

GOMOS Level 2 Daily Report

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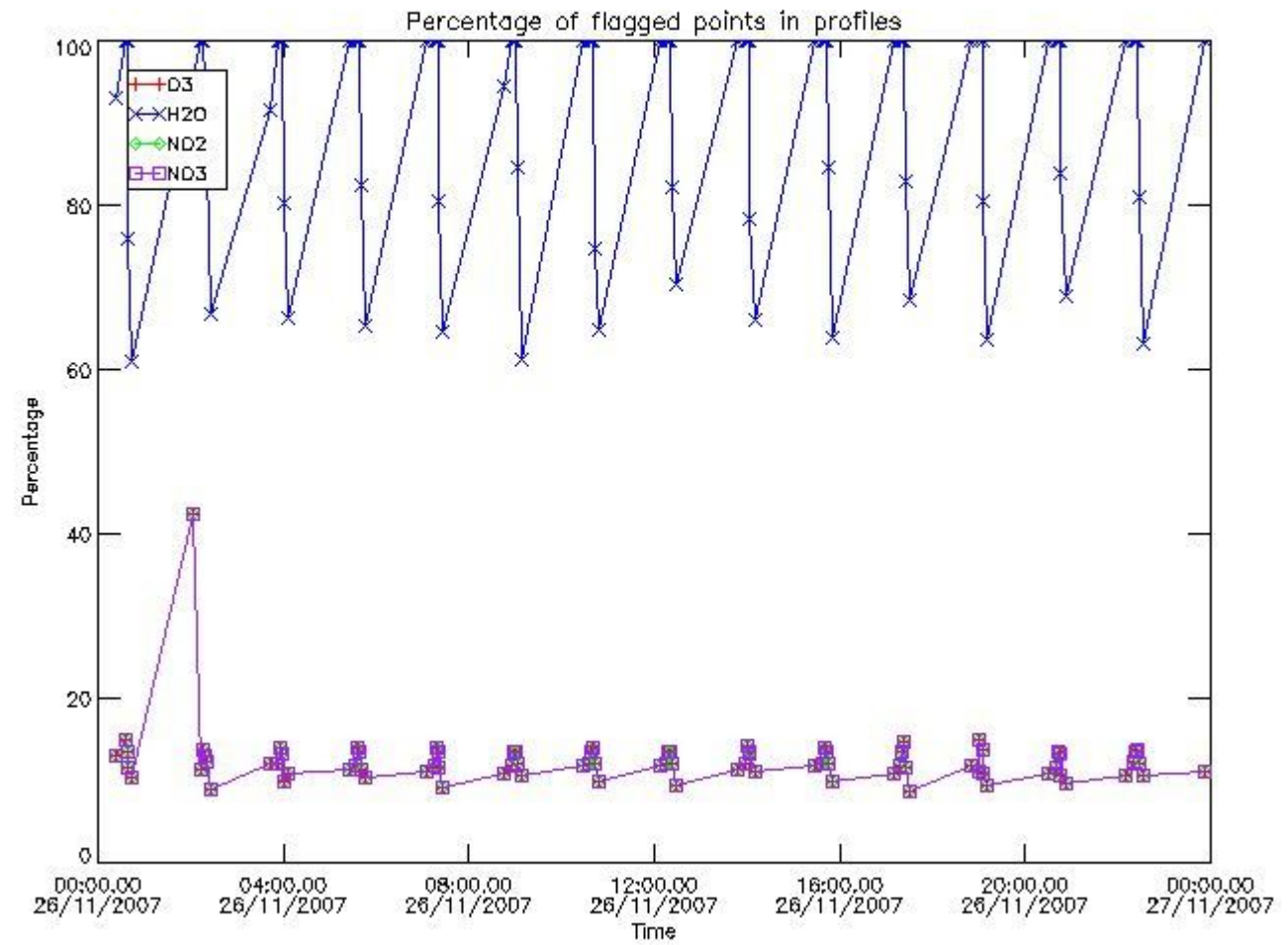
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279	GOM_NL__2PRFIN20071126_222522_000000372063_00402_30015_4621.N1	26-NOV-2007 22:25:22	Dark	37.000	29	Bet Car	1.6720	10200.	74	30015	No
280	GOM_NL__2PRFIN20071126_222701_000000432063_00402_30015_4622.N1	26-NOV-2007 22:27:01	Dark	42.500	41	Eps Car	1.8600	4100.0	85	30015	No
281	GOM_NL__2PRFIN20071126_223228_000000482063_00402_30015_4623.N1	26-NOV-2007 22:32:28	Dark	48.000	2	Alp Car	-0.73600	7000.0	96	30015	No
282	GOM_NL__2PRFIN20071126_224709_000000432063_00402_30015_4624.N1	26-NOV-2007 22:47:09	Straylight	43.000	165	34Gam Eri	2.9500	3200.0	86	30015	No
283	GOM_NL__2PRFIN20071126_225232_000000422063_00402_30015_4625.N1	26-NOV-2007 22:52:32	Tw_i_and_stray	41.500	94	92Alp Cet	2.5260	3100.0	83	30015	No
284	GOM_NL__2PRFIN20071126_225838_000000402063_00402_30015_4626.N1	26-NOV-2007 22:58:38	Bright	39.500	146	25Eta Tau	2.8730	15200.	79	30015	No
285	GOM_NL__2PRFIN20071126_230126_000000342063_00402_30015_4627.N1	26-NOV-2007 23:01:26	Bright	34.000	173	4Bet Tri	3.0040	8900.0	68	30015	No
286	GOM_NL__2PRFIN20071126_230307_000000372063_00402_30015_4628.N1	26-NOV-2007 23:03:07	Bright	37.000	79	26Bet Per	2.3100	13100.	74	30015	No
287	GOM_NL__2PRFIN20071126_230529_000000372063_00402_30015_4629.N1	26-NOV-2007 23:05:29	Bright	36.500	175	39Del Per	3.0100	19400.	73	30015	No
288	GOM_NL__2PRFIN20071126_231638_000000342063_00402_30015_4630.N1	26-NOV-2007 23:16:38	Bright	34.000	49	1Alp UMi	1.9900	6300.0	68	30015	No
289	GOM_NL__2PRFIN20071126_232114_000000382063_00402_30015_4631.N1	26-NOV-2007 23:21:14	Bright	37.500	60	7Bet UMi	2.0810	3950.0	75	30015	No
290	GOM_NL__2PRFIN20071126_232635_000000392063_00402_30015_4632.N1	26-NOV-2007 23:26:35	Bright	38.500	32	77Eps UMa	1.7630	11000.	77	30015	No
291	GOM_NL__2PRFIN20071126_232832_000000362063_00402_30015_4633.N1	26-NOV-2007 23:28:32	Bright	35.500	39	85Eta UMa	1.8540	24000.	71	30015	No
292	GOM_NL__2PRFIN20071126_233200_000000442063_00402_30015_4634.N1	26-NOV-2007 23:32:00	Bright	44.000	152	12Alp2CVn	2.8900	11000.	88	30015	No
293	GOM_NL__2PRFIN20071126_233717_000000342063_00402_30015_4635.N1	26-NOV-2007 23:37:17	Bright	33.500	111	8Eta Boo	2.6800	6000.0	67	30015	No
294	GOM_NL__2PRFIN20071126_234013_000000372063_00402_30015_4636.N1	26-NOV-2007 23:40:13	Bright	36.500	138	47Eps Vir	2.8280	4700.0	73	30015	No
295	GOM_NL__2PRFIN20071126_234422_000000402063_00402_30015_4637.N1	26-NOV-2007 23:44:22	Bright	40.000	121	29Gam Vir	2.7400	7200.0	80	30015	No
296	GOM_NL__2PRFIN20071126_234559_000000392063_00402_30015_4638.N1	26-NOV-2007 23:45:59	Bright	38.500	15	67Alp Vir	0.97600	28000.	77	30015	No
297	GOM_NL__2PRFIN20071126_234948_000000462063_00402_30015_4639.N1	26-NOV-2007 23:49:48	Tw_i_and_stray	46.000	100	4Gam Crv	2.5800	13100.	92	30015	No
298	GOM_NL__2PRFIN20071126_235123_000000462063_00402_30015_4640.N1	26-NOV-2007 23:51:23	Dark	45.500	171	2Eps Crv	3.0010	4250.0	91	30015	No

3. Quality information per product

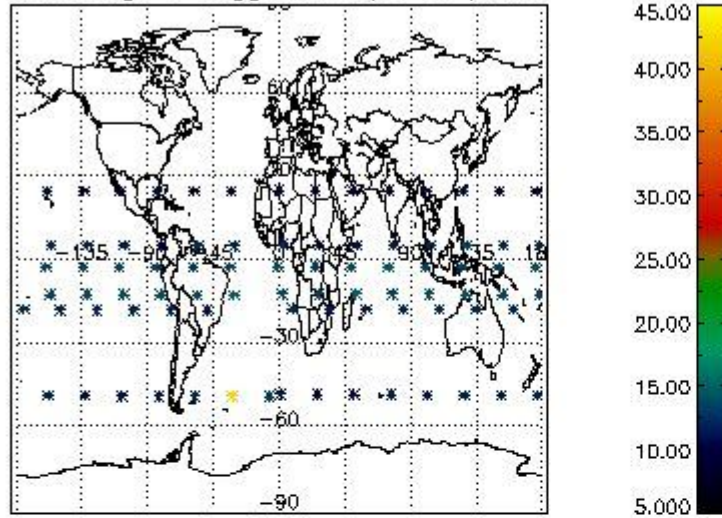
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

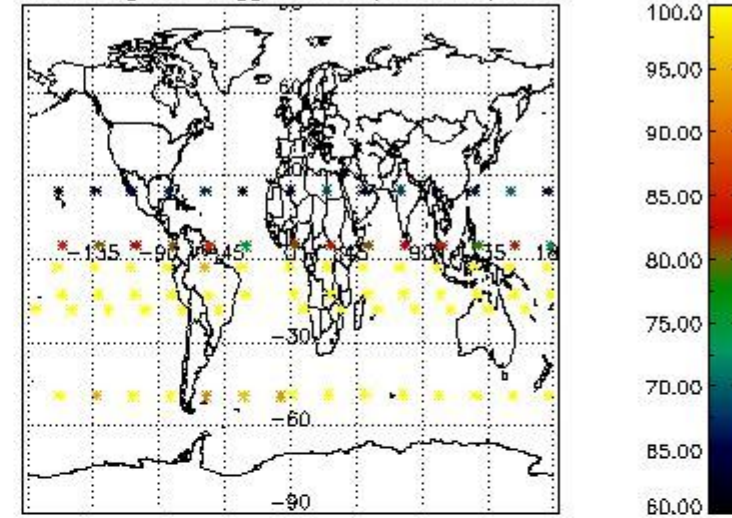


3.2 Plot quality information per product (world map)

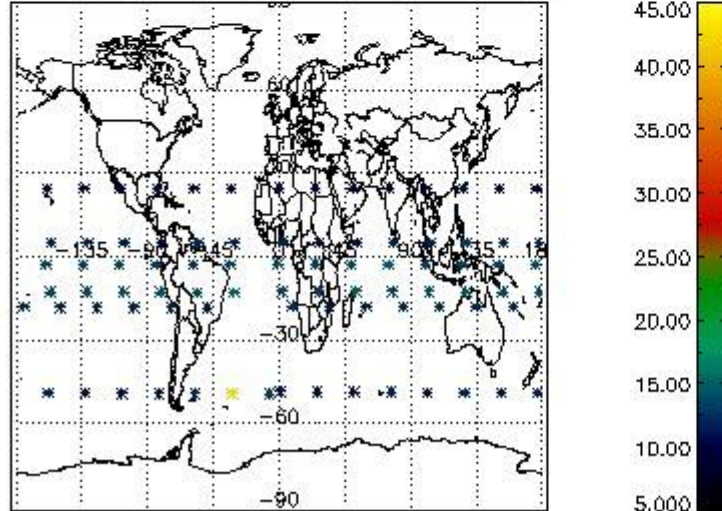
Percentage of flagged data per O3 profile



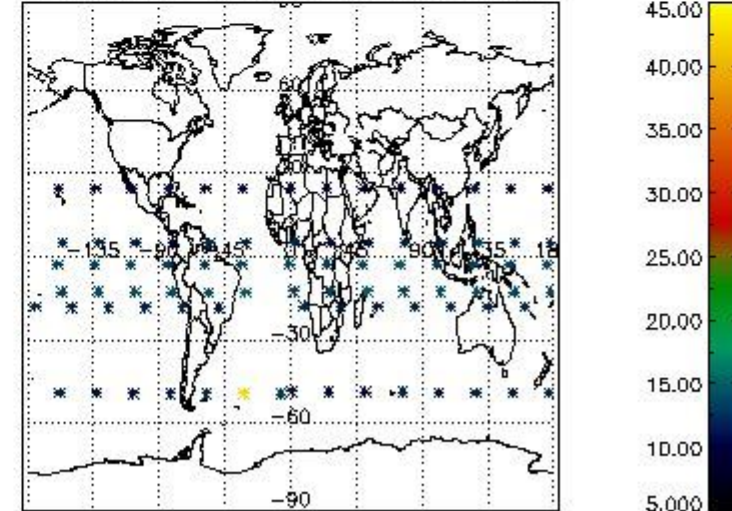
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

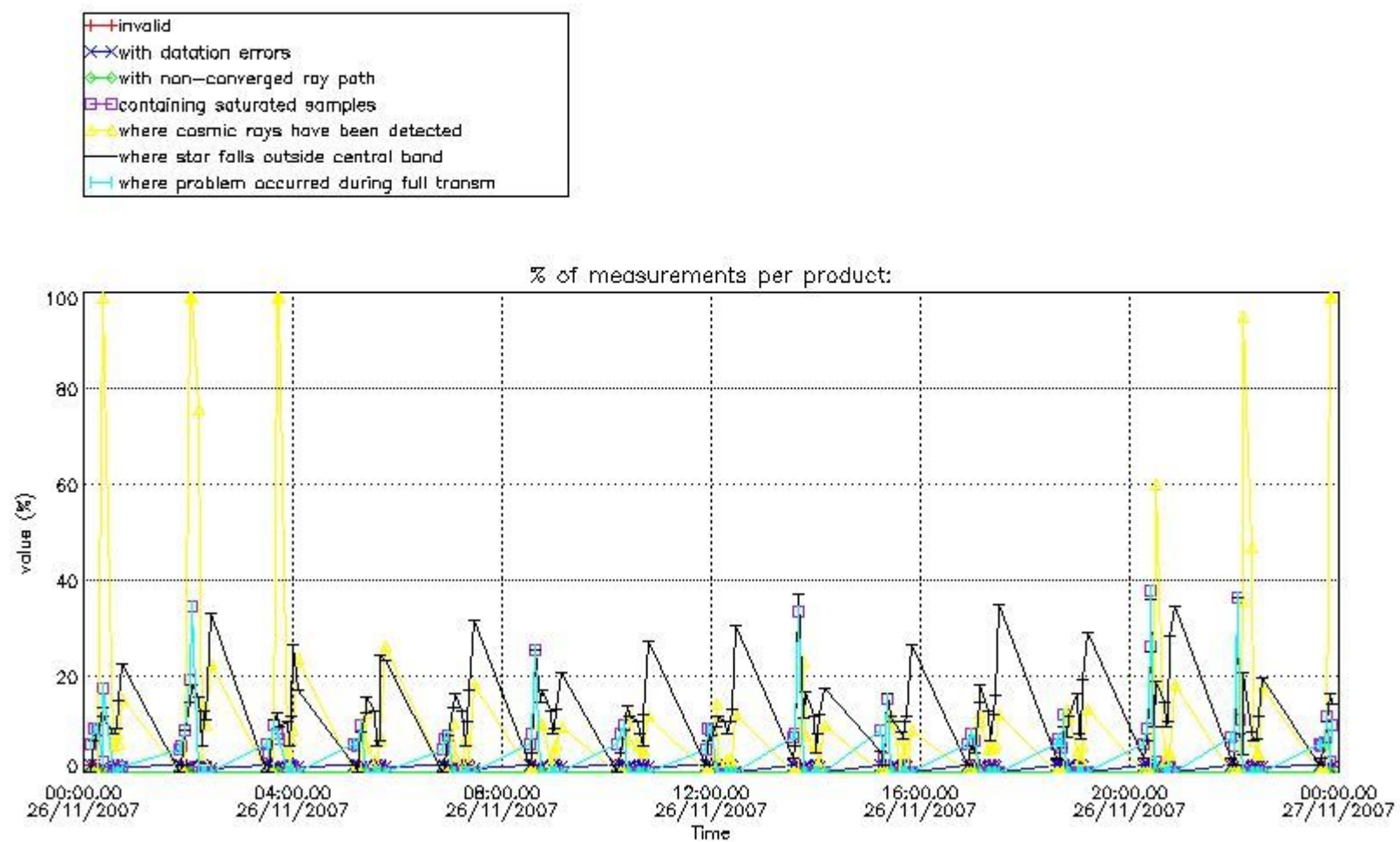


4. Level 1 quality information per product

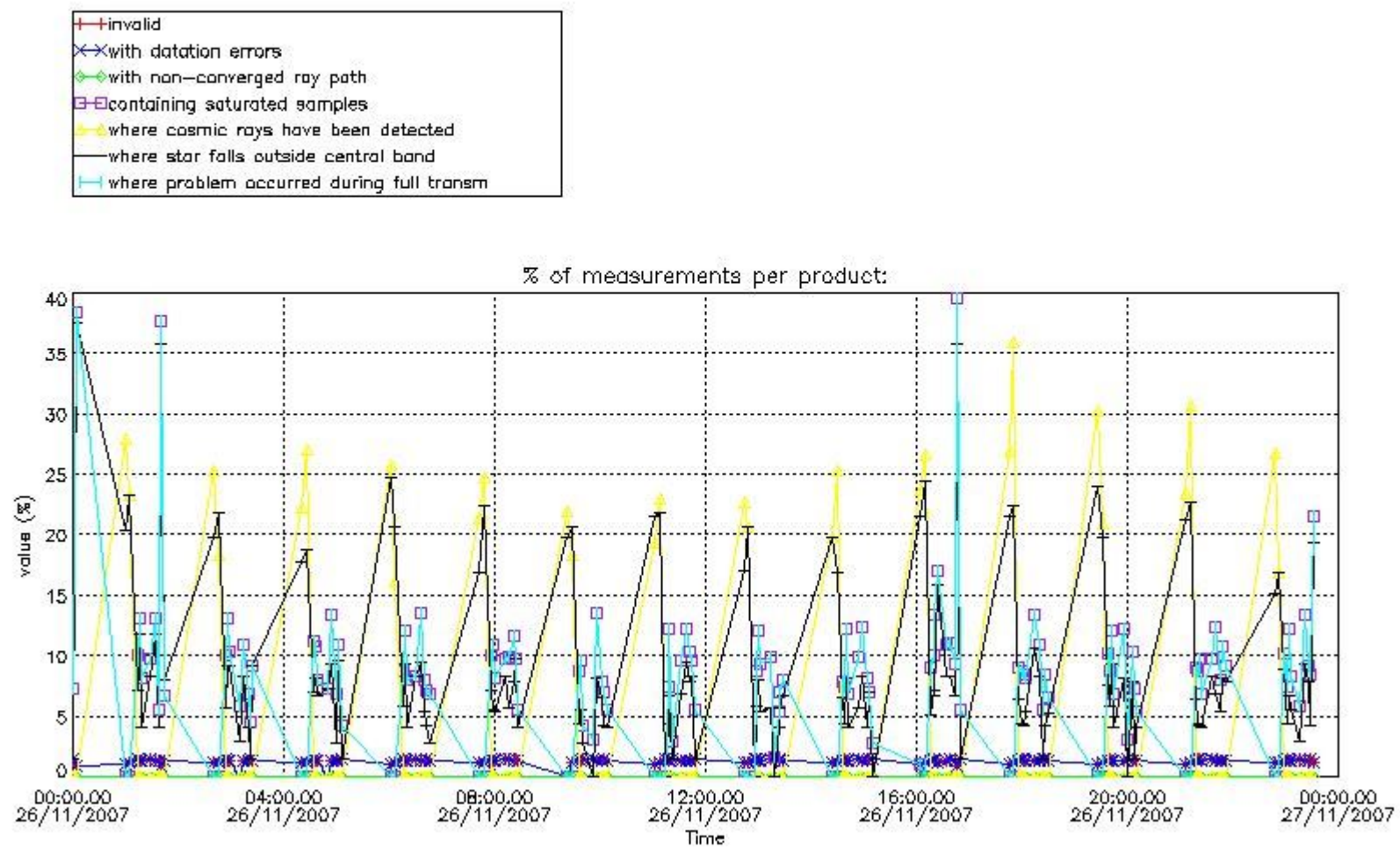
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



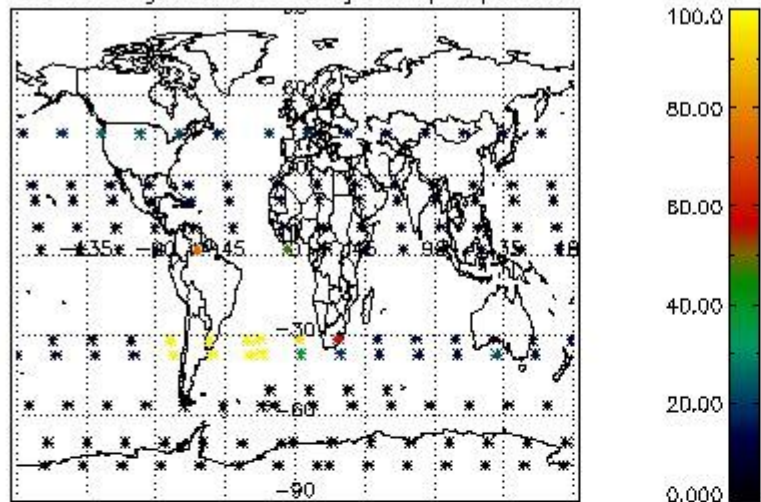
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



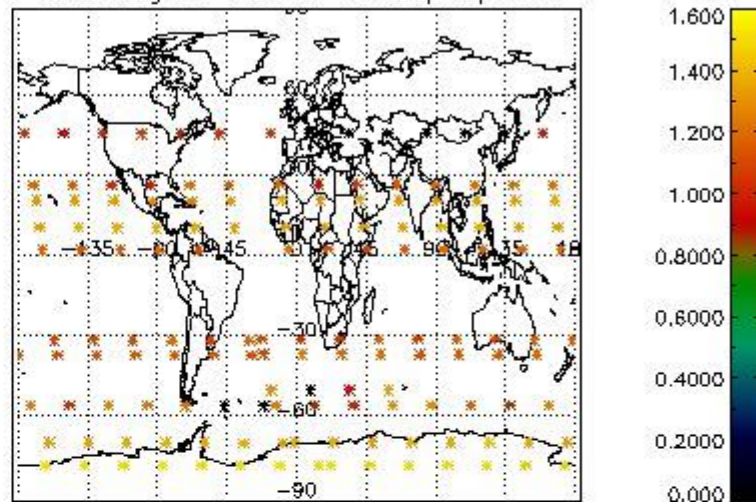
4.2 Plot quality information per product coming from level 1b processing (world map)

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

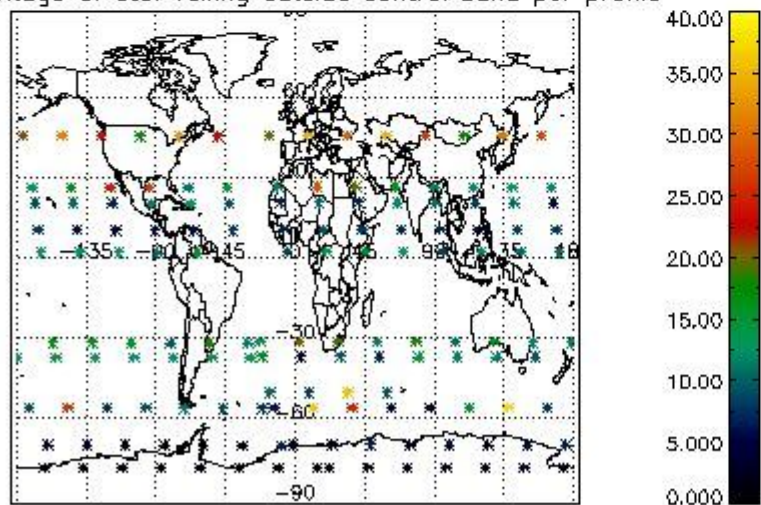
Percentage of cosmic ray hits per profile



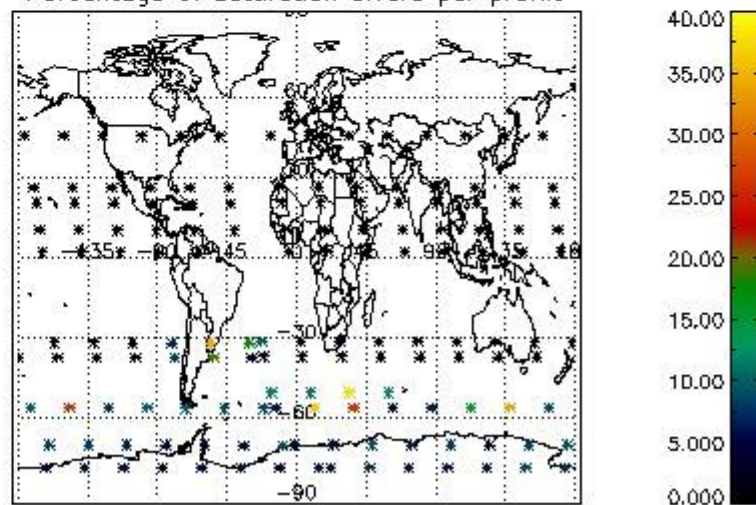
Percentage of datation errors per profile



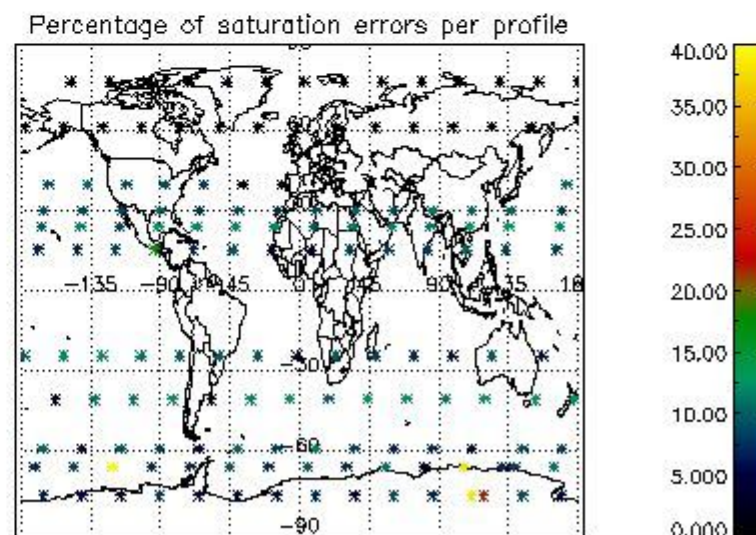
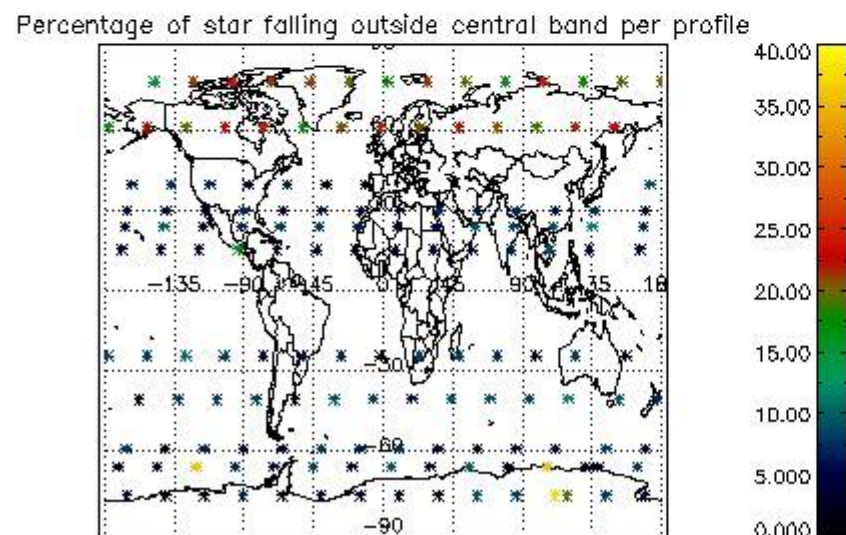
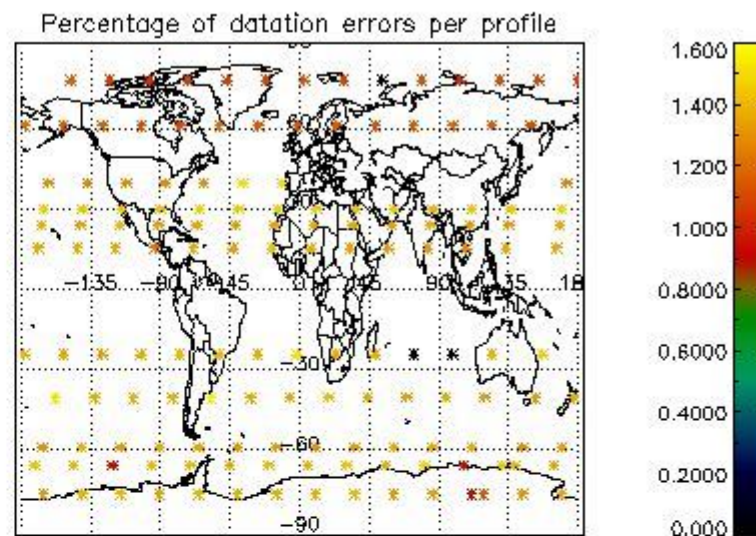
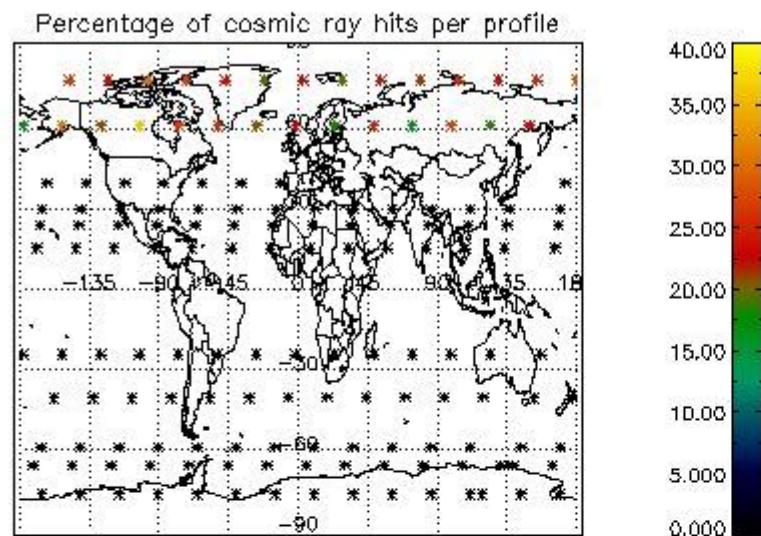
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

