

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

[3. Level 2 Quality information per product](#)

[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

[3.2 Plot of level 2 quality information per product \(world map\)](#)

[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](#)

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

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

[5.1 Ozone statistics based on quality of products](#)

[5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

[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](#)

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

Item	Value
Time of report generation	26APR2013 16:11:06
Data source version	GOMOS/6.01
Start time of products	09-01-2010 (09JAN2010 00:00:00)
Stop time of products	10-01-2010 (10JAN2010 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	262
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

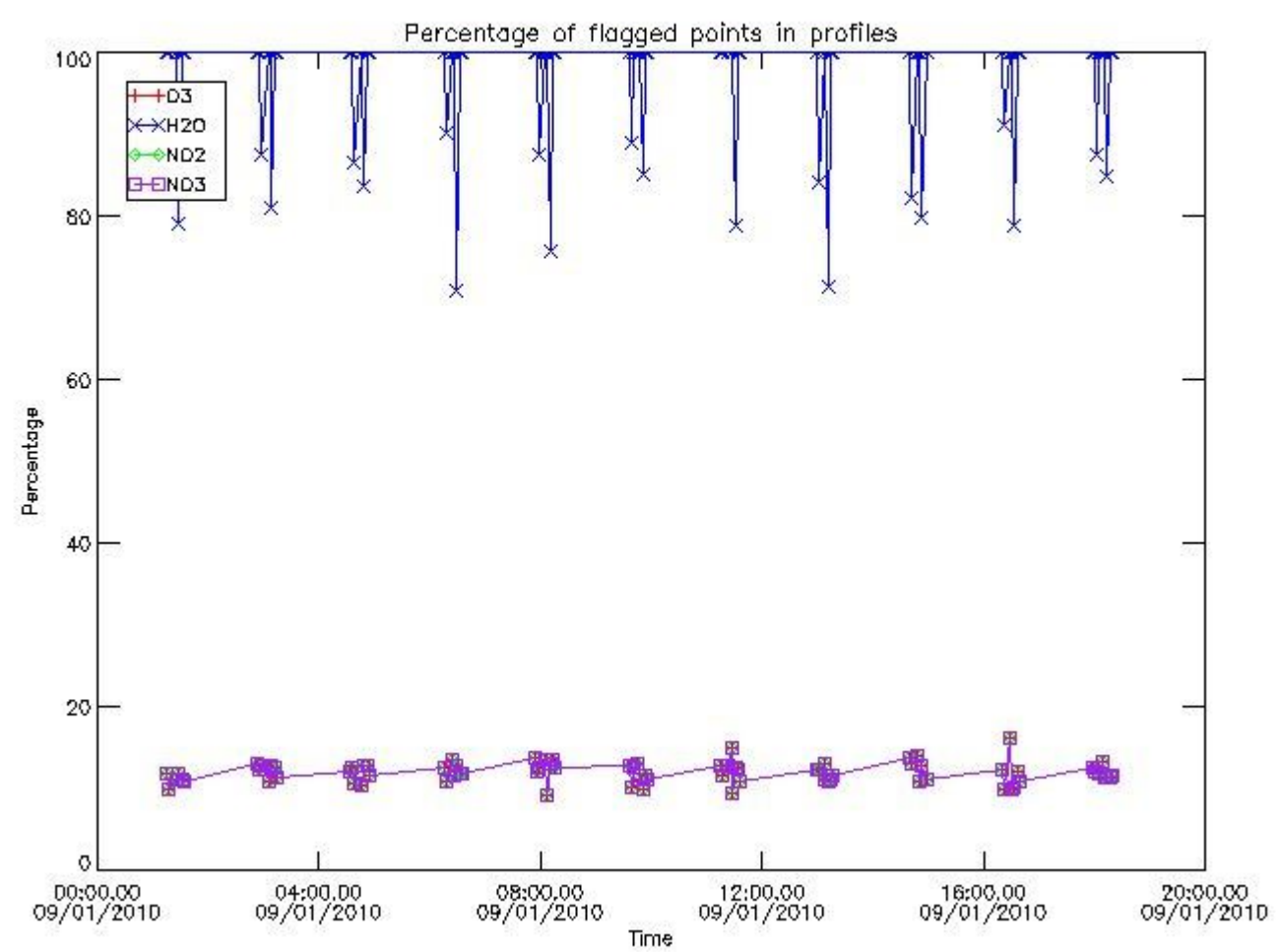
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20100109_000050_00000452085_00460_41095_9208.N1	09-JAN-2010 00:00:50	Straylight	45.000	1	9Alp CMa	-1.4400	11000.	90	41095	No
2	GOM_NL__2PRFIN20100109_000806_000000512085_00460_41095_9209.N1	09-JAN-2010 00:08:06	Twilight_stray	51.000	14	58Alp Ori	0.87000	3000.0	102	41095	No
3	GOM_NL__2PRFIN20100109_001055_000000472085_00460_41095_9210.N1	09-JAN-2010 00:10:55	Twilight_stray	46.500	44	24Gam Gem	1.9280	11000.	93	41095	No
4	GOM_NL__2PRFIN20100109_001236_000000442085_00460_41095_9211.N1	09-JAN-2010 00:12:36	Bright	44.000	151	13Mu Gem	2.8900	3000.0	88	41095	No
5	GOM_NL__2PRFIN20100109_001410_000000392085_00460_41095_9212.N1	09-JAN-2010 00:14:10	Bright	39.000	28	12Bet Tau	1.6500	15200.	78	41095	No
6	GOM_NL__2PRFIN20100109_001641_000000382085_00460_41095_9213.N1	09-JAN-2010 00:16:41	Bright	37.500	107	37The Aur	2.6490	11000.	75	41095	No
7	GOM_NL__2PRFIN20100109_001854_000000392085_00460_41095_9214.N1	09-JAN-2010 00:18:54	Bright	38.500	42	34Bet Aur	1.9000	10200.	77	41095	No
8	GOM_NL__2PRFIN20100109_003119_000000332085_00460_41095_9215.N1	09-JAN-2010 00:31:19	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	41095	No
9	GOM_NL__2PRFIN20100109_003532_000000392085_00460_41095_9216.N1	09-JAN-2010 00:35:32	Bright	39.000	60	7Bet UMi	2.0810	3950.0	78	41095	No
10	GOM_NL__2PRFIN20100109_003939_000000382085_00460_41095_9217.N1	09-JAN-2010 00:39:39	Bright	38.000	119	14Eta Dra	2.7270	4700.0	76	41095	No
11	GOM_NL__2PRFIN20100109_004815_000000532085_00460_41095_9218.N1	09-JAN-2010 00:48:15	Bright	53.000	133	40Zet Her	2.8070	6000.0	106	41095	No
12	GOM_NL__2PRFIN20100109_005022_000000392085_00460_41095_9219.N1	09-JAN-2010 00:50:22	Bright	39.000	67	5Alp CrB	2.2210	11000.	78	41095	No
13	GOM_NL__2PRFIN20100109_005624_000000392085_00460_41095_9220.N1	09-JAN-2010 00:56:24	Bright	39.000	102	24Alp Ser	2.6000	4250.0	78	41095	No
14	GOM_NL__2PRFIN20100109_005837_000000532085_00460_41095_9221.N1	09-JAN-2010 00:58:37	Bright	53.000	120	1Del Oph	2.7340	3200.0	106	41095	No
15	GOM_NL__2PRFIN20100109_010406_000000422085_00460_41095_9222.N1	09-JAN-2010 01:04:06	Twilight_stray	41.500	80	7Del Sco	2.3160	30000.	83	41095	No
16	GOM_NL__2PRFIN20100109_011424_000000442085_00460_41095_9223.N1	09-JAN-2010 01:14:24	Dark	43.500	95	Zet Cen	2.5450	26000.	87	41095	No
17	GOM_NL__2PRFIN20100109_011620_000000522085_00461_41096_9207.N1	09-JAN-2010 01:16:20	Dark	51.500	10	Bet Cen	0.61000	28000.	103	41096	No
18	GOM_NL__2PRFIN20100109_012426_000000462085_00461_41096_9208.N1	09-JAN-2010 01:24:26	Dark	46.000	113	Mu Vel	2.6920	5000.0	92	41096	No
19	GOM_NL__2PRFIN20100109_012744_000000442085_00461_41096_9209.N1	09-JAN-2010 01:27:44	Dark	43.500	41	Eps Car	1.8600	4100.0	87	41096	No
20	GOM_NL__2PRFIN20100109_013101_000000462085_00461_41096_9210.N1	09-JAN-2010 01:31:01	Dark	45.500	34	Gam2Vel	1.7930	23000.	91	41096	No
21	GOM_NL__2PRFIN20100109_013311_000000472085_00461_41096_9211.N1	09-JAN-2010 01:33:11	Dark	46.500	70	Zet Pup	2.2460	39000.	93	41096	No
22	GOM_NL__2PRFIN20100109_013501_000000462085_00461_41096_9212.N1	09-JAN-2010 01:35:01	Straylight	46.000	117	Pi Pup	2.7060	3800.0	92	41096	No
23	GOM_NL__2PRFIN20100109_013740_000000422085_00461_41096_9213.N1	09-JAN-2010 01:37:40	Straylight	42.000	23	21Eps CMa	1.5020	26000.	84	41096	No
24	GOM_NL__2PRFIN20100109_013908_000000432085_00461_41096_9214.N1	09-JAN-2010 01:39:08	Straylight	42.500	179	24Omi2CMa	3.0320	24000.	85	41096	No
25	GOM_NL__2PRFIN20100109_014126_000000482085_00461_41096_9215.N1	09-JAN-2010 01:41:26	Straylight	47.500	1	9Alp CMa	-1.4400	11000.	95	41096	No
26	GOM_NL__2PRFIN20100109_014842_000000482085_00461_41096_9216.N1	09-JAN-2010 01:48:42	Twilight_stray	48.000	14	58Alp Ori	0.87000	3000.0	96	41096	No
27	GOM_NL__2PRFIN20100109_015130_000000462085_00461_41096_9217.N1	09-JAN-2010 01:51:30	Twilight_stray	45.500	44	24Gam Gem	1.9280	11000.	91	41096	No
28	GOM_NL__2PRFIN20100109_015311_000000462085_00461_41096_9218.N1	09-JAN-2010 01:53:11	Bright	45.500	151	13Mu Gem	2.8900	3000.0	91	41096	No
29	GOM_NL__2PRFIN20100109_015446_000000392085_00461_41096_9219.N1	09-JAN-2010 01:54:46	Bright	38.500	28	12Bet Tau	1.6500	15200.	77	41096	No
30	GOM_NL__2PRFIN20100109_015716_000000382085_00461_41096_9220.N1	09-JAN-2010 01:57:16	Bright	37.500	107	37The Aur	2.6490	11000.	75	41096	No
31	GOM_NL__2PRFIN20100109_015929_000000382085_00461_41096_9221.N1	09-JAN-2010 01:59:29	Bright	37.500	42	34Bet Aur	1.9000	10200.	75	41096	No
32	GOM_NL__2PRFIN20100109_021155_000000342085_00461_41096_9222.N1	09-JAN-2010 02:11:55	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	41096	No
33	GOM_NL__2PRFIN20100109_021608_000000412085_00461_41096_9223.N1	09-JAN-2010 02:16:08	Bright	40.500	60	7Bet UMi	2.0810	3950.0	81	41096	No
34	GOM_NL__2PRFIN20100109_022015_000000532085_00461_41096_9224.N1	09-JAN-2010 02:20:15	Bright	52.500	119	14Eta Dra	2.7270	4700.0	105	41096	No
35	GOM_NL__2PRFIN20100109_022851_000000342085_00461_41096_9225.N1	09-JAN-2010 02:28:51	Bright	33.500	133	40Zet Her	2.8070	6000.0	67	41096	No
36	GOM_NL__2PRFIN20100109_023058_000000592085_00461_41096_9226.N1	09-JAN-2010 02:30:58	Bright	59.000	67	5Alp CrB	2.2210	11000.	118	41096	No
37	GOM_NL__2PRFIN20100109_023700_000000572085_00461_41096_9227.N1	09-JAN-2010 02:37:00	Bright	57.000	102	24Alp Ser	2.6000	4250.0	114	41096	No
38	GOM_NL__2PRFIN20100109_023913_000000542085_00461_41096_9228.N1	09-JAN-2010 02:39:13	Bright	54.000	120	1Del Oph	2.7340	3200.0	108	41096	No
39	GOM_NL__2PRFIN20100109_024442_000000422085_00461_41096_9229.N1	09-JAN-2010 02:44:42	Twilight_stray	42.000	80	7Del Sco	2.3160	30000.	84	41096	No
40	GOM_NL__2PRFIN20100109_025313_000000402085_00461_41096_9230.N1	09-JAN-2010 02:53:13	Dark	39.500	78	Alp Lup	2.3040	28000.	79	41096	No
41	GOM_NL__2PRFIN20100109_025501_000000422085_00461_41096_9231.N1	09-JAN-2010 02:55:01	Dark	41.500	95	Zet Cen	2.5450	26000.	83	41096	No
42	GOM_NL__2PRFIN20100109_025656_000000402085_00462_41097_9216.N1	09-JAN-2010 02:56:56	Dark	40.000	10	Bet Cen	0.61000	28000.	80	41097	No

220	GOM_NL__2PRFIN20100109_151330_000000462085_00469_41104_9308.N1	09-JAN-2010 15:13:30	Twilight	45.500	14	58Alp Ori	0.87000	3000.0	91	41104	No
221	GOM_NL__2PRFIN20100109_151758_000000552085_00469_41104_9309.N1	09-JAN-2010 15:17:58	Bright	55.000	151	13Mu Gem	2.8900	3000.0	110	41104	No
222	GOM_NL__2PRFIN20100109_152203_000000372085_00469_41104_9310.N1	09-JAN-2010 15:22:03	Bright	36.500	107	37The Aur	2.6490	11000.	73	41104	No
223	GOM_NL__2PRFIN20100109_152416_000000412085_00469_41104_9311.N1	09-JAN-2010 15:24:16	Bright	40.500	42	34Bet Aur	1.9000	10200.	81	41104	No
224	GOM_NL__2PRFIN20100109_153642_000000392085_00469_41104_9312.N1	09-JAN-2010 15:36:42	Bright	38.500	49	1Alp UMi	1.9900	6300.0	77	41104	No
225	GOM_NL__2PRFIN20100109_154054_000000412085_00469_41104_9313.N1	09-JAN-2010 15:40:54	Bright	41.000	60	7Bet UMi	2.0810	3950.0	82	41104	No
226	GOM_NL__2PRFIN20100109_154502_000000412085_00469_41104_9314.N1	09-JAN-2010 15:45:02	Bright	40.500	119	14Eta Dra	2.7270	4700.0	81	41104	No
227	GOM_NL__2PRFIN20100109_155339_000000532085_00469_41104_9315.N1	09-JAN-2010 15:53:39	Bright	53.000	133	40Zet Her	2.8070	6000.0	106	41104	No
228	GOM_NL__2PRFIN20100109_160151_000000402085_00469_41104_9316.N1	09-JAN-2010 16:01:51	Bright	40.000	102	24Alp Ser	2.6000	4250.0	80	41104	No
229	GOM_NL__2PRFIN20100109_160404_000000542085_00469_41104_9317.N1	09-JAN-2010 16:04:04	Bright	53.500	120	1Del Oph	2.7340	3200.0	107	41104	No
230	GOM_NL__2PRFIN20100109_160933_000000432085_00469_41104_9318.N1	09-JAN-2010 16:09:33	Twilight	43.000	80	7Del Sco	2.3160	30000.	86	41104	No
231	GOM_NL__2PRFIN20100109_161954_000000422085_00469_41104_9319.N1	09-JAN-2010 16:19:54	Dark	41.500	95	Zet Cen	2.5450	26000.	83	41104	No
232	GOM_NL__2PRFIN20100109_162147_000000512085_00470_41105_9308.N1	09-JAN-2010 16:21:47	Dark	51.000	10	Bet Cen	0.61000	28000.	102	41105	No
233	GOM_NL__2PRFIN20100109_162828_000000382085_00470_41105_9309.N1	09-JAN-2010 16:28:28	Dark	38.000	124	The Car	2.7640	30000.	76	41105	No
234	GOM_NL__2PRFIN20100109_162957_000000522085_00470_41105_9310.N1	09-JAN-2010 16:29:57	Dark	52.000	113	Mu Vel	2.6920	5000.0	104	41105	No
235	GOM_NL__2PRFIN20100109_163311_000000502085_00470_41105_9311.N1	09-JAN-2010 16:33:11	Dark	50.000	41	Eps Car	1.8600	4100.0	100	41105	No
236	GOM_NL__2PRFIN20100109_163628_000000422085_00470_41105_9312.N1	09-JAN-2010 16:36:28	Dark	42.000	34	Gam2Vel	1.7930	23000.	84	41105	No
237	GOM_NL__2PRFIN20100109_163838_000000472085_00470_41105_9313.N1	09-JAN-2010 16:38:38	Dark	46.500	70	Zet Pup	2.2460	39000.	93	41105	No
238	GOM_NL__2PRFIN20100109_164027_000000452085_00470_41105_9314.N1	09-JAN-2010 16:40:27	Straylight	45.000	117	Pi Pup	2.7060	3800.0	90	41105	No
239	GOM_NL__2PRFIN20100109_164305_000000442085_00470_41105_9315.N1	09-JAN-2010 16:43:05	Straylight	43.500	23	21Eps CMa	1.5020	26000.	87	41105	No
240	GOM_NL__2PRFIN20100109_164433_000000432085_00470_41105_9316.N1	09-JAN-2010 16:44:33	Straylight	42.500	179	24Omi2CMa	3.0320	24000.	85	41105	No
241	GOM_NL__2PRFIN20100109_164651_000000462085_00470_41105_9317.N1	09-JAN-2010 16:46:51	Straylight	45.500	1	9Alp CMa	-1.4400	11000.	91	41105	No
242	GOM_NL__2PRFIN20100109_165406_000000472085_00470_41105_9318.N1	09-JAN-2010 16:54:06	Twilight	47.000	14	58Alp Ori	0.87000	3000.0	94	41105	No
243	GOM_NL__2PRFIN20100109_165834_000000532085_00470_41105_9319.N1	09-JAN-2010 16:58:34	Bright	53.000	151	13Mu Gem	2.8900	3000.0	106	41105	No
244	GOM_NL__2PRFIN20100109_170239_000000372085_00470_41105_9320.N1	09-JAN-2010 17:02:39	Bright	36.500	107	37The Aur	2.6490	11000.	73	41105	No
245	GOM_NL__2PRFIN20100109_170452_000000382085_00470_41105_9321.N1	09-JAN-2010 17:04:52	Bright	37.500	42	34Bet Aur	1.9000	10200.	75	41105	No
246	GOM_NL__2PRFIN20100109_171718_000000402085_00470_41105_9322.N1	09-JAN-2010 17:17:18	Bright	40.000	49	1Alp UMi	1.9900	6300.0	80	41105	No
247	GOM_NL__2PRFIN20100109_172130_000000552085_00470_41105_9323.N1	09-JAN-2010 17:21:30	Bright	55.000	60	7Bet UMi	2.0810	3950.0	110	41105	No
248	GOM_NL__2PRFIN20100109_172538_000000392085_00470_41105_9324.N1	09-JAN-2010 17:25:38	Bright	38.500	119	14Eta Dra	2.7270	4700.0	77	41105	No
249	GOM_NL__2PRFIN20100109_173416_000000352085_00470_41105_9325.N1	09-JAN-2010 17:34:16	Bright	34.500	133	40Zet Her	2.8070	6000.0	69	41105	No
250	GOM_NL__2PRFIN20100109_174228_000000392085_00470_41105_9326.N1	09-JAN-2010 17:42:28	Bright	39.000	102	24Alp Ser	2.6000	4250.0	78	41105	No
251	GOM_NL__2PRFIN20100109_174440_000000382085_00470_41105_9327.N1	09-JAN-2010 17:44:40	Bright	37.500	120	1Del Oph	2.7340	3200.0	75	41105	No
252	GOM_NL__2PRFIN20100109_174755_000000452085_00470_41105_9328.N1	09-JAN-2010 17:47:55	Twilight	45.000	104	27Bet Lib	2.6140	13100.	90	41105	No
253	GOM_NL__2PRFIN20100109_175009_000000442085_00470_41105_9329.N1	09-JAN-2010 17:50:09	Twilight	43.500	80	7Del Sco	2.3160	30000.	87	41105	No
254	GOM_NL__2PRFIN20100109_175842_000000412085_00470_41105_9330.N1	09-JAN-2010 17:58:42	Dark	41.000	78	Alp Lup	2.3040	28000.	82	41105	No
255	GOM_NL__2PRFIN20100109_180031_000000432085_00470_41105_9331.N1	09-JAN-2010 18:00:31	Dark	42.500	95	Zet Cen	2.5450	26000.	85	41105	No
256	GOM_NL__2PRFIN20100109_180224_000000412085_00471_41106_9317.N1	09-JAN-2010 18:02:24	Dark	40.500	10	Bet Cen	0.61000	28000.	81	41106	No
257	GOM_NL__2PRFIN20100109_180448_000000442085_00471_41106_9318.N1	09-JAN-2010 18:04:48	Dark	43.500	20	Bet Cru	1.2530	30000.	87	41106	No
258	GOM_NL__2PRFIN20100109_180904_000000392085_00471_41106_9319.N1	09-JAN-2010 18:09:04	Dark	38.500	124	The Car	2.7640	30000.	77	41106	No
259	GOM_NL__2PRFIN20100109_181034_000000502085_00471_41106_9320.N1	09-JAN-2010 18:10:34	Dark	49.500	113	Mu Vel	2.6920	5000.0	99	41106	No
260	GOM_NL__2PRFIN20100109_181347_000000542085_00471_41106_9321.N1	09-JAN-2010 18:13:47	Dark	53.500	41	Eps Car	1.8600	4100.0	107	41106	No
261	GOM_NL__2PRFIN20100109_181705_000000452085_00471_41106_9322.N1	09-JAN-2010 18:17:05	Dark	45.000	34	Gam2Vel	1.7930	23000.	90	41106	No
262	GOM_NL__2PRFIN20100109_181915_000000442085_00471_41106_9323.N1	09-JAN-2010 18:19:15	Dark	44.000	70	Zet Pup	2.2460	39000.	88	41106	No

3. Quality information per product

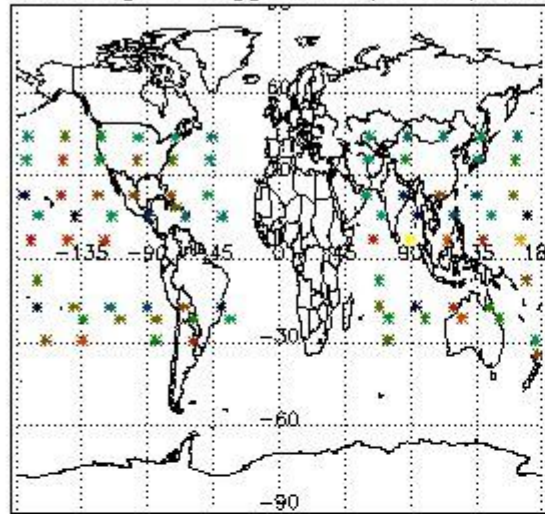
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

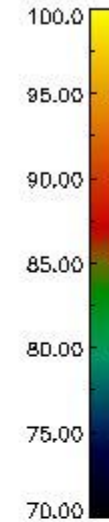
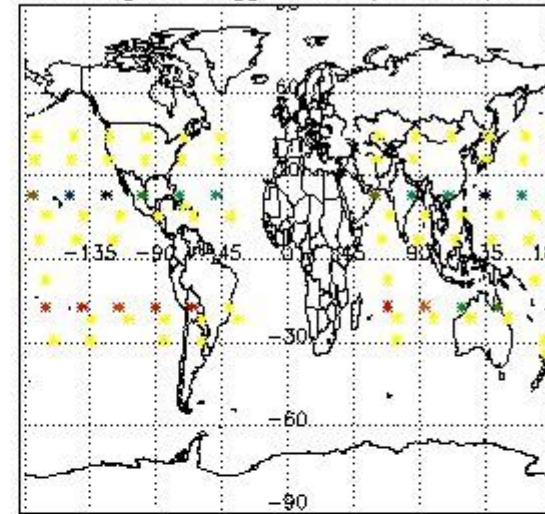


3.2 Plot quality information per product (world map)

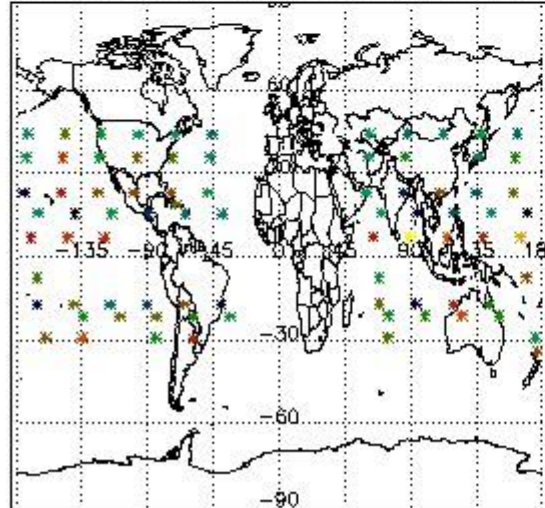
Percentage of flagged data per O3 profile



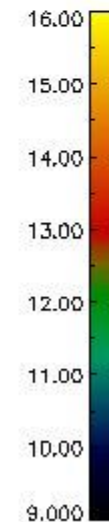
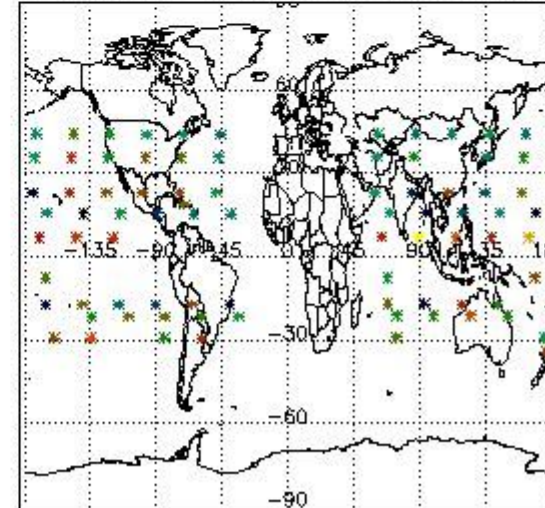
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

