

GOMOS Level 2 Daily Report

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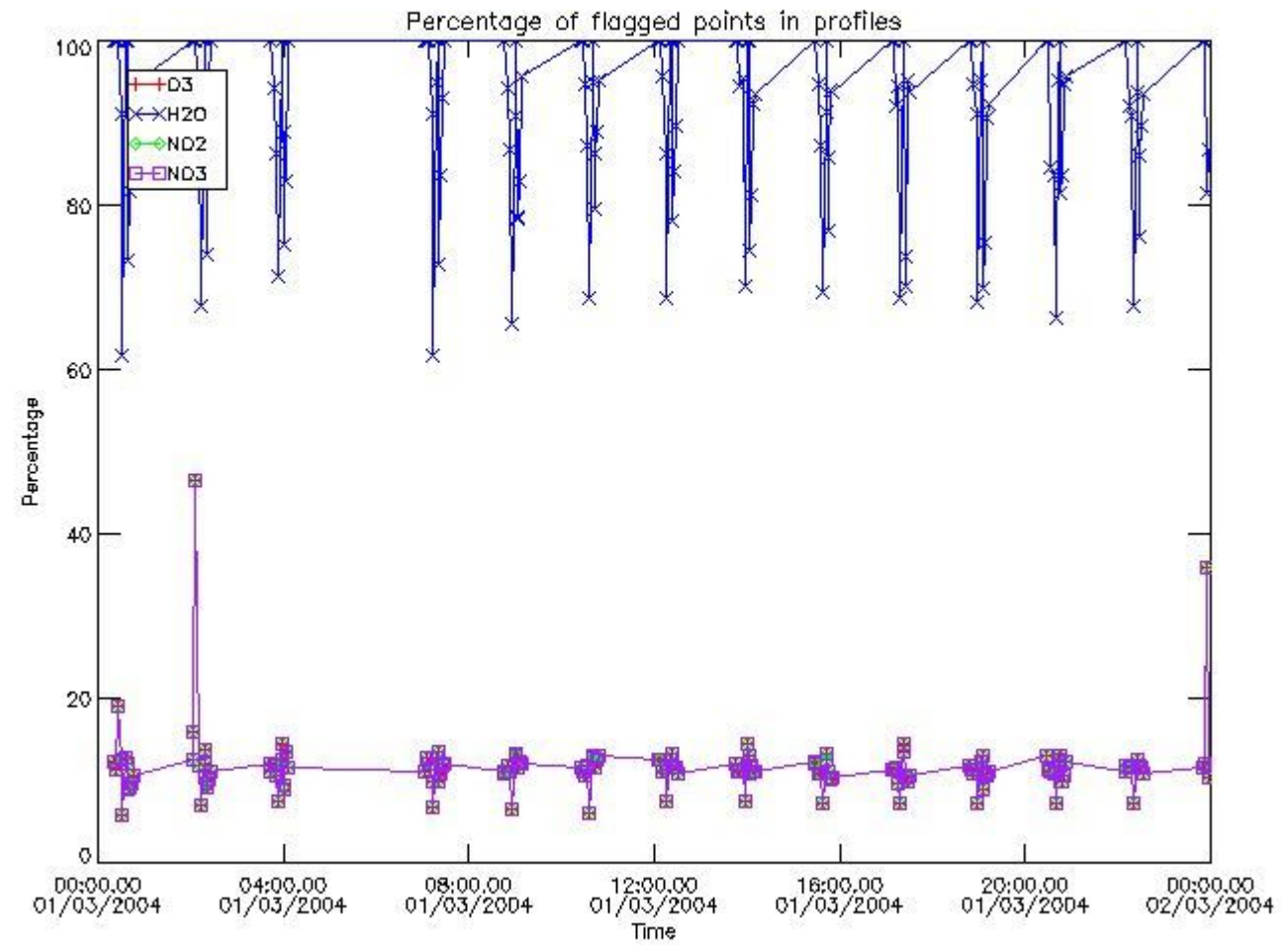
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456	GOM_NL__2PRFIN20040301_224504_000000682024_00402_10476_9991.N1	01-MAR-2004 22:45:04	Straylight	68.000	100	4Gam Crv	2.5800	13100.	136	10476	No
457	GOM_NL__2PRFIN20040301_224858_000000472024_00402_10476_9992.N1	01-MAR-2004 22:48:58	Tw_i_and_stray	46.500	48	30Alp Hya	1.9770	4100.0	93	10476	No
458	GOM_NL__2PRFIN20040301_225504_000000452024_00402_10476_9993.N1	01-MAR-2004 22:55:04	Bright	45.000	22	32Alp Leo	1.3600	15200.	90	10476	No
459	GOM_NL__2PRFIN20040301_225740_000000442024_00402_10476_9994.N1	01-MAR-2004 22:57:40	Bright	44.000	51	41Gam1Leo	2.0100	4500.0	88	10476	No
460	GOM_NL__2PRFIN20040301_230012_000000412024_00402_10476_9995.N1	01-MAR-2004 23:00:12	Bright	40.500	17	78Bet Gem	1.1610	4500.0	81	10476	No
461	GOM_NL__2PRFIN20040301_230128_000000392024_00402_10476_9996.N1	01-MAR-2004 23:01:28	Bright	39.000	24	66Alp Gem	1.5800	10200.	78	10476	No
462	GOM_NL__2PRFIN20040301_230630_000000442024_00402_10476_9997.N1	01-MAR-2004 23:06:30	Bright	44.000	174	52Psi UMa	3.0040	4400.0	88	10476	No
463	GOM_NL__2PRFIN20040301_230917_000000432024_00402_10476_9998.N1	01-MAR-2004 23:09:17	Bright	42.500	82	48Bet UMa	2.3650	10600.	85	10476	No
464	GOM_NL__2PRFIN20040301_231038_000000422024_00402_10476_9999.N1	01-MAR-2004 23:10:38	Bright	42.000	36	50Alp UMa	1.8000	6300.0	84	10476	No
465	GOM_NL__2PRFIN20040301_231345_000000512024_00402_10476_0000.N1	01-MAR-2004 23:13:45	Bright	51.000	32	77Eps UMa	1.7630	11000.	102	10476	No
466	GOM_NL__2PRFIN20040301_231656_000000382024_00402_10476_0001.N1	01-MAR-2004 23:16:56	Bright	38.000	49	1Alp UMi	1.9900	6300.0	76	10476	No
467	GOM_NL__2PRFIN20040301_232228_000000492024_00402_10476_0002.N1	01-MAR-2004 23:22:28	Bright	49.000	119	14Eta Dra	2.7270	4700.0	98	10476	No
468	GOM_NL__2PRFIN20040301_232429_000000372024_00402_10476_0003.N1	01-MAR-2004 23:24:29	Bright	37.000	89	5Alp Cep	2.4510	8000.0	74	10476	No
469	GOM_NL__2PRFIN20040301_232655_000000462024_00402_10476_0004.N1	01-MAR-2004 23:26:55	Bright	46.000	130	23Bet Dra	2.7990	5800.0	92	10476	No
470	GOM_NL__2PRFIN20040301_232934_000000402024_00402_10476_0005.N1	01-MAR-2004 23:29:34	Bright	39.500	19	50Alp Cyg	1.2460	10500.	79	10476	No
471	GOM_NL__2PRFIN20040301_233106_000000382024_00402_10476_0006.N1	01-MAR-2004 23:31:06	Bright	37.500	66	37Gam Cyg	2.2080	5900.0	75	10476	No
472	GOM_NL__2PRFIN20040301_233241_000000352024_00402_10476_0007.N1	01-MAR-2004 23:32:41	Bright	34.500	92	53Eps Cyg	2.5000	4500.0	69	10476	No
473	GOM_NL__2PRFIN20040301_233545_000000832024_00402_10476_0008.N1	01-MAR-2004 23:35:45	Bright	82.500	133	40Zet Her	2.8070	6000.0	165	10476	No
474	GOM_NL__2PRFIN20040301_233946_000000422024_00402_10476_0009.N1	01-MAR-2004 23:39:46	Bright	41.500	168	17Zet Aql	2.9860	11000.	83	10476	No
475	GOM_NL__2PRFIN20040301_234317_000000712024_00402_10476_0010.N1	01-MAR-2004 23:43:17	Straylight	70.500	59	55Alp Oph	2.0800	8900.0	141	10476	No
476	GOM_NL__2PRFIN20040301_234551_000000742024_00402_10476_0011.N1	01-MAR-2004 23:45:51	Straylight	74.000	126	60Bet Oph	2.7700	4250.0	148	10476	No
477	GOM_NL__2PRFIN20040301_234937_000000442024_00402_10476_0012.N1	01-MAR-2004 23:49:37	Dark	44.000	155	41Pi Sgr	2.9000	6600.0	88	10476	No
478	GOM_NL__2PRFIN20040301_235127_000000472024_00402_10476_0013.N1	01-MAR-2004 23:51:27	Dark	46.500	57	34Sig Sgr	2.0660	26000.	93	10476	No
479	GOM_NL__2PRFIN20040301_235436_000000472024_00402_10476_0014.N1	01-MAR-2004 23:54:36	Dark	46.500	38	20Eps Sgr	1.8360	11000.	93	10476	No
480	GOM_NL__2PRFIN20040301_235826_000000502024_00402_10476_0015.N1	01-MAR-2004 23:58:26	Dark	49.500	40	The Sco	1.8590	7100.0	99	10476	No

3. Quality information per product

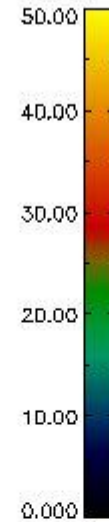
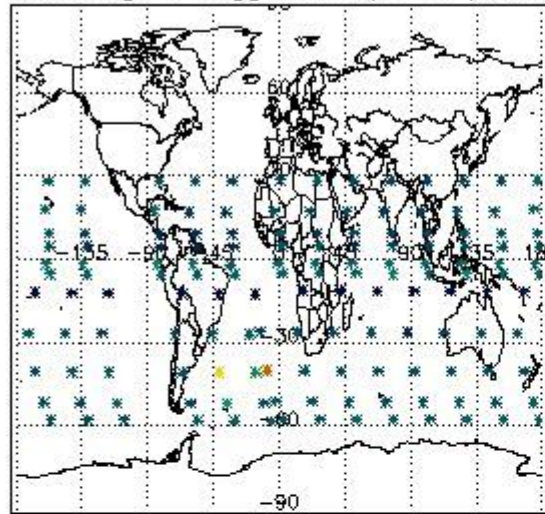
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

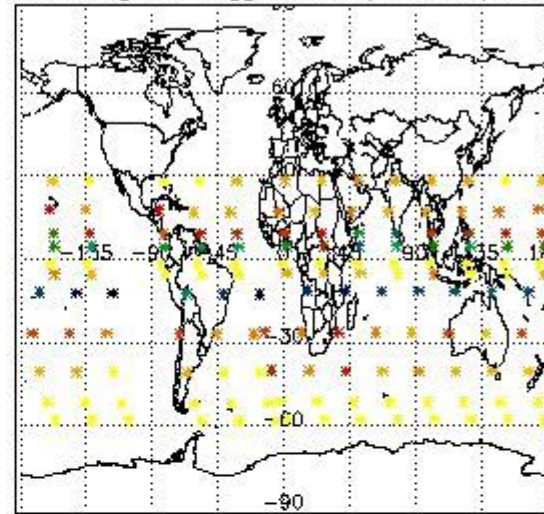


3.2 Plot quality information per product (world map)

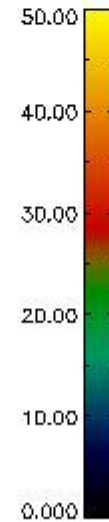
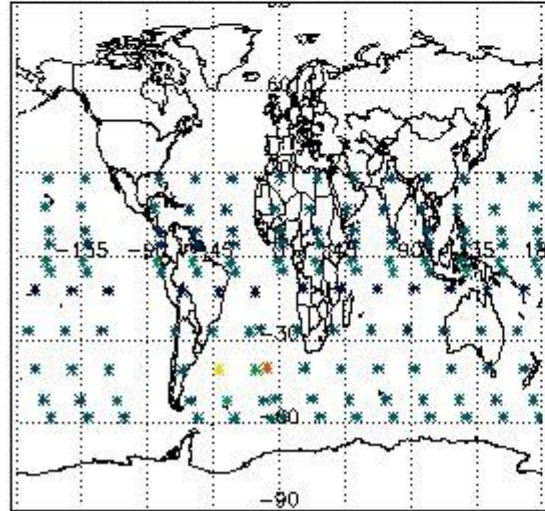
Percentage of flagged data per O3 profile



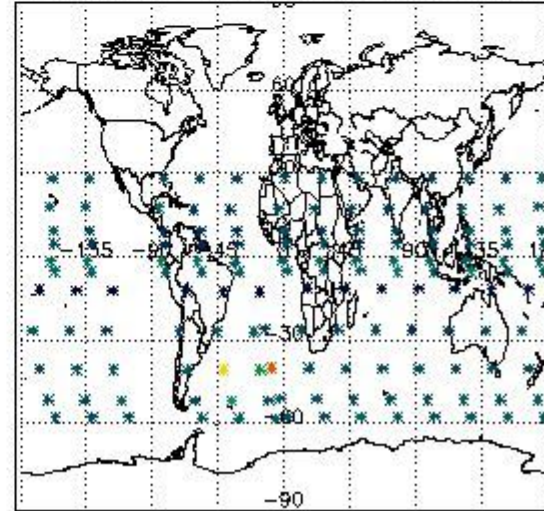
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

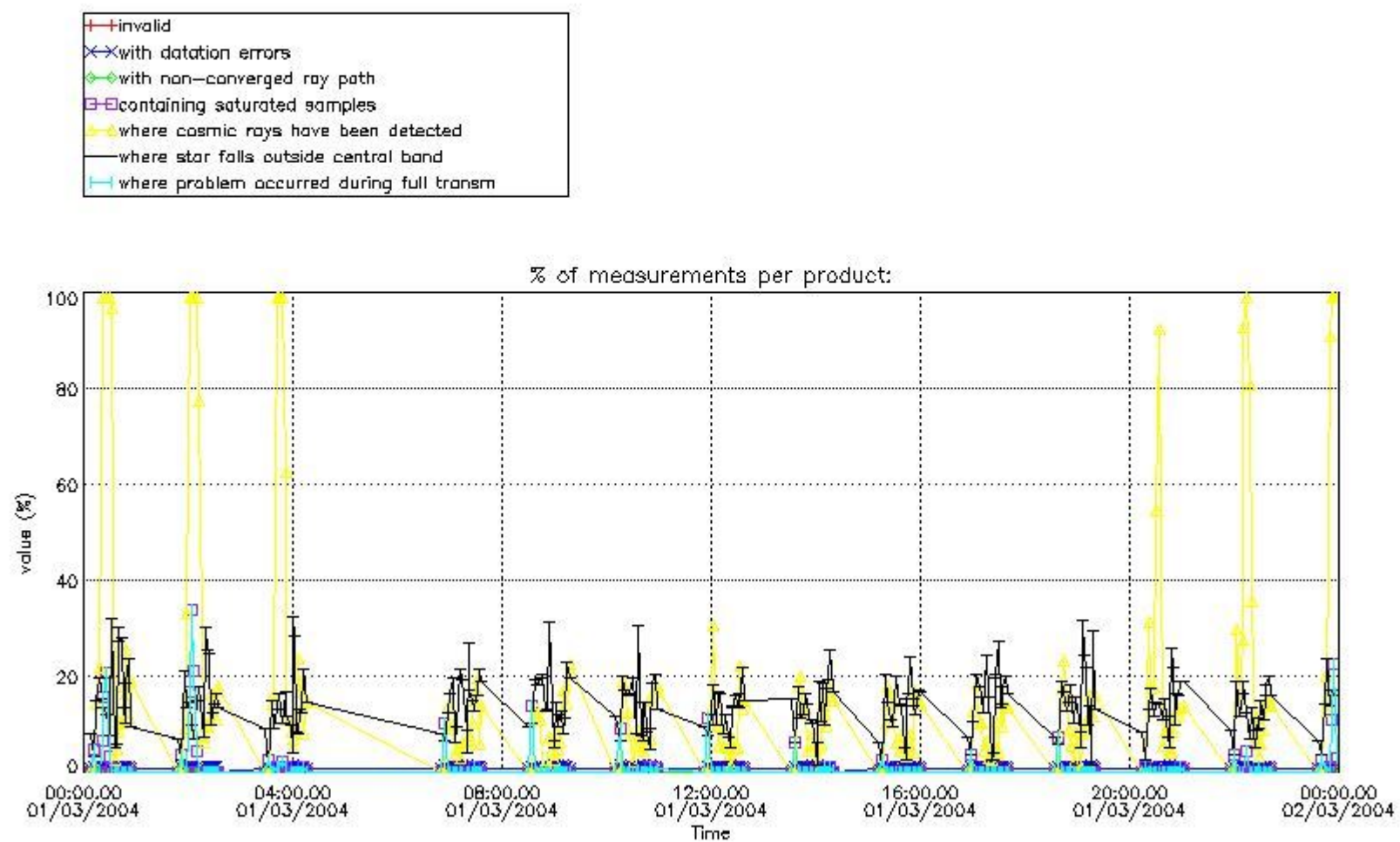


4. Level 1 quality information per product

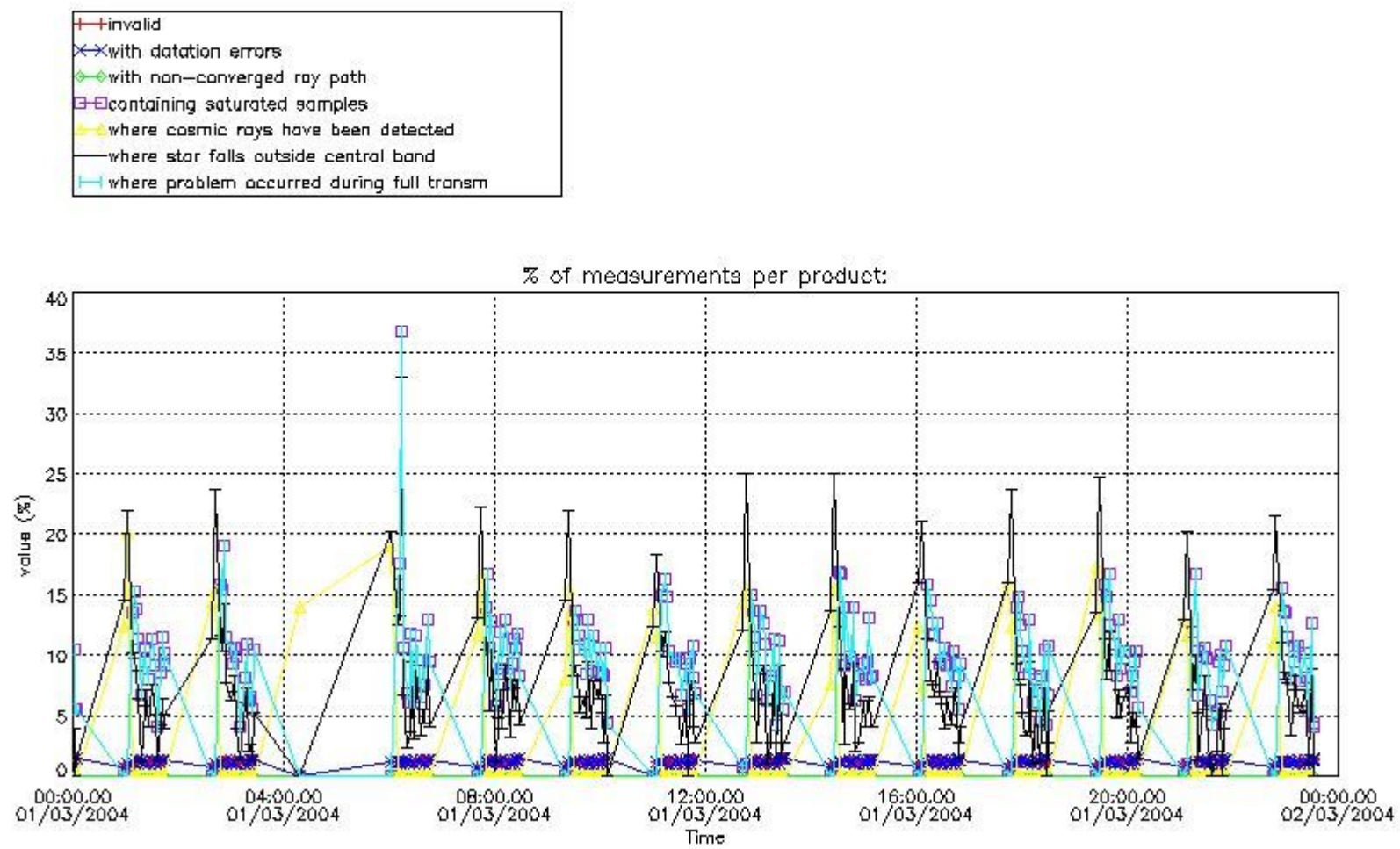
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



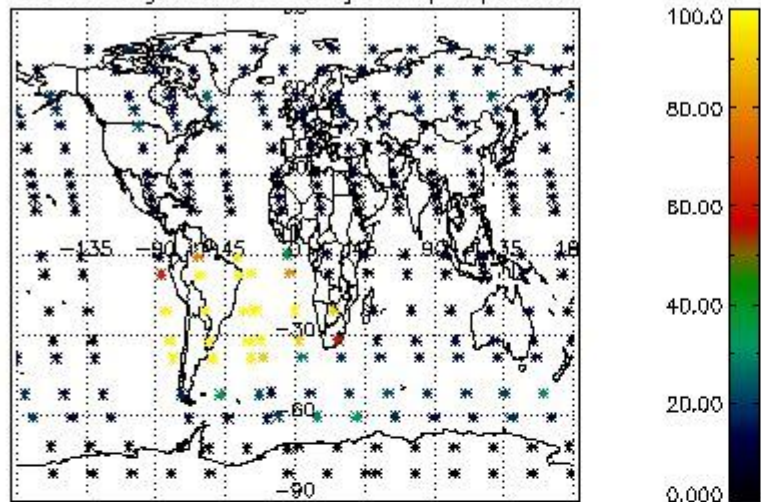
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



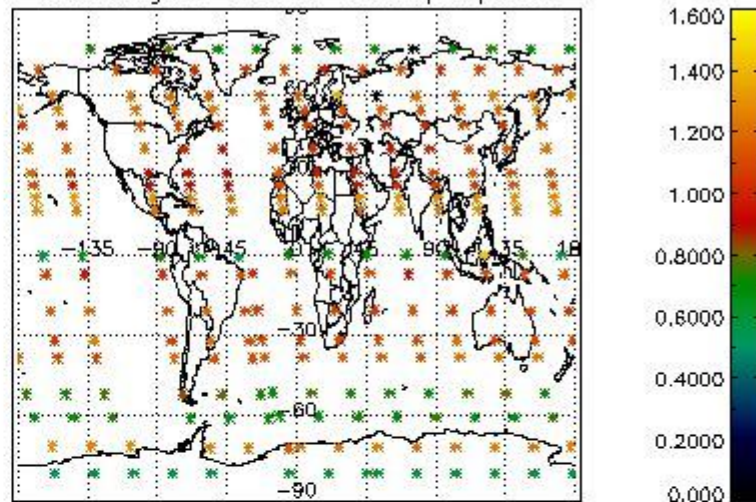
4.2 Plot quality information per product coming from level 1b processing (world map)

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

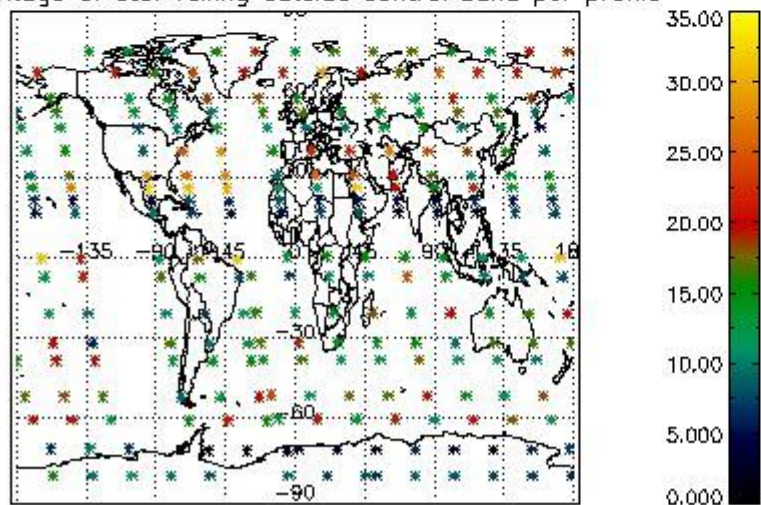
Percentage of cosmic ray hits per profile



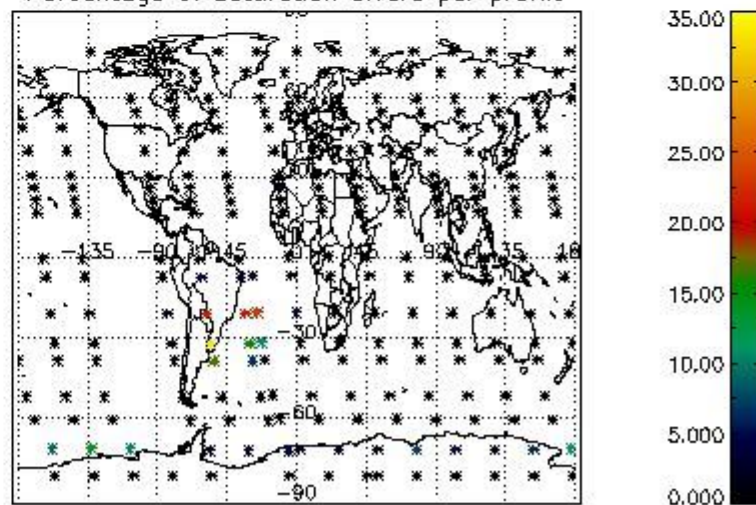
Percentage of datation errors per profile



