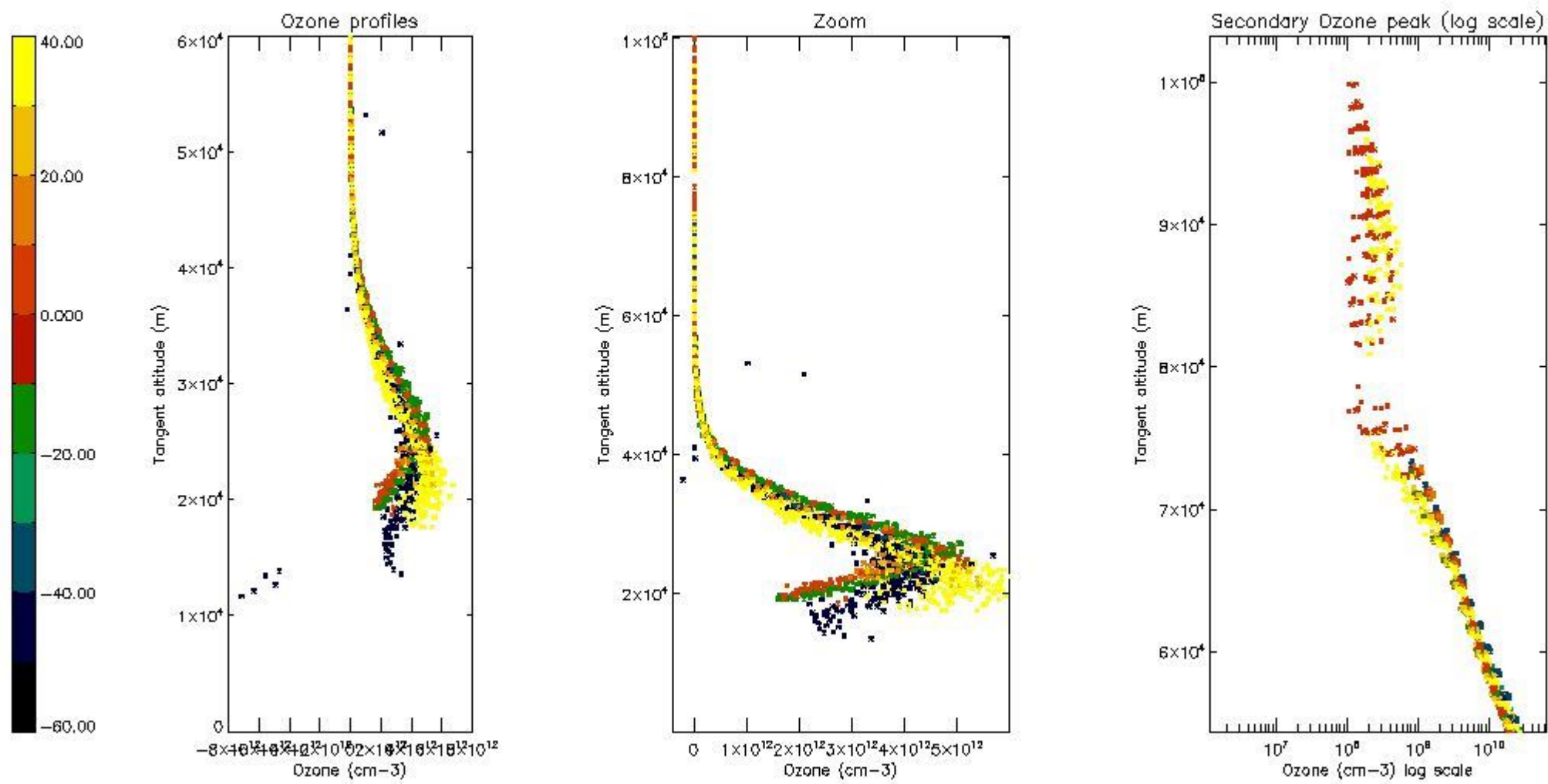
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



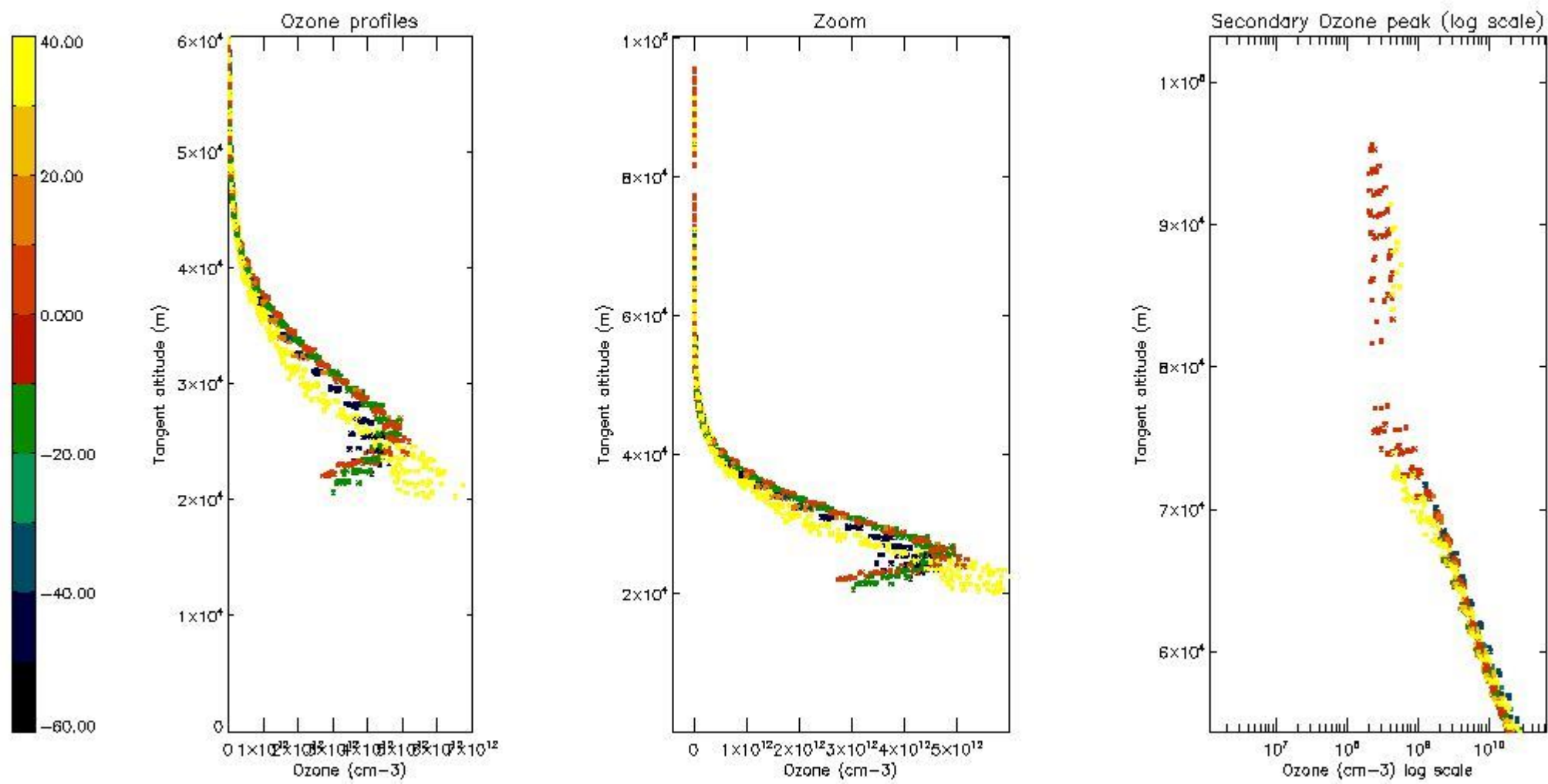
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



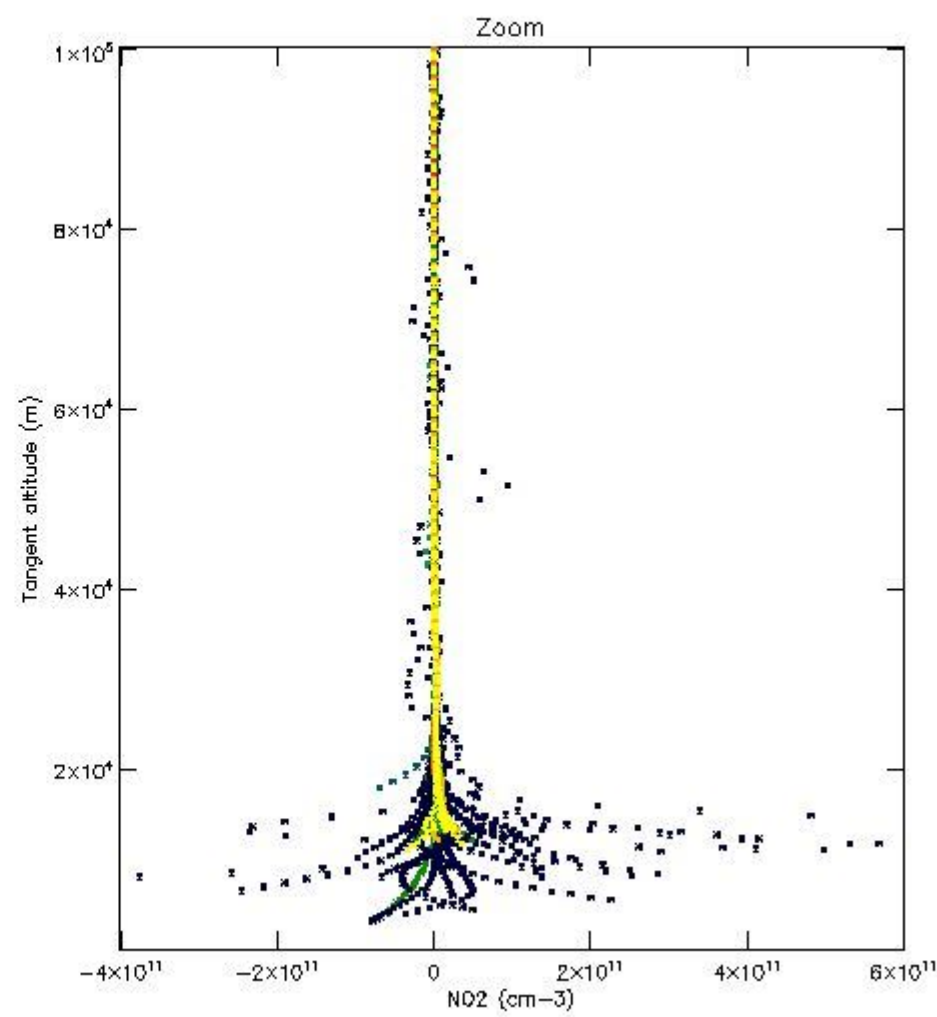
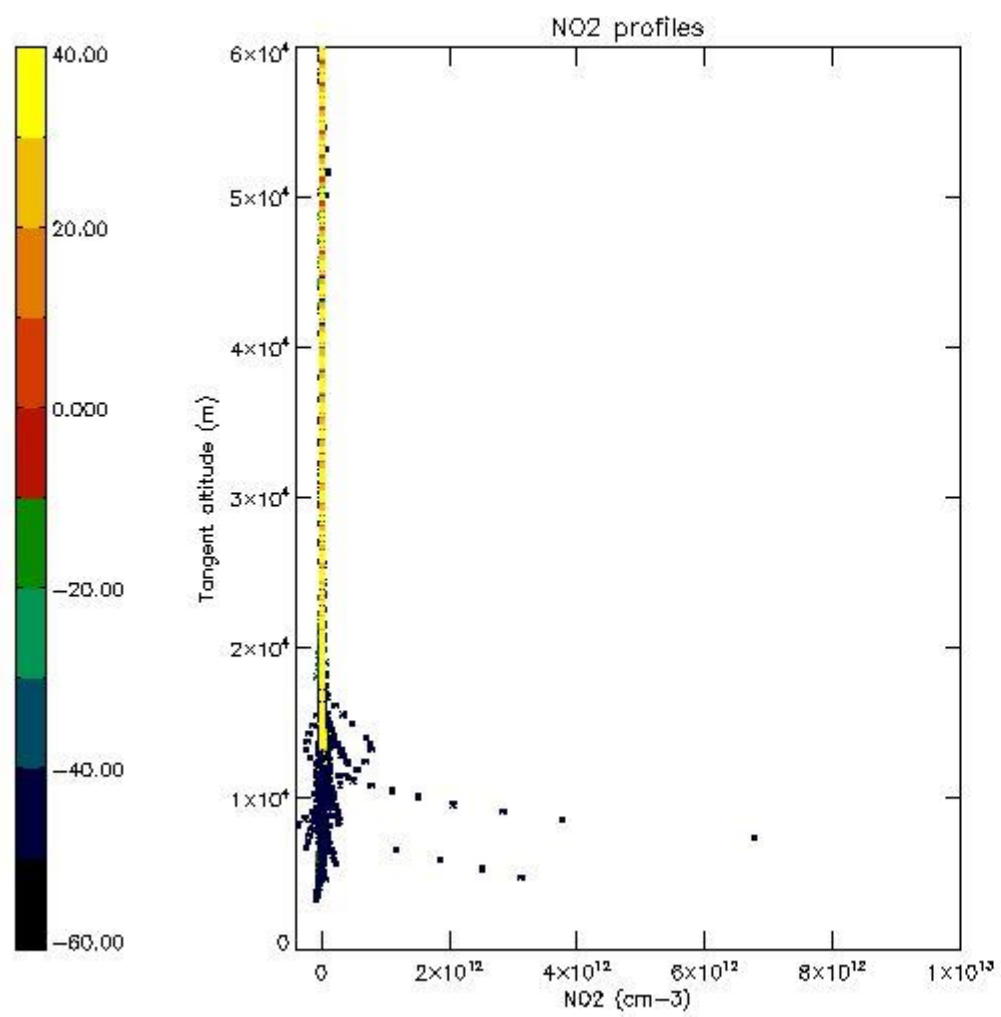
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



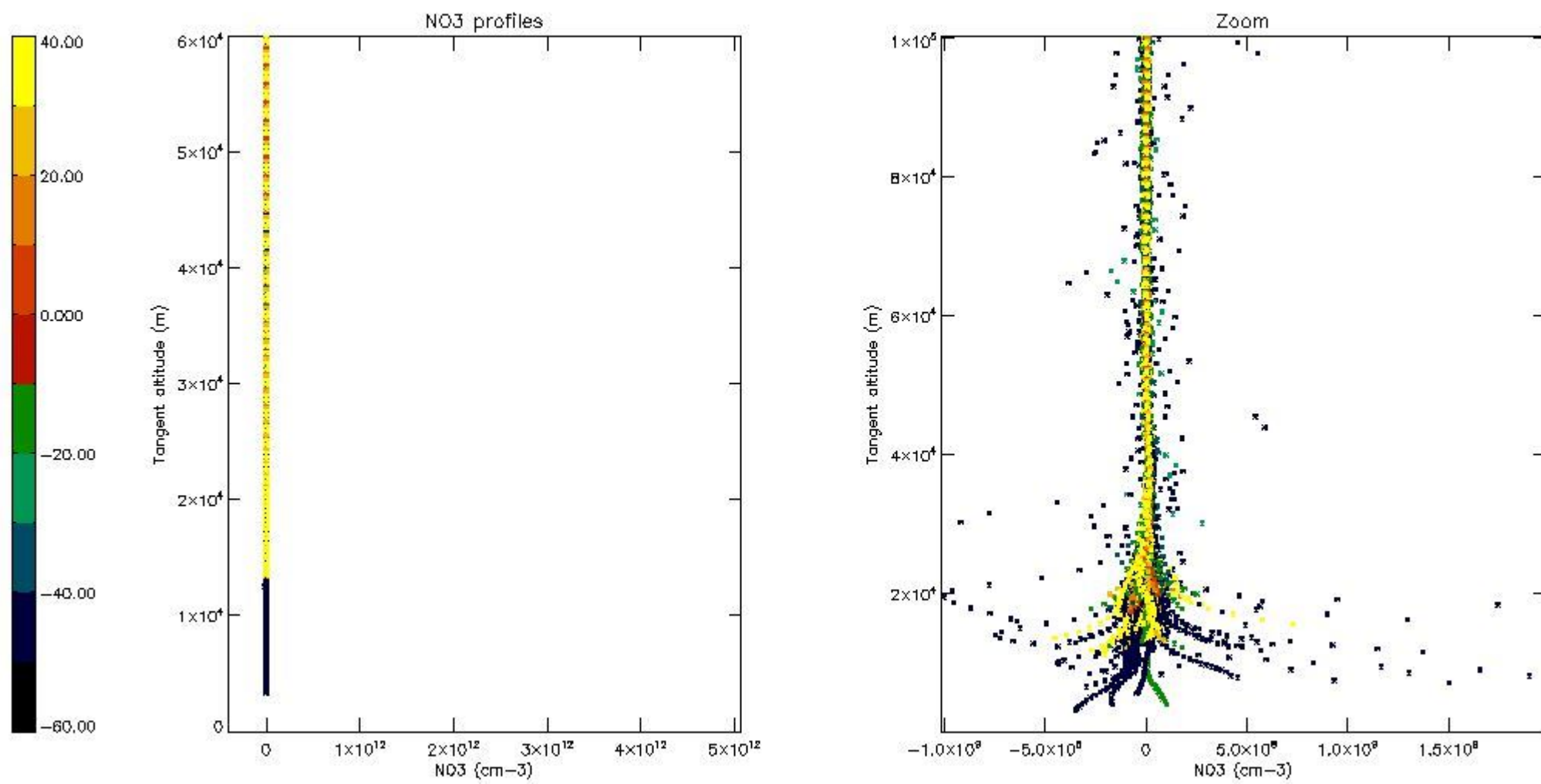
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



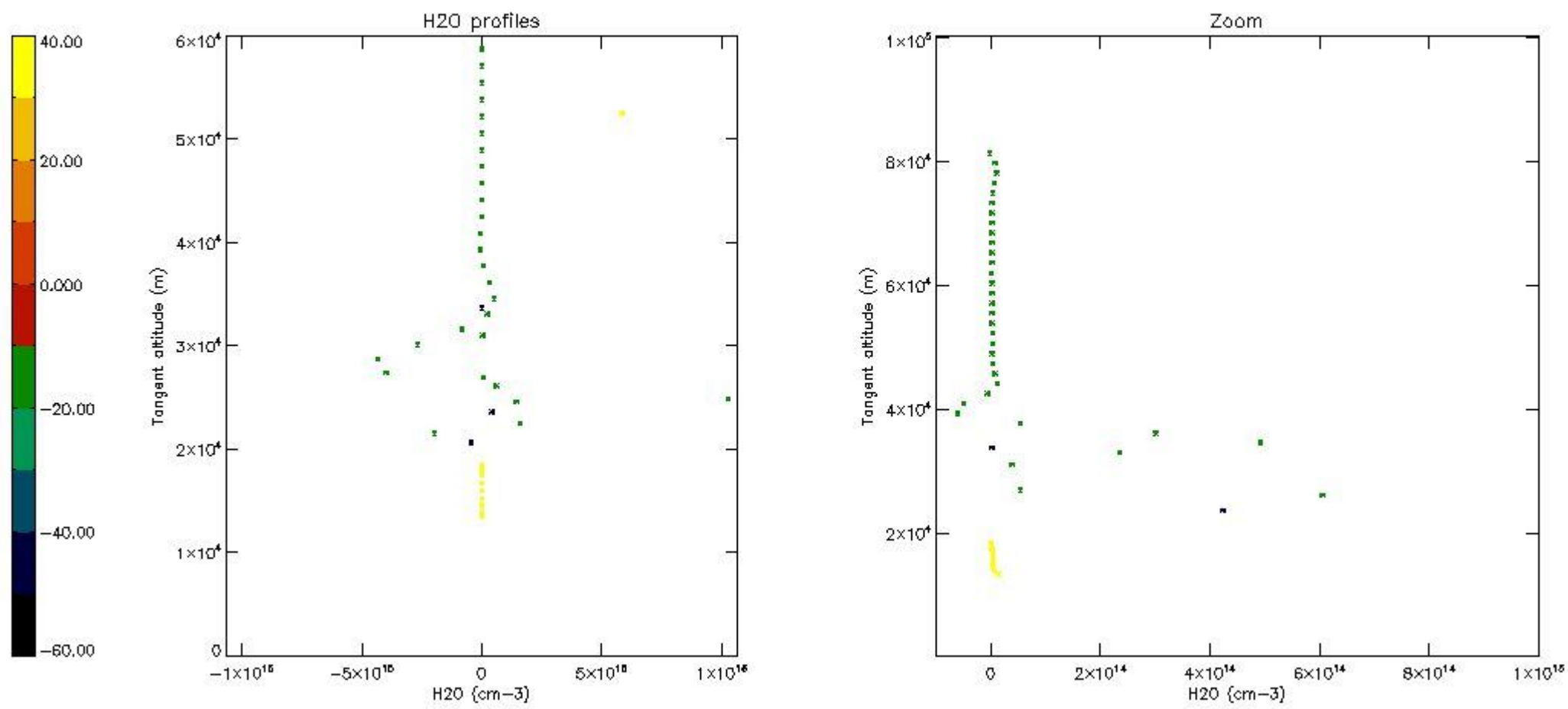
5.7 Plot NO3 profiles for all STD (dark without errors)

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	27-JAN-2008 00:00:37
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	27-JAN-2008 00:00:37
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	27-JAN-2008 00:00:37

GOMOS Level 2 Daily Report

SUMMARY

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[4. Level 1 Quality information per product \(stored on level 2 products\)](#)

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

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

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

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

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

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

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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](#)

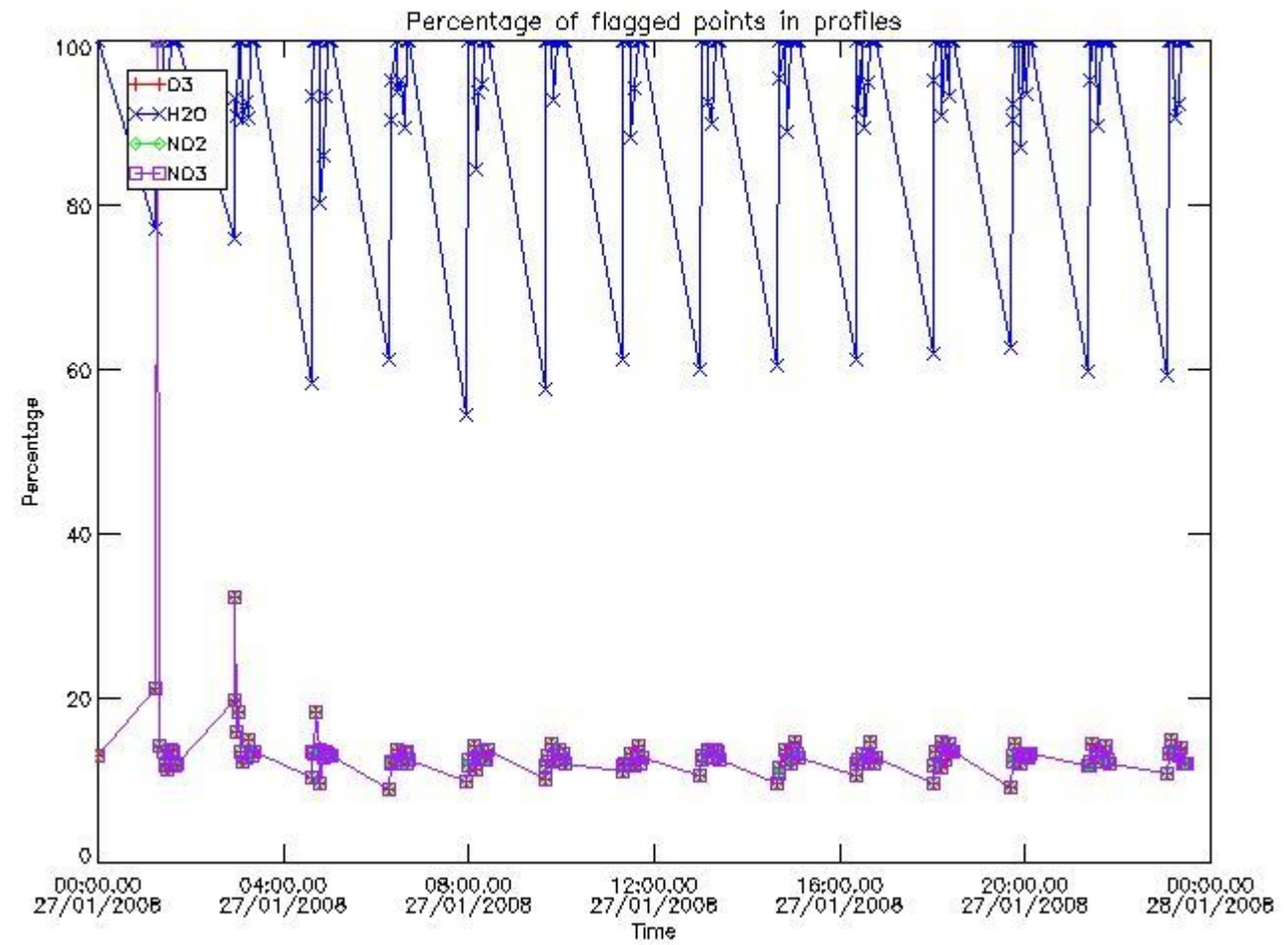
[6. Auxiliary Data Files used for the production reported in section 2](#)

