

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	25APR2013 22:01:46
Data source version	GOMOS/6.01
Start time of products	13-11-2008 (13NOV2008 00:00:00)
Stop time of products	14-11-2008 (14NOV2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	302
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

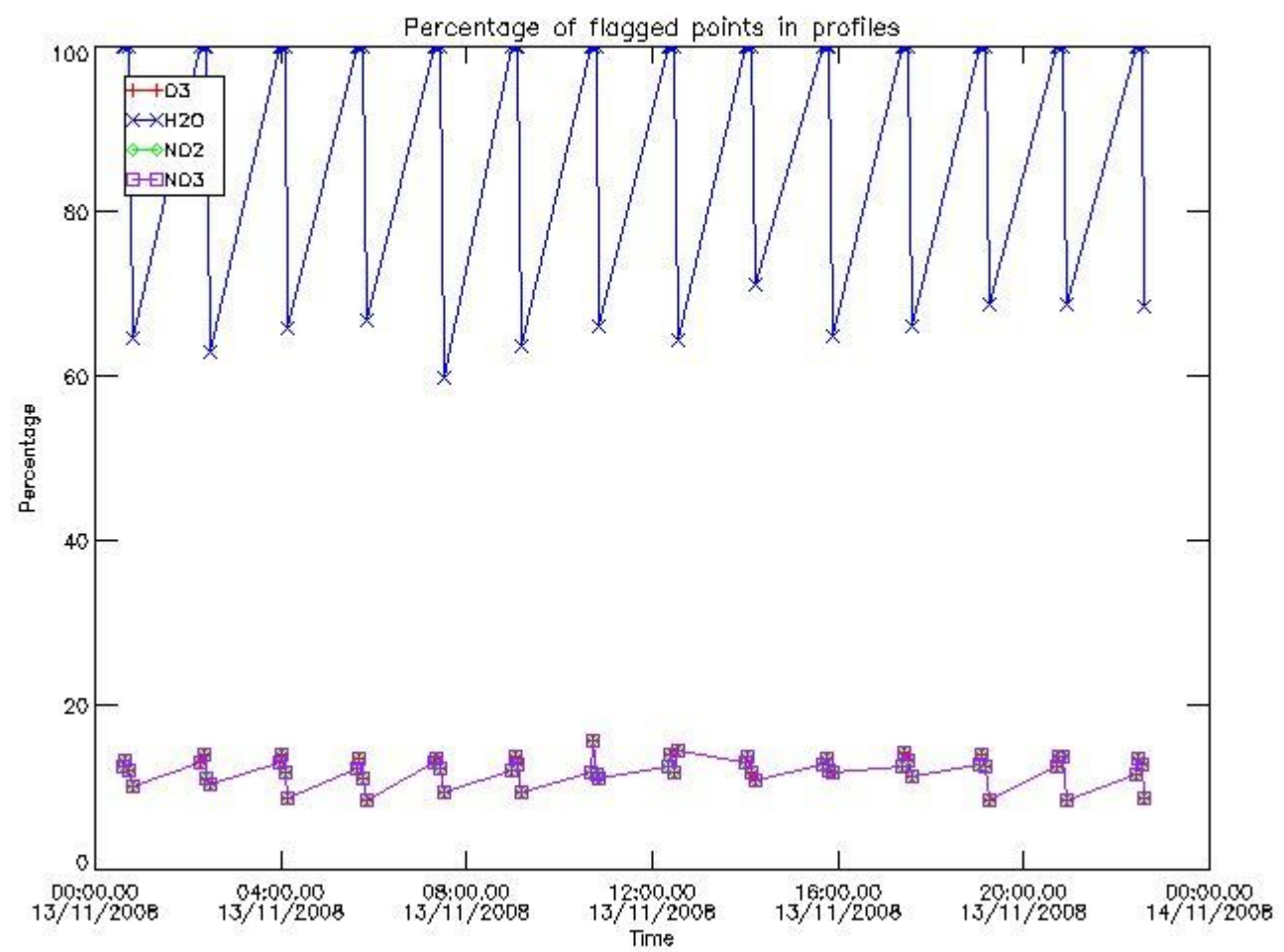
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20081113_000145_000000412073_00431_35054_1433.N1	13-NOV-2008 00:01:45	Bright	40.500	36	50Alp UMa	1.8000	6300.0	81	35054	No
2	GOM_NL__2PRFIN20081113_000323_000000402073_00431_35054_1434.N1	13-NOV-2008 00:03:23	Bright	40.000	82	48Bet UMa	2.3650	10600.	80	35054	No
3	GOM_NL__2PRFIN20081113_000532_000000362073_00431_35054_1435.N1	13-NOV-2008 00:05:32	Bright	35.500	39	85Eta UMa	1.8540	24000.	71	35054	No
4	GOM_NL__2PRFIN20081113_000902_000000422073_00431_35054_1436.N1	13-NOV-2008 00:09:02	Bright	42.000	152	12Alp2CVn	2.8900	11000.	84	35054	No
5	GOM_NL__2PRFIN20081113_001654_000000392073_00431_35054_1437.N1	13-NOV-2008 00:16:54	Bright	39.000	62	94Bet Leo	2.1360	9700.0	78	35054	No
6	GOM_NL__2PRFIN20081113_002028_000000342073_00431_35054_1438.N1	13-NOV-2008 00:20:28	Bright	34.000	121	29Gam Vir	2.7400	7200.0	68	35054	No
7	GOM_NL__2PRFIN20081113_002527_000000402073_00431_35054_1439.N1	13-NOV-2008 00:25:27	Twilight	40.000	100	4Gam Crv	2.5800	13100.	80	35054	No
8	GOM_NL__2PRFIN20081113_002657_000000422073_00431_35054_1440.N1	13-NOV-2008 00:26:57	Twilight	42.000	171	2Eps Crv	3.0010	4250.0	84	35054	No
9	GOM_NL__2PRFIN20081113_003607_000000412073_00431_35054_1441.N1	13-NOV-2008 00:36:07	Dark	41.000	113	Mu Vel	2.6920	5000.0	82	35054	No
10	GOM_NL__2PRFIN20081113_003912_000000392073_00432_35055_1378.N1	13-NOV-2008 00:39:12	Dark	38.500	124	The Car	2.7640	30000.	77	35055	No
11	GOM_NL__2PRFIN20081113_004338_000000472073_00432_35055_1379.N1	13-NOV-2008 00:43:38	Dark	46.500	34	Gam2Vel	1.7930	23000.	93	35055	No
12	GOM_NL__2PRFIN20081113_004826_000000502073_00432_35055_1380.N1	13-NOV-2008 00:48:26	Dark	50.000	2	Alp Car	-0.73600	7000.0	100	35055	No
13	GOM_NL__2PRFIN20081113_005725_000000402073_00432_35055_1381.N1	13-NOV-2008 00:57:25	Straylight	39.500	157	The1Eri	2.9060	9300.0	79	35055	No
14	GOM_NL__2PRFIN20081113_011030_000000542073_00432_35055_1382.N1	13-NOV-2008 01:10:30	Twilight	53.500	94	92Alp Cet	2.5260	3100.0	107	35055	No
15	GOM_NL__2PRFIN20081113_011515_000000382073_00432_35055_1383.N1	13-NOV-2008 01:15:15	Bright	37.500	105	6Bet Ari	2.6450	8900.0	75	35055	No
16	GOM_NL__2PRFIN20081113_011918_000000362073_00432_35055_1384.N1	13-NOV-2008 01:19:18	Bright	36.000	173	4Bet Tri	3.0040	8900.0	72	35055	No
17	GOM_NL__2PRFIN20081113_012122_000000372073_00432_35055_1385.N1	13-NOV-2008 01:21:22	Bright	37.000	73	57Gam1And	2.2600	13100.	74	35055	No
18	GOM_NL__2PRFIN20081113_012441_000000382073_00432_35055_1386.N1	13-NOV-2008 01:24:41	Bright	38.000	35	33Alp Per	1.7950	6250.0	76	35055	No
19	GOM_NL__2PRFIN20081113_012622_000000352073_00432_35055_1387.N1	13-NOV-2008 01:26:22	Bright	35.000	110	37Del Cas	2.6780	8900.0	70	35055	No
20	GOM_NL__2PRFIN20081113_013435_000000362073_00432_35055_1388.N1	13-NOV-2008 01:34:35	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	35055	No
21	GOM_NL__2PRFIN20081113_013852_000000372073_00432_35055_1389.N1	13-NOV-2008 01:38:52	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	35055	No
22	GOM_NL__2PRFIN20081113_014220_000000422073_00432_35055_1390.N1	13-NOV-2008 01:42:20	Bright	42.000	36	50Alp UMa	1.8000	6300.0	84	35055	No
23	GOM_NL__2PRFIN20081113_014359_000000602073_00432_35055_1391.N1	13-NOV-2008 01:43:59	Bright	60.000	82	48Bet UMa	2.3650	10600.	120	35055	No
24	GOM_NL__2PRFIN20081113_014608_000000362073_00432_35055_1392.N1	13-NOV-2008 01:46:08	Bright	35.500	39	85Eta UMa	1.8540	24000.	71	35055	No
25	GOM_NL__2PRFIN20081113_014938_000000352073_00432_35055_1393.N1	13-NOV-2008 01:49:38	Bright	34.500	152	12Alp2CVn	2.8900	11000.	69	35055	No
26	GOM_NL__2PRFIN20081113_015730_000000402073_00432_35055_1394.N1	13-NOV-2008 01:57:30	Bright	39.500	62	94Bet Leo	2.1360	9700.0	79	35055	No
27	GOM_NL__2PRFIN20081113_020105_000000342073_00432_35055_1395.N1	13-NOV-2008 02:01:05	Bright	34.000	121	29Gam Vir	2.7400	7200.0	68	35055	No
28	GOM_NL__2PRFIN20081113_020603_000000422073_00432_35055_1396.N1	13-NOV-2008 02:06:03	Twilight	42.000	100	4Gam Crv	2.5800	13100.	84	35055	No
29	GOM_NL__2PRFIN20081113_020734_000000442073_00432_35055_1397.N1	13-NOV-2008 02:07:34	Twilight	43.500	171	2Eps Crv	3.0010	4250.0	87	35055	No
30	GOM_NL__2PRFIN20081113_021644_000000392073_00432_35055_1398.N1	13-NOV-2008 02:16:44	Dark	39.000	113	Mu Vel	2.6920	5000.0	78	35055	No
31	GOM_NL__2PRFIN20081113_021948_000000372073_00433_35056_1446.N1	13-NOV-2008 02:19:48	Dark	36.500	124	The Car	2.7640	30000.	73	35056	No
32	GOM_NL__2PRFIN20081113_022415_000000462073_00433_35056_1447.N1	13-NOV-2008 02:24:15	Dark	46.000	34	Gam2Vel	1.7930	23000.	92	35056	No
33	GOM_NL__2PRFIN20081113_022902_000000492073_00433_35056_1448.N1	13-NOV-2008 02:29:02	Dark	49.000	2	Alp Car	-0.73600	7000.0	98	35056	No
34	GOM_NL__2PRFIN20081113_023801_000000402073_00433_35056_1449.N1	13-NOV-2008 02:38:01	Straylight	39.500	157	The1Eri	2.9060	9300.0	79	35056	No
35	GOM_NL__2PRFIN20081113_025106_000000472073_00433_35056_1450.N1	13-NOV-2008 02:51:06	Twilight	47.000	94	92Alp Cet	2.5260	3100.0	94	35056	No
36	GOM_NL__2PRFIN20081113_025551_000000372073_00433_35056_1451.N1	13-NOV-2008 02:55:51	Bright	36.500	105	6Bet Ari	2.6450	8900.0	73	35056	No
37	GOM_NL__2PRFIN20081113_025954_000000362073_00433_35056_1452.N1	13-NOV-2008 02:59:54	Bright	36.000	173	4Bet Tri	3.0040	8900.0	72	35056	No
38	GOM_NL__2PRFIN20081113_030158_000000392073_00433_35056_1453.N1	13-NOV-2008 03:01:58	Bright	39.000	73	57Gam1And	2.2600	13100.	78	35056	No
39	GOM_NL__2PRFIN20081113_030517_000000402073_00433_35056_1454.N1	13-NOV-2008 03:05:17	Bright	40.000	35	33Alp Per	1.7950	6250.0	80	35056	No
40	GOM_NL__2PRFIN20081113_030658_000000352073_00433_35056_1455.N1	13-NOV-2008 03:06:58	Bright	35.000	110	37Del Cas	2.6780	8900.0	70	35056	No
41	GOM_NL__2PRFIN20081113_031510_000000332073_00433_35056_1456.N1	13-NOV-2008 03:15:10	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	35056	No
42	GOM_NL__2PRFIN20081113_031928_000000362073_00433_35056_1457.N1	13-NOV-2008 03:19:28	Bright	35.500	60	7Bet UMi	2.0810	3950.0	71	35056	No

279	GOM_NL__2PRFIN20081113_220820_000000342073_00444_35067_1569.N1	13-NOV-2008 22:08:20	Bright	34.000	121	29Gam Vir	2.7400	7200.0	68	35067	No
280	GOM_NL__2PRFIN20081113_221319_000000402073_00444_35067_1570.N1	13-NOV-2008 22:13:19	Twilight	40.000	100	4Gam Crv	2.5800	13100.	80	35067	No
281	GOM_NL__2PRFIN20081113_221450_000000442073_00444_35067_1571.N1	13-NOV-2008 22:14:50	Twilight	43.500	171	2Eps Crv	3.0010	4250.0	87	35067	No
282	GOM_NL__2PRFIN20081113_222402_000000452073_00444_35067_1572.N1	13-NOV-2008 22:24:02	Dark	44.500	113	Mu Vel	2.6920	5000.0	89	35067	No
283	GOM_NL__2PRFIN20081113_222704_000000382073_00445_35068_1569.N1	13-NOV-2008 22:27:04	Dark	38.000	124	The Car	2.7640	30000.	76	35068	No
284	GOM_NL__2PRFIN20081113_223138_000000402073_00445_35068_1570.N1	13-NOV-2008 22:31:38	Dark	40.000	34	Gam2Vel	1.7930	23000.	80	35068	No
285	GOM_NL__2PRFIN20081113_223621_000000592073_00445_35068_1571.N1	13-NOV-2008 22:36:21	Dark	59.000	2	Alp Car	-0.73600	7000.0	118	35068	No
286	GOM_NL__2PRFIN20081113_224515_000000382073_00445_35068_1572.N1	13-NOV-2008 22:45:15	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	35068	No
287	GOM_NL__2PRFIN20081113_225816_000000502073_00445_35068_1573.N1	13-NOV-2008 22:58:16	Twilight	50.000	94	92Alp Cet	2.5260	3100.0	100	35068	No
288	GOM_NL__2PRFIN20081113_230302_000000362073_00445_35068_1574.N1	13-NOV-2008 23:03:02	Bright	36.000	105	6Bet Ari	2.6450	8900.0	72	35068	No
289	GOM_NL__2PRFIN20081113_230704_000000372073_00445_35068_1575.N1	13-NOV-2008 23:07:04	Bright	36.500	173	4Bet Tri	3.0040	8900.0	73	35068	No
290	GOM_NL__2PRFIN20081113_230908_000000382073_00445_35068_1576.N1	13-NOV-2008 23:09:08	Bright	37.500	73	57Gam1And	2.2600	13100.	75	35068	No
291	GOM_NL__2PRFIN20081113_231223_000000382073_00445_35068_1577.N1	13-NOV-2008 23:12:23	Bright	37.500	35	33Alp Per	1.7950	6250.0	75	35068	No
292	GOM_NL__2PRFIN20081113_231410_000000352073_00445_35068_1578.N1	13-NOV-2008 23:14:10	Bright	35.000	110	37Del Cas	2.6780	8900.0	70	35068	No
293	GOM_NL__2PRFIN20081113_232222_000000362073_00445_35068_1579.N1	13-NOV-2008 23:22:22	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	35068	No
294	GOM_NL__2PRFIN20081113_232641_000000322073_00445_35068_1580.N1	13-NOV-2008 23:26:41	Bright	32.000	60	7Bet UMi	2.0810	3950.0	64	35068	No
295	GOM_NL__2PRFIN20081113_233005_000000412073_00445_35068_1581.N1	13-NOV-2008 23:30:05	Bright	40.500	36	50Alp UMa	1.8000	6300.0	81	35068	No
296	GOM_NL__2PRFIN20081113_233143_000000412073_00445_35068_1582.N1	13-NOV-2008 23:31:43	Bright	40.500	82	48Bet UMa	2.3650	10600.	81	35068	No
297	GOM_NL__2PRFIN20081113_233357_000000342073_00445_35068_1583.N1	13-NOV-2008 23:33:57	Bright	34.000	39	85Eta UMa	1.8540	24000.	68	35068	No
298	GOM_NL__2PRFIN20081113_233726_000000352073_00445_35068_1584.N1	13-NOV-2008 23:37:26	Bright	35.000	152	12Alp2CVn	2.8900	11000.	70	35068	No
299	GOM_NL__2PRFIN20081113_234522_000000412073_00445_35068_1585.N1	13-NOV-2008 23:45:22	Bright	41.000	62	94Bet Leo	2.1360	9700.0	82	35068	No
300	GOM_NL__2PRFIN20081113_234856_000000352073_00445_35068_1586.N1	13-NOV-2008 23:48:56	Bright	34.500	121	29Gam Vir	2.7400	7200.0	69	35068	No
301	GOM_NL__2PRFIN20081113_235356_000000402073_00445_35068_1587.N1	13-NOV-2008 23:53:56	Twilight	39.500	100	4Gam Crv	2.5800	13100.	79	35068	No
302	GOM_NL__2PRFIN20081113_235526_000000402073_00445_35068_1588.N1	13-NOV-2008 23:55:26	Twilight	39.500	171	2Eps Crv	3.0010	4250.0	79	35068	No

3. Quality information per product

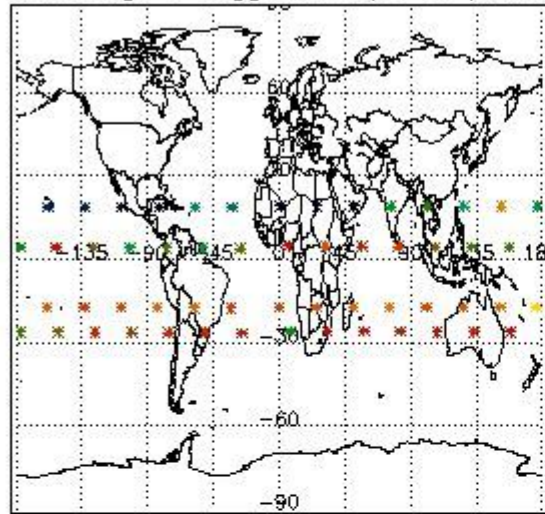
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

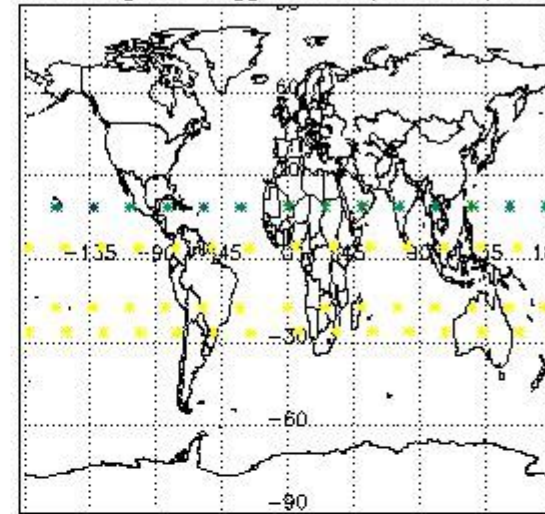


3.2 Plot quality information per product (world map)

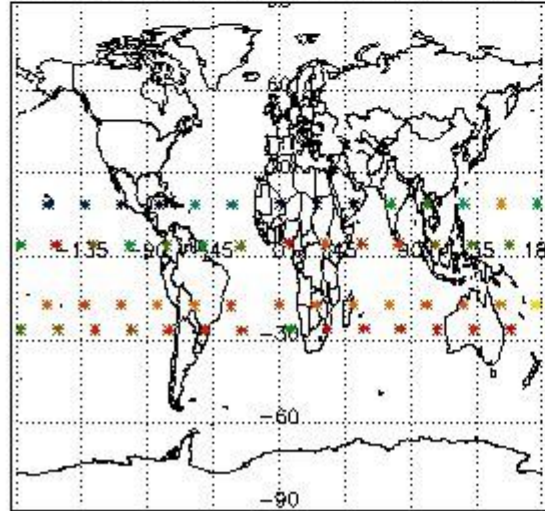
Percentage of flagged data per O3 profile



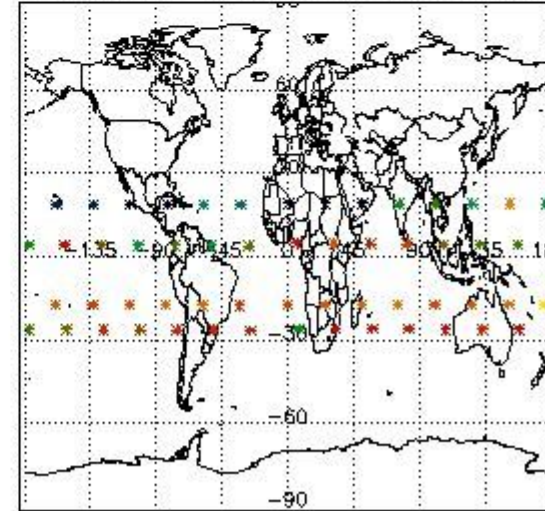
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

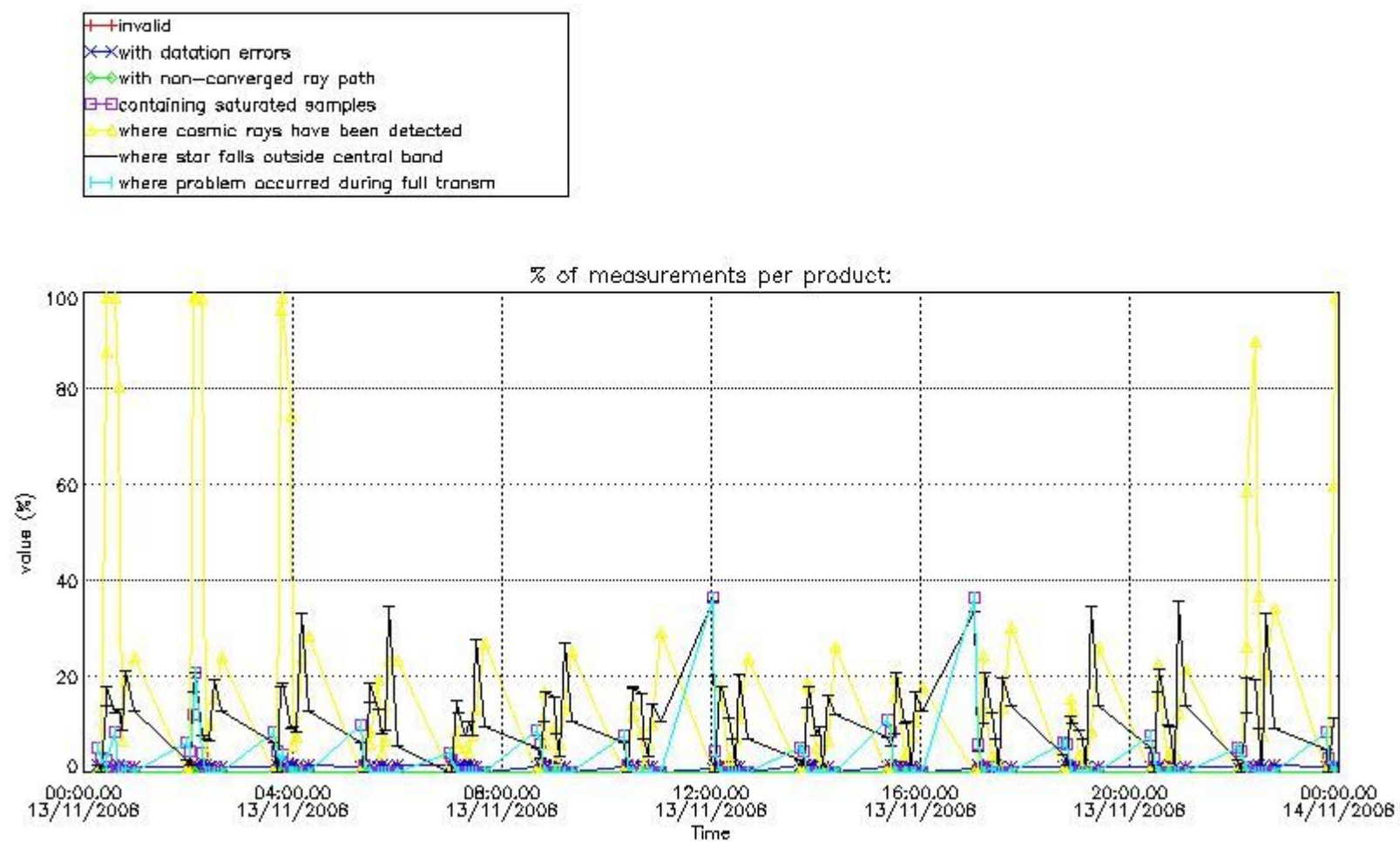


4. Level 1 quality information per product

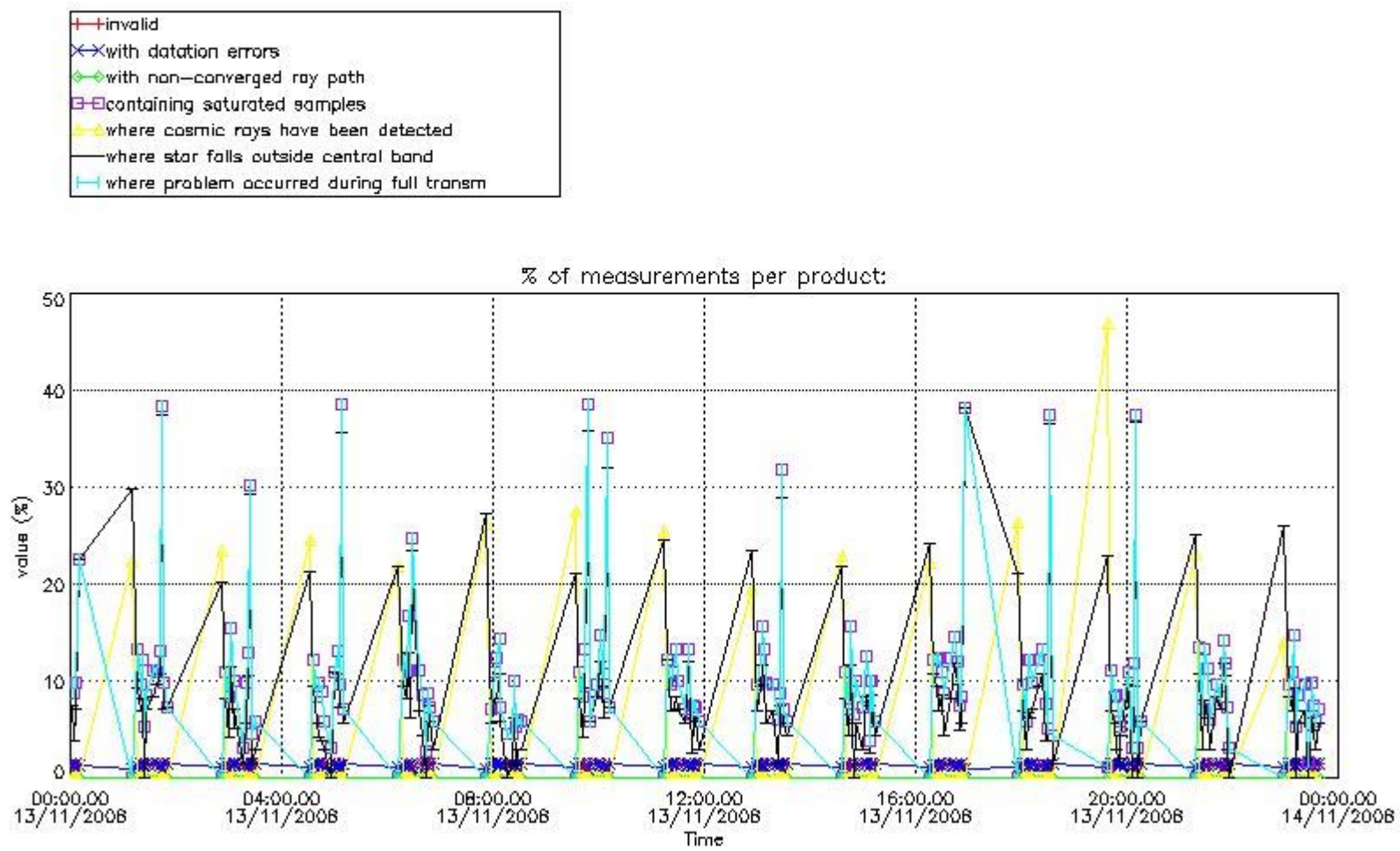
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



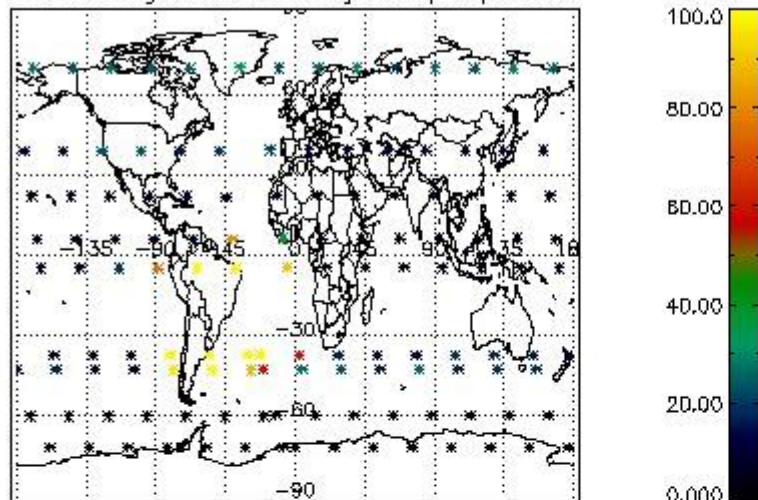
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