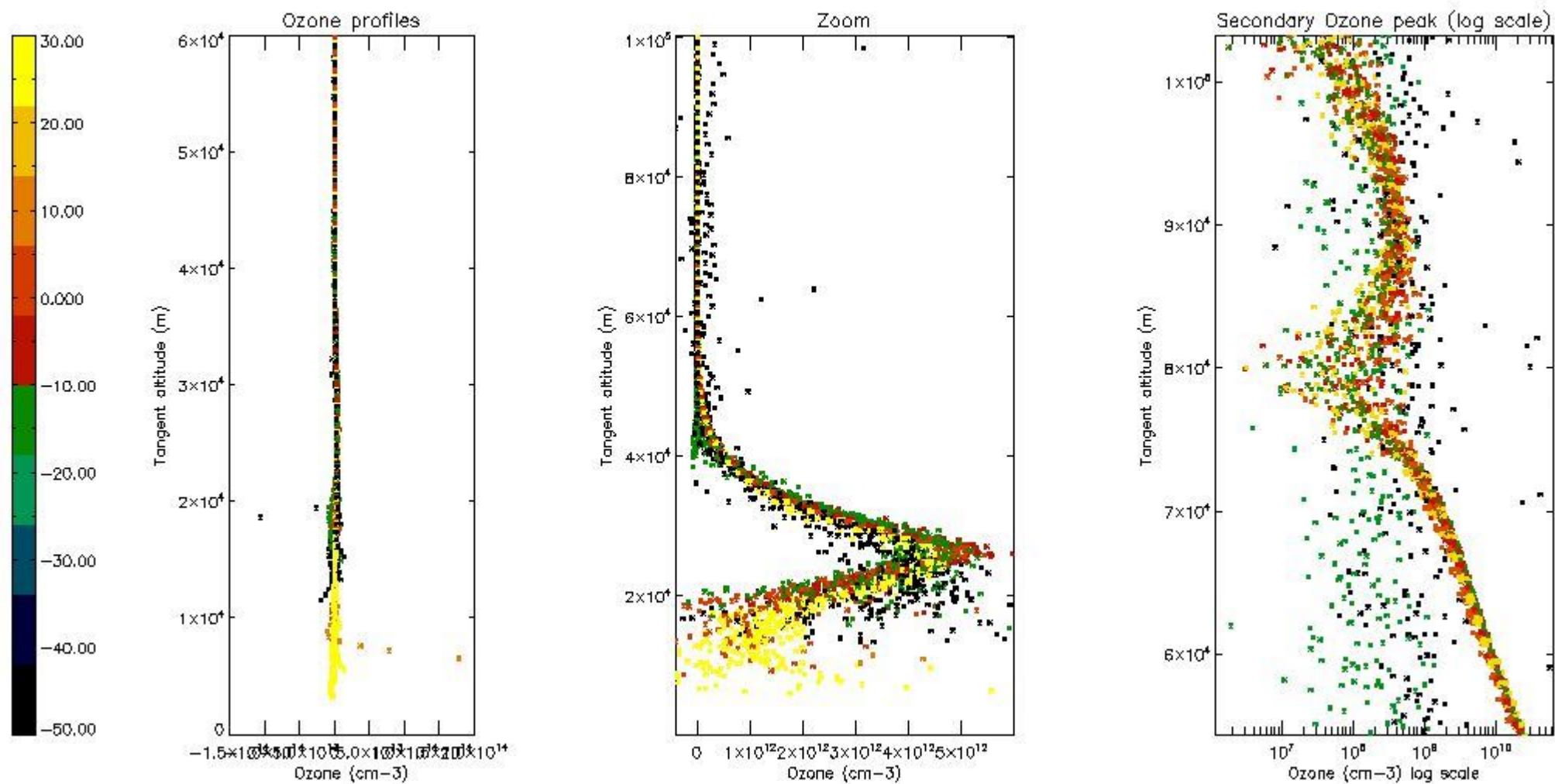
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	31
STD < 20	16

STD < 10	12
STD < 5	6

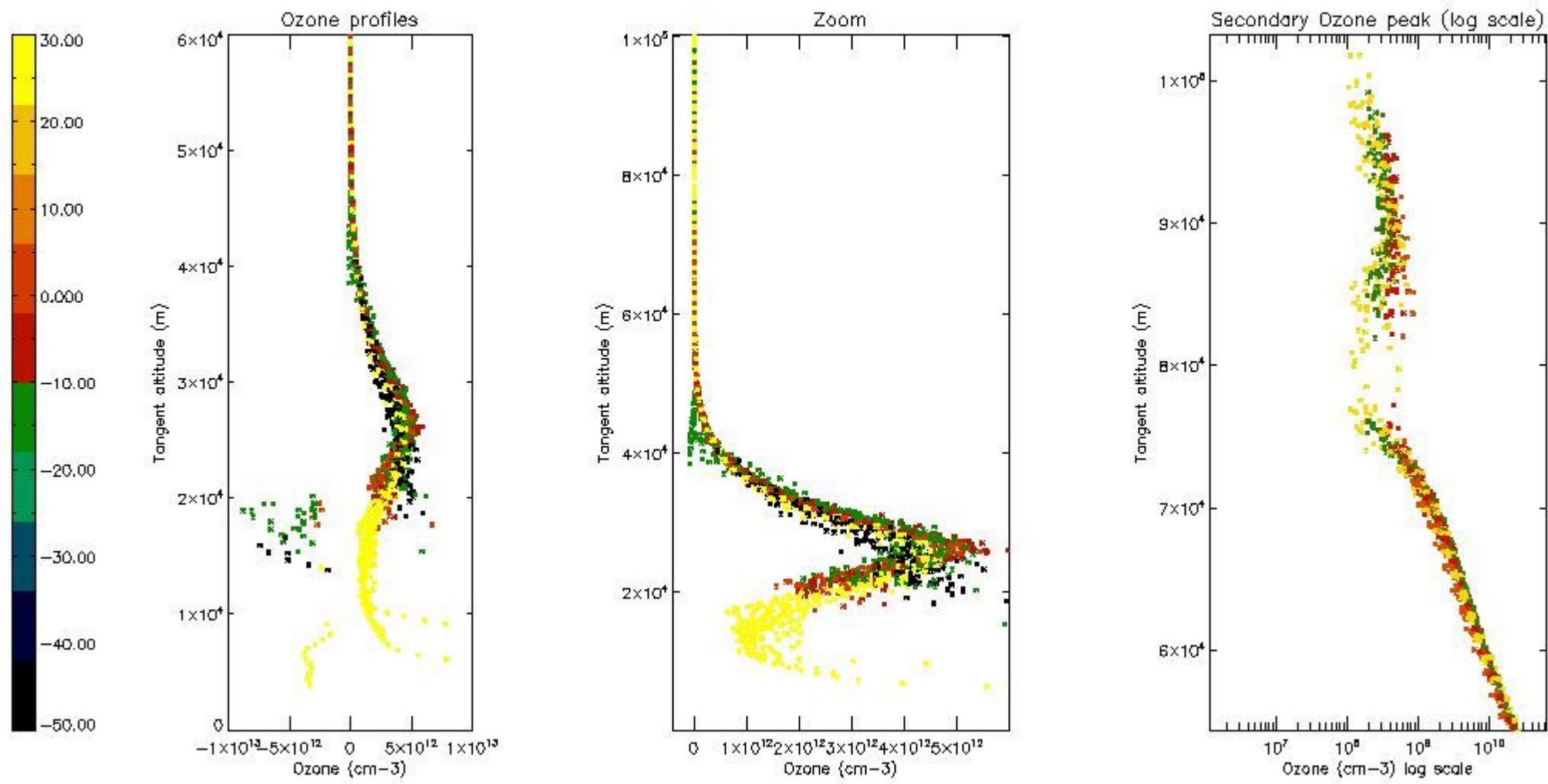
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



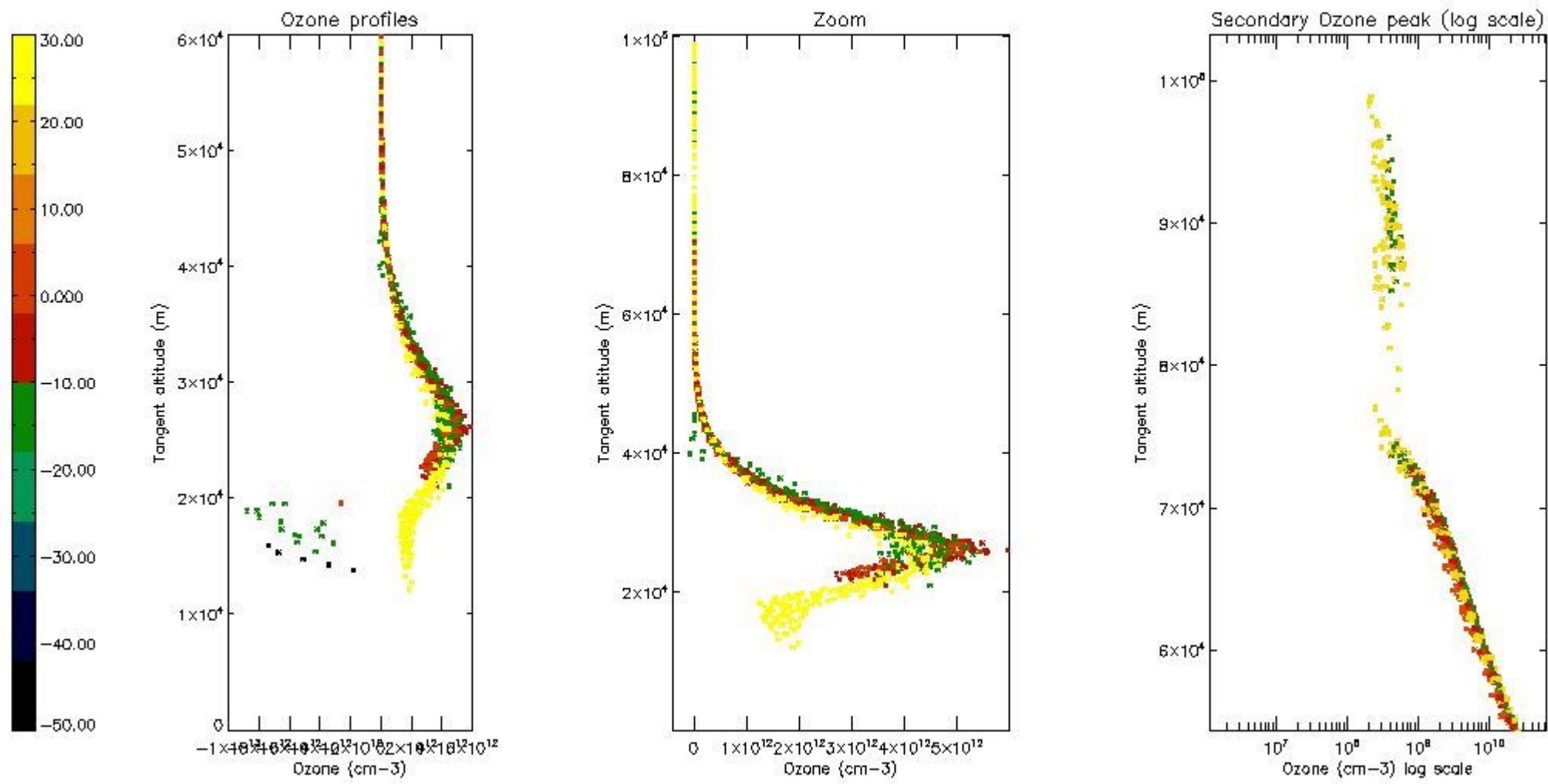
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



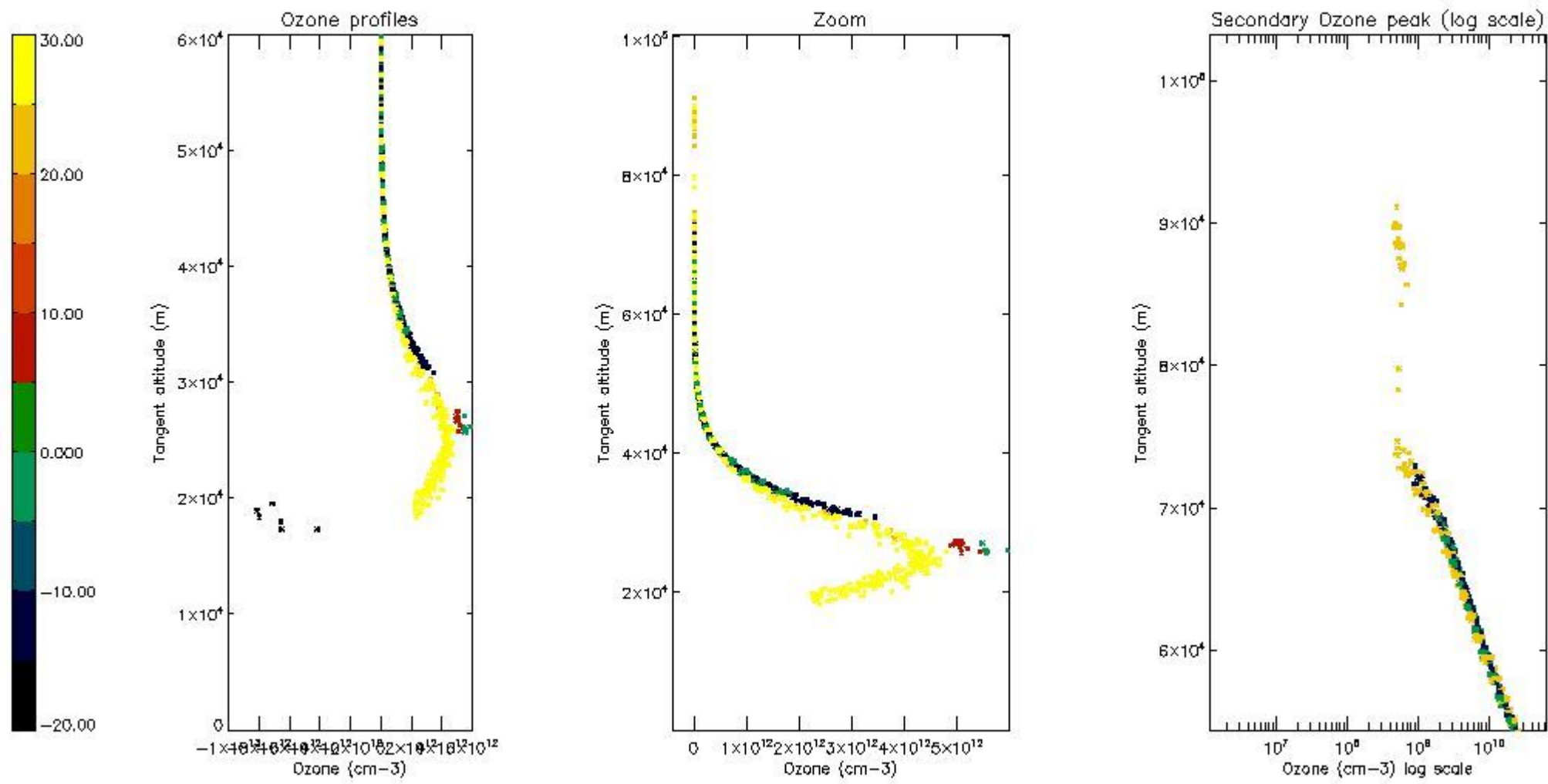
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



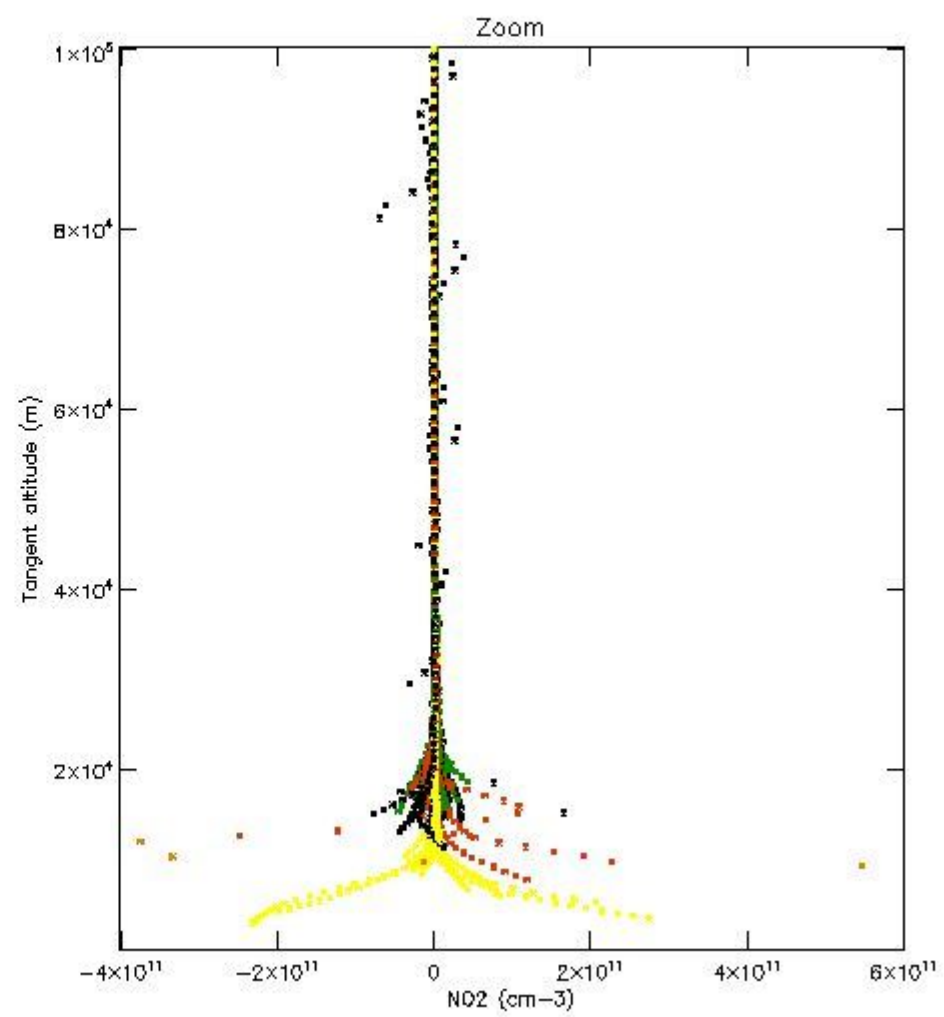
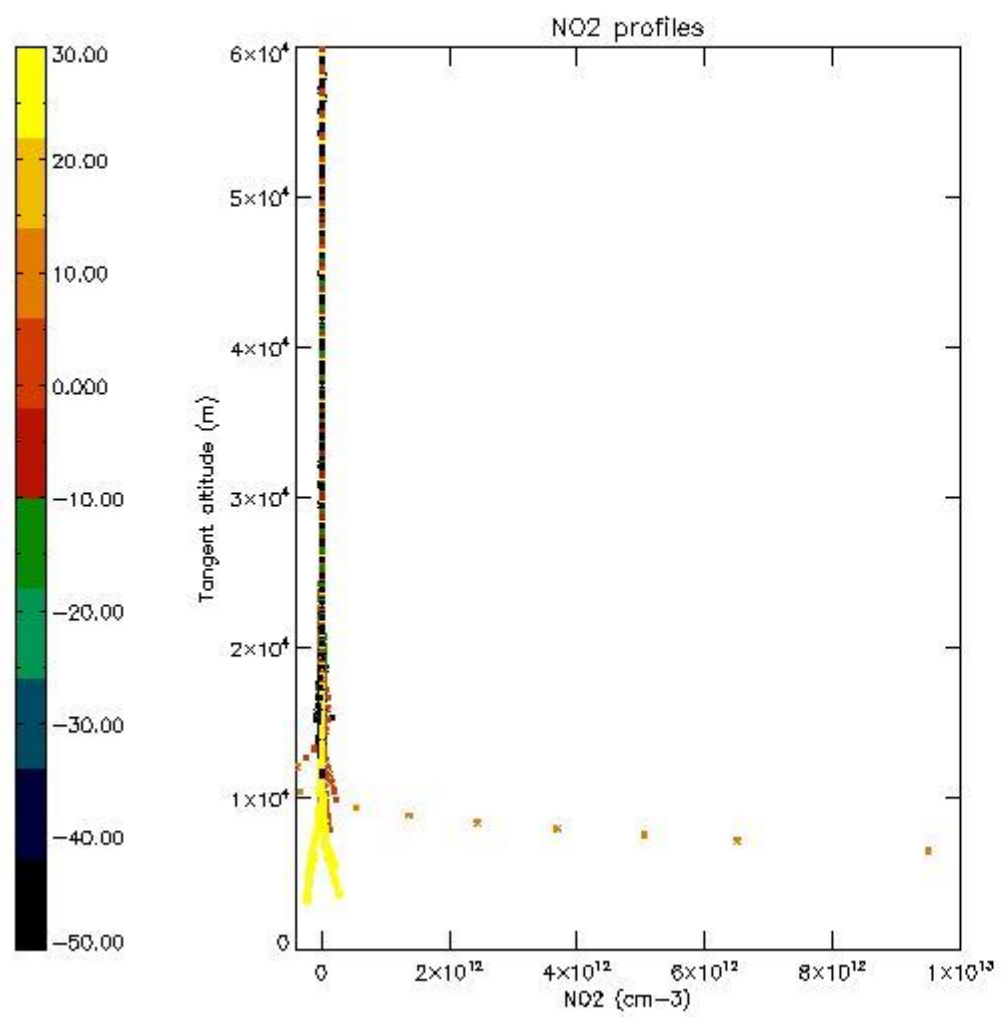
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



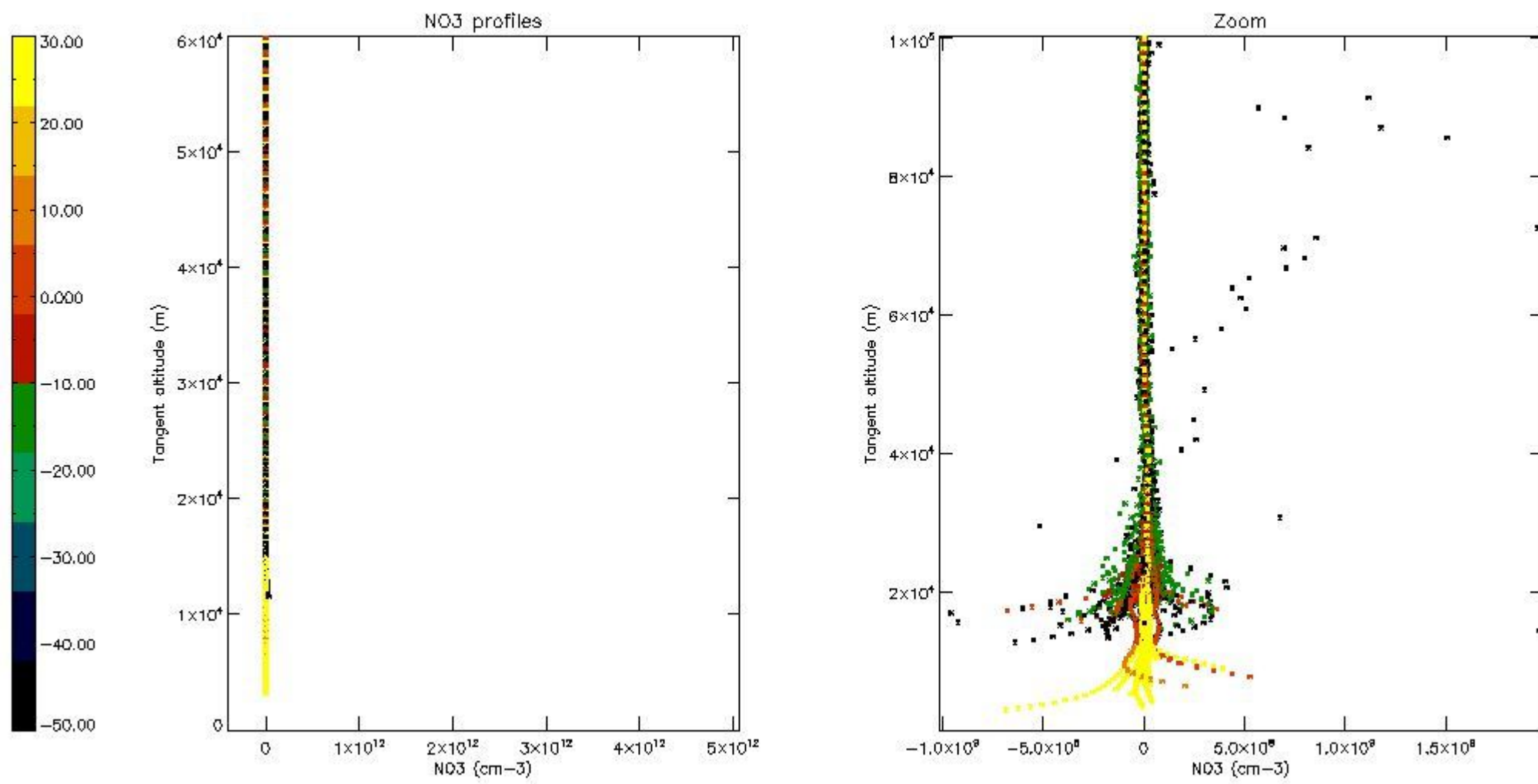
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



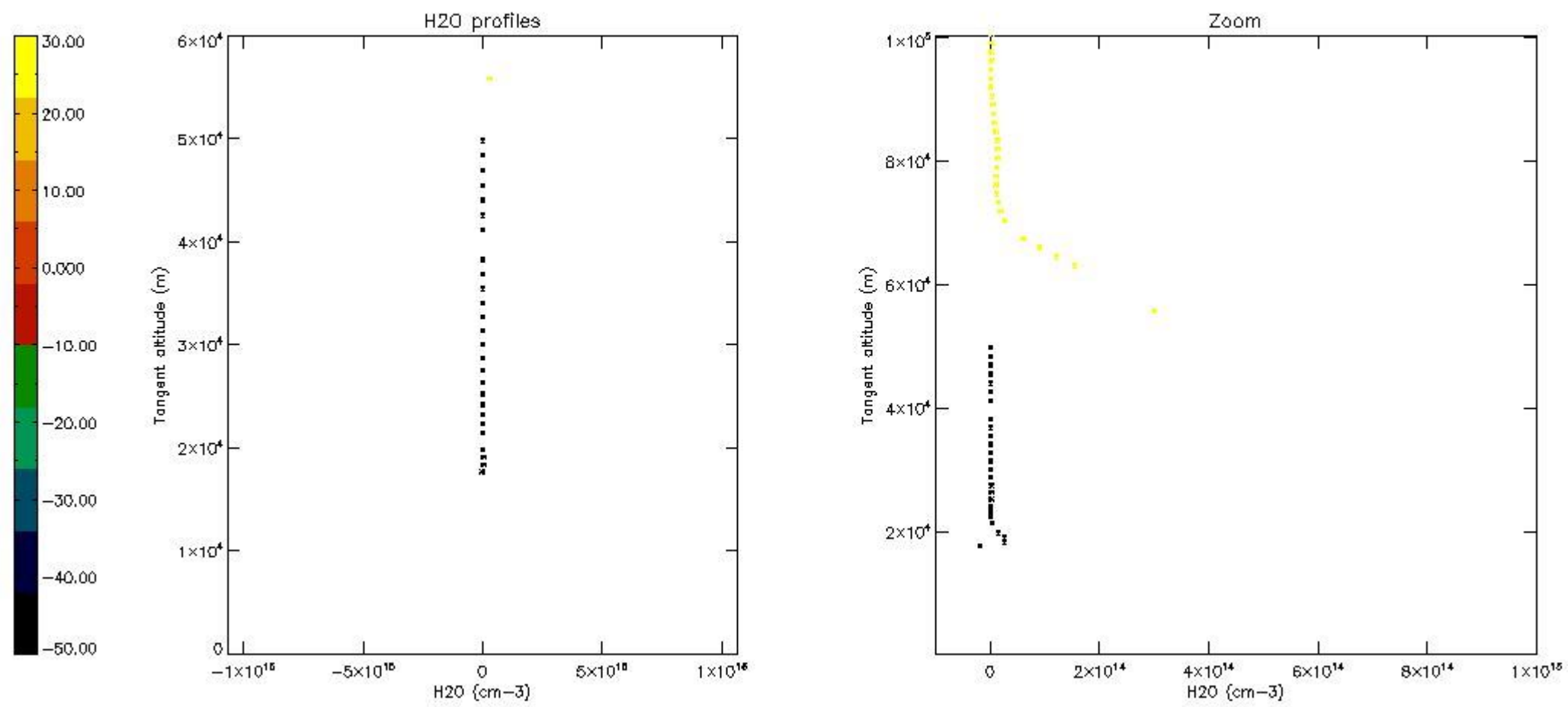
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	26-NOV-2007 00:00:08
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	26-NOV-2007 00:00:08
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	26-NOV-2007 00:00:08

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

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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](#)

