

GOMOS Level 2 Daily Report

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

Item	Value
Time of report generation	24APR2013 04:09:21
Data source version	GOMOS/6.01
Start time of products	15-09-2006 (15SEP2006 00:00:00)
Stop time of products	16-09-2006 (16SEP2006 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	258
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

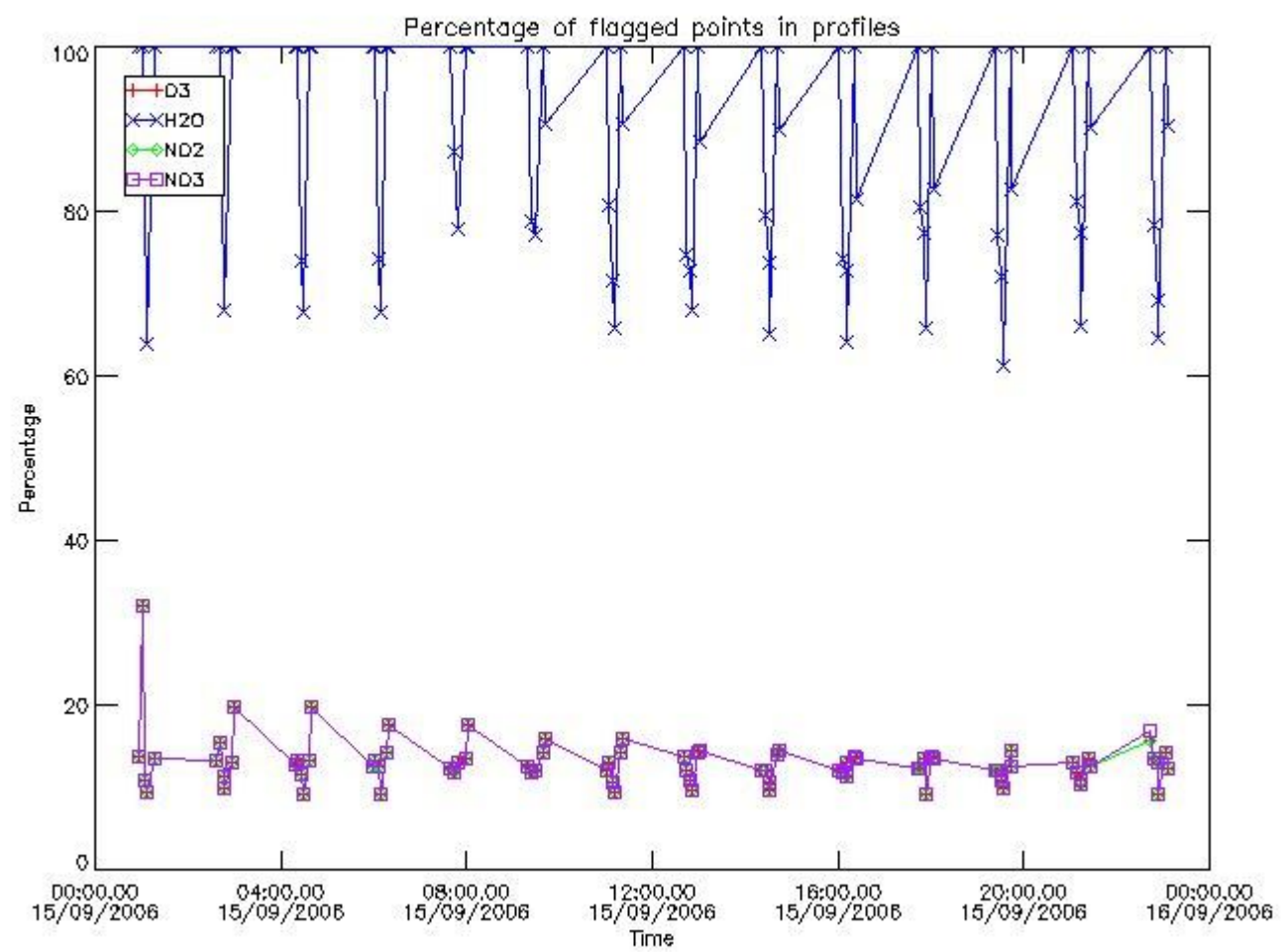
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20060915_000031_00000372051_00145_23746_1706.N1	15-SEP-2006 00:00:31	Bright	37.000	61	8Eps Peg	2.1000	3900.0	74	23746	No
2	GOM_NL__2PRFIN20060915_000747_00000392051_00145_23746_1707.N1	15-SEP-2006 00:07:47	Bright	38.500	92	53Eps Cyg	2.5000	4500.0	77	23746	No
3	GOM_NL__2PRFIN20060915_001053_00000342051_00145_23746_1708.N1	15-SEP-2006 00:10:53	Bright	33.500	19	50Alp Cyg	1.2460	10500.	67	23746	No
4	GOM_NL__2PRFIN20060915_001519_00000332051_00145_23746_1709.N1	15-SEP-2006 00:15:19	Bright	33.000	89	5Alp Cep	2.4510	8000.0	66	23746	No
5	GOM_NL__2PRFIN20060915_002259_00000332051_00145_23746_1710.N1	15-SEP-2006 00:22:59	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	23746	No
6	GOM_NL__2PRFIN20060915_003016_00000372051_00145_23746_1711.N1	15-SEP-2006 00:30:16	Bright	36.500	36	50Alp UMa	1.8000	6300.0	73	23746	No
7	GOM_NL__2PRFIN20060915_003142_00000352051_00145_23746_1712.N1	15-SEP-2006 00:31:42	Bright	35.000	82	48Bet UMa	2.3650	10600.	70	23746	No
8	GOM_NL__2PRFIN20060915_005629_00000412051_00145_23746_1713.N1	15-SEP-2006 00:56:29	Dark	41.000	132	15Rho Pup	2.8030	6900.0	82	23746	No
9	GOM_NL__2PRFIN20060915_010038_00000382051_00145_23746_1714.N1	15-SEP-2006 01:00:38	Dark	38.000	70	Zet Pup	2.2460	39000.	76	23746	No
10	GOM_NL__2PRFIN20060915_010516_00000482051_00145_23746_1715.N1	15-SEP-2006 01:05:16	Dark	47.500	41	Eps Car	1.8600	4100.0	95	23746	No
11	GOM_NL__2PRFIN20060915_010636_00000552051_00146_23747_1698.N1	15-SEP-2006 01:06:36	Dark	54.500	2	Alp Car	-0.73600	7000.0	109	23747	No
12	GOM_NL__2PRFIN20060915_011553_00000382051_00146_23747_1699.N1	15-SEP-2006 01:15:53	Dark	37.500	135	Bet Hyi	2.8200	5800.0	75	23747	No
13	GOM_NL__2PRFIN20060915_012126_00000412051_00146_23747_1700.N1	15-SEP-2006 01:21:26	Straylight	40.500	148	Alp Tuc	2.8780	4100.0	81	23747	No
14	GOM_NL__2PRFIN20060915_012509_00000392051_00146_23747_1701.N1	15-SEP-2006 01:25:09	Straylight	38.500	31	Alp Gru	1.7340	15200.	77	23747	No
15	GOM_NL__2PRFIN20060915_012756_00000382051_00146_23747_1702.N1	15-SEP-2006 01:27:56	Straylight	38.000	172	Gam Gru	3.0030	13100.	76	23747	No
16	GOM_NL__2PRFIN20060915_012921_00000432051_00146_23747_1703.N1	15-SEP-2006 01:29:21	Straylight	42.500	18	24Alp PsA	1.1660	9700.0	85	23747	No
17	GOM_NL__2PRFIN20060915_013353_00000402051_00146_23747_1704.N1	15-SEP-2006 01:33:53	Tw_i_and_stray	39.500	142	49Del Cap	2.8500	8900.0	79	23747	No
18	GOM_NL__2PRFIN20060915_013807_00000382051_00146_23747_1705.N1	15-SEP-2006 01:38:07	Bright	38.000	162	34Alp Aqr	2.9440	5350.0	76	23747	No
19	GOM_NL__2PRFIN20060915_014107_00000372051_00146_23747_1706.N1	15-SEP-2006 01:41:07	Bright	37.000	61	8Eps Peg	2.1000	3900.0	74	23747	No
20	GOM_NL__2PRFIN20060915_014823_00000392051_00146_23747_1707.N1	15-SEP-2006 01:48:23	Bright	39.000	92	53Eps Cyg	2.5000	4500.0	78	23747	No
21	GOM_NL__2PRFIN20060915_015129_00000352051_00146_23747_1708.N1	15-SEP-2006 01:51:29	Bright	35.000	19	50Alp Cyg	1.2460	10500.	70	23747	No
22	GOM_NL__2PRFIN20060915_015555_00000342051_00146_23747_1709.N1	15-SEP-2006 01:55:55	Bright	34.000	89	5Alp Cep	2.4510	8000.0	68	23747	No
23	GOM_NL__2PRFIN20060915_020335_00000342051_00146_23747_1710.N1	15-SEP-2006 02:03:35	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	23747	No
24	GOM_NL__2PRFIN20060915_021052_00000372051_00146_23747_1711.N1	15-SEP-2006 02:10:52	Bright	36.500	36	50Alp UMa	1.8000	6300.0	73	23747	No
25	GOM_NL__2PRFIN20060915_021218_00000352051_00146_23747_1712.N1	15-SEP-2006 02:12:18	Bright	35.000	82	48Bet UMa	2.3650	10600.	70	23747	No
26	GOM_NL__2PRFIN20060915_023705_00000422051_00146_23747_1713.N1	15-SEP-2006 02:37:05	Dark	42.000	132	15Rho Pup	2.8030	6900.0	84	23747	No
27	GOM_NL__2PRFIN20060915_024115_00000402051_00146_23747_1714.N1	15-SEP-2006 02:41:15	Dark	39.500	70	Zet Pup	2.2460	39000.	79	23747	No
28	GOM_NL__2PRFIN20060915_024553_00000492051_00146_23747_1715.N1	15-SEP-2006 02:45:53	Dark	49.000	41	Eps Car	1.8600	4100.0	98	23747	No
29	GOM_NL__2PRFIN20060915_024713_00000522051_00147_23748_1698.N1	15-SEP-2006 02:47:13	Dark	52.000	2	Alp Car	-0.73600	7000.0	104	23748	No
30	GOM_NL__2PRFIN20060915_025629_00000402051_00147_23748_1699.N1	15-SEP-2006 02:56:29	Dark	39.500	135	Bet Hyi	2.8200	5800.0	79	23748	No
31	GOM_NL__2PRFIN20060915_025856_00000262051_00147_23748_1700.N1	15-SEP-2006 02:58:56	Dark	26.000	9	Alp Eri	0.45300	24000.	52	23748	No
32	GOM_NL__2PRFIN20060915_030202_00000402051_00147_23748_1701.N1	15-SEP-2006 03:02:02	Straylight	39.500	148	Alp Tuc	2.8780	4100.0	79	23748	No
33	GOM_NL__2PRFIN20060915_030546_00000412051_00147_23748_1702.N1	15-SEP-2006 03:05:46	Straylight	41.000	31	Alp Gru	1.7340	15200.	82	23748	No
34	GOM_NL__2PRFIN20060915_030833_00000372051_00147_23748_1703.N1	15-SEP-2006 03:08:33	Straylight	37.000	172	Gam Gru	3.0030	13100.	74	23748	No
35	GOM_NL__2PRFIN20060915_030958_00000462051_00147_23748_1704.N1	15-SEP-2006 03:09:58	Straylight	45.500	18	24Alp PsA	1.1660	9700.0	91	23748	No
36	GOM_NL__2PRFIN20060915_031430_00000362051_00147_23748_1705.N1	15-SEP-2006 03:14:30	Tw_i_and_stray	36.000	142	49Del Cap	2.8500	8900.0	72	23748	No
37	GOM_NL__2PRFIN20060915_031844_00000372051_00147_23748_1706.N1	15-SEP-2006 03:18:44	Bright	37.000	162	34Alp Aqr	2.9440	5350.0	74	23748	No
38	GOM_NL__2PRFIN20060915_032144_00000382051_00147_23748_1707.N1	15-SEP-2006 03:21:44	Bright	37.500	61	8Eps Peg	2.1000	3900.0	75	23748	No
39	GOM_NL__2PRFIN20060915_032900_00000372051_00147_23748_1708.N1	15-SEP-2006 03:29:00	Bright	36.500	92	53Eps Cyg	2.5000	4500.0	73	23748	No
40	GOM_NL__2PRFIN20060915_033206_00000362051_00147_23748_1709.N1	15-SEP-2006 03:32:06	Bright	36.000	19	50Alp Cyg	1.2460	10500.	72	23748	No
41	GOM_NL__2PRFIN20060915_033631_00000352051_00147_23748_1710.N1	15-SEP-2006 03:36:31	Bright	34.500	89	5Alp Cep	2.4510	8000.0	69	23748	No
42	GOM_NL__2PRFIN20060915_034412_00000322051_00147_23748_1711.N1	15-SEP-2006 03:44:12	Bright	32.000	49	1Alp UMi	1.9900	6300.0	64	23748	No

220	GOM_NL__2PRFIN20060915_202231_000000352051_00157_23758_1729.N1	15-SEP-2006 20:22:31	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	23758	No
221	GOM_NL__2PRFIN20060915_203011_000000362051_00157_23758_1730.N1	15-SEP-2006 20:30:11	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	23758	No
222	GOM_NL__2PRFIN20060915_203730_000000332051_00157_23758_1731.N1	15-SEP-2006 20:37:30	Bright	32.500	36	50Alp UMa	1.8000	6300.0	65	23758	No
223	GOM_NL__2PRFIN20060915_203856_000000332051_00157_23758_1732.N1	15-SEP-2006 20:38:56	Bright	33.000	82	48Bet UMa	2.3650	10600.	66	23758	No
224	GOM_NL__2PRFIN20060915_210346_000000402051_00157_23758_1733.N1	15-SEP-2006 21:03:46	Dark	39.500	132	15Rho Pup	2.8030	6900.0	79	23758	No
225	GOM_NL__2PRFIN20060915_210742_000000432051_00157_23758_1734.N1	15-SEP-2006 21:07:42	Dark	43.000	65	Lam Vel	2.2040	4400.0	86	23758	No
226	GOM_NL__2PRFIN20060915_211231_000000492051_00157_23758_1735.N1	15-SEP-2006 21:12:31	Dark	49.000	41	Eps Car	1.8600	4100.0	98	23758	No
227	GOM_NL__2PRFIN20060915_211356_000000522051_00158_23759_1718.N1	15-SEP-2006 21:13:56	Dark	52.000	2	Alp Car	-0.73600	7000.0	104	23759	No
228	GOM_NL__2PRFIN20060915_212307_000000382051_00158_23759_1719.N1	15-SEP-2006 21:23:07	Dark	37.500	135	Bet Hyi	2.8200	5800.0	75	23759	No
229	GOM_NL__2PRFIN20060915_212537_000000412051_00158_23759_1720.N1	15-SEP-2006 21:25:37	Dark	41.000	9	Alp Eri	0.45300	24000.	82	23759	No
230	GOM_NL__2PRFIN20060915_213223_000000412051_00158_23759_1721.N1	15-SEP-2006 21:32:23	Straylight	41.000	31	Alp Gru	1.7340	15200.	82	23759	No
231	GOM_NL__2PRFIN20060915_213510_000000372051_00158_23759_1722.N1	15-SEP-2006 21:35:10	Straylight	36.500	172	Gam Gru	3.0030	13100.	73	23759	No
232	GOM_NL__2PRFIN20060915_213635_000000432051_00158_23759_1723.N1	15-SEP-2006 21:36:35	Straylight	42.500	18	24Alp PsA	1.1660	9700.0	85	23759	No
233	GOM_NL__2PRFIN20060915_214107_000000382051_00158_23759_1724.N1	15-SEP-2006 21:41:07	Twilight_and_stray	38.000	142	49Del Cap	2.8500	8900.0	76	23759	No
234	GOM_NL__2PRFIN20060915_214521_000000372051_00158_23759_1725.N1	15-SEP-2006 21:45:21	Bright	36.500	162	34Alp Aqr	2.9440	5350.0	73	23759	No
235	GOM_NL__2PRFIN20060915_214821_000000382051_00158_23759_1726.N1	15-SEP-2006 21:48:21	Bright	37.500	61	8Eps Peg	2.1000	3900.0	75	23759	No
236	GOM_NL__2PRFIN20060915_215539_000000362051_00158_23759_1727.N1	15-SEP-2006 21:55:39	Bright	36.000	92	53Eps Cyg	2.5000	4500.0	72	23759	No
237	GOM_NL__2PRFIN20060915_215844_000000382051_00158_23759_1728.N1	15-SEP-2006 21:58:44	Bright	38.000	19	50Alp Cyg	1.2460	10500.	76	23759	No
238	GOM_NL__2PRFIN20060915_220307_000000352051_00158_23759_1729.N1	15-SEP-2006 22:03:07	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	23759	No
239	GOM_NL__2PRFIN20060915_221047_000000362051_00158_23759_1730.N1	15-SEP-2006 22:10:47	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	23759	No
240	GOM_NL__2PRFIN20060915_221806_000000372051_00158_23759_1731.N1	15-SEP-2006 22:18:06	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	23759	No
241	GOM_NL__2PRFIN20060915_221933_000000512051_00158_23759_1732.N1	15-SEP-2006 22:19:33	Bright	50.500	82	48Bet UMa	2.3650	10600.	101	23759	No
242	GOM_NL__2PRFIN20060915_224423_000000422051_00158_23759_1733.N1	15-SEP-2006 22:44:23	Dark	42.000	132	15Rho Pup	2.8030	6900.0	84	23759	No
243	GOM_NL__2PRFIN20060915_224818_000000382051_00158_23759_1734.N1	15-SEP-2006 22:48:18	Dark	37.500	65	Lam Vel	2.2040	4400.0	75	23759	No
244	GOM_NL__2PRFIN20060915_225307_000000402051_00158_23759_1735.N1	15-SEP-2006 22:53:07	Dark	39.500	41	Eps Car	1.8600	4100.0	79	23759	No
245	GOM_NL__2PRFIN20060915_225432_000000562051_00159_23760_1718.N1	15-SEP-2006 22:54:32	Dark	55.500	2	Alp Car	-0.73600	7000.0	111	23760	No
246	GOM_NL__2PRFIN20060915_230343_000000362051_00159_23760_1719.N1	15-SEP-2006 23:03:43	Dark	36.000	135	Bet Hyi	2.8200	5800.0	72	23760	No
247	GOM_NL__2PRFIN20060915_230614_000000422051_00159_23760_1720.N1	15-SEP-2006 23:06:14	Dark	41.500	9	Alp Eri	0.45300	24000.	83	23760	No
248	GOM_NL__2PRFIN20060915_231259_000000402051_00159_23760_1721.N1	15-SEP-2006 23:12:59	Straylight	40.000	31	Alp Gru	1.7340	15200.	80	23760	No
249	GOM_NL__2PRFIN20060915_231546_000000352051_00159_23760_1722.N1	15-SEP-2006 23:15:46	Straylight	35.000	172	Gam Gru	3.0030	13100.	70	23760	No
250	GOM_NL__2PRFIN20060915_231711_000000432051_00159_23760_1723.N1	15-SEP-2006 23:17:11	Straylight	43.000	18	24Alp PsA	1.1660	9700.0	86	23760	No
251	GOM_NL__2PRFIN20060915_232143_000000392051_00159_23760_1724.N1	15-SEP-2006 23:21:43	Twilight_and_stray	39.000	142	49Del Cap	2.8500	8900.0	78	23760	No
252	GOM_NL__2PRFIN20060915_232557_000000382051_00159_23760_1725.N1	15-SEP-2006 23:25:57	Bright	38.000	162	34Alp Aqr	2.9440	5350.0	76	23760	No
253	GOM_NL__2PRFIN20060915_232857_000000372051_00159_23760_1726.N1	15-SEP-2006 23:28:57	Bright	37.000	61	8Eps Peg	2.1000	3900.0	74	23760	No
254	GOM_NL__2PRFIN20060915_233615_000000352051_00159_23760_1727.N1	15-SEP-2006 23:36:15	Bright	35.000	92	53Eps Cyg	2.5000	4500.0	70	23760	No
255	GOM_NL__2PRFIN20060915_233920_000000362051_00159_23760_1728.N1	15-SEP-2006 23:39:20	Bright	35.500	19	50Alp Cyg	1.2460	10500.	71	23760	No
256	GOM_NL__2PRFIN20060915_234343_000000362051_00159_23760_1729.N1	15-SEP-2006 23:43:43	Bright	36.000	89	5Alp Cep	2.4510	8000.0	72	23760	No
257	GOM_NL__2PRFIN20060915_235123_000000332051_00159_23760_1730.N1	15-SEP-2006 23:51:23	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	23760	No
258	GOM_NL__2PRFIN20060915_235842_000000372051_00159_23760_1731.N1	15-SEP-2006 23:58:42	Bright	36.500	36	50Alp UMa	1.8000	6300.0	73	23760	No

3. Quality information per product

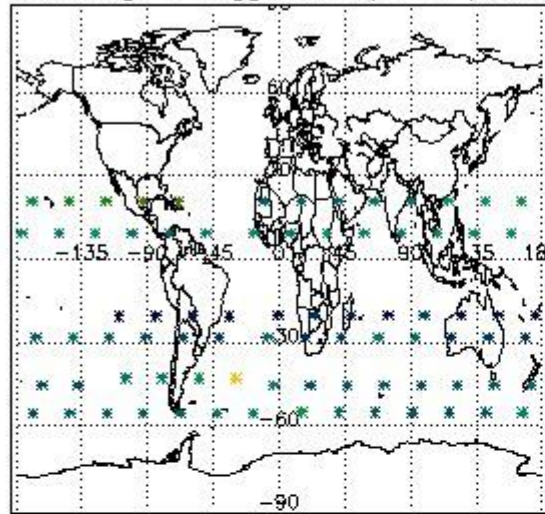
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

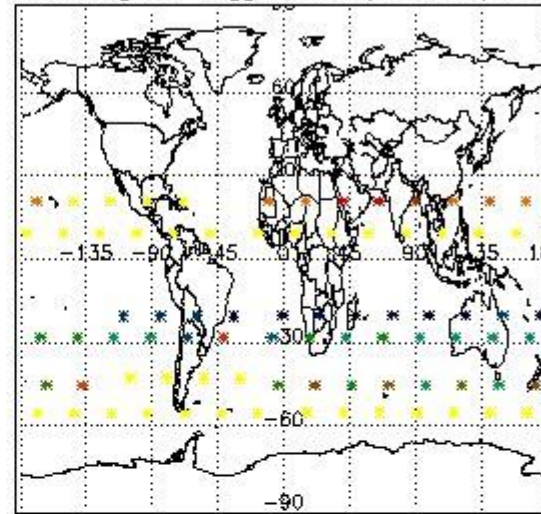


3.2 Plot quality information per product (world map)

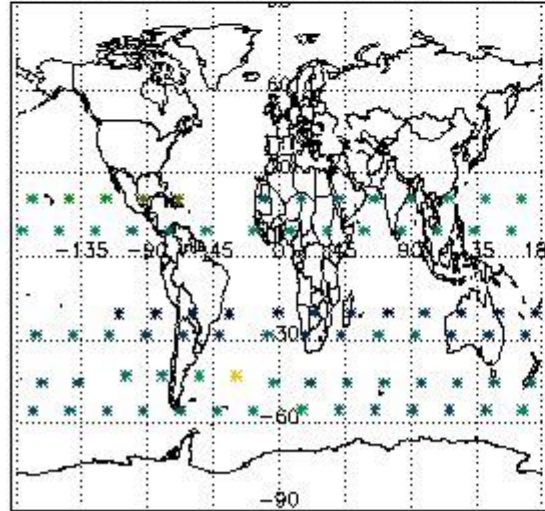
Percentage of flagged data per O3 profile



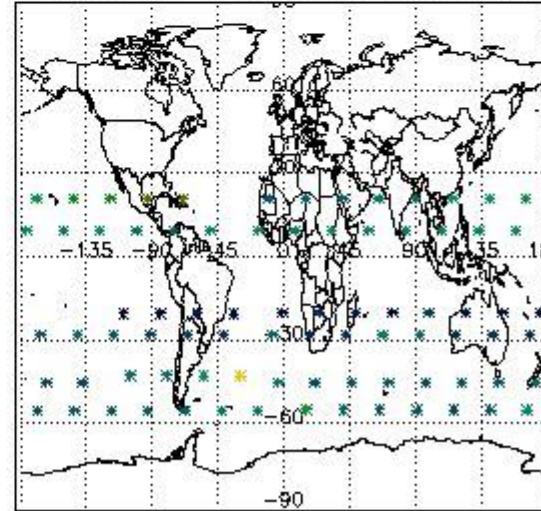
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

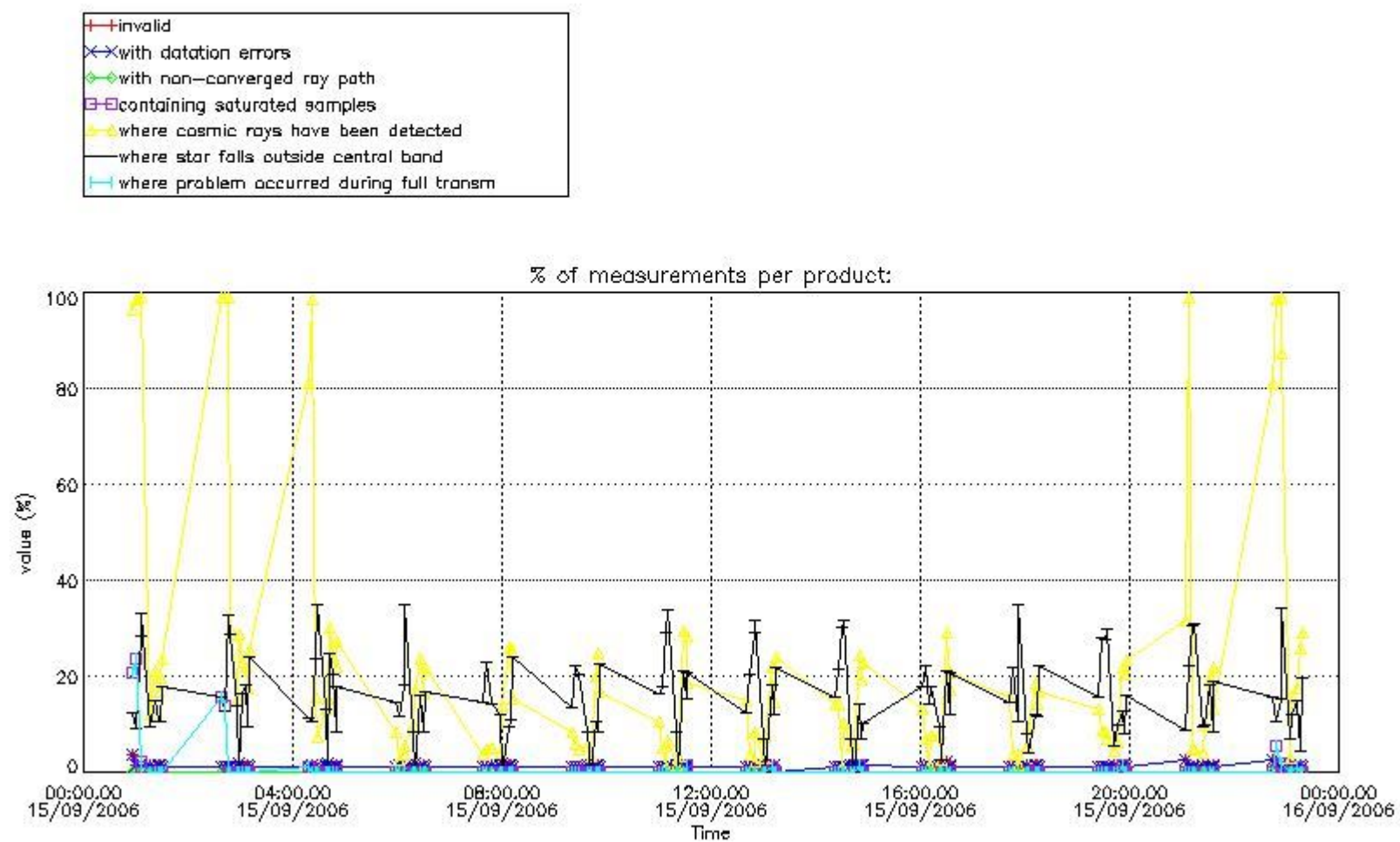


4. Level 1 quality information per product

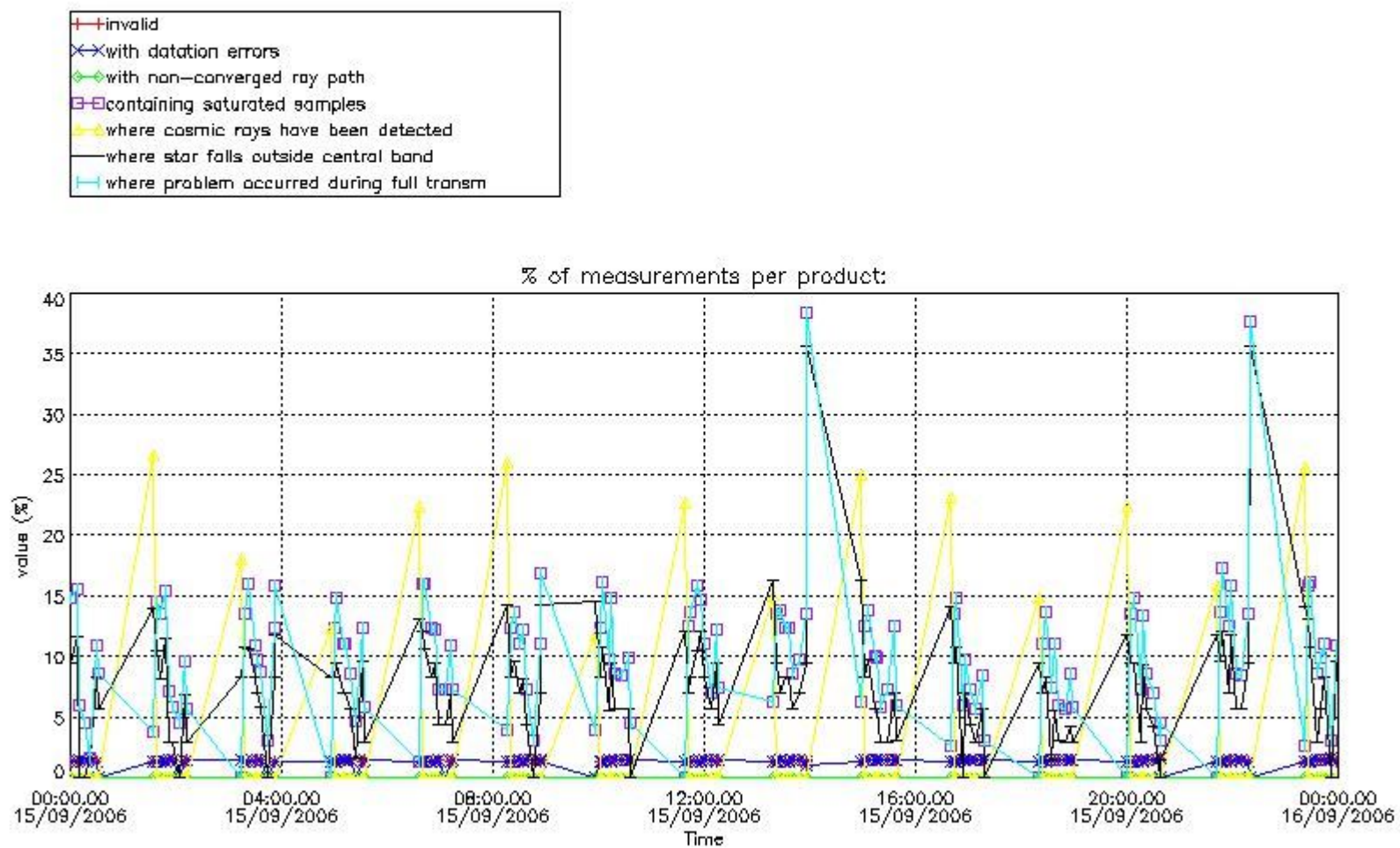
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