338	GOM_NL__2PRFIN20080127_213325_000000442065_00287_30902_1311.N1	27-JAN-2008 21:33:25	Dark	43.500	4	Alp1Cen	-0.010000	5800.0	87	30902	No
339	GOM_NL__2PRFIN20080127_213800_000000422065_00287_30902_1312.N1	27-JAN-2008 21:38:00	Dark	41.500	12	Alp1Cru	0.77500	30000.	83	30902	No
340	GOM_NL__2PRFIN20080127_214152_000000382065_00287_30902_1313.N1	27-JAN-2008 21:41:52	Dark	37.500	29	Bet Car	1.6720	10200.	75	30902	No
341	GOM_NL__2PRFIN20080127_214407_000000402065_00287_30902_1314.N1	27-JAN-2008 21:44:07	Dark	39.500	71	lot Car	2.2460	7700.0	79	30902	No
342	GOM_NL__2PRFIN20080127_214554_000000412065_00287_30902_1315.N1	27-JAN-2008 21:45:54	Dark	40.500	46	Del Vel	1.9540	10600.	81	30902	No
343	GOM_NL__2PRFIN20080127_214828_000000422065_00287_30902_1316.N1	27-JAN-2008 21:48:28	Dark	42.000	34	Gam2Vel	1.7930	23000.	84	30902	No
344	GOM_NL__2PRFIN20080127_215034_000000382065_00287_30902_1317.N1	27-JAN-2008 21:50:34	Straylight	38.000	70	Zet Pup	2.2460	39000.	76	30902	No
345	GOM_NL__2PRFIN20080127_215201_000000432065_00287_30902_1318.N1	27-JAN-2008 21:52:01	Straylight	42.500	117	Pi Pup	2.7060	3800.0	85	30902	No
346	GOM_NL__2PRFIN20080127_215428_000000392065_00287_30902_1319.N1	27-JAN-2008 21:54:28	Straylight	38.500	23	21Eps CMa	1.5020	26000.	77	30902	No
347	GOM_NL__2PRFIN20080127_215551_000000322065_00287_30902_1320.N1	27-JAN-2008 21:55:51	Straylight	32.000	179	24Omi2CMa	3.0320	24000.	64	30902	No
348	GOM_NL__2PRFIN20080127_215800_000000452065_00287_30902_1321.N1	27-JAN-2008 21:58:00	Straylight	45.000	1	9Alp CMa	-1.4400	11000.	90	30902	No
349	GOM_NL__2PRFIN20080127_220453_000000382065_00287_30902_1322.N1	27-JAN-2008 22:04:53	Tw_i_and_stray	38.000	153	3Bet CMi	2.8940	13100.	76	30902	No
350	GOM_NL__2PRFIN20080127_220717_000000382065_00287_30902_1323.N1	27-JAN-2008 22:07:17	Bright	38.000	44	24Gam Gem	1.9280	11000.	76	30902	No
351	GOM_NL__2PRFIN20080127_220905_000000382065_00287_30902_1324.N1	27-JAN-2008 22:09:05	Bright	37.500	151	13Mu Gem	2.8900	3000.0	75	30902	No
352	GOM_NL__2PRFIN20080127_221320_000000352065_00287_30902_1325.N1	27-JAN-2008 22:13:20	Bright	34.500	107	37The Aur	2.6490	11000.	69	30902	No
353	GOM_NL__2PRFIN20080127_221527_000000372065_00287_30902_1326.N1	27-JAN-2008 22:15:27	Bright	37.000	42	34Bet Aur	1.9000	10200.	74	30902	No
354	GOM_NL__2PRFIN20080127_222753_000000372065_00287_30902_1327.N1	27-JAN-2008 22:27:53	Bright	37.000	49	1Alp UMi	1.9900	6300.0	74	30902	No
355	GOM_NL__2PRFIN20080127_223852_000000372065_00287_30902_1328.N1	27-JAN-2008 22:38:52	Bright	37.000	130	23Bet Dra	2.7990	5800.0	74	30902	No
356	GOM_NL__2PRFIN20080127_224221_000000372065_00287_30902_1329.N1	27-JAN-2008 22:42:21	Bright	37.000	5	3Alp Lyr	0.033000	11000.	74	30902	No
357	GOM_NL__2PRFIN20080127_225025_000000532065_00287_30902_1330.N1	27-JAN-2008 22:50:25	Bright	53.000	59	55Alp Oph	2.0800	8900.0	106	30902	No
358	GOM_NL__2PRFIN20080127_225232_000000352065_00287_30902_1331.N1	27-JAN-2008 22:52:32	Bright	34.500	126	60Bet Oph	2.7700	4250.0	69	30902	No
359	GOM_NL__2PRFIN20080127_225850_000000442065_00287_30902_1332.N1	27-JAN-2008 22:58:50	Tw_i_and_stray	43.500	86	35Eta Oph	2.4300	10200.	87	30902	No
360	GOM_NL__2PRFIN20080127_230256_000000522065_00287_30902_1333.N1	27-JAN-2008 23:02:56	Dark	52.000	16	21Alp Sco	1.0200	3000.0	104	30902	No
361	GOM_NL__2PRFIN20080127_230534_000000392065_00287_30902_1334.N1	27-JAN-2008 23:05:34	Dark	38.500	40	The Sco	1.8590	7100.0	77	30902	No
362	GOM_NL__2PRFIN20080127_230728_000000382065_00287_30902_1335.N1	27-JAN-2008 23:07:28	Dark	37.500	147	Alp Ara	2.8770	26000.	75	30902	No
363	GOM_NL__2PRFIN20080127_231230_000000382065_00288_30903_1324.N1	27-JAN-2008 23:12:30	Dark	37.500	134	Bet TrA	2.8100	6600.0	75	30903	No
364	GOM_NL__2PRFIN20080127_231402_000000432065_00288_30903_1325.N1	27-JAN-2008 23:14:02	Dark	42.500	4	Alp1Cen	-0.010000	5800.0	85	30903	No
365	GOM_NL__2PRFIN20080127_231837_000000402065_00288_30903_1326.N1	27-JAN-2008 23:18:37	Dark	39.500	12	Alp1Cru	0.77500	30000.	79	30903	No
366	GOM_NL__2PRFIN20080127_232228_000000372065_00288_30903_1327.N1	27-JAN-2008 23:22:28	Dark	36.500	29	Bet Car	1.6720	10200.	73	30903	No
367	GOM_NL__2PRFIN20080127_232443_000000432065_00288_30903_1328.N1	27-JAN-2008 23:24:43	Dark	42.500	71	lot Car	2.2460	7700.0	85	30903	No
368	GOM_NL__2PRFIN20080127_232630_000000422065_00288_30903_1329.N1	27-JAN-2008 23:26:30	Dark	42.000	46	Del Vel	1.9540	10600.	84	30903	No
369	GOM_NL__2PRFIN20080127_232904_000000422065_00288_30903_1330.N1	27-JAN-2008 23:29:04	Dark	42.000	34	Gam2Vel	1.7930	23000.	84	30903	No
370	GOM_NL__2PRFIN20080127_233110_000000392065_00288_30903_1331.N1	27-JAN-2008 23:31:10	Straylight	38.500	70	Zet Pup	2.2460	39000.	77	30903	No
371	GOM_NL__2PRFIN20080127_233237_000000432065_00288_30903_1332.N1	27-JAN-2008 23:32:37	Straylight	42.500	117	Pi Pup	2.7060	3800.0	85	30903	No
372	GOM_NL__2PRFIN20080127_233504_000000412065_00288_30903_1333.N1	27-JAN-2008 23:35:04	Straylight	41.000	23	21Eps CMa	1.5020	26000.	82	30903	No
373	GOM_NL__2PRFIN20080127_233627_000000392065_00288_30903_1334.N1	27-JAN-2008 23:36:27	Straylight	38.500	179	24Omi2CMa	3.0320	24000.	77	30903	No
374	GOM_NL__2PRFIN20080127_233836_000000482065_00288_30903_1335.N1	27-JAN-2008 23:38:36	Straylight	48.000	1	9Alp CMa	-1.4400	11000.	96	30903	No
375	GOM_NL__2PRFIN20080127_234528_000000402065_00288_30903_1336.N1	27-JAN-2008 23:45:28	Tw_i_and_stray	40.000	153	3Bet CMi	2.8940	13100.	80	30903	No
376	GOM_NL__2PRFIN20080127_234753_000000382065_00288_30903_1337.N1	27-JAN-2008 23:47:53	Bright	37.500	44	24Gam Gem	1.9280	11000.	75	30903	No
377	GOM_NL__2PRFIN20080127_234941_000000382065_00288_30903_1338.N1	27-JAN-2008 23:49:41	Bright	38.000	151	13Mu Gem	2.8900	3000.0	76	30903	No
378	GOM_NL__2PRFIN20080127_235356_000000352065_00288_30903_1339.N1	27-JAN-2008 23:53:56	Bright	35.000	107	37The Aur	2.6490	11000.	70	30903	No
379	GOM_NL__2PRFIN20080127_235603_000000362065_00288_30903_1340.N1	27-JAN-2008 23:56:03	Bright	35.500	42	34Bet Aur	1.9000	10200.	71	30903	No

3. Quality information per product

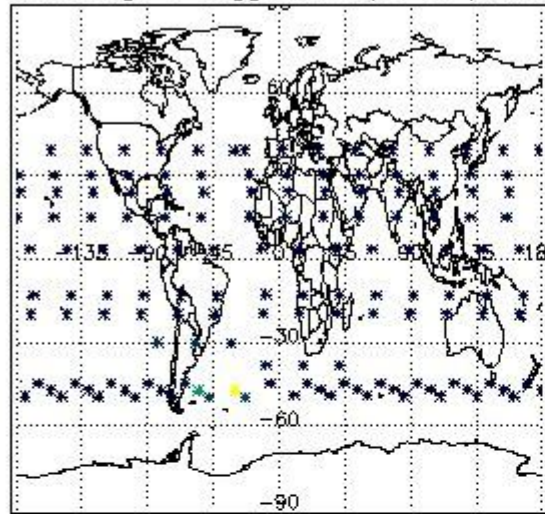
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

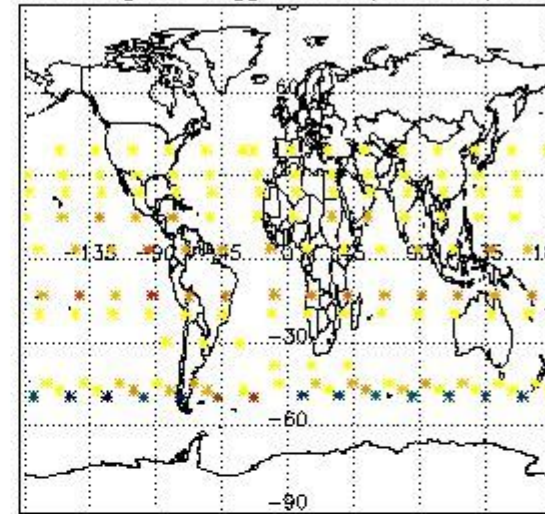


3.2 Plot quality information per product (world map)

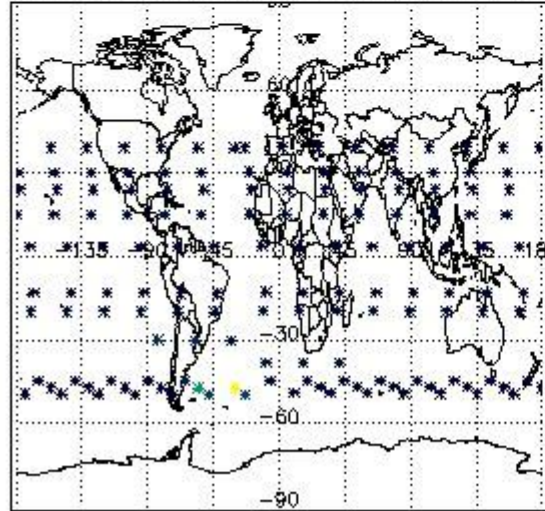
Percentage of flagged data per O3 profile



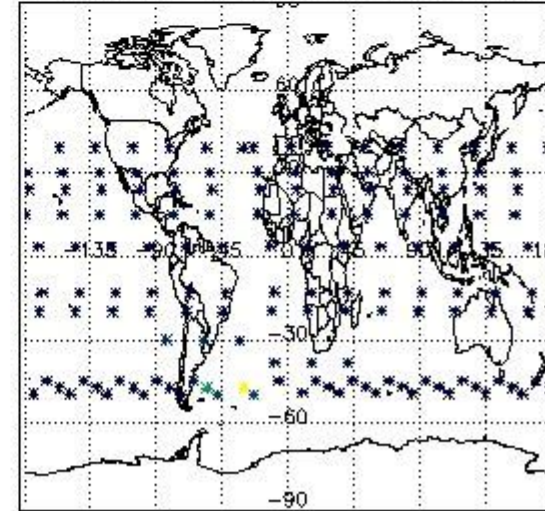
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

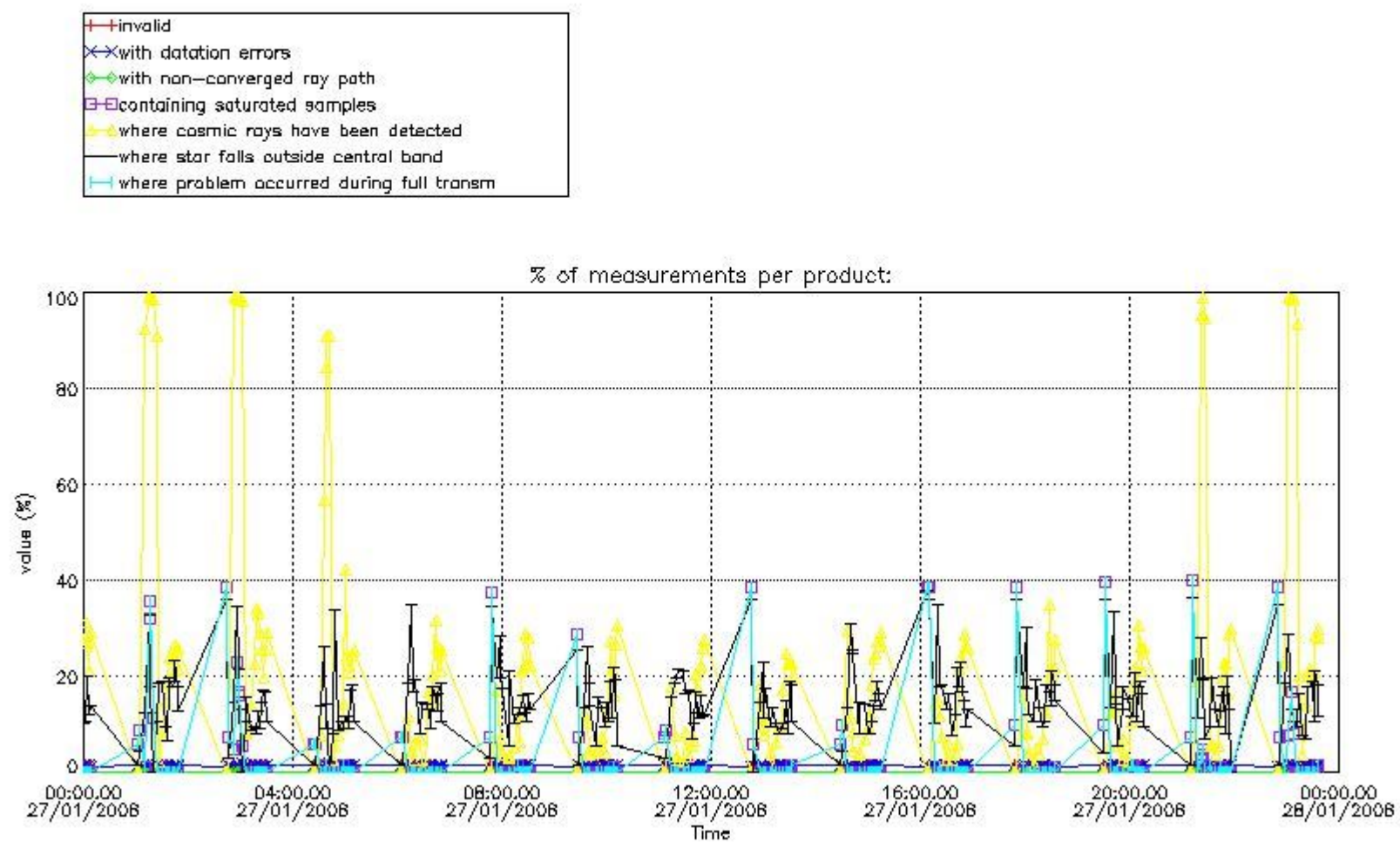


4. Level 1 quality information per product

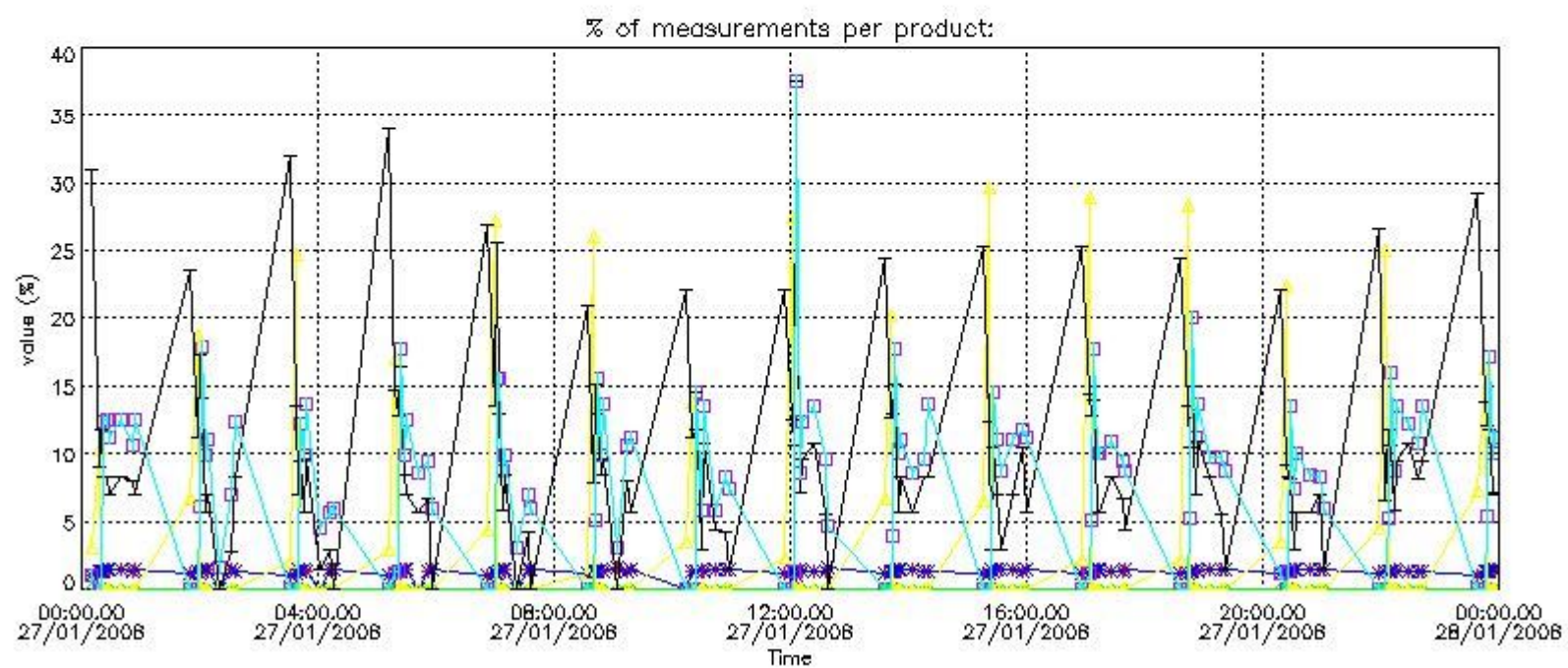
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

