

# GOMOS Level 2 Daily Report

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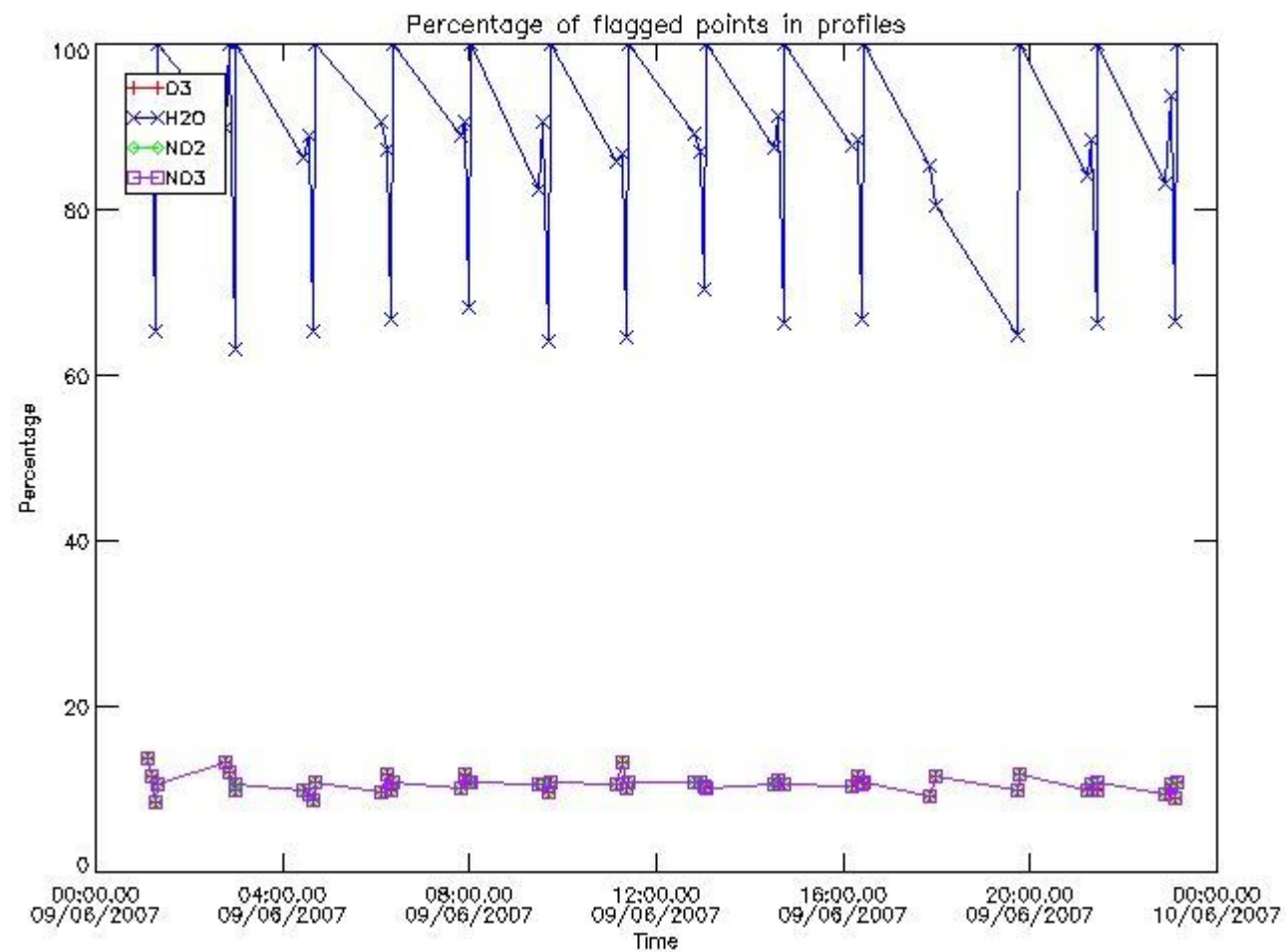


279	GOM_NL__2PRFIN20070609_230003_000000492058_00473_27581_8362.N1	09-JUN-2007 23:00:03	Dark	48.500	84	Alp Phe	2.3970	4500.0	97	27581	No
280	GOM_NL__2PRFIN20070609_230556_000000632058_00474_27582_8362.N1	09-JUN-2007 23:05:56	Dark	63.000	63	Bet Gru	2.1500	2800.0	126	27582	No
281	GOM_NL__2PRFIN20070609_230757_000000472058_00474_27582_8363.N1	09-JUN-2007 23:07:57	Dark	46.500	31	Alp Gru	1.7340	15200.	93	27582	No
282	GOM_NL__2PRFIN20070609_231220_000000432058_00474_27582_8364.N1	09-JUN-2007 23:12:20	Straylight	43.000	45	Alp Pav	1.9400	26000.	86	27582	No
283	GOM_NL__2PRFIN20070609_232055_000000442058_00474_27582_8365.N1	09-JUN-2007 23:20:55	Straylight	43.500	40	The Sco	1.8590	7100.0	87	27582	No
284	GOM_NL__2PRFIN20070609_232240_000000442058_00474_27582_8366.N1	09-JUN-2007 23:22:40	Twilight_stray	44.000	25	35Lam Sco	1.6200	28000.	88	27582	No
285	GOM_NL__2PRFIN20070609_232414_000000422058_00474_27582_8367.N1	09-JUN-2007 23:24:14	Twilight_stray	42.000	75	26Eps Sco	2.2910	4250.0	84	27582	No
286	GOM_NL__2PRFIN20070609_232934_000000412058_00474_27582_8368.N1	09-JUN-2007 23:29:34	Bright	41.000	86	35Eta Oph	2.4300	10200.	82	27582	No
287	GOM_NL__2PRFIN20070609_233120_000000382058_00474_27582_8369.N1	09-JUN-2007 23:31:20	Bright	38.000	98	13Zet Oph	2.5710	30000.	76	27582	No
288	GOM_NL__2PRFIN20070609_233327_000000372058_00474_27582_8370.N1	09-JUN-2007 23:33:27	Bright	36.500	120	1Del Oph	2.7340	3200.0	73	27582	No
289	GOM_NL__2PRFIN20070609_234059_000000372058_00474_27582_8371.N1	09-JUN-2007 23:40:59	Bright	37.000	127	27Bet Her	2.7810	4700.0	74	27582	No
290	GOM_NL__2PRFIN20070609_234411_000000402058_00474_27582_8372.N1	09-JUN-2007 23:44:11	Bright	40.000	133	40Zet Her	2.8070	6000.0	80	27582	No
291	GOM_NL__2PRFIN20070609_235118_000000392058_00474_27582_8373.N1	09-JUN-2007 23:51:18	Bright	39.000	130	23Bet Dra	2.7990	5800.0	78	27582	No

### 3. Quality information per product

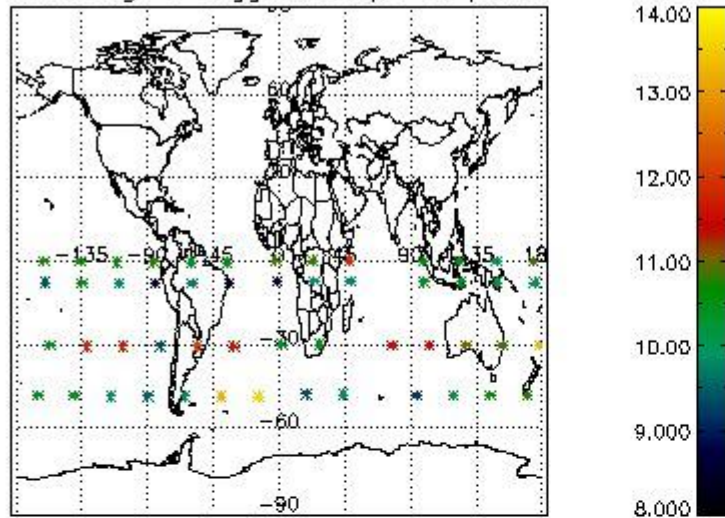
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

#### 3.1 Plot quality information per product (time dependant)

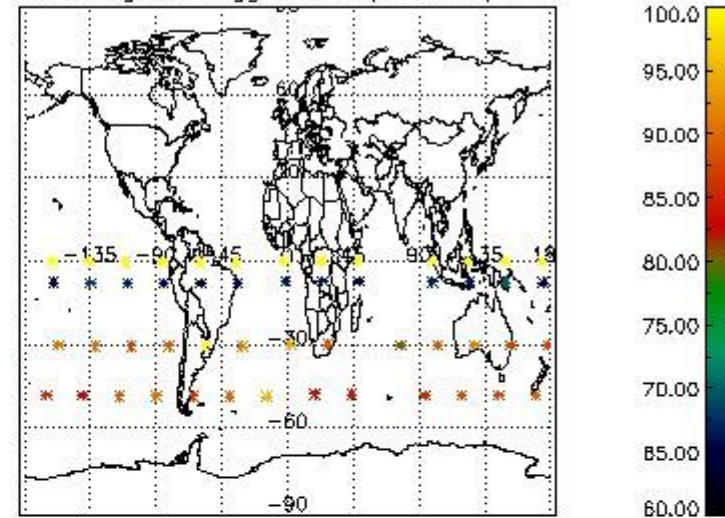


#### 3.2 Plot quality information per product (world map)

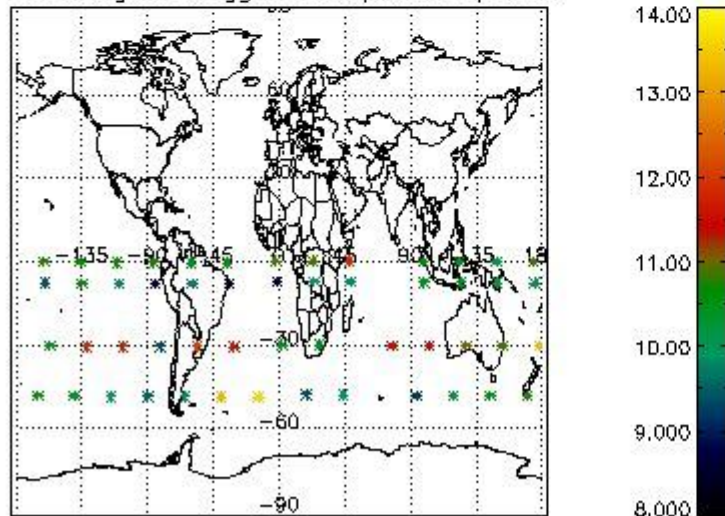
Percentage of flagged data per O3 profile



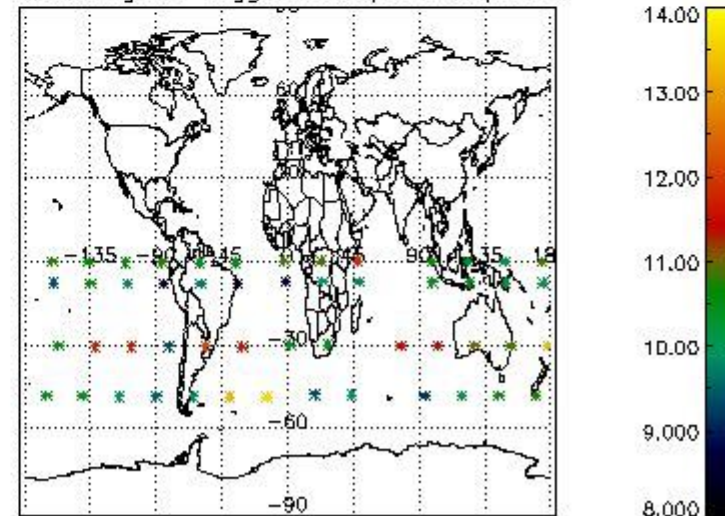
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile



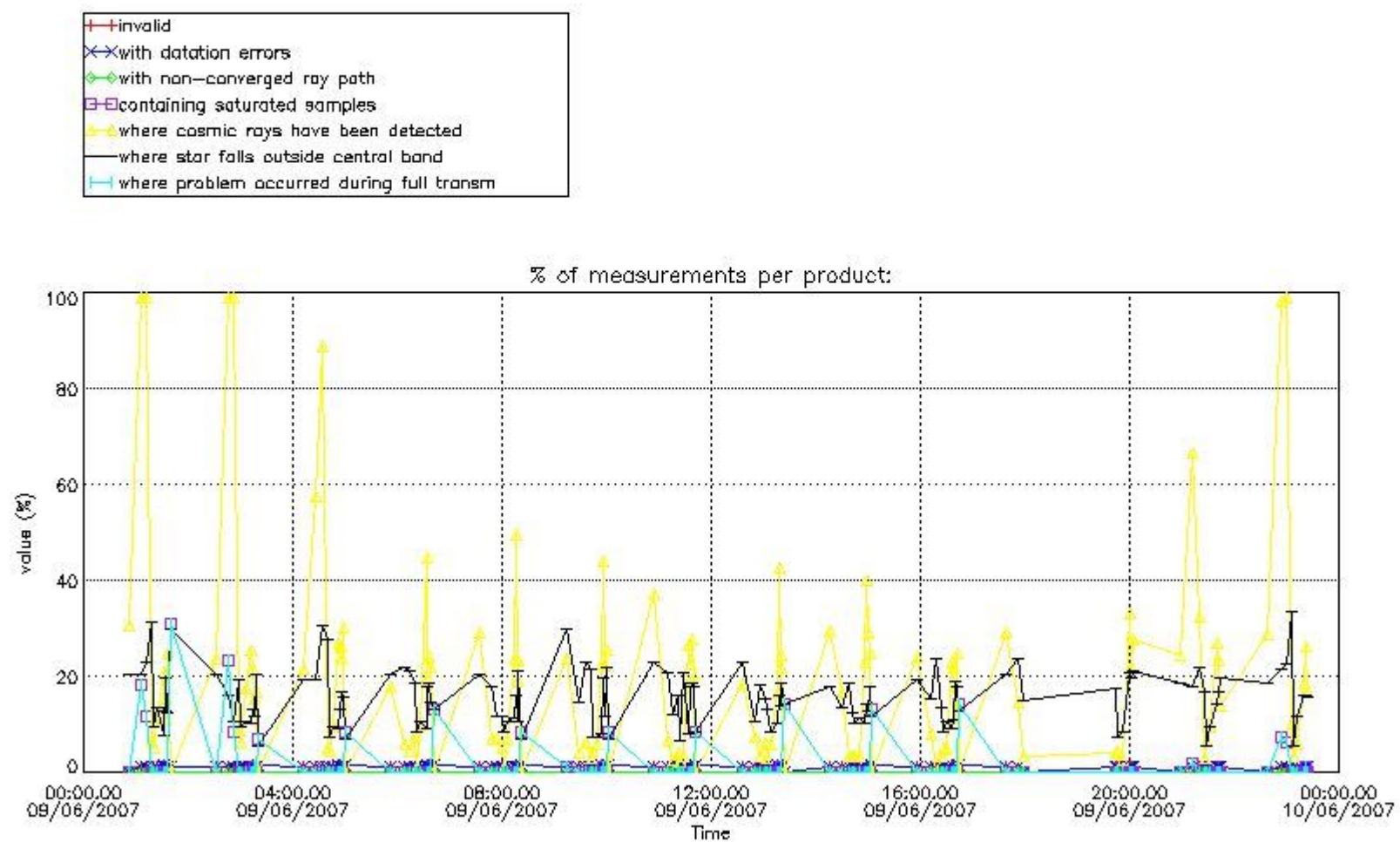
#### 4. Level 1 quality information per product

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.

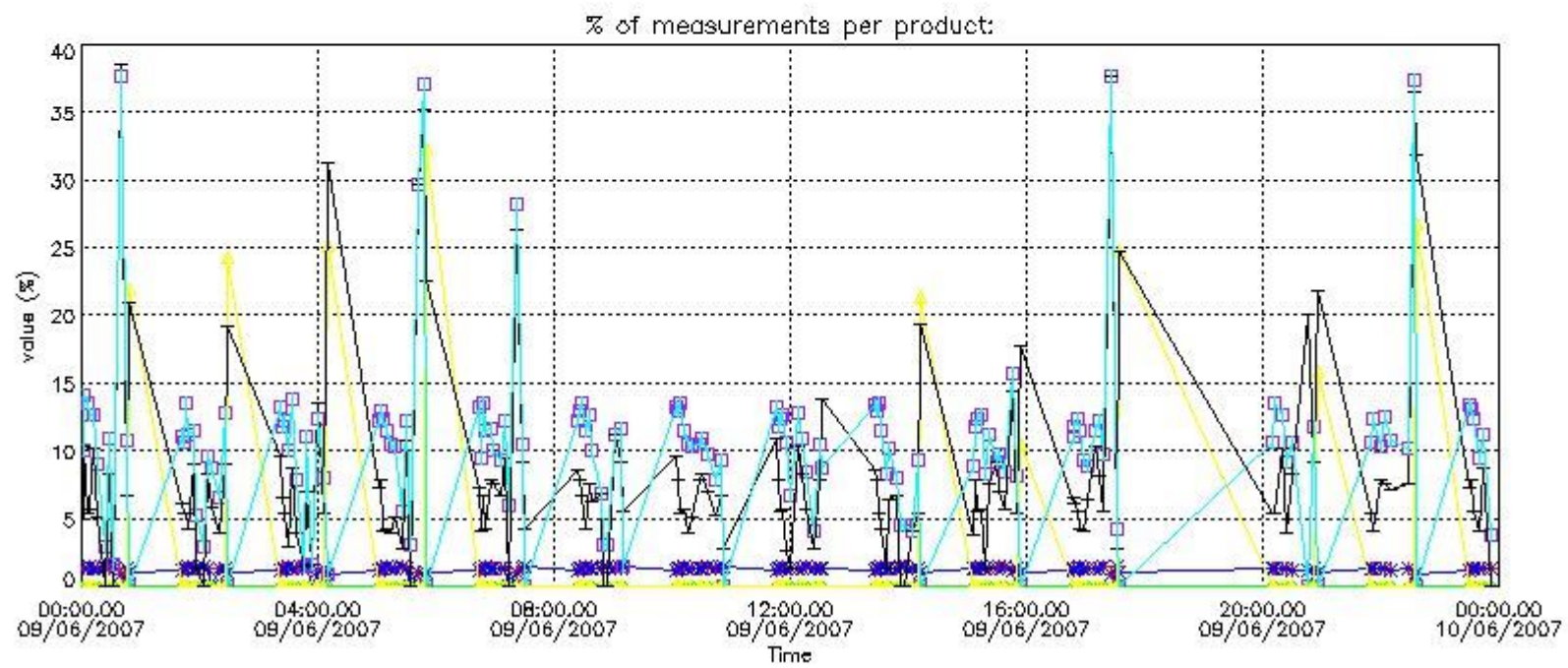
##### 4.1 Plot quality information per product (time dependant) coming from level 1b processing

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



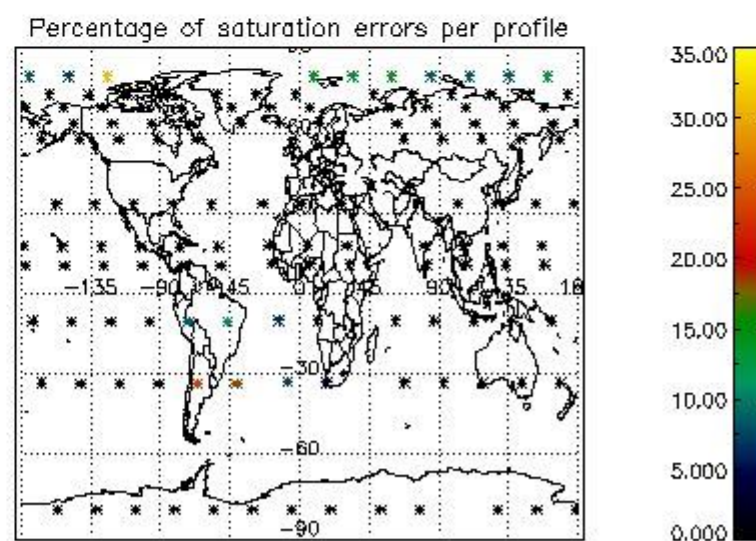
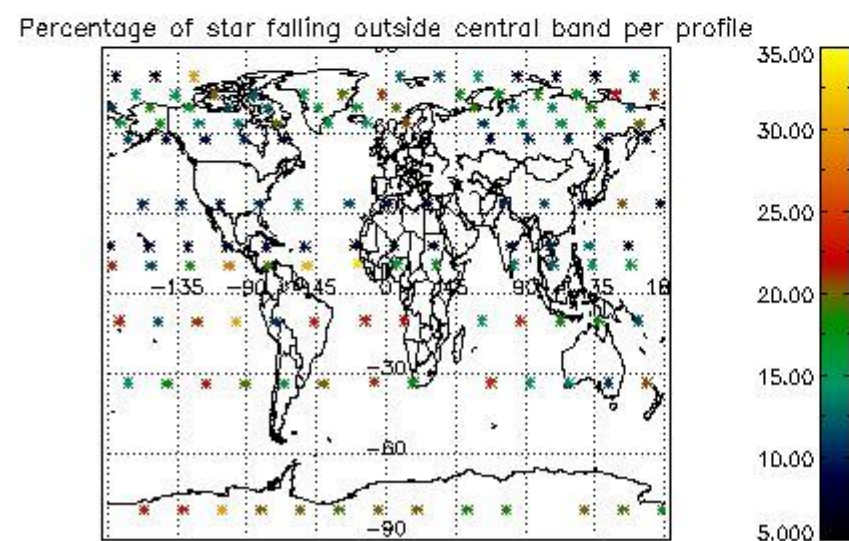
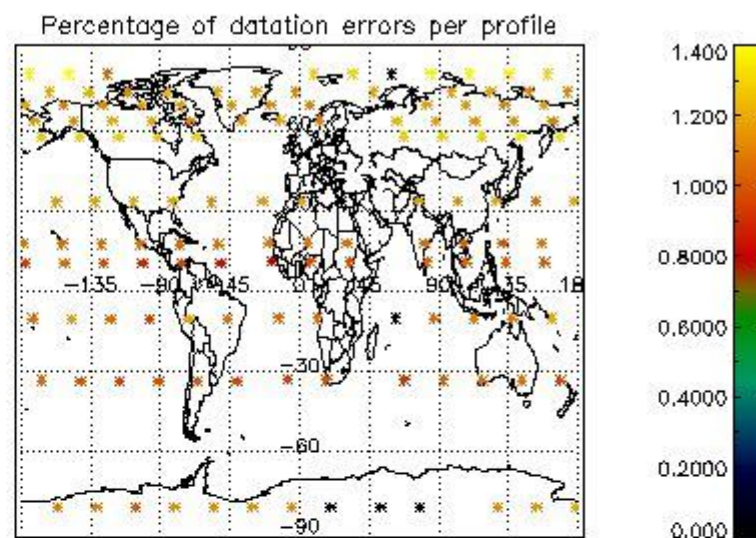
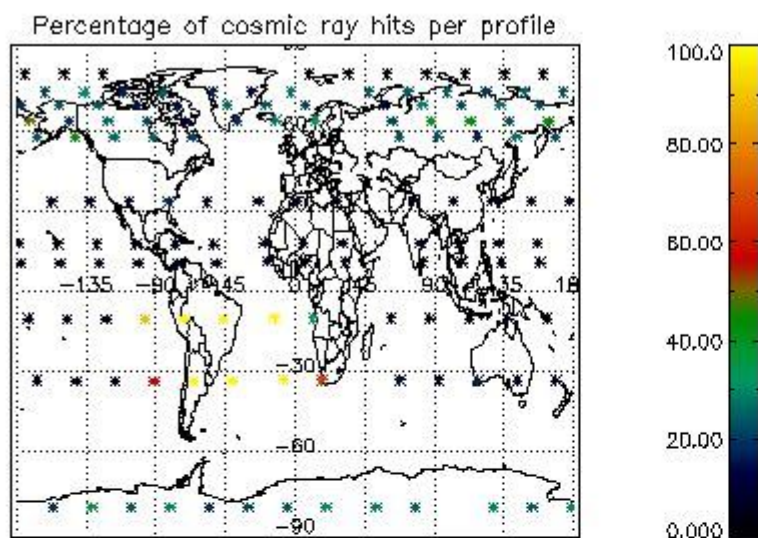


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

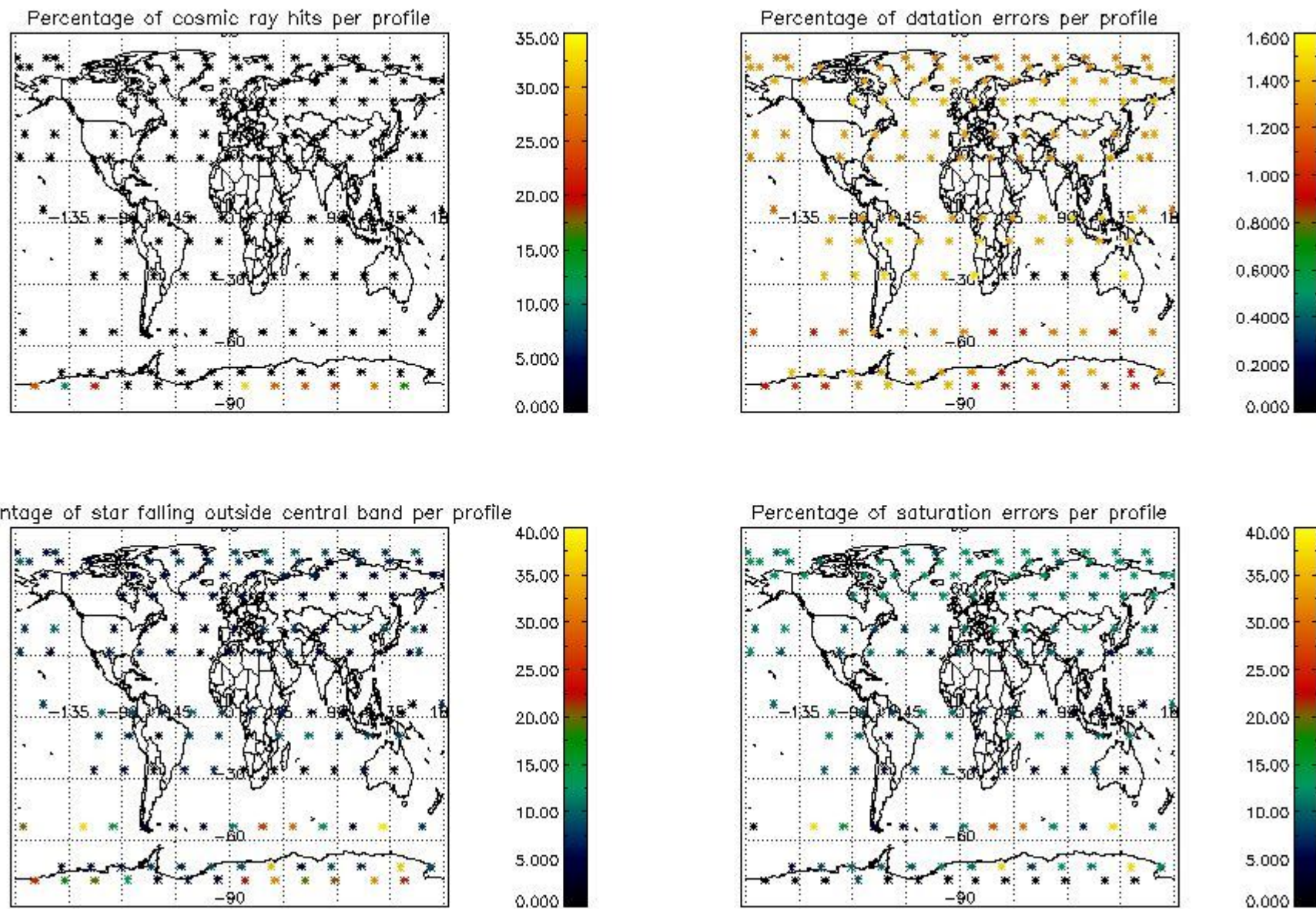


*4.2 Plot quality information per product coming from level 1b processing (world map)*