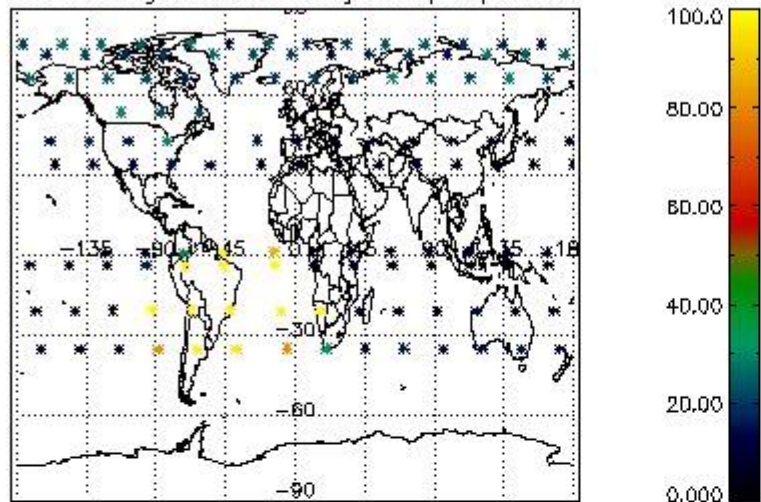
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



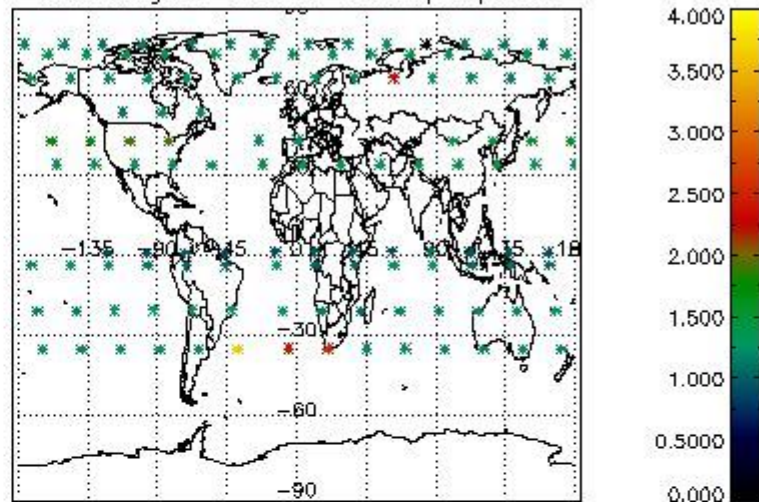
4.2 Plot quality information per product coming from level 1b processing (world map)

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

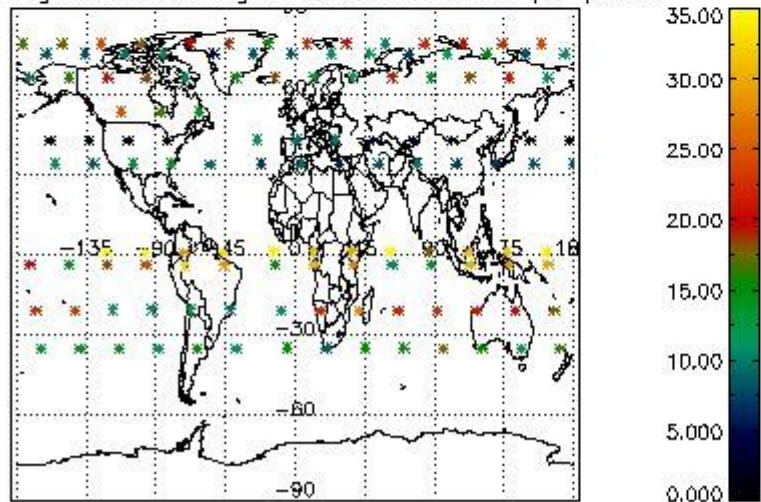
Percentage of cosmic ray hits per profile



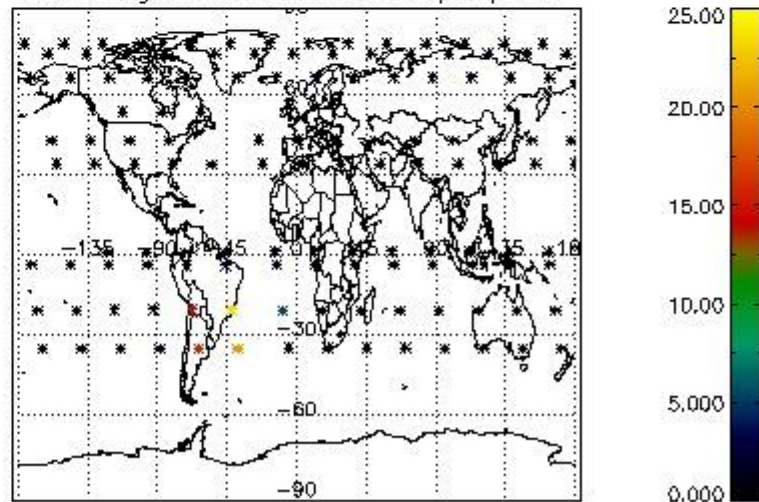
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

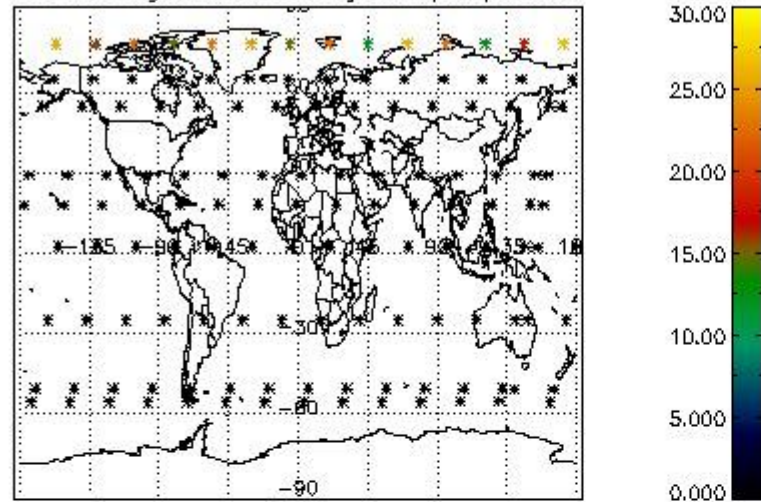


Percentage of saturation errors per profile

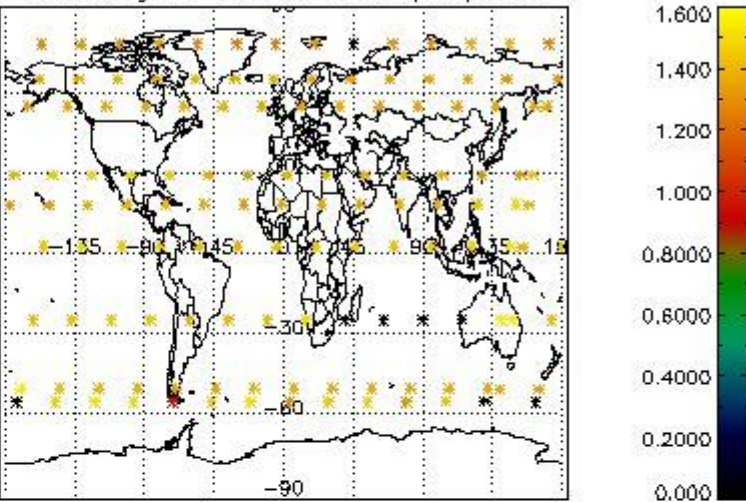


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

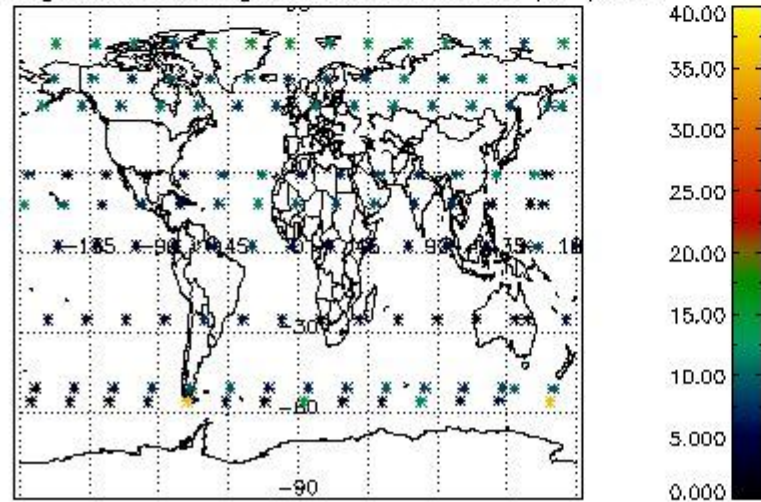
Percentage of cosmic ray hits per profile



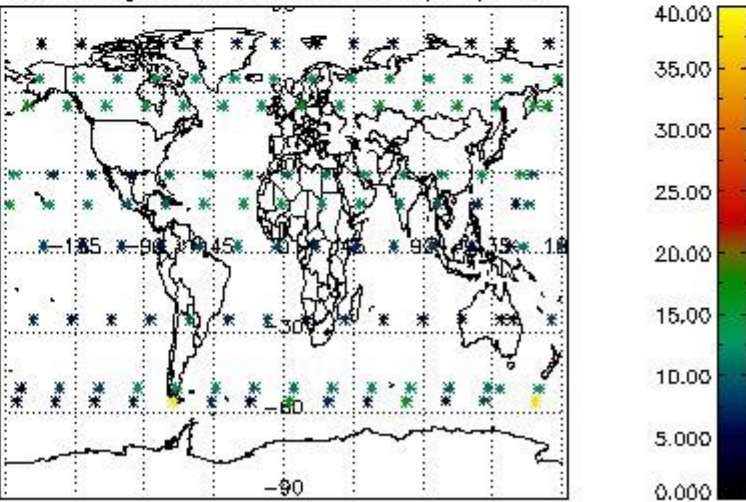
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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

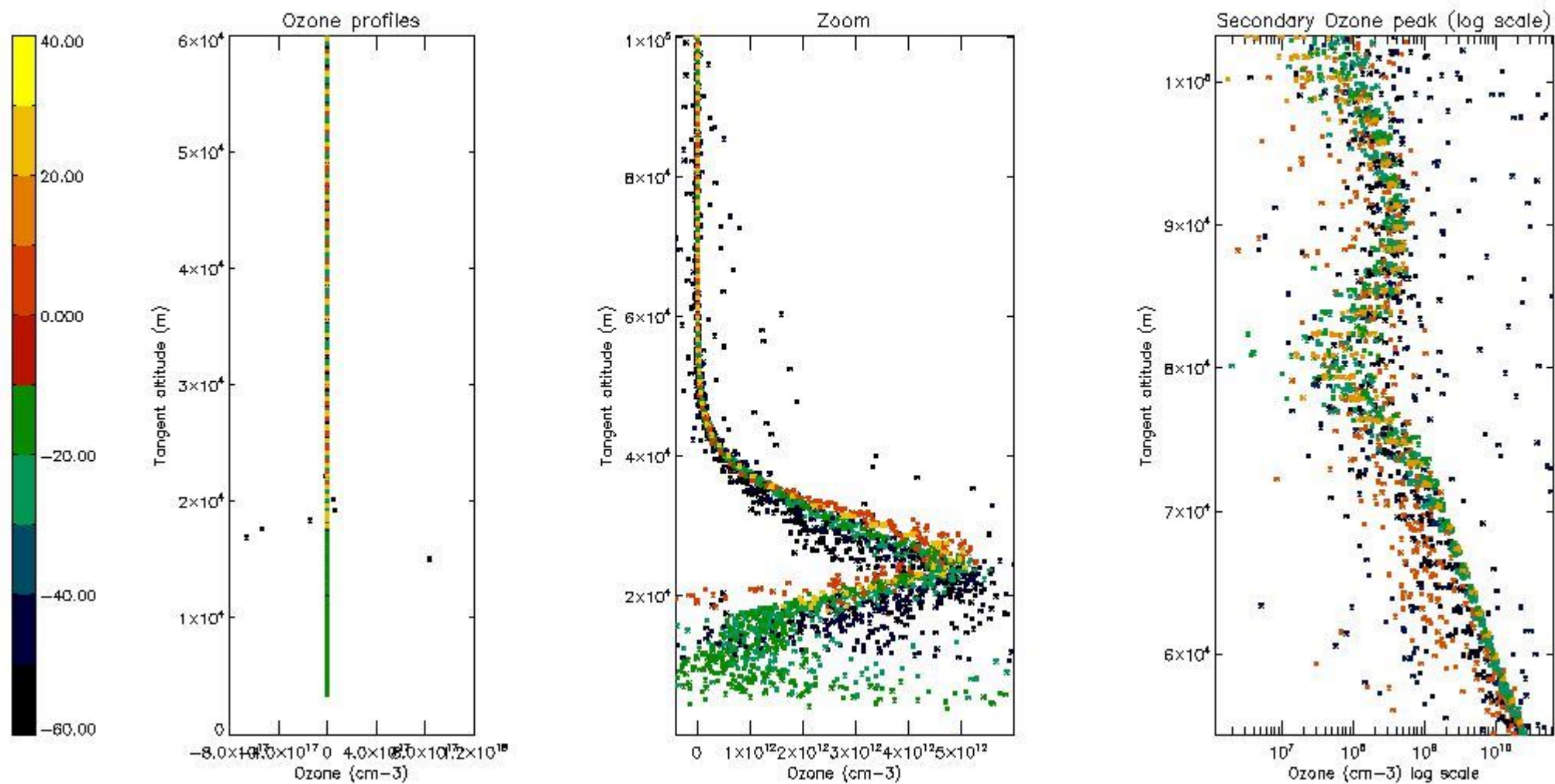
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	35
STD < 20	17

STD < 10	12
STD < 5	6

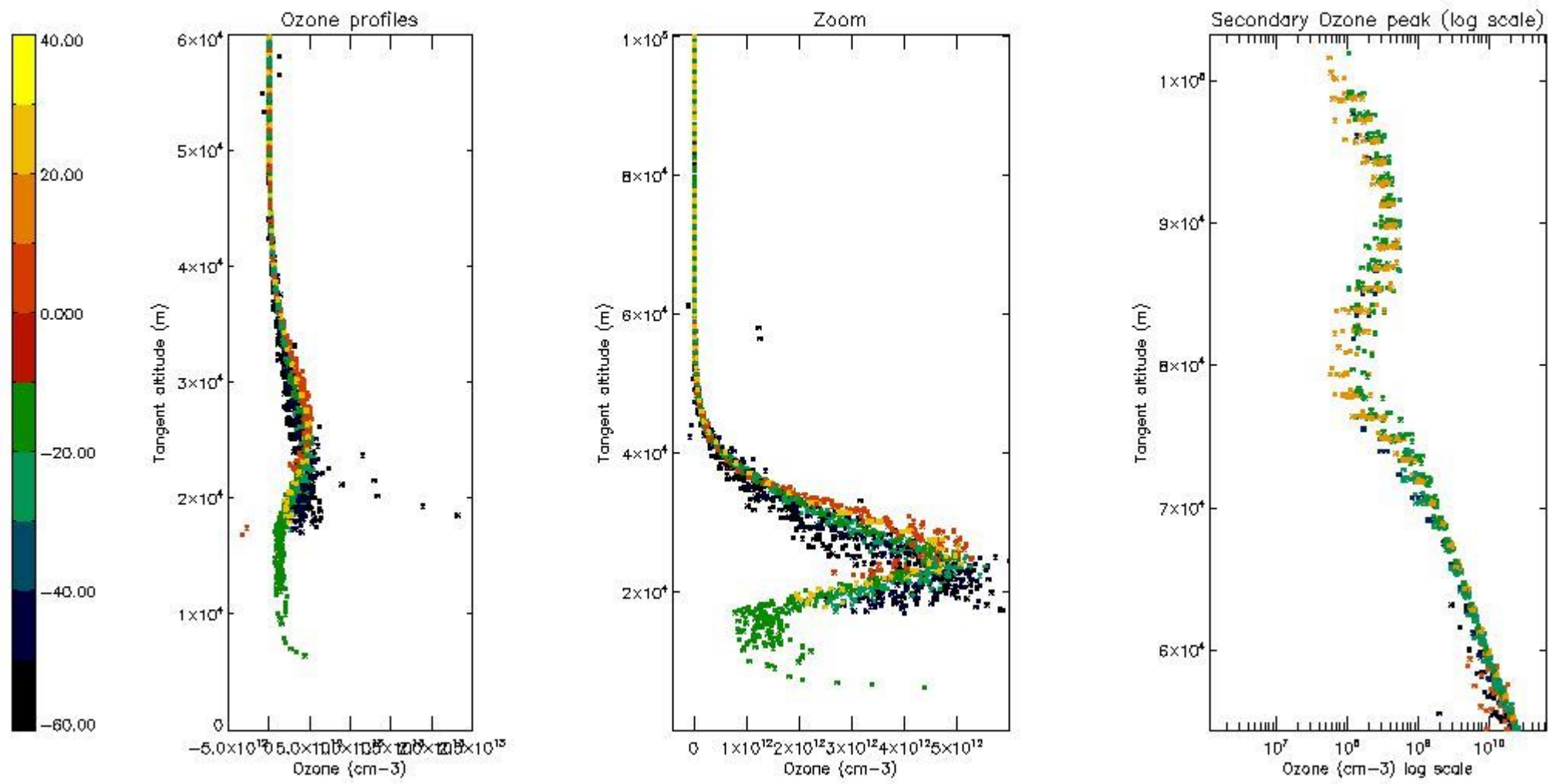
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



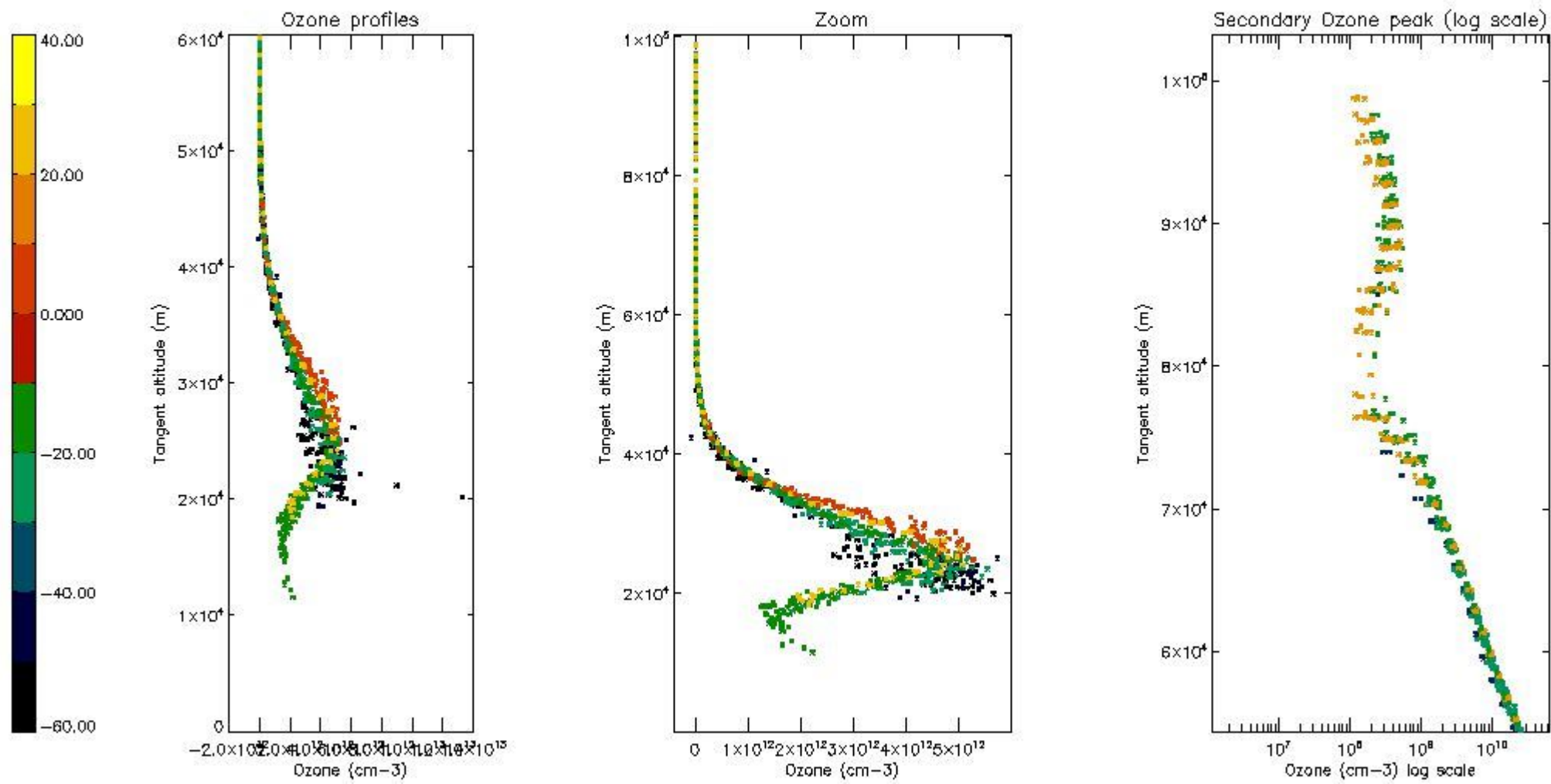
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



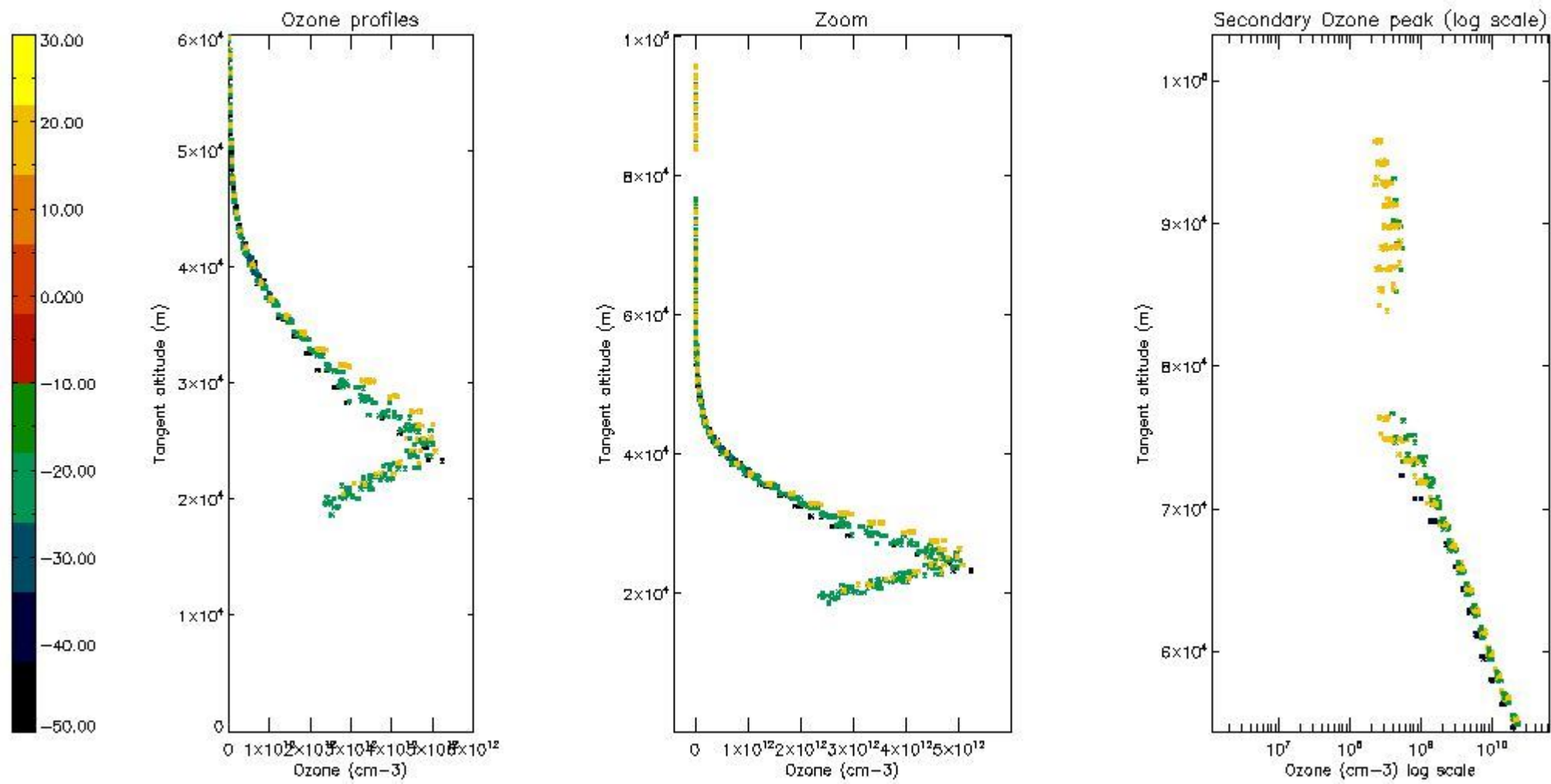
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



