

# 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 21:50:06
Data source version	GOMOS/6.01
Start time of products	08-11-2008 (08NOV2008 00:00:00)
Stop time of products	09-11-2008 (09NOV2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	208
Nb of prods with errors	0

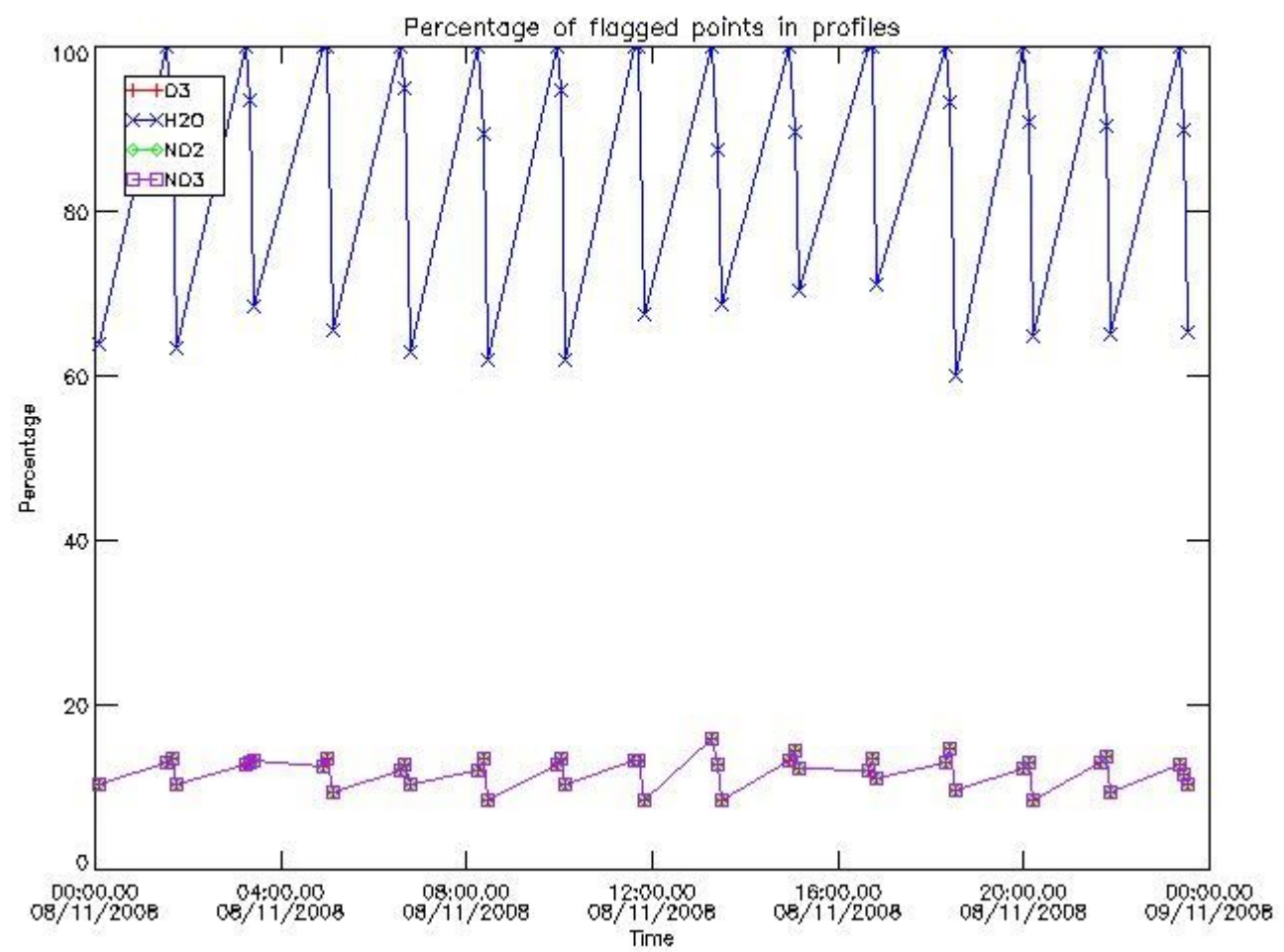
## 2. Summary of processed GOM\_NL\_\_2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20081108_000428_000000492073_00360_34983_0142.N1	08-NOV-2008 00:04:28	Dark	49.000	2	Alp Car	-0.73600	7000.0	98	34983	No
2	GOM_NL__2PRFIN20081108_001359_000000392073_00360_34983_0143.N1	08-NOV-2008 00:13:59	Straylight	39.000	157	The1Eri	2.9060	9300.0	78	34983	No
3	GOM_NL__2PRFIN20081108_002732_000000502073_00360_34983_0144.N1	08-NOV-2008 00:27:32	Twilight_stray	49.500	94	92Alp Cet	2.5260	3100.0	99	34983	No
4	GOM_NL__2PRFIN20081108_003209_000000362073_00360_34983_0145.N1	08-NOV-2008 00:32:09	Bright	36.000	105	6Bet Ari	2.6450	8900.0	72	34983	No
5	GOM_NL__2PRFIN20081108_003622_000000362073_00360_34983_0146.N1	08-NOV-2008 00:36:22	Bright	35.500	53	43Bet And	2.0480	3300.0	71	34983	No
6	GOM_NL__2PRFIN20081108_003824_000000382073_00360_34983_0147.N1	08-NOV-2008 00:38:24	Bright	37.500	73	57Gam1And	2.2600	13100.	75	34983	No
7	GOM_NL__2PRFIN20081108_004219_000000362073_00360_34983_0148.N1	08-NOV-2008 00:42:19	Bright	36.000	68	18Alp Cas	2.2250	4500.0	72	34983	No
8	GOM_NL__2PRFIN20081108_005129_000000332073_00360_34983_0149.N1	08-NOV-2008 00:51:29	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	34983	No
9	GOM_NL__2PRFIN20081108_005926_000000402073_00360_34983_0150.N1	08-NOV-2008 00:59:26	Bright	39.500	36	50Alp UMa	1.8000	6300.0	79	34983	No
10	GOM_NL__2PRFIN20081108_010103_000000382073_00360_34983_0151.N1	08-NOV-2008 01:01:03	Bright	38.000	82	48Bet UMa	2.3650	10600.	76	34983	No
11	GOM_NL__2PRFIN20081108_010454_000000412073_00360_34983_0152.N1	08-NOV-2008 01:04:54	Bright	41.000	174	52Psi UMa	3.0040	4400.0	82	34983	No
12	GOM_NL__2PRFIN20081108_011248_000000592073_00360_34983_0153.N1	08-NOV-2008 01:12:48	Bright	59.000	96	68Del Leo	2.5600	9300.0	118	34983	No
13	GOM_NL__2PRFIN20081108_013258_000000402073_00360_34983_0154.N1	08-NOV-2008 01:32:58	Dark	39.500	113	Mu Vel	2.6920	5000.0	79	34983	No
14	GOM_NL__2PRFIN20081108_013907_000000382073_00361_34984_0162.N1	08-NOV-2008 01:39:07	Dark	37.500	29	Bet Car	1.6720	10200.	75	34984	No
15	GOM_NL__2PRFIN20081108_014505_000000502073_00361_34984_0163.N1	08-NOV-2008 01:45:05	Dark	49.500	2	Alp Car	-0.73600	7000.0	99	34984	No
16	GOM_NL__2PRFIN20081108_015435_000000392073_00361_34984_0164.N1	08-NOV-2008 01:54:35	Straylight	38.500	157	The1Eri	2.9060	9300.0	77	34984	No
17	GOM_NL__2PRFIN20081108_020808_000000512073_00361_34984_0165.N1	08-NOV-2008 02:08:08	Twilight_stray	51.000	94	92Alp Cet	2.5260	3100.0	102	34984	No
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21	GOM_NL__2PRFIN20081108_022255_000000352073_00361_34984_0169.N1	08-NOV-2008 02:22:55	Bright	35.000	68	18Alp Cas	2.2250	4500.0	70	34984	No
22	GOM_NL__2PRFIN20081108_023204_000000332073_00361_34984_0170.N1	08-NOV-2008 02:32:04	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	34984	No
23	GOM_NL__2PRFIN20081108_024001_000000402073_00361_34984_0171.N1	08-NOV-2008 02:40:01	Bright	40.000	36	50Alp UMa	1.8000	6300.0	80	34984	No
24	GOM_NL__2PRFIN20081108_024139_000000392073_00361_34984_0172.N1	08-NOV-2008 02:41:39	Bright	38.500	82	48Bet UMa	2.3650	10600.	77	34984	No
25	GOM_NL__2PRFIN20081108_024530_000000402073_00361_34984_0173.N1	08-NOV-2008 02:45:30	Bright	40.000	174	52Psi UMa	3.0040	4400.0	80	34984	No
26	GOM_NL__2PRFIN20081108_024658_000000332073_00361_34984_0174.N1	08-NOV-2008 02:46:58	Bright	33.000	152	12Alp2CVn	2.8900	11000.	66	34984	No
27	GOM_NL__2PRFIN20081108_025324_000000412073_00361_34984_0175.N1	08-NOV-2008 02:53:24	Bright	41.000	96	68Del Leo	2.5600	9300.0	82	34984	No
28	GOM_NL__2PRFIN20081108_031335_000000402073_00361_34984_0176.N1	08-NOV-2008 03:13:35	Dark	40.000	113	Mu Vel	2.6920	5000.0	80	34984	No
29	GOM_NL__2PRFIN20081108_031943_000000402073_00362_34985_0172.N1	08-NOV-2008 03:19:43	Dark	39.500	29	Bet Car	1.6720	10200.	79	34985	No
30	GOM_NL__2PRFIN20081108_032542_000000502073_00362_34985_0173.N1	08-NOV-2008 03:25:42	Dark	49.500	2	Alp Car	-0.73600	7000.0	99	34985	No
31	GOM_NL__2PRFIN20081108_033511_000000382073_00362_34985_0174.N1	08-NOV-2008 03:35:11	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	34985	No
32	GOM_NL__2PRFIN20081108_034844_000000532073_00362_34985_0175.N1	08-NOV-2008 03:48:44	Twilight_stray	52.500	94	92Alp Cet	2.5260	3100.0	105	34985	No
33	GOM_NL__2PRFIN20081108_035321_000000362073_00362_34985_0176.N1	08-NOV-2008 03:53:21	Bright	35.500	105	6Bet Ari	2.6450	8900.0	71	34985	No
34	GOM_NL__2PRFIN20081108_035734_000000382073_00362_34985_0177.N1	08-NOV-2008 03:57:34	Bright	37.500	53	43Bet And	2.0480	3300.0	75	34985	No
35	GOM_NL__2PRFIN20081108_035936_000000392073_00362_34985_0178.N1	08-NOV-2008 03:59:36	Bright	38.500	73	57Gam1And	2.2600	13100.	77	34985	No
36	GOM_NL__2PRFIN20081108_040332_000000352073_00362_34985_0179.N1	08-NOV-2008 04:03:32	Bright	35.000	68	18Alp Cas	2.2250	4500.0	70	34985	No
37	GOM_NL__2PRFIN20081108_041240_000000332073_00362_34985_0180.N1	08-NOV-2008 04:12:40	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	34985	No
38	GOM_NL__2PRFIN20081108_042037_000000392073_00362_34985_0181.N1	08-NOV-2008 04:20:37	Bright	39.000	36	50Alp UMa	1.8000	6300.0	78	34985	No
39	GOM_NL__2PRFIN20081108_042215_000000412073_00362_34985_0182.N1	08-NOV-2008 04:22:15	Bright	40.500	82	48Bet UMa	2.3650	10600.	81	34985	No
40	GOM_NL__2PRFIN20081108_042606_000000412073_00362_34985_0183.N1	08-NOV-2008 04:26:06	Bright	41.000	174	52Psi UMa	3.0040	4400.0	82	34985	No
41	GOM_NL__2PRFIN20081108_042734_000000342073_00362_34985_0184.N1	08-NOV-2008 04:27:34	Bright	34.000	152	12Alp2CVn	2.8900	11000.	68	34985	No
42	GOM_NL__2PRFIN20081108_043401_000000622073_00362_34985_0185.N1	08-NOV-2008 04:34:01	Bright	62.000	96	68Del Leo	2.5600	9300.0	124	34985	No



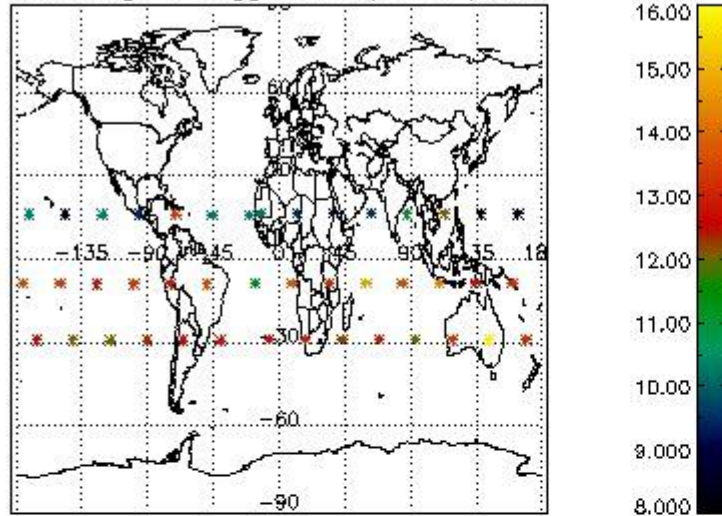




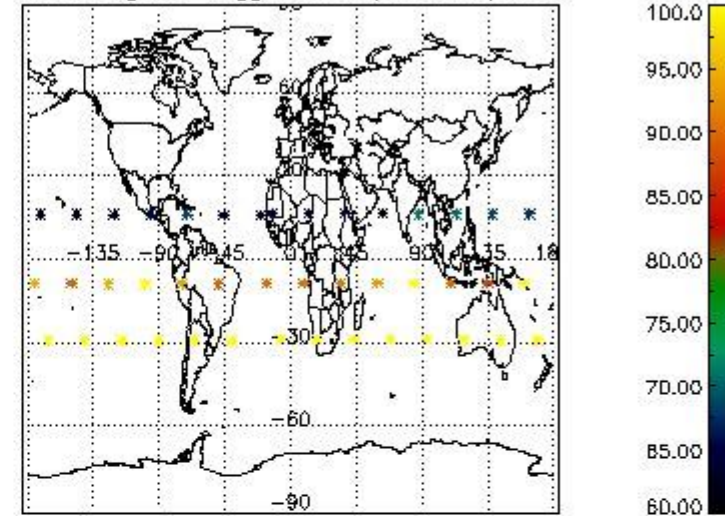


3.2 Plot quality information per product (world map)

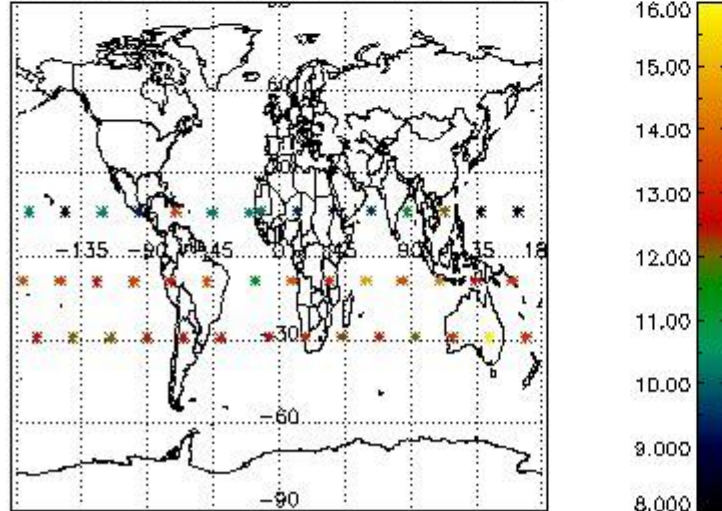
Percentage of flagged data per O3 profile



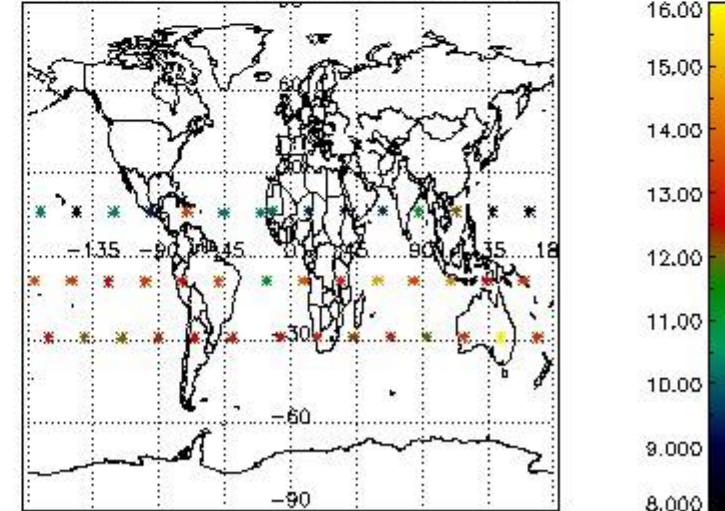
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

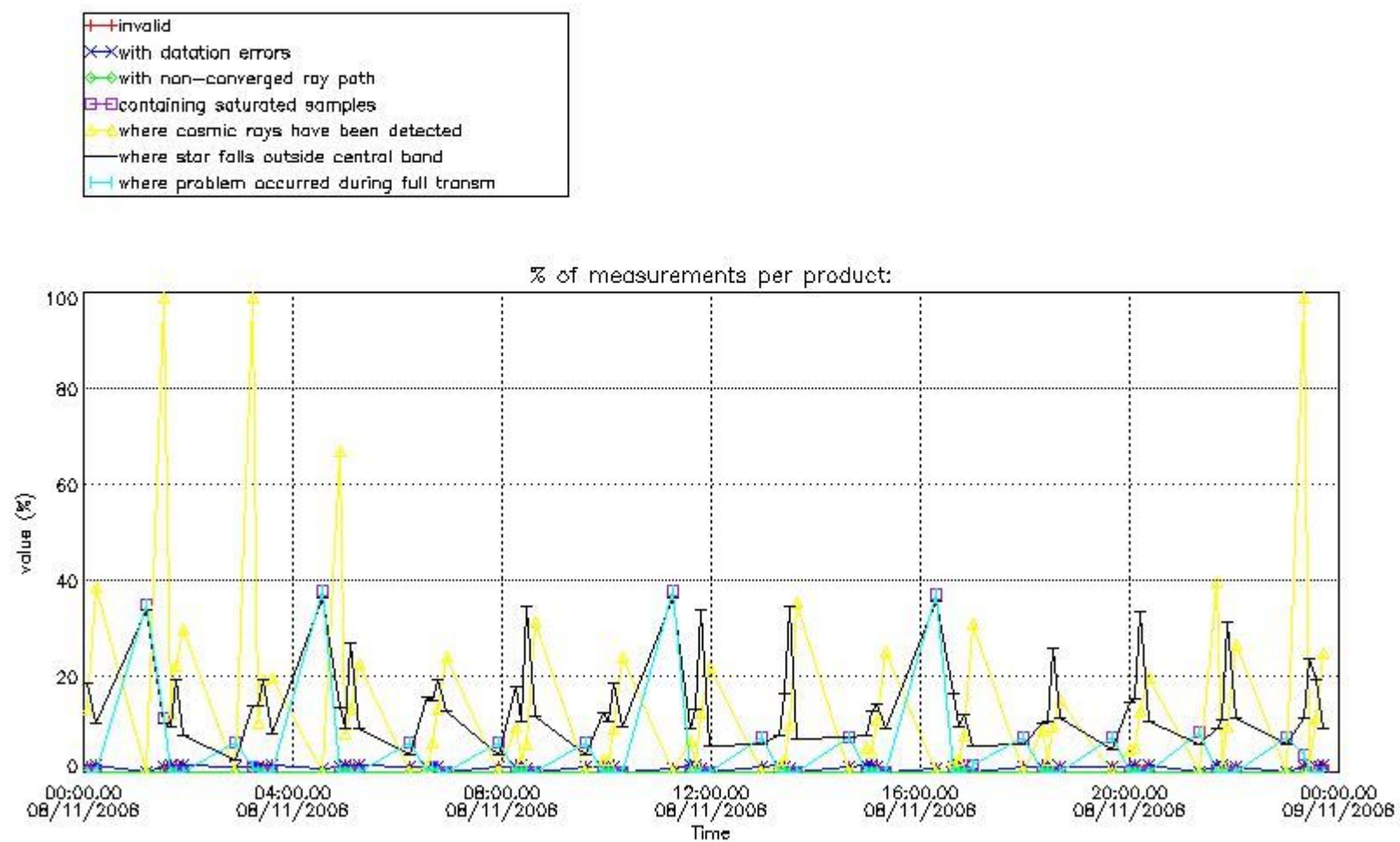


#### 4. Level 1 quality information per product

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.

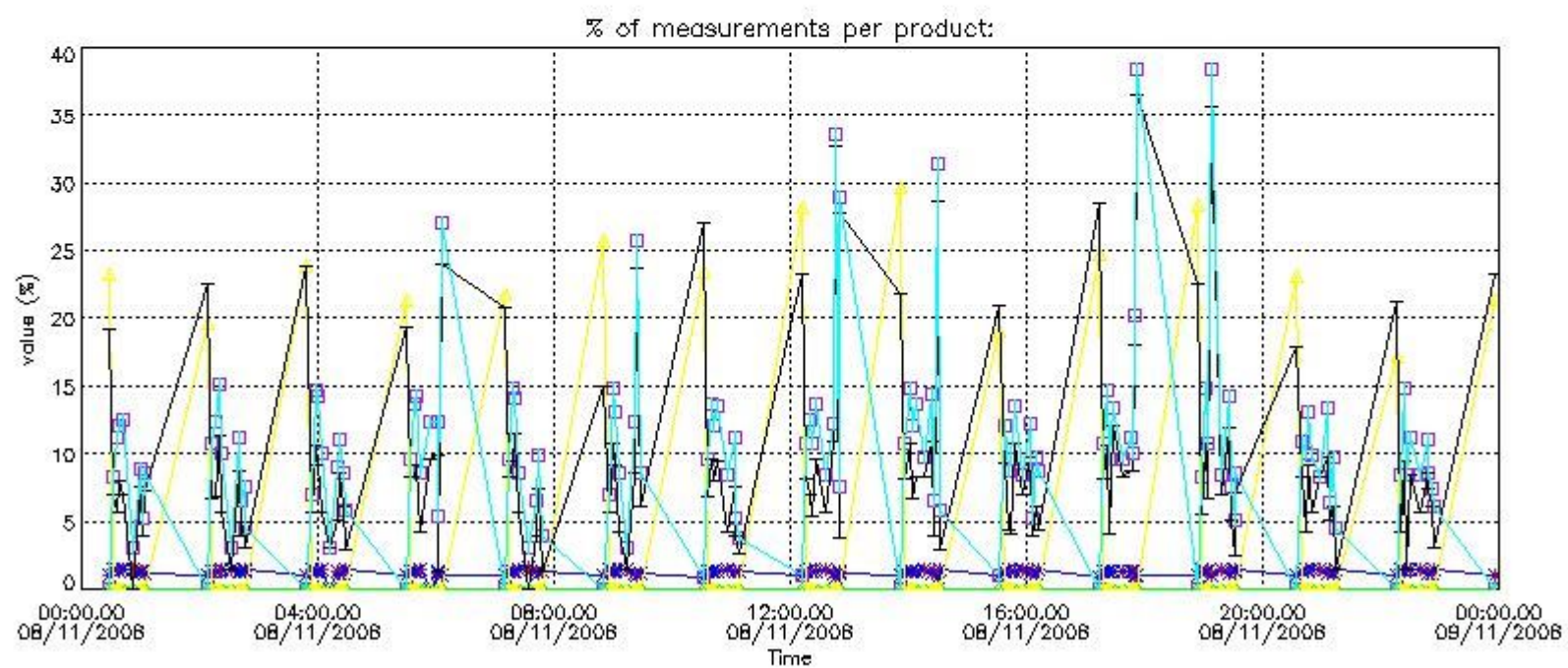
##### 4.1 Plot quality information per product (time dependant) coming from level 1b processing

###### 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

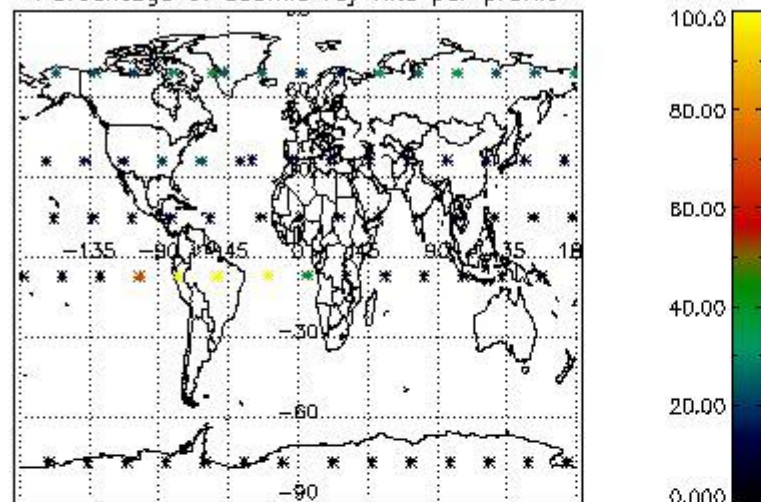




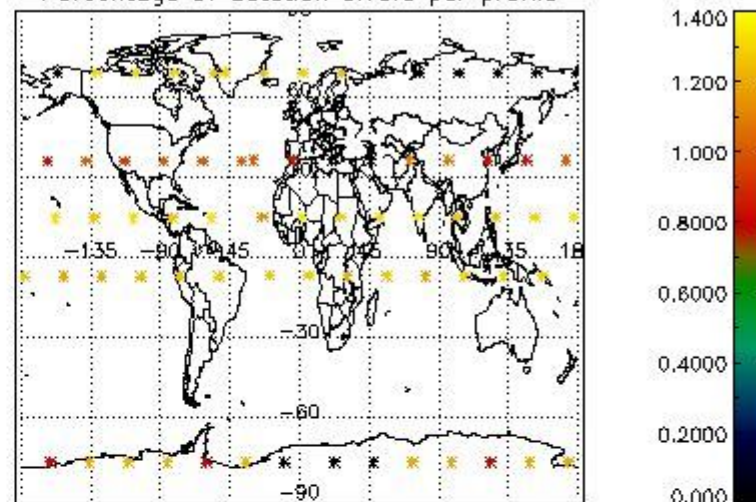
4.2 Plot quality information per product coming from level 1b processing (world map)

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

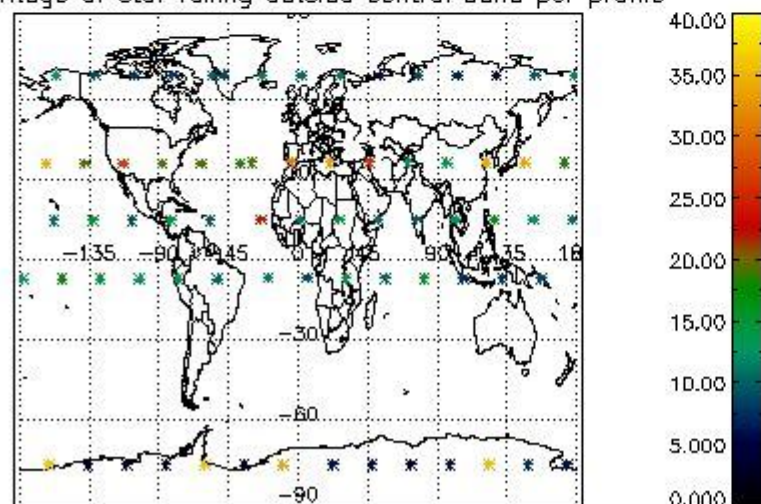
Percentage of cosmic ray hits per profile



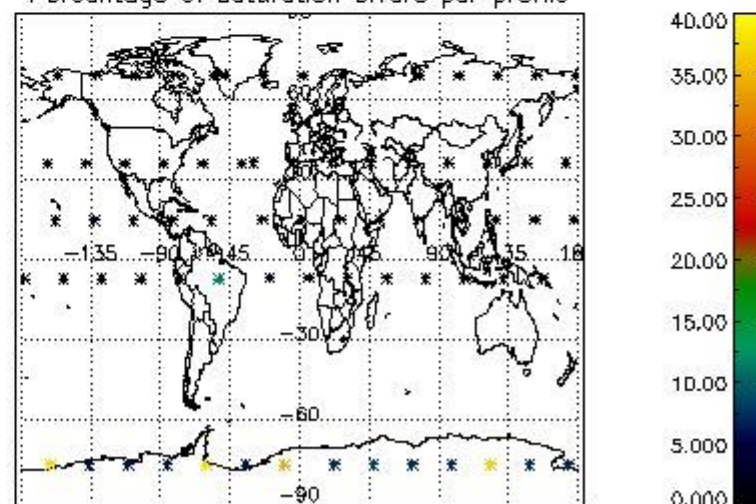
Percentage of datation errors per profile