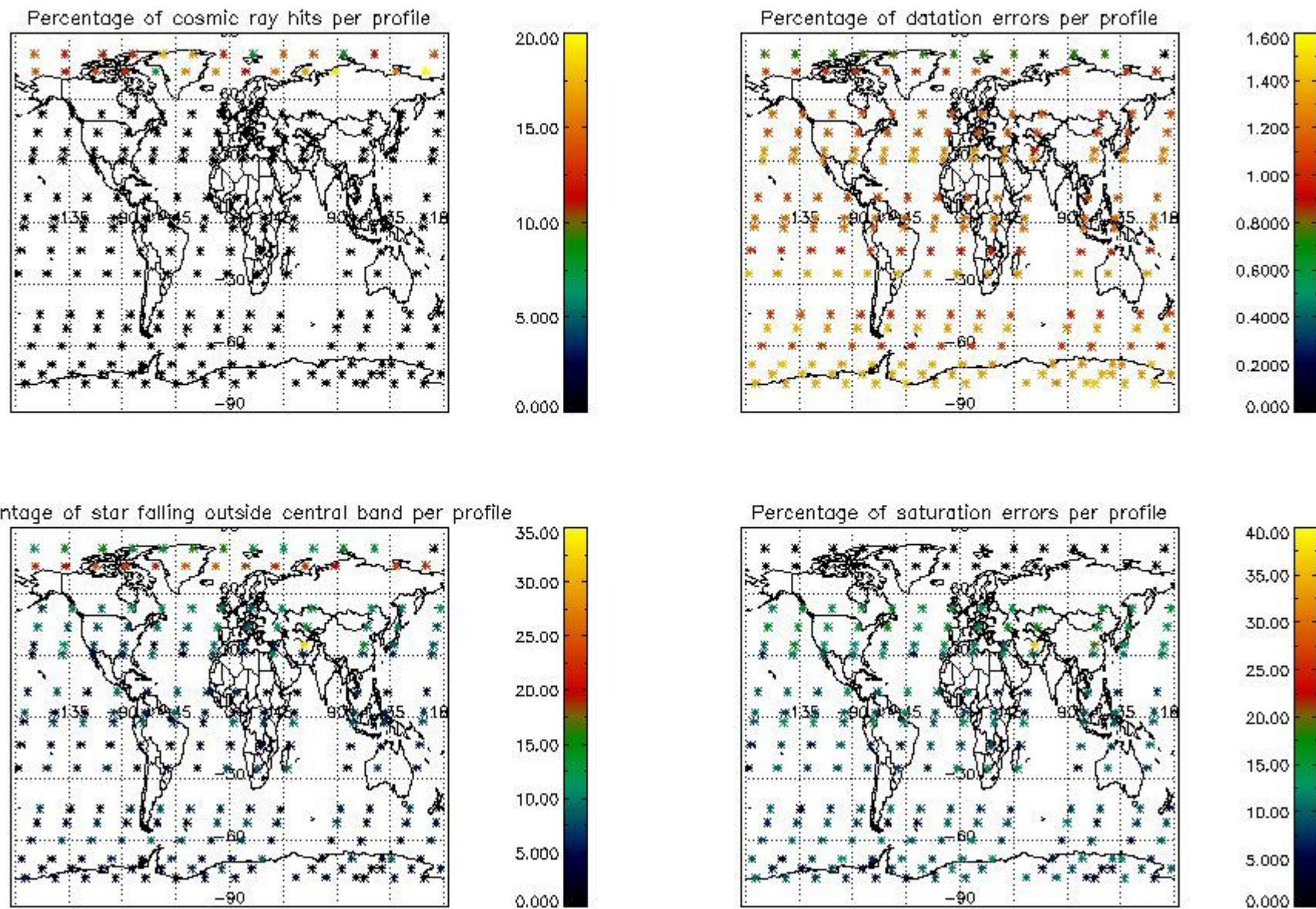
Percentage of star falling outside central band per profile



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

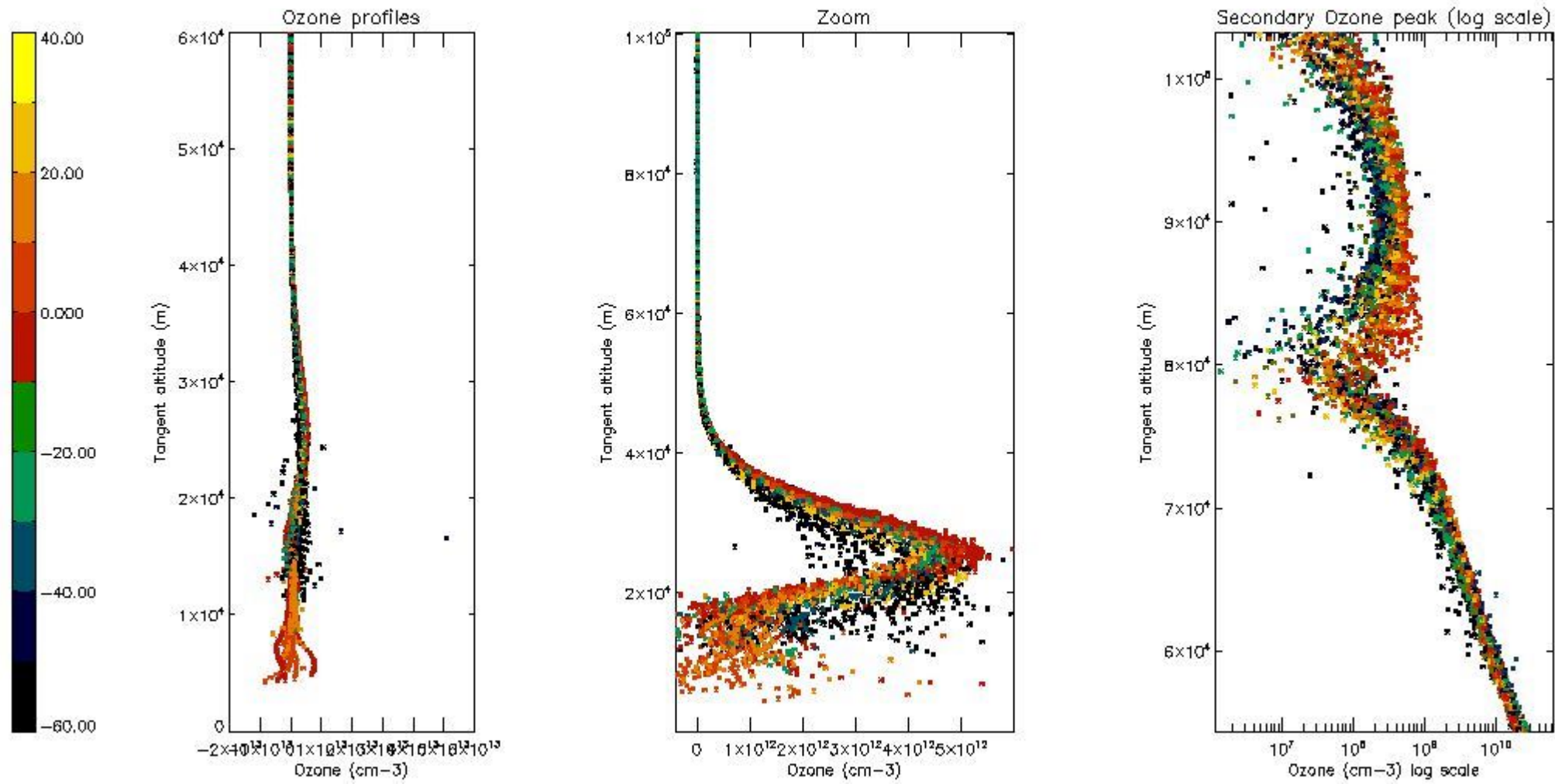
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	31
STD < 20	18

STD < 10	15
STD < 5	10

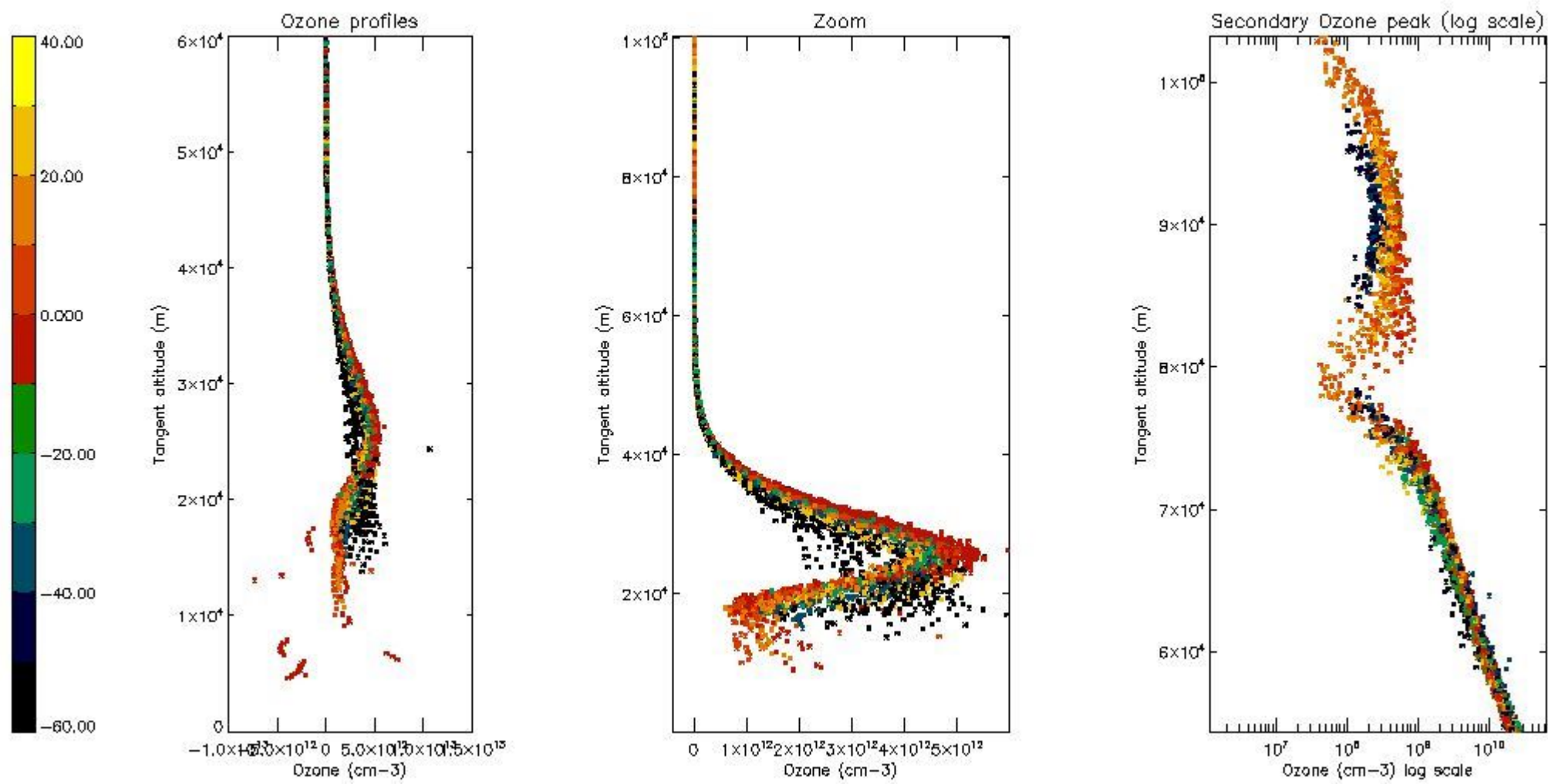
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



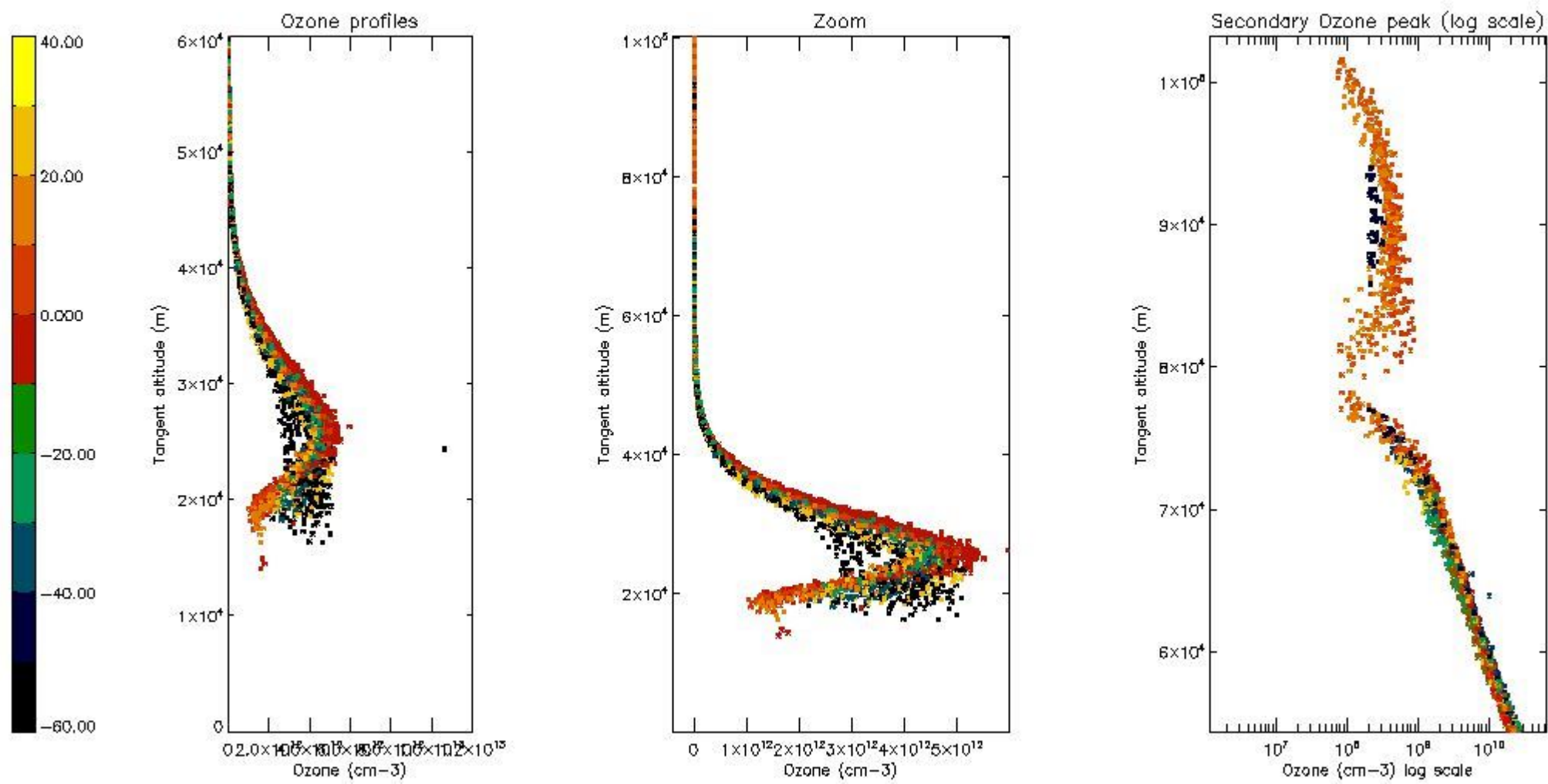
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



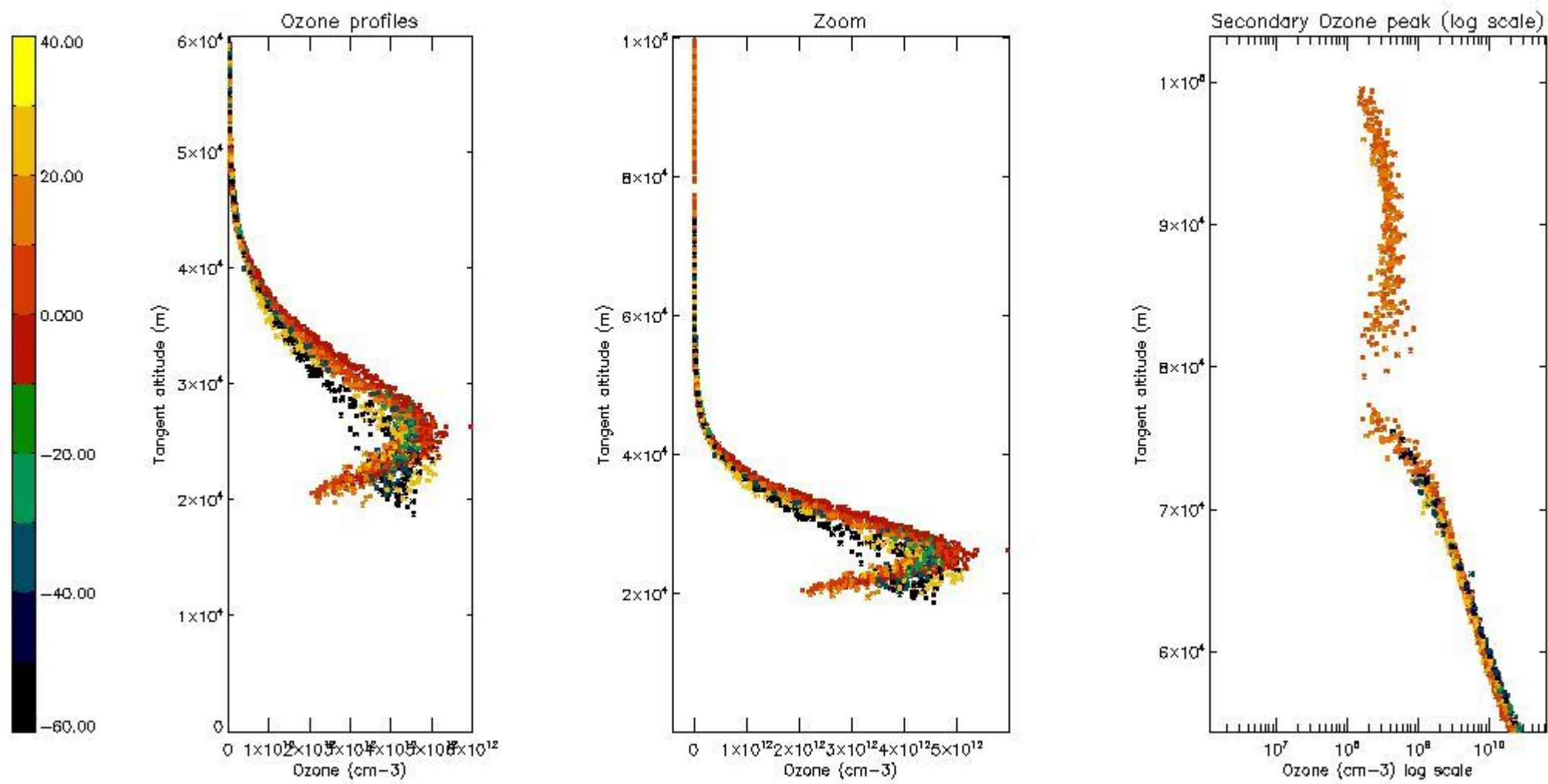
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



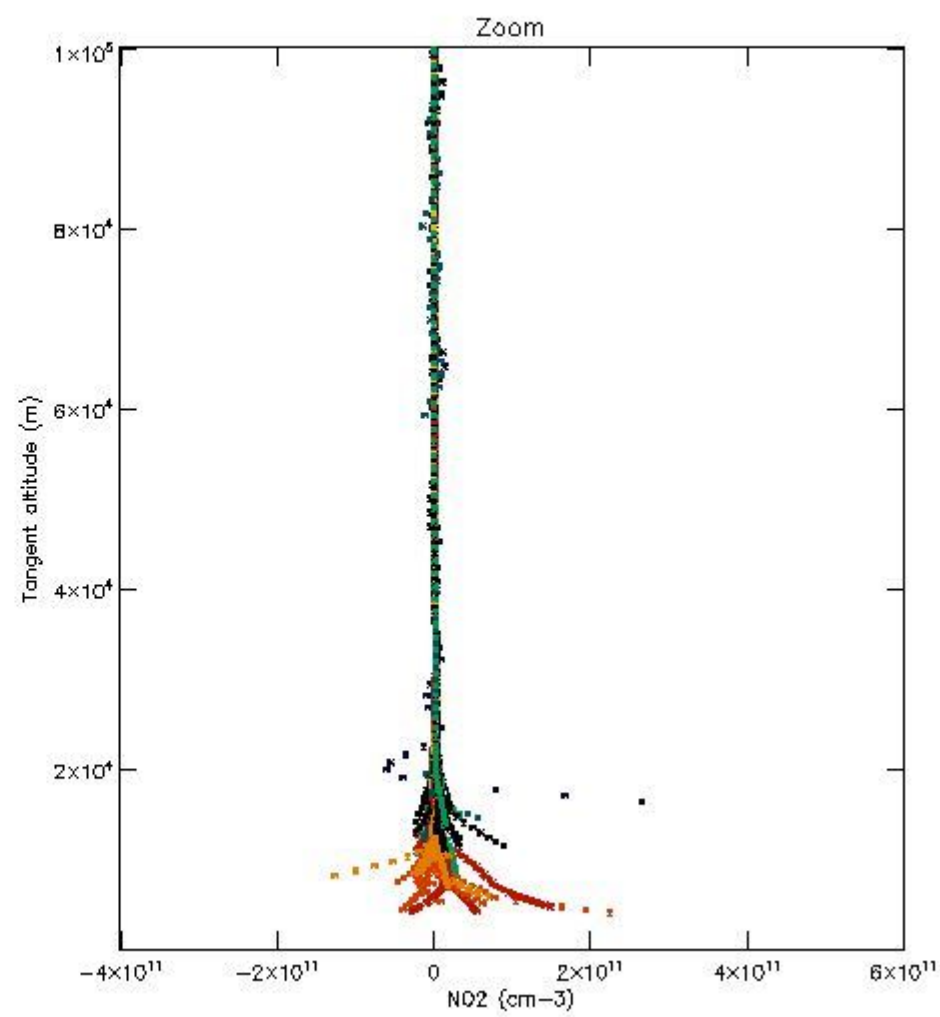
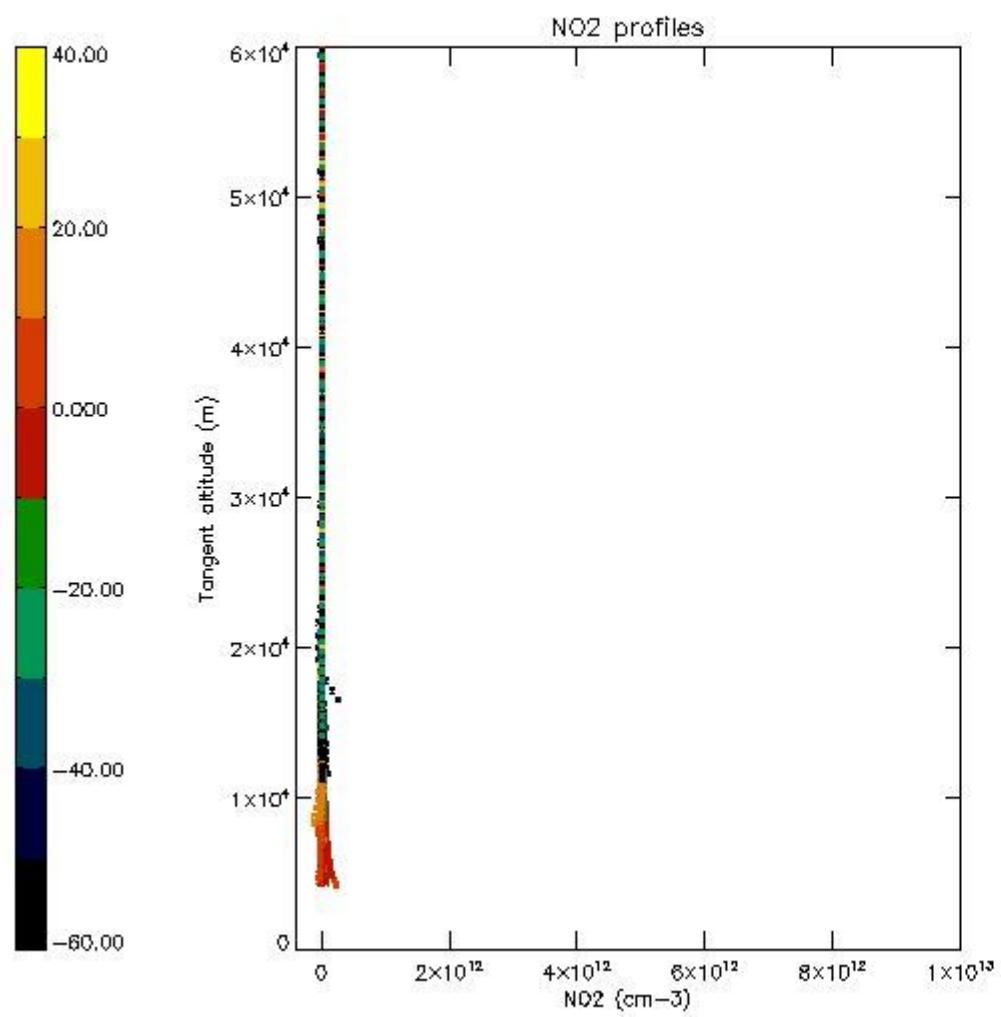
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