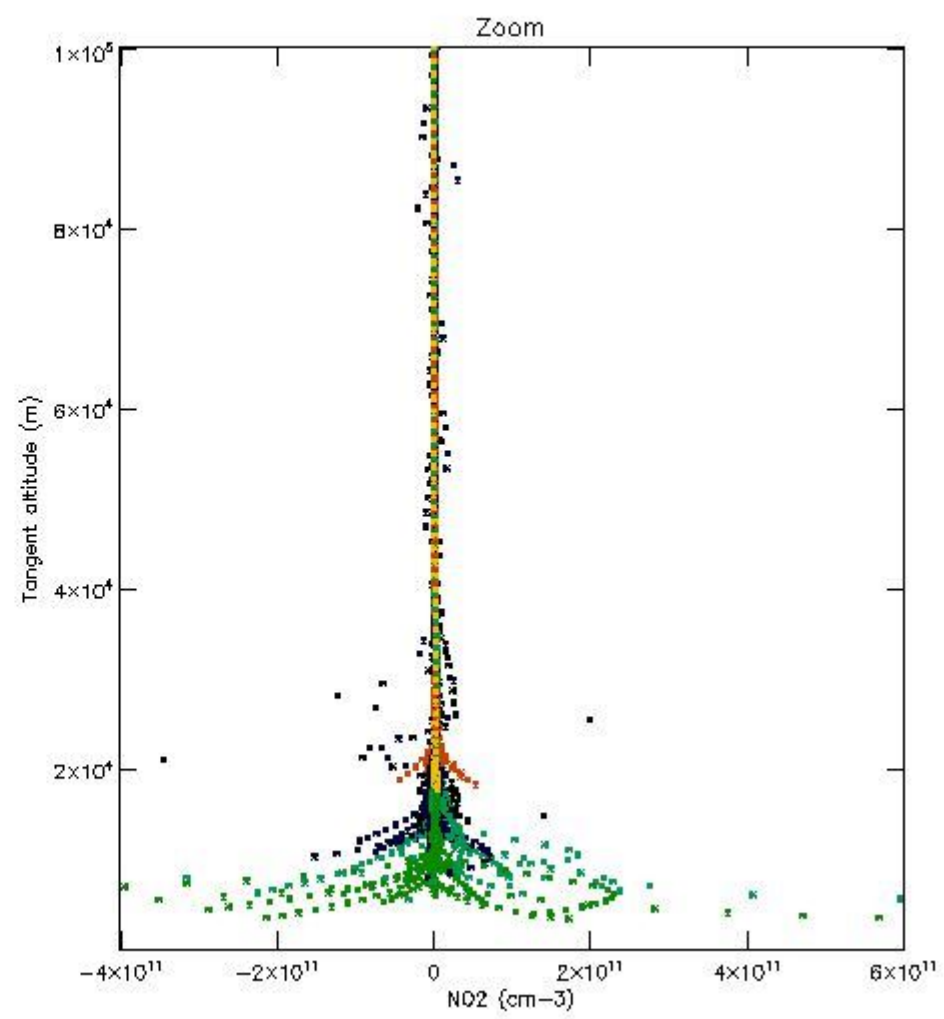
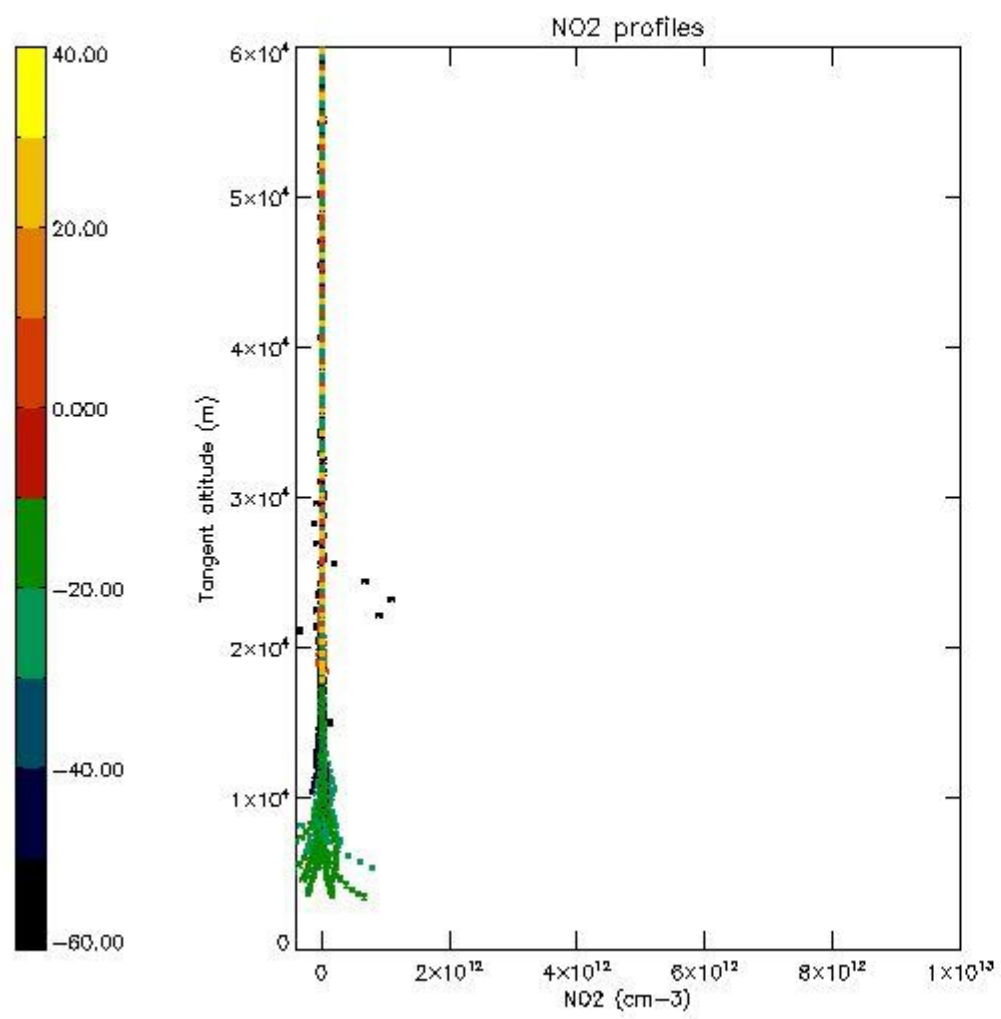
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



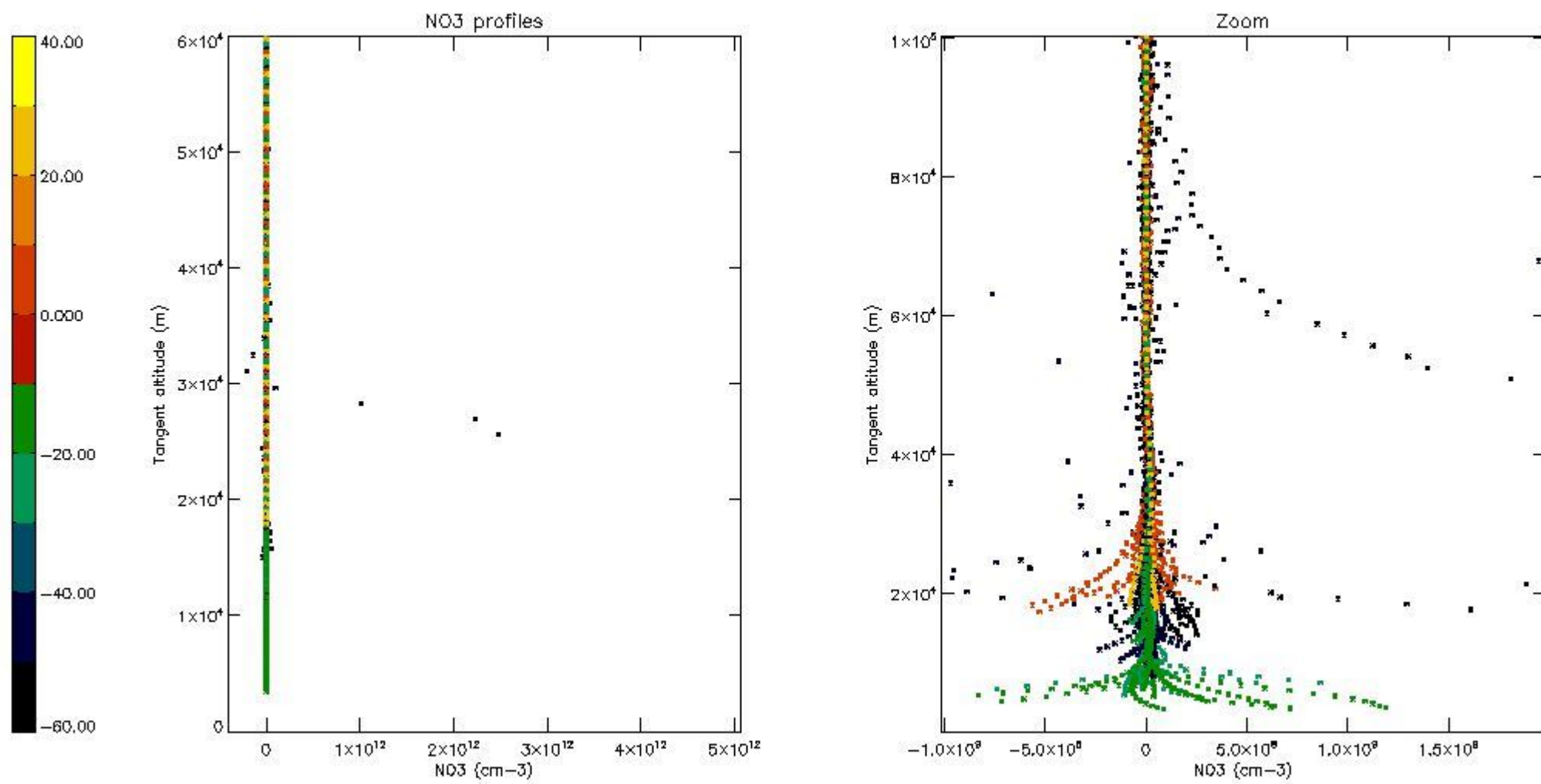
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



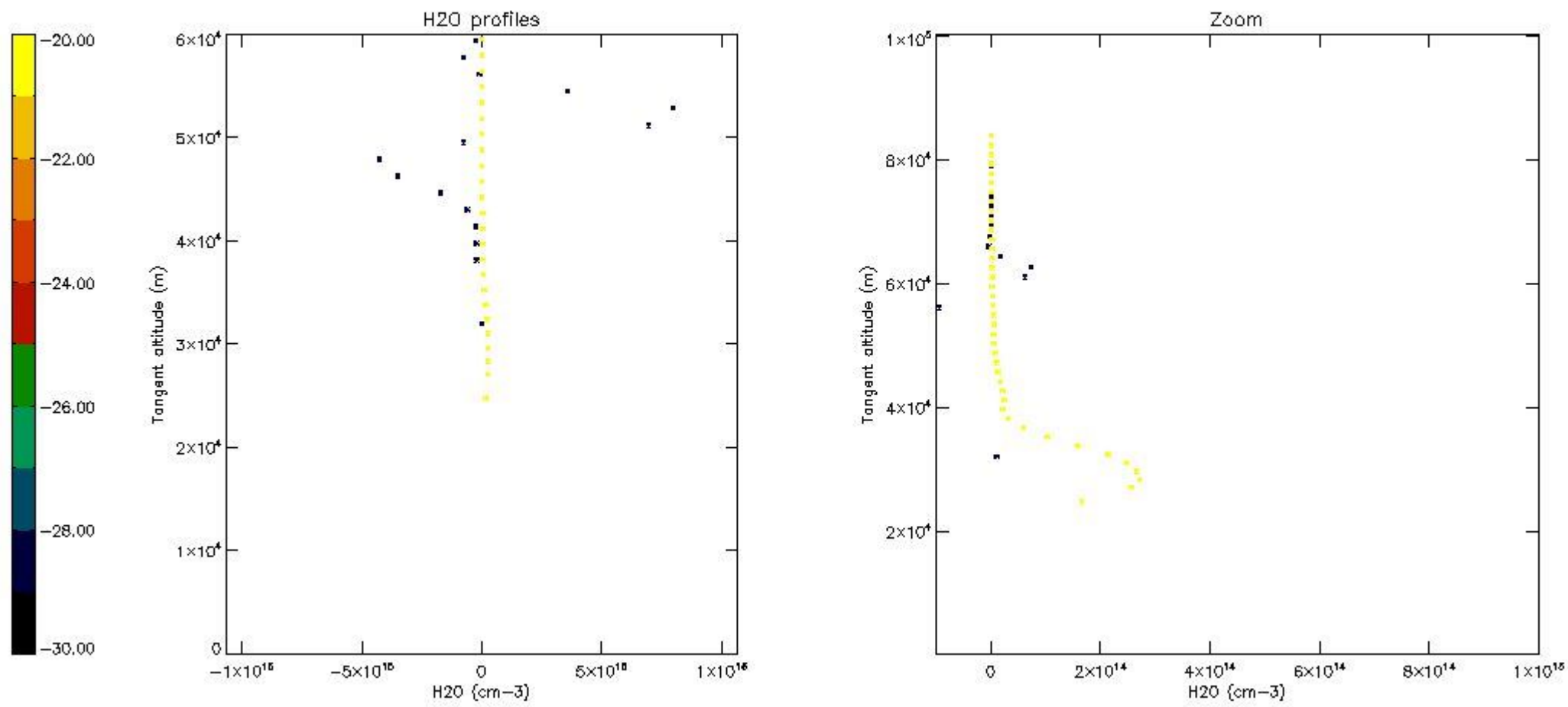
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

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

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	15-SEP-2006 00:00:31
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	15-SEP-2006 00:00:31
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	15-SEP-2006 00:00:31

GOMOS Level 2 Daily Report

SUMMARY

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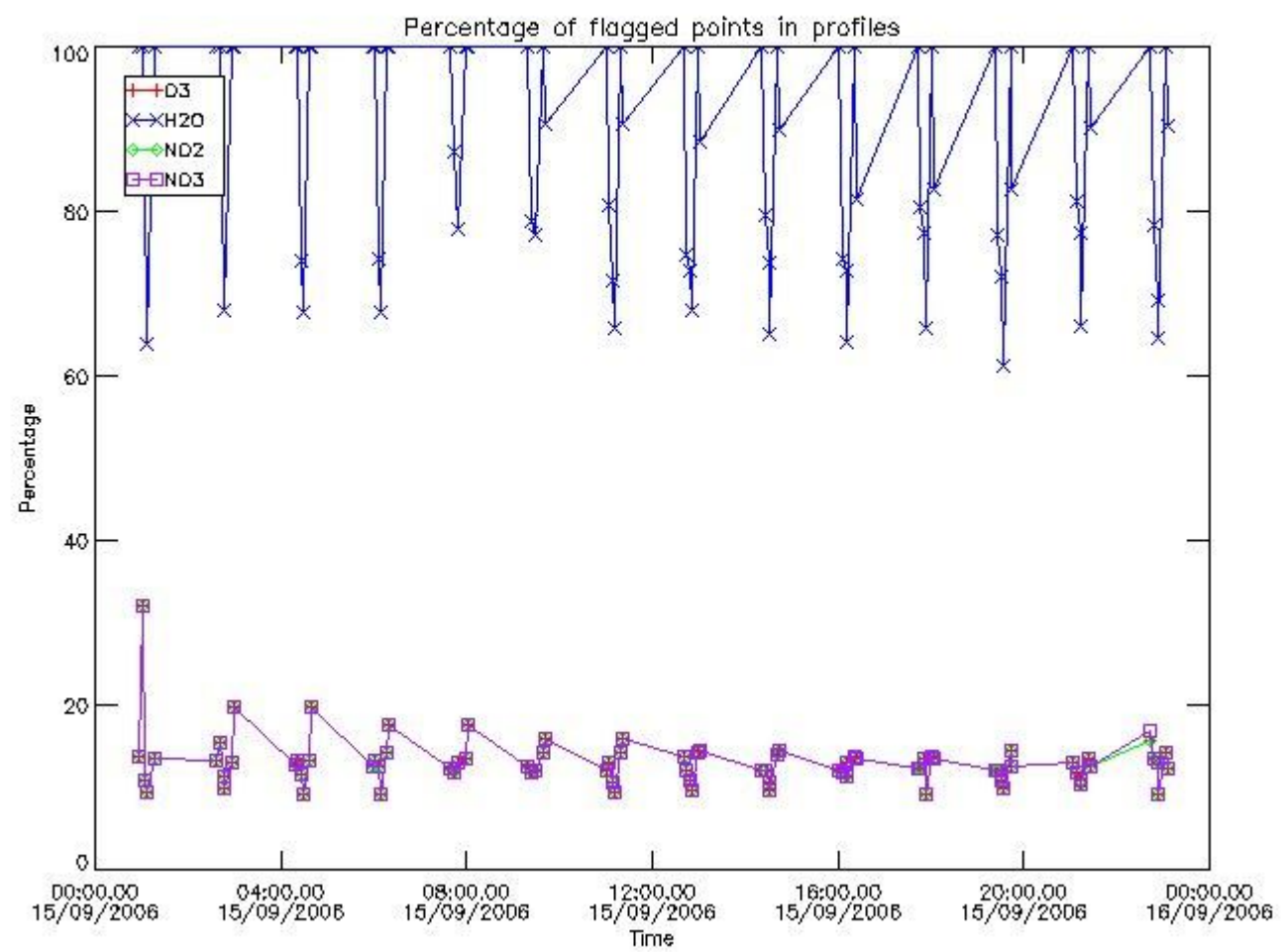
[6. Auxiliary Data Files used for the production reported in section 2](#)

220	GOM_NL__2PRFIN20060915_202231_000000352051_00157_23758_1729.N1	15-SEP-2006 20:22:31	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	23758	No
221	GOM_NL__2PRFIN20060915_203011_000000362051_00157_23758_1730.N1	15-SEP-2006 20:30:11	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	23758	No
222	GOM_NL__2PRFIN20060915_203730_000000332051_00157_23758_1731.N1	15-SEP-2006 20:37:30	Bright	32.500	36	50Alp UMa	1.8000	6300.0	65	23758	No
223	GOM_NL__2PRFIN20060915_203856_000000332051_00157_23758_1732.N1	15-SEP-2006 20:38:56	Bright	33.000	82	48Bet UMa	2.3650	10600.	66	23758	No
224	GOM_NL__2PRFIN20060915_210346_000000402051_00157_23758_1733.N1	15-SEP-2006 21:03:46	Dark	39.500	132	15Rho Pup	2.8030	6900.0	79	23758	No
225	GOM_NL__2PRFIN20060915_210742_000000432051_00157_23758_1734.N1	15-SEP-2006 21:07:42	Dark	43.000	65	Lam Vel	2.2040	4400.0	86	23758	No
226	GOM_NL__2PRFIN20060915_211231_000000492051_00157_23758_1735.N1	15-SEP-2006 21:12:31	Dark	49.000	41	Eps Car	1.8600	4100.0	98	23758	No
227	GOM_NL__2PRFIN20060915_211356_000000522051_00158_23759_1718.N1	15-SEP-2006 21:13:56	Dark	52.000	2	Alp Car	-0.73600	7000.0	104	23759	No
228	GOM_NL__2PRFIN20060915_212307_000000382051_00158_23759_1719.N1	15-SEP-2006 21:23:07	Dark	37.500	135	Bet Hyi	2.8200	5800.0	75	23759	No
229	GOM_NL__2PRFIN20060915_212537_000000412051_00158_23759_1720.N1	15-SEP-2006 21:25:37	Dark	41.000	9	Alp Eri	0.45300	24000.	82	23759	No
230	GOM_NL__2PRFIN20060915_213223_000000412051_00158_23759_1721.N1	15-SEP-2006 21:32:23	Straylight	41.000	31	Alp Gru	1.7340	15200.	82	23759	No
231	GOM_NL__2PRFIN20060915_213510_000000372051_00158_23759_1722.N1	15-SEP-2006 21:35:10	Straylight	36.500	172	Gam Gru	3.0030	13100.	73	23759	No
232	GOM_NL__2PRFIN20060915_213635_000000432051_00158_23759_1723.N1	15-SEP-2006 21:36:35	Straylight	42.500	18	24Alp PsA	1.1660	9700.0	85	23759	No
233	GOM_NL__2PRFIN20060915_214107_000000382051_00158_23759_1724.N1	15-SEP-2006 21:41:07	Twilight_and_stray	38.000	142	49Del Cap	2.8500	8900.0	76	23759	No
234	GOM_NL__2PRFIN20060915_214521_000000372051_00158_23759_1725.N1	15-SEP-2006 21:45:21	Bright	36.500	162	34Alp Aqr	2.9440	5350.0	73	23759	No
235	GOM_NL__2PRFIN20060915_214821_000000382051_00158_23759_1726.N1	15-SEP-2006 21:48:21	Bright	37.500	61	8Eps Peg	2.1000	3900.0	75	23759	No
236	GOM_NL__2PRFIN20060915_215539_000000362051_00158_23759_1727.N1	15-SEP-2006 21:55:39	Bright	36.000	92	53Eps Cyg	2.5000	4500.0	72	23759	No
237	GOM_NL__2PRFIN20060915_215844_000000382051_00158_23759_1728.N1	15-SEP-2006 21:58:44	Bright	38.000	19	50Alp Cyg	1.2460	10500.	76	23759	No
238	GOM_NL__2PRFIN20060915_220307_000000352051_00158_23759_1729.N1	15-SEP-2006 22:03:07	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	23759	No
239	GOM_NL__2PRFIN20060915_221047_000000362051_00158_23759_1730.N1	15-SEP-2006 22:10:47	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	23759	No
240	GOM_NL__2PRFIN20060915_221806_000000372051_00158_23759_1731.N1	15-SEP-2006 22:18:06	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	23759	No
241	GOM_NL__2PRFIN20060915_221933_000000512051_00158_23759_1732.N1	15-SEP-2006 22:19:33	Bright	50.500	82	48Bet UMa	2.3650	10600.	101	23759	No
242	GOM_NL__2PRFIN20060915_224423_000000422051_00158_23759_1733.N1	15-SEP-2006 22:44:23	Dark	42.000	132	15Rho Pup	2.8030	6900.0	84	23759	No
243	GOM_NL__2PRFIN20060915_224818_000000382051_00158_23759_1734.N1	15-SEP-2006 22:48:18	Dark	37.500	65	Lam Vel	2.2040	4400.0	75	23759	No
244	GOM_NL__2PRFIN20060915_225307_000000402051_00158_23759_1735.N1	15-SEP-2006 22:53:07	Dark	39.500	41	Eps Car	1.8600	4100.0	79	23759	No
245	GOM_NL__2PRFIN20060915_225432_000000562051_00159_23760_1718.N1	15-SEP-2006 22:54:32	Dark	55.500	2	Alp Car	-0.73600	7000.0	111	23760	No
246	GOM_NL__2PRFIN20060915_230343_000000362051_00159_23760_1719.N1	15-SEP-2006 23:03:43	Dark	36.000	135	Bet Hyi	2.8200	5800.0	72	23760	No
247	GOM_NL__2PRFIN20060915_230614_000000422051_00159_23760_1720.N1	15-SEP-2006 23:06:14	Dark	41.500	9	Alp Eri	0.45300	24000.	83	23760	No
248	GOM_NL__2PRFIN20060915_231259_000000402051_00159_23760_1721.N1	15-SEP-2006 23:12:59	Straylight	40.000	31	Alp Gru	1.7340	15200.	80	23760	No
249	GOM_NL__2PRFIN20060915_231546_000000352051_00159_23760_1722.N1	15-SEP-2006 23:15:46	Straylight	35.000	172	Gam Gru	3.0030	13100.	70	23760	No
250	GOM_NL__2PRFIN20060915_231711_000000432051_00159_23760_1723.N1	15-SEP-2006 23:17:11	Straylight	43.000	18	24Alp PsA	1.1660	9700.0	86	23760	No
251	GOM_NL__2PRFIN20060915_232143_000000392051_00159_23760_1724.N1	15-SEP-2006 23:21:43	Twilight_and_stray	39.000	142	49Del Cap	2.8500	8900.0	78	23760	No
252	GOM_NL__2PRFIN20060915_232557_000000382051_00159_23760_1725.N1	15-SEP-2006 23:25:57	Bright	38.000	162	34Alp Aqr	2.9440	5350.0	76	23760	No
253	GOM_NL__2PRFIN20060915_232857_000000372051_00159_23760_1726.N1	15-SEP-2006 23:28:57	Bright	37.000	61	8Eps Peg	2.1000	3900.0	74	23760	No
254	GOM_NL__2PRFIN20060915_233615_000000352051_00159_23760_1727.N1	15-SEP-2006 23:36:15	Bright	35.000	92	53Eps Cyg	2.5000	4500.0	70	23760	No
255	GOM_NL__2PRFIN20060915_233920_000000362051_00159_23760_1728.N1	15-SEP-2006 23:39:20	Bright	35.500	19	50Alp Cyg	1.2460	10500.	71	23760	No
256	GOM_NL__2PRFIN20060915_234343_000000362051_00159_23760_1729.N1	15-SEP-2006 23:43:43	Bright	36.000	89	5Alp Cep	2.4510	8000.0	72	23760	No
257	GOM_NL__2PRFIN20060915_235123_000000332051_00159_23760_1730.N1	15-SEP-2006 23:51:23	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	23760	No
258	GOM_NL__2PRFIN20060915_235842_000000372051_00159_23760_1731.N1	15-SEP-2006 23:58:42	Bright	36.500	36	50Alp UMa	1.8000	6300.0	73	23760	No

3. Quality information per product

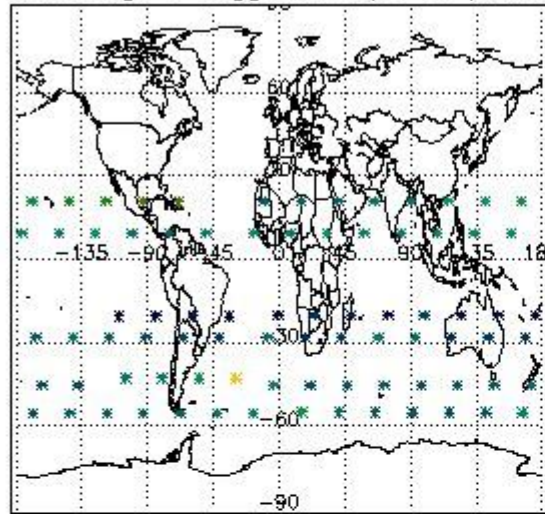
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

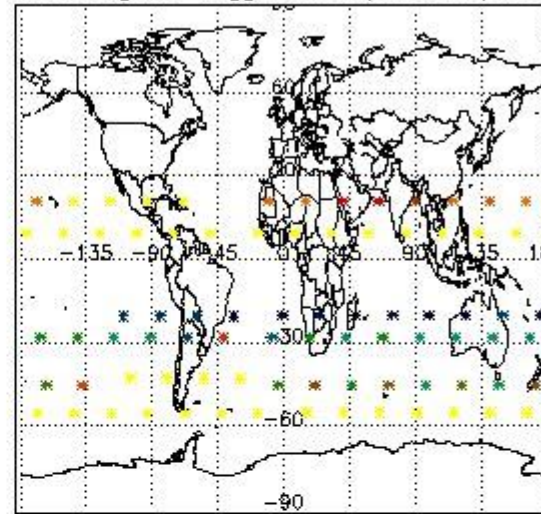


3.2 Plot quality information per product (world map)

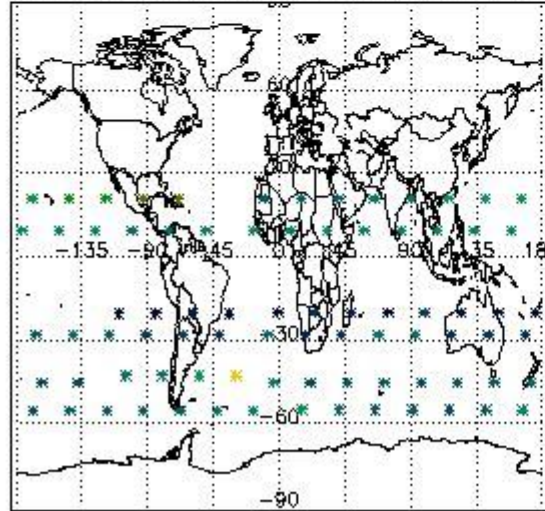
Percentage of flagged data per O3 profile



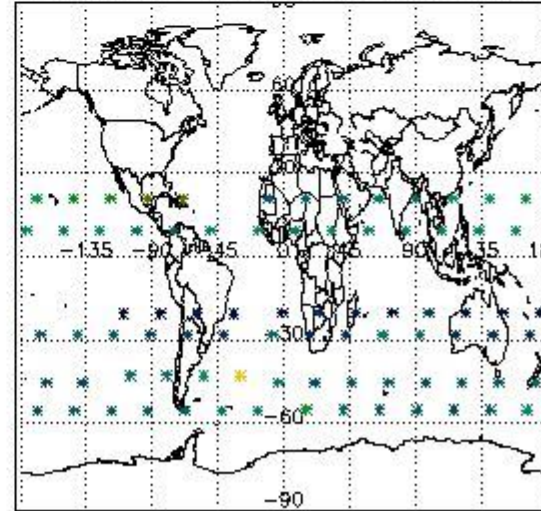
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