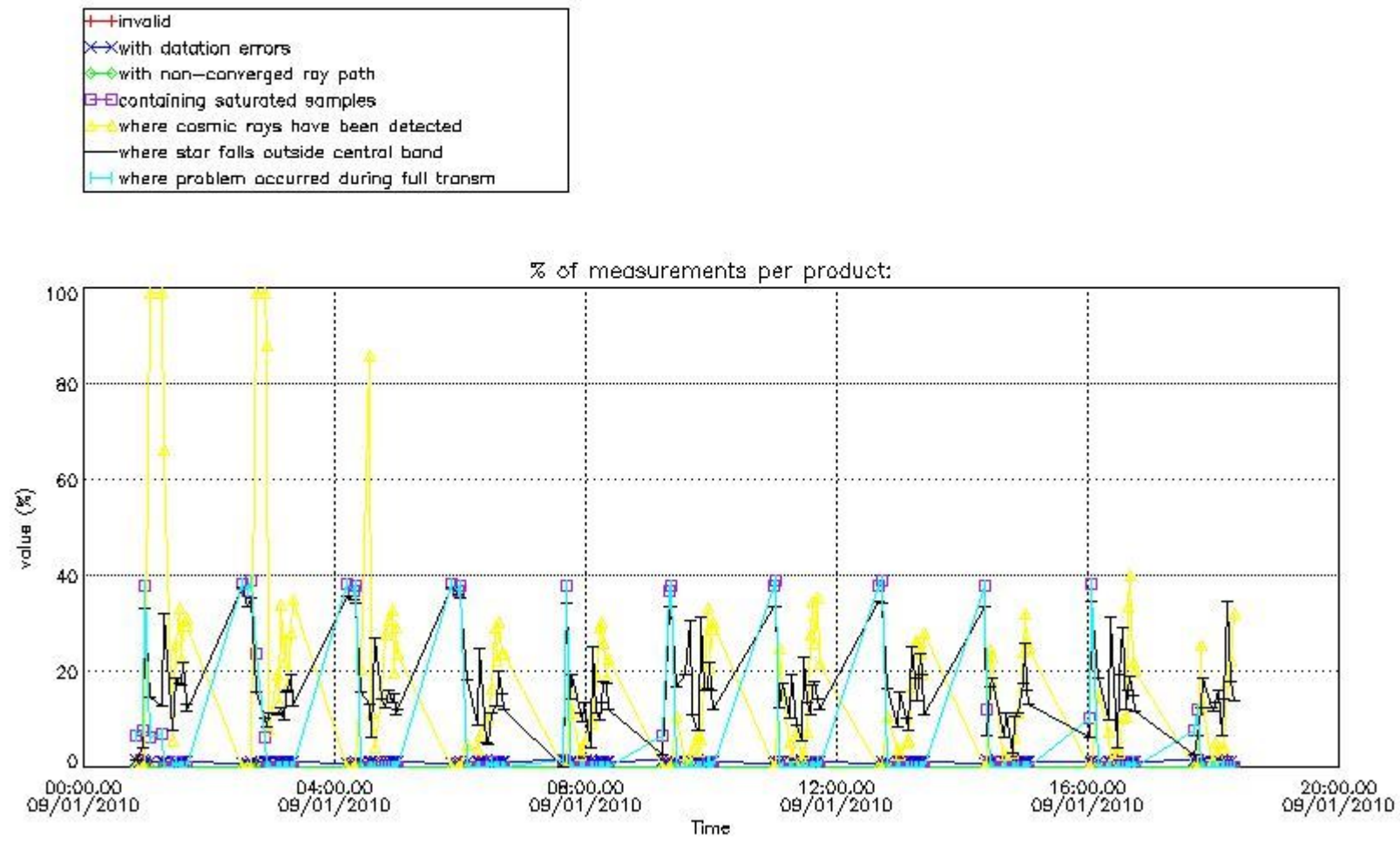


4. Level 1 quality information per product

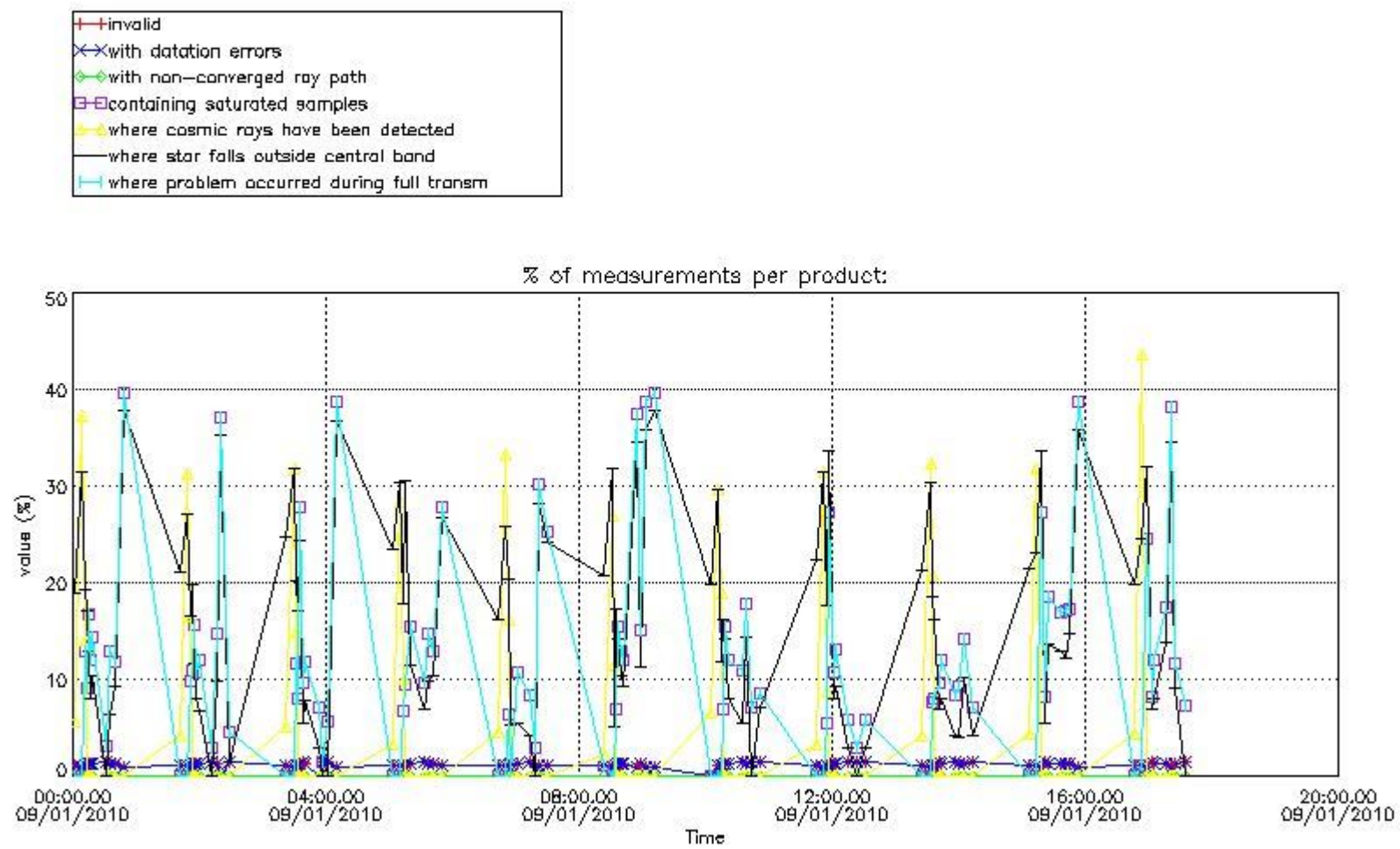
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



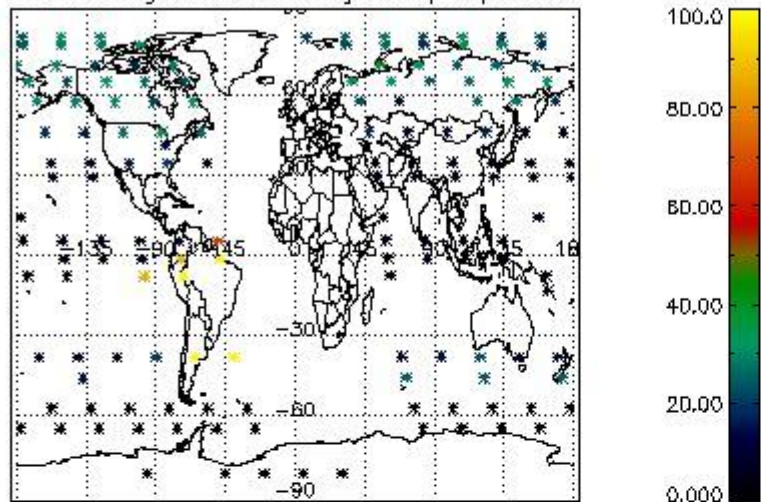
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



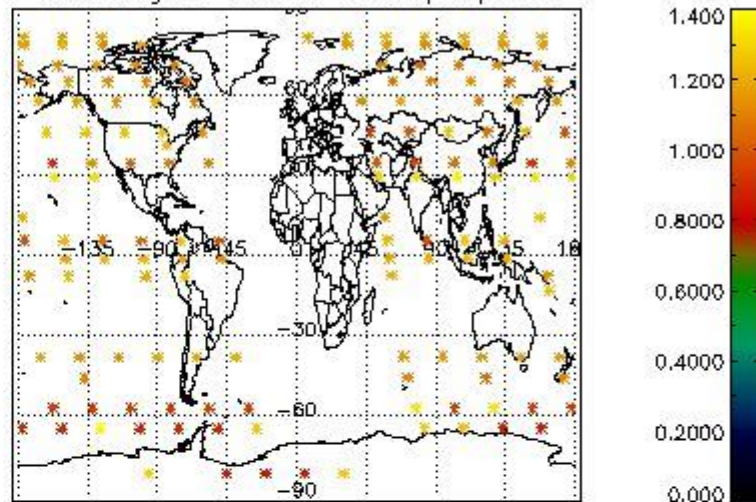
4.2 Plot quality information per product coming from level 1b processing (world map)

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

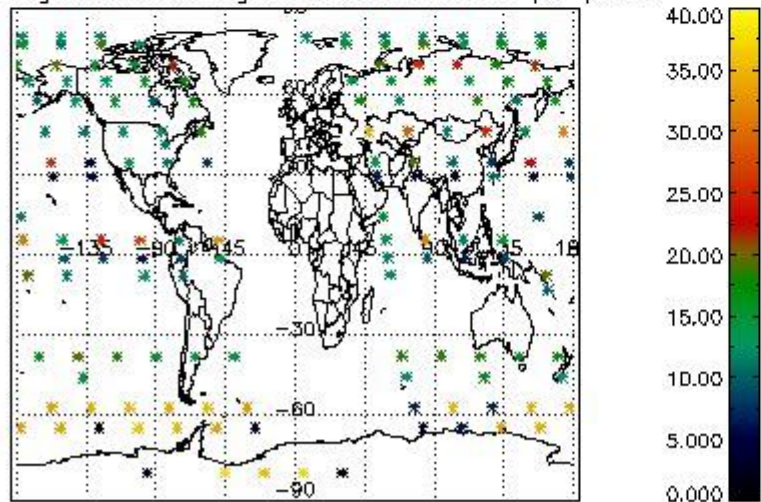
Percentage of cosmic ray hits per profile



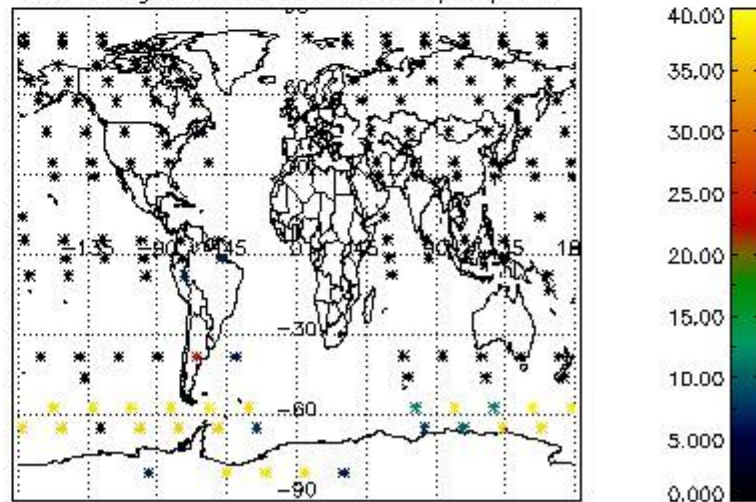
Percentage of datation errors per profile



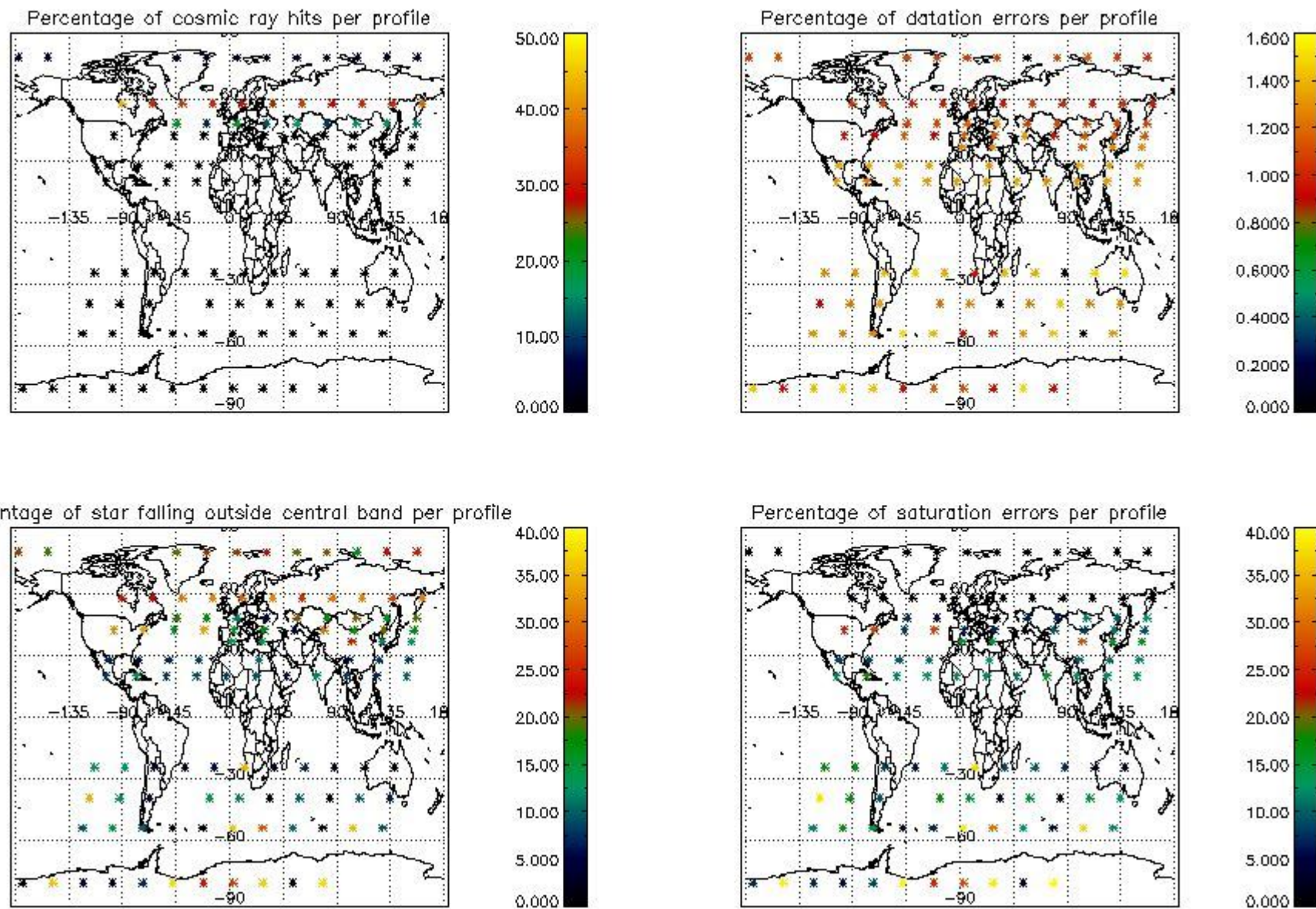
Percentage of star falling outside central band per profile



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

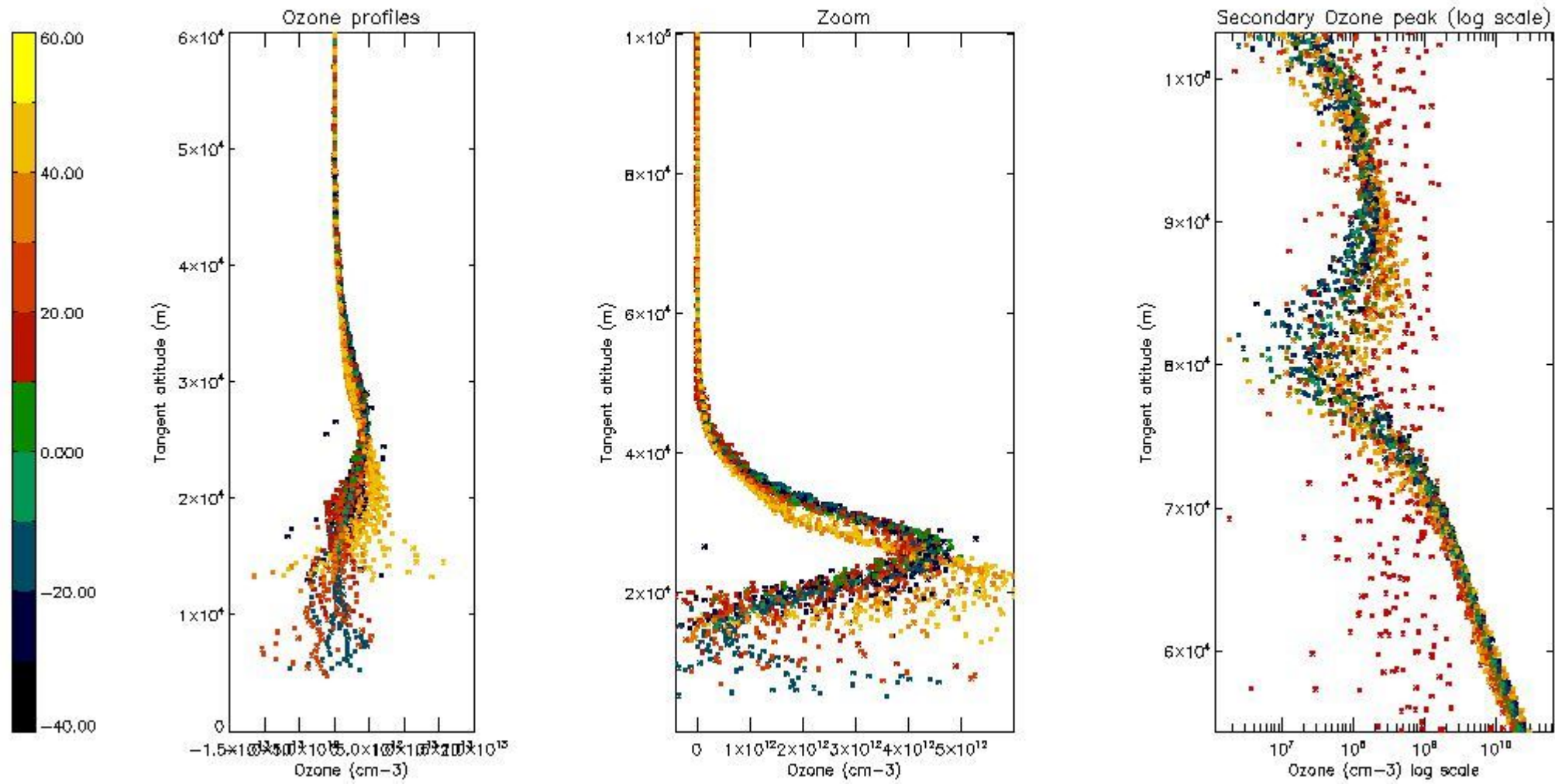
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	32
STD < 20	18

STD < 10	14
STD < 5	10

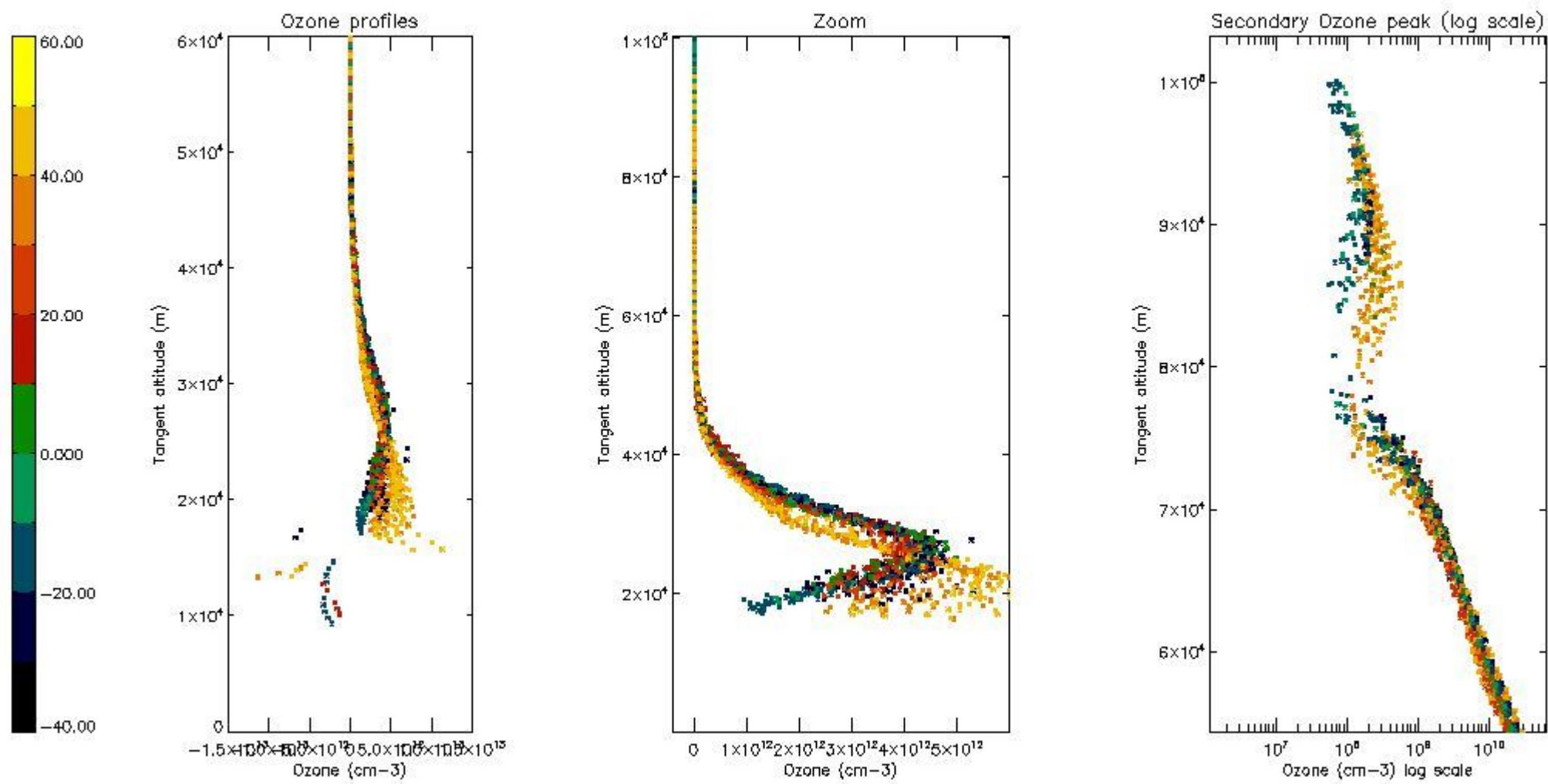
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



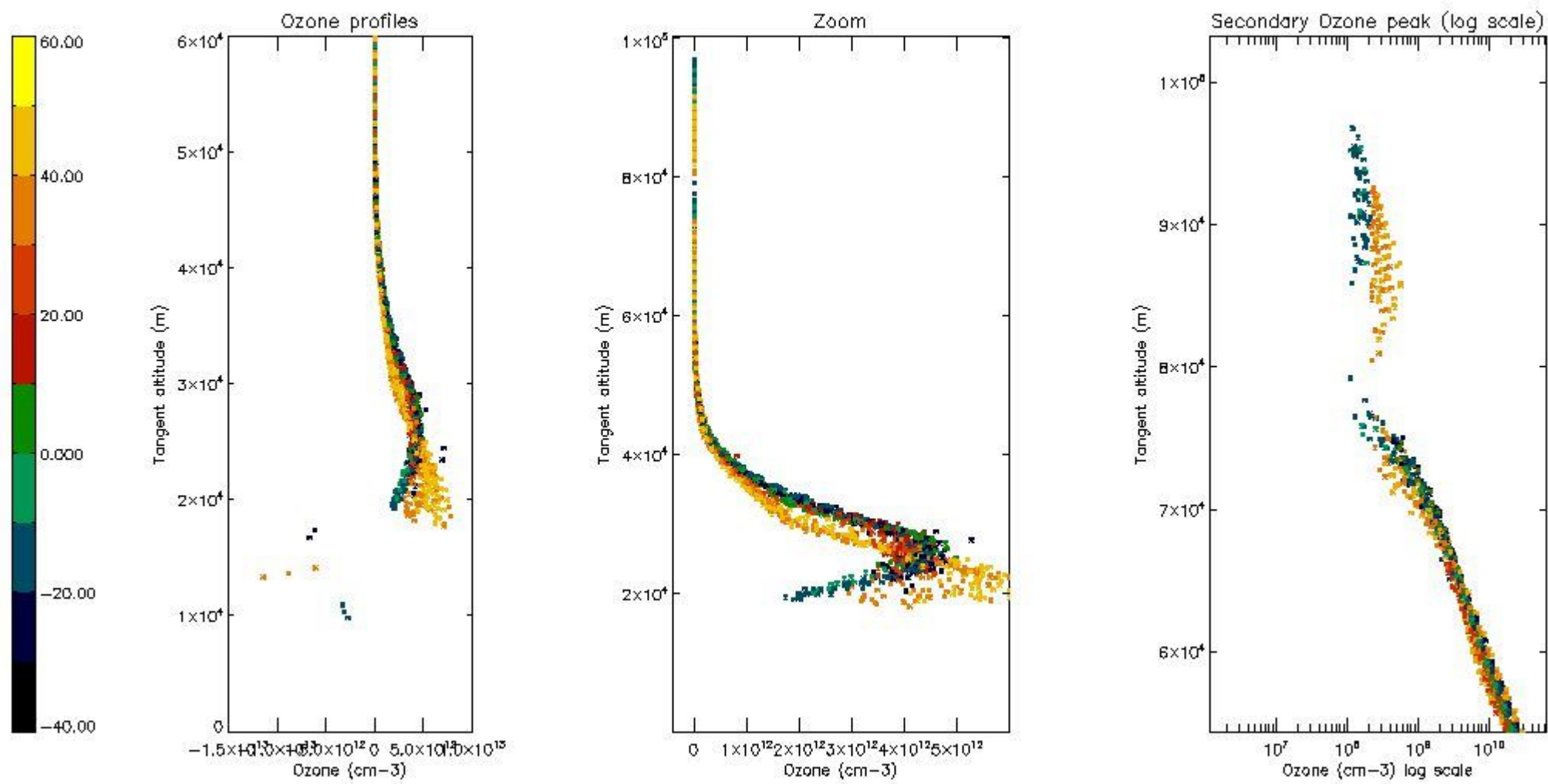
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



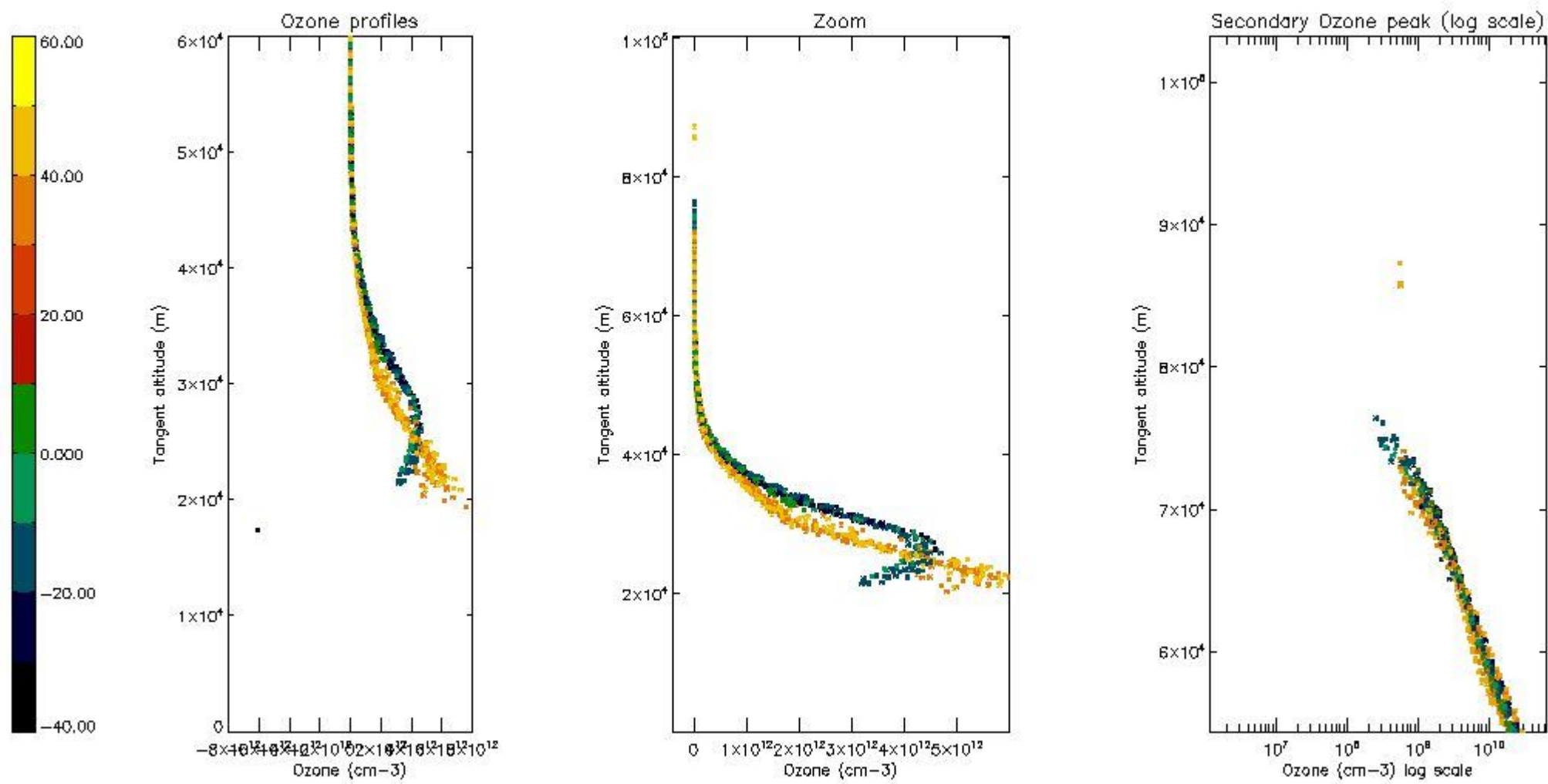
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



