

GOMOS Level 2 Daily Report

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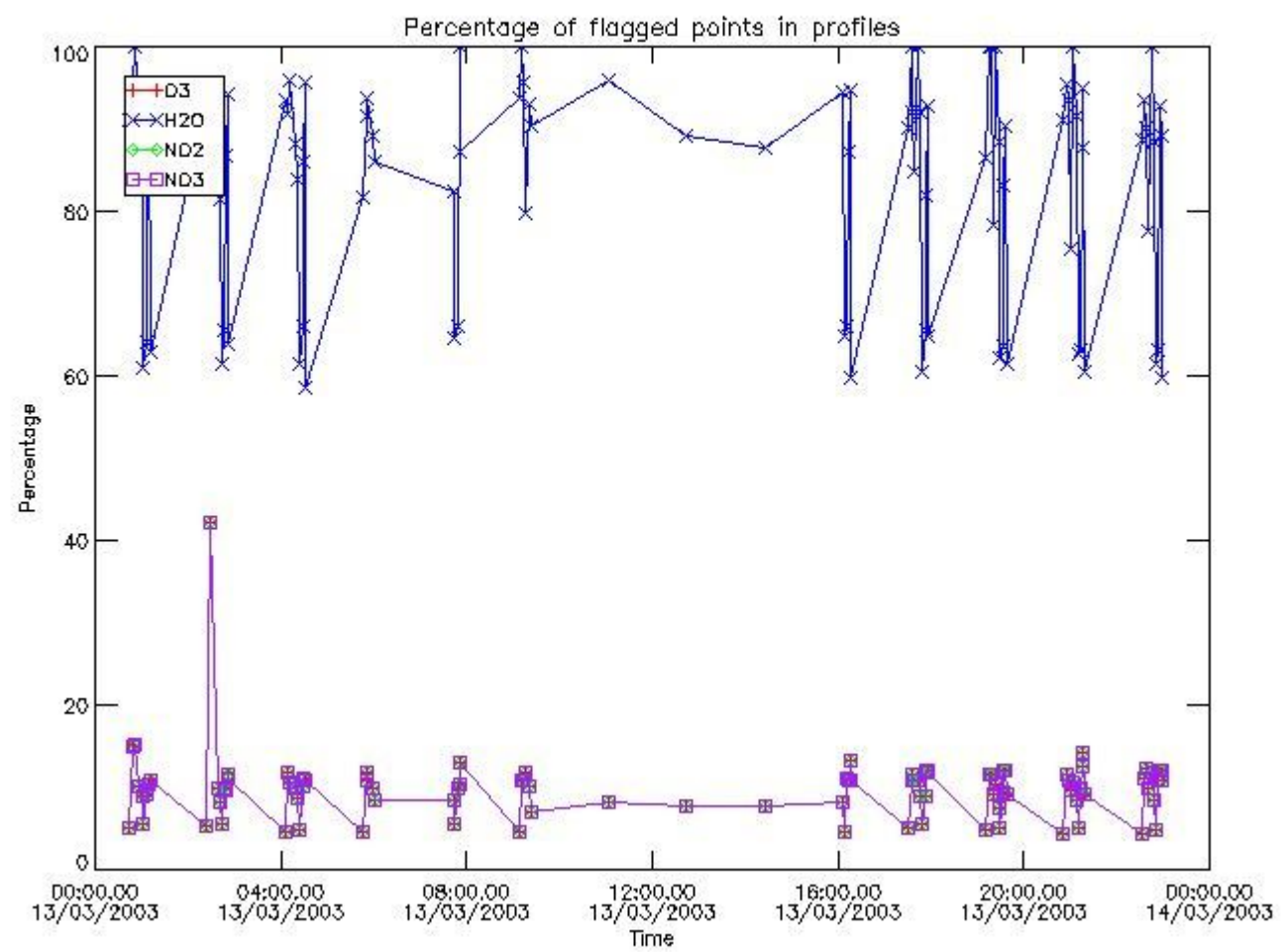
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279	GOM_NL__2PRFIN20030313_221818_000000372014_00344_05408_5948.N1	13-MAR-2003 22:18:18	Bright	36.500	92	53Eps Cyg	2.5000	4500.0	73	5408	No
280	GOM_NL__2PRFIN20030313_222628_000000512014_00344_05408_5949.N1	13-MAR-2003 22:26:28	Twilight	50.500	11	53Alp Aql	0.76500	8000.0	101	5408	No
281	GOM_NL__2PRFIN20030313_223207_000001162014_00344_05408_5950.N1	13-MAR-2003 22:32:07	Dark	116.00	59	55Alp Oph	2.0800	8900.0	232	5408	No
282	GOM_NL__2PRFIN20030313_223626_000000462014_00344_05408_5951.N1	13-MAR-2003 22:36:26	Dark	46.000	155	41Pi Sgr	2.9000	6600.0	92	5408	No
283	GOM_NL__2PRFIN20030313_223825_000000462014_00344_05408_5952.N1	13-MAR-2003 22:38:25	Dark	45.500	57	34Sig Sgr	2.0660	26000.	91	5408	No
284	GOM_NL__2PRFIN20030313_224104_000000522014_00344_05408_5953.N1	13-MAR-2003 22:41:04	Dark	52.000	116	19Del Sgr	2.7000	4100.0	104	5408	No
285	GOM_NL__2PRFIN20030313_224503_000000472014_00344_05408_5954.N1	13-MAR-2003 22:45:03	Dark	47.000	85	Kap Sco	2.4070	28000.	94	5408	No
286	GOM_NL__2PRFIN20030313_224824_000000612014_00345_05409_5923.N1	13-MAR-2003 22:48:24	Dark	61.000	75	26Eps Sco	2.2910	4250.0	122	5409	No
287	GOM_NL__2PRFIN20030313_225038_000001072014_00345_05409_5924.N1	13-MAR-2003 22:50:38	Dark	107.00	16	21Alp Sco	1.0200	3000.0	214	5409	No
288	GOM_NL__2PRFIN20030313_225430_000000472014_00345_05409_5925.N1	13-MAR-2003 22:54:30	Dark	46.500	4	Alp1Cen	-0.010000	5800.0	93	5409	No
289	GOM_NL__2PRFIN20030313_225544_000000432014_00345_05409_5926.N1	13-MAR-2003 22:55:44	Dark	42.500	10	Bet Cen	0.61000	28000.	85	5409	No
290	GOM_NL__2PRFIN20030313_225747_000000422014_00345_05409_5927.N1	13-MAR-2003 22:57:47	Dark	42.000	12	Alp1Cru	0.77500	30000.	84	5409	No
291	GOM_NL__2PRFIN20030313_225902_000000472014_00345_05409_5928.N1	13-MAR-2003 22:59:02	Dark	46.500	26	Gam Cru	1.6240	2900.0	93	5409	No
292	GOM_NL__2PRFIN20030313_230050_000000642014_00345_05409_5929.N1	13-MAR-2003 23:00:50	Straylight	63.500	54	5The Cen	2.0550	4500.0	127	5409	No
293	GOM_NL__2PRFIN20030313_230301_000000392014_00345_05409_5930.N1	13-MAR-2003 23:03:01	Straylight	39.000	113	Mu Vel	2.6920	5000.0	78	5409	No
294	GOM_NL__2PRFIN20030313_230850_000000532014_00345_05409_5931.N1	13-MAR-2003 23:08:50	Straylight	52.500	106	9Bet Crv	2.6480	5600.0	105	5409	No
295	GOM_NL__2PRFIN20030313_231115_000000502014_00345_05409_5932.N1	13-MAR-2003 23:11:15	Straylight	50.000	100	4Gam Crv	2.5800	13100.	100	5409	No
296	GOM_NL__2PRFIN20030313_231418_000001082014_00345_05409_5933.N1	13-MAR-2003 23:14:18	Bright	107.50	15	67Alp Vir	0.97600	28000.	215	5409	No
297	GOM_NL__2PRFIN20030313_231814_000000652014_00345_05409_5934.N1	13-MAR-2003 23:18:14	Bright	64.500	121	29Gam Vir	2.7400	7200.0	129	5409	No
298	GOM_NL__2PRFIN20030313_232042_000000382014_00345_05409_5935.N1	13-MAR-2003 23:20:42	Bright	37.500	22	32Alp Leo	1.3600	15200.	75	5409	No
299	GOM_NL__2PRFIN20030313_232300_000000402014_00345_05409_5936.N1	13-MAR-2003 23:23:00	Bright	39.500	51	41Gam1Leo	2.0100	4500.0	79	5409	No
300	GOM_NL__2PRFIN20030313_232534_000000872014_00345_05409_5937.N1	13-MAR-2003 23:25:34	Bright	87.000	138	47Eps Vir	2.8280	4700.0	174	5409	No
301	GOM_NL__2PRFIN20030313_233057_000000412014_00345_05409_5938.N1	13-MAR-2003 23:30:57	Bright	40.500	174	52Psi UMa	3.0040	4400.0	81	5409	No
302	GOM_NL__2PRFIN20030313_233405_000000392014_00345_05409_5939.N1	13-MAR-2003 23:34:05	Bright	38.500	82	48Bet UMa	2.3650	10600.	77	5409	No
303	GOM_NL__2PRFIN20030313_233533_000000392014_00345_05409_5940.N1	13-MAR-2003 23:35:33	Bright	38.500	36	50Alp UMa	1.8000	6300.0	77	5409	No
304	GOM_NL__2PRFIN20030313_233725_000000482014_00345_05409_5941.N1	13-MAR-2003 23:37:25	Bright	47.500	32	77Eps UMa	1.7630	11000.	95	5409	No
305	GOM_NL__2PRFIN20030313_233936_000000572014_00345_05409_5942.N1	13-MAR-2003 23:39:36	Bright	57.000	39	85Eta UMa	1.8540	24000.	114	5409	No
306	GOM_NL__2PRFIN20030313_234248_000000362014_00345_05409_5943.N1	13-MAR-2003 23:42:48	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	5409	No
307	GOM_NL__2PRFIN20030313_234654_000000482014_00345_05409_5944.N1	13-MAR-2003 23:46:54	Bright	48.000	119	14Eta Dra	2.7270	4700.0	96	5409	No
308	GOM_NL__2PRFIN20030313_235033_000000352014_00345_05409_5945.N1	13-MAR-2003 23:50:33	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	5409	No
309	GOM_NL__2PRFIN20030313_235241_000000532014_00345_05409_5946.N1	13-MAR-2003 23:52:41	Bright	52.500	69	33Gam Dra	2.2310	3800.0	105	5409	No
310	GOM_NL__2PRFIN20030313_235540_000000372014_00345_05409_5947.N1	13-MAR-2003 23:55:40	Bright	37.000	19	50Alp Cyg	1.2460	10500.	74	5409	No
311	GOM_NL__2PRFIN20030313_235714_000000382014_00345_05409_5948.N1	13-MAR-2003 23:57:14	Bright	38.000	66	37Gam Cyg	2.2080	5900.0	76	5409	No
312	GOM_NL__2PRFIN20030313_235854_000000352014_00345_05409_5949.N1	13-MAR-2003 23:58:54	Bright	35.000	92	53Eps Cyg	2.5000	4500.0	70	5409	No

3. Quality information per product

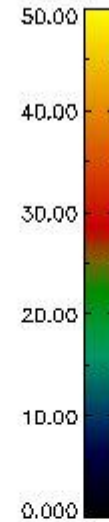
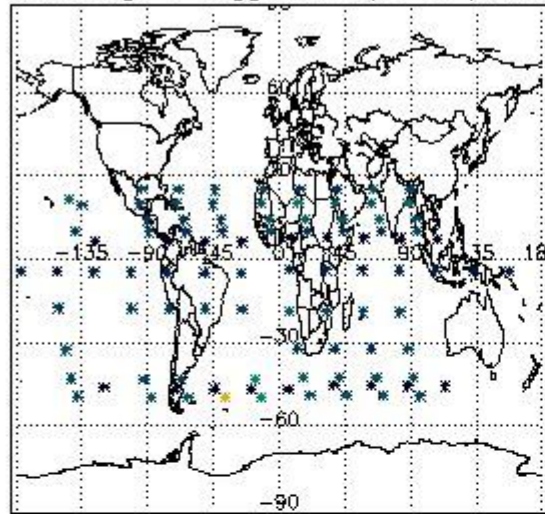
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

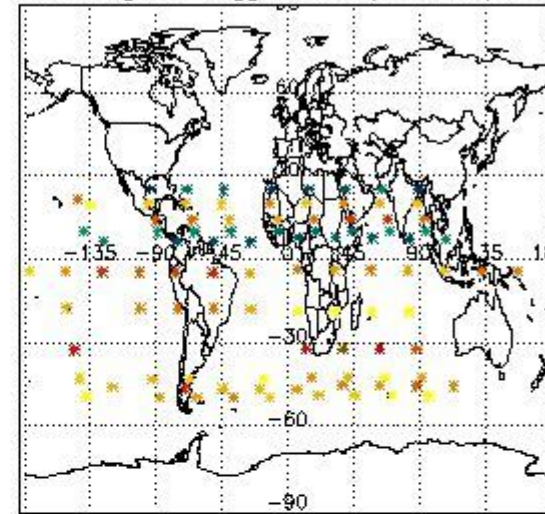


3.2 Plot quality information per product (world map)

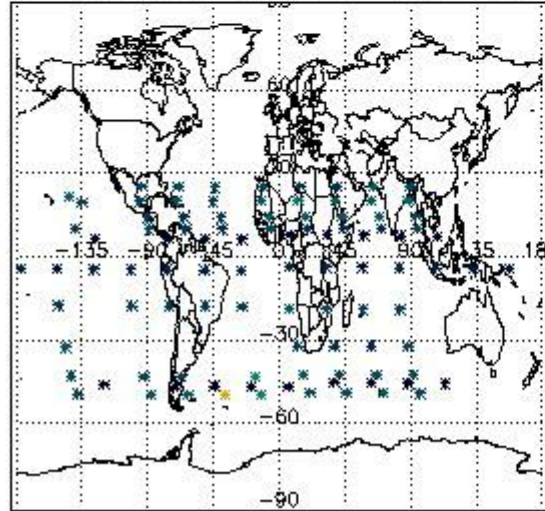
Percentage of flagged data per O3 profile



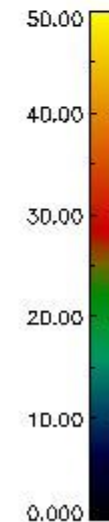
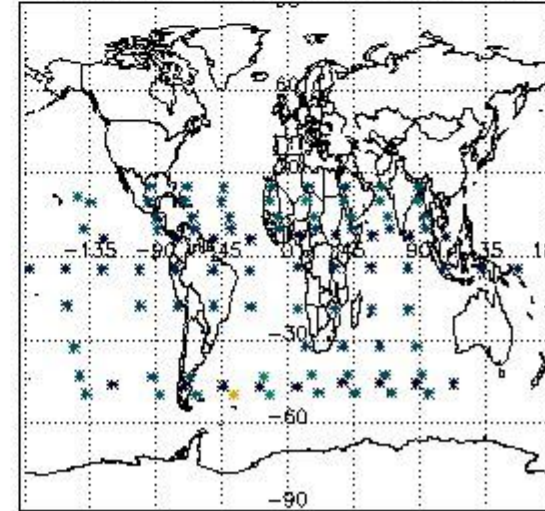
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

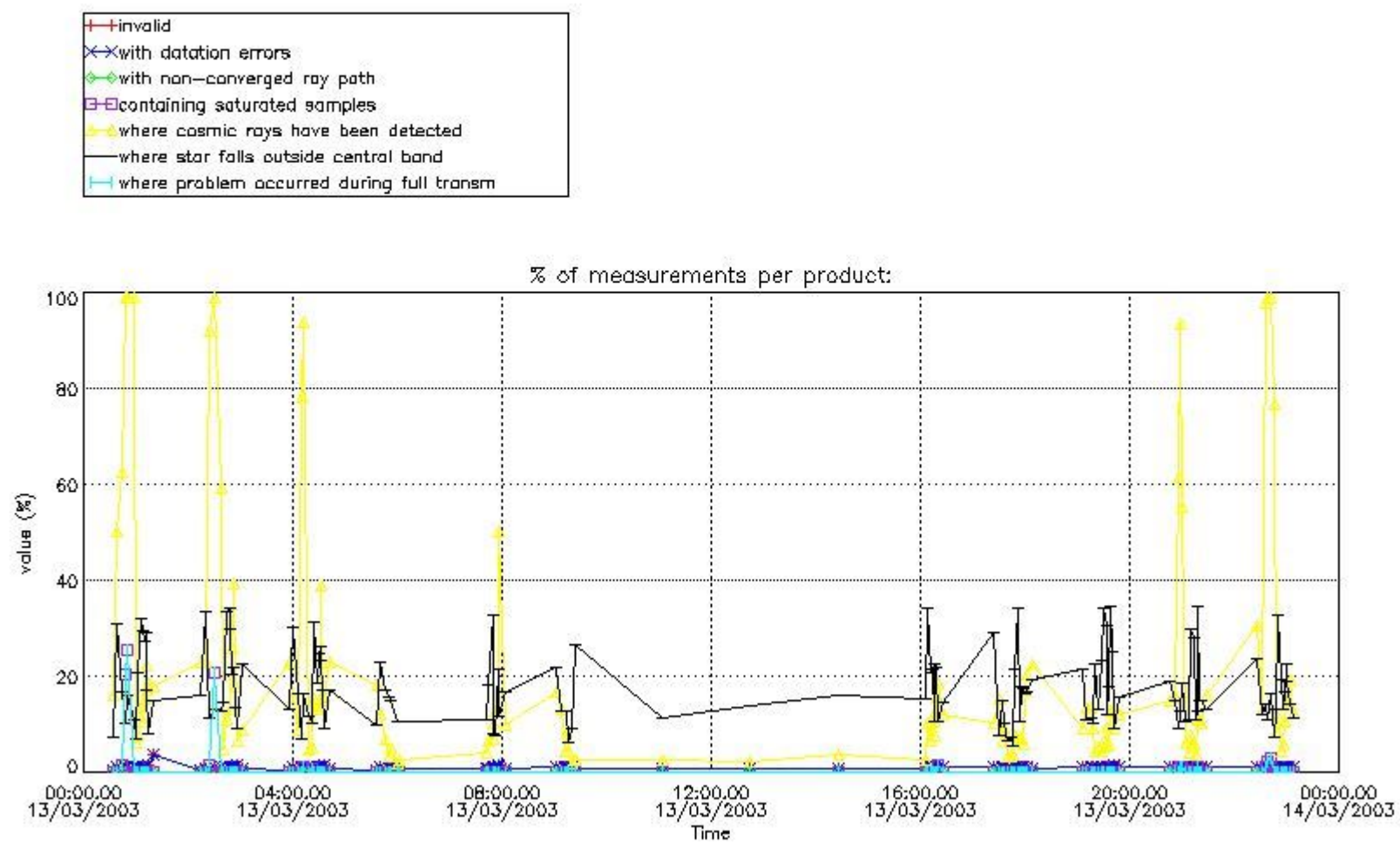


4. Level 1 quality information per product

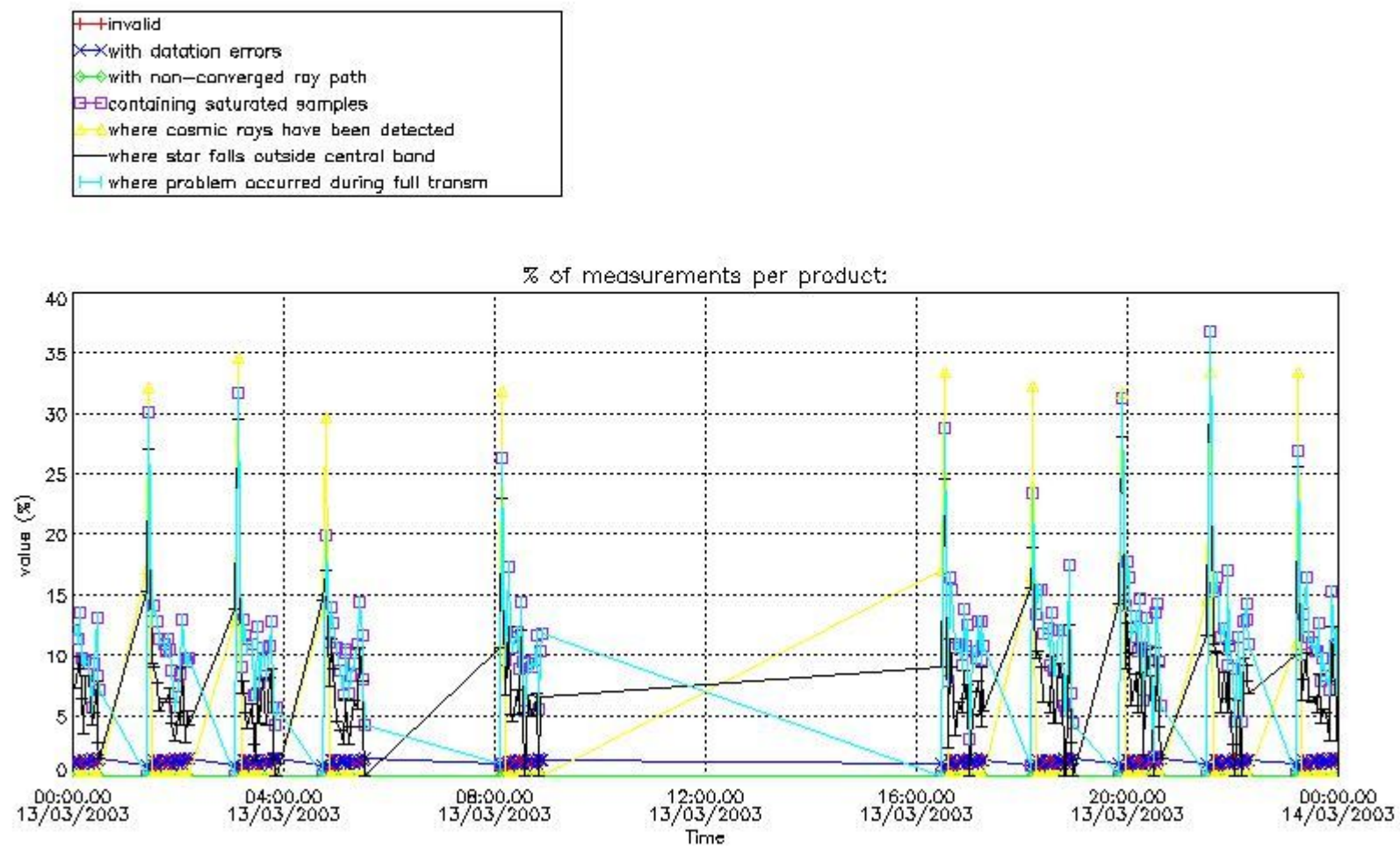
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



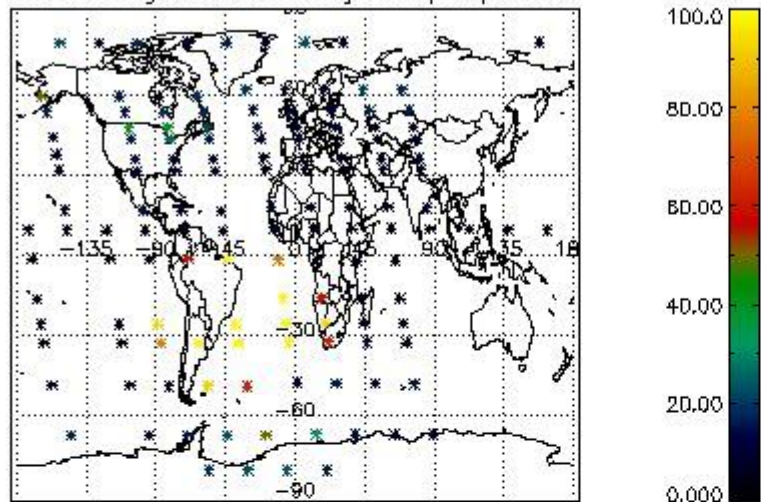
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



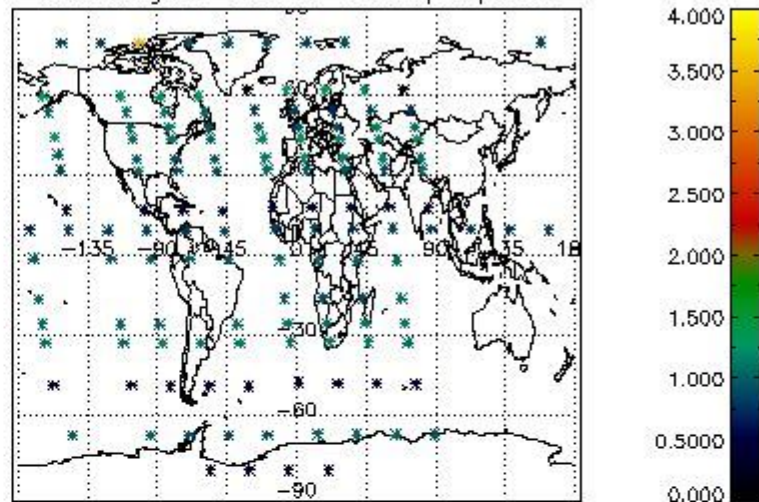
4.2 Plot quality information per product coming from level 1b processing (world map)

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

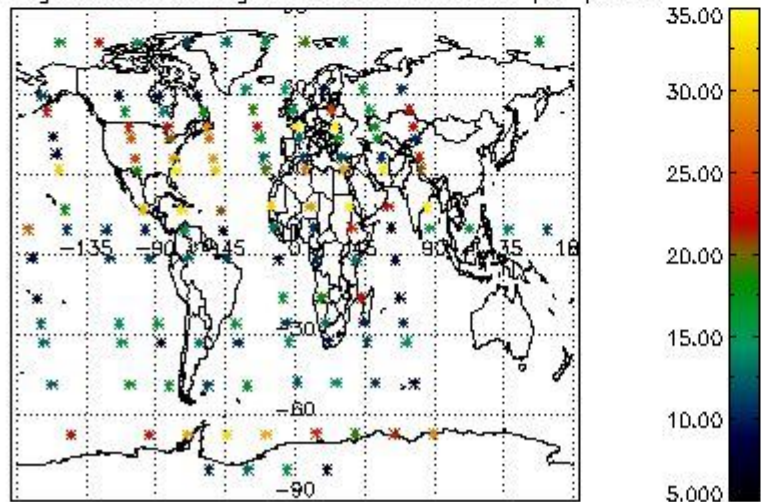
Percentage of cosmic ray hits per profile



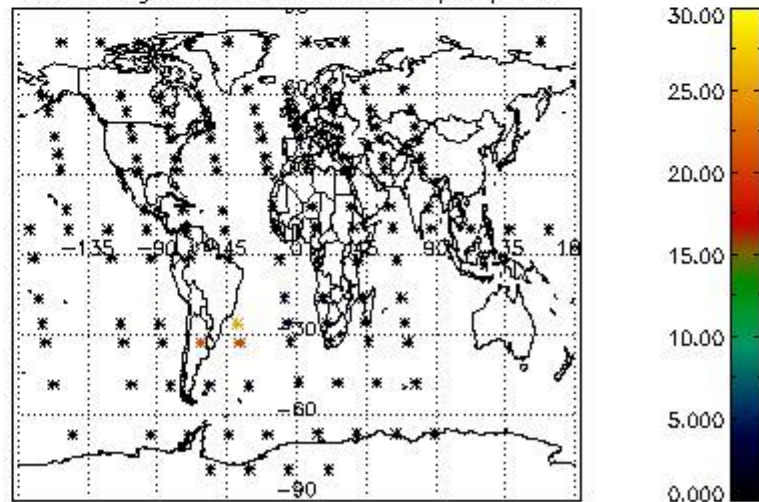
Percentage of datation errors per profile