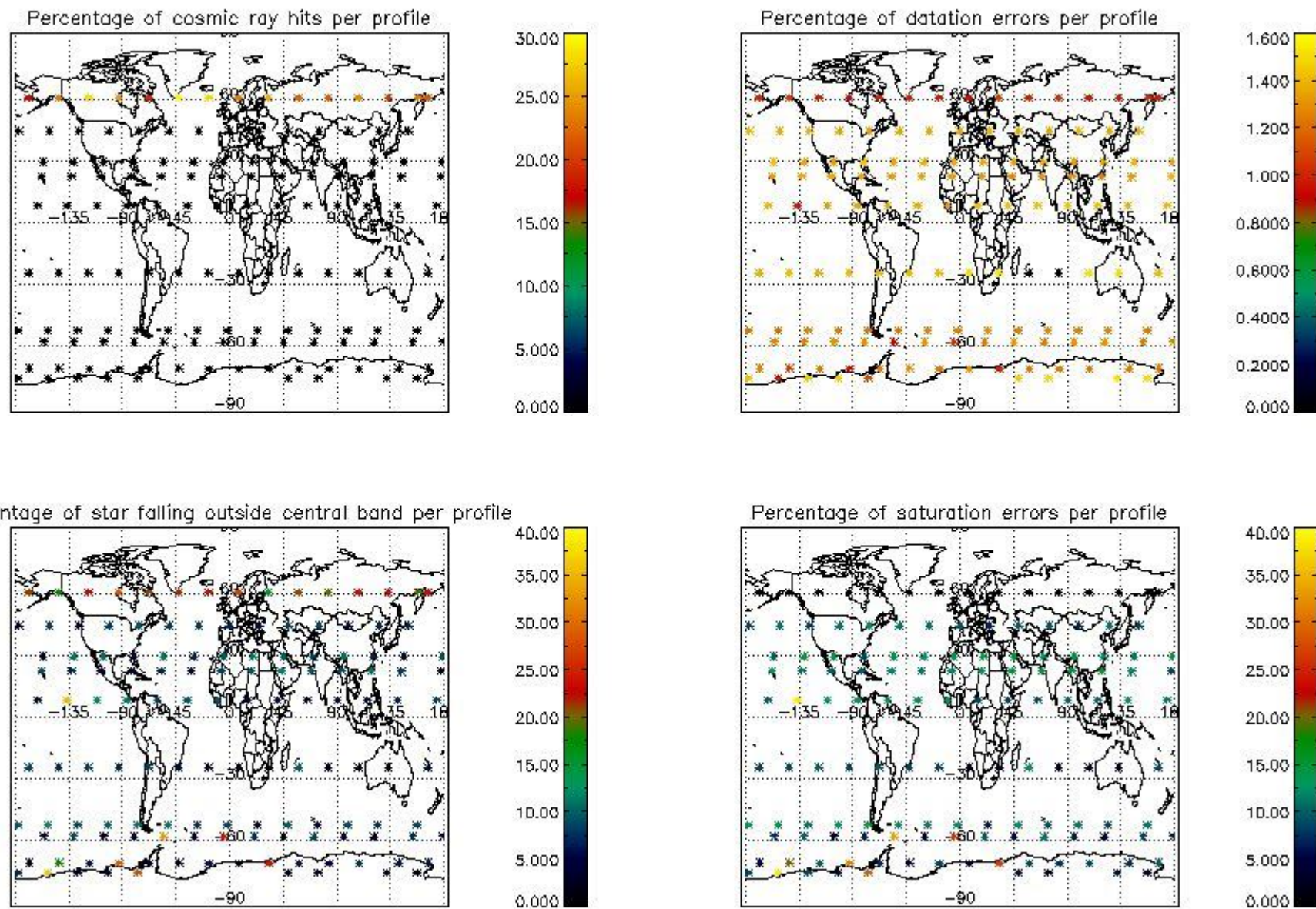
Percentage of star falling outside central band per profile



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

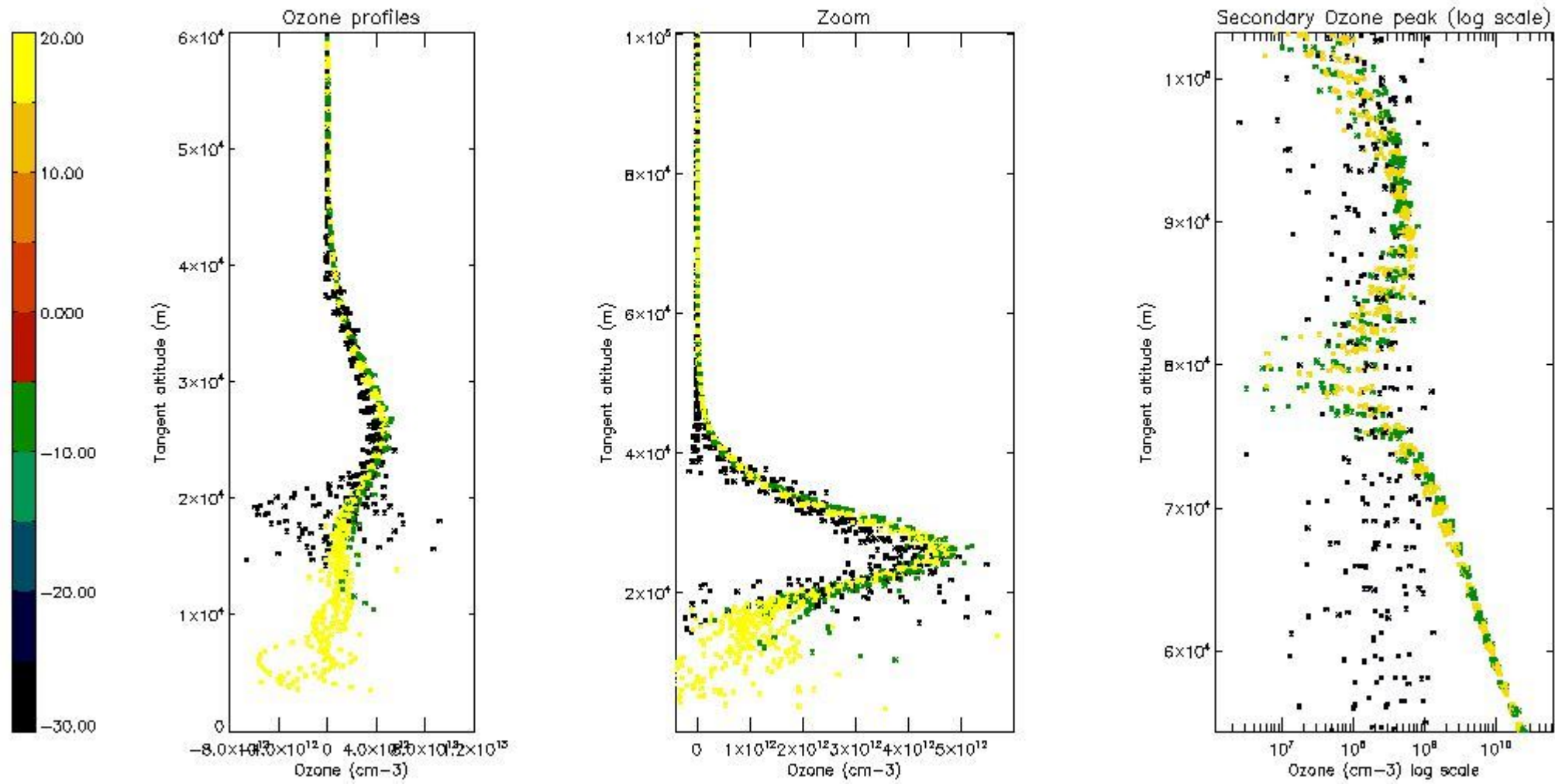
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	23
STD < 20	13

STD < 10	10
STD < 5	7

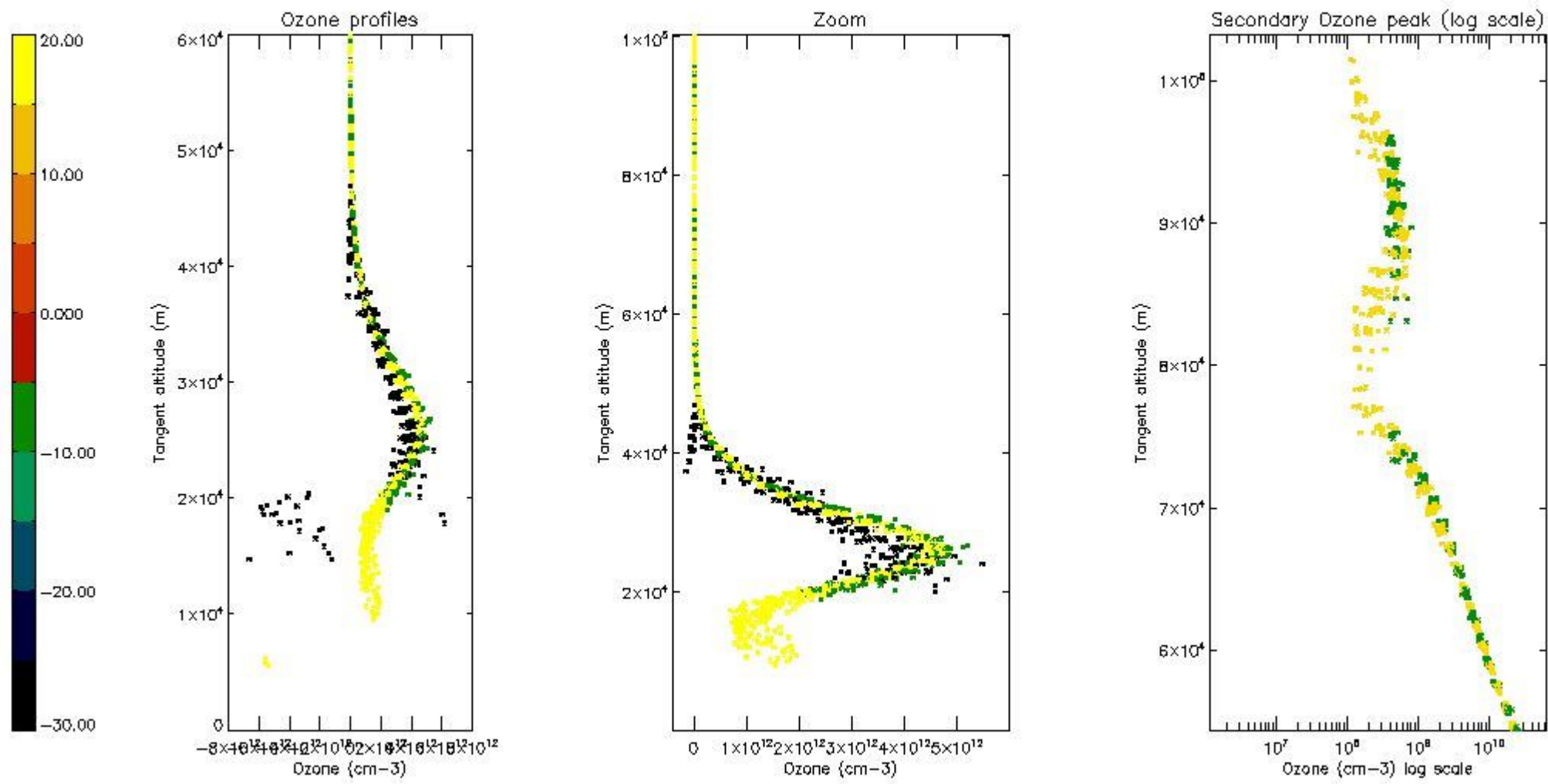
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



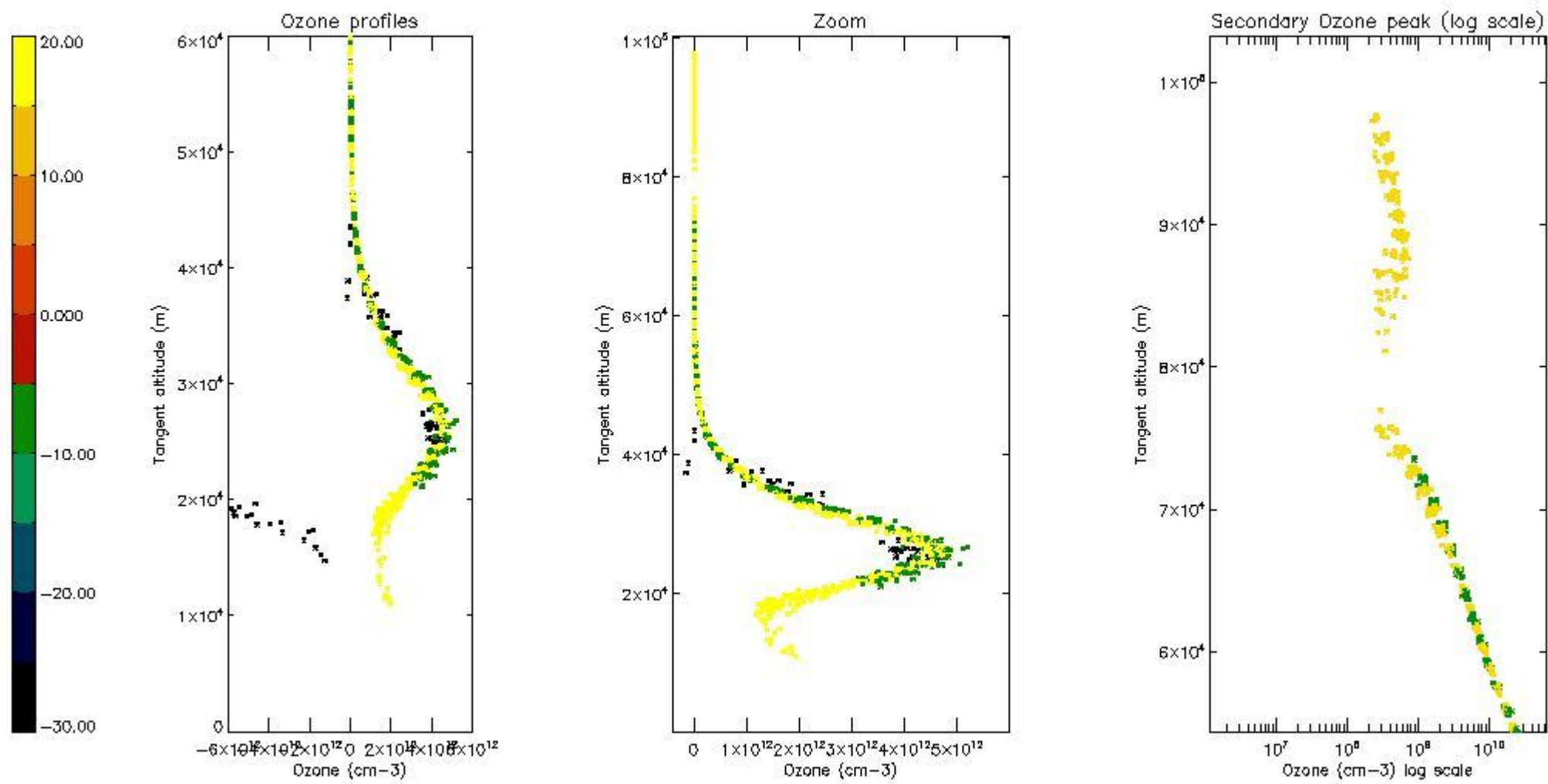
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



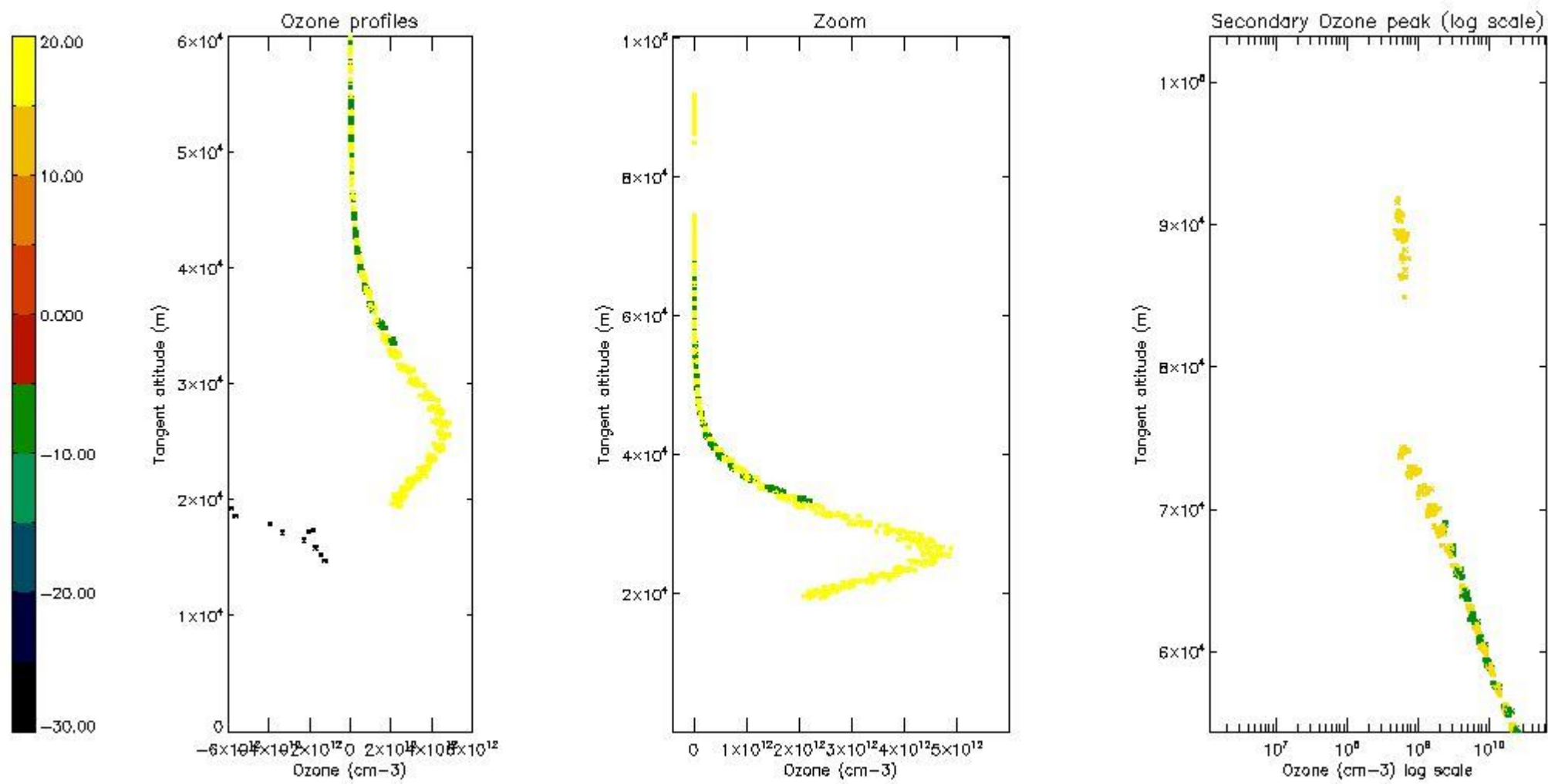
*5.4 Plot ozone profiles where STD < 10% (dark without errors)*

The colorbar represents the latitude.



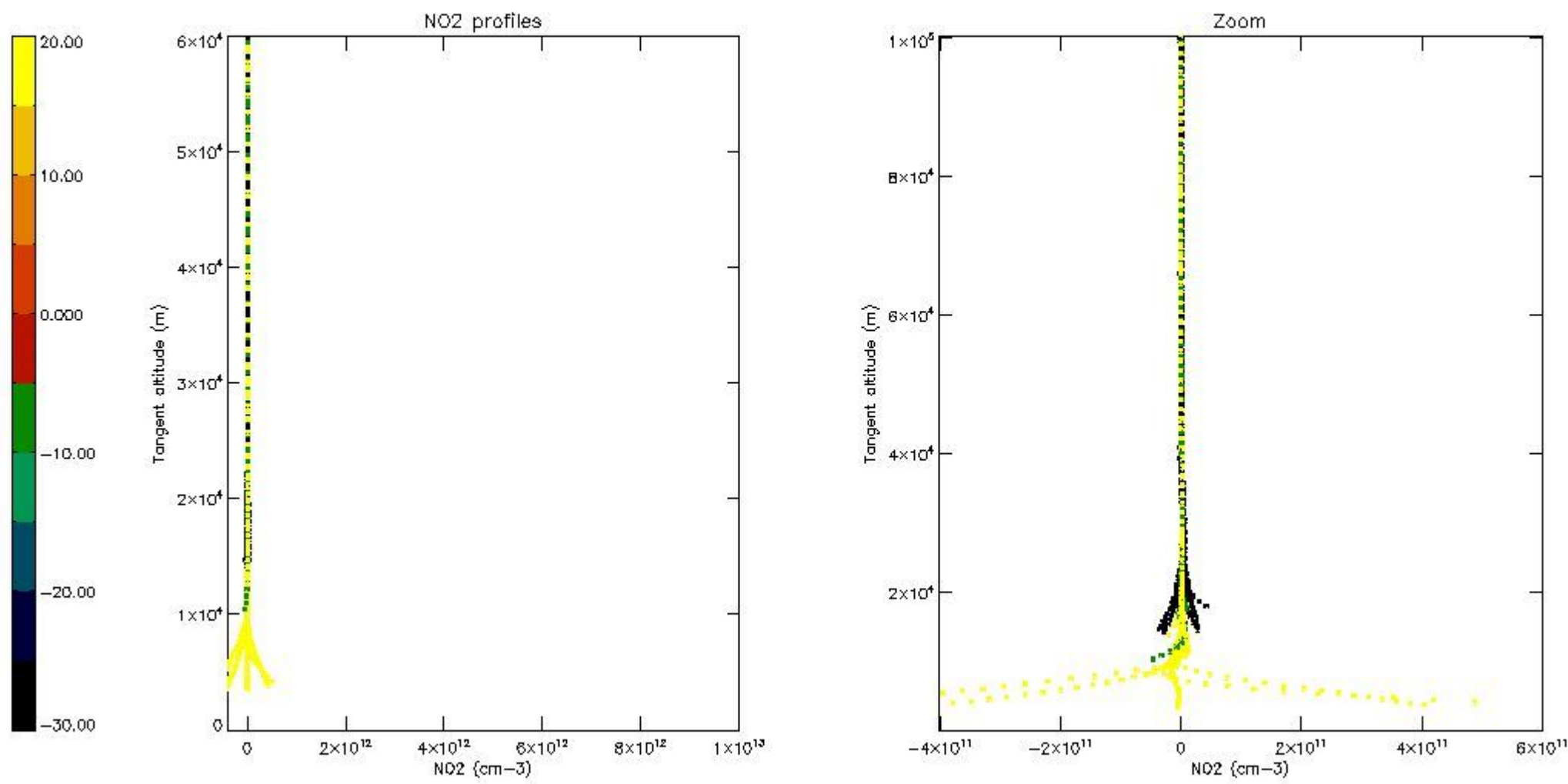
*5.5 Plot ozone profiles where STD < 5% (dark without errors)*

The colorbar represents the latitude.



*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

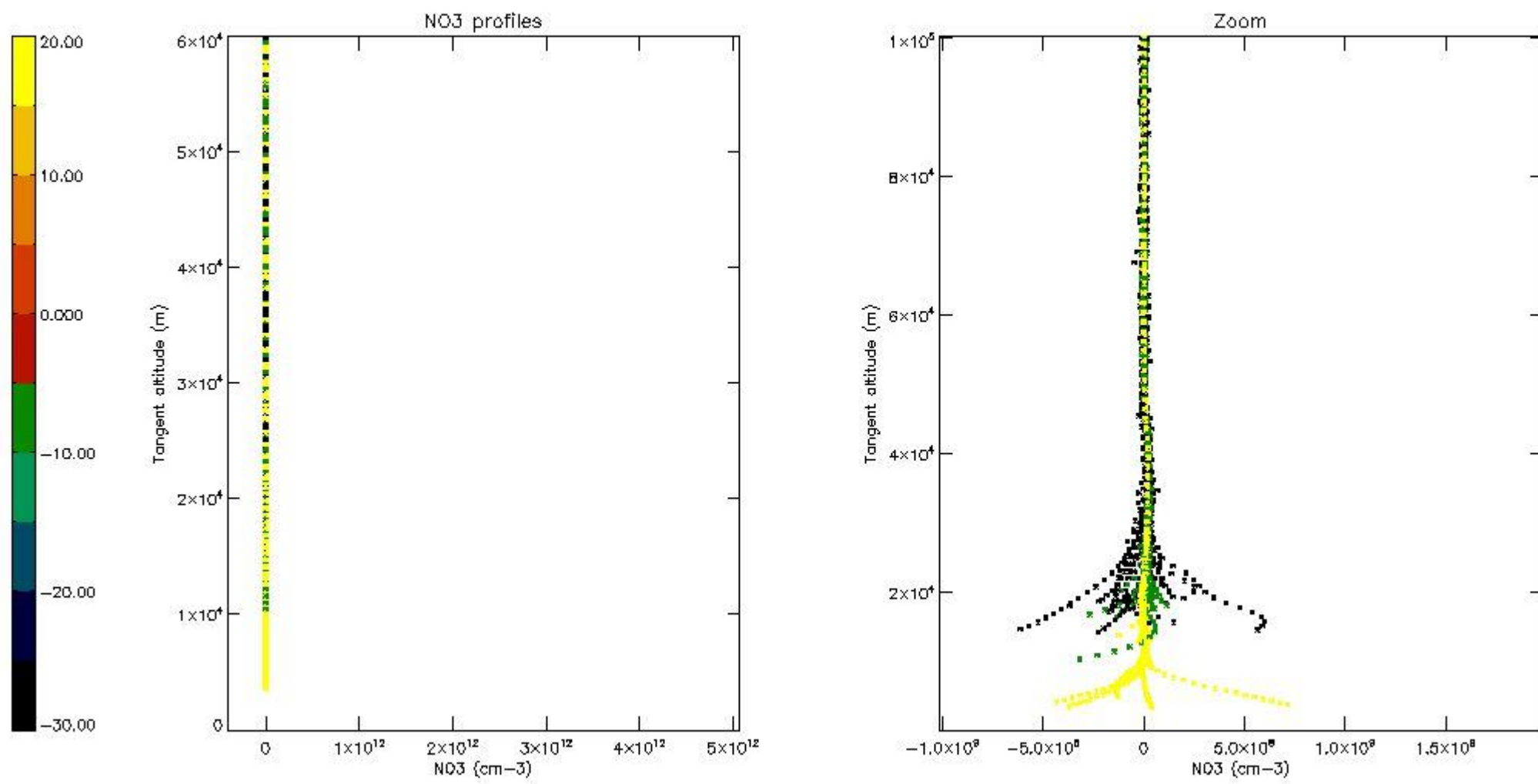
The colorbar represents the latitude.



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

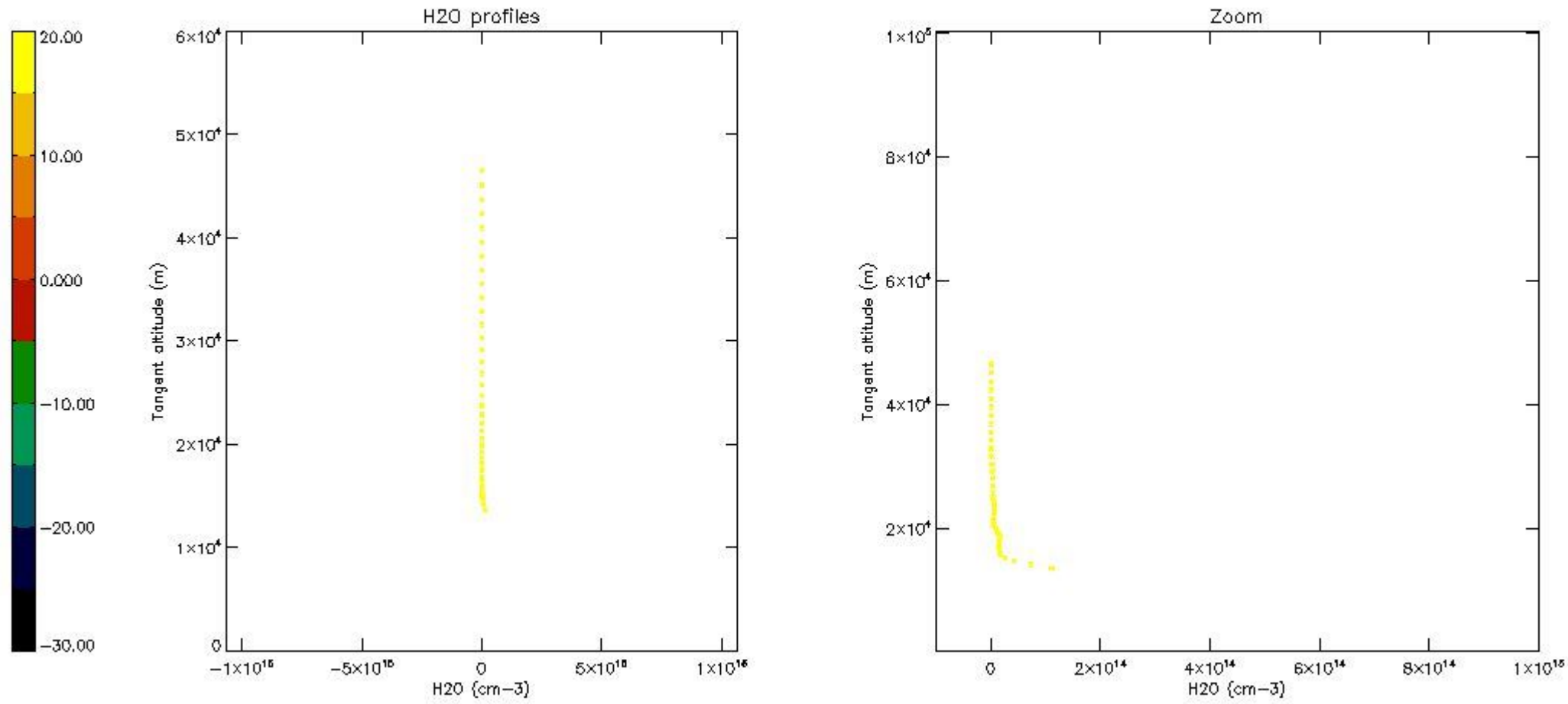
The colorbar represents the latitude.