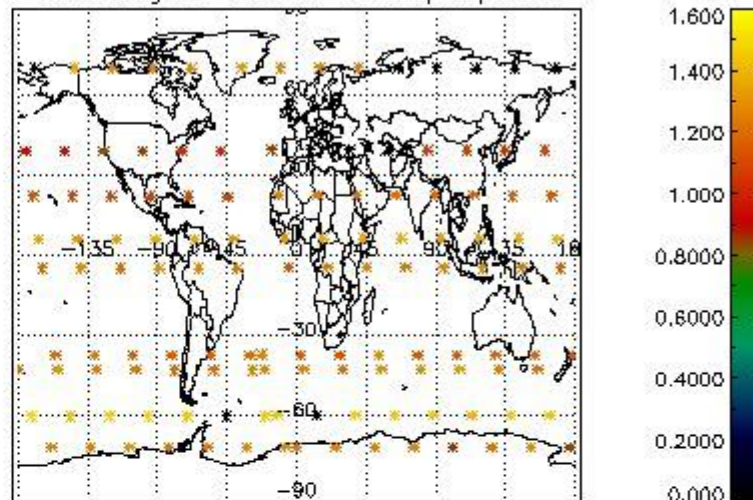
4.2 Plot quality information per product coming from level 1b processing (world map)

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

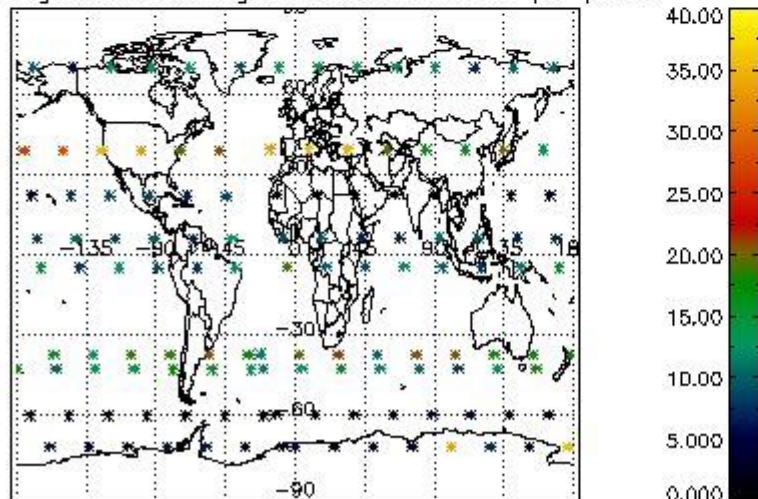
Percentage of cosmic ray hits per profile



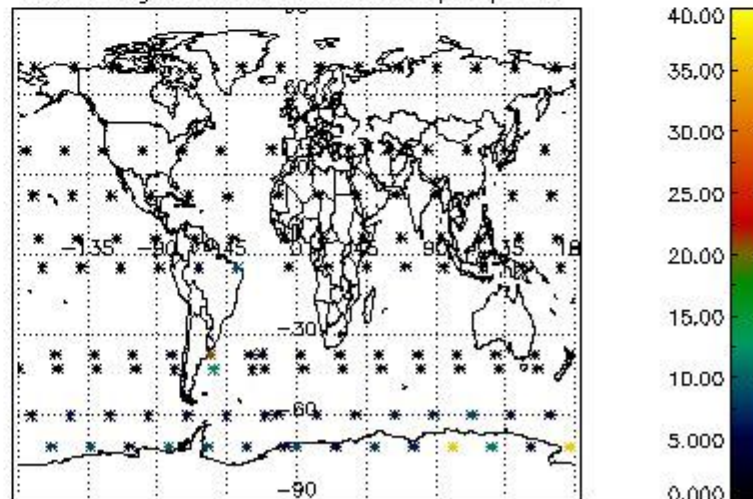
Percentage of datation errors per profile



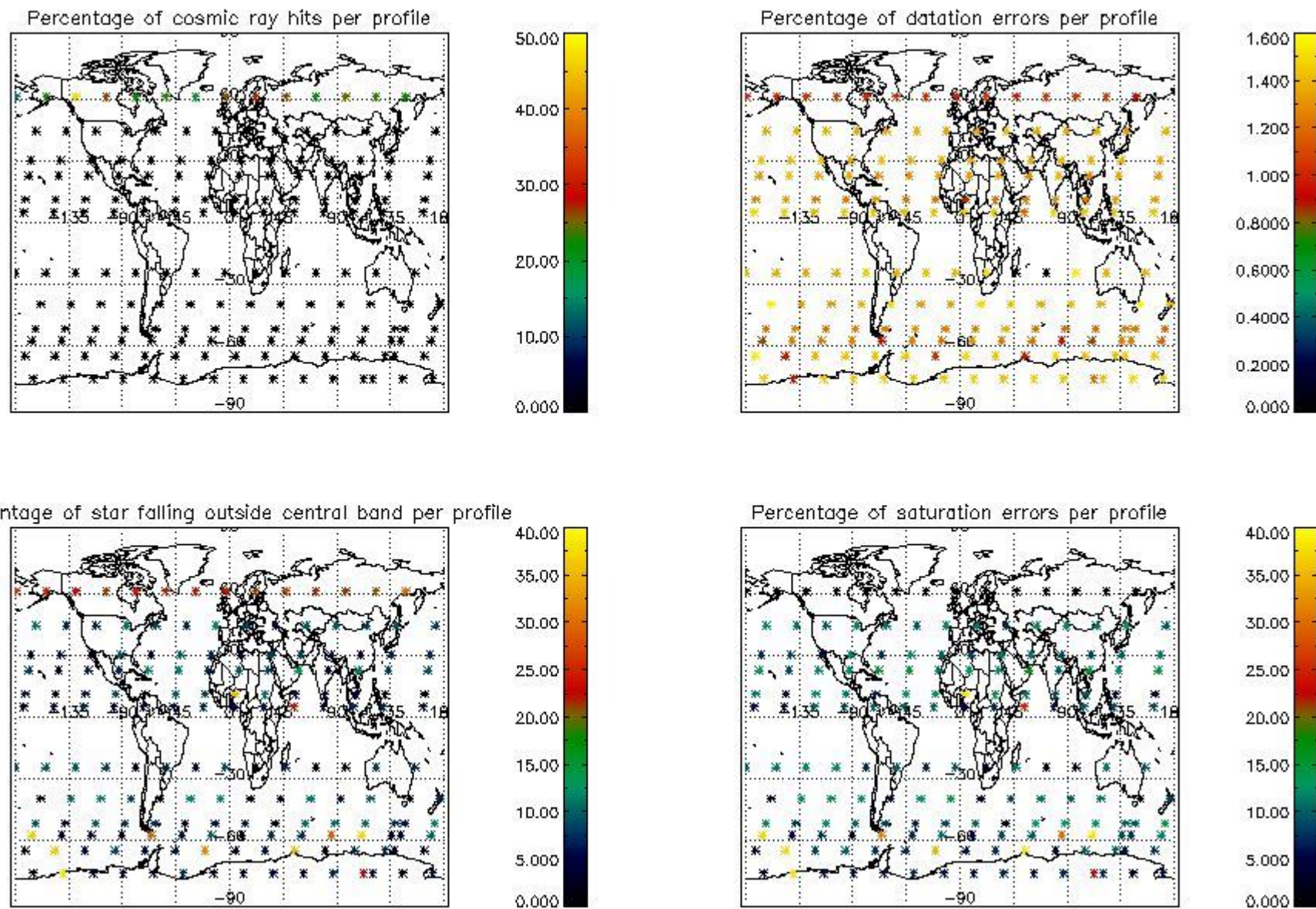
Percentage of star falling outside central band per profile



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

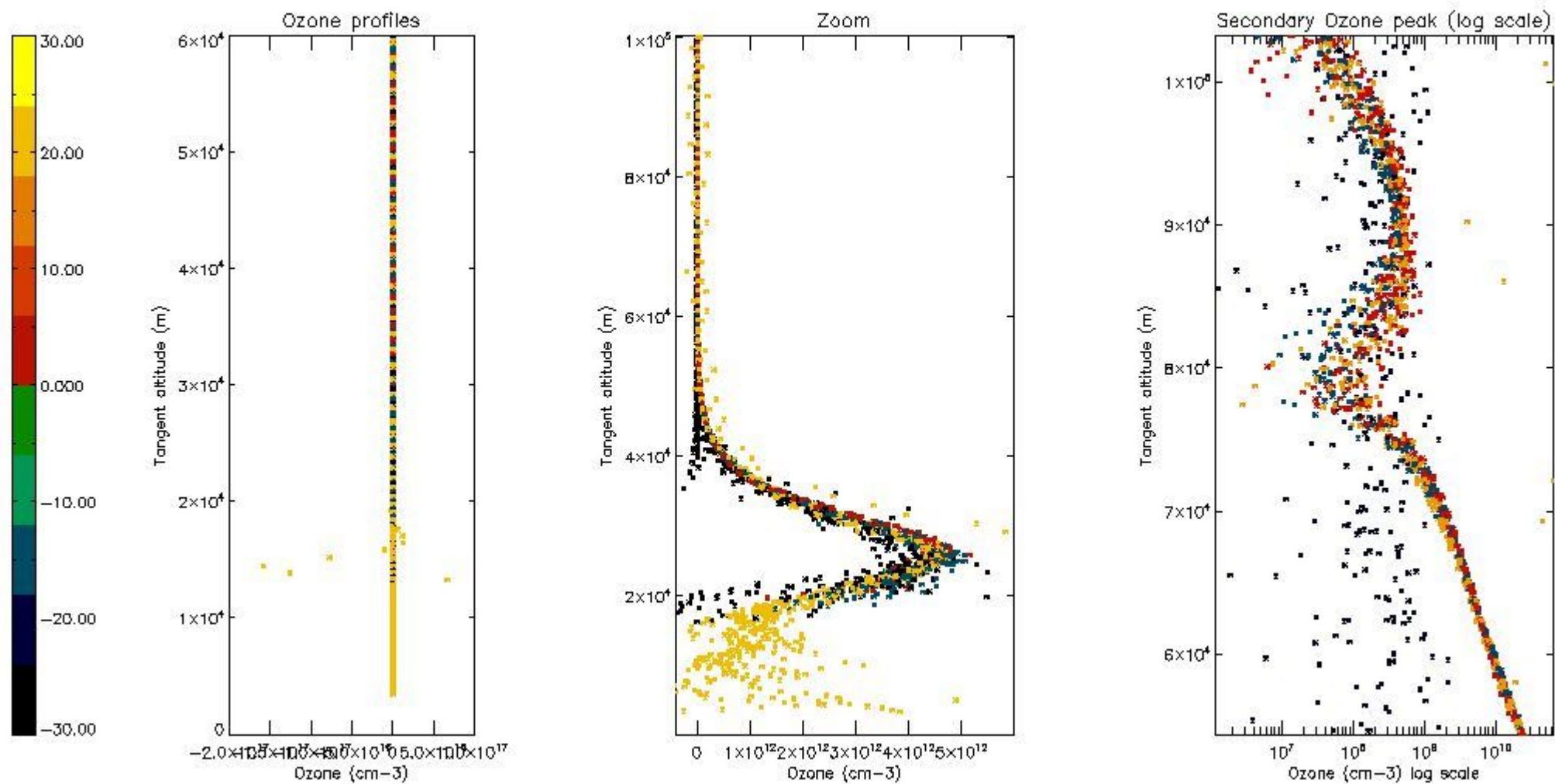
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	21
STD < 20	12

STD < 10	10
STD < 5	8

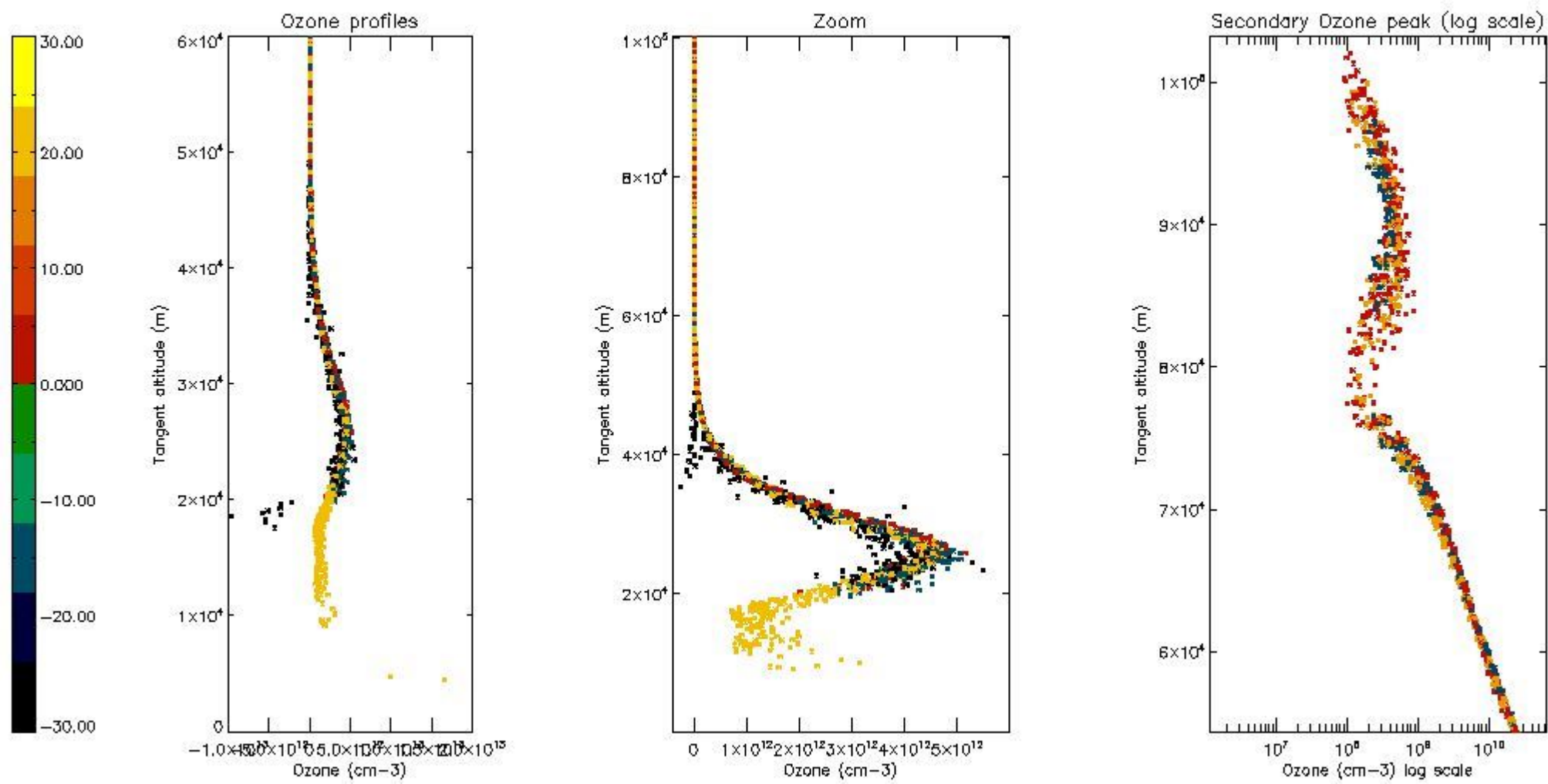
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



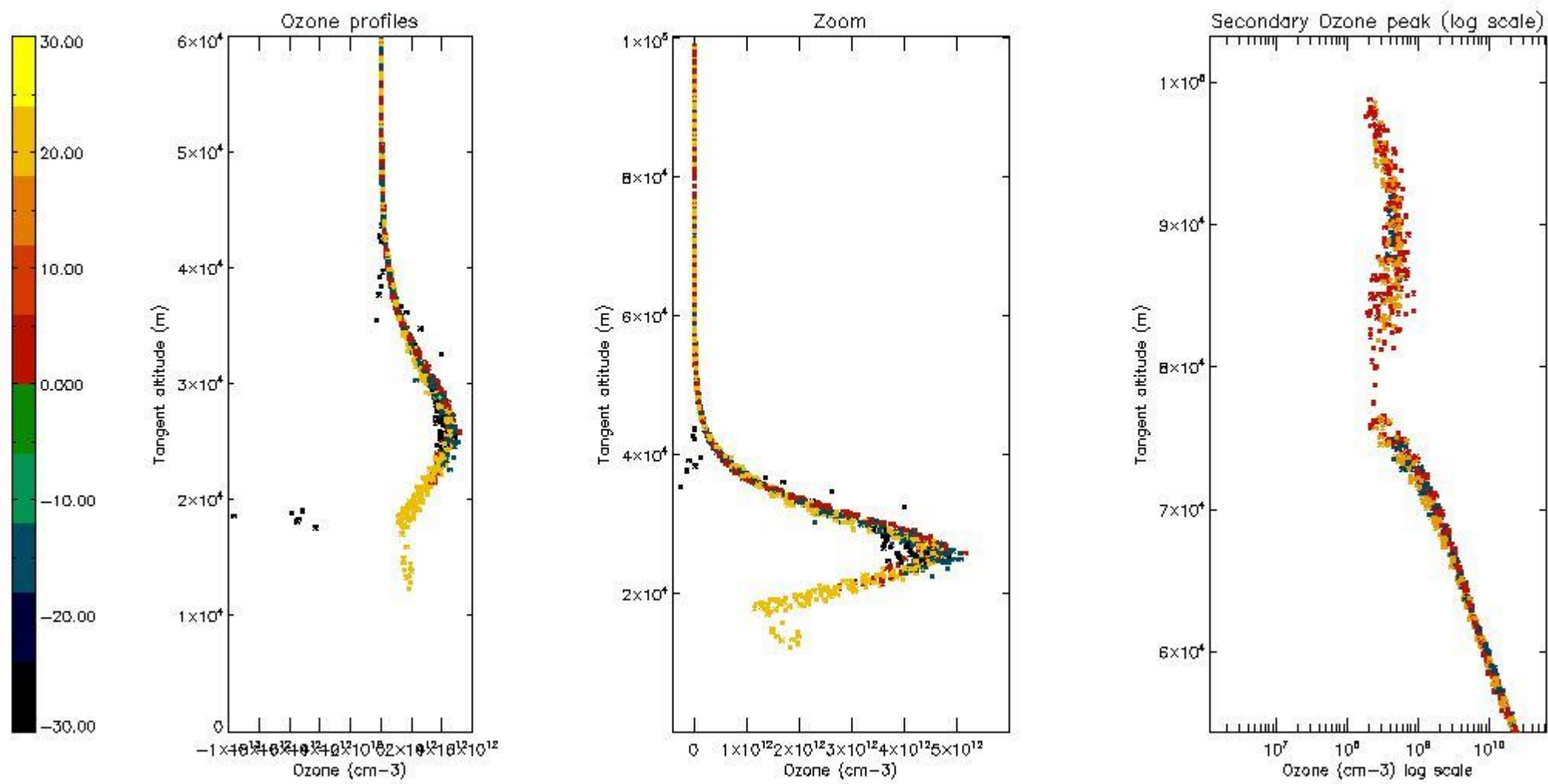
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



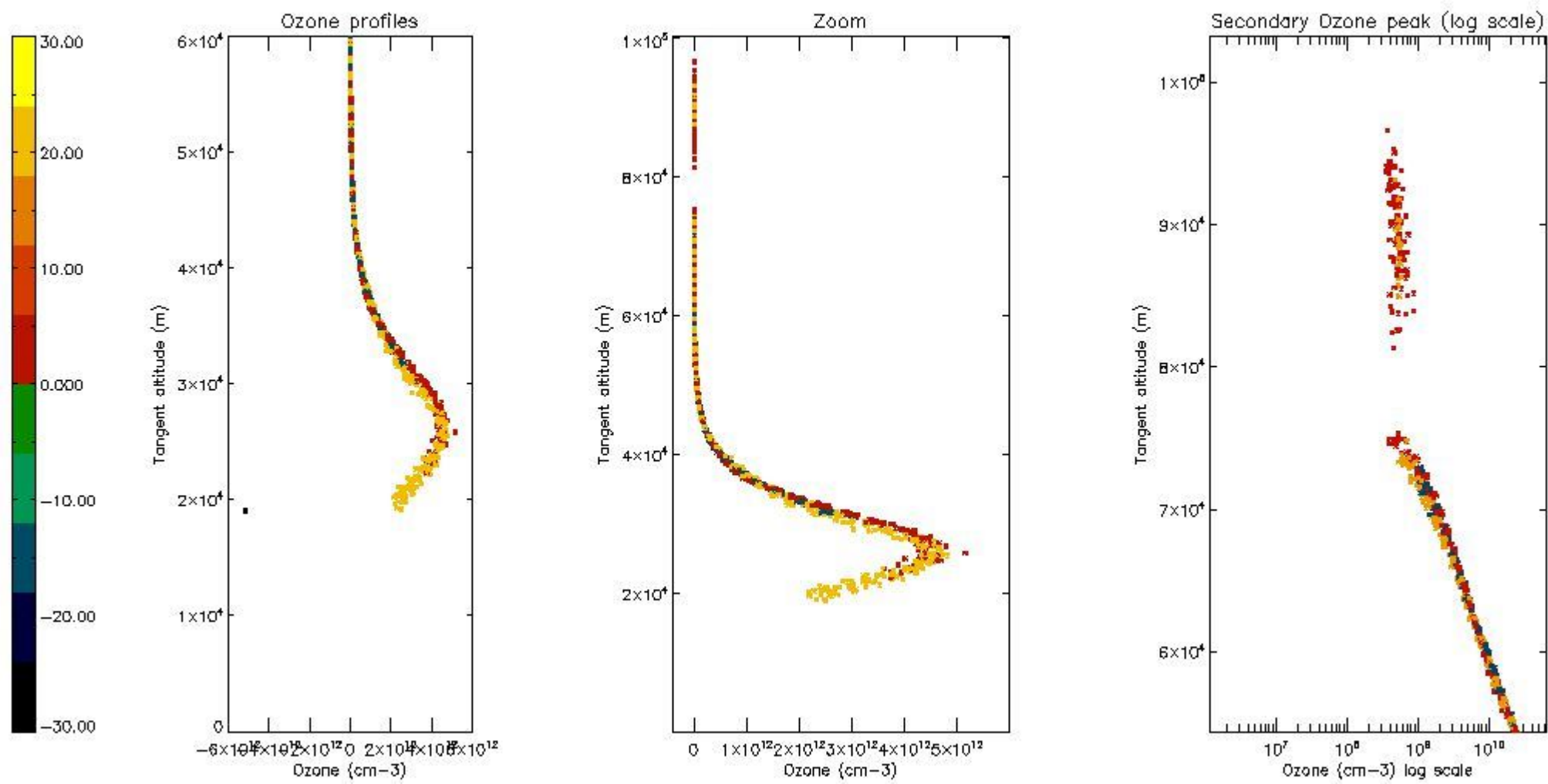
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



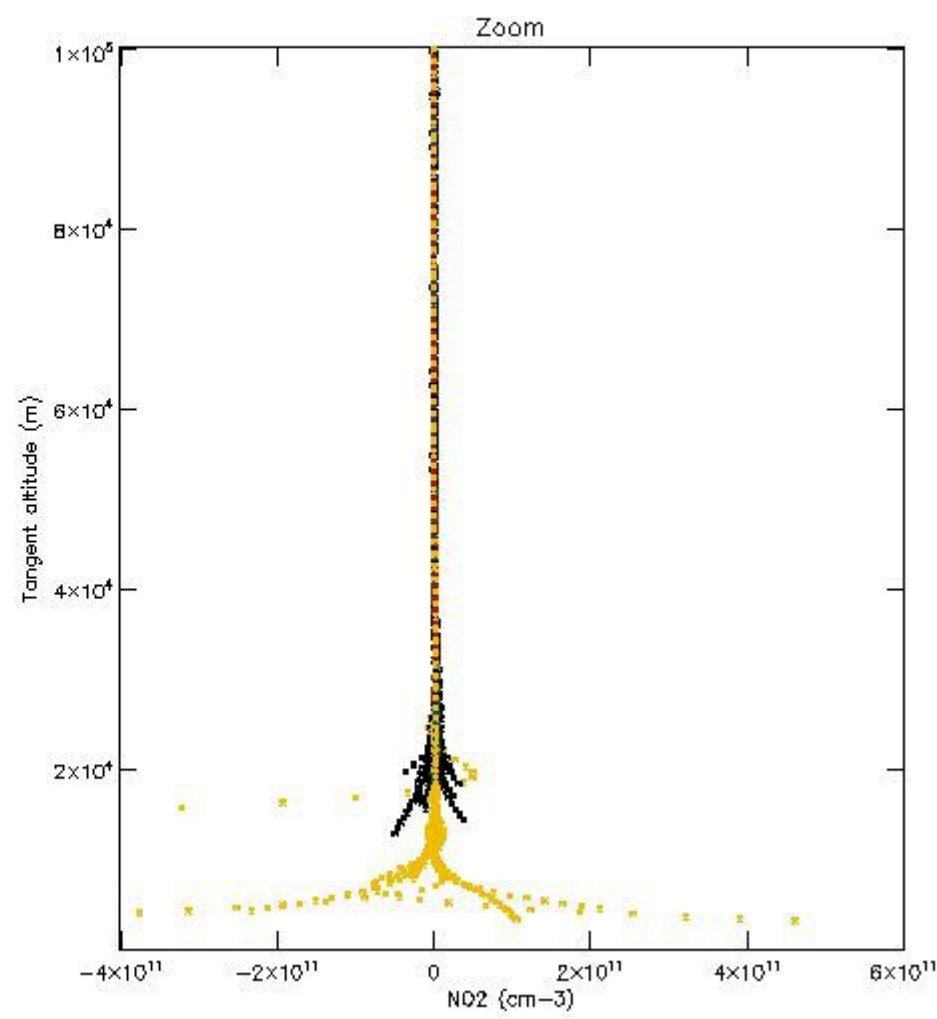
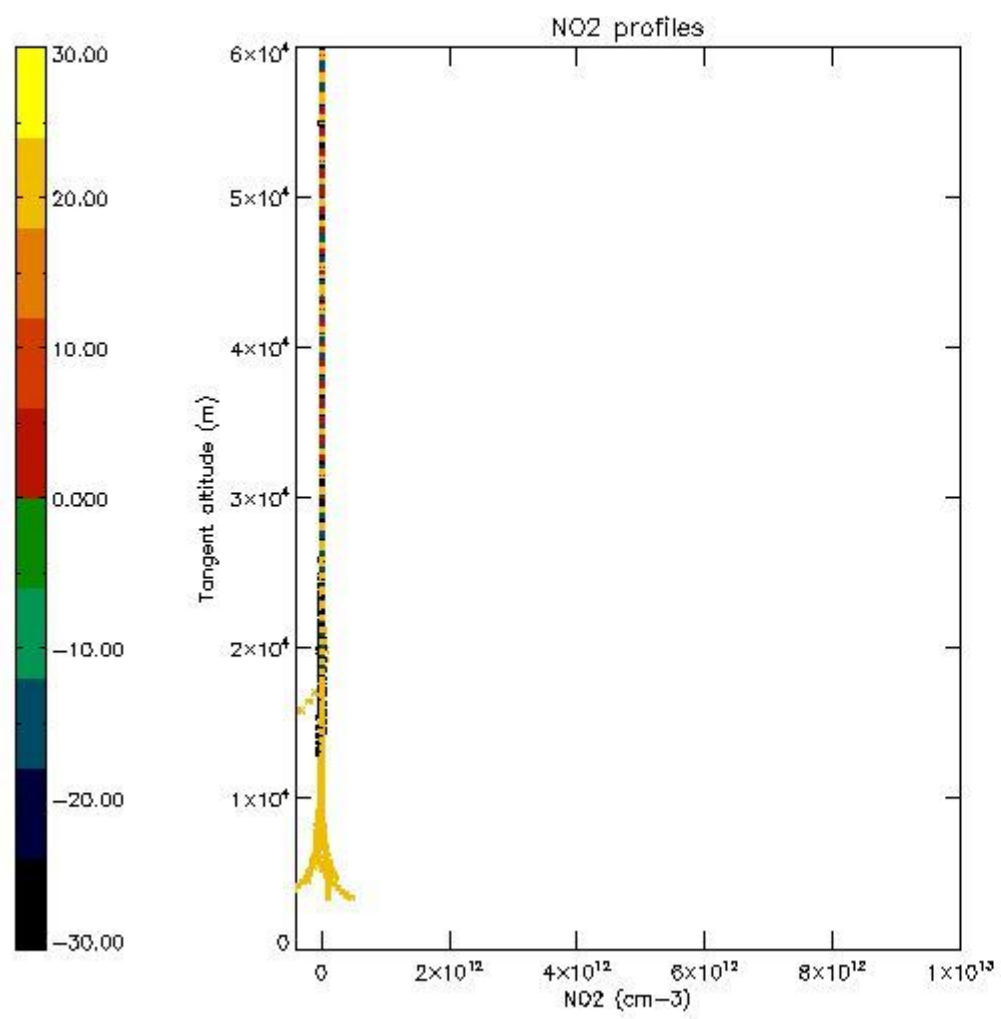
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