161	GOM_NL__2PRFIN20071126_132300_000000372063_00396_30009_4541.N1	26-NOV-2007 13:23:00	Bright	37.000	32	77Eps UMa	1.7630	11000.	74	30009	No
162	GOM_NL__2PRFIN20071126_132456_000000362063_00396_30009_4542.N1	26-NOV-2007 13:24:56	Bright	35.500	39	85Eta UMa	1.8540	24000.	71	30009	No
163	GOM_NL__2PRFIN20071126_132824_000000382063_00396_30009_4543.N1	26-NOV-2007 13:28:24	Bright	37.500	152	12Alp2CVn	2.8900	11000.	75	30009	No
164	GOM_NL__2PRFIN20071126_133340_000000342063_00396_30009_4544.N1	26-NOV-2007 13:33:40	Bright	34.000	111	8Eta Boo	2.6800	6000.0	68	30009	No
165	GOM_NL__2PRFIN20071126_133636_000000372063_00396_30009_4545.N1	26-NOV-2007 13:36:36	Bright	37.000	138	47Eps Vir	2.8280	4700.0	74	30009	No
166	GOM_NL__2PRFIN20071126_134043_000000582063_00396_30009_4546.N1	26-NOV-2007 13:40:43	Bright	58.000	121	29Gam Vir	2.7400	7200.0	116	30009	No
167	GOM_NL__2PRFIN20071126_134609_000000442063_00396_30009_4547.N1	26-NOV-2007 13:46:09	Twilight_stray	44.000	100	4Gam Crv	2.5800	13100.	88	30009	No
168	GOM_NL__2PRFIN20071126_134743_000000452063_00396_30009_4548.N1	26-NOV-2007 13:47:43	Dark	45.000	171	2Eps Crv	3.0010	4250.0	90	30009	No
169	GOM_NL__2PRFIN20071126_135711_000000432063_00397_30010_4546.N1	26-NOV-2007 13:57:11	Dark	42.500	113	Mu Vel	2.6920	5000.0	85	30010	No
170	GOM_NL__2PRFIN20071126_135930_000000362063_00397_30010_4547.N1	26-NOV-2007 13:59:30	Dark	36.000	124	The Car	2.7640	30000.	72	30010	No
171	GOM_NL__2PRFIN20071126_140220_000000382063_00397_30010_4548.N1	26-NOV-2007 14:02:20	Dark	37.500	29	Bet Car	1.6720	10200.	75	30010	No
172	GOM_NL__2PRFIN20071126_140358_000000422063_00397_30010_4549.N1	26-NOV-2007 14:03:58	Dark	42.000	41	Eps Car	1.8600	4100.0	84	30010	No
173	GOM_NL__2PRFIN20071126_140925_000000462063_00397_30010_4550.N1	26-NOV-2007 14:09:25	Dark	45.500	2	Alp Car	-0.73600	7000.0	91	30010	No
174	GOM_NL__2PRFIN20071126_142409_000000462063_00397_30010_4551.N1	26-NOV-2007 14:24:09	Straylight	45.500	165	34Gam Eri	2.9500	3200.0	91	30010	No
175	GOM_NL__2PRFIN20071126_142932_000000422063_00397_30010_4552.N1	26-NOV-2007 14:29:32	Twilight_stray	41.500	94	92Alp Cet	2.5260	3100.0	83	30010	No
176	GOM_NL__2PRFIN20071126_143540_000000392063_00397_30010_4553.N1	26-NOV-2007 14:35:40	Bright	38.500	146	25Eta Tau	2.8730	15200.	77	30010	No
177	GOM_NL__2PRFIN20071126_143826_000000342063_00397_30010_4554.N1	26-NOV-2007 14:38:26	Bright	34.000	173	4Bet Tri	3.0040	8900.0	68	30010	No
178	GOM_NL__2PRFIN20071126_144008_000000372063_00397_30010_4555.N1	26-NOV-2007 14:40:08	Bright	37.000	79	26Bet Per	2.3100	13100.	74	30010	No
179	GOM_NL__2PRFIN20071126_144231_000000372063_00397_30010_4556.N1	26-NOV-2007 14:42:31	Bright	36.500	175	39Del Per	3.0100	19400.	73	30010	No
180	GOM_NL__2PRFIN20071126_145338_000000362063_00397_30010_4557.N1	26-NOV-2007 14:53:38	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	30010	No
181	GOM_NL__2PRFIN20071126_145814_000000372063_00397_30010_4558.N1	26-NOV-2007 14:58:14	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	30010	No
182	GOM_NL__2PRFIN20071126_150336_000000372063_00397_30010_4559.N1	26-NOV-2007 15:03:36	Bright	37.000	32	77Eps UMa	1.7630	11000.	74	30010	No
183	GOM_NL__2PRFIN20071126_150532_000000362063_00397_30010_4560.N1	26-NOV-2007 15:05:32	Bright	35.500	39	85Eta UMa	1.8540	24000.	71	30010	No
184	GOM_NL__2PRFIN20071126_150900_000000362063_00397_30010_4561.N1	26-NOV-2007 15:09:00	Bright	35.500	152	12Alp2CVn	2.8900	11000.	71	30010	No
185	GOM_NL__2PRFIN20071126_151416_000000352063_00397_30010_4562.N1	26-NOV-2007 15:14:16	Bright	34.500	111	8Eta Boo	2.6800	6000.0	69	30010	No
186	GOM_NL__2PRFIN20071126_151712_000000352063_00397_30010_4563.N1	26-NOV-2007 15:17:12	Bright	35.000	138	47Eps Vir	2.8280	4700.0	70	30010	No
187	GOM_NL__2PRFIN20071126_152120_000000432063_00397_30010_4564.N1	26-NOV-2007 15:21:20	Bright	43.000	121	29Gam Vir	2.7400	7200.0	86	30010	No
188	GOM_NL__2PRFIN20071126_152645_000000442063_00397_30010_4565.N1	26-NOV-2007 15:26:45	Twilight_stray	43.500	100	4Gam Crv	2.5800	13100.	87	30010	No
189	GOM_NL__2PRFIN20071126_152820_000000432063_00397_30010_4566.N1	26-NOV-2007 15:28:20	Dark	43.000	171	2Eps Crv	3.0010	4250.0	86	30010	No
190	GOM_NL__2PRFIN20071126_153748_000000422063_00398_30011_4562.N1	26-NOV-2007 15:37:48	Dark	42.000	113	Mu Vel	2.6920	5000.0	84	30011	No
191	GOM_NL__2PRFIN20071126_154006_000000372063_00398_30011_4563.N1	26-NOV-2007 15:40:06	Dark	36.500	124	The Car	2.7640	30000.	73	30011	No
192	GOM_NL__2PRFIN20071126_154257_000000382063_00398_30011_4564.N1	26-NOV-2007 15:42:57	Dark	38.000	29	Bet Car	1.6720	10200.	76	30011	No
193	GOM_NL__2PRFIN20071126_154435_000000432063_00398_30011_4565.N1	26-NOV-2007 15:44:35	Dark	42.500	41	Eps Car	1.8600	4100.0	85	30011	No
194	GOM_NL__2PRFIN20071126_155002_000000512063_00398_30011_4566.N1	26-NOV-2007 15:50:02	Dark	51.000	2	Alp Car	-0.73600	7000.0	102	30011	No
195	GOM_NL__2PRFIN20071126_160445_000000472063_00398_30011_4567.N1	26-NOV-2007 16:04:45	Straylight	46.500	165	34Gam Eri	2.9500	3200.0	93	30011	No
196	GOM_NL__2PRFIN20071126_161008_000000452063_00398_30011_4568.N1	26-NOV-2007 16:10:08	Twilight_stray	45.000	94	92Alp Cet	2.5260	3100.0	90	30011	No
197	GOM_NL__2PRFIN20071126_161615_000000392063_00398_30011_4569.N1	26-NOV-2007 16:16:15	Bright	39.000	146	25Eta Tau	2.8730	15200.	78	30011	No
198	GOM_NL__2PRFIN20071126_161902_000000352063_00398_30011_4570.N1	26-NOV-2007 16:19:02	Bright	35.000	173	4Bet Tri	3.0040	8900.0	70	30011	No
199	GOM_NL__2PRFIN20071126_162044_000000382063_00398_30011_4571.N1	26-NOV-2007 16:20:44	Bright	37.500	79	26Bet Per	2.3100	13100.	75	30011	No
200	GOM_NL__2PRFIN20071126_162307_000000412063_00398_30011_4572.N1	26-NOV-2007 16:23:07	Bright	41.000	175	39Del Per	3.0100	19400.	82	30011	No
201	GOM_NL__2PRFIN20071126_163414_000000372063_00398_30011_4573.N1	26-NOV-2007 16:34:14	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	30011	No
202	GOM_NL__2PRFIN20071126_163850_000000362063_00398_30011_4574.N1	26-NOV-2007 16:38:50	Bright	36.000	60	7Bet UMi	2.0810	3950.0	72	30011	No
203	GOM_NL__2PRFIN20071126_164412_000000382063_00398_30011_4575.N1	26-NOV-2007 16:44:12	Bright	37.500	32	77Eps UMa	1.7630	11000.	75	30011	No
204	GOM_NL__2PRFIN20071126_164608_000000532063_00398_30011_4576.N1	26-NOV-2007 16:46:08	Bright	53.000	39	85Eta UMa	1.8540	24000.	106	30011	No
205	GOM_NL__2PRFIN20071126_164936_000000362063_00398_30011_4577.N1	26-NOV-2007 16:49:36	Bright	36.000	152	12Alp2CVn	2.8900	11000.	72	30011	No
206	GOM_NL__2PRFIN20071126_165452_000000342063_00398_30011_4578.N1	26-NOV-2007 16:54:52	Bright	33.500	111	8Eta Boo	2.6800	6000.0	67	30011	No
207	GOM_NL__2PRFIN20071126_165748_000000372063_00398_30011_4579.N1	26-NOV-2007 16:57:48	Bright	37.000	138	47Eps Vir	2.8280	4700.0	74	30011	No
208	GOM_NL__2PRFIN20071126_170156_000000392063_00398_30011_4580.N1	26-NOV-2007 17:01:56	Bright	39.000	121	29Gam Vir	2.7400	7200.0	78	30011	No
209	GOM_NL__2PRFIN20071126_170722_000000452063_00398_30011_4581.N1	26-NOV-2007 17:07:22	Twilight_stray	45.000	100	4Gam Crv	2.5800	13100.	90	30011	No
210	GOM_NL__2PRFIN20071126_170856_000000472063_00398_30011_4582.N1	26-NOV-2007 17:08:56	Dark	47.000	171	2Eps Crv	3.0010	4250.0	94	30011	No
211	GOM_NL__2PRFIN20071126_171825_000000442063_00399_30012_4572.N1	26-NOV-2007 17:18:25	Dark	43.500	113	Mu Vel	2.6920	5000.0	87	30012	No
212	GOM_NL__2PRFIN20071126_172043_000000382063_00399_30012_4573.N1	26-NOV-2007 17:20:43	Dark	37.500	124	The Car	2.7640	30000.	75	30012	No
213	GOM_NL__2PRFIN20071126_172333_000000382063_00399_30012_4574.N1	26-NOV-2007 17:23:33	Dark	38.000	29	Bet Car	1.6720	10200.	76	30012	No
214	GOM_NL__2PRFIN20071126_172511_000000442063_00399_30012_4575.N1	26-NOV-2007 17:25:11	Dark	44.000	41	Eps Car	1.8600	4100.0	88	30012	No
215	GOM_NL__2PRFIN20071126_173038_000000592063_00399_30012_4576.N1	26-NOV-2007 17:30:38	Dark	58.500	2	Alp Car	-0.73600	7000.0	117	30012	No
216	GOM_NL__2PRFIN20071126_174521_000000472063_00399_30012_4577.N1	26-NOV-2007 17:45:21	Straylight	46.500	165	34Gam Eri	2.9500	3200.0	93	30012	No
217	GOM_NL__2PRFIN20071126_175044_000000452063_00399_30012_4578.N1	26-NOV-2007 17:50:44	Twilight_stray	44.500	94	92Alp Cet	2.5260	3100.0	89	30012	No
218	GOM_NL__2PRFIN20071126_175651_000000392063_00399_30012_4579.N1	26-NOV-2007 17:56:51	Bright	39.000	146	25Eta Tau	2.8730	15200.	78	30012	No
219	GOM_NL__2PRFIN20071126_175938_000000352063_00399_30012_4580.N1	26-NOV-2007 17:59:38	Bright	34.500	173	4Bet Tri	3.0040	8900.0	69	30012	No

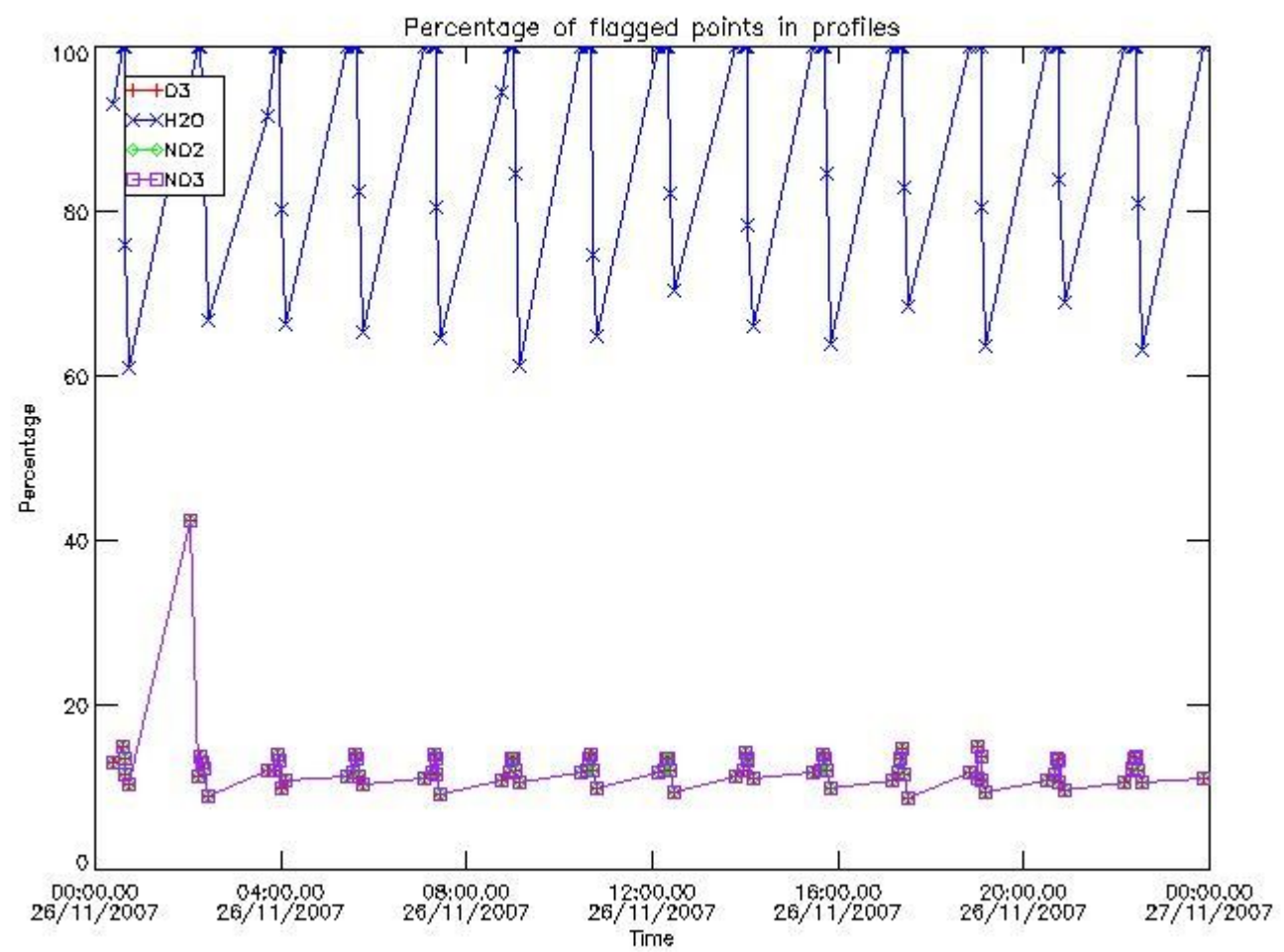
220	GOM_NL__2PRFIN20071126_180120_000000362063_00399_30012_4581.N1	26-NOV-2007 18:01:20	Bright	35.500	79	26Bet Per	2.3100	13100.	71	30012	No
221	GOM_NL__2PRFIN20071126_180343_000000372063_00399_30012_4582.N1	26-NOV-2007 18:03:43	Bright	37.000	175	39Del Per	3.0100	19400.	74	30012	No
222	GOM_NL__2PRFIN20071126_181450_000000382063_00399_30012_4583.N1	26-NOV-2007 18:14:50	Bright	37.500	49	1Alp UMi	1.9900	6300.0	75	30012	No
223	GOM_NL__2PRFIN20071126_181926_000000372063_00399_30012_4584.N1	26-NOV-2007 18:19:26	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	30012	No
224	GOM_NL__2PRFIN20071126_182448_000000362063_00399_30012_4585.N1	26-NOV-2007 18:24:48	Bright	36.000	32	77Eps UMa	1.7630	11000.	72	30012	No
225	GOM_NL__2PRFIN20071126_182644_000000362063_00399_30012_4586.N1	26-NOV-2007 18:26:44	Bright	35.500	39	85Eta UMa	1.8540	24000.	71	30012	No
226	GOM_NL__2PRFIN20071126_183012_000000382063_00399_30012_4587.N1	26-NOV-2007 18:30:12	Bright	38.000	152	12Alp2CVn	2.8900	11000.	76	30012	No
227	GOM_NL__2PRFIN20071126_183529_000000342063_00399_30012_4588.N1	26-NOV-2007 18:35:29	Bright	33.500	111	8Eta Boo	2.6800	6000.0	67	30012	No
228	GOM_NL__2PRFIN20071126_183825_000000372063_00399_30012_4589.N1	26-NOV-2007 18:38:25	Bright	37.000	138	47Eps Vir	2.8280	4700.0	74	30012	No
229	GOM_NL__2PRFIN20071126_184233_000000392063_00399_30012_4590.N1	26-NOV-2007 18:42:33	Bright	38.500	121	29Gam Vir	2.7400	7200.0	77	30012	No
230	GOM_NL__2PRFIN20071126_184410_000000382063_00399_30012_4591.N1	26-NOV-2007 18:44:10	Bright	37.500	15	67Alp Vir	0.97600	28000.	75	30012	No
231	GOM_NL__2PRFIN20071126_184759_000000422063_00399_30012_4592.N1	26-NOV-2007 18:47:59	Twilight	41.500	100	4Gam Crv	2.5800	13100.	83	30012	No
232	GOM_NL__2PRFIN20071126_184933_000000442063_00399_30012_4593.N1	26-NOV-2007 18:49:33	Dark	43.500	171	2Eps Crv	3.0010	4250.0	87	30012	No
233	GOM_NL__2PRFIN20071126_185901_000000462063_00400_30013_4593.N1	26-NOV-2007 18:59:01	Dark	45.500	113	Mu Vel	2.6920	5000.0	91	30013	No
234	GOM_NL__2PRFIN20071126_190119_000000382063_00400_30013_4594.N1	26-NOV-2007 19:01:19	Dark	37.500	124	The Car	2.7640	30000.	75	30013	No
235	GOM_NL__2PRFIN20071126_190409_000000372063_00400_30013_4595.N1	26-NOV-2007 19:04:09	Dark	37.000	29	Bet Car	1.6720	10200.	74	30013	No
236	GOM_NL__2PRFIN20071126_190548_000000472063_00400_30013_4596.N1	26-NOV-2007 19:05:48	Dark	46.500	41	Eps Car	1.8600	4100.0	93	30013	No
237	GOM_NL__2PRFIN20071126_191115_000000542063_00400_30013_4597.N1	26-NOV-2007 19:11:15	Dark	53.500	2	Alp Car	-0.73600	7000.0	107	30013	No
238	GOM_NL__2PRFIN20071126_192557_000000482063_00400_30013_4598.N1	26-NOV-2007 19:25:57	Straylight	48.000	165	34Gam Eri	2.9500	3200.0	96	30013	No
239	GOM_NL__2PRFIN20071126_193120_000000432063_00400_30013_4599.N1	26-NOV-2007 19:31:20	Twilight	43.000	94	92Alp Cet	2.5260	3100.0	86	30013	No
240	GOM_NL__2PRFIN20071126_193727_000000402063_00400_30013_4600.N1	26-NOV-2007 19:37:27	Bright	39.500	146	25Eta Tau	2.8730	15200.	79	30013	No
241	GOM_NL__2PRFIN20071126_194015_000000352063_00400_30013_4601.N1	26-NOV-2007 19:40:15	Bright	34.500	173	4Bet Tri	3.0040	8900.0	69	30013	No
242	GOM_NL__2PRFIN20071126_194156_000000382063_00400_30013_4602.N1	26-NOV-2007 19:41:56	Bright	37.500	79	26Bet Per	2.3100	13100.	75	30013	No
243	GOM_NL__2PRFIN20071126_194418_000000372063_00400_30013_4603.N1	26-NOV-2007 19:44:18	Bright	36.500	175	39Del Per	3.0100	19400.	73	30013	No
244	GOM_NL__2PRFIN20071126_195526_000000372063_00400_30013_4604.N1	26-NOV-2007 19:55:26	Bright	37.000	49	1Alp UMi	1.9900	6300.0	74	30013	No
245	GOM_NL__2PRFIN20071126_200002_000000332063_00400_30013_4605.N1	26-NOV-2007 20:00:02	Bright	33.000	60	7Bet UMi	2.0810	3950.0	66	30013	No
246	GOM_NL__2PRFIN20071126_200524_000000392063_00400_30013_4606.N1	26-NOV-2007 20:05:24	Bright	38.500	32	77Eps UMa	1.7630	11000.	77	30013	No
247	GOM_NL__2PRFIN20071126_200720_000000352063_00400_30013_4607.N1	26-NOV-2007 20:07:20	Bright	34.500	39	85Eta UMa	1.8540	24000.	69	30013	No
248	GOM_NL__2PRFIN20071126_201048_000000372063_00400_30013_4608.N1	26-NOV-2007 20:10:48	Bright	37.000	152	12Alp2CVn	2.8900	11000.	74	30013	No
249	GOM_NL__2PRFIN20071126_201605_000000342063_00400_30013_4609.N1	26-NOV-2007 20:16:05	Bright	33.500	111	8Eta Boo	2.6800	6000.0	67	30013	No
250	GOM_NL__2PRFIN20071126_201901_000000382063_00400_30013_4610.N1	26-NOV-2007 20:19:01	Bright	38.000	138	47Eps Vir	2.8280	4700.0	76	30013	No
251	GOM_NL__2PRFIN20071126_202309_000000502063_00400_30013_4611.N1	26-NOV-2007 20:23:09	Bright	50.000	121	29Gam Vir	2.7400	7200.0	100	30013	No
252	GOM_NL__2PRFIN20071126_202447_000000532063_00400_30013_4612.N1	26-NOV-2007 20:24:47	Bright	53.000	15	67Alp Vir	0.97600	28000.	106	30013	No
253	GOM_NL__2PRFIN20071126_202835_000000432063_00400_30013_4613.N1	26-NOV-2007 20:28:35	Twilight	42.500	100	4Gam Crv	2.5800	13100.	85	30013	No
254	GOM_NL__2PRFIN20071126_203010_000000482063_00400_30013_4614.N1	26-NOV-2007 20:30:10	Dark	47.500	171	2Eps Crv	3.0010	4250.0	95	30013	No
255	GOM_NL__2PRFIN20071126_203938_000000452063_00401_30014_4602.N1	26-NOV-2007 20:39:38	Dark	44.500	113	Mu Vel	2.6920	5000.0	89	30014	No
256	GOM_NL__2PRFIN20071126_204156_000000382063_00401_30014_4603.N1	26-NOV-2007 20:41:56	Dark	37.500	124	The Car	2.7640	30000.	75	30014	No
257	GOM_NL__2PRFIN20071126_204446_000000392063_00401_30014_4604.N1	26-NOV-2007 20:44:46	Dark	38.500	29	Bet Car	1.6720	10200.	77	30014	No
258	GOM_NL__2PRFIN20071126_204624_000000532063_00401_30014_4605.N1	26-NOV-2007 20:46:24	Dark	53.000	41	Eps Car	1.8600	4100.0	106	30014	No
259	GOM_NL__2PRFIN20071126_205151_000000582063_00401_30014_4606.N1	26-NOV-2007 20:51:51	Dark	58.000	2	Alp Car	-0.73600	7000.0	116	30014	No
260	GOM_NL__2PRFIN20071126_210633_000000472063_00401_30014_4607.N1	26-NOV-2007 21:06:33	Straylight	47.000	165	34Gam Eri	2.9500	3200.0	94	30014	No
261	GOM_NL__2PRFIN20071126_211156_000000442063_00401_30014_4608.N1	26-NOV-2007 21:11:56	Twilight	44.000	94	92Alp Cet	2.5260	3100.0	88	30014	No
262	GOM_NL__2PRFIN20071126_211802_000000392063_00401_30014_4609.N1	26-NOV-2007 21:18:02	Bright	39.000	146	25Eta Tau	2.8730	15200.	78	30014	No
263	GOM_NL__2PRFIN20071126_212051_000000352063_00401_30014_4610.N1	26-NOV-2007 21:20:51	Bright	34.500	173	4Bet Tri	3.0040	8900.0	69	30014	No
264	GOM_NL__2PRFIN20071126_212231_000000362063_00401_30014_4611.N1	26-NOV-2007 21:22:31	Bright	36.000	79	26Bet Per	2.3100	13100.	72	30014	No
265	GOM_NL__2PRFIN20071126_212454_000000372063_00401_30014_4612.N1	26-NOV-2007 21:24:54	Bright	36.500	175	39Del Per	3.0100	19400.	73	30014	No
266	GOM_NL__2PRFIN20071126_213602_000000362063_00401_30014_4613.N1	26-NOV-2007 21:36:02	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	30014	No
267	GOM_NL__2PRFIN20071126_214038_000000372063_00401_30014_4614.N1	26-NOV-2007 21:40:38	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	30014	No
268	GOM_NL__2PRFIN20071126_214559_000000382063_00401_30014_4615.N1	26-NOV-2007 21:45:59	Bright	37.500	32	77Eps UMa	1.7630	11000.	75	30014	No
269	GOM_NL__2PRFIN20071126_214756_000000372063_00401_30014_4616.N1	26-NOV-2007 21:47:56	Bright	37.000	39	85Eta UMa	1.8540	24000.	74	30014	No
270	GOM_NL__2PRFIN20071126_215124_000000382063_00401_30014_4617.N1	26-NOV-2007 21:51:24	Bright	38.000	152	12Alp2CVn	2.8900	11000.	76	30014	No
271	GOM_NL__2PRFIN20071126_215641_000000342063_00401_30014_4618.N1	26-NOV-2007 21:56:41	Bright	34.000	111	8Eta Boo	2.6800	6000.0	68	30014	No
272	GOM_NL__2PRFIN20071126_215937_000000372063_00401_30014_4619.N1	26-NOV-2007 21:59:37	Bright	36.500	138	47Eps Vir	2.8280	4700.0	73	30014	No
273	GOM_NL__2PRFIN20071126_220345_000000582063_00401_30014_4620.N1	26-NOV-2007 22:03:45	Bright	58.000	121	29Gam Vir	2.7400	7200.0	116	30014	No
274	GOM_NL__2PRFIN20071126_220523_000000372063_00401_30014_4621.N1	26-NOV-2007 22:05:23	Bright	37.000	15	67Alp Vir	0.97600	28000.	74	30014	No
275	GOM_NL__2PRFIN20071126_220912_000000412063_00401_30014_4622.N1	26-NOV-2007 22:09:12	Twilight	40.500	100	4Gam Crv	2.5800	13100.	81	30014	No
276	GOM_NL__2PRFIN20071126_221046_000000492063_00401_30014_4623.N1	26-NOV-2007 22:10:46	Dark	48.500	171	2Eps Crv	3.0010	4250.0	97	30014	No
277	GOM_NL__2PRFIN20071126_222014_000000422063_00402_30015_4619.N1	26-NOV-2007 22:20:14	Dark	41.500	113	Mu Vel	2.6920	5000.0	83	30015	No
278	GOM_NL__2PRFIN20071126_222232_000000382063_00402_30015_4620.N1	26-NOV-2007 22:22:32	Dark	37.500	124	The Car	2.7640	30000.	75	30015	No

279	GOM_NL__2PRFIN20071126_222522_000000372063_00402_30015_4621.N1	26-NOV-2007 22:25:22	Dark	37.000	29	Bet Car	1.6720	10200.	74	30015	No
280	GOM_NL__2PRFIN20071126_222701_000000432063_00402_30015_4622.N1	26-NOV-2007 22:27:01	Dark	42.500	41	Eps Car	1.8600	4100.0	85	30015	No
281	GOM_NL__2PRFIN20071126_223228_000000482063_00402_30015_4623.N1	26-NOV-2007 22:32:28	Dark	48.000	2	Alp Car	-0.73600	7000.0	96	30015	No
282	GOM_NL__2PRFIN20071126_224709_000000432063_00402_30015_4624.N1	26-NOV-2007 22:47:09	Straylight	43.000	165	34Gam Eri	2.9500	3200.0	86	30015	No
283	GOM_NL__2PRFIN20071126_225232_000000422063_00402_30015_4625.N1	26-NOV-2007 22:52:32	Tw_i_and_stray	41.500	94	92Alp Cet	2.5260	3100.0	83	30015	No
284	GOM_NL__2PRFIN20071126_225838_000000402063_00402_30015_4626.N1	26-NOV-2007 22:58:38	Bright	39.500	146	25Eta Tau	2.8730	15200.	79	30015	No
285	GOM_NL__2PRFIN20071126_230126_000000342063_00402_30015_4627.N1	26-NOV-2007 23:01:26	Bright	34.000	173	4Bet Tri	3.0040	8900.0	68	30015	No
286	GOM_NL__2PRFIN20071126_230307_000000372063_00402_30015_4628.N1	26-NOV-2007 23:03:07	Bright	37.000	79	26Bet Per	2.3100	13100.	74	30015	No
287	GOM_NL__2PRFIN20071126_230529_000000372063_00402_30015_4629.N1	26-NOV-2007 23:05:29	Bright	36.500	175	39Del Per	3.0100	19400.	73	30015	No
288	GOM_NL__2PRFIN20071126_231638_000000342063_00402_30015_4630.N1	26-NOV-2007 23:16:38	Bright	34.000	49	1Alp UMi	1.9900	6300.0	68	30015	No
289	GOM_NL__2PRFIN20071126_232114_000000382063_00402_30015_4631.N1	26-NOV-2007 23:21:14	Bright	37.500	60	7Bet UMi	2.0810	3950.0	75	30015	No
290	GOM_NL__2PRFIN20071126_232635_000000392063_00402_30015_4632.N1	26-NOV-2007 23:26:35	Bright	38.500	32	77Eps UMa	1.7630	11000.	77	30015	No
291	GOM_NL__2PRFIN20071126_232832_000000362063_00402_30015_4633.N1	26-NOV-2007 23:28:32	Bright	35.500	39	85Eta UMa	1.8540	24000.	71	30015	No
292	GOM_NL__2PRFIN20071126_233200_000000442063_00402_30015_4634.N1	26-NOV-2007 23:32:00	Bright	44.000	152	12Alp2CVn	2.8900	11000.	88	30015	No
293	GOM_NL__2PRFIN20071126_233717_000000342063_00402_30015_4635.N1	26-NOV-2007 23:37:17	Bright	33.500	111	8Eta Boo	2.6800	6000.0	67	30015	No
294	GOM_NL__2PRFIN20071126_234013_000000372063_00402_30015_4636.N1	26-NOV-2007 23:40:13	Bright	36.500	138	47Eps Vir	2.8280	4700.0	73	30015	No
295	GOM_NL__2PRFIN20071126_234422_000000402063_00402_30015_4637.N1	26-NOV-2007 23:44:22	Bright	40.000	121	29Gam Vir	2.7400	7200.0	80	30015	No
296	GOM_NL__2PRFIN20071126_234559_000000392063_00402_30015_4638.N1	26-NOV-2007 23:45:59	Bright	38.500	15	67Alp Vir	0.97600	28000.	77	30015	No
297	GOM_NL__2PRFIN20071126_234948_000000462063_00402_30015_4639.N1	26-NOV-2007 23:49:48	Tw_i_and_stray	46.000	100	4Gam Crv	2.5800	13100.	92	30015	No
298	GOM_NL__2PRFIN20071126_235123_000000462063_00402_30015_4640.N1	26-NOV-2007 23:51:23	Dark	45.500	171	2Eps Crv	3.0010	4250.0	91	30015	No

3. Quality information per product

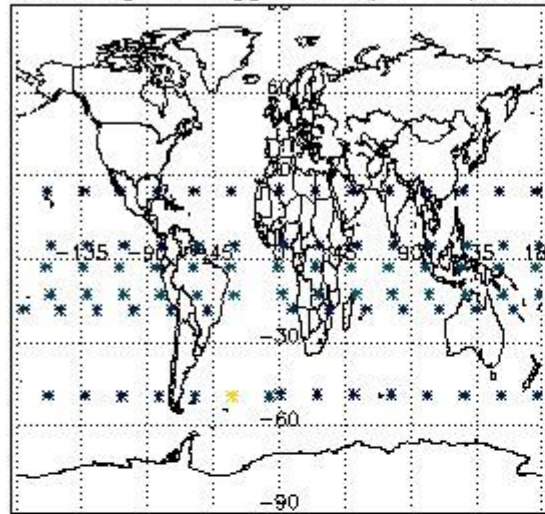
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