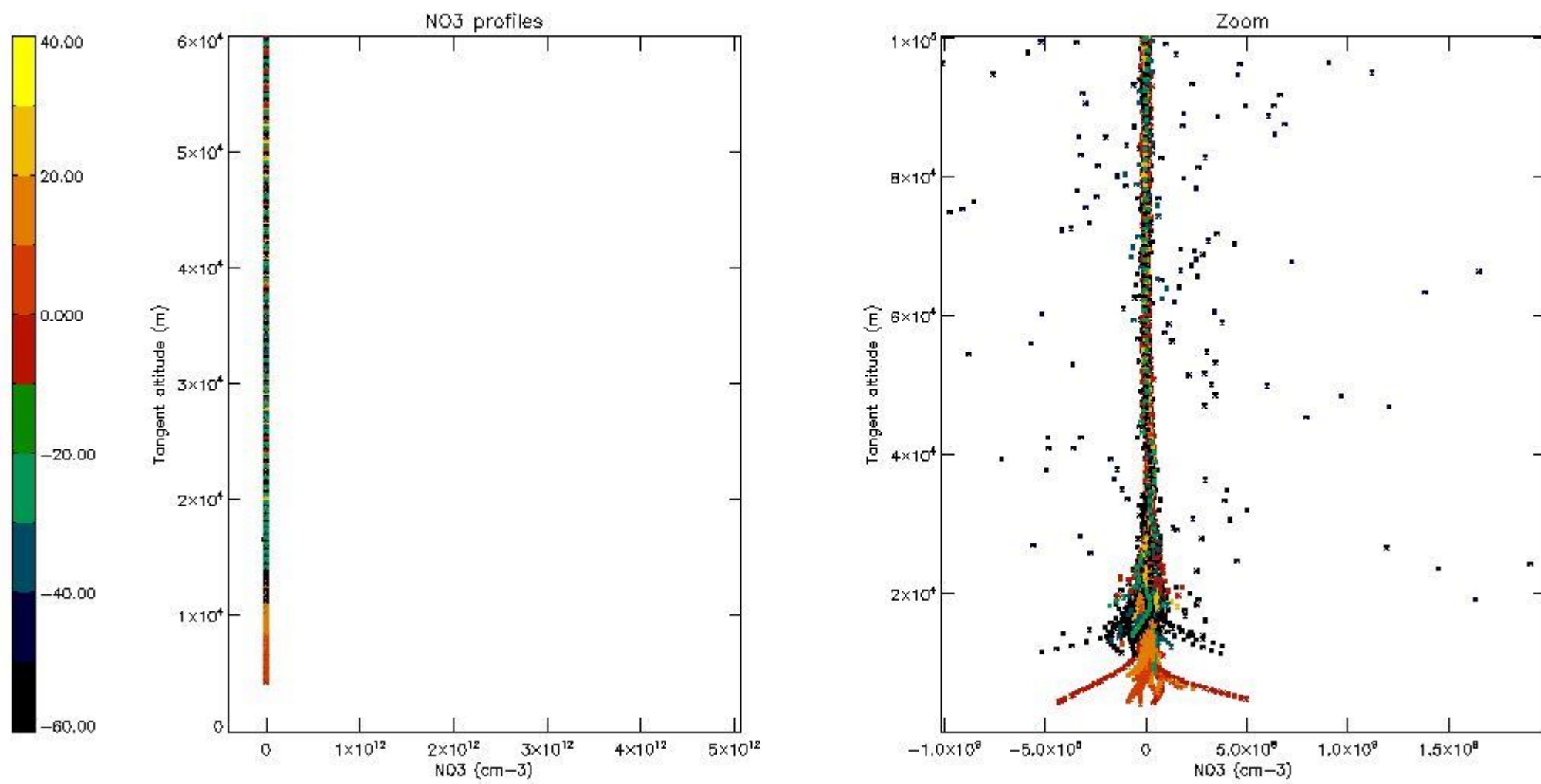
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



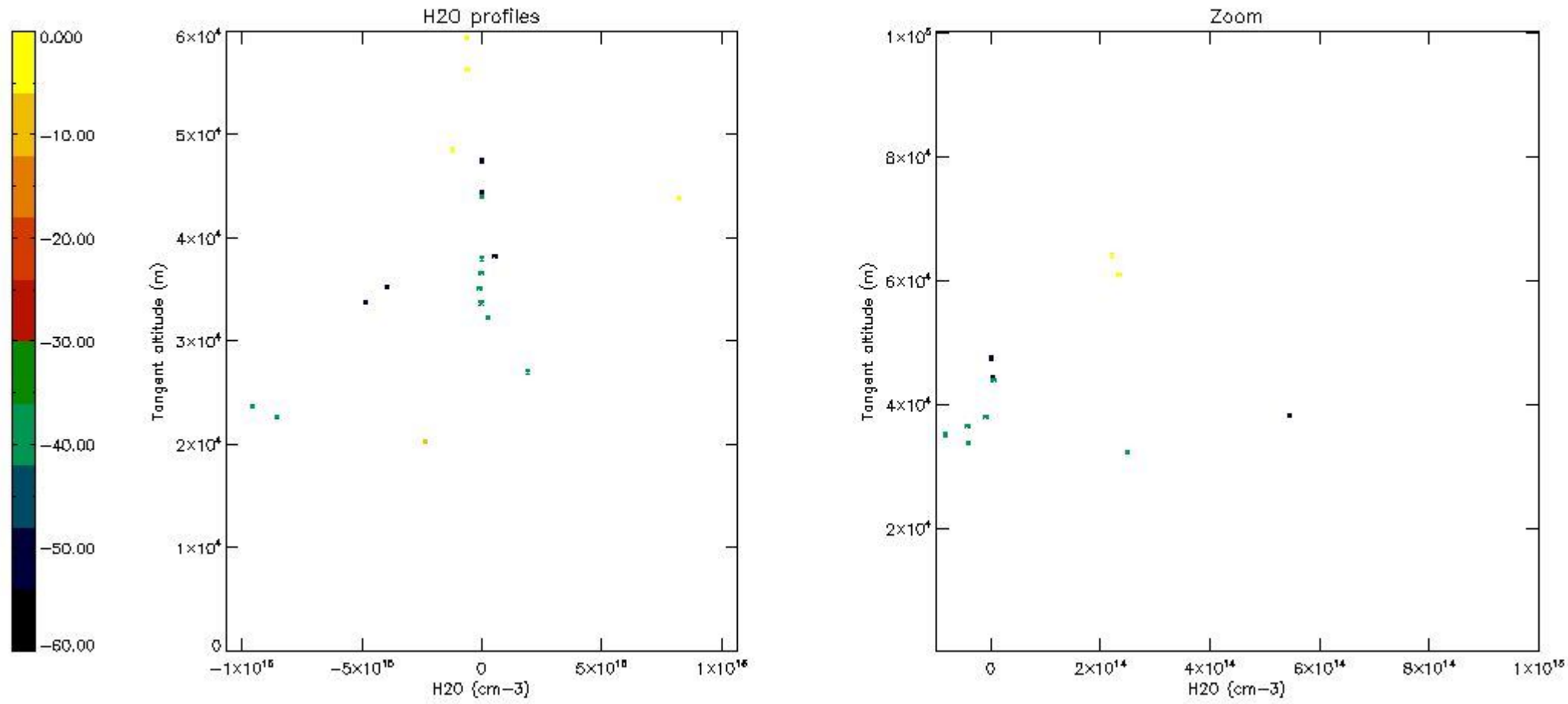
5.7 Plot NO3 profiles for all STD (dark without errors)

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	01-MAR-2004 00:01:08
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-MAR-2004 00:01:08
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-MAR-2004 00:01:08

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[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](#)

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[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	18APR2013 20:28:42
Data source version	GOMOS/6.01
Start time of products	01-03-2004 (01MAR2004 00:00:00)
Stop time of products	02-03-2004 (02MAR2004 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	480
Nb of prods with errors	1

2. Summary of processed GOM_NL__2P products.

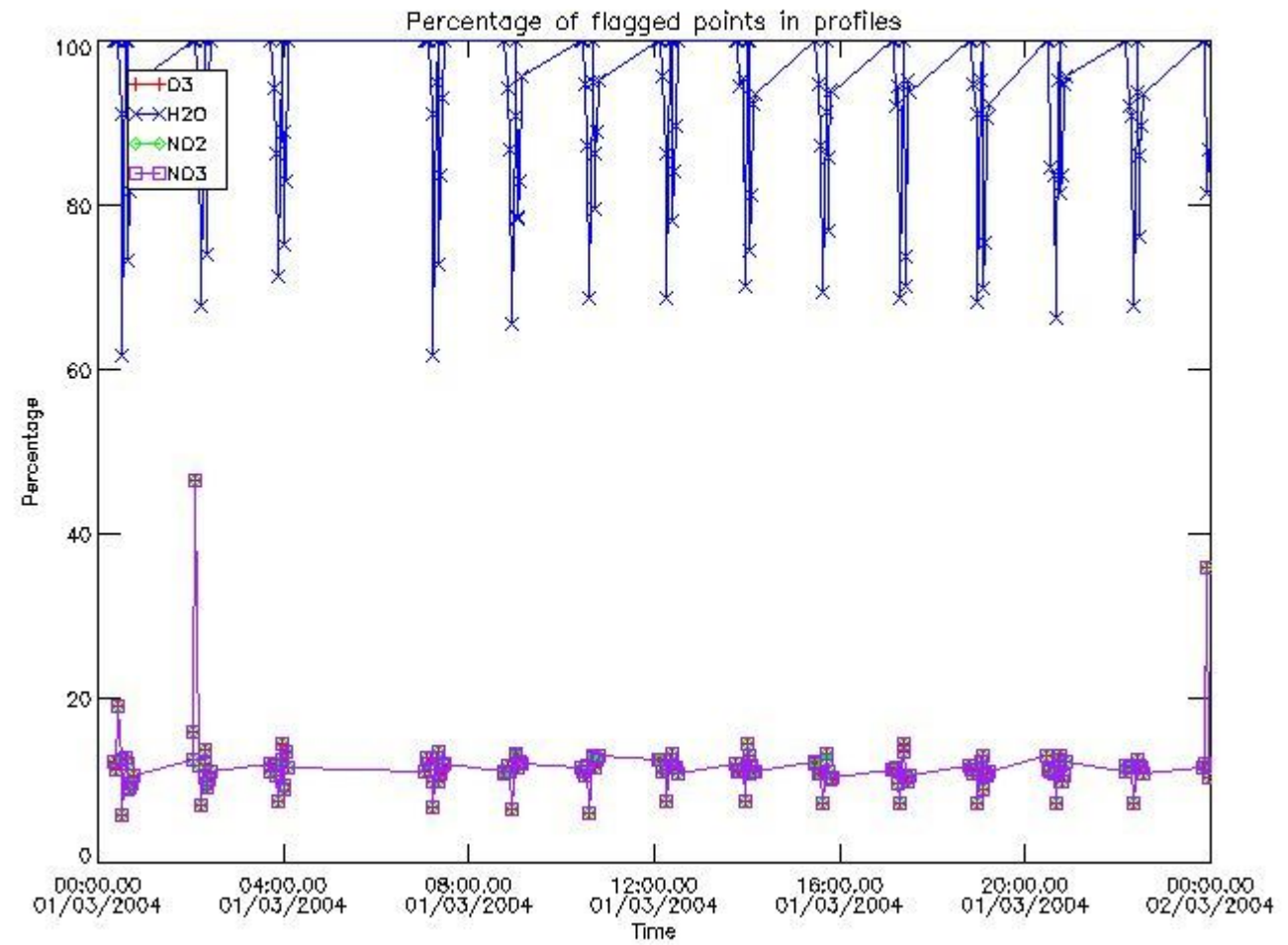
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20040301_000108_000000382024_00388_10462_9981.N1	01-MAR-2004 00:01:08	Bright	38.000	19	50Alp Cyg	1.2460	10500.	76	10462	No
2	GOM_NL__2PRFIN20040301_000242_000000372024_00388_10462_9982.N1	01-MAR-2004 00:02:42	Bright	36.500	66	37Gam Cyg	2.2080	5900.0	73	10462	No
3	GOM_NL__2PRFIN20040301_000415_000000362024_00388_10462_9983.N1	01-MAR-2004 00:04:15	Bright	36.000	92	53Eps Cyg	2.5000	4500.0	72	10462	No
4	GOM_NL__2PRFIN20040301_000718_000000812024_00388_10462_9984.N1	01-MAR-2004 00:07:18	Bright	81.000	133	40Zet Her	2.8070	6000.0	162	10462	No
5	GOM_NL__2PRFIN20040301_001116_000000442024_00388_10462_9985.N1	01-MAR-2004 00:11:16	Bright	43.500	168	17Zet Aql	2.9860	11000.	87	10462	No
6	GOM_NL__2PRFIN20040301_001441_000000702024_00388_10462_9986.N1	01-MAR-2004 00:14:41	Twilight	70.000	59	55Alp Oph	2.0800	8900.0	140	10462	No
7	GOM_NL__2PRFIN20040301_001714_000000692024_00388_10462_9987.N1	01-MAR-2004 00:17:14	Straylight	68.500	126	60Bet Oph	2.7700	4250.0	137	10462	No
8	GOM_NL__2PRFIN20040301_002106_000000462024_00388_10462_9988.N1	01-MAR-2004 00:21:06	Dark	45.500	155	41Pi Sgr	2.9000	6600.0	91	10462	No
9	GOM_NL__2PRFIN20040301_002256_000000452024_00388_10462_9989.N1	01-MAR-2004 00:22:56	Dark	45.000	57	34Sig Sgr	2.0660	26000.	90	10462	No
10	GOM_NL__2PRFIN20040301_002602_000000462024_00388_10462_9990.N1	01-MAR-2004 00:26:02	Dark	45.500	38	20Eps Sgr	1.8360	11000.	91	10462	No
11	GOM_NL__2PRFIN20040301_002952_000000452024_00388_10462_9991.N1	01-MAR-2004 00:29:52	Dark	45.000	40	The Sco	1.8590	7100.0	90	10462	No
12	GOM_NL__2PRFIN20040301_003144_000000882024_00388_10462_9992.N1	01-MAR-2004 00:31:44	Dark	88.000	16	21Alp Sco	1.0200	3000.0	176	10462	No
13	GOM_NL__2PRFIN20040301_003636_000000402024_00389_10463_9957.N1	01-MAR-2004 00:36:36	Dark	40.000	134	Bet TrA	2.8100	6600.0	80	10463	No
14	GOM_NL__2PRFIN20040301_003751_000000422024_00389_10463_9958.N1	01-MAR-2004 00:37:51	Dark	42.000	145	Gam TrA	2.8720	10600.	84	10463	No
15	GOM_NL__2PRFIN20040301_003911_000000572024_00389_10463_9959.N1	01-MAR-2004 00:39:11	Dark	56.500	4	Alp1Cen	-0.010000	5800.0	113	10463	No
16	GOM_NL__2PRFIN20040301_004031_000000552024_00389_10463_9960.N1	01-MAR-2004 00:40:31	Dark	55.000	10	Bet Cen	0.61000	28000.	110	10463	No
17	GOM_NL__2PRFIN20040301_004304_000000542024_00389_10463_9961.N1	01-MAR-2004 00:43:04	Dark	53.500	12	Alp1Cru	0.77500	30000.	107	10463	No
18	GOM_NL__2PRFIN20040301_004532_000000482024_00389_10463_9962.N1	01-MAR-2004 00:45:32	Dark	48.000	64	Gam Cen	2.2000	10600.	96	10463	No
19	GOM_NL__2PRFIN20040301_004715_000000402024_00389_10463_9963.N1	01-MAR-2004 00:47:15	Straylight	40.000	71	Iot Car	2.2460	7700.0	80	10463	No
20	GOM_NL__2PRFIN20040301_004846_000000442024_00389_10463_9964.N1	01-MAR-2004 00:48:46	Straylight	43.500	46	Del Vel	1.9540	10600.	87	10463	No
21	GOM_NL__2PRFIN20040301_005138_000000492024_00389_10463_9965.N1	01-MAR-2004 00:51:38	Straylight	49.000	65	Lam Vel	2.2040	4400.0	98	10463	No
22	GOM_NL__2PRFIN20040301_005413_000000642024_00389_10463_9966.N1	01-MAR-2004 00:54:13	Straylight	64.000	106	9Bet Crv	2.6480	5600.0	128	10463	No
23	GOM_NL__2PRFIN20040301_005715_000000692024_00389_10463_9967.N1	01-MAR-2004 00:57:15	Straylight	69.000	100	4Gam Crv	2.5800	13100.	138	10463	No
24	GOM_NL__2PRFIN20040301_010107_000000502024_00389_10463_9968.N1	01-MAR-2004 01:01:07	Twilight	50.000	48	30Alp Hya	1.9770	4100.0	100	10463	No
25	GOM_NL__2PRFIN20040301_010719_000000452024_00389_10463_9969.N1	01-MAR-2004 01:07:19	Bright	44.500	22	32Alp Leo	1.3600	15200.	89	10463	No
26	GOM_NL__2PRFIN20040301_010955_000000462024_00389_10463_9970.N1	01-MAR-2004 01:09:55	Bright	46.000	51	41Gam1Leo	2.0100	4500.0	92	10463	No
27	GOM_NL__2PRFIN20040301_011222_000000402024_00389_10463_9971.N1	01-MAR-2004 01:12:22	Bright	40.000	17	78Bet Gem	1.1610	4500.0	80	10463	No
28	GOM_NL__2PRFIN20040301_011335_000000402024_00389_10463_9972.N1	01-MAR-2004 01:13:35	Bright	39.500	24	66Alp Gem	1.5800	10200.	79	10463	No
29	GOM_NL__2PRFIN20040301_011850_000000452024_00389_10463_9973.N1	01-MAR-2004 01:18:50	Bright	45.000	174	52Psi UMa	3.0040	4400.0	90	10463	No
30	GOM_NL__2PRFIN20040301_012136_000000432024_00389_10463_9974.N1	01-MAR-2004 01:21:36	Bright	42.500	82	48Bet UMa	2.3650	10600.	85	10463	No
31	GOM_NL__2PRFIN20040301_012256_000000422024_00389_10463_9975.N1	01-MAR-2004 01:22:56	Bright	42.000	36	50Alp UMa	1.8000	6300.0	84	10463	No
32	GOM_NL__2PRFIN20040301_012609_000000502024_00389_10463_9976.N1	01-MAR-2004 01:26:09	Bright	50.000	32	77Eps UMa	1.7630	11000.	100	10463	No
33	GOM_NL__2PRFIN20040301_012909_000000402024_00389_10463_9977.N1	01-MAR-2004 01:29:09	Bright	39.500	49	1Alp UMi	1.9900	6300.0	79	10463	No
34	GOM_NL__2PRFIN20040301_013445_000000492024_00389_10463_9978.N1	01-MAR-2004 01:34:45	Bright	49.000	119	14Eta Dra	2.7270	4700.0	98	10463	No
35	GOM_NL__2PRFIN20040301_013637_000000382024_00389_10463_9979.N1	01-MAR-2004 01:36:37	Bright	37.500	89	5Alp Cep	2.4510	8000.0	75	10463	No
36	GOM_NL__2PRFIN20040301_013912_000000472024_00389_10463_9980.N1	01-MAR-2004 01:39:12	Bright	47.000	130	23Bet Dra	2.7990	5800.0	94	10463	No
37	GOM_NL__2PRFIN20040301_014145_000000392024_00389_10463_9981.N1	01-MAR-2004 01:41:45	Bright	39.000	19	50Alp Cyg	1.2460	10500.	78	10463	No
38	GOM_NL__2PRFIN20040301_014319_000000382024_00389_10463_9982.N1	01-MAR-2004 01:43:19	Bright	38.000	66	37Gam Cyg	2.2080	5900.0	76	10463	No
39	GOM_NL__2PRFIN20040301_014450_000000402024_00389_10463_9983.N1	01-MAR-2004 01:44:50	Bright	39.500	92	53Eps Cyg	2.5000	4500.0	79	10463	No
40	GOM_NL__2PRFIN20040301_014754_000000802024_00389_10463_9984.N1	01-MAR-2004 01:47:54	Bright	79.500	133	40Zet Her	2.8070	6000.0	159	10463	No
41	GOM_NL__2PRFIN20040301_015154_000000412024_00389_10463_9985.N1	01-MAR-2004 01:51:54	Bright	41.000	168	17Zet Aql	2.9860	11000.	82	10463	No
42	GOM_NL__2PRFIN20040301_015518_000000762024_00389_10463_9986.N1	01-MAR-2004 01:55:18	Twilight	75.500	59	55Alp Oph	2.0800	8900.0	151	10463	No

456	GOM_NL__2PRFIN20040301_224504_000000682024_00402_10476_9991.N1	01-MAR-2004 22:45:04	Straylight	68.000	100	4Gam Crv	2.5800	13100.	136	10476	No
457	GOM_NL__2PRFIN20040301_224858_000000472024_00402_10476_9992.N1	01-MAR-2004 22:48:58	Tw_i_and_stray	46.500	48	30Alp Hya	1.9770	4100.0	93	10476	No
458	GOM_NL__2PRFIN20040301_225504_000000452024_00402_10476_9993.N1	01-MAR-2004 22:55:04	Bright	45.000	22	32Alp Leo	1.3600	15200.	90	10476	No
459	GOM_NL__2PRFIN20040301_225740_000000442024_00402_10476_9994.N1	01-MAR-2004 22:57:40	Bright	44.000	51	41Gam1Leo	2.0100	4500.0	88	10476	No
460	GOM_NL__2PRFIN20040301_230012_000000412024_00402_10476_9995.N1	01-MAR-2004 23:00:12	Bright	40.500	17	78Bet Gem	1.1610	4500.0	81	10476	No
461	GOM_NL__2PRFIN20040301_230128_000000392024_00402_10476_9996.N1	01-MAR-2004 23:01:28	Bright	39.000	24	66Alp Gem	1.5800	10200.	78	10476	No
462	GOM_NL__2PRFIN20040301_230630_000000442024_00402_10476_9997.N1	01-MAR-2004 23:06:30	Bright	44.000	174	52Psi UMa	3.0040	4400.0	88	10476	No
463	GOM_NL__2PRFIN20040301_230917_000000432024_00402_10476_9998.N1	01-MAR-2004 23:09:17	Bright	42.500	82	48Bet UMa	2.3650	10600.	85	10476	No
464	GOM_NL__2PRFIN20040301_231038_000000422024_00402_10476_9999.N1	01-MAR-2004 23:10:38	Bright	42.000	36	50Alp UMa	1.8000	6300.0	84	10476	No
465	GOM_NL__2PRFIN20040301_231345_000000512024_00402_10476_0000.N1	01-MAR-2004 23:13:45	Bright	51.000	32	77Eps UMa	1.7630	11000.	102	10476	No
466	GOM_NL__2PRFIN20040301_231656_000000382024_00402_10476_0001.N1	01-MAR-2004 23:16:56	Bright	38.000	49	1Alp UMi	1.9900	6300.0	76	10476	No
467	GOM_NL__2PRFIN20040301_232228_000000492024_00402_10476_0002.N1	01-MAR-2004 23:22:28	Bright	49.000	119	14Eta Dra	2.7270	4700.0	98	10476	No
468	GOM_NL__2PRFIN20040301_232429_000000372024_00402_10476_0003.N1	01-MAR-2004 23:24:29	Bright	37.000	89	5Alp Cep	2.4510	8000.0	74	10476	No
469	GOM_NL__2PRFIN20040301_232655_000000462024_00402_10476_0004.N1	01-MAR-2004 23:26:55	Bright	46.000	130	23Bet Dra	2.7990	5800.0	92	10476	No
470	GOM_NL__2PRFIN20040301_232934_000000402024_00402_10476_0005.N1	01-MAR-2004 23:29:34	Bright	39.500	19	50Alp Cyg	1.2460	10500.	79	10476	No
471	GOM_NL__2PRFIN20040301_233106_000000382024_00402_10476_0006.N1	01-MAR-2004 23:31:06	Bright	37.500	66	37Gam Cyg	2.2080	5900.0	75	10476	No
472	GOM_NL__2PRFIN20040301_233241_000000352024_00402_10476_0007.N1	01-MAR-2004 23:32:41	Bright	34.500	92	53Eps Cyg	2.5000	4500.0	69	10476	No
473	GOM_NL__2PRFIN20040301_233545_000000832024_00402_10476_0008.N1	01-MAR-2004 23:35:45	Bright	82.500	133	40Zet Her	2.8070	6000.0	165	10476	No
474	GOM_NL__2PRFIN20040301_233946_000000422024_00402_10476_0009.N1	01-MAR-2004 23:39:46	Bright	41.500	168	17Zet Aql	2.9860	11000.	83	10476	No
475	GOM_NL__2PRFIN20040301_234317_000000712024_00402_10476_0010.N1	01-MAR-2004 23:43:17	Straylight	70.500	59	55Alp Oph	2.0800	8900.0	141	10476	No
476	GOM_NL__2PRFIN20040301_234551_000000742024_00402_10476_0011.N1	01-MAR-2004 23:45:51	Straylight	74.000	126	60Bet Oph	2.7700	4250.0	148	10476	No
477	GOM_NL__2PRFIN20040301_234937_000000442024_00402_10476_0012.N1	01-MAR-2004 23:49:37	Dark	44.000	155	41Pi Sgr	2.9000	6600.0	88	10476	No
478	GOM_NL__2PRFIN20040301_235127_000000472024_00402_10476_0013.N1	01-MAR-2004 23:51:27	Dark	46.500	57	34Sig Sgr	2.0660	26000.	93	10476	No
479	GOM_NL__2PRFIN20040301_235436_000000472024_00402_10476_0014.N1	01-MAR-2004 23:54:36	Dark	46.500	38	20Eps Sgr	1.8360	11000.	93	10476	No
480	GOM_NL__2PRFIN20040301_235826_000000502024_00402_10476_0015.N1	01-MAR-2004 23:58:26	Dark	49.500	40	The Sco	1.8590	7100.0	99	10476	No

3. Quality information per product

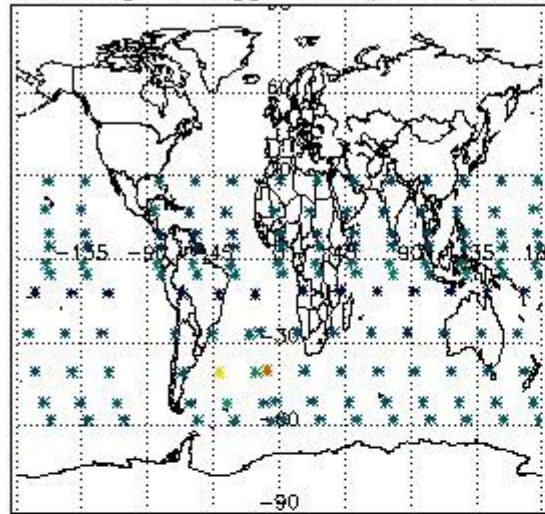
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