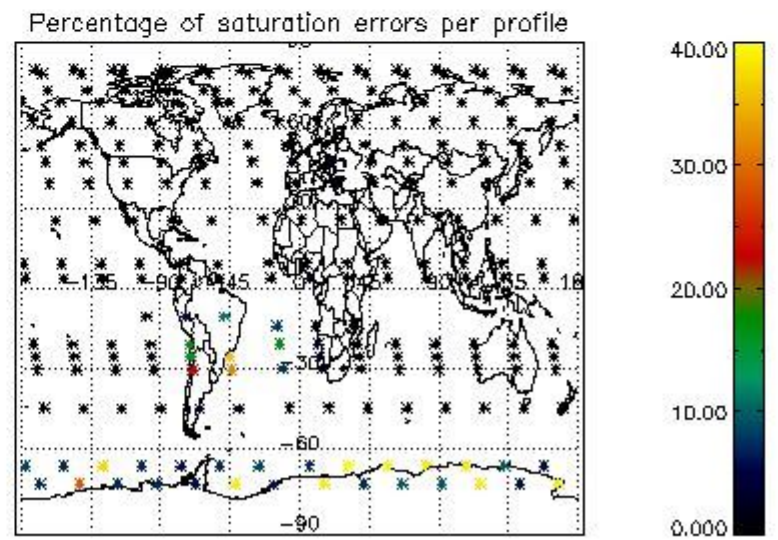
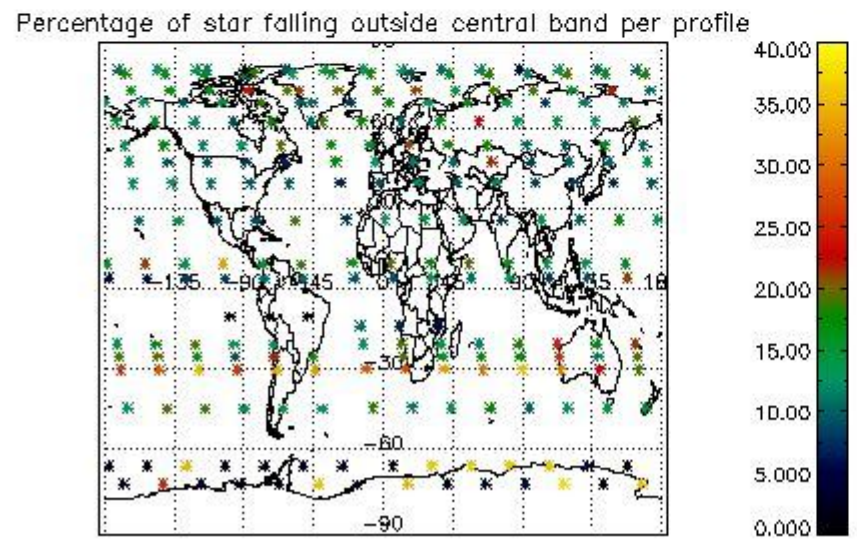
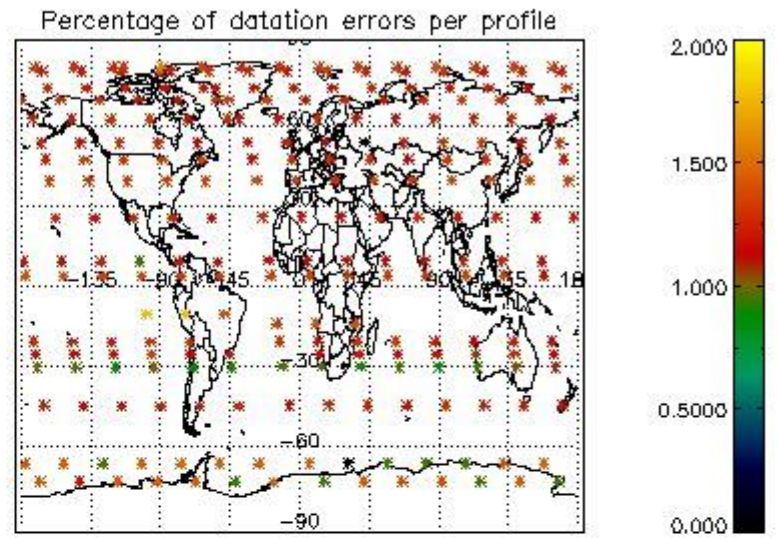
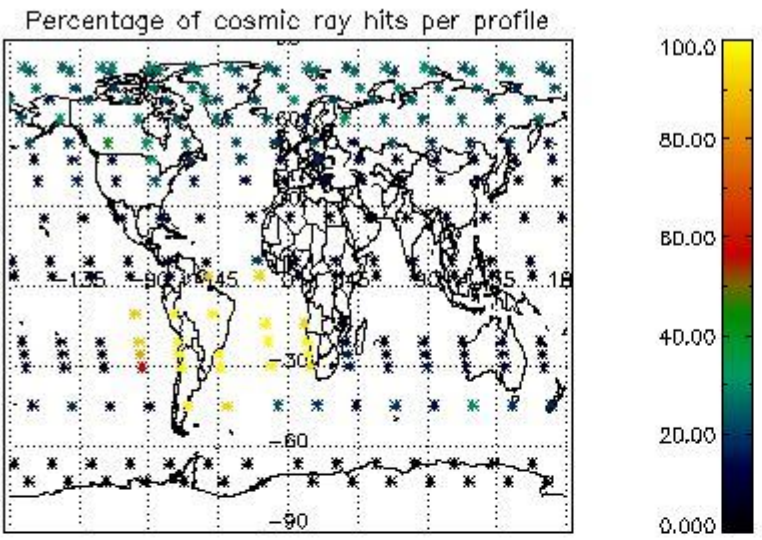


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

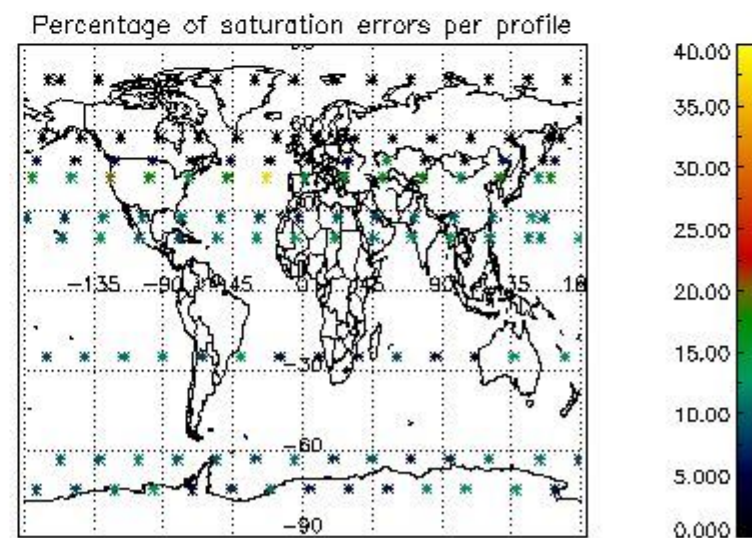
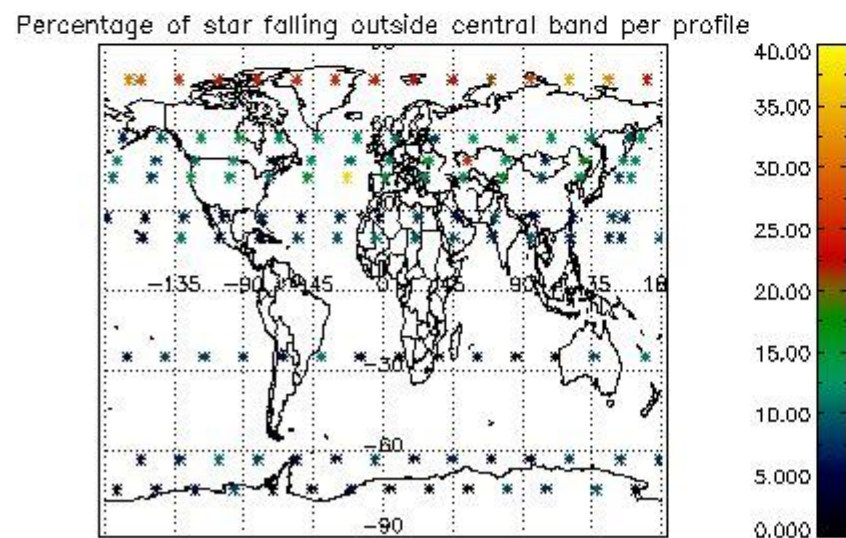
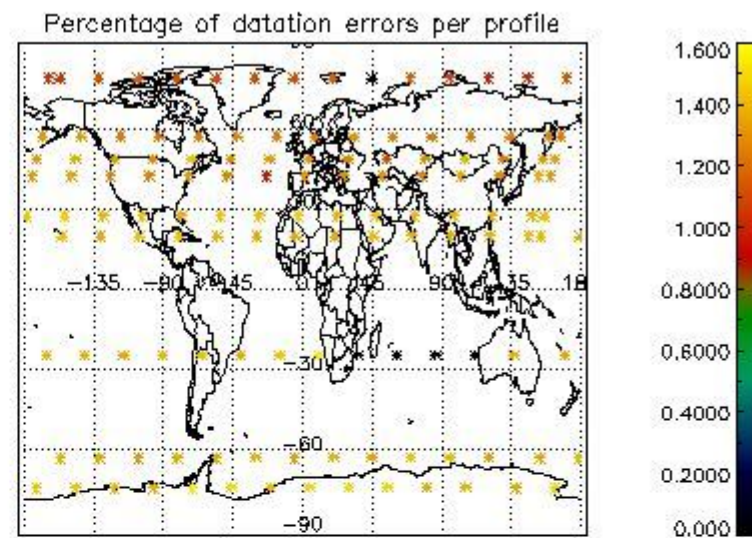
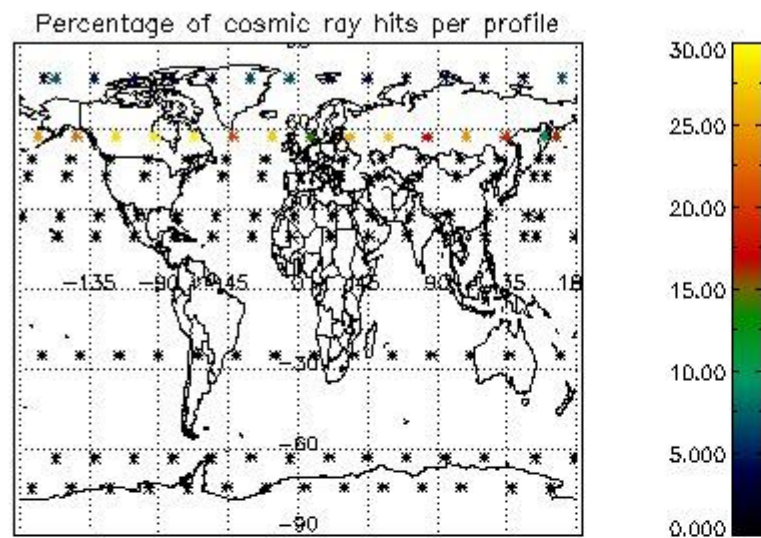


4.2 Plot quality information per product coming from level 1b processing (world map)

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

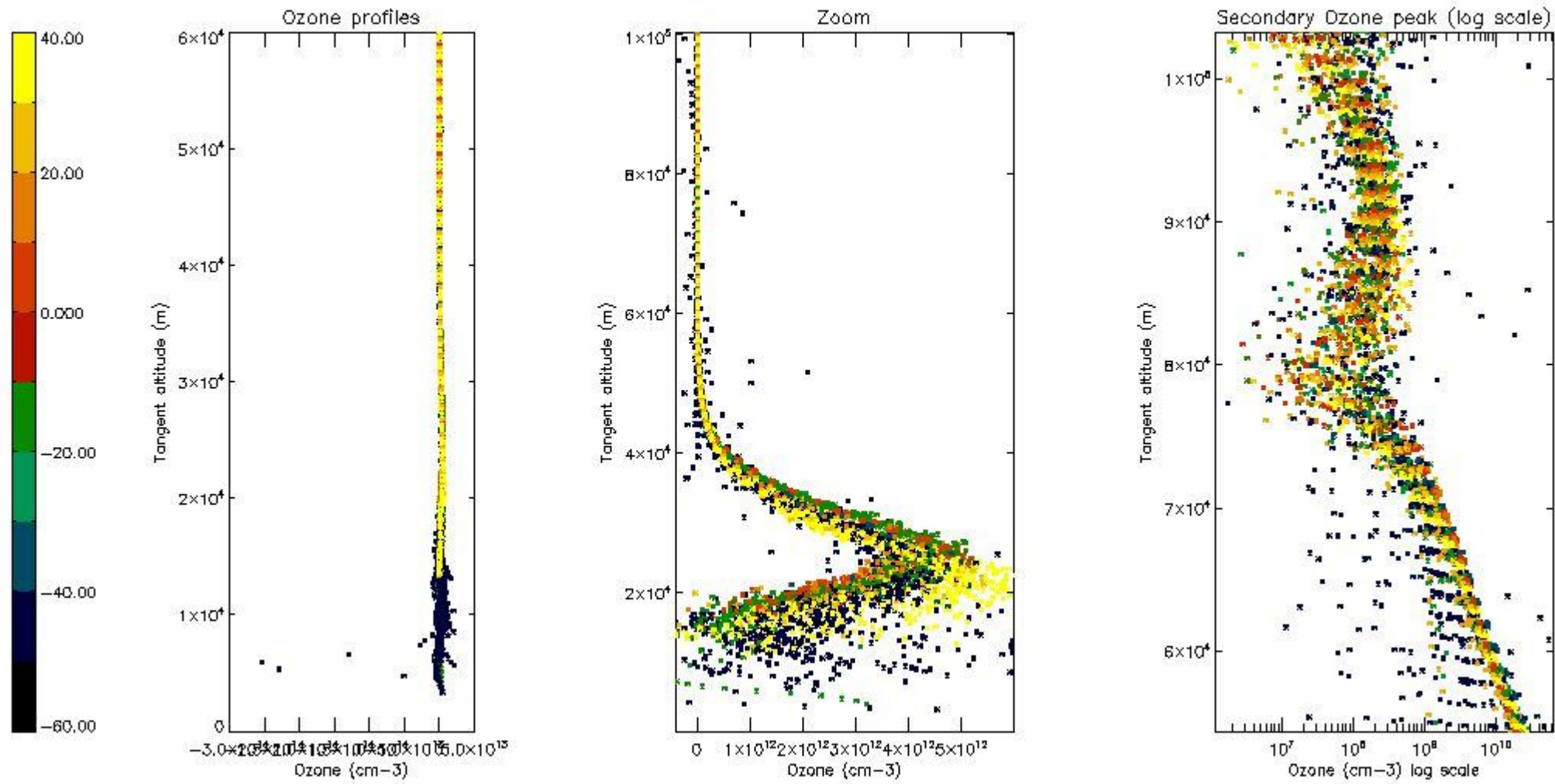
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	40
STD < 20	21

STD < 10	16
STD < 5	10

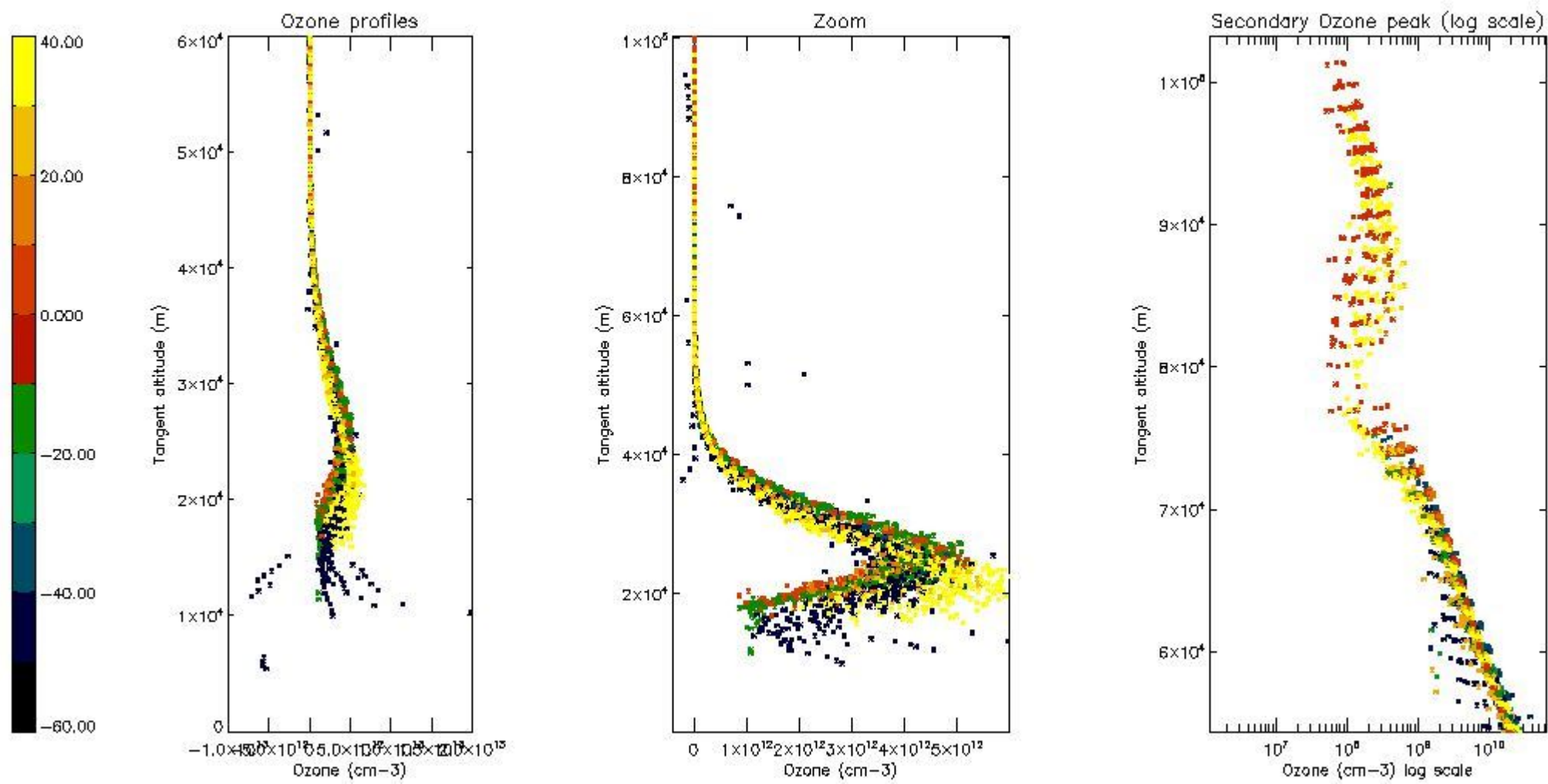
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



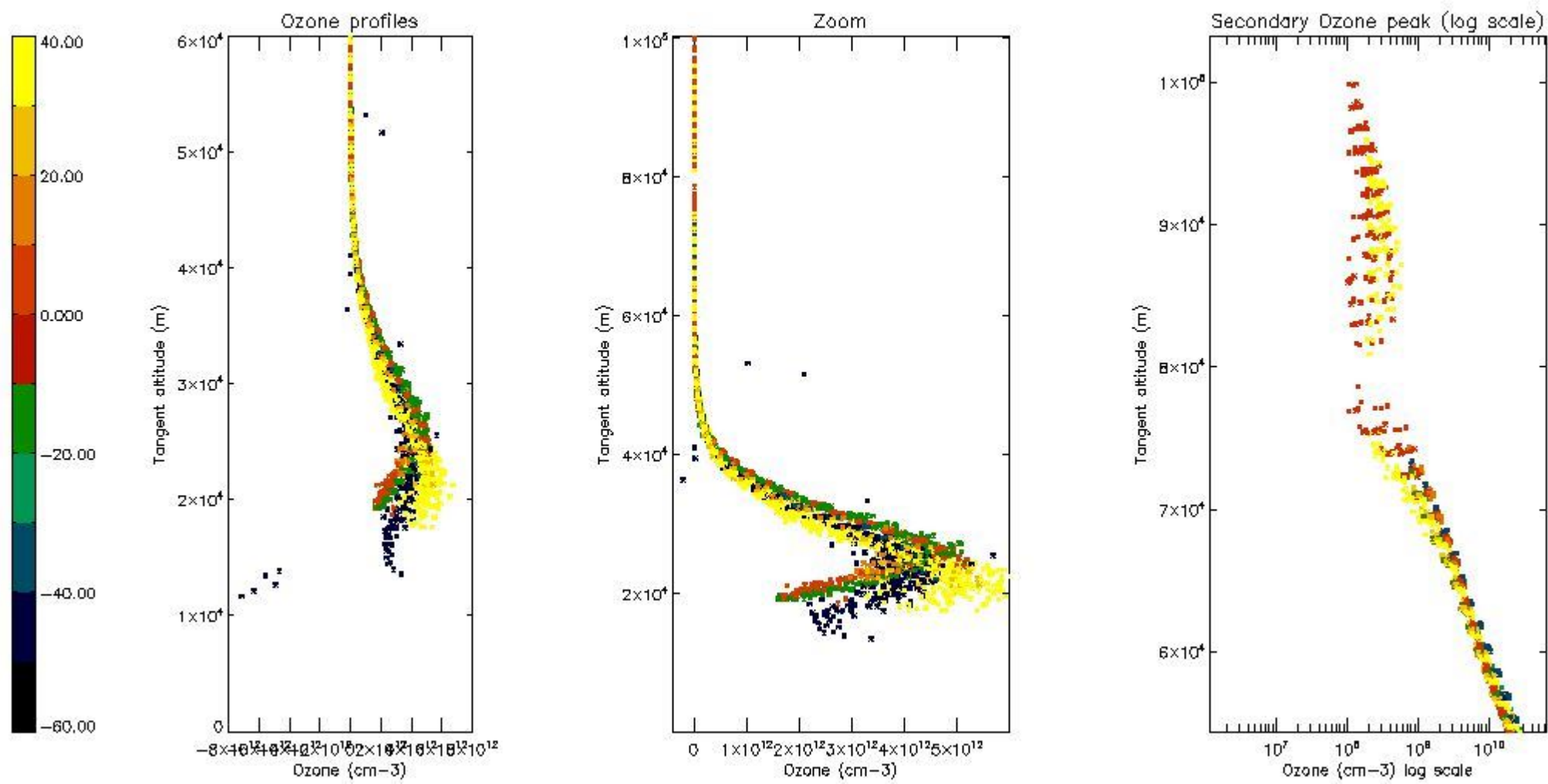
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



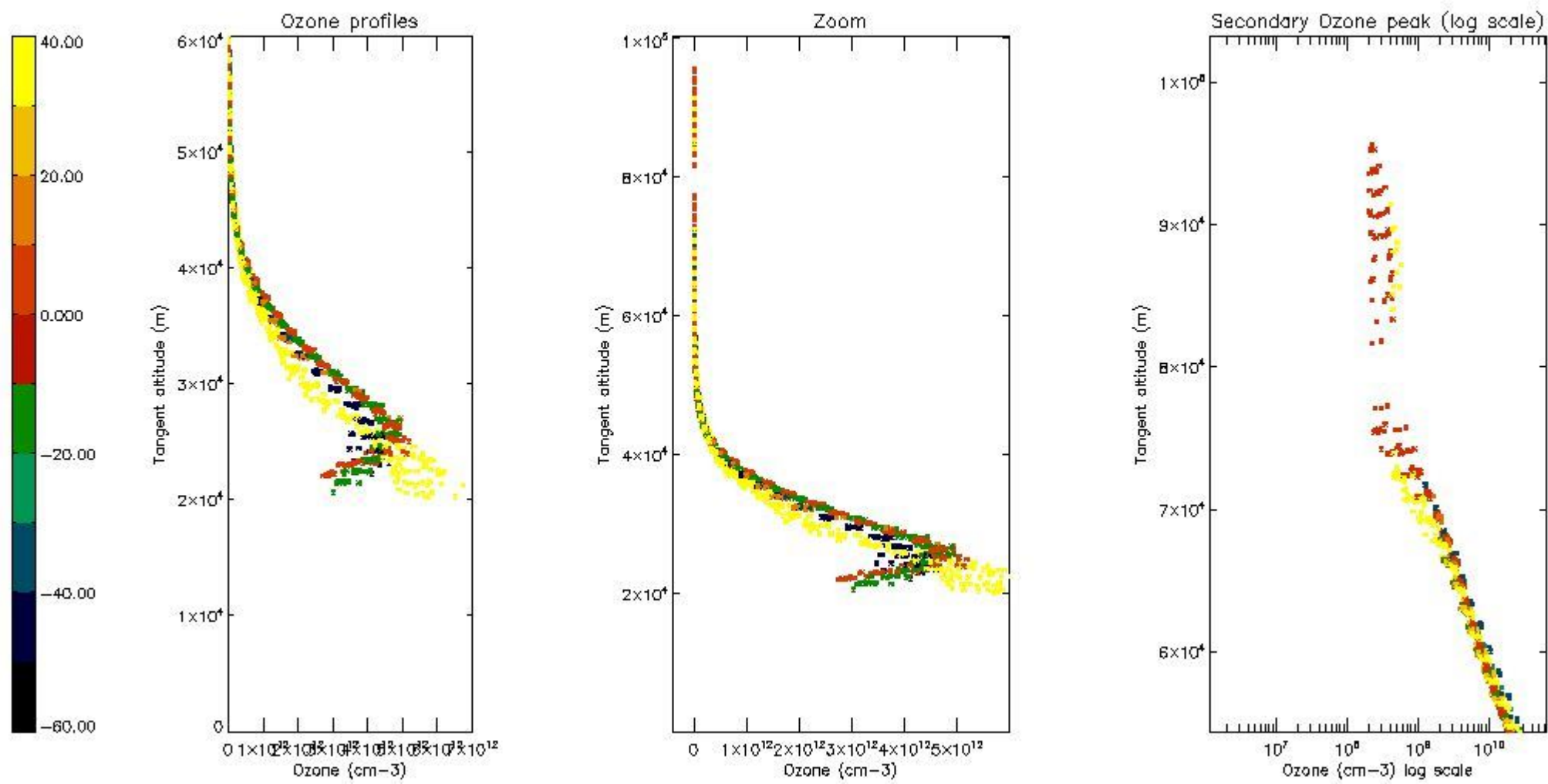
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