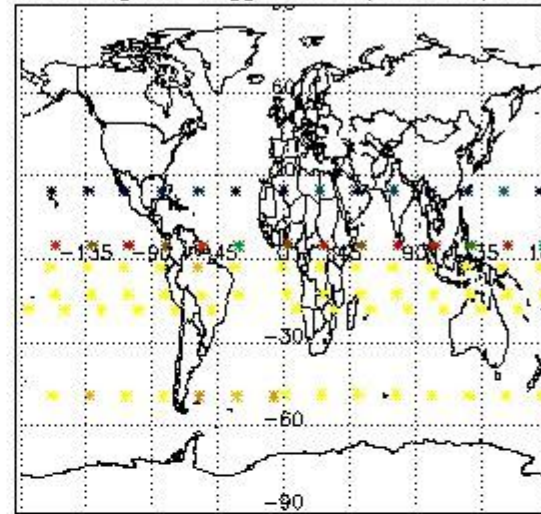


3.2 Plot quality information per product (world map)

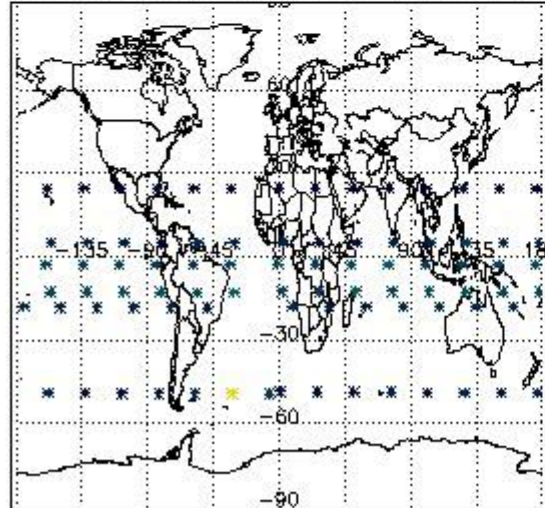
Percentage of flagged data per O3 profile



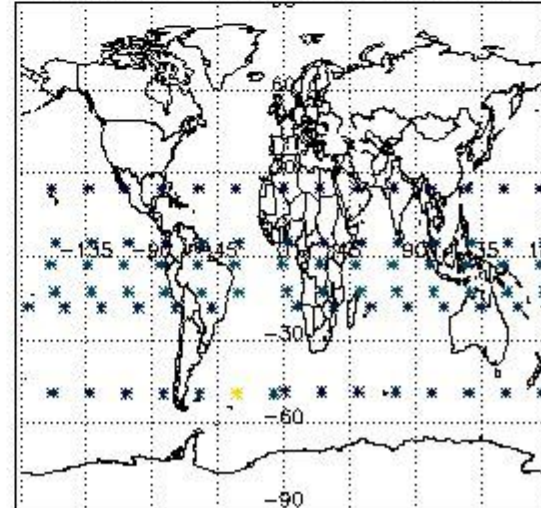
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

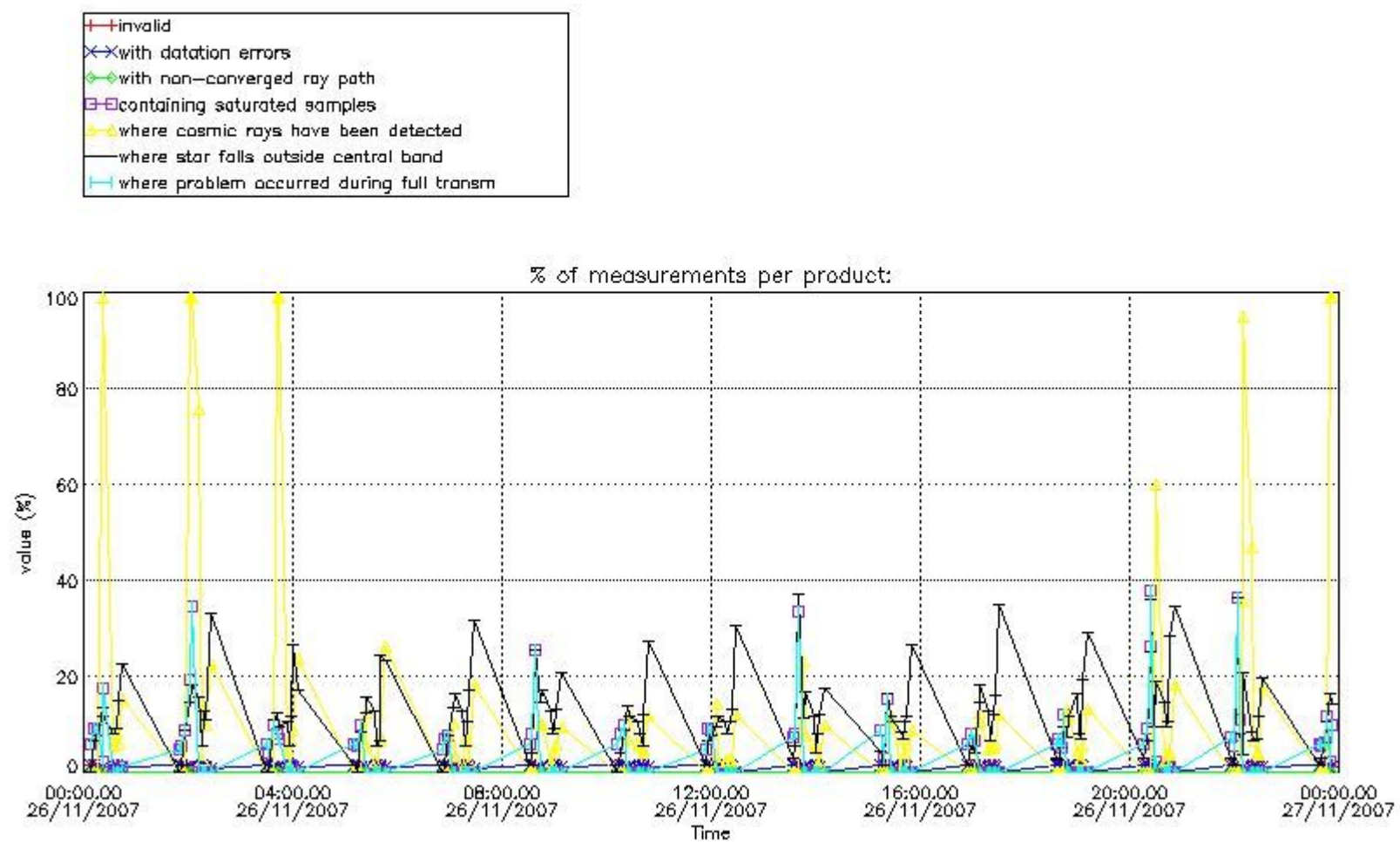


4. Level 1 quality information per product

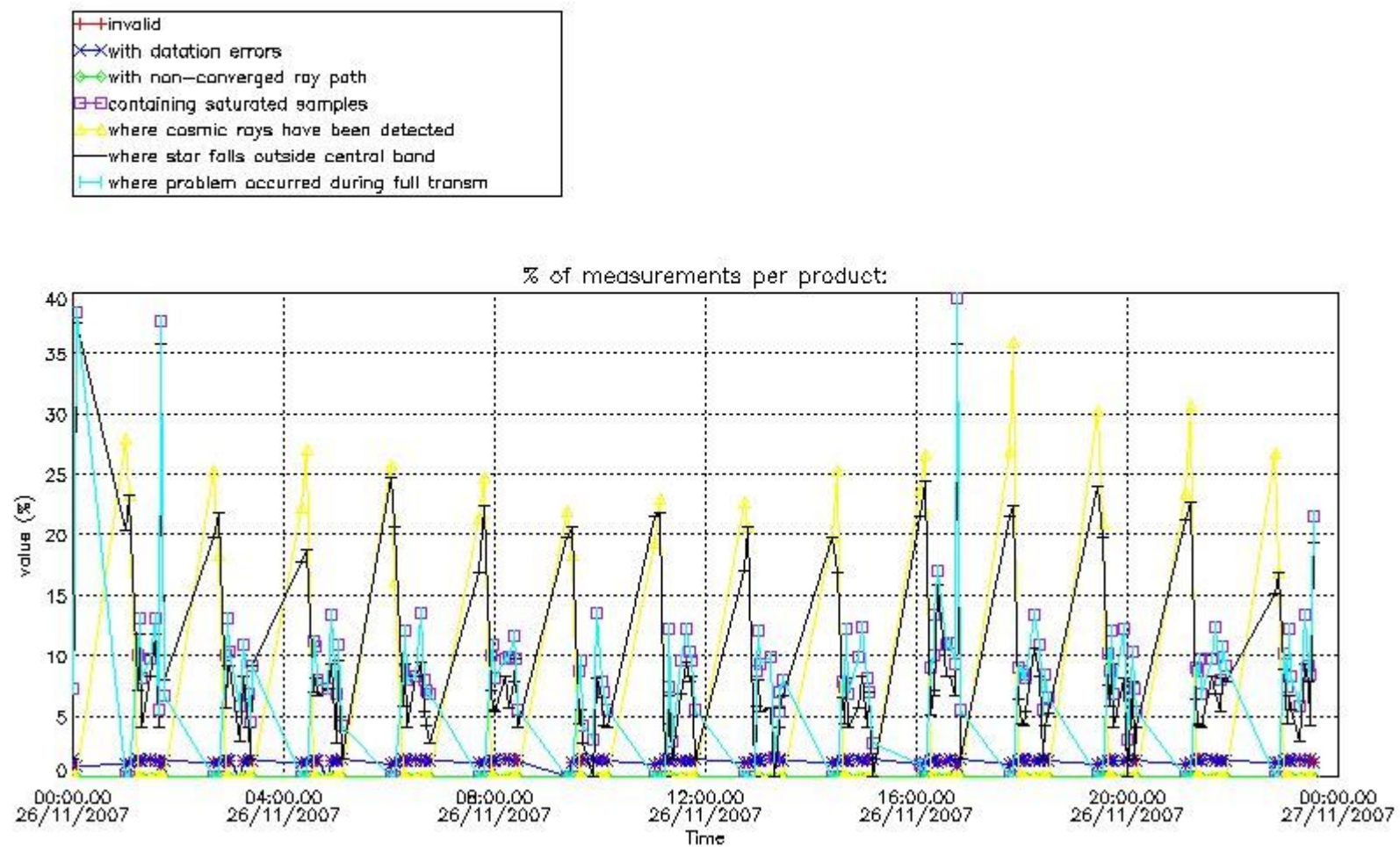
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



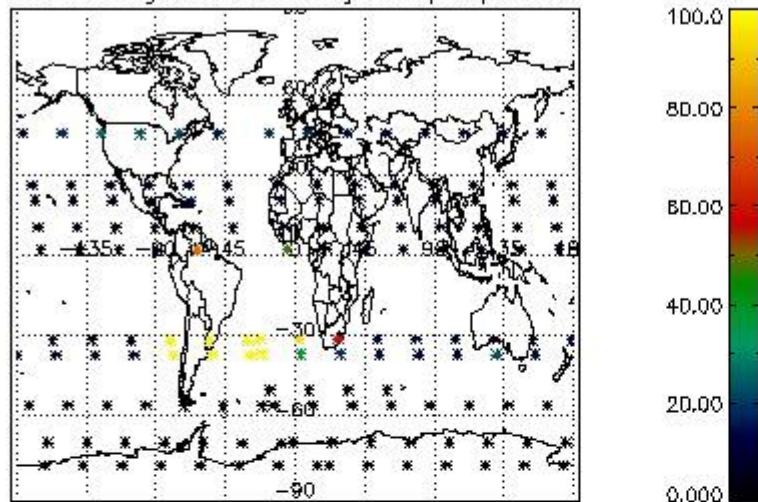
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



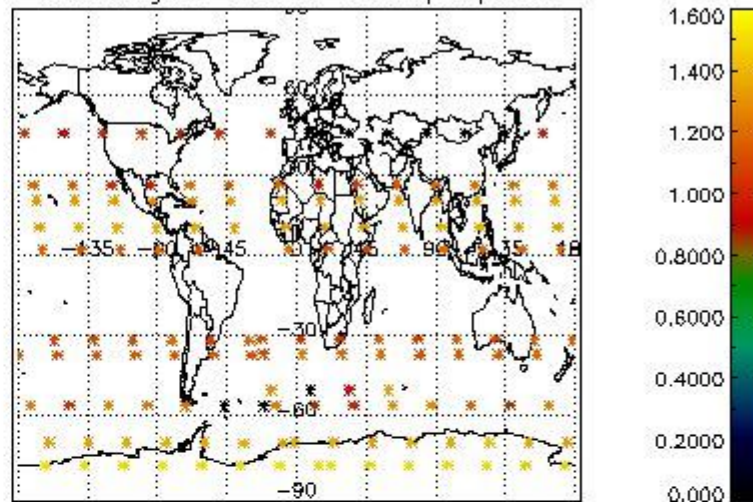
4.2 Plot quality information per product coming from level 1b processing (world map)

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

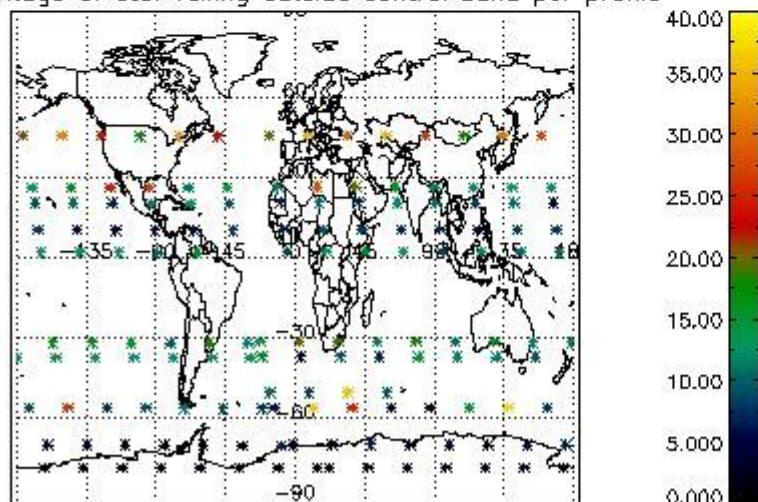
Percentage of cosmic ray hits per profile



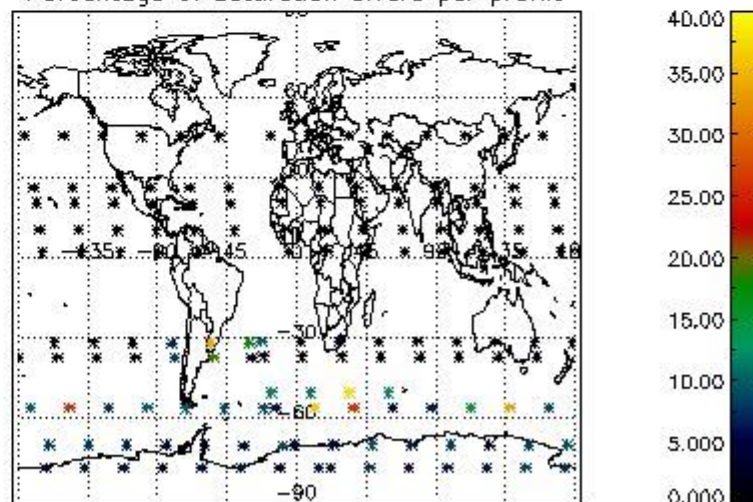
Percentage of datation errors per profile



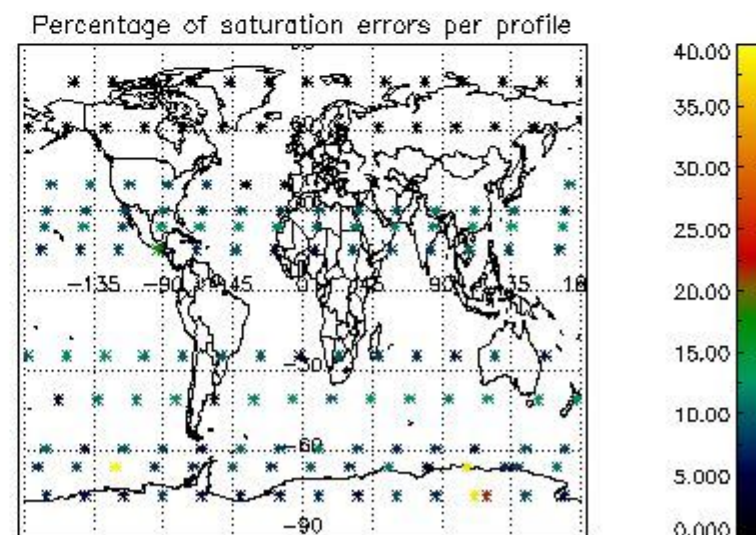
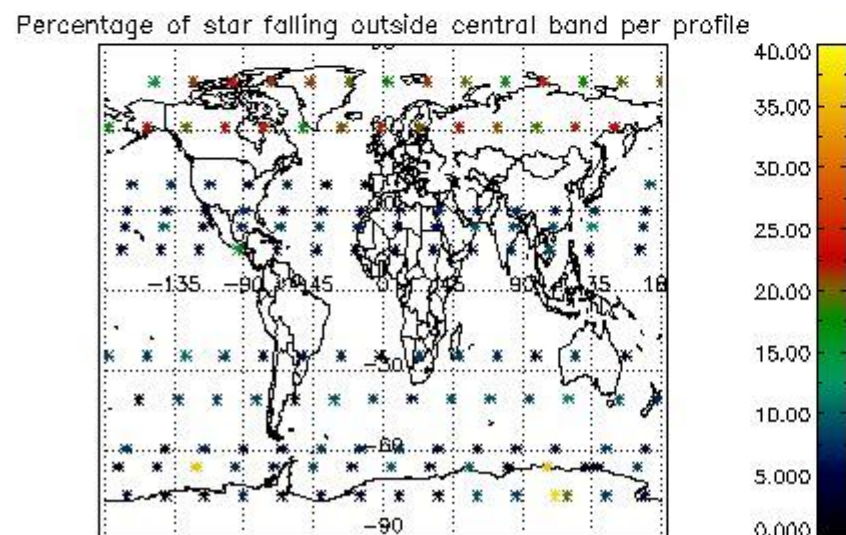
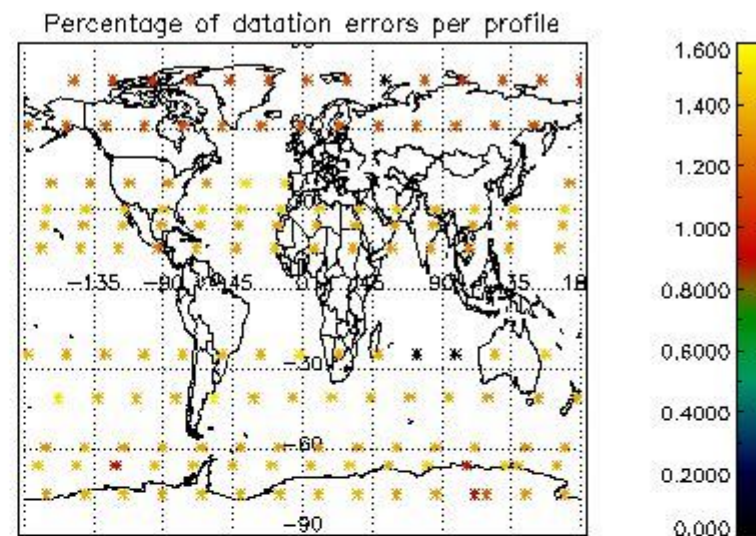
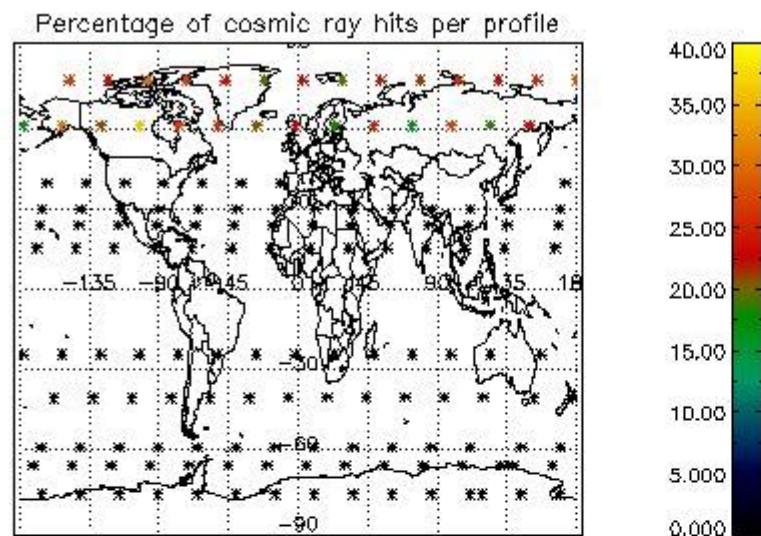
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

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

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

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

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

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

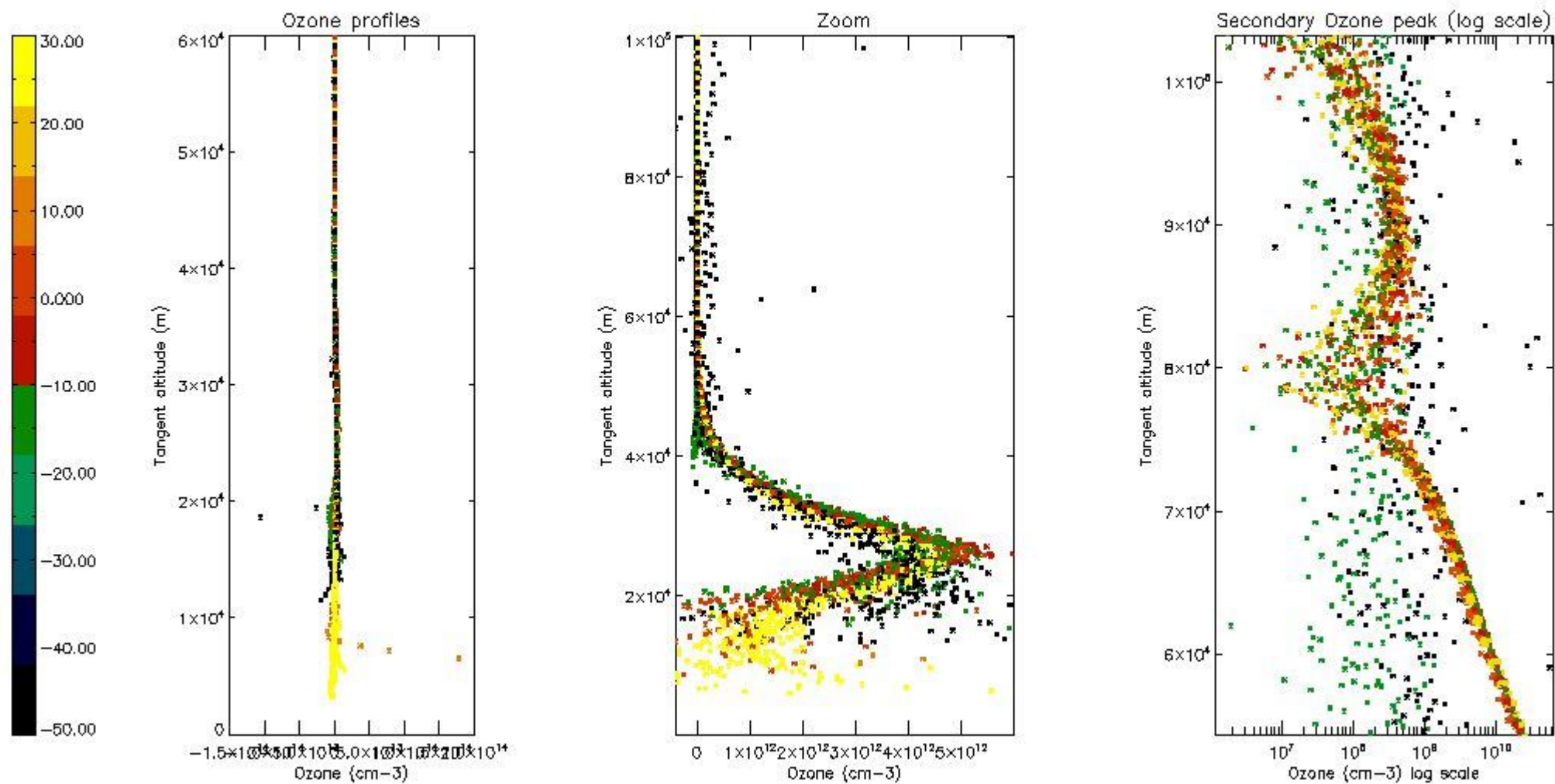
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	31
STD < 20	16

STD < 10	12
STD < 5	6

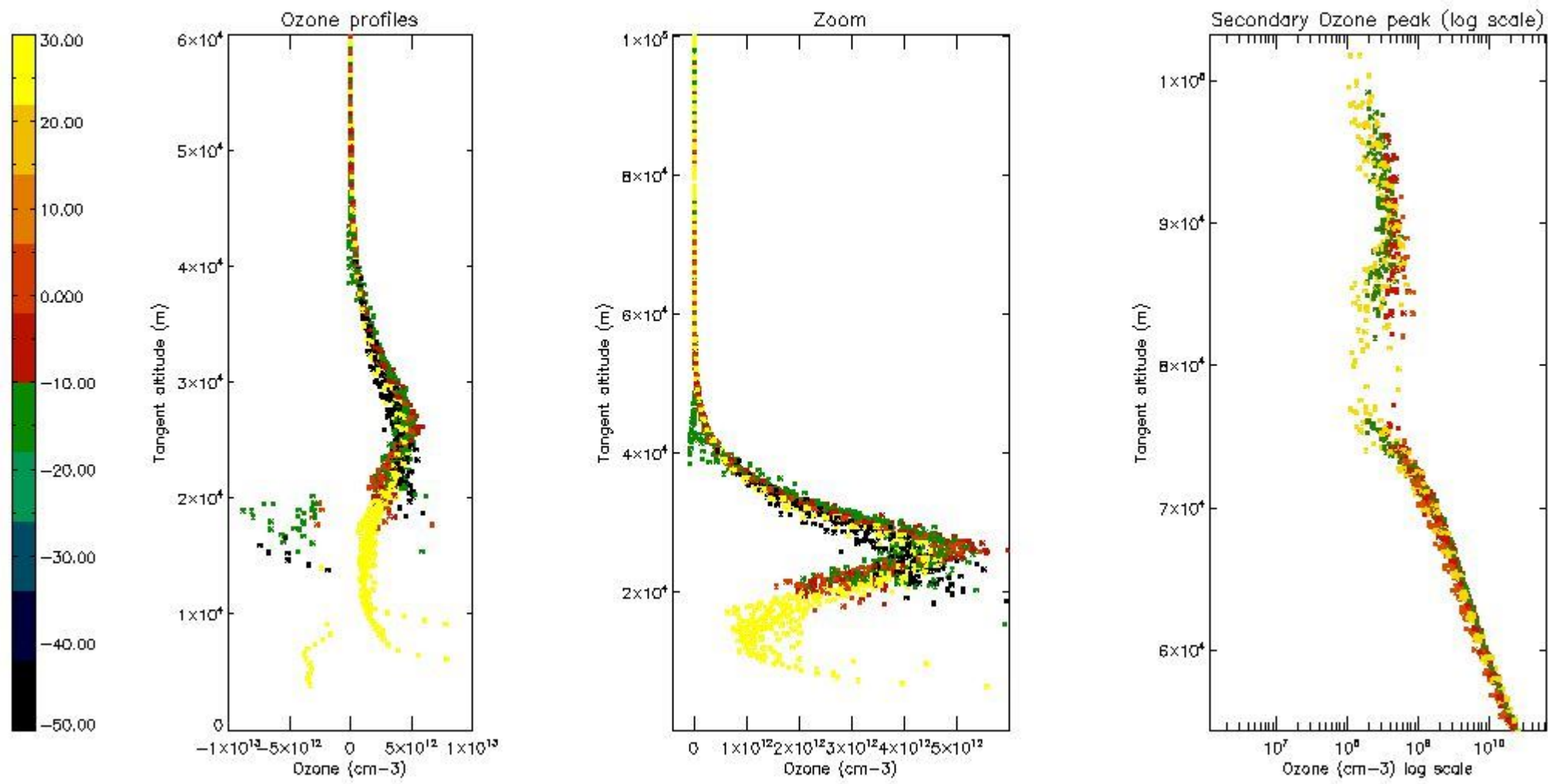
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



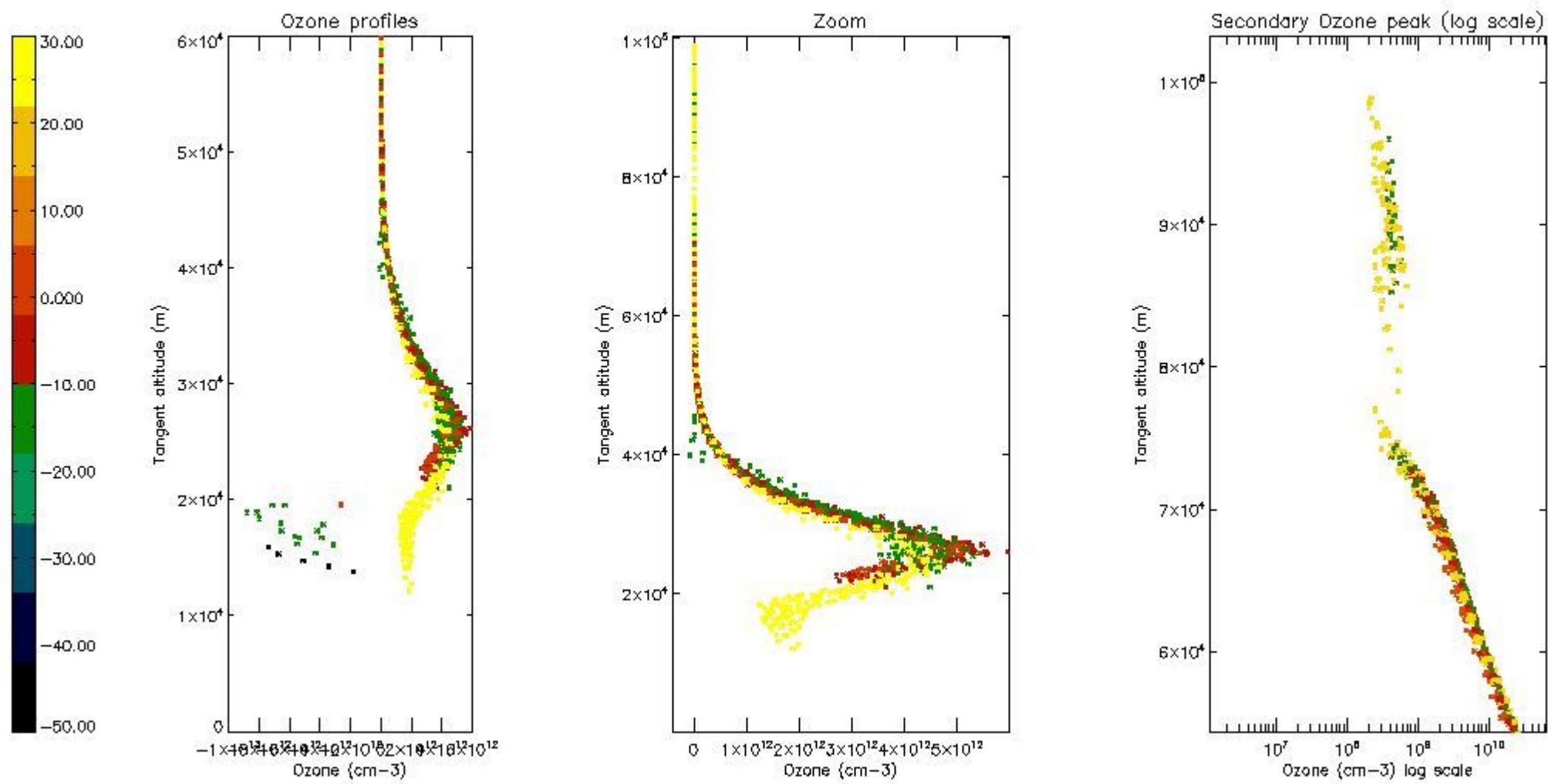
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