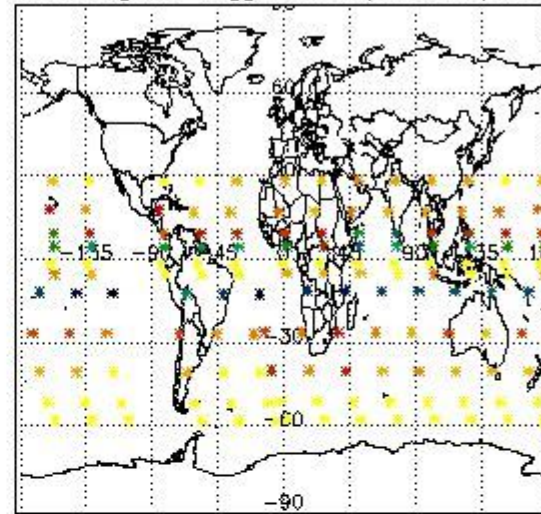


3.2 Plot quality information per product (world map)

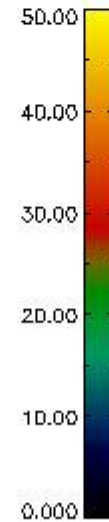
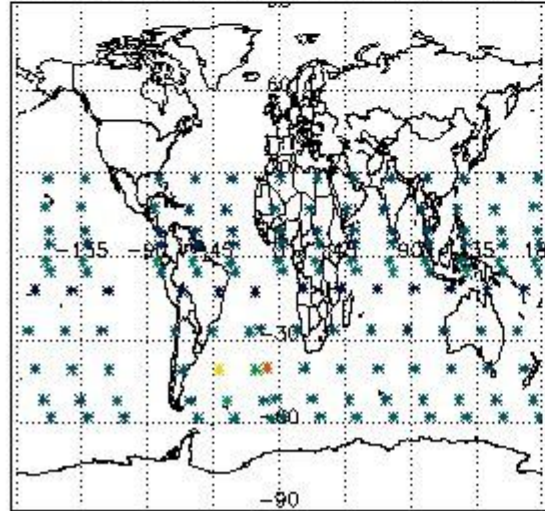
Percentage of flagged data per O3 profile



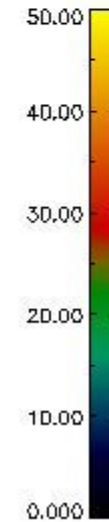
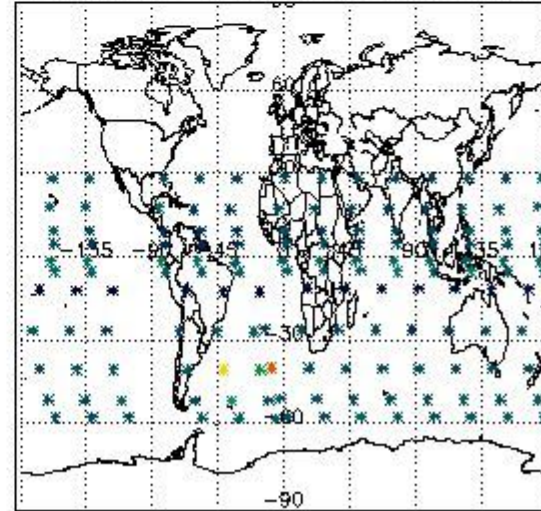
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

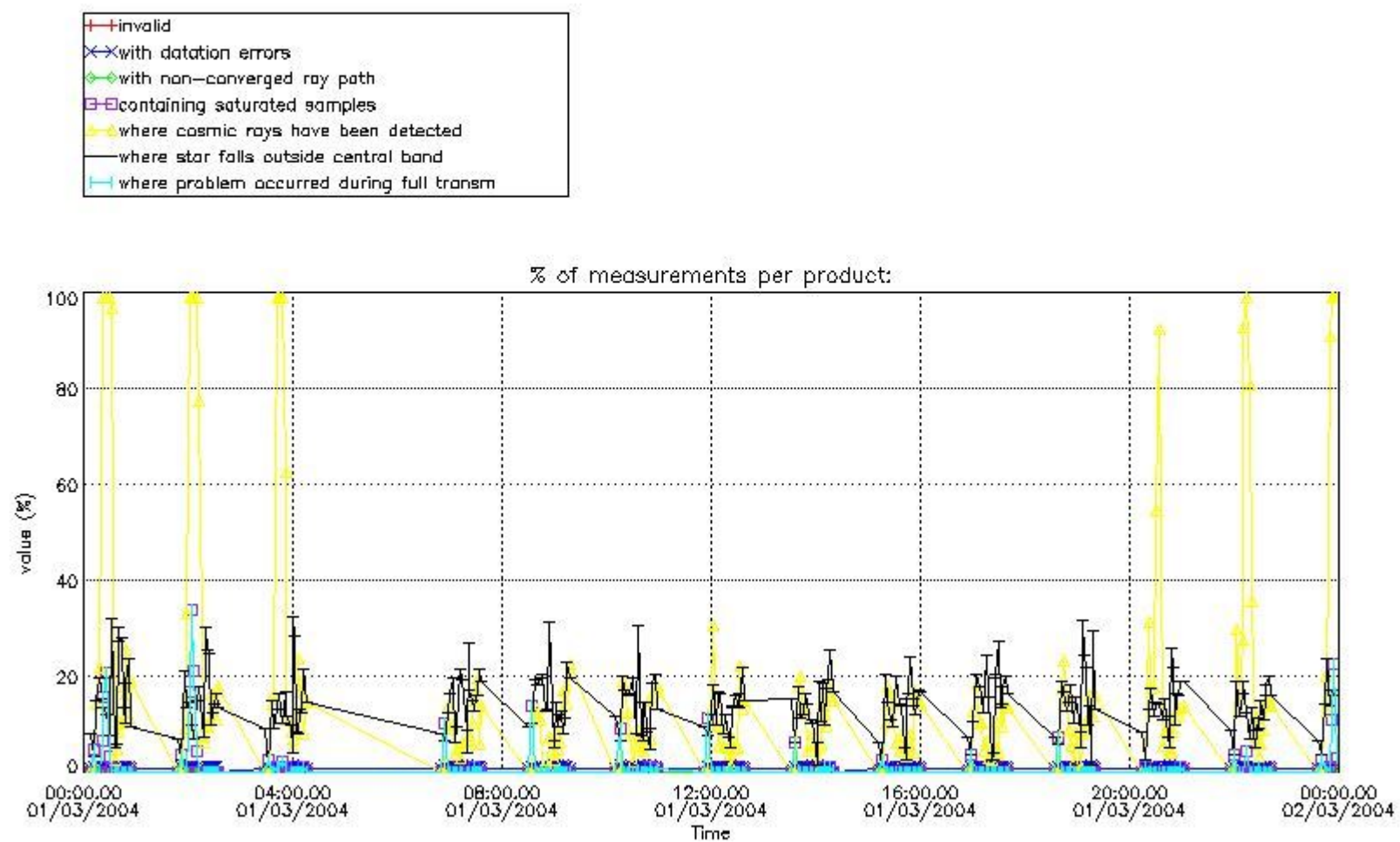


4. Level 1 quality information per product

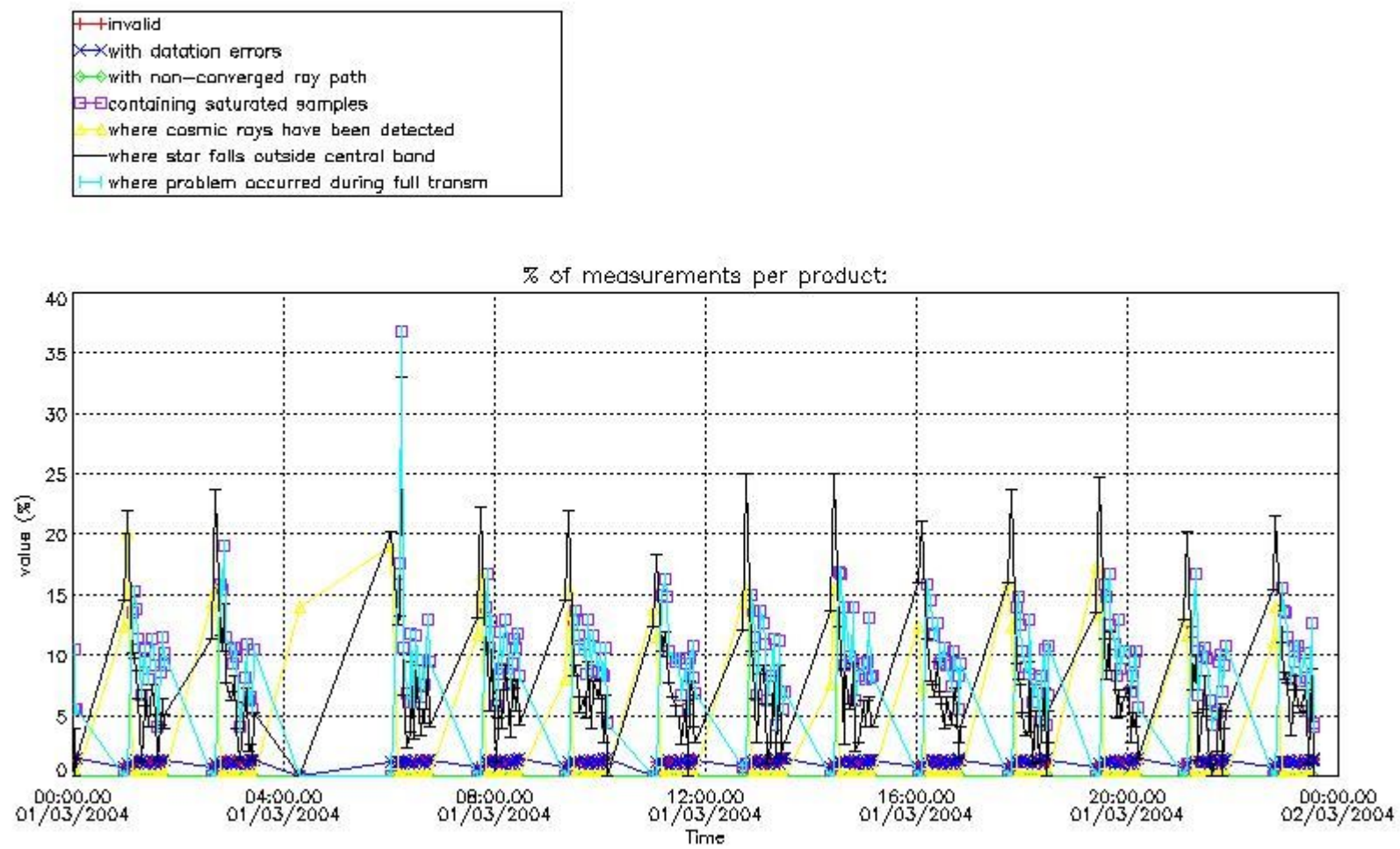
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



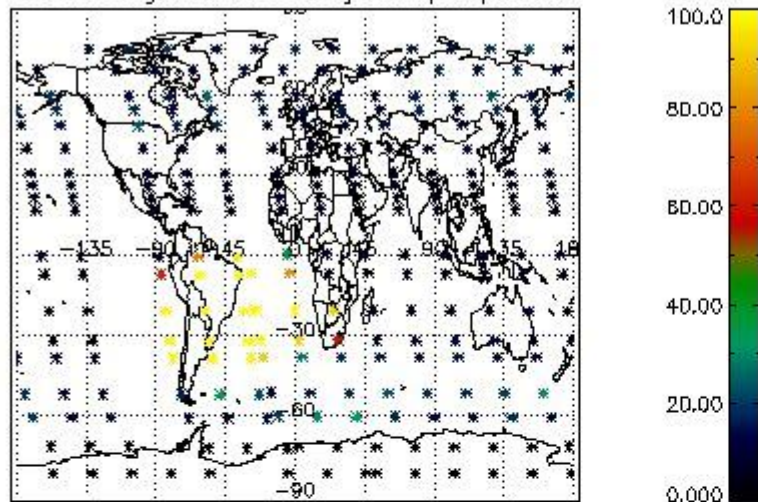
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



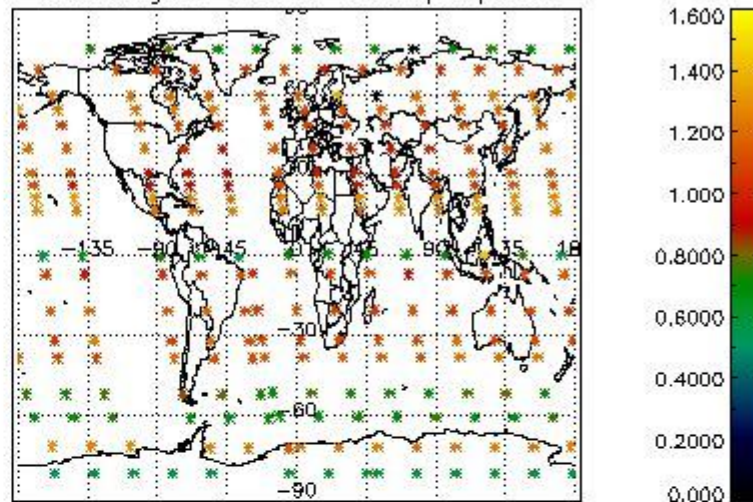
4.2 Plot quality information per product coming from level 1b processing (world map)

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

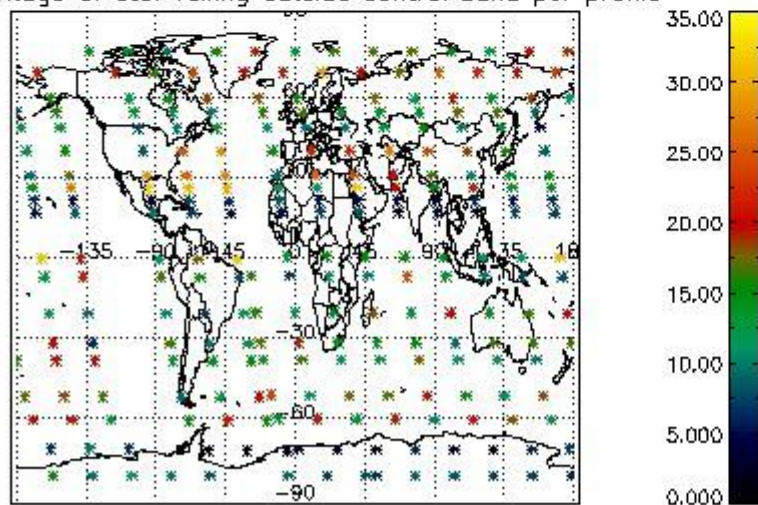
Percentage of cosmic ray hits per profile



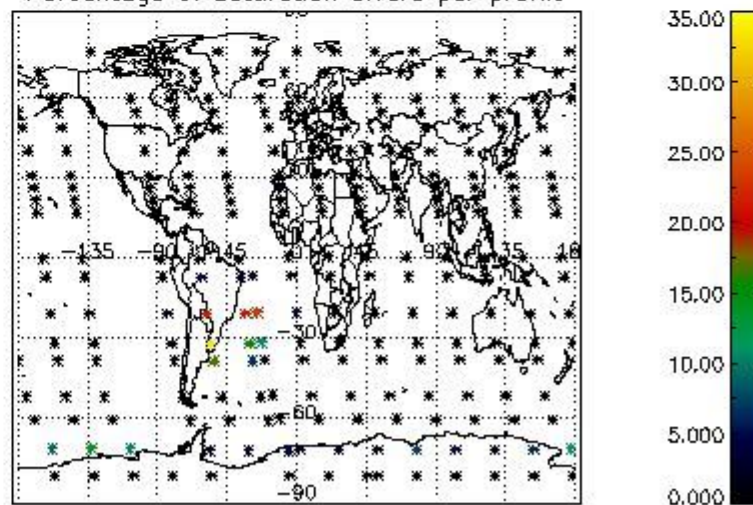
Percentage of datation errors per profile



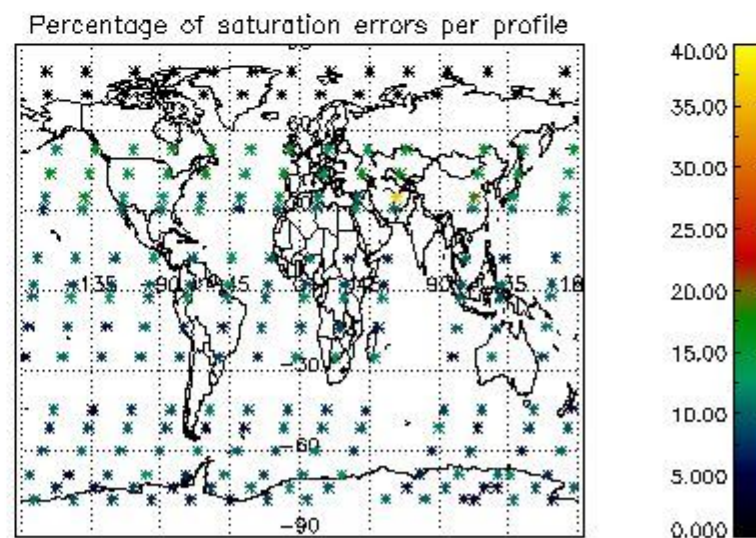
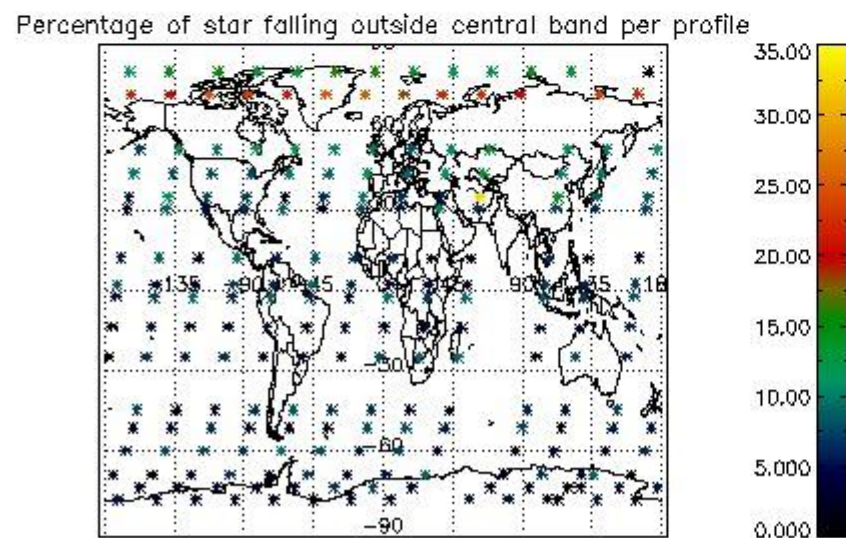
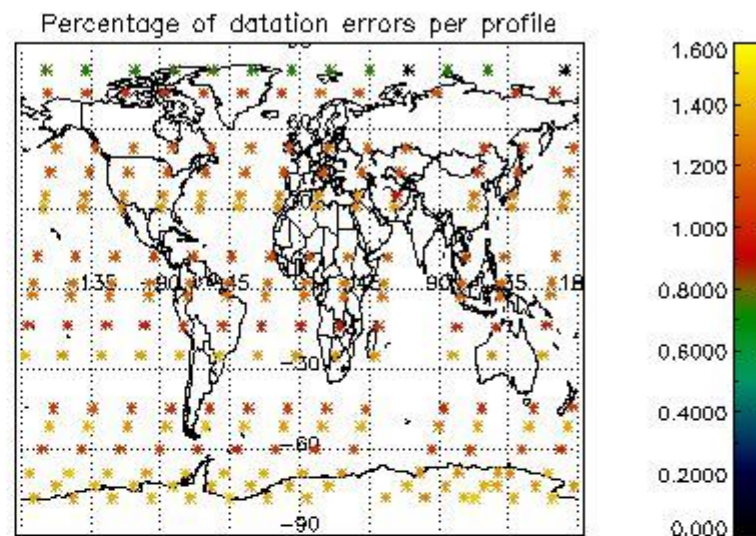
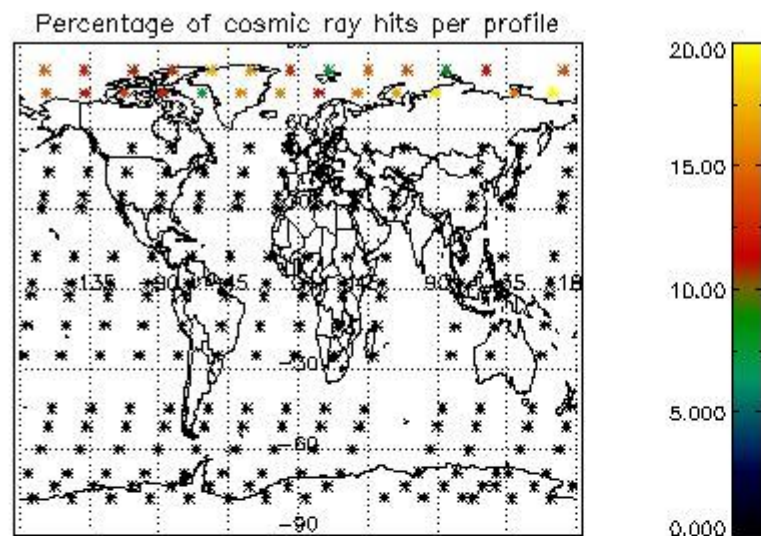
Percentage of star falling outside central band per profile



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

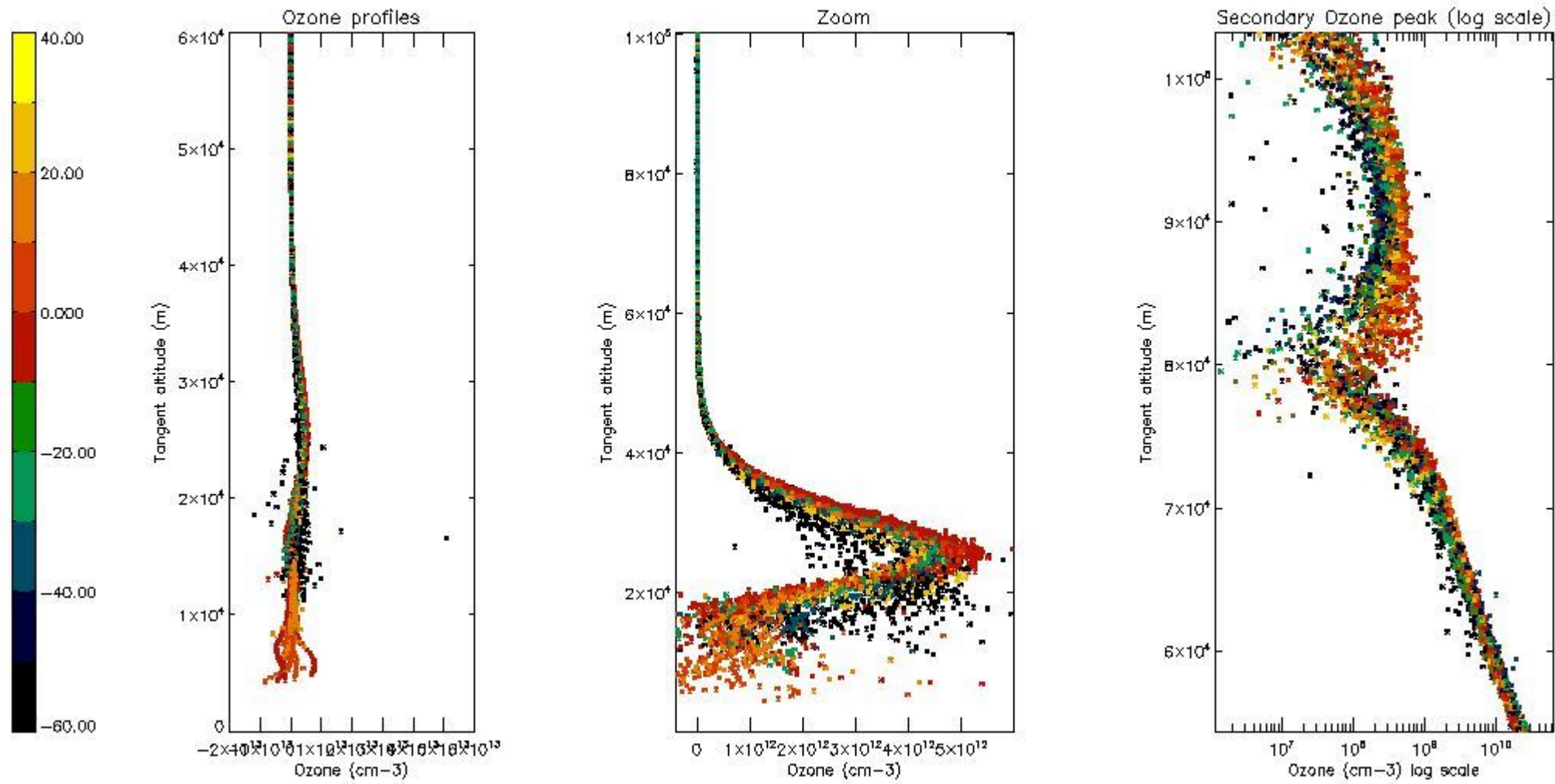
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	31
STD < 20	18

