

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	17APR2013 17:42:51
Data source version	GOMOS/6.01
Start time of products	30-06-2002 (30JUN2002 00:00:00)
Stop time of products	01-07-2002 (01JUL2002 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	62
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

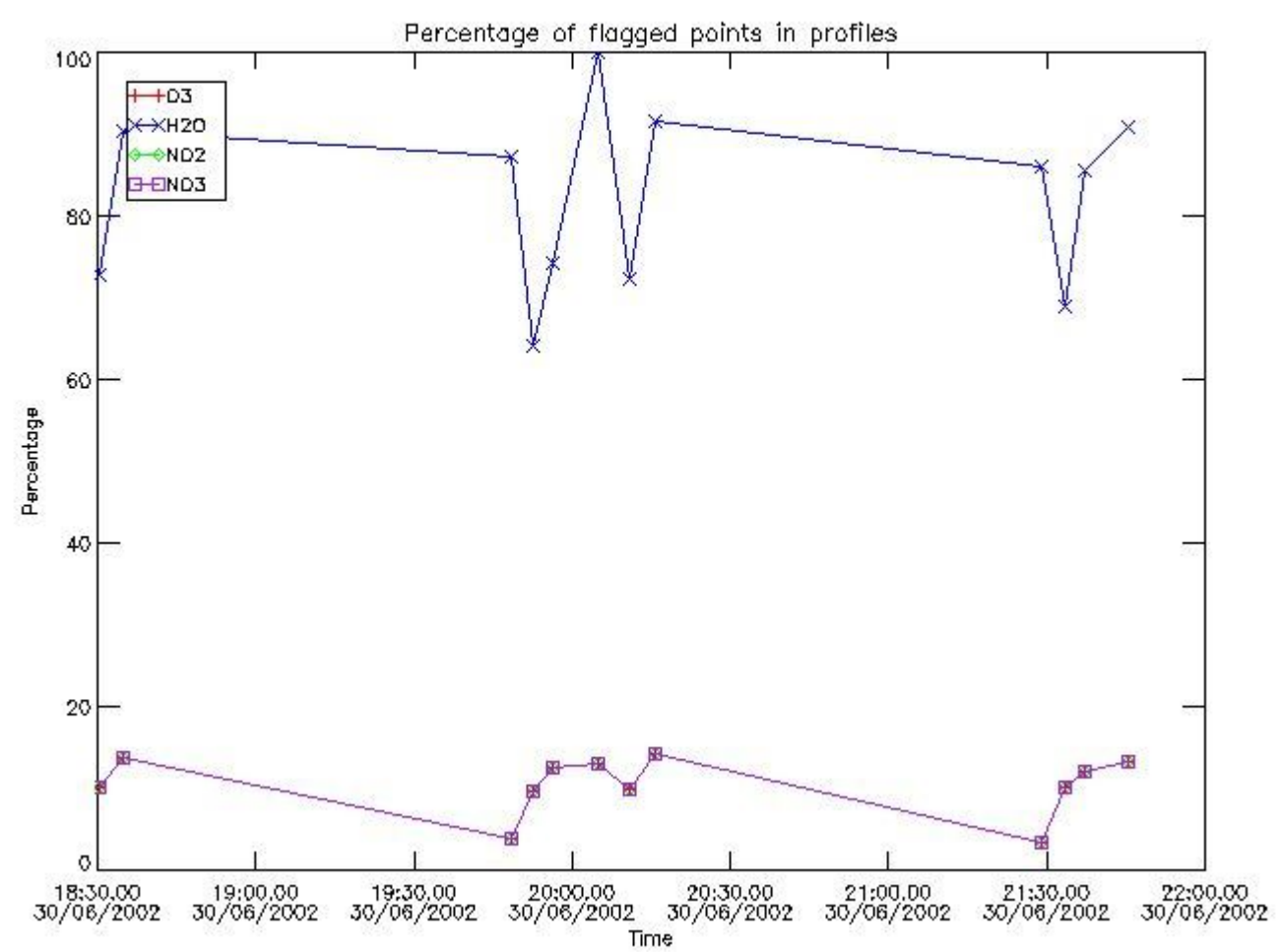
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20020630_183018_000000502007_00185_01742_8388.N1	30-JUN-2002 18:30:18	Dark	50.000	9	Alp Eri	0.45300	24000.	100	1742	No
2	GOM_NL__2PRFIN20020630_183459_000000372007_00185_01742_8389.N1	30-JUN-2002 18:34:59	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	1742	No
3	GOM_NL__2PRFIN20020630_183746_000000512007_00185_01742_8390.N1	30-JUN-2002 18:37:46	Straylight	51.000	63	Bet Gru	2.1500	2800.0	102	1742	No
4	GOM_NL__2PRFIN20020630_183942_000000522007_00185_01742_8391.N1	30-JUN-2002 18:39:42	Straylight	51.500	31	Alp Gru	1.7340	15200.	103	1742	No
5	GOM_NL__2PRFIN20020630_184207_000000412007_00185_01742_8392.N1	30-JUN-2002 18:42:07	Straylight	40.500	45	Alp Pav	1.9400	26000.	81	1742	No
6	GOM_NL__2PRFIN20020630_184559_000000462007_00185_01742_8393.N1	30-JUN-2002 18:45:59	Straylight	45.500	141	Bet Ara	2.8400	4600.0	91	1742	No
7	GOM_NL__2PRFIN20020630_184727_000000372007_00185_01742_8394.N1	30-JUN-2002 18:47:27	Twilight	37.000	147	Alp Ara	2.8770	26000.	74	1742	No
8	GOM_NL__2PRFIN20020630_184915_000000432007_00185_01742_8395.N1	30-JUN-2002 18:49:15	Twilight	43.000	40	The Sco	1.8590	7100.0	86	1742	No
9	GOM_NL__2PRFIN20020630_185055_000000422007_00185_01742_8396.N1	30-JUN-2002 18:50:55	Twilight	41.500	25	35Lam Sco	1.6200	28000.	83	1742	No
10	GOM_NL__2PRFIN20020630_185253_000000442007_00185_01742_8397.N1	30-JUN-2002 18:52:53	Bright	44.000	57	34Sig Sgr	2.0660	26000.	88	1742	No
11	GOM_NL__2PRFIN20020630_185452_000000372007_00185_01742_8398.N1	30-JUN-2002 18:54:52	Bright	37.000	156	20Sig Sco	2.9030	28000.	74	1742	No
12	GOM_NL__2PRFIN20020630_185707_000000372007_00185_01742_8399.N1	30-JUN-2002 18:57:07	Bright	36.500	86	35Eta Oph	2.4300	10200.	73	1742	No
13	GOM_NL__2PRFIN20020630_185852_000000362007_00185_01742_8400.N1	30-JUN-2002 18:58:52	Bright	36.000	98	13Zet Oph	2.5710	30000.	72	1742	No
14	GOM_NL__2PRFIN20020630_190102_000000372007_00185_01742_8401.N1	30-JUN-2002 19:01:02	Bright	37.000	120	1Del Oph	2.7340	3200.0	74	1742	No
15	GOM_NL__2PRFIN20020630_190247_000000382007_00185_01742_8402.N1	30-JUN-2002 19:02:47	Bright	37.500	126	60Bet Oph	2.7700	4250.0	75	1742	No
16	GOM_NL__2PRFIN20020630_190507_000000372007_00185_01742_8403.N1	30-JUN-2002 19:05:07	Bright	36.500	59	55Alp Oph	2.0800	8900.0	73	1742	No
17	GOM_NL__2PRFIN20020630_190709_000000712007_00185_01742_8404.N1	30-JUN-2002 19:07:09	Bright	71.000	11	53Alp Aql	0.76500	8000.0	142	1742	No
18	GOM_NL__2PRFIN20020630_191000_000000362007_00185_01742_8405.N1	30-JUN-2002 19:10:00	Bright	35.500	67	5Alp CrB	2.2210	11000.	71	1742	No
19	GOM_NL__2PRFIN20020630_191400_000000422007_00185_01742_8406.N1	30-JUN-2002 19:14:00	Bright	42.000	5	3Alp Lyr	0.033000	11000.	84	1742	No
20	GOM_NL__2PRFIN20020630_191635_000000392007_00185_01742_8407.N1	30-JUN-2002 19:16:35	Bright	38.500	130	23Bet Dra	2.7990	5800.0	77	1742	No
21	GOM_NL__2PRFIN20020630_192001_000000632007_00185_01742_8408.N1	30-JUN-2002 19:20:01	Bright	63.000	66	37Gam Cyg	2.2080	5900.0	126	1742	No
22	GOM_NL__2PRFIN20020630_192217_000000572007_00185_01742_8409.N1	30-JUN-2002 19:22:17	Bright	57.000	19	50Alp Cyg	1.2460	10500.	114	1742	No
23	GOM_NL__2PRFIN20020630_192710_000000372007_00185_01742_8410.N1	30-JUN-2002 19:27:10	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	1742	No
24	GOM_NL__2PRFIN20020630_193342_000000432007_00185_01742_8411.N1	30-JUN-2002 19:33:42	Bright	43.000	76	27Gam Cas	2.3000	30000.	86	1742	No
25	GOM_NL__2PRFIN20020630_193836_000000352007_00185_01742_8412.N1	30-JUN-2002 19:38:36	Bright	35.000	35	33Alp Per	1.7950	6250.0	70	1742	No
26	GOM_NL__2PRFIN20020630_194053_000000492007_00185_01742_8413.N1	30-JUN-2002 19:40:53	Bright	49.000	73	57Gam1And	2.2600	13100.	98	1742	No
27	GOM_NL__2PRFIN20020630_194326_000000692007_00185_01742_8414.N1	30-JUN-2002 19:43:26	Twilight	68.500	53	43Bet And	2.0480	3300.0	137	1742	No
28	GOM_NL__2PRFIN20020630_194825_000001442007_00185_01742_8415.N1	30-JUN-2002 19:48:25	Dark	144.00	58	21Alp And	2.0730	11000.	288	1742	No
29	GOM_NL__2PRFIN20020630_195241_000000542007_00185_01742_8416.N1	30-JUN-2002 19:52:41	Dark	53.500	94	92Alp Cet	2.5260	3100.0	107	1742	No
30	GOM_NL__2PRFIN20020630_195625_000000412007_00185_01742_8417.N1	30-JUN-2002 19:56:25	Dark	41.000	165	34Gam Eri	2.9500	3200.0	82	1742	No
31	GOM_NL__2PRFIN20020630_200448_000000402007_00185_01742_8418.N1	30-JUN-2002 20:04:48	Dark	39.500	157	The1Eri	2.9060	9300.0	79	1742	No
32	GOM_NL__2PRFIN20020630_201055_000000512007_00186_01743_8407.N1	30-JUN-2002 20:10:55	Dark	51.000	9	Alp Eri	0.45300	24000.	102	1743	No
33	GOM_NL__2PRFIN20020630_201536_000000362007_00186_01743_8408.N1	30-JUN-2002 20:15:36	Dark	36.000	135	Bet Hyi	2.8200	5800.0	72	1743	No
34	GOM_NL__2PRFIN20020630_201822_000000642007_00186_01743_8409.N1	30-JUN-2002 20:18:22	Straylight	63.500	63	Bet Gru	2.1500	2800.0	127	1743	No
35	GOM_NL__2PRFIN20020630_202019_000000482007_00186_01743_8410.N1	30-JUN-2002 20:20:19	Straylight	48.000	31	Alp Gru	1.7340	15200.	96	1743	No
36	GOM_NL__2PRFIN20020630_202244_000000402007_00186_01743_8411.N1	30-JUN-2002 20:22:44	Straylight	40.000	45	Alp Pav	1.9400	26000.	80	1743	No
37	GOM_NL__2PRFIN20020630_202636_000000442007_00186_01743_8412.N1	30-JUN-2002 20:26:36	Straylight	44.000	141	Bet Ara	2.8400	4600.0	88	1743	No
38	GOM_NL__2PRFIN20020630_202803_000000392007_00186_01743_8413.N1	30-JUN-2002 20:28:03	Twilight	38.500	147	Alp Ara	2.8770	26000.	77	1743	No
39	GOM_NL__2PRFIN20020630_202951_000000432007_00186_01743_8414.N1	30-JUN-2002 20:29:51	Twilight	43.000	40	The Sco	1.8590	7100.0	86	1743	No
40	GOM_NL__2PRFIN20020630_203131_000000422007_00186_01743_8415.N1	30-JUN-2002 20:31:31	Twilight	42.000	25	35Lam Sco	1.6200	28000.	84	1743	No
41	GOM_NL__2PRFIN20020630_203329_000000442007_00186_01743_8416.N1	30-JUN-2002 20:33:29	Bright	43.500	57	34Sig Sgr	2.0660	26000.	87	1743	No
42	GOM_NL__2PRFIN20020630_203528_000000382007_00186_01743_8417.N1	30-JUN-2002 20:35:28	Bright	37.500	156	20Sig Sco	2.9030	28000.	75	1743	No

43	GOM_NL__2PRFIN20020630_203743_000000372007_00186_01743_8418.N1	30-JUN-2002 20:37:43	Bright	36.500	86	35Eta Oph	2.4300	10200.	73	1743	No
44	GOM_NL__2PRFIN20020630_203928_000000372007_00186_01743_8419.N1	30-JUN-2002 20:39:28	Bright	36.500	98	13Zet Oph	2.5710	30000.	73	1743	No
45	GOM_NL__2PRFIN20020630_204138_000000362007_00186_01743_8420.N1	30-JUN-2002 20:41:38	Bright	36.000	120	1Del Oph	2.7340	3200.0	72	1743	No
46	GOM_NL__2PRFIN20020630_204323_000000372007_00186_01743_8421.N1	30-JUN-2002 20:43:23	Bright	37.000	126	60Bet Oph	2.7700	4250.0	74	1743	No
47	GOM_NL__2PRFIN20020630_204543_000000372007_00186_01743_8422.N1	30-JUN-2002 20:45:43	Bright	37.000	59	55Alp Oph	2.0800	8900.0	74	1743	No
48	GOM_NL__2PRFIN20020630_204744_000000662007_00186_01743_8423.N1	30-JUN-2002 20:47:44	Bright	66.000	11	53Alp Aql	0.76500	8000.0	132	1743	No
49	GOM_NL__2PRFIN20020630_205036_000000372007_00186_01743_8424.N1	30-JUN-2002 20:50:36	Bright	37.000	67	5Alp CrB	2.2210	11000.	74	1743	No
50	GOM_NL__2PRFIN20020630_205435_000000452007_00186_01743_8425.N1	30-JUN-2002 20:54:35	Bright	45.000	5	3Alp Lyr	0.033000	11000.	90	1743	No
51	GOM_NL__2PRFIN20020630_205710_000000372007_00186_01743_8426.N1	30-JUN-2002 20:57:10	Bright	37.000	130	23Bet Dra	2.7990	5800.0	74	1743	No
52	GOM_NL__2PRFIN20020630_210035_000000602007_00186_01743_8427.N1	30-JUN-2002 21:00:35	Bright	60.000	66	37Gam Cyg	2.2080	5900.0	120	1743	No
53	GOM_NL__2PRFIN20020630_210252_000000582007_00186_01743_8428.N1	30-JUN-2002 21:02:52	Bright	57.500	19	50Alp Cyg	1.2460	10500.	115	1743	No
54	GOM_NL__2PRFIN20020630_210746_000000372007_00186_01743_8429.N1	30-JUN-2002 21:07:46	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	1743	No
55	GOM_NL__2PRFIN20020630_211417_000000632007_00186_01743_8430.N1	30-JUN-2002 21:14:17	Bright	63.000	76	27Gam Cas	2.3000	30000.	126	1743	No
56	GOM_NL__2PRFIN20020630_211912_000000382007_00186_01743_8431.N1	30-JUN-2002 21:19:12	Bright	38.000	35	33Alp Per	1.7950	6250.0	76	1743	No
57	GOM_NL__2PRFIN20020630_212129_000000492007_00186_01743_8432.N1	30-JUN-2002 21:21:29	Bright	49.000	73	57Gam1And	2.2600	13100.	98	1743	No
58	GOM_NL__2PRFIN20020630_212402_000000772007_00186_01743_8433.N1	30-JUN-2002 21:24:02	Tw_i_and_stray	76.500	53	43Bet And	2.0480	3300.0	153	1743	No
59	GOM_NL__2PRFIN20020630_212902_000001482007_00186_01743_8434.N1	30-JUN-2002 21:29:02	Dark	148.00	58	21Alp And	2.0730	11000.	296	1743	No
60	GOM_NL__2PRFIN20020630_213317_000000512007_00186_01743_8435.N1	30-JUN-2002 21:33:17	Dark	50.500	94	92Alp Cet	2.5260	3100.0	101	1743	No
61	GOM_NL__2PRFIN20020630_213701_000000422007_00186_01743_8436.N1	30-JUN-2002 21:37:01	Dark	42.000	165	34Gam Eri	2.9500	3200.0	84	1743	No
62	GOM_NL__2PRFIN20020630_214524_000000392007_00186_01743_8437.N1	30-JUN-2002 21:45:24	Dark	38.500	157	The1Eri	2.9060	9300.0	77	1743	No

3. Quality information per product

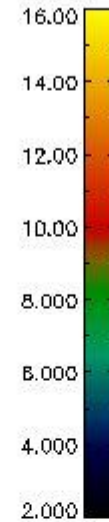
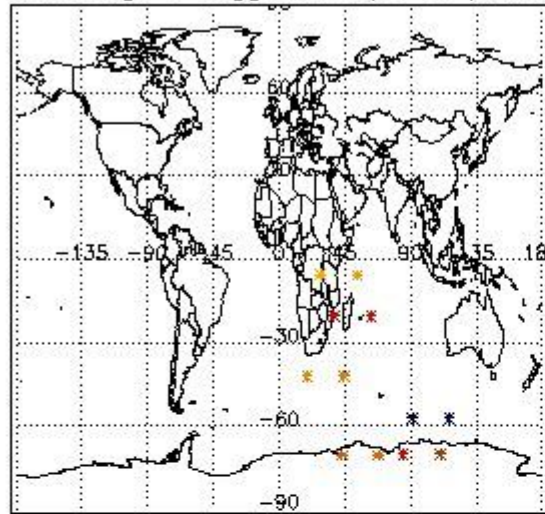
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

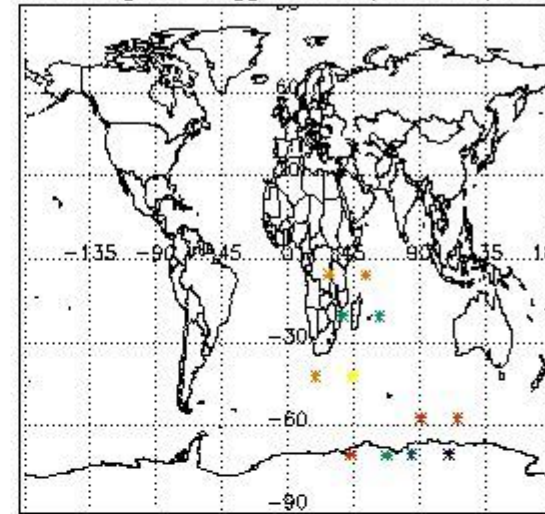


3.2 Plot quality information per product (world map)

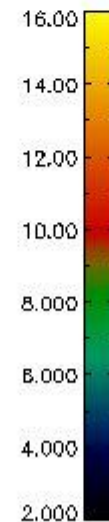
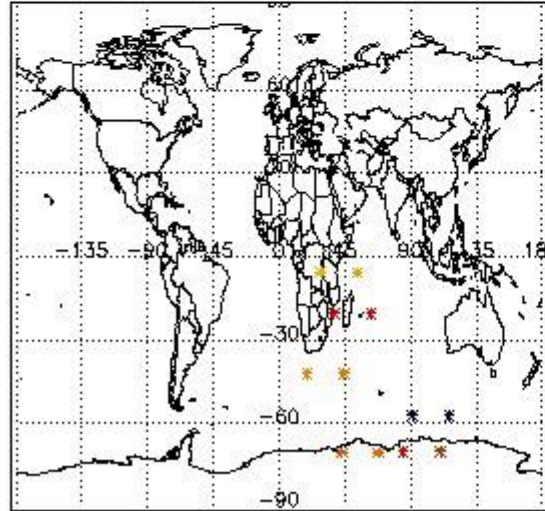
Percentage of flagged data per O3 profile



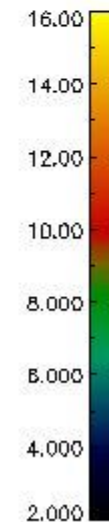
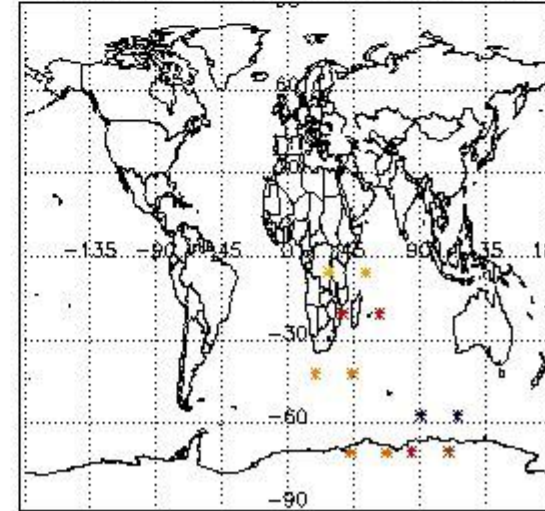
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

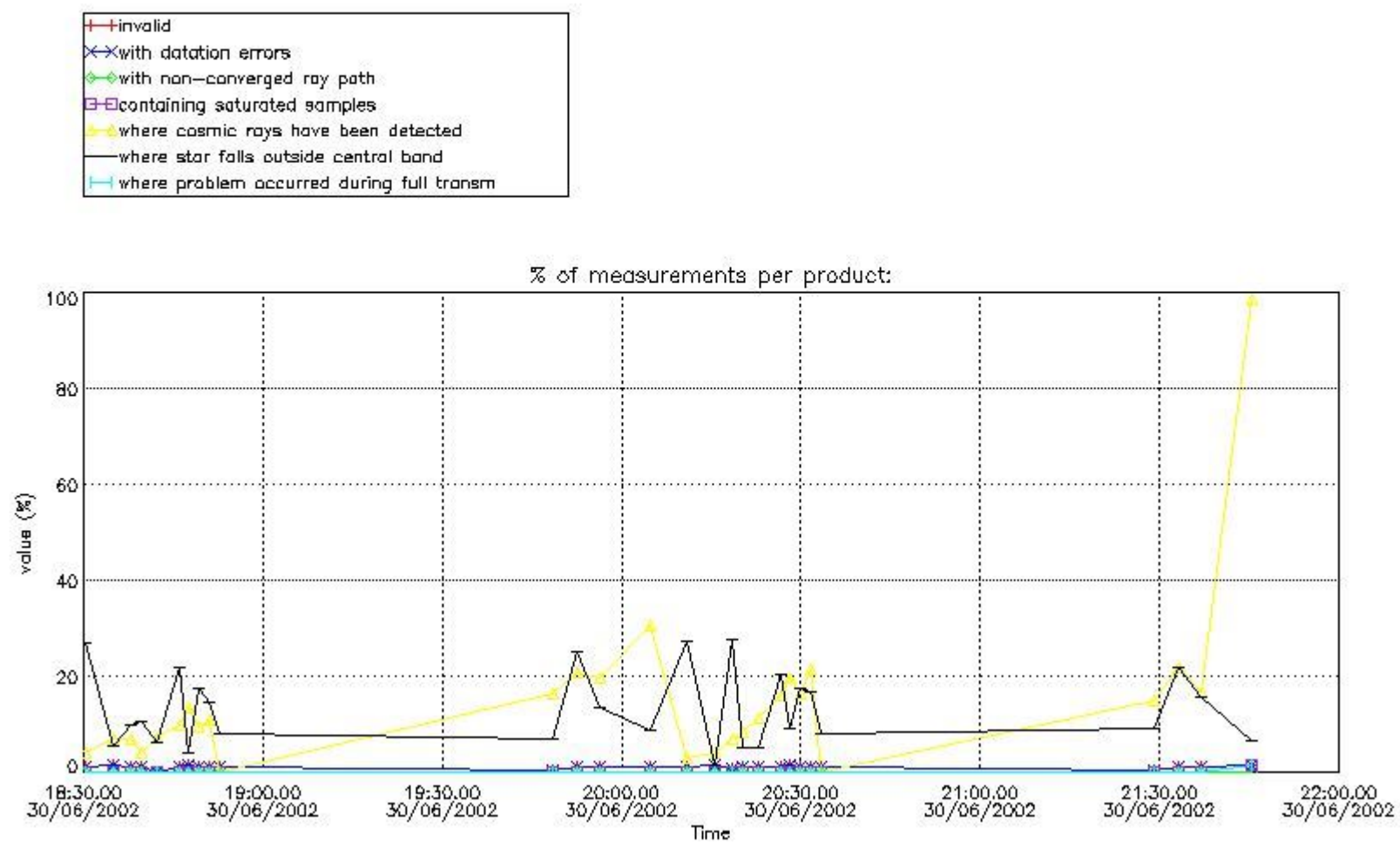


4. Level 1 quality information per product

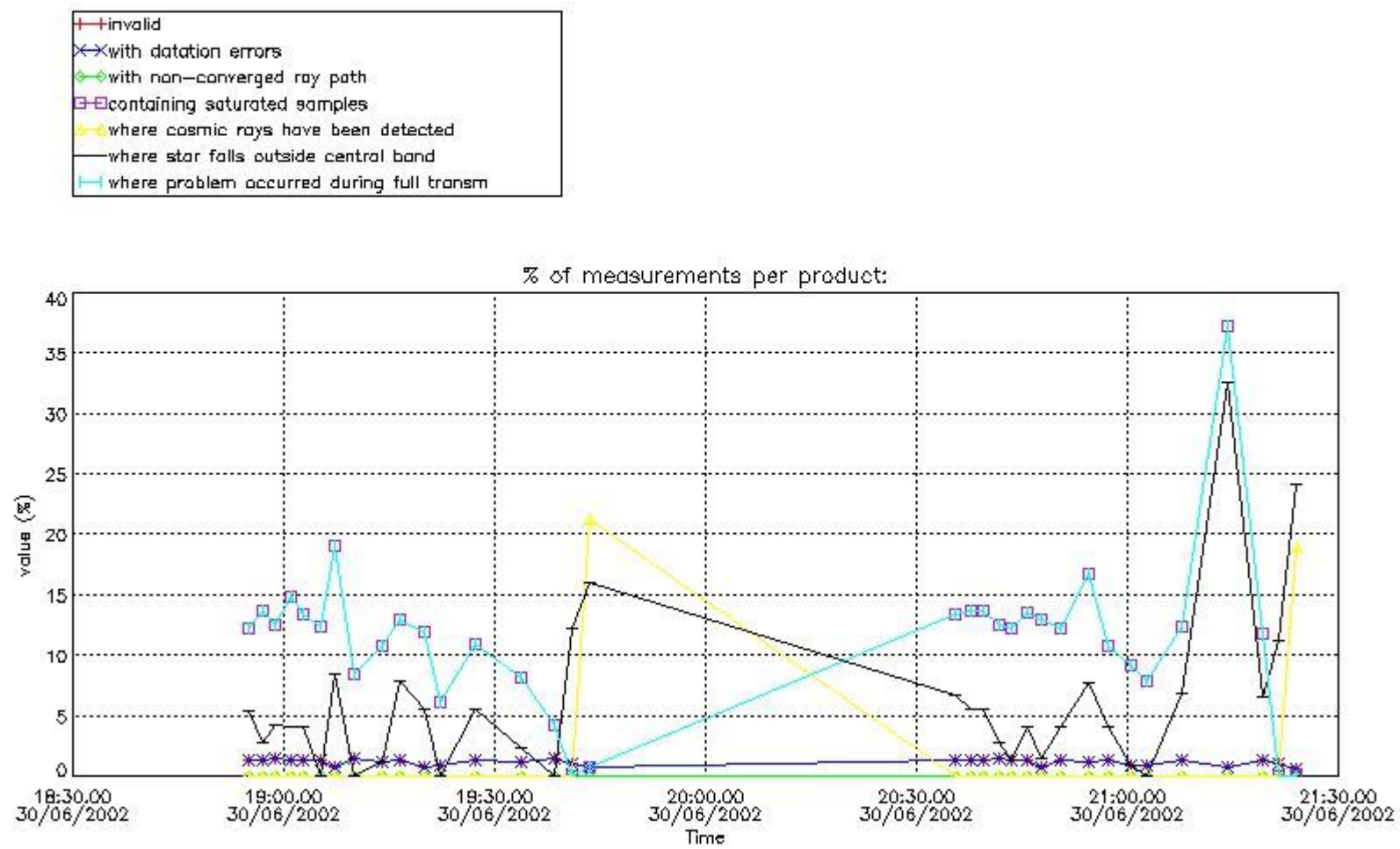
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



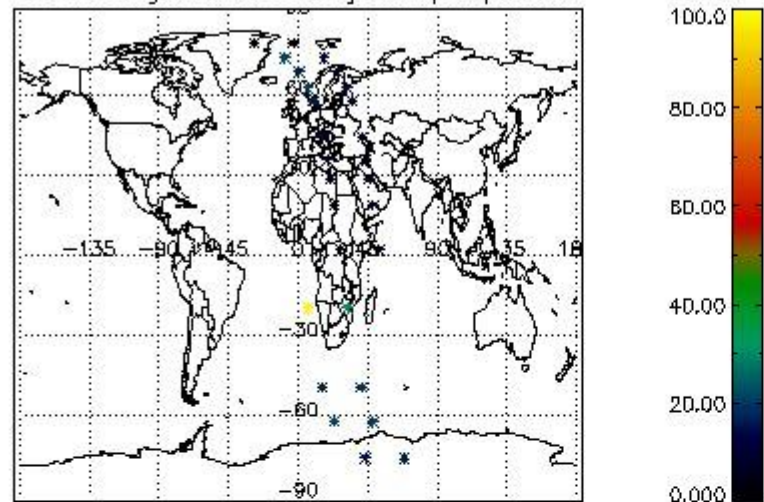
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