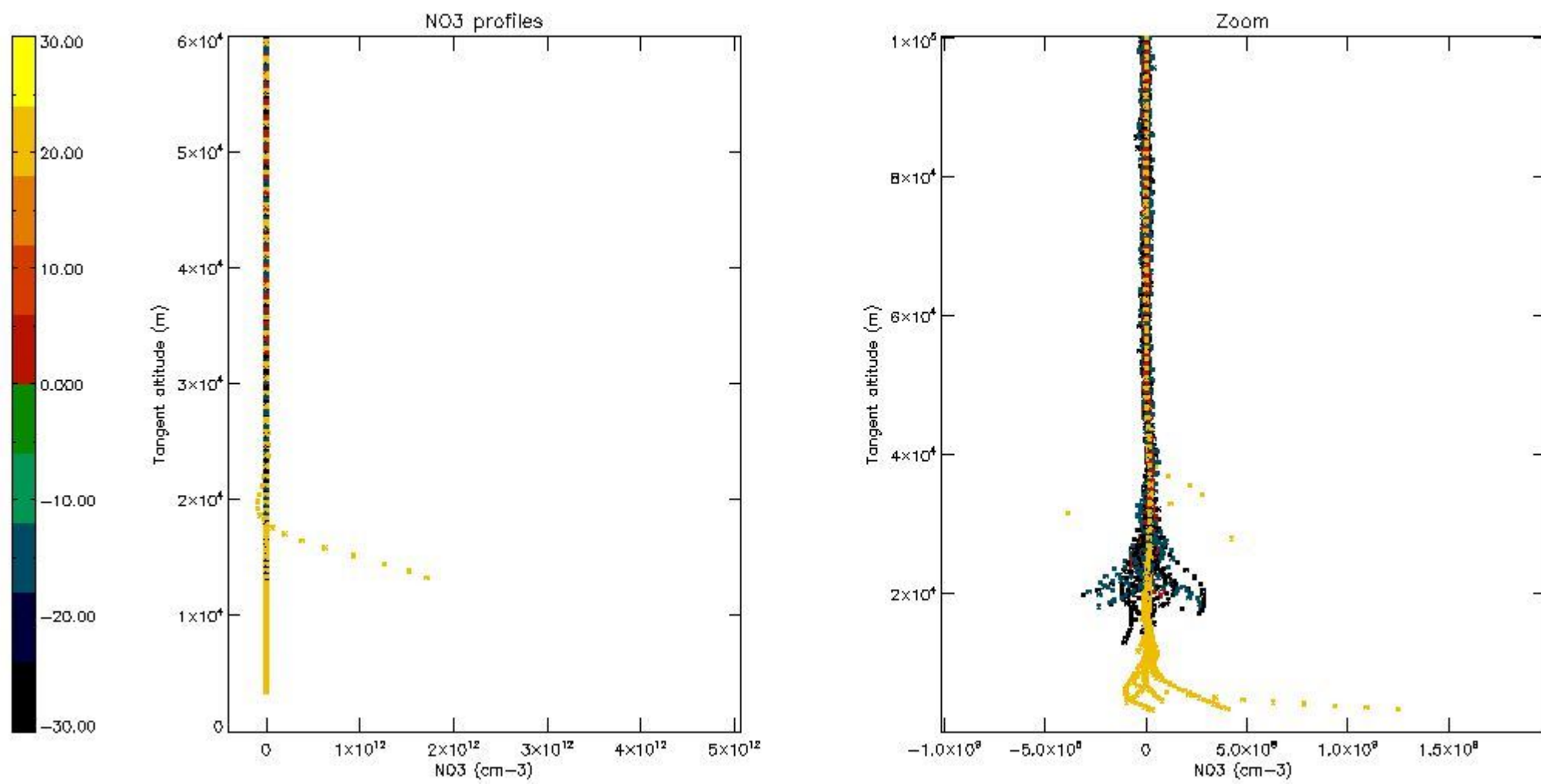
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



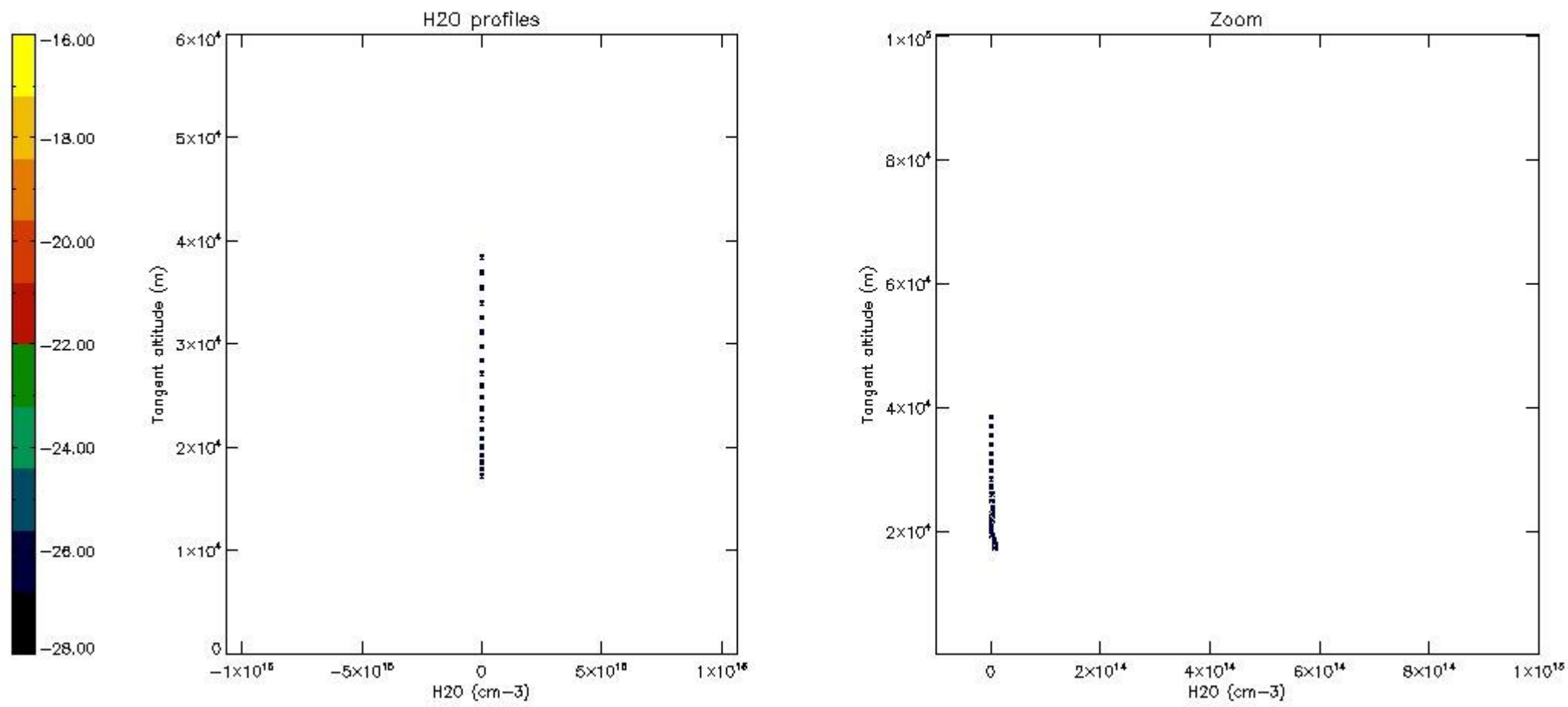
5.7 Plot NO3 profiles for all STD (dark without errors)

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	13-NOV-2008 00:01:45
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	13-NOV-2008 00:01:45
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	13-NOV-2008 00:01:45

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	25APR2013 22:01:46
Data source version	GOMOS/6.01
Start time of products	13-11-2008 (13NOV2008 00:00:00)
Stop time of products	14-11-2008 (14NOV2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	302
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

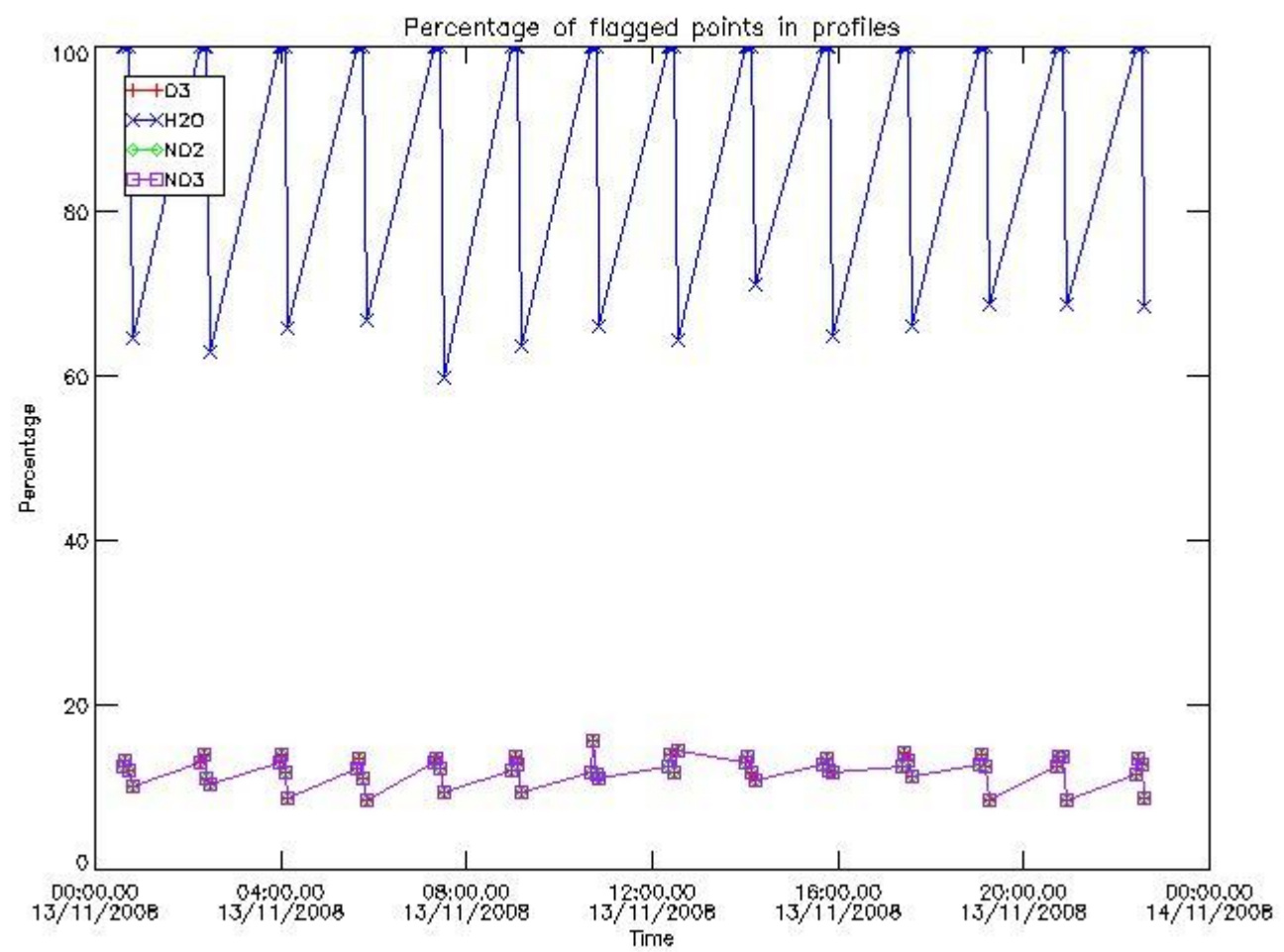
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20081113_000145_000000412073_00431_35054_1433.N1	13-NOV-2008 00:01:45	Bright	40.500	36	50Alp UMa	1.8000	6300.0	81	35054	No
2	GOM_NL__2PRFIN20081113_000323_000000402073_00431_35054_1434.N1	13-NOV-2008 00:03:23	Bright	40.000	82	48Bet UMa	2.3650	10600.	80	35054	No
3	GOM_NL__2PRFIN20081113_000532_000000362073_00431_35054_1435.N1	13-NOV-2008 00:05:32	Bright	35.500	39	85Eta UMa	1.8540	24000.	71	35054	No
4	GOM_NL__2PRFIN20081113_000902_000000422073_00431_35054_1436.N1	13-NOV-2008 00:09:02	Bright	42.000	152	12Alp2CVn	2.8900	11000.	84	35054	No
5	GOM_NL__2PRFIN20081113_001654_000000392073_00431_35054_1437.N1	13-NOV-2008 00:16:54	Bright	39.000	62	94Bet Leo	2.1360	9700.0	78	35054	No
6	GOM_NL__2PRFIN20081113_002028_000000342073_00431_35054_1438.N1	13-NOV-2008 00:20:28	Bright	34.000	121	29Gam Vir	2.7400	7200.0	68	35054	No
7	GOM_NL__2PRFIN20081113_002527_000000402073_00431_35054_1439.N1	13-NOV-2008 00:25:27	Twilight	40.000	100	4Gam Crv	2.5800	13100.	80	35054	No
8	GOM_NL__2PRFIN20081113_002657_000000422073_00431_35054_1440.N1	13-NOV-2008 00:26:57	Twilight	42.000	171	2Eps Crv	3.0010	4250.0	84	35054	No
9	GOM_NL__2PRFIN20081113_003607_000000412073_00431_35054_1441.N1	13-NOV-2008 00:36:07	Dark	41.000	113	Mu Vel	2.6920	5000.0	82	35054	No
10	GOM_NL__2PRFIN20081113_003912_000000392073_00432_35055_1378.N1	13-NOV-2008 00:39:12	Dark	38.500	124	The Car	2.7640	30000.	77	35055	No
11	GOM_NL__2PRFIN20081113_004338_000000472073_00432_35055_1379.N1	13-NOV-2008 00:43:38	Dark	46.500	34	Gam2Vel	1.7930	23000.	93	35055	No
12	GOM_NL__2PRFIN20081113_004826_000000502073_00432_35055_1380.N1	13-NOV-2008 00:48:26	Dark	50.000	2	Alp Car	-0.73600	7000.0	100	35055	No
13	GOM_NL__2PRFIN20081113_005725_000000402073_00432_35055_1381.N1	13-NOV-2008 00:57:25	Straylight	39.500	157	The1Eri	2.9060	9300.0	79	35055	No
14	GOM_NL__2PRFIN20081113_011030_000000542073_00432_35055_1382.N1	13-NOV-2008 01:10:30	Twilight	53.500	94	92Alp Cet	2.5260	3100.0	107	35055	No
15	GOM_NL__2PRFIN20081113_011515_000000382073_00432_35055_1383.N1	13-NOV-2008 01:15:15	Bright	37.500	105	6Bet Ari	2.6450	8900.0	75	35055	No
16	GOM_NL__2PRFIN20081113_011918_000000362073_00432_35055_1384.N1	13-NOV-2008 01:19:18	Bright	36.000	173	4Bet Tri	3.0040	8900.0	72	35055	No
17	GOM_NL__2PRFIN20081113_012122_000000372073_00432_35055_1385.N1	13-NOV-2008 01:21:22	Bright	37.000	73	57Gam1And	2.2600	13100.	74	35055	No
18	GOM_NL__2PRFIN20081113_012441_000000382073_00432_35055_1386.N1	13-NOV-2008 01:24:41	Bright	38.000	35	33Alp Per	1.7950	6250.0	76	35055	No
19	GOM_NL__2PRFIN20081113_012622_000000352073_00432_35055_1387.N1	13-NOV-2008 01:26:22	Bright	35.000	110	37Del Cas	2.6780	8900.0	70	35055	No
20	GOM_NL__2PRFIN20081113_013435_000000362073_00432_35055_1388.N1	13-NOV-2008 01:34:35	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	35055	No
21	GOM_NL__2PRFIN20081113_013852_000000372073_00432_35055_1389.N1	13-NOV-2008 01:38:52	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	35055	No
22	GOM_NL__2PRFIN20081113_014220_000000422073_00432_35055_1390.N1	13-NOV-2008 01:42:20	Bright	42.000	36	50Alp UMa	1.8000	6300.0	84	35055	No
23	GOM_NL__2PRFIN20081113_014359_000000602073_00432_35055_1391.N1	13-NOV-2008 01:43:59	Bright	60.000	82	48Bet UMa	2.3650	10600.	120	35055	No
24	GOM_NL__2PRFIN20081113_014608_000000362073_00432_35055_1392.N1	13-NOV-2008 01:46:08	Bright	35.500	39	85Eta UMa	1.8540	24000.	71	35055	No
25	GOM_NL__2PRFIN20081113_014938_000000352073_00432_35055_1393.N1	13-NOV-2008 01:49:38	Bright	34.500	152	12Alp2CVn	2.8900	11000.	69	35055	No
26	GOM_NL__2PRFIN20081113_015730_000000402073_00432_35055_1394.N1	13-NOV-2008 01:57:30	Bright	39.500	62	94Bet Leo	2.1360	9700.0	79	35055	No
27	GOM_NL__2PRFIN20081113_020105_000000342073_00432_35055_1395.N1	13-NOV-2008 02:01:05	Bright	34.000	121	29Gam Vir	2.7400	7200.0	68	35055	No
28	GOM_NL__2PRFIN20081113_020603_000000422073_00432_35055_1396.N1	13-NOV-2008 02:06:03	Twilight	42.000	100	4Gam Crv	2.5800	13100.	84	35055	No
29	GOM_NL__2PRFIN20081113_020734_000000442073_00432_35055_1397.N1	13-NOV-2008 02:07:34	Twilight	43.500	171	2Eps Crv	3.0010	4250.0	87	35055	No
30	GOM_NL__2PRFIN20081113_021644_000000392073_00432_35055_1398.N1	13-NOV-2008 02:16:44	Dark	39.000	113	Mu Vel	2.6920	5000.0	78	35055	No
31	GOM_NL__2PRFIN20081113_021948_000000372073_00433_35056_1446.N1	13-NOV-2008 02:19:48	Dark	36.500	124	The Car	2.7640	30000.	73	35056	No
32	GOM_NL__2PRFIN20081113_022415_000000462073_00433_35056_1447.N1	13-NOV-2008 02:24:15	Dark	46.000	34	Gam2Vel	1.7930	23000.	92	35056	No
33	GOM_NL__2PRFIN20081113_022902_000000492073_00433_35056_1448.N1	13-NOV-2008 02:29:02	Dark	49.000	2	Alp Car	-0.73600	7000.0	98	35056	No
34	GOM_NL__2PRFIN20081113_023801_000000402073_00433_35056_1449.N1	13-NOV-2008 02:38:01	Straylight	39.500	157	The1Eri	2.9060	9300.0	79	35056	No
35	GOM_NL__2PRFIN20081113_025106_000000472073_00433_35056_1450.N1	13-NOV-2008 02:51:06	Twilight	47.000	94	92Alp Cet	2.5260	3100.0	94	35056	No
36	GOM_NL__2PRFIN20081113_025551_000000372073_00433_35056_1451.N1	13-NOV-2008 02:55:51	Bright	36.500	105	6Bet Ari	2.6450	8900.0	73	35056	No
37	GOM_NL__2PRFIN20081113_025954_000000362073_00433_35056_1452.N1	13-NOV-2008 02:59:54	Bright	36.000	173	4Bet Tri	3.0040	8900.0	72	35056	No
38	GOM_NL__2PRFIN20081113_030158_000000392073_00433_35056_1453.N1	13-NOV-2008 03:01:58	Bright	39.000	73	57Gam1And	2.2600	13100.	78	35056	No
39	GOM_NL__2PRFIN20081113_030517_000000402073_00433_35056_1454.N1	13-NOV-2008 03:05:17	Bright	40.000	35	33Alp Per	1.7950	6250.0	80	35056	No
40	GOM_NL__2PRFIN20081113_030658_000000352073_00433_35056_1455.N1	13-NOV-2008 03:06:58	Bright	35.000	110	37Del Cas	2.6780	8900.0	70	35056	No
41	GOM_NL__2PRFIN20081113_031510_000000332073_00433_35056_1456.N1	13-NOV-2008 03:15:10	Bright	32.500	49	1Alp UMi	1.9900	6300.0	65	35056	No
42	GOM_NL__2PRFIN20081113_031928_000000362073_00433_35056_1457.N1	13-NOV-2008 03:19:28	Bright	35.500	60	7Bet UMi	2.0810	3950.0	71	35056	No

279	GOM_NL__2PRFIN20081113_220820_000000342073_00444_35067_1569.N1	13-NOV-2008 22:08:20	Bright	34.000	121	29Gam Vir	2.7400	7200.0	68	35067	No
280	GOM_NL__2PRFIN20081113_221319_000000402073_00444_35067_1570.N1	13-NOV-2008 22:13:19	Twilight	40.000	100	4Gam Crv	2.5800	13100.	80	35067	No
281	GOM_NL__2PRFIN20081113_221450_000000442073_00444_35067_1571.N1	13-NOV-2008 22:14:50	Twilight	43.500	171	2Eps Crv	3.0010	4250.0	87	35067	No
282	GOM_NL__2PRFIN20081113_222402_000000452073_00444_35067_1572.N1	13-NOV-2008 22:24:02	Dark	44.500	113	Mu Vel	2.6920	5000.0	89	35067	No
283	GOM_NL__2PRFIN20081113_222704_000000382073_00445_35068_1569.N1	13-NOV-2008 22:27:04	Dark	38.000	124	The Car	2.7640	30000.	76	35068	No
284	GOM_NL__2PRFIN20081113_223138_000000402073_00445_35068_1570.N1	13-NOV-2008 22:31:38	Dark	40.000	34	Gam2Vel	1.7930	23000.	80	35068	No
285	GOM_NL__2PRFIN20081113_223621_000000592073_00445_35068_1571.N1	13-NOV-2008 22:36:21	Dark	59.000	2	Alp Car	-0.73600	7000.0	118	35068	No
286	GOM_NL__2PRFIN20081113_224515_000000382073_00445_35068_1572.N1	13-NOV-2008 22:45:15	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	35068	No
287	GOM_NL__2PRFIN20081113_225816_000000502073_00445_35068_1573.N1	13-NOV-2008 22:58:16	Twilight	50.000	94	92Alp Cet	2.5260	3100.0	100	35068	No
288	GOM_NL__2PRFIN20081113_230302_000000362073_00445_35068_1574.N1	13-NOV-2008 23:03:02	Bright	36.000	105	6Bet Ari	2.6450	8900.0	72	35068	No
289	GOM_NL__2PRFIN20081113_230704_000000372073_00445_35068_1575.N1	13-NOV-2008 23:07:04	Bright	36.500	173	4Bet Tri	3.0040	8900.0	73	35068	No
290	GOM_NL__2PRFIN20081113_230908_000000382073_00445_35068_1576.N1	13-NOV-2008 23:09:08	Bright	37.500	73	57Gam1And	2.2600	13100.	75	35068	No
291	GOM_NL__2PRFIN20081113_231223_000000382073_00445_35068_1577.N1	13-NOV-2008 23:12:23	Bright	37.500	35	33Alp Per	1.7950	6250.0	75	35068	No
292	GOM_NL__2PRFIN20081113_231410_000000352073_00445_35068_1578.N1	13-NOV-2008 23:14:10	Bright	35.000	110	37Del Cas	2.6780	8900.0	70	35068	No
293	GOM_NL__2PRFIN20081113_232222_000000362073_00445_35068_1579.N1	13-NOV-2008 23:22:22	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	35068	No
294	GOM_NL__2PRFIN20081113_232641_000000322073_00445_35068_1580.N1	13-NOV-2008 23:26:41	Bright	32.000	60	7Bet UMi	2.0810	3950.0	64	35068	No
295	GOM_NL__2PRFIN20081113_233005_000000412073_00445_35068_1581.N1	13-NOV-2008 23:30:05	Bright	40.500	36	50Alp UMa	1.8000	6300.0	81	35068	No
296	GOM_NL__2PRFIN20081113_233143_000000412073_00445_35068_1582.N1	13-NOV-2008 23:31:43	Bright	40.500	82	48Bet UMa	2.3650	10600.	81	35068	No
297	GOM_NL__2PRFIN20081113_233357_000000342073_00445_35068_1583.N1	13-NOV-2008 23:33:57	Bright	34.000	39	85Eta UMa	1.8540	24000.	68	35068	No
298	GOM_NL__2PRFIN20081113_233726_000000352073_00445_35068_1584.N1	13-NOV-2008 23:37:26	Bright	35.000	152	12Alp2CVn	2.8900	11000.	70	35068	No
299	GOM_NL__2PRFIN20081113_234522_000000412073_00445_35068_1585.N1	13-NOV-2008 23:45:22	Bright	41.000	62	94Bet Leo	2.1360	9700.0	82	35068	No
300	GOM_NL__2PRFIN20081113_234856_000000352073_00445_35068_1586.N1	13-NOV-2008 23:48:56	Bright	34.500	121	29Gam Vir	2.7400	7200.0	69	35068	No
301	GOM_NL__2PRFIN20081113_235356_000000402073_00445_35068_1587.N1	13-NOV-2008 23:53:56	Twilight	39.500	100	4Gam Crv	2.5800	13100.	79	35068	No
302	GOM_NL__2PRFIN20081113_235526_000000402073_00445_35068_1588.N1	13-NOV-2008 23:55:26	Twilight	39.500	171	2Eps Crv	3.0010	4250.0	79	35068	No

3. Quality information per product

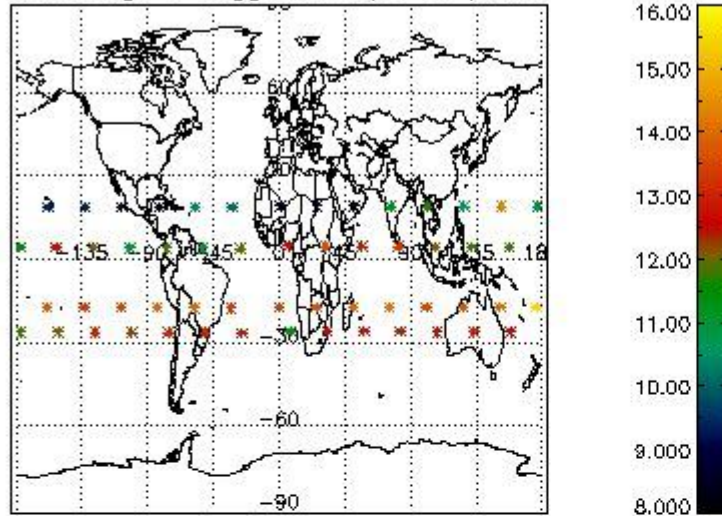
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

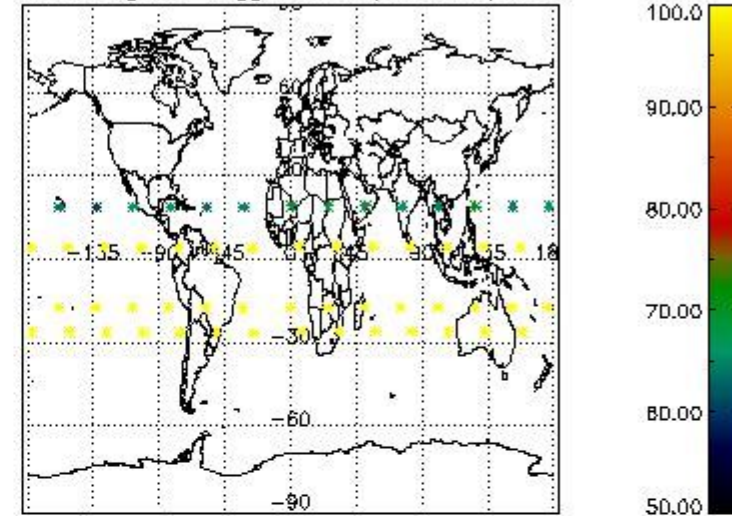


3.2 Plot quality information per product (world map)

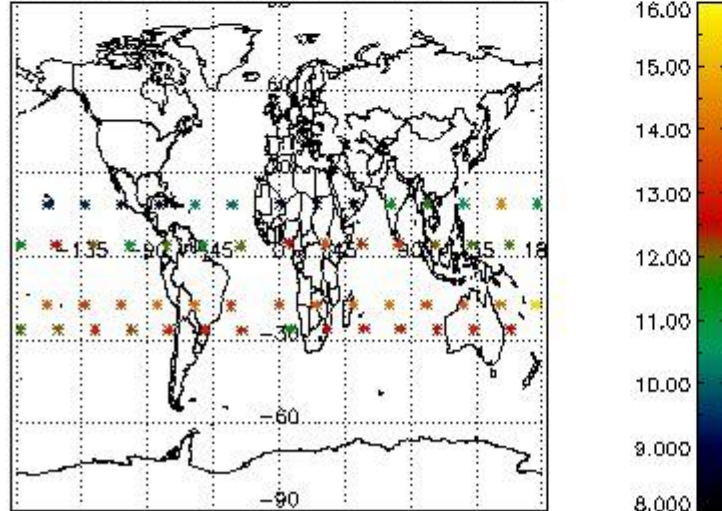
Percentage of flagged data per O3 profile



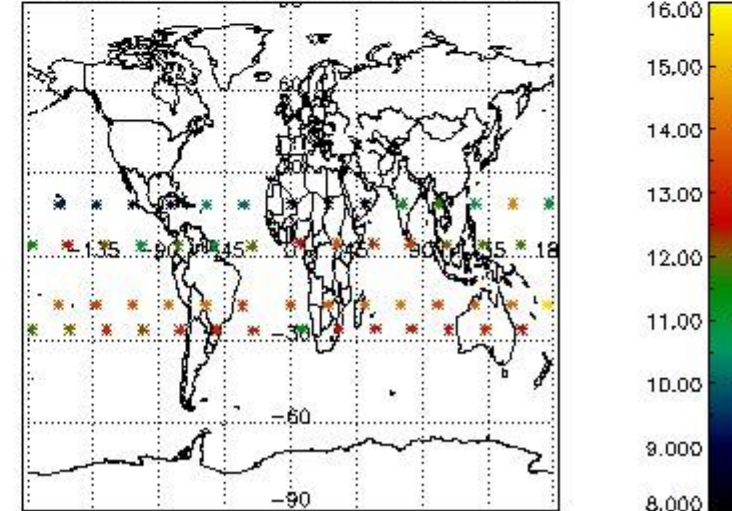
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