STD < 10	15
STD < 5	10

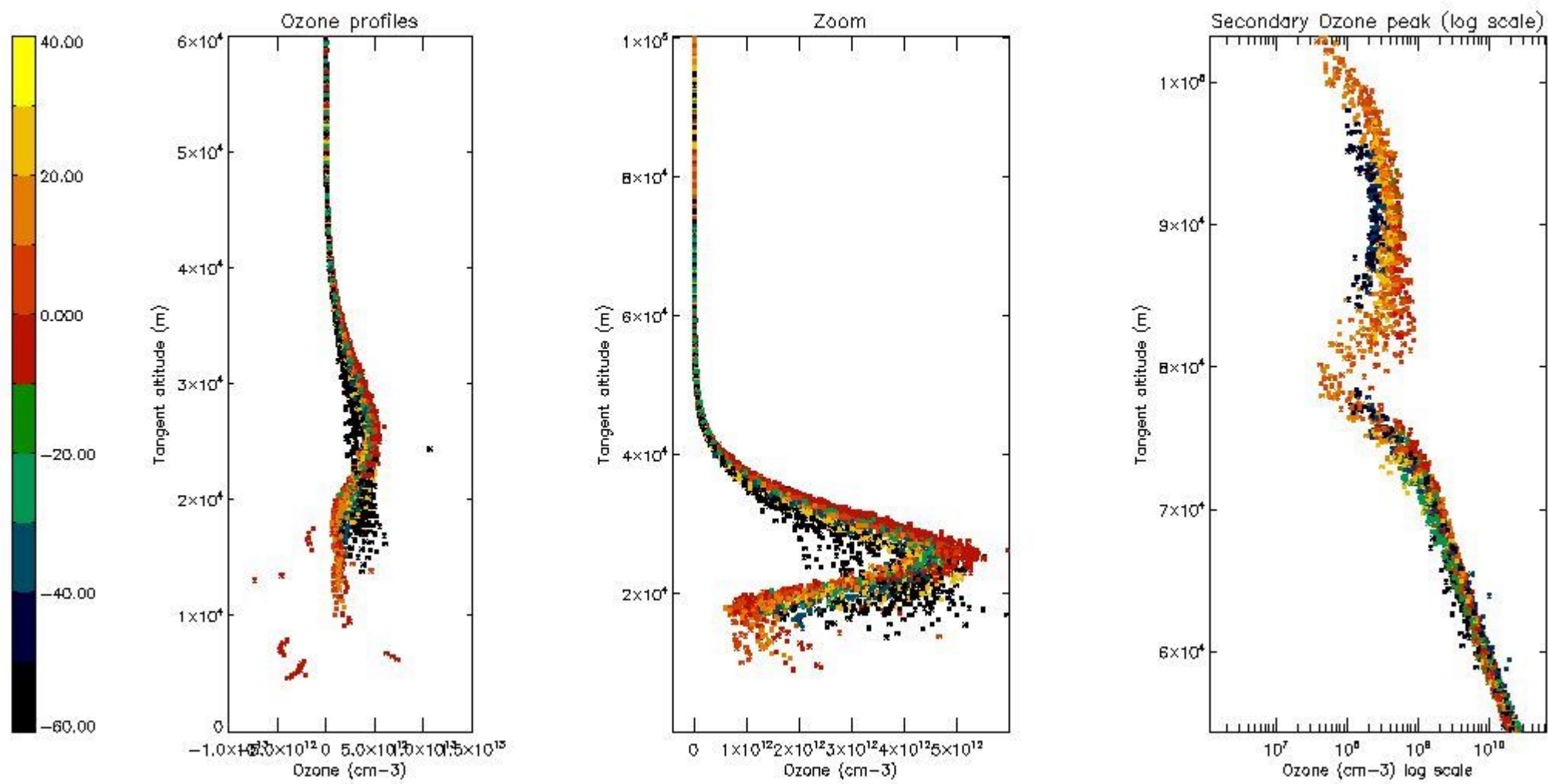
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



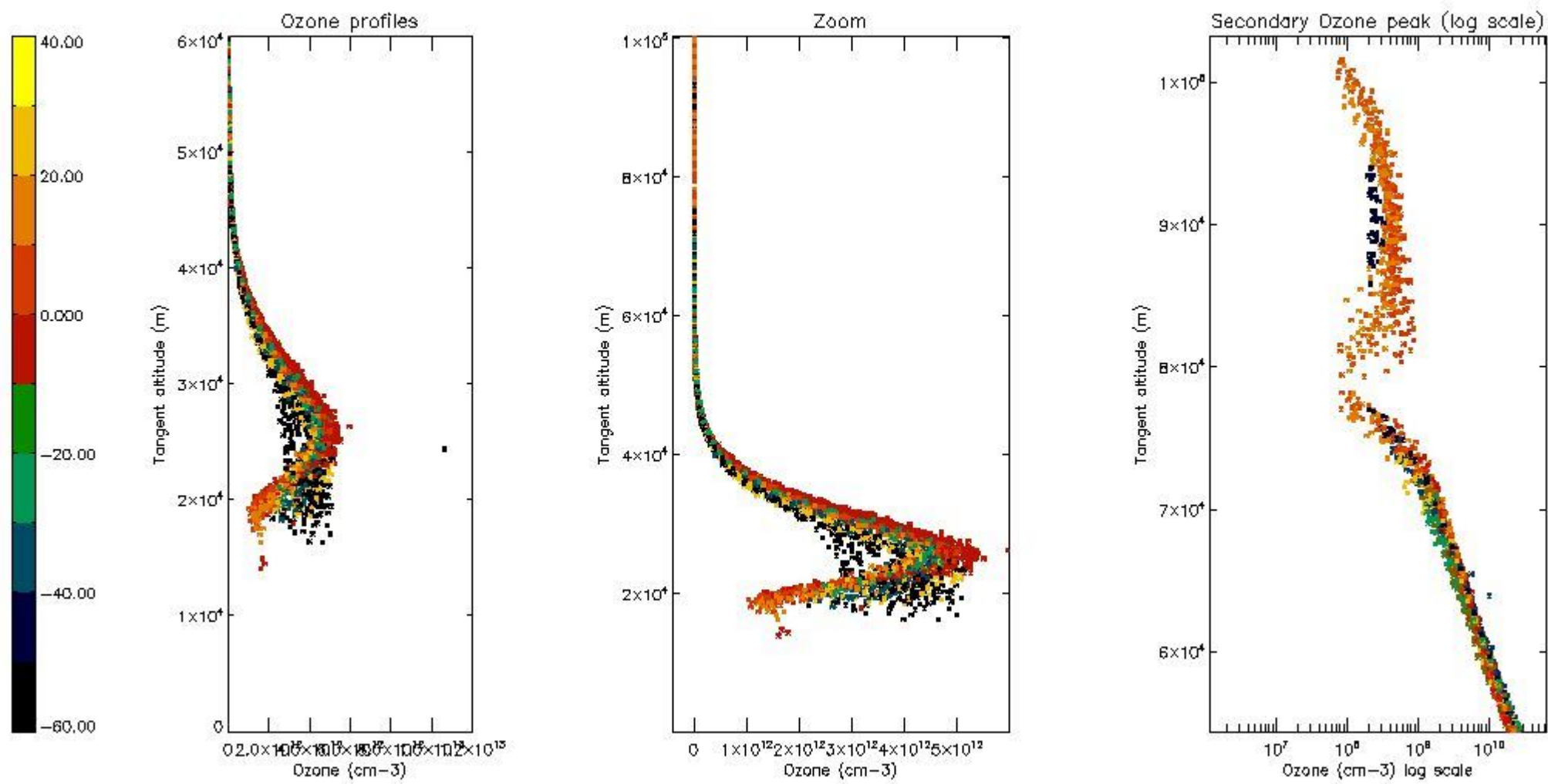
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



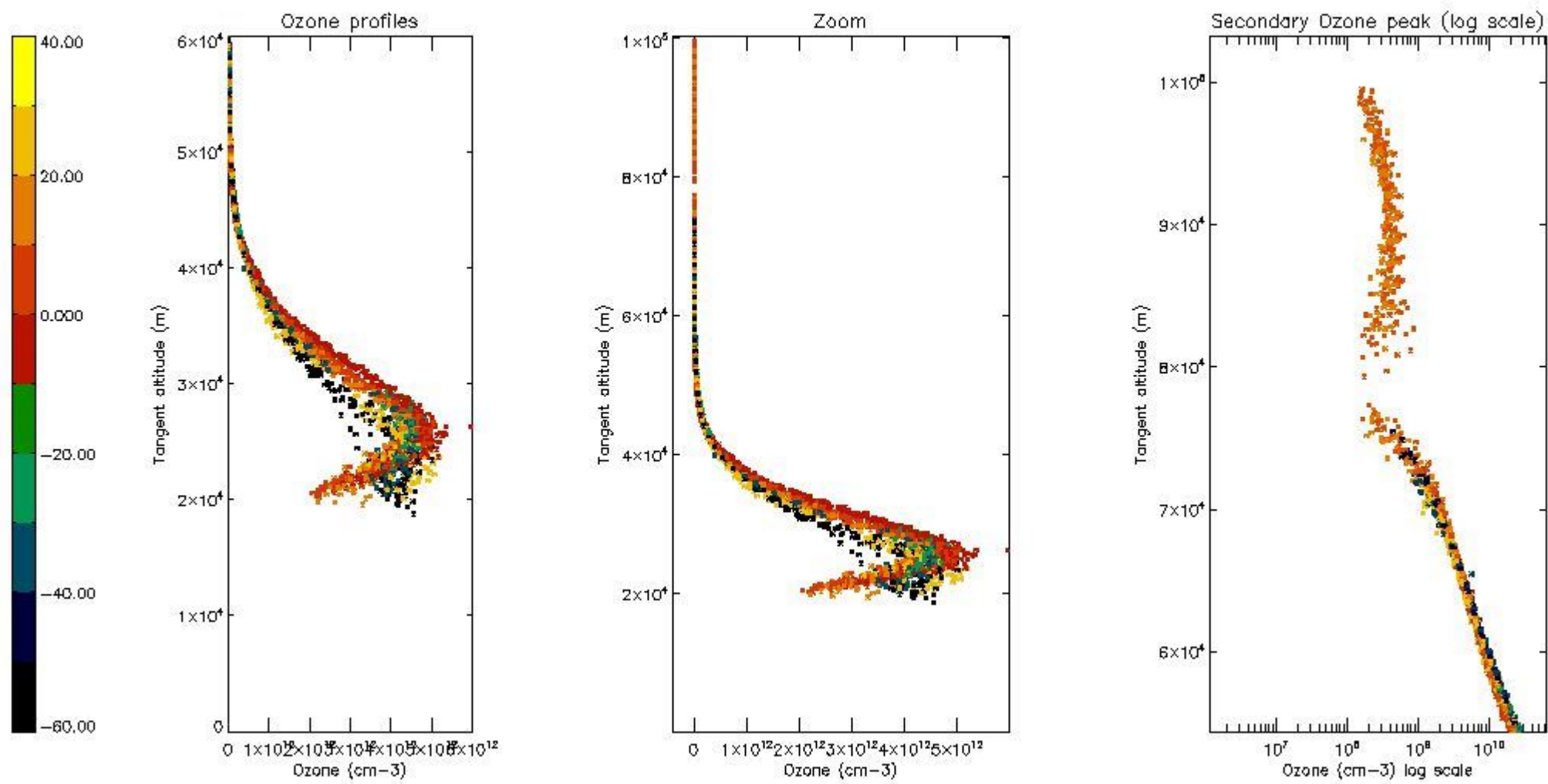
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



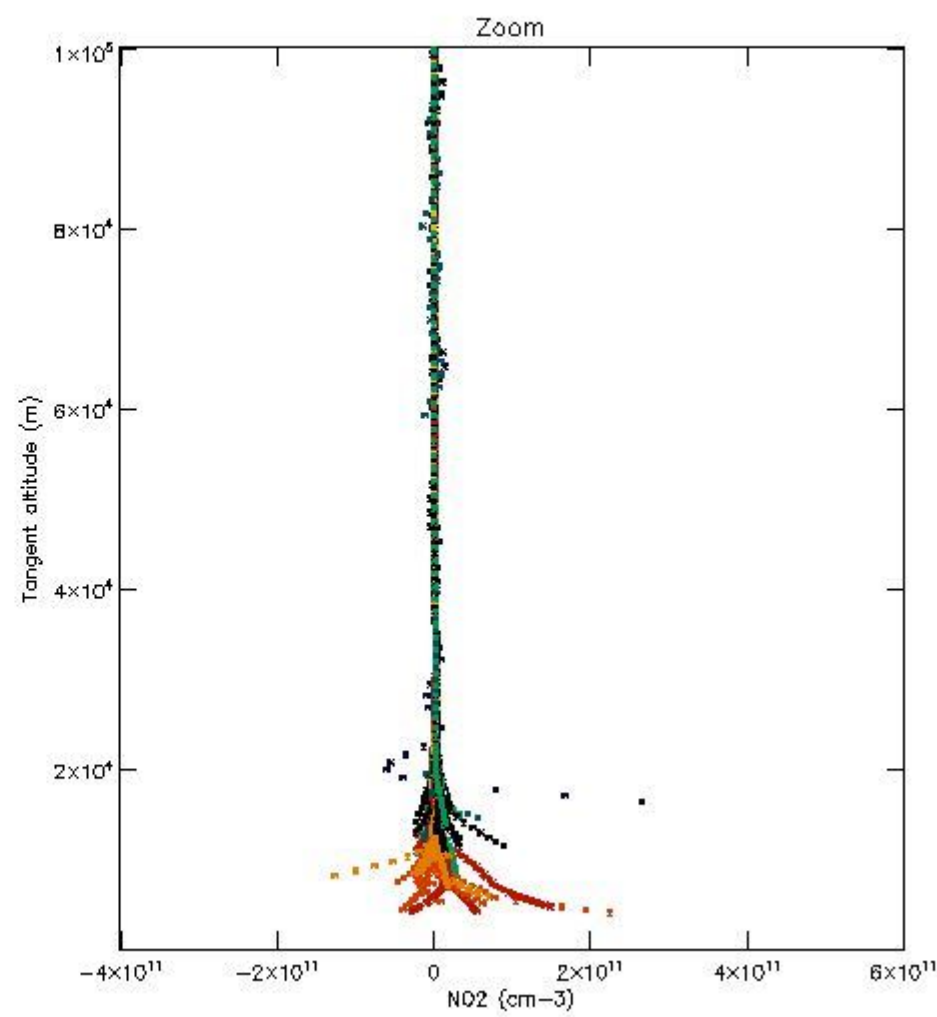
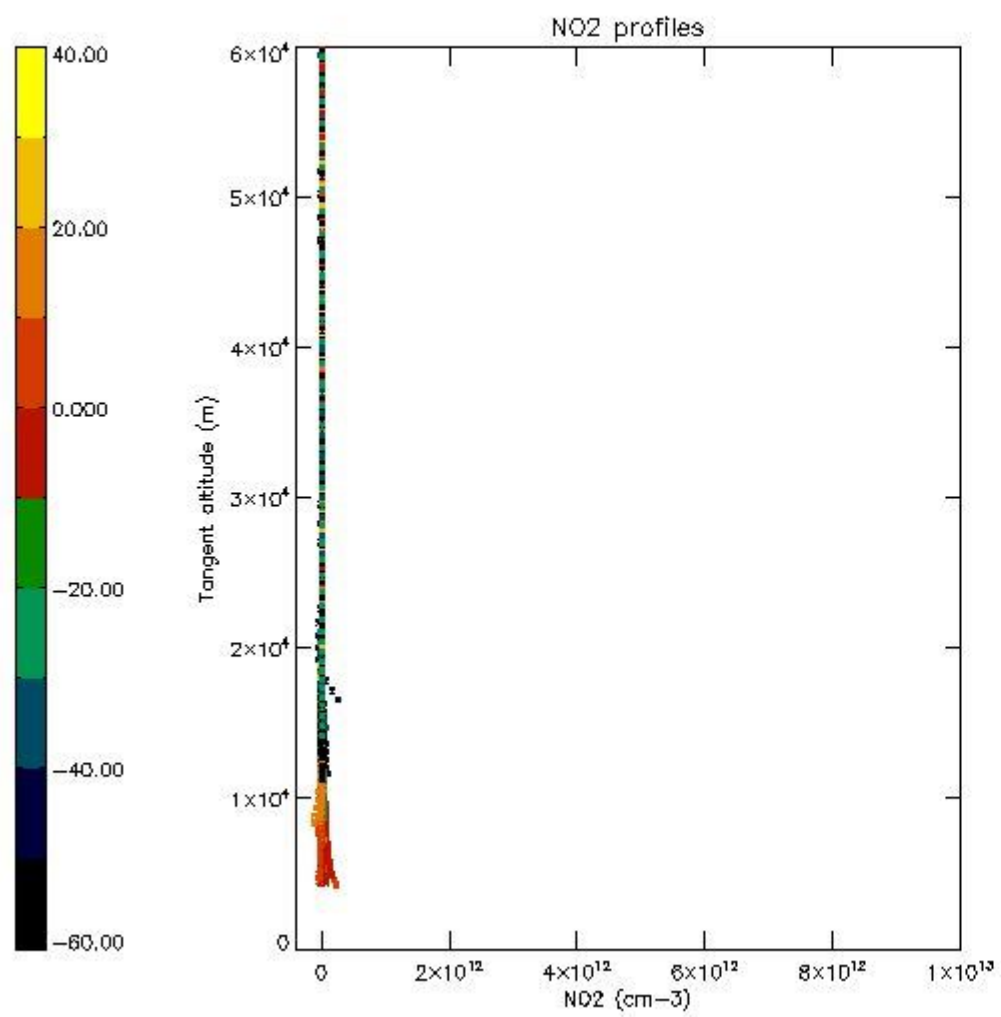
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



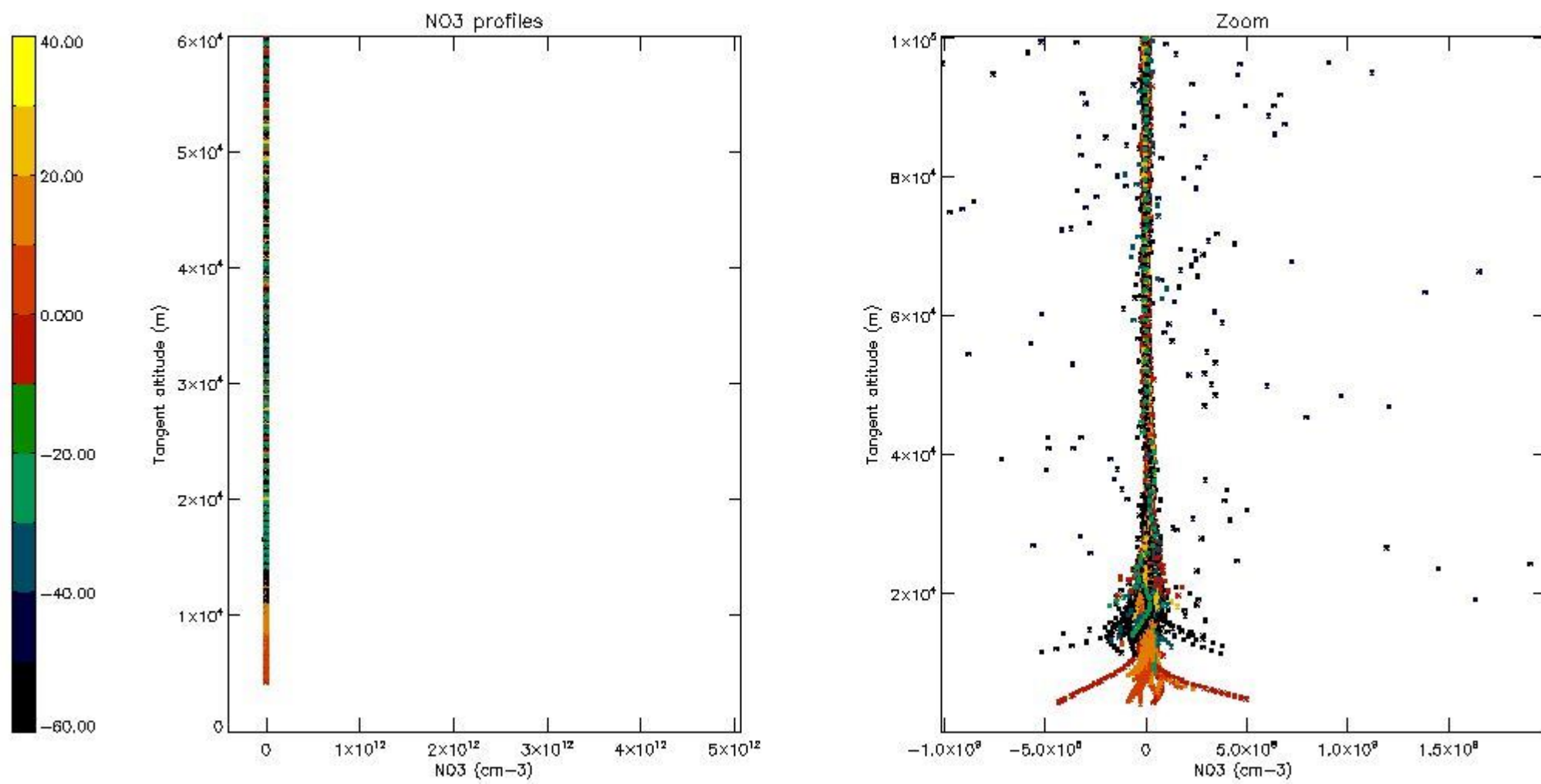
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



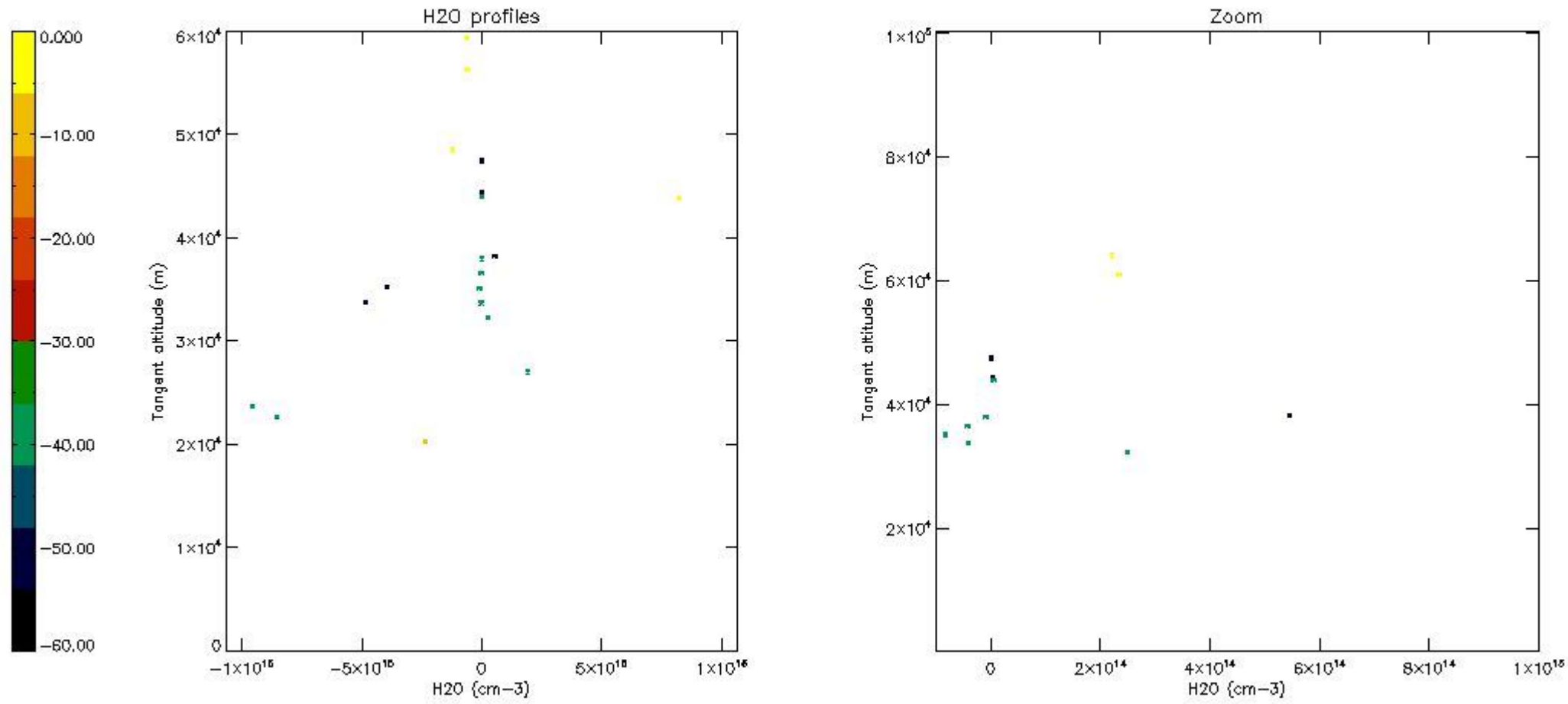
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

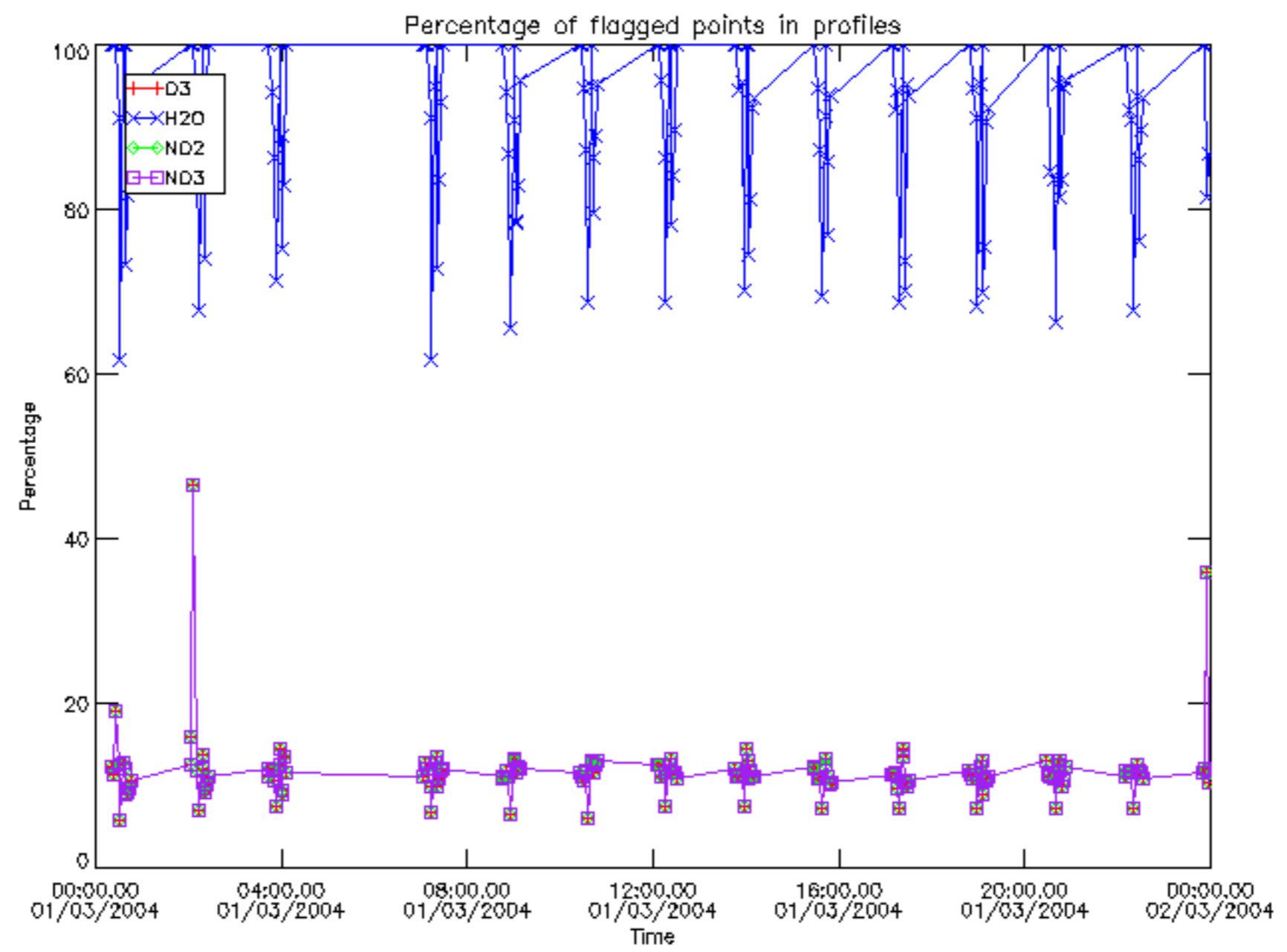
The colorbar represents the latitude.