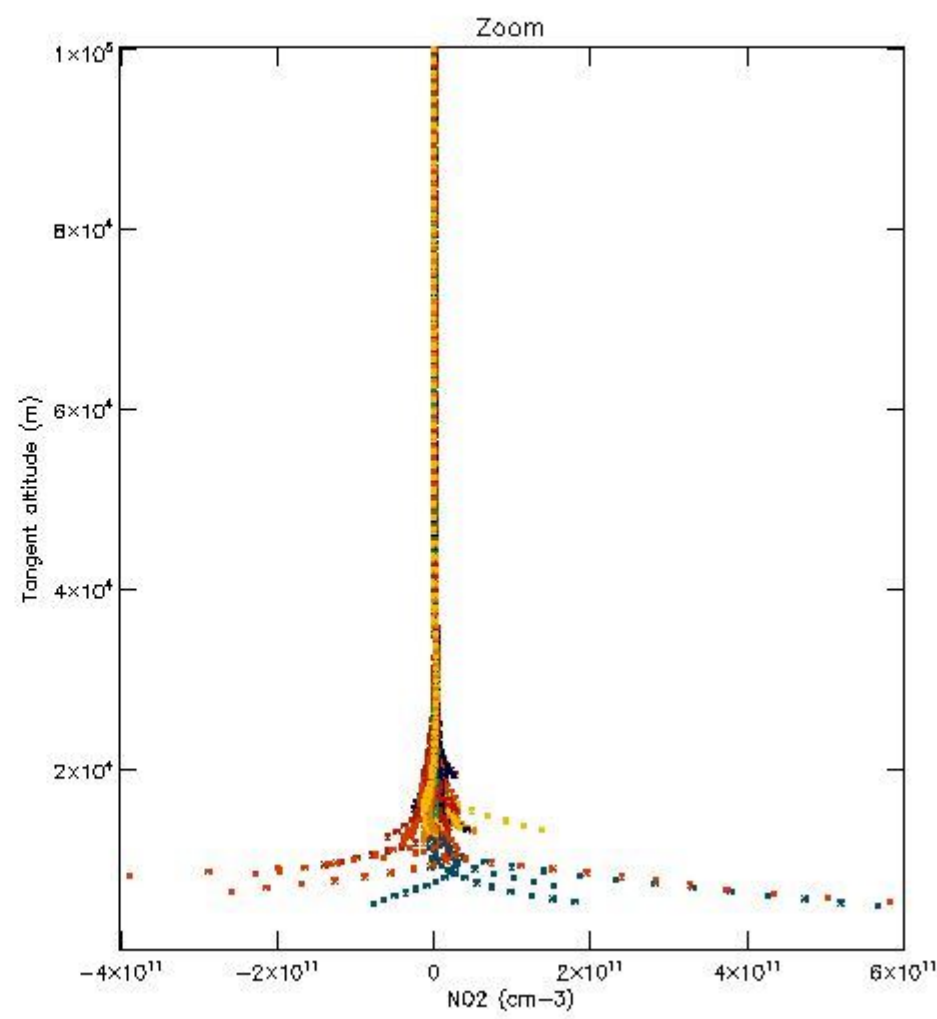
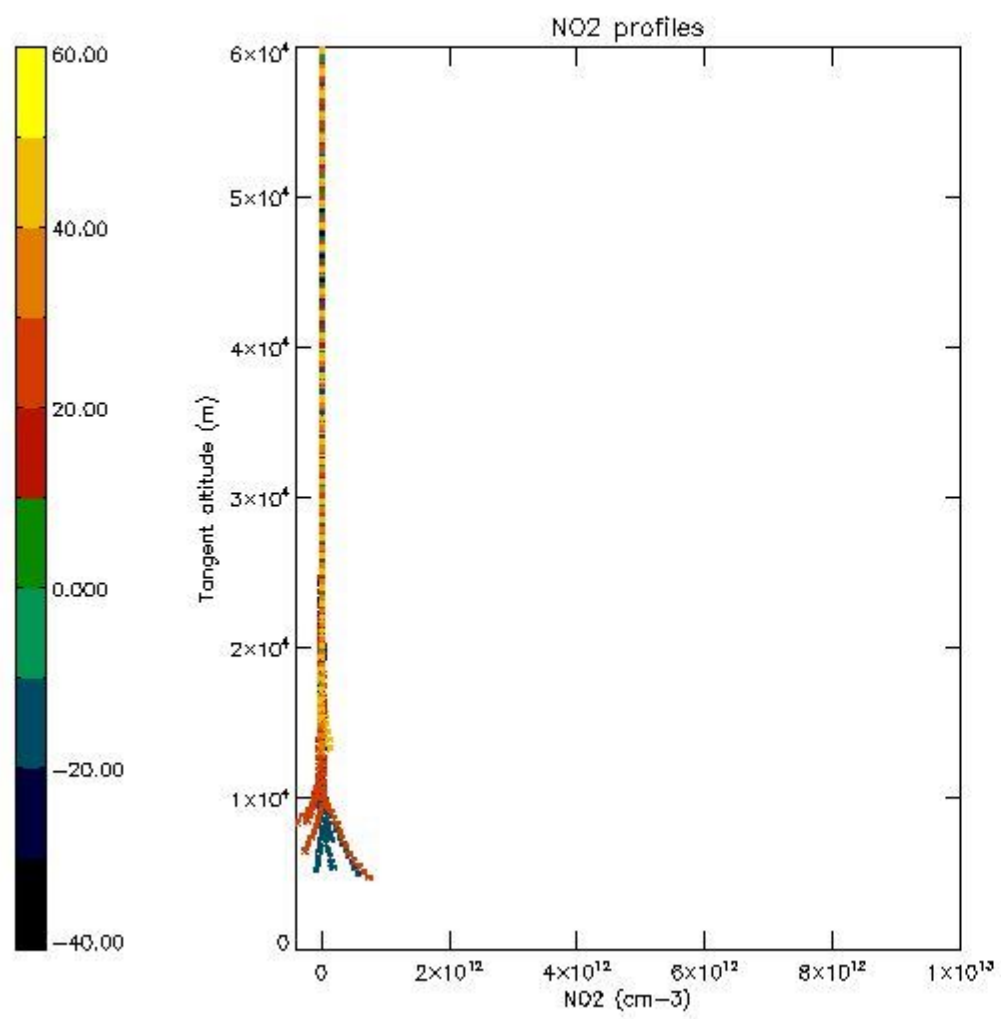
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



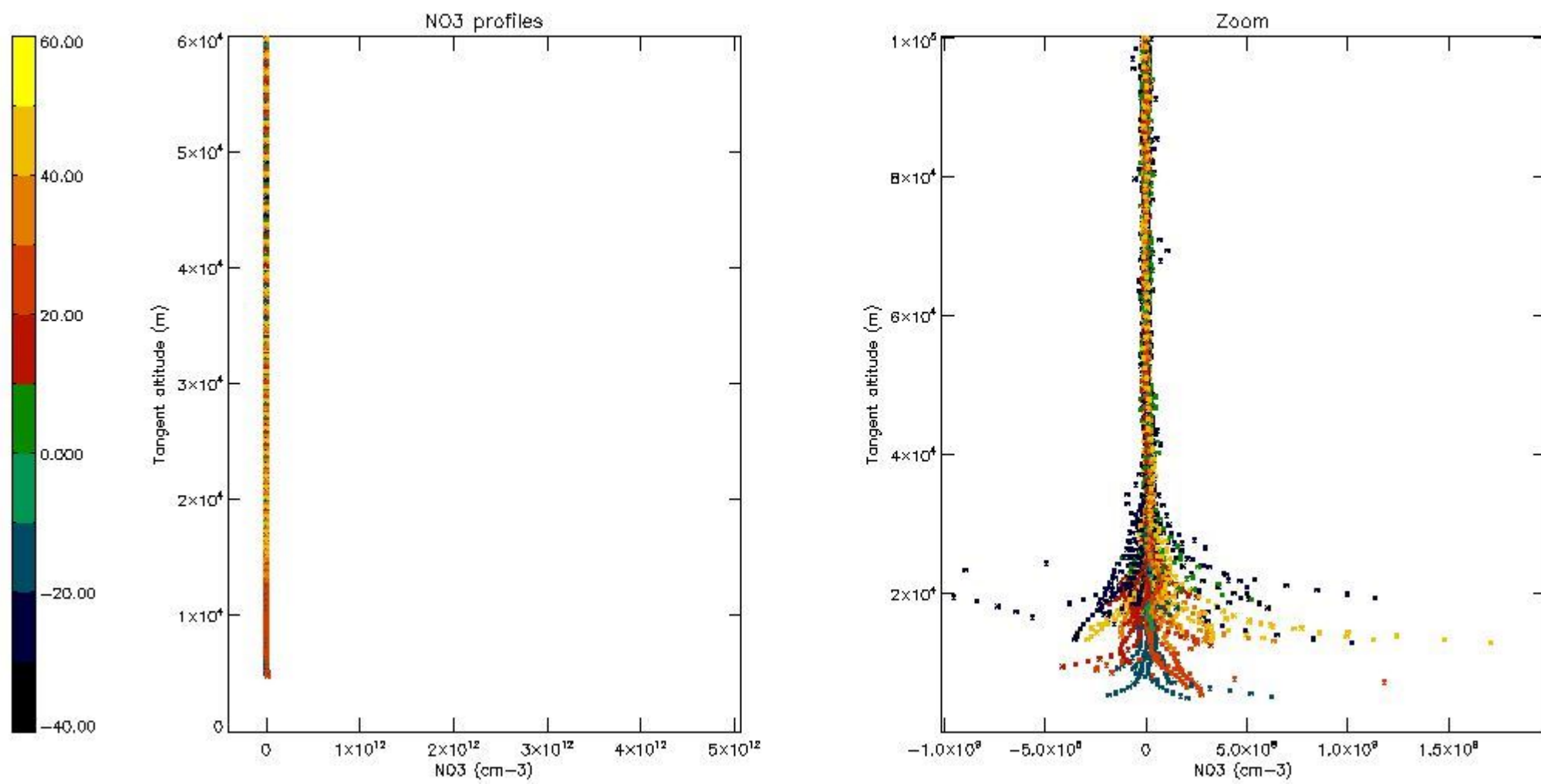
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



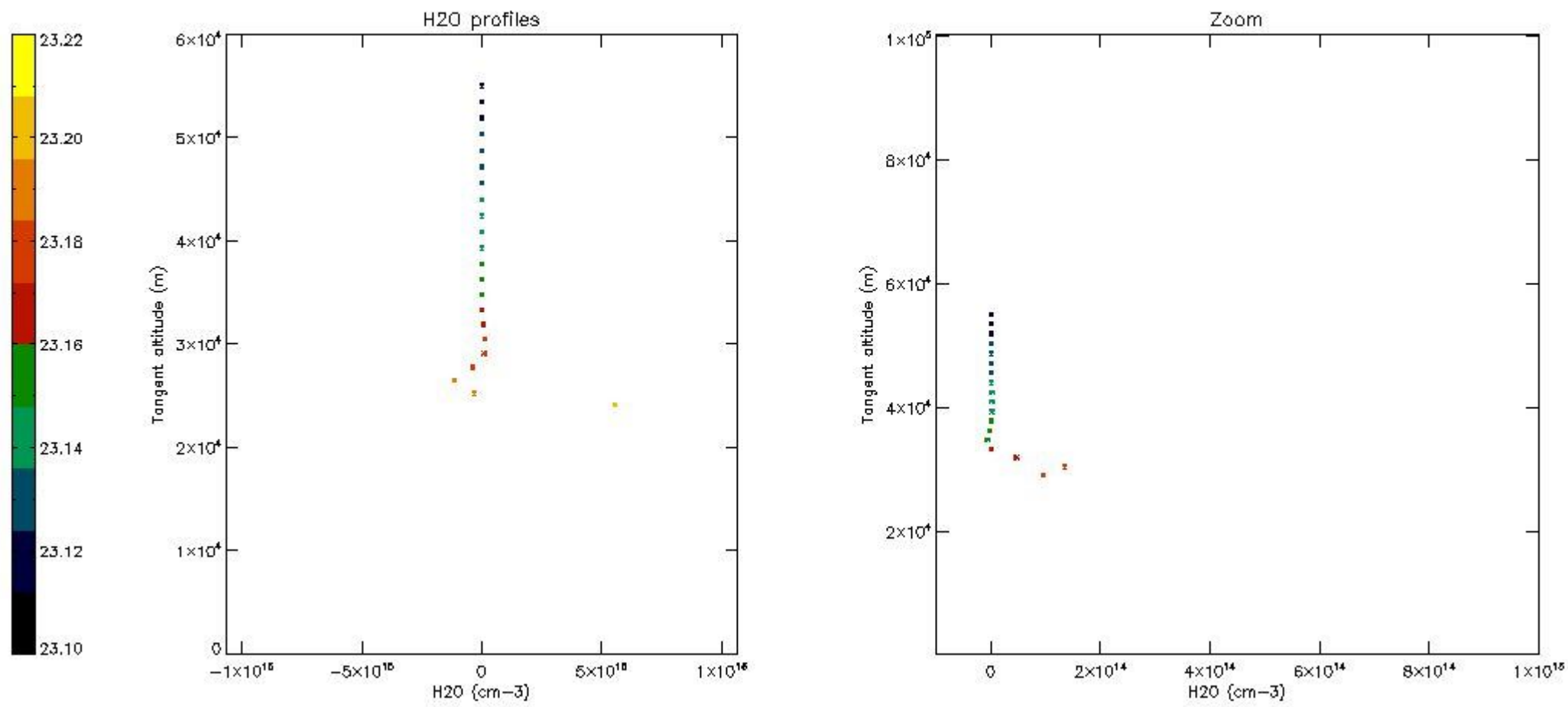
5.7 Plot NO3 profiles for all STD (dark without errors)

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	09-JAN-2010 00:00:50
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	09-JAN-2010 00:00:50
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	09-JAN-2010 00:00:50

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

[3. Level 2 Quality information per product](#)

[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

[3.2 Plot of level 2 quality information per product \(world map\)](#)

[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](#)

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

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

[5.1 Ozone statistics based on quality of products](#)

[5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

[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](#)

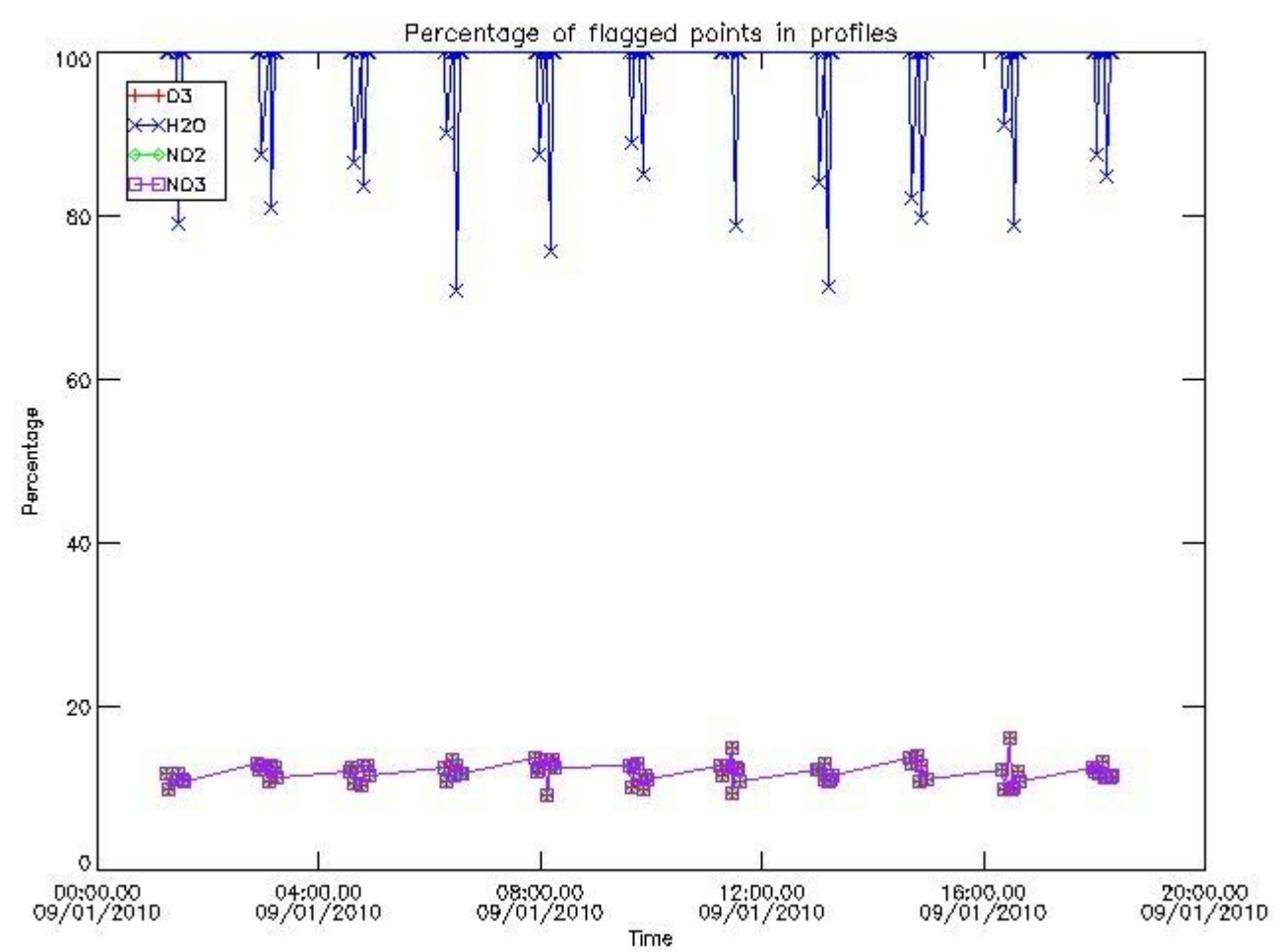
[6. Auxiliary Data Files used for the production reported in section 2](#)

220	GOM_NL__2PRFIN20100109_151330_000000462085_00469_41104_9308.N1	09-JAN-2010 15:13:30	Twilight	45.500	14	58Alp Ori	0.87000	3000.0	91	41104	No
221	GOM_NL__2PRFIN20100109_151758_000000552085_00469_41104_9309.N1	09-JAN-2010 15:17:58	Bright	55.000	151	13Mu Gem	2.8900	3000.0	110	41104	No
222	GOM_NL__2PRFIN20100109_152203_000000372085_00469_41104_9310.N1	09-JAN-2010 15:22:03	Bright	36.500	107	37The Aur	2.6490	11000.	73	41104	No
223	GOM_NL__2PRFIN20100109_152416_000000412085_00469_41104_9311.N1	09-JAN-2010 15:24:16	Bright	40.500	42	34Bet Aur	1.9000	10200.	81	41104	No
224	GOM_NL__2PRFIN20100109_153642_000000392085_00469_41104_9312.N1	09-JAN-2010 15:36:42	Bright	38.500	49	1Alp UMi	1.9900	6300.0	77	41104	No
225	GOM_NL__2PRFIN20100109_154054_000000412085_00469_41104_9313.N1	09-JAN-2010 15:40:54	Bright	41.000	60	7Bet UMi	2.0810	3950.0	82	41104	No
226	GOM_NL__2PRFIN20100109_154502_000000412085_00469_41104_9314.N1	09-JAN-2010 15:45:02	Bright	40.500	119	14Eta Dra	2.7270	4700.0	81	41104	No
227	GOM_NL__2PRFIN20100109_155339_000000532085_00469_41104_9315.N1	09-JAN-2010 15:53:39	Bright	53.000	133	40Zet Her	2.8070	6000.0	106	41104	No
228	GOM_NL__2PRFIN20100109_160151_000000402085_00469_41104_9316.N1	09-JAN-2010 16:01:51	Bright	40.000	102	24Alp Ser	2.6000	4250.0	80	41104	No
229	GOM_NL__2PRFIN20100109_160404_000000542085_00469_41104_9317.N1	09-JAN-2010 16:04:04	Bright	53.500	120	1Del Oph	2.7340	3200.0	107	41104	No
230	GOM_NL__2PRFIN20100109_160933_000000432085_00469_41104_9318.N1	09-JAN-2010 16:09:33	Twilight	43.000	80	7Del Sco	2.3160	30000.	86	41104	No
231	GOM_NL__2PRFIN20100109_161954_000000422085_00469_41104_9319.N1	09-JAN-2010 16:19:54	Dark	41.500	95	Zet Cen	2.5450	26000.	83	41104	No
232	GOM_NL__2PRFIN20100109_162147_000000512085_00470_41105_9308.N1	09-JAN-2010 16:21:47	Dark	51.000	10	Bet Cen	0.61000	28000.	102	41105	No
233	GOM_NL__2PRFIN20100109_162828_000000382085_00470_41105_9309.N1	09-JAN-2010 16:28:28	Dark	38.000	124	The Car	2.7640	30000.	76	41105	No
234	GOM_NL__2PRFIN20100109_162957_000000522085_00470_41105_9310.N1	09-JAN-2010 16:29:57	Dark	52.000	113	Mu Vel	2.6920	5000.0	104	41105	No
235	GOM_NL__2PRFIN20100109_163311_000000502085_00470_41105_9311.N1	09-JAN-2010 16:33:11	Dark	50.000	41	Eps Car	1.8600	4100.0	100	41105	No
236	GOM_NL__2PRFIN20100109_163628_000000422085_00470_41105_9312.N1	09-JAN-2010 16:36:28	Dark	42.000	34	Gam2Vel	1.7930	23000.	84	41105	No
237	GOM_NL__2PRFIN20100109_163838_000000472085_00470_41105_9313.N1	09-JAN-2010 16:38:38	Dark	46.500	70	Zet Pup	2.2460	39000.	93	41105	No
238	GOM_NL__2PRFIN20100109_164027_000000452085_00470_41105_9314.N1	09-JAN-2010 16:40:27	Straylight	45.000	117	Pi Pup	2.7060	3800.0	90	41105	No
239	GOM_NL__2PRFIN20100109_164305_000000442085_00470_41105_9315.N1	09-JAN-2010 16:43:05	Straylight	43.500	23	21Eps CMa	1.5020	26000.	87	41105	No
240	GOM_NL__2PRFIN20100109_164433_000000432085_00470_41105_9316.N1	09-JAN-2010 16:44:33	Straylight	42.500	179	24Omi2CMa	3.0320	24000.	85	41105	No
241	GOM_NL__2PRFIN20100109_164651_000000462085_00470_41105_9317.N1	09-JAN-2010 16:46:51	Straylight	45.500	1	9Alp CMa	-1.4400	11000.	91	41105	No
242	GOM_NL__2PRFIN20100109_165406_000000472085_00470_41105_9318.N1	09-JAN-2010 16:54:06	Twilight	47.000	14	58Alp Ori	0.87000	3000.0	94	41105	No
243	GOM_NL__2PRFIN20100109_165834_000000532085_00470_41105_9319.N1	09-JAN-2010 16:58:34	Bright	53.000	151	13Mu Gem	2.8900	3000.0	106	41105	No
244	GOM_NL__2PRFIN20100109_170239_000000372085_00470_41105_9320.N1	09-JAN-2010 17:02:39	Bright	36.500	107	37The Aur	2.6490	11000.	73	41105	No
245	GOM_NL__2PRFIN20100109_170452_000000382085_00470_41105_9321.N1	09-JAN-2010 17:04:52	Bright	37.500	42	34Bet Aur	1.9000	10200.	75	41105	No
246	GOM_NL__2PRFIN20100109_171718_000000402085_00470_41105_9322.N1	09-JAN-2010 17:17:18	Bright	40.000	49	1Alp UMi	1.9900	6300.0	80	41105	No
247	GOM_NL__2PRFIN20100109_172130_000000552085_00470_41105_9323.N1	09-JAN-2010 17:21:30	Bright	55.000	60	7Bet UMi	2.0810	3950.0	110	41105	No
248	GOM_NL__2PRFIN20100109_172538_000000392085_00470_41105_9324.N1	09-JAN-2010 17:25:38	Bright	38.500	119	14Eta Dra	2.7270	4700.0	77	41105	No
249	GOM_NL__2PRFIN20100109_173416_000000352085_00470_41105_9325.N1	09-JAN-2010 17:34:16	Bright	34.500	133	40Zet Her	2.8070	6000.0	69	41105	No
250	GOM_NL__2PRFIN20100109_174228_000000392085_00470_41105_9326.N1	09-JAN-2010 17:42:28	Bright	39.000	102	24Alp Ser	2.6000	4250.0	78	41105	No
251	GOM_NL__2PRFIN20100109_174440_000000382085_00470_41105_9327.N1	09-JAN-2010 17:44:40	Bright	37.500	120	1Del Oph	2.7340	3200.0	75	41105	No
252	GOM_NL__2PRFIN20100109_174755_000000452085_00470_41105_9328.N1	09-JAN-2010 17:47:55	Twilight	45.000	104	27Bet Lib	2.6140	13100.	90	41105	No
253	GOM_NL__2PRFIN20100109_175009_000000442085_00470_41105_9329.N1	09-JAN-2010 17:50:09	Twilight	43.500	80	7Del Sco	2.3160	30000.	87	41105	No
254	GOM_NL__2PRFIN20100109_175842_000000412085_00470_41105_9330.N1	09-JAN-2010 17:58:42	Dark	41.000	78	Alp Lup	2.3040	28000.	82	41105	No
255	GOM_NL__2PRFIN20100109_180031_000000432085_00470_41105_9331.N1	09-JAN-2010 18:00:31	Dark	42.500	95	Zet Cen	2.5450	26000.	85	41105	No
256	GOM_NL__2PRFIN20100109_180224_000000412085_00471_41106_9317.N1	09-JAN-2010 18:02:24	Dark	40.500	10	Bet Cen	0.61000	28000.	81	41106	No
257	GOM_NL__2PRFIN20100109_180448_000000442085_00471_41106_9318.N1	09-JAN-2010 18:04:48	Dark	43.500	20	Bet Cru	1.2530	30000.	87	41106	No
258	GOM_NL__2PRFIN20100109_180904_000000392085_00471_41106_9319.N1	09-JAN-2010 18:09:04	Dark	38.500	124	The Car	2.7640	30000.	77	41106	No
259	GOM_NL__2PRFIN20100109_181034_000000502085_00471_41106_9320.N1	09-JAN-2010 18:10:34	Dark	49.500	113	Mu Vel	2.6920	5000.0	99	41106	No
260	GOM_NL__2PRFIN20100109_181347_000000542085_00471_41106_9321.N1	09-JAN-2010 18:13:47	Dark	53.500	41	Eps Car	1.8600	4100.0	107	41106	No
261	GOM_NL__2PRFIN20100109_181705_000000452085_00471_41106_9322.N1	09-JAN-2010 18:17:05	Dark	45.000	34	Gam2Vel	1.7930	23000.	90	41106	No
262	GOM_NL__2PRFIN20100109_181915_000000442085_00471_41106_9323.N1	09-JAN-2010 18:19:15	Dark	44.000	70	Zet Pup	2.2460	39000.	88	41106	No

3. Quality information per product

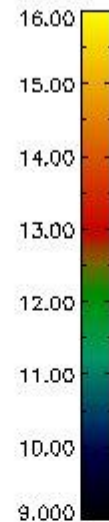
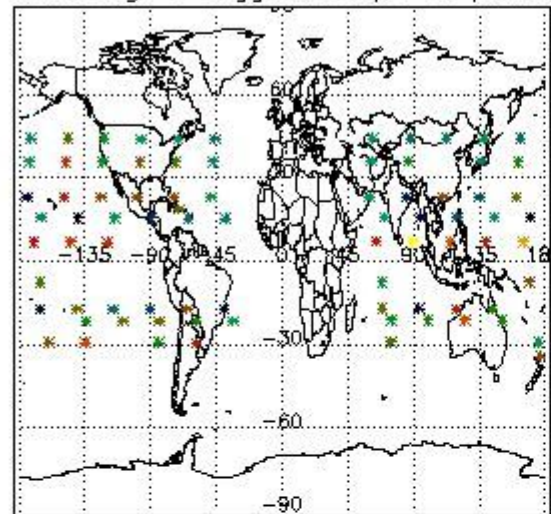
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

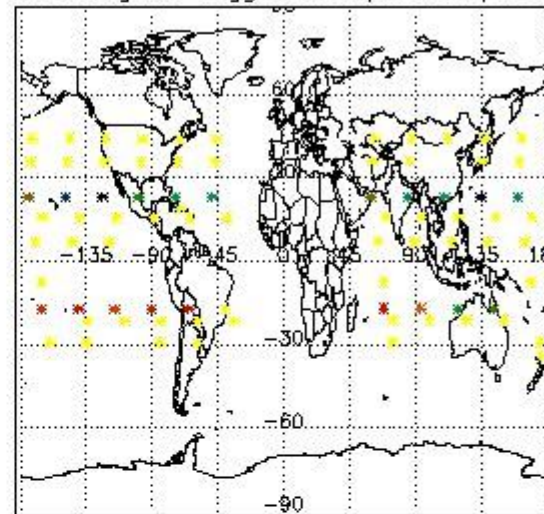


3.2 Plot quality information per product (world map)

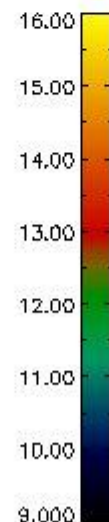
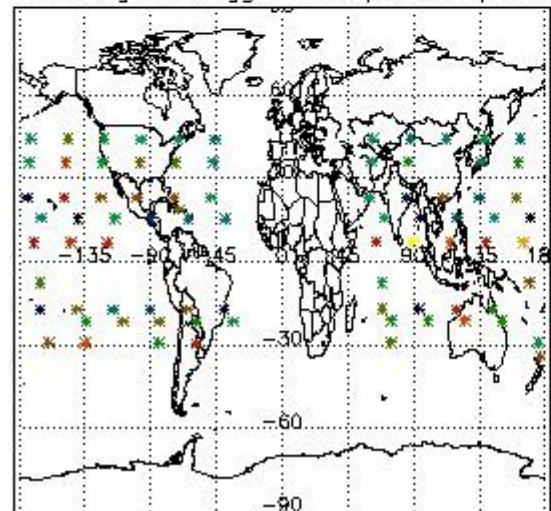
Percentage of flagged data per O3 profile



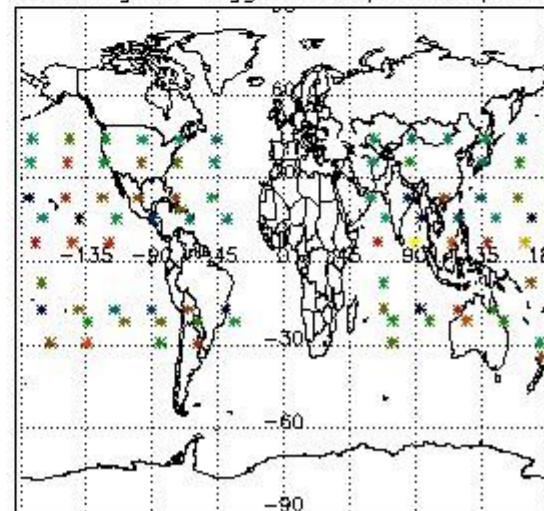
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