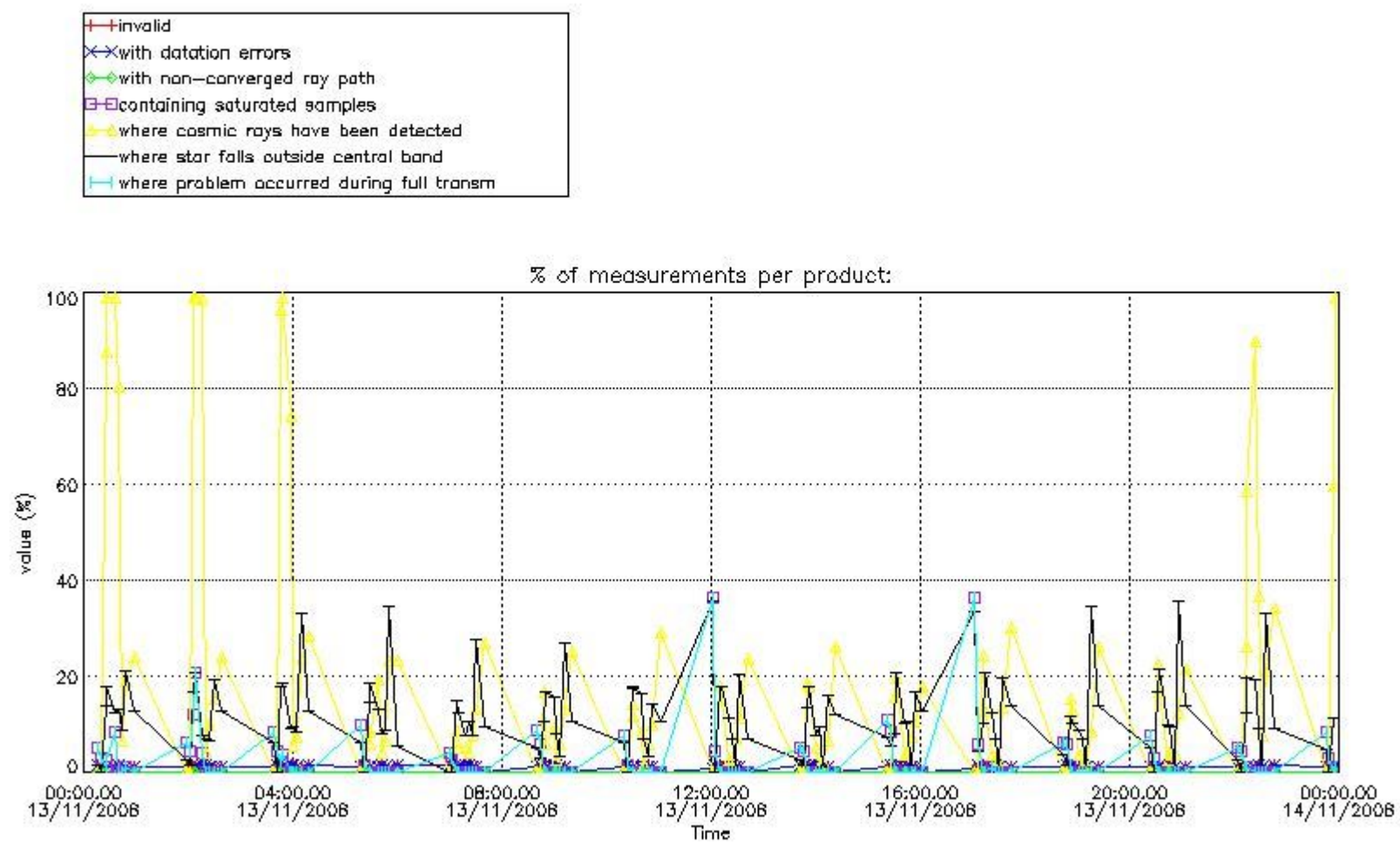


4. Level 1 quality information per product

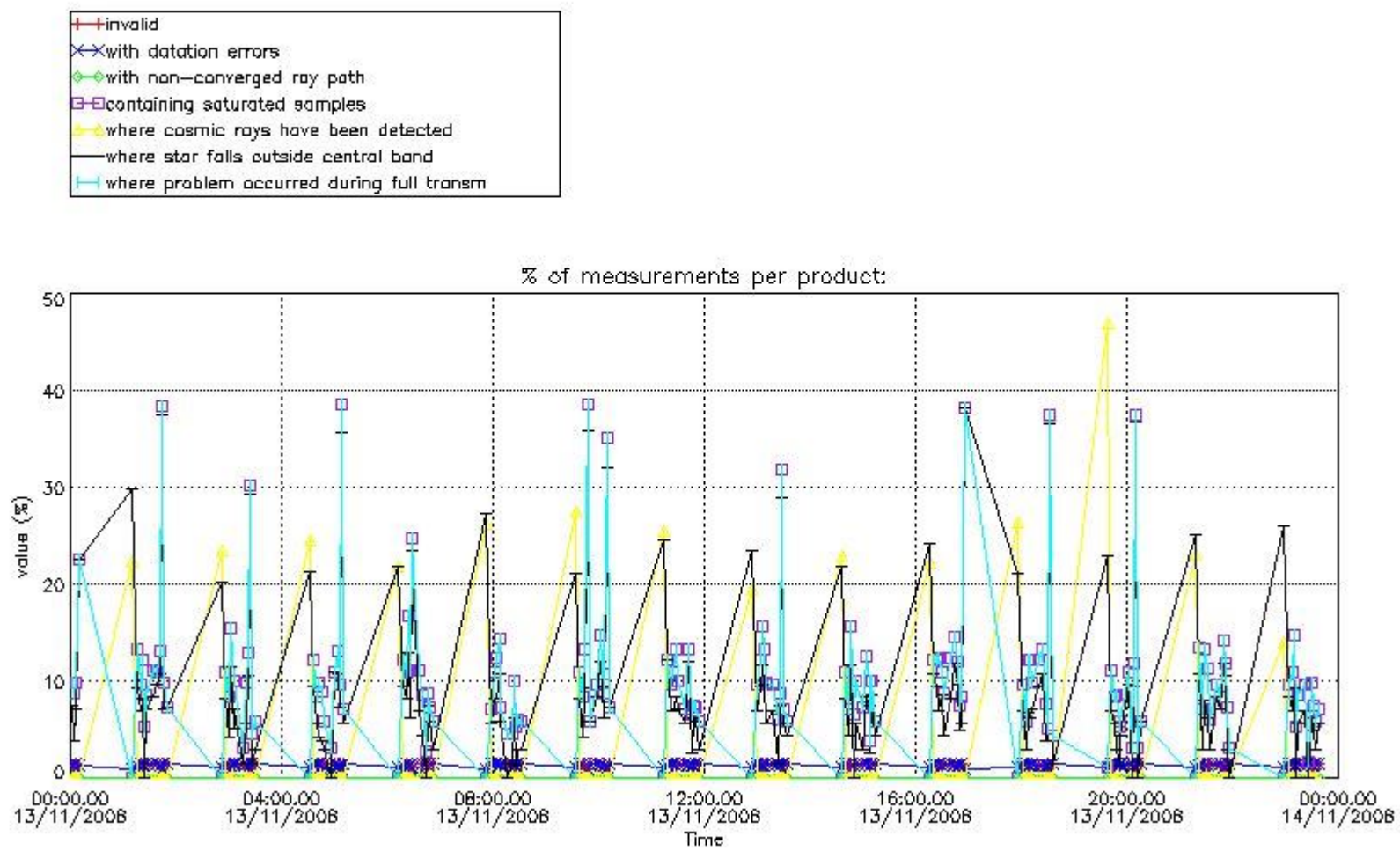
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



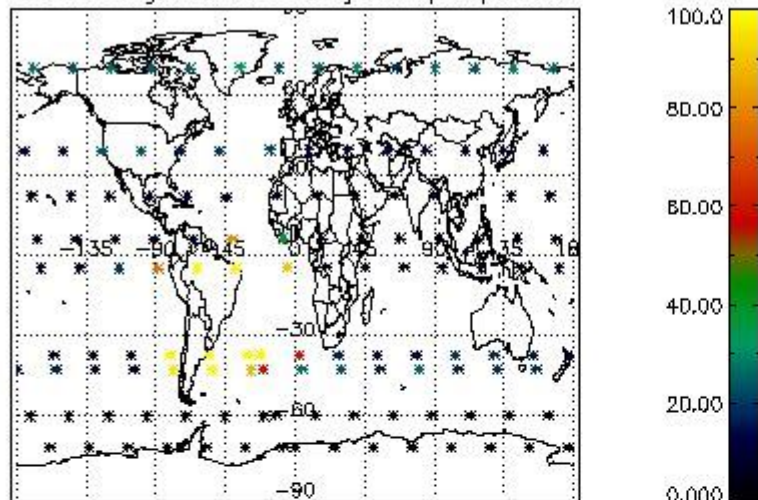
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



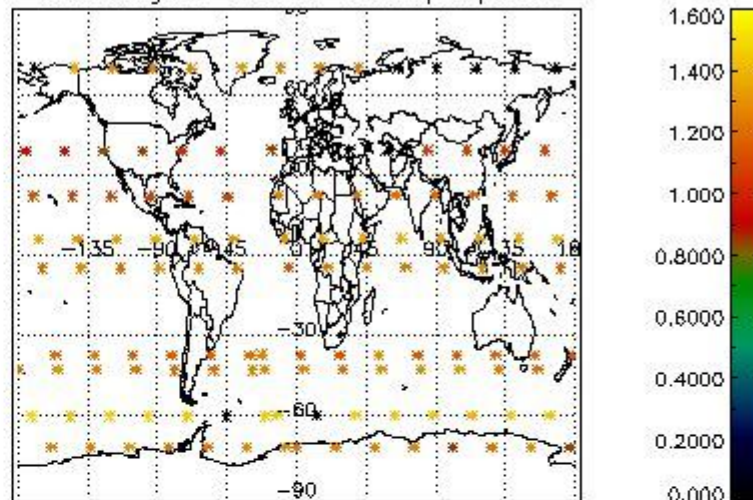
4.2 Plot quality information per product coming from level 1b processing (world map)

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

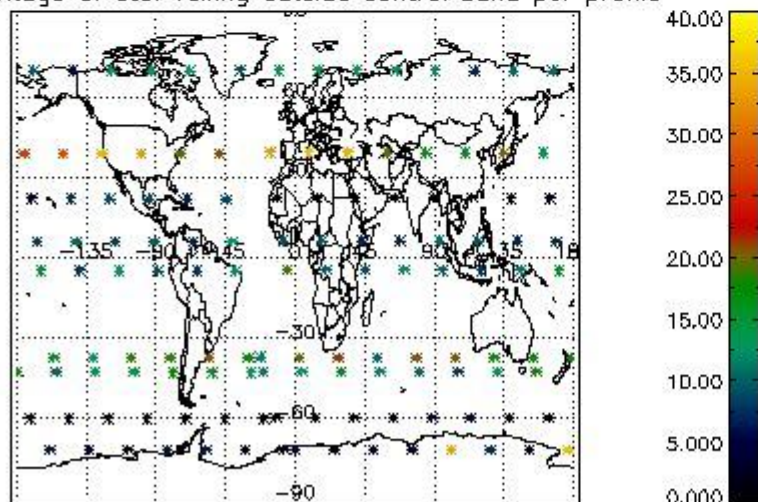
Percentage of cosmic ray hits per profile



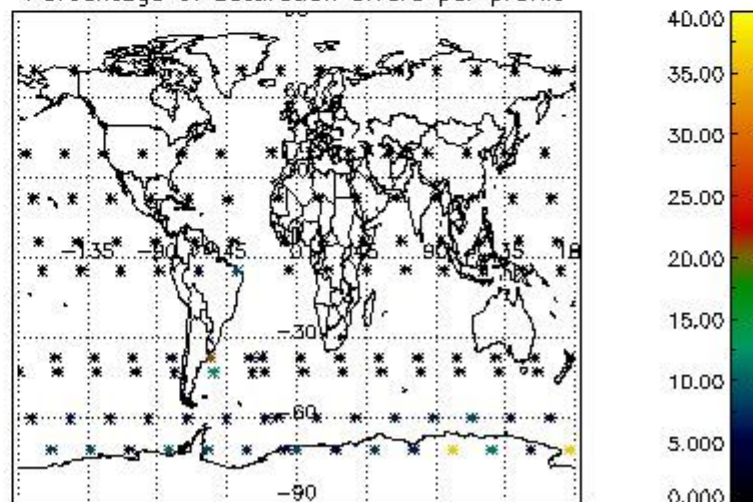
Percentage of datation errors per profile



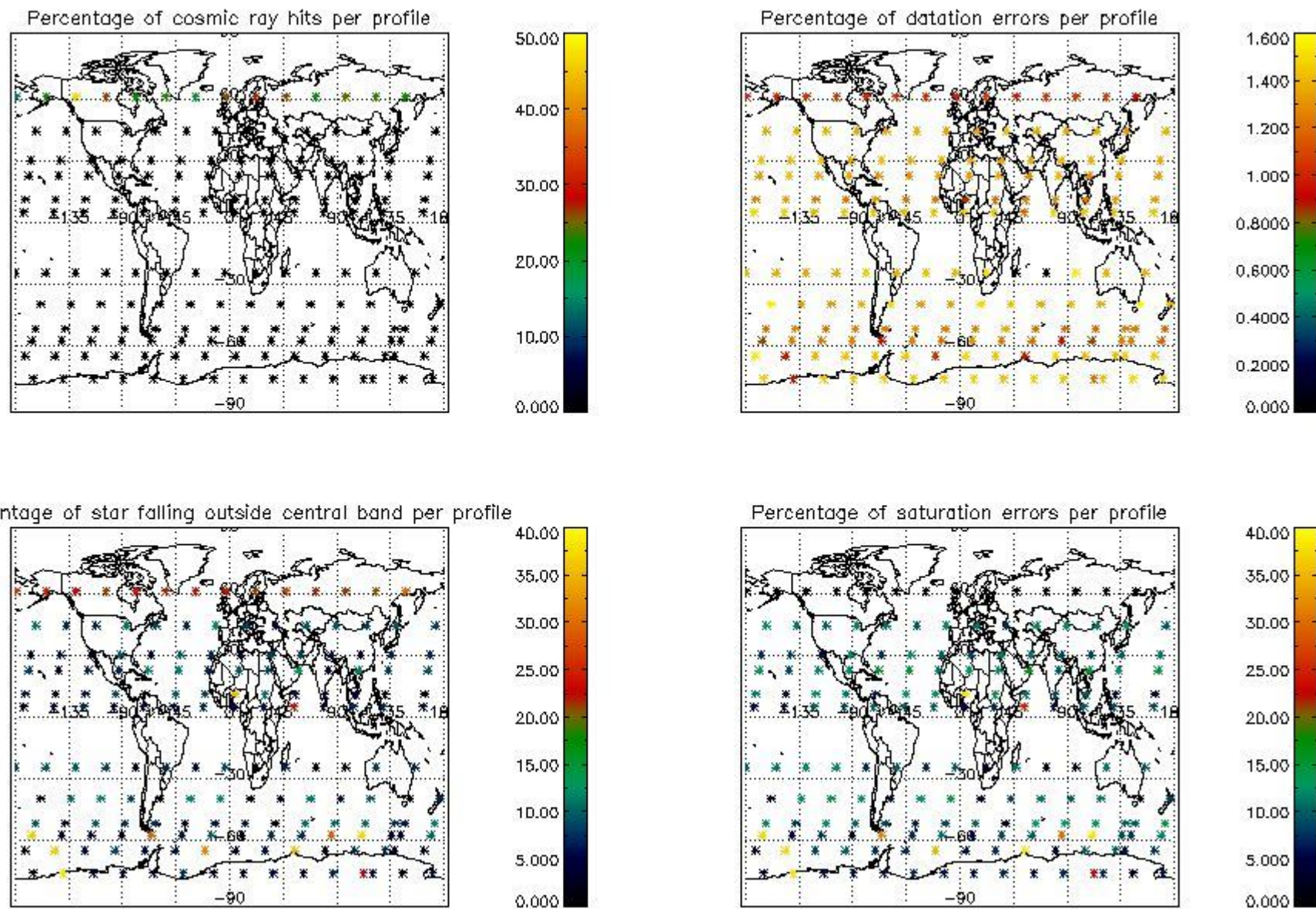
Percentage of star falling outside central band per profile



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

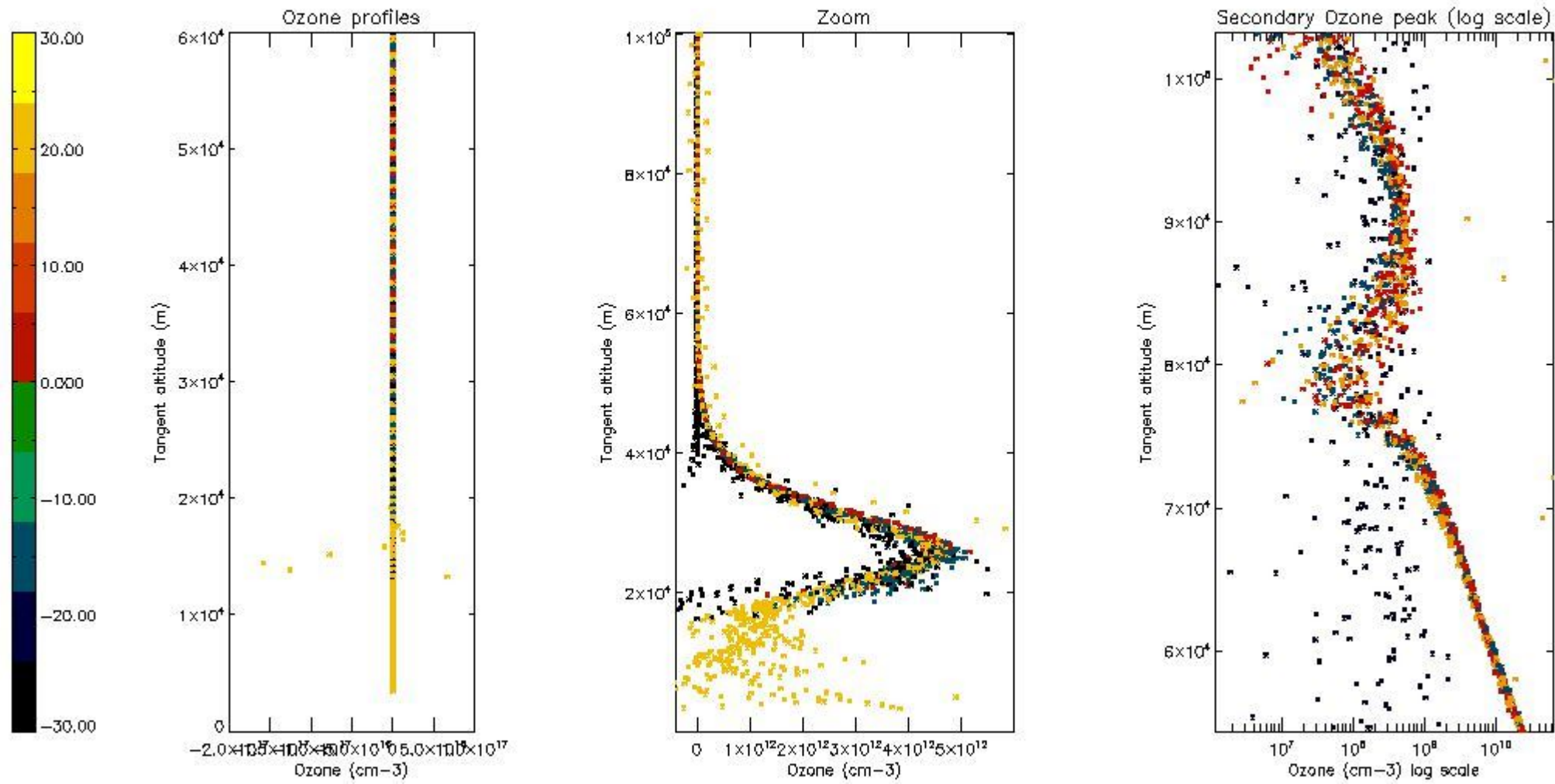
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	21
STD < 20	12

STD < 10	10
STD < 5	8

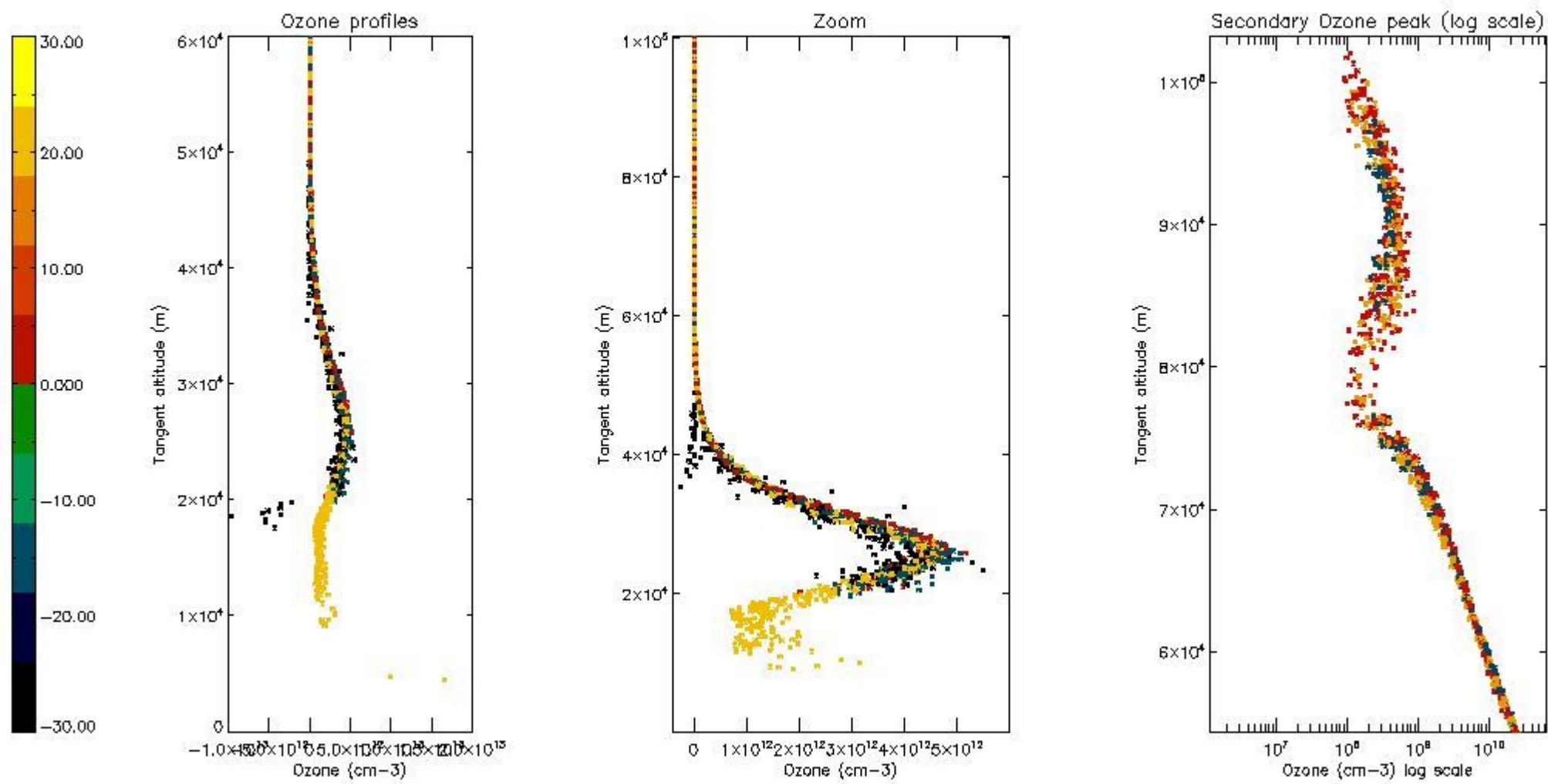
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



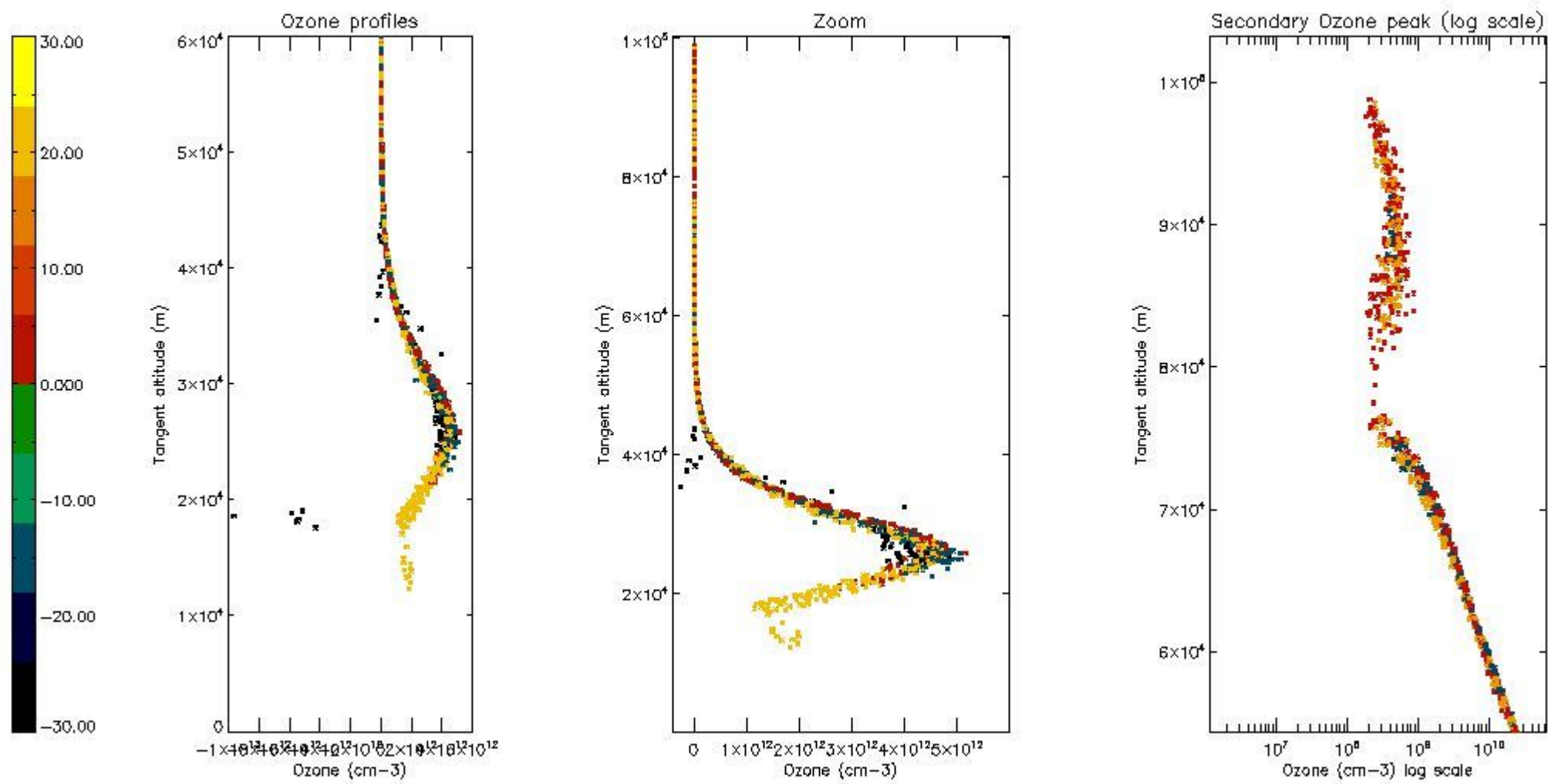
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



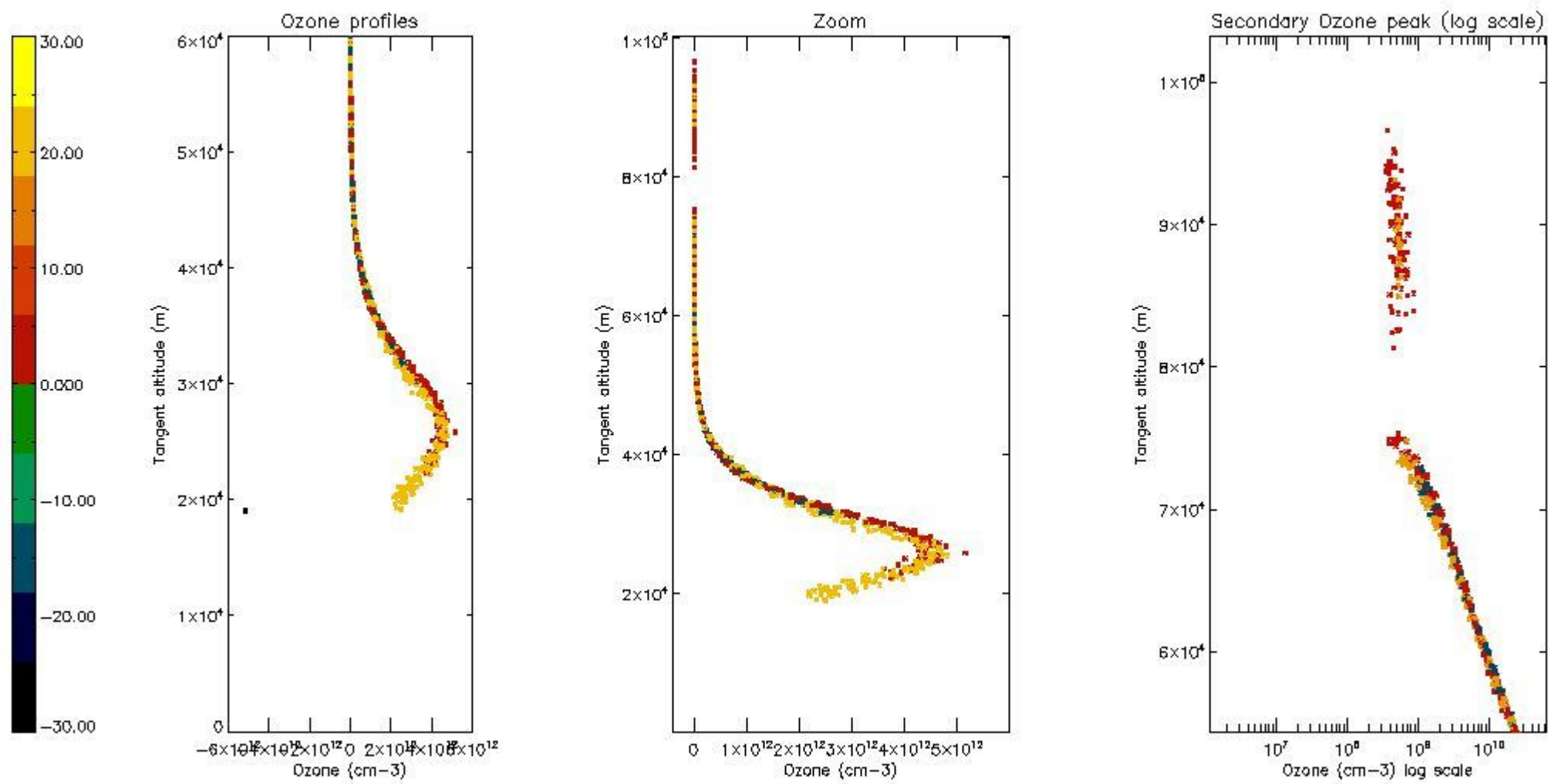
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