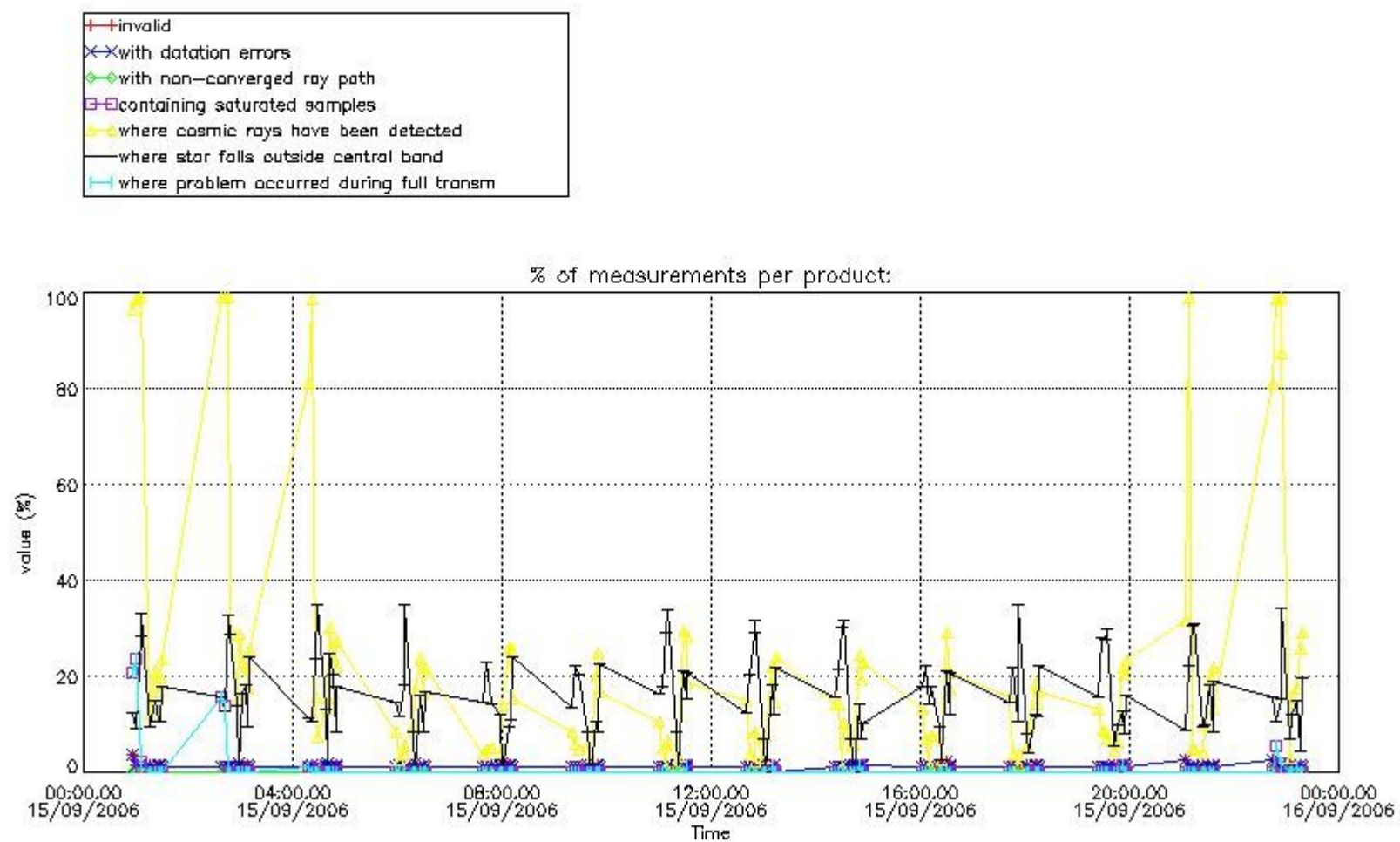


4. Level 1 quality information per product

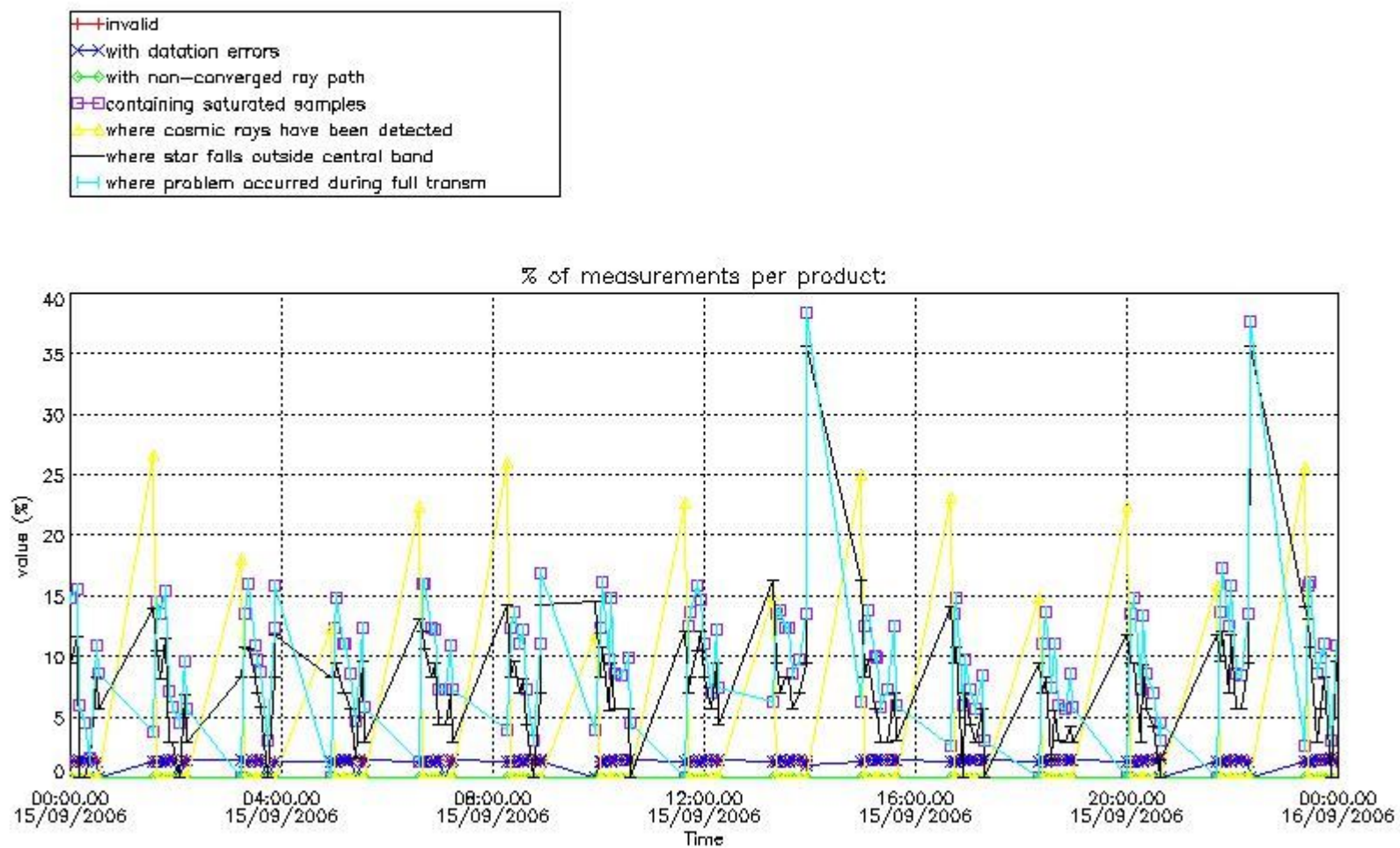
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



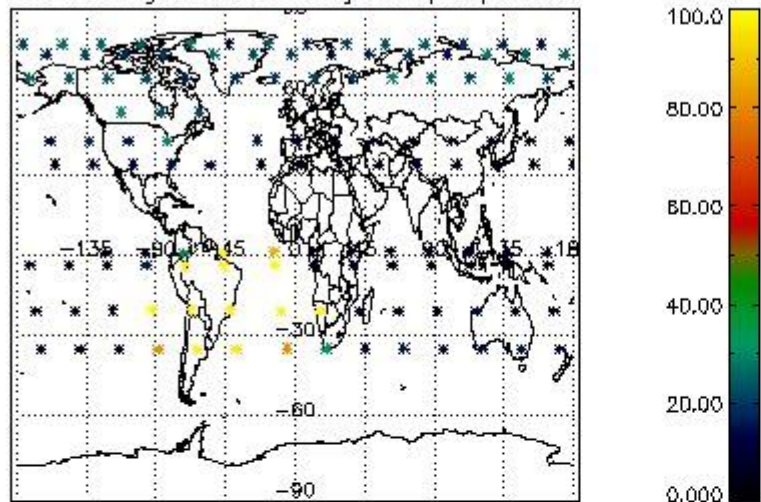
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



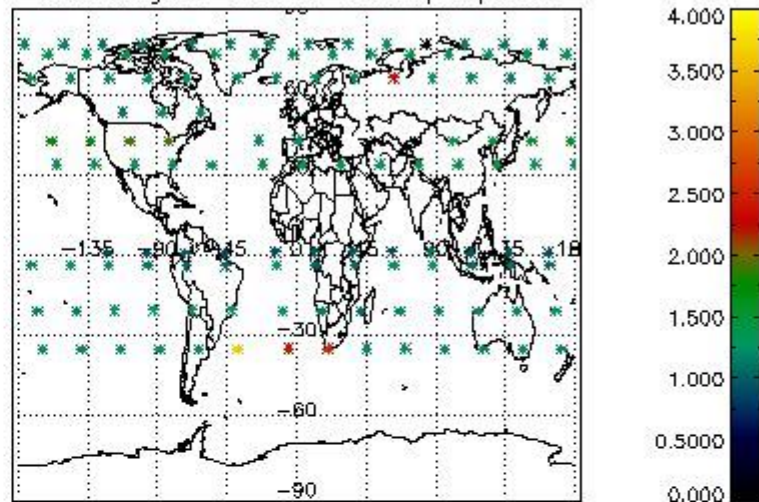
4.2 Plot quality information per product coming from level 1b processing (world map)

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

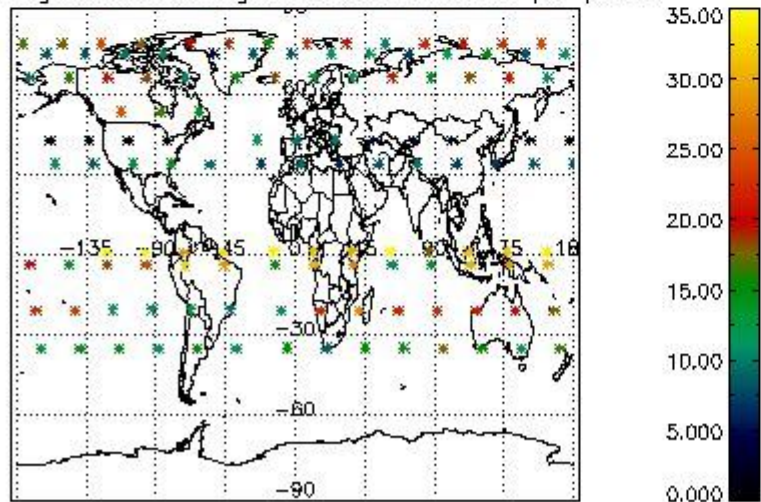
Percentage of cosmic ray hits per profile



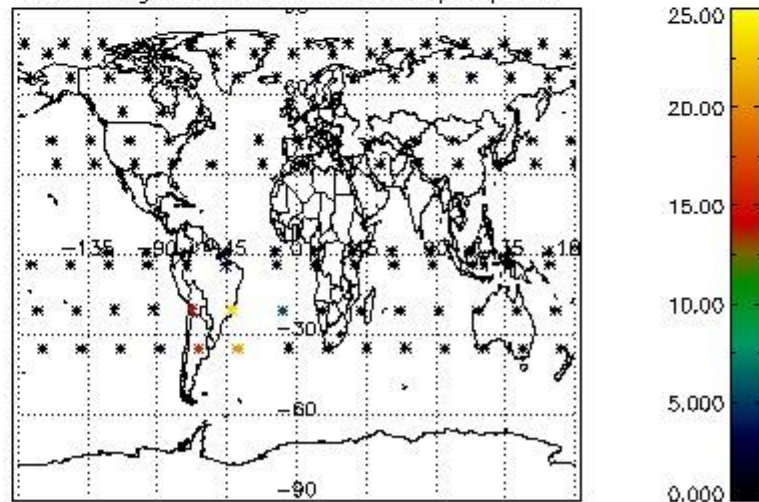
Percentage of datation errors per profile



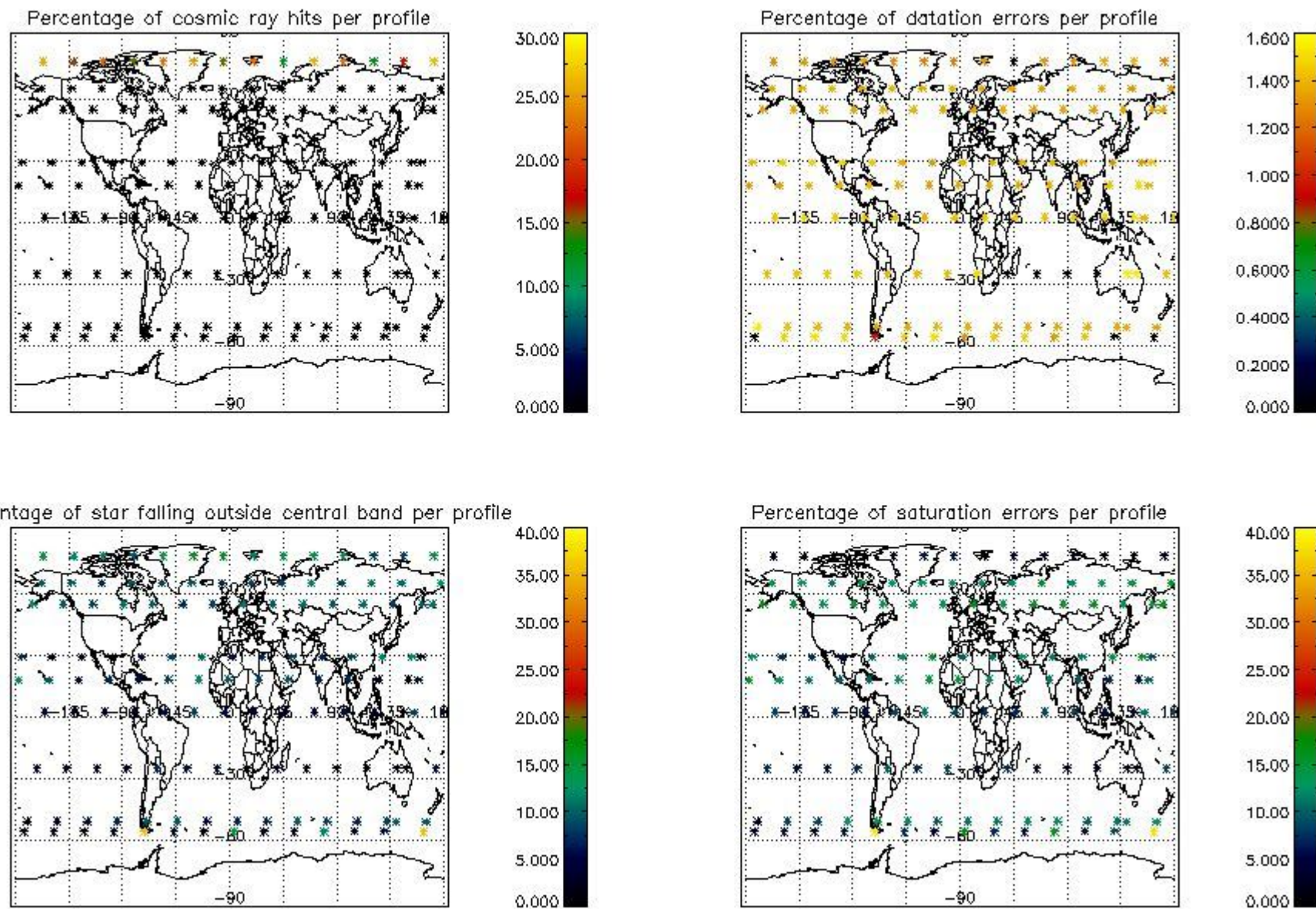
Percentage of star falling outside central band per profile



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

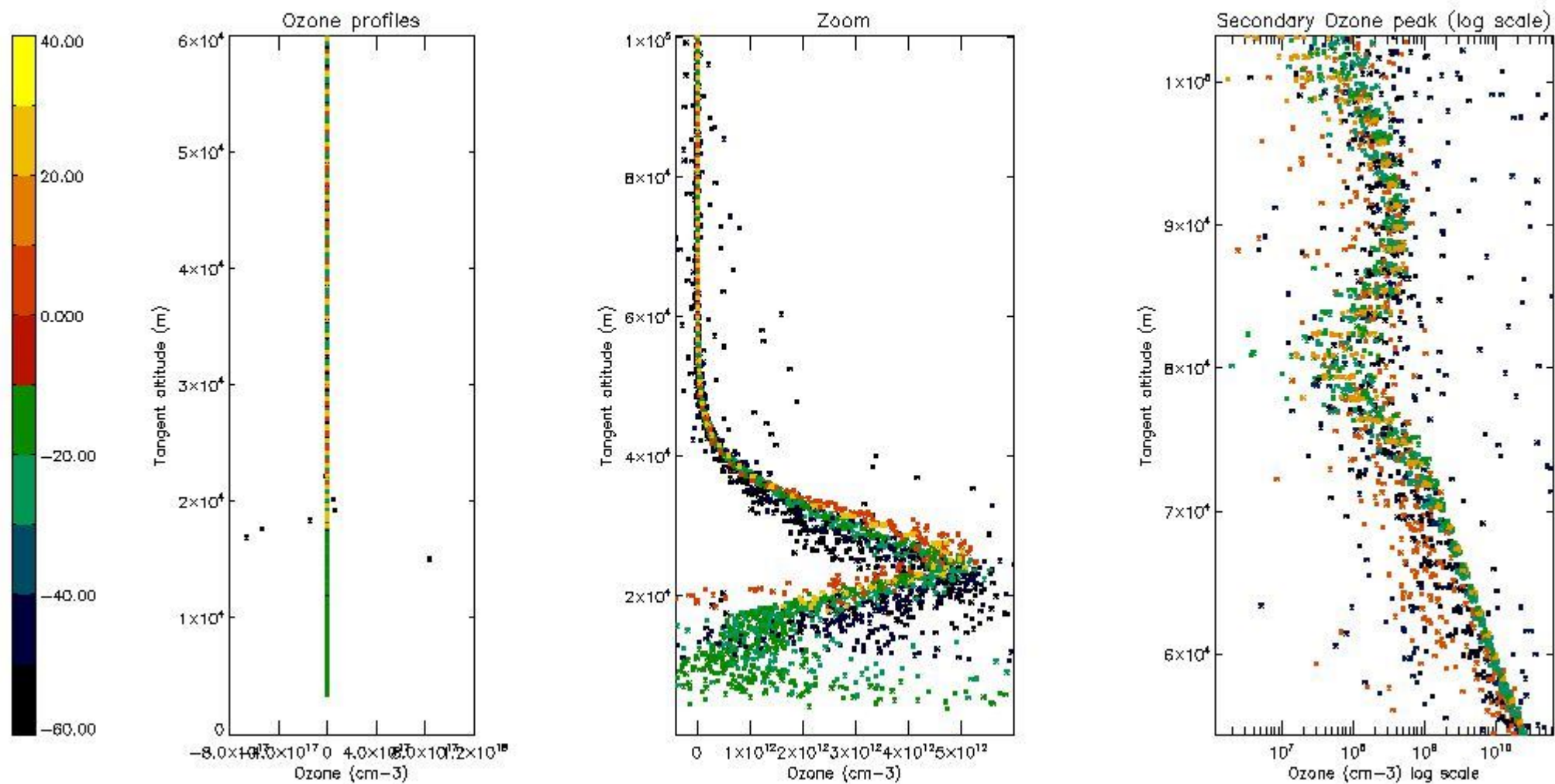
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	35
STD < 20	17

STD < 10	12
STD < 5	6

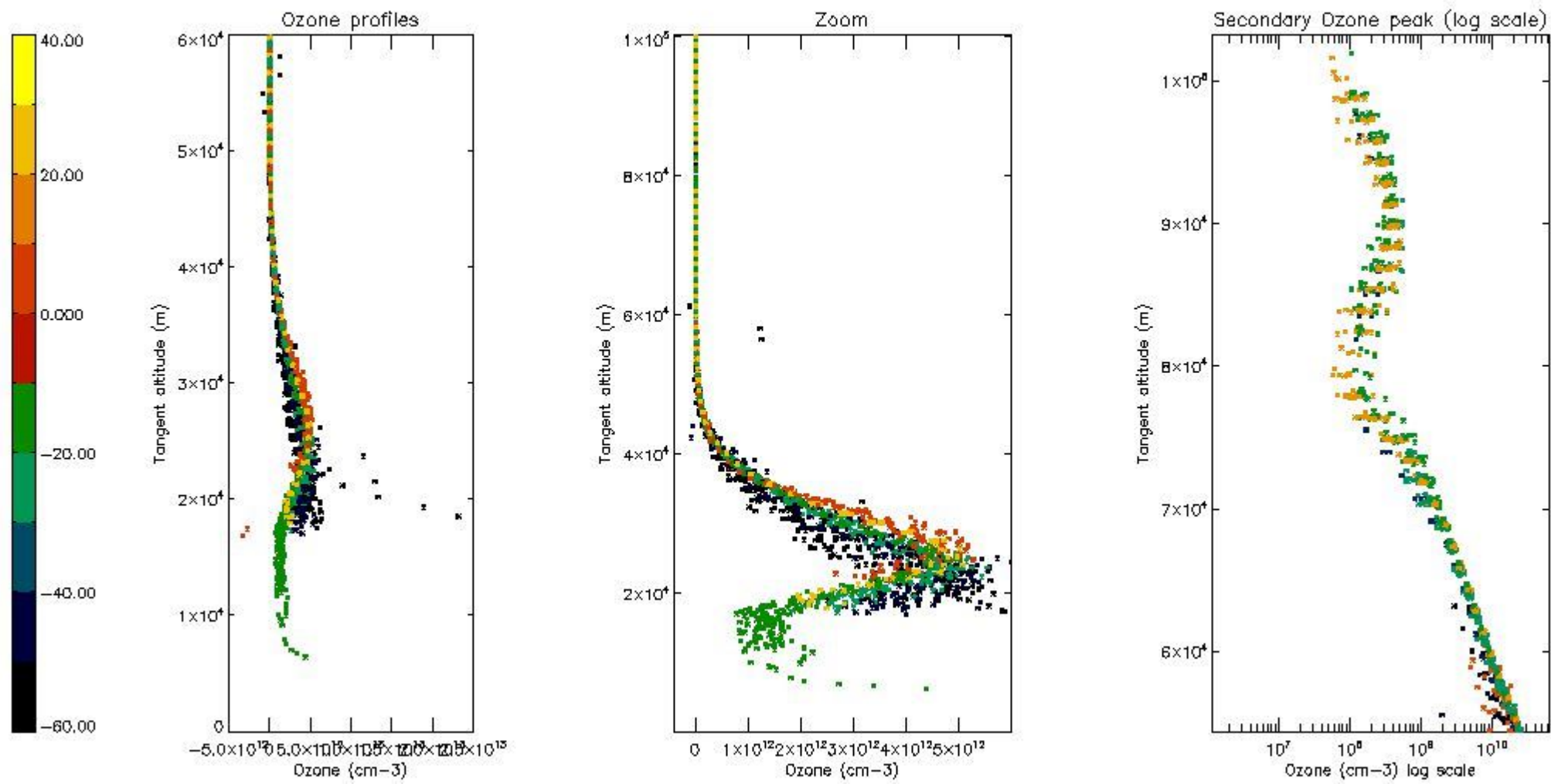
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



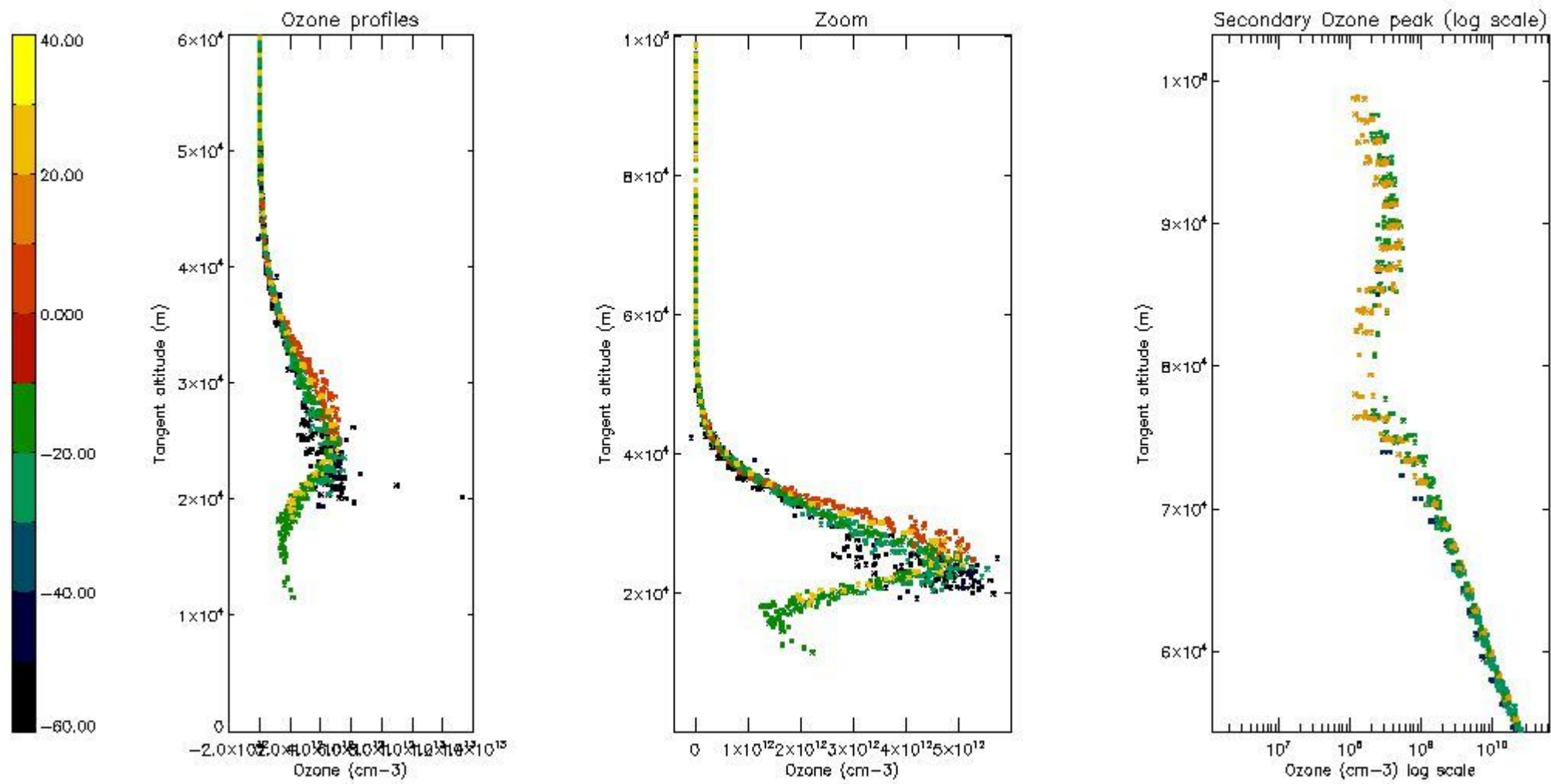
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



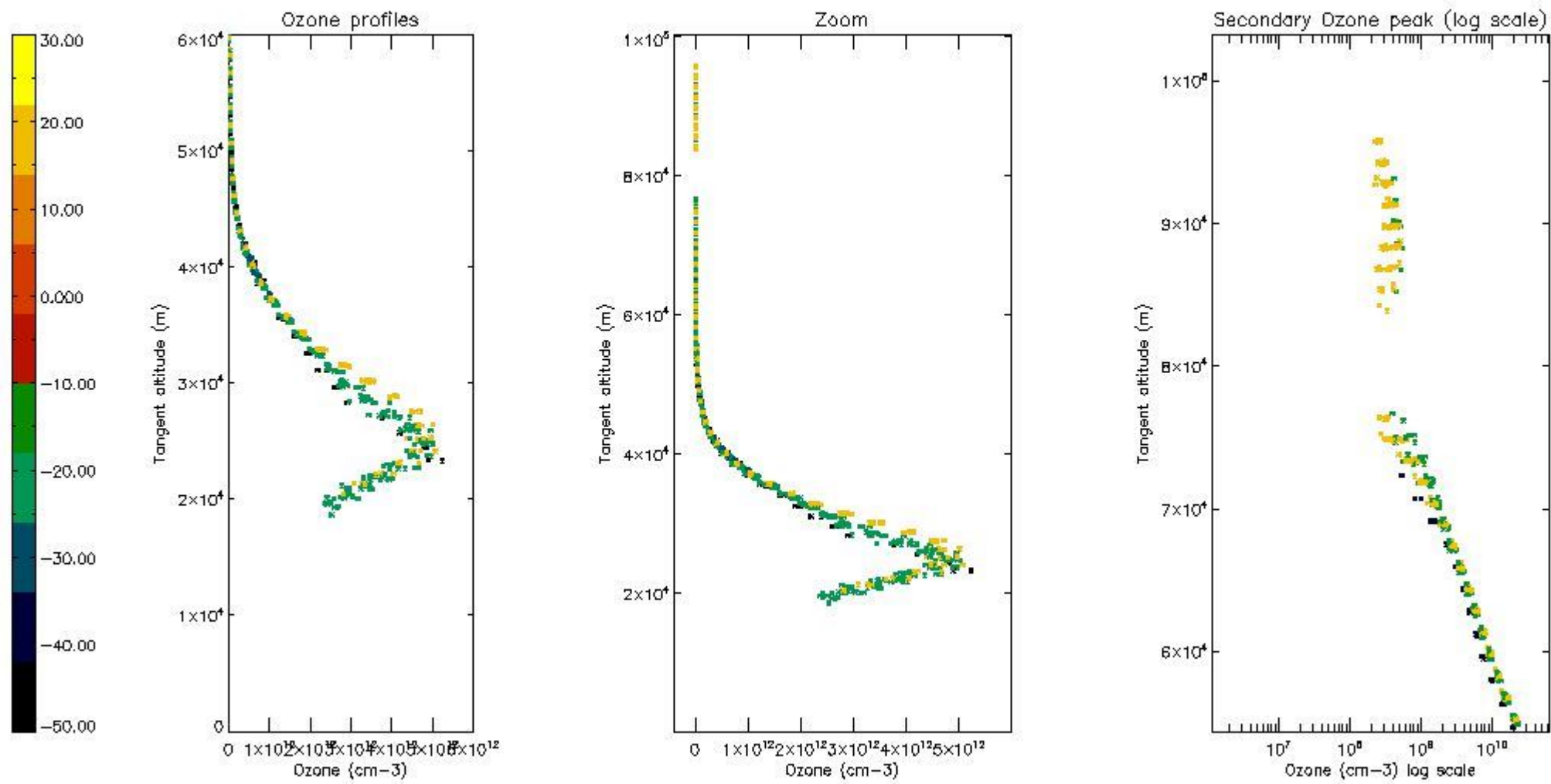
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