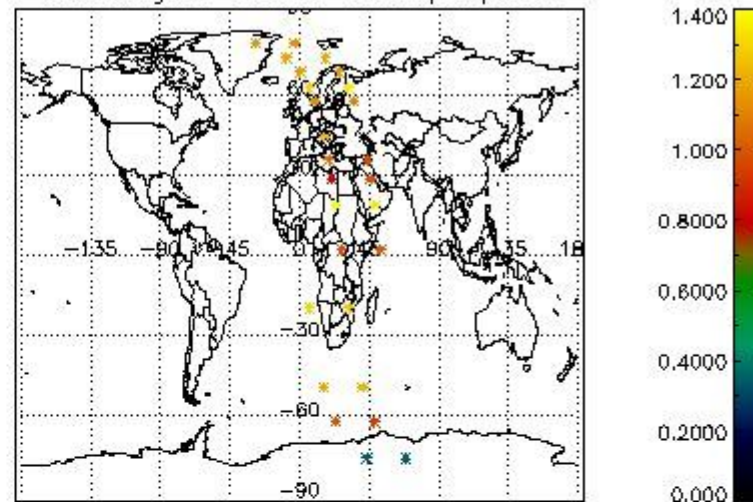
4.2 Plot quality information per product coming from level 1b processing (world map)

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

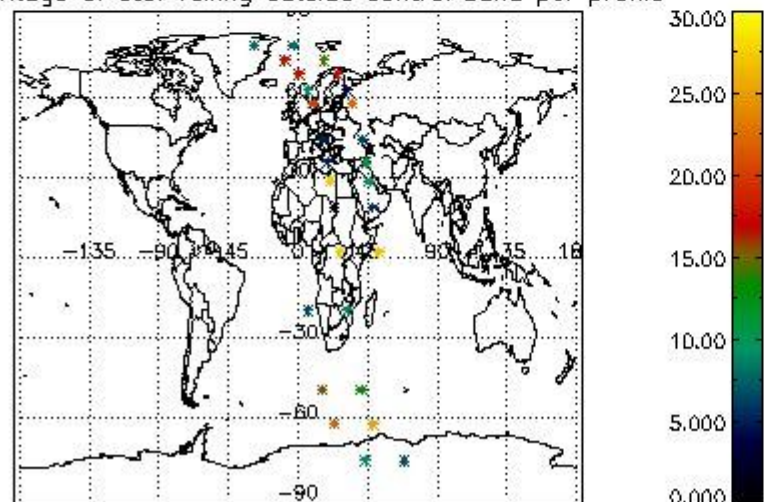
Percentage of cosmic ray hits per profile



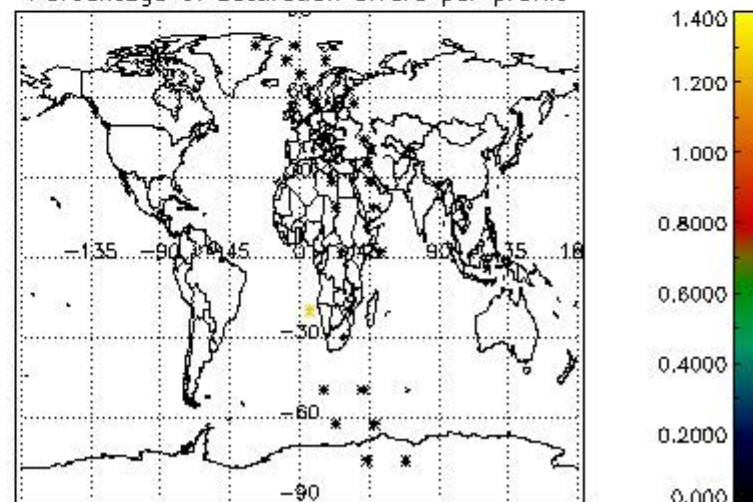
Percentage of datation errors per profile



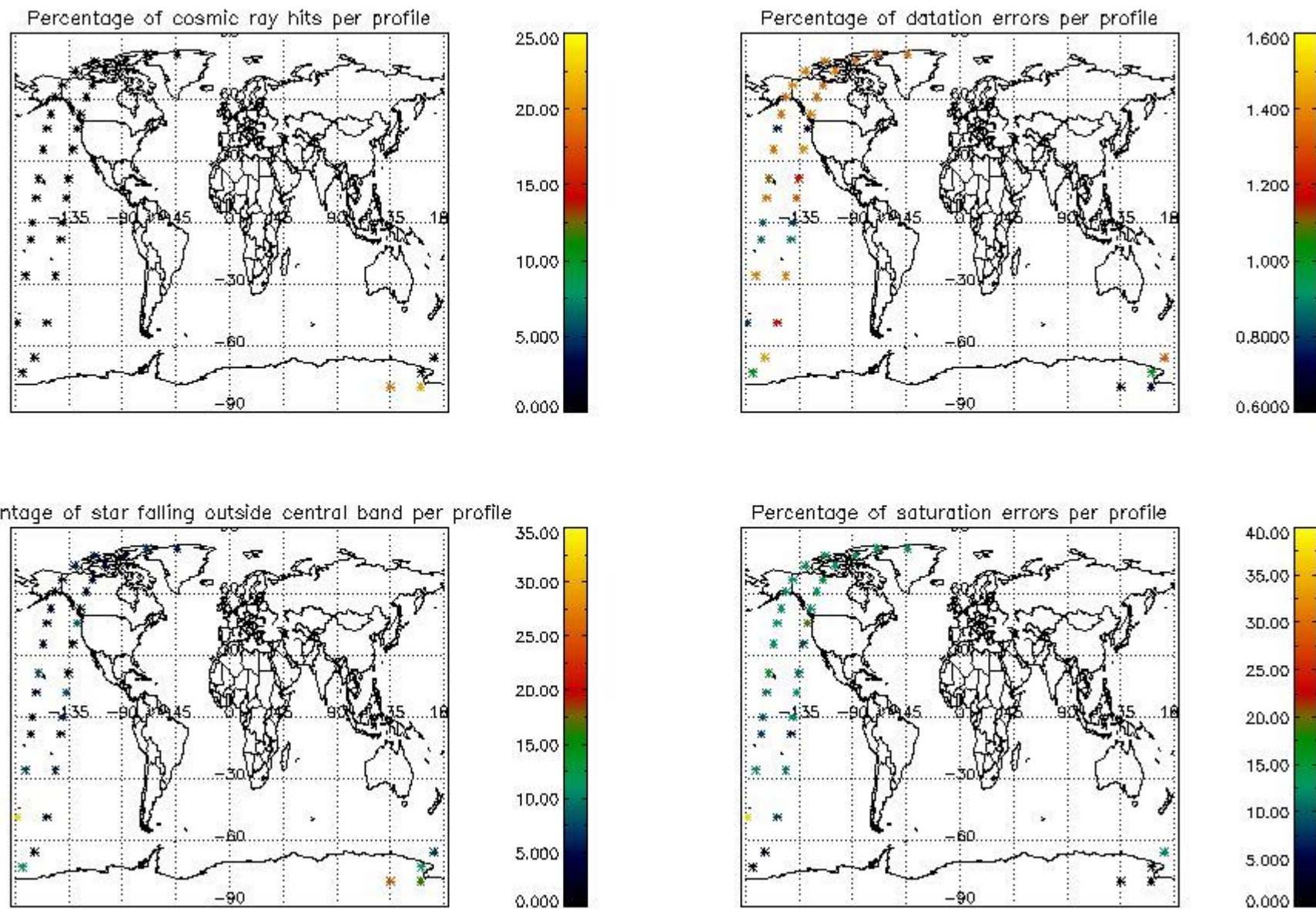
Percentage of star falling outside central band per profile



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

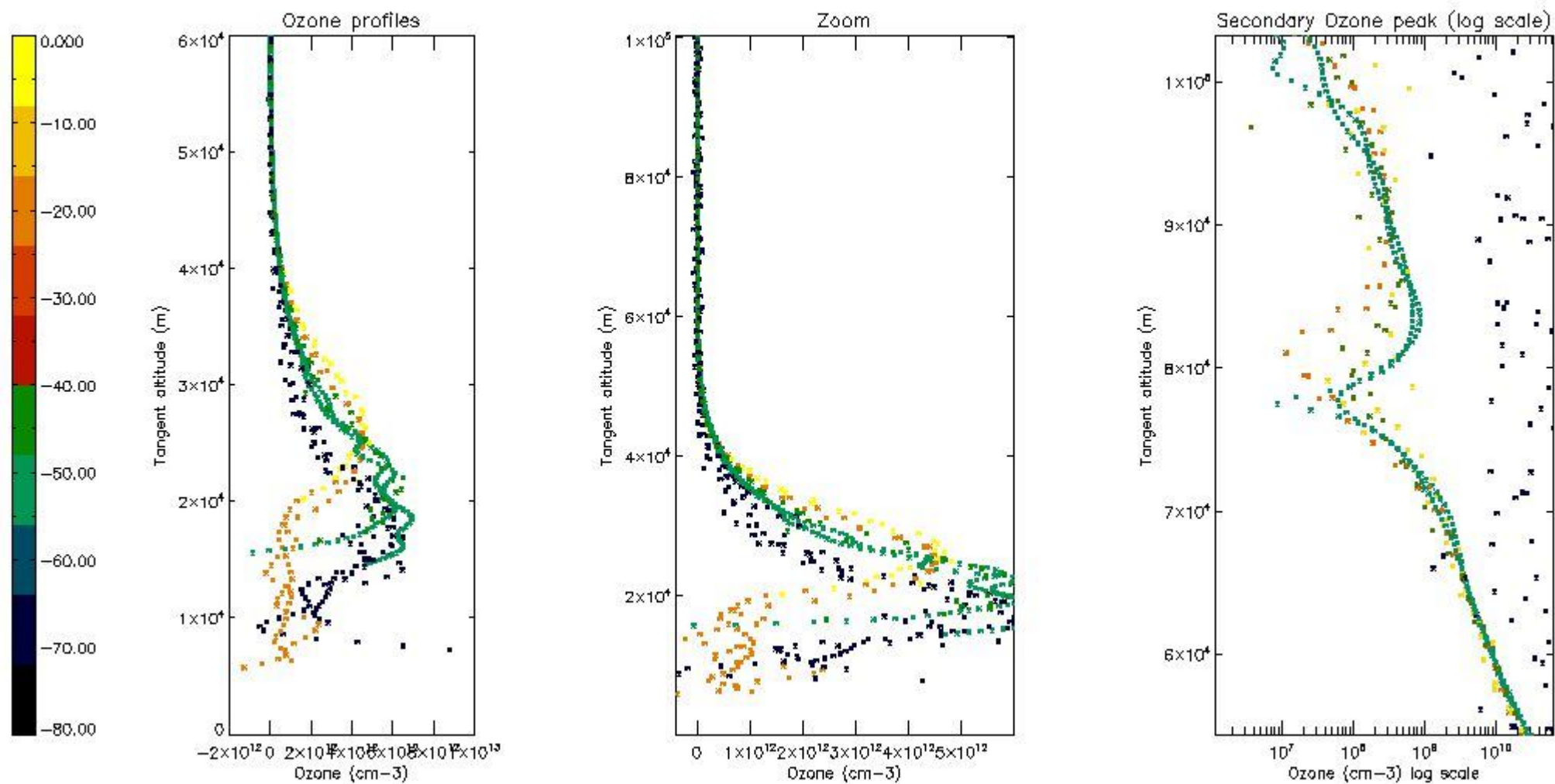
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	15

STD < 10	13
STD < 5	10

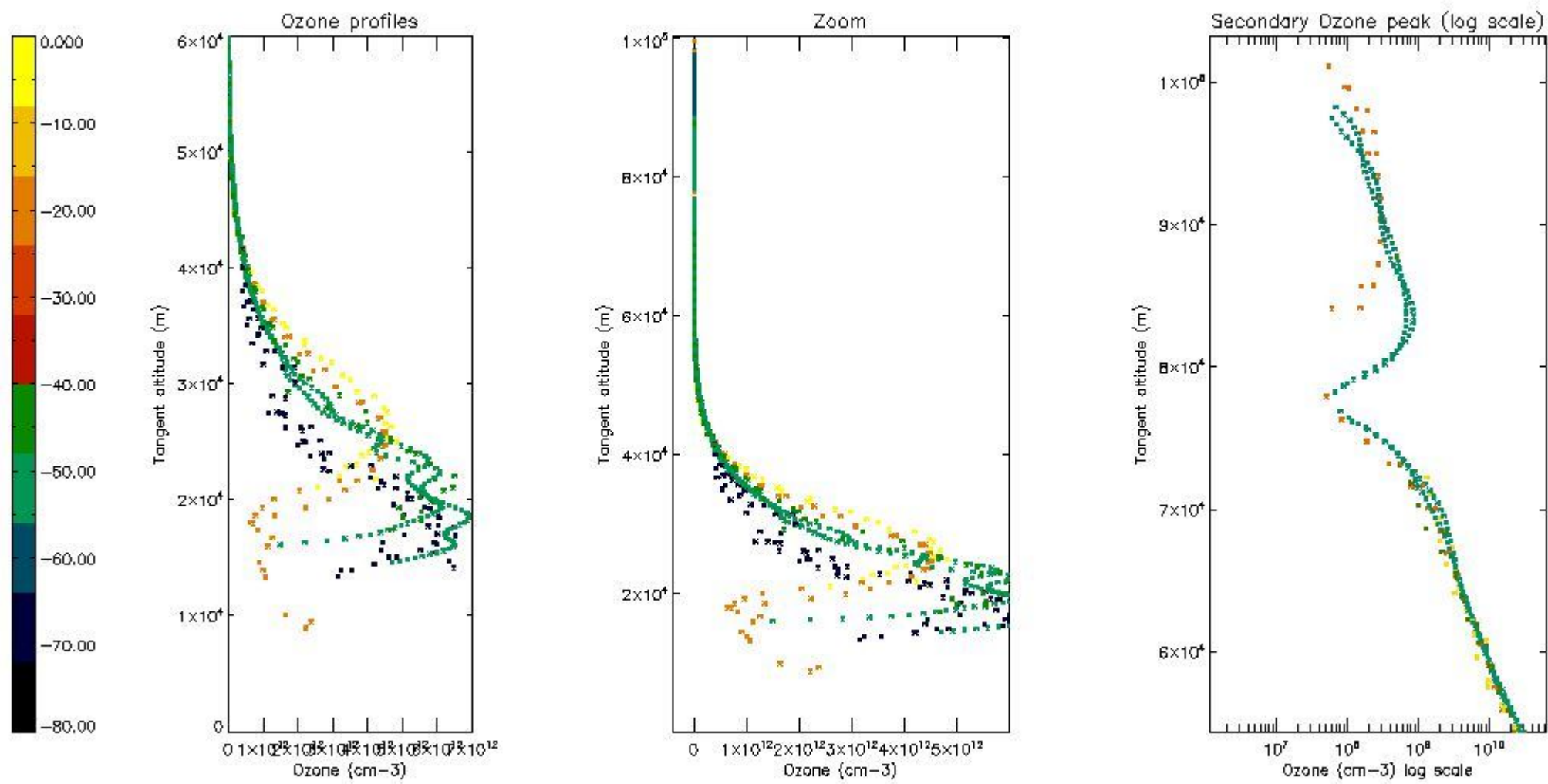
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



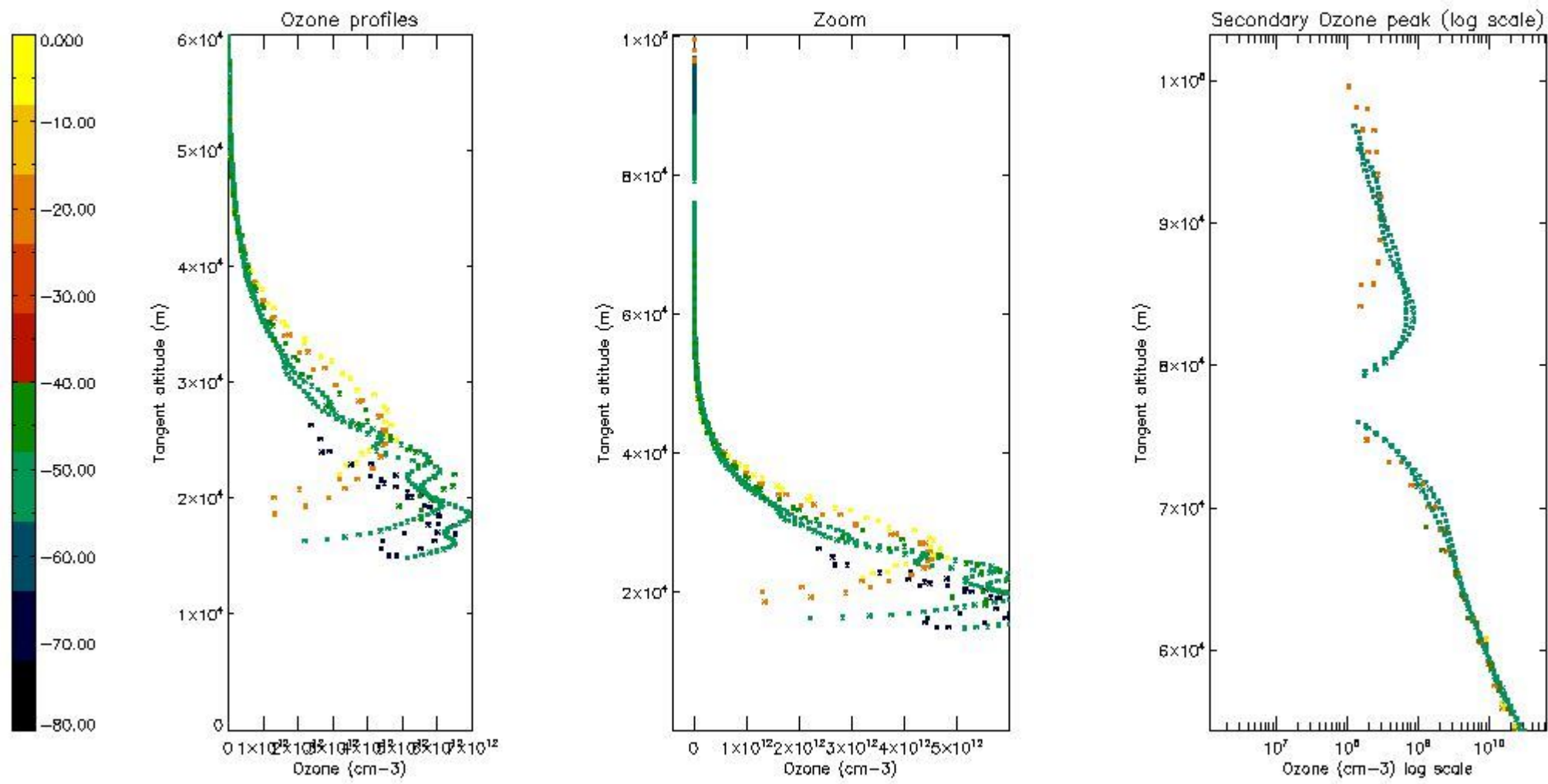
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



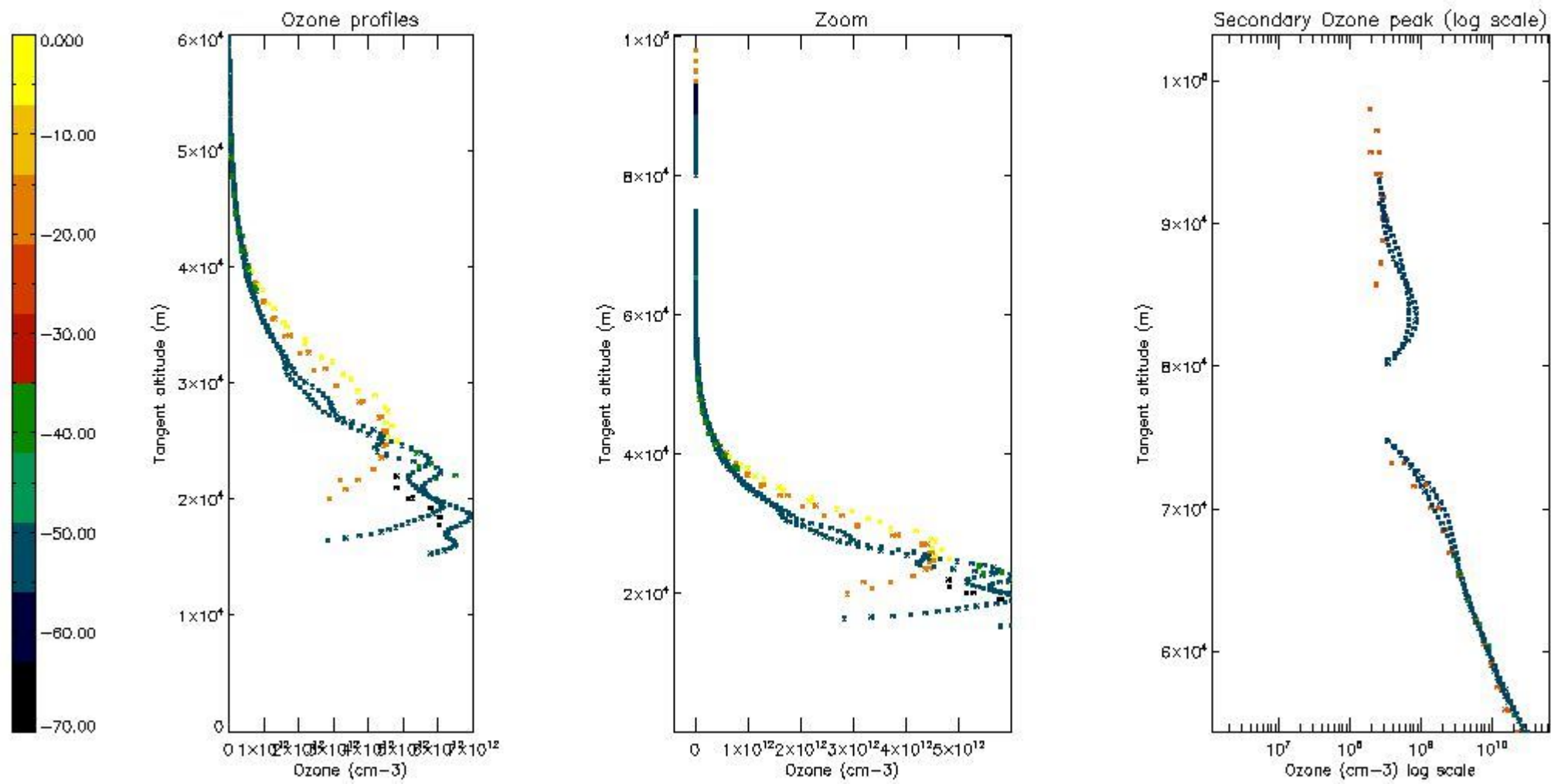
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



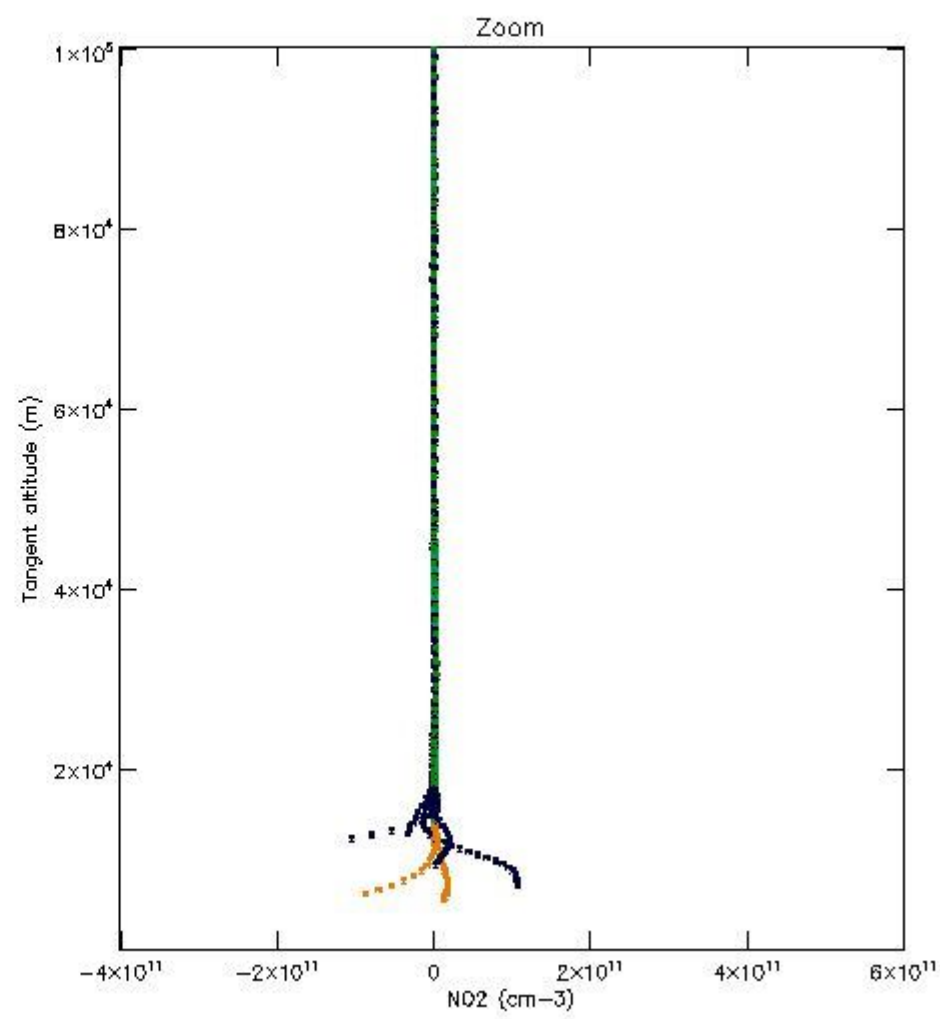
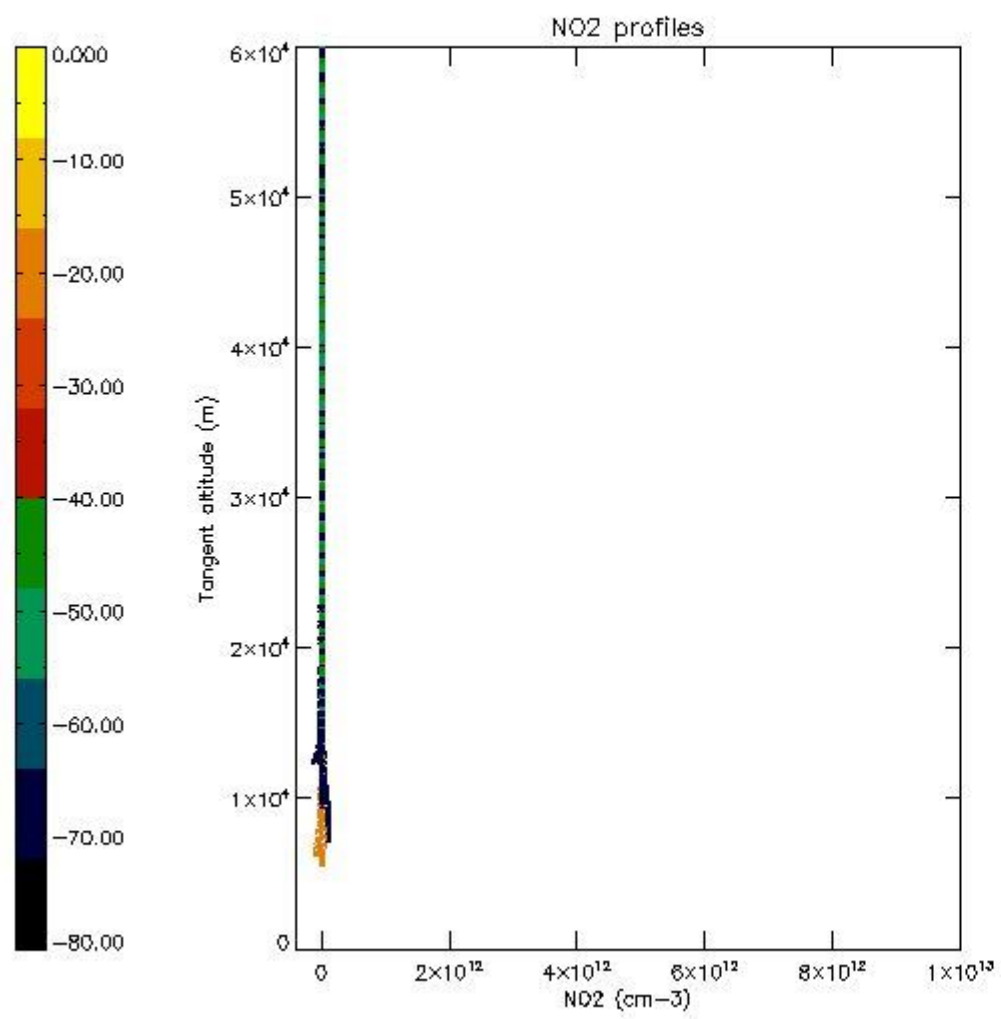
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