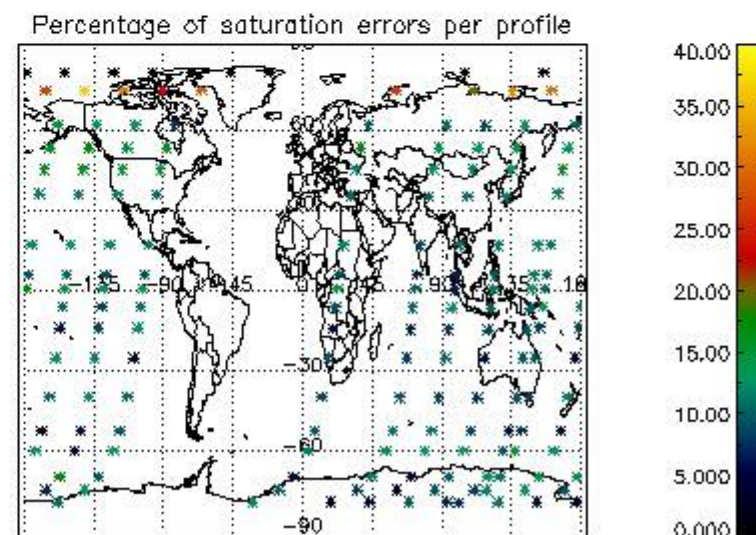
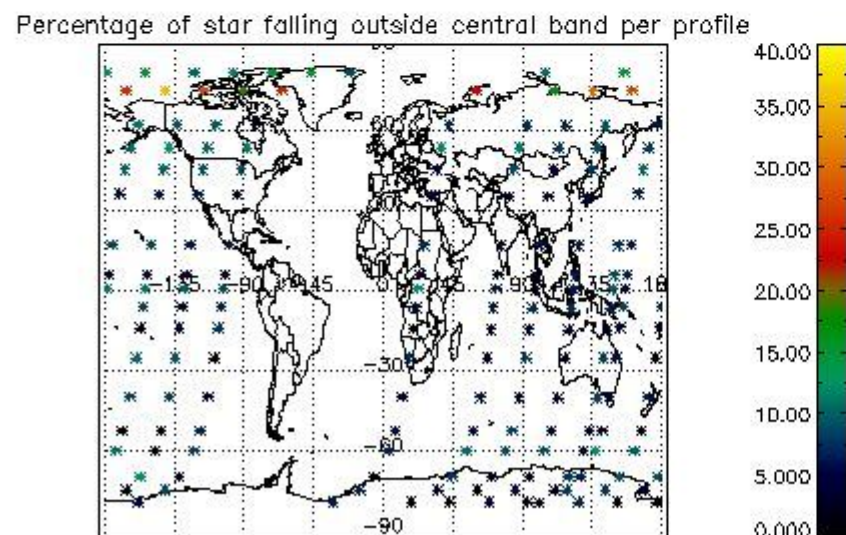
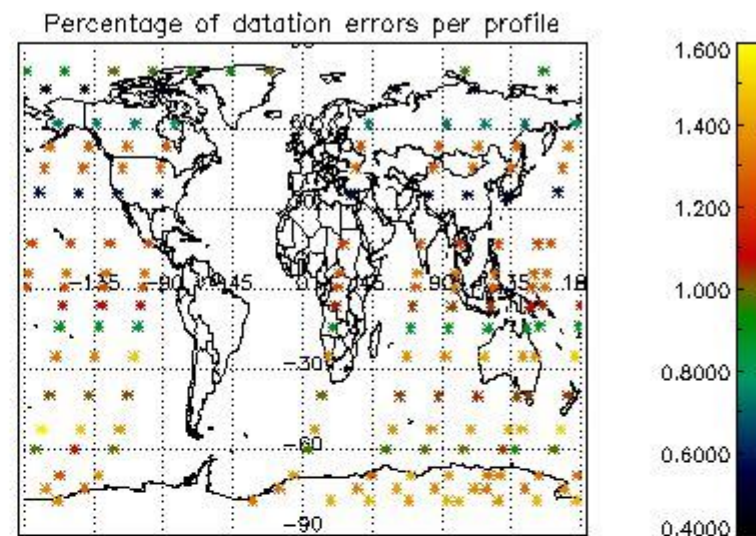
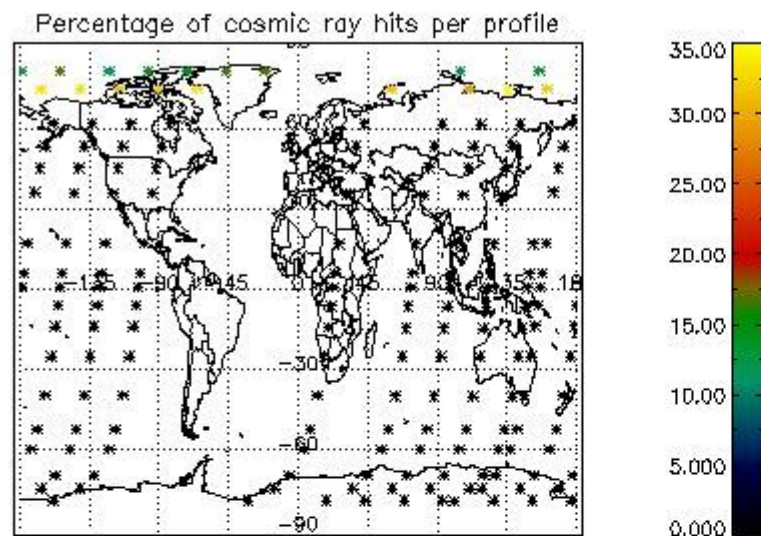
Percentage of star falling outside central band per profile



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

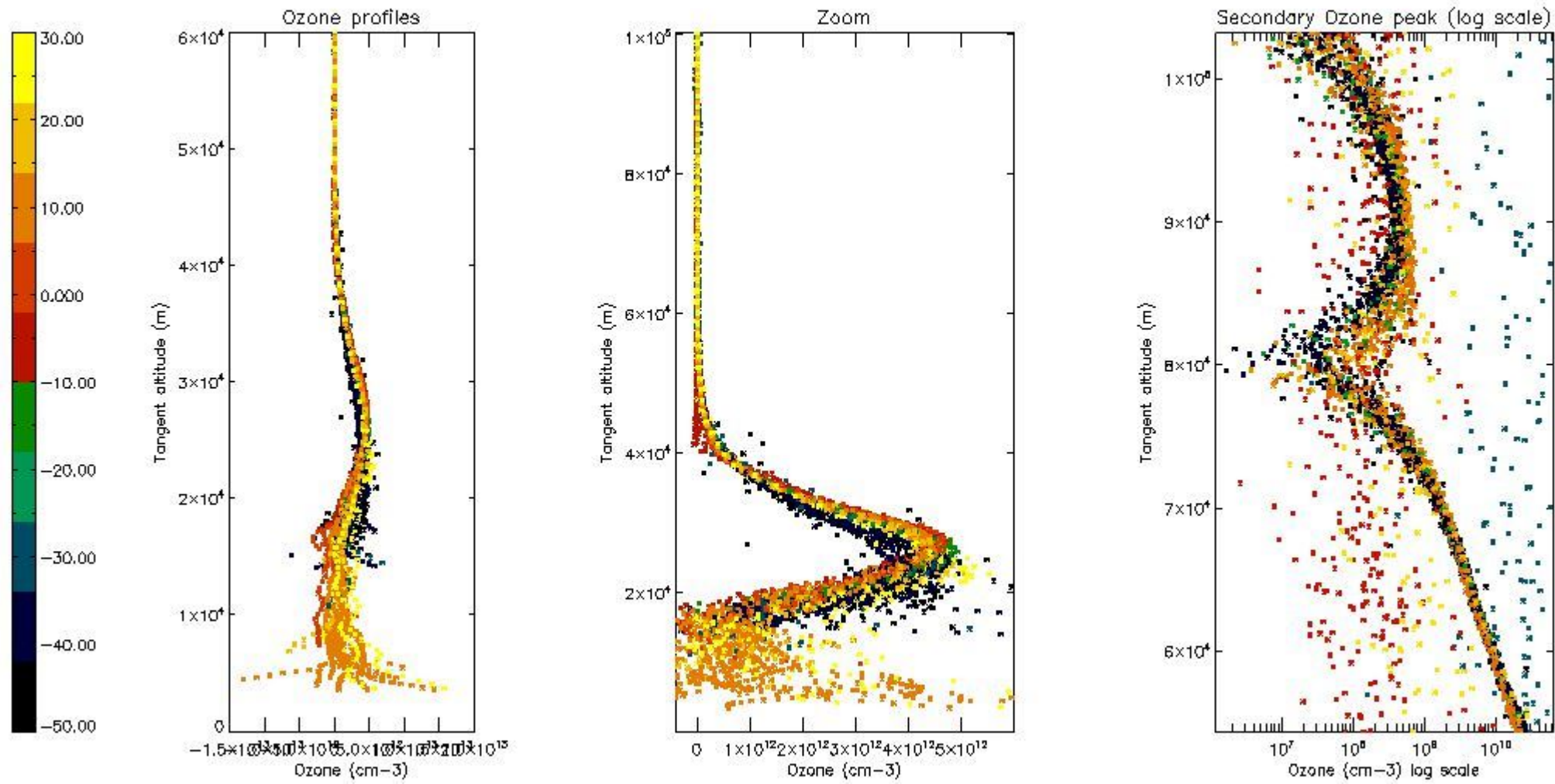
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	36
STD < 20	20

STD < 10	17
STD < 5	12

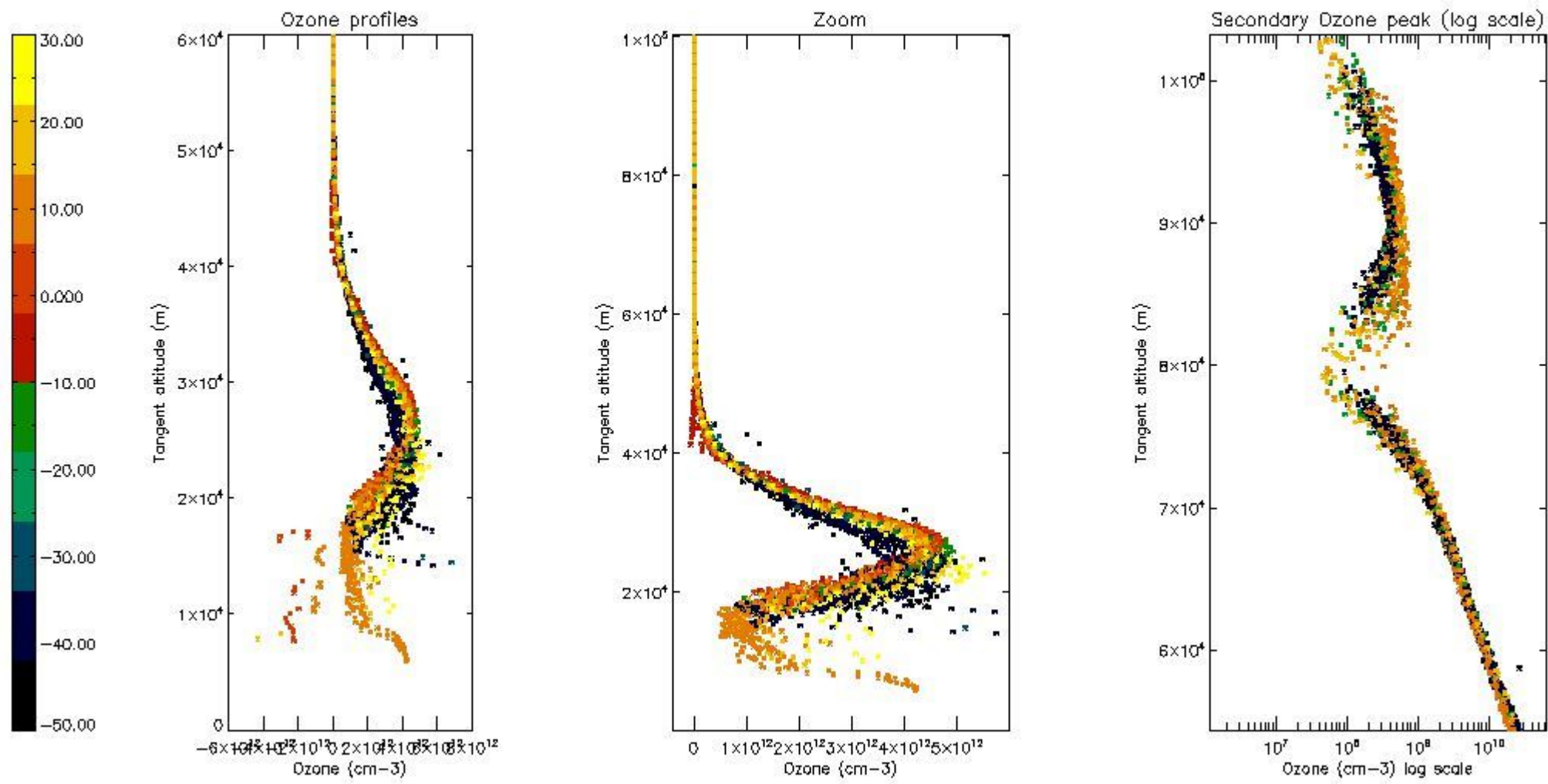
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



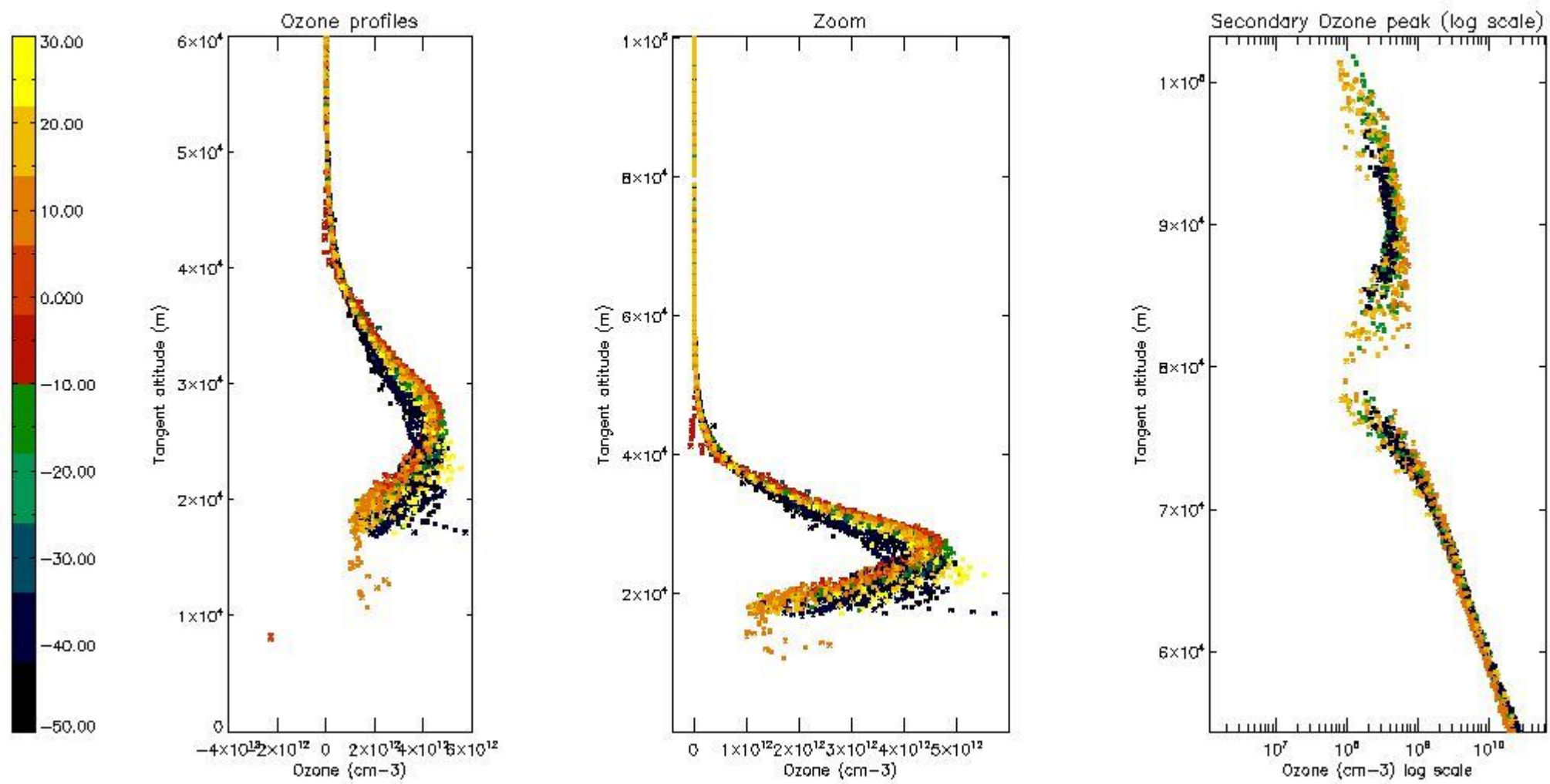
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



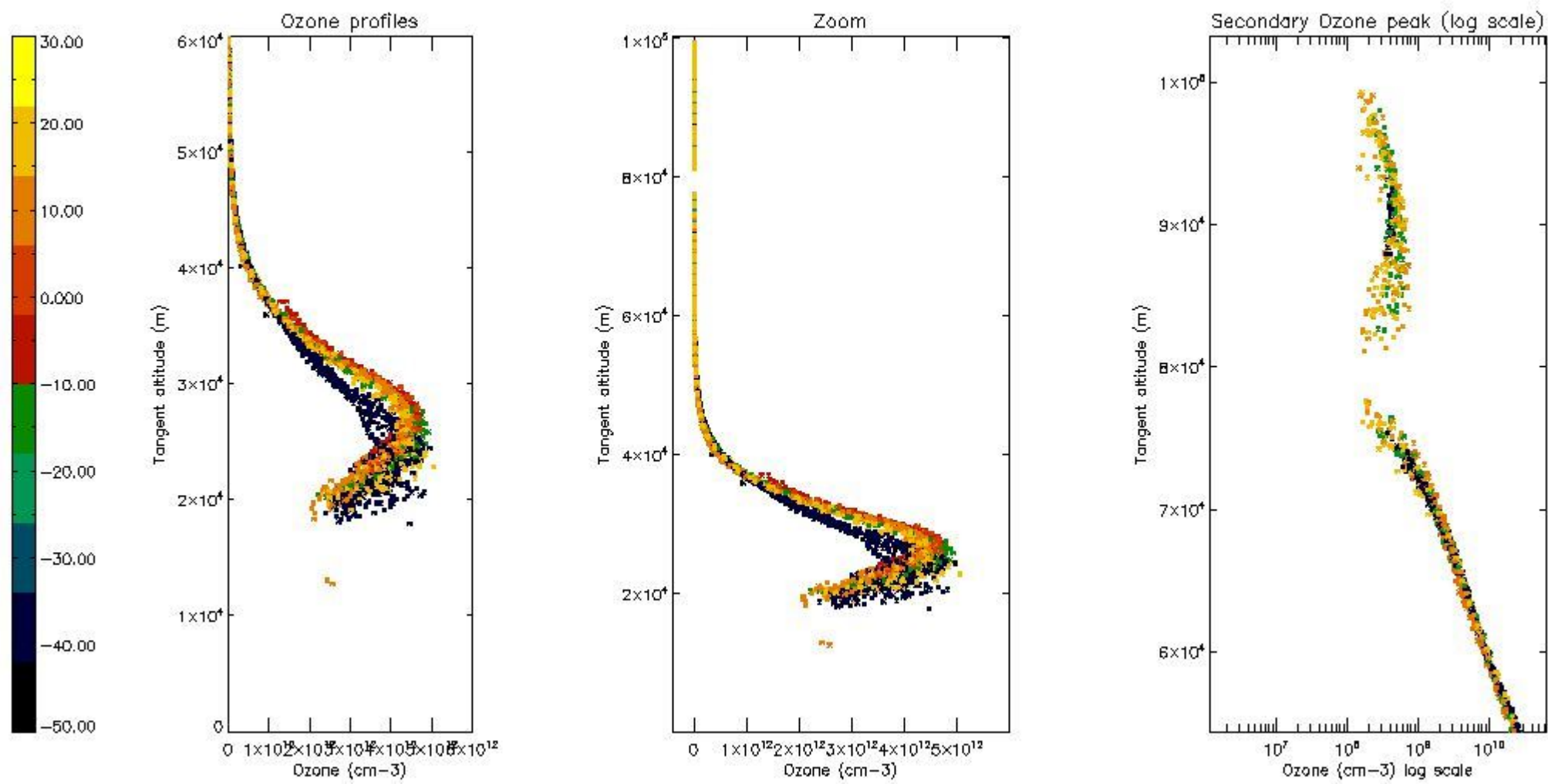
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



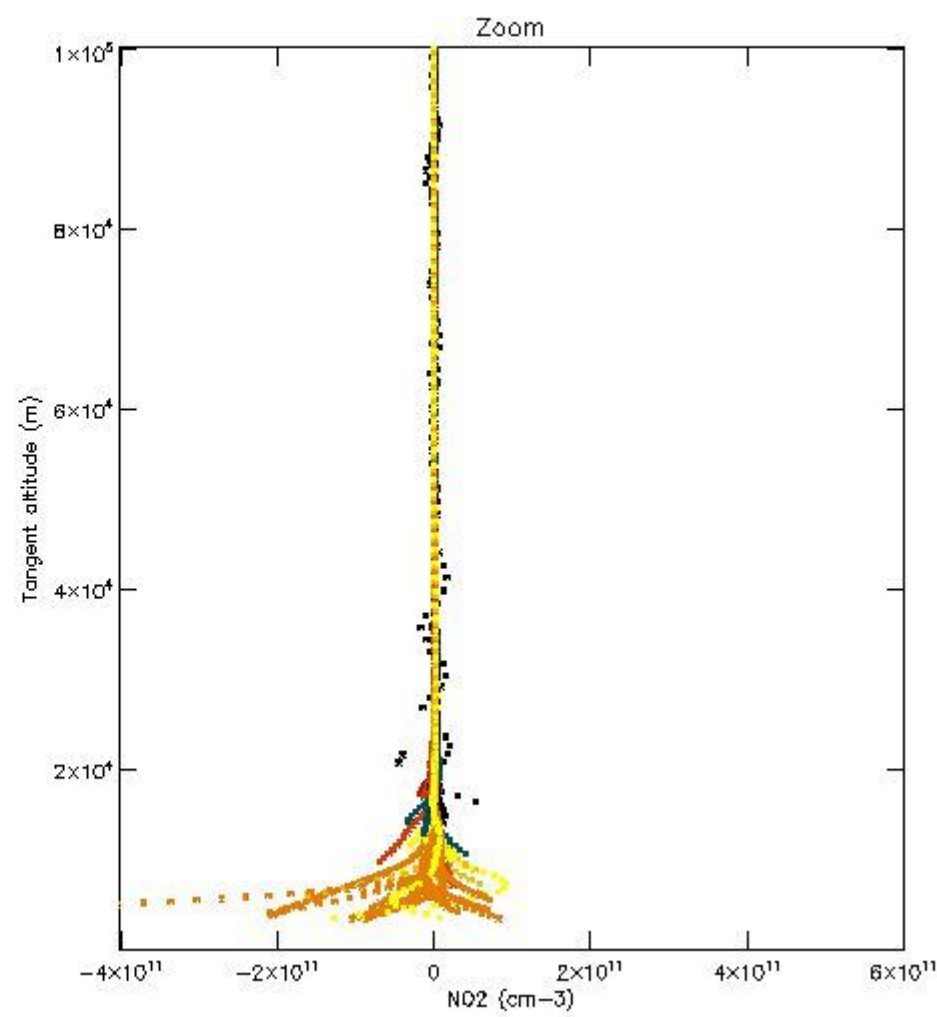
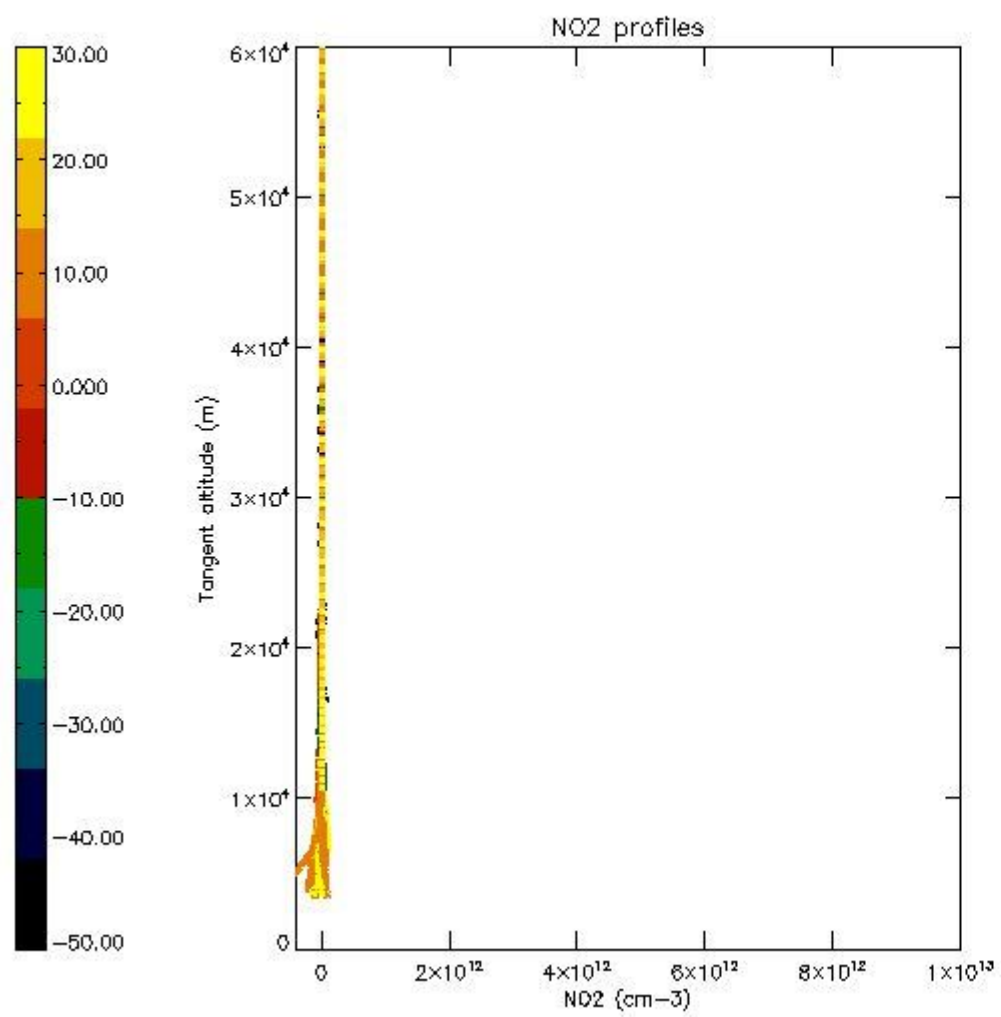
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



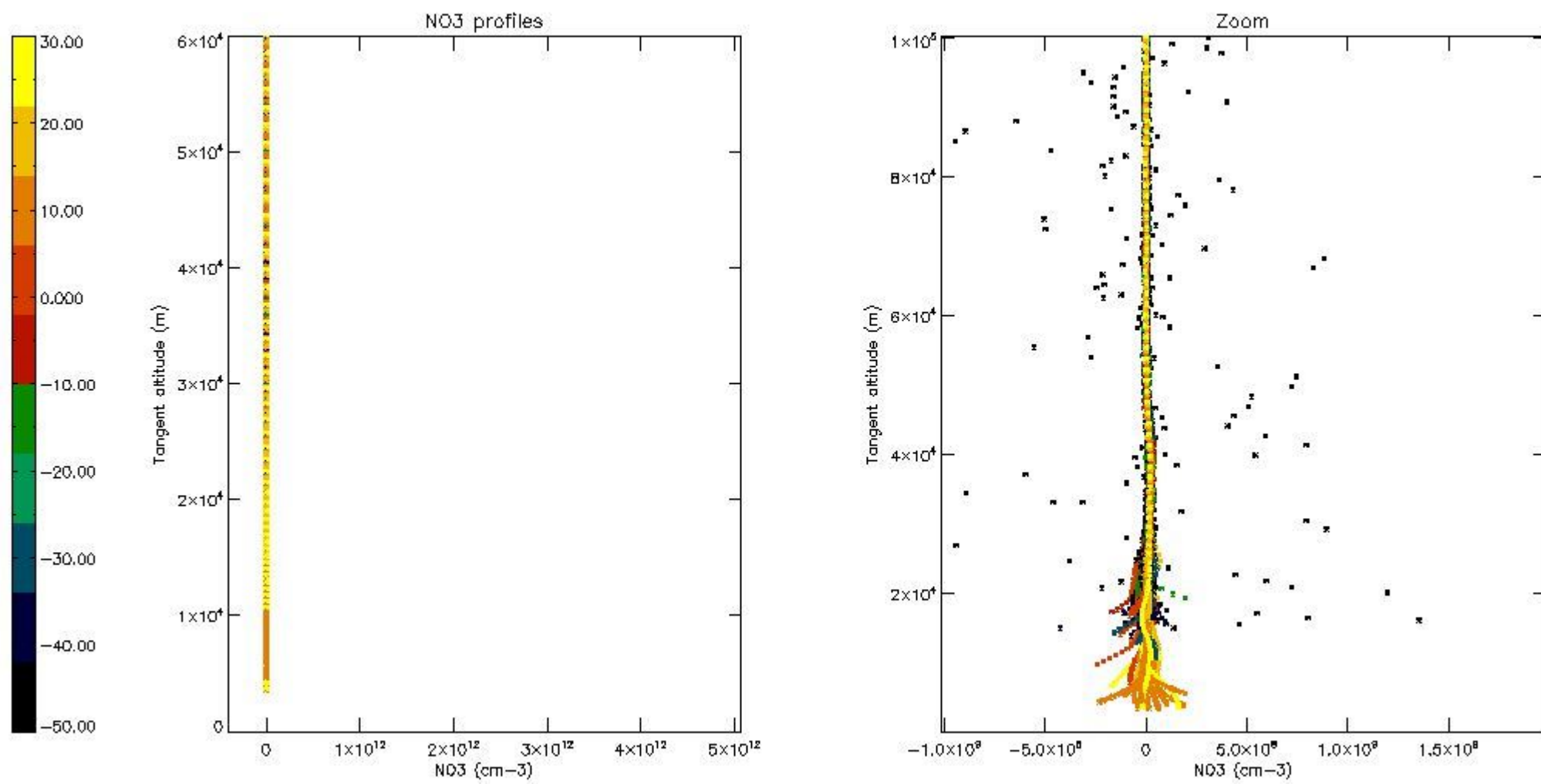
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