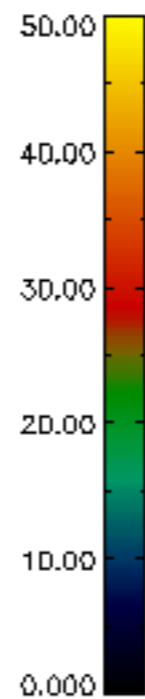
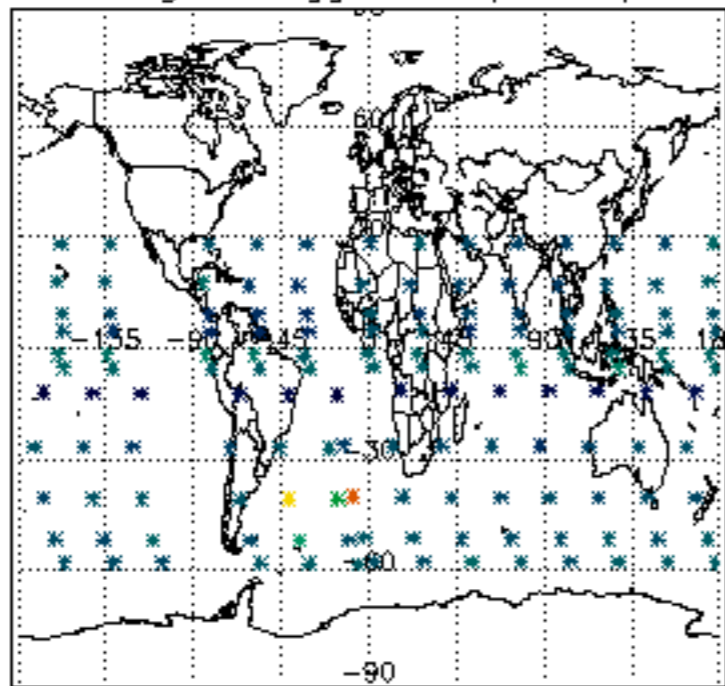
6. Auxiliary Data Files used for the production reported in section 2

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.

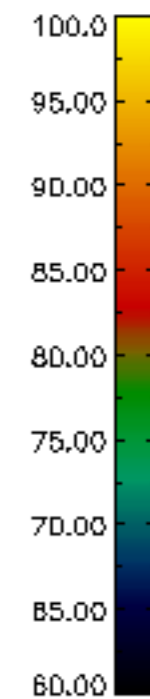
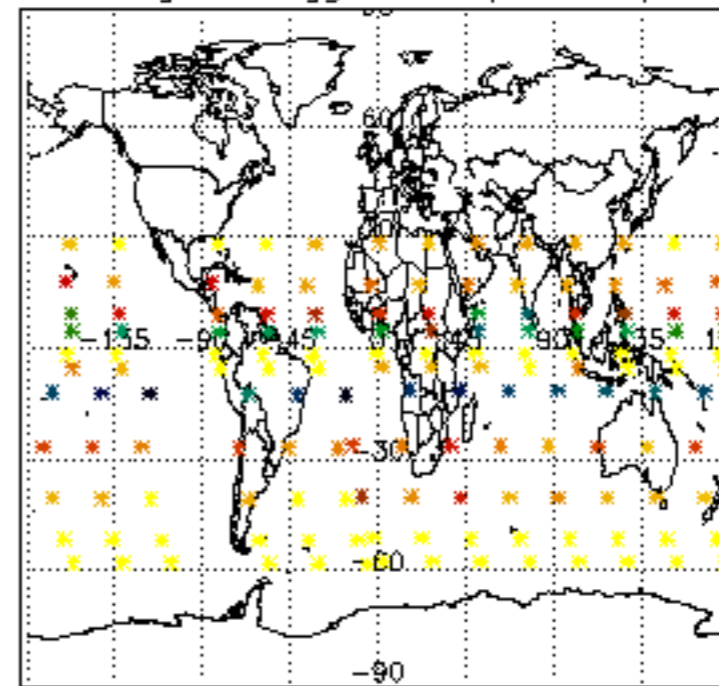
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	01-MAR-2004 00:01:08
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	01-MAR-2004 00:01:08
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	01-MAR-2004 00:01:08



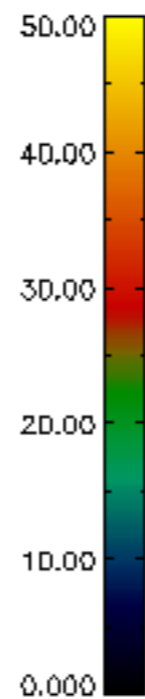
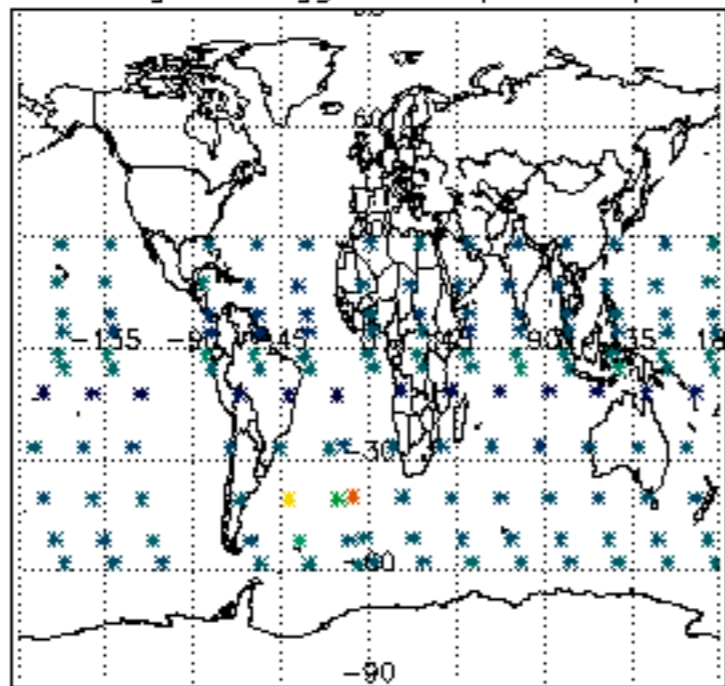
Percentage of flagged data per D3 profile



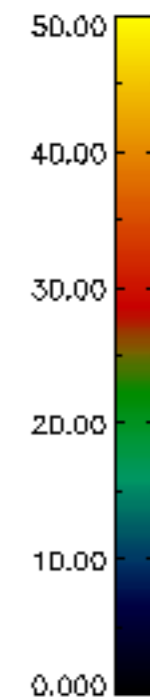
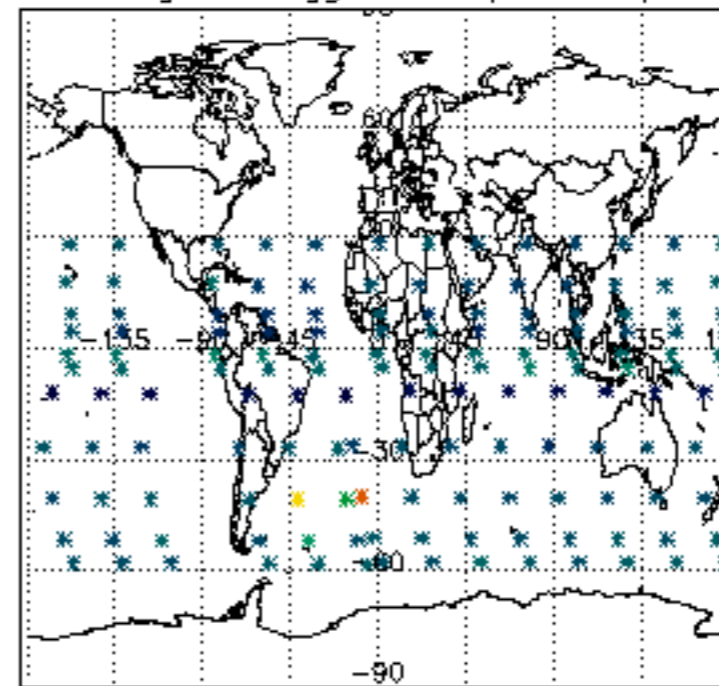
Percentage of flagged data per H2O profile

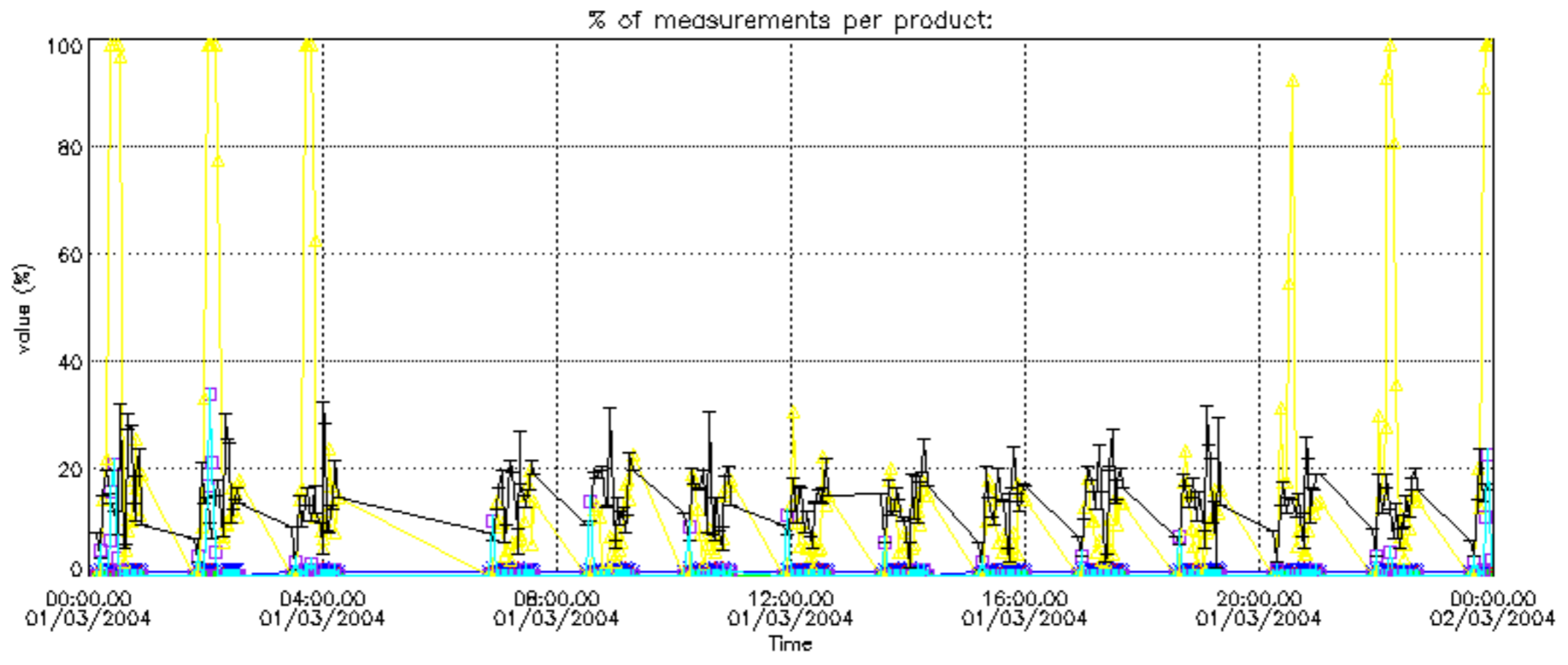


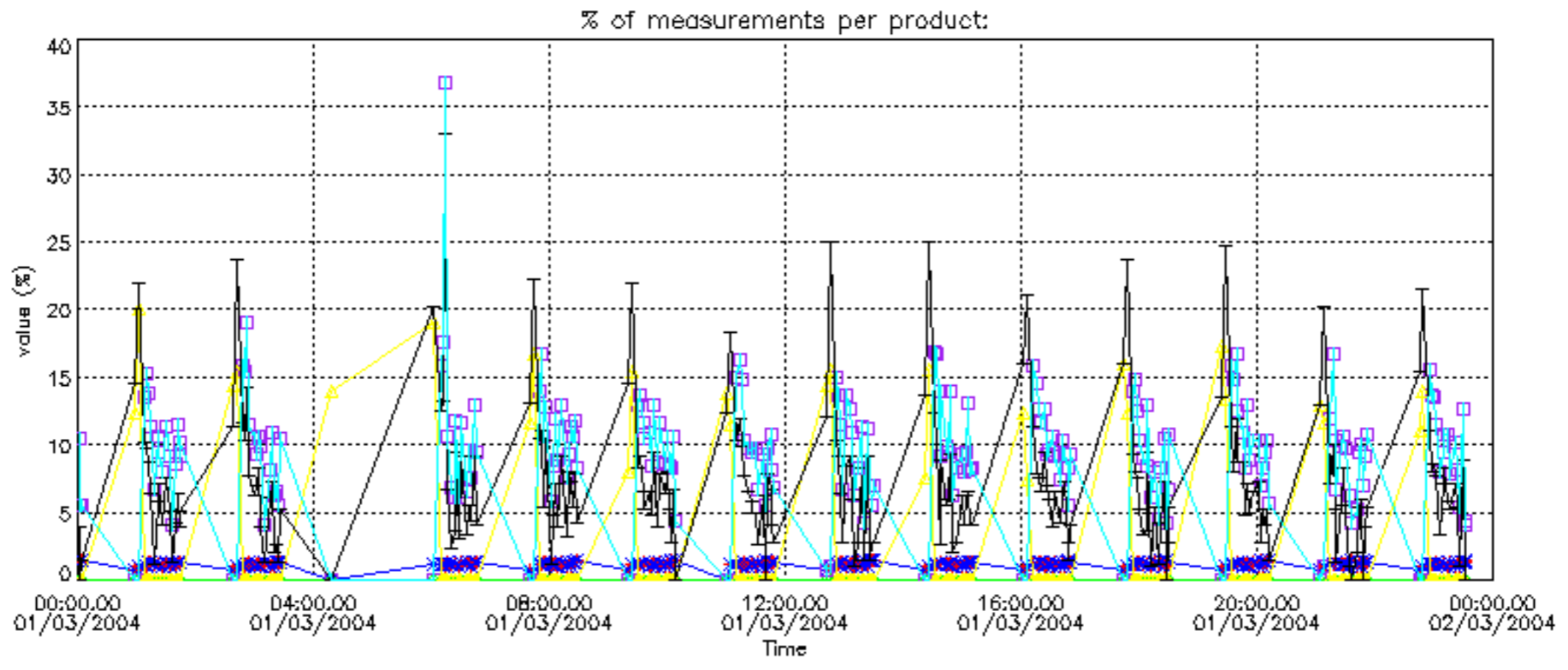
Percentage of flagged data per NO2 profile



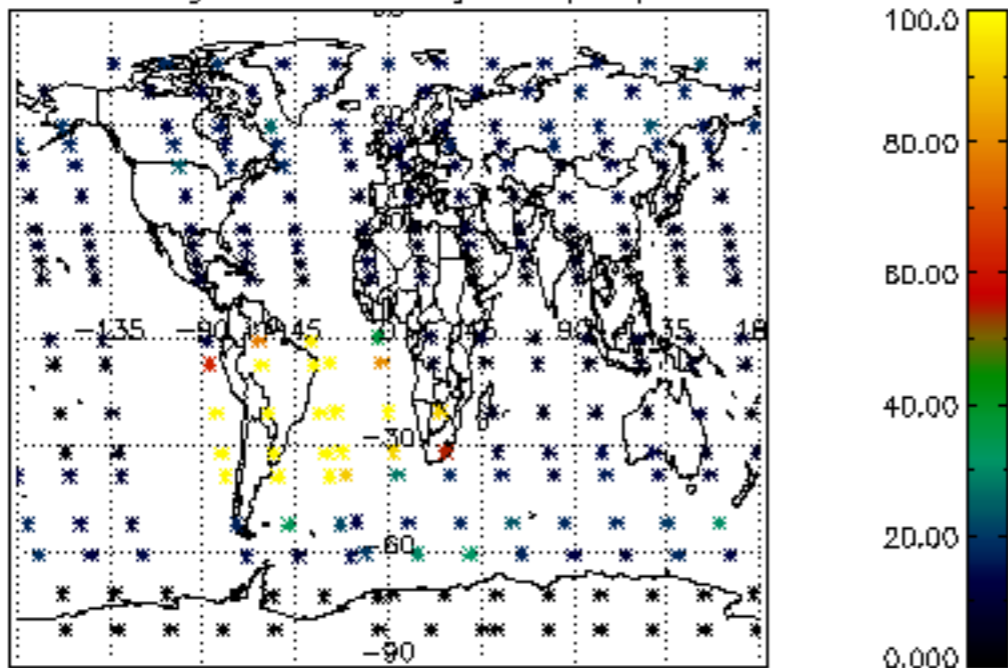
Percentage of flagged data per NO3 profile



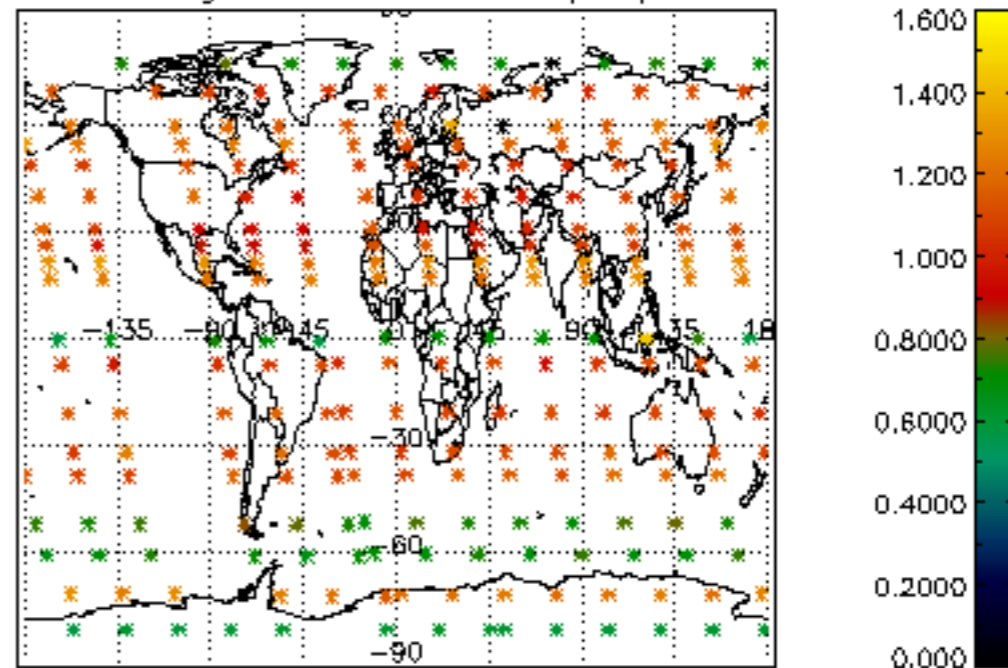




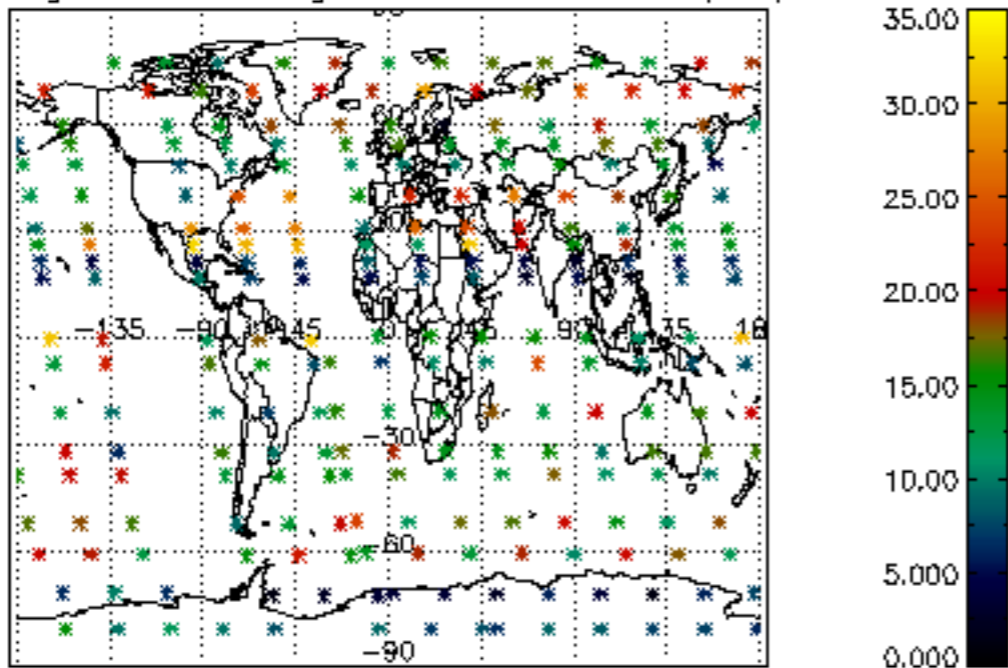
Percentage of cosmic ray hits per profile



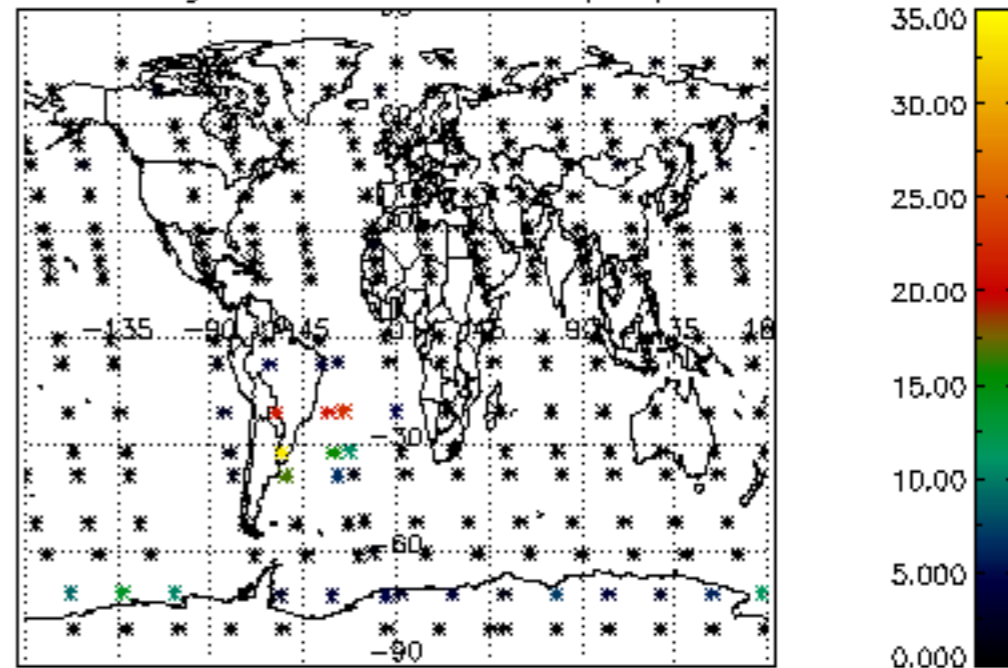
Percentage of datation errors per profile



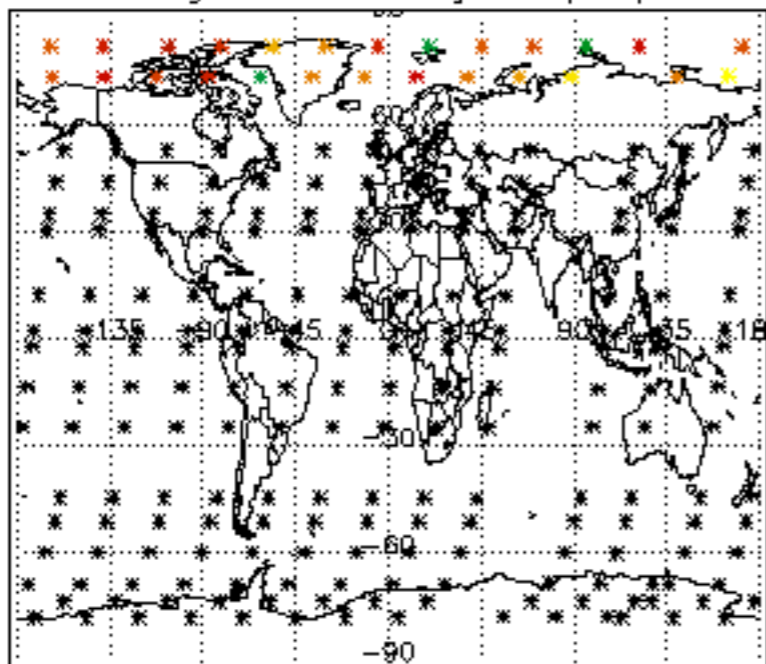
Percentage of star falling outside central band per profile