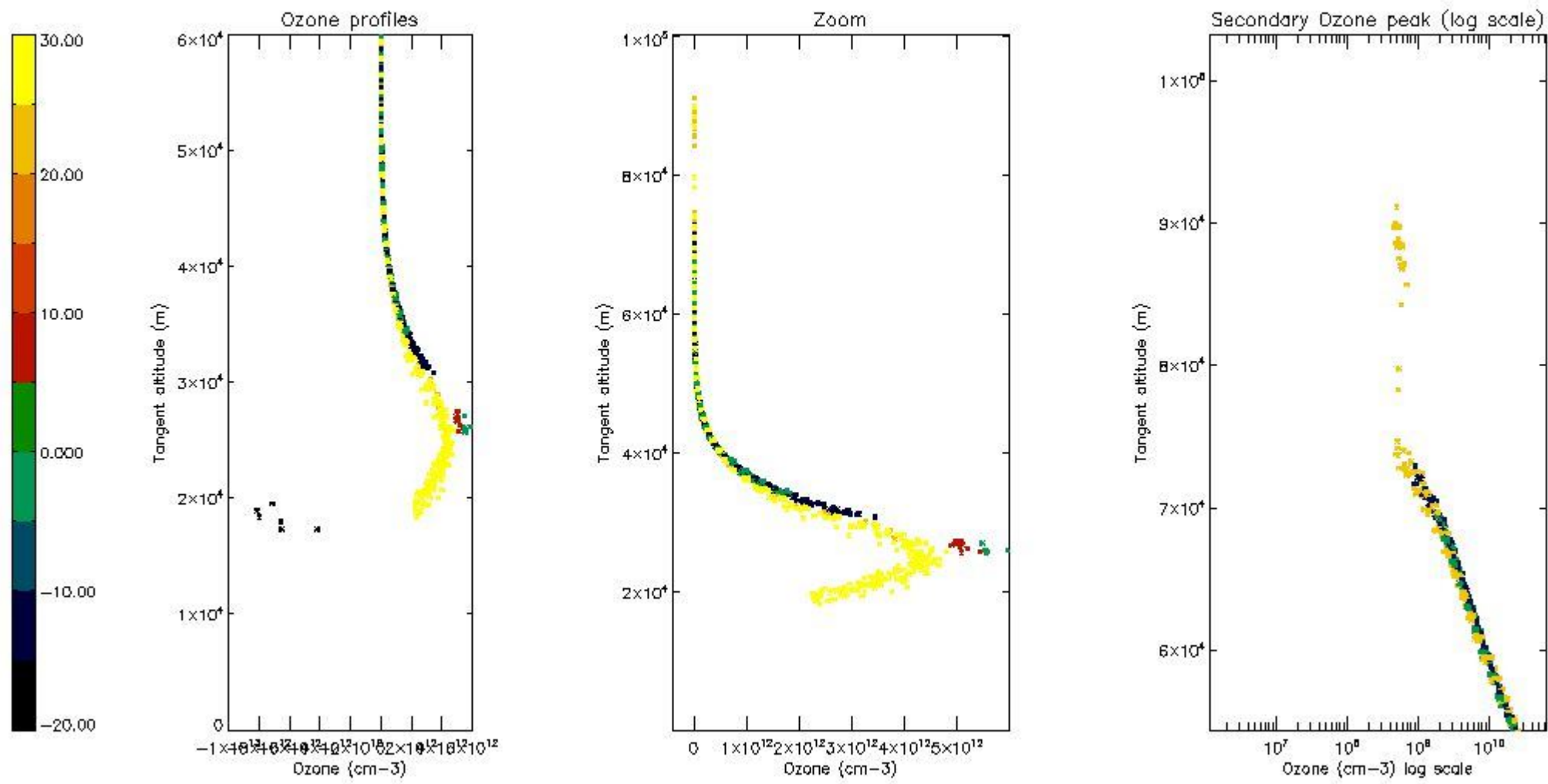
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



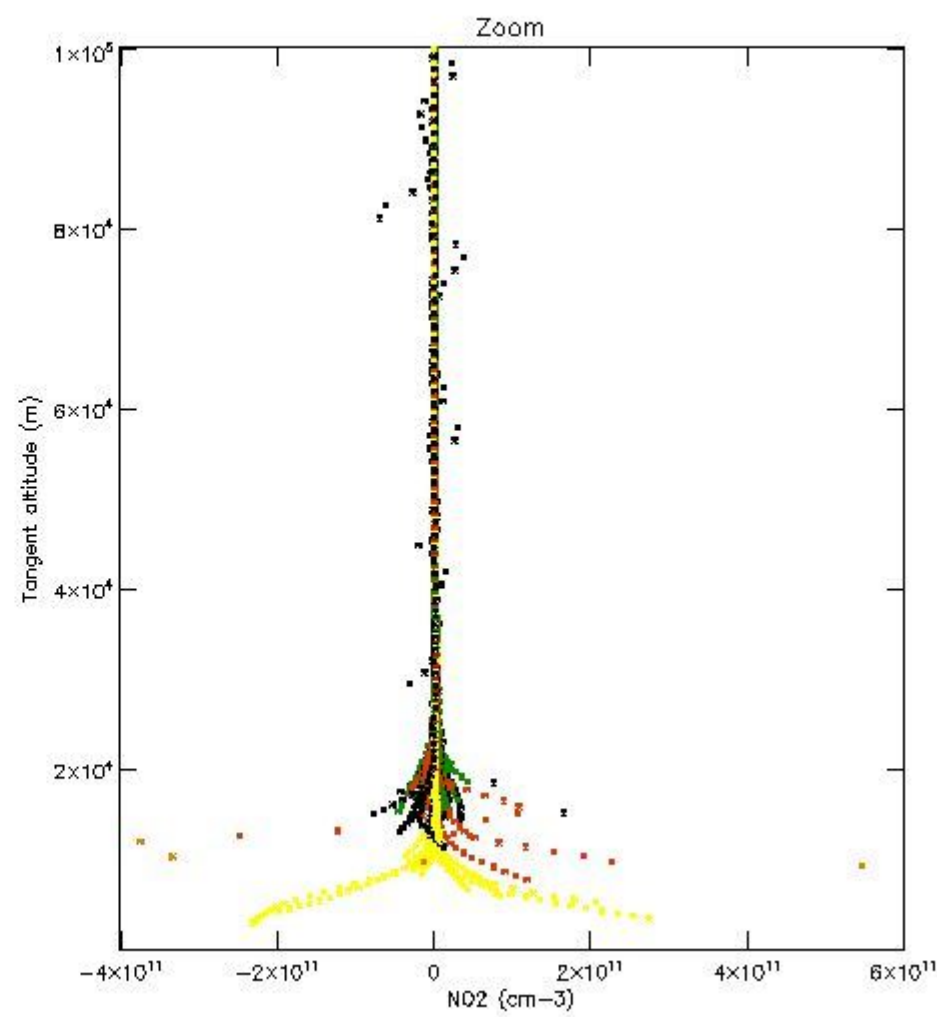
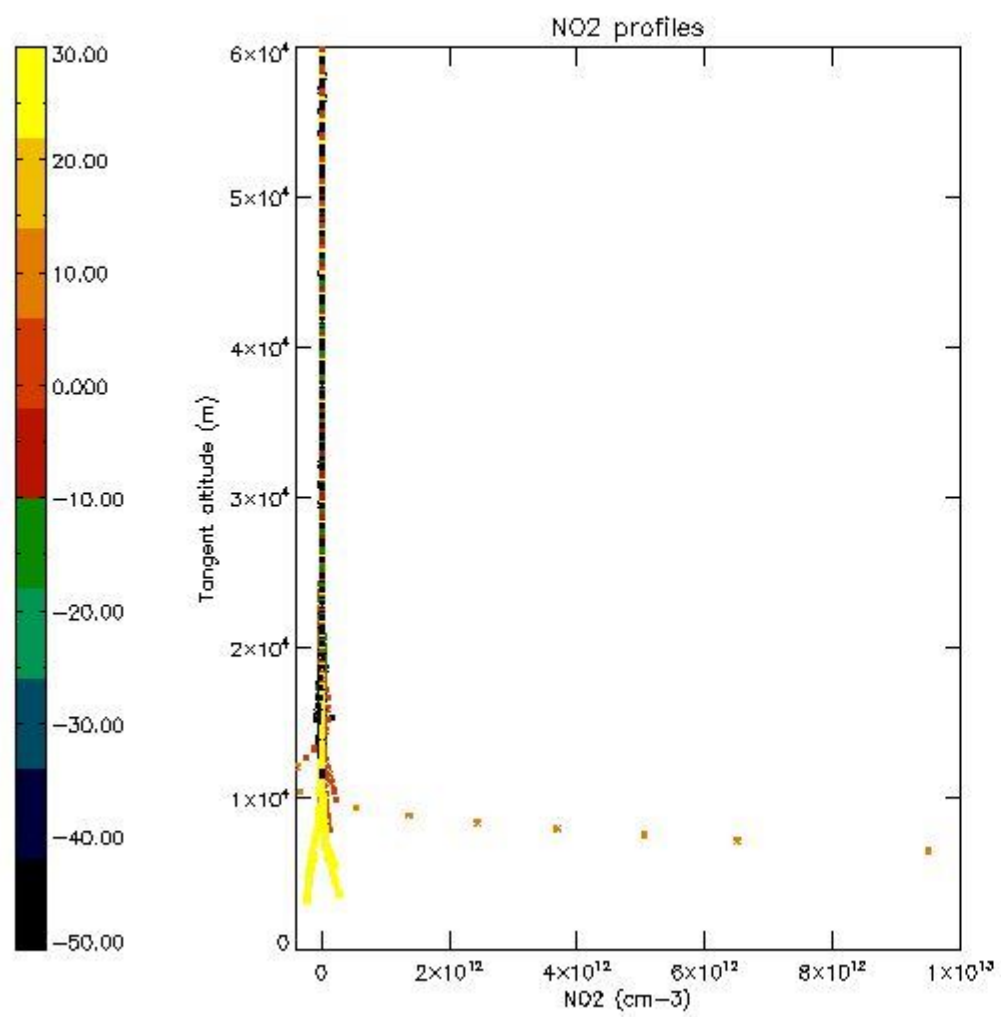
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



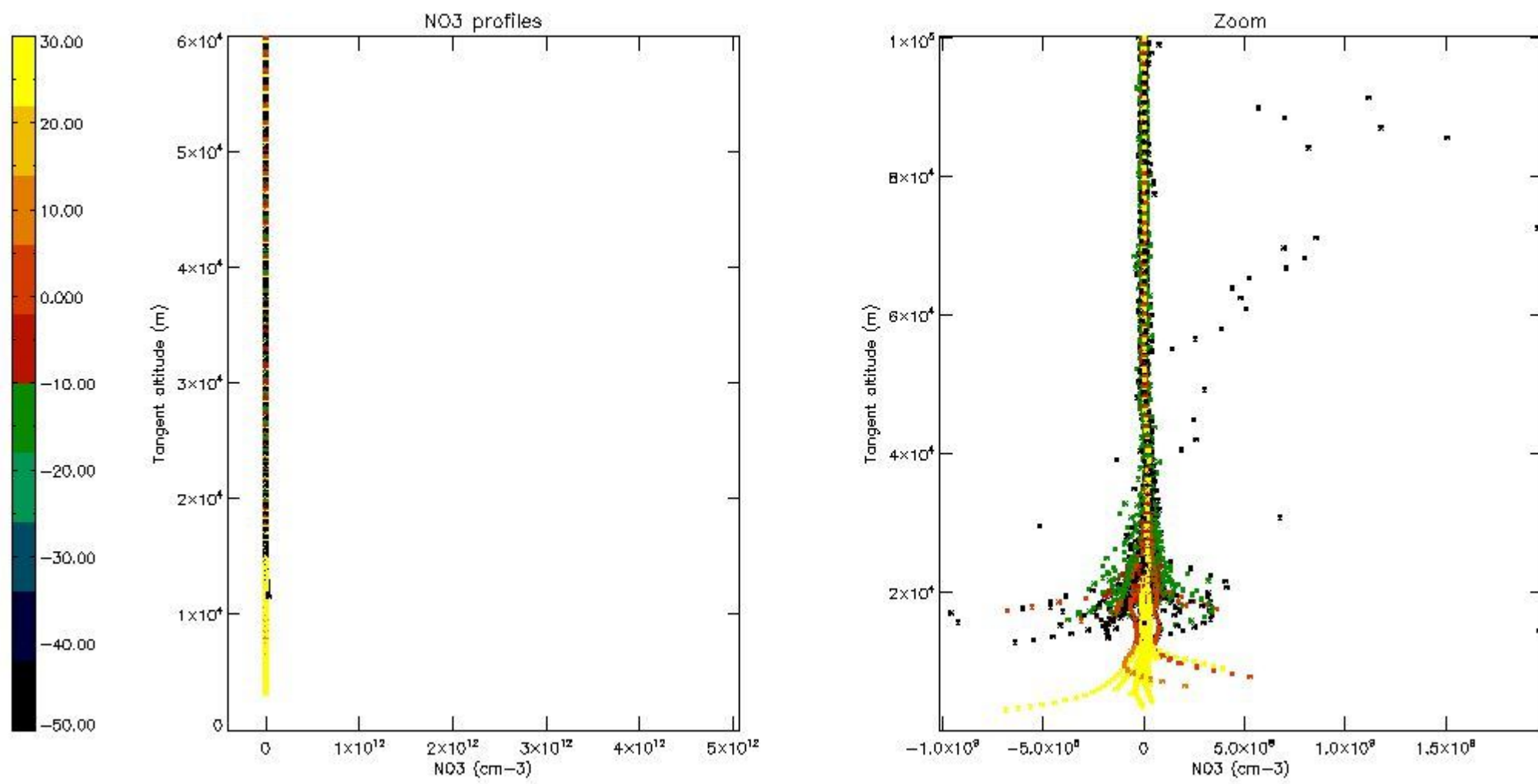
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



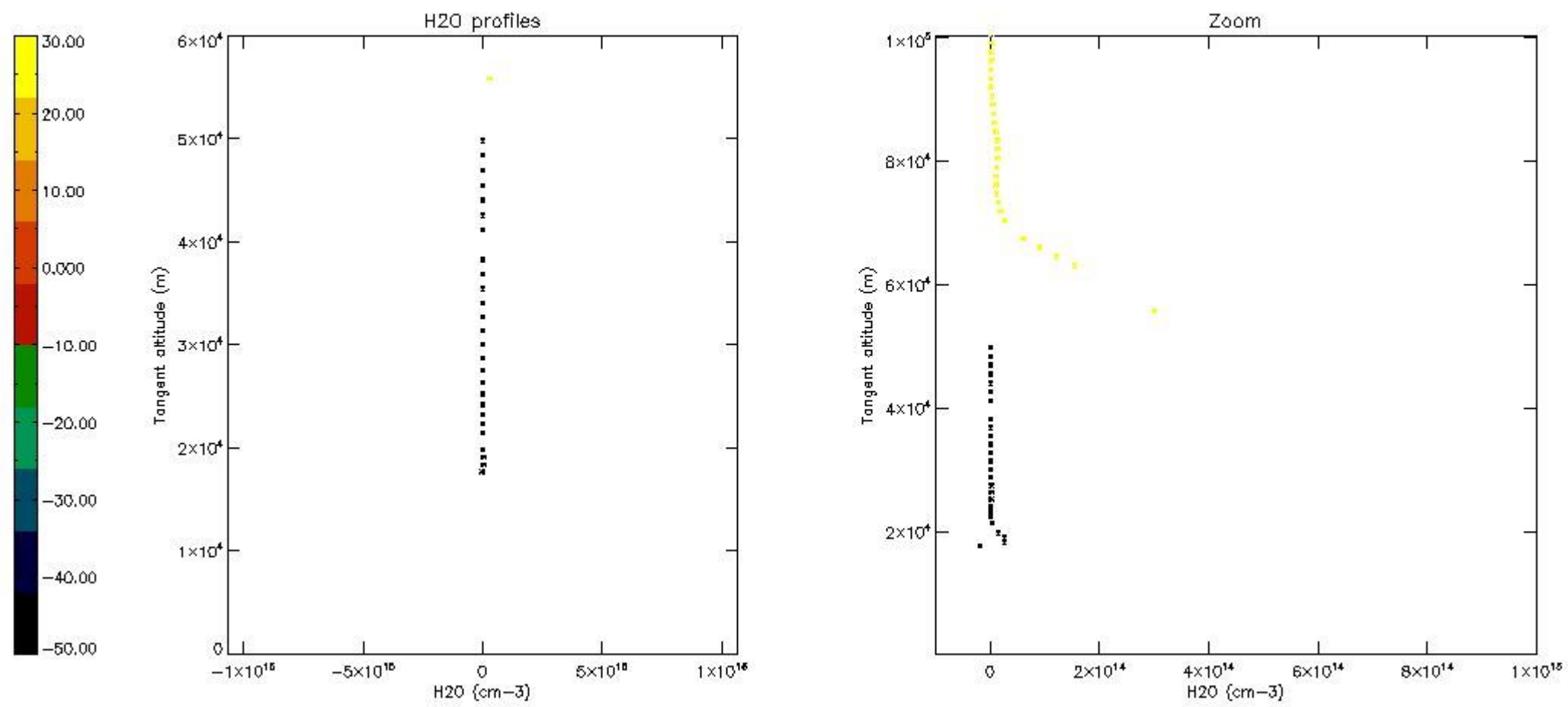
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

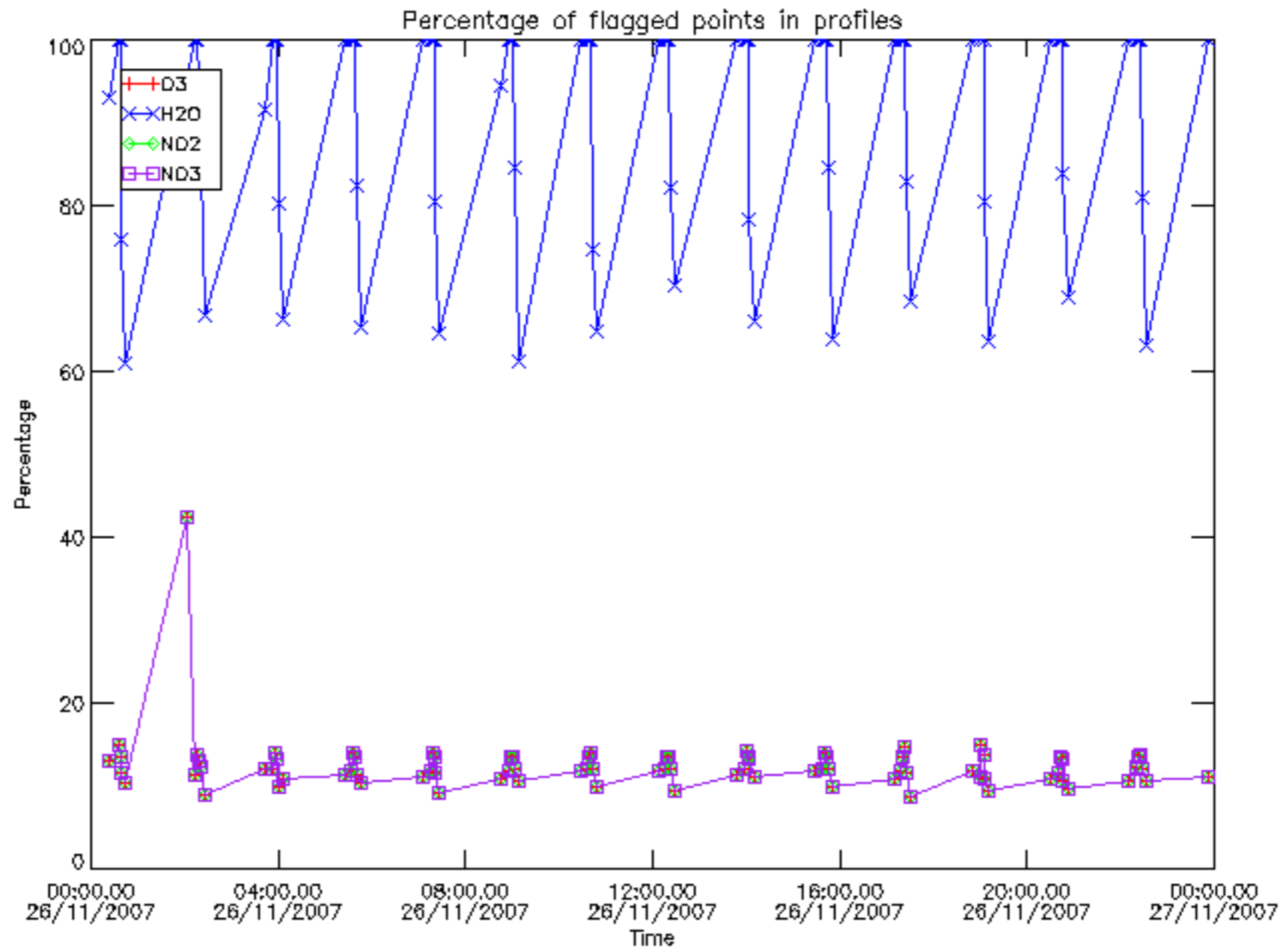
The colorbar represents the latitude.



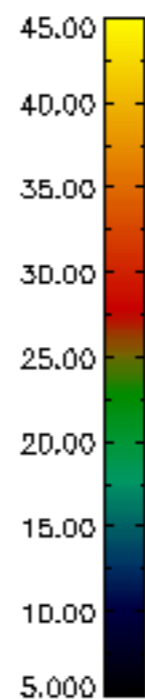
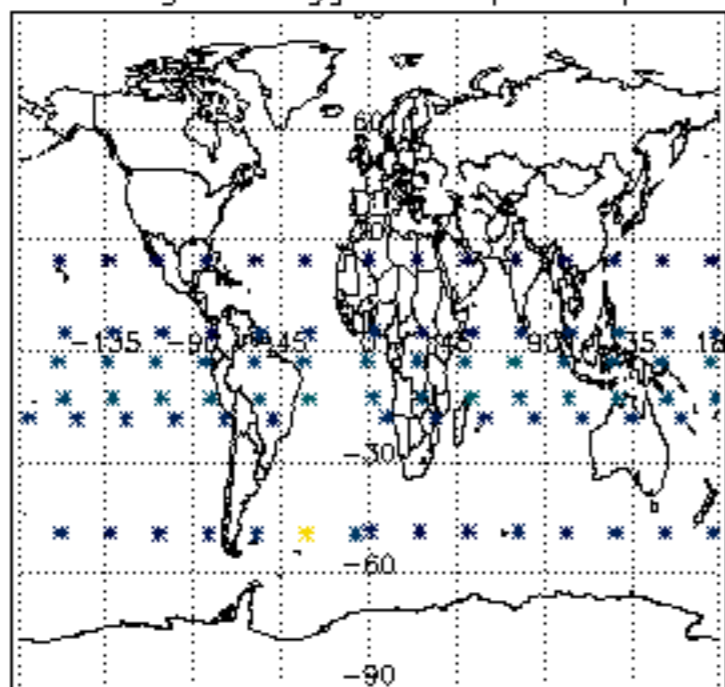
6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

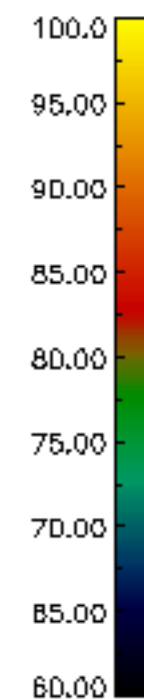
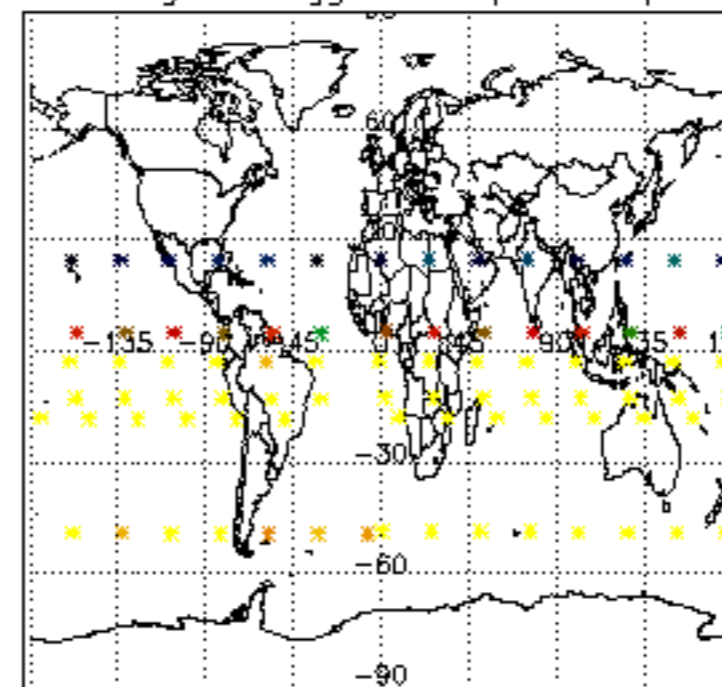
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	26-NOV-2007 00:00:08
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	26-NOV-2007 00:00:08
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	26-NOV-2007 00:00:08



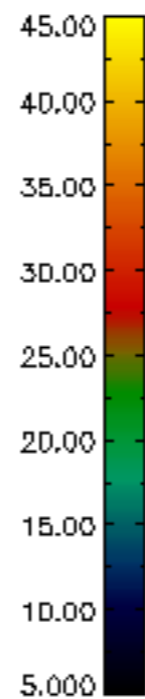
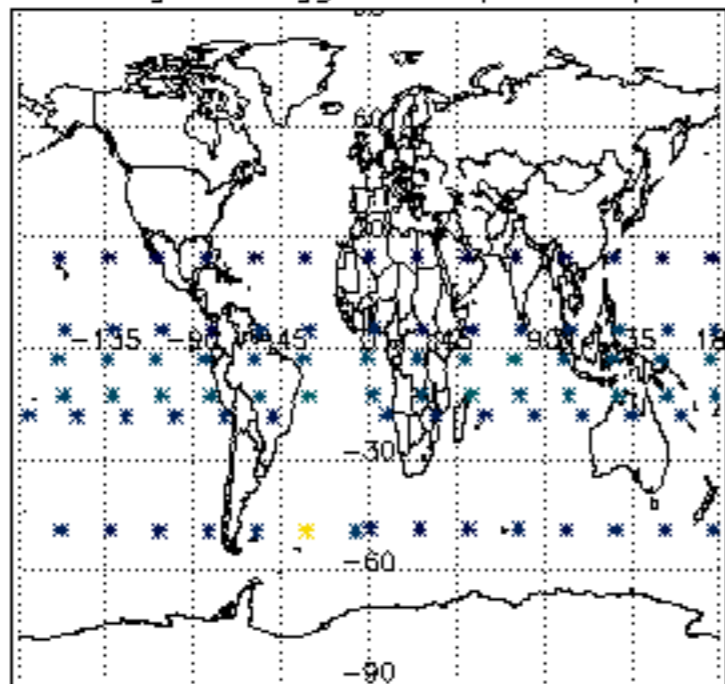
Percentage of flagged data per D3 profile



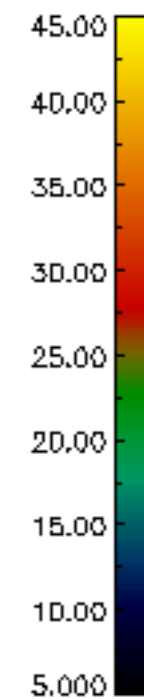
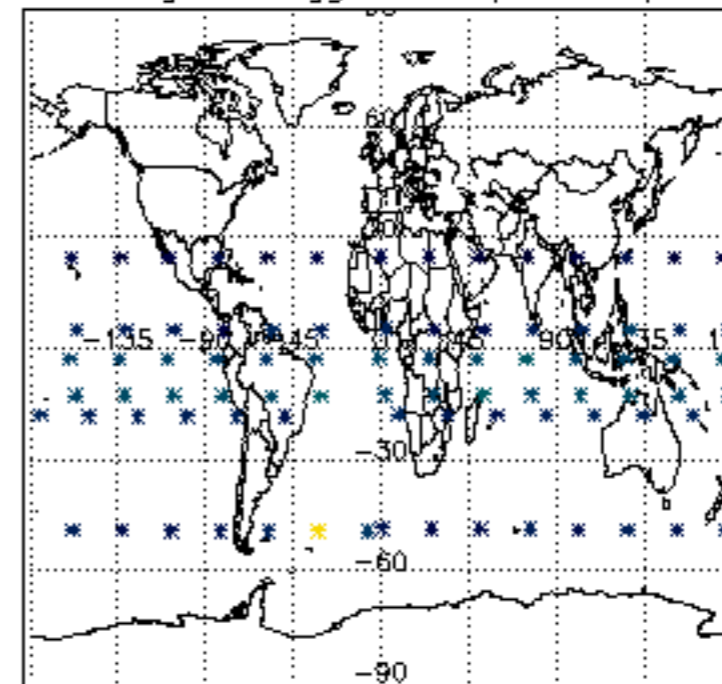
Percentage of flagged data per H2O profile

