

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	18APR2013 21:19:06
Data source version	GOMOS/6.01
Start time of products	12-03-2004 (12MAR2004 00:00:00)
Stop time of products	13-03-2004 (13MAR2004 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	454
Nb of prods with errors	0

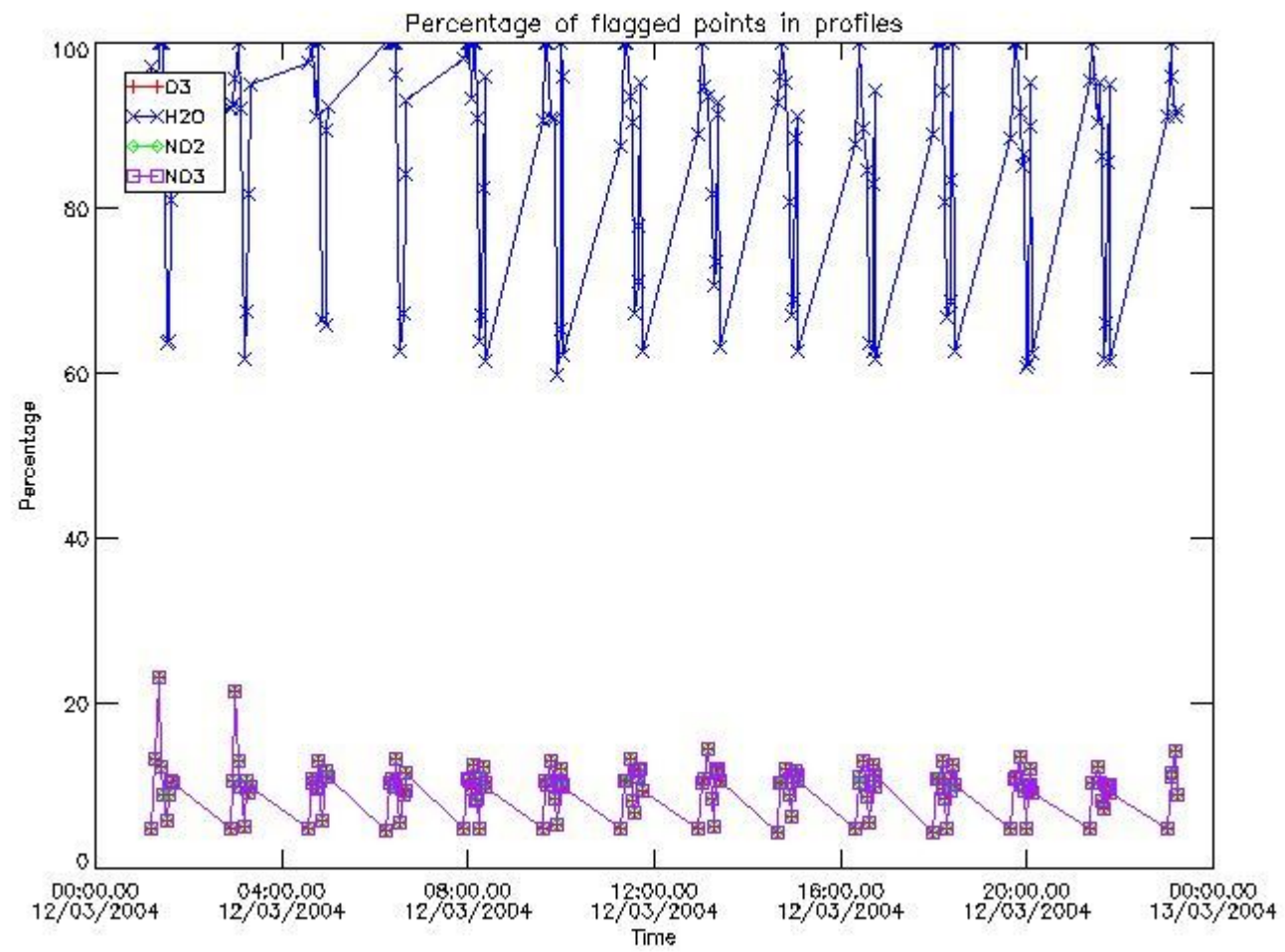
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20040312_000101_000000452025_00045_10620_0413.N1	12-MAR-2004 00:01:01	Straylight	45.000	64	Gam Cen	2.2000	10600.	90	10620	No
2	GOM_NL__2PRFIN20040312_000246_000000392025_00045_10620_0414.N1	12-MAR-2004 00:02:46	Straylight	38.500	91	Kap Vel	2.4900	26000.	77	10620	No
3	GOM_NL__2PRFIN20040312_000912_000000542025_00045_10620_0415.N1	12-MAR-2004 00:09:12	Straylight	53.500	106	9Bet Crv	2.6480	5600.0	107	10620	No
4	GOM_NL__2PRFIN20040312_001139_000000572025_00045_10620_0416.N1	12-MAR-2004 00:11:39	Straylight	57.000	100	4Gam Crv	2.5800	13100.	114	10620	No
5	GOM_NL__2PRFIN20040312_001453_000001112025_00045_10620_0417.N1	12-MAR-2004 00:14:53	Bright	110.50	15	67Alp Vir	0.97600	28000.	221	10620	No
6	GOM_NL__2PRFIN20040312_001851_000000662025_00045_10620_0418.N1	12-MAR-2004 00:18:51	Bright	66.000	121	29Gam Vir	2.7400	7200.0	132	10620	No
7	GOM_NL__2PRFIN20040312_002109_000000412025_00045_10620_0419.N1	12-MAR-2004 00:21:09	Bright	41.000	22	32Alp Leo	1.3600	15200.	82	10620	No
8	GOM_NL__2PRFIN20040312_002329_000000412025_00045_10620_0420.N1	12-MAR-2004 00:23:29	Bright	40.500	51	41Gam1Leo	2.0100	4500.0	81	10620	No
9	GOM_NL__2PRFIN20040312_002635_000000892025_00045_10620_0421.N1	12-MAR-2004 00:26:35	Bright	89.000	138	47Eps Vir	2.8280	4700.0	178	10620	No
10	GOM_NL__2PRFIN20040312_003131_000000432025_00045_10620_0422.N1	12-MAR-2004 00:31:31	Bright	43.000	174	52Psi UMa	3.0040	4400.0	86	10620	No
11	GOM_NL__2PRFIN20040312_003437_000000402025_00045_10620_0423.N1	12-MAR-2004 00:34:37	Bright	40.000	82	48Bet UMa	2.3650	10600.	80	10620	No
12	GOM_NL__2PRFIN20040312_003605_000000422025_00045_10620_0424.N1	12-MAR-2004 00:36:05	Bright	42.000	36	50Alp UMa	1.8000	6300.0	84	10620	No
13	GOM_NL__2PRFIN20040312_003805_000000482025_00045_10620_0425.N1	12-MAR-2004 00:38:05	Bright	48.000	32	77Eps UMa	1.7630	11000.	96	10620	No
14	GOM_NL__2PRFIN20040312_004024_000000582025_00045_10620_0426.N1	12-MAR-2004 00:40:24	Bright	58.000	39	85Eta UMa	1.8540	24000.	116	10620	No
15	GOM_NL__2PRFIN20040312_004315_000000352025_00045_10620_0427.N1	12-MAR-2004 00:43:15	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	10620	No
16	GOM_NL__2PRFIN20040312_004731_000000492025_00045_10620_0428.N1	12-MAR-2004 00:47:31	Bright	48.500	119	14Eta Dra	2.7270	4700.0	97	10620	No
17	GOM_NL__2PRFIN20040312_005059_000000372025_00045_10620_0429.N1	12-MAR-2004 00:50:59	Bright	36.500	89	5Alp Cep	2.4510	8000.0	73	10620	No
18	GOM_NL__2PRFIN20040312_005314_000000482025_00045_10620_0430.N1	12-MAR-2004 00:53:14	Bright	48.000	69	33Gam Dra	2.2310	3800.0	96	10620	No
19	GOM_NL__2PRFIN20040312_005605_000000392025_00045_10620_0431.N1	12-MAR-2004 00:56:05	Bright	38.500	19	50Alp Cyg	1.2460	10500.	77	10620	No
20	GOM_NL__2PRFIN20040312_005739_000000382025_00045_10620_0432.N1	12-MAR-2004 00:57:39	Bright	37.500	66	37Gam Cyg	2.2080	5900.0	75	10620	No
21	GOM_NL__2PRFIN20040312_005918_000000372025_00045_10620_0433.N1	12-MAR-2004 00:59:18	Bright	36.500	92	53Eps Cyg	2.5000	4500.0	73	10620	No
22	GOM_NL__2PRFIN20040312_010251_000001472025_00045_10620_0434.N1	12-MAR-2004 01:02:51	Twilight_stray	146.50	133	40Zet Her	2.8070	6000.0	293	10620	No
23	GOM_NL__2PRFIN20040312_010725_000000532025_00045_10620_0435.N1	12-MAR-2004 01:07:25	Bright	53.000	11	53Alp Aql	0.76500	8000.0	106	10620	No
24	GOM_NL__2PRFIN20040312_011240_000001042025_00045_10620_0436.N1	12-MAR-2004 01:12:40	Dark	104.00	59	55Alp Oph	2.0800	8900.0	208	10620	No
25	GOM_NL__2PRFIN20040312_011716_000000462025_00045_10620_0437.N1	12-MAR-2004 01:17:16	Dark	46.000	155	41Pi Sgr	2.9000	6600.0	92	10620	No
26	GOM_NL__2PRFIN20040312_012238_000000482025_00045_10620_0438.N1	12-MAR-2004 01:22:38	Dark	48.000	38	20Eps Sgr	1.8360	11000.	96	10620	No
27	GOM_NL__2PRFIN20040312_012431_000000422025_00045_10620_0439.N1	12-MAR-2004 01:24:31	Dark	41.500	45	Alp Pav	1.9400	26000.	83	10620	No
28	GOM_NL__2PRFIN20040312_012605_000000572025_00045_10620_0440.N1	12-MAR-2004 01:26:05	Dark	57.000	25	35Lam Sco	1.6200	28000.	114	10620	No
29	GOM_NL__2PRFIN20040312_013110_000000872025_00046_10621_0410.N1	12-MAR-2004 01:31:10	Dark	87.000	16	21Alp Sco	1.0200	3000.0	174	10621	No
30	GOM_NL__2PRFIN20040312_013522_000000572025_00046_10621_0411.N1	12-MAR-2004 01:35:22	Dark	57.000	4	Alp1Cen	-0.010000	5800.0	114	10621	No
31	GOM_NL__2PRFIN20040312_013638_000000482025_00046_10621_0412.N1	12-MAR-2004 01:36:38	Dark	48.000	10	Bet Cen	0.61000	28000.	96	10621	No
32	GOM_NL__2PRFIN20040312_013844_000000492025_00046_10621_0413.N1	12-MAR-2004 01:38:44	Dark	49.000	12	Alp1Cru	0.77500	30000.	98	10621	No
33	GOM_NL__2PRFIN20040312_014137_000000492025_00046_10621_0414.N1	12-MAR-2004 01:41:37	Straylight	49.000	64	Gam Cen	2.2000	10600.	98	10621	No
34	GOM_NL__2PRFIN20040312_014322_000000432025_00046_10621_0415.N1	12-MAR-2004 01:43:22	Straylight	43.000	91	Kap Vel	2.4900	26000.	86	10621	No
35	GOM_NL__2PRFIN20040312_014948_000000572025_00046_10621_0416.N1	12-MAR-2004 01:49:48	Straylight	56.500	106	9Bet Crv	2.6480	5600.0	113	10621	No
36	GOM_NL__2PRFIN20040312_015215_000000562025_00046_10621_0417.N1	12-MAR-2004 01:52:15	Straylight	55.500	100	4Gam Crv	2.5800	13100.	111	10621	No
37	GOM_NL__2PRFIN20040312_015528_000001022025_00046_10621_0418.N1	12-MAR-2004 01:55:28	Bright	101.50	15	67Alp Vir	0.97600	28000.	203	10621	No
38	GOM_NL__2PRFIN20040312_015927_000000702025_00046_10621_0419.N1	12-MAR-2004 01:59:27	Bright	69.500	121	29Gam Vir	2.7400	7200.0	139	10621	No
39	GOM_NL__2PRFIN20040312_020145_000000402025_00046_10621_0420.N1	12-MAR-2004 02:01:45	Bright	40.000	22	32Alp Leo	1.3600	15200.	80	10621	No
40	GOM_NL__2PRFIN20040312_020403_000000412025_00046_10621_0421.N1	12-MAR-2004 02:04:03	Bright	41.000	51	41Gam1Leo	2.0100	4500.0	82	10621	No
41	GOM_NL__2PRFIN20040312_020708_000000902025_00046_10621_0422.N1	12-MAR-2004 02:07:08	Bright	90.000	138	47Eps Vir	2.8280	4700.0	180	10621	No
42	GOM_NL__2PRFIN20040312_021206_000000412025_00046_10621_0423.N1	12-MAR-2004 02:12:06	Bright	41.000	174	52Psi UMa	3.0040	4400.0	82	10621	No

3. Quality information per product

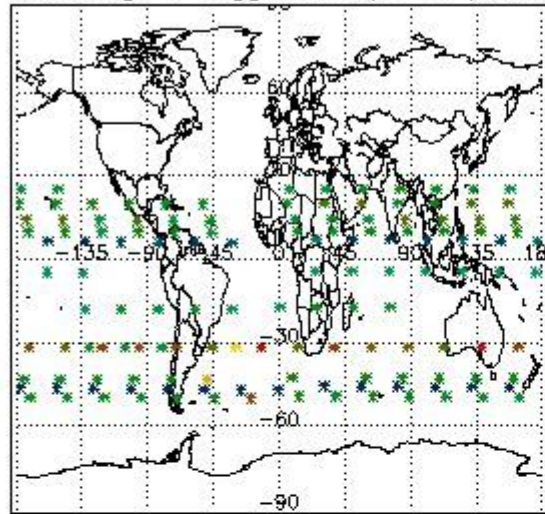
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

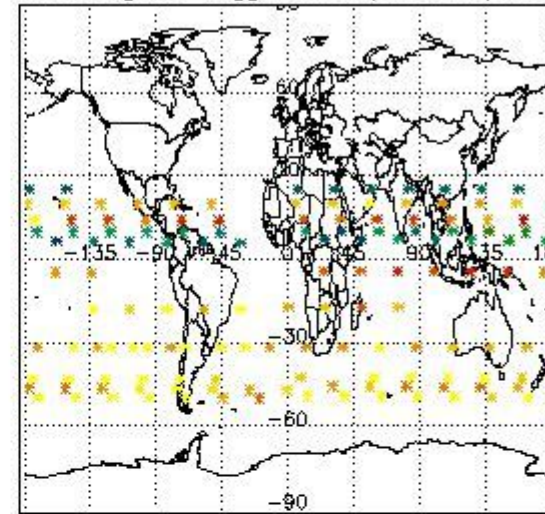


3.2 Plot quality information per product (world map)

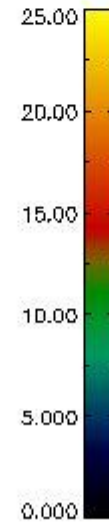
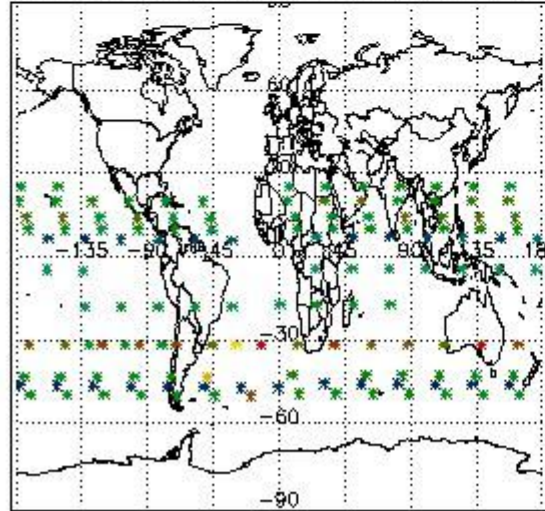
Percentage of flagged data per O3 profile



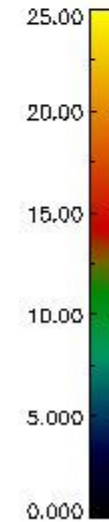
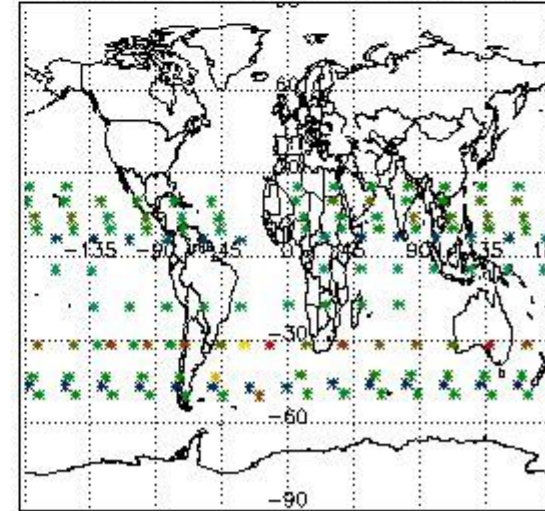
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

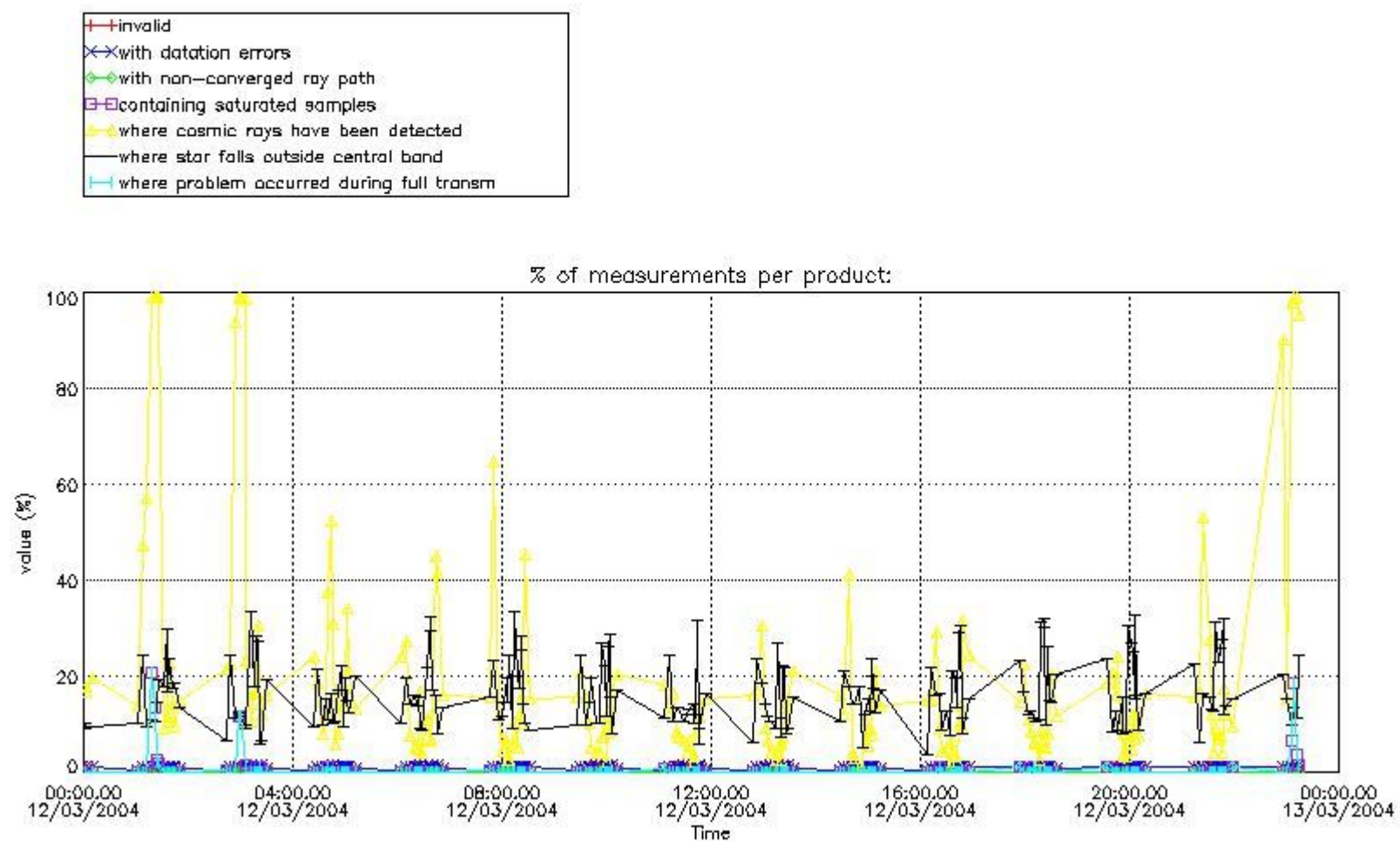


4. Level 1 quality information per product

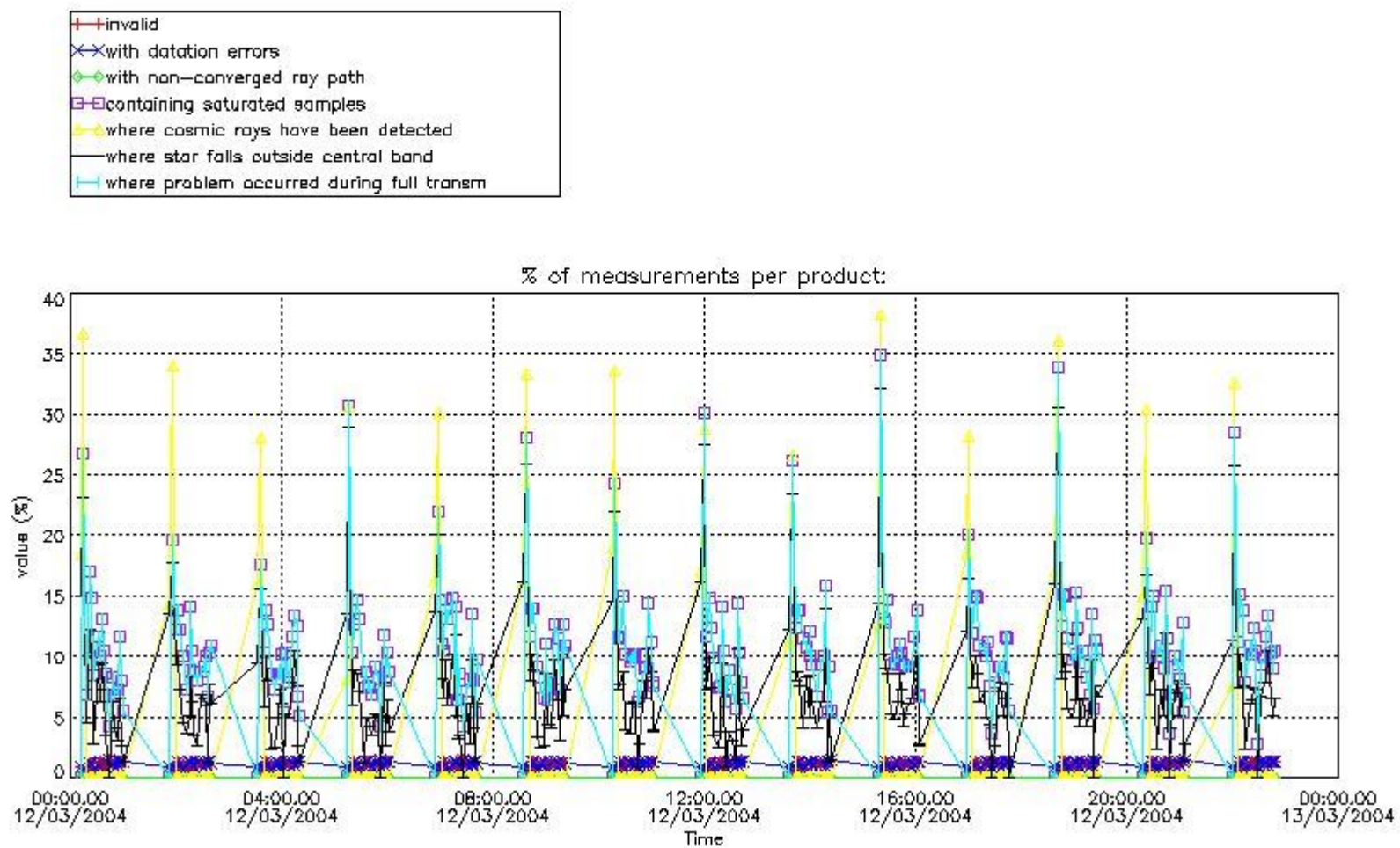
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



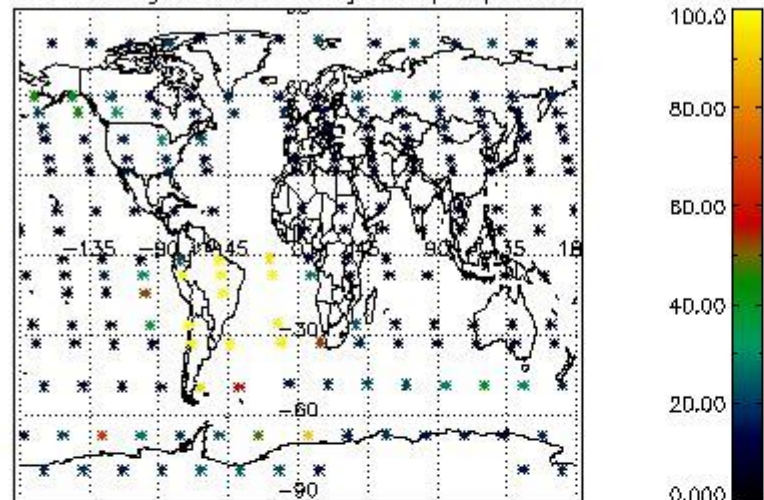
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



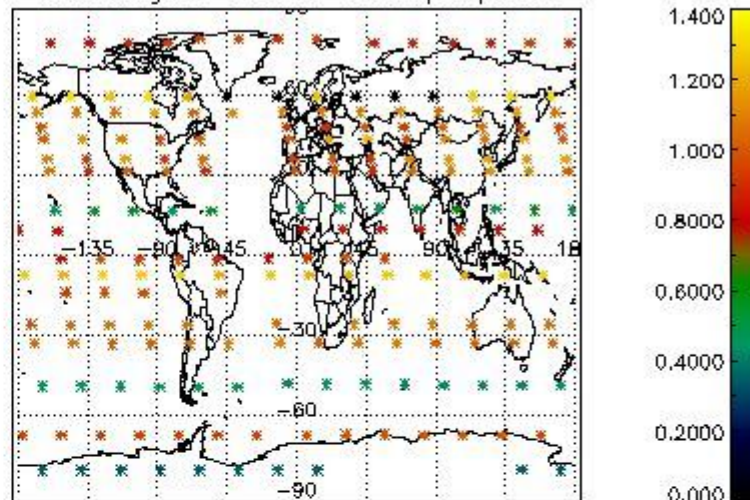
4.2 Plot quality information per product coming from level 1b processing (world map)

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

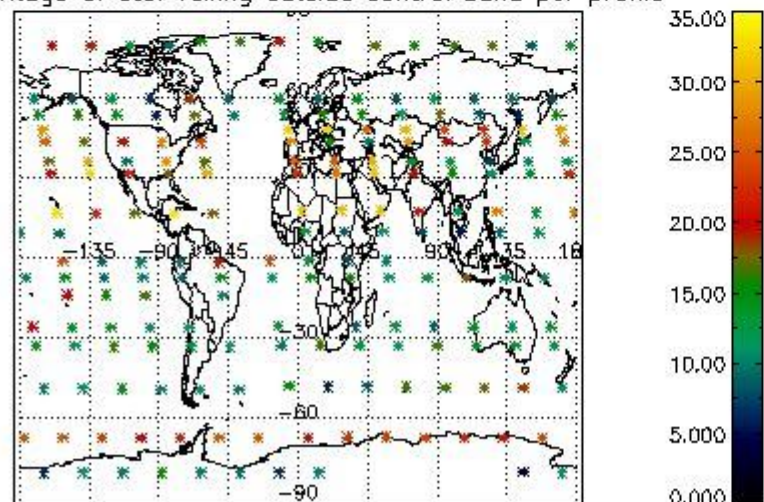
Percentage of cosmic ray hits per profile



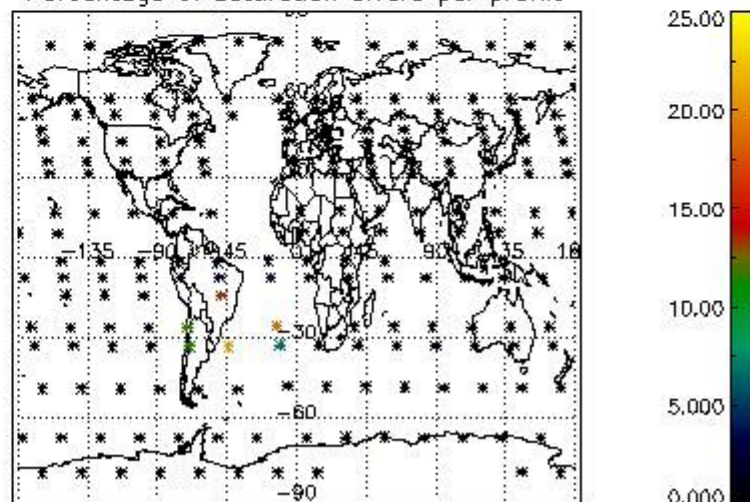
Percentage of datation errors per profile