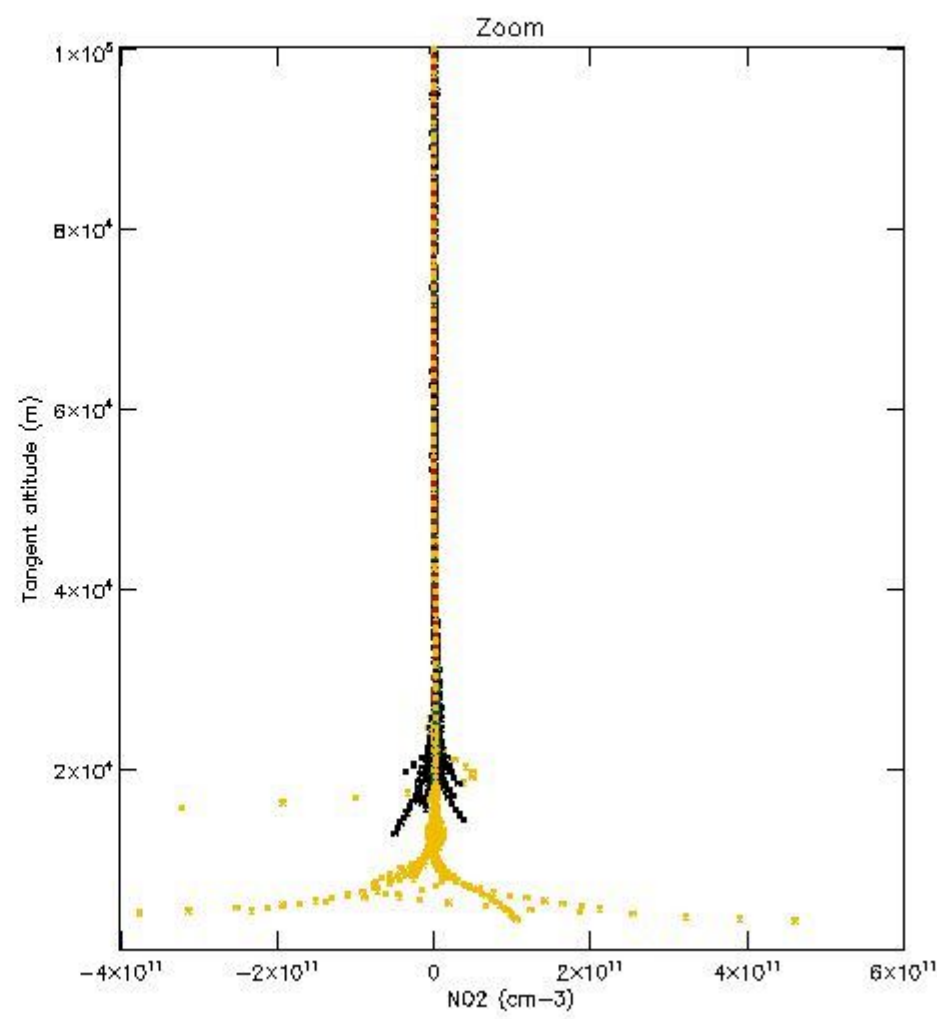
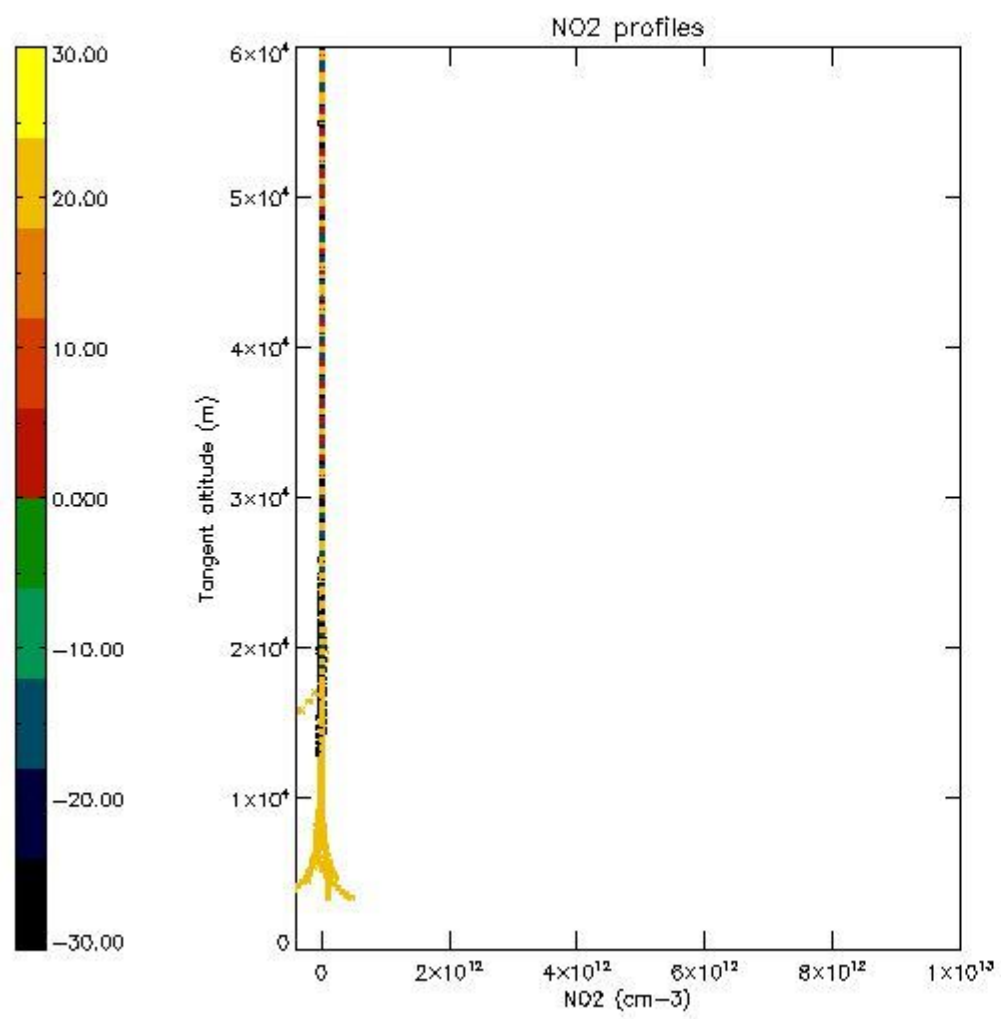
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



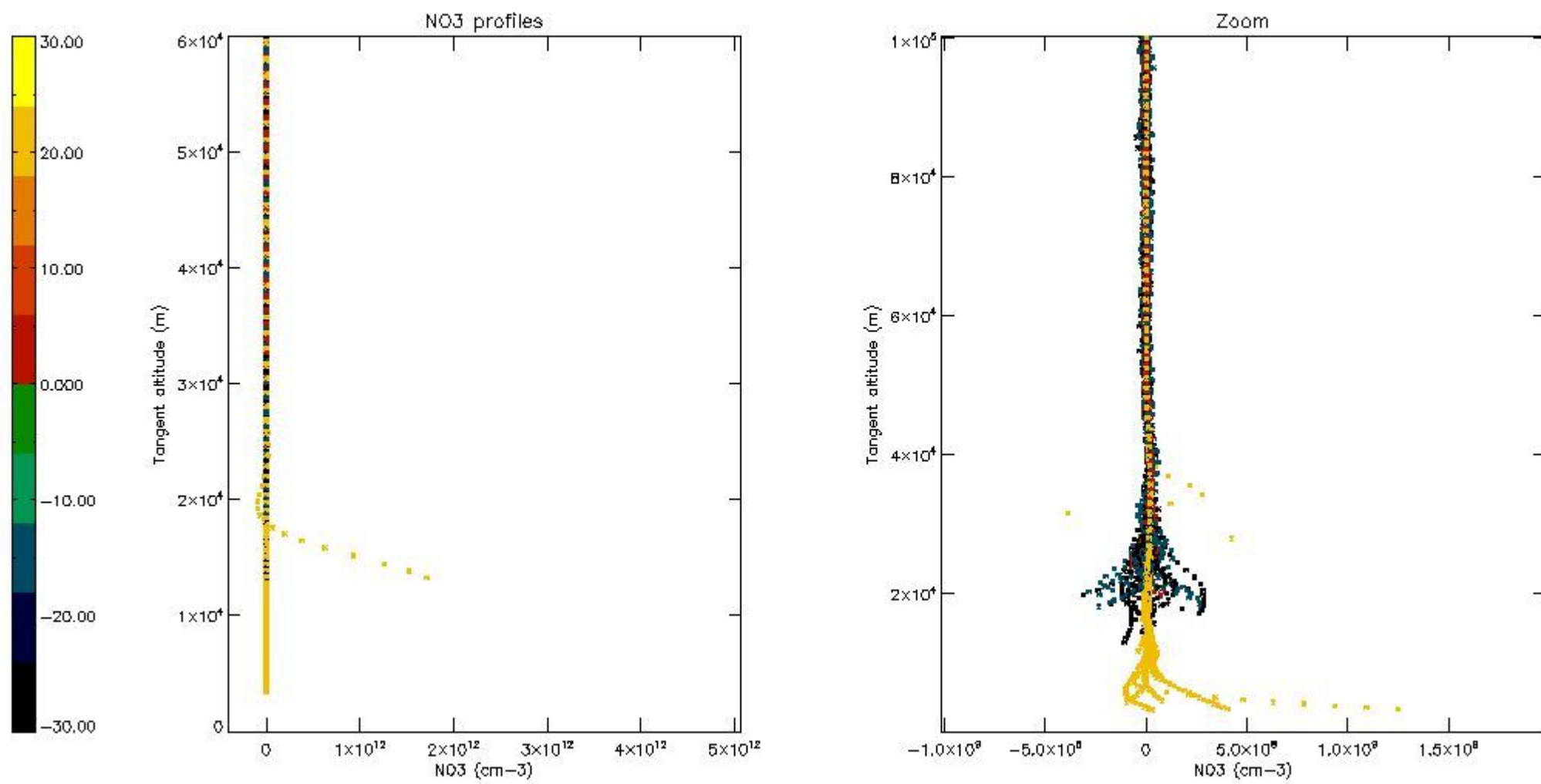
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



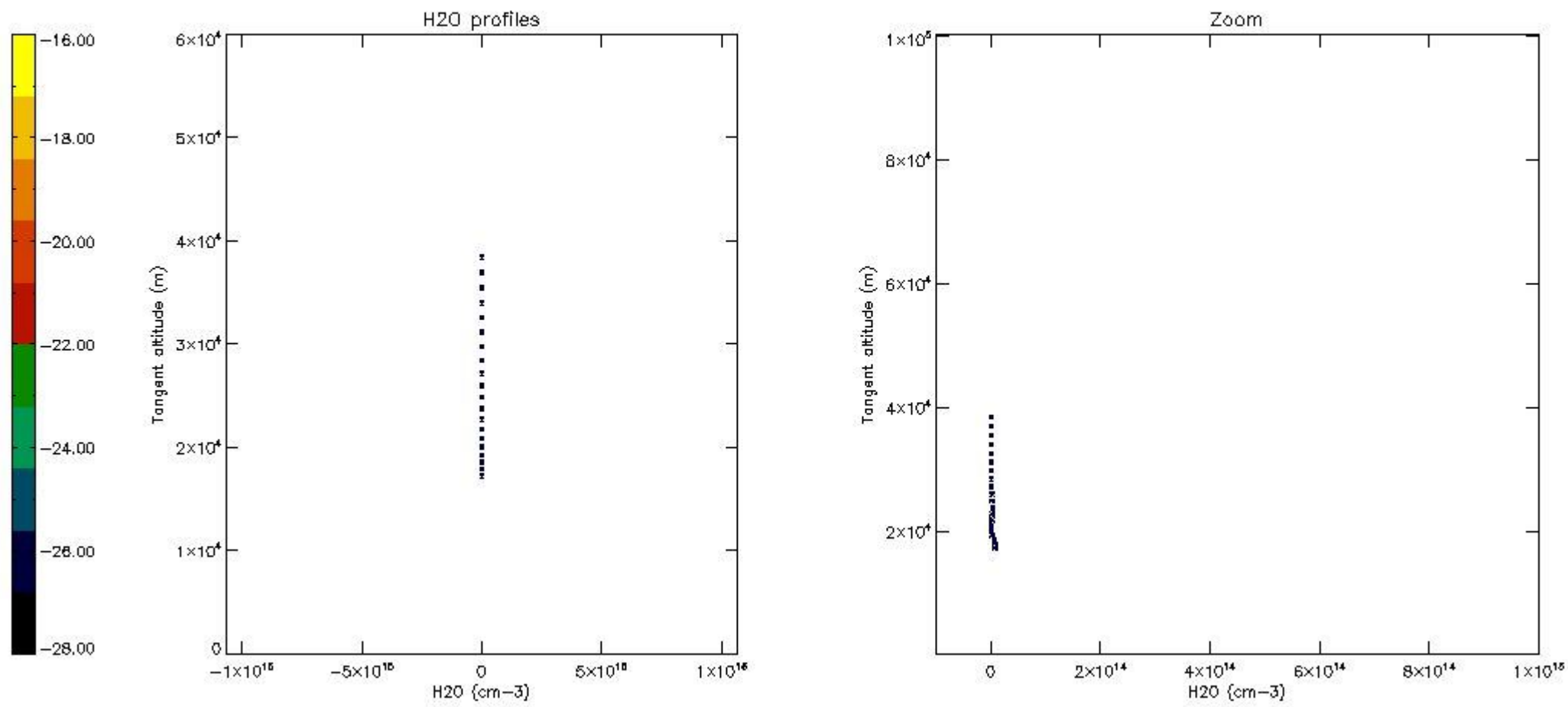
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

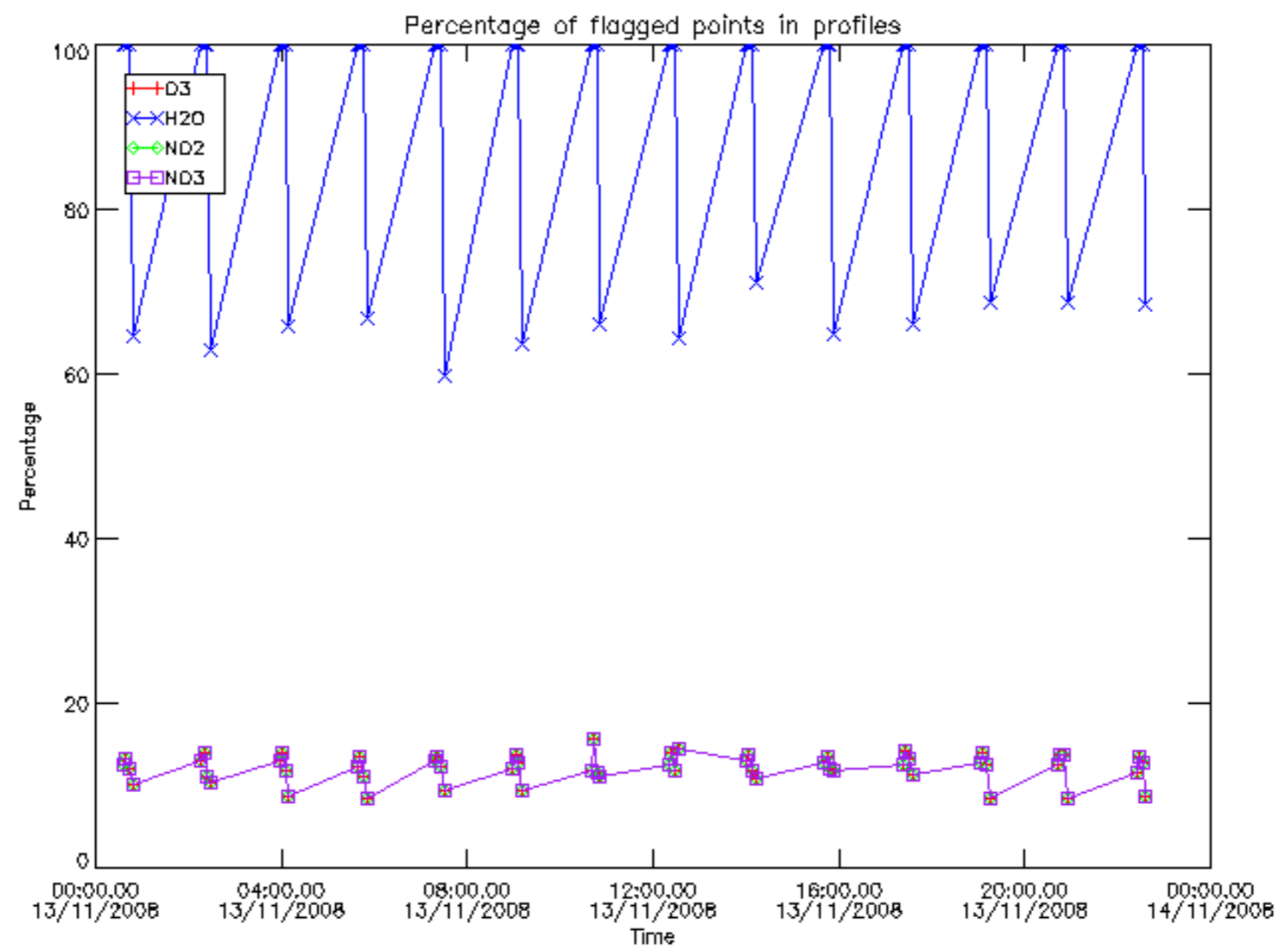
The colorbar represents the latitude.



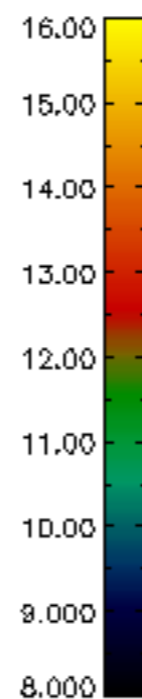
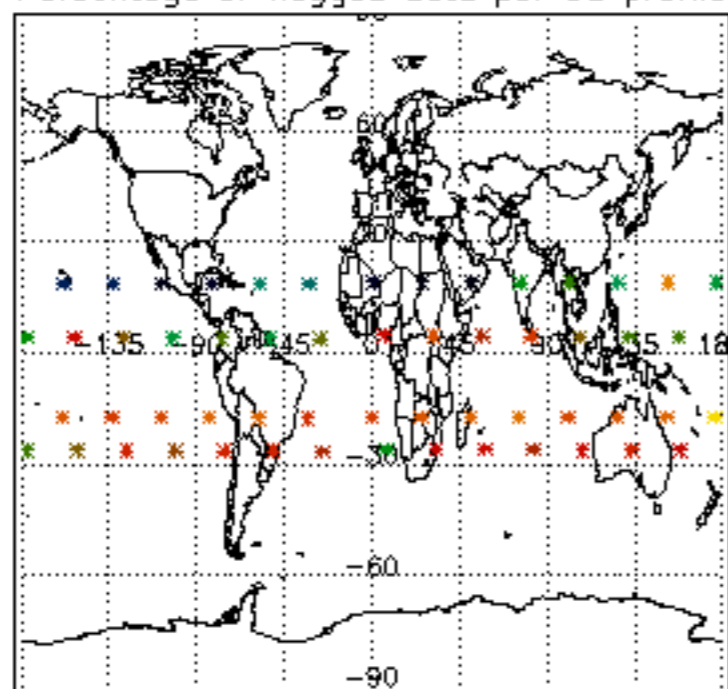
6. Auxiliary Data Files used for the production reported in section 2

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.

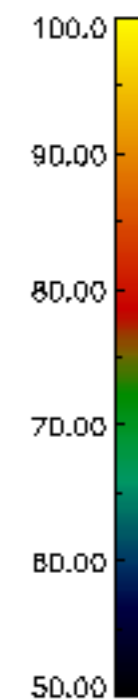
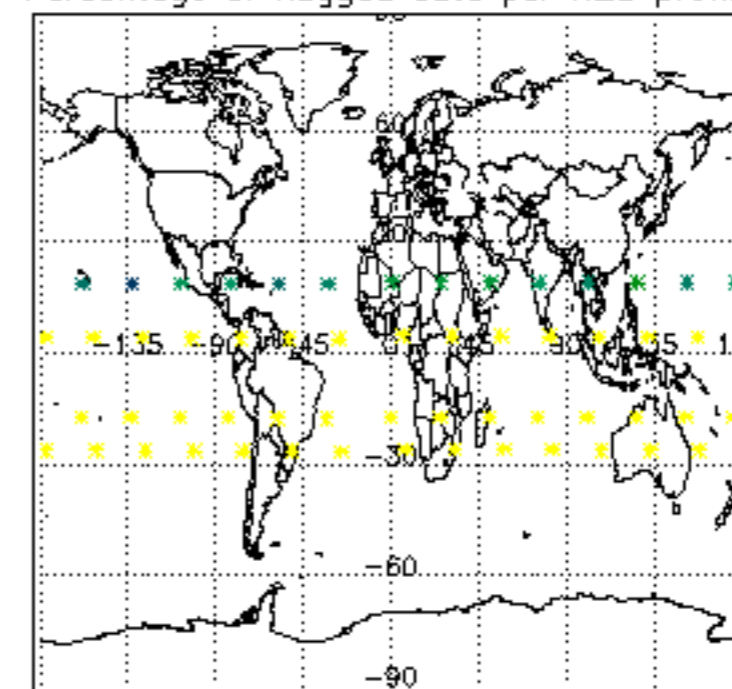
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	13-NOV-2008 00:01:45
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	13-NOV-2008 00:01:45
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	13-NOV-2008 00:01:45



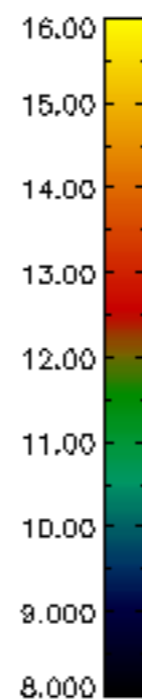
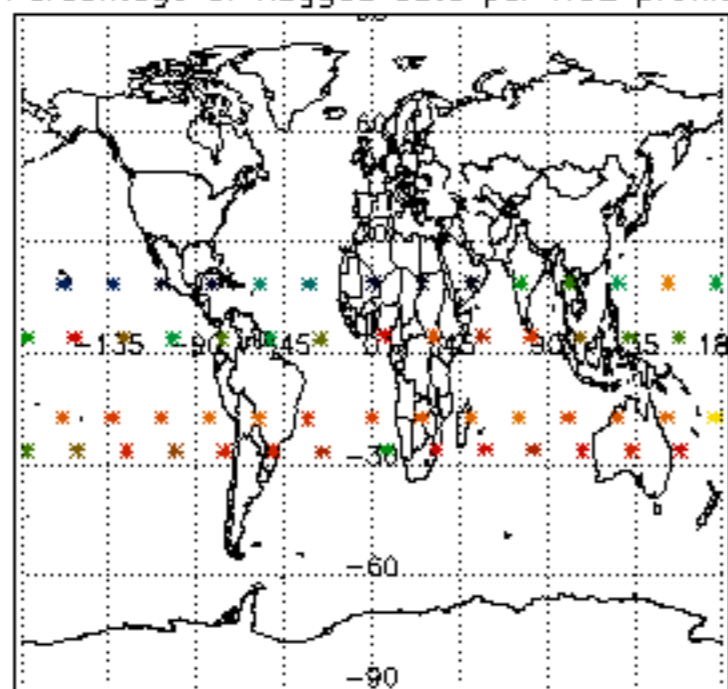
Percentage of flagged data per D3 profile



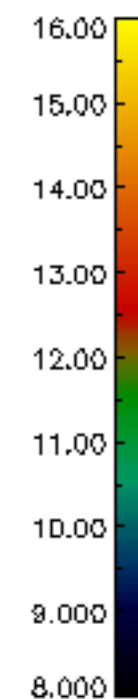
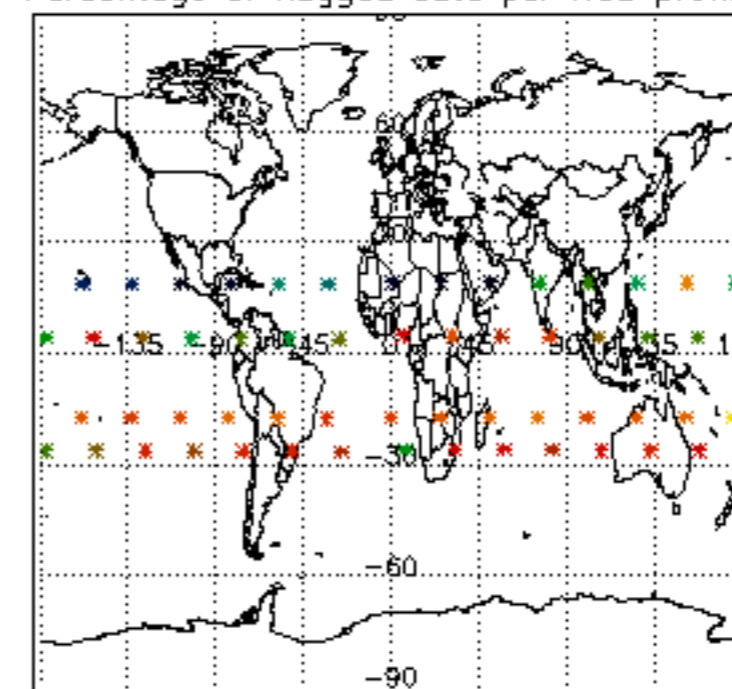
Percentage of flagged data per H2O profile

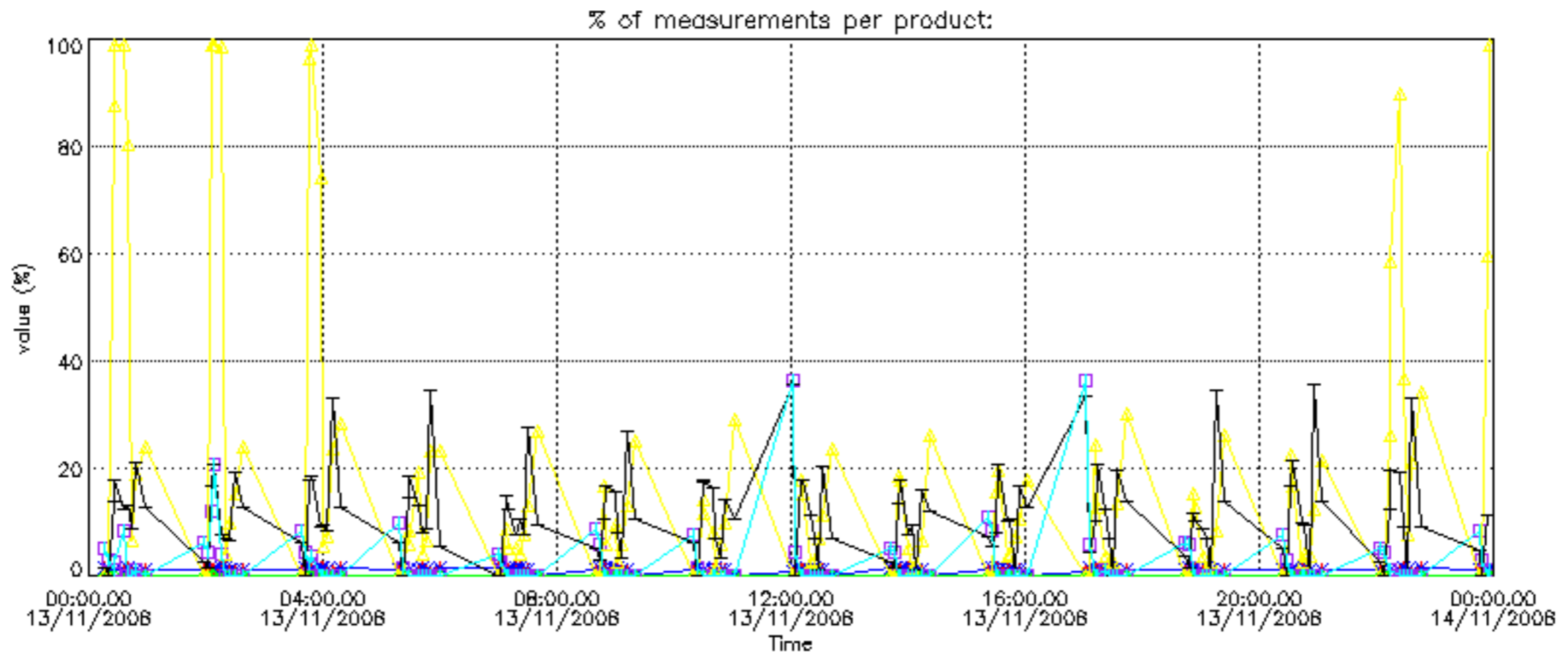


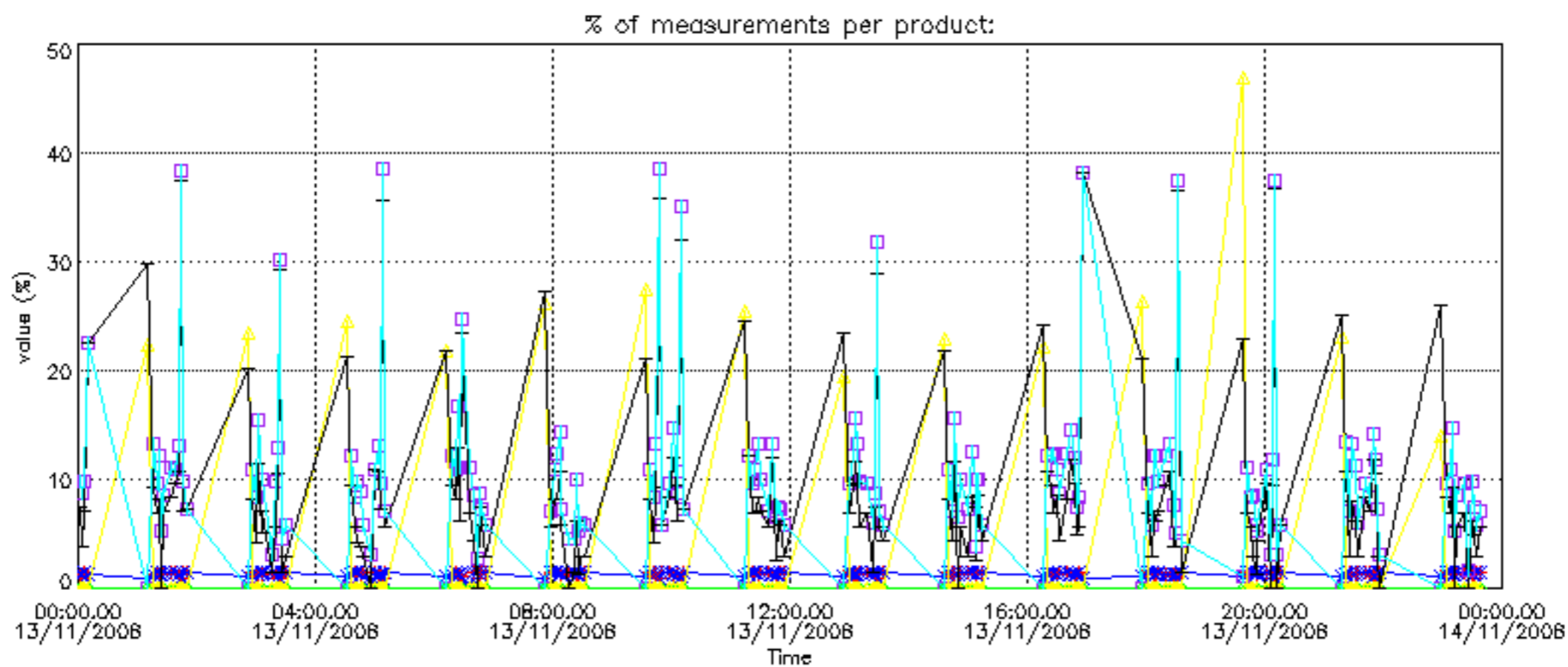
Percentage of flagged data per NO2 profile



