

# 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 10:58:45
Data source version	GOMOS/6.01
Start time of products	27-02-2008 (27FEB2008 00:00:00)
Stop time of products	28-02-2008 (28FEB2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	317
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__2PRFIN20080227_000232_000000422066_00216_31332_9661.N1	27-FEB-2008 00:02:32	Dark	41.500	38	20Eps Sgr	1.8360	11000.	83	31332	No
2	GOM_NL__2PRFIN20080227_000514_000000442066_00216_31332_9662.N1	27-FEB-2008 00:05:14	Dark	44.000	25	35Lam Sco	1.6200	28000.	88	31332	No
3	GOM_NL__2PRFIN20080227_000752_000000412066_00216_31332_9663.N1	27-FEB-2008 00:07:52	Dark	40.500	147	Alp Ara	2.8770	26000.	81	31332	No
4	GOM_NL__2PRFIN20080227_000909_000000402066_00217_31333_9643.N1	27-FEB-2008 00:09:09	Dark	39.500	141	Bet Ara	2.8400	4600.0	79	31333	No
5	GOM_NL__2PRFIN20080227_001308_000000382066_00217_31333_9644.N1	27-FEB-2008 00:13:08	Dark	38.000	134	Bet TrA	2.8100	6600.0	76	31333	No
6	GOM_NL__2PRFIN20080227_001540_000000502066_00217_31333_9645.N1	27-FEB-2008 00:15:40	Dark	49.500	4	Alp1Cen	-0.010000	5800.0	99	31333	No
7	GOM_NL__2PRFIN20080227_001700_000000462066_00217_31333_9646.N1	27-FEB-2008 00:17:00	Dark	45.500	10	Bet Cen	0.61000	28000.	91	31333	No
8	GOM_NL__2PRFIN20080227_001843_000000312066_00217_31333_9647.N1	27-FEB-2008 00:18:43	Dark	31.000	77	Eps Cen	2.3030	28000.	62	31333	No
9	GOM_NL__2PRFIN20080227_001941_000000502066_00217_31333_9648.N1	27-FEB-2008 00:19:41	Dark	49.500	12	Alp1Cru	0.77500	30000.	99	31333	No
10	GOM_NL__2PRFIN20080227_002246_000000412066_00217_31333_9649.N1	27-FEB-2008 00:22:46	Dark	41.000	99	Del Cen	2.5750	26000.	82	31333	No
11	GOM_NL__2PRFIN20080227_002509_000000382066_00217_31333_9650.N1	27-FEB-2008 00:25:09	Straylight	38.000	91	Kap Vel	2.4900	26000.	76	31333	No
12	GOM_NL__2PRFIN20080227_002827_000000452066_00217_31333_9651.N1	27-FEB-2008 00:28:27	Straylight	45.000	65	Lam Vel	2.2040	4400.0	90	31333	No
13	GOM_NL__2PRFIN20080227_003800_000000462066_00217_31333_9652.N1	27-FEB-2008 00:38:00	Twilight_and_stray	45.500	48	30Alp Hya	1.9770	4100.0	91	31333	No
14	GOM_NL__2PRFIN20080227_010603_000000352066_00217_31333_9653.N1	27-FEB-2008 01:06:03	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	31333	No
15	GOM_NL__2PRFIN20080227_011328_000000372066_00217_31333_9654.N1	27-FEB-2008 01:13:28	Bright	36.500	89	5Alp Cep	2.4510	8000.0	73	31333	No
16	GOM_NL__2PRFIN20080227_011834_000000352066_00217_31333_9655.N1	27-FEB-2008 01:18:34	Bright	34.500	19	50Alp Cyg	1.2460	10500.	69	31333	No
17	GOM_NL__2PRFIN20080227_012008_000000332066_00217_31333_9656.N1	27-FEB-2008 01:20:08	Bright	33.000	66	37Gam Cyg	2.2080	5900.0	66	31333	No
18	GOM_NL__2PRFIN20080227_012140_000000342066_00217_31333_9657.N1	27-FEB-2008 01:21:40	Bright	33.500	92	53Eps Cyg	2.5000	4500.0	67	31333	No
19	GOM_NL__2PRFIN20080227_012836_000000372066_00217_31333_9658.N1	27-FEB-2008 01:28:36	Bright	37.000	168	17Zet Aql	2.9860	11000.	74	31333	No
20	GOM_NL__2PRFIN20080227_013819_000000402066_00217_31333_9659.N1	27-FEB-2008 01:38:19	Dark	39.500	155	41Pi Sgr	2.9000	6600.0	79	31333	No
21	GOM_NL__2PRFIN20080227_014006_000000422066_00217_31333_9660.N1	27-FEB-2008 01:40:06	Dark	42.000	57	34Sig Sgr	2.0660	26000.	84	31333	No
22	GOM_NL__2PRFIN20080227_014309_000000442066_00217_31333_9661.N1	27-FEB-2008 01:43:09	Dark	43.500	38	20Eps Sgr	1.8360	11000.	87	31333	No
23	GOM_NL__2PRFIN20080227_014551_000000432066_00217_31333_9662.N1	27-FEB-2008 01:45:51	Dark	42.500	25	35Lam Sco	1.6200	28000.	85	31333	No
24	GOM_NL__2PRFIN20080227_014828_000000402066_00217_31333_9663.N1	27-FEB-2008 01:48:28	Dark	40.000	147	Alp Ara	2.8770	26000.	80	31333	No
25	GOM_NL__2PRFIN20080227_014946_000000432066_00218_31334_9643.N1	27-FEB-2008 01:49:46	Dark	43.000	141	Bet Ara	2.8400	4600.0	86	31334	No
26	GOM_NL__2PRFIN20080227_015345_000000382066_00218_31334_9644.N1	27-FEB-2008 01:53:45	Dark	38.000	134	Bet TrA	2.8100	6600.0	76	31334	No
27	GOM_NL__2PRFIN20080227_015617_000000482066_00218_31334_9645.N1	27-FEB-2008 01:56:17	Dark	47.500	4	Alp1Cen	-0.010000	5800.0	95	31334	No
28	GOM_NL__2PRFIN20080227_015736_000000442066_00218_31334_9646.N1	27-FEB-2008 01:57:36	Dark	44.000	10	Bet Cen	0.61000	28000.	88	31334	No
29	GOM_NL__2PRFIN20080227_015920_000000322066_00218_31334_9647.N1	27-FEB-2008 01:59:20	Dark	32.000	77	Eps Cen	2.3030	28000.	64	31334	No
30	GOM_NL__2PRFIN20080227_020017_000000382066_00218_31334_9648.N1	27-FEB-2008 02:00:17	Dark	38.000	12	Alp1Cru	0.77500	30000.	76	31334	No
31	GOM_NL__2PRFIN20080227_020323_000000402066_00218_31334_9649.N1	27-FEB-2008 02:03:23	Dark	40.000	99	Del Cen	2.5750	26000.	80	31334	No
32	GOM_NL__2PRFIN20080227_020545_000000382066_00218_31334_9650.N1	27-FEB-2008 02:05:45	Straylight	38.000	91	Kap Vel	2.4900	26000.	76	31334	No
33	GOM_NL__2PRFIN20080227_020903_000000452066_00218_31334_9651.N1	27-FEB-2008 02:09:03	Straylight	45.000	65	Lam Vel	2.2040	4400.0	90	31334	No
34	GOM_NL__2PRFIN20080227_021836_000000452066_00218_31334_9652.N1	27-FEB-2008 02:18:36	Twilight_and_stray	44.500	48	30Alp Hya	1.9770	4100.0	89	31334	No
35	GOM_NL__2PRFIN20080227_024639_000000342066_00218_31334_9653.N1	27-FEB-2008 02:46:39	Bright	34.000	49	1Alp UMi	1.9900	6300.0	68	31334	No
36	GOM_NL__2PRFIN20080227_025404_000000362066_00218_31334_9654.N1	27-FEB-2008 02:54:04	Bright	36.000	89	5Alp Cep	2.4510	8000.0	72	31334	No
37	GOM_NL__2PRFIN20080227_025910_000000352066_00218_31334_9655.N1	27-FEB-2008 02:59:10	Bright	34.500	19	50Alp Cyg	1.2460	10500.	69	31334	No
38	GOM_NL__2PRFIN20080227_030044_000000342066_00218_31334_9656.N1	27-FEB-2008 03:00:44	Bright	33.500	66	37Gam Cyg	2.2080	5900.0	67	31334	No
39	GOM_NL__2PRFIN20080227_030216_000000352066_00218_31334_9657.N1	27-FEB-2008 03:02:16	Bright	34.500	92	53Eps Cyg	2.5000	4500.0	69	31334	No
40	GOM_NL__2PRFIN20080227_030912_000000382066_00218_31334_9658.N1	27-FEB-2008 03:09:12	Bright	37.500	168	17Zet Aql	2.9860	11000.	75	31334	No
41	GOM_NL__2PRFIN20080227_031856_000000402066_00218_31334_9659.N1	27-FEB-2008 03:18:56	Dark	39.500	155	41Pi Sgr	2.9000	6600.0	79	31334	No
42	GOM_NL__2PRFIN20080227_032043_000000412066_00218_31334_9660.N1	27-FEB-2008 03:20:43	Dark	40.500	57	34Sig Sgr	2.0660	26000.	81	31334	No







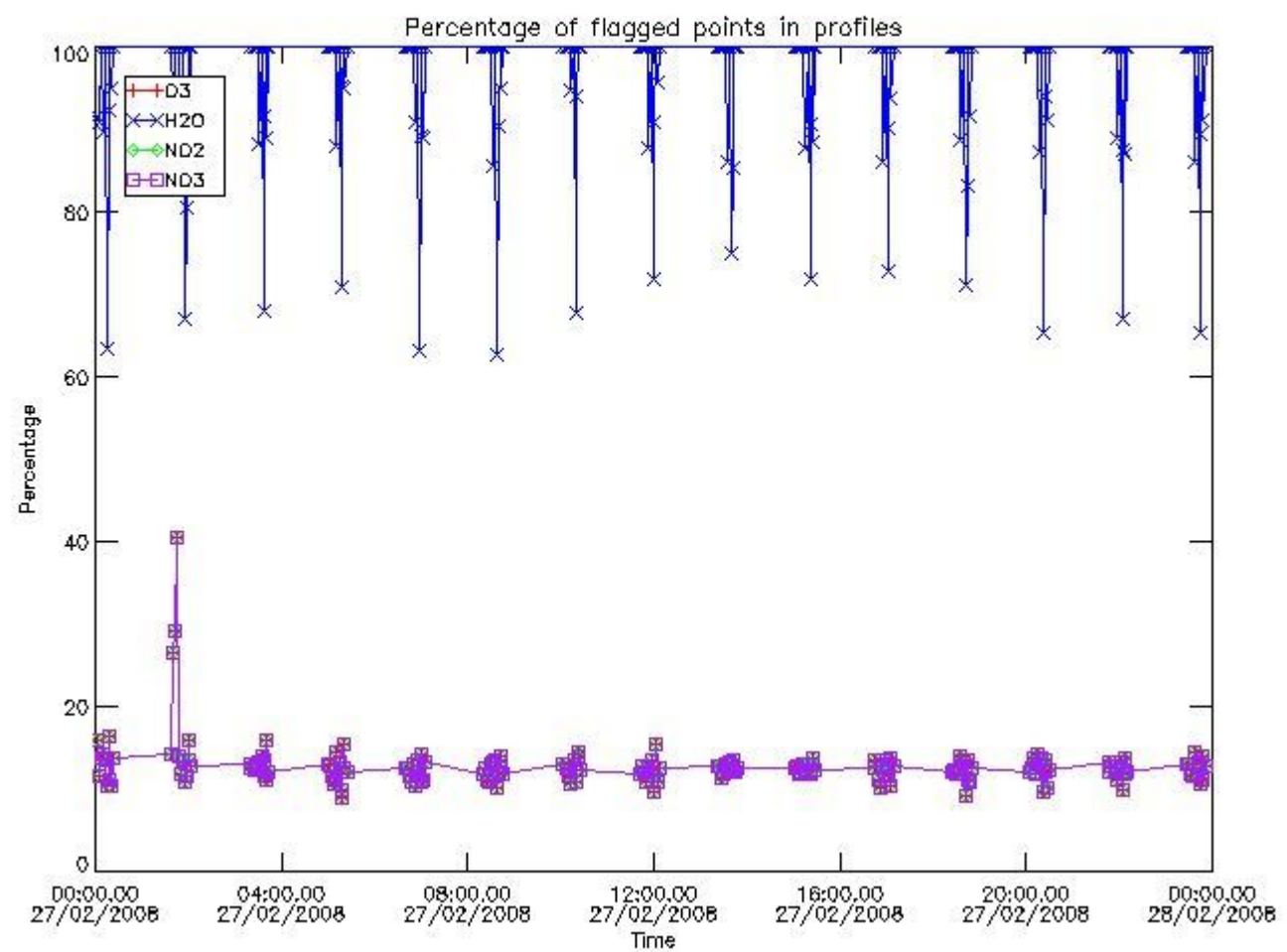


279	GOM_NL__2PRFIN20080227_212721_000000342066_00229_31345_9657.N1	27-FEB-2008 21:27:21	Bright	33.500	66	37Gam Cyg	2.2080	5900.0	67	31345	No
280	GOM_NL__2PRFIN20080227_212853_000000342066_00229_31345_9658.N1	27-FEB-2008 21:28:53	Bright	34.000	92	53Eps Cyg	2.5000	4500.0	68	31345	No
281	GOM_NL__2PRFIN20080227_213551_000000362066_00229_31345_9659.N1	27-FEB-2008 21:35:51	Bright	36.000	168	17Zet Aql	2.9860	11000.	72	31345	No
282	GOM_NL__2PRFIN20080227_214536_000000392066_00229_31345_9660.N1	27-FEB-2008 21:45:36	Dark	38.500	155	41Pi Sgr	2.9000	6600.0	77	31345	No
283	GOM_NL__2PRFIN20080227_214723_000000432066_00229_31345_9661.N1	27-FEB-2008 21:47:23	Dark	42.500	57	34Sig Sgr	2.0660	26000.	85	31345	No
284	GOM_NL__2PRFIN20080227_215027_000000442066_00229_31345_9662.N1	27-FEB-2008 21:50:27	Dark	44.000	38	20Eps Sgr	1.8360	11000.	88	31345	No
285	GOM_NL__2PRFIN20080227_215312_000000462066_00229_31345_9663.N1	27-FEB-2008 21:53:12	Dark	46.000	25	35Lam Sco	1.6200	28000.	92	31345	No
286	GOM_NL__2PRFIN20080227_215547_000000402066_00229_31345_9664.N1	27-FEB-2008 21:55:47	Dark	40.000	147	Alp Ara	2.8770	26000.	80	31345	No
287	GOM_NL__2PRFIN20080227_215703_000000462066_00230_31346_9643.N1	27-FEB-2008 21:57:03	Dark	46.000	141	Bet Ara	2.8400	4600.0	92	31346	No
288	GOM_NL__2PRFIN20080227_220102_000000392066_00230_31346_9644.N1	27-FEB-2008 22:01:02	Dark	38.500	134	Bet TrA	2.8100	6600.0	77	31346	No
289	GOM_NL__2PRFIN20080227_220335_000000432066_00230_31346_9645.N1	27-FEB-2008 22:03:35	Dark	43.000	4	Alp1Cen	-0.010000	5800.0	86	31346	No
290	GOM_NL__2PRFIN20080227_220455_000000522066_00230_31346_9646.N1	27-FEB-2008 22:04:55	Dark	52.000	10	Bet Cen	0.61000	28000.	104	31346	No
291	GOM_NL__2PRFIN20080227_220619_000000372066_00230_31346_9647.N1	27-FEB-2008 22:06:19	Dark	37.000	112	Alp Mus	2.6880	26000.	74	31346	No
292	GOM_NL__2PRFIN20080227_220734_000000432066_00230_31346_9648.N1	27-FEB-2008 22:07:34	Dark	43.000	12	Alp1Cru	0.77500	30000.	86	31346	No
293	GOM_NL__2PRFIN20080227_221040_000000432066_00230_31346_9649.N1	27-FEB-2008 22:10:40	Dark	42.500	99	Del Cen	2.5750	26000.	85	31346	No
294	GOM_NL__2PRFIN20080227_221258_000000372066_00230_31346_9650.N1	27-FEB-2008 22:12:58	Straylight	37.000	91	Kap Vel	2.4900	26000.	74	31346	No
295	GOM_NL__2PRFIN20080227_221617_000000422066_00230_31346_9651.N1	27-FEB-2008 22:16:17	Straylight	41.500	65	Lam Vel	2.2040	4400.0	83	31346	No
296	GOM_NL__2PRFIN20080227_222549_000000472066_00230_31346_9652.N1	27-FEB-2008 22:25:49	Tw_i_and_stray	46.500	48	30Alp Hya	1.9770	4100.0	93	31346	No
297	GOM_NL__2PRFIN20080227_223527_000000392066_00230_31346_9653.N1	27-FEB-2008 22:35:27	Bright	39.000	166	17Eps Leo	2.9800	6000.0	78	31346	No
298	GOM_NL__2PRFIN20080227_225351_000000362066_00230_31346_9654.N1	27-FEB-2008 22:53:51	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	31346	No
299	GOM_NL__2PRFIN20080227_230117_000000342066_00230_31346_9655.N1	27-FEB-2008 23:01:17	Bright	34.000	89	5Alp Cep	2.4510	8000.0	68	31346	No
300	GOM_NL__2PRFIN20080227_230623_000000352066_00230_31346_9656.N1	27-FEB-2008 23:06:23	Bright	35.000	19	50Alp Cyg	1.2460	10500.	70	31346	No
301	GOM_NL__2PRFIN20080227_230757_000000522066_00230_31346_9657.N1	27-FEB-2008 23:07:57	Bright	52.000	66	37Gam Cyg	2.2080	5900.0	104	31346	No
302	GOM_NL__2PRFIN20080227_230929_000000512066_00230_31346_9658.N1	27-FEB-2008 23:09:29	Bright	51.000	92	53Eps Cyg	2.5000	4500.0	102	31346	No
303	GOM_NL__2PRFIN20080227_231627_000000372066_00230_31346_9659.N1	27-FEB-2008 23:16:27	Bright	36.500	168	17Zet Aql	2.9860	11000.	73	31346	No
304	GOM_NL__2PRFIN20080227_232612_000000402066_00230_31346_9660.N1	27-FEB-2008 23:26:12	Dark	39.500	155	41Pi Sgr	2.9000	6600.0	79	31346	No
305	GOM_NL__2PRFIN20080227_232800_000000392066_00230_31346_9661.N1	27-FEB-2008 23:28:00	Dark	39.000	57	34Sig Sgr	2.0660	26000.	78	31346	No
306	GOM_NL__2PRFIN20080227_233103_000000432066_00230_31346_9662.N1	27-FEB-2008 23:31:03	Dark	43.000	38	20Eps Sgr	1.8360	11000.	86	31346	No
307	GOM_NL__2PRFIN20080227_233348_000000442066_00230_31346_9663.N1	27-FEB-2008 23:33:48	Dark	44.000	25	35Lam Sco	1.6200	28000.	88	31346	No
308	GOM_NL__2PRFIN20080227_233623_000000392066_00230_31346_9664.N1	27-FEB-2008 23:36:23	Dark	38.500	147	Alp Ara	2.8770	26000.	77	31346	No
309	GOM_NL__2PRFIN20080227_233740_000000402066_00231_31347_9643.N1	27-FEB-2008 23:37:40	Dark	39.500	141	Bet Ara	2.8400	4600.0	79	31347	No
310	GOM_NL__2PRFIN20080227_234139_000000392066_00231_31347_9644.N1	27-FEB-2008 23:41:39	Dark	38.500	134	Bet TrA	2.8100	6600.0	77	31347	No
311	GOM_NL__2PRFIN20080227_234412_000000452066_00231_31347_9645.N1	27-FEB-2008 23:44:12	Dark	45.000	4	Alp1Cen	-0.010000	5800.0	90	31347	No
312	GOM_NL__2PRFIN20080227_234531_000000482066_00231_31347_9646.N1	27-FEB-2008 23:45:31	Dark	48.000	10	Bet Cen	0.61000	28000.	96	31347	No
313	GOM_NL__2PRFIN20080227_234655_000000372066_00231_31347_9647.N1	27-FEB-2008 23:46:55	Dark	36.500	112	Alp Mus	2.6880	26000.	73	31347	No
314	GOM_NL__2PRFIN20080227_234810_000000462066_00231_31347_9648.N1	27-FEB-2008 23:48:10	Dark	45.500	12	Alp1Cru	0.77500	30000.	91	31347	No
315	GOM_NL__2PRFIN20080227_235117_000000402066_00231_31347_9649.N1	27-FEB-2008 23:51:17	Dark	40.000	99	Del Cen	2.5750	26000.	80	31347	No
316	GOM_NL__2PRFIN20080227_235335_000000372066_00231_31347_9650.N1	27-FEB-2008 23:53:35	Straylight	37.000	91	Kap Vel	2.4900	26000.	74	31347	No
317	GOM_NL__2PRFIN20080227_235653_000000422066_00231_31347_9651.N1	27-FEB-2008 23:56:53	Straylight	41.500	65	Lam Vel	2.2040	4400.0	83	31347	No

### 3. Quality information per product

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

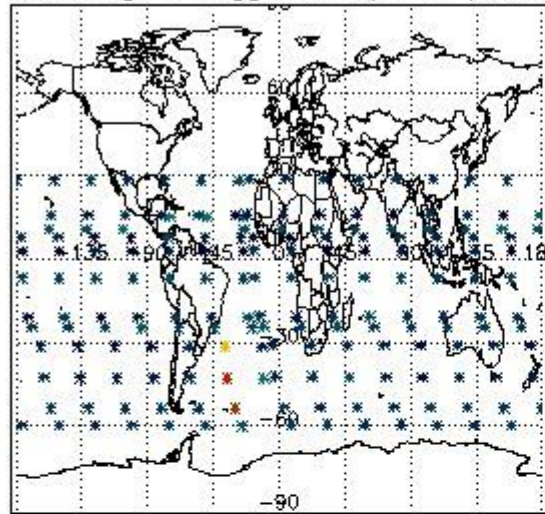
#### 3.1 Plot quality information per product (time dependant)



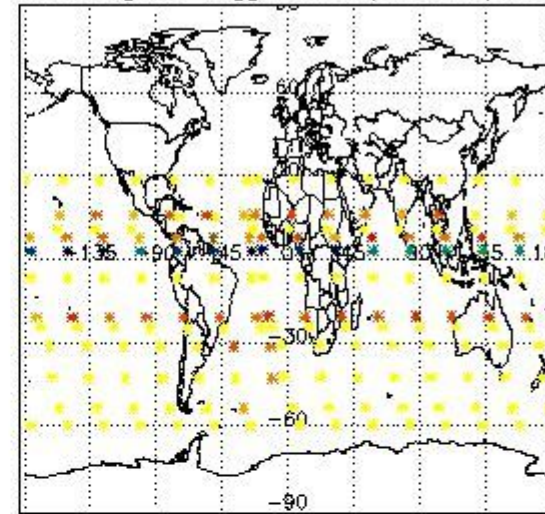
3.2 Plot quality information per product (world map)



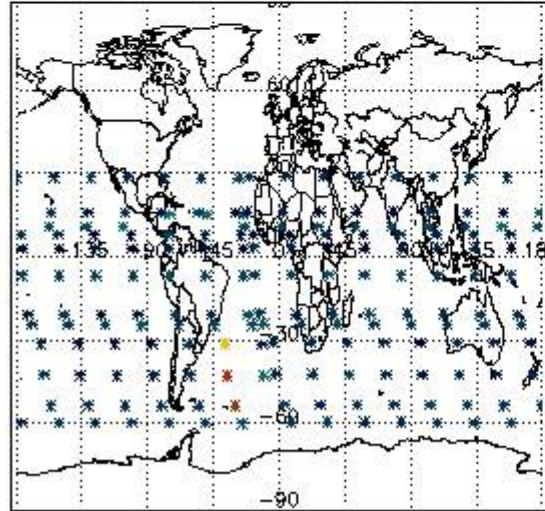
Percentage of flagged data per O3 profile



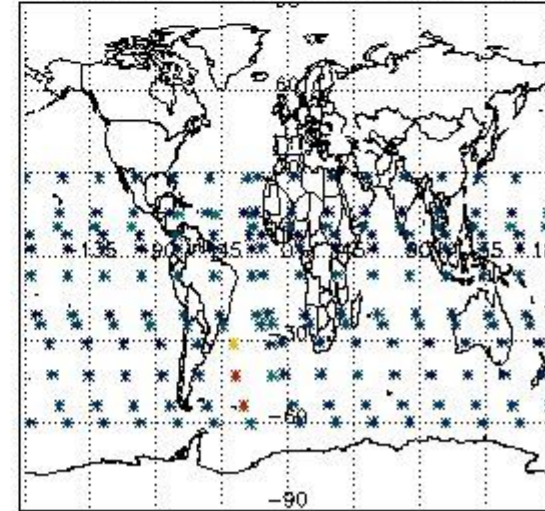
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

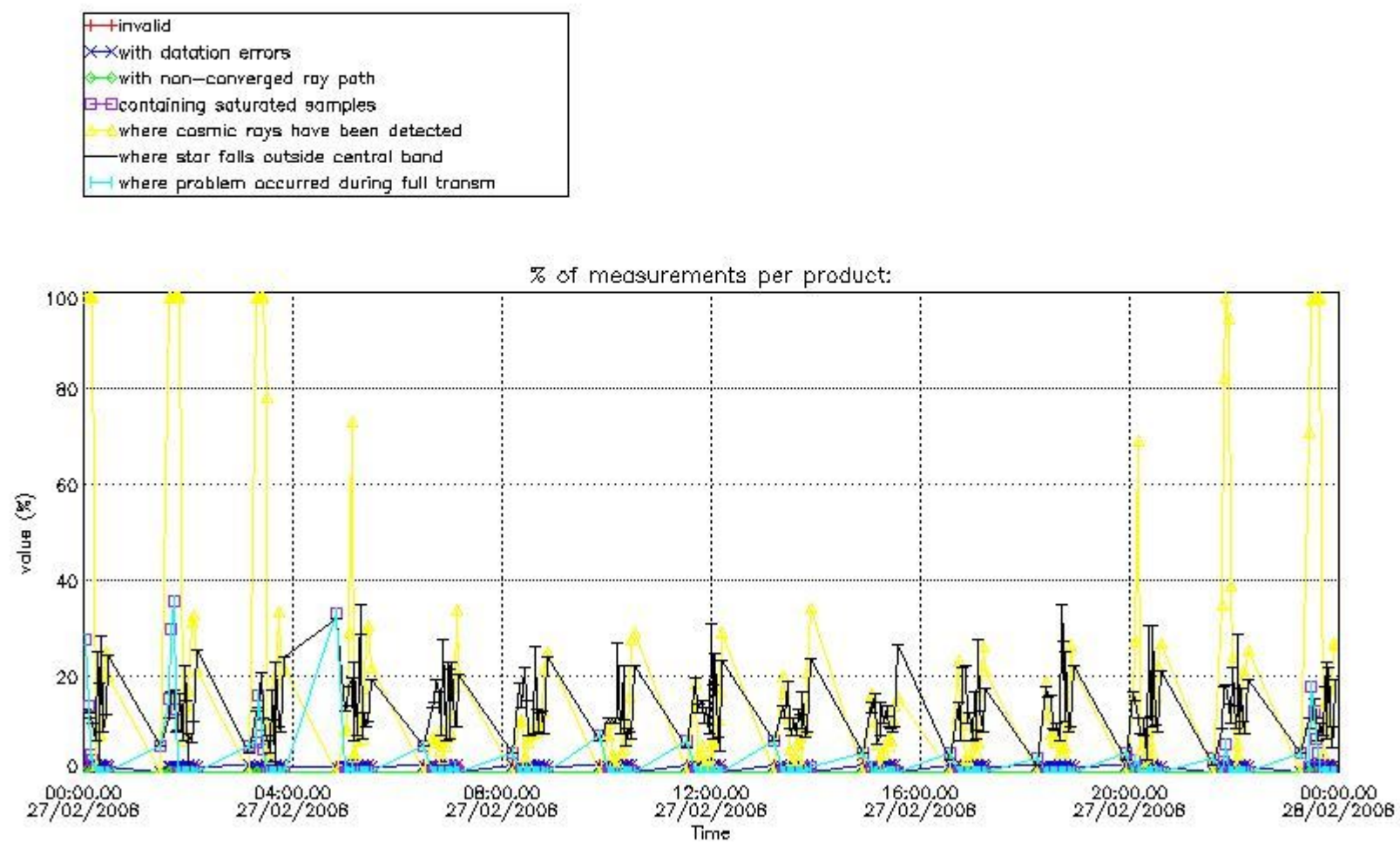


#### 4. Level 1 quality information per product

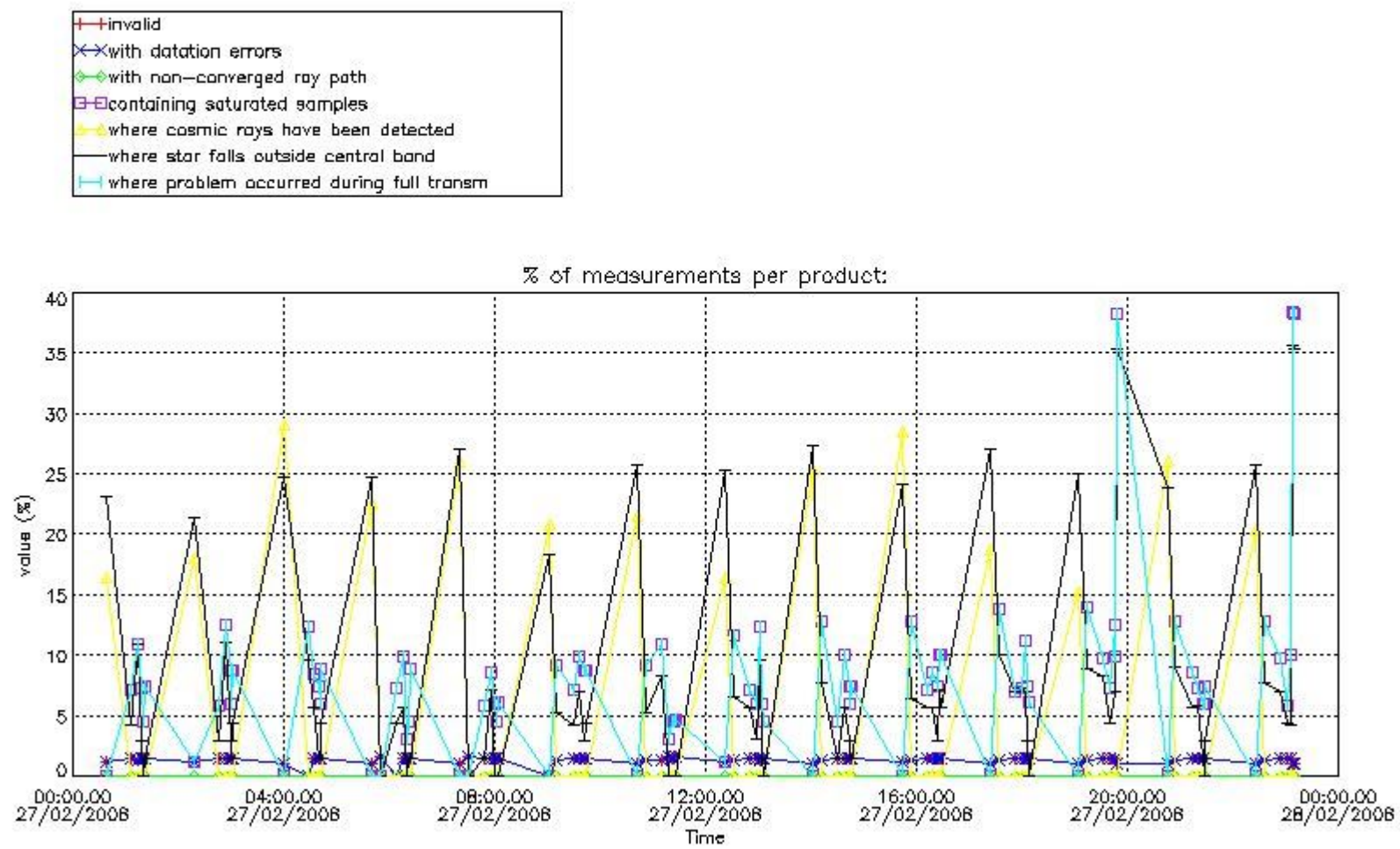
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