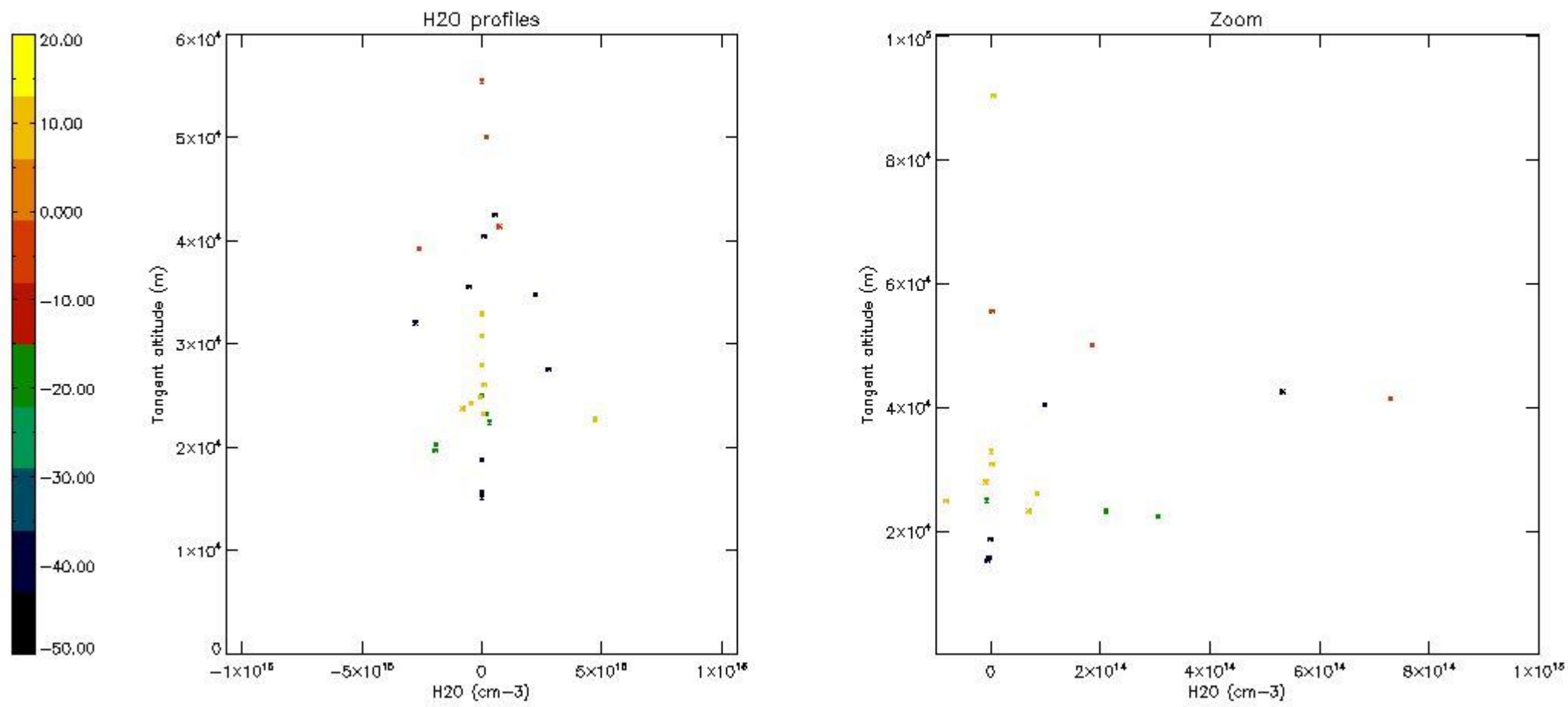
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

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

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	13-MAR-2003 00:02:39
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	13-MAR-2003 00:02:39
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	13-MAR-2003 00:02:39

GOMOS Level 2 Daily Report

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Item	Value
Time of report generation	19APR2013 11:46:42
Data source version	GOMOS/6.01
Start time of products	13-03-2003 (13MAR2003 00:00:00)
Stop time of products	14-03-2003 (14MAR2003 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	312
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

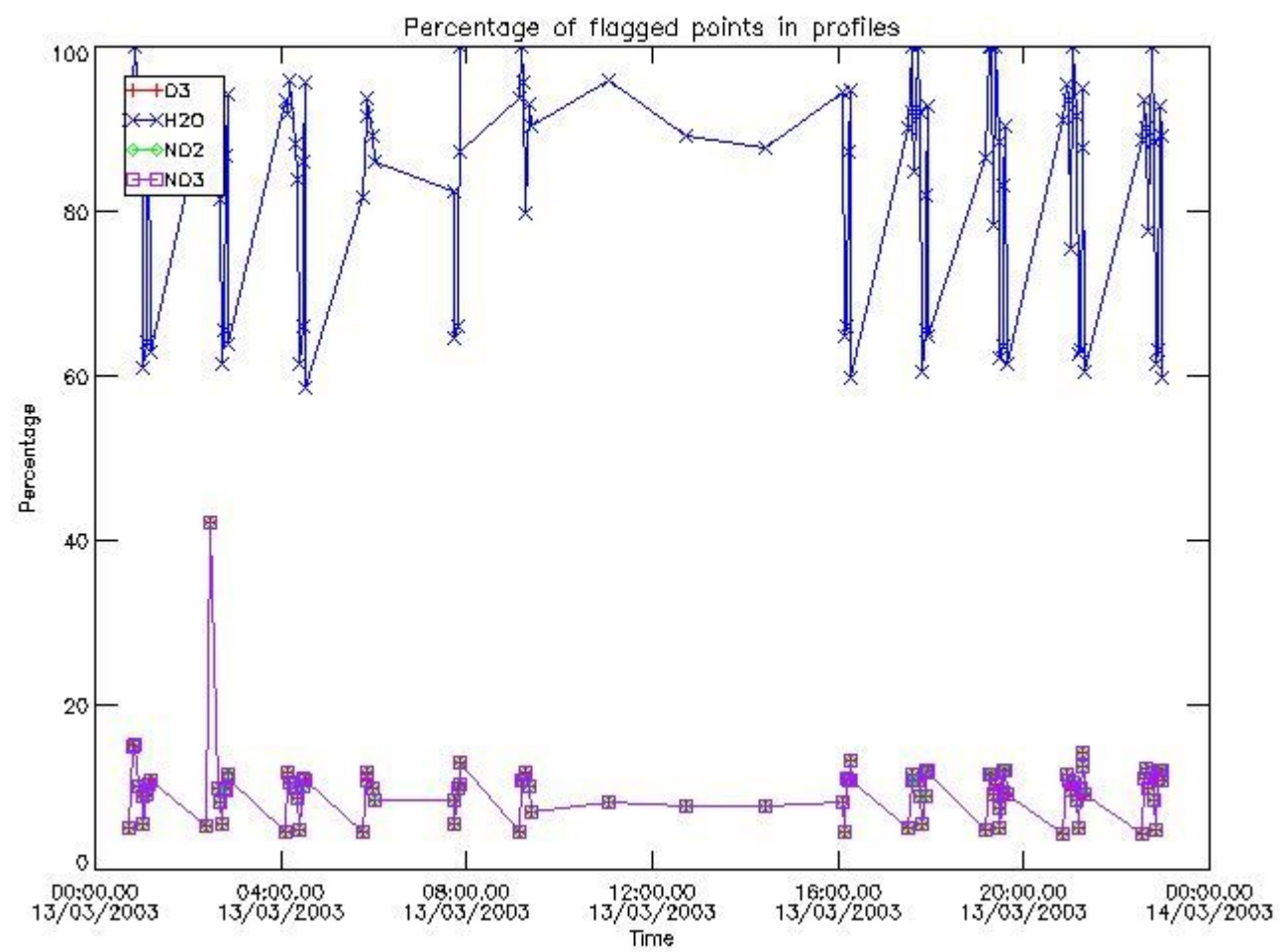
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20030313_000239_000000422014_00331_05395_5904.N1	13-MAR-2003 00:02:39	Bright	41.500	174	52Psi UMa	3.0040	4400.0	83	5395	No
2	GOM_NL__2PRFIN20030313_000546_000000402014_00331_05395_5905.N1	13-MAR-2003 00:05:46	Bright	39.500	82	48Bet UMa	2.3650	10600.	79	5395	No
3	GOM_NL__2PRFIN20030313_000714_000000412014_00331_05395_5906.N1	13-MAR-2003 00:07:14	Bright	40.500	36	50Alp UMa	1.8000	6300.0	81	5395	No
4	GOM_NL__2PRFIN20030313_000912_000000472014_00331_05395_5907.N1	13-MAR-2003 00:09:12	Bright	46.500	32	77Eps UMa	1.7630	11000.	93	5395	No
5	GOM_NL__2PRFIN20030313_001130_000000582014_00331_05395_5908.N1	13-MAR-2003 00:11:30	Bright	57.500	39	85Eta UMa	1.8540	24000.	115	5395	No
6	GOM_NL__2PRFIN20030313_001425_000000372014_00331_05395_5909.N1	13-MAR-2003 00:14:25	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	5395	No
7	GOM_NL__2PRFIN20030313_001839_000000492014_00331_05395_5910.N1	13-MAR-2003 00:18:39	Bright	48.500	119	14Eta Dra	2.7270	4700.0	97	5395	No
8	GOM_NL__2PRFIN20030313_002209_000000352014_00331_05395_5911.N1	13-MAR-2003 00:22:09	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	5395	No
9	GOM_NL__2PRFIN20030313_002422_000000482014_00331_05395_5912.N1	13-MAR-2003 00:24:22	Bright	48.000	69	33Gam Dra	2.2310	3800.0	96	5395	No
10	GOM_NL__2PRFIN20030313_002715_000000382014_00331_05395_5913.N1	13-MAR-2003 00:27:15	Bright	38.000	19	50Alp Cyg	1.2460	10500.	76	5395	No
11	GOM_NL__2PRFIN20030313_002849_000000372014_00331_05395_5914.N1	13-MAR-2003 00:28:49	Bright	36.500	66	37Gam Cyg	2.2080	5900.0	73	5395	No
12	GOM_NL__2PRFIN20030313_003029_000000352014_00331_05395_5915.N1	13-MAR-2003 00:30:29	Bright	35.000	92	53Eps Cyg	2.5000	4500.0	70	5395	No
13	GOM_NL__2PRFIN20030313_003400_000001452014_00331_05395_5916.N1	13-MAR-2003 00:34:00	Twilight	145.000	133	40Zet Her	2.8070	6000.0	290	5395	No
14	GOM_NL__2PRFIN20030313_003836_000000552014_00331_05395_5917.N1	13-MAR-2003 00:38:36	Bright	55.000	11	53Alp Aql	0.76500	8000.0	110	5395	No
15	GOM_NL__2PRFIN20030313_004354_000001142014_00331_05395_5918.N1	13-MAR-2003 00:43:54	Dark	113.500	59	55Alp Oph	2.0800	8900.0	227	5395	No
16	GOM_NL__2PRFIN20030313_004829_000000442014_00331_05395_5919.N1	13-MAR-2003 00:48:29	Dark	44.000	155	41Pi Sgr	2.9000	6600.0	88	5395	No
17	GOM_NL__2PRFIN20030313_005028_000000472014_00331_05395_5920.N1	13-MAR-2003 00:50:28	Dark	47.000	57	34Sig Sgr	2.0660	26000.	94	5395	No
18	GOM_NL__2PRFIN20030313_005718_000000512014_00331_05395_5921.N1	13-MAR-2003 00:57:18	Dark	50.500	25	35Lam Sco	1.6200	28000.	101	5395	No
19	GOM_NL__2PRFIN20030313_010017_000000582014_00332_05396_6461.N1	13-MAR-2003 01:00:17	Dark	57.500	75	26Eps Sco	2.2910	4250.0	115	5396	No
20	GOM_NL__2PRFIN20030313_010224_000000922014_00332_05396_6462.N1	13-MAR-2003 01:02:24	Dark	91.500	16	21Alp Sco	1.0200	3000.0	183	5396	No
21	GOM_NL__2PRFIN20030313_010635_000000562014_00332_05396_6463.N1	13-MAR-2003 01:06:35	Dark	56.000	4	Alp1Cen	-0.010000	5800.0	112	5396	No
22	GOM_NL__2PRFIN20030313_010750_000000532014_00332_05396_6464.N1	13-MAR-2003 01:07:50	Dark	52.500	10	Bet Cen	0.61000	28000.	105	5396	No
23	GOM_NL__2PRFIN20030313_010955_000000502014_00332_05396_6465.N1	13-MAR-2003 01:09:55	Dark	49.500	12	Alp1Cru	0.77500	30000.	99	5396	No
24	GOM_NL__2PRFIN20030313_011109_000000522014_00332_05396_6466.N1	13-MAR-2003 01:11:09	Dark	51.500	26	Gam Cru	1.6240	2900.0	103	5396	No
25	GOM_NL__2PRFIN20030313_011249_000000472014_00332_05396_6467.N1	13-MAR-2003 01:12:49	Straylight	46.500	64	Gam Cen	2.2000	10600.	93	5396	No
26	GOM_NL__2PRFIN20030313_011431_000000382014_00332_05396_6468.N1	13-MAR-2003 01:14:31	Straylight	37.500	91	Kap Vel	2.4900	26000.	75	5396	No
27	GOM_NL__2PRFIN20030313_012058_000000572014_00332_05396_6053.N1	13-MAR-2003 01:20:58	Straylight	56.500	106	9Bet Crv	2.6480	5600.0	113	5396	No
28	GOM_NL__2PRFIN20030313_012325_000000562014_00332_05396_6054.N1	13-MAR-2003 01:23:25	Straylight	55.500	100	4Gam Crv	2.5800	13100.	111	5396	No
29	GOM_NL__2PRFIN20030313_012633_000001182014_00332_05396_6055.N1	13-MAR-2003 01:26:33	Bright	118.000	15	67Alp Vir	0.97600	28000.	236	5396	No
30	GOM_NL__2PRFIN20030313_013033_000000702014_00332_05396_6056.N1	13-MAR-2003 01:30:33	Bright	70.000	121	29Gam Vir	2.7400	7200.0	140	5396	No
31	GOM_NL__2PRFIN20030313_013254_000000392014_00332_05396_6057.N1	13-MAR-2003 01:32:54	Bright	39.000	22	32Alp Leo	1.3600	15200.	78	5396	No
32	GOM_NL__2PRFIN20030313_013513_000000392014_00332_05396_6058.N1	13-MAR-2003 01:35:13	Bright	39.000	51	41Gam1Leo	2.0100	4500.0	78	5396	No
33	GOM_NL__2PRFIN20030313_013810_000000922014_00332_05396_6059.N1	13-MAR-2003 01:38:10	Bright	92.000	138	47Eps Vir	2.8280	4700.0	184	5396	No
34	GOM_NL__2PRFIN20030313_014314_000000412014_00332_05396_6060.N1	13-MAR-2003 01:43:14	Bright	41.000	174	52Psi UMa	3.0040	4400.0	82	5396	No
35	GOM_NL__2PRFIN20030313_014621_000000392014_00332_05396_6061.N1	13-MAR-2003 01:46:21	Bright	39.000	82	48Bet UMa	2.3650	10600.	78	5396	No
36	GOM_NL__2PRFIN20030313_014749_000000402014_00332_05396_6062.N1	13-MAR-2003 01:47:49	Bright	39.500	36	50Alp UMa	1.8000	6300.0	79	5396	No
37	GOM_NL__2PRFIN20030313_014947_000000482014_00332_05396_6063.N1	13-MAR-2003 01:49:47	Bright	48.000	32	77Eps UMa	1.7630	11000.	96	5396	No
38	GOM_NL__2PRFIN20030313_015204_000000582014_00332_05396_6064.N1	13-MAR-2003 01:52:04	Bright	57.500	39	85Eta UMa	1.8540	24000.	115	5396	No
39	GOM_NL__2PRFIN20030313_015500_000000352014_00332_05396_6065.N1	13-MAR-2003 01:55:00	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	5396	No
40	GOM_NL__2PRFIN20030313_015914_000000482014_00332_05396_6066.N1	13-MAR-2003 01:59:14	Bright	47.500	119	14Eta Dra	2.7270	4700.0	95	5396	No
41	GOM_NL__2PRFIN20030313_020245_000000362014_00332_05396_6067.N1	13-MAR-2003 02:02:45	Bright	35.500	89	5Alp Cep	2.4510	8000.0	71	5396	No
42	GOM_NL__2PRFIN20030313_020458_000000502014_00332_05396_6068.N1	13-MAR-2003 02:04:58	Bright	50.000	69	33Gam Dra	2.2310	3800.0	100	5396	No

279	GOM_NL__2PRFIN20030313_221818_000000372014_00344_05408_5948.N1	13-MAR-2003 22:18:18	Bright	36.500	92	53Eps Cyg	2.5000	4500.0	73	5408	No
280	GOM_NL__2PRFIN20030313_222628_000000512014_00344_05408_5949.N1	13-MAR-2003 22:26:28	Twilight	50.500	11	53Alp Aql	0.76500	8000.0	101	5408	No
281	GOM_NL__2PRFIN20030313_223207_000001162014_00344_05408_5950.N1	13-MAR-2003 22:32:07	Dark	116.00	59	55Alp Oph	2.0800	8900.0	232	5408	No
282	GOM_NL__2PRFIN20030313_223626_000000462014_00344_05408_5951.N1	13-MAR-2003 22:36:26	Dark	46.000	155	41Pi Sgr	2.9000	6600.0	92	5408	No
283	GOM_NL__2PRFIN20030313_223825_000000462014_00344_05408_5952.N1	13-MAR-2003 22:38:25	Dark	45.500	57	34Sig Sgr	2.0660	26000.	91	5408	No
284	GOM_NL__2PRFIN20030313_224104_000000522014_00344_05408_5953.N1	13-MAR-2003 22:41:04	Dark	52.000	116	19Del Sgr	2.7000	4100.0	104	5408	No
285	GOM_NL__2PRFIN20030313_224503_000000472014_00344_05408_5954.N1	13-MAR-2003 22:45:03	Dark	47.000	85	Kap Sco	2.4070	28000.	94	5408	No
286	GOM_NL__2PRFIN20030313_224824_000000612014_00345_05409_5923.N1	13-MAR-2003 22:48:24	Dark	61.000	75	26Eps Sco	2.2910	4250.0	122	5409	No
287	GOM_NL__2PRFIN20030313_225038_000001072014_00345_05409_5924.N1	13-MAR-2003 22:50:38	Dark	107.00	16	21Alp Sco	1.0200	3000.0	214	5409	No
288	GOM_NL__2PRFIN20030313_225430_000000472014_00345_05409_5925.N1	13-MAR-2003 22:54:30	Dark	46.500	4	Alp1Cen	-0.010000	5800.0	93	5409	No
289	GOM_NL__2PRFIN20030313_225544_000000432014_00345_05409_5926.N1	13-MAR-2003 22:55:44	Dark	42.500	10	Bet Cen	0.61000	28000.	85	5409	No
290	GOM_NL__2PRFIN20030313_225747_000000422014_00345_05409_5927.N1	13-MAR-2003 22:57:47	Dark	42.000	12	Alp1Cru	0.77500	30000.	84	5409	No
291	GOM_NL__2PRFIN20030313_225902_000000472014_00345_05409_5928.N1	13-MAR-2003 22:59:02	Dark	46.500	26	Gam Cru	1.6240	2900.0	93	5409	No
292	GOM_NL__2PRFIN20030313_230050_000000642014_00345_05409_5929.N1	13-MAR-2003 23:00:50	Straylight	63.500	54	5The Cen	2.0550	4500.0	127	5409	No
293	GOM_NL__2PRFIN20030313_230301_000000392014_00345_05409_5930.N1	13-MAR-2003 23:03:01	Straylight	39.000	113	Mu Vel	2.6920	5000.0	78	5409	No
294	GOM_NL__2PRFIN20030313_230850_000000532014_00345_05409_5931.N1	13-MAR-2003 23:08:50	Straylight	52.500	106	9Bet Crv	2.6480	5600.0	105	5409	No
295	GOM_NL__2PRFIN20030313_231115_000000502014_00345_05409_5932.N1	13-MAR-2003 23:11:15	Straylight	50.000	100	4Gam Crv	2.5800	13100.	100	5409	No
296	GOM_NL__2PRFIN20030313_231418_000001082014_00345_05409_5933.N1	13-MAR-2003 23:14:18	Bright	107.50	15	67Alp Vir	0.97600	28000.	215	5409	No
297	GOM_NL__2PRFIN20030313_231814_000000652014_00345_05409_5934.N1	13-MAR-2003 23:18:14	Bright	64.500	121	29Gam Vir	2.7400	7200.0	129	5409	No
298	GOM_NL__2PRFIN20030313_232042_000000382014_00345_05409_5935.N1	13-MAR-2003 23:20:42	Bright	37.500	22	32Alp Leo	1.3600	15200.	75	5409	No
299	GOM_NL__2PRFIN20030313_232300_000000402014_00345_05409_5936.N1	13-MAR-2003 23:23:00	Bright	39.500	51	41Gam1Leo	2.0100	4500.0	79	5409	No
300	GOM_NL__2PRFIN20030313_232534_000000872014_00345_05409_5937.N1	13-MAR-2003 23:25:34	Bright	87.000	138	47Eps Vir	2.8280	4700.0	174	5409	No
301	GOM_NL__2PRFIN20030313_233057_000000412014_00345_05409_5938.N1	13-MAR-2003 23:30:57	Bright	40.500	174	52Psi UMa	3.0040	4400.0	81	5409	No
302	GOM_NL__2PRFIN20030313_233405_000000392014_00345_05409_5939.N1	13-MAR-2003 23:34:05	Bright	38.500	82	48Bet UMa	2.3650	10600.	77	5409	No
303	GOM_NL__2PRFIN20030313_233533_000000392014_00345_05409_5940.N1	13-MAR-2003 23:35:33	Bright	38.500	36	50Alp UMa	1.8000	6300.0	77	5409	No
304	GOM_NL__2PRFIN20030313_233725_000000482014_00345_05409_5941.N1	13-MAR-2003 23:37:25	Bright	47.500	32	77Eps UMa	1.7630	11000.	95	5409	No
305	GOM_NL__2PRFIN20030313_233936_000000572014_00345_05409_5942.N1	13-MAR-2003 23:39:36	Bright	57.000	39	85Eta UMa	1.8540	24000.	114	5409	No
306	GOM_NL__2PRFIN20030313_234248_000000362014_00345_05409_5943.N1	13-MAR-2003 23:42:48	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	5409	No
307	GOM_NL__2PRFIN20030313_234654_000000482014_00345_05409_5944.N1	13-MAR-2003 23:46:54	Bright	48.000	119	14Eta Dra	2.7270	4700.0	96	5409	No
308	GOM_NL__2PRFIN20030313_235033_000000352014_00345_05409_5945.N1	13-MAR-2003 23:50:33	Bright	35.000	89	5Alp Cep	2.4510	8000.0	70	5409	No
309	GOM_NL__2PRFIN20030313_235241_000000532014_00345_05409_5946.N1	13-MAR-2003 23:52:41	Bright	52.500	69	33Gam Dra	2.2310	3800.0	105	5409	No
310	GOM_NL__2PRFIN20030313_235540_000000372014_00345_05409_5947.N1	13-MAR-2003 23:55:40	Bright	37.000	19	50Alp Cyg	1.2460	10500.	74	5409	No
311	GOM_NL__2PRFIN20030313_235714_000000382014_00345_05409_5948.N1	13-MAR-2003 23:57:14	Bright	38.000	66	37Gam Cyg	2.2080	5900.0	76	5409	No
312	GOM_NL__2PRFIN20030313_235854_000000352014_00345_05409_5949.N1	13-MAR-2003 23:58:54	Bright	35.000	92	53Eps Cyg	2.5000	4500.0	70	5409	No

3. Quality information per product

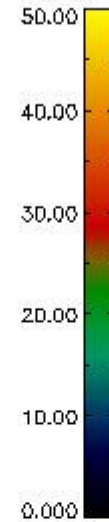
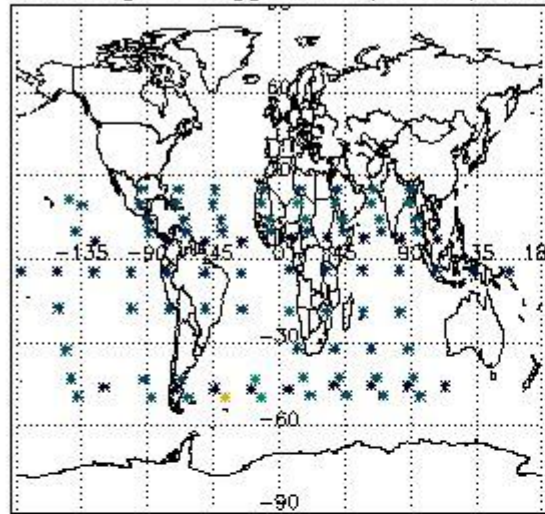
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

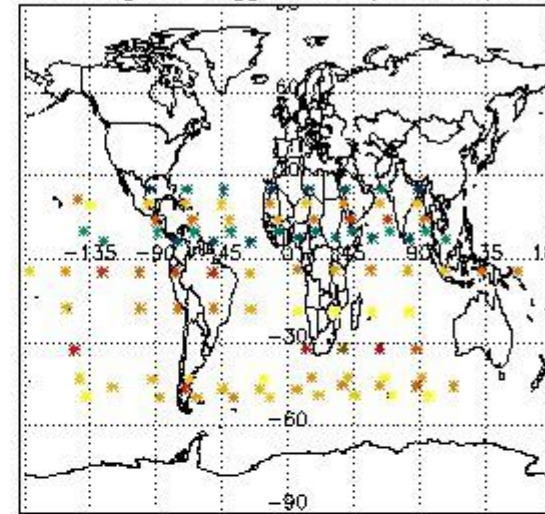


3.2 Plot quality information per product (world map)

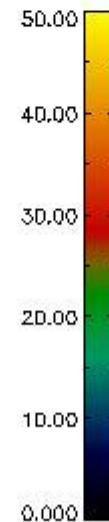
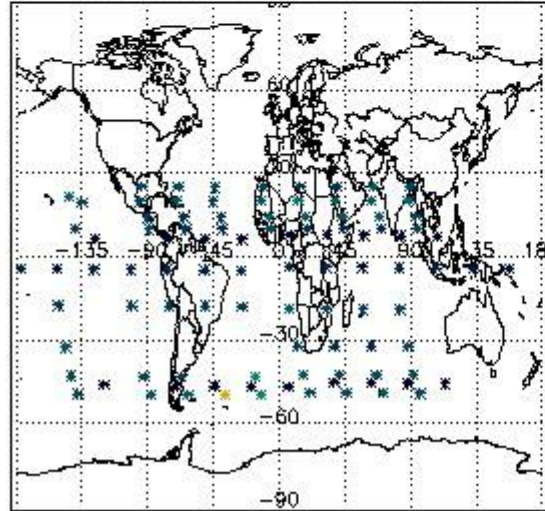
Percentage of flagged data per O3 profile



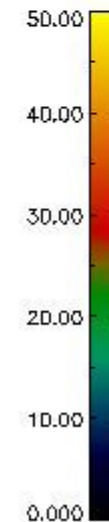
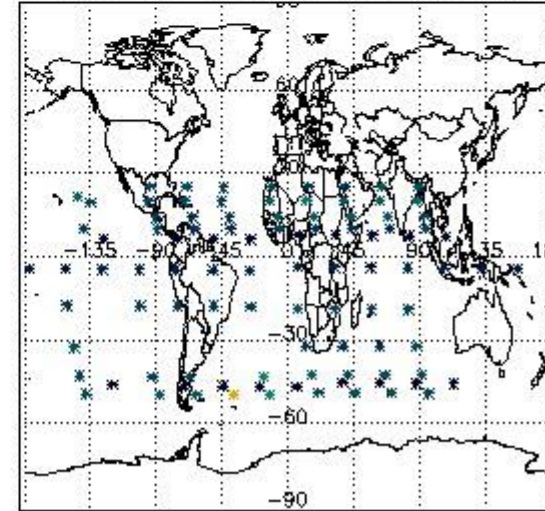
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