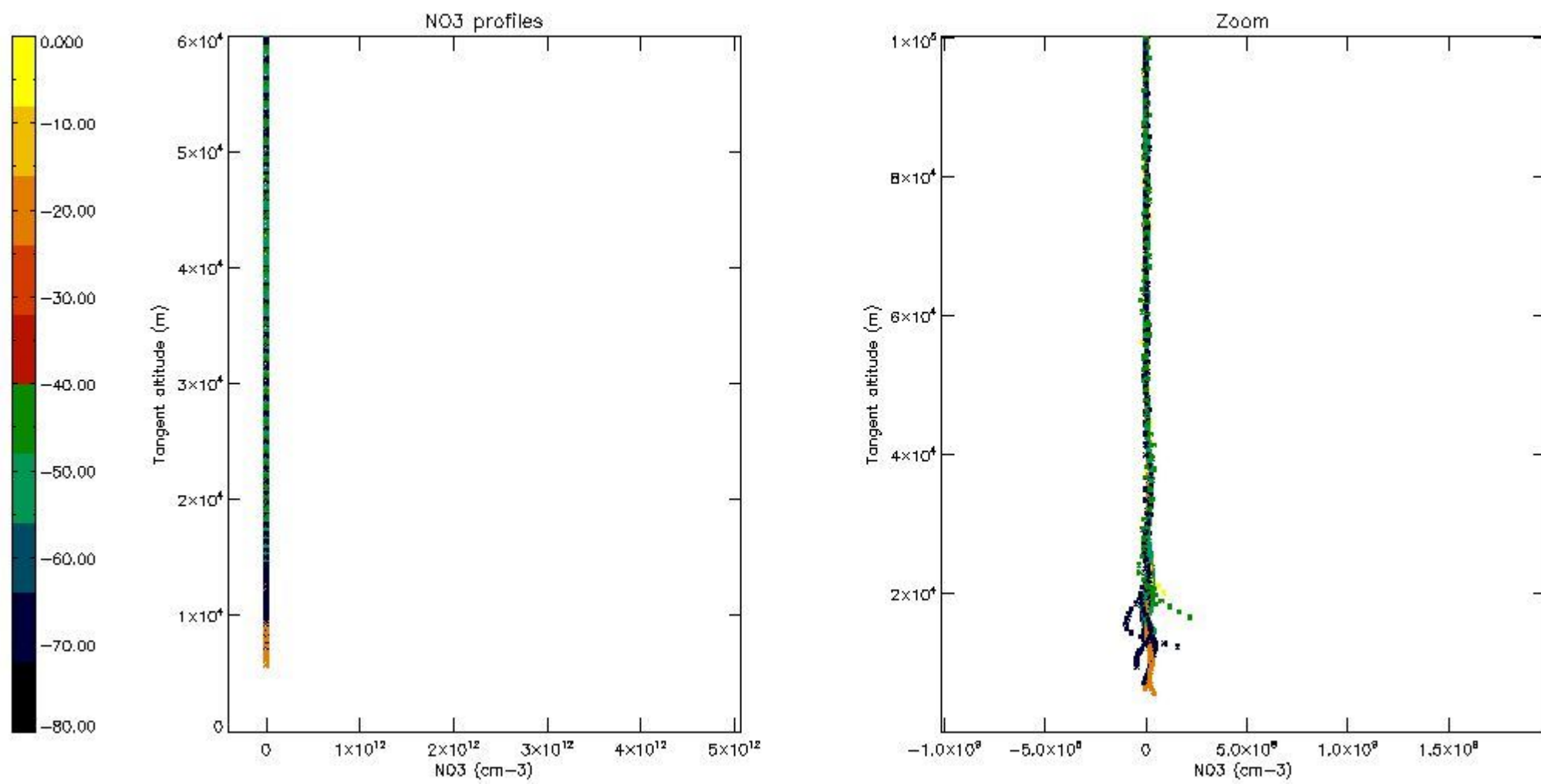
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



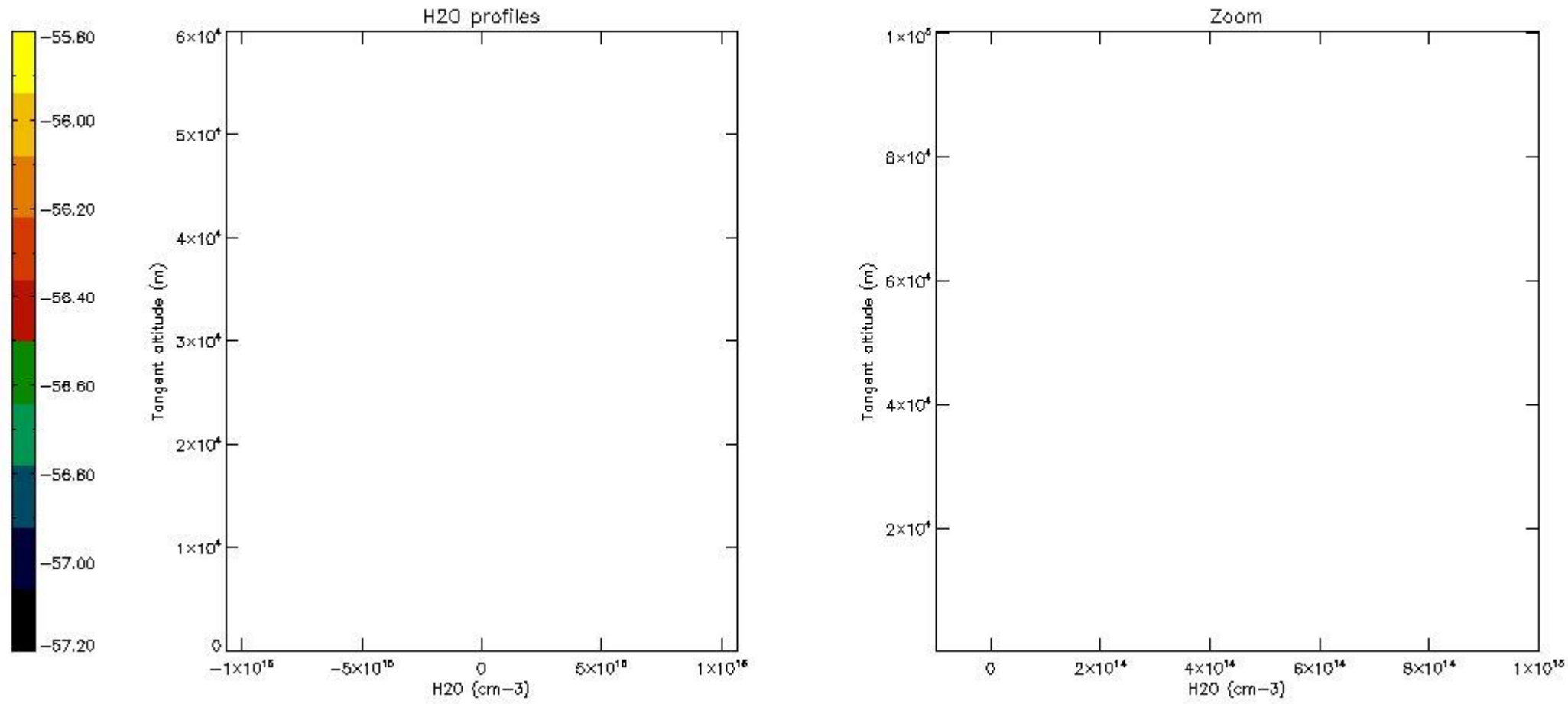
5.7 Plot NO3 profiles for all STD (dark without errors)

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_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	30-JUN-2002 18:30:18
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	30-JUN-2002 18:30:18
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	30-JUN-2002 18:30:18

GOMOS Level 2 Daily Report

SUMMARY

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

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

Item	Value
Time of report generation	17APR2013 17:42:51
Data source version	GOMOS/6.01
Start time of products	30-06-2002 (30JUN2002 00:00:00)
Stop time of products	01-07-2002 (01JUL2002 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	62
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

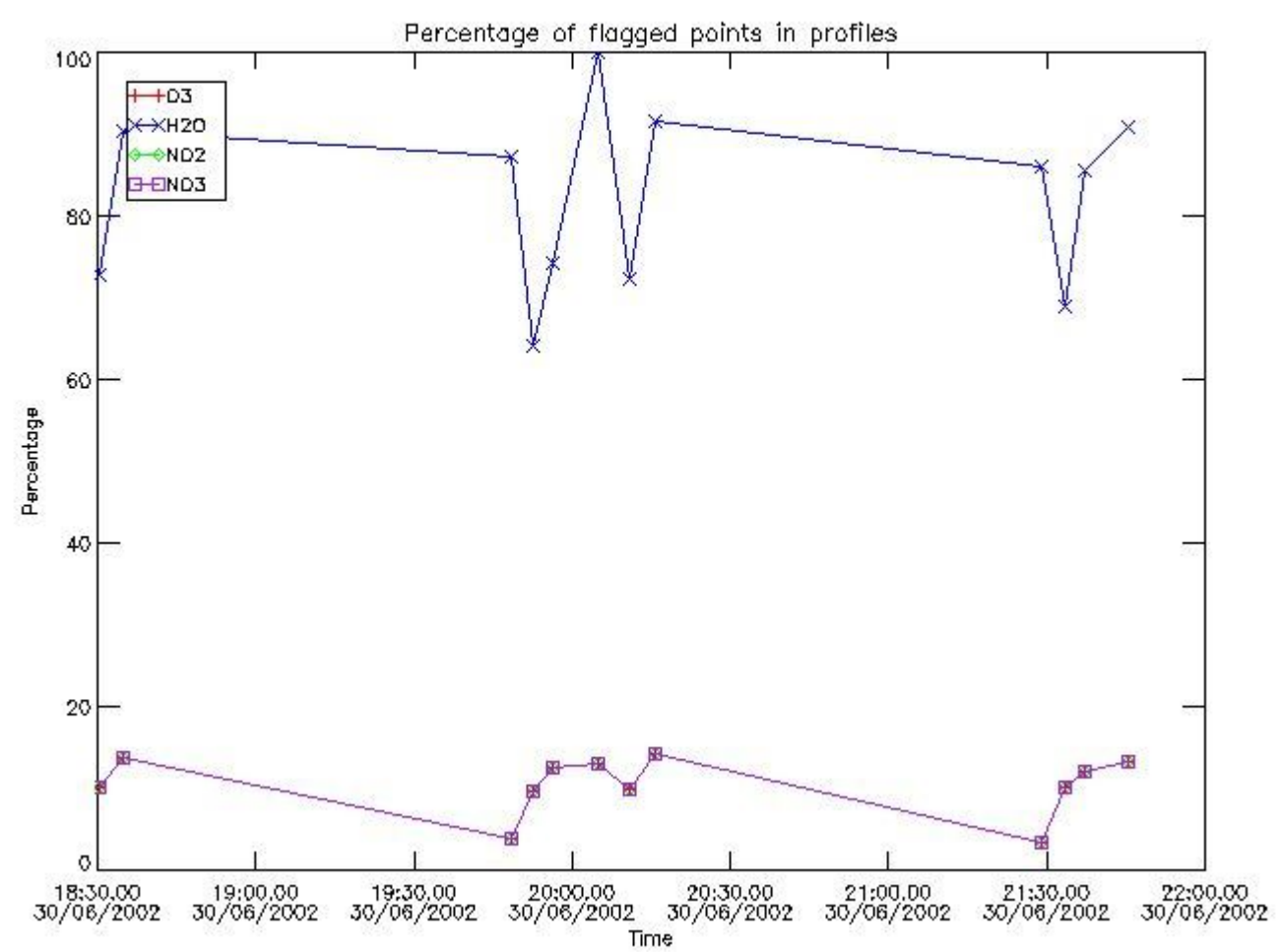
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20020630_183018_000000502007_00185_01742_8388.N1	30-JUN-2002 18:30:18	Dark	50.000	9	Alp Eri	0.45300	24000.	100	1742	No
2	GOM_NL__2PRFIN20020630_183459_000000372007_00185_01742_8389.N1	30-JUN-2002 18:34:59	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	1742	No
3	GOM_NL__2PRFIN20020630_183746_000000512007_00185_01742_8390.N1	30-JUN-2002 18:37:46	Straylight	51.000	63	Bet Gru	2.1500	2800.0	102	1742	No
4	GOM_NL__2PRFIN20020630_183942_000000522007_00185_01742_8391.N1	30-JUN-2002 18:39:42	Straylight	51.500	31	Alp Gru	1.7340	15200.	103	1742	No
5	GOM_NL__2PRFIN20020630_184207_000000412007_00185_01742_8392.N1	30-JUN-2002 18:42:07	Straylight	40.500	45	Alp Pav	1.9400	26000.	81	1742	No
6	GOM_NL__2PRFIN20020630_184559_000000462007_00185_01742_8393.N1	30-JUN-2002 18:45:59	Straylight	45.500	141	Bet Ara	2.8400	4600.0	91	1742	No
7	GOM_NL__2PRFIN20020630_184727_000000372007_00185_01742_8394.N1	30-JUN-2002 18:47:27	Twilight	37.000	147	Alp Ara	2.8770	26000.	74	1742	No
8	GOM_NL__2PRFIN20020630_184915_000000432007_00185_01742_8395.N1	30-JUN-2002 18:49:15	Twilight	43.000	40	The Sco	1.8590	7100.0	86	1742	No
9	GOM_NL__2PRFIN20020630_185055_000000422007_00185_01742_8396.N1	30-JUN-2002 18:50:55	Twilight	41.500	25	35Lam Sco	1.6200	28000.	83	1742	No
10	GOM_NL__2PRFIN20020630_185253_000000442007_00185_01742_8397.N1	30-JUN-2002 18:52:53	Bright	44.000	57	34Sig Sgr	2.0660	26000.	88	1742	No
11	GOM_NL__2PRFIN20020630_185452_000000372007_00185_01742_8398.N1	30-JUN-2002 18:54:52	Bright	37.000	156	20Sig Sco	2.9030	28000.	74	1742	No
12	GOM_NL__2PRFIN20020630_185707_000000372007_00185_01742_8399.N1	30-JUN-2002 18:57:07	Bright	36.500	86	35Eta Oph	2.4300	10200.	73	1742	No
13	GOM_NL__2PRFIN20020630_185852_000000362007_00185_01742_8400.N1	30-JUN-2002 18:58:52	Bright	36.000	98	13Zet Oph	2.5710	30000.	72	1742	No
14	GOM_NL__2PRFIN20020630_190102_000000372007_00185_01742_8401.N1	30-JUN-2002 19:01:02	Bright	37.000	120	1Del Oph	2.7340	3200.0	74	1742	No
15	GOM_NL__2PRFIN20020630_190247_000000382007_00185_01742_8402.N1	30-JUN-2002 19:02:47	Bright	37.500	126	60Bet Oph	2.7700	4250.0	75	1742	No
16	GOM_NL__2PRFIN20020630_190507_000000372007_00185_01742_8403.N1	30-JUN-2002 19:05:07	Bright	36.500	59	55Alp Oph	2.0800	8900.0	73	1742	No
17	GOM_NL__2PRFIN20020630_190709_000000712007_00185_01742_8404.N1	30-JUN-2002 19:07:09	Bright	71.000	11	53Alp Aql	0.76500	8000.0	142	1742	No
18	GOM_NL__2PRFIN20020630_191000_000000362007_00185_01742_8405.N1	30-JUN-2002 19:10:00	Bright	35.500	67	5Alp CrB	2.2210	11000.	71	1742	No
19	GOM_NL__2PRFIN20020630_191400_000000422007_00185_01742_8406.N1	30-JUN-2002 19:14:00	Bright	42.000	5	3Alp Lyr	0.033000	11000.	84	1742	No
20	GOM_NL__2PRFIN20020630_191635_000000392007_00185_01742_8407.N1	30-JUN-2002 19:16:35	Bright	38.500	130	23Bet Dra	2.7990	5800.0	77	1742	No
21	GOM_NL__2PRFIN20020630_192001_000000632007_00185_01742_8408.N1	30-JUN-2002 19:20:01	Bright	63.000	66	37Gam Cyg	2.2080	5900.0	126	1742	No
22	GOM_NL__2PRFIN20020630_192217_000000572007_00185_01742_8409.N1	30-JUN-2002 19:22:17	Bright	57.000	19	50Alp Cyg	1.2460	10500.	114	1742	No
23	GOM_NL__2PRFIN20020630_192710_000000372007_00185_01742_8410.N1	30-JUN-2002 19:27:10	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	1742	No
24	GOM_NL__2PRFIN20020630_193342_000000432007_00185_01742_8411.N1	30-JUN-2002 19:33:42	Bright	43.000	76	27Gam Cas	2.3000	30000.	86	1742	No
25	GOM_NL__2PRFIN20020630_193836_000000352007_00185_01742_8412.N1	30-JUN-2002 19:38:36	Bright	35.000	35	33Alp Per	1.7950	6250.0	70	1742	No
26	GOM_NL__2PRFIN20020630_194053_000000492007_00185_01742_8413.N1	30-JUN-2002 19:40:53	Bright	49.000	73	57Gam1And	2.2600	13100.	98	1742	No
27	GOM_NL__2PRFIN20020630_194326_000000692007_00185_01742_8414.N1	30-JUN-2002 19:43:26	Twilight	68.500	53	43Bet And	2.0480	3300.0	137	1742	No
28	GOM_NL__2PRFIN20020630_194825_000001442007_00185_01742_8415.N1	30-JUN-2002 19:48:25	Dark	144.00	58	21Alp And	2.0730	11000.	288	1742	No
29	GOM_NL__2PRFIN20020630_195241_000000542007_00185_01742_8416.N1	30-JUN-2002 19:52:41	Dark	53.500	94	92Alp Cet	2.5260	3100.0	107	1742	No
30	GOM_NL__2PRFIN20020630_195625_000000412007_00185_01742_8417.N1	30-JUN-2002 19:56:25	Dark	41.000	165	34Gam Eri	2.9500	3200.0	82	1742	No
31	GOM_NL__2PRFIN20020630_200448_000000402007_00185_01742_8418.N1	30-JUN-2002 20:04:48	Dark	39.500	157	The1Eri	2.9060	9300.0	79	1742	No
32	GOM_NL__2PRFIN20020630_201055_000000512007_00186_01743_8407.N1	30-JUN-2002 20:10:55	Dark	51.000	9	Alp Eri	0.45300	24000.	102	1743	No
33	GOM_NL__2PRFIN20020630_201536_000000362007_00186_01743_8408.N1	30-JUN-2002 20:15:36	Dark	36.000	135	Bet Hyi	2.8200	5800.0	72	1743	No
34	GOM_NL__2PRFIN20020630_201822_000000642007_00186_01743_8409.N1	30-JUN-2002 20:18:22	Straylight	63.500	63	Bet Gru	2.1500	2800.0	127	1743	No
35	GOM_NL__2PRFIN20020630_202019_000000482007_00186_01743_8410.N1	30-JUN-2002 20:20:19	Straylight	48.000	31	Alp Gru	1.7340	15200.	96	1743	No
36	GOM_NL__2PRFIN20020630_202244_000000402007_00186_01743_8411.N1	30-JUN-2002 20:22:44	Straylight	40.000	45	Alp Pav	1.9400	26000.	80	1743	No
37	GOM_NL__2PRFIN20020630_202636_000000442007_00186_01743_8412.N1	30-JUN-2002 20:26:36	Straylight	44.000	141	Bet Ara	2.8400	4600.0	88	1743	No
38	GOM_NL__2PRFIN20020630_202803_000000392007_00186_01743_8413.N1	30-JUN-2002 20:28:03	Twilight	38.500	147	Alp Ara	2.8770	26000.	77	1743	No
39	GOM_NL__2PRFIN20020630_202951_000000432007_00186_01743_8414.N1	30-JUN-2002 20:29:51	Twilight	43.000	40	The Sco	1.8590	7100.0	86	1743	No
40	GOM_NL__2PRFIN20020630_203131_000000422007_00186_01743_8415.N1	30-JUN-2002 20:31:31	Twilight	42.000	25	35Lam Sco	1.6200	28000.	84	1743	No
41	GOM_NL__2PRFIN20020630_203329_000000442007_00186_01743_8416.N1	30-JUN-2002 20:33:29	Bright	43.500	57	34Sig Sgr	2.0660	26000.	87	1743	No
42	GOM_NL__2PRFIN20020630_203528_000000382007_00186_01743_8417.N1	30-JUN-2002 20:35:28	Bright	37.500	156	20Sig Sco	2.9030	28000.	75	1743	No

43	GOM_NL__2PRFIN20020630_203743_000000372007_00186_01743_8418.N1	30-JUN-2002 20:37:43	Bright	36.500	86	35Eta Oph	2.4300	10200.	73	1743	No
44	GOM_NL__2PRFIN20020630_203928_000000372007_00186_01743_8419.N1	30-JUN-2002 20:39:28	Bright	36.500	98	13Zet Oph	2.5710	30000.	73	1743	No
45	GOM_NL__2PRFIN20020630_204138_000000362007_00186_01743_8420.N1	30-JUN-2002 20:41:38	Bright	36.000	120	1Del Oph	2.7340	3200.0	72	1743	No
46	GOM_NL__2PRFIN20020630_204323_000000372007_00186_01743_8421.N1	30-JUN-2002 20:43:23	Bright	37.000	126	60Bet Oph	2.7700	4250.0	74	1743	No
47	GOM_NL__2PRFIN20020630_204543_000000372007_00186_01743_8422.N1	30-JUN-2002 20:45:43	Bright	37.000	59	55Alp Oph	2.0800	8900.0	74	1743	No
48	GOM_NL__2PRFIN20020630_204744_000000662007_00186_01743_8423.N1	30-JUN-2002 20:47:44	Bright	66.000	11	53Alp Aql	0.76500	8000.0	132	1743	No
49	GOM_NL__2PRFIN20020630_205036_000000372007_00186_01743_8424.N1	30-JUN-2002 20:50:36	Bright	37.000	67	5Alp CrB	2.2210	11000.	74	1743	No
50	GOM_NL__2PRFIN20020630_205435_000000452007_00186_01743_8425.N1	30-JUN-2002 20:54:35	Bright	45.000	5	3Alp Lyr	0.033000	11000.	90	1743	No
51	GOM_NL__2PRFIN20020630_205710_000000372007_00186_01743_8426.N1	30-JUN-2002 20:57:10	Bright	37.000	130	23Bet Dra	2.7990	5800.0	74	1743	No
52	GOM_NL__2PRFIN20020630_210035_000000602007_00186_01743_8427.N1	30-JUN-2002 21:00:35	Bright	60.000	66	37Gam Cyg	2.2080	5900.0	120	1743	No
53	GOM_NL__2PRFIN20020630_210252_000000582007_00186_01743_8428.N1	30-JUN-2002 21:02:52	Bright	57.500	19	50Alp Cyg	1.2460	10500.	115	1743	No
54	GOM_NL__2PRFIN20020630_210746_000000372007_00186_01743_8429.N1	30-JUN-2002 21:07:46	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	1743	No
55	GOM_NL__2PRFIN20020630_211417_000000632007_00186_01743_8430.N1	30-JUN-2002 21:14:17	Bright	63.000	76	27Gam Cas	2.3000	30000.	126	1743	No
56	GOM_NL__2PRFIN20020630_211912_000000382007_00186_01743_8431.N1	30-JUN-2002 21:19:12	Bright	38.000	35	33Alp Per	1.7950	6250.0	76	1743	No
57	GOM_NL__2PRFIN20020630_212129_000000492007_00186_01743_8432.N1	30-JUN-2002 21:21:29	Bright	49.000	73	57Gam1And	2.2600	13100.	98	1743	No
58	GOM_NL__2PRFIN20020630_212402_000000772007_00186_01743_8433.N1	30-JUN-2002 21:24:02	Tw_i_and_stray	76.500	53	43Bet And	2.0480	3300.0	153	1743	No
59	GOM_NL__2PRFIN20020630_212902_000001482007_00186_01743_8434.N1	30-JUN-2002 21:29:02	Dark	148.00	58	21Alp And	2.0730	11000.	296	1743	No
60	GOM_NL__2PRFIN20020630_213317_000000512007_00186_01743_8435.N1	30-JUN-2002 21:33:17	Dark	50.500	94	92Alp Cet	2.5260	3100.0	101	1743	No
61	GOM_NL__2PRFIN20020630_213701_000000422007_00186_01743_8436.N1	30-JUN-2002 21:37:01	Dark	42.000	165	34Gam Eri	2.9500	3200.0	84	1743	No
62	GOM_NL__2PRFIN20020630_214524_000000392007_00186_01743_8437.N1	30-JUN-2002 21:45:24	Dark	38.500	157	The1Eri	2.9060	9300.0	77	1743	No

3. Quality information per product

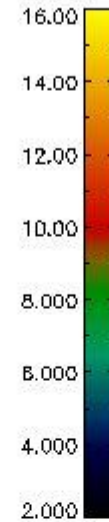
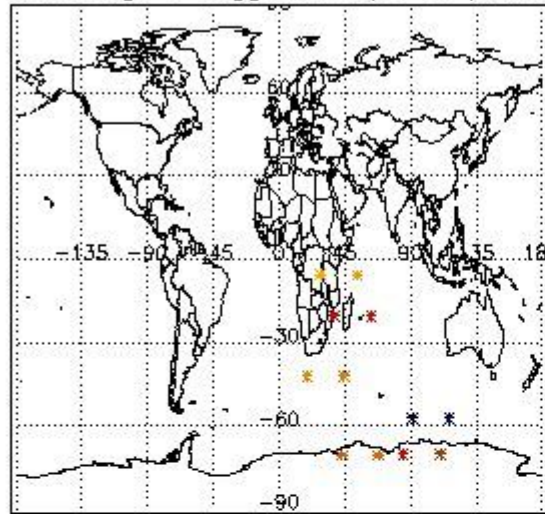
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

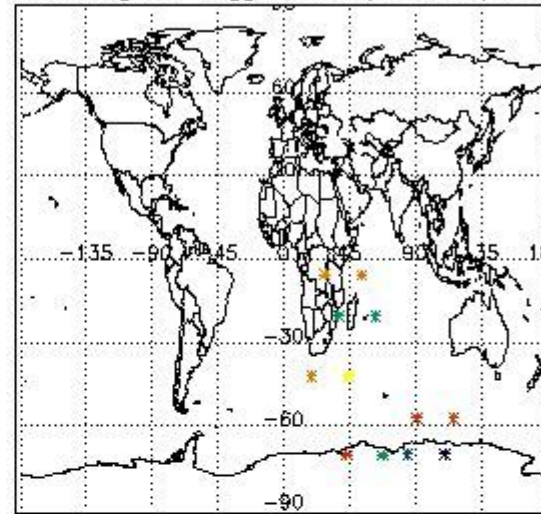


3.2 Plot quality information per product (world map)

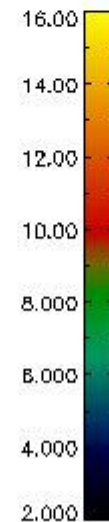
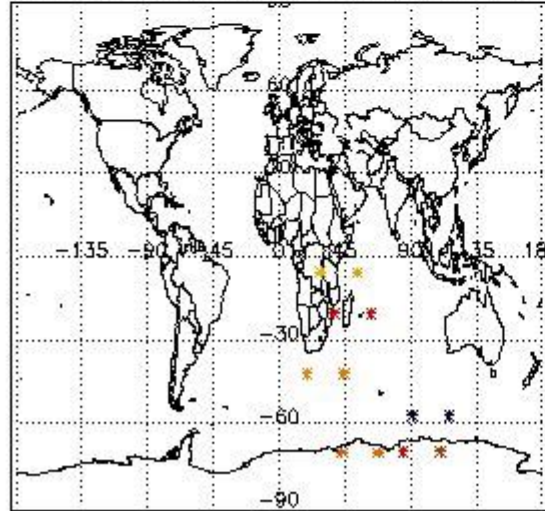
Percentage of flagged data per O3 profile



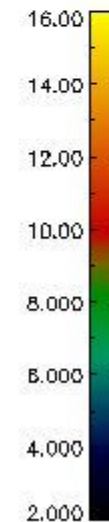
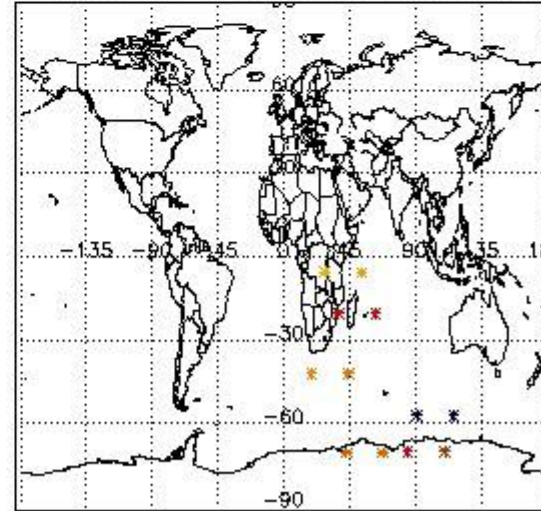
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

