

GOMOS Level 2 Daily Report

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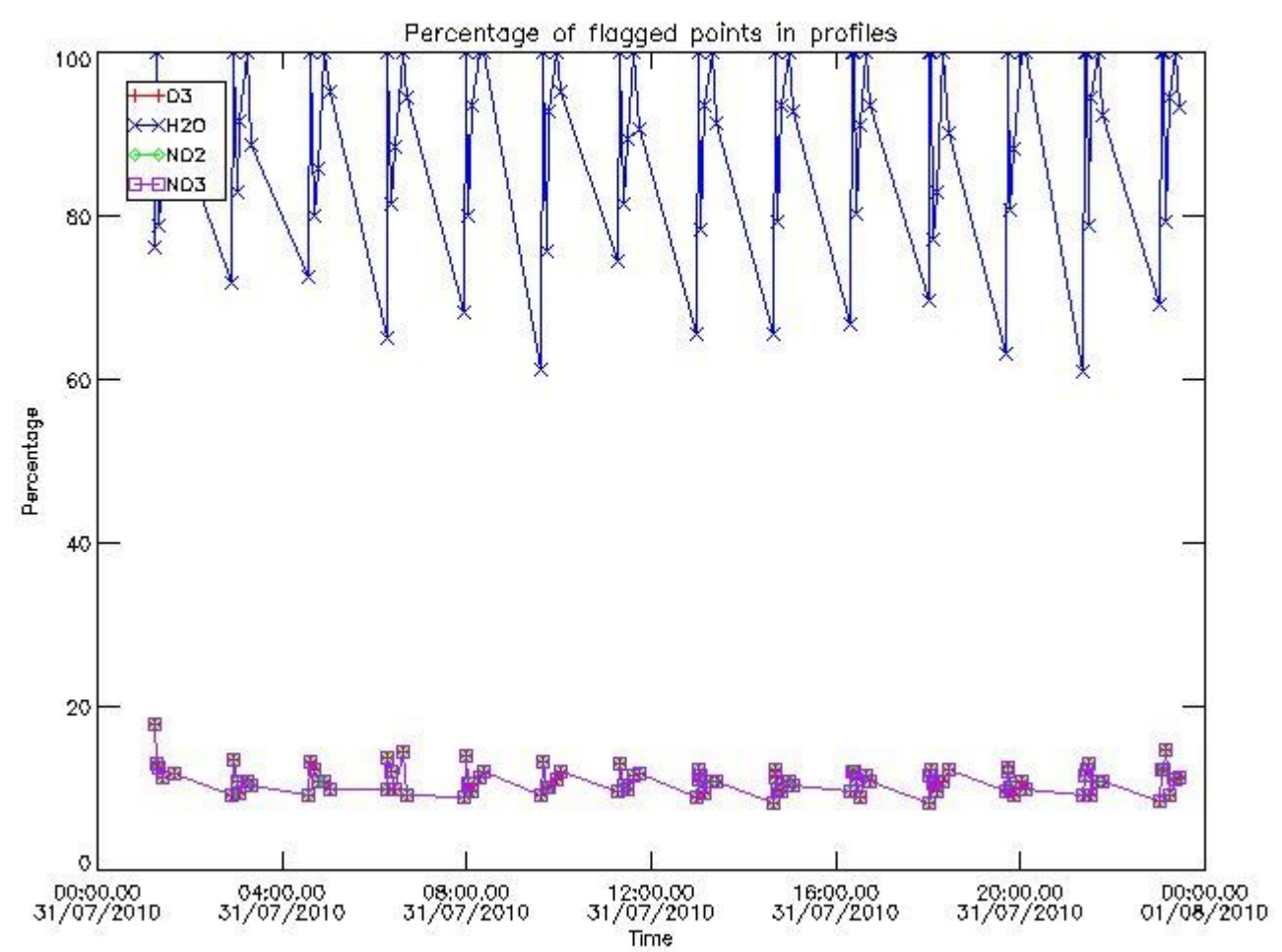
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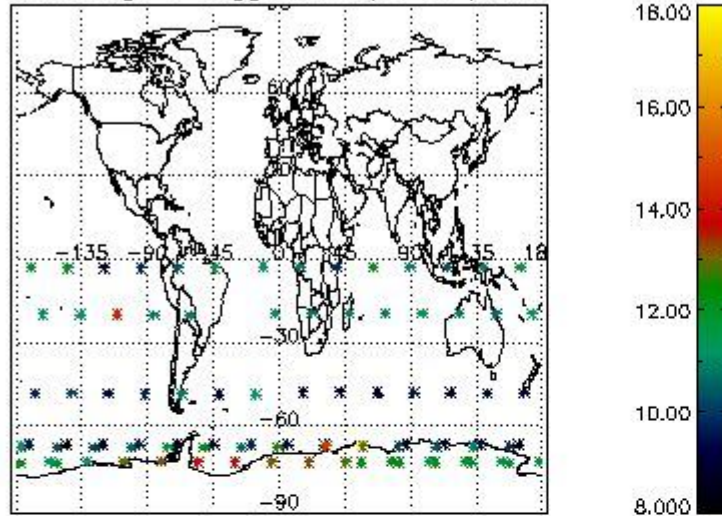
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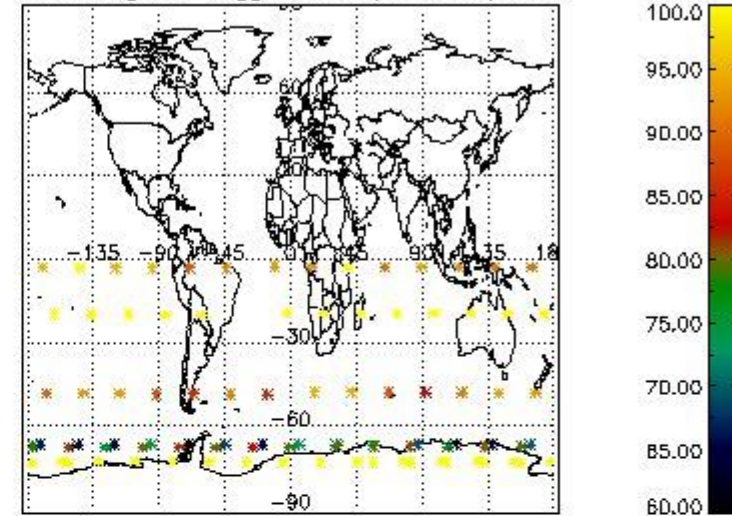


3.2 Plot quality information per product (world map)

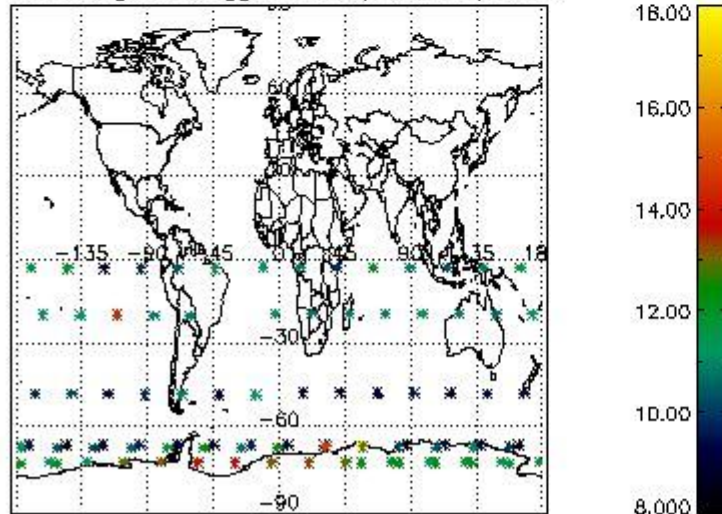
Percentage of flagged data per O3 profile



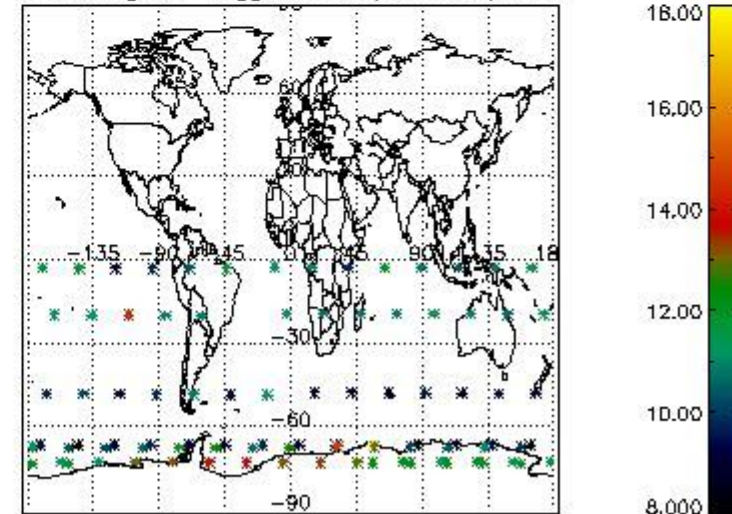
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

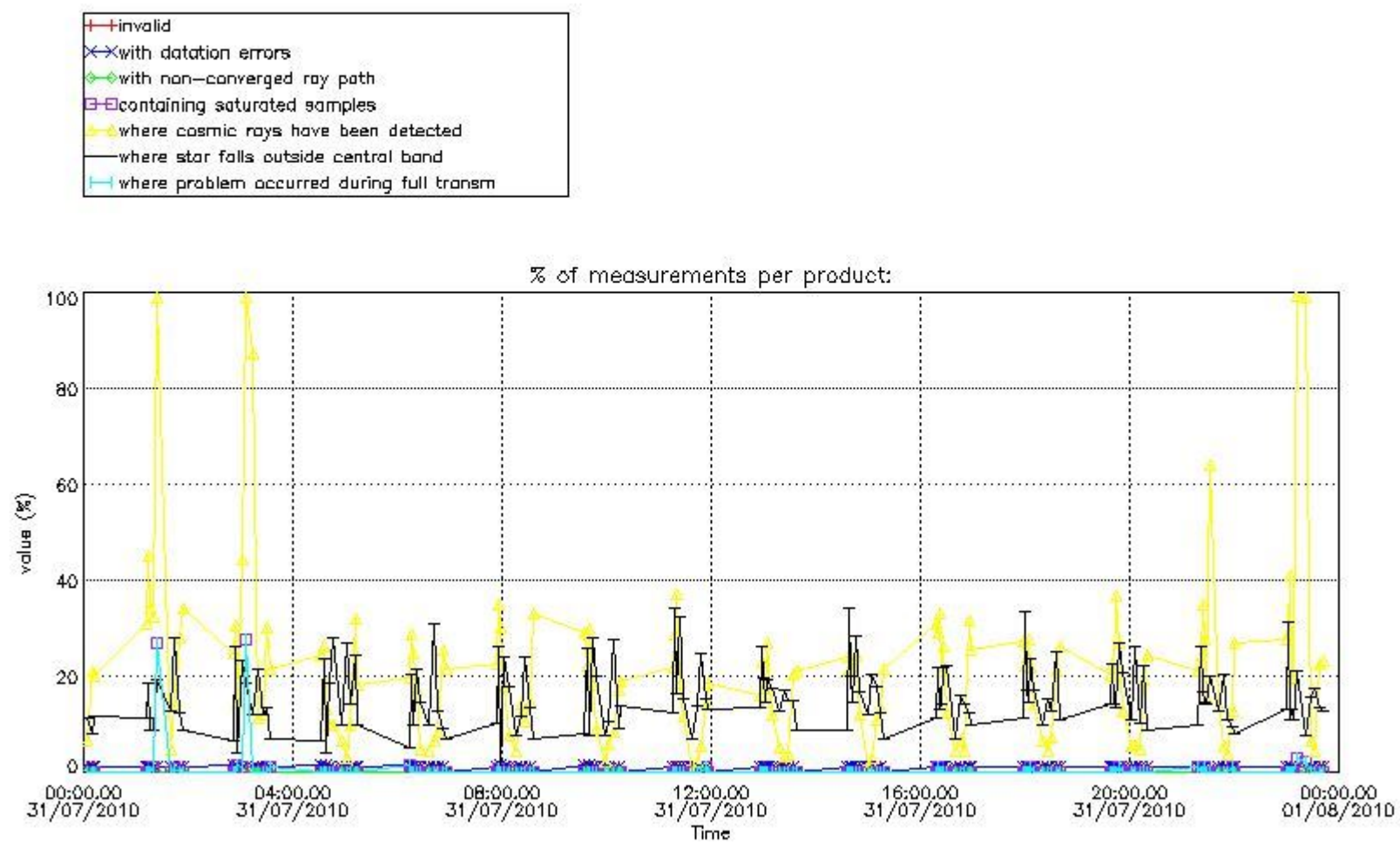


4. Level 1 quality information per product

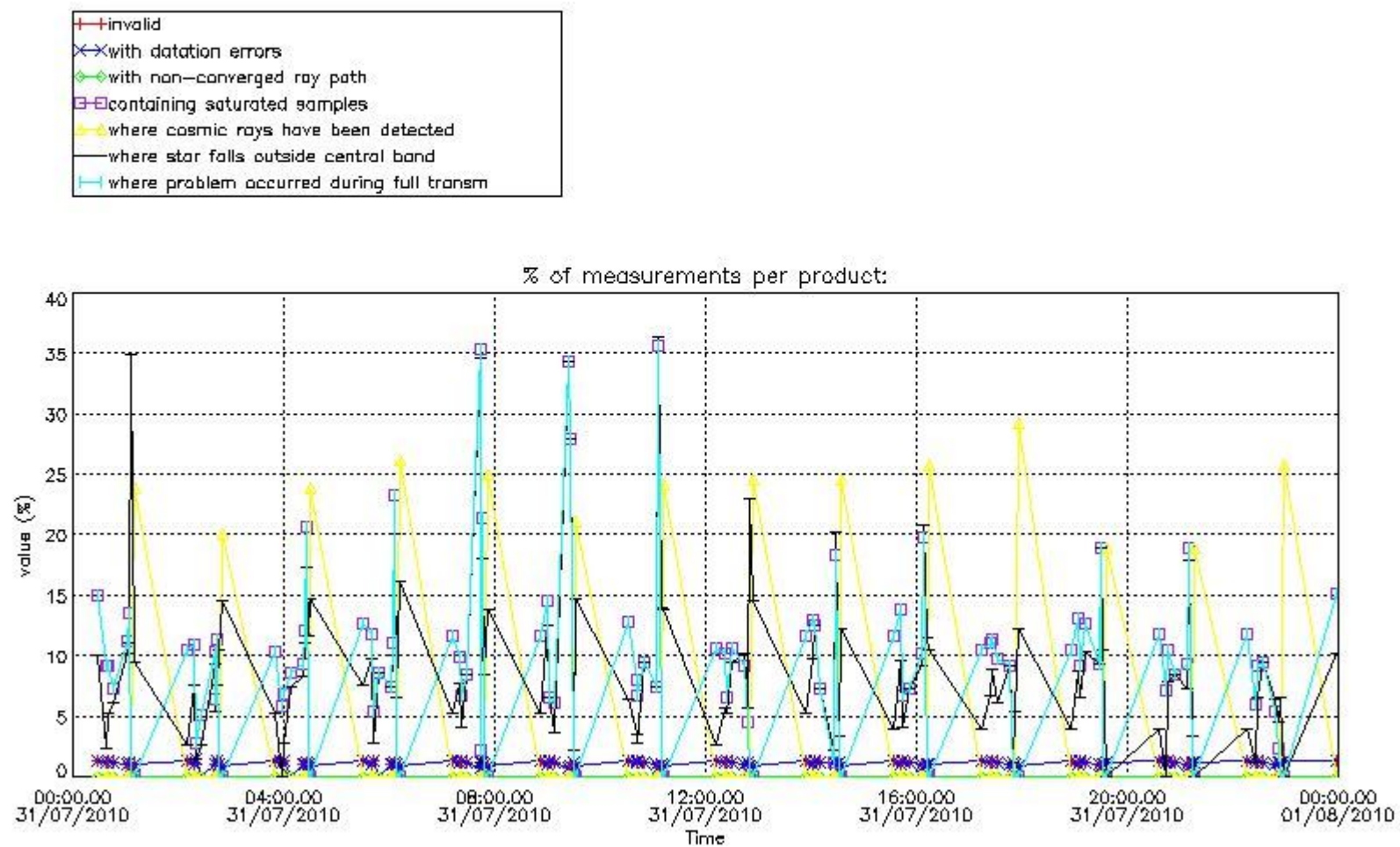
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

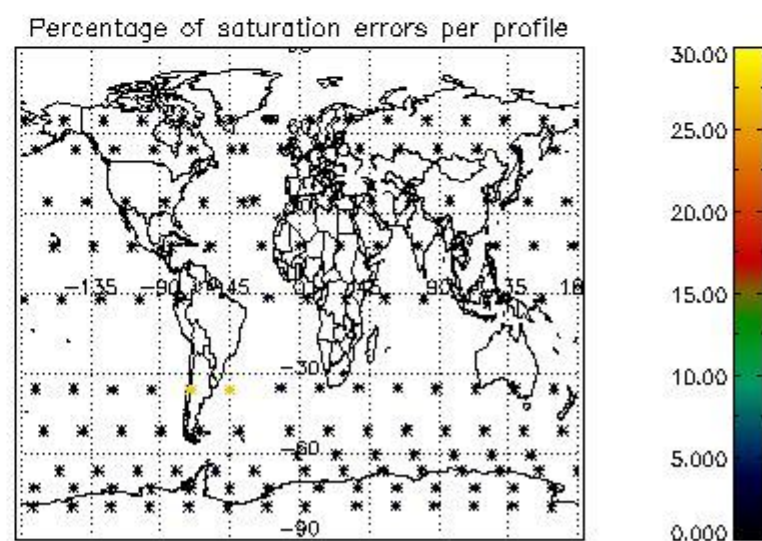
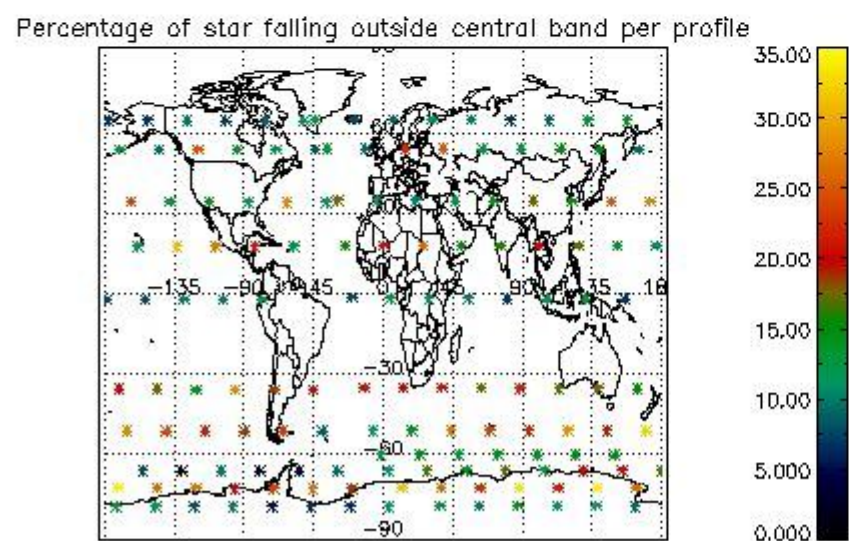
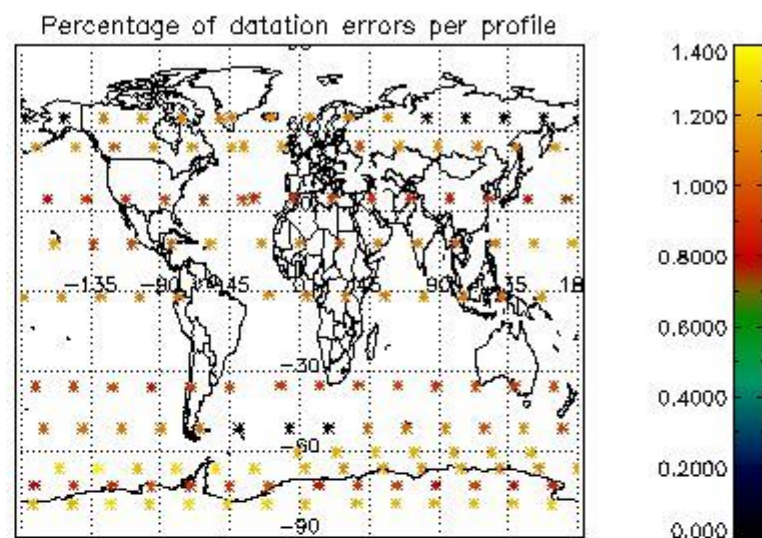
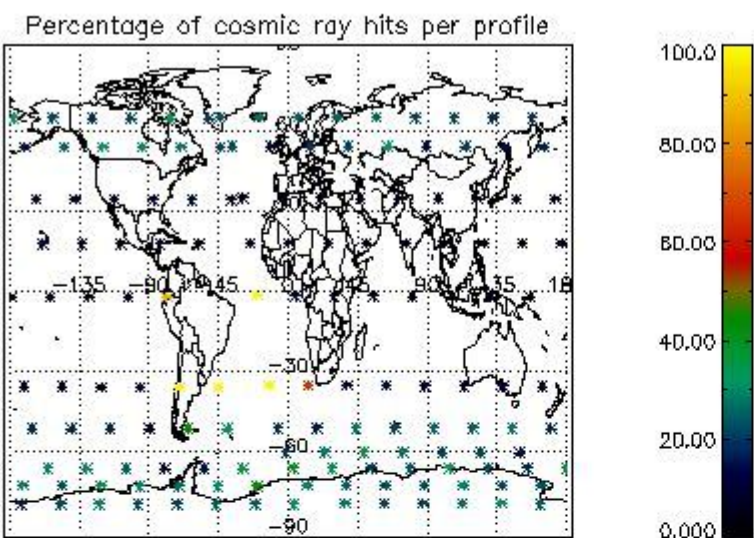


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

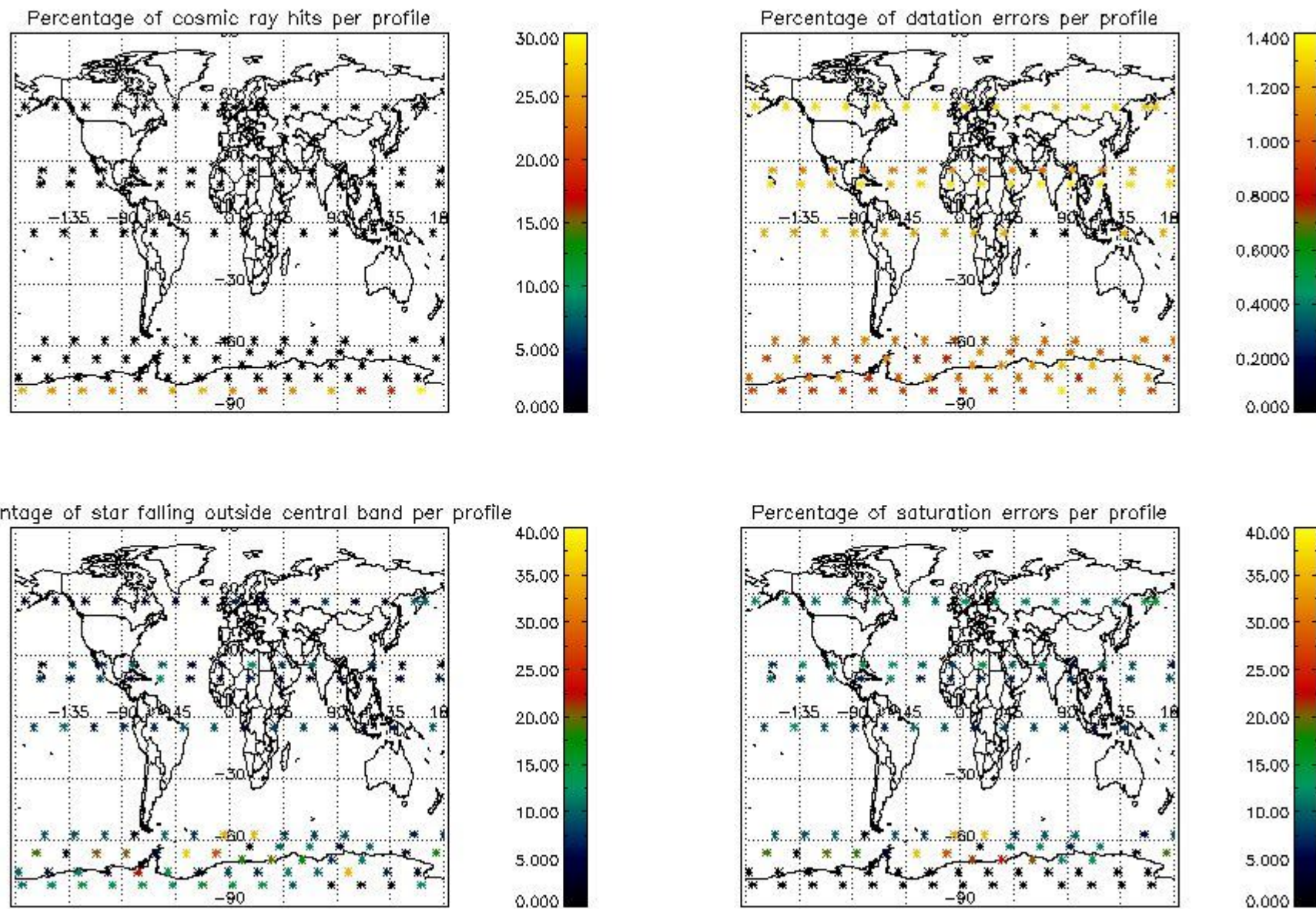


4.2 Plot quality information per product coming from level 1b processing (world map)

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

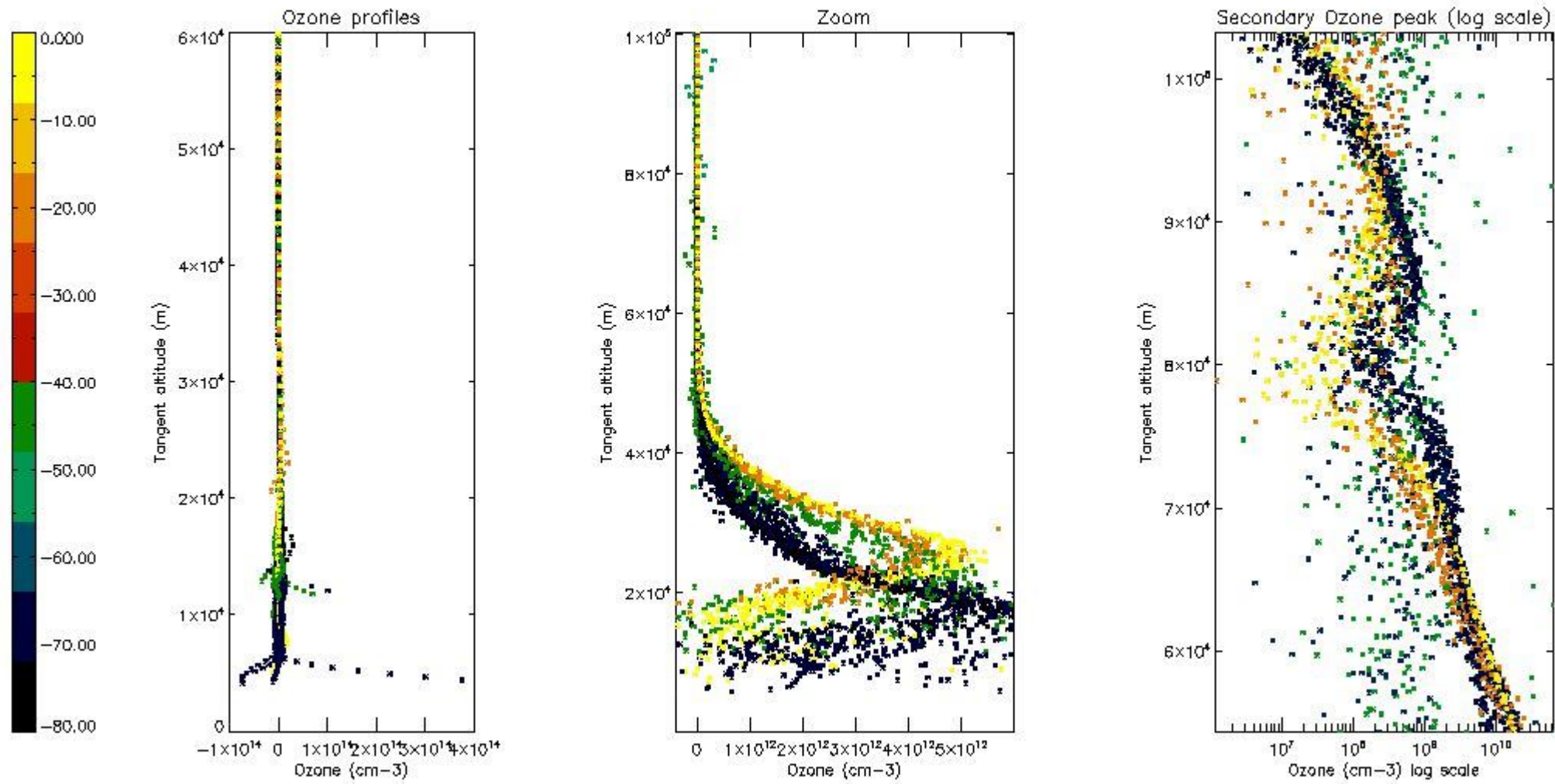
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	35
STD < 20	18