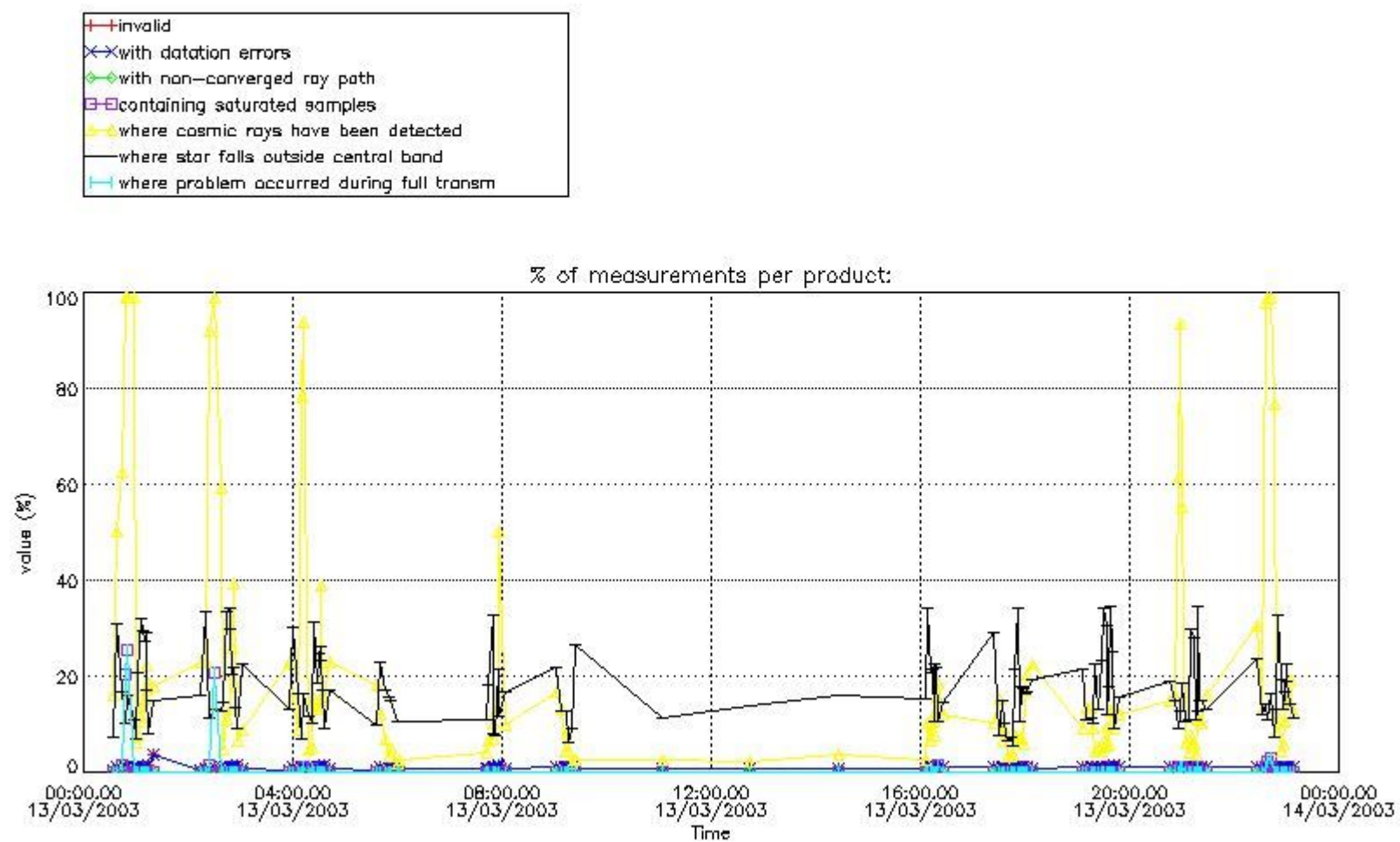


4. Level 1 quality information per product

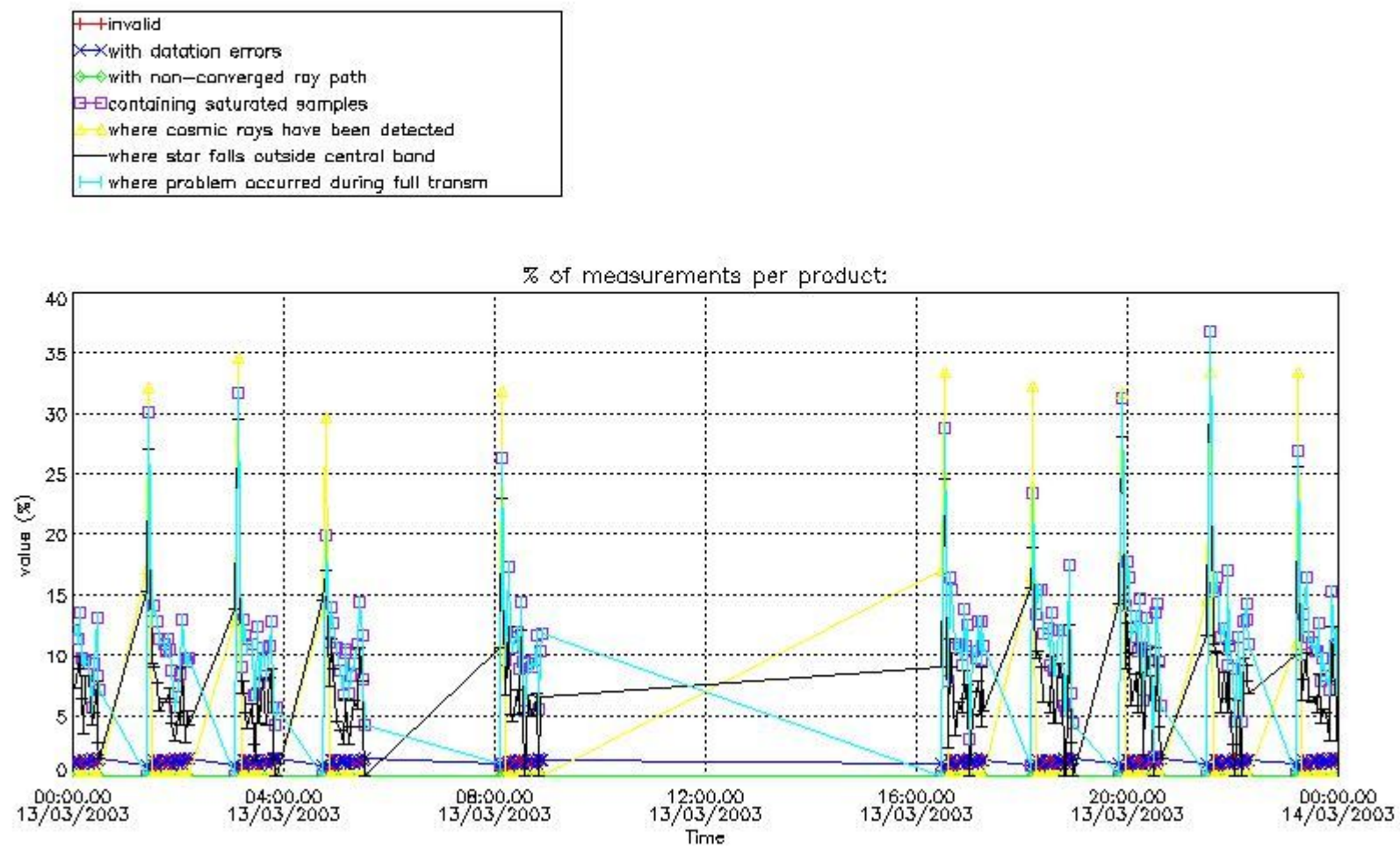
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



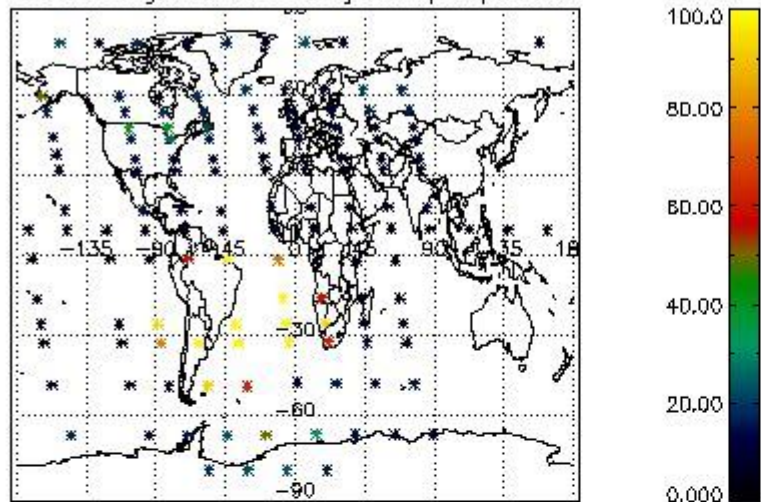
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



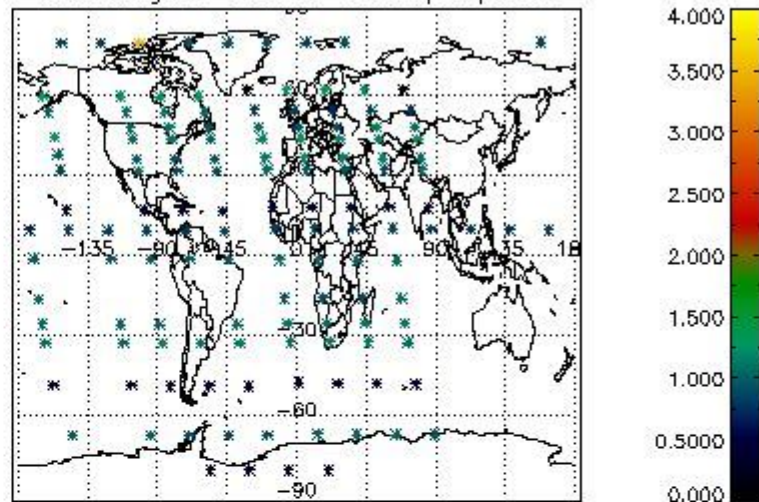
4.2 Plot quality information per product coming from level 1b processing (world map)

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

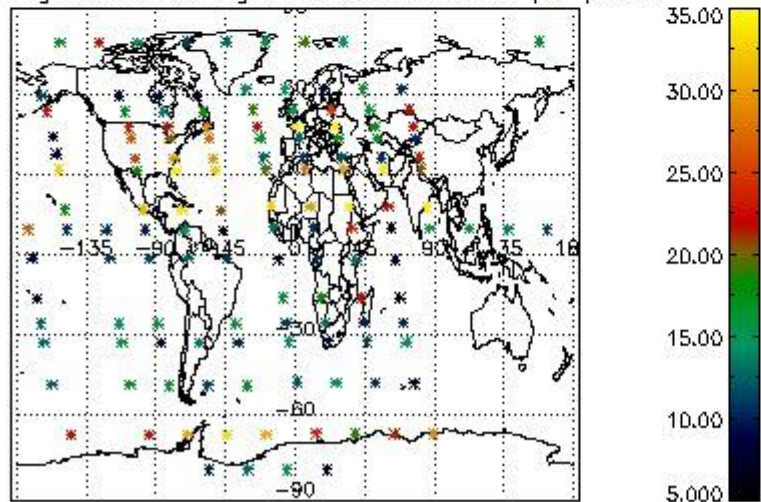
Percentage of cosmic ray hits per profile



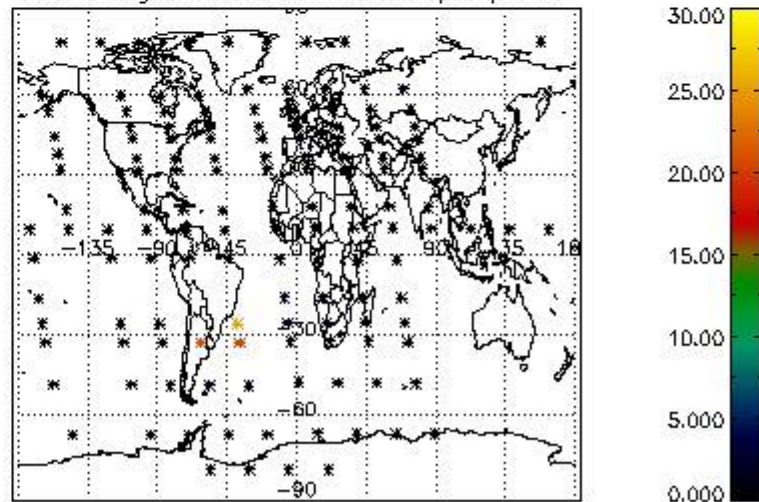
Percentage of datation errors per profile



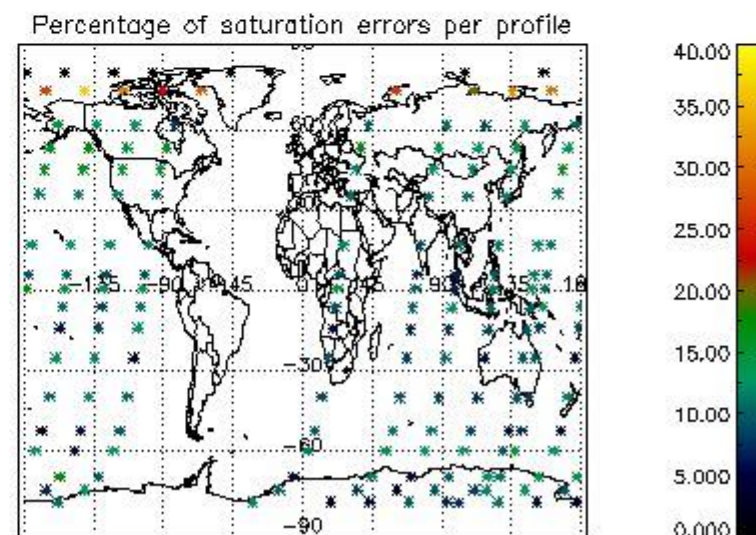
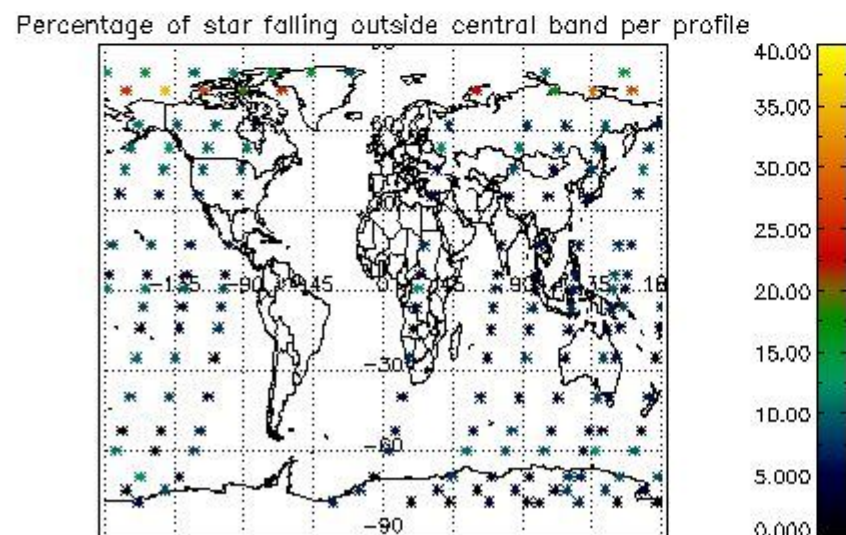
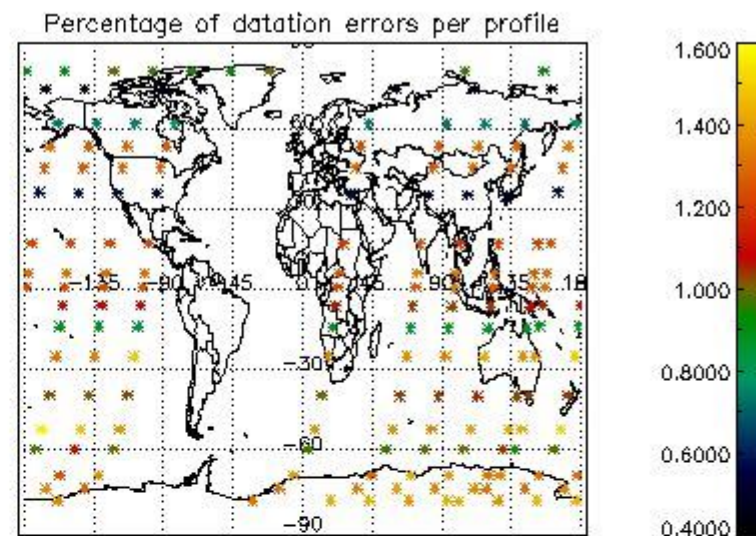
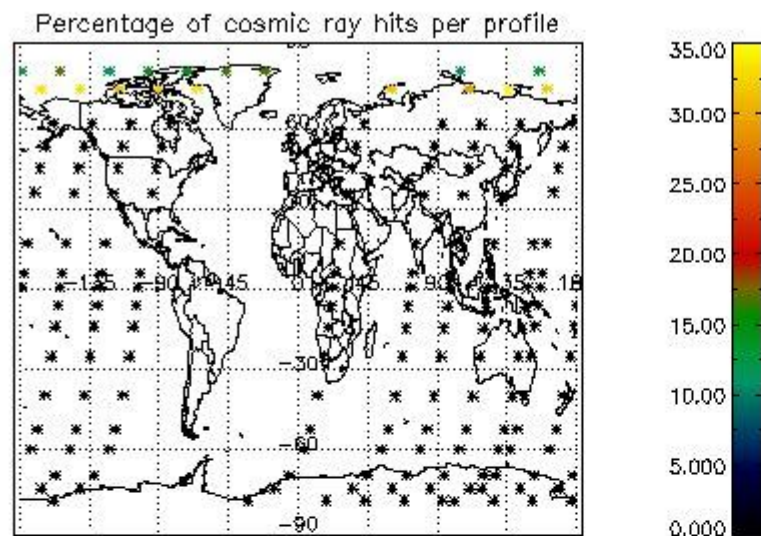
Percentage of star falling outside central band per profile



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

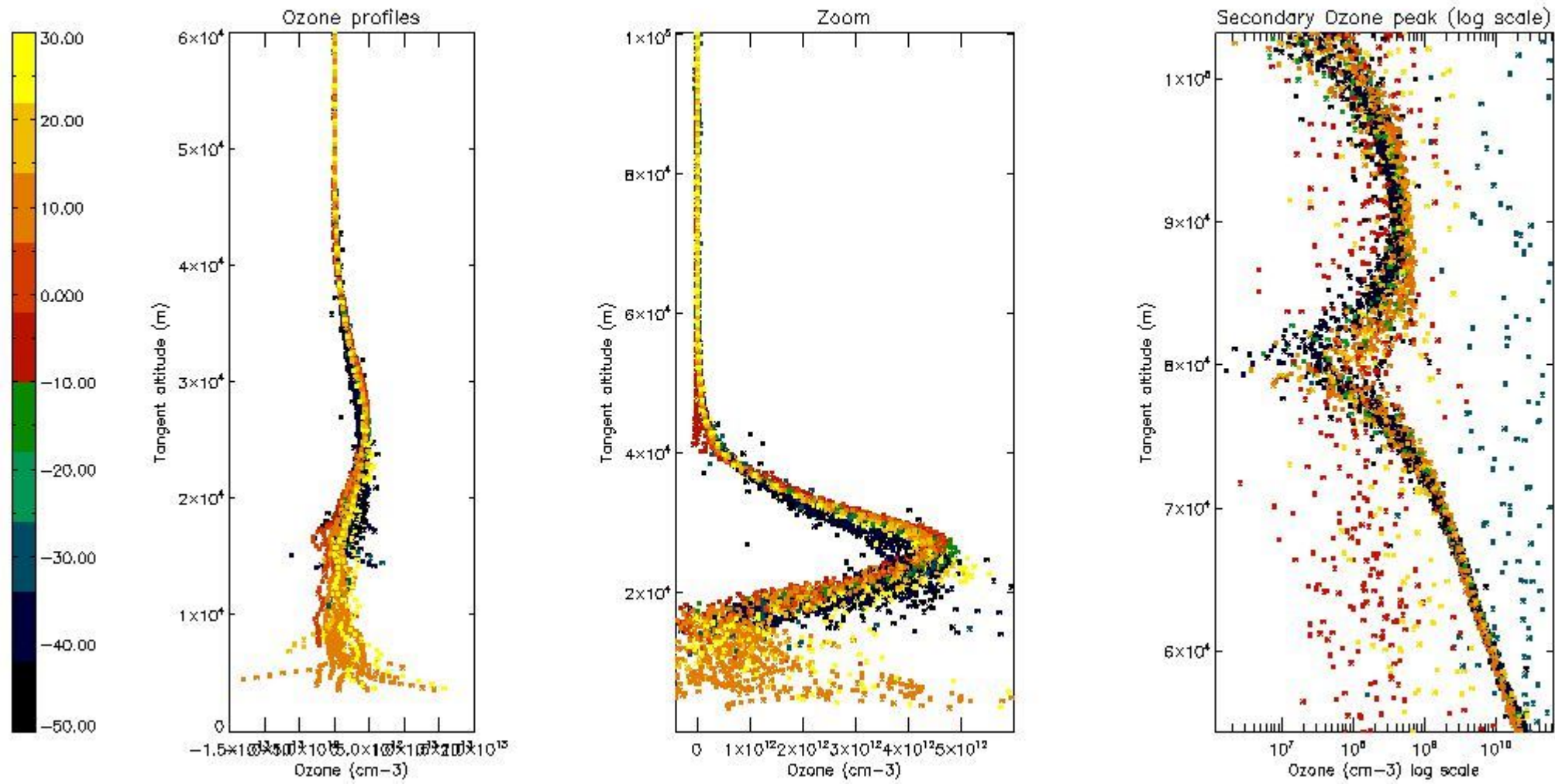
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	36
STD < 20	20

STD < 10	17
STD < 5	12

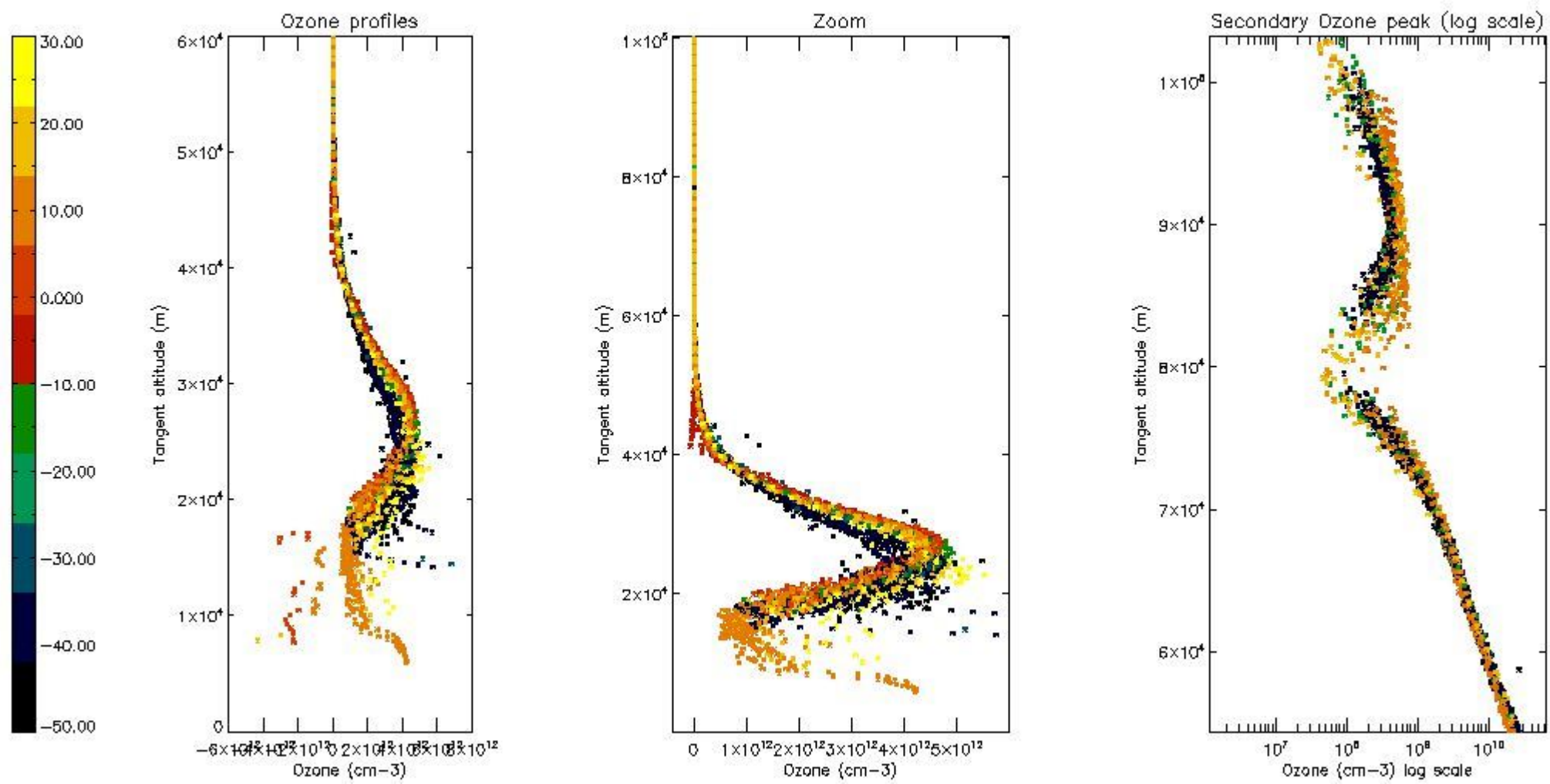
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



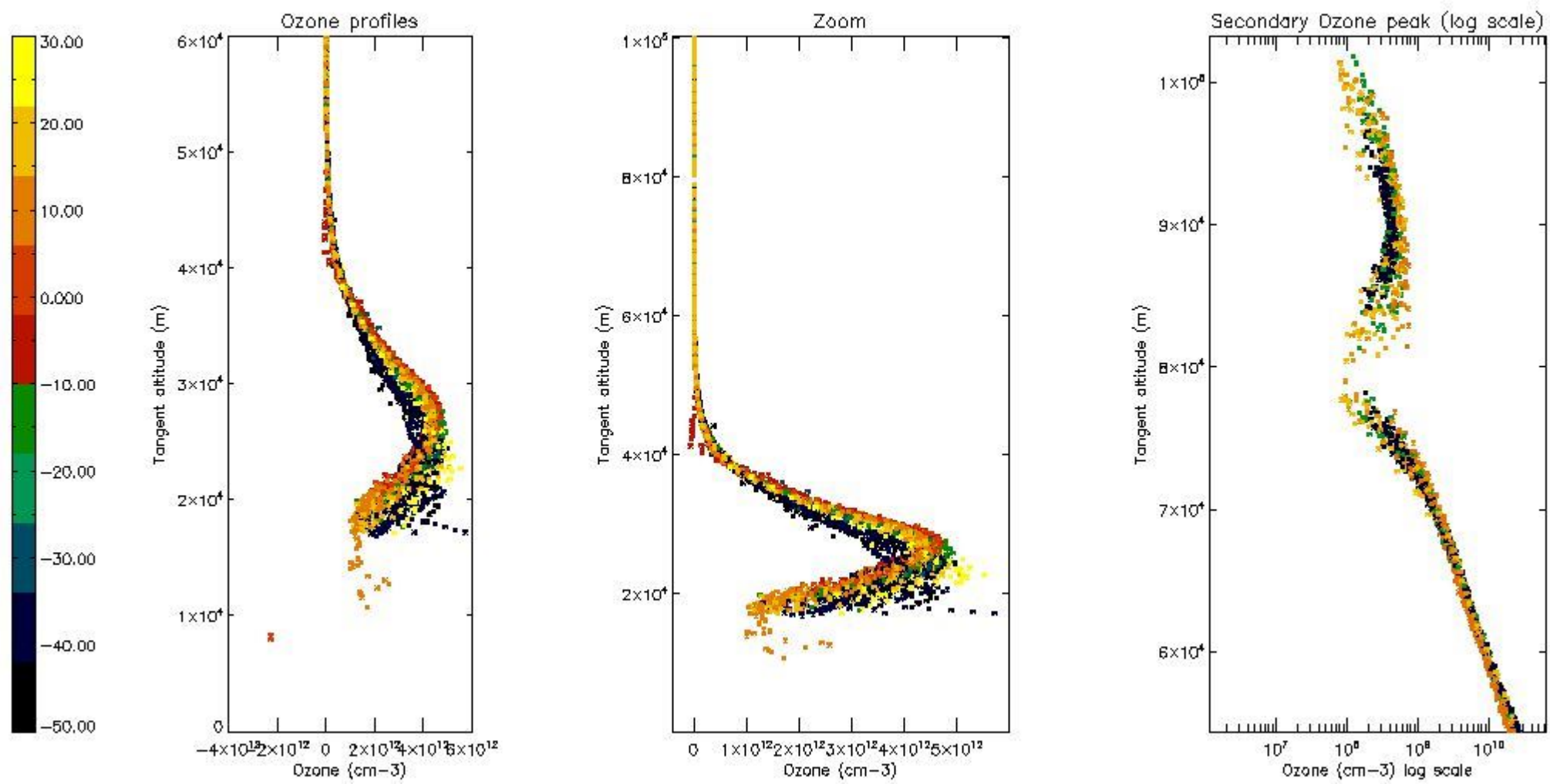
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



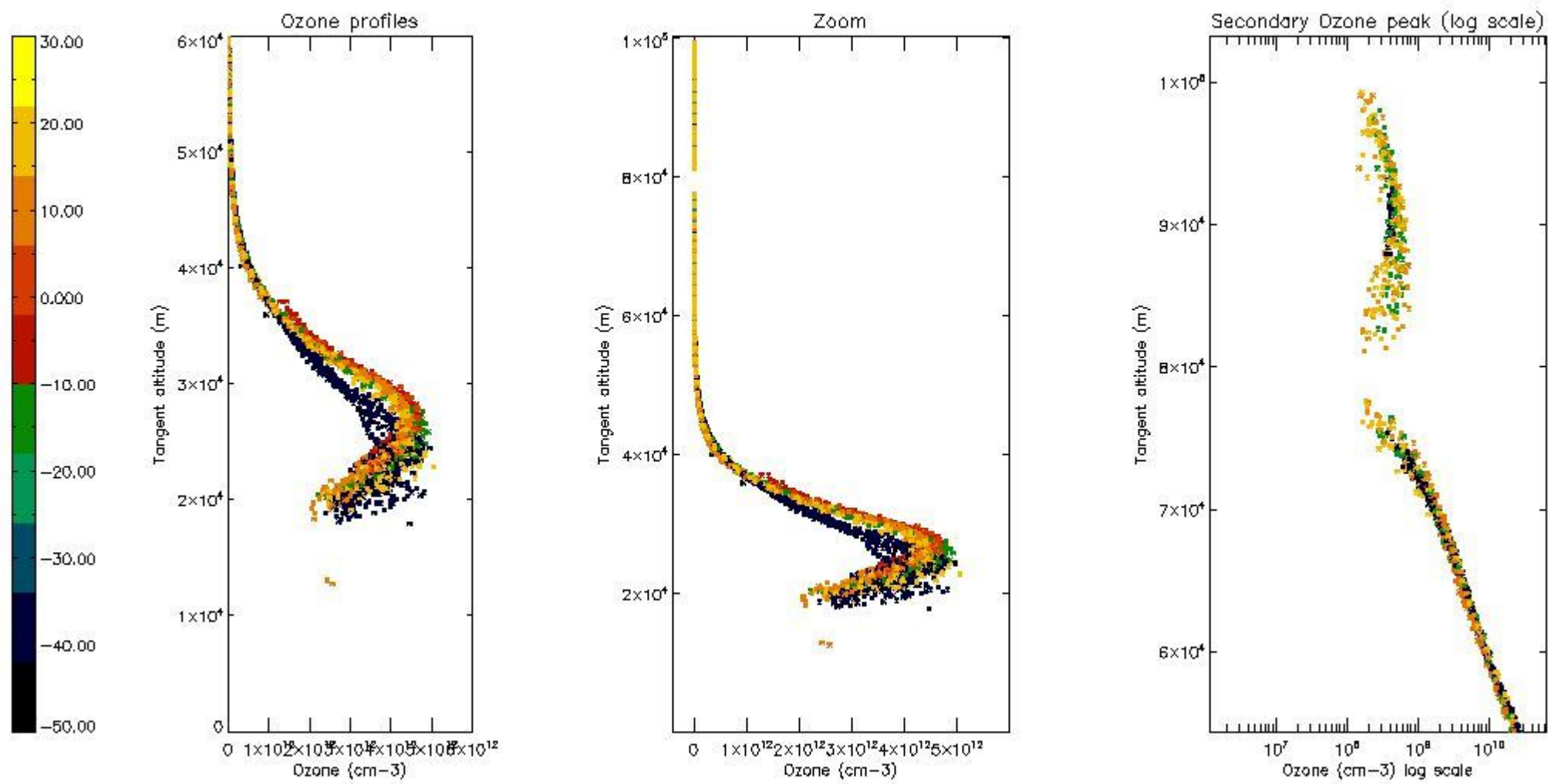
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



