

# GOMOS Level 2 Daily Report

## SUMMARY

### [1. General Info](#)

### [2. Summary of processed GOM\\_NL\\_2P products](#)

### [3. Level 2 Quality information per product](#)

#### [3.1 Plot of level 2 quality information per product \(time dependant\)](#)

#### [3.2 Plot of level 2 quality information per product \(world map\)](#)

### [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	20APR2013 02:19:09
Data source version	GOMOS/6.01
Start time of products	20-12-2003 (20DEC2003 00:00:00)
Stop time of products	21-12-2003 (21DEC2003 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	486
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__2PRFIN20031220_000156_000000412022_00360_09432_0181.N1	20-DEC-2003 00:01:56	Dark	40.500	159	Ups Car	2.9200	7200.0	81	9432	No
2	GOM_NL__2PRFIN20031220_000324_000000432022_00360_09432_0182.N1	20-DEC-2003 00:03:24	Dark	43.000	71	Iot Car	2.2460	7700.0	86	9432	No
3	GOM_NL__2PRFIN20031220_000515_000000482022_00360_09432_0183.N1	20-DEC-2003 00:05:15	Dark	47.500	41	Eps Car	1.8600	4100.0	95	9432	No
4	GOM_NL__2PRFIN20031220_000807_000000522022_00360_09432_0184.N1	20-DEC-2003 00:08:07	Dark	51.500	34	Gam2Vel	1.7930	23000.	103	9432	No
5	GOM_NL__2PRFIN20031220_000959_000000542022_00360_09432_0185.N1	20-DEC-2003 00:09:59	Dark	54.000	2	Alp Car	-0.73600	7000.0	108	9432	No
6	GOM_NL__2PRFIN20031220_001251_000000582022_00360_09432_0186.N1	20-DEC-2003 00:12:51	Dark	57.500	117	Pi Pup	2.7060	3800.0	115	9432	No
7	GOM_NL__2PRFIN20031220_001559_000000562022_00360_09432_0187.N1	20-DEC-2003 00:15:59	Straylight	55.500	23	21Eps CMa	1.5020	26000.	111	9432	No
8	GOM_NL__2PRFIN20031220_001744_000000552022_00360_09432_0188.N1	20-DEC-2003 00:17:44	Straylight	54.500	179	24Omi2CMa	3.0320	24000.	109	9432	No
9	GOM_NL__2PRFIN20031220_002020_000000572022_00360_09432_0189.N1	20-DEC-2003 00:20:20	Straylight	57.000	47	2Bet CMa	1.9760	28000.	114	9432	No
10	GOM_NL__2PRFIN20031220_002250_000000472022_00360_09432_0190.N1	20-DEC-2003 00:22:50	Straylight	47.000	165	34Gam Eri	2.9500	3200.0	94	9432	No
11	GOM_NL__2PRFIN20031220_002428_000000462022_00360_09432_0191.N1	20-DEC-2003 00:24:28	Straylight	46.000	125	44Iot Ori	2.7700	30000.	92	9432	No
12	GOM_NL__2PRFIN20031220_002555_000000532022_00360_09432_0192.N1	20-DEC-2003 00:25:55	Straylight	52.500	30	46Eps Ori	1.6940	30000.	105	9432	No
13	GOM_NL__2PRFIN20031220_002856_000000582022_00360_09432_0193.N1	20-DEC-2003 00:28:56	Twilight	58.000	14	58Alp Ori	0.87000	3000.0	116	9432	No
14	GOM_NL__2PRFIN20031220_003104_000000502022_00360_09432_0194.N1	20-DEC-2003 00:31:04	Twilight	50.000	13	87Alp Tau	0.86700	3800.0	100	9432	No
15	GOM_NL__2PRFIN20031220_003320_000000392022_00360_09432_0195.N1	20-DEC-2003 00:33:20	Bright	38.500	146	25Eta Tau	2.8730	15200.	77	9432	No
16	GOM_NL__2PRFIN20031220_003529_000000372022_00360_09432_0196.N1	20-DEC-2003 00:35:29	Bright	37.000	150	44Zet Per	2.8900	28000.	74	9432	No
17	GOM_NL__2PRFIN20031220_003745_000000372022_00360_09432_0197.N1	20-DEC-2003 00:37:45	Bright	36.500	149	45Eps Per	2.8880	30000.	73	9432	No
18	GOM_NL__2PRFIN20031220_003958_000000362022_00360_09432_0198.N1	20-DEC-2003 00:39:58	Bright	36.000	175	39Del Per	3.0100	19400.	72	9432	No
19	GOM_NL__2PRFIN20031220_004147_000000402022_00360_09432_0199.N1	20-DEC-2003 00:41:47	Bright	39.500	160	23Gam Per	2.9300	4700.0	79	9432	No
20	GOM_NL__2PRFIN20031220_004511_000000392022_00360_09432_0200.N1	20-DEC-2003 00:45:11	Bright	39.000	110	37Del Cas	2.6780	8900.0	78	9432	No
21	GOM_NL__2PRFIN20031220_005138_000000352022_00360_09432_0201.N1	20-DEC-2003 00:51:38	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	9432	No
22	GOM_NL__2PRFIN20031220_005620_000000382022_00360_09432_0202.N1	20-DEC-2003 00:56:20	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	9432	No
23	GOM_NL__2PRFIN20031220_005942_000000522022_00360_09432_0203.N1	20-DEC-2003 00:59:42	Bright	52.000	119	14Eta Dra	2.7270	4700.0	104	9432	No
24	GOM_NL__2PRFIN20031220_010130_000000432022_00360_09432_0204.N1	20-DEC-2003 01:01:30	Bright	43.000	55	79Zet UMa	2.0600	10200.	86	9432	No
25	GOM_NL__2PRFIN20031220_010330_000000592022_00360_09432_0205.N1	20-DEC-2003 01:03:30	Bright	59.000	39	85Eta UMa	1.8540	24000.	118	9432	No
26	GOM_NL__2PRFIN20031220_010659_000000382022_00360_09432_0206.N1	20-DEC-2003 01:06:59	Bright	37.500	180	27Gam Boo	3.0400	8000.0	75	9432	No
27	GOM_NL__2PRFIN20031220_011016_000000392022_00360_09432_0207.N1	20-DEC-2003 01:10:16	Bright	39.000	83		2.3780	11000.	78	9432	No
28	GOM_NL__2PRFIN20031220_011343_000000442022_00360_09432_0208.N1	20-DEC-2003 01:13:43	Bright	44.000	111	8Eta Boo	2.6800	6000.0	88	9432	No
29	GOM_NL__2PRFIN20031220_011523_000000362022_00360_09432_0209.N1	20-DEC-2003 01:15:23	Bright	35.500	102	24Alp Ser	2.6000	4250.0	71	9432	No
30	GOM_NL__2PRFIN20031220_011802_000000612022_00360_09432_0210.N1	20-DEC-2003 01:18:02	Bright	61.000	138	47Eps Vir	2.8280	4700.0	122	9432	No
31	GOM_NL__2PRFIN20031220_012225_000000382022_00360_09432_0211.N1	20-DEC-2003 01:22:25	Bright	38.000	122	9Alp2Lib	2.7470	9700.0	76	9432	No
32	GOM_NL__2PRFIN20031220_012402_000000522022_00360_09432_0212.N1	20-DEC-2003 01:24:02	Twilight	51.500	15	67Alp Vir	0.97600	28000.	103	9432	No
33	GOM_NL__2PRFIN20031220_012733_000000502022_00360_09432_0213.N1	20-DEC-2003 01:27:33	Dark	50.000	169	46Gam Hya	2.9910	4700.0	100	9432	No
34	GOM_NL__2PRFIN20031220_012931_000000392022_00360_09432_0214.N1	20-DEC-2003 01:29:31	Dark	39.000	109	Bet Lup	2.6770	26000.	78	9432	No
35	GOM_NL__2PRFIN20031220_013054_000000422022_00360_09432_0215.N1	20-DEC-2003 01:30:54	Dark	41.500	78	Alp Lup	2.3040	28000.	83	9432	No
36	GOM_NL__2PRFIN20031220_013426_000000452022_00360_09432_0216.N1	20-DEC-2003 01:34:26	Dark	45.000	4	Alp1Cen	-0.010000	5800.0	90	9432	No
37	GOM_NL__2PRFIN20031220_013736_000000512022_00361_09433_0172.N1	20-DEC-2003 01:37:36	Dark	51.000	12	Alp1Cru	0.77500	30000.	102	9433	No
38	GOM_NL__2PRFIN20031220_014233_000000412022_00361_09433_0173.N1	20-DEC-2003 01:42:33	Dark	40.500	159	Ups Car	2.9200	7200.0	81	9433	No
39	GOM_NL__2PRFIN20031220_014401_000000422022_00361_09433_0174.N1	20-DEC-2003 01:44:01	Dark	41.500	71	Iot Car	2.2460	7700.0	83	9433	No
40	GOM_NL__2PRFIN20031220_014551_000000572022_00361_09433_0175.N1	20-DEC-2003 01:45:51	Dark	56.500	41	Eps Car	1.8600	4100.0	113	9433	No
41	GOM_NL__2PRFIN20031220_014844_000000512022_00361_09433_0176.N1	20-DEC-2003 01:48:44	Dark	50.500	34	Gam2Vel	1.7930	23000.	101	9433	No
42	GOM_NL__2PRFIN20031220_015036_000000462022_00361_09433_0177.N1	20-DEC-2003 01:50:36	Dark	46.000	2	Alp Car	-0.73600	7000.0	92	9433	No















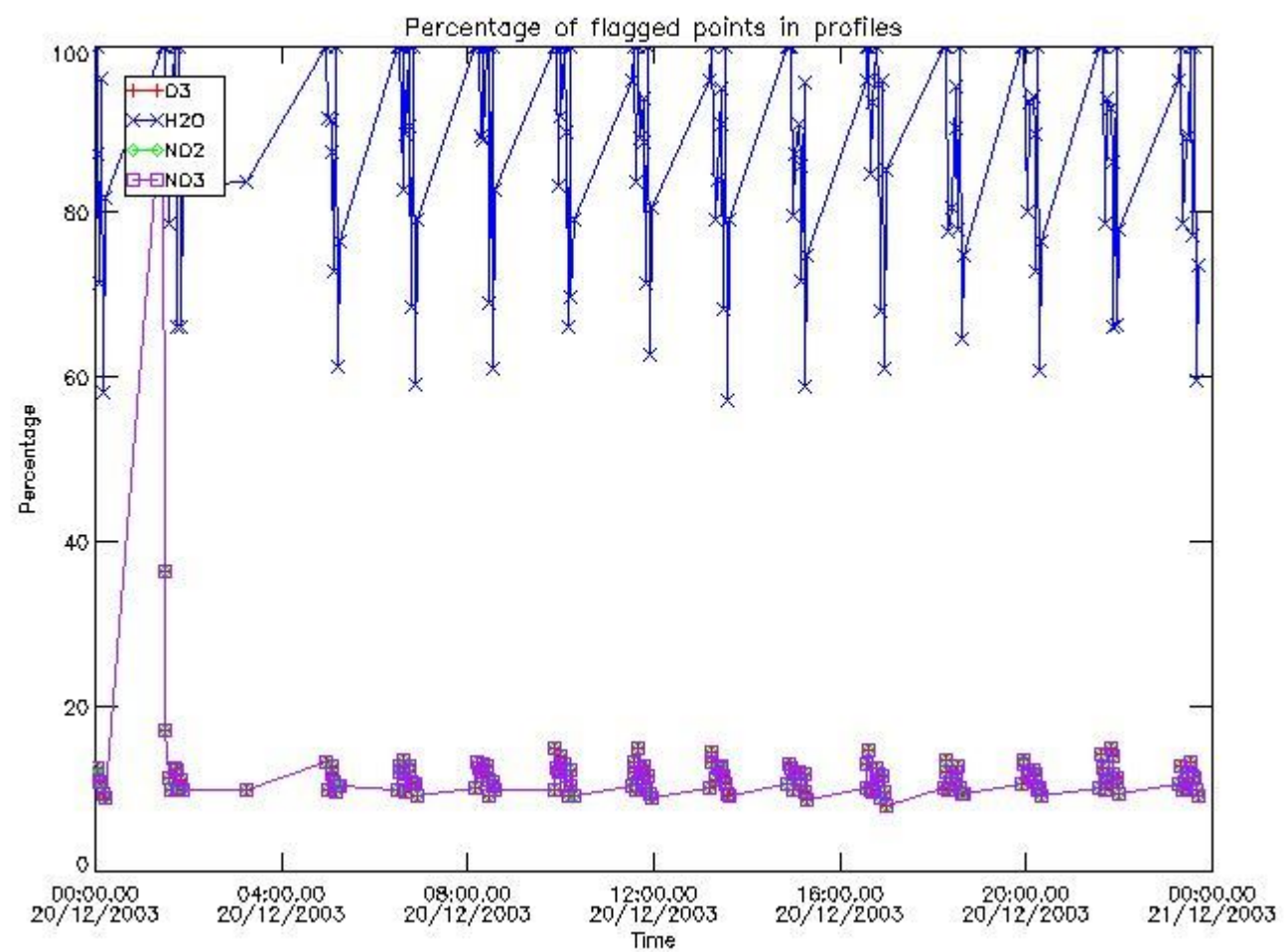


456	GOM_NL__2PRFIN20031220_223305_000000382022_00373_09445_0280.N1	20-DEC-2003 22:33:05	Bright	37.500	110	37Del Cas	2.6780	8900.0	75	9445	No
457	GOM_NL__2PRFIN20031220_223926_000000382022_00373_09445_0281.N1	20-DEC-2003 22:39:26	Bright	38.000	49	1Alp UMi	1.9900	6300.0	76	9445	No
458	GOM_NL__2PRFIN20031220_224407_000000392022_00373_09445_0282.N1	20-DEC-2003 22:44:07	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	9445	No
459	GOM_NL__2PRFIN20031220_224732_000000382022_00373_09445_0283.N1	20-DEC-2003 22:47:32	Bright	37.500	119	14Eta Dra	2.7270	4700.0	75	9445	No
460	GOM_NL__2PRFIN20031220_224915_000000422022_00373_09445_0284.N1	20-DEC-2003 22:49:15	Bright	41.500	55	79Zet UMa	2.0600	10200.	83	9445	No
461	GOM_NL__2PRFIN20031220_225116_000000402022_00373_09445_0285.N1	20-DEC-2003 22:51:16	Bright	40.000	39	85Eta UMa	1.8540	24000.	80	9445	No
462	GOM_NL__2PRFIN20031220_225447_000000382022_00373_09445_0286.N1	20-DEC-2003 22:54:47	Bright	38.000	180	27Gam Boo	3.0400	8000.0	76	9445	No
463	GOM_NL__2PRFIN20031220_225806_000000392022_00373_09445_0287.N1	20-DEC-2003 22:58:06	Bright	38.500	83		2.3780	11000.	77	9445	No
464	GOM_NL__2PRFIN20031220_230135_000000452022_00373_09445_0288.N1	20-DEC-2003 23:01:35	Bright	44.500	111	8Eta Boo	2.6800	6000.0	89	9445	No
465	GOM_NL__2PRFIN20031220_230313_000000352022_00373_09445_0289.N1	20-DEC-2003 23:03:13	Bright	35.000	102	24Alp Ser	2.6000	4250.0	70	9445	No
466	GOM_NL__2PRFIN20031220_230600_000000632022_00373_09445_0290.N1	20-DEC-2003 23:06:00	Bright	63.000	138	47Eps Vir	2.8280	4700.0	126	9445	No
467	GOM_NL__2PRFIN20031220_231018_000000532022_00373_09445_0291.N1	20-DEC-2003 23:10:18	Bright	53.000	122	9Alp2Lib	2.7470	9700.0	106	9445	No
468	GOM_NL__2PRFIN20031220_231201_000000572022_00373_09445_0292.N1	20-DEC-2003 23:12:01	Tw_i_and_stray	57.000	15	67Alp Vir	0.97600	28000.	114	9445	No
469	GOM_NL__2PRFIN20031220_231532_000000492022_00373_09445_0293.N1	20-DEC-2003 23:15:32	Dark	48.500	169	46Gam Hya	2.9910	4700.0	97	9445	No
470	GOM_NL__2PRFIN20031220_231846_000000402022_00373_09445_0294.N1	20-DEC-2003 23:18:46	Dark	40.000	78	Alp Lup	2.3040	28000.	80	9445	No
471	GOM_NL__2PRFIN20031220_232216_000000522022_00373_09445_0295.N1	20-DEC-2003 23:22:16	Dark	52.000	4	Alp1Cen	-0.010000	5800.0	104	9445	No
472	GOM_NL__2PRFIN20031220_232528_000000512022_00374_09446_0298.N1	20-DEC-2003 23:25:28	Dark	50.500	12	Alp1Cru	0.77500	30000.	101	9446	No
473	GOM_NL__2PRFIN20031220_233027_000000422022_00374_09446_0299.N1	20-DEC-2003 23:30:27	Dark	42.000	159	Ups Car	2.9200	7200.0	84	9446	No
474	GOM_NL__2PRFIN20031220_233156_000000432022_00374_09446_0300.N1	20-DEC-2003 23:31:56	Dark	42.500	71	lot Car	2.2460	7700.0	85	9446	No
475	GOM_NL__2PRFIN20031220_233345_000000442022_00374_09446_0301.N1	20-DEC-2003 23:33:45	Dark	44.000	41	Eps Car	1.8600	4100.0	88	9446	No
476	GOM_NL__2PRFIN20031220_233639_000000502022_00374_09446_0302.N1	20-DEC-2003 23:36:39	Dark	49.500	34	Gam2Vel	1.7930	23000.	99	9446	No
477	GOM_NL__2PRFIN20031220_233827_000000512022_00374_09446_0303.N1	20-DEC-2003 23:38:27	Dark	51.000	2	Alp Car	-0.73600	7000.0	102	9446	No
478	GOM_NL__2PRFIN20031220_234119_000000552022_00374_09446_0304.N1	20-DEC-2003 23:41:19	Dark	55.000	117	Pi Pup	2.7060	3800.0	110	9446	No
479	GOM_NL__2PRFIN20031220_234428_000000572022_00374_09446_0305.N1	20-DEC-2003 23:44:28	Straylight	57.000	23	21Eps CMa	1.5020	26000.	114	9446	No
480	GOM_NL__2PRFIN20031220_234609_000000542022_00374_09446_0306.N1	20-DEC-2003 23:46:09	Straylight	54.000	179	24Omi2CMa	3.0320	24000.	108	9446	No
481	GOM_NL__2PRFIN20031220_234847_000000512022_00374_09446_0307.N1	20-DEC-2003 23:48:47	Straylight	50.500	47	2Bet CMa	1.9760	28000.	101	9446	No
482	GOM_NL__2PRFIN20031220_235118_000000442022_00374_09446_0308.N1	20-DEC-2003 23:51:18	Straylight	44.000	165	34Gam Eri	2.9500	3200.0	88	9446	No
483	GOM_NL__2PRFIN20031220_235252_000000442022_00374_09446_0309.N1	20-DEC-2003 23:52:52	Straylight	44.000	125	44lot Ori	2.7700	30000.	88	9446	No
484	GOM_NL__2PRFIN20031220_235420_000000492022_00374_09446_0310.N1	20-DEC-2003 23:54:20	Straylight	48.500	30	46Eps Ori	1.6940	30000.	97	9446	No
485	GOM_NL__2PRFIN20031220_235716_000000602022_00374_09446_0311.N1	20-DEC-2003 23:57:16	Tw_i_and_stray	60.000	14	58Alp Ori	0.87000	3000.0	120	9446	No
486	GOM_NL__2PRFIN20031220_235928_000000502022_00374_09446_0312.N1	20-DEC-2003 23:59:28	Tw_i_and_stray	49.500	13	87Alp Tau	0.86700	3800.0	99	9446	No

### 3. Quality information per product

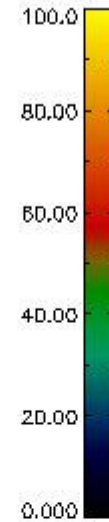
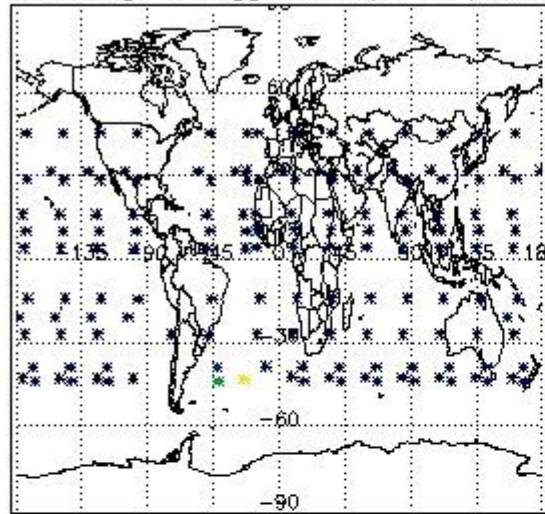
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

#### 3.1 Plot quality information per product (time dependant)

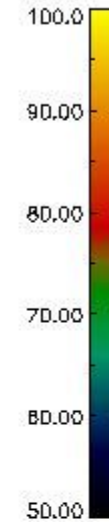
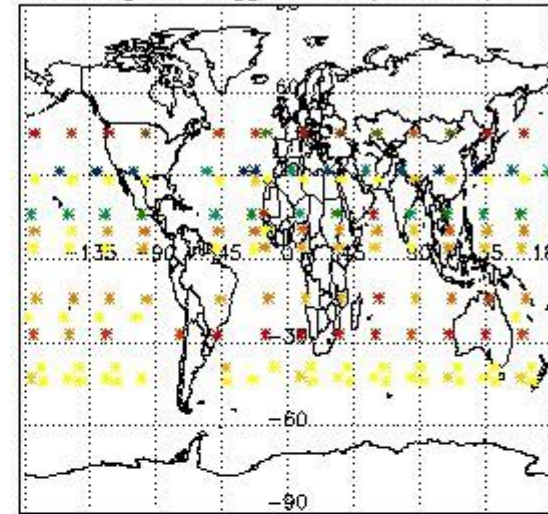


3.2 Plot quality information per product (world map)

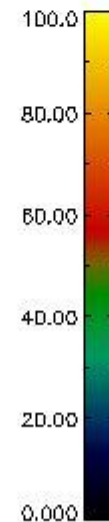
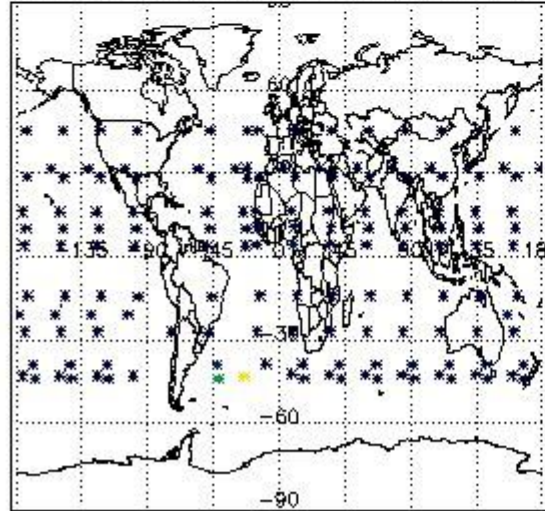
Percentage of flagged data per O3 profile



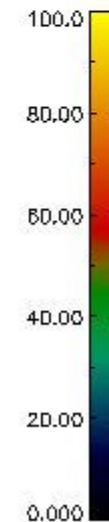
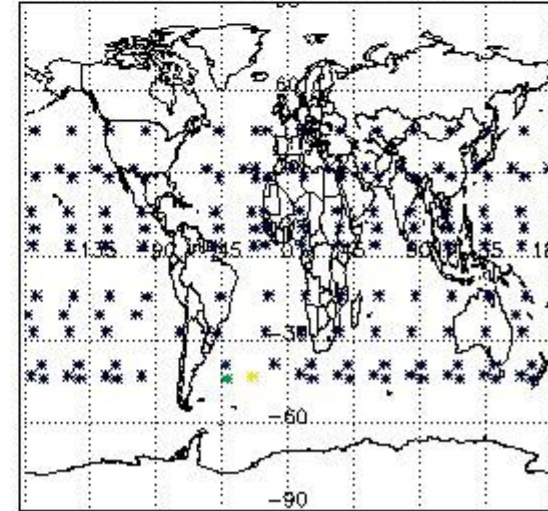
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

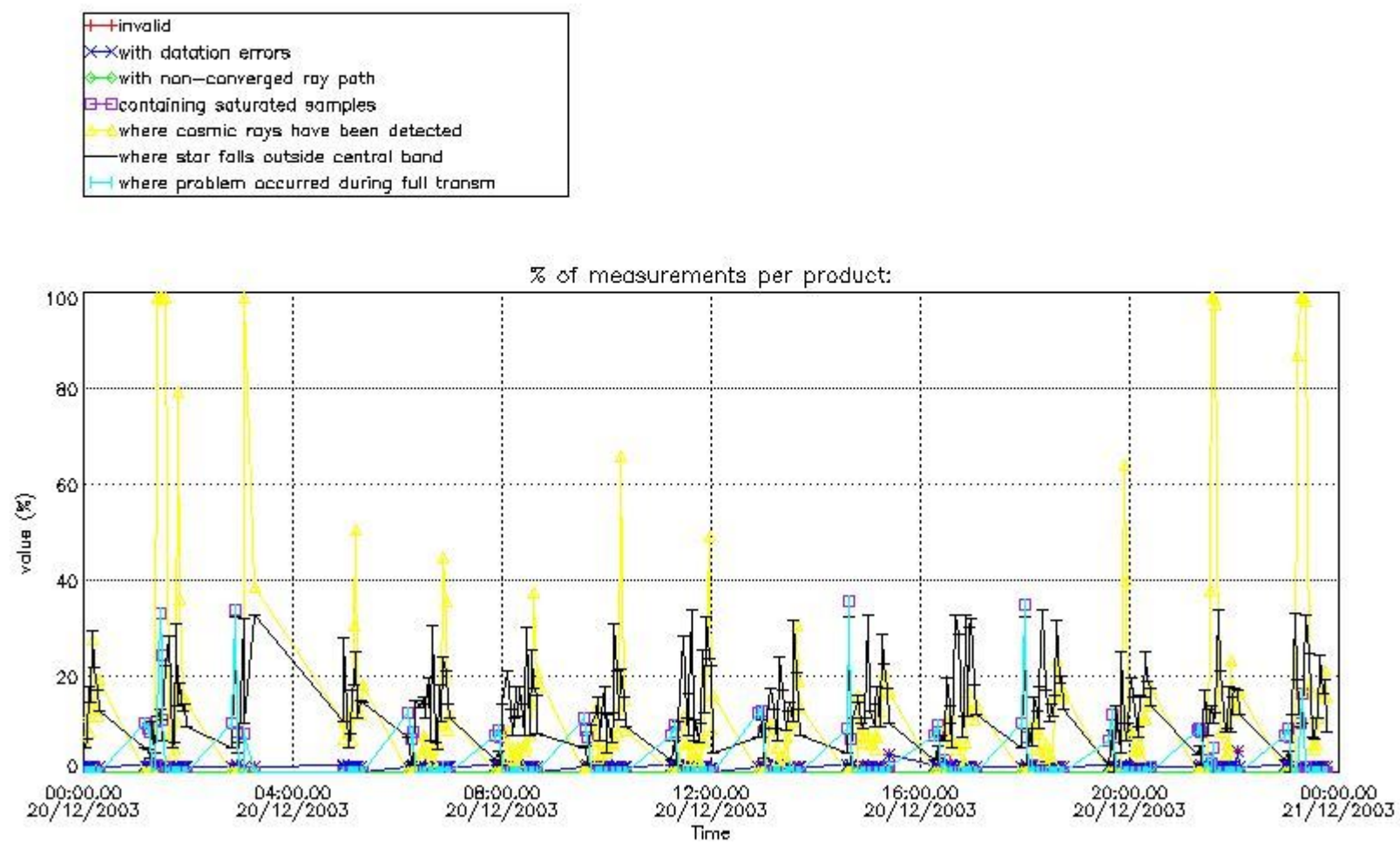


#### 4. Level 1 quality information per product

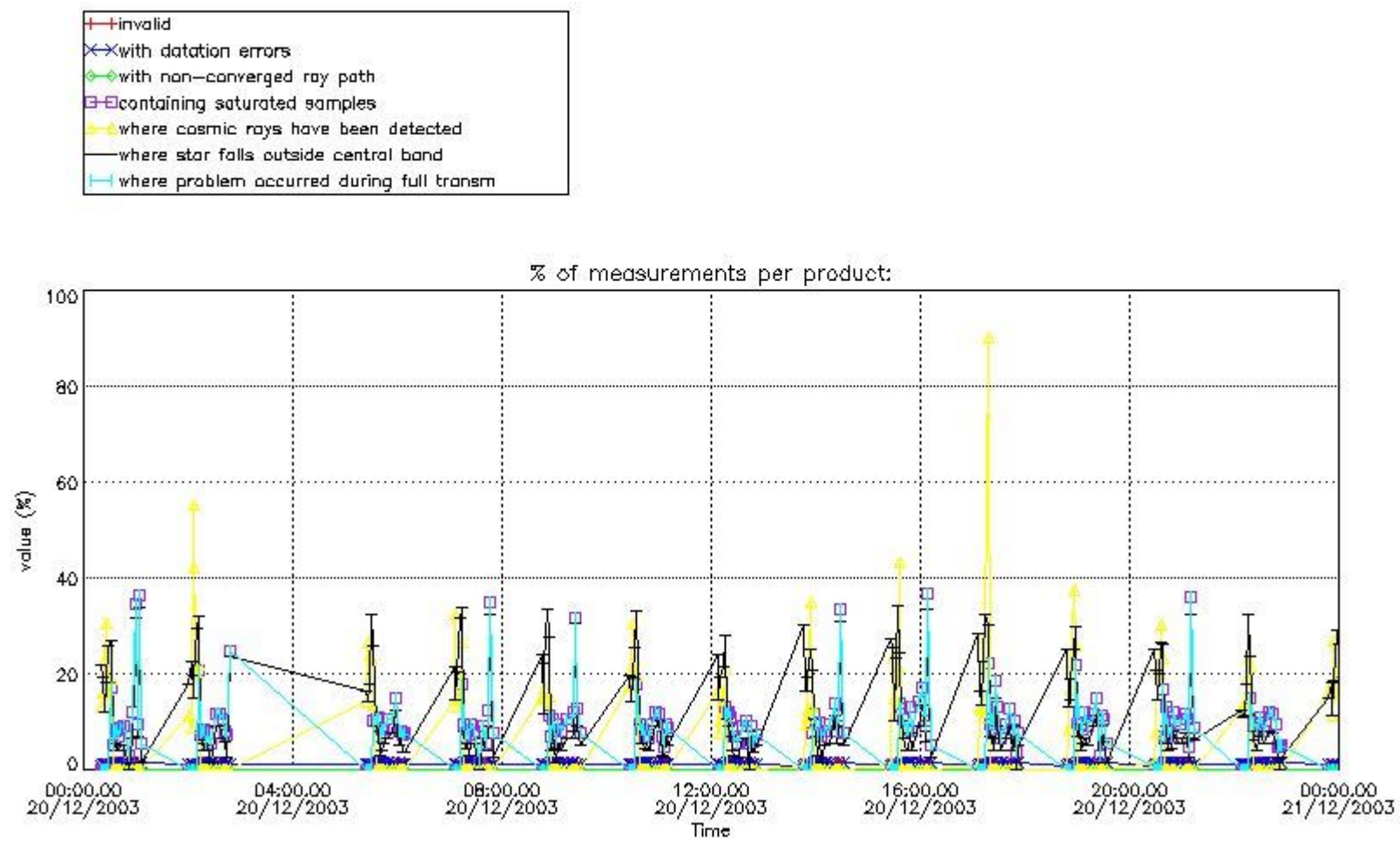
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