*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	08-NOV-2008 00:04:28
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	08-NOV-2008 00:04:28
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	08-NOV-2008 00:04:28

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### [4. Level 1 Quality information per product \(stored on level 2 products\)](#)

#### [4.1 Plot of level 1 quality information per product \(time dependant\)](#)

##### [4.1.1 Plot of level 1 quality information per product \(time dependant\): ASCENDING](#)

##### [4.1.2 Plot of level 1 quality information per product \(time dependant\): DESCENDING](#)

#### [4.2 Plot of level 1 quality information per product \(world map\)](#)

##### [4.2.1 Plot of level 1 quality information per product \(world map\): ASCENDING](#)

##### [4.2.2 Plot of level 1 quality information per product \(world map\): DESCENDING](#)

### [5. Ozone profiles based on quality statistics and other trace gas profiles](#)

#### [5.1 Ozone statistics based on quality of products](#)

#### [5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

#### [5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

#### [5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

#### [5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

#### [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](#)

### [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 21:50:06
Data source version	GOMOS/6.01
Start time of products	08-11-2008 (08NOV2008 00:00:00)
Stop time of products	09-11-2008 (09NOV2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	208
Nb of prods with errors	0

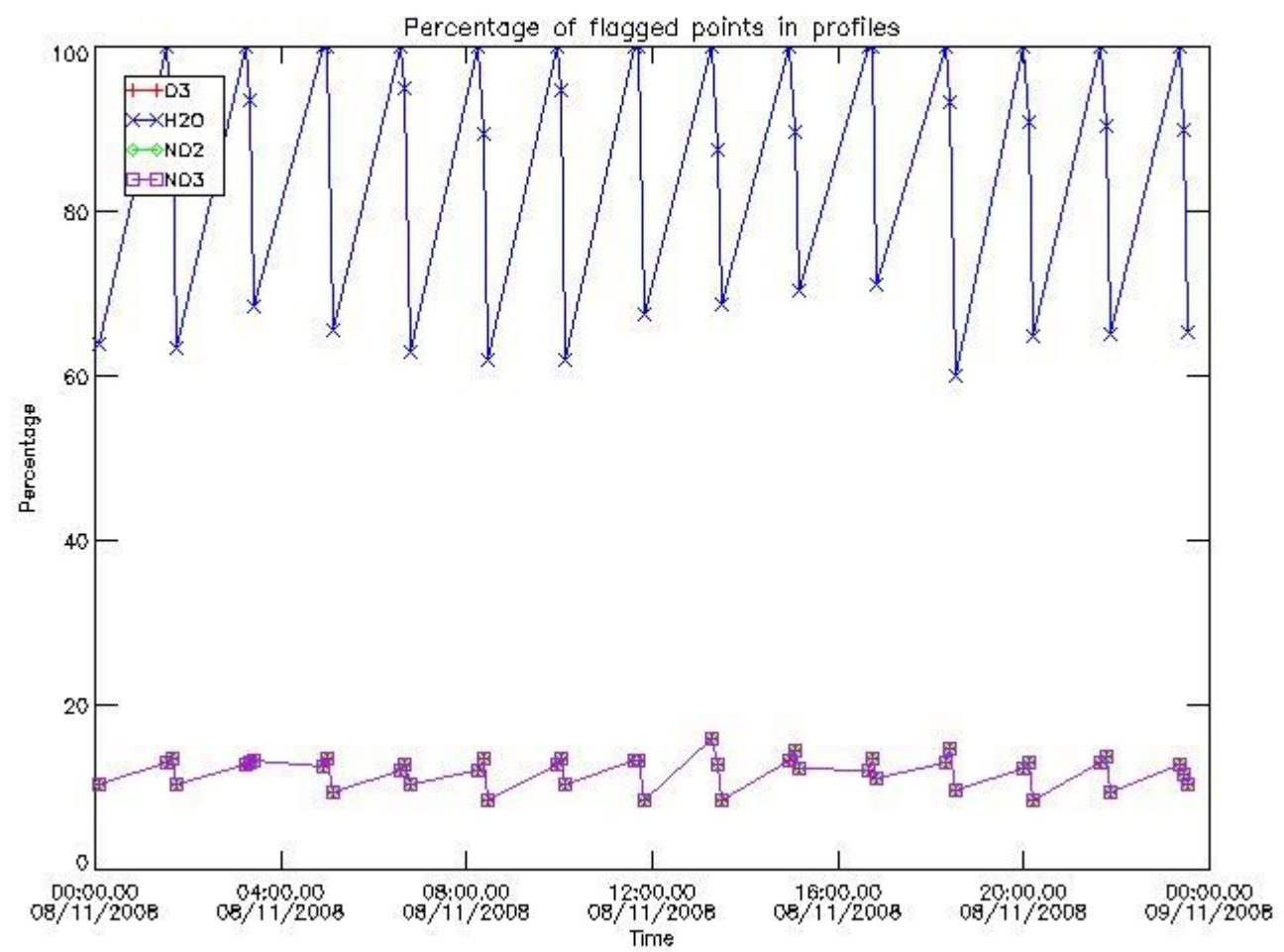
## 2. Summary of processed GOM\_NL\_\_2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20081108_000428_000000492073_00360_34983_0142.N1	08-NOV-2008 00:04:28	Dark	49.000	2	Alp Car	-0.73600	7000.0	98	34983	No
2	GOM_NL__2PRFIN20081108_001359_000000392073_00360_34983_0143.N1	08-NOV-2008 00:13:59	Straylight	39.000	157	The1Eri	2.9060	9300.0	78	34983	No
3	GOM_NL__2PRFIN20081108_002732_000000502073_00360_34983_0144.N1	08-NOV-2008 00:27:32	Twilight_and_stray	49.500	94	92Alp Cet	2.5260	3100.0	99	34983	No
4	GOM_NL__2PRFIN20081108_003209_000000362073_00360_34983_0145.N1	08-NOV-2008 00:32:09	Bright	36.000	105	6Bet Ari	2.6450	8900.0	72	34983	No
5	GOM_NL__2PRFIN20081108_003622_000000362073_00360_34983_0146.N1	08-NOV-2008 00:36:22	Bright	35.500	53	43Bet And	2.0480	3300.0	71	34983	No
6	GOM_NL__2PRFIN20081108_003824_000000382073_00360_34983_0147.N1	08-NOV-2008 00:38:24	Bright	37.500	73	57Gam1And	2.2600	13100.0	75	34983	No
7	GOM_NL__2PRFIN20081108_004219_000000362073_00360_34983_0148.N1	08-NOV-2008 00:42:19	Bright	36.000	68	18Alp Cas	2.2250	4500.0	72	34983	No
8	GOM_NL__2PRFIN20081108_005129_000000332073_00360_34983_0149.N1	08-NOV-2008 00:51:29	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	34983	No
9	GOM_NL__2PRFIN20081108_005926_000000402073_00360_34983_0150.N1	08-NOV-2008 00:59:26	Bright	39.500	36	50Alp UMa	1.8000	6300.0	79	34983	No
10	GOM_NL__2PRFIN20081108_010103_000000382073_00360_34983_0151.N1	08-NOV-2008 01:01:03	Bright	38.000	82	48Bet UMa	2.3650	10600.0	76	34983	No
11	GOM_NL__2PRFIN20081108_010454_000000412073_00360_34983_0152.N1	08-NOV-2008 01:04:54	Bright	41.000	174	52Psi UMa	3.0040	4400.0	82	34983	No
12	GOM_NL__2PRFIN20081108_011248_000000592073_00360_34983_0153.N1	08-NOV-2008 01:12:48	Bright	59.000	96	68Del Leo	2.5600	9300.0	118	34983	No
13	GOM_NL__2PRFIN20081108_013258_000000402073_00360_34983_0154.N1	08-NOV-2008 01:32:58	Dark	39.500	113	Mu Vel	2.6920	5000.0	79	34983	No
14	GOM_NL__2PRFIN20081108_013907_000000382073_00361_34984_0162.N1	08-NOV-2008 01:39:07	Dark	37.500	29	Bet Car	1.6720	10200.0	75	34984	No
15	GOM_NL__2PRFIN20081108_014505_000000502073_00361_34984_0163.N1	08-NOV-2008 01:45:05	Dark	49.500	2	Alp Car	-0.73600	7000.0	99	34984	No
16	GOM_NL__2PRFIN20081108_015435_000000392073_00361_34984_0164.N1	08-NOV-2008 01:54:35	Straylight	38.500	157	The1Eri	2.9060	9300.0	77	34984	No
17	GOM_NL__2PRFIN20081108_020808_000000512073_00361_34984_0165.N1	08-NOV-2008 02:08:08	Twilight_and_stray	51.000	94	92Alp Cet	2.5260	3100.0	102	34984	No
18	GOM_NL__2PRFIN20081108_021245_000000372073_00361_34984_0166.N1	08-NOV-2008 02:12:45	Bright	37.000	105	6Bet Ari	2.6450	8900.0	74	34984	No
19	GOM_NL__2PRFIN20081108_021658_000000372073_00361_34984_0167.N1	08-NOV-2008 02:16:58	Bright	36.500	53	43Bet And	2.0480	3300.0	73	34984	No
20	GOM_NL__2PRFIN20081108_021900_000000402073_00361_34984_0168.N1	08-NOV-2008 02:19:00	Bright	39.500	73	57Gam1And	2.2600	13100.0	79	34984	No
21	GOM_NL__2PRFIN20081108_022255_000000352073_00361_34984_0169.N1	08-NOV-2008 02:22:55	Bright	35.000	68	18Alp Cas	2.2250	4500.0	70	34984	No
22	GOM_NL__2PRFIN20081108_023204_000000332073_00361_34984_0170.N1	08-NOV-2008 02:32:04	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	34984	No
23	GOM_NL__2PRFIN20081108_024001_000000402073_00361_34984_0171.N1	08-NOV-2008 02:40:01	Bright	40.000	36	50Alp UMa	1.8000	6300.0	80	34984	No
24	GOM_NL__2PRFIN20081108_024139_000000392073_00361_34984_0172.N1	08-NOV-2008 02:41:39	Bright	38.500	82	48Bet UMa	2.3650	10600.0	77	34984	No
25	GOM_NL__2PRFIN20081108_024530_000000402073_00361_34984_0173.N1	08-NOV-2008 02:45:30	Bright	40.000	174	52Psi UMa	3.0040	4400.0	80	34984	No
26	GOM_NL__2PRFIN20081108_024658_000000332073_00361_34984_0174.N1	08-NOV-2008 02:46:58	Bright	33.000	152	12Alp2CVn	2.8900	11000.0	66	34984	No
27	GOM_NL__2PRFIN20081108_025324_000000412073_00361_34984_0175.N1	08-NOV-2008 02:53:24	Bright	41.000	96	68Del Leo	2.5600	9300.0	82	34984	No
28	GOM_NL__2PRFIN20081108_031335_000000402073_00361_34984_0176.N1	08-NOV-2008 03:13:35	Dark	40.000	113	Mu Vel	2.6920	5000.0	80	34984	No
29	GOM_NL__2PRFIN20081108_031943_000000402073_00362_34985_0172.N1	08-NOV-2008 03:19:43	Dark	39.500	29	Bet Car	1.6720	10200.0	79	34985	No
30	GOM_NL__2PRFIN20081108_032542_000000502073_00362_34985_0173.N1	08-NOV-2008 03:25:42	Dark	49.500	2	Alp Car	-0.73600	7000.0	99	34985	No
31	GOM_NL__2PRFIN20081108_033511_000000382073_00362_34985_0174.N1	08-NOV-2008 03:35:11	Straylight	38.000	157	The1Eri	2.9060	9300.0	76	34985	No
32	GOM_NL__2PRFIN20081108_034844_000000532073_00362_34985_0175.N1	08-NOV-2008 03:48:44	Twilight_and_stray	52.500	94	92Alp Cet	2.5260	3100.0	105	34985	No
33	GOM_NL__2PRFIN20081108_035321_000000362073_00362_34985_0176.N1	08-NOV-2008 03:53:21	Bright	35.500	105	6Bet Ari	2.6450	8900.0	71	34985	No
34	GOM_NL__2PRFIN20081108_035734_000000382073_00362_34985_0177.N1	08-NOV-2008 03:57:34	Bright	37.500	53	43Bet And	2.0480	3300.0	75	34985	No
35	GOM_NL__2PRFIN20081108_035936_000000392073_00362_34985_0178.N1	08-NOV-2008 03:59:36	Bright	38.500	73	57Gam1And	2.2600	13100.0	77	34985	No
36	GOM_NL__2PRFIN20081108_040332_000000352073_00362_34985_0179.N1	08-NOV-2008 04:03:32	Bright	35.000	68	18Alp Cas	2.2250	4500.0	70	34985	No
37	GOM_NL__2PRFIN20081108_041240_000000332073_00362_34985_0180.N1	08-NOV-2008 04:12:40	Bright	33.000	49	1Alp UMi	1.9900	6300.0	66	34985	No
38	GOM_NL__2PRFIN20081108_042037_000000392073_00362_34985_0181.N1	08-NOV-2008 04:20:37	Bright	39.000	36	50Alp UMa	1.8000	6300.0	78	34985	No
39	GOM_NL__2PRFIN20081108_042215_000000412073_00362_34985_0182.N1	08-NOV-2008 04:22:15	Bright	40.500	82	48Bet UMa	2.3650	10600.0	81	34985	No
40	GOM_NL__2PRFIN20081108_042606_000000412073_00362_34985_0183.N1	08-NOV-2008 04:26:06	Bright	41.000	174	52Psi UMa	3.0040	4400.0	82	34985	No
41	GOM_NL__2PRFIN20081108_042734_000000342073_00362_34985_0184.N1	08-NOV-2008 04:27:34	Bright	34.000	152	12Alp2CVn	2.8900	11000.0	68	34985	No
42	GOM_NL__2PRFIN20081108_043401_000000622073_00362_34985_0185.N1	08-NOV-2008 04:34:01	Bright	62.000	96	68Del Leo	2.5600	9300.0	124	34985	No





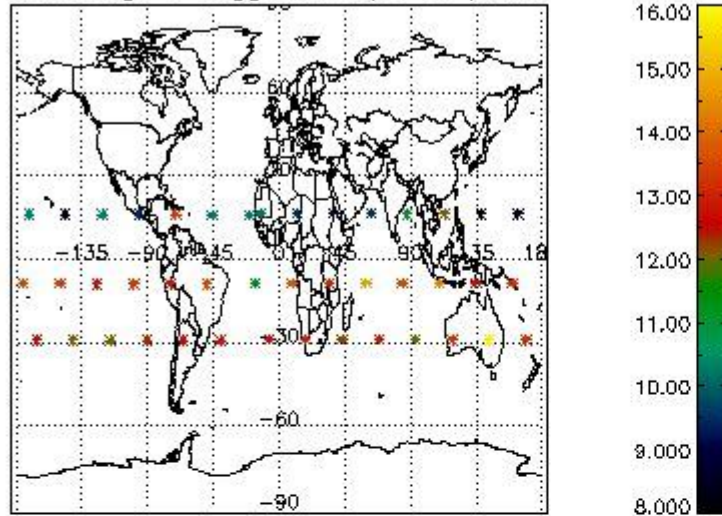




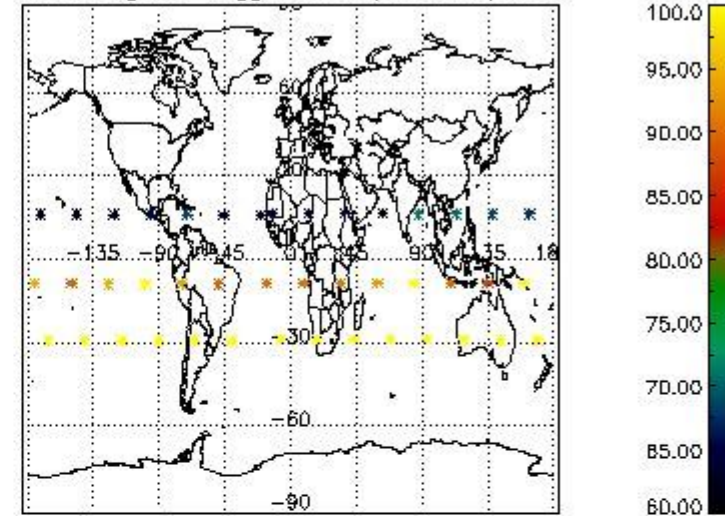
3.2 Plot quality information per product (world map)



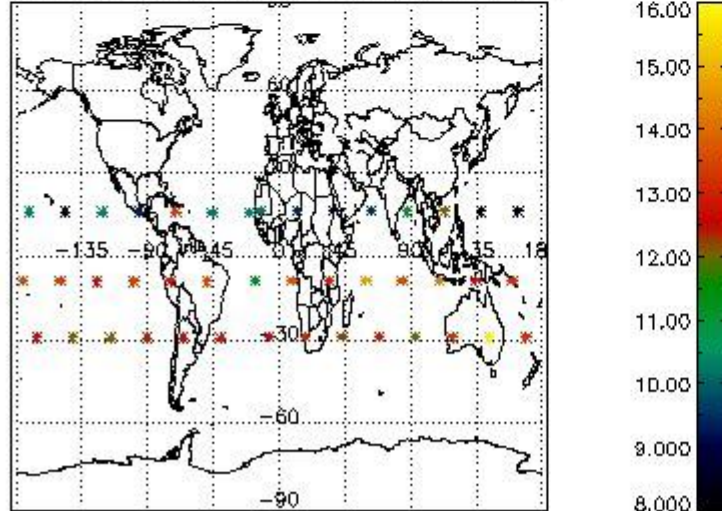
Percentage of flagged data per O3 profile



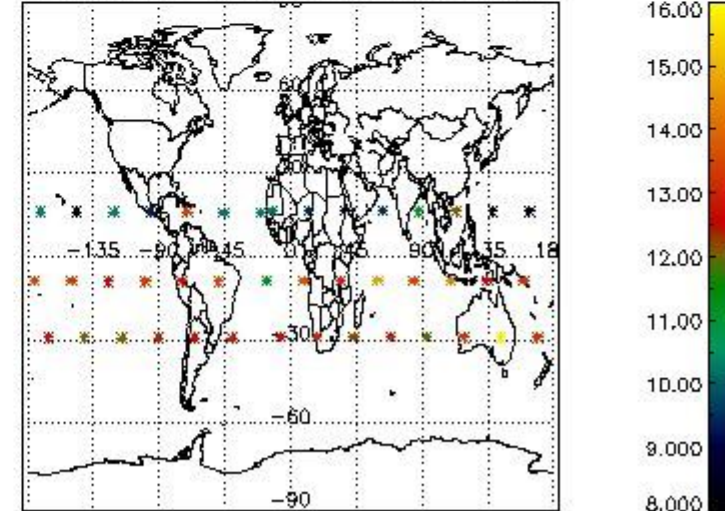
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

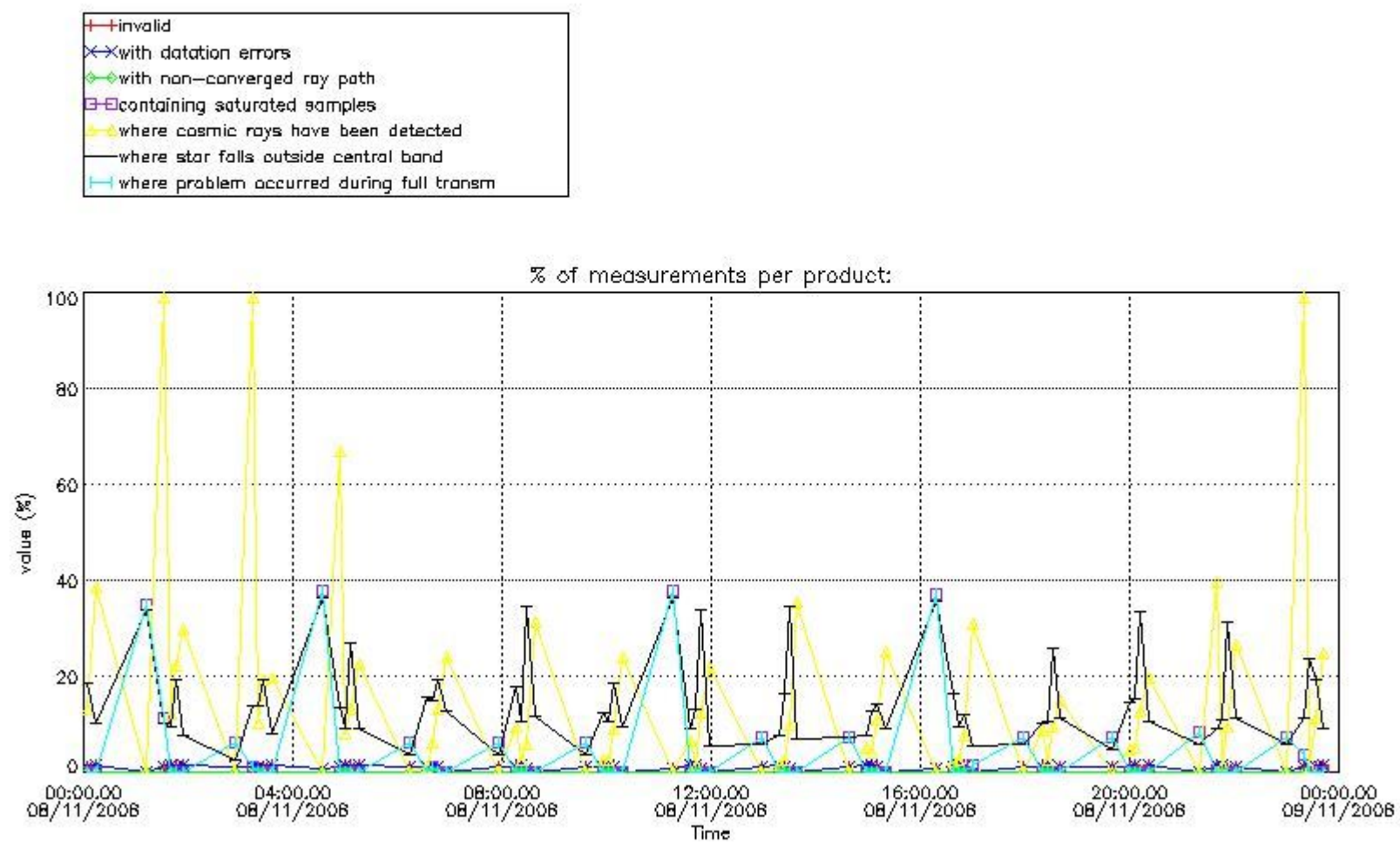


#### 4. Level 1 quality information per product

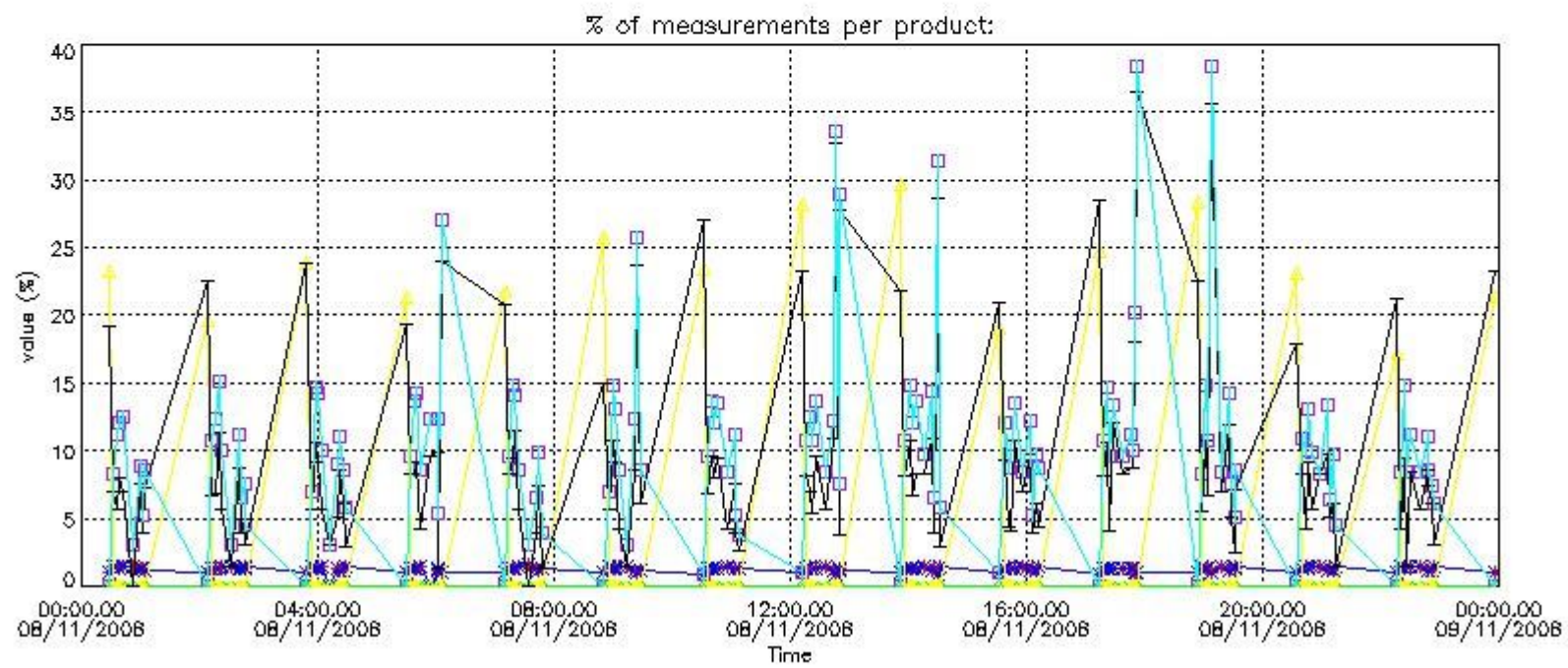
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

##### 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



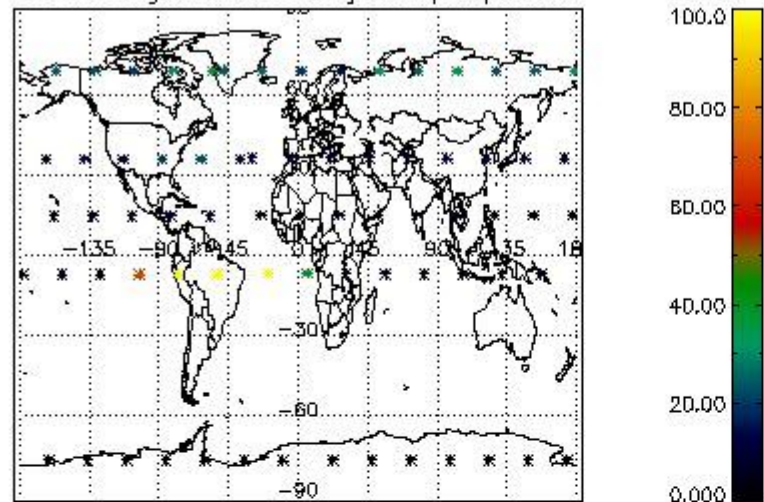
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



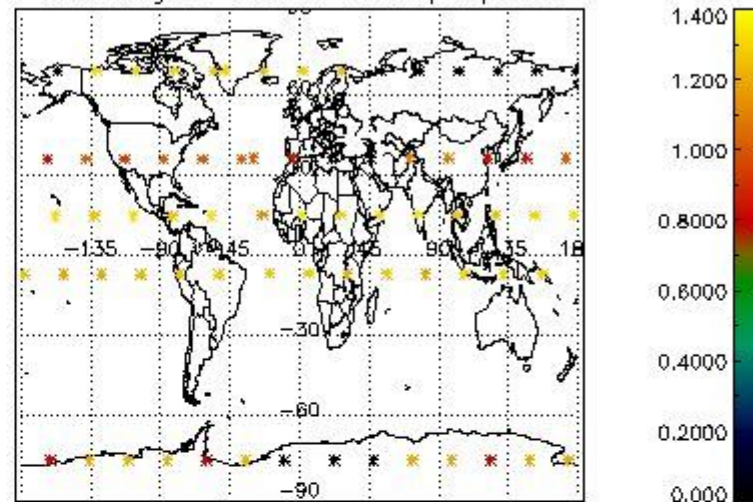
4.2 Plot quality information per product coming from level 1b processing (world map)