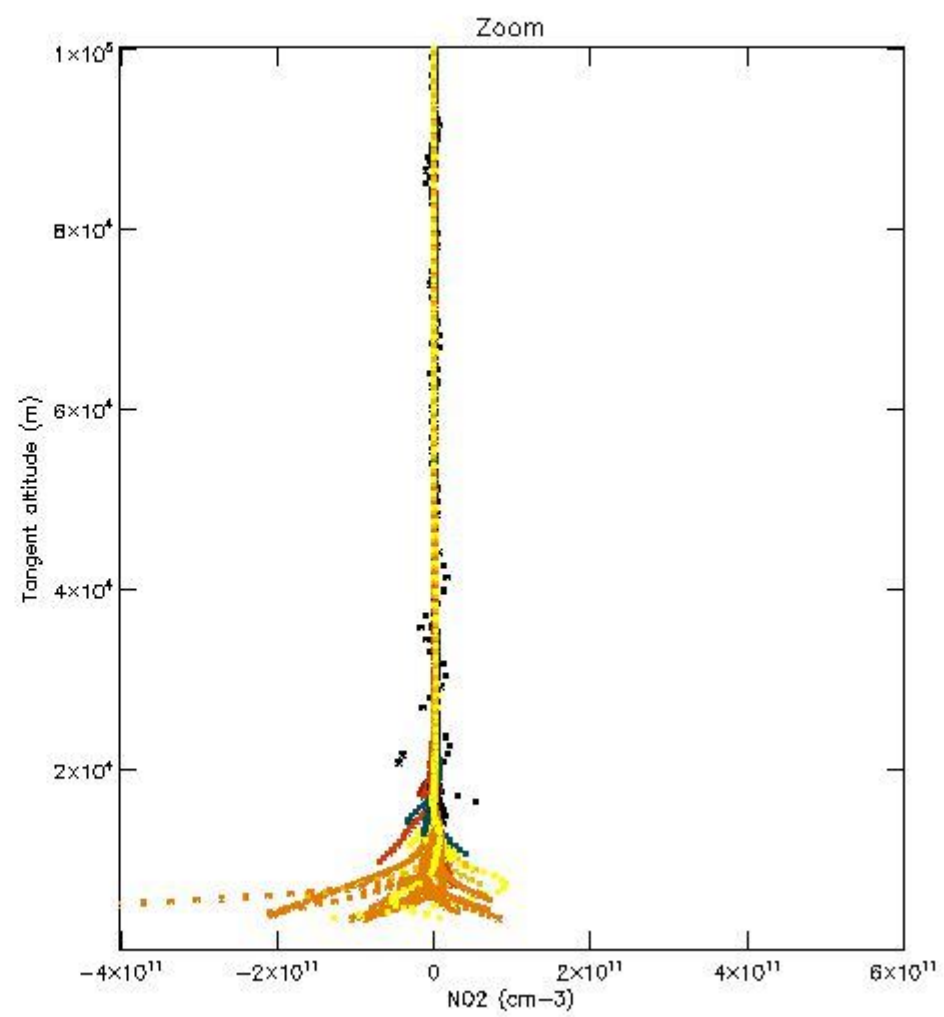
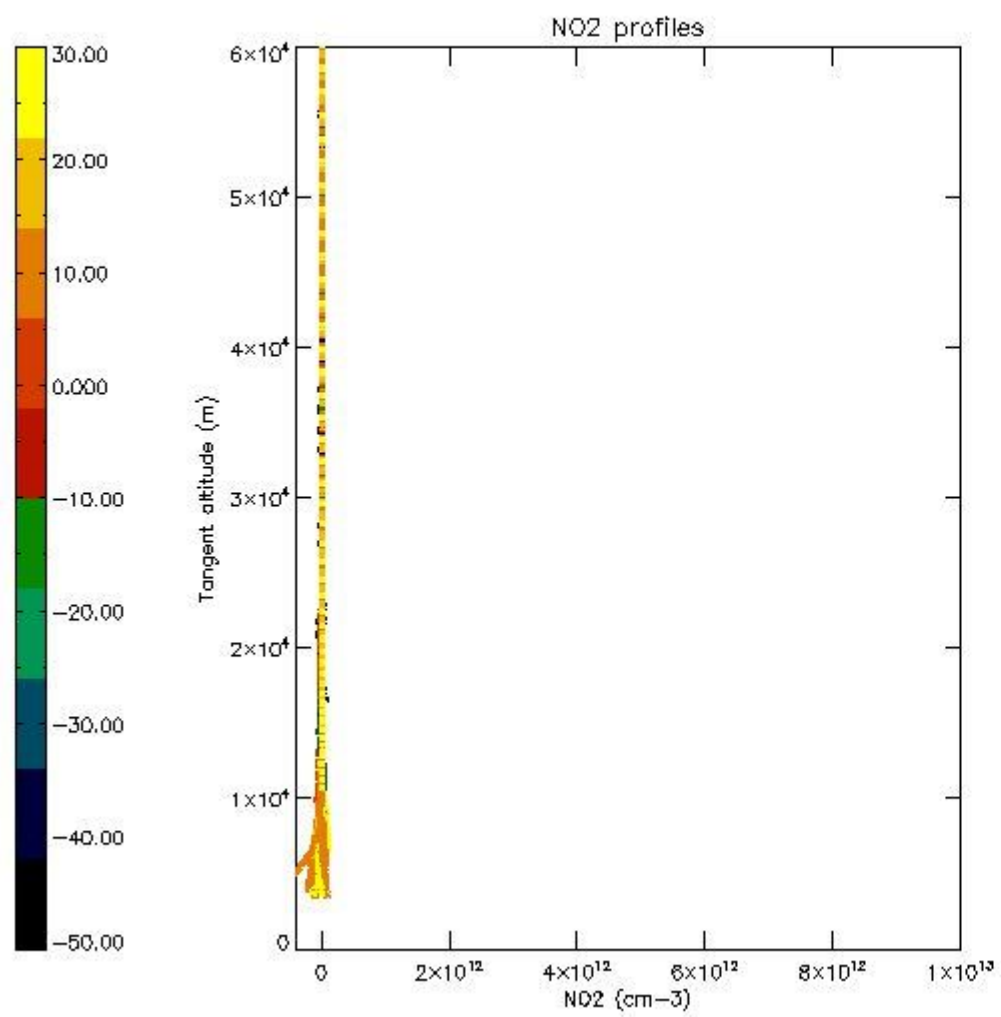
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



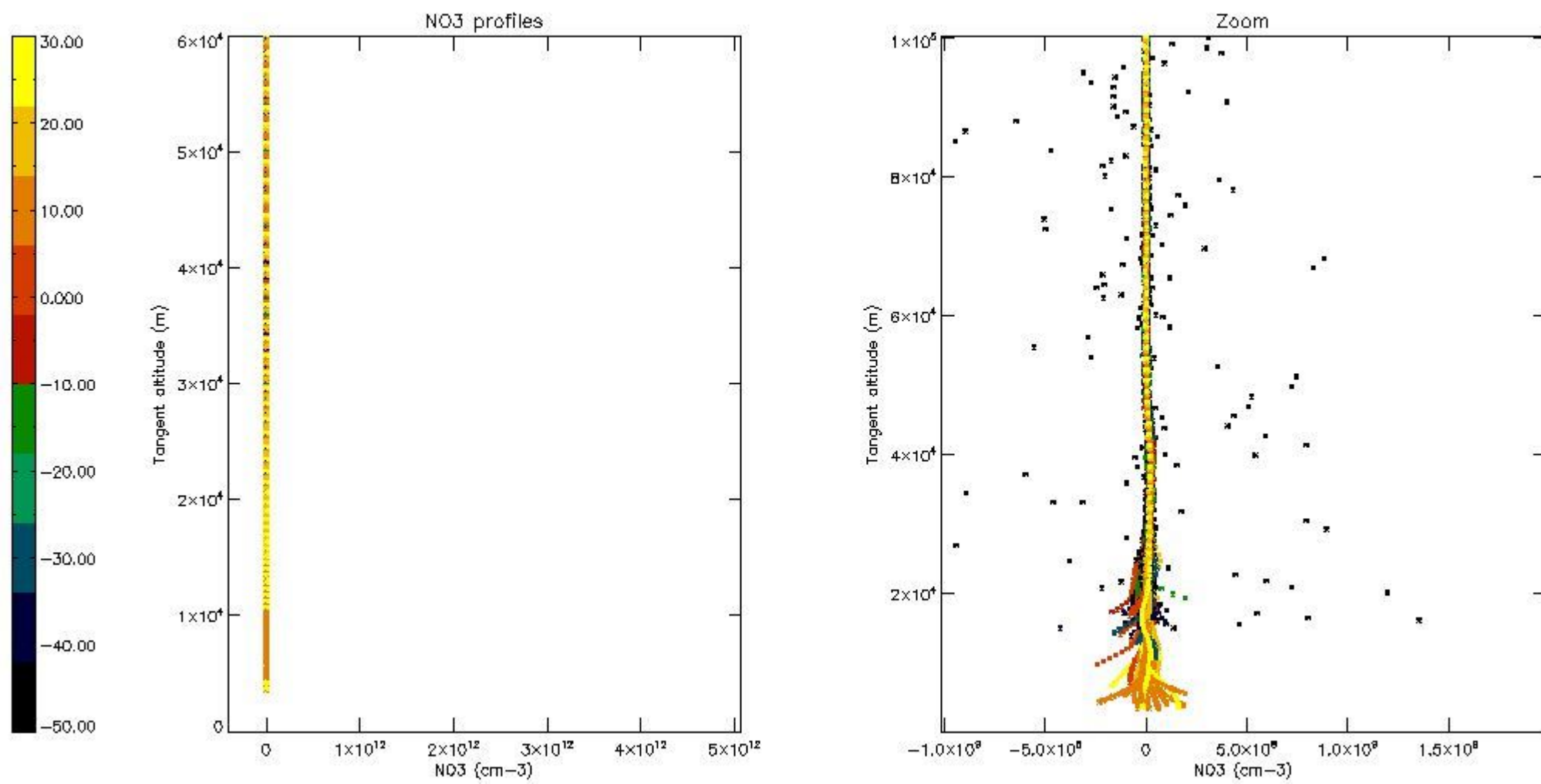
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



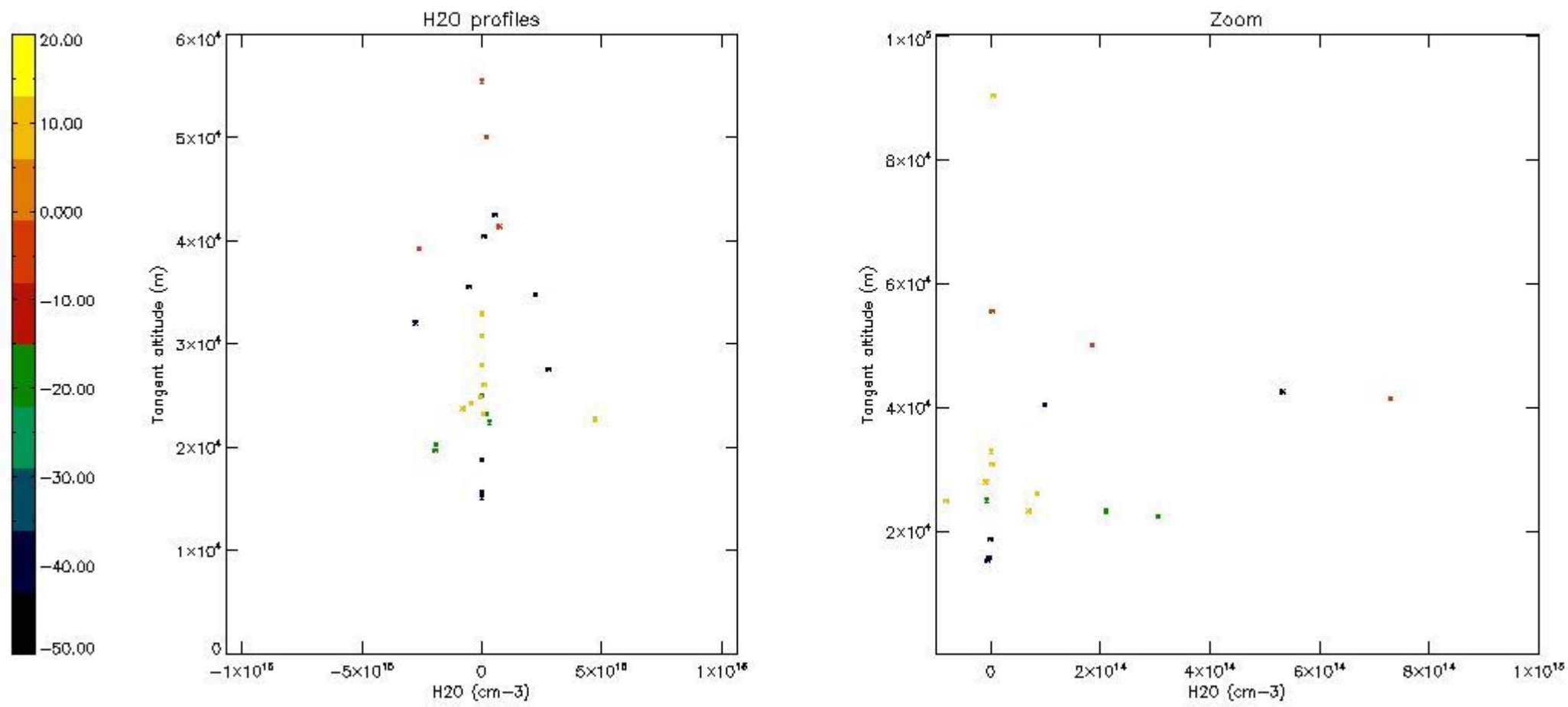
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

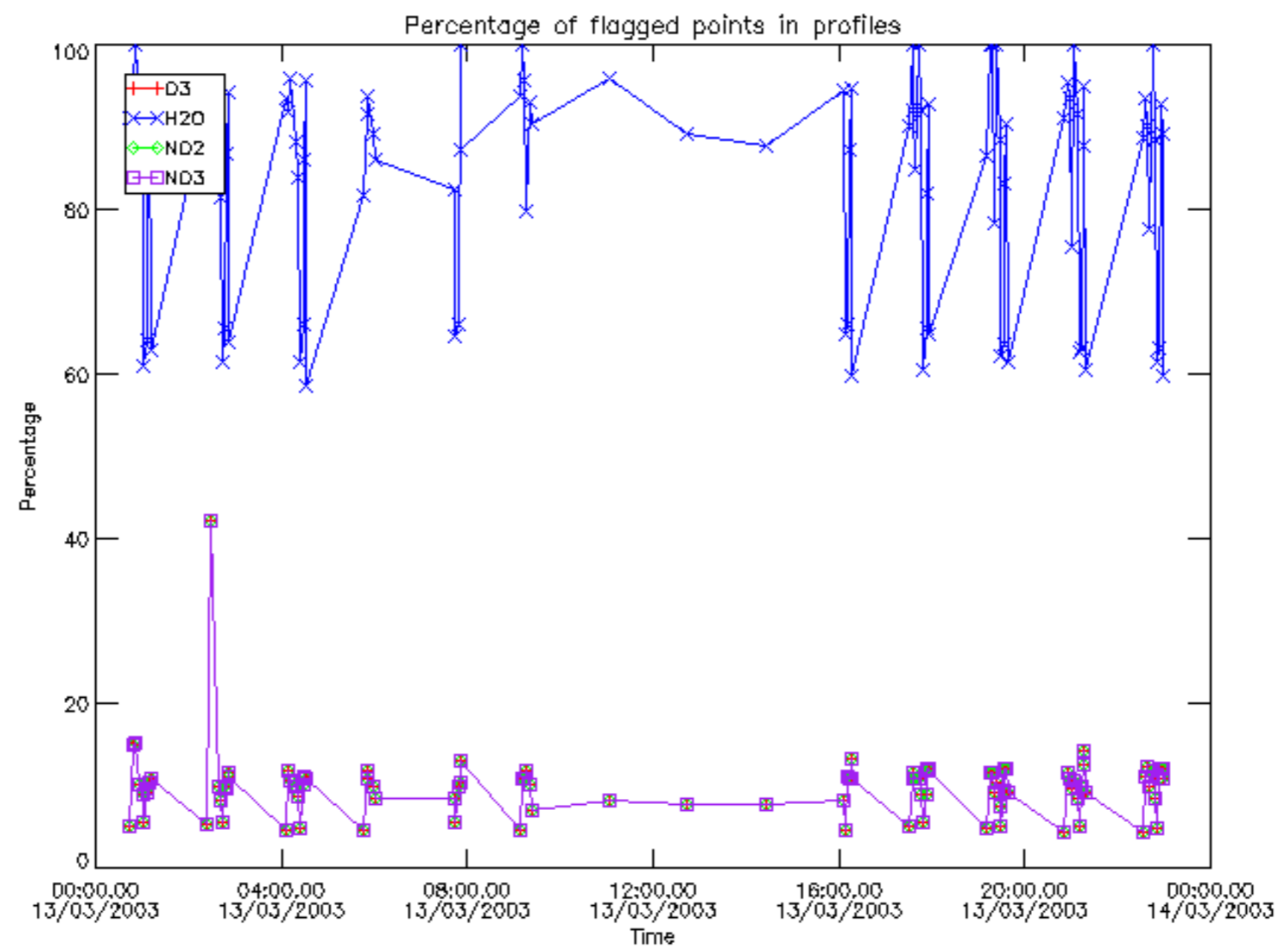
The colorbar represents the latitude.



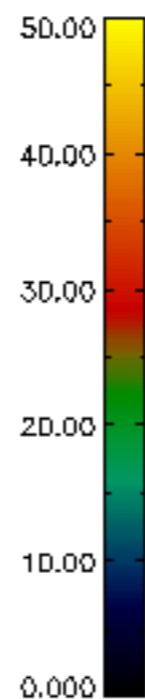
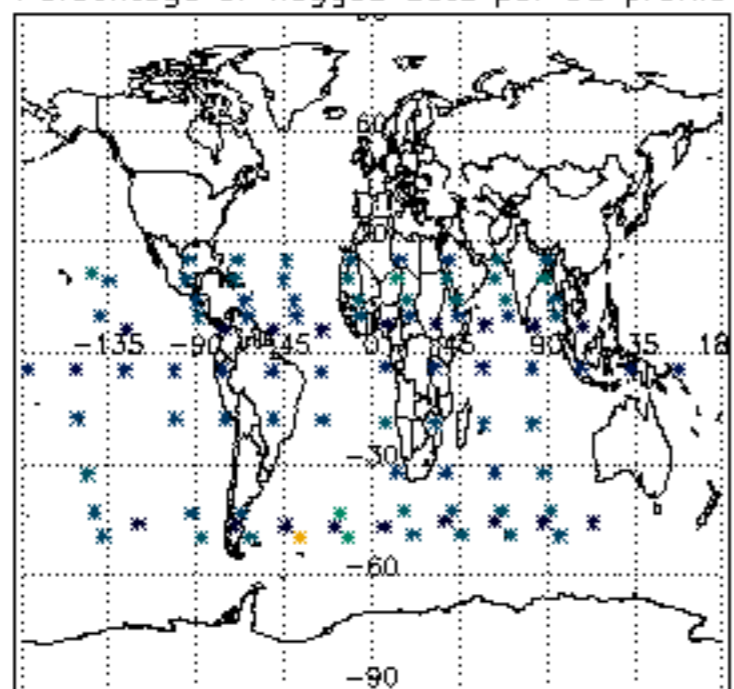
6. Auxiliary Data Files used for the production reported in section 2

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

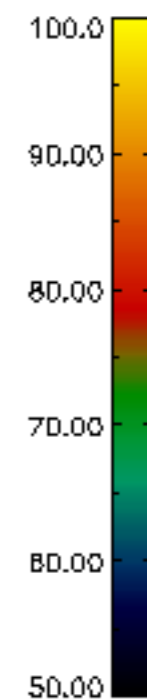
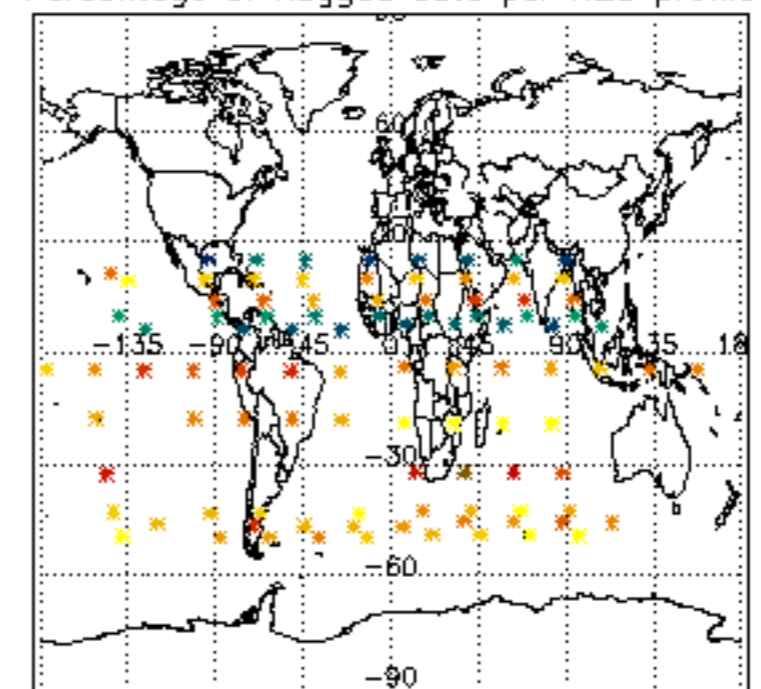
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	13-MAR-2003 00:02:39
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	13-MAR-2003 00:02:39
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	13-MAR-2003 00:02:39



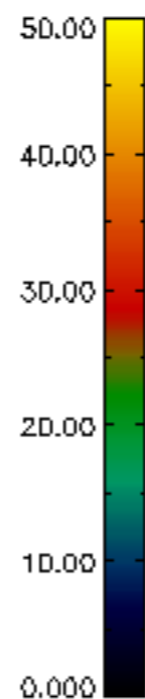
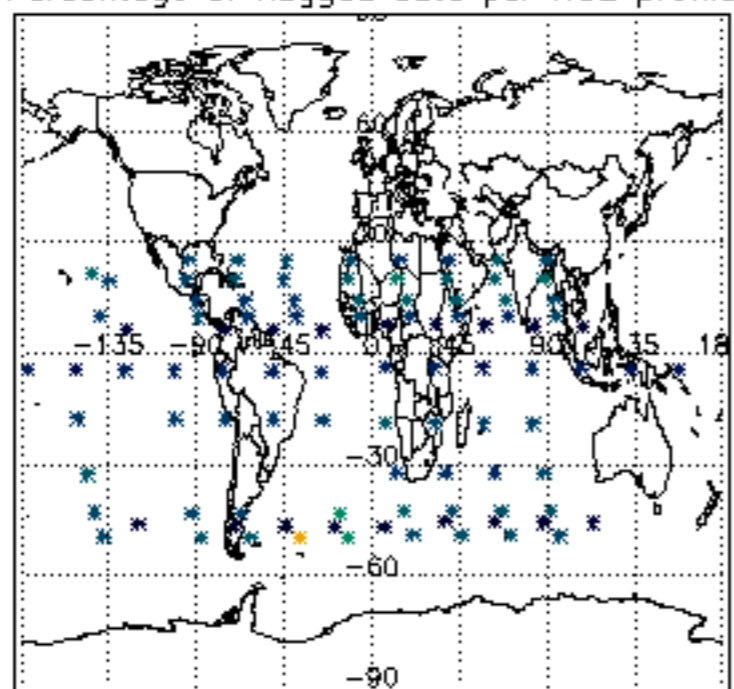
Percentage of flagged data per D3 profile



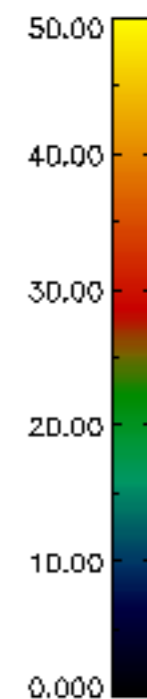
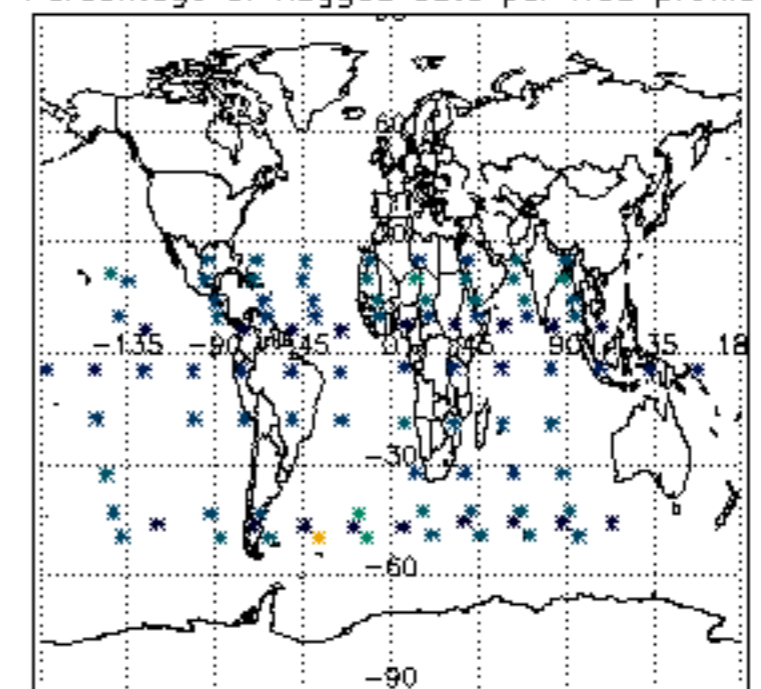
Percentage of flagged data per H2O profile

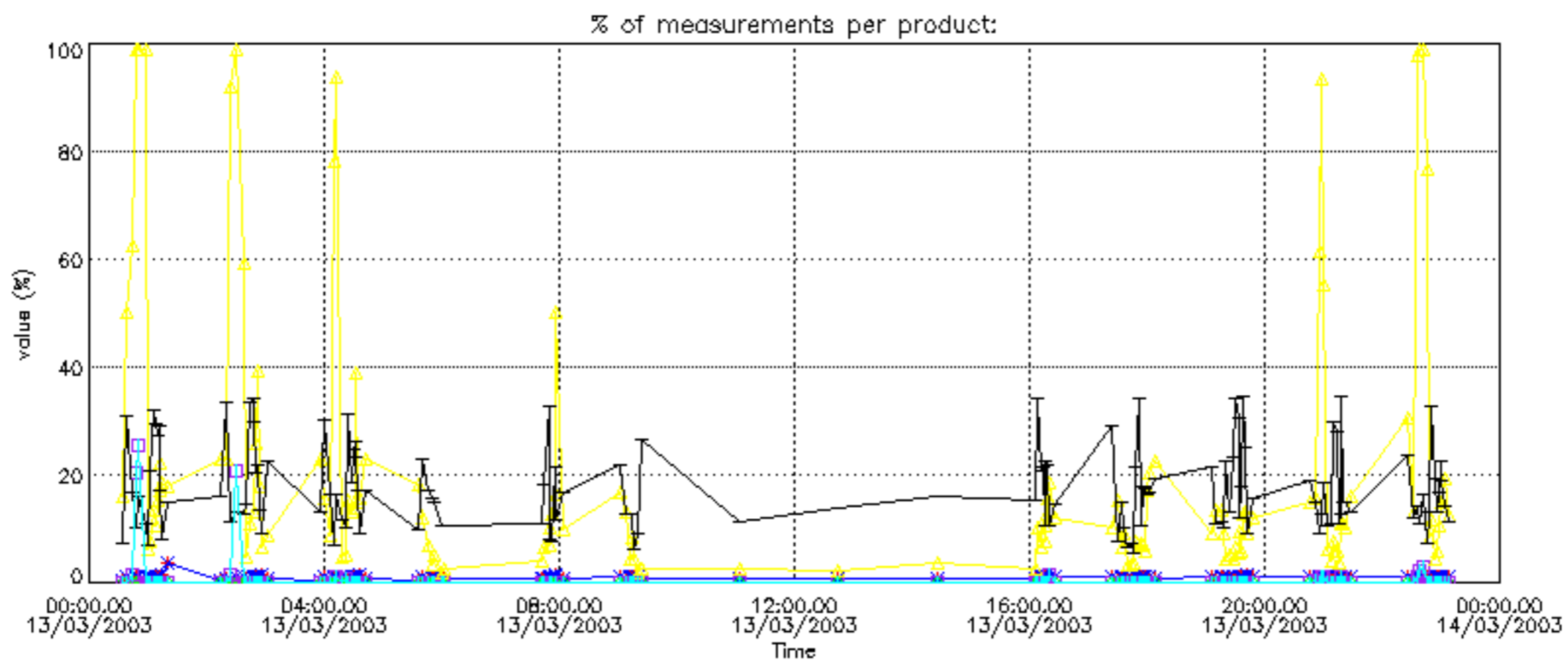


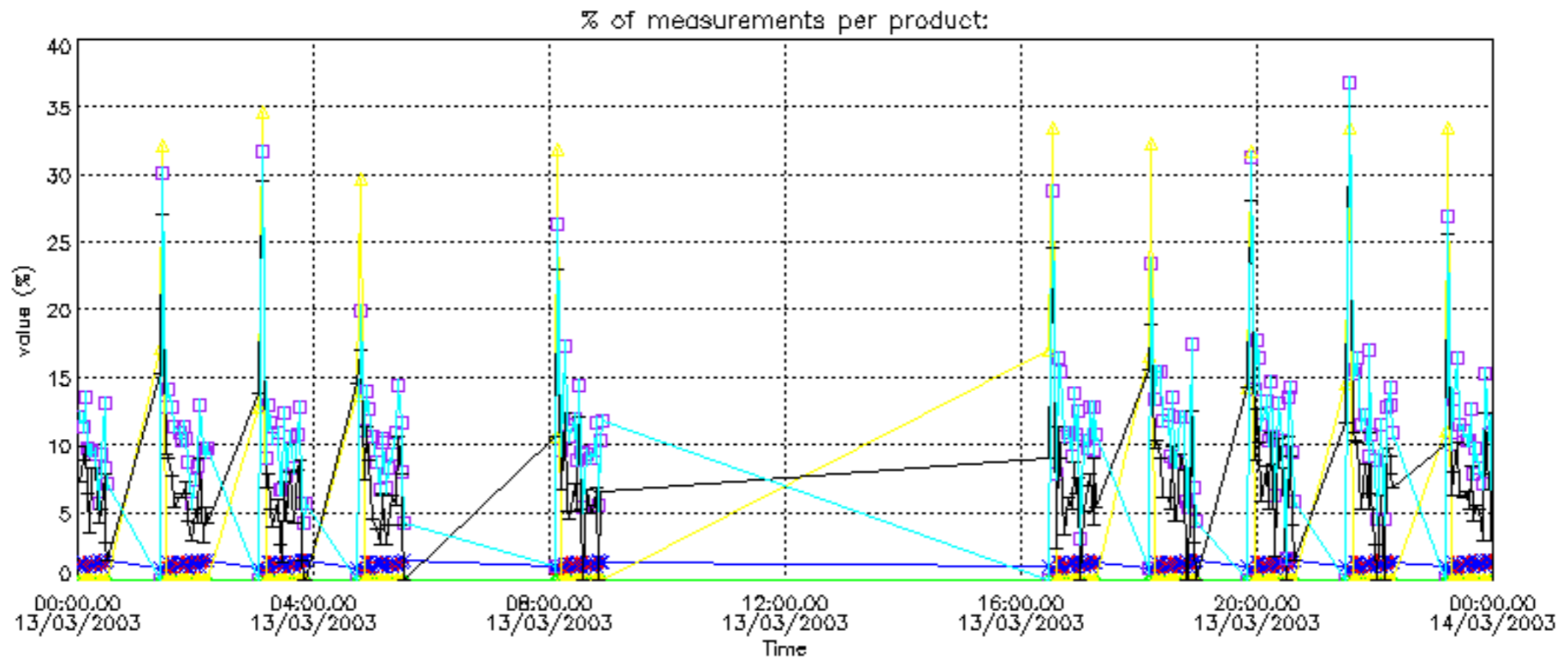
Percentage of flagged data per NO2 profile