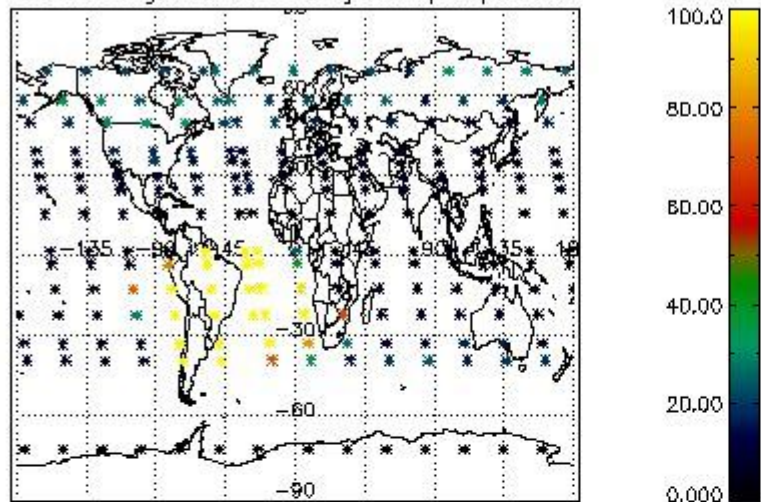
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



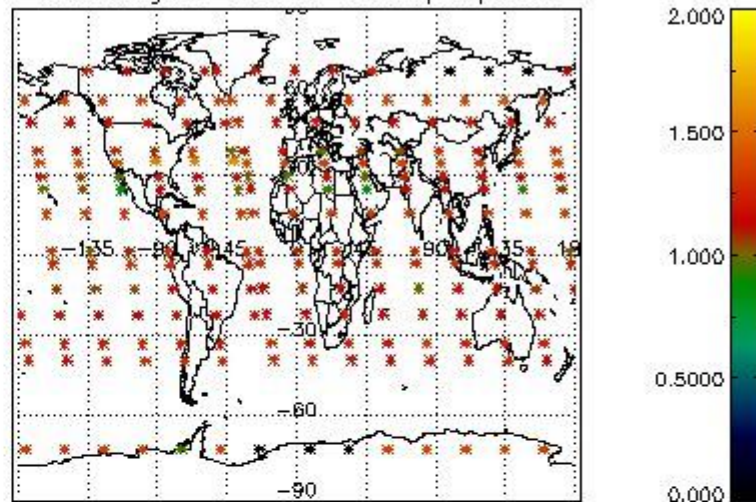
*4.2 Plot quality information per product coming from level 1b processing (world map)*

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

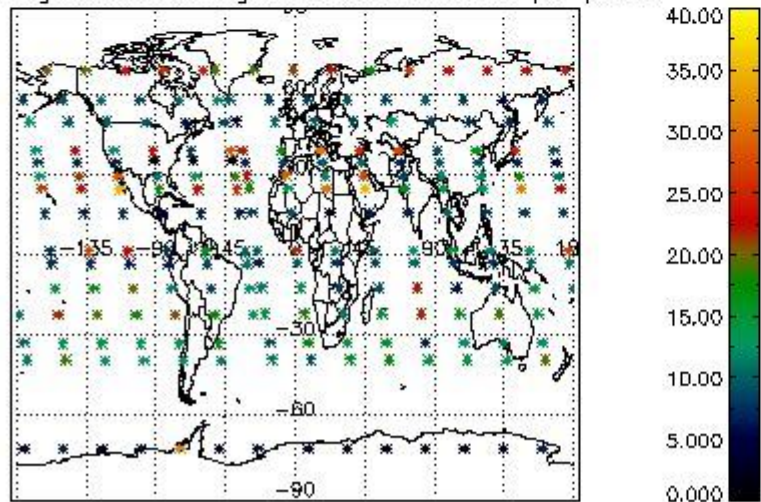
Percentage of cosmic ray hits per profile



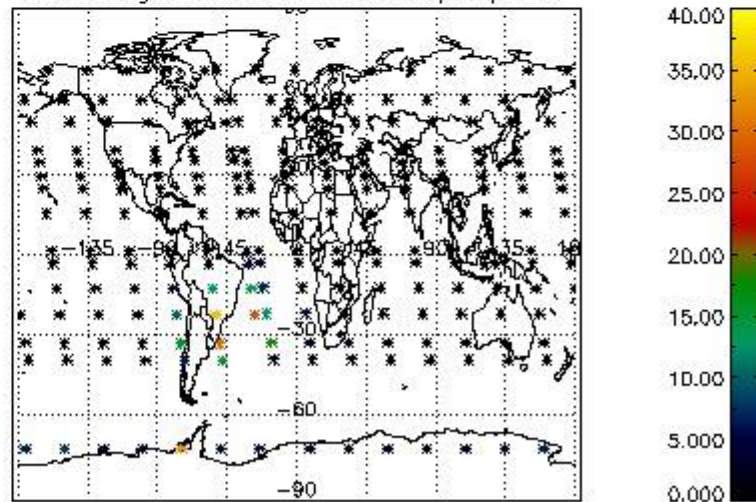
Percentage of datation errors per profile



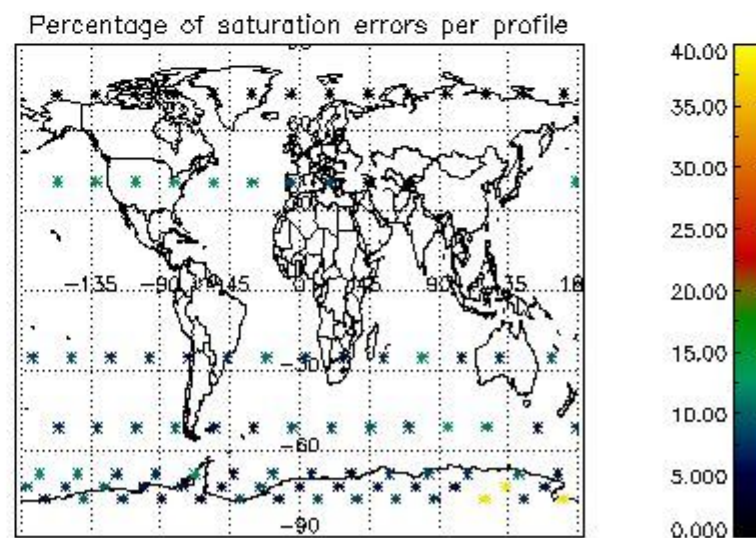
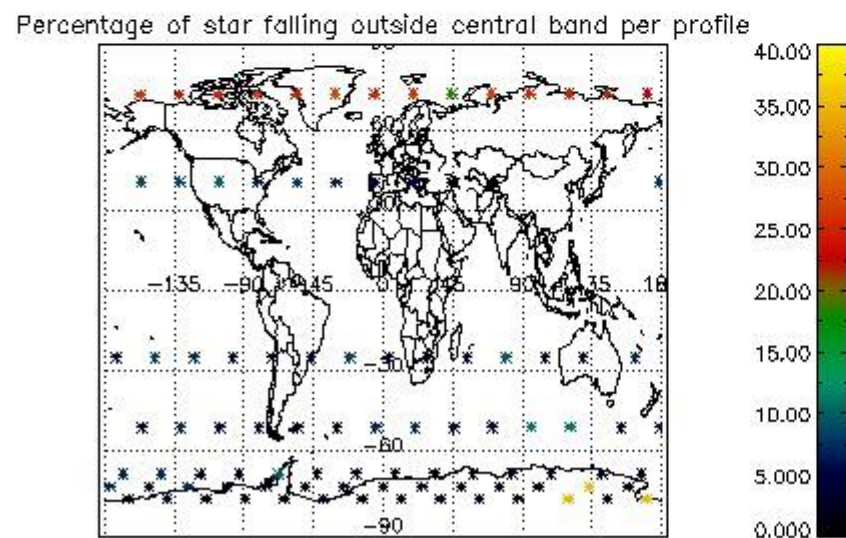
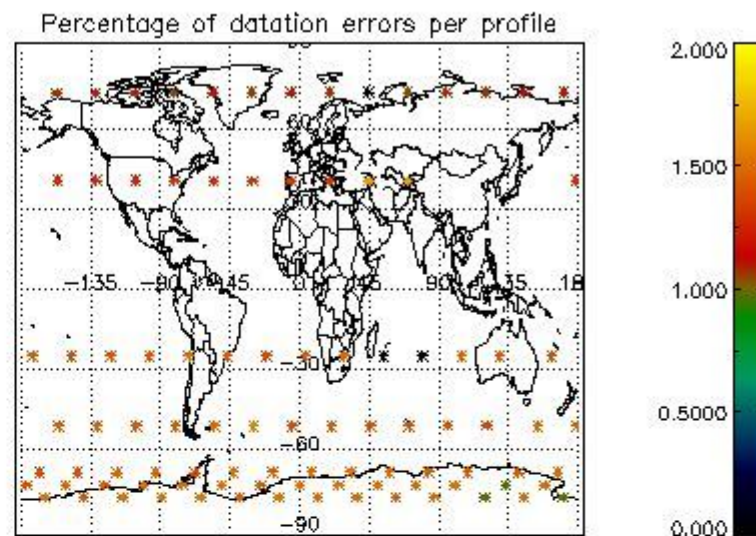
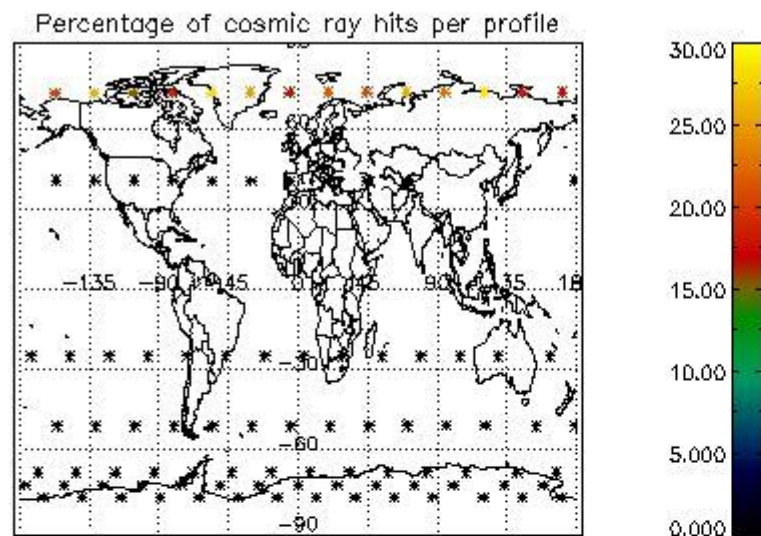
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



## 5. Trace gas profiles

### 5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/o3\_std of the level 2 products. The table below shows the statistics for given STD ranges.

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

- Products without fatal errors: GOM\_NL\_\_2P/MPH/PRODUCT\_ERR=0
- Valid point profile: GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/pcd(0)=0

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

- Products in dark limb illumination condition: GOM\_NL\_\_2P/NL\_SUMMARY\_QUALITY/obs\_ill\_cond=0
- Products without fatal errors: GOM\_NL\_\_2P/MPH/PRODUCT\_ERR=0
- Valid point profile: GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/pcd(0)=0

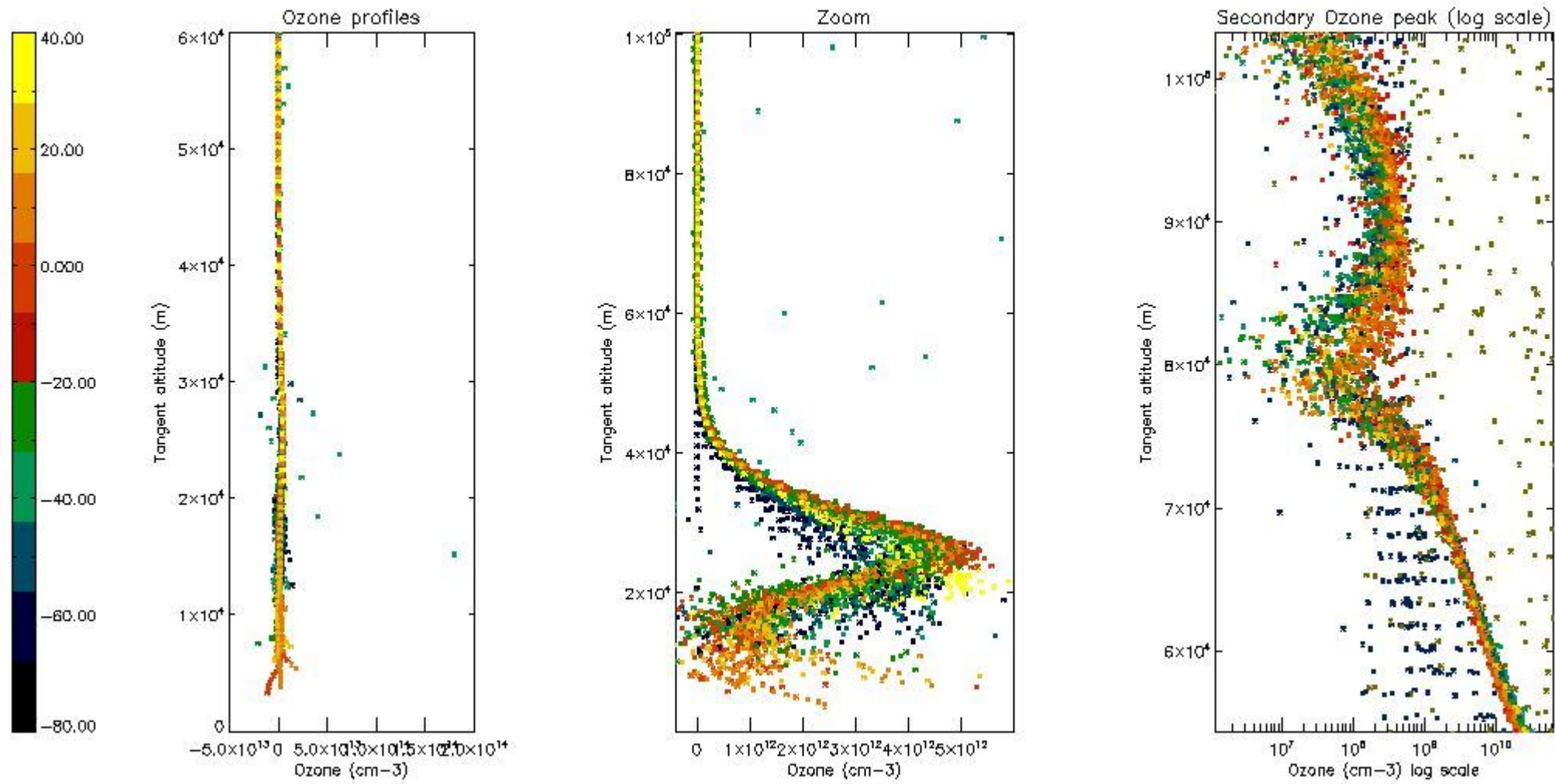
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	60
STD < 20	34

STD < 10	27
STD < 5	20

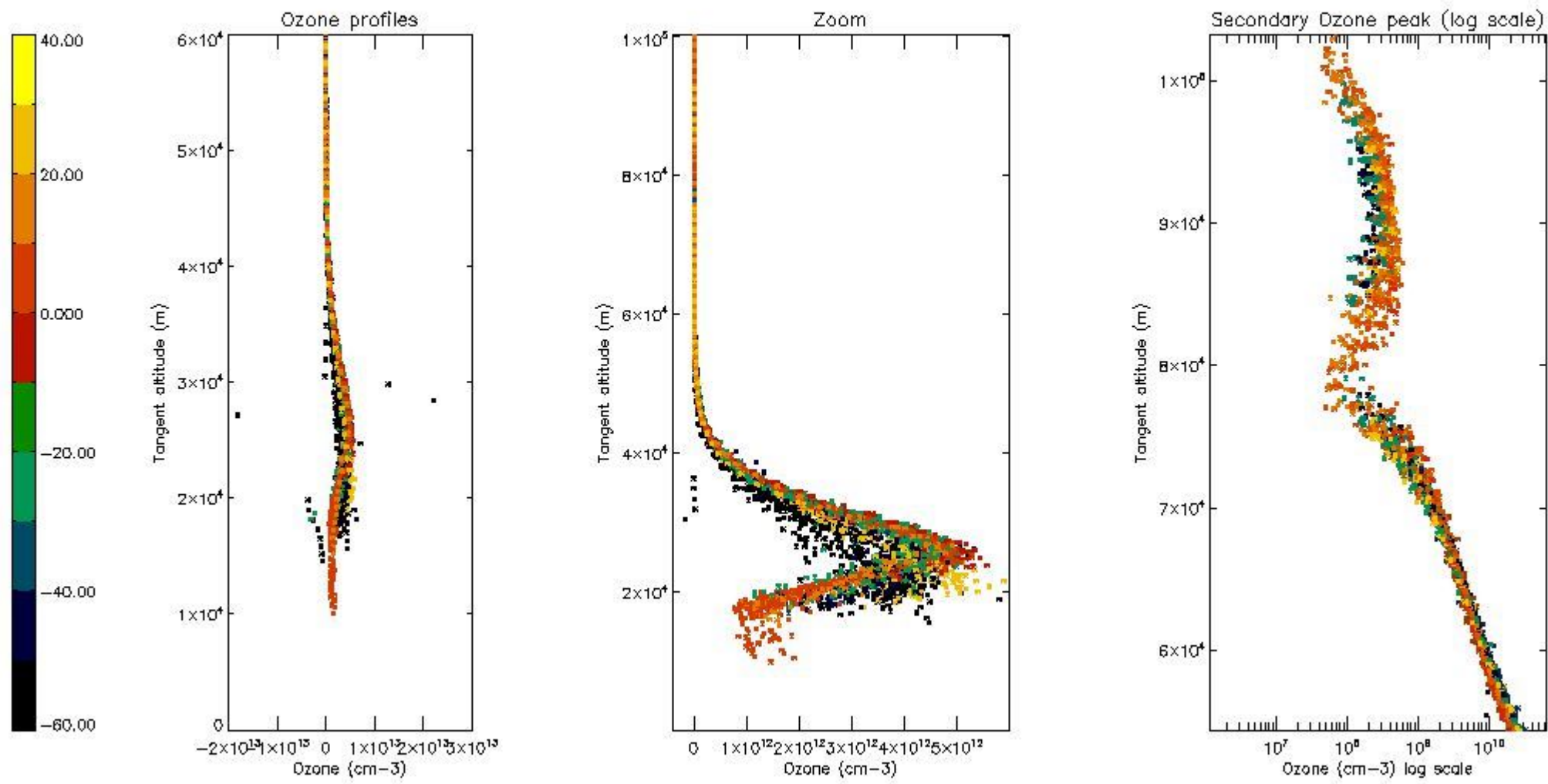
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



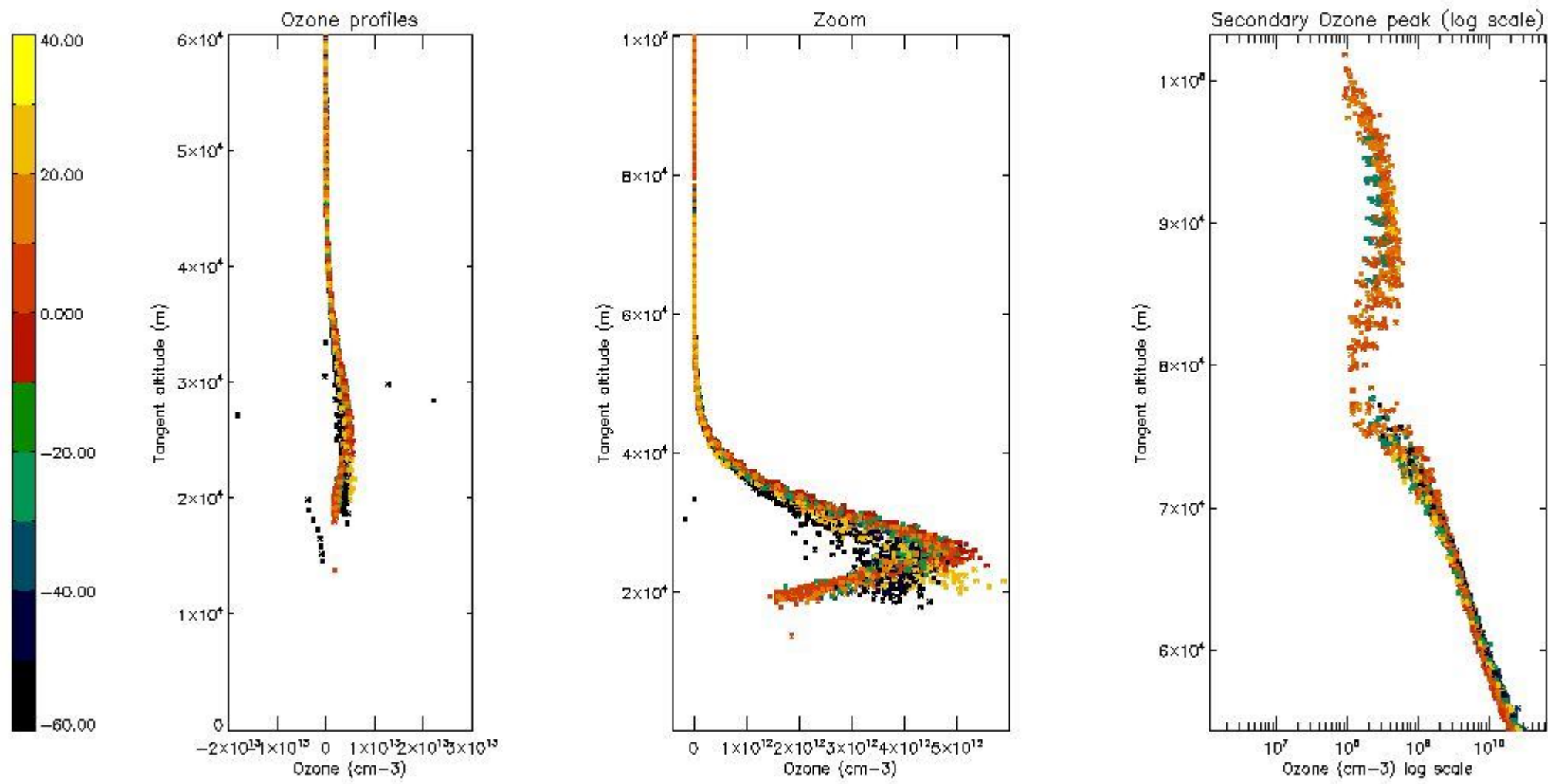
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



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

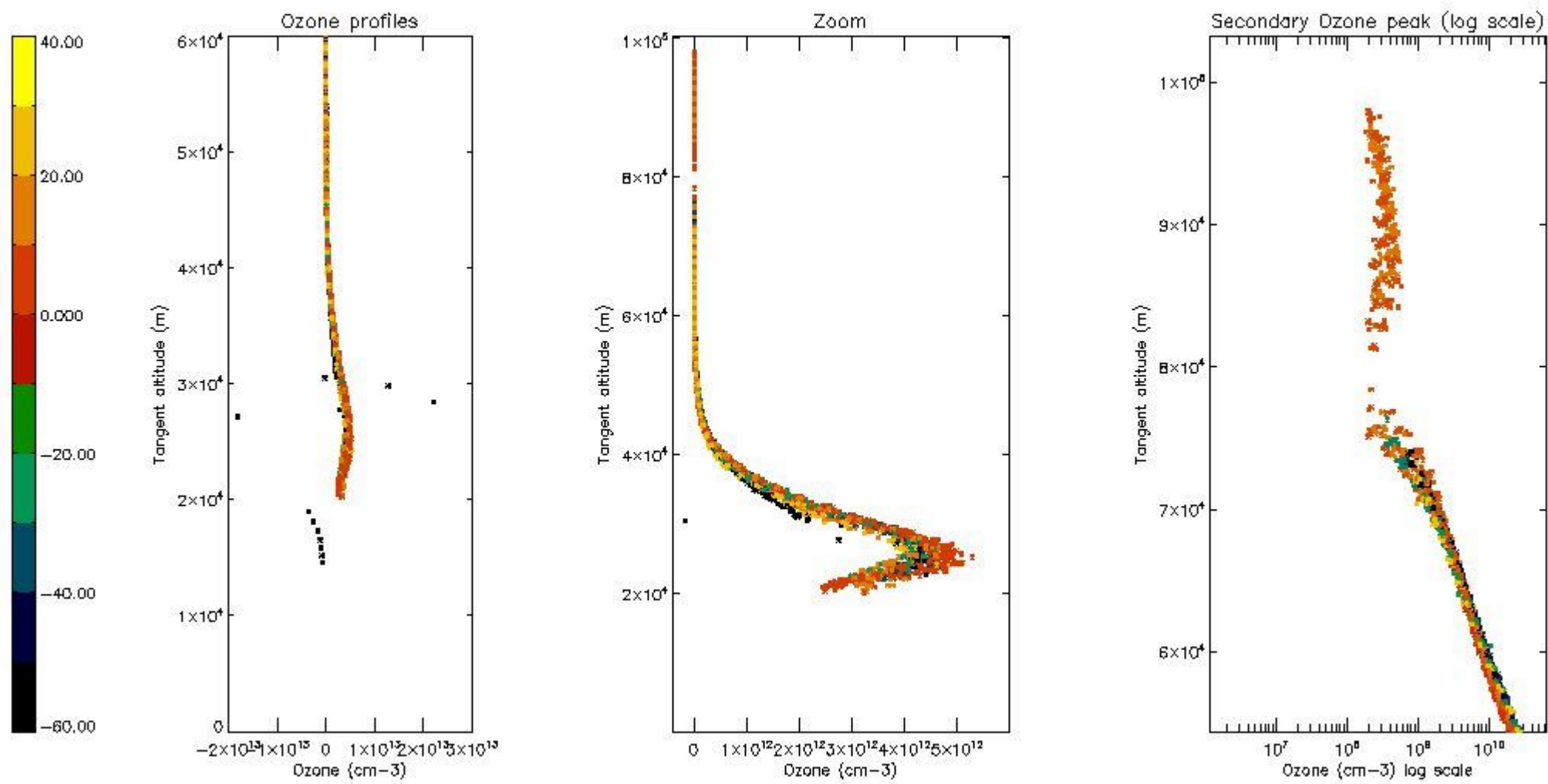
The colorbar represents the latitude.