STD < 10	14
STD < 5	10

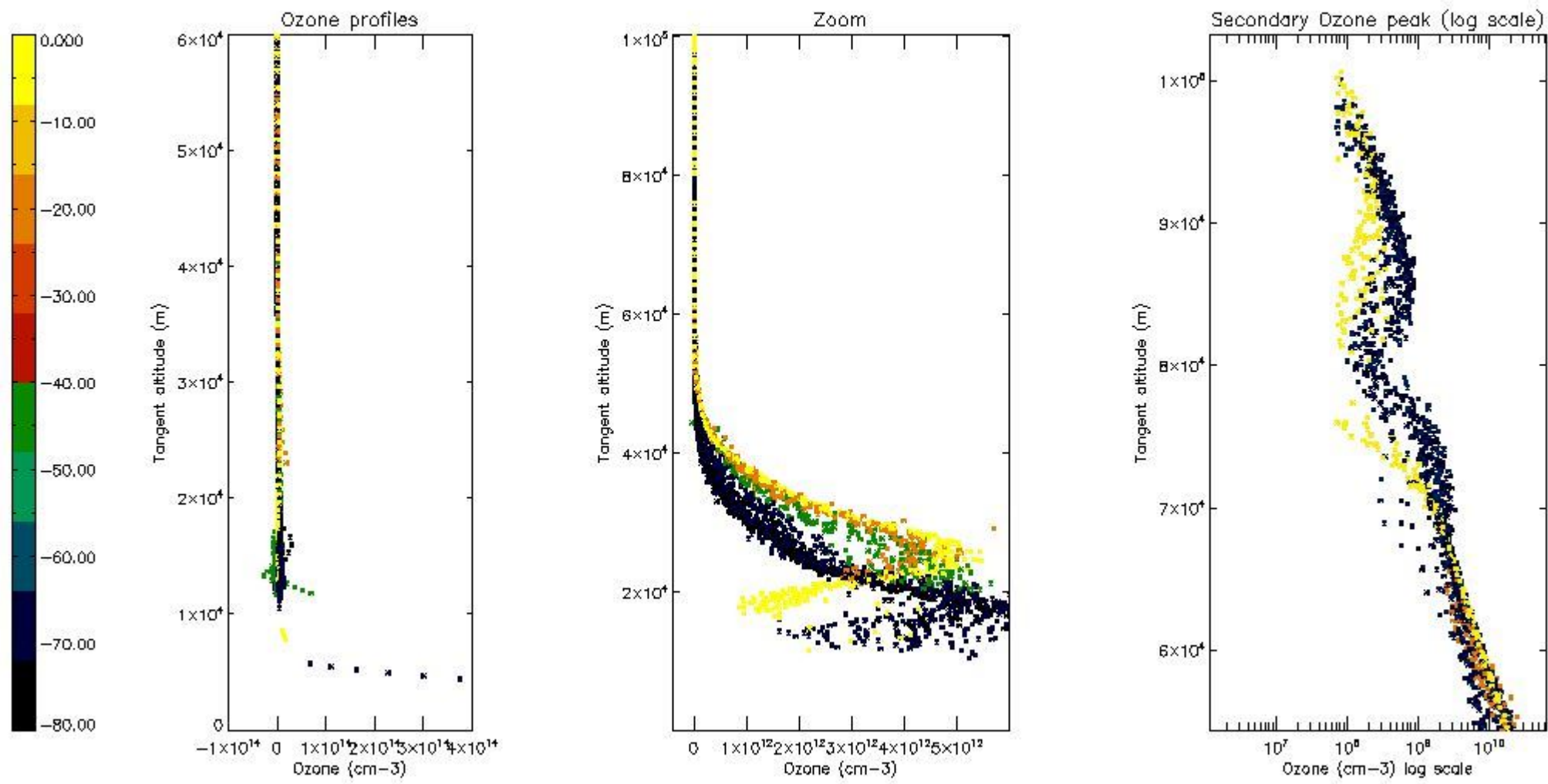
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



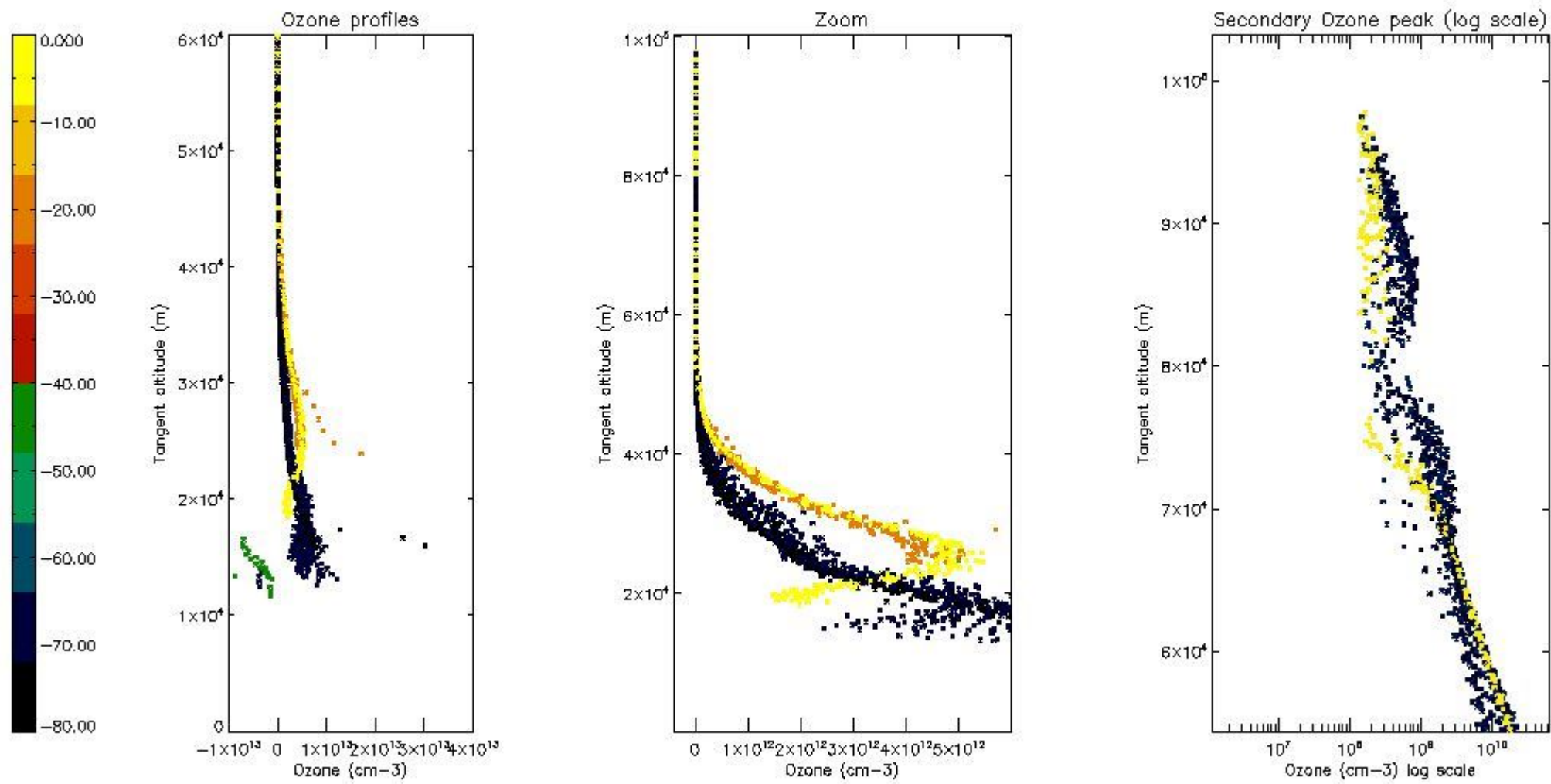
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



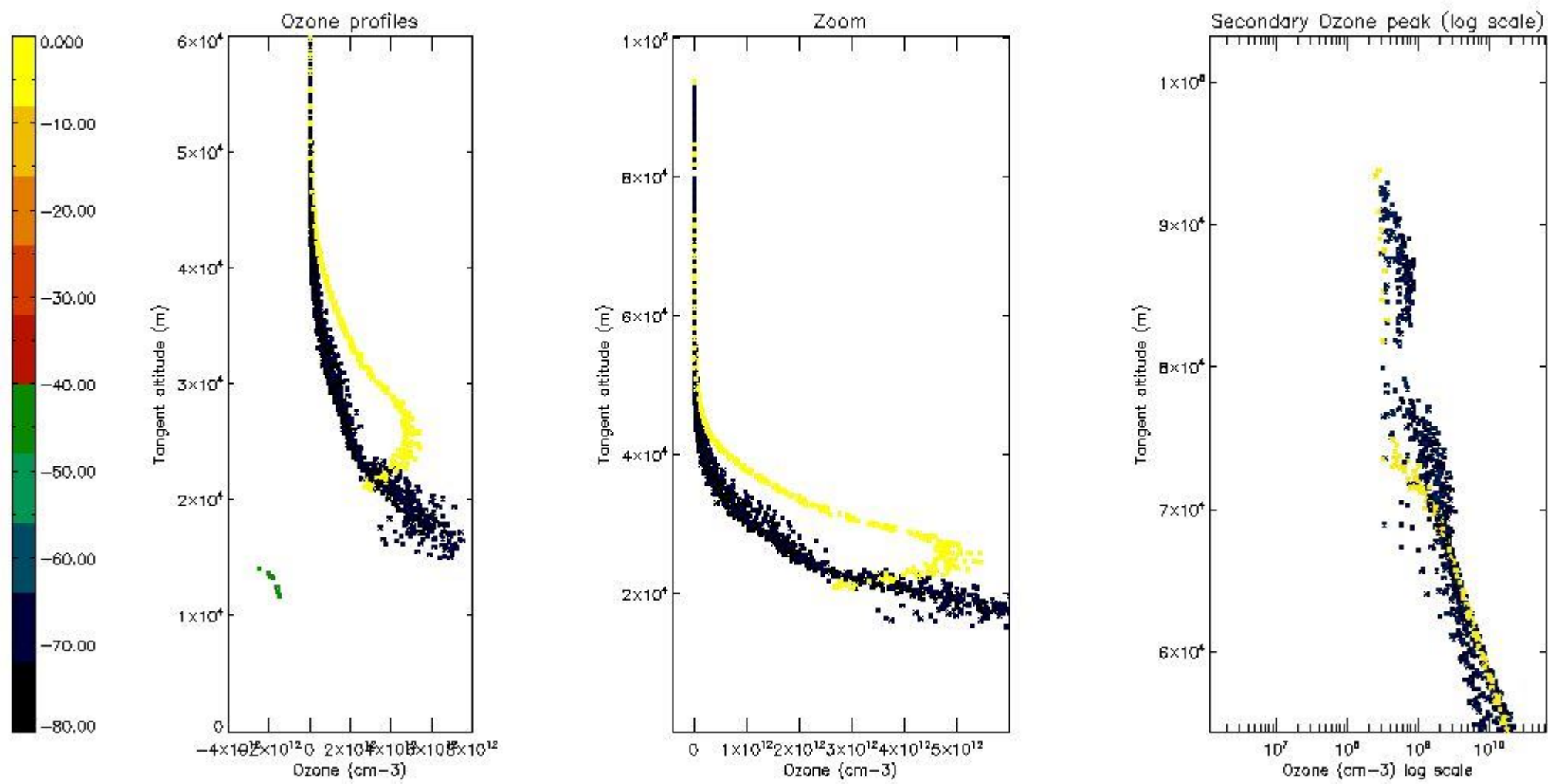
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



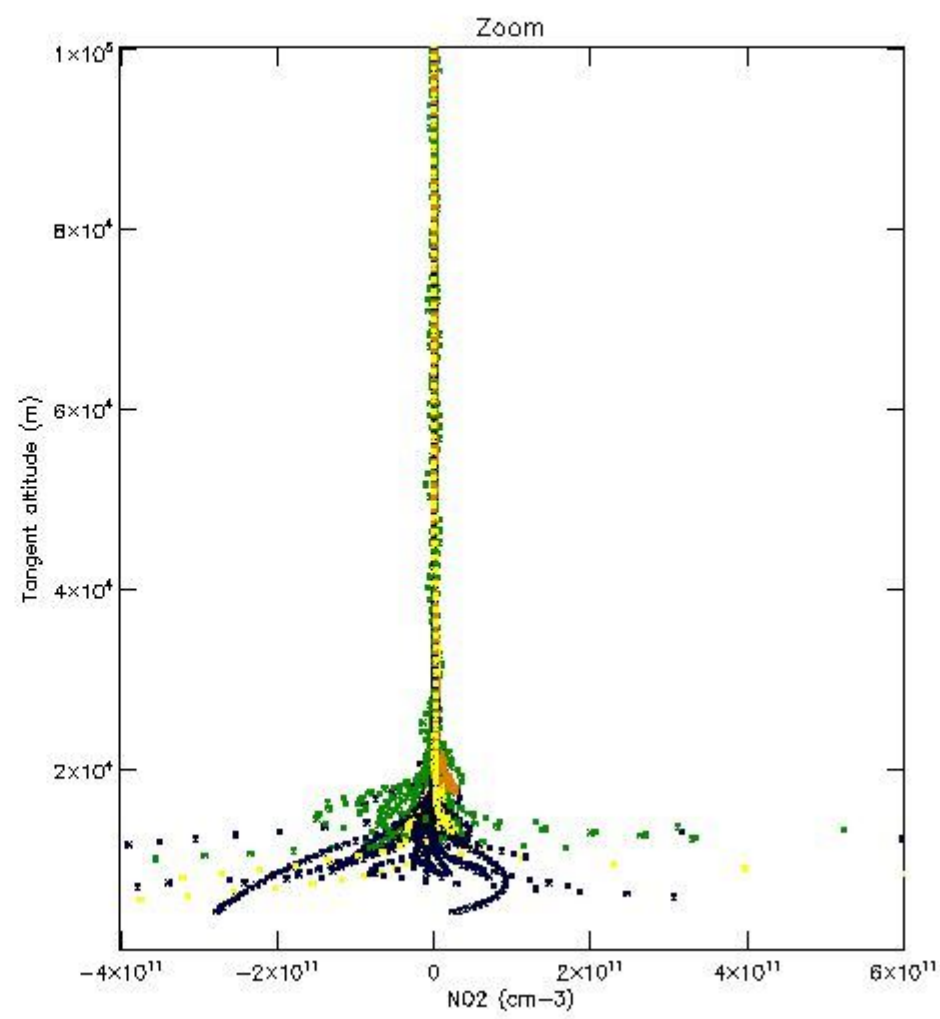
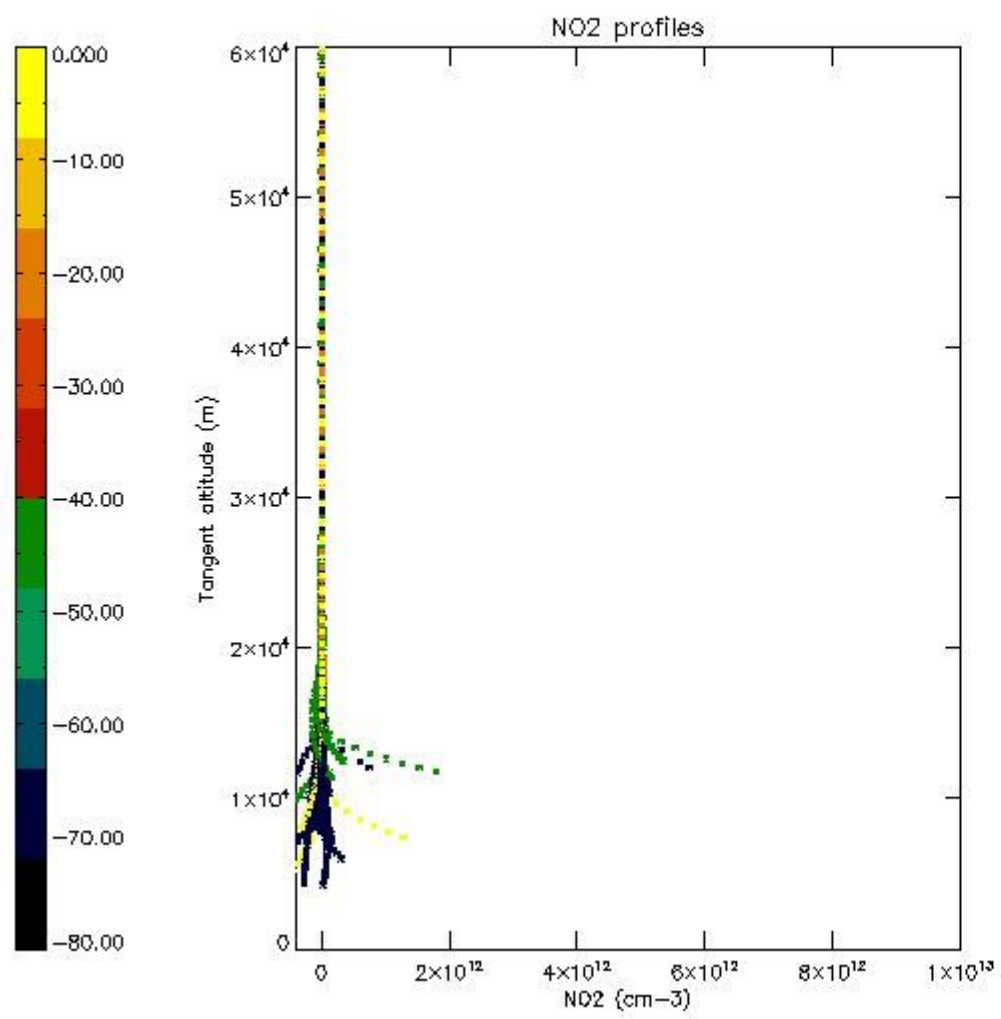
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



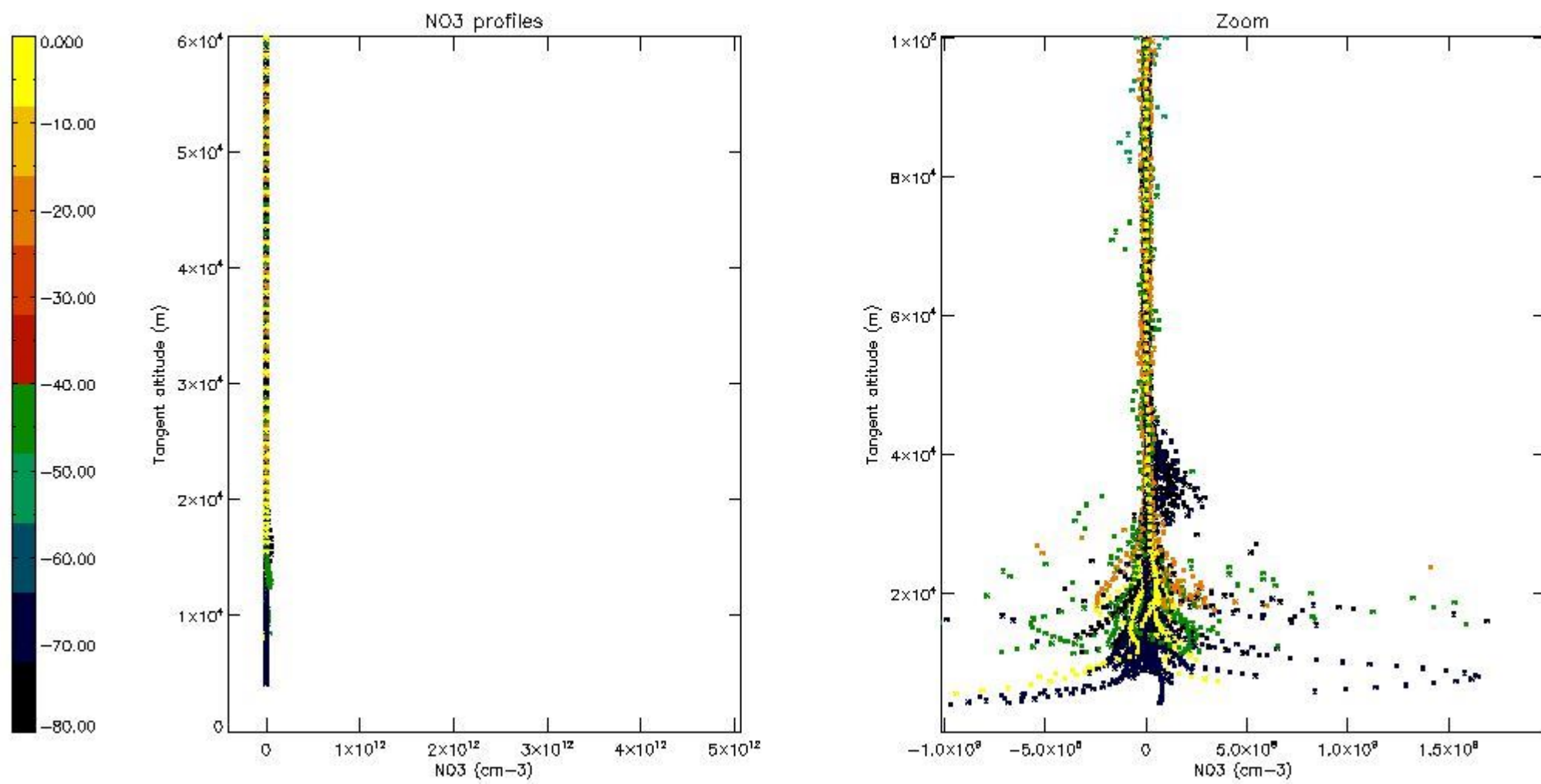
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



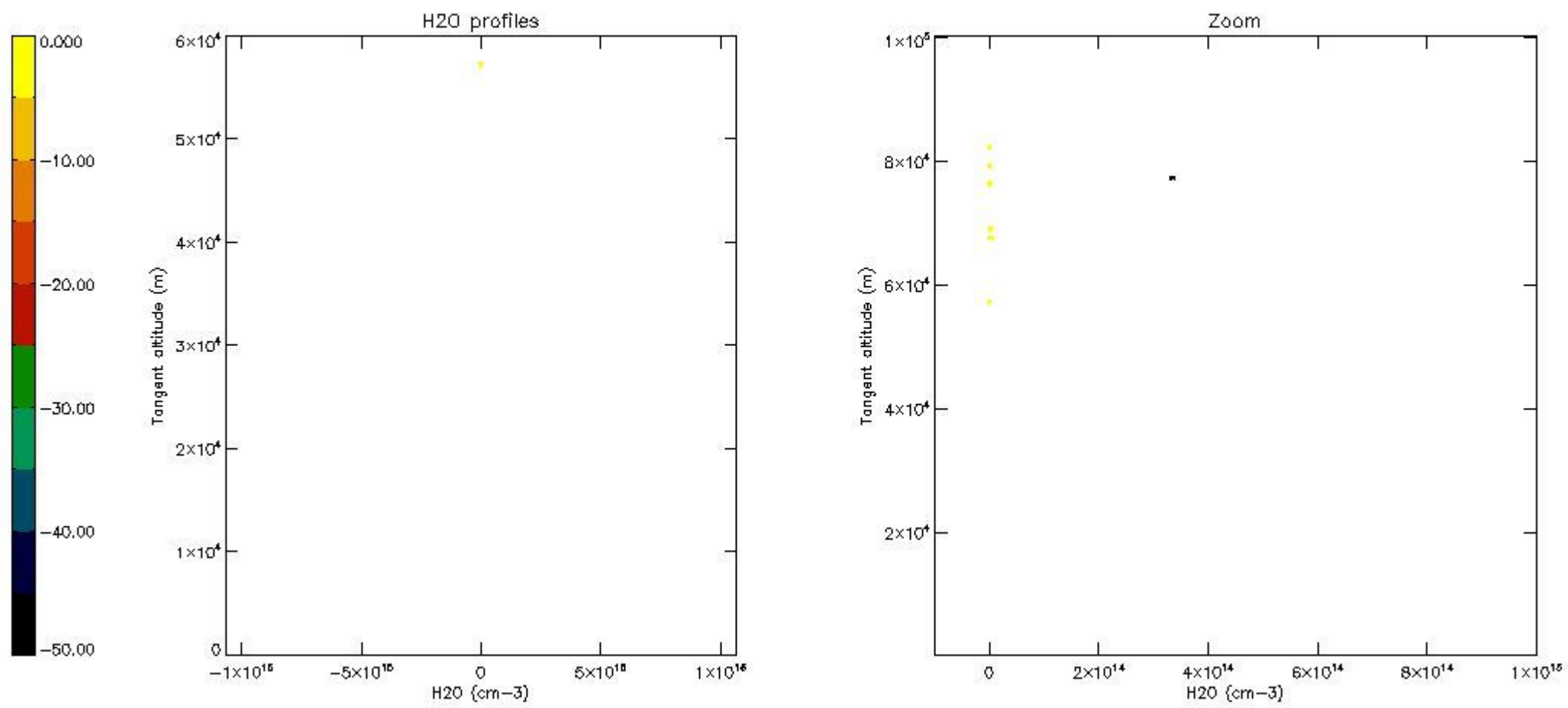
5.7 Plot NO3 profiles for all STD (dark without errors)

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	31-JUL-2010 00:03:53
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	31-JUL-2010 00:03:53
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	31-JUL-2010 00:03:53