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

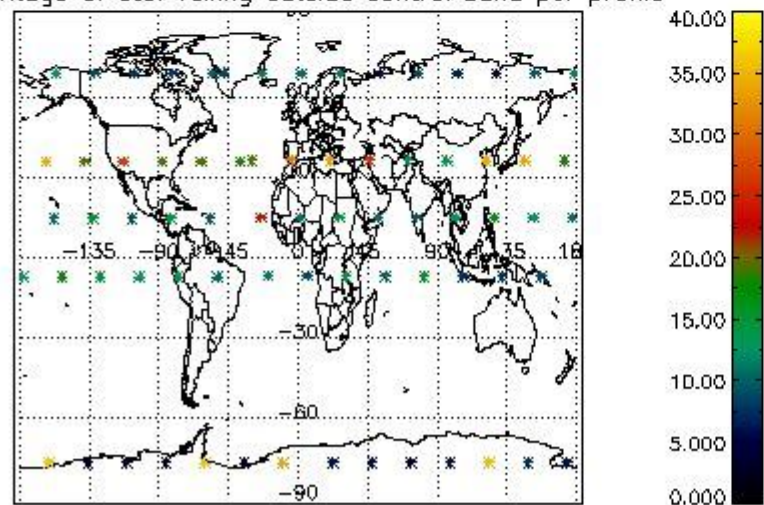
Percentage of cosmic ray hits per profile



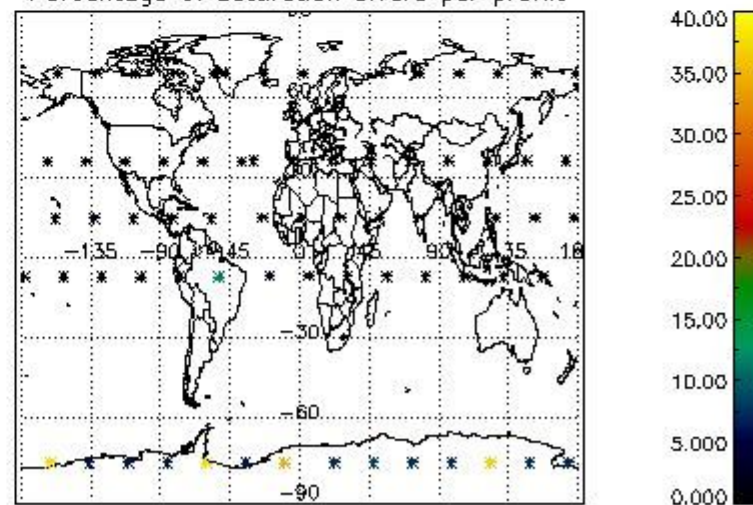
Percentage of datation errors per profile



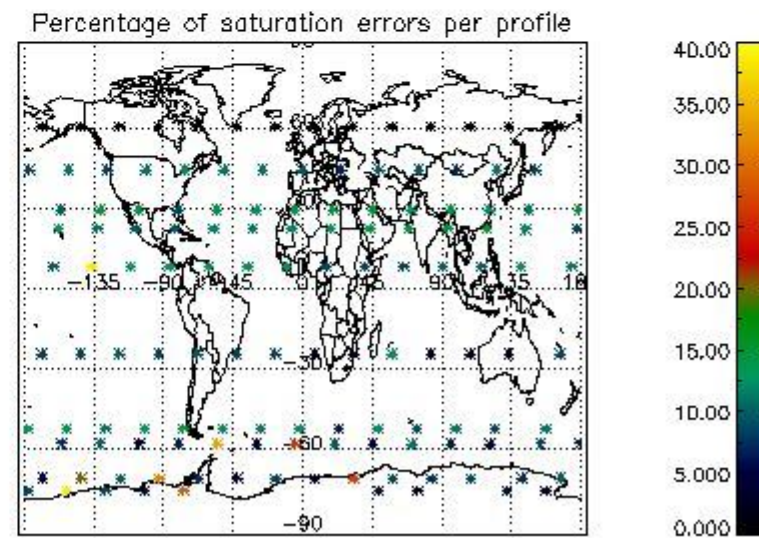
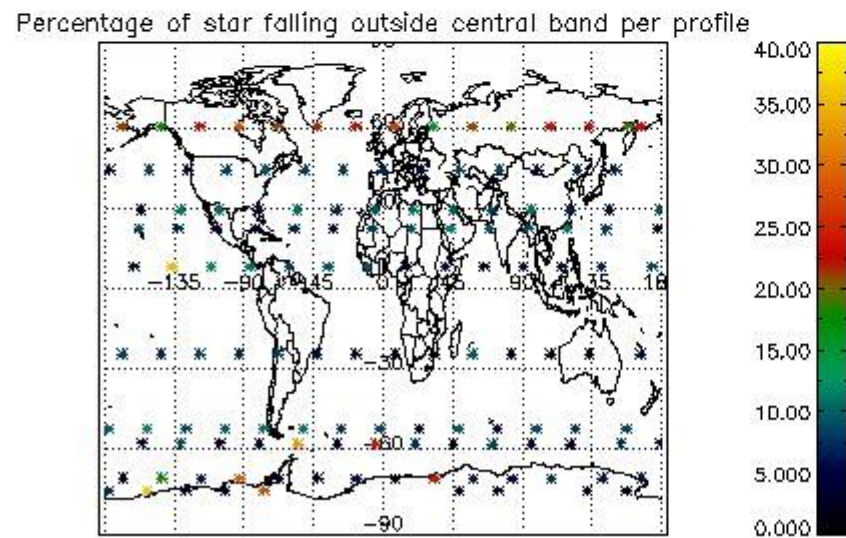
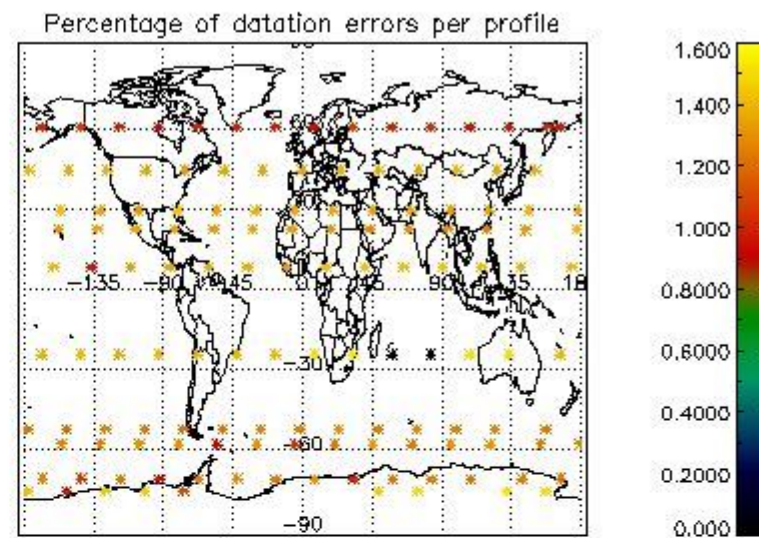
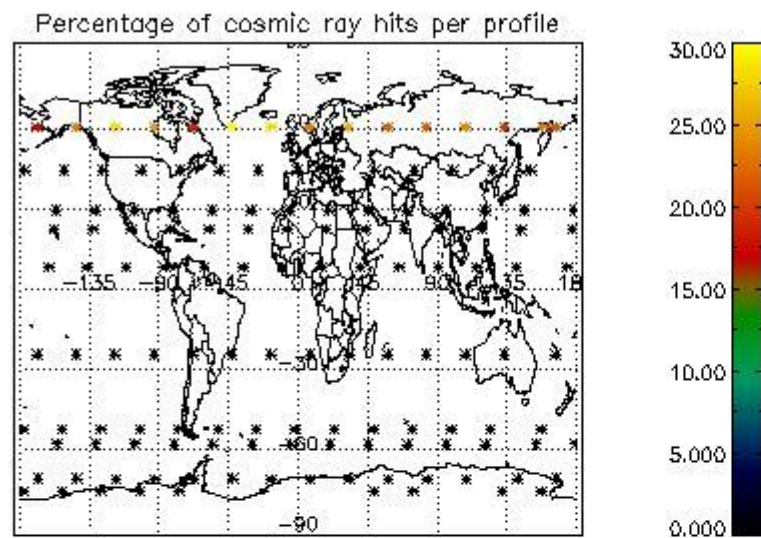
Percentage of star falling outside central band per profile



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

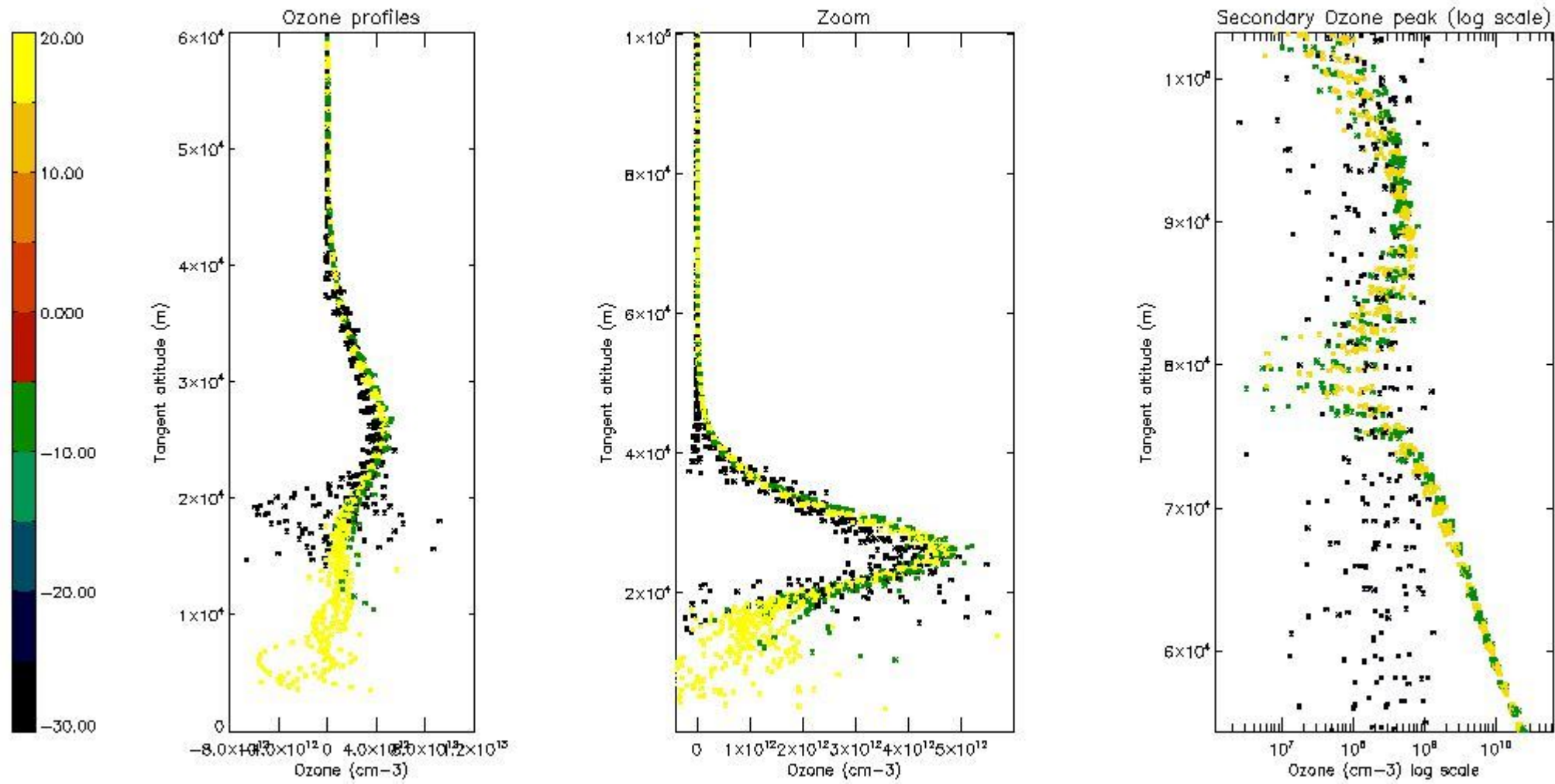
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	23
STD < 20	13

STD < 10	10
STD < 5	7

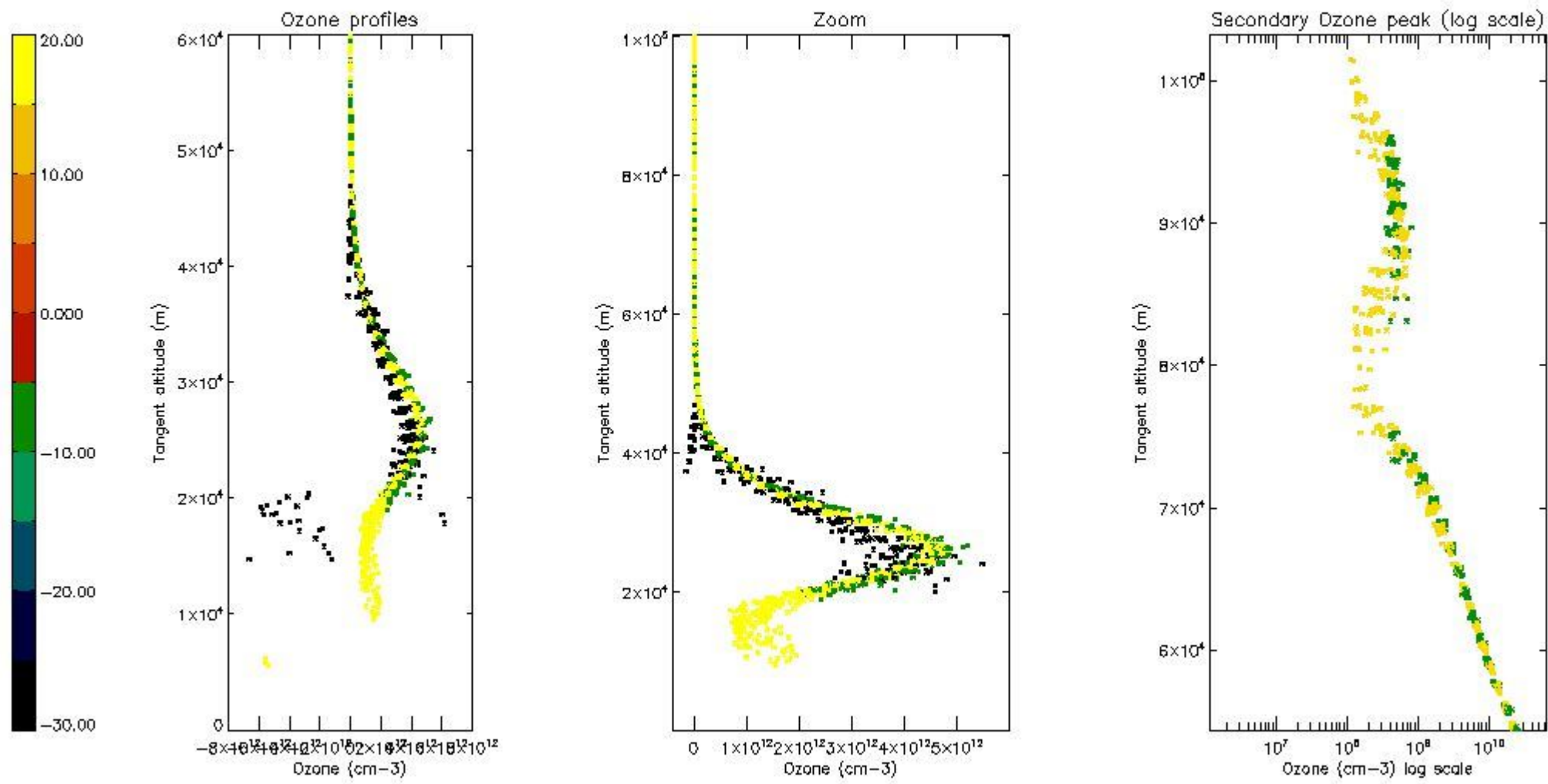
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



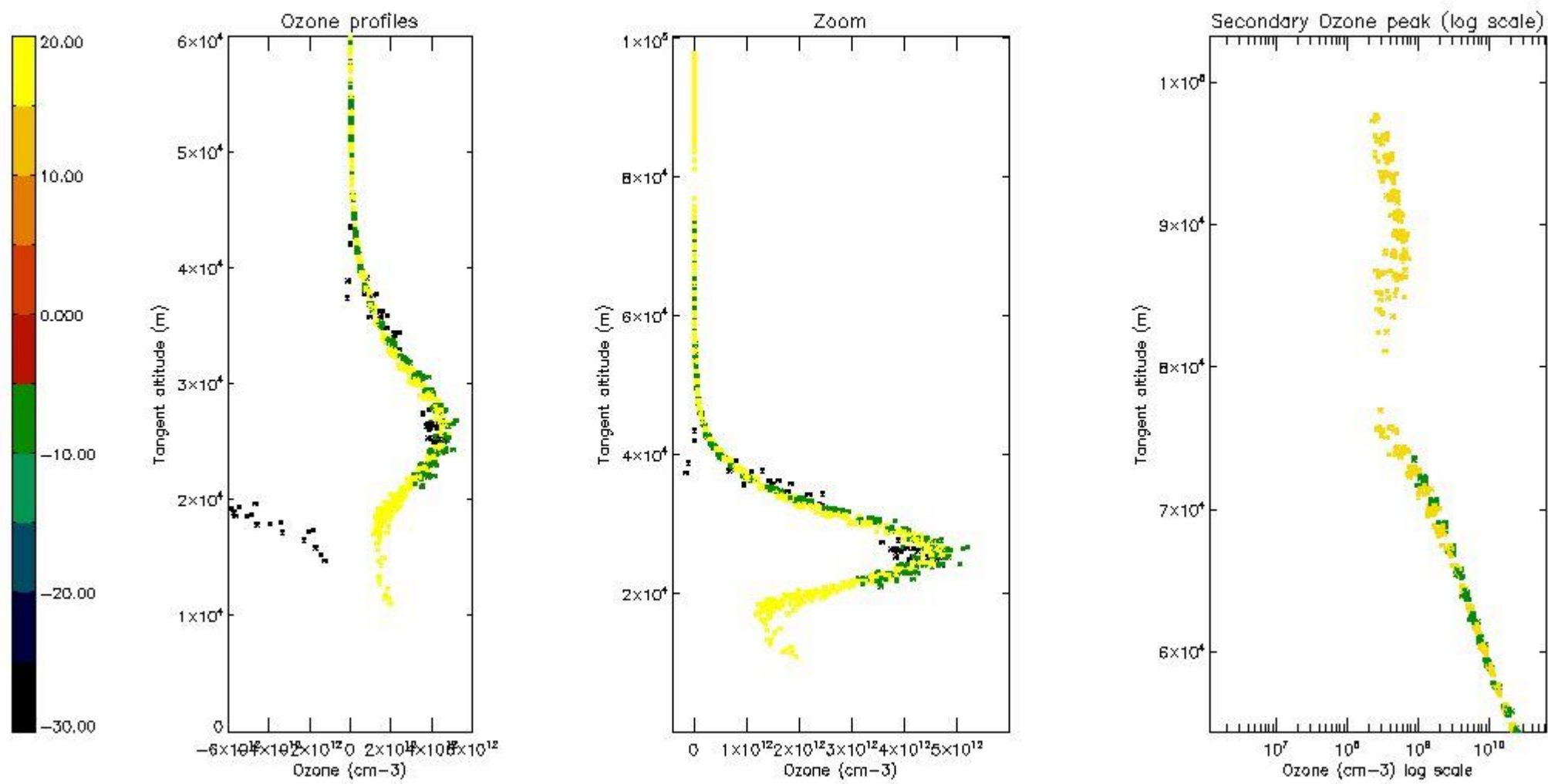
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



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

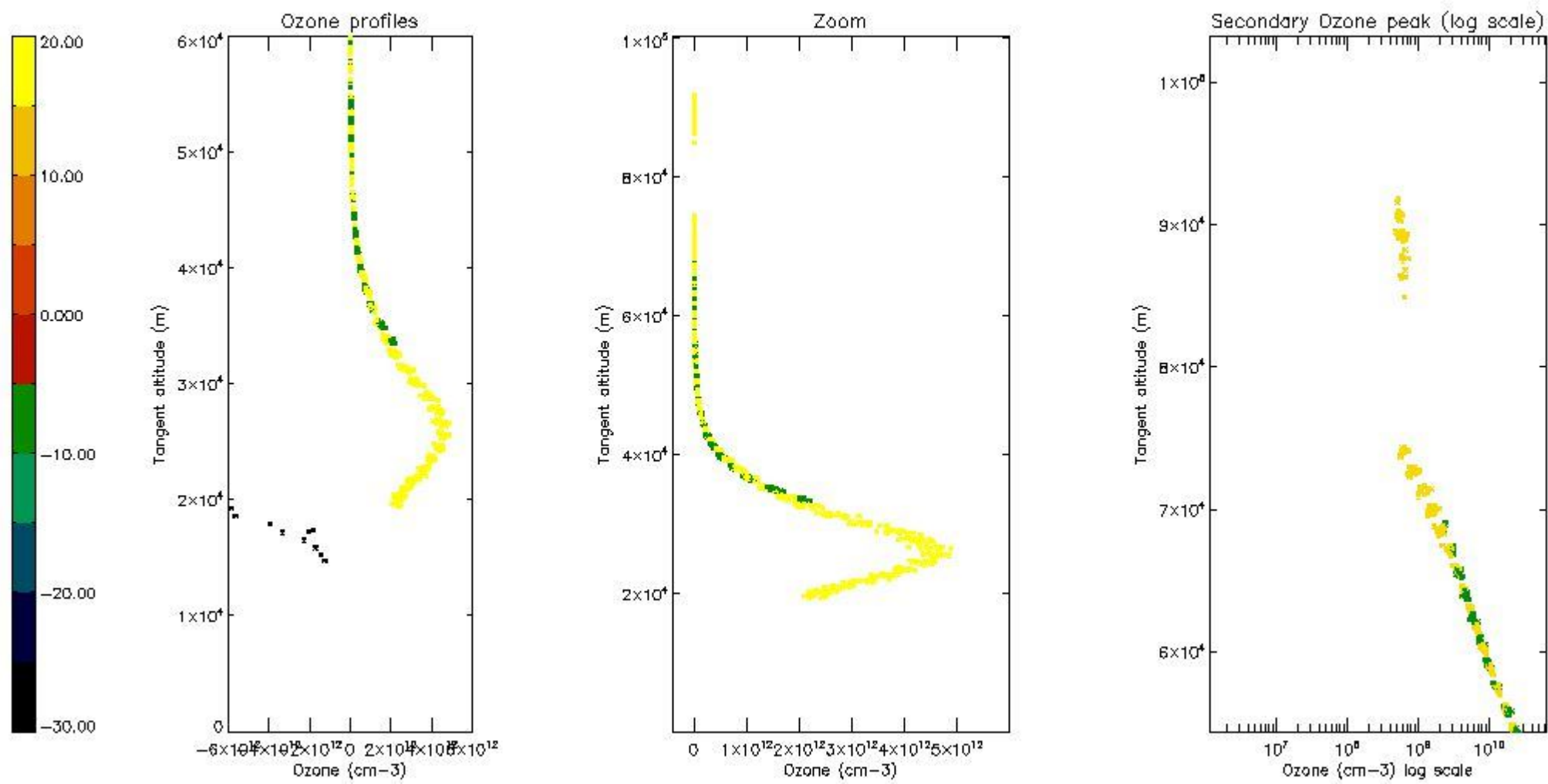
The colorbar represents the latitude.



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

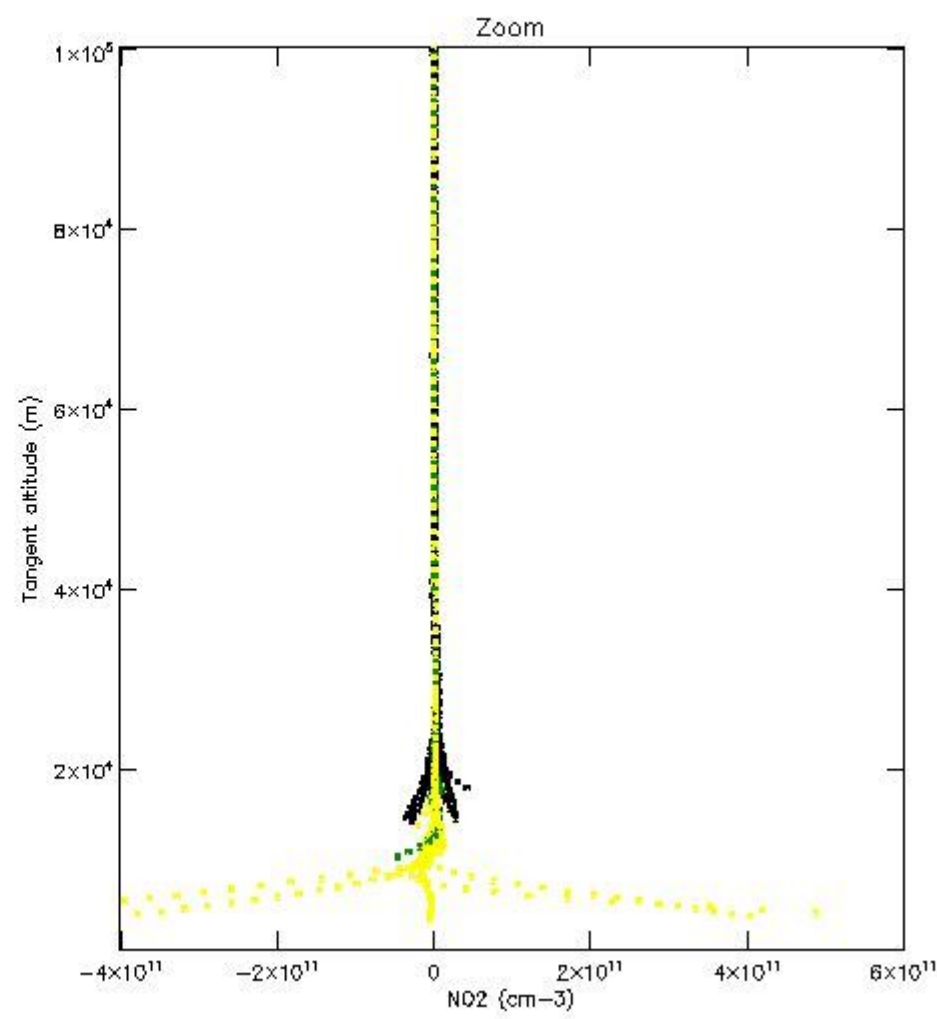
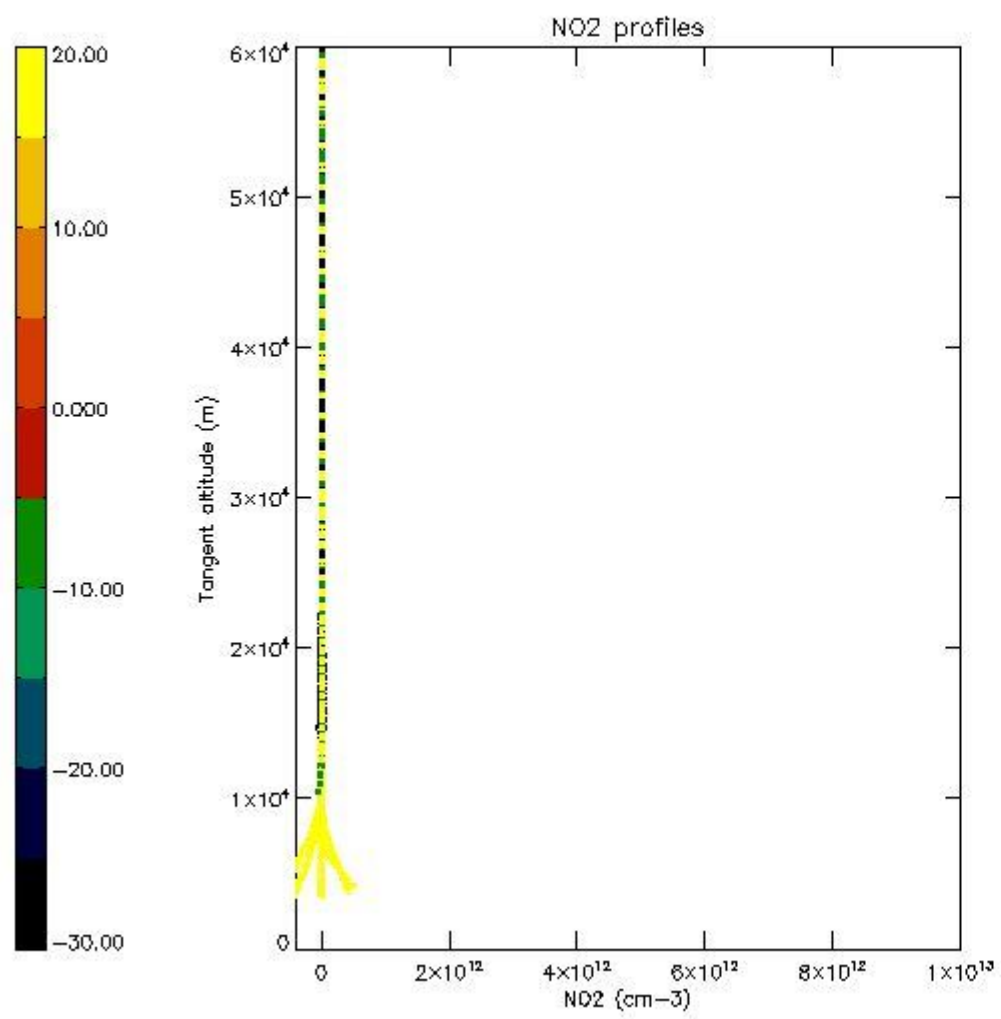
The colorbar represents the latitude.