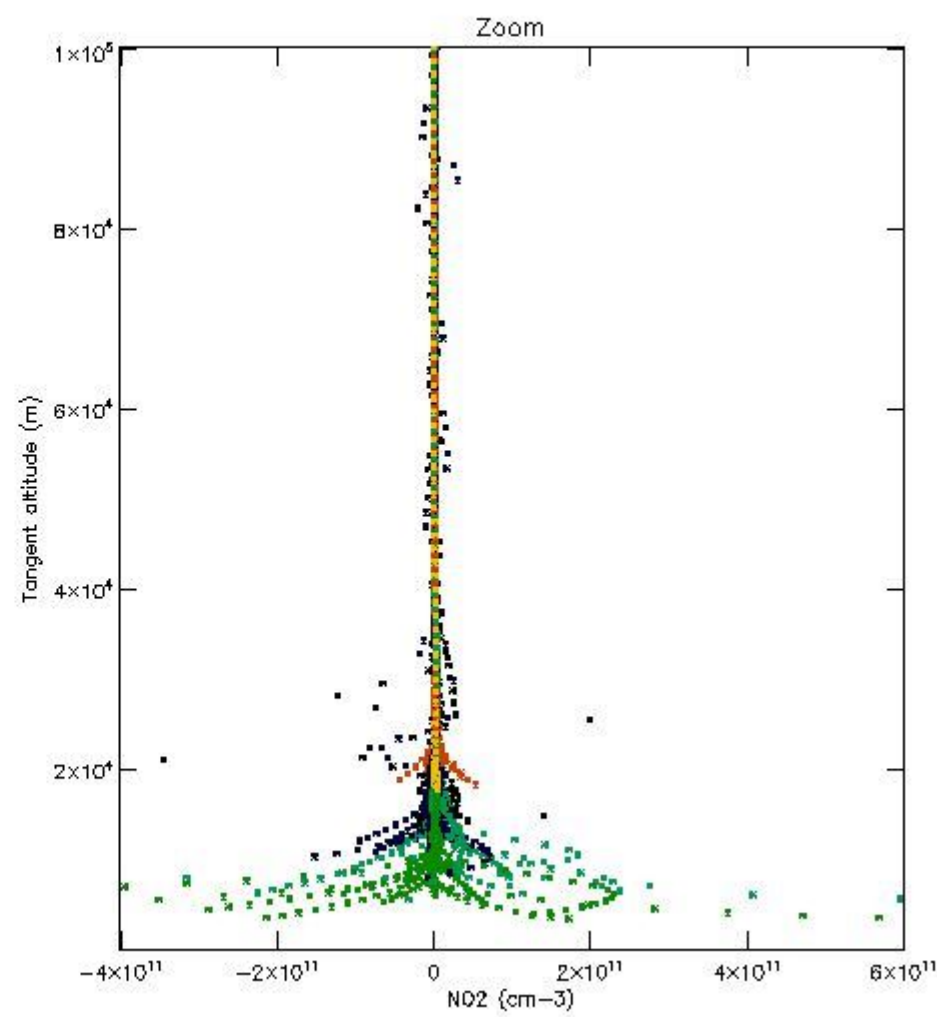
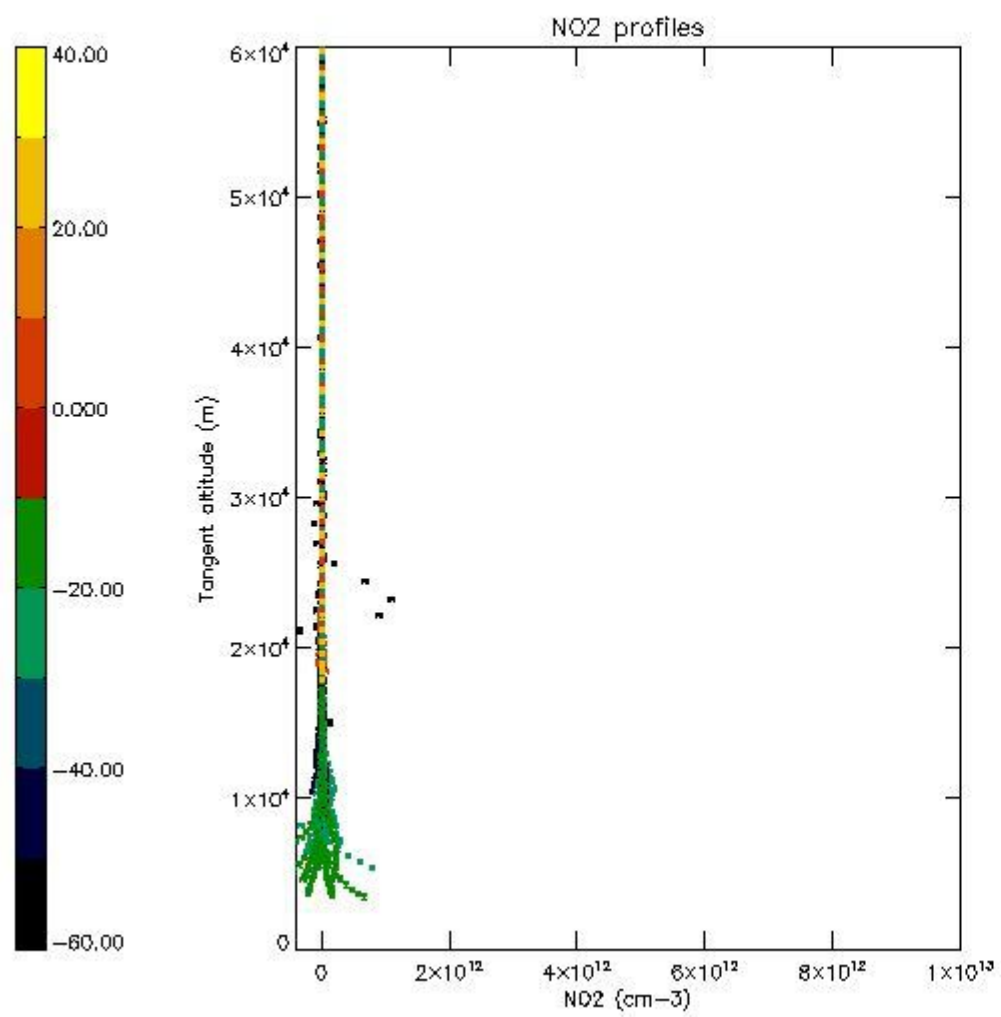
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



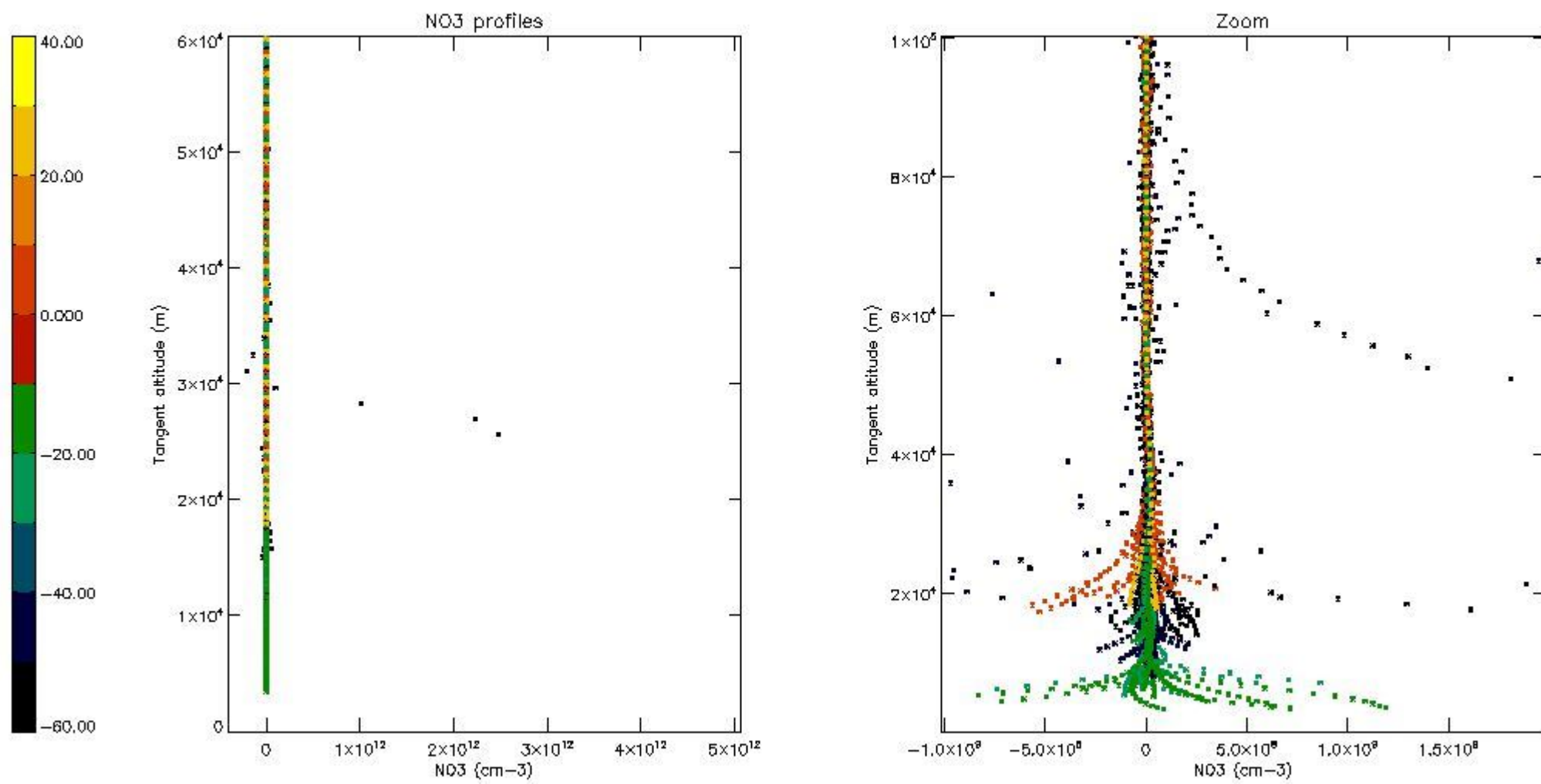
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



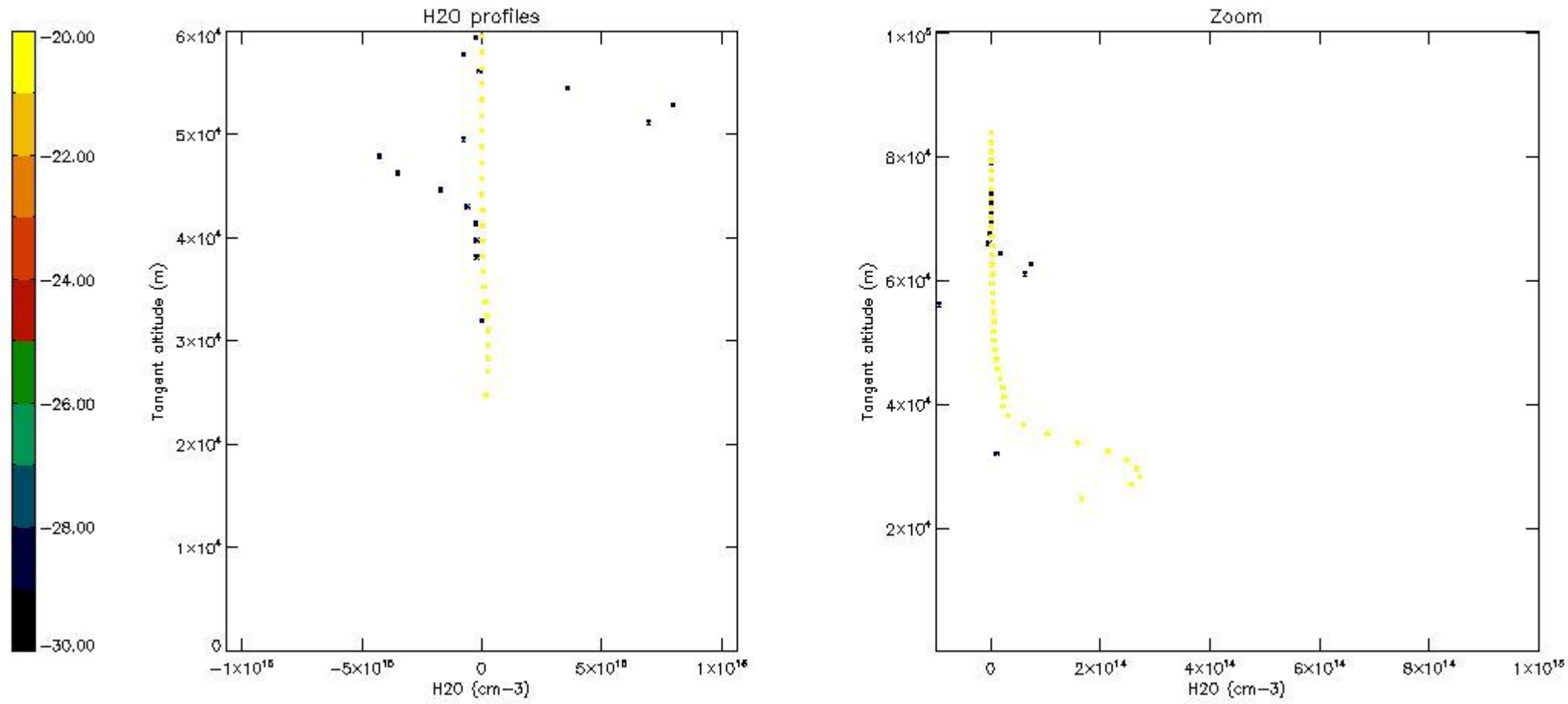
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

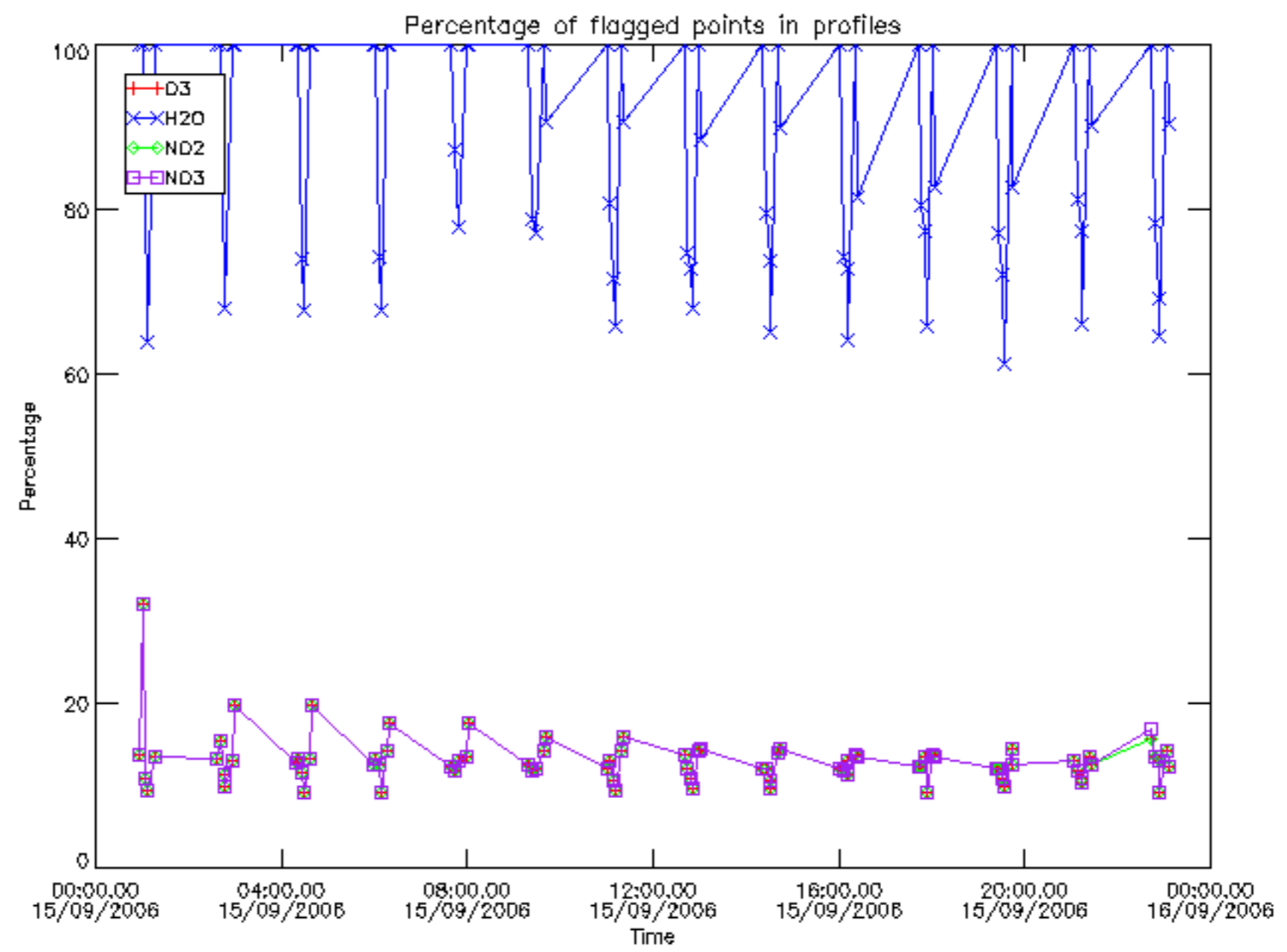
The colorbar represents the latitude.



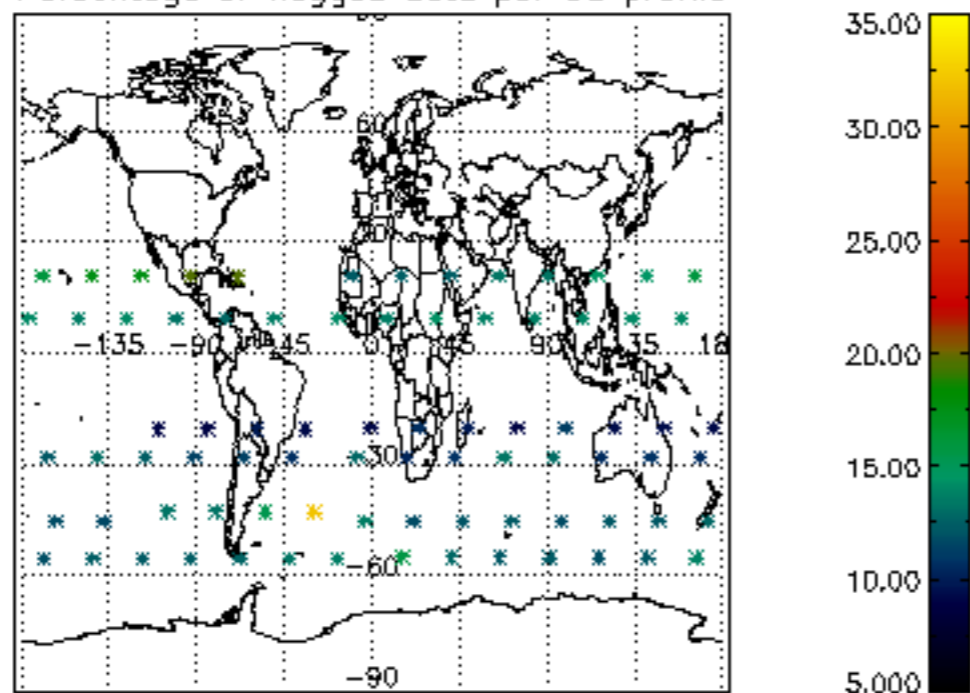
6. Auxiliary Data Files used for the production reported in section 2

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

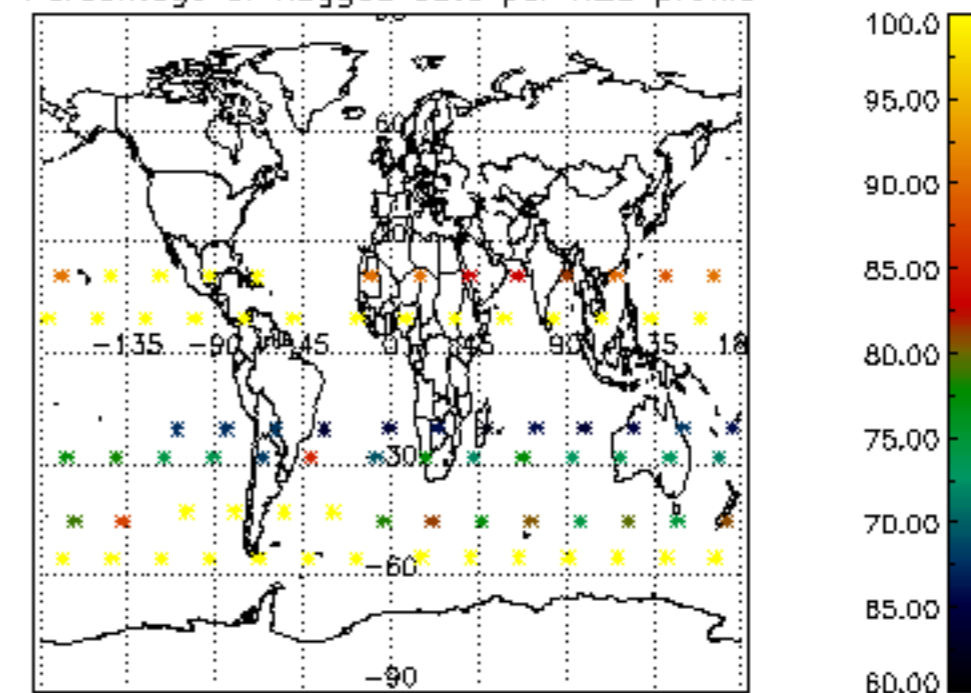
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	15-SEP-2006 00:00:31
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	15-SEP-2006 00:00:31
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	15-SEP-2006 00:00:31



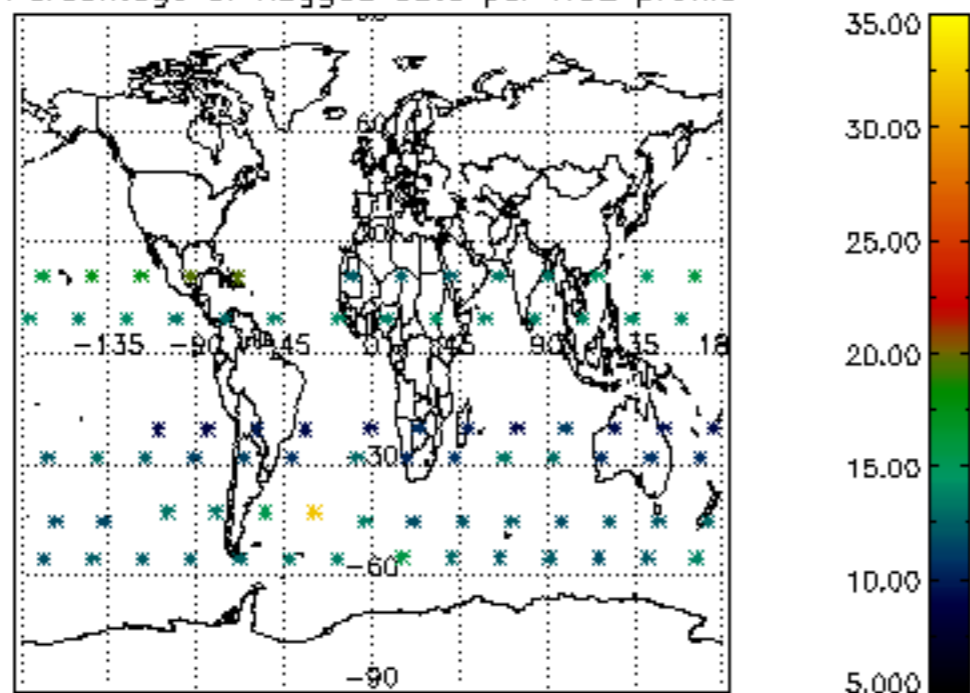
Percentage of flagged data per D3 profile



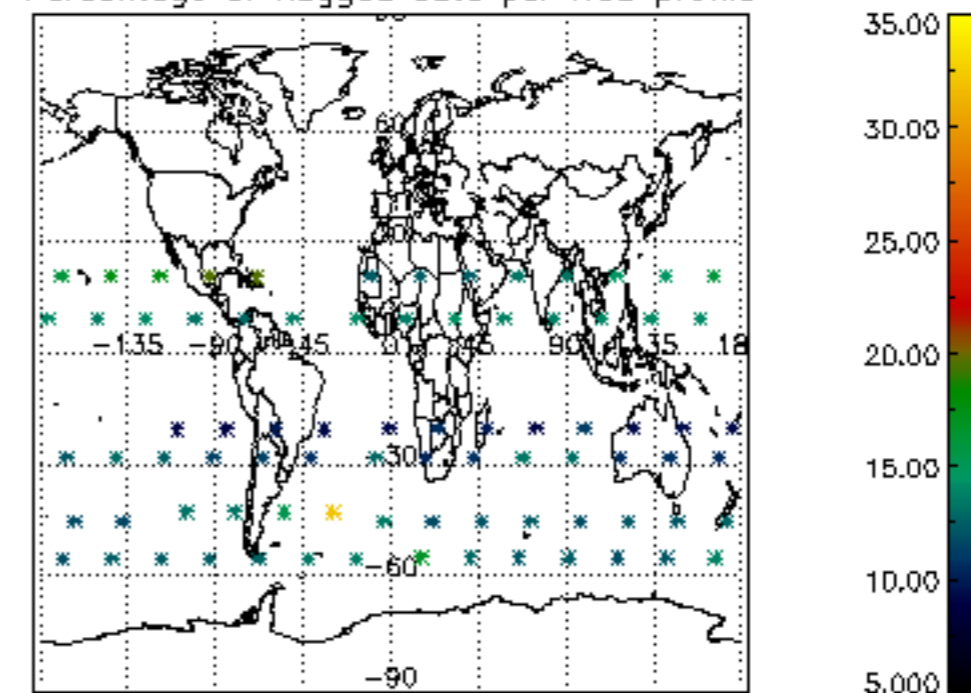
Percentage of flagged data per H2O profile

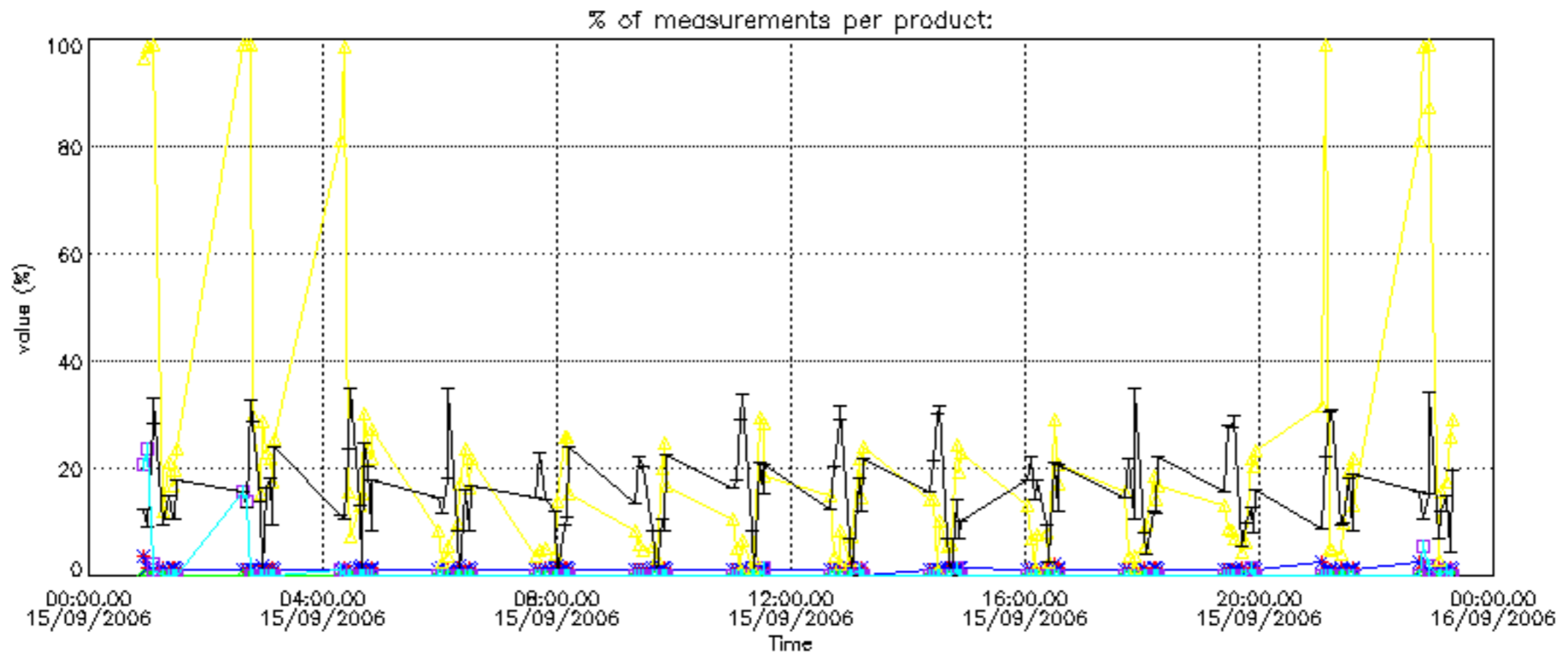


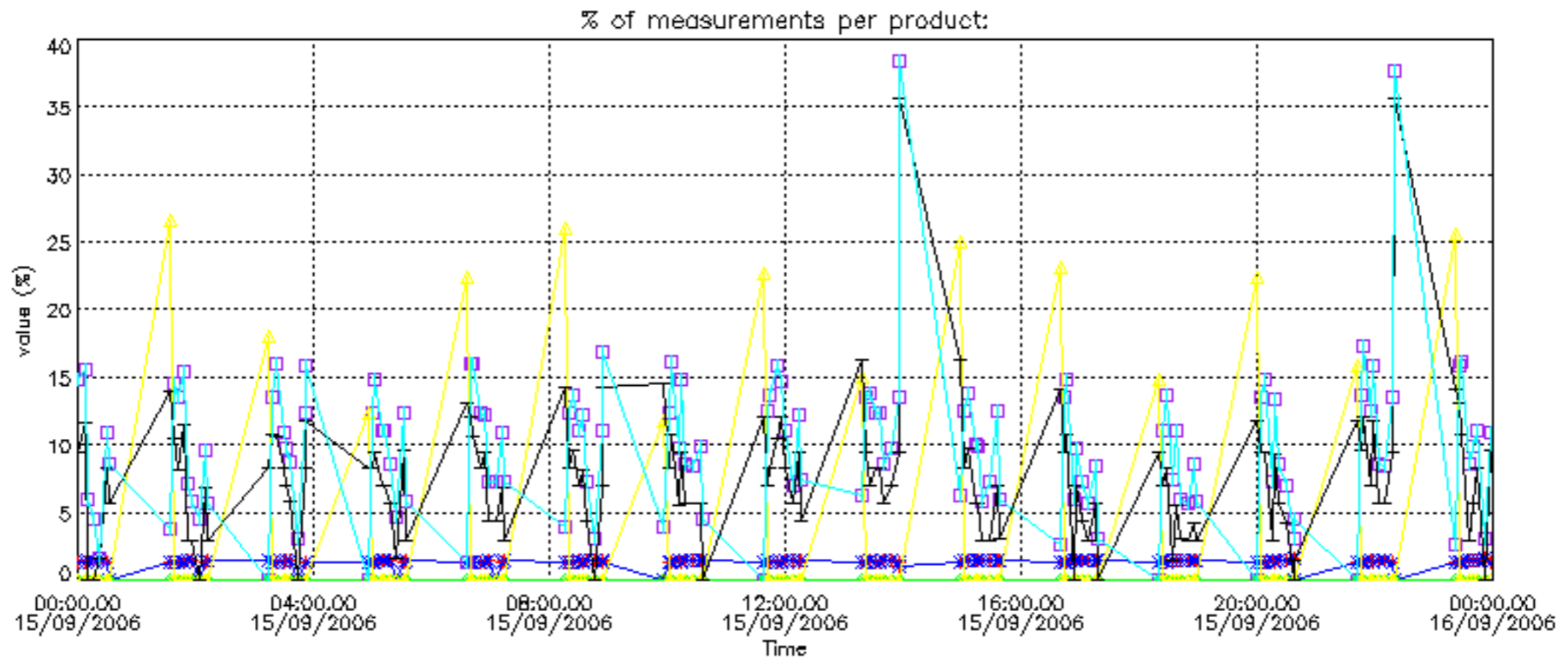
Percentage of flagged data per NO2 profile



