

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 11:01:17
Data source version	GOMOS/6.01
Start time of products	28-02-2008 (28FEB2008 00:00:00)
Stop time of products	29-02-2008 (29FEB2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	299
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

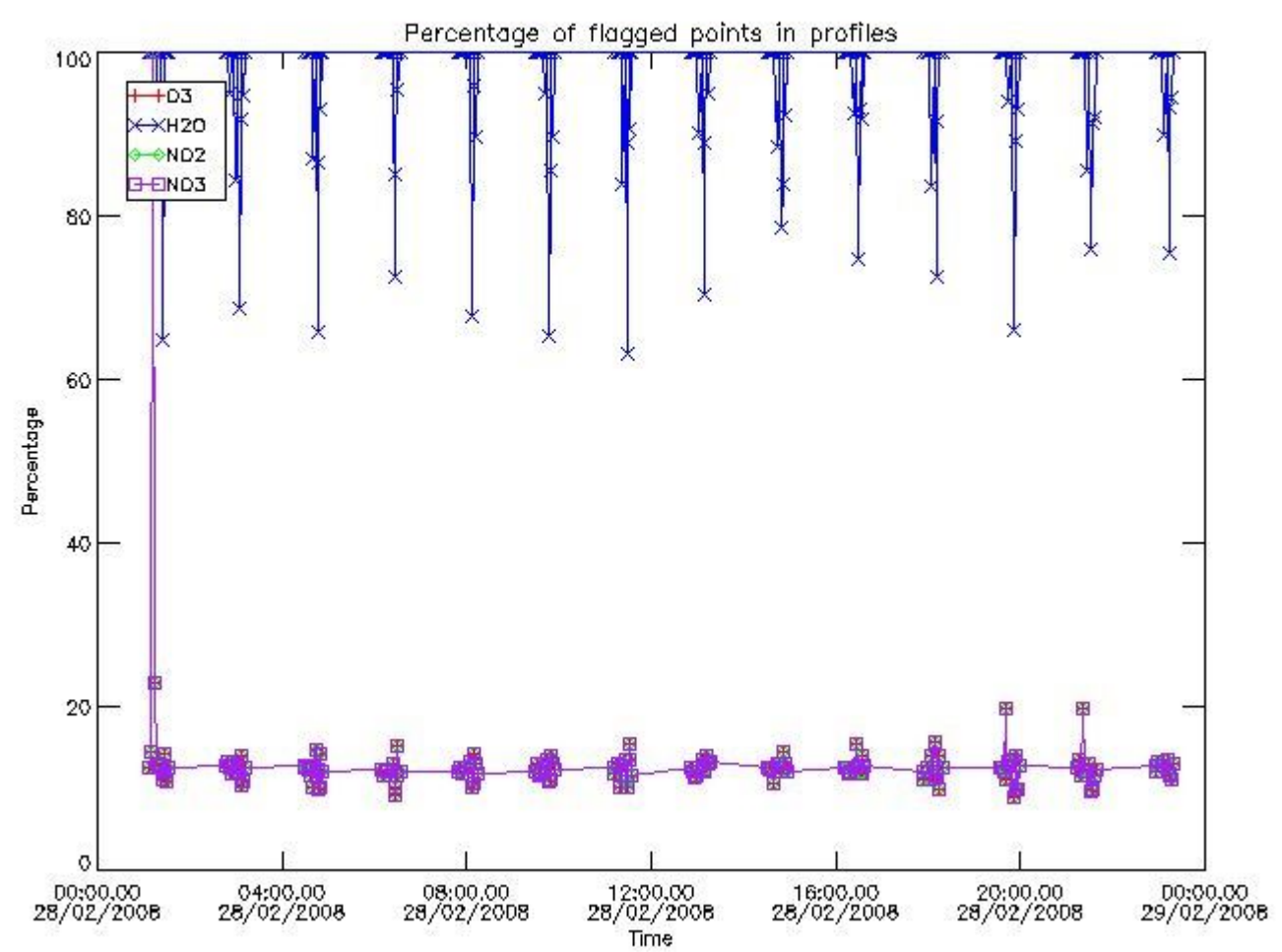
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080228_000625_000000452066_00231_31347_9652.N1	28-FEB-2008 00:06:25	Twilight	45.000	48	30Alp Hya	1.9770	4100.0	90	31347	No
2	GOM_NL__2PRFIN20080228_001602_000000382066_00231_31347_9653.N1	28-FEB-2008 00:16:02	Bright	37.500	166	17Eps Leo	2.9800	6000.0	75	31347	No
3	GOM_NL__2PRFIN20080228_003427_000000352066_00231_31347_9654.N1	28-FEB-2008 00:34:27	Bright	34.500	49	1Alp UMi	1.9900	6300.0	69	31347	No
4	GOM_NL__2PRFIN20080228_004153_000000362066_00231_31347_9655.N1	28-FEB-2008 00:41:53	Bright	35.500	89	5Alp Cep	2.4510	8000.0	71	31347	No
5	GOM_NL__2PRFIN20080228_004659_000000332066_00231_31347_9656.N1	28-FEB-2008 00:46:59	Bright	33.000	19	50Alp Cyg	1.2460	10500.0	66	31347	No
6	GOM_NL__2PRFIN20080228_004833_000000342066_00231_31347_9657.N1	28-FEB-2008 00:48:33	Bright	33.500	66	37Gam Cyg	2.2080	5900.0	67	31347	No
7	GOM_NL__2PRFIN20080228_005005_000000342066_00231_31347_9658.N1	28-FEB-2008 00:50:05	Bright	33.500	92	53Eps Cyg	2.5000	4500.0	67	31347	No
8	GOM_NL__2PRFIN20080228_005703_000000382066_00231_31347_9659.N1	28-FEB-2008 00:57:03	Bright	37.500	168	17Zet Aql	2.9860	11000.0	75	31347	No
9	GOM_NL__2PRFIN20080228_010648_000000412066_00231_31347_9660.N1	28-FEB-2008 01:06:48	Dark	41.000	155	41Pi Sgr	2.9000	6600.0	82	31347	No
10	GOM_NL__2PRFIN20080228_010836_000000432066_00231_31347_9661.N1	28-FEB-2008 01:08:36	Dark	42.500	57	34Sig Sgr	2.0660	26000.0	85	31347	No
11	GOM_NL__2PRFIN20080228_011140_000000422066_00231_31347_9662.N1	28-FEB-2008 01:11:40	Dark	42.000	38	20Eps Sgr	1.8360	11000.0	84	31347	No
12	GOM_NL__2PRFIN20080228_011425_000000452066_00231_31347_9663.N1	28-FEB-2008 01:14:25	Dark	44.500	25	35Lam Sco	1.6200	28000.0	89	31347	No
13	GOM_NL__2PRFIN20080228_011700_000000392066_00231_31347_9664.N1	28-FEB-2008 01:17:00	Dark	39.000	147	Alp Ara	2.8770	26000.0	78	31347	No
14	GOM_NL__2PRFIN20080228_011816_000000402066_00232_31348_9643.N1	28-FEB-2008 01:18:16	Dark	40.000	141	Bet Ara	2.8400	4600.0	80	31348	No
15	GOM_NL__2PRFIN20080228_012215_000000402066_00232_31348_9644.N1	28-FEB-2008 01:22:15	Dark	40.000	134	Bet TrA	2.8100	6600.0	80	31348	No
16	GOM_NL__2PRFIN20080228_012448_000000462066_00232_31348_9645.N1	28-FEB-2008 01:24:48	Dark	46.000	4	Alp1Cen	-0.010000	5800.0	92	31348	No
17	GOM_NL__2PRFIN20080228_012608_000000422066_00232_31348_9646.N1	28-FEB-2008 01:26:08	Dark	42.000	10	Bet Cen	0.61000	28000.0	84	31348	No
18	GOM_NL__2PRFIN20080228_012732_000000362066_00232_31348_9647.N1	28-FEB-2008 01:27:32	Dark	36.000	112	Alp Mus	2.6880	26000.0	72	31348	No
19	GOM_NL__2PRFIN20080228_012847_000000472066_00232_31348_9648.N1	28-FEB-2008 01:28:47	Dark	46.500	12	Alp1Cru	0.77500	30000.0	93	31348	No
20	GOM_NL__2PRFIN20080228_013153_000000412066_00232_31348_9649.N1	28-FEB-2008 01:31:53	Dark	41.000	99	Del Cen	2.5750	26000.0	82	31348	No
21	GOM_NL__2PRFIN20080228_013411_000000372066_00232_31348_9650.N1	28-FEB-2008 01:34:11	Straylight	37.000	91	Kap Vel	2.4900	26000.0	74	31348	No
22	GOM_NL__2PRFIN20080228_013729_000000432066_00232_31348_9651.N1	28-FEB-2008 01:37:29	Straylight	42.500	65	Lam Vel	2.2040	4400.0	85	31348	No
23	GOM_NL__2PRFIN20080228_014701_000000462066_00232_31348_9652.N1	28-FEB-2008 01:47:01	Twilight	45.500	48	30Alp Hya	1.9770	4100.0	91	31348	No
24	GOM_NL__2PRFIN20080228_015638_000000382066_00232_31348_9653.N1	28-FEB-2008 01:56:38	Bright	37.500	166	17Eps Leo	2.9800	6000.0	75	31348	No
25	GOM_NL__2PRFIN20080228_021503_000000352066_00232_31348_9654.N1	28-FEB-2008 02:15:03	Bright	34.500	49	1Alp UMi	1.9900	6300.0	69	31348	No
26	GOM_NL__2PRFIN20080228_022229_000000352066_00232_31348_9655.N1	28-FEB-2008 02:22:29	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	31348	No
27	GOM_NL__2PRFIN20080228_022735_000000372066_00232_31348_9656.N1	28-FEB-2008 02:27:35	Bright	36.500	19	50Alp Cyg	1.2460	10500.0	73	31348	No
28	GOM_NL__2PRFIN20080228_022909_000000362066_00232_31348_9657.N1	28-FEB-2008 02:29:09	Bright	35.500	66	37Gam Cyg	2.2080	5900.0	71	31348	No
29	GOM_NL__2PRFIN20080228_023041_000000352066_00232_31348_9658.N1	28-FEB-2008 02:30:41	Bright	35.000	92	53Eps Cyg	2.5000	4500.0	70	31348	No
30	GOM_NL__2PRFIN20080228_023740_000000382066_00232_31348_9659.N1	28-FEB-2008 02:37:40	Bright	37.500	168	17Zet Aql	2.9860	11000.0	75	31348	No
31	GOM_NL__2PRFIN20080228_024725_000000402066_00232_31348_9660.N1	28-FEB-2008 02:47:25	Dark	40.000	155	41Pi Sgr	2.9000	6600.0	80	31348	No
32	GOM_NL__2PRFIN20080228_024912_000000392066_00232_31348_9661.N1	28-FEB-2008 02:49:12	Dark	38.500	57	34Sig Sgr	2.0660	26000.0	77	31348	No
33	GOM_NL__2PRFIN20080228_025216_000000412066_00232_31348_9662.N1	28-FEB-2008 02:52:16	Dark	40.500	38	20Eps Sgr	1.8360	11000.0	81	31348	No
34	GOM_NL__2PRFIN20080228_025502_000000442066_00232_31348_9663.N1	28-FEB-2008 02:55:02	Dark	43.500	25	35Lam Sco	1.6200	28000.0	87	31348	No
35	GOM_NL__2PRFIN20080228_025736_000000402066_00232_31348_9664.N1	28-FEB-2008 02:57:36	Dark	40.000	147	Alp Ara	2.8770	26000.0	80	31348	No
36	GOM_NL__2PRFIN20080228_025853_000000422066_00233_31349_9643.N1	28-FEB-2008 02:58:53	Dark	42.000	141	Bet Ara	2.8400	4600.0	84	31349	No
37	GOM_NL__2PRFIN20080228_030252_000000392066_00233_31349_9644.N1	28-FEB-2008 03:02:52	Dark	39.000	134	Bet TrA	2.8100	6600.0	78	31349	No
38	GOM_NL__2PRFIN20080228_030525_000000442066_00233_31349_9645.N1	28-FEB-2008 03:05:25	Dark	43.500	4	Alp1Cen	-0.010000	5800.0	87	31349	No
39	GOM_NL__2PRFIN20080228_030644_000000502066_00233_31349_9646.N1	28-FEB-2008 03:06:44	Dark	49.500	10	Bet Cen	0.61000	28000.0	99	31349	No
40	GOM_NL__2PRFIN20080228_030808_000000372066_00233_31349_9647.N1	28-FEB-2008 03:08:08	Dark	36.500	112	Alp Mus	2.6880	26000.0	73	31349	No
41	GOM_NL__2PRFIN20080228_030923_000000482066_00233_31349_9648.N1	28-FEB-2008 03:09:23	Dark	47.500	12	Alp1Cru	0.77500	30000.0	95	31349	No
42	GOM_NL__2PRFIN20080228_031230_000000412066_00233_31349_9649.N1	28-FEB-2008 03:12:30	Dark	40.500	99	Del Cen	2.5750	26000.0	81	31349	No

279	GOM_NL__2PRFIN20080228_220347_000000392066_00244_31360_9652.N1	28-FEB-2008 22:03:47	Bright	39.000	166	17Eps Leo	2.9800	6000.0	78	31360	No
280	GOM_NL__2PRFIN20080228_222214_000000372066_00244_31360_9653.N1	28-FEB-2008 22:22:14	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	31360	No
281	GOM_NL__2PRFIN20080228_222942_000000352066_00244_31360_9654.N1	28-FEB-2008 22:29:42	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	31360	No
282	GOM_NL__2PRFIN20080228_223448_000000342066_00244_31360_9655.N1	28-FEB-2008 22:34:48	Bright	34.000	19	50Alp Cyg	1.2460	10500.	68	31360	No
283	GOM_NL__2PRFIN20080228_223622_000000352066_00244_31360_9656.N1	28-FEB-2008 22:36:22	Bright	34.500	66	37Gam Cyg	2.2080	5900.0	69	31360	No
284	GOM_NL__2PRFIN20080228_223754_000000352066_00244_31360_9657.N1	28-FEB-2008 22:37:54	Bright	35.000	92	53Eps Cyg	2.5000	4500.0	70	31360	No
285	GOM_NL__2PRFIN20080228_224455_000000372066_00244_31360_9658.N1	28-FEB-2008 22:44:55	Bright	37.000	168	17Zet Aql	2.9860	11000.	74	31360	No
286	GOM_NL__2PRFIN20080228_225441_000000402066_00244_31360_9659.N1	28-FEB-2008 22:54:41	Dark	40.000	155	41Pi Sgr	2.9000	6600.0	80	31360	No
287	GOM_NL__2PRFIN20080228_225630_000000422066_00244_31360_9660.N1	28-FEB-2008 22:56:30	Dark	42.000	57	34Sig Sgr	2.0660	26000.	84	31360	No
288	GOM_NL__2PRFIN20080228_225935_000000422066_00244_31360_9661.N1	28-FEB-2008 22:59:35	Dark	42.000	38	20Eps Sgr	1.8360	11000.	84	31360	No
289	GOM_NL__2PRFIN20080228_230223_000000442066_00244_31360_9662.N1	28-FEB-2008 23:02:23	Dark	44.000	25	35Lam Sco	1.6200	28000.	88	31360	No
290	GOM_NL__2PRFIN20080228_230610_000000402066_00245_31361_9643.N1	28-FEB-2008 23:06:10	Dark	40.000	141	Bet Ara	2.8400	4600.0	80	31361	No
291	GOM_NL__2PRFIN20080228_231009_000000382066_00245_31361_9644.N1	28-FEB-2008 23:10:09	Dark	37.500	134	Bet TrA	2.8100	6600.0	75	31361	No
292	GOM_NL__2PRFIN20080228_231243_000000432066_00245_31361_9645.N1	28-FEB-2008 23:12:43	Dark	43.000	4	Alp1Cen	-0.010000	5800.0	86	31361	No
293	GOM_NL__2PRFIN20080228_231403_000000452066_00245_31361_9646.N1	28-FEB-2008 23:14:03	Dark	44.500	10	Bet Cen	0.61000	28000.	89	31361	No
294	GOM_NL__2PRFIN20080228_231639_000000462066_00245_31361_9647.N1	28-FEB-2008 23:16:39	Dark	46.000	12	Alp1Cru	0.77500	30000.	92	31361	No
295	GOM_NL__2PRFIN20080228_231947_000000392066_00245_31361_9648.N1	28-FEB-2008 23:19:47	Dark	39.000	99	Del Cen	2.5750	26000.	78	31361	No
296	GOM_NL__2PRFIN20080228_232212_000000452066_00245_31361_9649.N1	28-FEB-2008 23:22:12	Straylight	45.000	113	Mu Vel	2.6920	5000.0	90	31361	No
297	GOM_NL__2PRFIN20080228_232518_000000422066_00245_31361_9650.N1	28-FEB-2008 23:25:18	Straylight	41.500	65	Lam Vel	2.2040	4400.0	83	31361	No
298	GOM_NL__2PRFIN20080228_233449_000000462066_00245_31361_9651.N1	28-FEB-2008 23:34:49	Twl_and_stray	46.000	48	30Alp Hya	1.9770	4100.0	92	31361	No
299	GOM_NL__2PRFIN20080228_234423_000000392066_00245_31361_9652.N1	28-FEB-2008 23:44:23	Bright	38.500	166	17Eps Leo	2.9800	6000.0	77	31361	No

3. Quality information per product

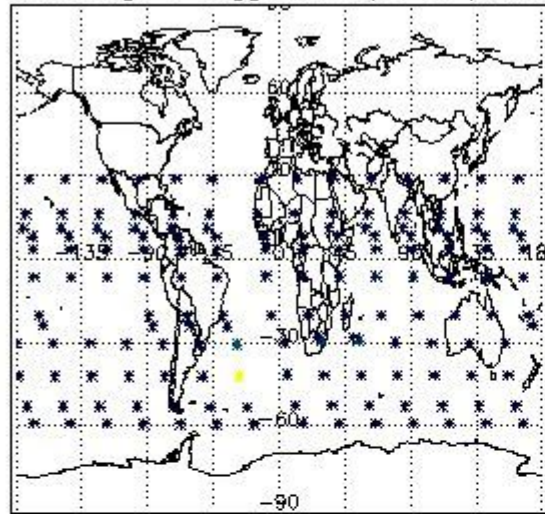
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

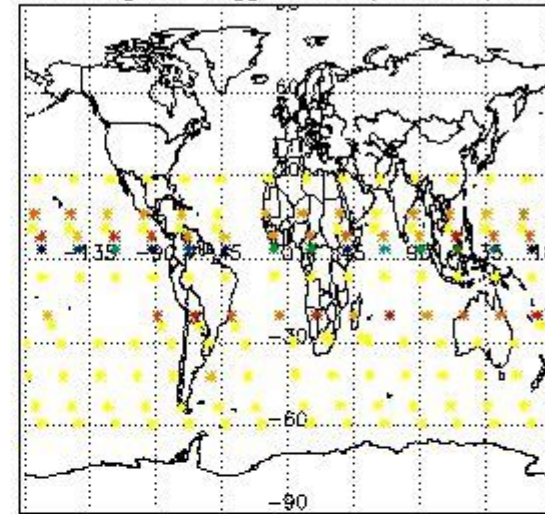


3.2 Plot quality information per product (world map)

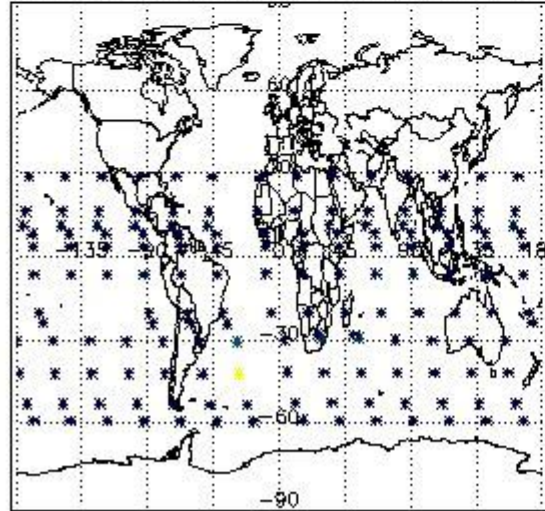
Percentage of flagged data per O3 profile



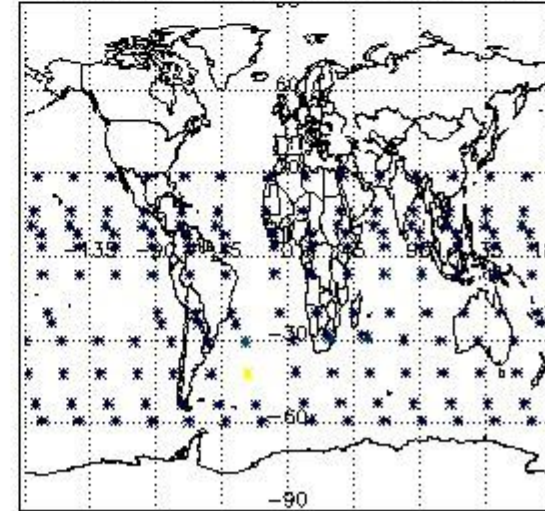
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

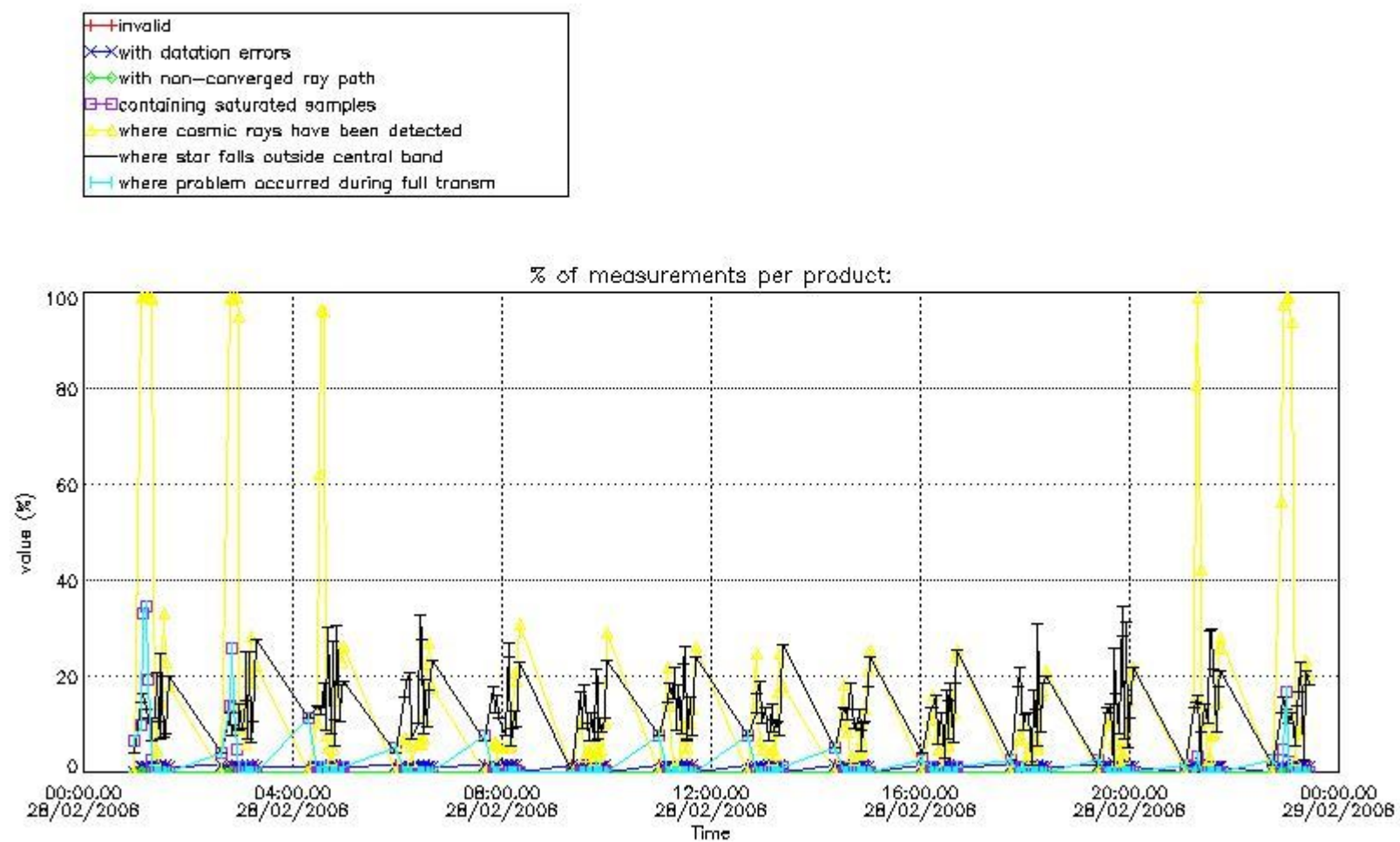


4. Level 1 quality information per product

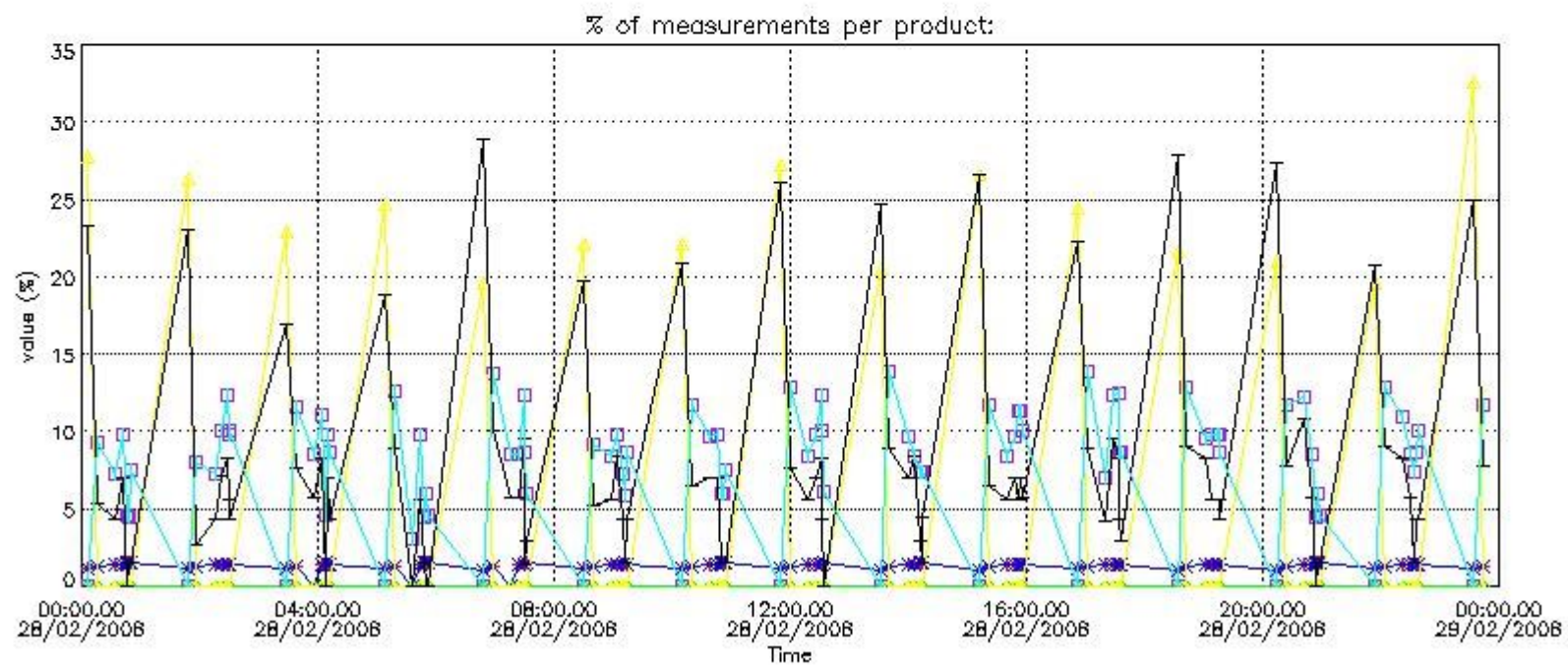
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



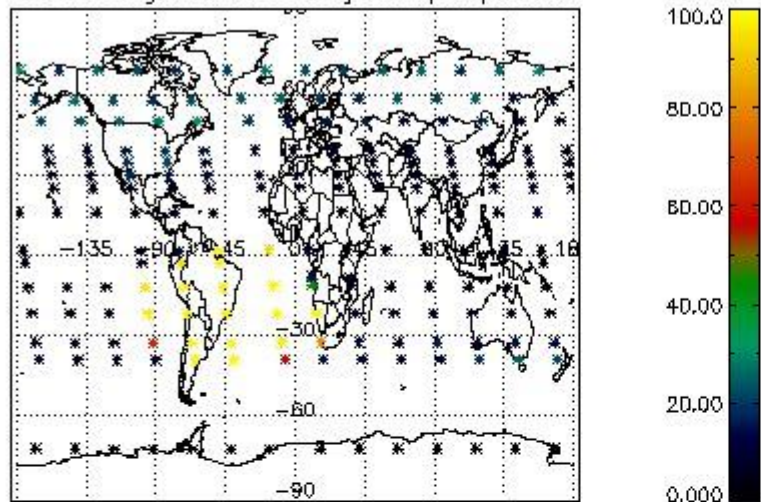
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