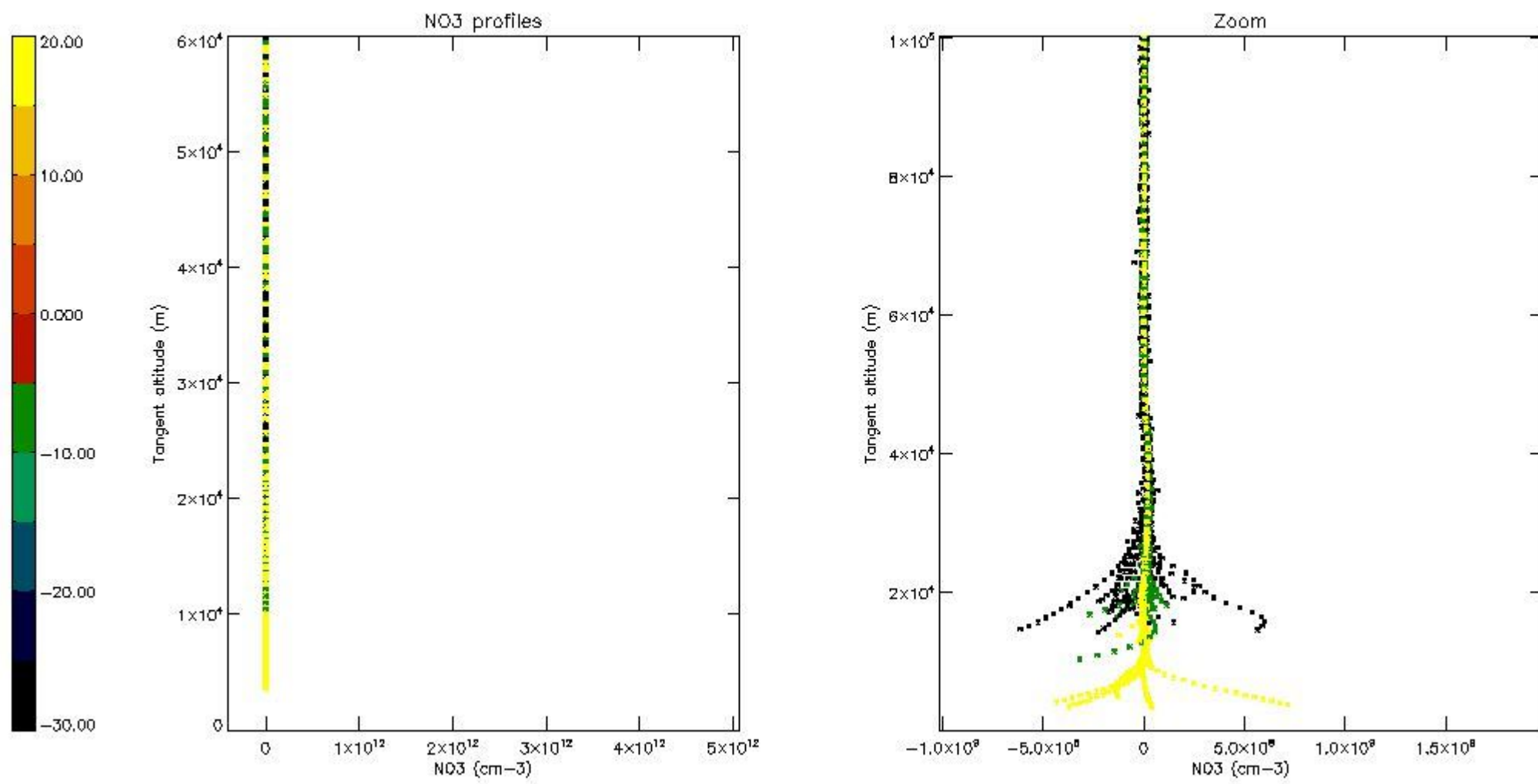
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



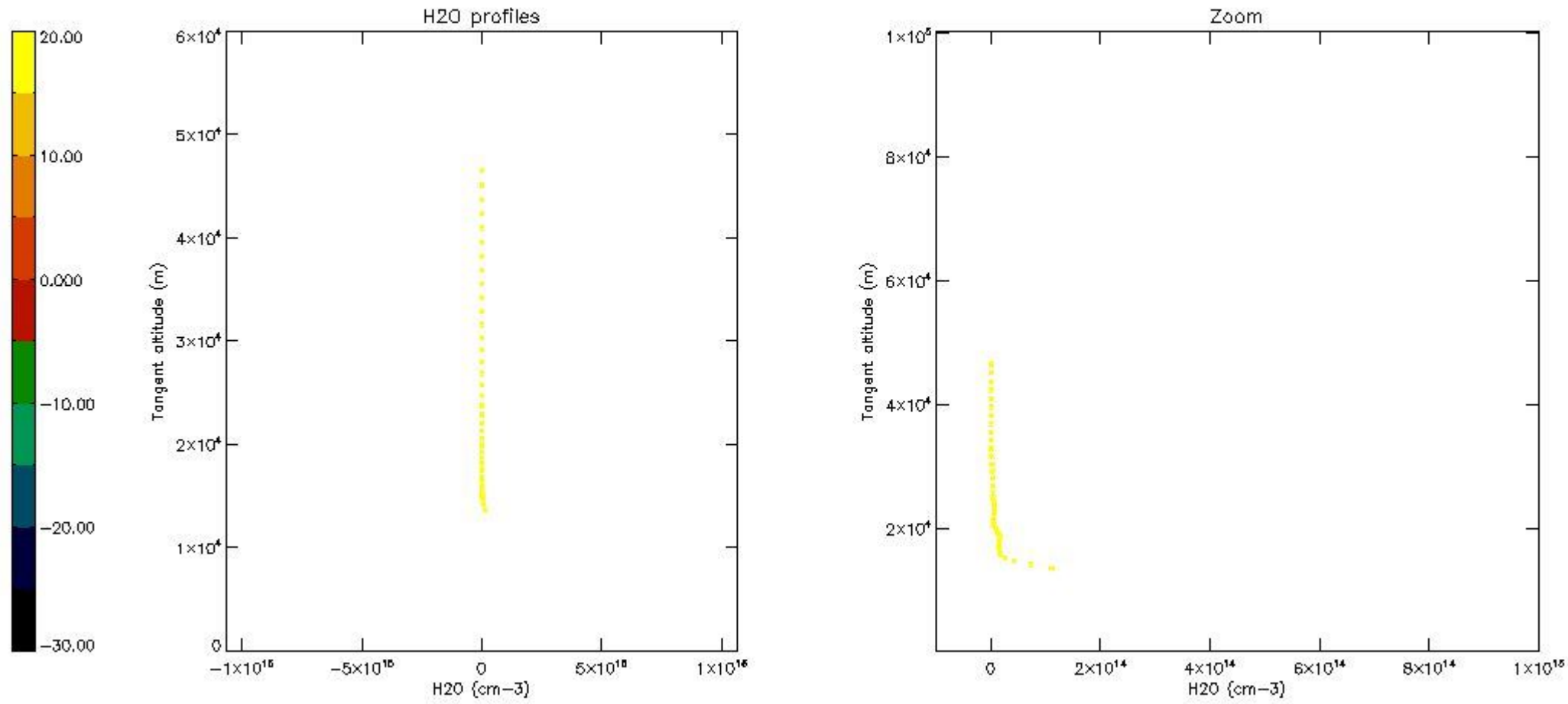
*5.7 Plot NO3 profiles for all STD (dark without errors)*

The colorbar represents the latitude.



5.8 Plot H<sub>2</sub>O profiles for all STD (only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors)

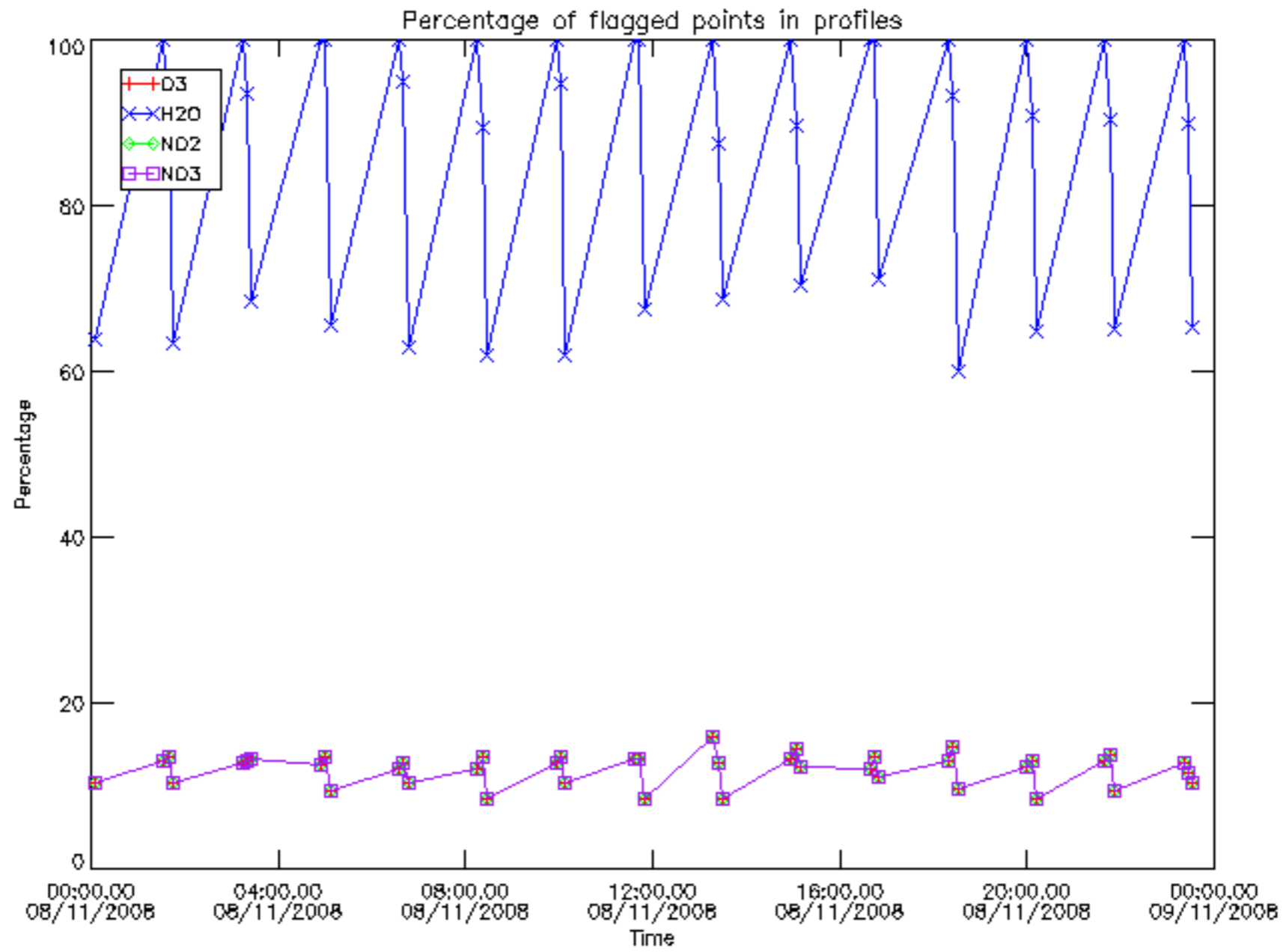
The colorbar represents the latitude.



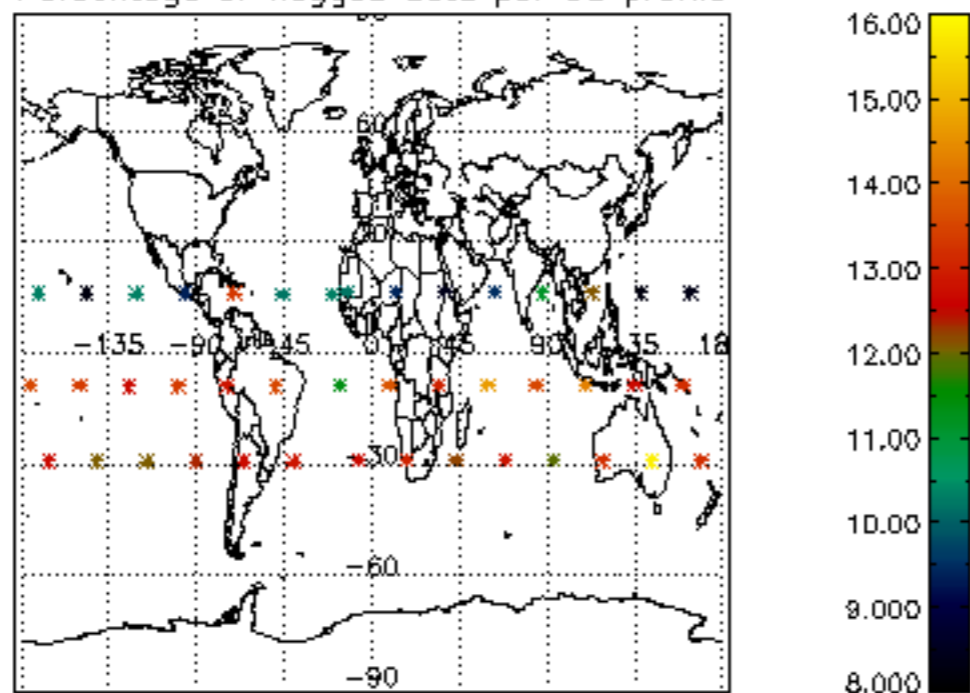
## 6. Auxiliary Data Files used for the production reported in section 2

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.

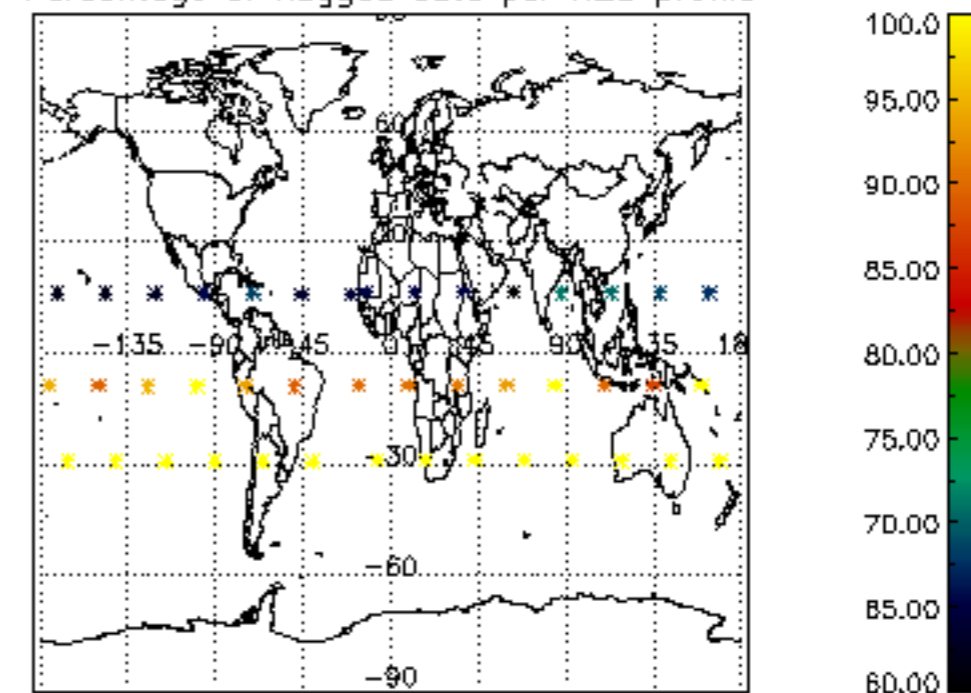
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	08-NOV-2008 00:04:28
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	08-NOV-2008 00:04:28
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	08-NOV-2008 00:04:28



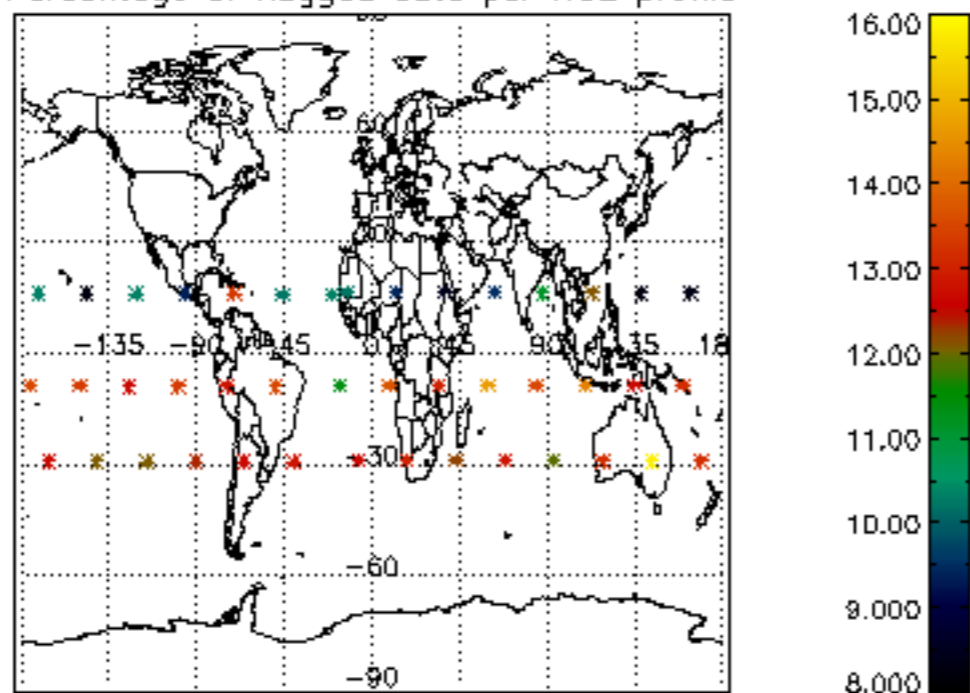
Percentage of flagged data per D3 profile



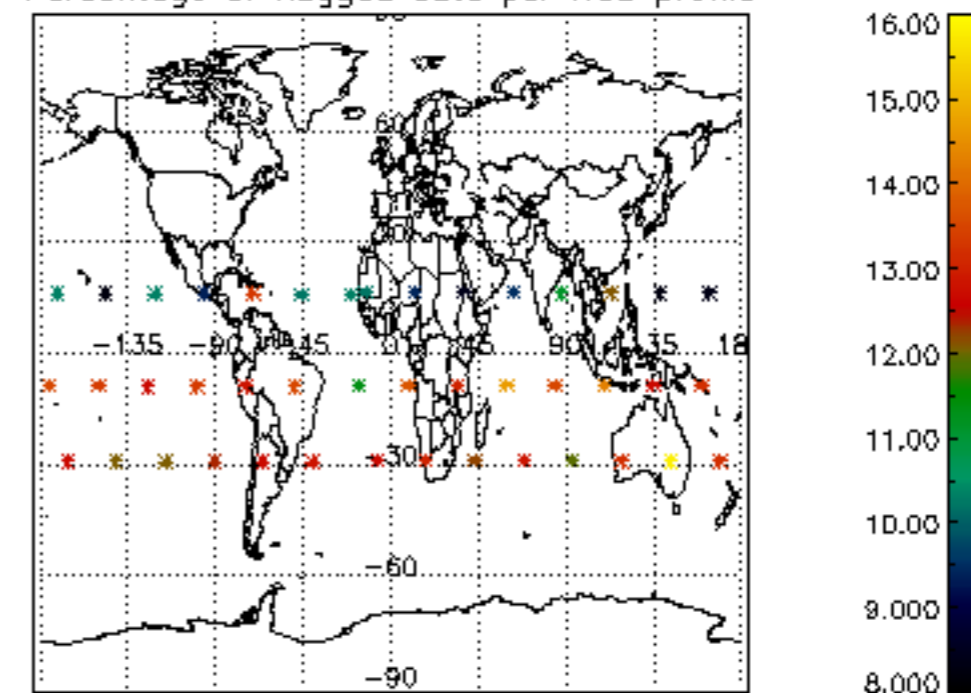
Percentage of flagged data per H2O profile

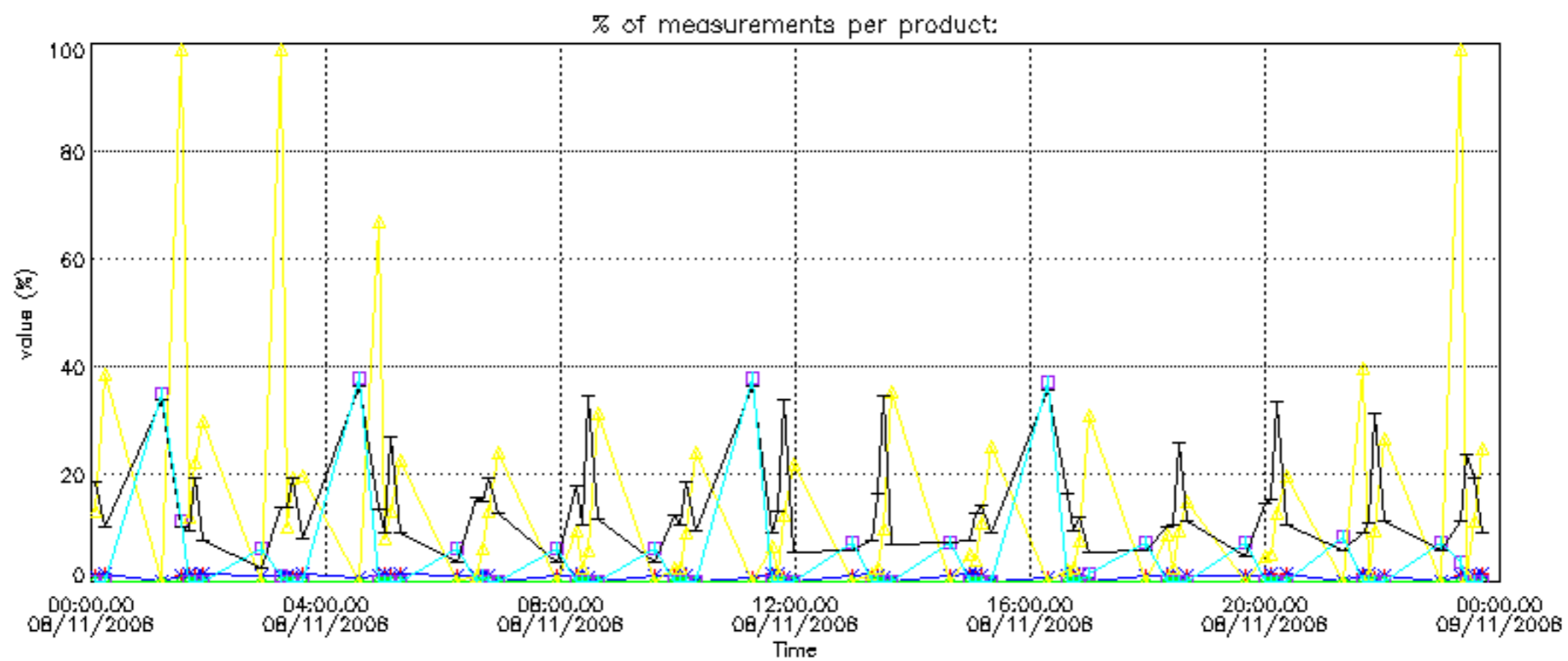
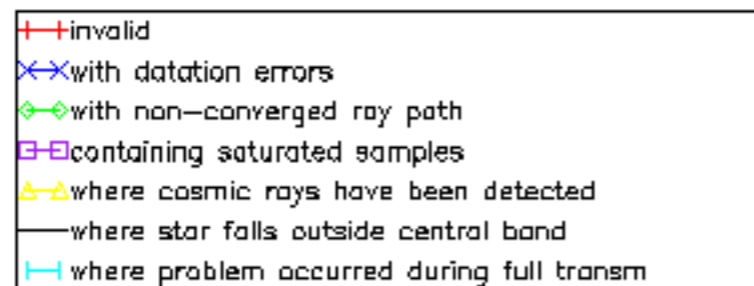


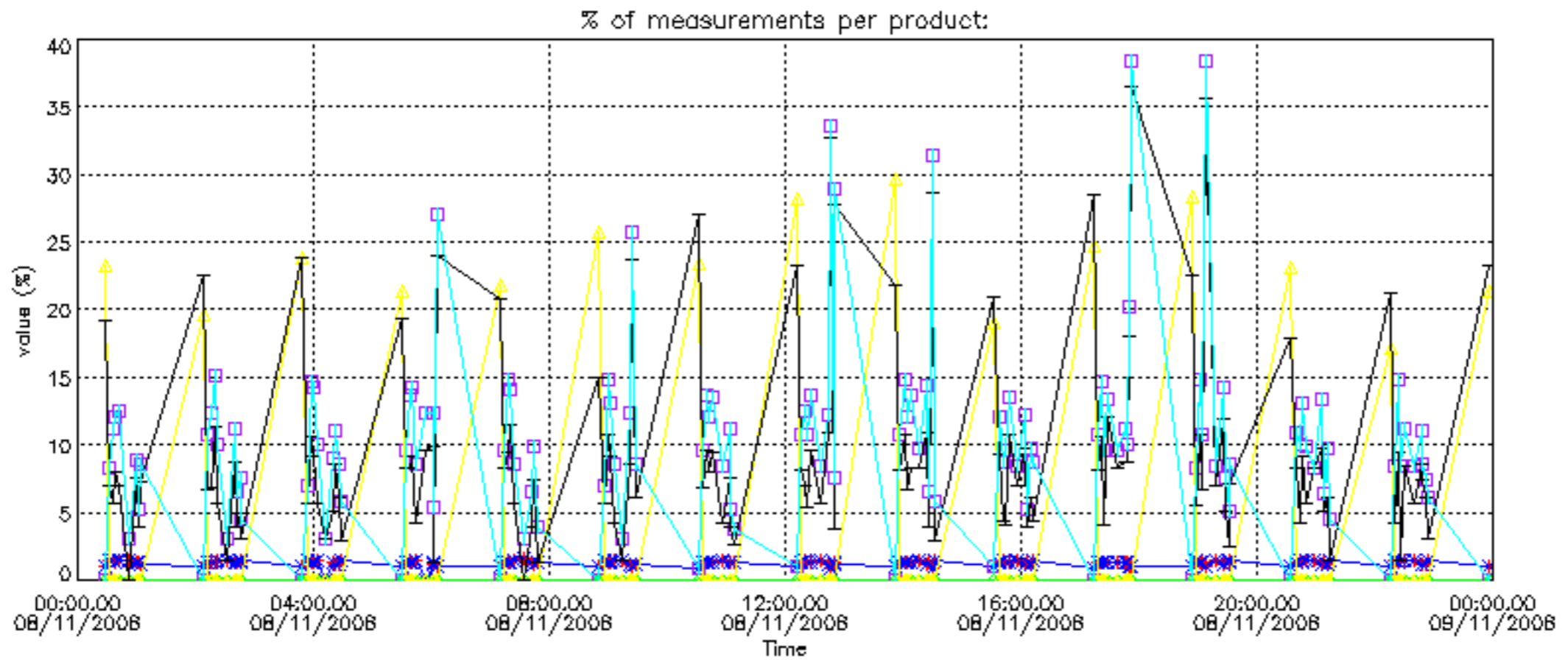
Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