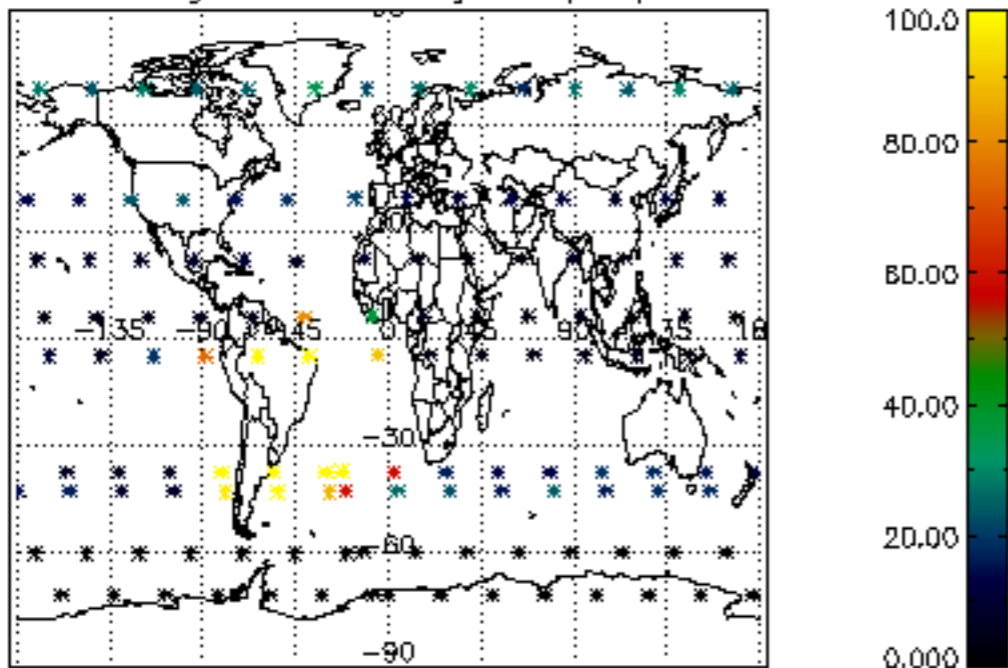
Percentage of flagged data per NO3 profile



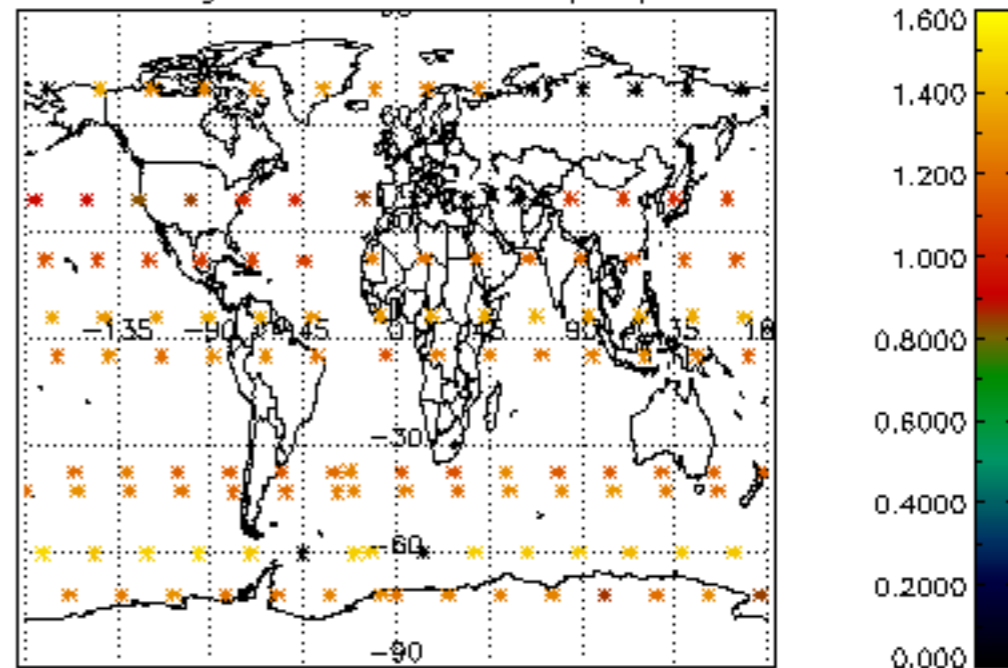




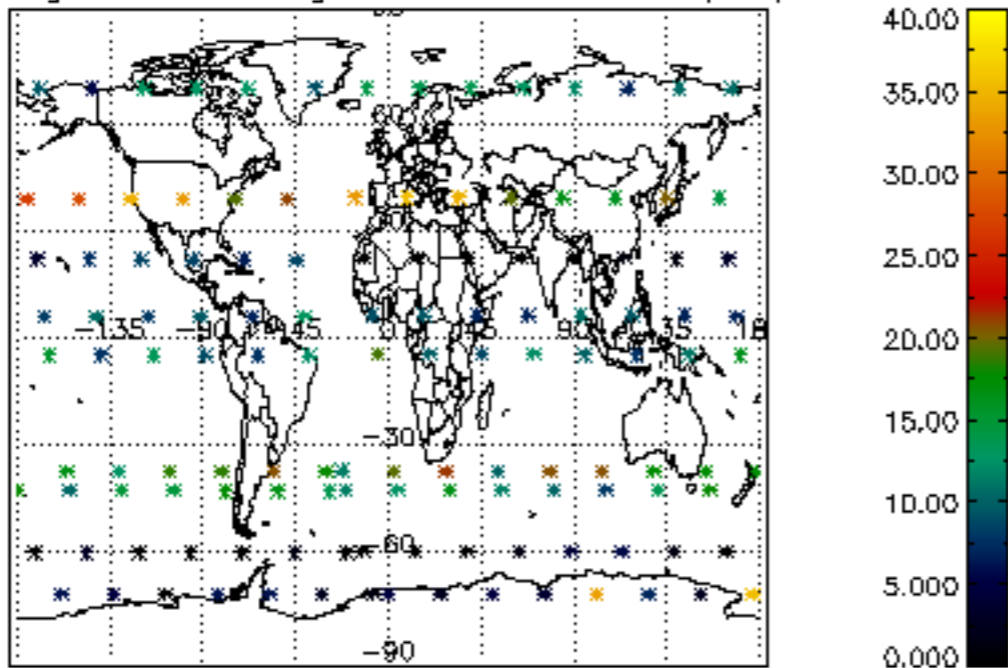
Percentage of cosmic ray hits per profile



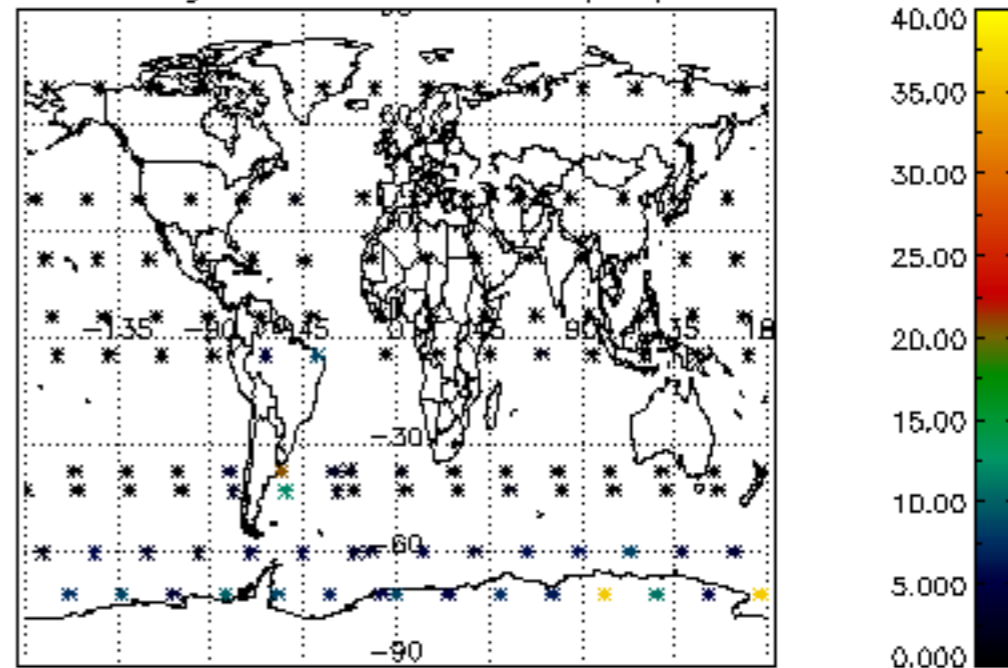
Percentage of datation errors per profile



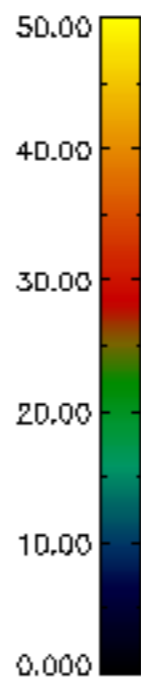
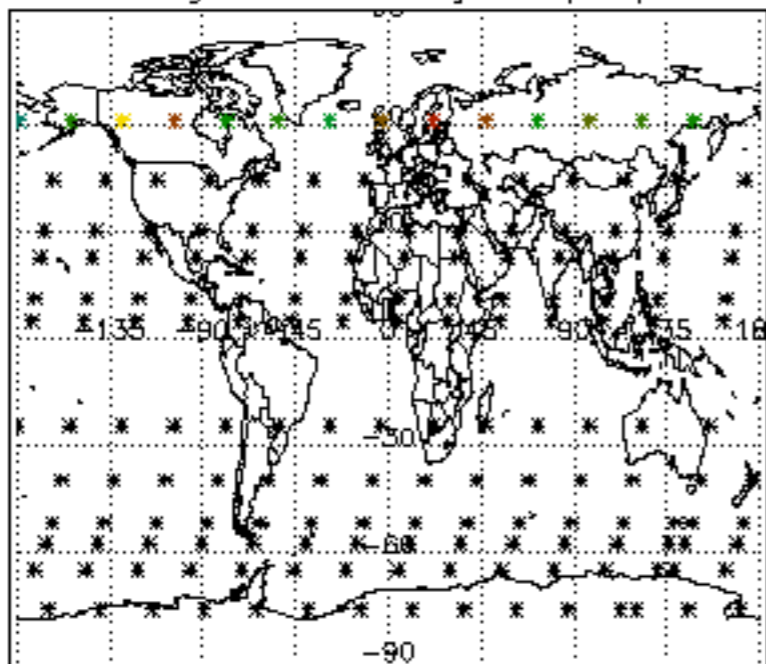
Percentage of star falling outside central band per profile



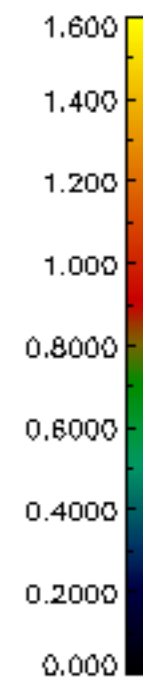
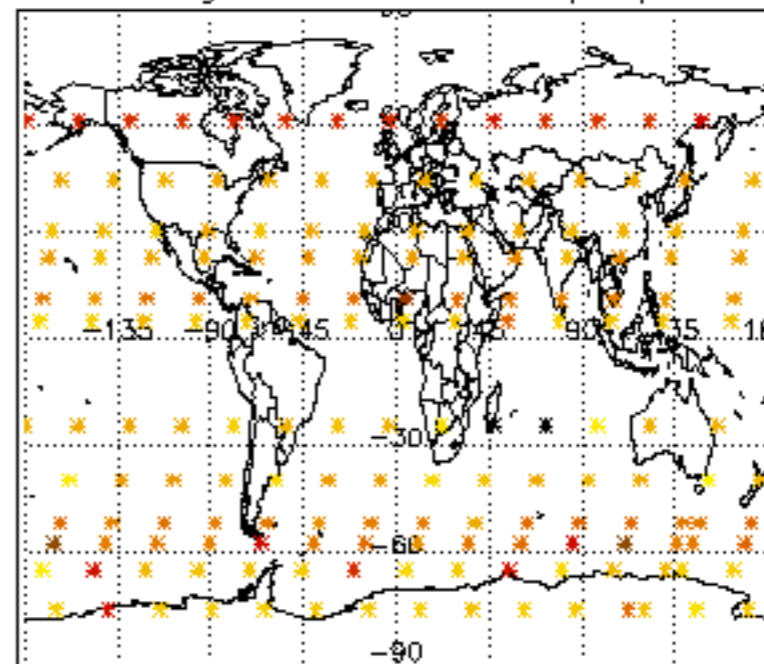
Percentage of saturation errors per profile



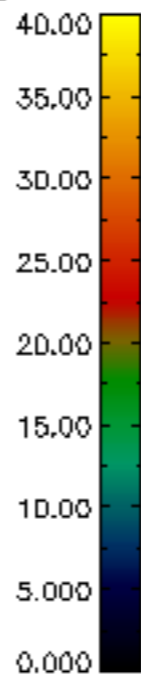
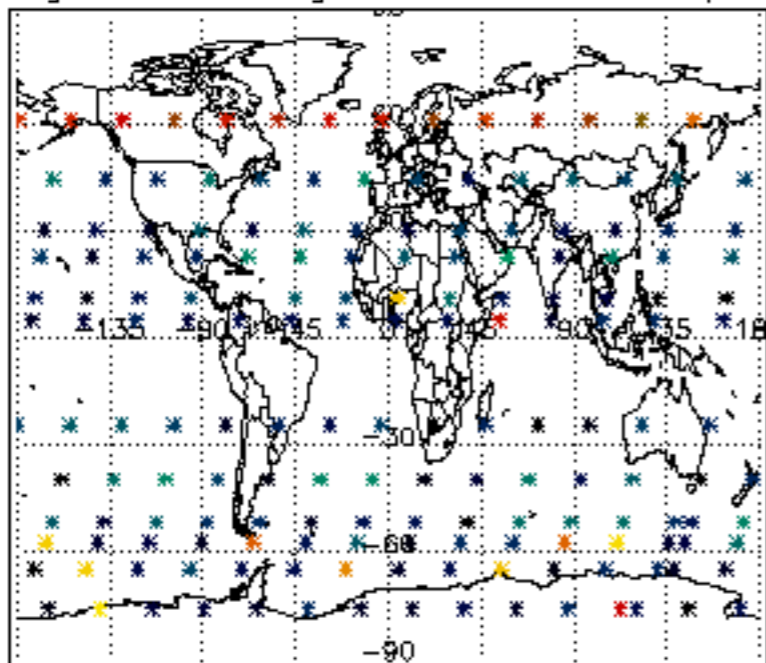
Percentage of cosmic ray hits per profile



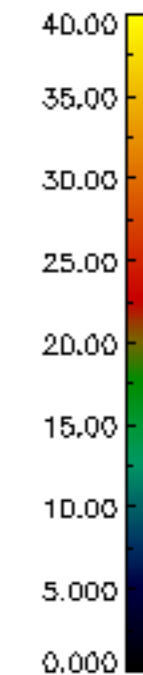
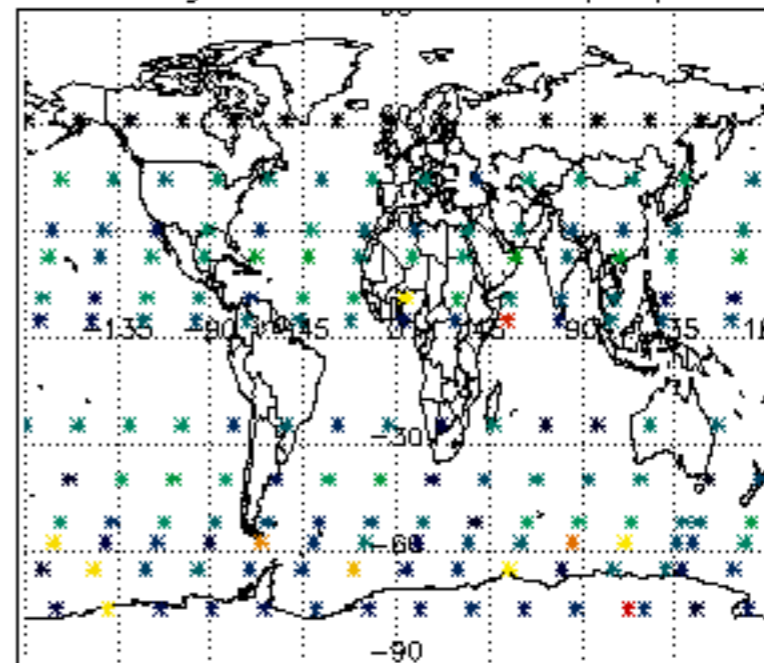
Percentage of datation errors per profile

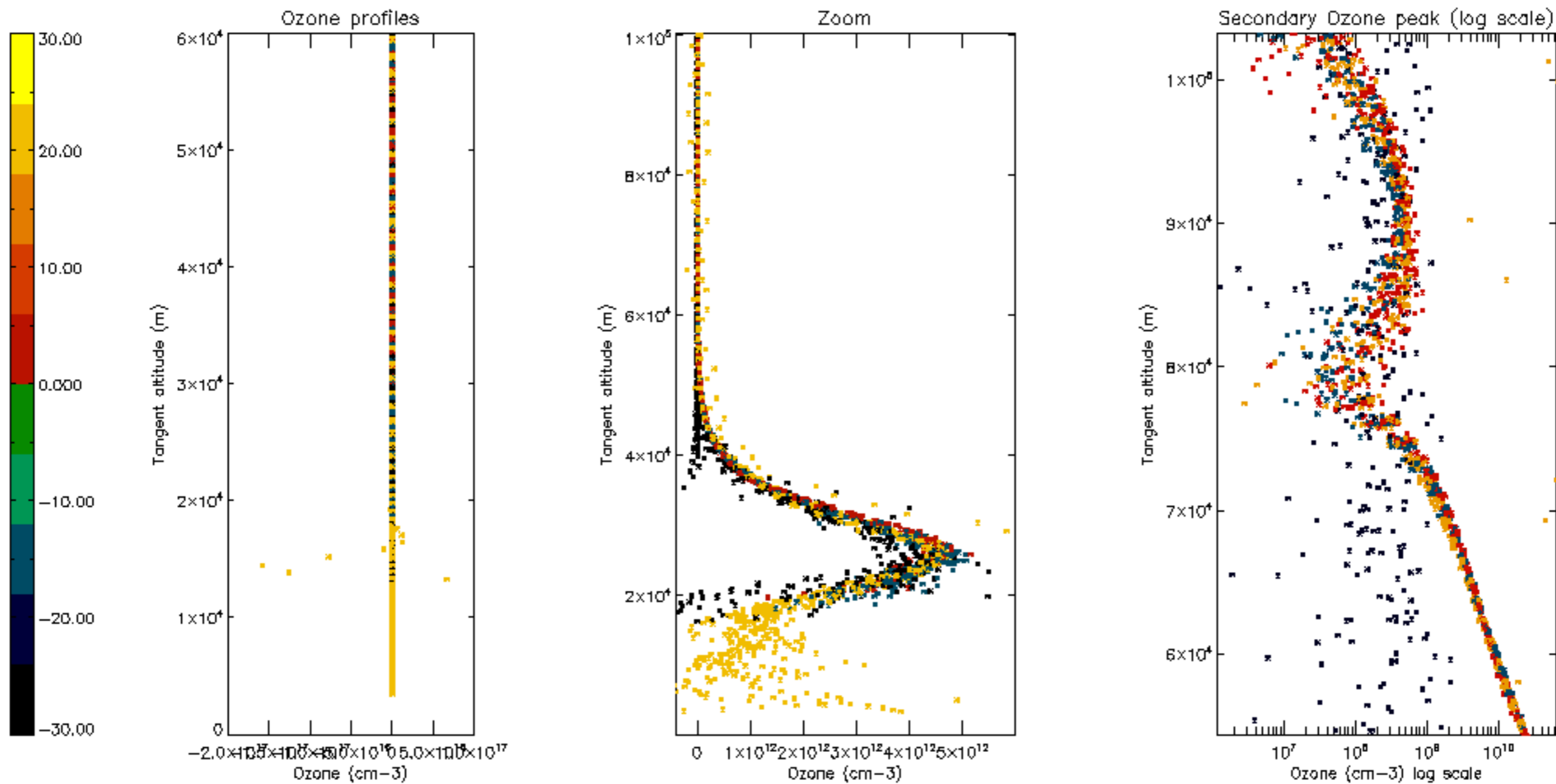


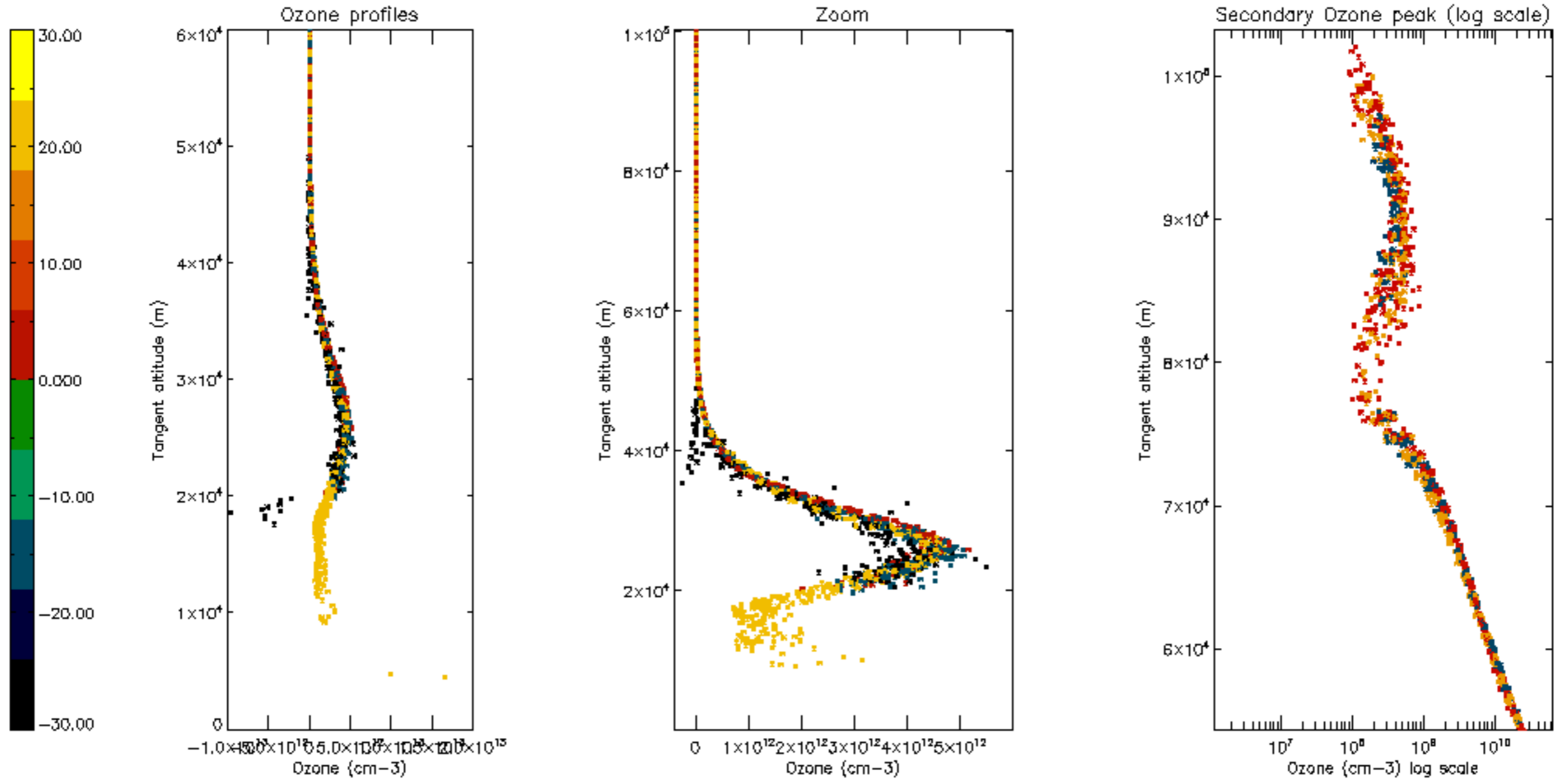
Percentage of star falling outside central band per profile