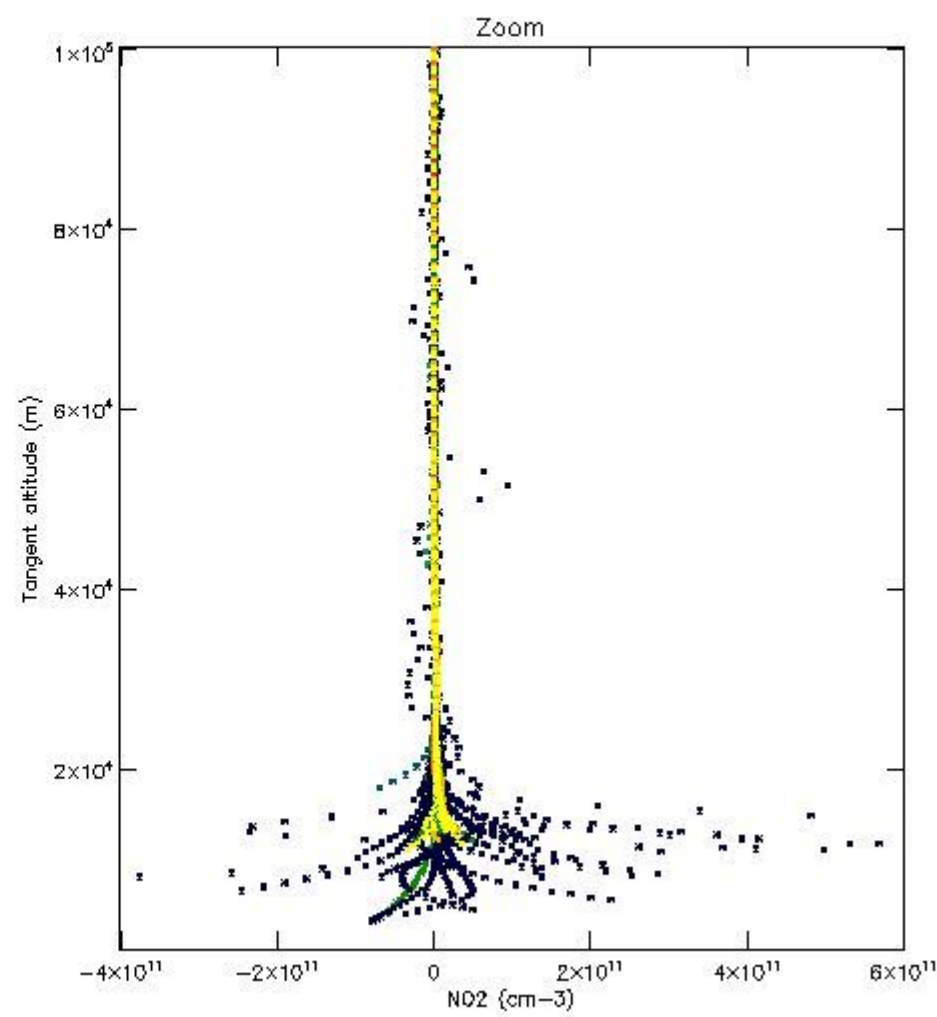
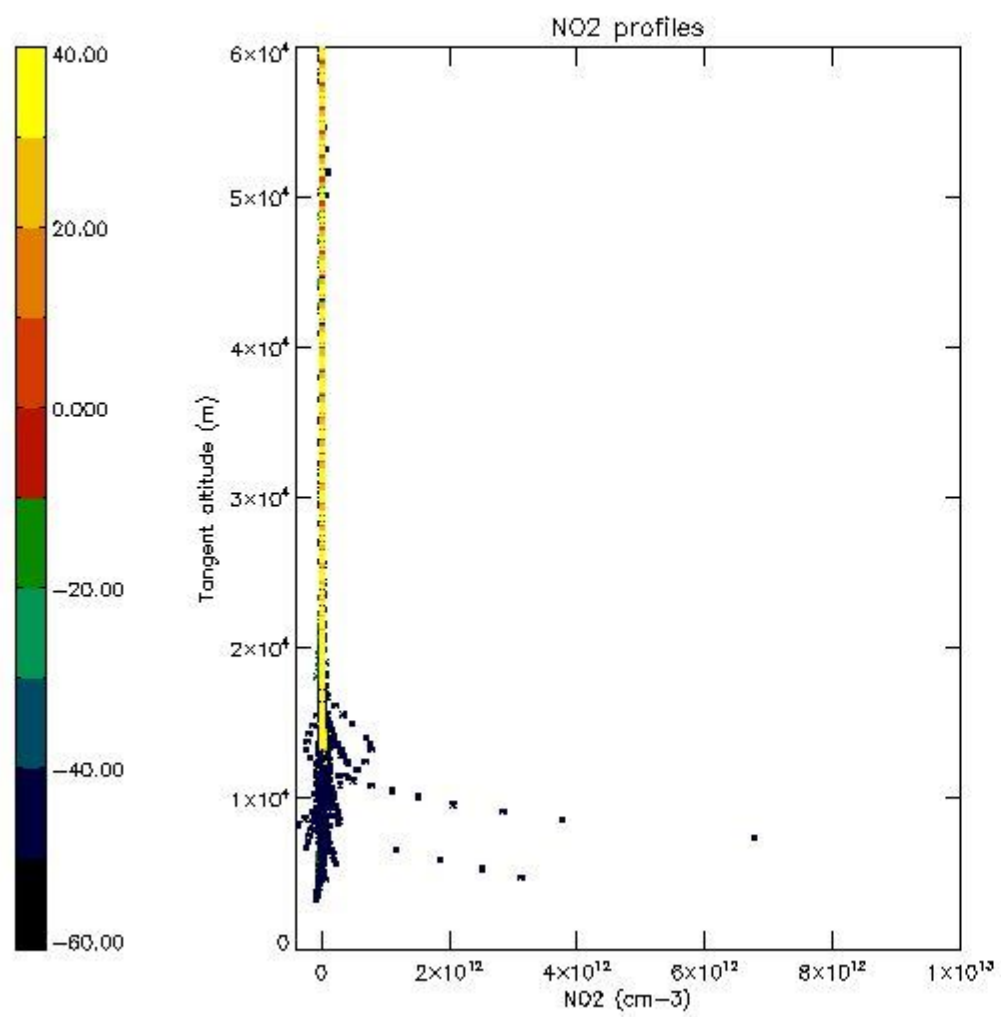
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



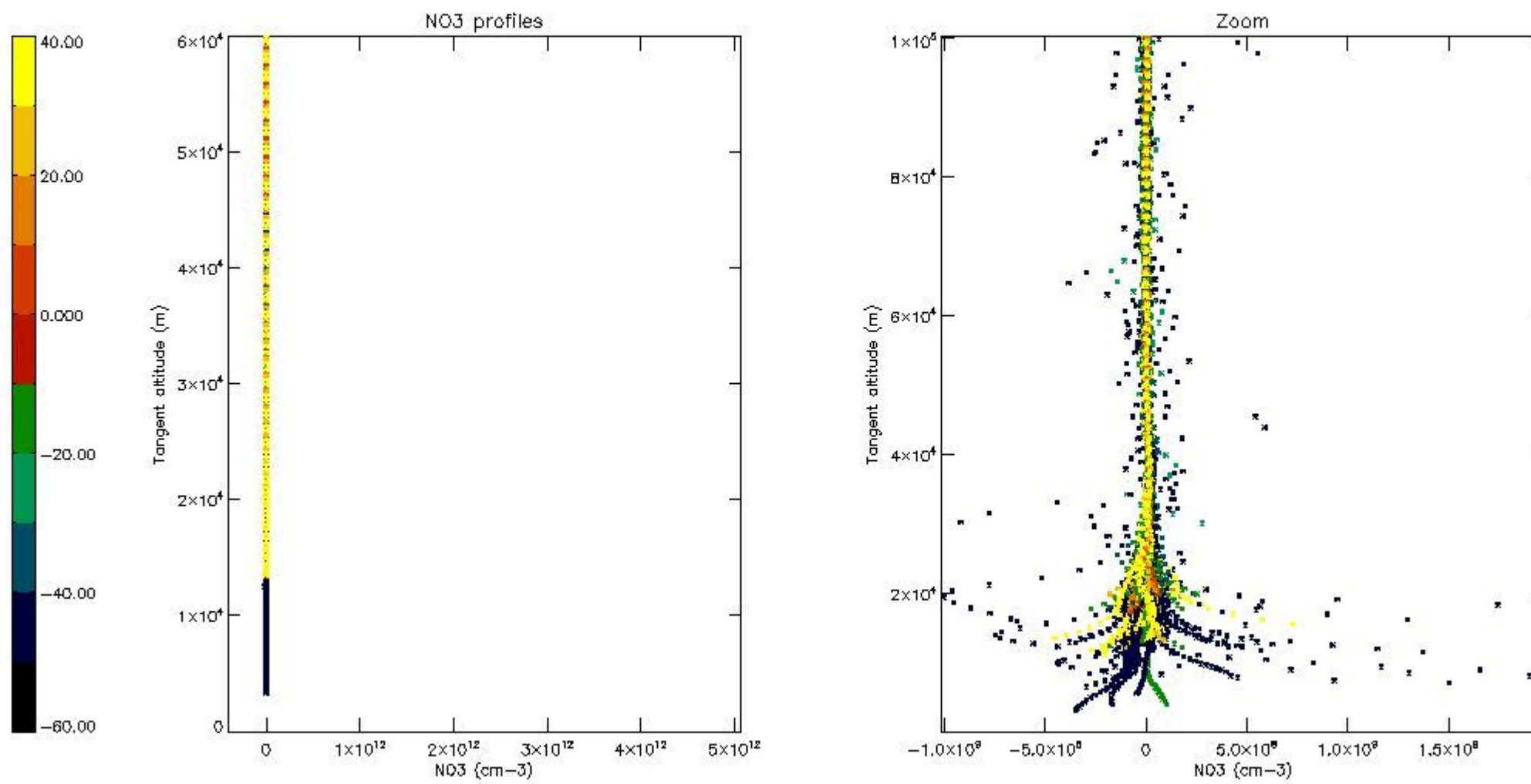
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



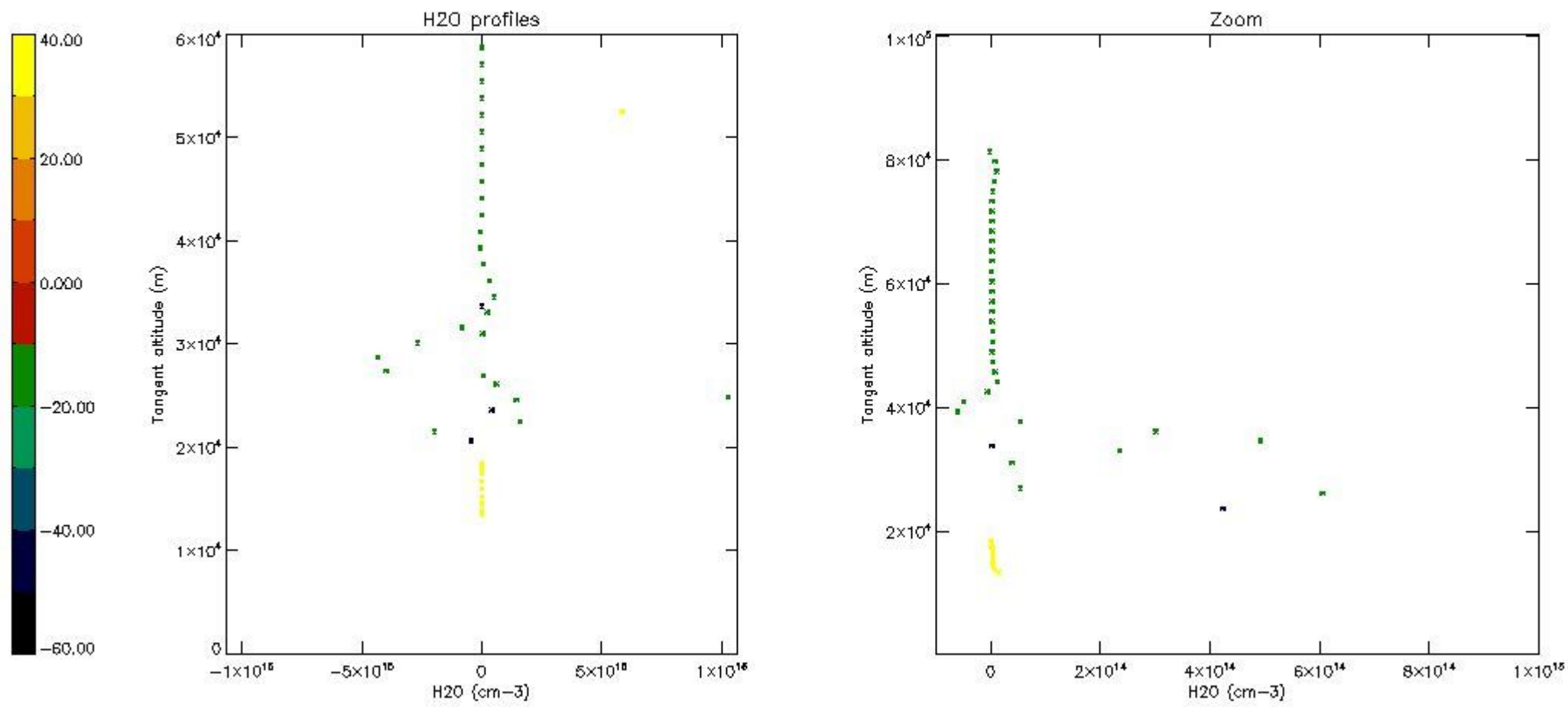
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

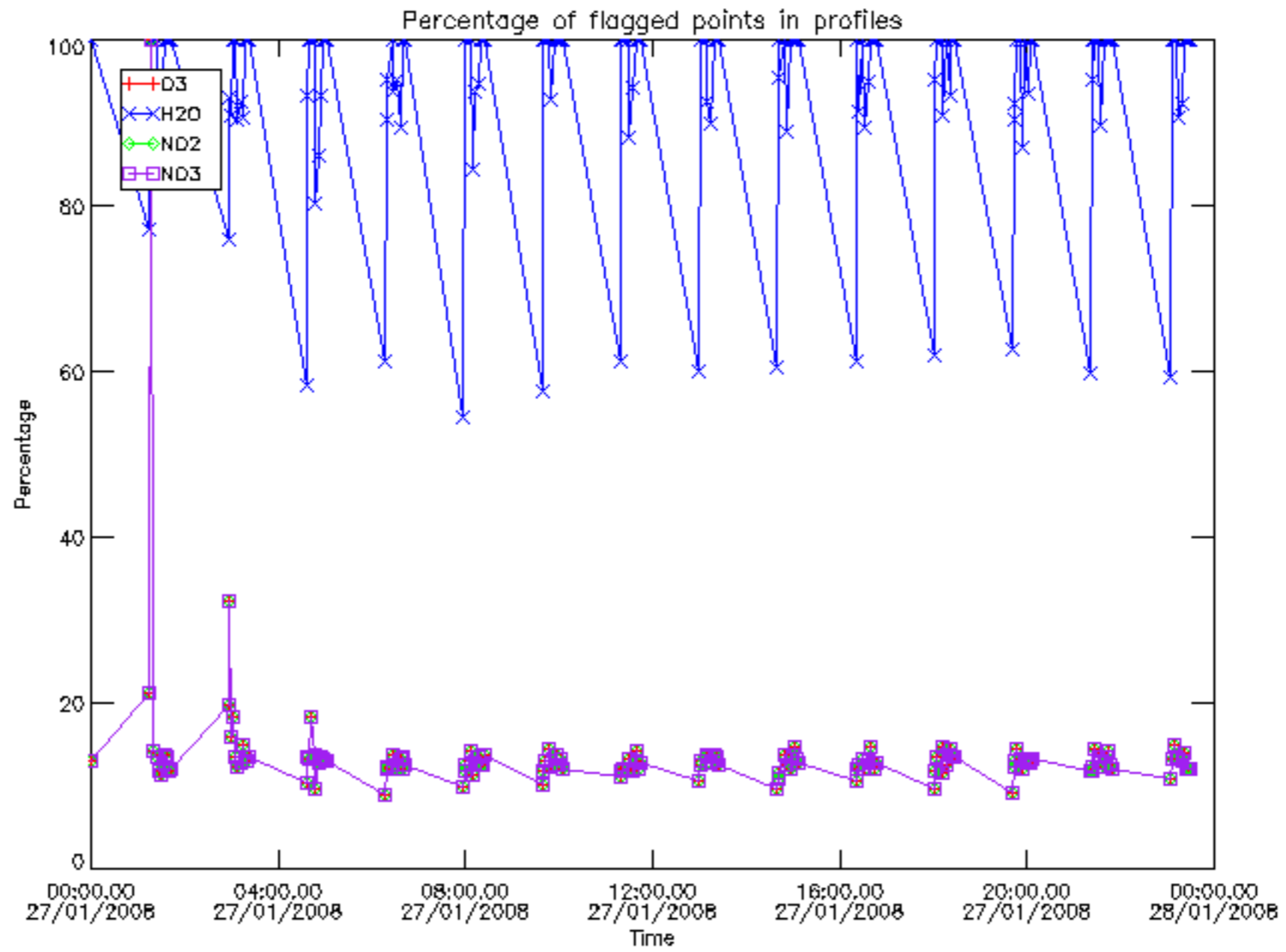
The colorbar represents the latitude.



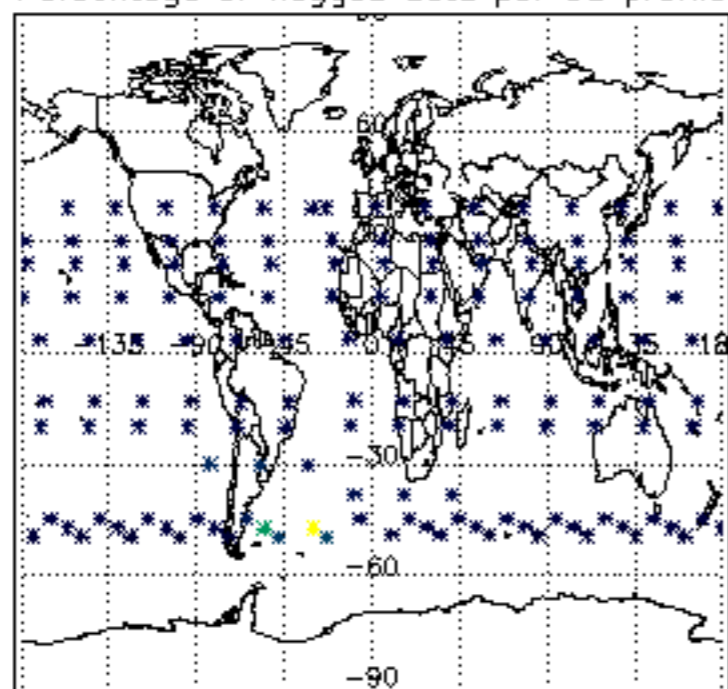
6. Auxiliary Data Files used for the production reported in section 2

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.

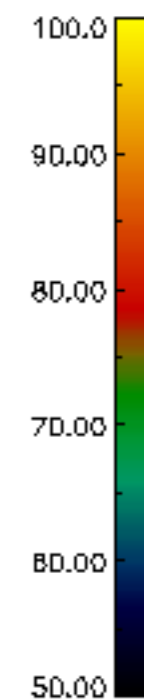
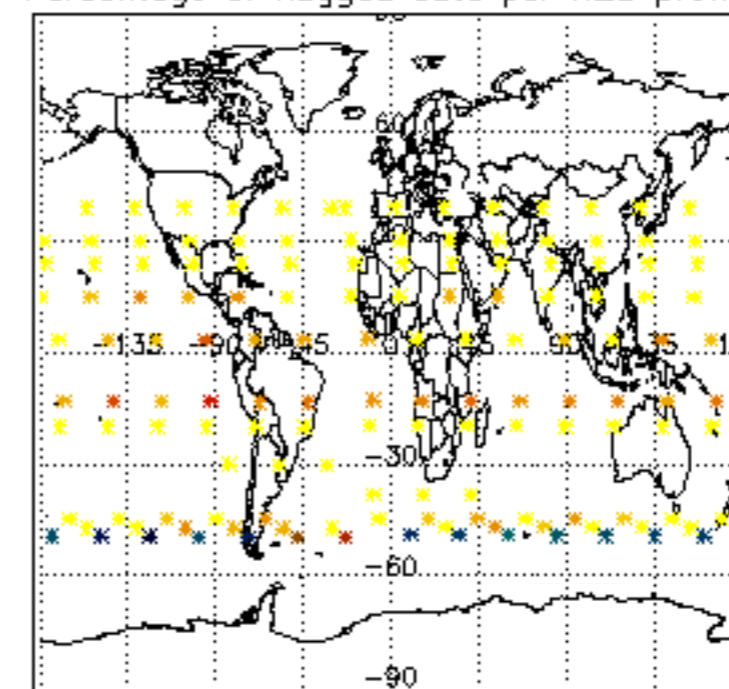
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	27-JAN-2008 00:00:37
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	27-JAN-2008 00:00:37
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	27-JAN-2008 00:00:37



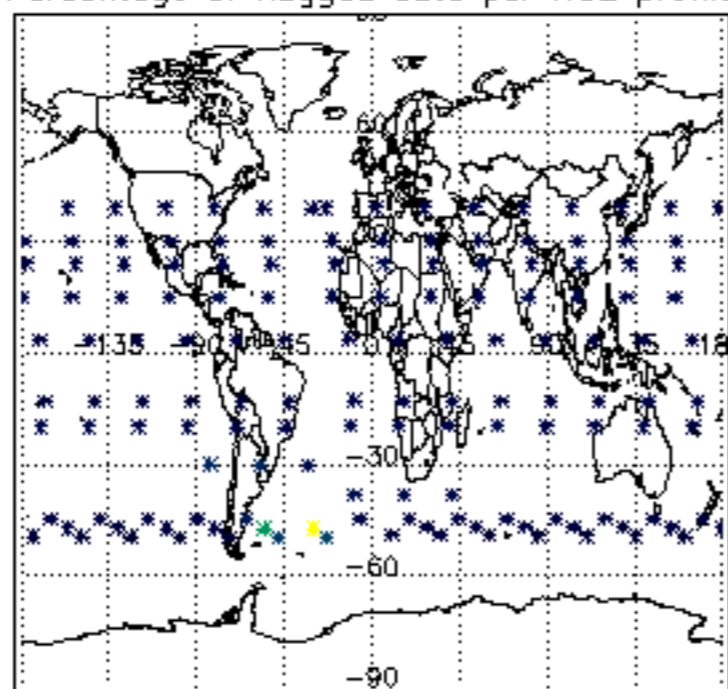
Percentage of flagged data per D3 profile



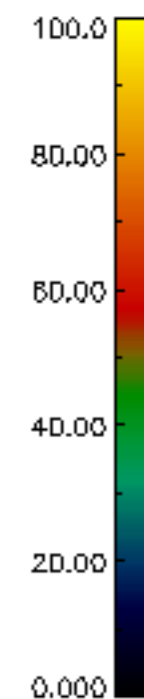
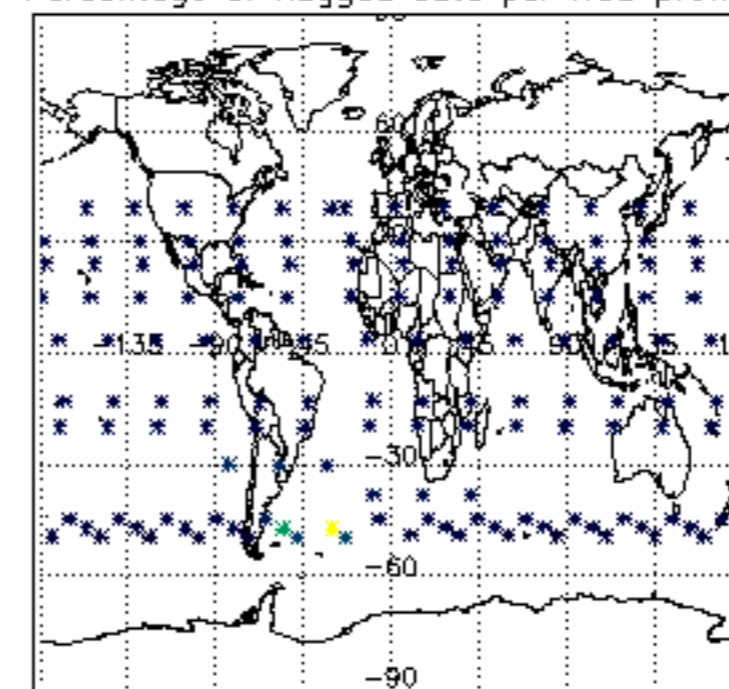
Percentage of flagged data per H2O profile