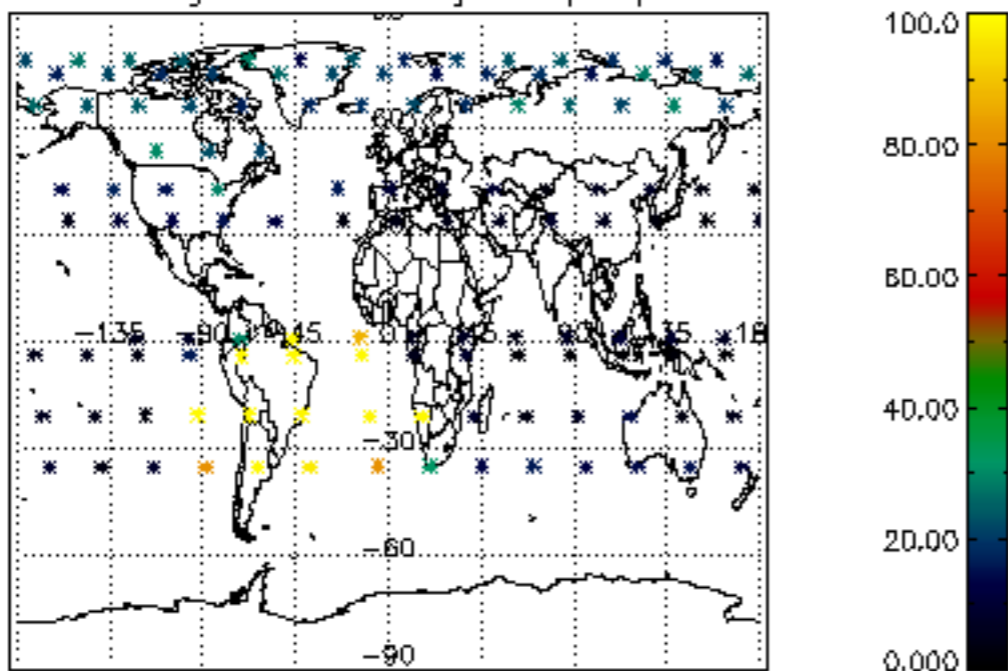
Percentage of flagged data per NO3 profile



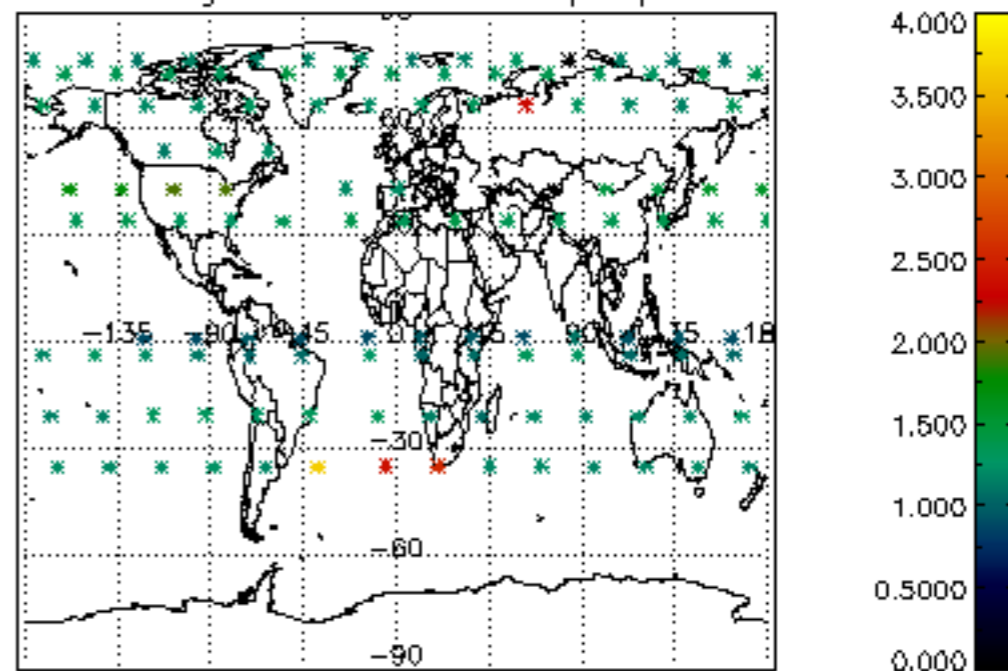




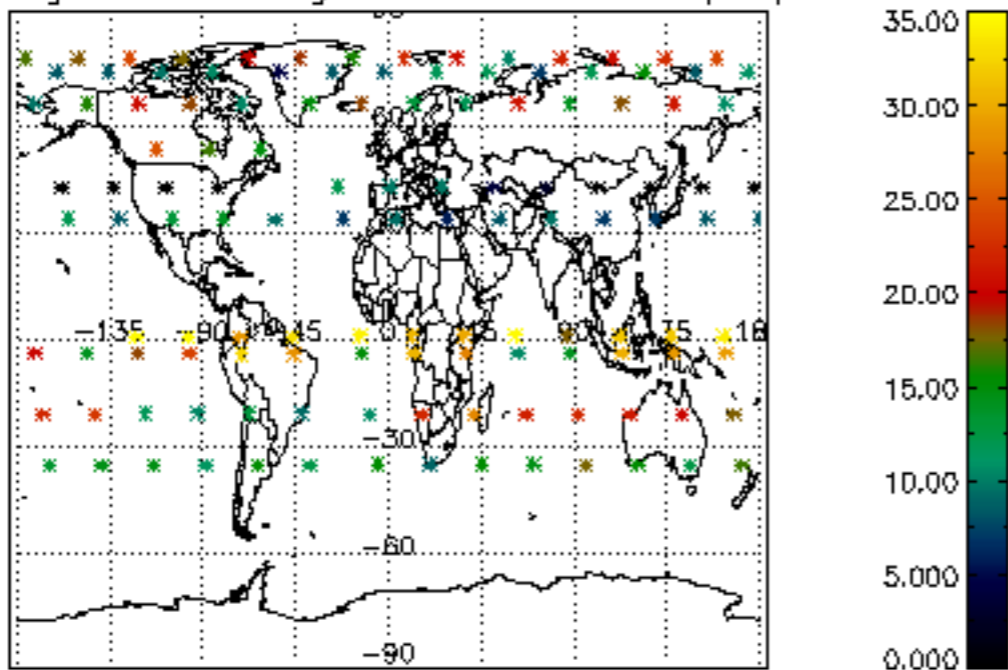
Percentage of cosmic ray hits per profile



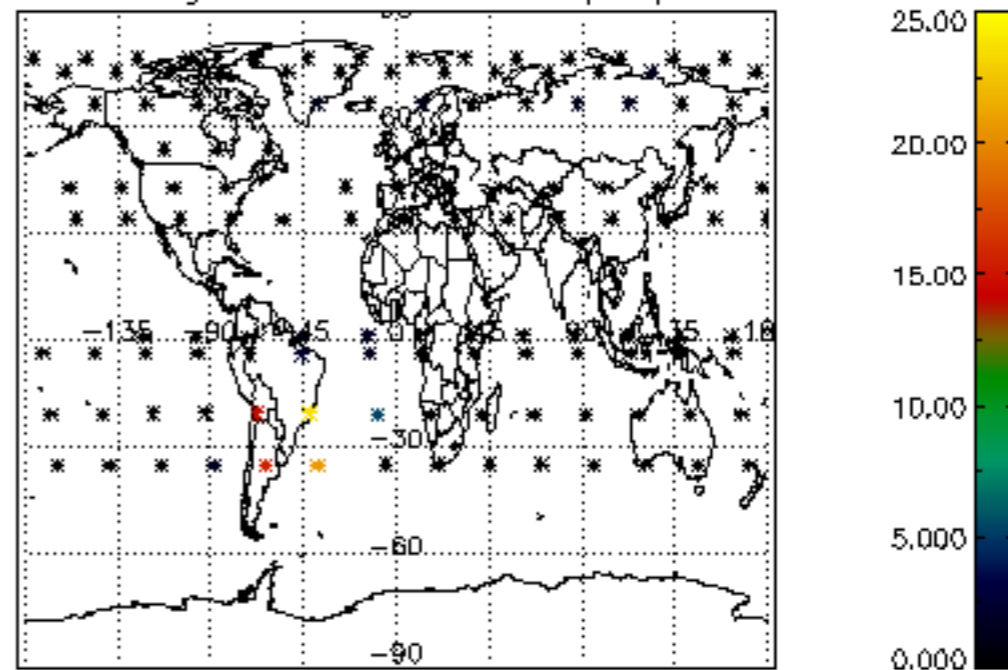
Percentage of datation errors per profile



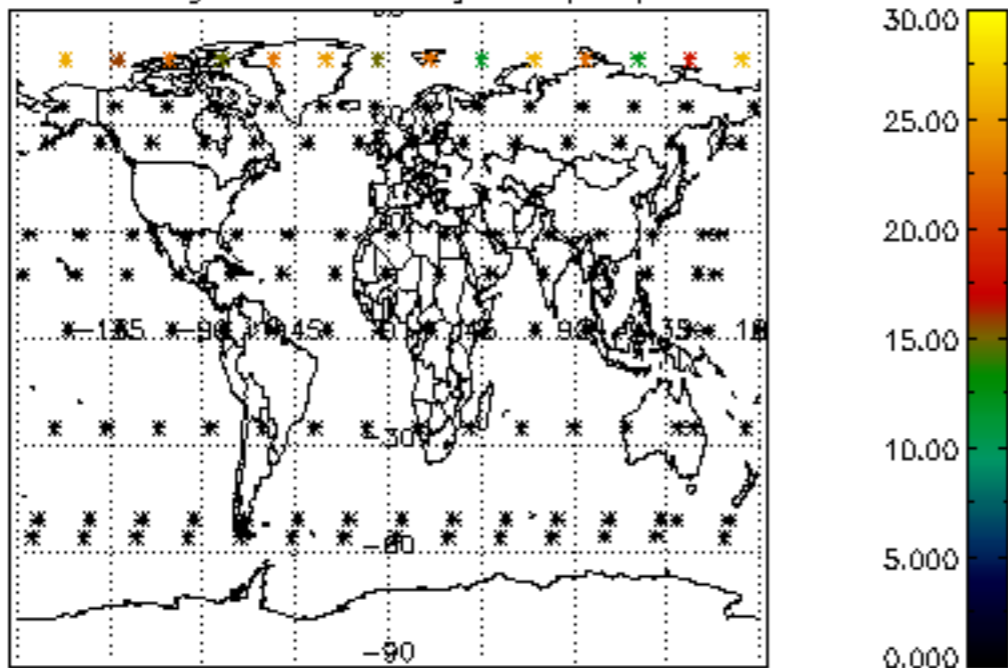
Percentage of star falling outside central band per profile



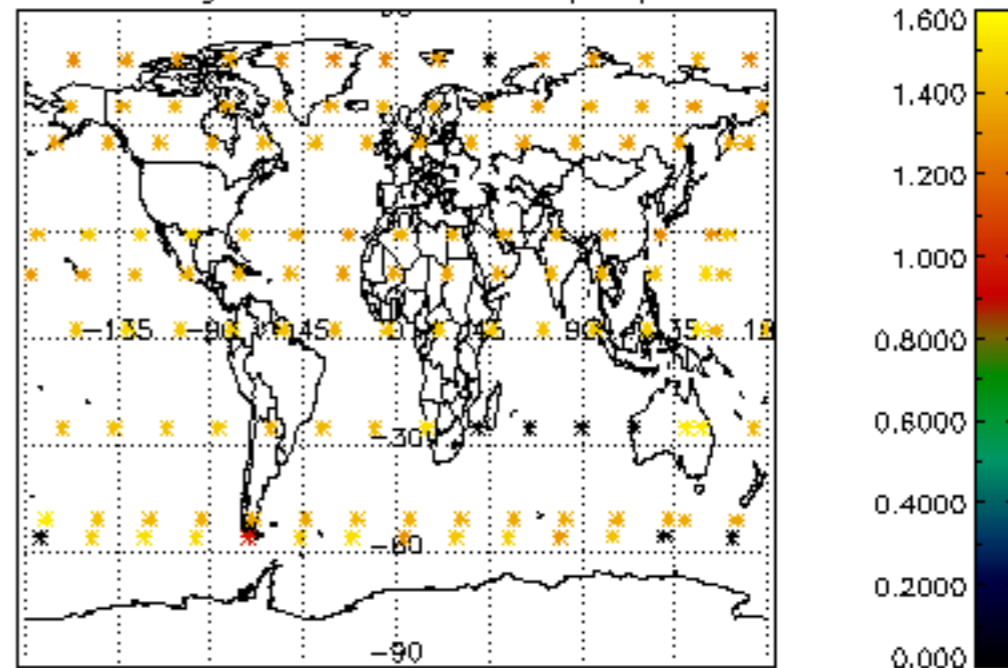
Percentage of saturation errors per profile



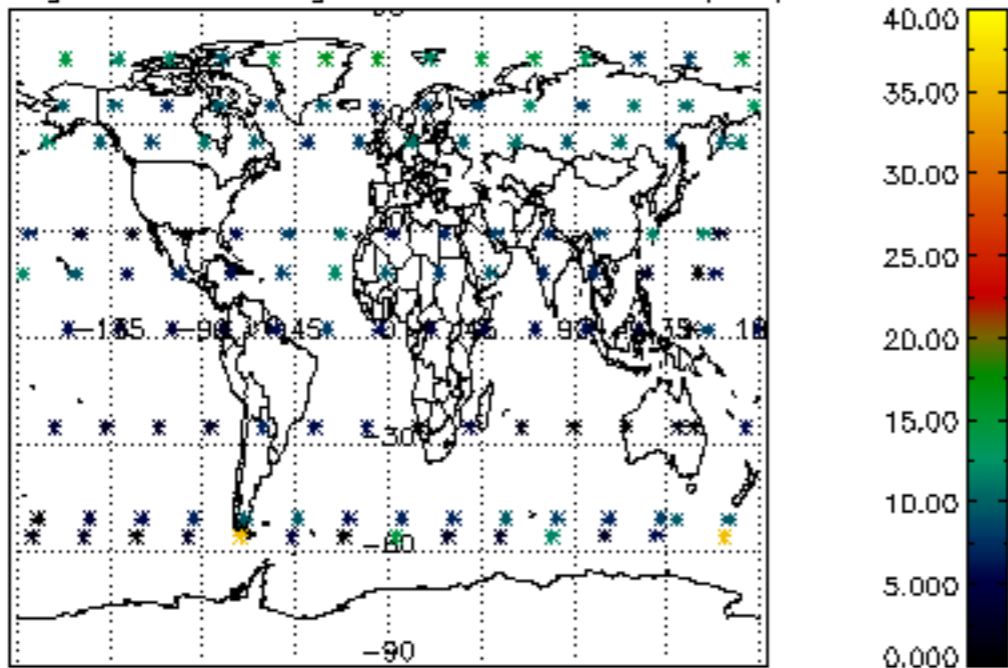
Percentage of cosmic ray hits per profile



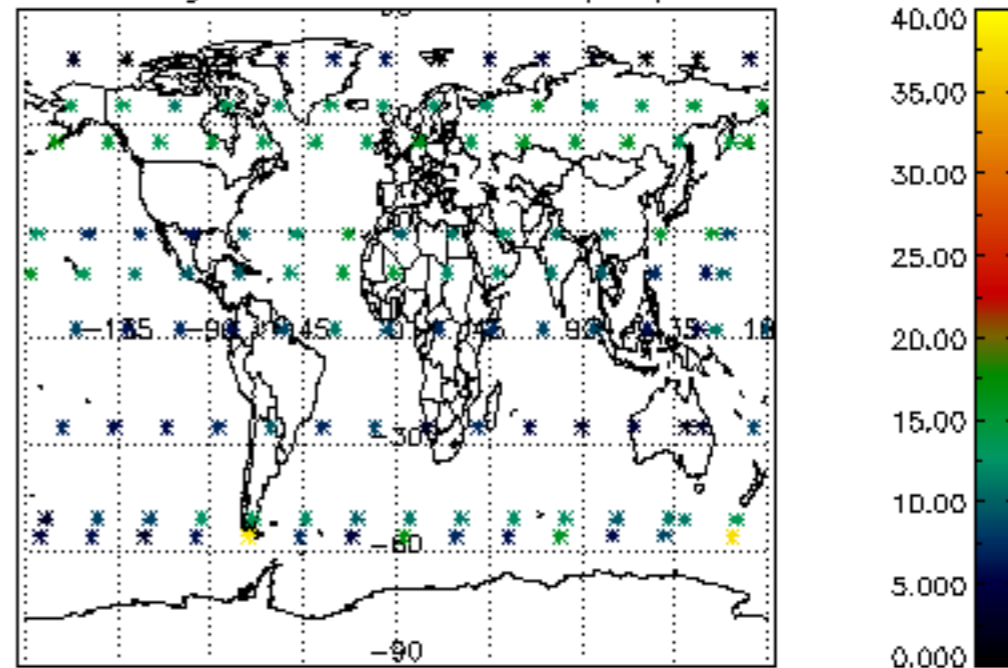
Percentage of datation errors per profile

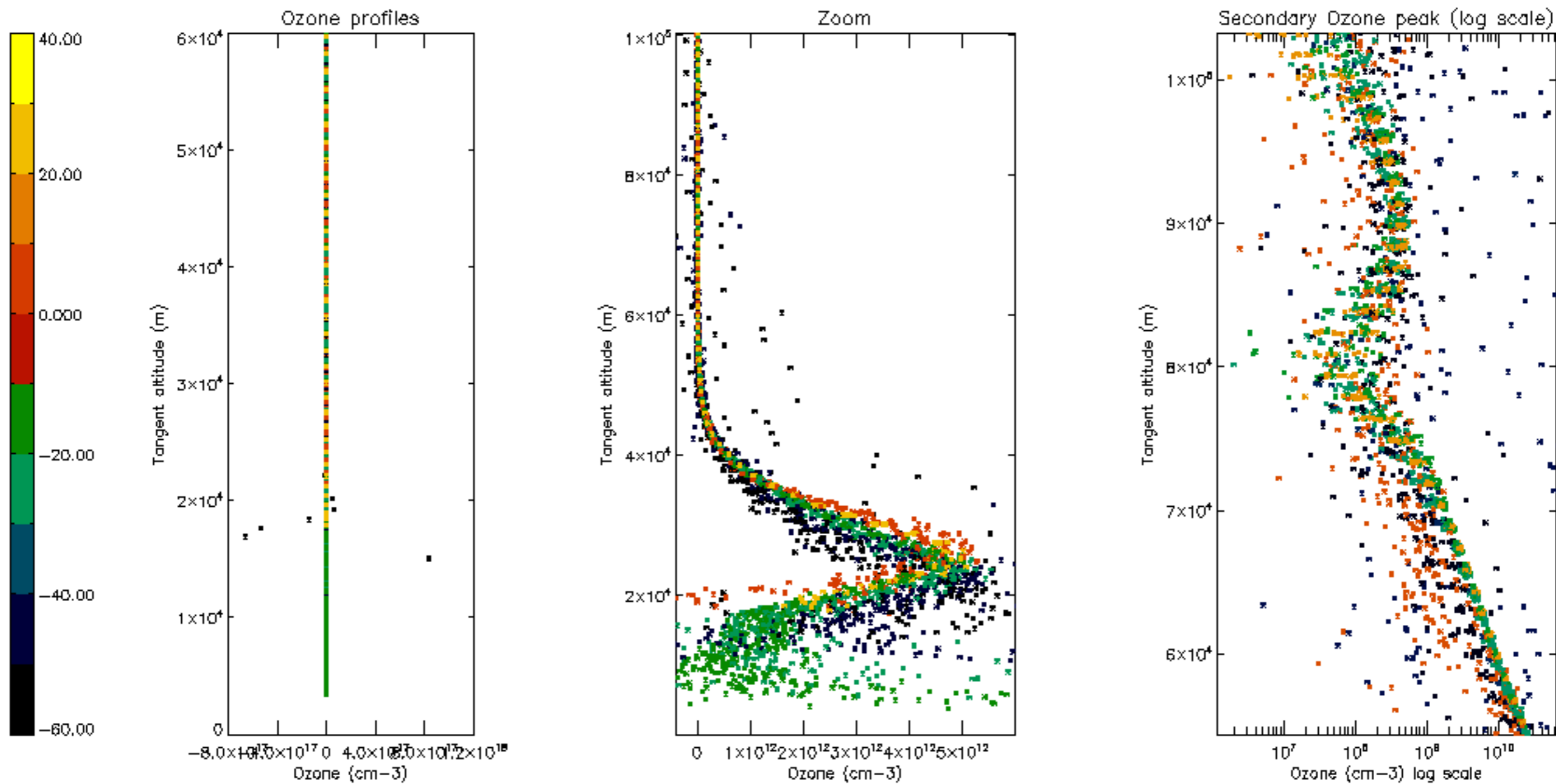


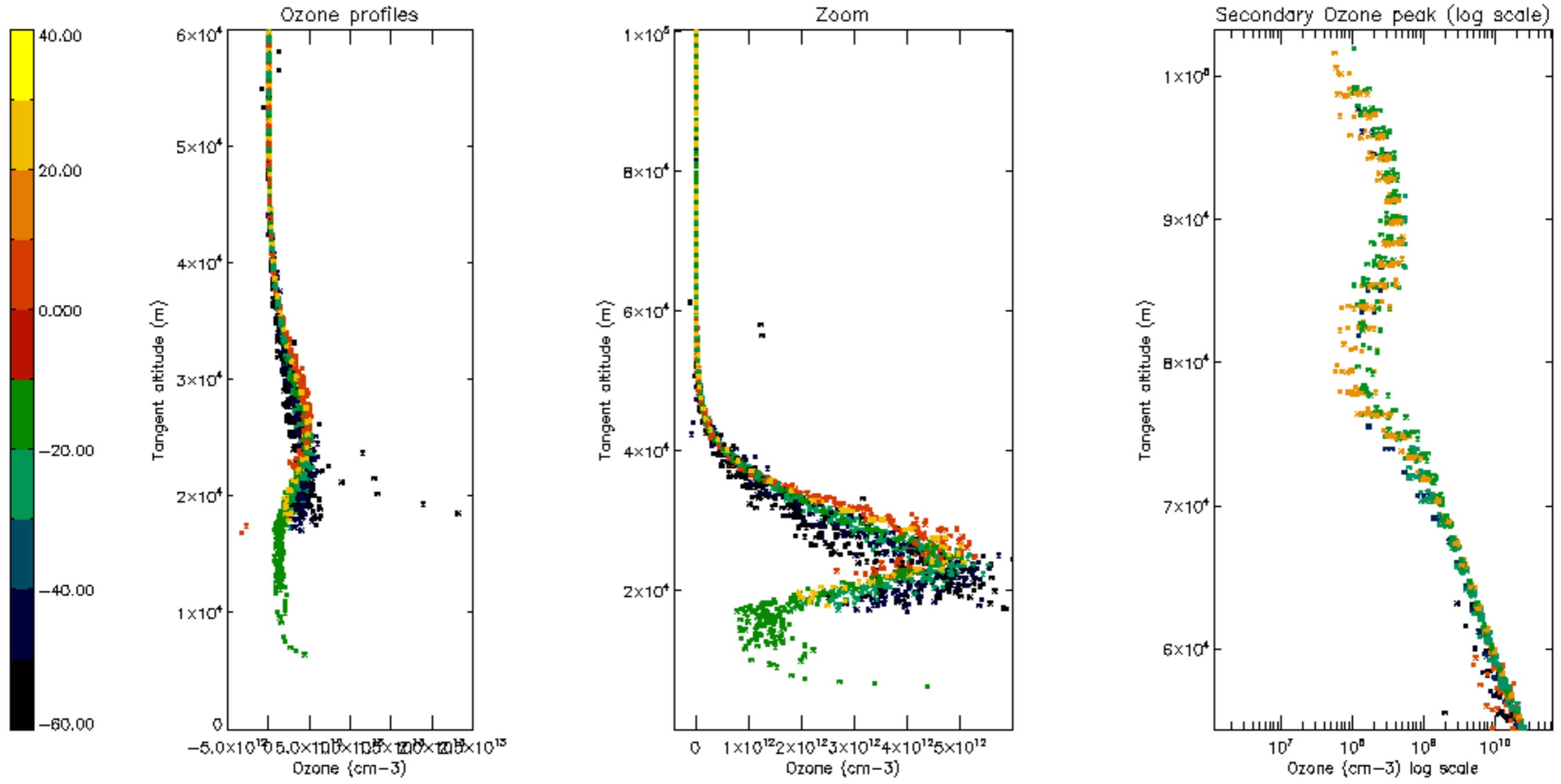
Percentage of star falling outside central band per profile

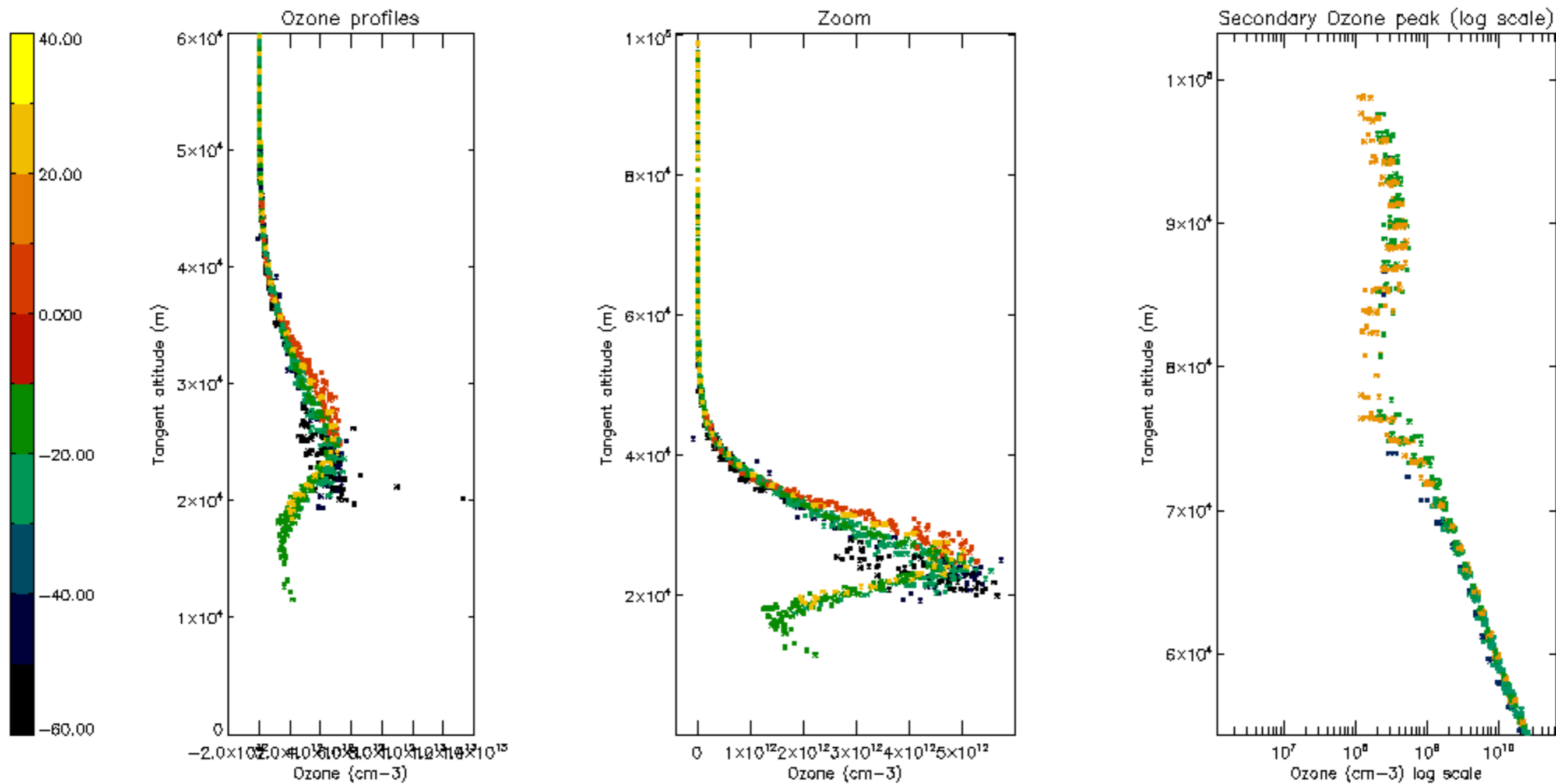


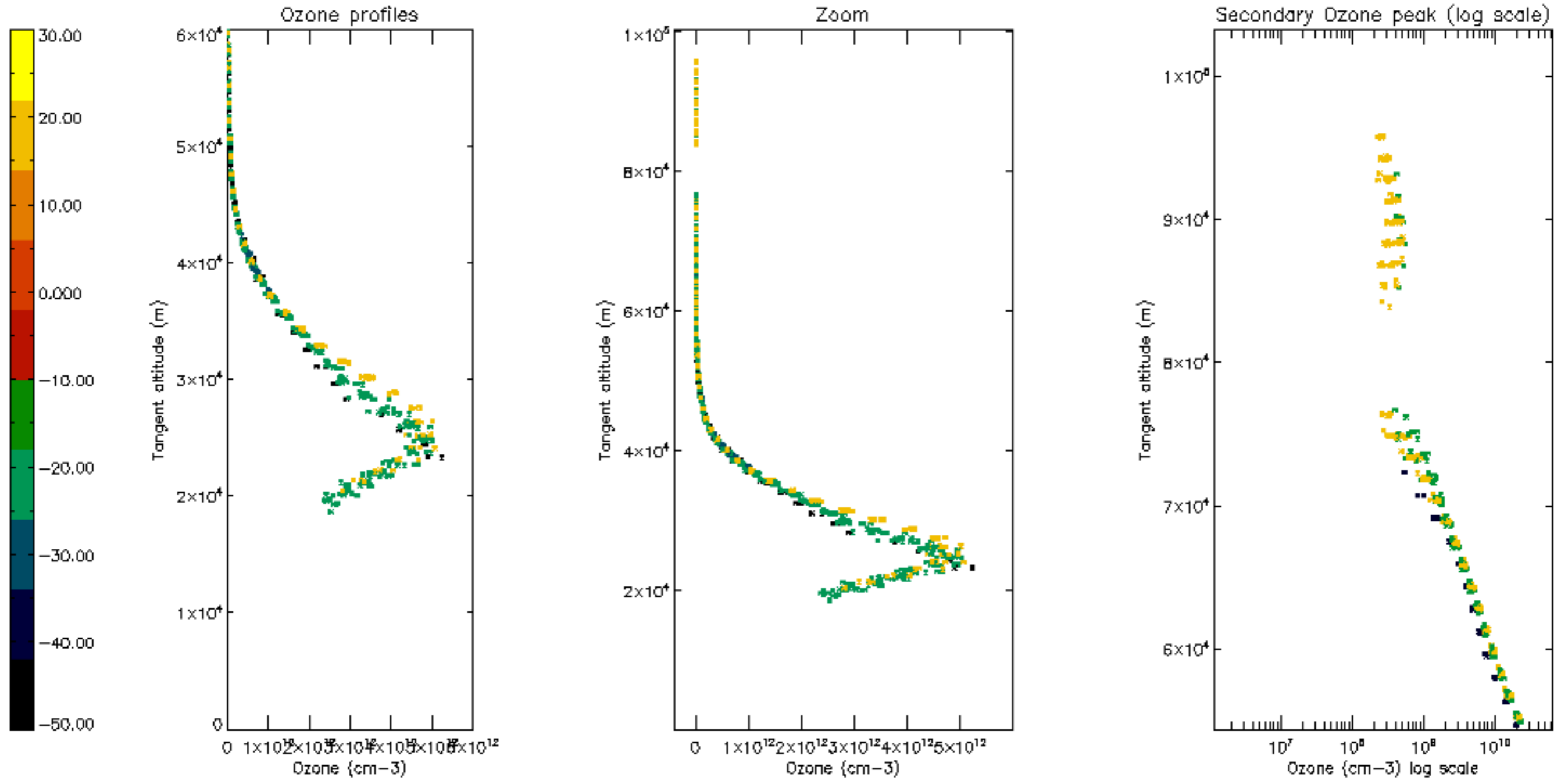
Percentage of saturation errors per profile