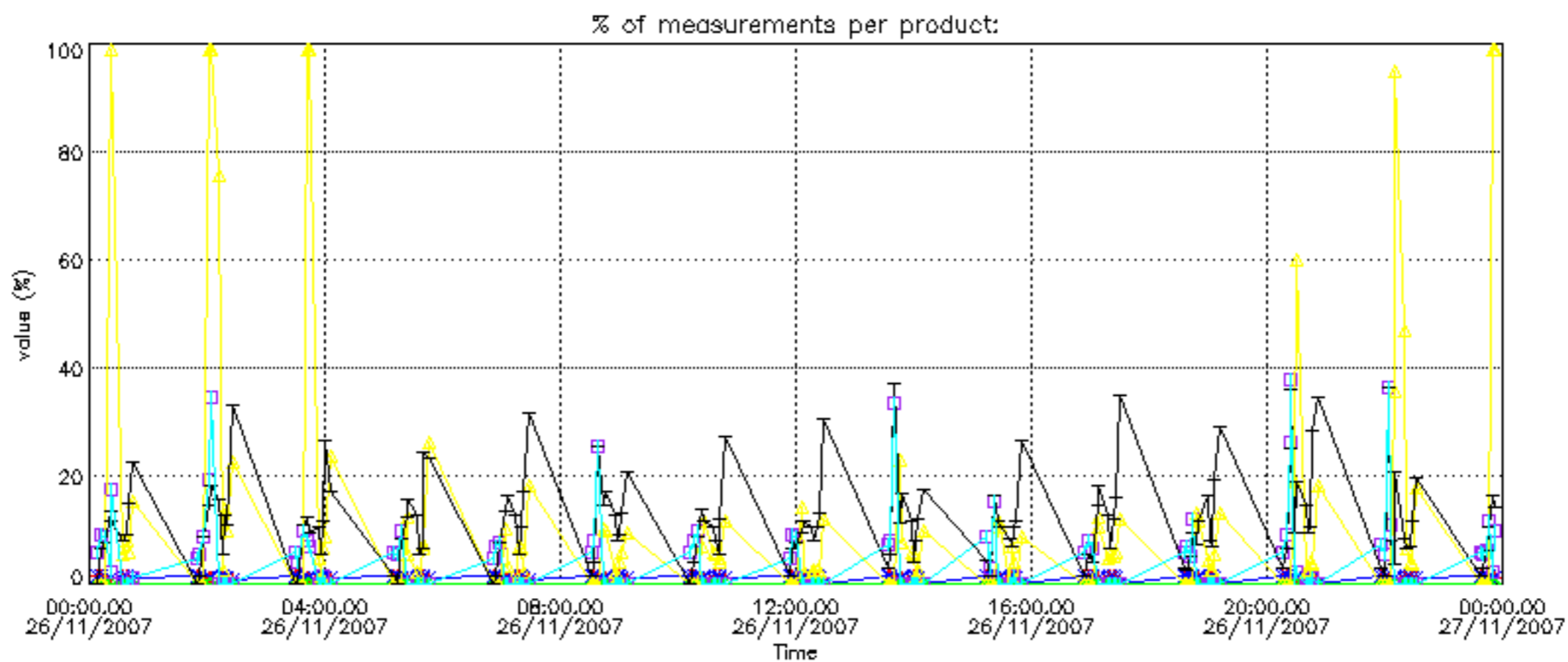


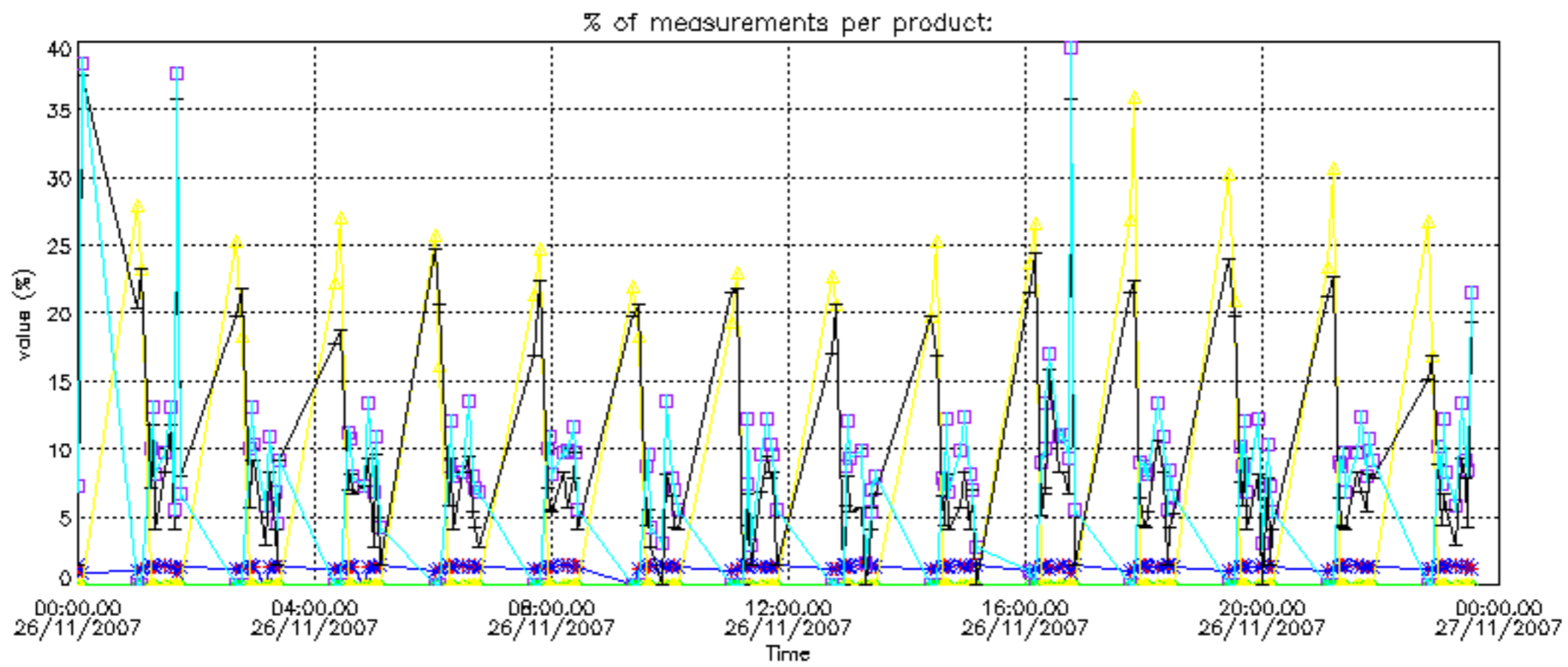
Percentage of flagged data per NO2 profile



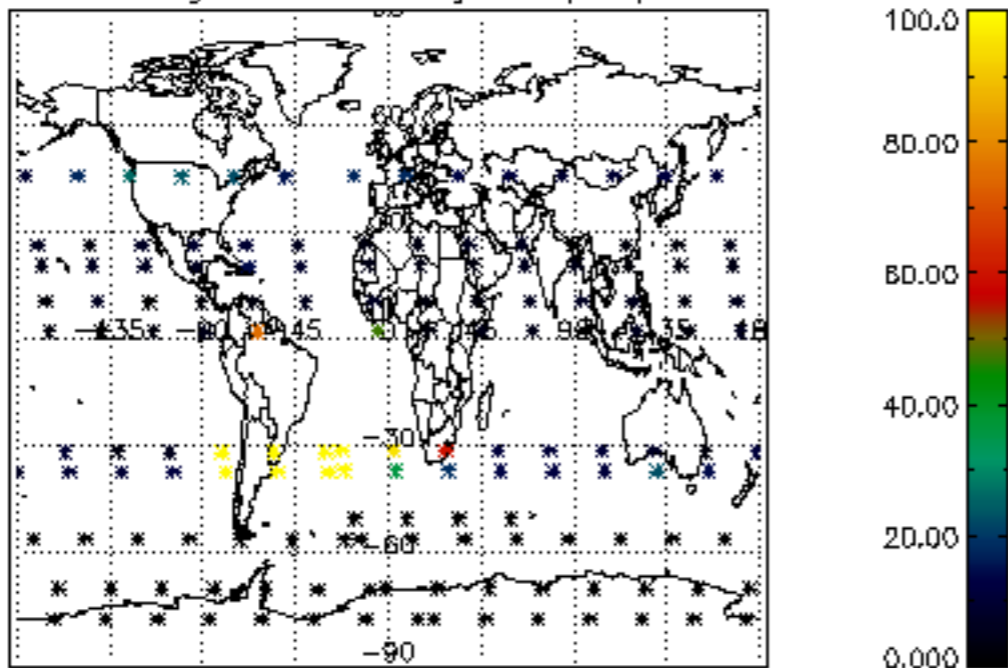
Percentage of flagged data per NO3 profile



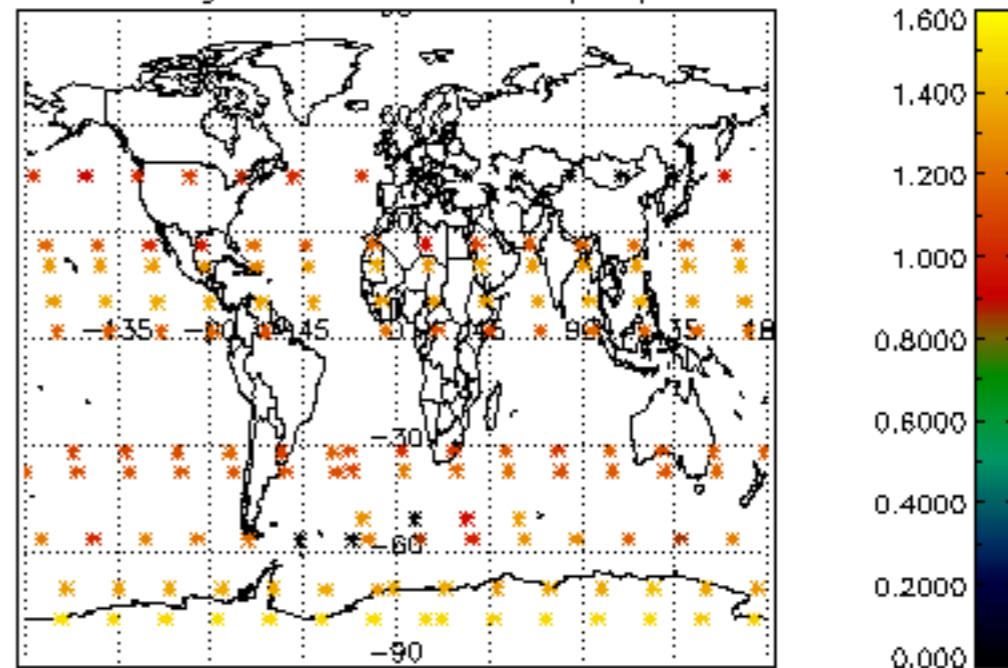




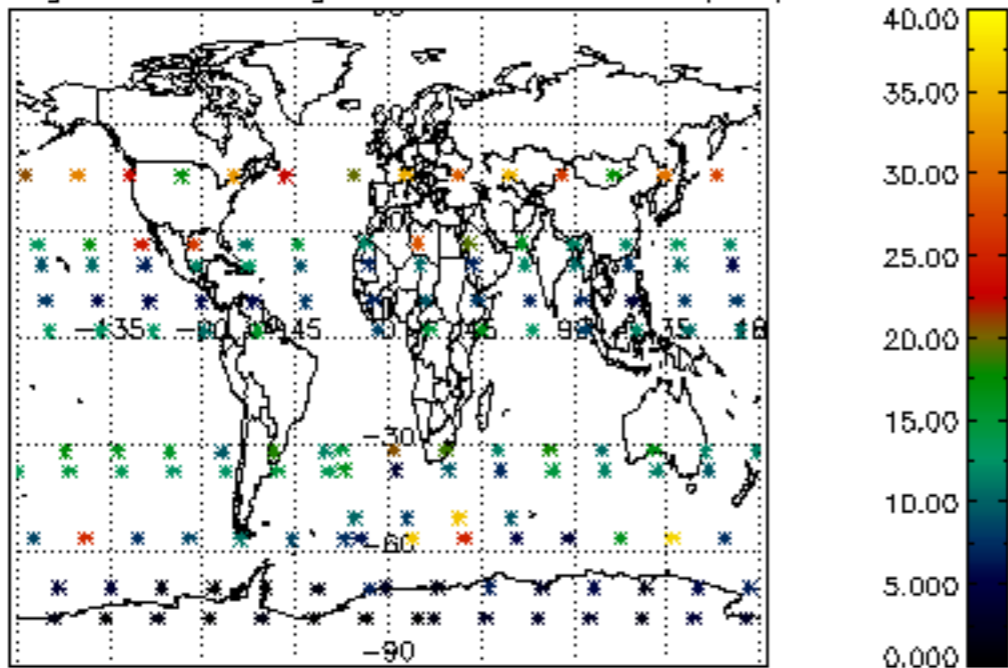
Percentage of cosmic ray hits per profile



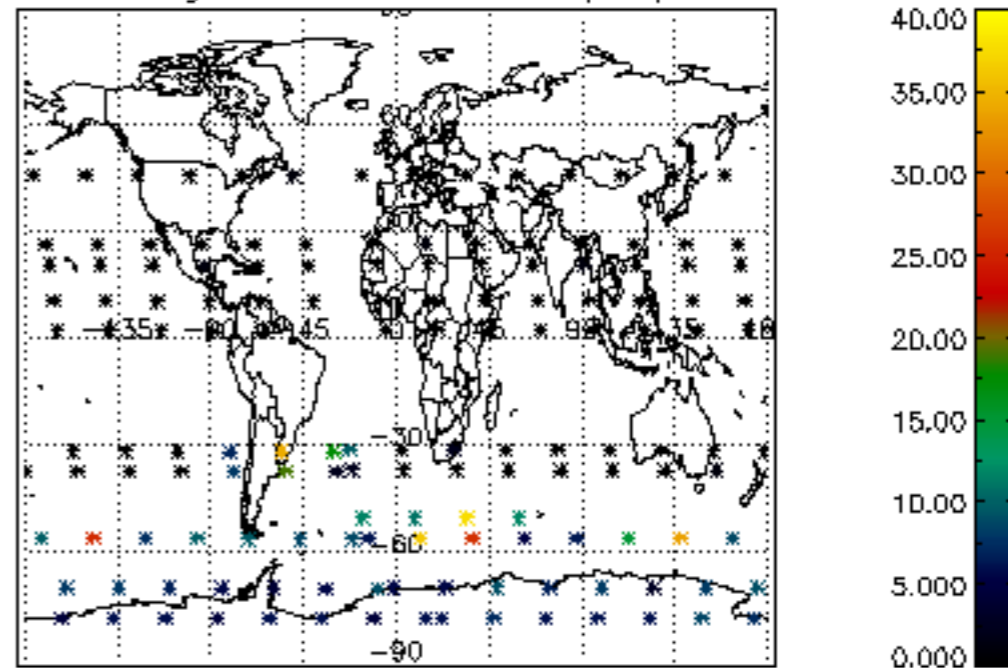
Percentage of datation errors per profile



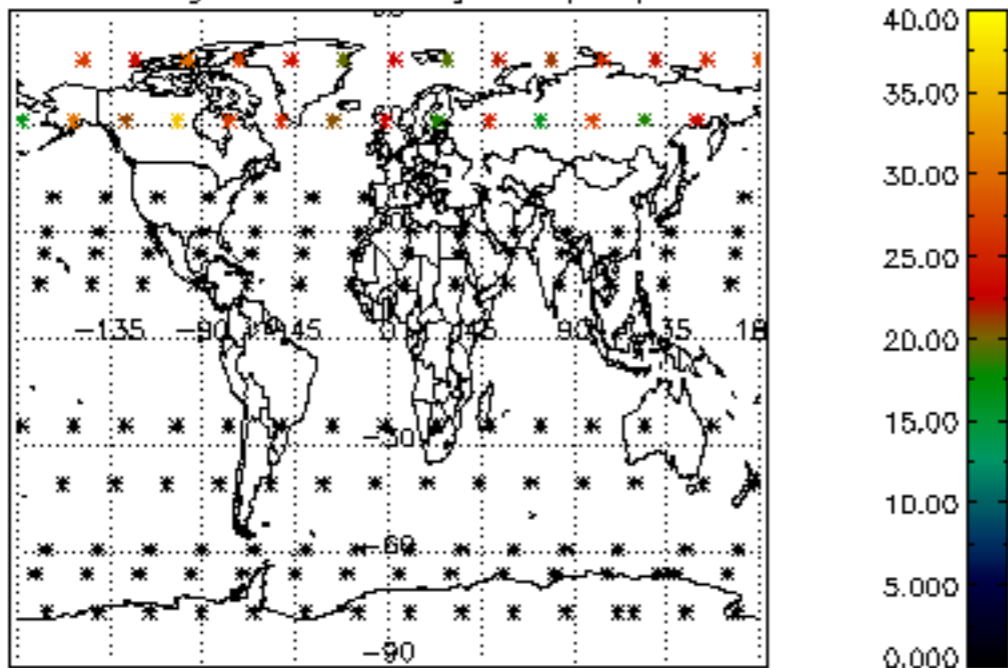
Percentage of star falling outside central band per profile



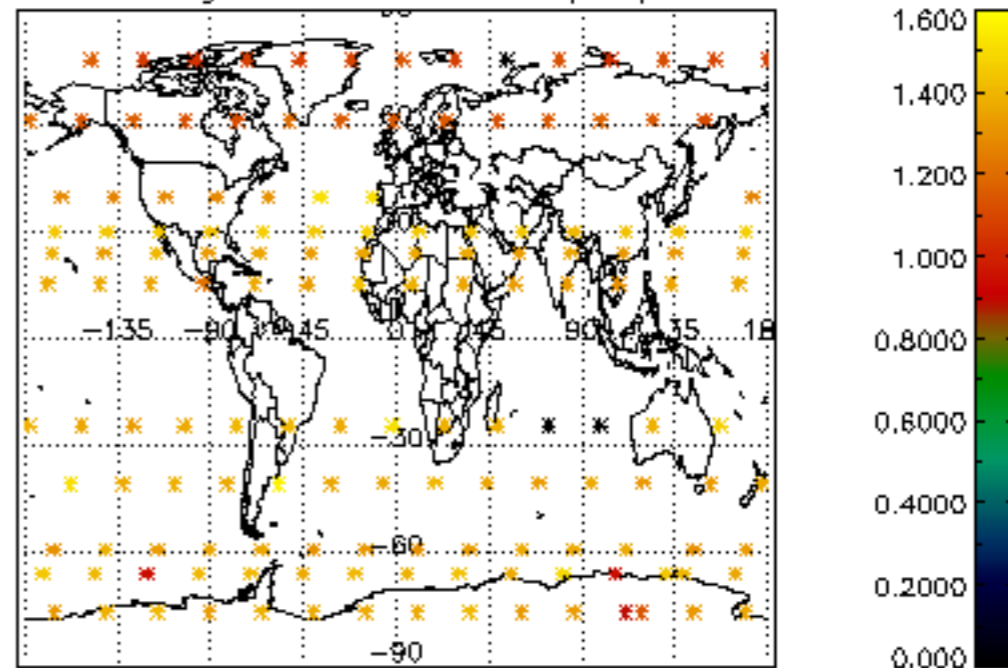
Percentage of saturation errors per profile



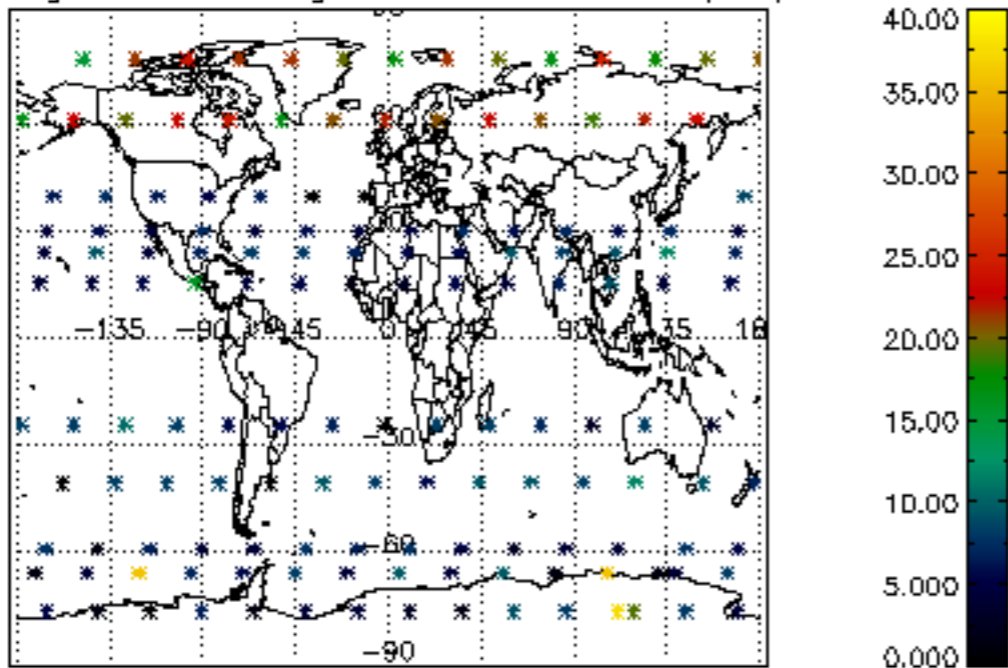
Percentage of cosmic ray hits per profile



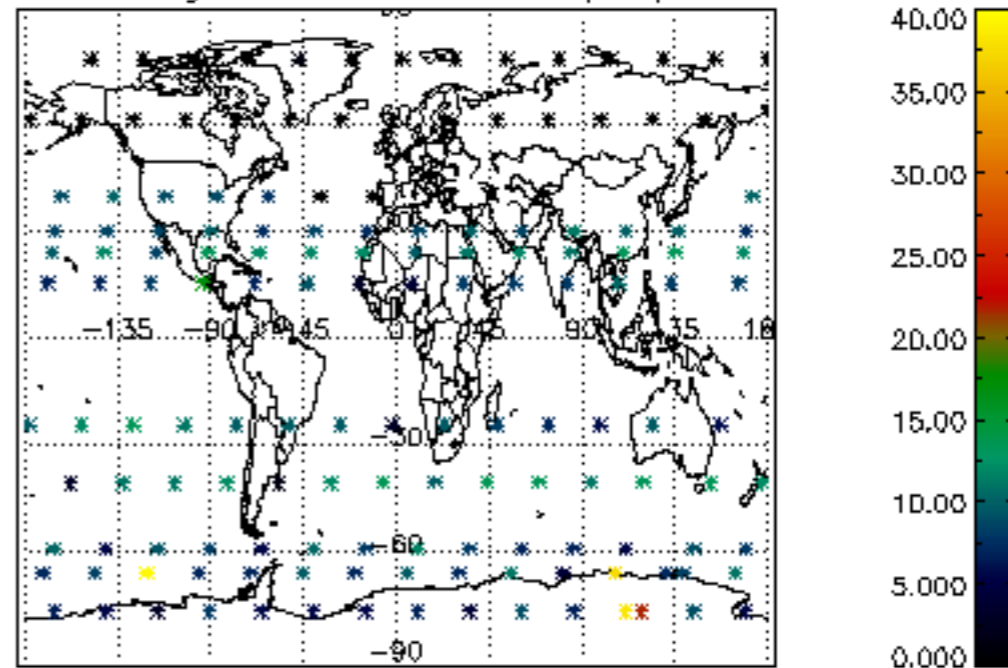
Percentage of datation errors per profile

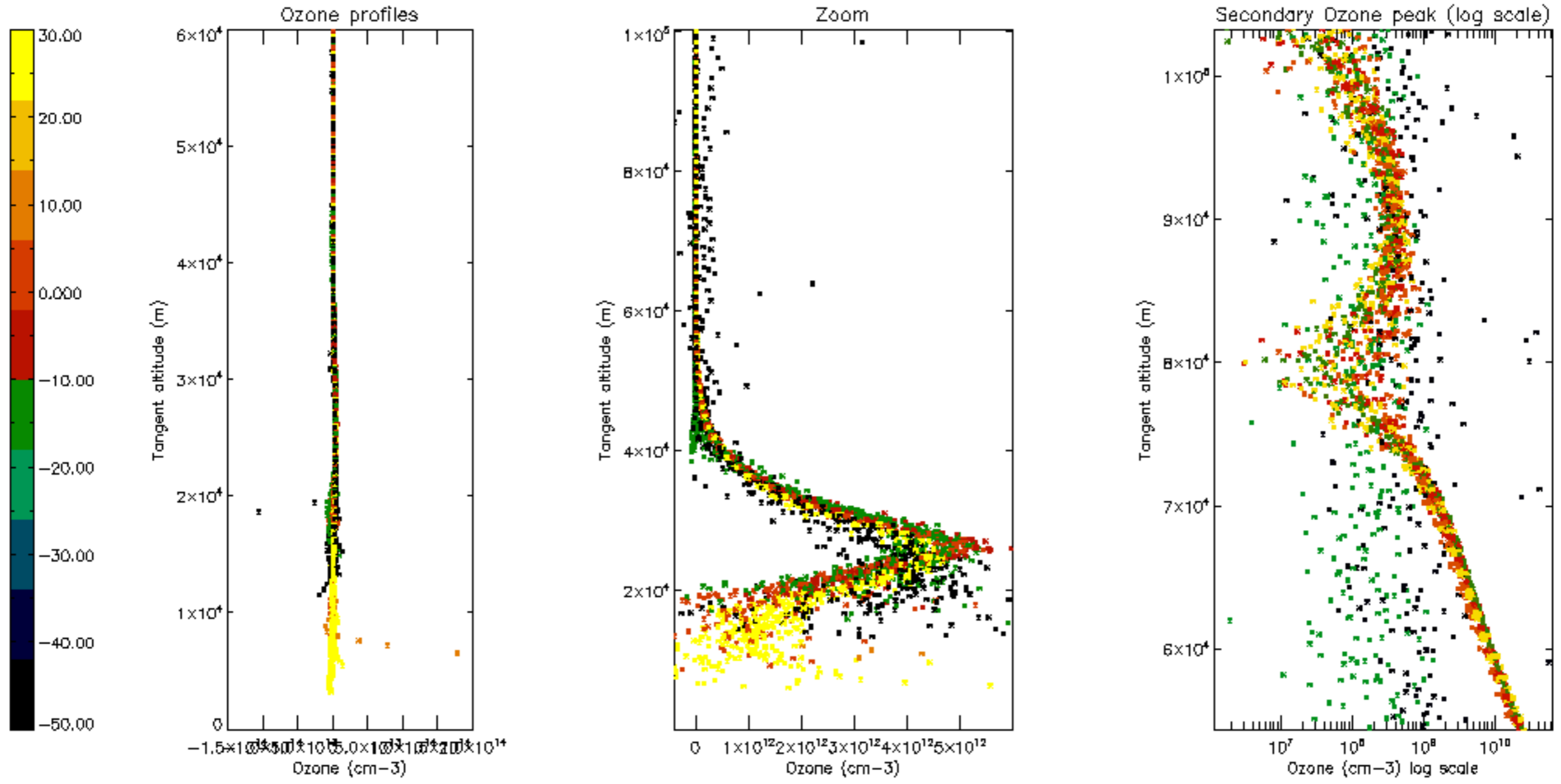


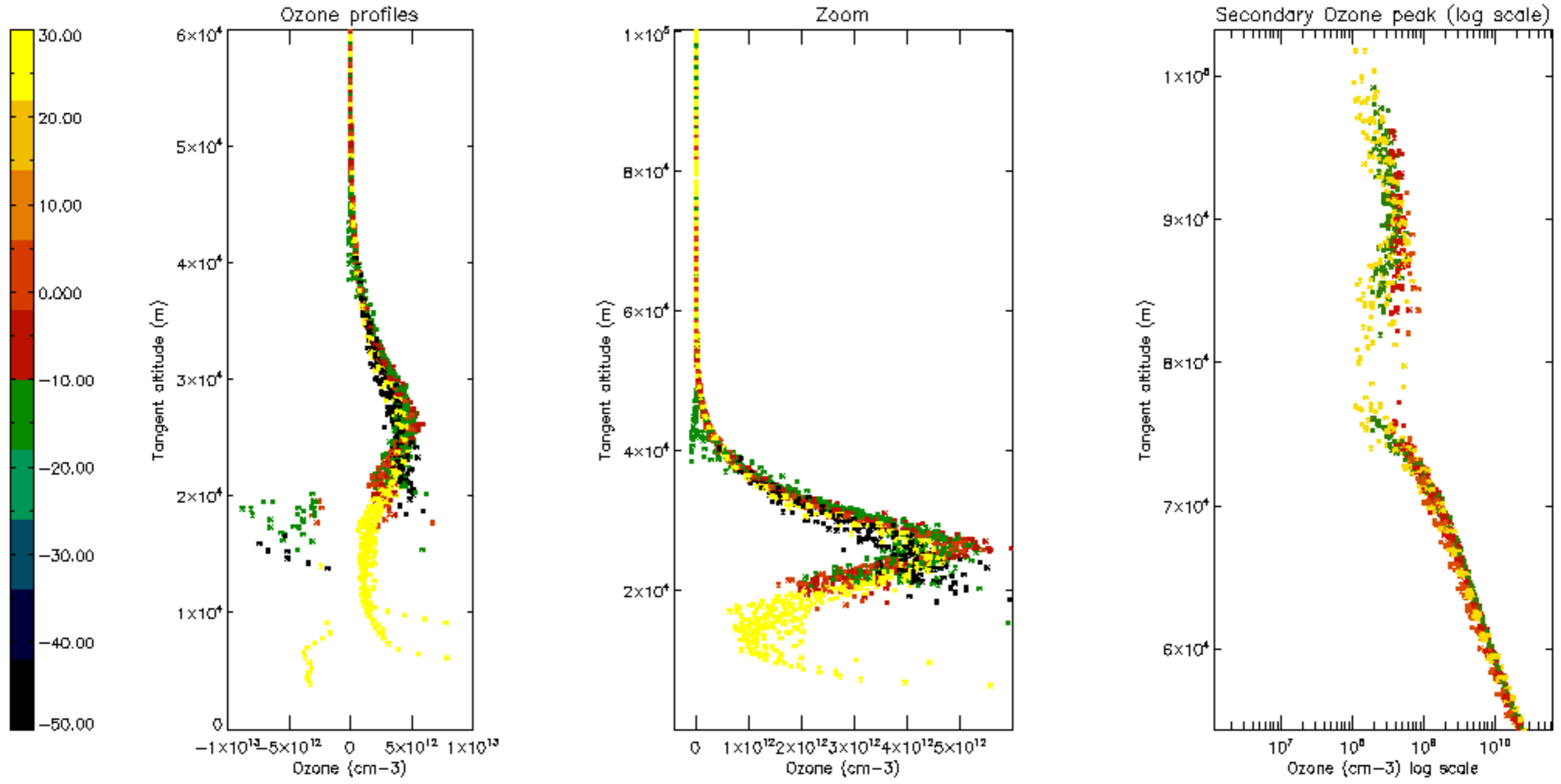
Percentage of star falling outside central band per profile