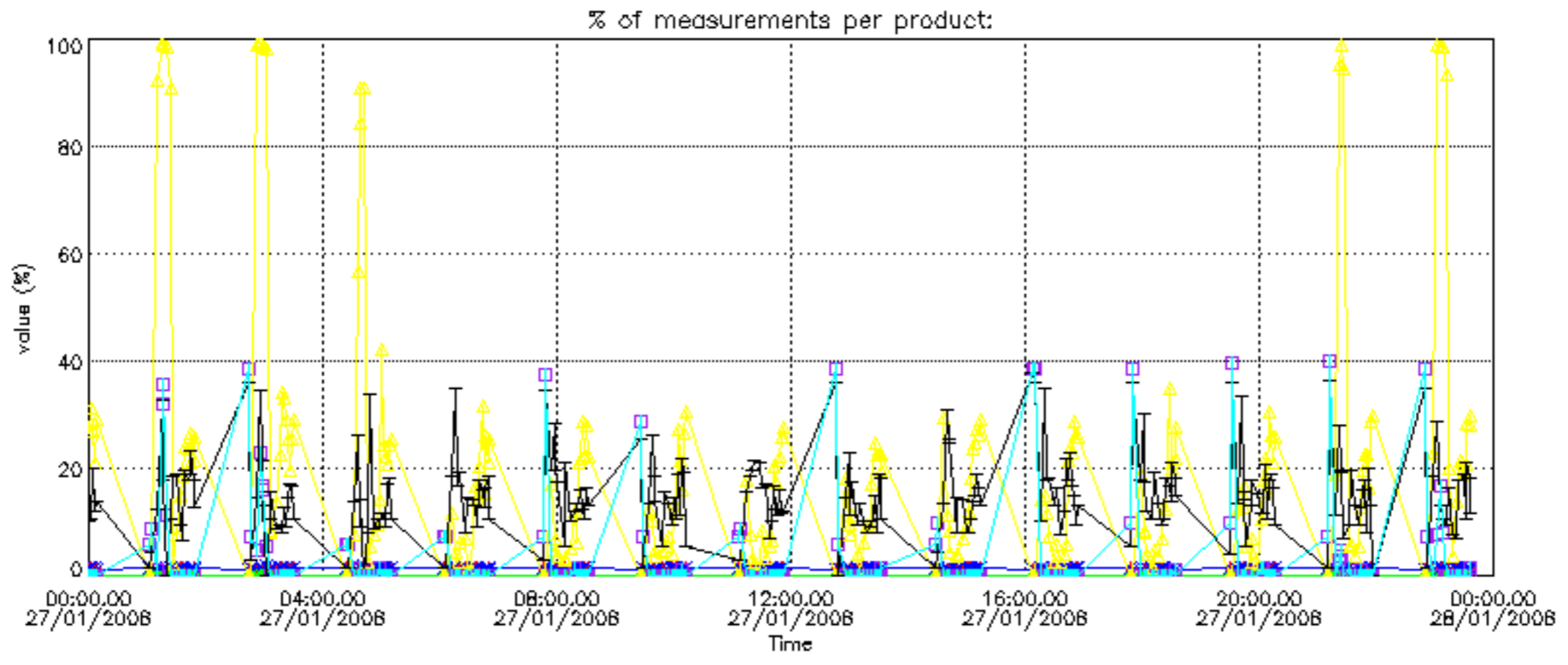


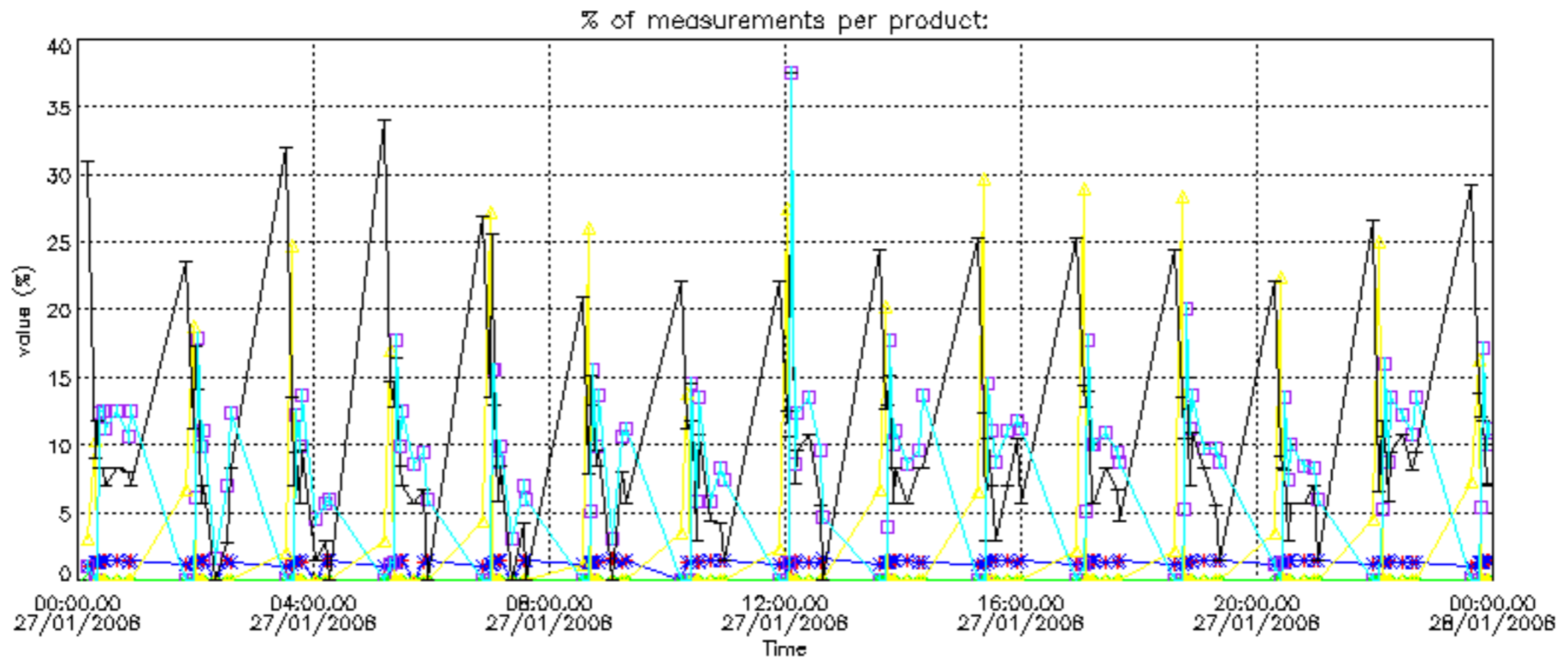
Percentage of flagged data per NO2 profile



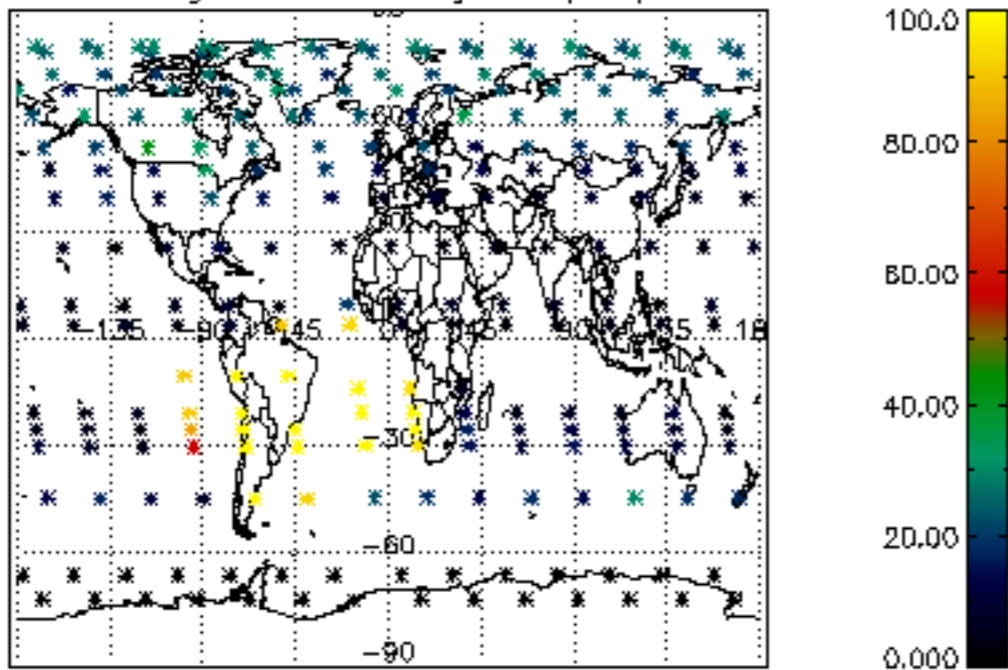
Percentage of flagged data per NO3 profile



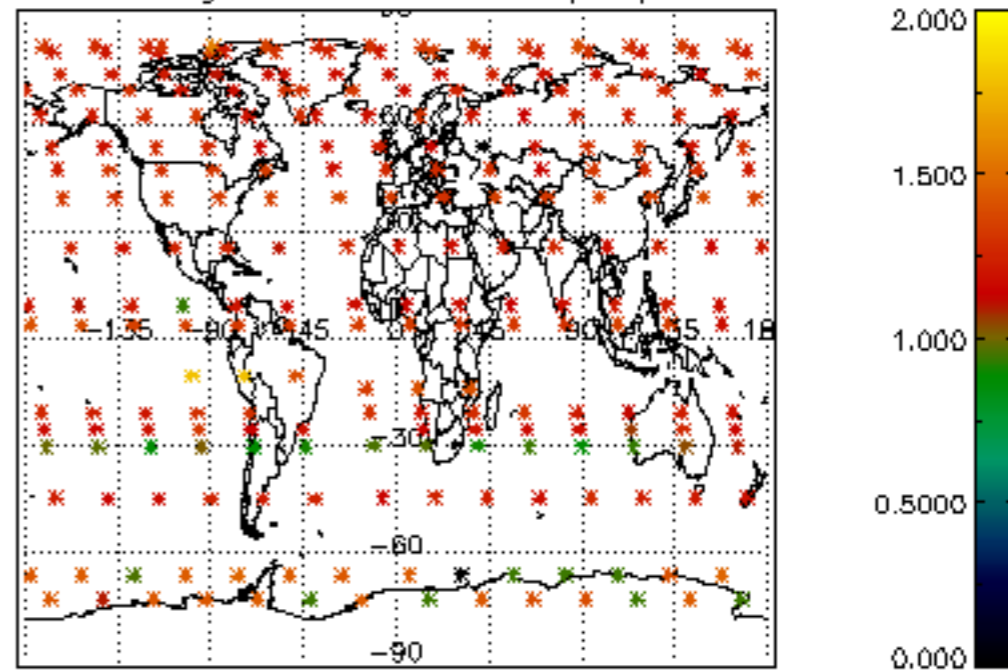




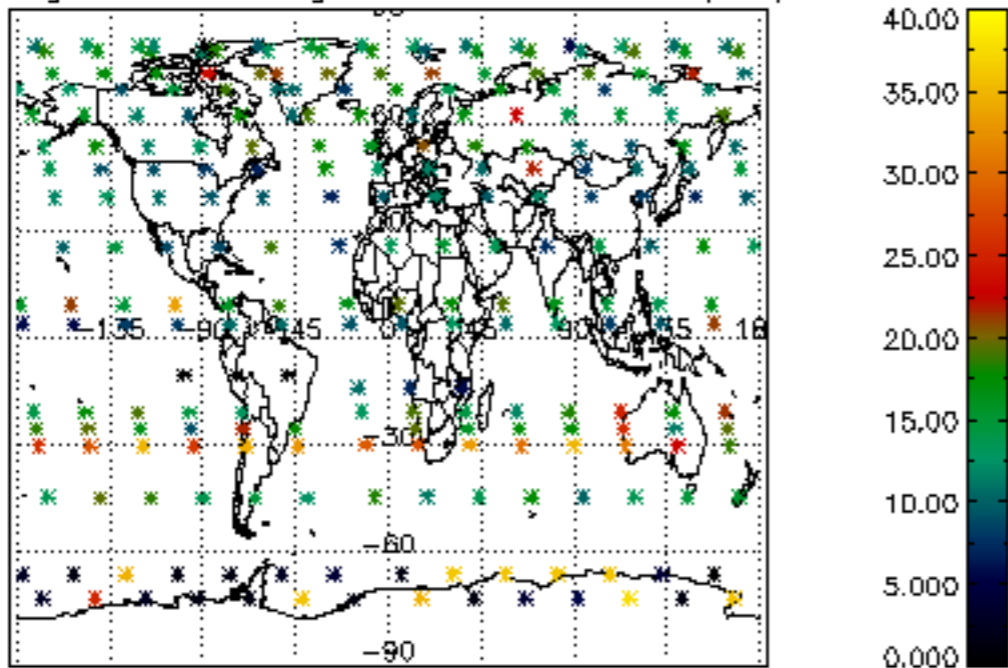
Percentage of cosmic ray hits per profile



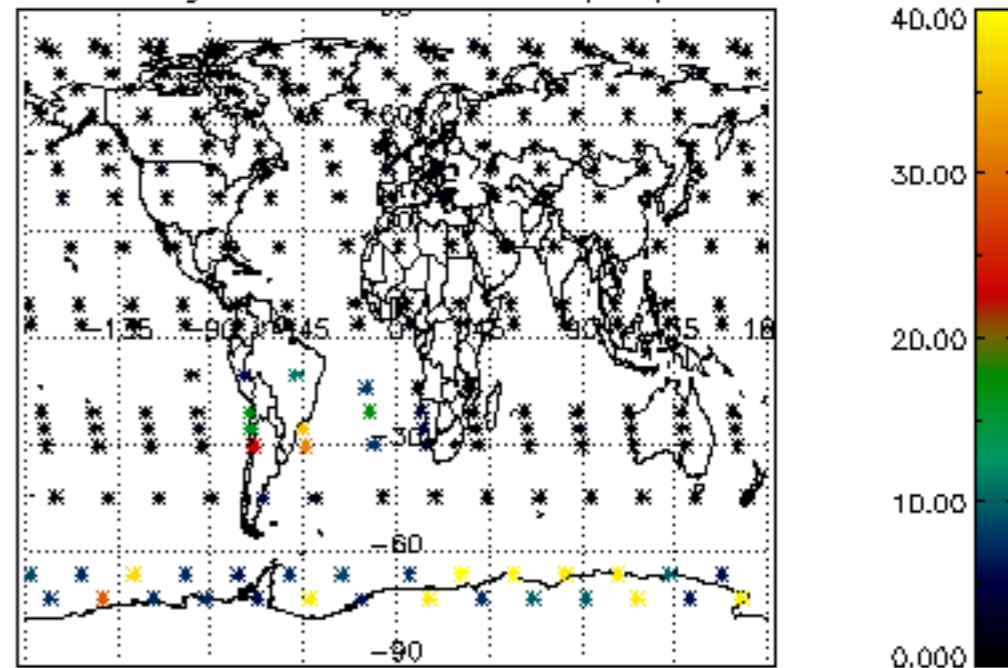
Percentage of datation errors per profile



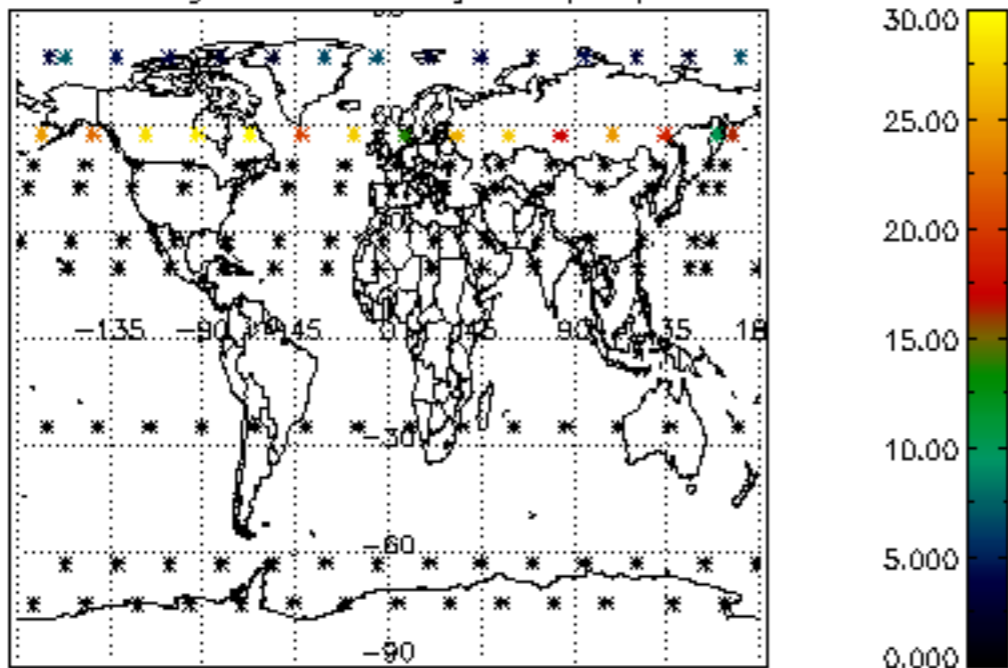
Percentage of star falling outside central band per profile



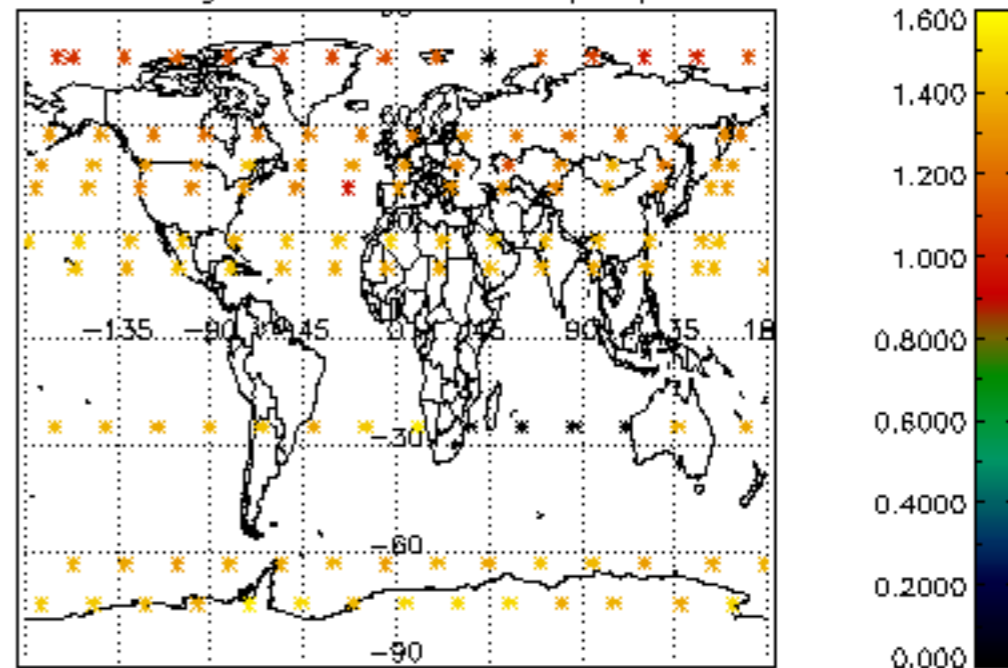
Percentage of saturation errors per profile



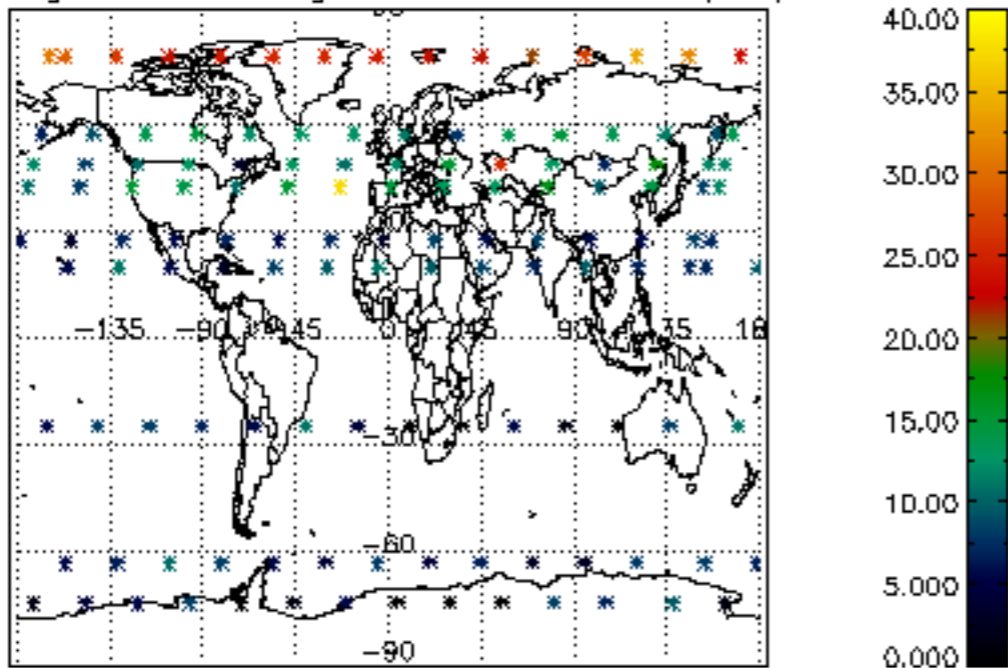
Percentage of cosmic ray hits per profile



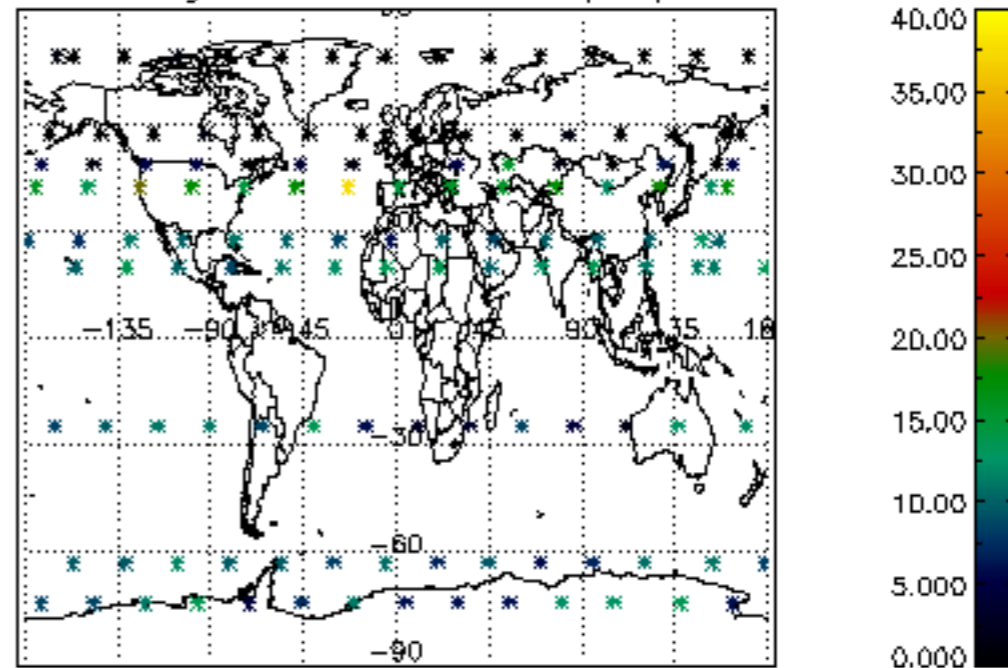
Percentage of datation errors per profile