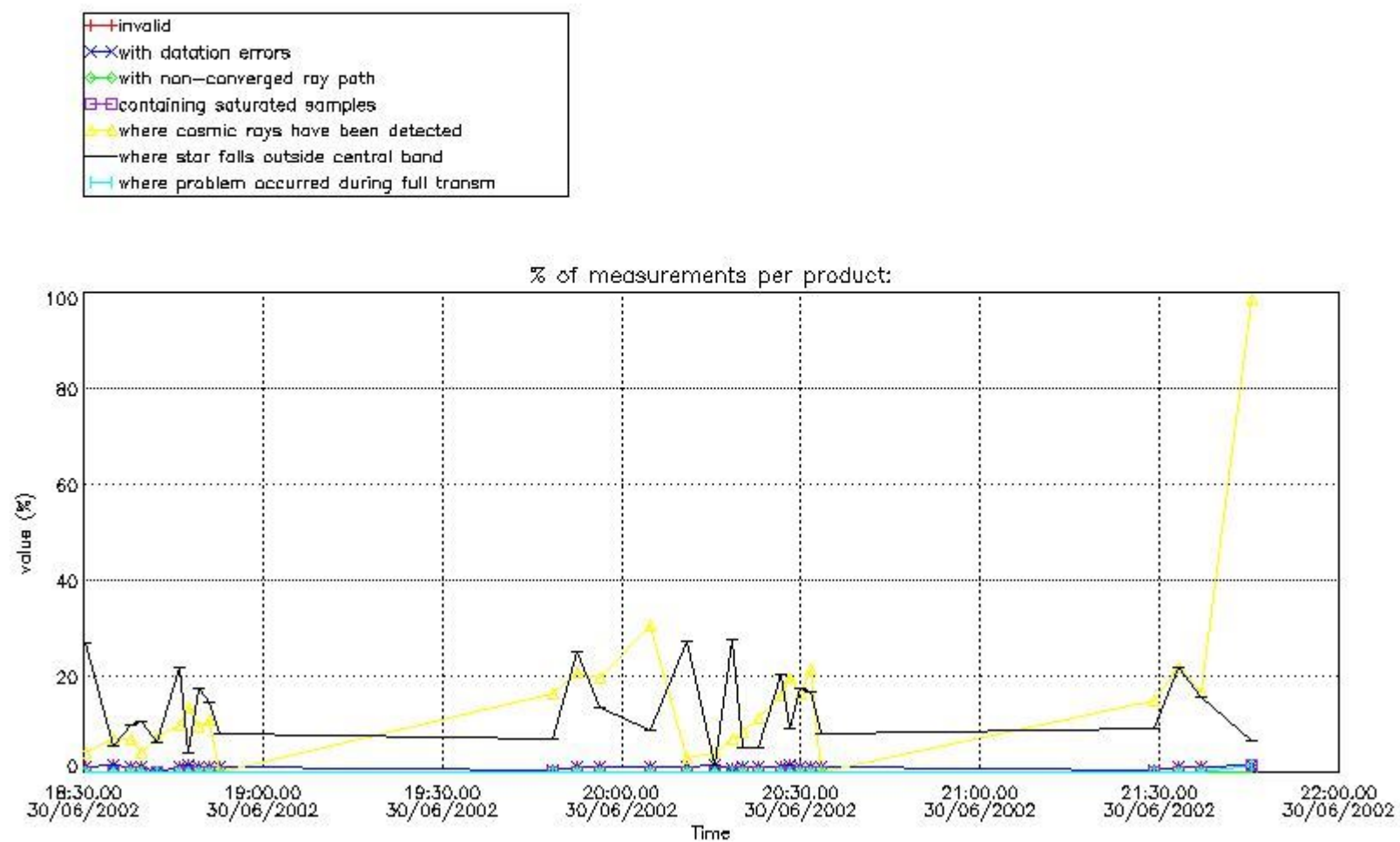


4. Level 1 quality information per product

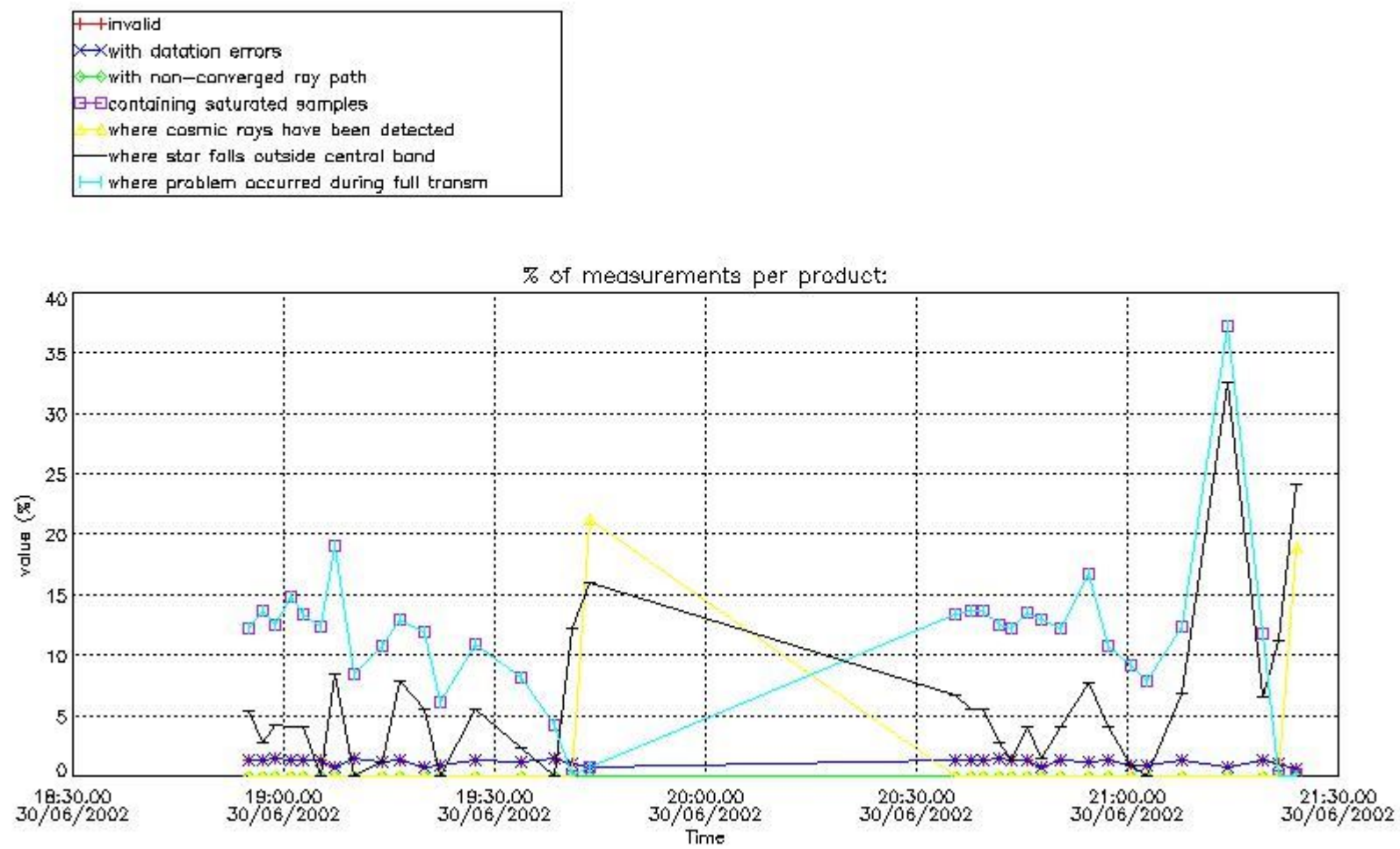
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



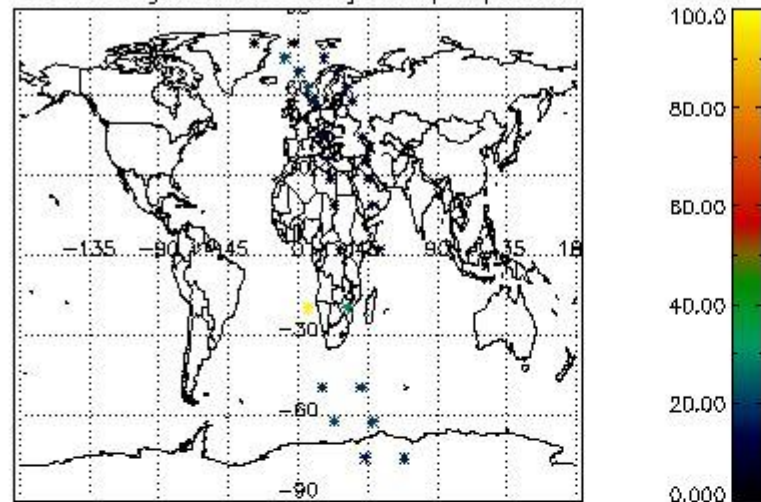
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



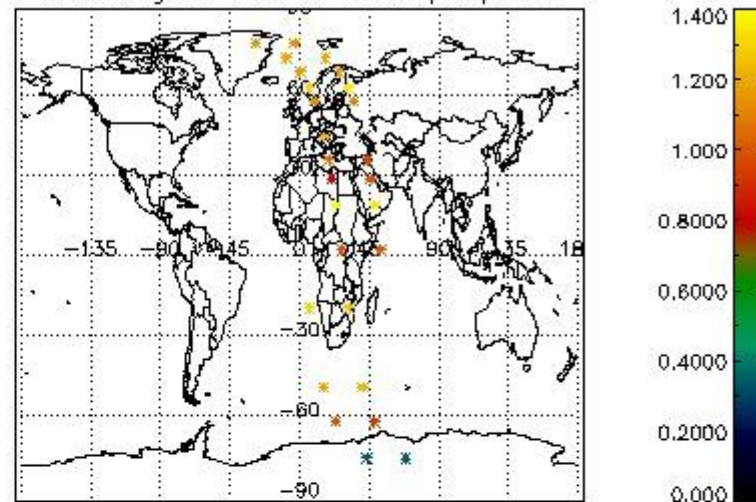
4.2 Plot quality information per product coming from level 1b processing (world map)

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

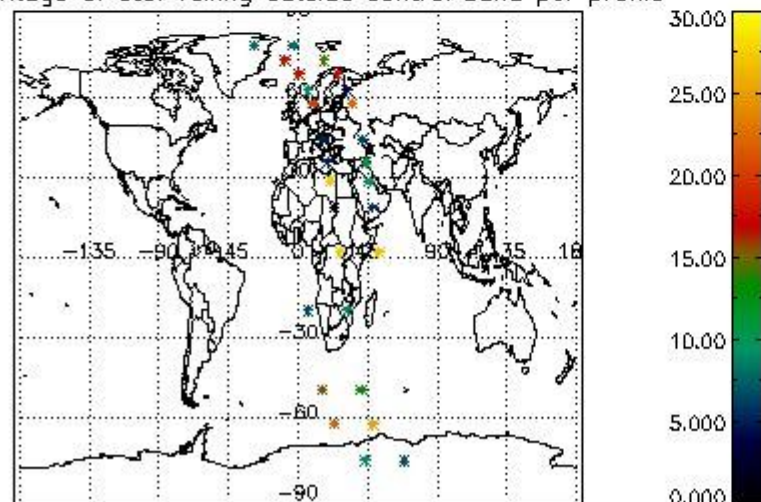
Percentage of cosmic ray hits per profile



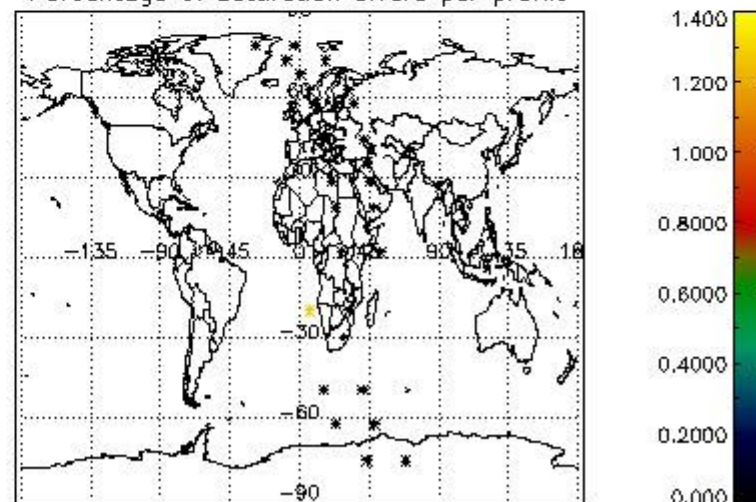
Percentage of datation errors per profile



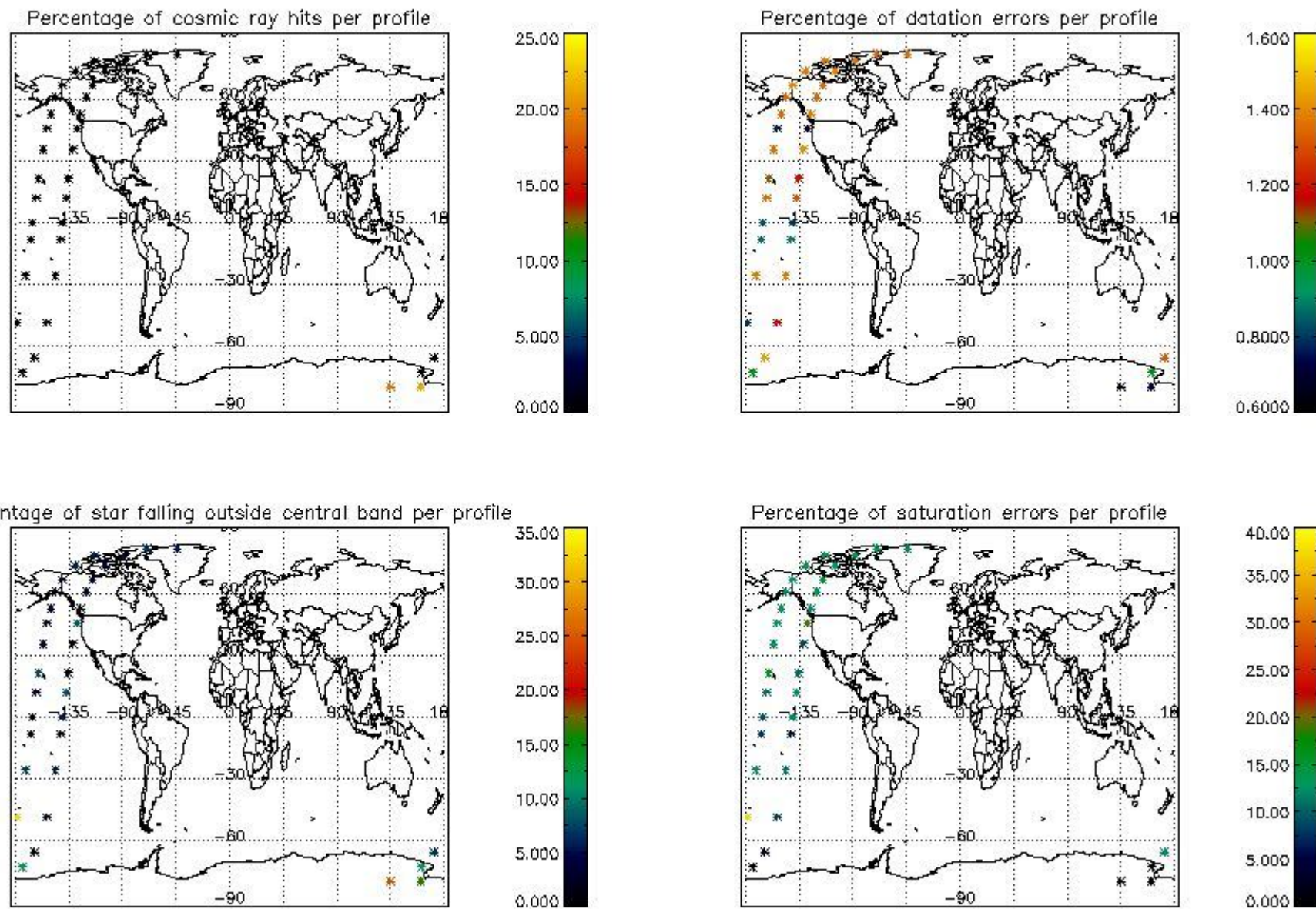
Percentage of star falling outside central band per profile



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

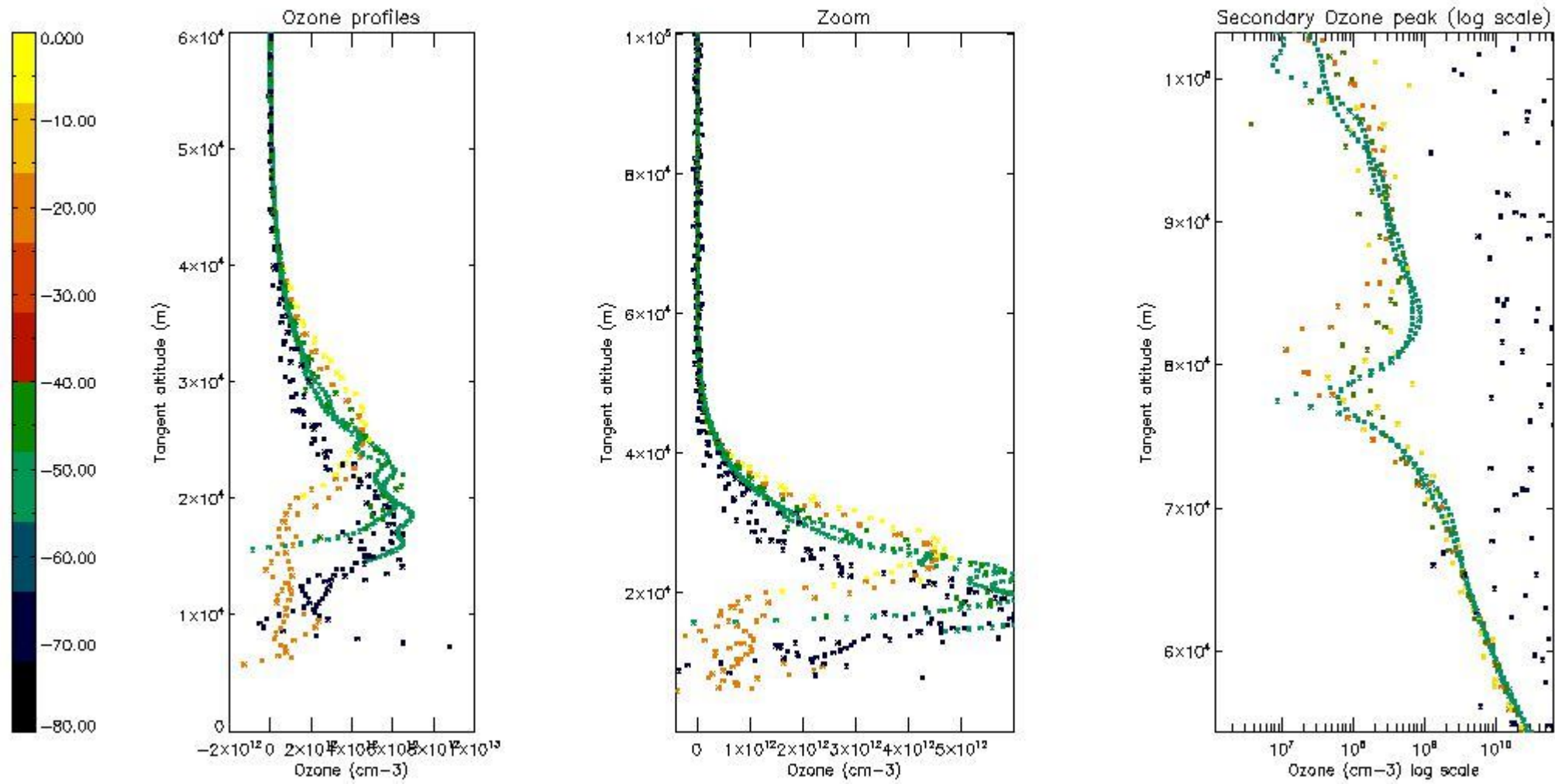
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	15

STD < 10	13
STD < 5	10

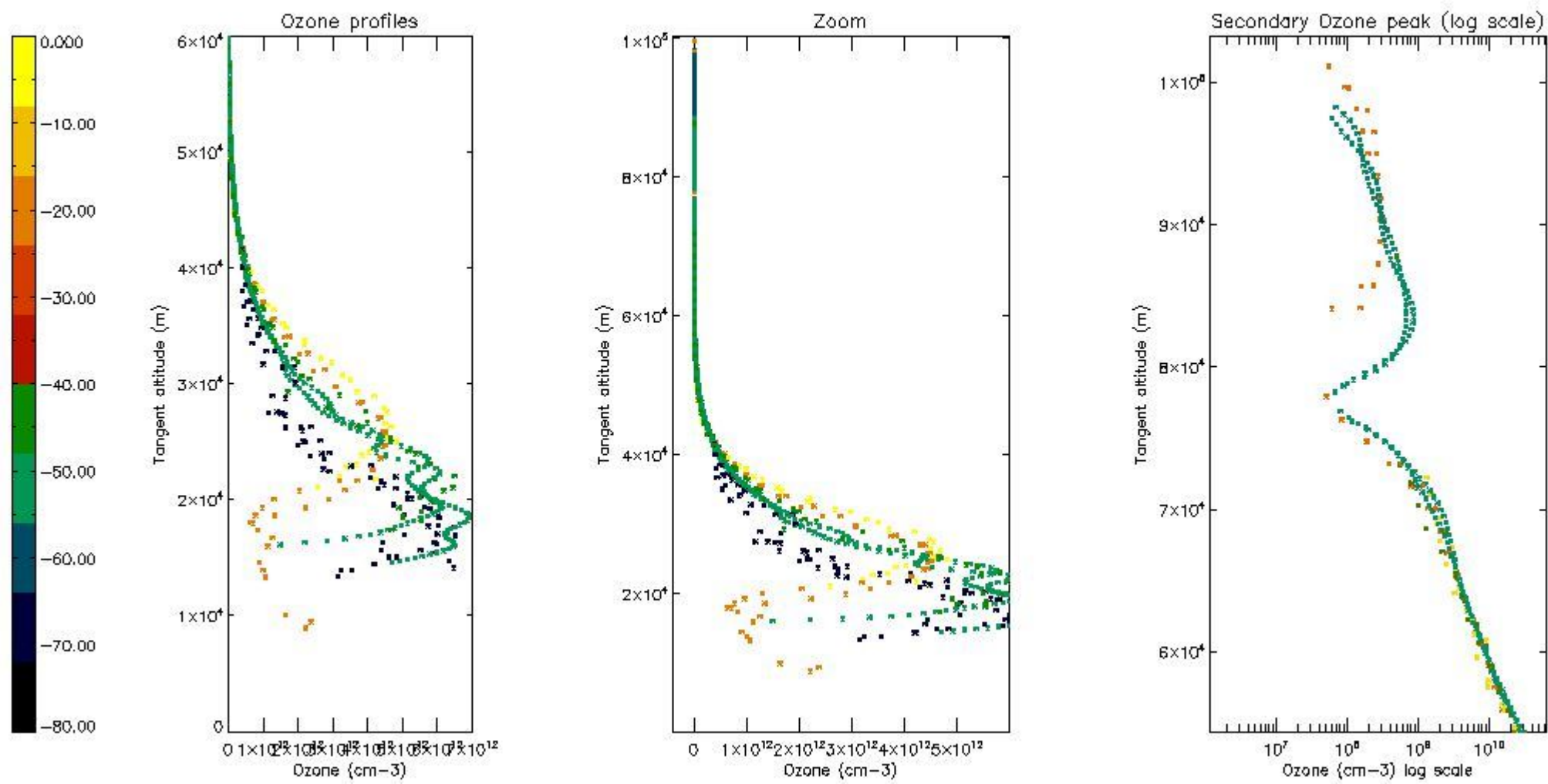
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



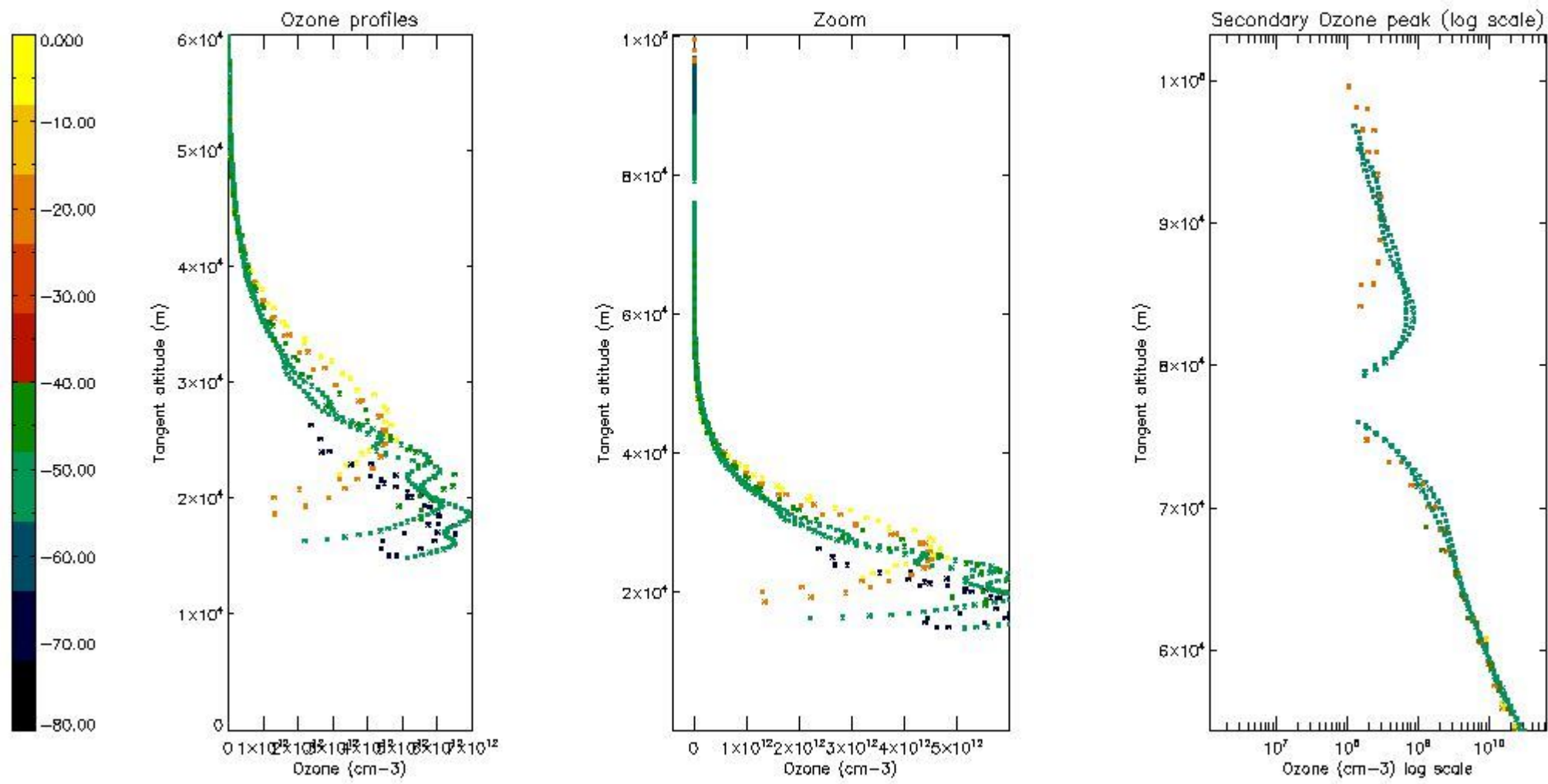
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



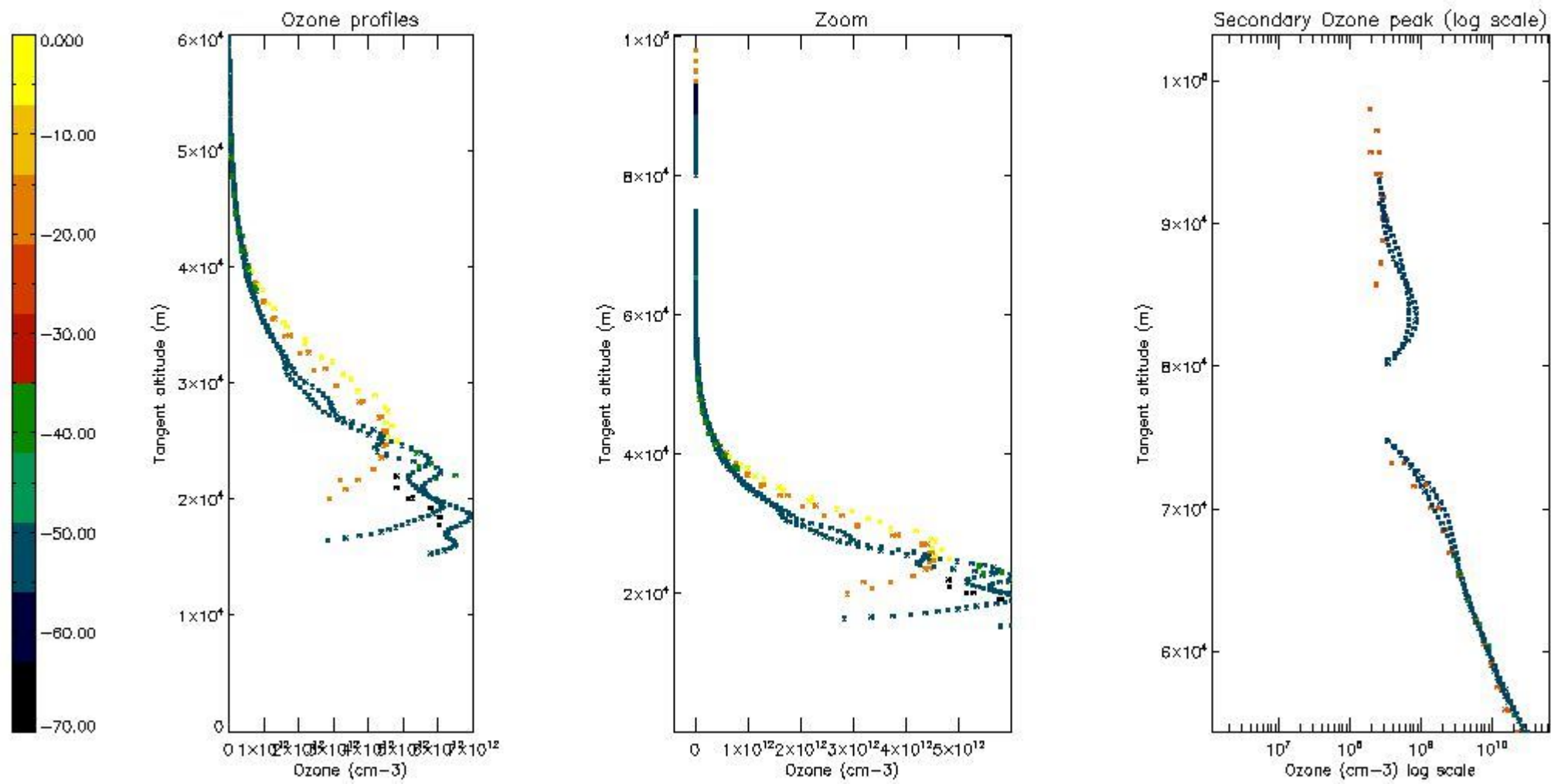
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