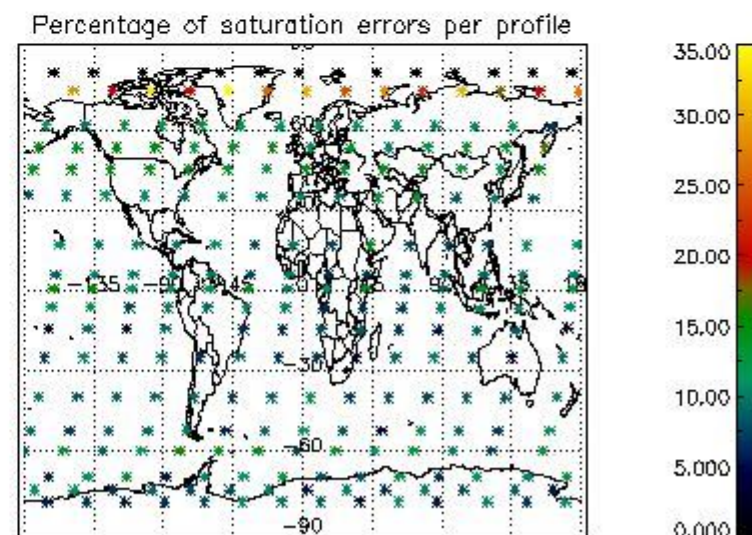
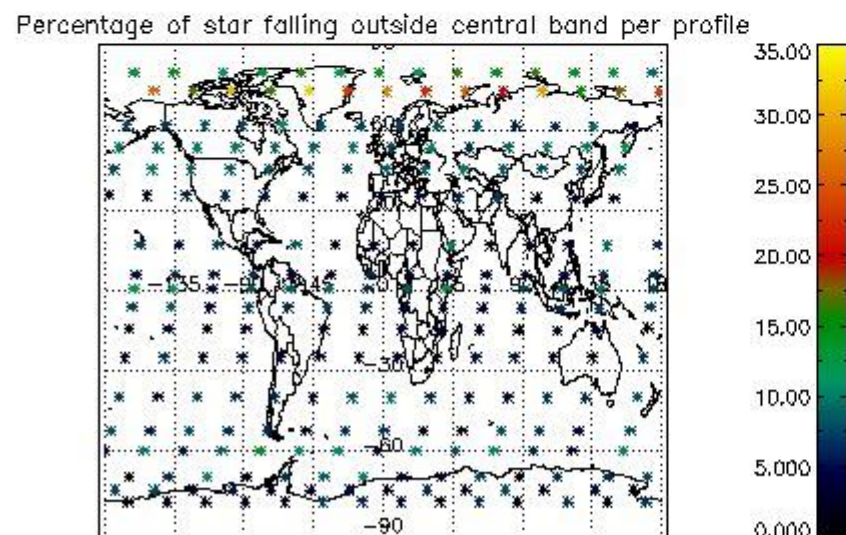
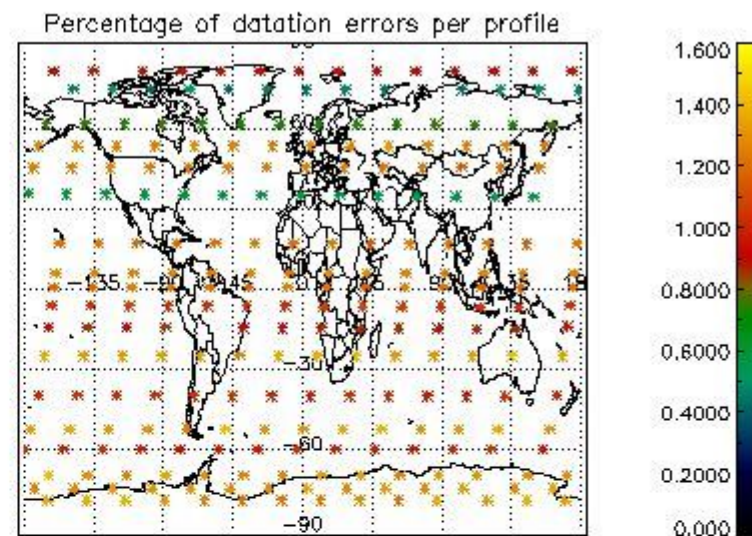
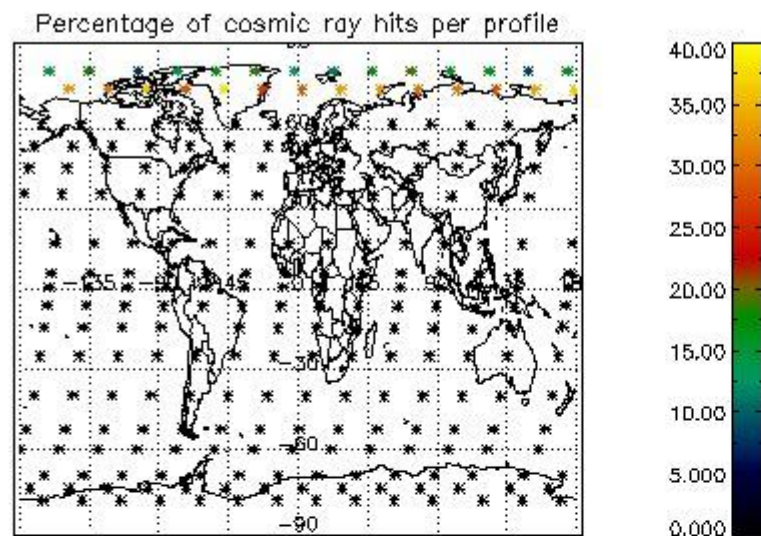
Percentage of star falling outside central band per profile



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

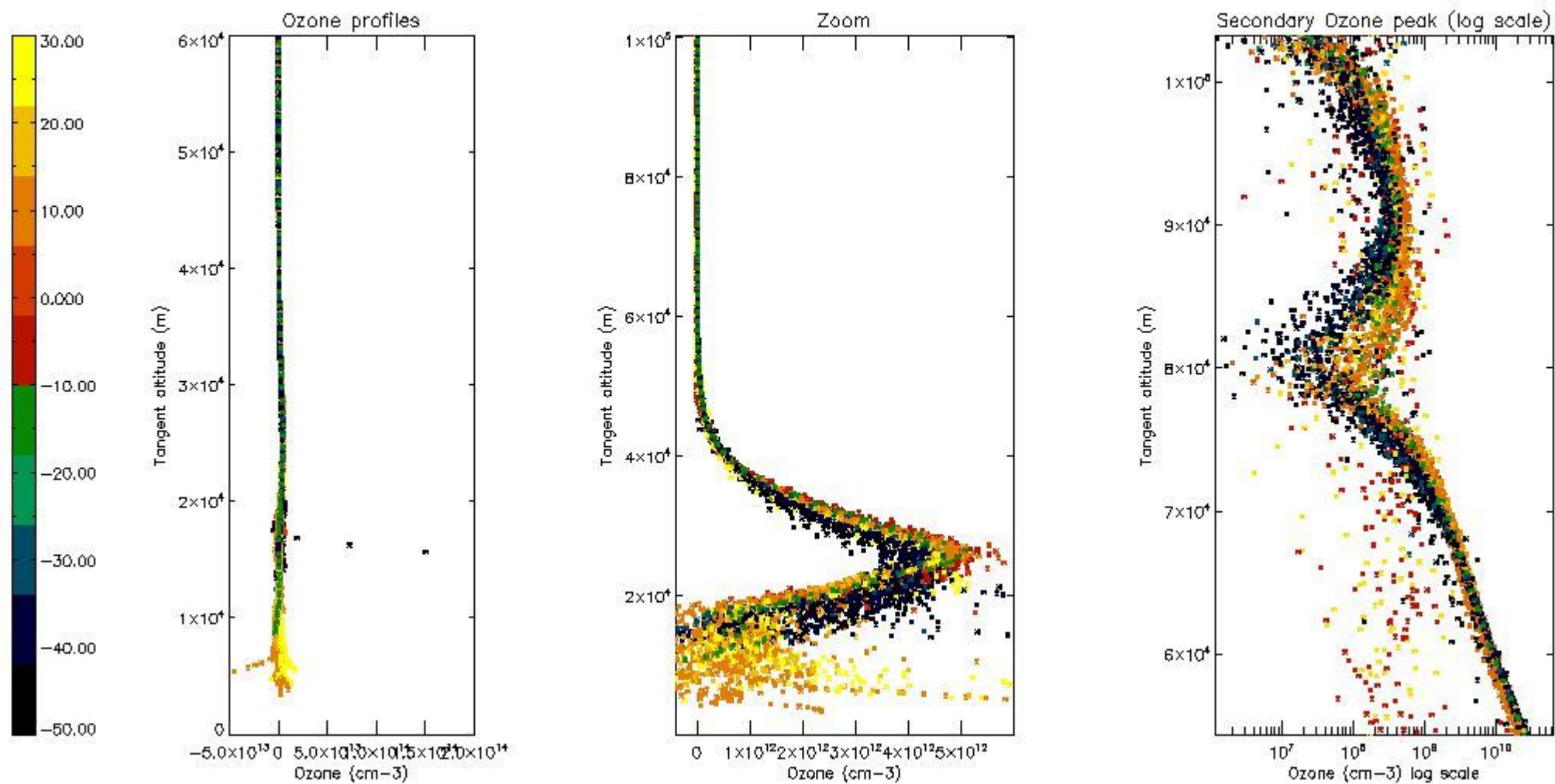
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	33
STD < 20	20

STD < 10	16
STD < 5	12

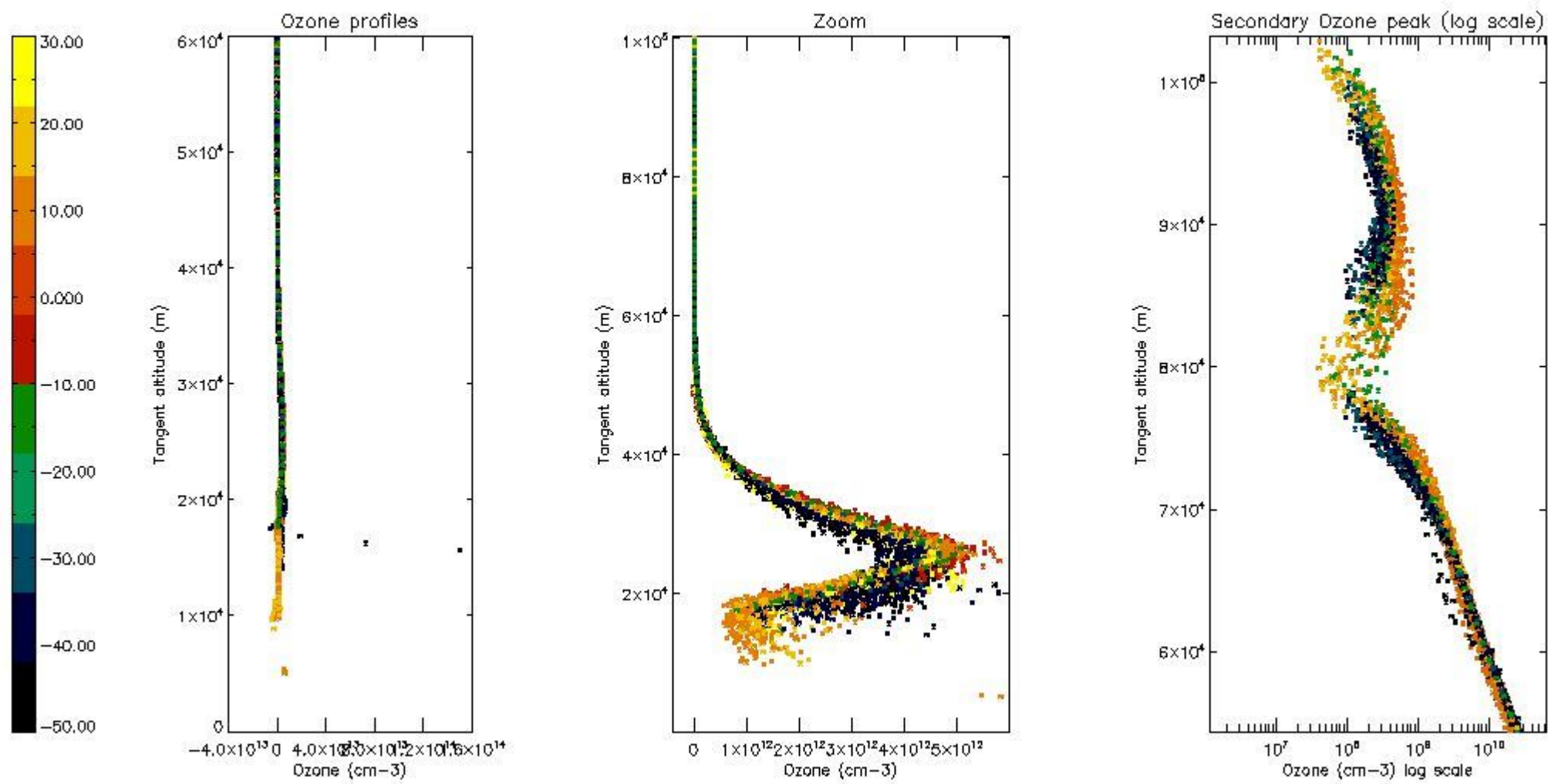
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



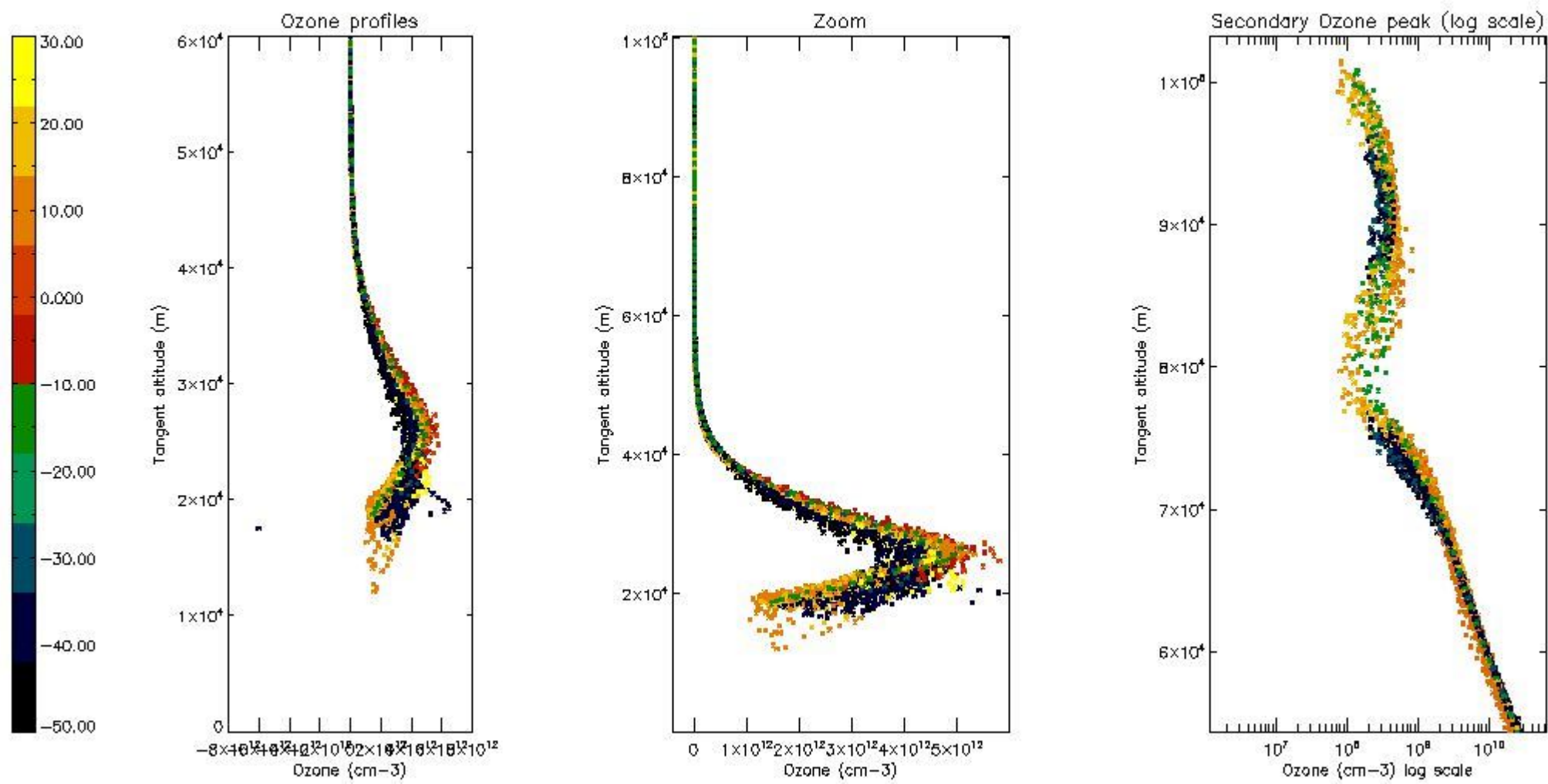
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



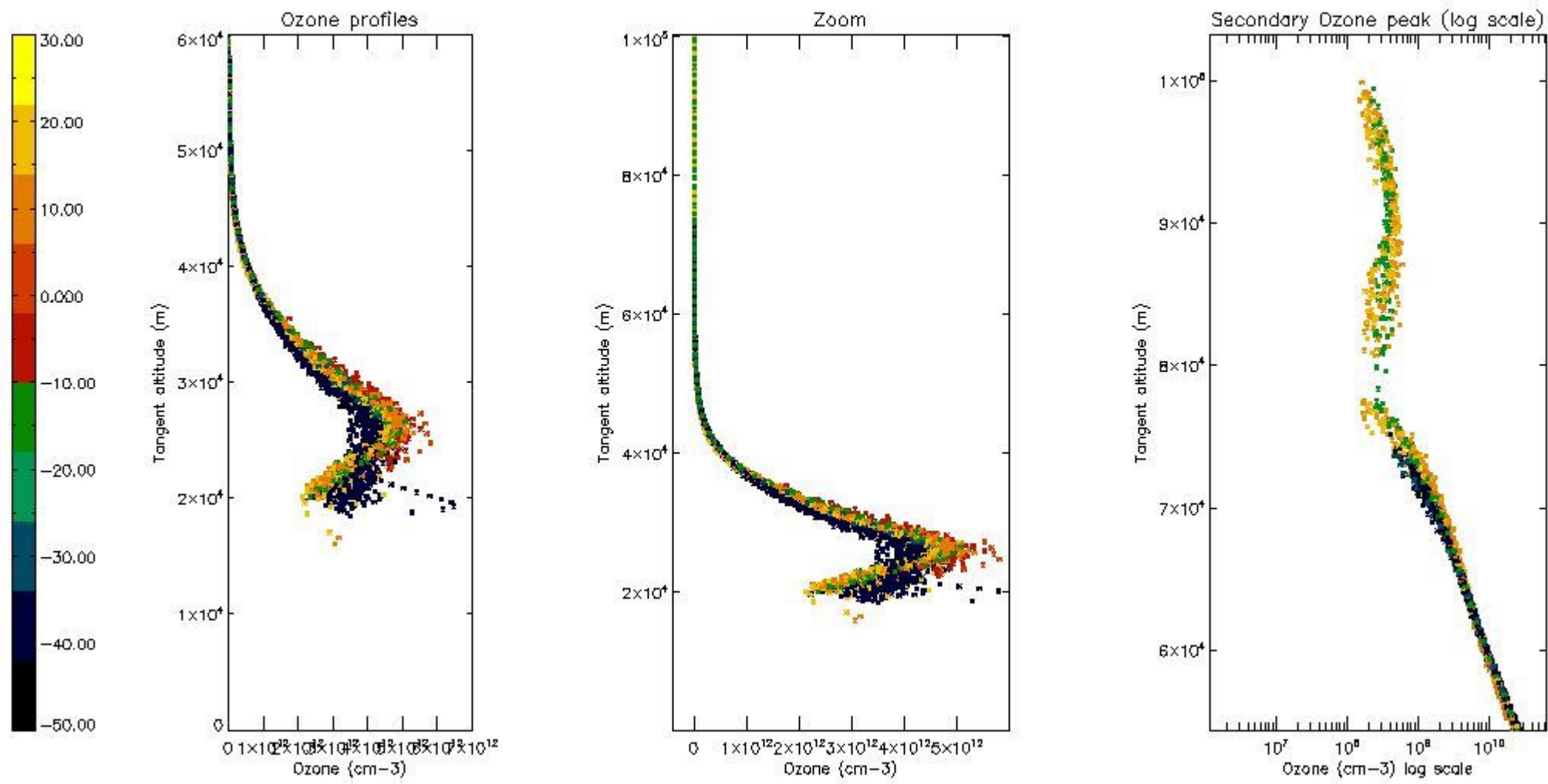
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



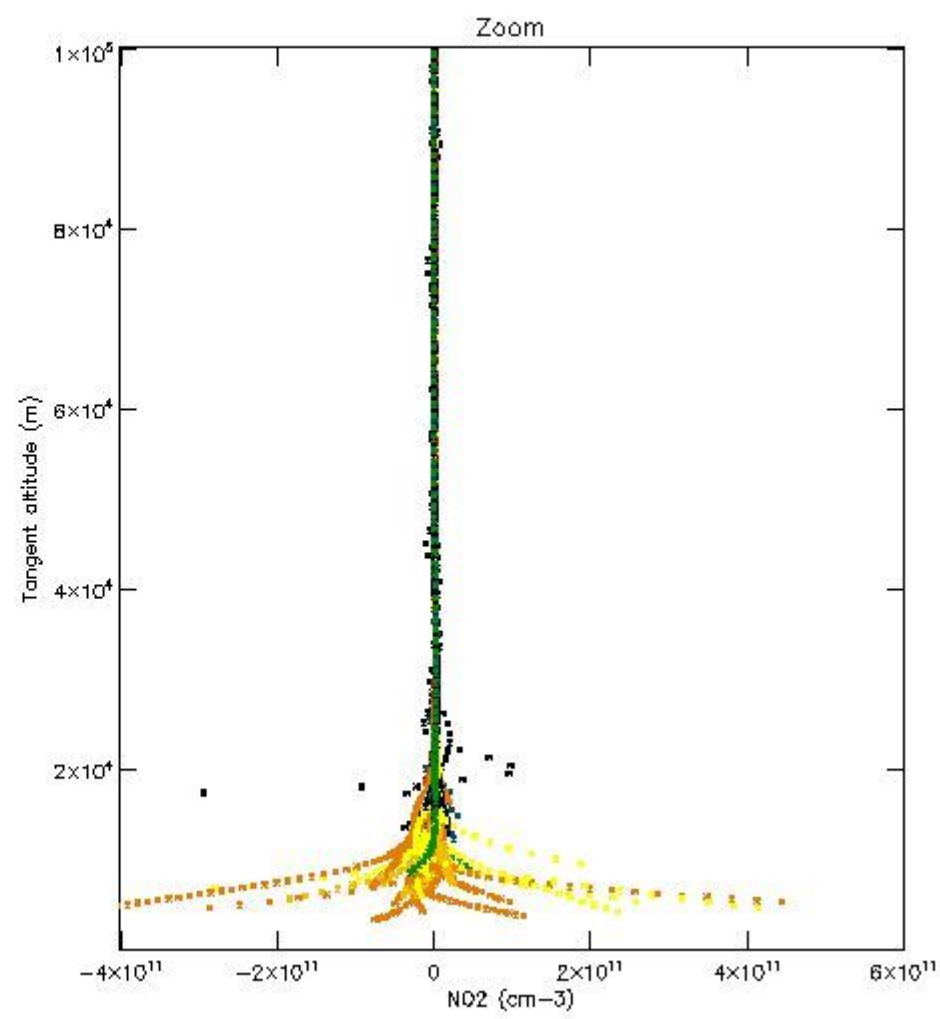
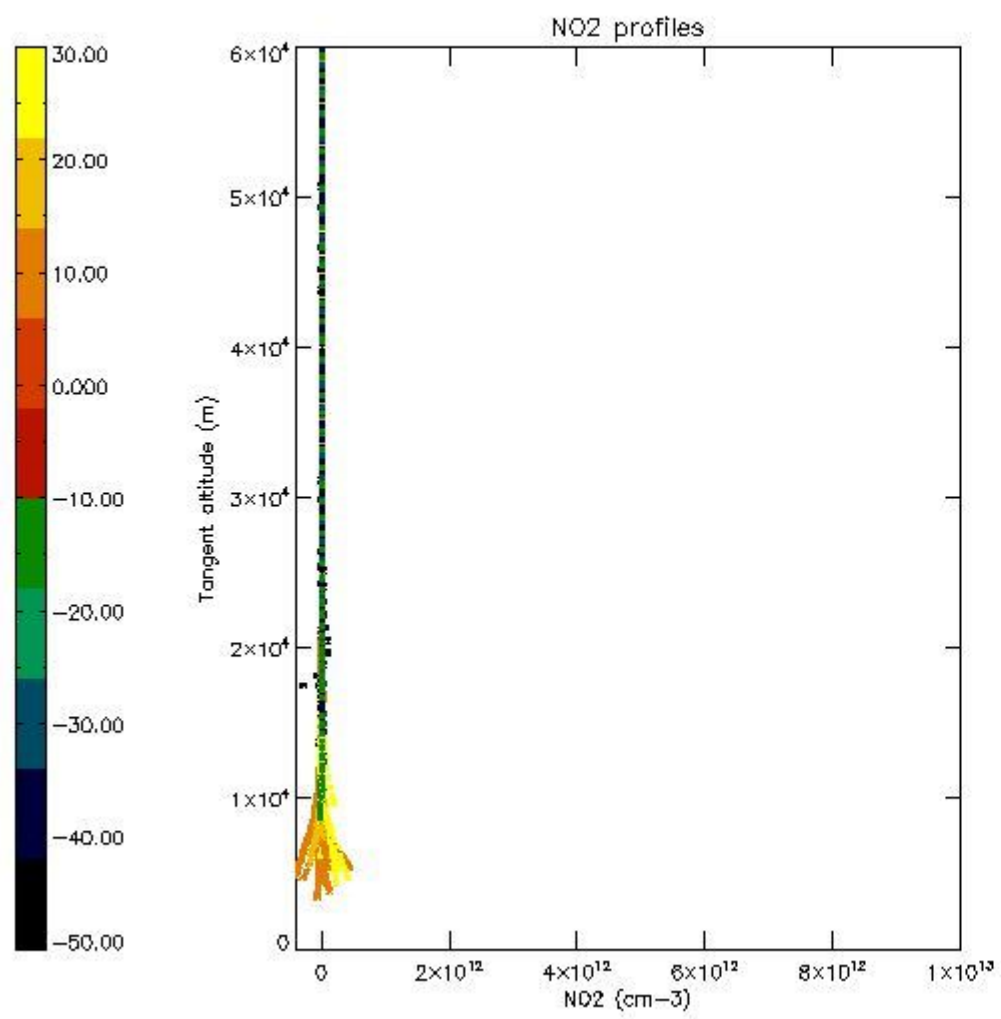
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