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

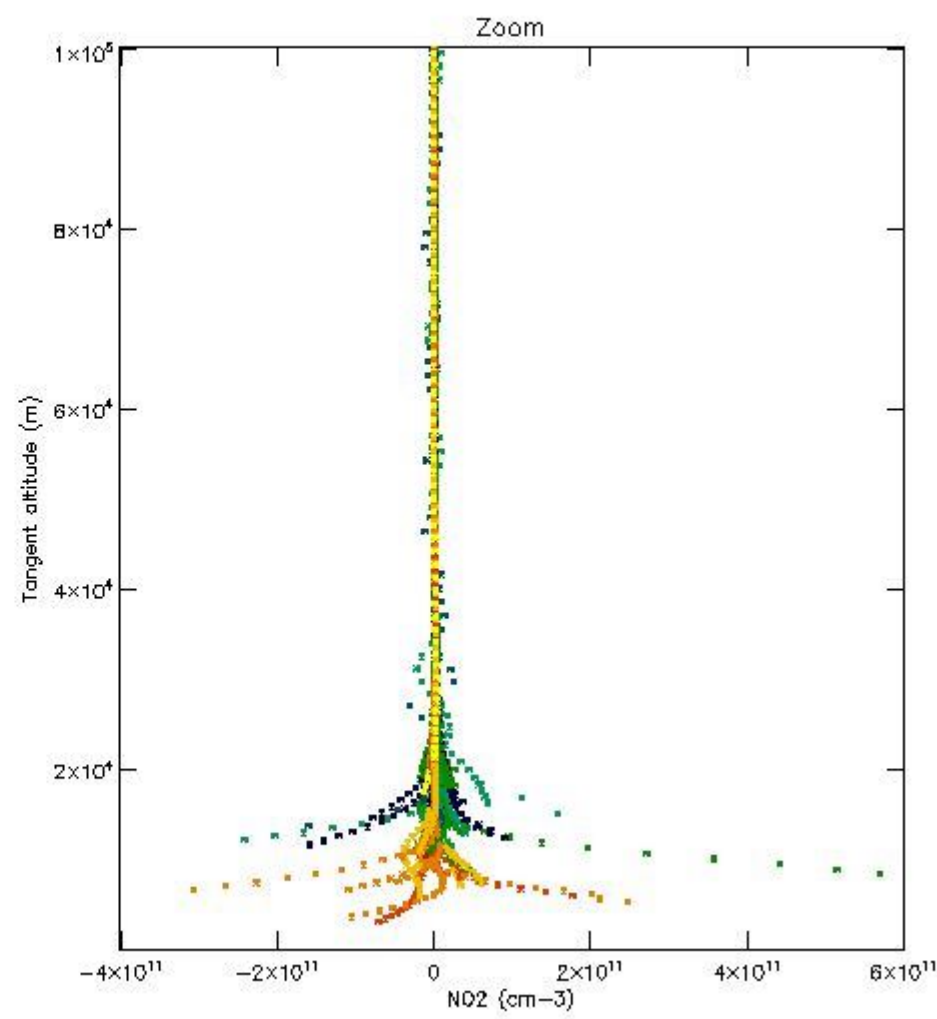
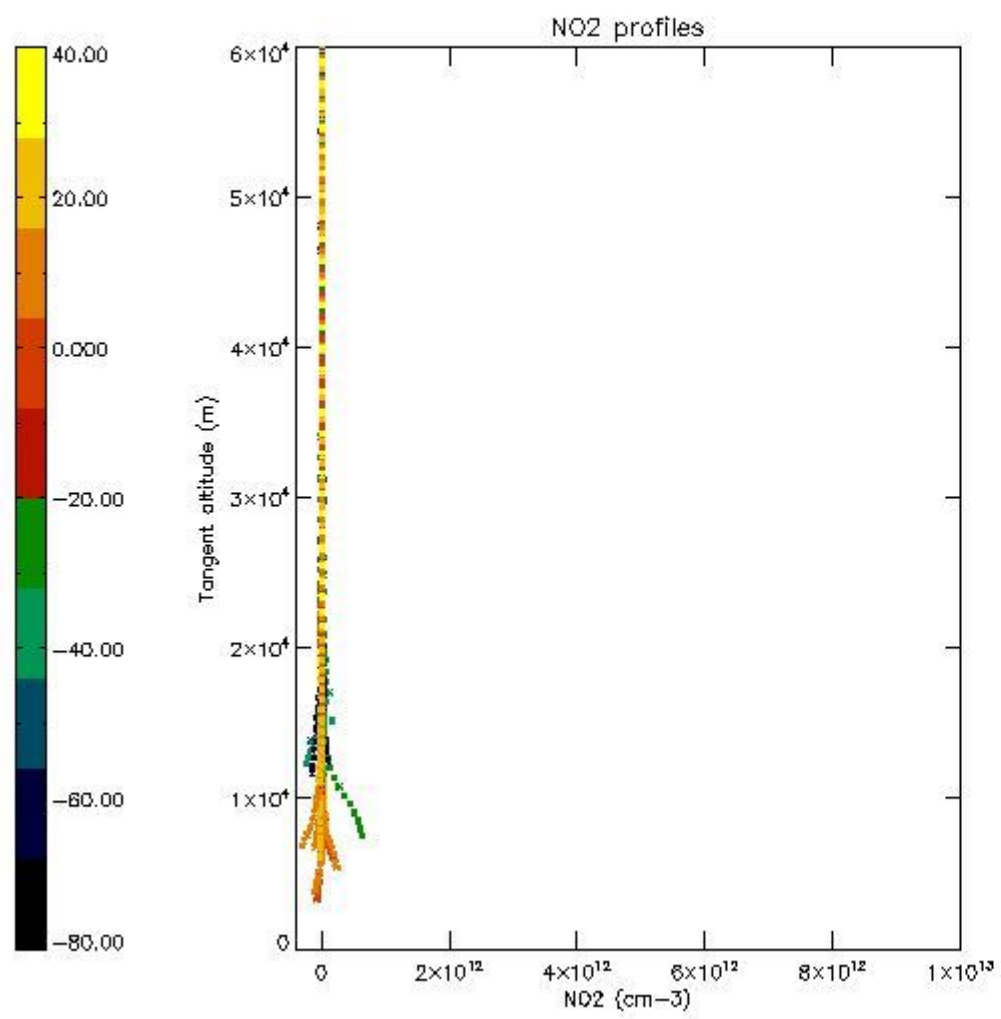
The colorbar represents the latitude.





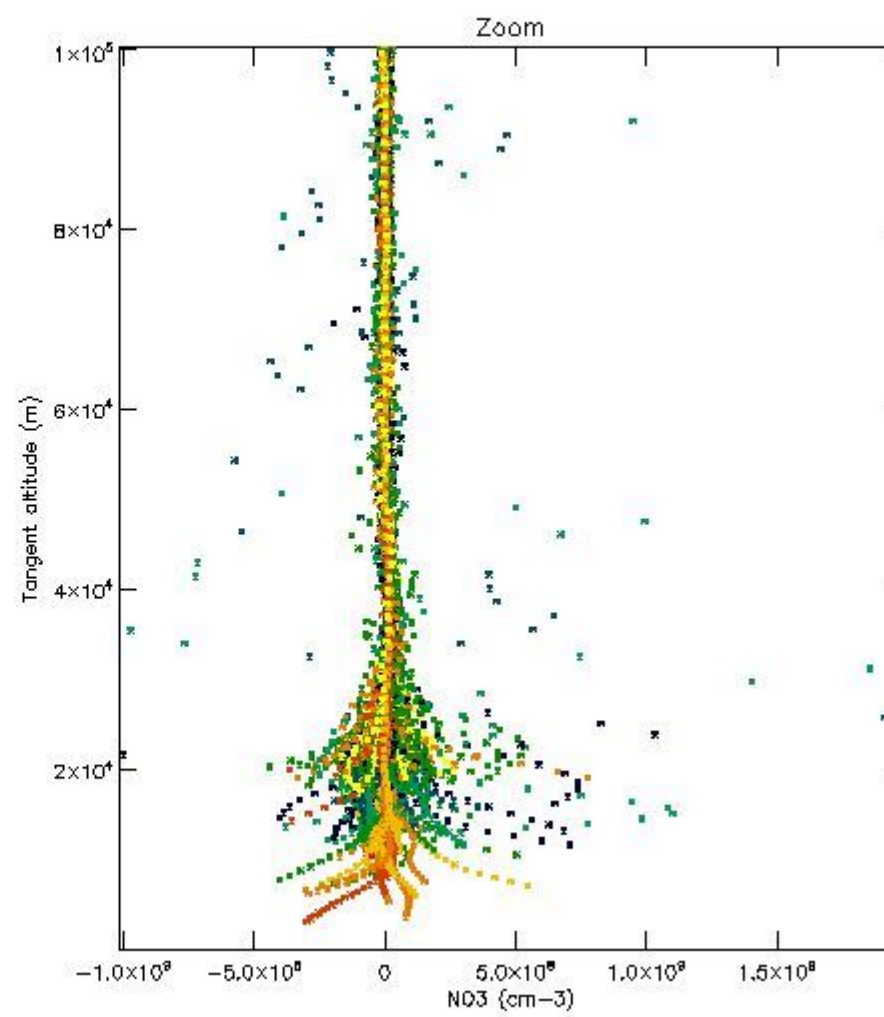
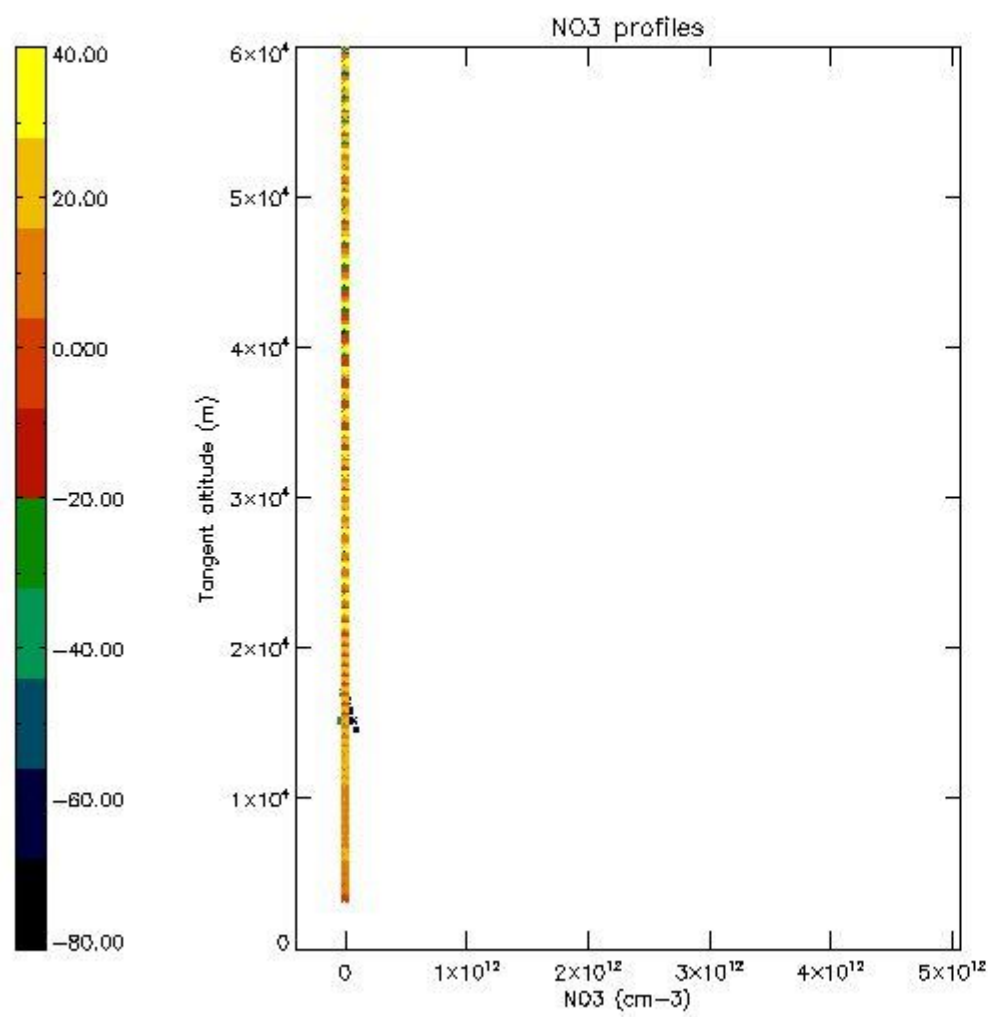
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



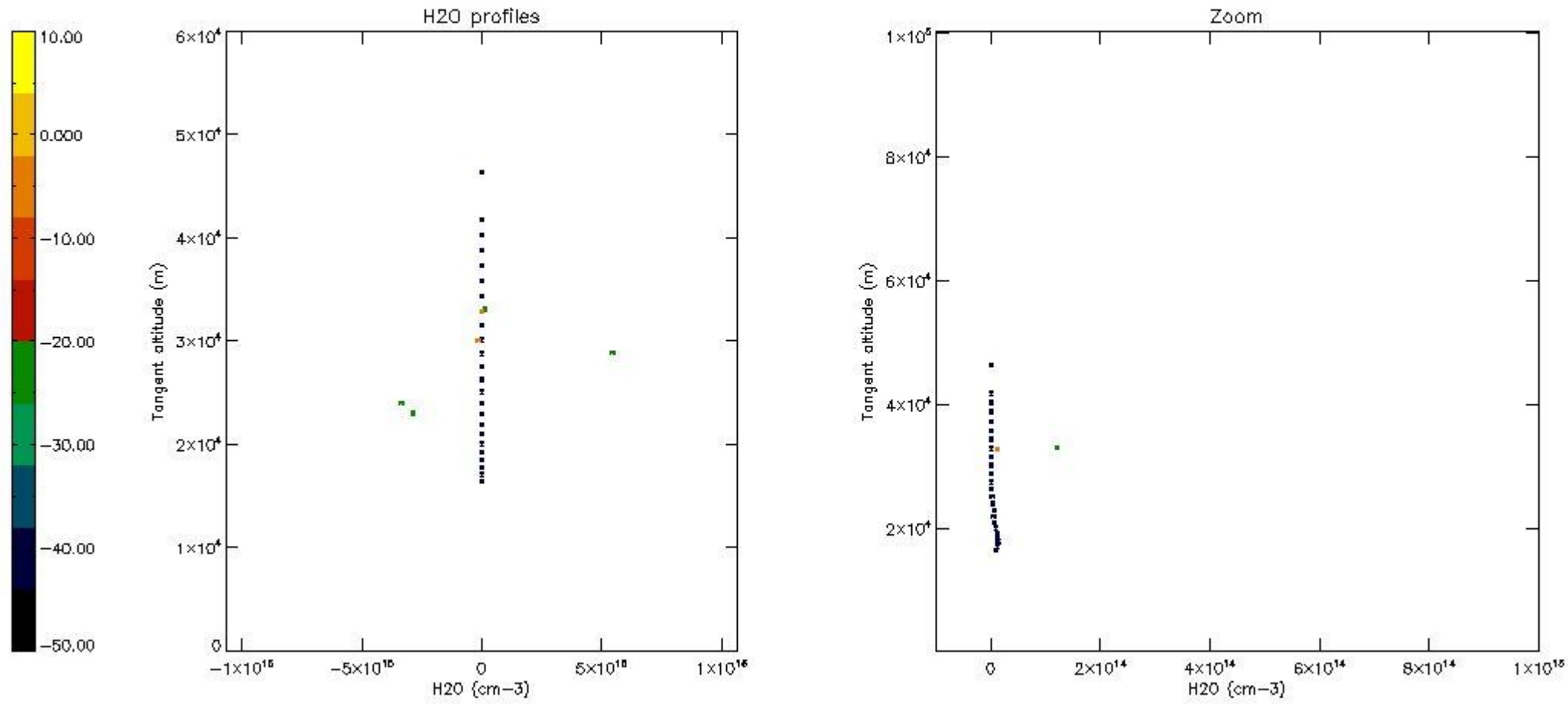
*5.7 Plot NO<sub>3</sub> profiles for all STD (dark without errors)*

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	27-FEB-2008 00:02:32
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	27-FEB-2008 00:02:32
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	27-FEB-2008 00:02:32

# 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](#)





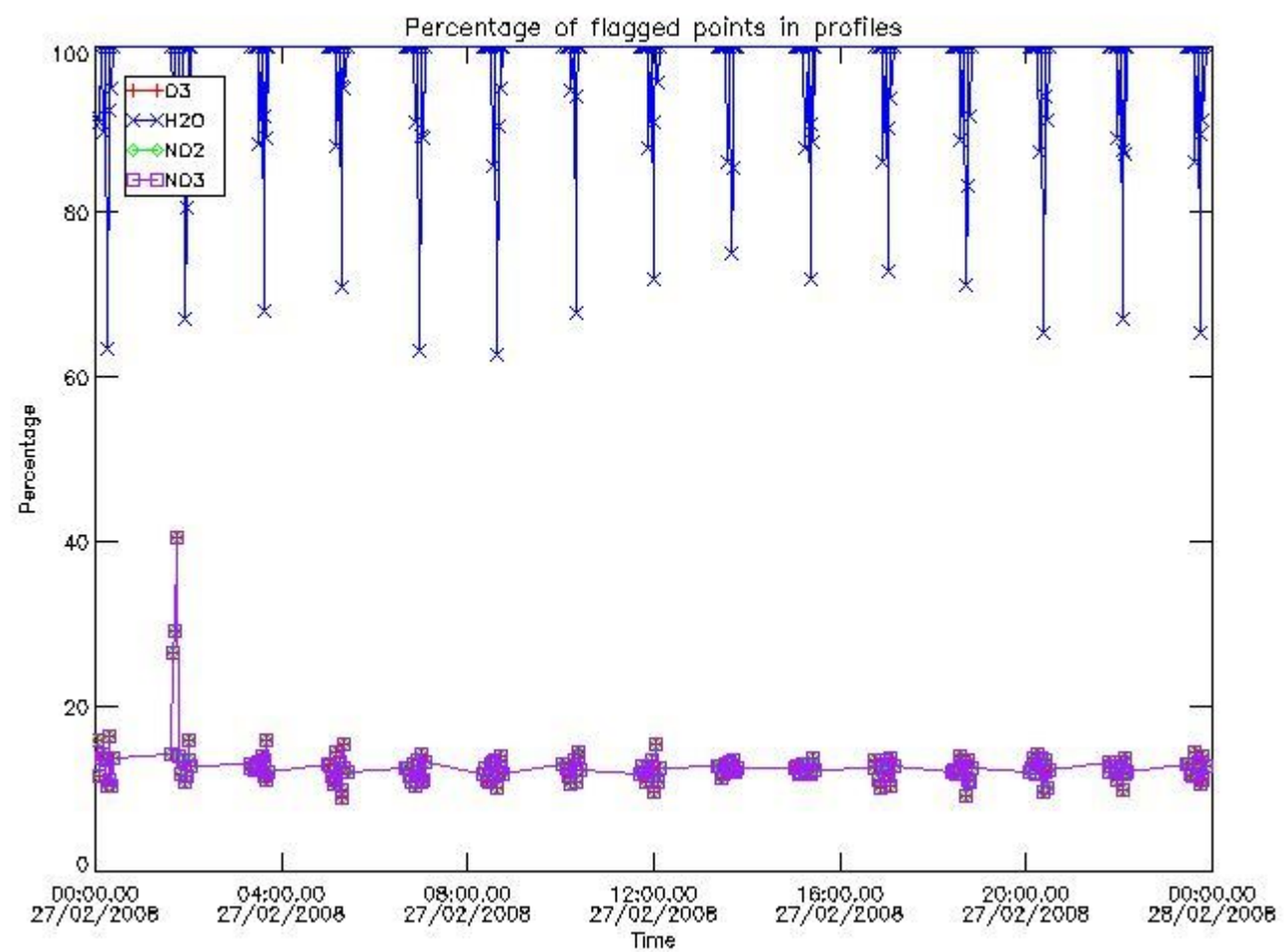






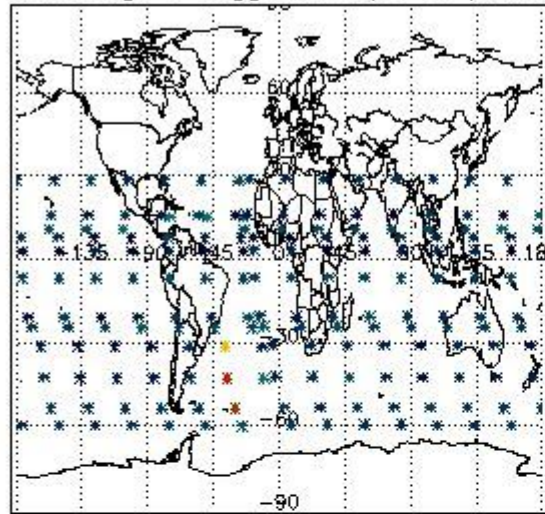




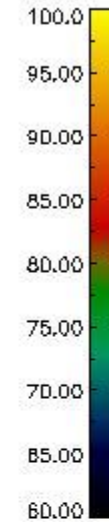
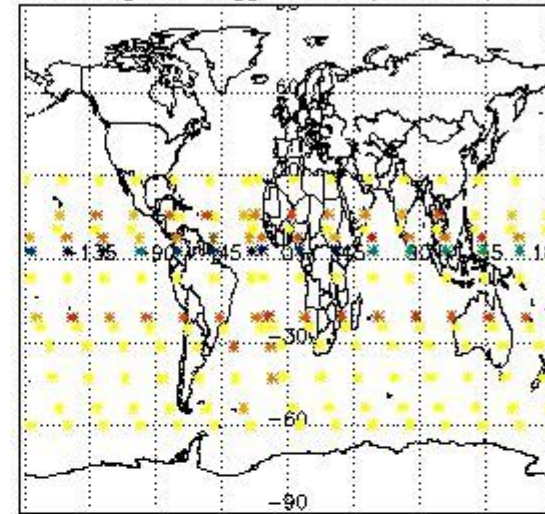


3.2 Plot quality information per product (world map)

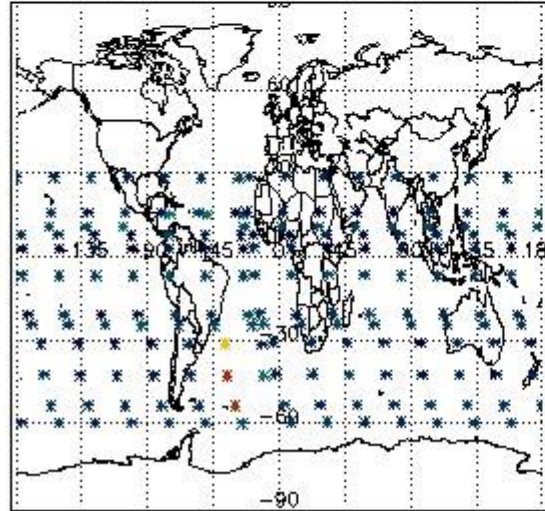
Percentage of flagged data per O3 profile



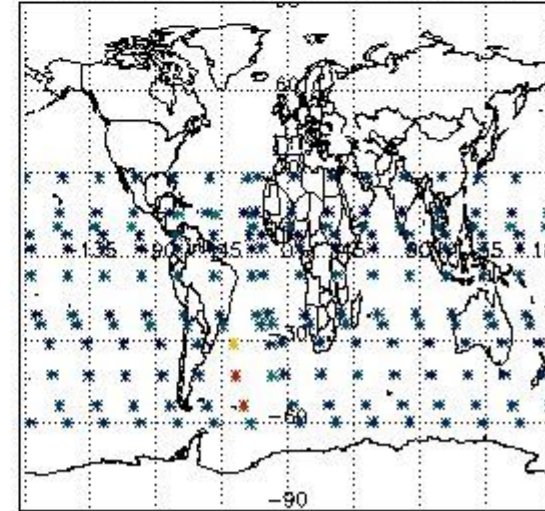
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

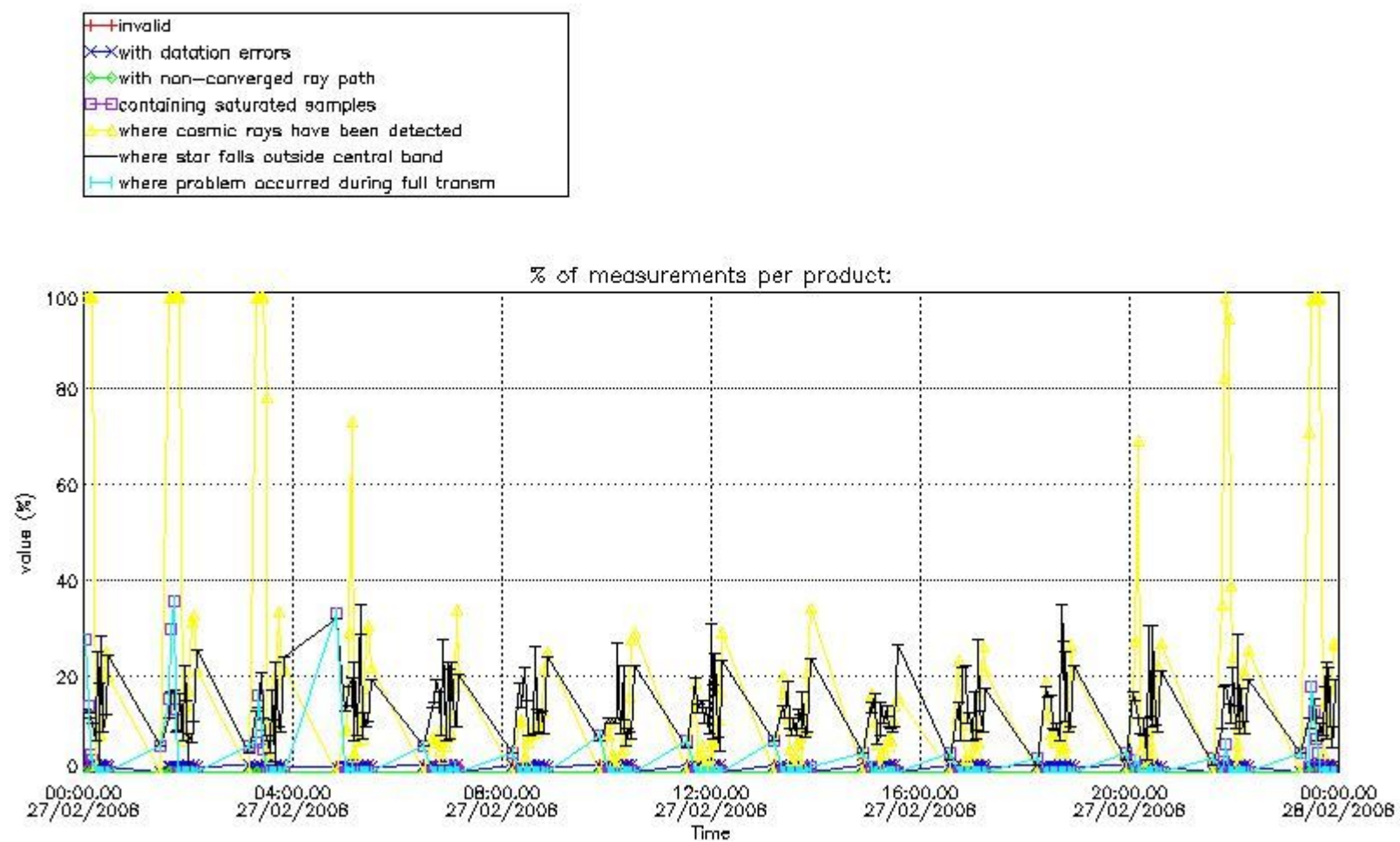


#### 4. Level 1 quality information per product

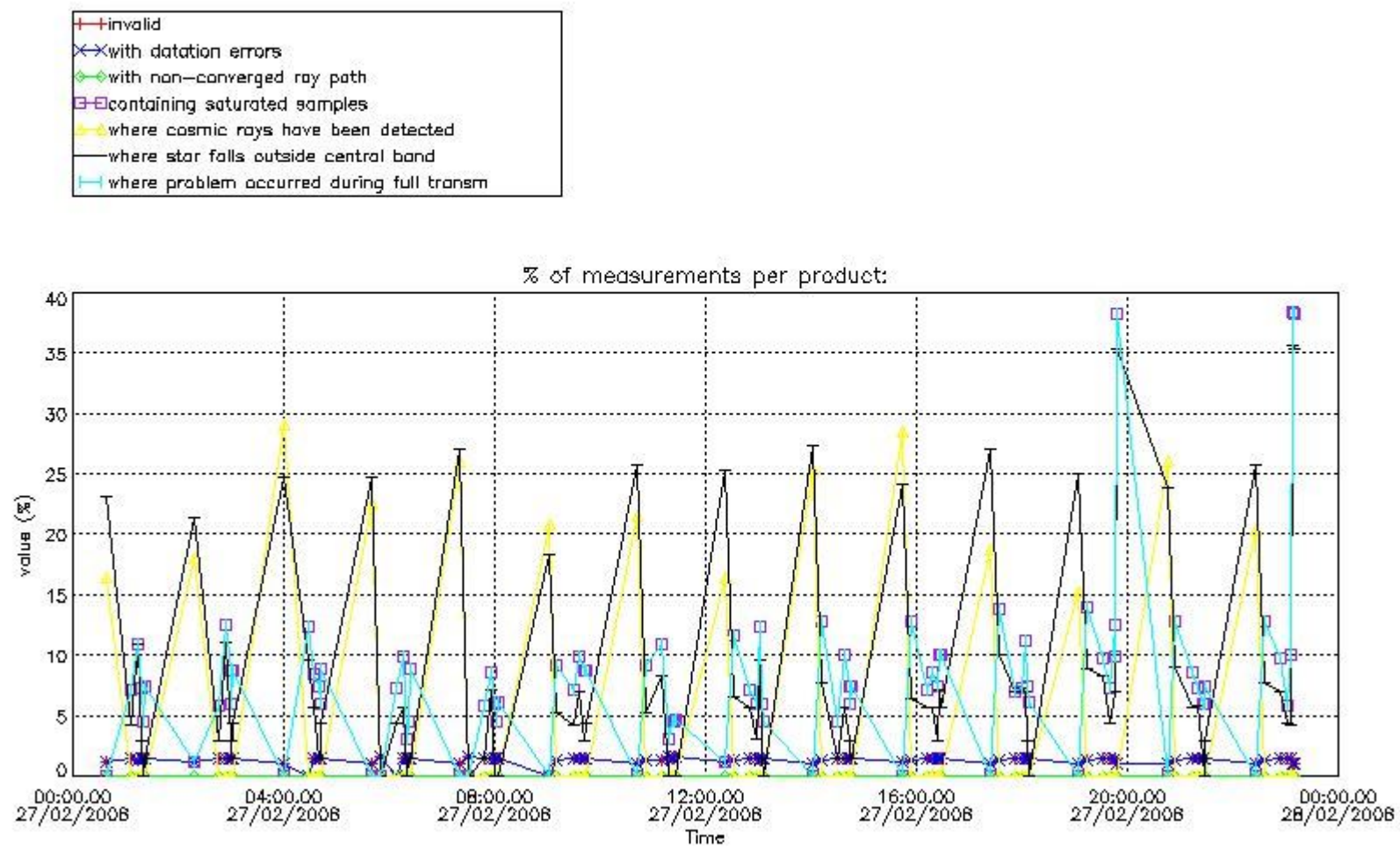
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