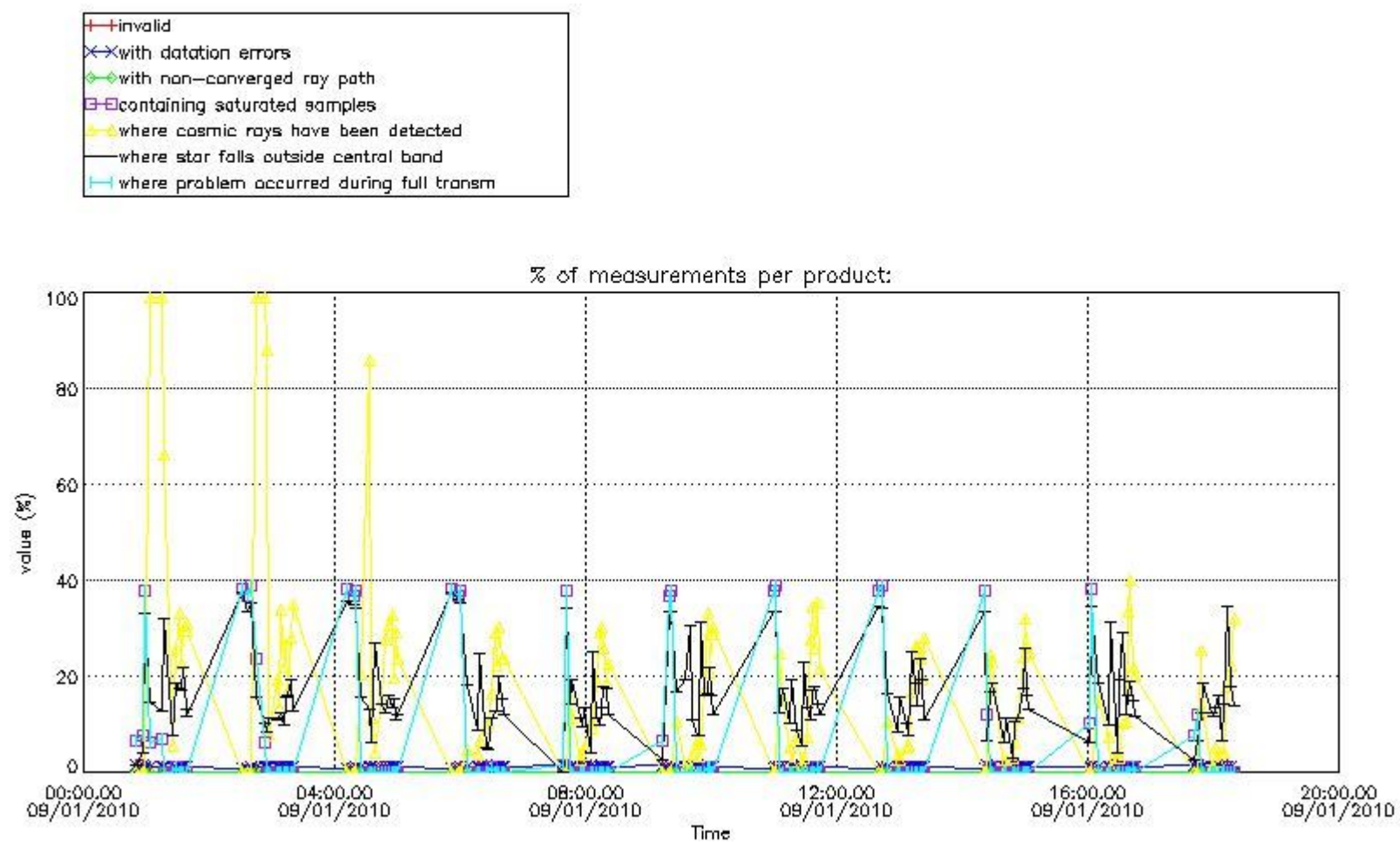


4. Level 1 quality information per product

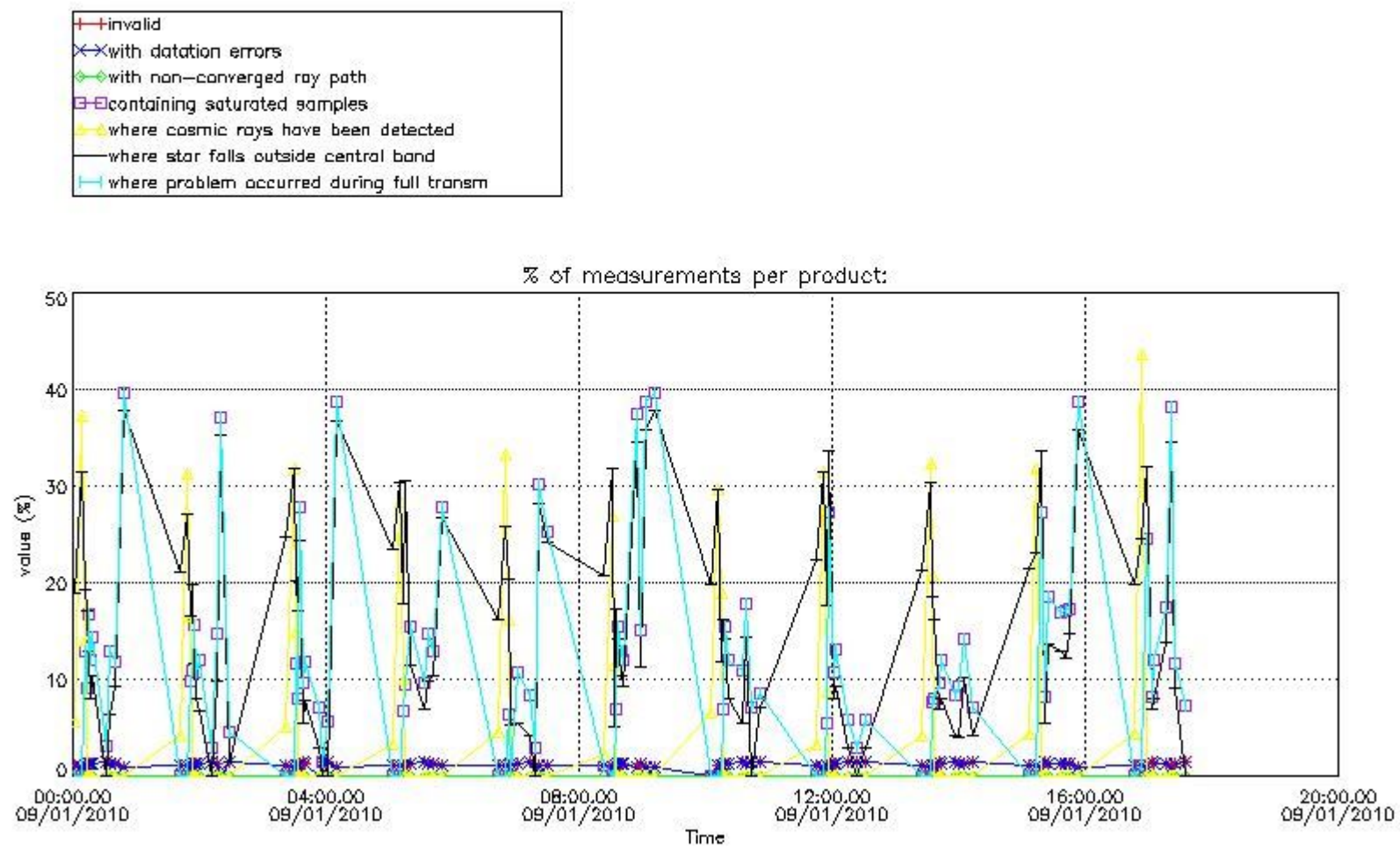
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

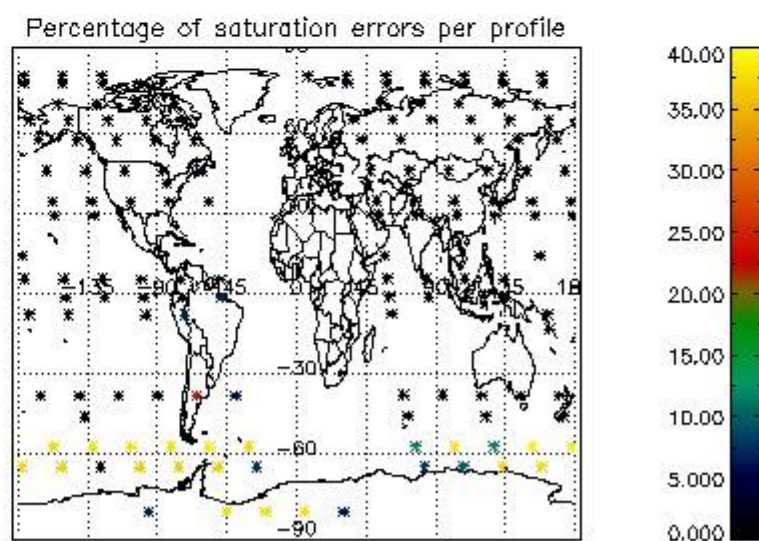
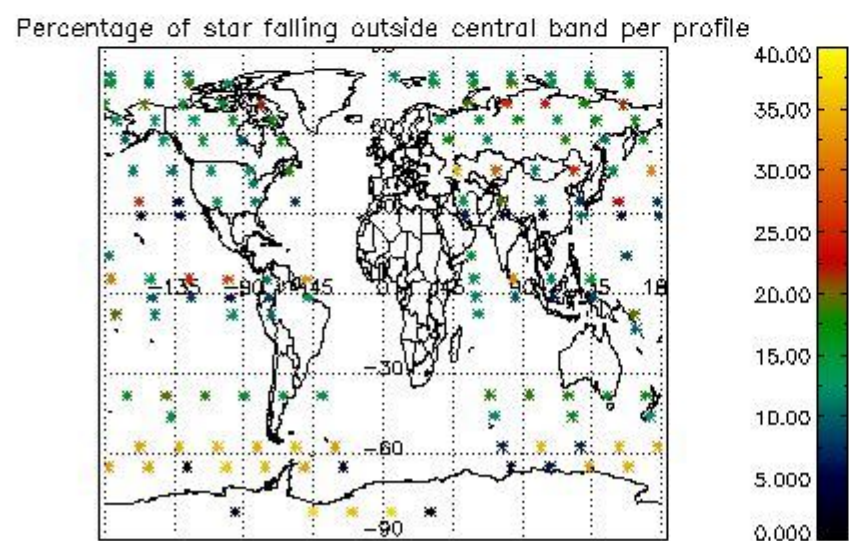
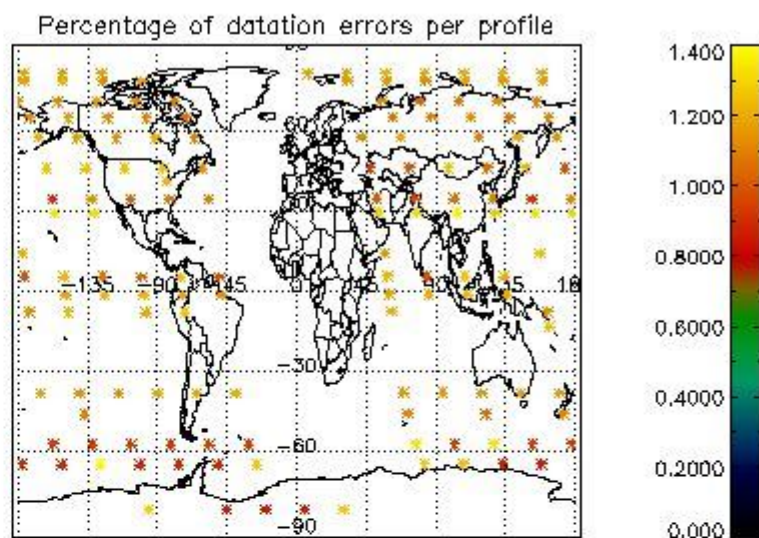
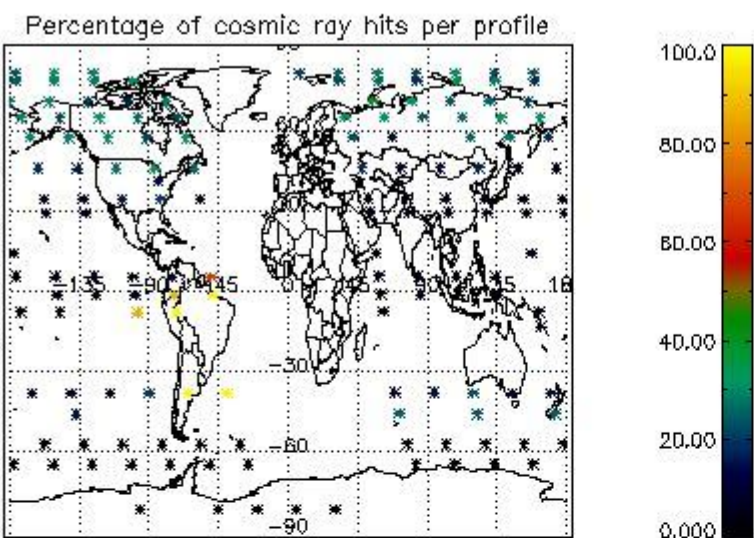


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

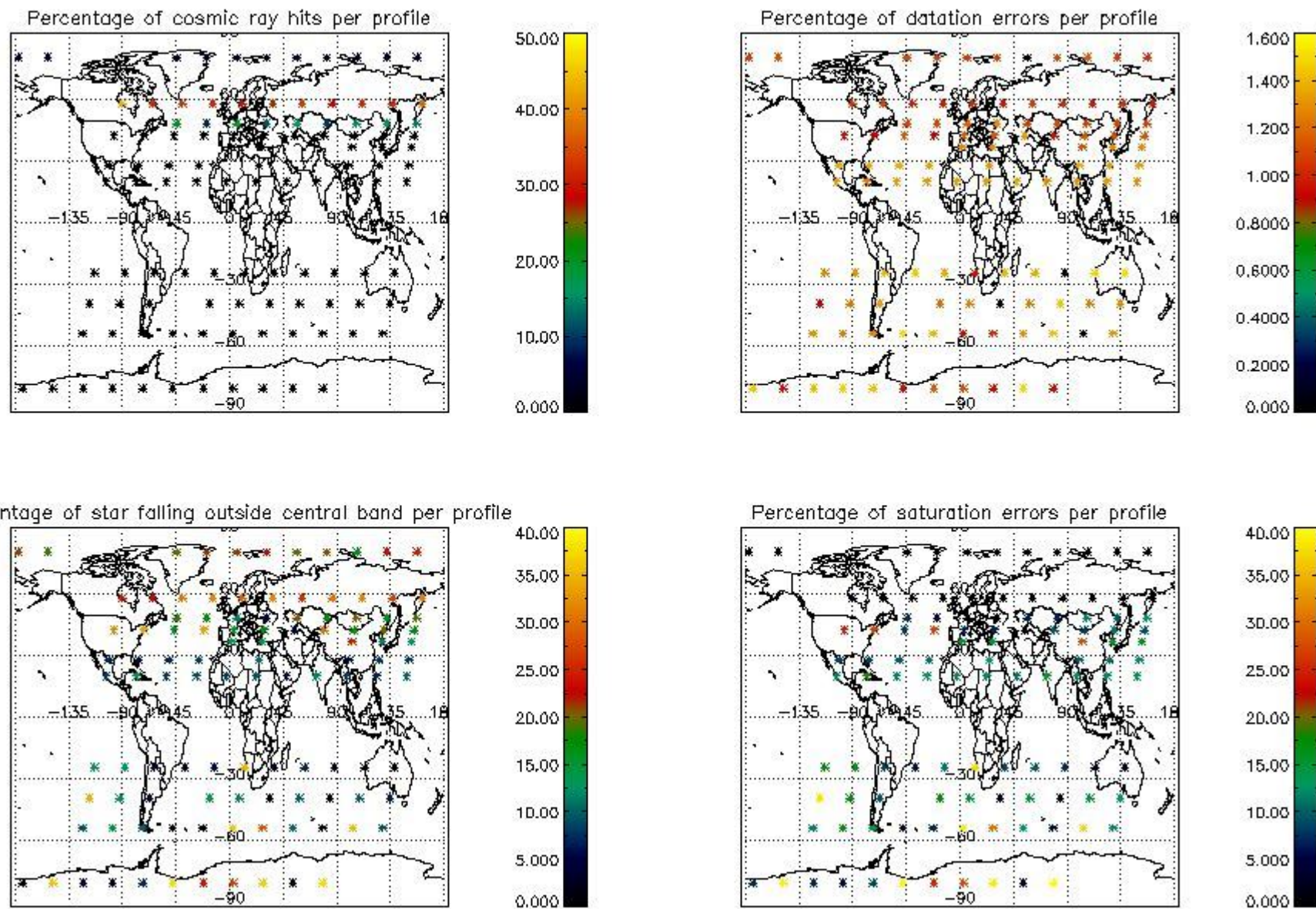


4.2 Plot quality information per product coming from level 1b processing (world map)

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

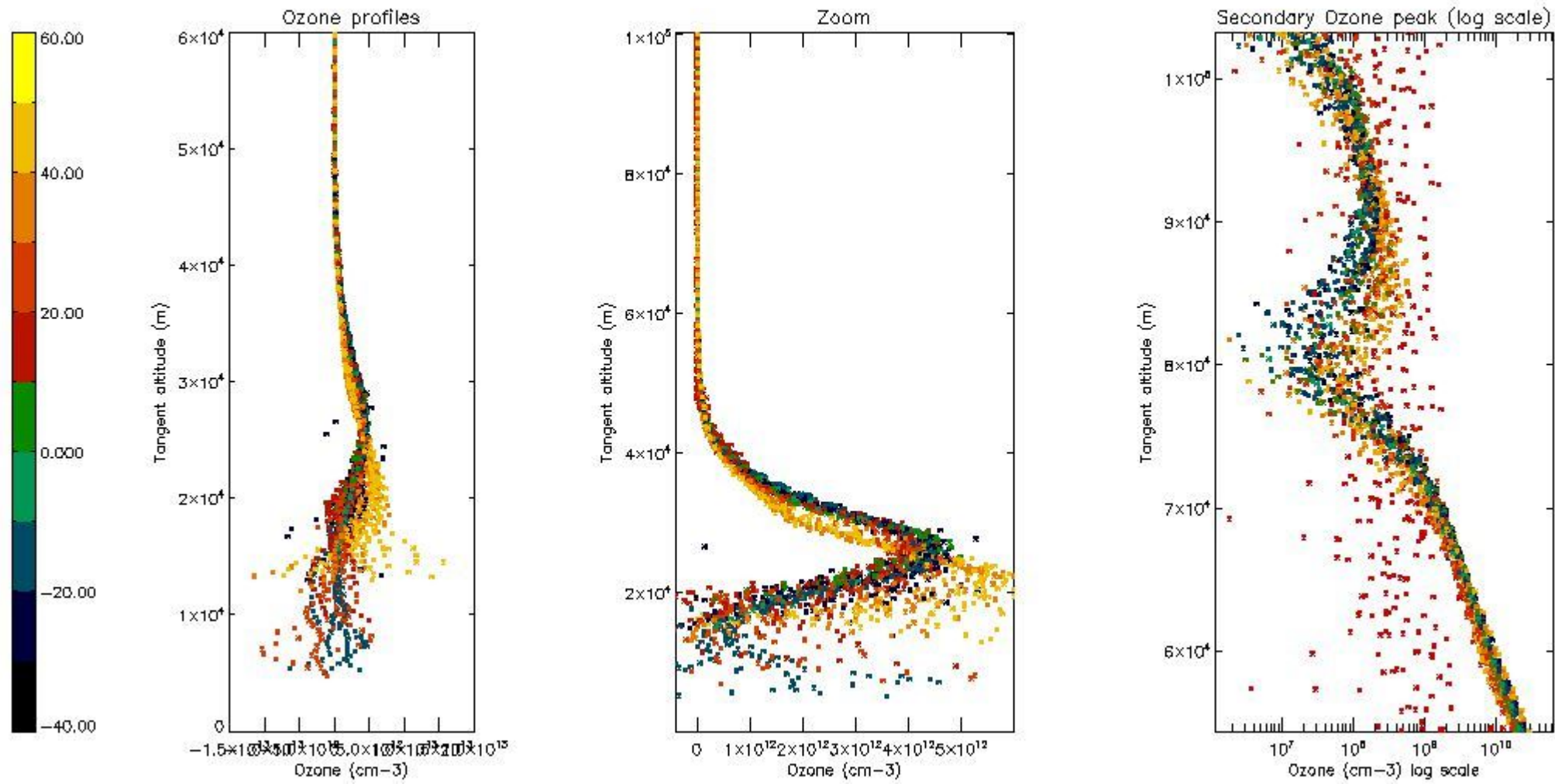
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	32
STD < 20	18

STD < 10	14
STD < 5	10

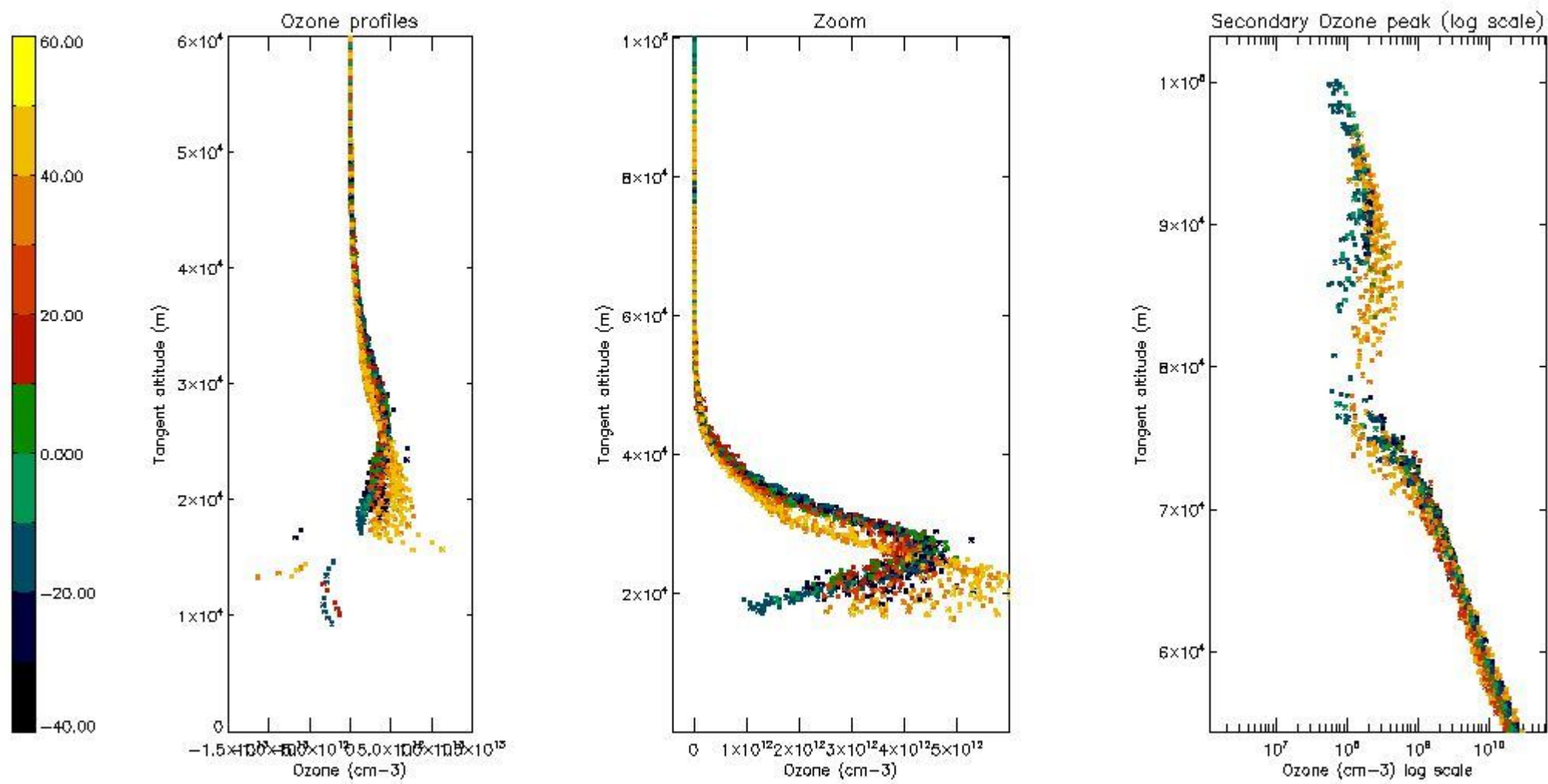
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



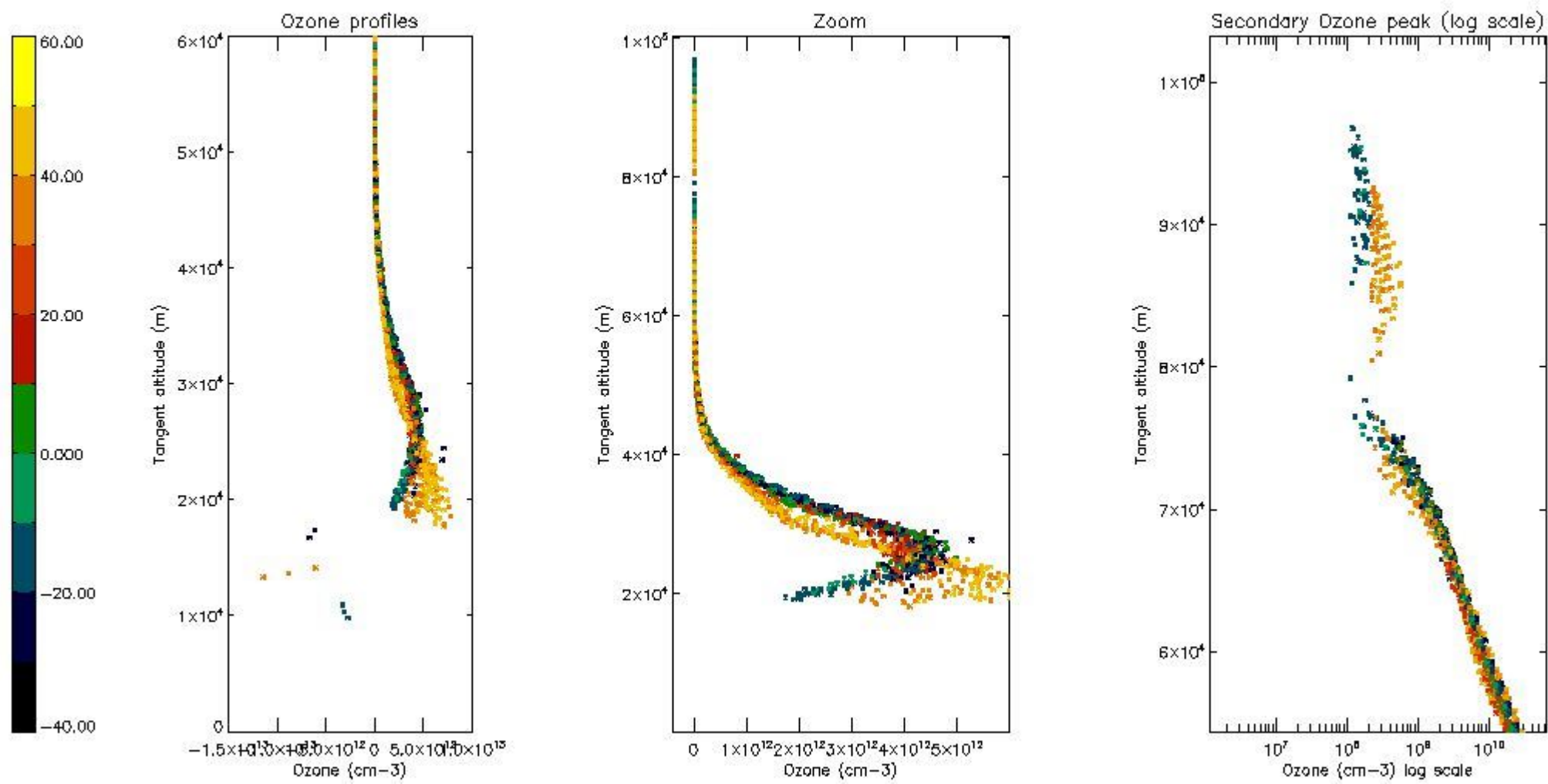
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



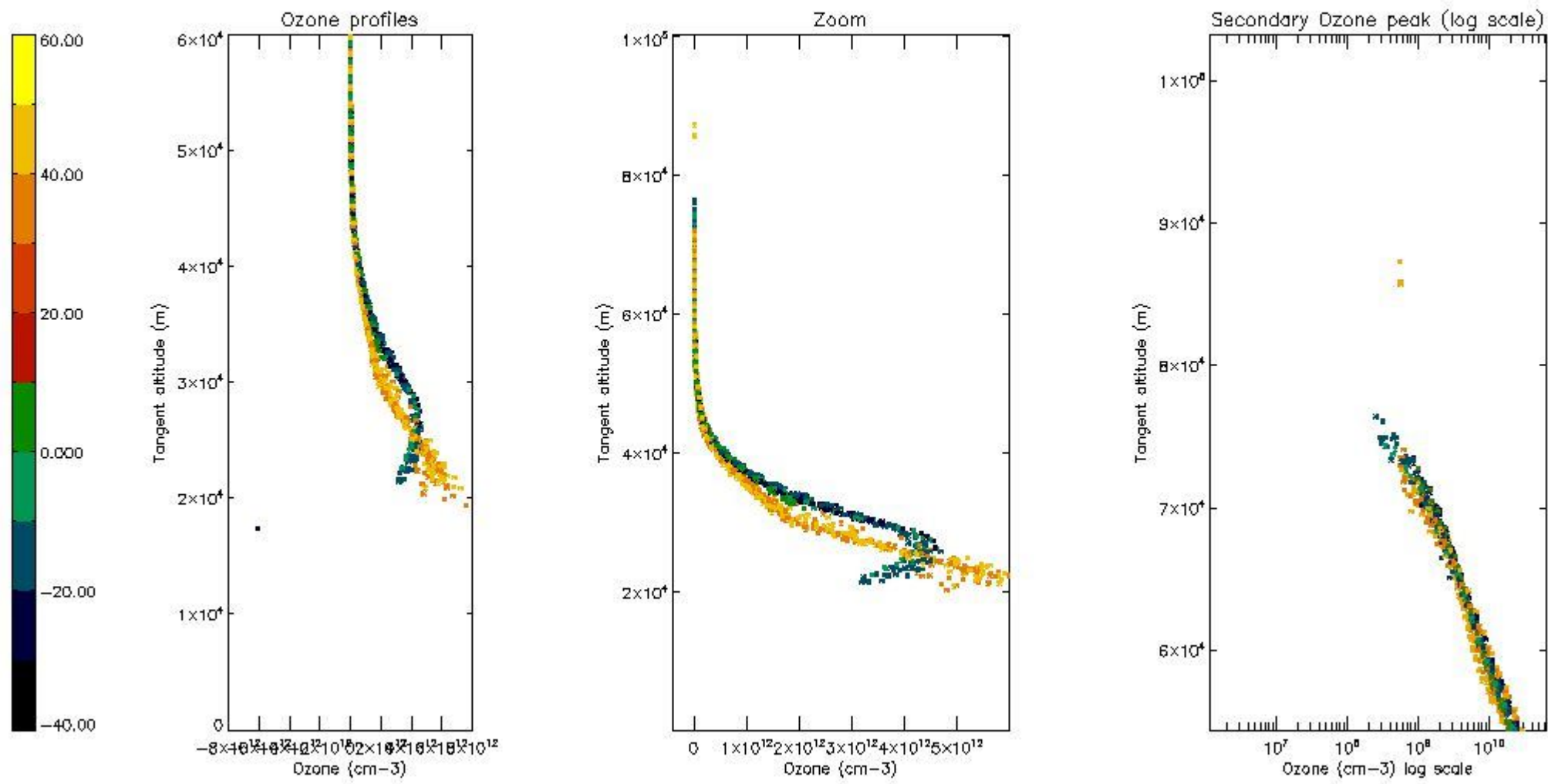
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