*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

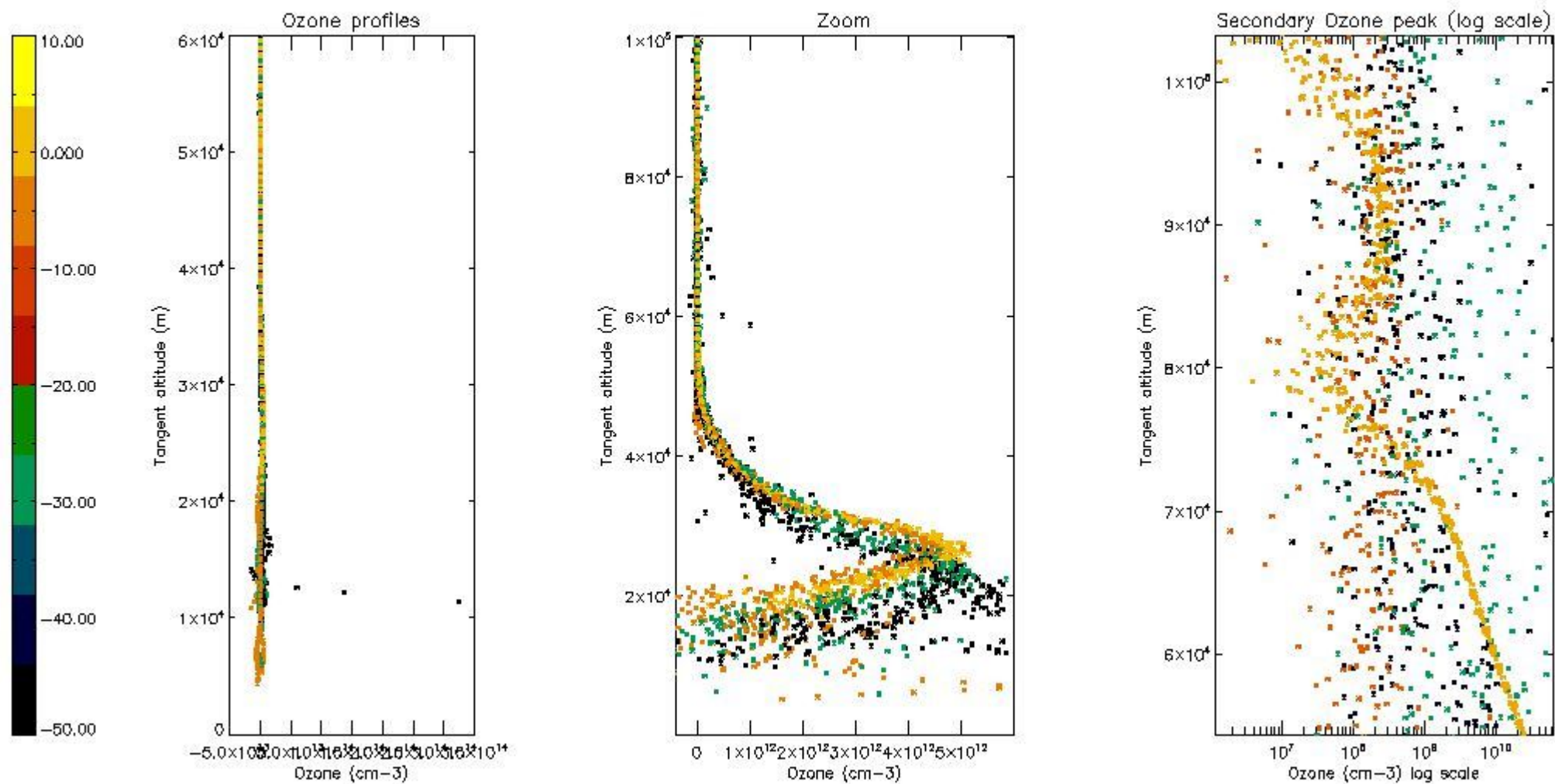
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	22
STD < 20	8

STD < 10	5
STD < 5	3

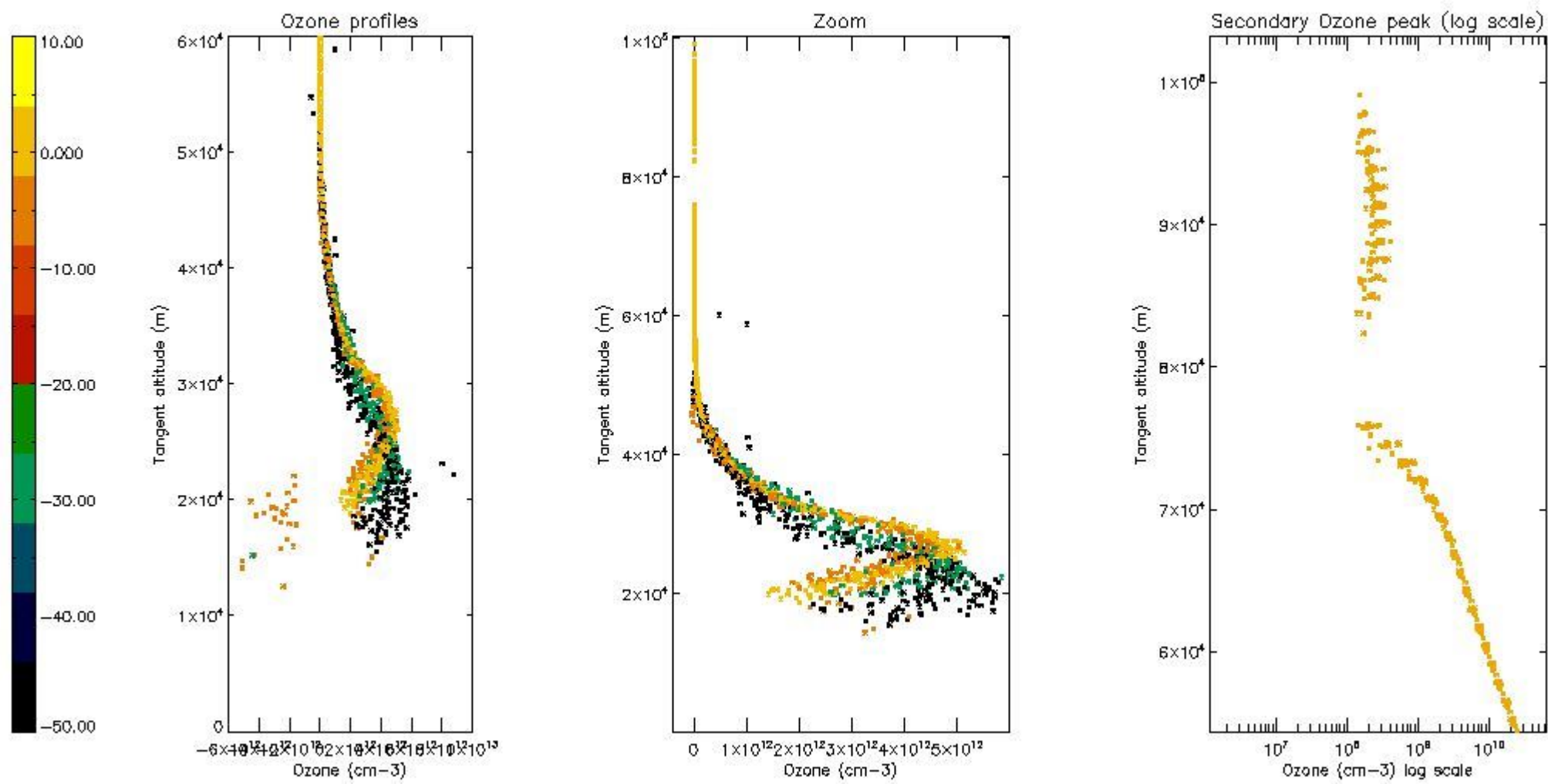
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



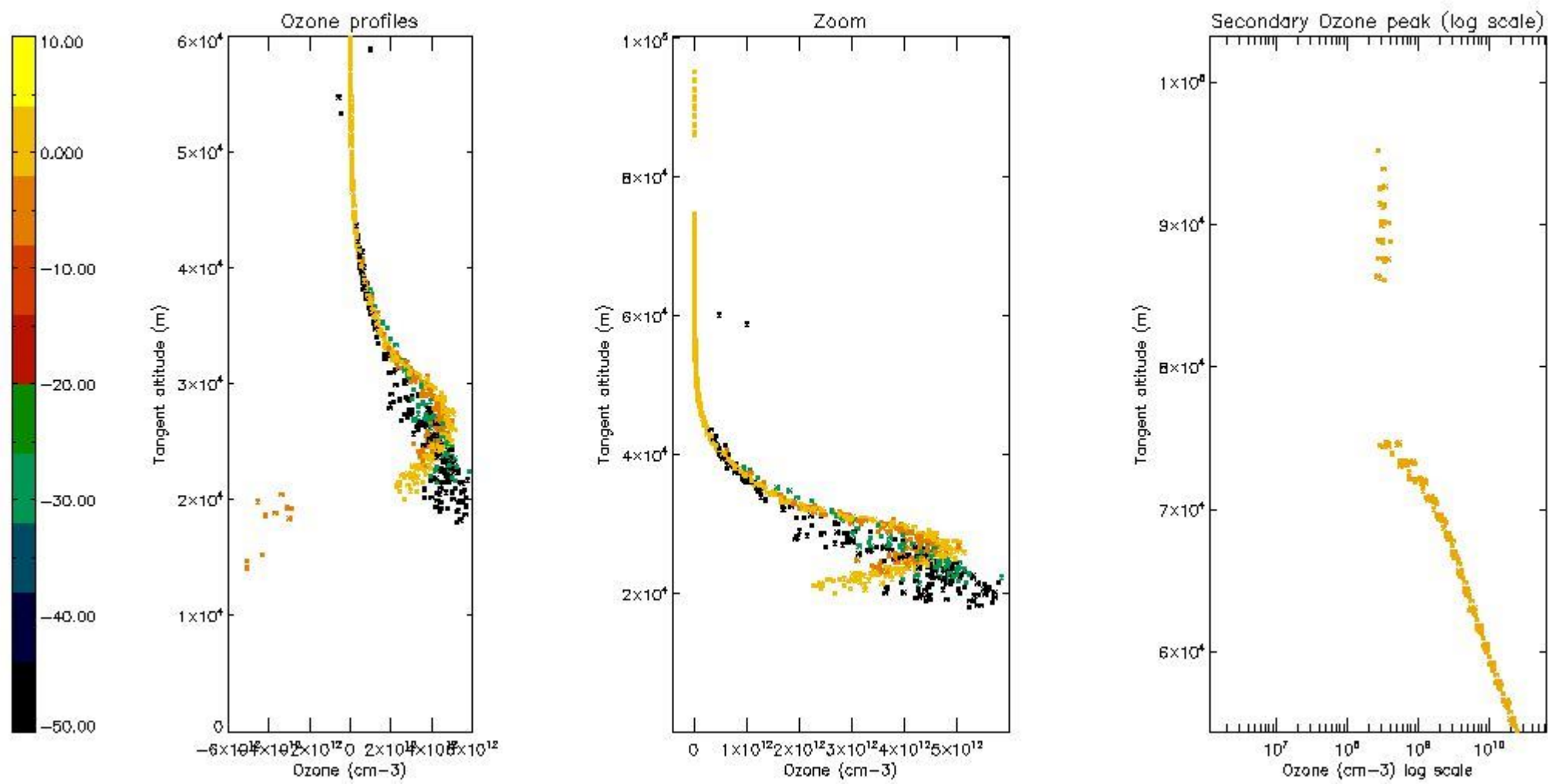
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



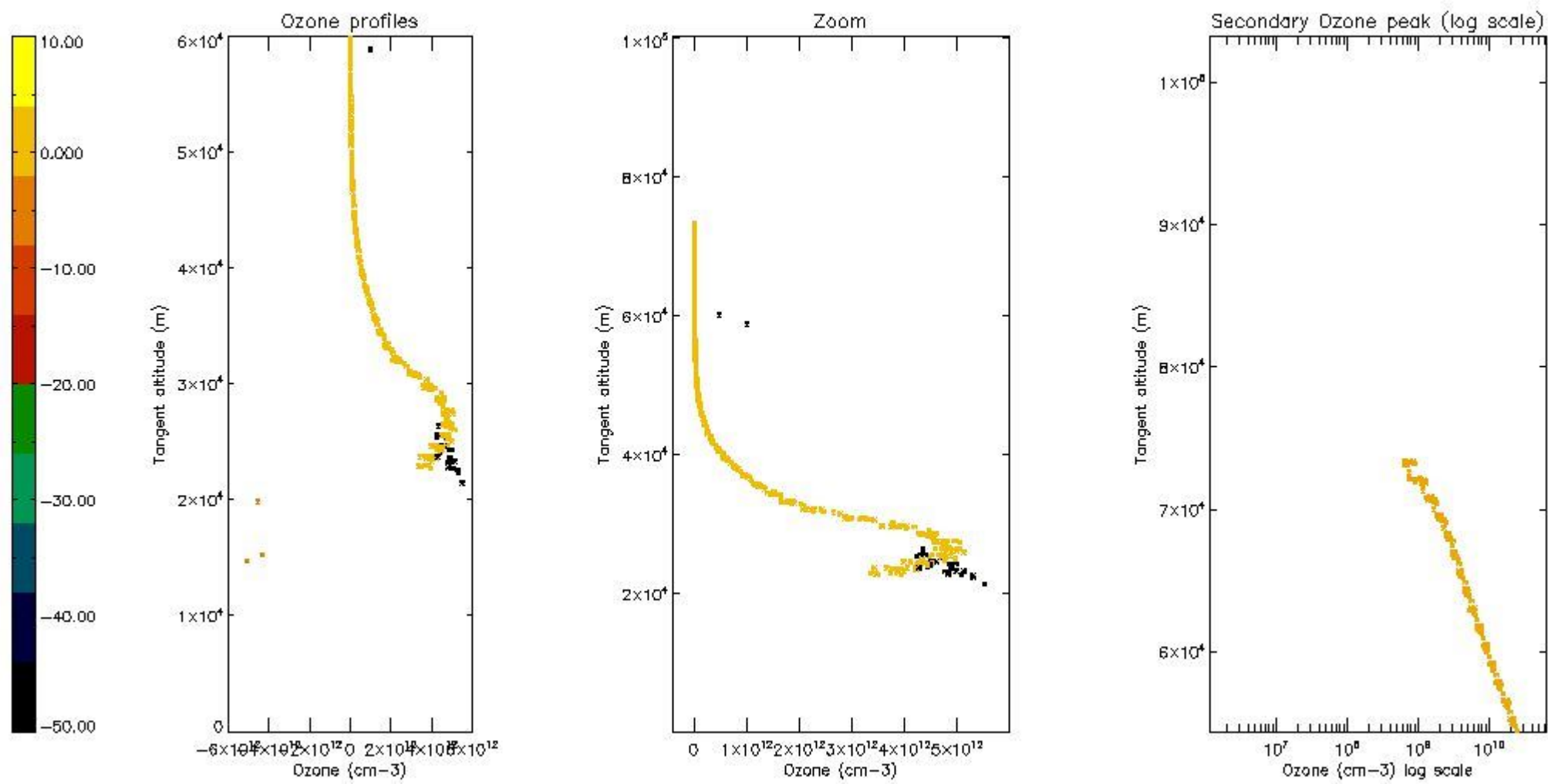
*5.4 Plot ozone profiles where STD < 10% (dark without errors)*

The colorbar represents the latitude.



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

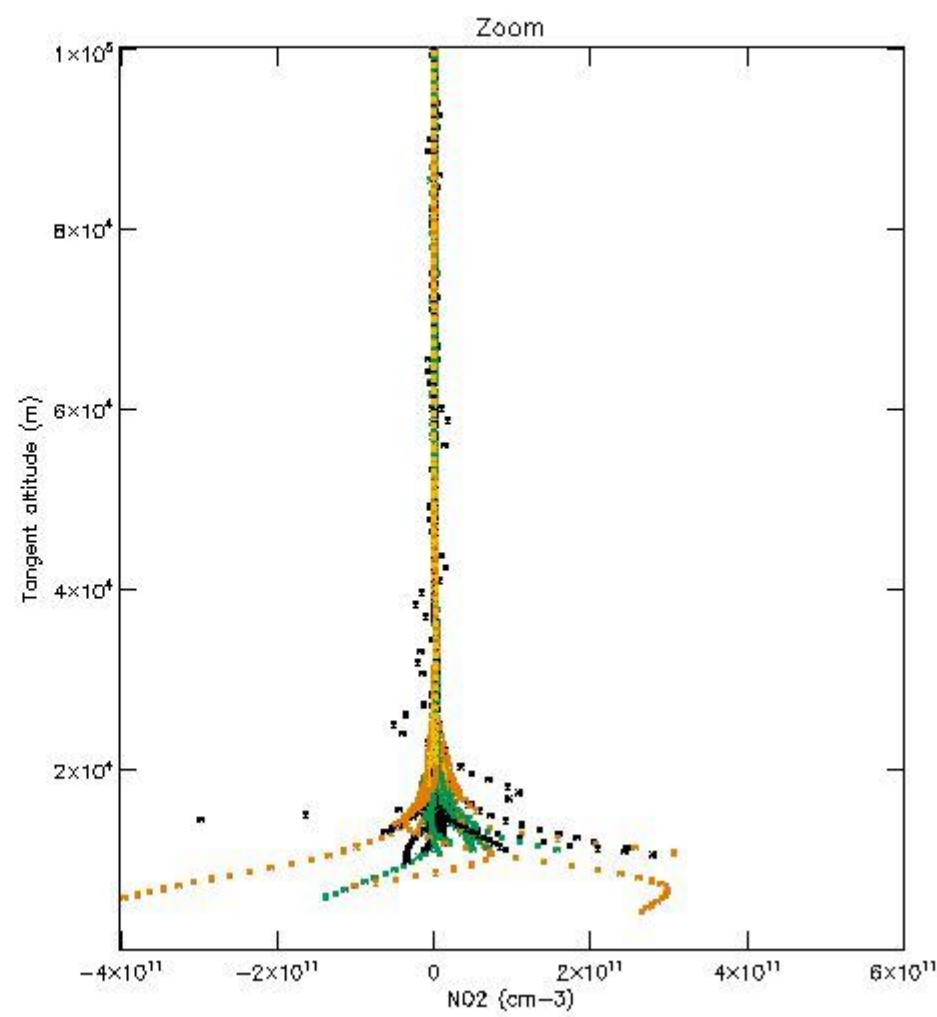
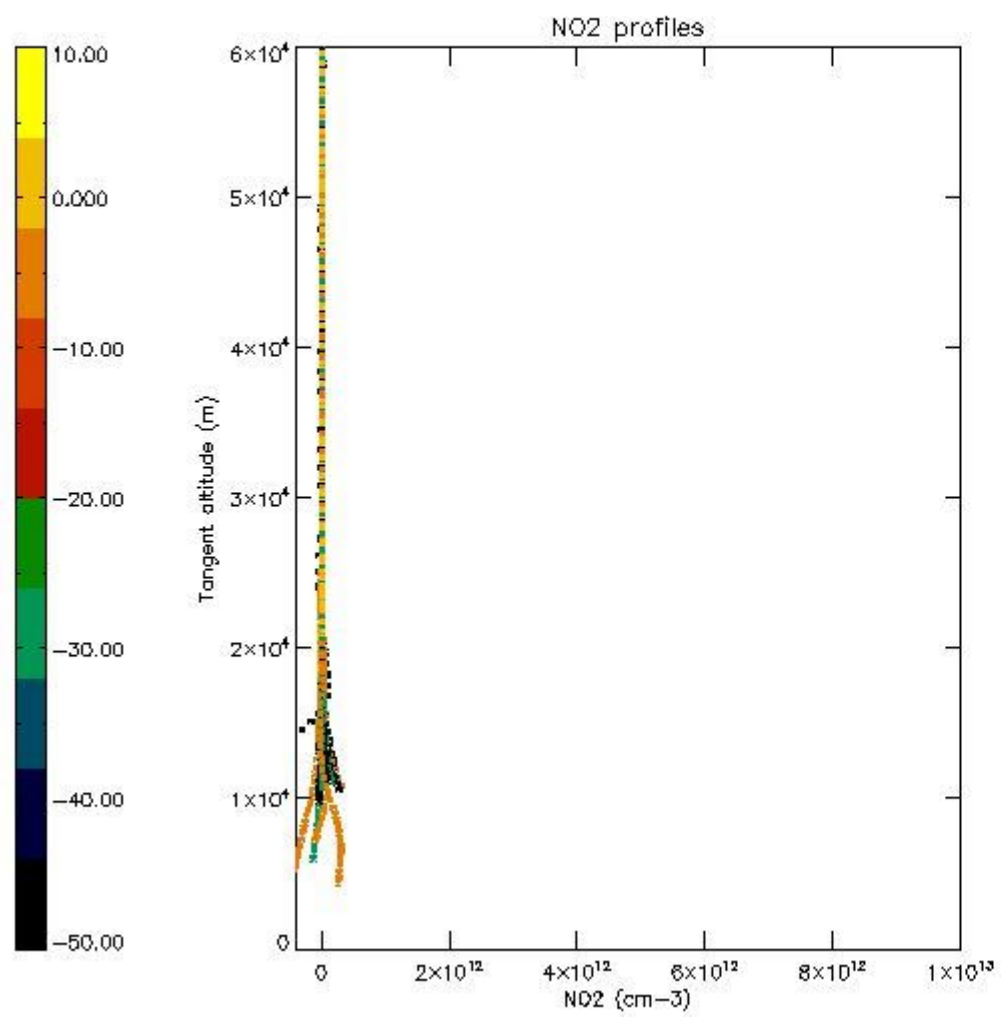
The colorbar represents the latitude.



*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

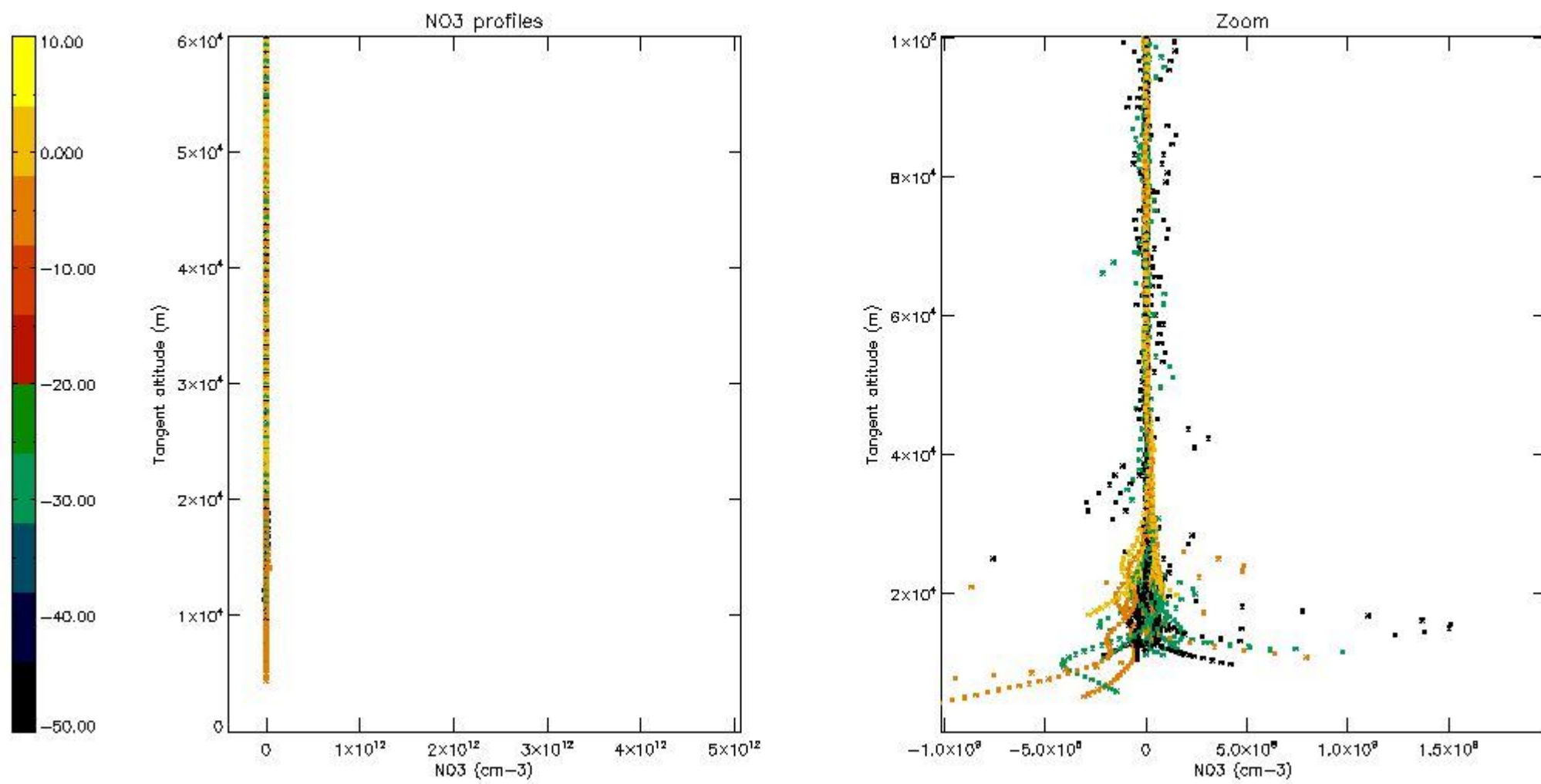
The colorbar represents the latitude.





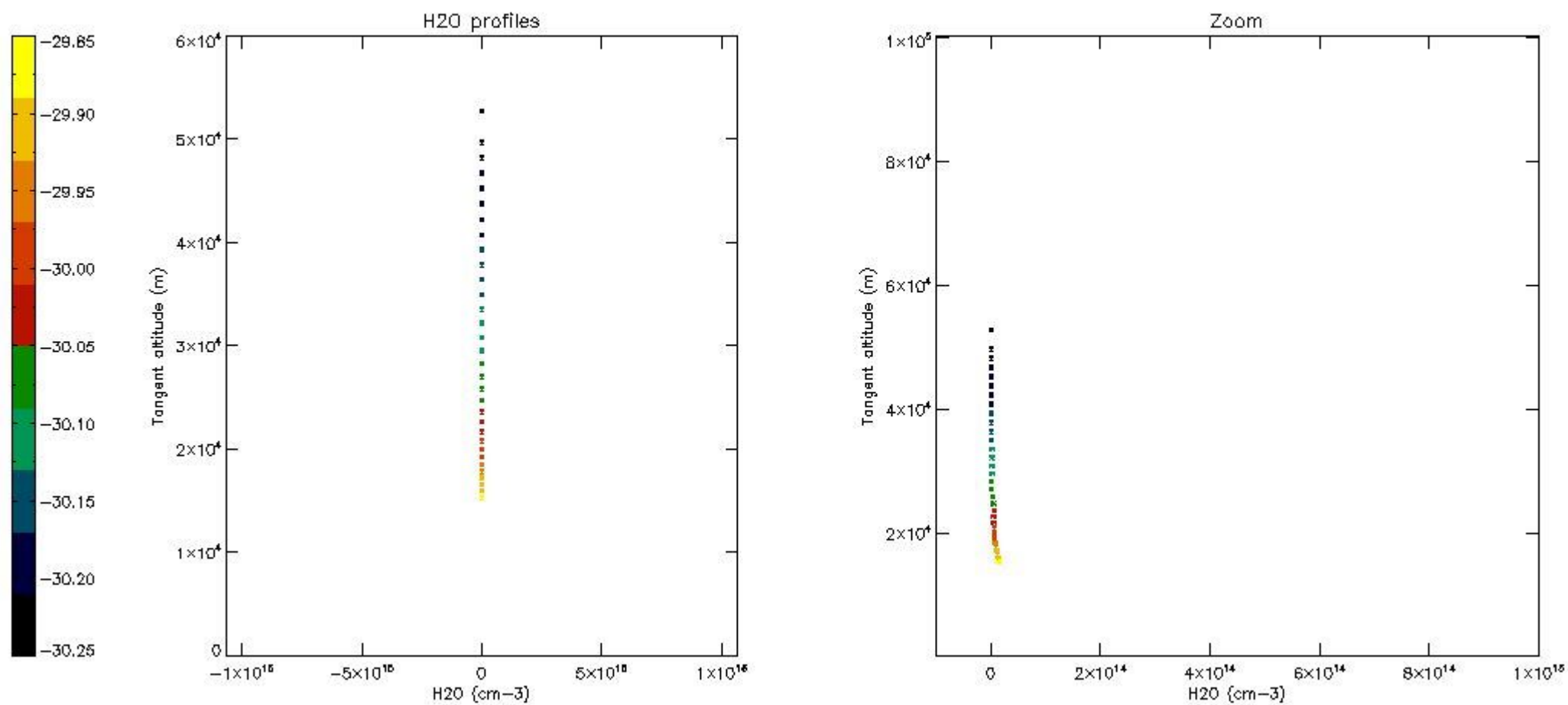
*5.7 Plot NO3 profiles for all STD (dark without errors)*

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-JUN-2007 00:01:09
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	09-JUN-2007 00:01:09
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	09-JUN-2007 00:01:09

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#### [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](#)

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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](#)