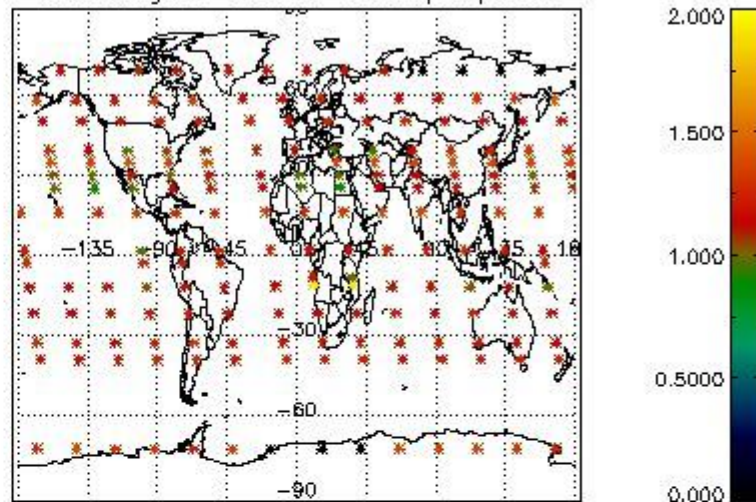
4.2 Plot quality information per product coming from level 1b processing (world map)

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

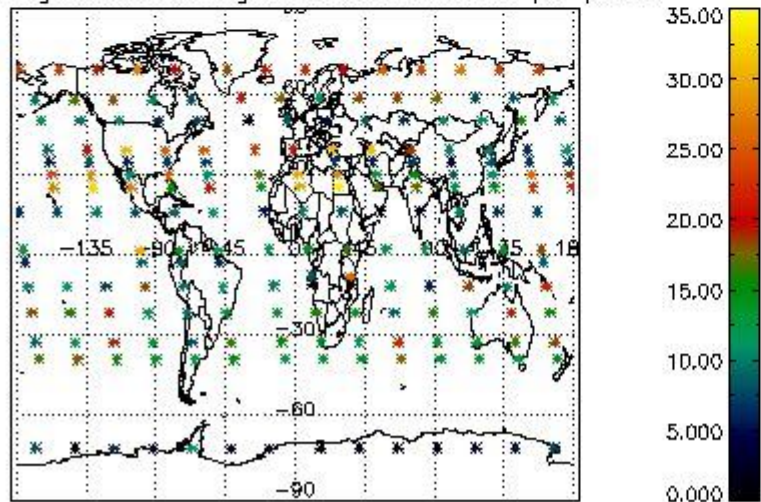
Percentage of cosmic ray hits per profile



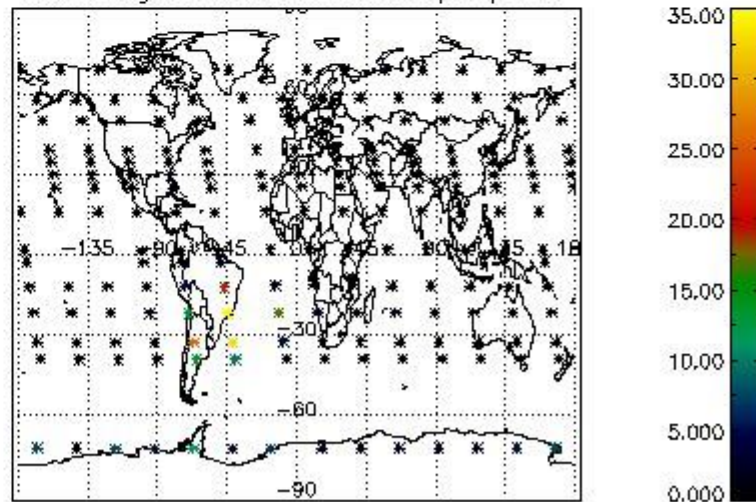
Percentage of datation errors per profile



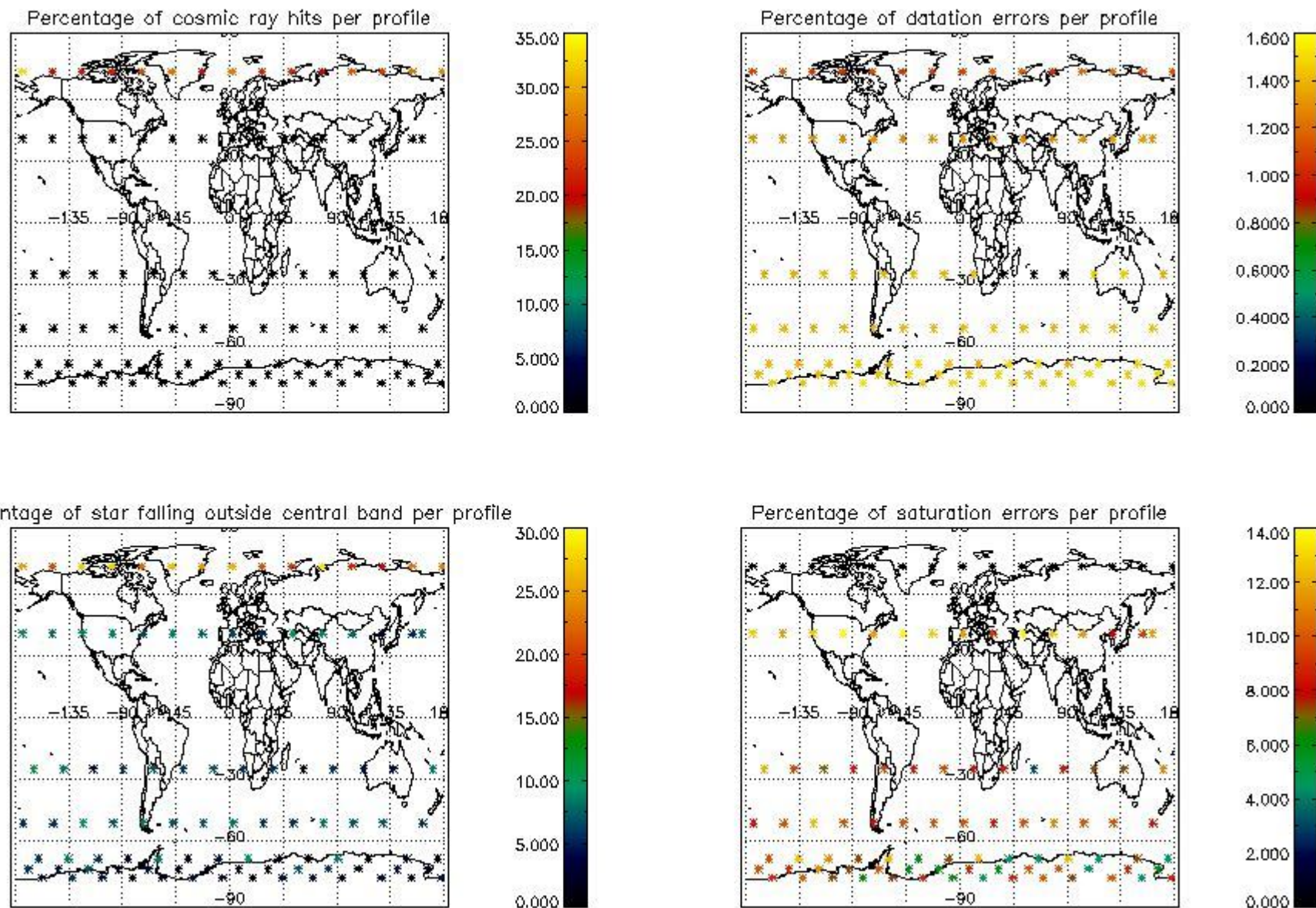
Percentage of star falling outside central band per profile



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

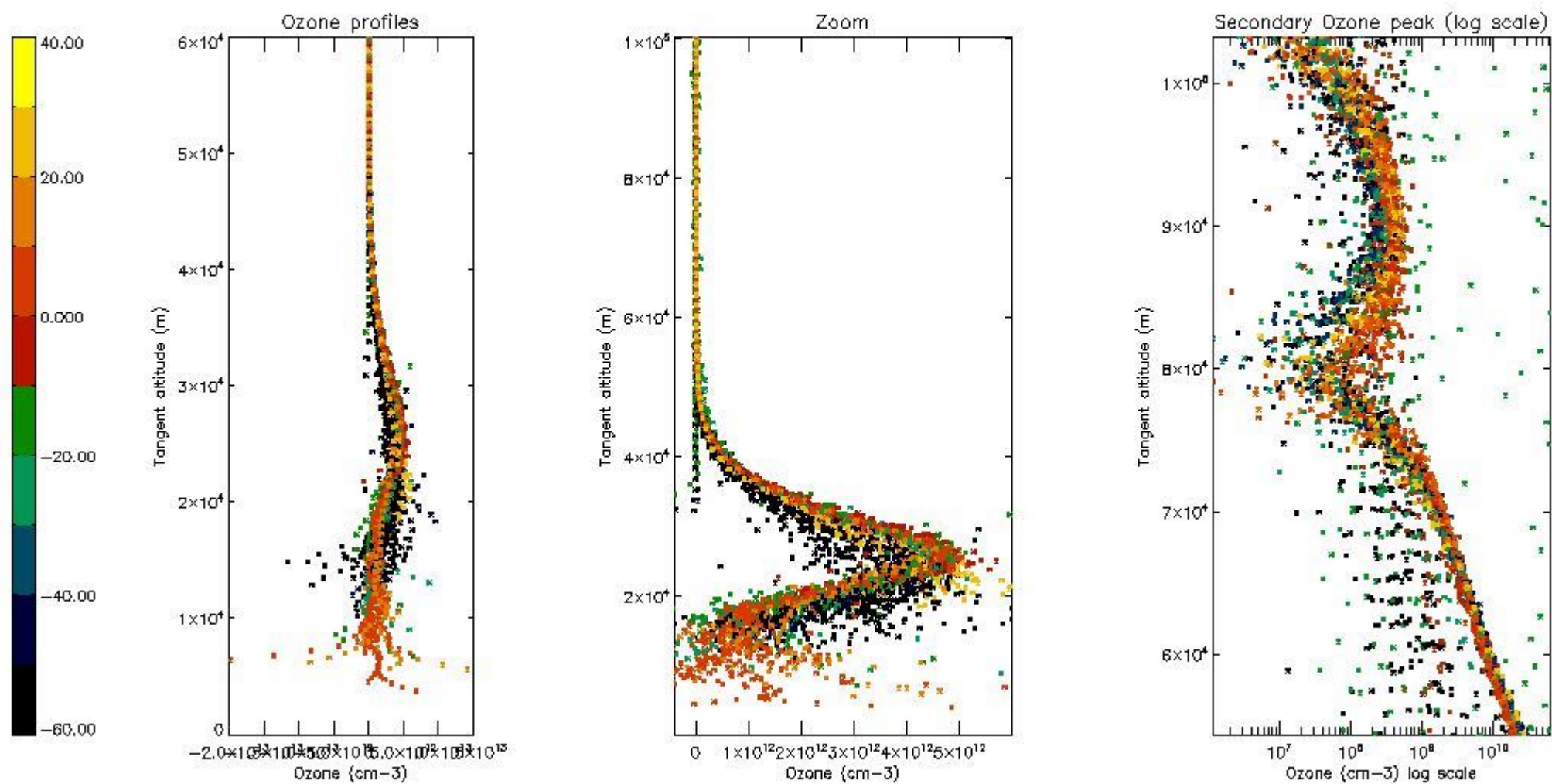
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	56
STD < 20	32

STD < 10	25
STD < 5	19

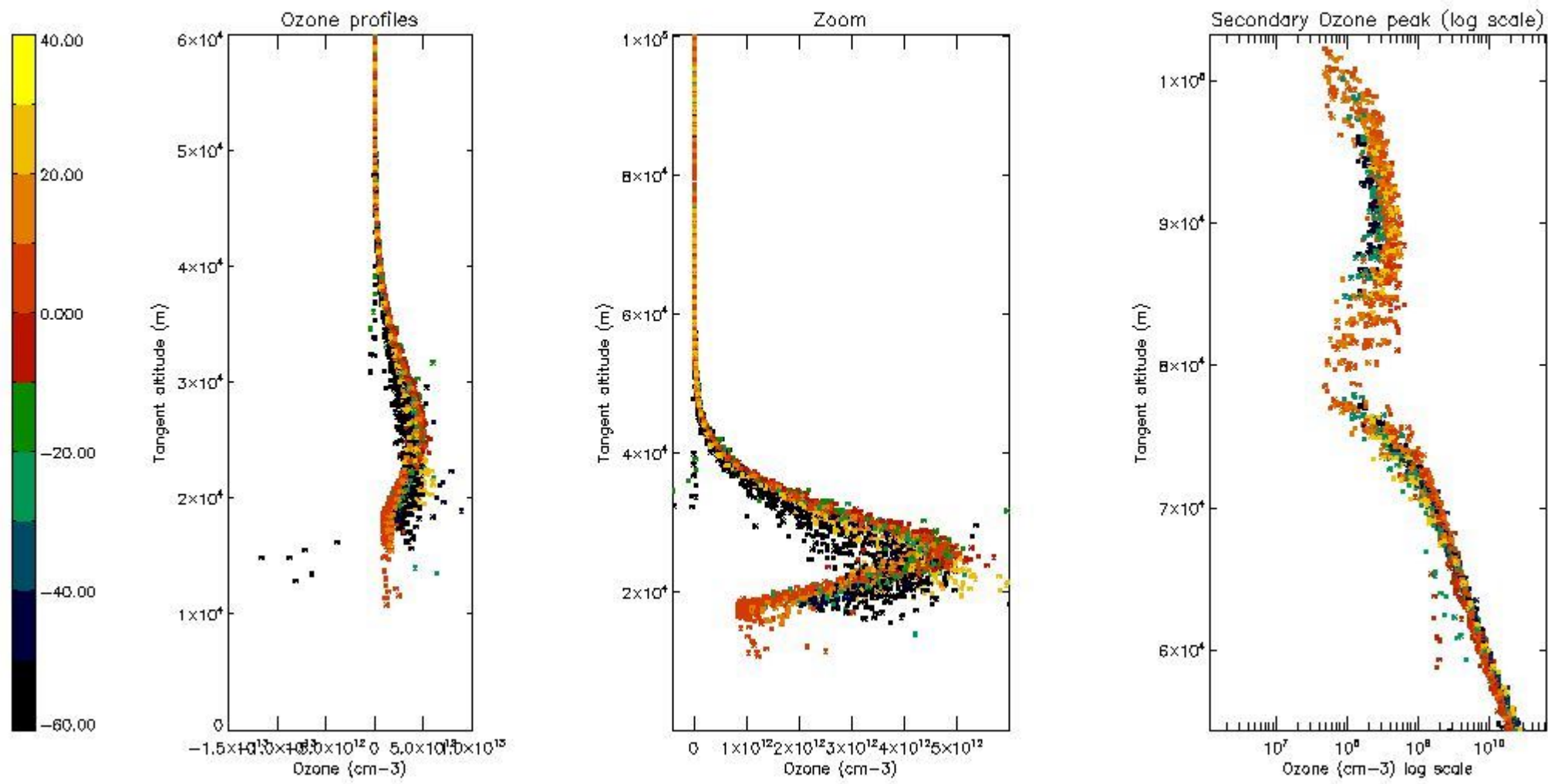
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



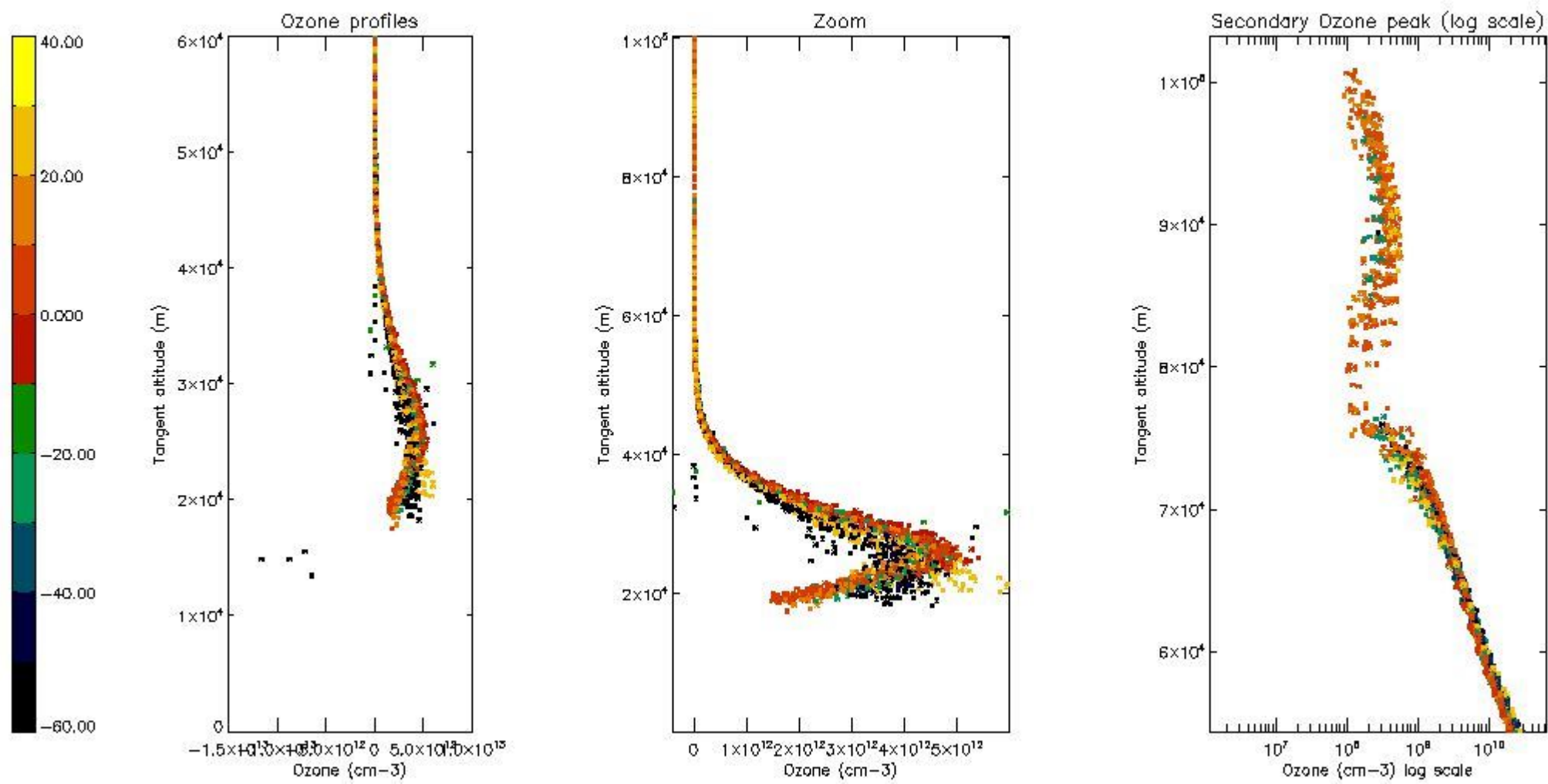
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



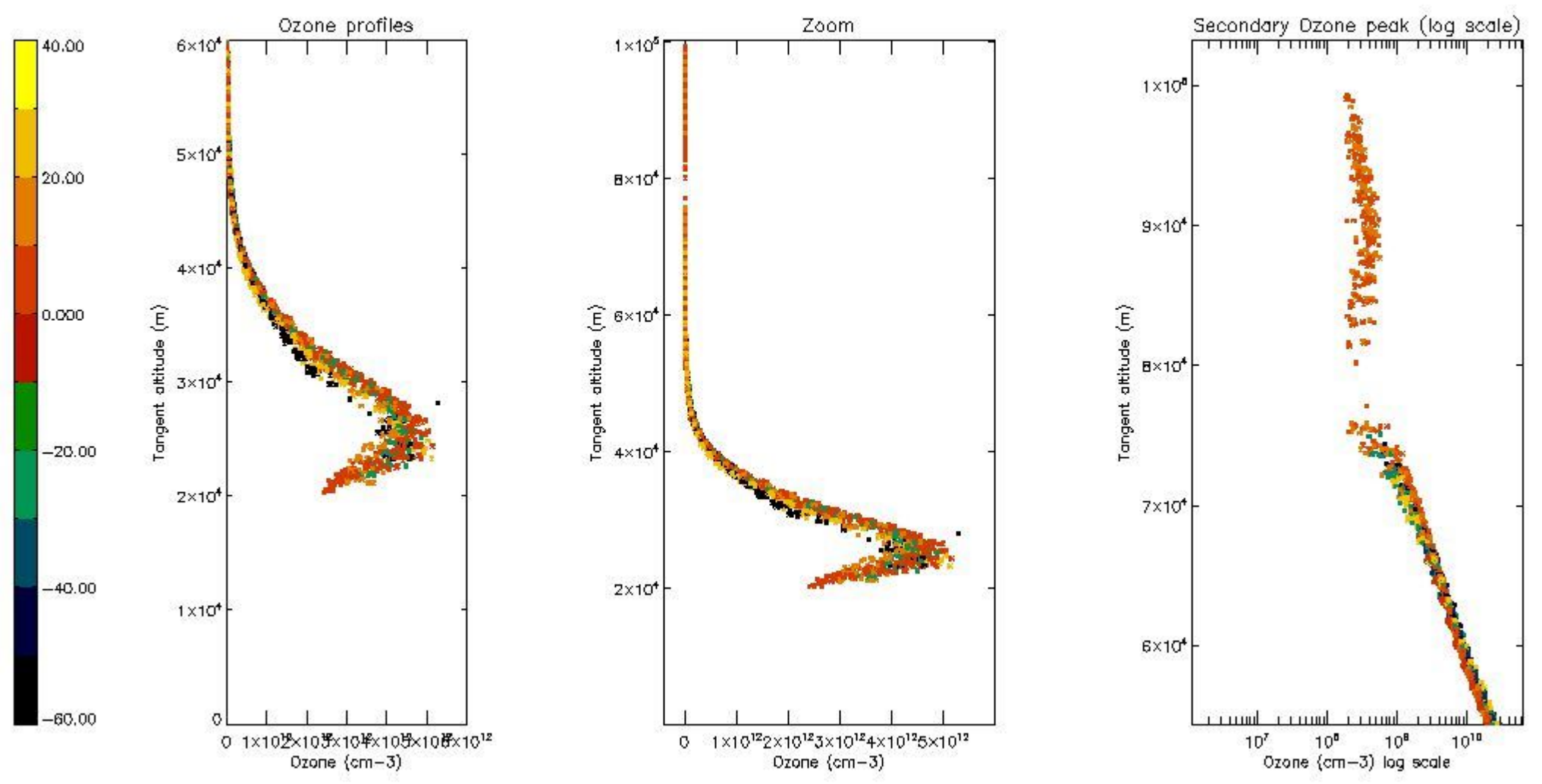
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



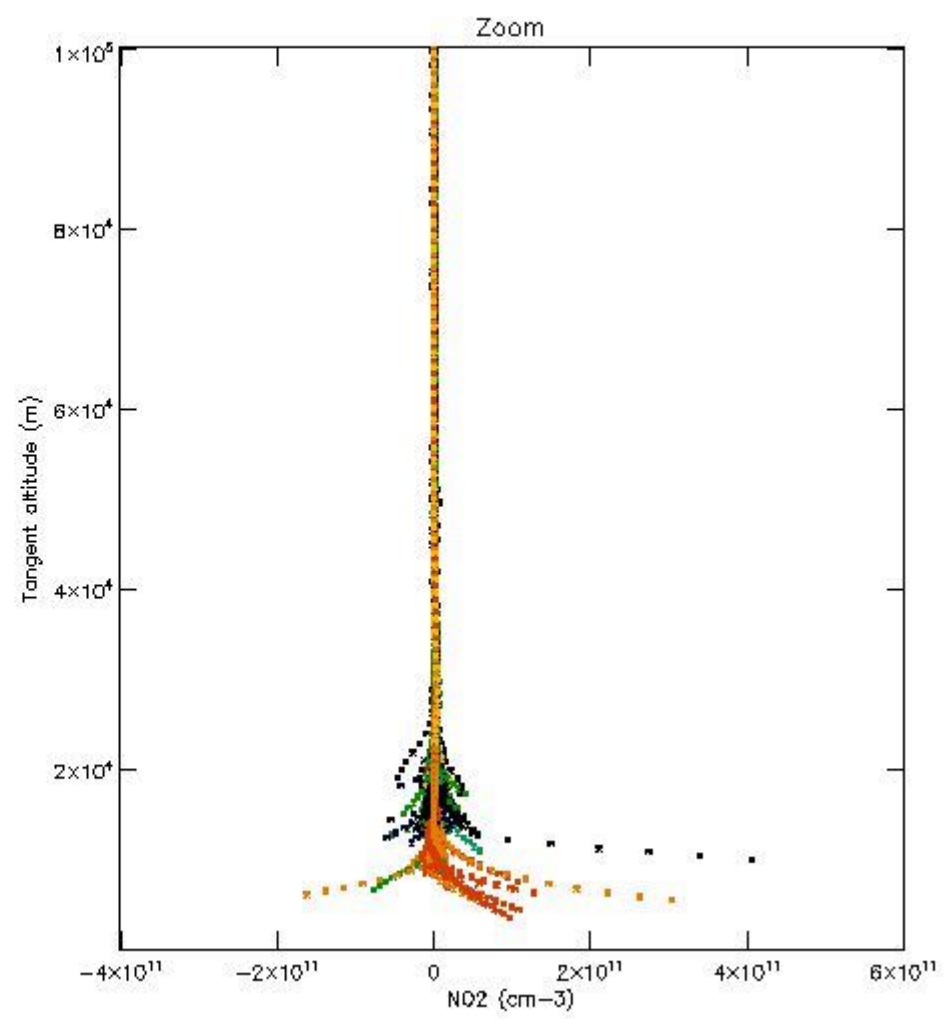
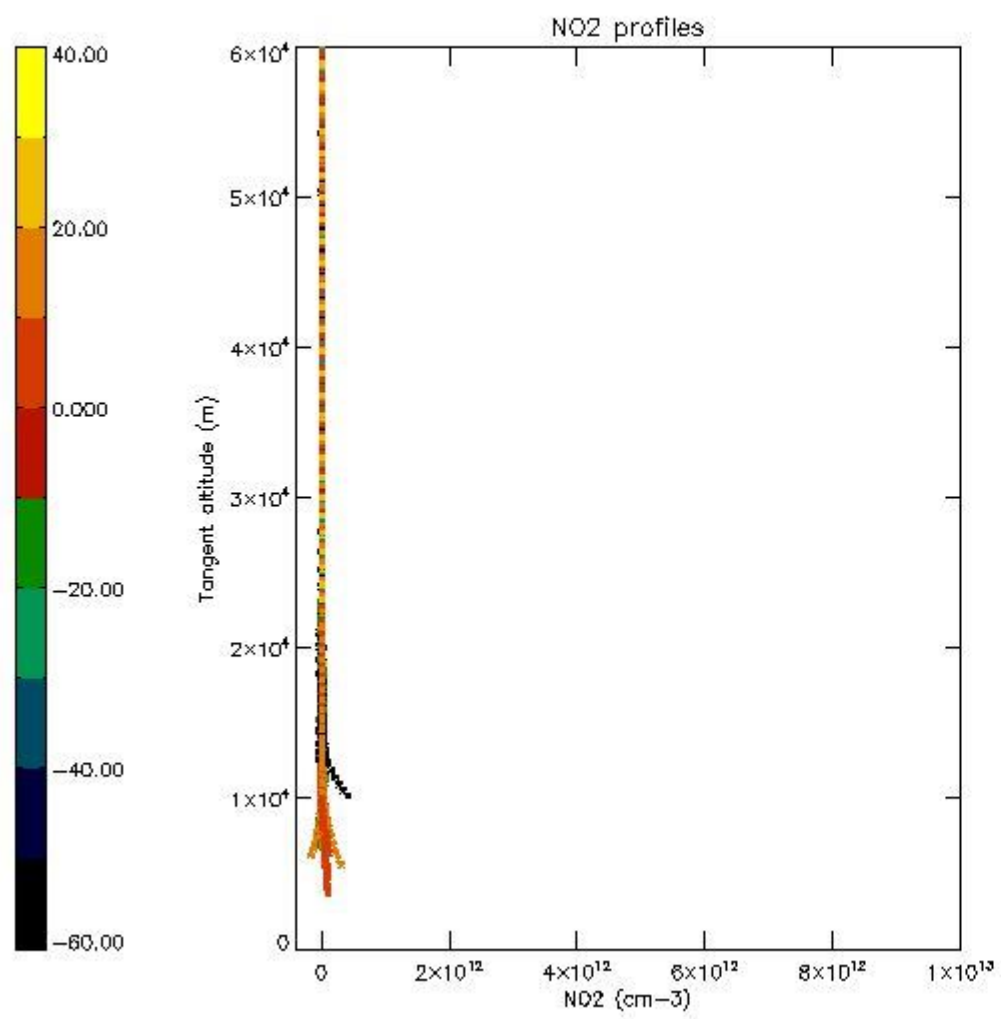
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