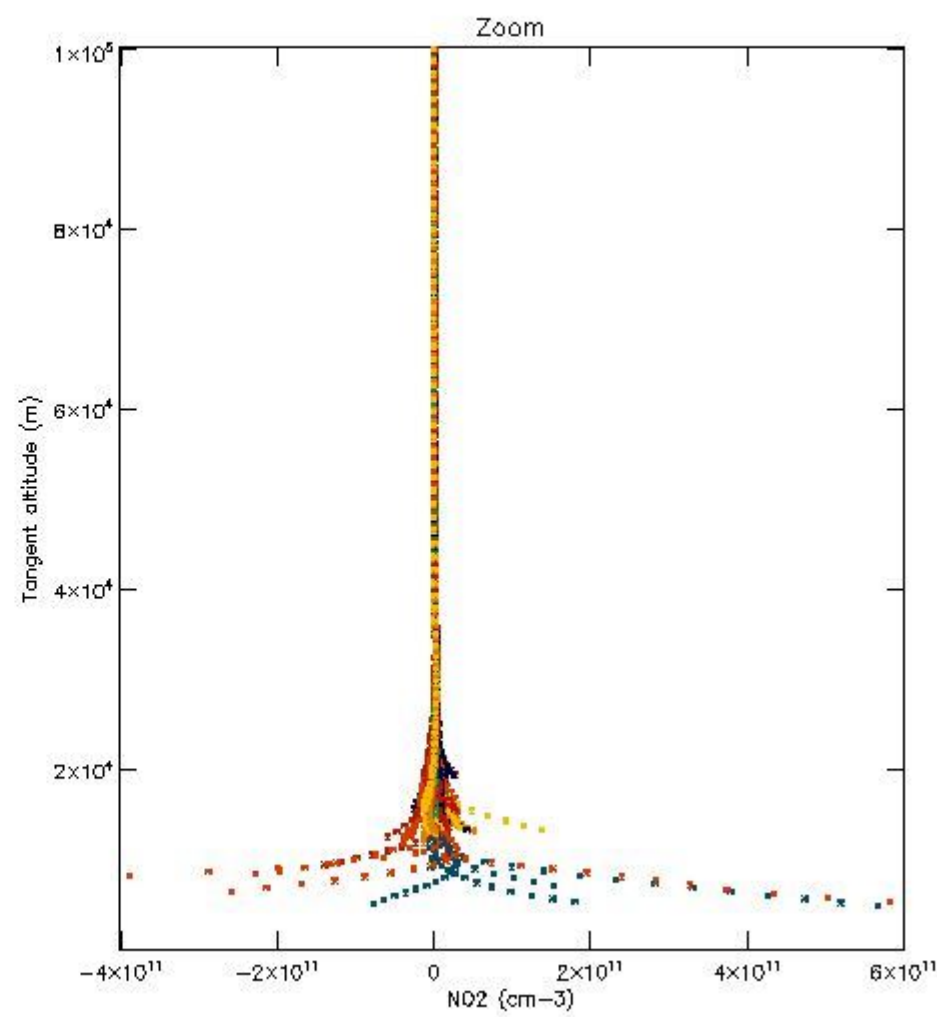
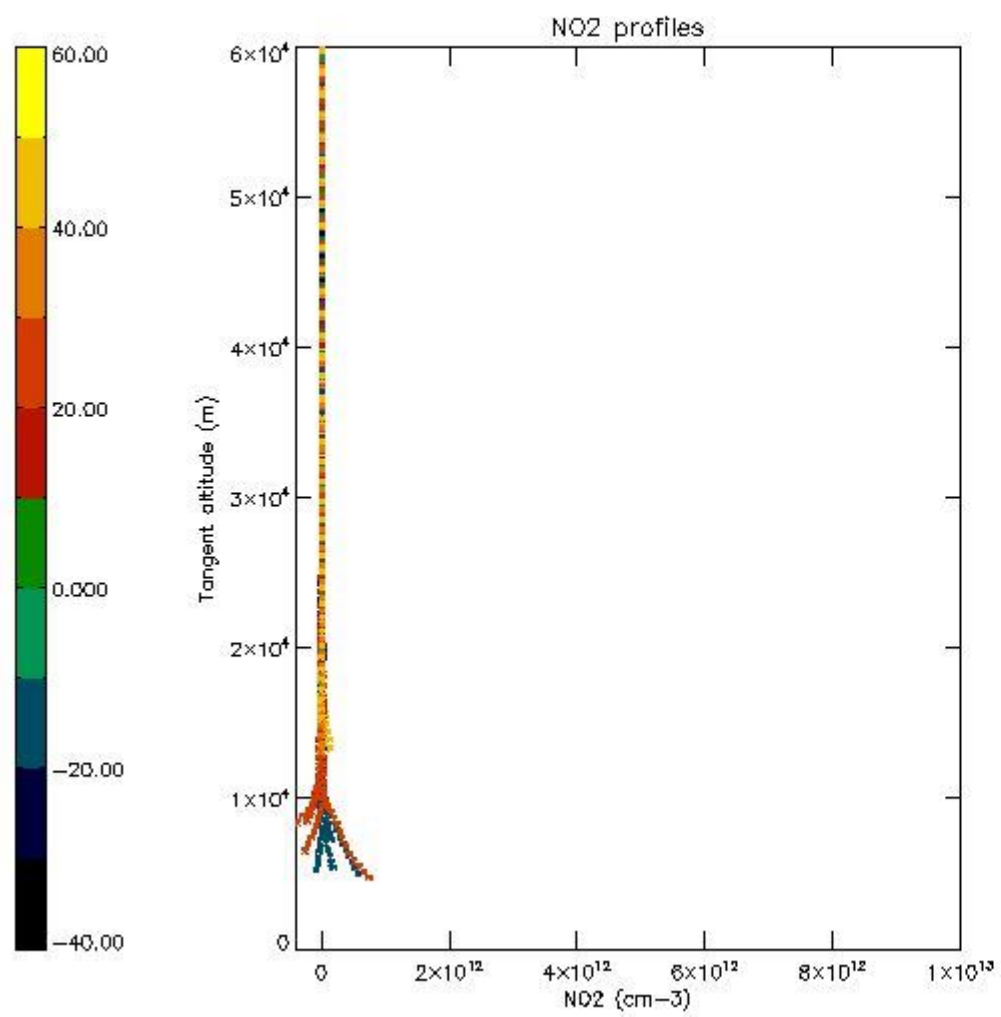
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



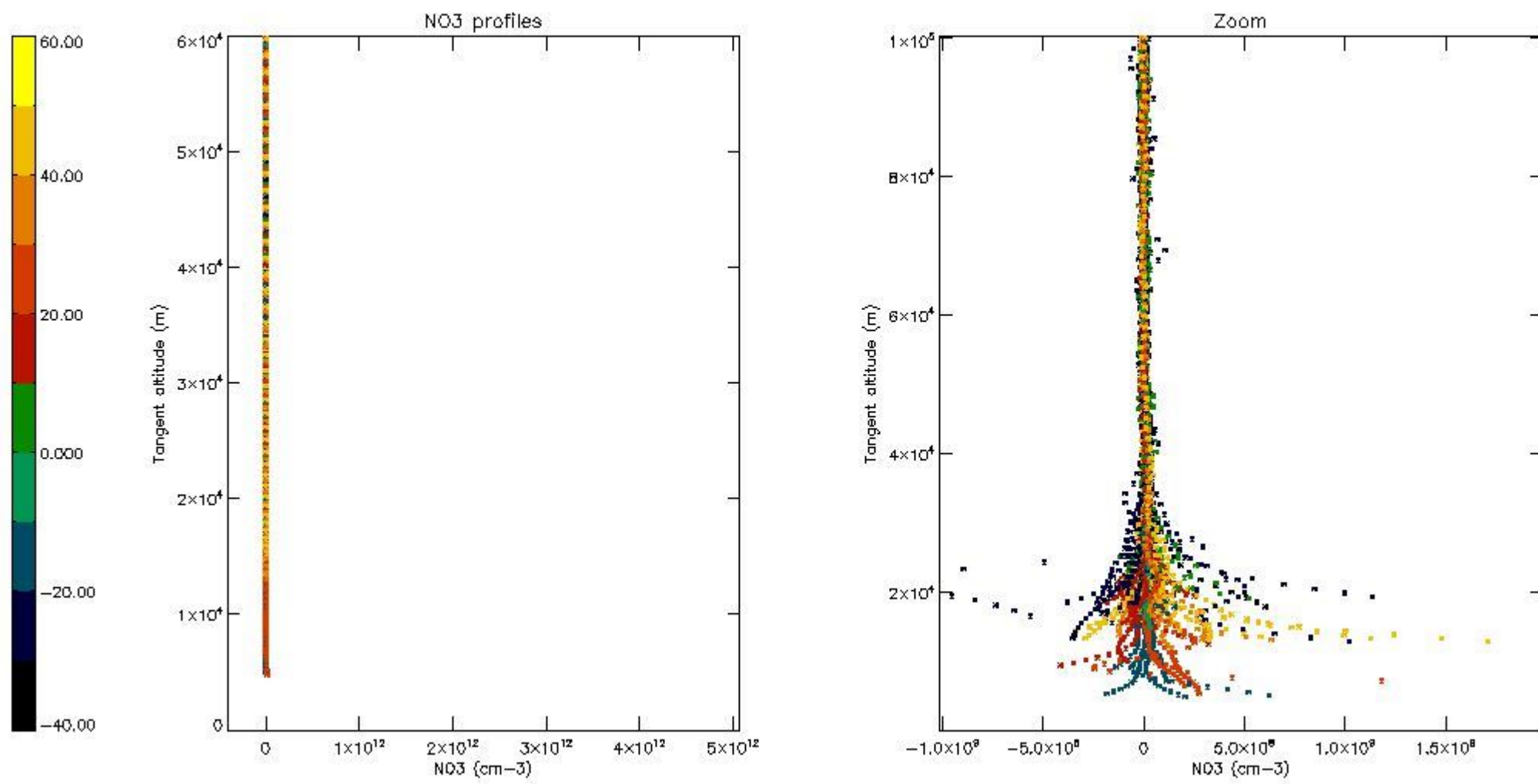
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



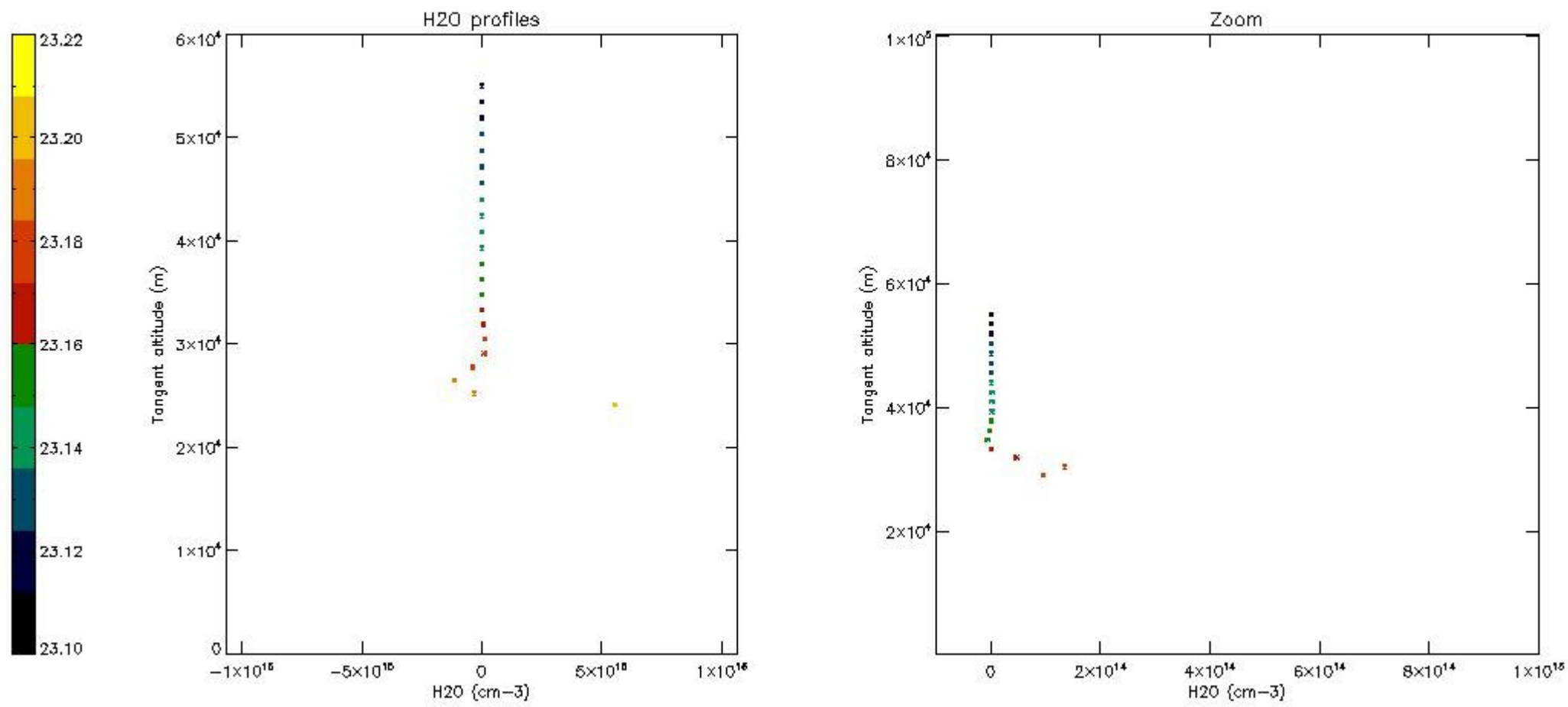
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

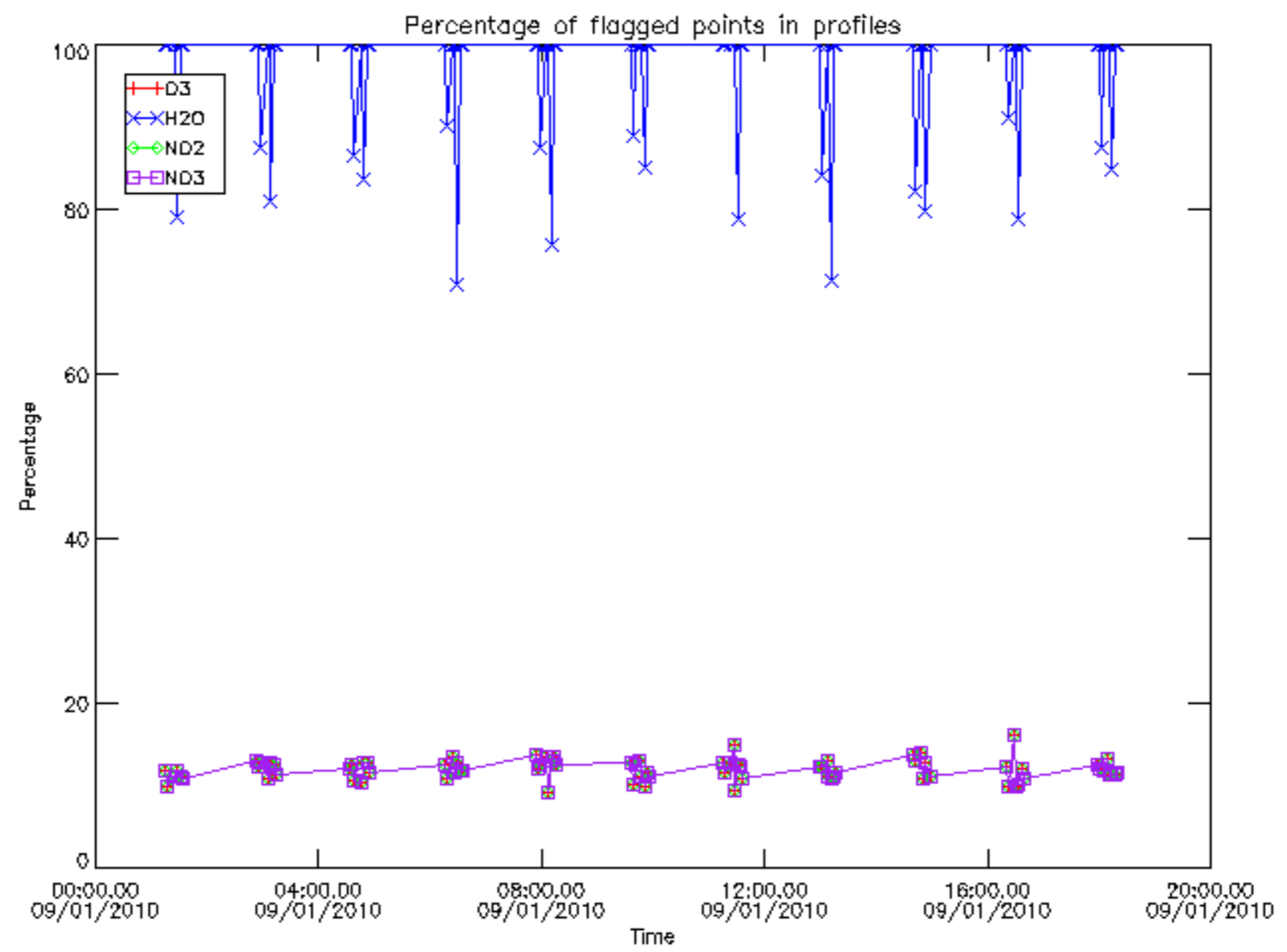
The colorbar represents the latitude.



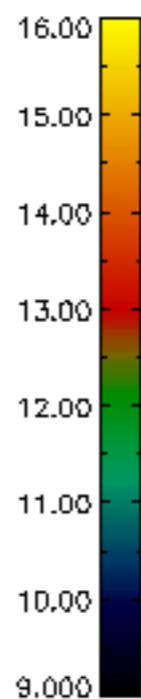
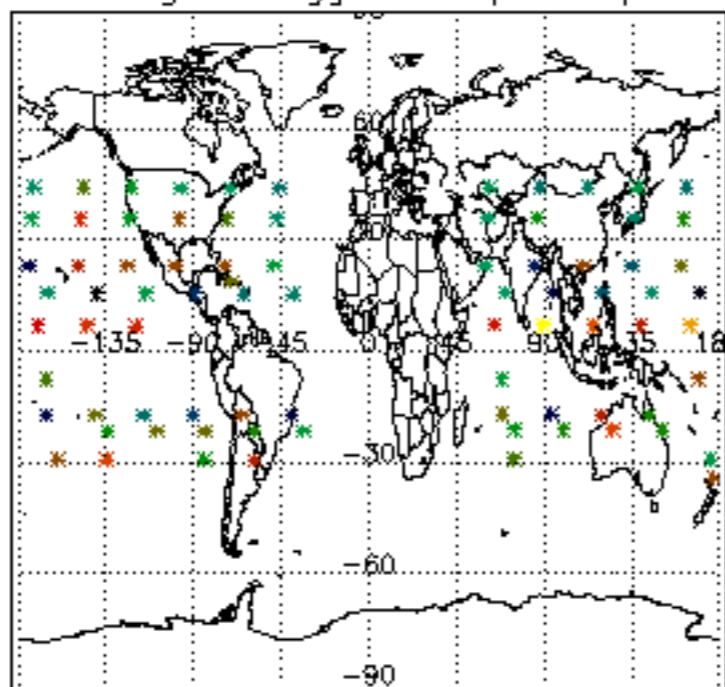
6. Auxiliary Data Files used for the production reported in section 2

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.

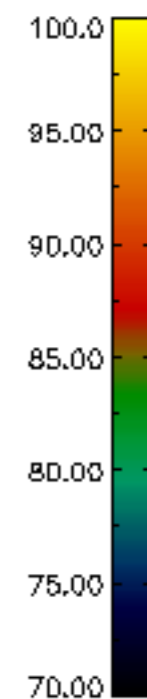
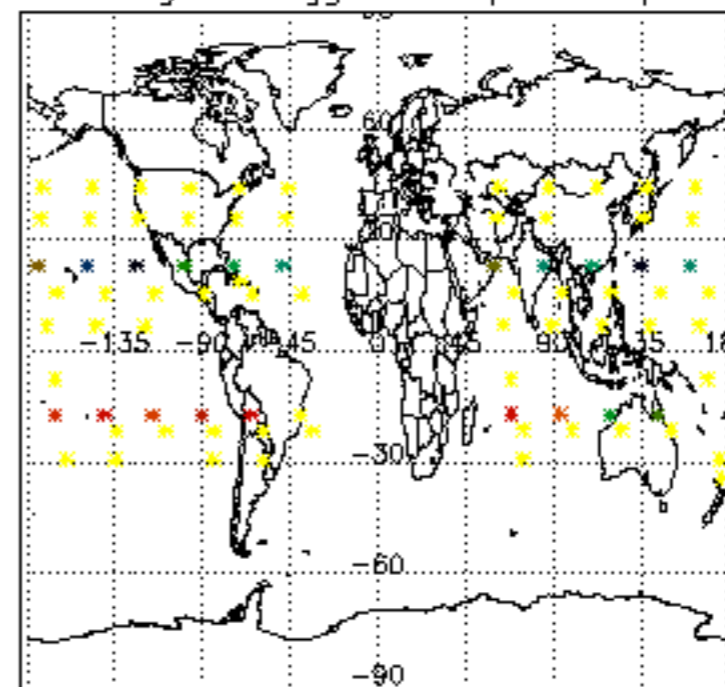
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	09-JAN-2010 00:00:50
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	09-JAN-2010 00:00:50
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	09-JAN-2010 00:00:50



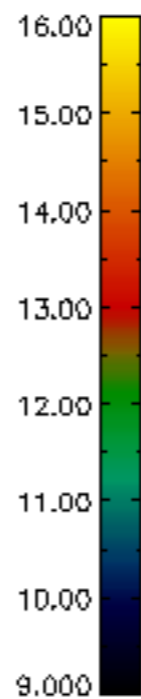
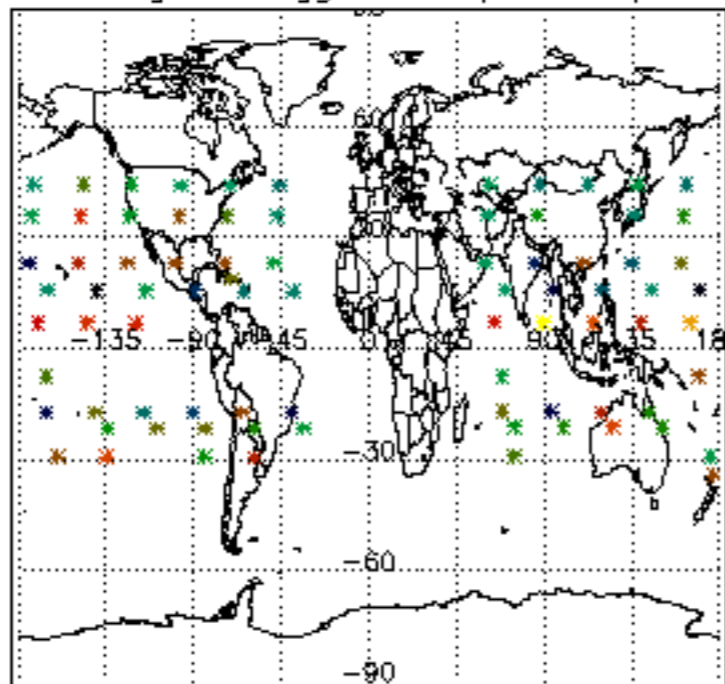
Percentage of flagged data per D3 profile



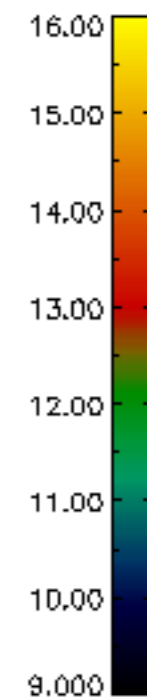
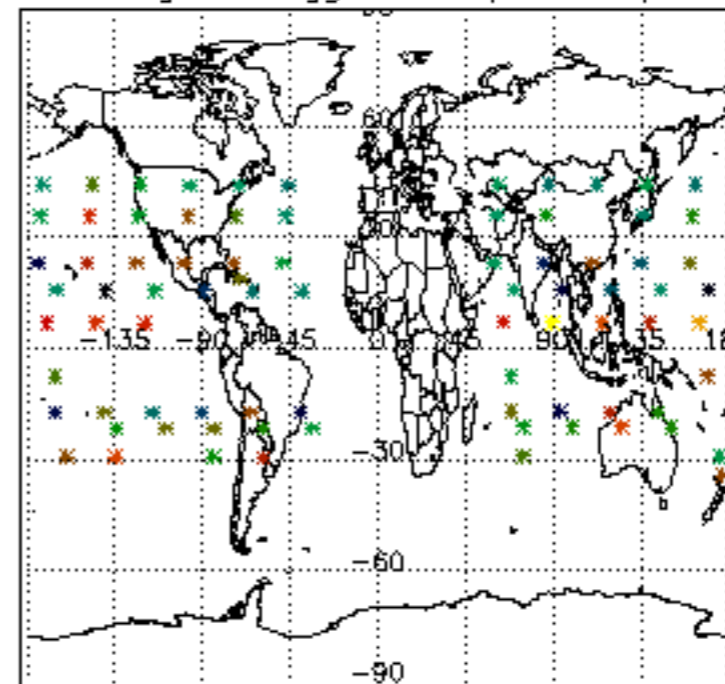
Percentage of flagged data per H2O profile

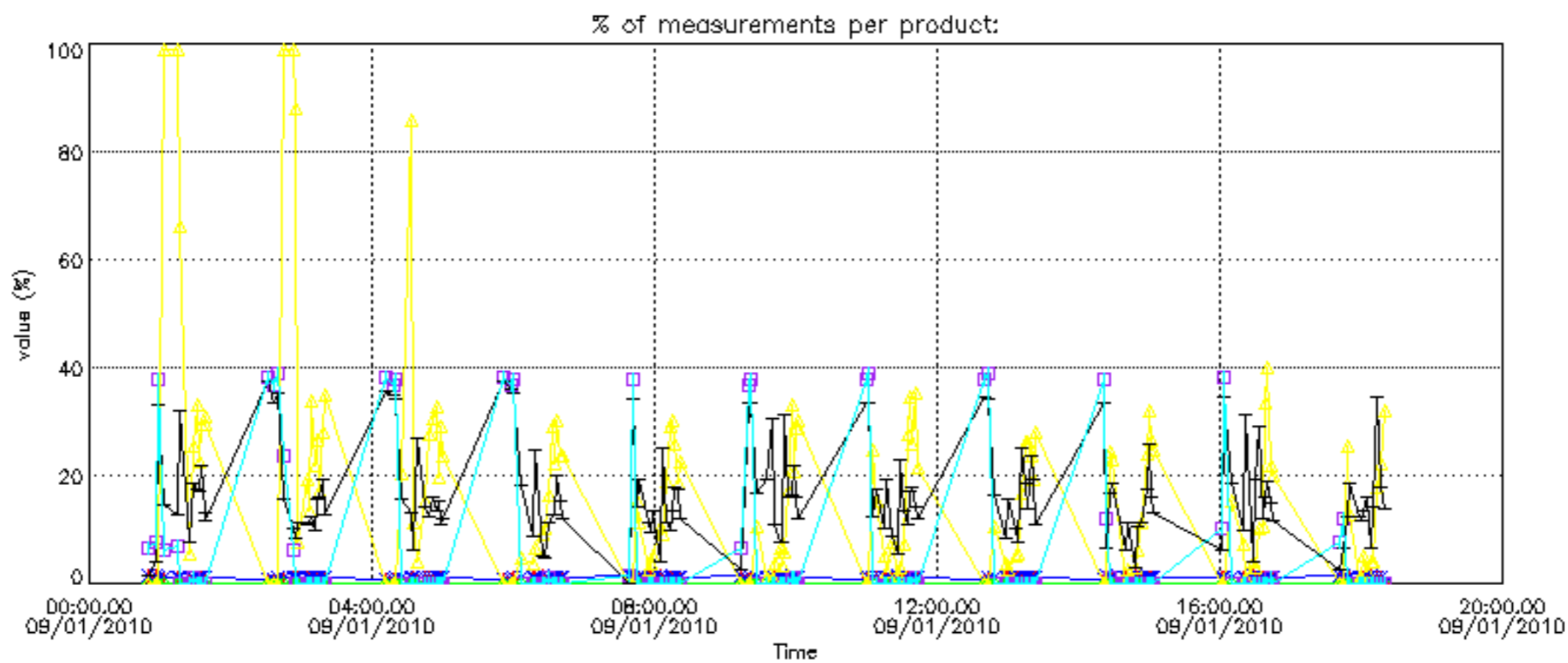


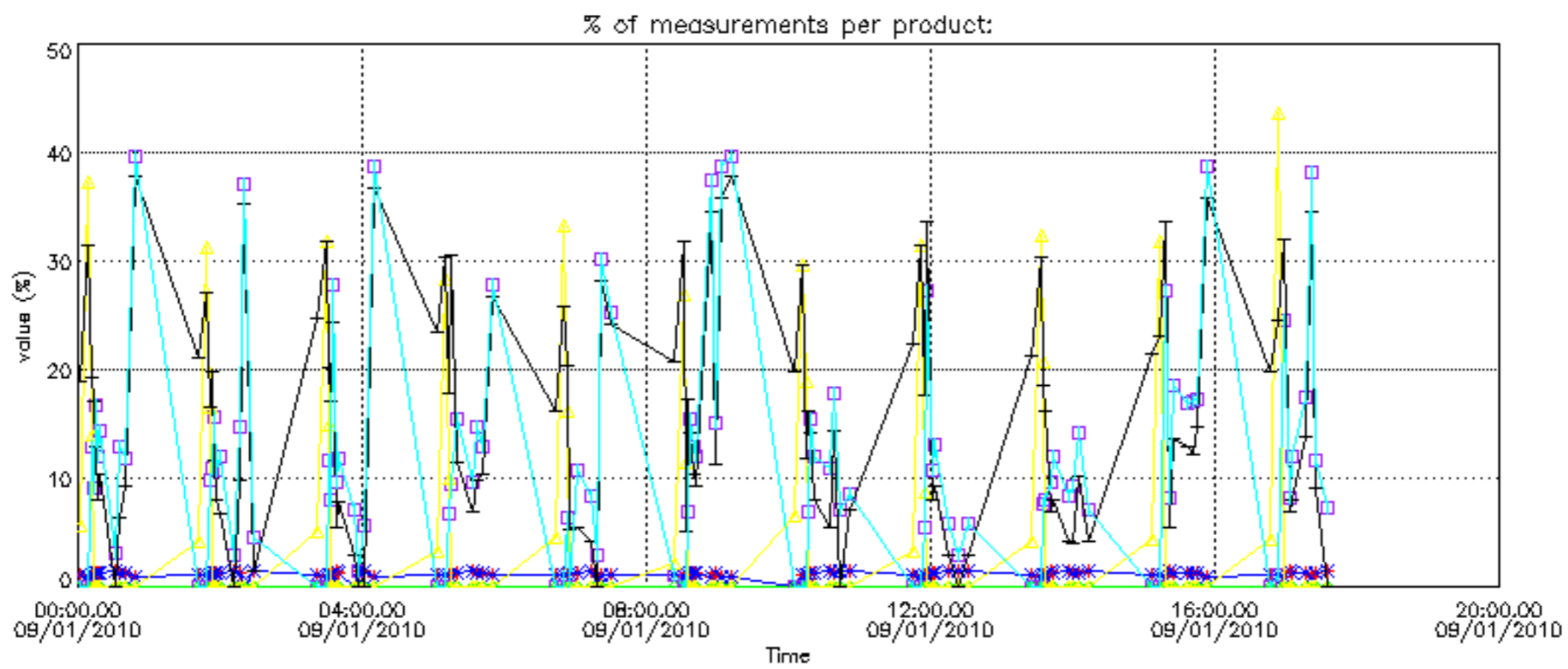
Percentage of flagged data per NO2 profile