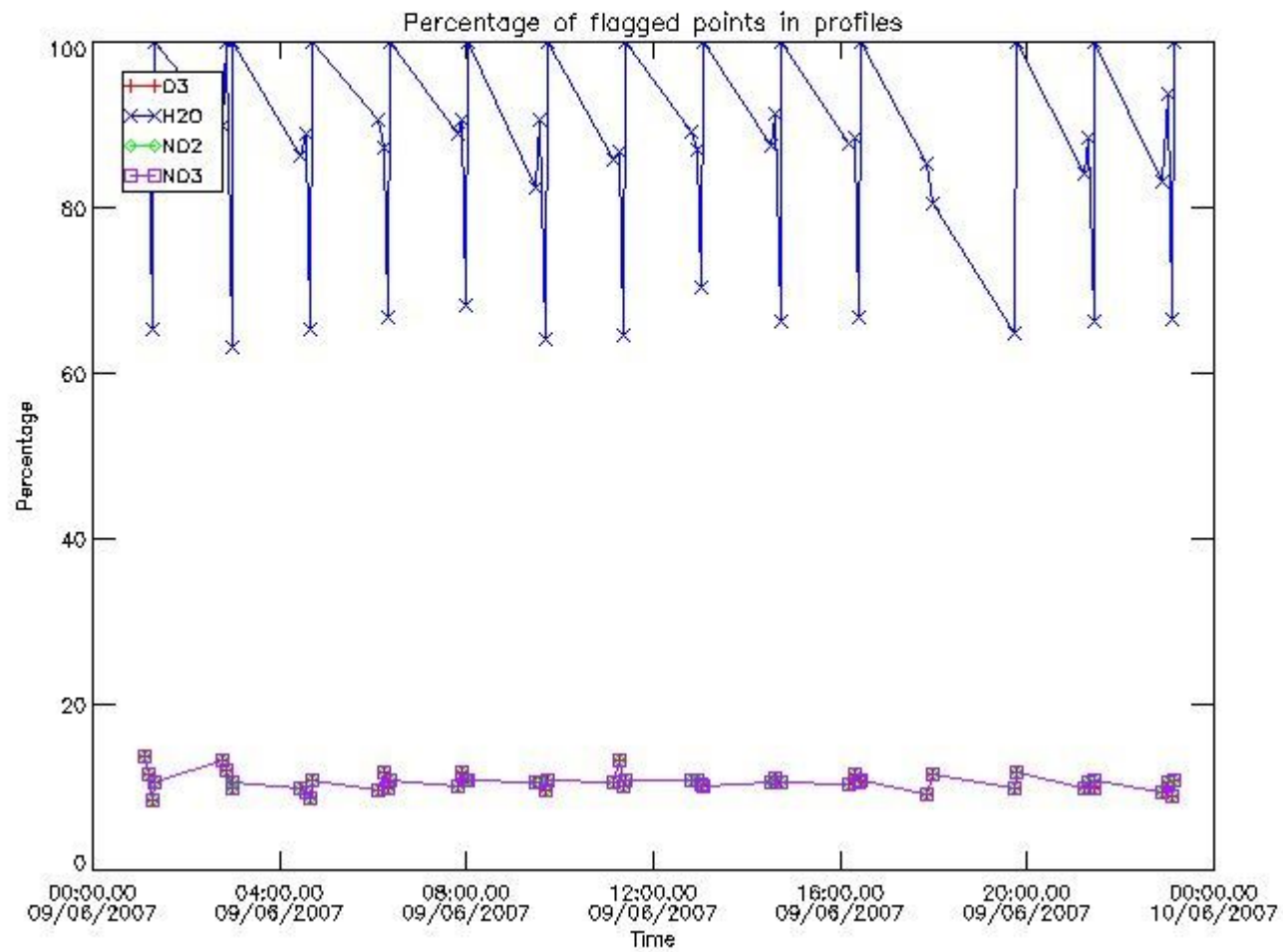
220	GOM_NL__2PRFIN20070609_155631_000000442058_00469_27577_8302.N1	09-JUN-2007 15:56:31	Twilight	44.000	50	13Alp Ari	2.0070	4250.0	88	27577	No
221	GOM_NL__2PRFIN20070609_161106_000000502058_00469_27577_8303.N1	09-JUN-2007 16:11:06	Dark	49.500	52	16Bet Cet	2.0370	4500.0	99	27577	No
222	GOM_NL__2PRFIN20070609_161737_000000492058_00469_27577_8304.N1	09-JUN-2007 16:17:37	Dark	48.500	84	Alp Phe	2.3970	4500.0	97	27577	No
223	GOM_NL__2PRFIN20070609_162329_000000492058_00470_27578_8298.N1	09-JUN-2007 16:23:29	Dark	48.500	63	Bet Gru	2.1500	2800.0	97	27578	No
224	GOM_NL__2PRFIN20070609_162529_000000482058_00470_27578_8299.N1	09-JUN-2007 16:25:29	Dark	47.500	31	Alp Gru	1.7340	15200.	95	27578	No
225	GOM_NL__2PRFIN20070609_162953_000000432058_00470_27578_8300.N1	09-JUN-2007 16:29:53	Straylight	43.000	45	Alp Pav	1.9400	26000.	86	27578	No
226	GOM_NL__2PRFIN20070609_163647_000000392058_00470_27578_8301.N1	09-JUN-2007 16:36:47	Straylight	39.000	147	Alp Ara	2.8770	26000.	78	27578	No
227	GOM_NL__2PRFIN20070609_163830_000000412058_00470_27578_8302.N1	09-JUN-2007 16:38:30	Straylight	41.000	40	The Sco	1.8590	7100.0	82	27578	No
228	GOM_NL__2PRFIN20070609_164015_000000452058_00470_27578_8303.N1	09-JUN-2007 16:40:15	Tw_i_and_stray	45.000	25	35Lam Sco	1.6200	28000.	90	27578	No
229	GOM_NL__2PRFIN20070609_164150_000000432058_00470_27578_8304.N1	09-JUN-2007 16:41:50	Tw_i_and_stray	42.500	75	26Eps Sco	2.2910	4250.0	85	27578	No
230	GOM_NL__2PRFIN20070609_164441_000000392058_00470_27578_8305.N1	09-JUN-2007 16:44:41	Bright	39.000	156	20Sig Sco	2.9030	28000.	78	27578	No
231	GOM_NL__2PRFIN20070609_164710_000000412058_00470_27578_8306.N1	09-JUN-2007 16:47:10	Bright	40.500	86	35Eta Oph	2.4300	10200.	81	27578	No
232	GOM_NL__2PRFIN20070609_164856_000000382058_00470_27578_8307.N1	09-JUN-2007 16:48:56	Bright	38.000	98	13Zet Oph	2.5710	30000.	76	27578	No
233	GOM_NL__2PRFIN20070609_165103_000000372058_00470_27578_8308.N1	09-JUN-2007 16:51:03	Bright	36.500	120	1Del Oph	2.7340	3200.0	73	27578	No
234	GOM_NL__2PRFIN20070609_165404_000000352058_00470_27578_8309.N1	09-JUN-2007 16:54:04	Bright	35.000	102	24Alp Ser	2.6000	4250.0	70	27578	No
235	GOM_NL__2PRFIN20070609_165837_000000382058_00470_27578_8310.N1	09-JUN-2007 16:58:37	Bright	37.500	127	27Bet Her	2.7810	4700.0	75	27578	No
236	GOM_NL__2PRFIN20070609_170148_000000402058_00470_27578_8311.N1	09-JUN-2007 17:01:48	Bright	39.500	133	40Zet Her	2.8070	6000.0	79	27578	No
237	GOM_NL__2PRFIN20070609_171003_000000392058_00470_27578_8312.N1	09-JUN-2007 17:10:03	Bright	39.000	119	14Eta Dra	2.7270	4700.0	78	27578	No
238	GOM_NL__2PRFIN20070609_171312_000000372058_00470_27578_8313.N1	09-JUN-2007 17:13:12	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	27578	No
239	GOM_NL__2PRFIN20070609_171753_000000362058_00470_27578_8314.N1	09-JUN-2007 17:17:53	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	27578	No
240	GOM_NL__2PRFIN20070609_172541_000000572058_00470_27578_8315.N1	09-JUN-2007 17:25:41	Bright	57.000	76	27Gam Cas	2.3000	30000.	114	27578	No
241	GOM_NL__2PRFIN20070609_173132_000000362058_00470_27578_8316.N1	09-JUN-2007 17:31:32	Bright	35.500	73	57Gam1And	2.2600	13100.	71	27578	No
242	GOM_NL__2PRFIN20070609_173351_000000532058_00470_27578_8317.N1	09-JUN-2007 17:33:51	Bright	52.500	53	43Bet And	2.0480	3300.0	105	27578	No
243	GOM_NL__2PRFIN20070609_173707_000000452058_00470_27578_8318.N1	09-JUN-2007 17:37:07	Twilight	44.500	50	13Alp Ari	2.0070	4250.0	89	27578	No
244	GOM_NL__2PRFIN20070609_175143_000000552058_00470_27578_8319.N1	09-JUN-2007 17:51:43	Dark	55.000	52	16Bet Cet	2.0370	4500.0	110	27578	No
245	GOM_NL__2PRFIN20070609_175814_000000442058_00470_27578_8320.N1	09-JUN-2007 17:58:14	Dark	43.500	84	Alp Phe	2.3970	4500.0	87	27578	No
246	GOM_NL__2PRFIN20070609_194443_000000522058_00472_27580_8335.N1	09-JUN-2007 19:44:43	Dark	51.500	63	Bet Gru	2.1500	2800.0	103	27580	No
247	GOM_NL__2PRFIN20070609_194643_000000472058_00472_27580_8336.N1	09-JUN-2007 19:46:43	Dark	47.000	31	Alp Gru	1.7340	15200.	94	27580	No
248	GOM_NL__2PRFIN20070609_195107_000000422058_00472_27580_8337.N1	09-JUN-2007 19:51:07	Straylight	41.500	45	Alp Pav	1.9400	26000.	83	27580	No
249	GOM_NL__2PRFIN20070609_195943_000000462058_00472_27580_8338.N1	09-JUN-2007 19:59:43	Straylight	45.500	40	The Sco	1.8590	7100.0	91	27580	No
250	GOM_NL__2PRFIN20070609_200128_000000462058_00472_27580_8339.N1	09-JUN-2007 20:01:28	Tw_i_and_stray	46.000	25	35Lam Sco	1.6200	28000.	92	27580	No
251	GOM_NL__2PRFIN20070609_200302_000000452058_00472_27580_8340.N1	09-JUN-2007 20:03:02	Tw_i_and_stray	45.000	75	26Eps Sco	2.2910	4250.0	90	27580	No
252	GOM_NL__2PRFIN20070609_201008_000000382058_00472_27580_8341.N1	09-JUN-2007 20:10:08	Bright	37.500	98	13Zet Oph	2.5710	30000.	75	27580	No
253	GOM_NL__2PRFIN20070609_201215_000000372058_00472_27580_8342.N1	09-JUN-2007 20:12:15	Bright	37.000	120	1Del Oph	2.7340	3200.0	74	27580	No
254	GOM_NL__2PRFIN20070609_201948_000000402058_00472_27580_8343.N1	09-JUN-2007 20:19:48	Bright	39.500	127	27Bet Her	2.7810	4700.0	79	27580	No
255	GOM_NL__2PRFIN20070609_202300_000000392058_00472_27580_8344.N1	09-JUN-2007 20:23:00	Bright	38.500	133	40Zet Her	2.8070	6000.0	77	27580	No
256	GOM_NL__2PRFIN20070609_203007_000000432058_00472_27580_8345.N1	09-JUN-2007 20:30:07	Bright	42.500	130	23Bet Dra	2.7990	5800.0	85	27580	No
257	GOM_NL__2PRFIN20070609_204653_000000452058_00472_27580_8346.N1	09-JUN-2007 20:46:53	Bright	45.000	76	27Gam Cas	2.3000	30000.	90	27580	No
258	GOM_NL__2PRFIN20070609_205244_000000382058_00472_27580_8347.N1	09-JUN-2007 20:52:44	Bright	38.000	73	57Gam1And	2.2600	13100.	76	27580	No
259	GOM_NL__2PRFIN20070609_205503_000000512058_00472_27580_8348.N1	09-JUN-2007 20:55:03	Bright	50.500	53	43Bet And	2.0480	3300.0	101	27580	No
260	GOM_NL__2PRFIN20070609_205820_000000432058_00472_27580_8349.N1	09-JUN-2007 20:58:20	Twilight	43.000	50	13Alp Ari	2.0070	4250.0	86	27580	No
261	GOM_NL__2PRFIN20070609_211256_000000512058_00472_27580_8350.N1	09-JUN-2007 21:12:56	Dark	51.000	52	16Bet Cet	2.0370	4500.0	102	27580	No
262	GOM_NL__2PRFIN20070609_211927_000000482058_00472_27580_8351.N1	09-JUN-2007 21:19:27	Dark	48.000	84	Alp Phe	2.3970	4500.0	96	27580	No
263	GOM_NL__2PRFIN20070609_212520_000000512058_00473_27581_8346.N1	09-JUN-2007 21:25:20	Dark	51.000	63	Bet Gru	2.1500	2800.0	102	27581	No
264	GOM_NL__2PRFIN20070609_212720_000000472058_00473_27581_8347.N1	09-JUN-2007 21:27:20	Dark	46.500	31	Alp Gru	1.7340	15200.	93	27581	No
265	GOM_NL__2PRFIN20070609_213143_000000432058_00473_27581_8348.N1	09-JUN-2007 21:31:43	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	27581	No
266	GOM_NL__2PRFIN20070609_214019_000000432058_00473_27581_8349.N1	09-JUN-2007 21:40:19	Straylight	42.500	40	The Sco	1.8590	7100.0	85	27581	No
267	GOM_NL__2PRFIN20070609_214204_000000452058_00473_27581_8350.N1	09-JUN-2007 21:42:04	Tw_i_and_stray	45.000	25	35Lam Sco	1.6200	28000.	90	27581	No
268	GOM_NL__2PRFIN20070609_214338_000000442058_00473_27581_8351.N1	09-JUN-2007 21:43:38	Tw_i_and_stray	43.500	75	26Eps Sco	2.2910	4250.0	87	27581	No
269	GOM_NL__2PRFIN20070609_215044_000000382058_00473_27581_8352.N1	09-JUN-2007 21:50:44	Bright	37.500	98	13Zet Oph	2.5710	30000.	75	27581	No
270	GOM_NL__2PRFIN20070609_215251_000000372058_00473_27581_8353.N1	09-JUN-2007 21:52:51	Bright	36.500	120	1Del Oph	2.7340	3200.0	73	27581	No
271	GOM_NL__2PRFIN20070609_220024_000000392058_00473_27581_8354.N1	09-JUN-2007 22:00:24	Bright	38.500	127	27Bet Her	2.7810	4700.0	77	27581	No
272	GOM_NL__2PRFIN20070609_220335_000000402058_00473_27581_8355.N1	09-JUN-2007 22:03:35	Bright	40.000	133	40Zet Her	2.8070	6000.0	80	27581	No
273	GOM_NL__2PRFIN20070609_221043_000000422058_00473_27581_8356.N1	09-JUN-2007 22:10:43	Bright	42.000	130	23Bet Dra	2.7990	5800.0	84	27581	No
274	GOM_NL__2PRFIN20070609_222728_000000402058_00473_27581_8357.N1	09-JUN-2007 22:27:28	Bright	39.500	76	27Gam Cas	2.3000	30000.	79	27581	No
275	GOM_NL__2PRFIN20070609_223320_000000542058_00473_27581_8358.N1	09-JUN-2007 22:33:20	Bright	53.500	73	57Gam1And	2.2600	13100.	107	27581	No
276	GOM_NL__2PRFIN20070609_223539_000000582058_00473_27581_8359.N1	09-JUN-2007 22:35:39	Bright	58.000	53	43Bet And	2.0480	3300.0	116	27581	No
277	GOM_NL__2PRFIN20070609_223856_000000442058_00473_27581_8360.N1	09-JUN-2007 22:38:56	Twilight	43.500	50	13Alp Ari	2.0070	4250.0	87	27581	No
278	GOM_NL__2PRFIN20070609_225333_000000542058_00473_27581_8361.N1	09-JUN-2007 22:53:33	Dark	54.000	52	16Bet Cet	2.0370	4500.0	108	27581	No

279	GOM_NL__2PRFIN20070609_230003_000000492058_00473_27581_8362.N1	09-JUN-2007 23:00:03	Dark	48.500	84	Alp Phe	2.3970	4500.0	97	27581	No
280	GOM_NL__2PRFIN20070609_230556_000000632058_00474_27582_8362.N1	09-JUN-2007 23:05:56	Dark	63.000	63	Bet Gru	2.1500	2800.0	126	27582	No
281	GOM_NL__2PRFIN20070609_230757_000000472058_00474_27582_8363.N1	09-JUN-2007 23:07:57	Dark	46.500	31	Alp Gru	1.7340	15200.	93	27582	No
282	GOM_NL__2PRFIN20070609_231220_000000432058_00474_27582_8364.N1	09-JUN-2007 23:12:20	Straylight	43.000	45	Alp Pav	1.9400	26000.	86	27582	No
283	GOM_NL__2PRFIN20070609_232055_000000442058_00474_27582_8365.N1	09-JUN-2007 23:20:55	Straylight	43.500	40	The Sco	1.8590	7100.0	87	27582	No
284	GOM_NL__2PRFIN20070609_232240_000000442058_00474_27582_8366.N1	09-JUN-2007 23:22:40	Twilight_stray	44.000	25	35Lam Sco	1.6200	28000.	88	27582	No
285	GOM_NL__2PRFIN20070609_232414_000000422058_00474_27582_8367.N1	09-JUN-2007 23:24:14	Twilight_stray	42.000	75	26Eps Sco	2.2910	4250.0	84	27582	No
286	GOM_NL__2PRFIN20070609_232934_000000412058_00474_27582_8368.N1	09-JUN-2007 23:29:34	Bright	41.000	86	35Eta Oph	2.4300	10200.	82	27582	No
287	GOM_NL__2PRFIN20070609_233120_000000382058_00474_27582_8369.N1	09-JUN-2007 23:31:20	Bright	38.000	98	13Zet Oph	2.5710	30000.	76	27582	No
288	GOM_NL__2PRFIN20070609_233327_000000372058_00474_27582_8370.N1	09-JUN-2007 23:33:27	Bright	36.500	120	1Del Oph	2.7340	3200.0	73	27582	No
289	GOM_NL__2PRFIN20070609_234059_000000372058_00474_27582_8371.N1	09-JUN-2007 23:40:59	Bright	37.000	127	27Bet Her	2.7810	4700.0	74	27582	No
290	GOM_NL__2PRFIN20070609_234411_000000402058_00474_27582_8372.N1	09-JUN-2007 23:44:11	Bright	40.000	133	40Zet Her	2.8070	6000.0	80	27582	No
291	GOM_NL__2PRFIN20070609_235118_000000392058_00474_27582_8373.N1	09-JUN-2007 23:51:18	Bright	39.000	130	23Bet Dra	2.7990	5800.0	78	27582	No

### 3. Quality information per product

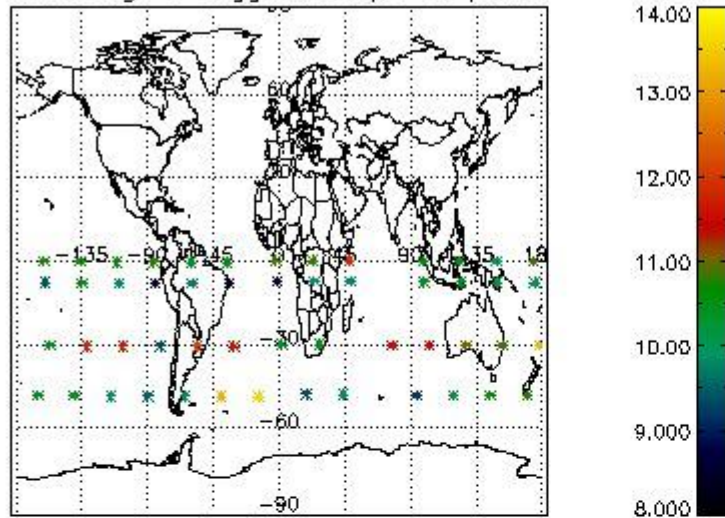
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

#### 3.1 Plot quality information per product (time dependant)

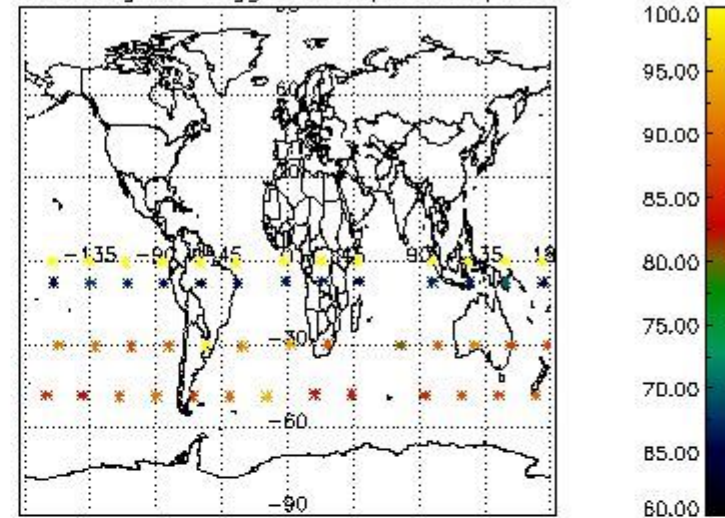


#### 3.2 Plot quality information per product (world map)

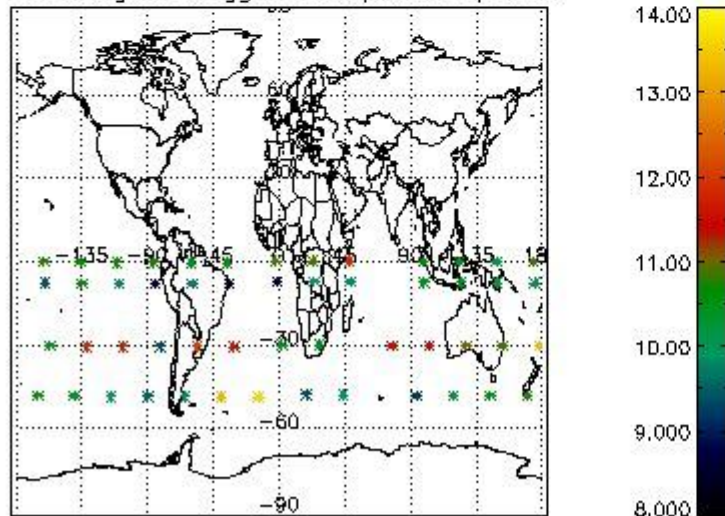
Percentage of flagged data per O3 profile



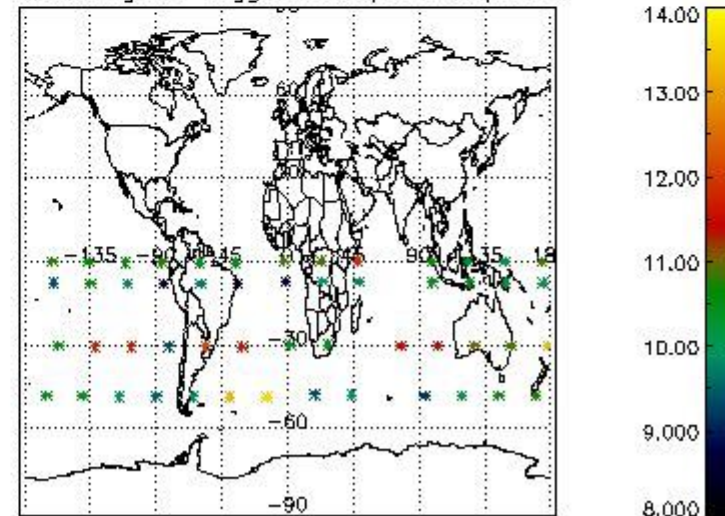
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

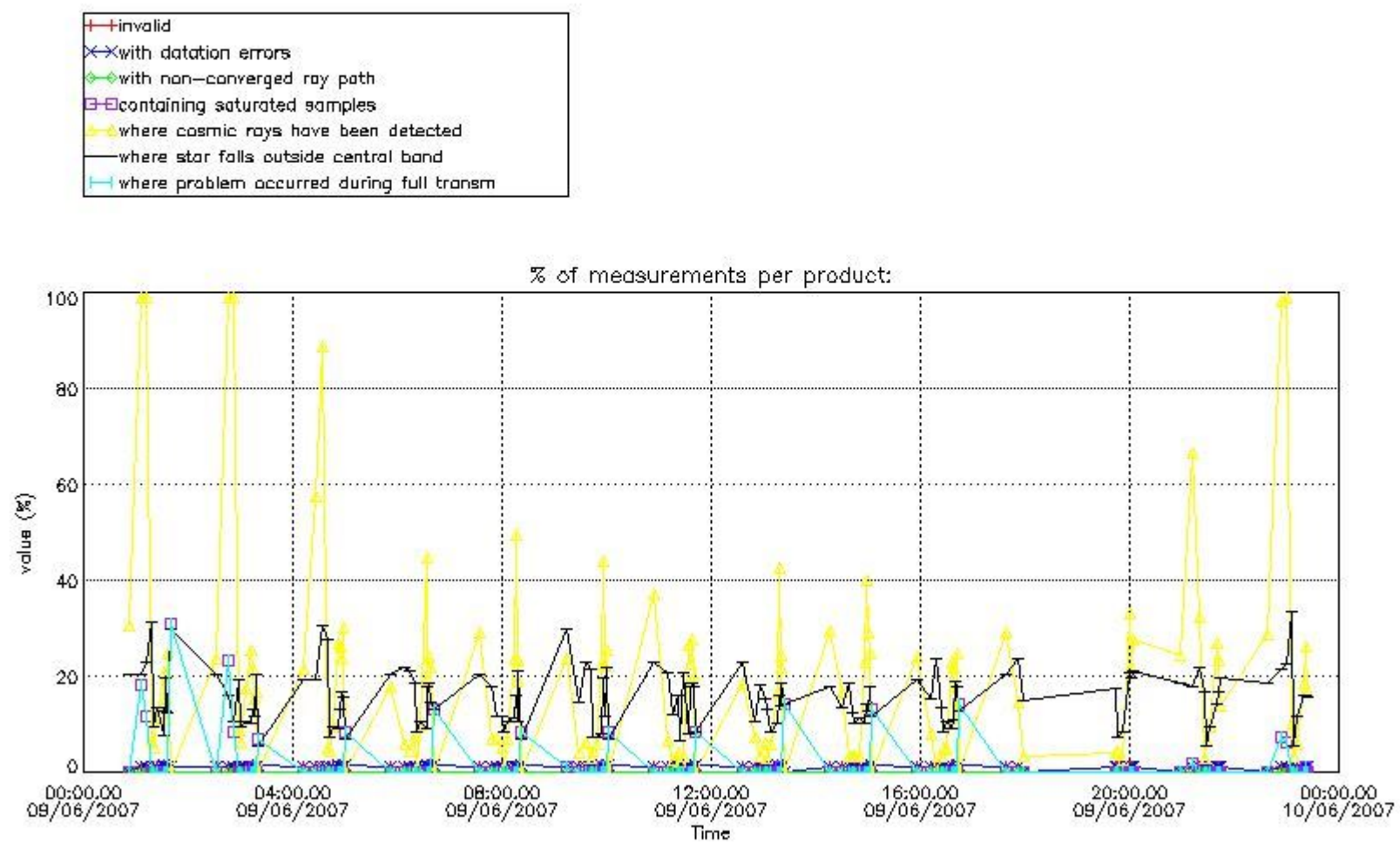


#### 4. Level 1 quality information per product

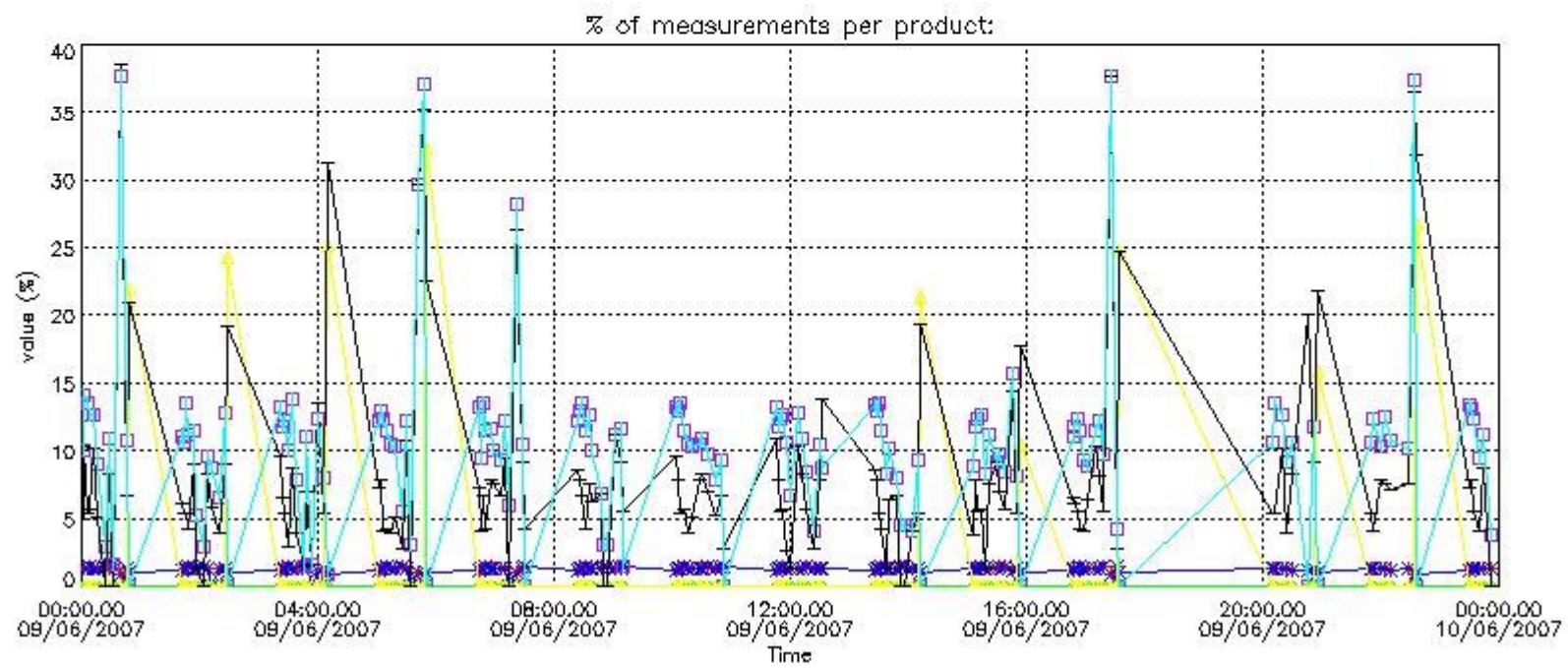
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