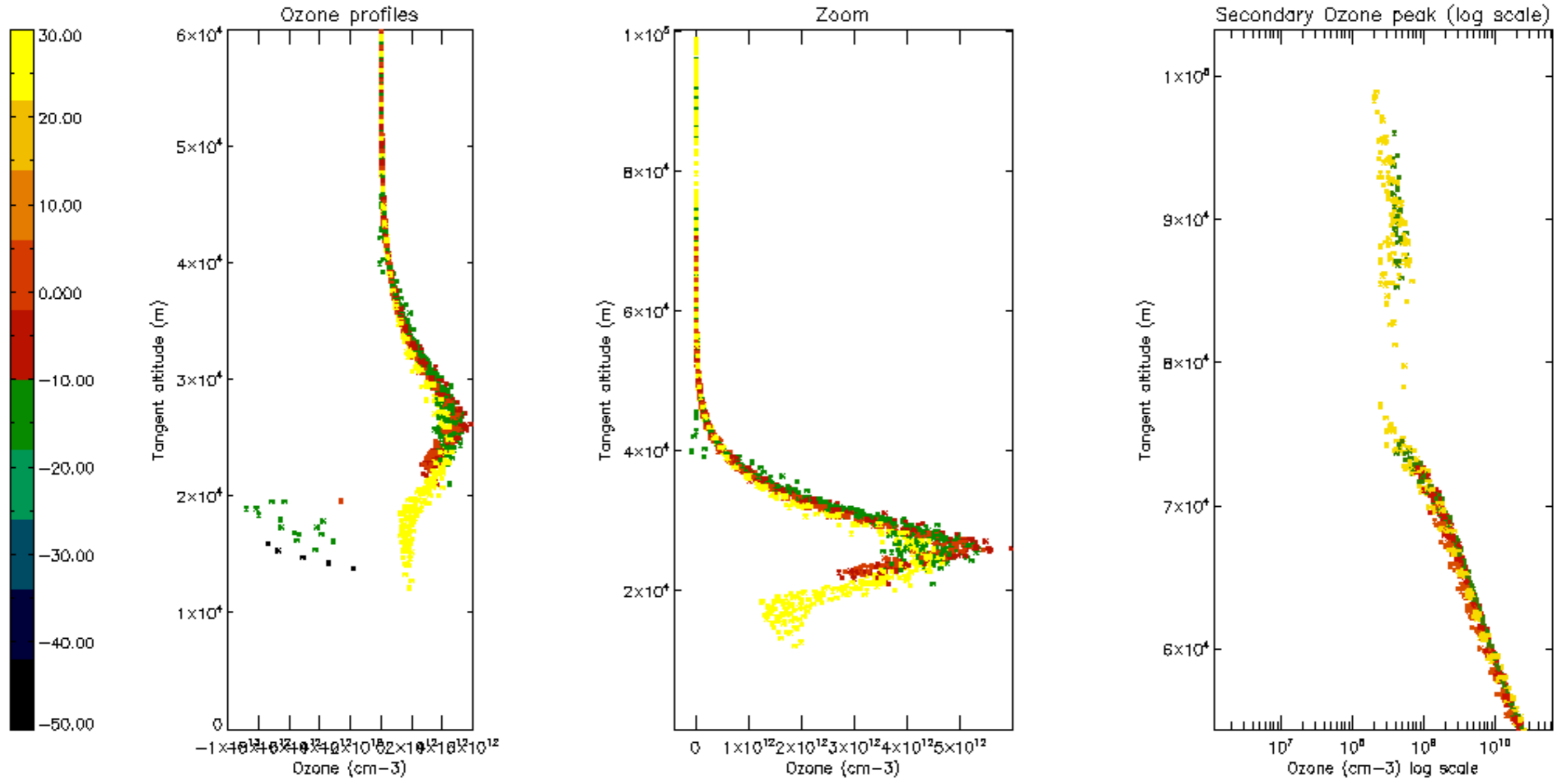


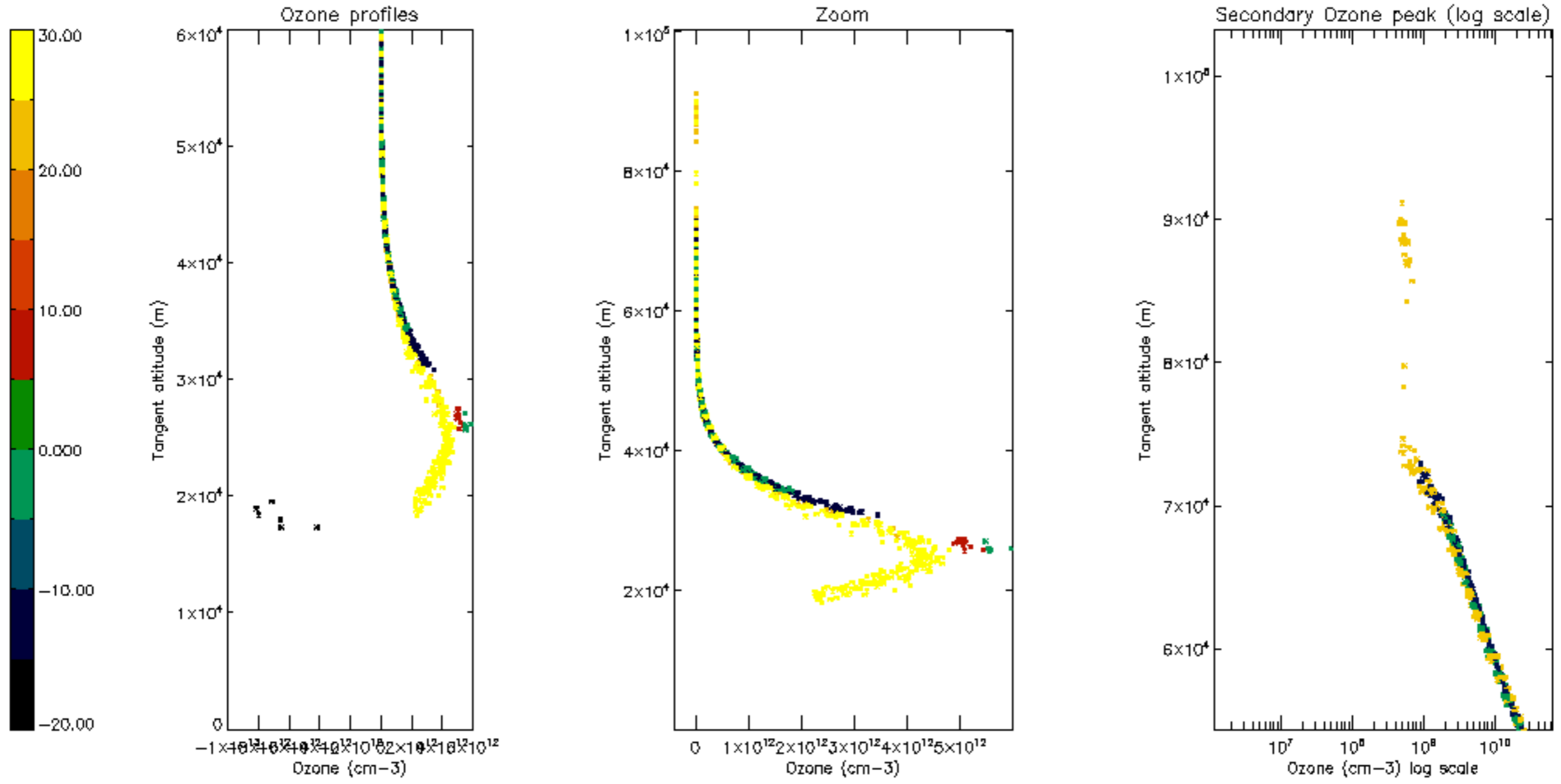
Percentage of saturation errors per profile

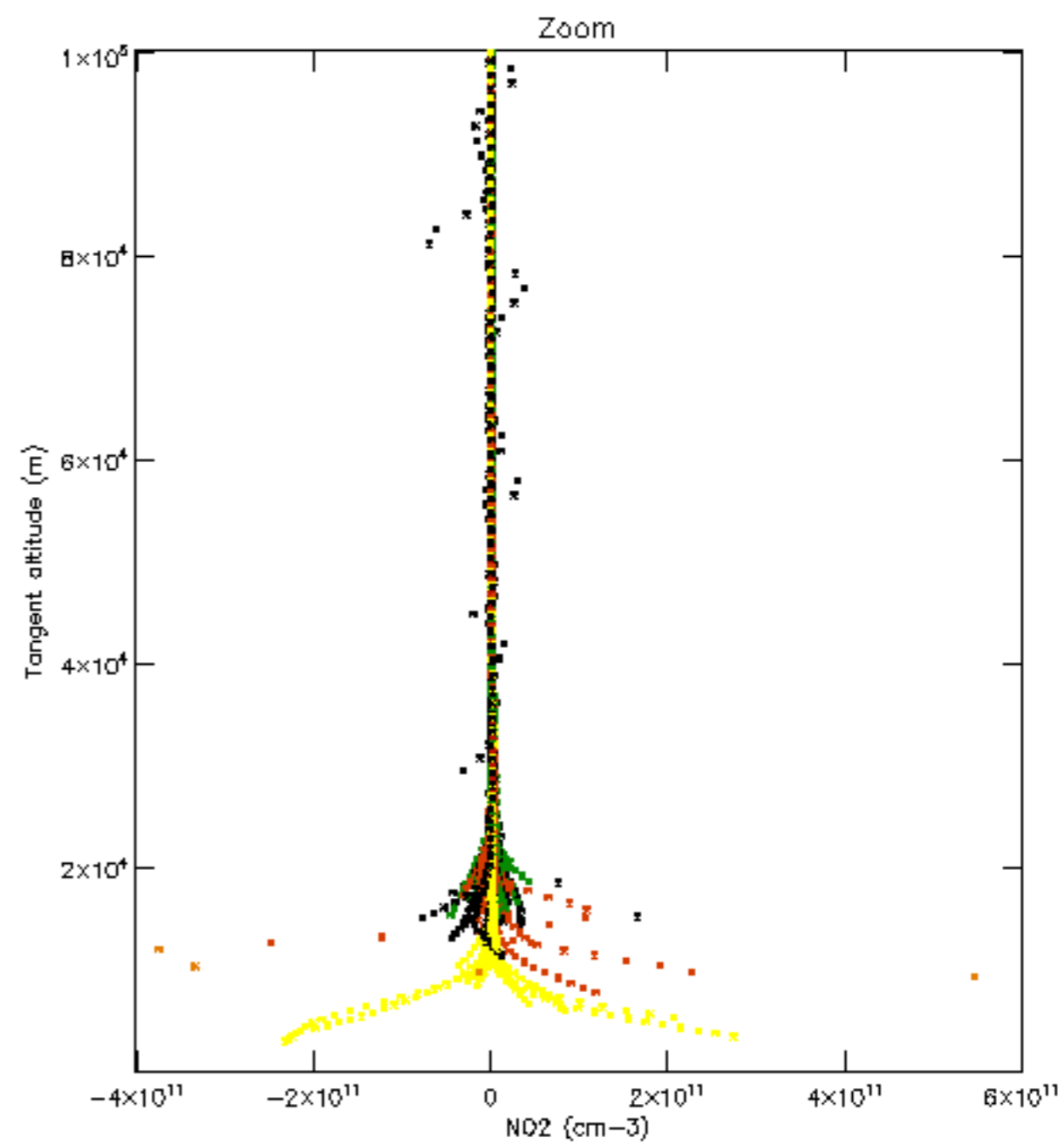
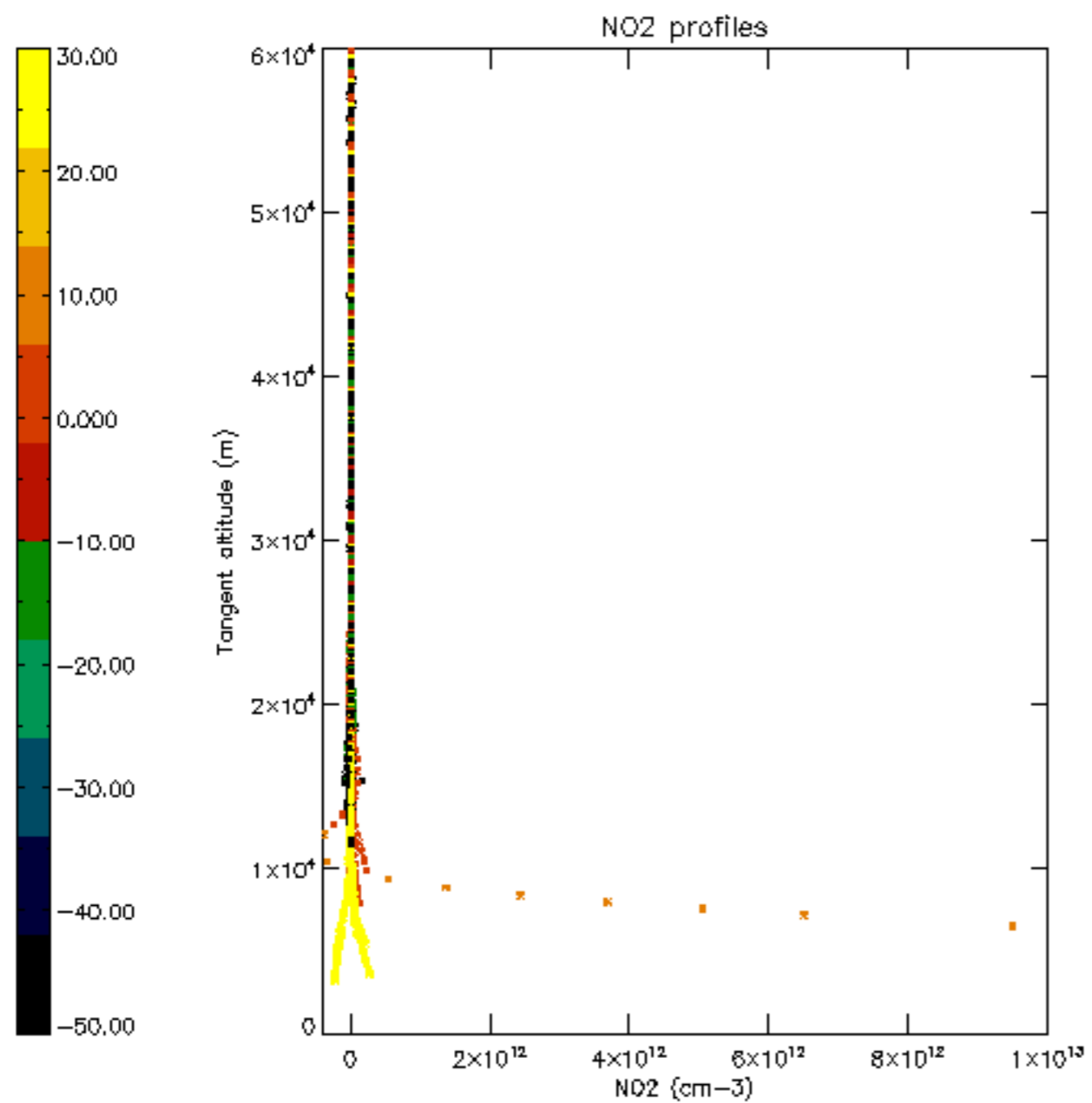


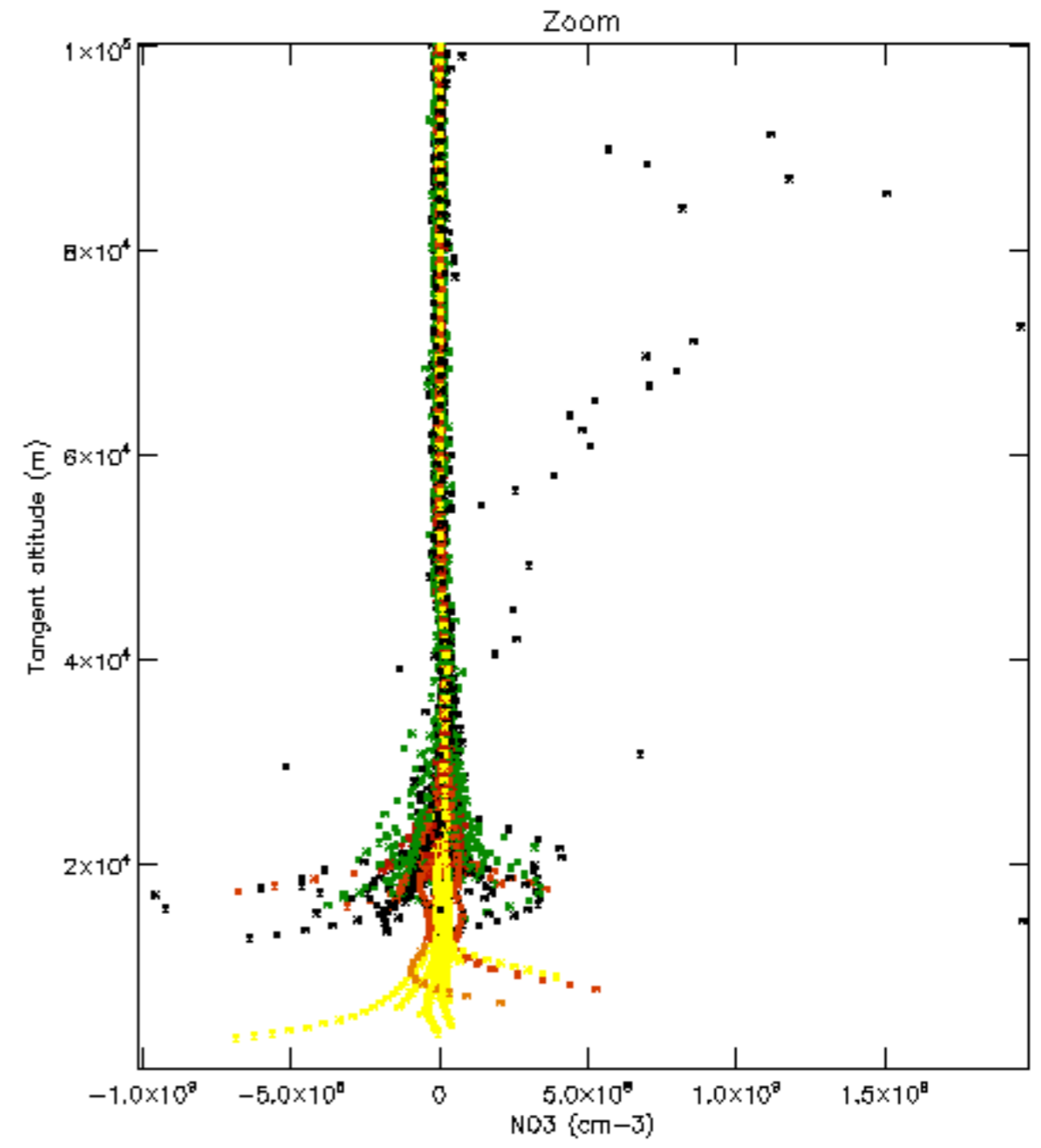
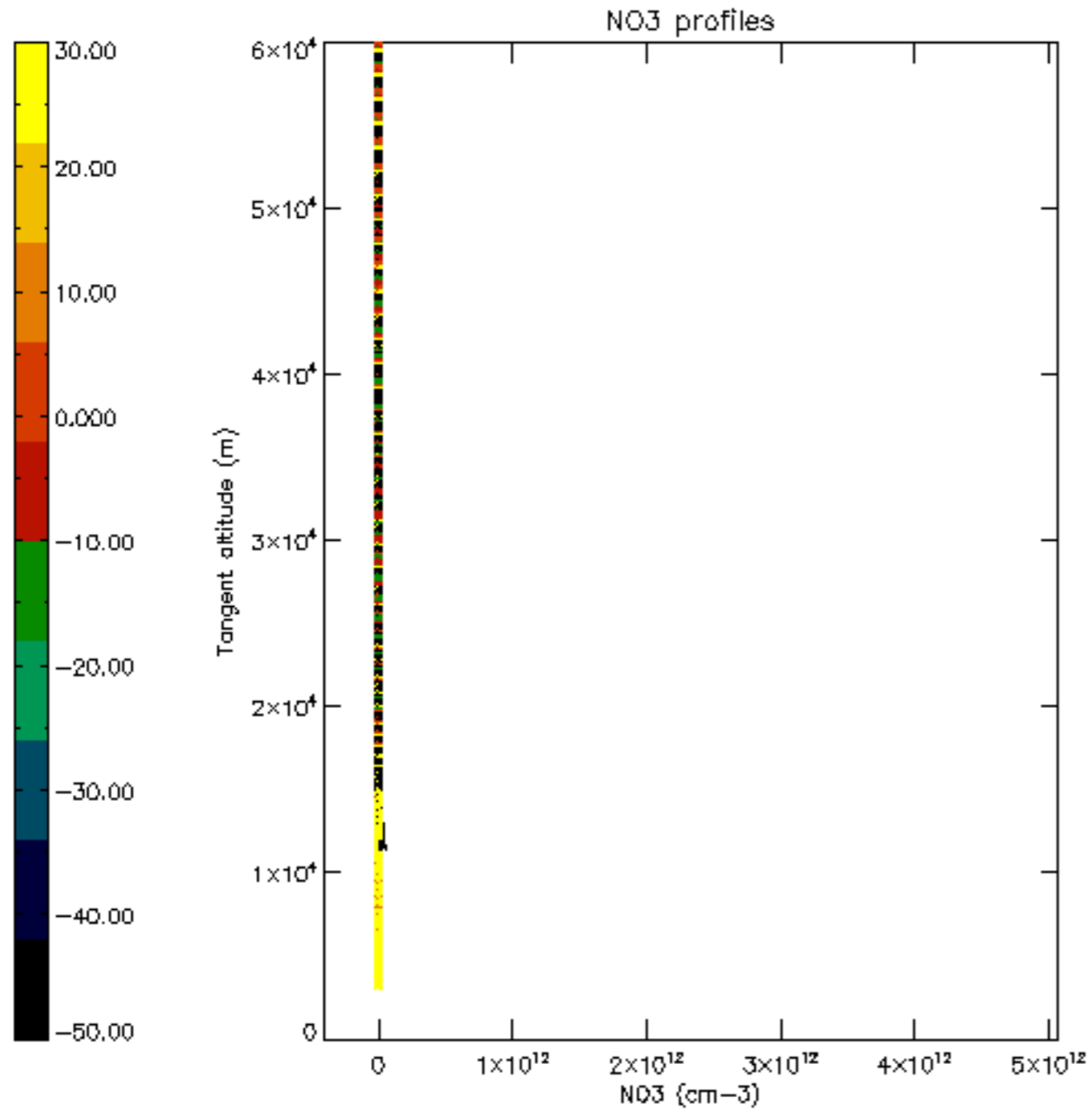


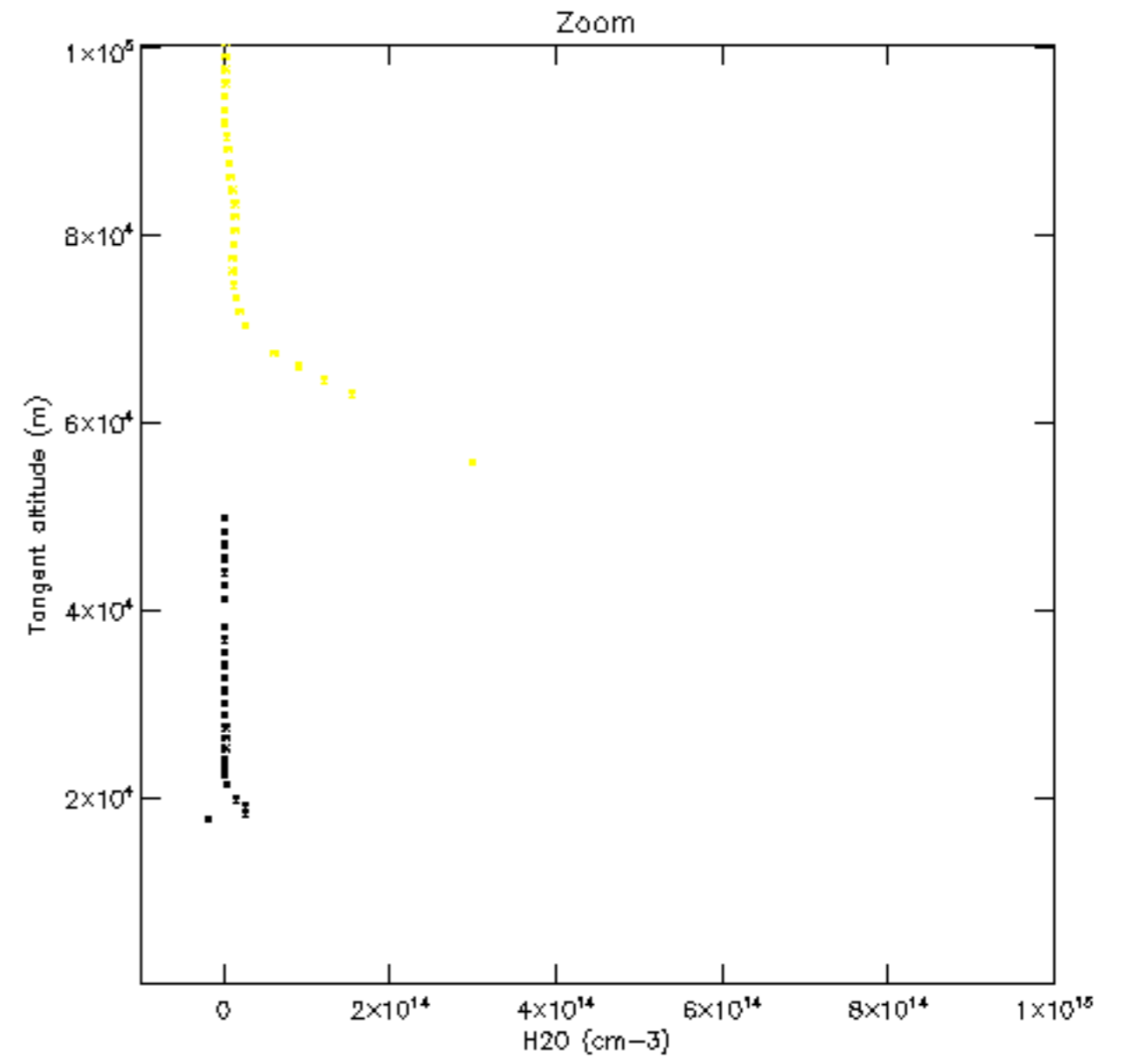
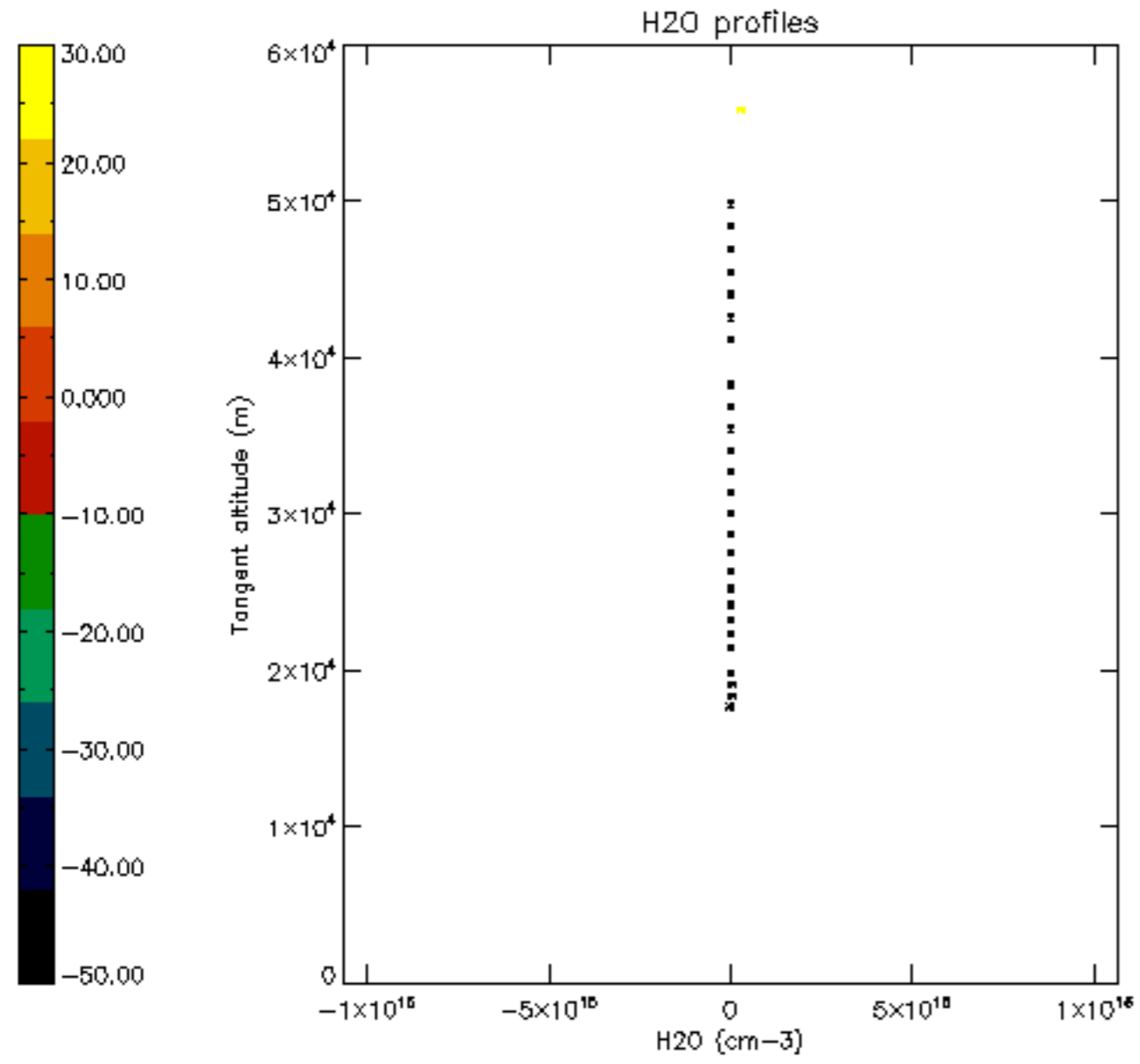