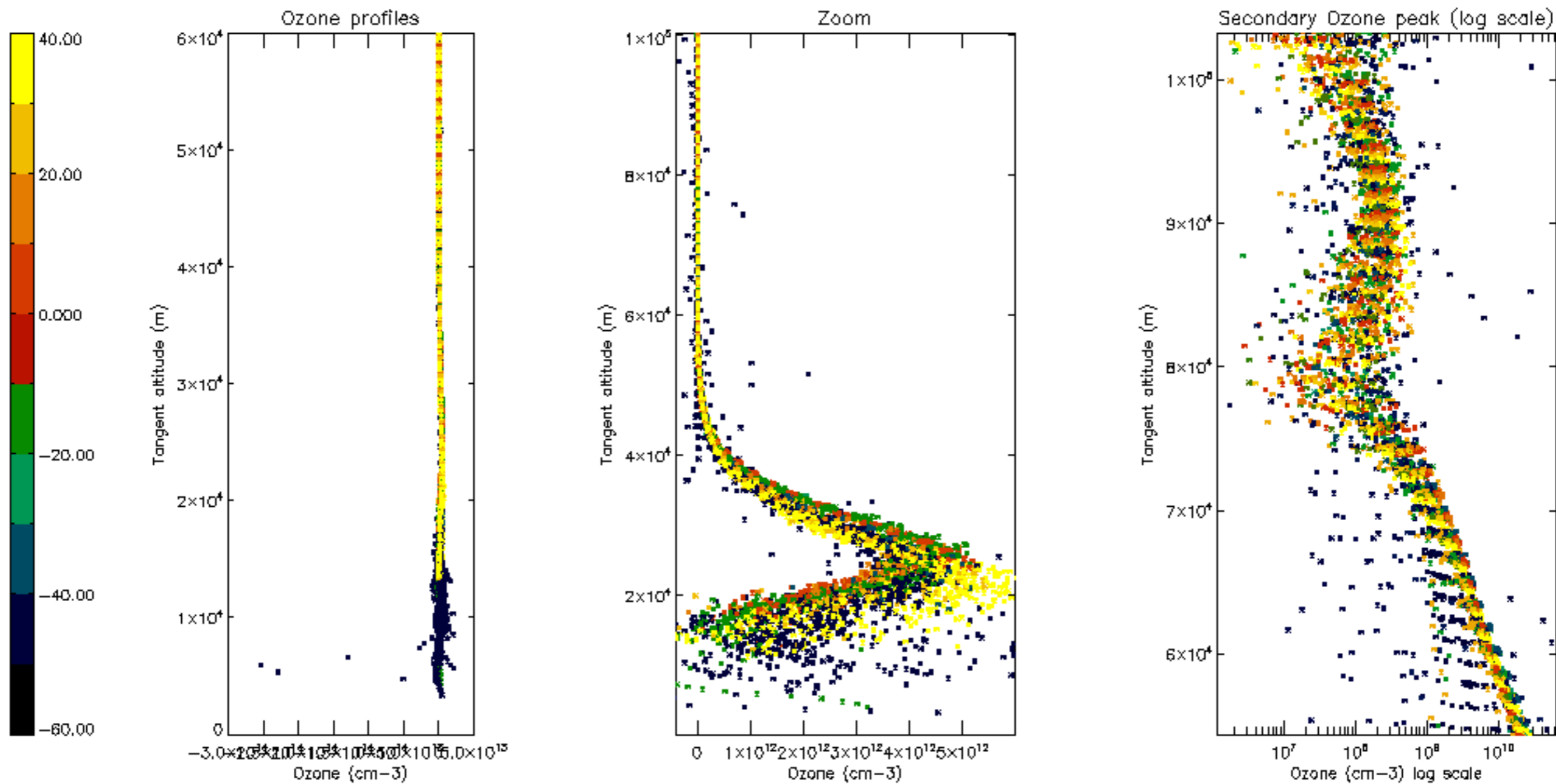


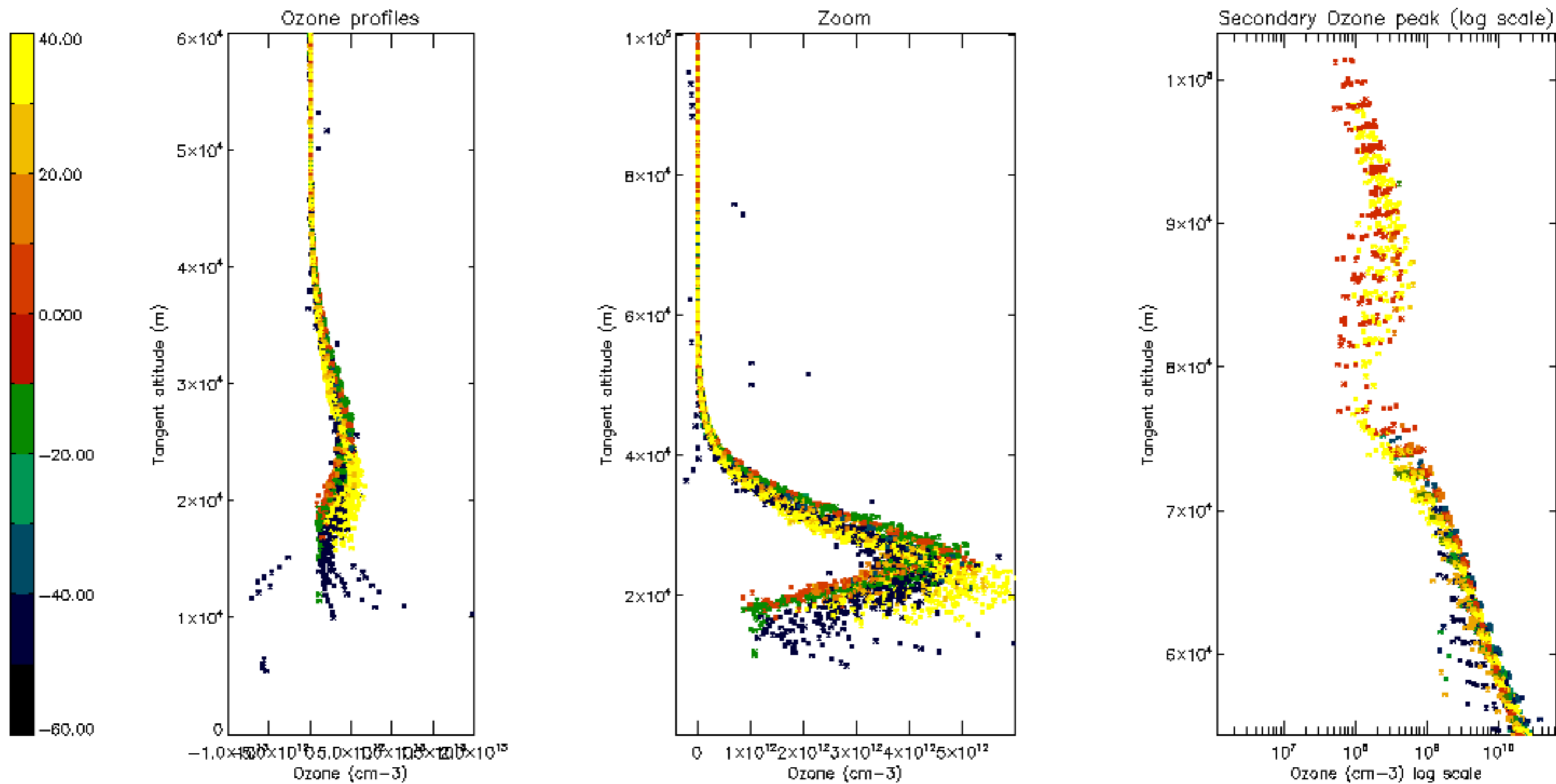
Percentage of star falling outside central band per profile

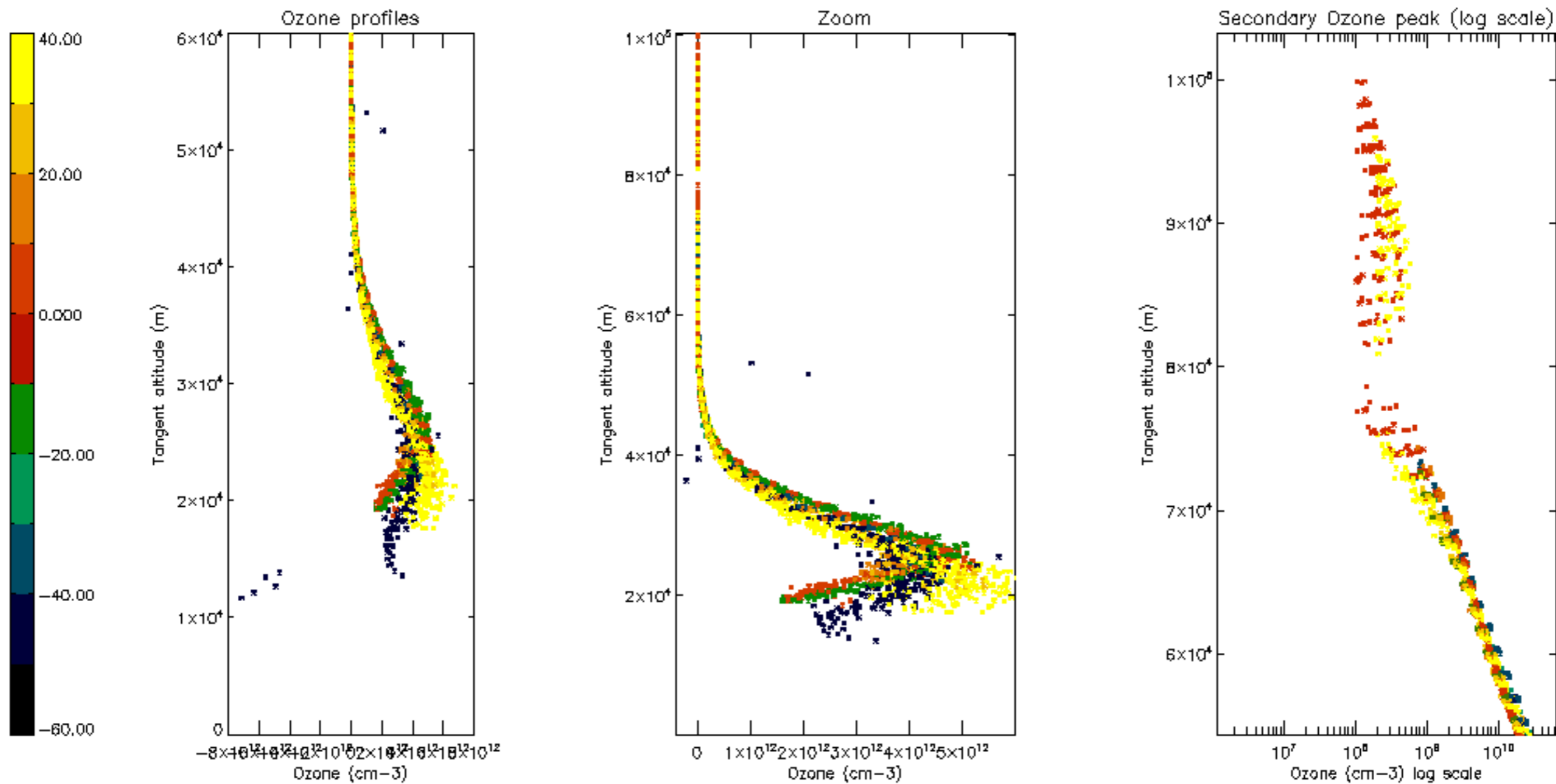


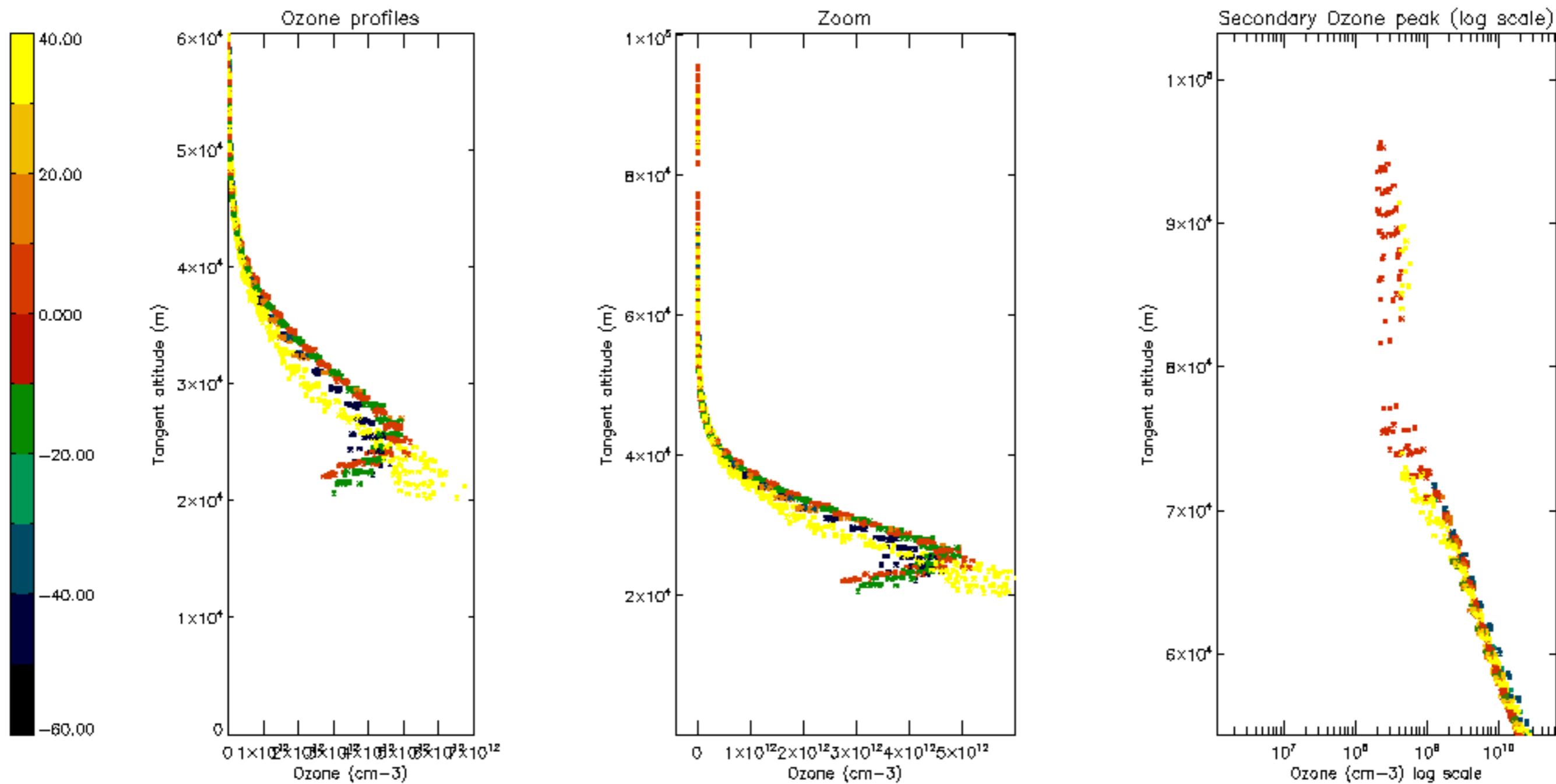
Percentage of saturation errors per profile

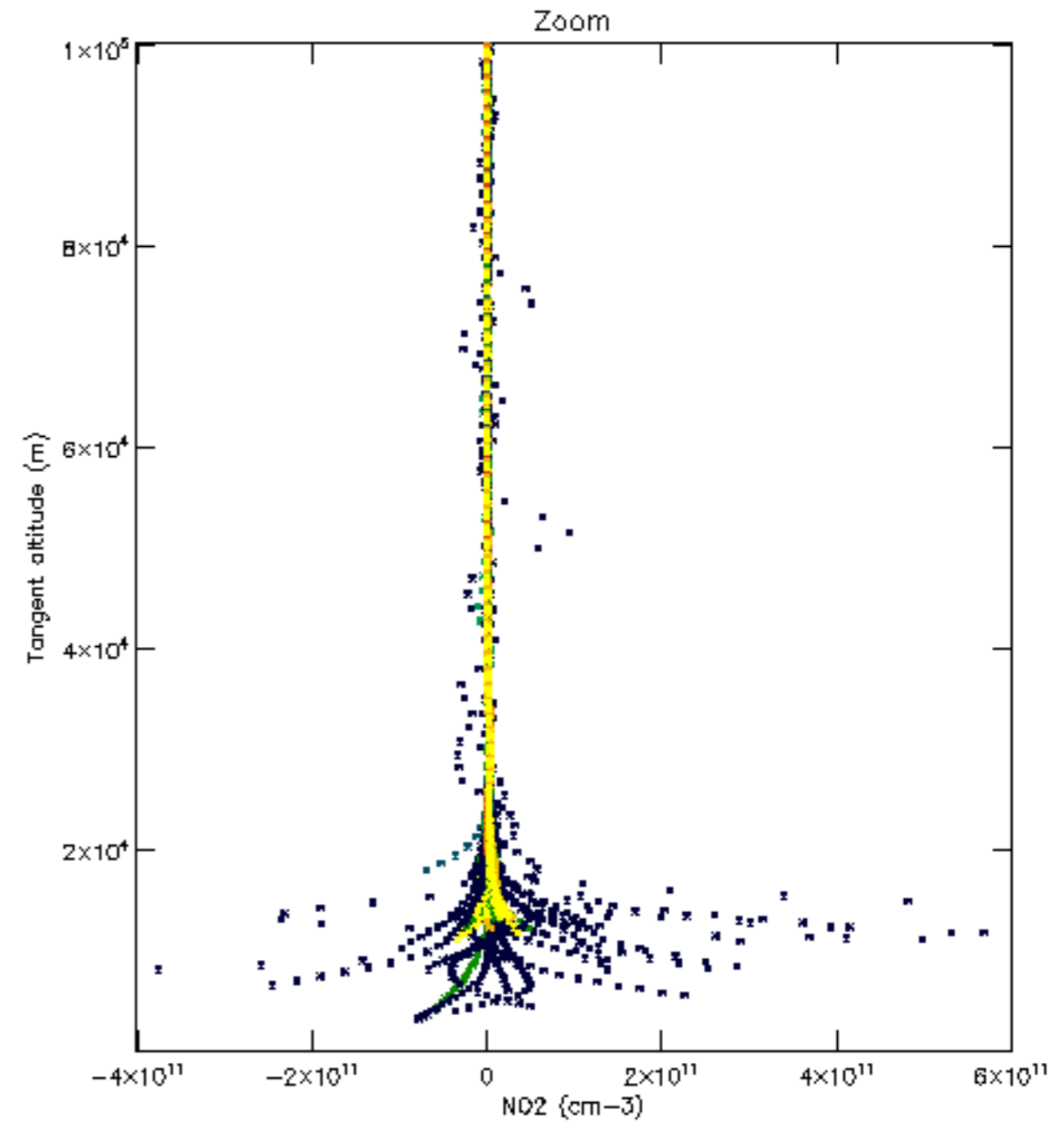
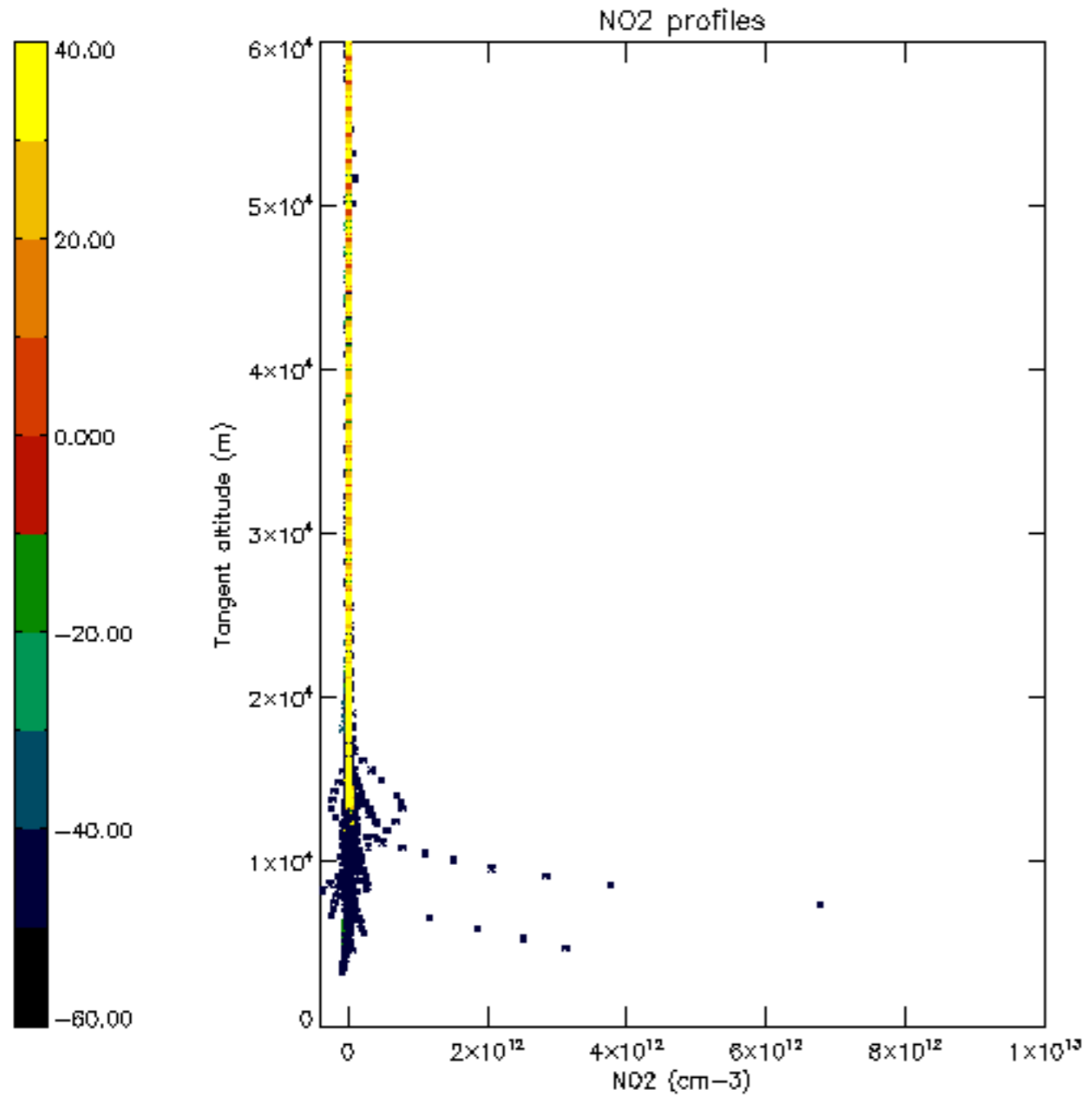