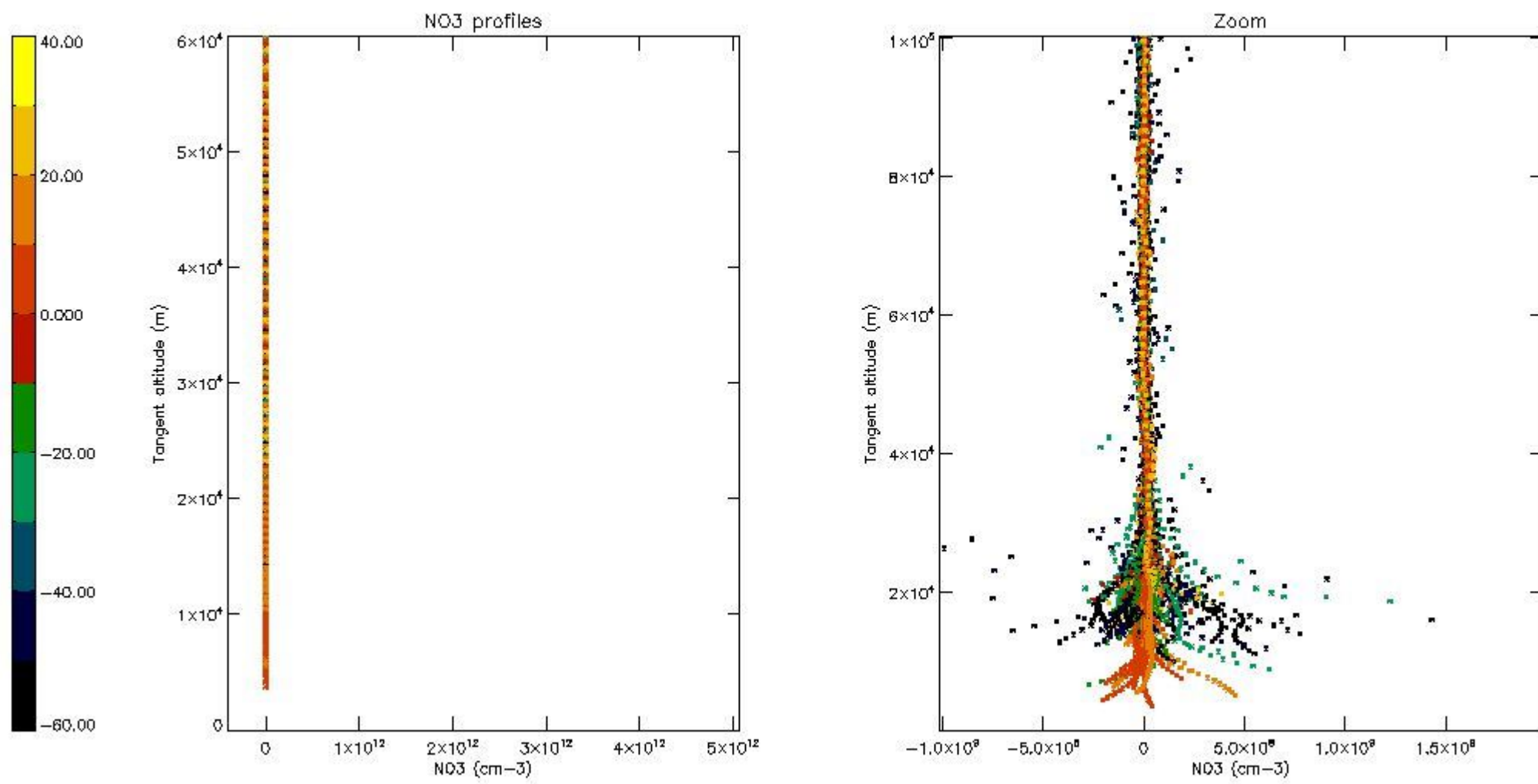
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



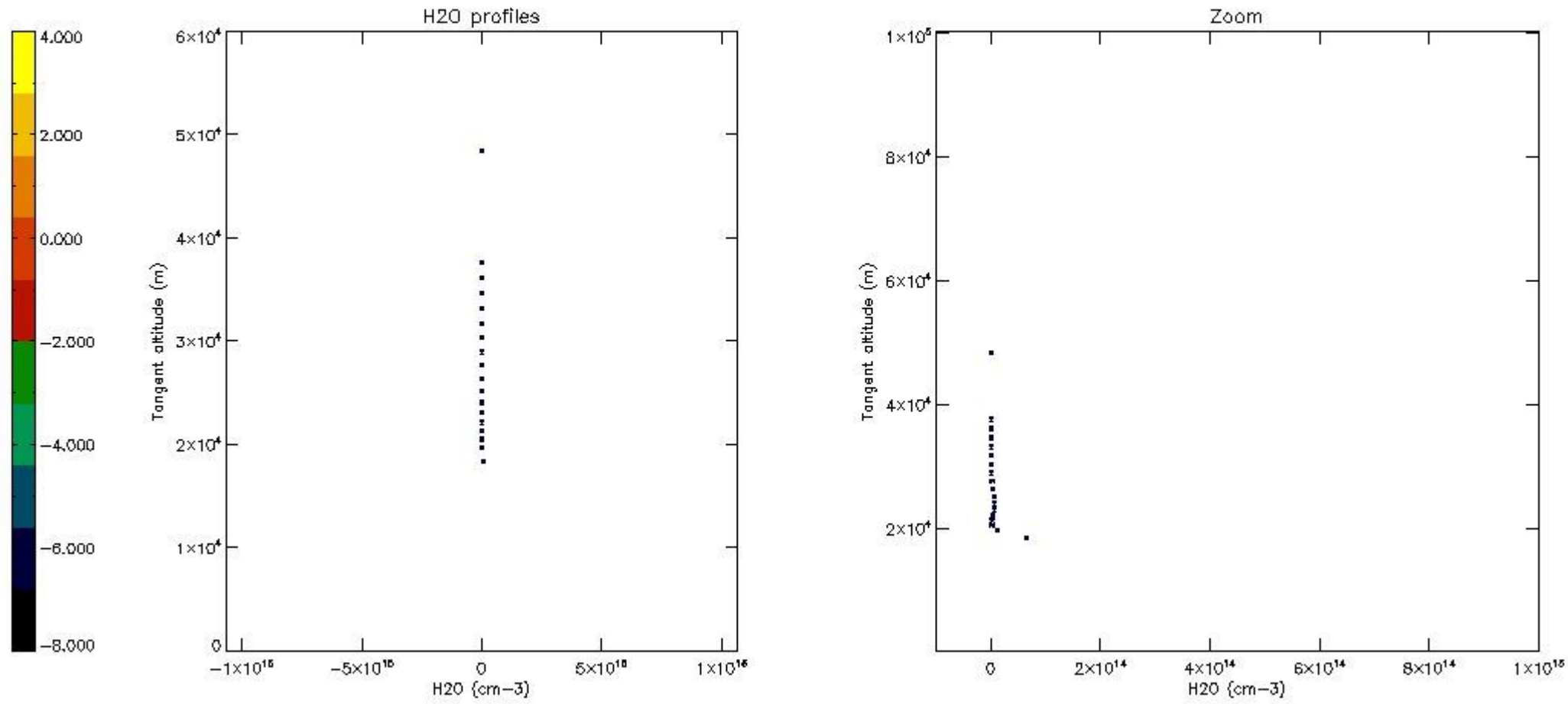
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

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

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	28-FEB-2008 00:06:25
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	28-FEB-2008 00:06:25
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	28-FEB-2008 00:06:25

GOMOS Level 2 Daily Report

SUMMARY

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[6. Auxiliary Data Files used for the production reported in section 2](#)

This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also given.

Item	Value
Time of report generation	25APR2013 11:01:17
Data source version	GOMOS/6.01
Start time of products	28-02-2008 (28FEB2008 00:00:00)
Stop time of products	29-02-2008 (29FEB2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	299
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

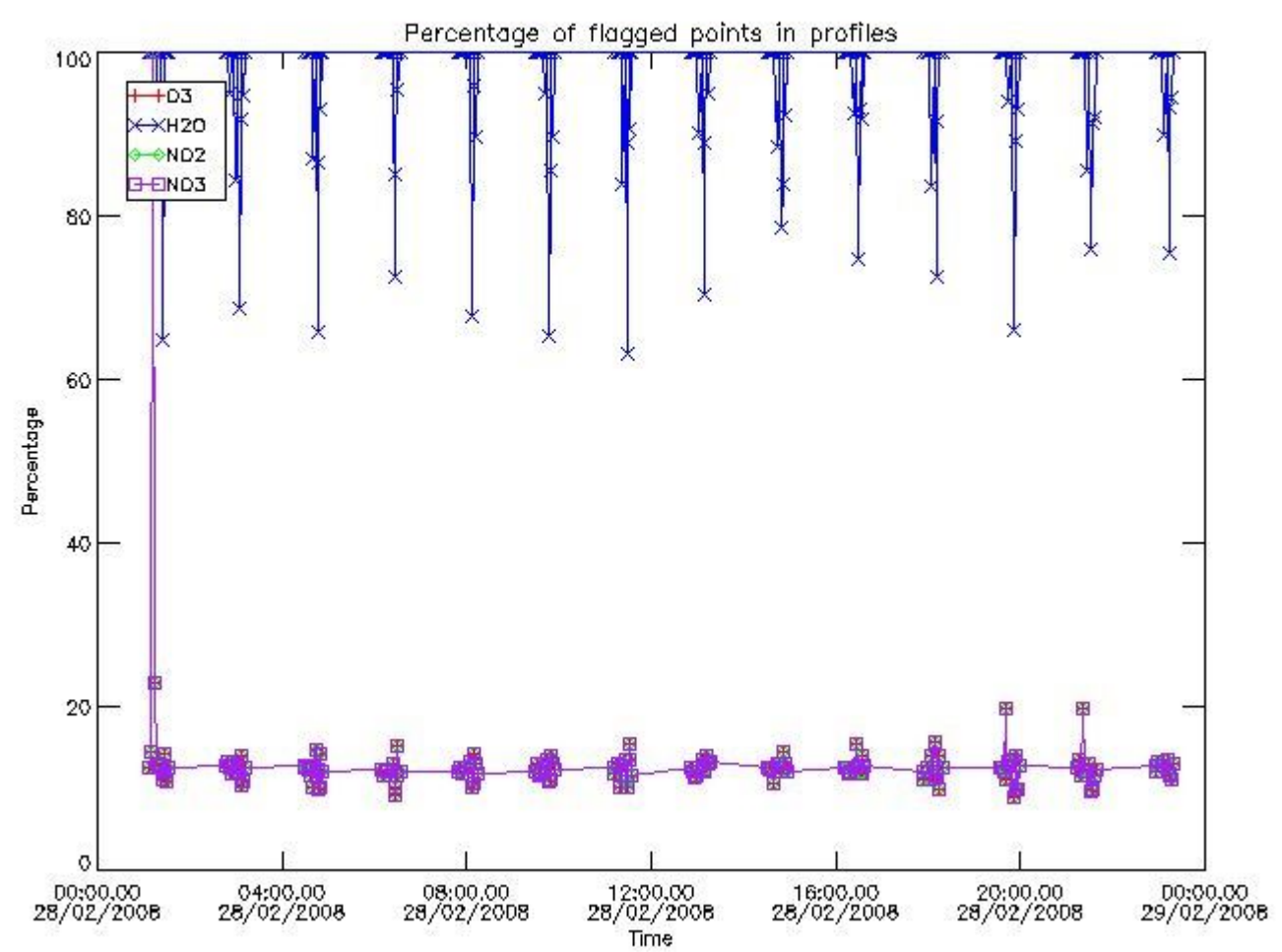
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080228_000625_000000452066_00231_31347_9652.N1	28-FEB-2008 00:06:25	Twilight	45.000	48	30Alp Hya	1.9770	4100.0	90	31347	No
2	GOM_NL__2PRFIN20080228_001602_000000382066_00231_31347_9653.N1	28-FEB-2008 00:16:02	Bright	37.500	166	17Eps Leo	2.9800	6000.0	75	31347	No
3	GOM_NL__2PRFIN20080228_003427_000000352066_00231_31347_9654.N1	28-FEB-2008 00:34:27	Bright	34.500	49	1Alp UMi	1.9900	6300.0	69	31347	No
4	GOM_NL__2PRFIN20080228_004153_000000362066_00231_31347_9655.N1	28-FEB-2008 00:41:53	Bright	35.500	89	5Alp Cep	2.4510	8000.0	71	31347	No
5	GOM_NL__2PRFIN20080228_004659_000000332066_00231_31347_9656.N1	28-FEB-2008 00:46:59	Bright	33.000	19	50Alp Cyg	1.2460	10500.0	66	31347	No
6	GOM_NL__2PRFIN20080228_004833_000000342066_00231_31347_9657.N1	28-FEB-2008 00:48:33	Bright	33.500	66	37Gam Cyg	2.2080	5900.0	67	31347	No
7	GOM_NL__2PRFIN20080228_005005_000000342066_00231_31347_9658.N1	28-FEB-2008 00:50:05	Bright	33.500	92	53Eps Cyg	2.5000	4500.0	67	31347	No
8	GOM_NL__2PRFIN20080228_005703_000000382066_00231_31347_9659.N1	28-FEB-2008 00:57:03	Bright	37.500	168	17Zet Aql	2.9860	11000.0	75	31347	No
9	GOM_NL__2PRFIN20080228_010648_000000412066_00231_31347_9660.N1	28-FEB-2008 01:06:48	Dark	41.000	155	41Pi Sgr	2.9000	6600.0	82	31347	No
10	GOM_NL__2PRFIN20080228_010836_000000432066_00231_31347_9661.N1	28-FEB-2008 01:08:36	Dark	42.500	57	34Sig Sgr	2.0660	26000.0	85	31347	No
11	GOM_NL__2PRFIN20080228_011140_000000422066_00231_31347_9662.N1	28-FEB-2008 01:11:40	Dark	42.000	38	20Eps Sgr	1.8360	11000.0	84	31347	No
12	GOM_NL__2PRFIN20080228_011425_000000452066_00231_31347_9663.N1	28-FEB-2008 01:14:25	Dark	44.500	25	35Lam Sco	1.6200	28000.0	89	31347	No
13	GOM_NL__2PRFIN20080228_011700_000000392066_00231_31347_9664.N1	28-FEB-2008 01:17:00	Dark	39.000	147	Alp Ara	2.8770	26000.0	78	31347	No
14	GOM_NL__2PRFIN20080228_011816_000000402066_00232_31348_9643.N1	28-FEB-2008 01:18:16	Dark	40.000	141	Bet Ara	2.8400	4600.0	80	31348	No
15	GOM_NL__2PRFIN20080228_012215_000000402066_00232_31348_9644.N1	28-FEB-2008 01:22:15	Dark	40.000	134	Bet TrA	2.8100	6600.0	80	31348	No
16	GOM_NL__2PRFIN20080228_012448_000000462066_00232_31348_9645.N1	28-FEB-2008 01:24:48	Dark	46.000	4	Alp1Cen	-0.010000	5800.0	92	31348	No
17	GOM_NL__2PRFIN20080228_012608_000000422066_00232_31348_9646.N1	28-FEB-2008 01:26:08	Dark	42.000	10	Bet Cen	0.61000	28000.0	84	31348	No
18	GOM_NL__2PRFIN20080228_012732_000000362066_00232_31348_9647.N1	28-FEB-2008 01:27:32	Dark	36.000	112	Alp Mus	2.6880	26000.0	72	31348	No
19	GOM_NL__2PRFIN20080228_012847_000000472066_00232_31348_9648.N1	28-FEB-2008 01:28:47	Dark	46.500	12	Alp1Cru	0.77500	30000.0	93	31348	No
20	GOM_NL__2PRFIN20080228_013153_000000412066_00232_31348_9649.N1	28-FEB-2008 01:31:53	Dark	41.000	99	Del Cen	2.5750	26000.0	82	31348	No
21	GOM_NL__2PRFIN20080228_013411_000000372066_00232_31348_9650.N1	28-FEB-2008 01:34:11	Straylight	37.000	91	Kap Vel	2.4900	26000.0	74	31348	No
22	GOM_NL__2PRFIN20080228_013729_000000432066_00232_31348_9651.N1	28-FEB-2008 01:37:29	Straylight	42.500	65	Lam Vel	2.2040	4400.0	85	31348	No
23	GOM_NL__2PRFIN20080228_014701_000000462066_00232_31348_9652.N1	28-FEB-2008 01:47:01	Twilight	45.500	48	30Alp Hya	1.9770	4100.0	91	31348	No
24	GOM_NL__2PRFIN20080228_015638_000000382066_00232_31348_9653.N1	28-FEB-2008 01:56:38	Bright	37.500	166	17Eps Leo	2.9800	6000.0	75	31348	No
25	GOM_NL__2PRFIN20080228_021503_000000352066_00232_31348_9654.N1	28-FEB-2008 02:15:03	Bright	34.500	49	1Alp UMi	1.9900	6300.0	69	31348	No
26	GOM_NL__2PRFIN20080228_022229_000000352066_00232_31348_9655.N1	28-FEB-2008 02:22:29	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	31348	No
27	GOM_NL__2PRFIN20080228_022735_000000372066_00232_31348_9656.N1	28-FEB-2008 02:27:35	Bright	36.500	19	50Alp Cyg	1.2460	10500.0	73	31348	No
28	GOM_NL__2PRFIN20080228_022909_000000362066_00232_31348_9657.N1	28-FEB-2008 02:29:09	Bright	35.500	66	37Gam Cyg	2.2080	5900.0	71	31348	No
29	GOM_NL__2PRFIN20080228_023041_000000352066_00232_31348_9658.N1	28-FEB-2008 02:30:41	Bright	35.000	92	53Eps Cyg	2.5000	4500.0	70	31348	No
30	GOM_NL__2PRFIN20080228_023740_000000382066_00232_31348_9659.N1	28-FEB-2008 02:37:40	Bright	37.500	168	17Zet Aql	2.9860	11000.0	75	31348	No
31	GOM_NL__2PRFIN20080228_024725_000000402066_00232_31348_9660.N1	28-FEB-2008 02:47:25	Dark	40.000	155	41Pi Sgr	2.9000	6600.0	80	31348	No
32	GOM_NL__2PRFIN20080228_024912_000000392066_00232_31348_9661.N1	28-FEB-2008 02:49:12	Dark	38.500	57	34Sig Sgr	2.0660	26000.0	77	31348	No
33	GOM_NL__2PRFIN20080228_025216_000000412066_00232_31348_9662.N1	28-FEB-2008 02:52:16	Dark	40.500	38	20Eps Sgr	1.8360	11000.0	81	31348	No
34	GOM_NL__2PRFIN20080228_025502_000000442066_00232_31348_9663.N1	28-FEB-2008 02:55:02	Dark	43.500	25	35Lam Sco	1.6200	28000.0	87	31348	No
35	GOM_NL__2PRFIN20080228_025736_000000402066_00232_31348_9664.N1	28-FEB-2008 02:57:36	Dark	40.000	147	Alp Ara	2.8770	26000.0	80	31348	No
36	GOM_NL__2PRFIN20080228_025853_000000422066_00233_31349_9643.N1	28-FEB-2008 02:58:53	Dark	42.000	141	Bet Ara	2.8400	4600.0	84	31349	No
37	GOM_NL__2PRFIN20080228_030252_000000392066_00233_31349_9644.N1	28-FEB-2008 03:02:52	Dark	39.000	134	Bet TrA	2.8100	6600.0	78	31349	No
38	GOM_NL__2PRFIN20080228_030525_000000442066_00233_31349_9645.N1	28-FEB-2008 03:05:25	Dark	43.500	4	Alp1Cen	-0.010000	5800.0	87	31349	No
39	GOM_NL__2PRFIN20080228_030644_000000502066_00233_31349_9646.N1	28-FEB-2008 03:06:44	Dark	49.500	10	Bet Cen	0.61000	28000.0	99	31349	No
40	GOM_NL__2PRFIN20080228_030808_000000372066_00233_31349_9647.N1	28-FEB-2008 03:08:08	Dark	36.500	112	Alp Mus	2.6880	26000.0	73	31349	No
41	GOM_NL__2PRFIN20080228_030923_000000482066_00233_31349_9648.N1	28-FEB-2008 03:09:23	Dark	47.500	12	Alp1Cru	0.77500	30000.0	95	31349	No
42	GOM_NL__2PRFIN20080228_031230_000000412066_00233_31349_9649.N1	28-FEB-2008 03:12:30	Dark	40.500	99	Del Cen	2.5750	26000.0	81	31349	No

279	GOM_NL__2PRFIN20080228_220347_000000392066_00244_31360_9652.N1	28-FEB-2008 22:03:47	Bright	39.000	166	17Eps Leo	2.9800	6000.0	78	31360	No
280	GOM_NL__2PRFIN20080228_222214_000000372066_00244_31360_9653.N1	28-FEB-2008 22:22:14	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	31360	No
281	GOM_NL__2PRFIN20080228_222942_000000352066_00244_31360_9654.N1	28-FEB-2008 22:29:42	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	31360	No
282	GOM_NL__2PRFIN20080228_223448_000000342066_00244_31360_9655.N1	28-FEB-2008 22:34:48	Bright	34.000	19	50Alp Cyg	1.2460	10500.	68	31360	No
283	GOM_NL__2PRFIN20080228_223622_000000352066_00244_31360_9656.N1	28-FEB-2008 22:36:22	Bright	34.500	66	37Gam Cyg	2.2080	5900.0	69	31360	No
284	GOM_NL__2PRFIN20080228_223754_000000352066_00244_31360_9657.N1	28-FEB-2008 22:37:54	Bright	35.000	92	53Eps Cyg	2.5000	4500.0	70	31360	No
285	GOM_NL__2PRFIN20080228_224455_000000372066_00244_31360_9658.N1	28-FEB-2008 22:44:55	Bright	37.000	168	17Zet Aql	2.9860	11000.	74	31360	No
286	GOM_NL__2PRFIN20080228_225441_000000402066_00244_31360_9659.N1	28-FEB-2008 22:54:41	Dark	40.000	155	41Pi Sgr	2.9000	6600.0	80	31360	No
287	GOM_NL__2PRFIN20080228_225630_000000422066_00244_31360_9660.N1	28-FEB-2008 22:56:30	Dark	42.000	57	34Sig Sgr	2.0660	26000.	84	31360	No
288	GOM_NL__2PRFIN20080228_225935_000000422066_00244_31360_9661.N1	28-FEB-2008 22:59:35	Dark	42.000	38	20Eps Sgr	1.8360	11000.	84	31360	No
289	GOM_NL__2PRFIN20080228_230223_000000442066_00244_31360_9662.N1	28-FEB-2008 23:02:23	Dark	44.000	25	35Lam Sco	1.6200	28000.	88	31360	No
290	GOM_NL__2PRFIN20080228_230610_000000402066_00245_31361_9643.N1	28-FEB-2008 23:06:10	Dark	40.000	141	Bet Ara	2.8400	4600.0	80	31361	No
291	GOM_NL__2PRFIN20080228_231009_000000382066_00245_31361_9644.N1	28-FEB-2008 23:10:09	Dark	37.500	134	Bet TrA	2.8100	6600.0	75	31361	No
292	GOM_NL__2PRFIN20080228_231243_000000432066_00245_31361_9645.N1	28-FEB-2008 23:12:43	Dark	43.000	4	Alp1Cen	-0.010000	5800.0	86	31361	No
293	GOM_NL__2PRFIN20080228_231403_000000452066_00245_31361_9646.N1	28-FEB-2008 23:14:03	Dark	44.500	10	Bet Cen	0.61000	28000.	89	31361	No
294	GOM_NL__2PRFIN20080228_231639_000000462066_00245_31361_9647.N1	28-FEB-2008 23:16:39	Dark	46.000	12	Alp1Cru	0.77500	30000.	92	31361	No
295	GOM_NL__2PRFIN20080228_231947_000000392066_00245_31361_9648.N1	28-FEB-2008 23:19:47	Dark	39.000	99	Del Cen	2.5750	26000.	78	31361	No
296	GOM_NL__2PRFIN20080228_232212_000000452066_00245_31361_9649.N1	28-FEB-2008 23:22:12	Straylight	45.000	113	Mu Vel	2.6920	5000.0	90	31361	No
297	GOM_NL__2PRFIN20080228_232518_000000422066_00245_31361_9650.N1	28-FEB-2008 23:25:18	Straylight	41.500	65	Lam Vel	2.2040	4400.0	83	31361	No
298	GOM_NL__2PRFIN20080228_233449_000000462066_00245_31361_9651.N1	28-FEB-2008 23:34:49	Twl_and_stray	46.000	48	30Alp Hya	1.9770	4100.0	92	31361	No
299	GOM_NL__2PRFIN20080228_234423_000000392066_00245_31361_9652.N1	28-FEB-2008 23:44:23	Bright	38.500	166	17Eps Leo	2.9800	6000.0	77	31361	No

3. Quality information per product

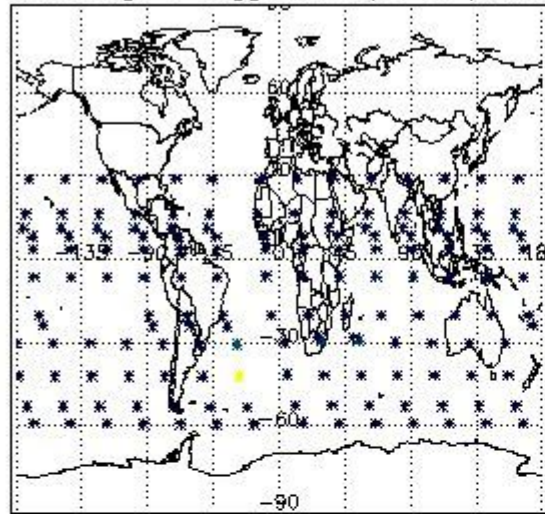
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

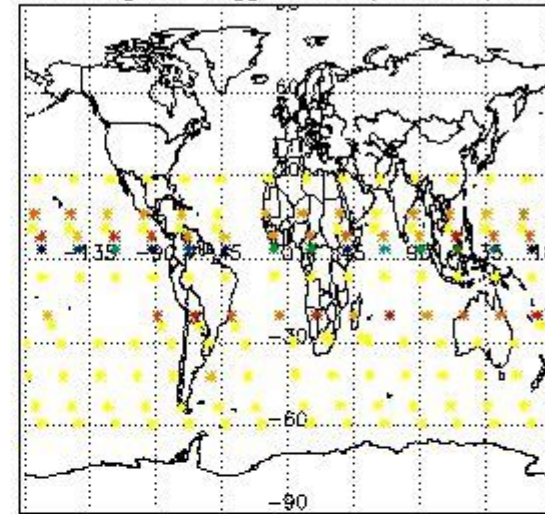


3.2 Plot quality information per product (world map)

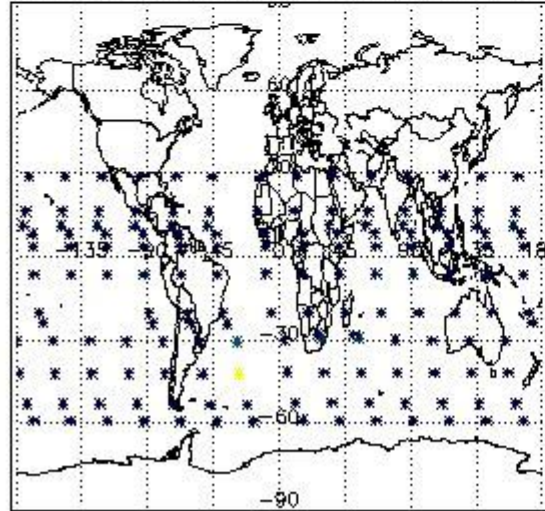
Percentage of flagged data per O3 profile



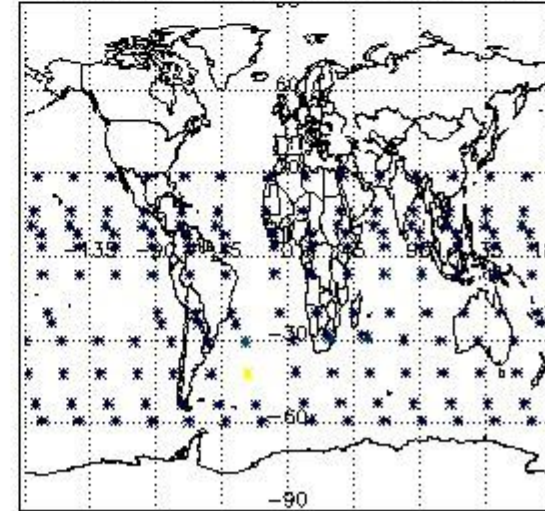
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