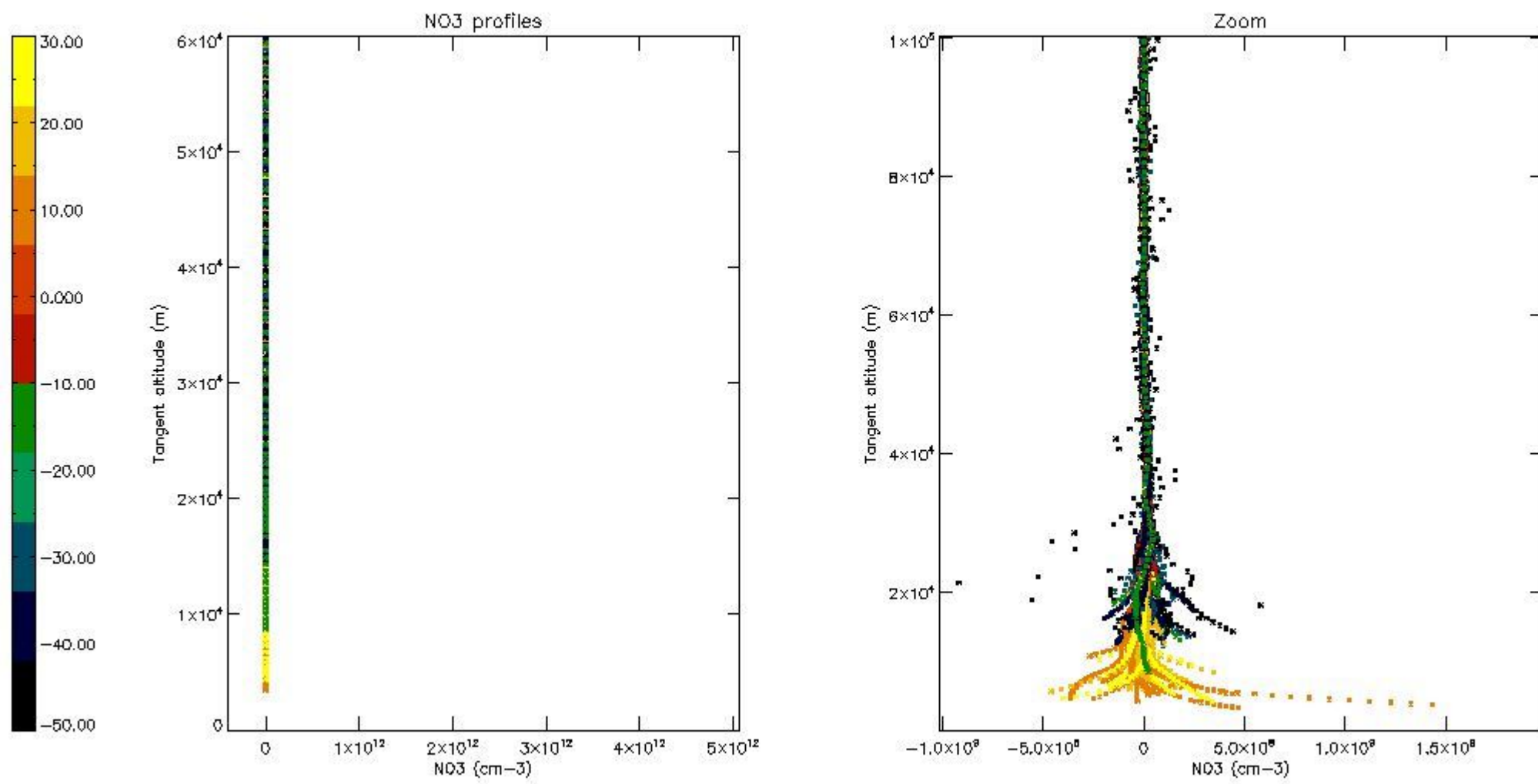
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



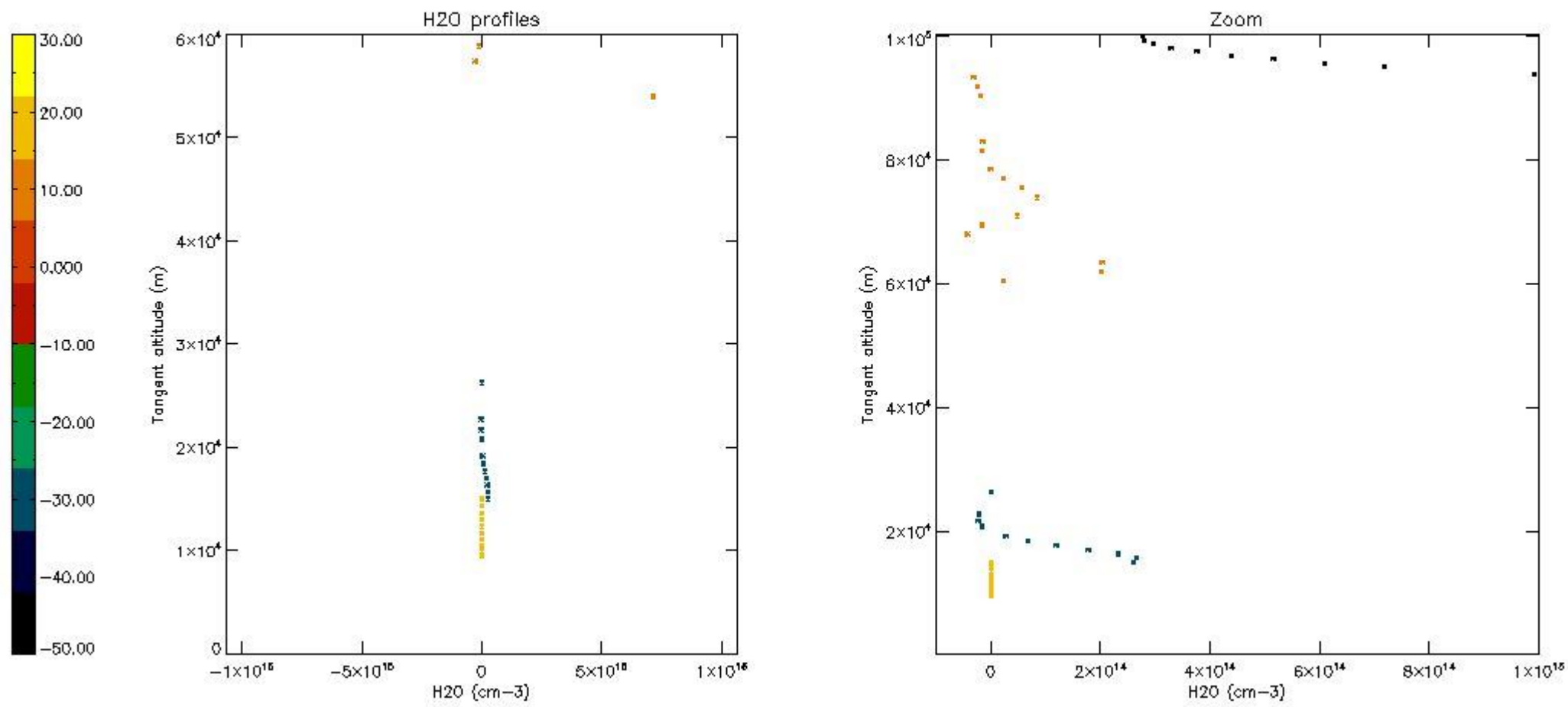
5.7 Plot NO3 profiles for all STD (dark without errors)

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	12-MAR-2004 00:01:01
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	12-MAR-2004 00:01:01
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	12-MAR-2004 00:01:01

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[5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

[5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

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

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 It is intended to monitor some important parameters that will impact the quality of these products.
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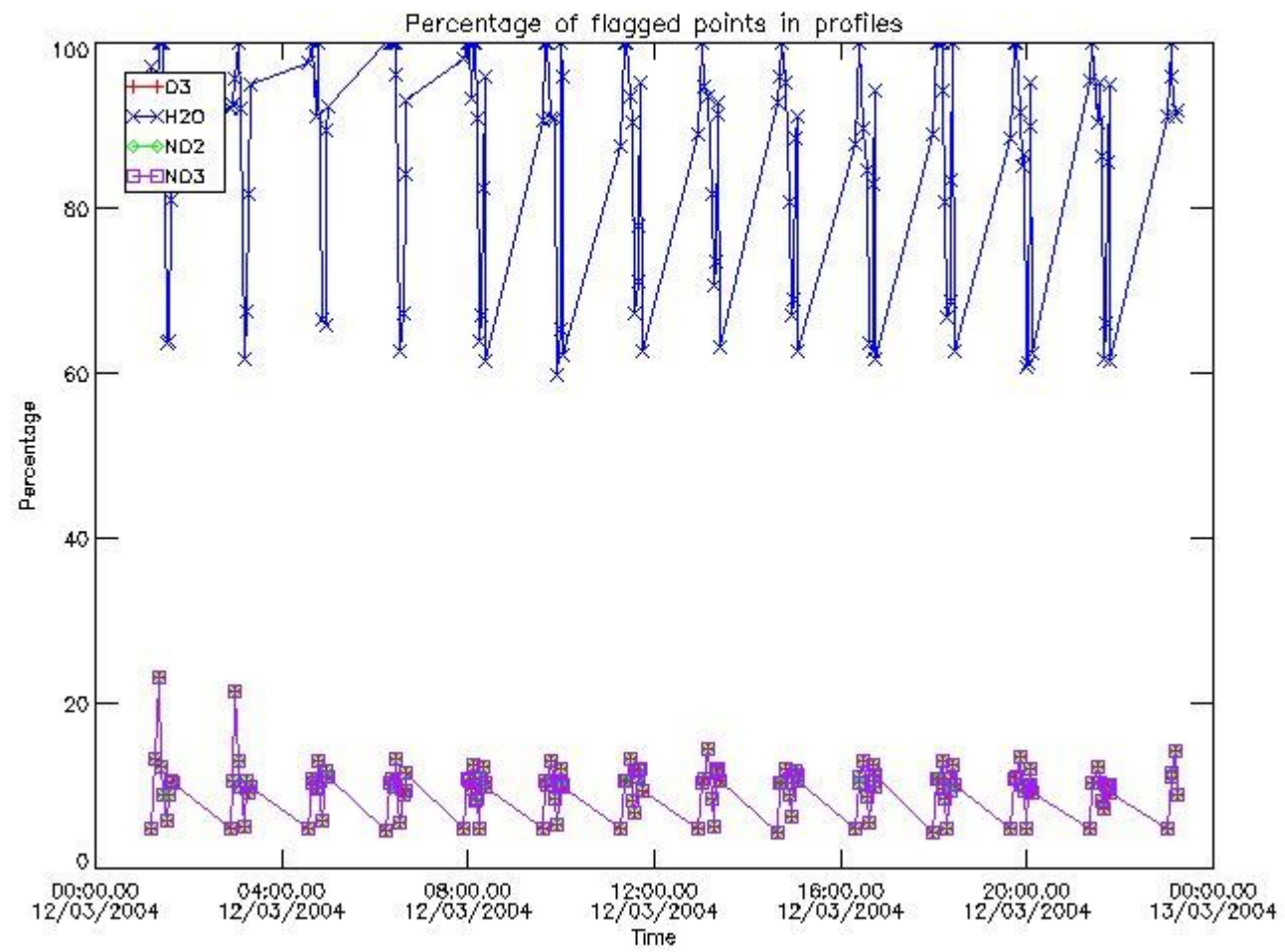
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Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20040312_000101_00000452025_00045_10620_0413.N1	12-MAR-2004 00:01:01	Straylight	45.000	64	Gam Cen	2.2000	10600.	90	10620	No
2	GOM_NL__2PRFIN20040312_000246_00000392025_00045_10620_0414.N1	12-MAR-2004 00:02:46	Straylight	38.500	91	Kap Vel	2.4900	26000.	77	10620	No
3	GOM_NL__2PRFIN20040312_000912_000000542025_00045_10620_0415.N1	12-MAR-2004 00:09:12	Straylight	53.500	106	9Bet Crv	2.6480	5600.0	107	10620	No
4	GOM_NL__2PRFIN20040312_001139_000000572025_00045_10620_0416.N1	12-MAR-2004 00:11:39	Straylight	57.000	100	4Gam Crv	2.5800	13100.	114	10620	No
5	GOM_NL__2PRFIN20040312_001453_000001112025_00045_10620_0417.N1	12-MAR-2004 00:14:53	Bright	110.50	15	67Alp Vir	0.97600	28000.	221	10620	No
6	GOM_NL__2PRFIN20040312_001851_000000662025_00045_10620_0418.N1	12-MAR-2004 00:18:51	Bright	66.000	121	29Gam Vir	2.7400	7200.0	132	10620	No
7	GOM_NL__2PRFIN20040312_002109_000000412025_00045_10620_0419.N1	12-MAR-2004 00:21:09	Bright	41.000	22	32Alp Leo	1.3600	15200.	82	10620	No
8	GOM_NL__2PRFIN20040312_002329_000000412025_00045_10620_0420.N1	12-MAR-2004 00:23:29	Bright	40.500	51	41Gam1Leo	2.0100	4500.0	81	10620	No
9	GOM_NL__2PRFIN20040312_002635_000000892025_00045_10620_0421.N1	12-MAR-2004 00:26:35	Bright	89.000	138	47Eps Vir	2.8280	4700.0	178	10620	No
10	GOM_NL__2PRFIN20040312_003131_000000432025_00045_10620_0422.N1	12-MAR-2004 00:31:31	Bright	43.000	174	52Psi UMa	3.0040	4400.0	86	10620	No
11	GOM_NL__2PRFIN20040312_003437_000000402025_00045_10620_0423.N1	12-MAR-2004 00:34:37	Bright	40.000	82	48Bet UMa	2.3650	10600.	80	10620	No
12	GOM_NL__2PRFIN20040312_003605_000000422025_00045_10620_0424.N1	12-MAR-2004 00:36:05	Bright	42.000	36	50Alp UMa	1.8000	6300.0	84	10620	No
13	GOM_NL__2PRFIN20040312_003805_000000482025_00045_10620_0425.N1	12-MAR-2004 00:38:05	Bright	48.000	32	77Eps UMa	1.7630	11000.	96	10620	No
14	GOM_NL__2PRFIN20040312_004024_000000582025_00045_10620_0426.N1	12-MAR-2004 00:40:24	Bright	58.000	39	85Eta UMa	1.8540	24000.	116	10620	No
15	GOM_NL__2PRFIN20040312_004315_000000352025_00045_10620_0427.N1	12-MAR-2004 00:43:15	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	10620	No
16	GOM_NL__2PRFIN20040312_004731_000000492025_00045_10620_0428.N1	12-MAR-2004 00:47:31	Bright	48.500	119	14Eta Dra	2.7270	4700.0	97	10620	No
17	GOM_NL__2PRFIN20040312_005059_000000372025_00045_10620_0429.N1	12-MAR-2004 00:50:59	Bright	36.500	89	5Alp Cep	2.4510	8000.0	73	10620	No
18	GOM_NL__2PRFIN20040312_005314_000000482025_00045_10620_0430.N1	12-MAR-2004 00:53:14	Bright	48.000	69	33Gam Dra	2.2310	3800.0	96	10620	No
19	GOM_NL__2PRFIN20040312_005605_000000392025_00045_10620_0431.N1	12-MAR-2004 00:56:05	Bright	38.500	19	50Alp Cyg	1.2460	10500.	77	10620	No
20	GOM_NL__2PRFIN20040312_005739_000000382025_00045_10620_0432.N1	12-MAR-2004 00:57:39	Bright	37.500	66	37Gam Cyg	2.2080	5900.0	75	10620	No
21	GOM_NL__2PRFIN20040312_005918_000000372025_00045_10620_0433.N1	12-MAR-2004 00:59:18	Bright	36.500	92	53Eps Cyg	2.5000	4500.0	73	10620	No
22	GOM_NL__2PRFIN20040312_010251_000001472025_00045_10620_0434.N1	12-MAR-2004 01:02:51	Twilight_stray	146.50	133	40Zet Her	2.8070	6000.0	293	10620	No
23	GOM_NL__2PRFIN20040312_010725_000000532025_00045_10620_0435.N1	12-MAR-2004 01:07:25	Bright	53.000	11	53Alp Aql	0.76500	8000.0	106	10620	No
24	GOM_NL__2PRFIN20040312_011240_000001042025_00045_10620_0436.N1	12-MAR-2004 01:12:40	Dark	104.00	59	55Alp Oph	2.0800	8900.0	208	10620	No
25	GOM_NL__2PRFIN20040312_011716_000000462025_00045_10620_0437.N1	12-MAR-2004 01:17:16	Dark	46.000	155	41Pi Sgr	2.9000	6600.0	92	10620	No
26	GOM_NL__2PRFIN20040312_012238_000000482025_00045_10620_0438.N1	12-MAR-2004 01:22:38	Dark	48.000	38	20Eps Sgr	1.8360	11000.	96	10620	No
27	GOM_NL__2PRFIN20040312_012431_000000422025_00045_10620_0439.N1	12-MAR-2004 01:24:31	Dark	41.500	45	Alp Pav	1.9400	26000.	83	10620	No
28	GOM_NL__2PRFIN20040312_012605_000000572025_00045_10620_0440.N1	12-MAR-2004 01:26:05	Dark	57.000	25	35Lam Sco	1.6200	28000.	114	10620	No
29	GOM_NL__2PRFIN20040312_013110_000000872025_00046_10621_0410.N1	12-MAR-2004 01:31:10	Dark	87.000	16	21Alp Sco	1.0200	3000.0	174	10621	No
30	GOM_NL__2PRFIN20040312_013522_000000572025_00046_10621_0411.N1	12-MAR-2004 01:35:22	Dark	57.000	4	Alp1Cen	-0.010000	5800.0	114	10621	No
31	GOM_NL__2PRFIN20040312_013638_000000482025_00046_10621_0412.N1	12-MAR-2004 01:36:38	Dark	48.000	10	Bet Cen	0.61000	28000.	96	10621	No
32	GOM_NL__2PRFIN20040312_013844_000000492025_00046_10621_0413.N1	12-MAR-2004 01:38:44	Dark	49.000	12	Alp1Cru	0.77500	30000.	98	10621	No
33	GOM_NL__2PRFIN20040312_014137_000000492025_00046_10621_0414.N1	12-MAR-2004 01:41:37	Straylight	49.000	64	Gam Cen	2.2000	10600.	98	10621	No
34	GOM_NL__2PRFIN20040312_014322_000000432025_00046_10621_0415.N1	12-MAR-2004 01:43:22	Straylight	43.000	91	Kap Vel	2.4900	26000.	86	10621	No
35	GOM_NL__2PRFIN20040312_014948_000000572025_00046_10621_0416.N1	12-MAR-2004 01:49:48	Straylight	56.500	106	9Bet Crv	2.6480	5600.0	113	10621	No
36	GOM_NL__2PRFIN20040312_015215_000000562025_00046_10621_0417.N1	12-MAR-2004 01:52:15	Straylight	55.500	100	4Gam Crv	2.5800	13100.	111	10621	No
37	GOM_NL__2PRFIN20040312_015528_000001022025_00046_10621_0418.N1	12-MAR-2004 01:55:28	Bright	101.50	15	67Alp Vir	0.97600	28000.	203	10621	No
38	GOM_NL__2PRFIN20040312_015927_000000702025_00046_10621_0419.N1	12-MAR-2004 01:59:27	Bright	69.500	121	29Gam Vir	2.7400	7200.0	139	10621	No
39	GOM_NL__2PRFIN20040312_020145_000000402025_00046_10621_0420.N1	12-MAR-2004 02:01:45	Bright	40.000	22	32Alp Leo	1.3600	15200.	80	10621	No
40	GOM_NL__2PRFIN20040312_020403_000000412025_00046_10621_0421.N1	12-MAR-2004 02:04:03	Bright	41.000	51	41Gam1Leo	2.0100	4500.0	82	10621	No
41	GOM_NL__2PRFIN20040312_020708_000000902025_00046_10621_0422.N1	12-MAR-2004 02:07:08	Bright	90.000	138	47Eps Vir	2.8280	4700.0	180	10621	No
42	GOM_NL__2PRFIN20040312_021206_000000412025_00046_10621_0423.N1	12-MAR-2004 02:12:06	Bright	41.000	174	52Psi UMa	3.0040	4400.0	82	10621	No

3. Quality information per product

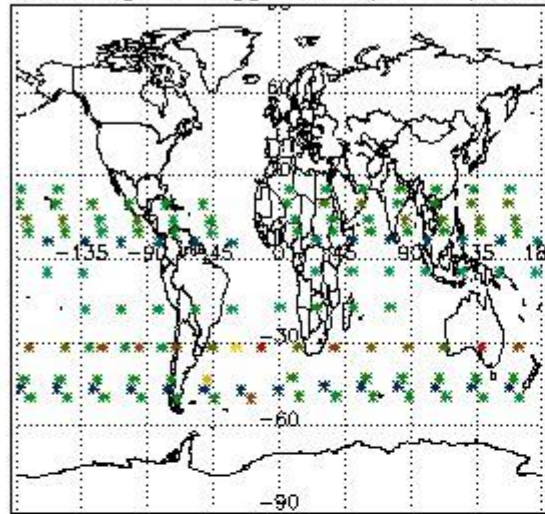
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

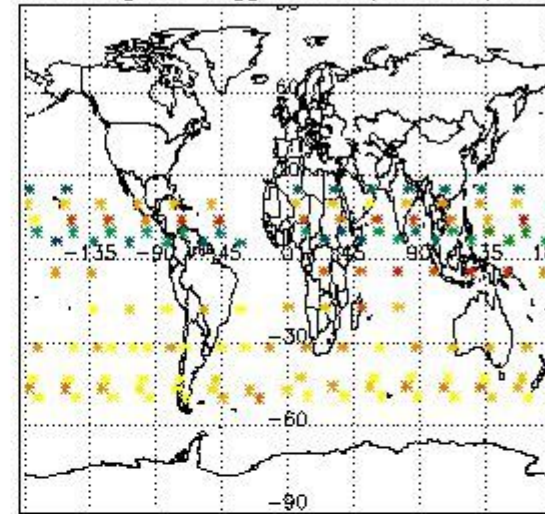


3.2 Plot quality information per product (world map)

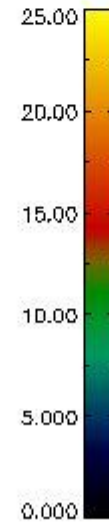
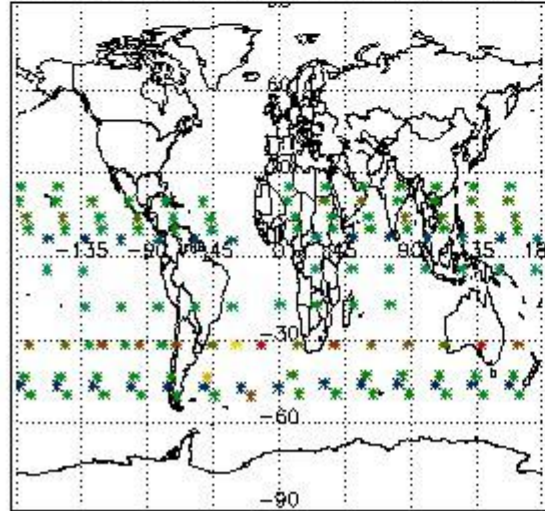
Percentage of flagged data per O3 profile



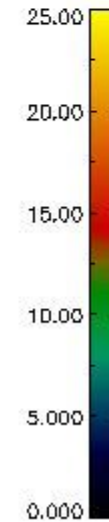
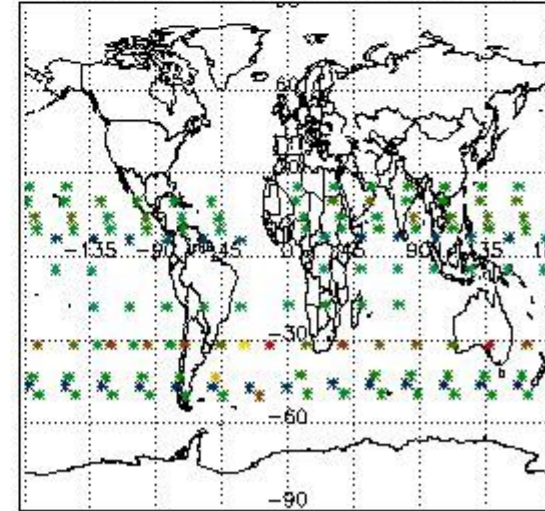
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

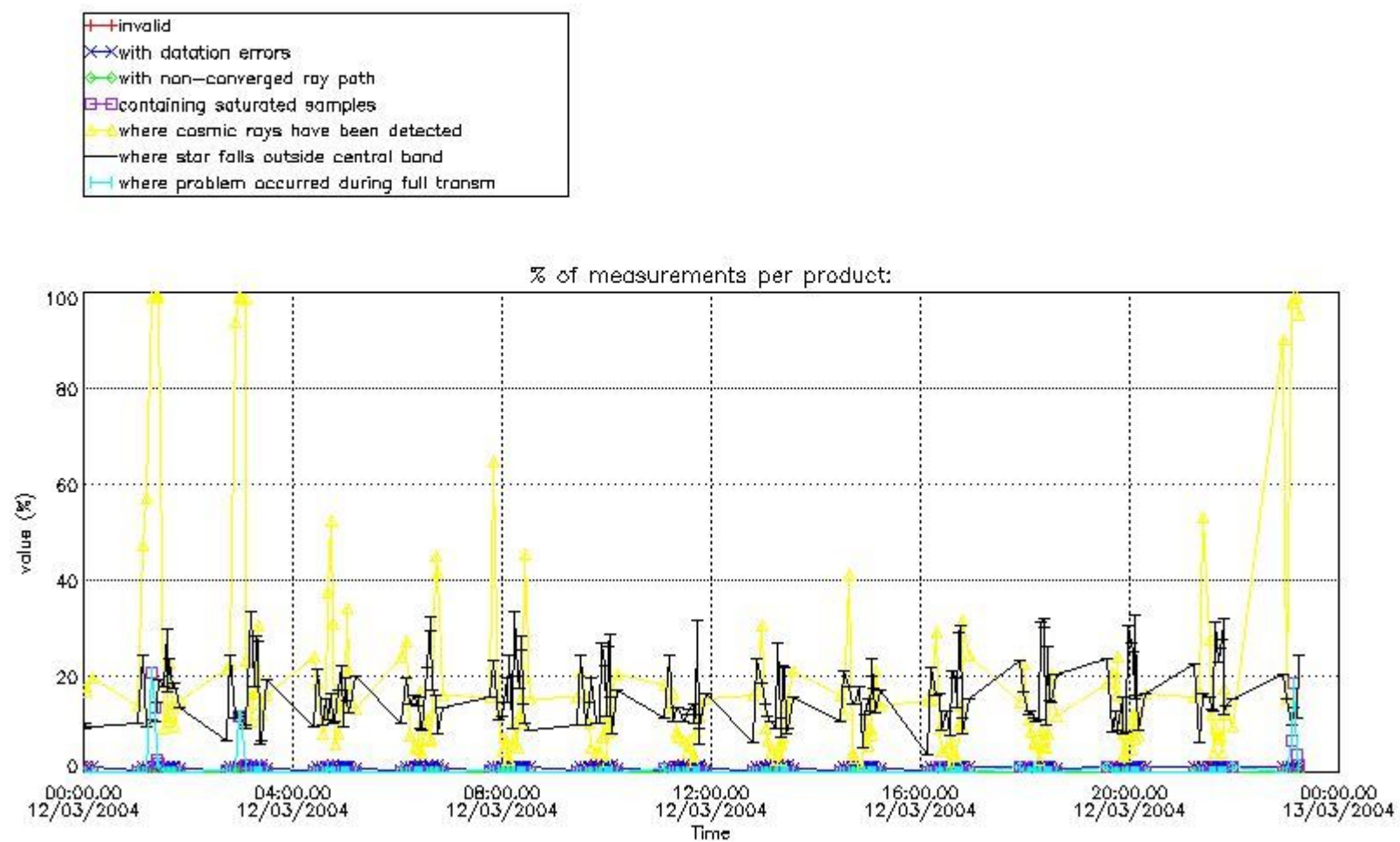


4. Level 1 quality information per product

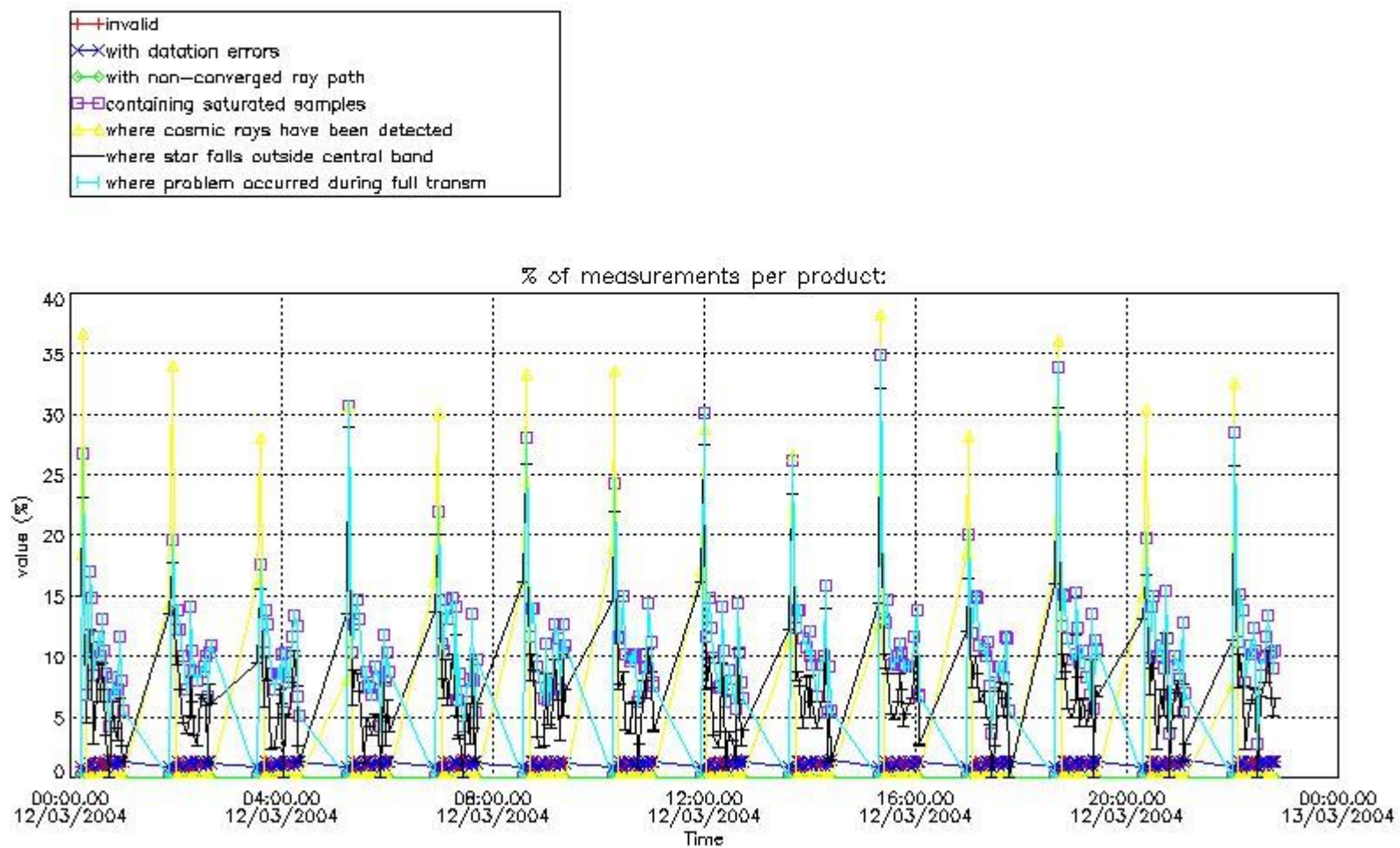
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