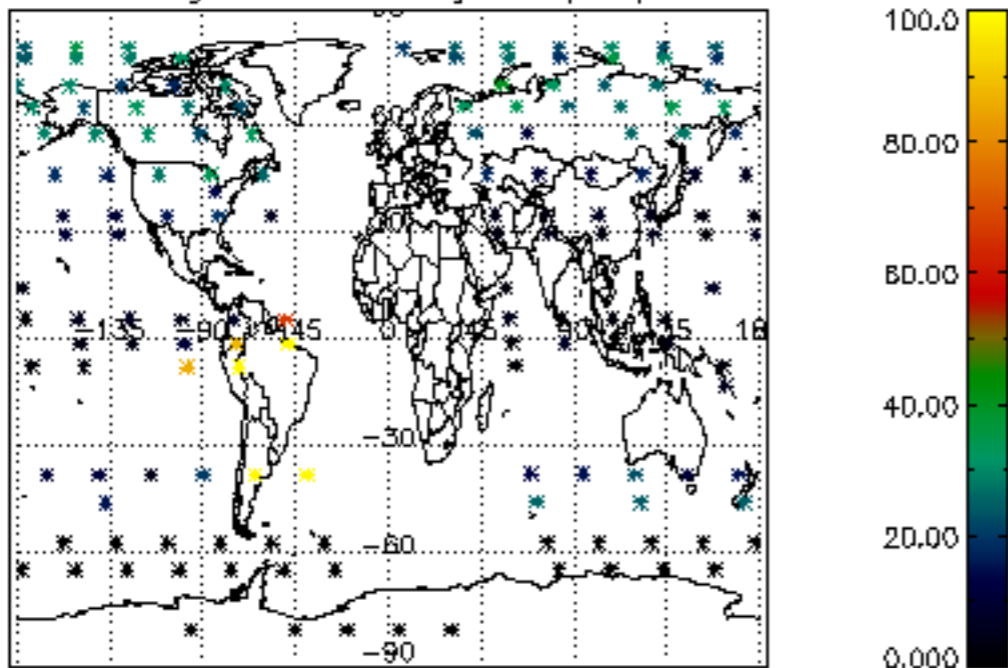
Percentage of flagged data per NO3 profile



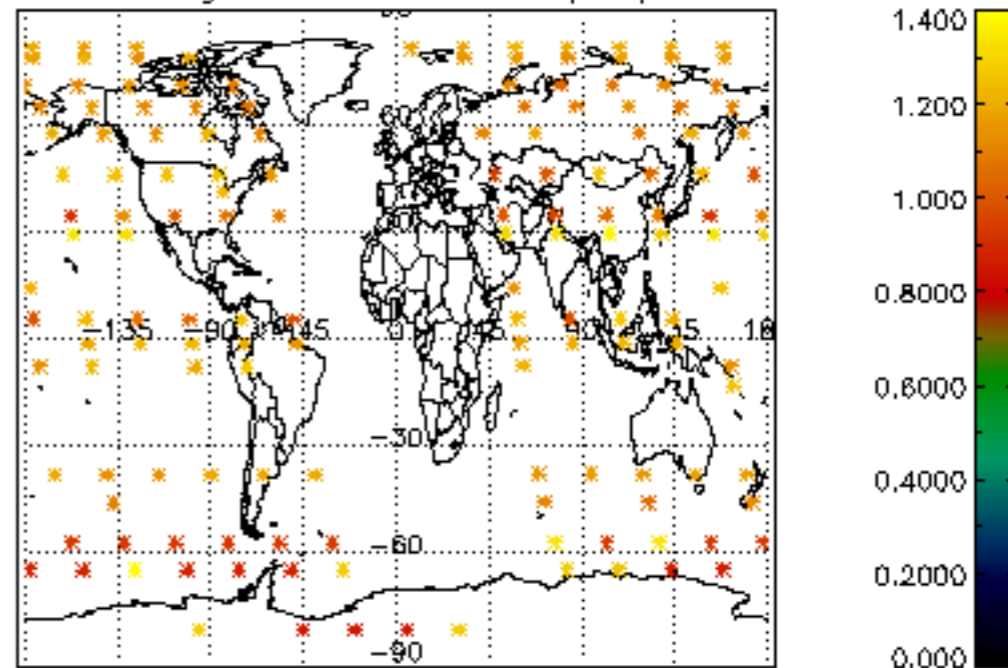




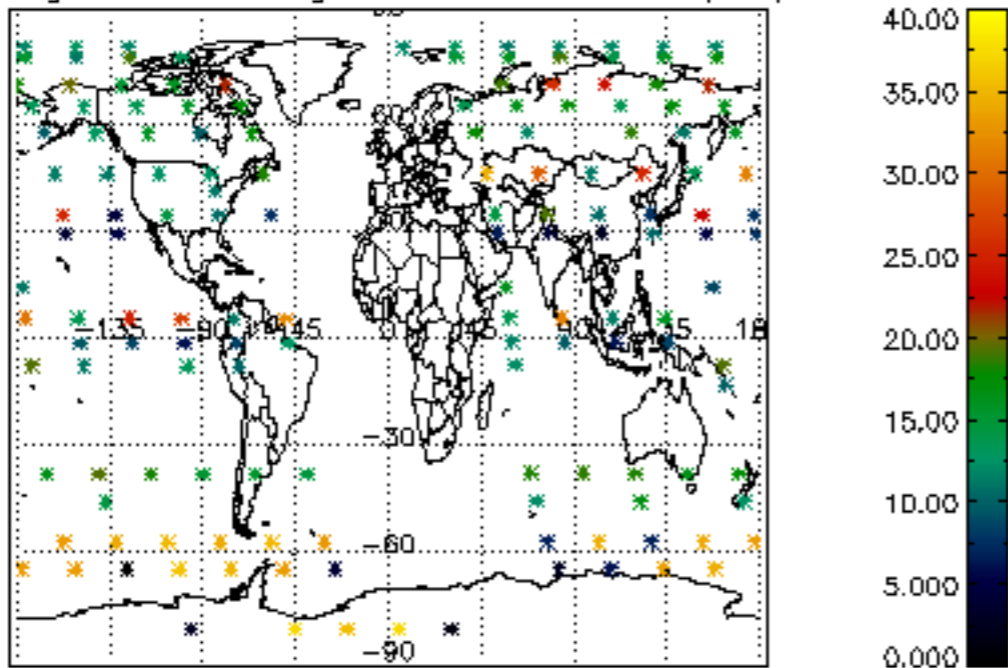
Percentage of cosmic ray hits per profile



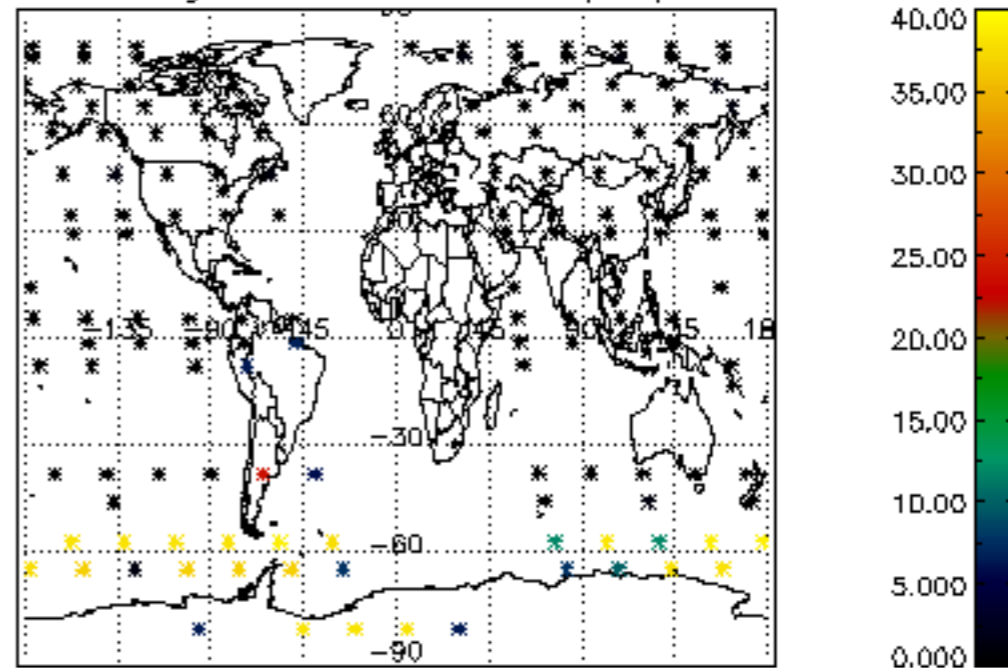
Percentage of datation errors per profile



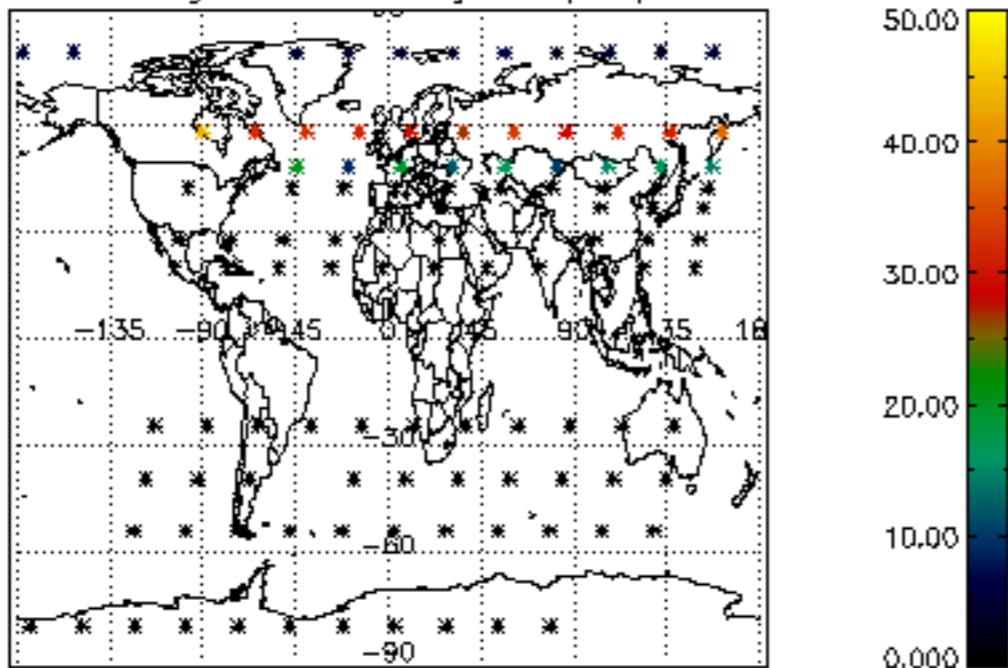
Percentage of star falling outside central band per profile



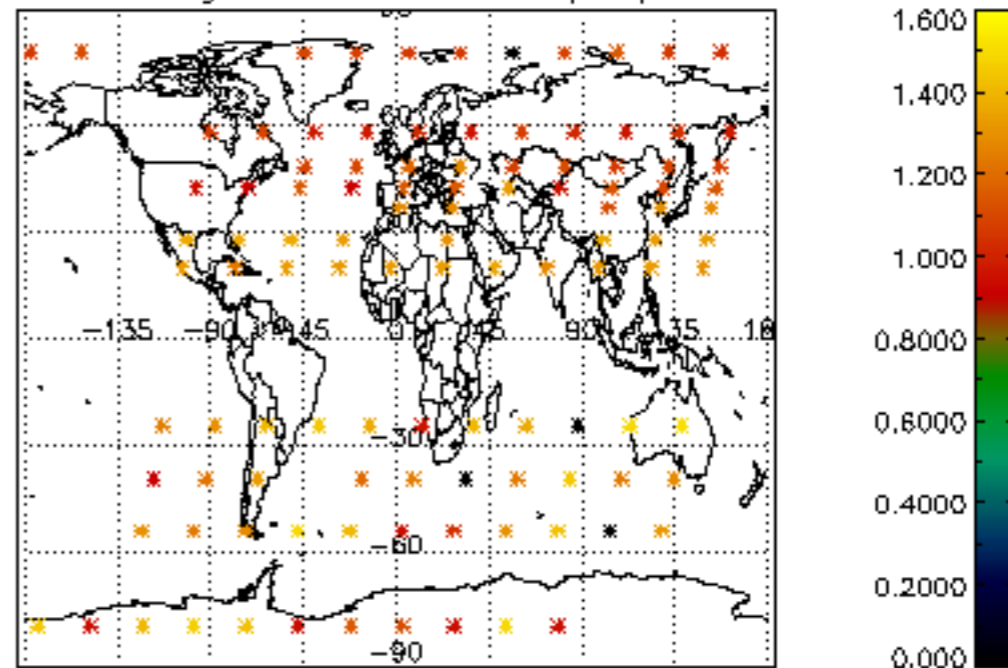
Percentage of saturation errors per profile



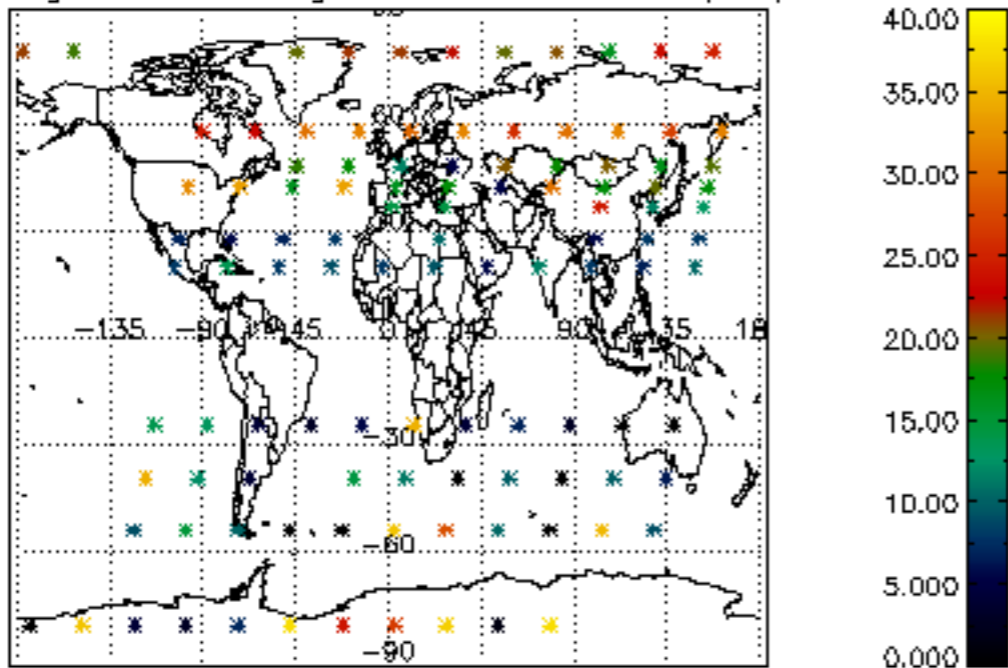
Percentage of cosmic ray hits per profile



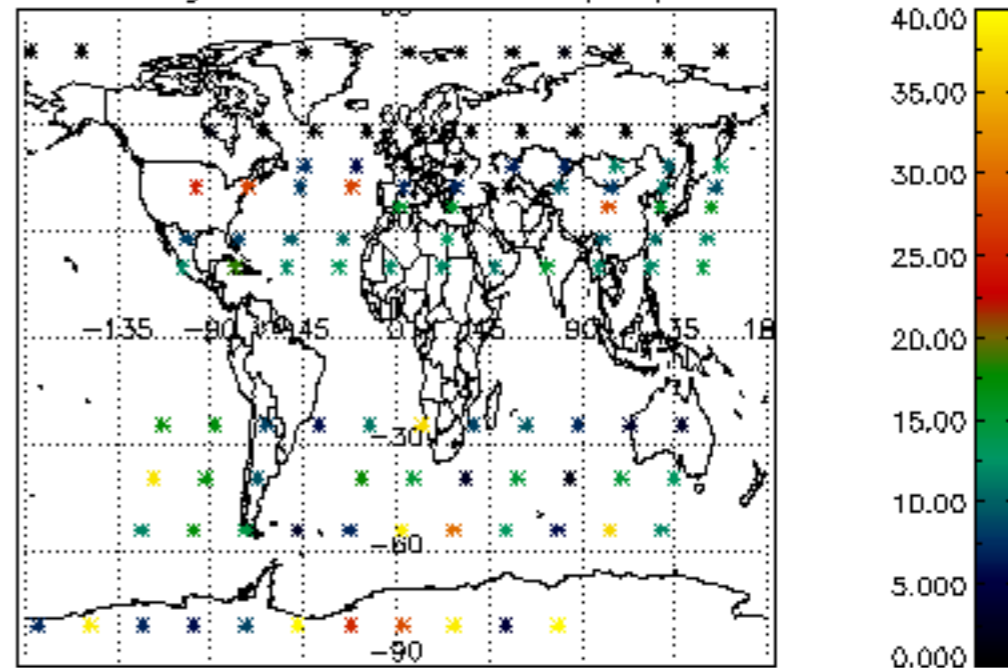
Percentage of datation errors per profile

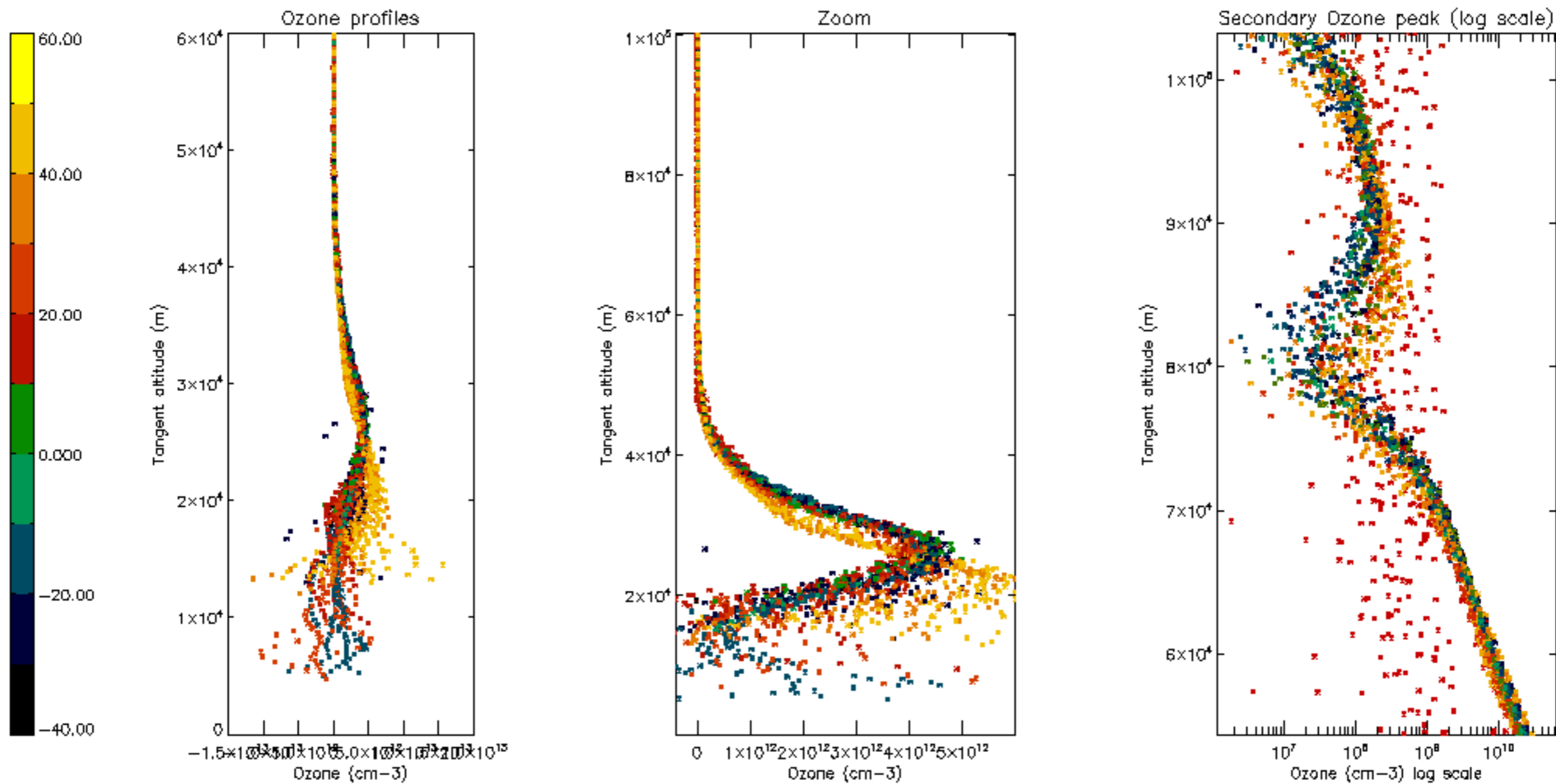


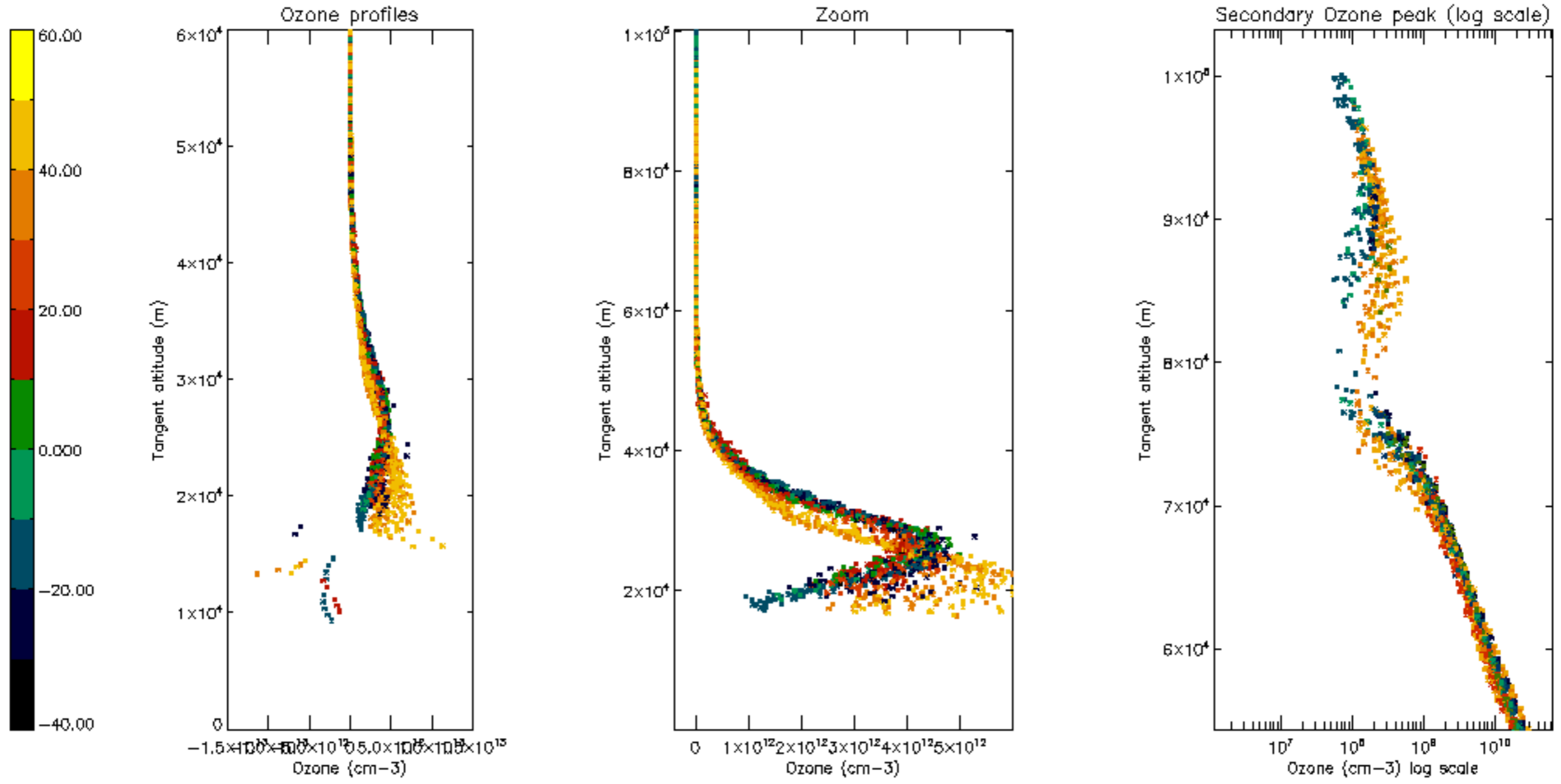
Percentage of star falling outside central band per profile