##### 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



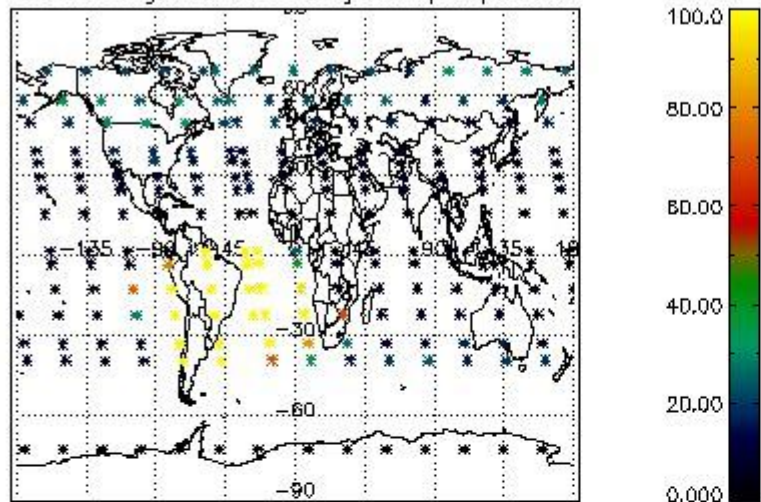
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



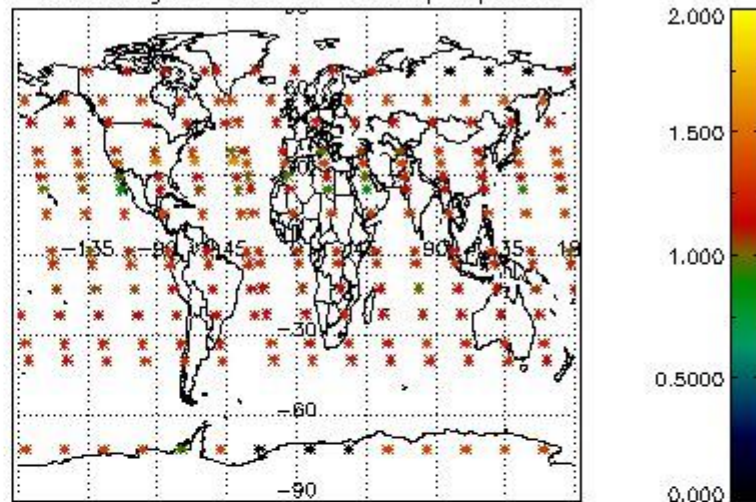
4.2 Plot quality information per product coming from level 1b processing (world map)

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

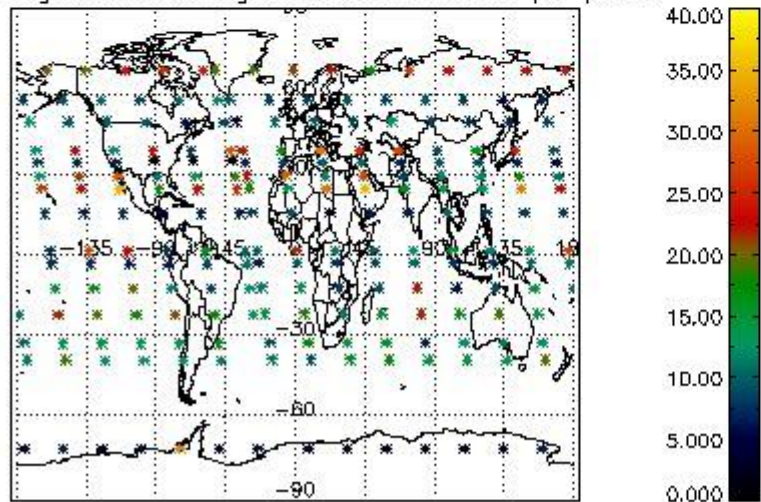
Percentage of cosmic ray hits per profile



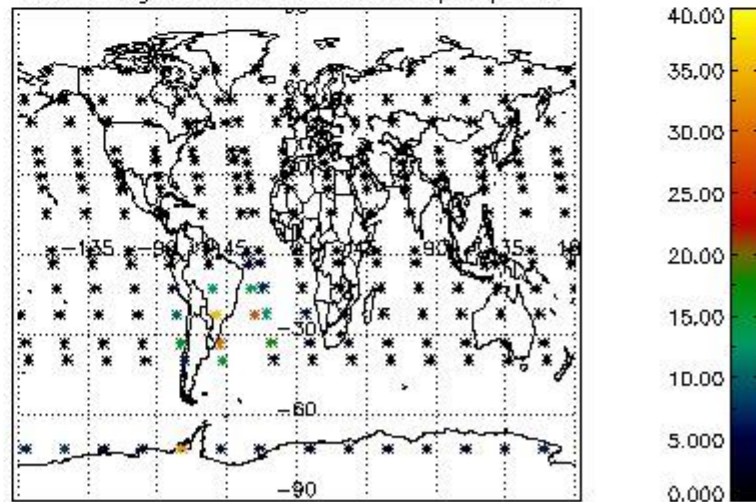
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

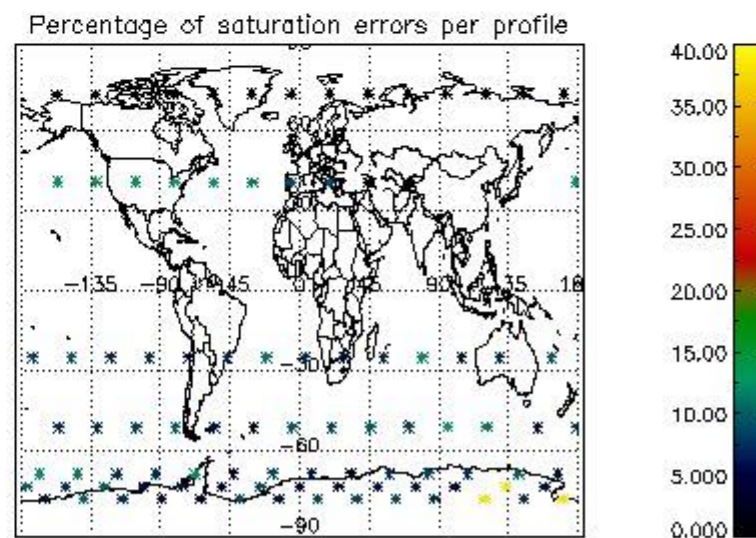
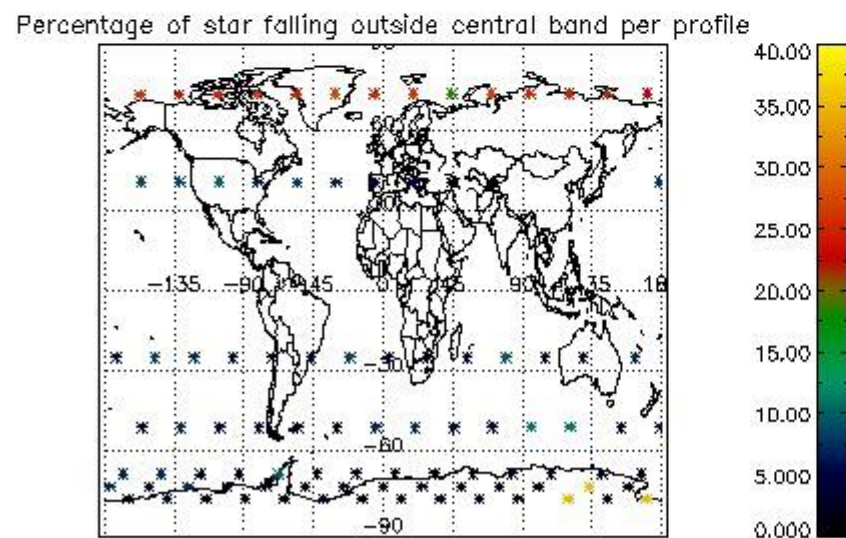
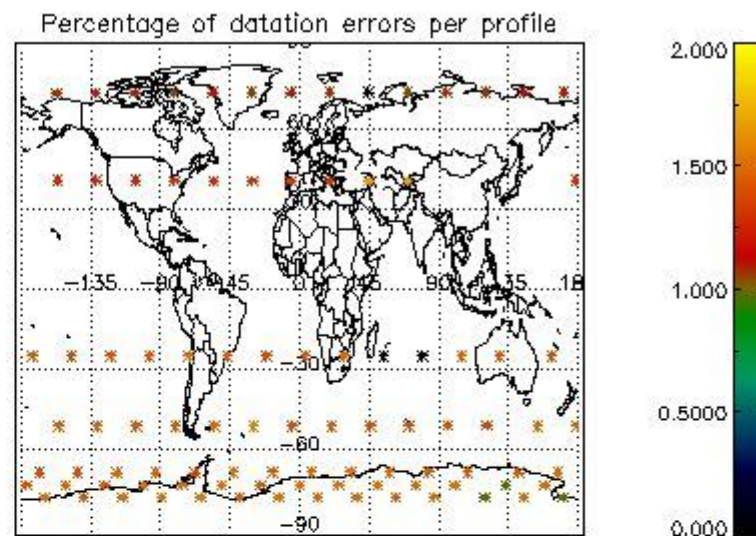
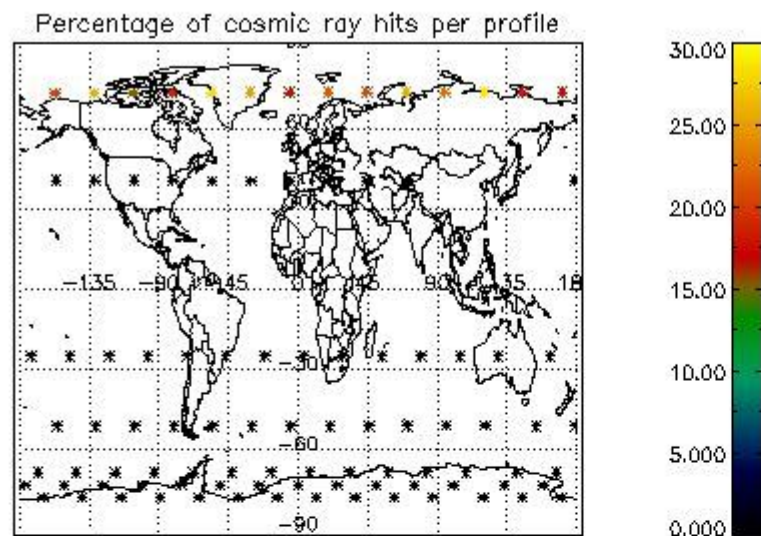


Percentage of saturation errors per profile



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

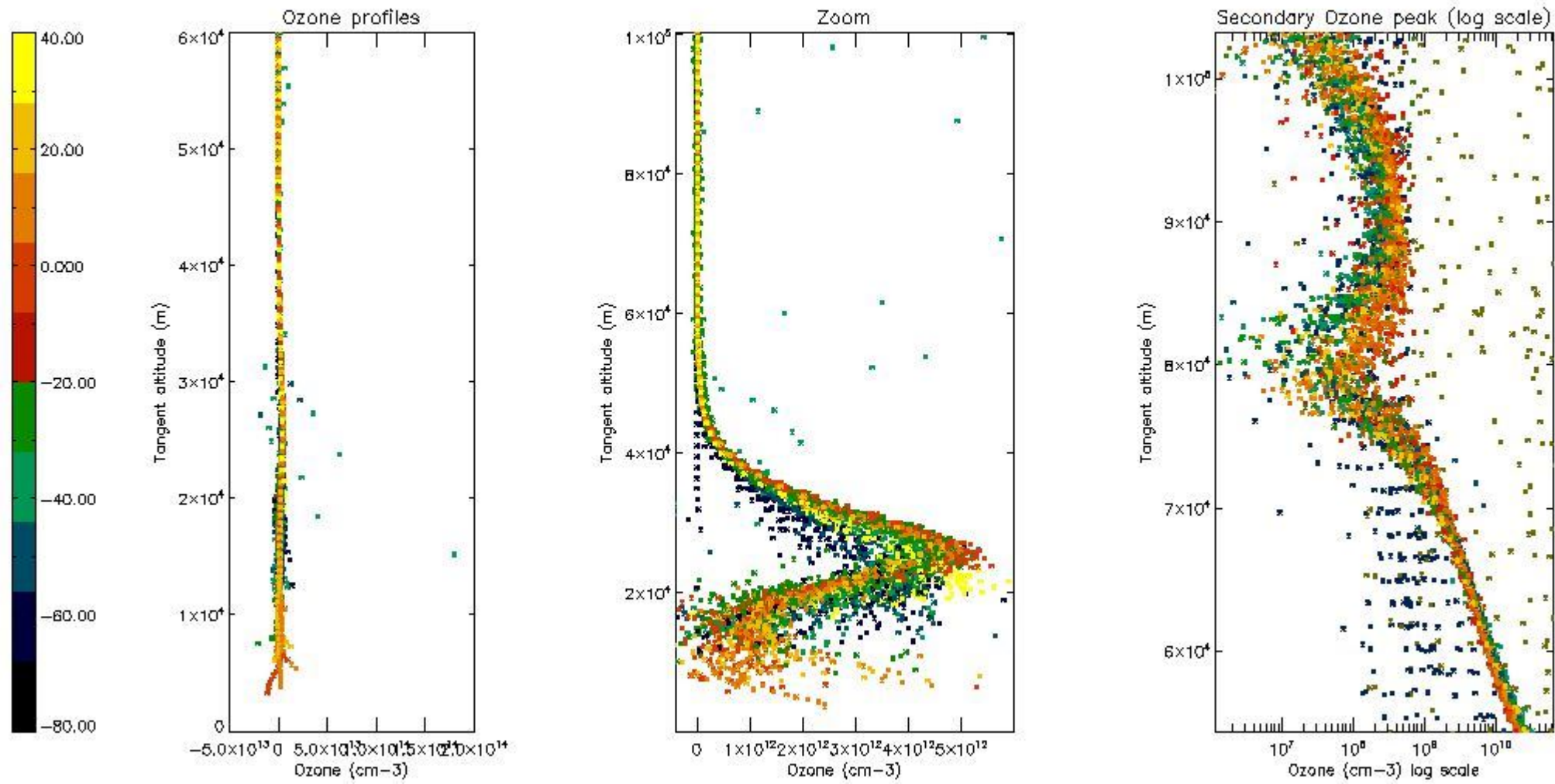
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	60
STD < 20	34

STD < 10	27
STD < 5	20

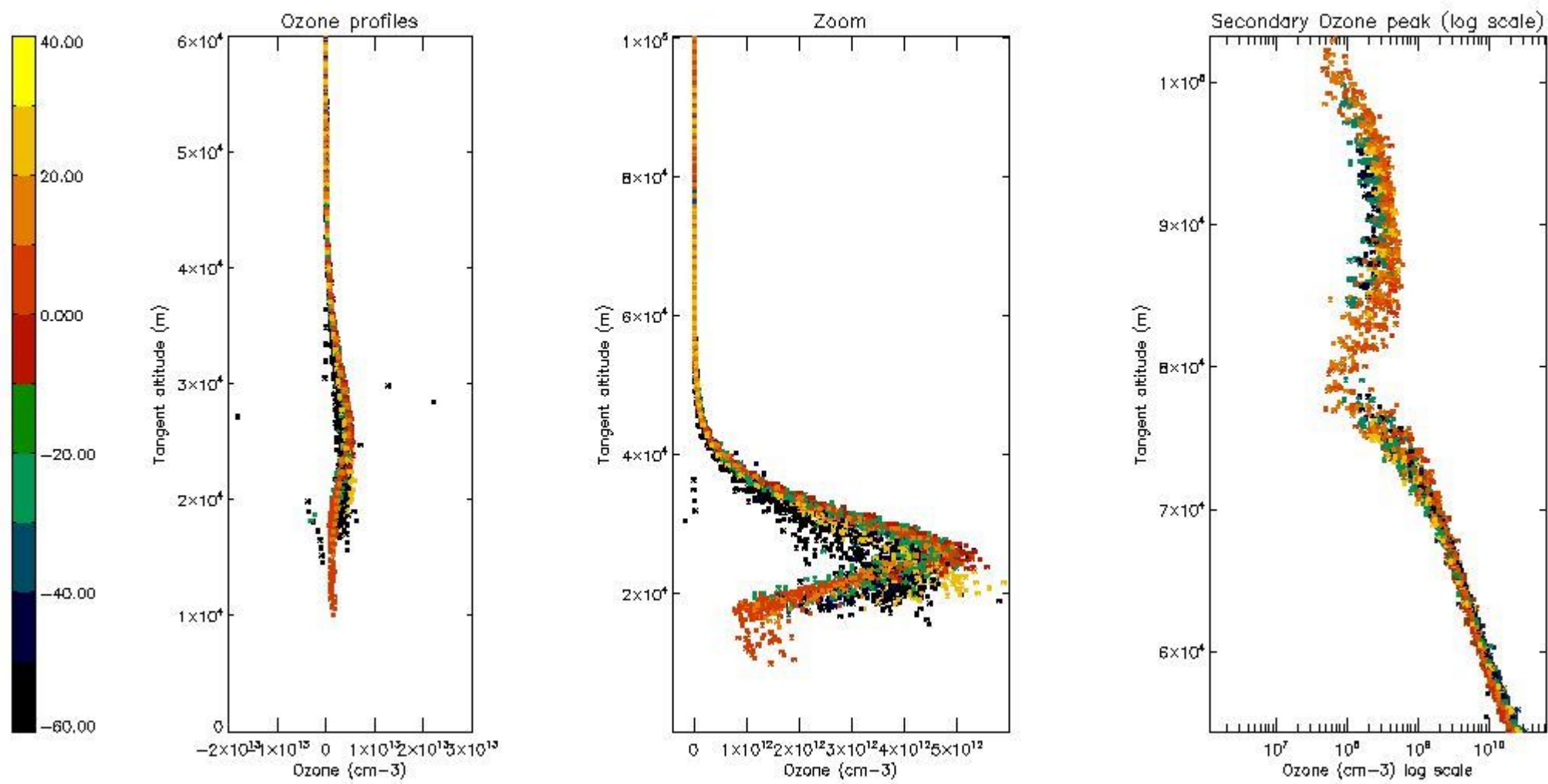
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



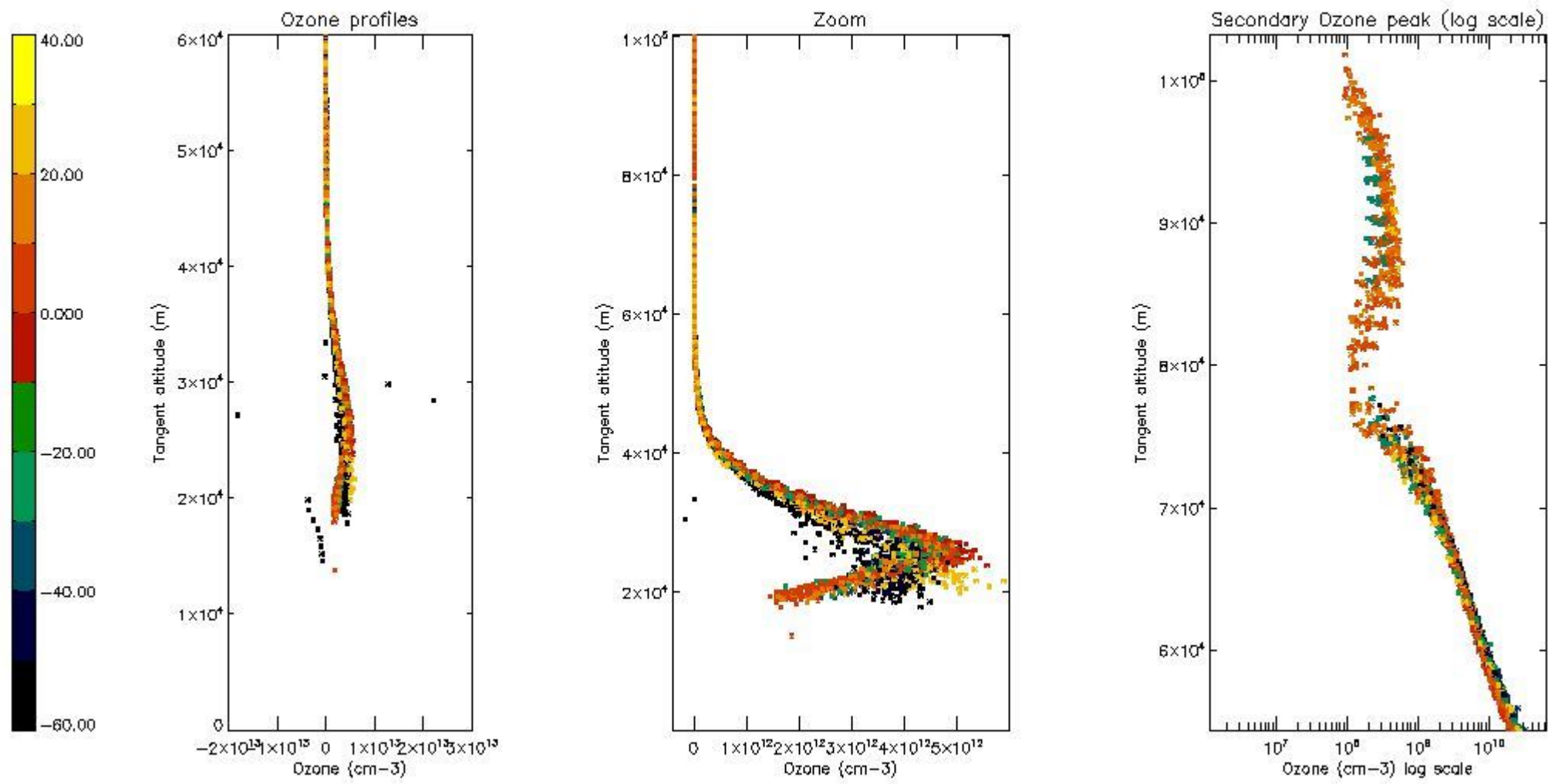
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



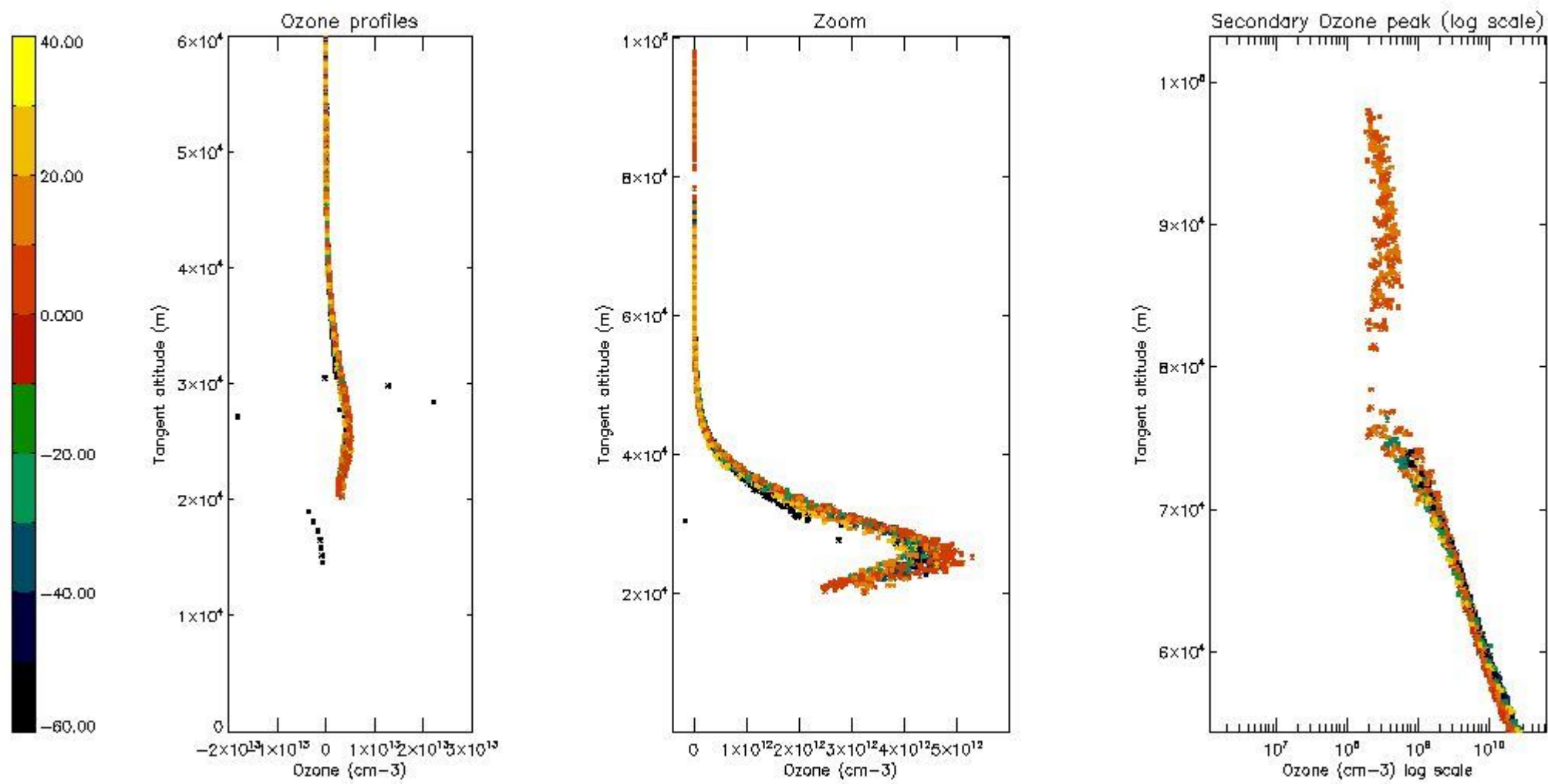
*5.4 Plot ozone profiles where STD < 10% (dark without errors)*

The colorbar represents the latitude.



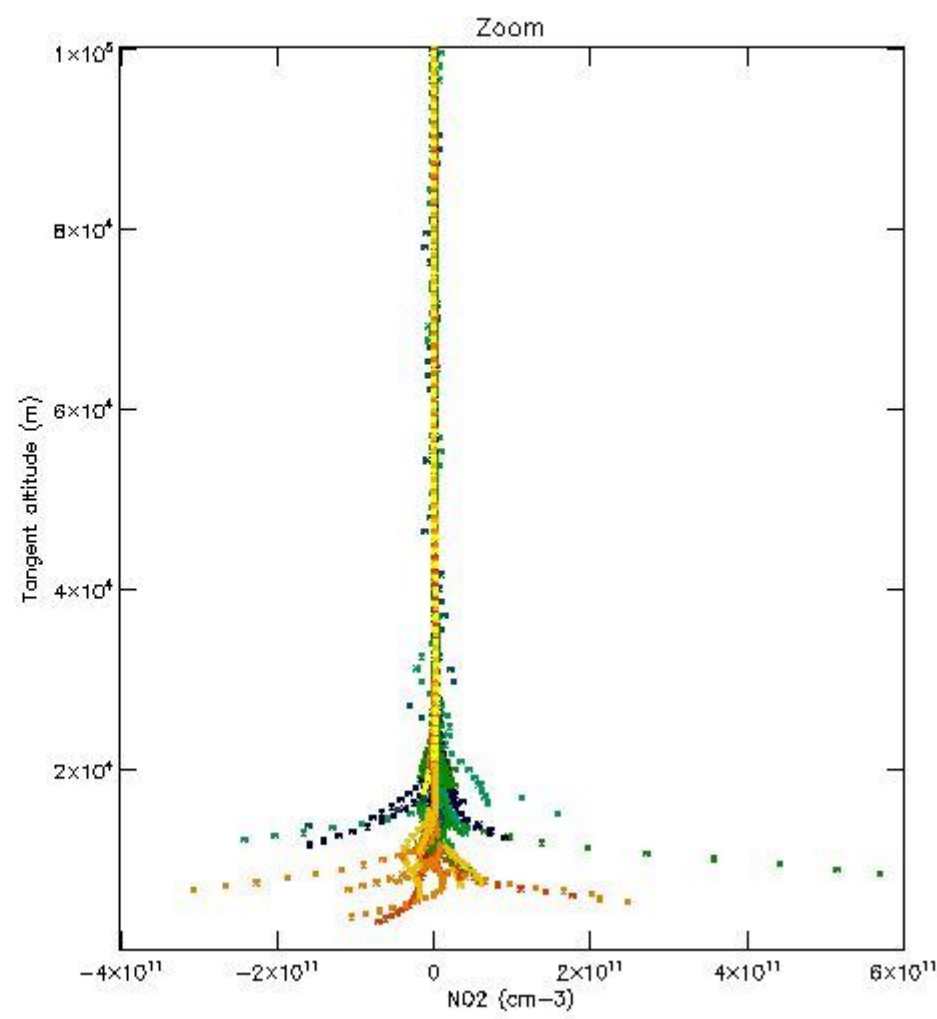
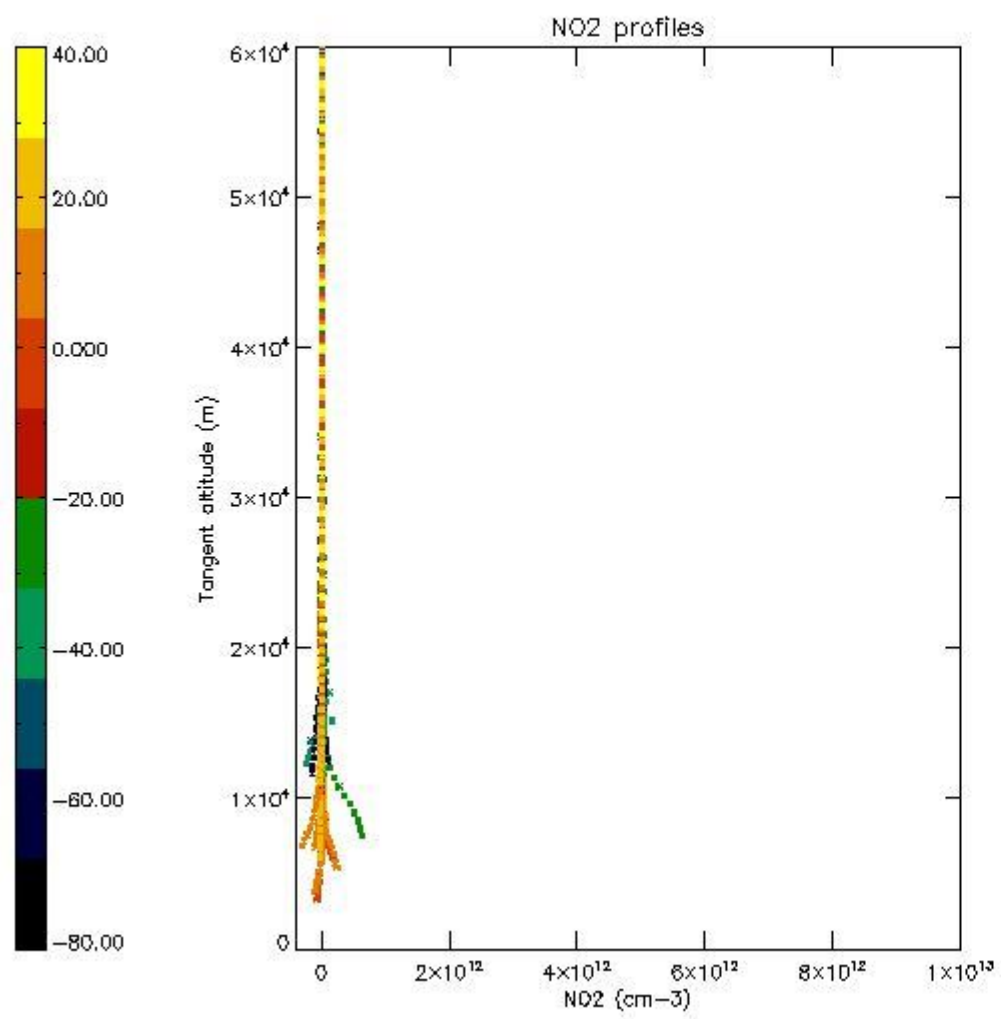
*5.5 Plot ozone profiles where STD < 5% (dark without errors)*

The colorbar represents the latitude.