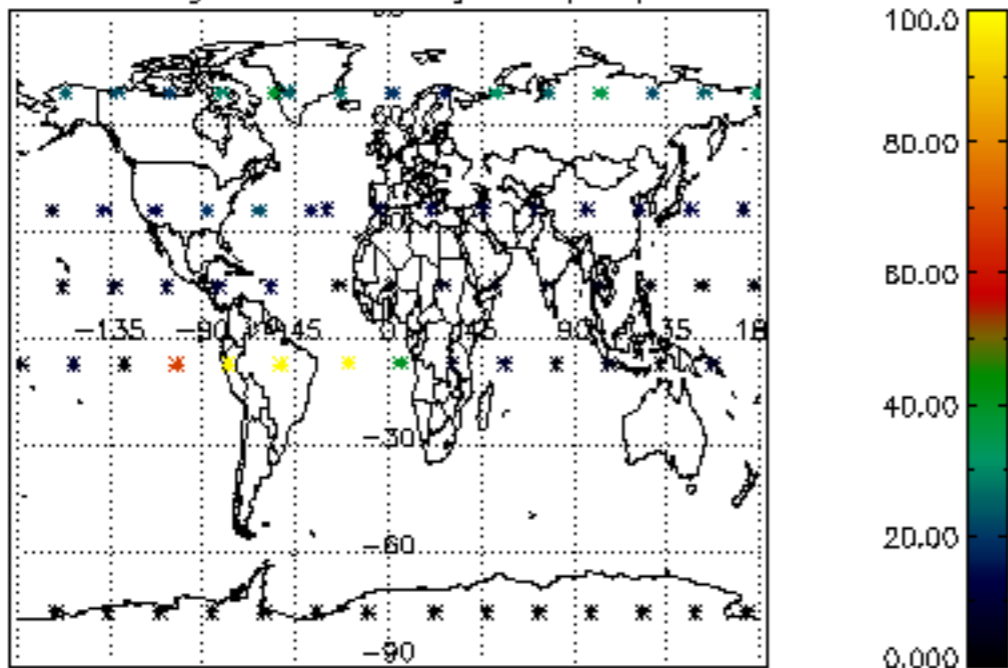




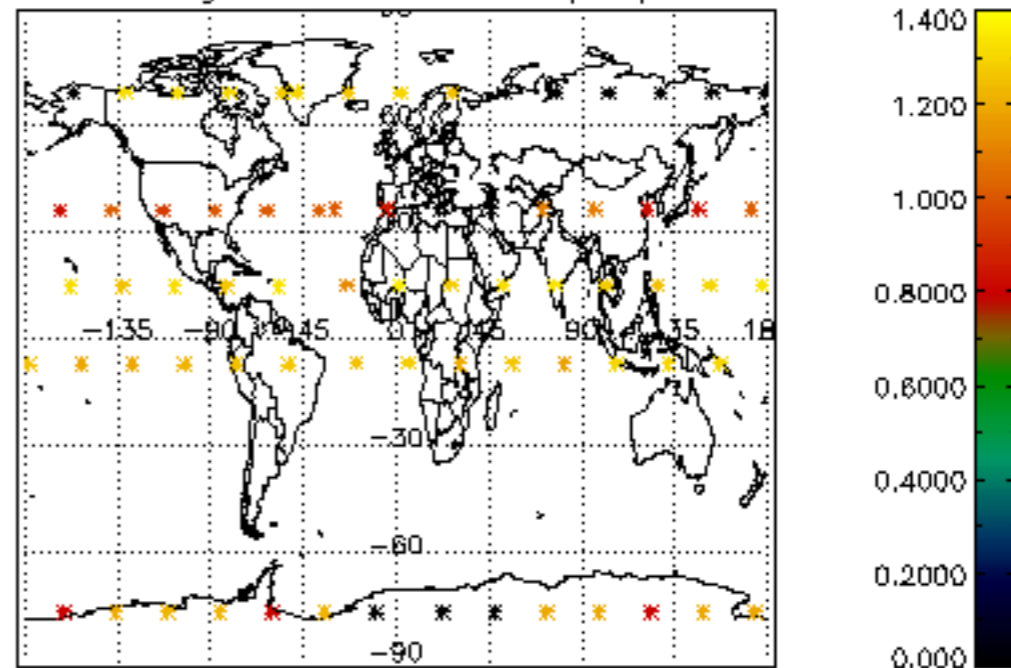




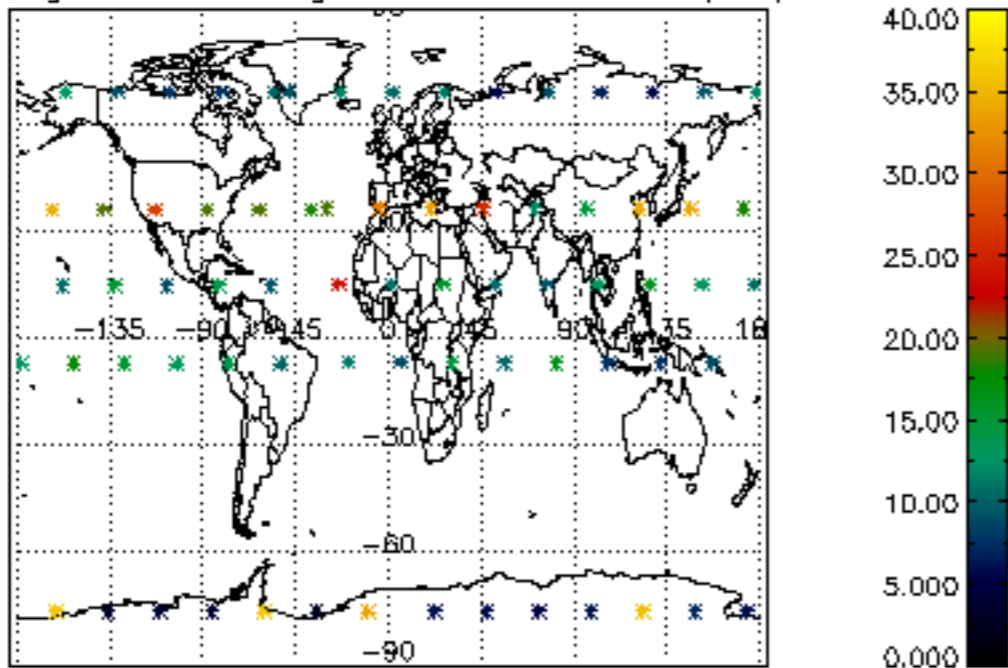
Percentage of cosmic ray hits per profile



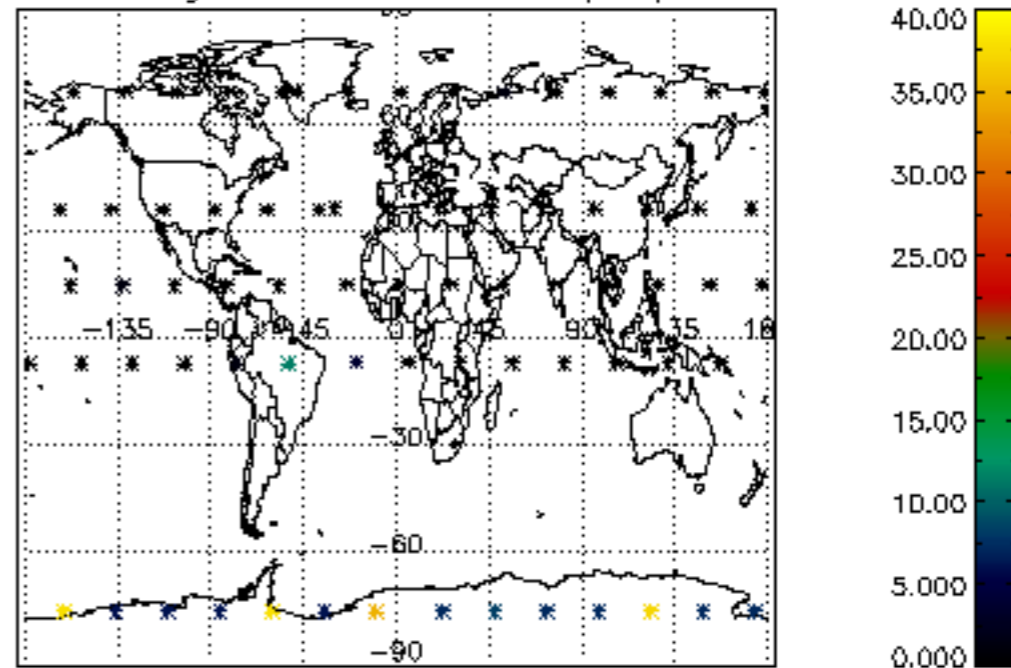
Percentage of datation errors per profile



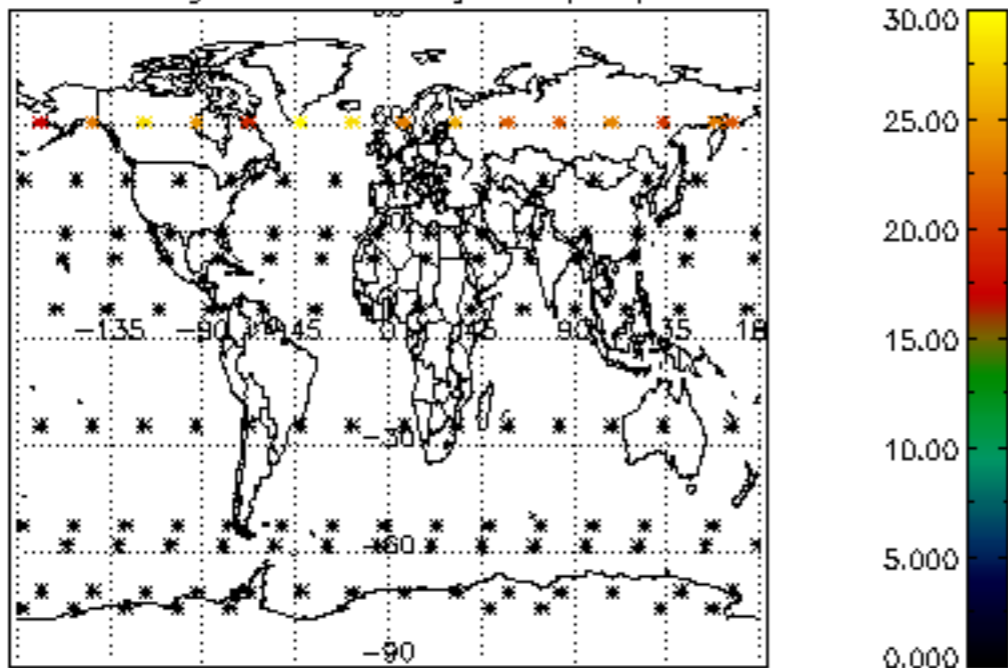
Percentage of star falling outside central band per profile



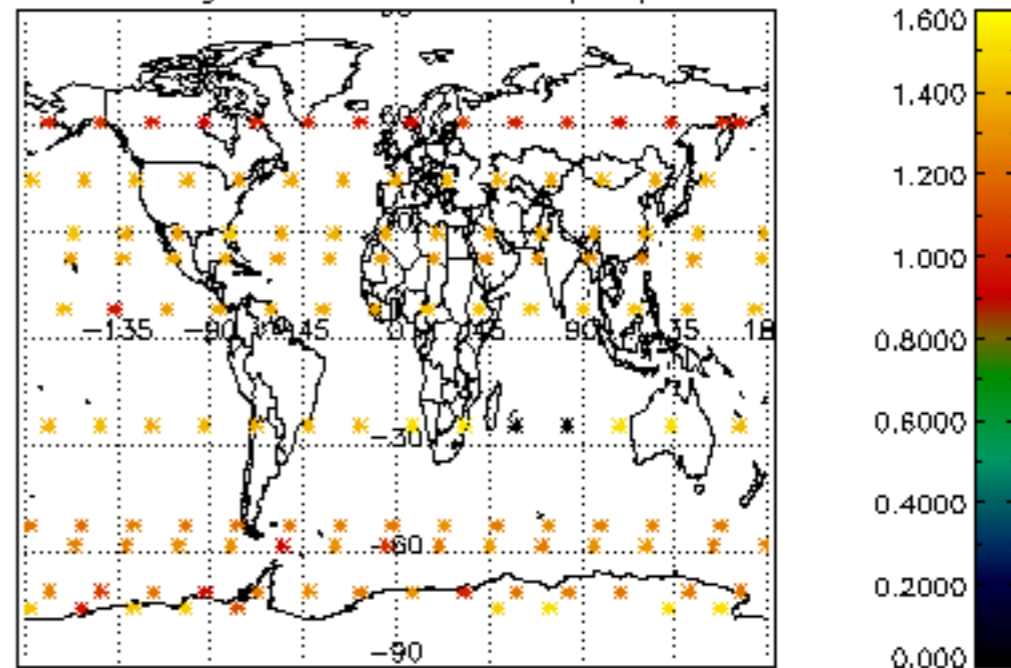
Percentage of saturation errors per profile



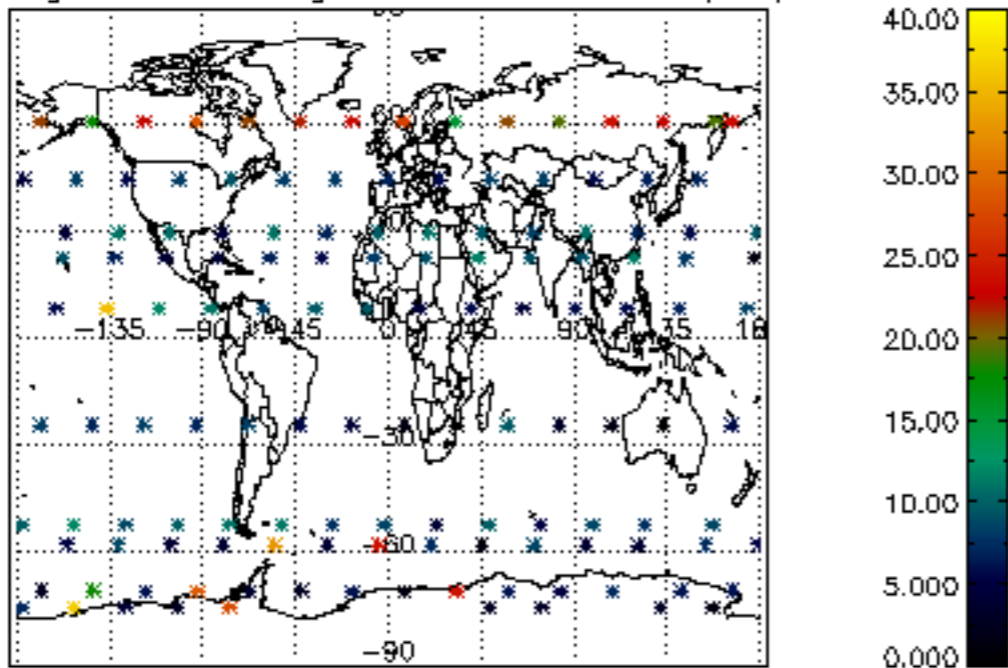
Percentage of cosmic ray hits per profile



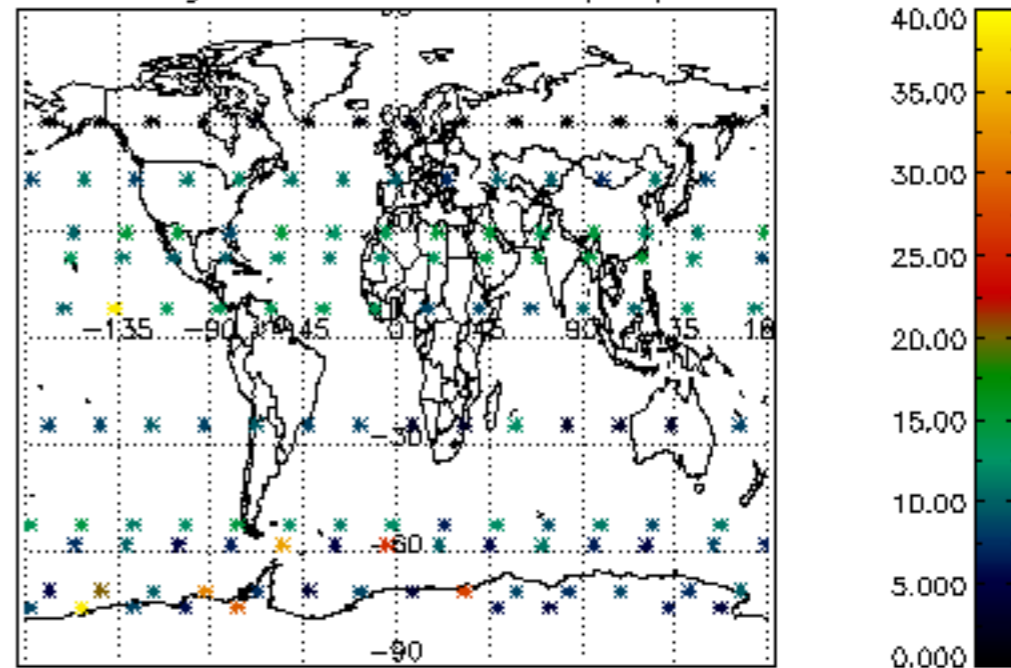
Percentage of datation errors per profile

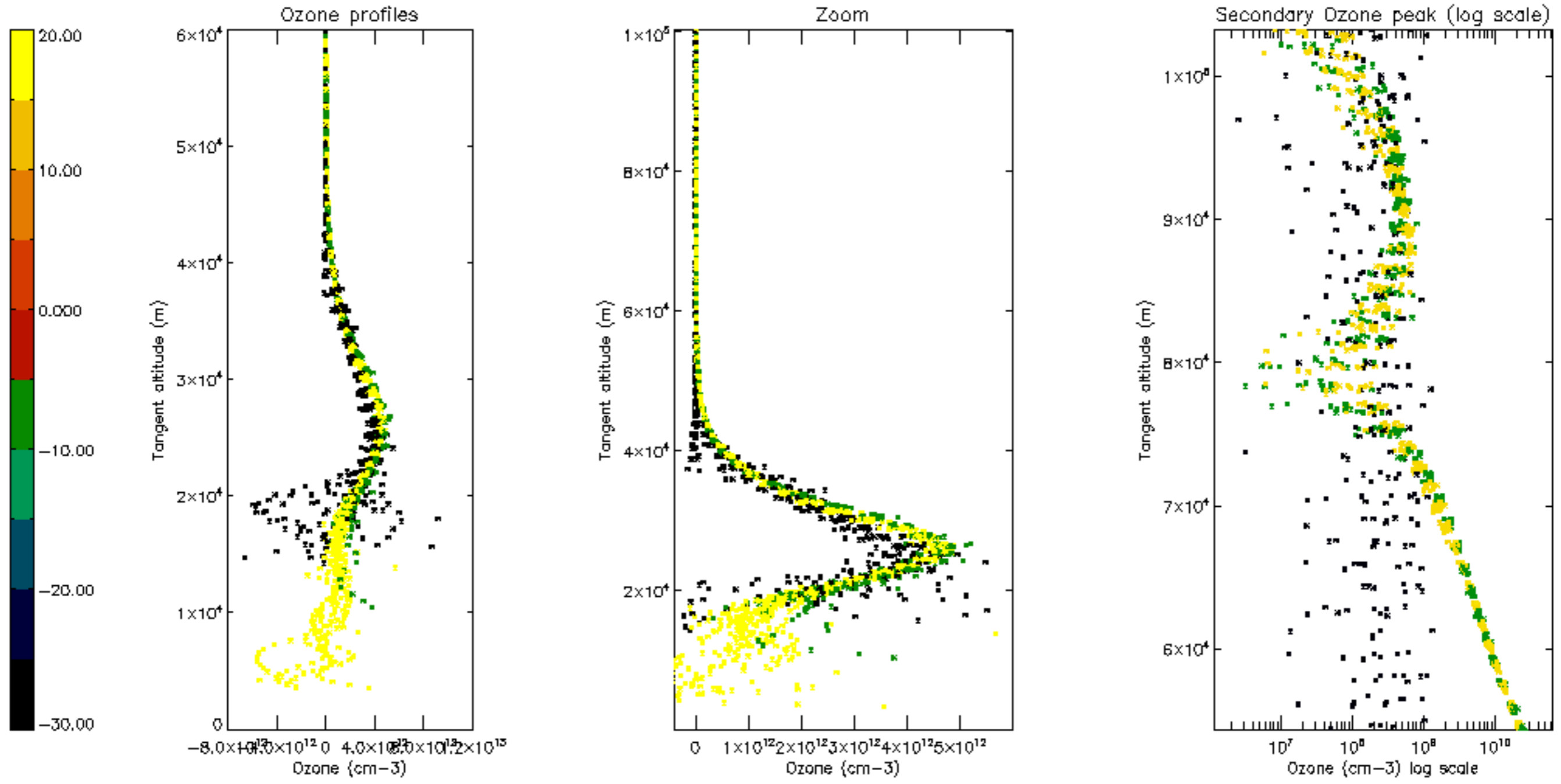


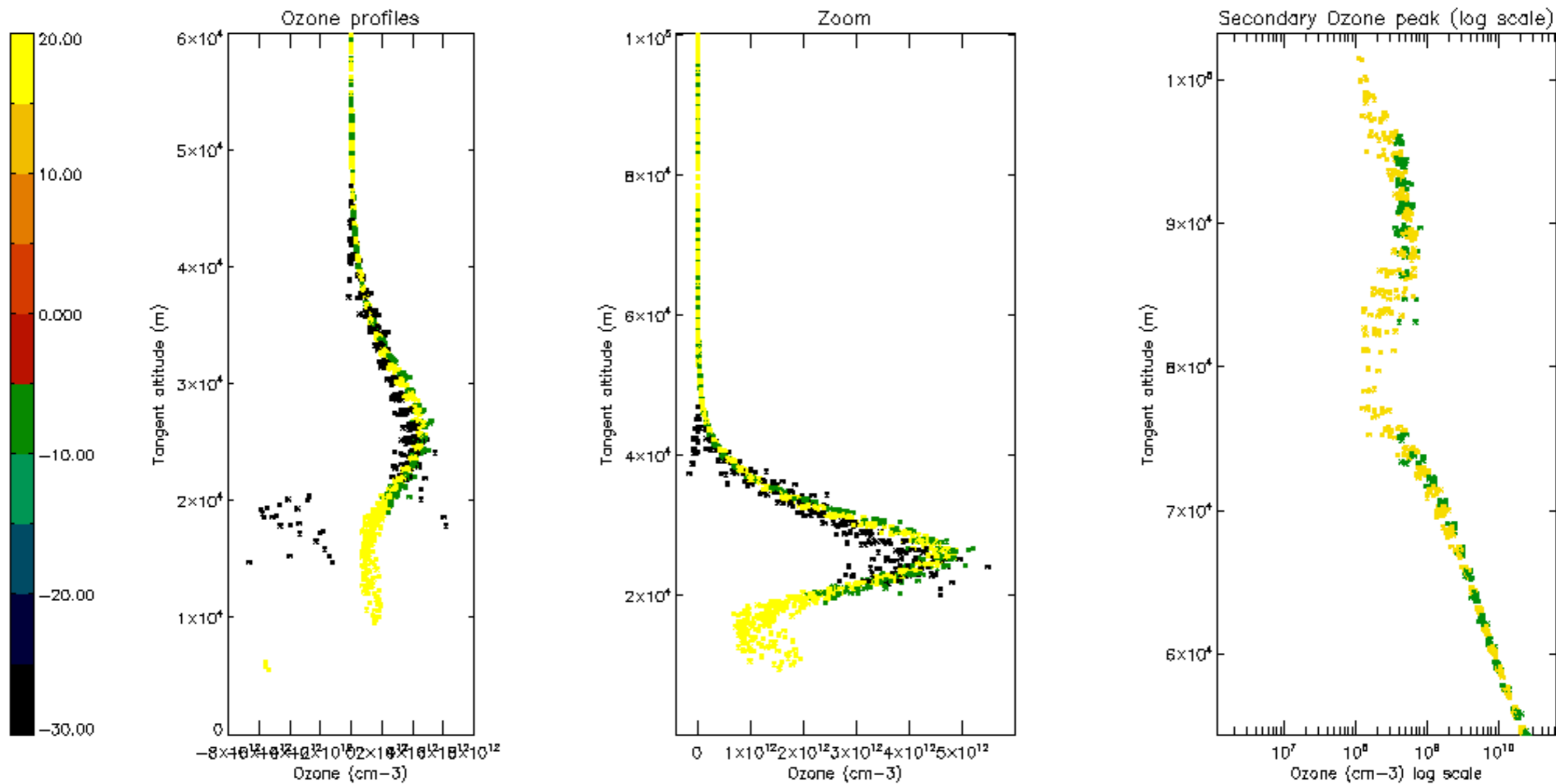
Percentage of star falling outside central band per profile

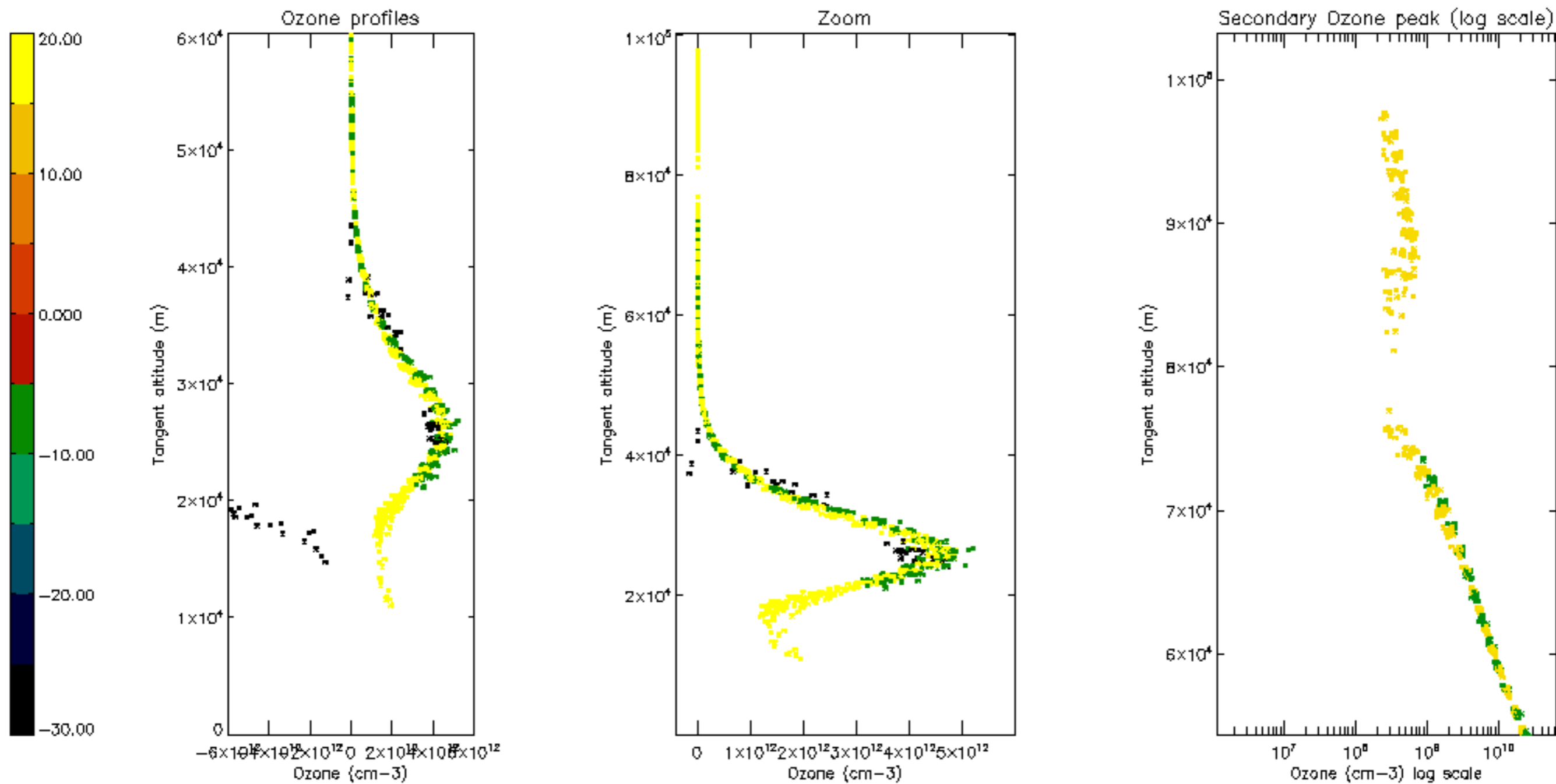


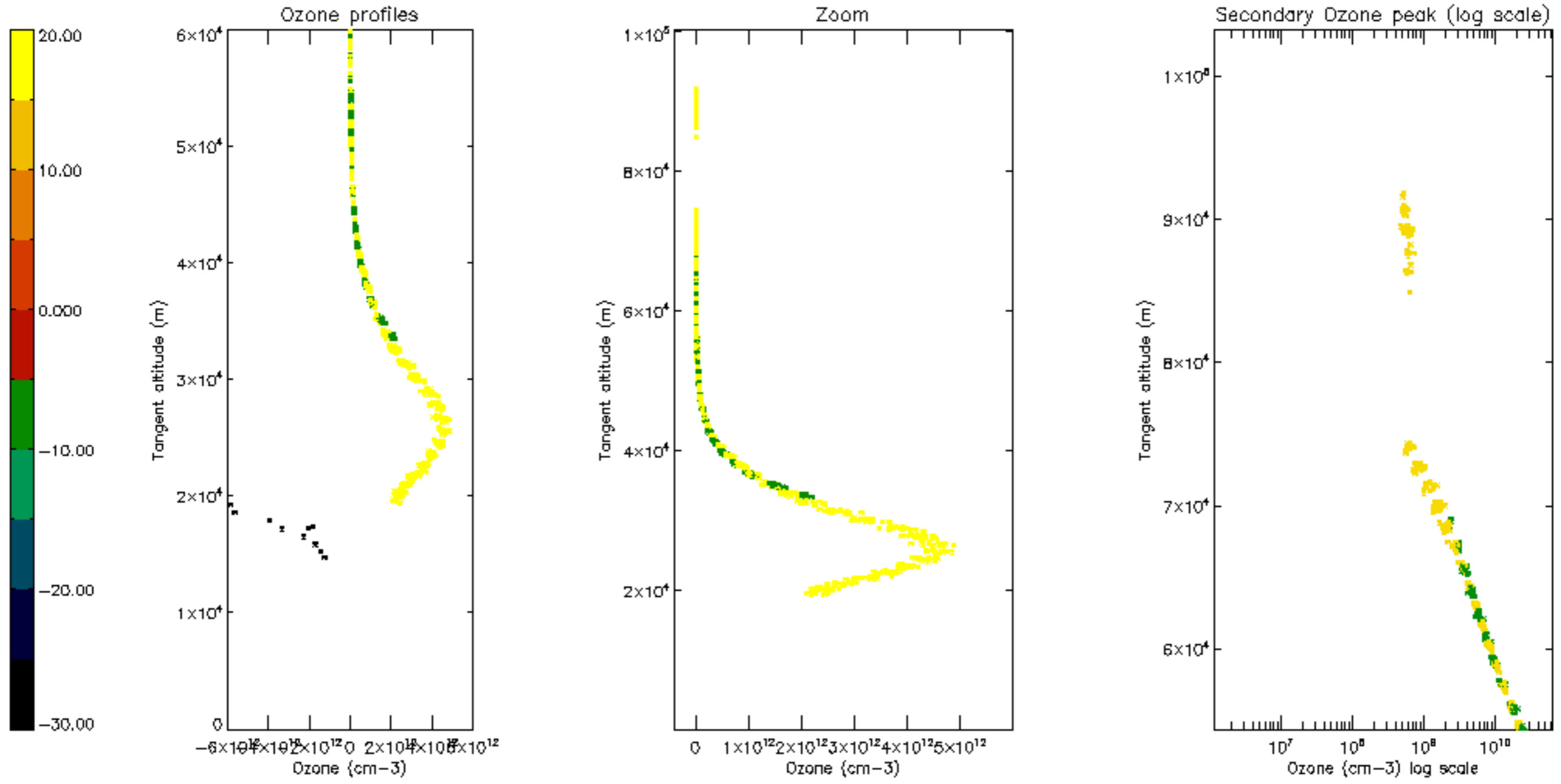
Percentage of saturation errors per profile