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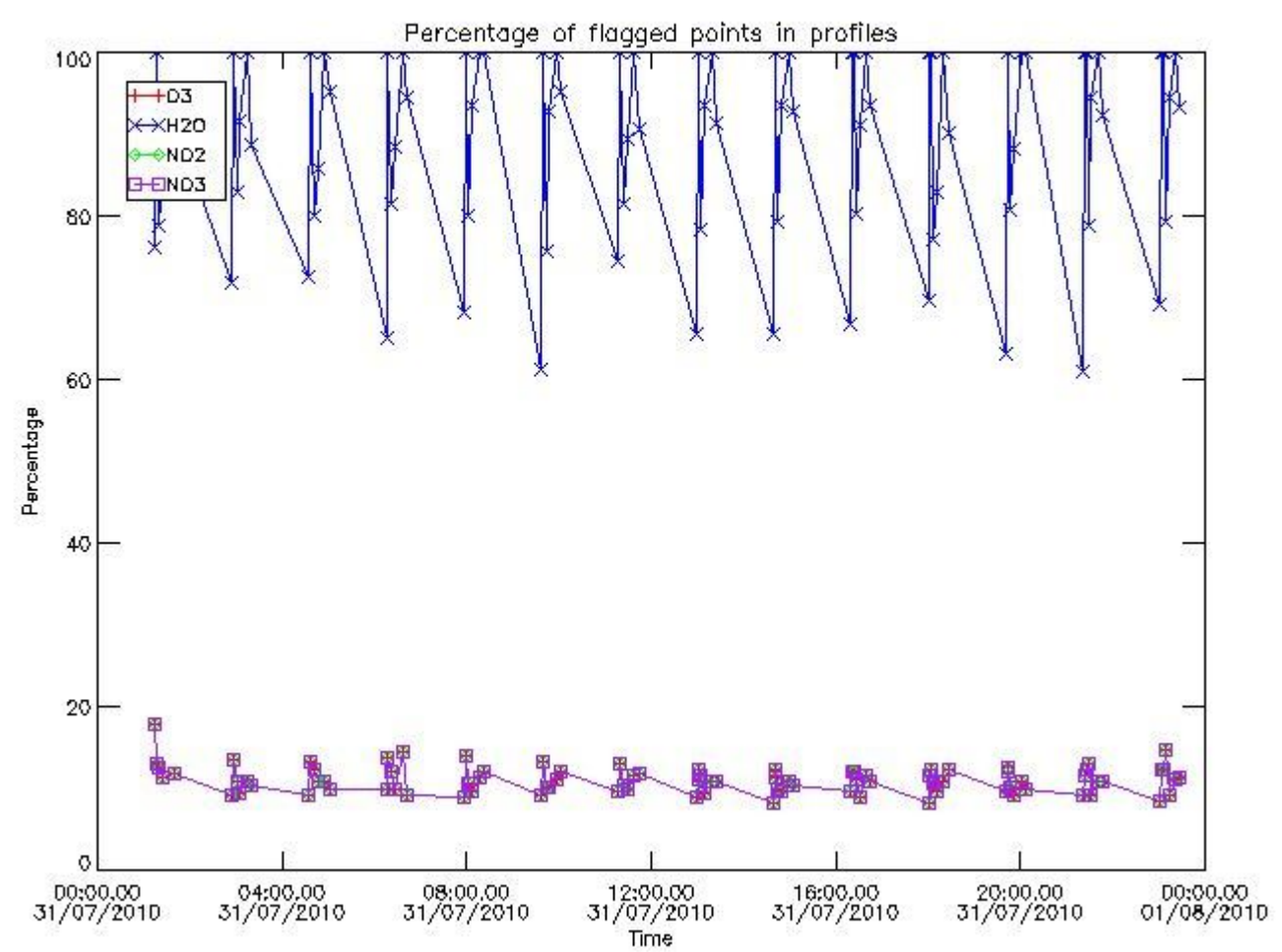
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220	GOM_NL__2PRFIN20100731_194427_000000412091_00371_44012_8877.N1	31-JUL-2010 19:44:27	Dark	41.000	72	34Del Ori	2.2500	30000.	82	44012	No
221	GOM_NL__2PRFIN20100731_194705_000000502091_00371_44012_8878.N1	31-JUL-2010 19:47:05	Dark	50.000	7	19Bet Ori	0.10000	14000.	100	44012	No
222	GOM_NL__2PRFIN20100731_195136_000000562091_00371_44012_8879.N1	31-JUL-2010 19:51:36	Dark	55.500	165	34Gam Eri	2.9500	3200.0	111	44012	No
223	GOM_NL__2PRFIN20100731_200101_000000472091_00371_44012_8880.N1	31-JUL-2010 20:01:01	Dark	46.500	157	The1Eri	2.9060	9300.0	93	44012	No
224	GOM_NL__2PRFIN20100731_200633_000000522091_00372_44013_8872.N1	31-JUL-2010 20:06:33	Dark	51.500	9	Alp Eri	0.45300	24000.	103	44013	No
225	GOM_NL__2PRFIN20100731_201117_000000542091_00372_44013_8873.N1	31-JUL-2010 20:11:17	Straylight	54.000	84	Alp Phe	2.3970	4500.0	108	44013	No
226	GOM_NL__2PRFIN20100731_201647_000000502091_00372_44013_8874.N1	31-JUL-2010 20:16:47	Straylight	49.500	31	Alp Gru	1.7340	15200.	99	44013	No
227	GOM_NL__2PRFIN20100731_201956_000000452091_00372_44013_8875.N1	31-JUL-2010 20:19:56	Straylight	45.000	172	Gam Gru	3.0030	13100.	90	44013	No
228	GOM_NL__2PRFIN20100731_203551_000000382091_00372_44013_8876.N1	31-JUL-2010 20:35:51	Bright	38.000	11	53Alp Aql	0.76500	8000.0	76	44013	No
229	GOM_NL__2PRFIN20100731_204434_000000432091_00372_44013_8877.N1	31-JUL-2010 20:44:34	Bright	42.500	92	53Eps Cyg	2.5000	4500.0	85	44013	No
230	GOM_NL__2PRFIN20100731_204627_000000382091_00372_44013_8878.N1	31-JUL-2010 20:46:27	Bright	38.000	144	18Del Cyg	2.8600	11000.	76	44013	No
231	GOM_NL__2PRFIN20100731_205305_000000422091_00372_44013_8879.N1	31-JUL-2010 20:53:05	Bright	41.500	89	5Alp Cep	2.4510	8000.0	83	44013	No
232	GOM_NL__2PRFIN20100731_210752_000000482091_00372_44013_8880.N1	31-JUL-2010 21:07:52	Bright	48.000	160	23Gam Per	2.9300	4700.0	96	44013	No
233	GOM_NL__2PRFIN20100731_211031_000000532091_00372_44013_8881.N1	31-JUL-2010 21:10:31	Bright	53.000	175	39Del Per	3.0100	19400.	106	44013	No
234	GOM_NL__2PRFIN20100731_211327_000000442091_00372_44013_8882.N1	31-JUL-2010 21:13:27	Bright	44.000	149	45Eps Per	2.8880	30000.	88	44013	No
235	GOM_NL__2PRFIN20100731_211631_000000452091_00372_44013_8883.N1	31-JUL-2010 21:16:31	Twilight	45.000	150	44Zet Per	2.8900	28000.	90	44013	No
236	GOM_NL__2PRFIN20100731_211849_000000412091_00372_44013_8884.N1	31-JUL-2010 21:18:49	Twilight	40.500	176	23Zet Tau	3.0200	22000.	81	44013	No
237	GOM_NL__2PRFIN20100731_212118_000000562091_00372_44013_8885.N1	31-JUL-2010 21:21:18	Dark	55.500	13	87Alp Tau	0.86700	3800.0	111	44013	No
238	GOM_NL__2PRFIN20100731_212318_000000452091_00372_44013_8886.N1	31-JUL-2010 21:23:18	Dark	44.500	27	24Gam Ori	1.6360	26000.	89	44013	No
239	GOM_NL__2PRFIN20100731_212504_000000422091_00372_44013_8887.N1	31-JUL-2010 21:25:04	Dark	41.500	72	34Del Ori	2.2500	30000.	83	44013	No
240	GOM_NL__2PRFIN20100731_212741_000000432091_00372_44013_8888.N1	31-JUL-2010 21:27:41	Dark	42.500	7	19Bet Ori	0.10000	14000.	85	44013	No
241	GOM_NL__2PRFIN20100731_213213_000000562091_00372_44013_8889.N1	31-JUL-2010 21:32:13	Dark	55.500	165	34Gam Eri	2.9500	3200.0	111	44013	No
242	GOM_NL__2PRFIN20100731_214138_000000472091_00372_44013_8890.N1	31-JUL-2010 21:41:38	Dark	47.000	157	The1Eri	2.9060	9300.0	94	44013	No
243	GOM_NL__2PRFIN20100731_214710_000000472091_00373_44014_8880.N1	31-JUL-2010 21:47:10	Dark	46.500	9	Alp Eri	0.45300	24000.	93	44014	No
244	GOM_NL__2PRFIN20100731_215154_000000552091_00373_44014_8881.N1	31-JUL-2010 21:51:54	Straylight	54.500	84	Alp Phe	2.3970	4500.0	109	44014	No
245	GOM_NL__2PRFIN20100731_215723_000000432091_00373_44014_8882.N1	31-JUL-2010 21:57:23	Straylight	43.000	31	Alp Gru	1.7340	15200.	86	44014	No
246	GOM_NL__2PRFIN20100731_220032_000000452091_00373_44014_8883.N1	31-JUL-2010 22:00:32	Straylight	44.500	172	Gam Gru	3.0030	13100.	89	44014	No
247	GOM_NL__2PRFIN20100731_221627_000000382091_00373_44014_8884.N1	31-JUL-2010 22:16:27	Bright	38.000	11	53Alp Aql	0.76500	8000.0	76	44014	No
248	GOM_NL__2PRFIN20100731_222509_000000422091_00373_44014_8885.N1	31-JUL-2010 22:25:09	Bright	42.000	92	53Eps Cyg	2.5000	4500.0	84	44014	No
249	GOM_NL__2PRFIN20100731_222702_000000382091_00373_44014_8886.N1	31-JUL-2010 22:27:02	Bright	38.000	144	18Del Cyg	2.8600	11000.	76	44014	No
250	GOM_NL__2PRFIN20100731_223340_000000422091_00373_44014_8887.N1	31-JUL-2010 22:33:40	Bright	42.000	89	5Alp Cep	2.4510	8000.0	84	44014	No
251	GOM_NL__2PRFIN20100731_224828_000000472091_00373_44014_8888.N1	31-JUL-2010 22:48:28	Bright	47.000	160	23Gam Per	2.9300	4700.0	94	44014	No
252	GOM_NL__2PRFIN20100731_225106_000000442091_00373_44014_8889.N1	31-JUL-2010 22:51:06	Bright	44.000	175	39Del Per	3.0100	19400.	88	44014	No
253	GOM_NL__2PRFIN20100731_225402_000000462091_00373_44014_8890.N1	31-JUL-2010 22:54:02	Bright	45.500	149	45Eps Per	2.8880	30000.	91	44014	No
254	GOM_NL__2PRFIN20100731_225707_000000372091_00373_44014_8891.N1	31-JUL-2010 22:57:07	Twilight	37.000	150	44Zet Per	2.8900	28000.	74	44014	No
255	GOM_NL__2PRFIN20100731_225925_000000422091_00373_44014_8892.N1	31-JUL-2010 22:59:25	Twilight	41.500	176	23Zet Tau	3.0200	22000.	83	44014	No
256	GOM_NL__2PRFIN20100731_230154_000000612091_00373_44014_8893.N1	31-JUL-2010 23:01:54	Dark	60.500	13	87Alp Tau	0.86700	3800.0	121	44014	No
257	GOM_NL__2PRFIN20100731_230354_000000422091_00373_44014_8894.N1	31-JUL-2010 23:03:54	Dark	41.500	27	24Gam Ori	1.6360	26000.	83	44014	No
258	GOM_NL__2PRFIN20100731_230540_000000422091_00373_44014_8895.N1	31-JUL-2010 23:05:40	Dark	41.500	72	34Del Ori	2.2500	30000.	83	44014	No
259	GOM_NL__2PRFIN20100731_230817_000000412091_00373_44014_8896.N1	31-JUL-2010 23:08:17	Dark	41.000	7	19Bet Ori	0.10000	14000.	82	44014	No
260	GOM_NL__2PRFIN20100731_231250_000000552091_00373_44014_8897.N1	31-JUL-2010 23:12:50	Dark	55.000	165	34Gam Eri	2.9500	3200.0	110	44014	No
261	GOM_NL__2PRFIN20100731_232214_000000462091_00373_44014_8898.N1	31-JUL-2010 23:22:14	Dark	45.500	157	The1Eri	2.9060	9300.0	91	44014	No
262	GOM_NL__2PRFIN20100731_232746_000000452091_00374_44015_8888.N1	31-JUL-2010 23:27:46	Dark	45.000	9	Alp Eri	0.45300	24000.	90	44015	No
263	GOM_NL__2PRFIN20100731_233231_000000572091_00374_44015_8889.N1	31-JUL-2010 23:32:31	Straylight	57.000	84	Alp Phe	2.3970	4500.0	114	44015	No
264	GOM_NL__2PRFIN20100731_233800_000000452091_00374_44015_8890.N1	31-JUL-2010 23:38:00	Straylight	44.500	31	Alp Gru	1.7340	15200.	89	44015	No
265	GOM_NL__2PRFIN20100731_234108_000000472091_00374_44015_8891.N1	31-JUL-2010 23:41:08	Straylight	47.000	172	Gam Gru	3.0030	13100.	94	44015	No
266	GOM_NL__2PRFIN20100731_235702_000000402091_00374_44015_8892.N1	31-JUL-2010 23:57:02	Bright	39.500	11	53Alp Aql	0.76500	8000.0	79	44015	No

3. Quality information per product

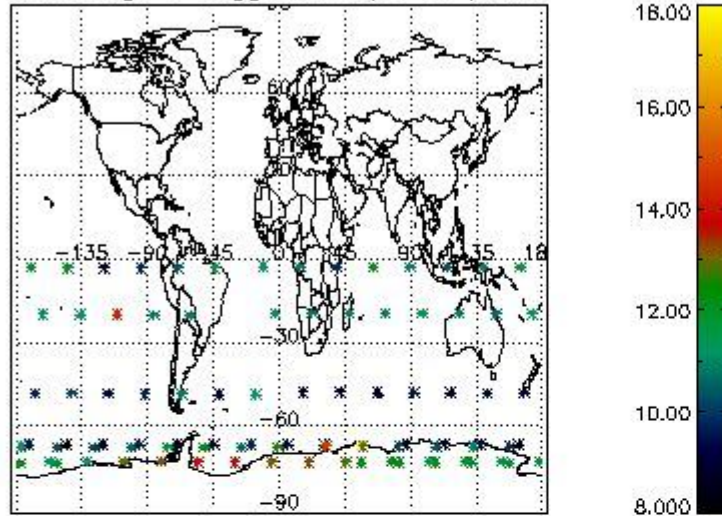
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

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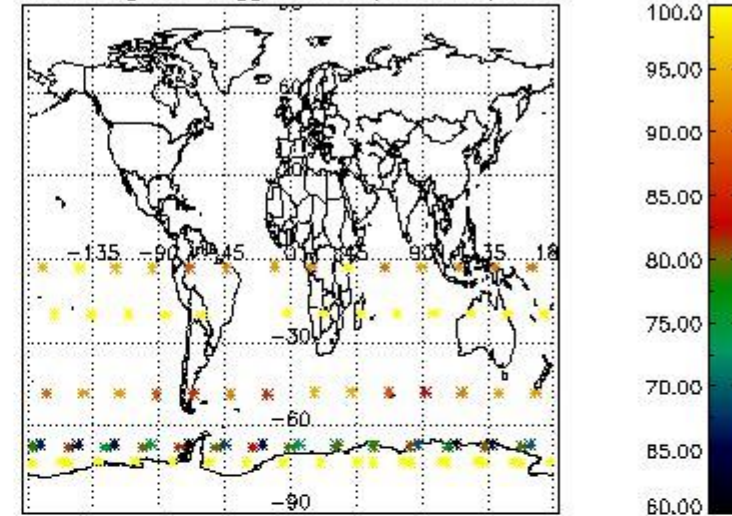


3.2 Plot quality information per product (world map)

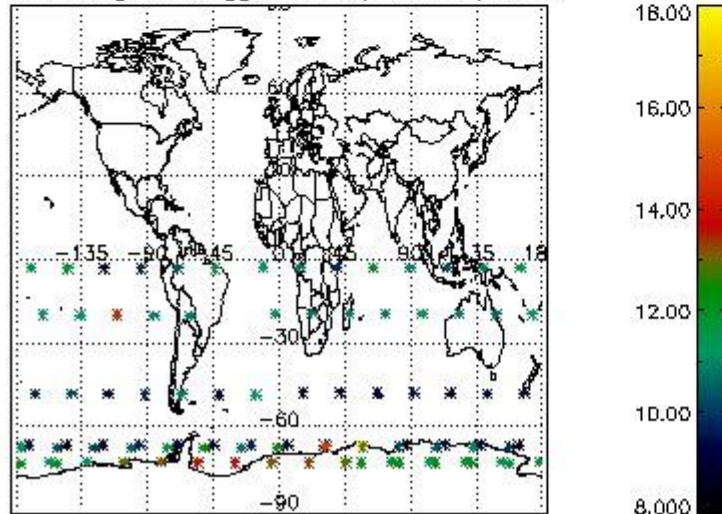
Percentage of flagged data per O3 profile



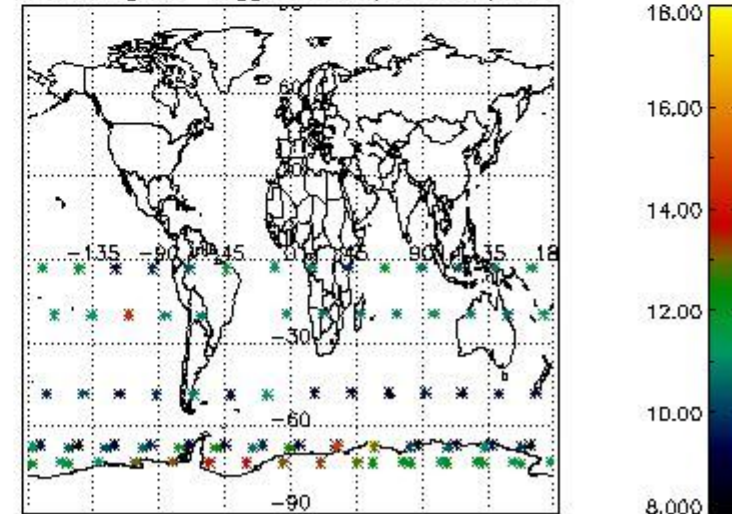
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

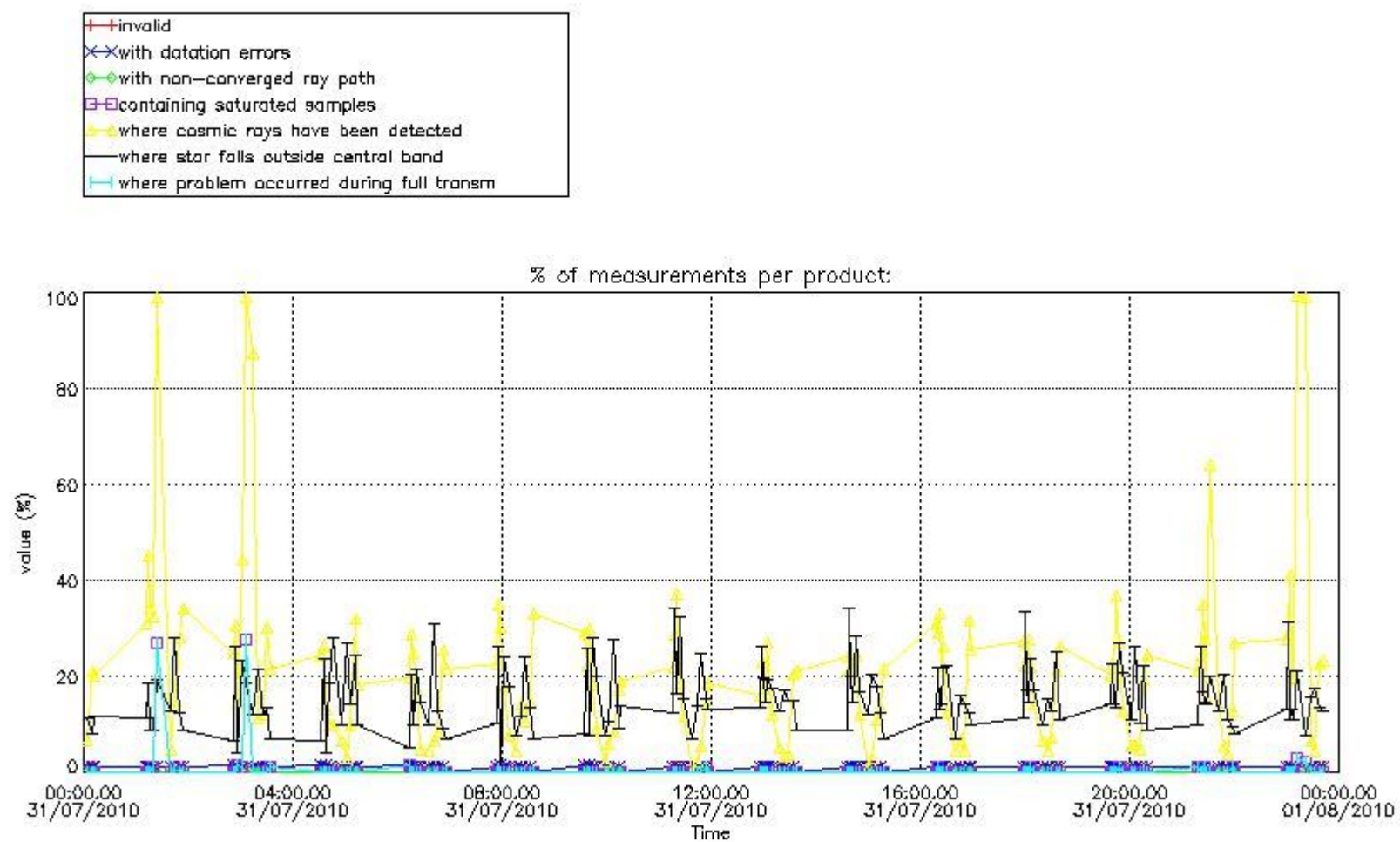


4. Level 1 quality information per product

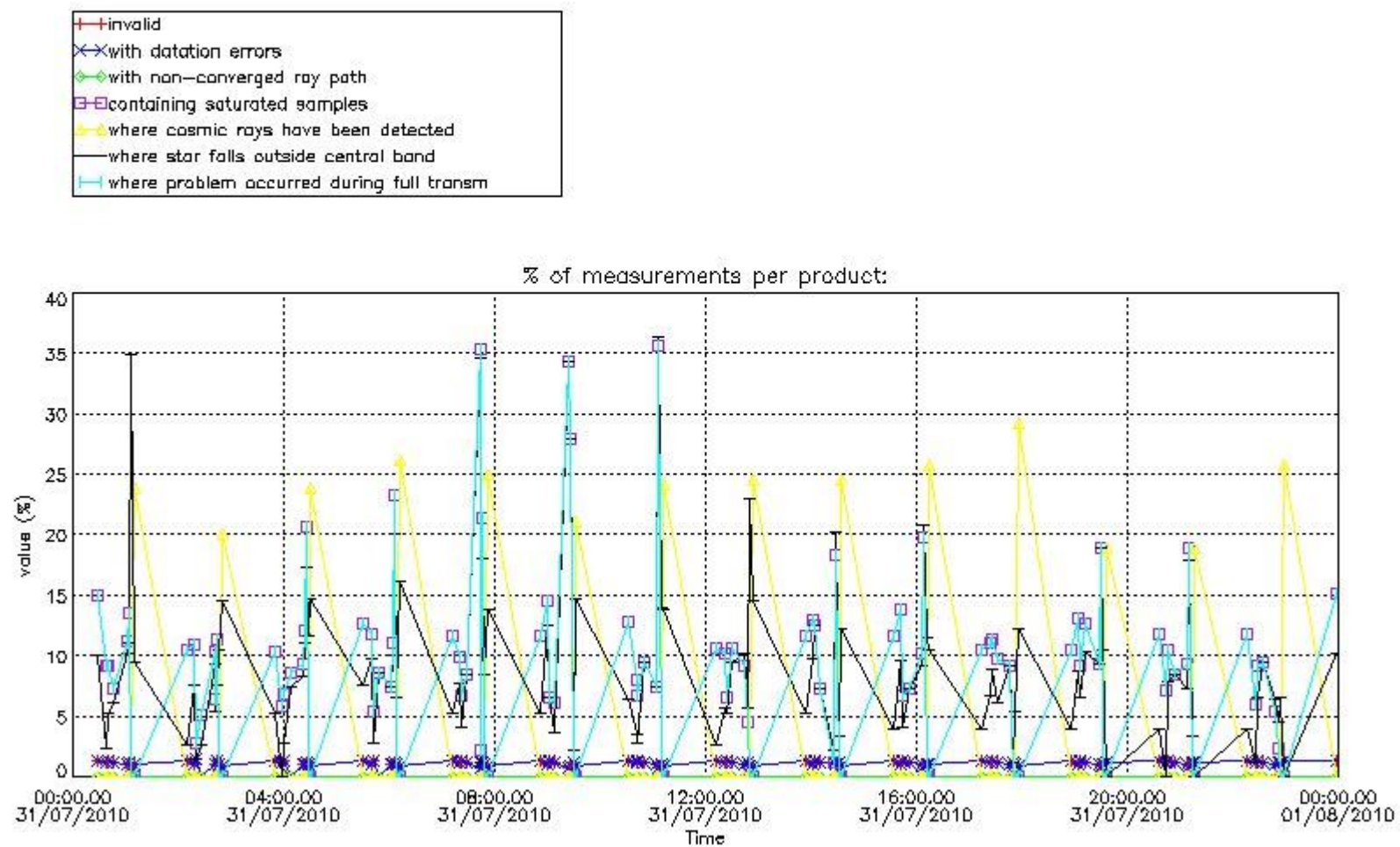
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

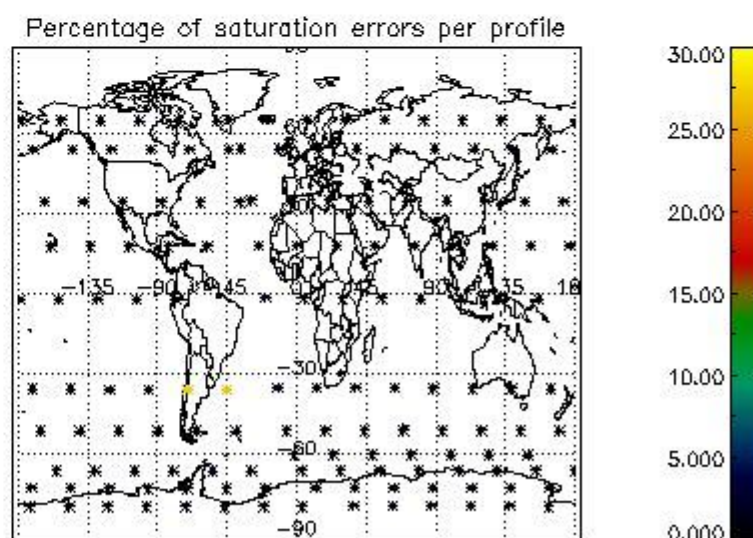
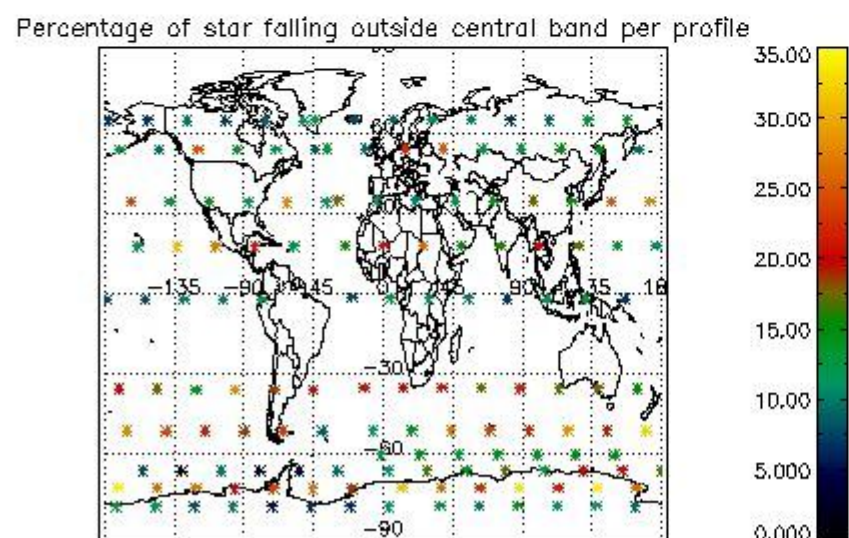
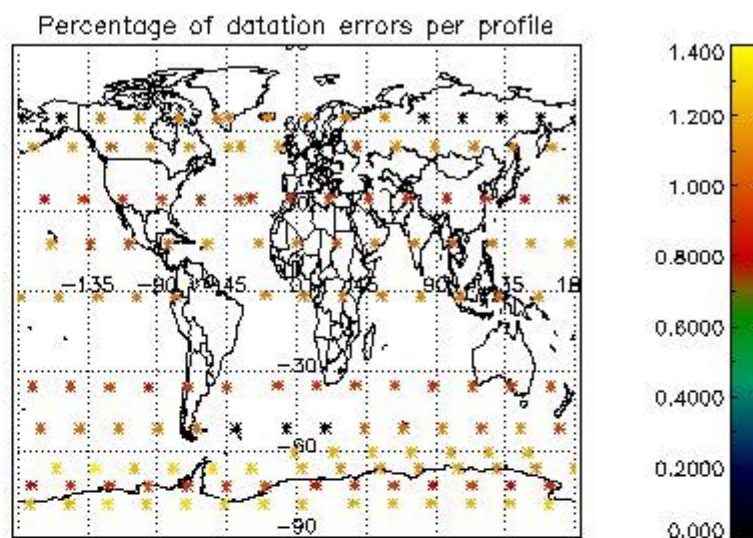
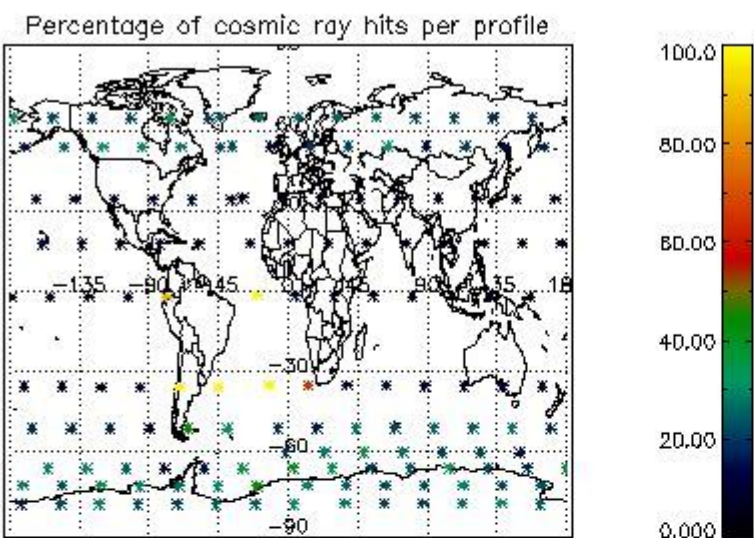