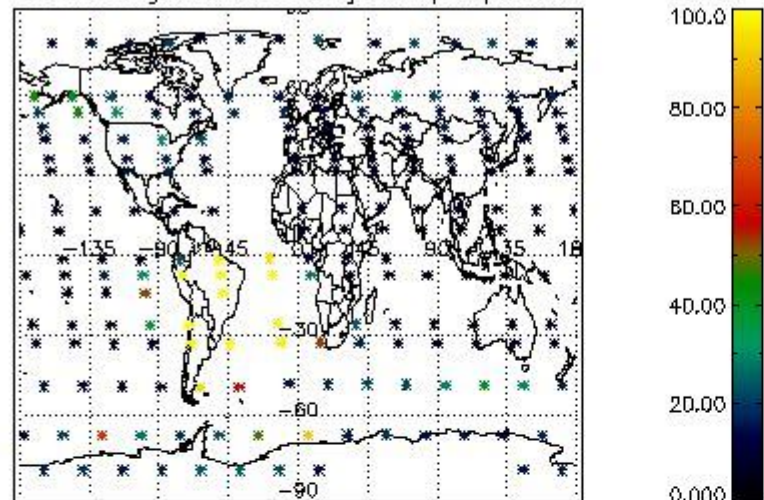
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



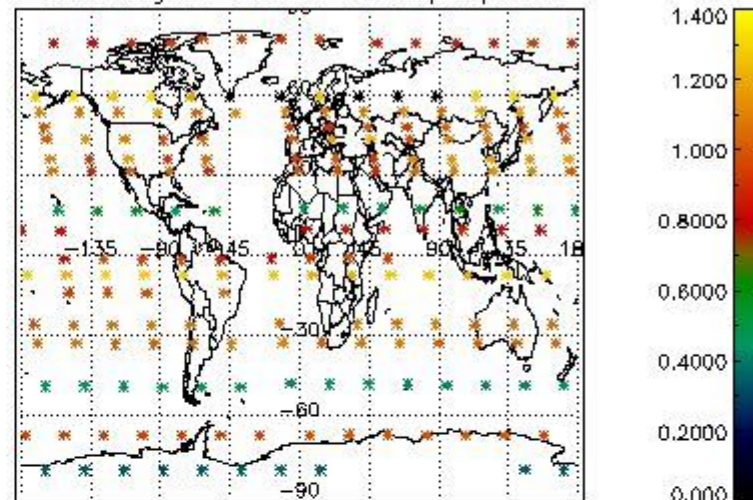
4.2 Plot quality information per product coming from level 1b processing (world map)

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

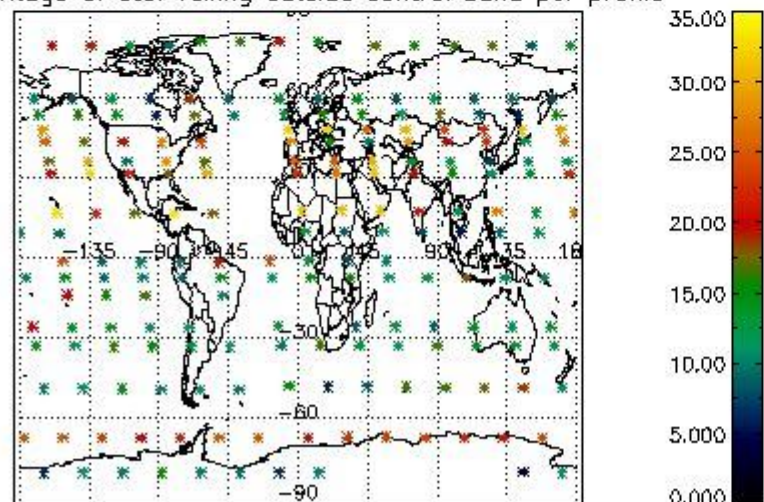
Percentage of cosmic ray hits per profile



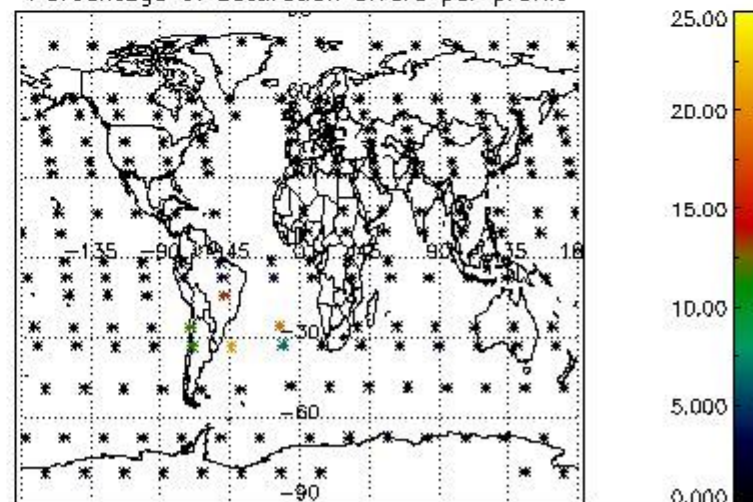
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

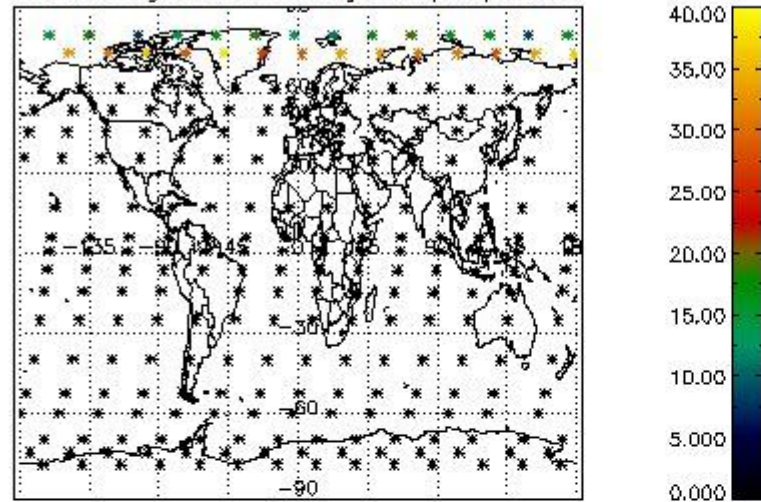


Percentage of saturation errors per profile

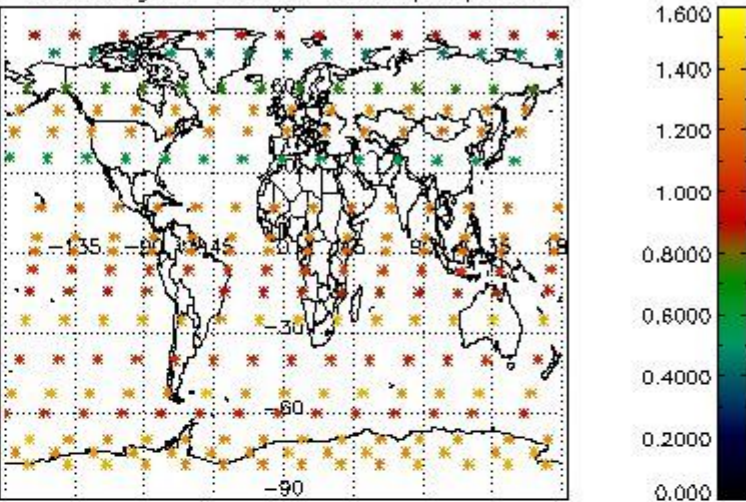


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

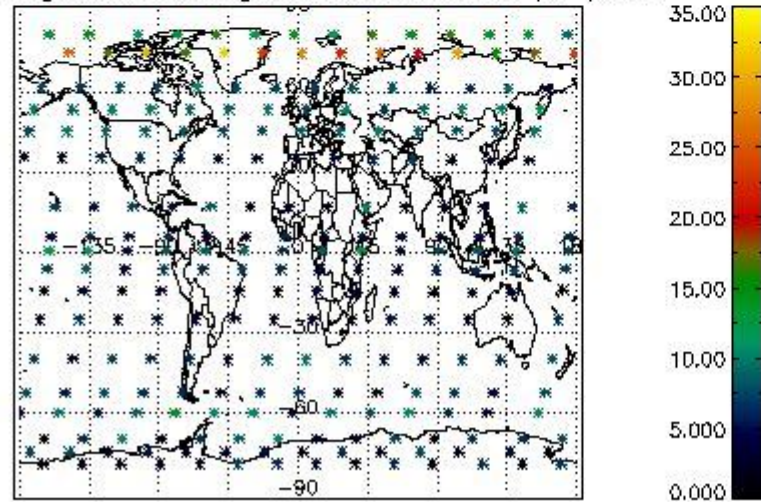
Percentage of cosmic ray hits per profile



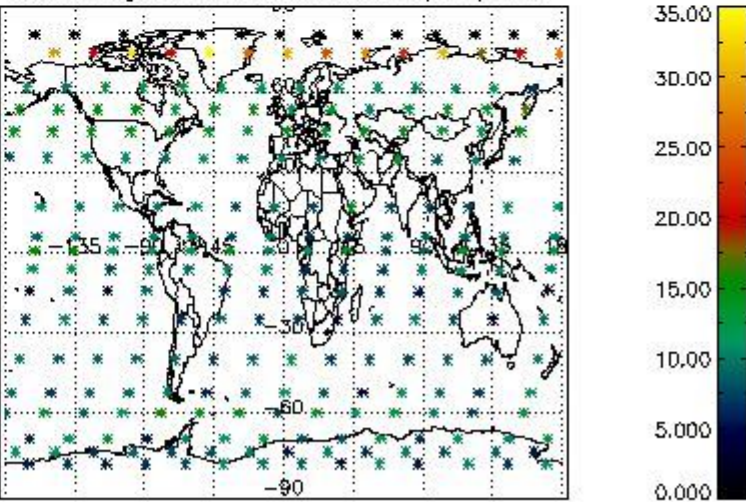
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

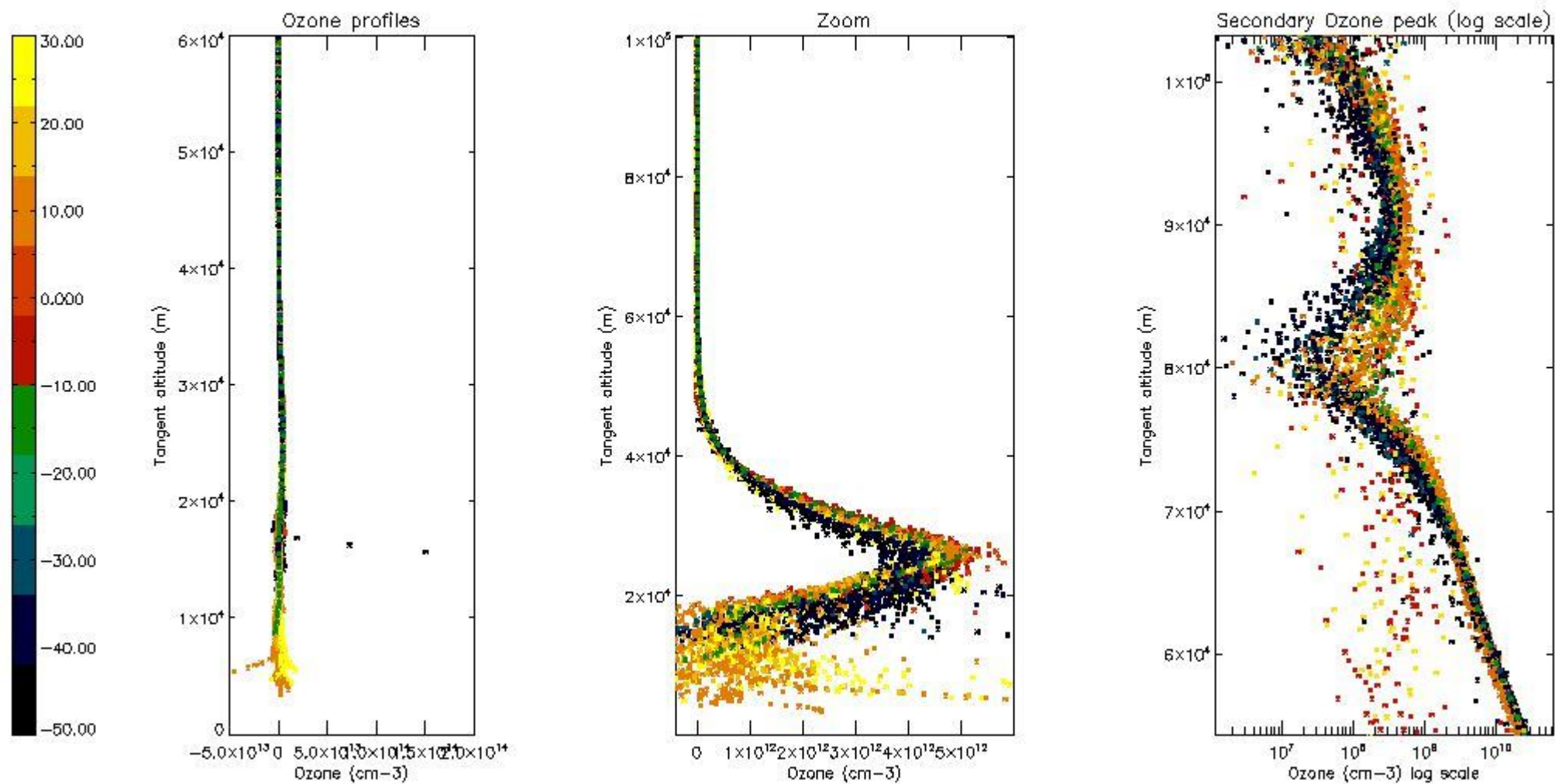
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	33
STD < 20	20

STD < 10	16
STD < 5	12

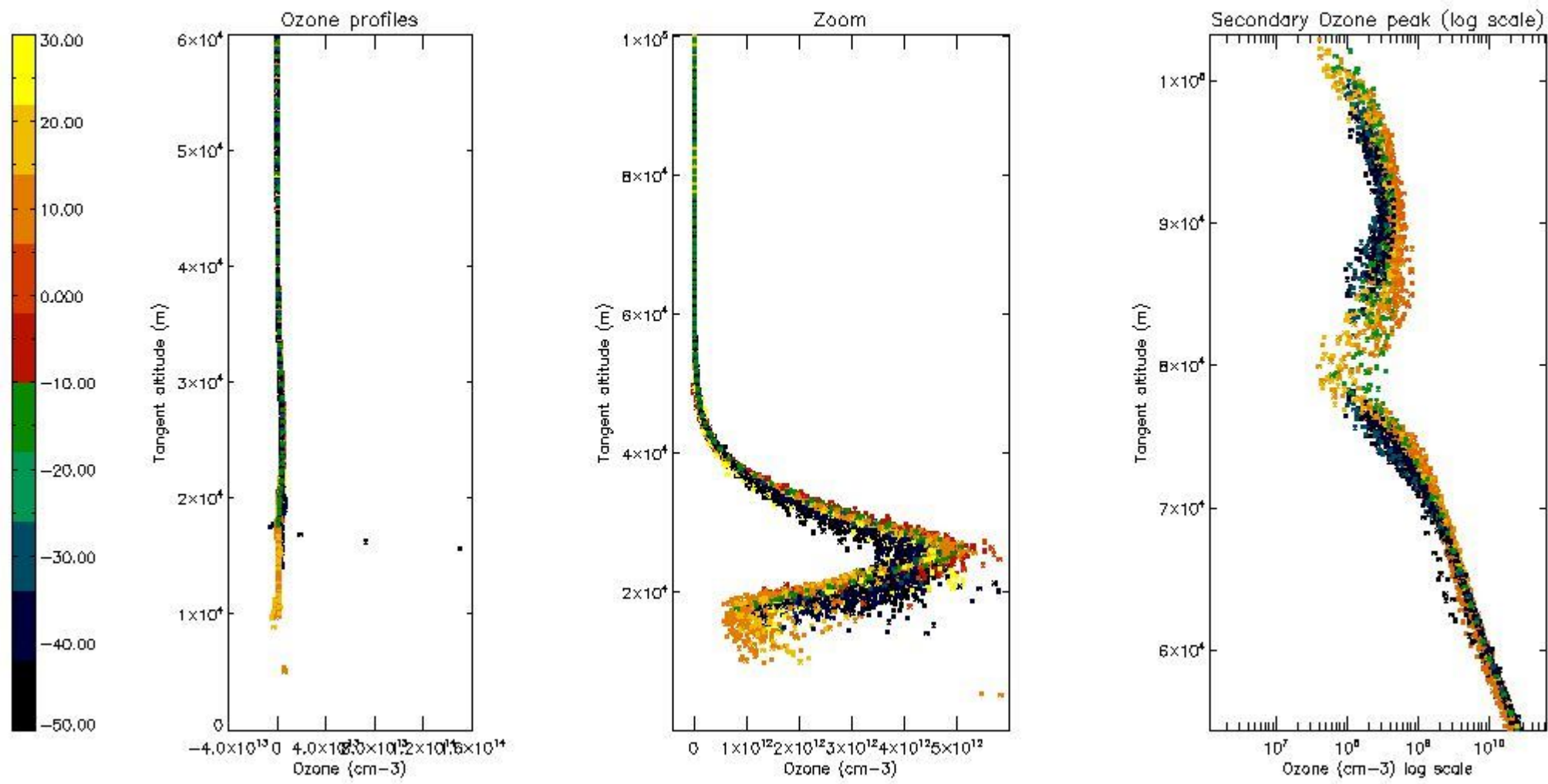
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



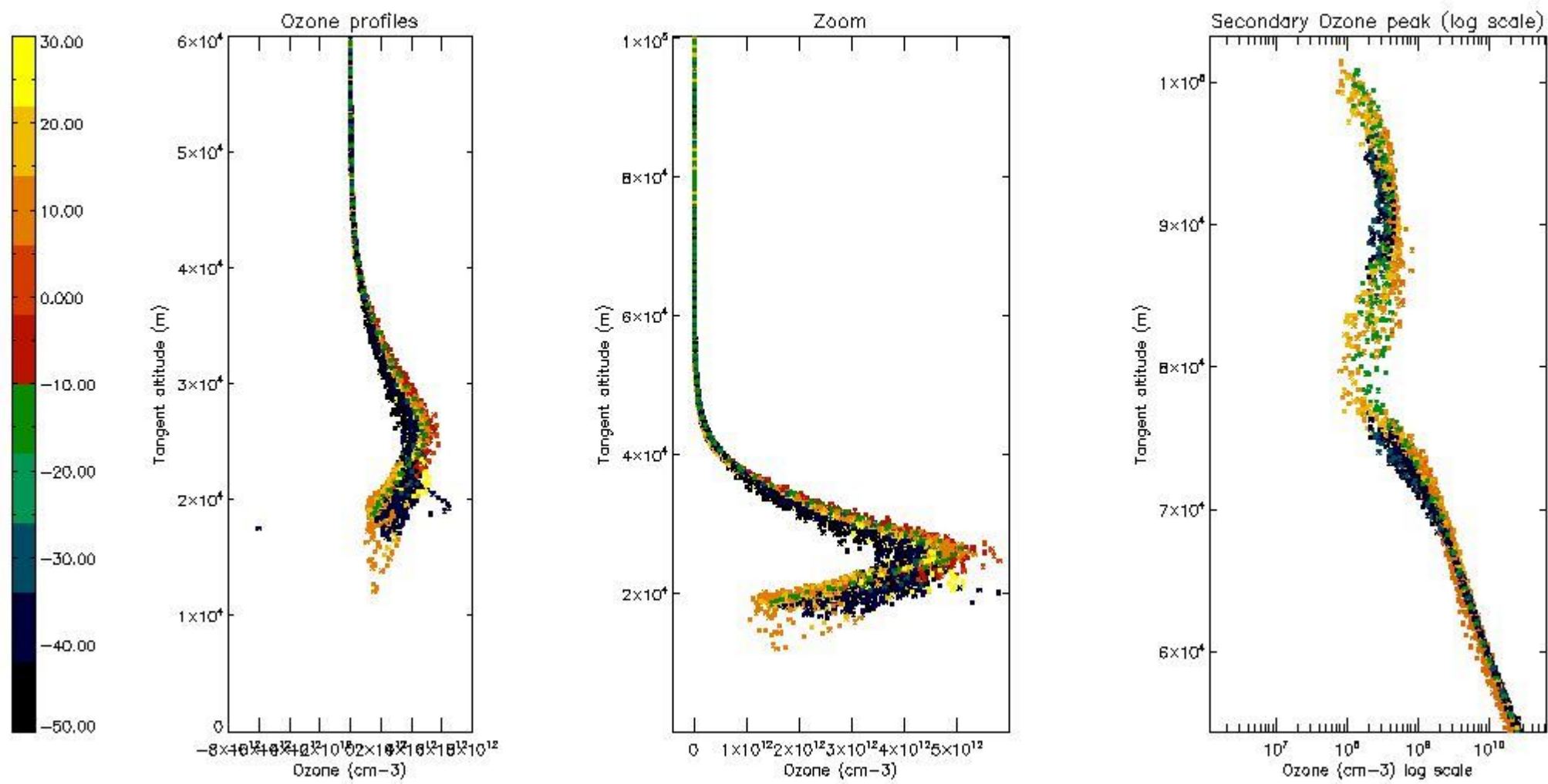
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



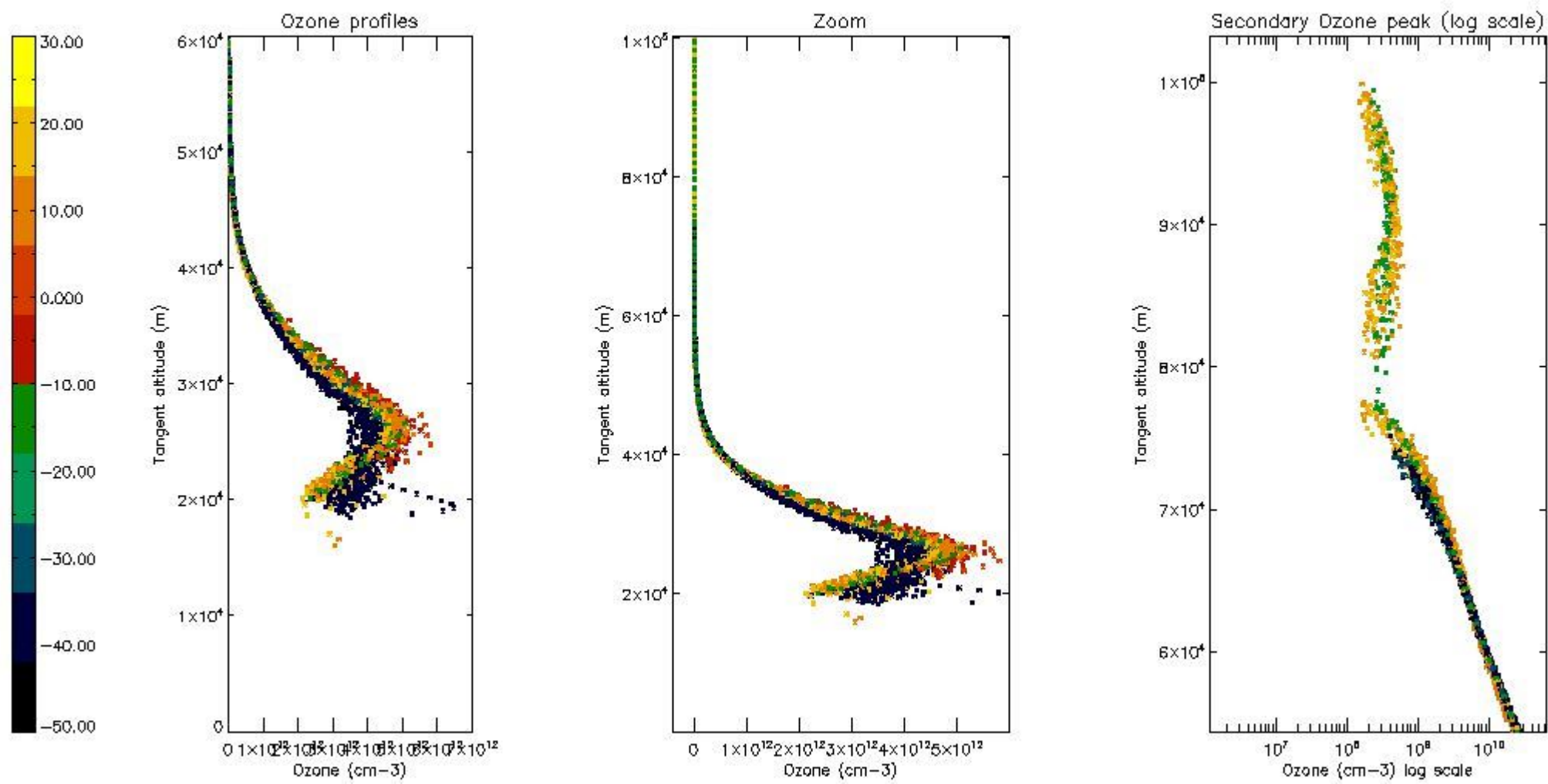
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