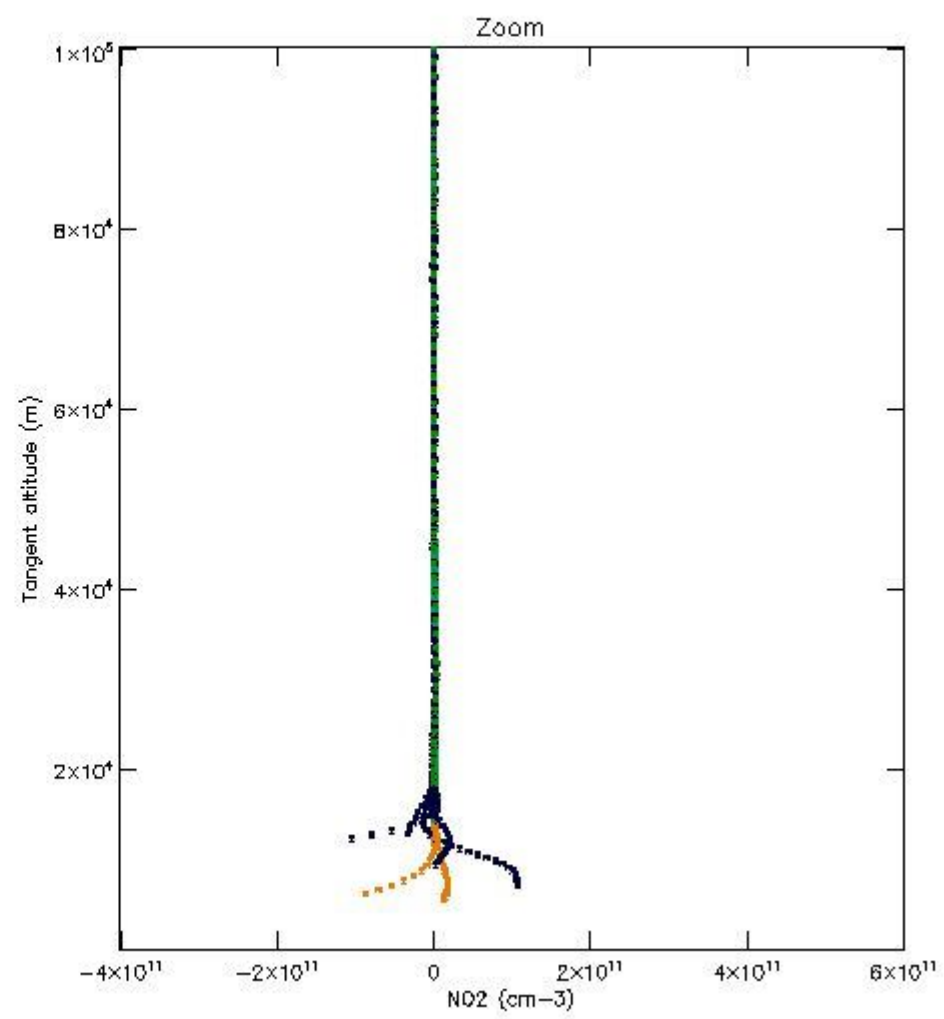
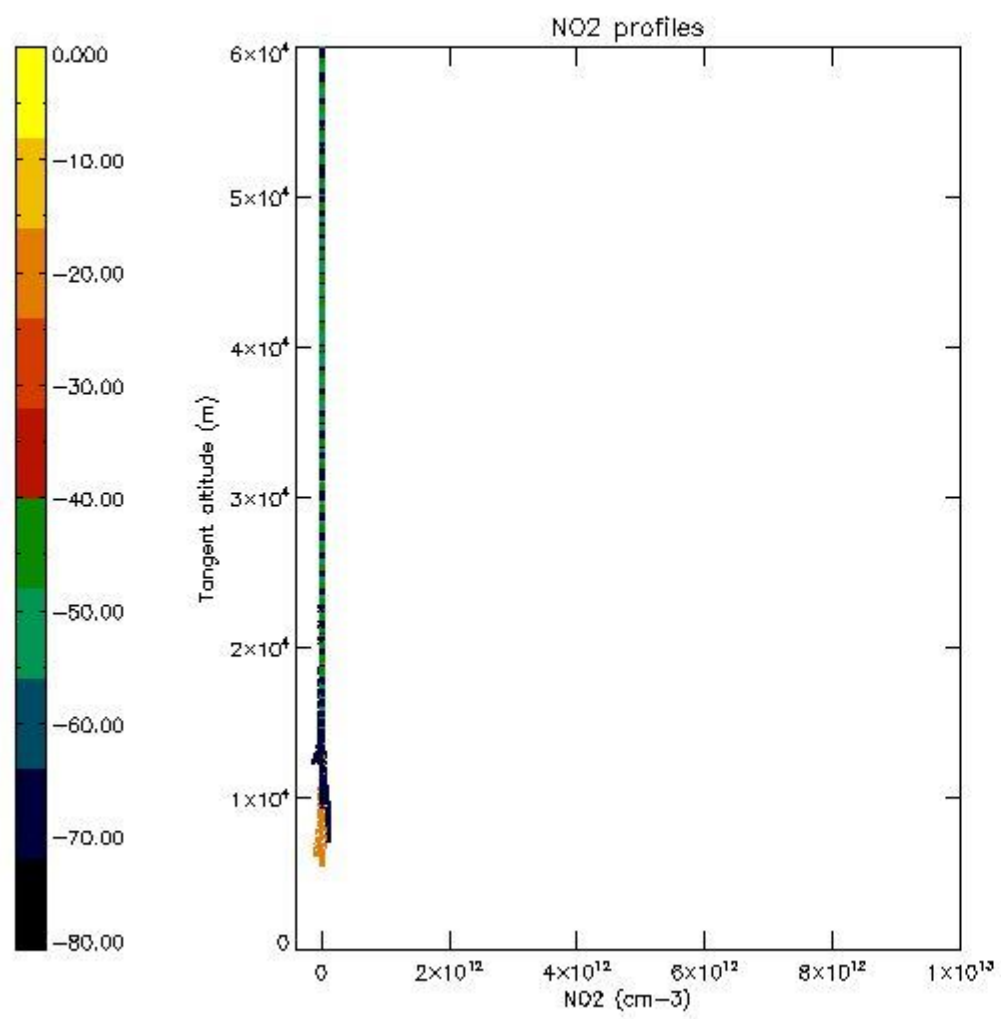
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



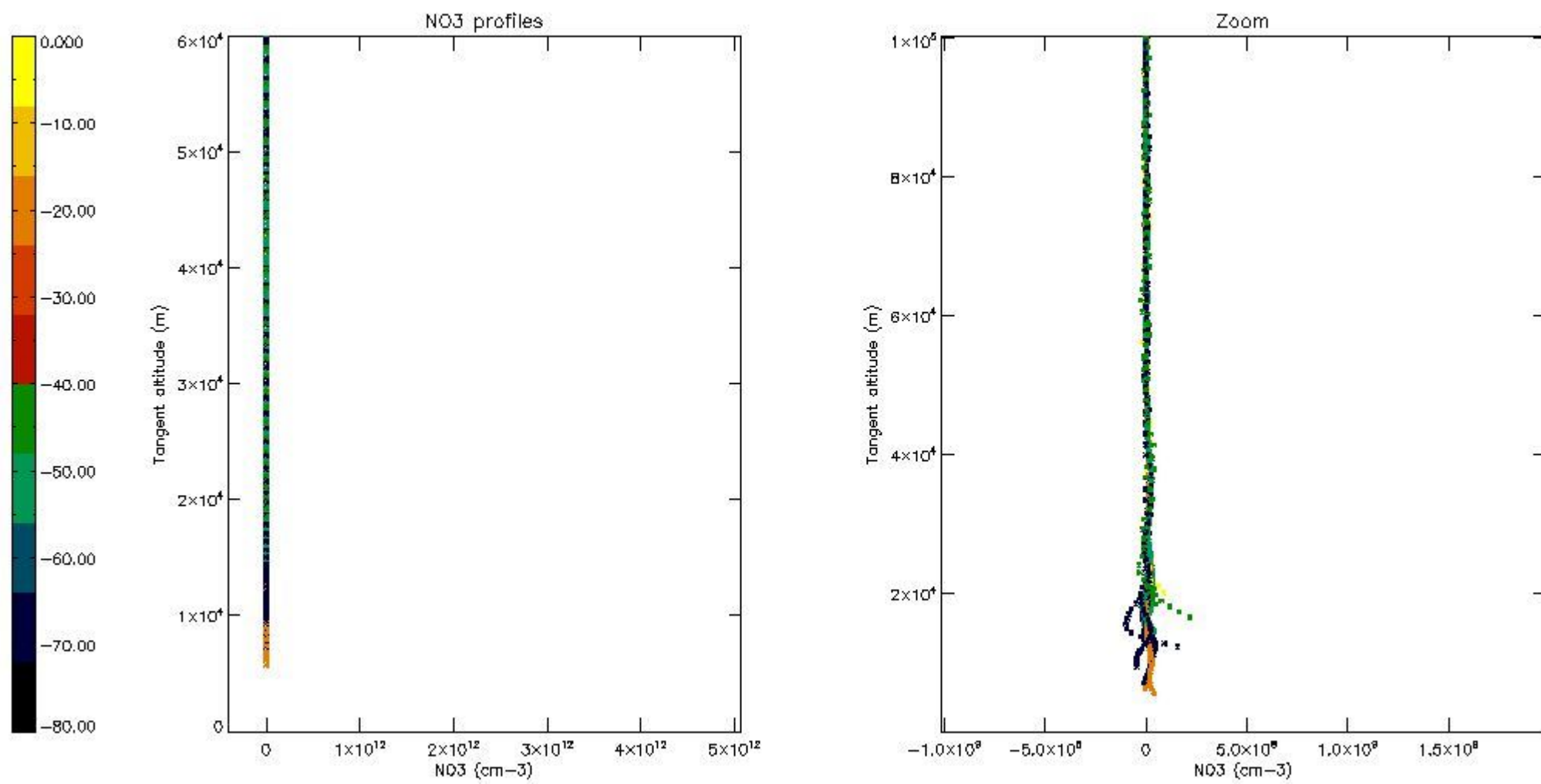
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



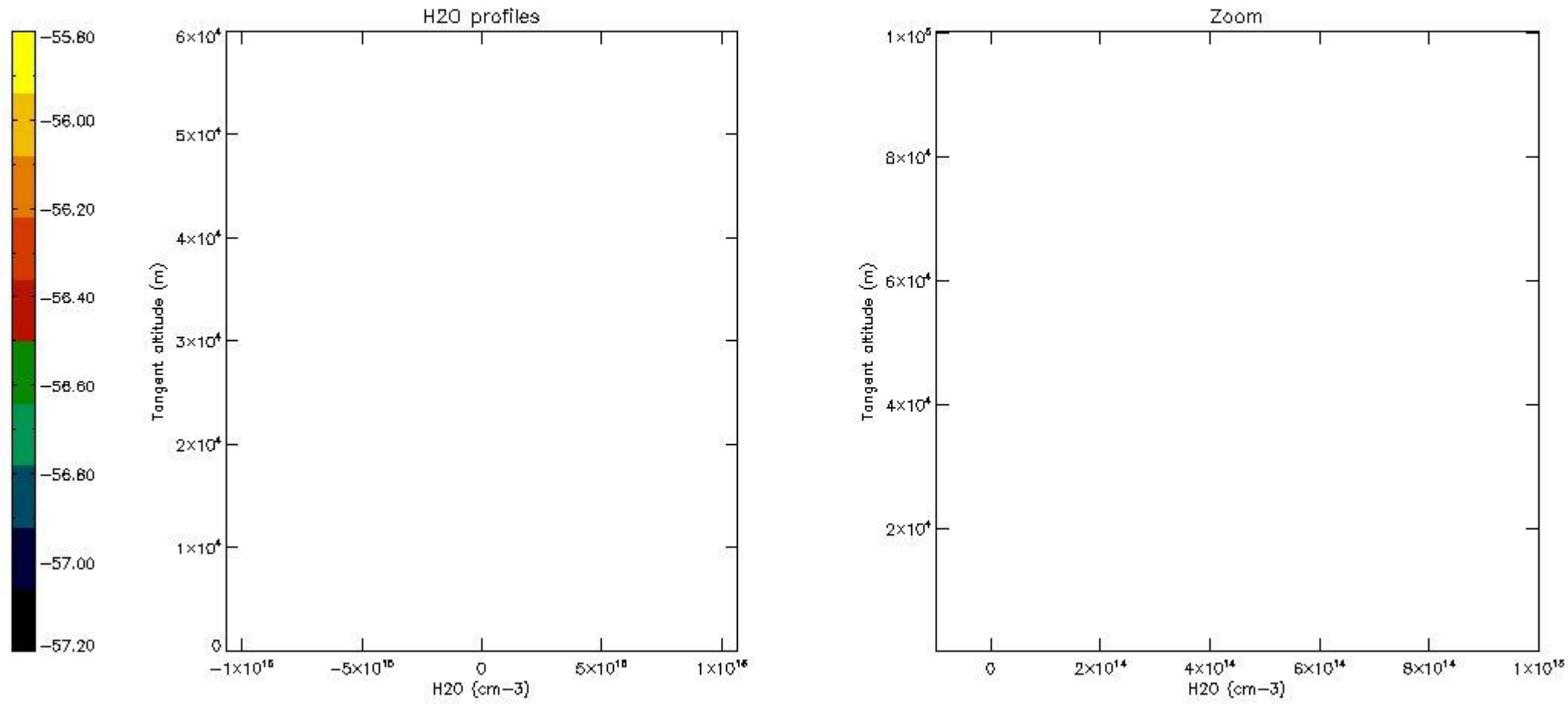
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

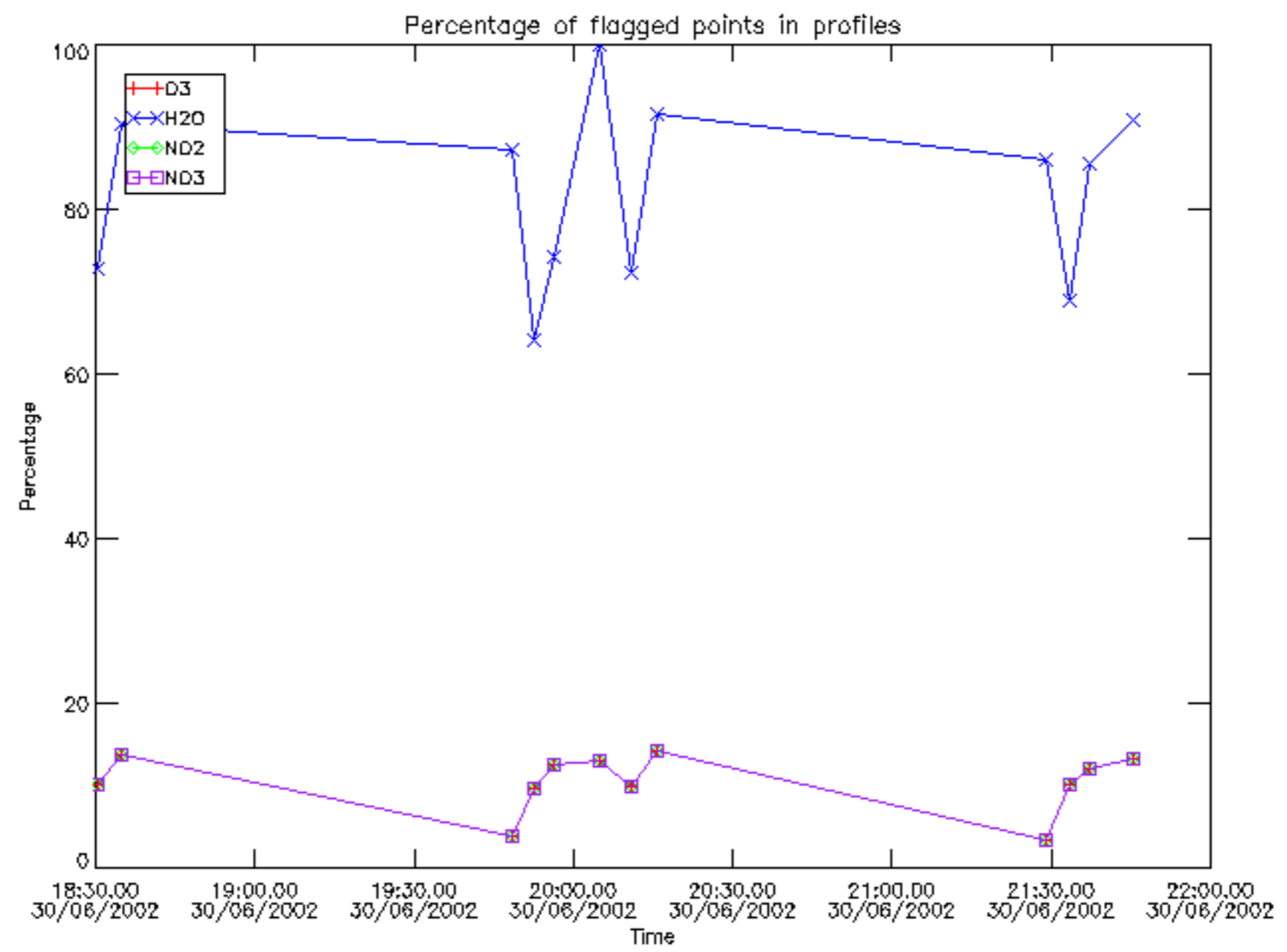
The colorbar represents the latitude.



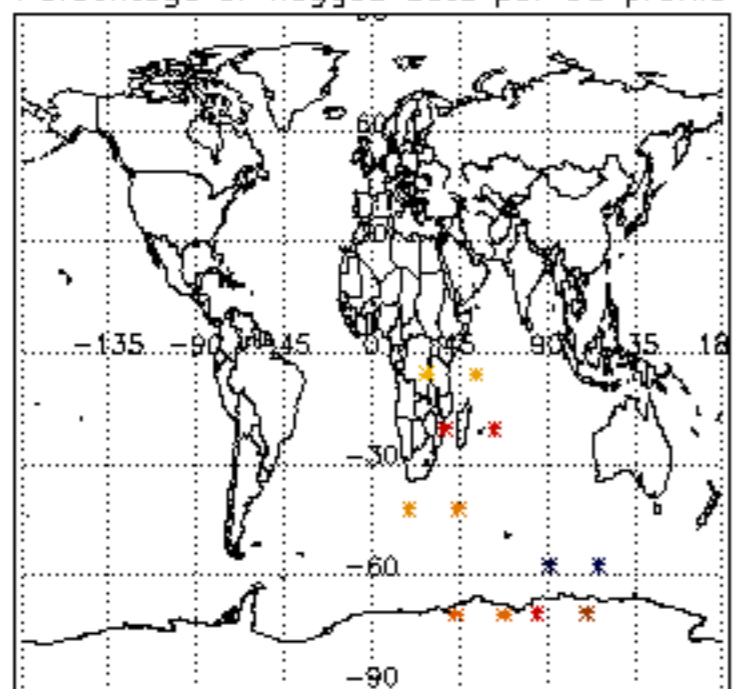
6. Auxiliary Data Files used for the production reported in section 2

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.

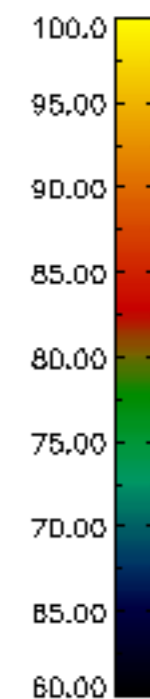
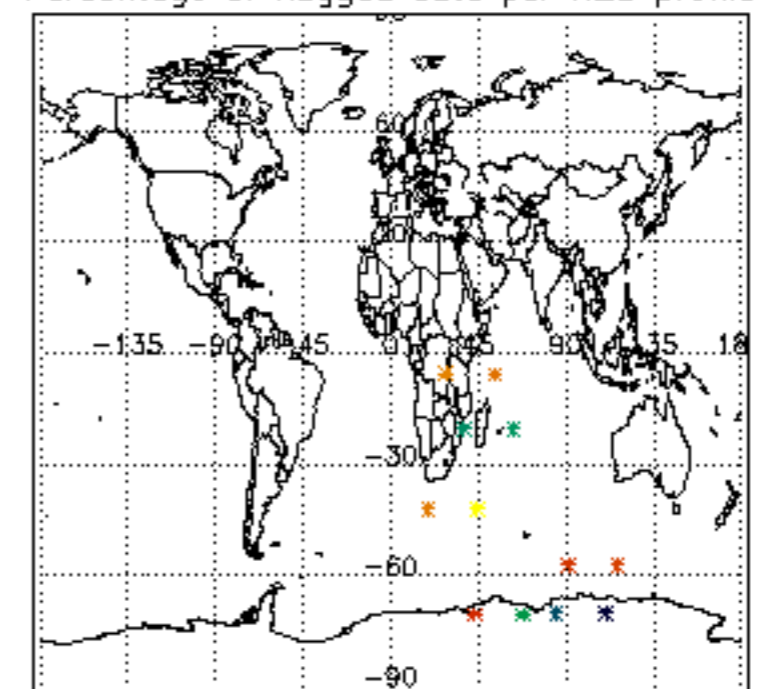
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	30-JUN-2002 18:30:18
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	30-JUN-2002 18:30:18
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	30-JUN-2002 18:30:18



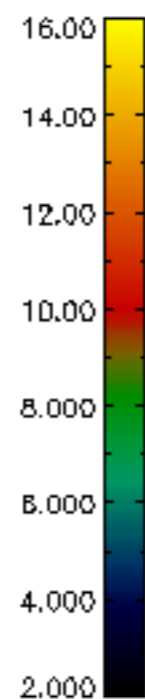
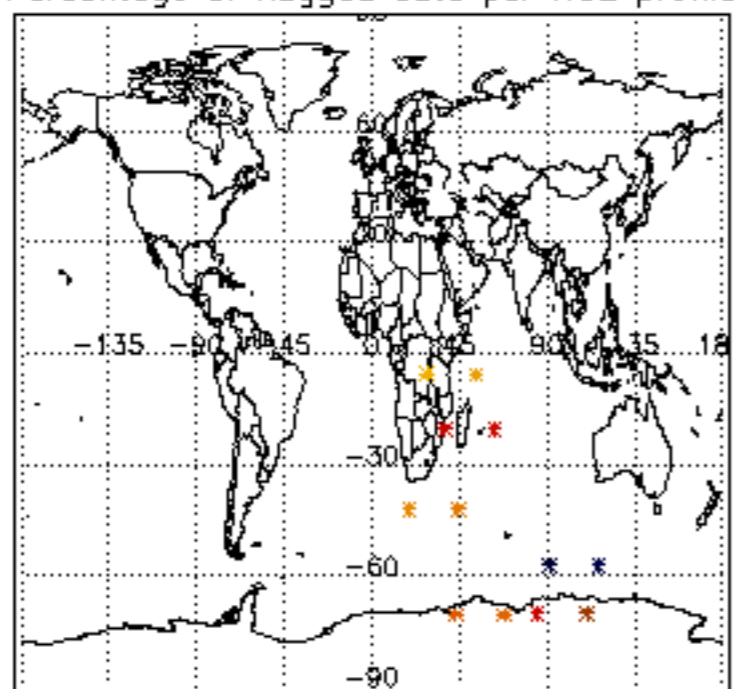
Percentage of flagged data per D3 profile



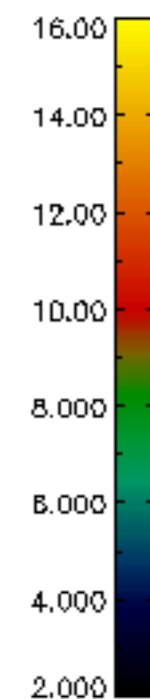
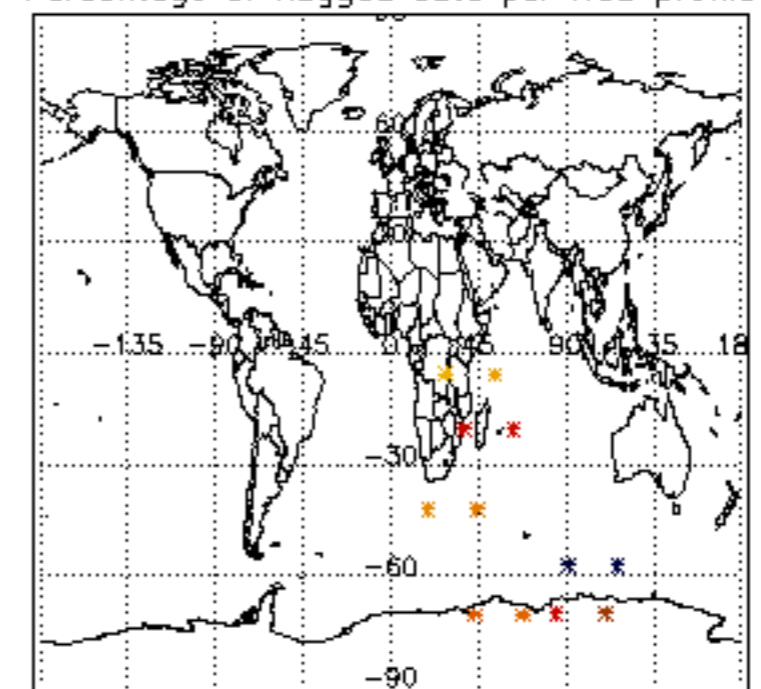
Percentage of flagged data per H2O profile

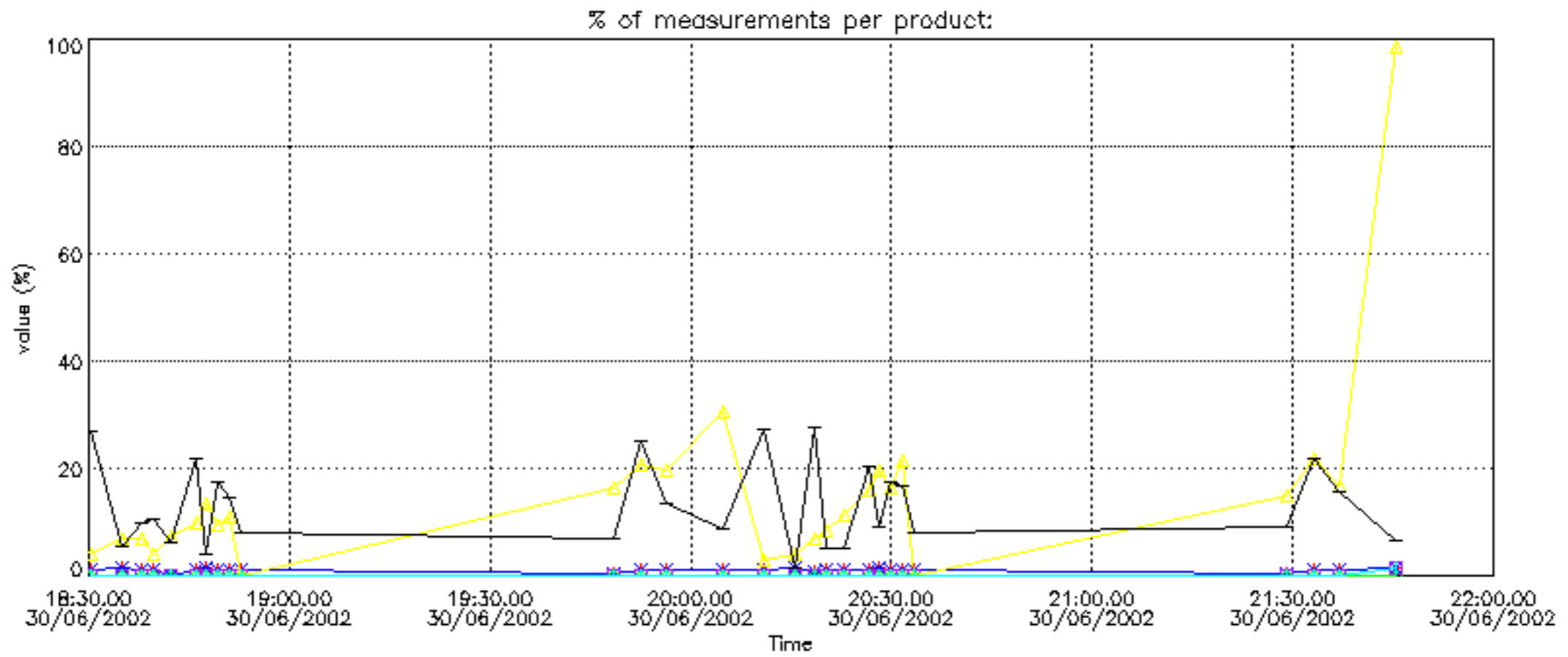


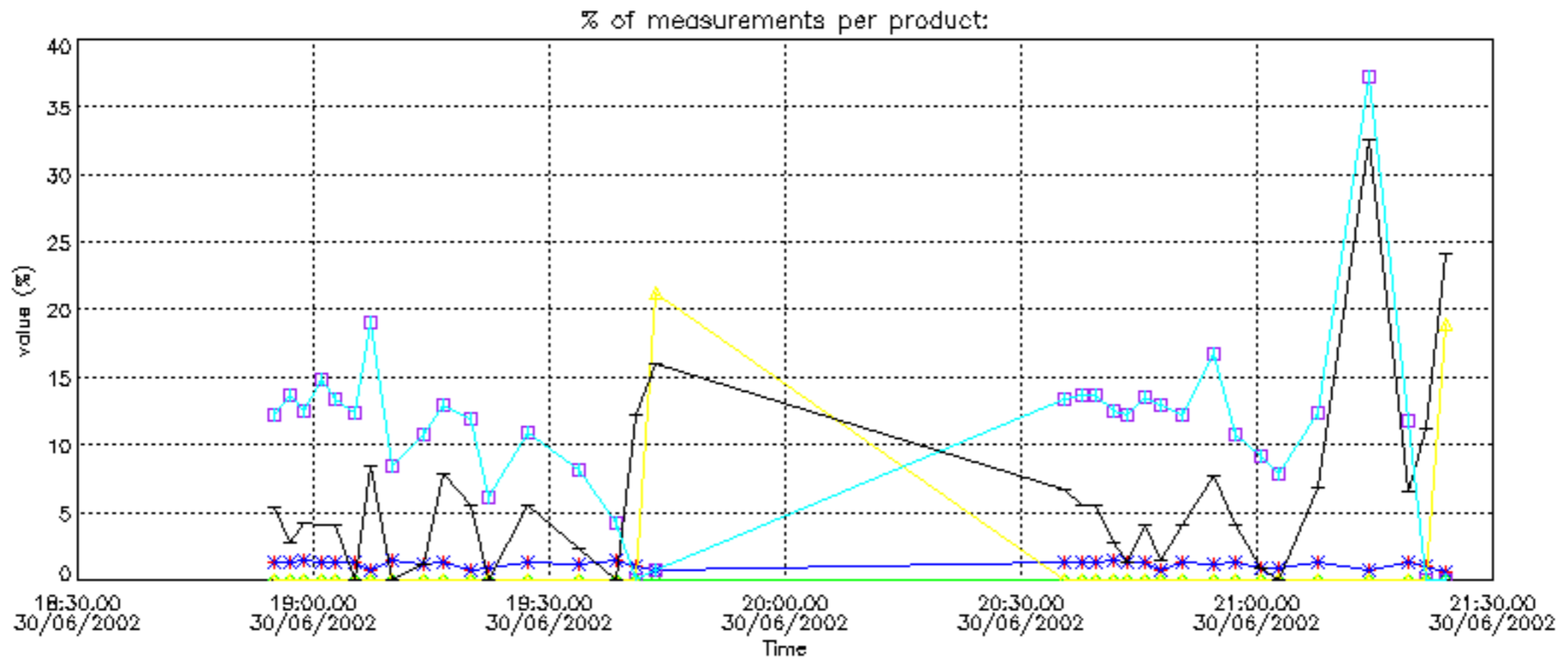
Percentage of flagged data per NO2 profile