##### 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

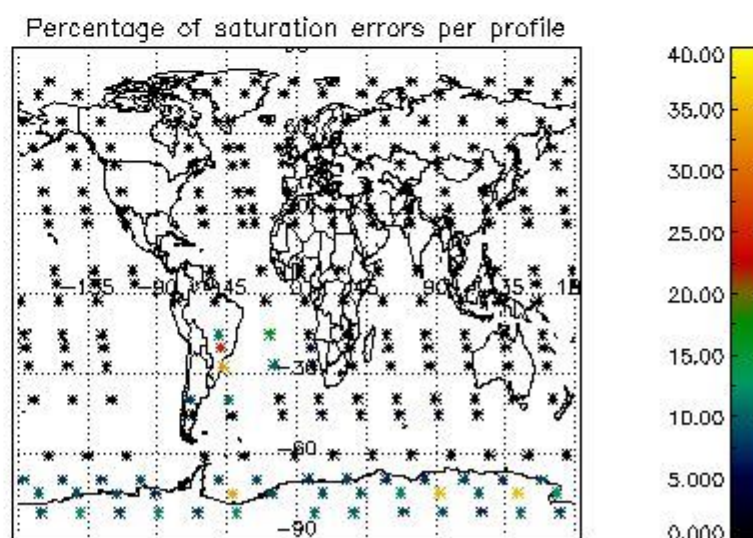
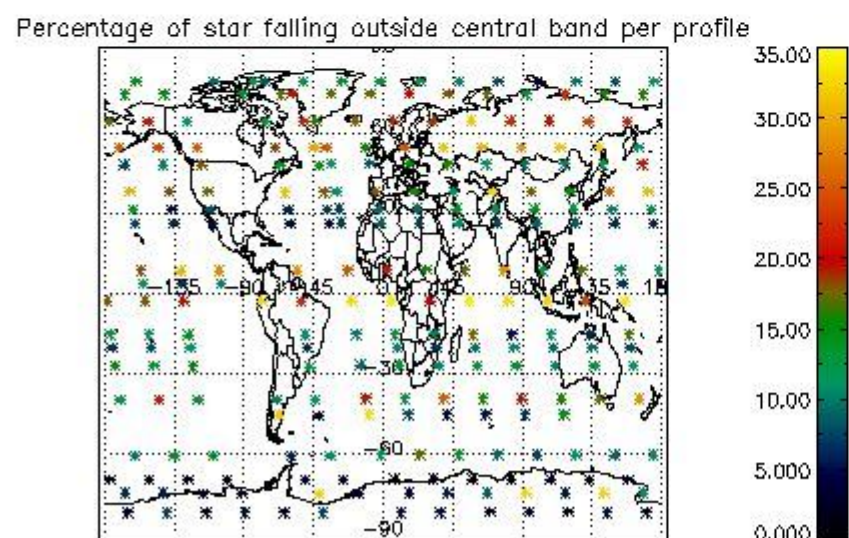
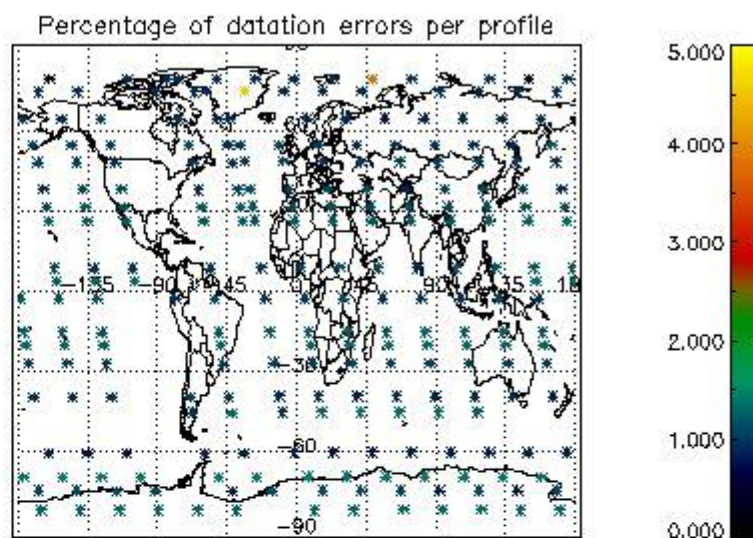
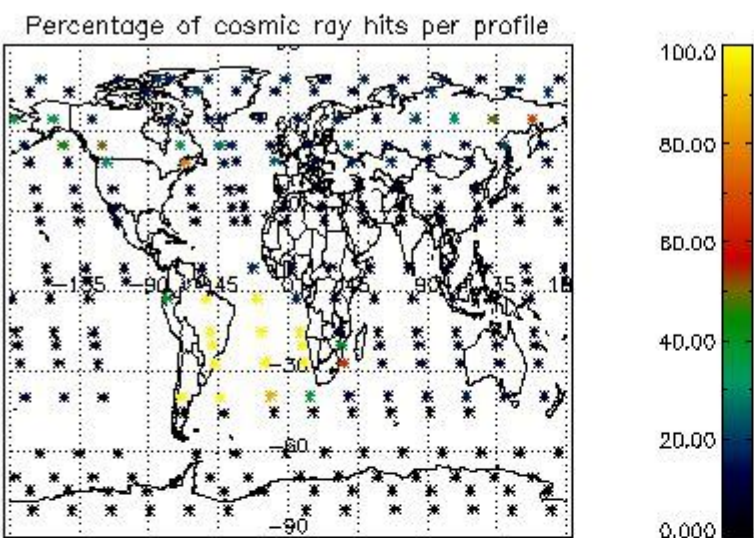


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

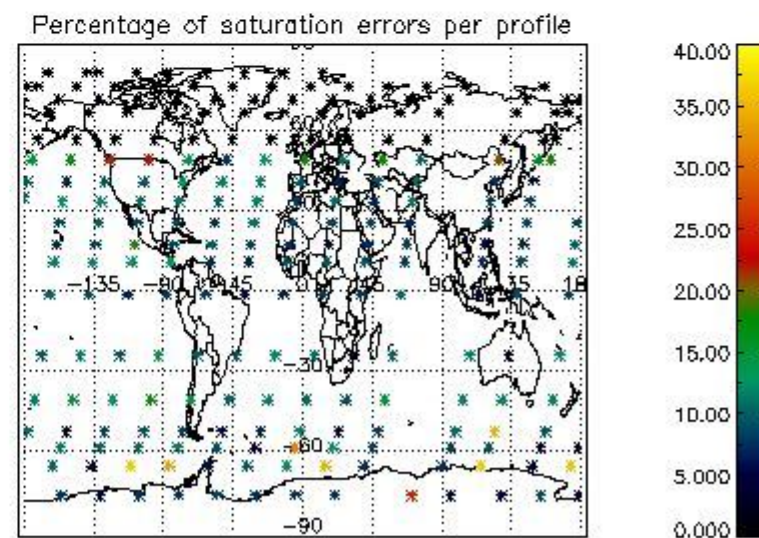
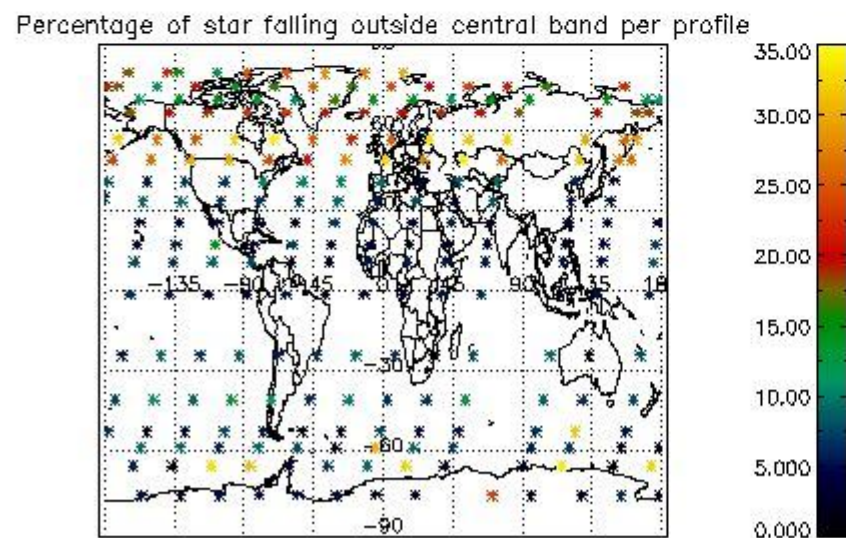
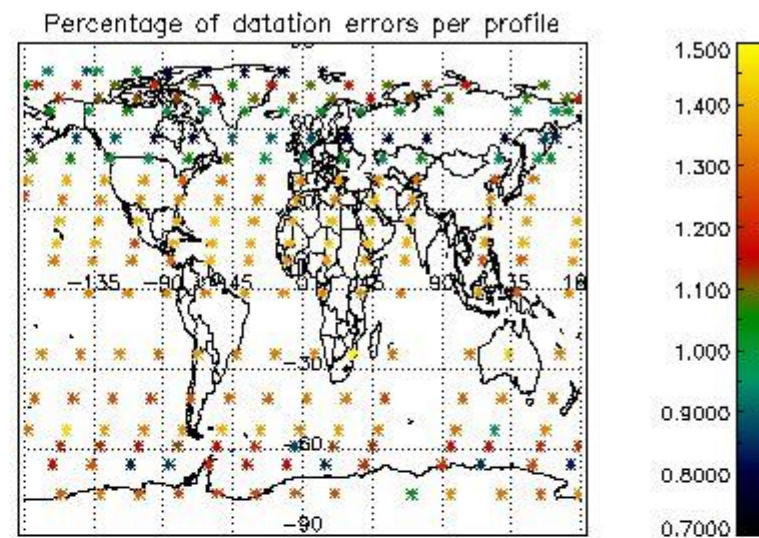
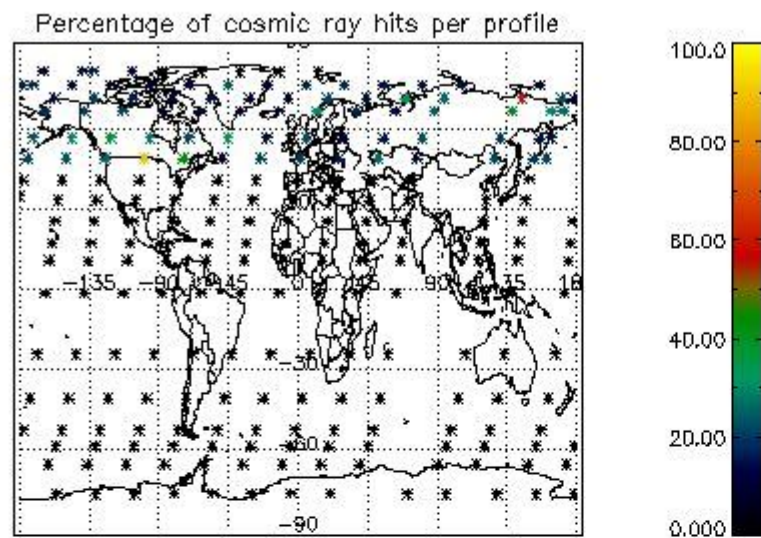


#### 4.2 Plot quality information per product coming from level 1b processing (world map)

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



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.

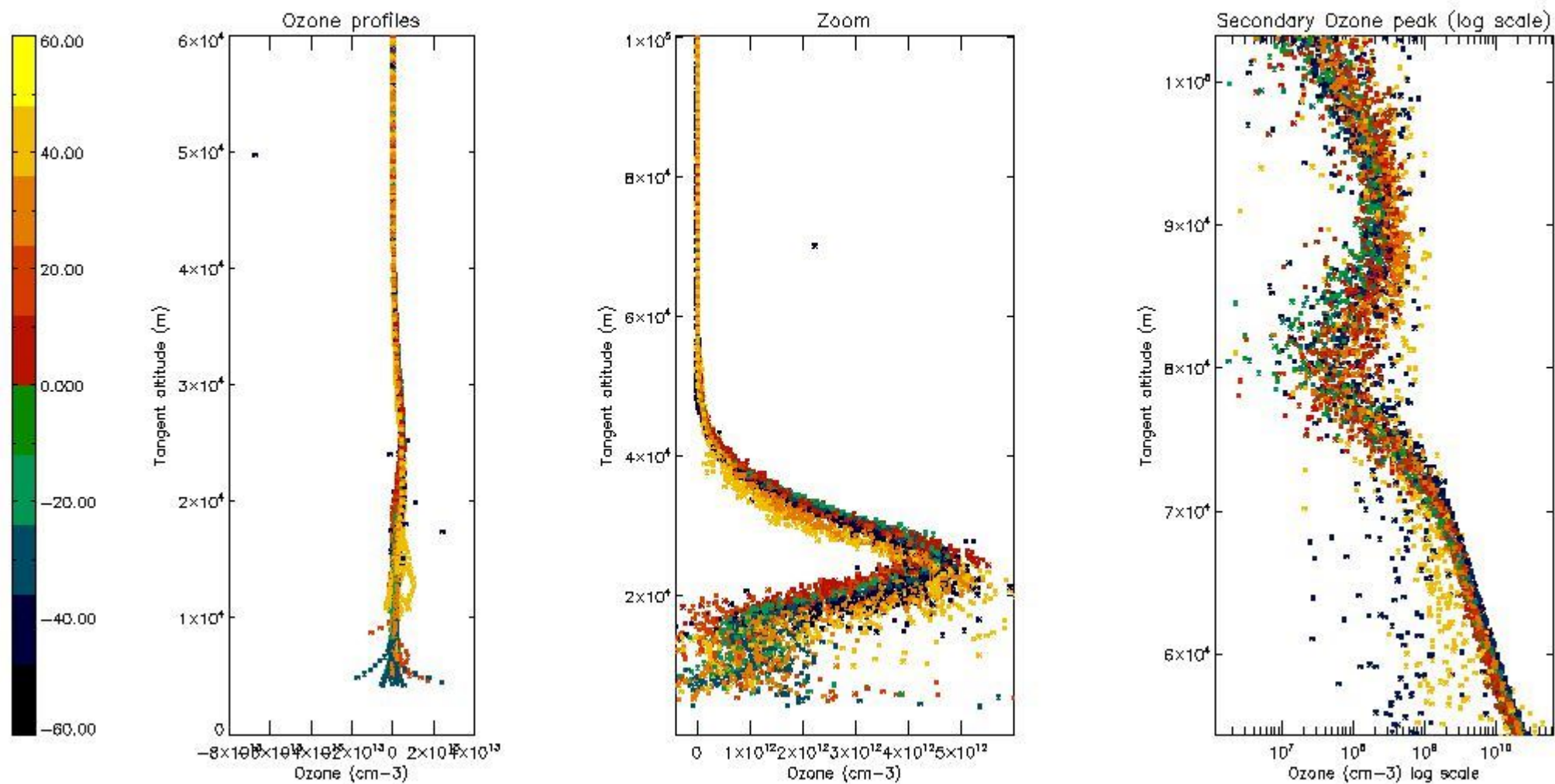
Criteria	% of total production
All STD	32
STD < 20	17



STD < 10	14
STD < 5	9

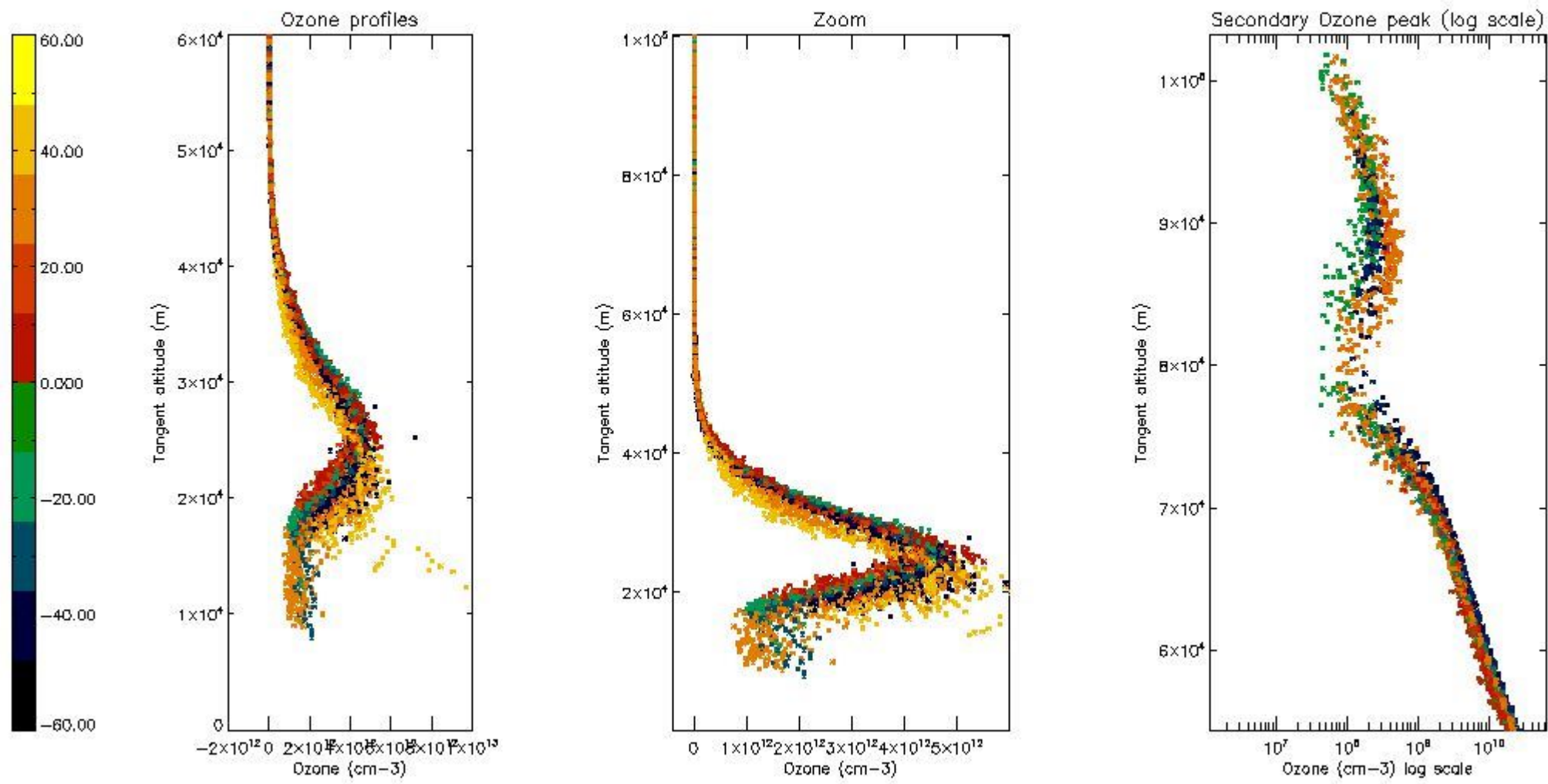
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



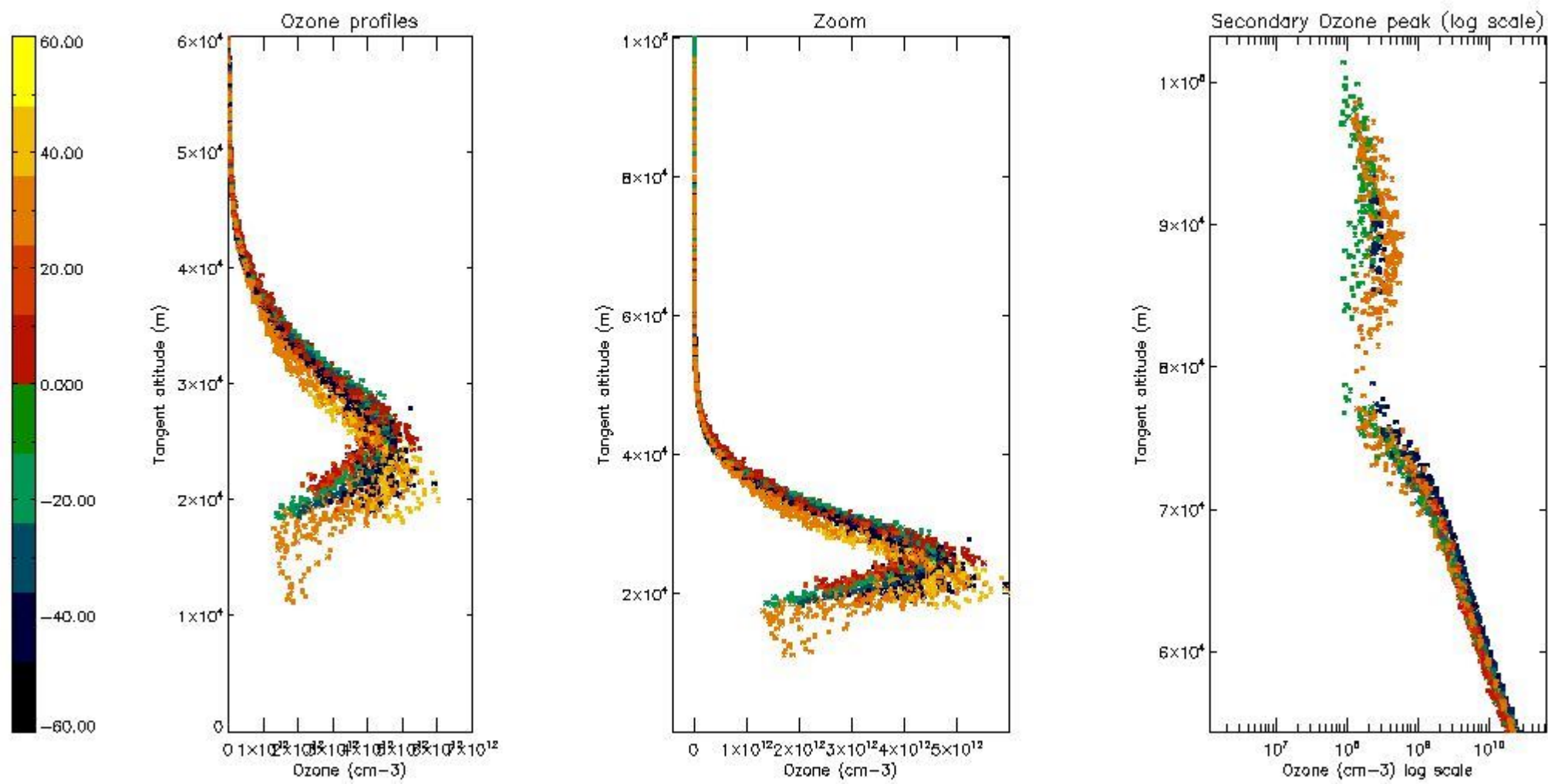
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



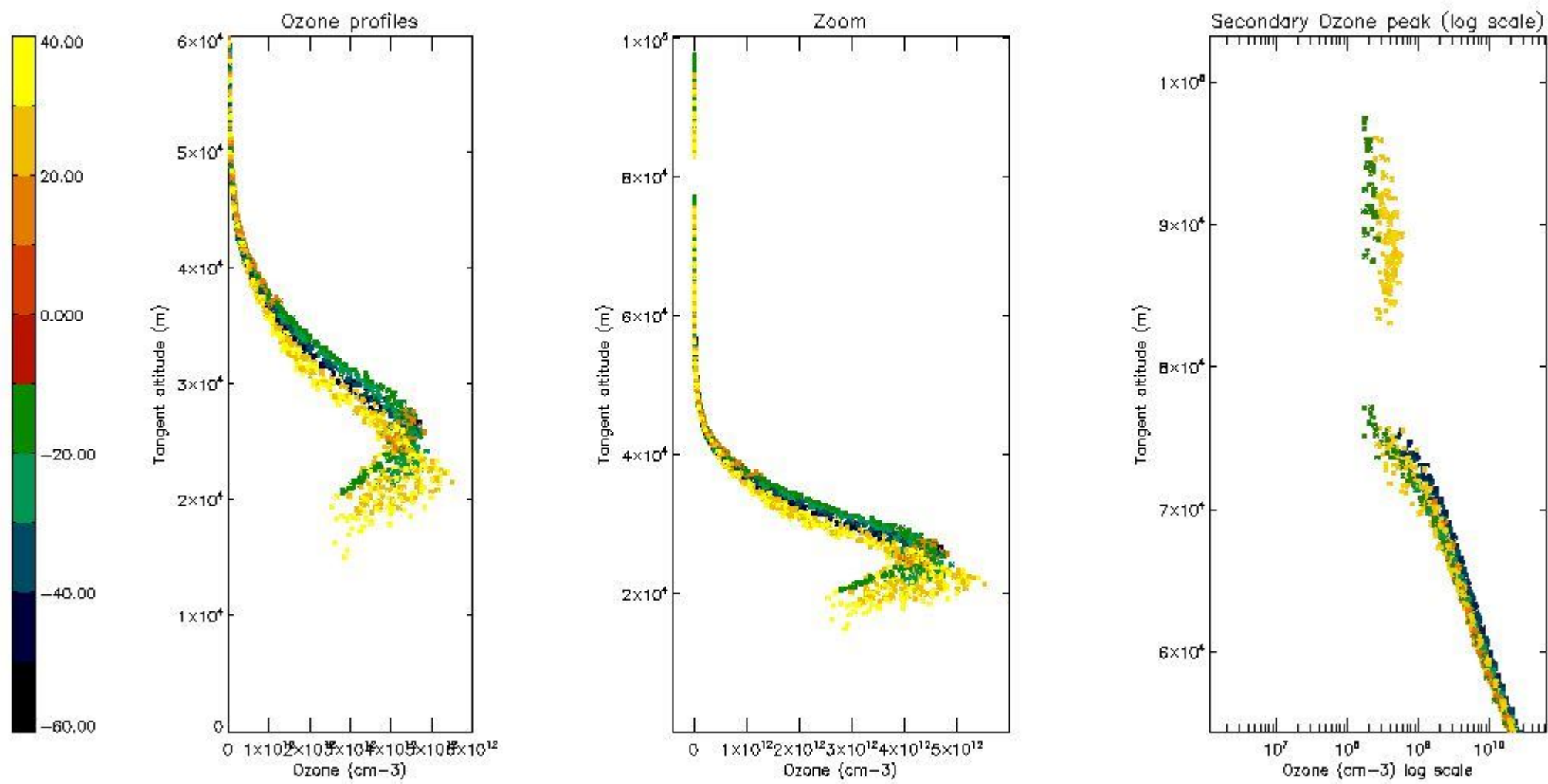
*5.4 Plot ozone profiles where STD < 10% (dark without errors)*

The colorbar represents the latitude.



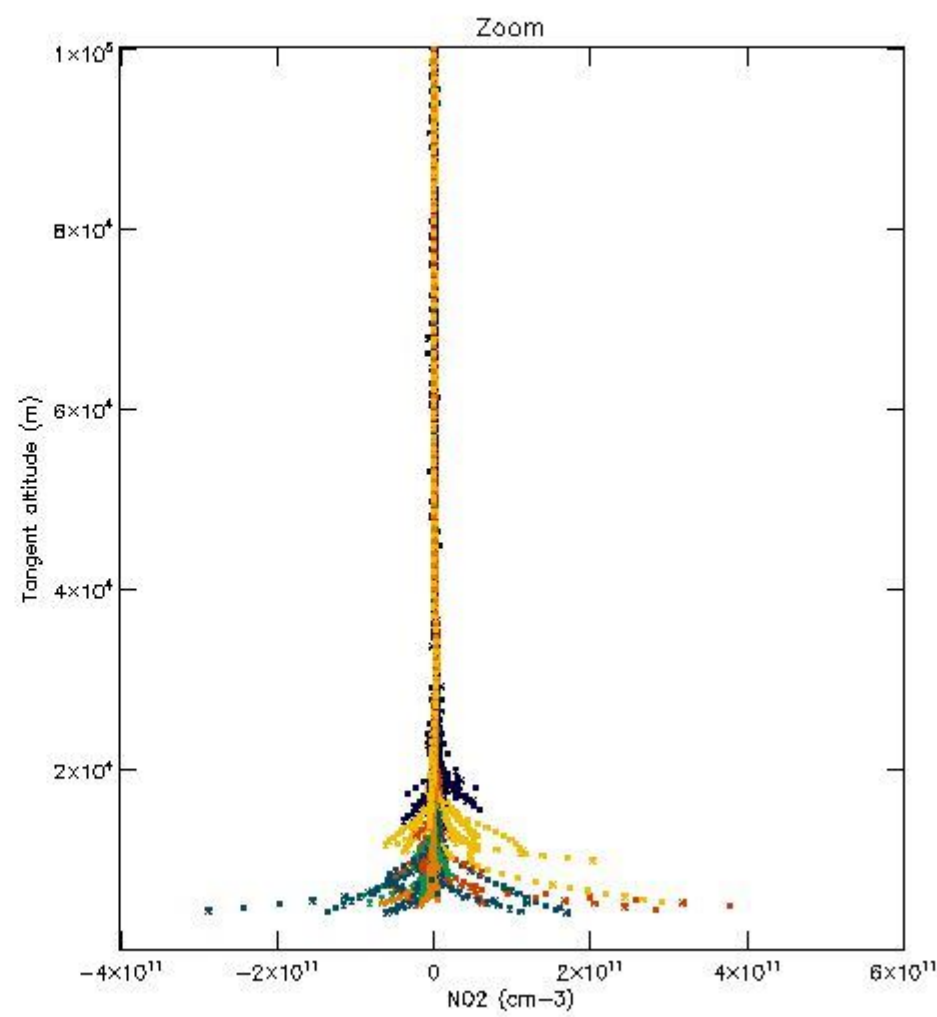
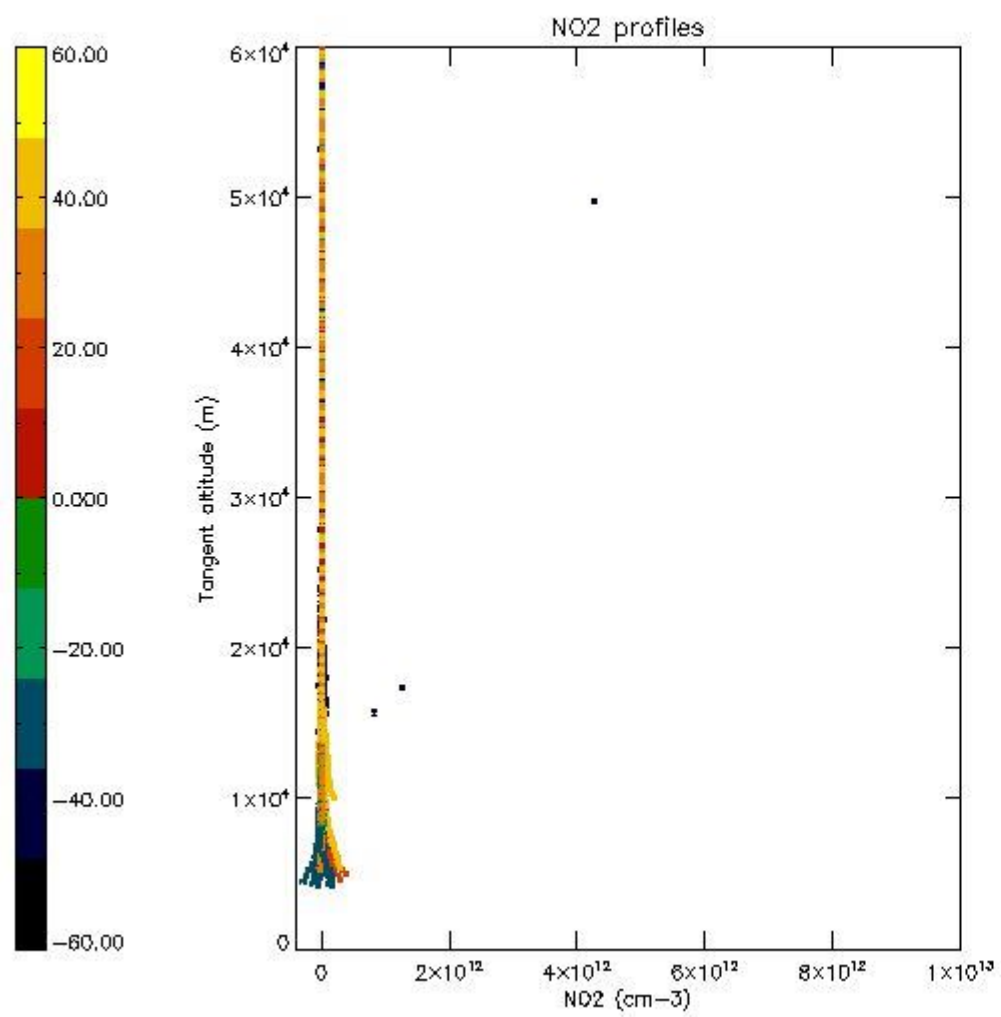
*5.5 Plot ozone profiles where STD < 5% (dark without errors)*

The colorbar represents the latitude.