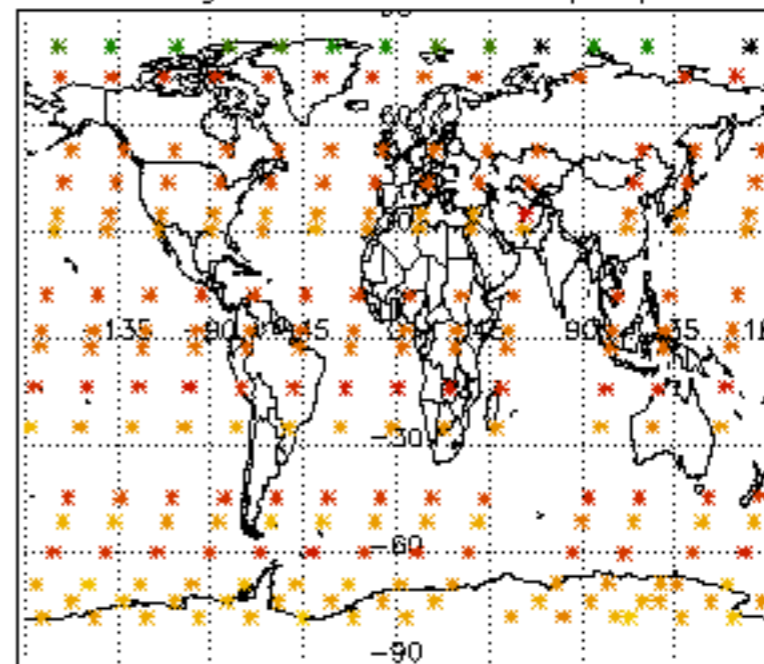
Percentage of saturation errors per profile



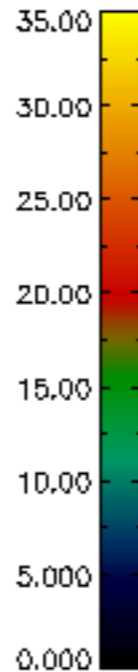
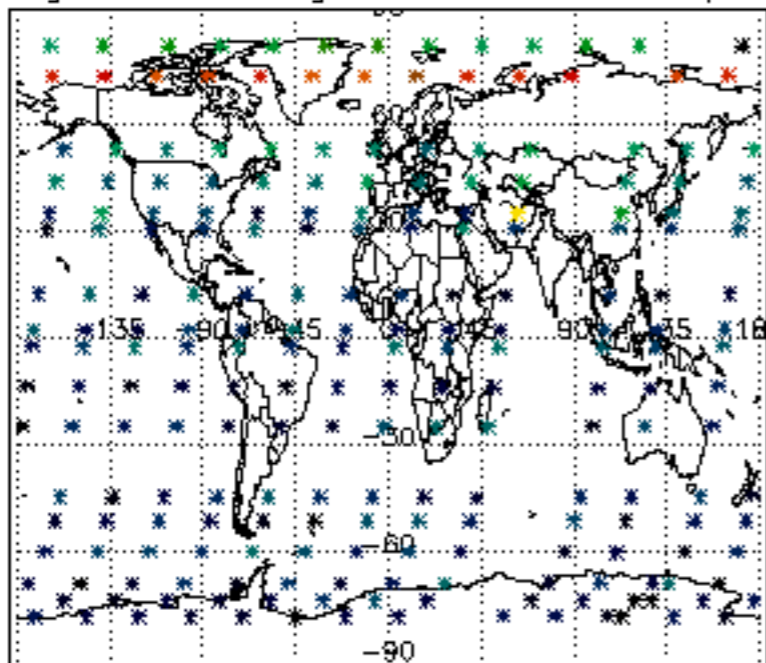
Percentage of cosmic ray hits per profile



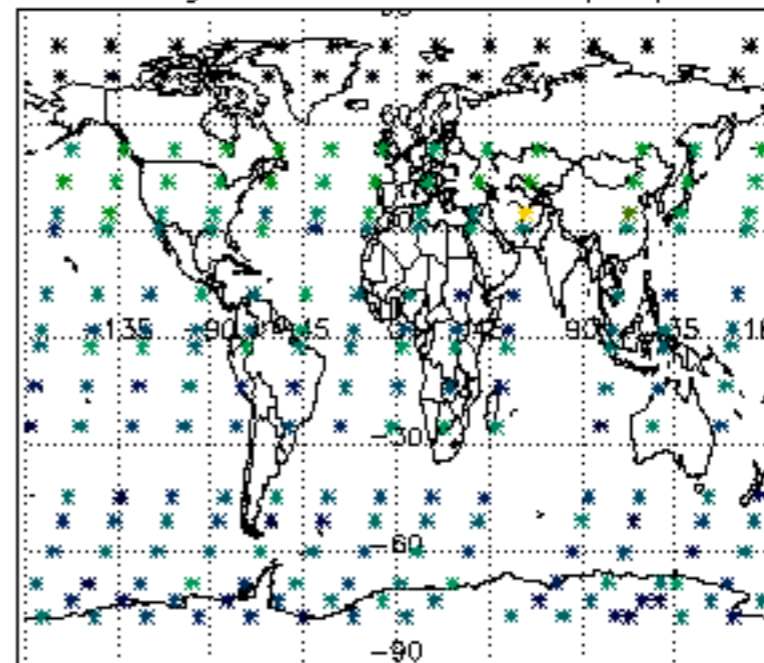
Percentage of datation errors per profile

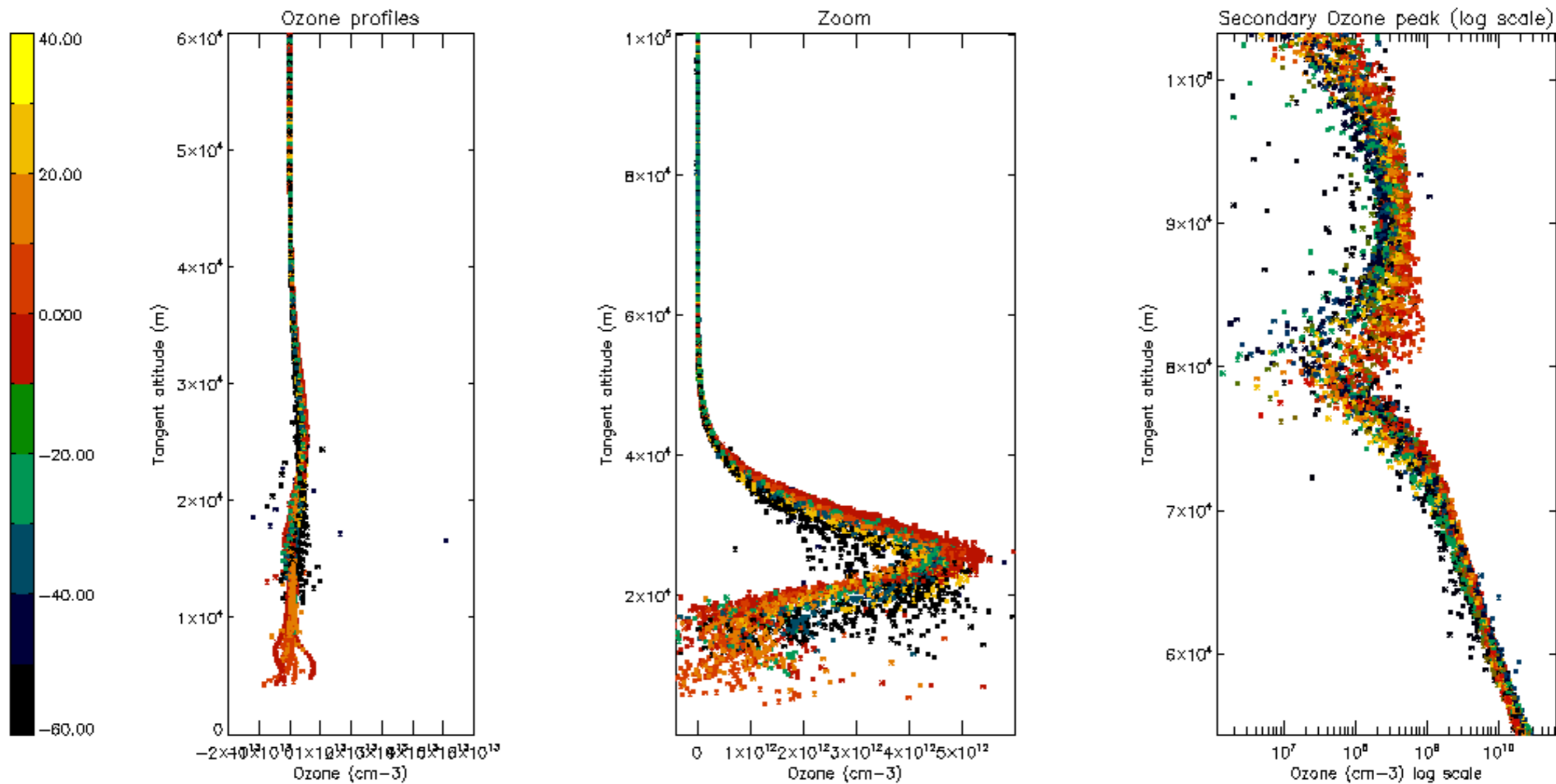


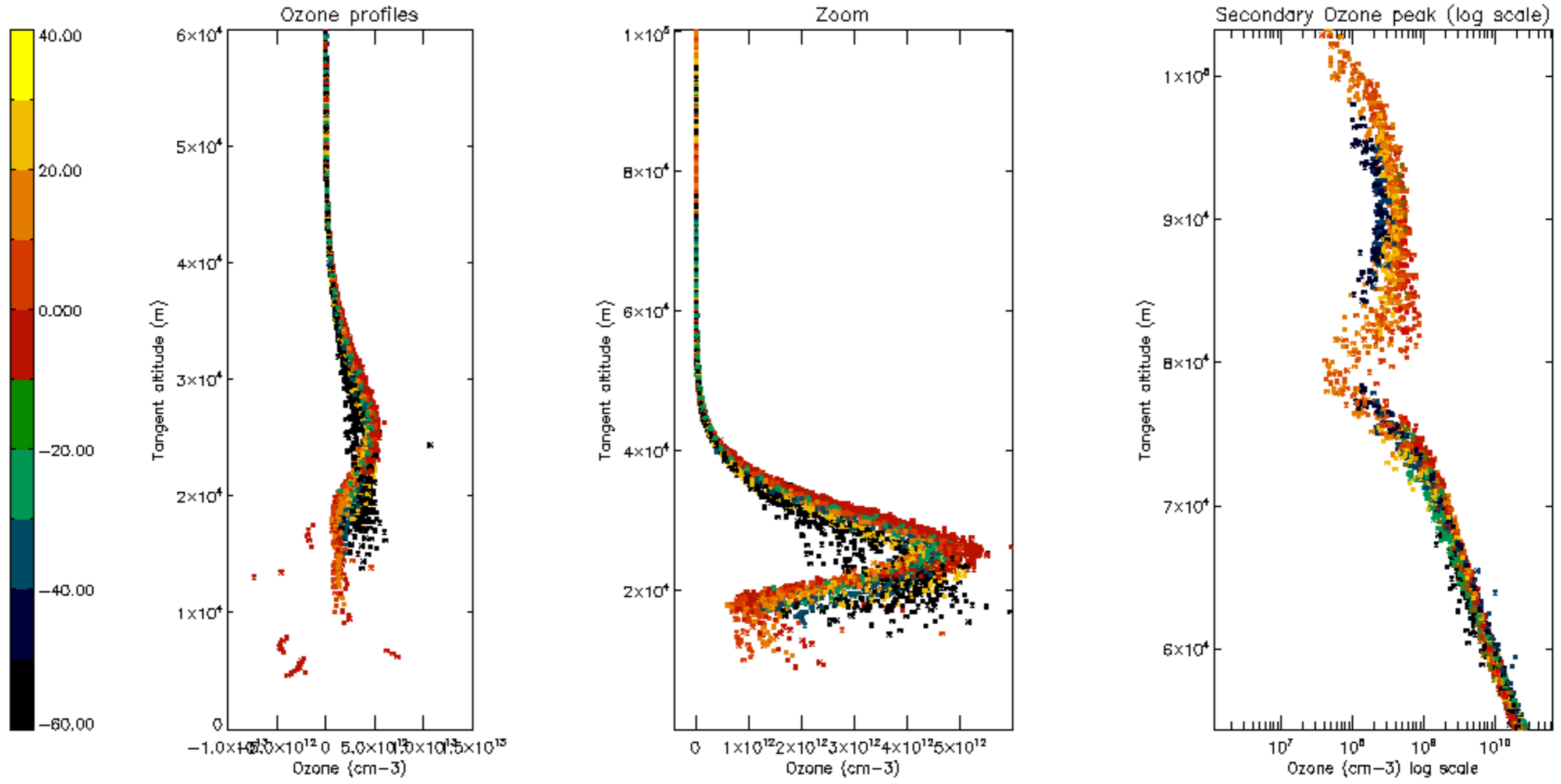
Percentage of star falling outside central band per profile

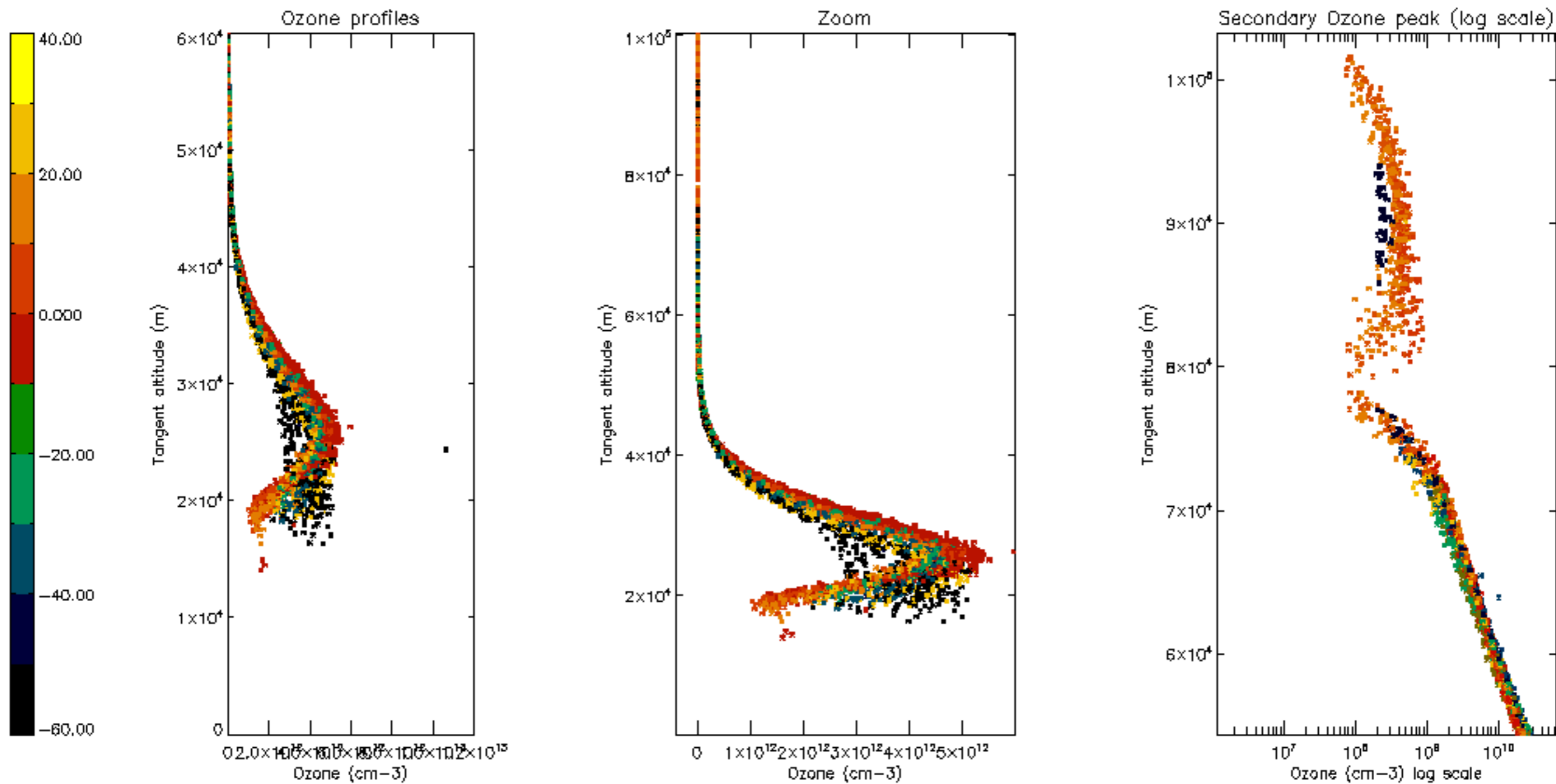


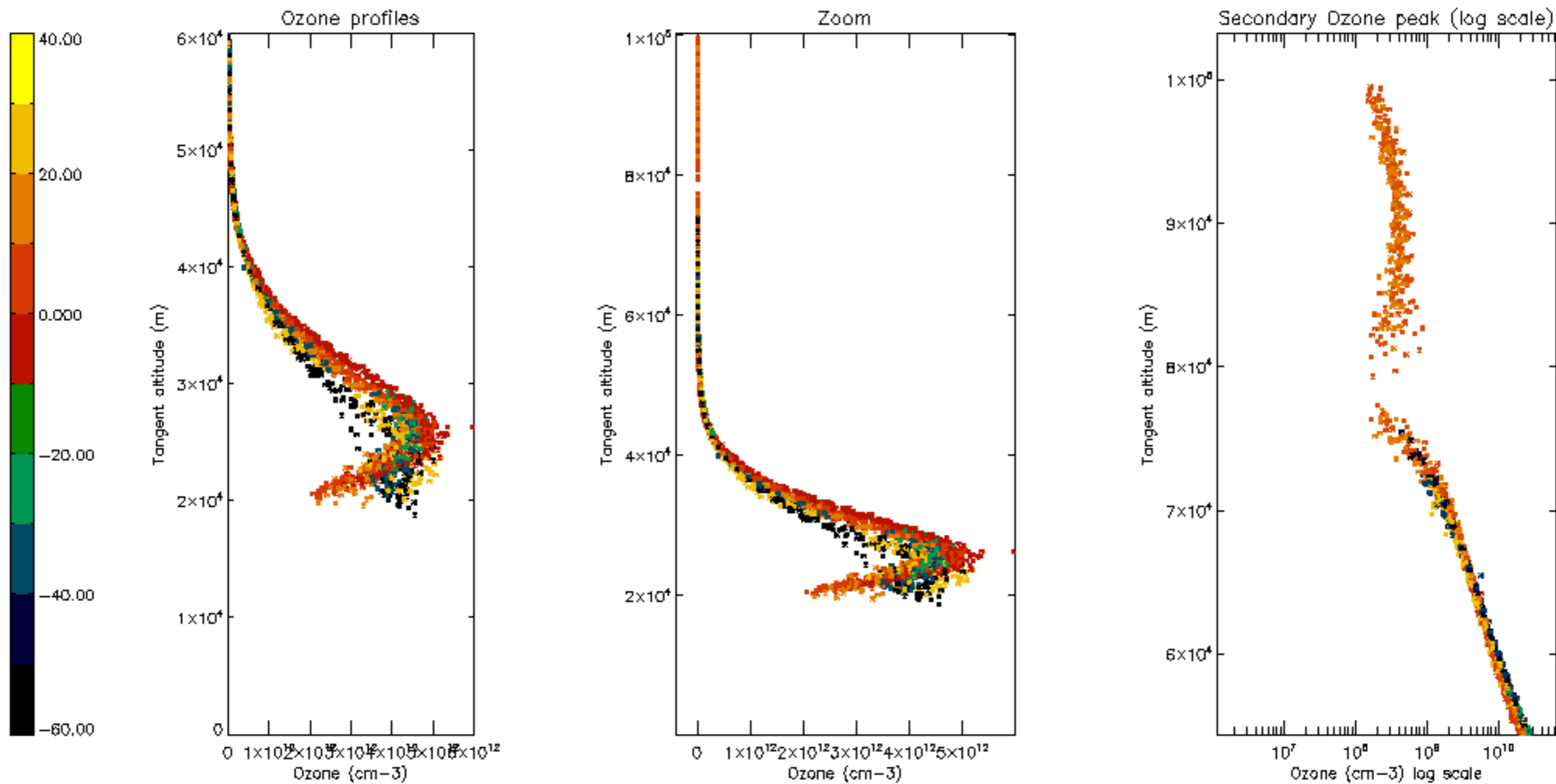
Percentage of saturation errors per profile

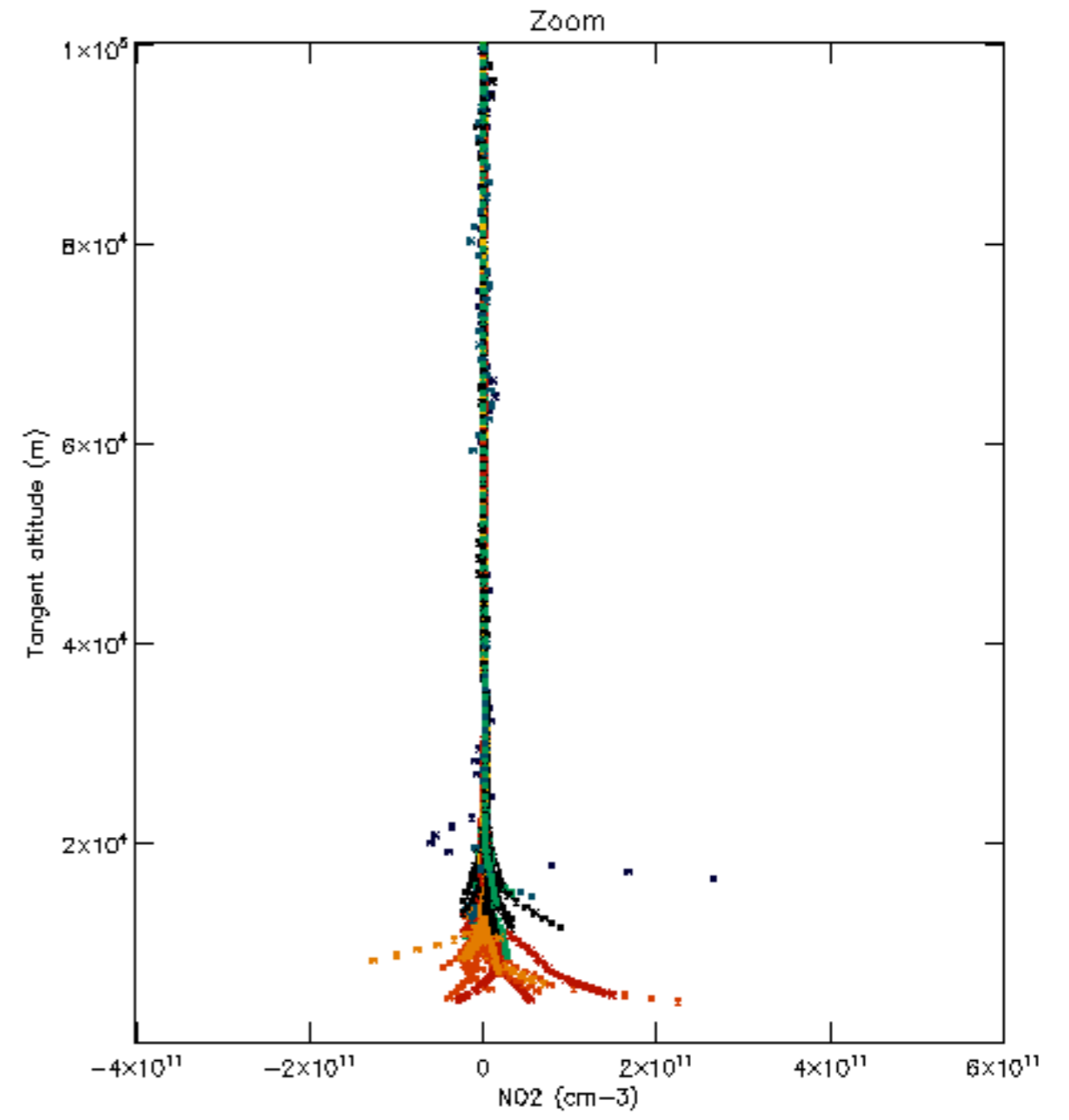
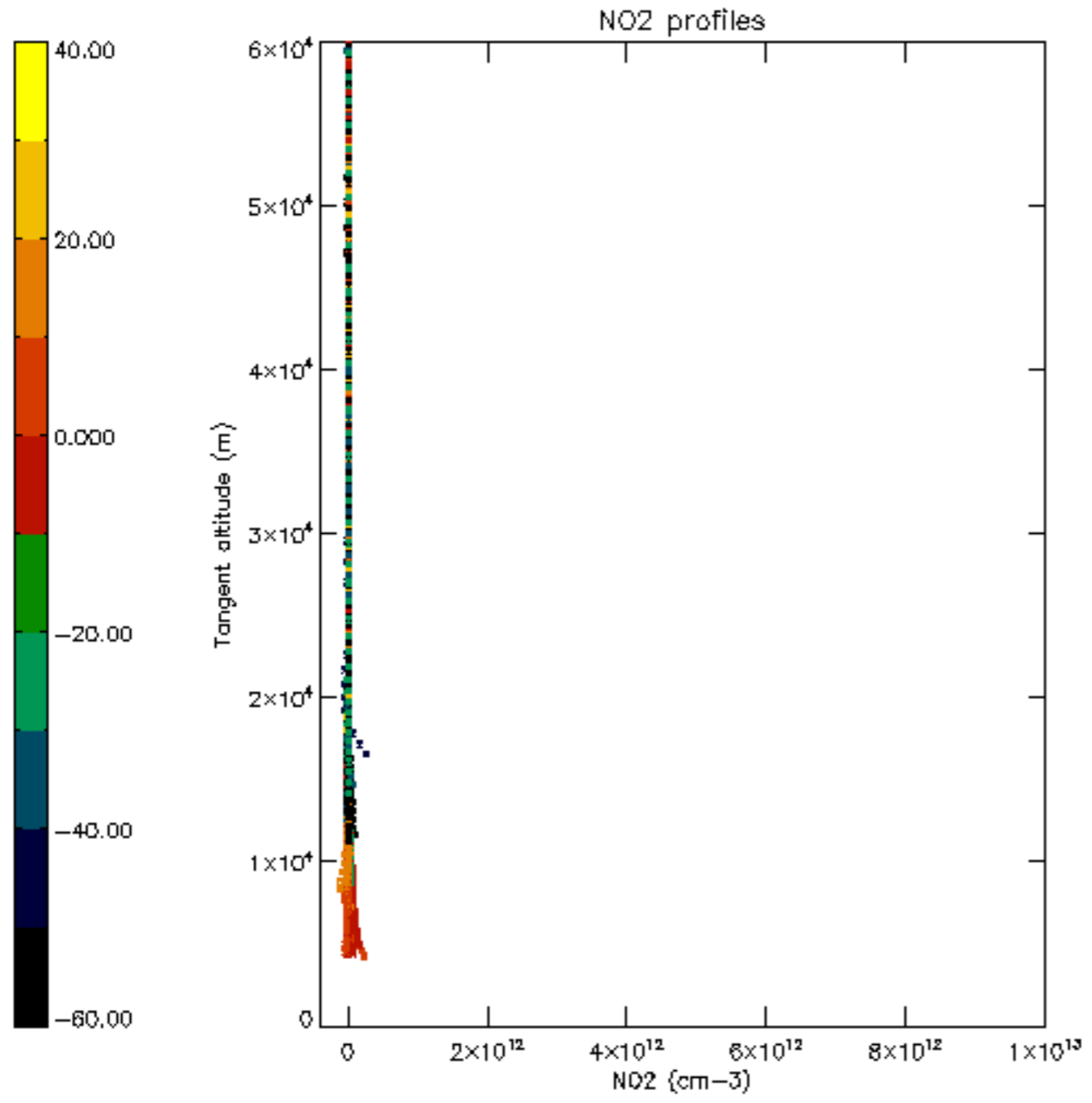