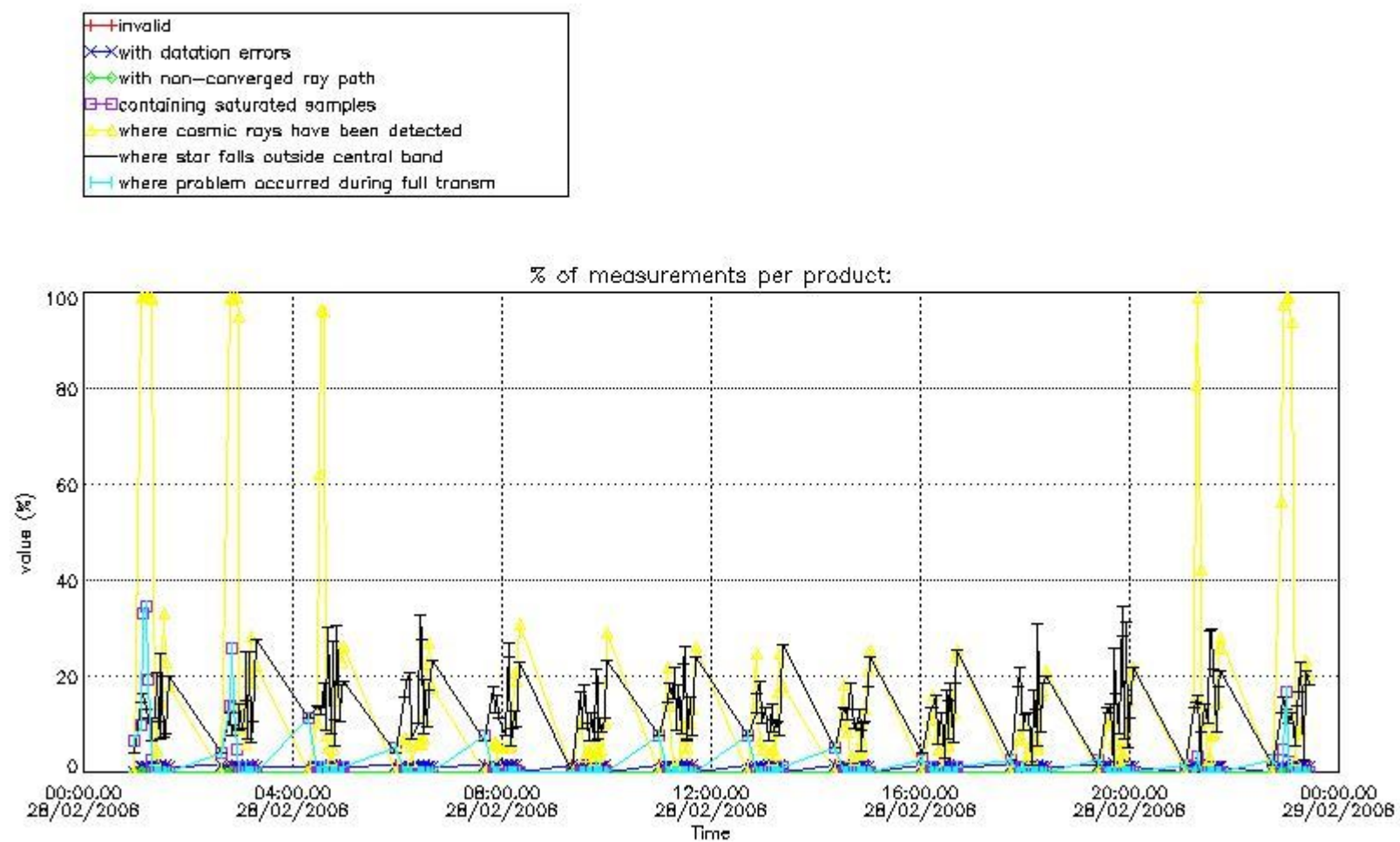


4. Level 1 quality information per product

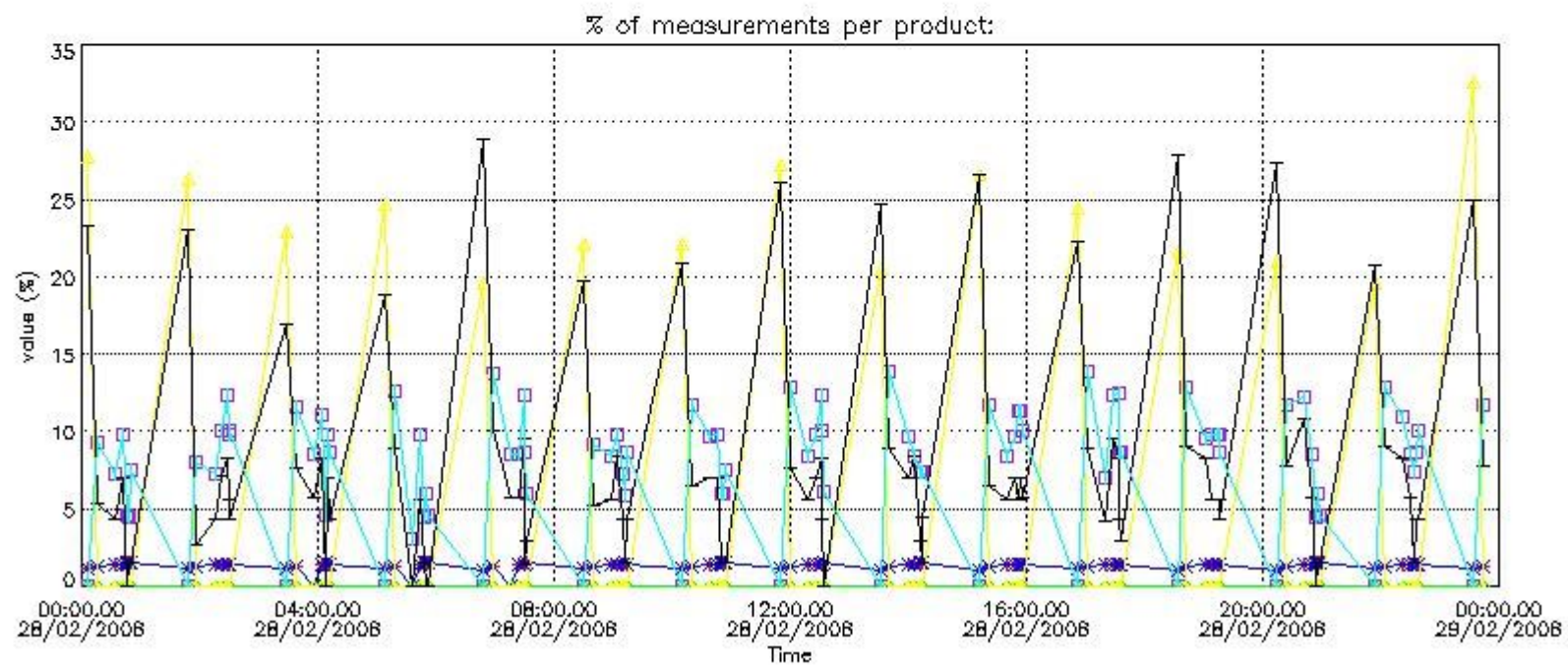
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



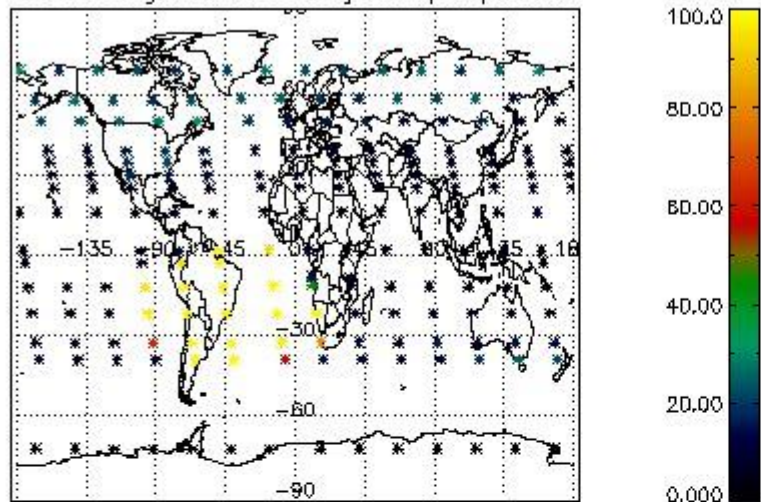
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



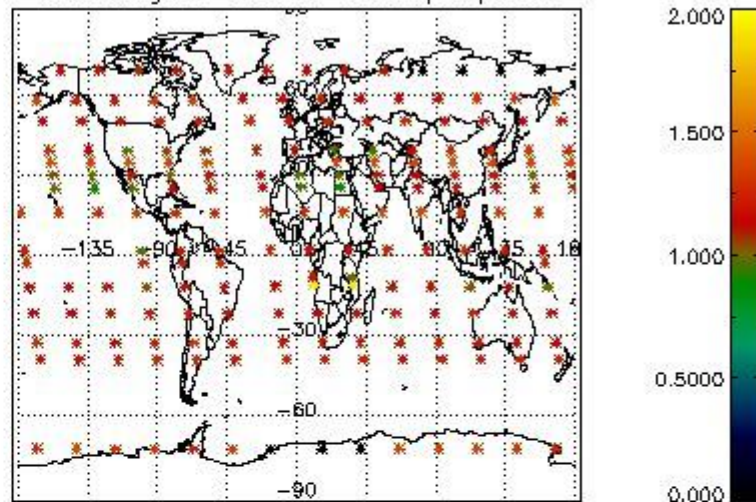
4.2 Plot quality information per product coming from level 1b processing (world map)

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

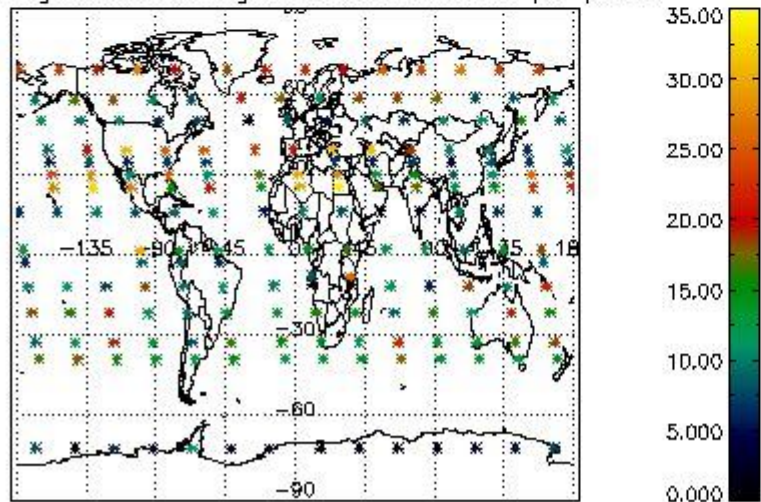
Percentage of cosmic ray hits per profile



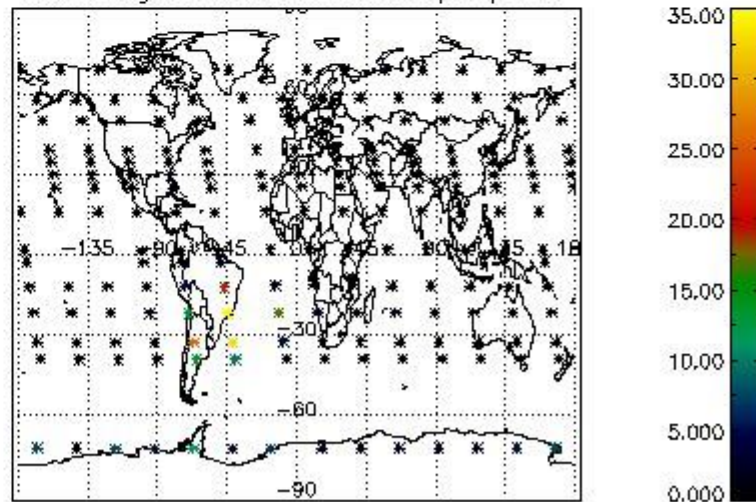
Percentage of datation errors per profile



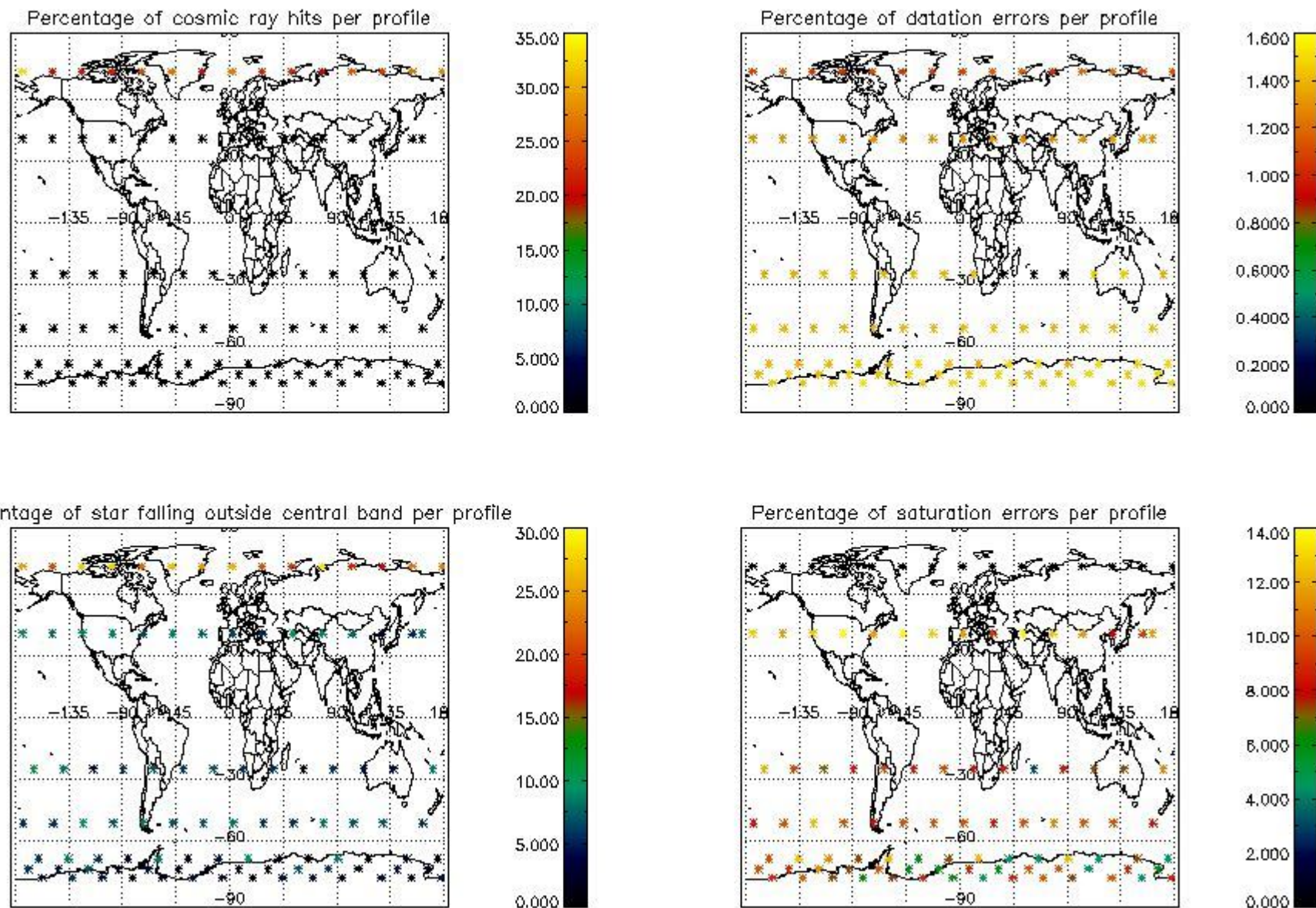
Percentage of star falling outside central band per profile



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

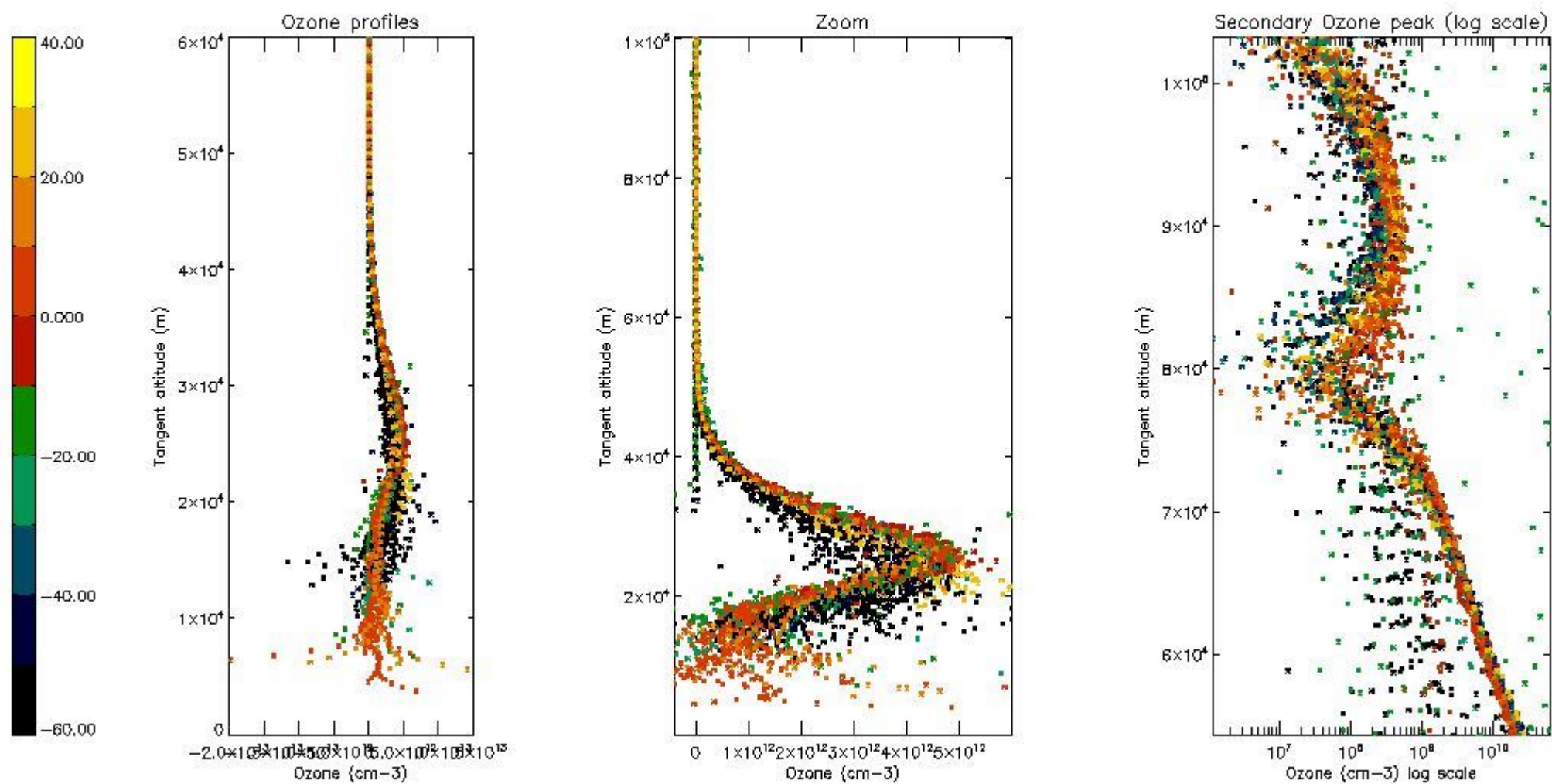
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	56
STD < 20	32

STD < 10	25
STD < 5	19

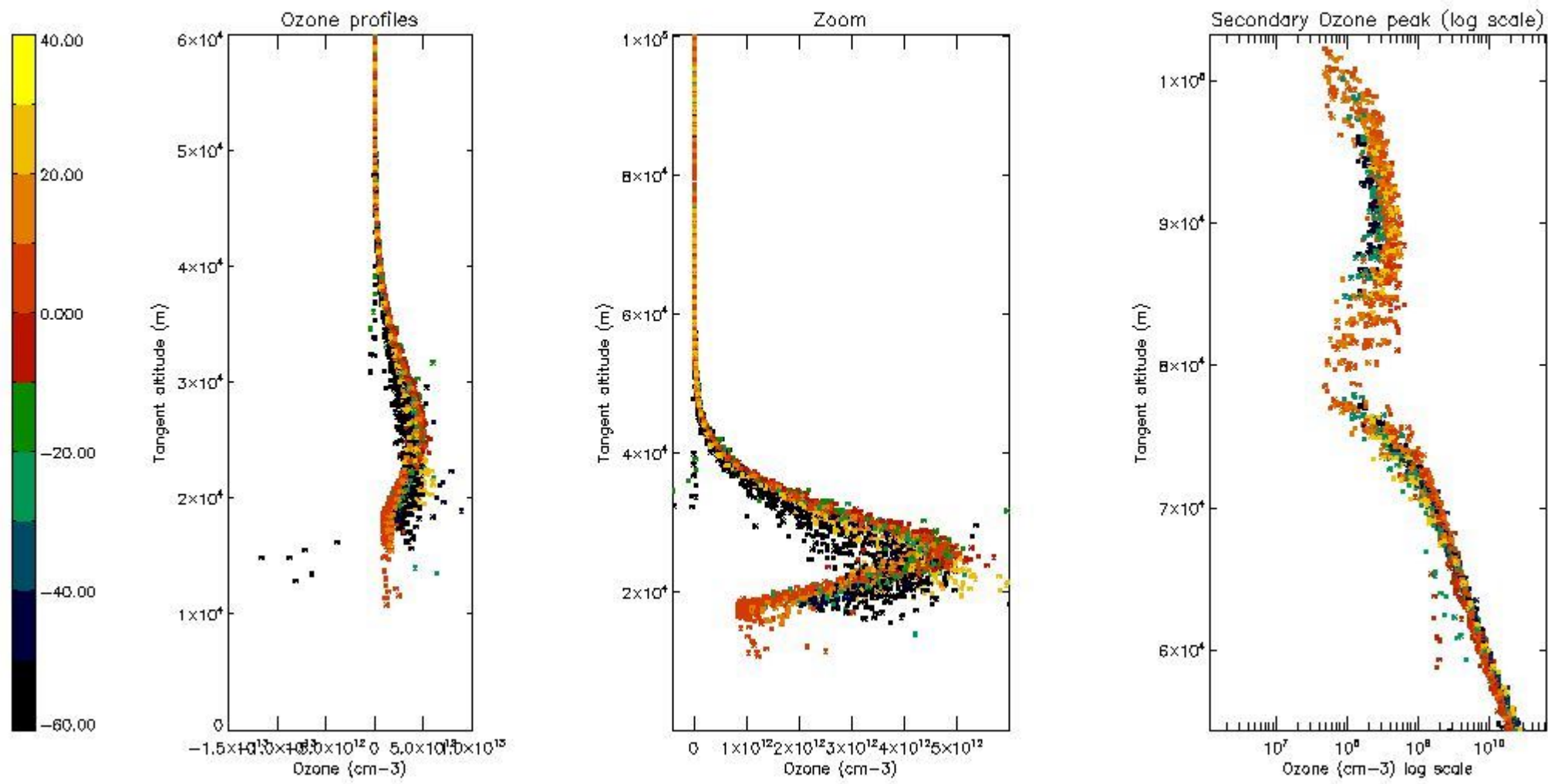
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



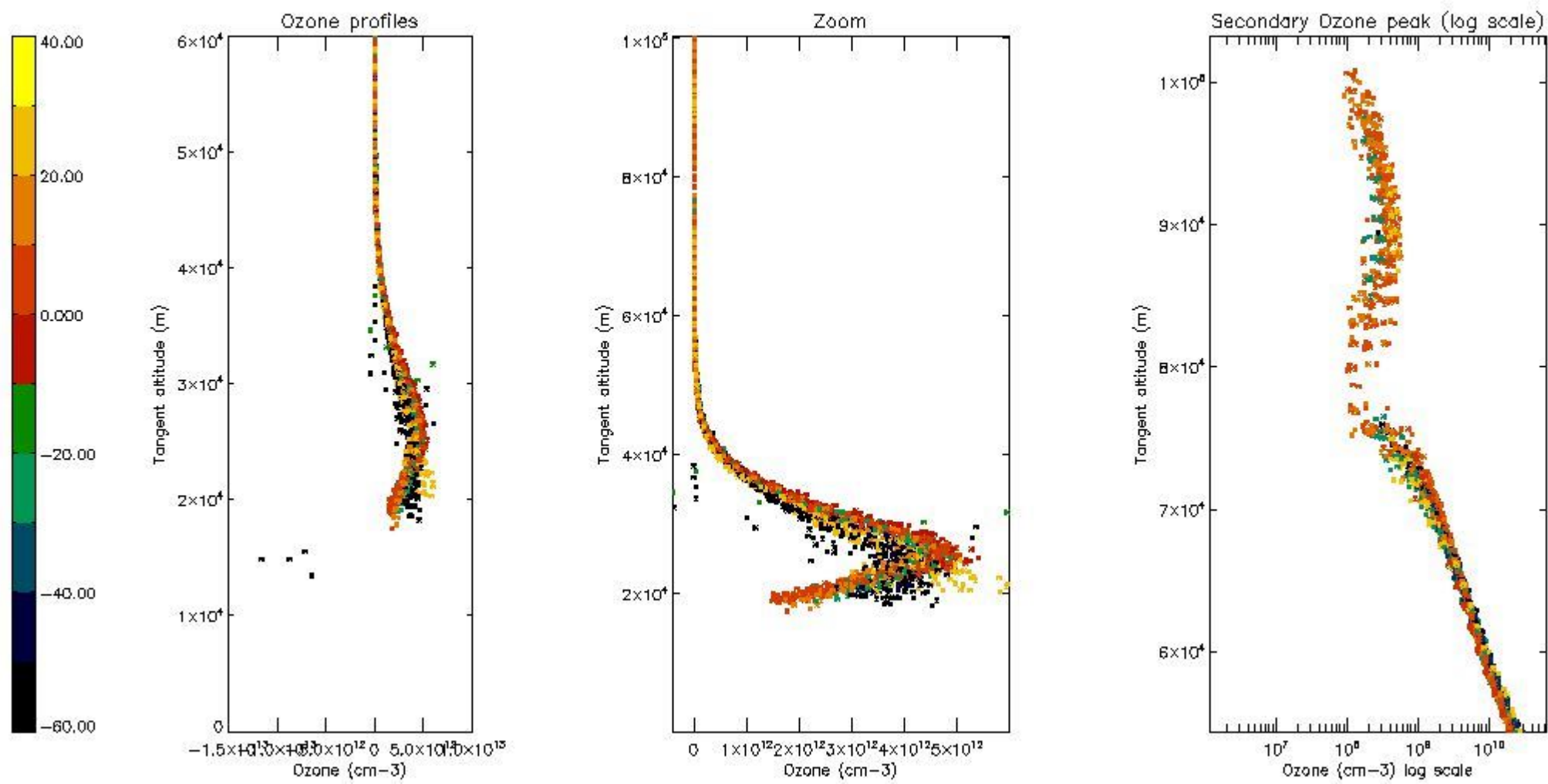
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



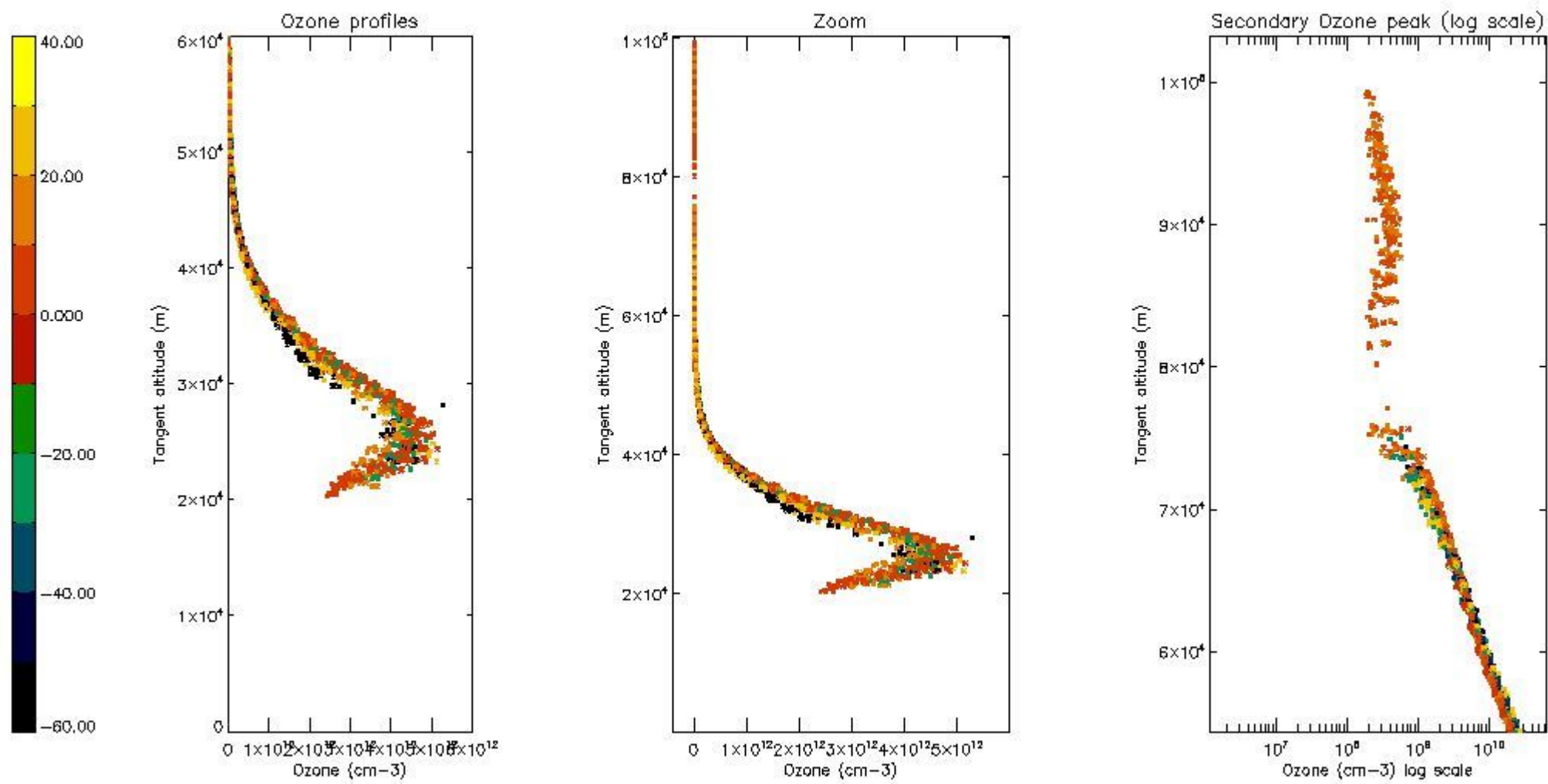
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