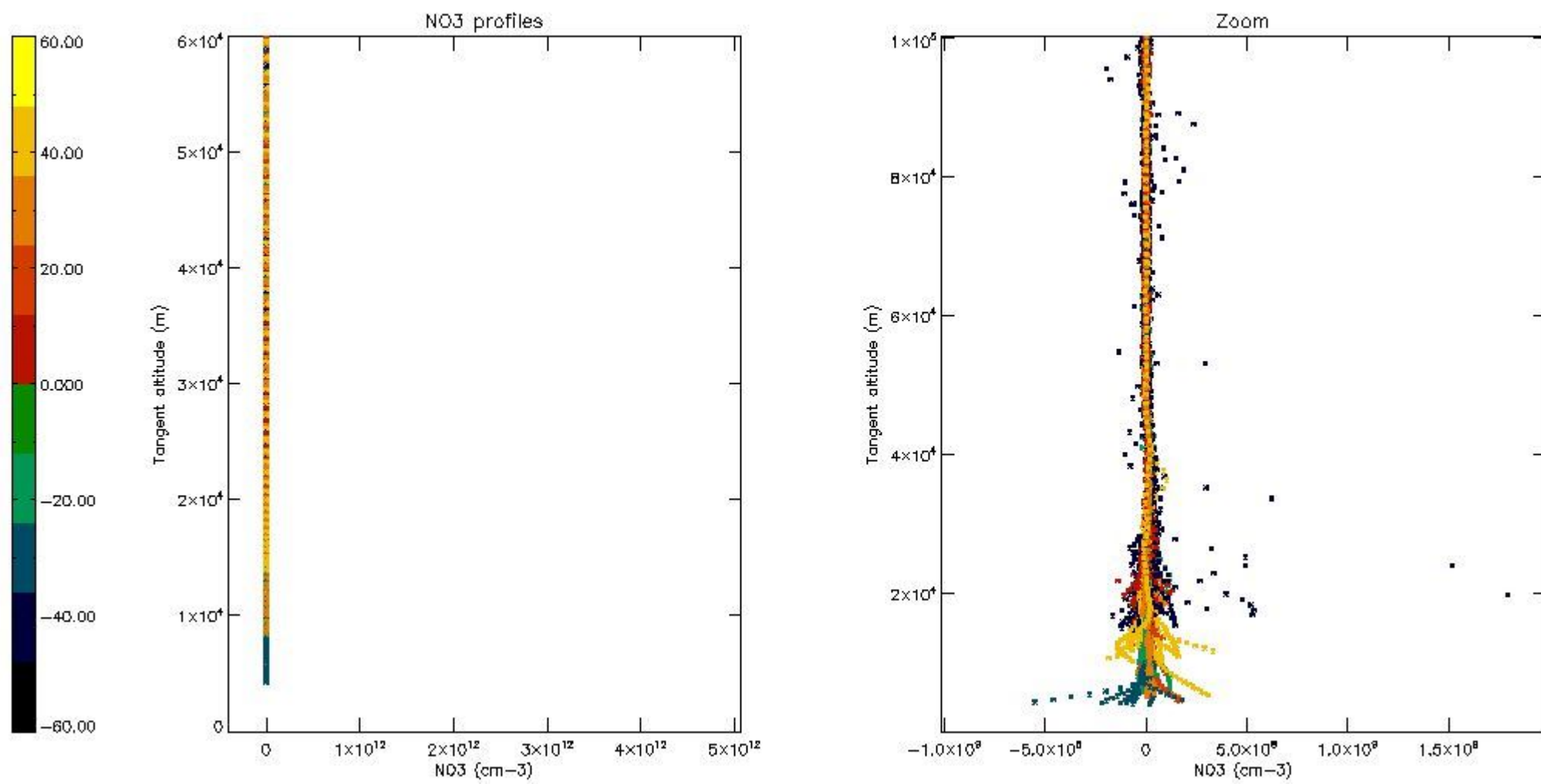
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



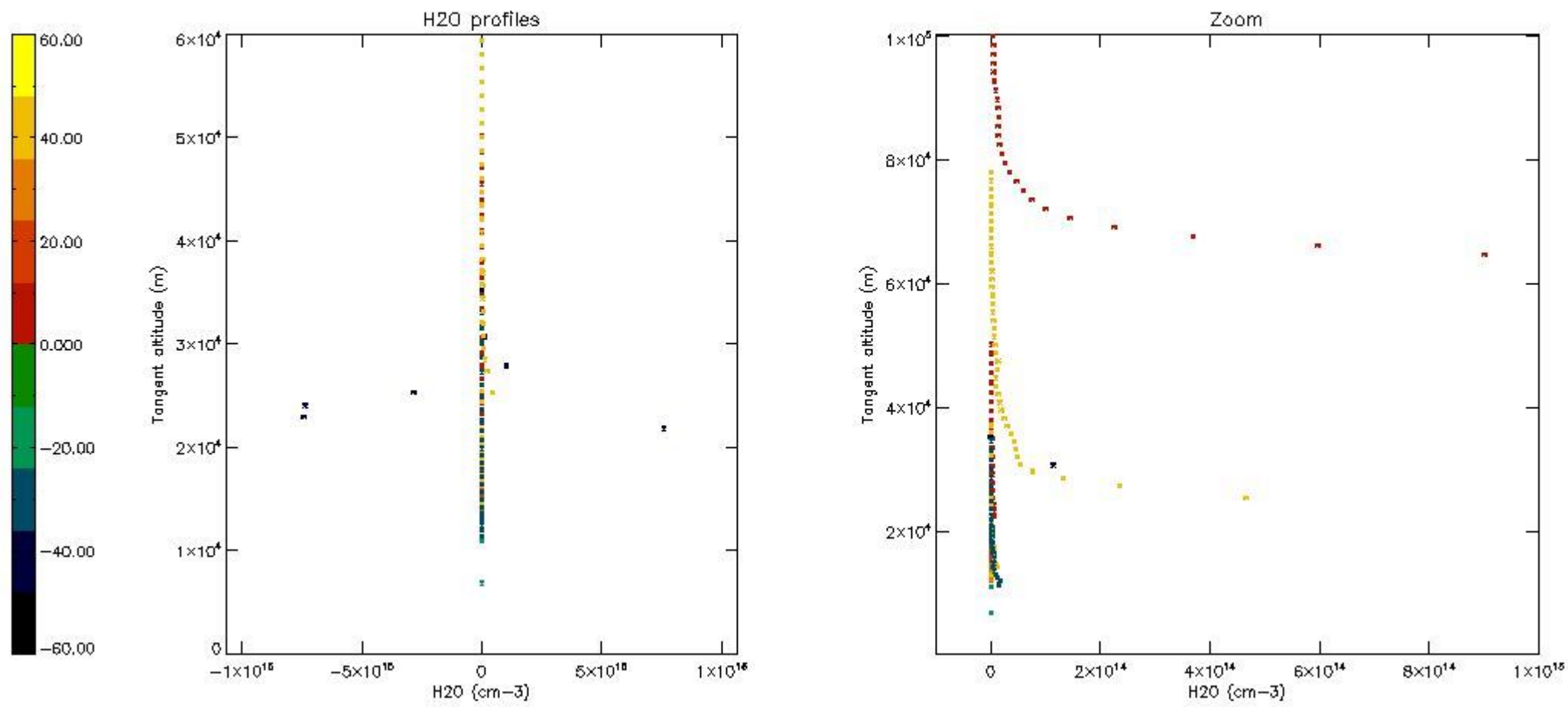
*5.7 Plot NO3 profiles for all STD (dark without errors)*

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	20-DEC-2003 00:01:56
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	20-DEC-2003 00:01:56
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	20-DEC-2003 00:01:56

# GOMOS Level 2 Daily Report

## SUMMARY

### [1. General Info](#)

### [2. Summary of processed GOM\\_NL\\_2P products](#)

### [3. Level 2 Quality information per product](#)

#### [3.1 Plot of level 2 quality information per product \(time dependant\)](#)

#### [3.2 Plot of level 2 quality information per product \(world map\)](#)

### [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	20APR2013 02:19:09
Data source version	GOMOS/6.01
Start time of products	20-12-2003 (20DEC2003 00:00:00)
Stop time of products	21-12-2003 (21DEC2003 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	486
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__2PRFIN20031220_000156_000000412022_00360_09432_0181.N1	20-DEC-2003 00:01:56	Dark	40.500	159	Ups Car	2.9200	7200.0	81	9432	No
2	GOM_NL__2PRFIN20031220_000324_000000432022_00360_09432_0182.N1	20-DEC-2003 00:03:24	Dark	43.000	71	Iot Car	2.2460	7700.0	86	9432	No
3	GOM_NL__2PRFIN20031220_000515_000000482022_00360_09432_0183.N1	20-DEC-2003 00:05:15	Dark	47.500	41	Eps Car	1.8600	4100.0	95	9432	No
4	GOM_NL__2PRFIN20031220_000807_000000522022_00360_09432_0184.N1	20-DEC-2003 00:08:07	Dark	51.500	34	Gam2Vel	1.7930	23000.	103	9432	No
5	GOM_NL__2PRFIN20031220_000959_000000542022_00360_09432_0185.N1	20-DEC-2003 00:09:59	Dark	54.000	2	Alp Car	-0.73600	7000.0	108	9432	No
6	GOM_NL__2PRFIN20031220_001251_000000582022_00360_09432_0186.N1	20-DEC-2003 00:12:51	Dark	57.500	117	Pi Pup	2.7060	3800.0	115	9432	No
7	GOM_NL__2PRFIN20031220_001559_000000562022_00360_09432_0187.N1	20-DEC-2003 00:15:59	Straylight	55.500	23	21Eps CMa	1.5020	26000.	111	9432	No
8	GOM_NL__2PRFIN20031220_001744_000000552022_00360_09432_0188.N1	20-DEC-2003 00:17:44	Straylight	54.500	179	24Omi2CMa	3.0320	24000.	109	9432	No
9	GOM_NL__2PRFIN20031220_002020_000000572022_00360_09432_0189.N1	20-DEC-2003 00:20:20	Straylight	57.000	47	2Bet CMa	1.9760	28000.	114	9432	No
10	GOM_NL__2PRFIN20031220_002250_000000472022_00360_09432_0190.N1	20-DEC-2003 00:22:50	Straylight	47.000	165	34Gam Eri	2.9500	3200.0	94	9432	No
11	GOM_NL__2PRFIN20031220_002428_000000462022_00360_09432_0191.N1	20-DEC-2003 00:24:28	Straylight	46.000	125	44Iot Ori	2.7700	30000.	92	9432	No
12	GOM_NL__2PRFIN20031220_002555_000000532022_00360_09432_0192.N1	20-DEC-2003 00:25:55	Straylight	52.500	30	46Eps Ori	1.6940	30000.	105	9432	No
13	GOM_NL__2PRFIN20031220_002856_000000582022_00360_09432_0193.N1	20-DEC-2003 00:28:56	Twilight	58.000	14	58Alp Ori	0.87000	3000.0	116	9432	No
14	GOM_NL__2PRFIN20031220_003104_000000502022_00360_09432_0194.N1	20-DEC-2003 00:31:04	Twilight	50.000	13	87Alp Tau	0.86700	3800.0	100	9432	No
15	GOM_NL__2PRFIN20031220_003320_000000392022_00360_09432_0195.N1	20-DEC-2003 00:33:20	Bright	38.500	146	25Eta Tau	2.8730	15200.	77	9432	No
16	GOM_NL__2PRFIN20031220_003529_000000372022_00360_09432_0196.N1	20-DEC-2003 00:35:29	Bright	37.000	150	44Zet Per	2.8900	28000.	74	9432	No
17	GOM_NL__2PRFIN20031220_003745_000000372022_00360_09432_0197.N1	20-DEC-2003 00:37:45	Bright	36.500	149	45Eps Per	2.8880	30000.	73	9432	No
18	GOM_NL__2PRFIN20031220_003958_000000362022_00360_09432_0198.N1	20-DEC-2003 00:39:58	Bright	36.000	175	39Del Per	3.0100	19400.	72	9432	No
19	GOM_NL__2PRFIN20031220_004147_000000402022_00360_09432_0199.N1	20-DEC-2003 00:41:47	Bright	39.500	160	23Gam Per	2.9300	4700.0	79	9432	No
20	GOM_NL__2PRFIN20031220_004511_000000392022_00360_09432_0200.N1	20-DEC-2003 00:45:11	Bright	39.000	110	37Del Cas	2.6780	8900.0	78	9432	No
21	GOM_NL__2PRFIN20031220_005138_000000352022_00360_09432_0201.N1	20-DEC-2003 00:51:38	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	9432	No
22	GOM_NL__2PRFIN20031220_005620_000000382022_00360_09432_0202.N1	20-DEC-2003 00:56:20	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	9432	No
23	GOM_NL__2PRFIN20031220_005942_000000522022_00360_09432_0203.N1	20-DEC-2003 00:59:42	Bright	52.000	119	14Eta Dra	2.7270	4700.0	104	9432	No
24	GOM_NL__2PRFIN20031220_010130_000000432022_00360_09432_0204.N1	20-DEC-2003 01:01:30	Bright	43.000	55	79Zet UMa	2.0600	10200.	86	9432	No
25	GOM_NL__2PRFIN20031220_010330_000000592022_00360_09432_0205.N1	20-DEC-2003 01:03:30	Bright	59.000	39	85Eta UMa	1.8540	24000.	118	9432	No
26	GOM_NL__2PRFIN20031220_010659_000000382022_00360_09432_0206.N1	20-DEC-2003 01:06:59	Bright	37.500	180	27Gam Boo	3.0400	8000.0	75	9432	No
27	GOM_NL__2PRFIN20031220_011016_000000392022_00360_09432_0207.N1	20-DEC-2003 01:10:16	Bright	39.000	83		2.3780	11000.	78	9432	No
28	GOM_NL__2PRFIN20031220_011343_000000442022_00360_09432_0208.N1	20-DEC-2003 01:13:43	Bright	44.000	111	8Eta Boo	2.6800	6000.0	88	9432	No
29	GOM_NL__2PRFIN20031220_011523_000000362022_00360_09432_0209.N1	20-DEC-2003 01:15:23	Bright	35.500	102	24Alp Ser	2.6000	4250.0	71	9432	No
30	GOM_NL__2PRFIN20031220_011802_000000612022_00360_09432_0210.N1	20-DEC-2003 01:18:02	Bright	61.000	138	47Eps Vir	2.8280	4700.0	122	9432	No
31	GOM_NL__2PRFIN20031220_012225_000000382022_00360_09432_0211.N1	20-DEC-2003 01:22:25	Bright	38.000	122	9Alp2Lib	2.7470	9700.0	76	9432	No
32	GOM_NL__2PRFIN20031220_012402_000000522022_00360_09432_0212.N1	20-DEC-2003 01:24:02	Twilight	51.500	15	67Alp Vir	0.97600	28000.	103	9432	No
33	GOM_NL__2PRFIN20031220_012733_000000502022_00360_09432_0213.N1	20-DEC-2003 01:27:33	Dark	50.000	169	46Gam Hya	2.9910	4700.0	100	9432	No
34	GOM_NL__2PRFIN20031220_012931_000000392022_00360_09432_0214.N1	20-DEC-2003 01:29:31	Dark	39.000	109	Bet Lup	2.6770	26000.	78	9432	No
35	GOM_NL__2PRFIN20031220_013054_000000422022_00360_09432_0215.N1	20-DEC-2003 01:30:54	Dark	41.500	78	Alp Lup	2.3040	28000.	83	9432	No
36	GOM_NL__2PRFIN20031220_013426_000000452022_00360_09432_0216.N1	20-DEC-2003 01:34:26	Dark	45.000	4	Alp1Cen	-0.010000	5800.0	90	9432	No
37	GOM_NL__2PRFIN20031220_013736_000000512022_00361_09433_0172.N1	20-DEC-2003 01:37:36	Dark	51.000	12	Alp1Cru	0.77500	30000.	102	9433	No
38	GOM_NL__2PRFIN20031220_014233_000000412022_00361_09433_0173.N1	20-DEC-2003 01:42:33	Dark	40.500	159	Ups Car	2.9200	7200.0	81	9433	No
39	GOM_NL__2PRFIN20031220_014401_000000422022_00361_09433_0174.N1	20-DEC-2003 01:44:01	Dark	41.500	71	Iot Car	2.2460	7700.0	83	9433	No
40	GOM_NL__2PRFIN20031220_014551_000000572022_00361_09433_0175.N1	20-DEC-2003 01:45:51	Dark	56.500	41	Eps Car	1.8600	4100.0	113	9433	No
41	GOM_NL__2PRFIN20031220_014844_000000512022_00361_09433_0176.N1	20-DEC-2003 01:48:44	Dark	50.500	34	Gam2Vel	1.7930	23000.	101	9433	No
42	GOM_NL__2PRFIN20031220_015036_000000462022_00361_09433_0177.N1	20-DEC-2003 01:50:36	Dark	46.000	2	Alp Car	-0.73600	7000.0	92	9433	No















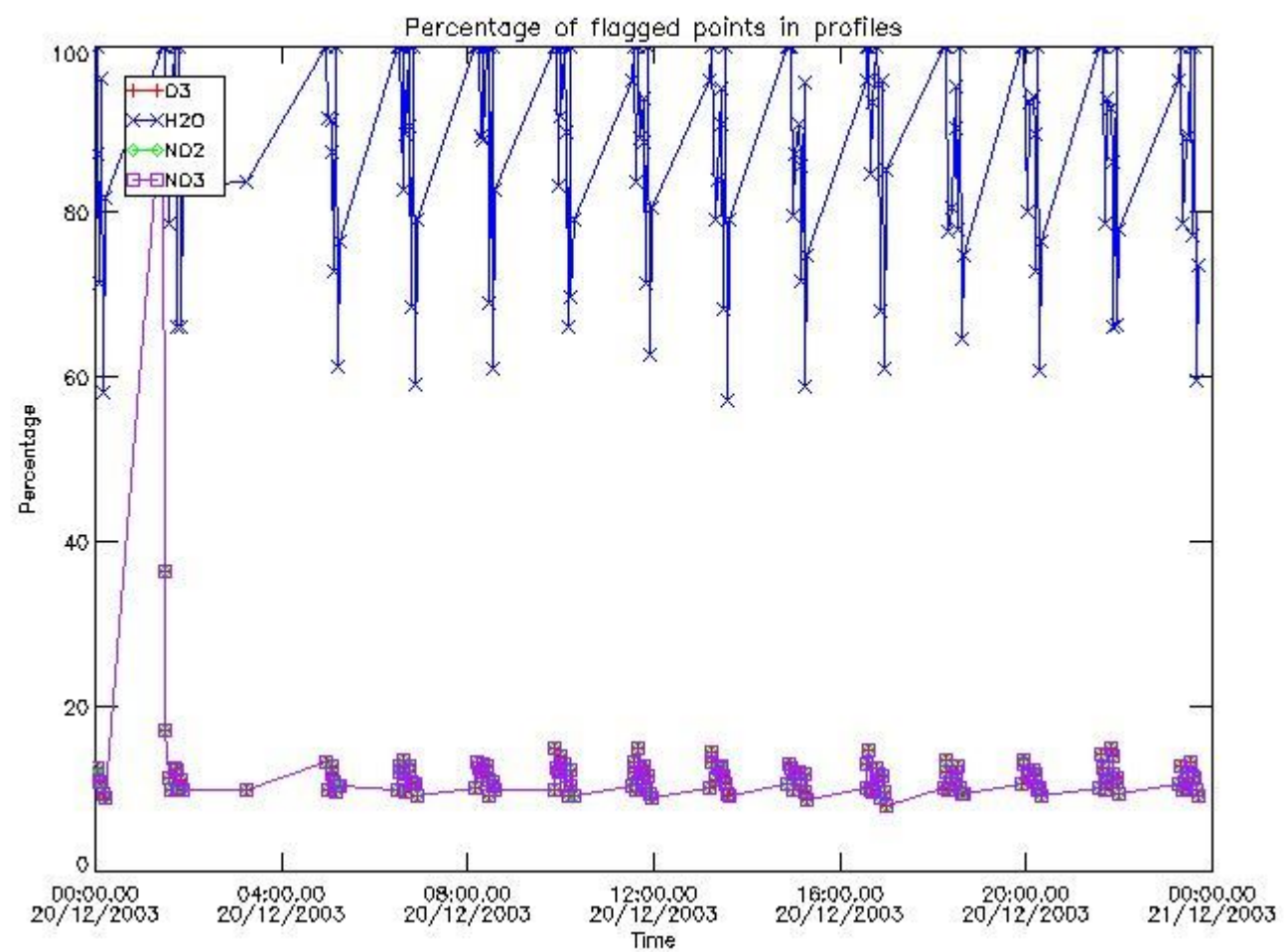


456	GOM_NL__2PRFIN20031220_223305_000000382022_00373_09445_0280.N1	20-DEC-2003 22:33:05	Bright	37.500	110	37Del Cas	2.6780	8900.0	75	9445	No
457	GOM_NL__2PRFIN20031220_223926_000000382022_00373_09445_0281.N1	20-DEC-2003 22:39:26	Bright	38.000	49	1Alp UMi	1.9900	6300.0	76	9445	No
458	GOM_NL__2PRFIN20031220_224407_000000392022_00373_09445_0282.N1	20-DEC-2003 22:44:07	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	9445	No
459	GOM_NL__2PRFIN20031220_224732_000000382022_00373_09445_0283.N1	20-DEC-2003 22:47:32	Bright	37.500	119	14Eta Dra	2.7270	4700.0	75	9445	No
460	GOM_NL__2PRFIN20031220_224915_000000422022_00373_09445_0284.N1	20-DEC-2003 22:49:15	Bright	41.500	55	79Zet UMa	2.0600	10200.	83	9445	No
461	GOM_NL__2PRFIN20031220_225116_000000402022_00373_09445_0285.N1	20-DEC-2003 22:51:16	Bright	40.000	39	85Eta UMa	1.8540	24000.	80	9445	No
462	GOM_NL__2PRFIN20031220_225447_000000382022_00373_09445_0286.N1	20-DEC-2003 22:54:47	Bright	38.000	180	27Gam Boo	3.0400	8000.0	76	9445	No
463	GOM_NL__2PRFIN20031220_225806_000000392022_00373_09445_0287.N1	20-DEC-2003 22:58:06	Bright	38.500	83		2.3780	11000.	77	9445	No
464	GOM_NL__2PRFIN20031220_230135_000000452022_00373_09445_0288.N1	20-DEC-2003 23:01:35	Bright	44.500	111	8Eta Boo	2.6800	6000.0	89	9445	No
465	GOM_NL__2PRFIN20031220_230313_000000352022_00373_09445_0289.N1	20-DEC-2003 23:03:13	Bright	35.000	102	24Alp Ser	2.6000	4250.0	70	9445	No
466	GOM_NL__2PRFIN20031220_230600_000000632022_00373_09445_0290.N1	20-DEC-2003 23:06:00	Bright	63.000	138	47Eps Vir	2.8280	4700.0	126	9445	No
467	GOM_NL__2PRFIN20031220_231018_000000532022_00373_09445_0291.N1	20-DEC-2003 23:10:18	Bright	53.000	122	9Alp2Lib	2.7470	9700.0	106	9445	No
468	GOM_NL__2PRFIN20031220_231201_000000572022_00373_09445_0292.N1	20-DEC-2003 23:12:01	Tw_i_and_stray	57.000	15	67Alp Vir	0.97600	28000.	114	9445	No
469	GOM_NL__2PRFIN20031220_231532_000000492022_00373_09445_0293.N1	20-DEC-2003 23:15:32	Dark	48.500	169	46Gam Hya	2.9910	4700.0	97	9445	No
470	GOM_NL__2PRFIN20031220_231846_000000402022_00373_09445_0294.N1	20-DEC-2003 23:18:46	Dark	40.000	78	Alp Lup	2.3040	28000.	80	9445	No
471	GOM_NL__2PRFIN20031220_232216_000000522022_00373_09445_0295.N1	20-DEC-2003 23:22:16	Dark	52.000	4	Alp1Cen	-0.010000	5800.0	104	9445	No
472	GOM_NL__2PRFIN20031220_232528_000000512022_00374_09446_0298.N1	20-DEC-2003 23:25:28	Dark	50.500	12	Alp1Cru	0.77500	30000.	101	9446	No
473	GOM_NL__2PRFIN20031220_233027_000000422022_00374_09446_0299.N1	20-DEC-2003 23:30:27	Dark	42.000	159	Ups Car	2.9200	7200.0	84	9446	No
474	GOM_NL__2PRFIN20031220_233156_000000432022_00374_09446_0300.N1	20-DEC-2003 23:31:56	Dark	42.500	71	lot Car	2.2460	7700.0	85	9446	No
475	GOM_NL__2PRFIN20031220_233345_000000442022_00374_09446_0301.N1	20-DEC-2003 23:33:45	Dark	44.000	41	Eps Car	1.8600	4100.0	88	9446	No
476	GOM_NL__2PRFIN20031220_233639_000000502022_00374_09446_0302.N1	20-DEC-2003 23:36:39	Dark	49.500	34	Gam2Vel	1.7930	23000.	99	9446	No
477	GOM_NL__2PRFIN20031220_233827_000000512022_00374_09446_0303.N1	20-DEC-2003 23:38:27	Dark	51.000	2	Alp Car	-0.73600	7000.0	102	9446	No
478	GOM_NL__2PRFIN20031220_234119_000000552022_00374_09446_0304.N1	20-DEC-2003 23:41:19	Dark	55.000	117	Pi Pup	2.7060	3800.0	110	9446	No
479	GOM_NL__2PRFIN20031220_234428_000000572022_00374_09446_0305.N1	20-DEC-2003 23:44:28	Straylight	57.000	23	21Eps CMa	1.5020	26000.	114	9446	No
480	GOM_NL__2PRFIN20031220_234609_000000542022_00374_09446_0306.N1	20-DEC-2003 23:46:09	Straylight	54.000	179	24Omi2CMa	3.0320	24000.	108	9446	No
481	GOM_NL__2PRFIN20031220_234847_000000512022_00374_09446_0307.N1	20-DEC-2003 23:48:47	Straylight	50.500	47	2Bet CMa	1.9760	28000.	101	9446	No
482	GOM_NL__2PRFIN20031220_235118_000000442022_00374_09446_0308.N1	20-DEC-2003 23:51:18	Straylight	44.000	165	34Gam Eri	2.9500	3200.0	88	9446	No
483	GOM_NL__2PRFIN20031220_235252_000000442022_00374_09446_0309.N1	20-DEC-2003 23:52:52	Straylight	44.000	125	44lot Ori	2.7700	30000.	88	9446	No
484	GOM_NL__2PRFIN20031220_235420_000000492022_00374_09446_0310.N1	20-DEC-2003 23:54:20	Straylight	48.500	30	46Eps Ori	1.6940	30000.	97	9446	No
485	GOM_NL__2PRFIN20031220_235716_000000602022_00374_09446_0311.N1	20-DEC-2003 23:57:16	Tw_i_and_stray	60.000	14	58Alp Ori	0.87000	3000.0	120	9446	No
486	GOM_NL__2PRFIN20031220_235928_000000502022_00374_09446_0312.N1	20-DEC-2003 23:59:28	Tw_i_and_stray	49.500	13	87Alp Tau	0.86700	3800.0	99	9446	No

### 3. Quality information per product

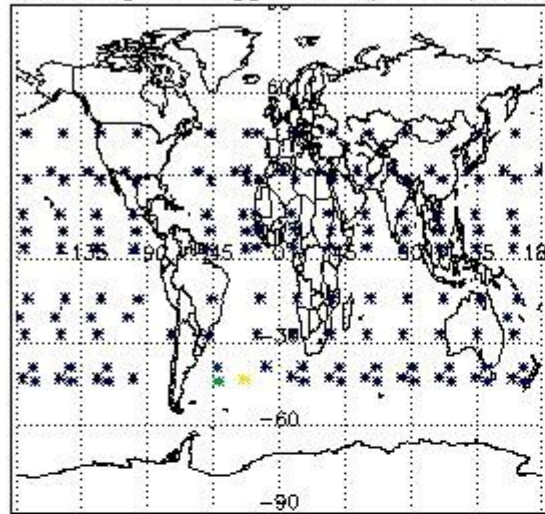
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