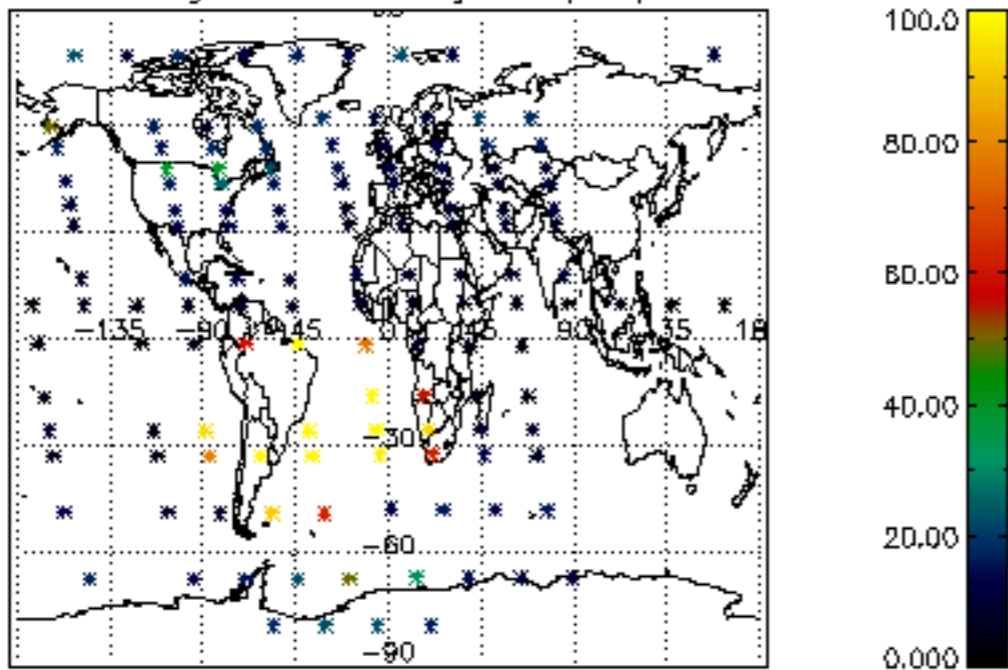
Percentage of flagged data per NO3 profile



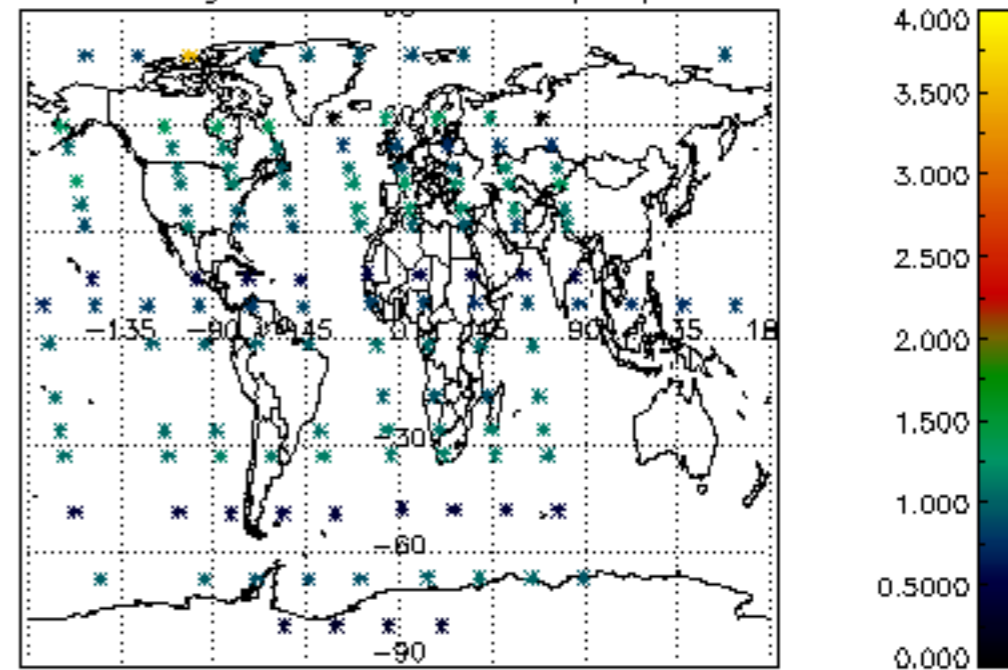




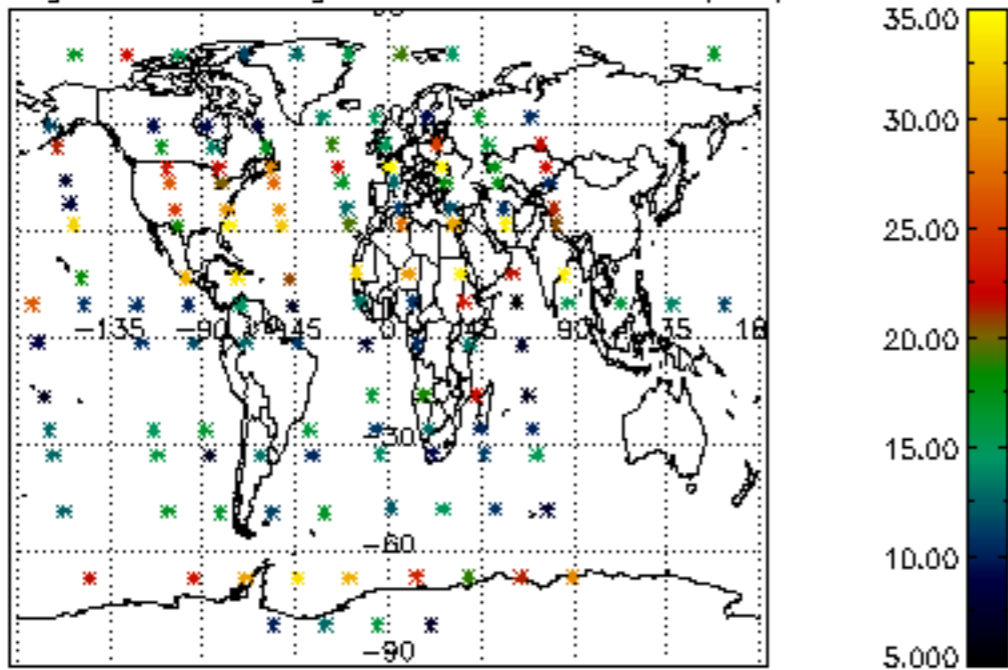
Percentage of cosmic ray hits per profile



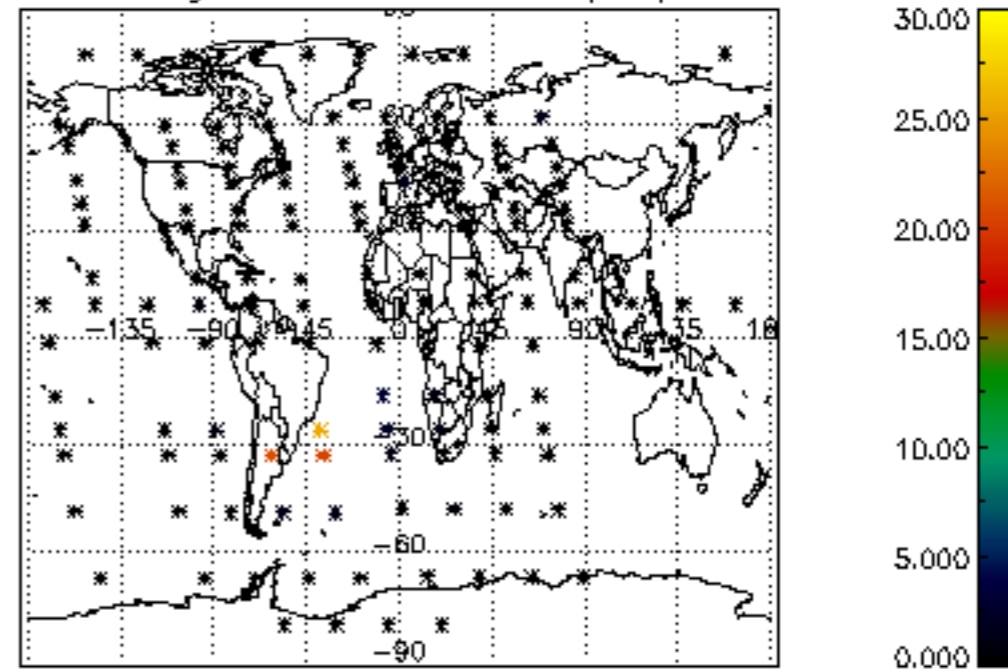
Percentage of datation errors per profile



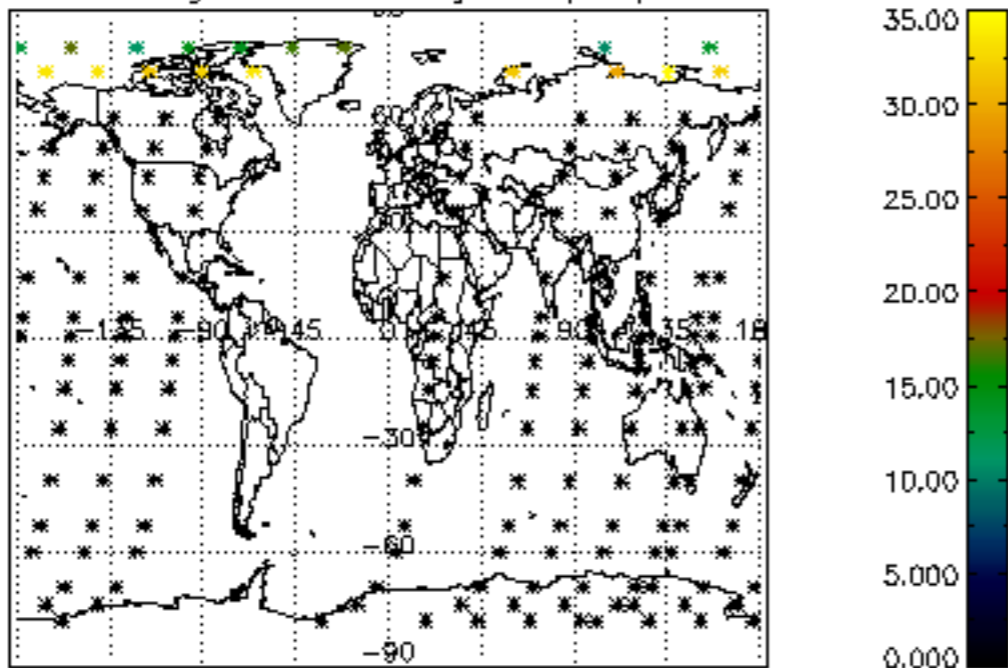
Percentage of star falling outside central band per profile



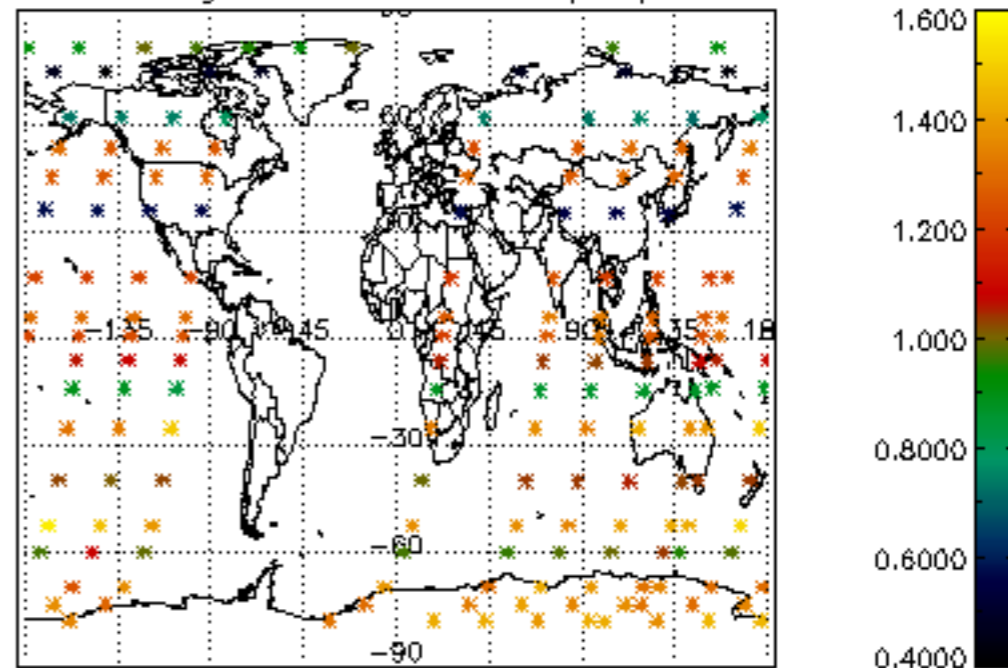
Percentage of saturation errors per profile



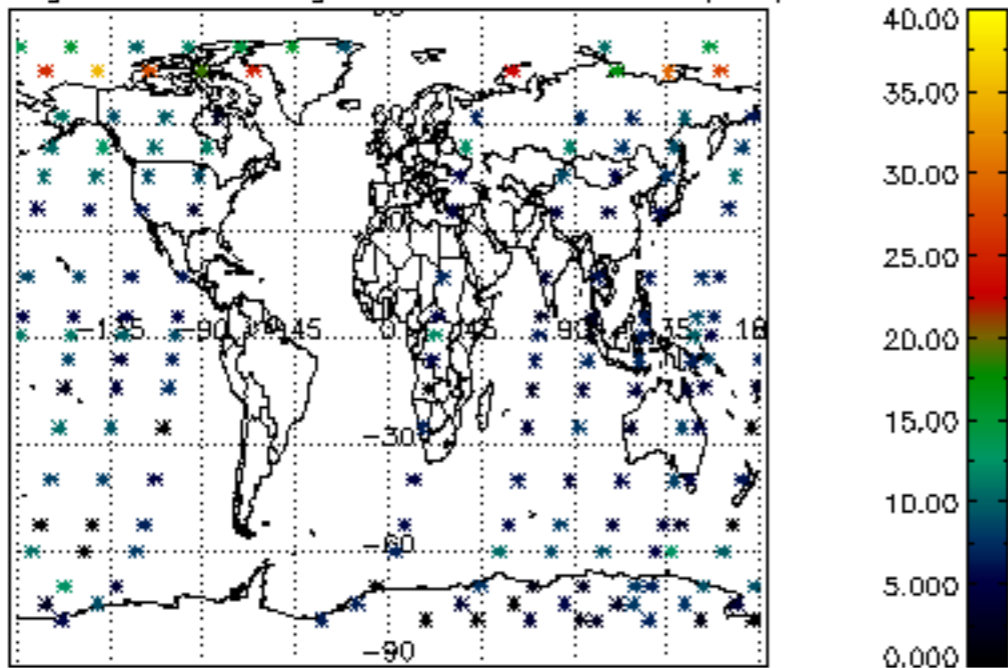
Percentage of cosmic ray hits per profile



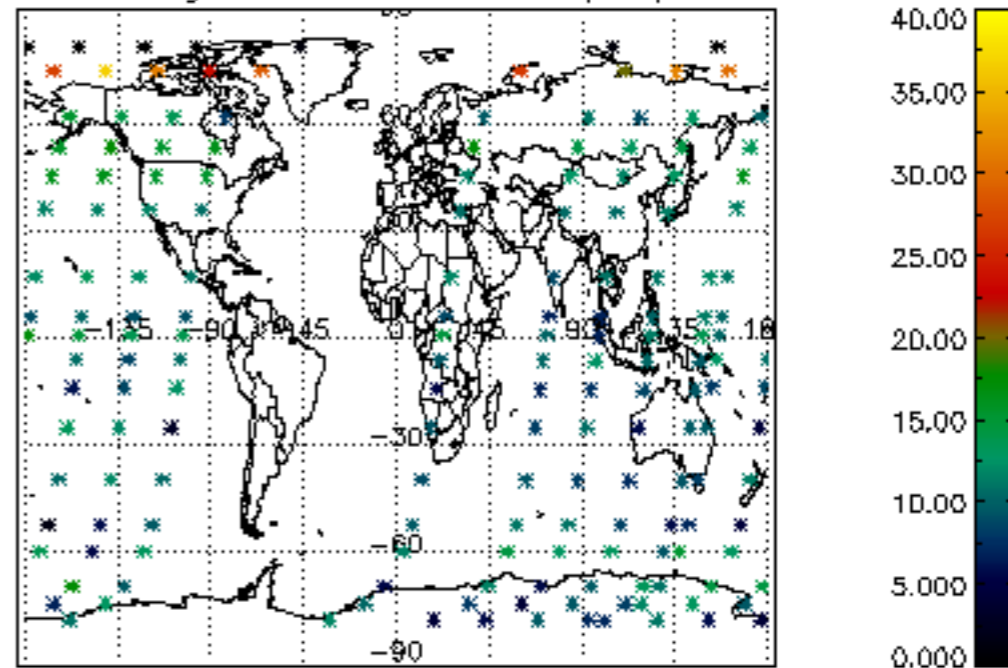
Percentage of datation errors per profile

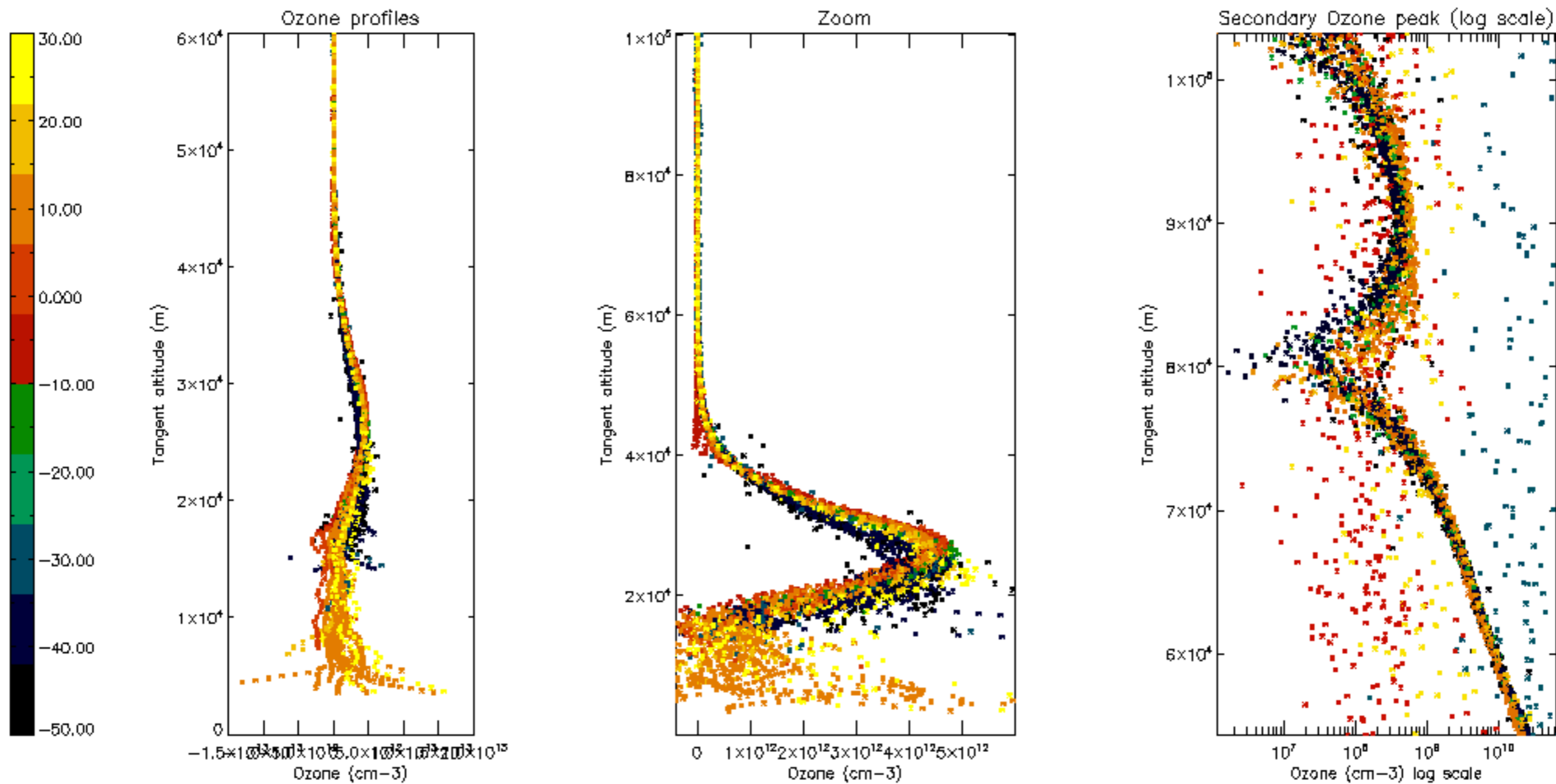


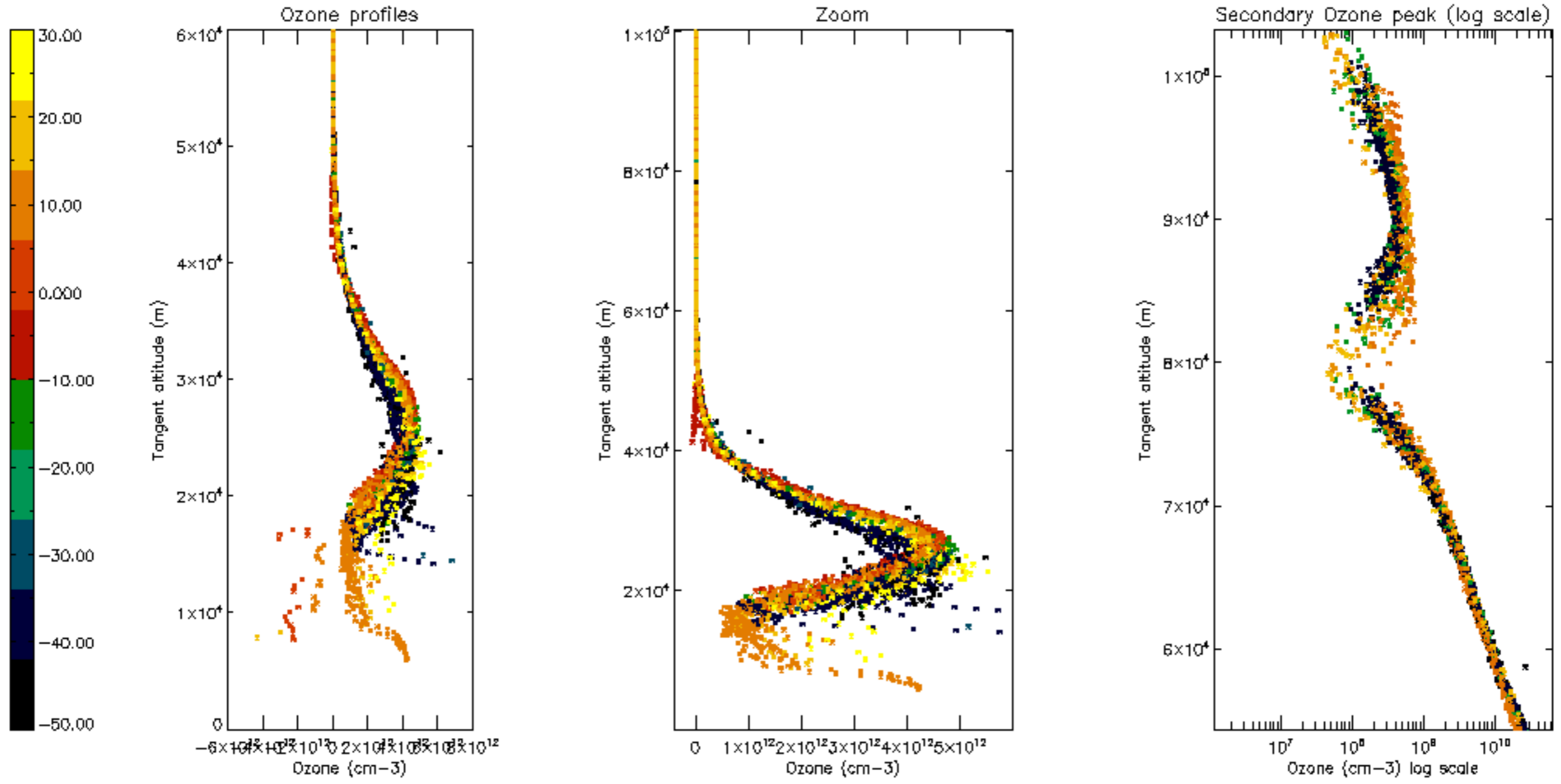
Percentage of star falling outside central band per profile