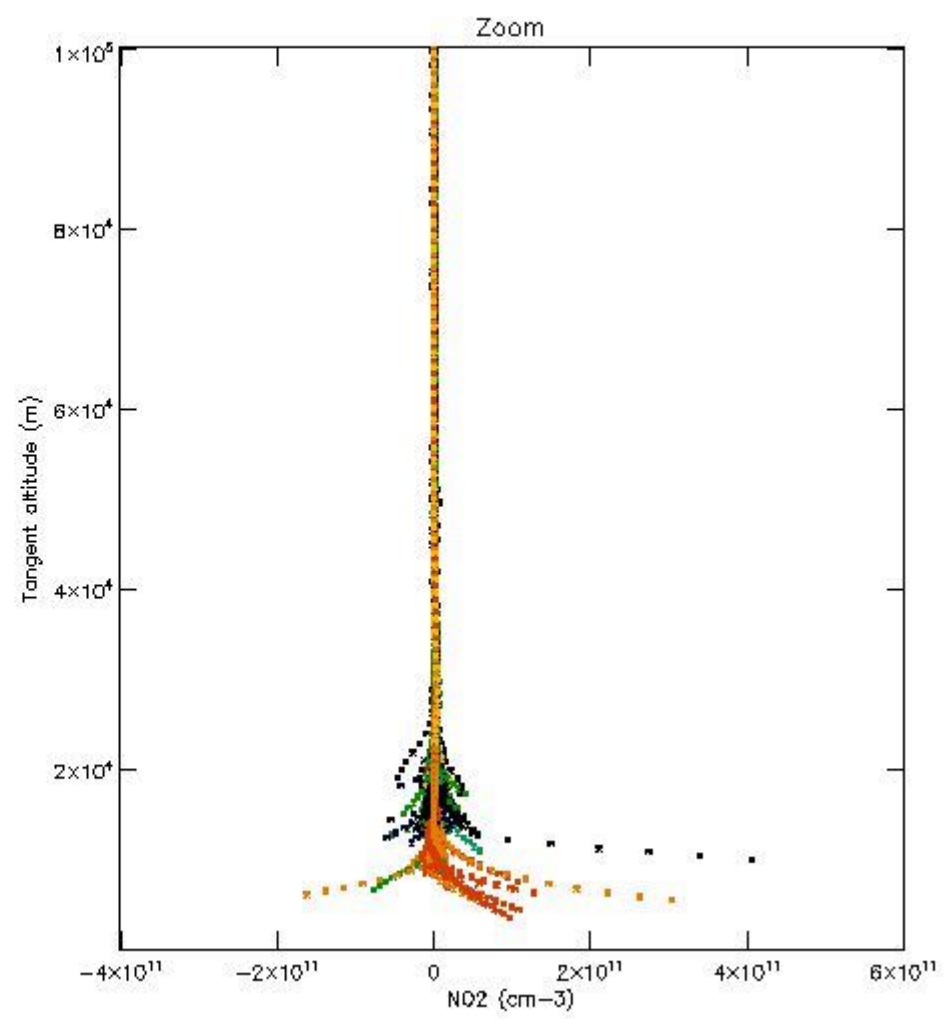
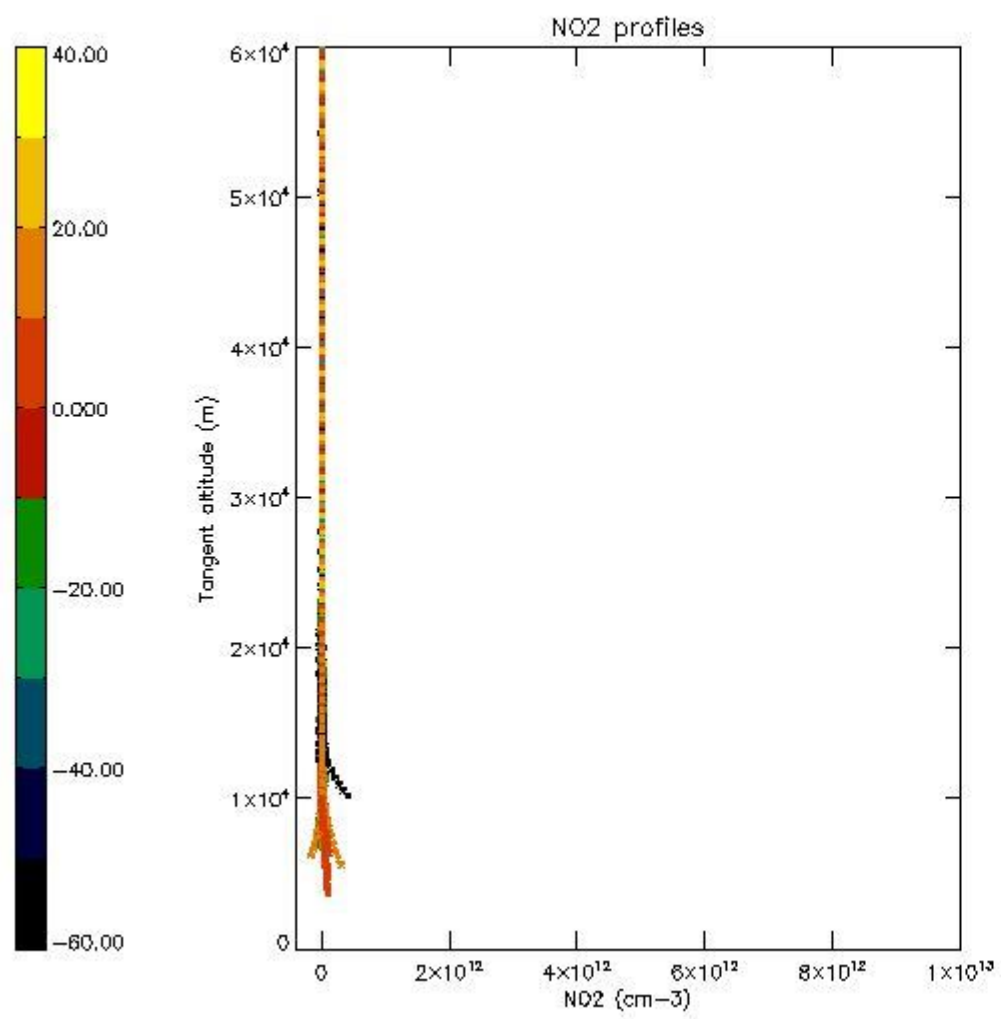
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



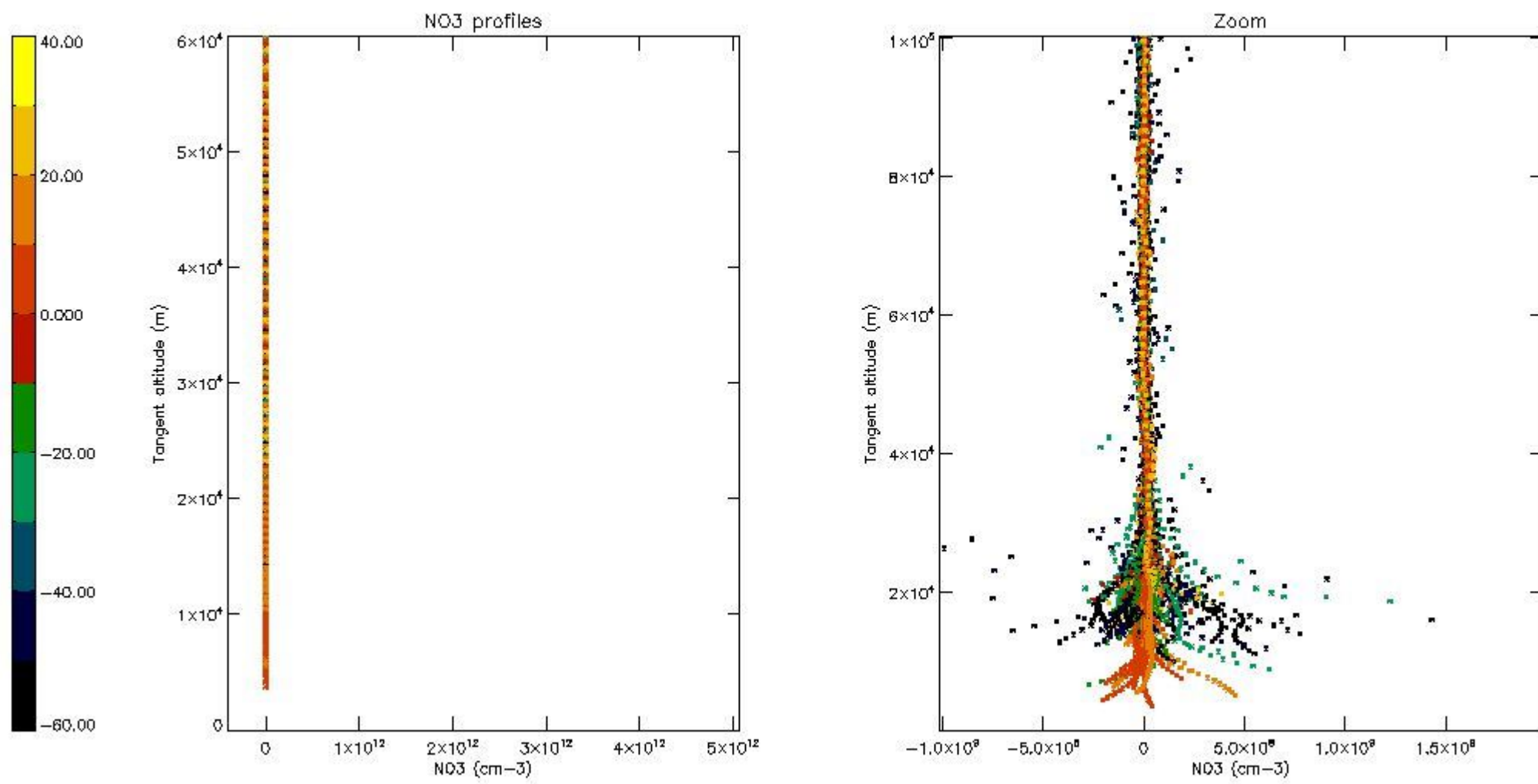
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



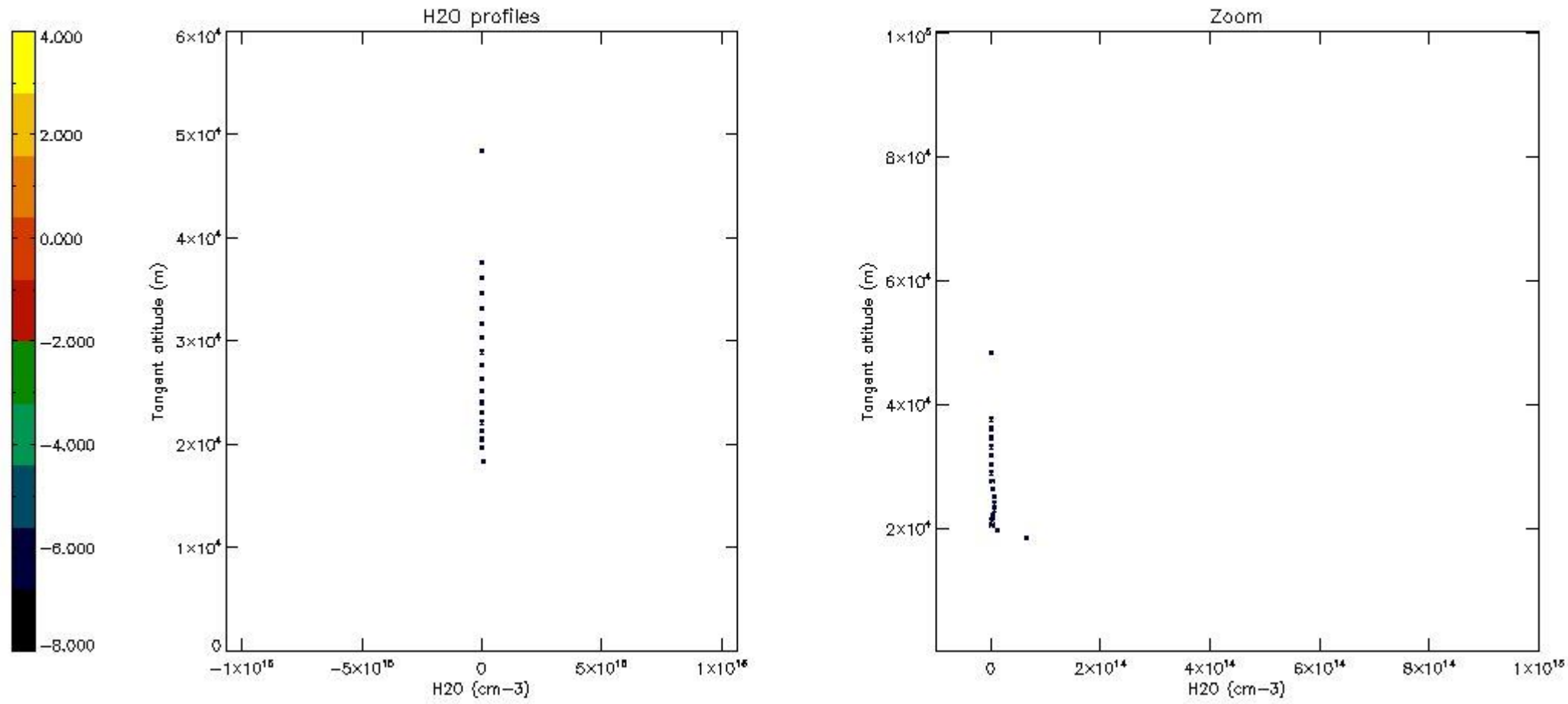
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

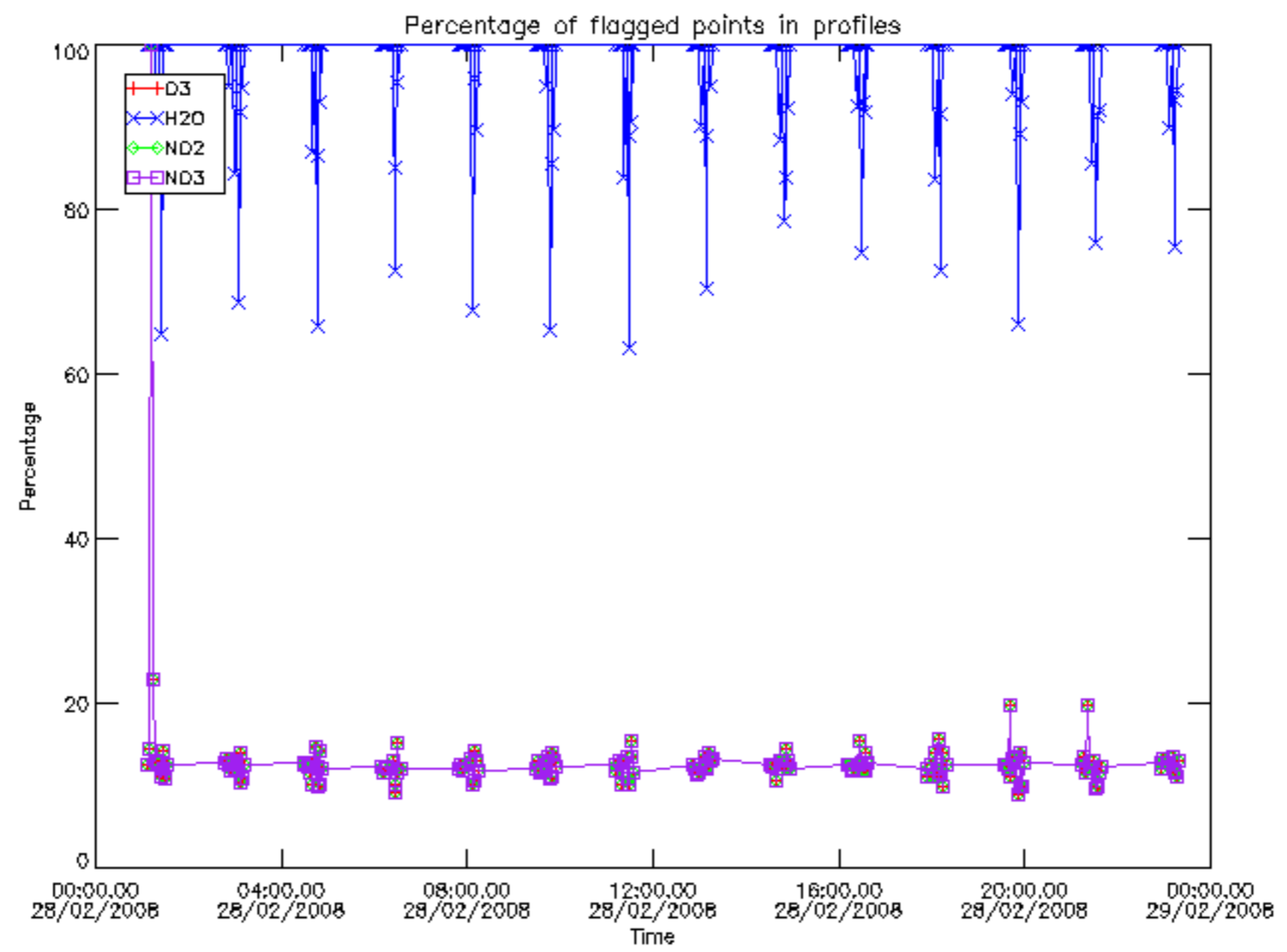
The colorbar represents the latitude.



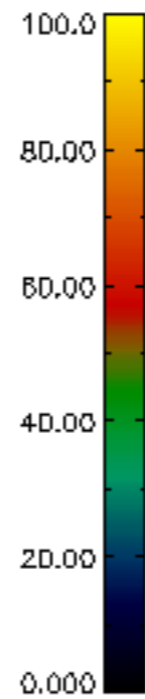
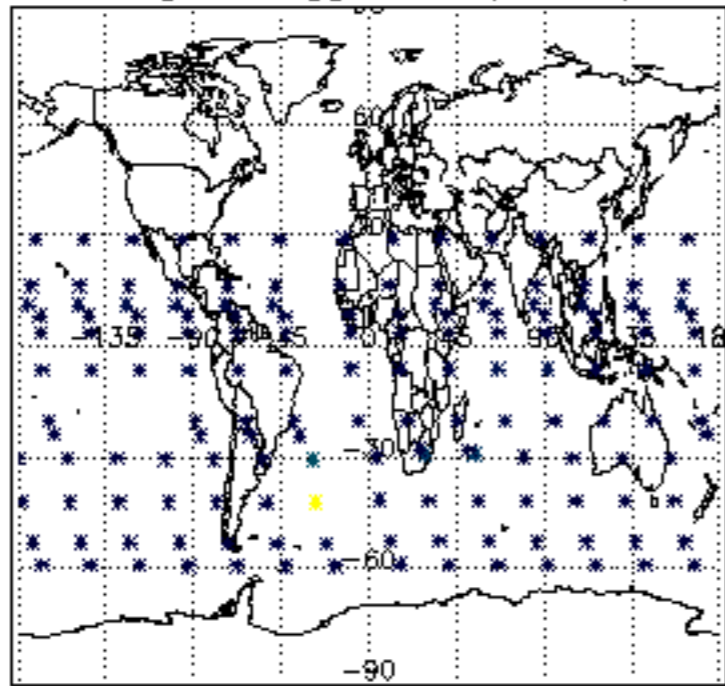
6. Auxiliary Data Files used for the production reported in section 2

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

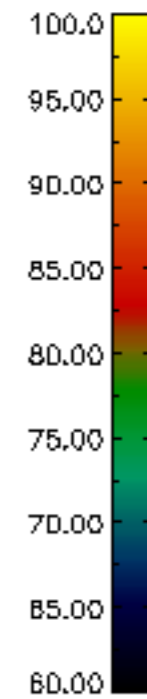
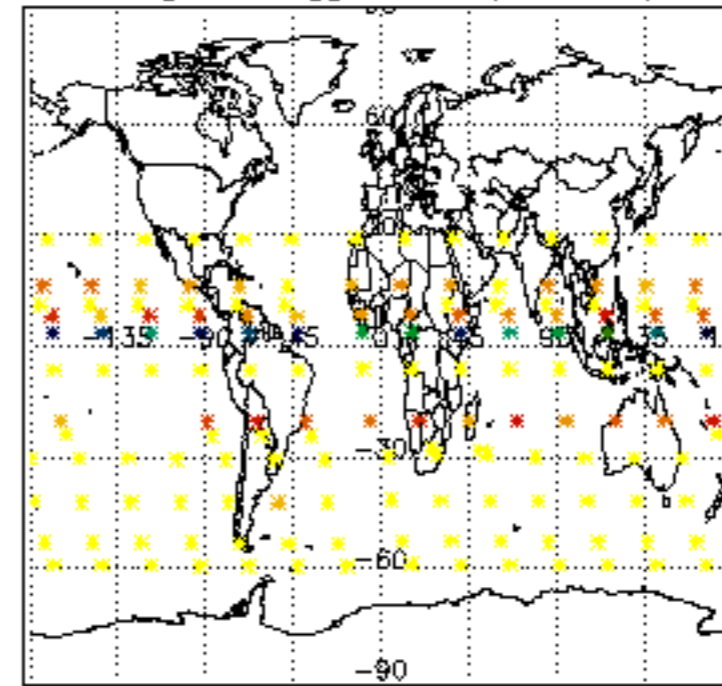
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	28-FEB-2008 00:06:25
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	28-FEB-2008 00:06:25
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	28-FEB-2008 00:06:25



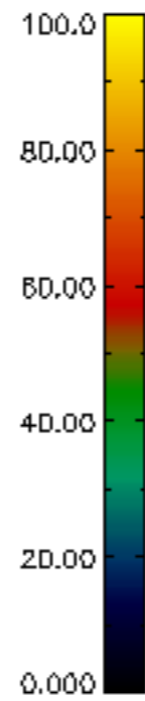
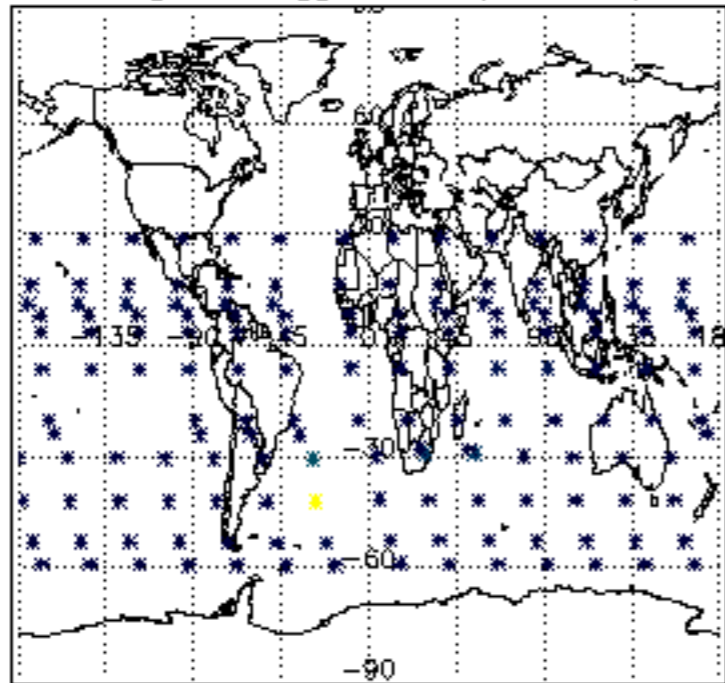
Percentage of flagged data per D3 profile



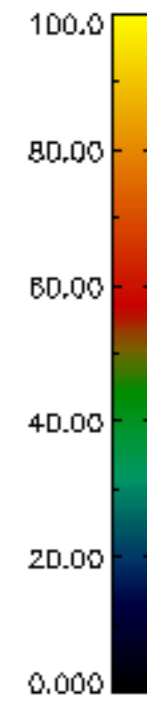
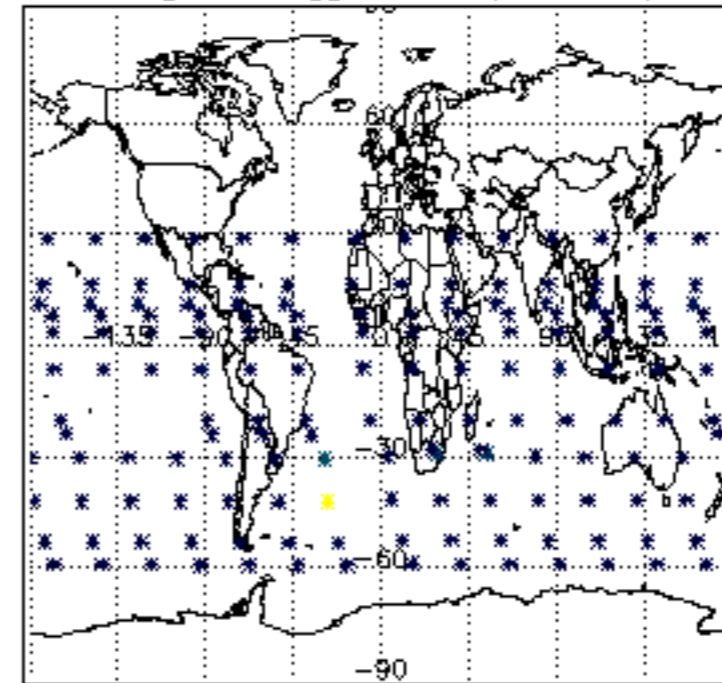
Percentage of flagged data per H2O profile

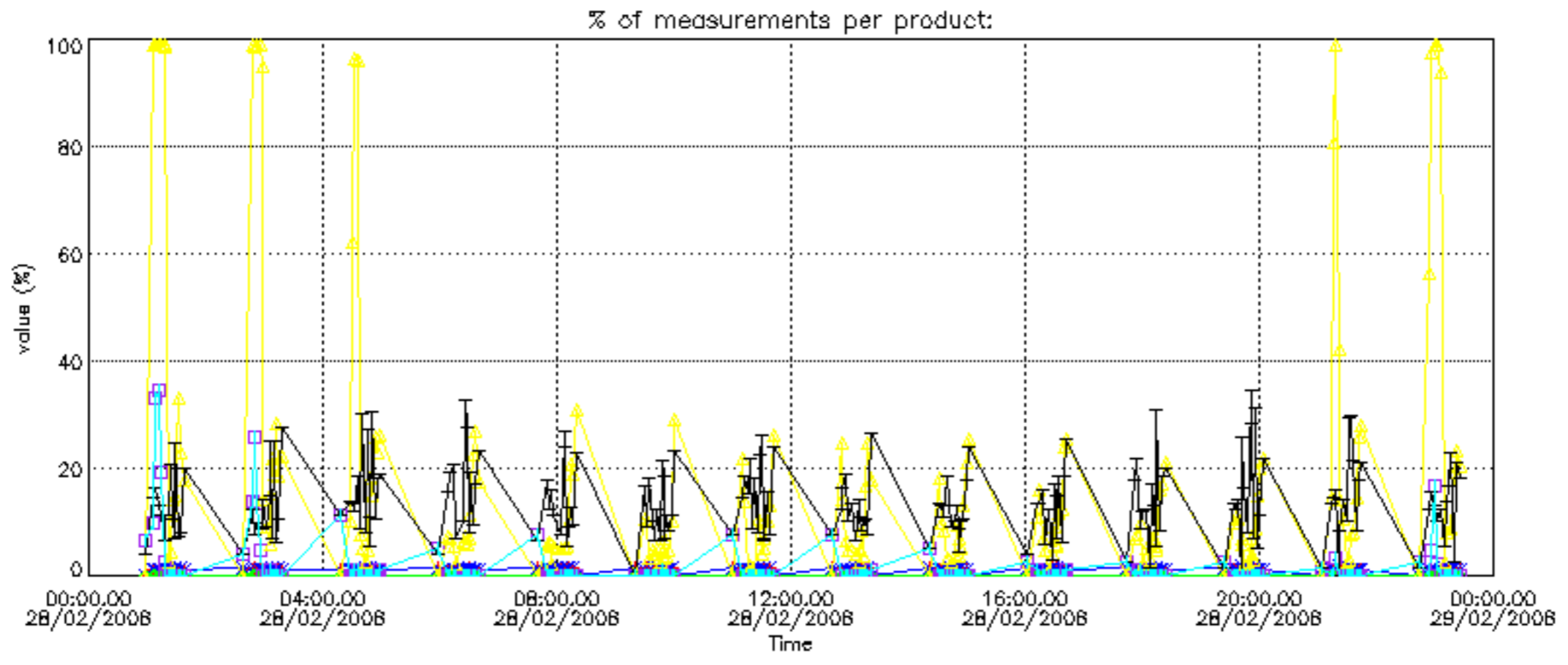


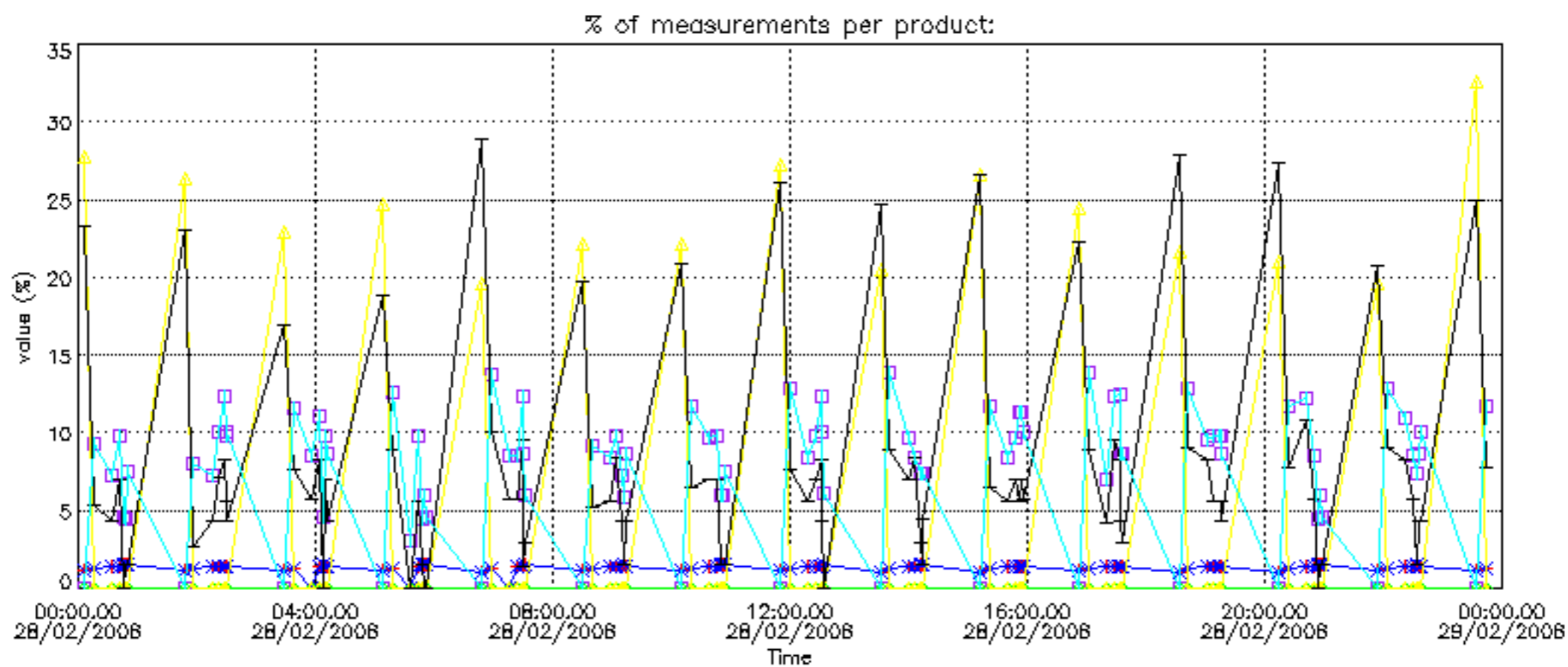
Percentage of flagged data per NO2 profile