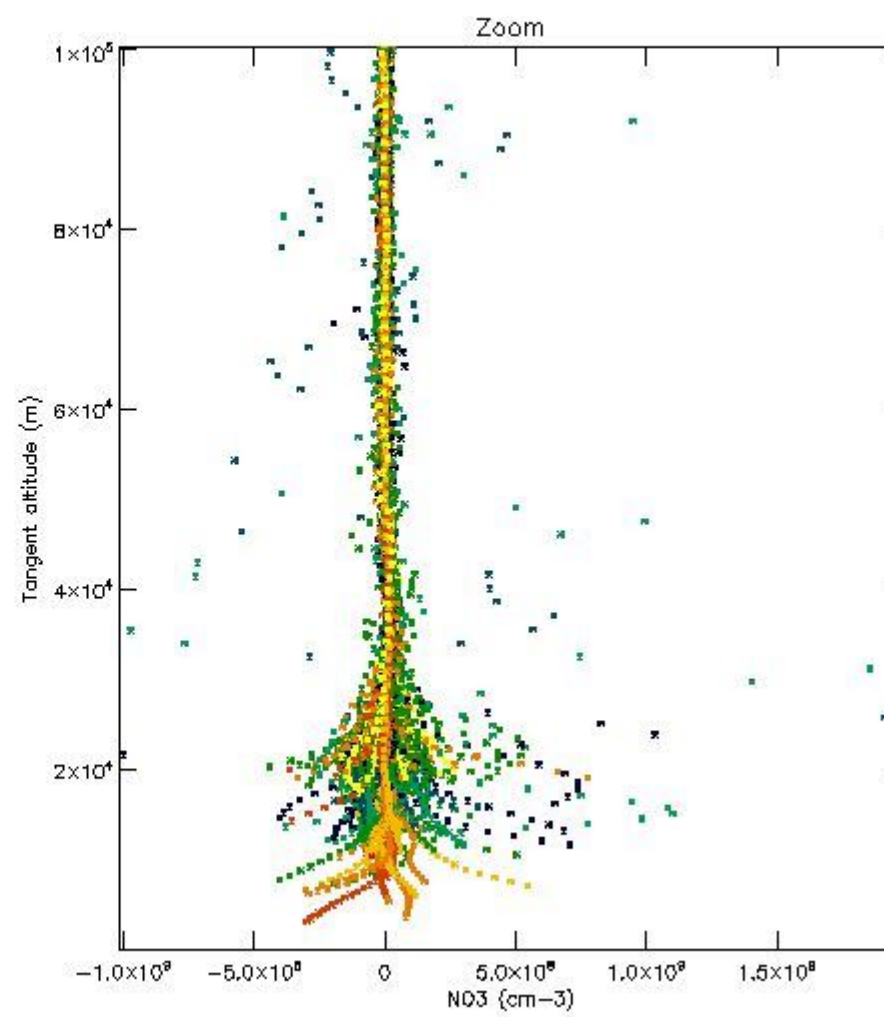
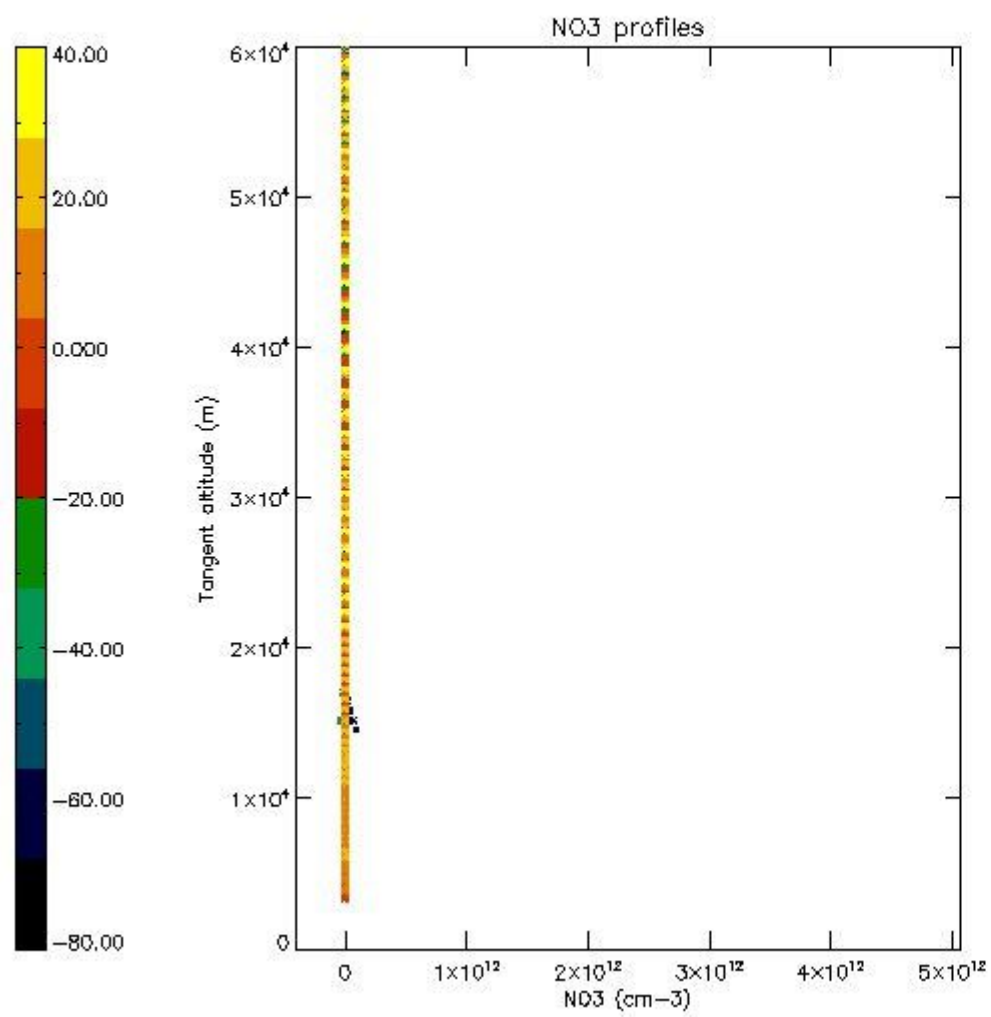
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



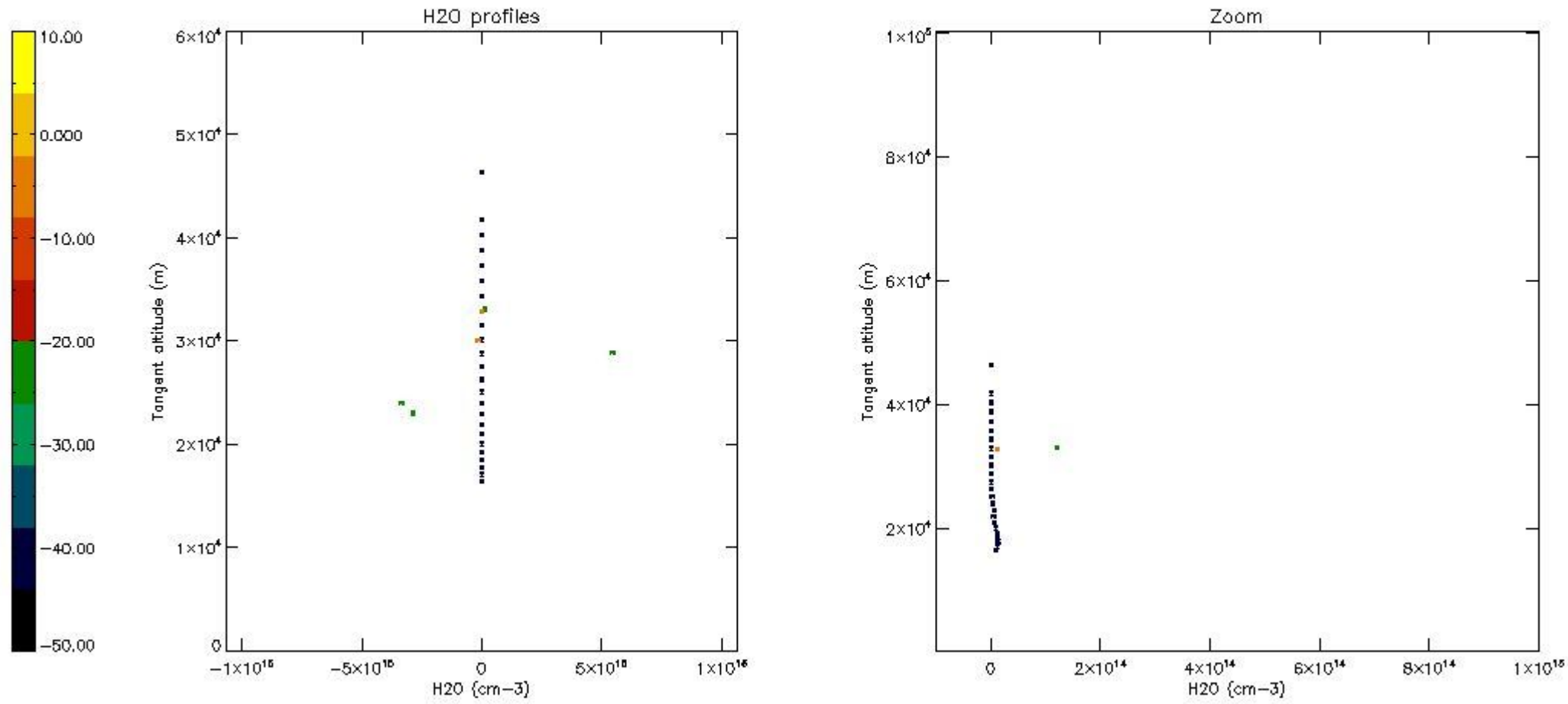
*5.7 Plot NO<sub>3</sub> profiles for all STD (dark without errors)*

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.

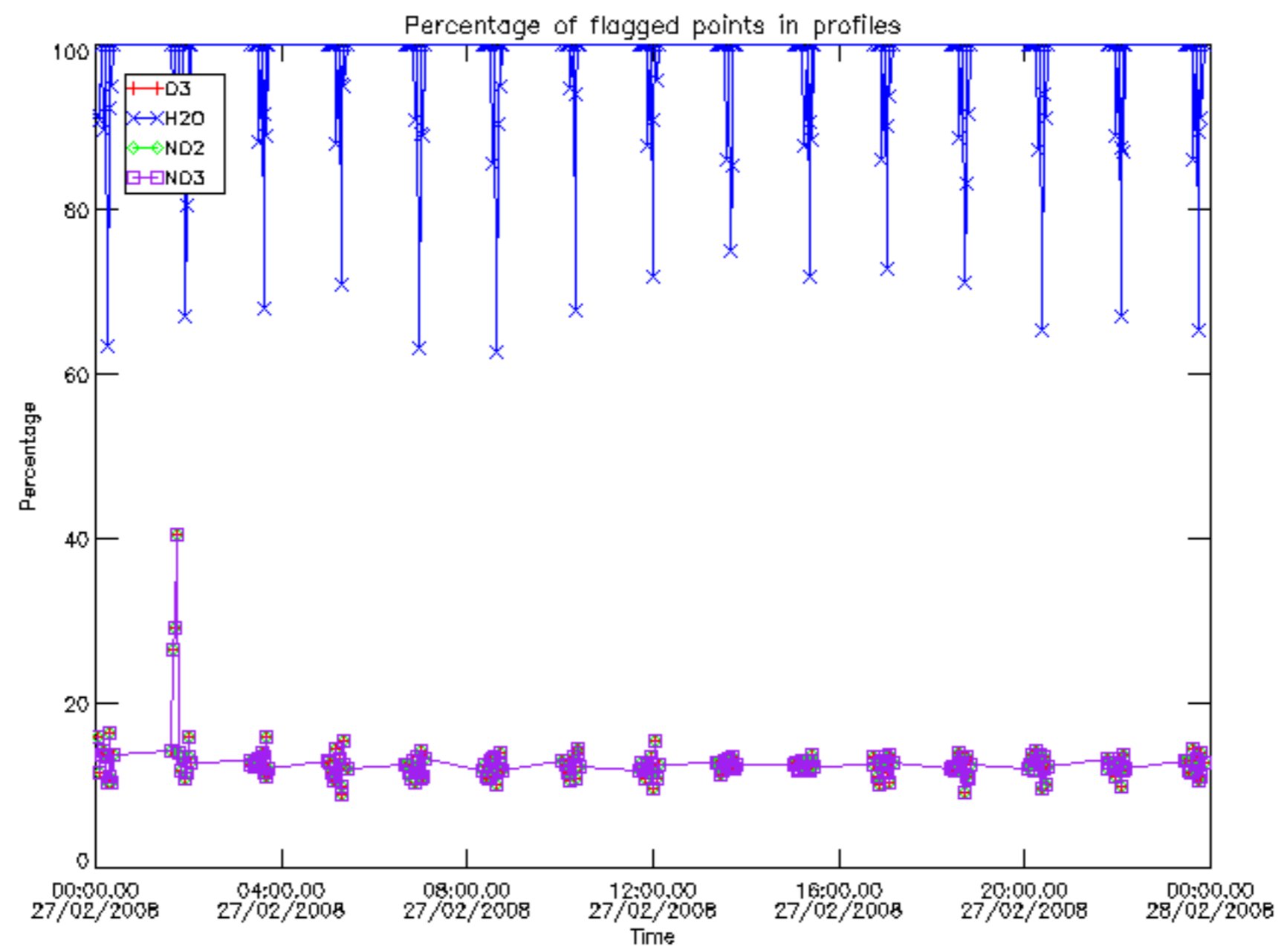


## 6. Auxiliary Data Files used for the production reported in section 2

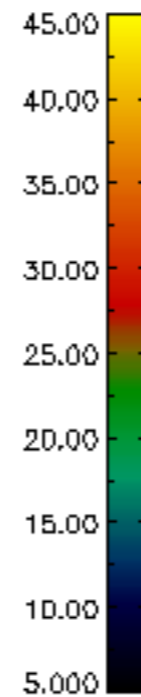
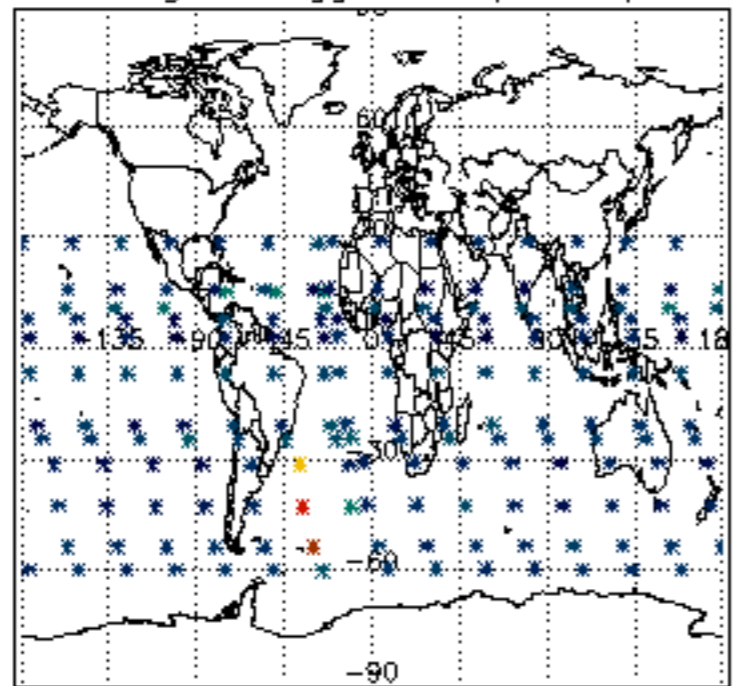
The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	27-FEB-2008 00:02:32
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	27-FEB-2008 00:02:32
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	27-FEB-2008 00:02:32

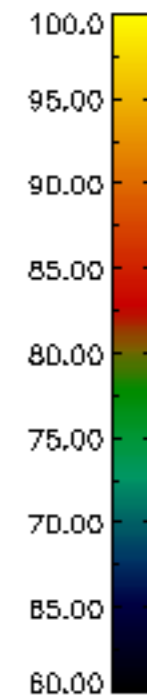
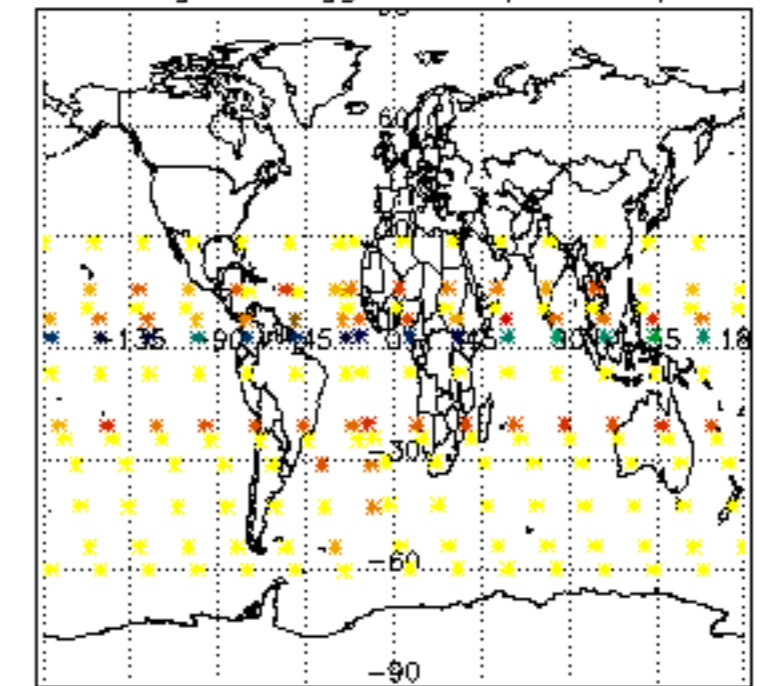




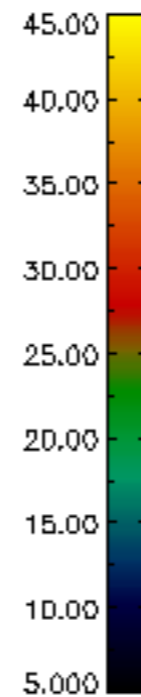
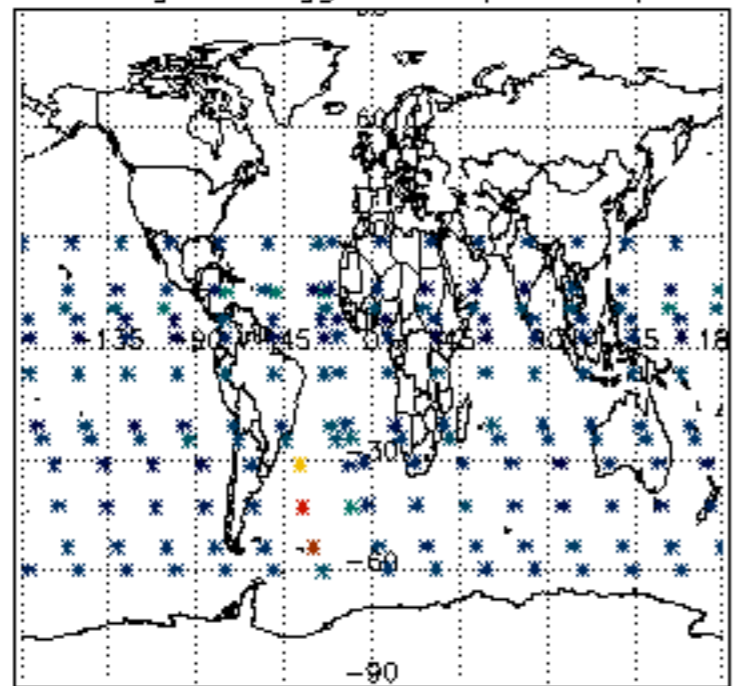
Percentage of flagged data per D3 profile



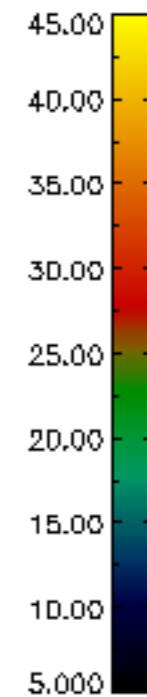
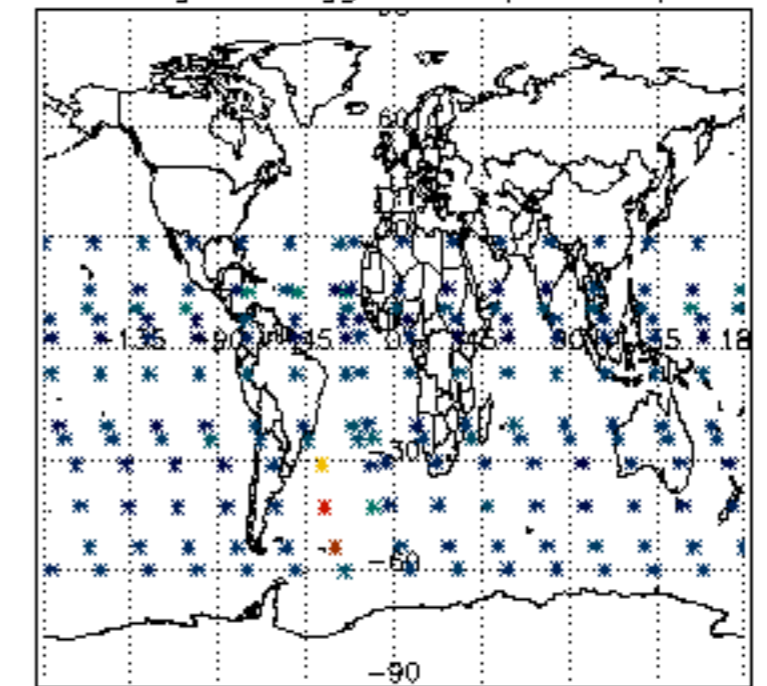
Percentage of flagged data per H2O profile

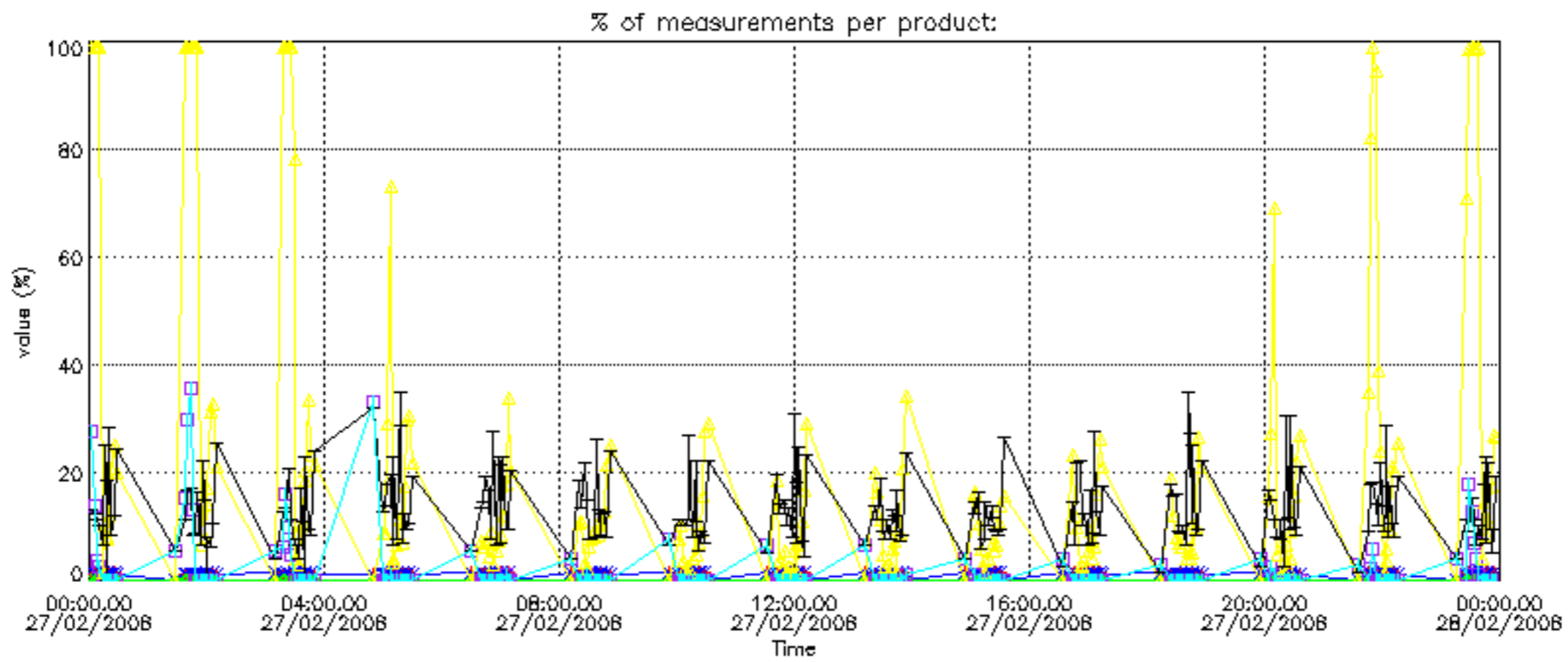


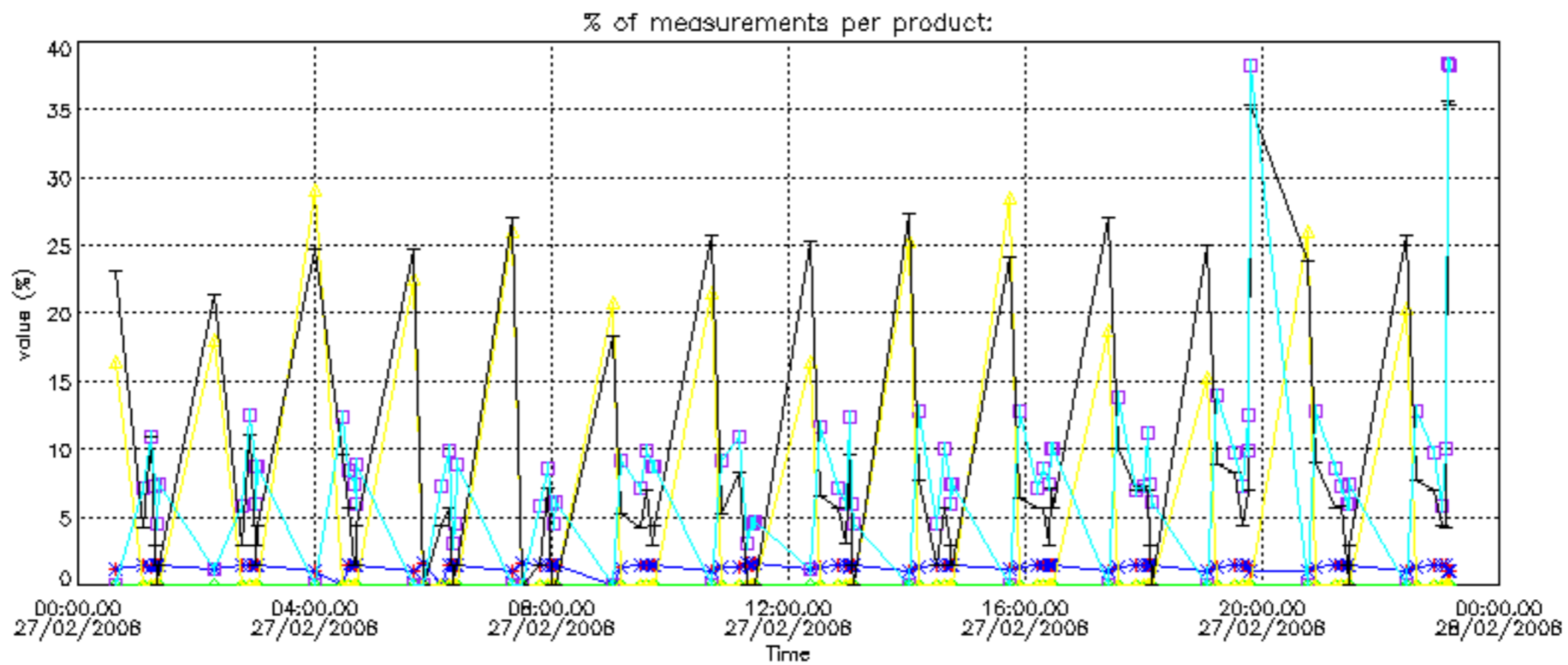
Percentage of flagged data per NO2 profile