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

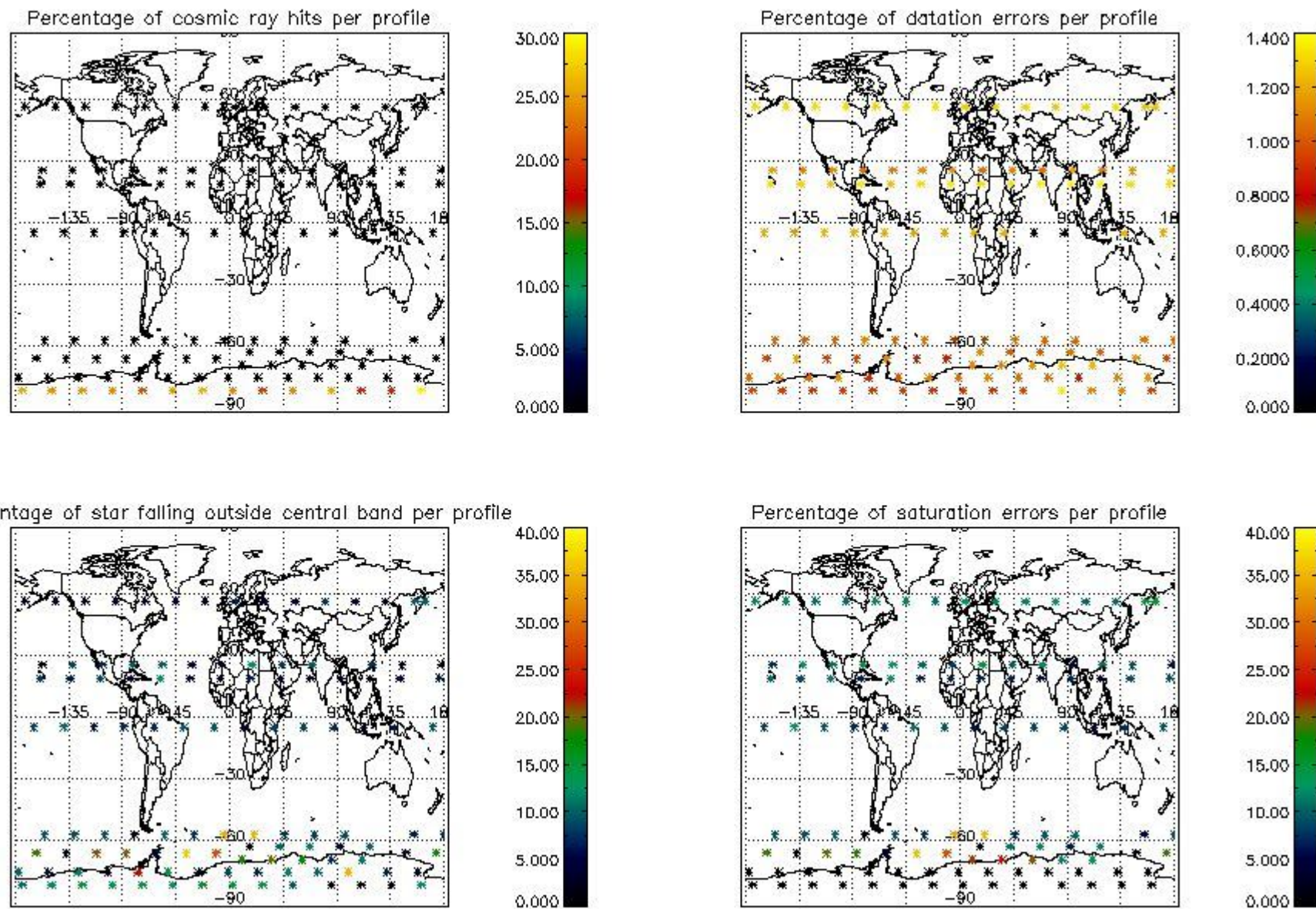


4.2 Plot quality information per product coming from level 1b processing (world map)

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

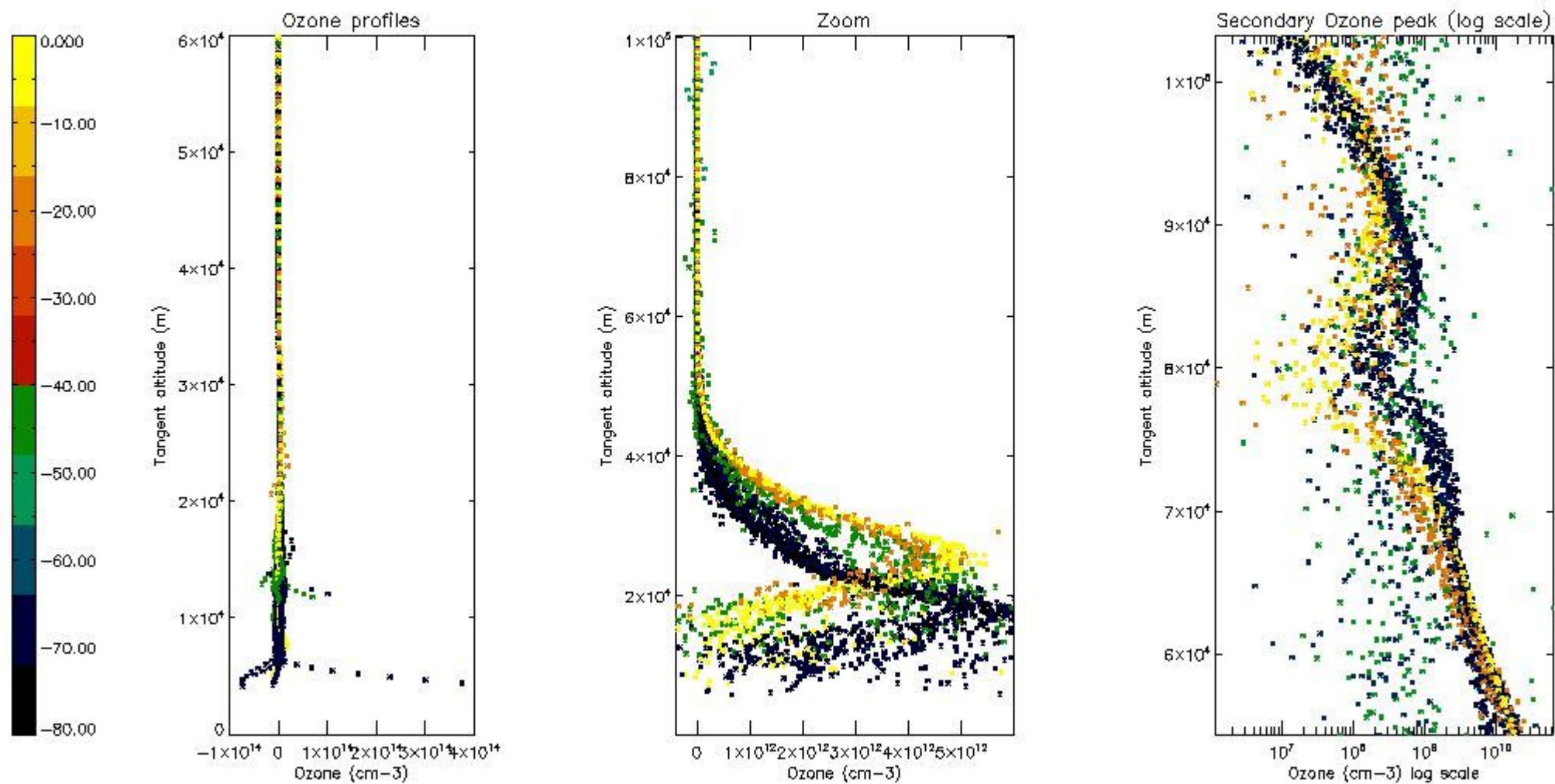
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	35
STD < 20	18

STD < 10	14
STD < 5	10

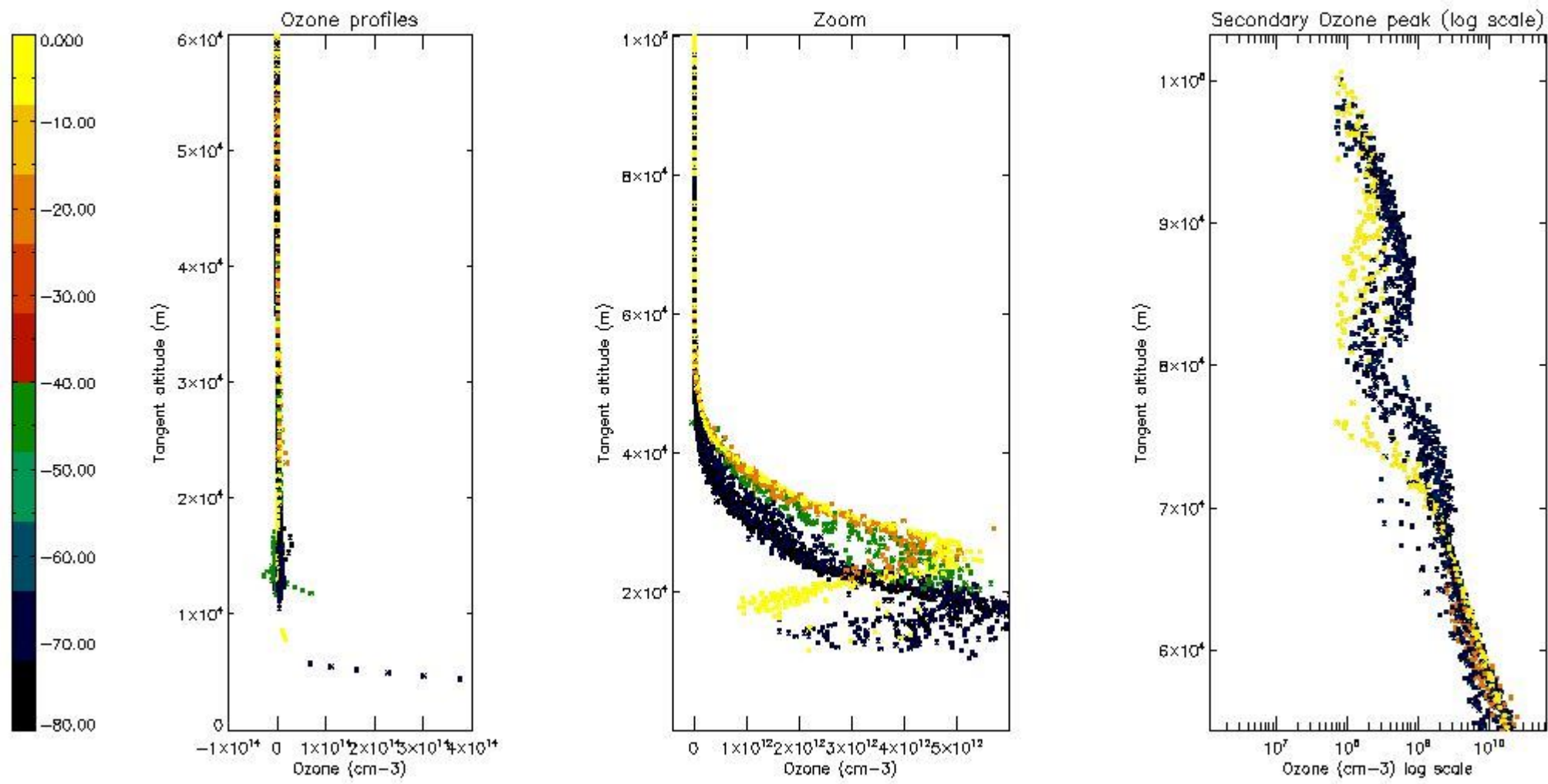
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



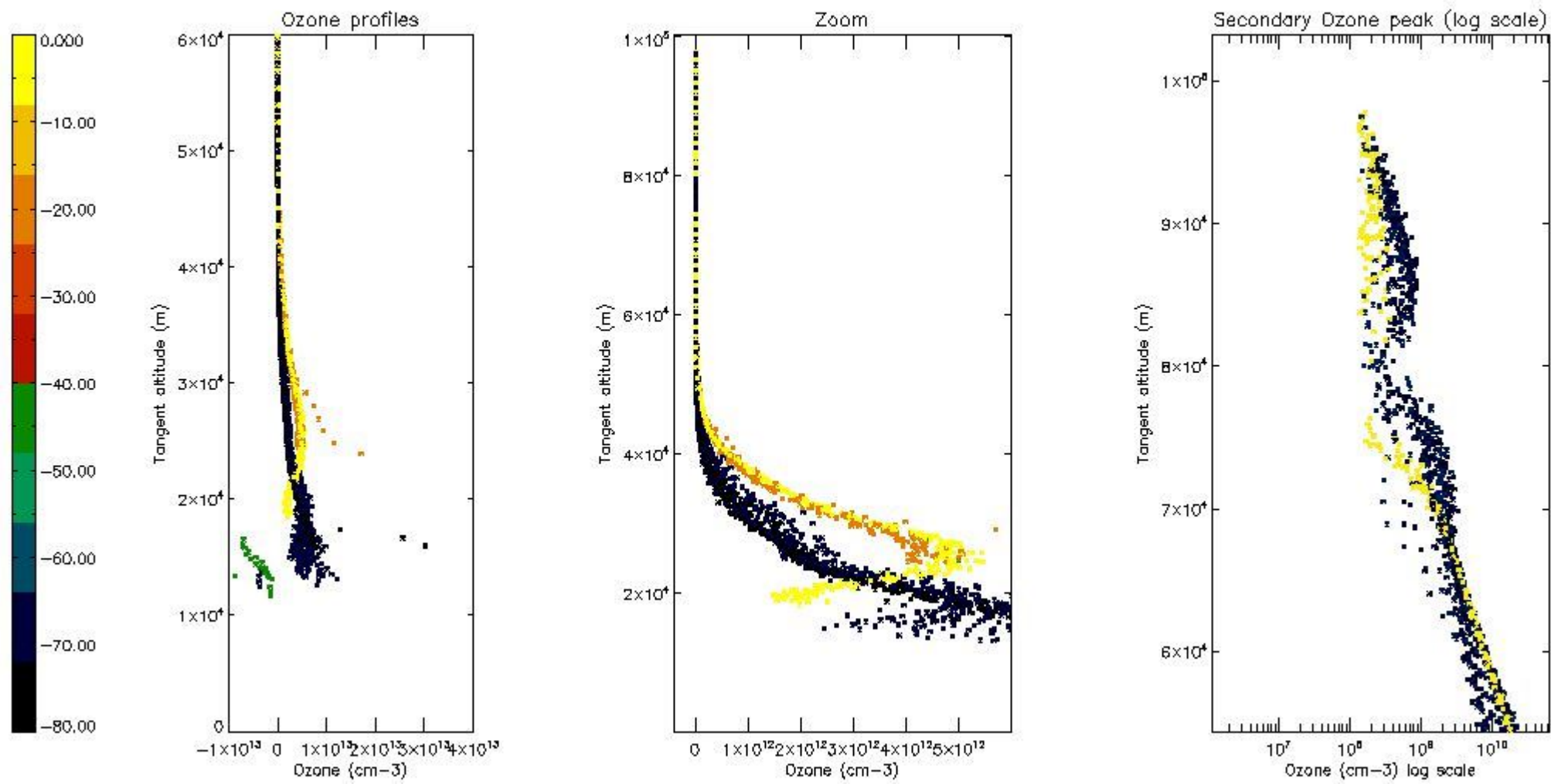
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



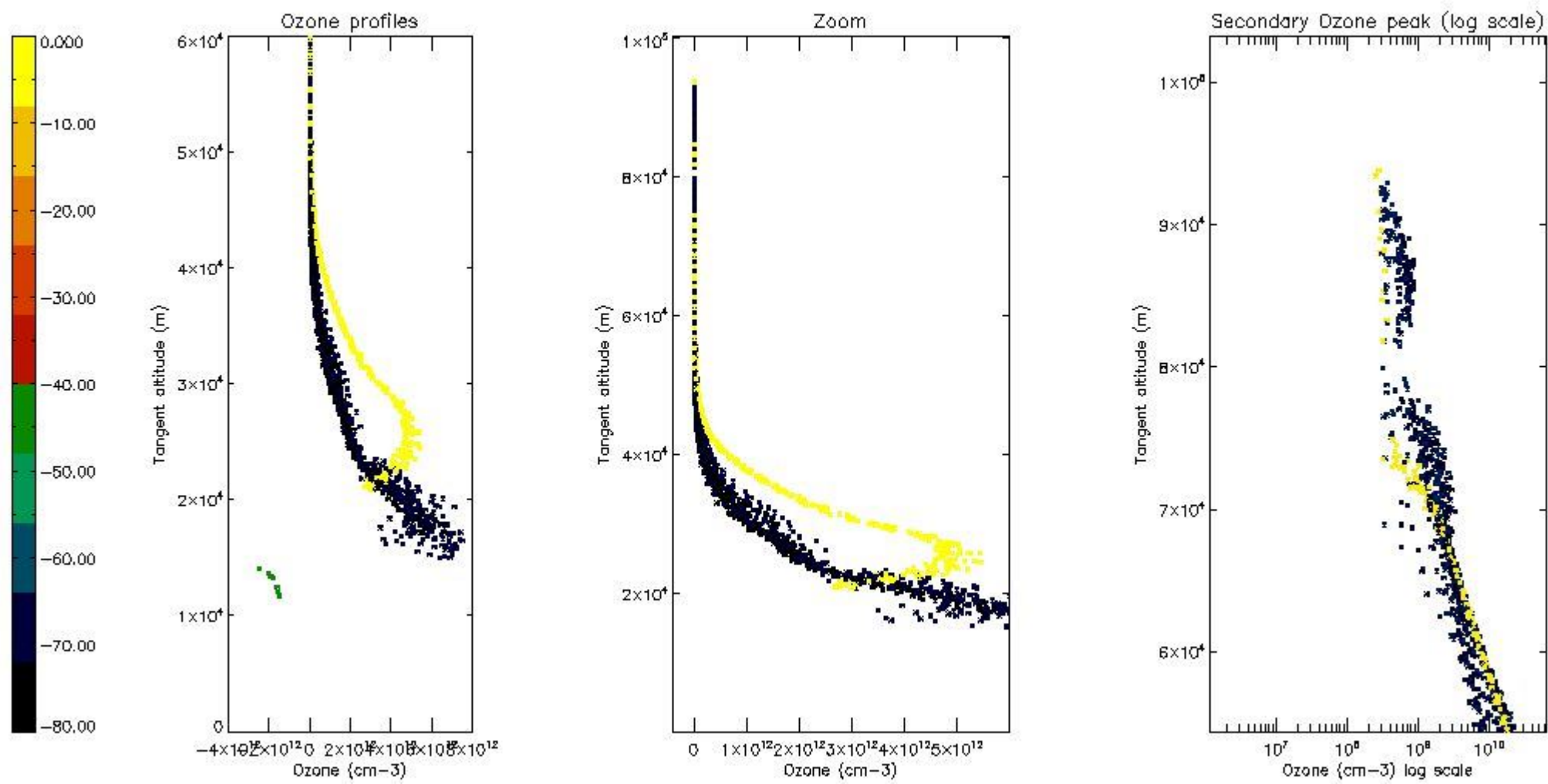
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



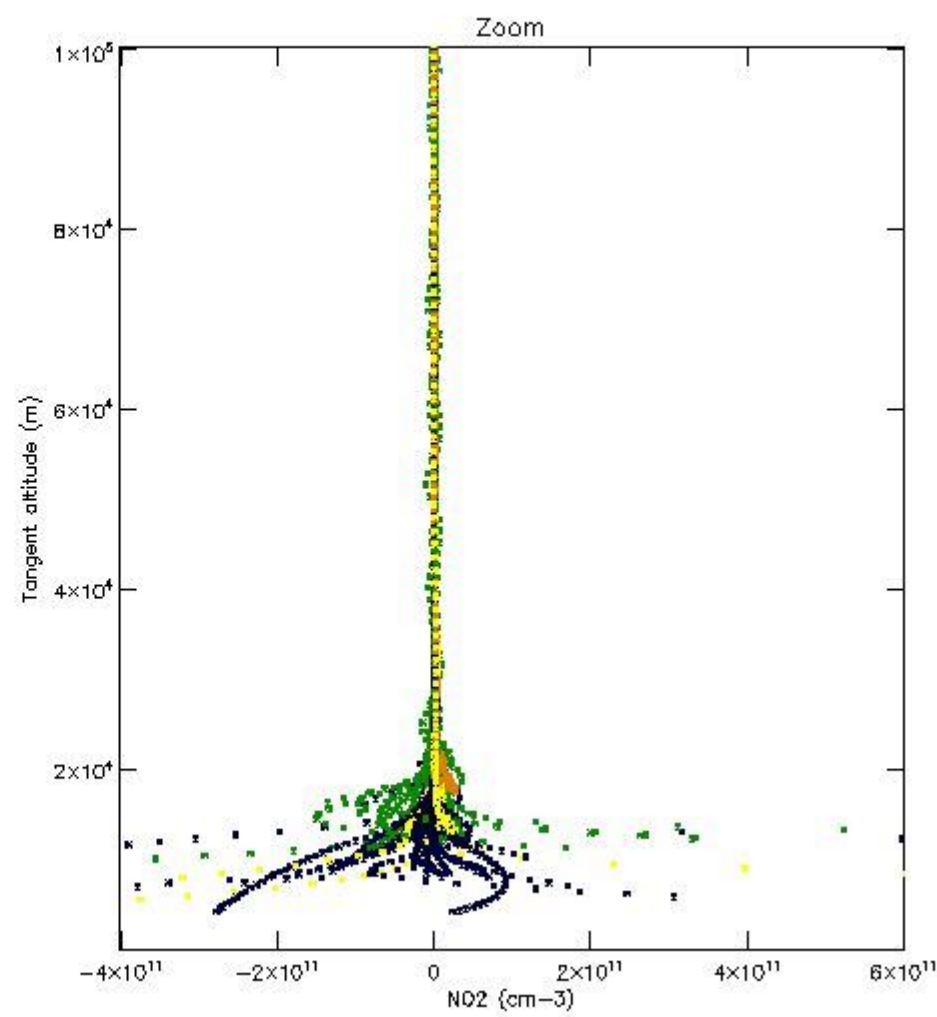
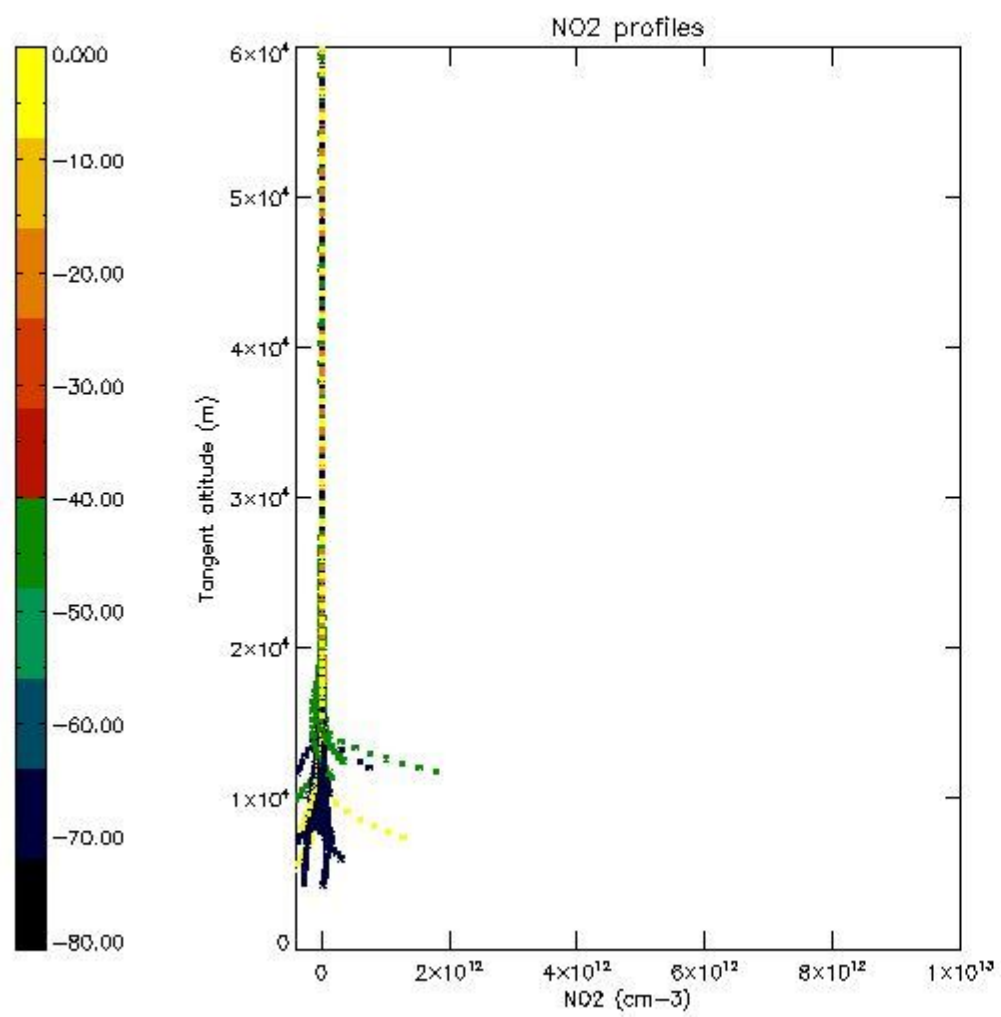
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