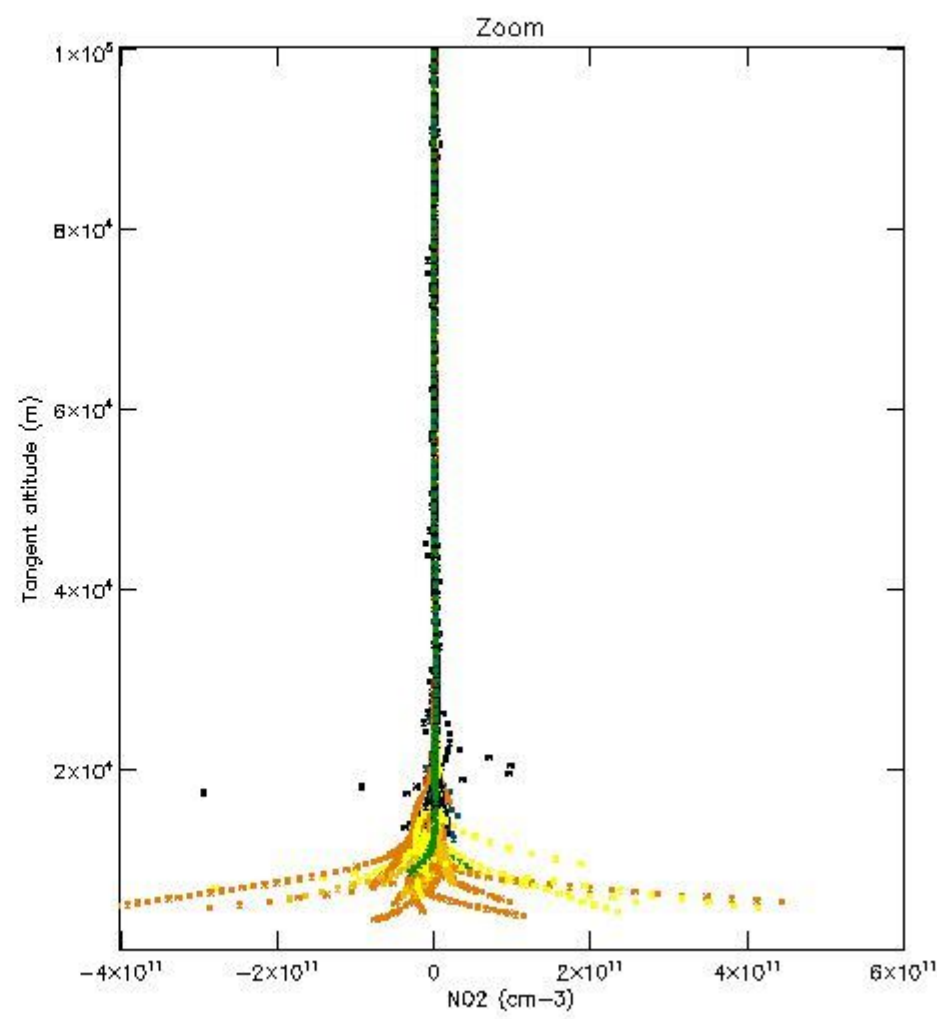
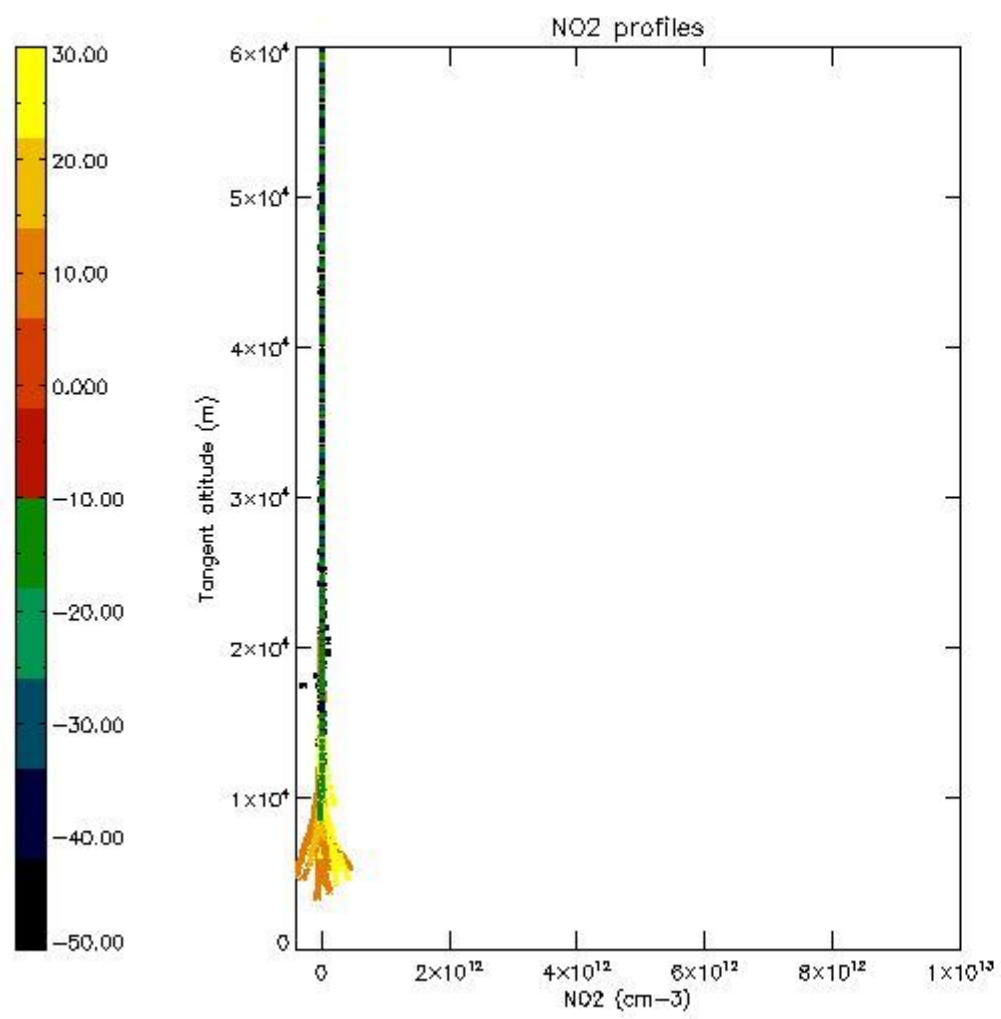
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



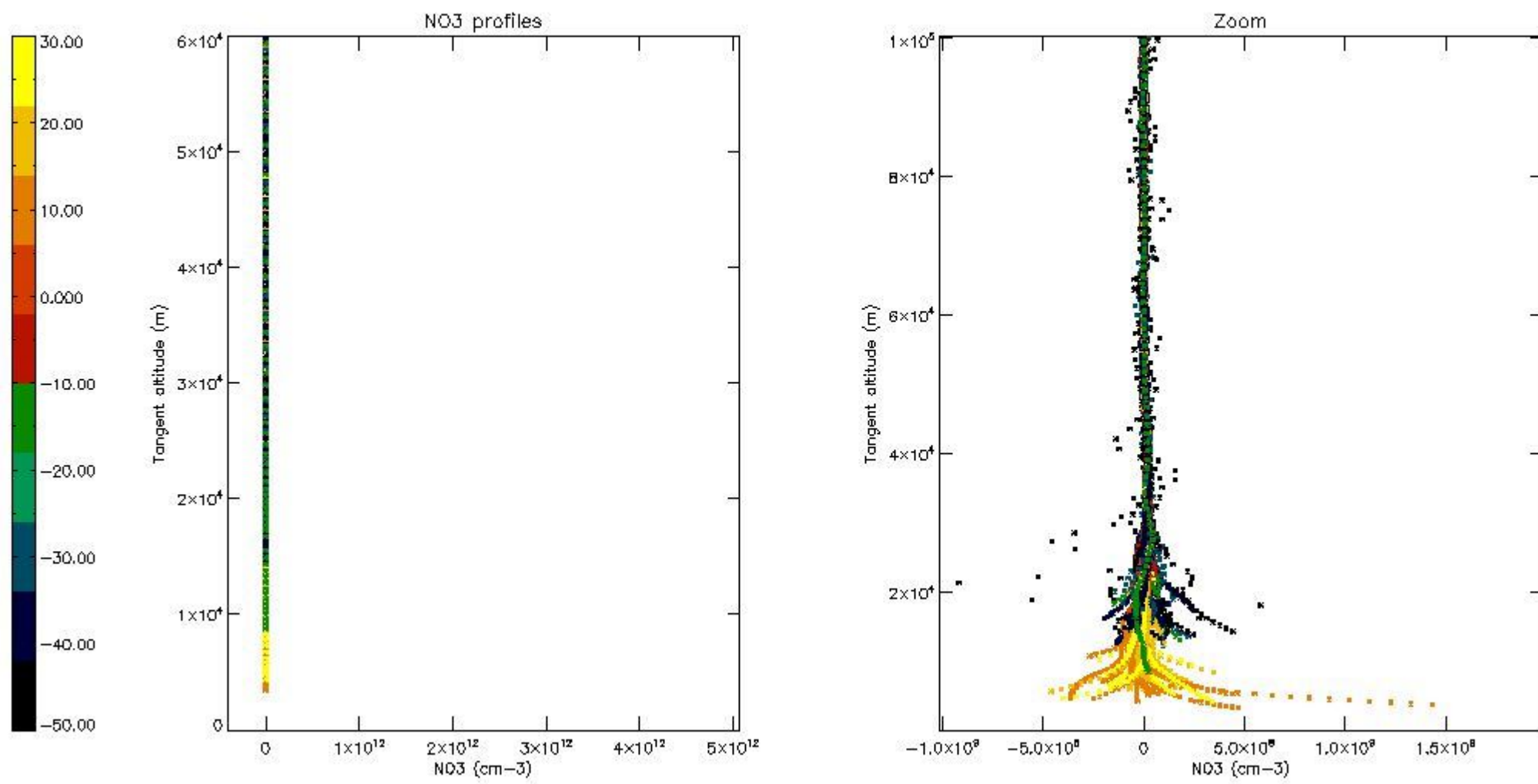
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



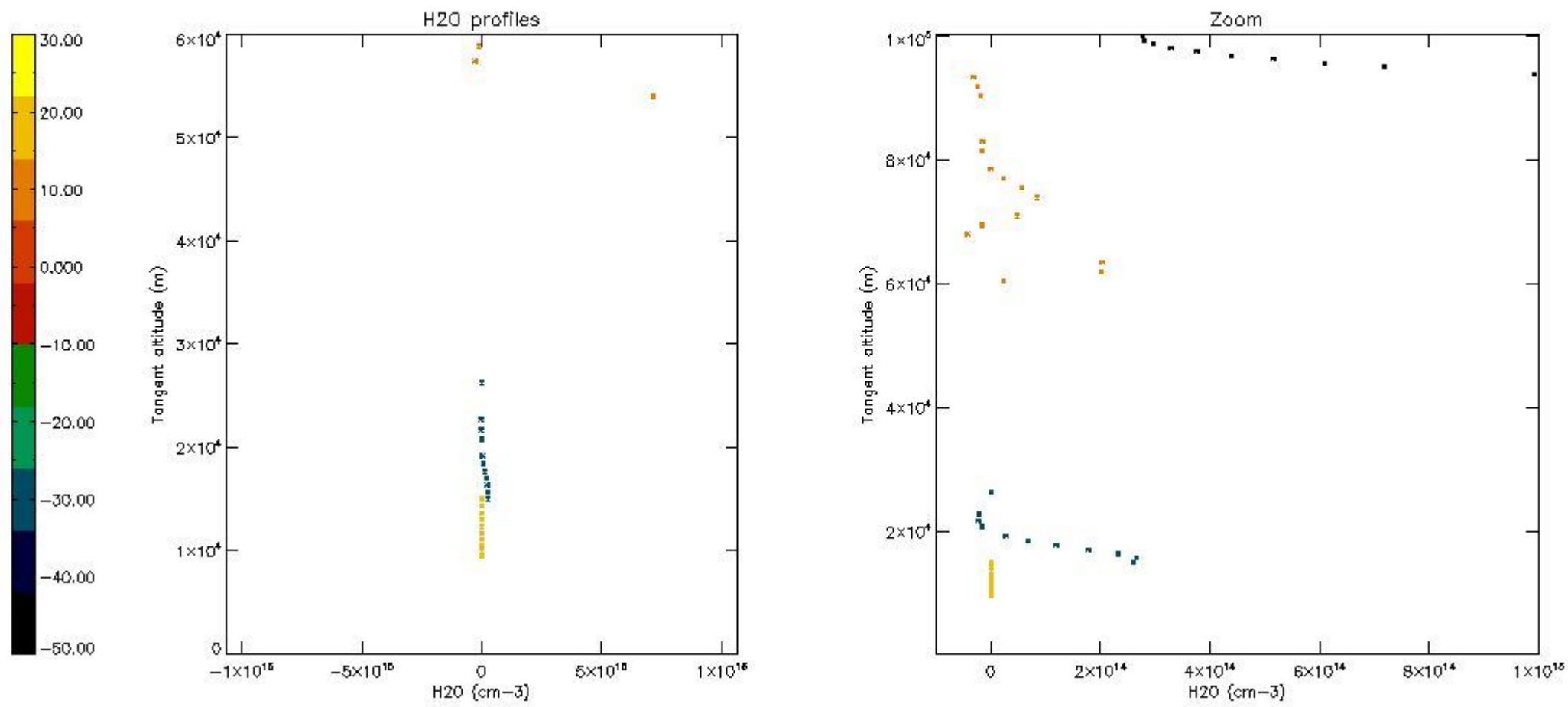
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

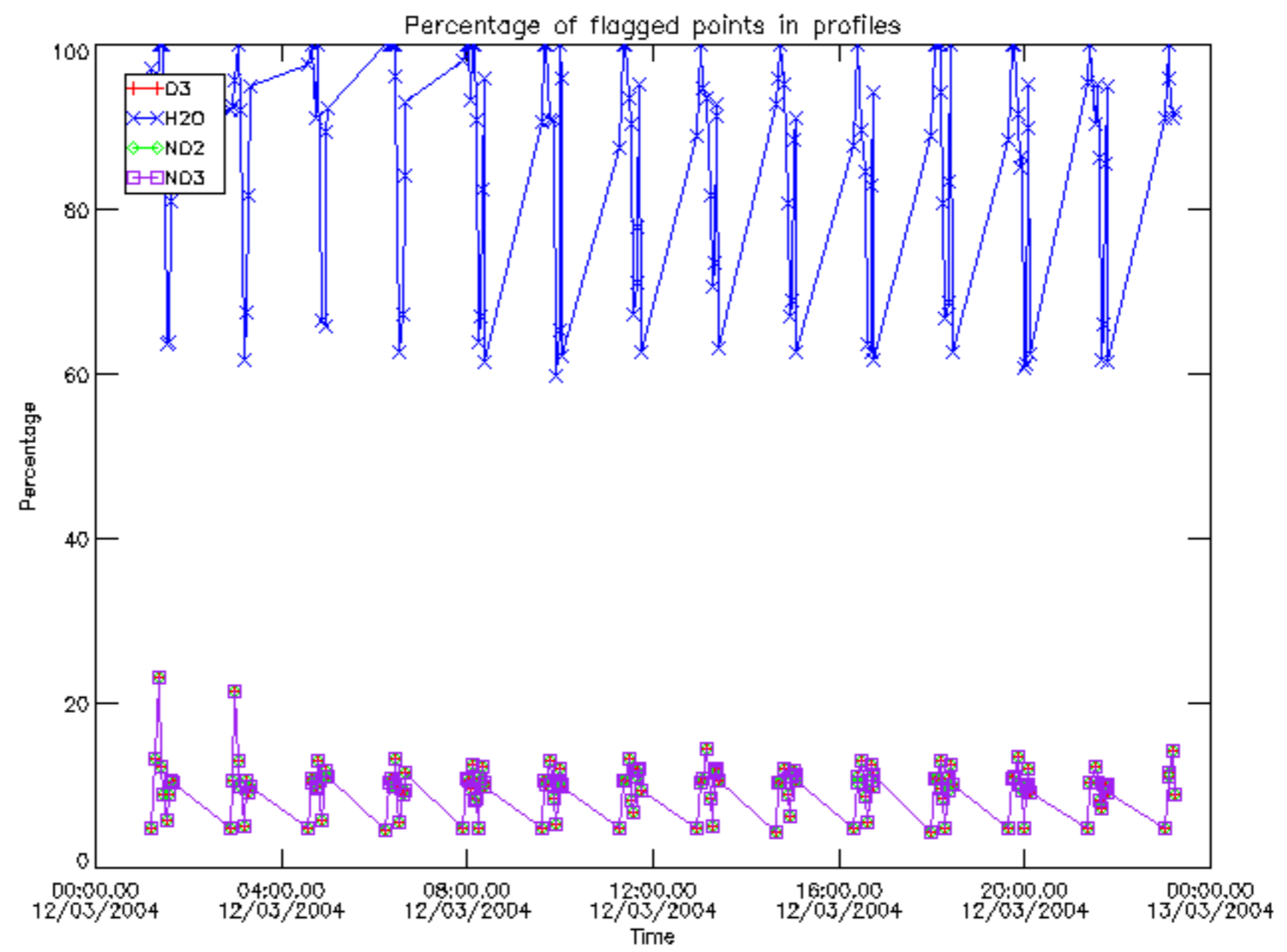
The colorbar represents the latitude.



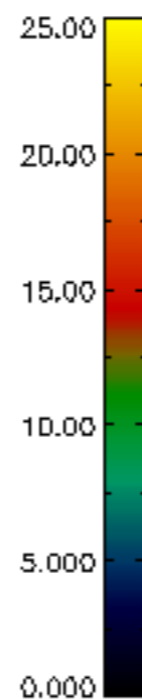
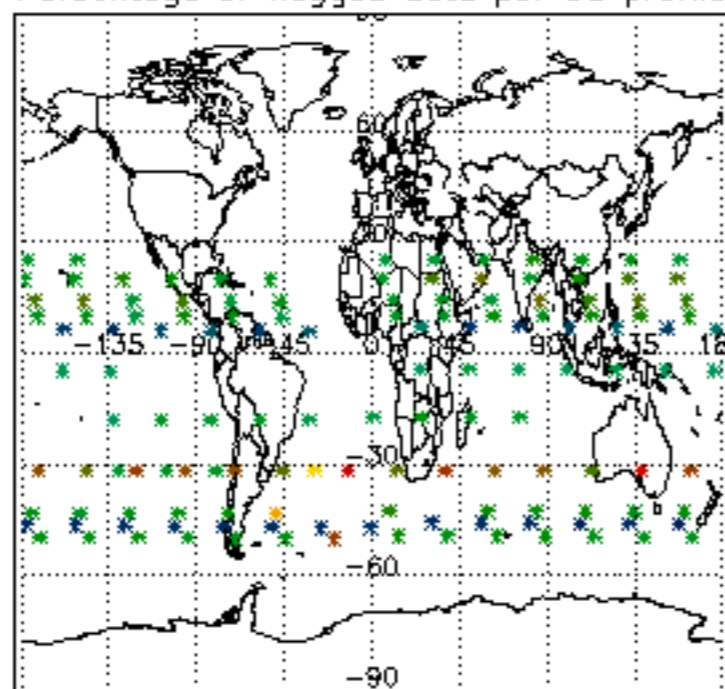
6. Auxiliary Data Files used for the production reported in section 2

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.

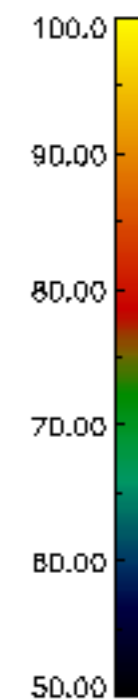
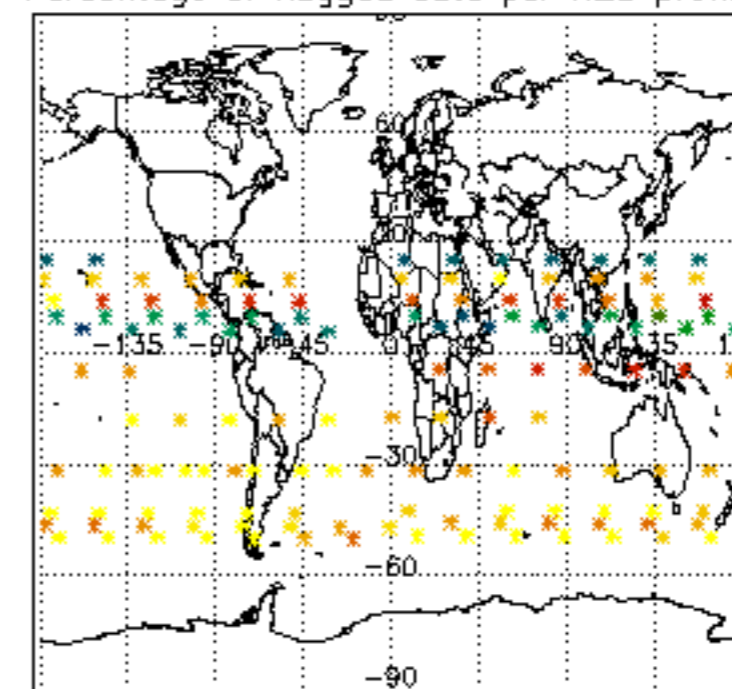
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	12-MAR-2004 00:01:01
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	12-MAR-2004 00:01:01
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	12-MAR-2004 00:01:01



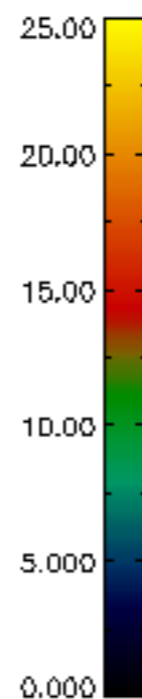
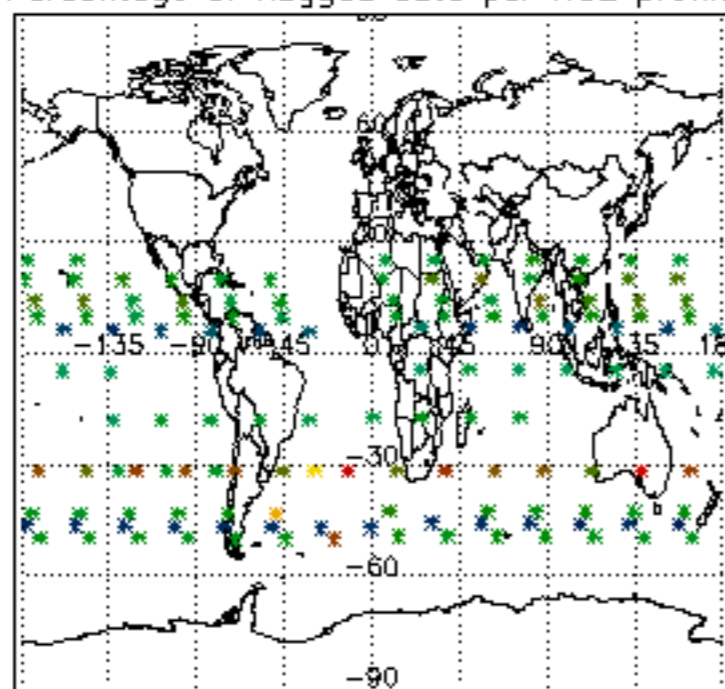
Percentage of flagged data per D3 profile



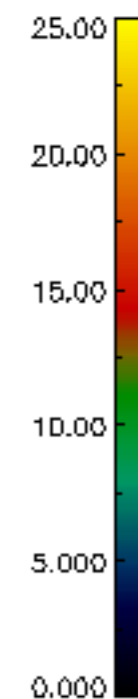
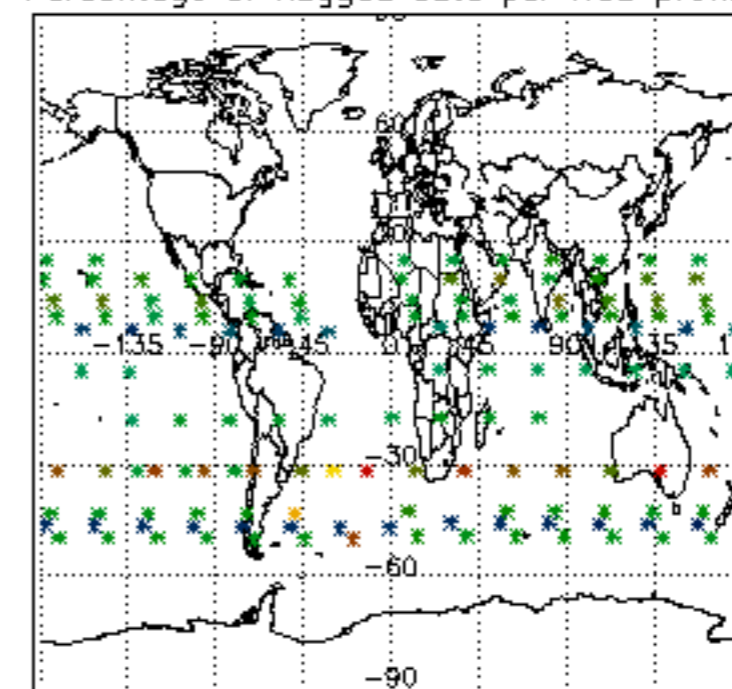
Percentage of flagged data per H2O profile

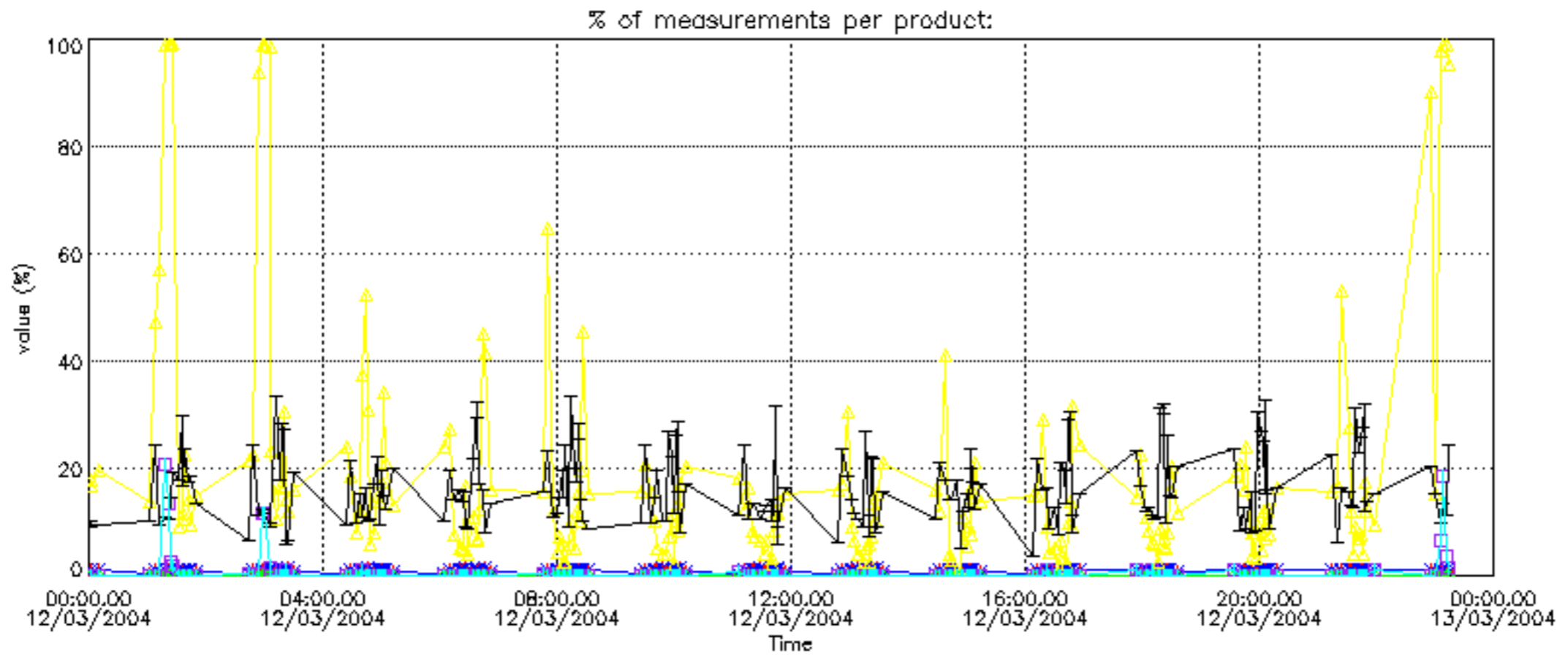


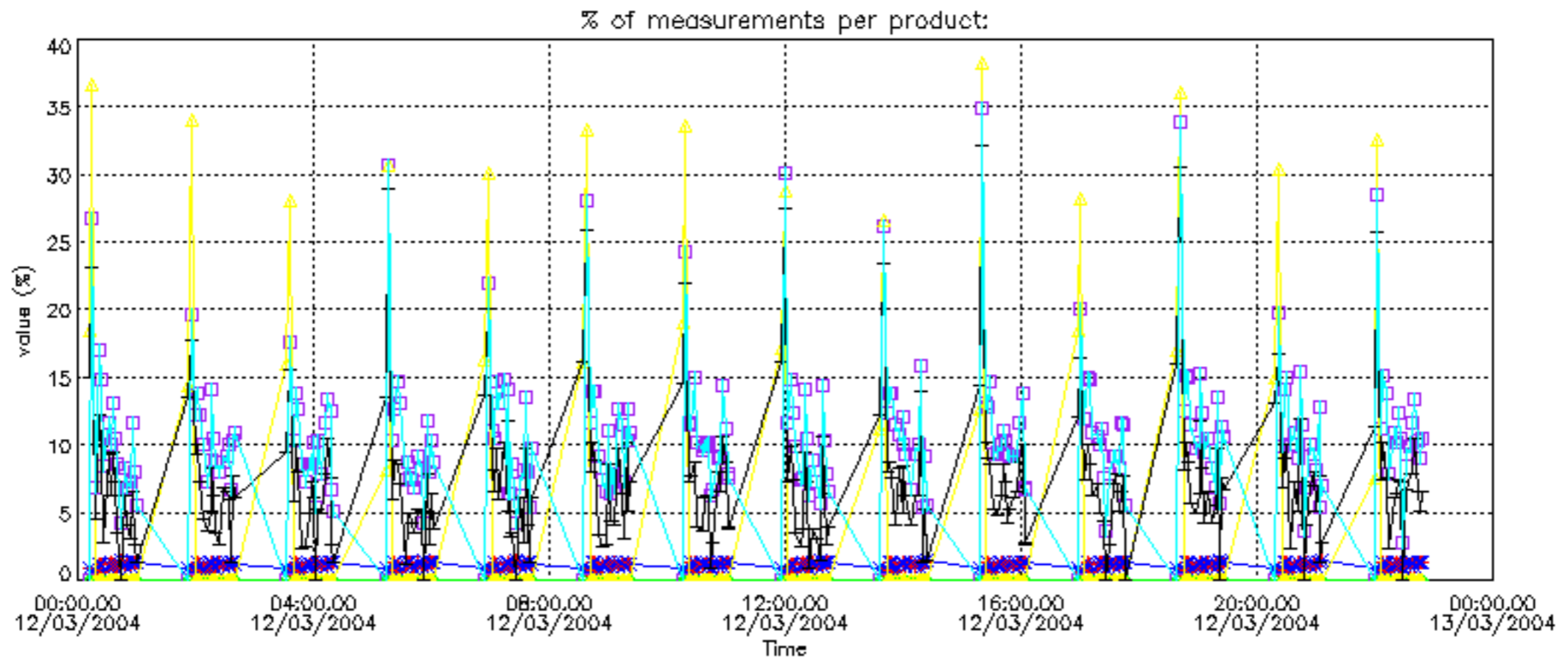
Percentage of flagged data per NO2 profile