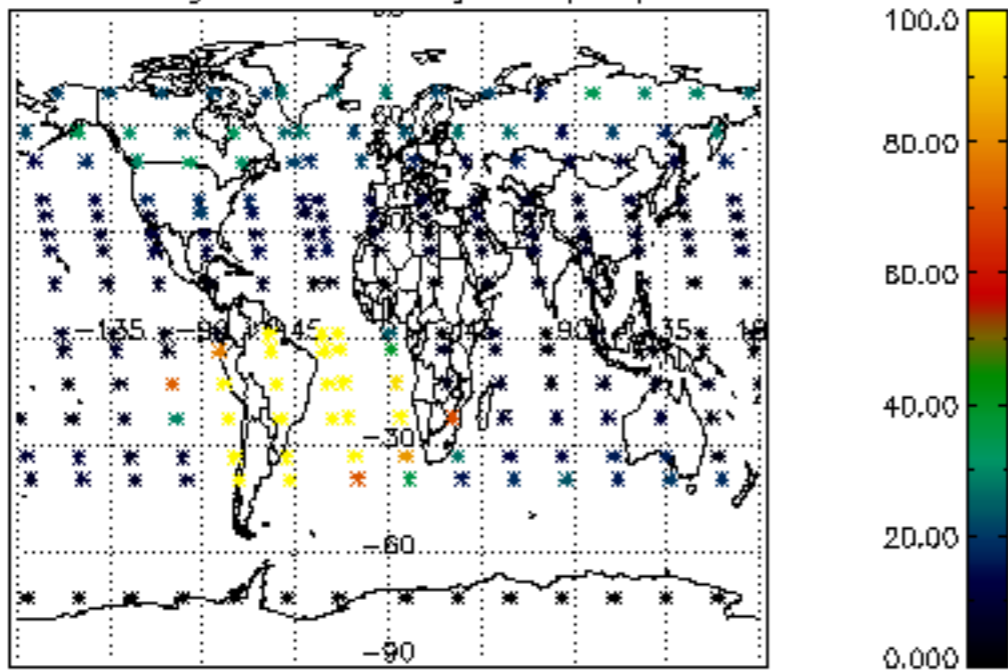
Percentage of flagged data per NO3 profile



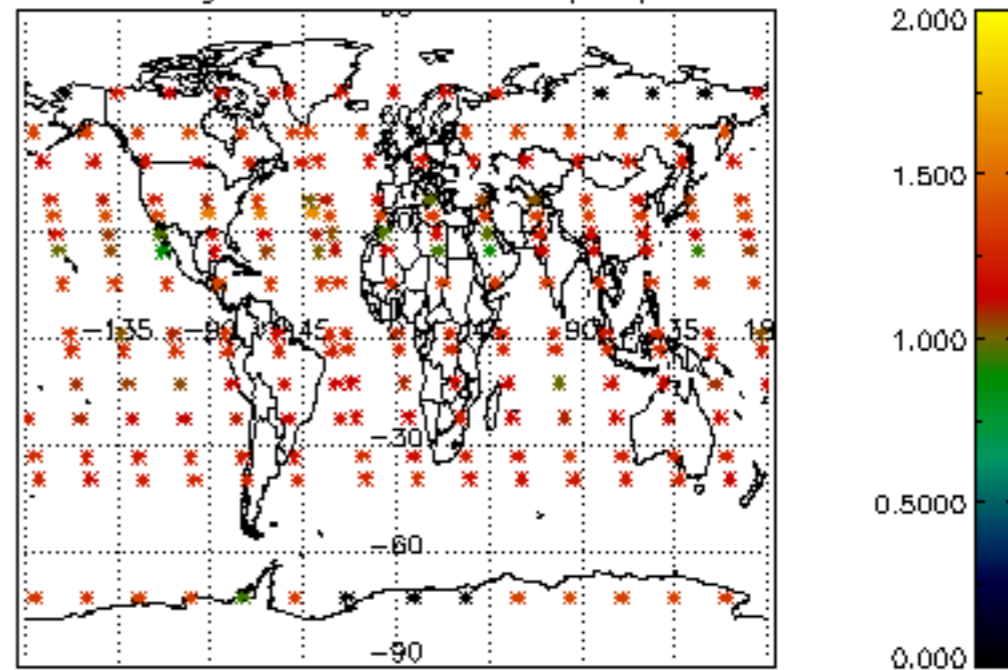




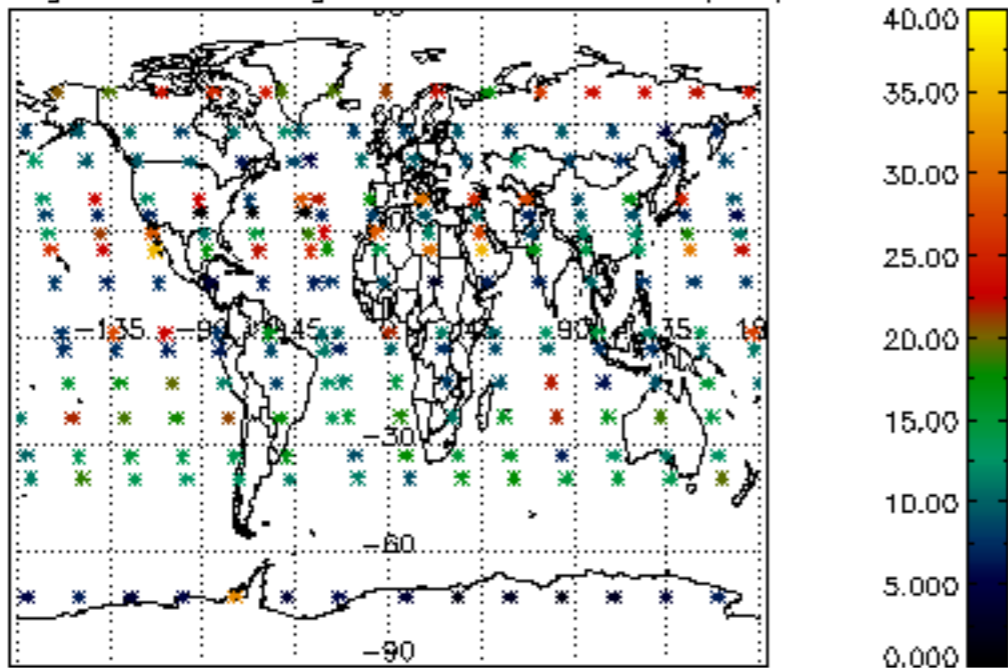
Percentage of cosmic ray hits per profile



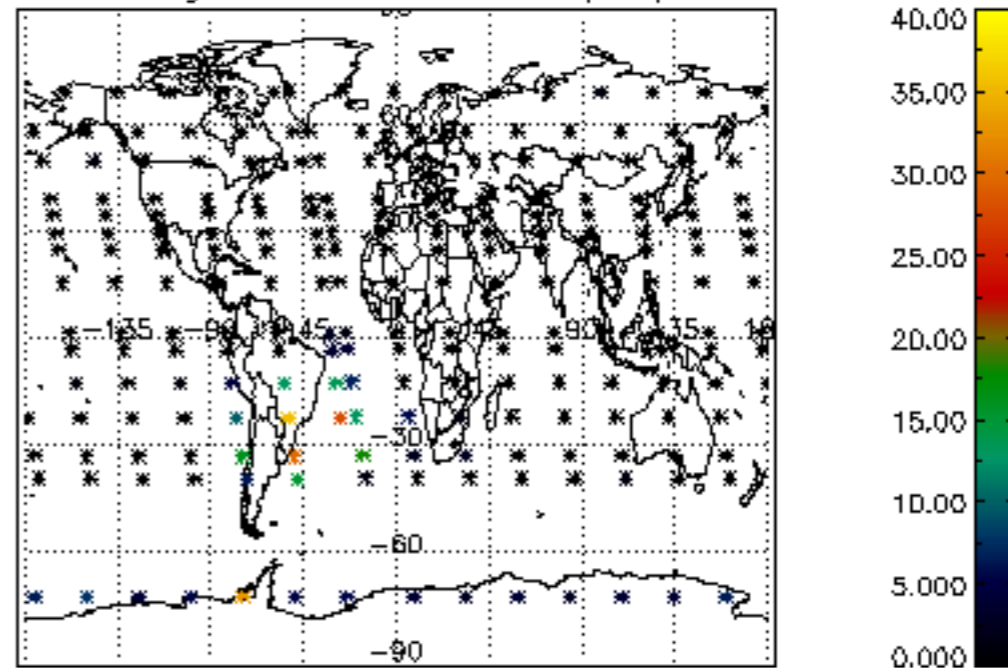
Percentage of datation errors per profile



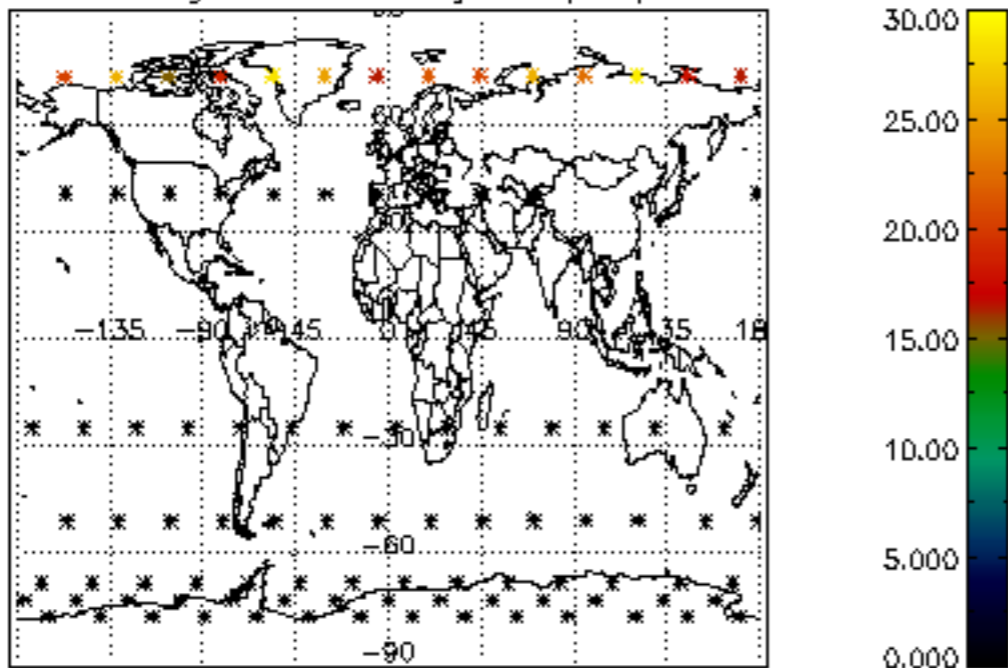
Percentage of star falling outside central band per profile



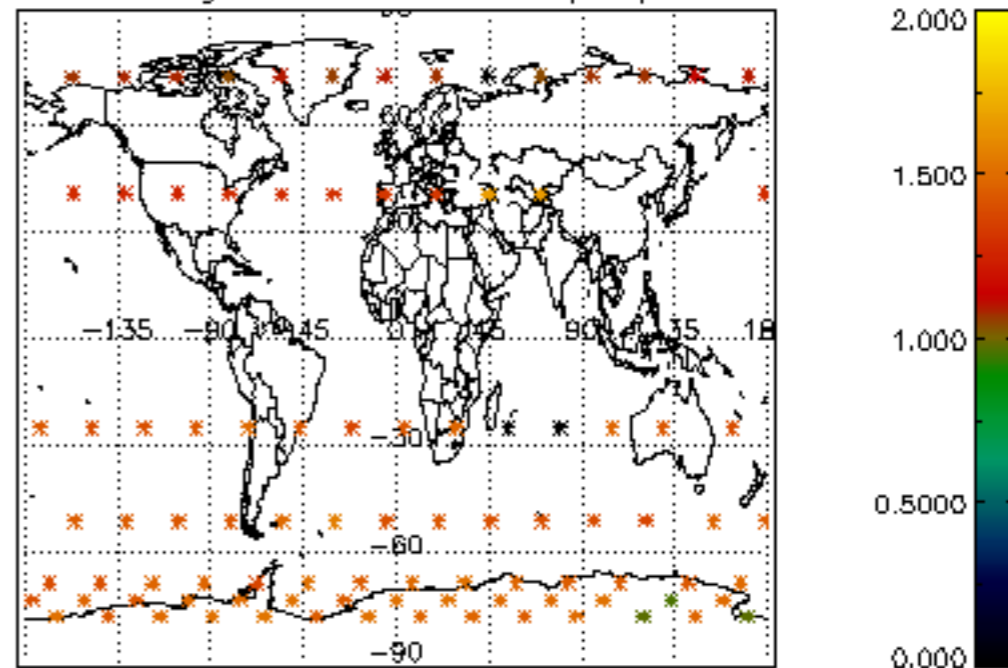
Percentage of saturation errors per profile



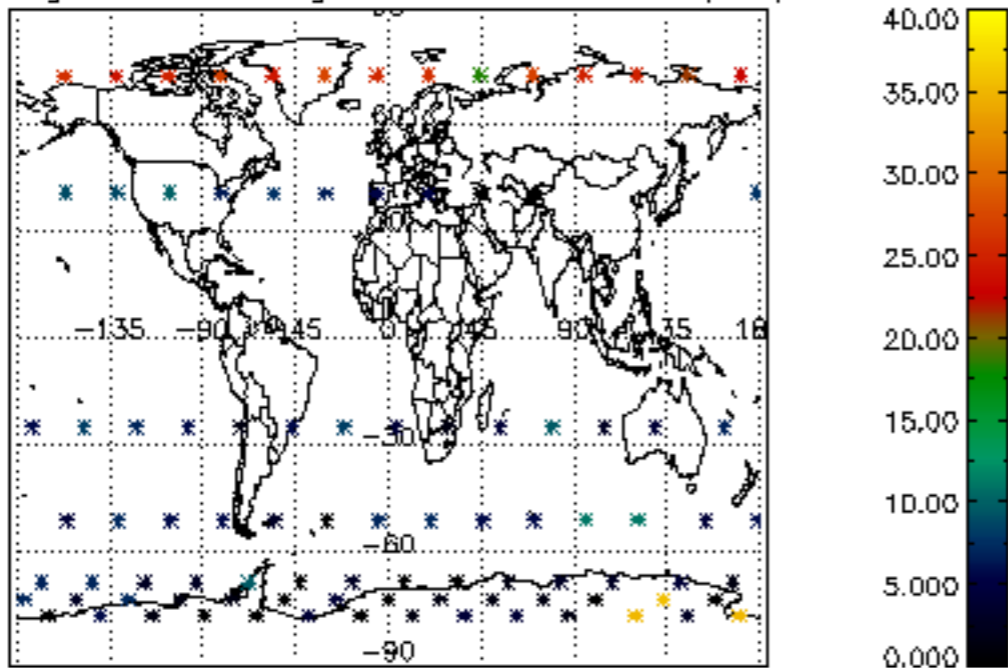
Percentage of cosmic ray hits per profile



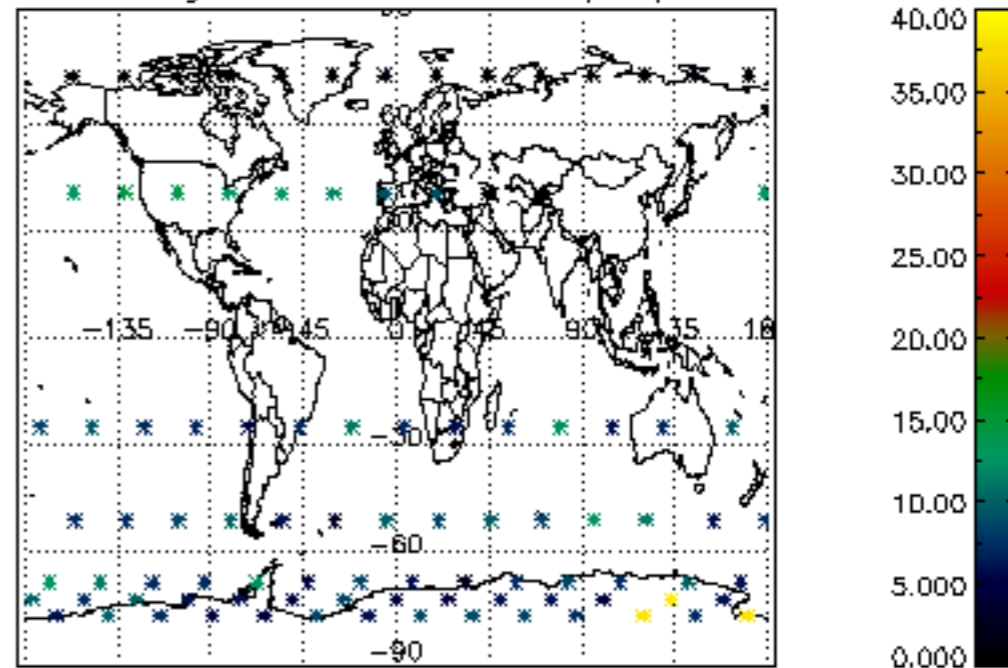
Percentage of datation errors per profile

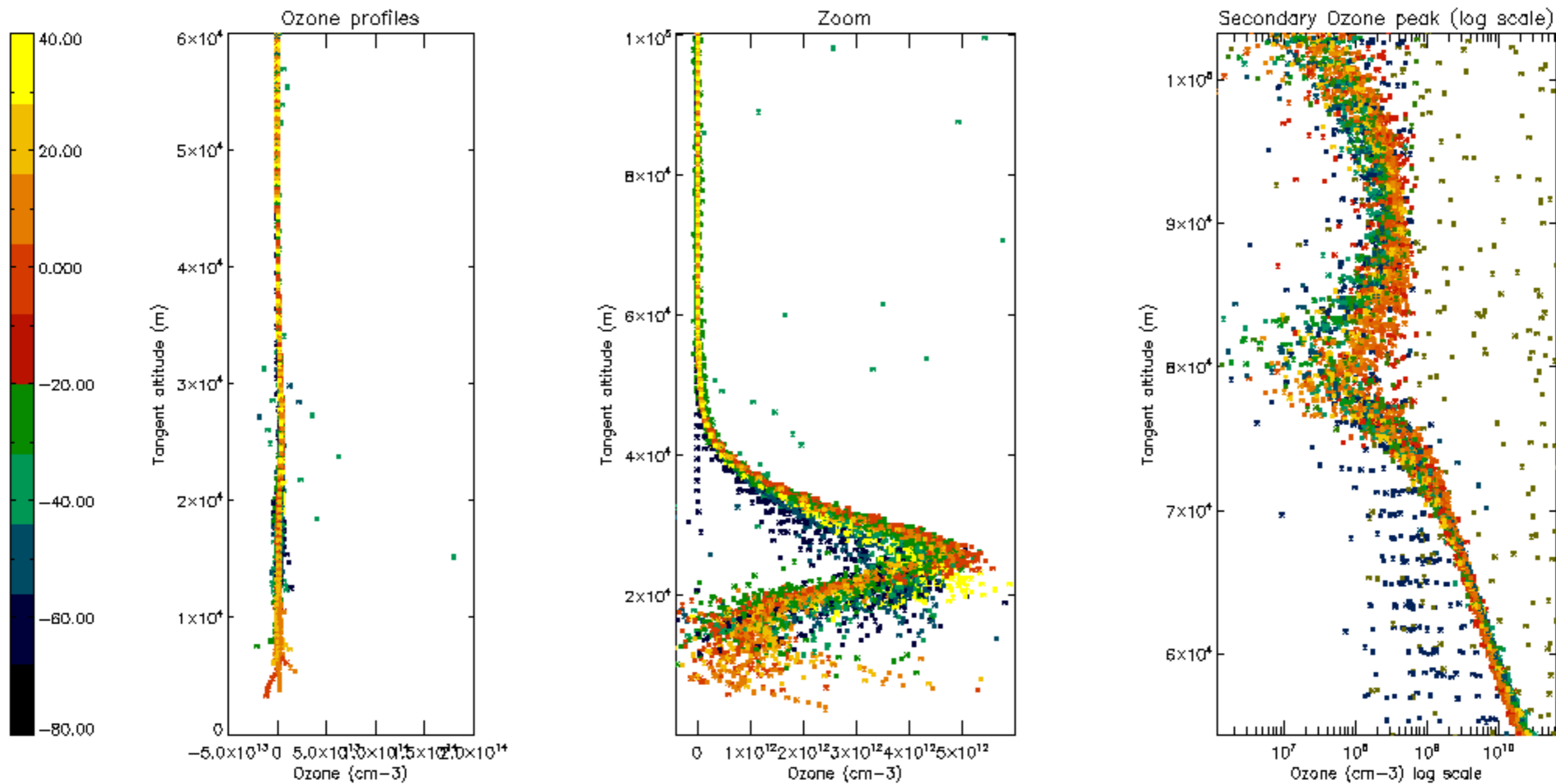


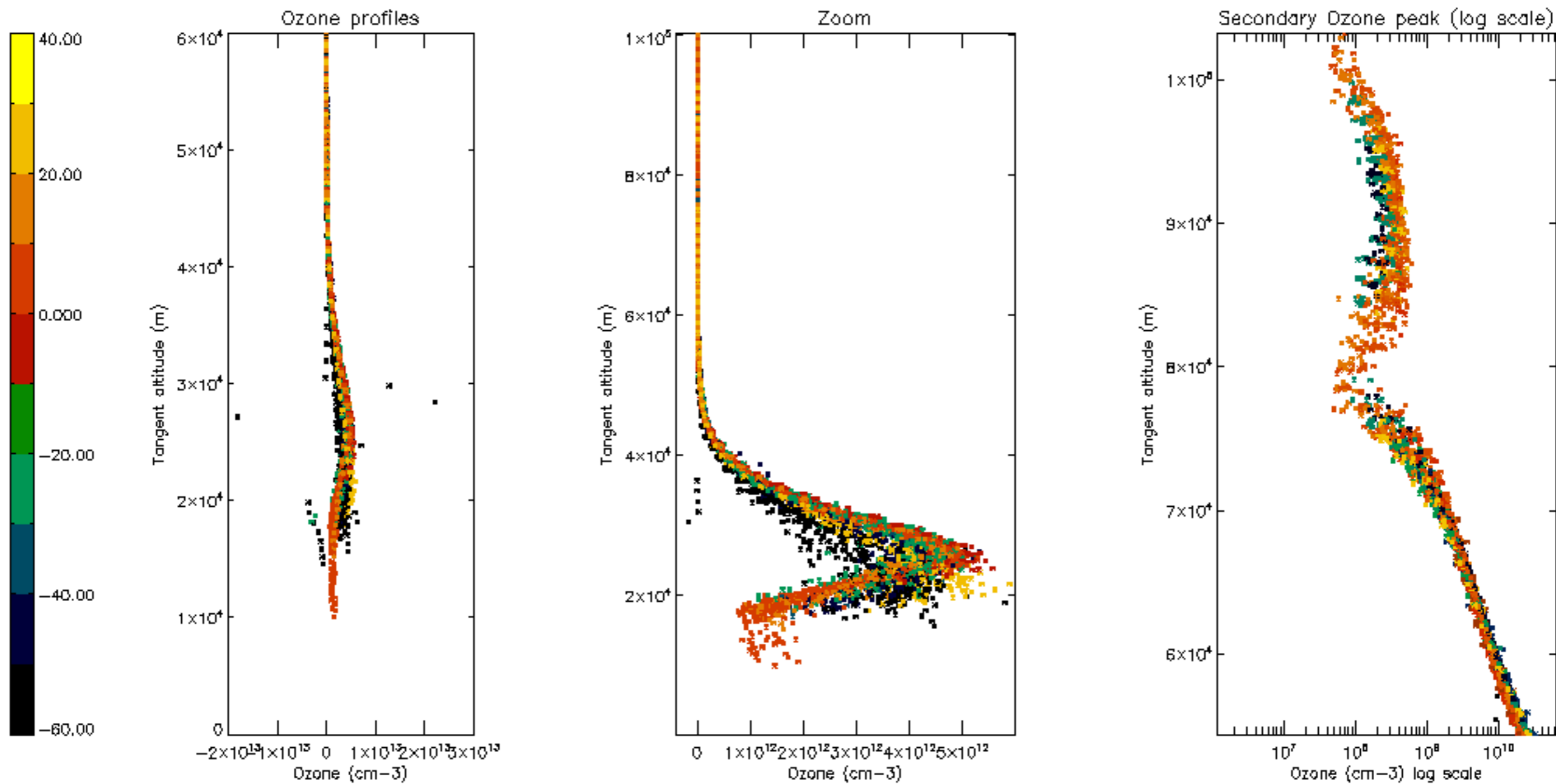
Percentage of star falling outside central band per profile



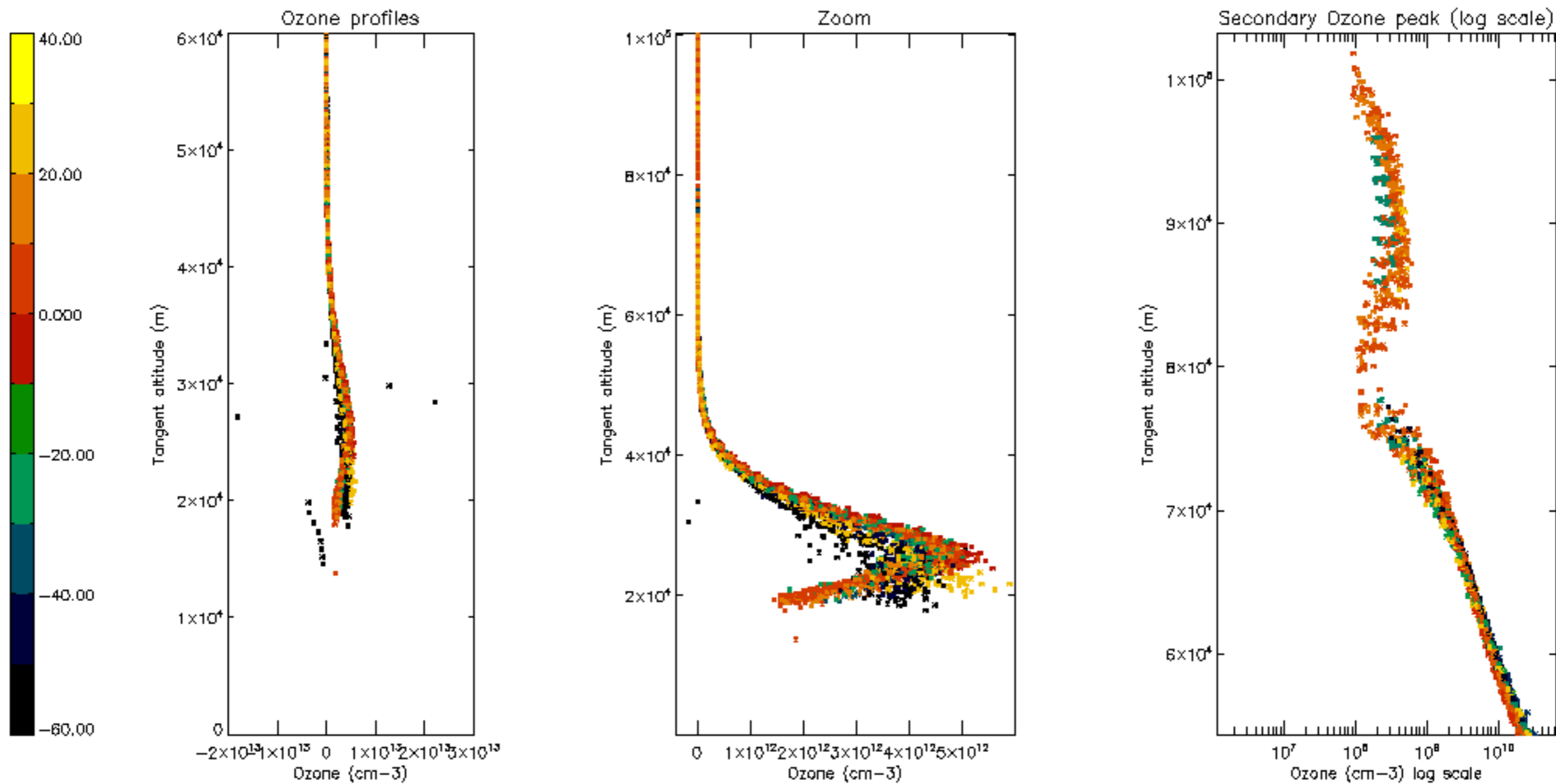
Percentage of saturation errors per profile