#### 3.1 Plot quality information per product (time dependant)

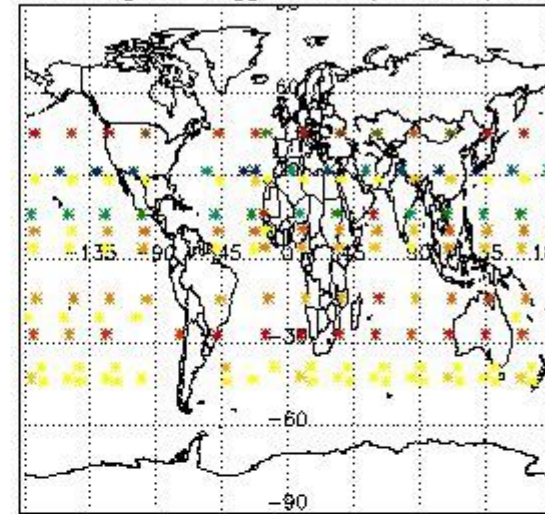


*3.2 Plot quality information per product (world map)*

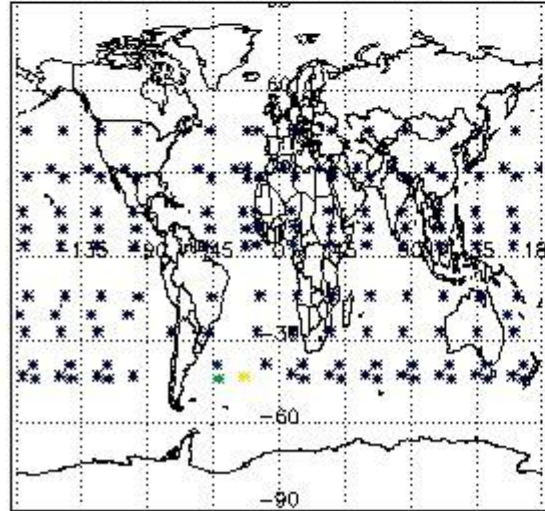
Percentage of flagged data per O3 profile



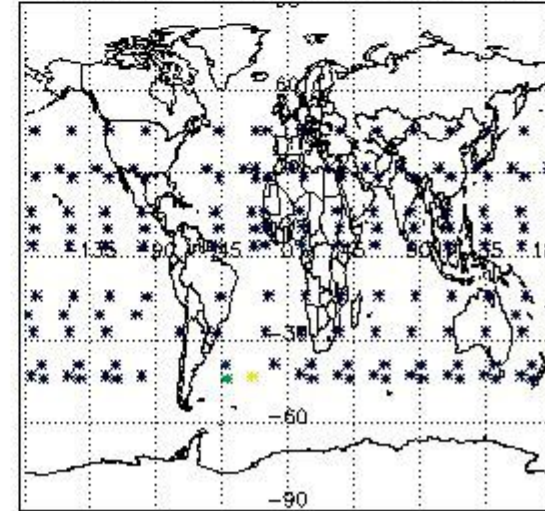
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

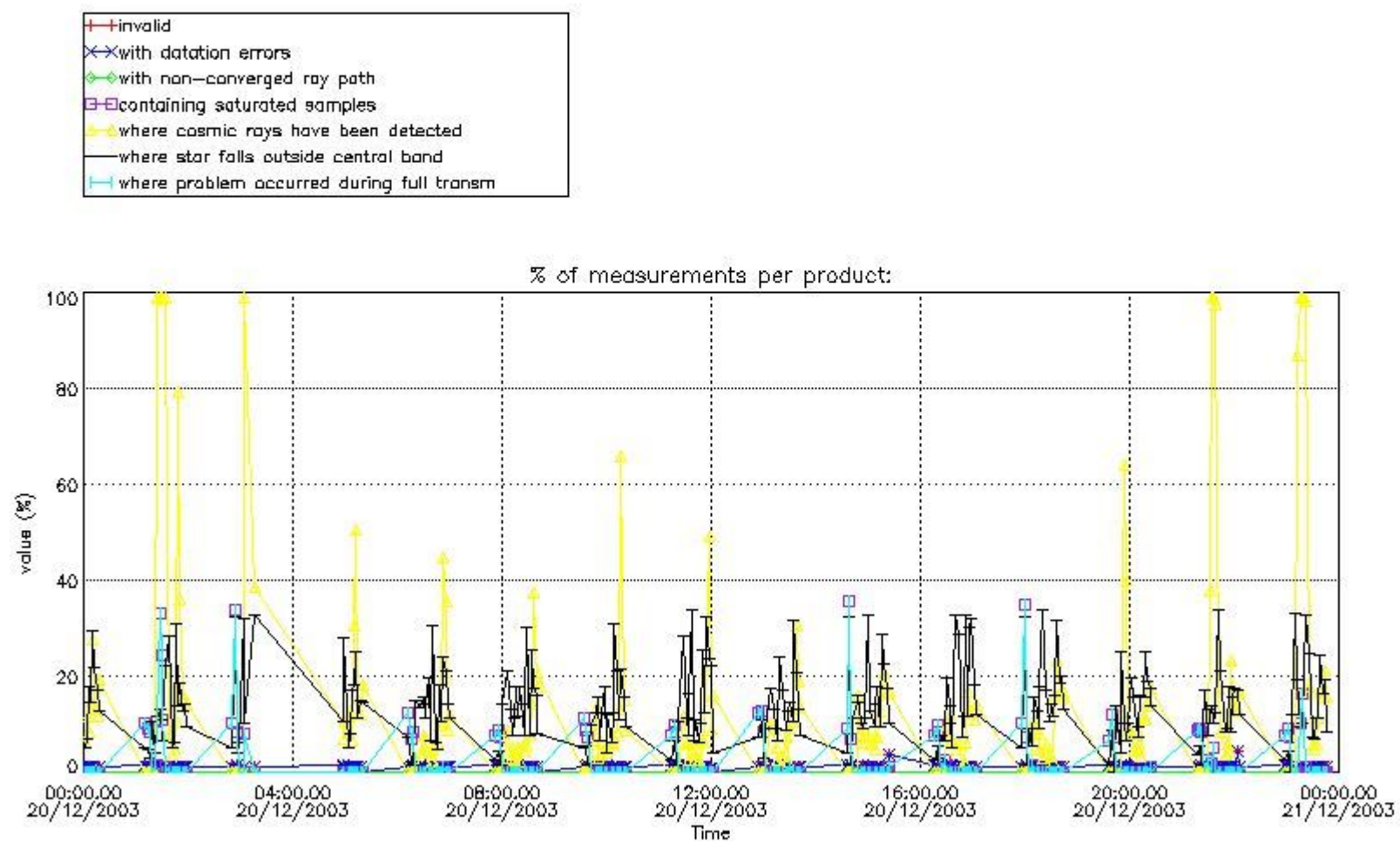


#### 4. Level 1 quality information per product

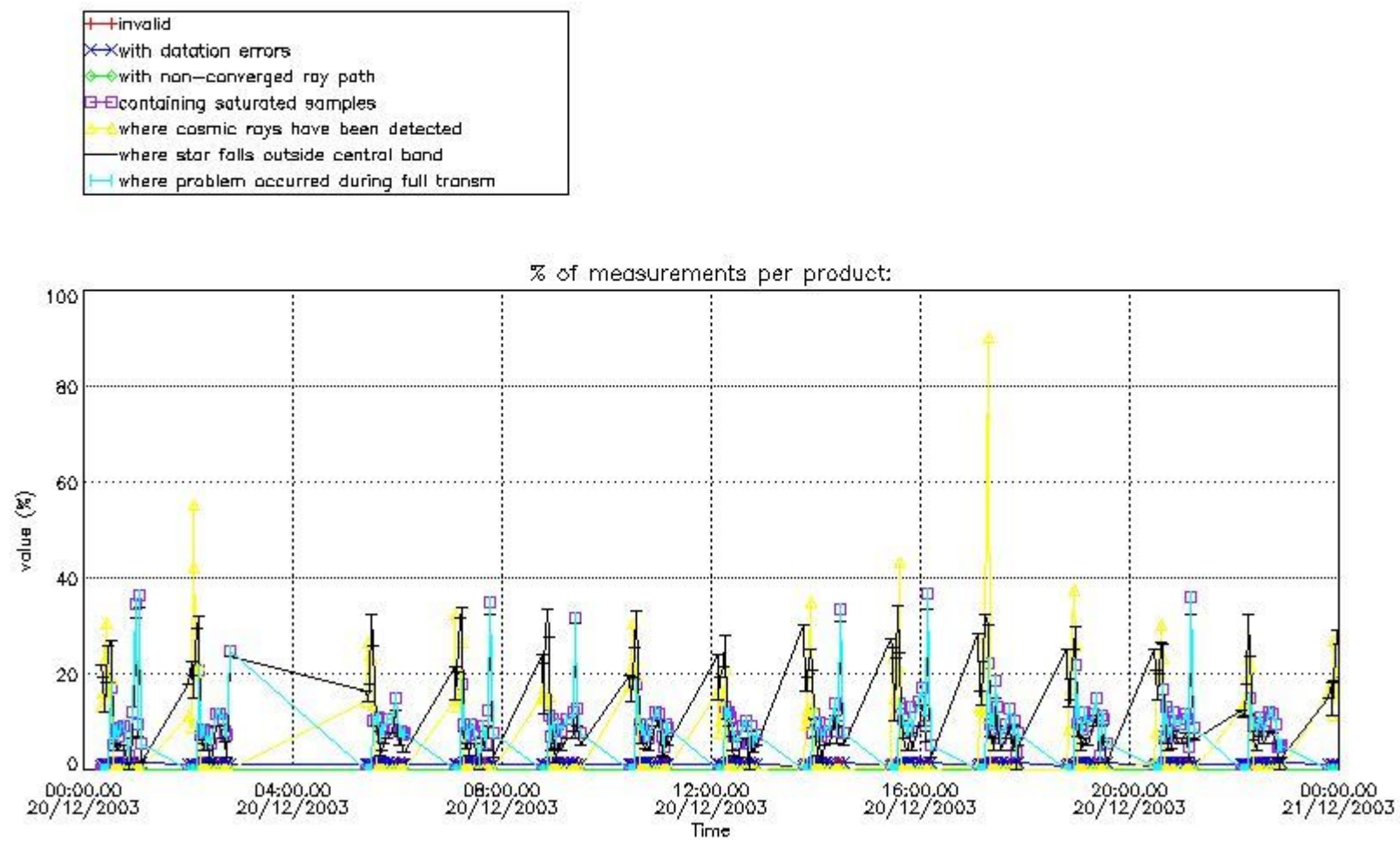
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

##### 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

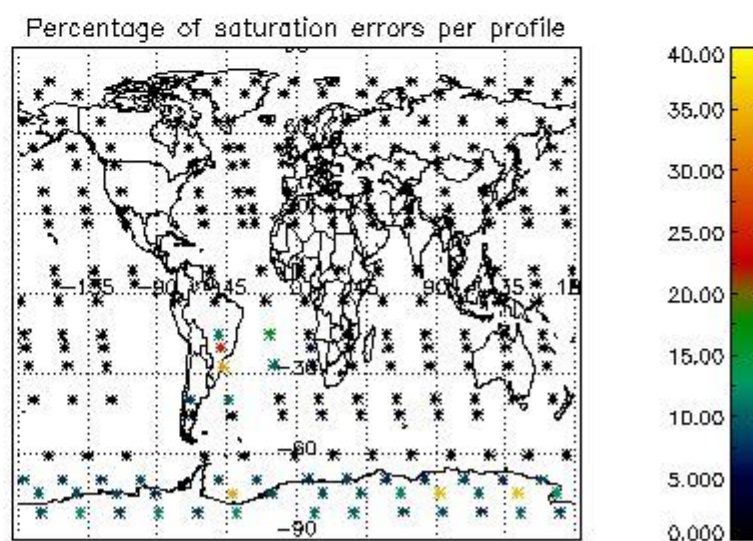
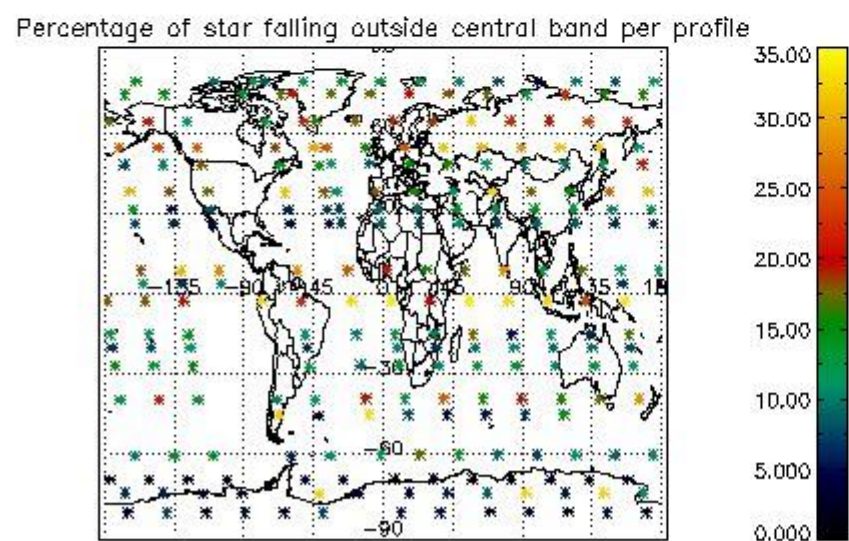
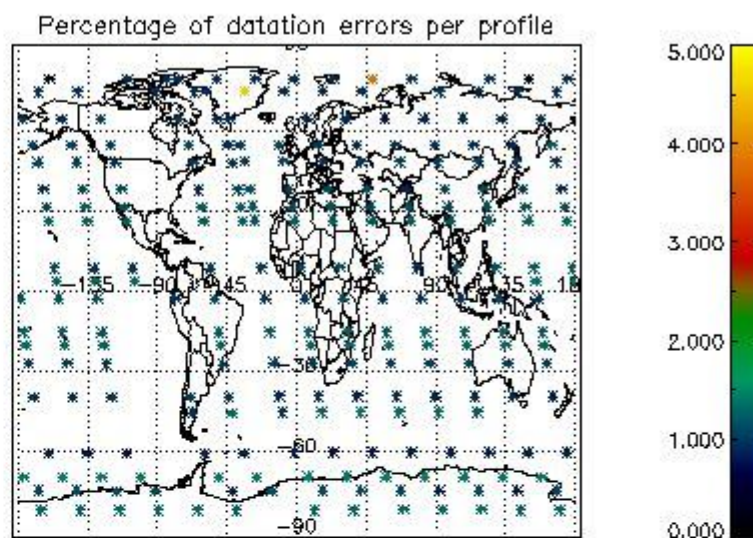
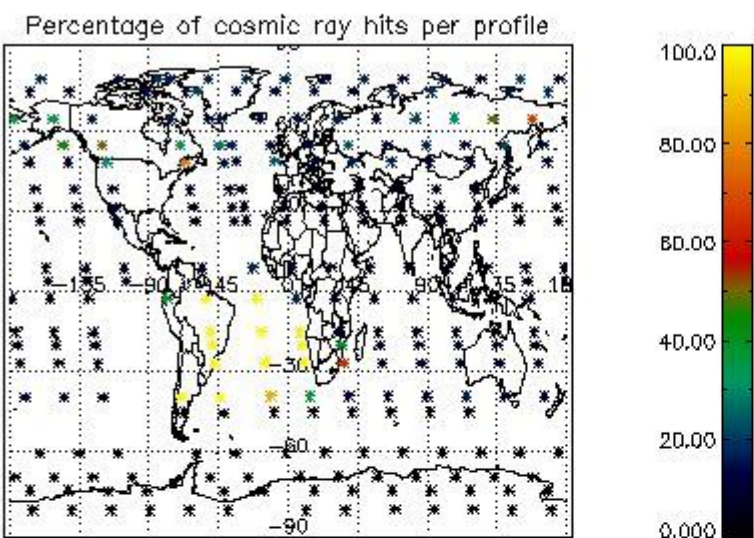


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

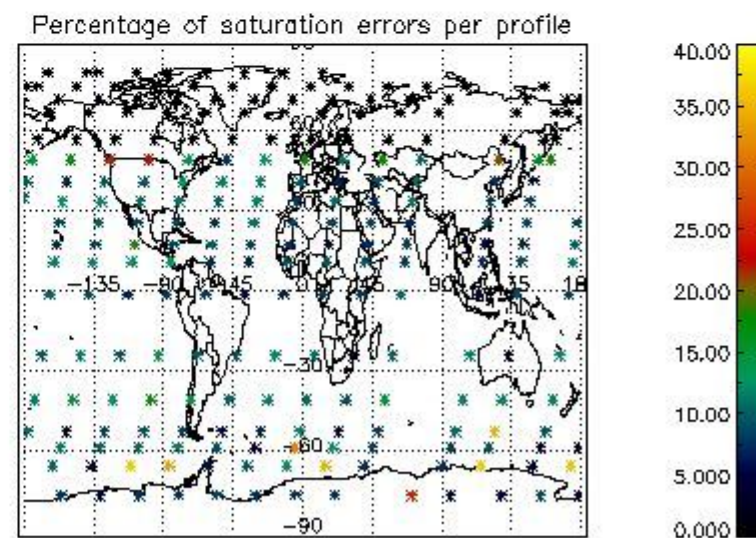
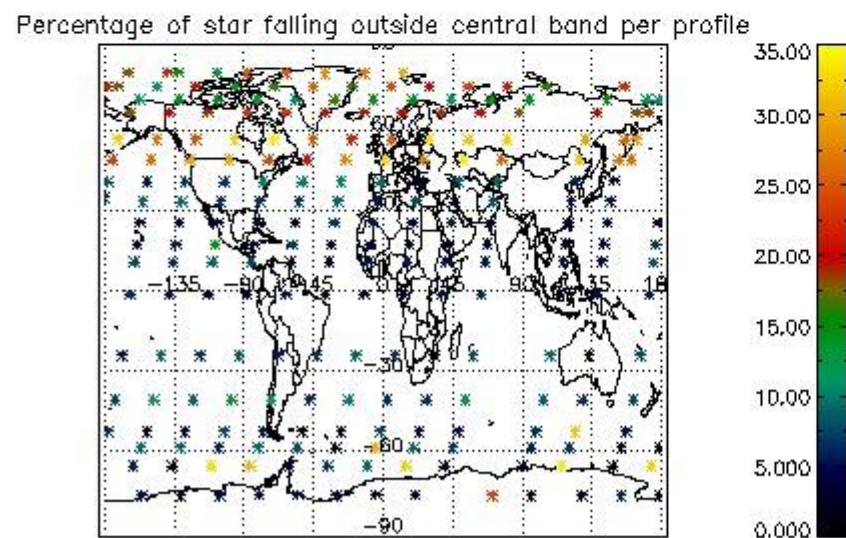
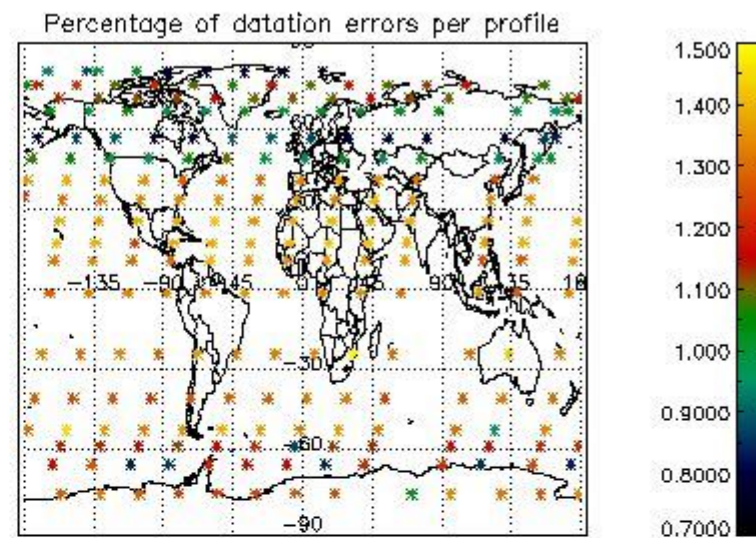
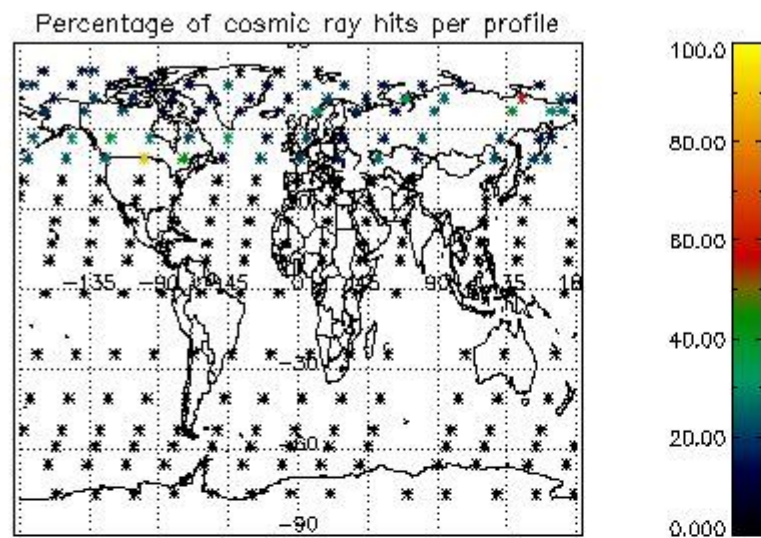


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

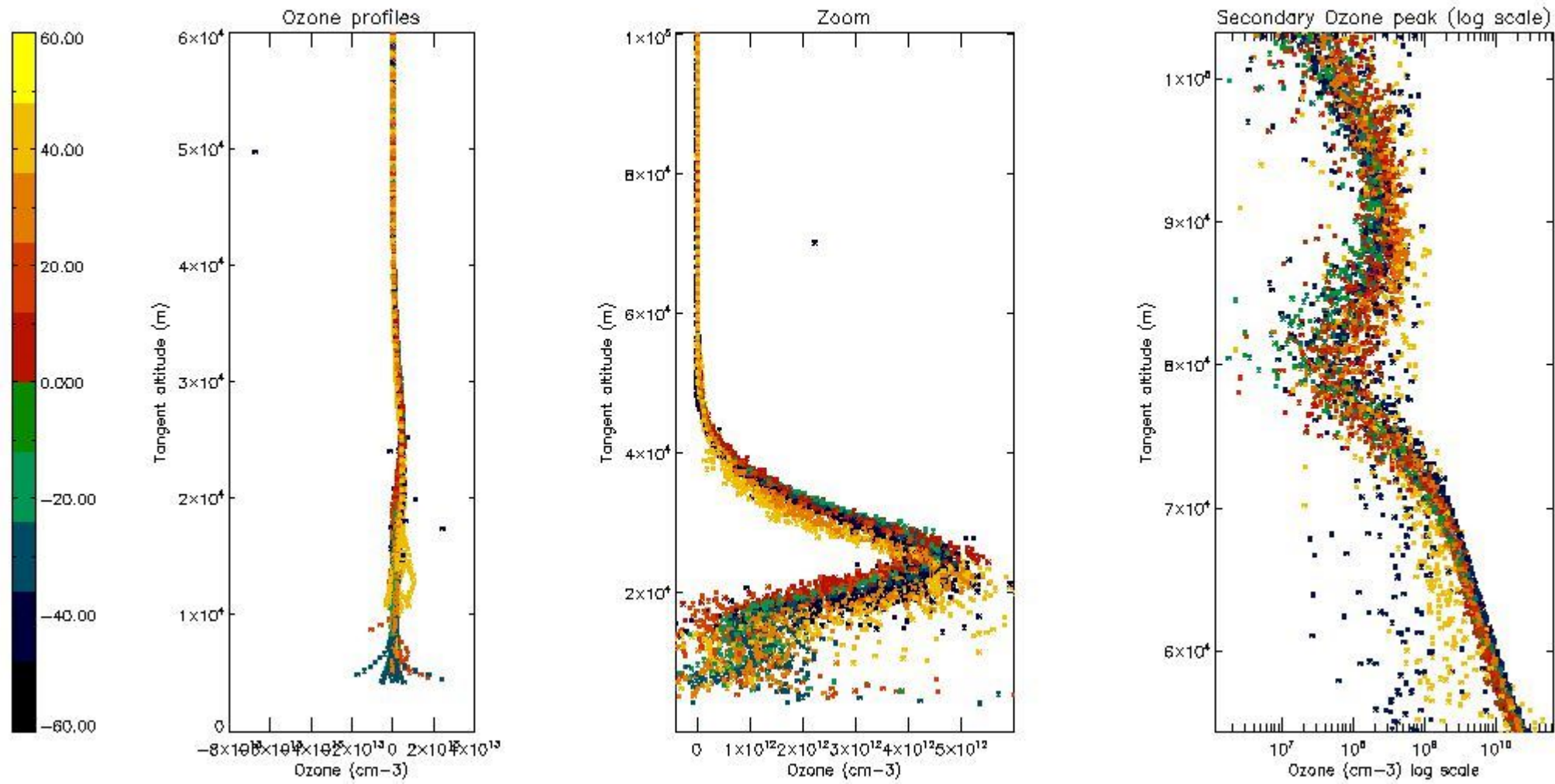
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	32
STD < 20	17

STD < 10	14
STD < 5	9

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

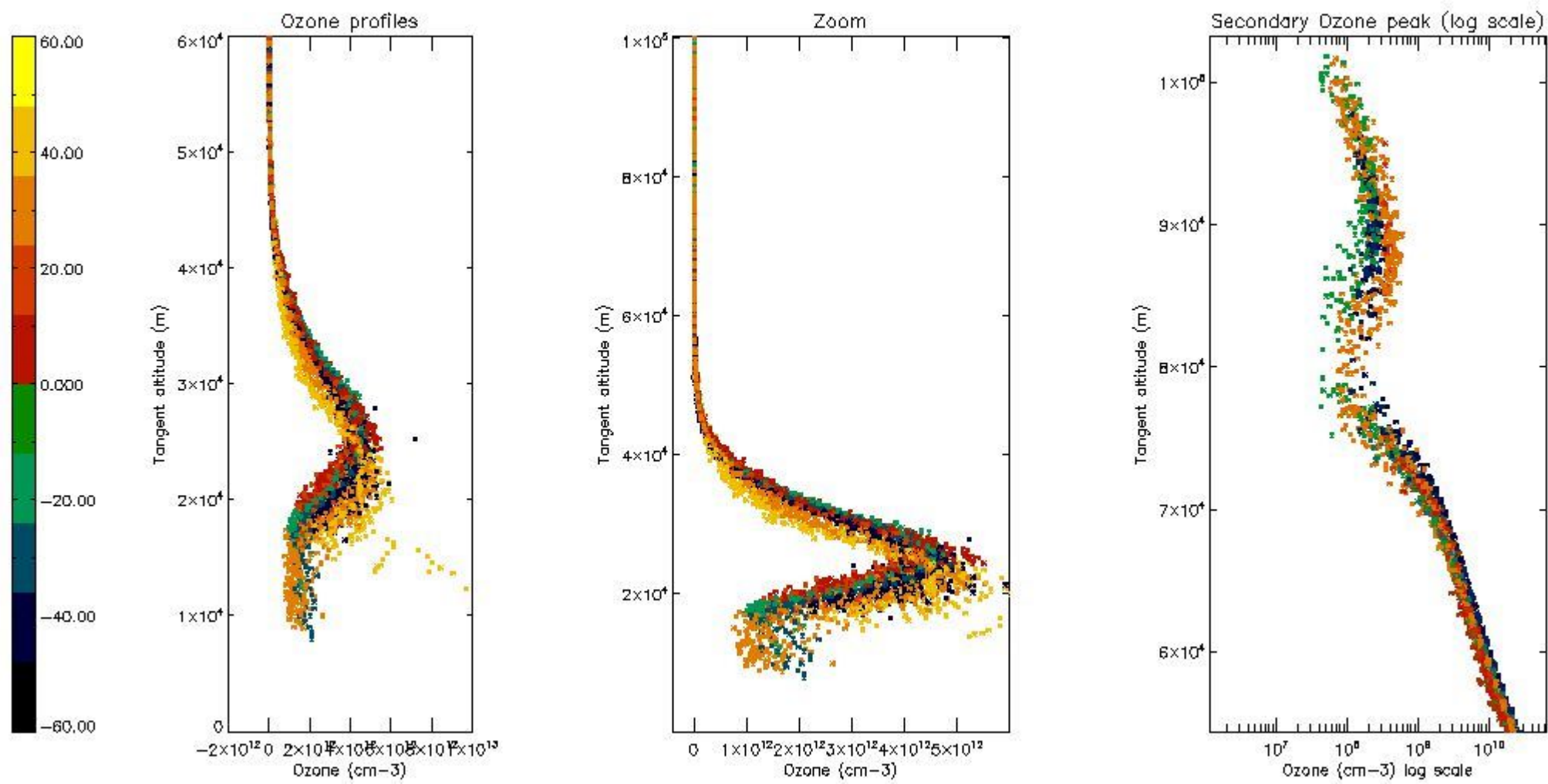
The colorbar represents the latitude.



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

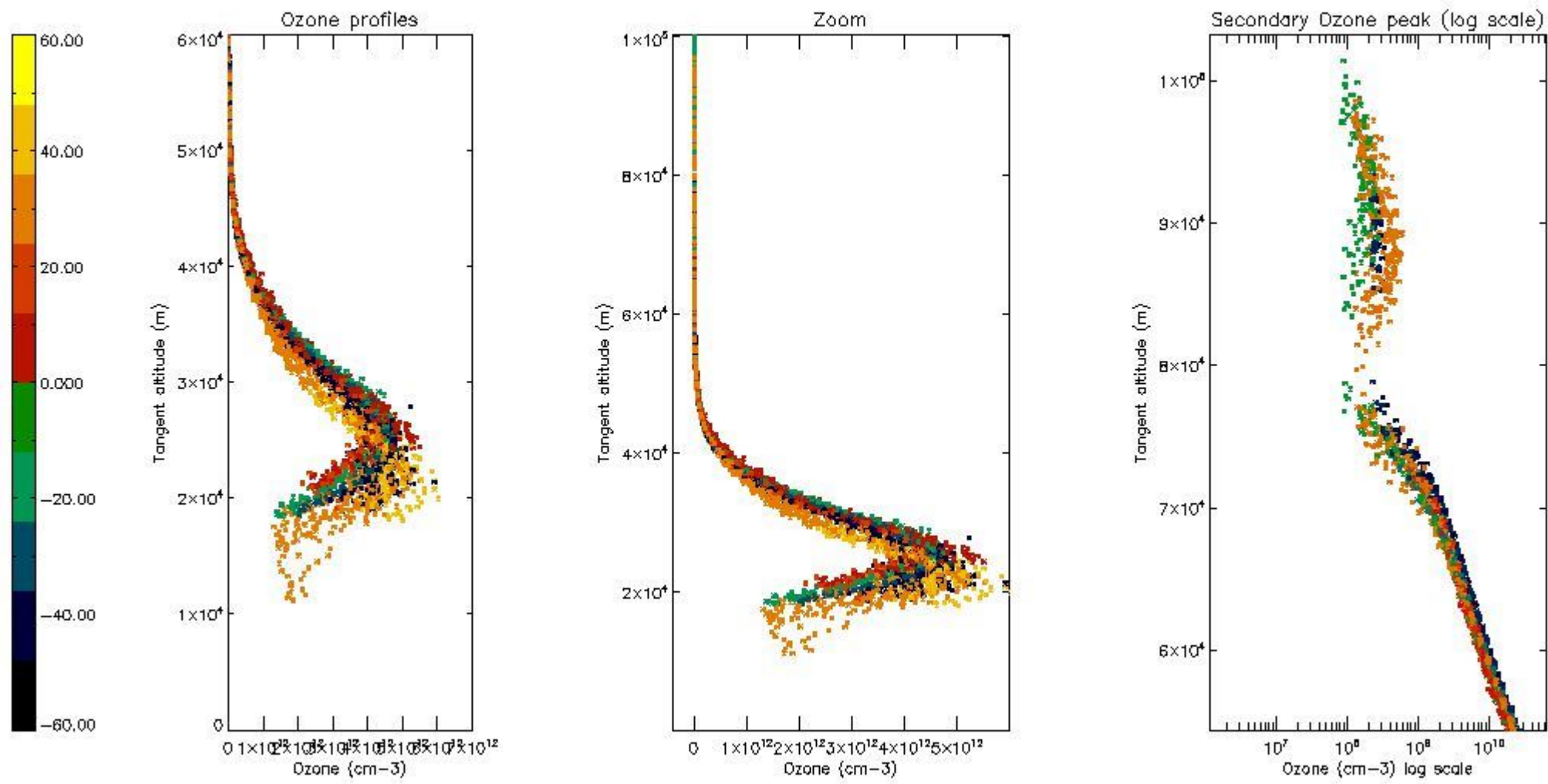
The colorbar represents the latitude.