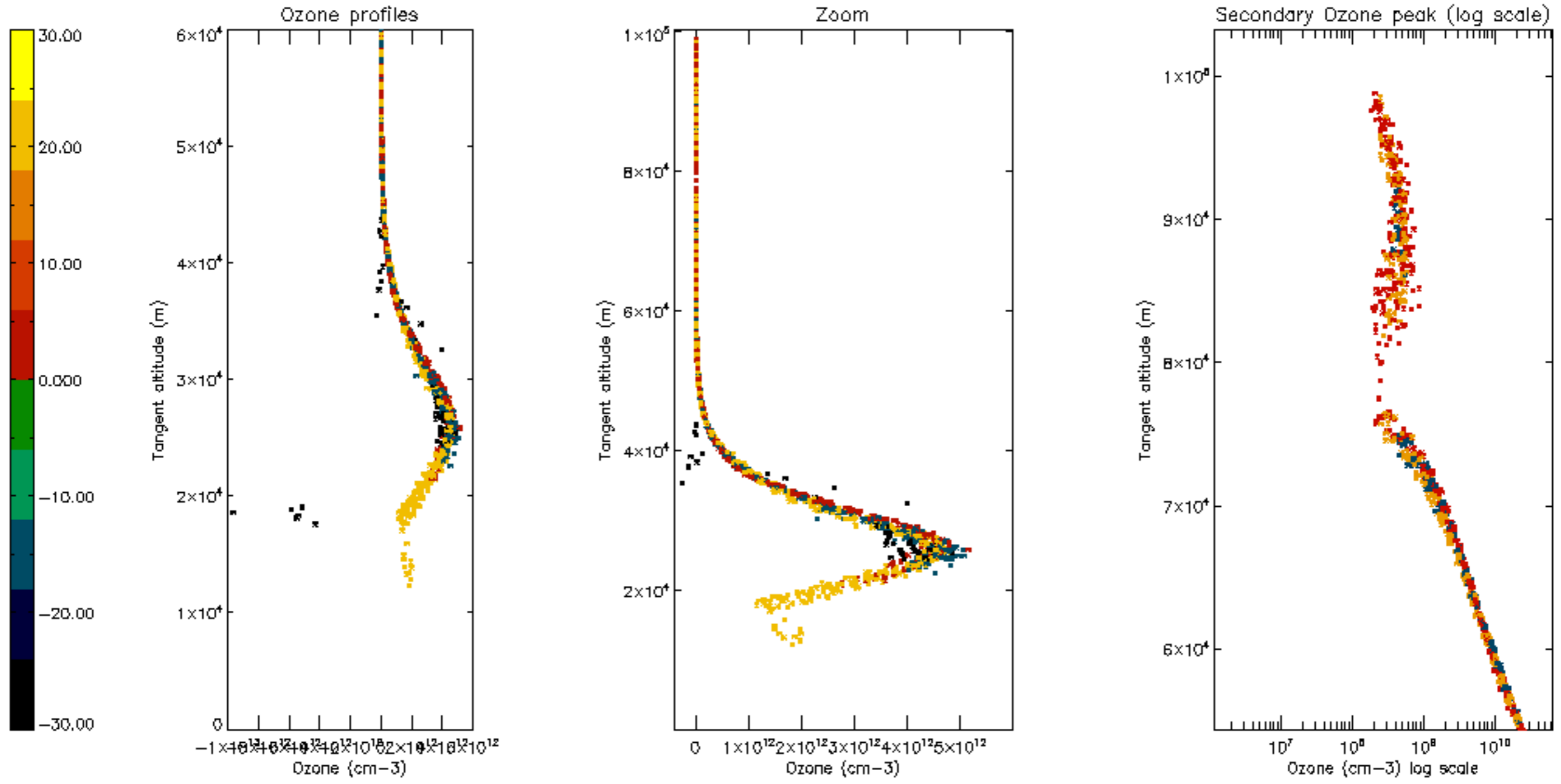


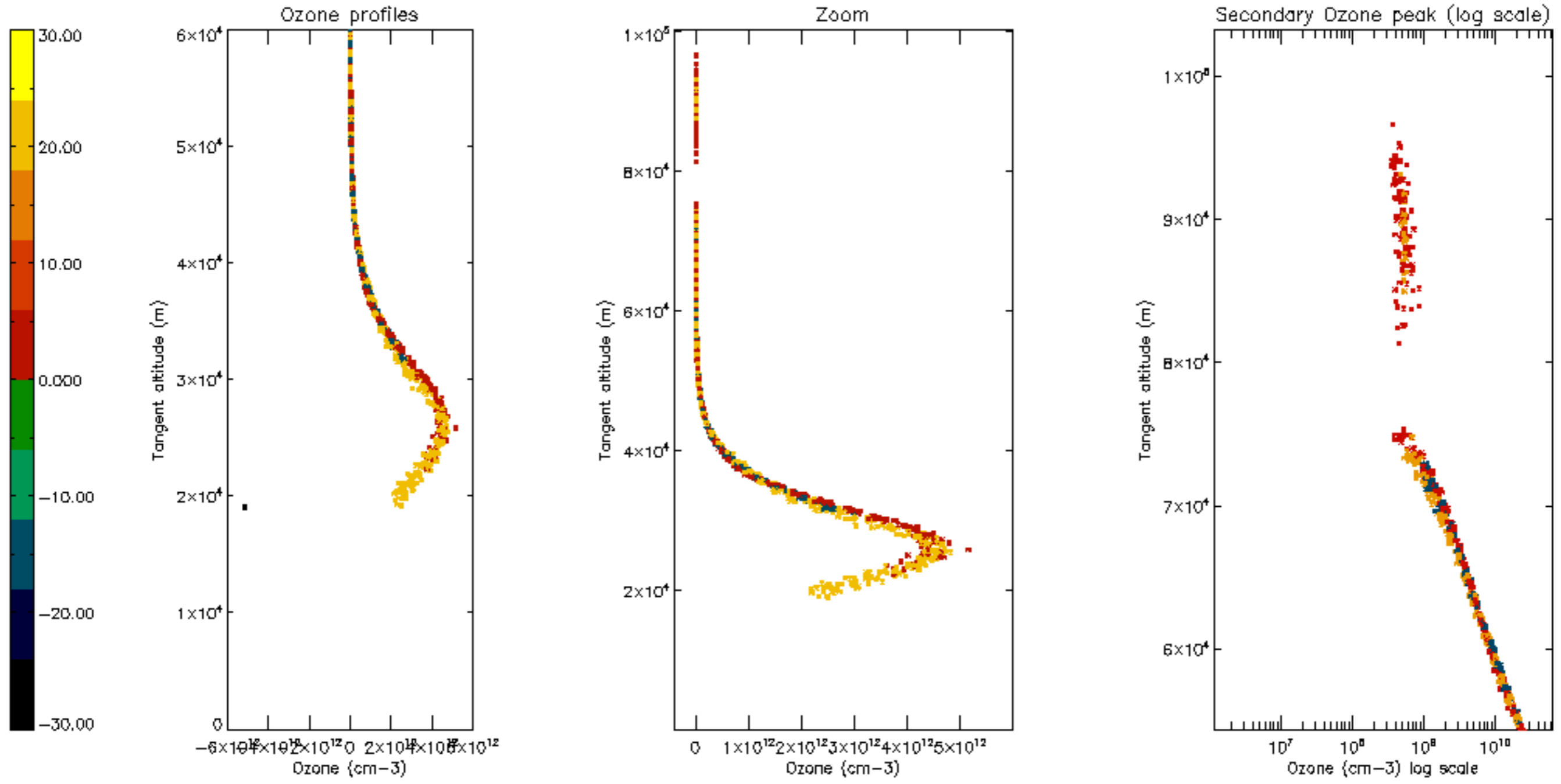
Percentage of saturation errors per profile

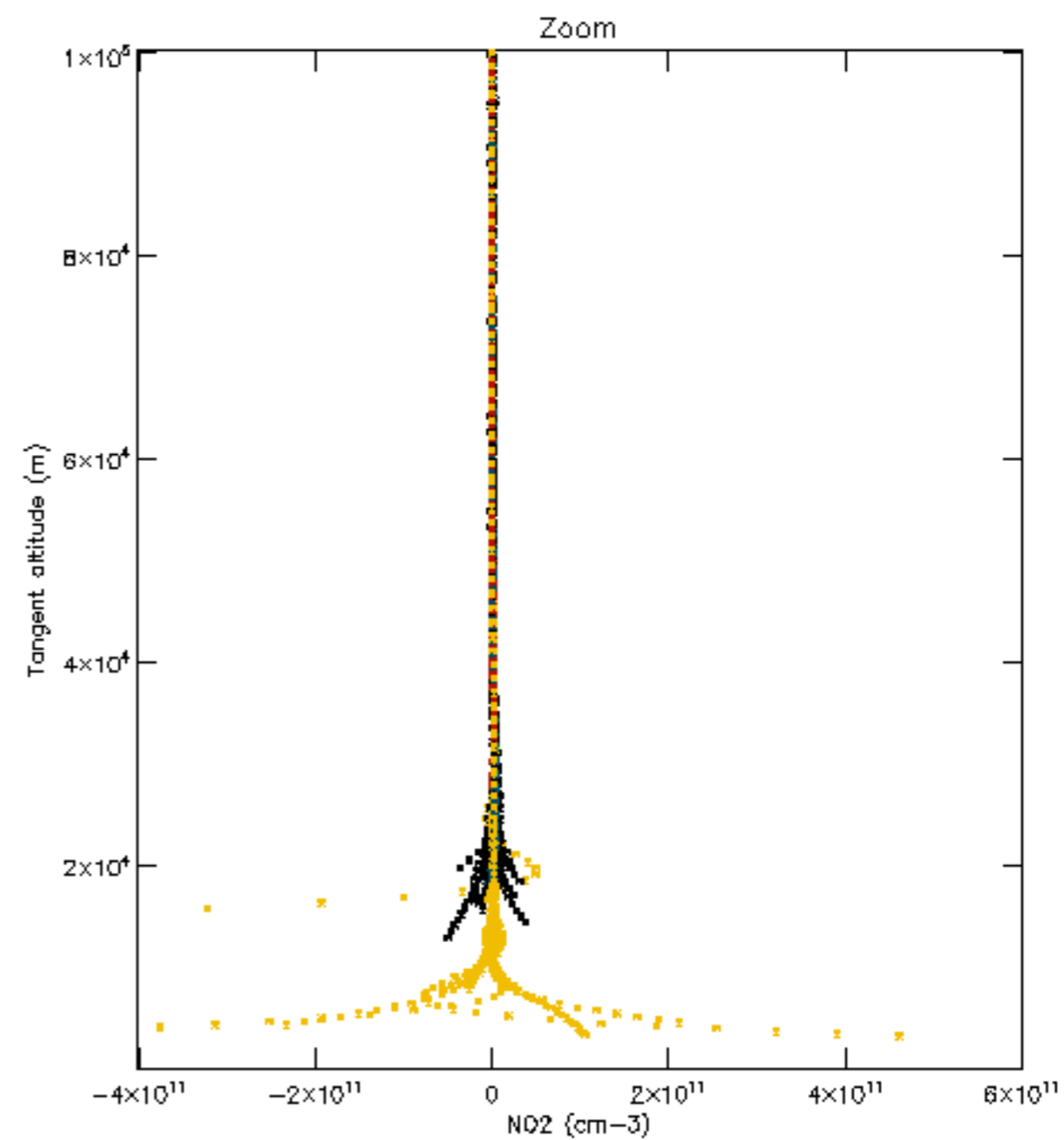
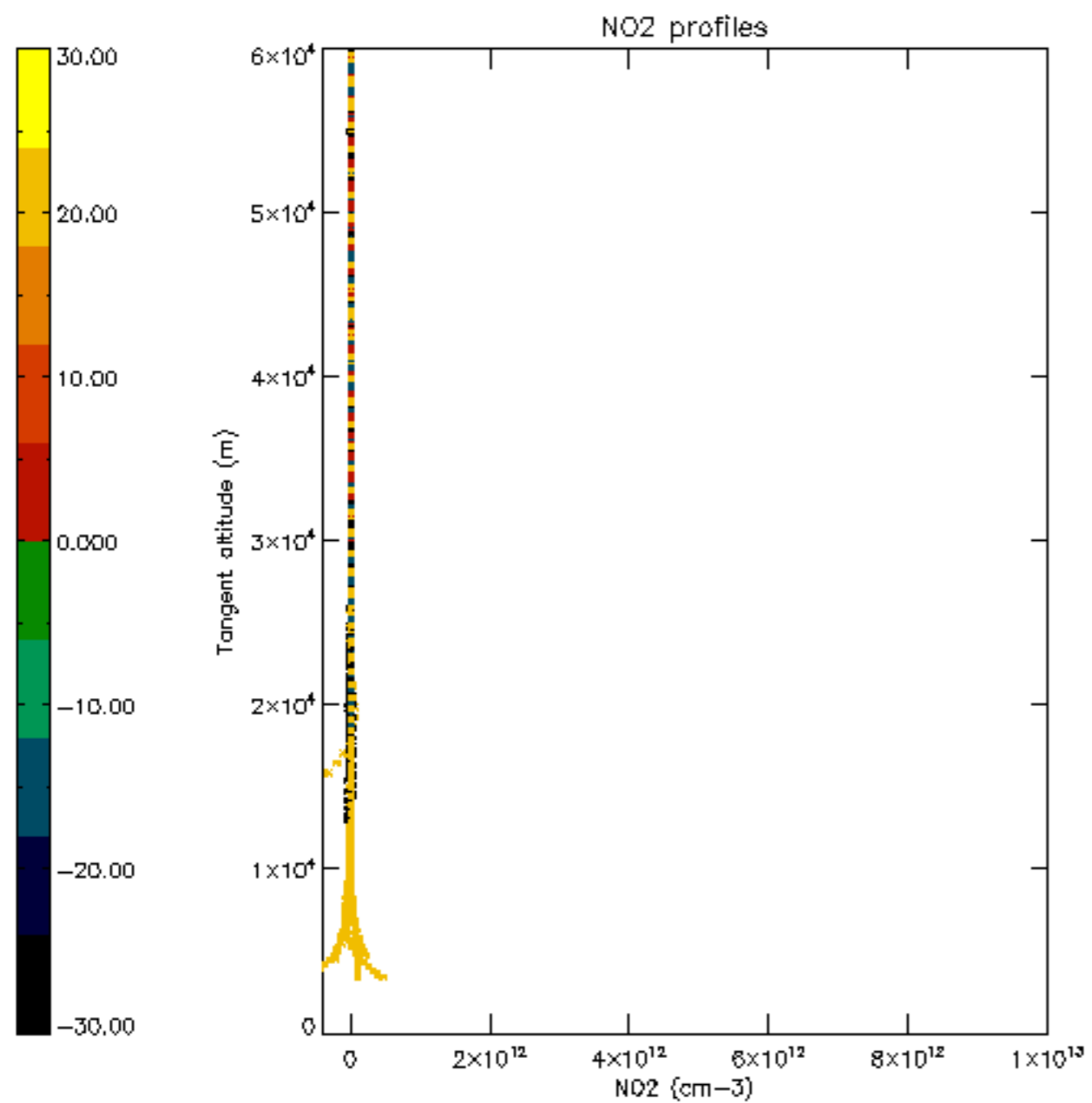


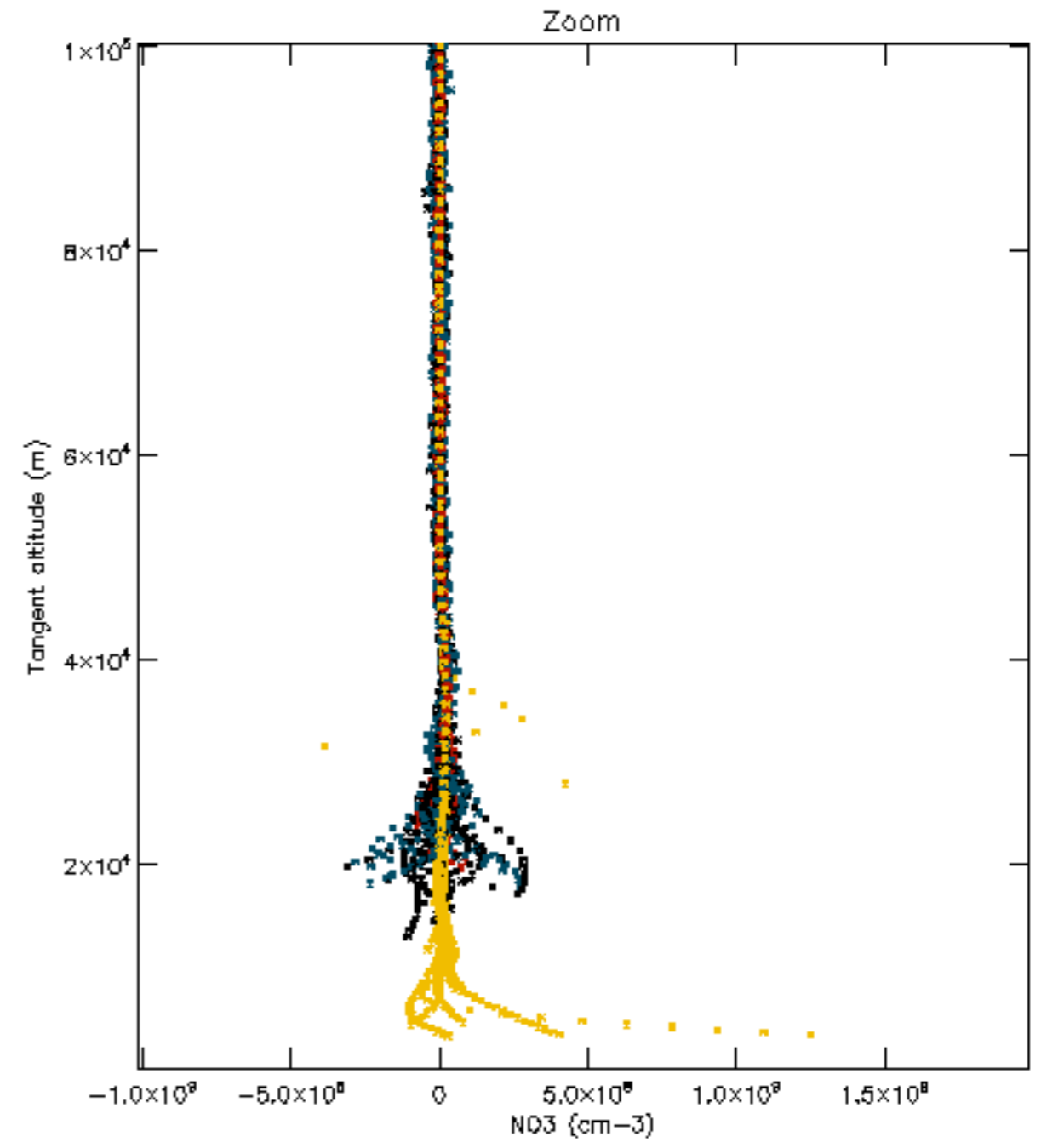
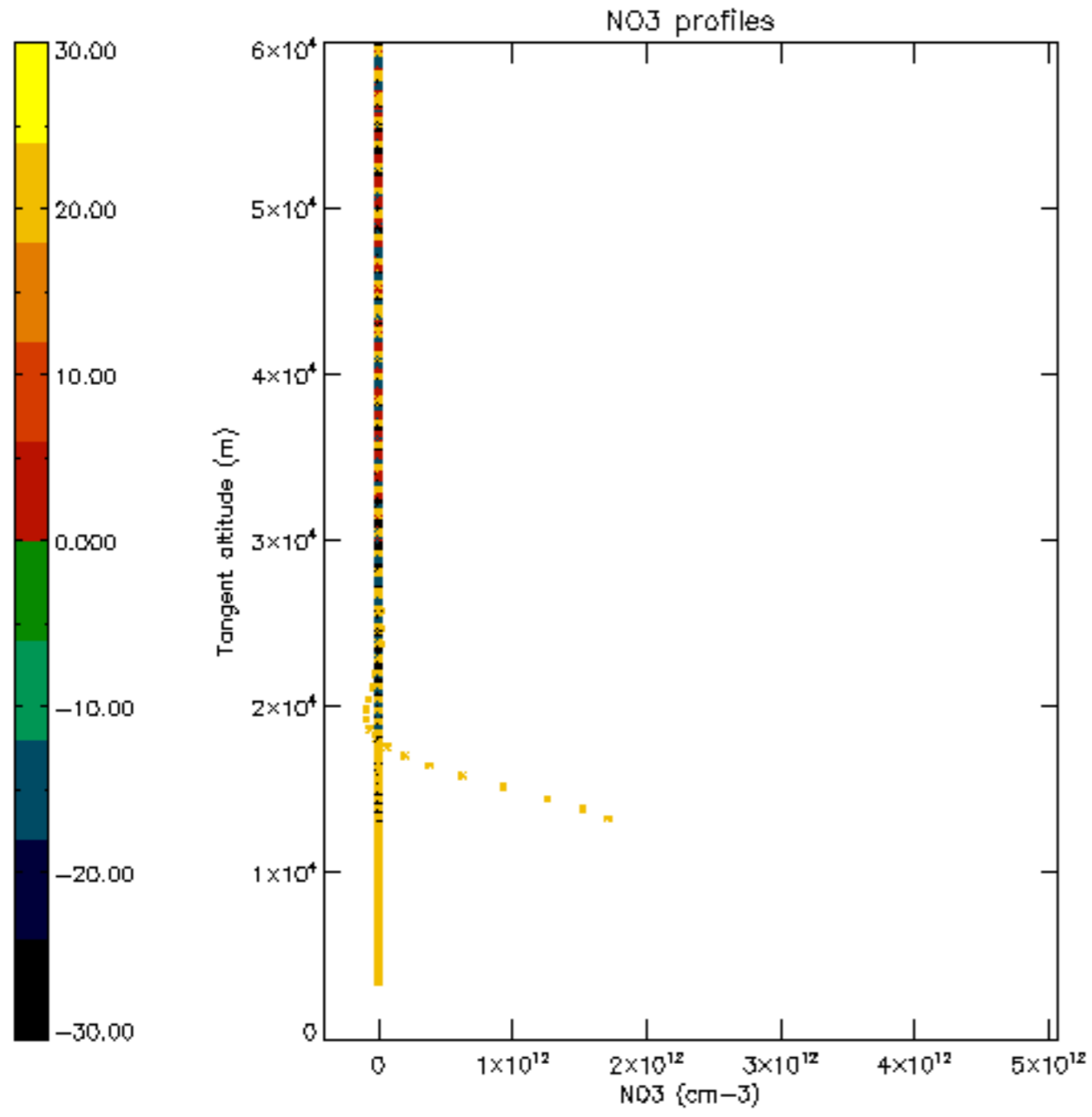


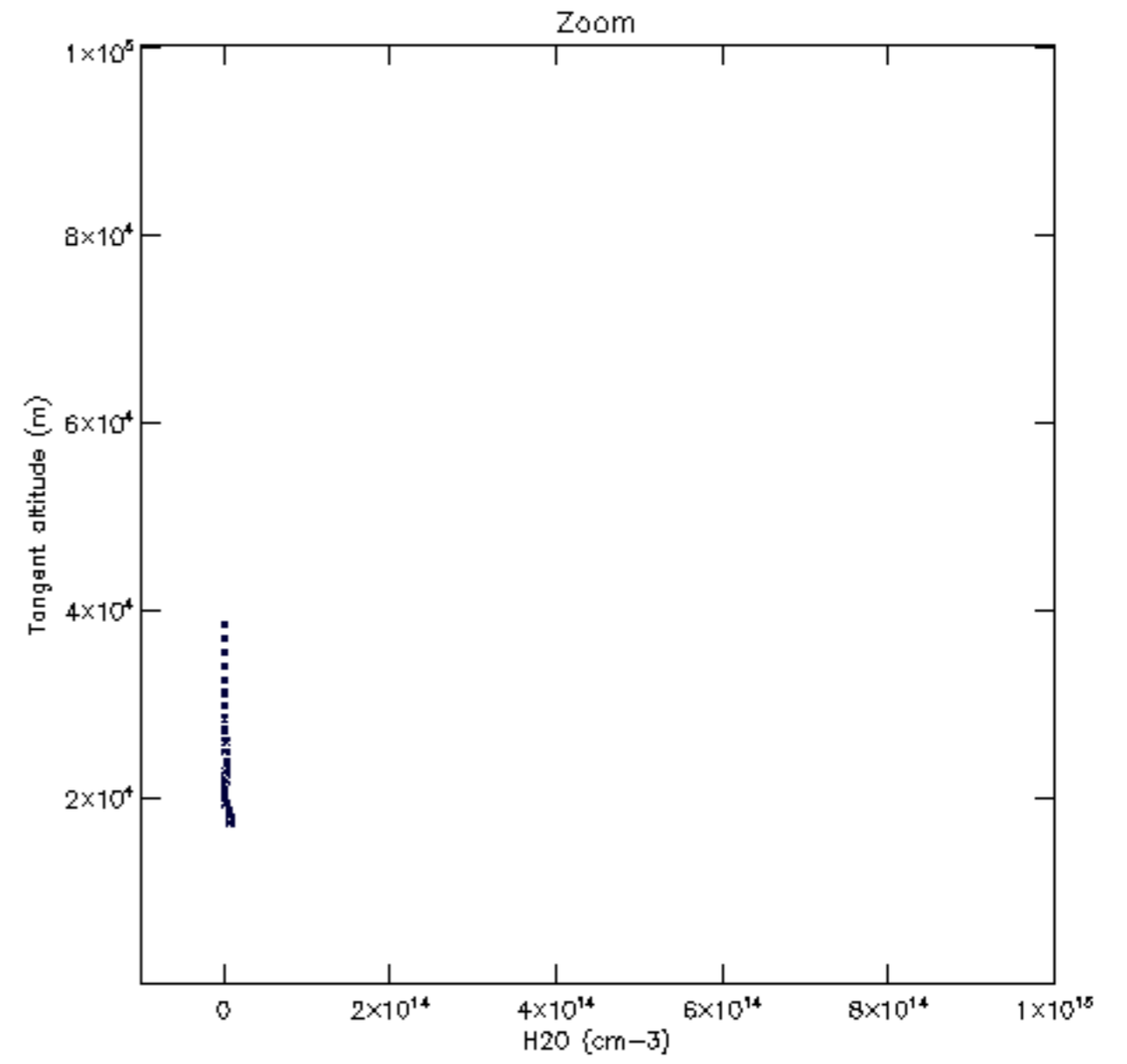
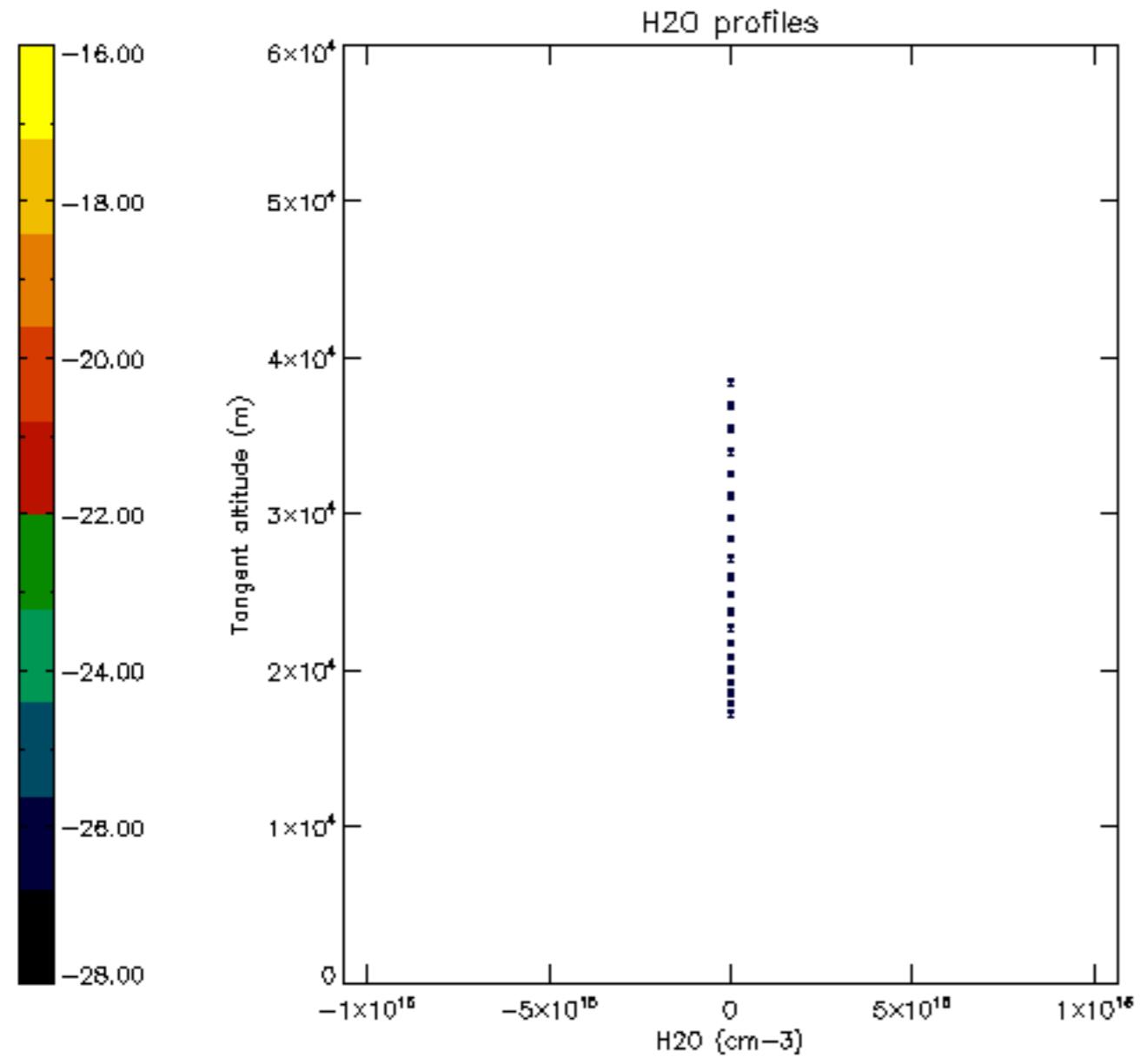


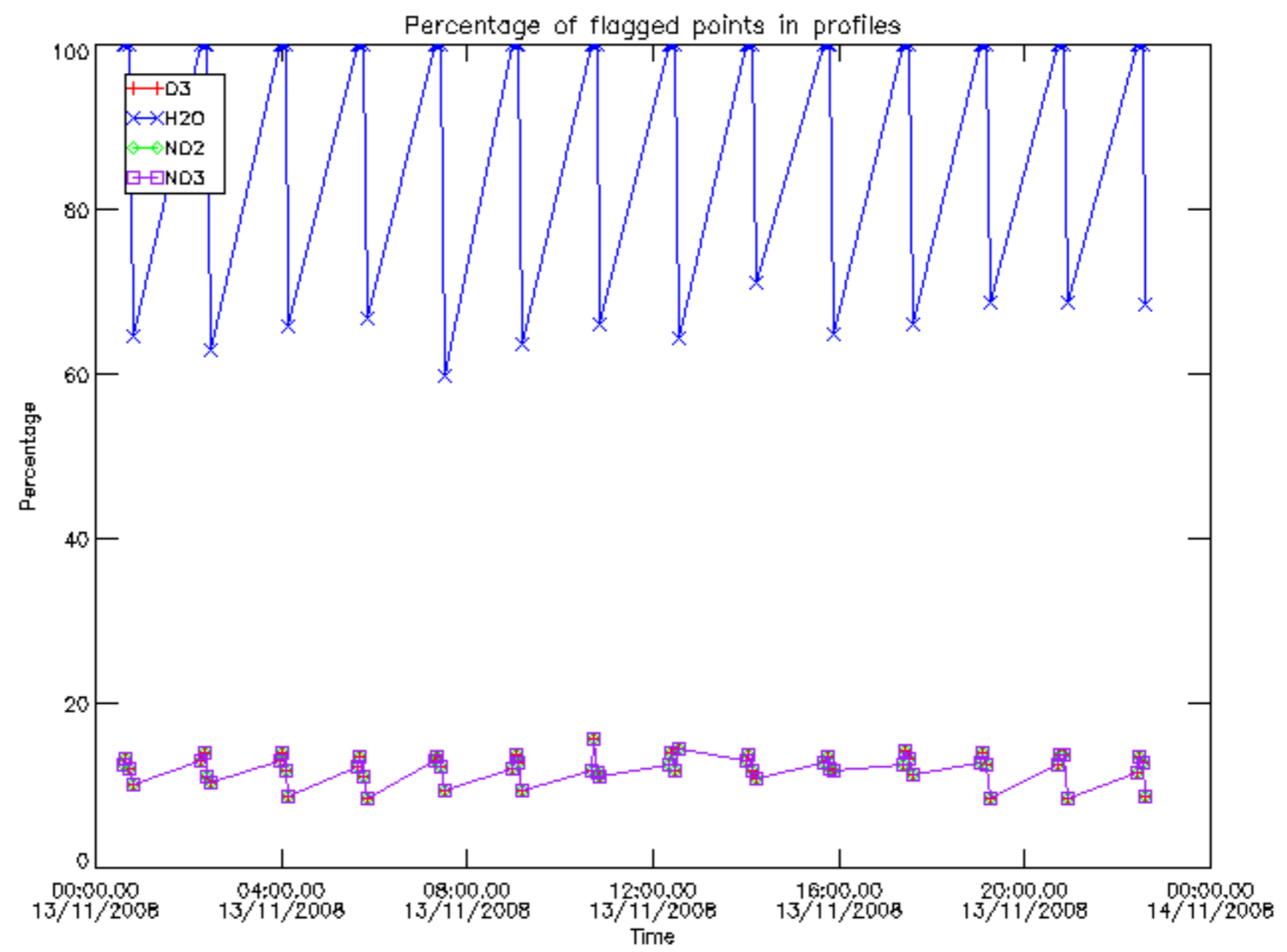




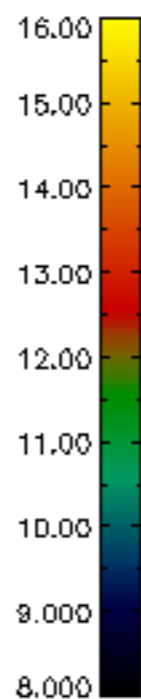
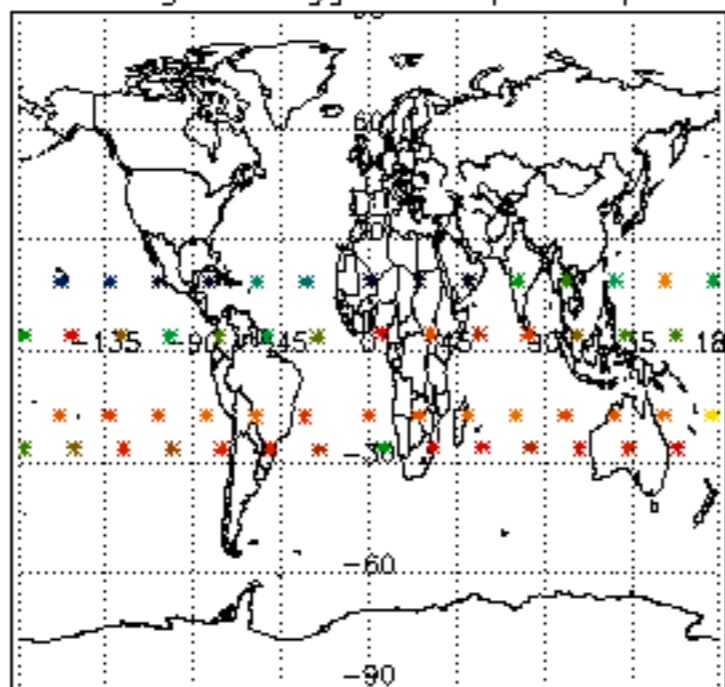