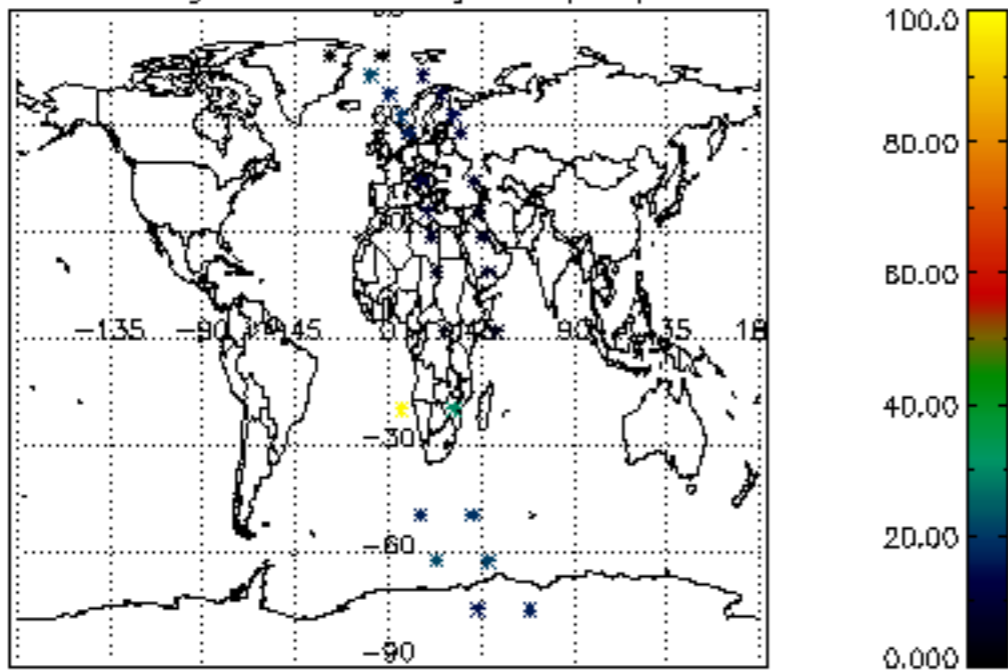
Percentage of flagged data per NO3 profile



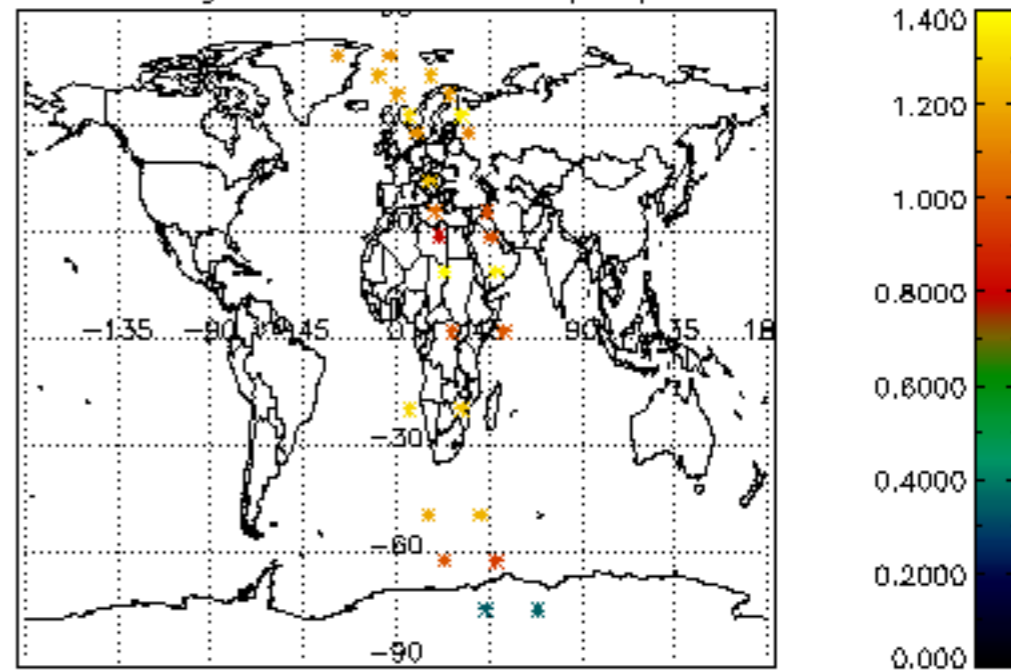




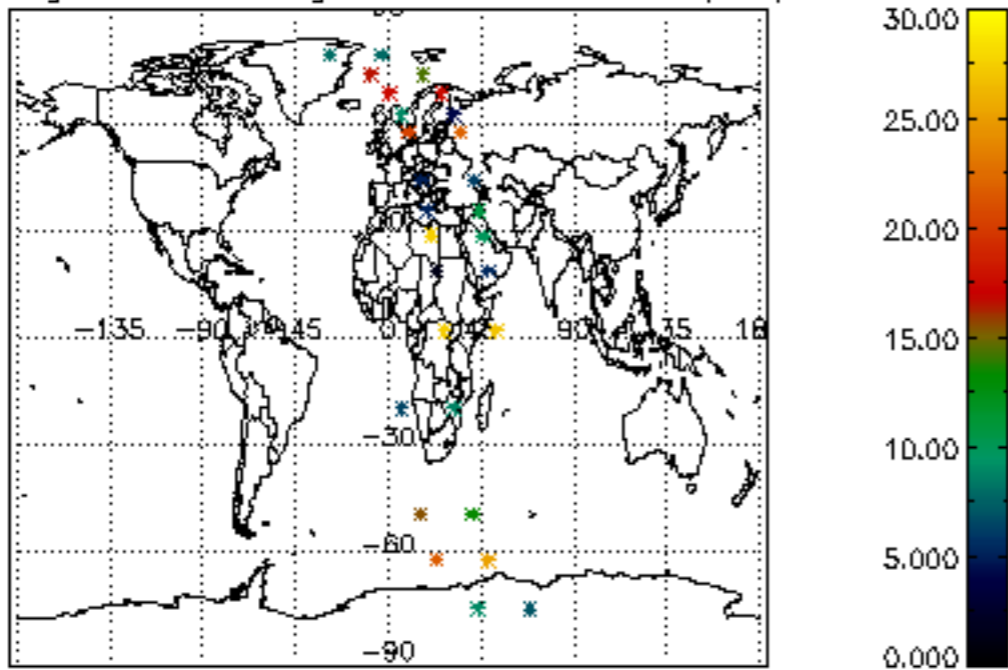
Percentage of cosmic ray hits per profile



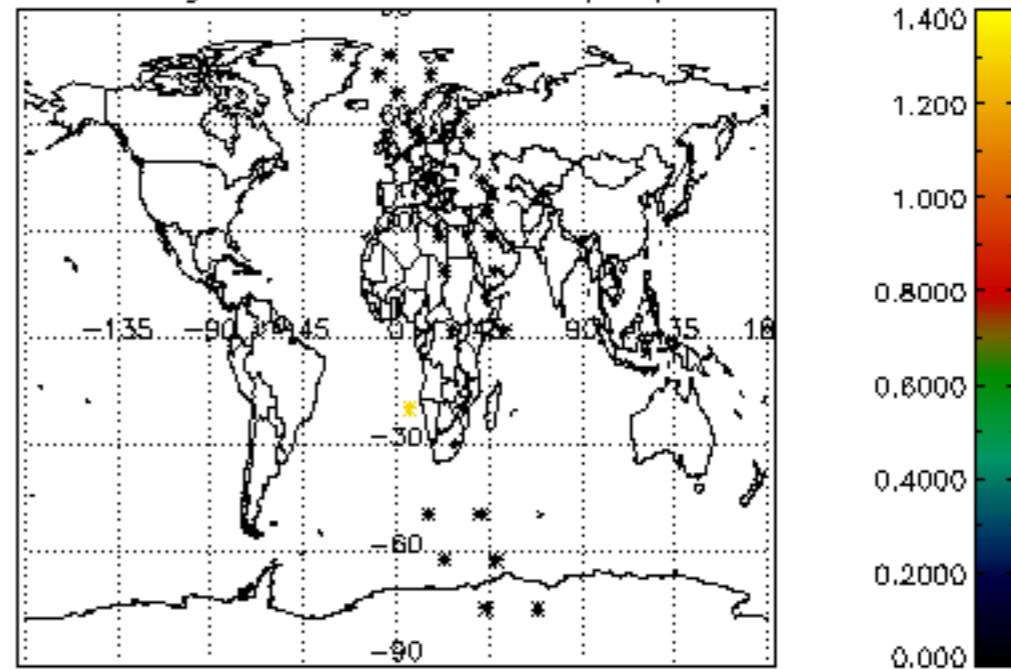
Percentage of datation errors per profile



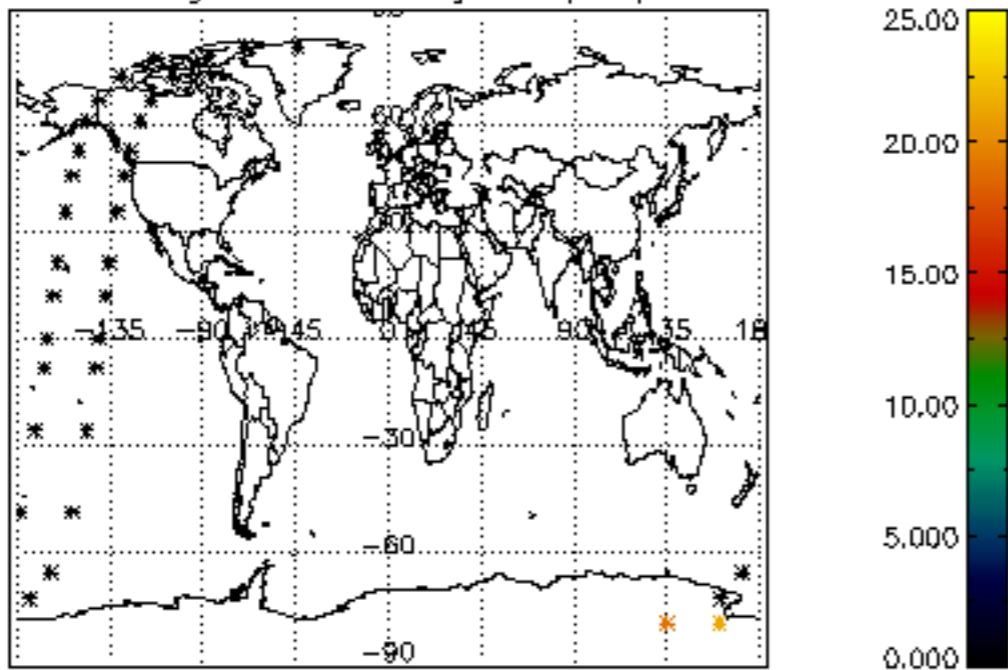
Percentage of star falling outside central band per profile



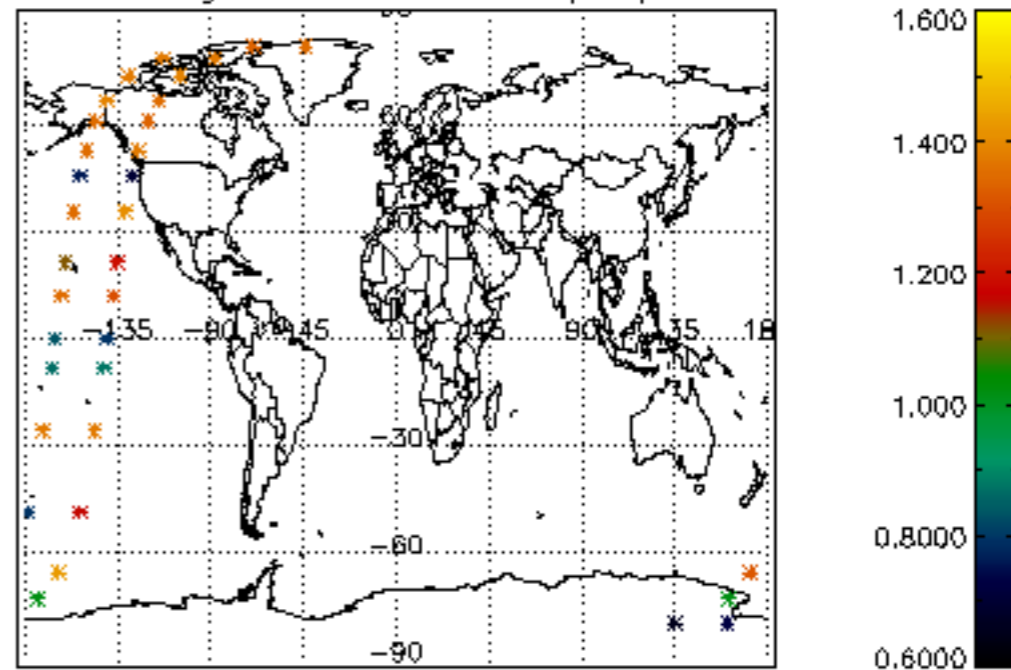
Percentage of saturation errors per profile



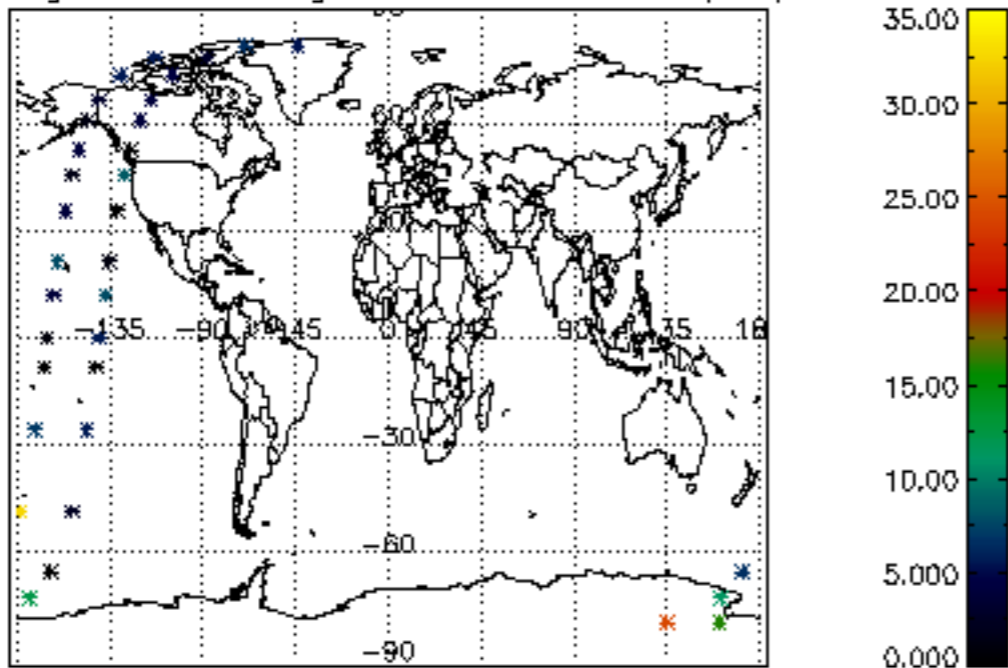
Percentage of cosmic ray hits per profile



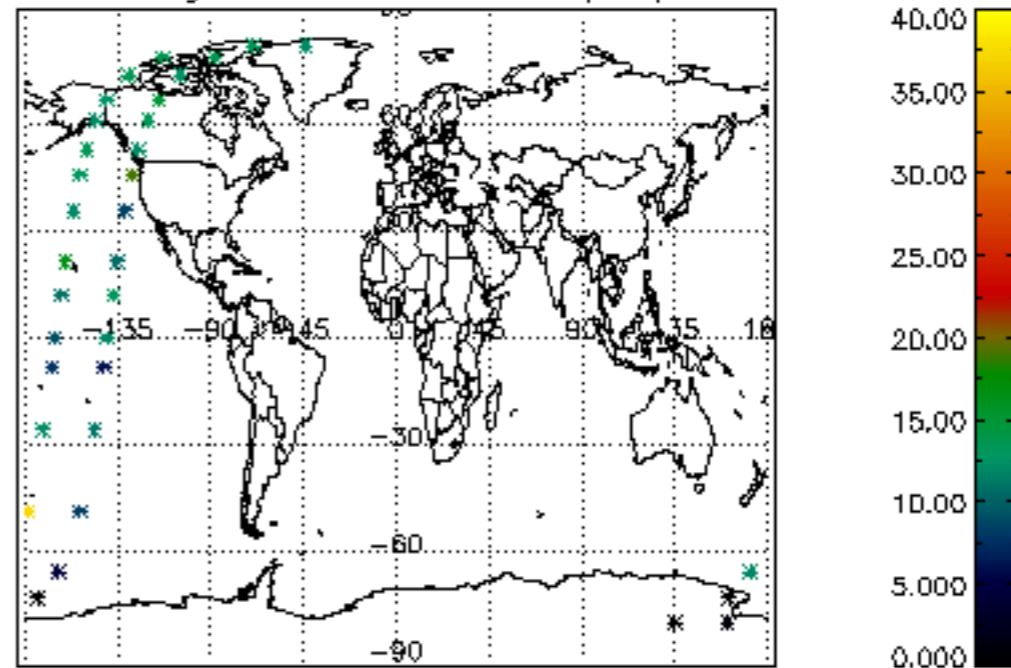
Percentage of datation errors per profile

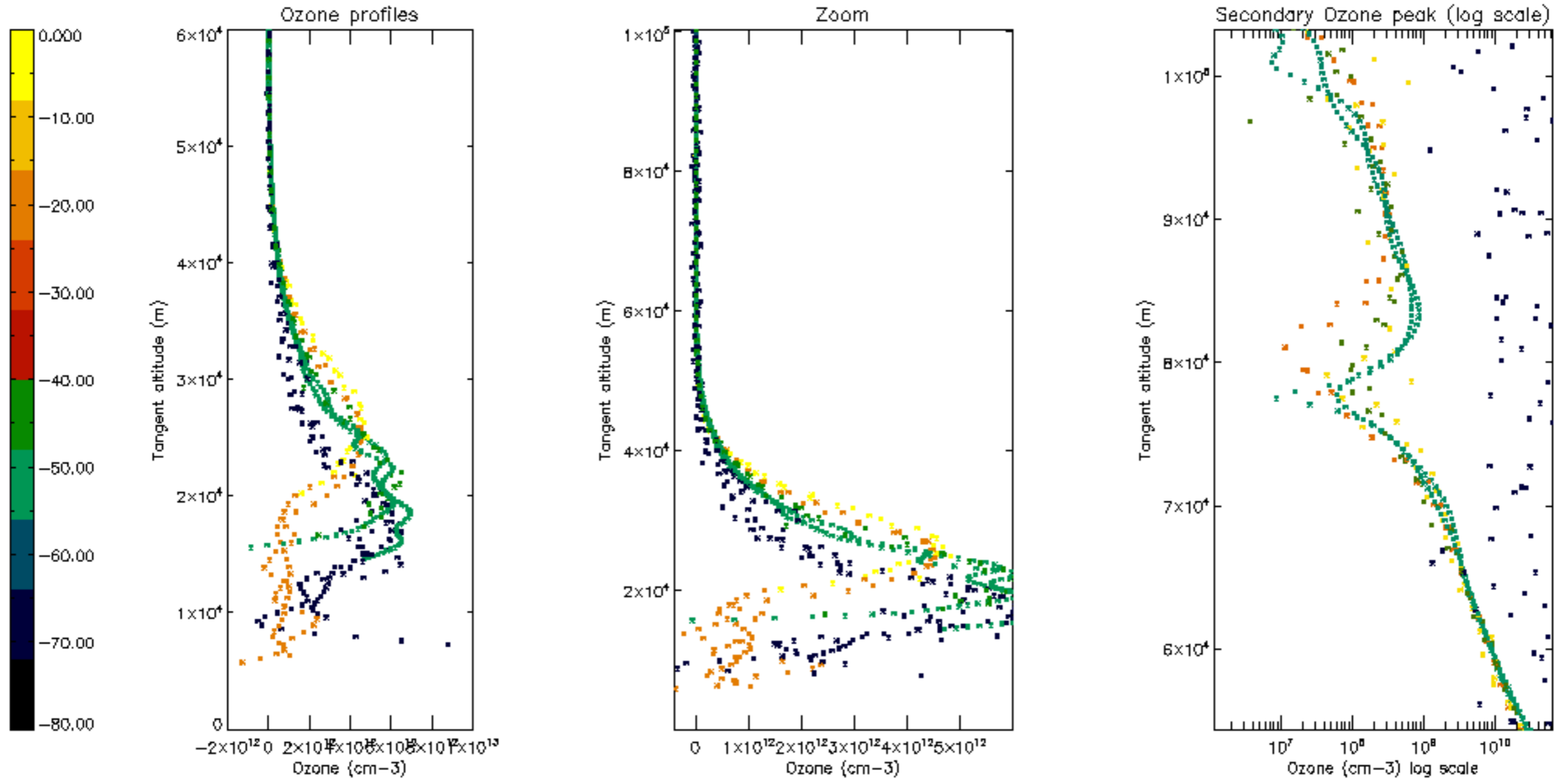


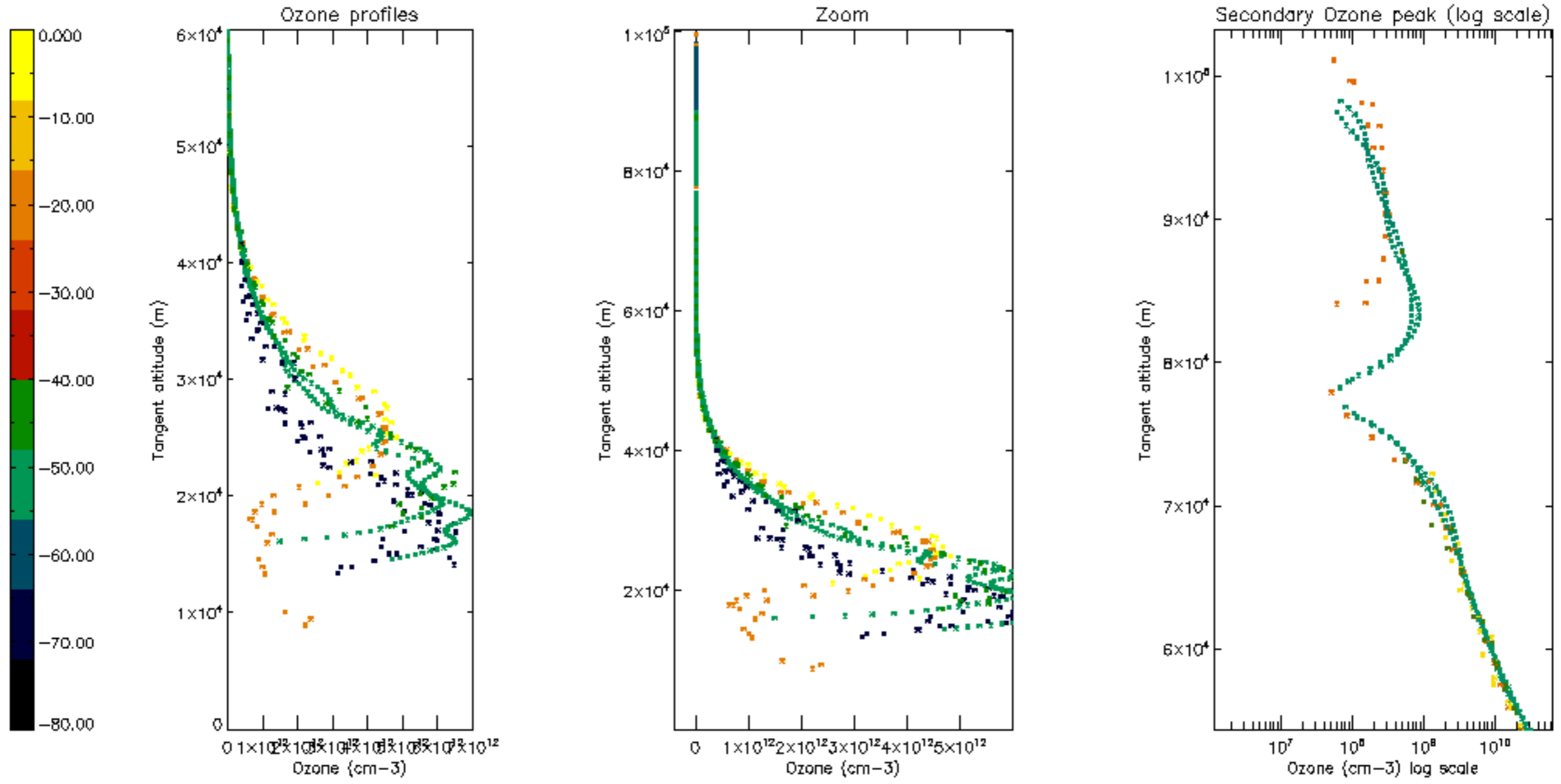
Percentage of star falling outside central band per profile