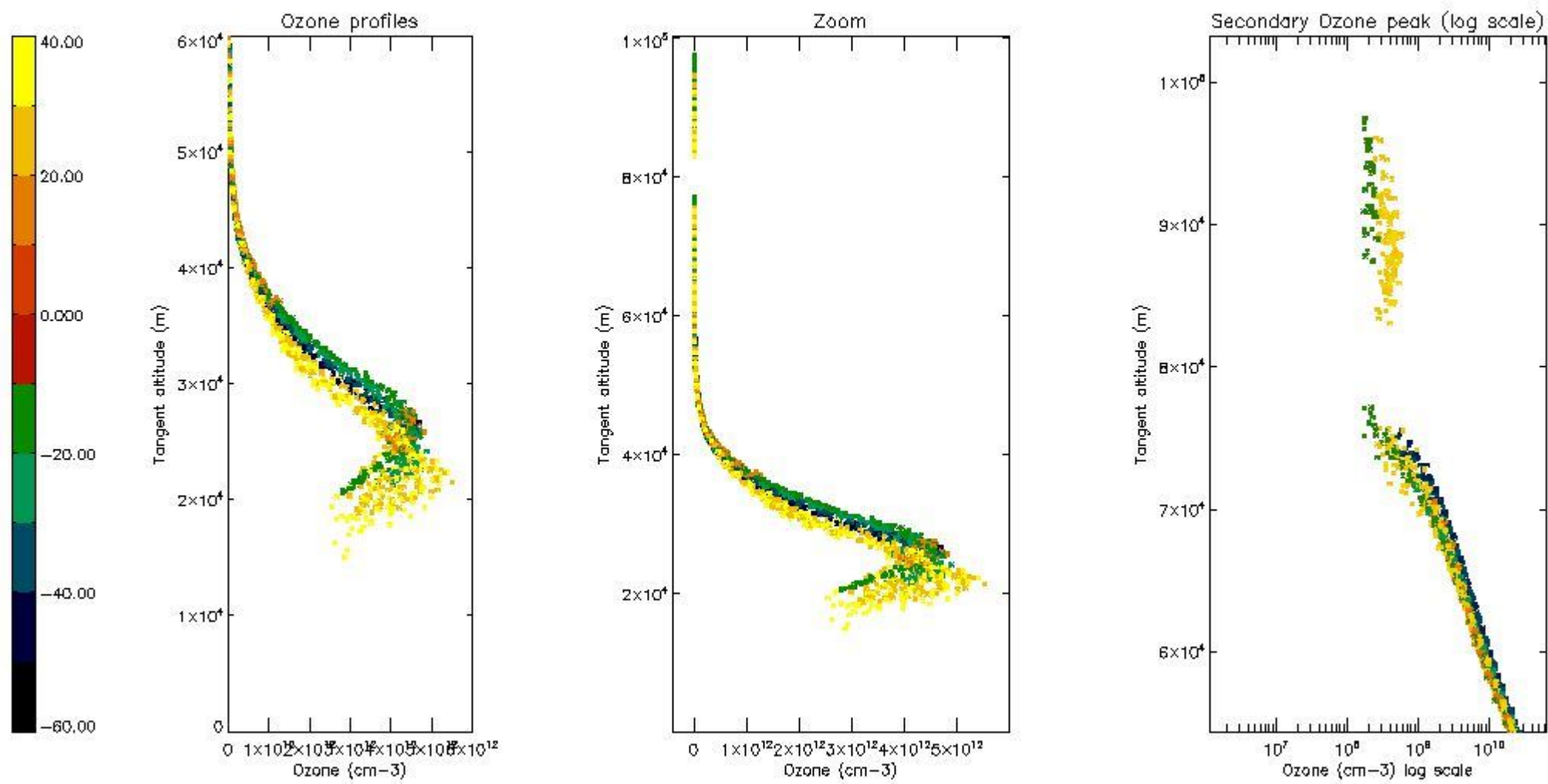
*5.4 Plot ozone profiles where STD < 10% (dark without errors)*

The colorbar represents the latitude.



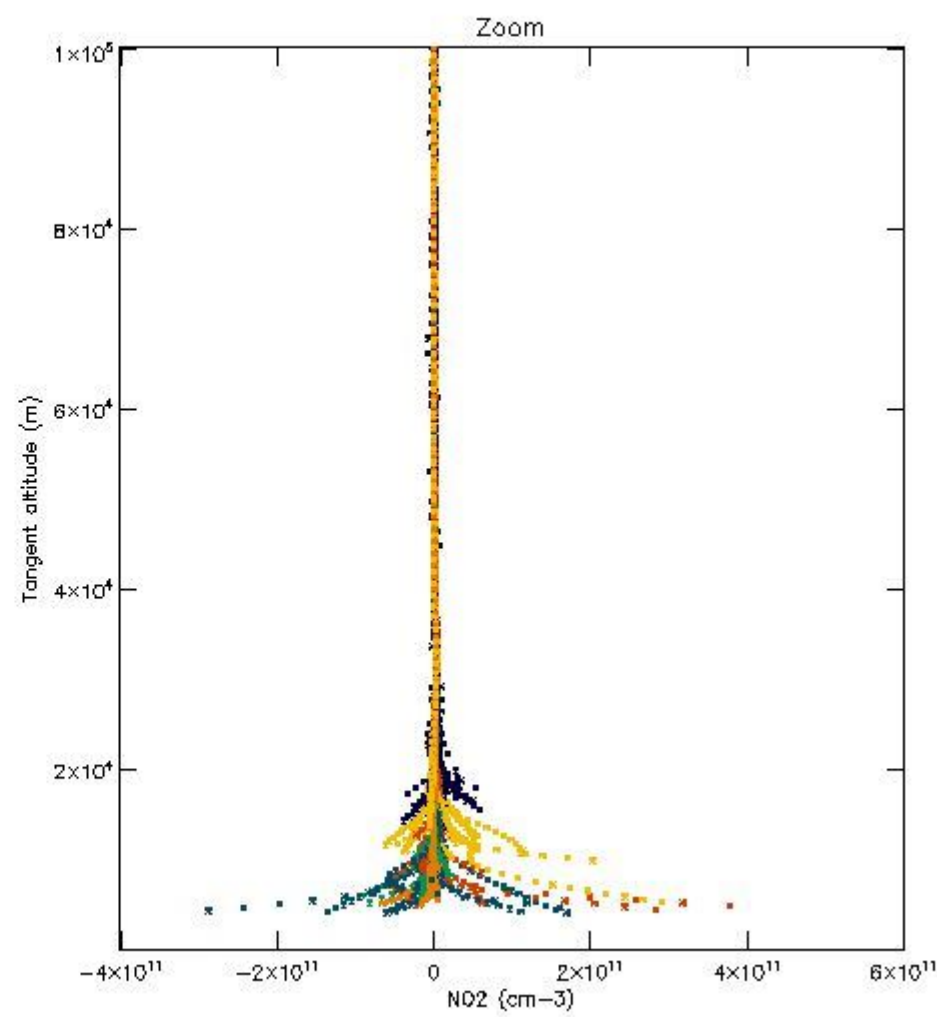
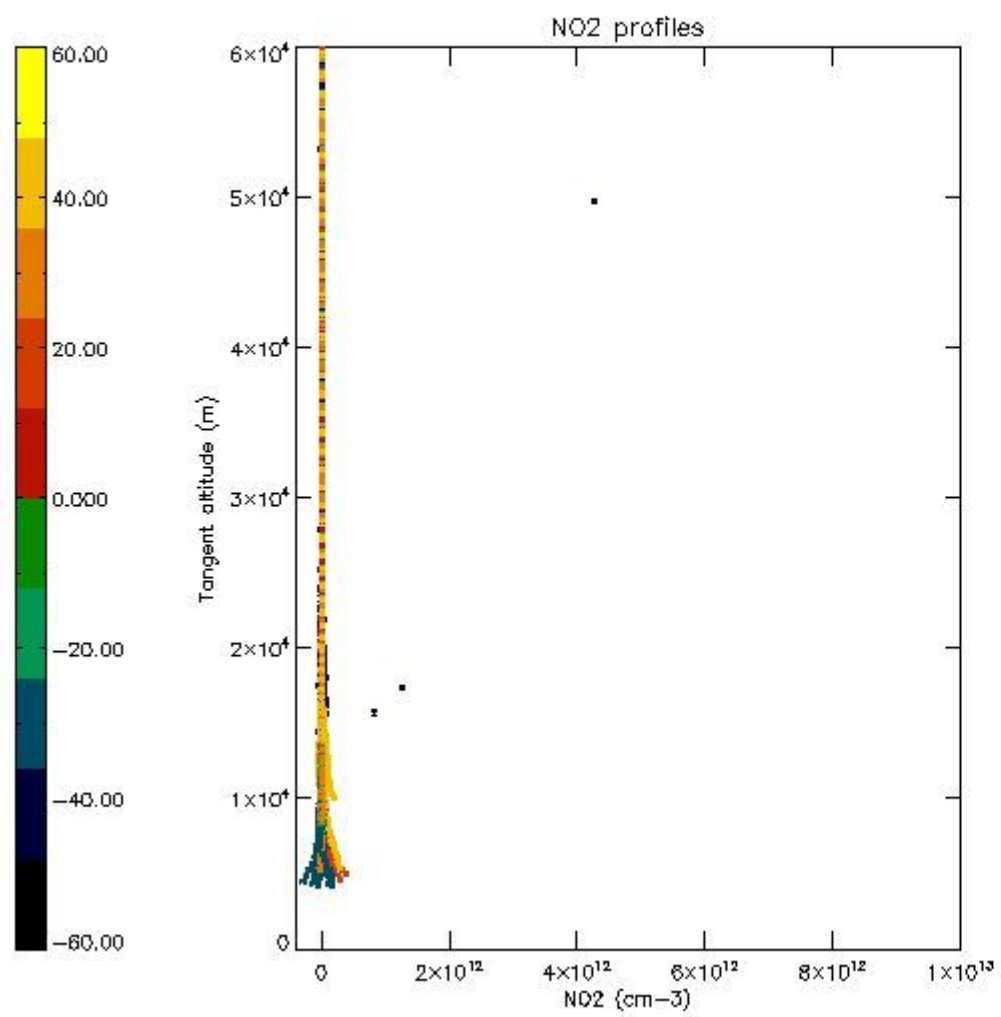
*5.5 Plot ozone profiles where STD < 5% (dark without errors)*

The colorbar represents the latitude.



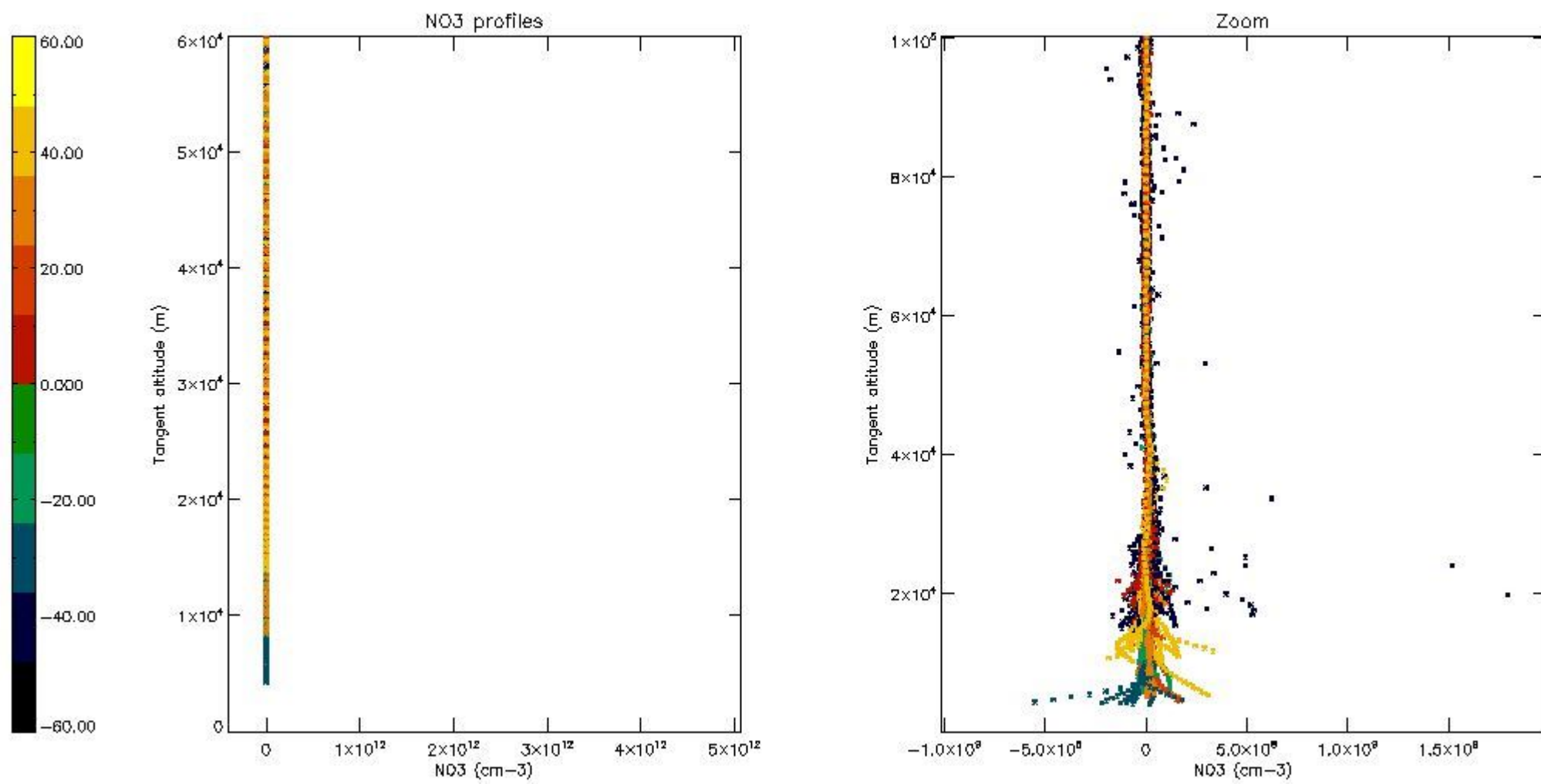
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



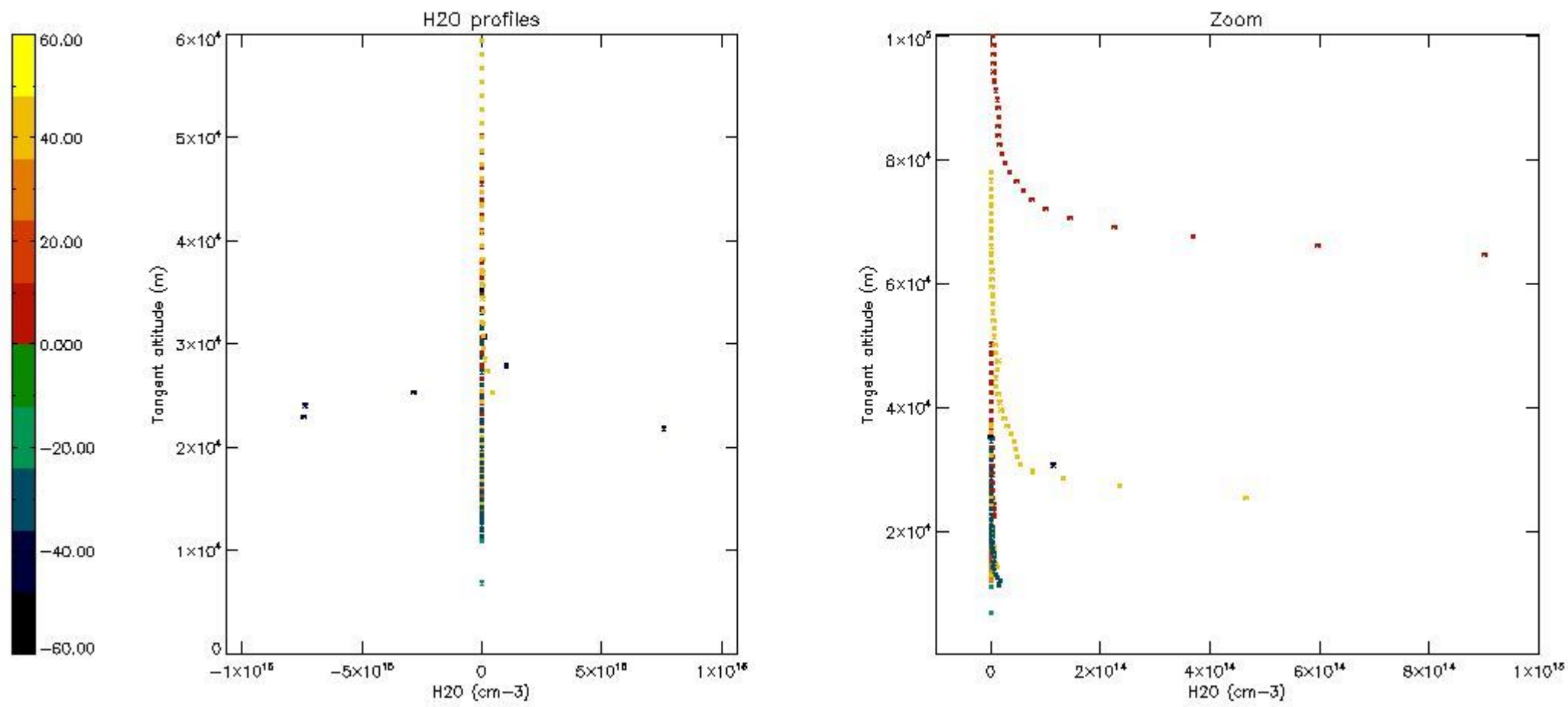
*5.7 Plot NO3 profiles for all STD (dark without errors)*

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)

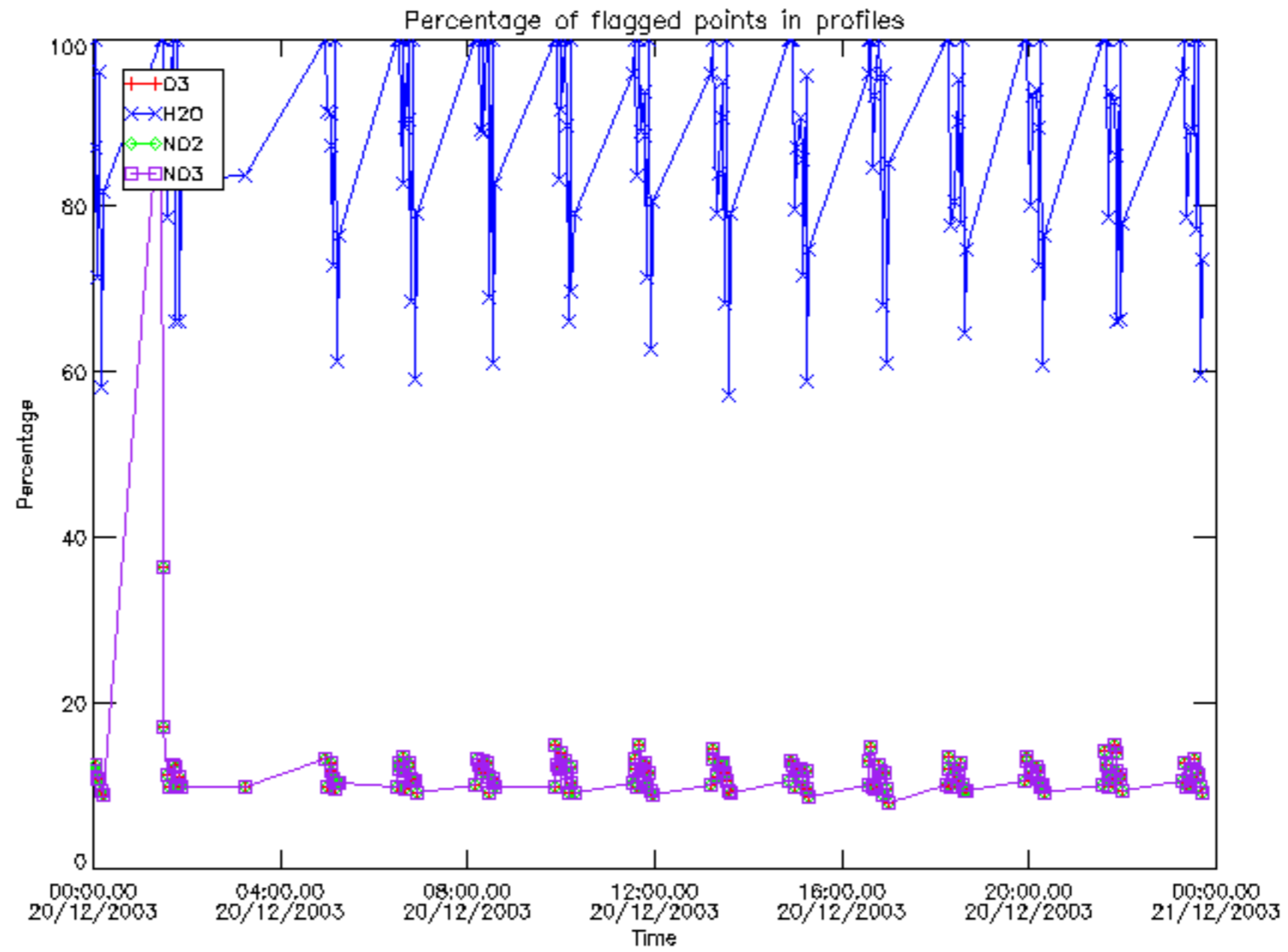
The colorbar represents the latitude.



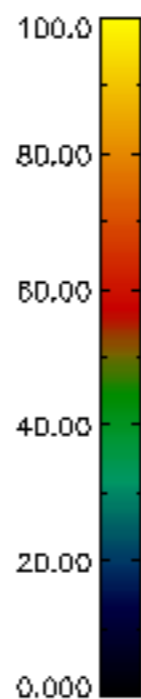
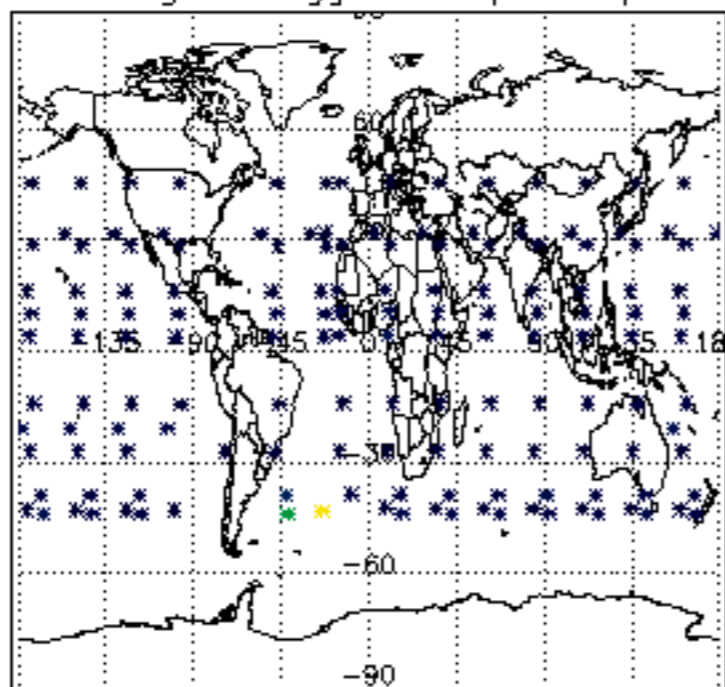
## 6. Auxiliary Data Files used for the production reported in section 2

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.

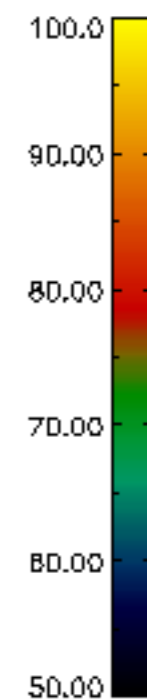
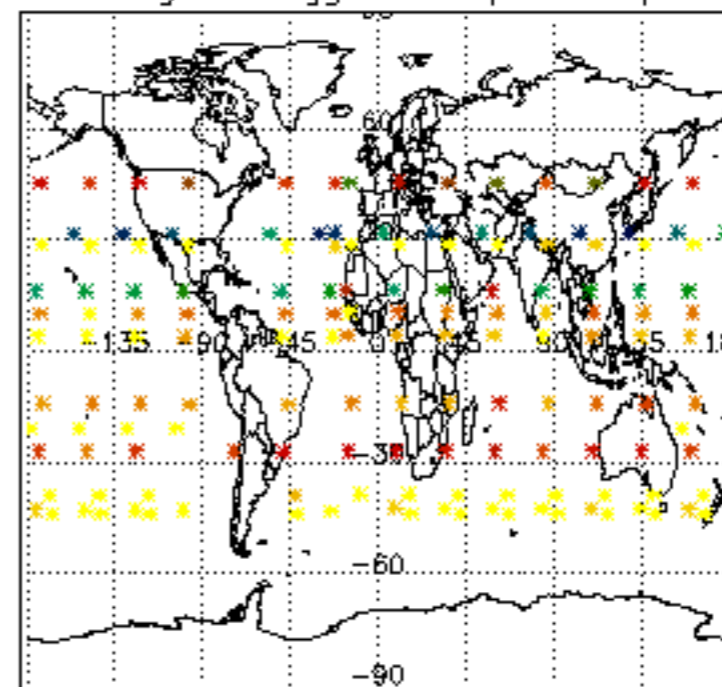
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	20-DEC-2003 00:01:56
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	20-DEC-2003 00:01:56
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	20-DEC-2003 00:01:56



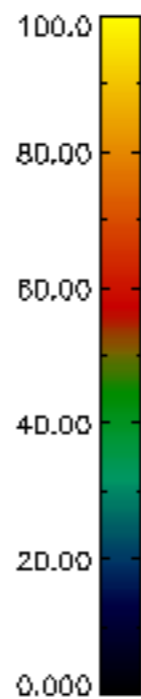
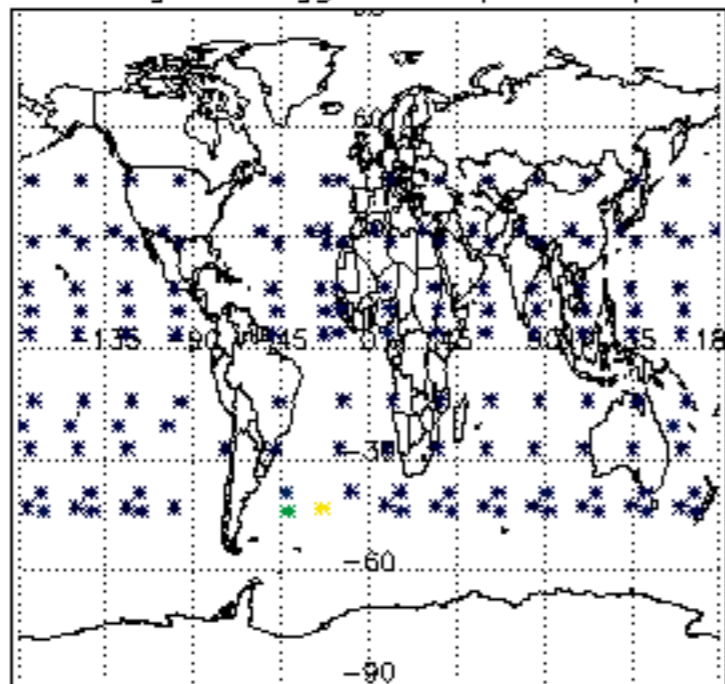
Percentage of flagged data per D3 profile



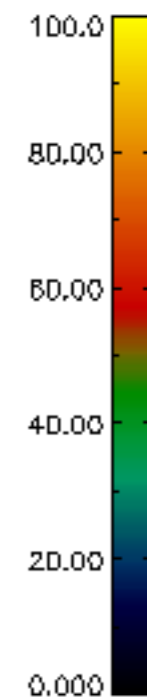
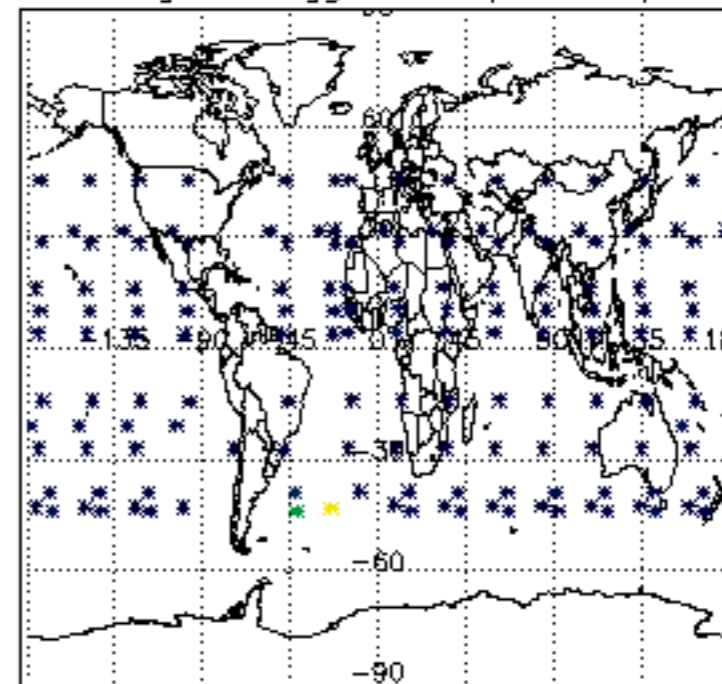
Percentage of flagged data per H2O profile