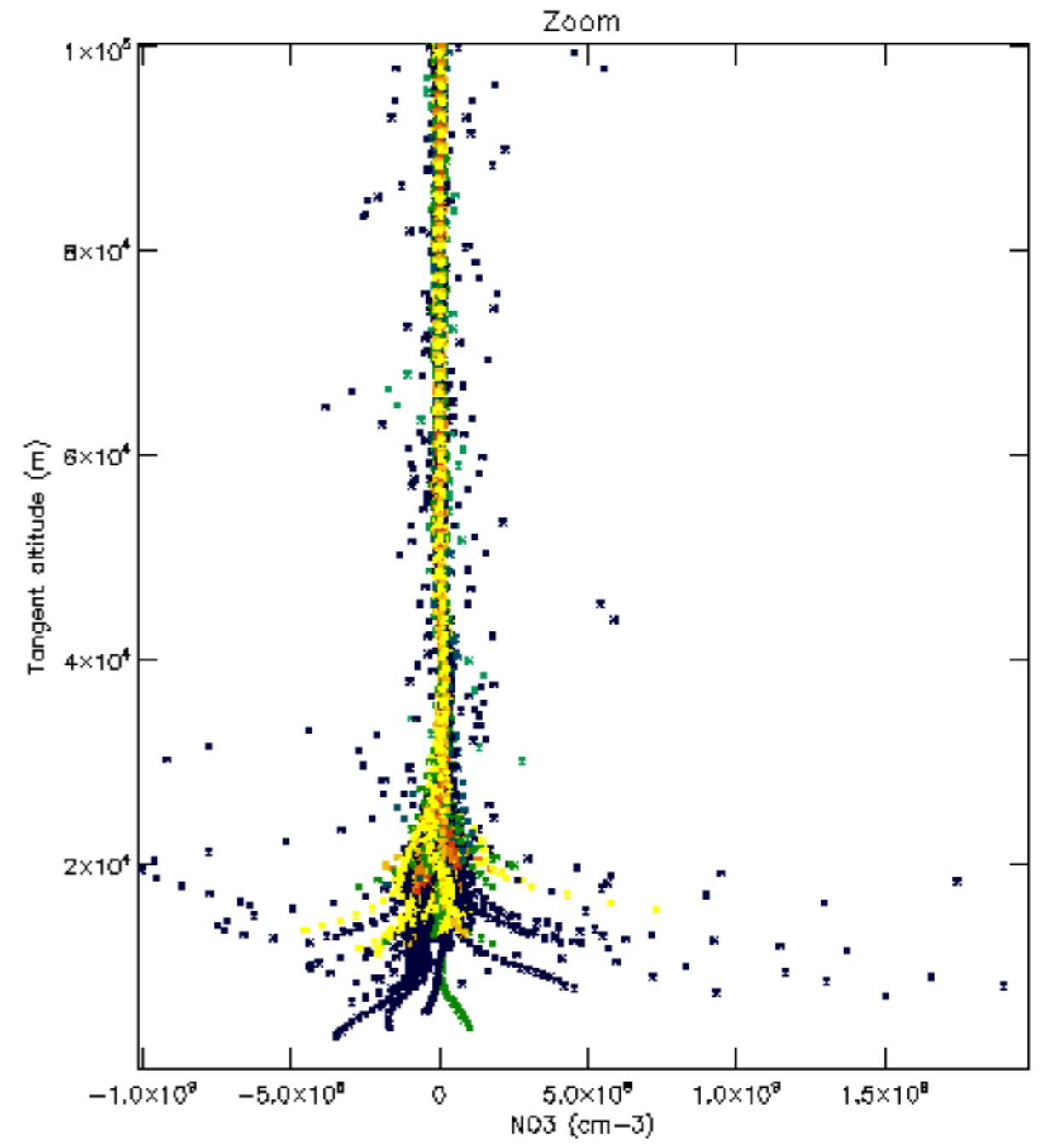
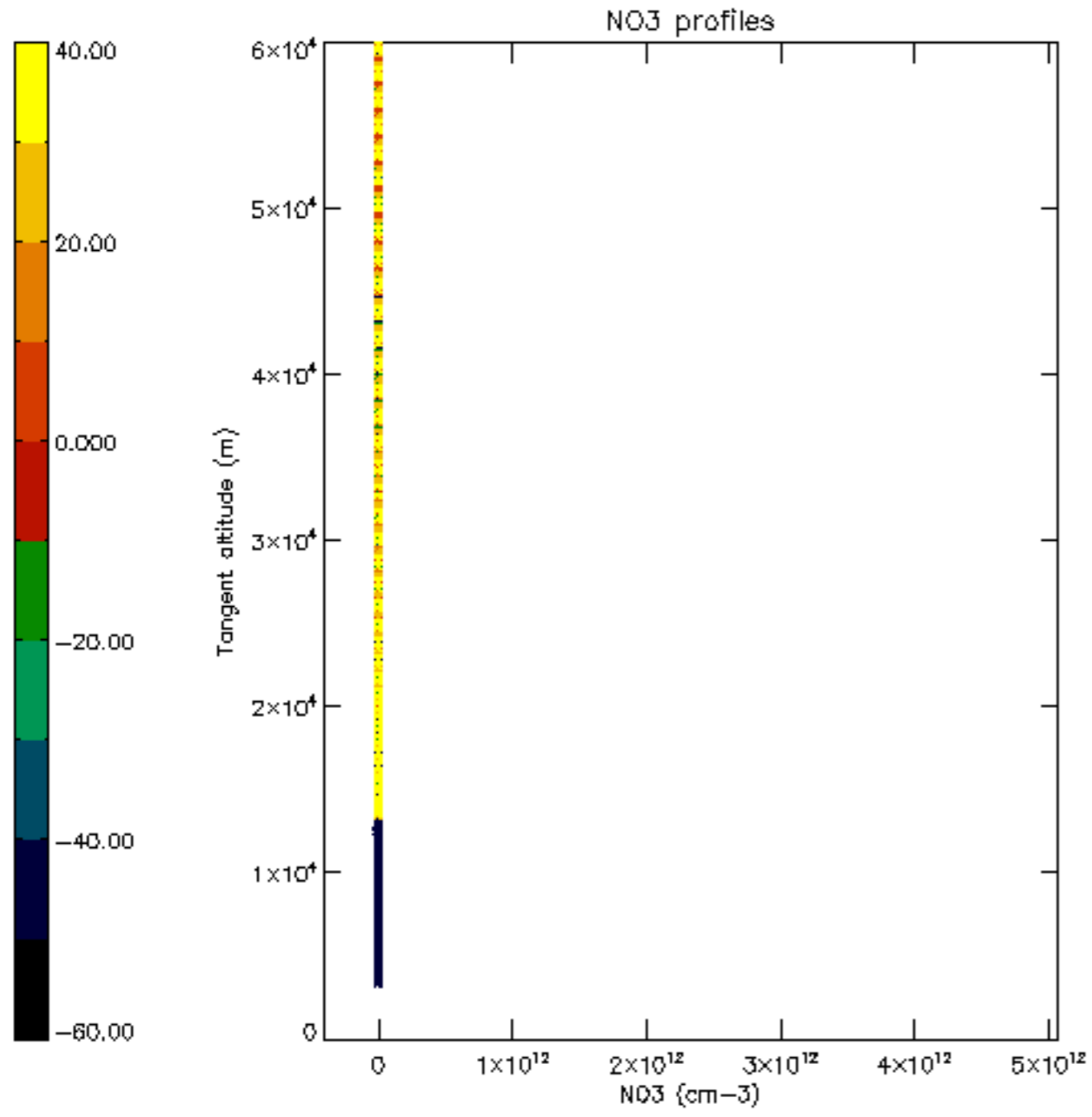


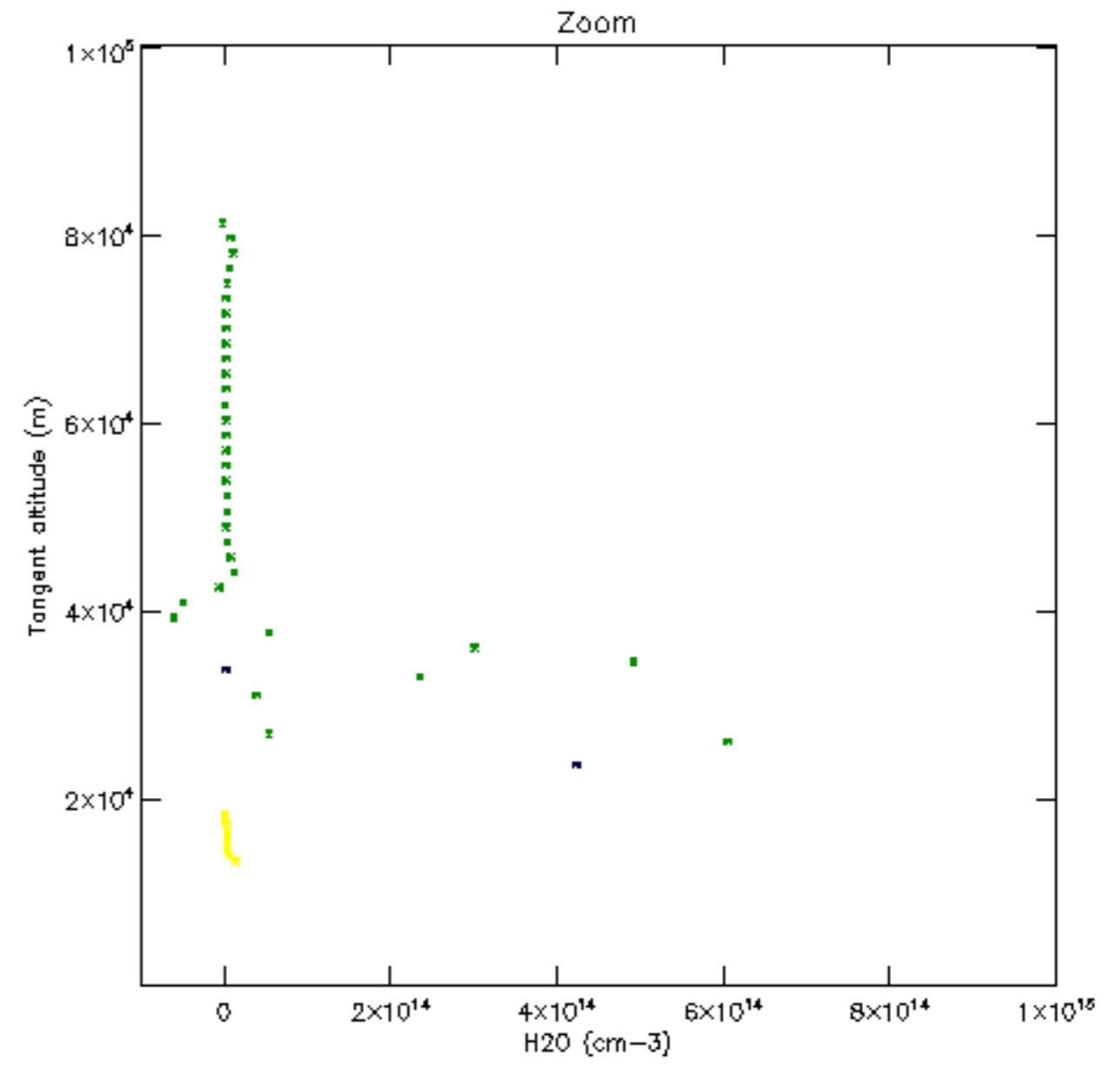
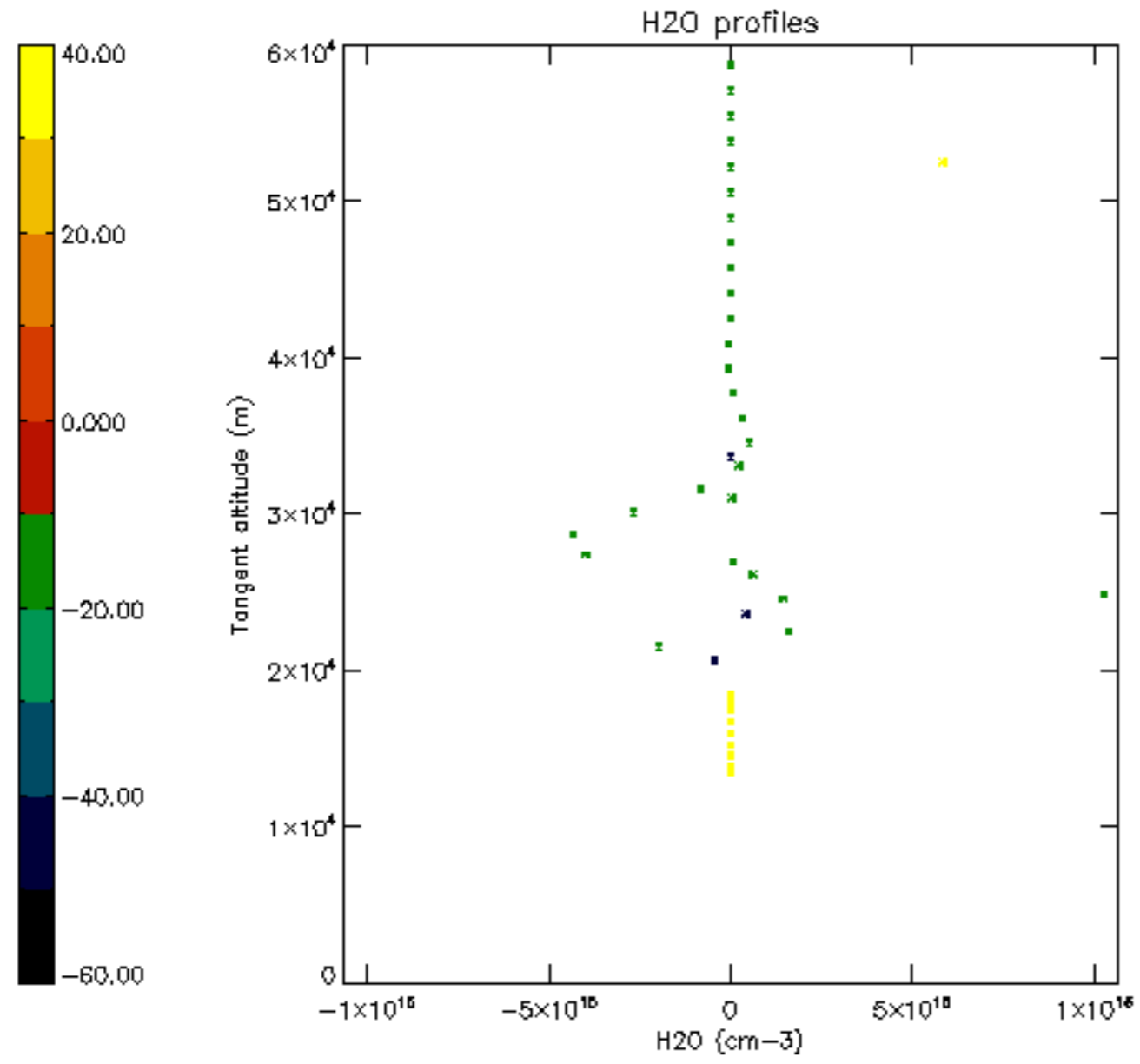


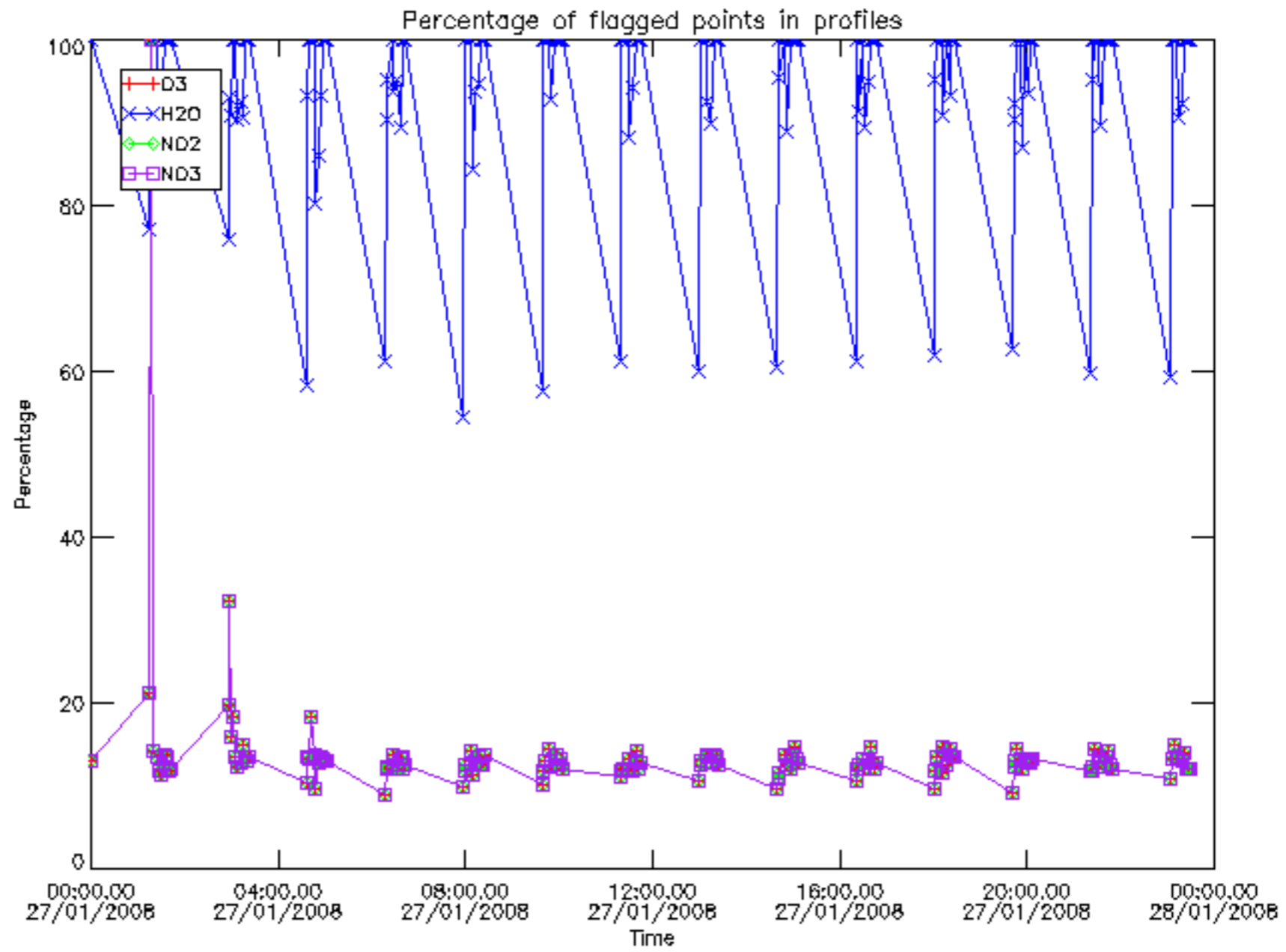




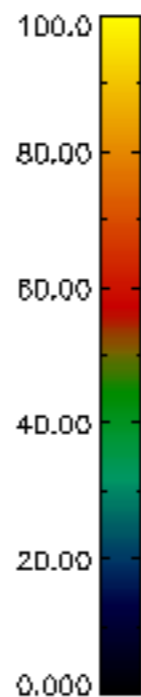
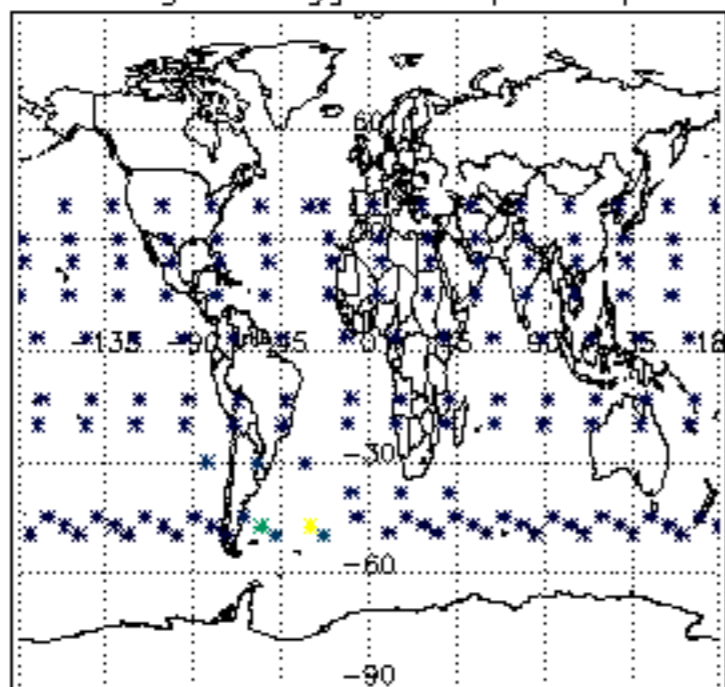




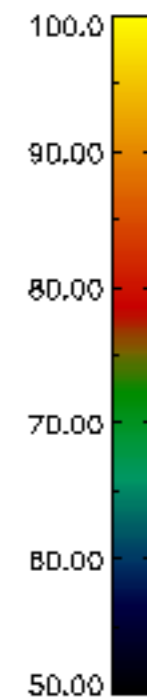
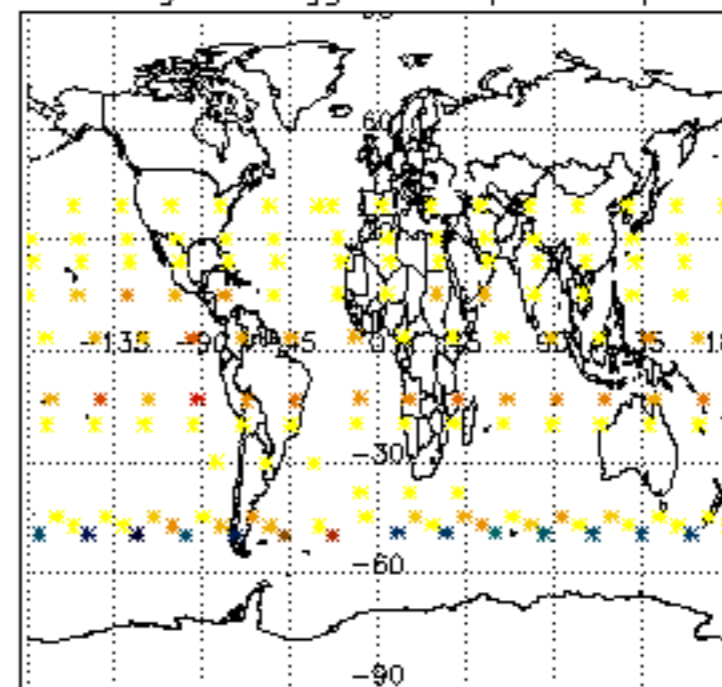




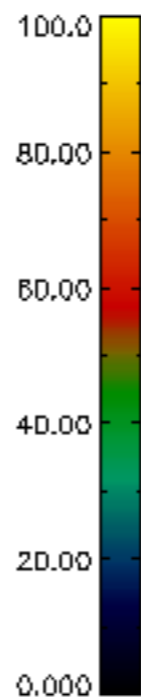
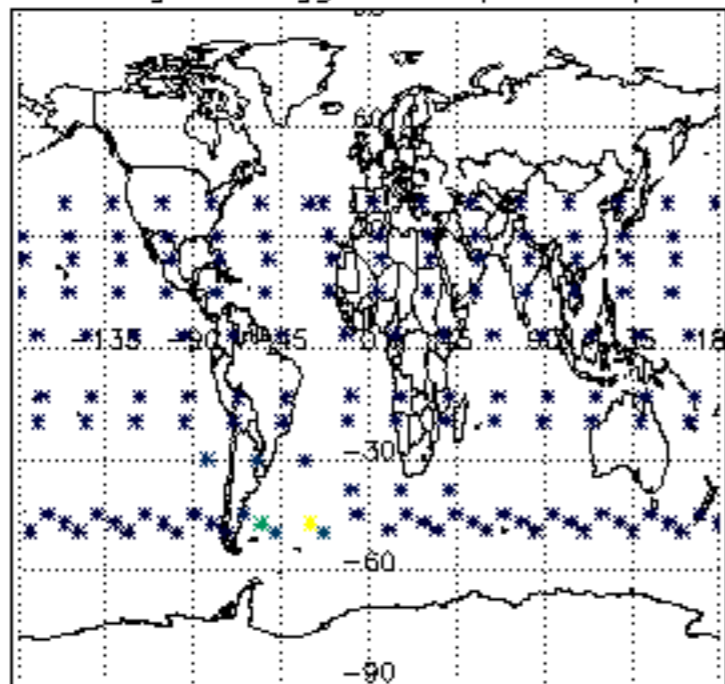
Percentage of flagged data per D3 profile