##### 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

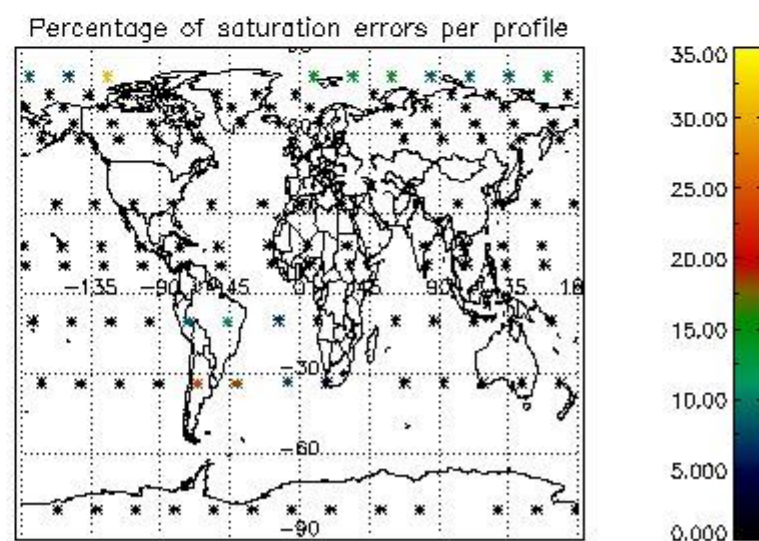
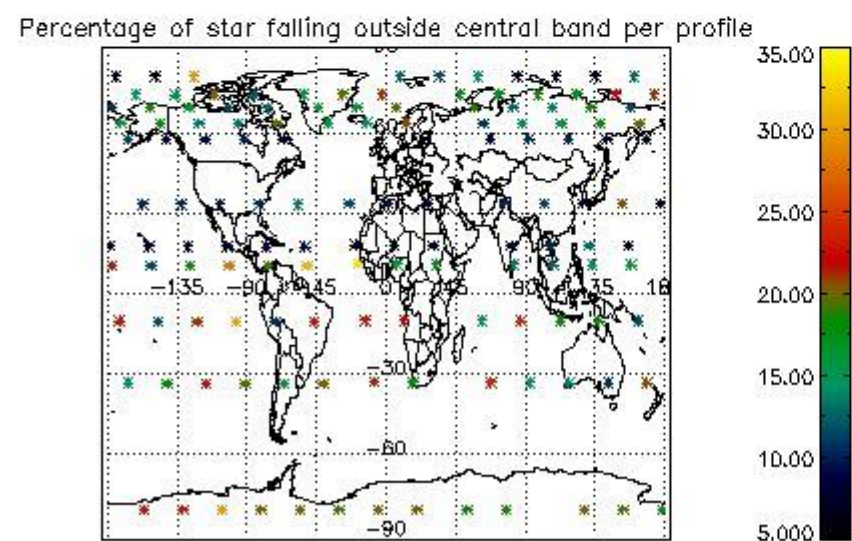
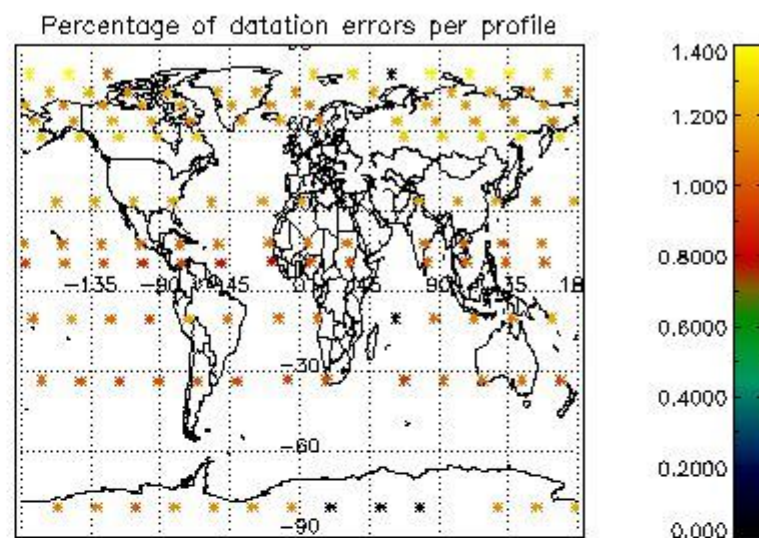
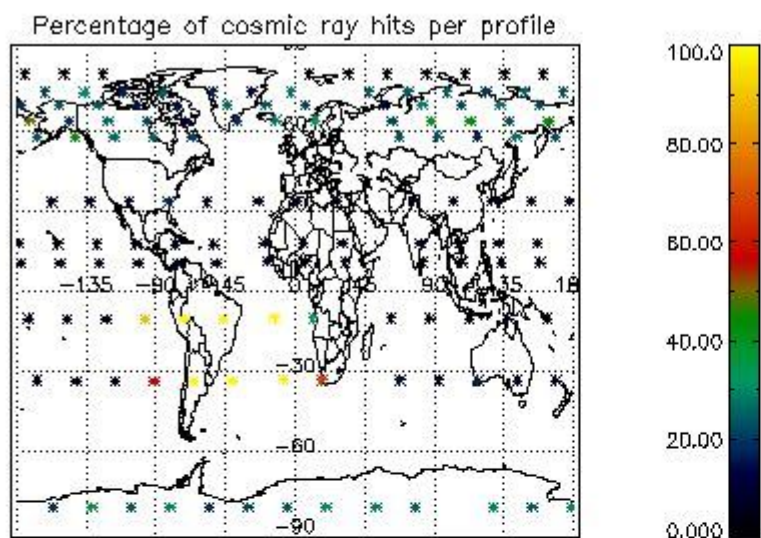


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

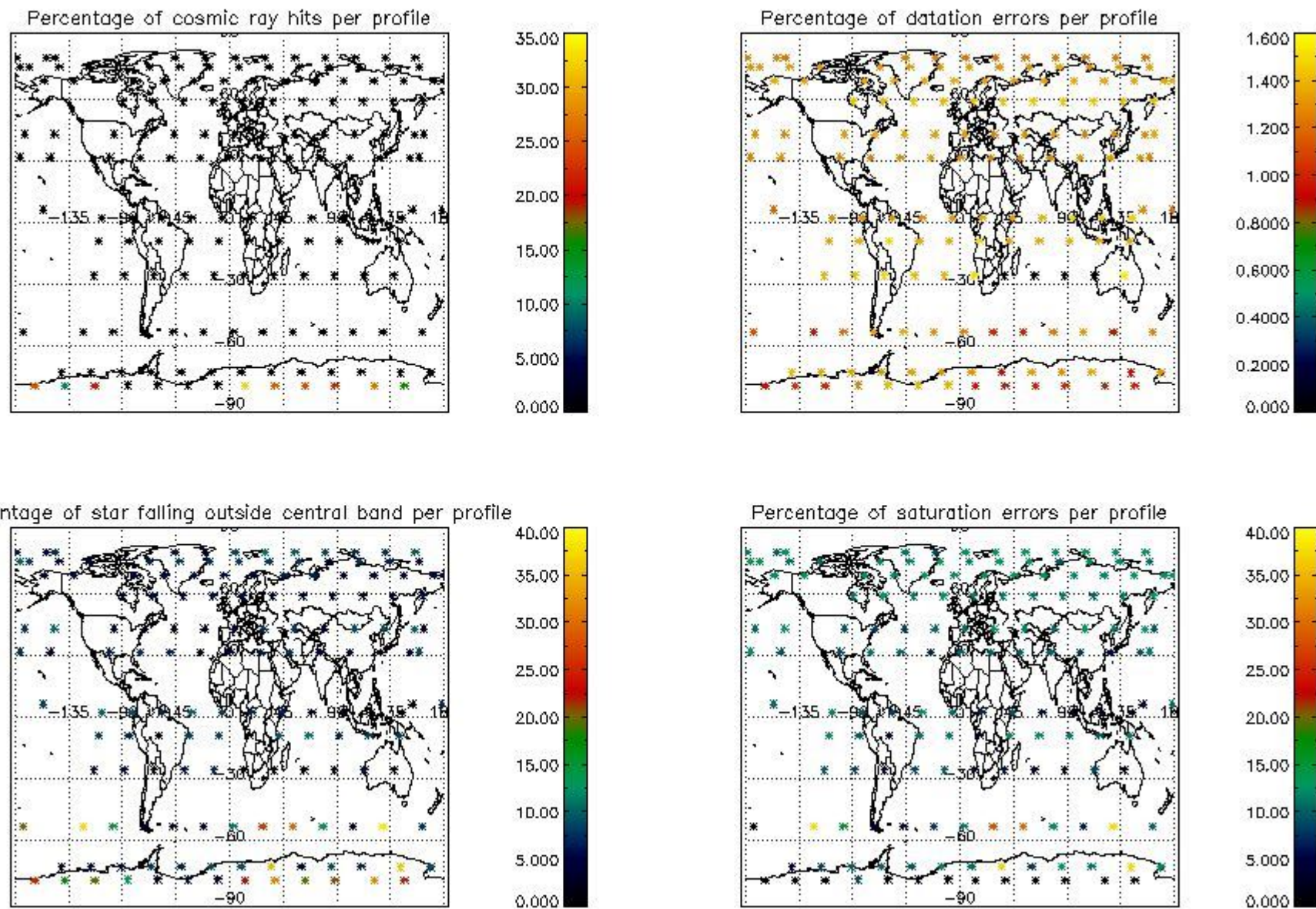


*4.2 Plot quality information per product coming from level 1b processing (world map)*

*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

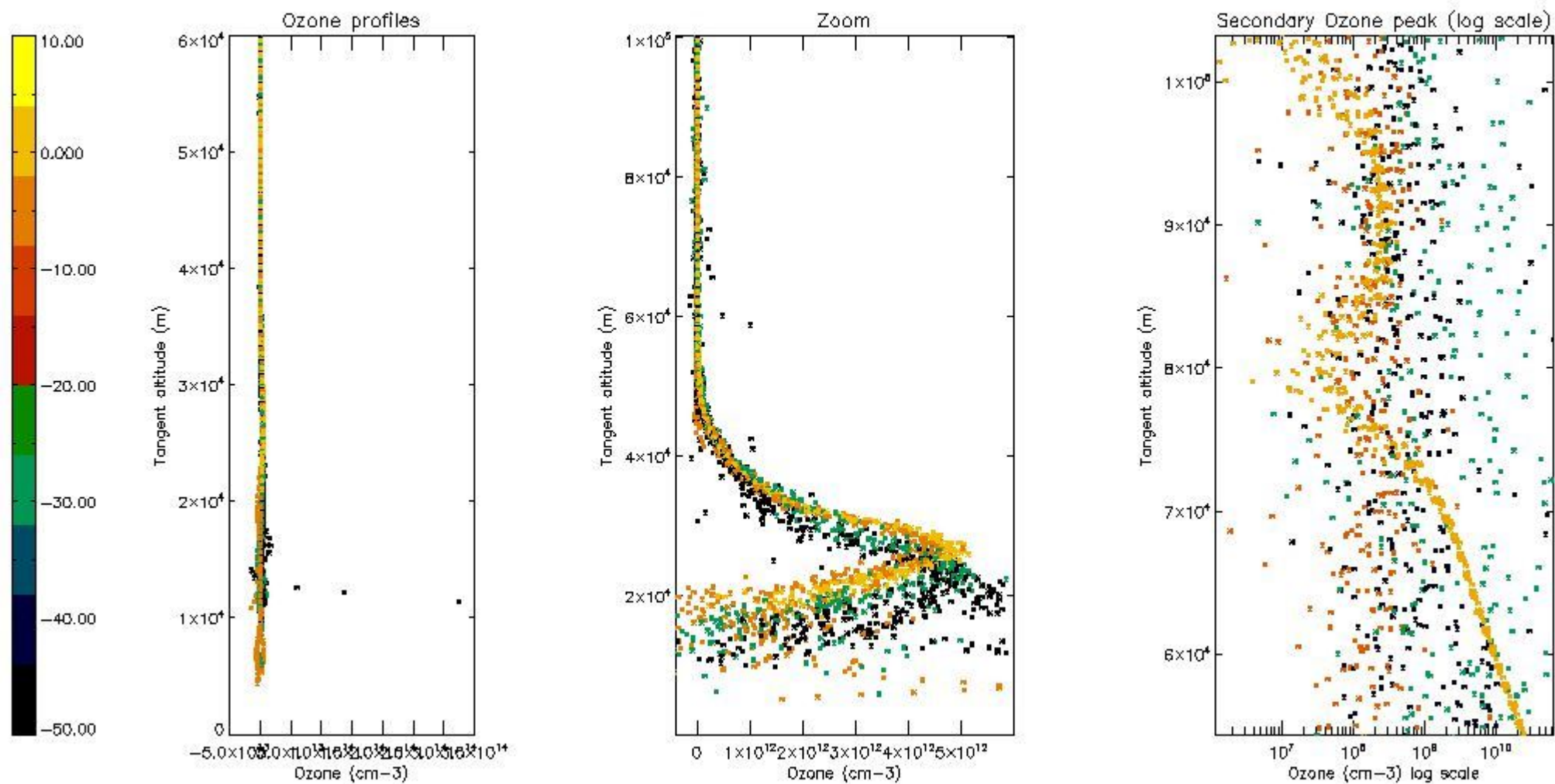
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	22
STD < 20	8

STD < 10	5
STD < 5	3

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

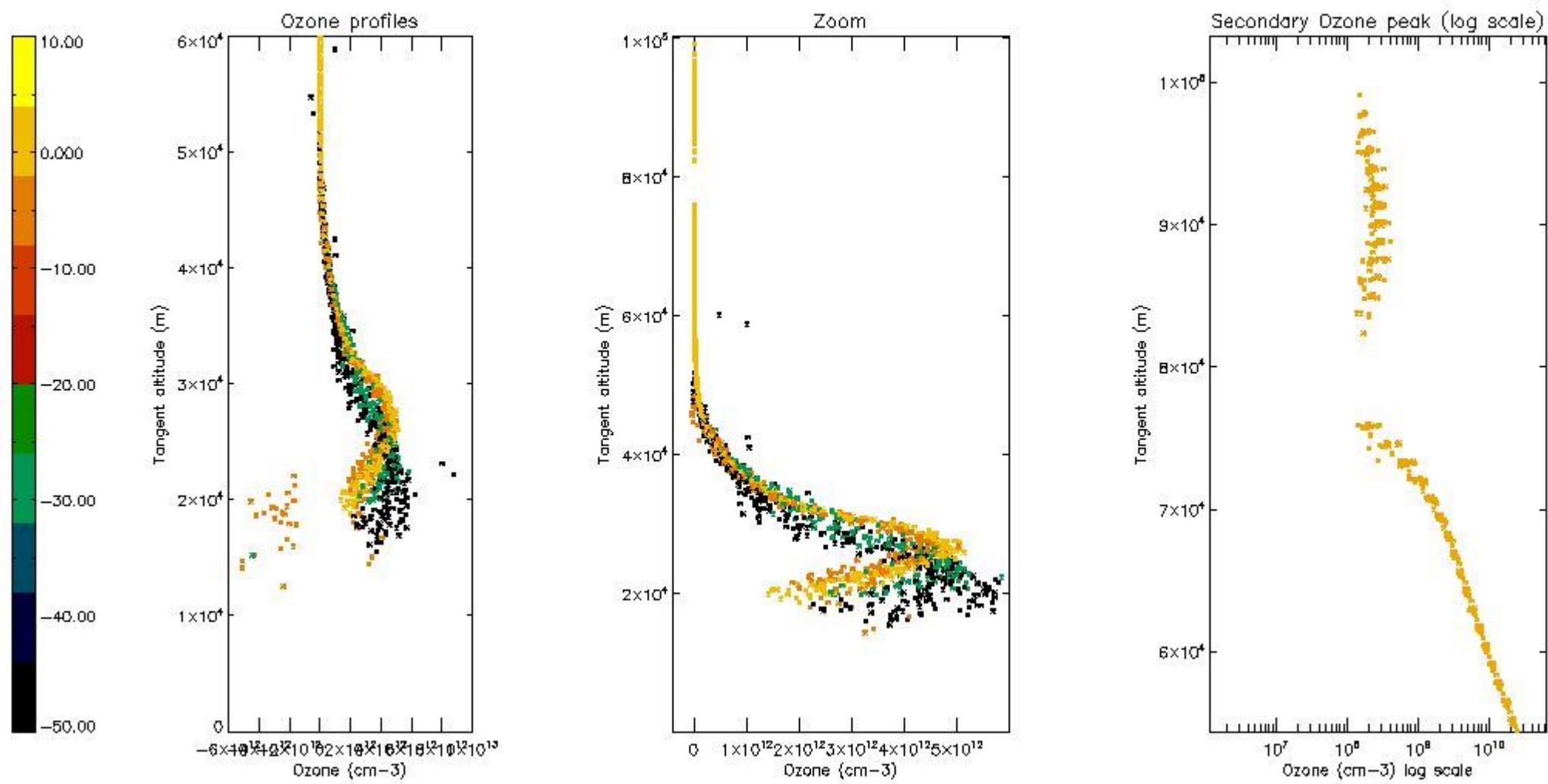
The colorbar represents the latitude.



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

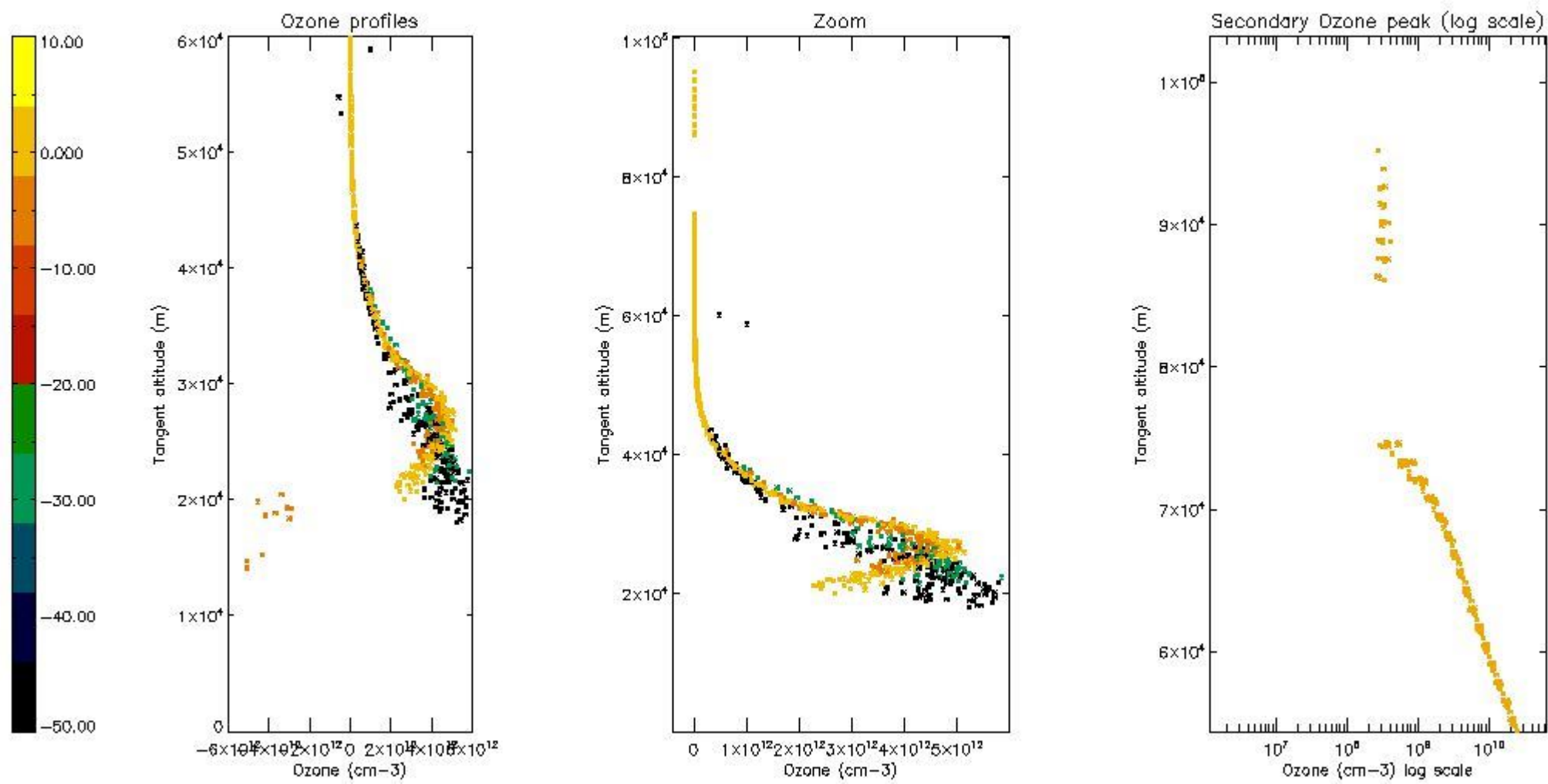
The colorbar represents the latitude.





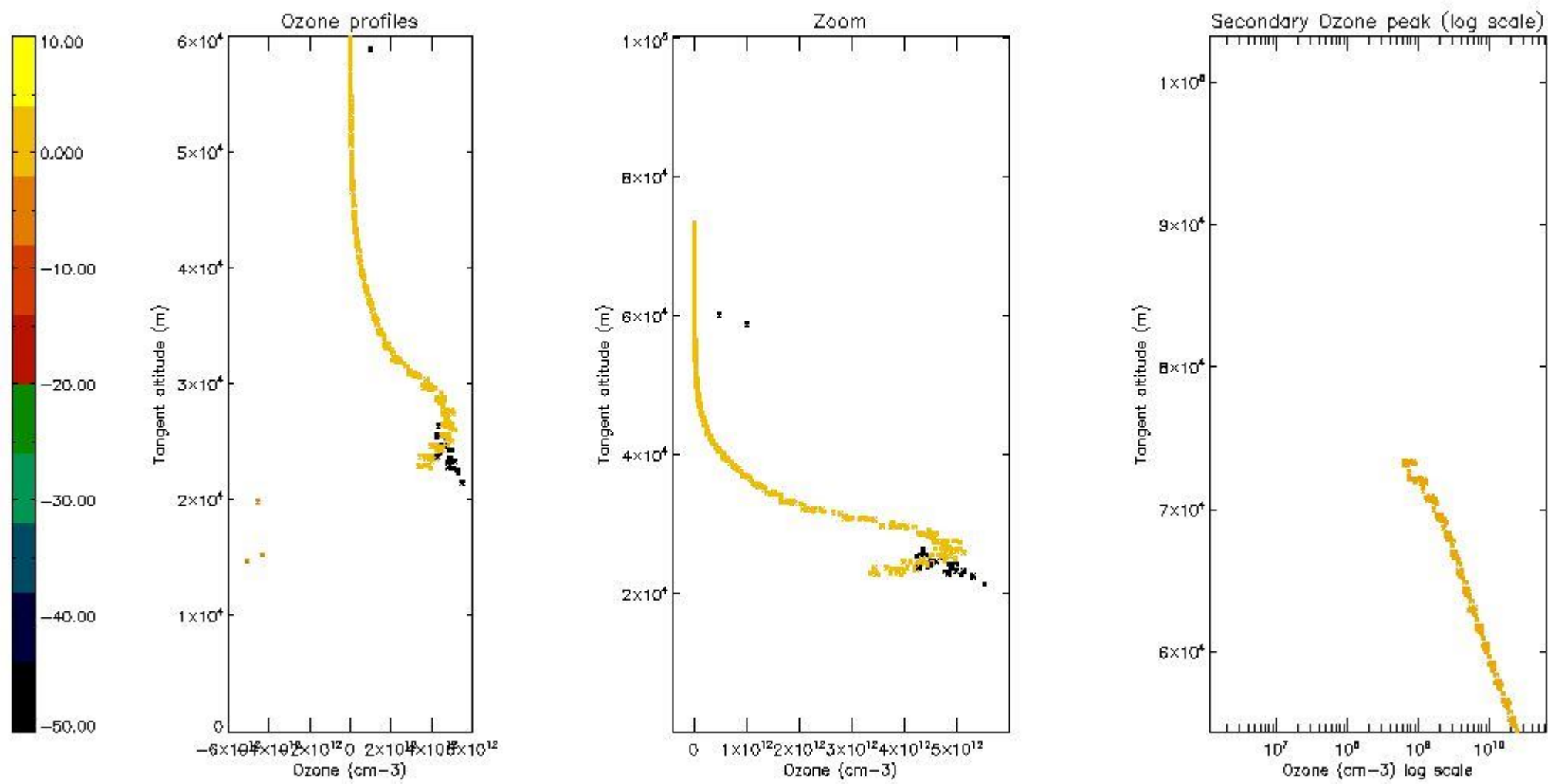
*5.4 Plot ozone profiles where  $STD < 10\%$  (dark without errors)*

The colorbar represents the latitude.



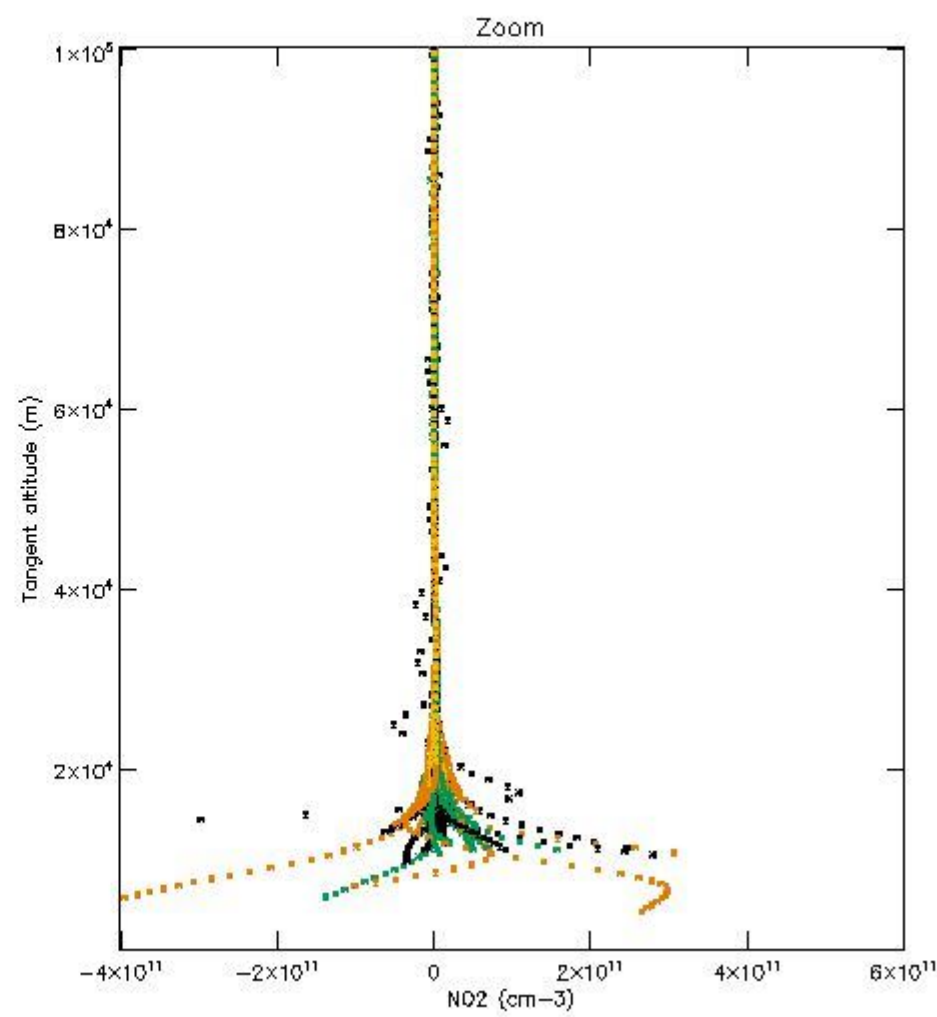
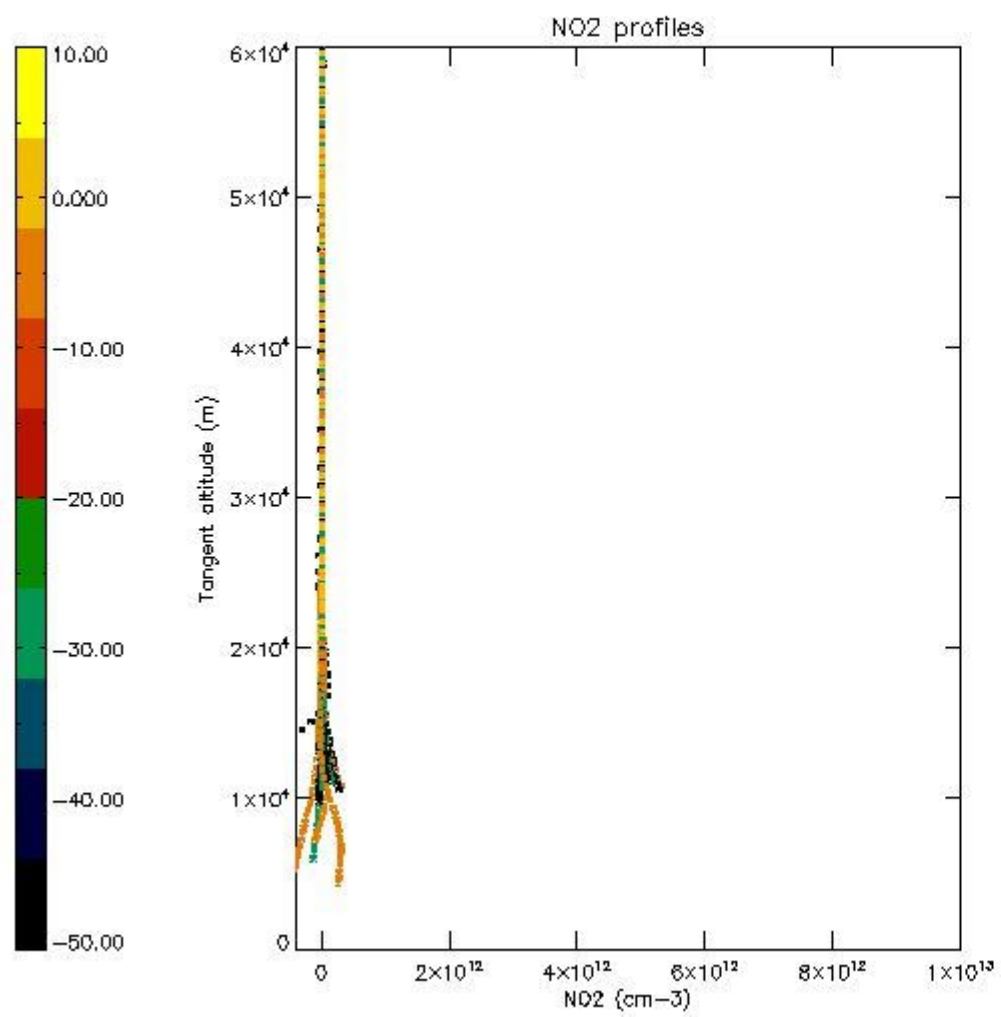
*5.5 Plot ozone profiles where STD < 5% (dark without errors)*

The colorbar represents the latitude.