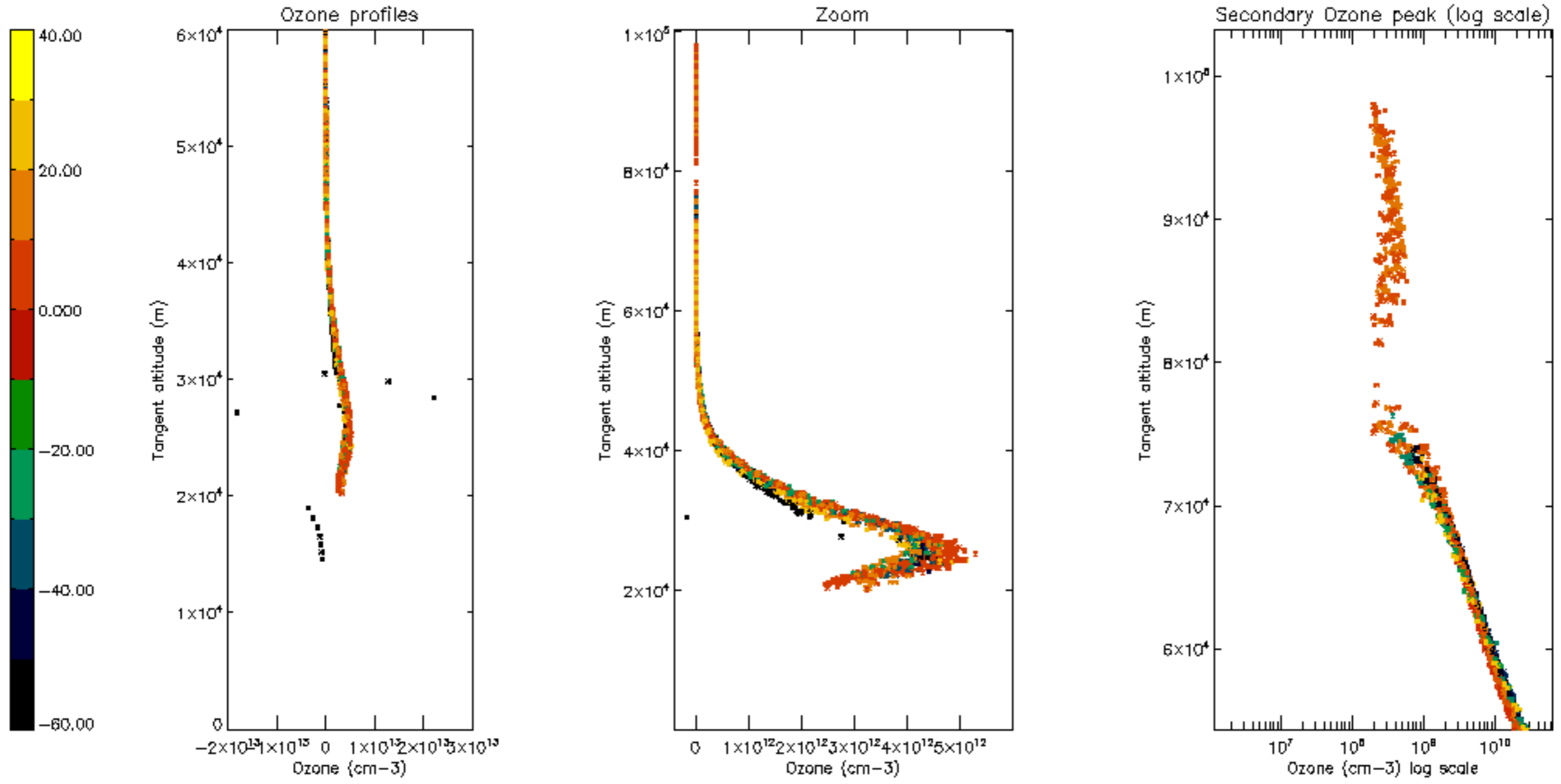


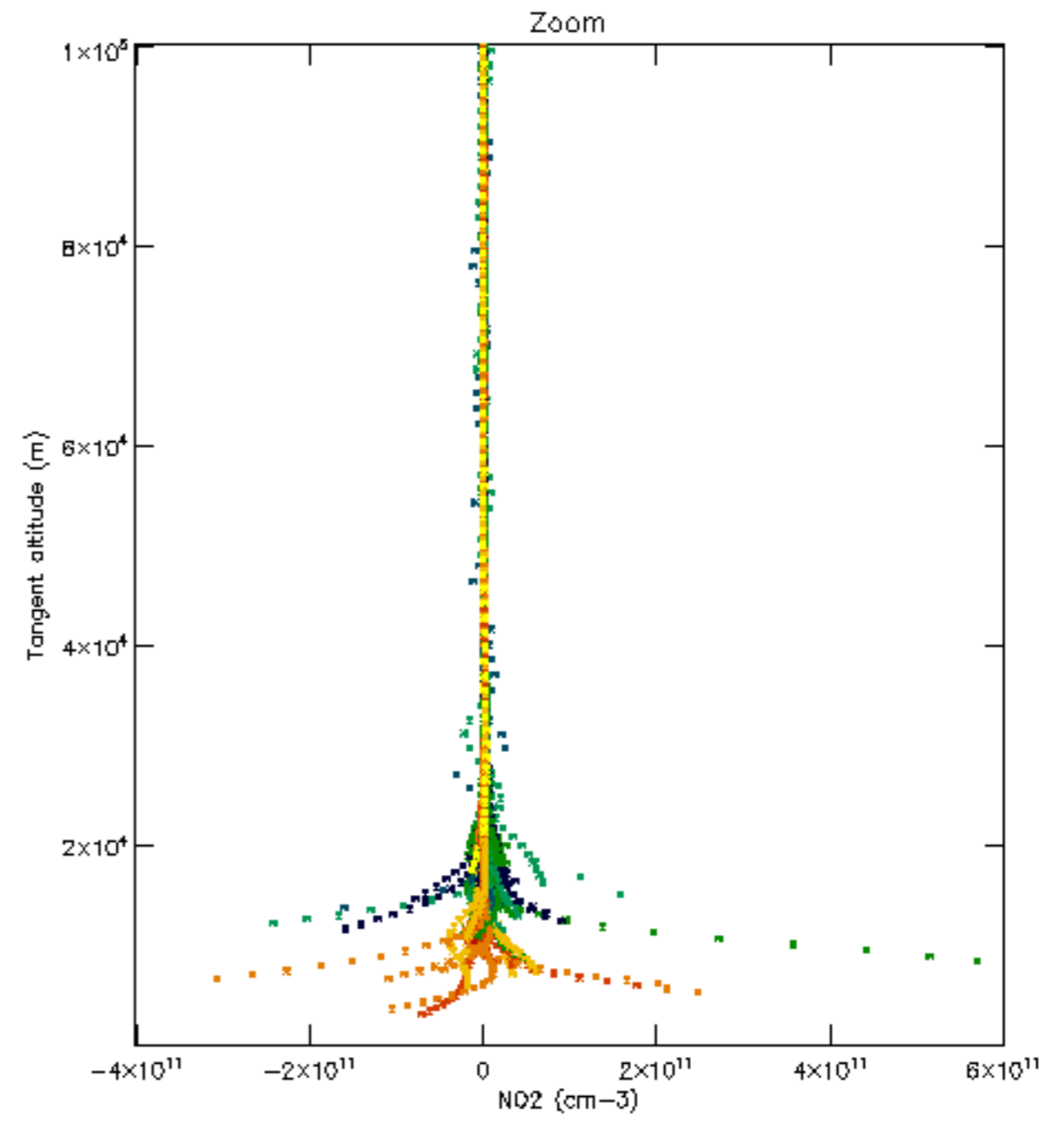
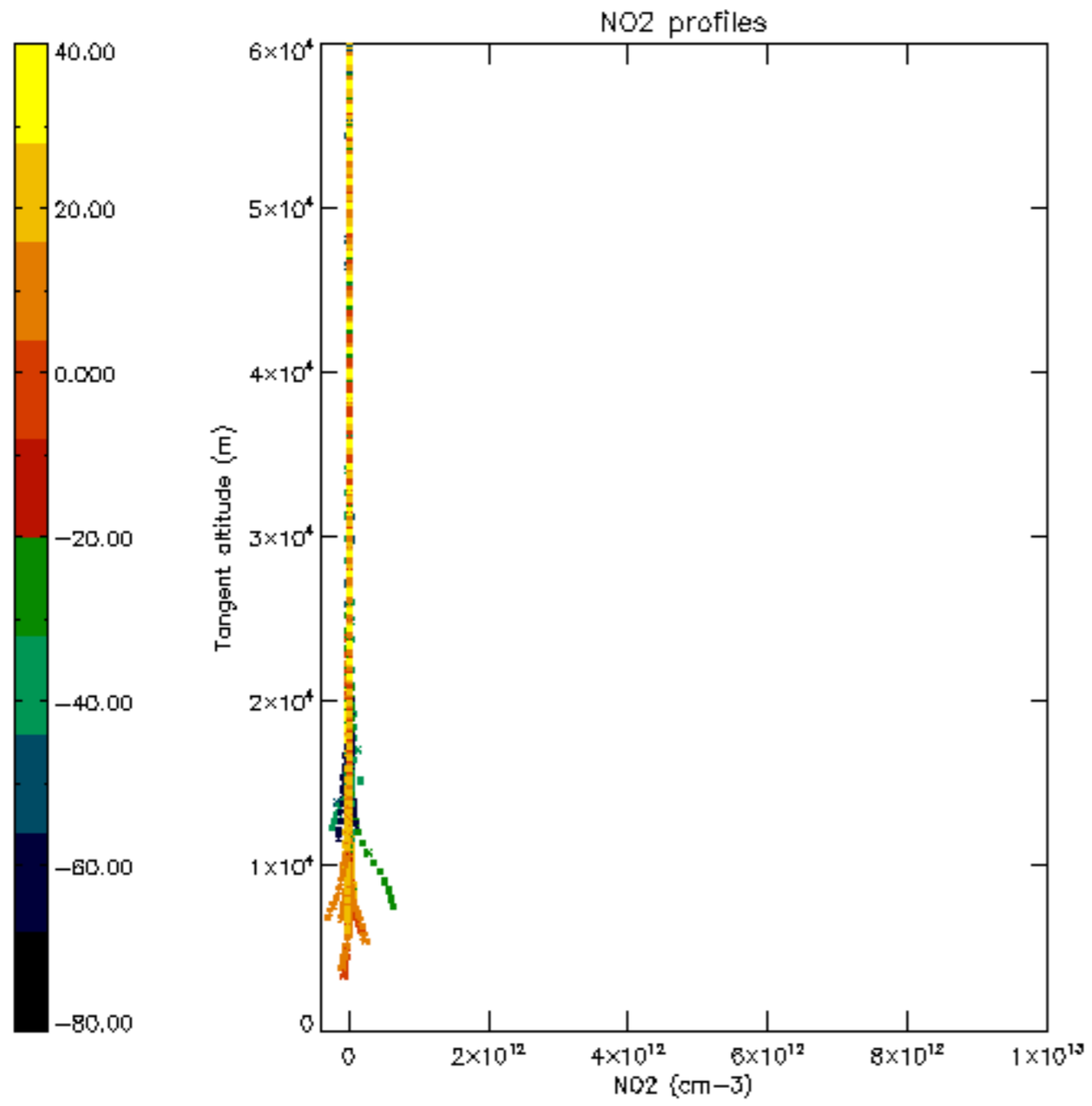


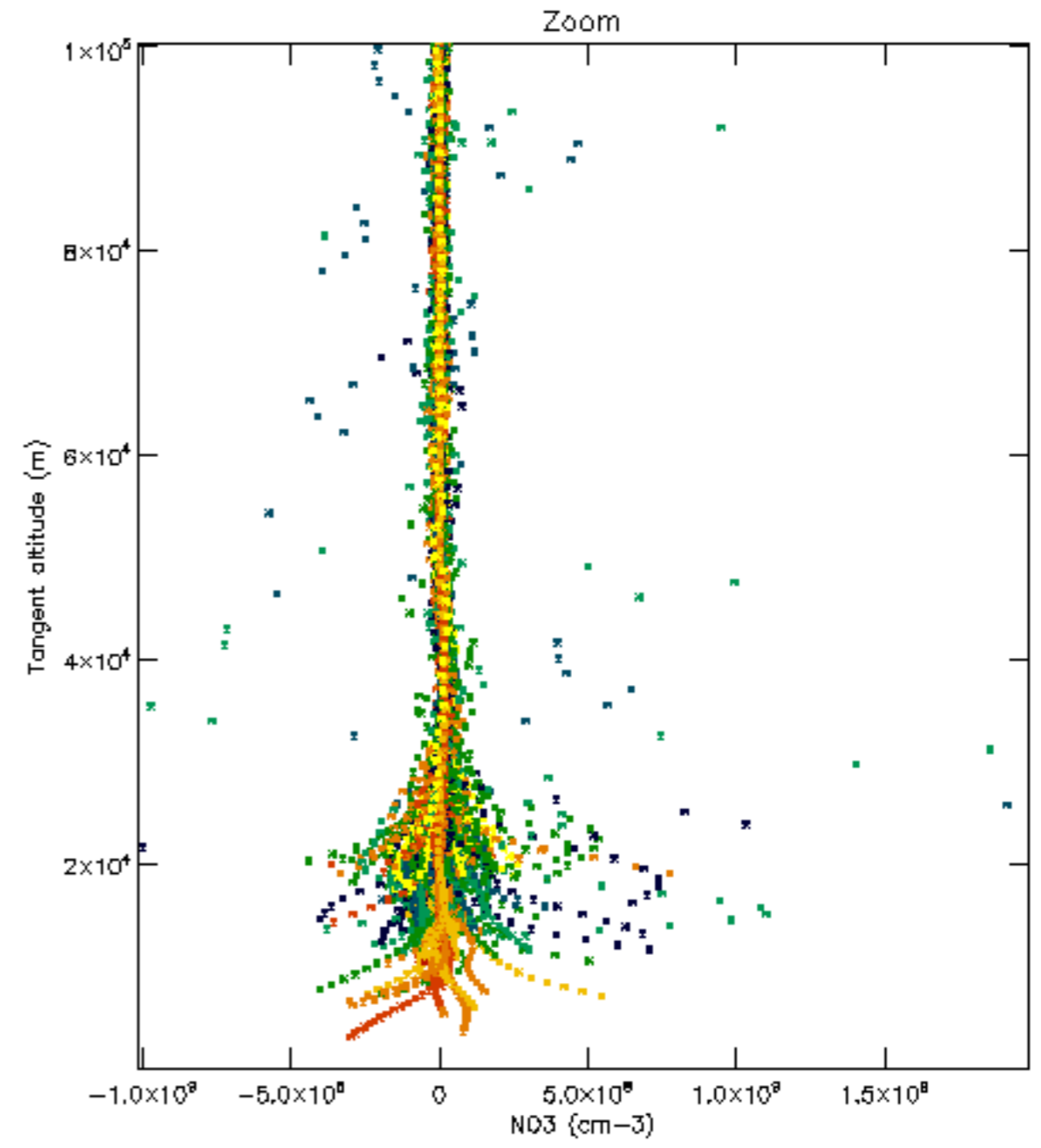
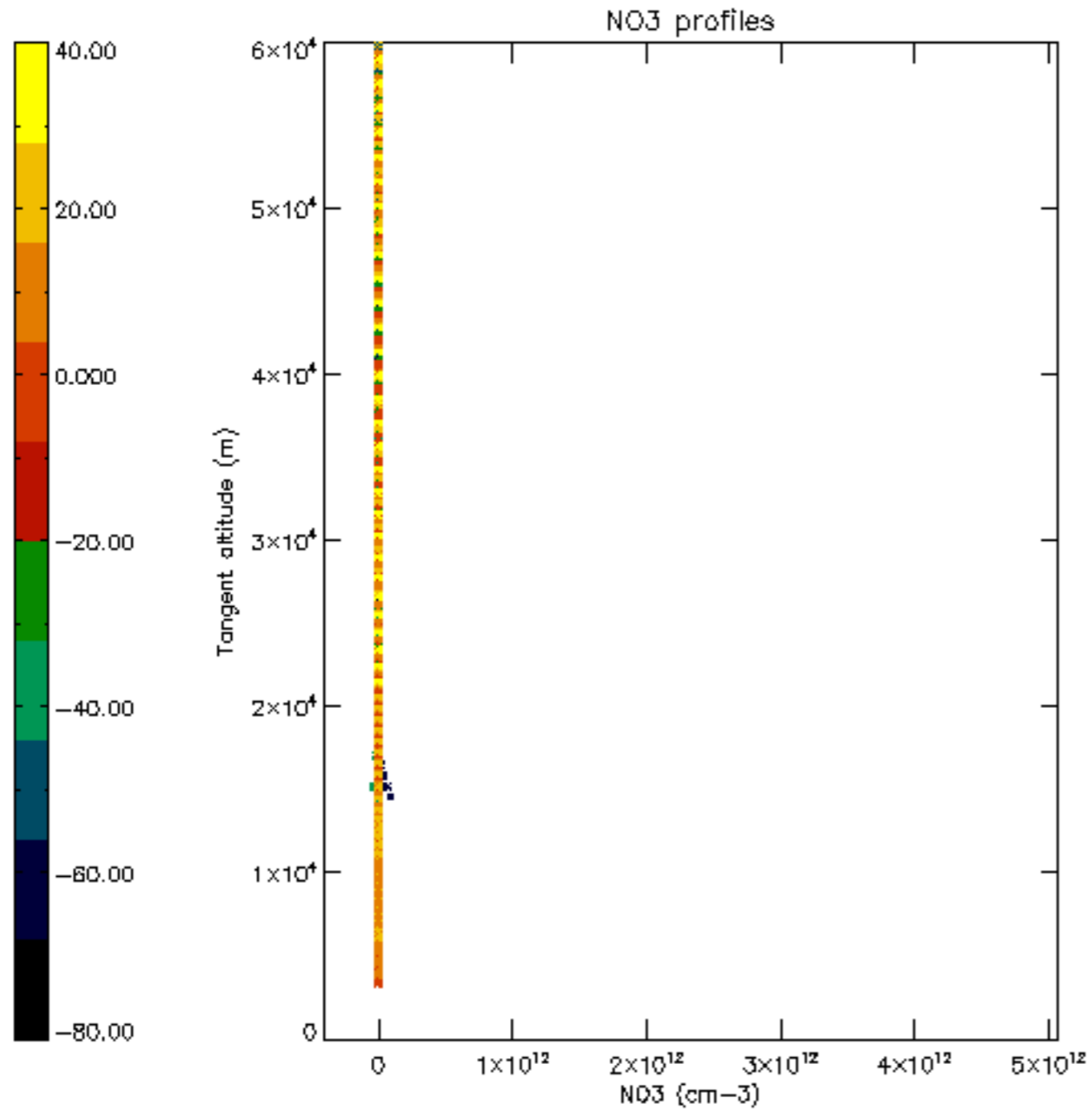


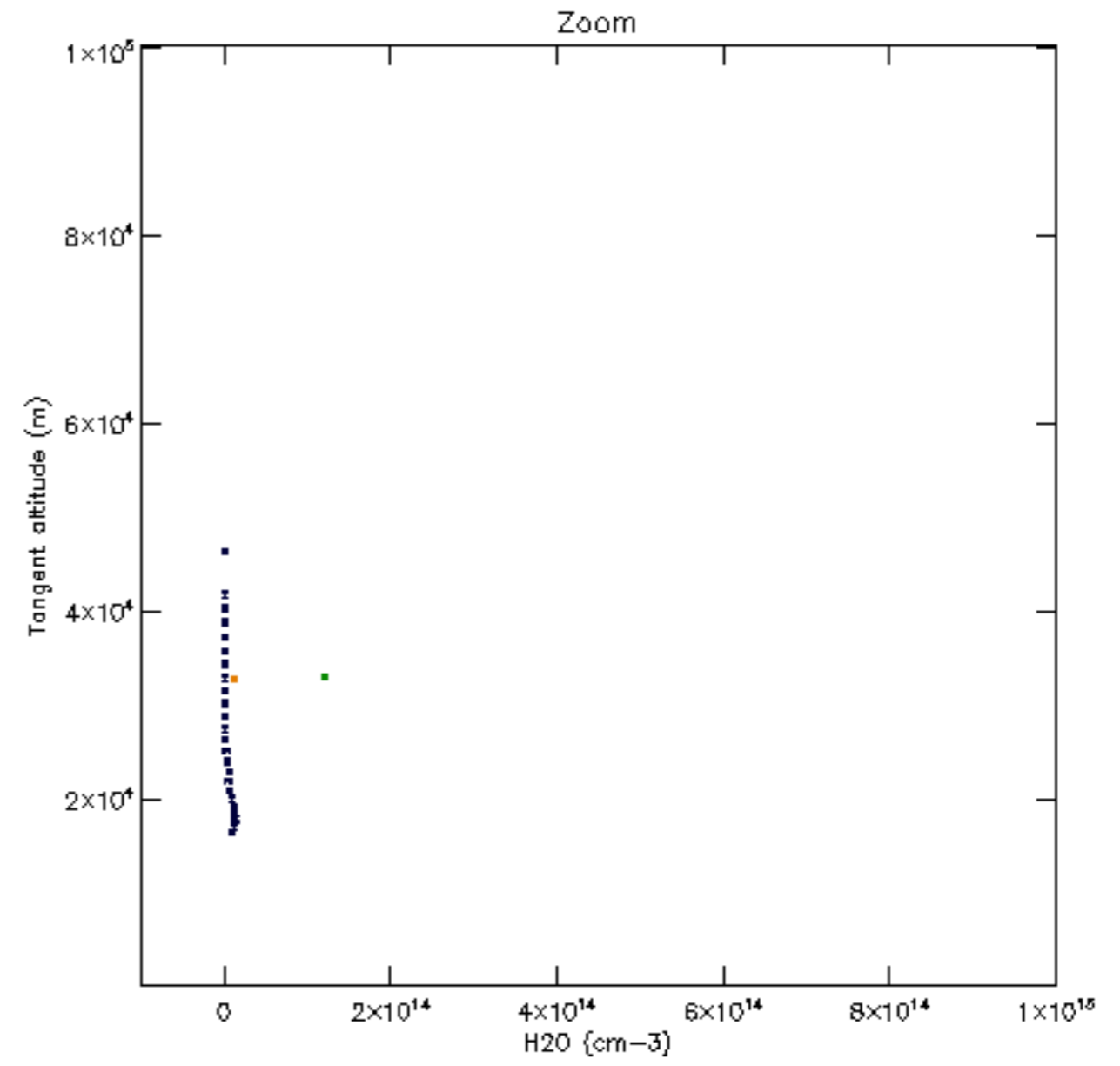
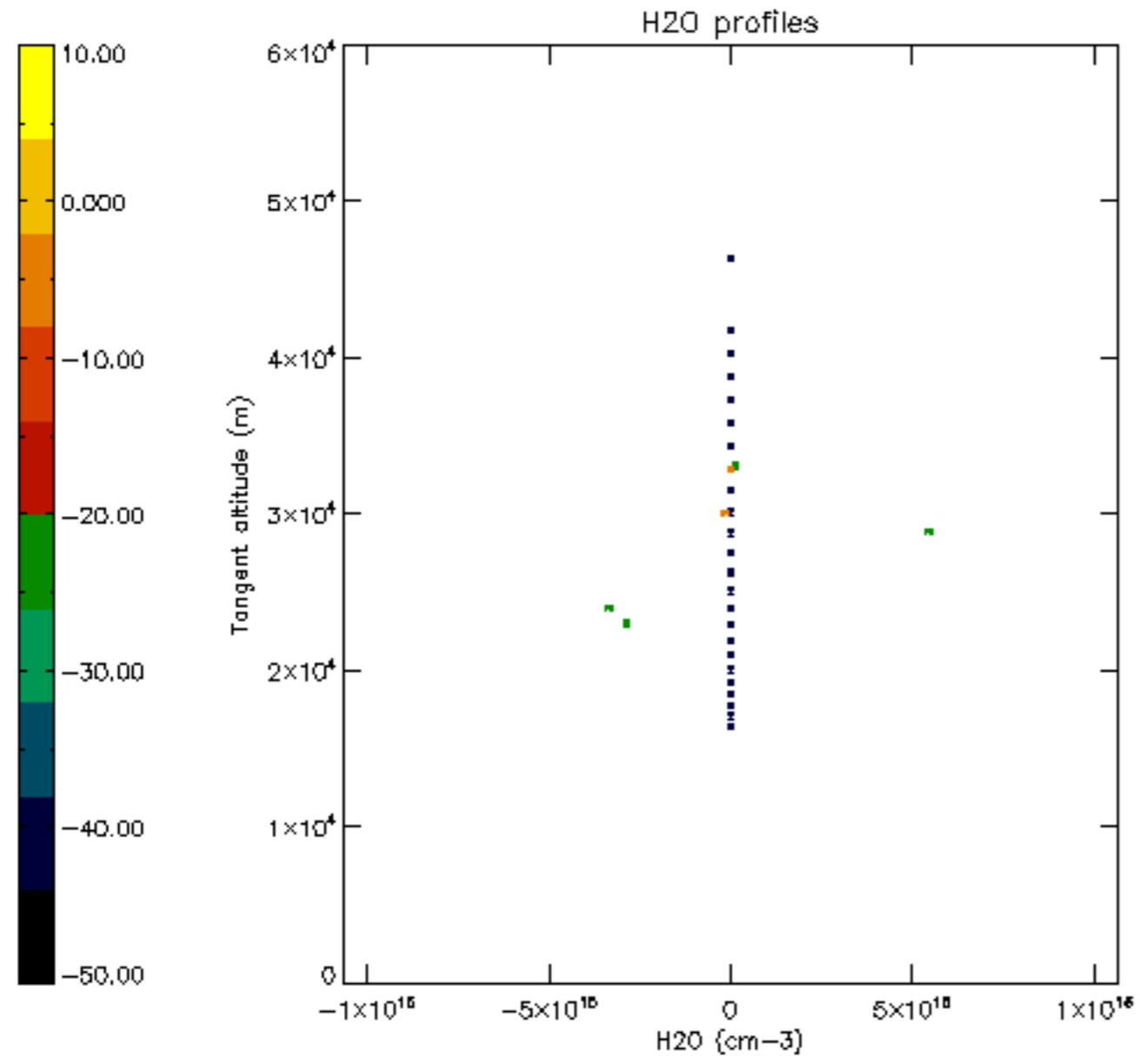