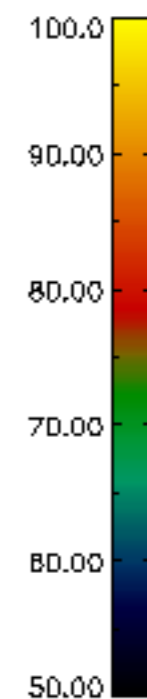
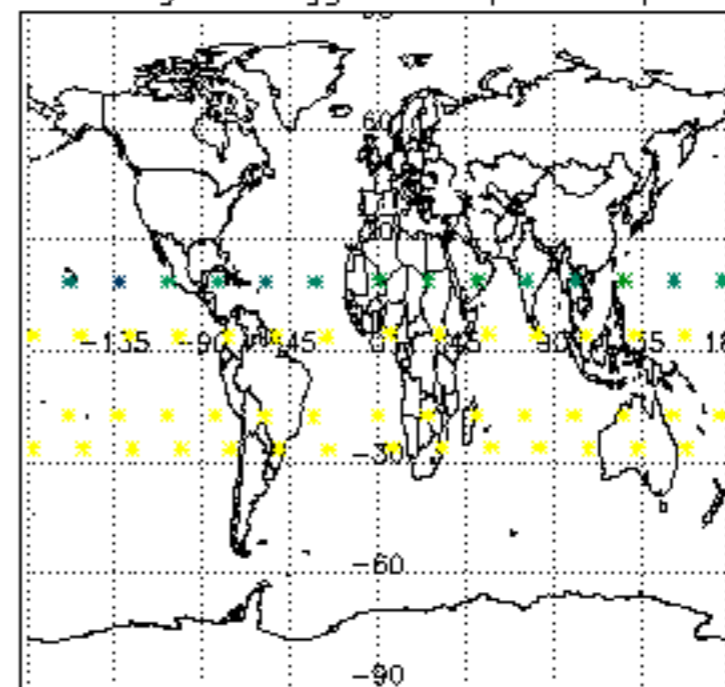




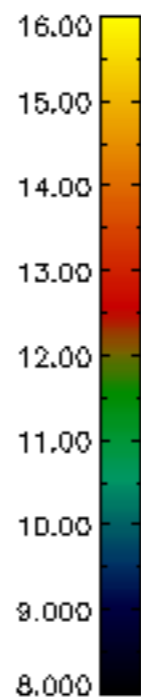
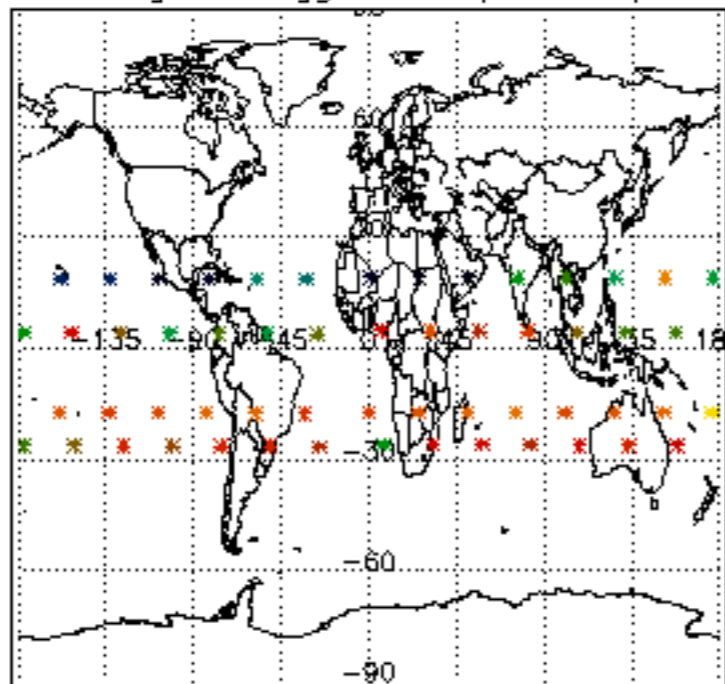
Percentage of flagged data per D3 profile



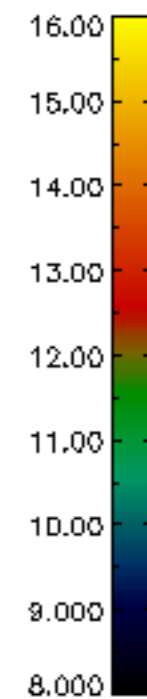
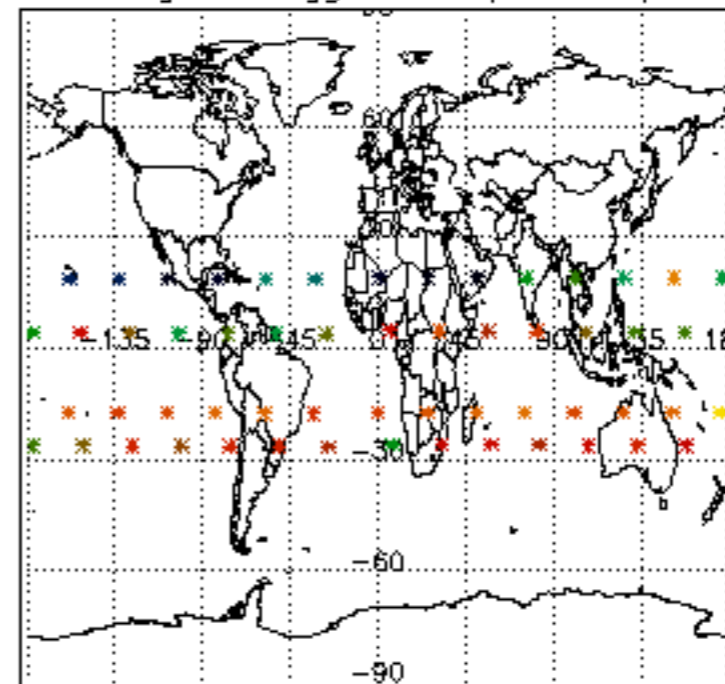
Percentage of flagged data per H2O profile

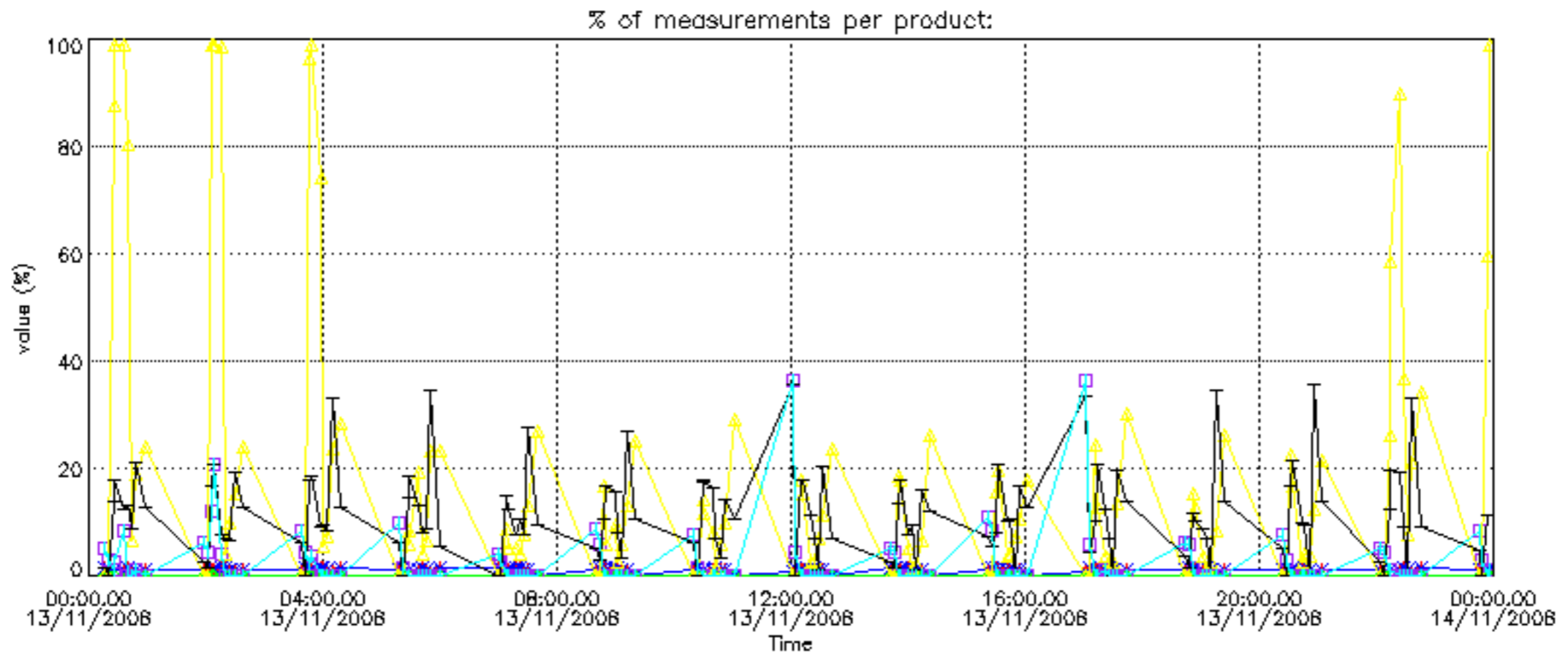


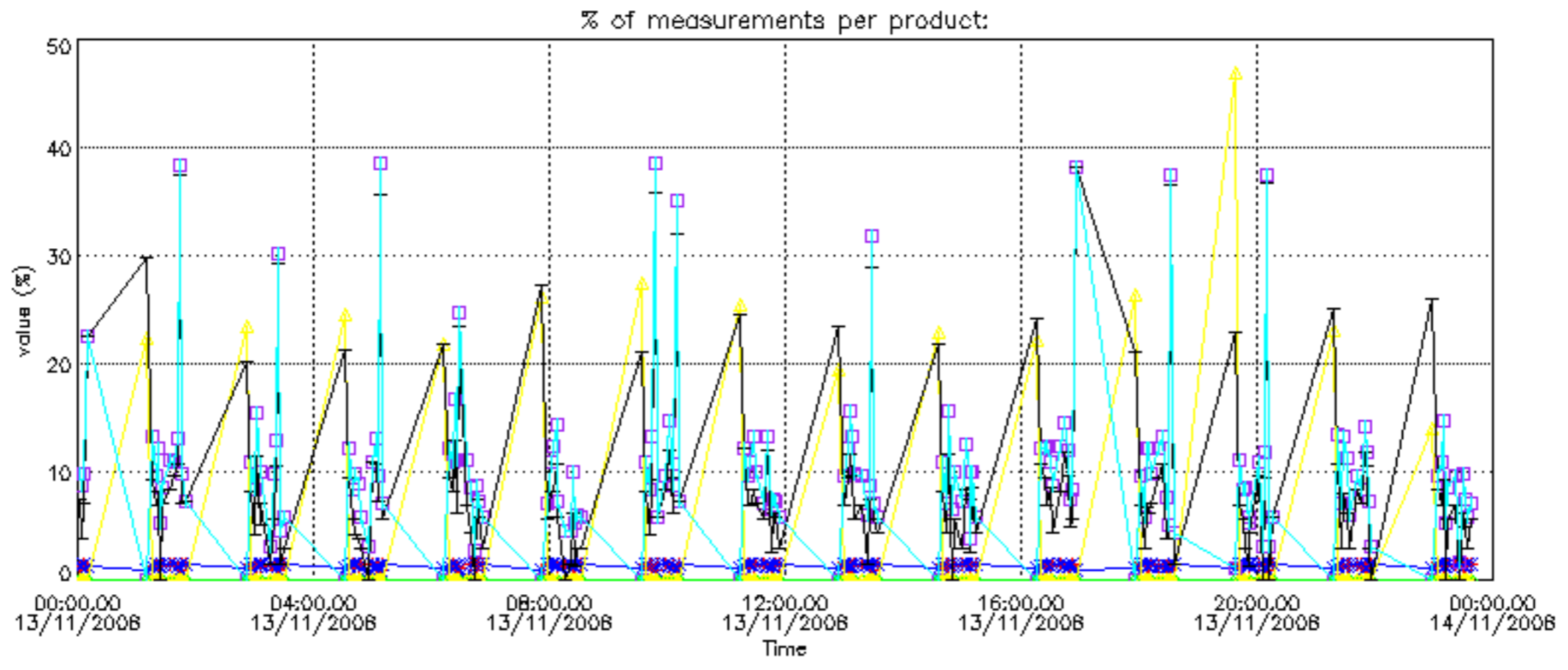
Percentage of flagged data per NO2 profile



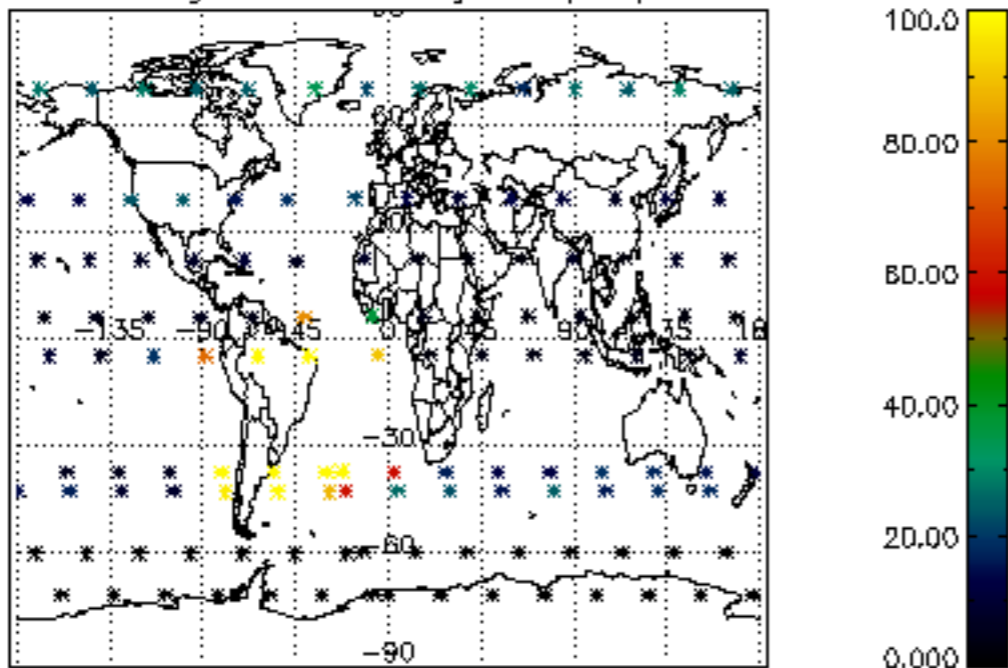
Percentage of flagged data per NO3 profile



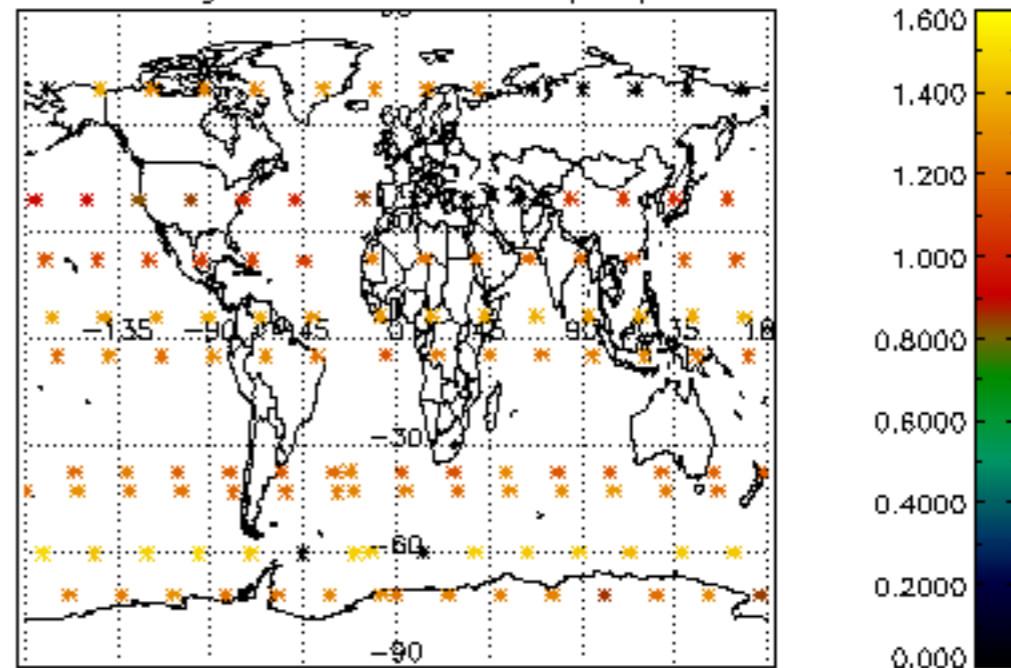




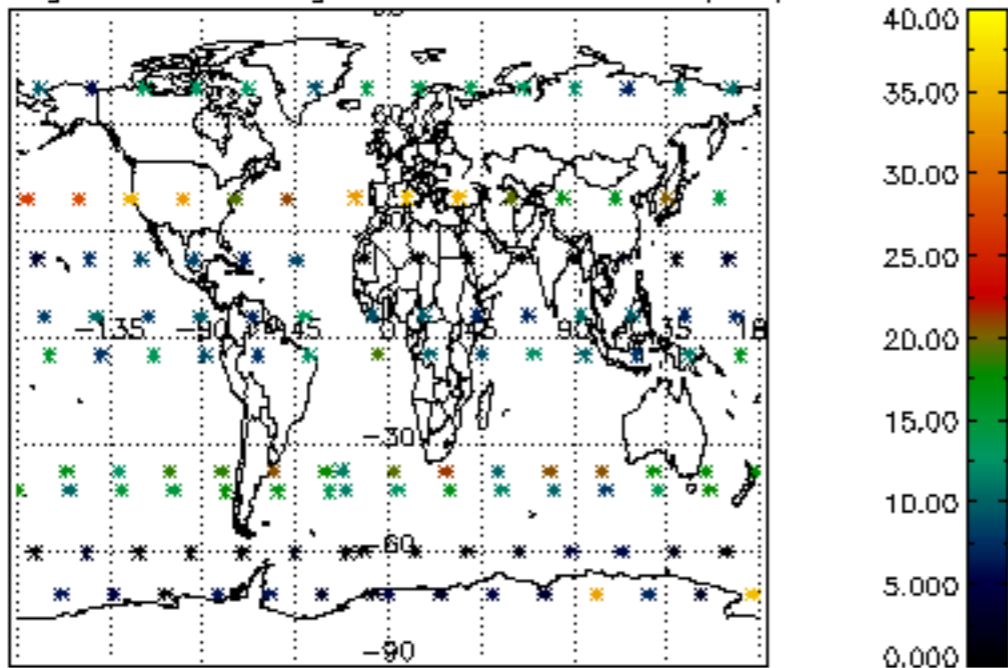
Percentage of cosmic ray hits per profile



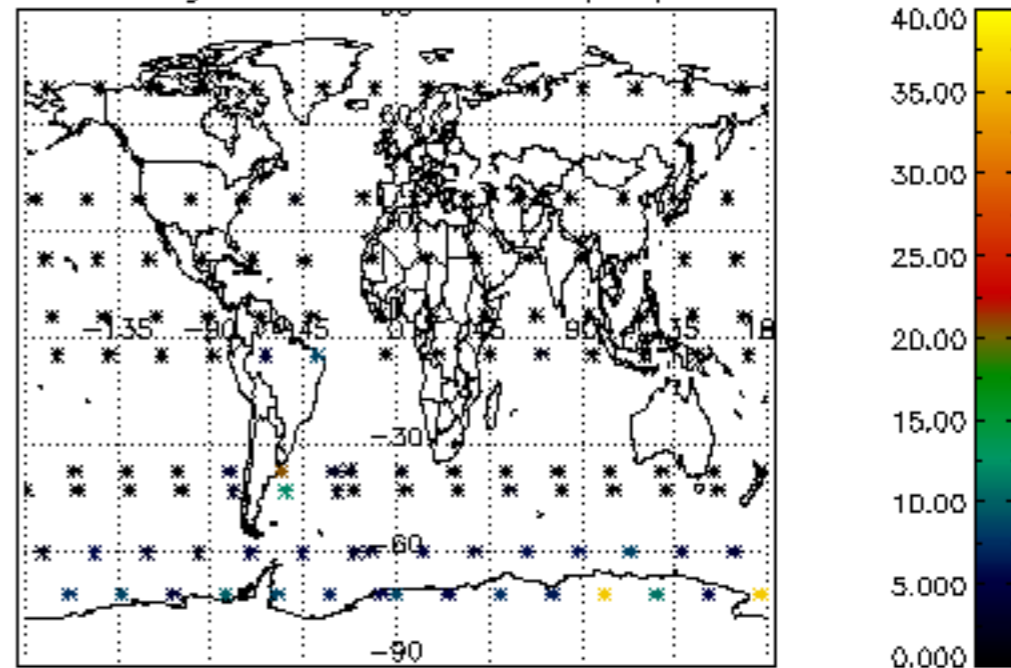
Percentage of datation errors per profile



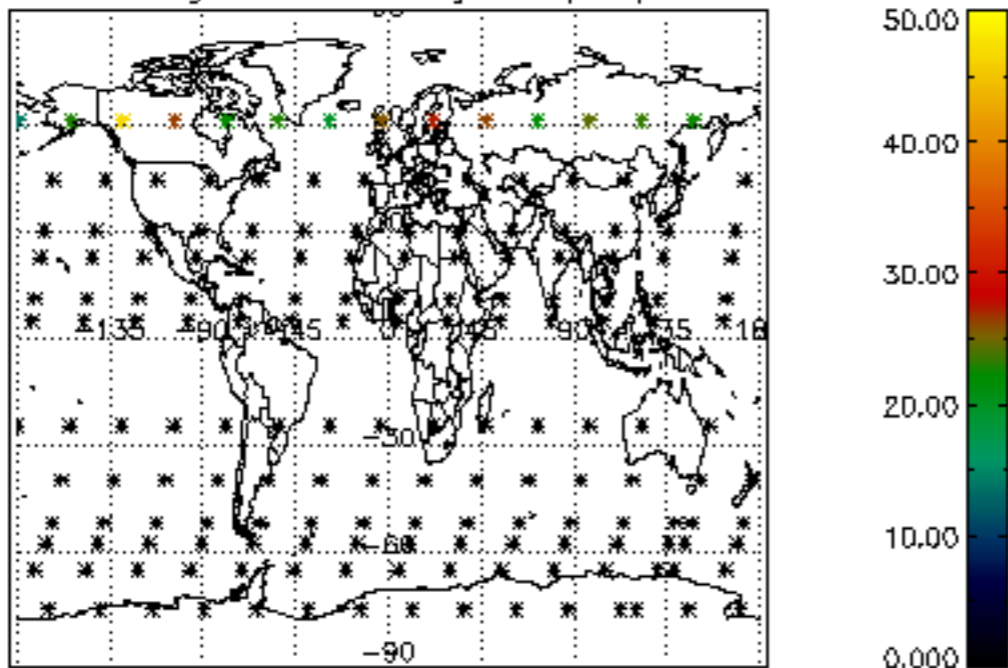
Percentage of star falling outside central band per profile



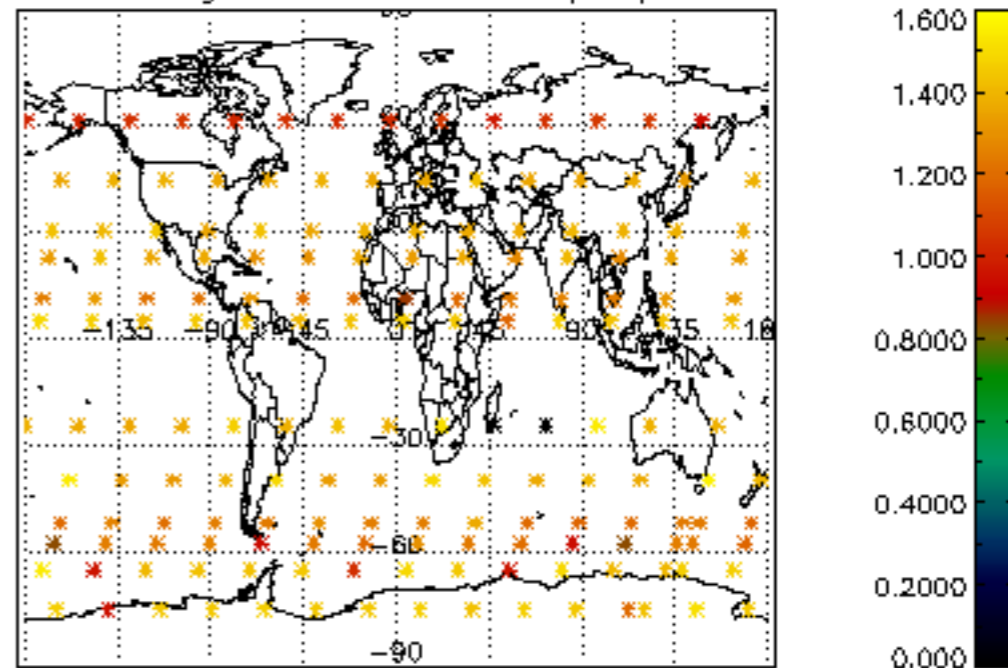
Percentage of saturation errors per profile



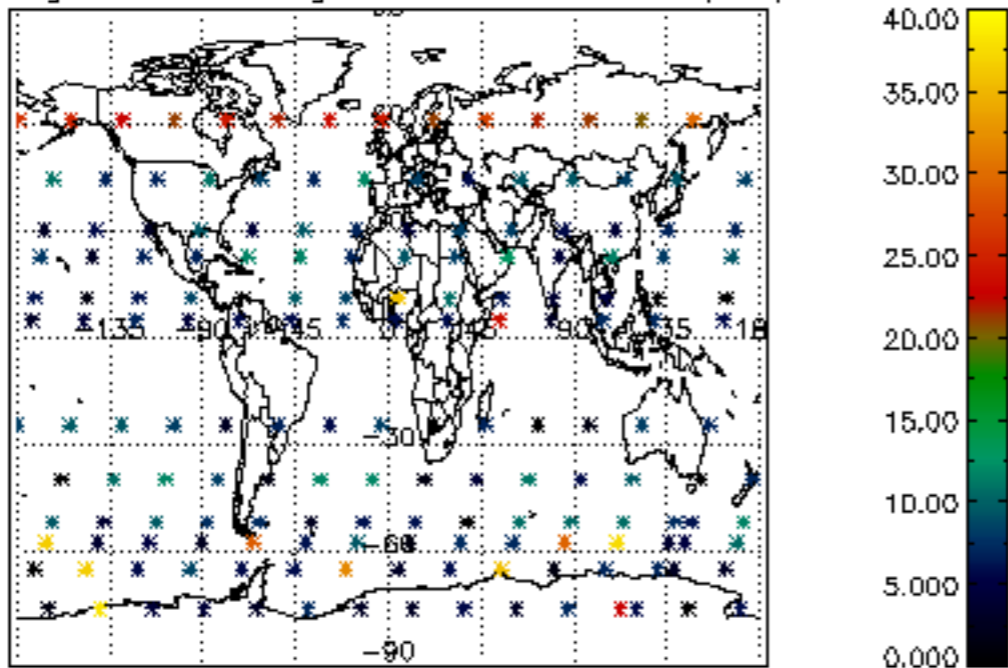
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