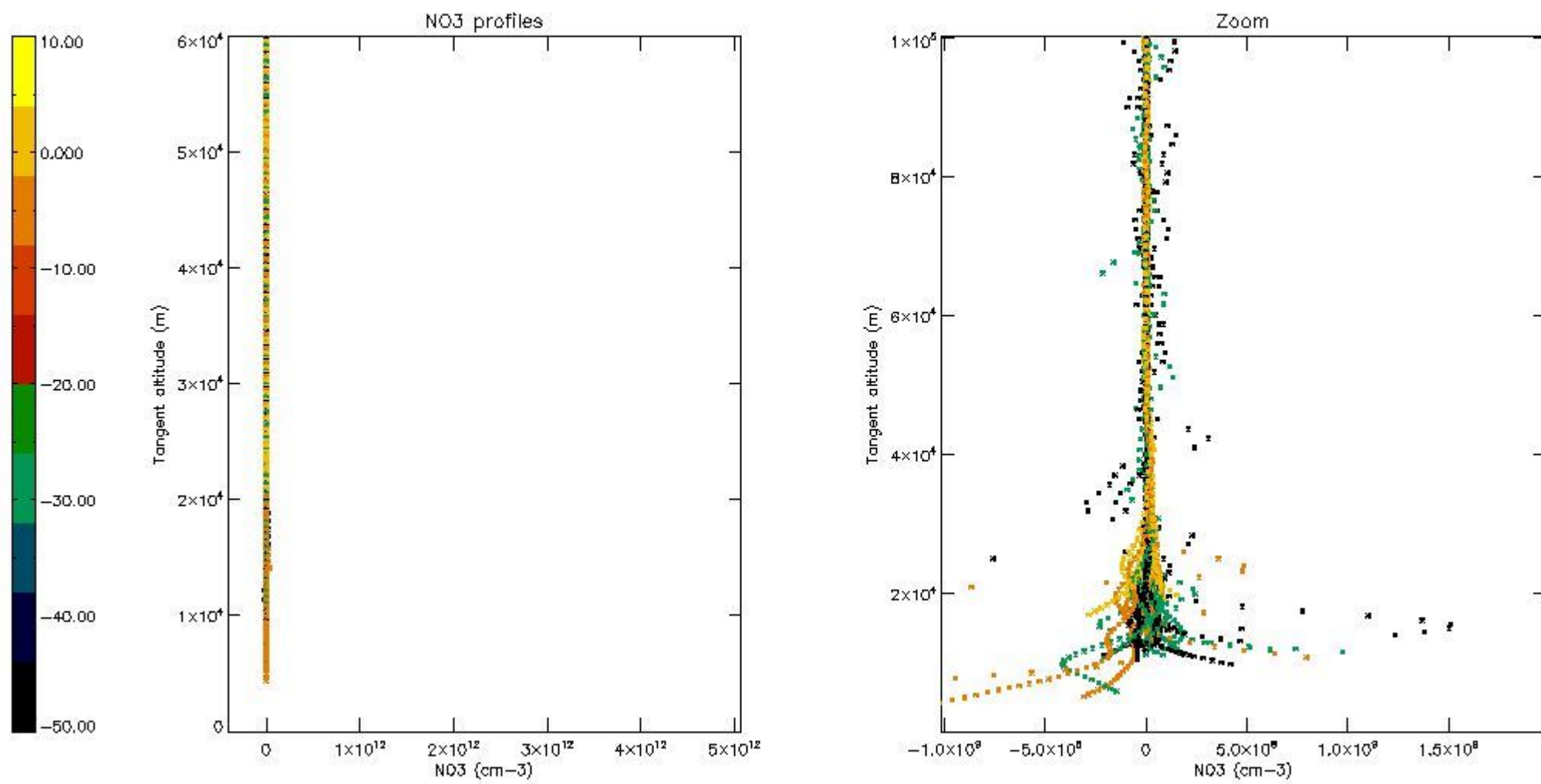
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



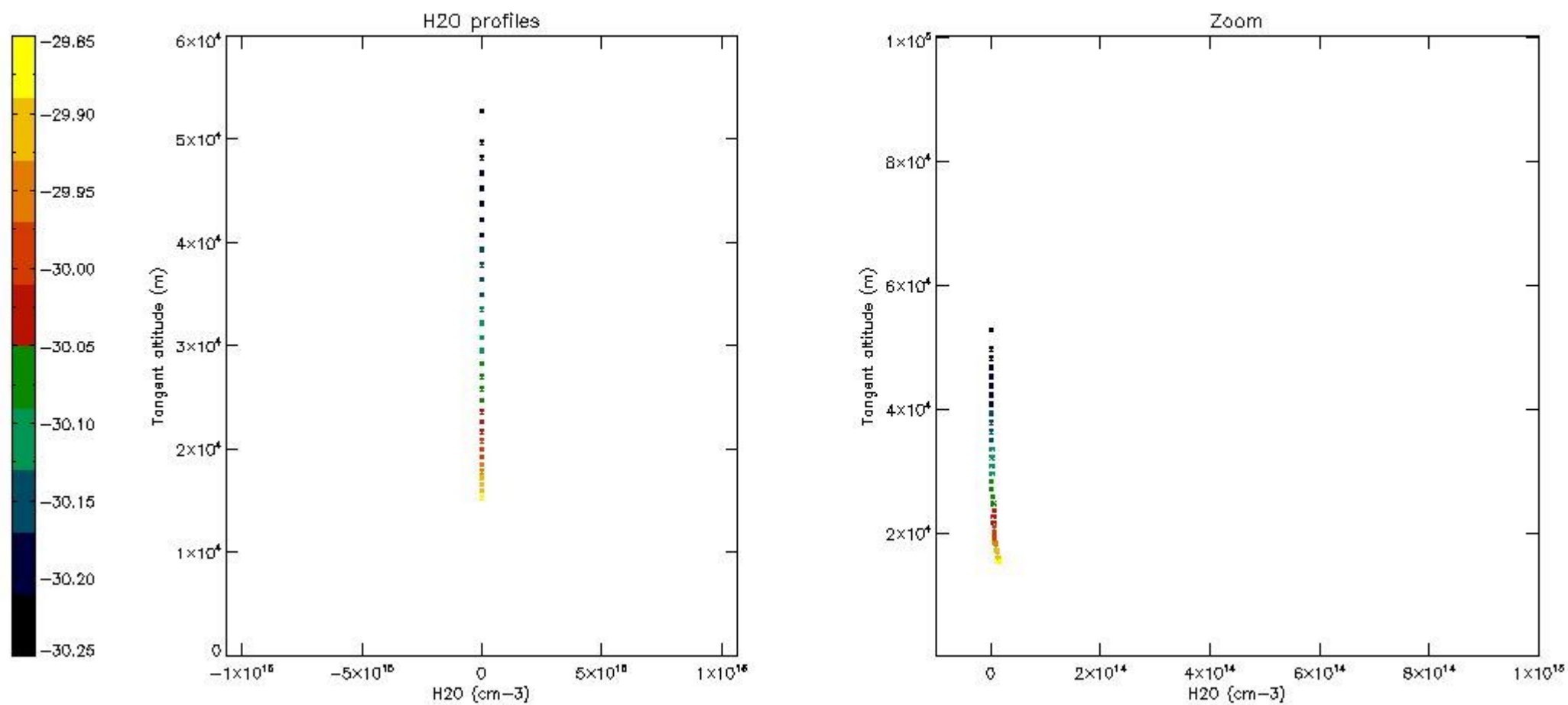
*5.7 Plot NO3 profiles for all STD (dark without errors)*

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)

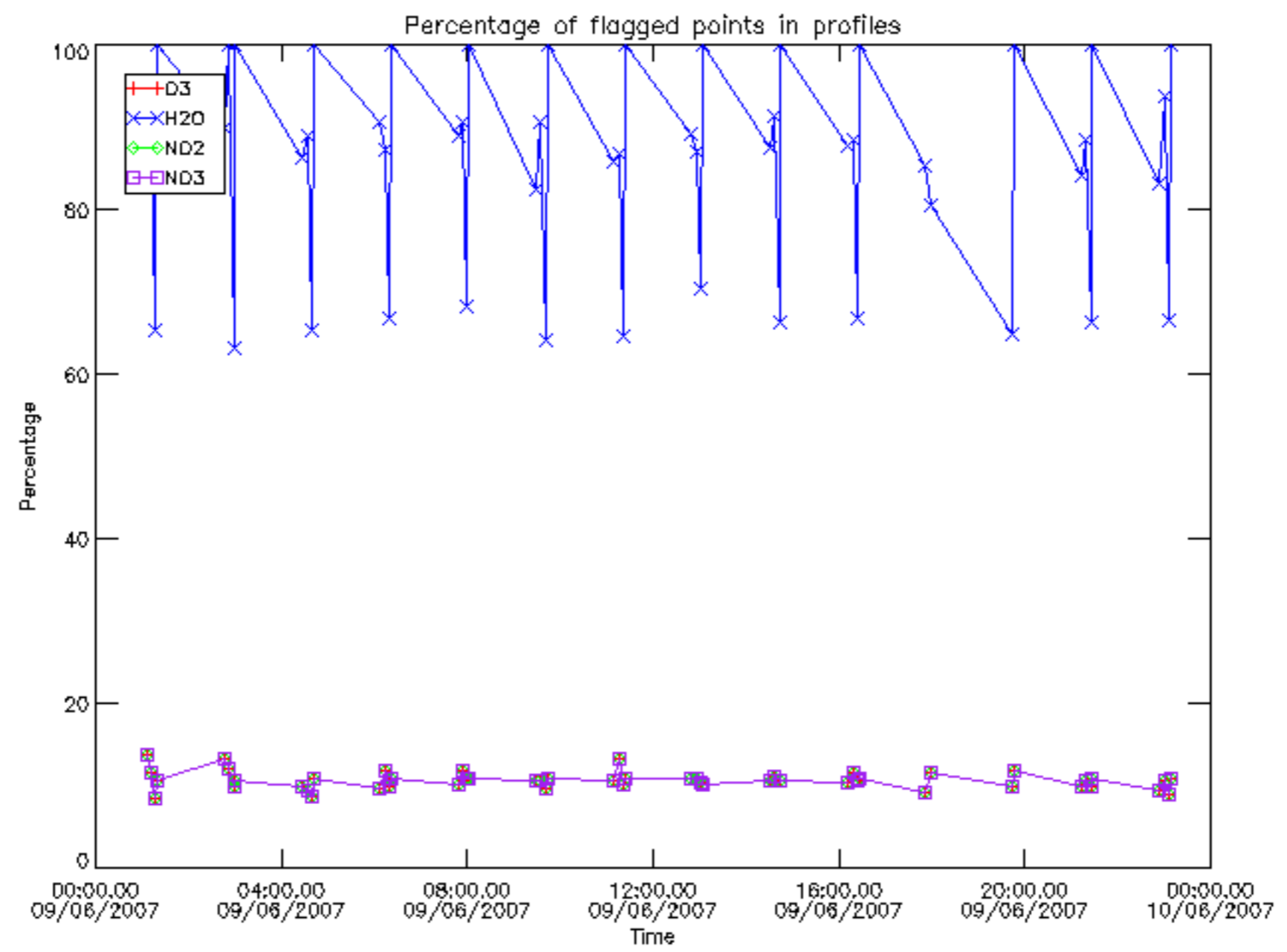
The colorbar represents the latitude.



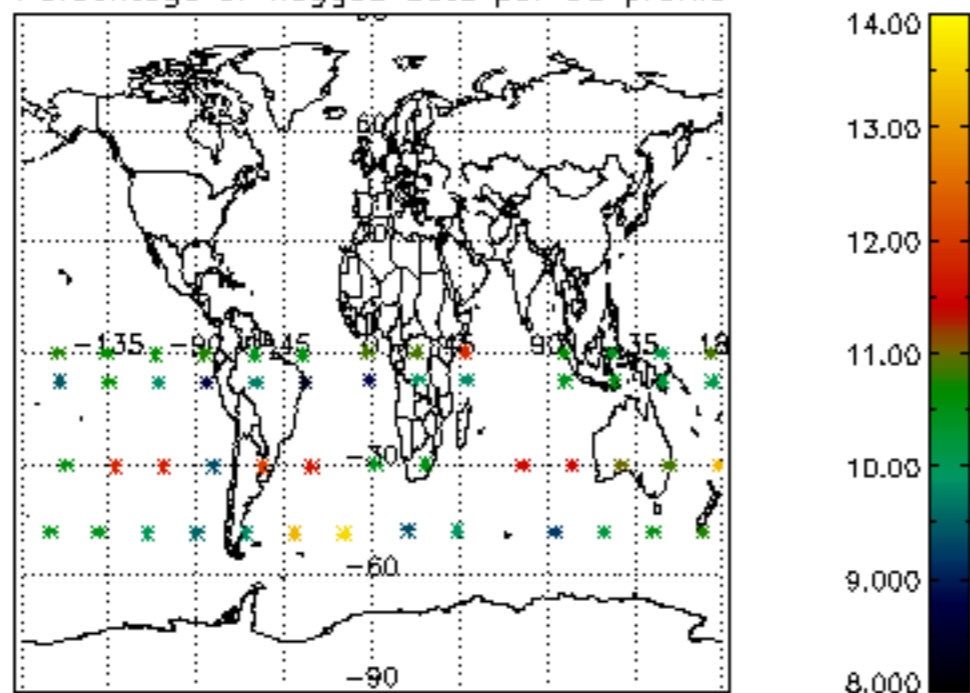
## 6. Auxiliary Data Files used for the production reported in section 2

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.

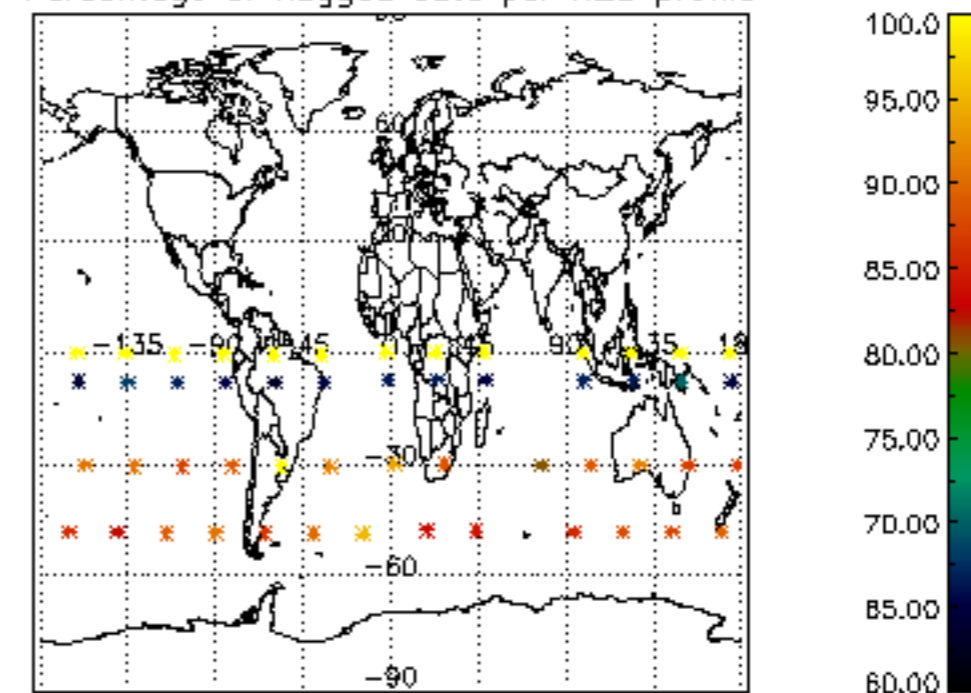
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	09-JUN-2007 00:01:09
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	09-JUN-2007 00:01:09
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	09-JUN-2007 00:01:09



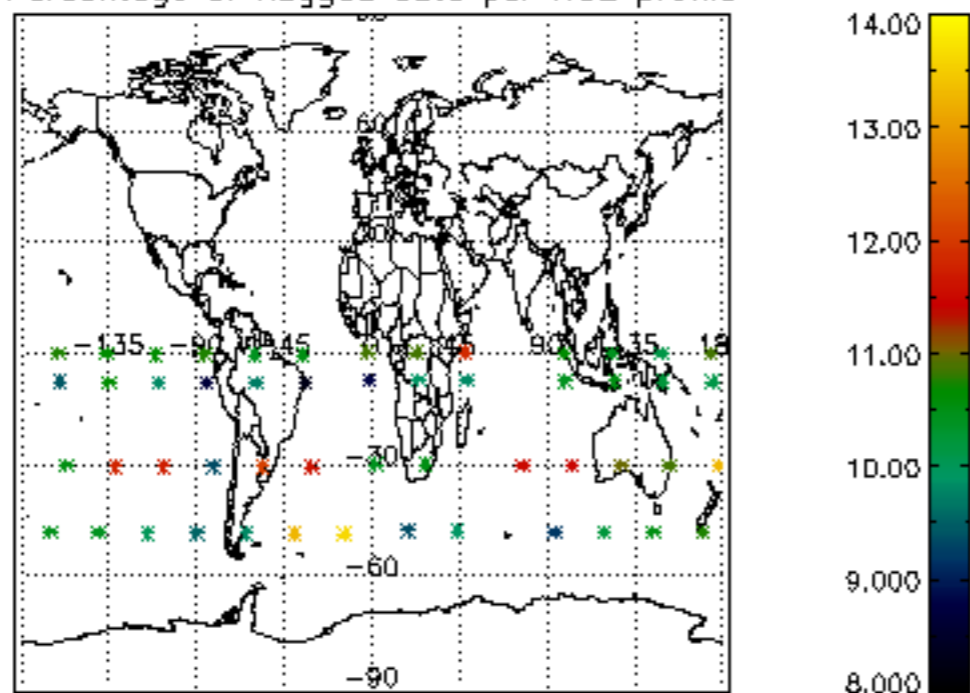
Percentage of flagged data per D3 profile



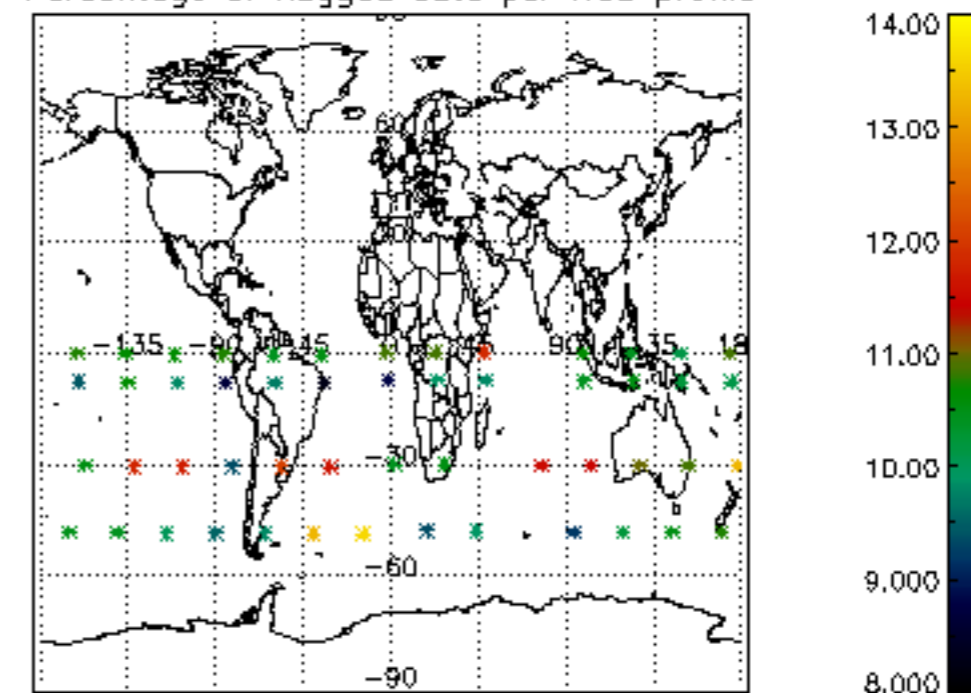
Percentage of flagged data per H2O profile



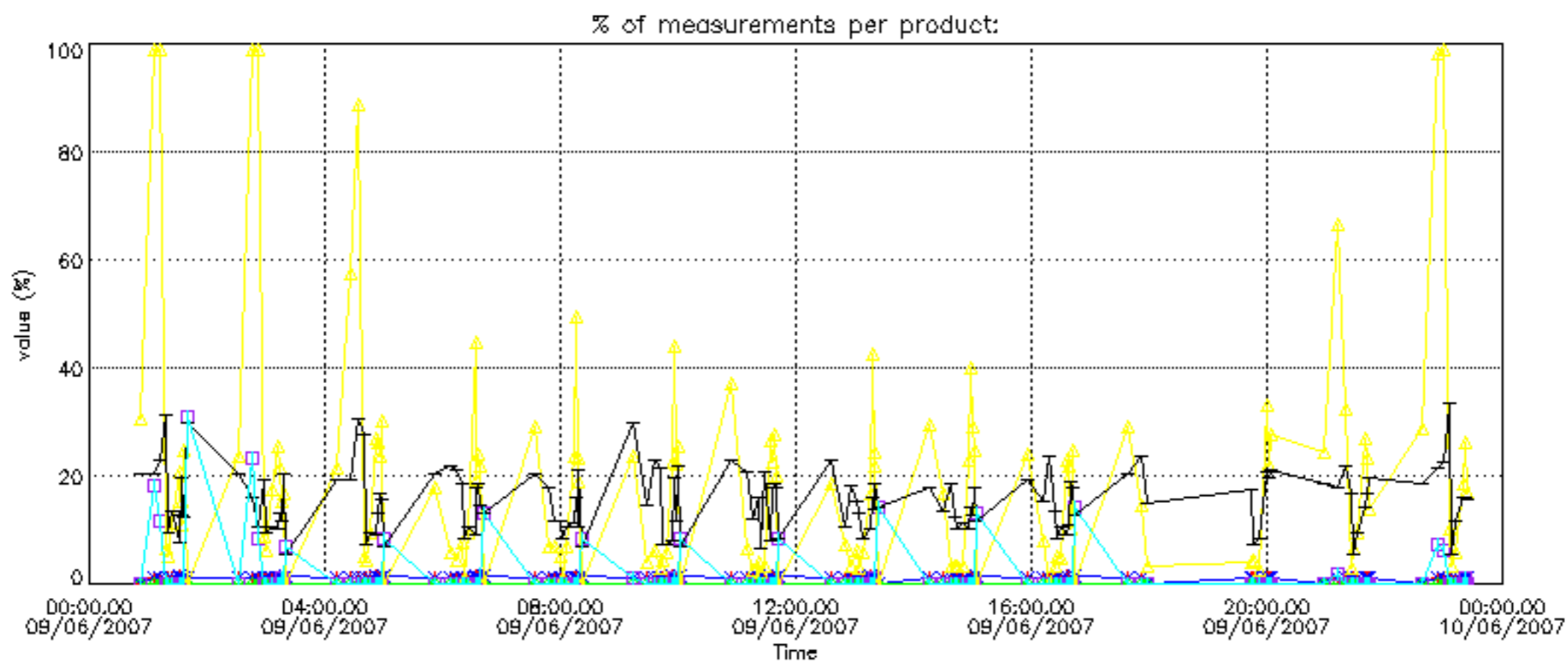
Percentage of flagged data per NO2 profile