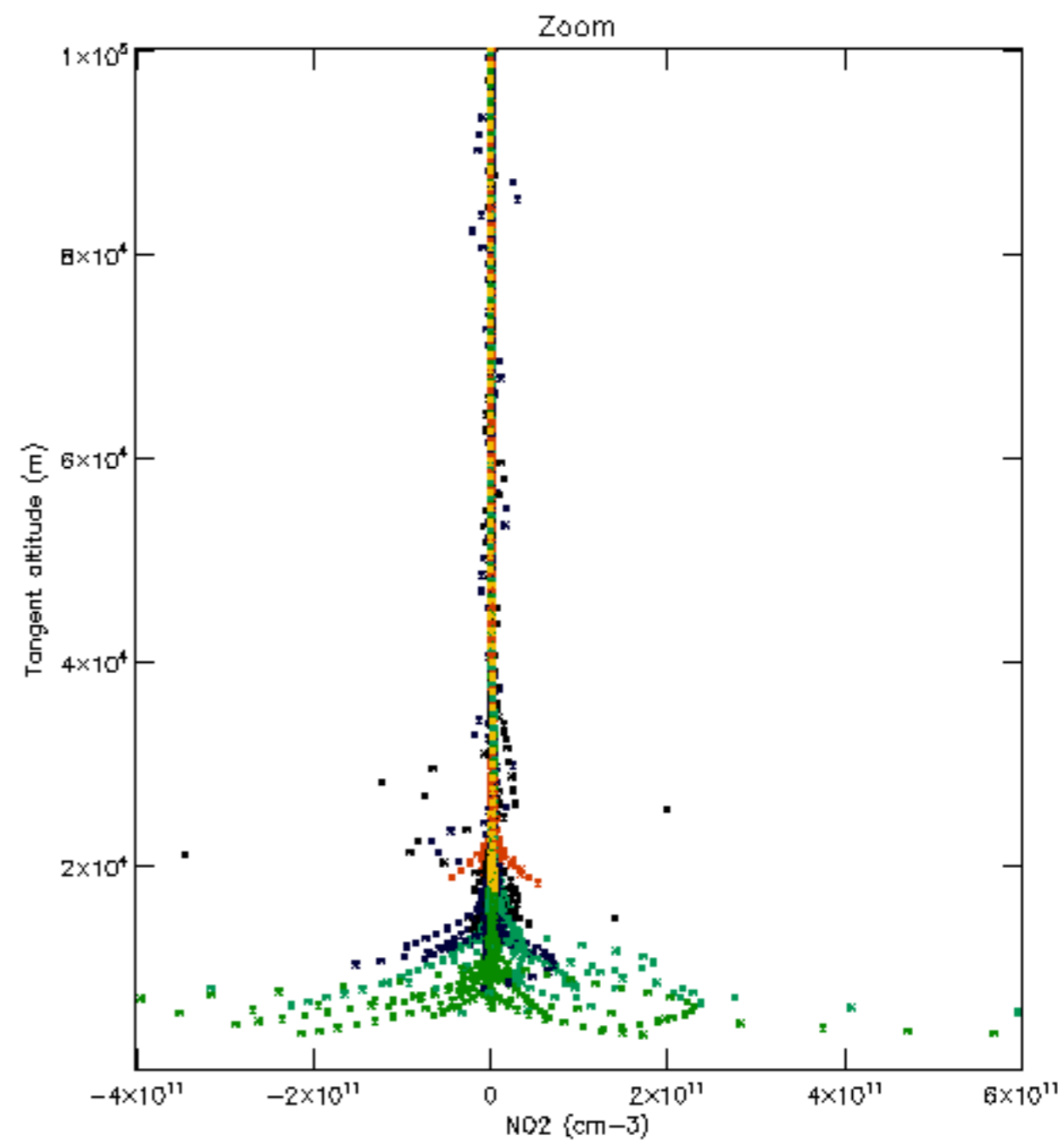
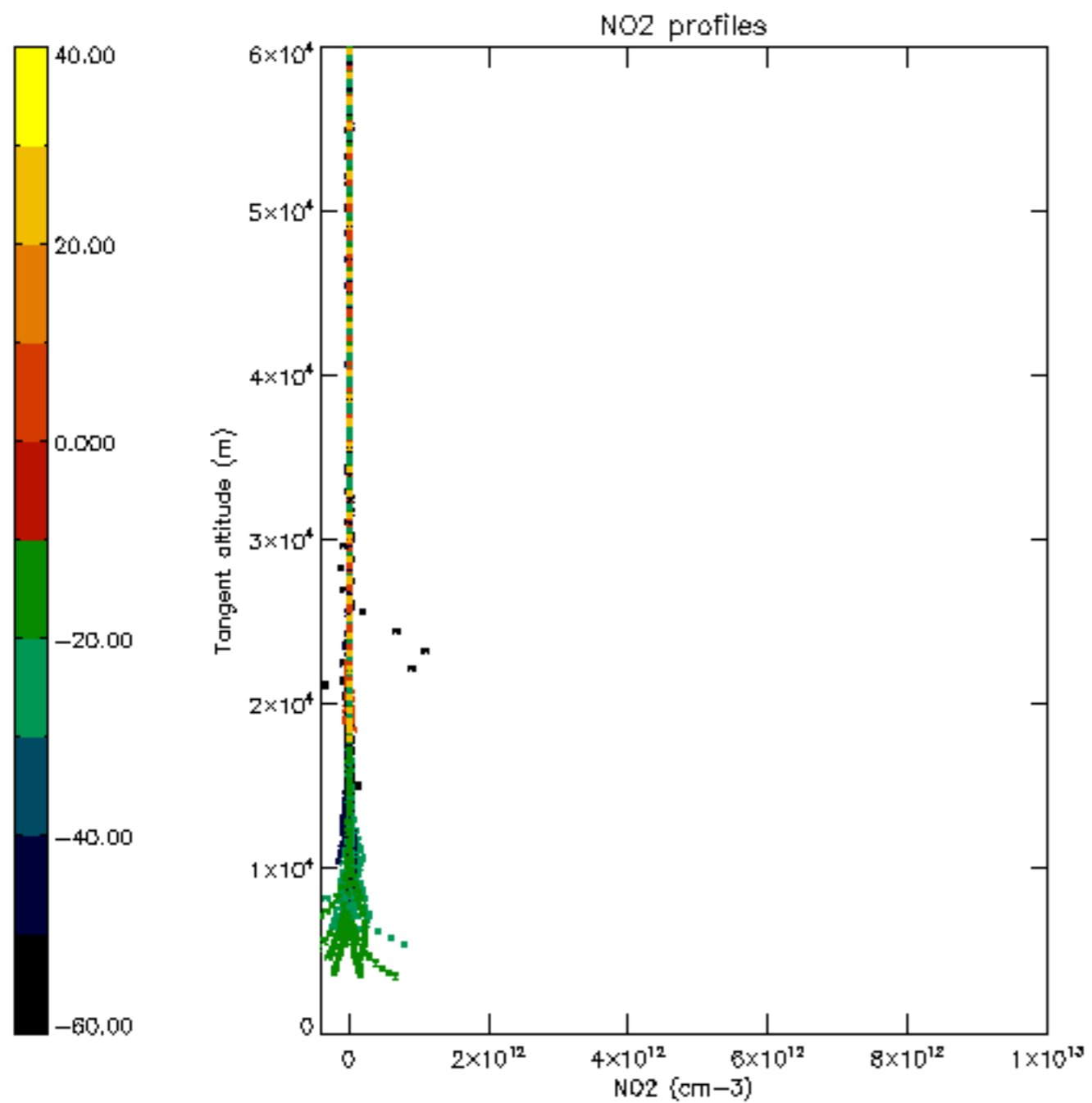


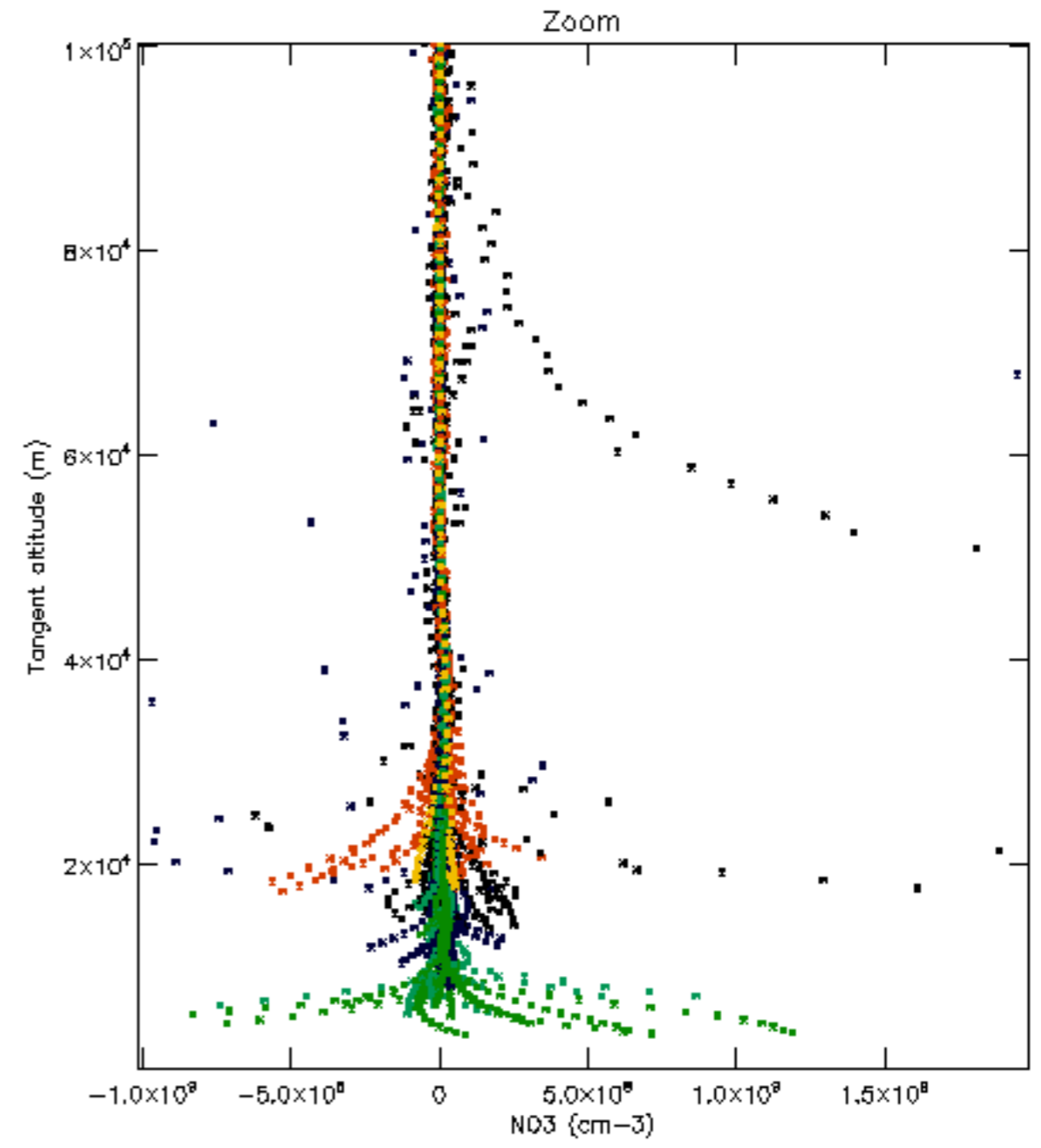
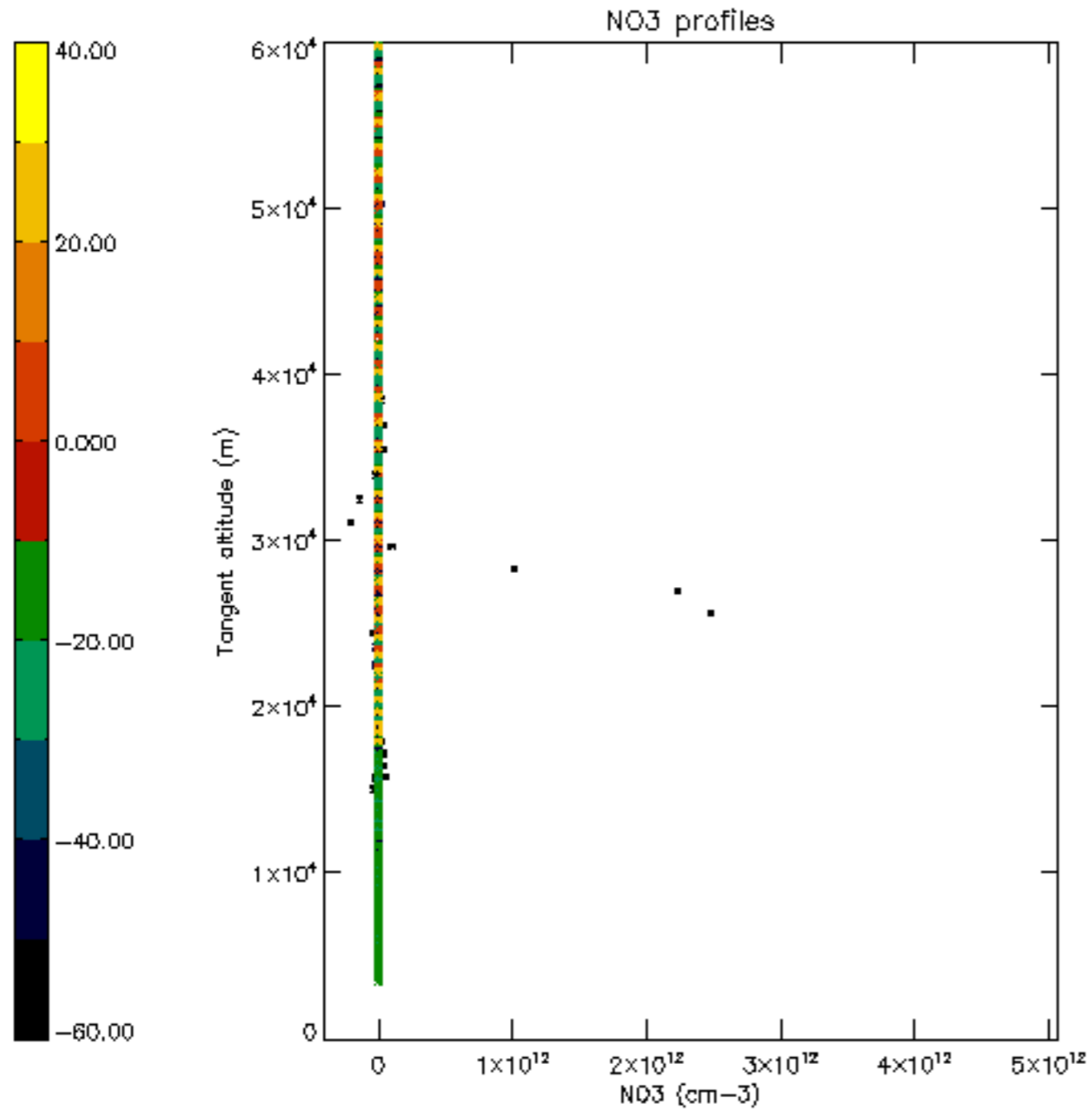


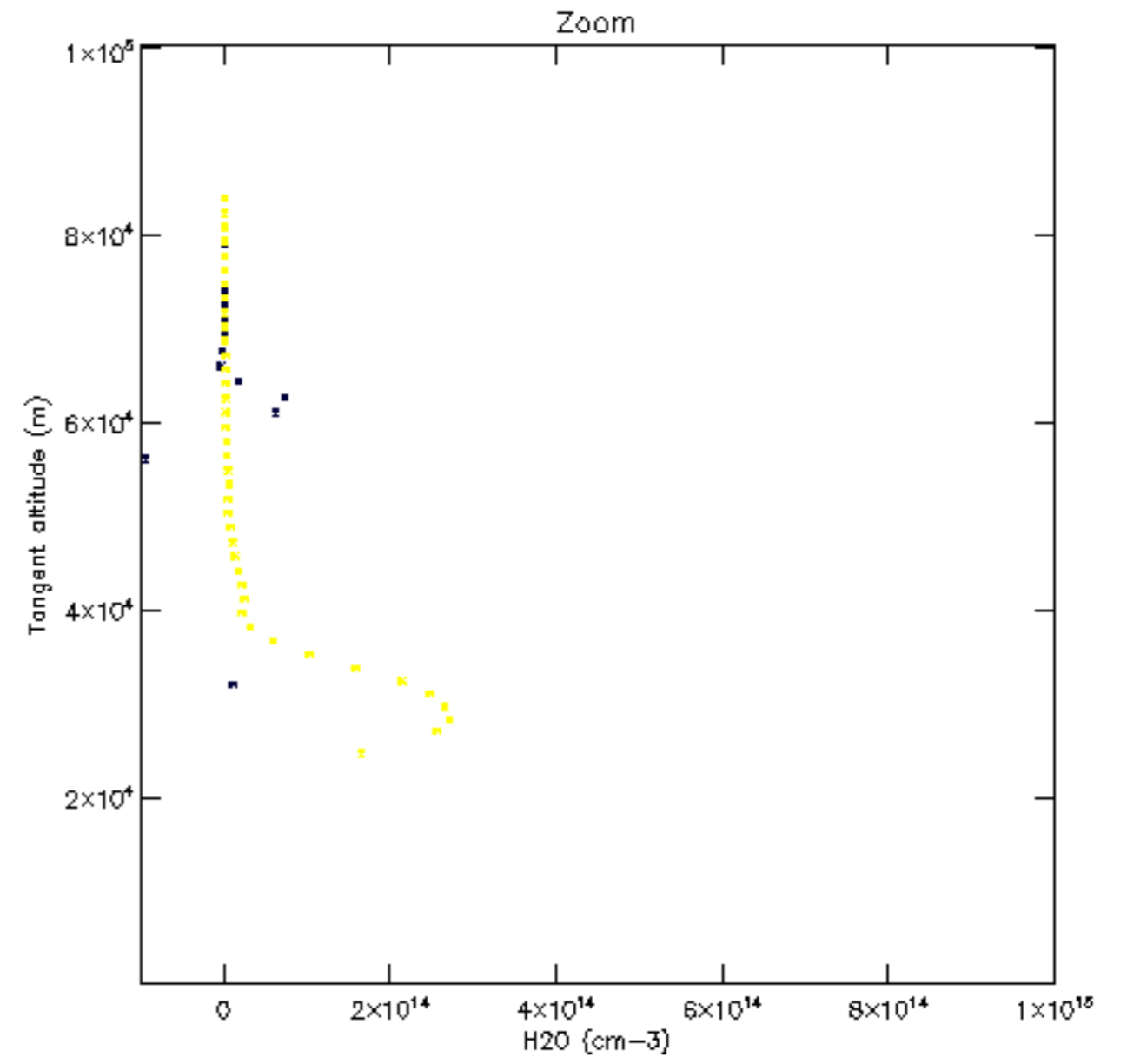
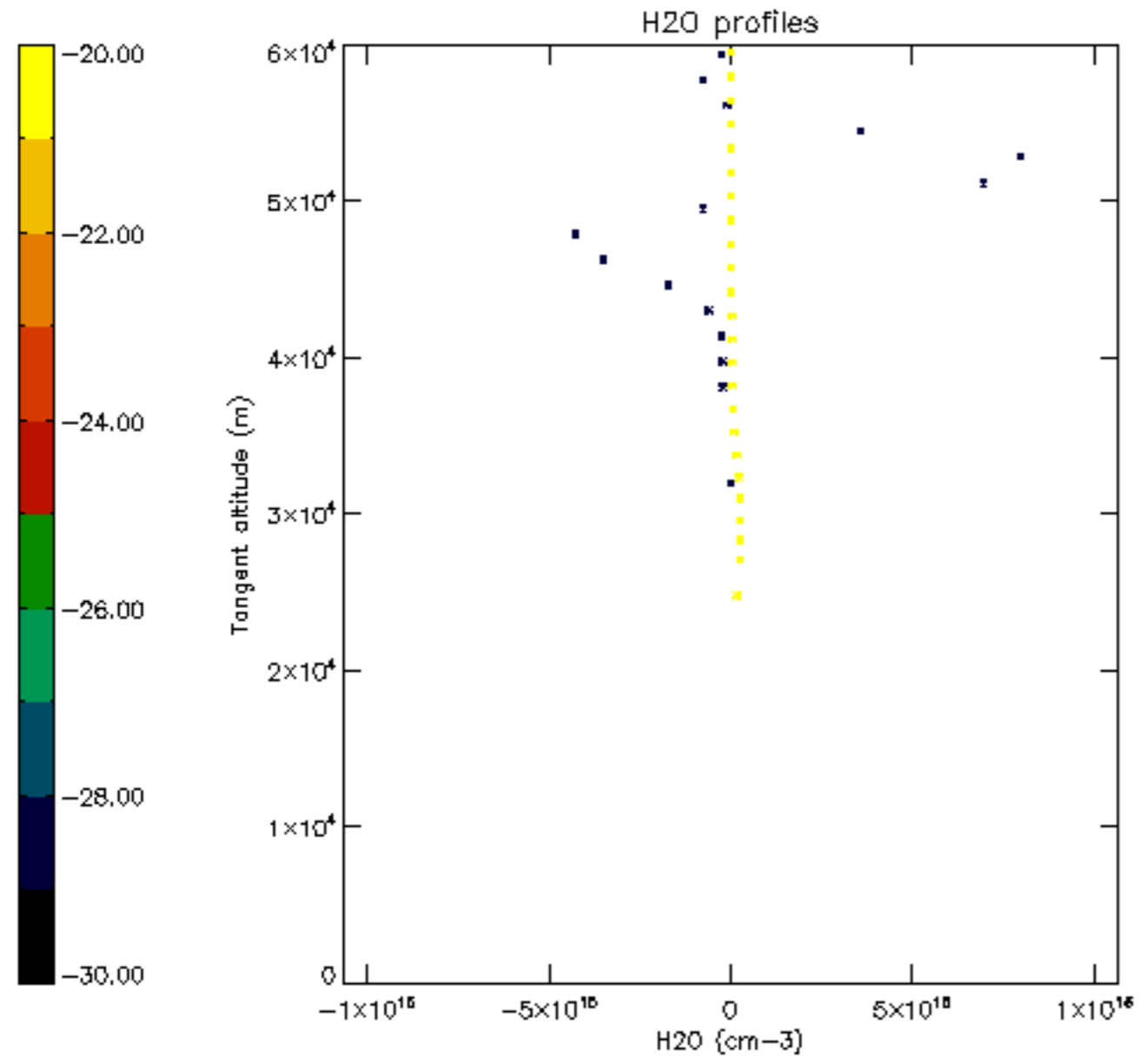