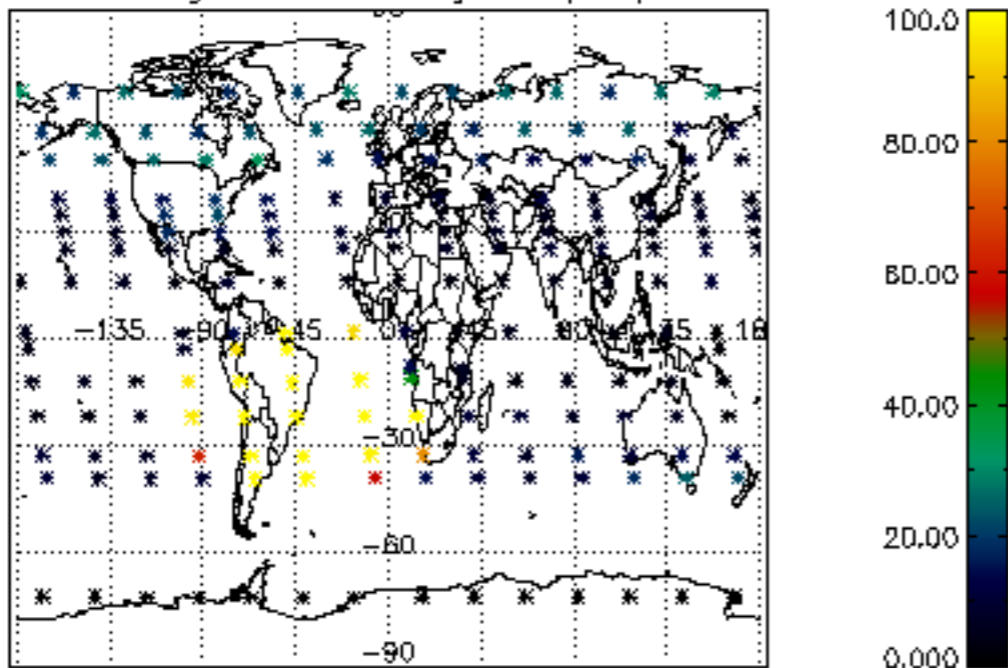
Percentage of flagged data per NO3 profile



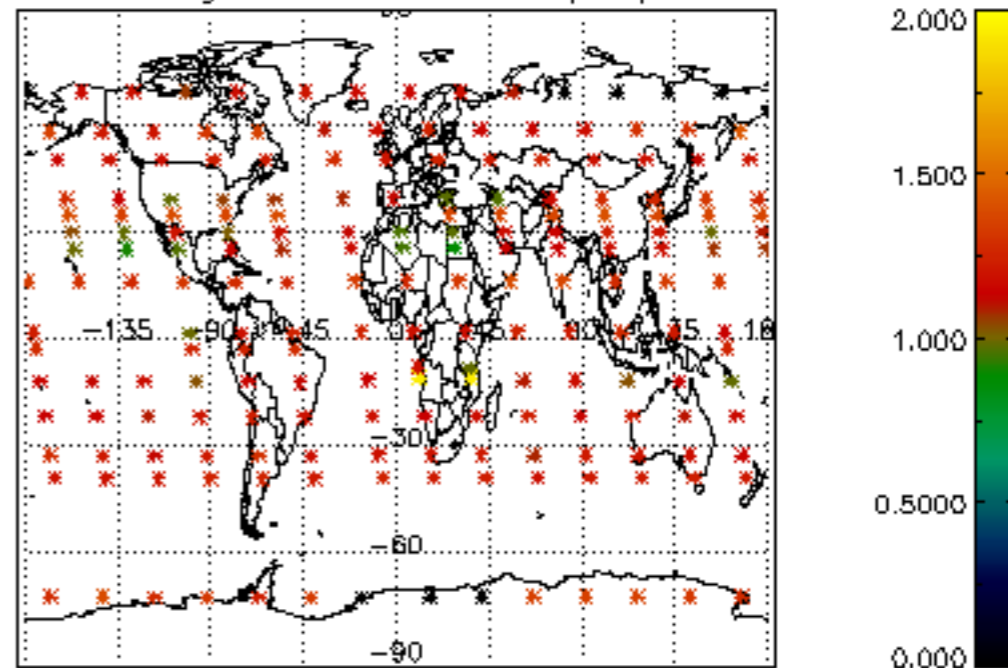




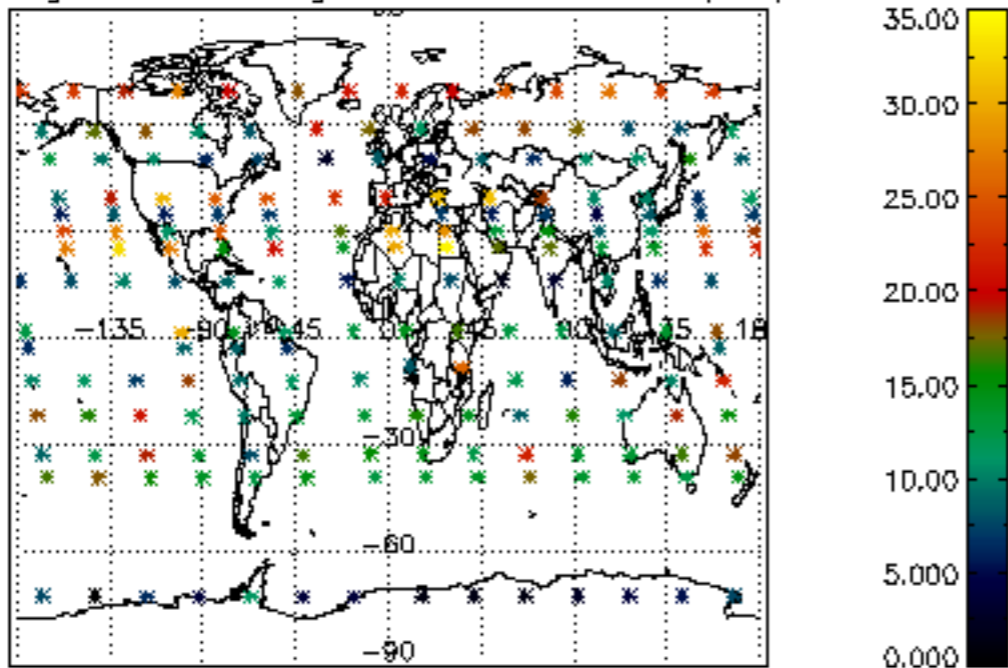
Percentage of cosmic ray hits per profile



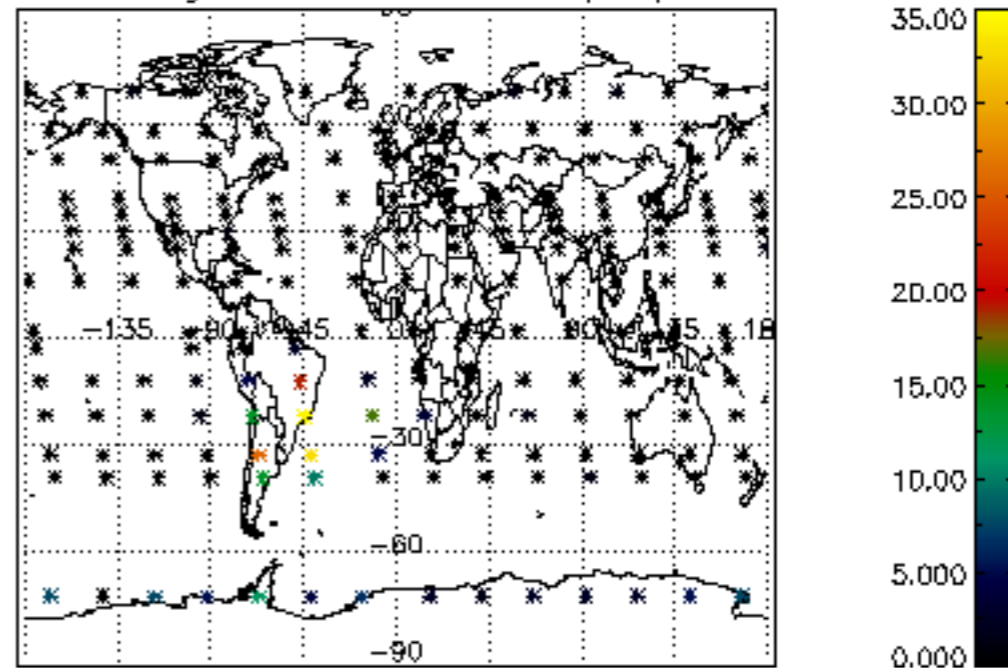
Percentage of datation errors per profile



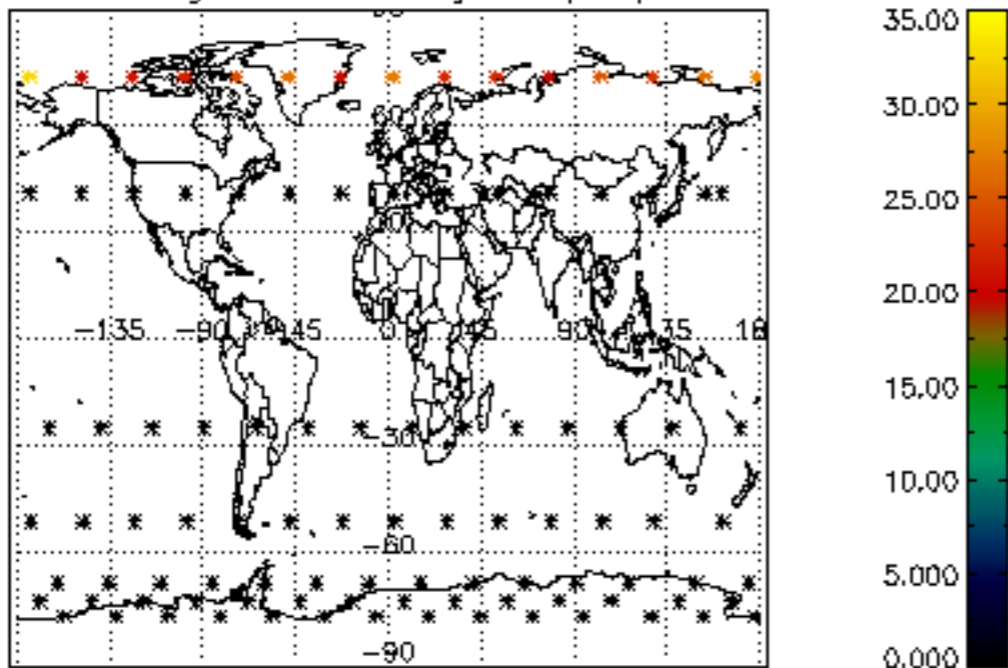
Percentage of star falling outside central band per profile



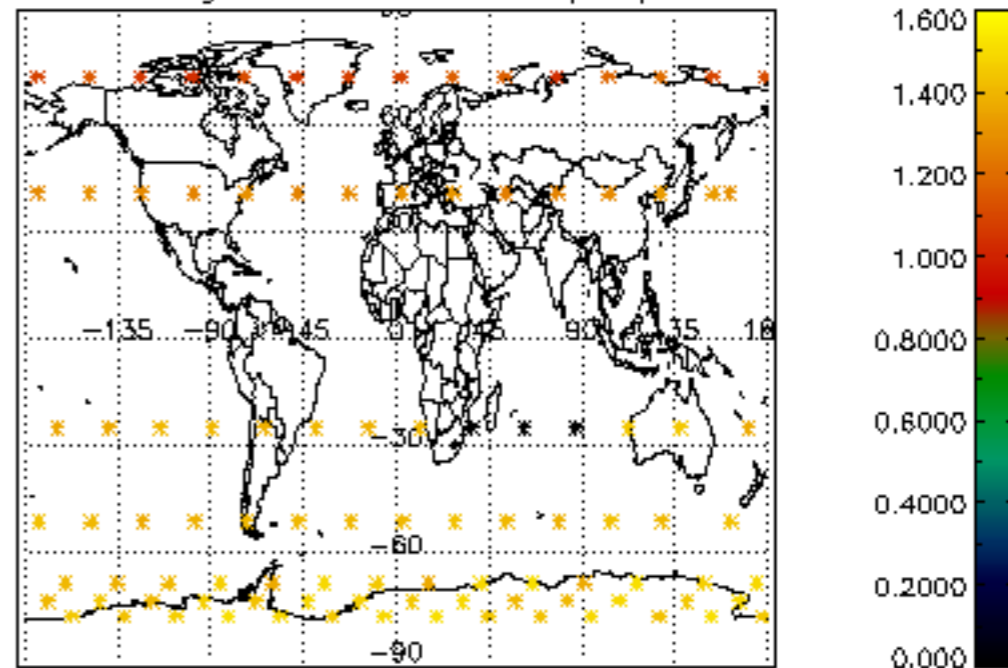
Percentage of saturation errors per profile



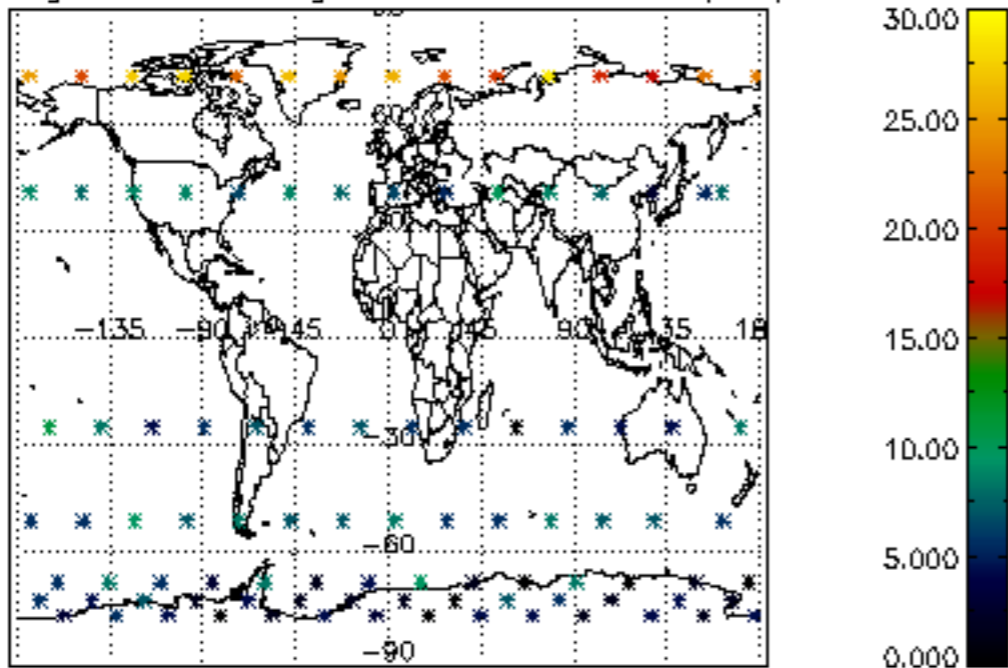
Percentage of cosmic ray hits per profile



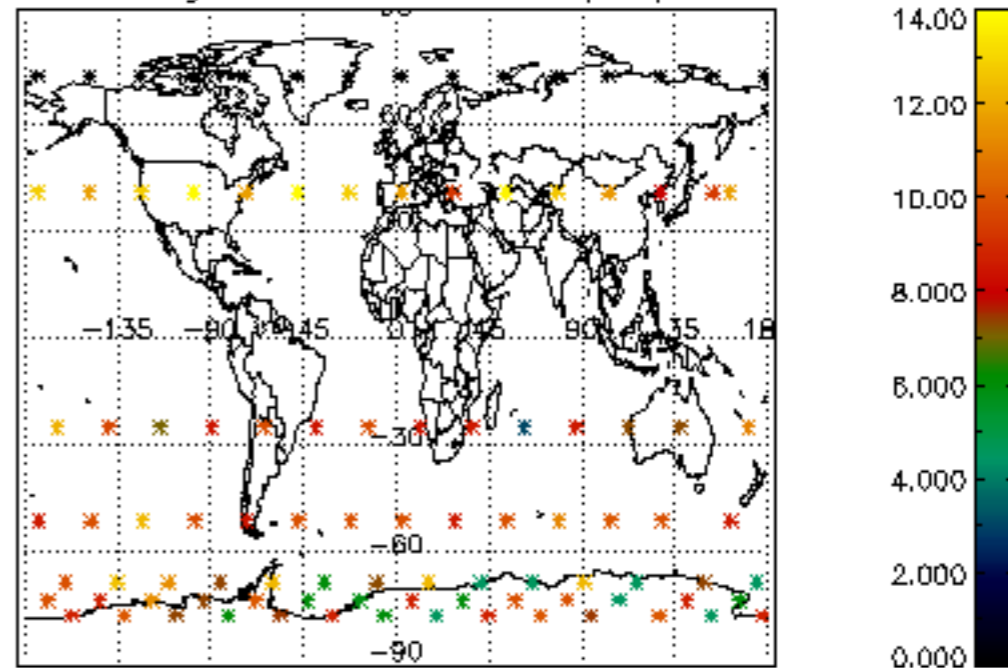
Percentage of datation errors per profile

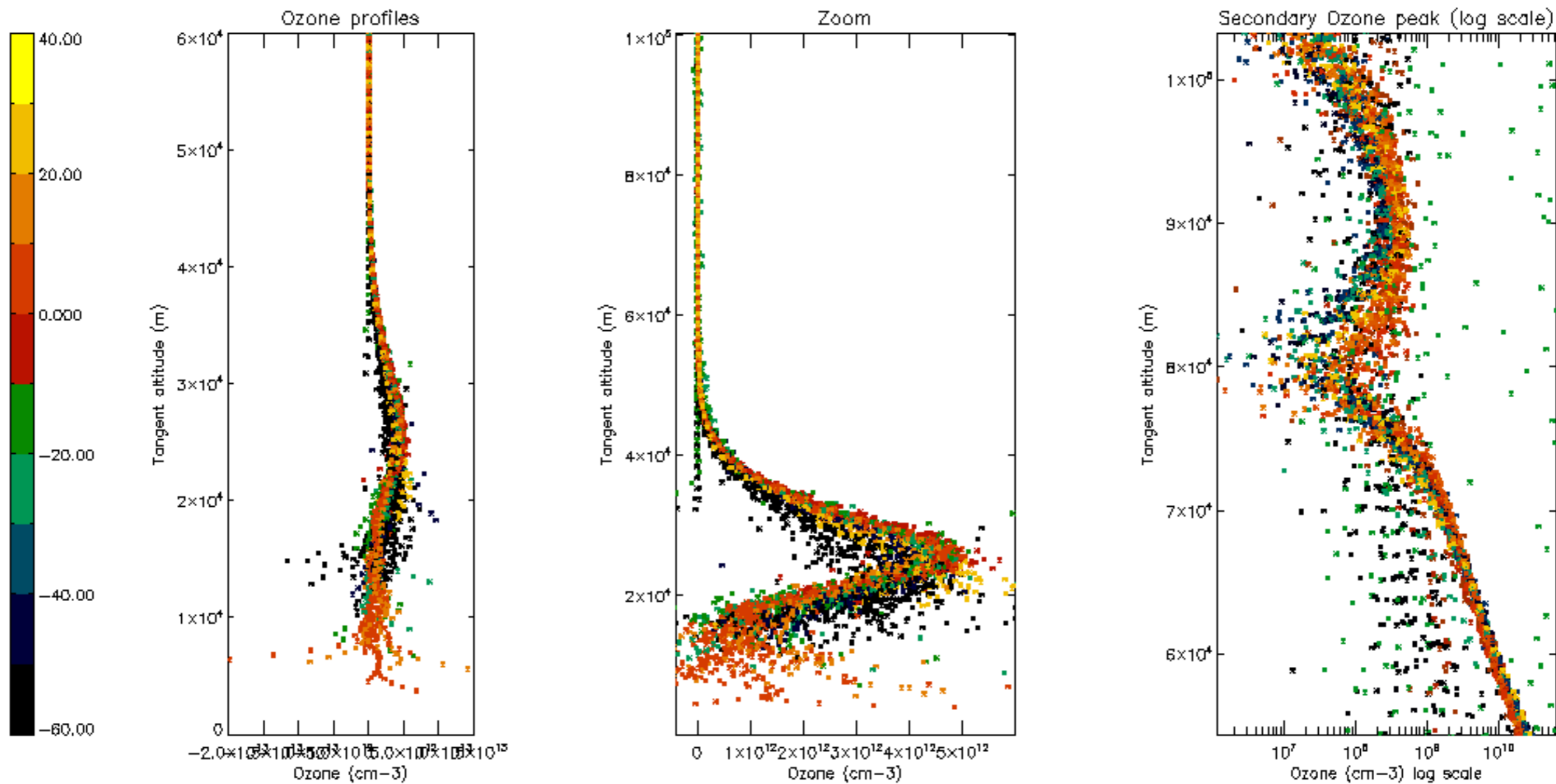


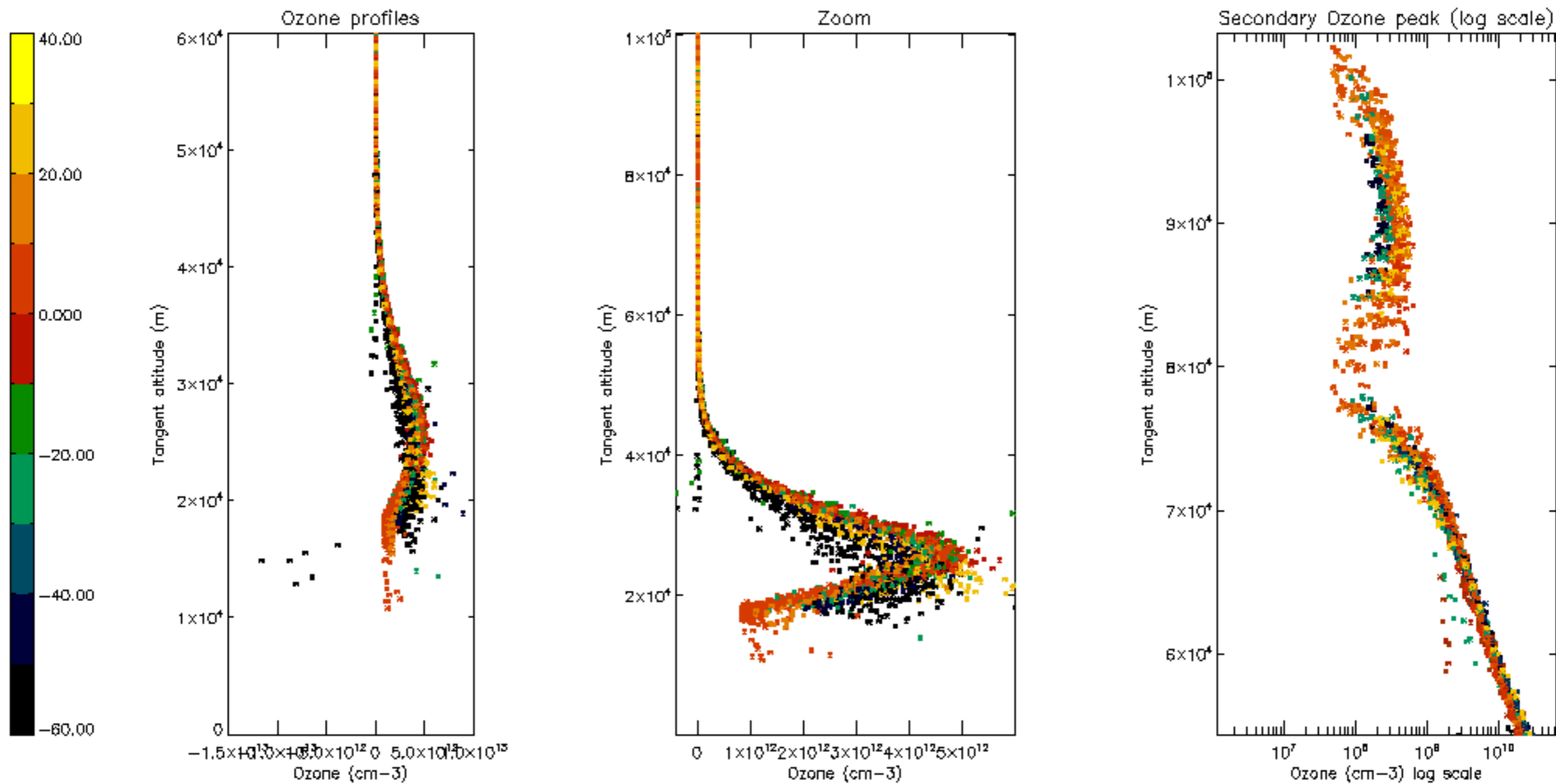
Percentage of star falling outside central band per profile

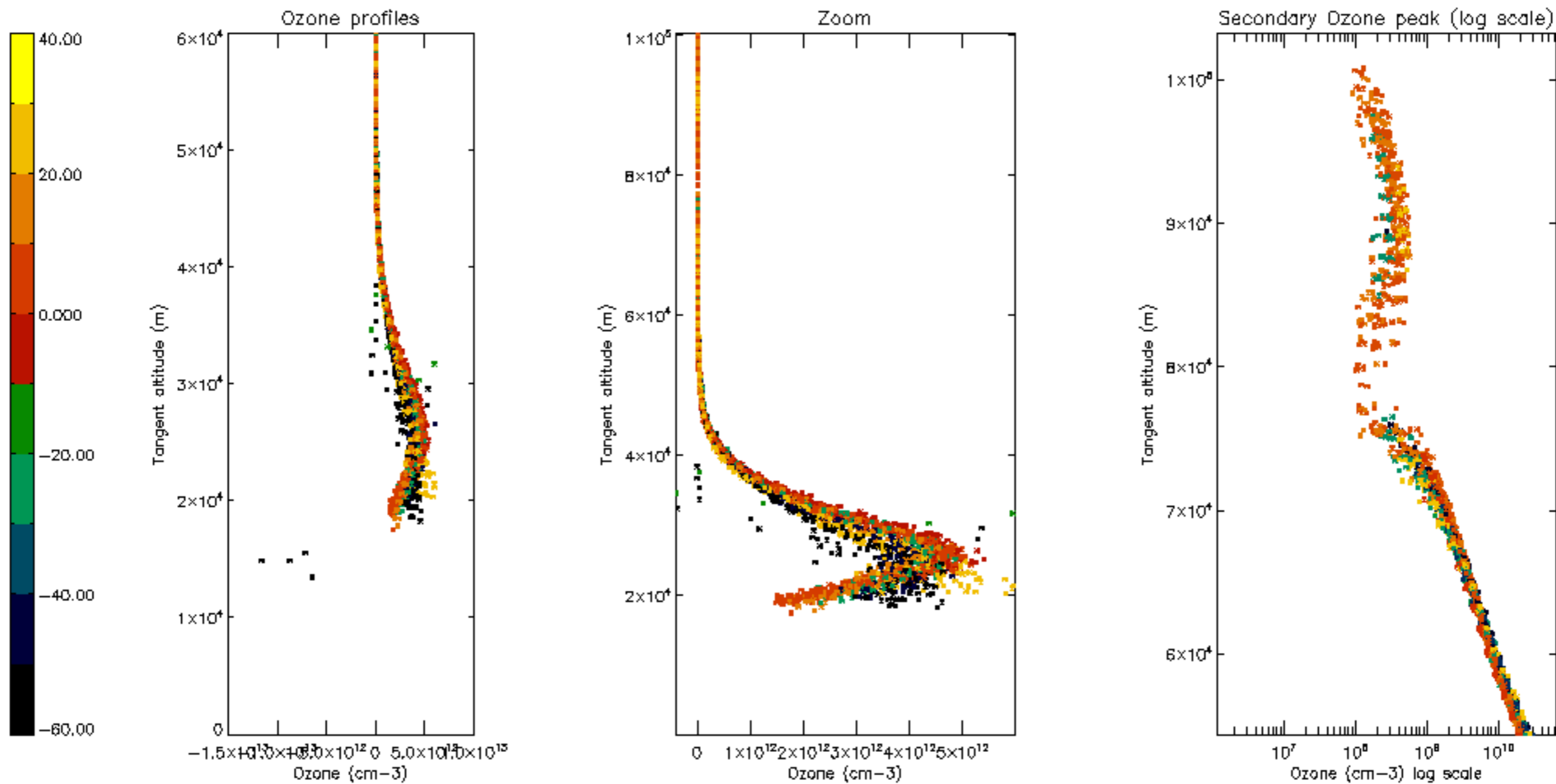


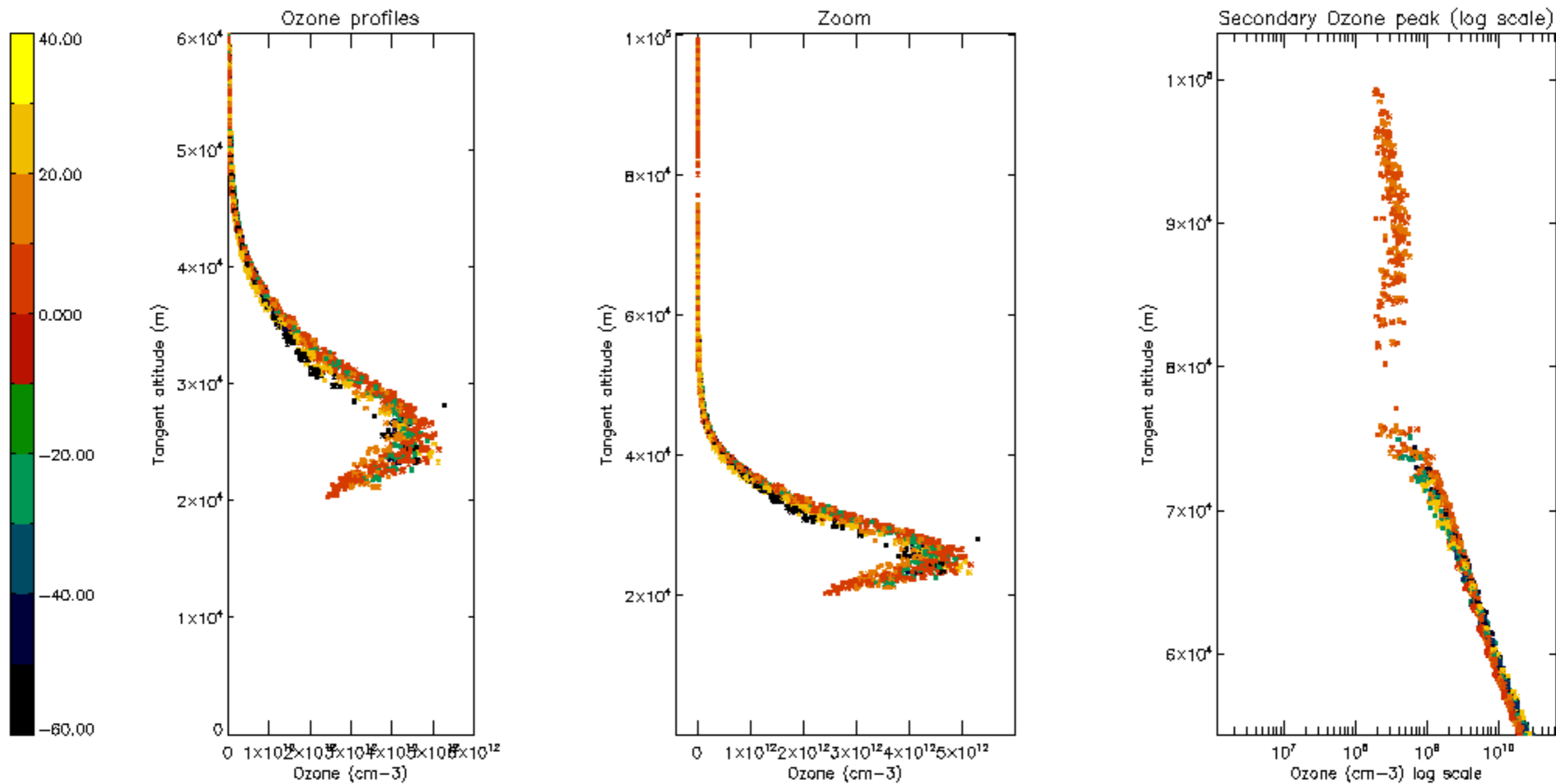
Percentage of saturation errors per profile