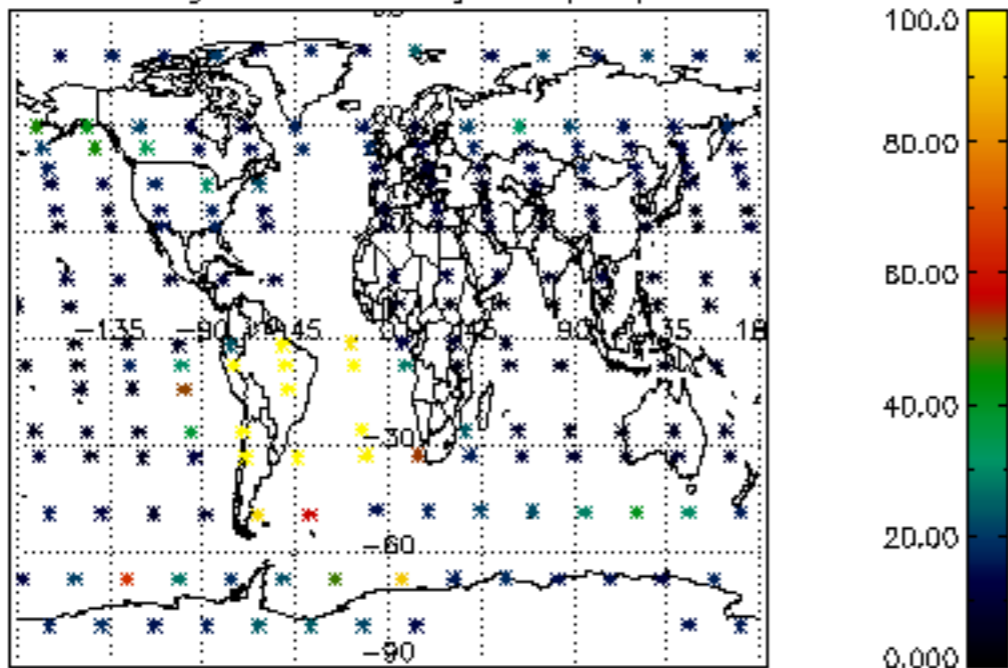
Percentage of flagged data per NO3 profile



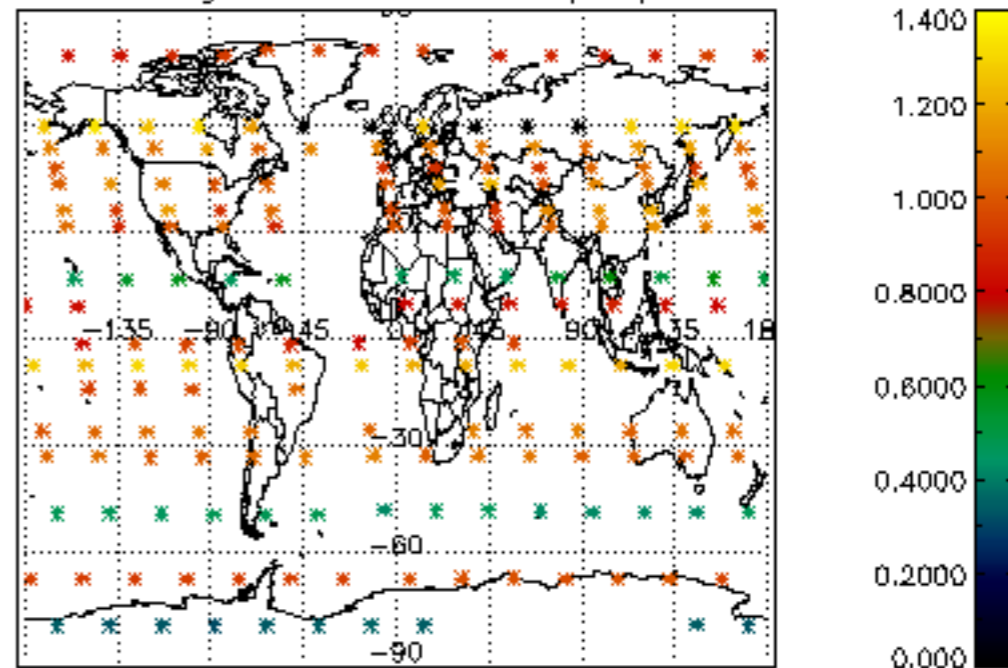




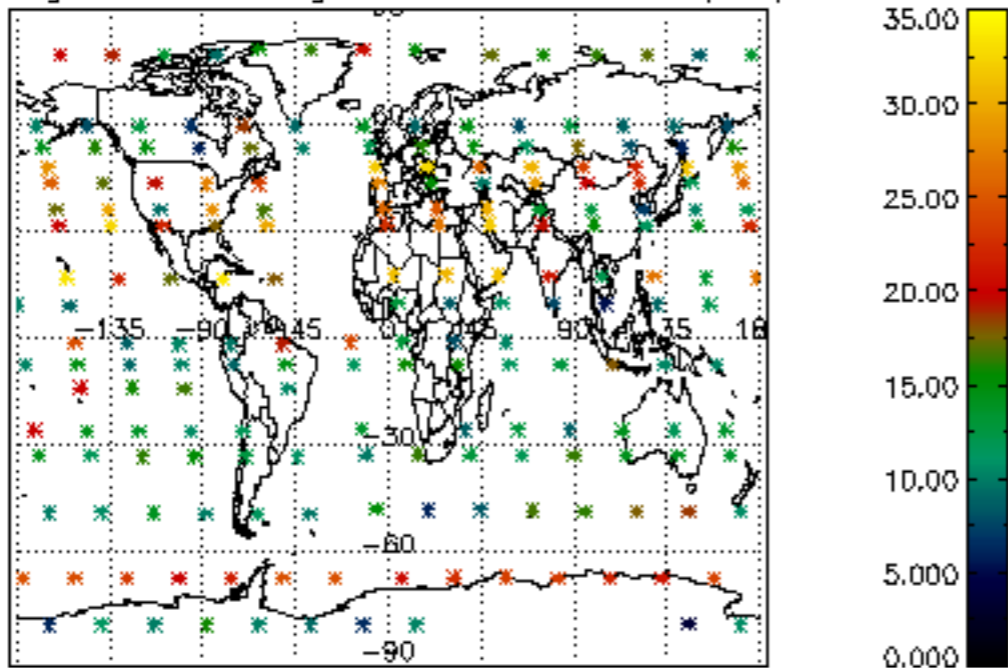
Percentage of cosmic ray hits per profile



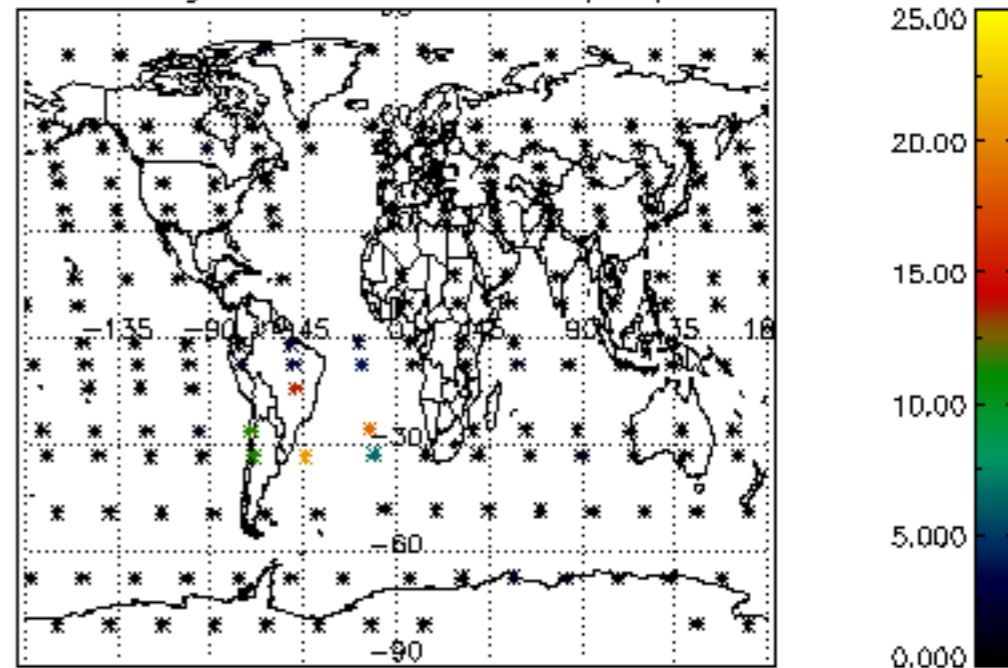
Percentage of datation errors per profile



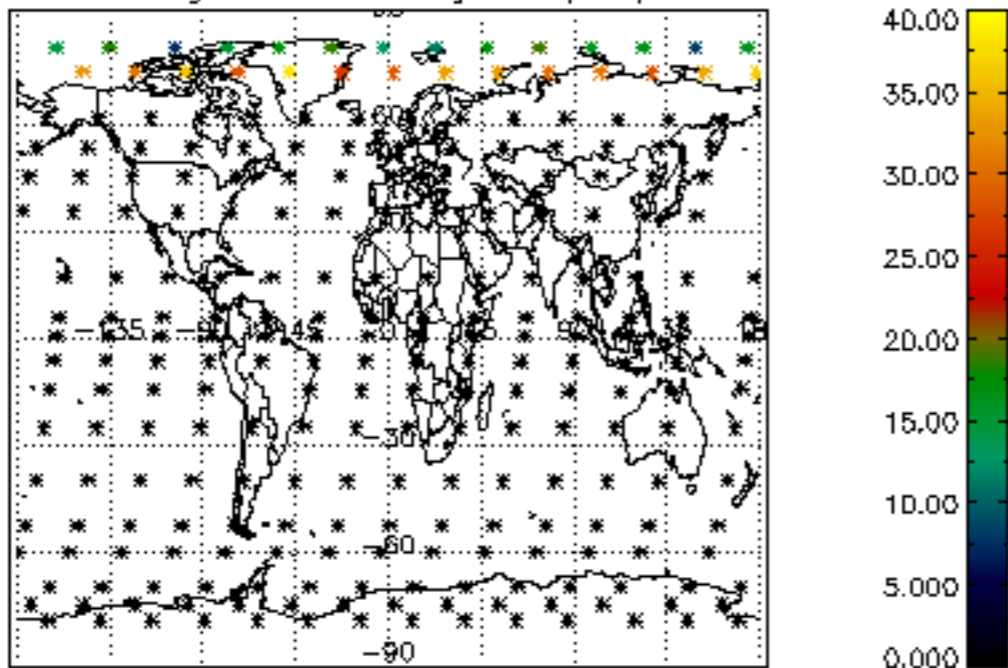
Percentage of star falling outside central band per profile



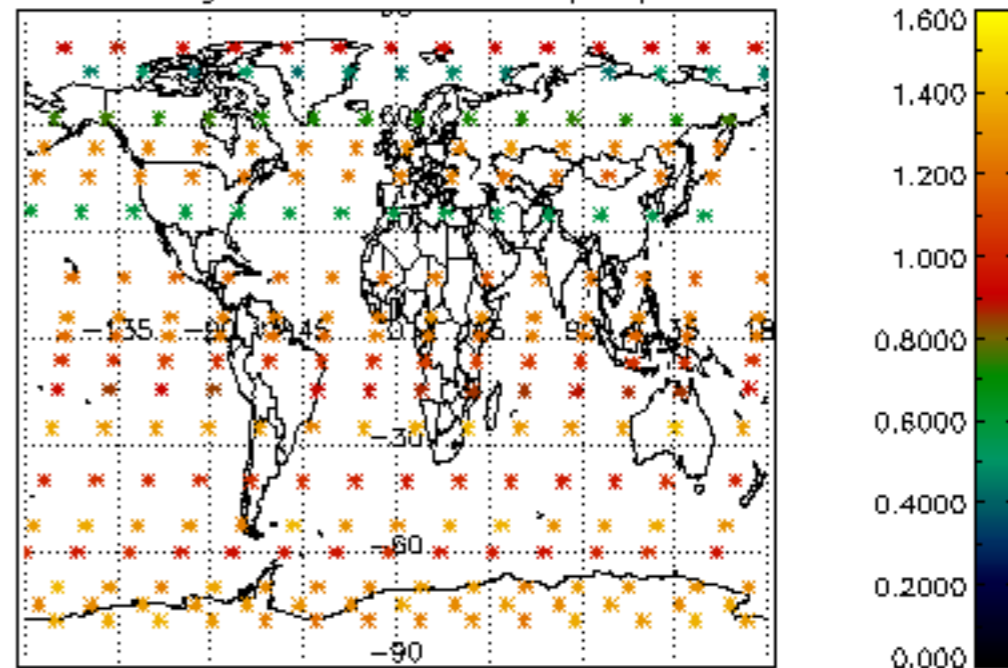
Percentage of saturation errors per profile



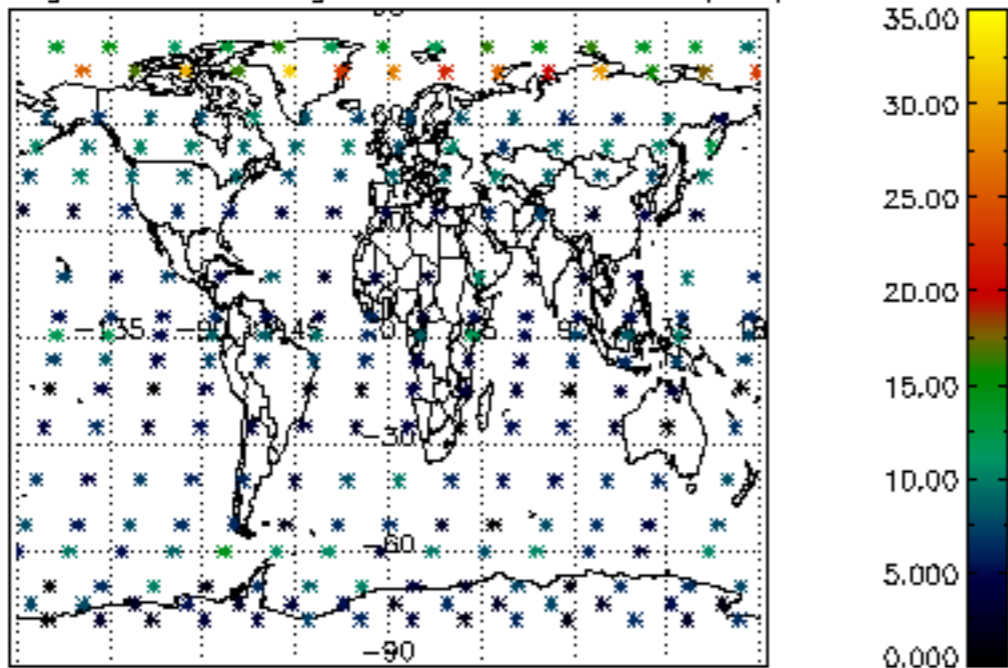
Percentage of cosmic ray hits per profile



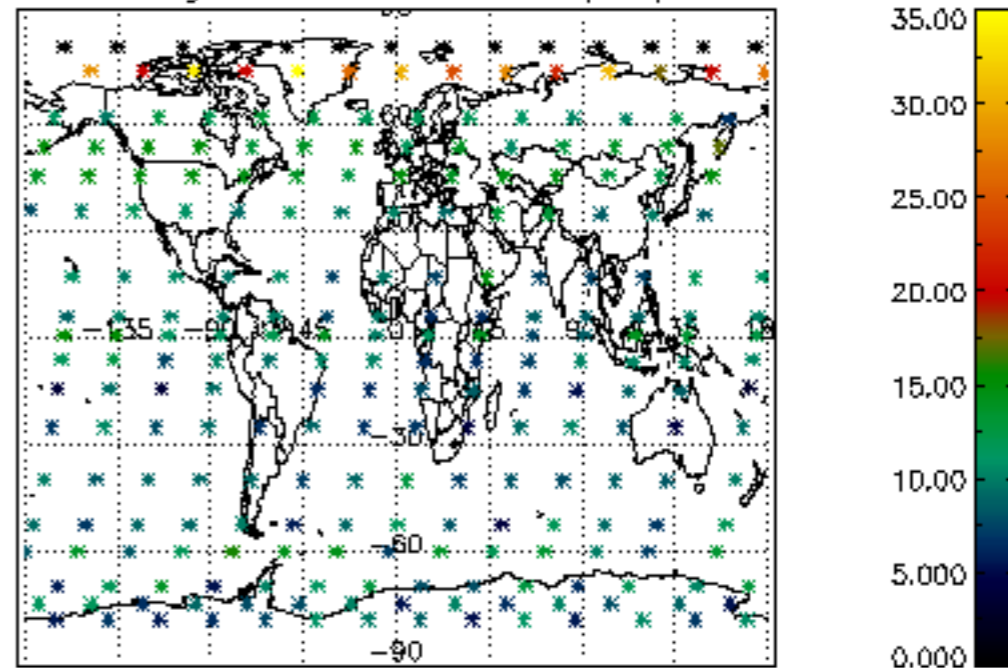
Percentage of datation errors per profile

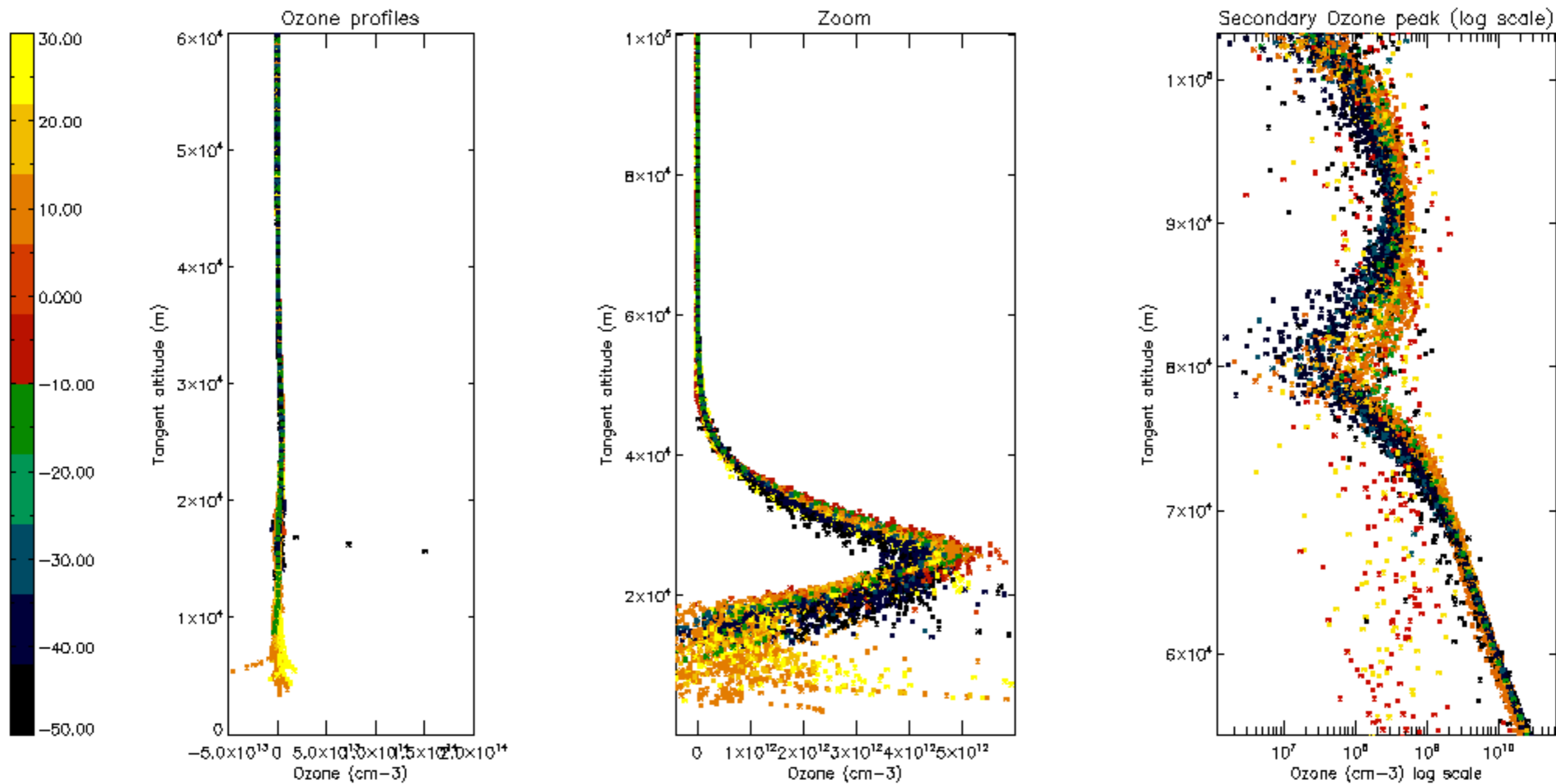


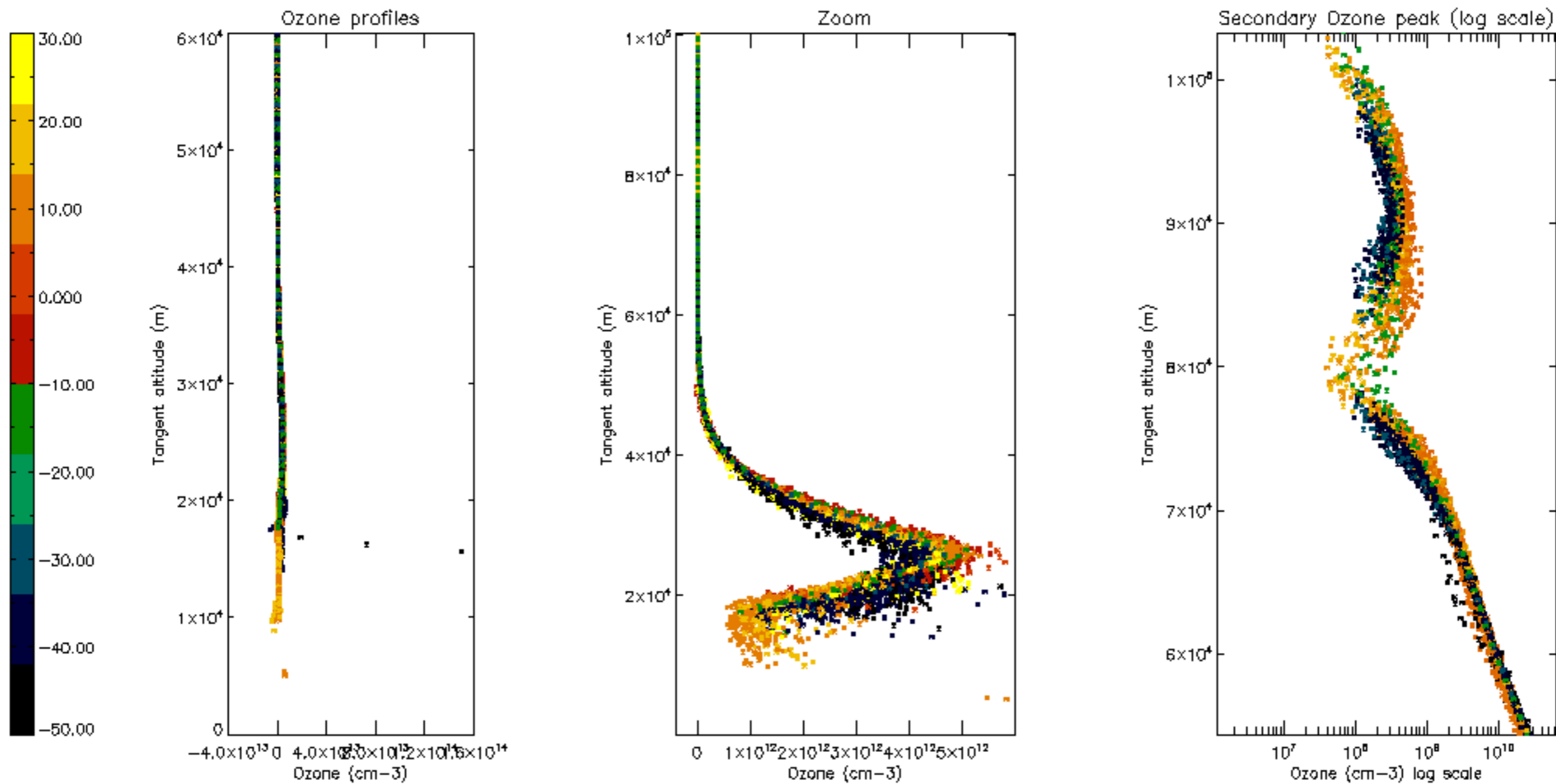
Percentage of star falling outside central band per profile

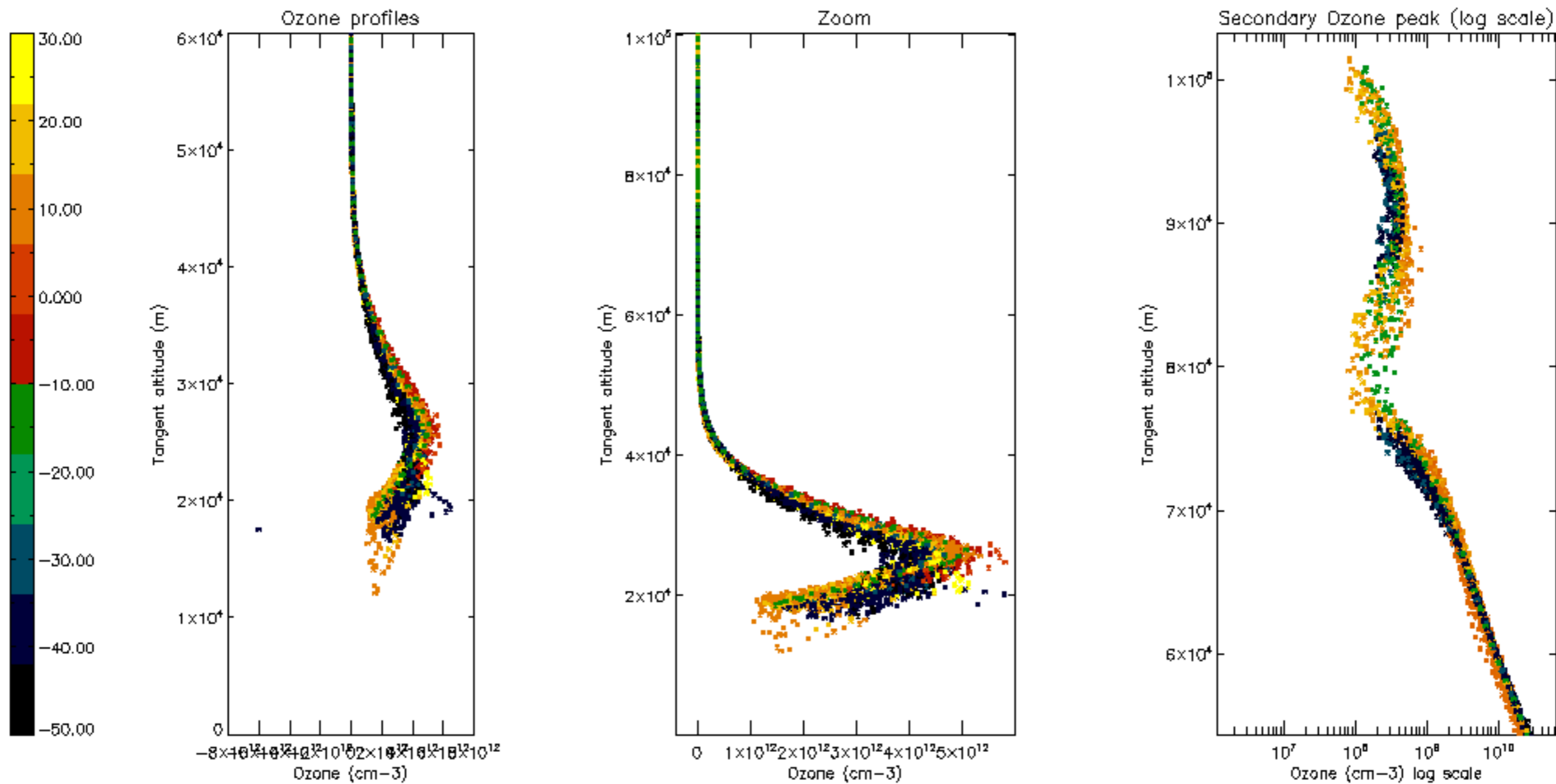


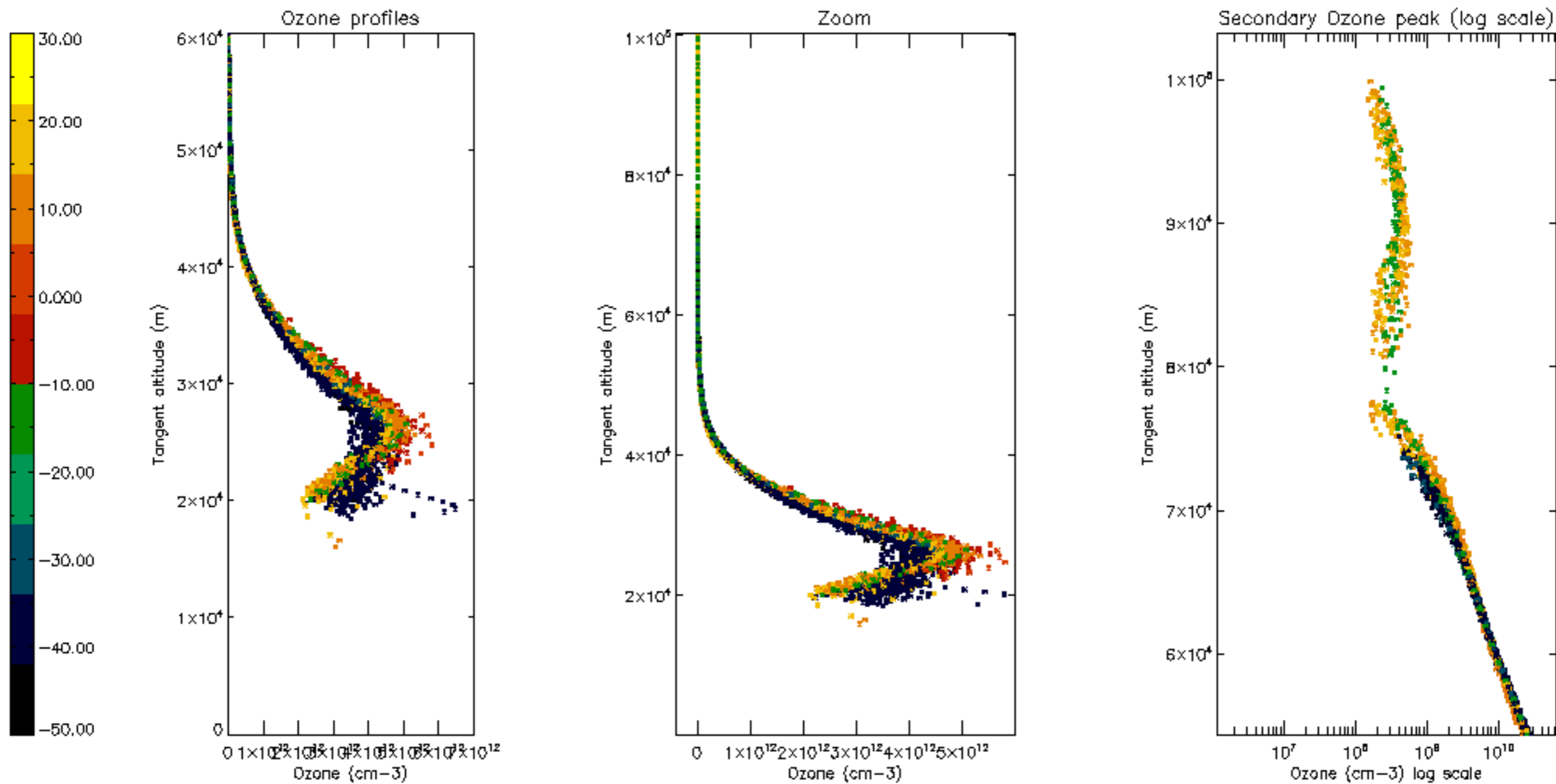
Percentage of saturation errors per profile