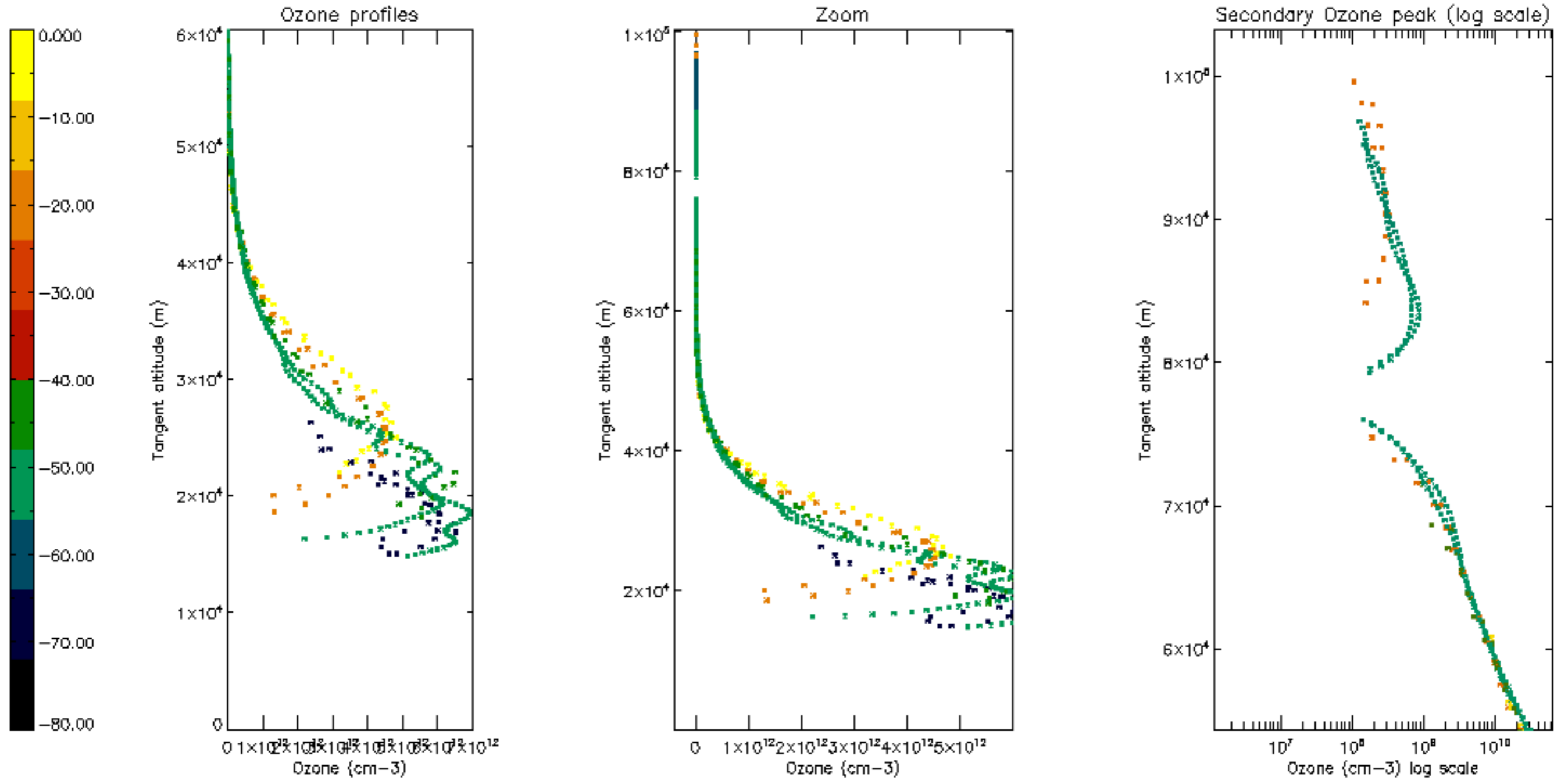


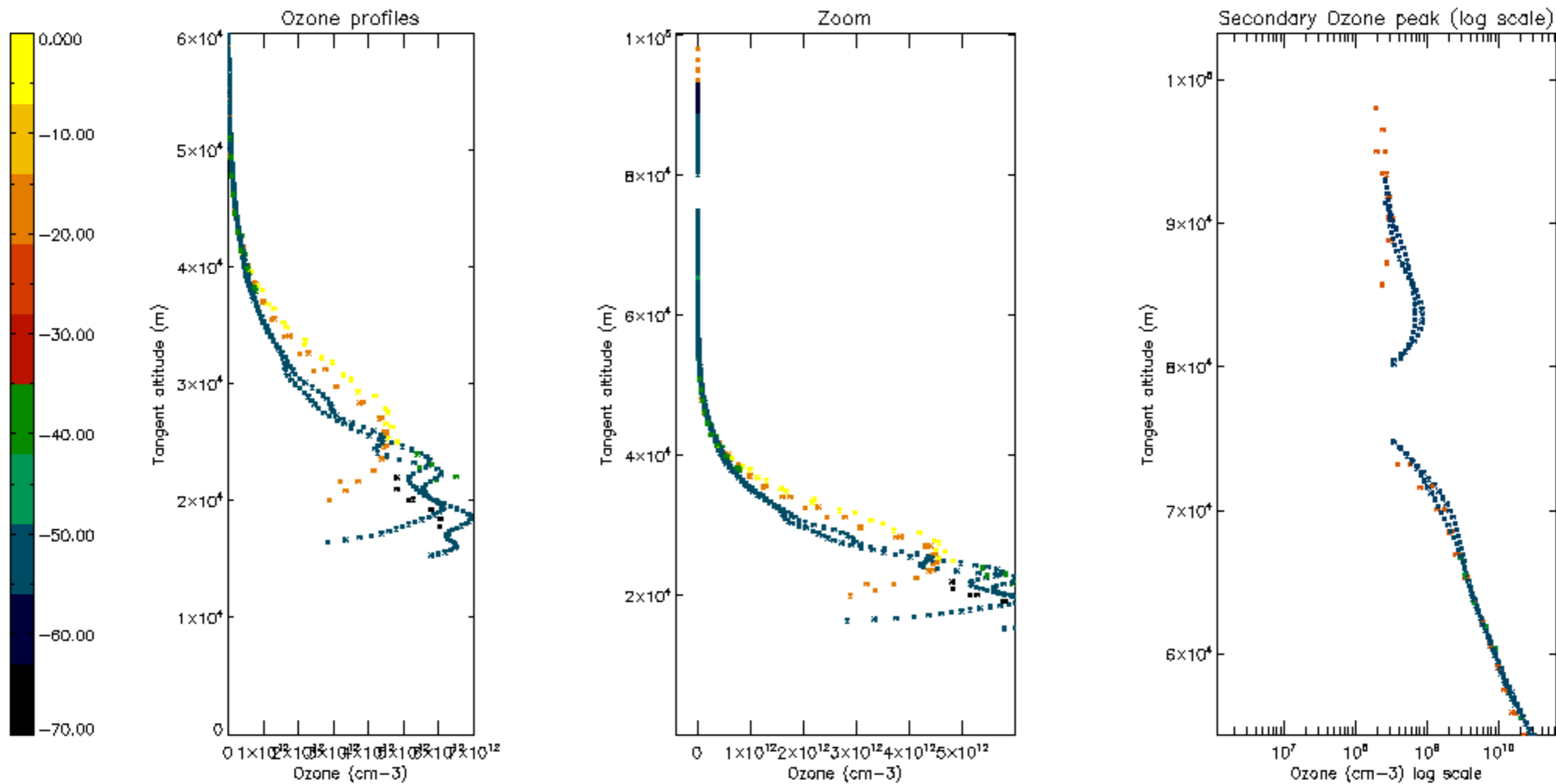
Percentage of saturation errors per profile

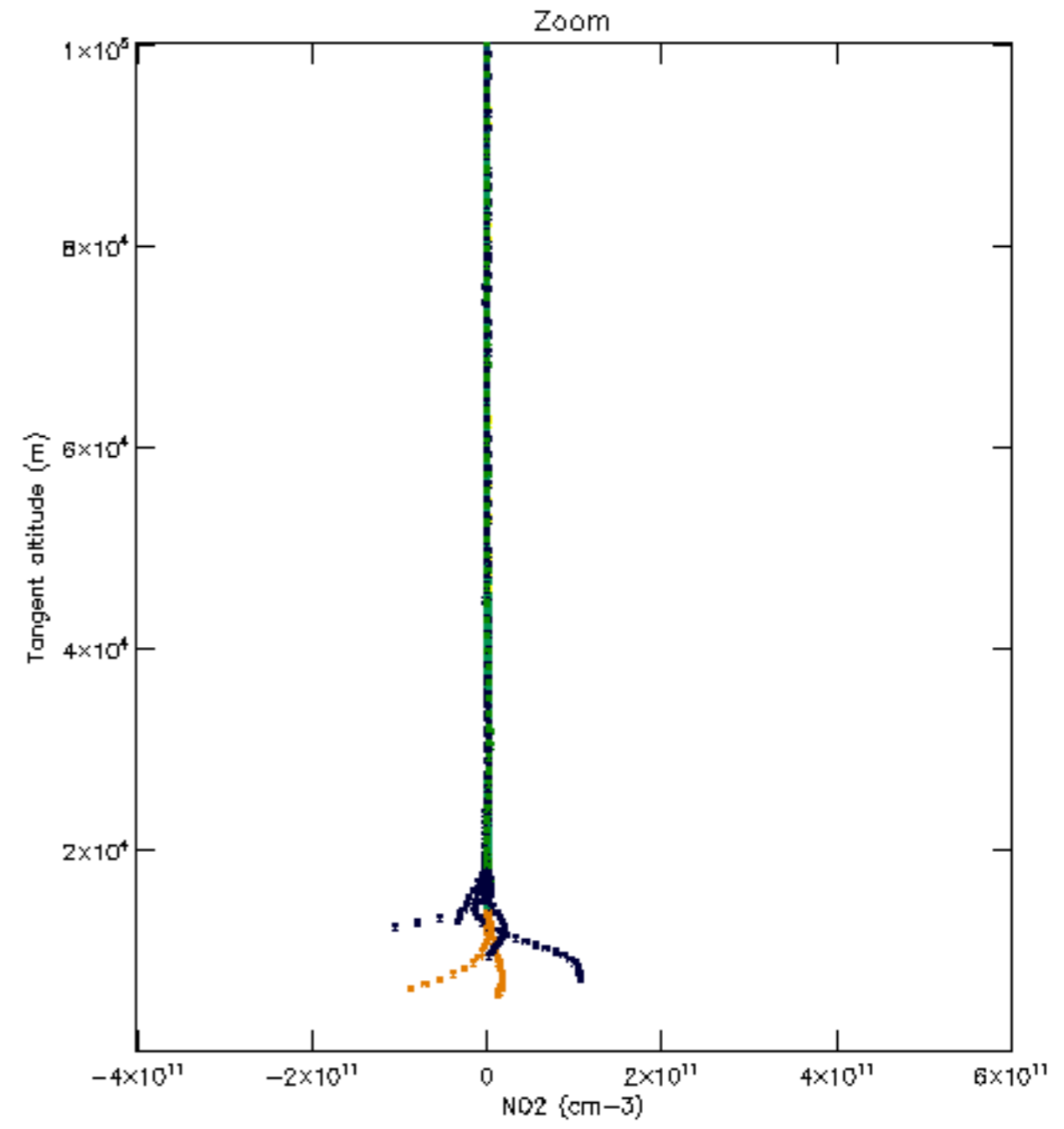
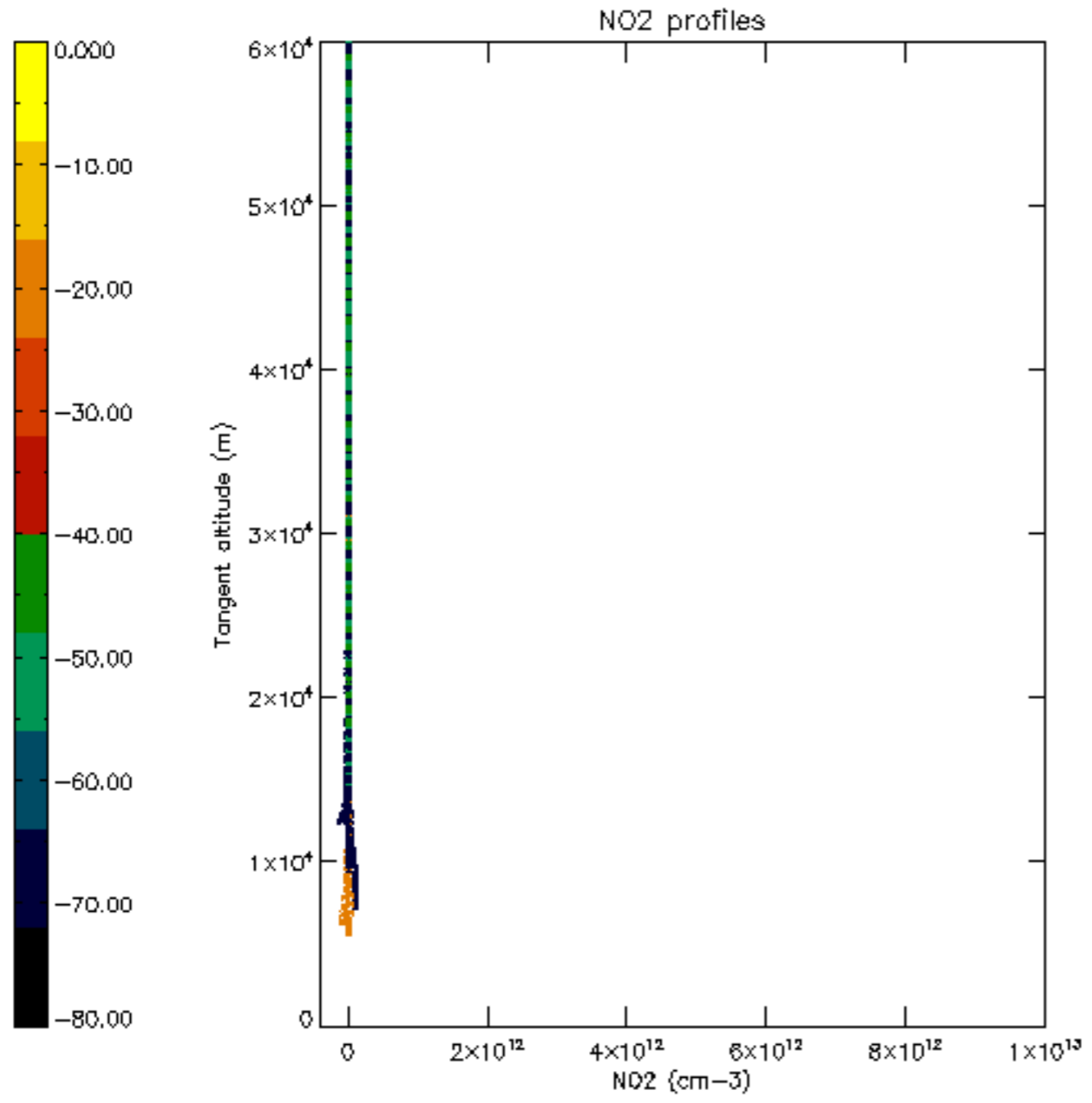


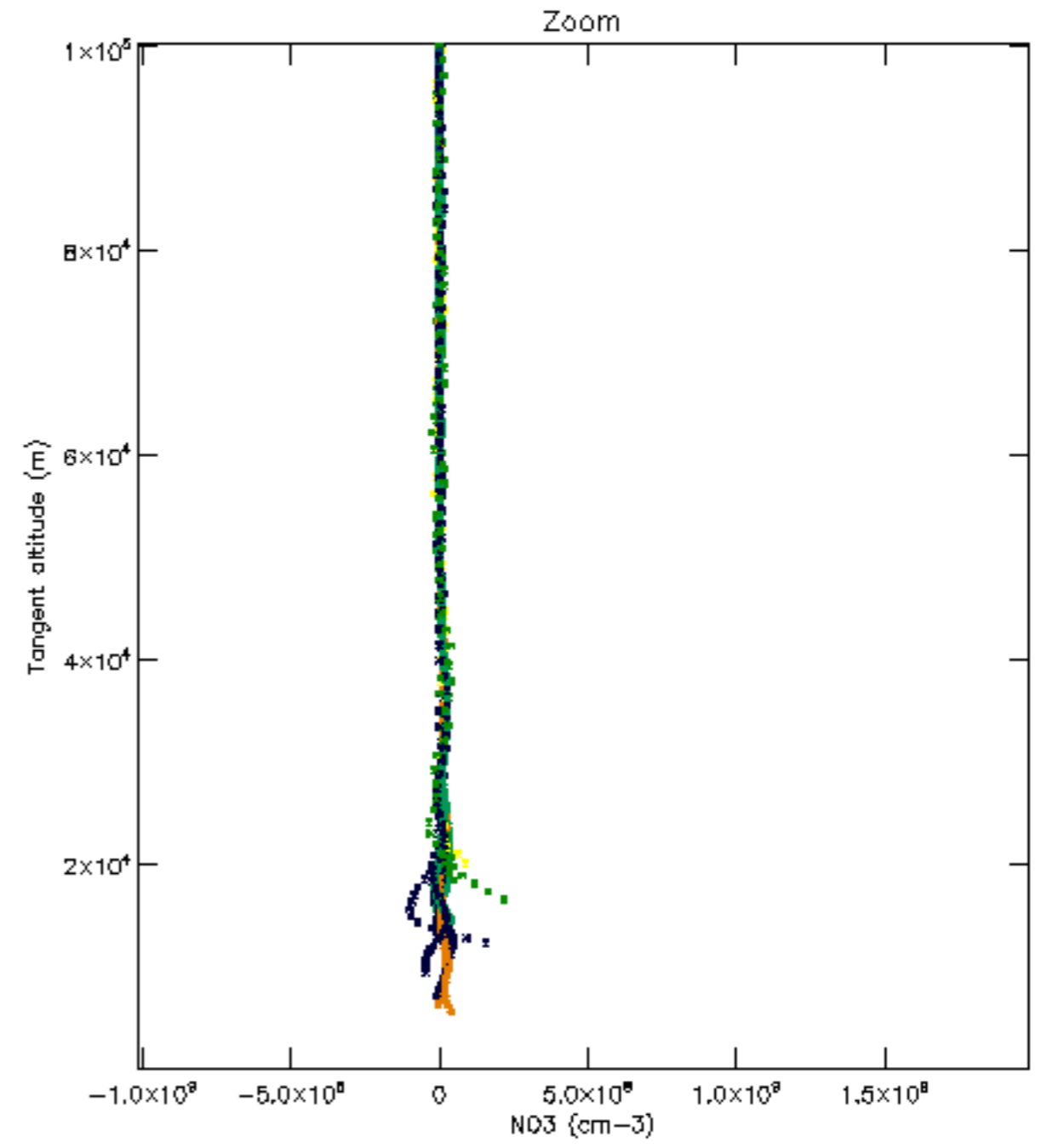
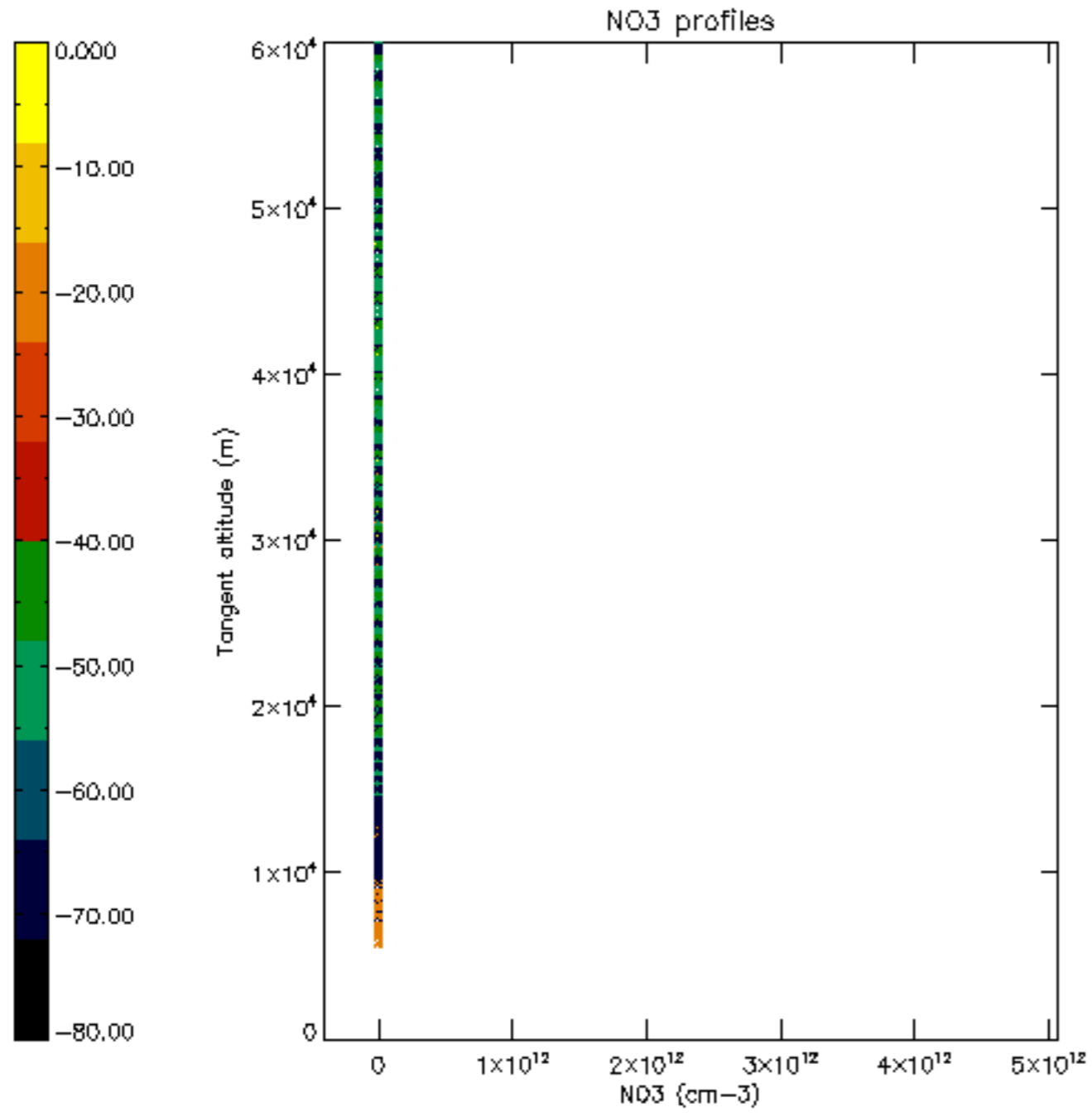


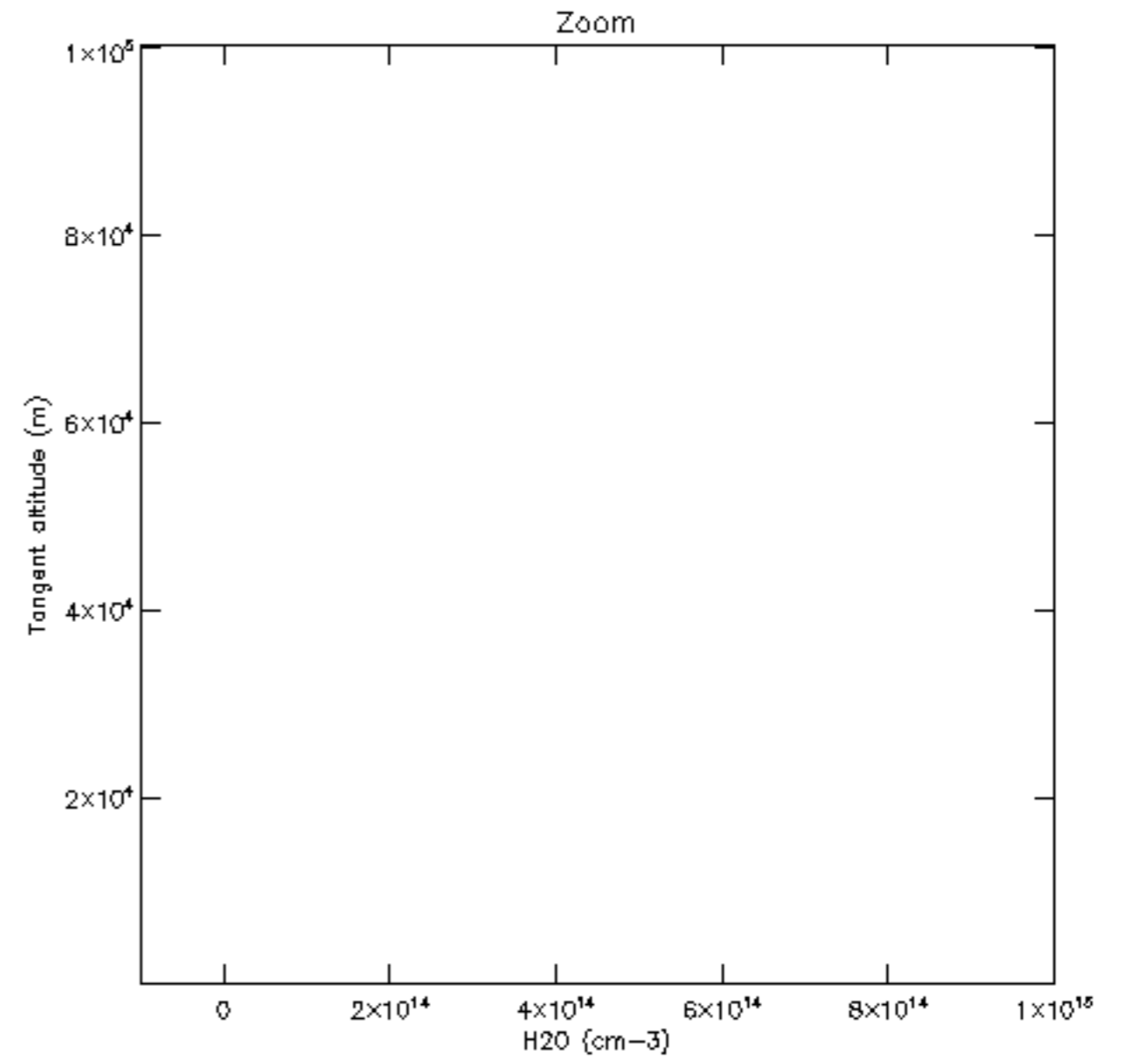
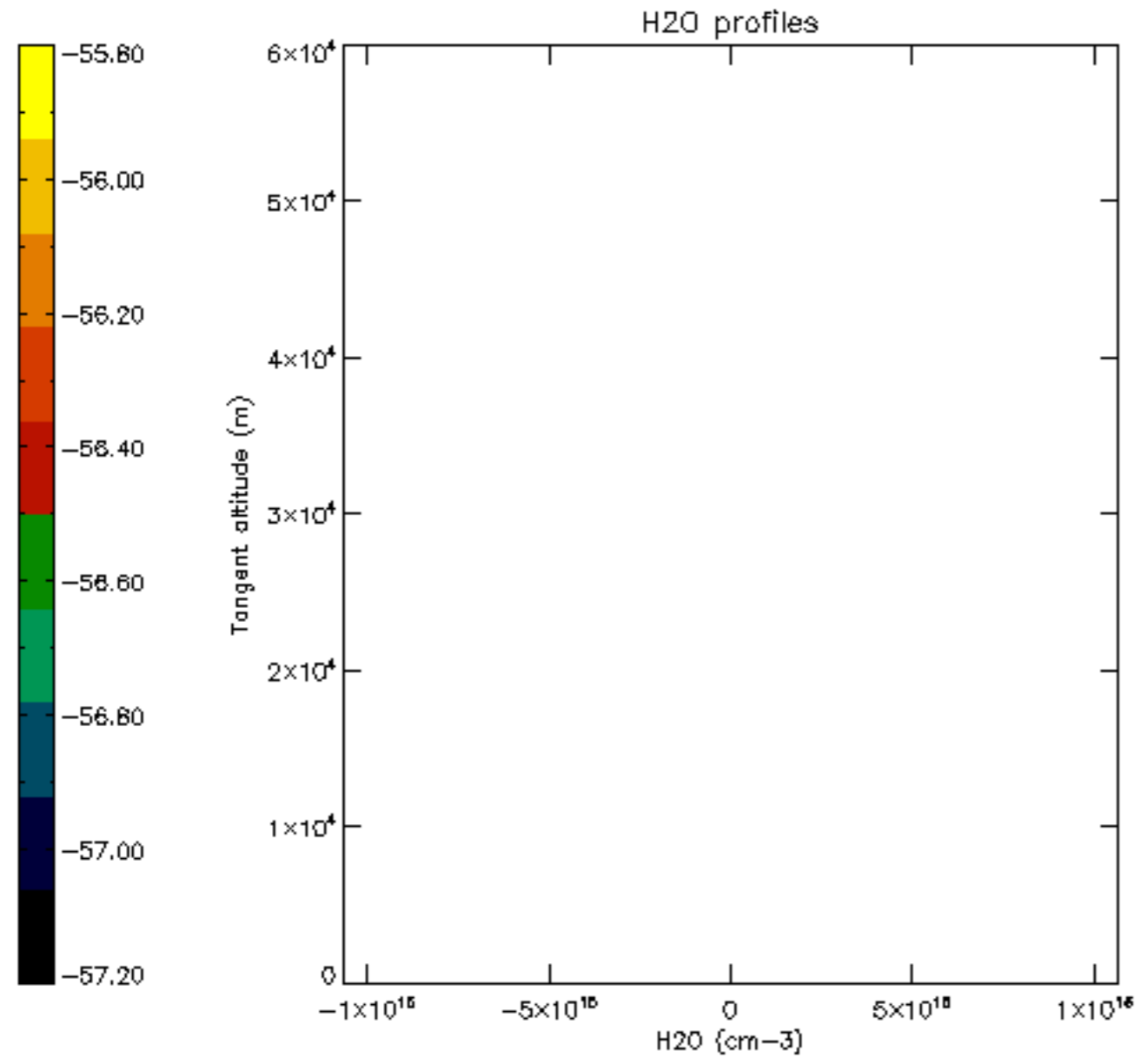


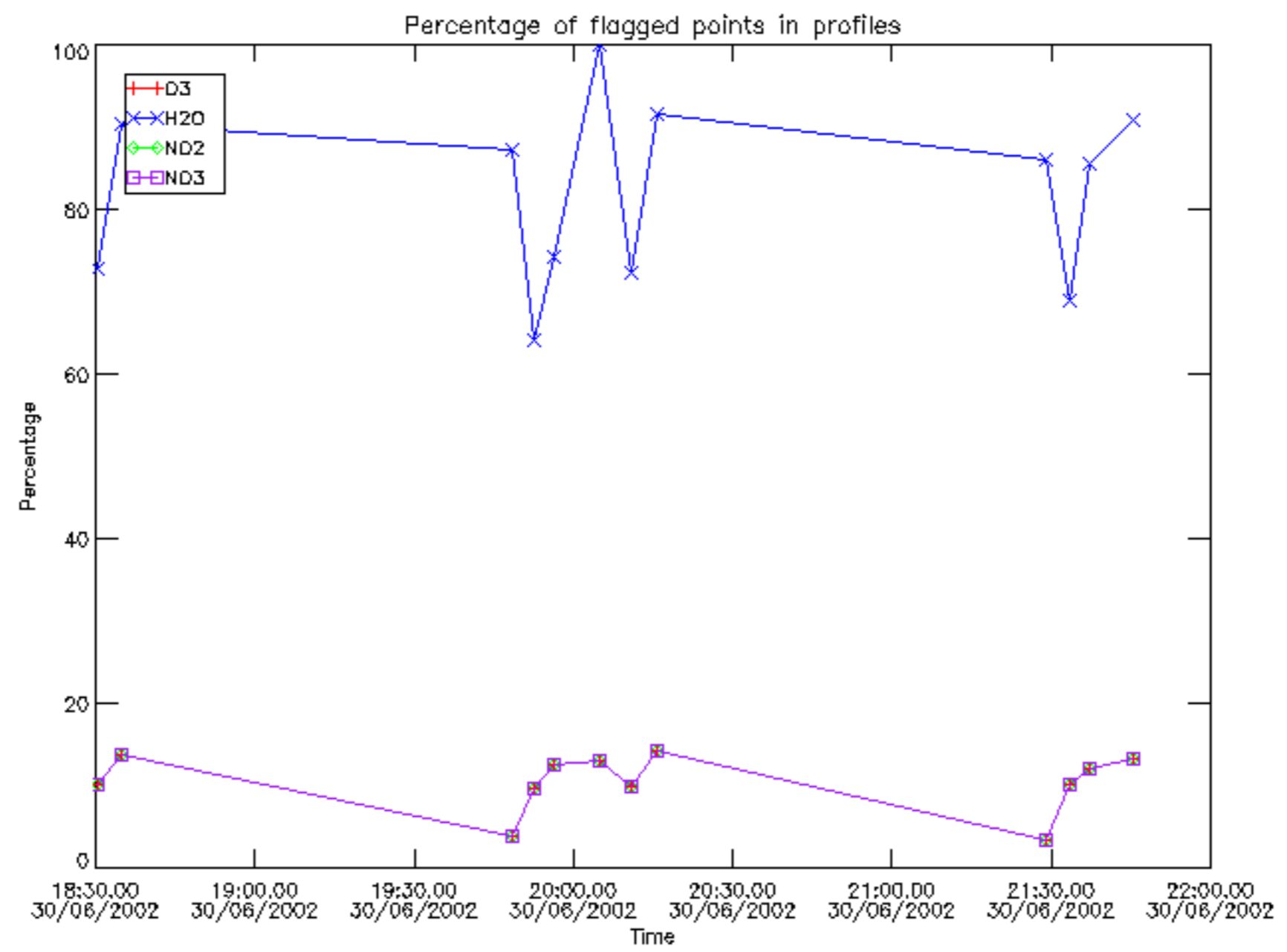




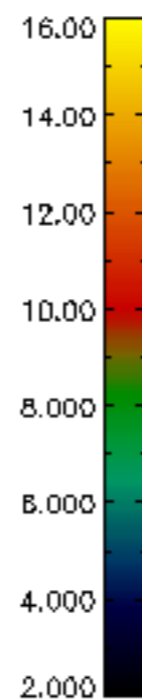
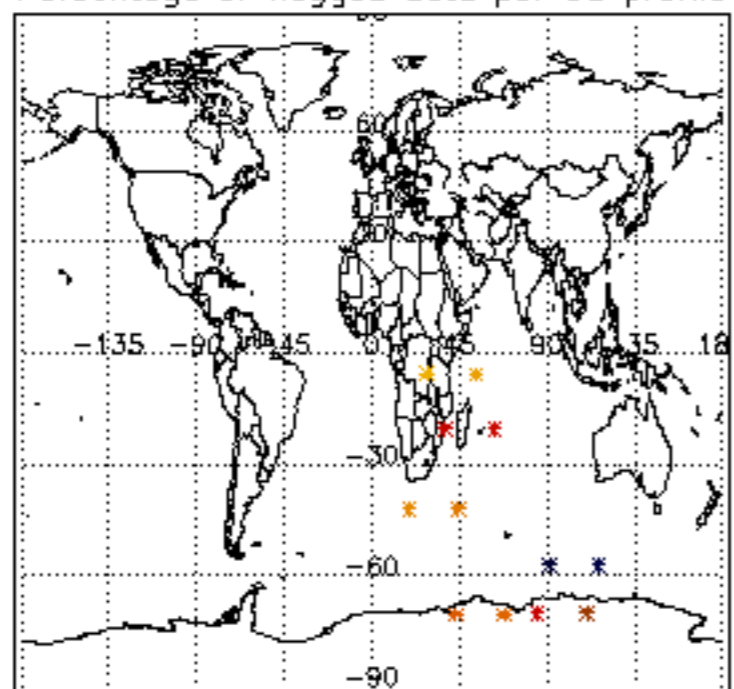