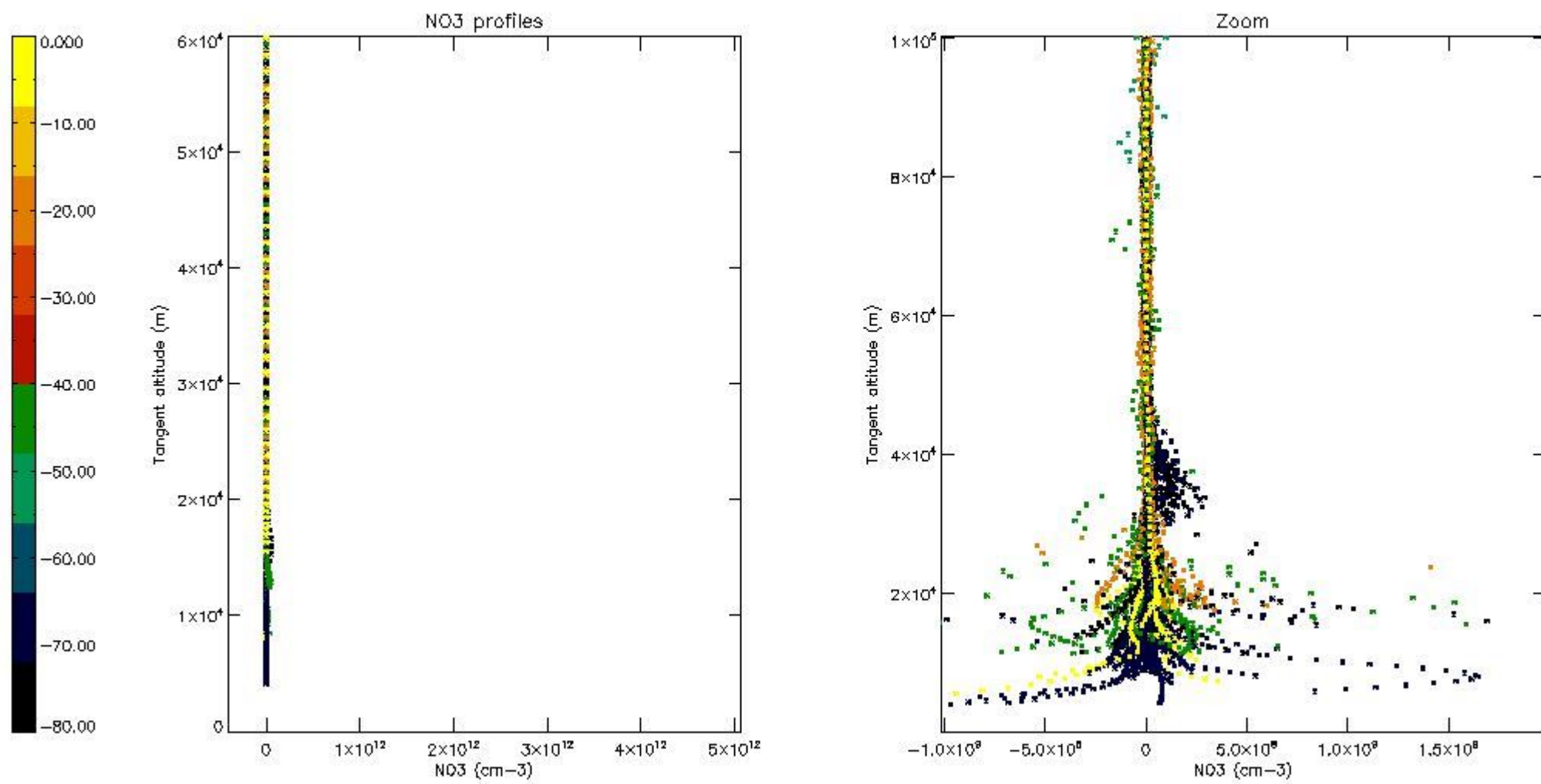
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



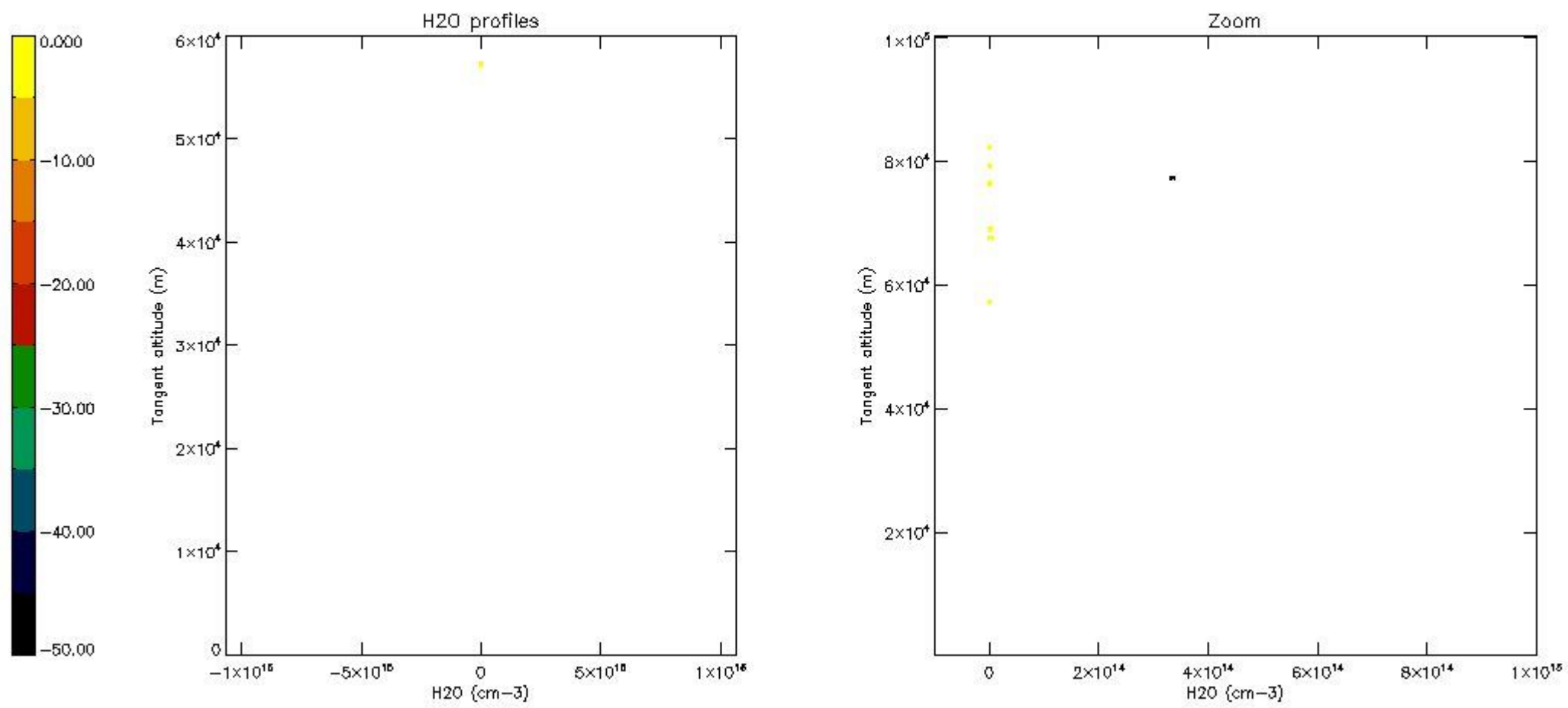
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

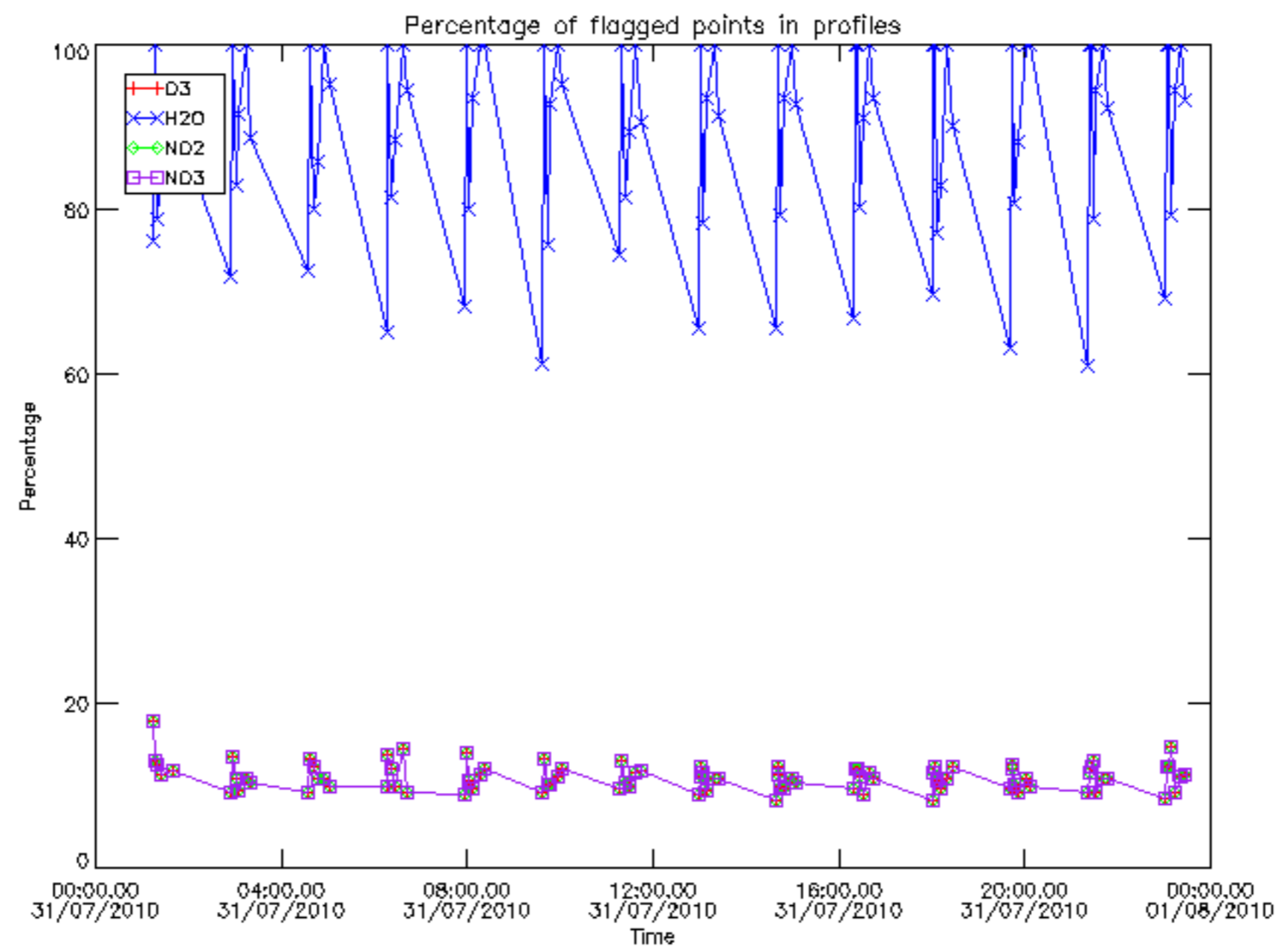
The colorbar represents the latitude.



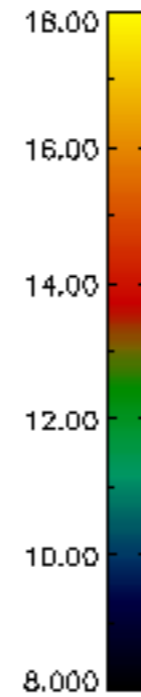
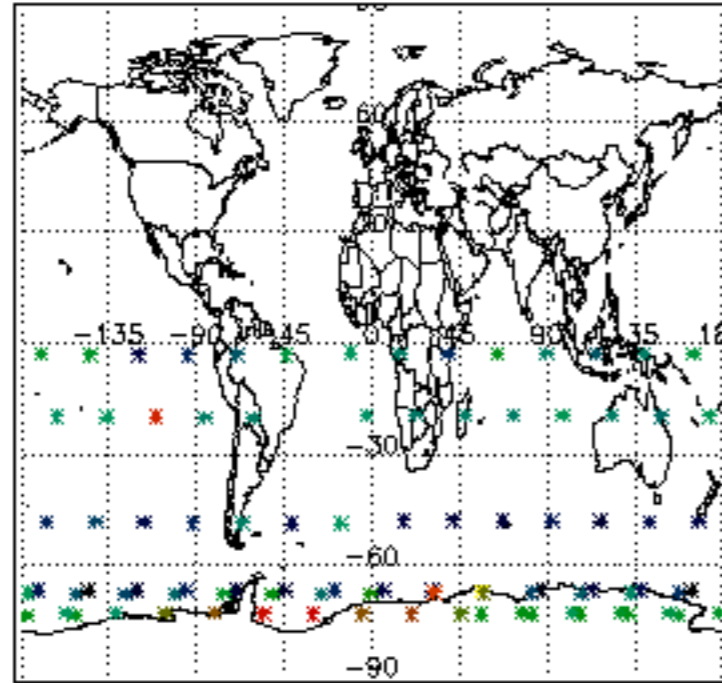
6. Auxiliary Data Files used for the production reported in section 2

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.

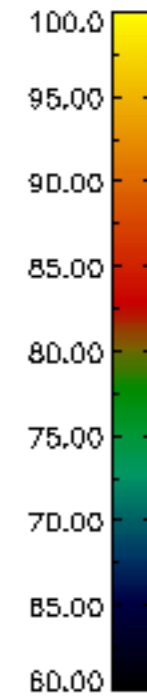
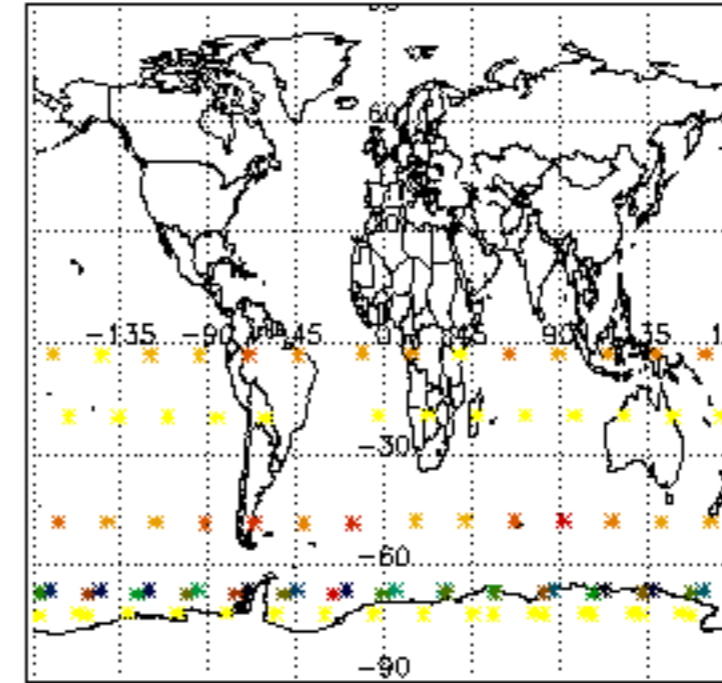
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	31-JUL-2010 00:03:53
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	31-JUL-2010 00:03:53
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	31-JUL-2010 00:03:53



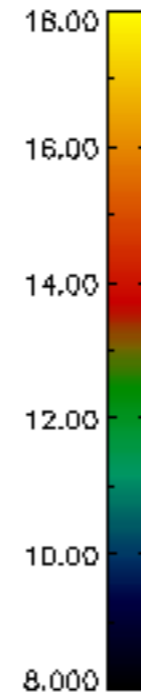
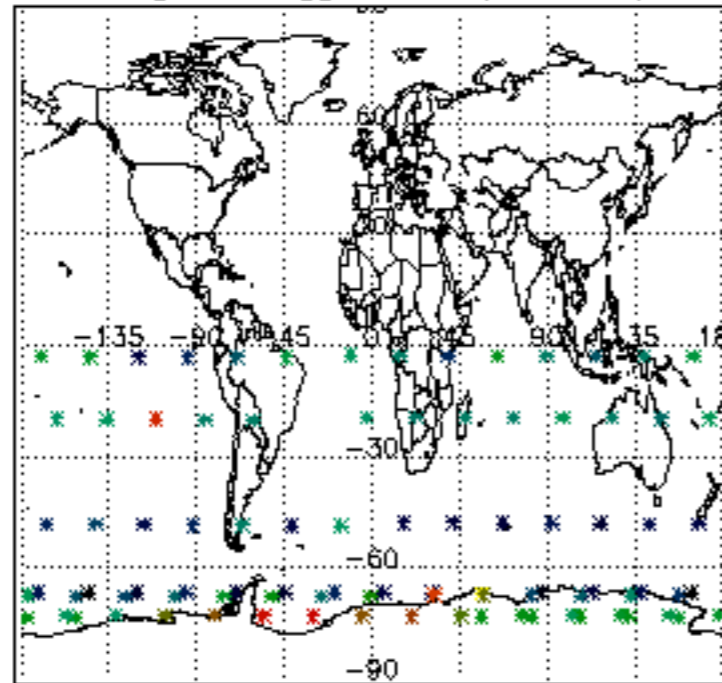
Percentage of flagged data per D3 profile



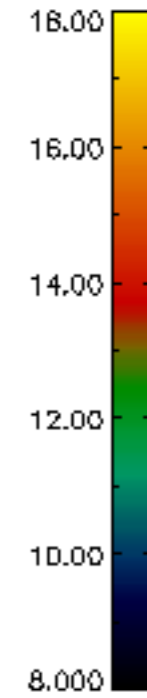
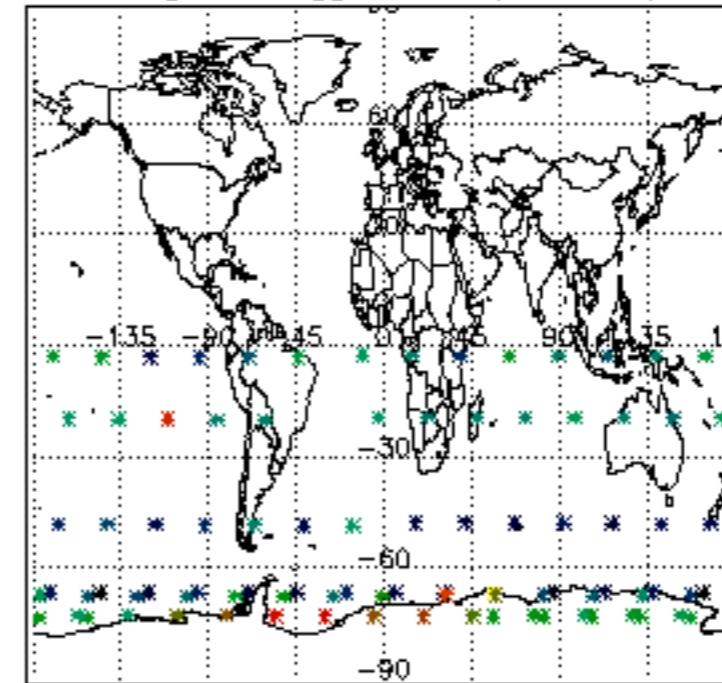
Percentage of flagged data per H2O profile

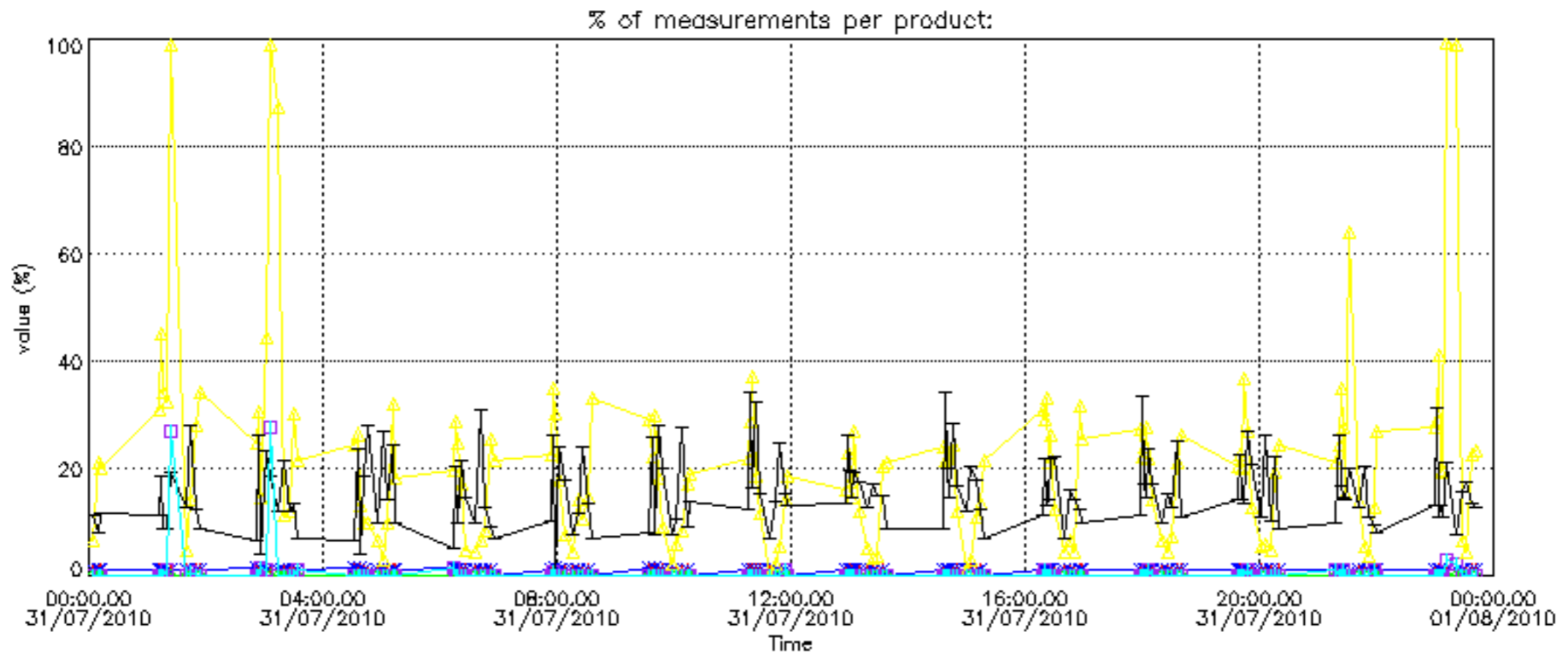


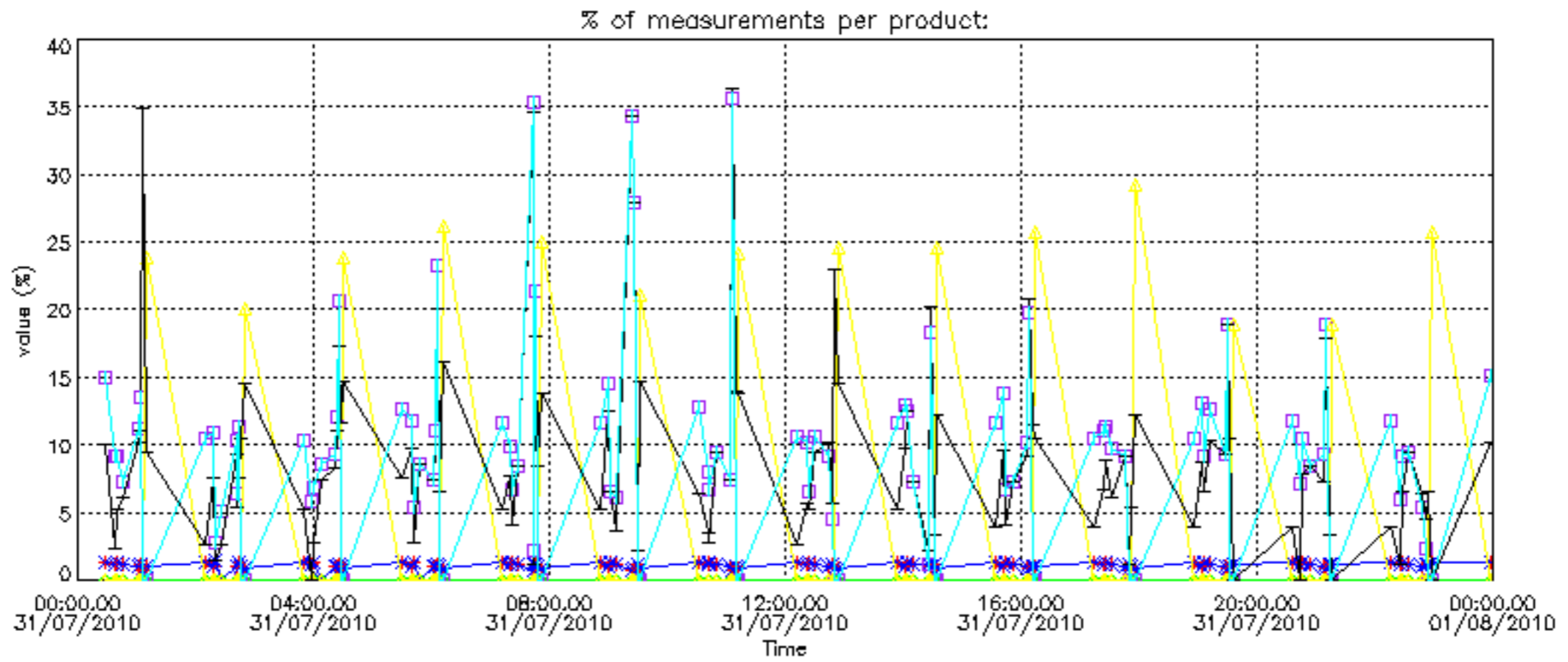
Percentage of flagged data per NO2 profile



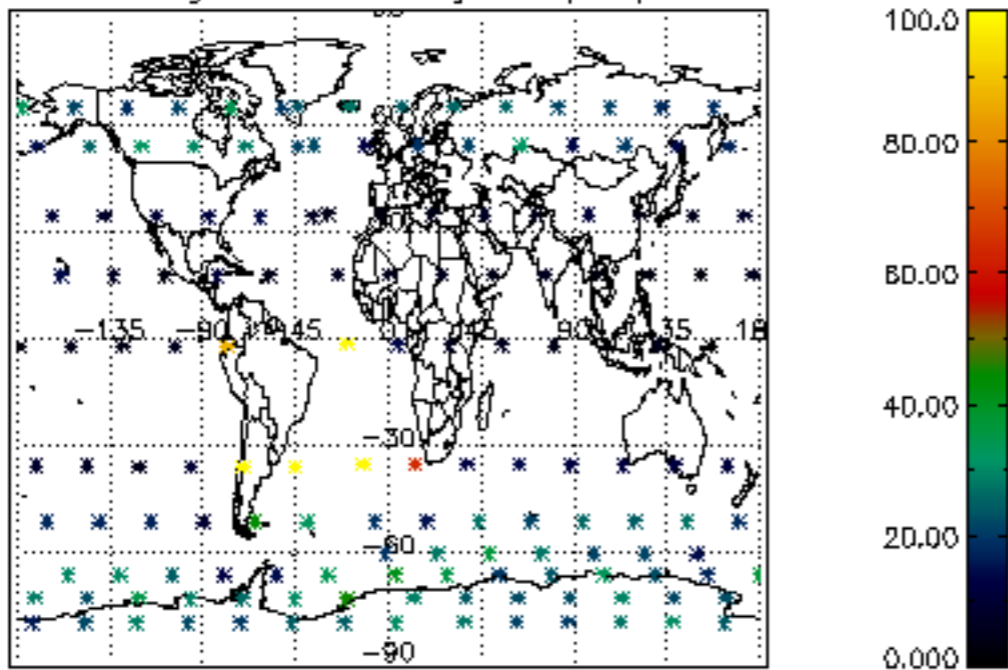
Percentage of flagged data per NO3 profile