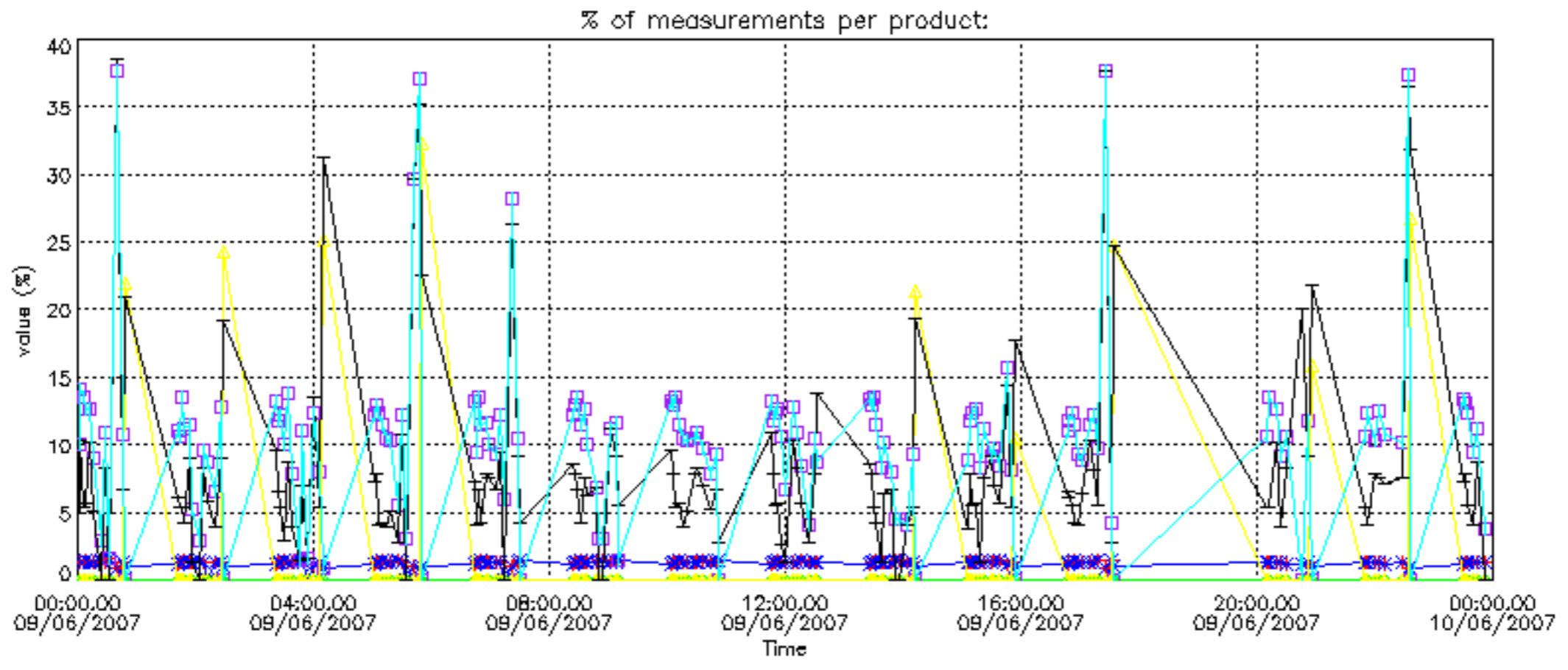


Percentage of flagged data per NO3 profile

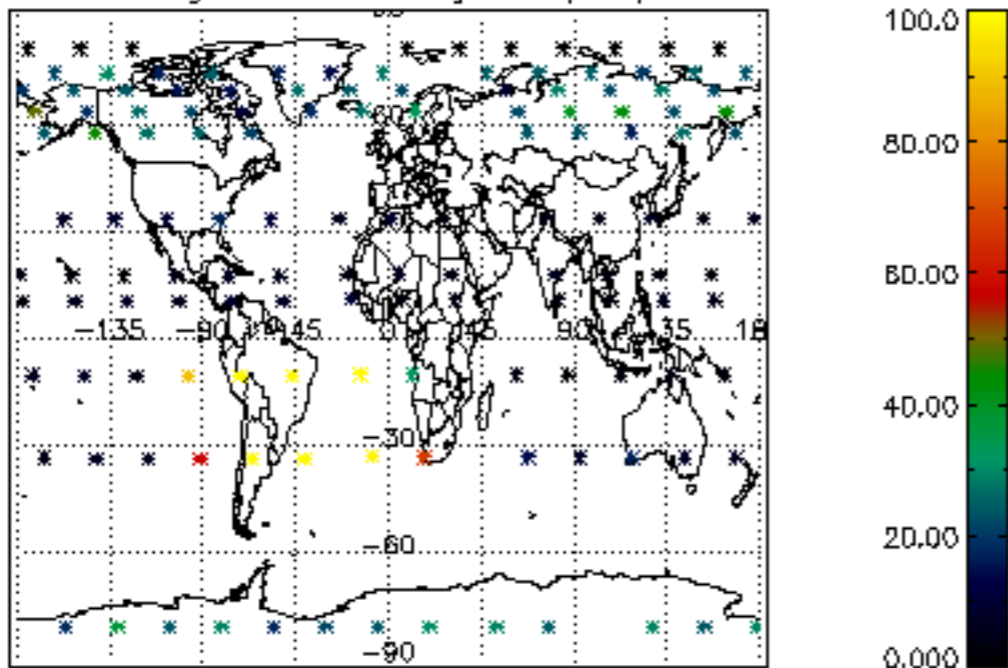




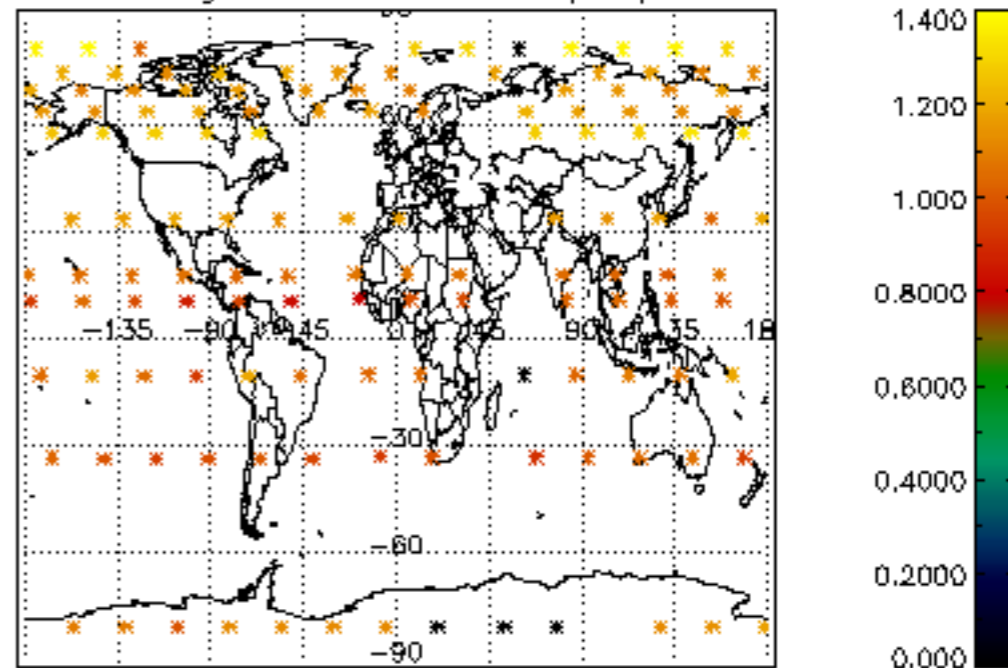




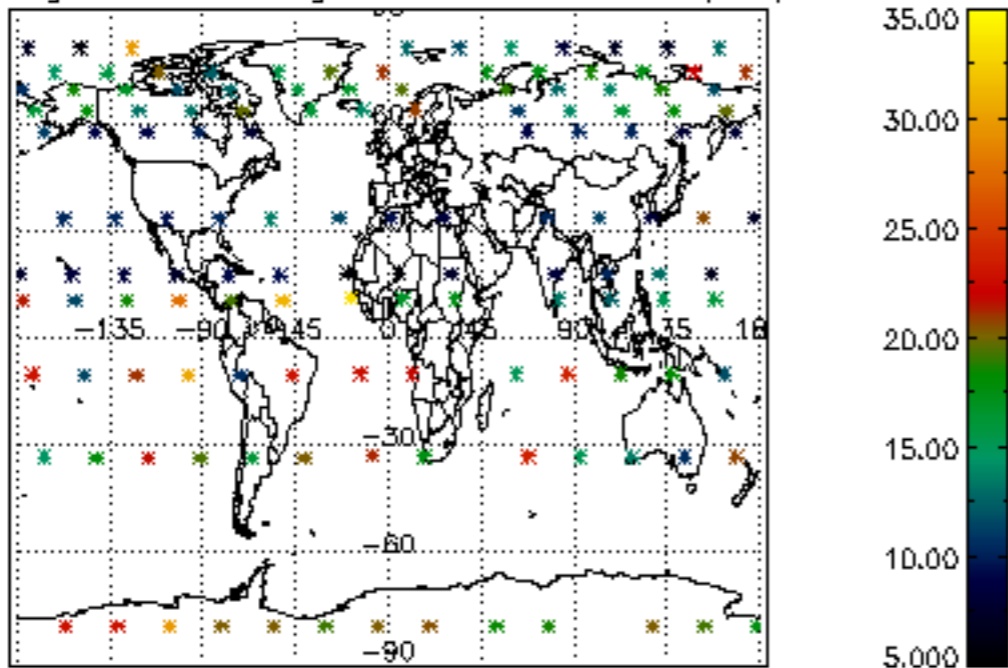
Percentage of cosmic ray hits per profile



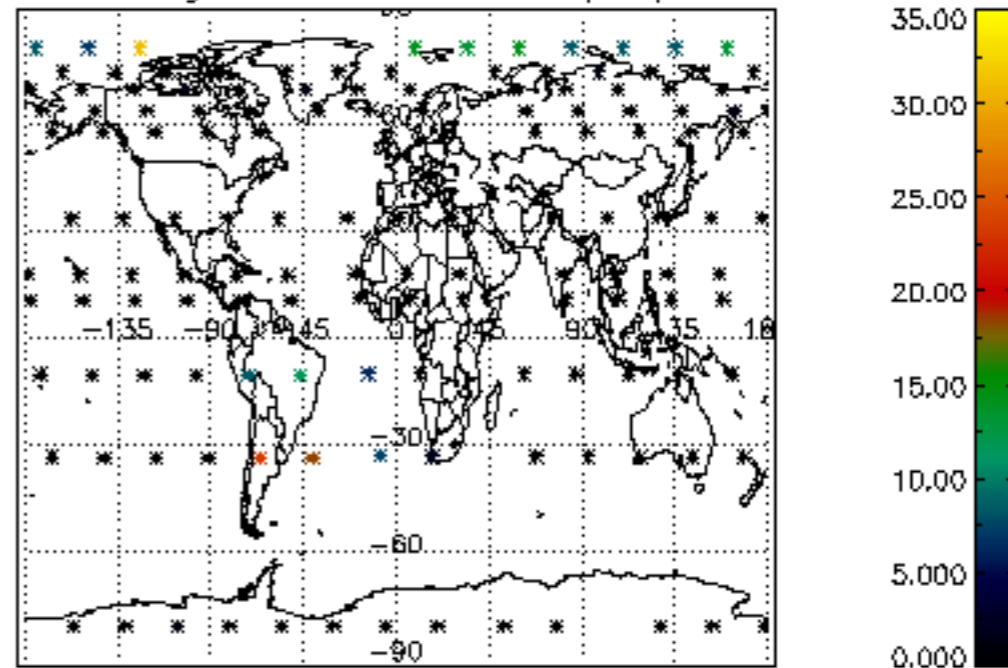
Percentage of datation errors per profile



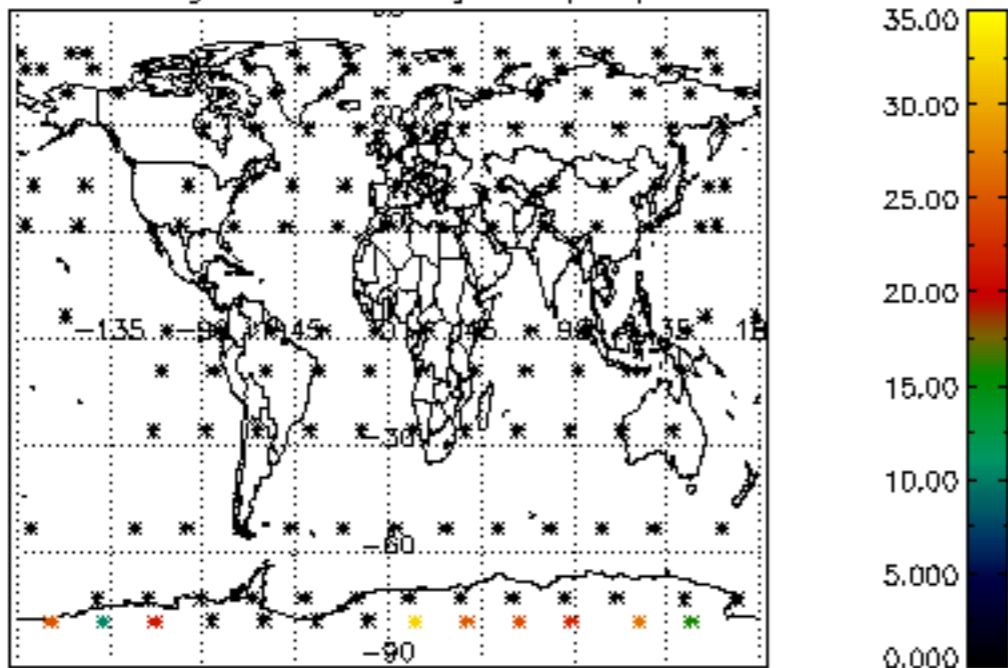
Percentage of star falling outside central band per profile



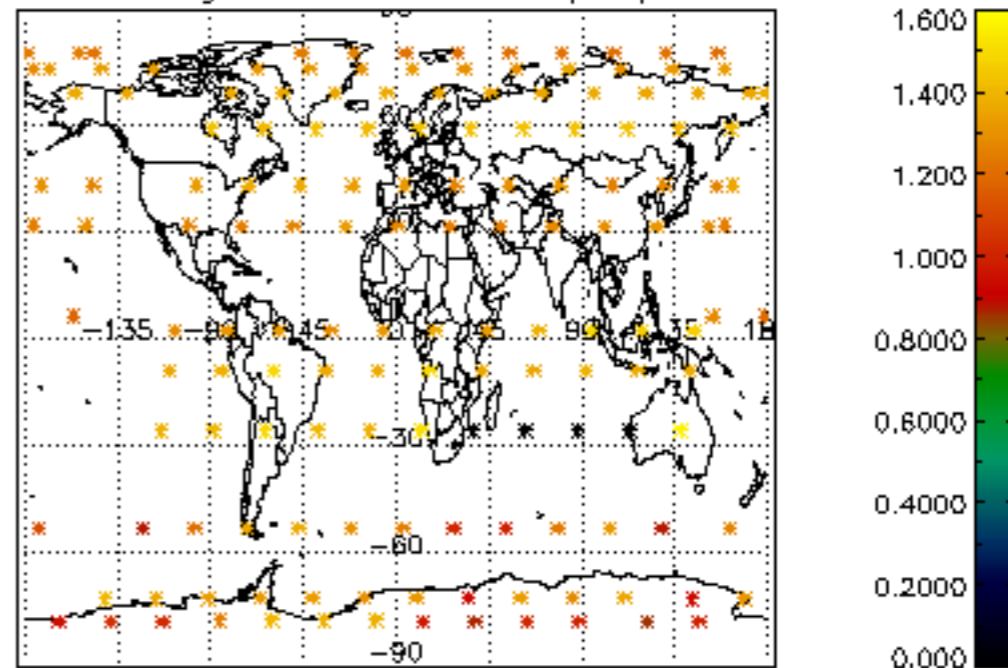
Percentage of saturation errors per profile



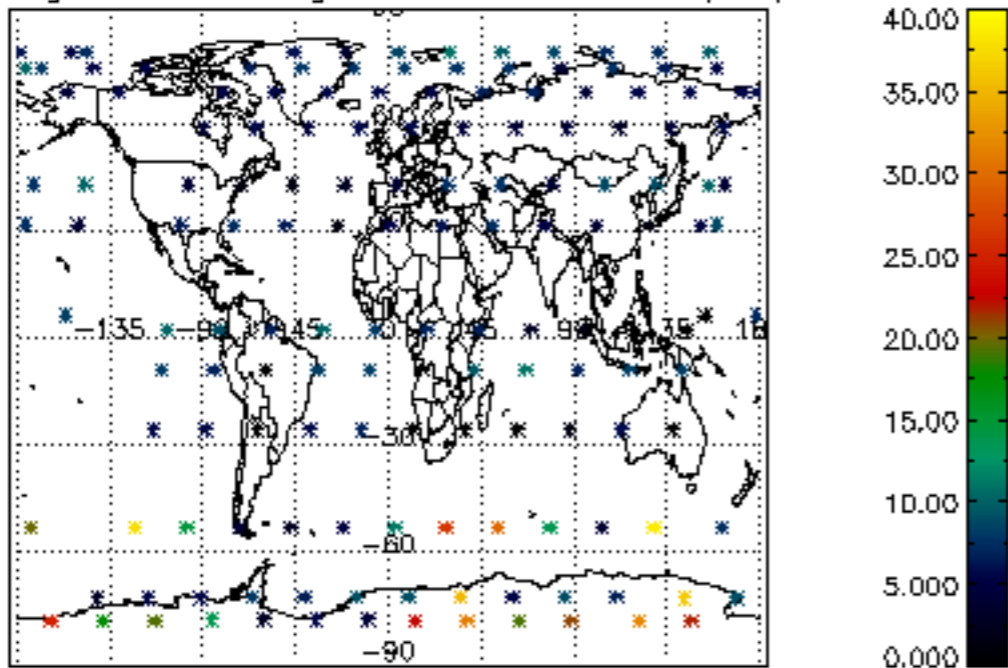
Percentage of cosmic ray hits per profile



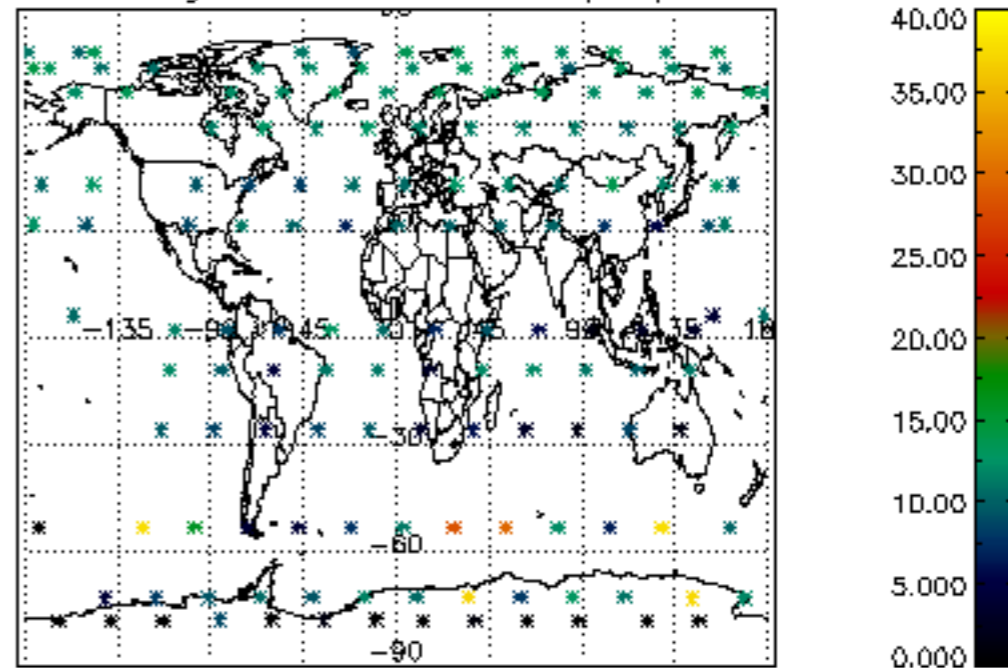
Percentage of datation errors per profile

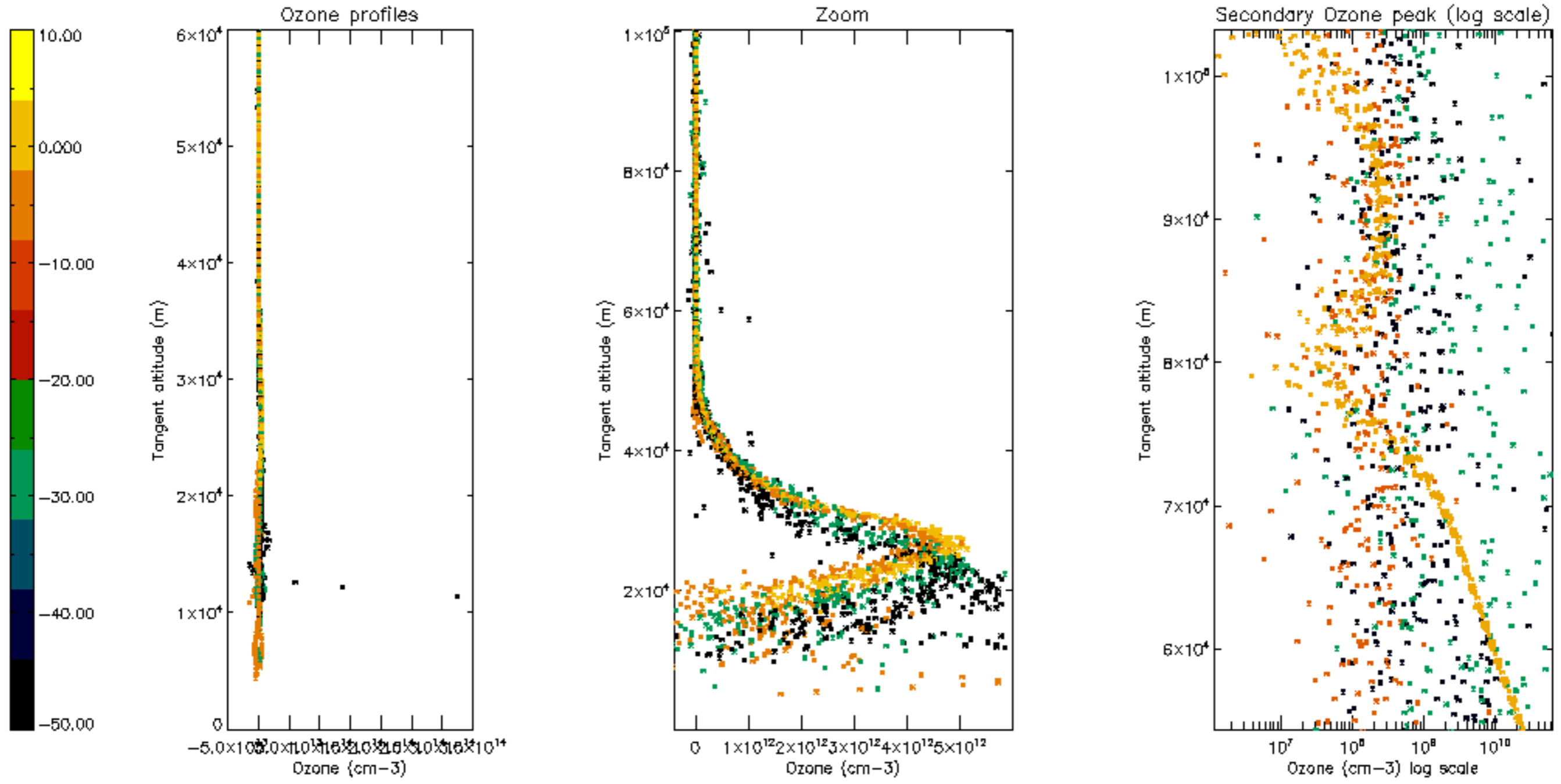


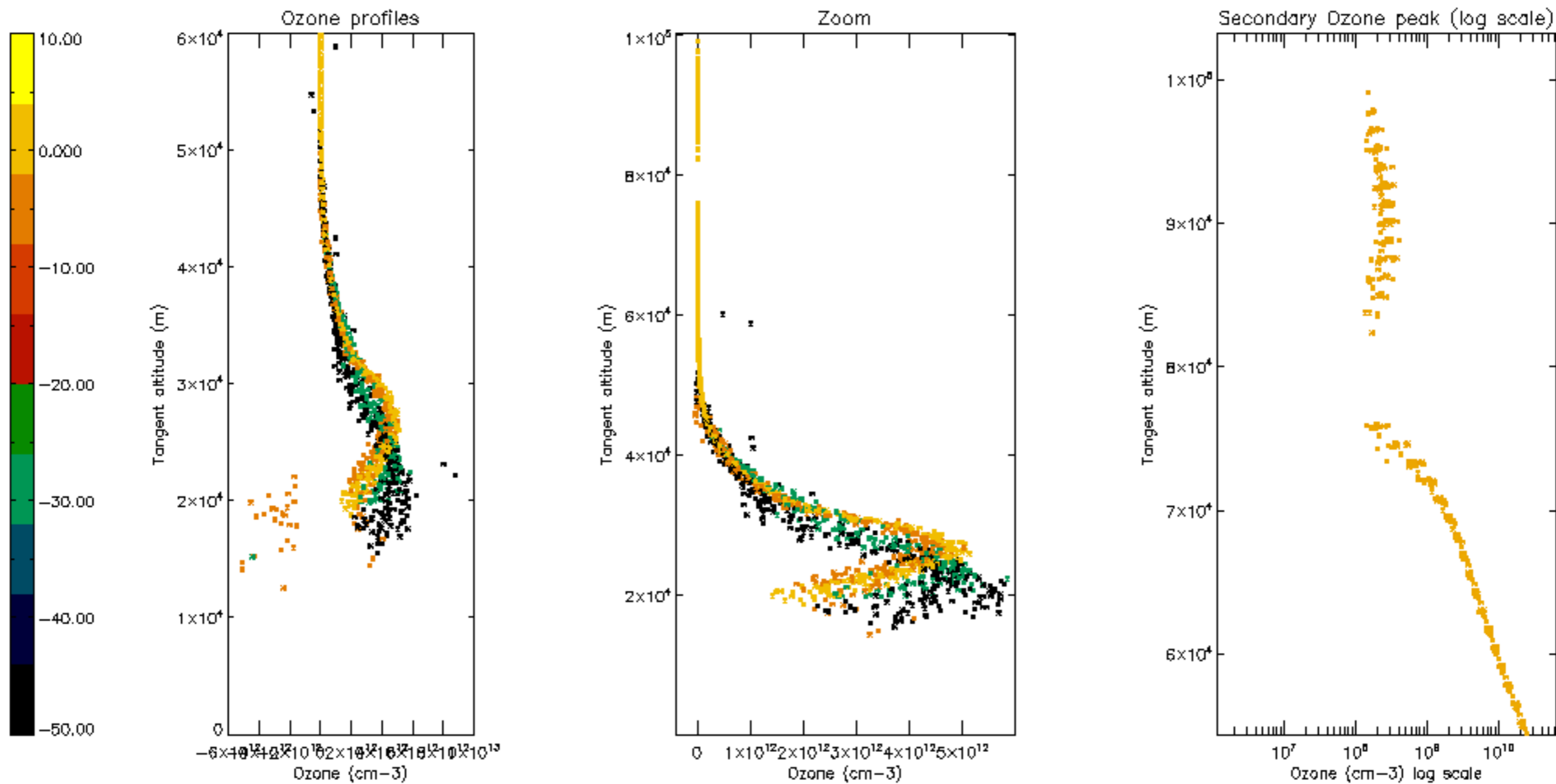
Percentage of star falling outside central band per profile

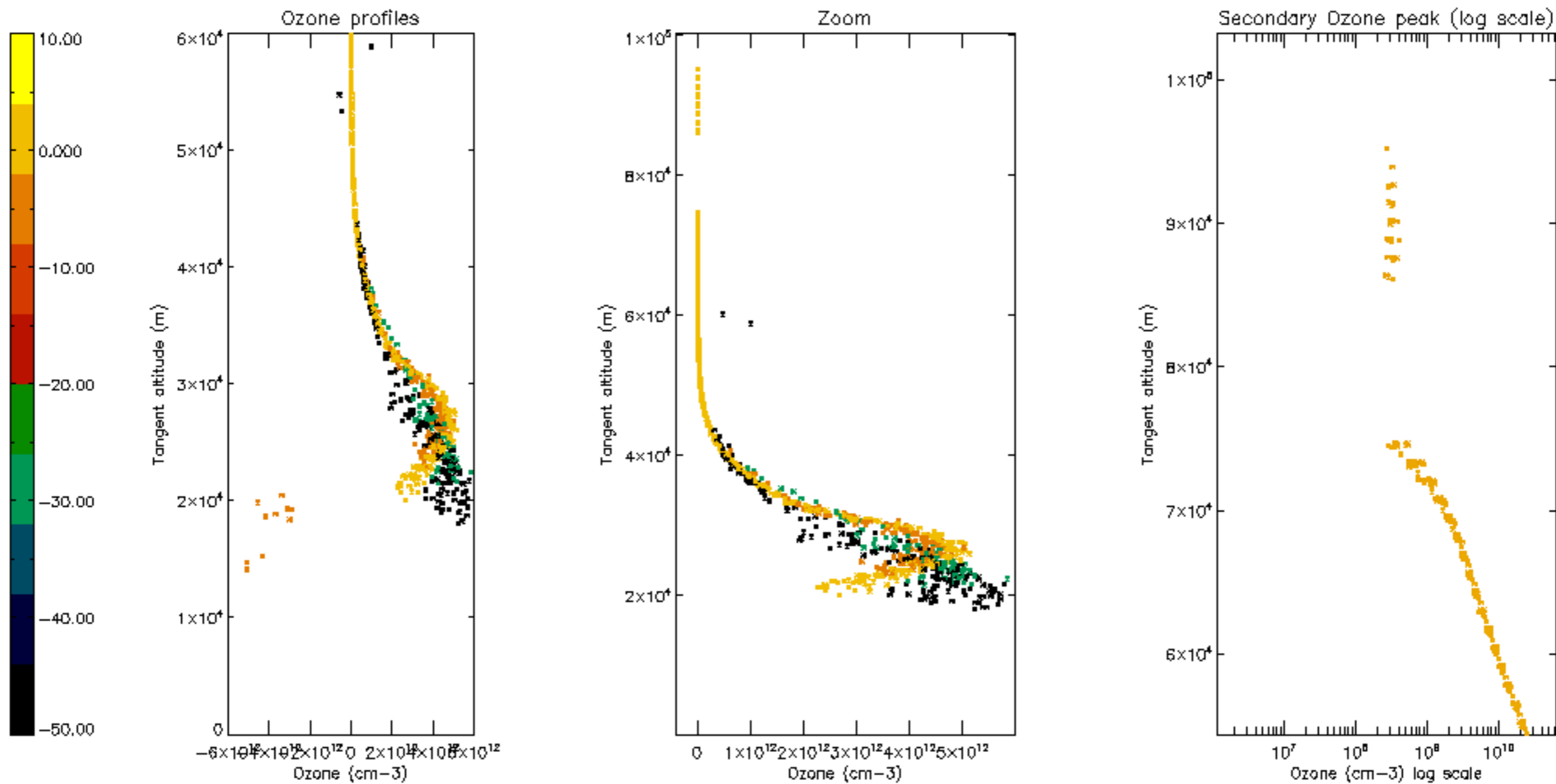


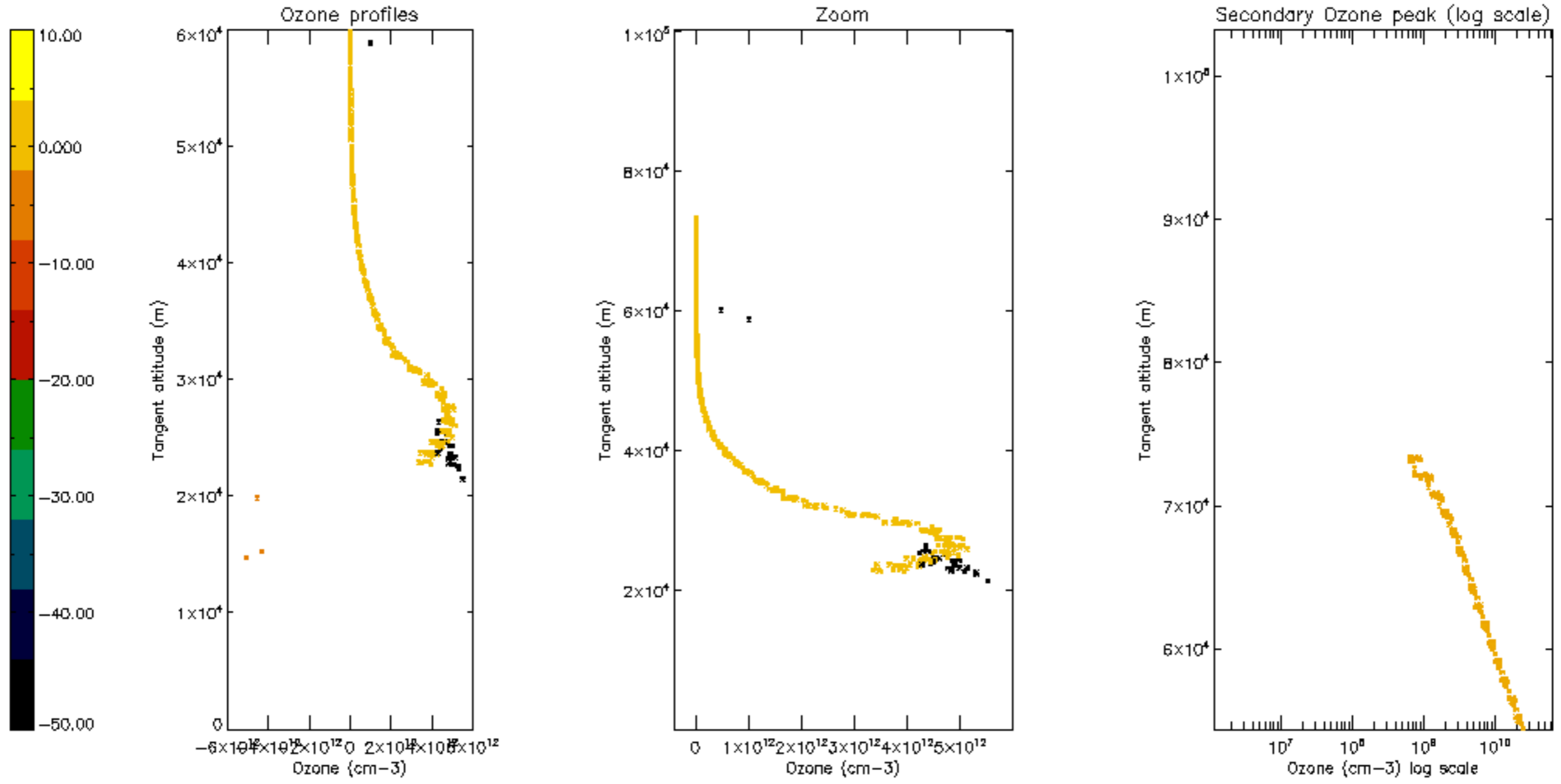
Percentage of saturation errors per profile