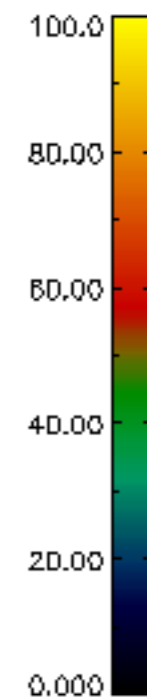
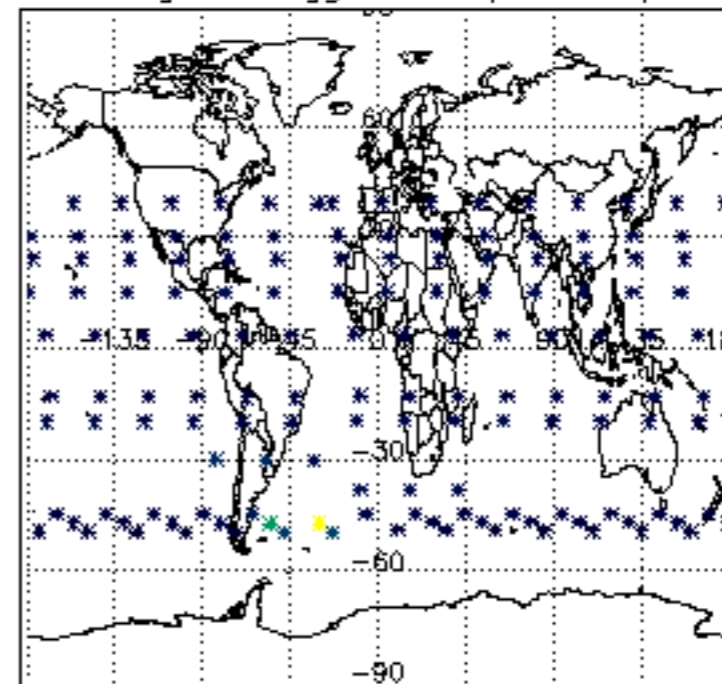
Percentage of flagged data per H2O profile

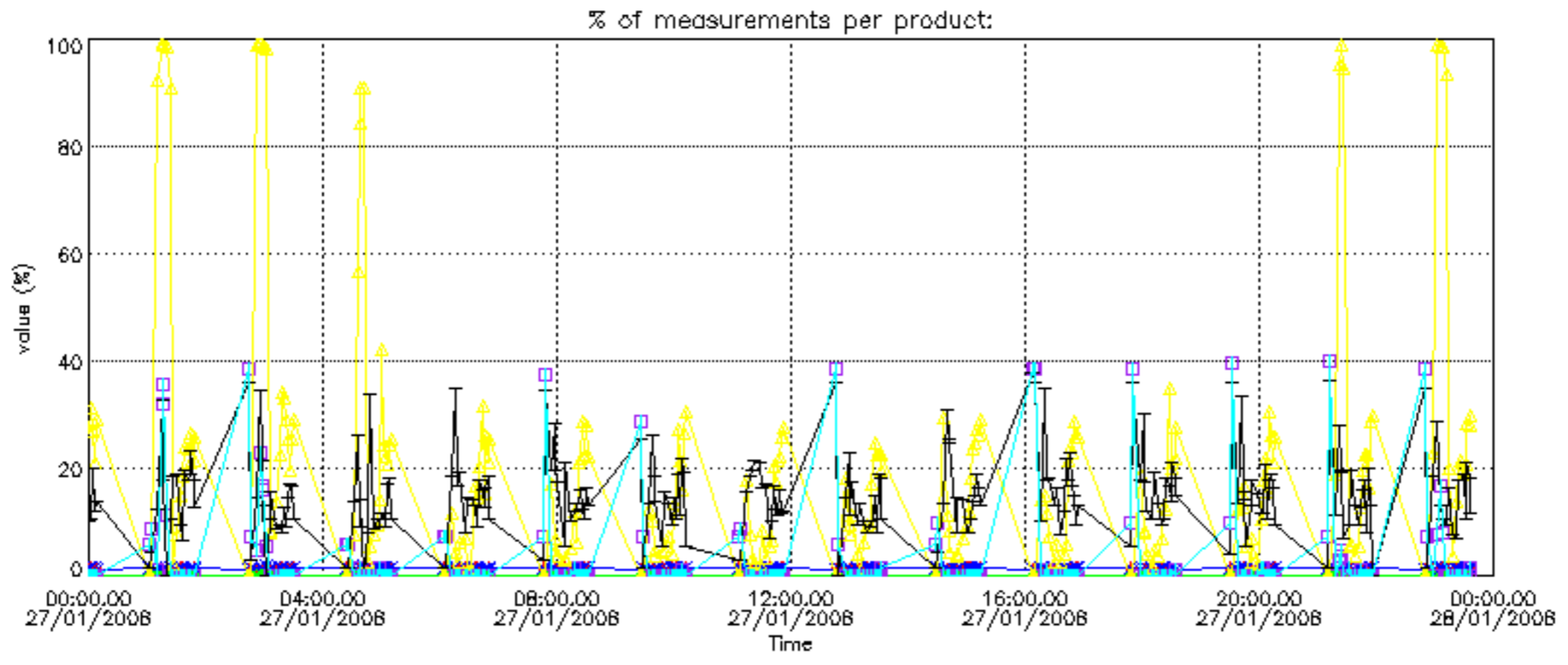


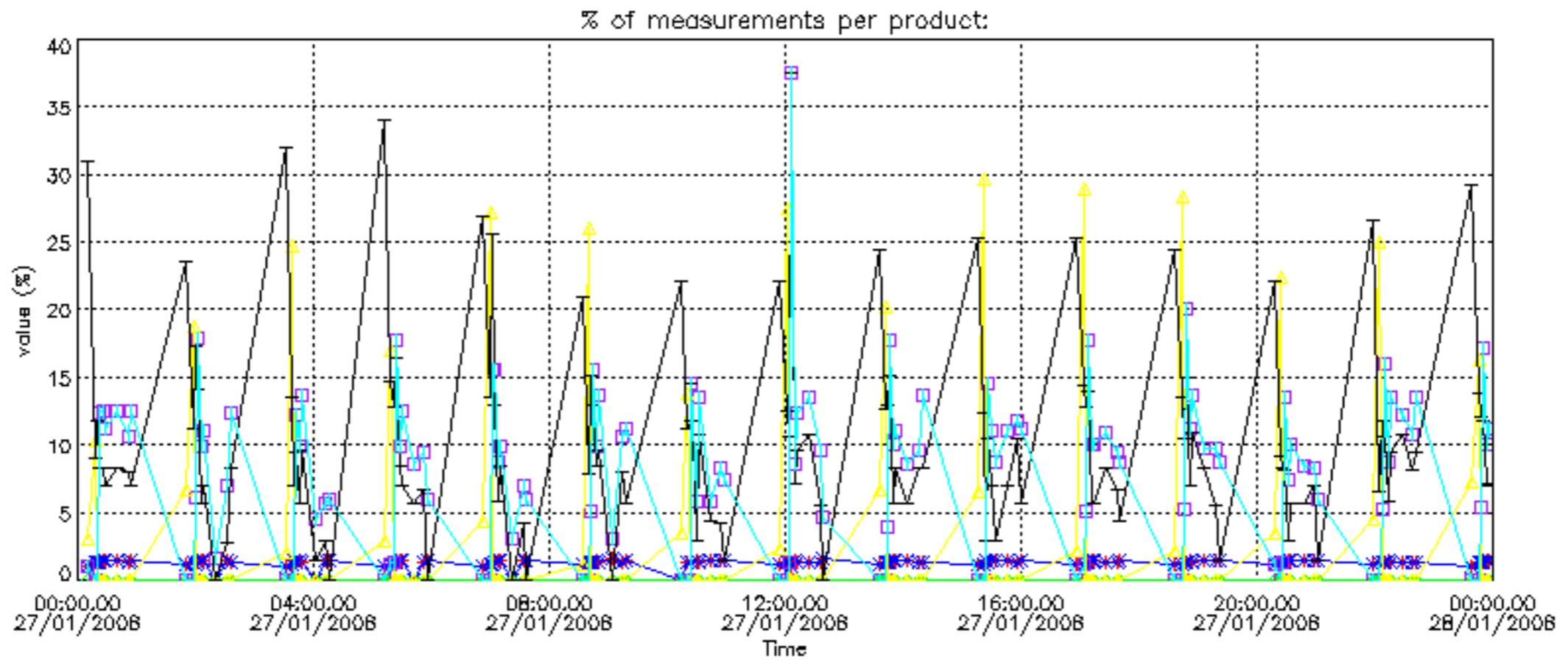
Percentage of flagged data per NO2 profile



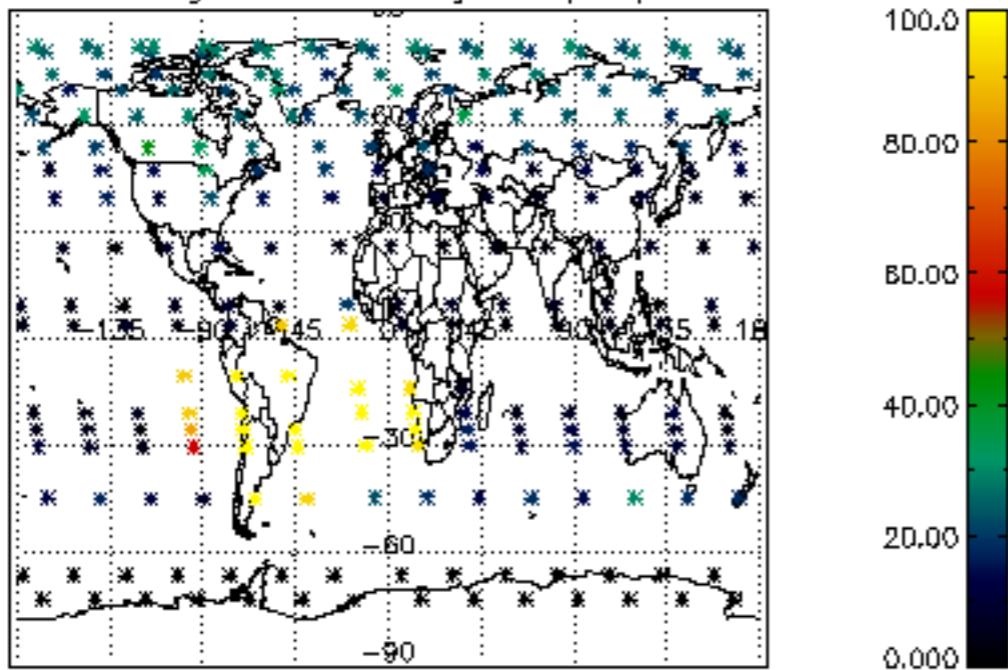
Percentage of flagged data per NO3 profile



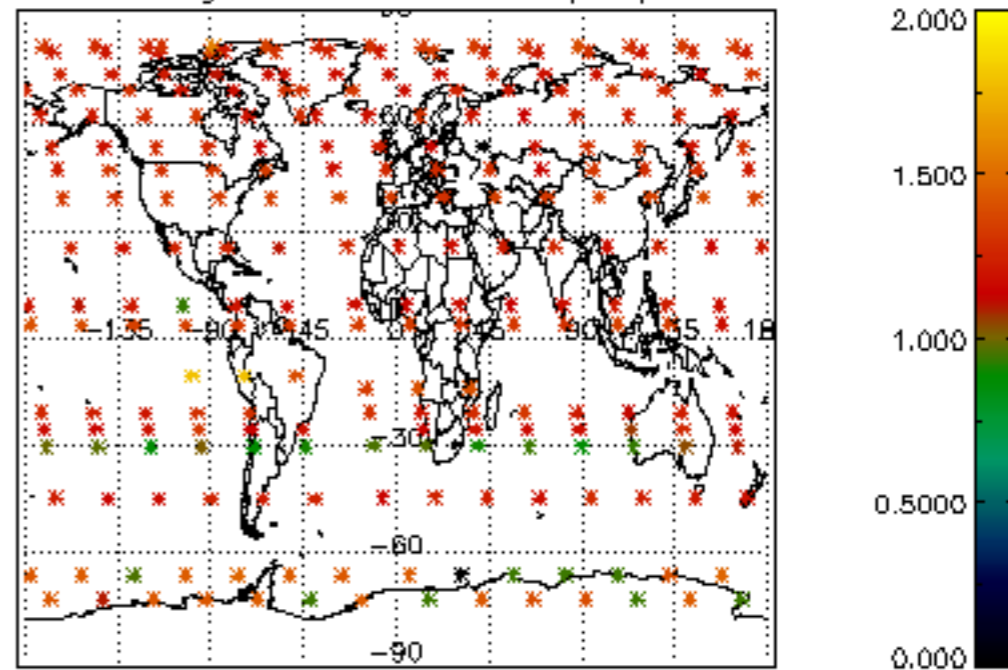




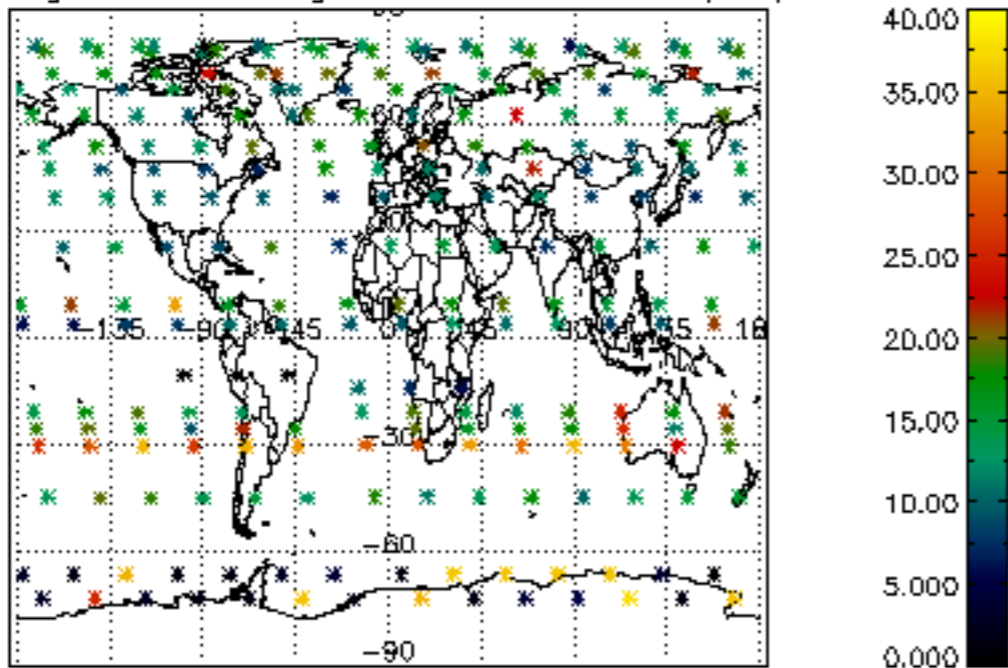
Percentage of cosmic ray hits per profile



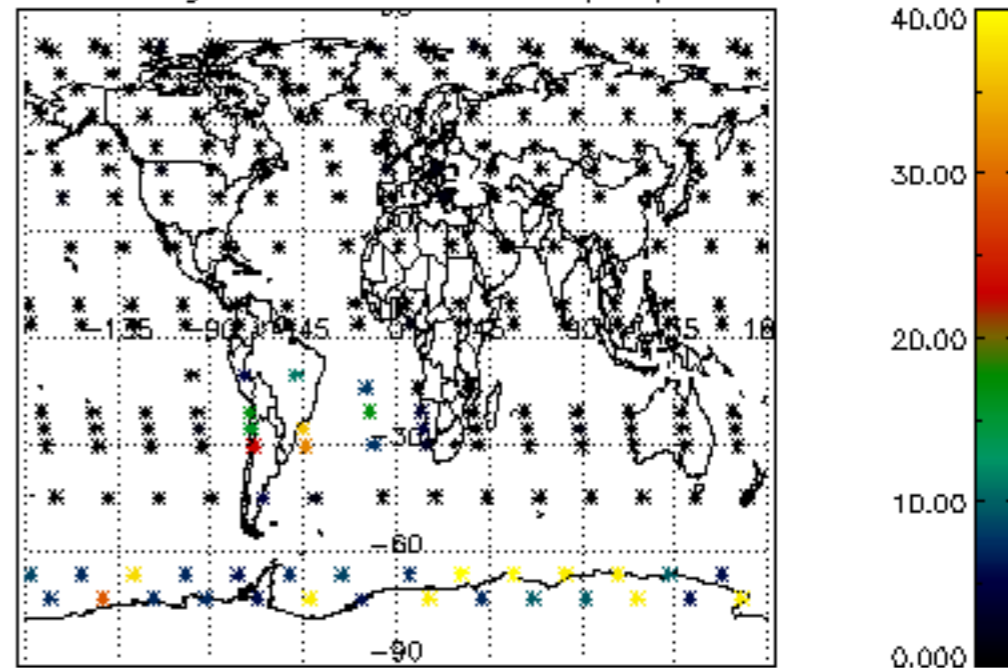
Percentage of datation errors per profile



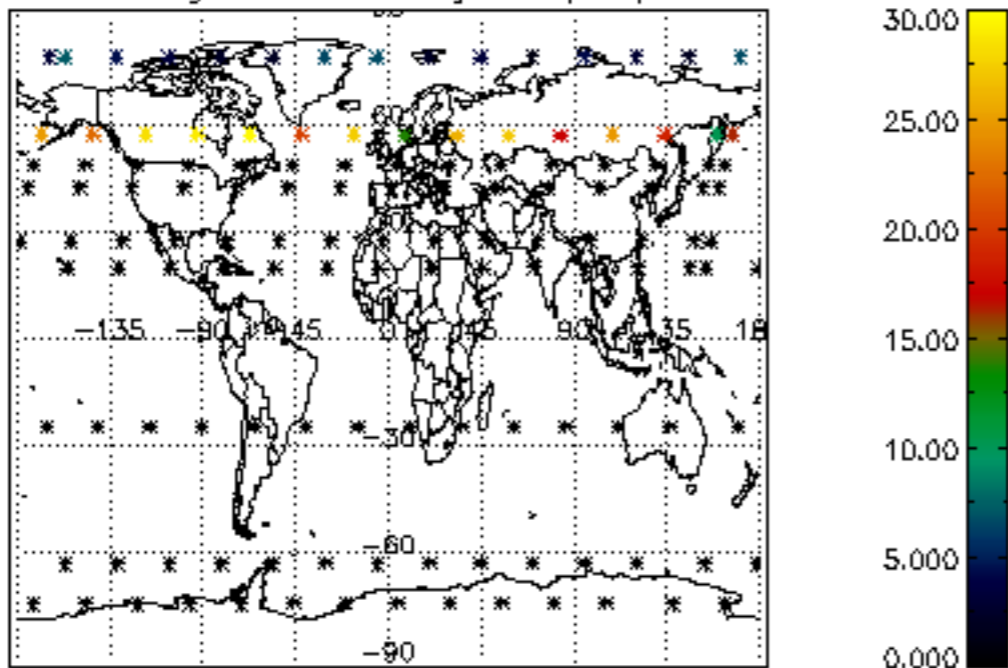
Percentage of star falling outside central band per profile



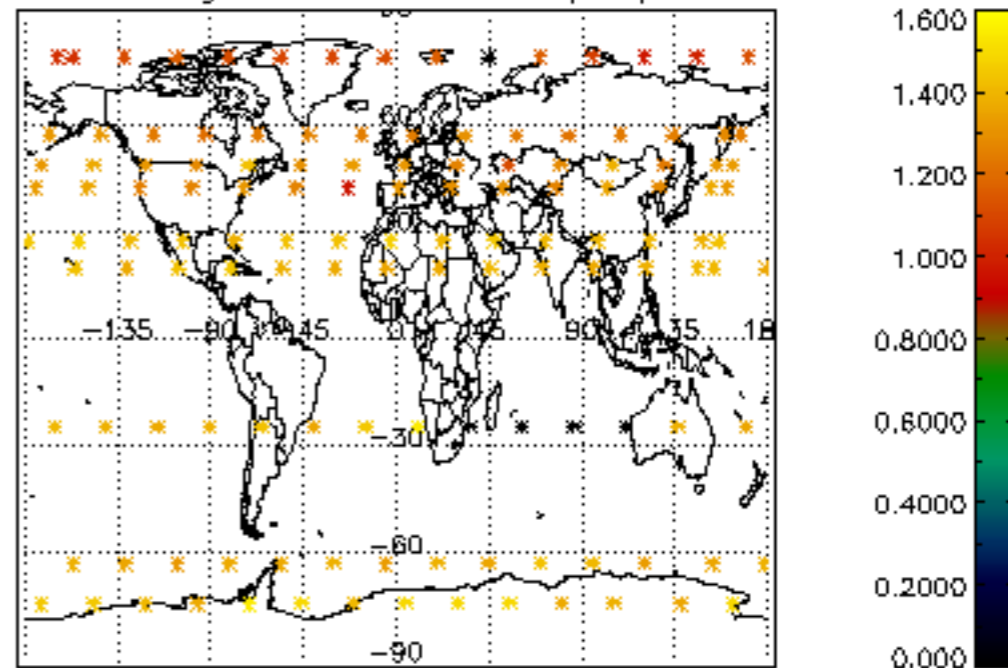
Percentage of saturation errors per profile



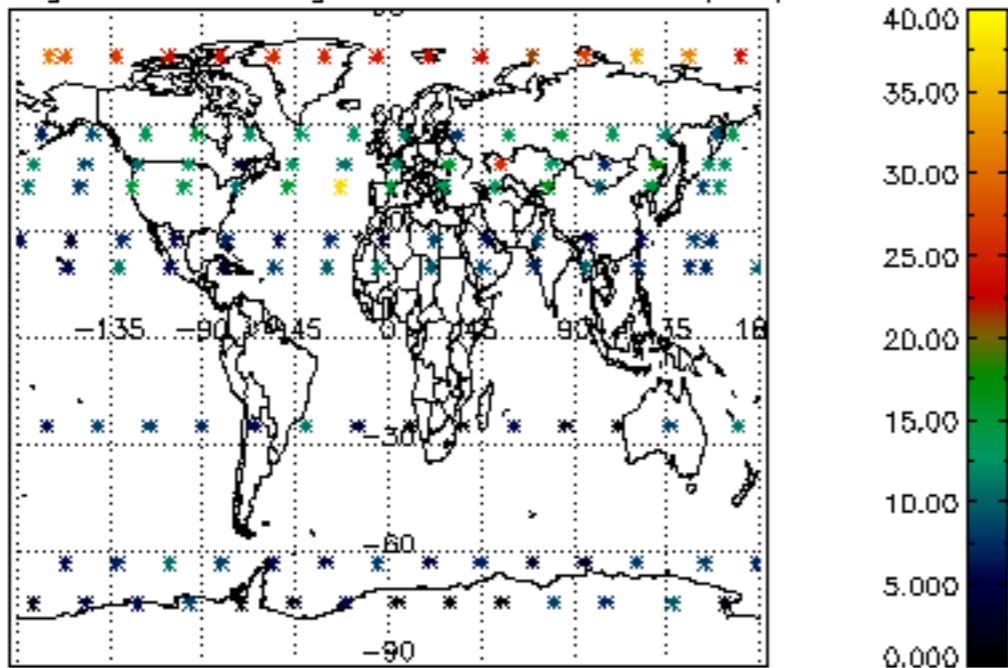
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