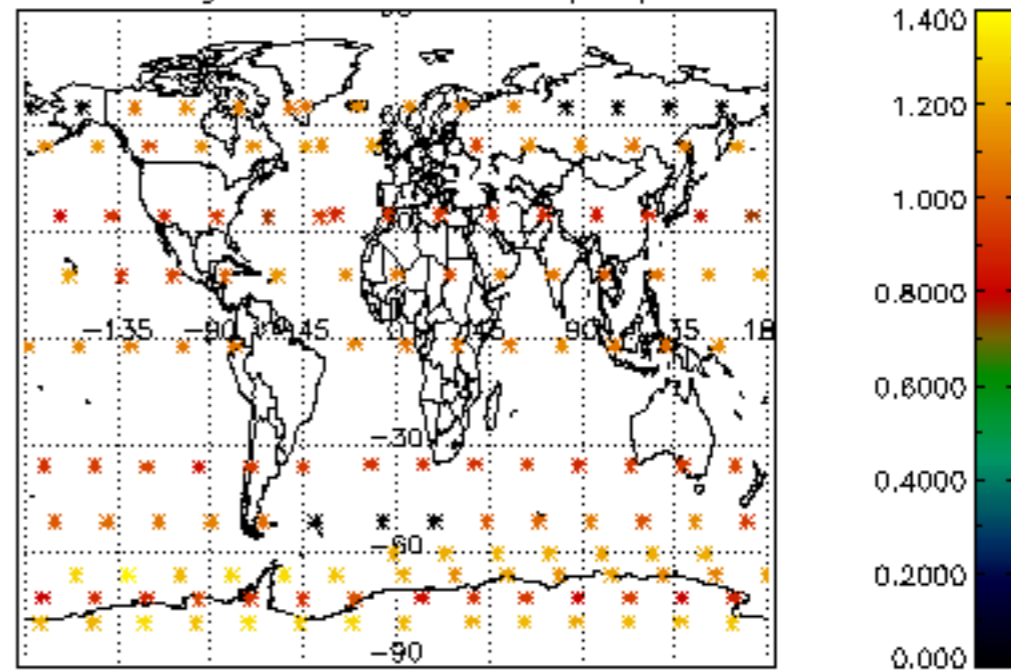




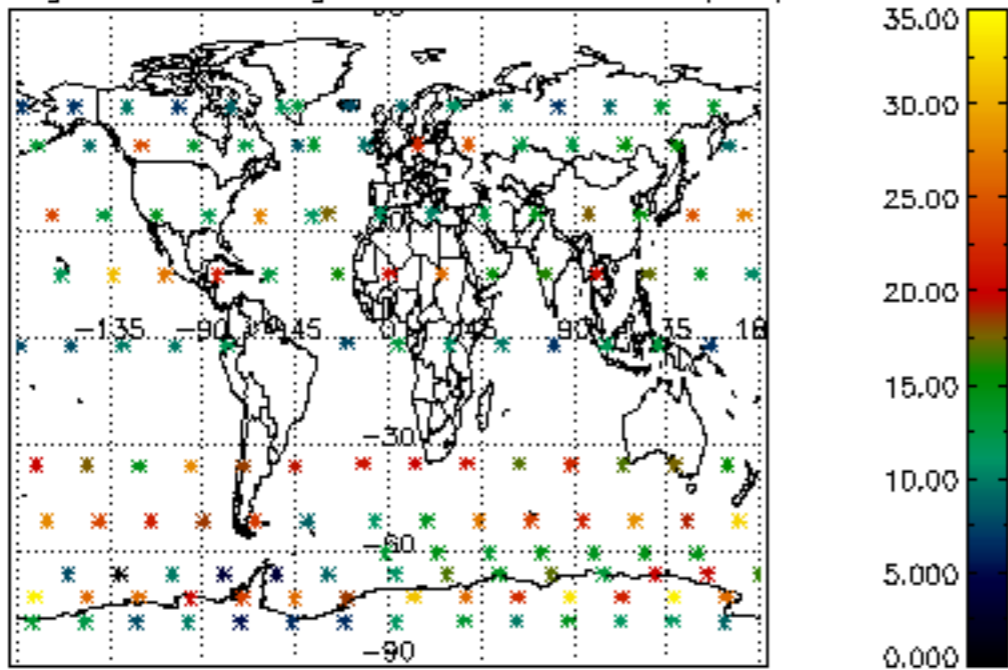
Percentage of cosmic ray hits per profile



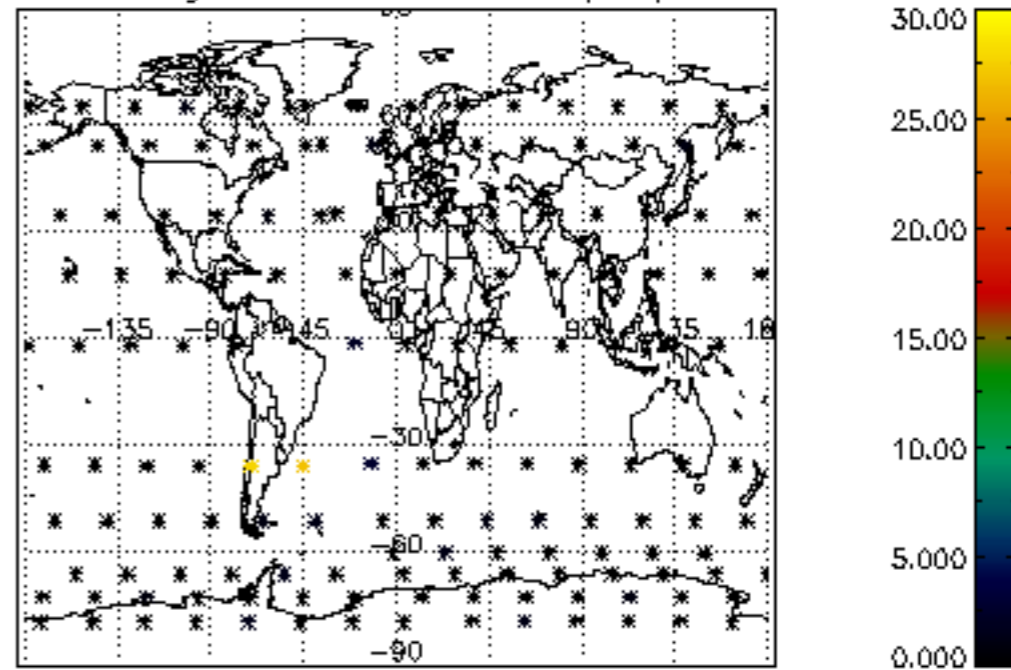
Percentage of datation errors per profile



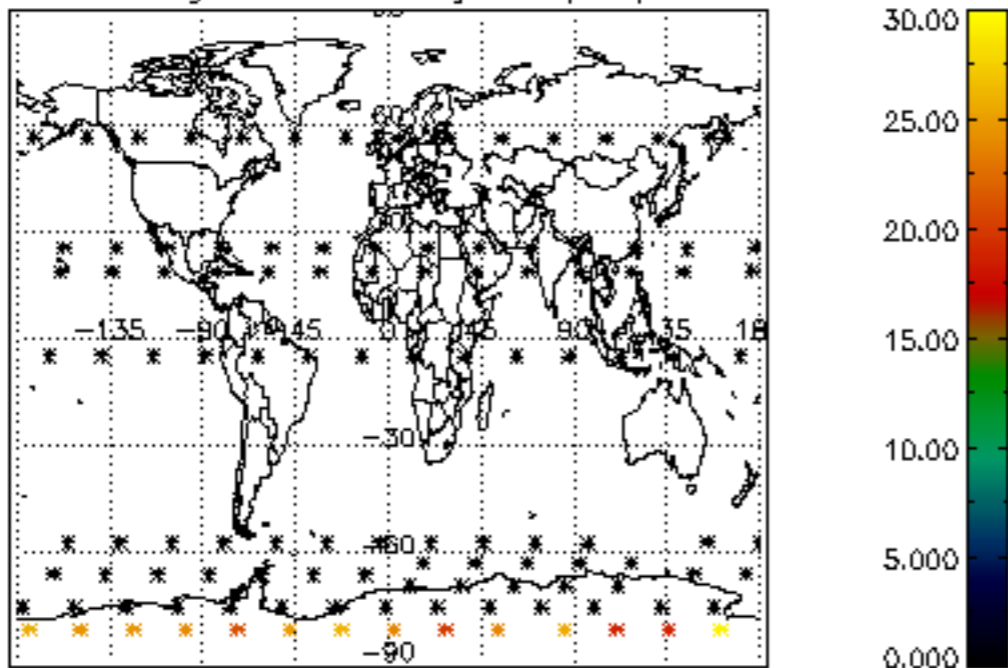
Percentage of star falling outside central band per profile



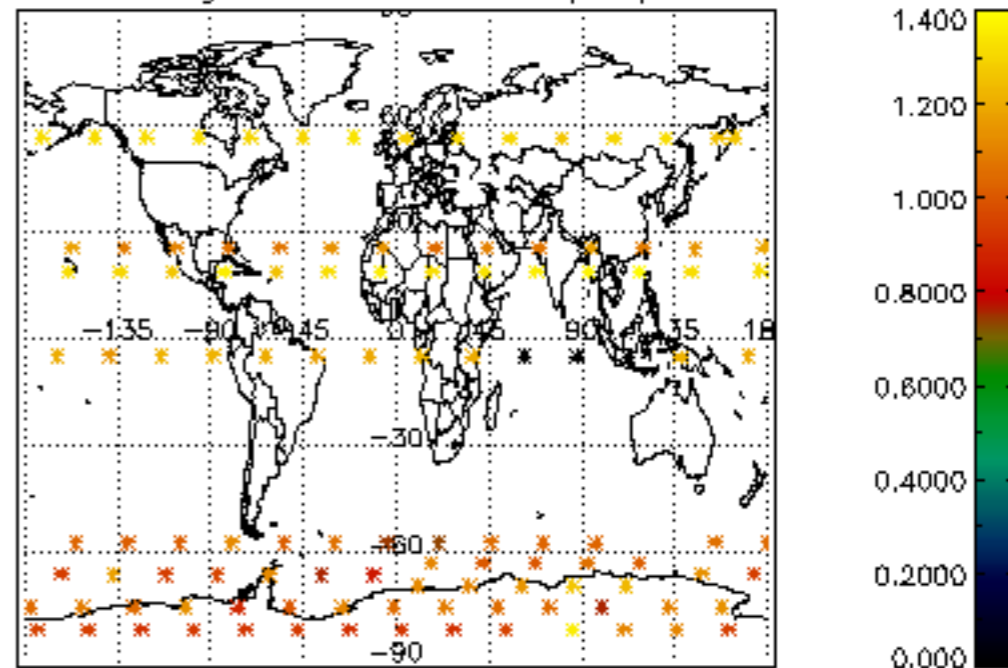
Percentage of saturation errors per profile



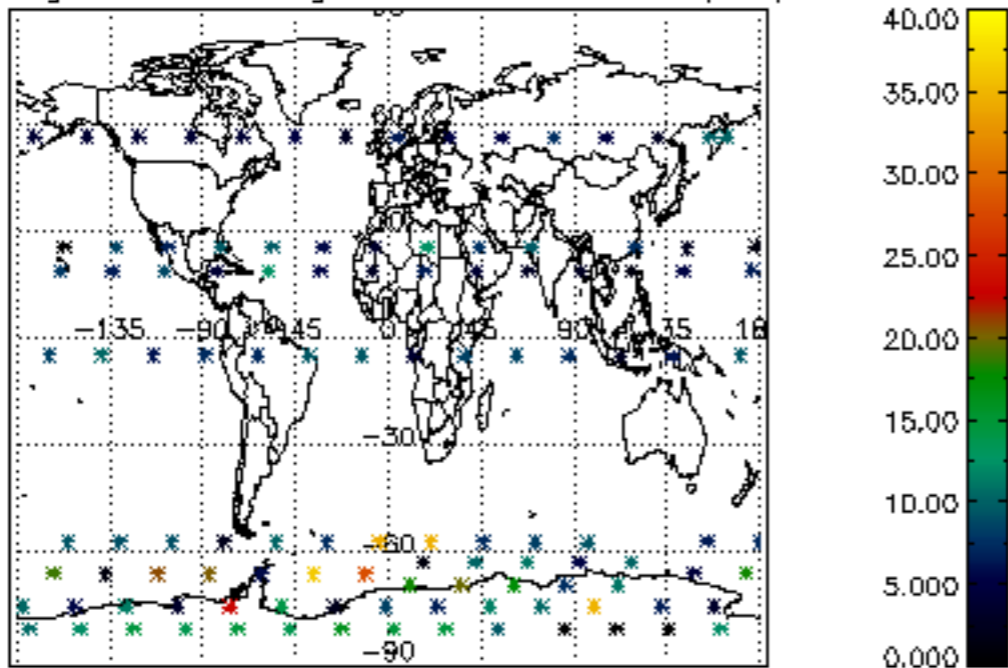
Percentage of cosmic ray hits per profile



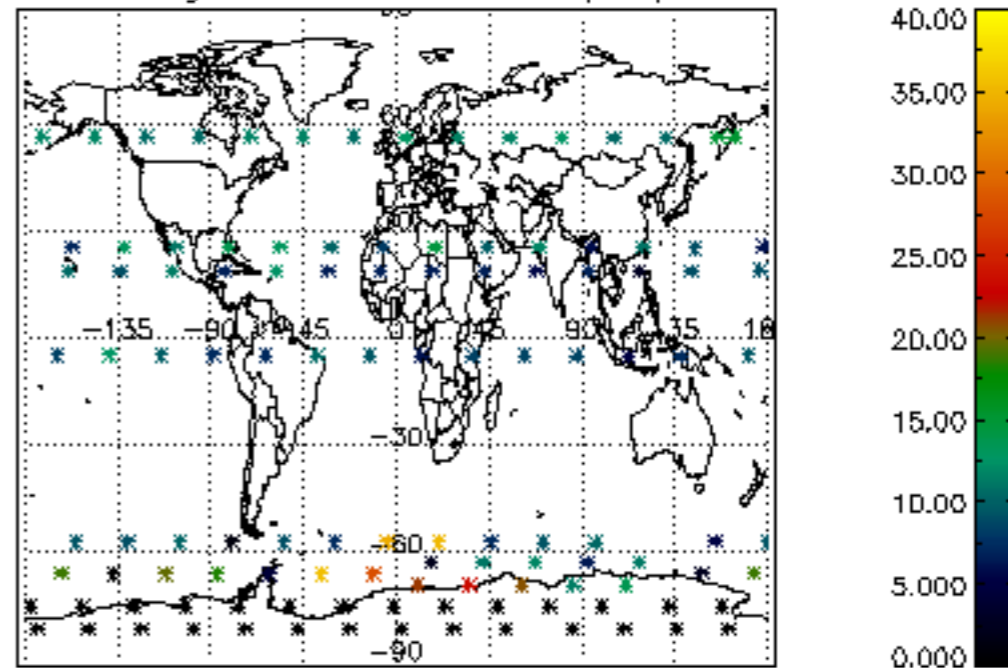
Percentage of datation errors per profile

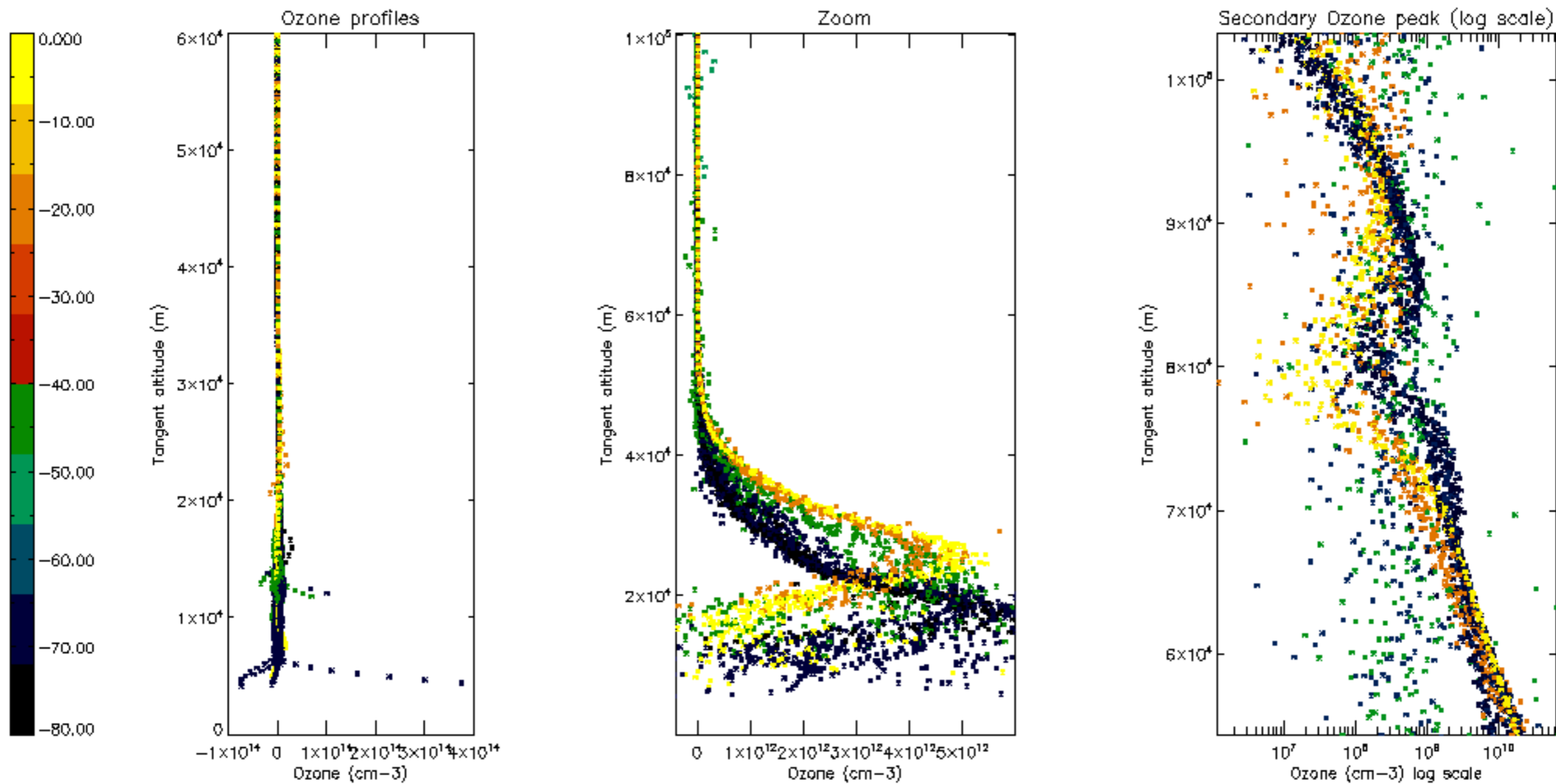


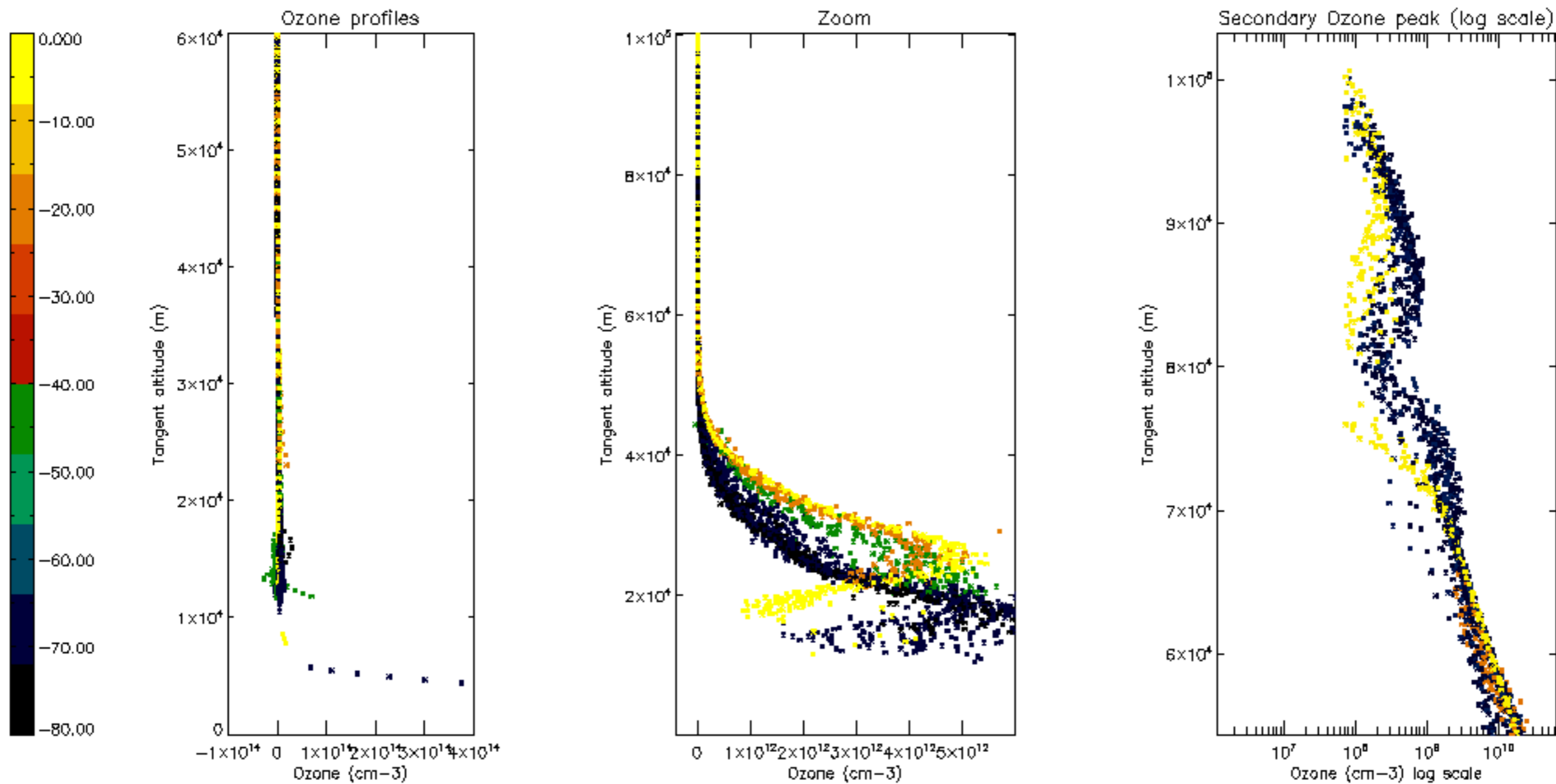
Percentage of star falling outside central band per profile

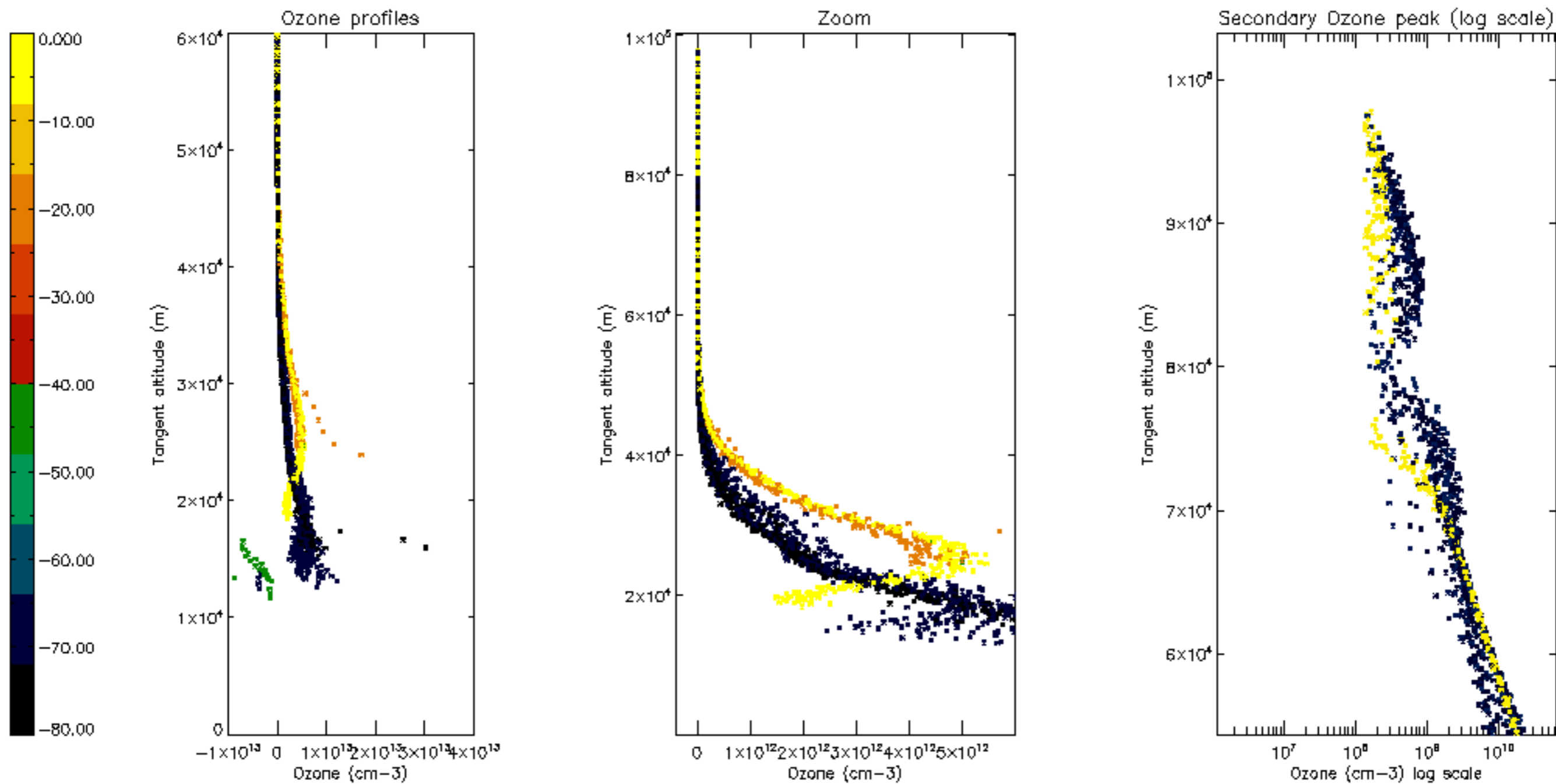


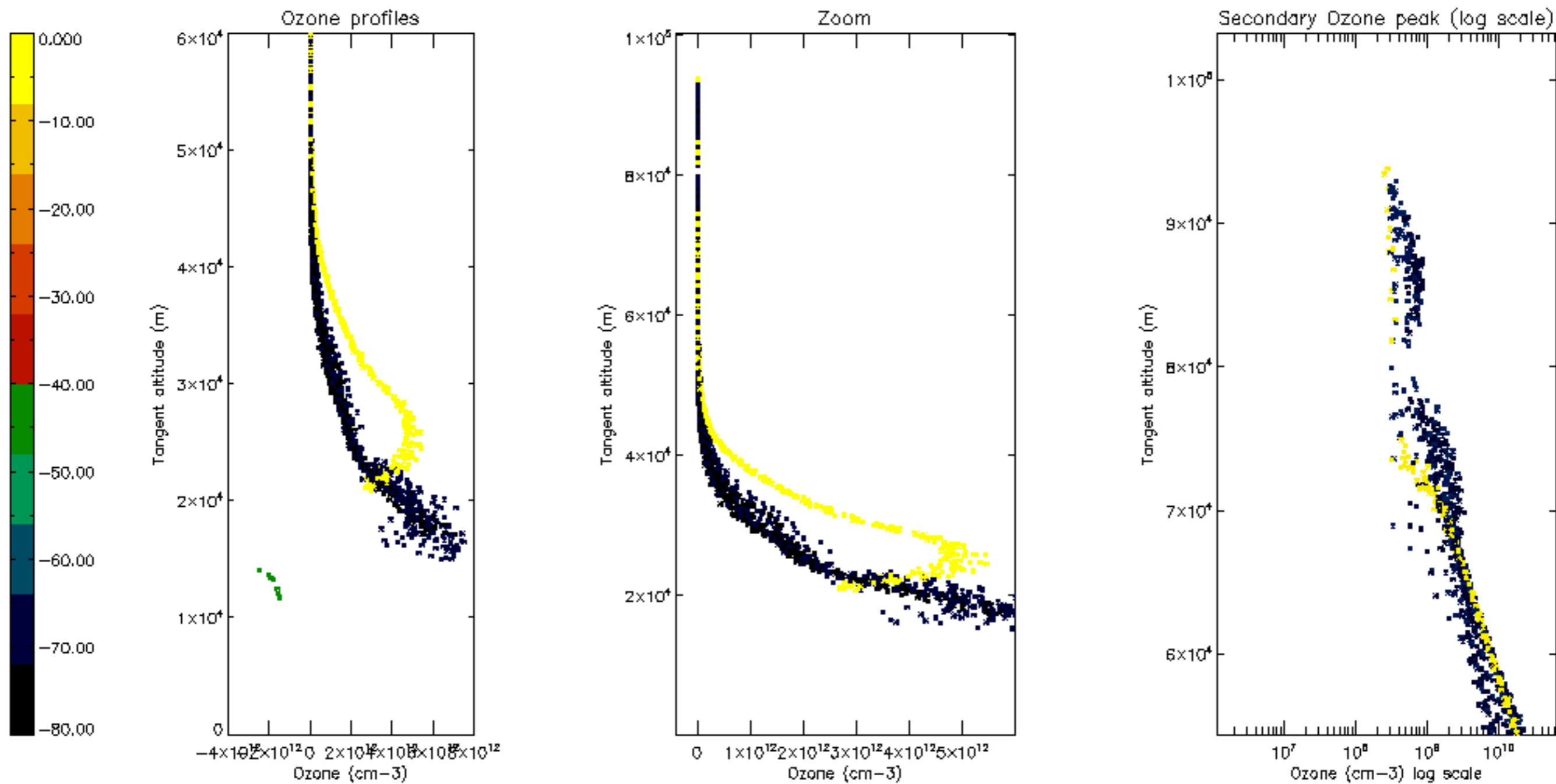
Percentage of saturation errors per profile