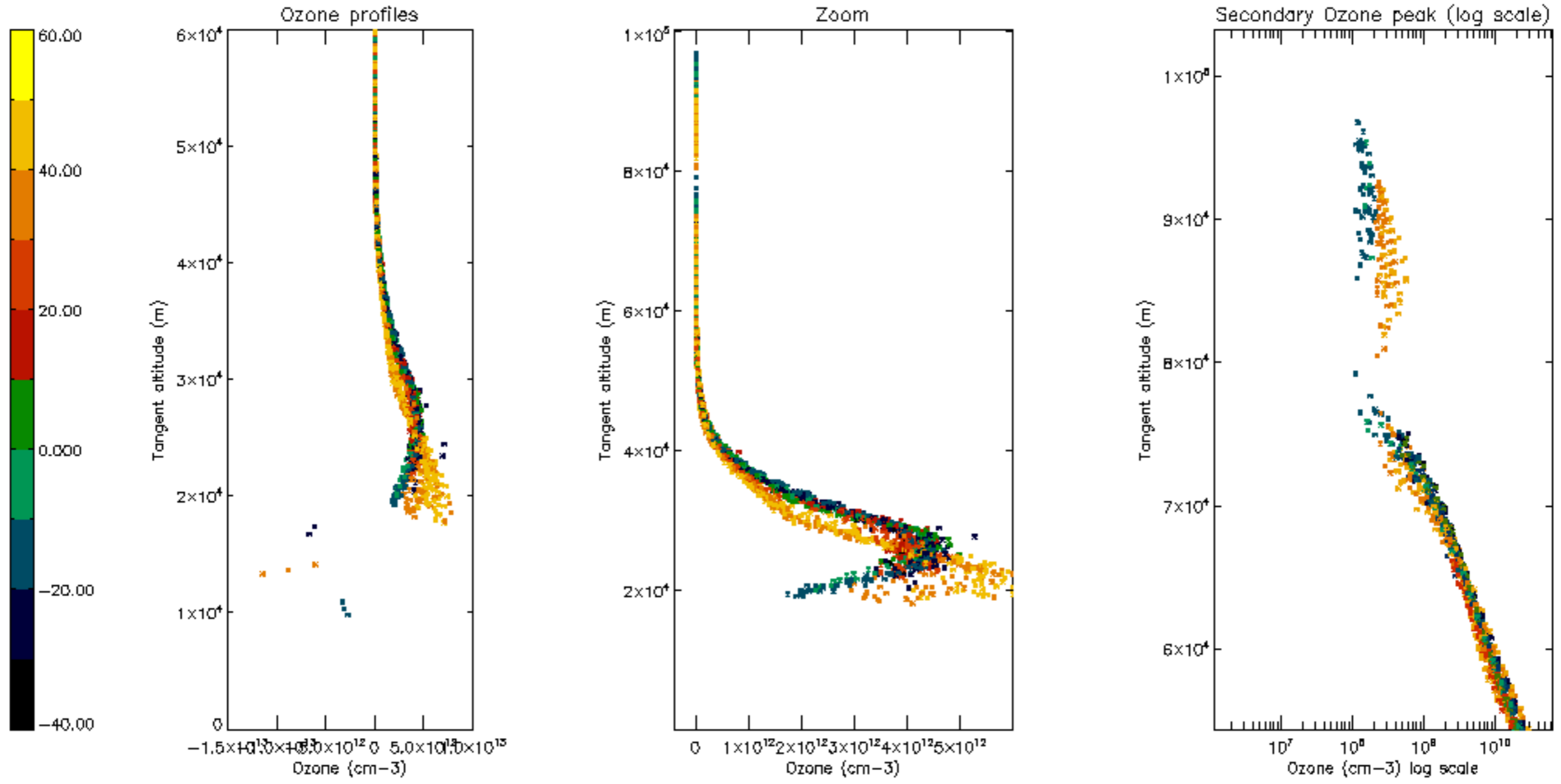


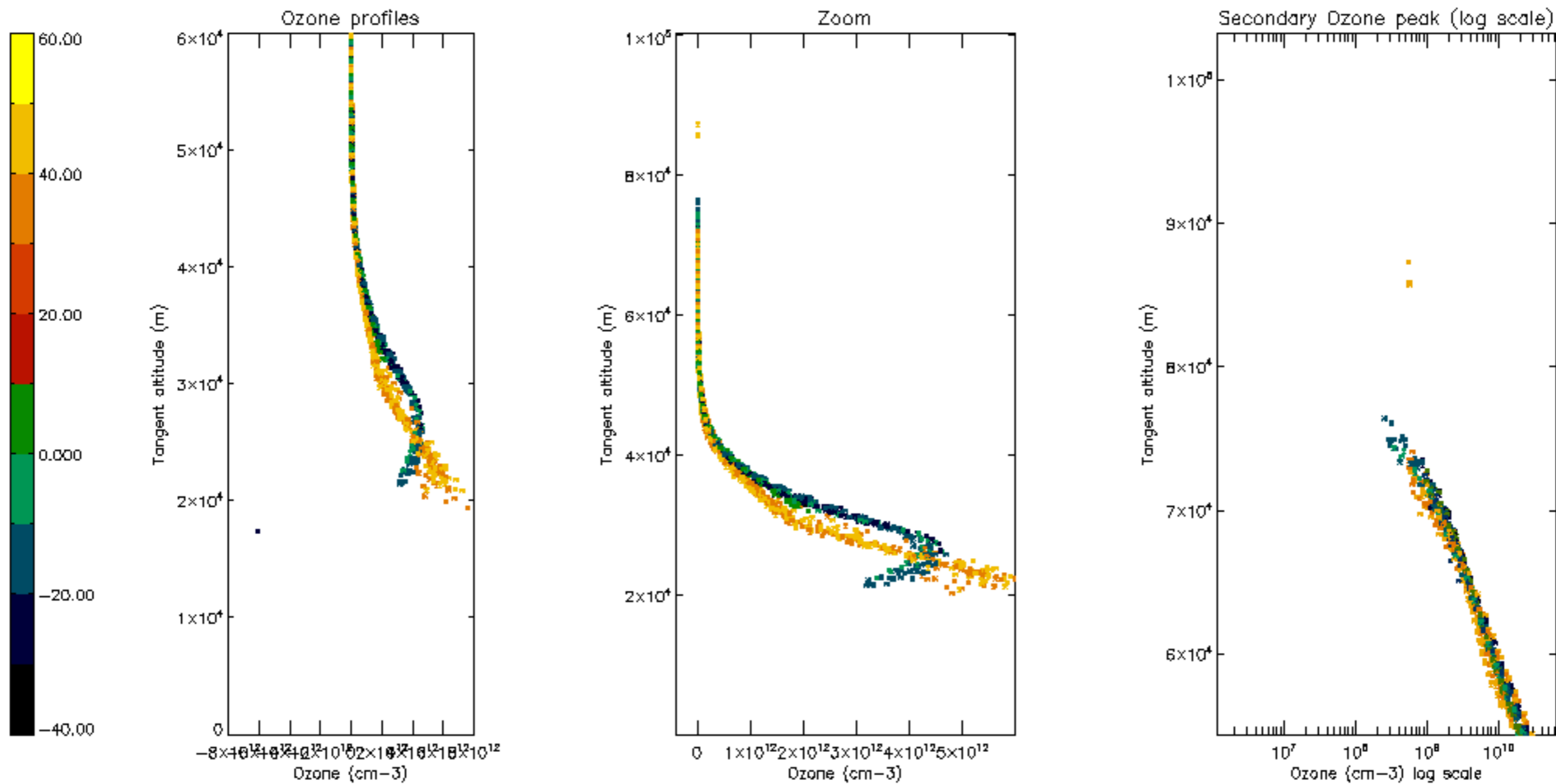
Percentage of saturation errors per profile

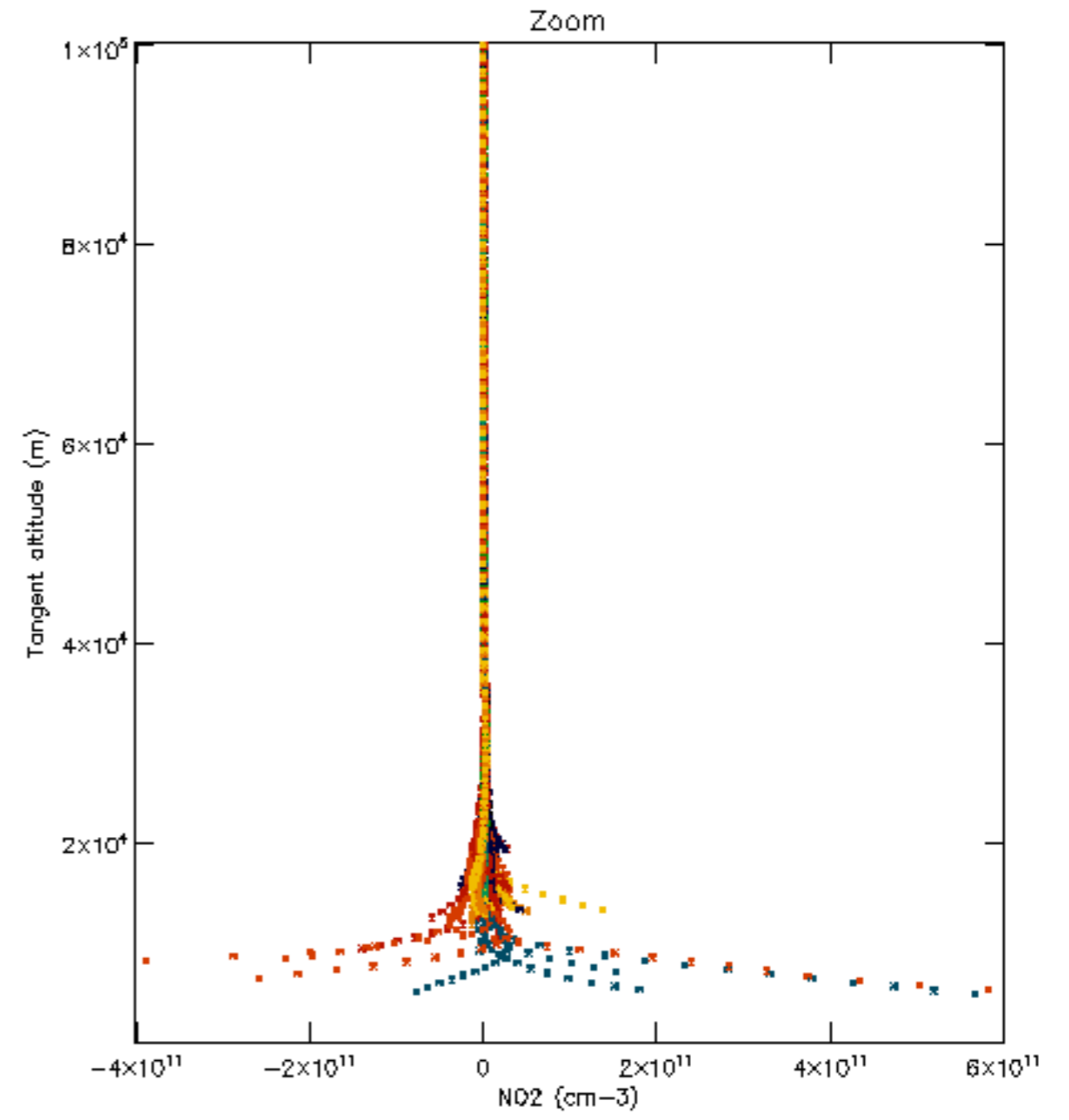
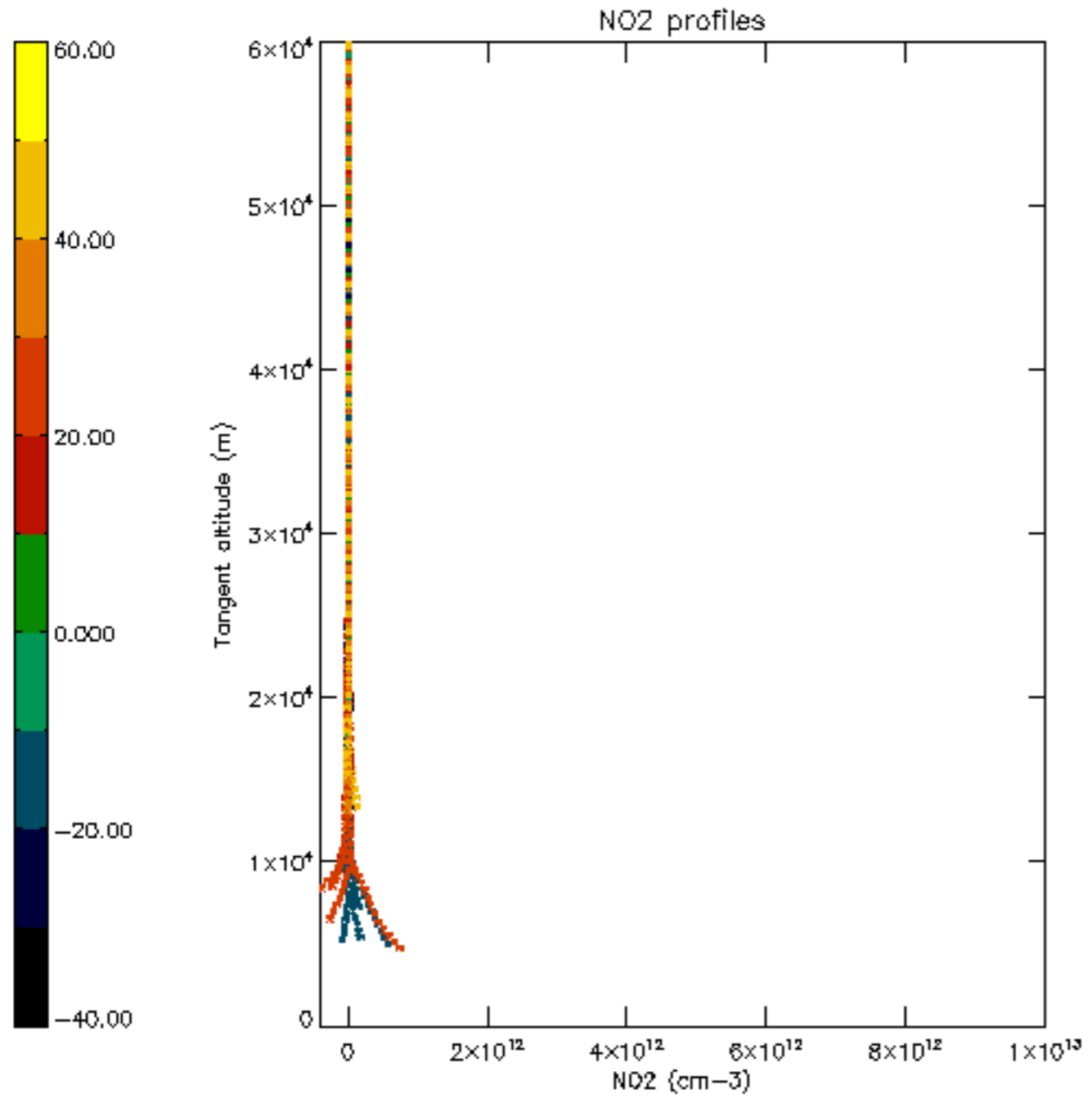


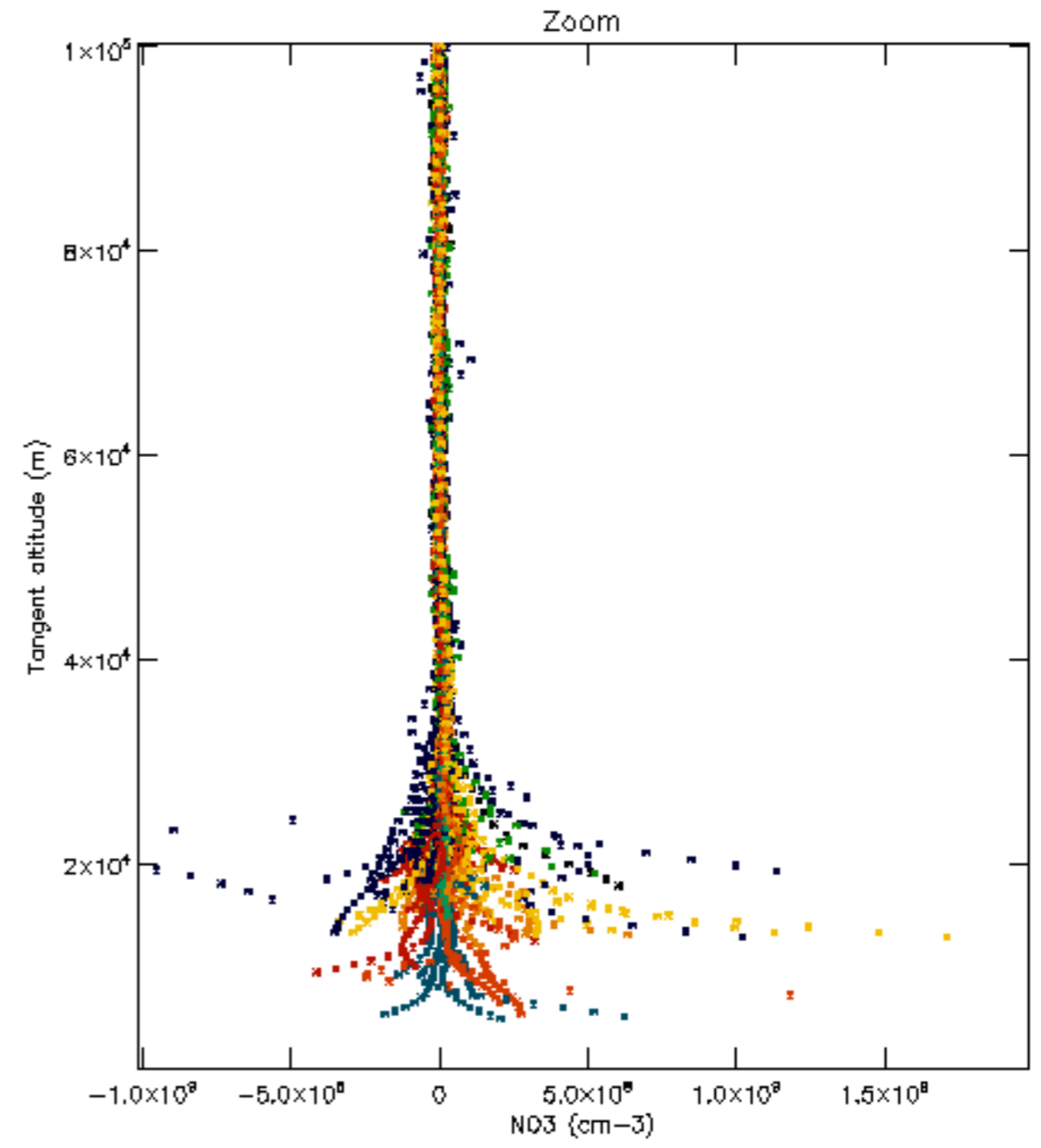
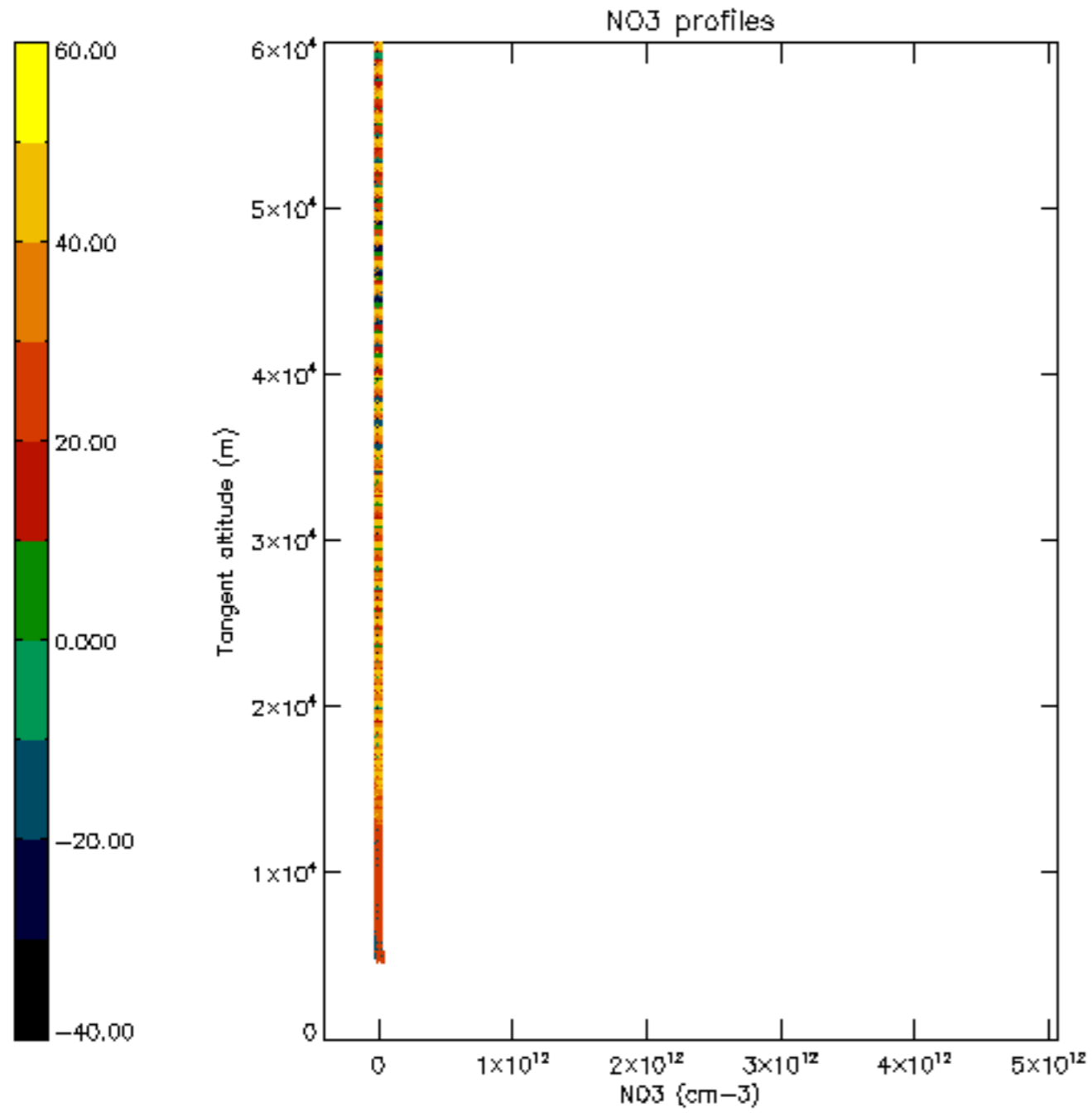


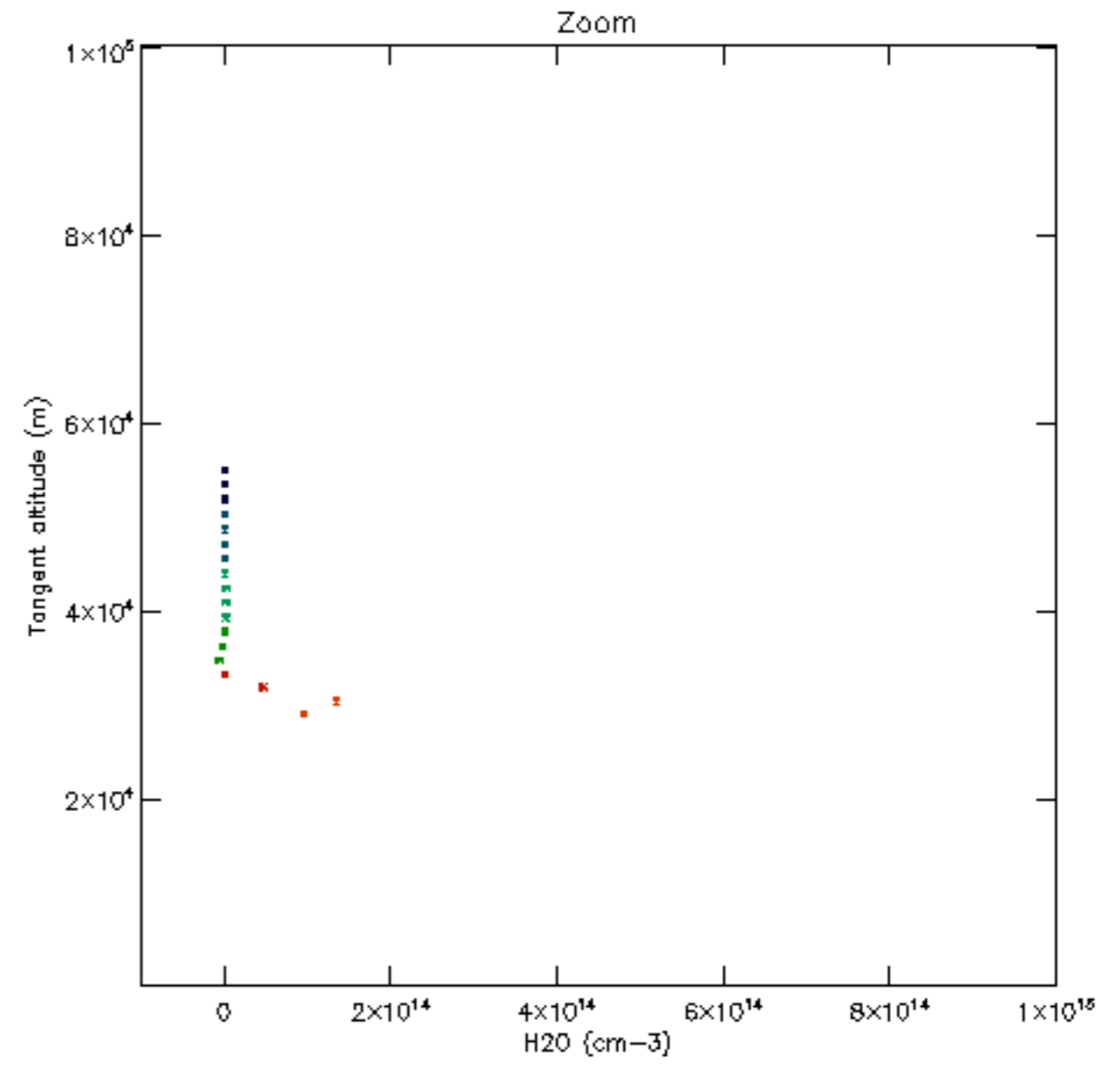
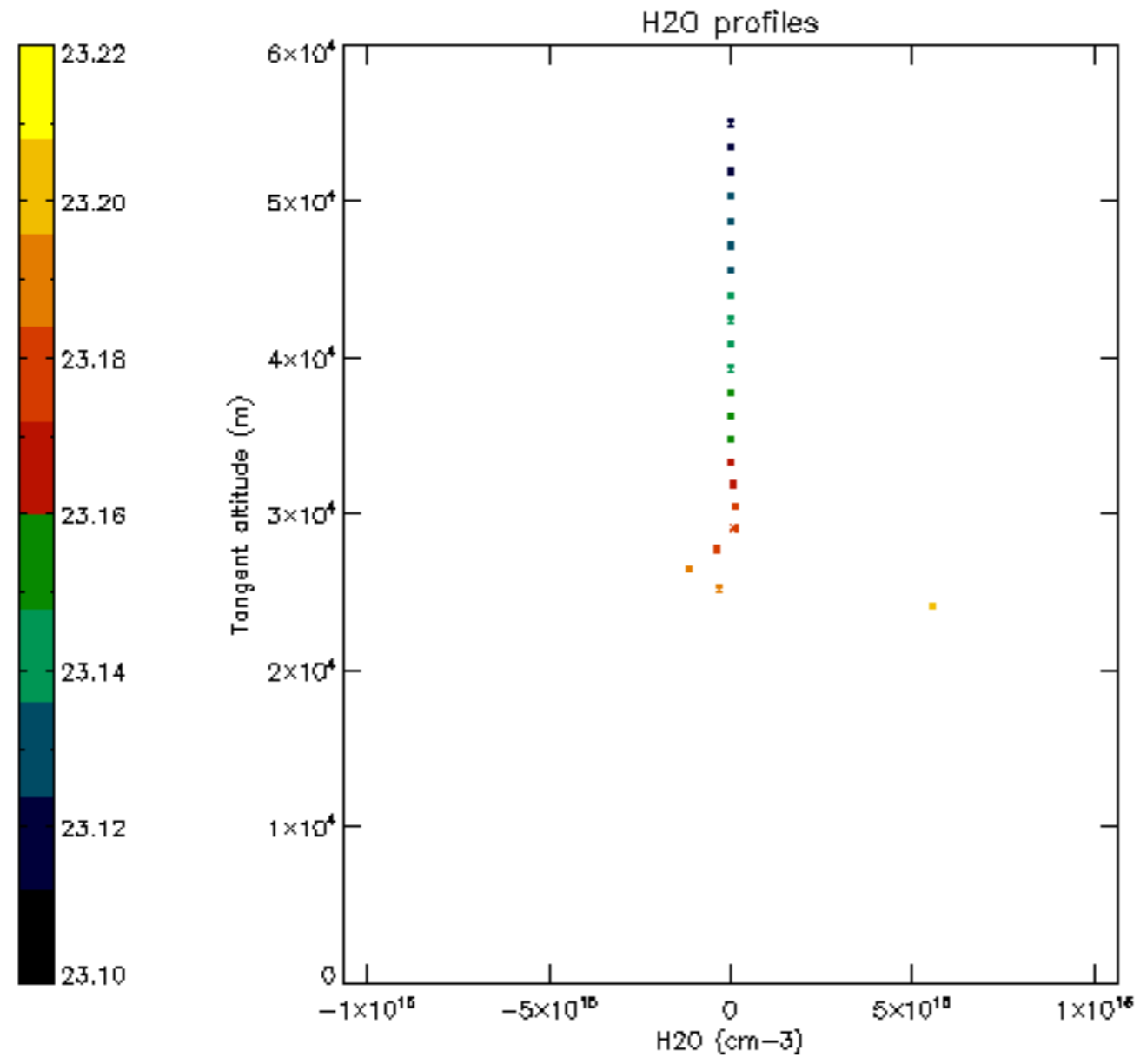


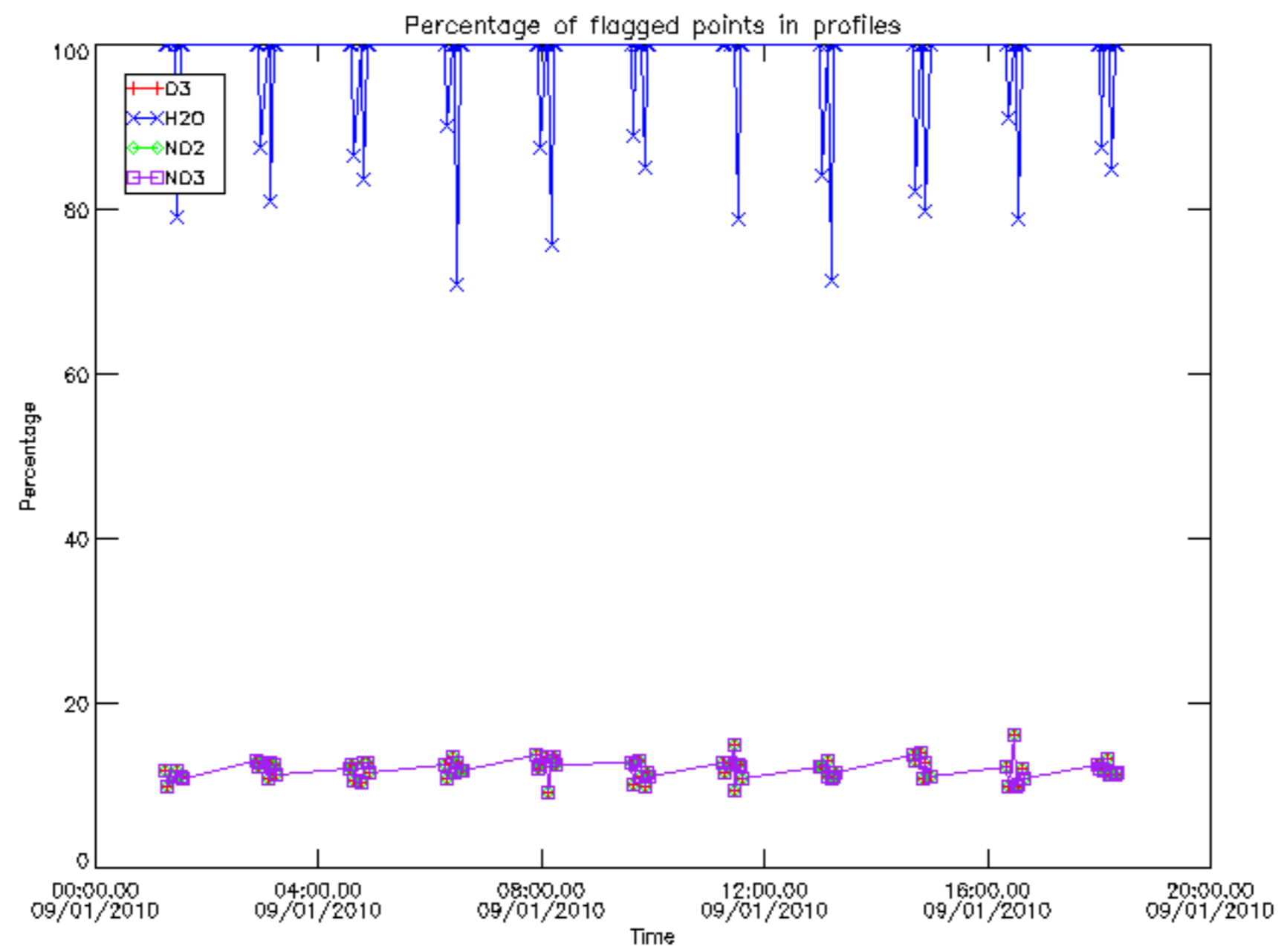




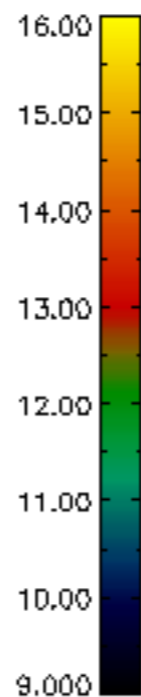
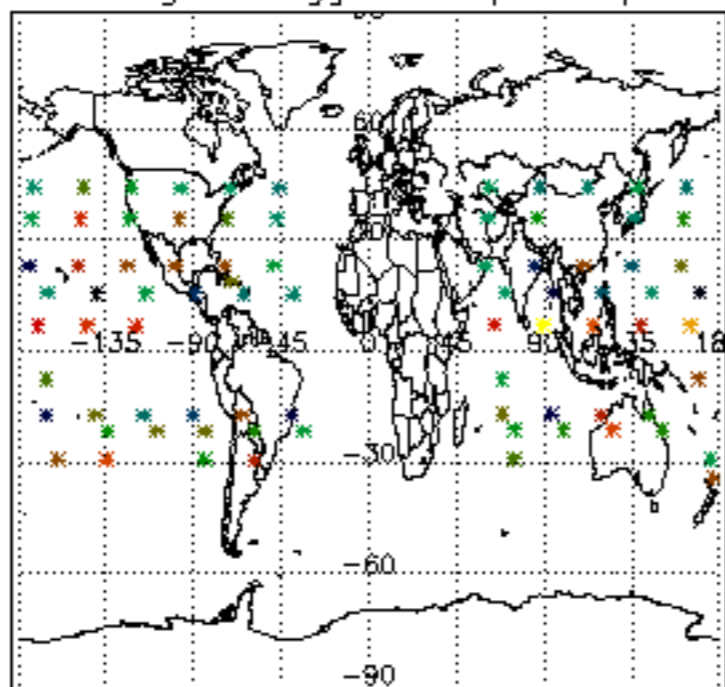