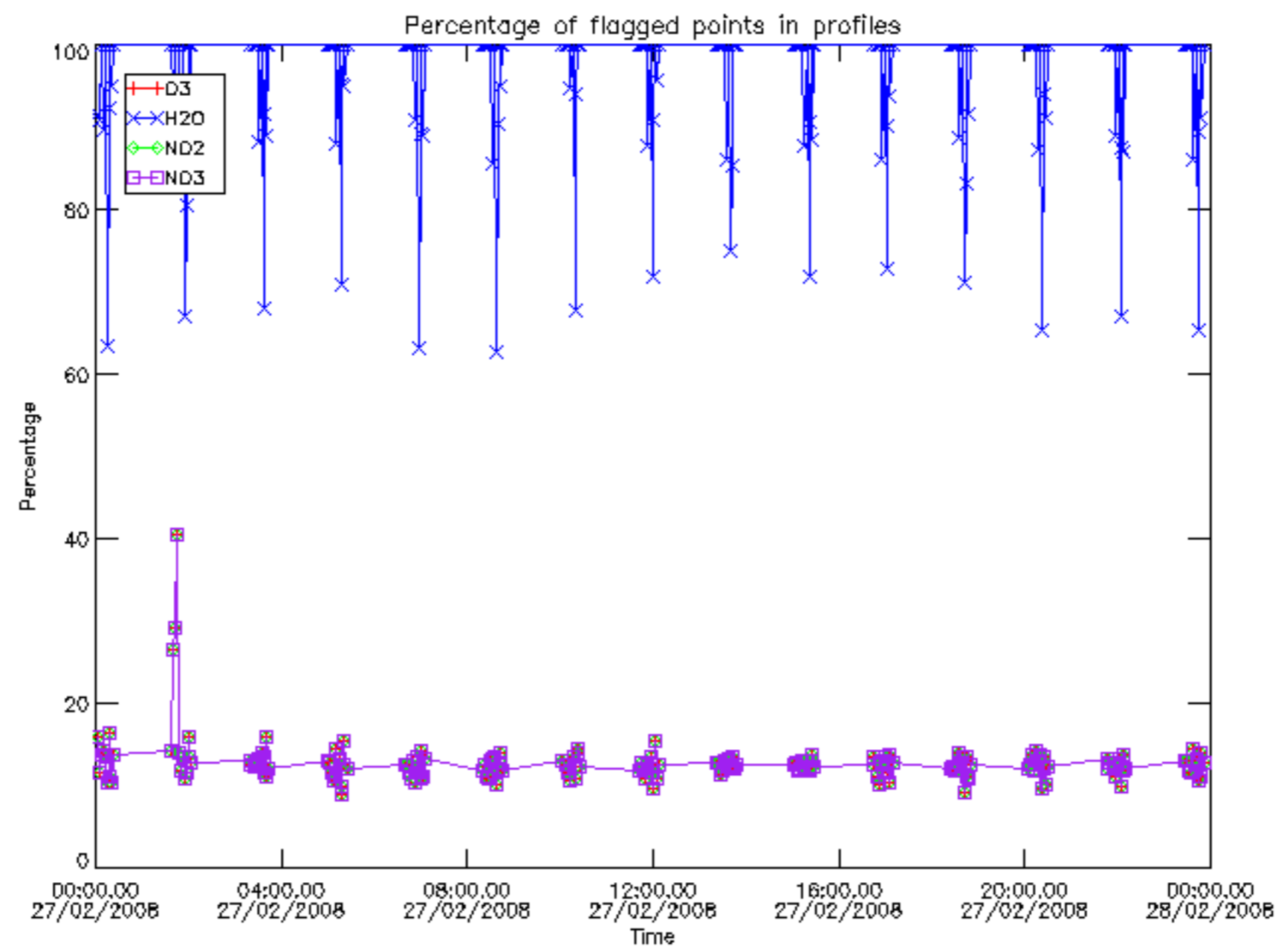




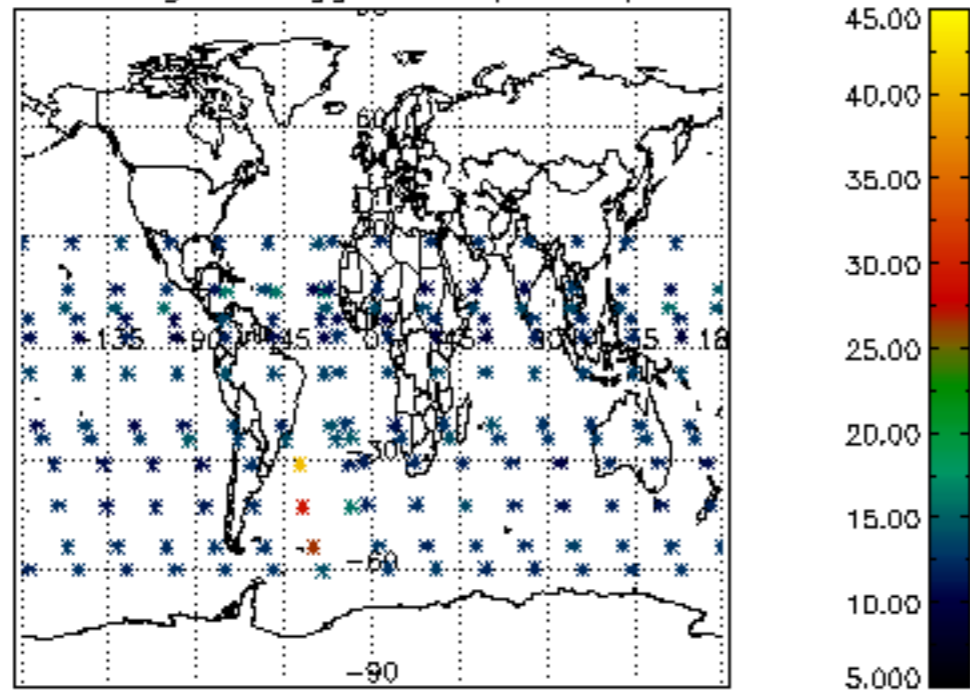




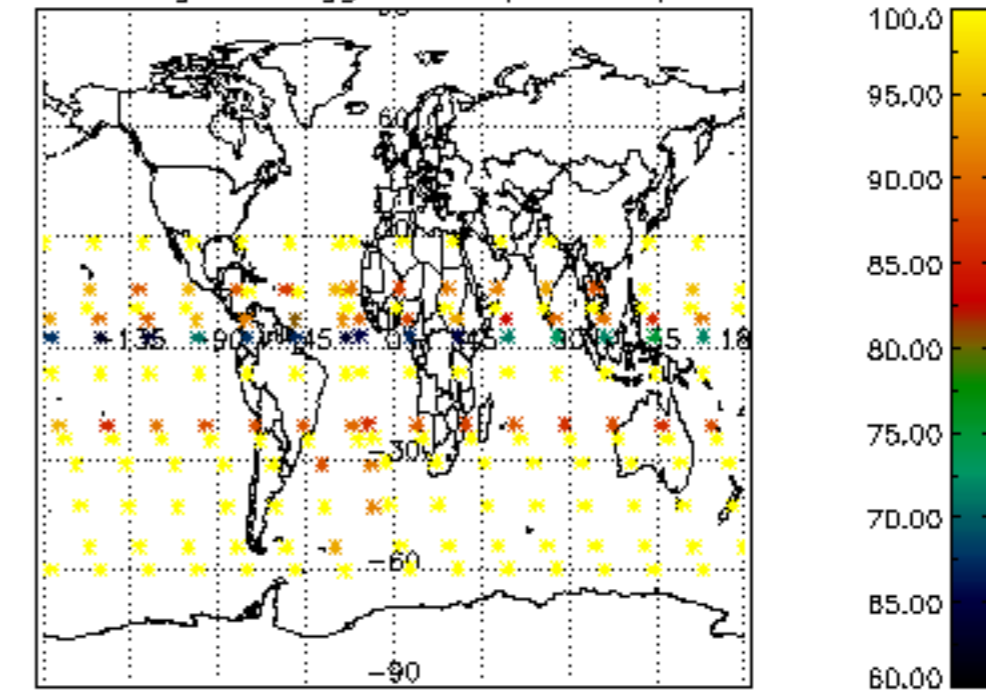




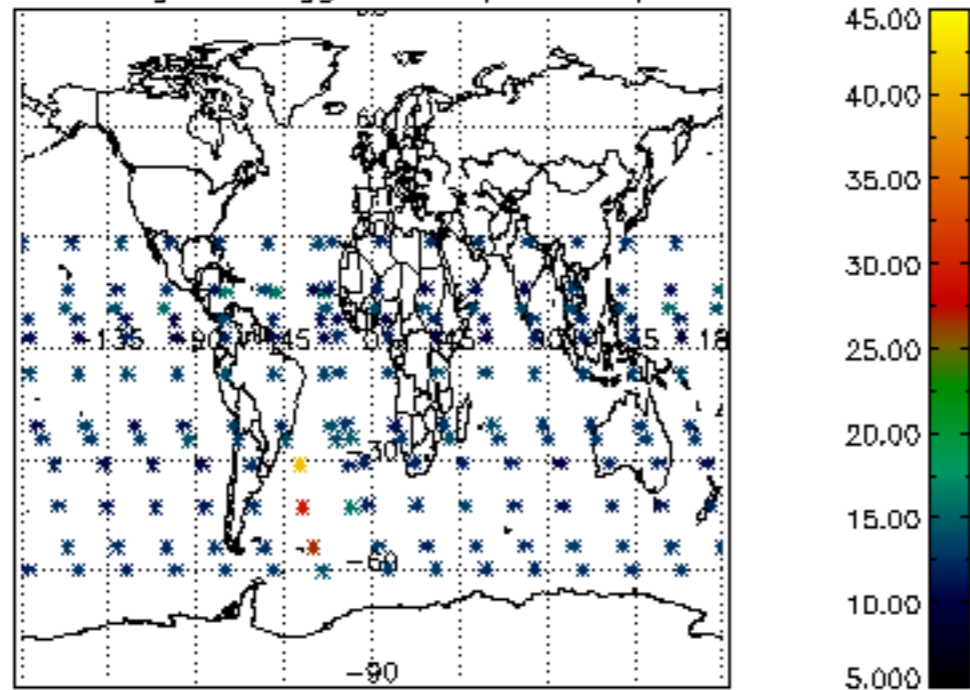
Percentage of flagged data per D3 profile



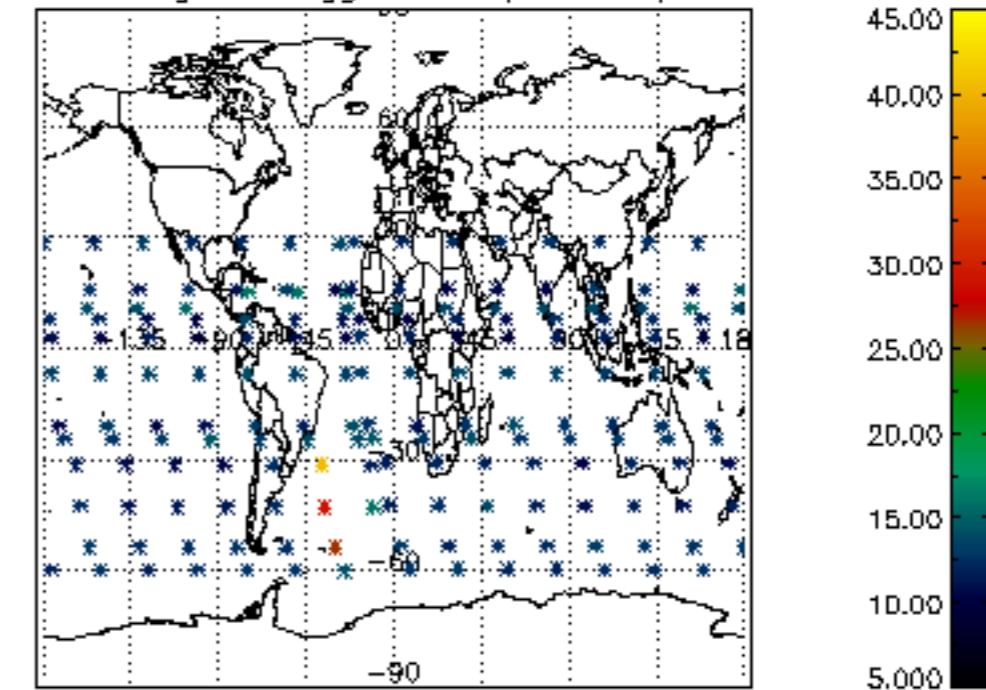
Percentage of flagged data per H2O profile

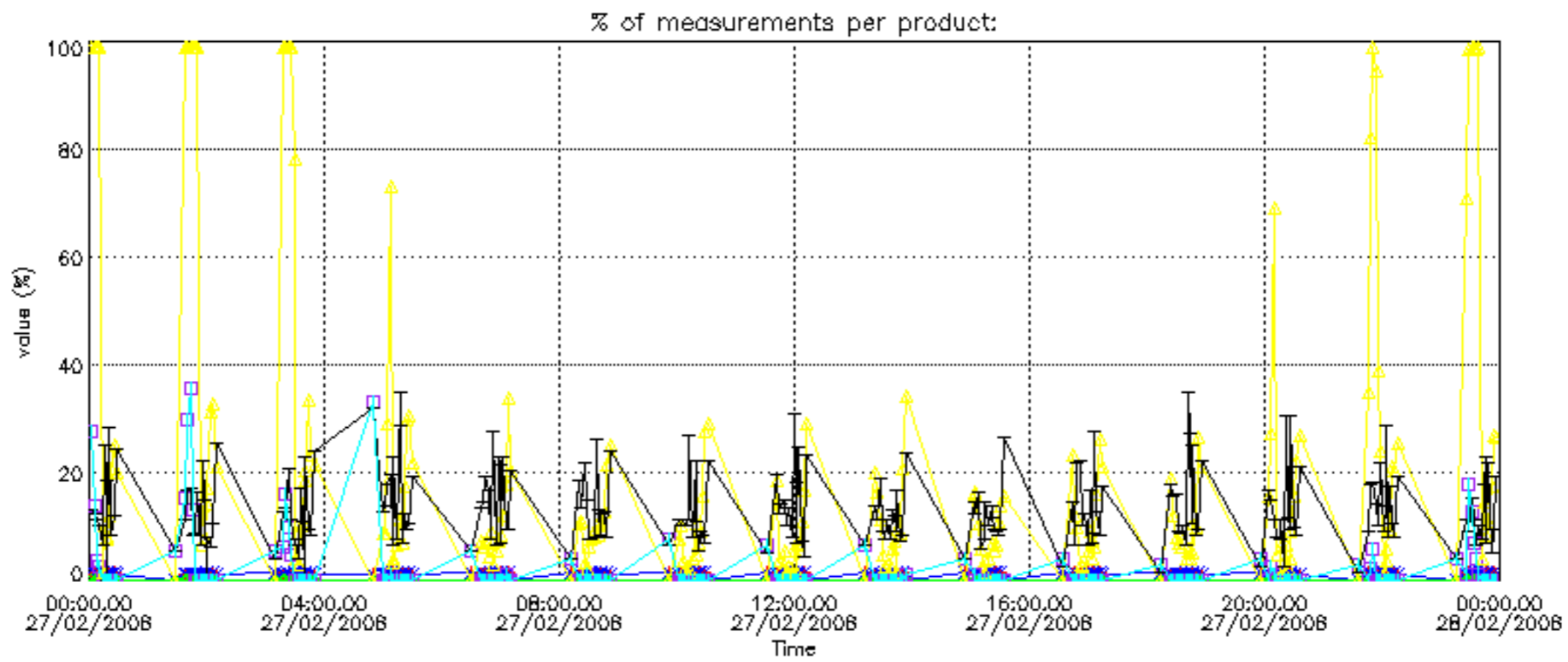


Percentage of flagged data per NO2 profile

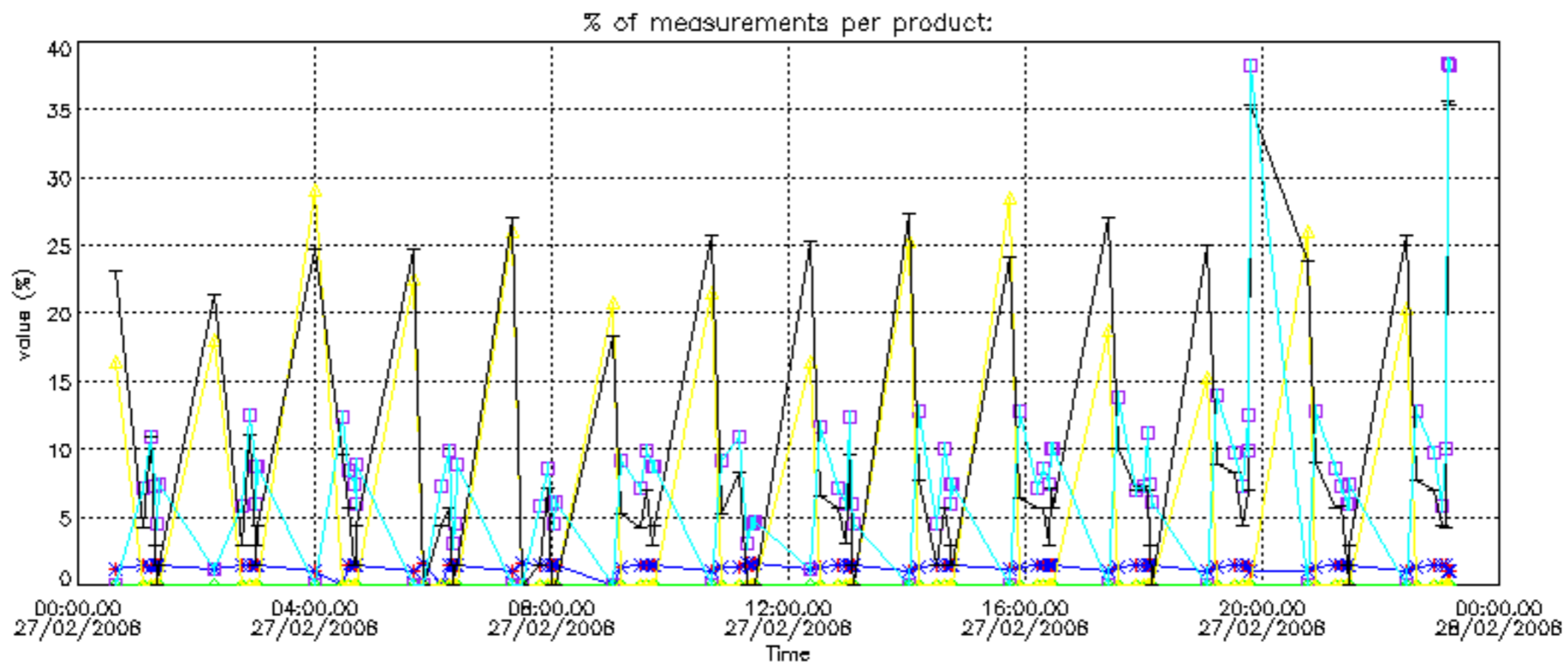


Percentage of flagged data per NO3 profile

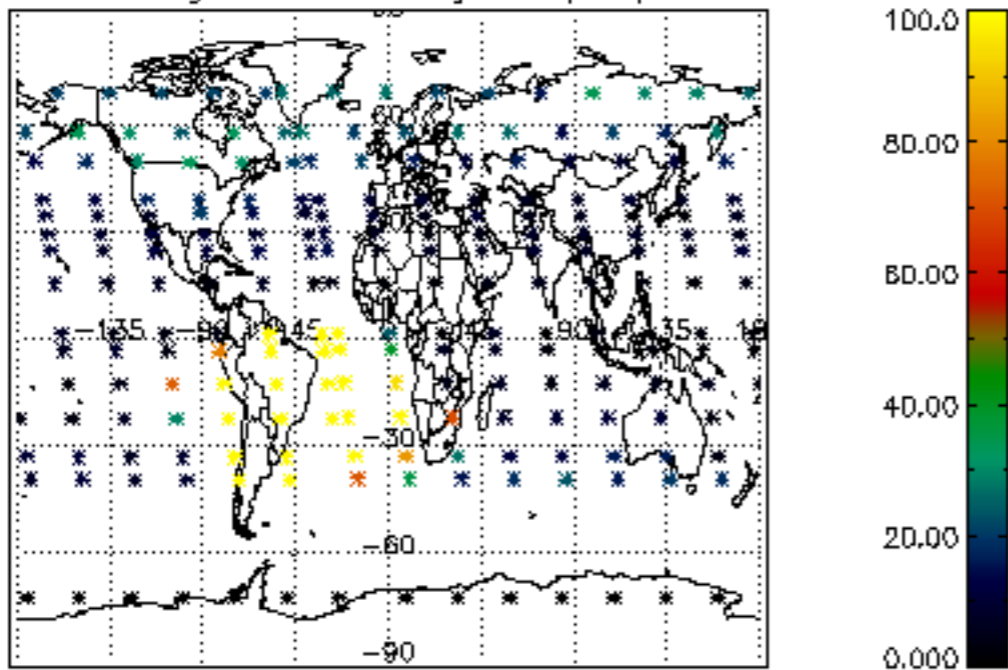




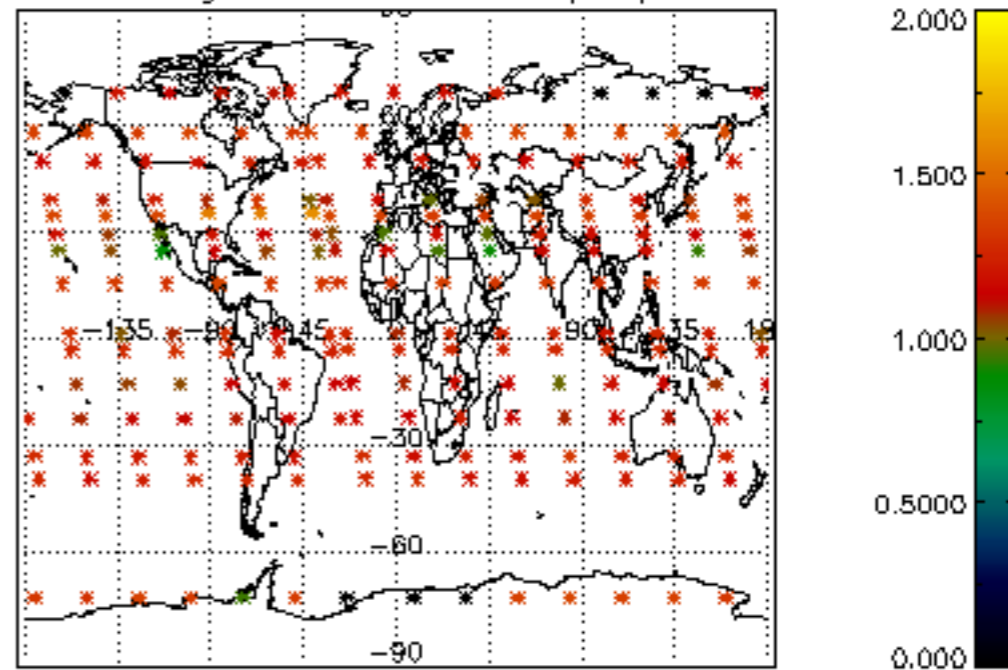




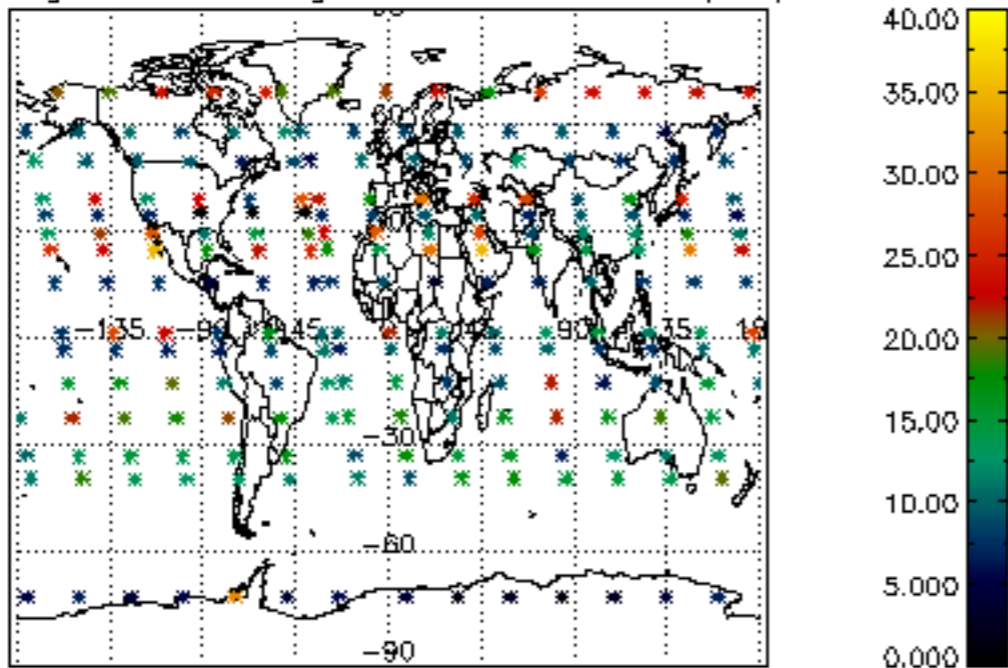
Percentage of cosmic ray hits per profile



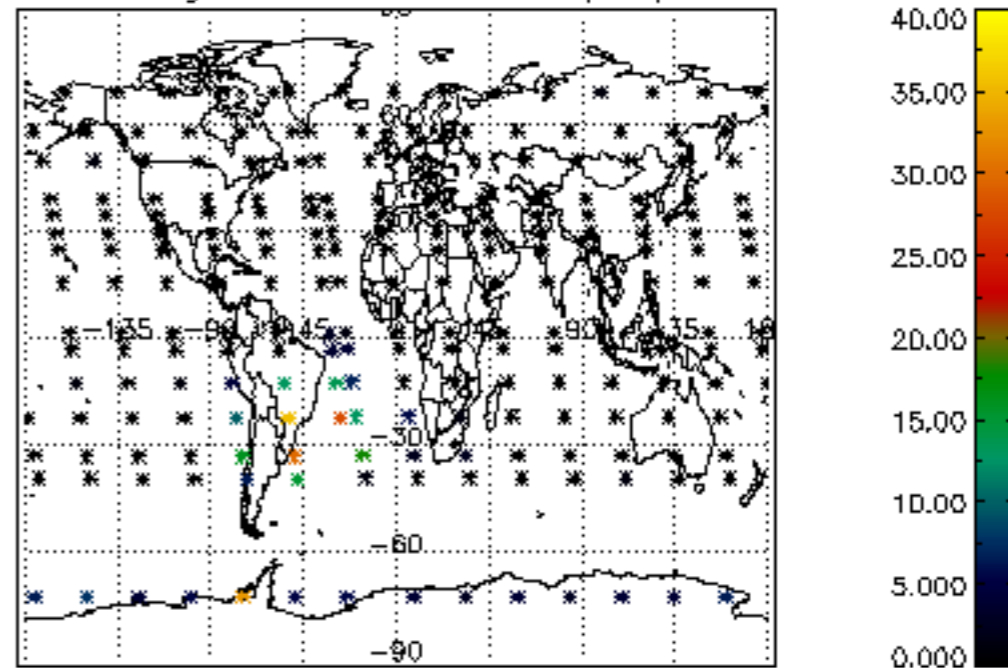
Percentage of datation errors per profile



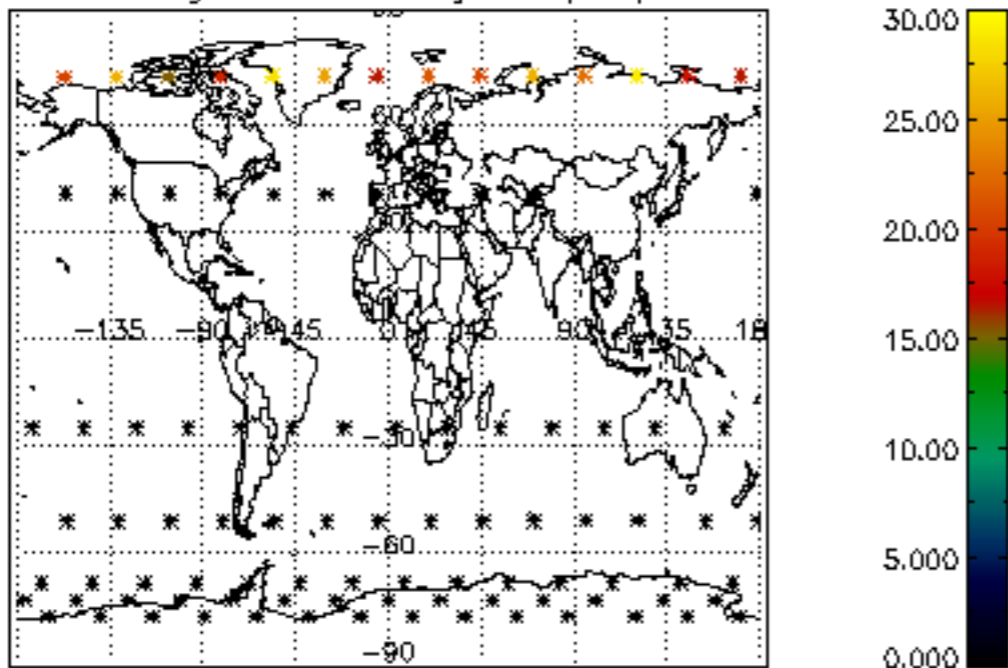
Percentage of star falling outside central band per profile



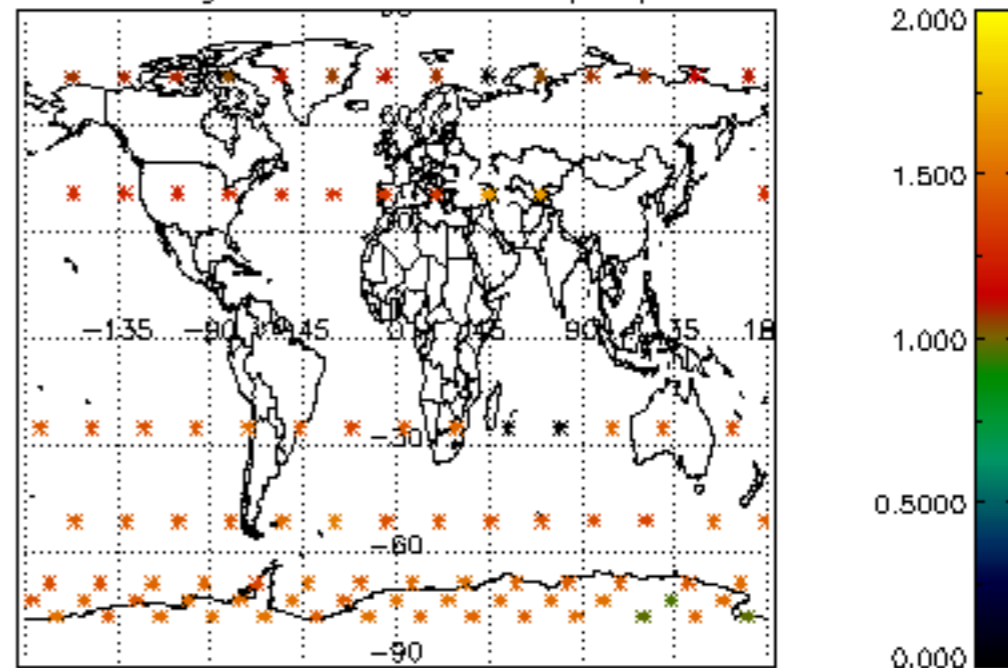
Percentage of saturation errors per profile



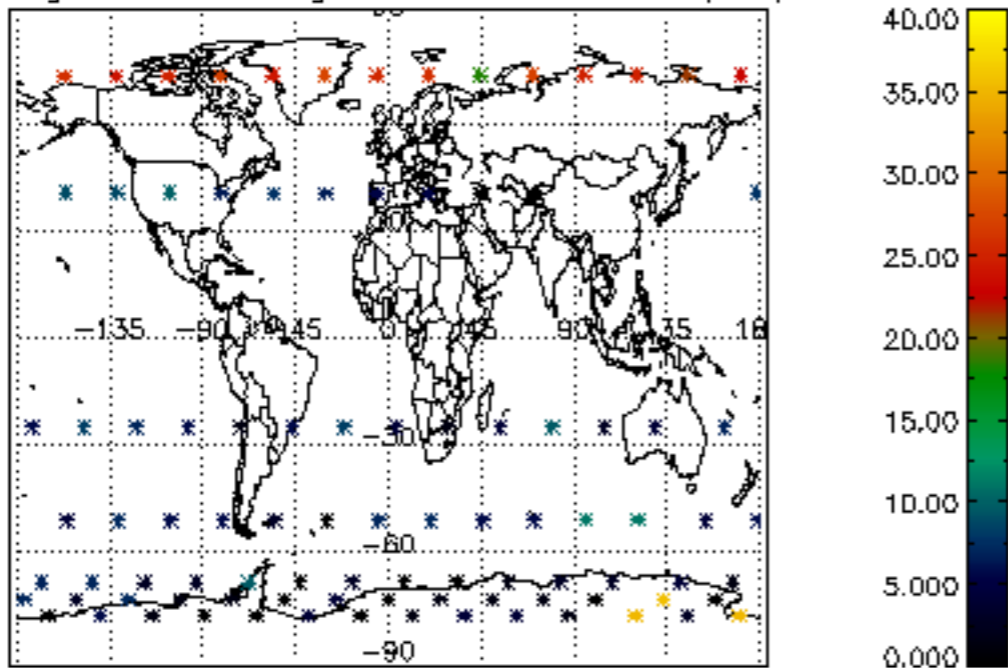
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