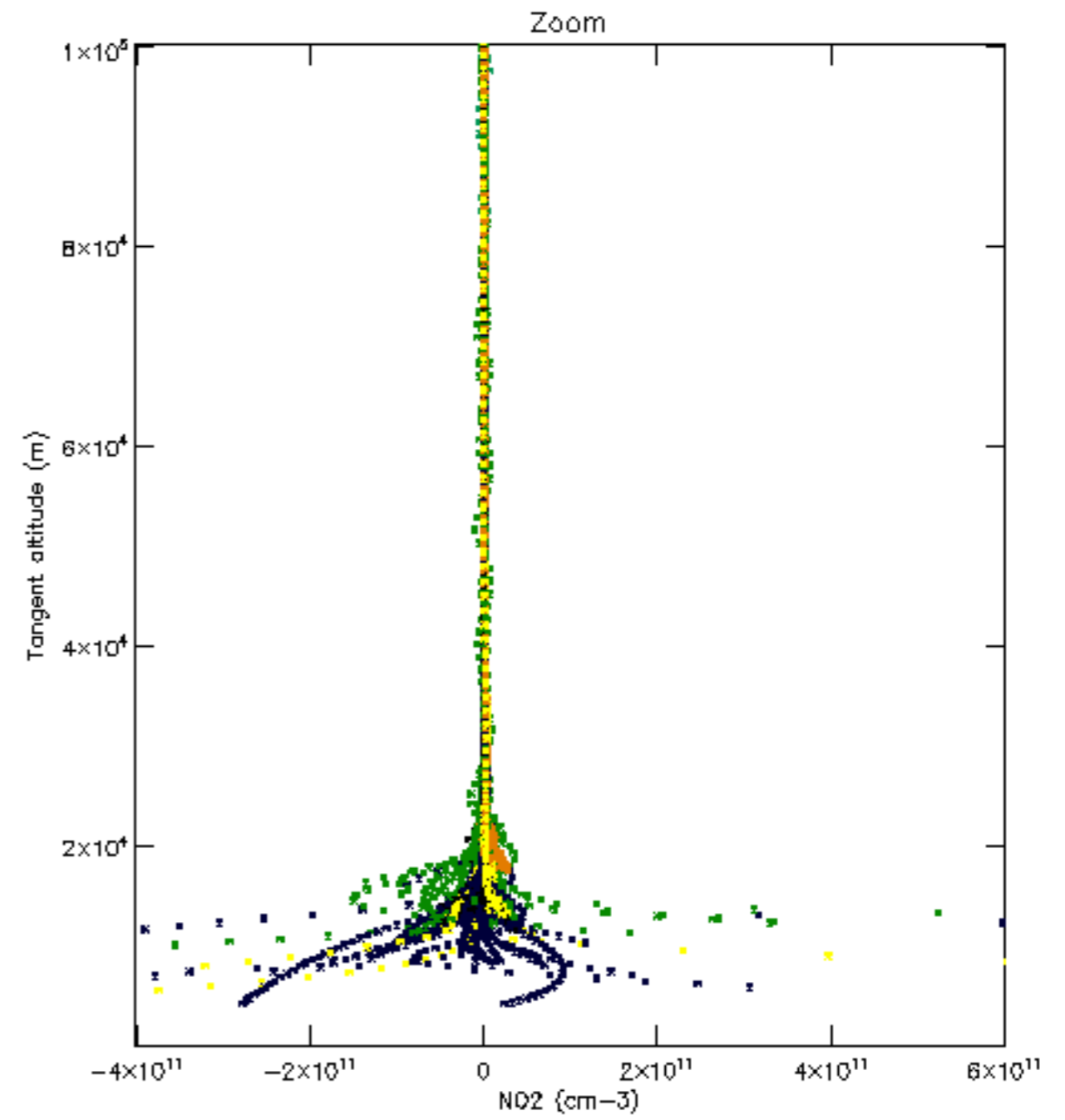
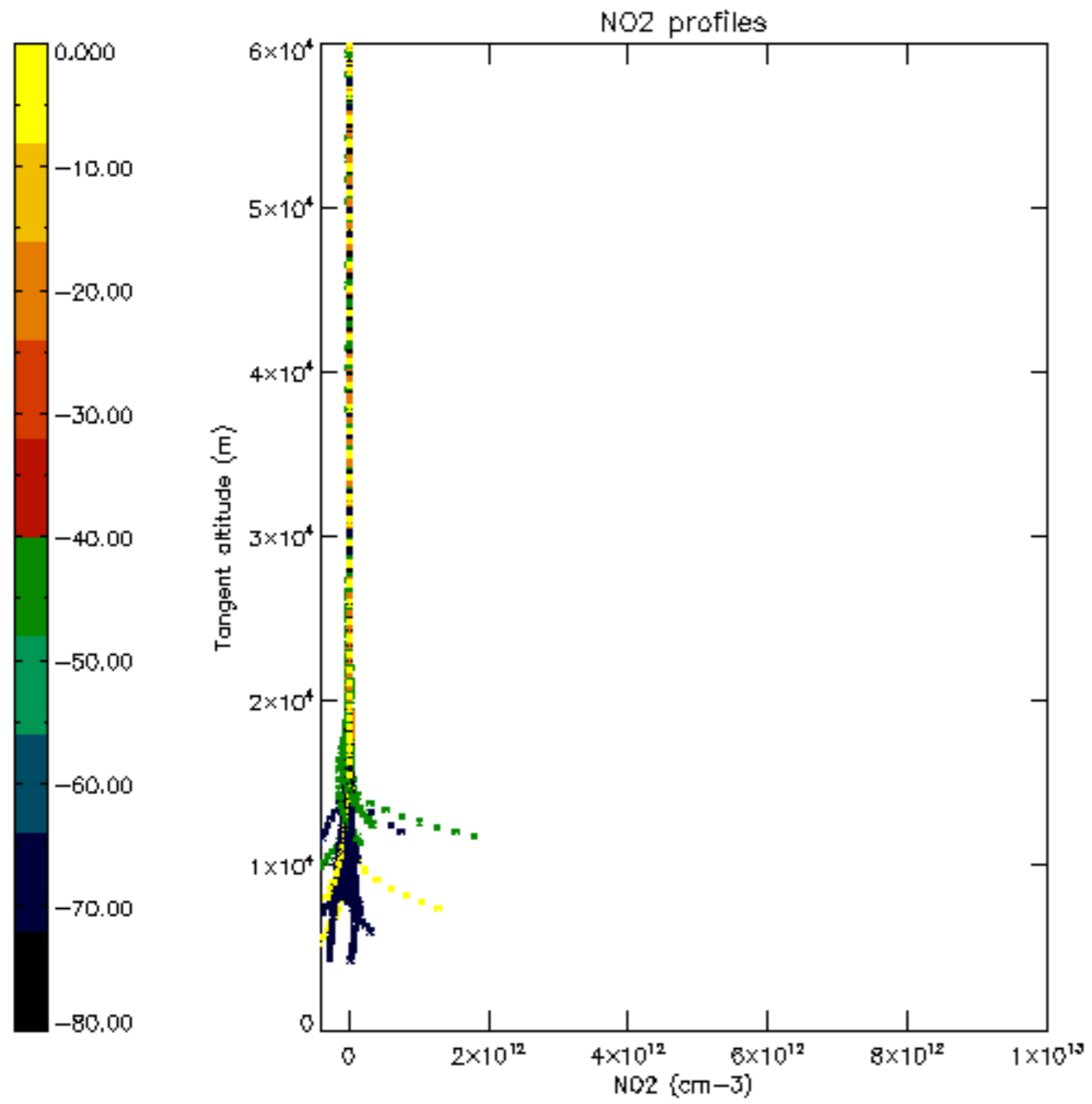


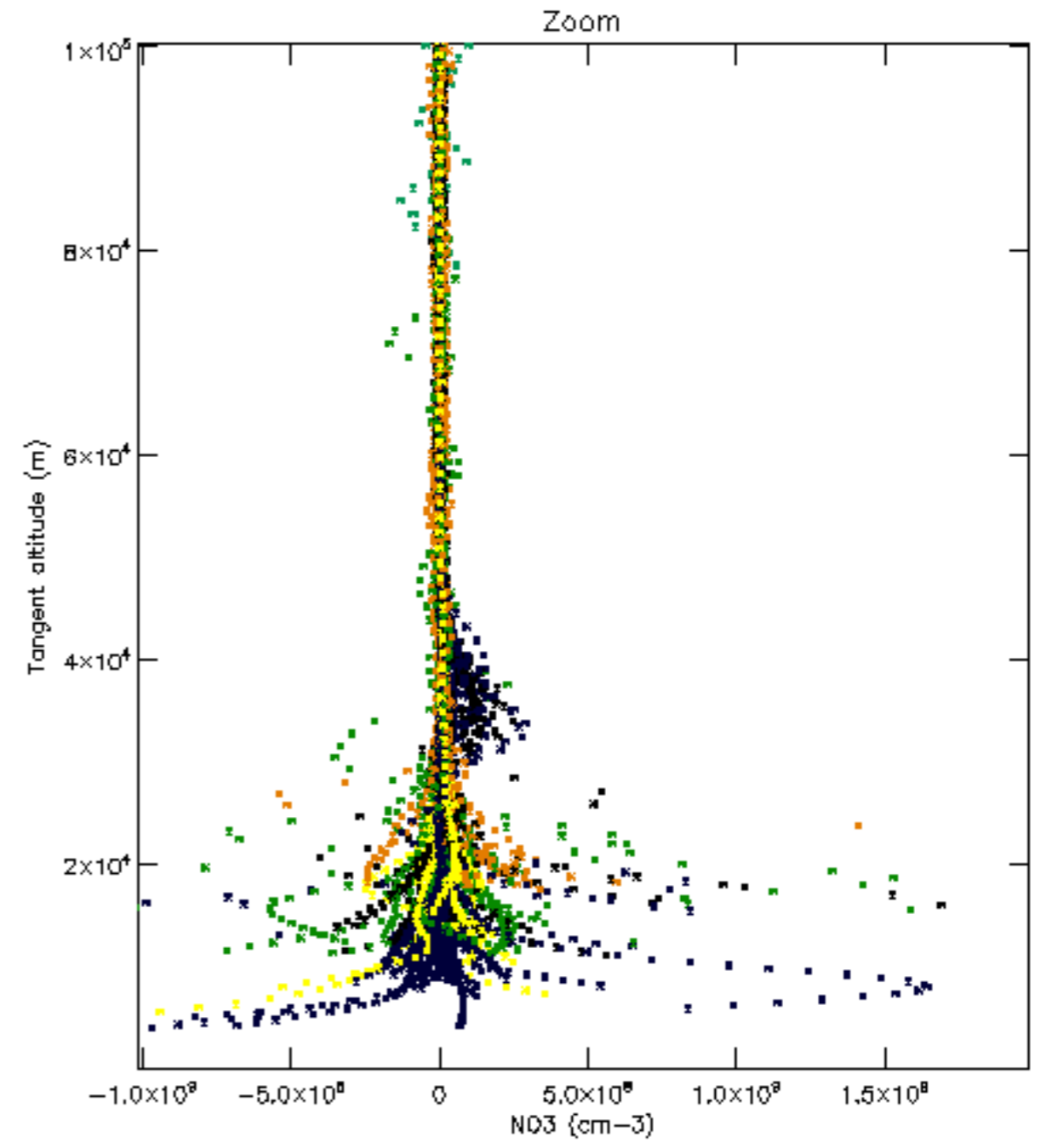
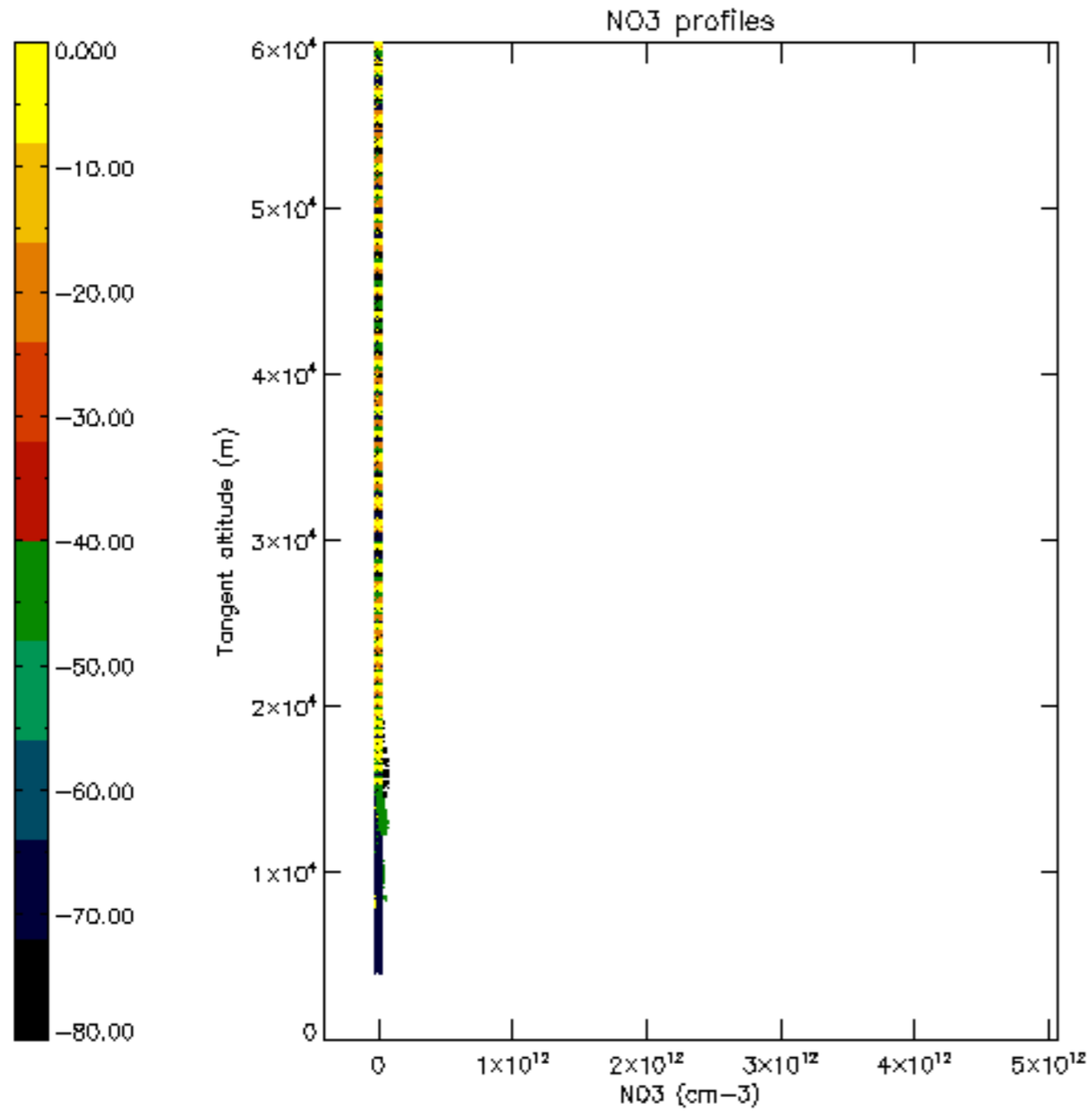


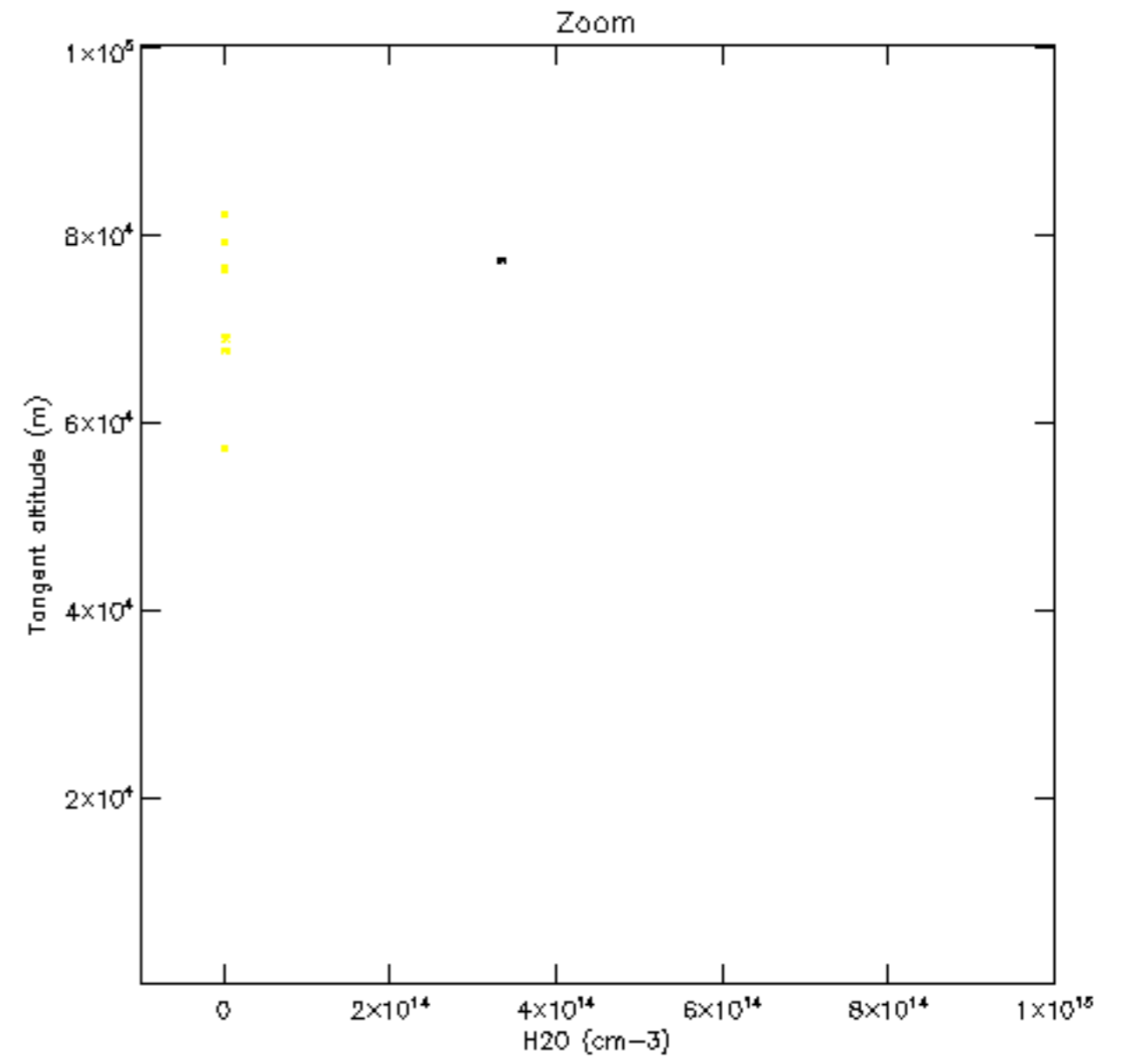
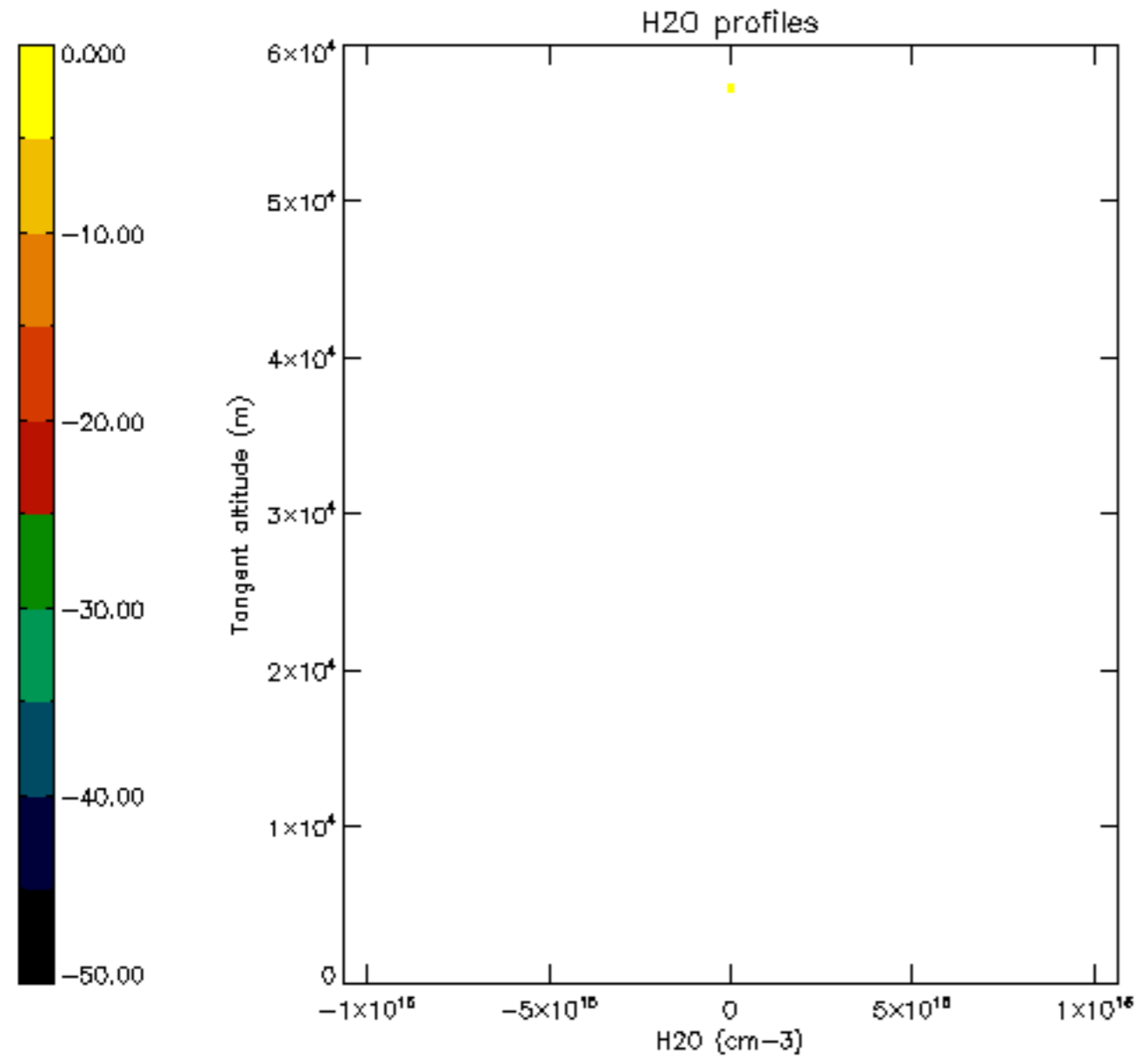


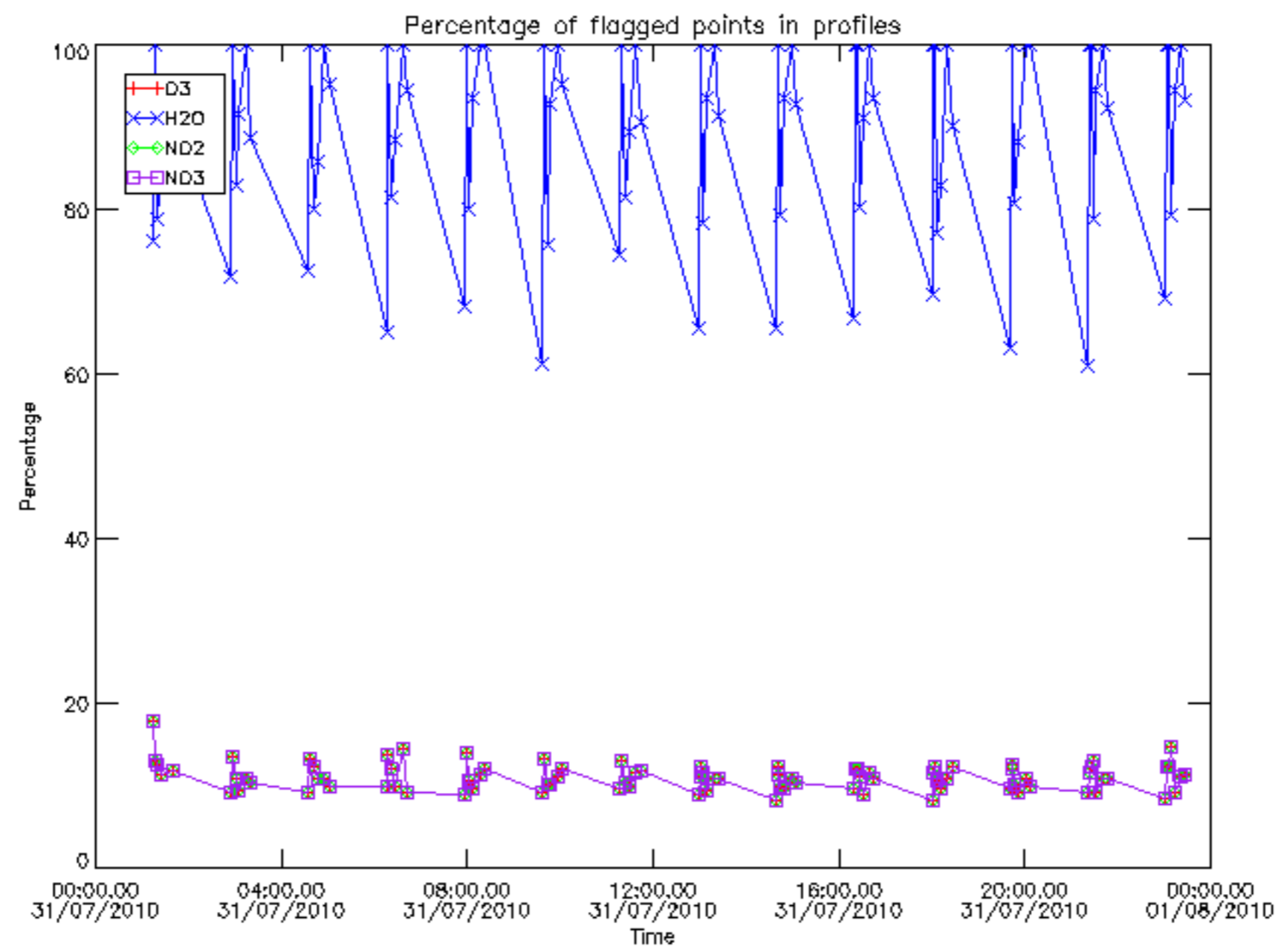




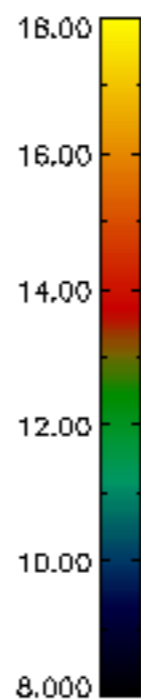
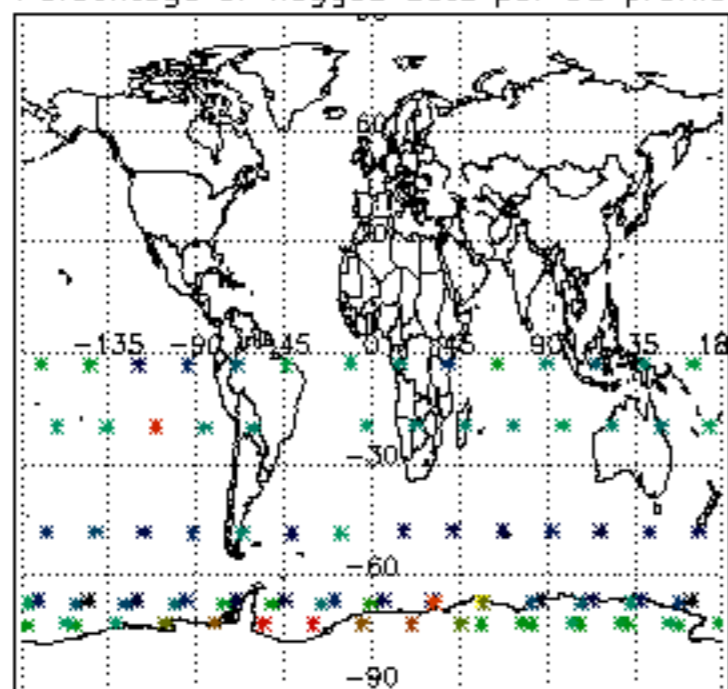