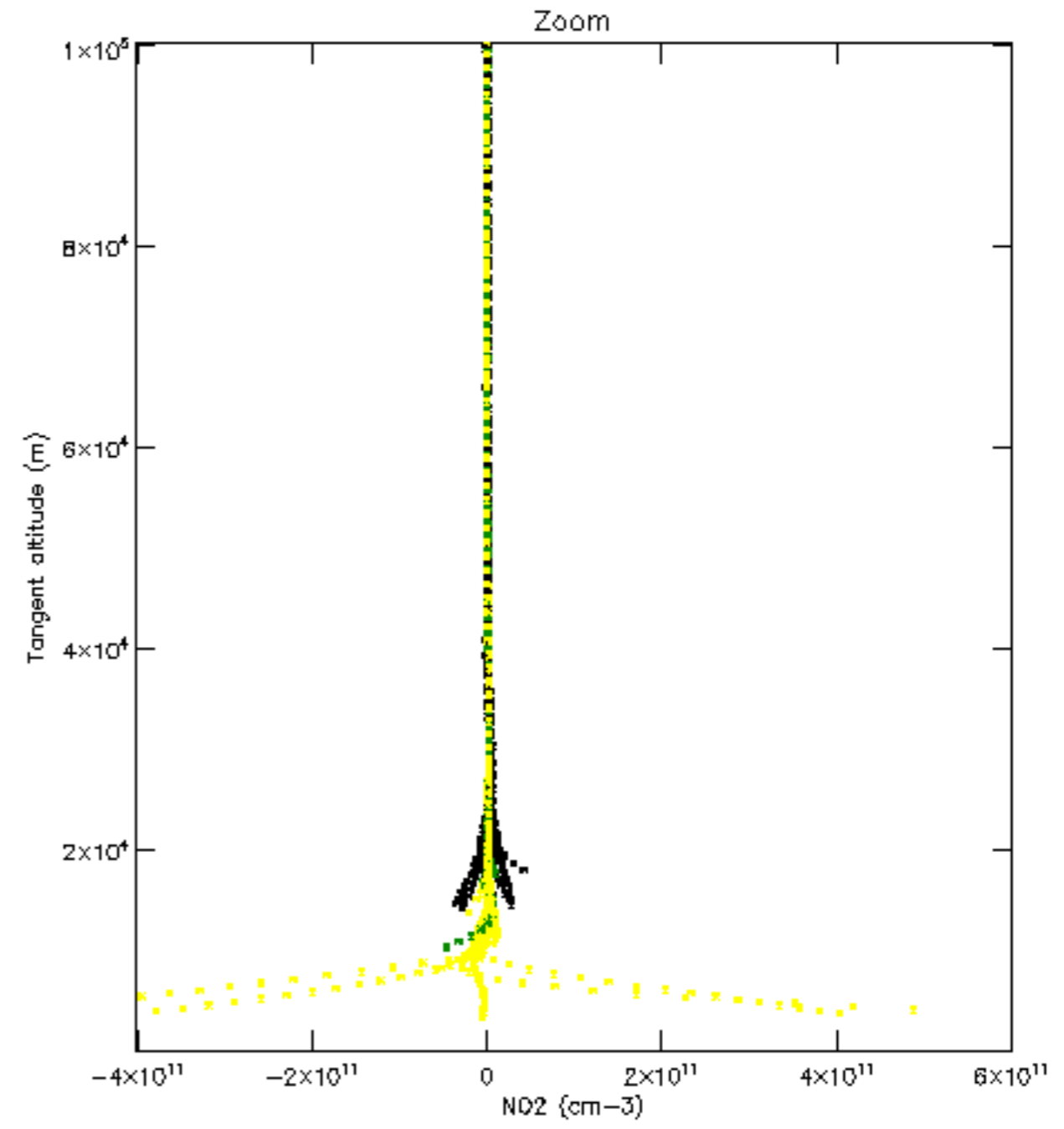
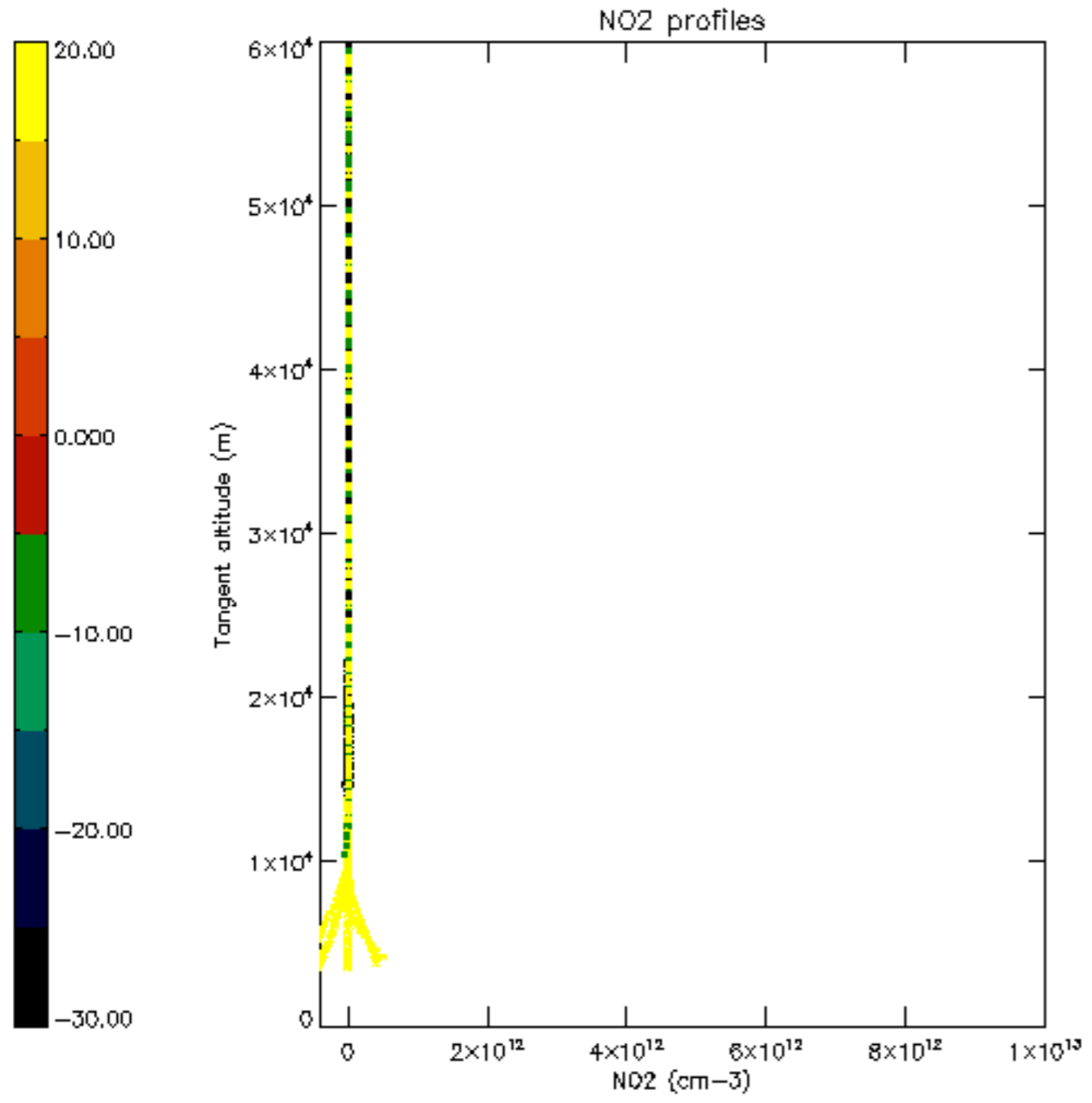


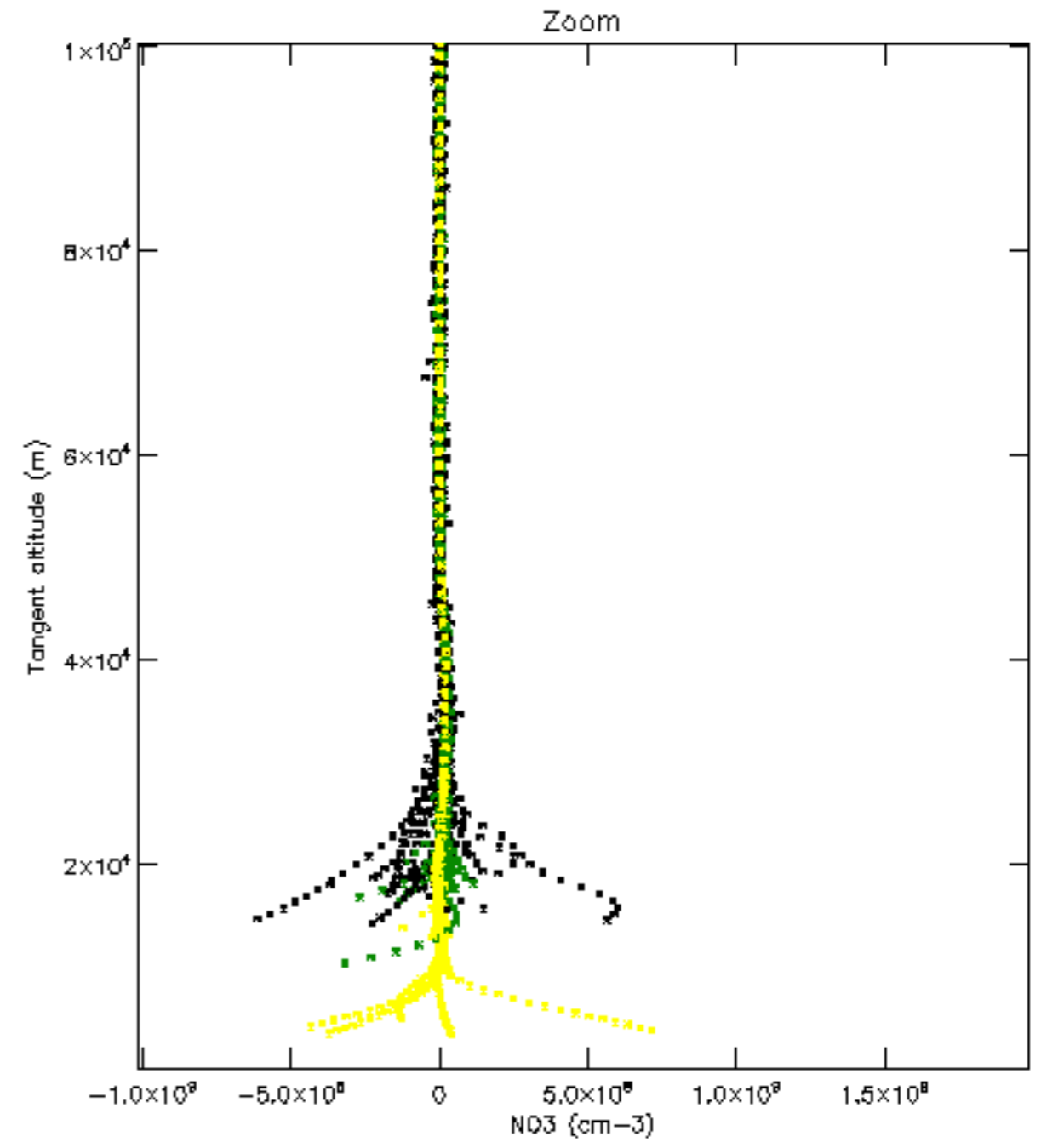
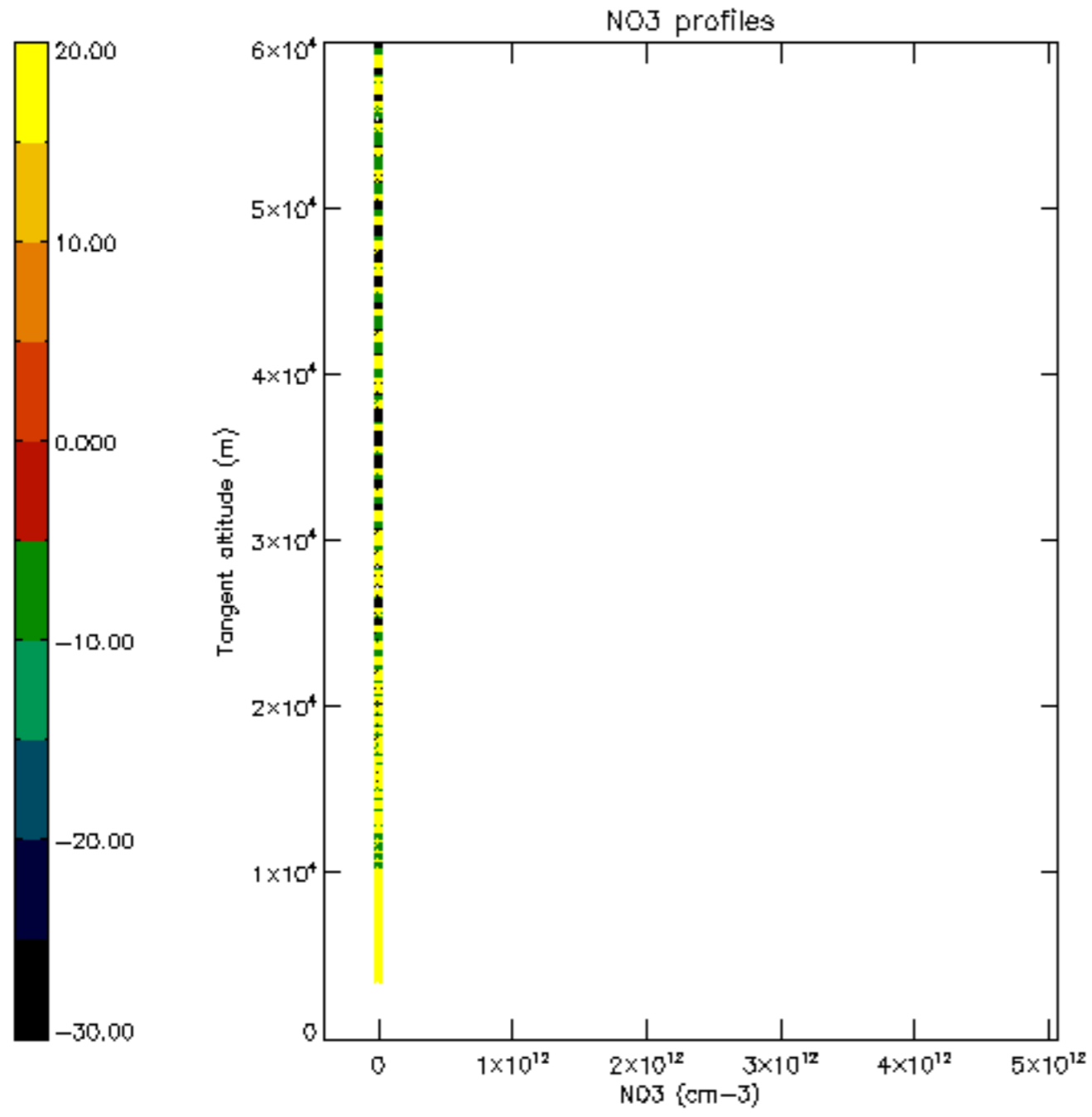




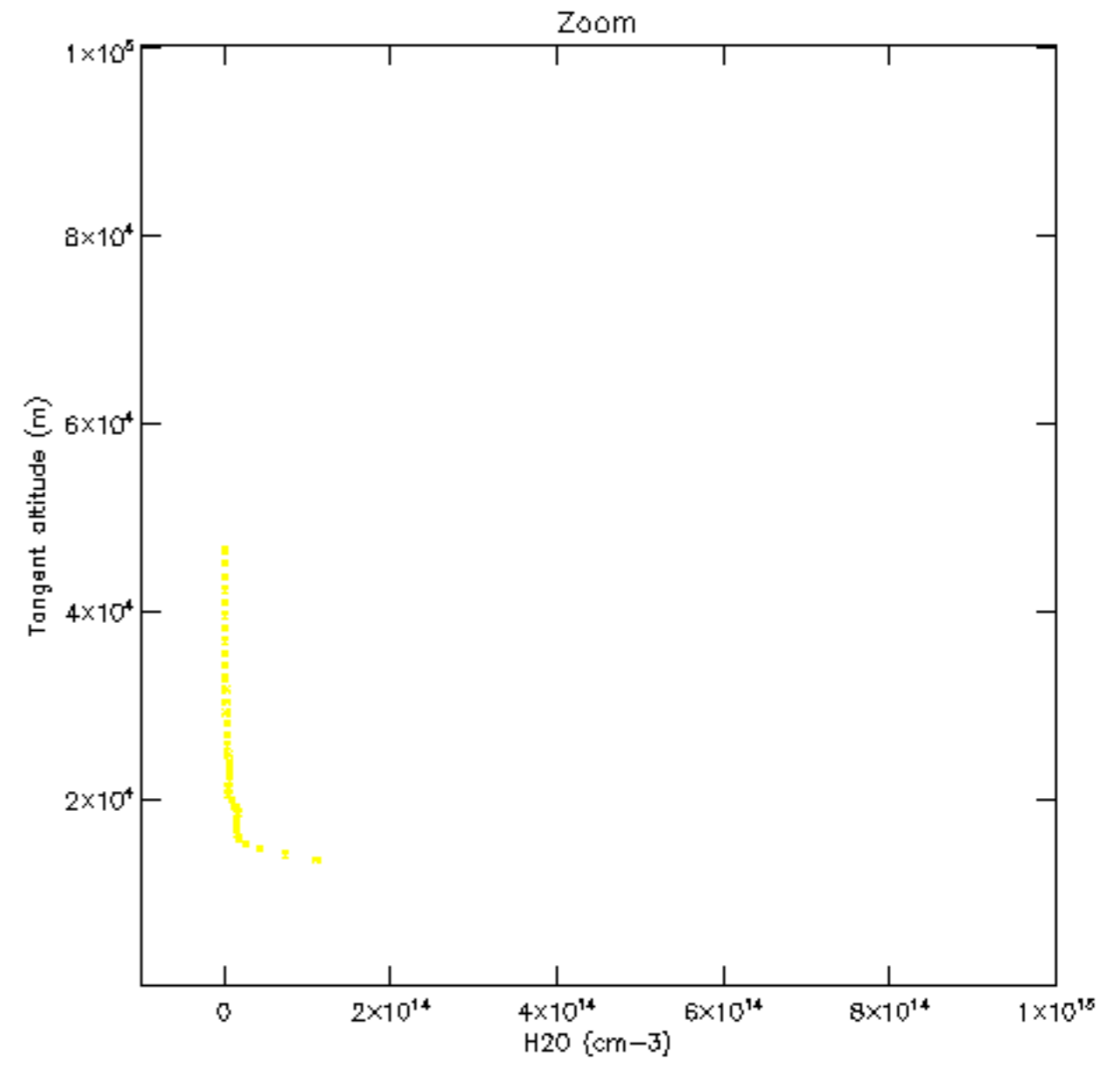
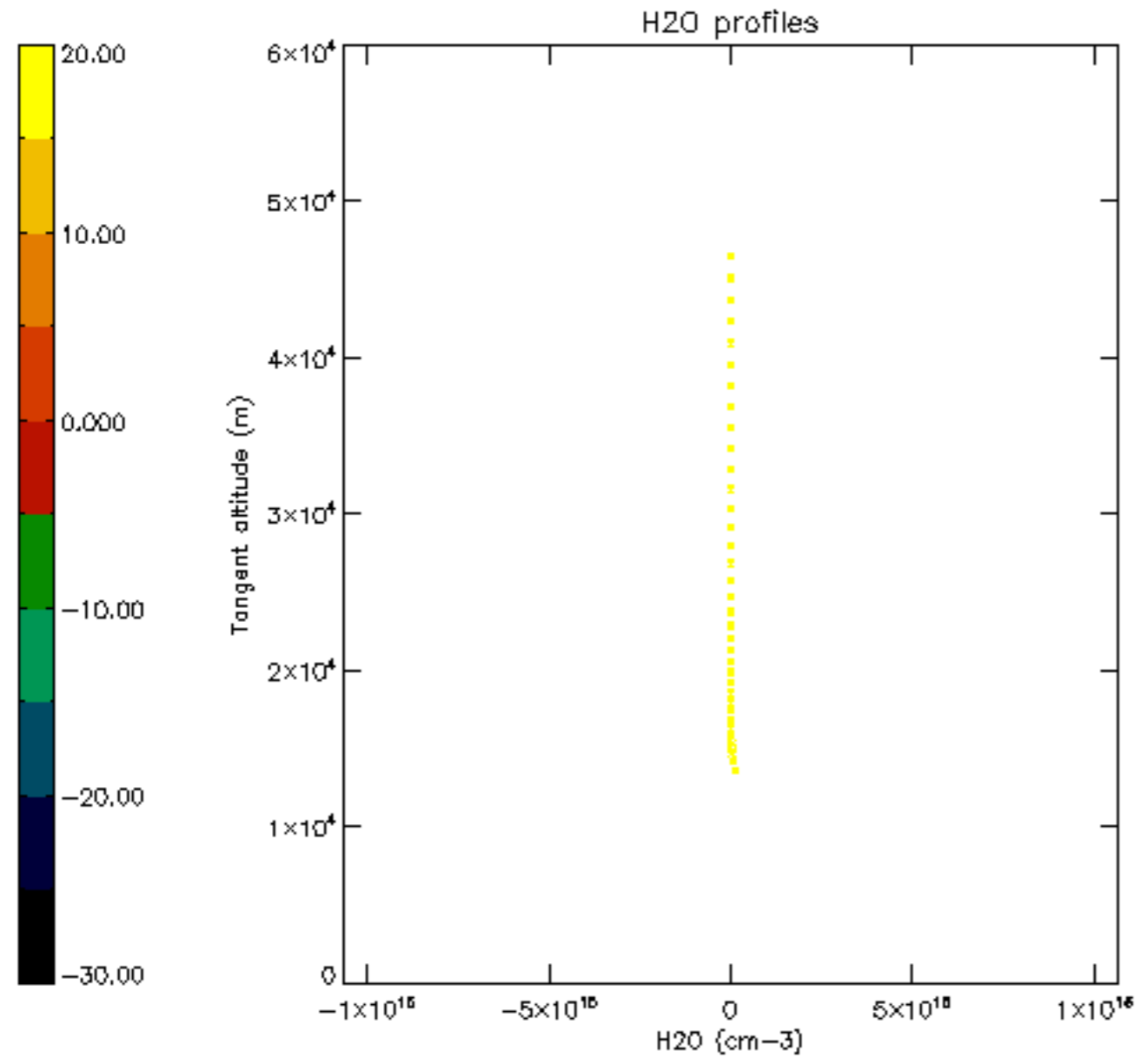