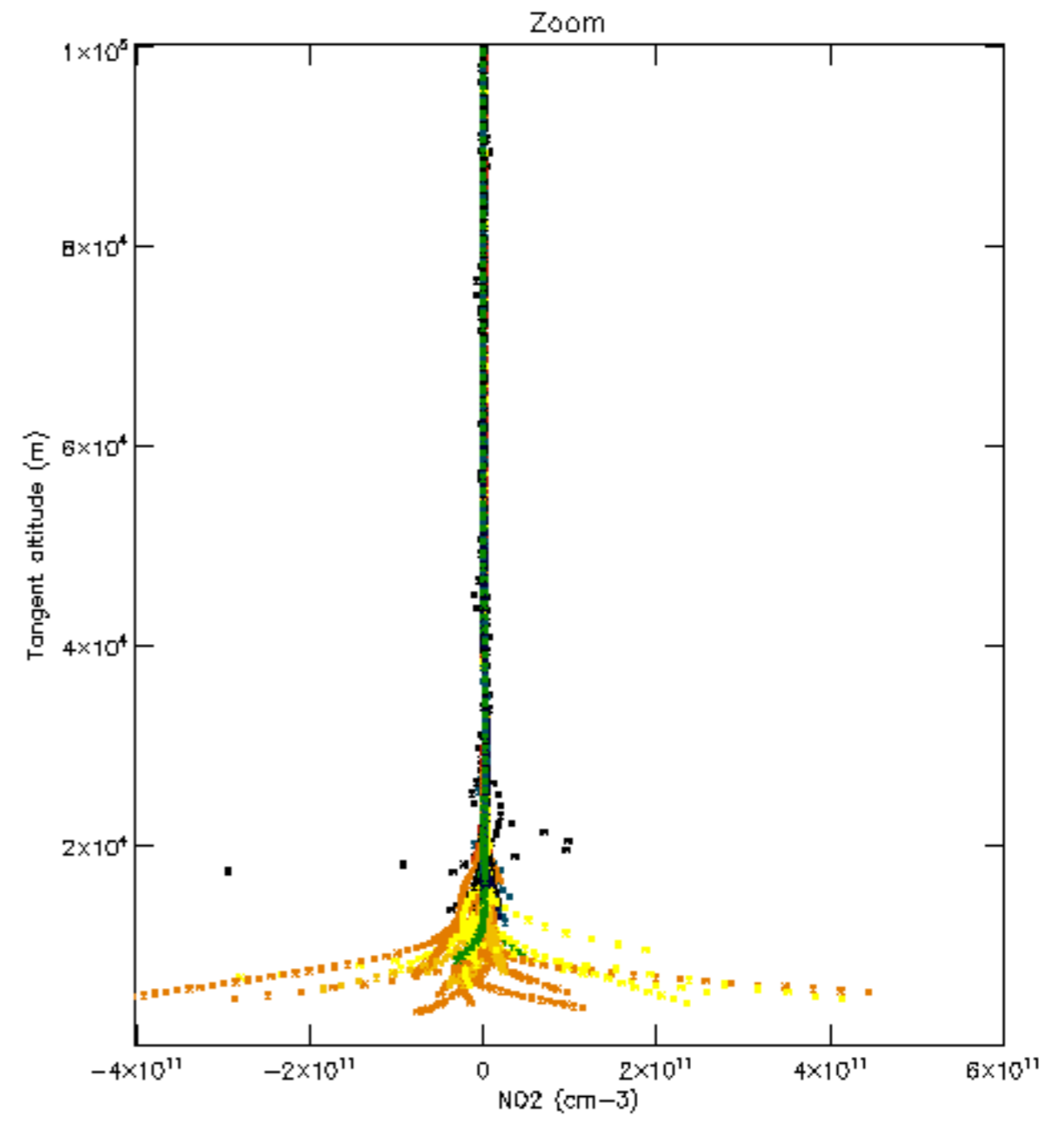
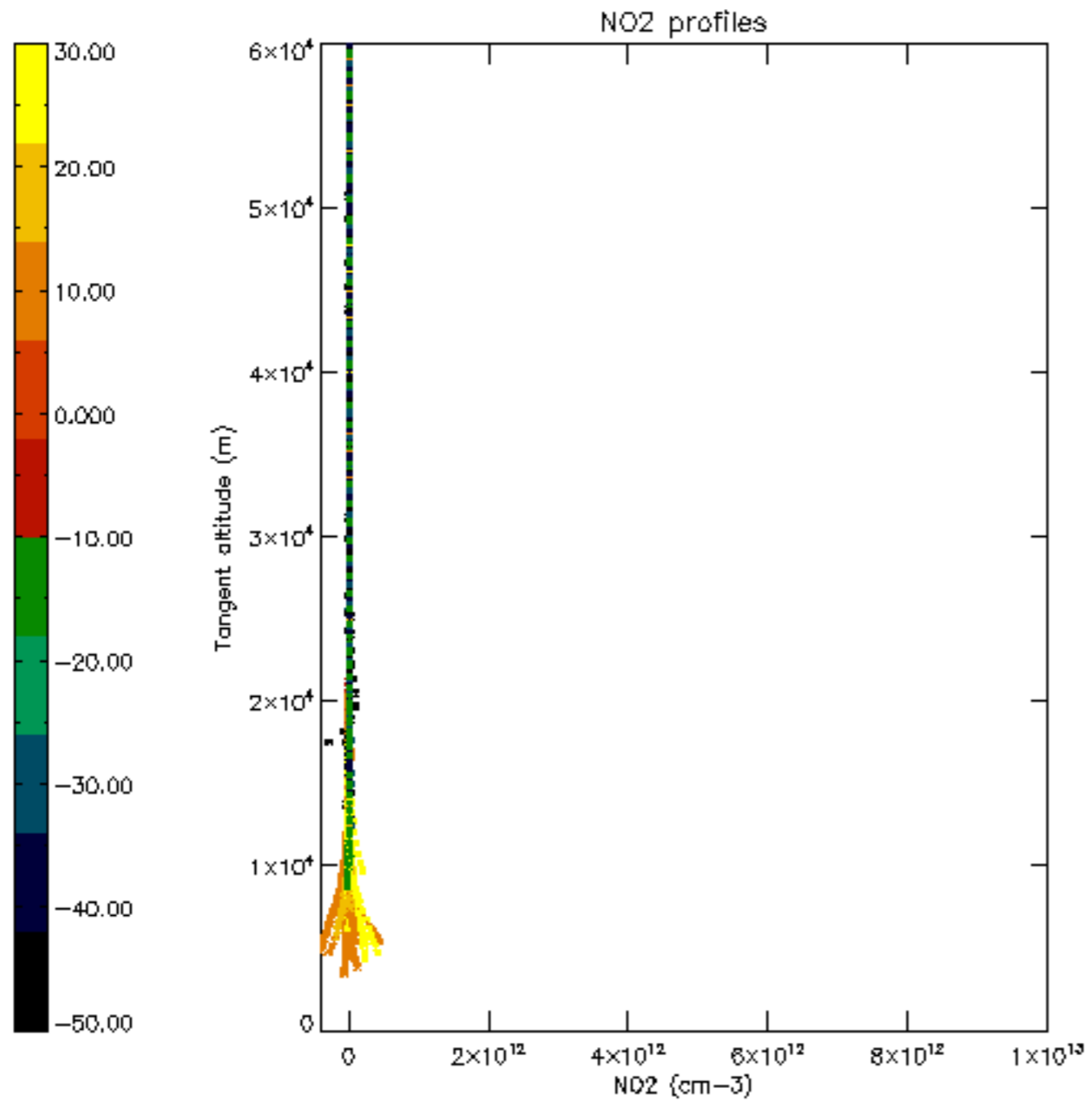


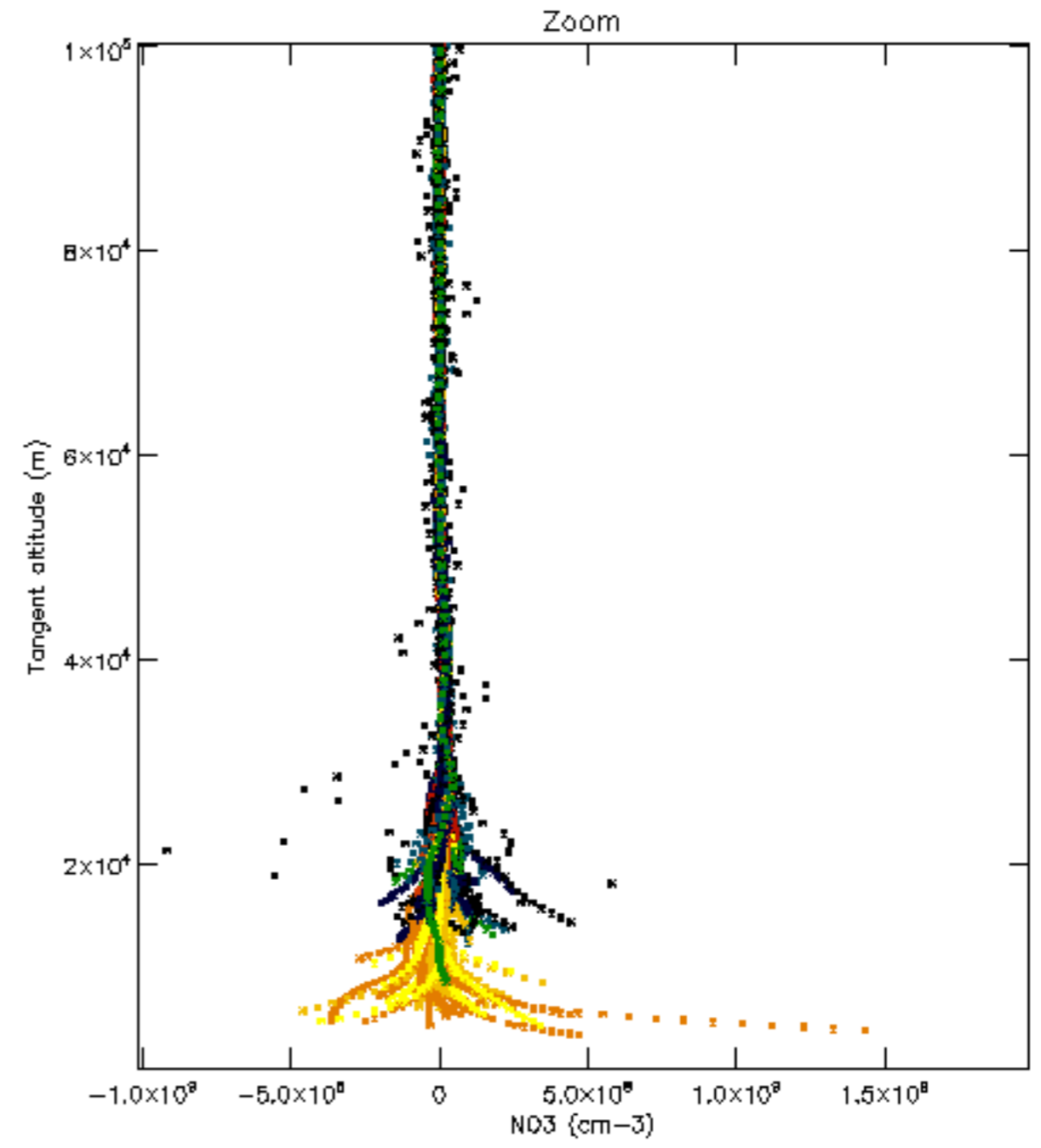
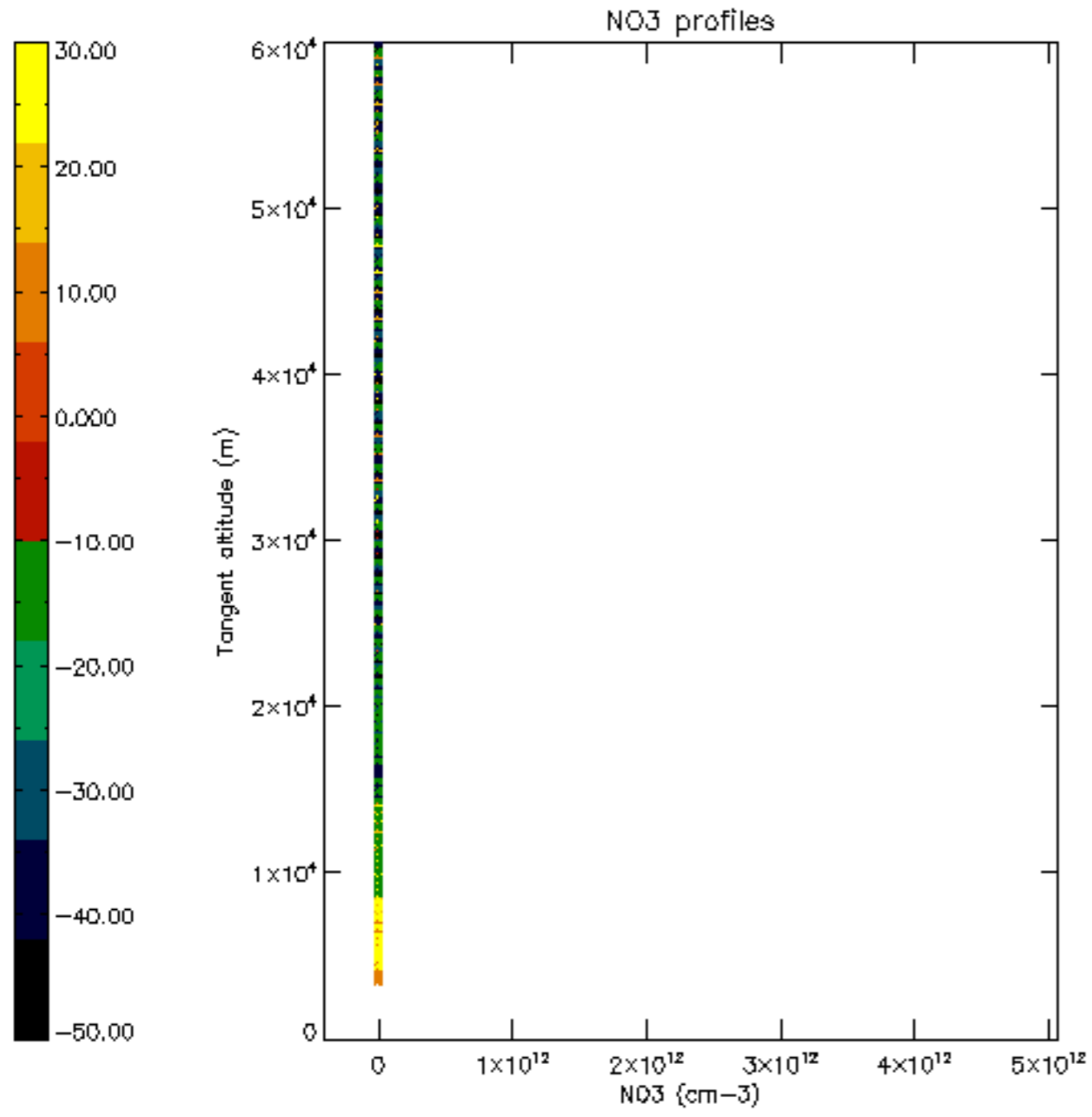


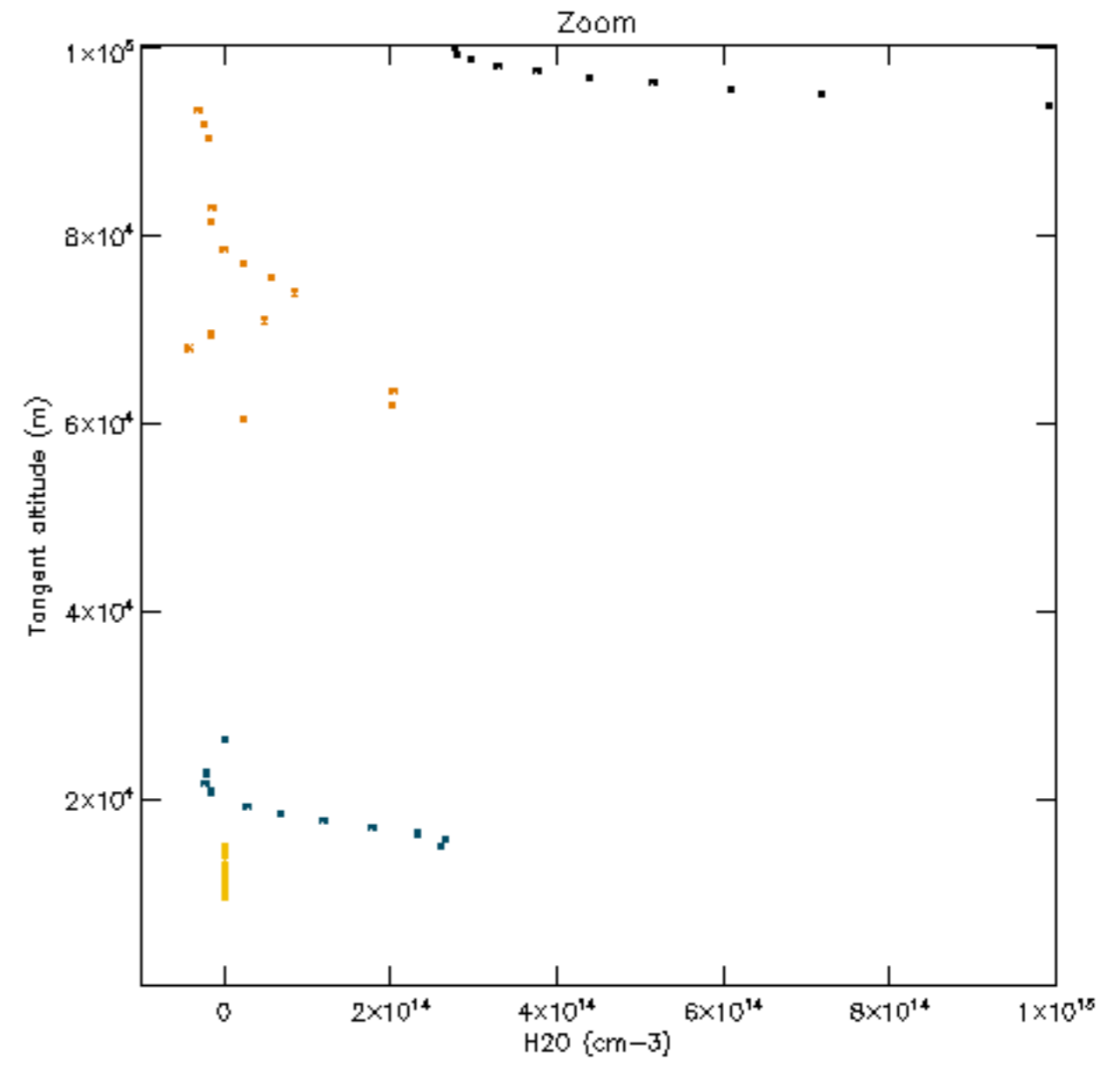
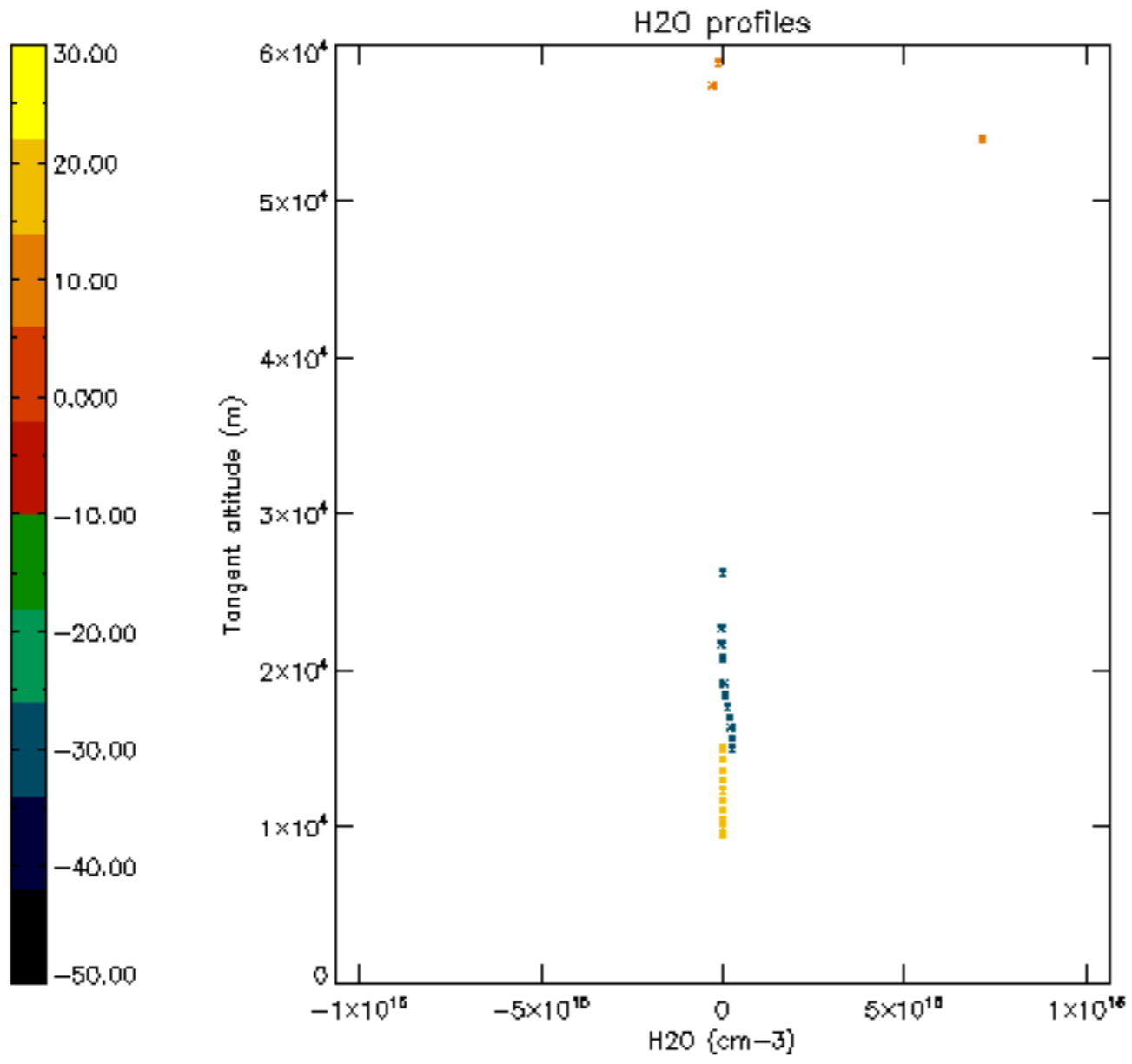


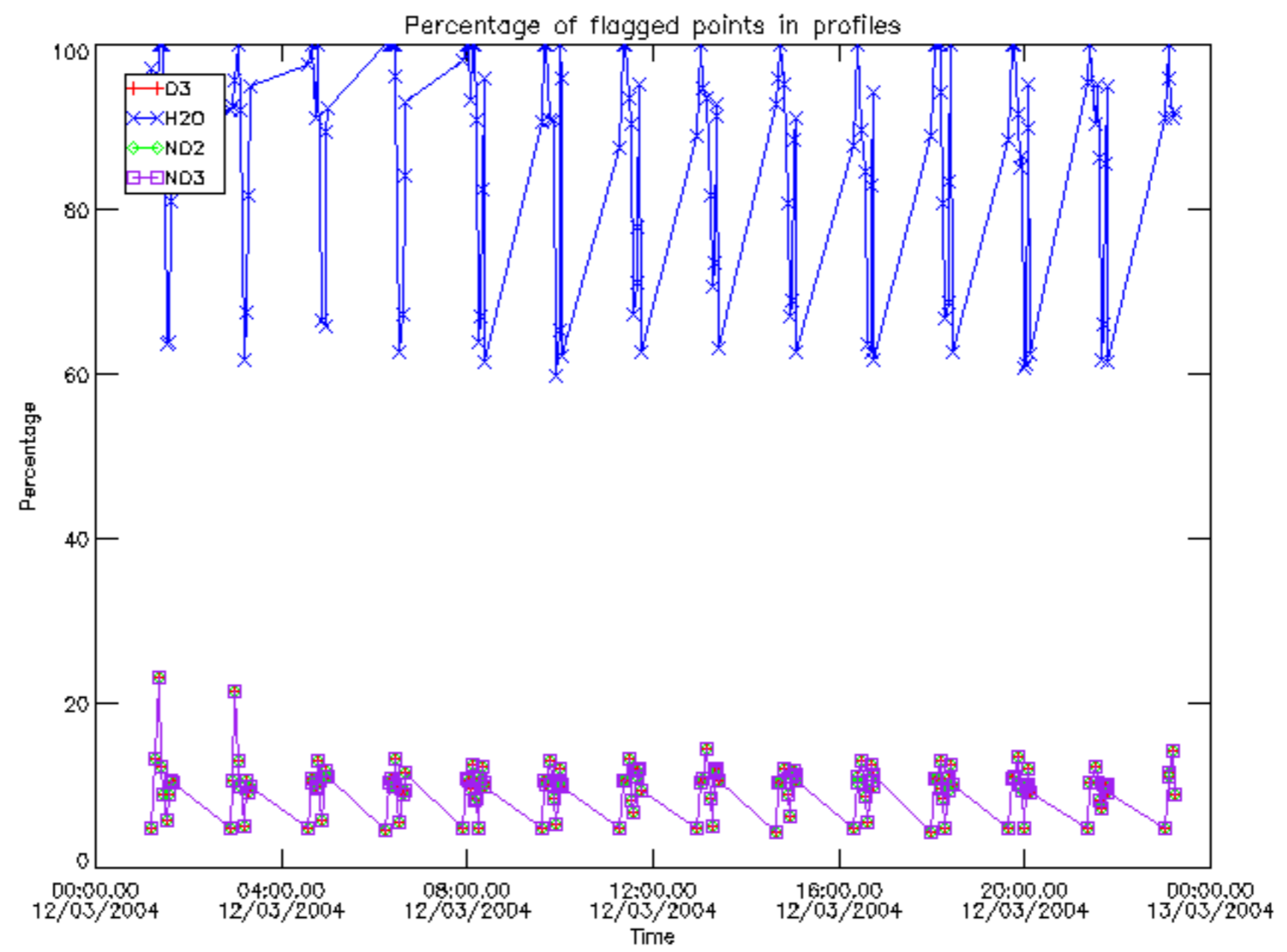




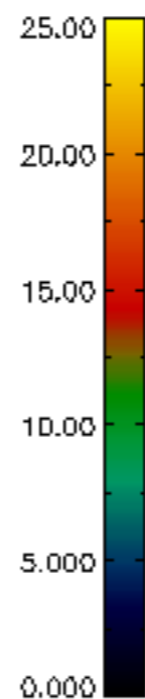
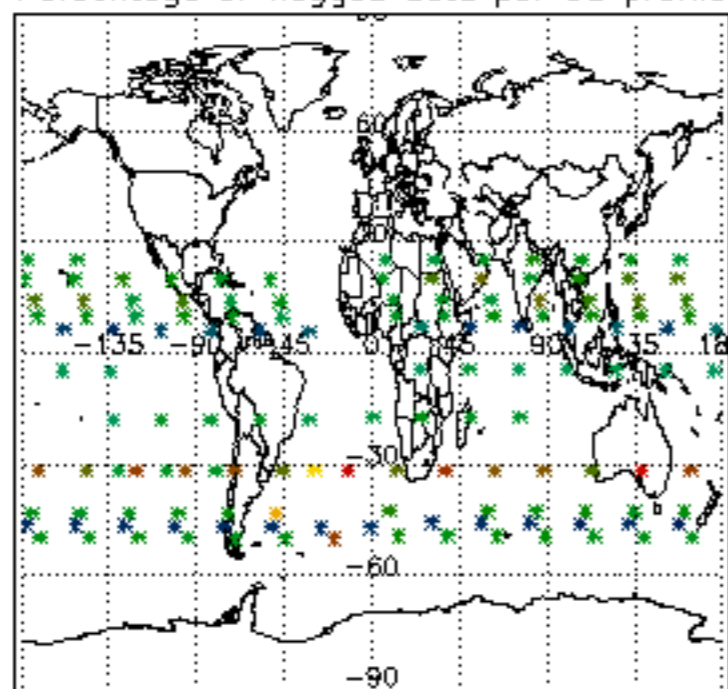