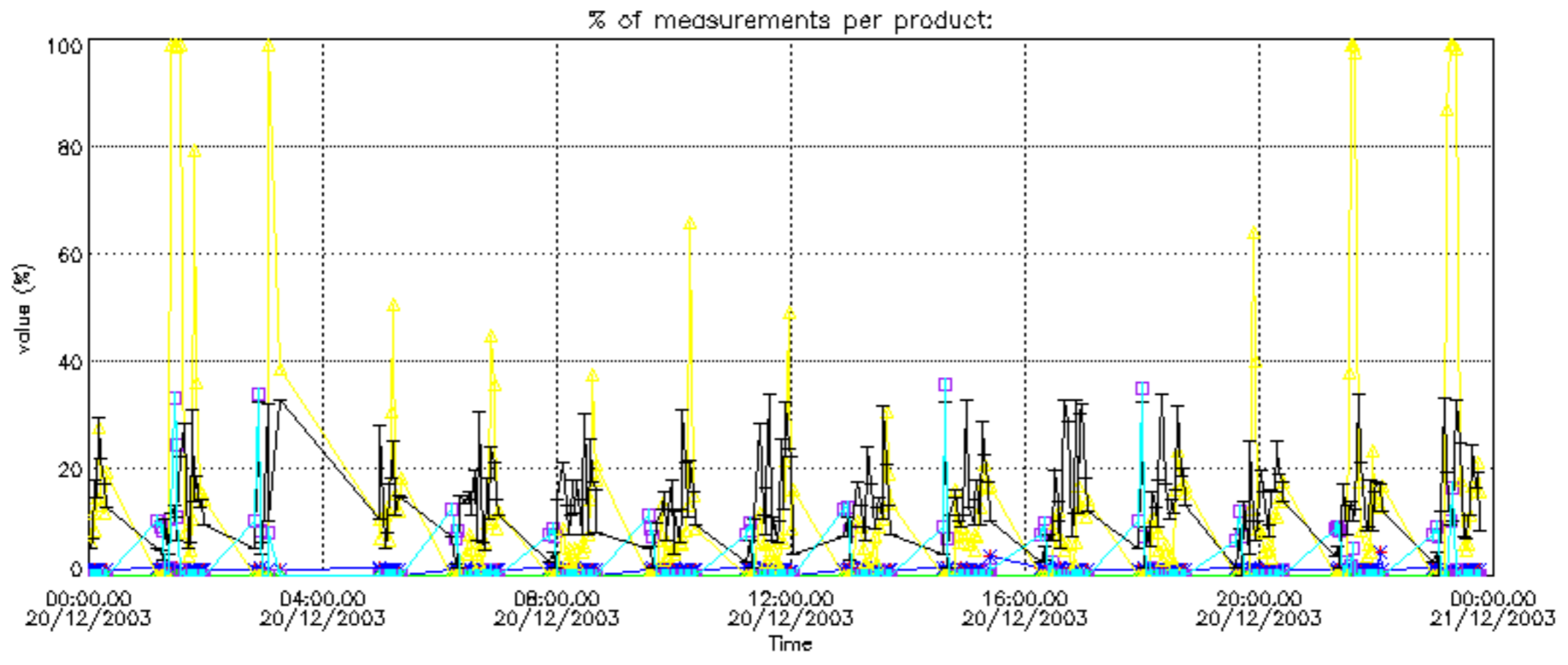
Percentage of flagged data per NO2 profile

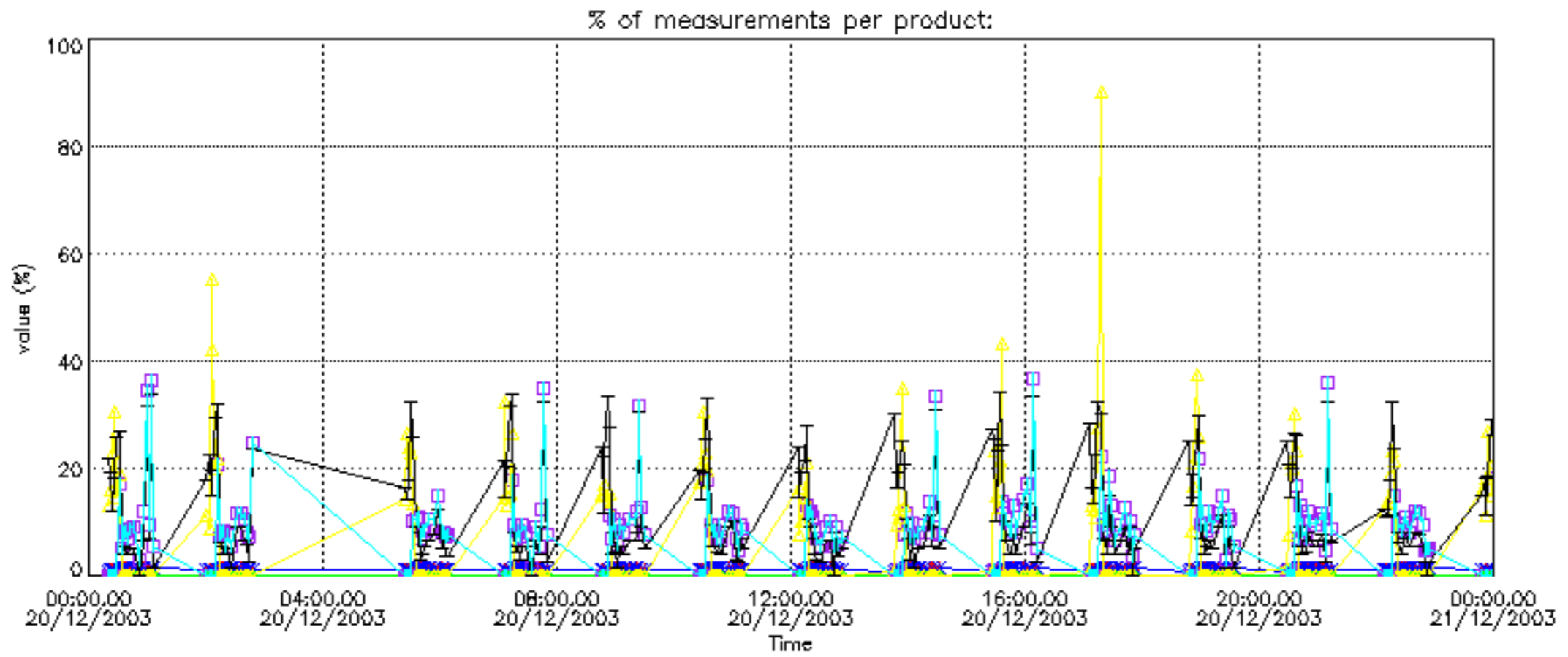


Percentage of flagged data per NO3 profile

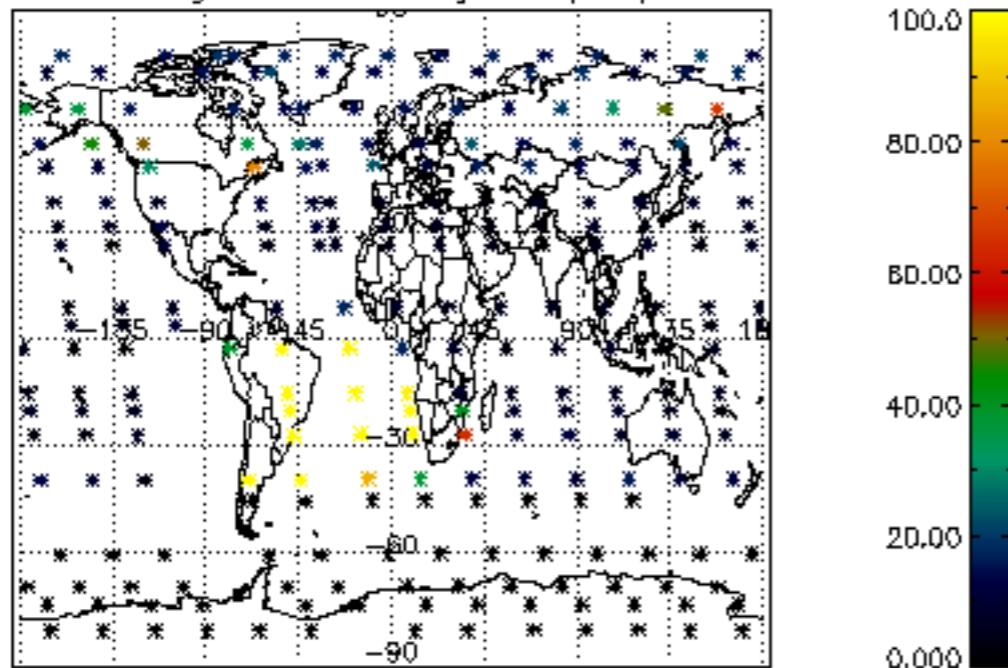




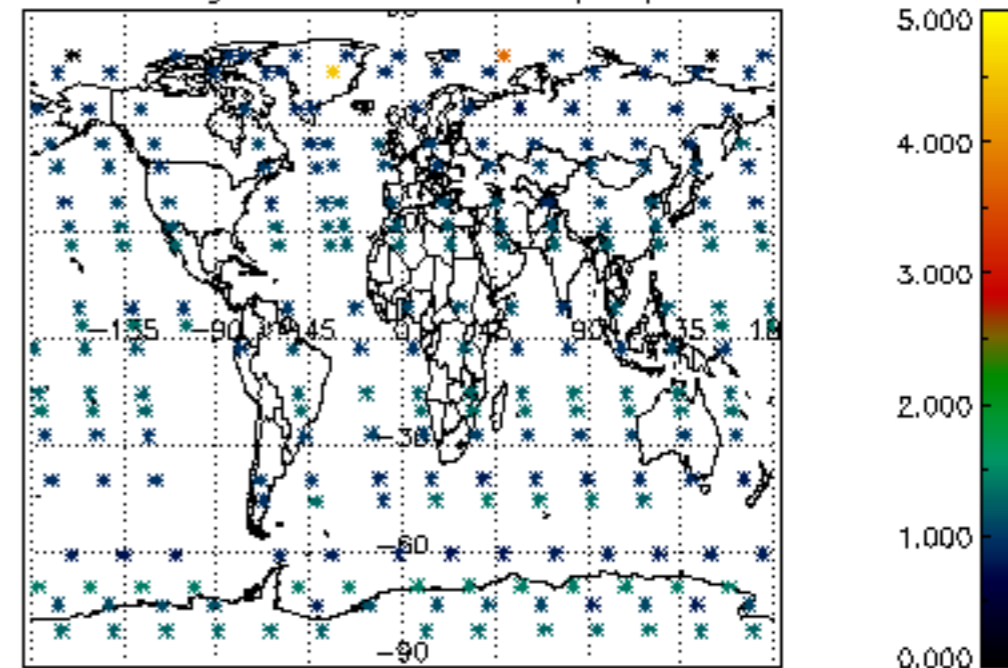




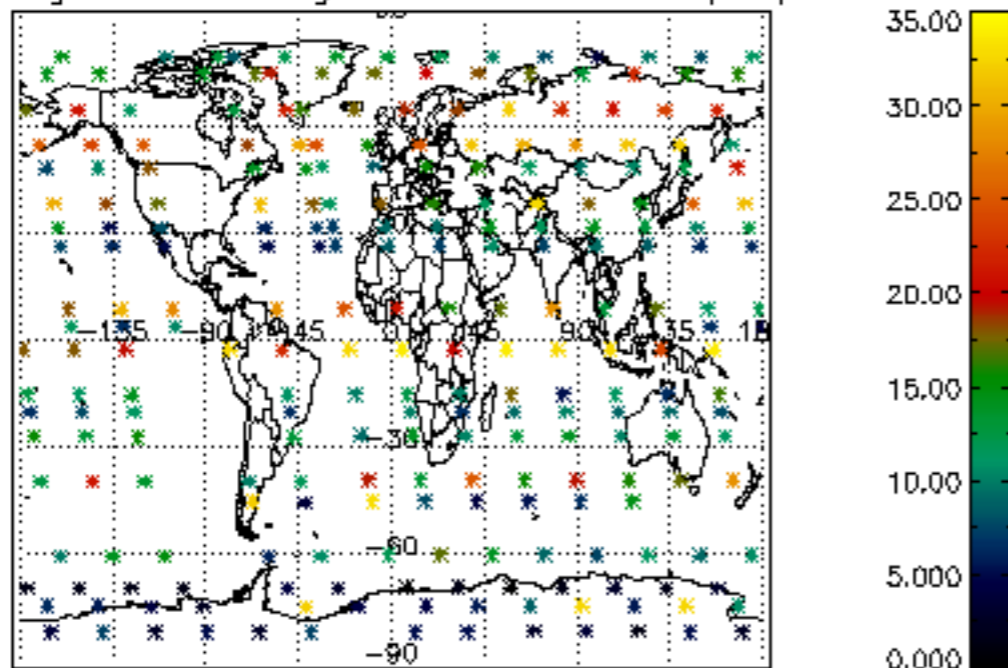
Percentage of cosmic ray hits per profile



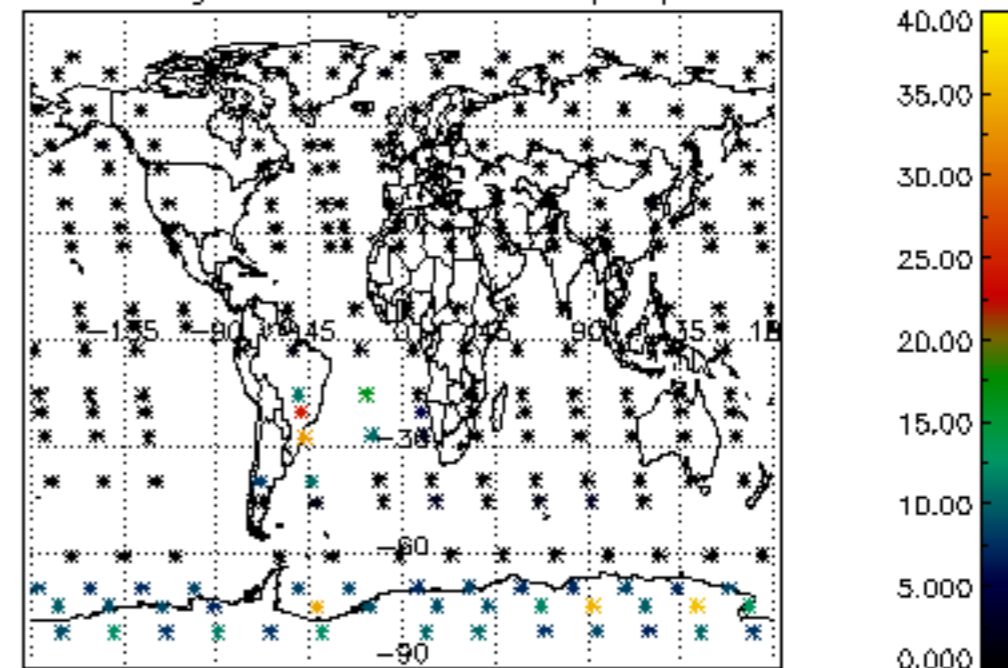
Percentage of datation errors per profile



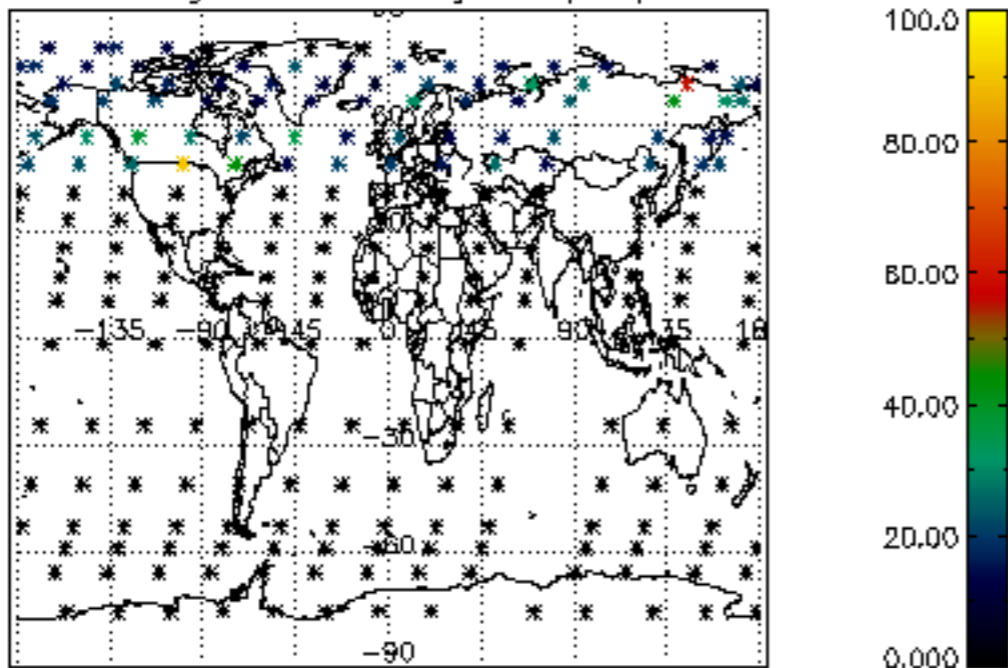
Percentage of star falling outside central band per profile



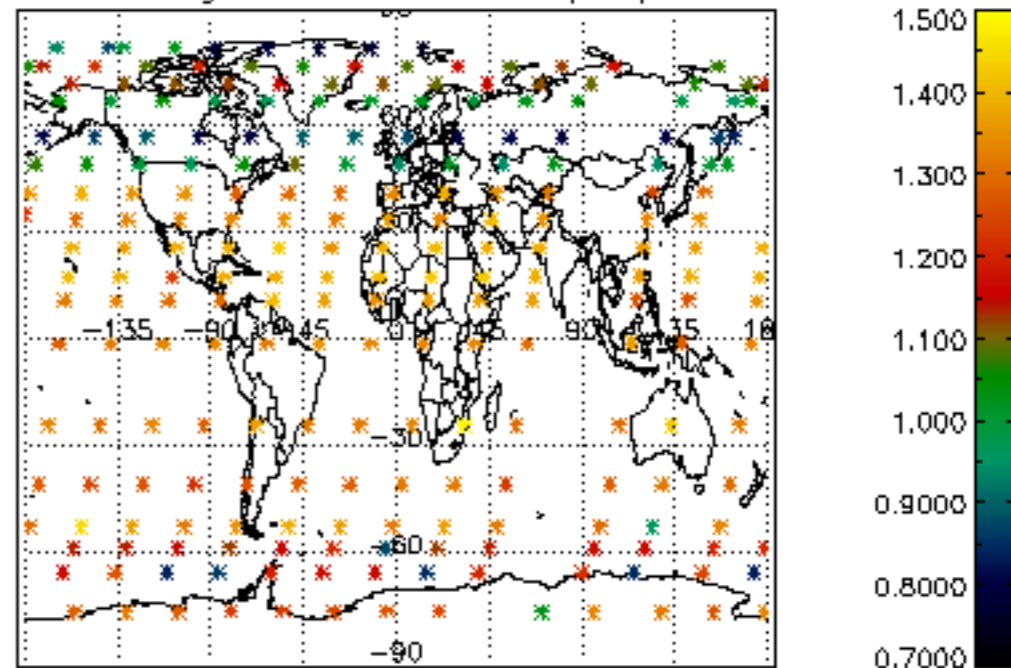
Percentage of saturation errors per profile



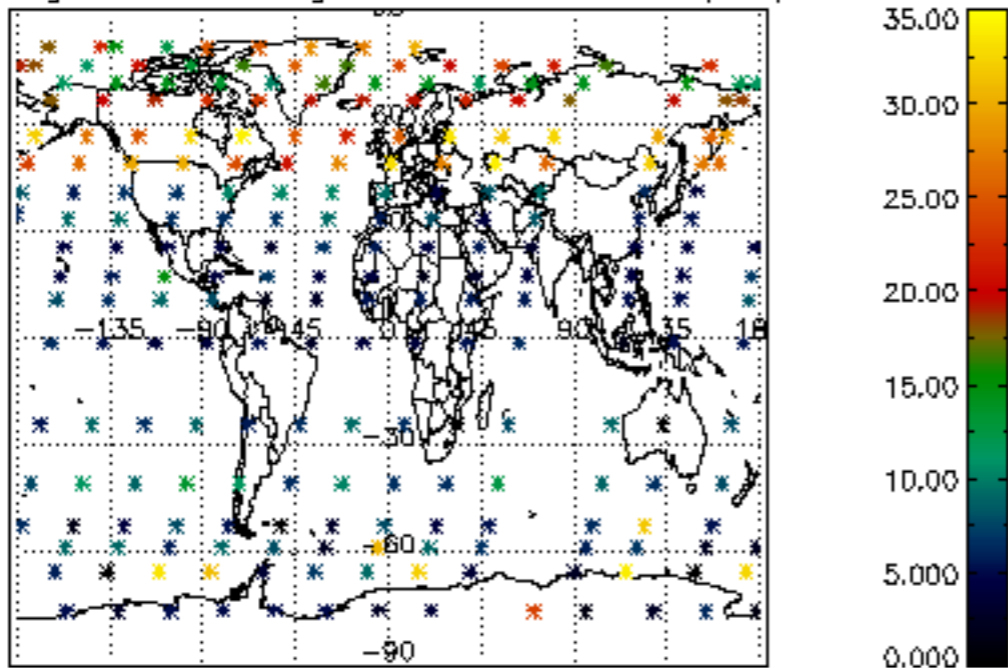
Percentage of cosmic ray hits per profile



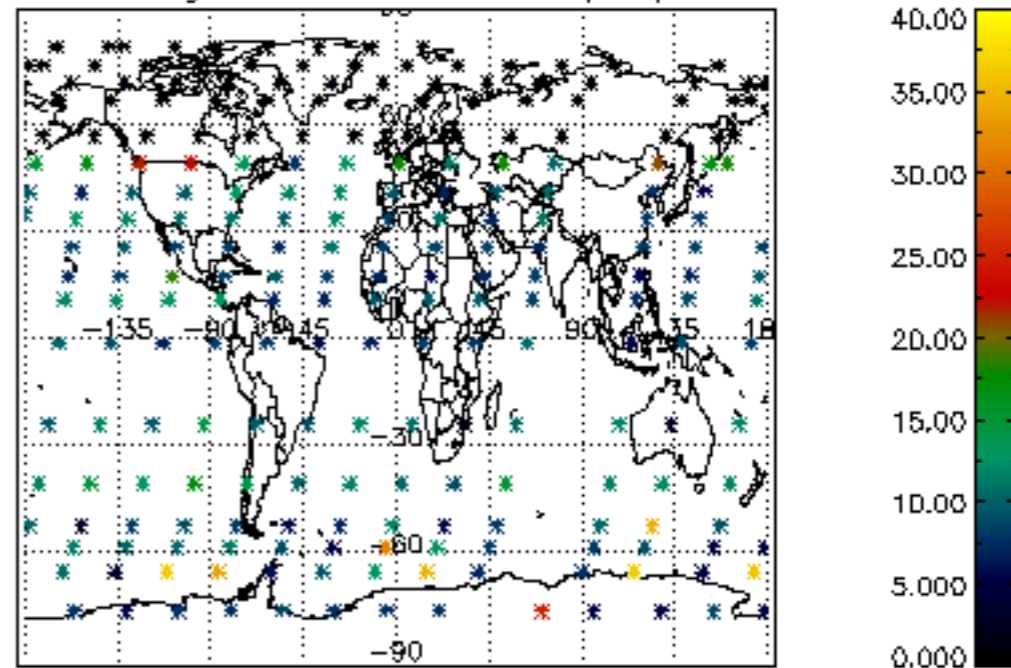
Percentage of datation errors per profile

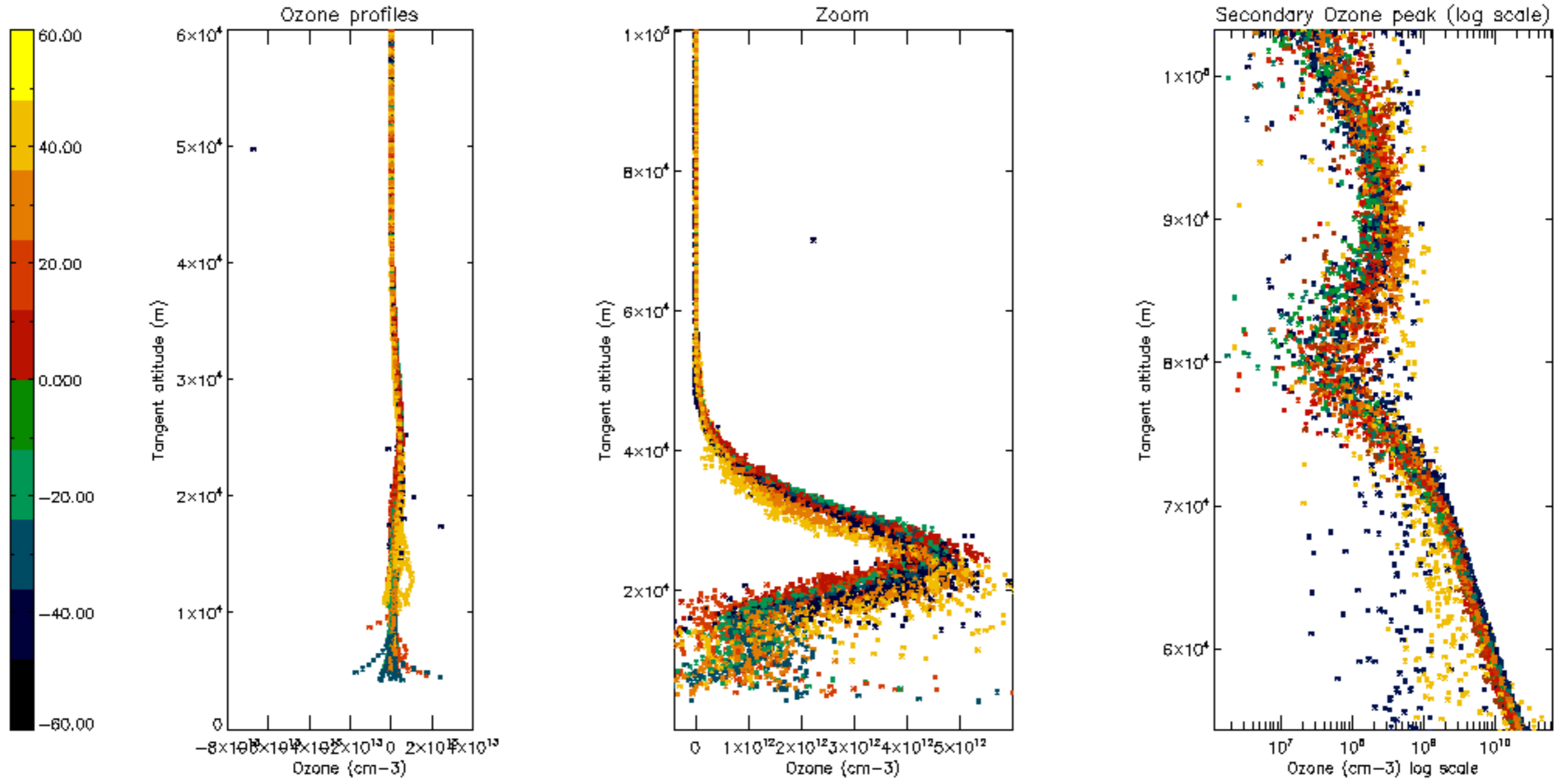


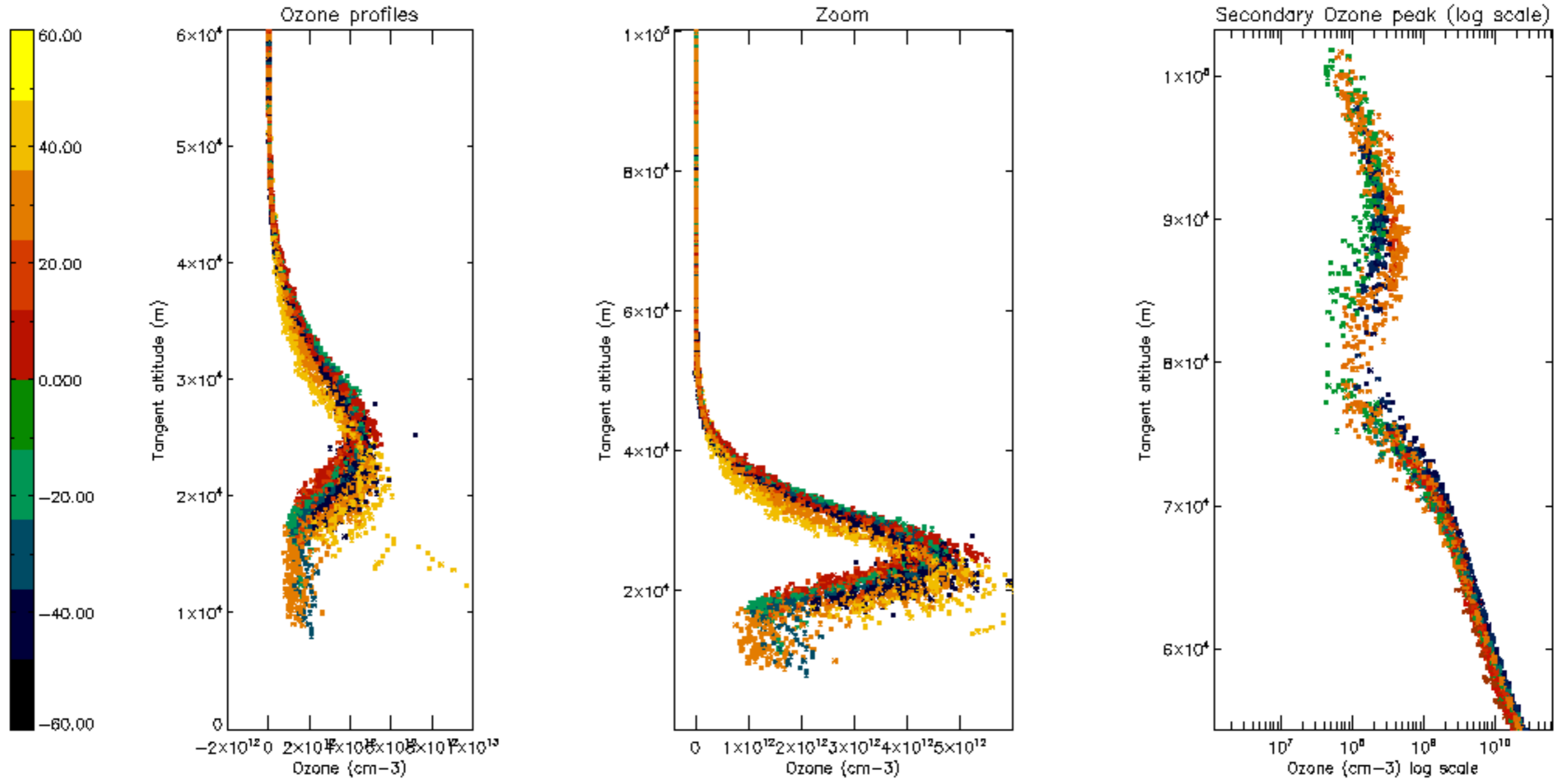
Percentage of star falling outside central band per profile