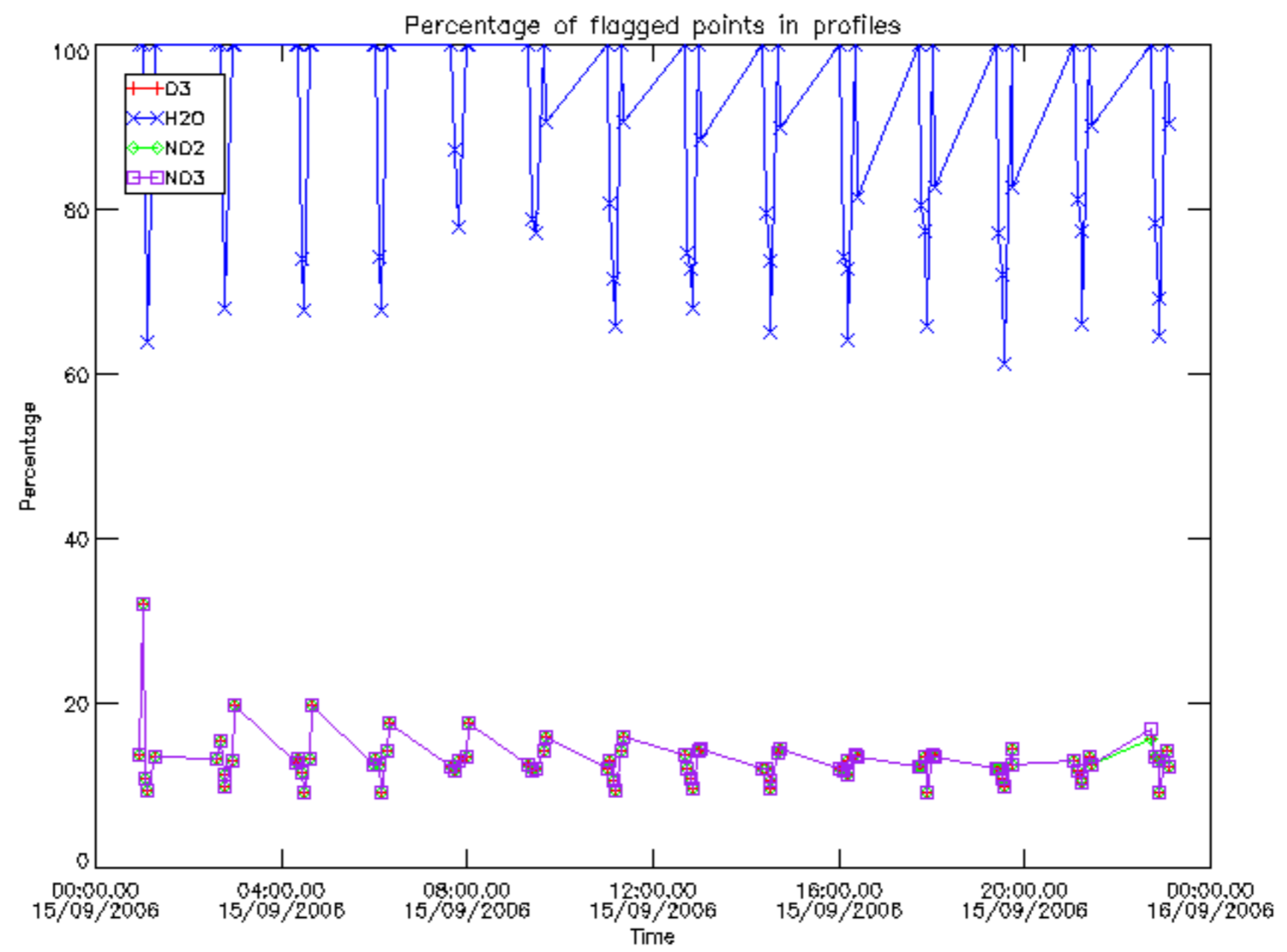




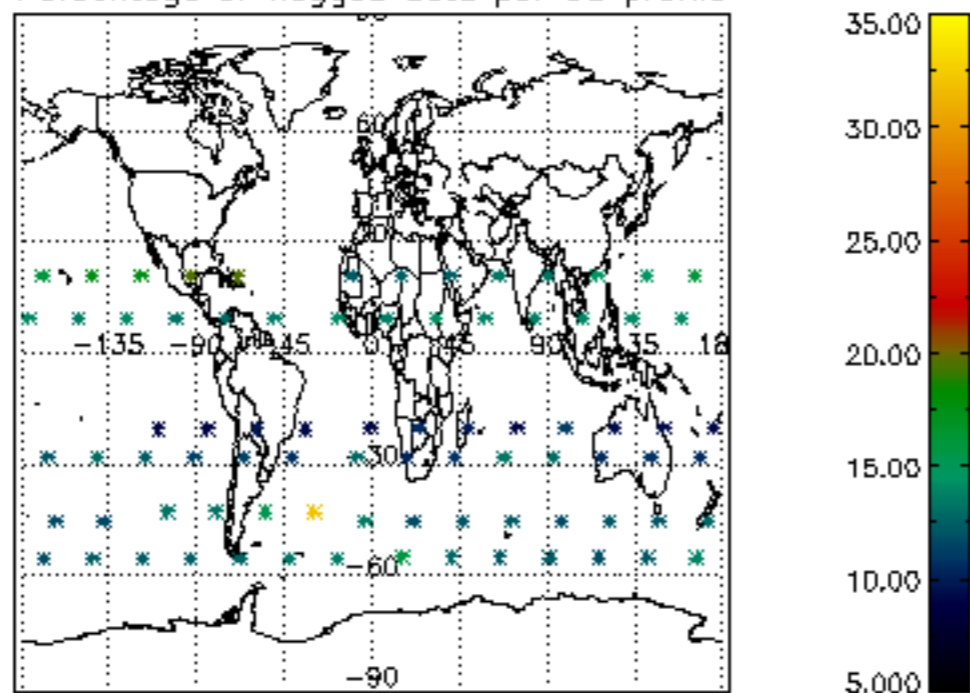




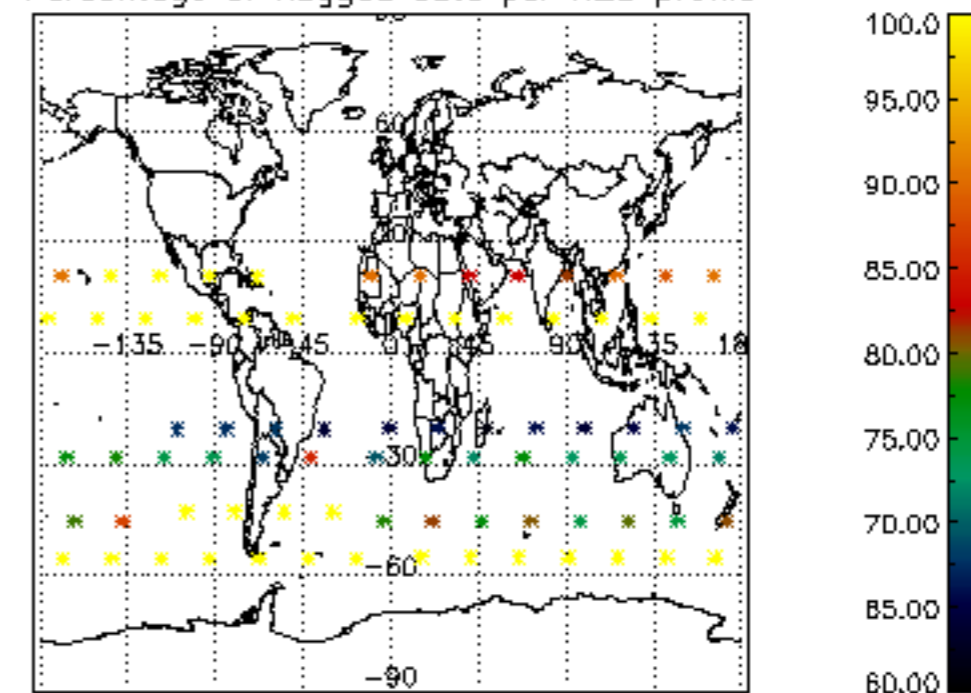




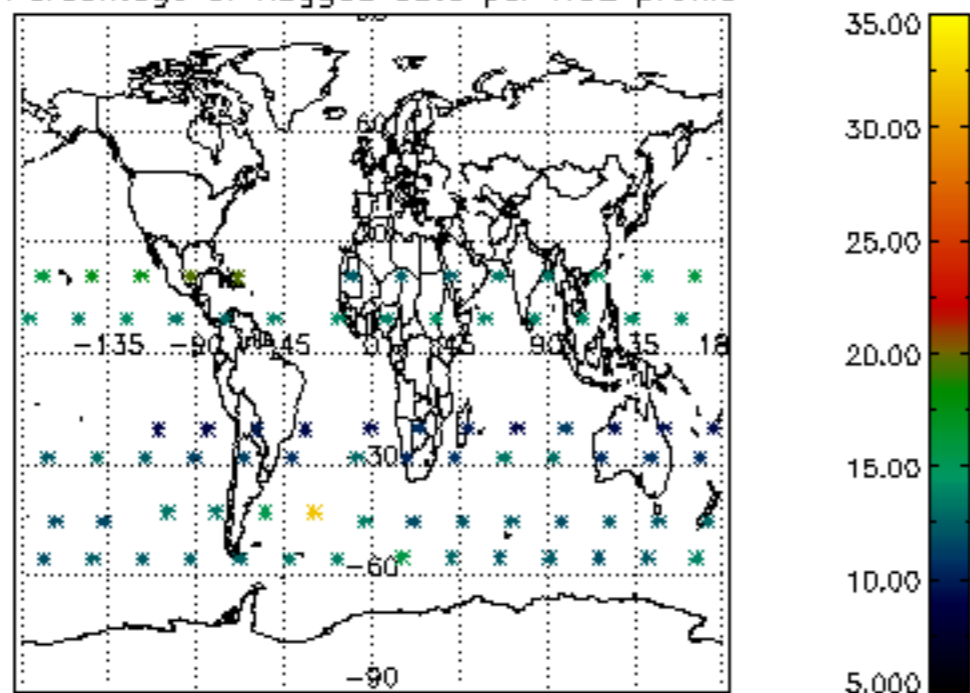
Percentage of flagged data per D3 profile



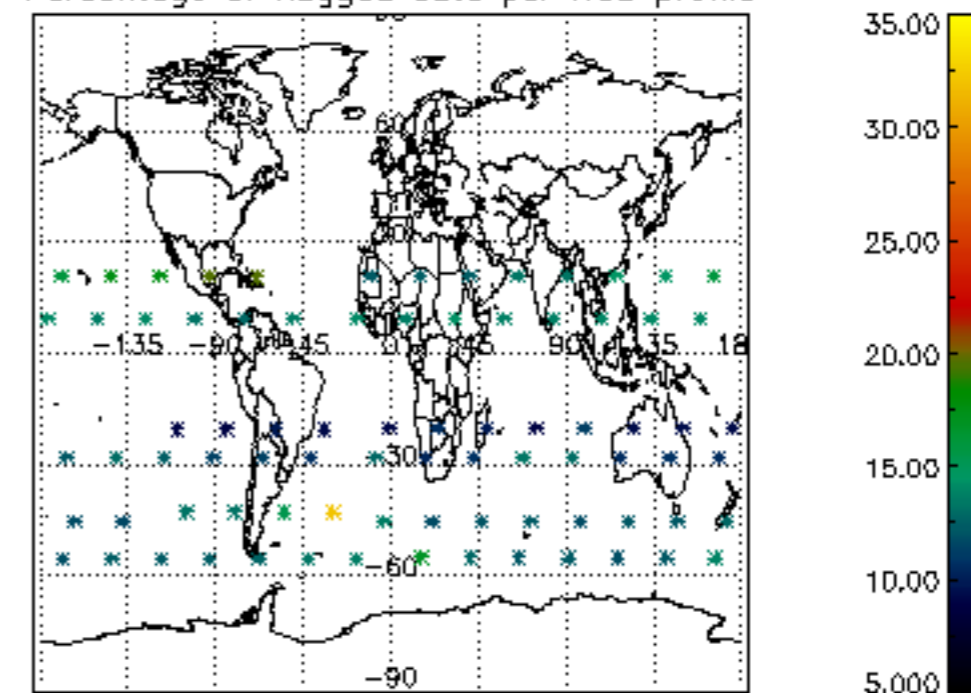
Percentage of flagged data per H2O profile

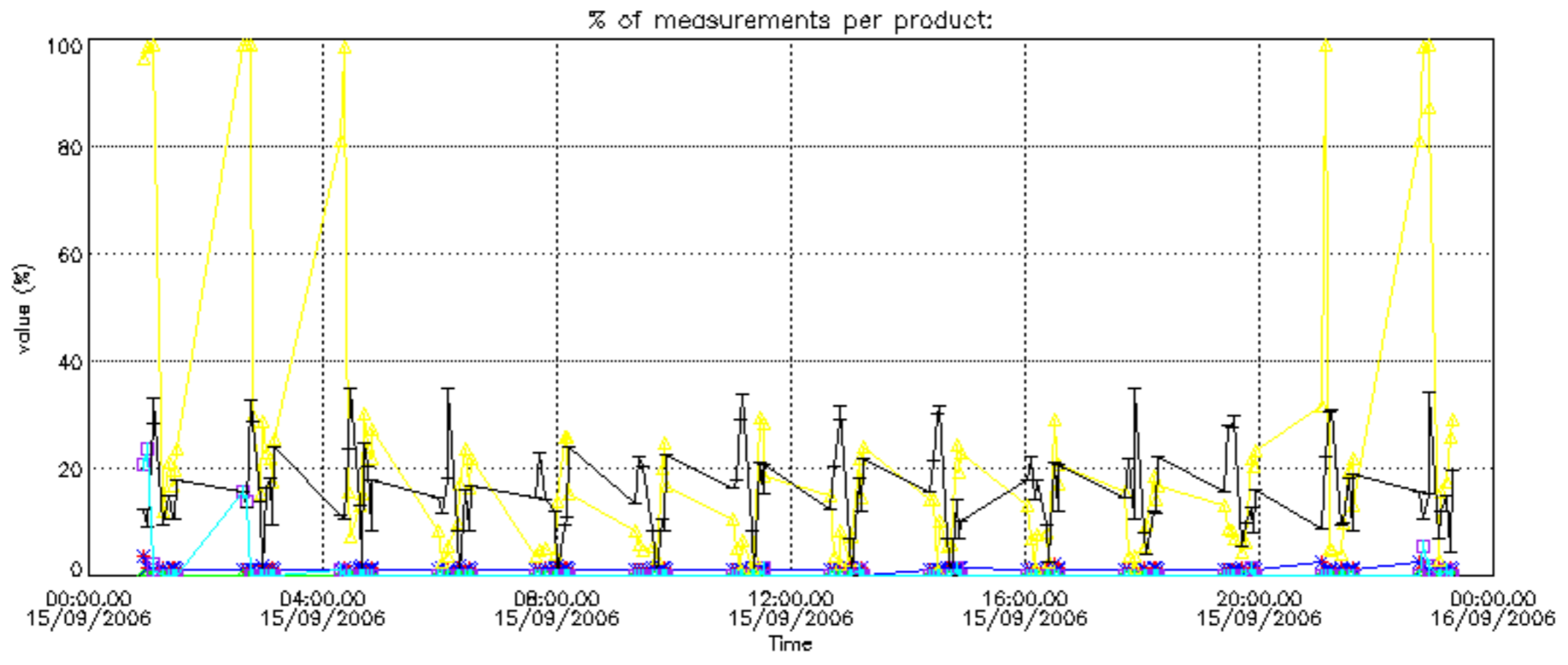


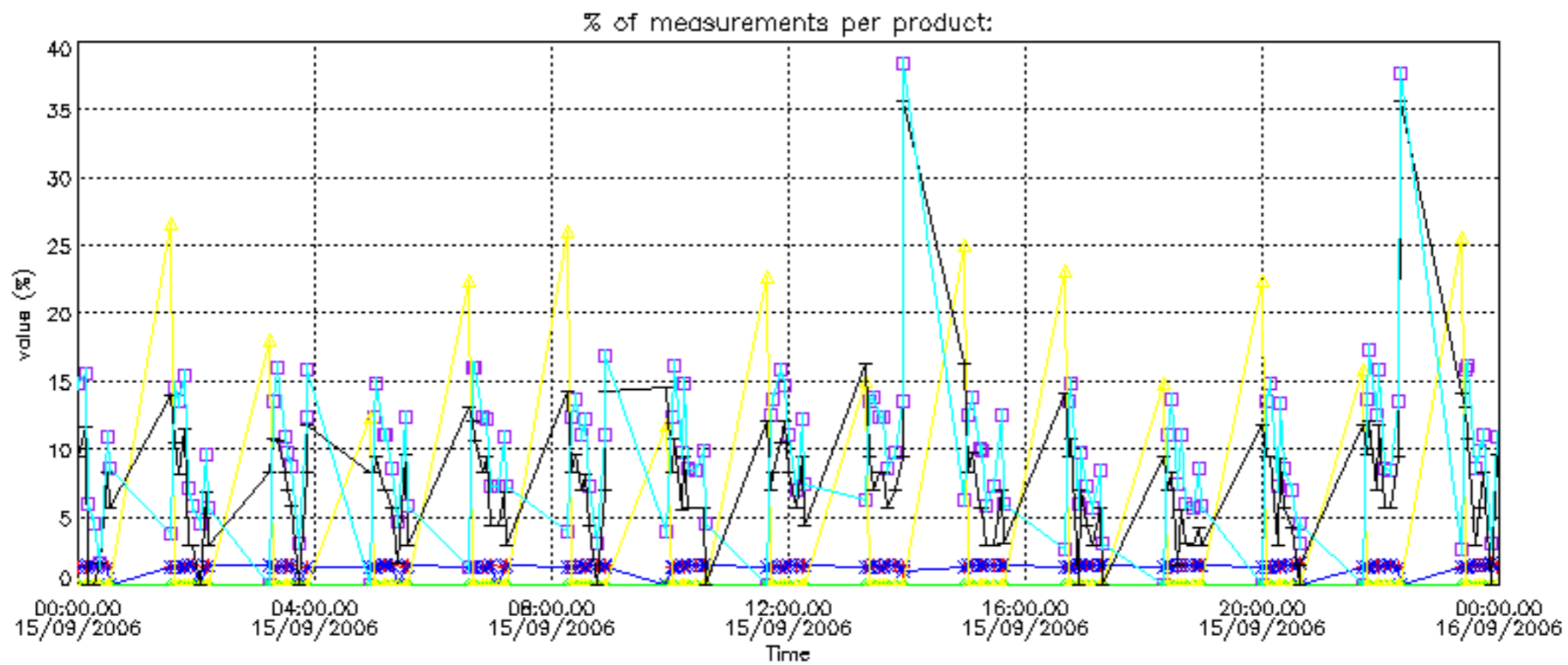
Percentage of flagged data per NO2 profile



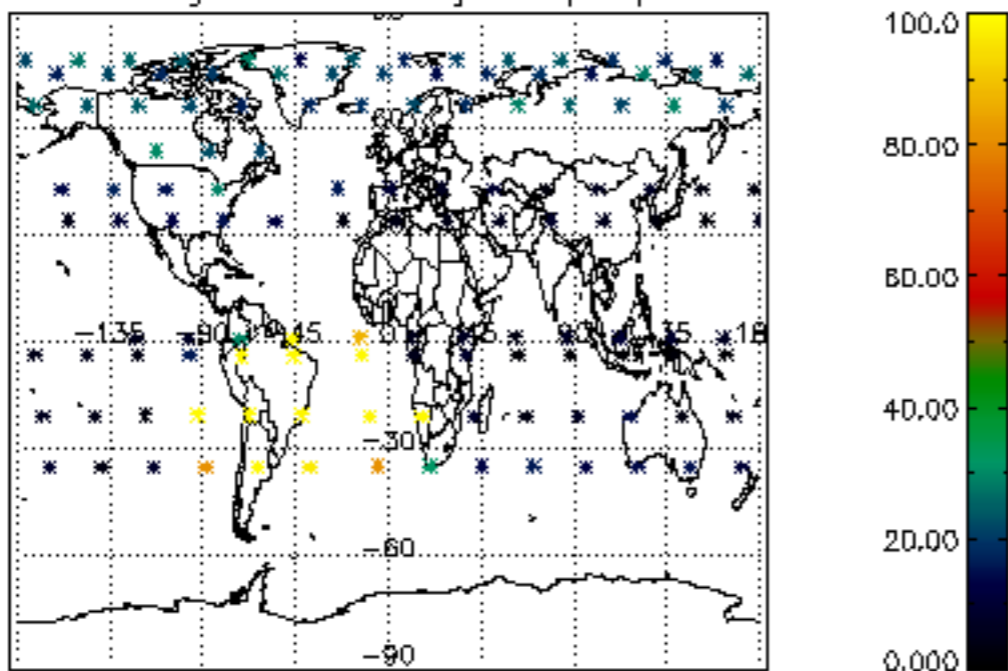
Percentage of flagged data per NO3 profile



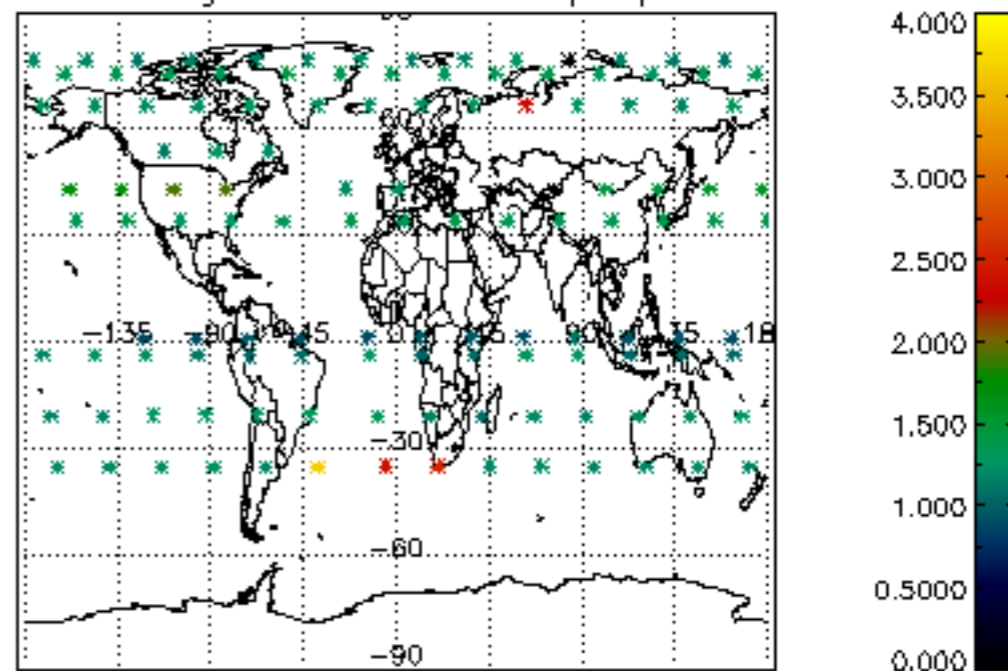




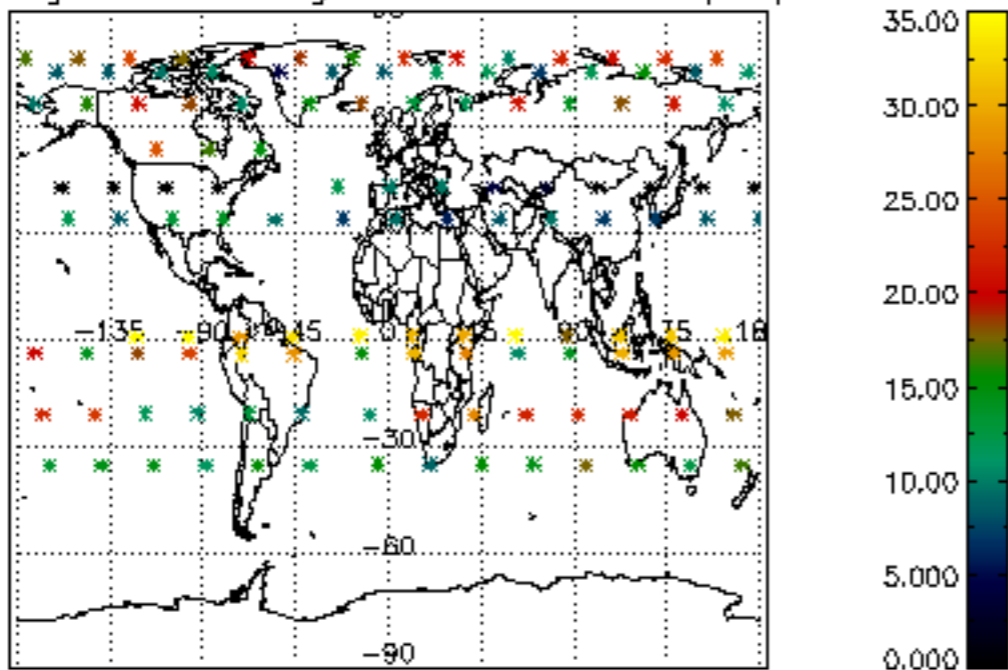
Percentage of cosmic ray hits per profile



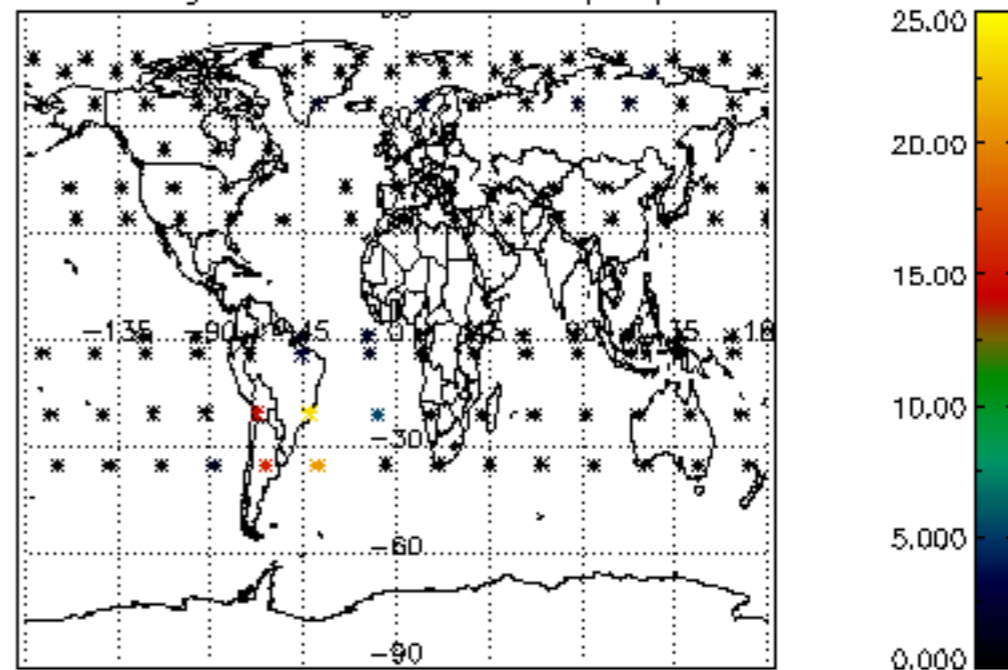
Percentage of datation errors per profile



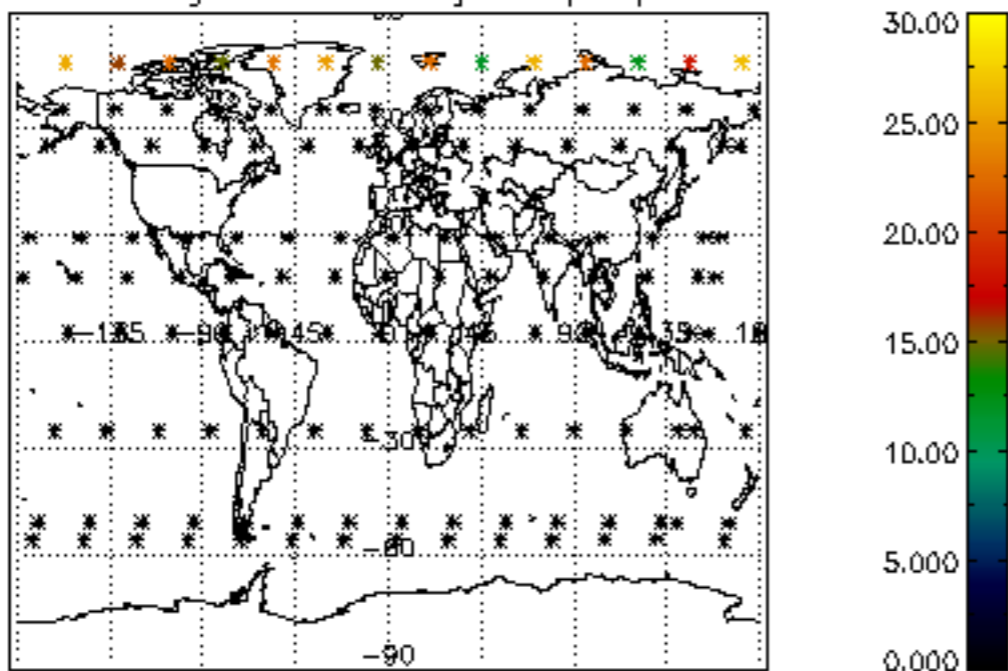
Percentage of star falling outside central band per profile



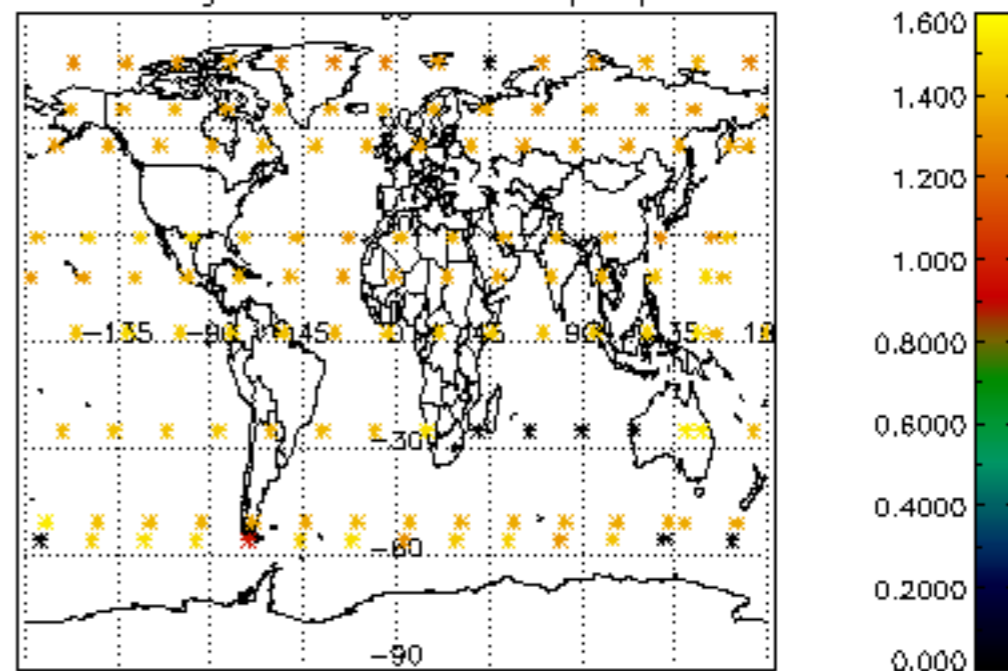
Percentage of saturation errors per profile



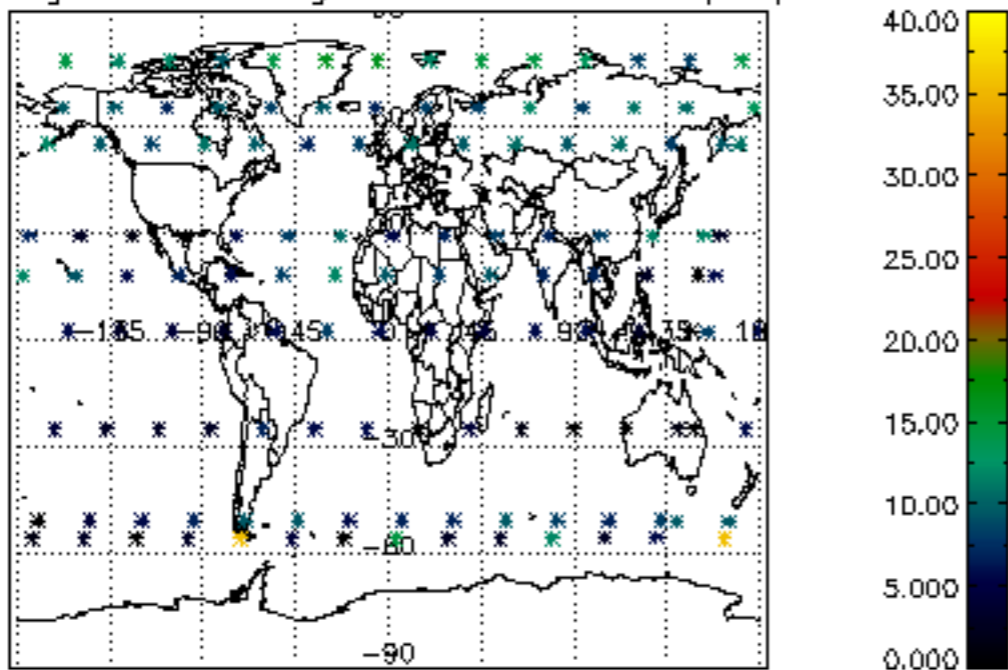
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