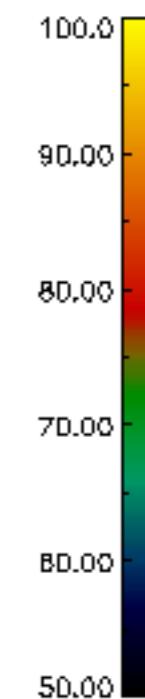
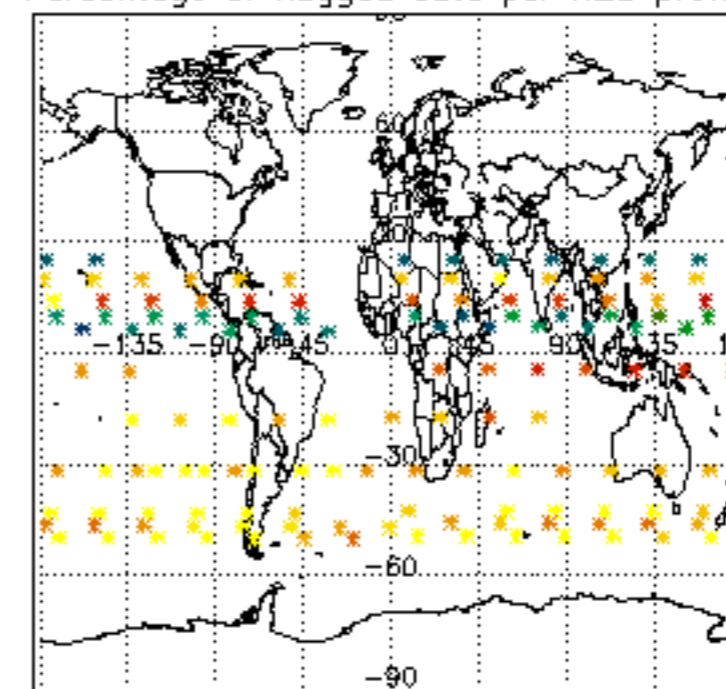




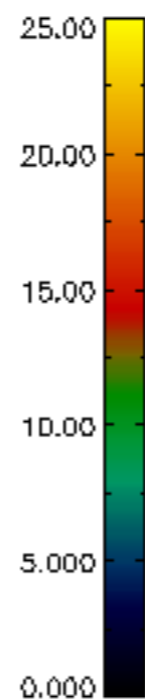
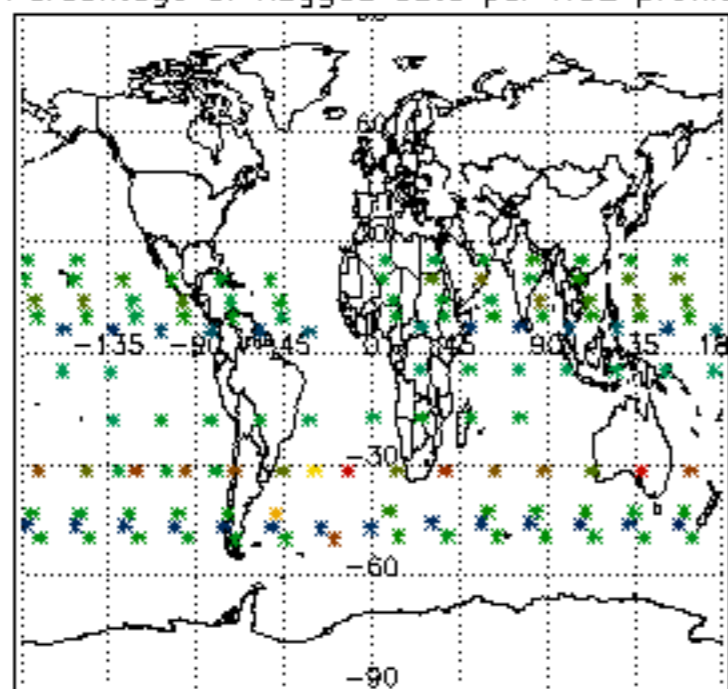
Percentage of flagged data per D3 profile



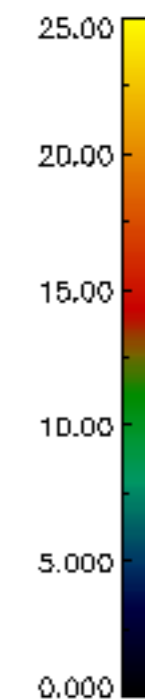
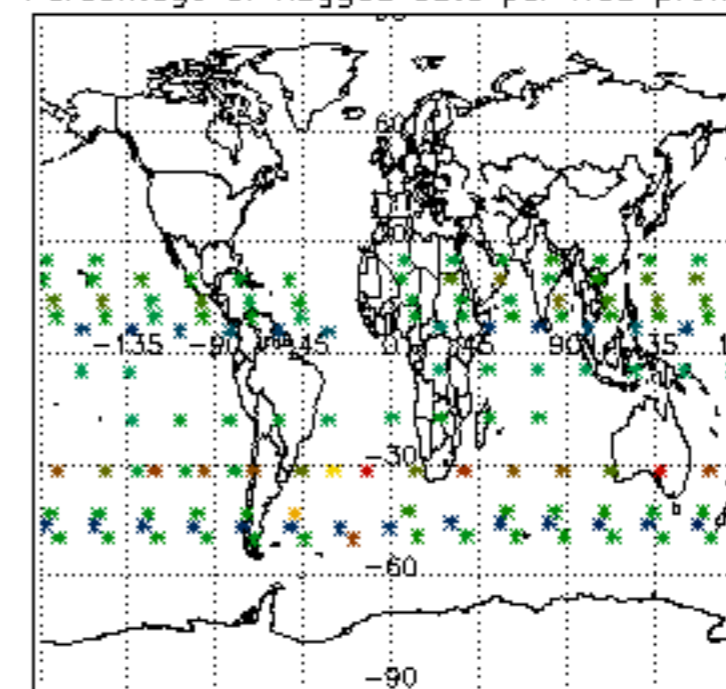
Percentage of flagged data per H2O profile

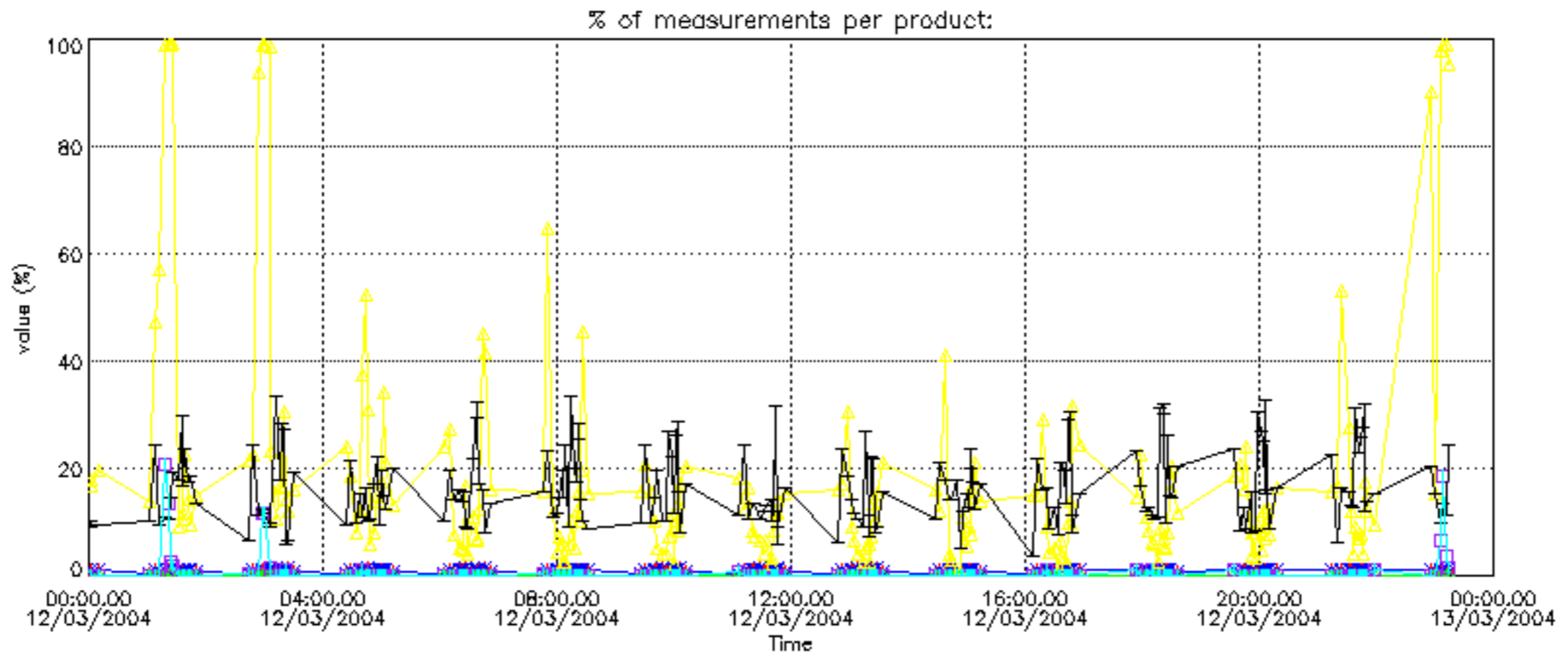


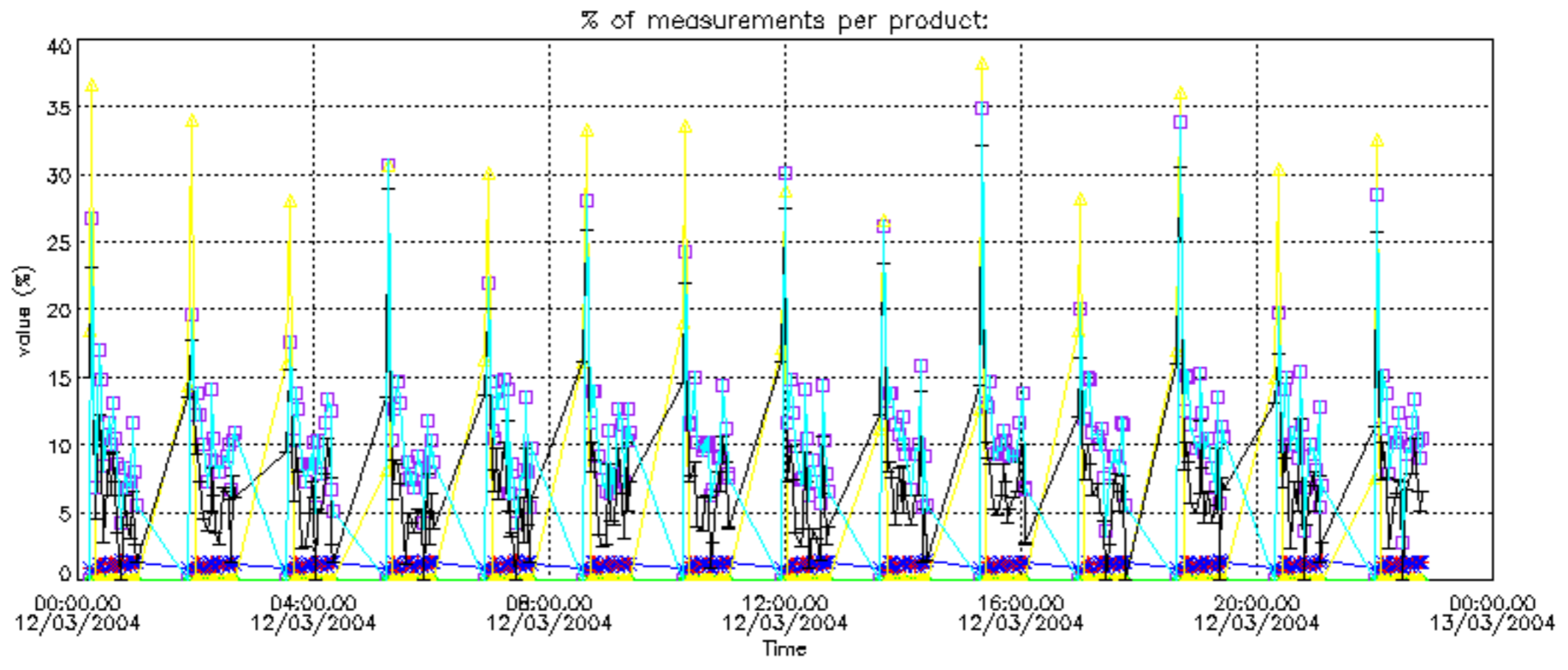
Percentage of flagged data per NO2 profile



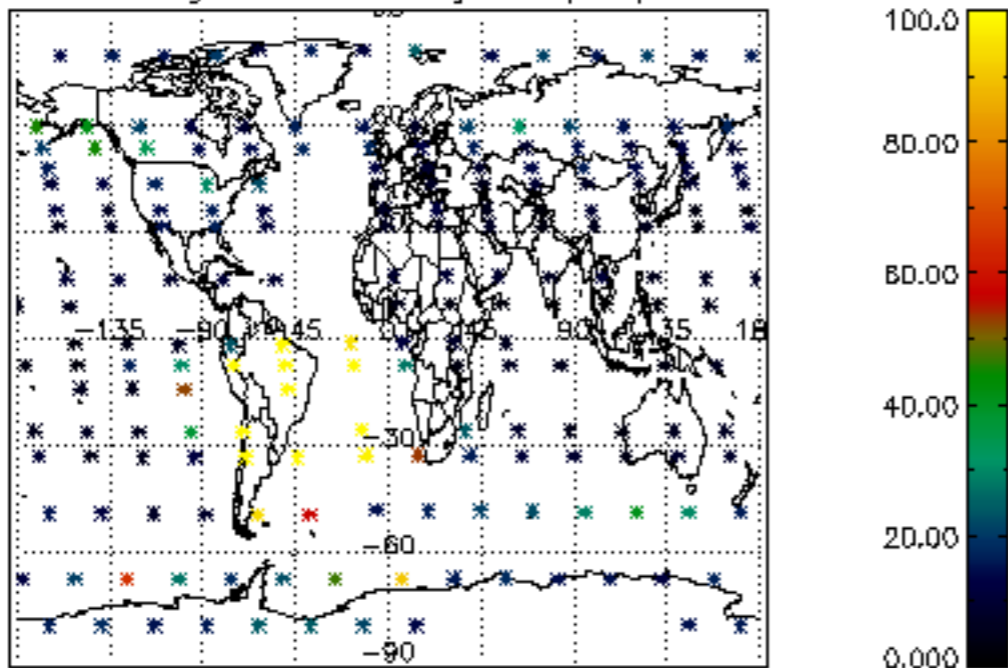
Percentage of flagged data per NO3 profile



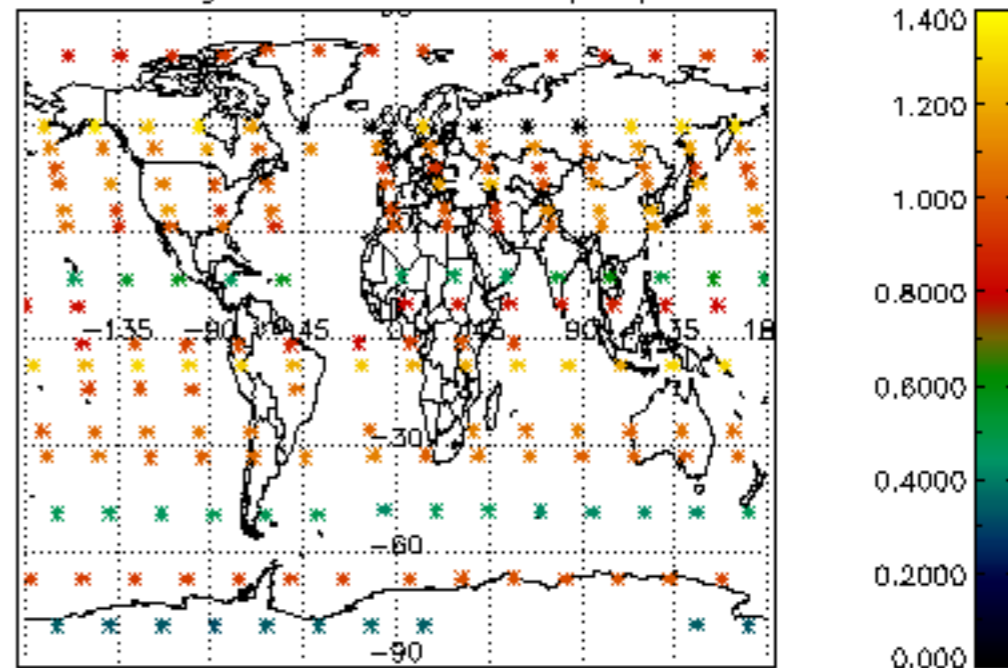




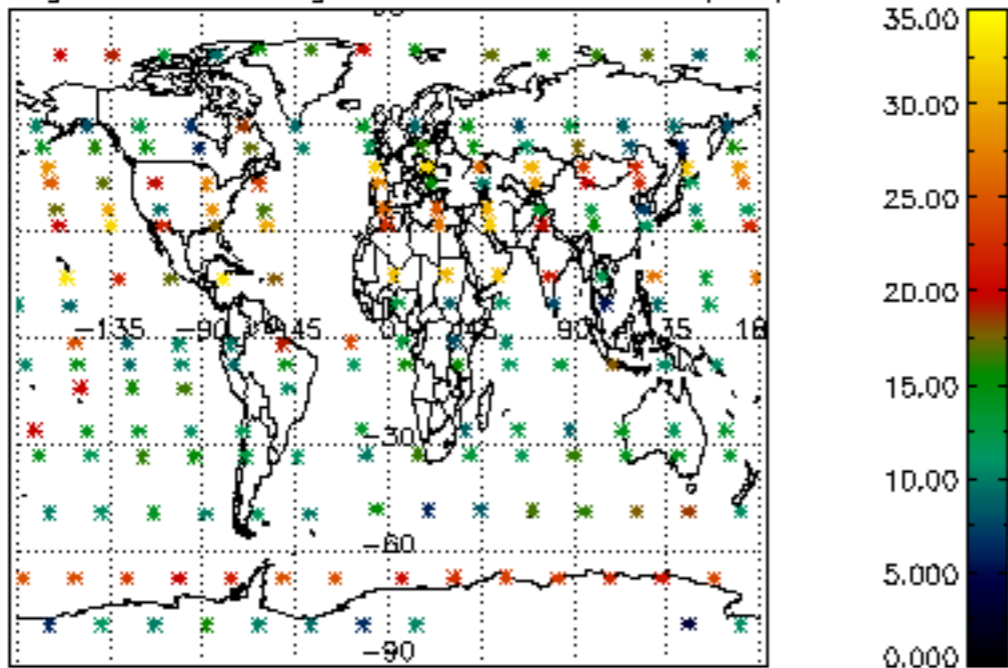
Percentage of cosmic ray hits per profile



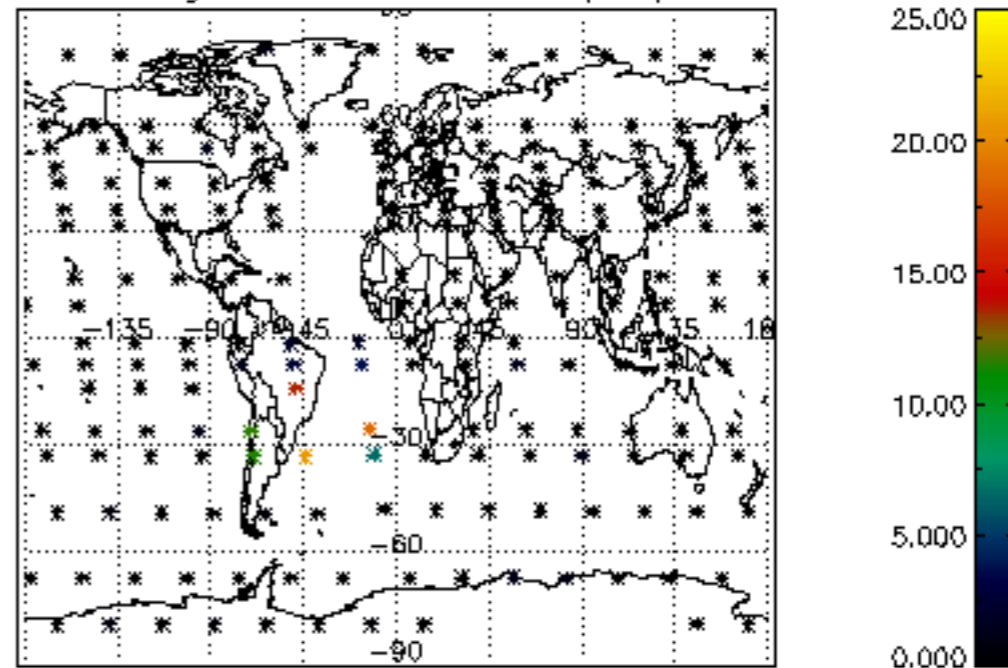
Percentage of datation errors per profile



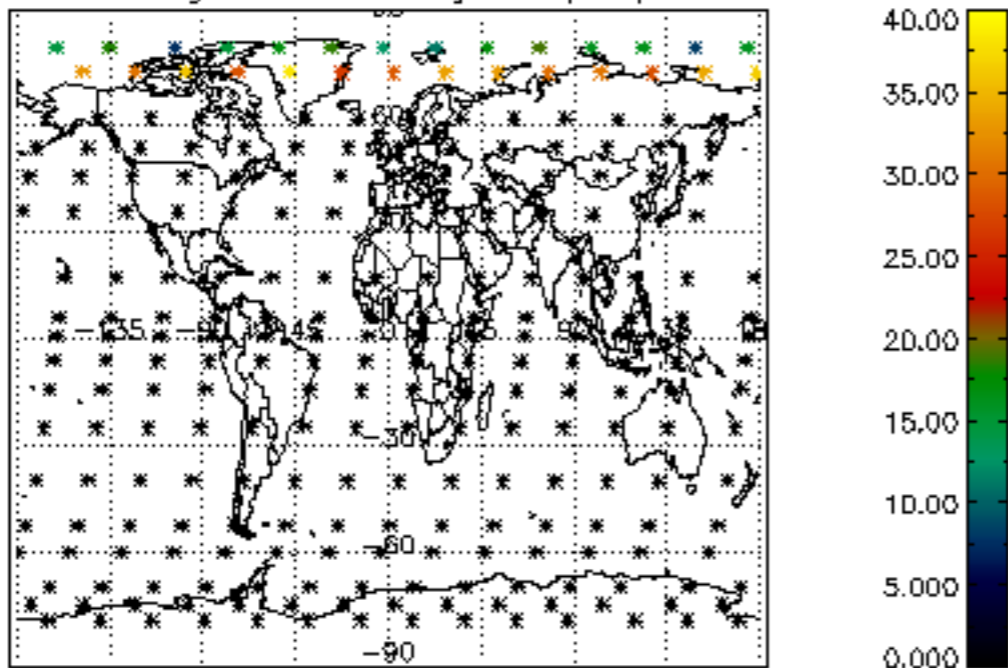
Percentage of star falling outside central band per profile



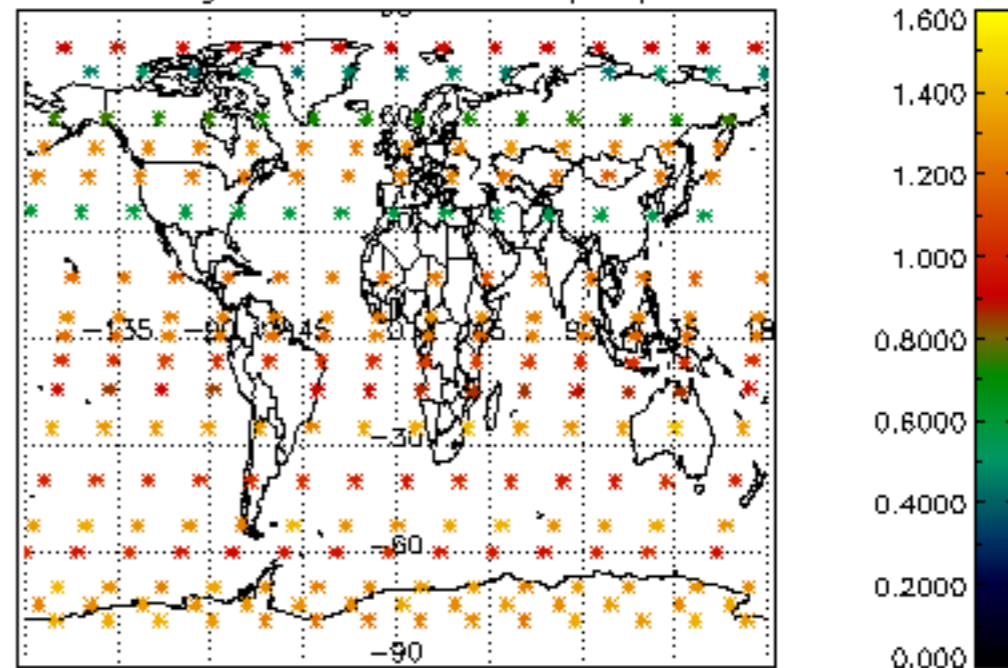
Percentage of saturation errors per profile



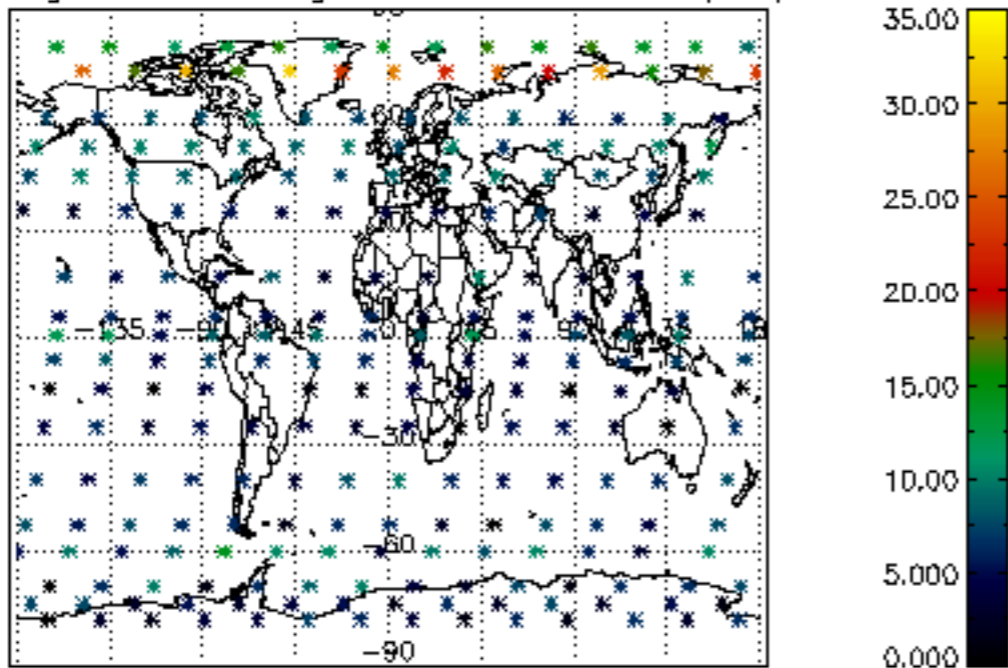
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