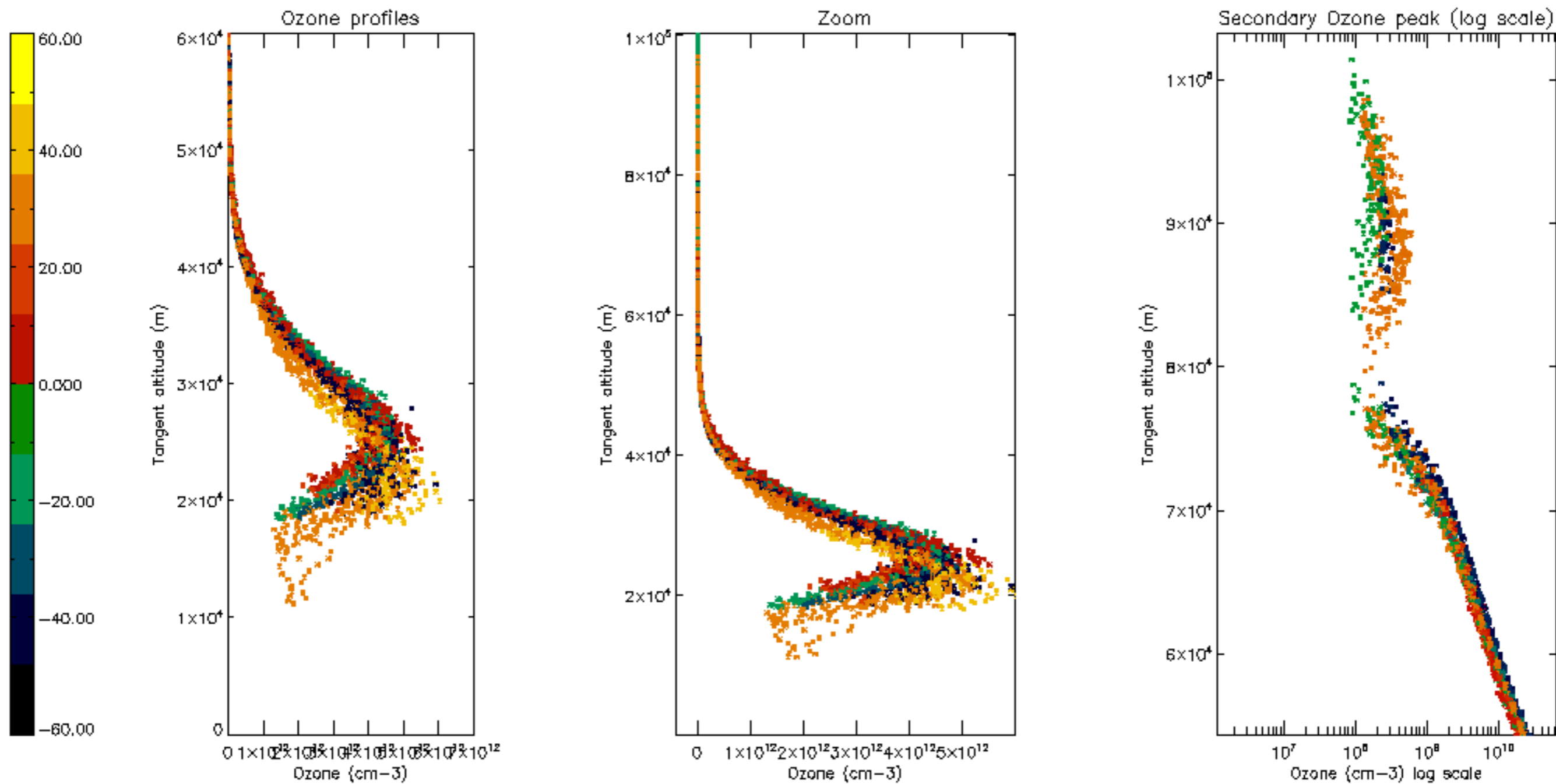


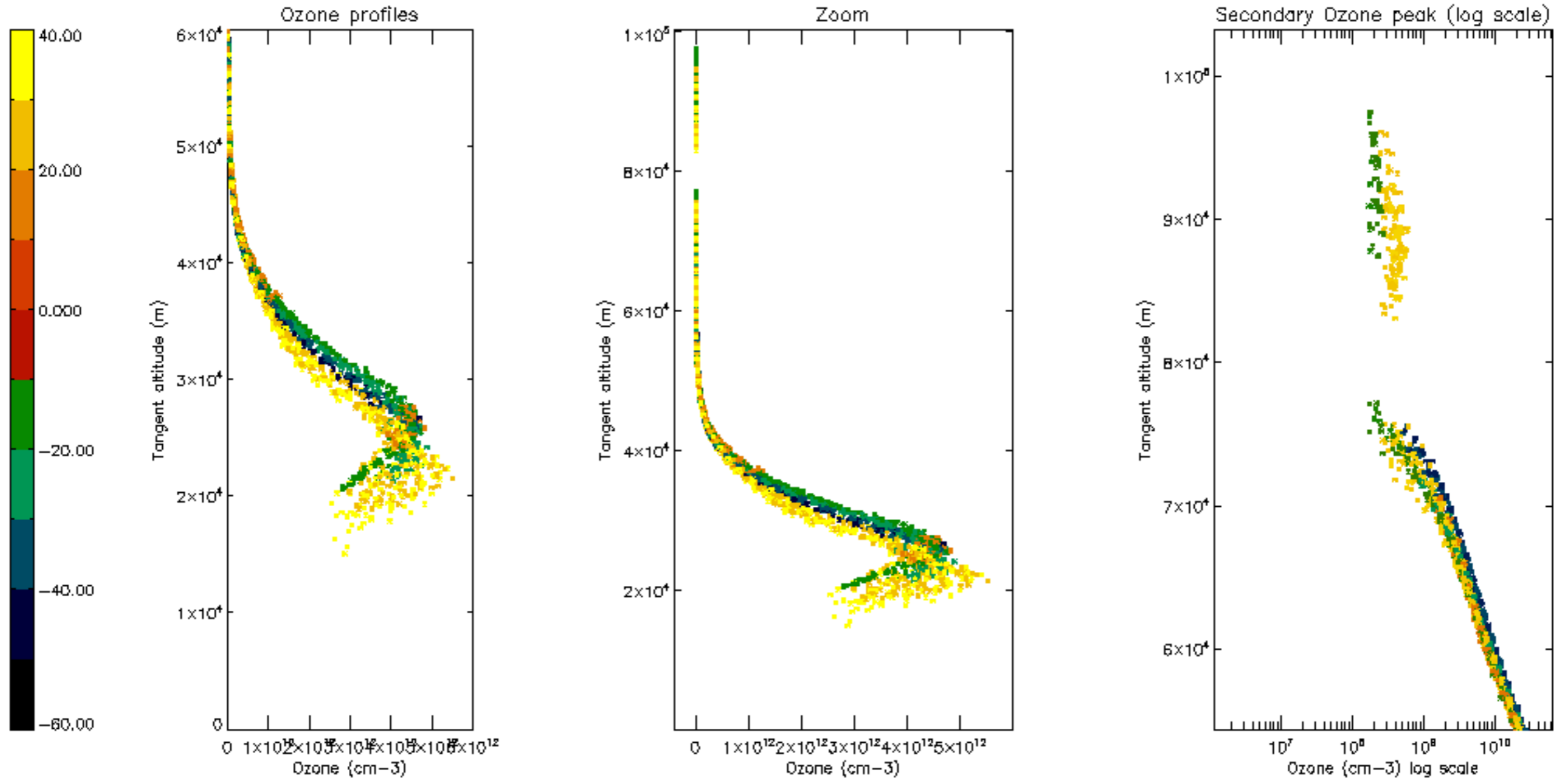
Percentage of saturation errors per profile



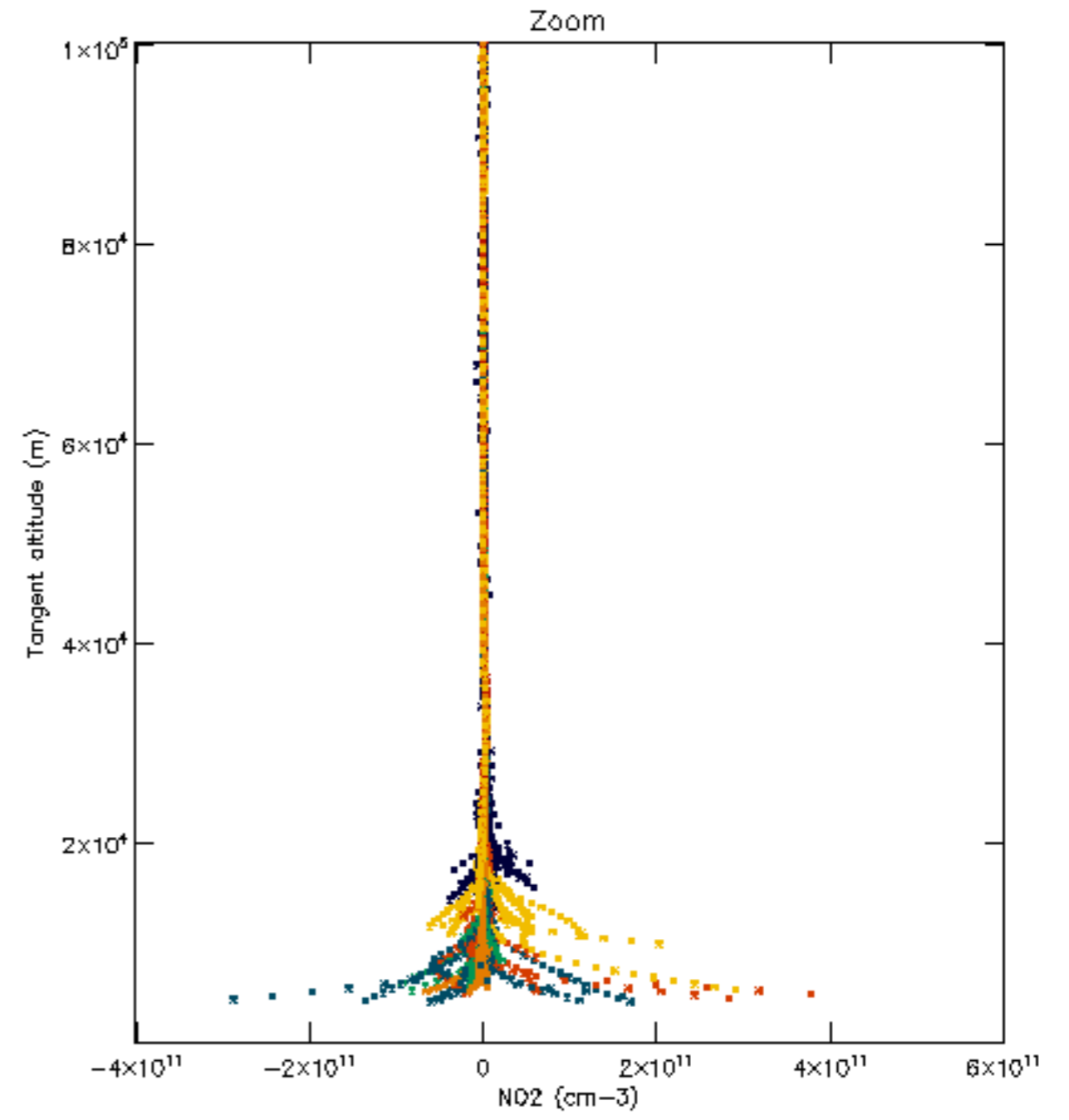
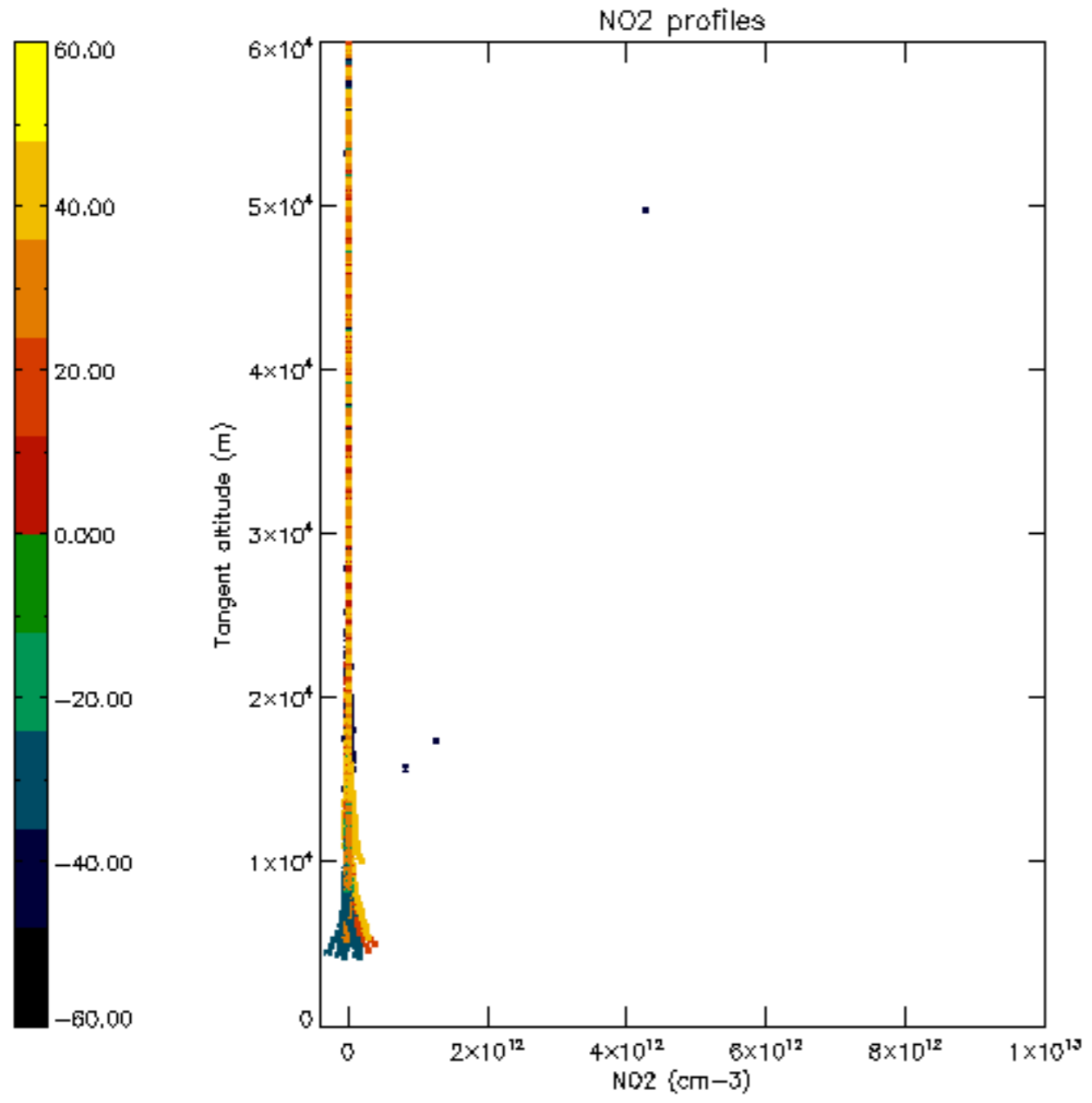


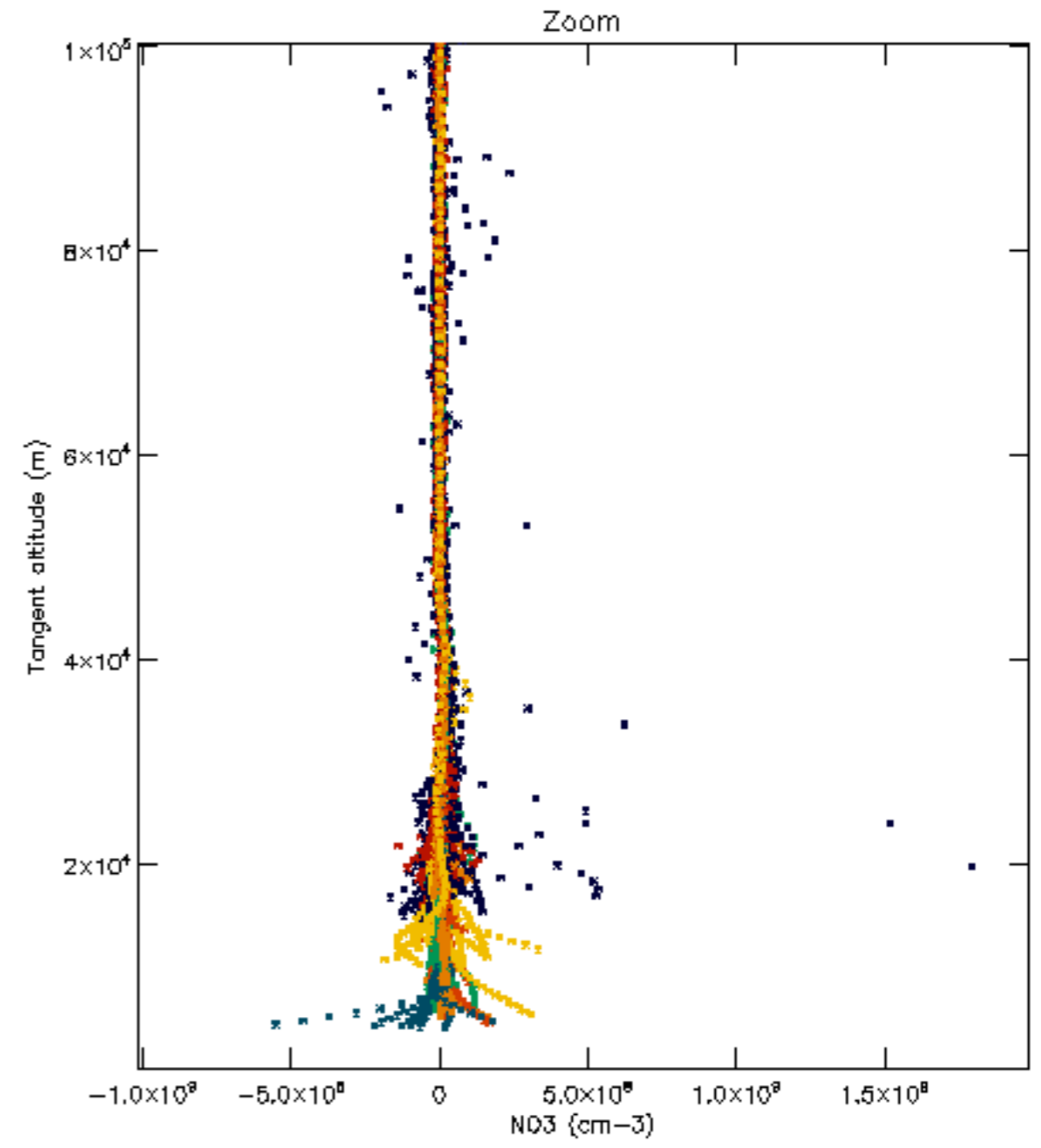
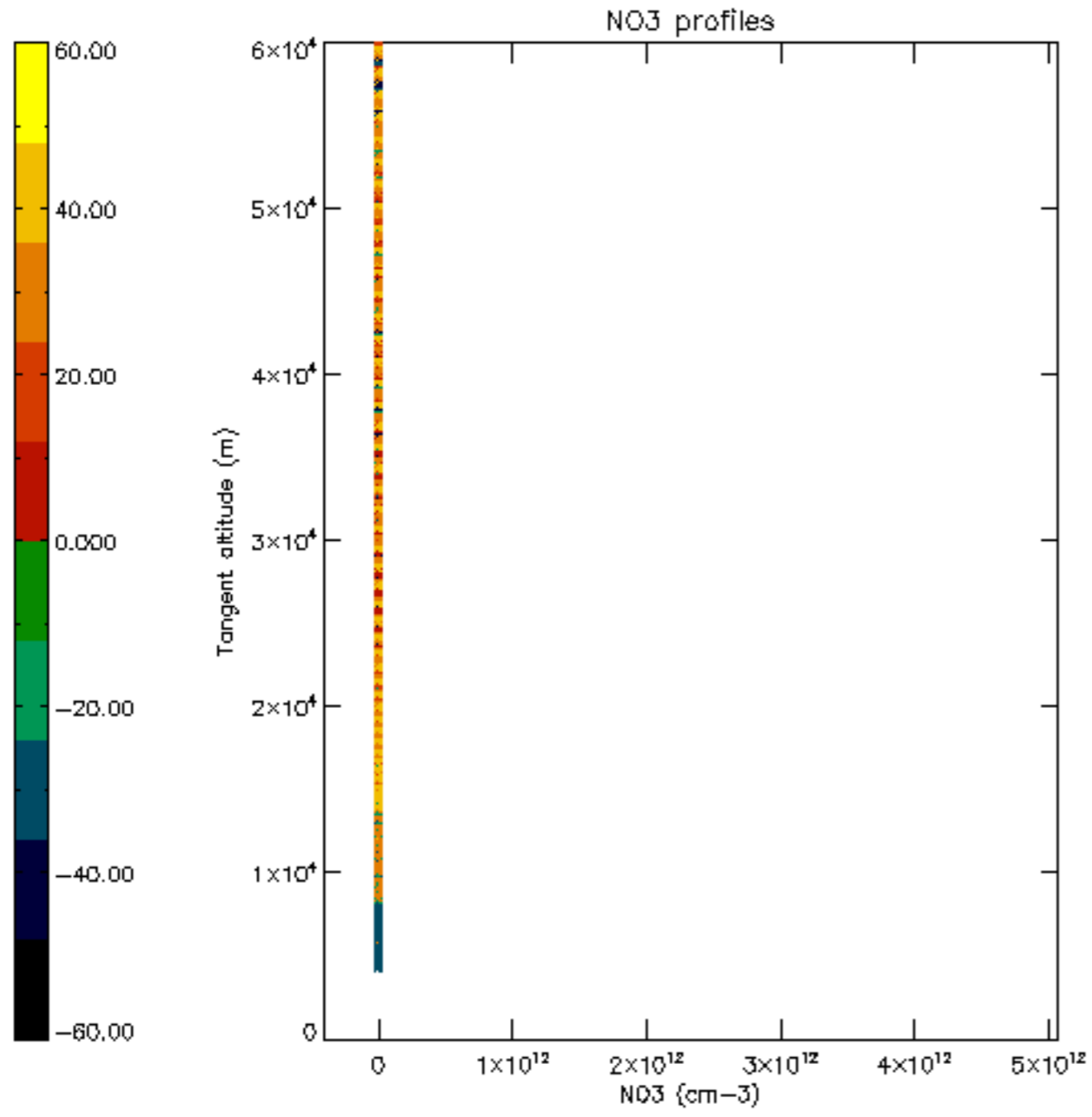


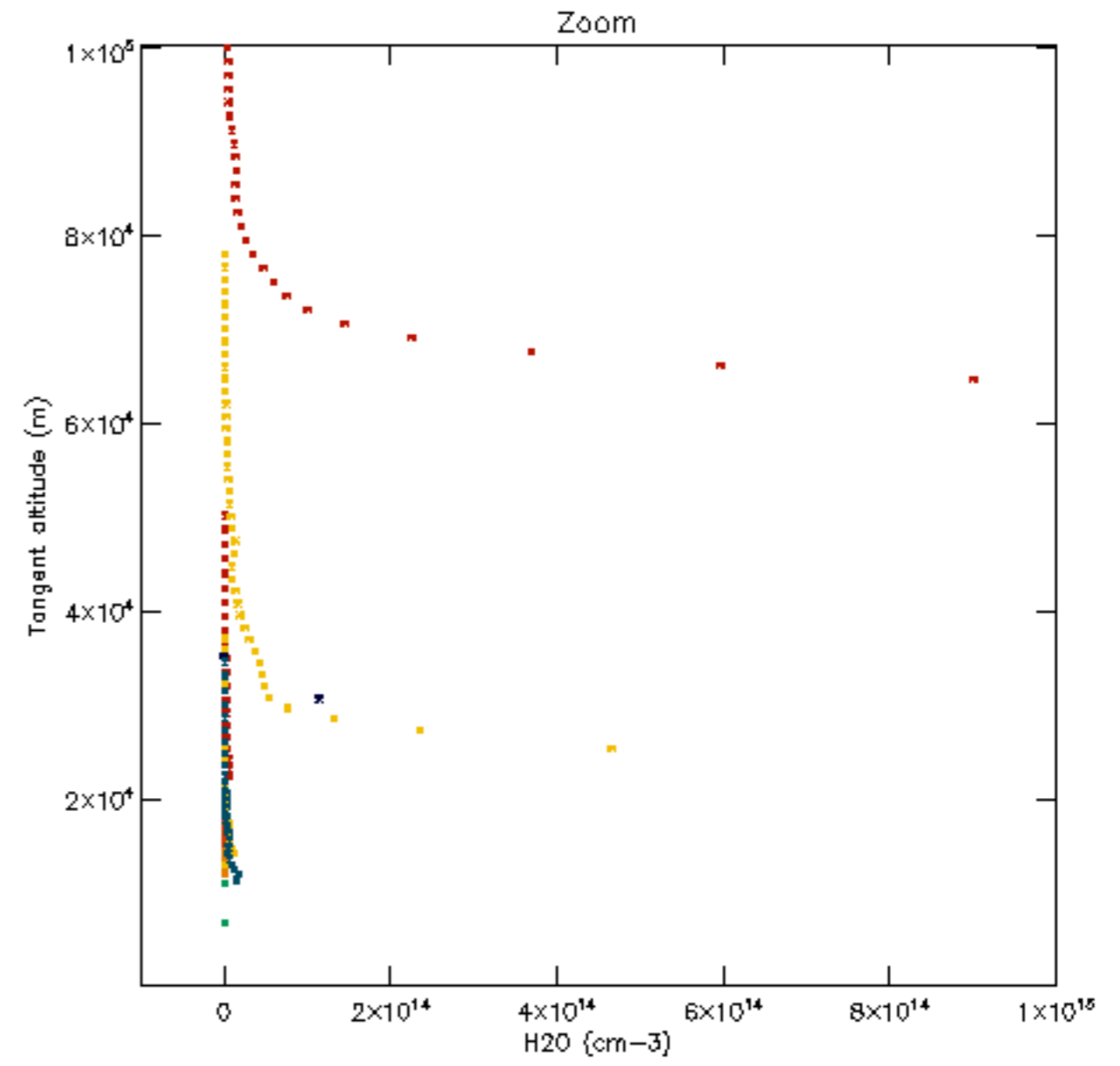
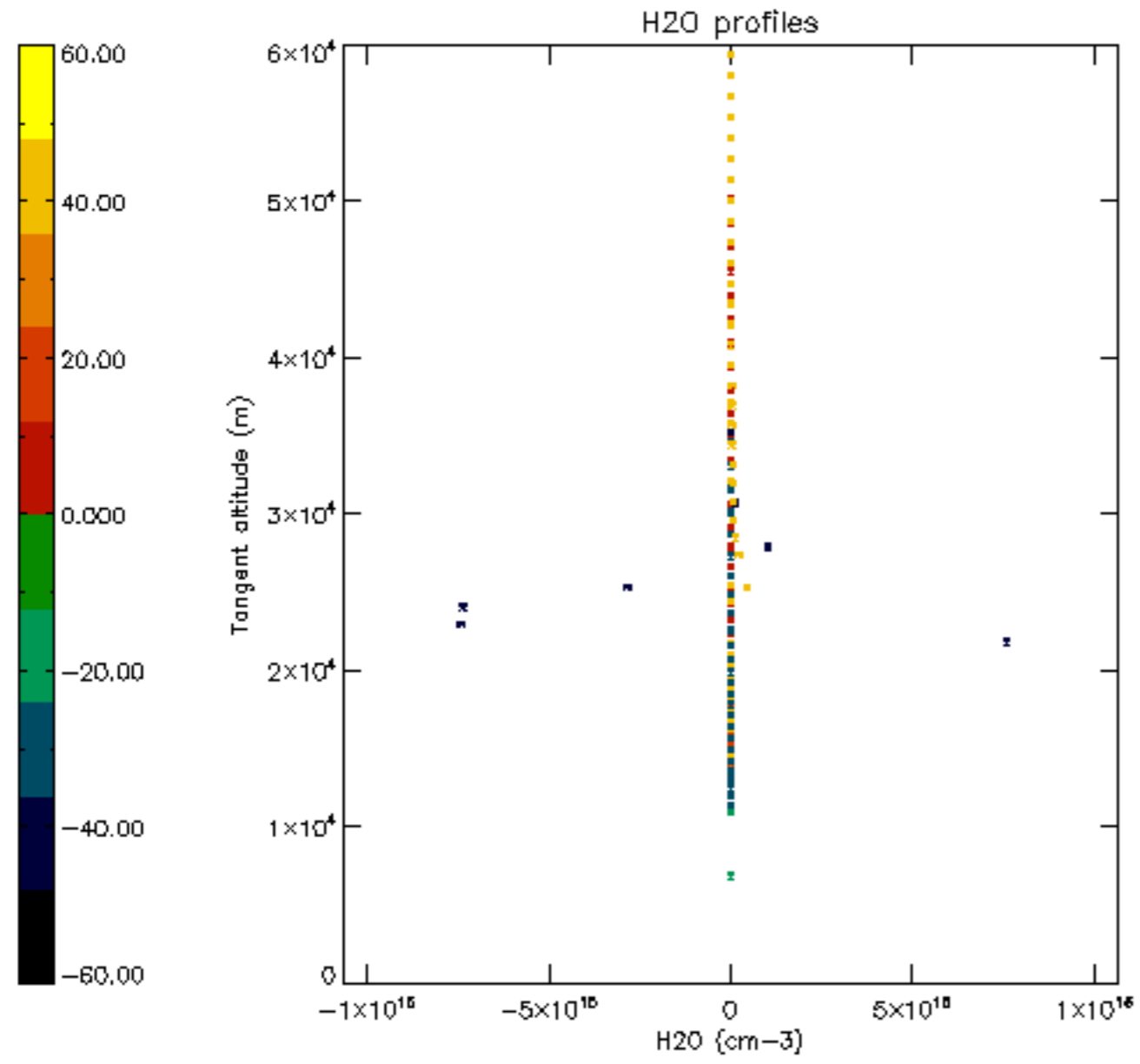