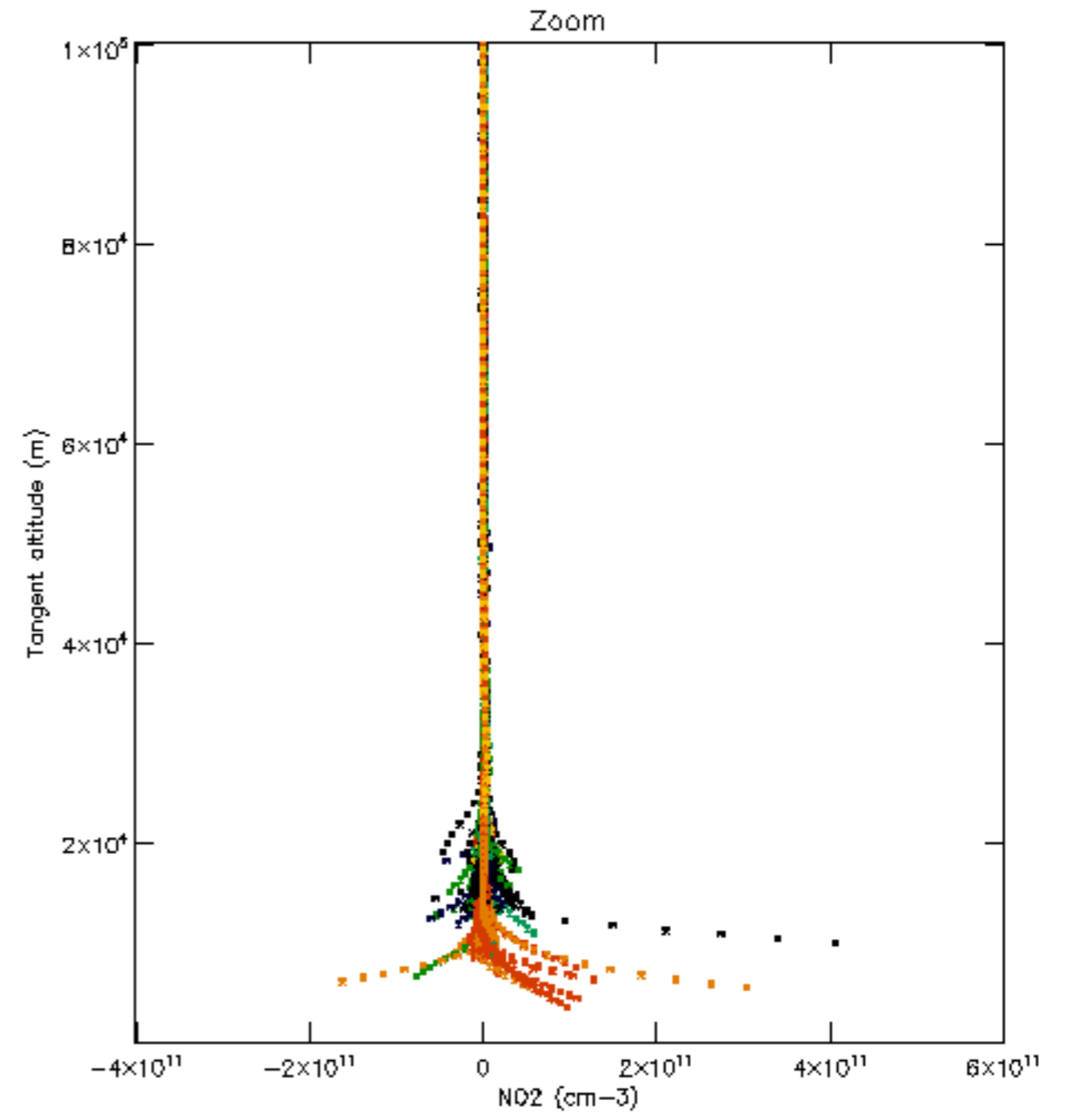
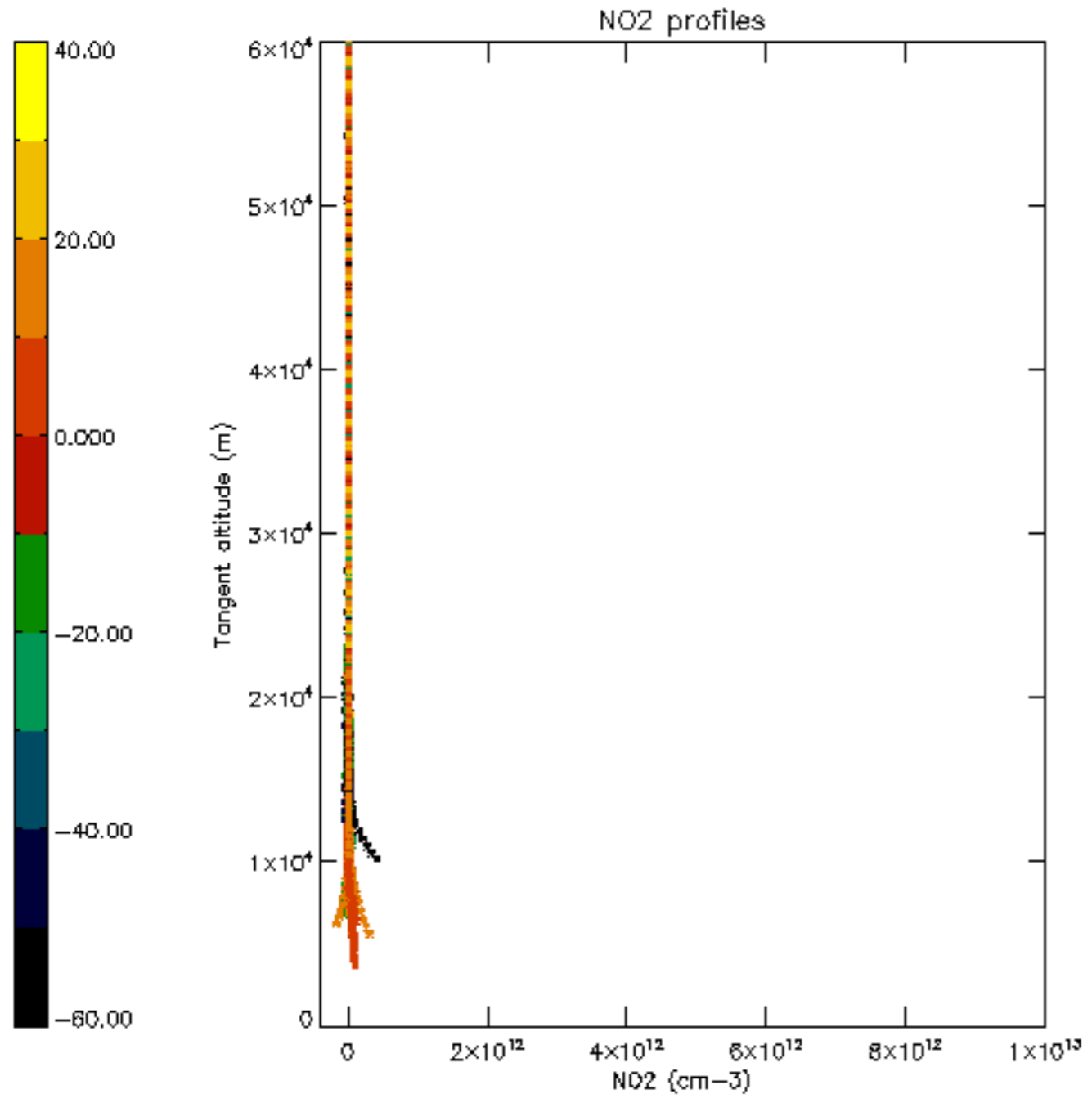


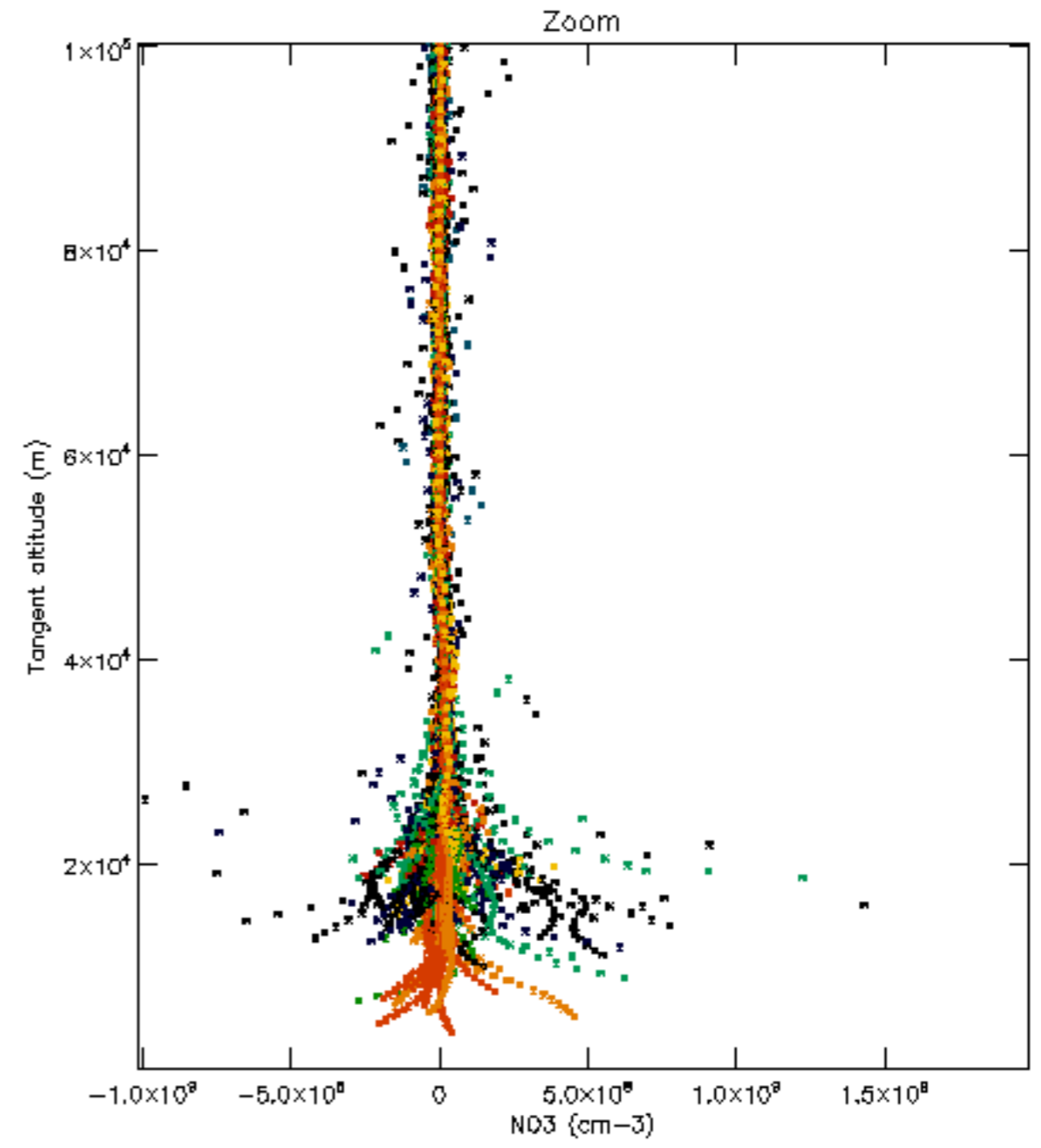
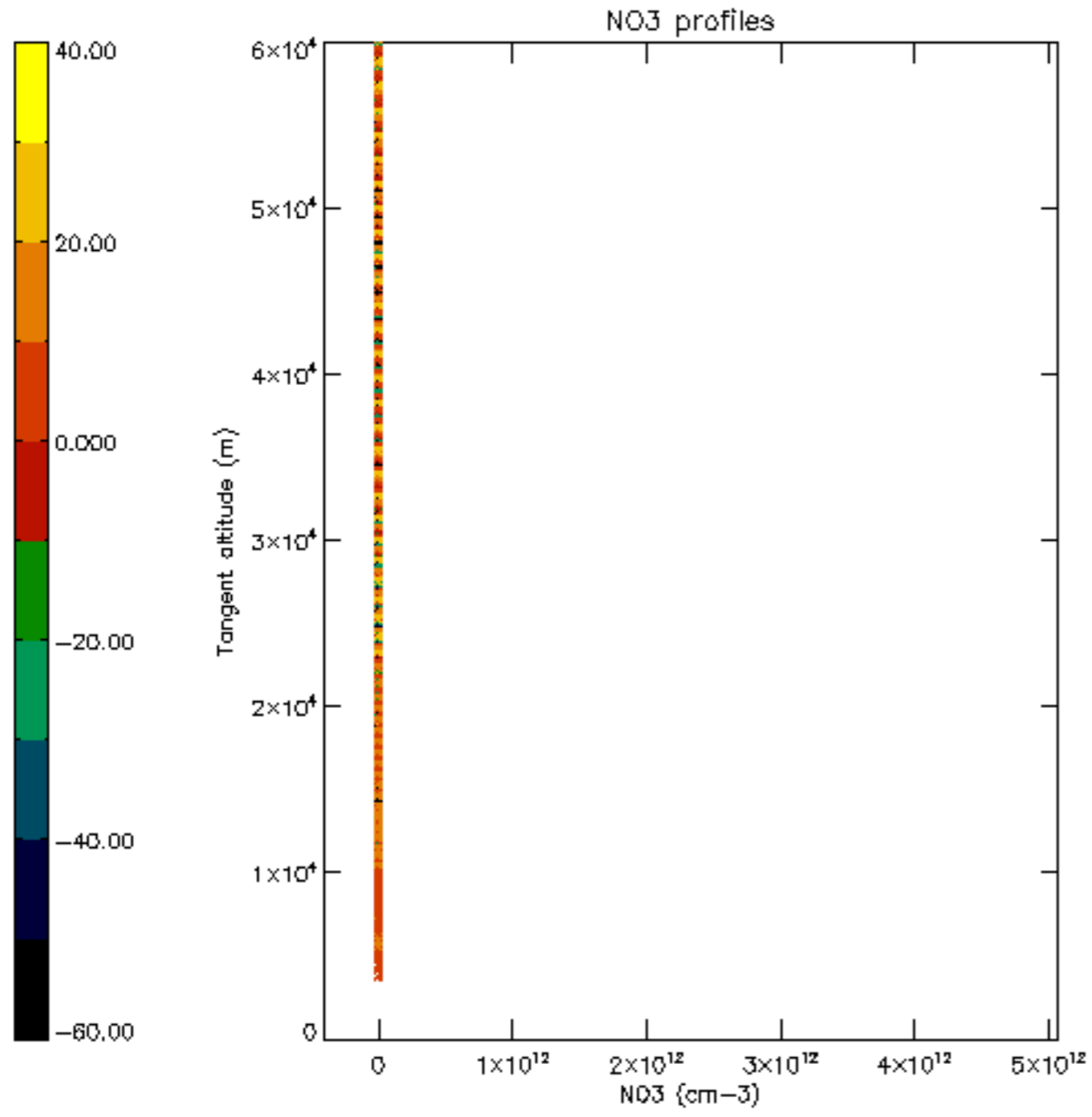


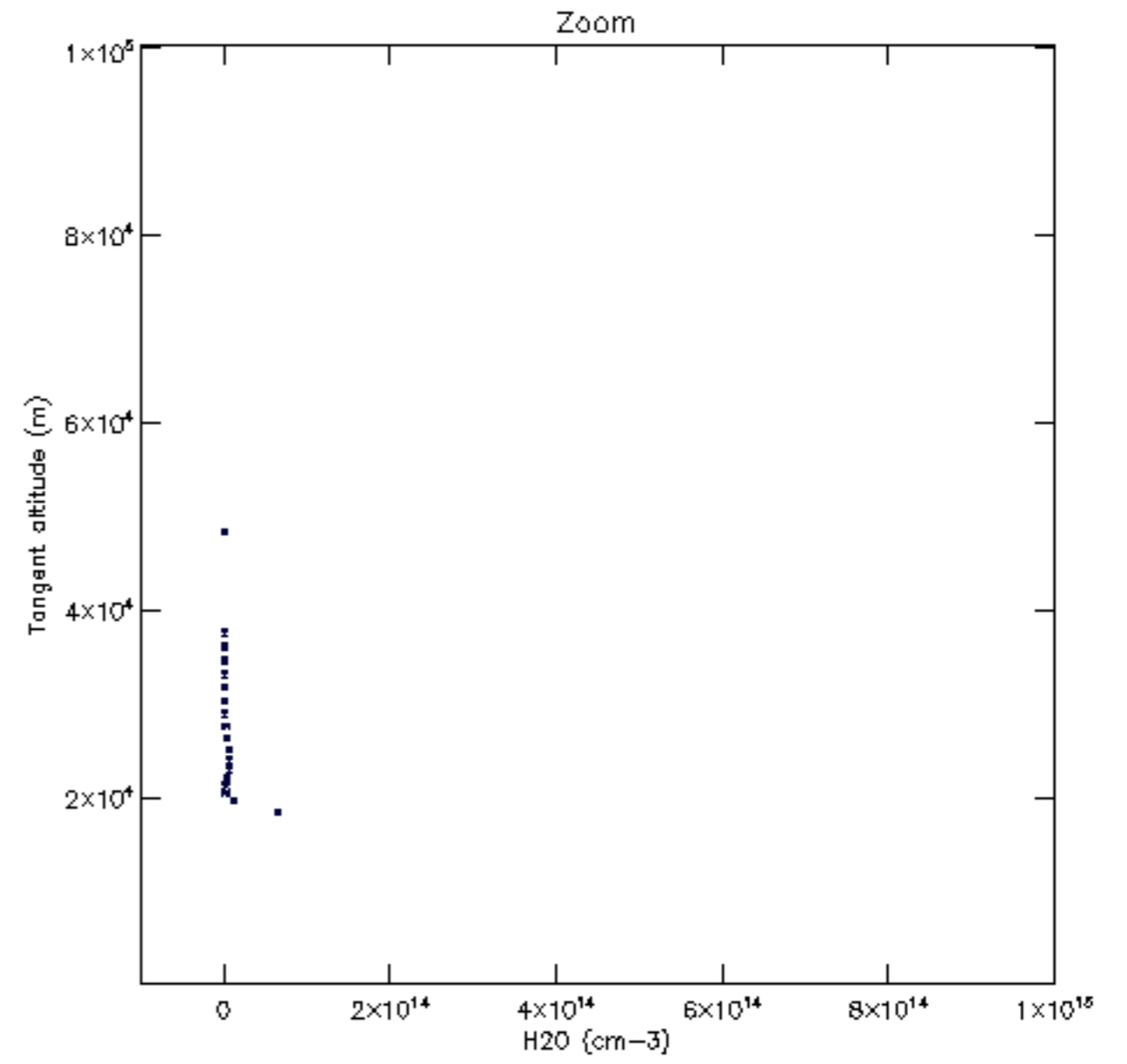
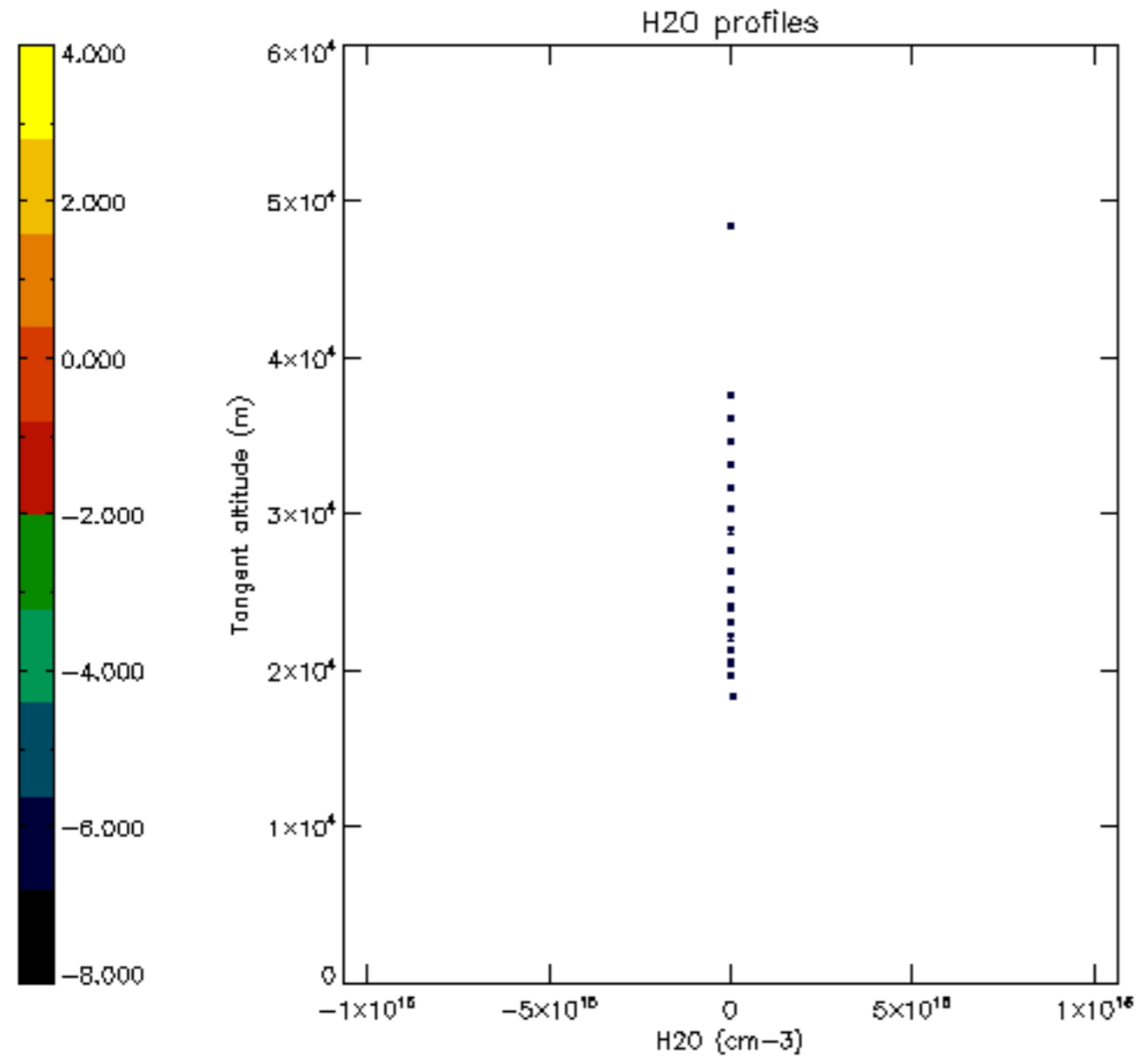


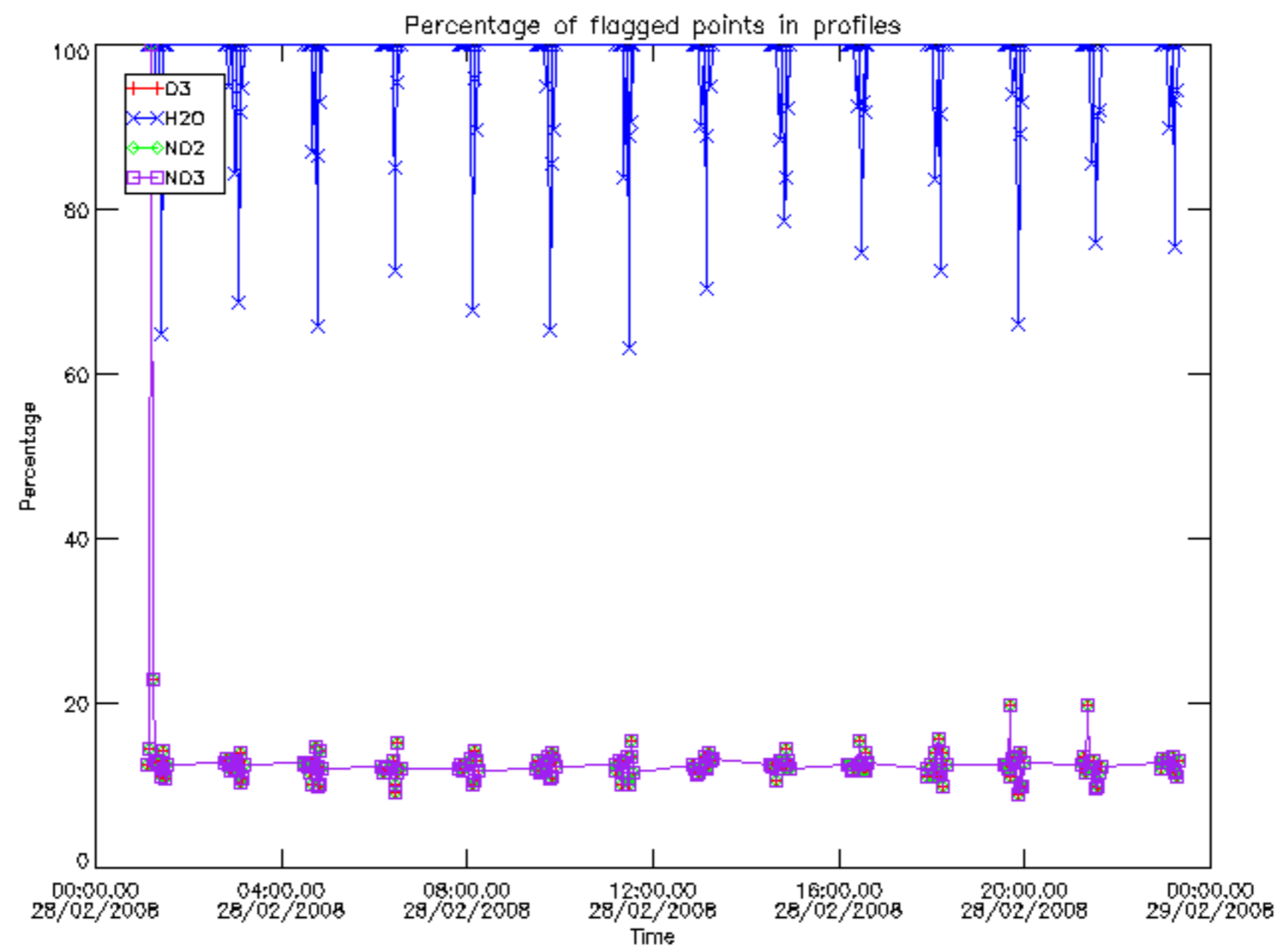




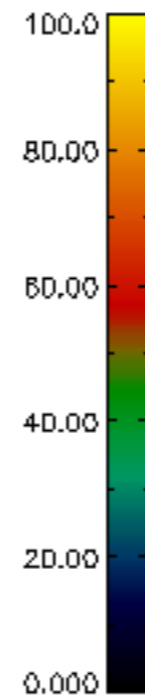
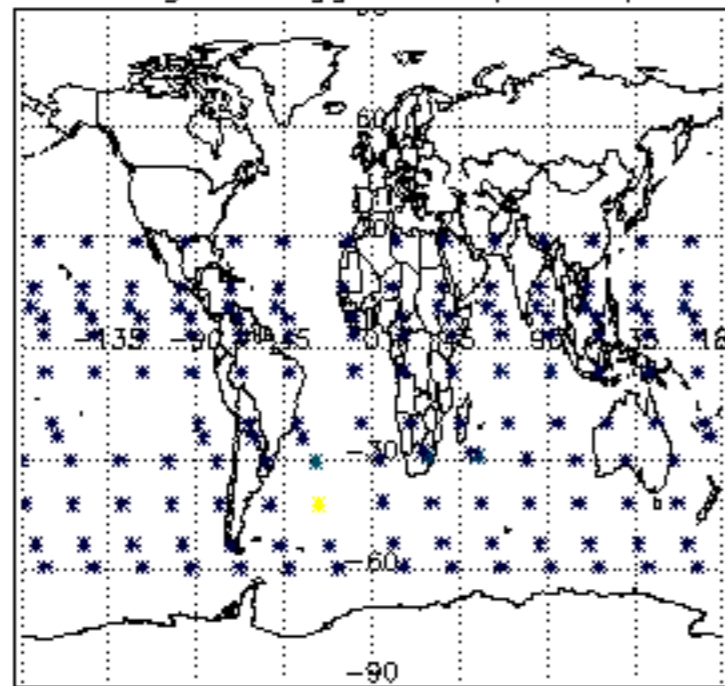