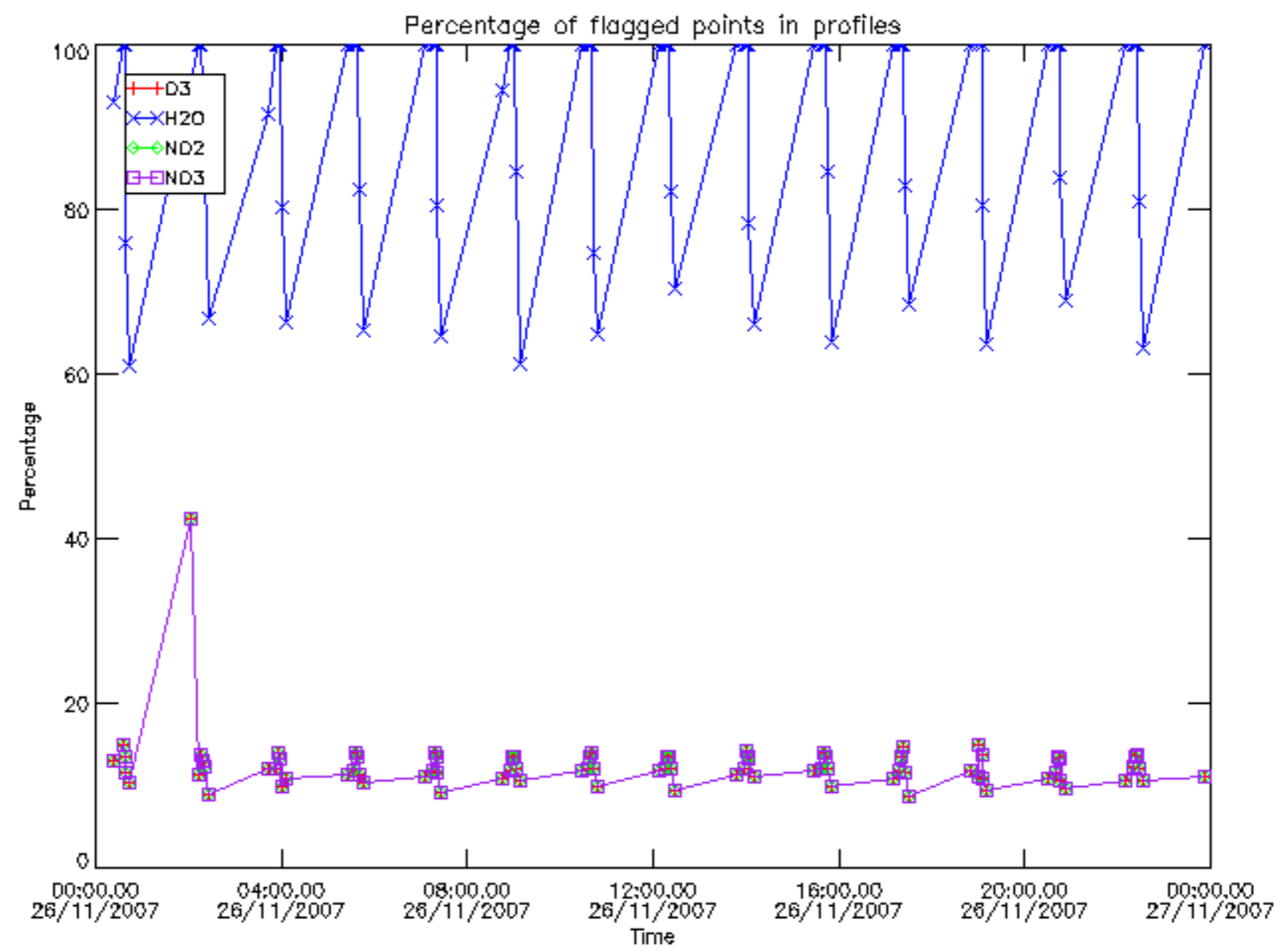




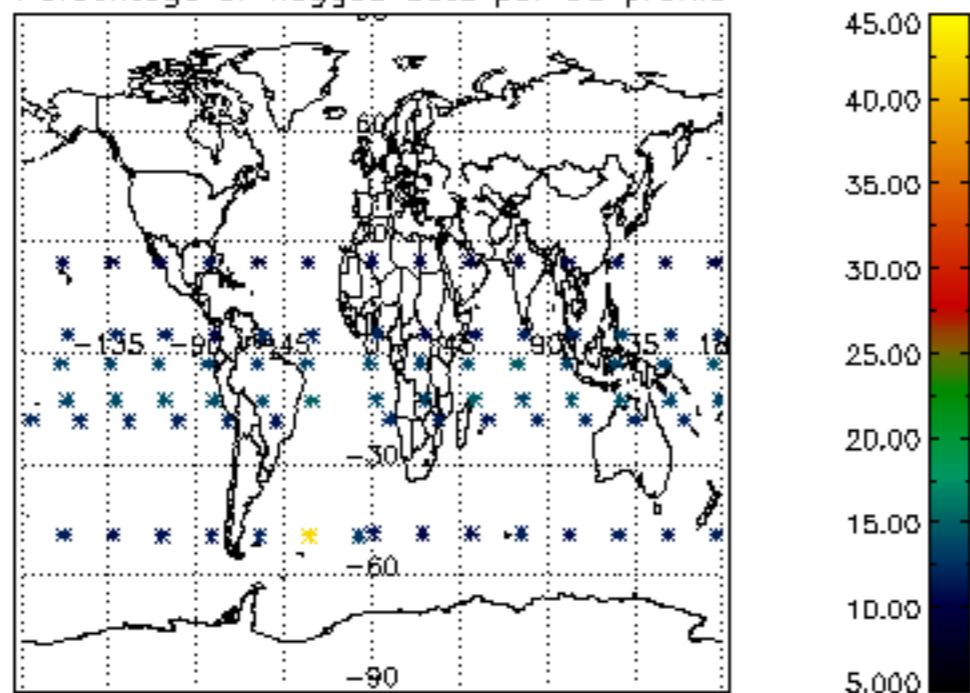




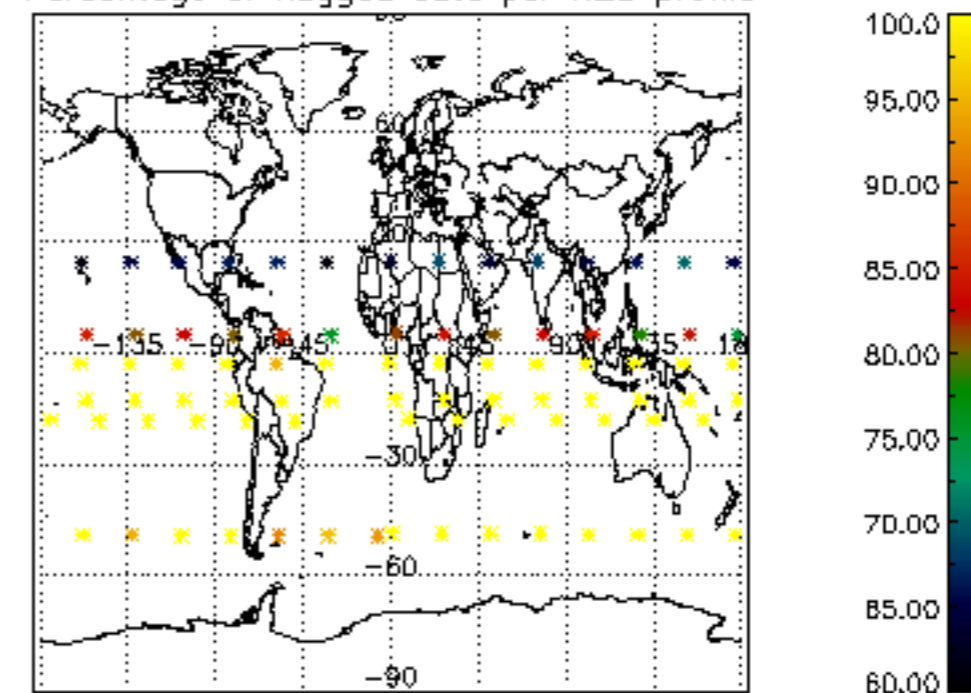




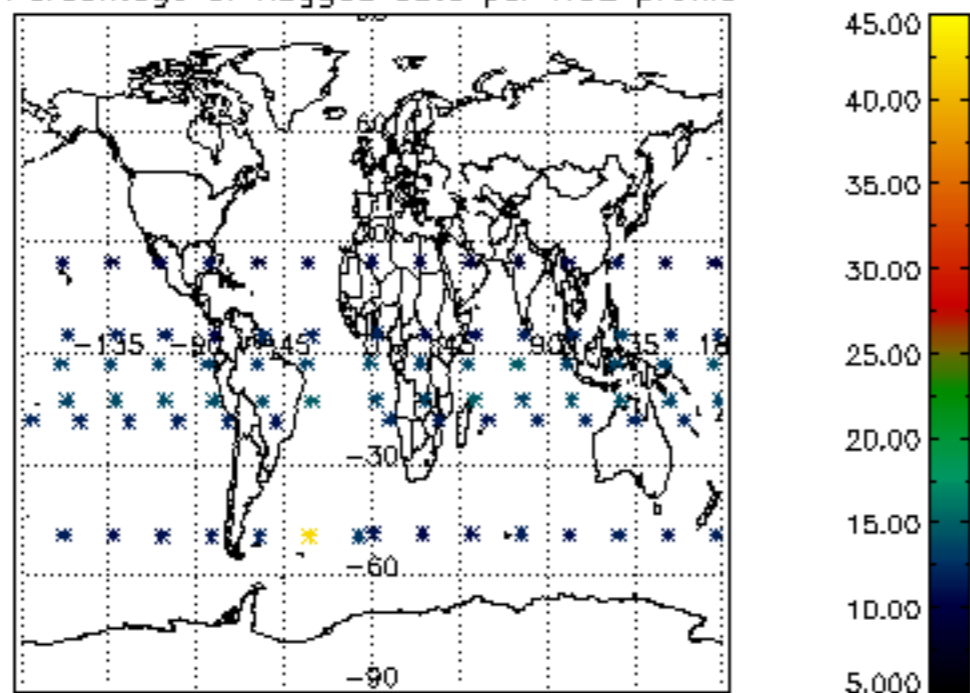
Percentage of flagged data per D3 profile



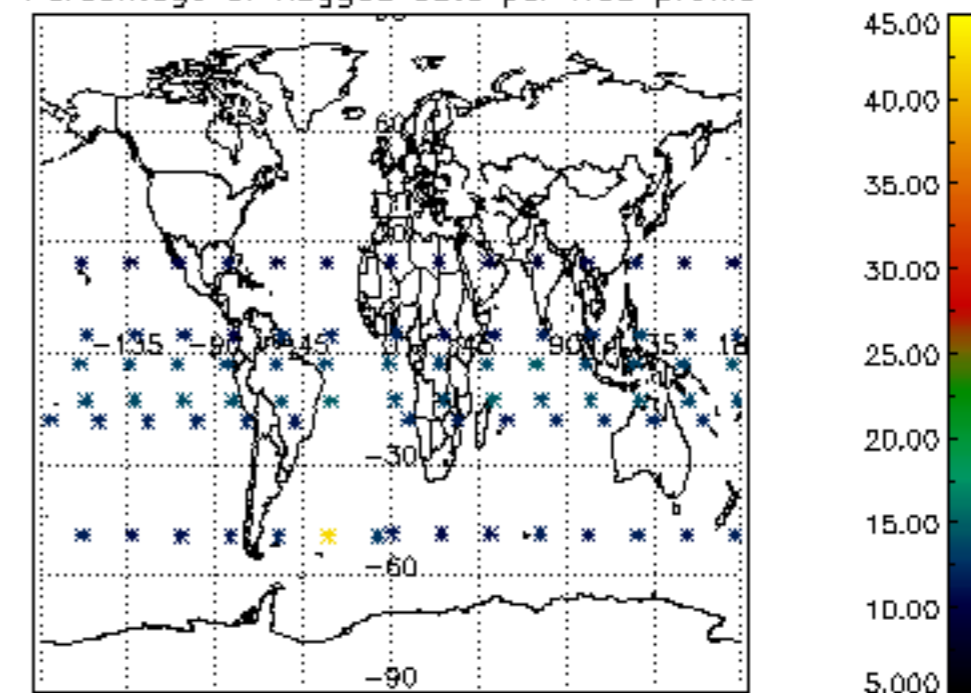
Percentage of flagged data per H2O profile

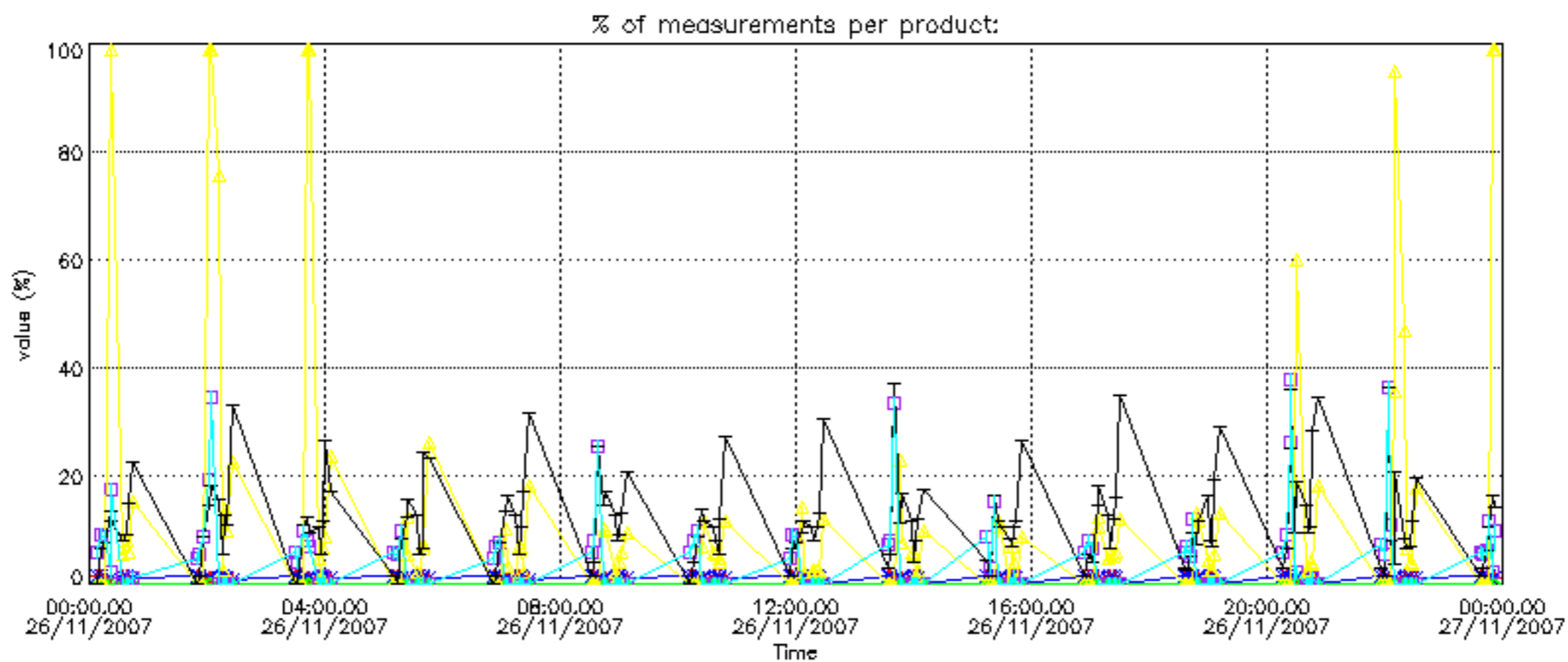


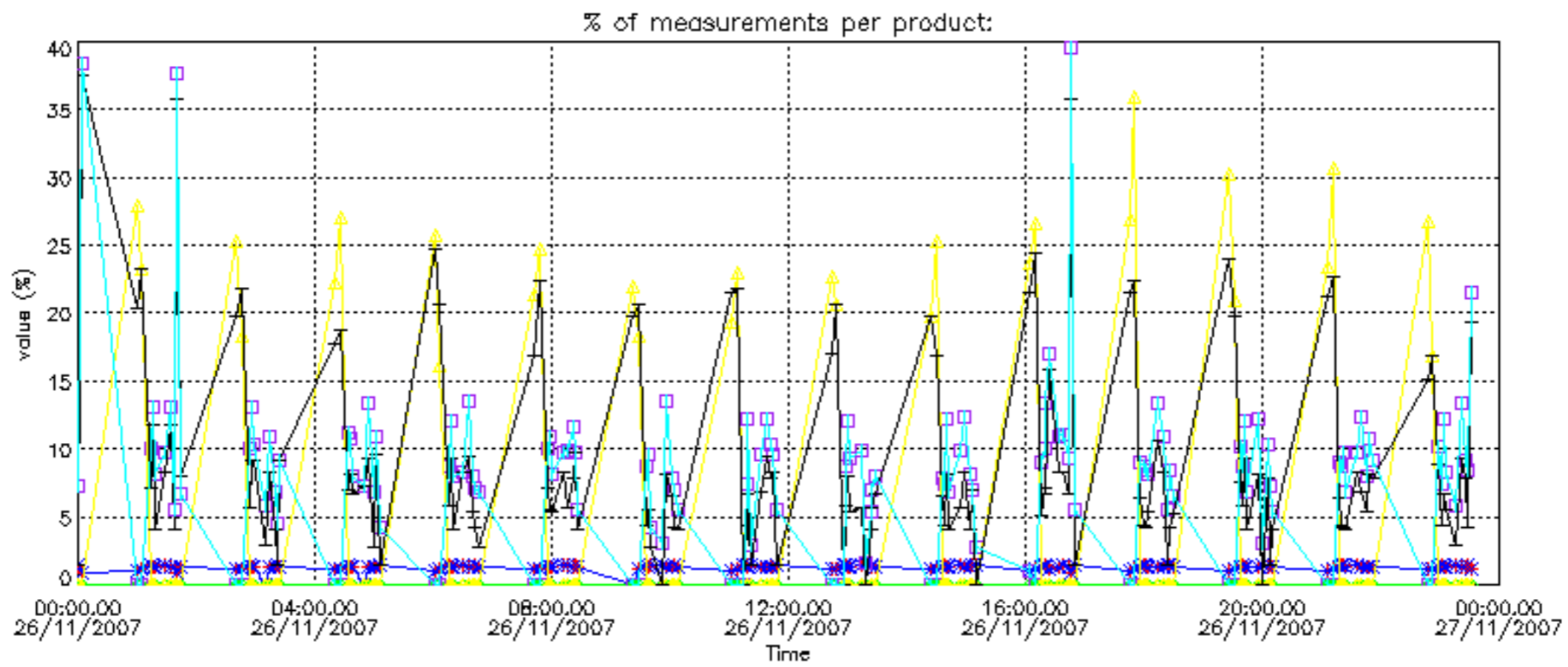
Percentage of flagged data per NO2 profile



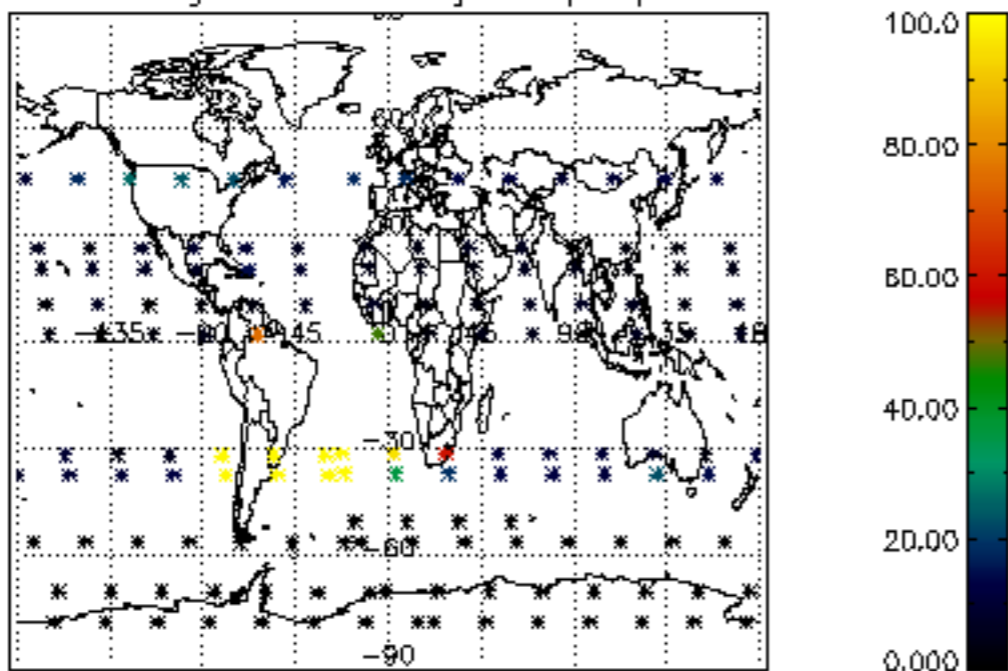
Percentage of flagged data per NO3 profile



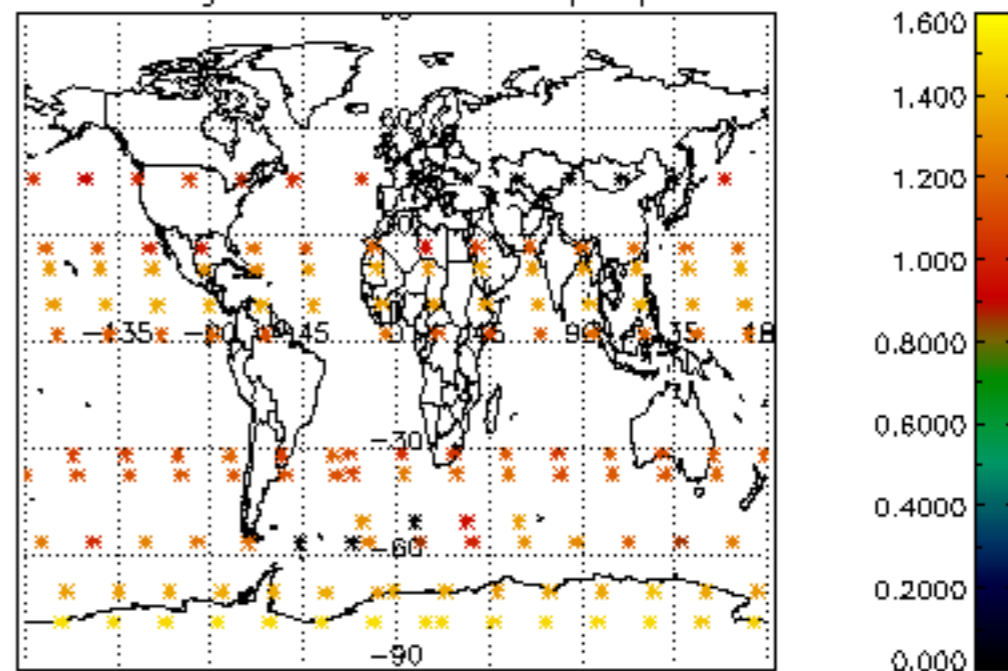




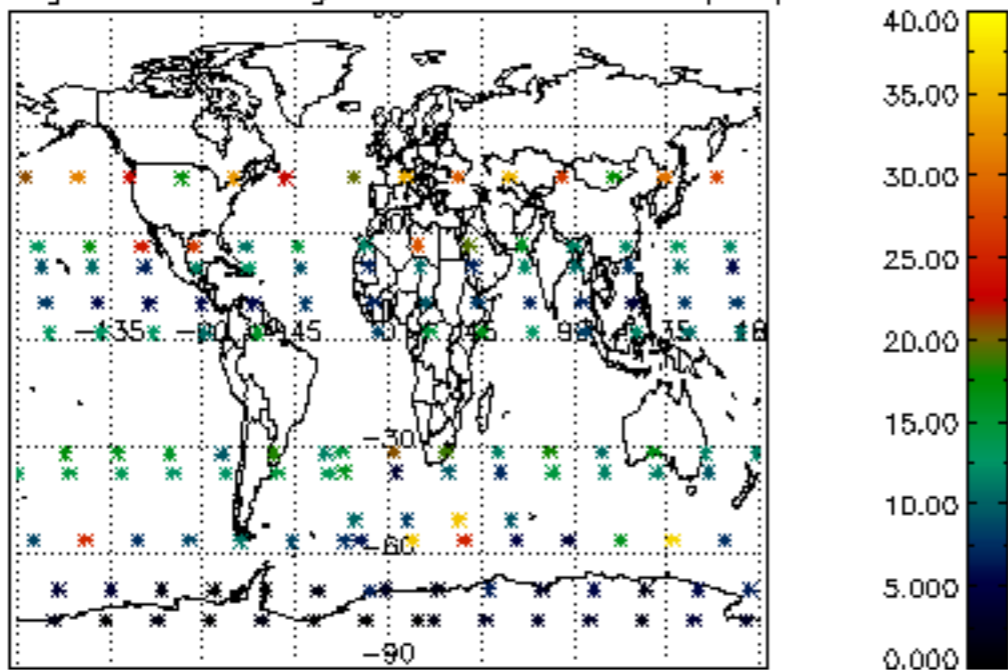
Percentage of cosmic ray hits per profile



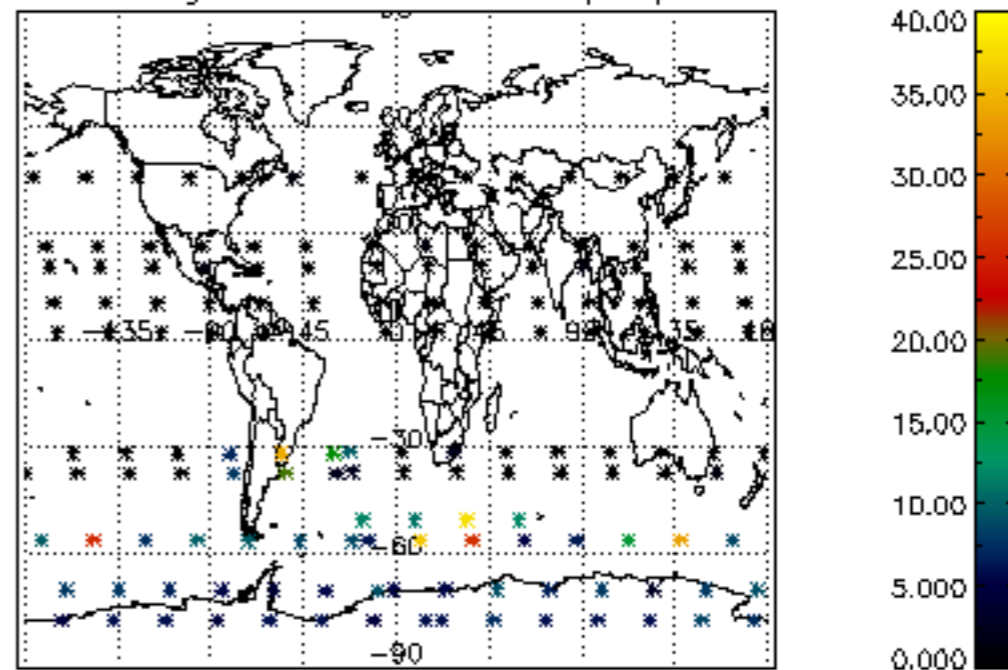
Percentage of datation errors per profile



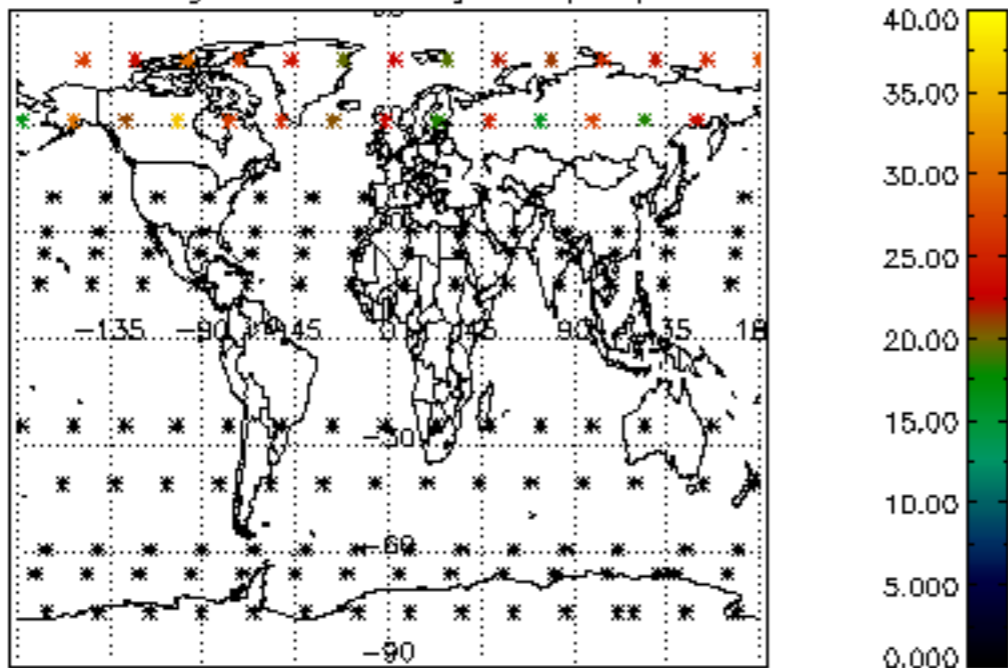
Percentage of star falling outside central band per profile



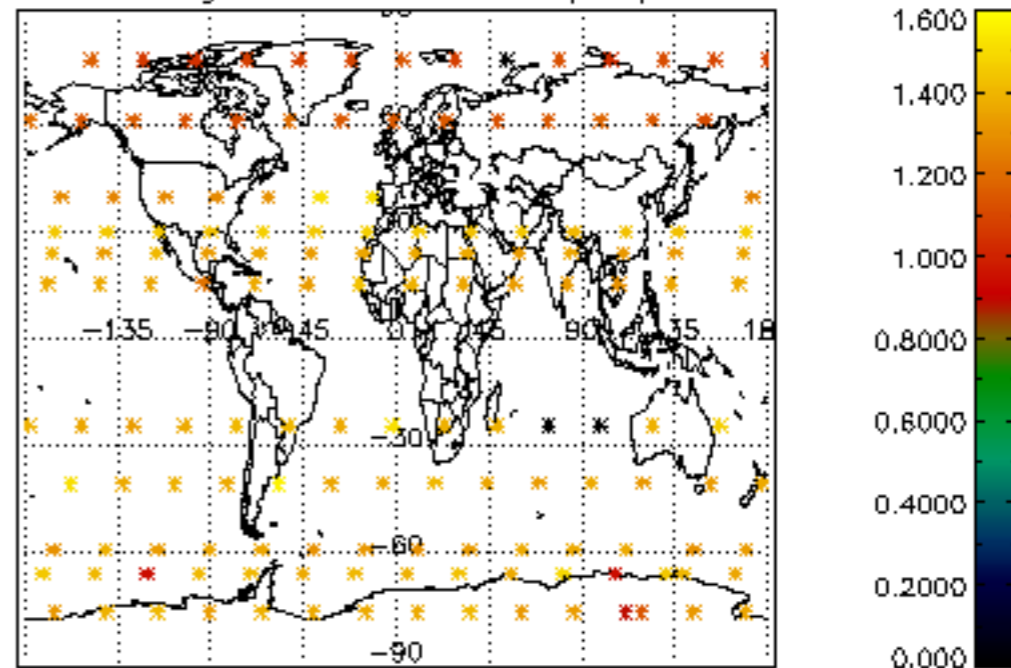
Percentage of saturation errors per profile



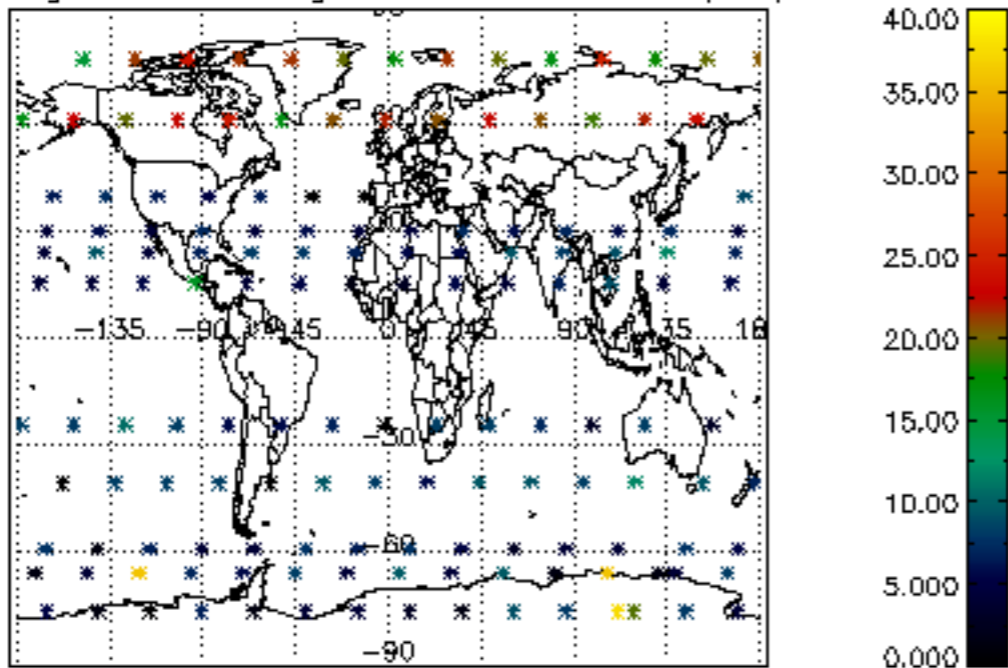
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