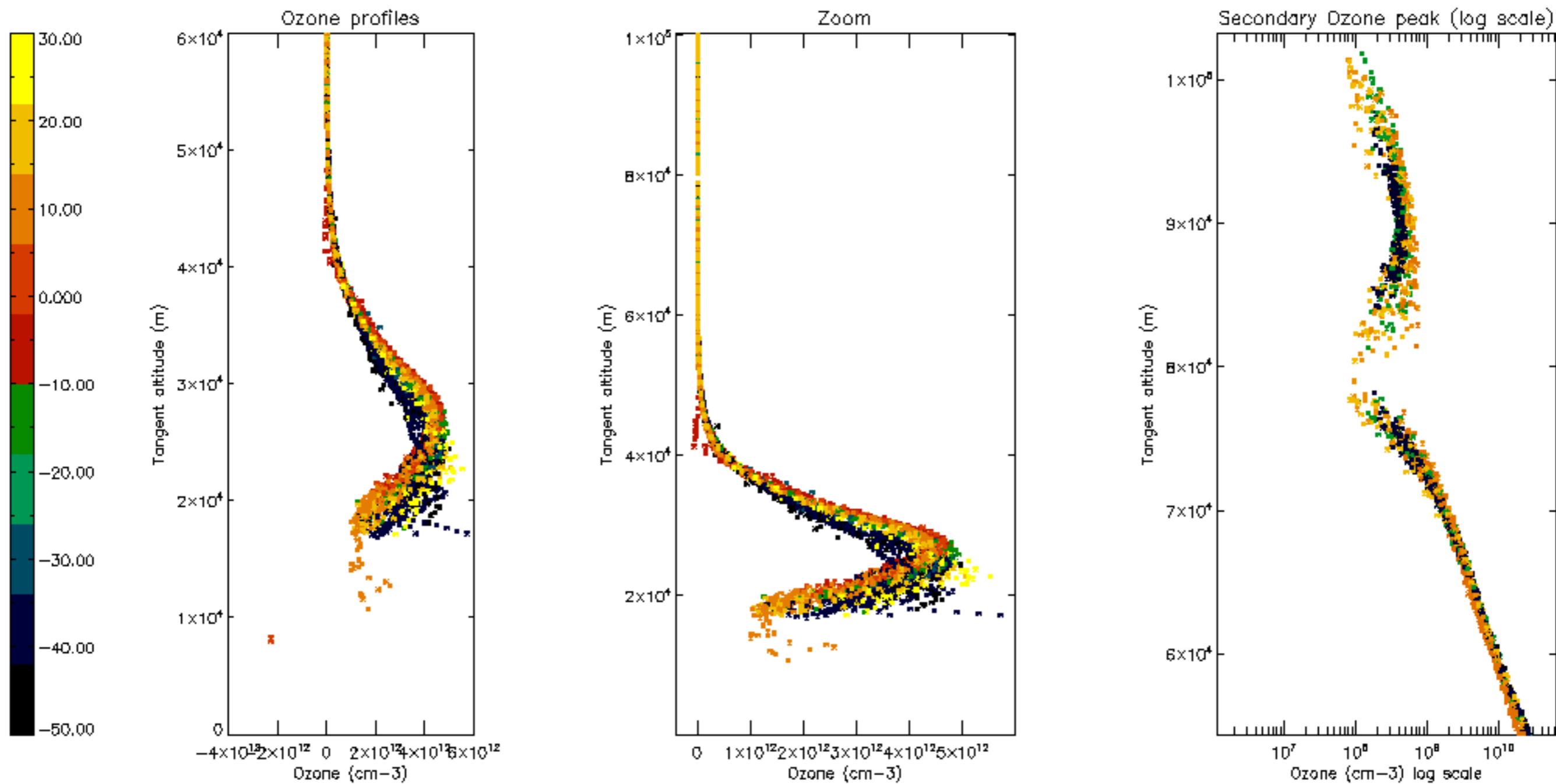


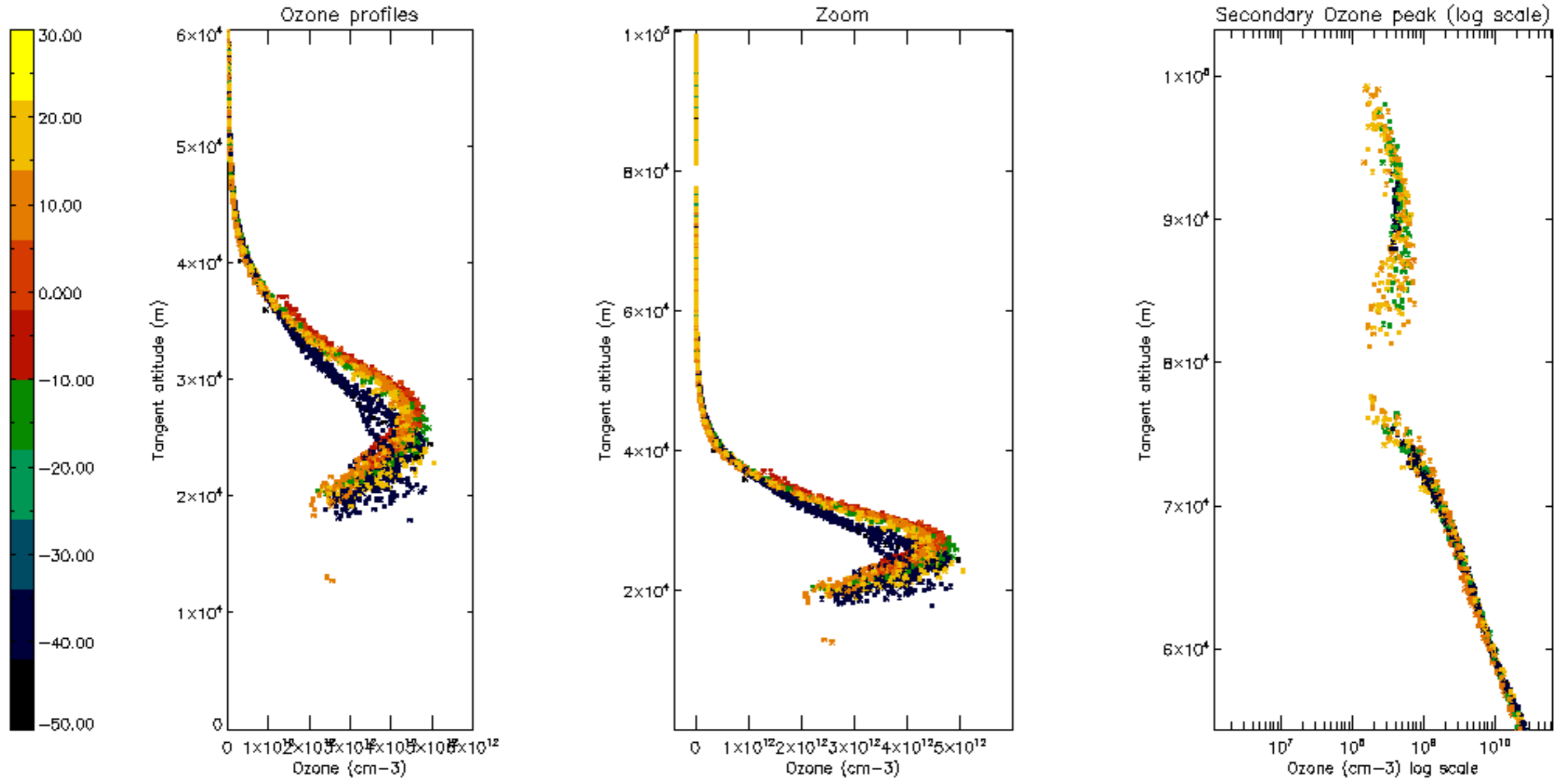
Percentage of saturation errors per profile

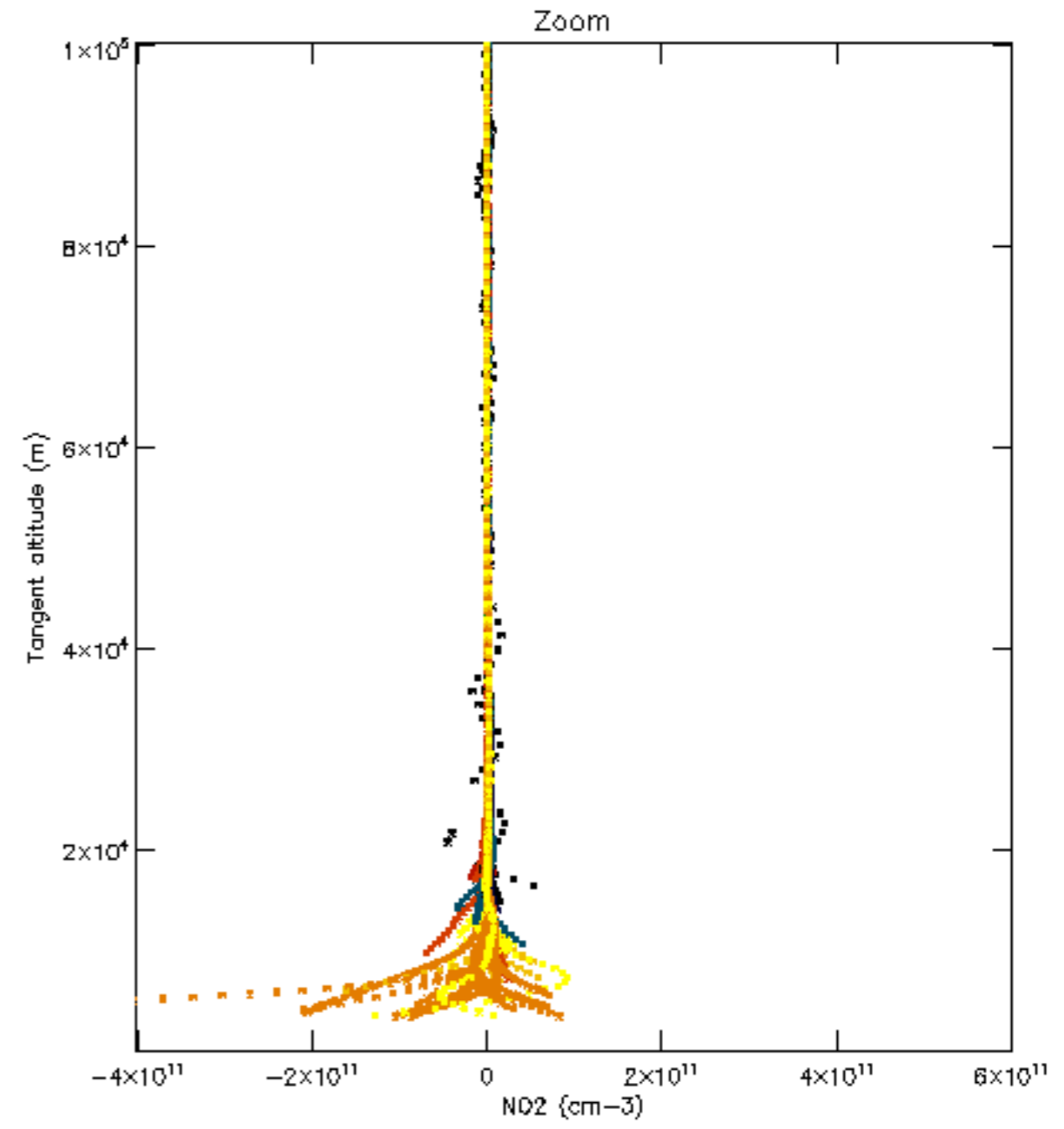
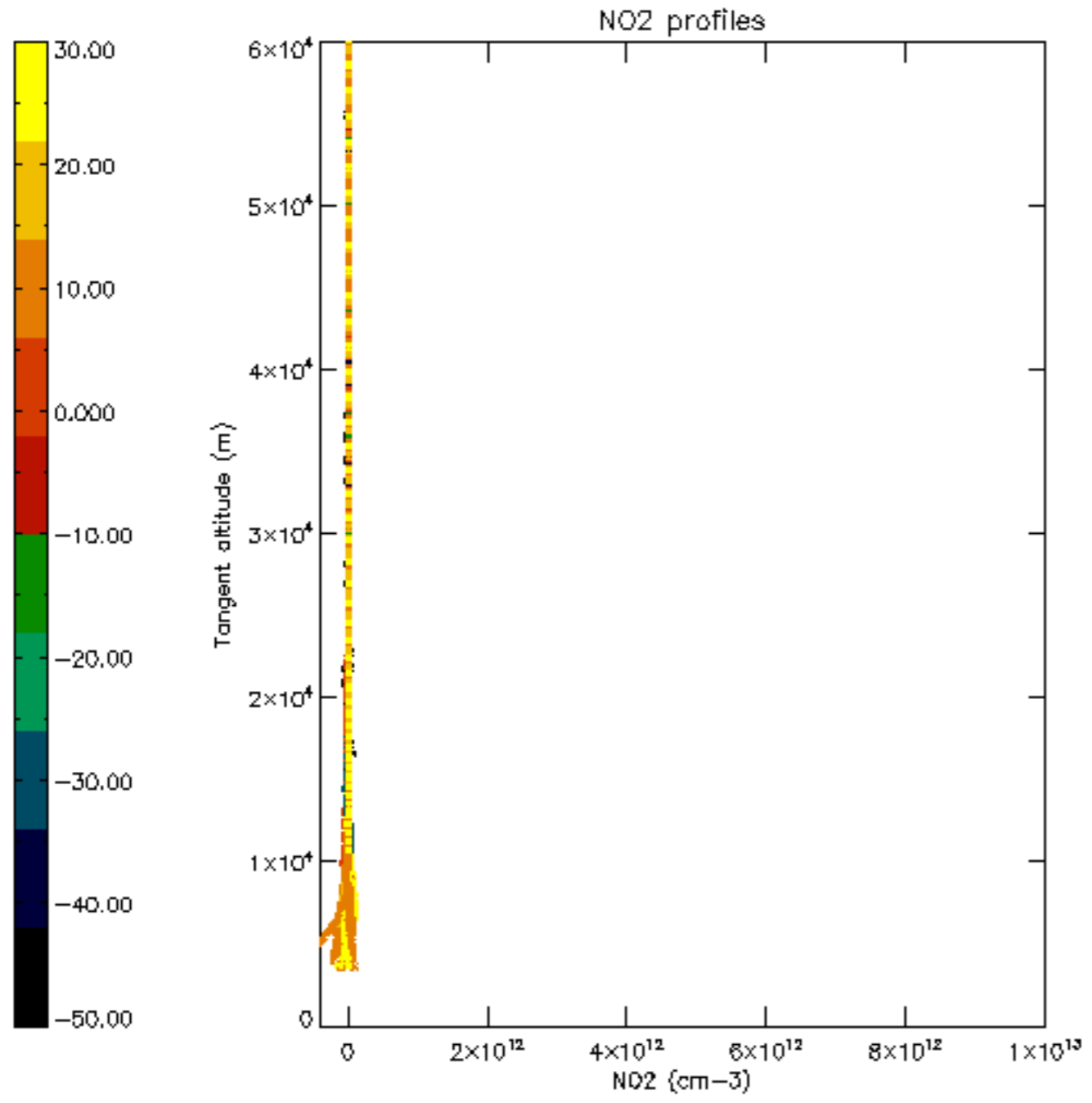


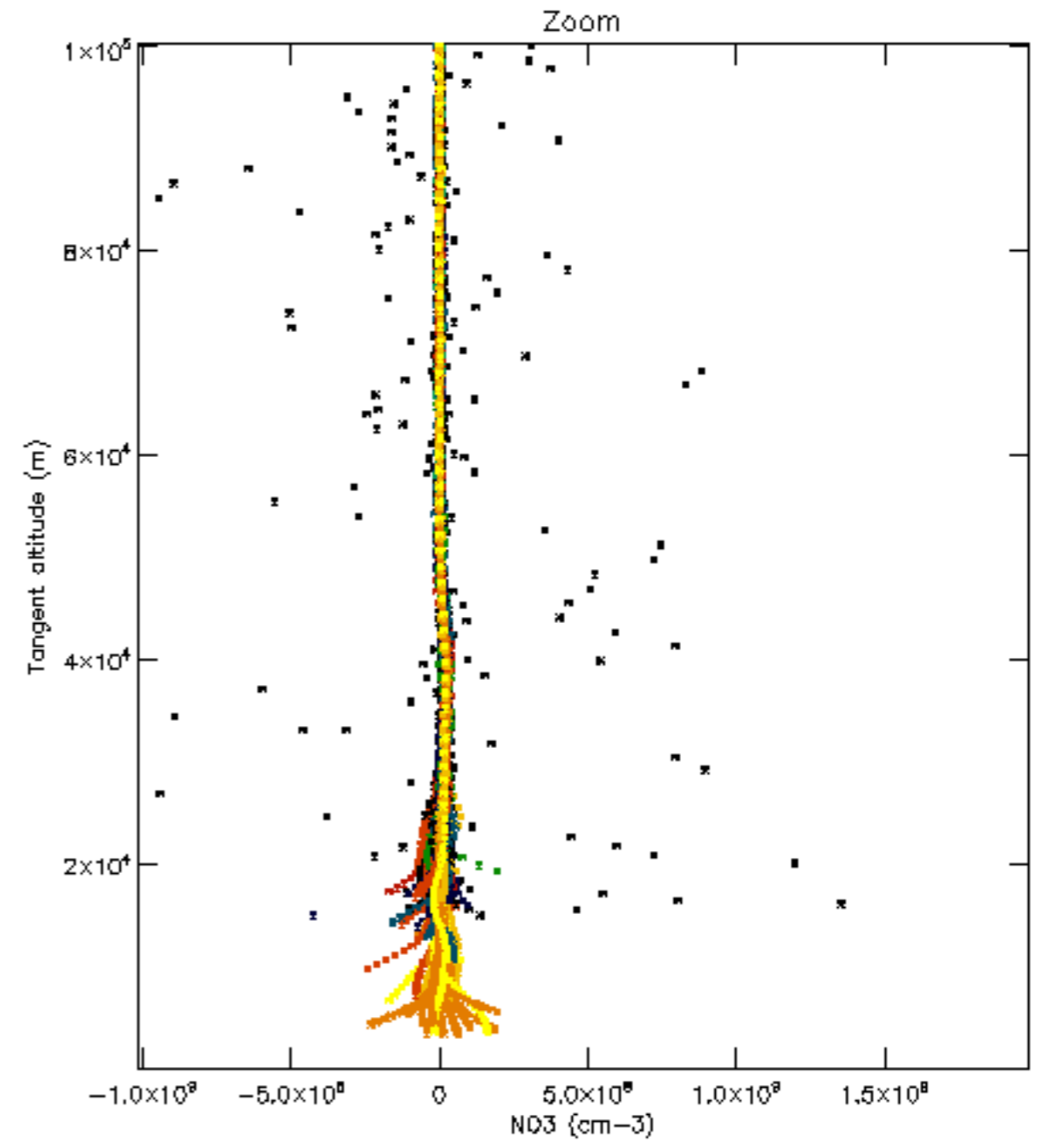
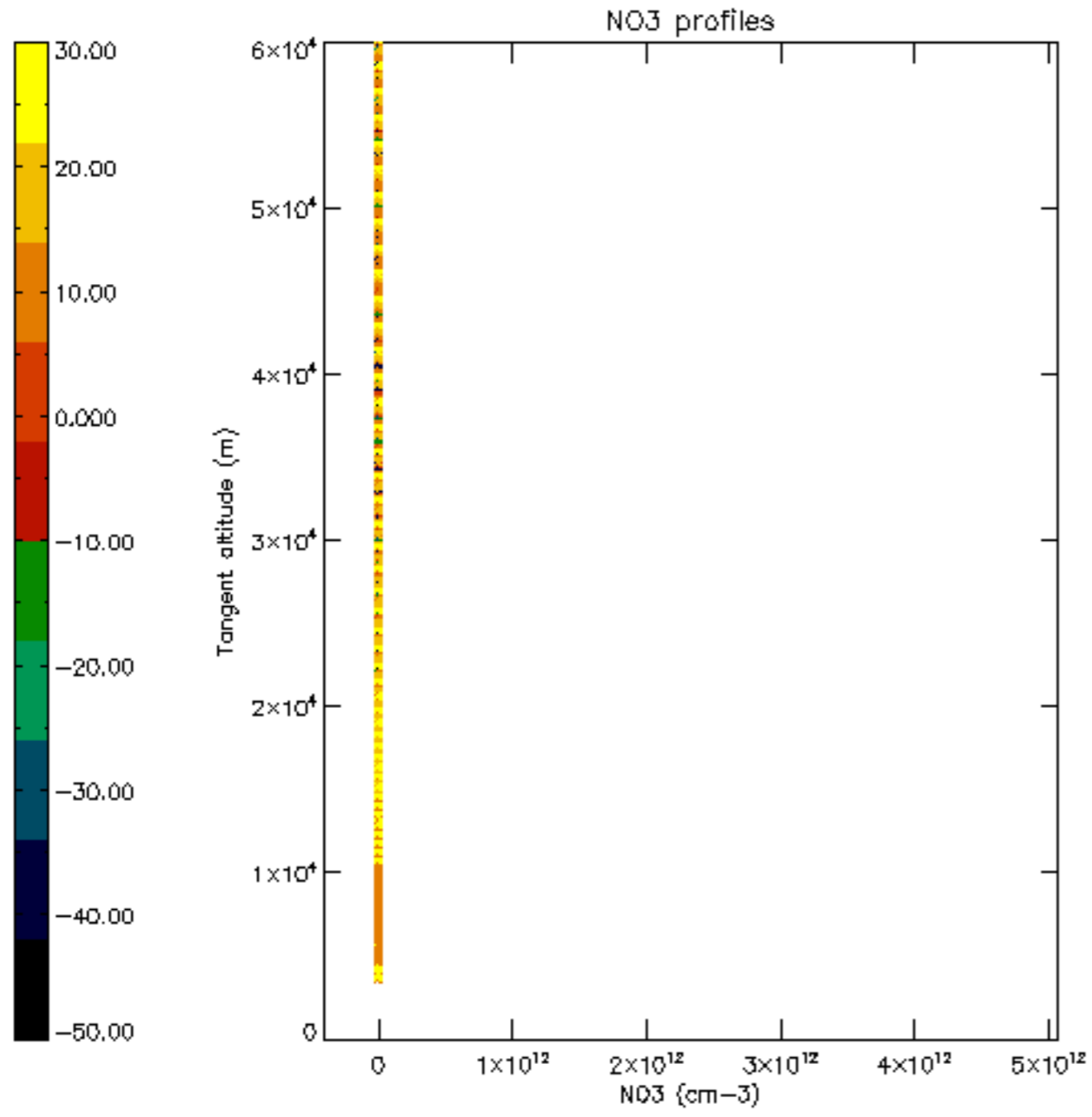


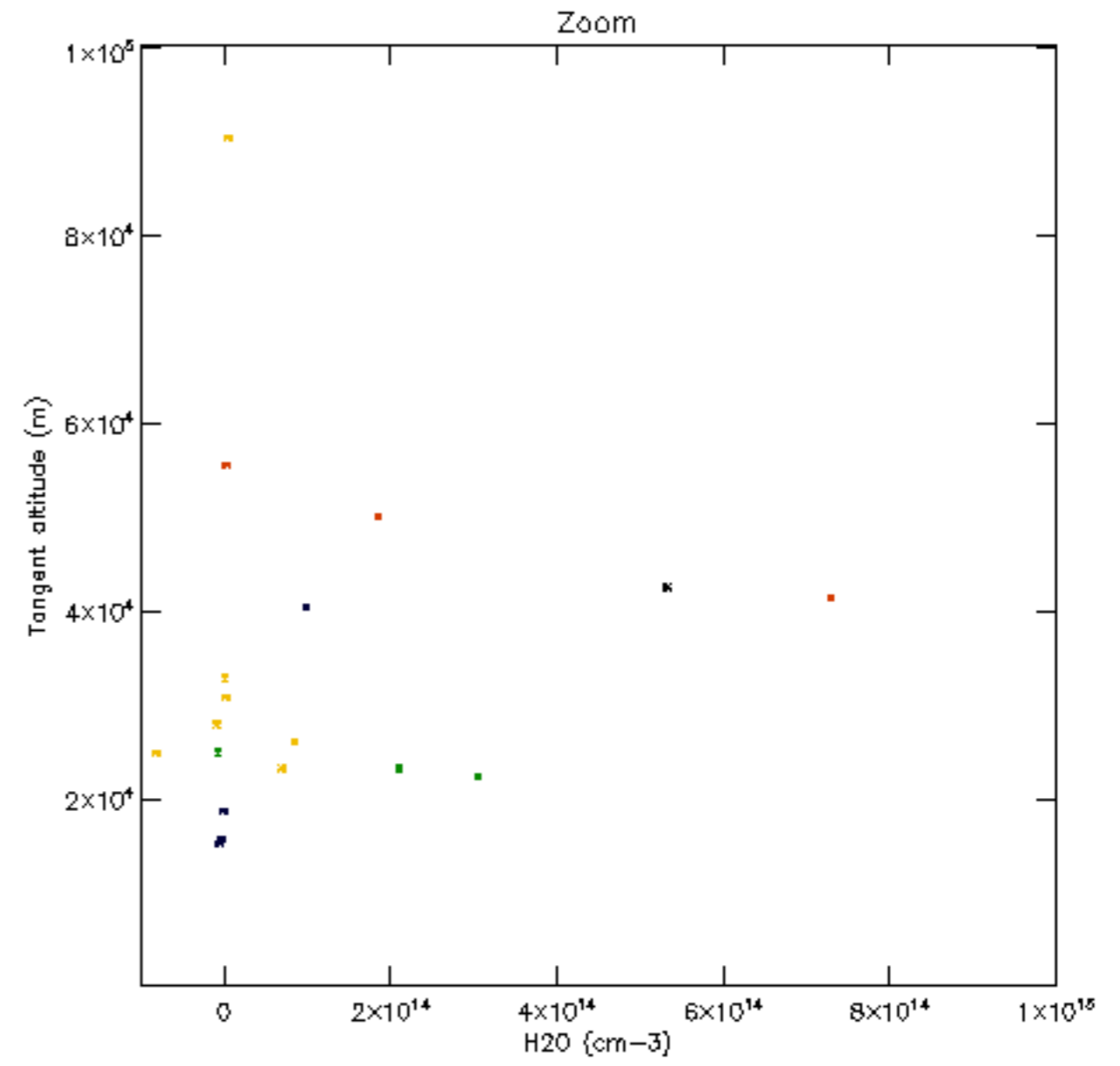
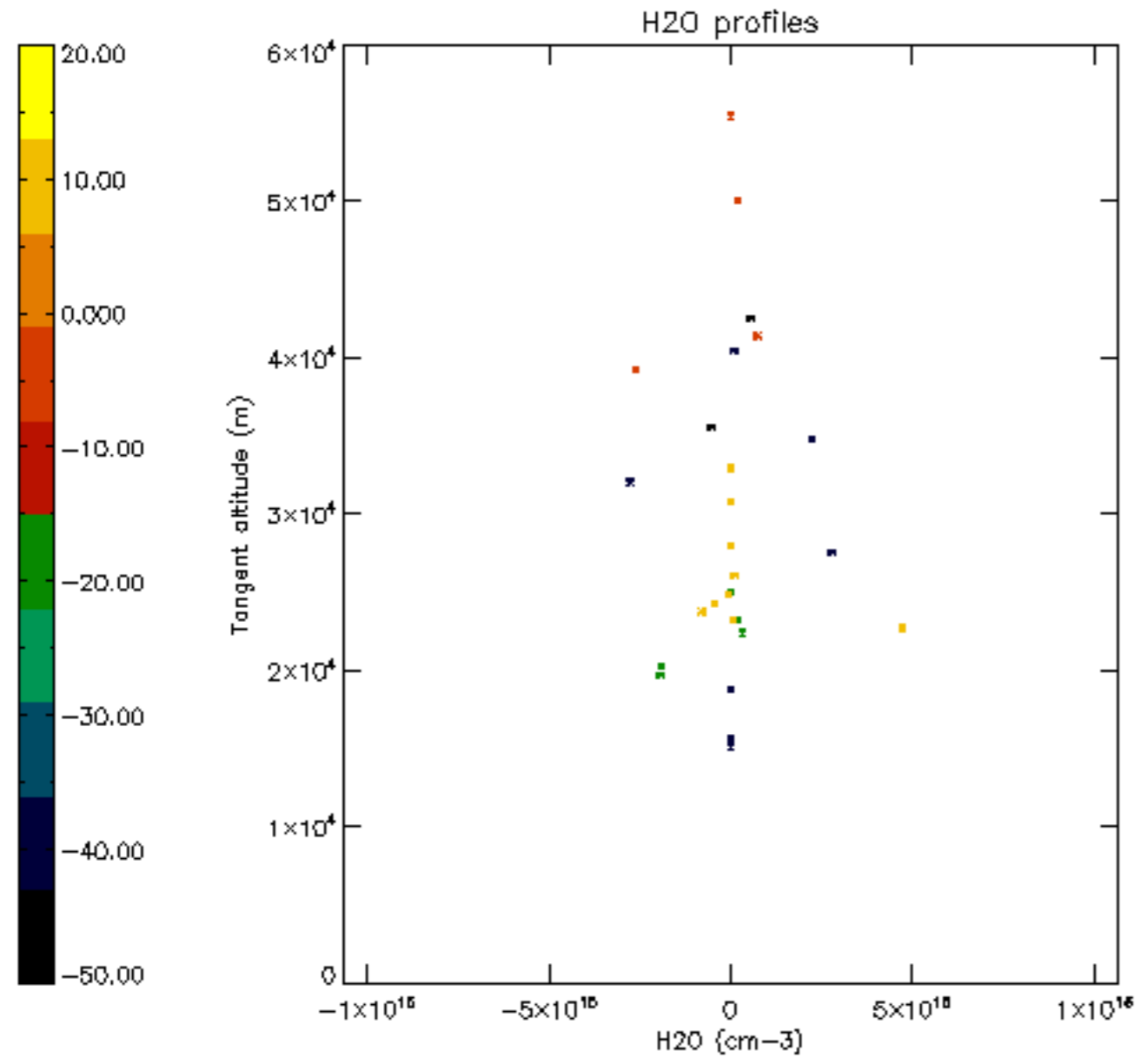


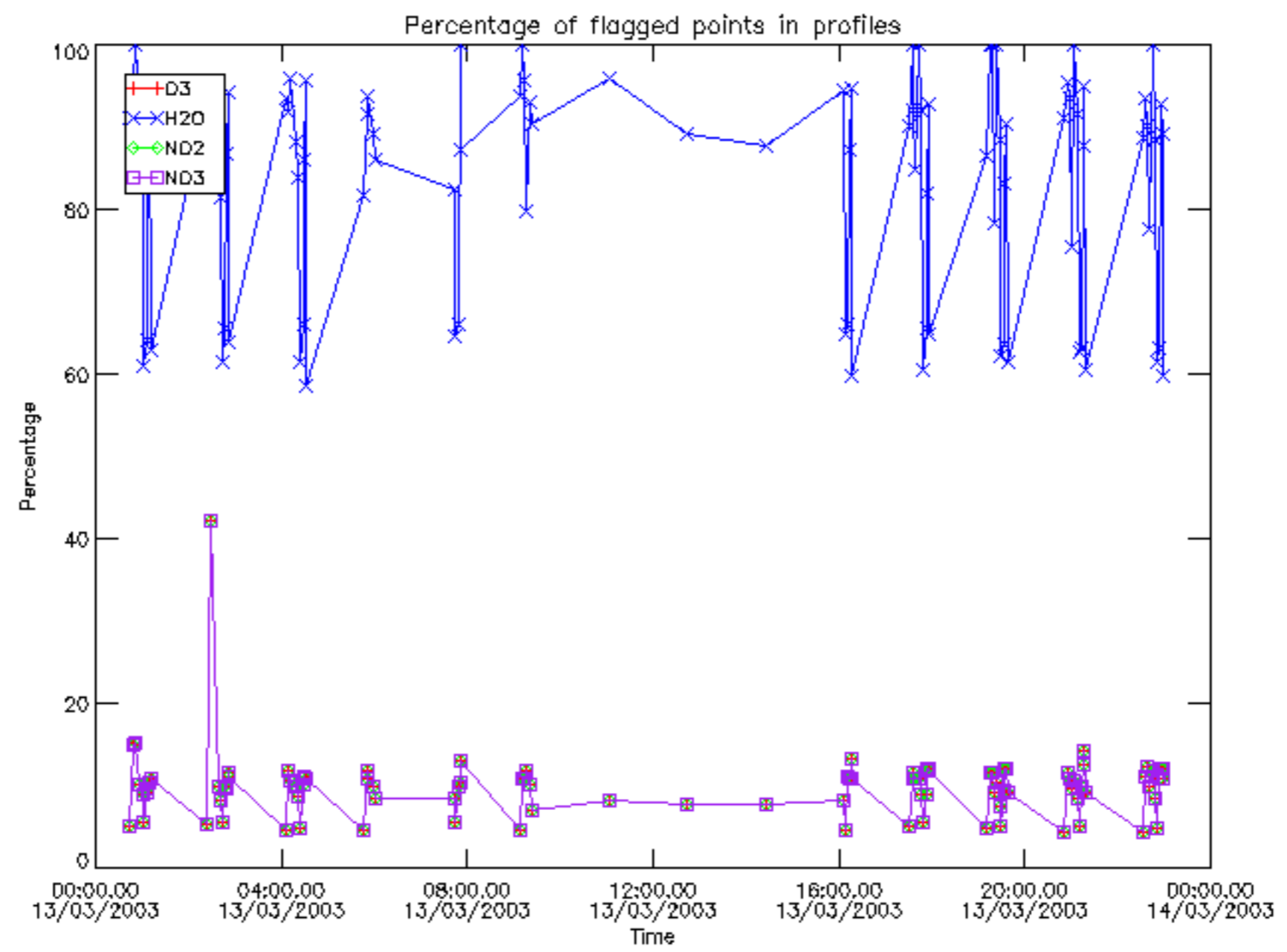




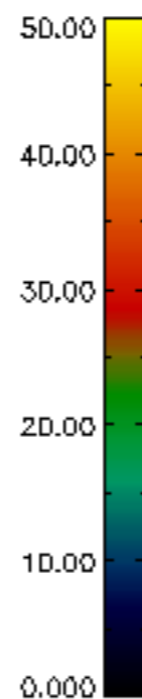
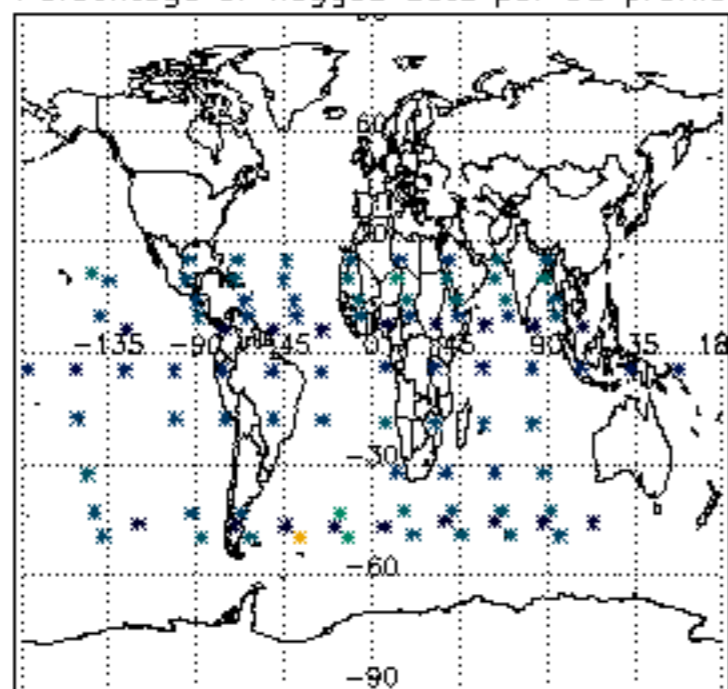