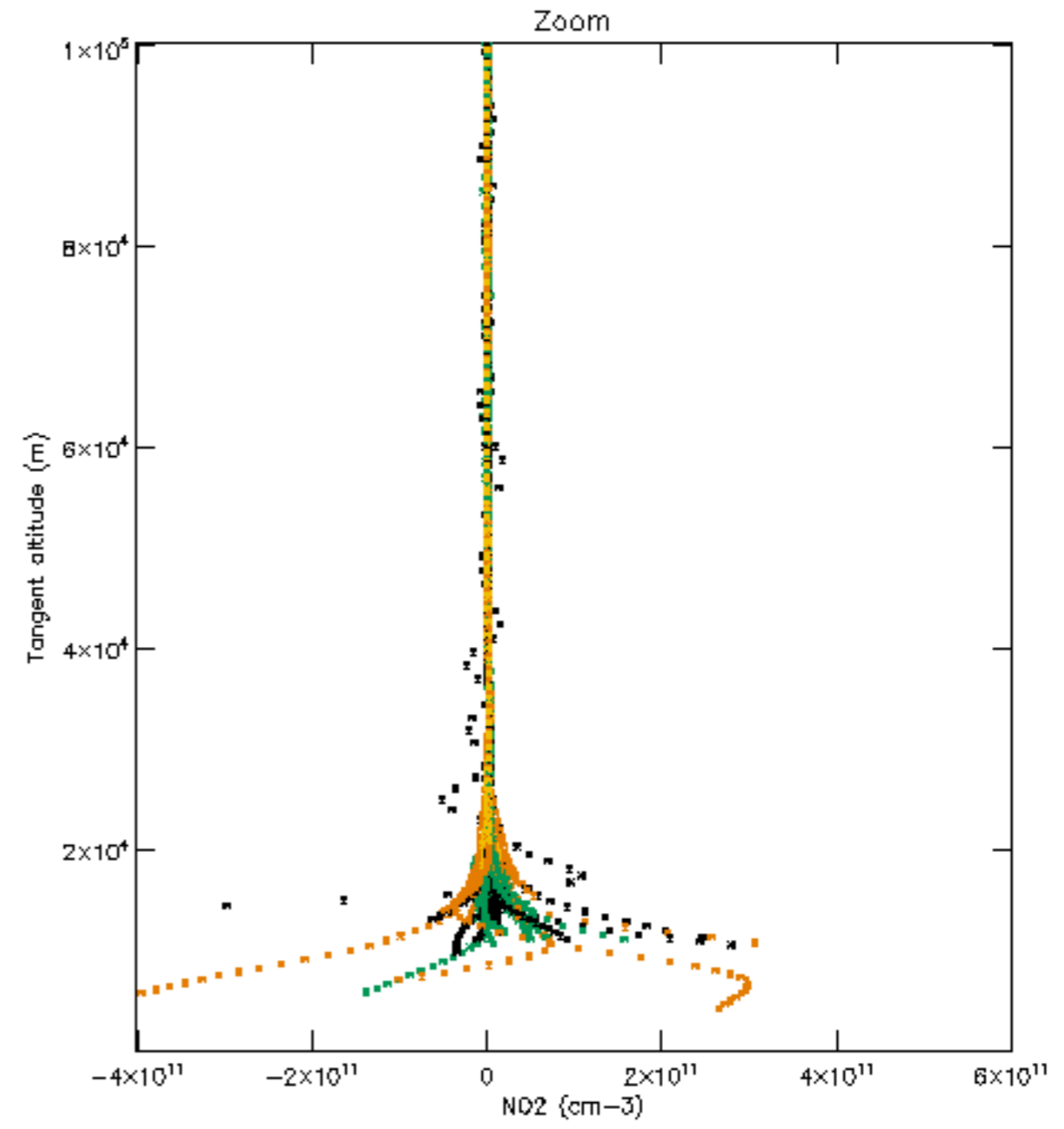
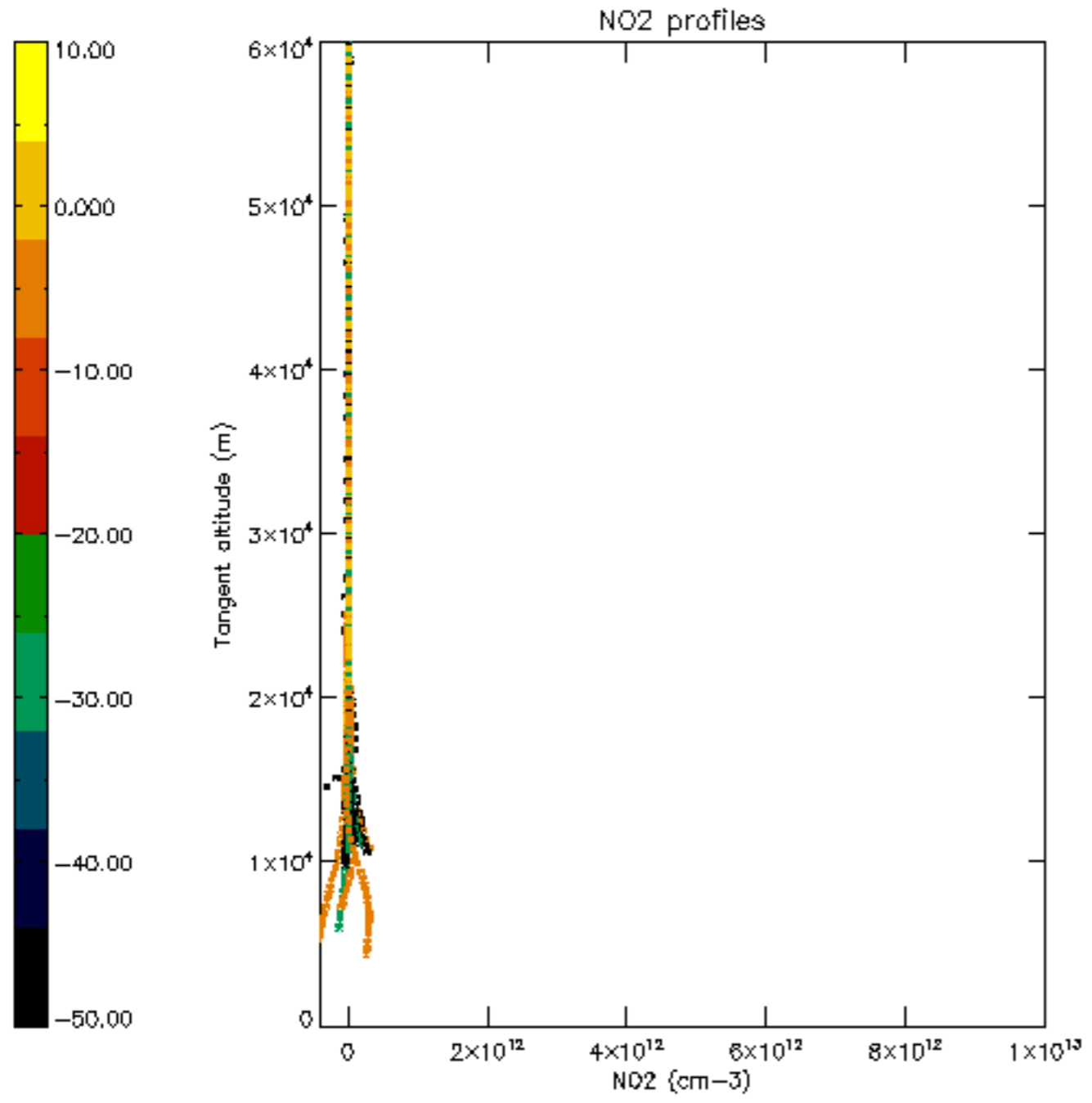


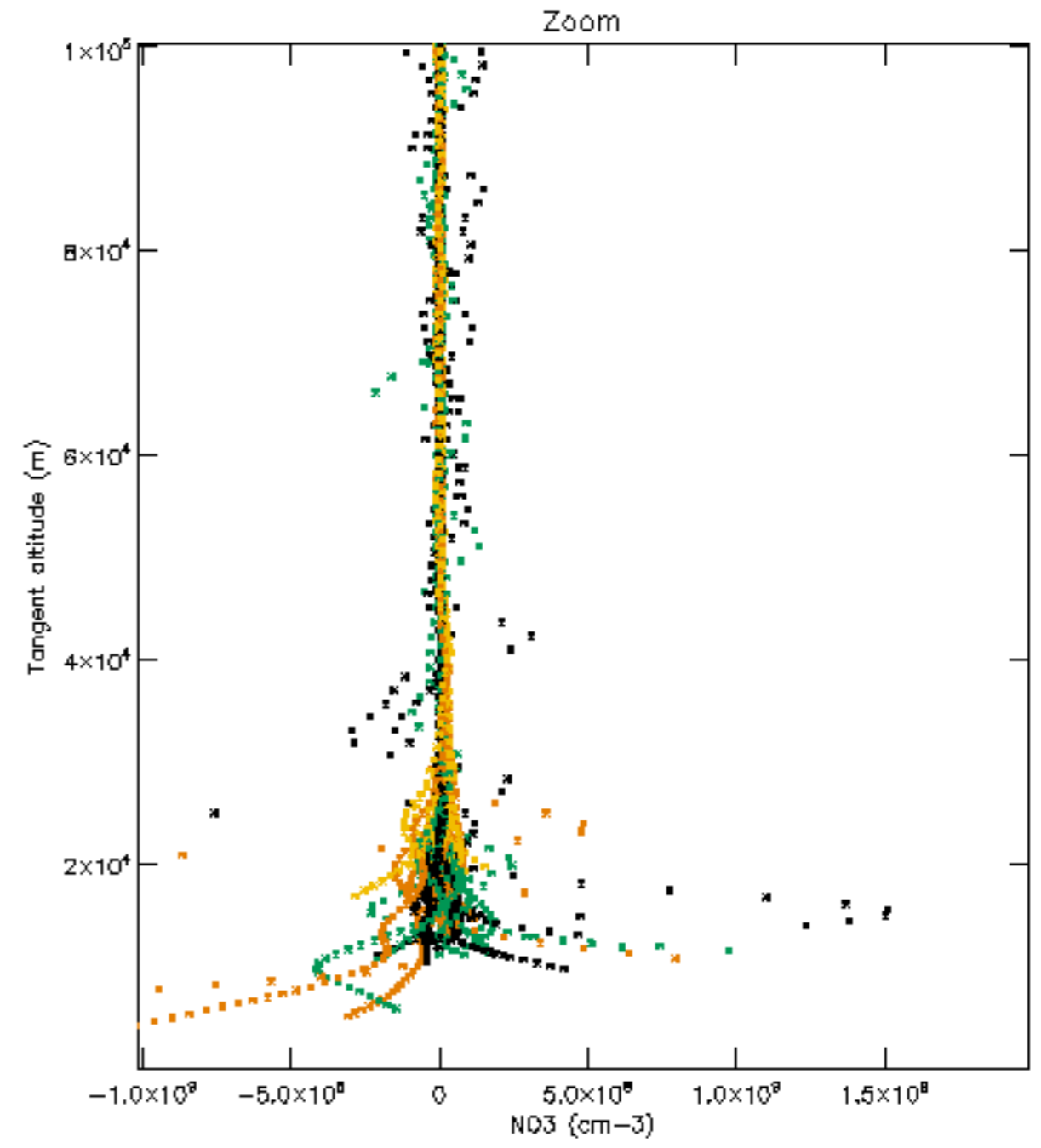
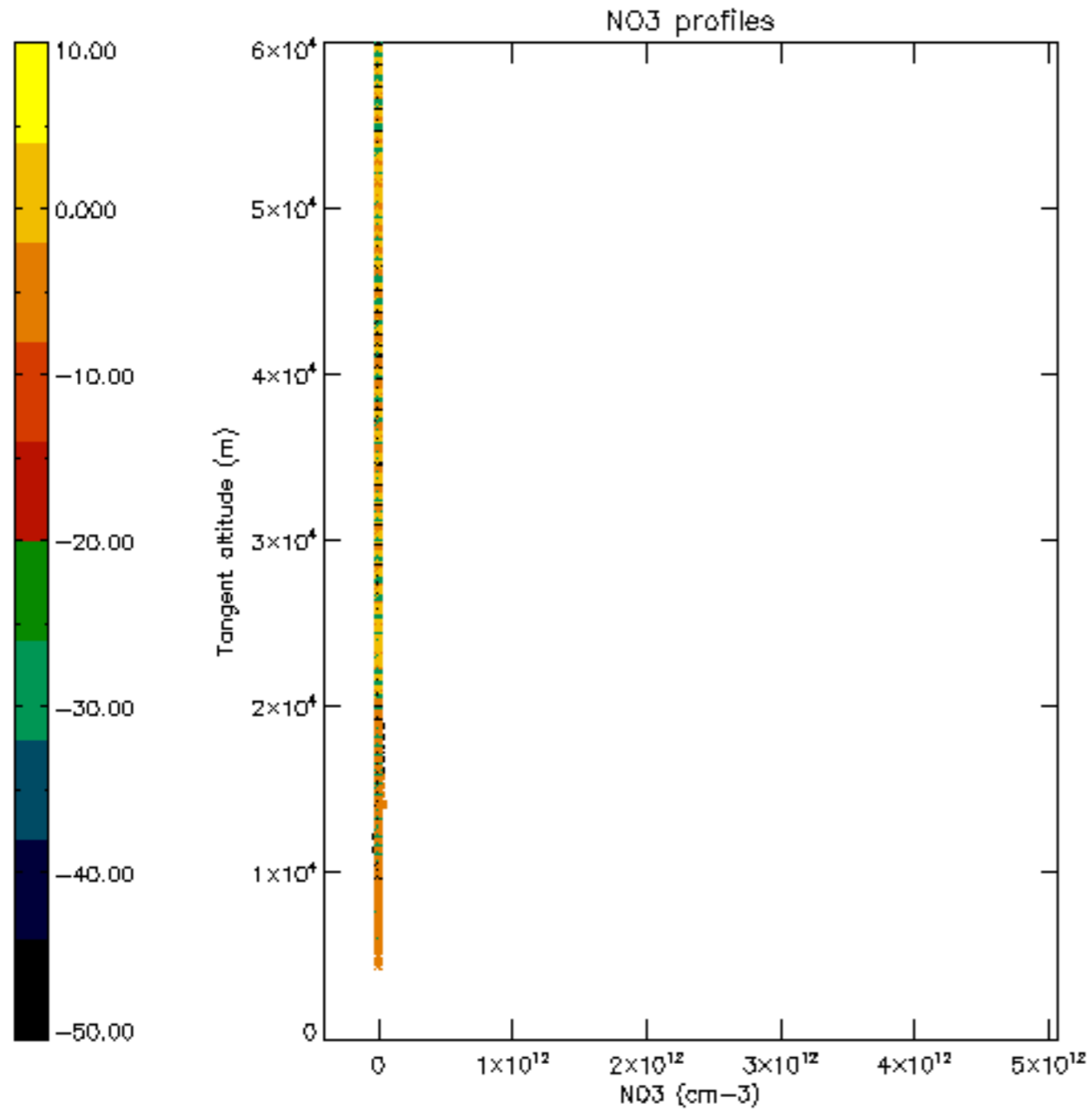


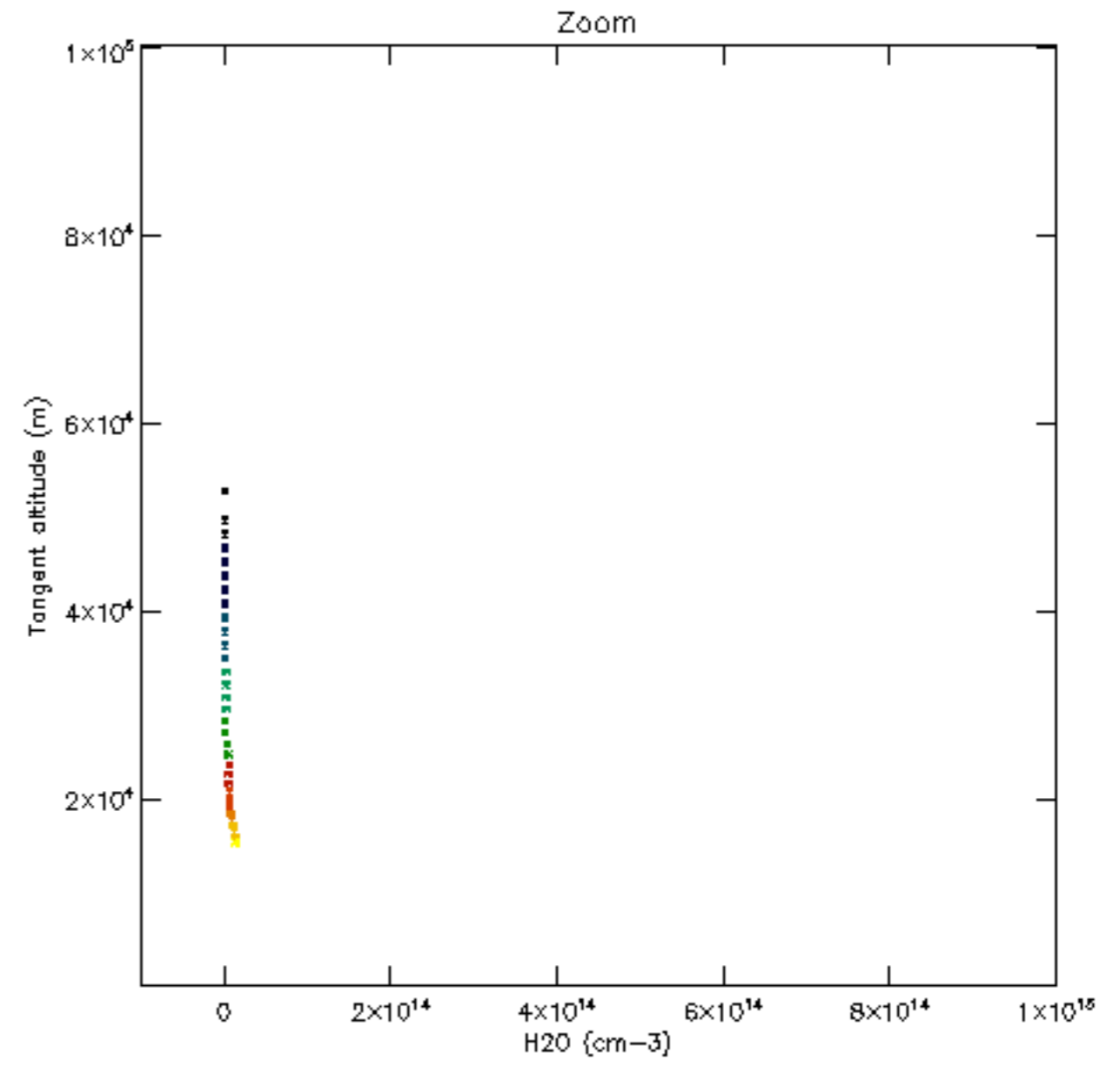
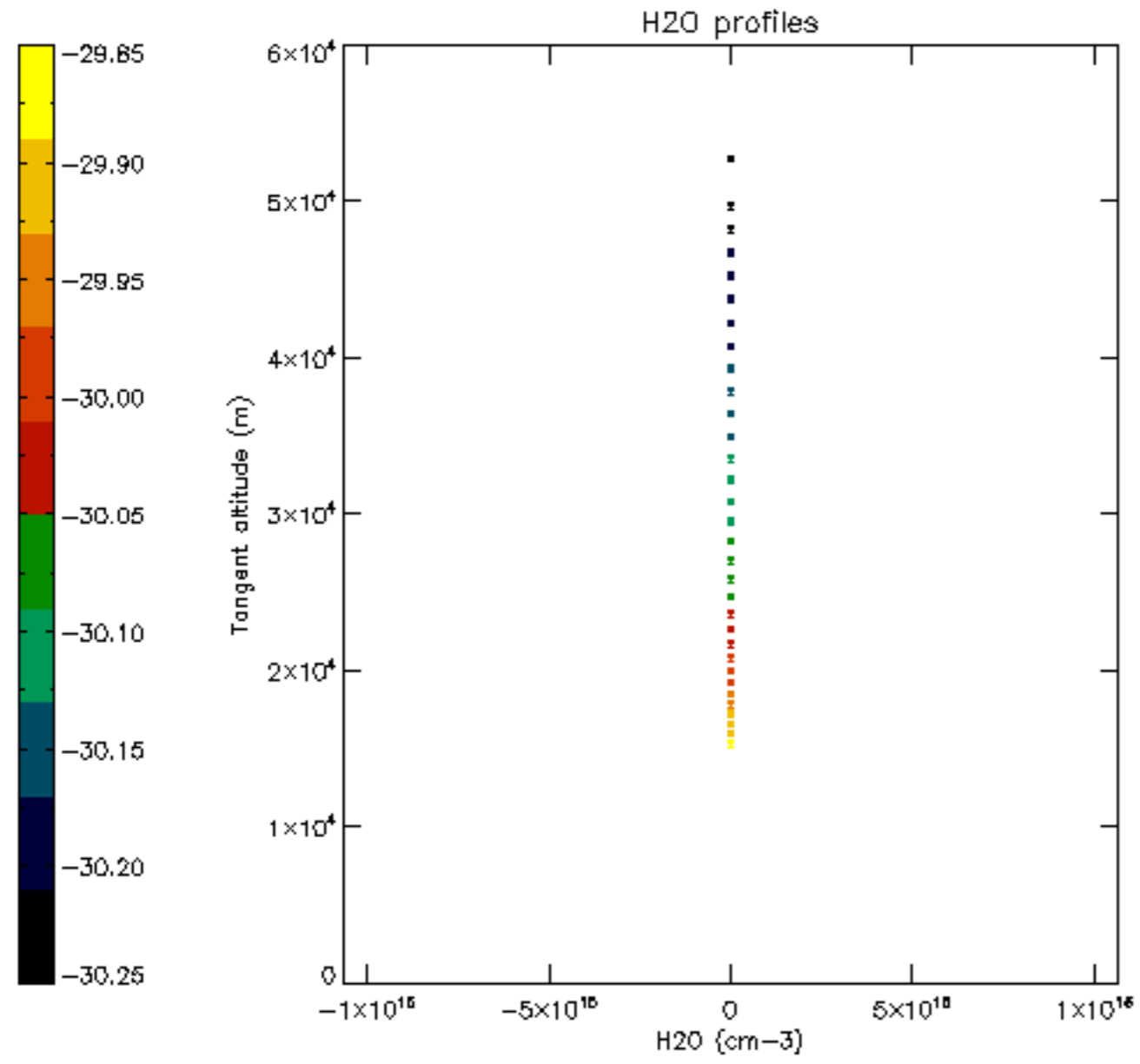


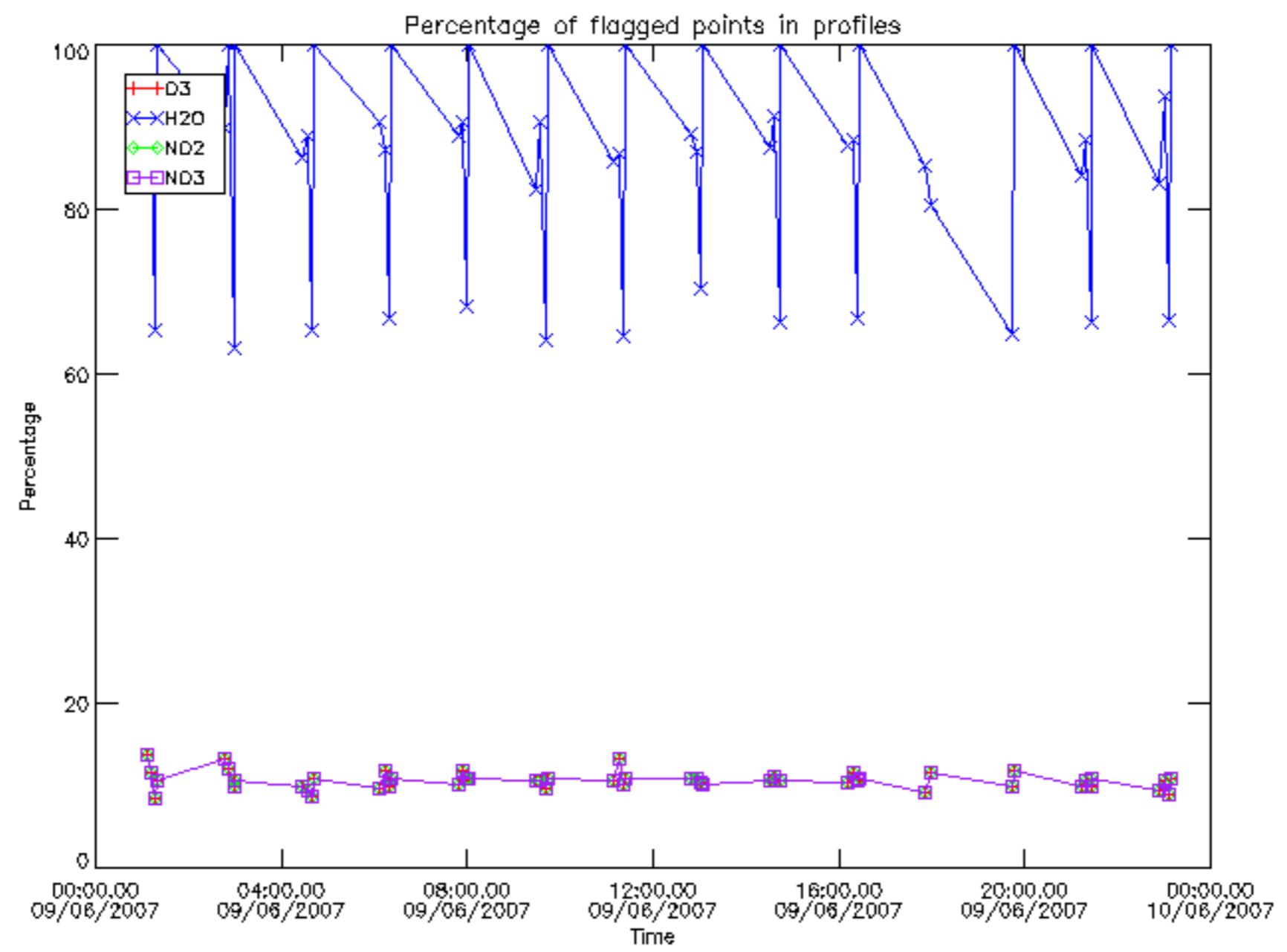




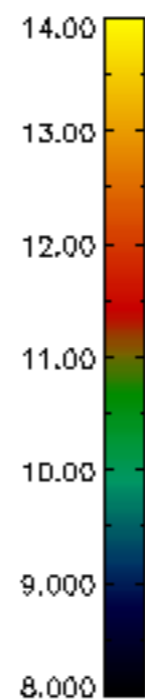
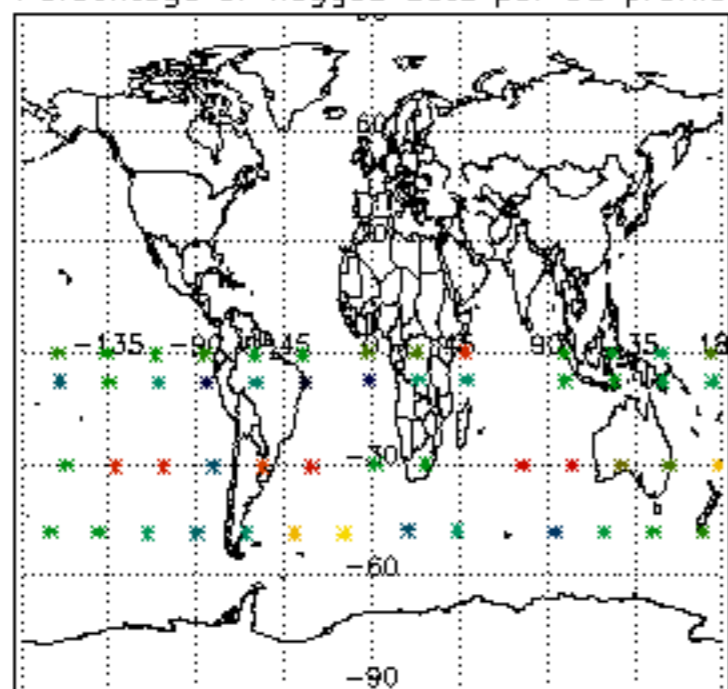