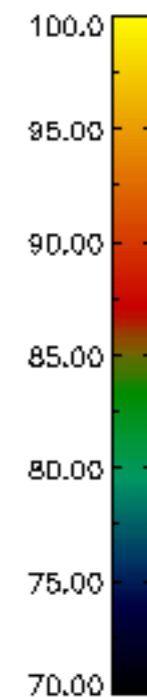
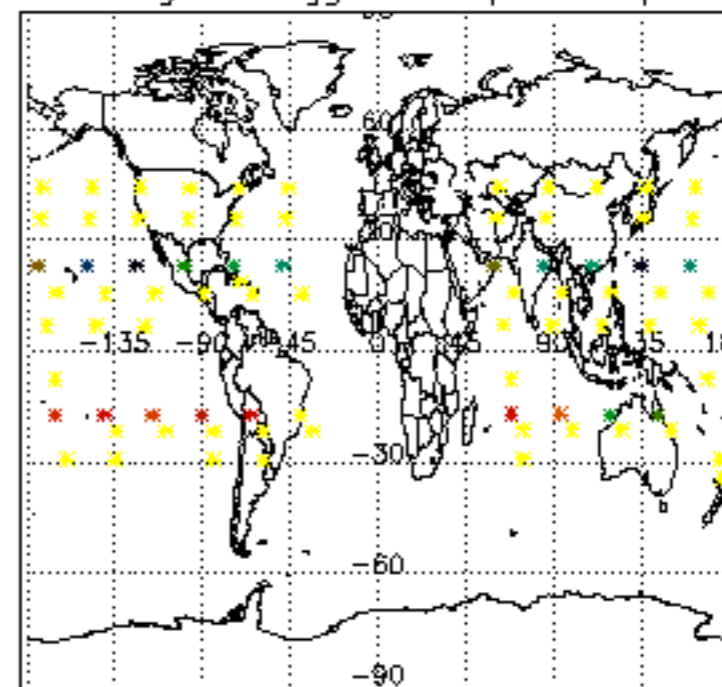




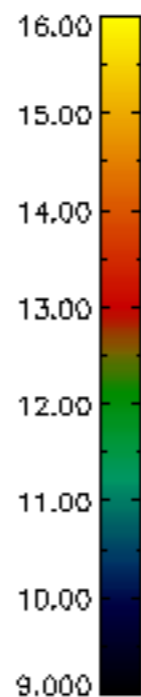
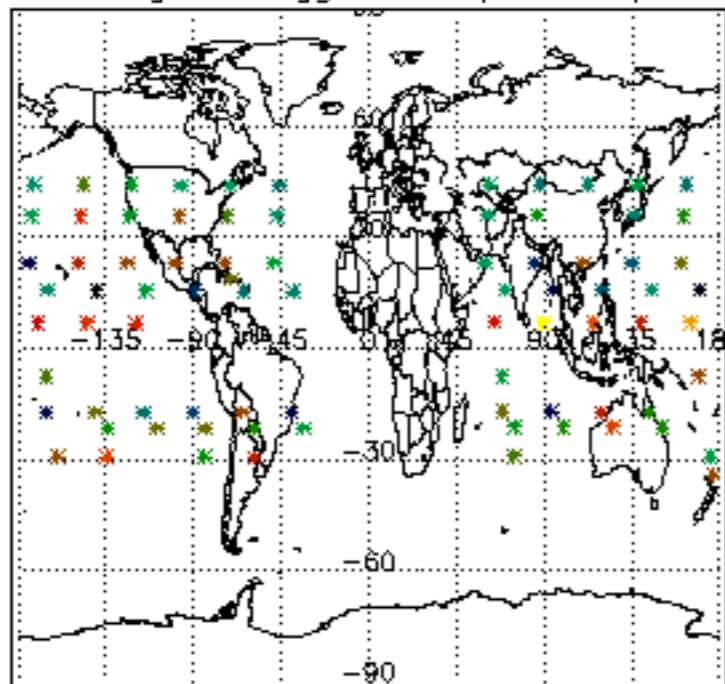
Percentage of flagged data per D3 profile



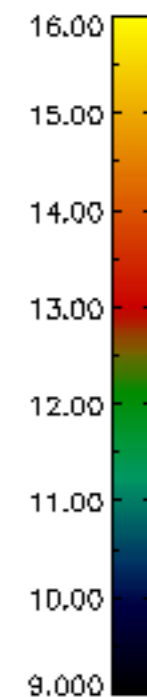
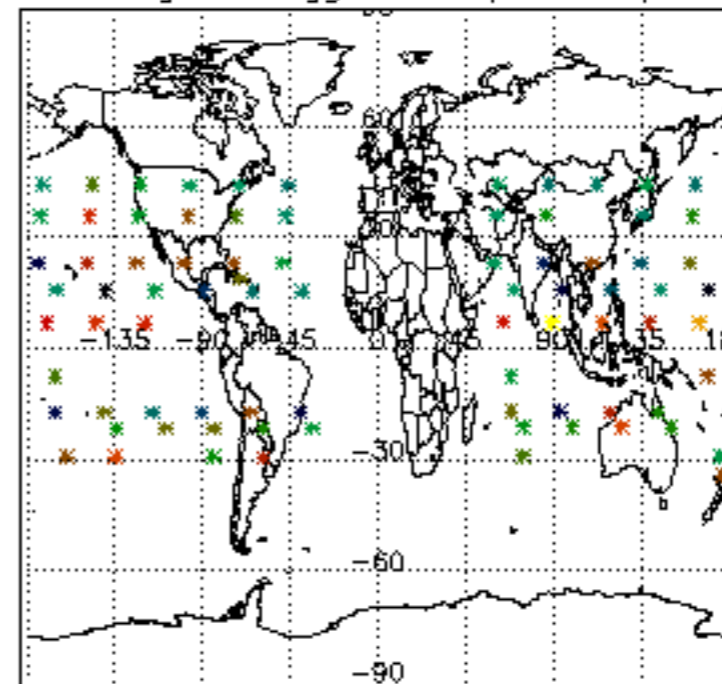
Percentage of flagged data per H2O profile

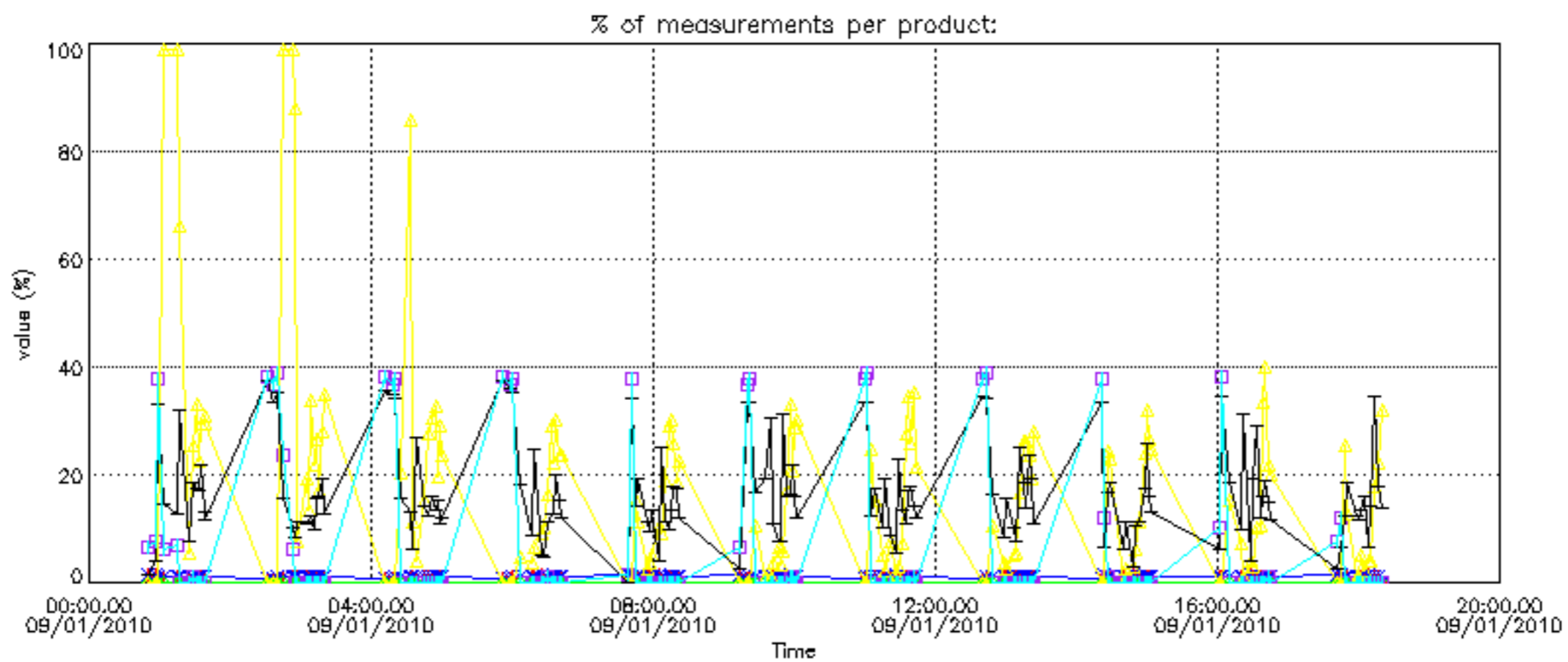


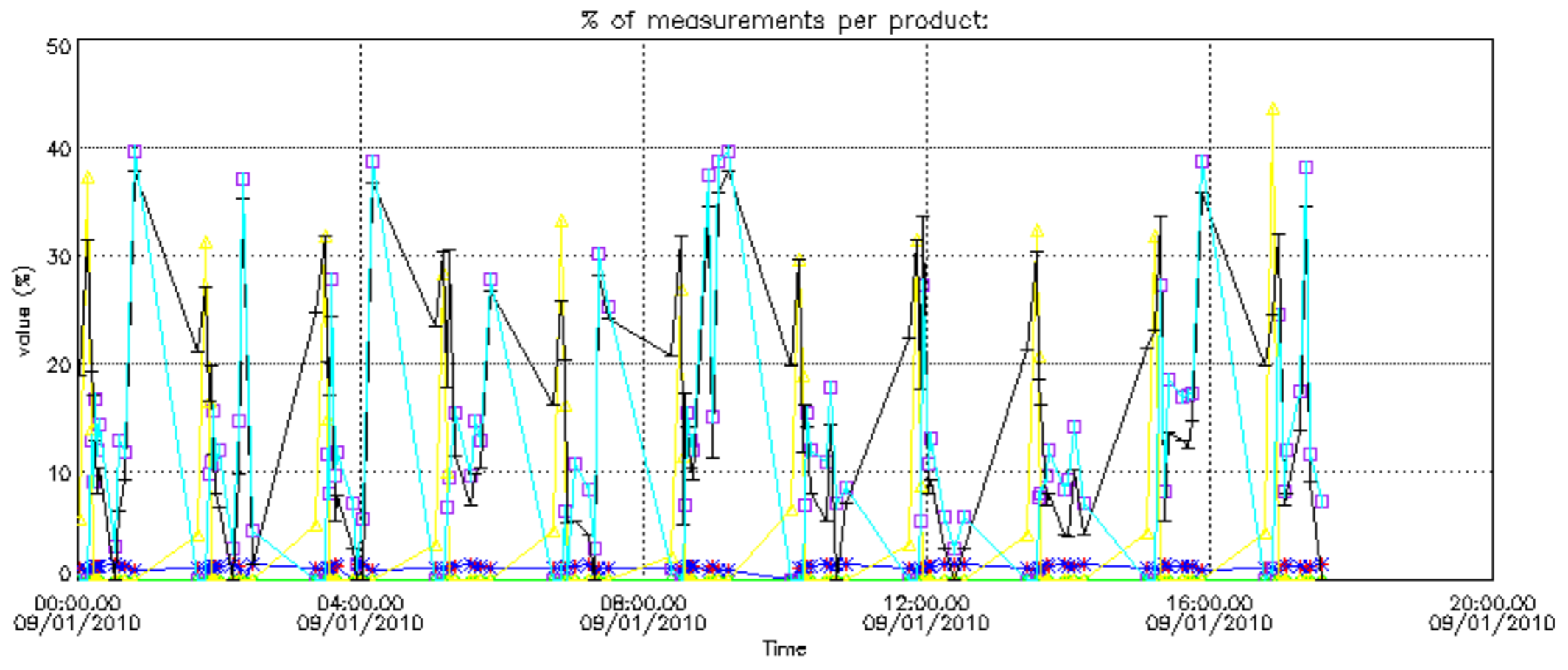
Percentage of flagged data per NO2 profile



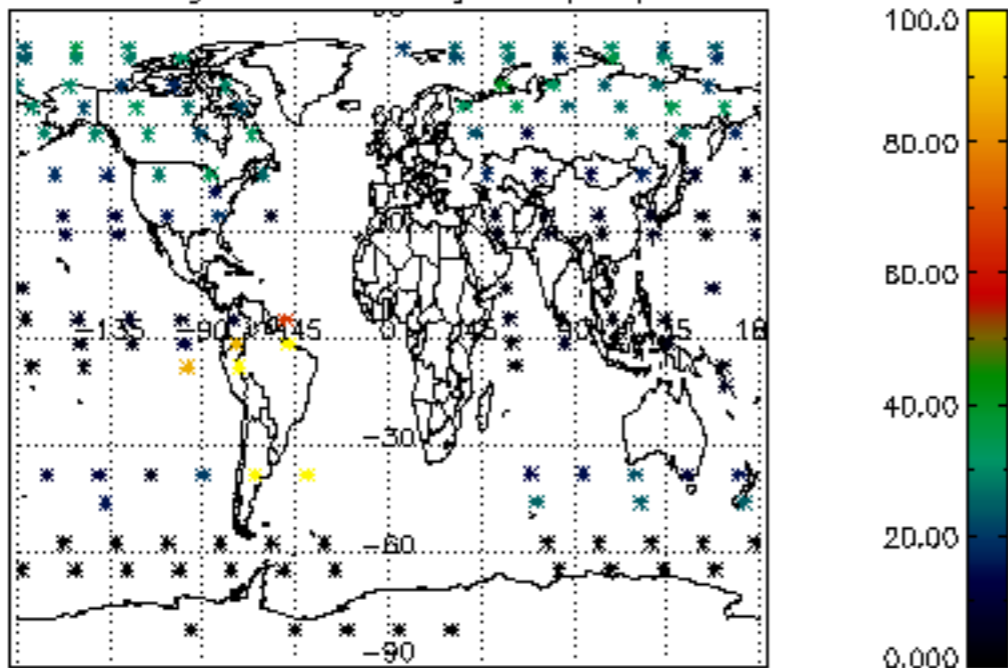
Percentage of flagged data per NO3 profile



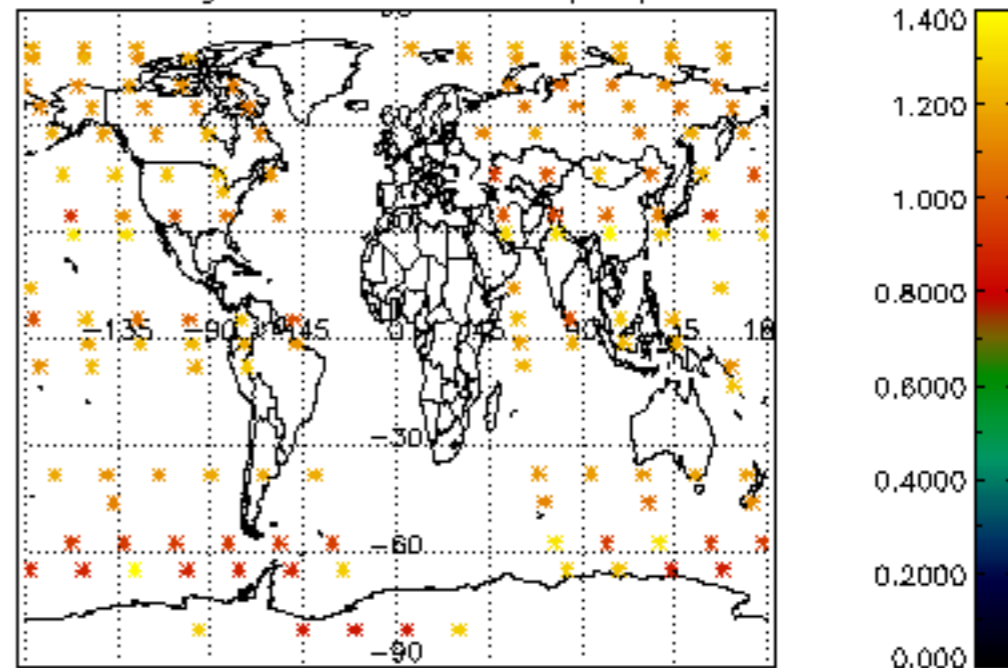




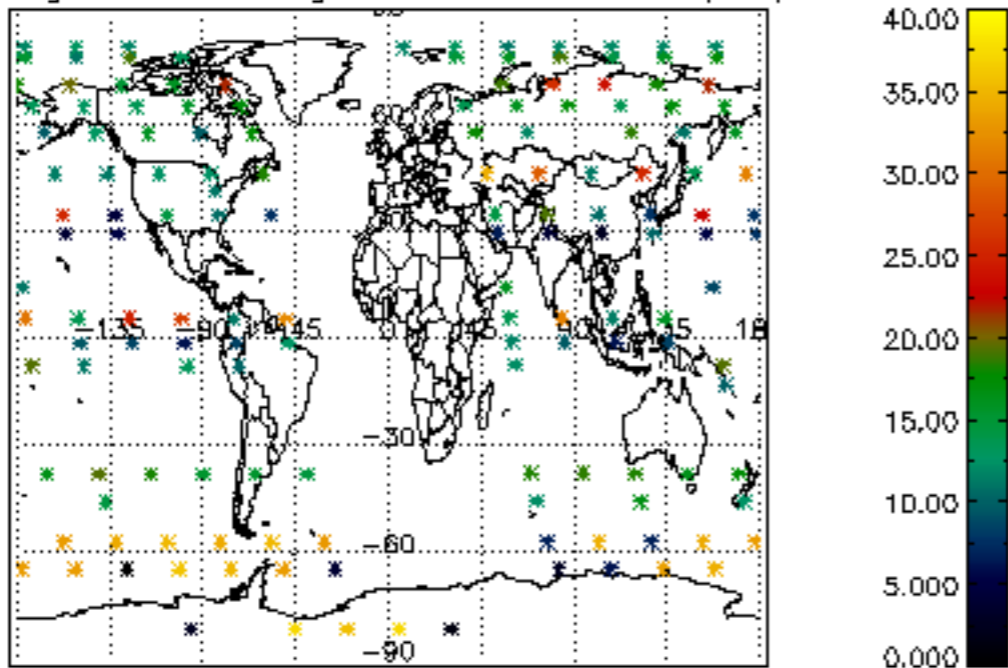
Percentage of cosmic ray hits per profile



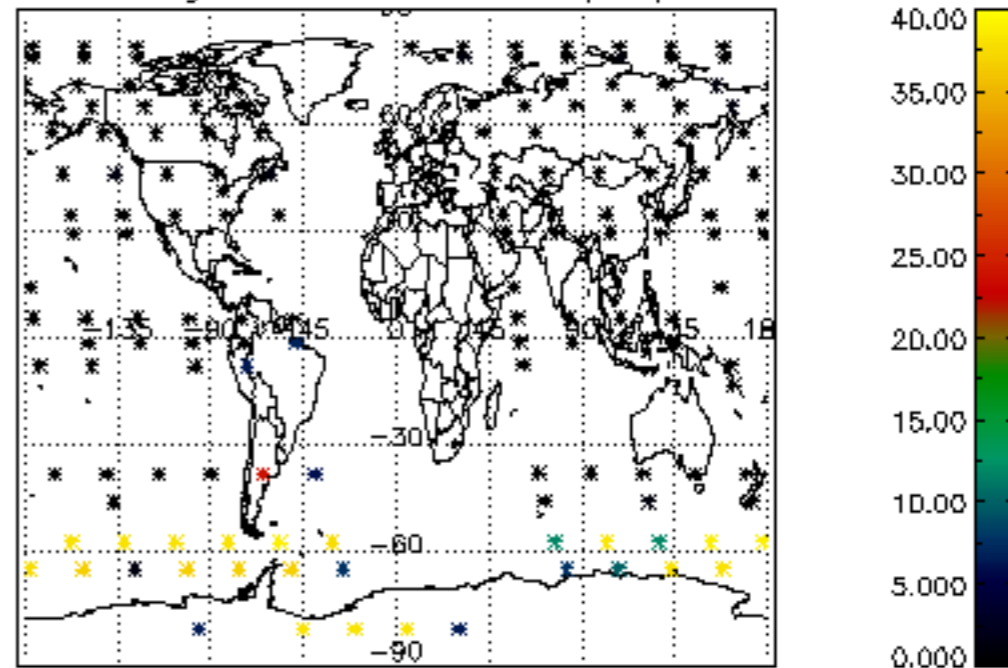
Percentage of datation errors per profile



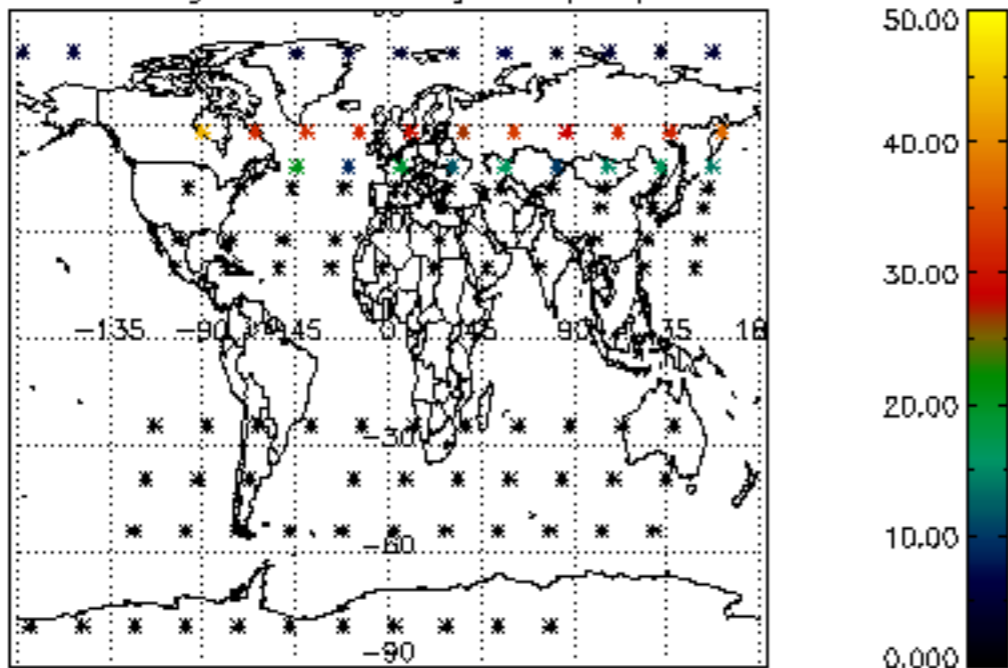
Percentage of star falling outside central band per profile



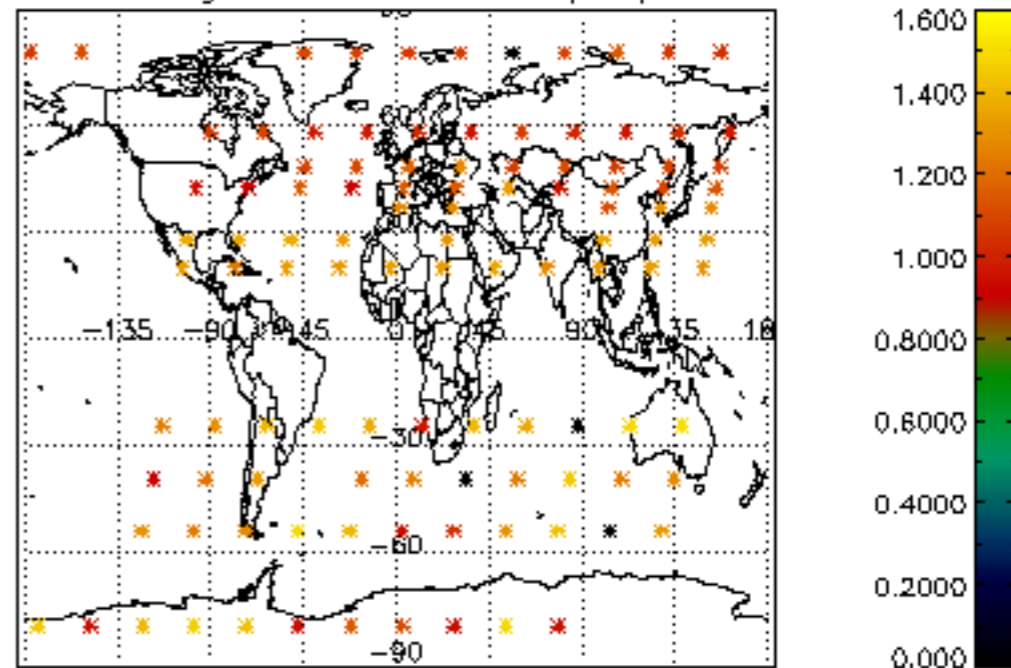
Percentage of saturation errors per profile



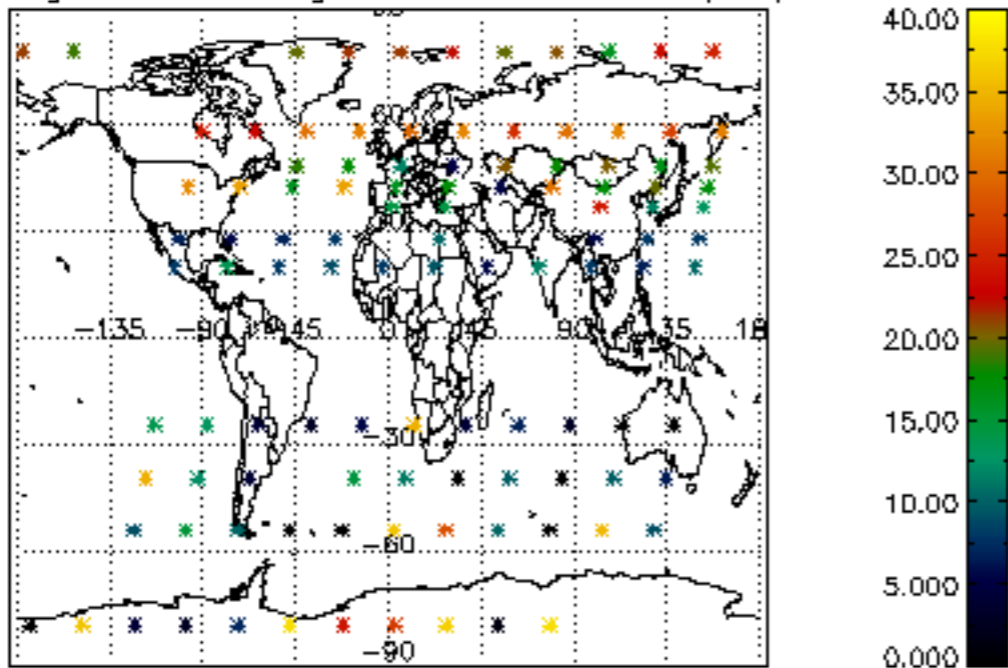
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