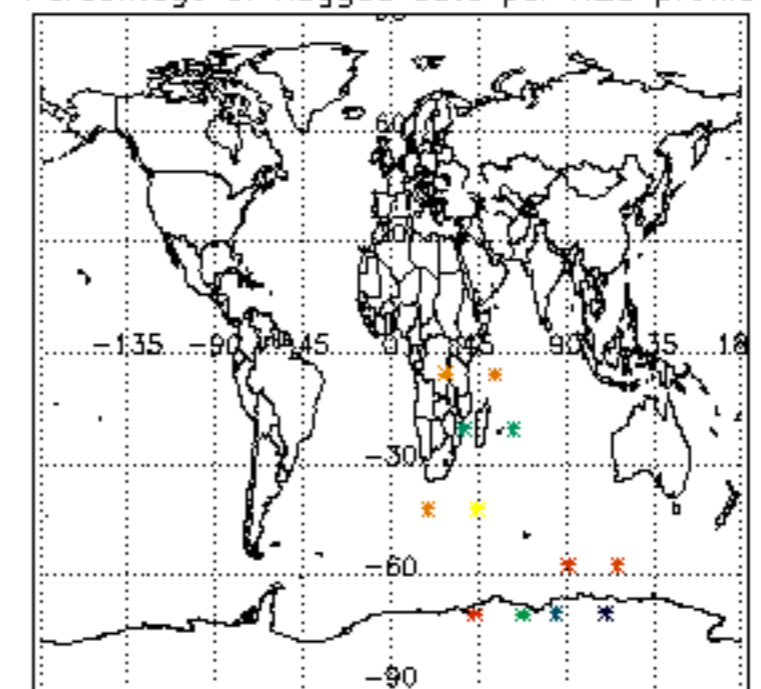




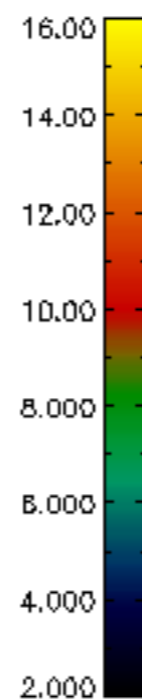
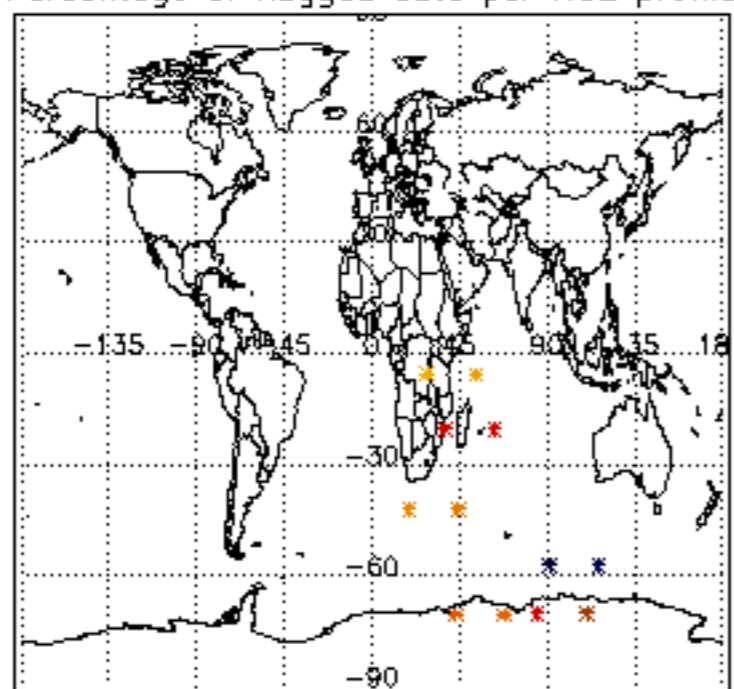
Percentage of flagged data per D3 profile



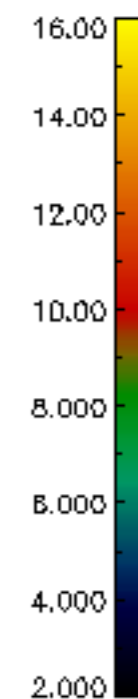
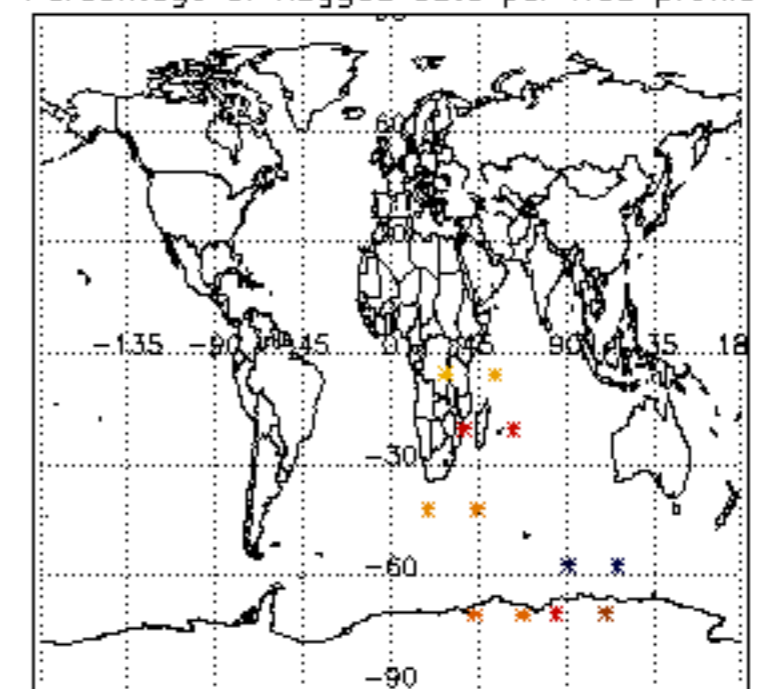
Percentage of flagged data per H2O profile

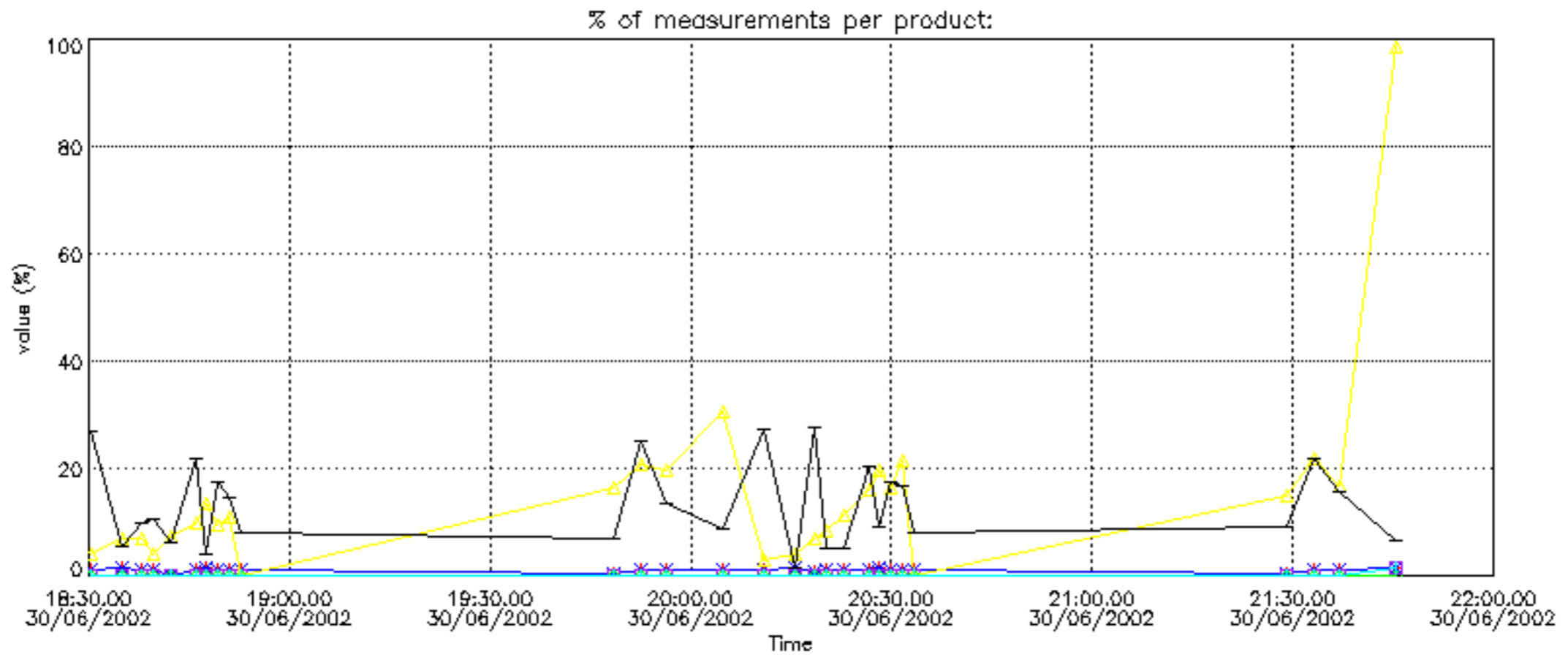


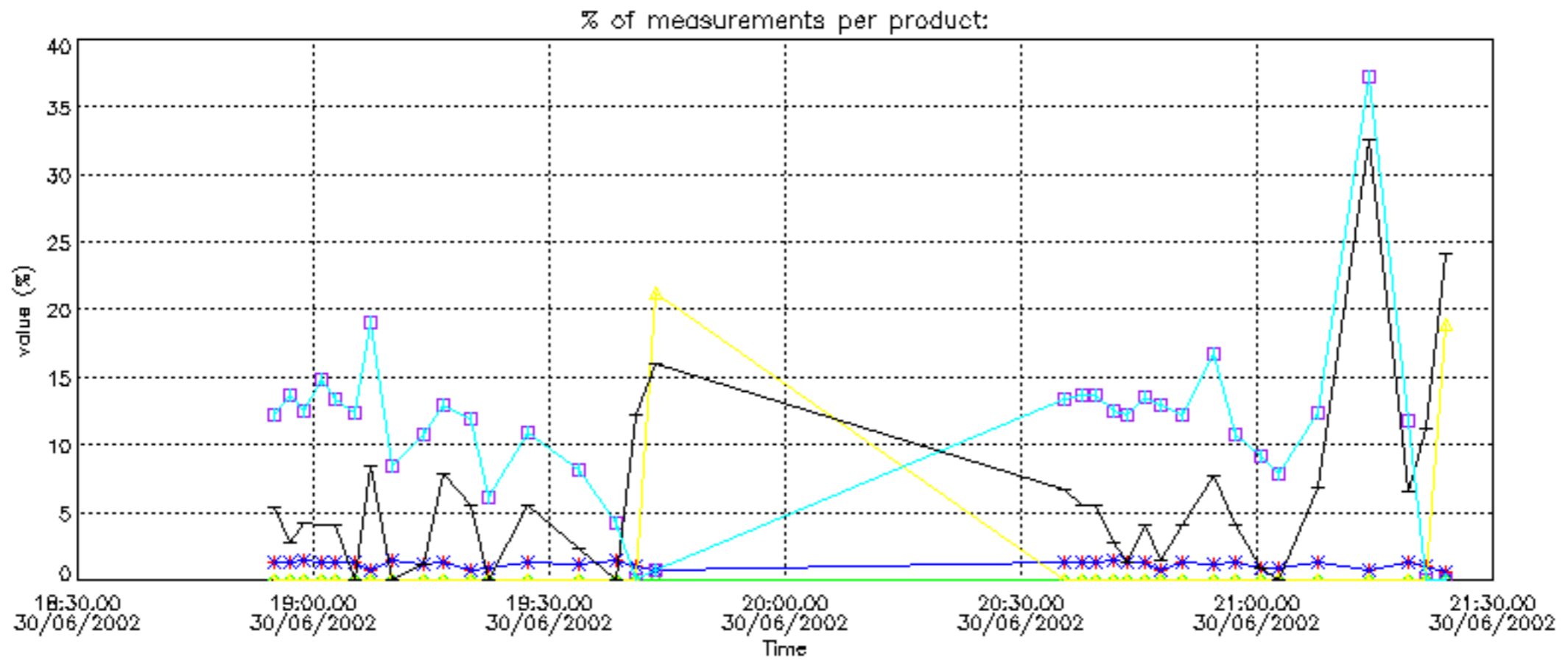
Percentage of flagged data per NO2 profile



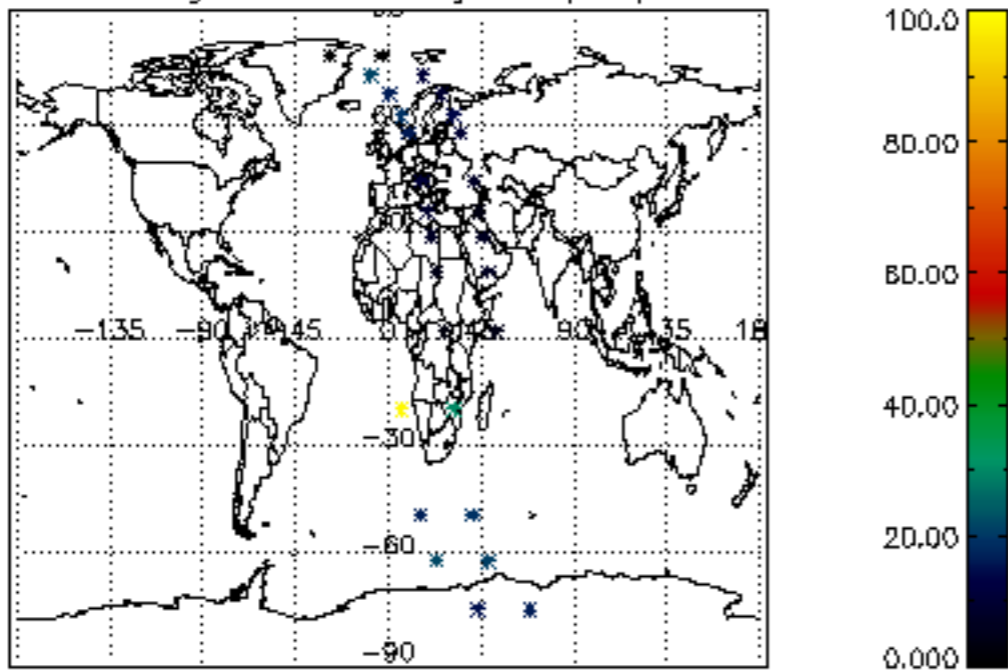
Percentage of flagged data per NO3 profile



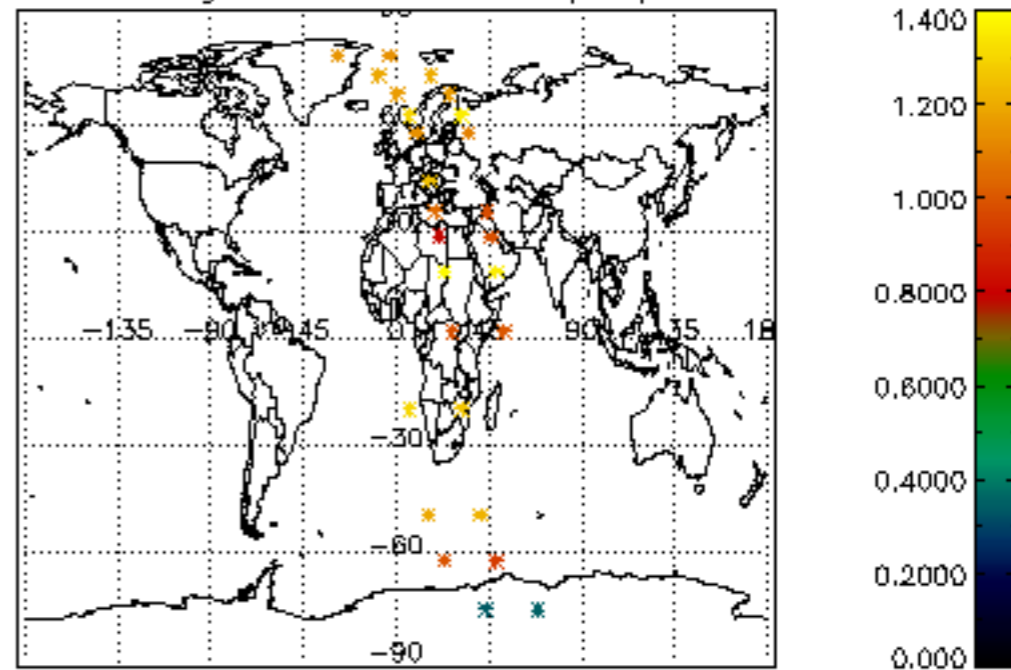




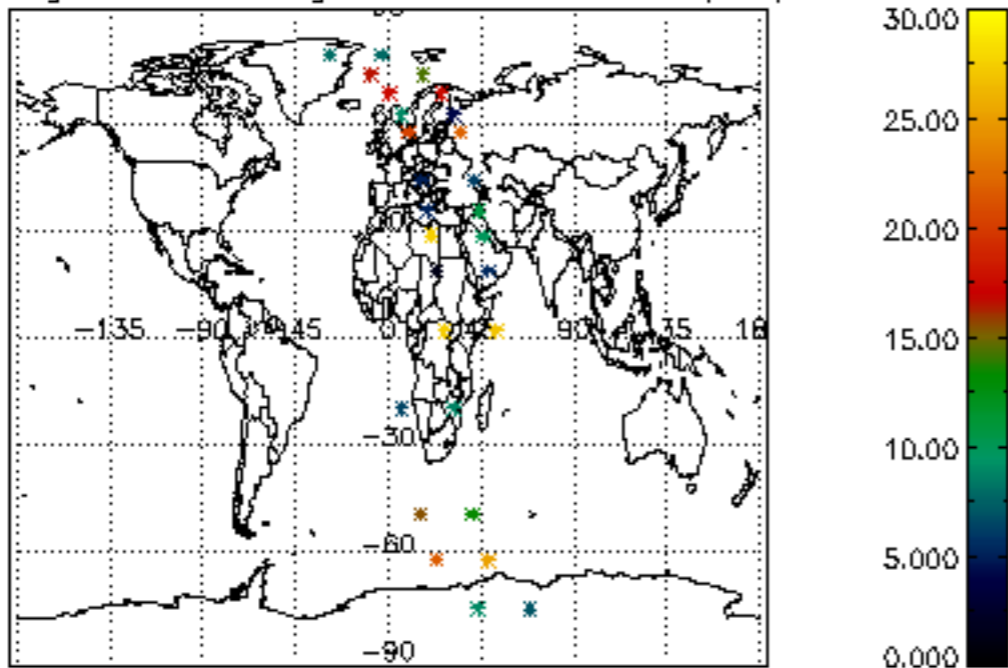
Percentage of cosmic ray hits per profile



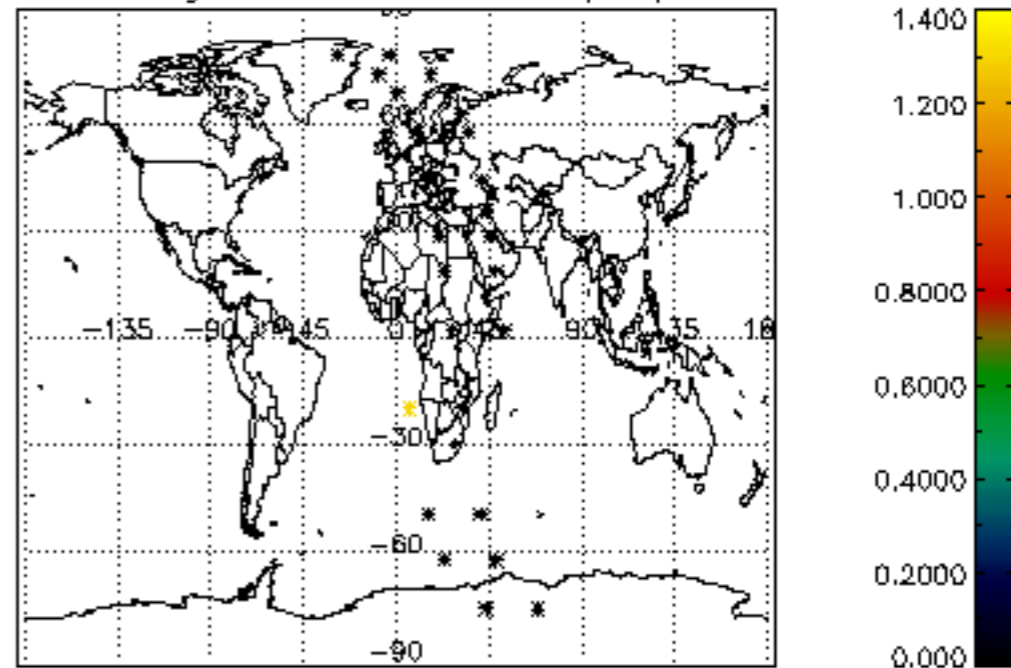
Percentage of datation errors per profile



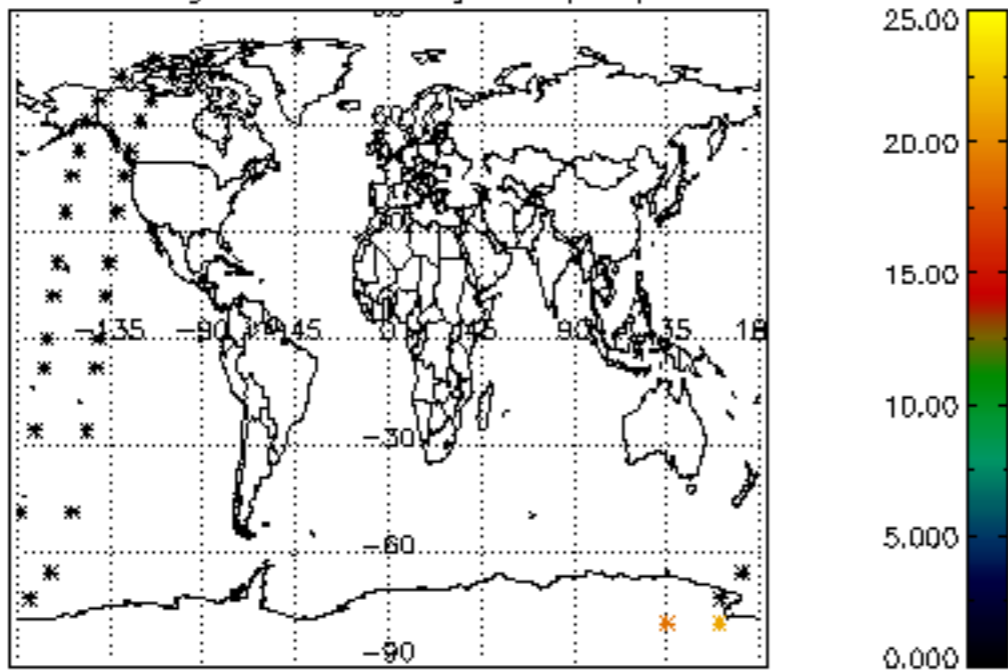
Percentage of star falling outside central band per profile



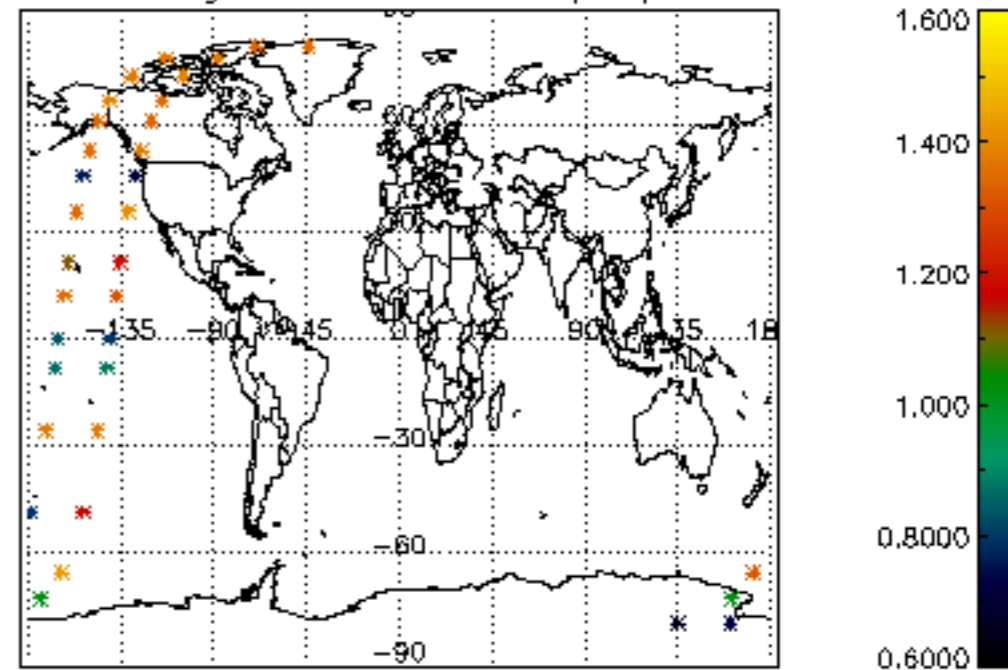
Percentage of saturation errors per profile



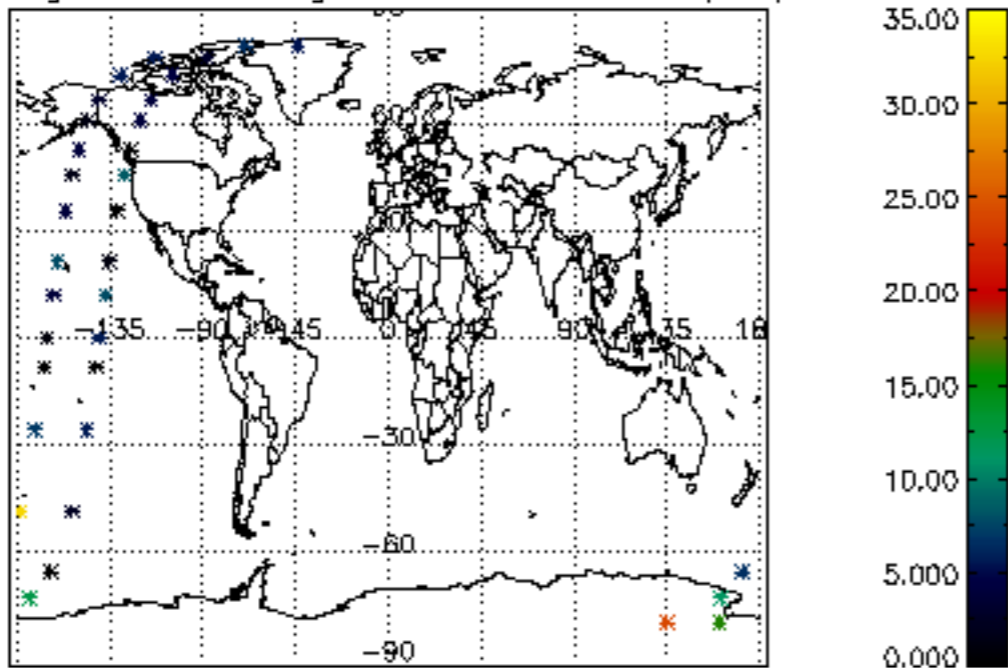
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