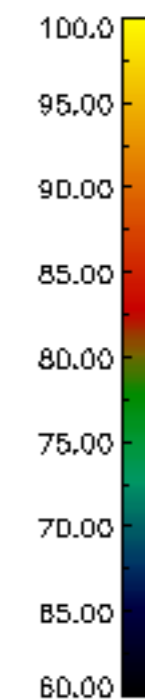
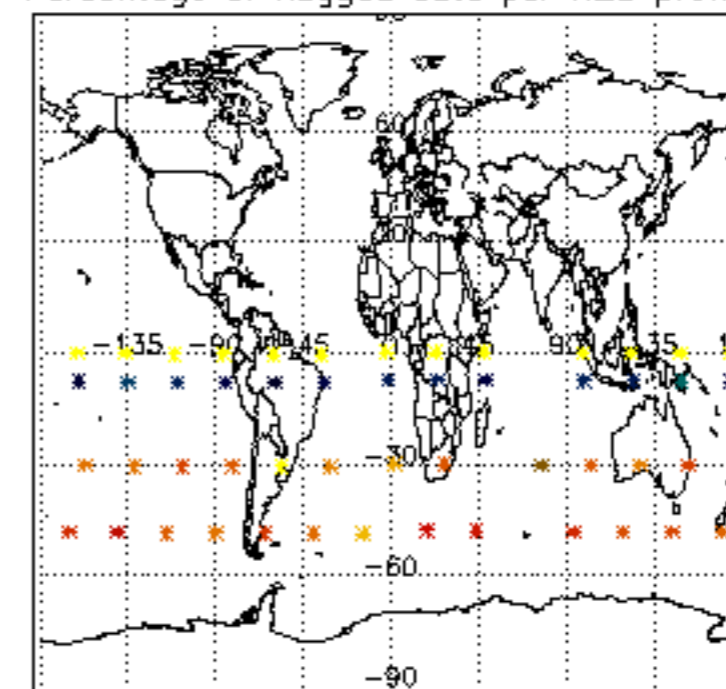




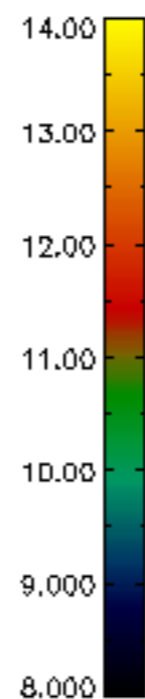
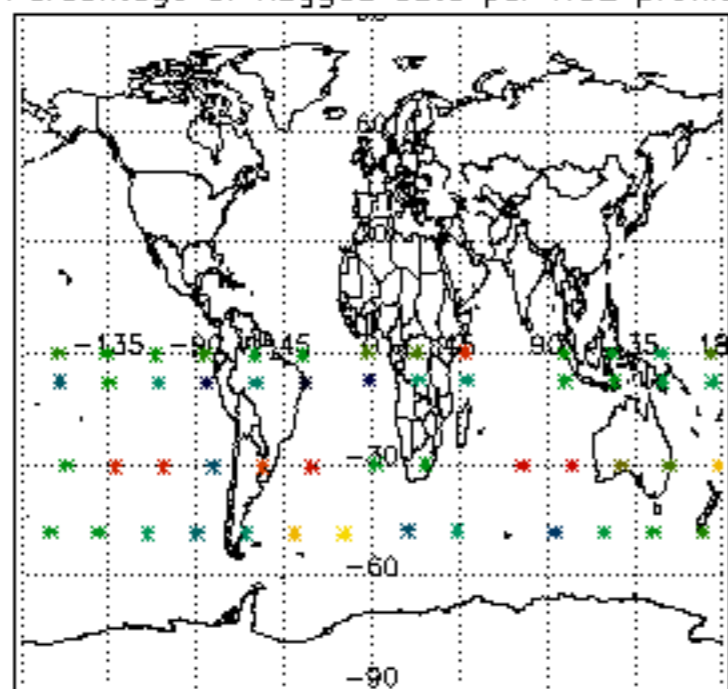
Percentage of flagged data per D3 profile



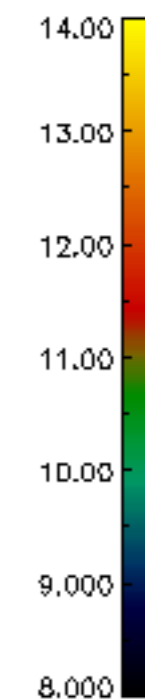
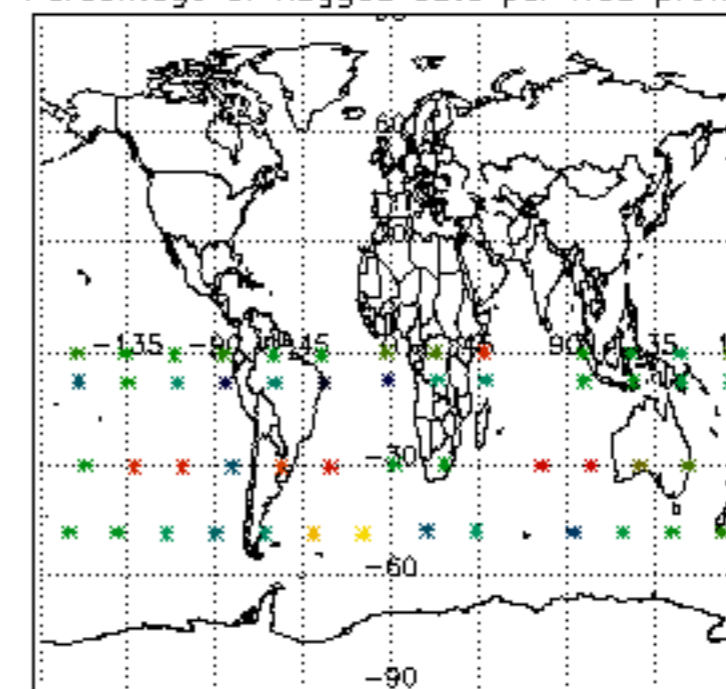
Percentage of flagged data per H2O profile

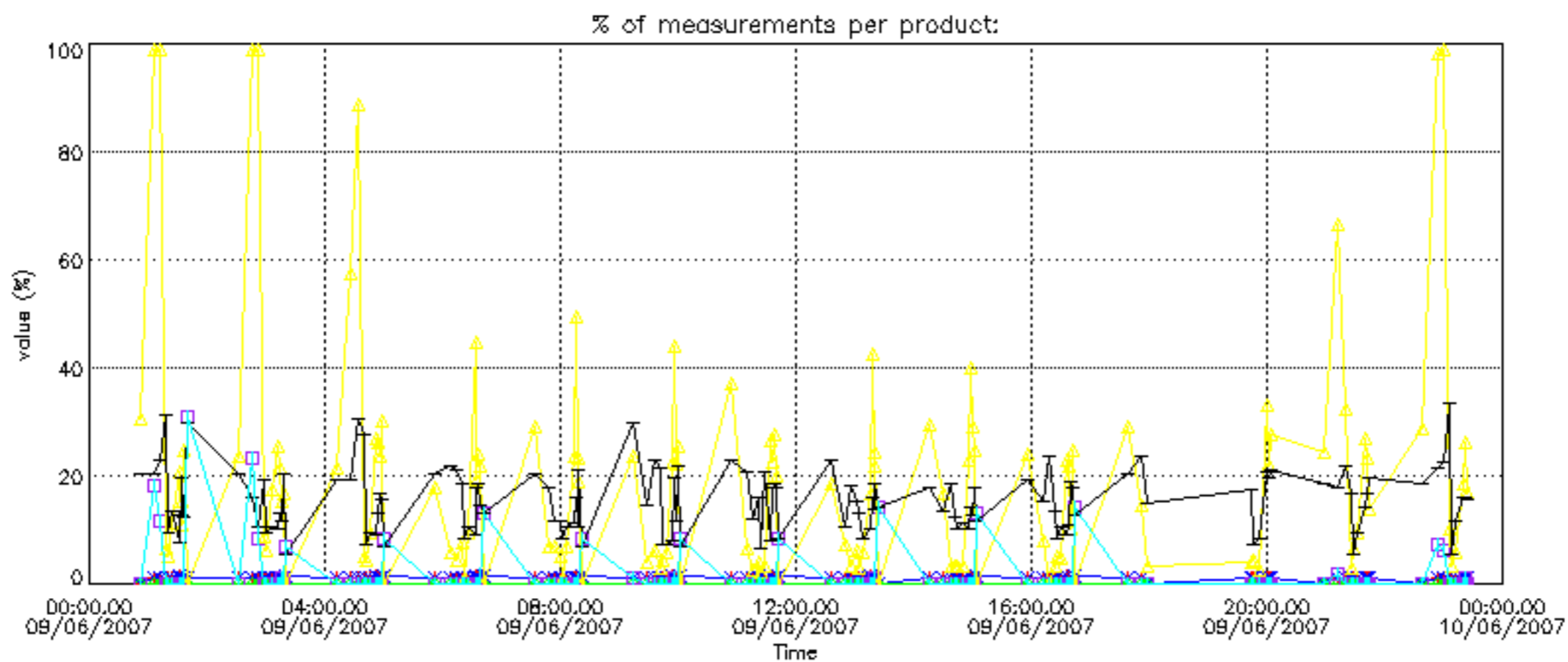


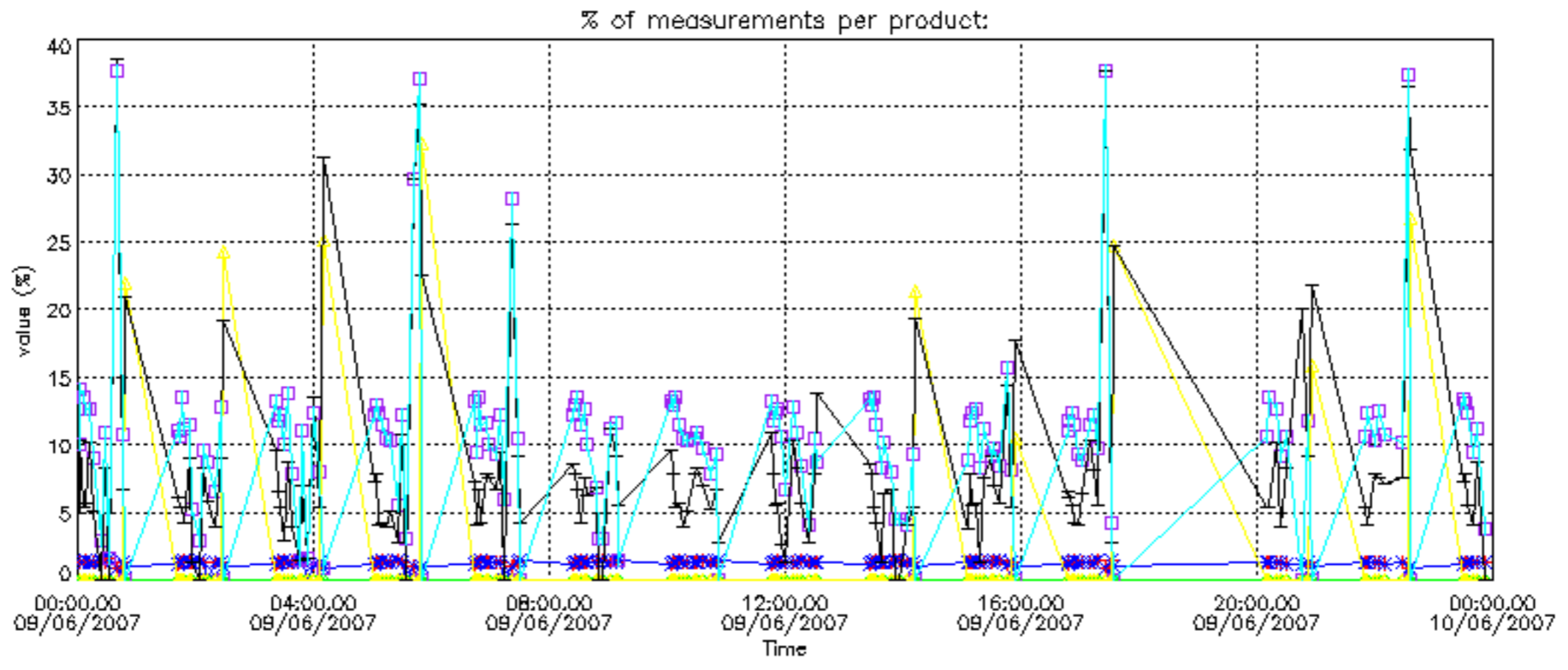
Percentage of flagged data per NO2 profile



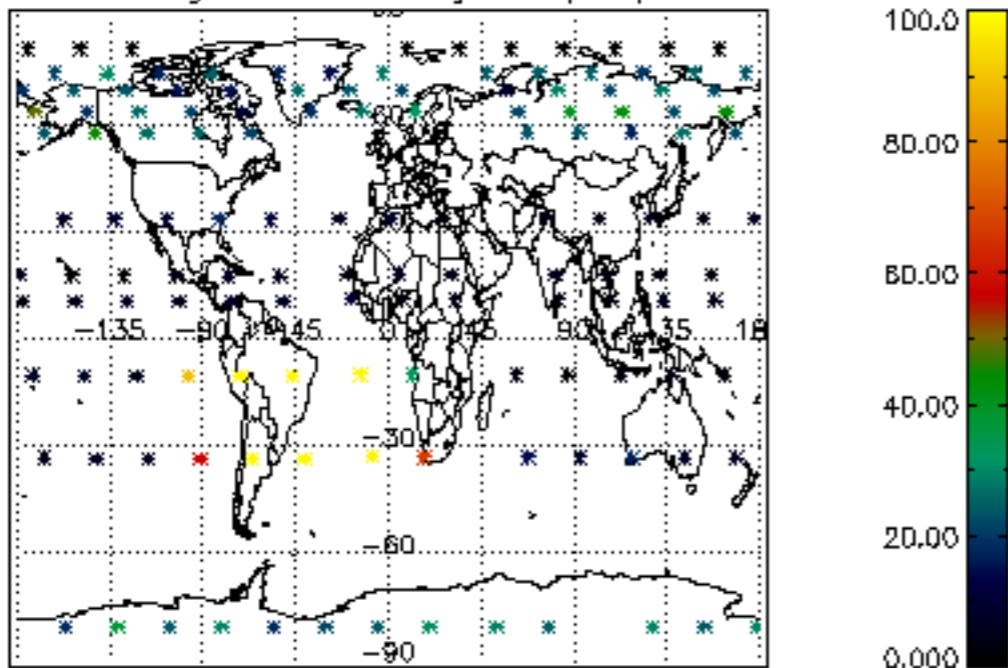
Percentage of flagged data per NO3 profile



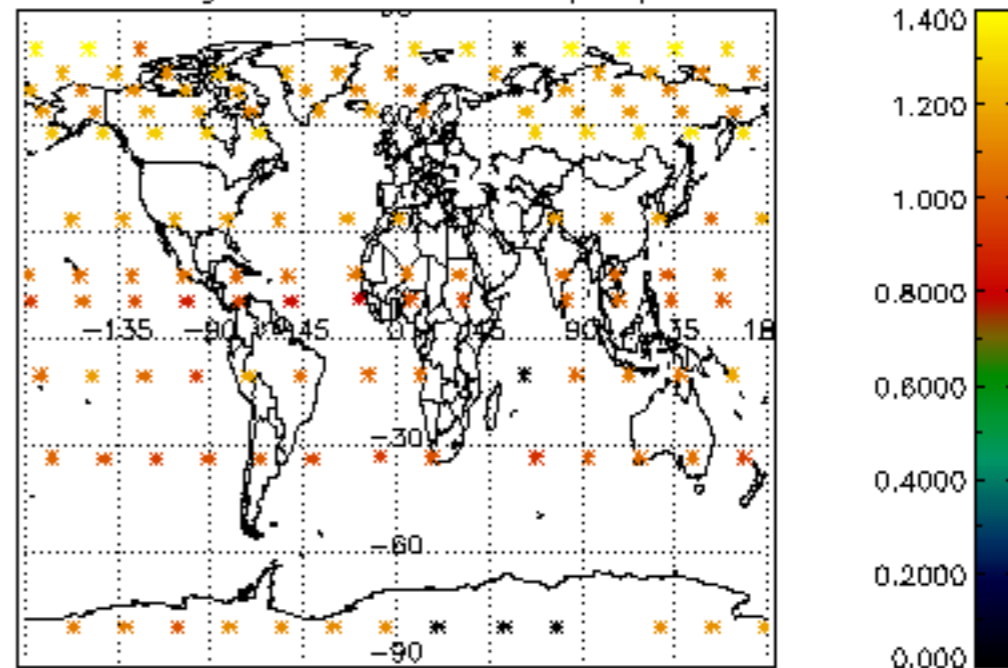




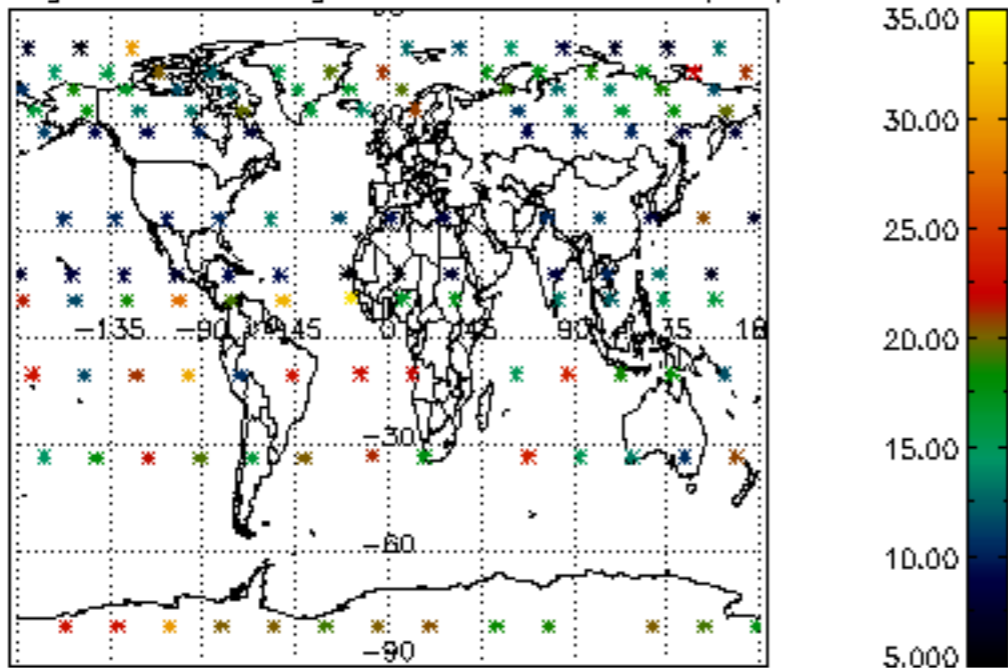
Percentage of cosmic ray hits per profile



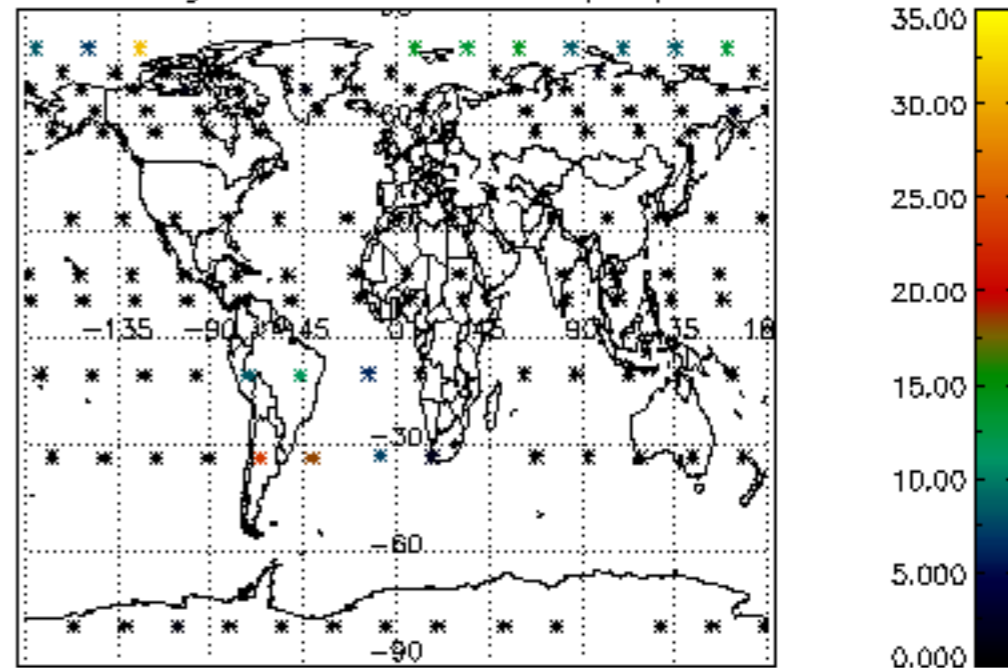
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

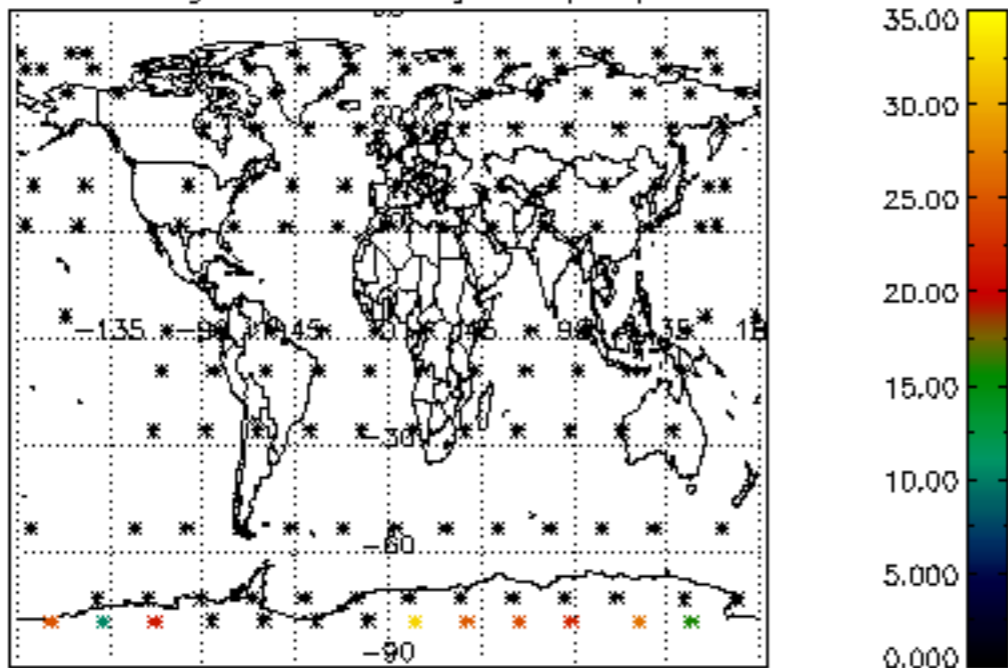


Percentage of saturation errors per profile

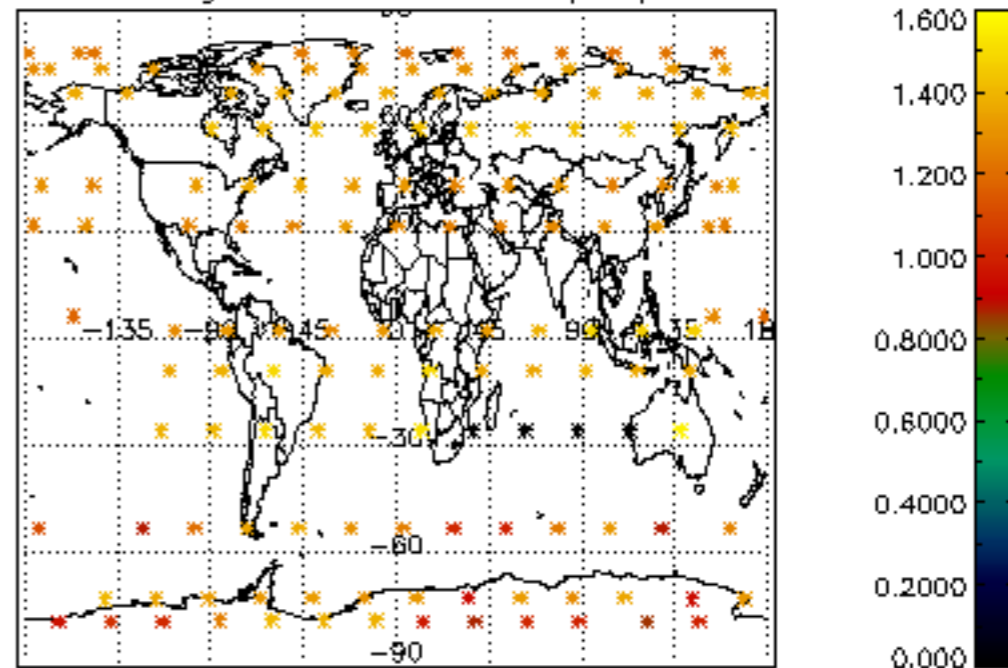




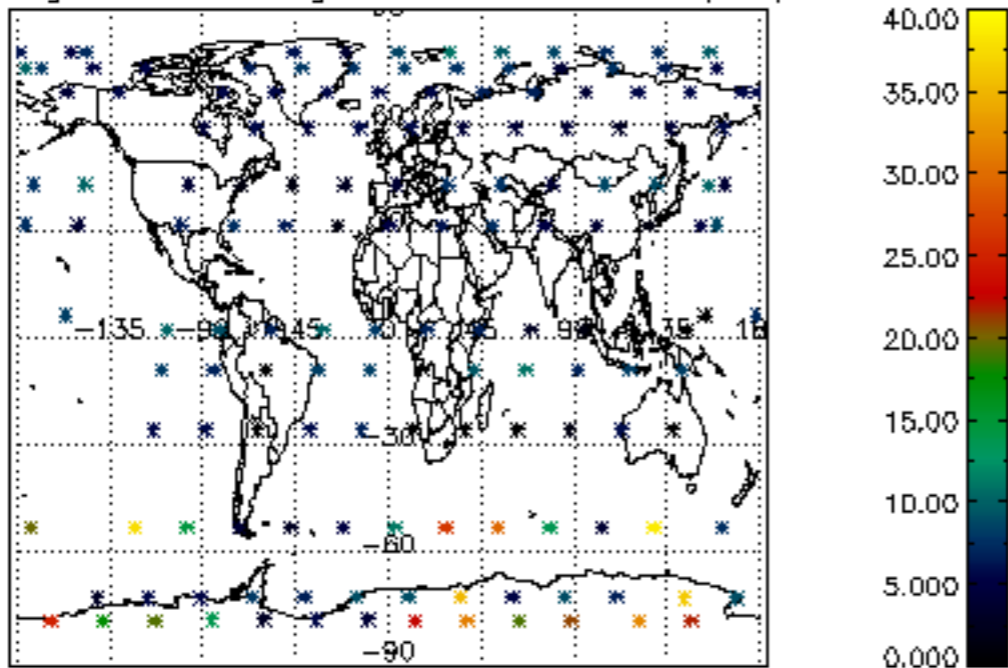
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