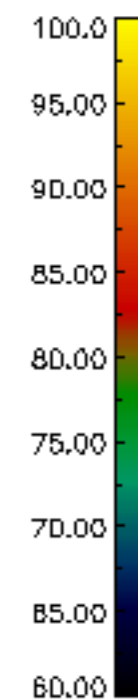
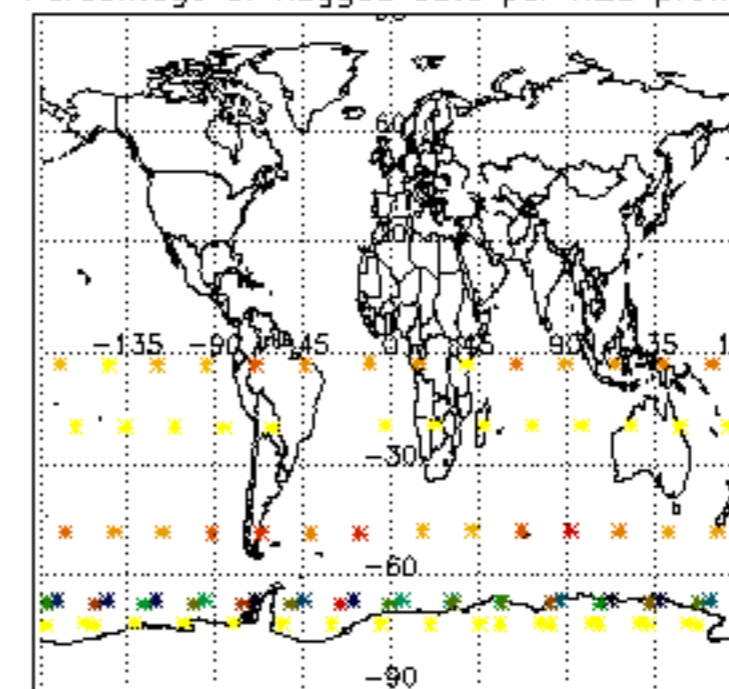




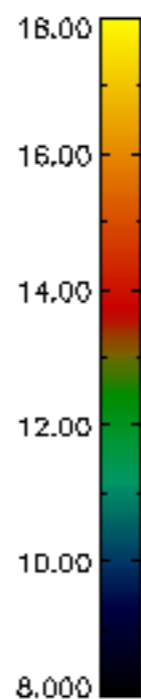
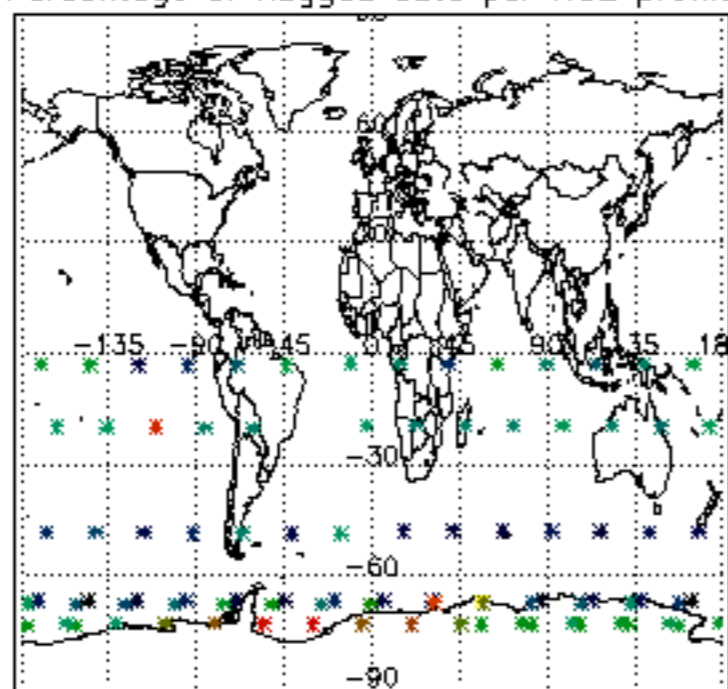
Percentage of flagged data per D3 profile



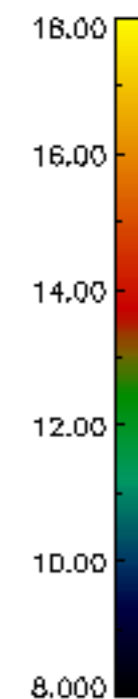
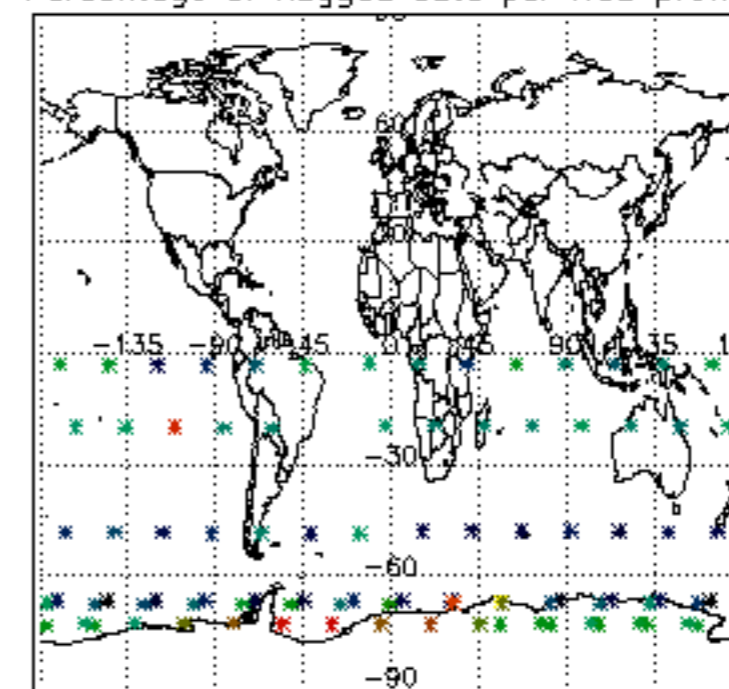
Percentage of flagged data per H2O profile

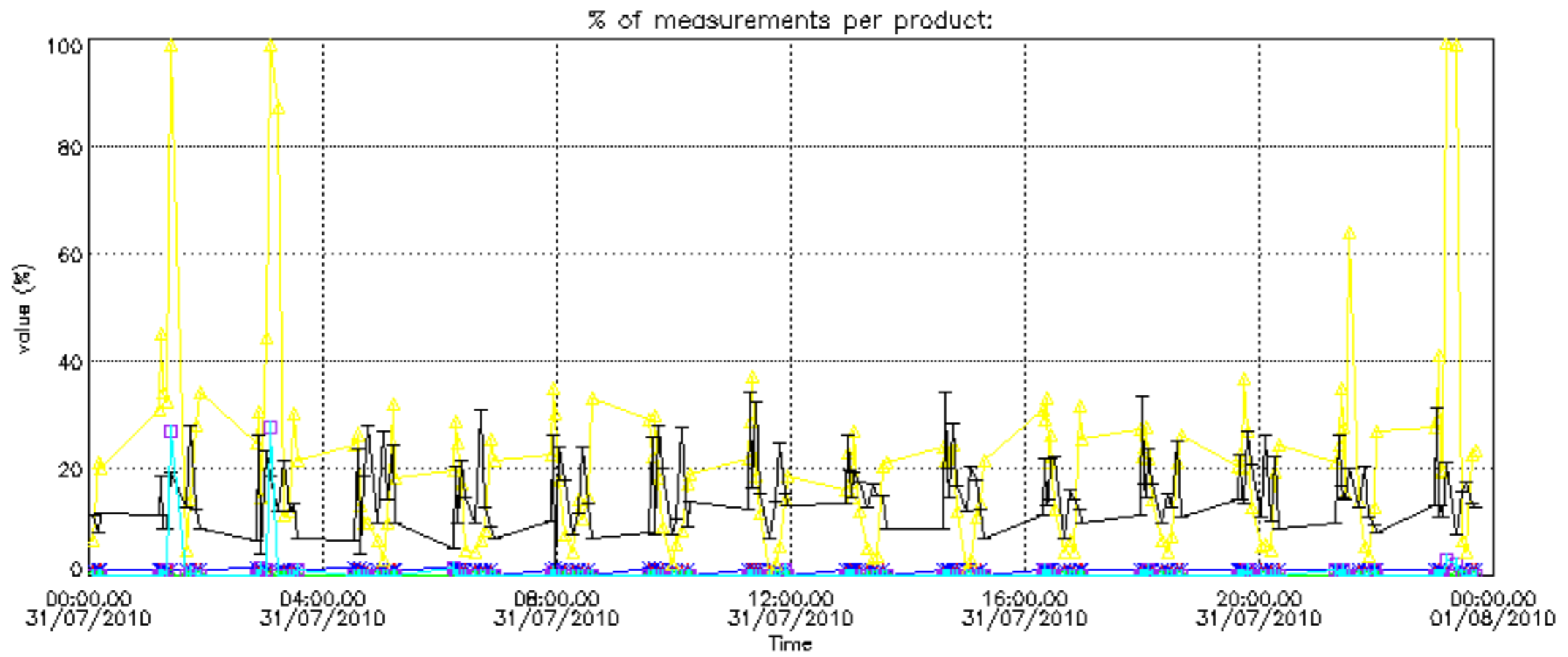


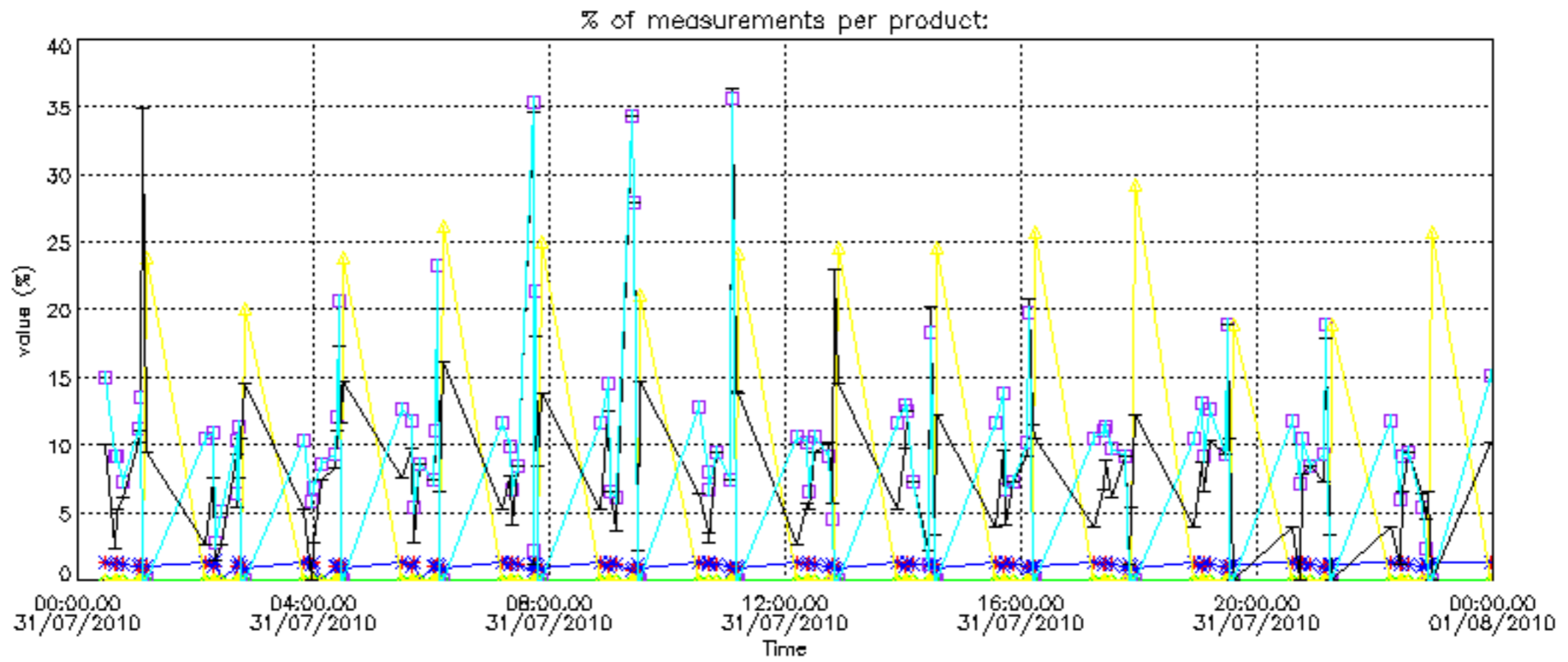
Percentage of flagged data per NO2 profile



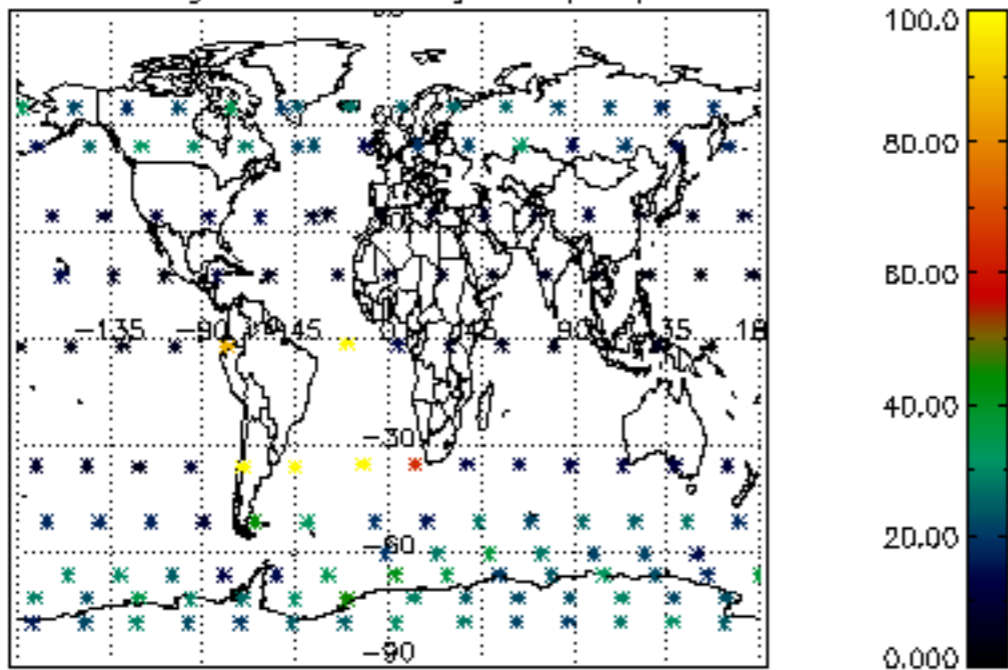
Percentage of flagged data per NO3 profile



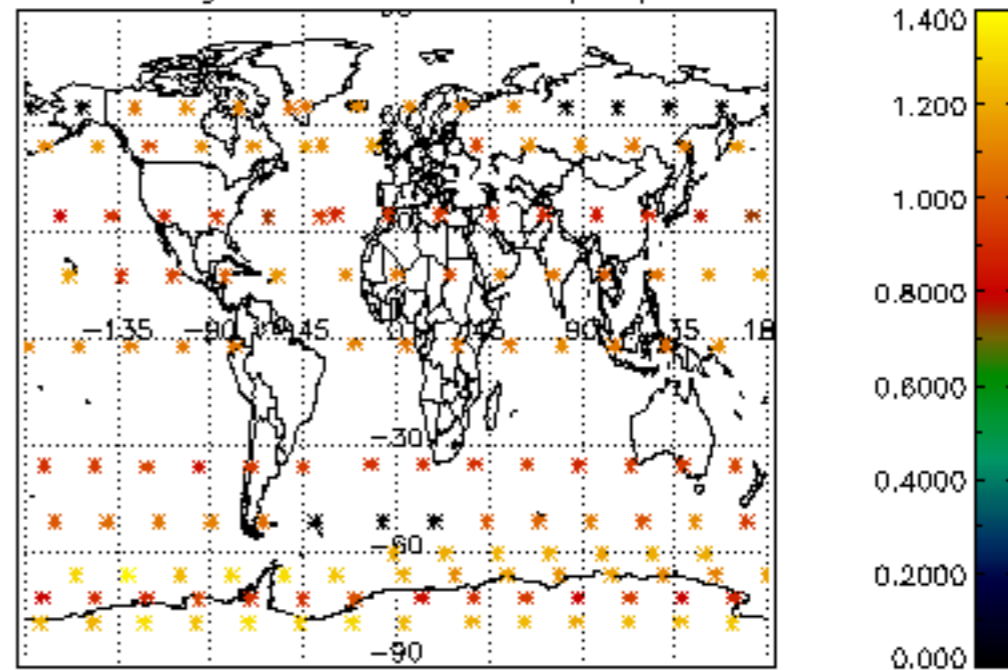




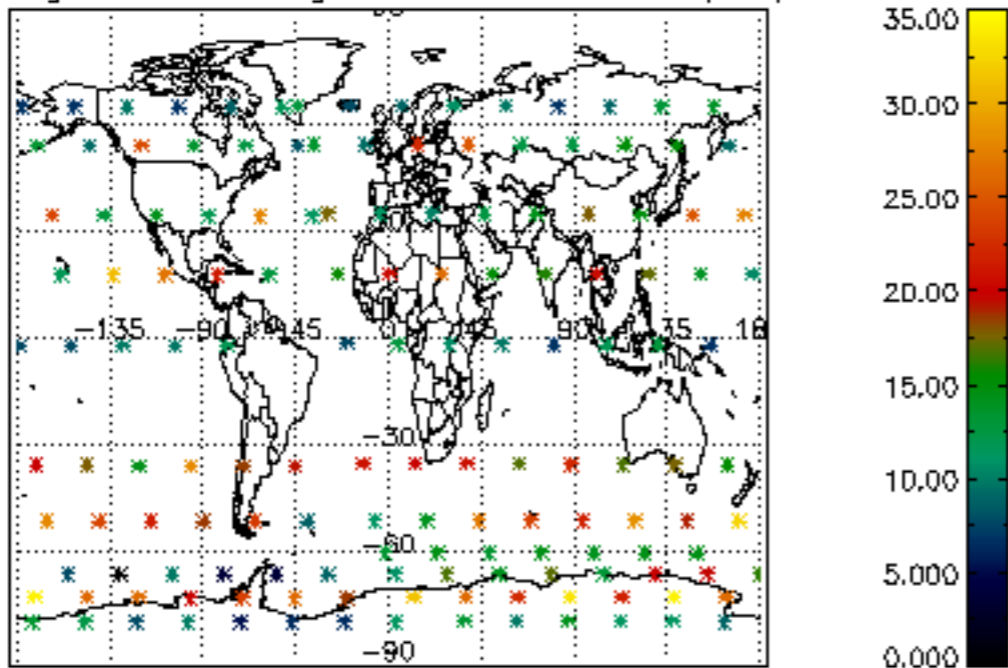
Percentage of cosmic ray hits per profile



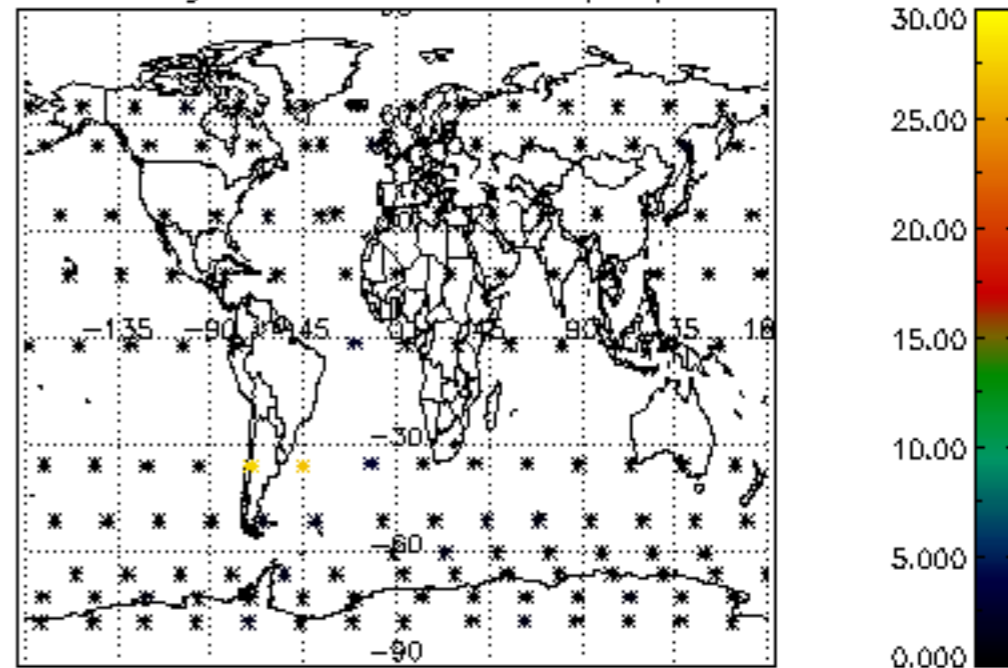
Percentage of datation errors per profile



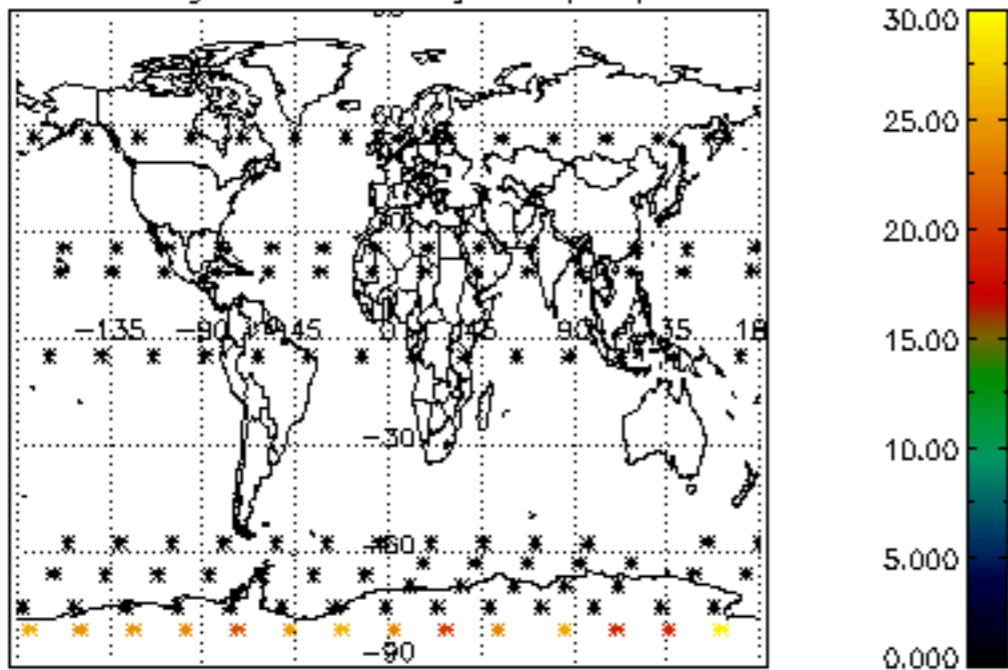
Percentage of star falling outside central band per profile



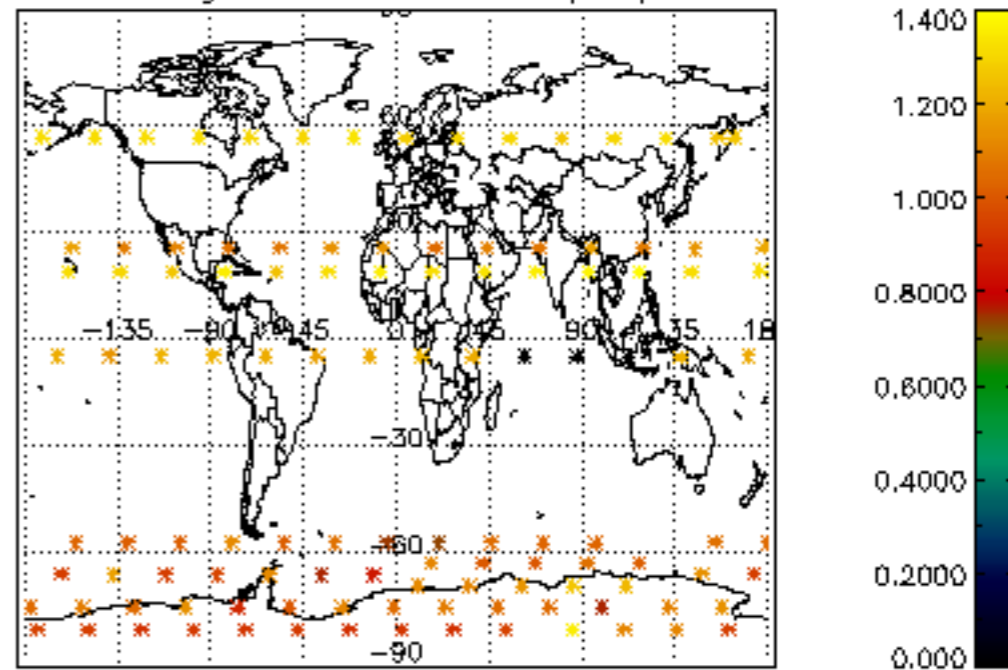
Percentage of saturation errors per profile



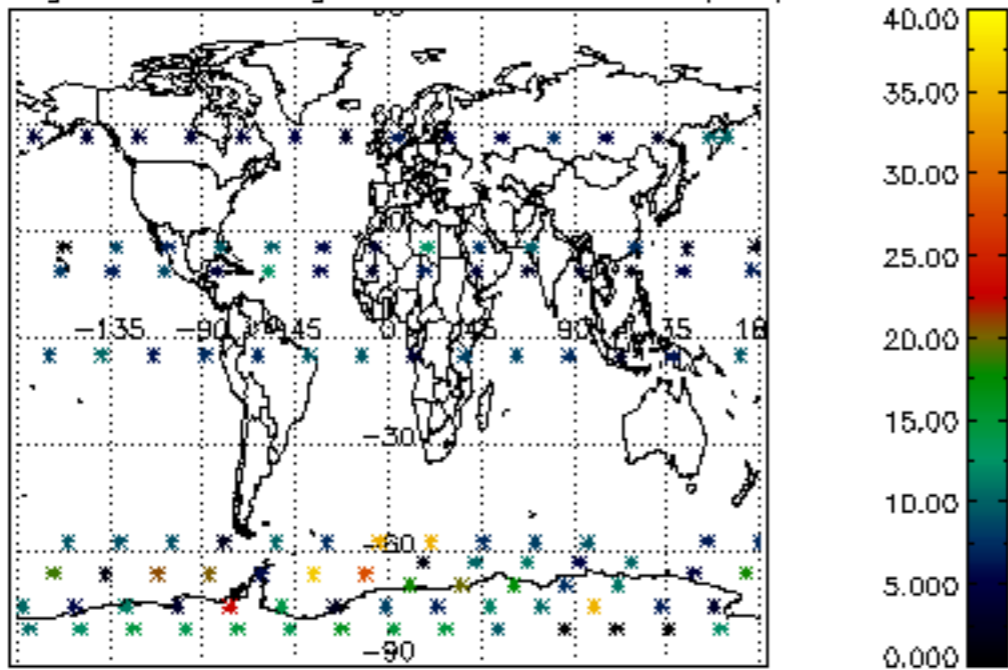
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