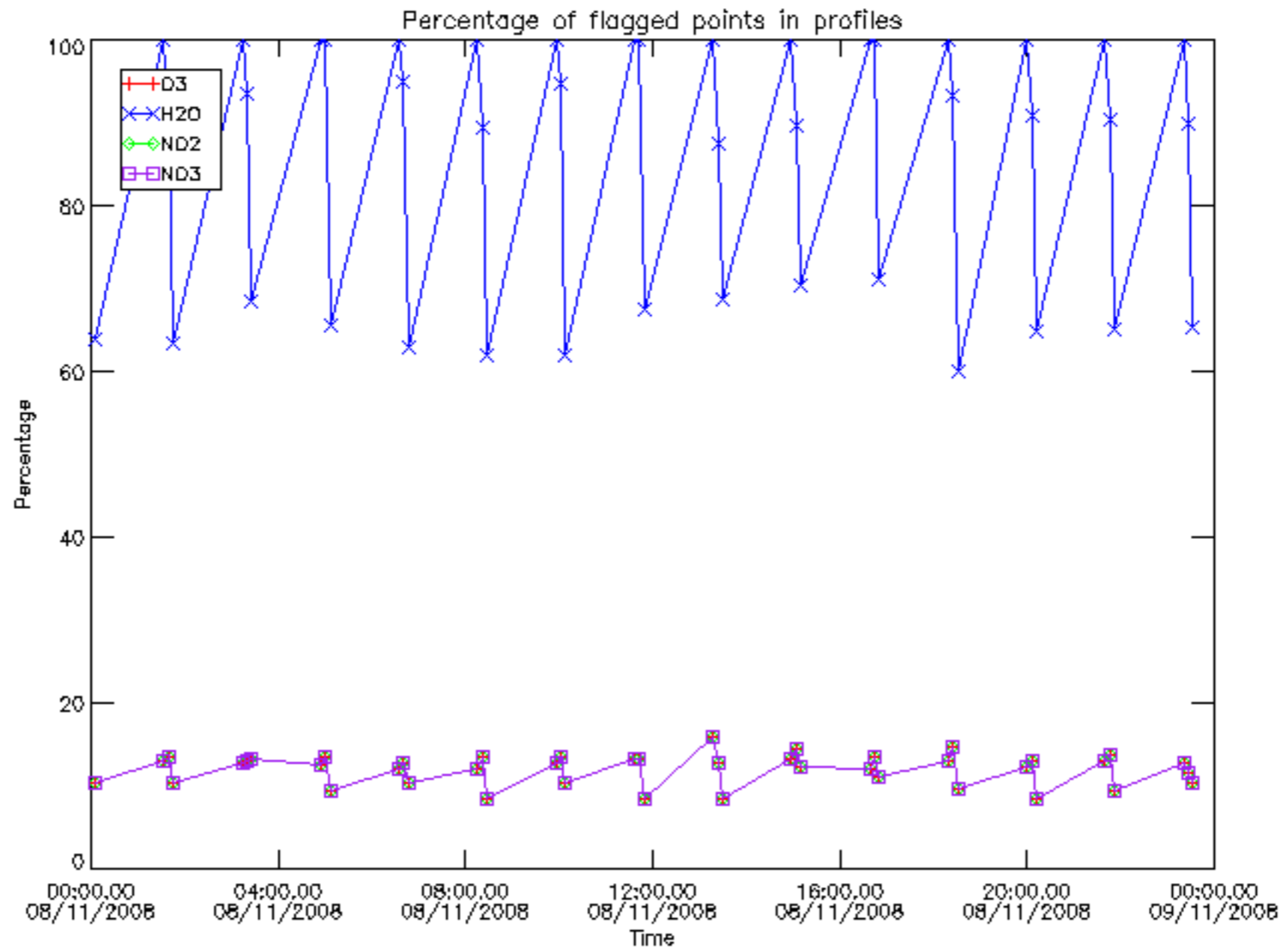




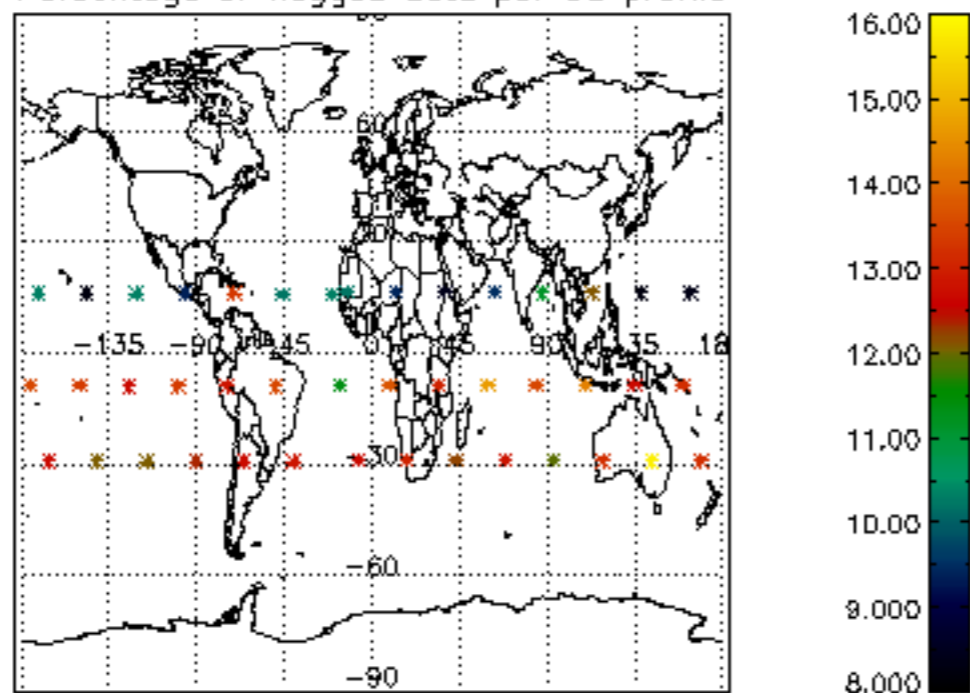




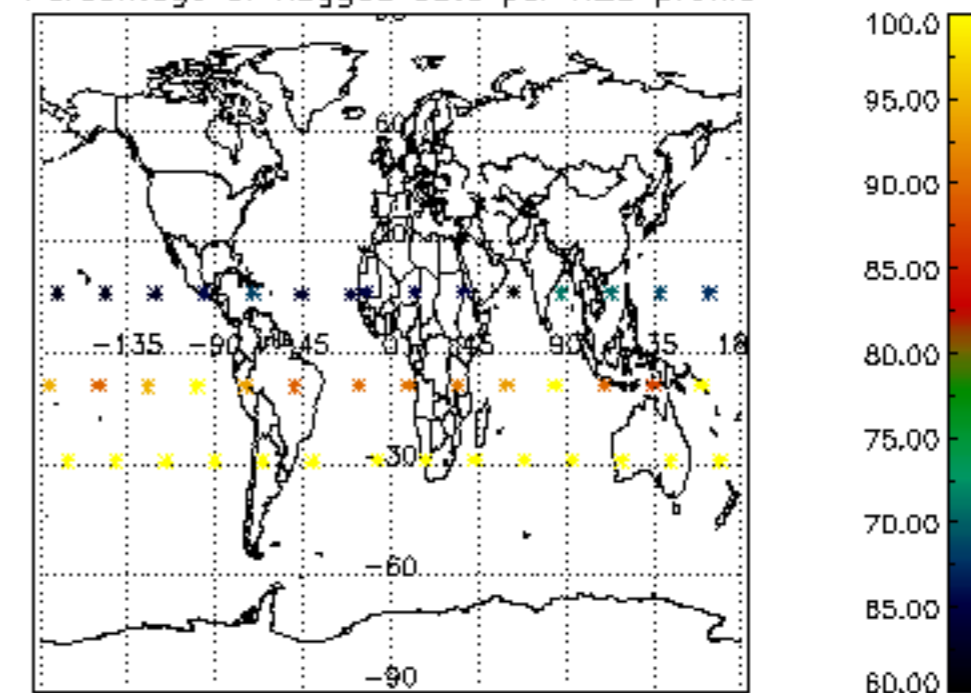




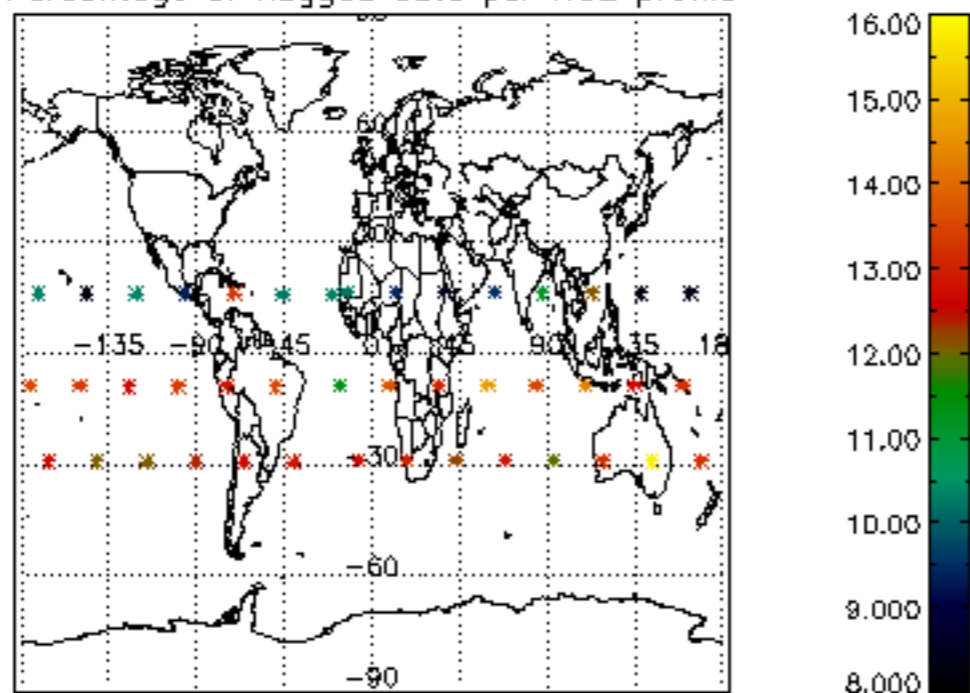
Percentage of flagged data per D3 profile



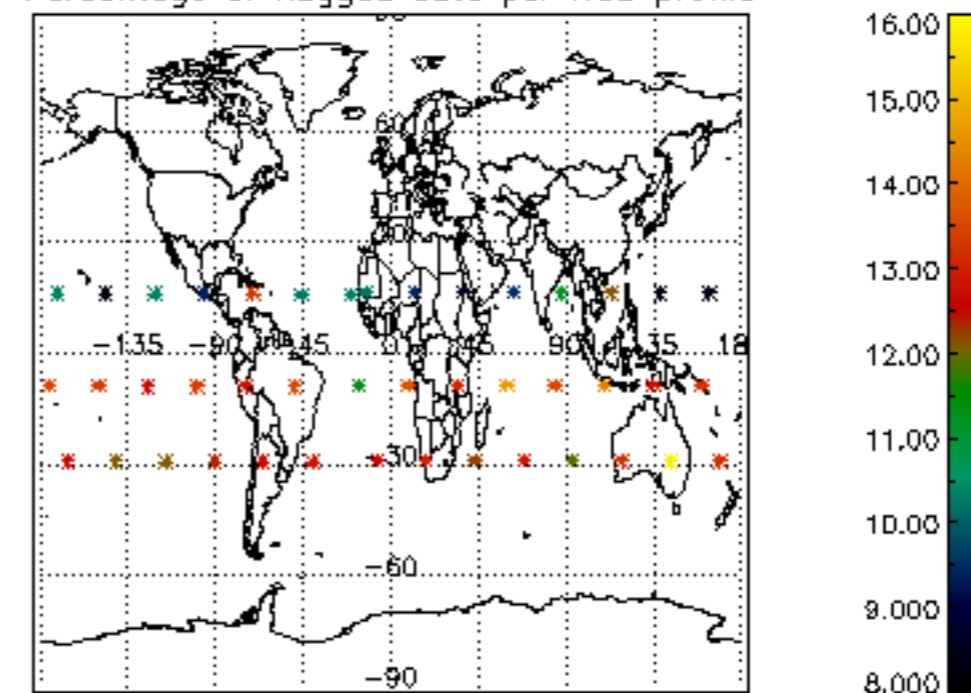
Percentage of flagged data per H2O profile

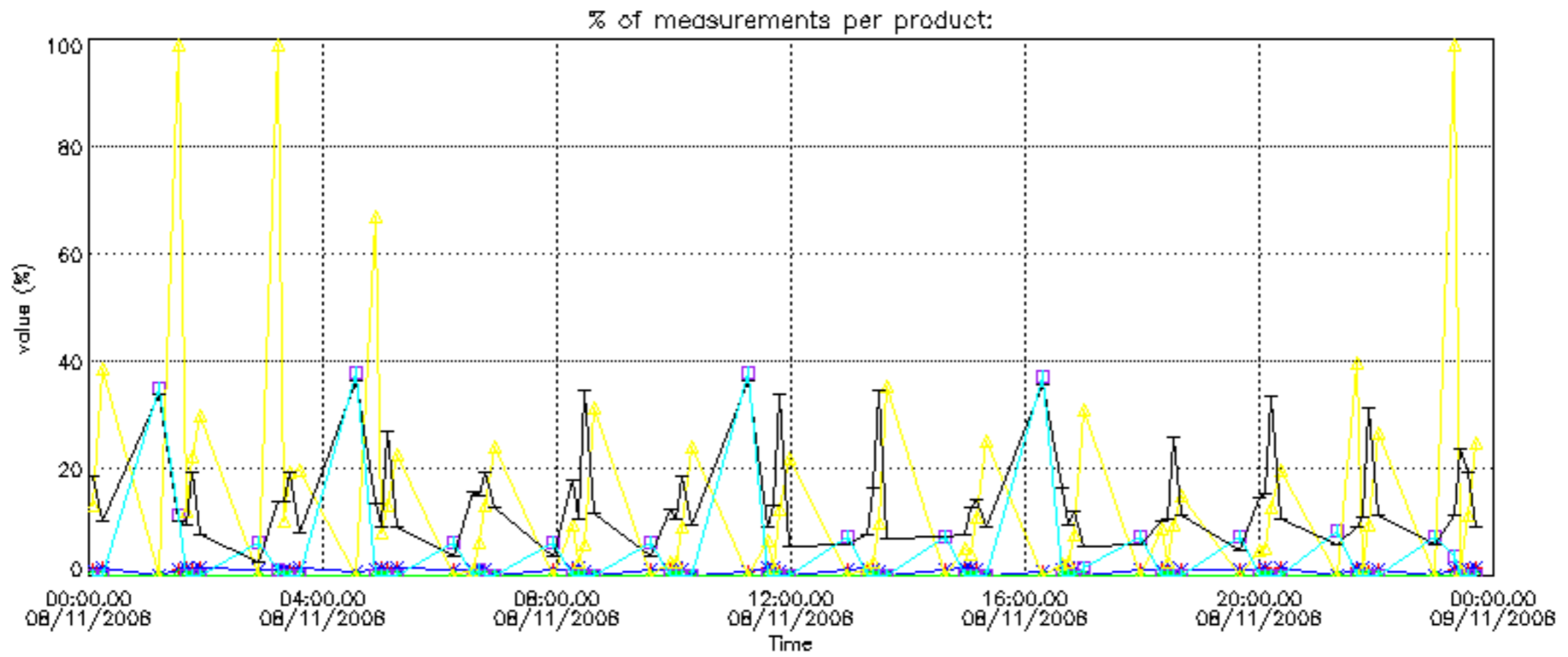


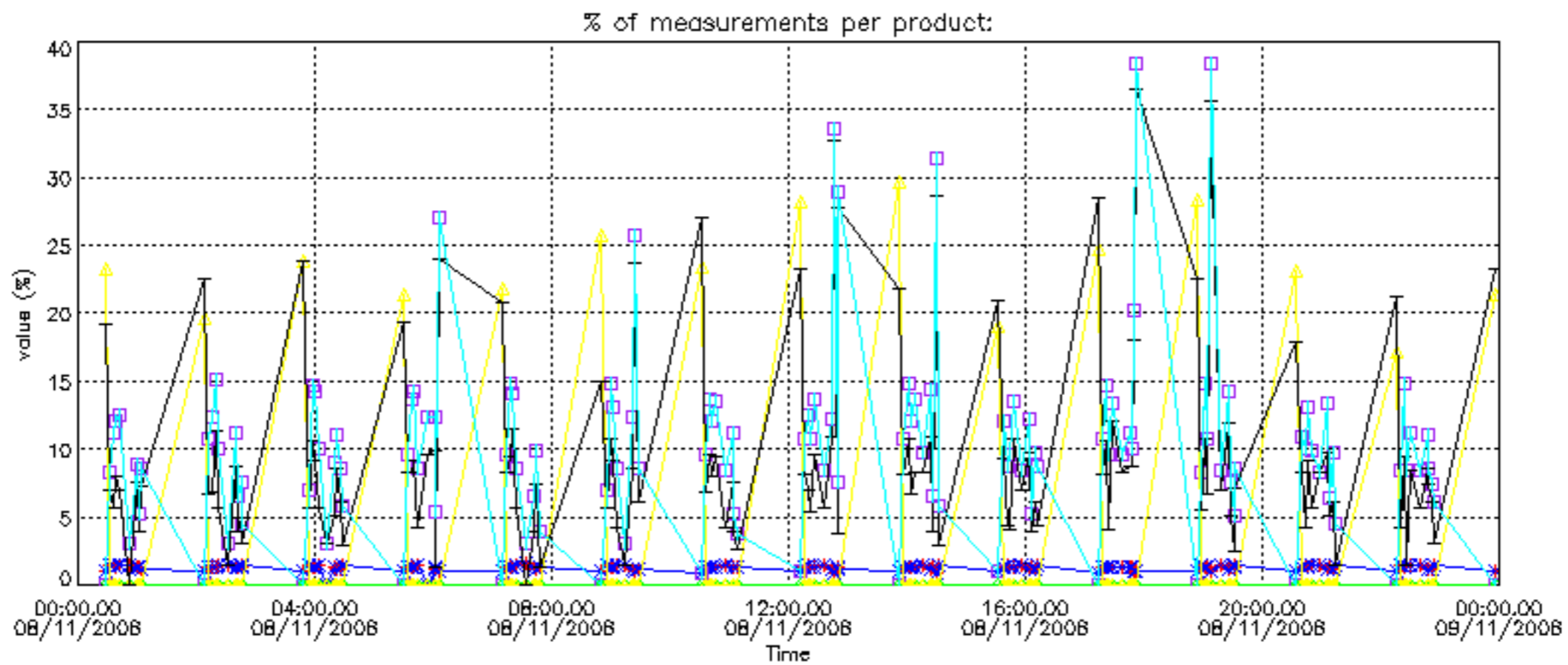
Percentage of flagged data per NO2 profile



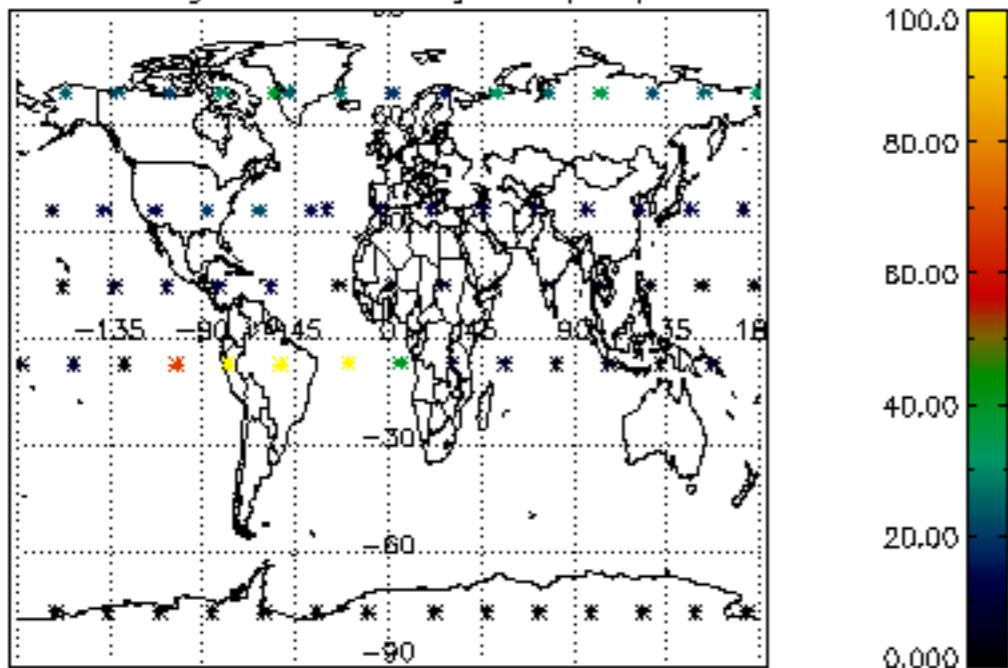
Percentage of flagged data per NO3 profile



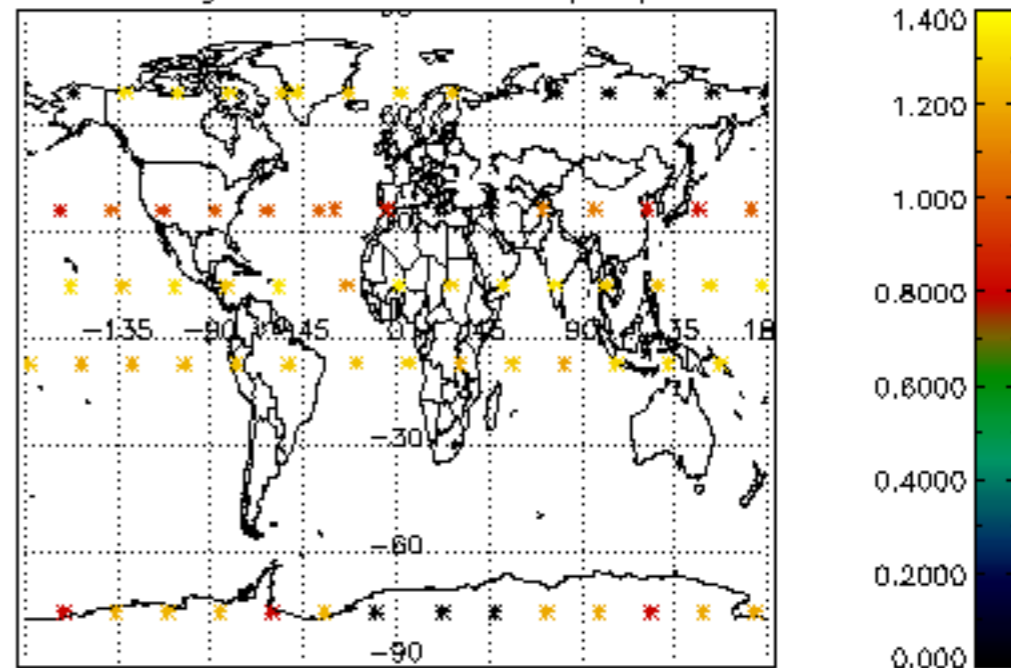




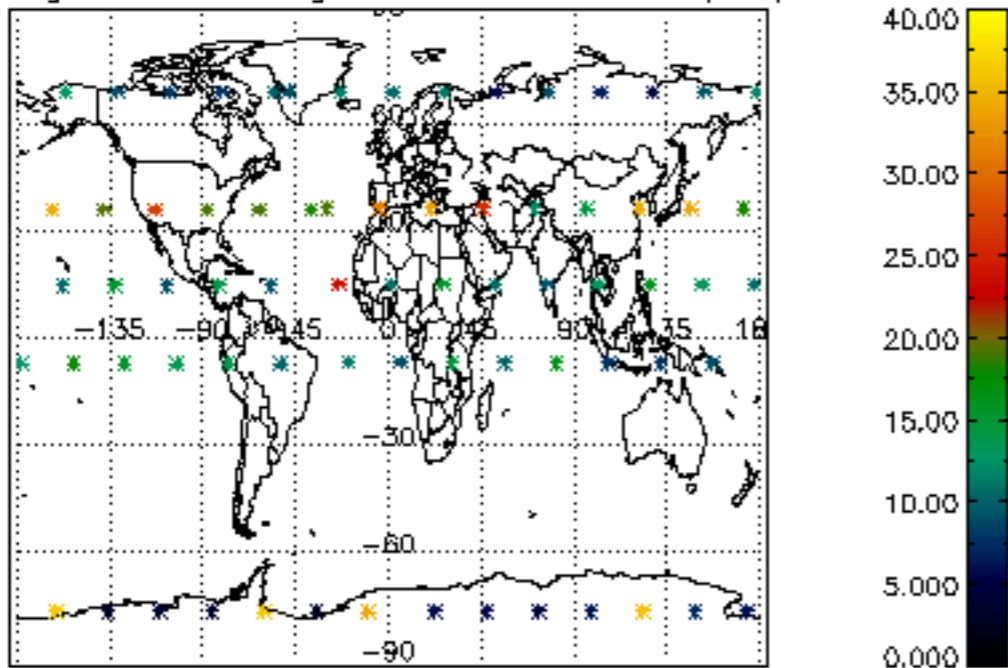
Percentage of cosmic ray hits per profile



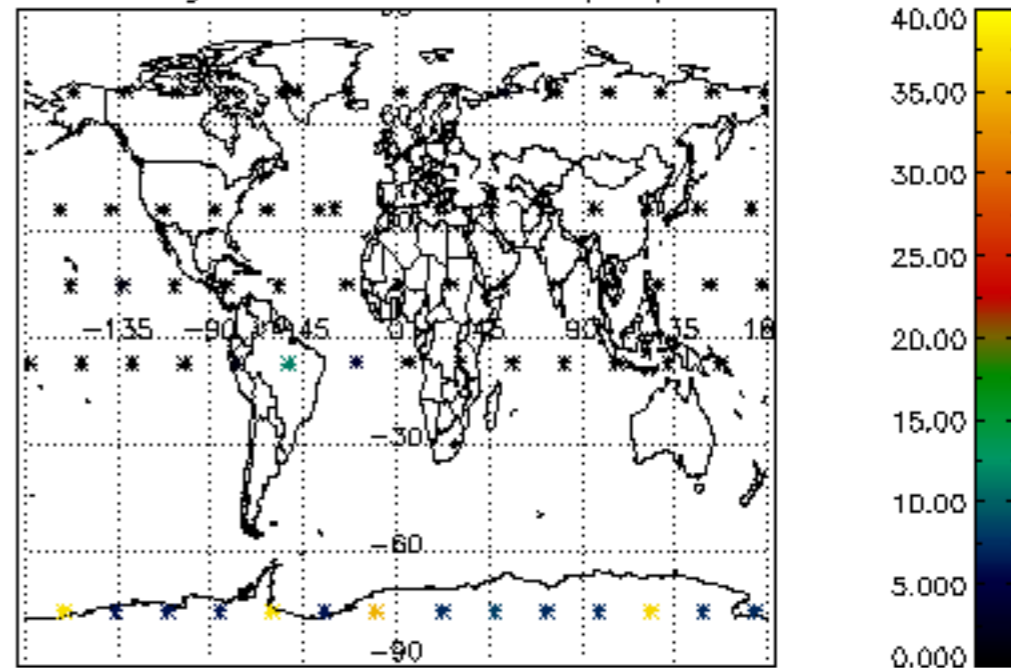
Percentage of datation errors per profile



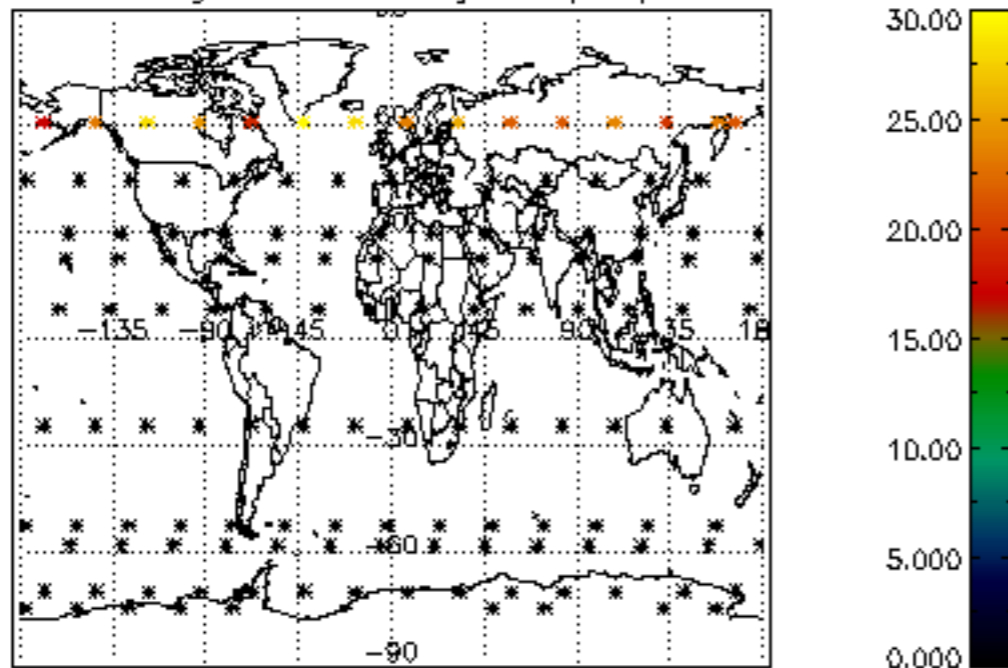
Percentage of star falling outside central band per profile



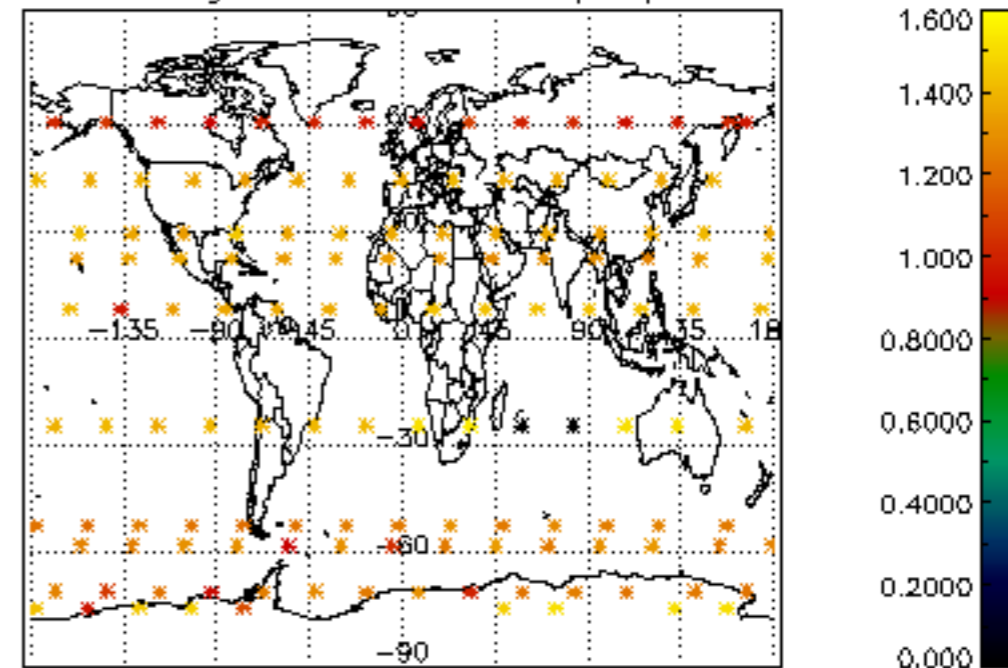
Percentage of saturation errors per profile



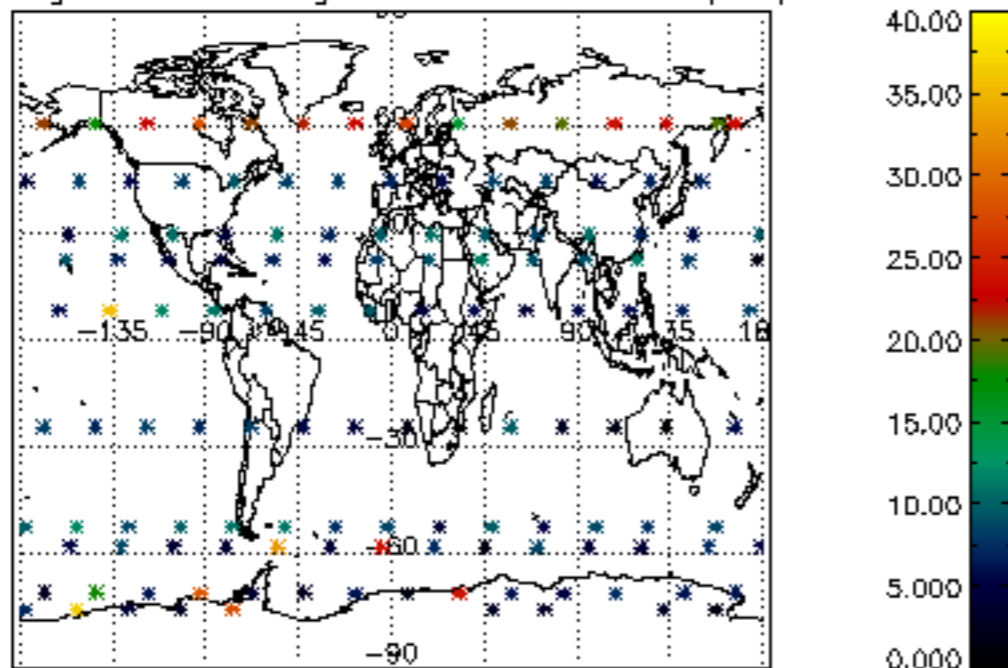
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