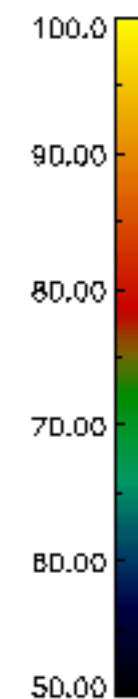
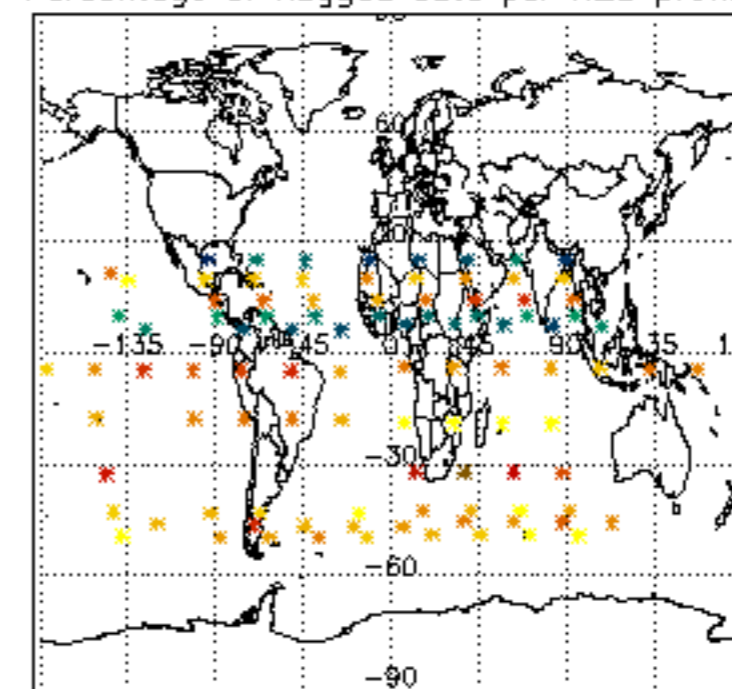




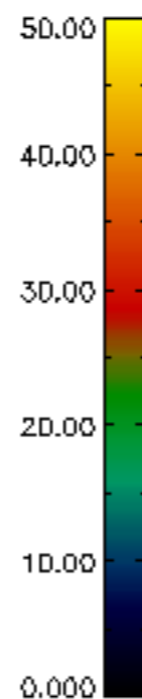
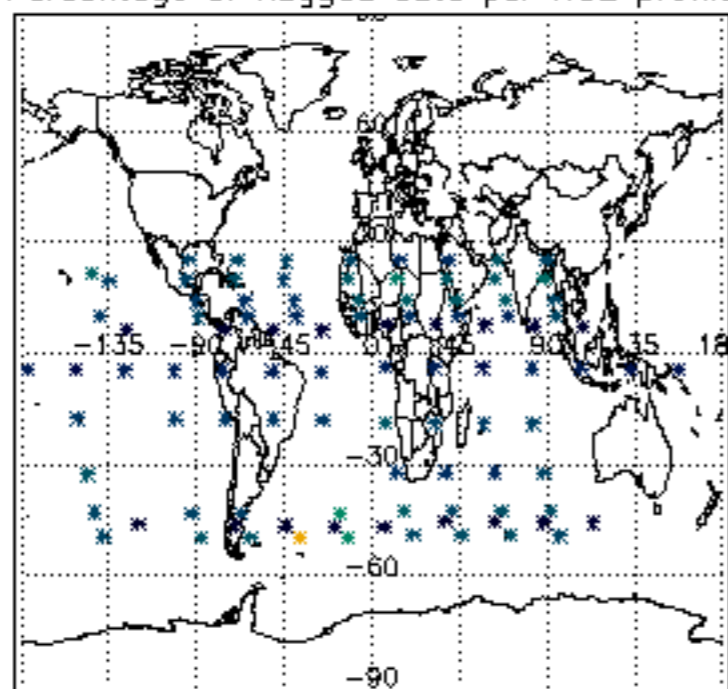
Percentage of flagged data per D3 profile



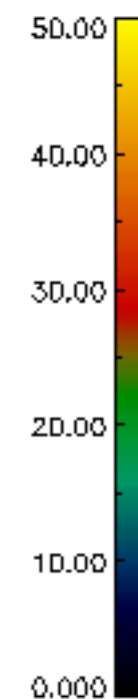
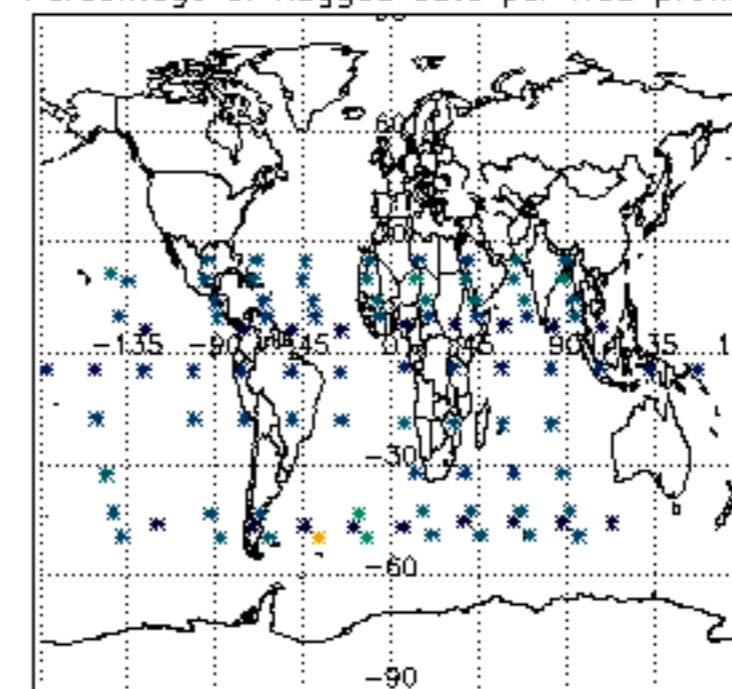
Percentage of flagged data per H2O profile

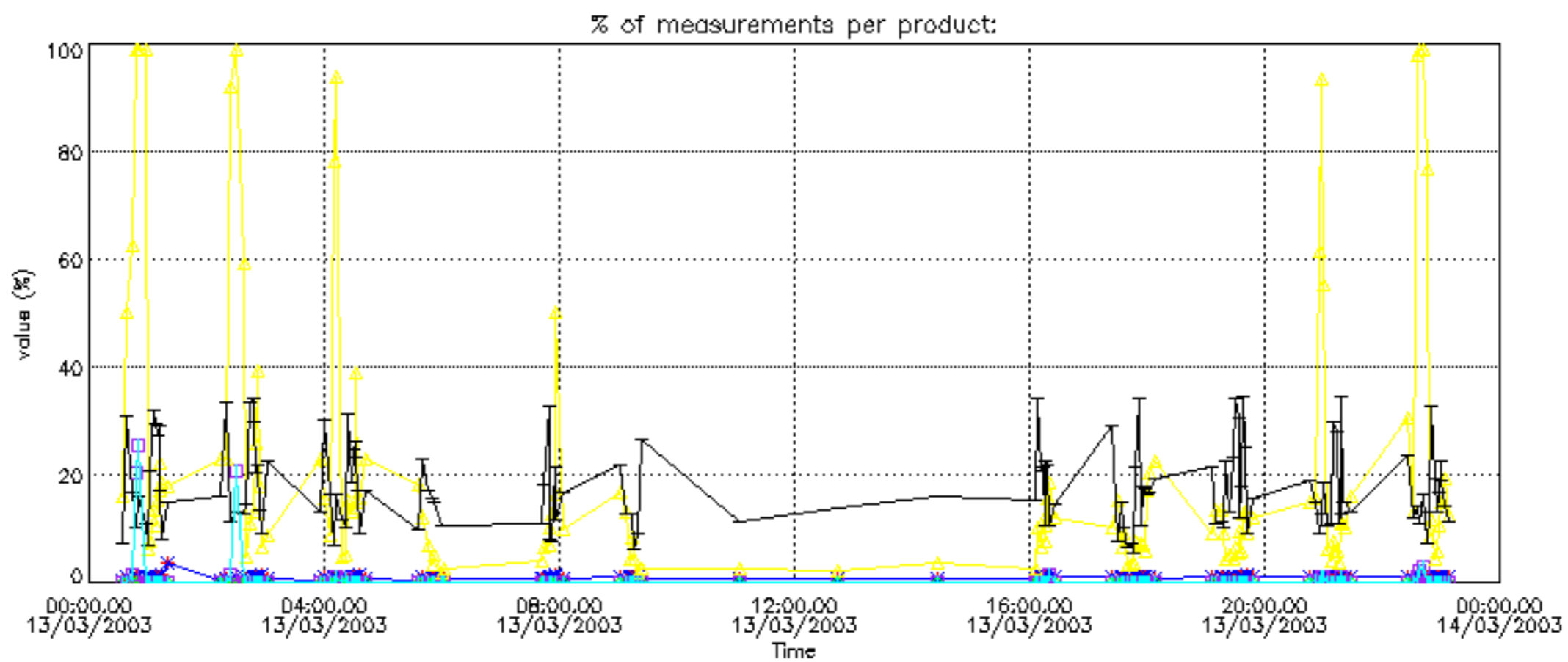


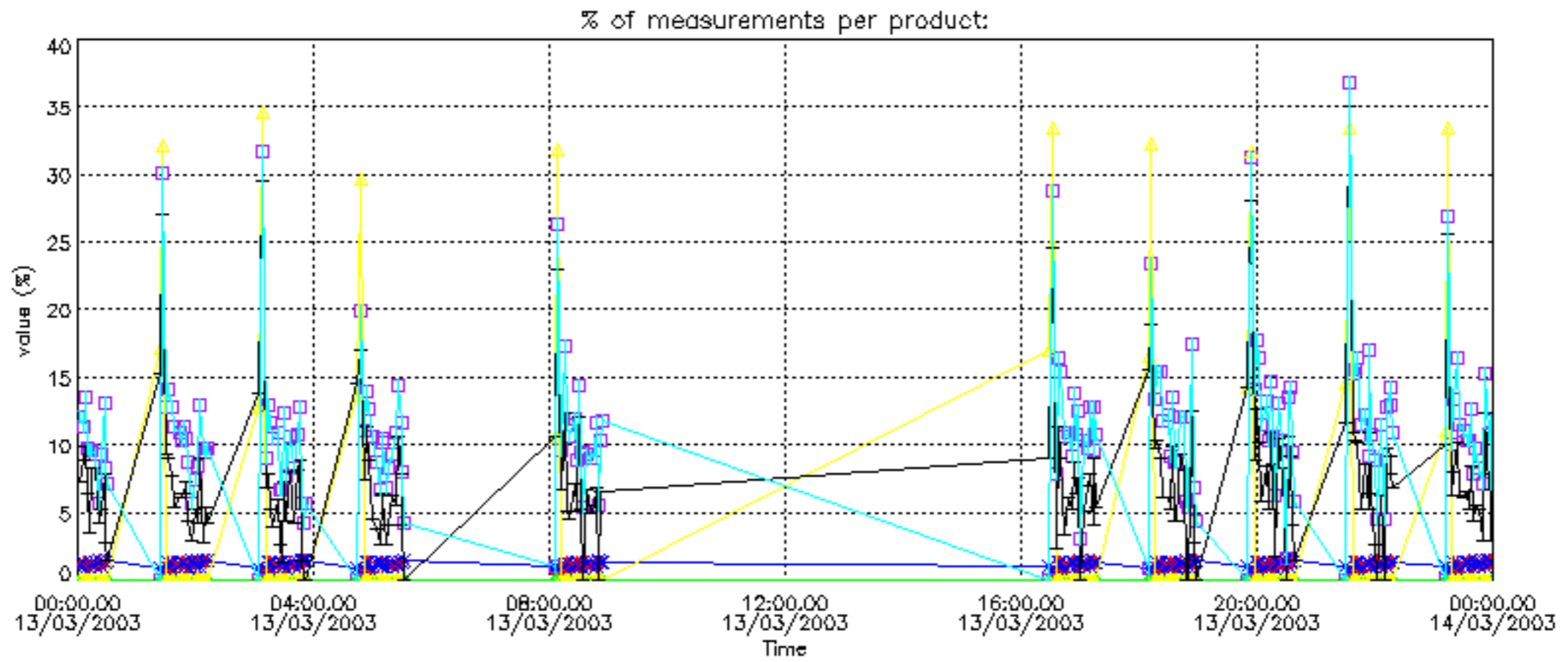
Percentage of flagged data per NO2 profile



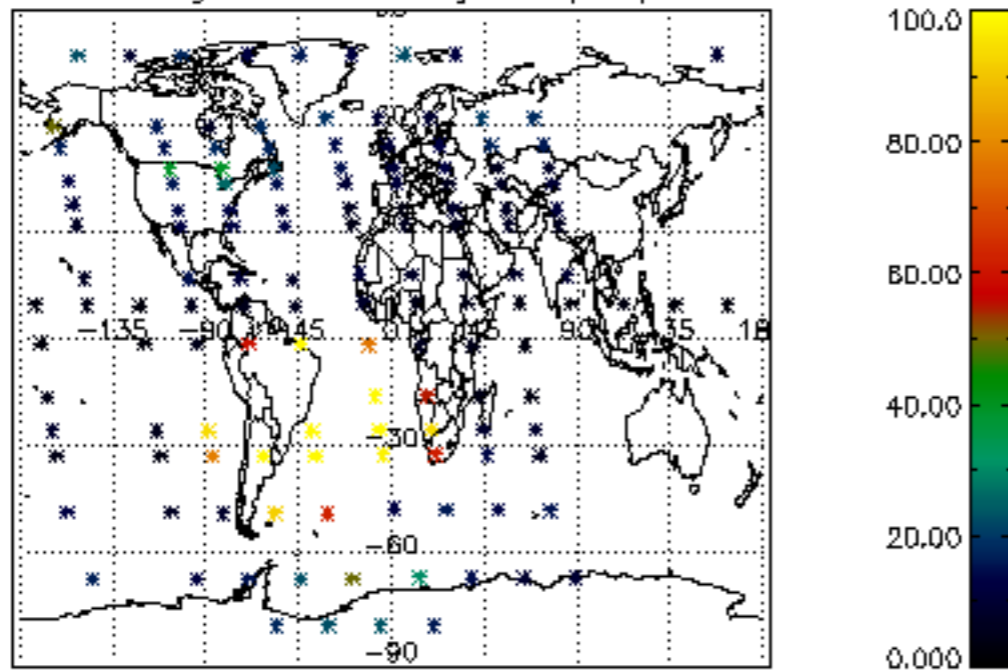
Percentage of flagged data per NO3 profile



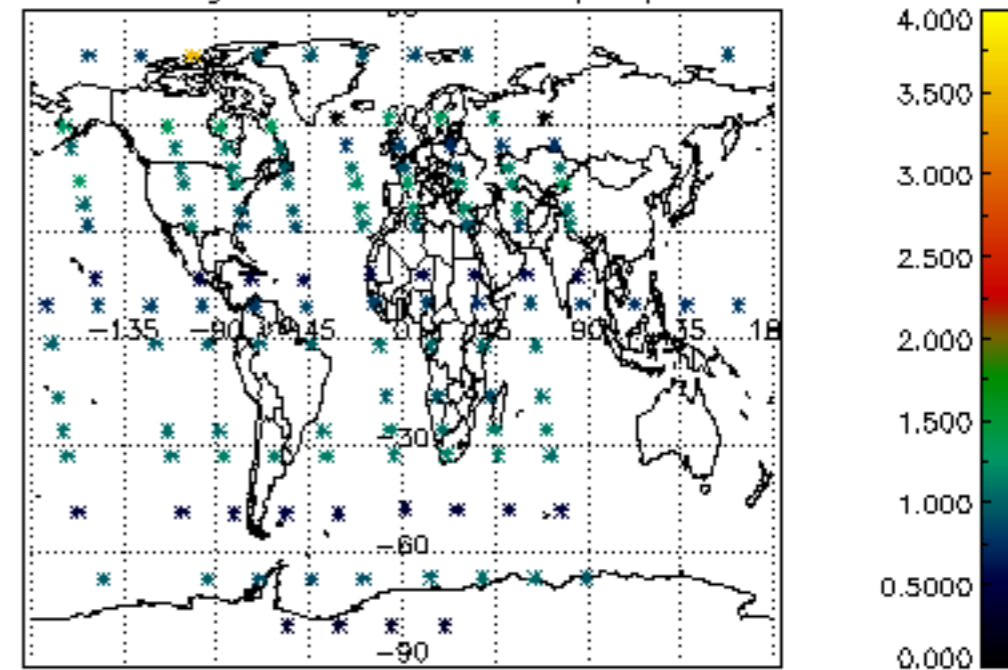




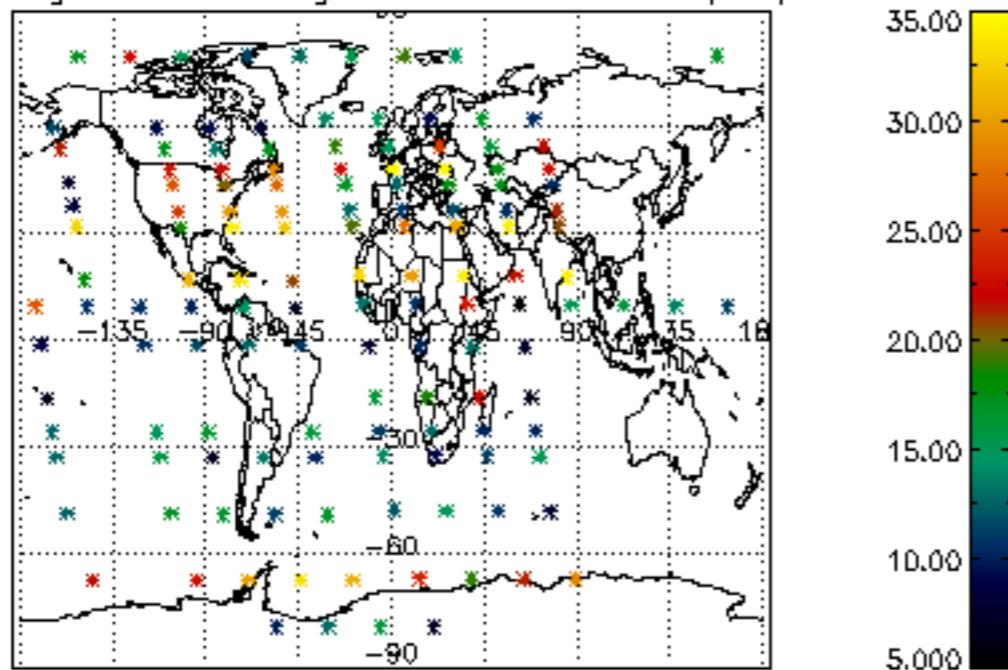
Percentage of cosmic ray hits per profile



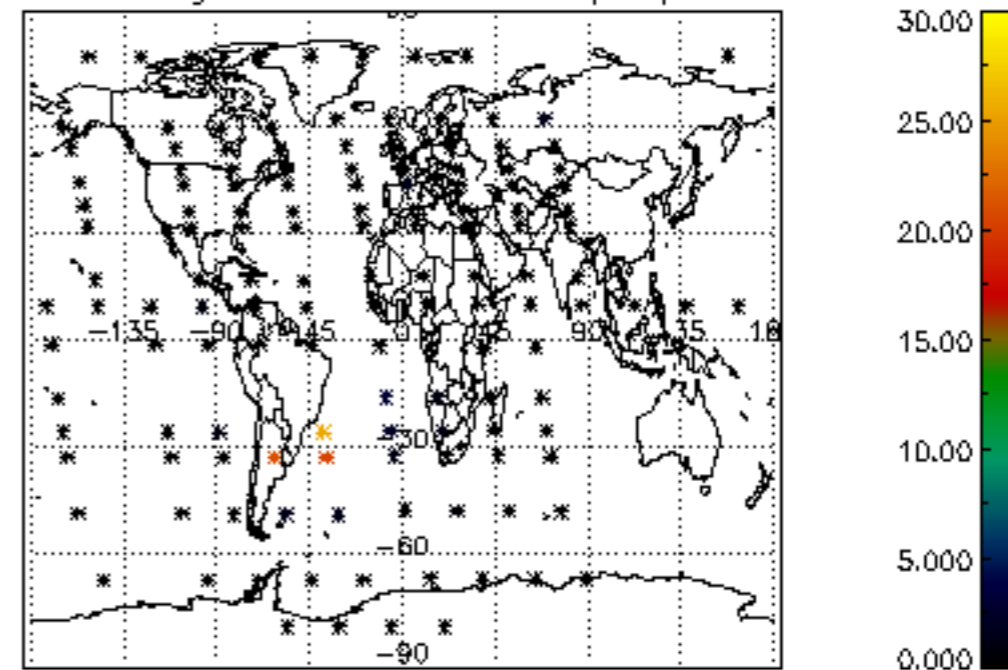
Percentage of datation errors per profile



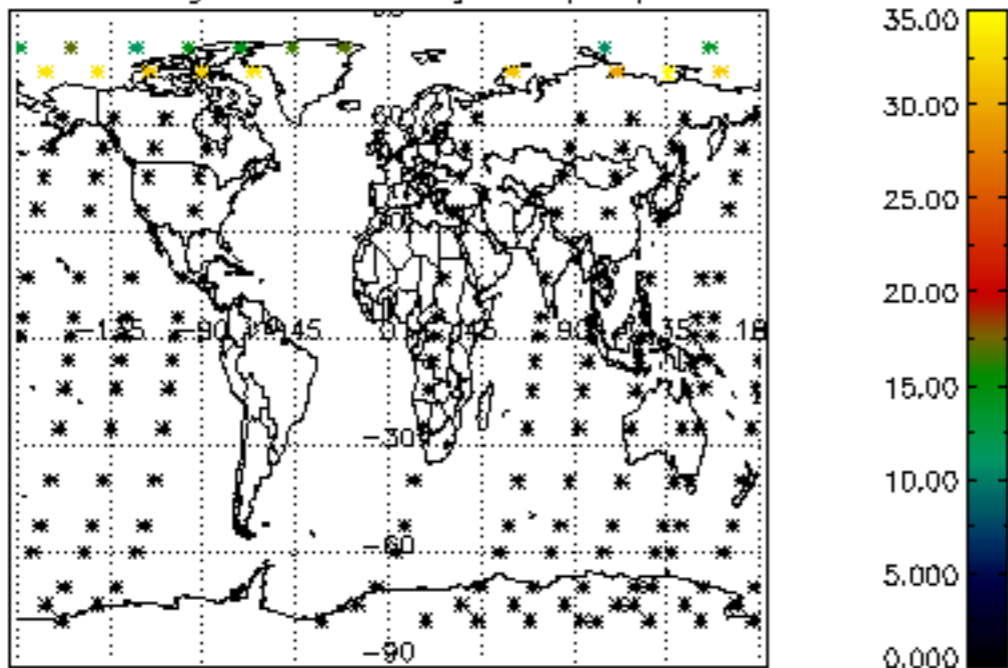
Percentage of star falling outside central band per profile



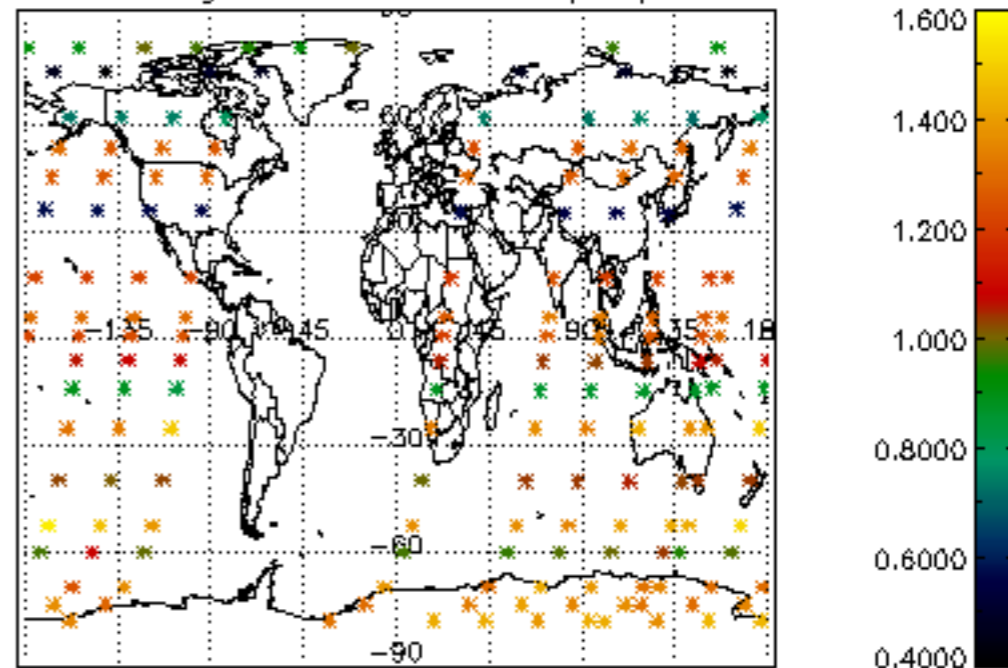
Percentage of saturation errors per profile



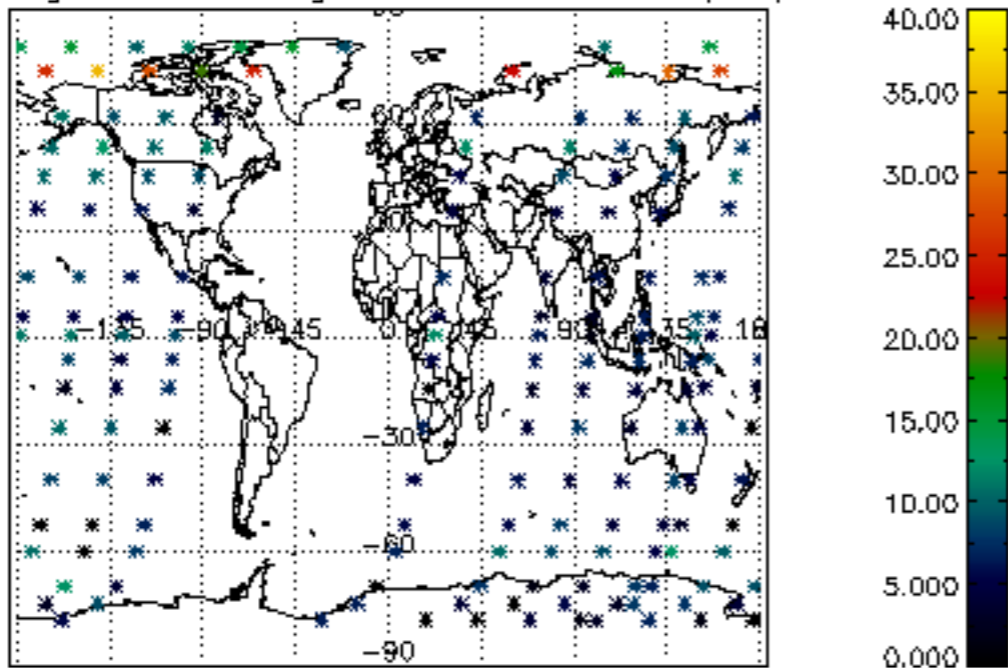
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