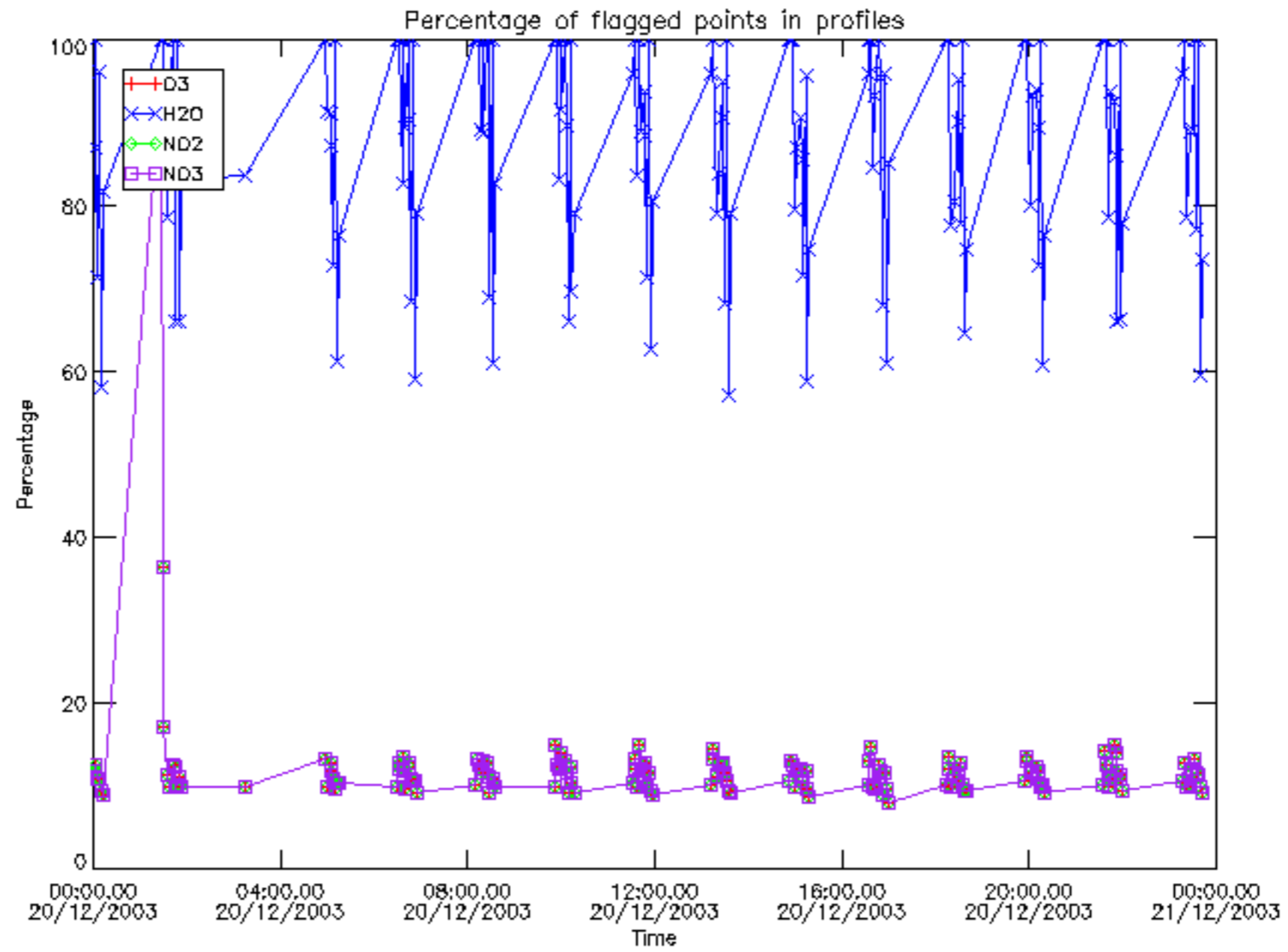




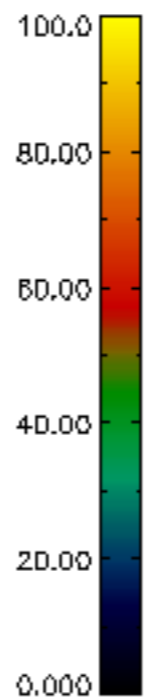
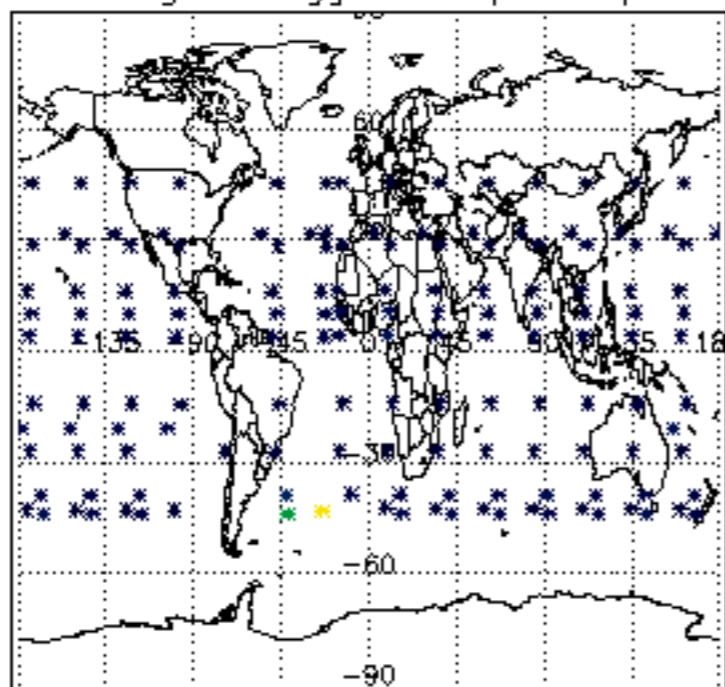




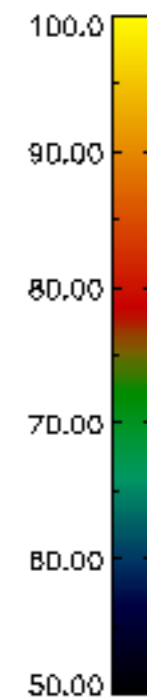
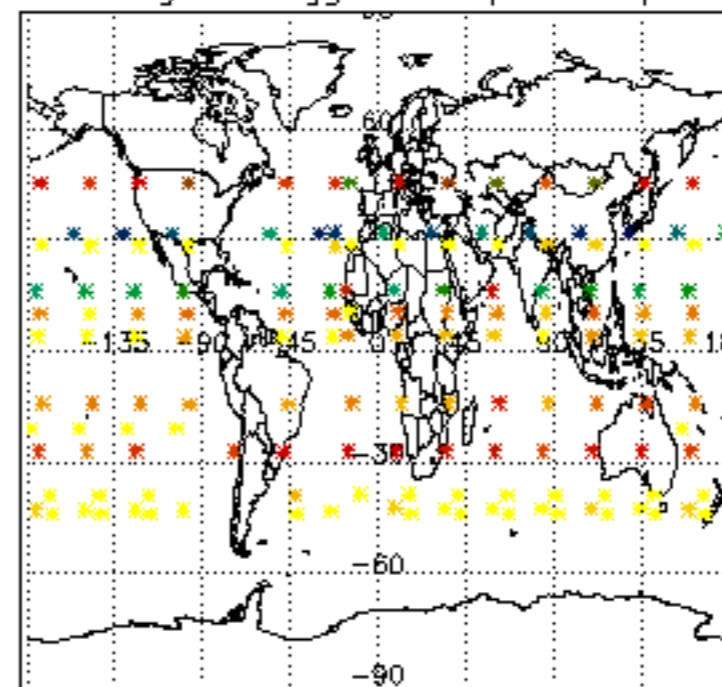




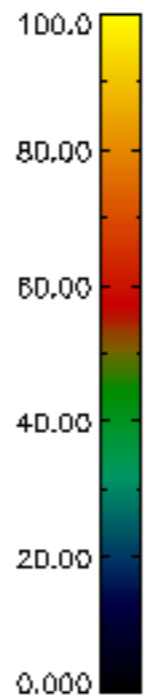
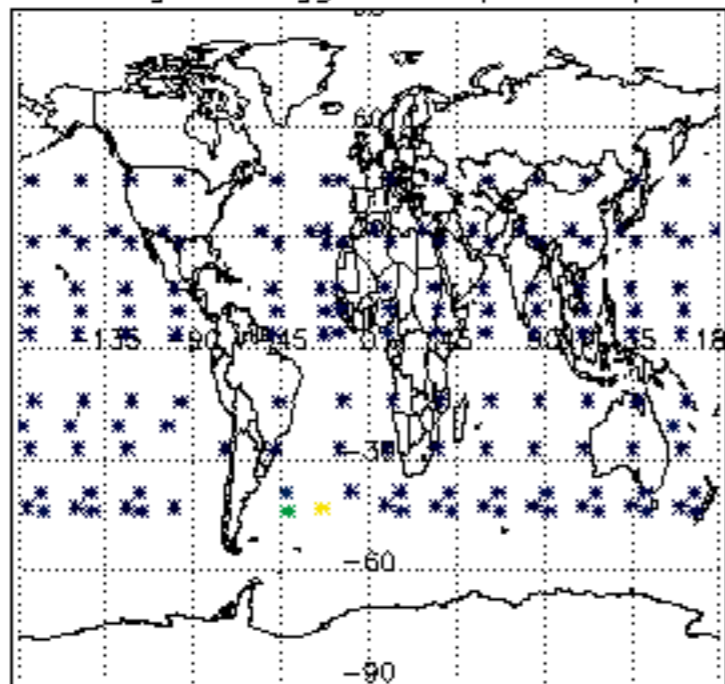
Percentage of flagged data per D3 profile



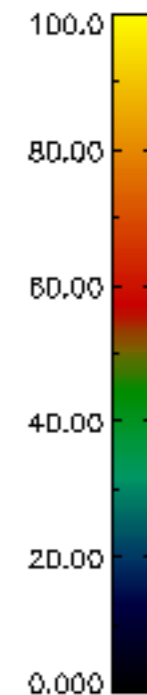
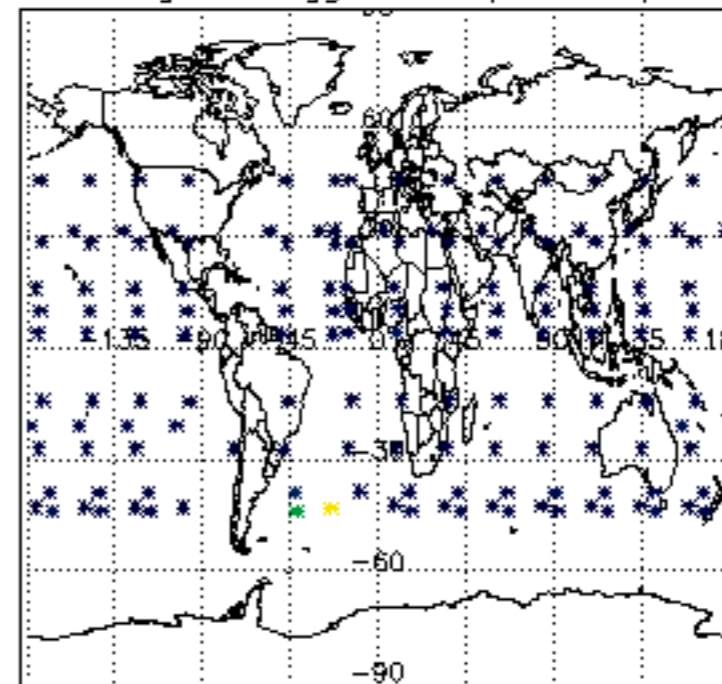
Percentage of flagged data per H2O profile

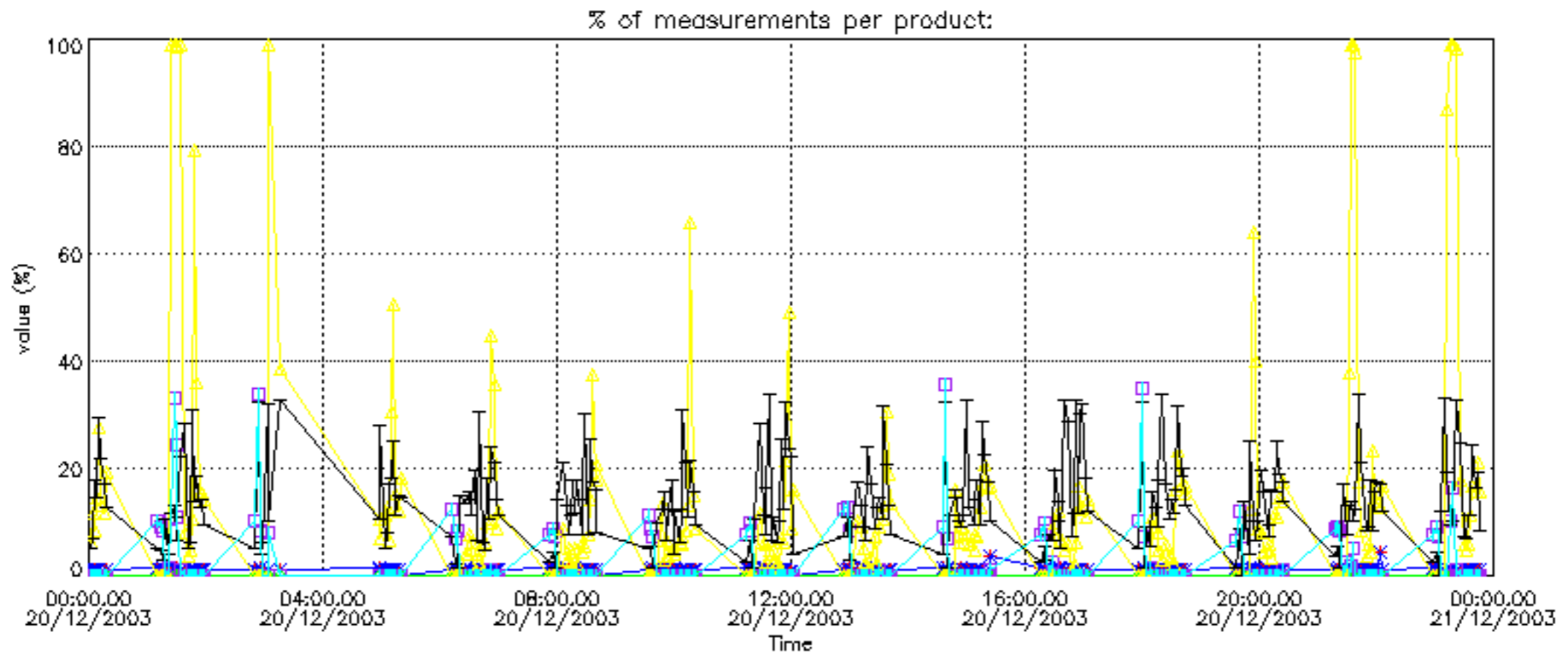


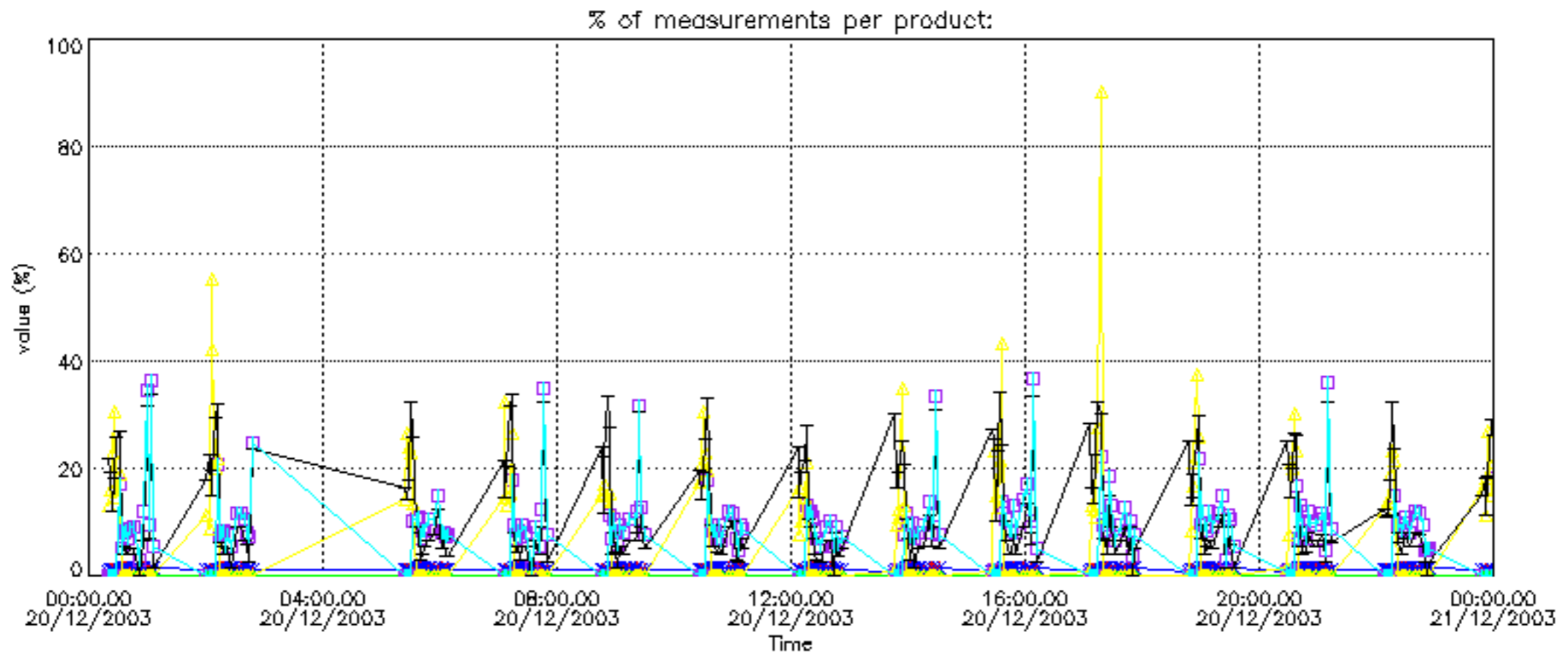
Percentage of flagged data per NO2 profile



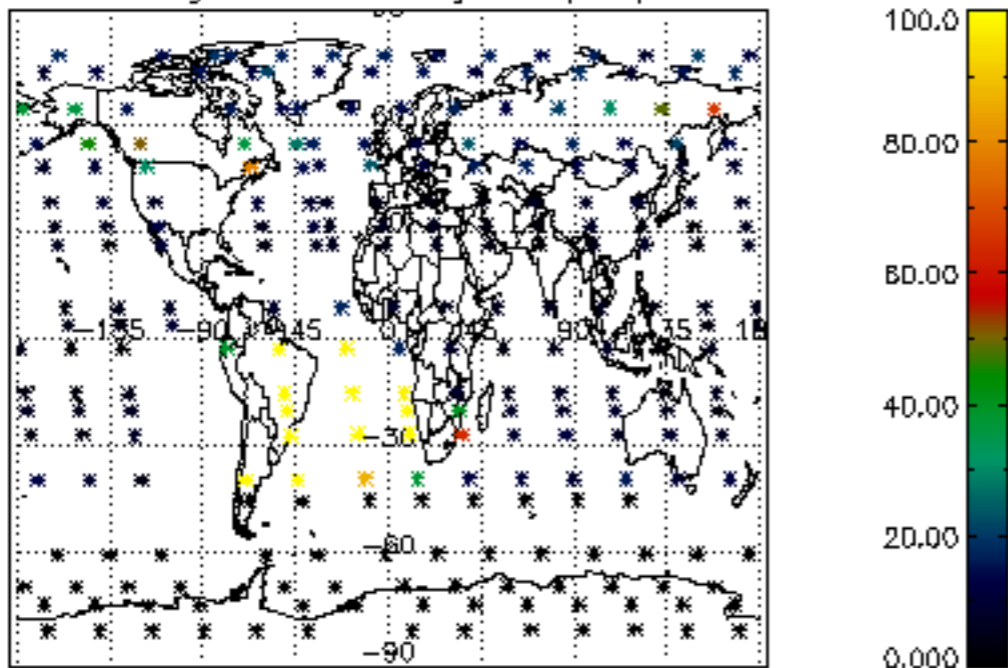
Percentage of flagged data per NO3 profile



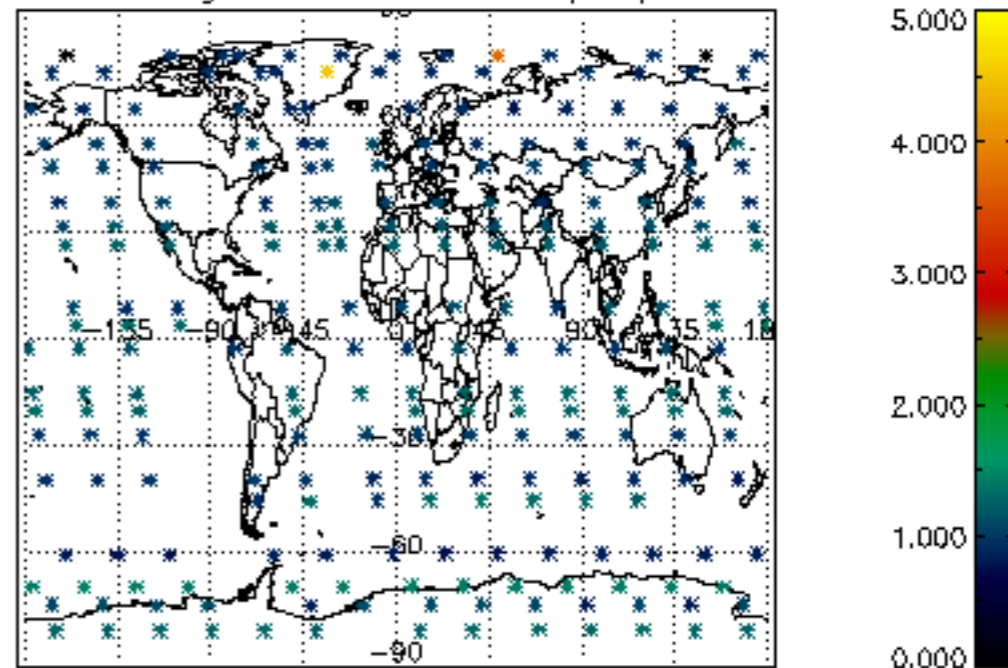




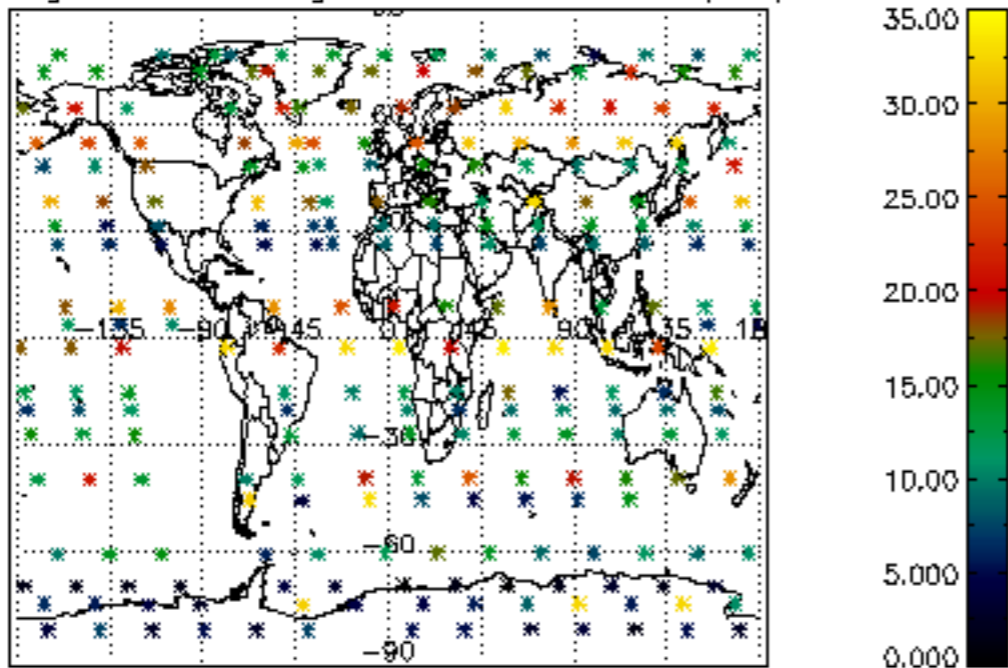
Percentage of cosmic ray hits per profile



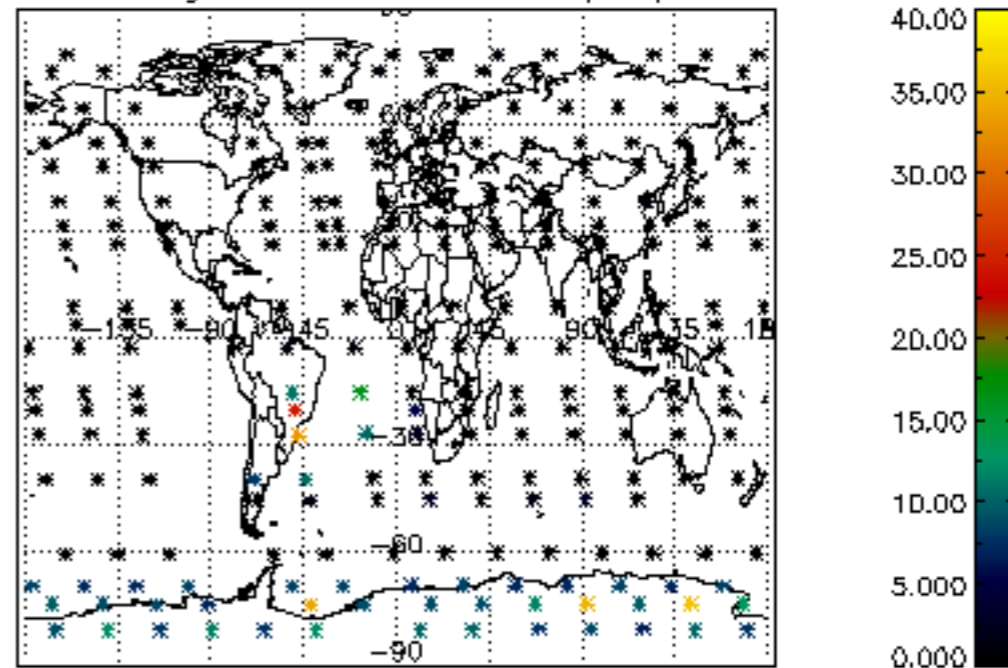
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

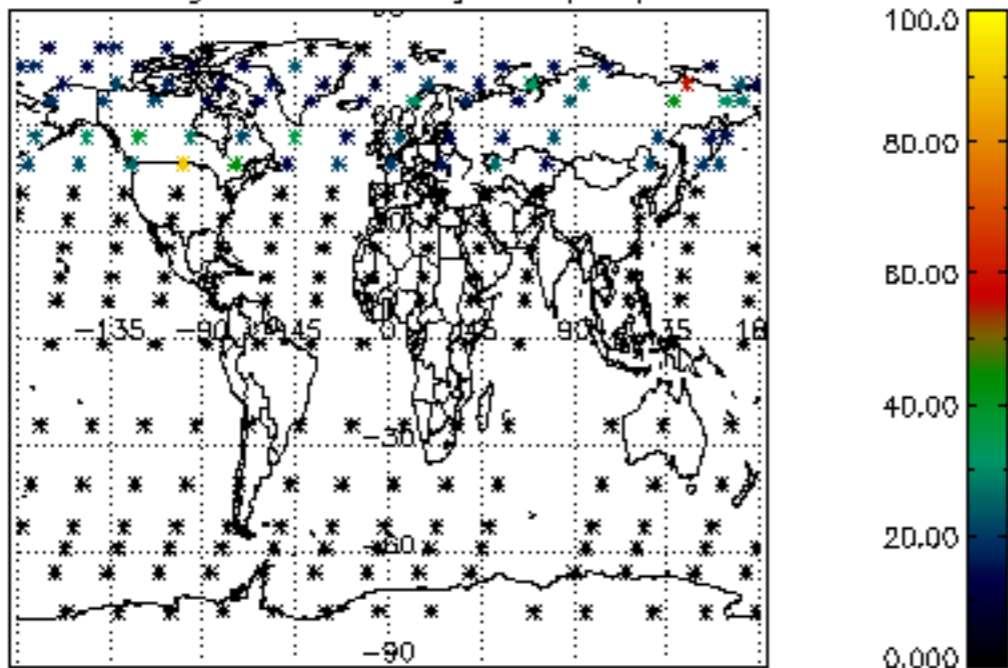


Percentage of saturation errors per profile

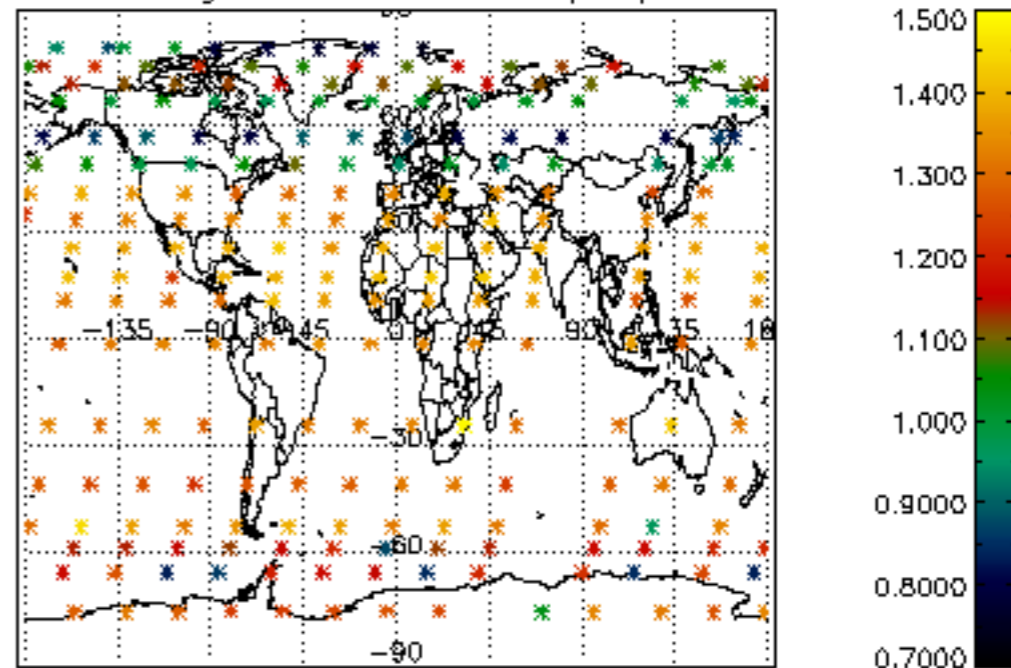




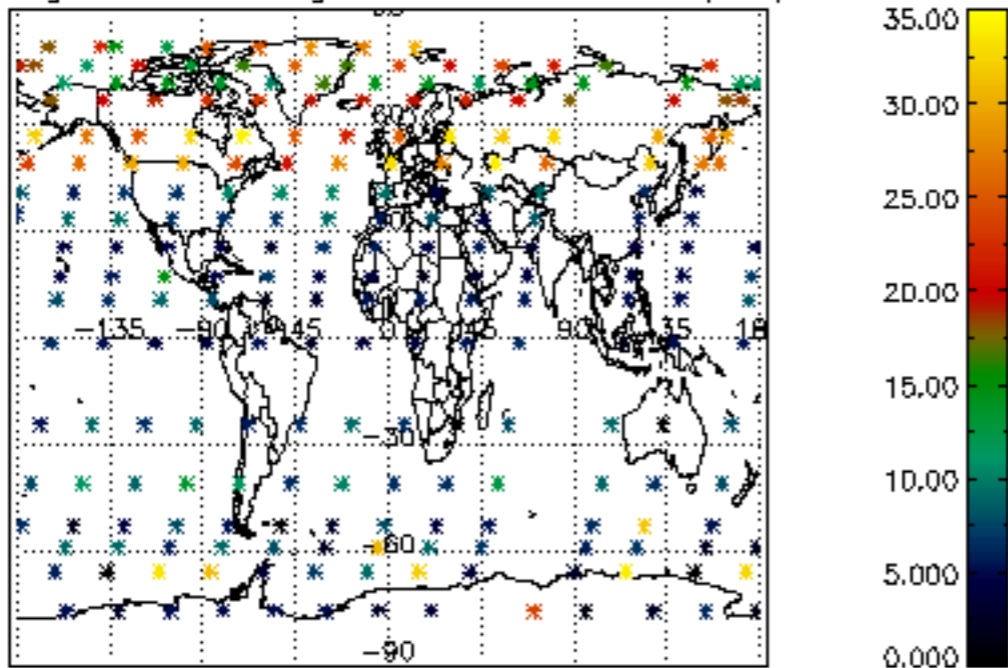
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