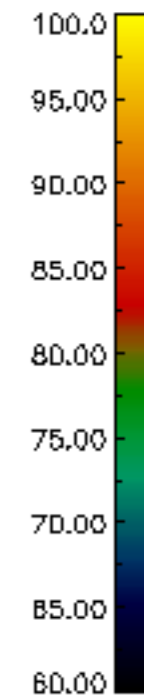
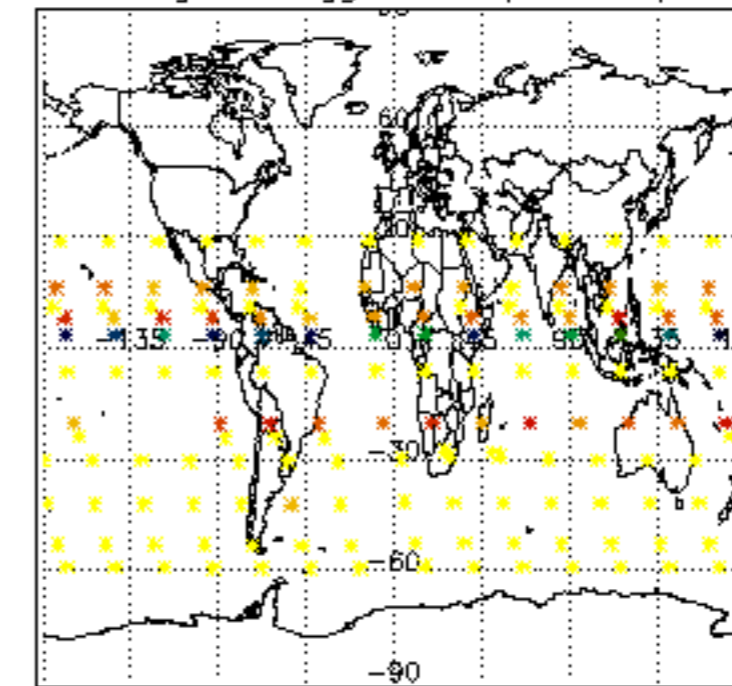




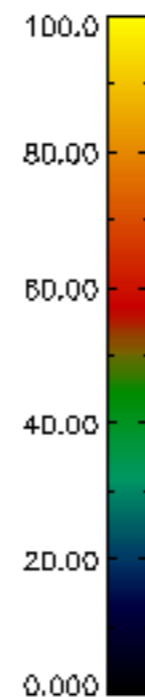
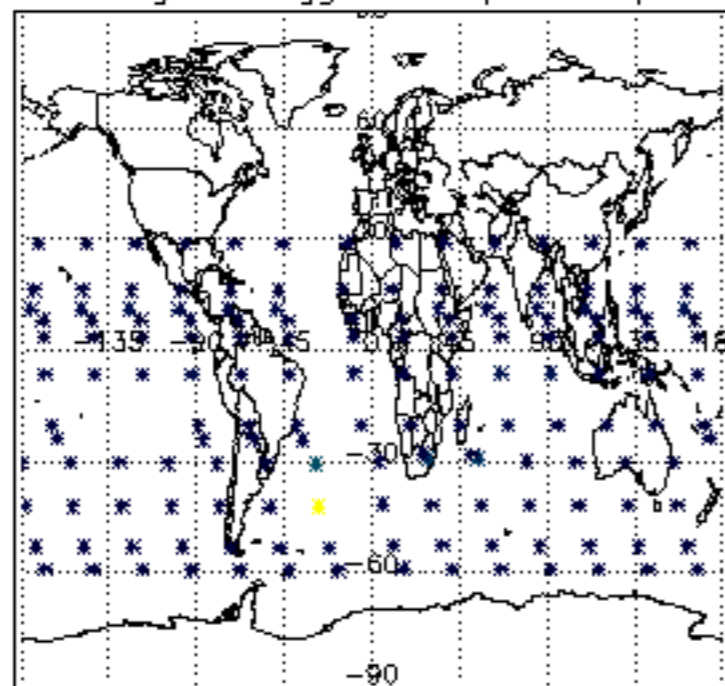
Percentage of flagged data per D3 profile



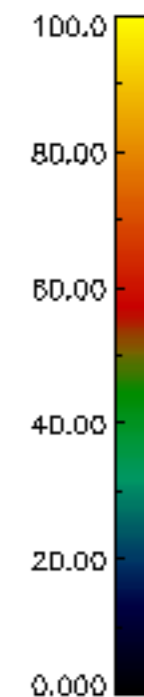
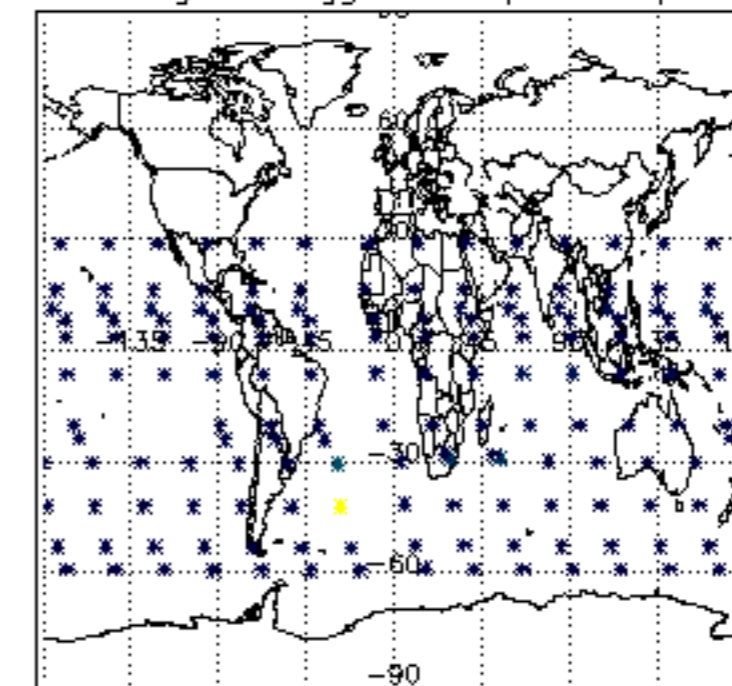
Percentage of flagged data per H2O profile

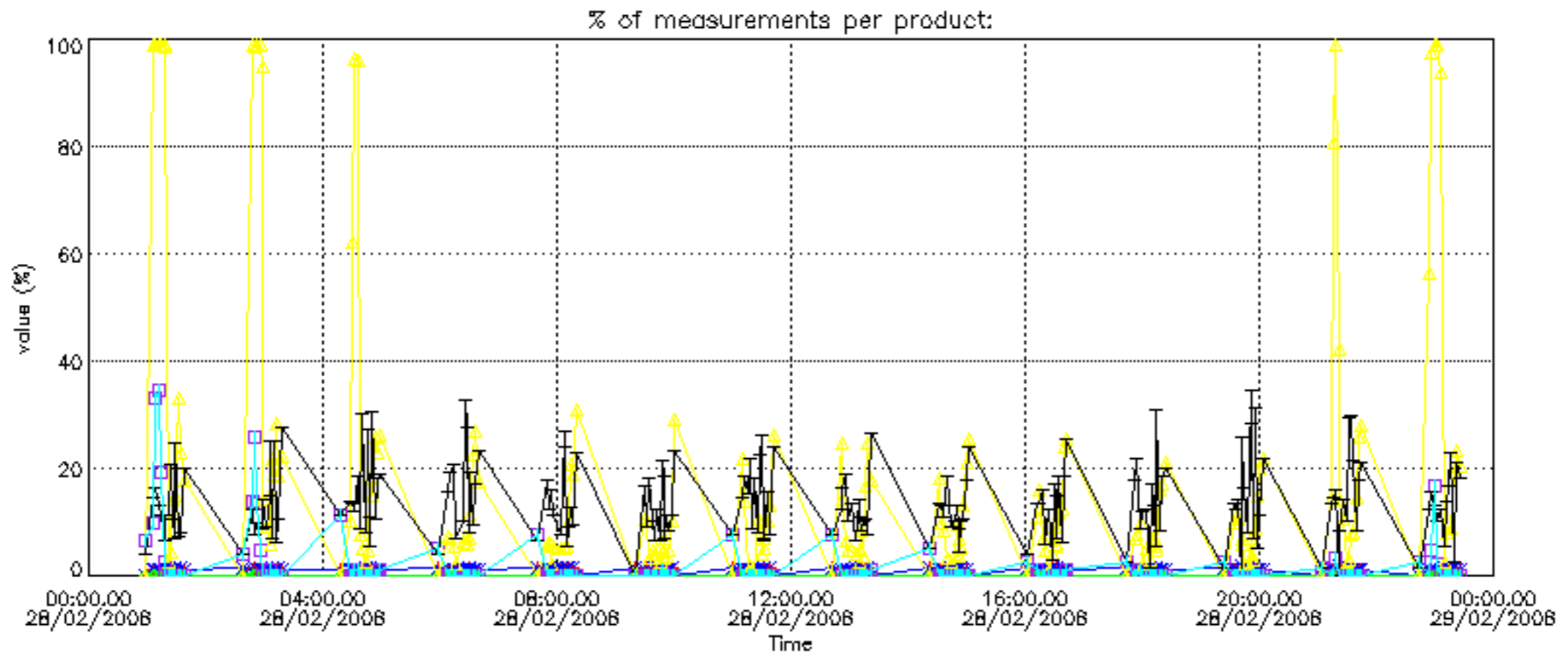


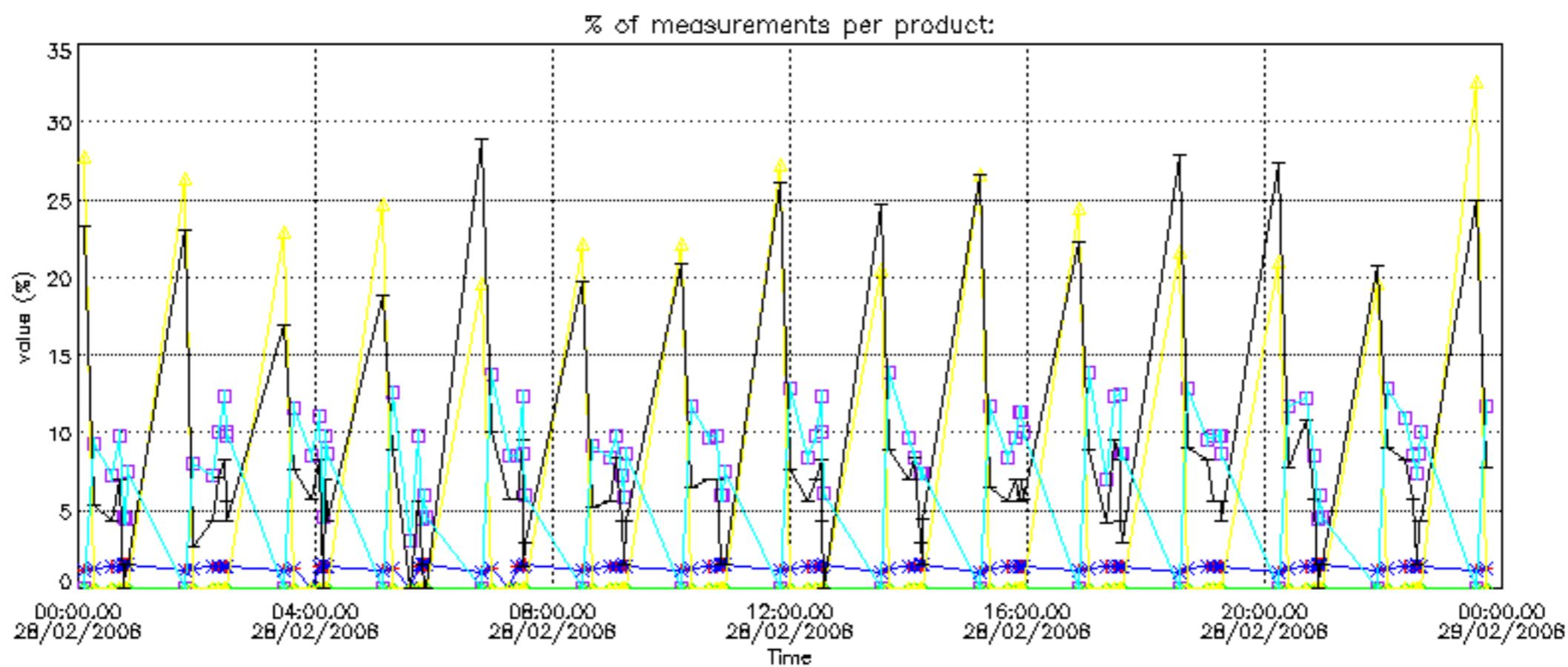
Percentage of flagged data per NO2 profile



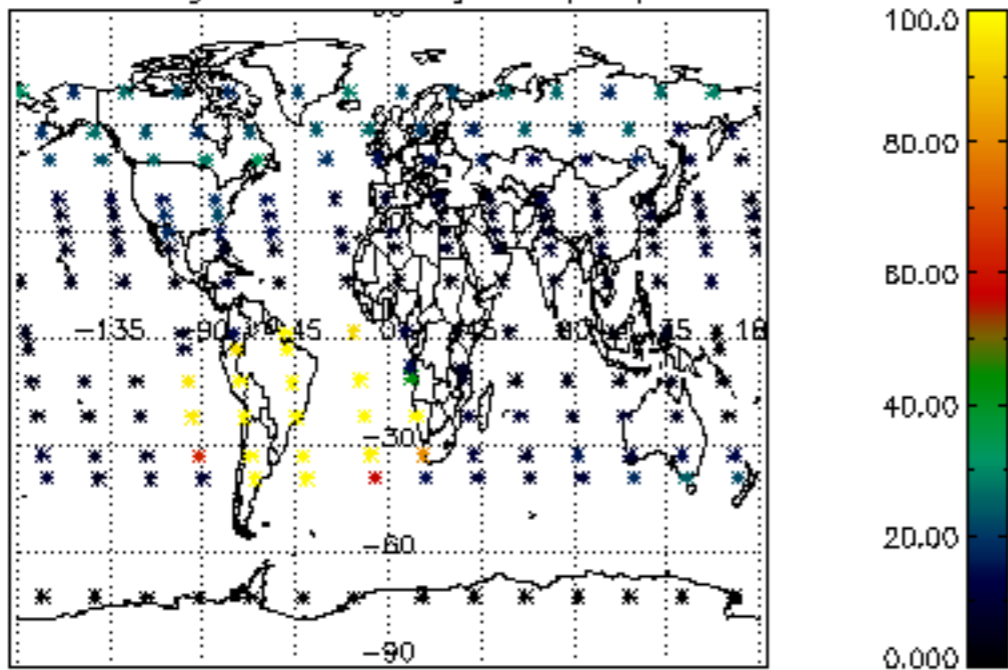
Percentage of flagged data per NO3 profile



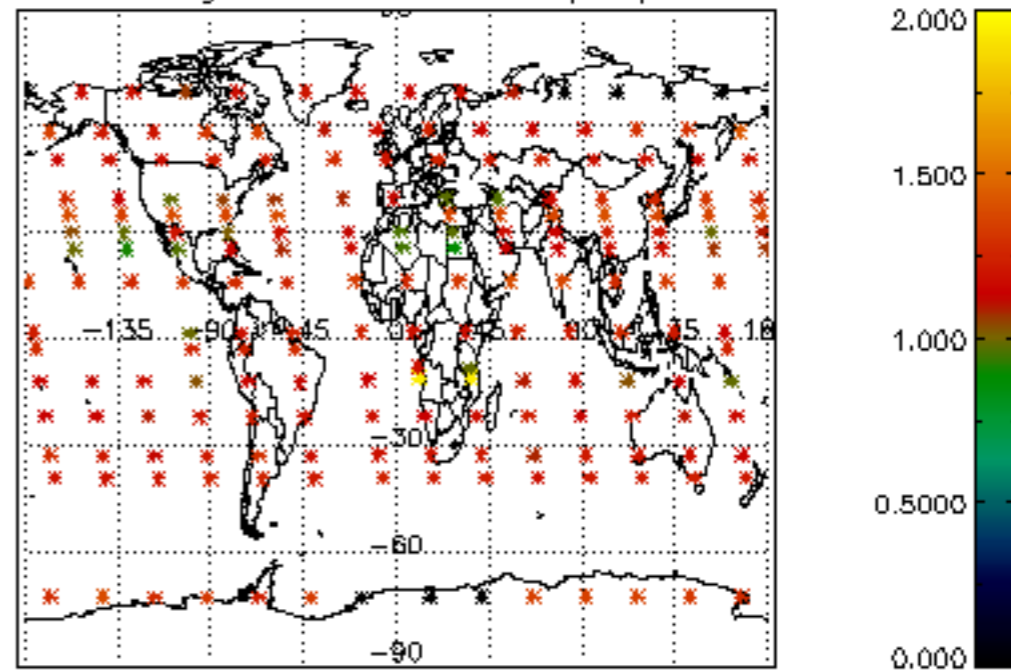




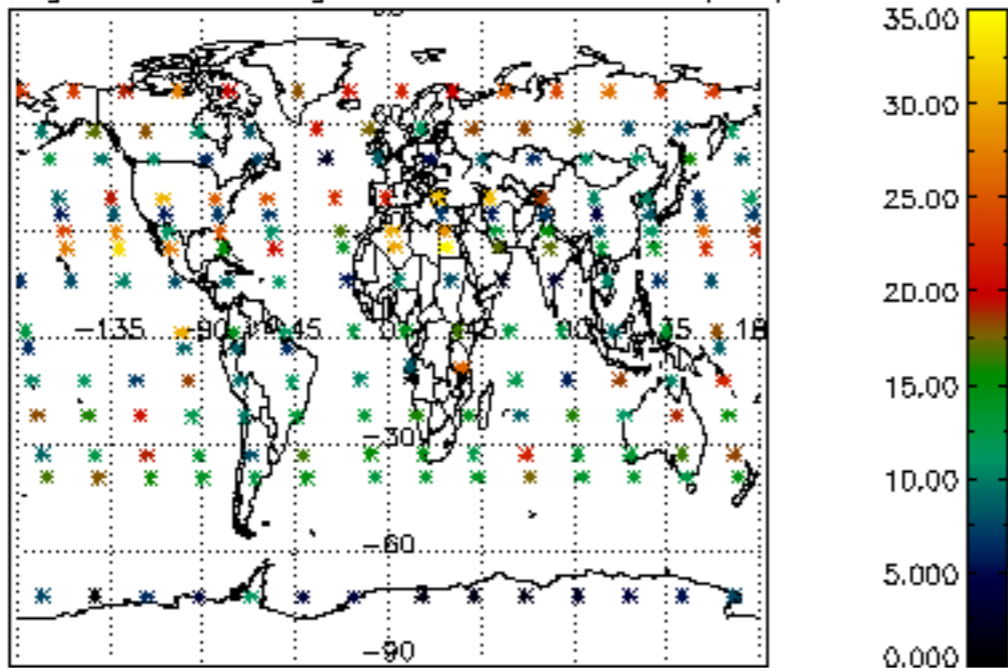
Percentage of cosmic ray hits per profile



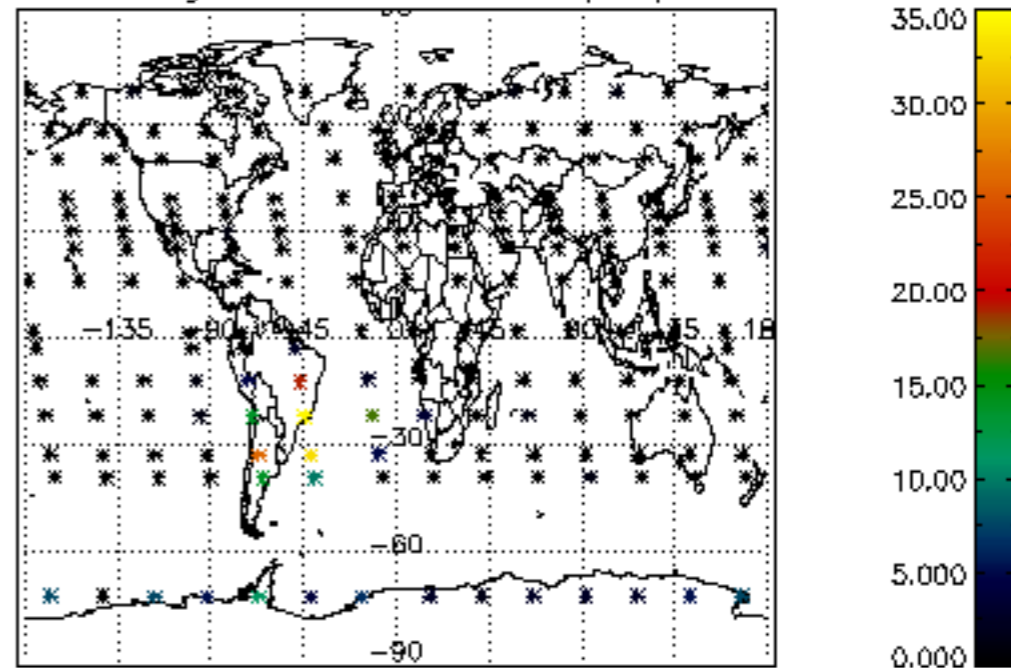
Percentage of datation errors per profile



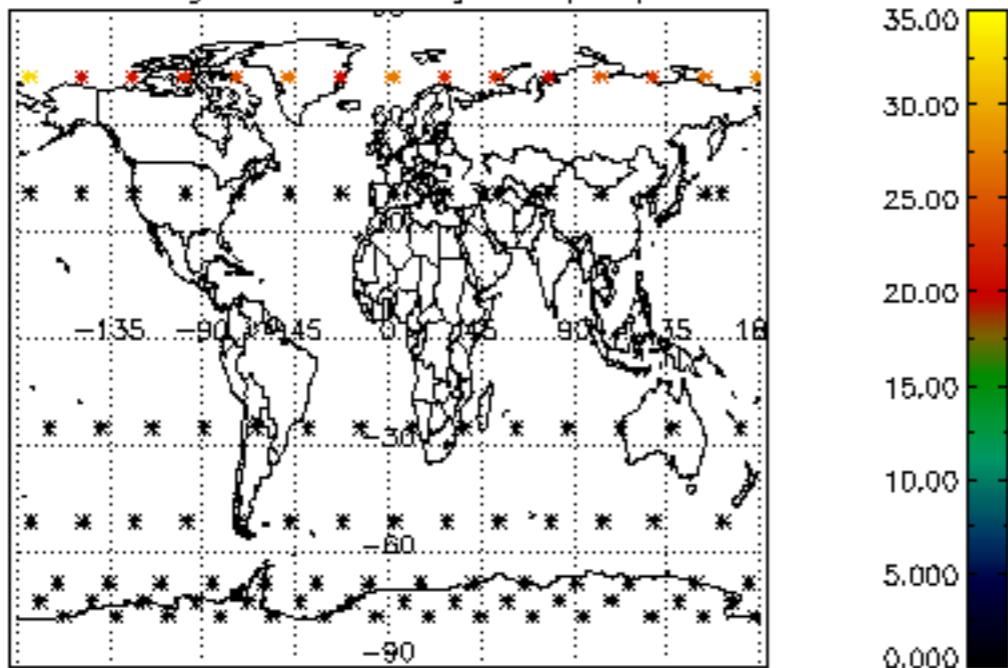
Percentage of star falling outside central band per profile



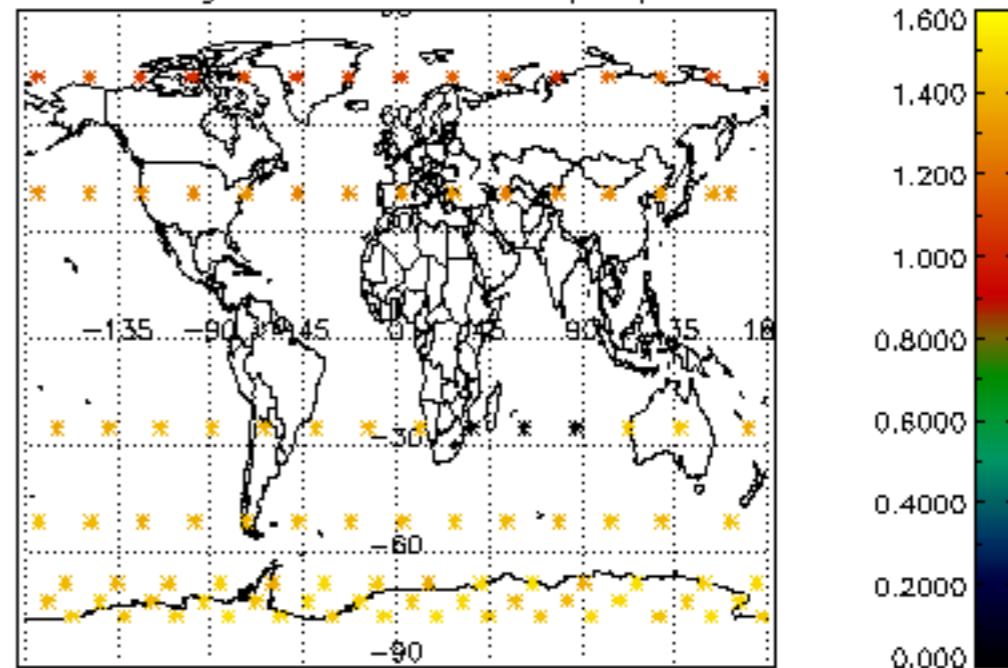
Percentage of saturation errors per profile



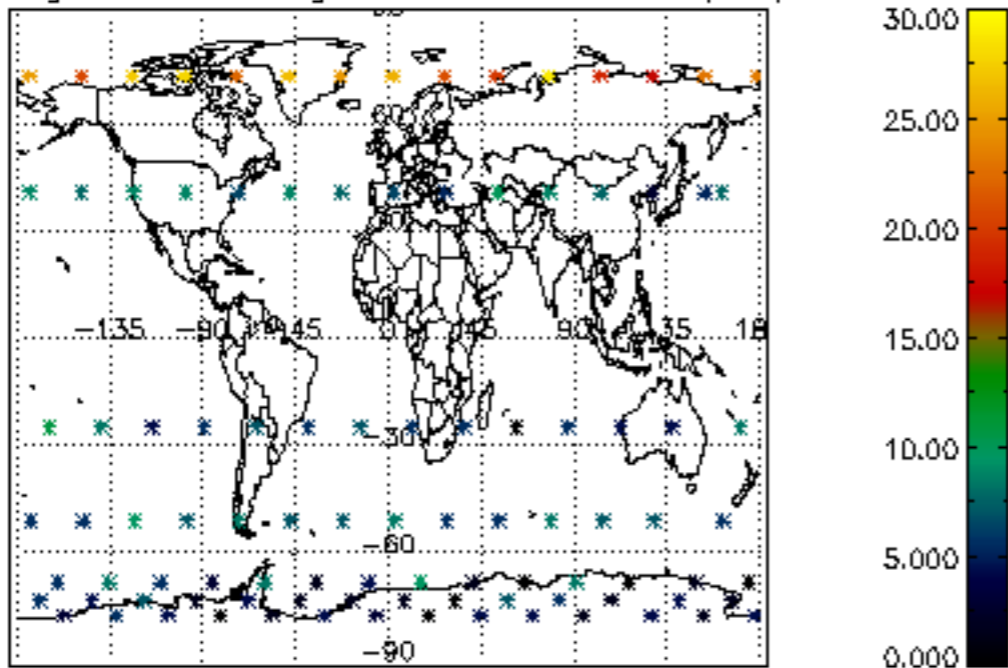
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