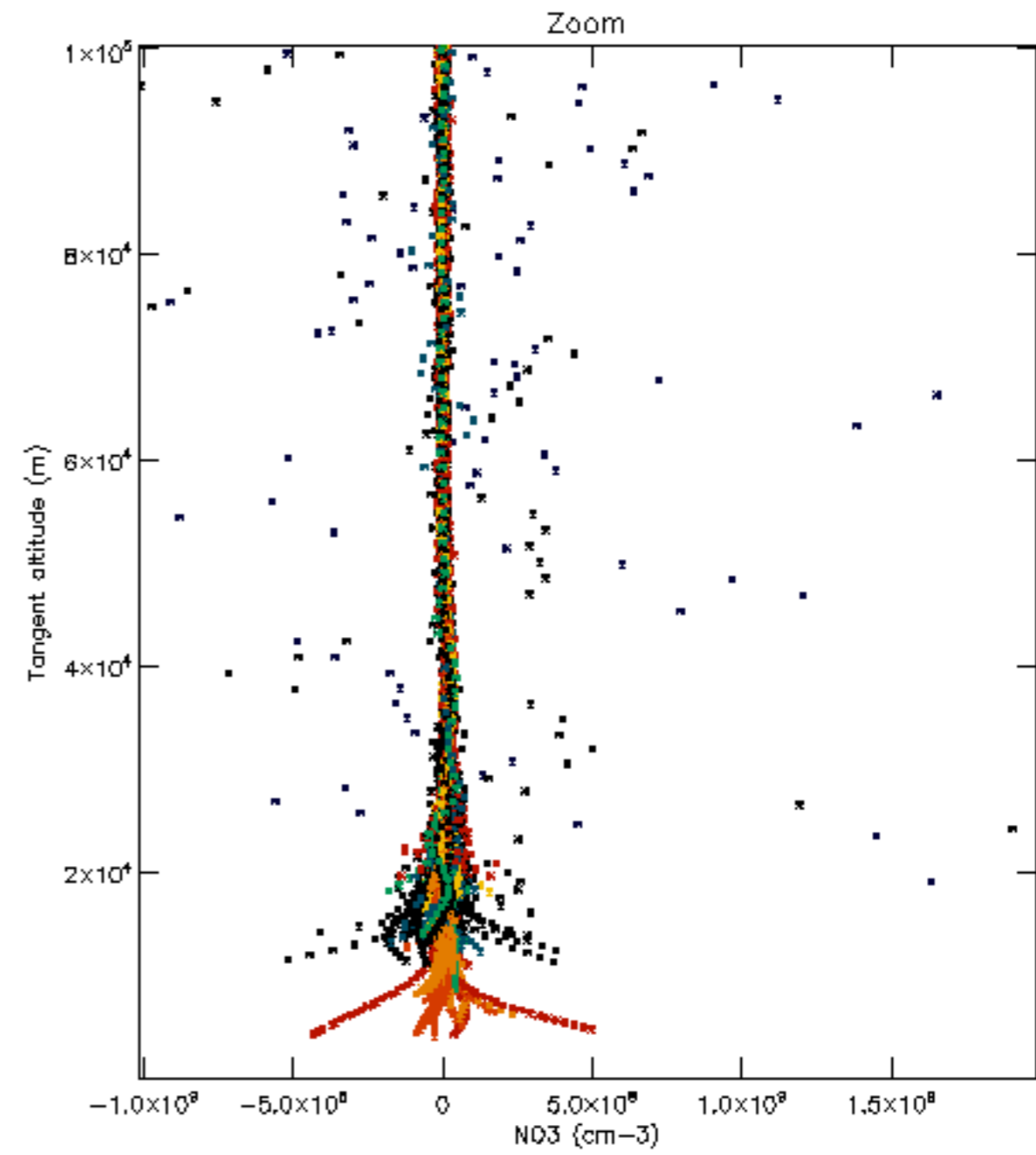
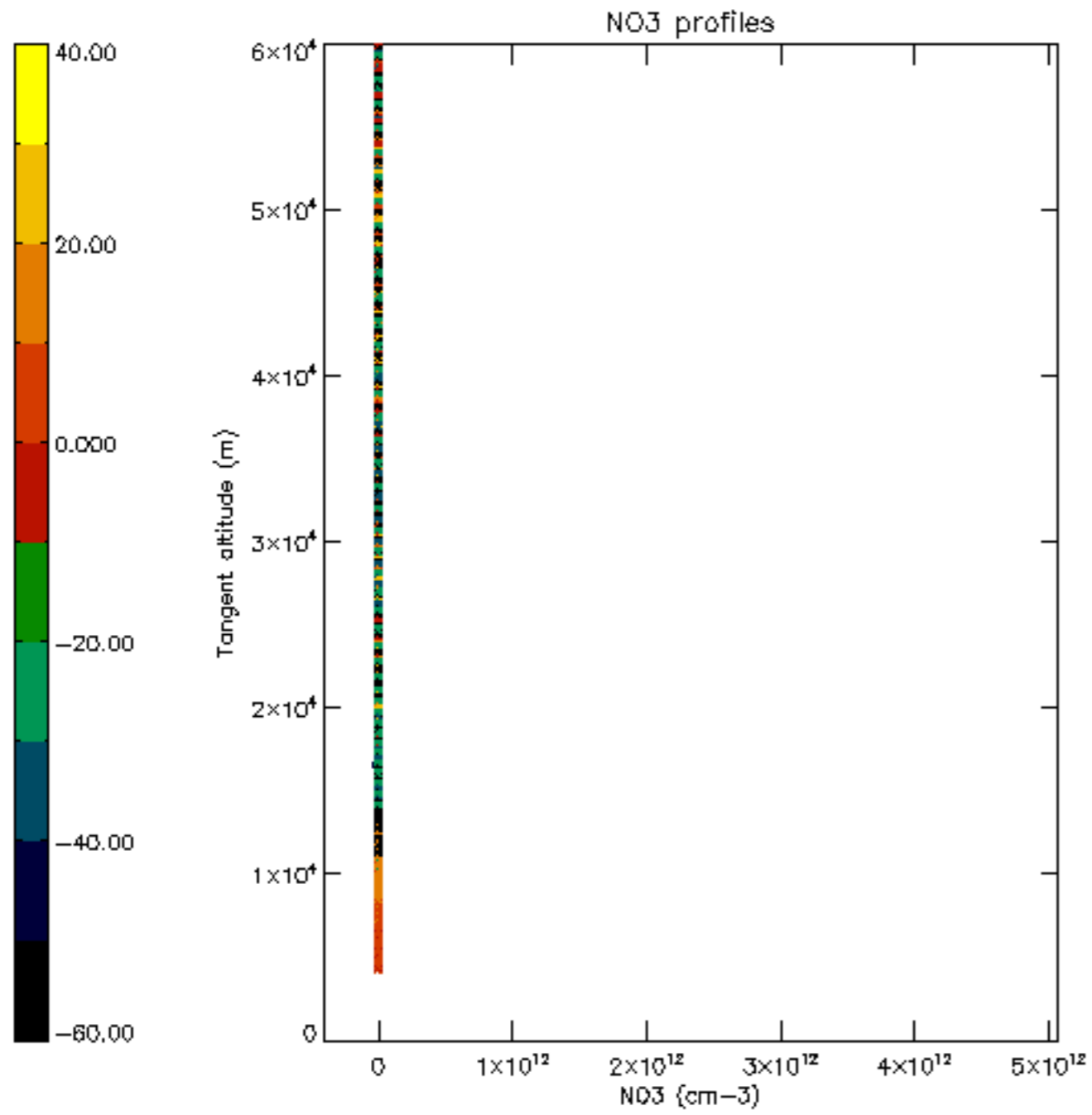


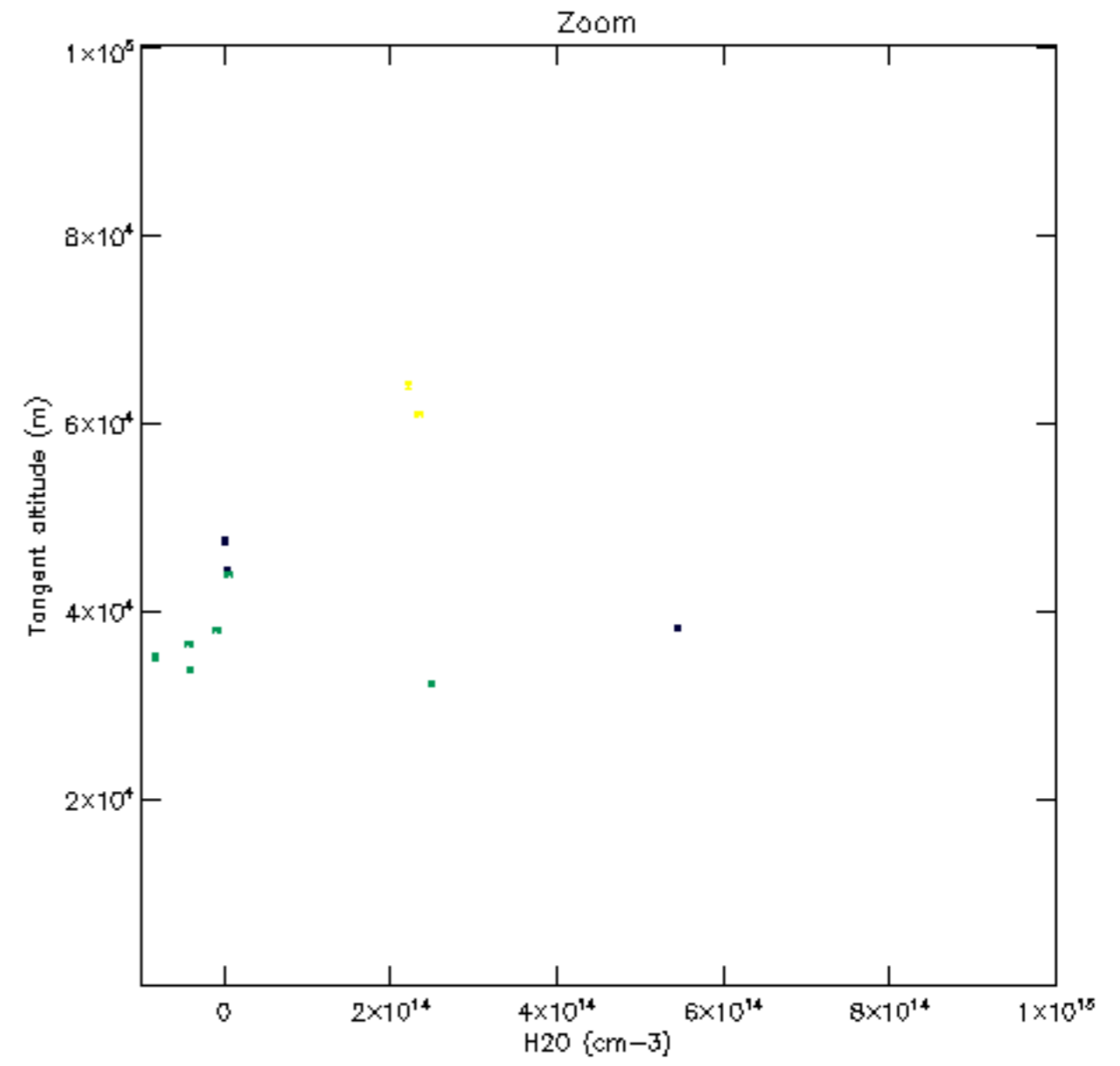
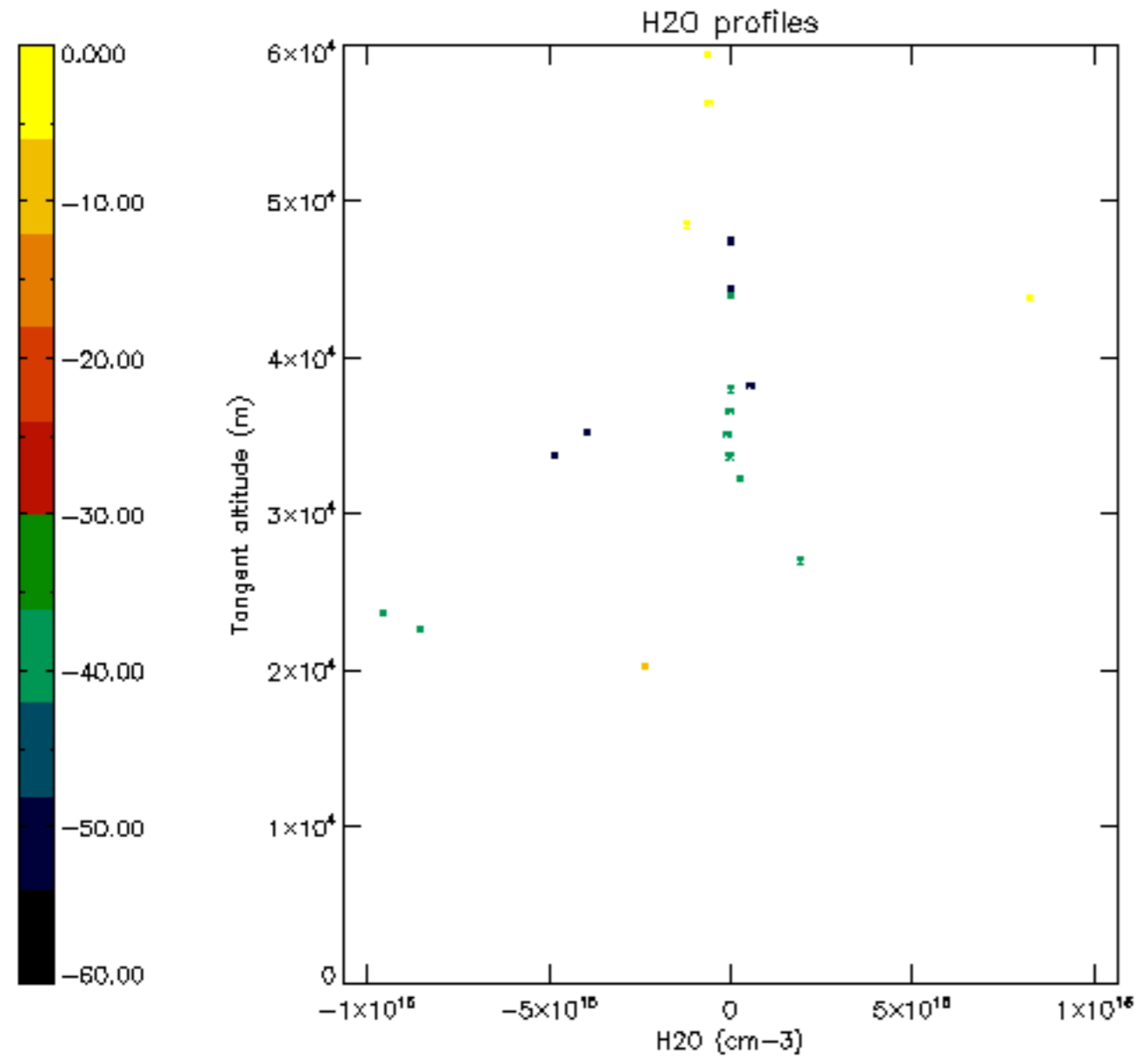


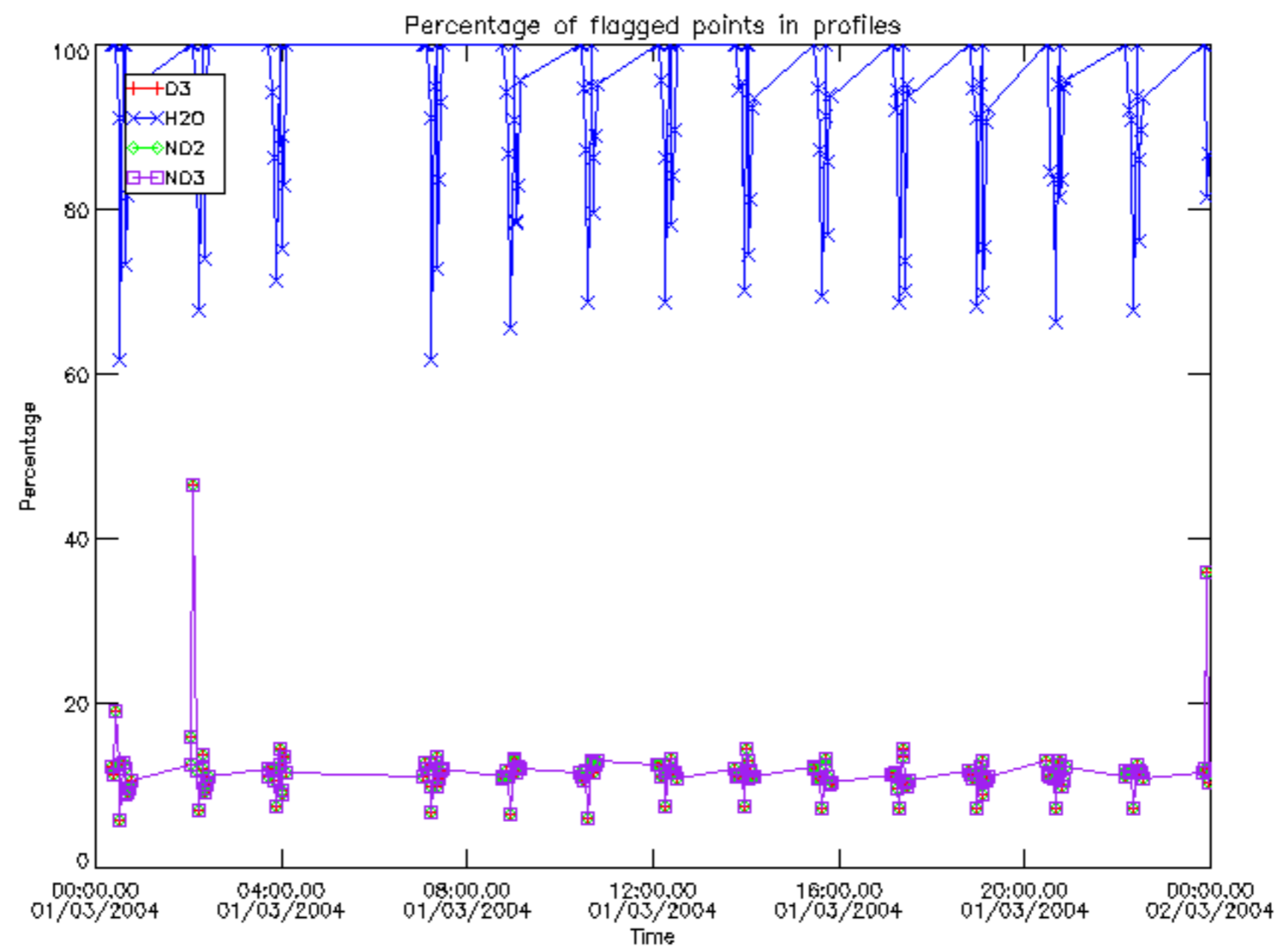




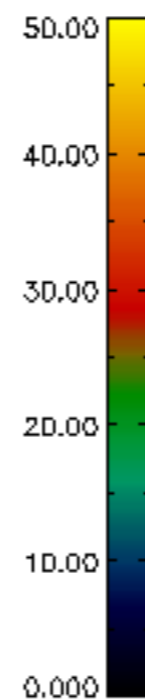
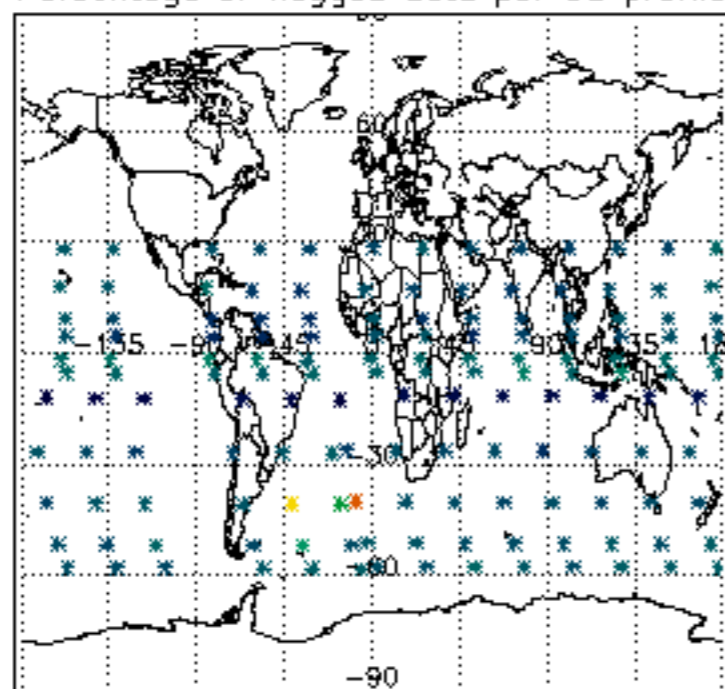




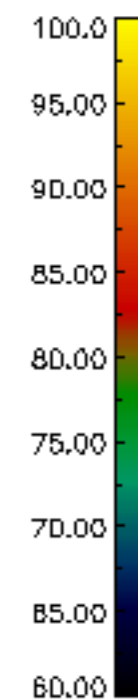
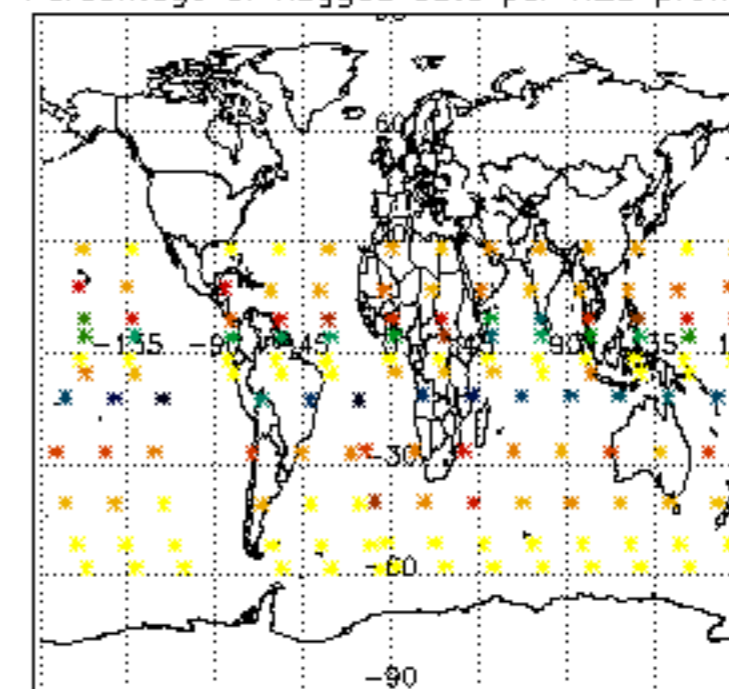




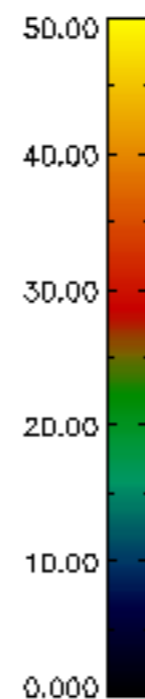
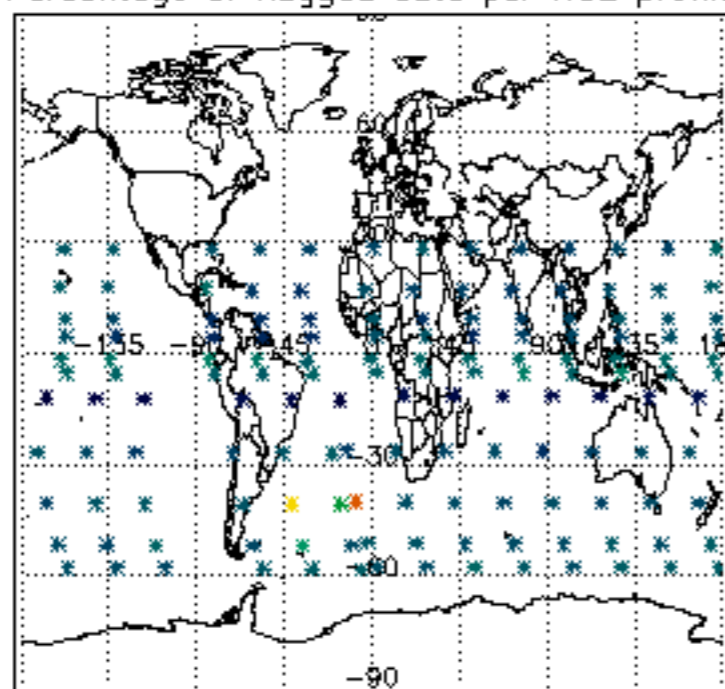
Percentage of flagged data per D3 profile



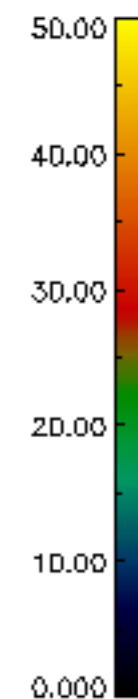
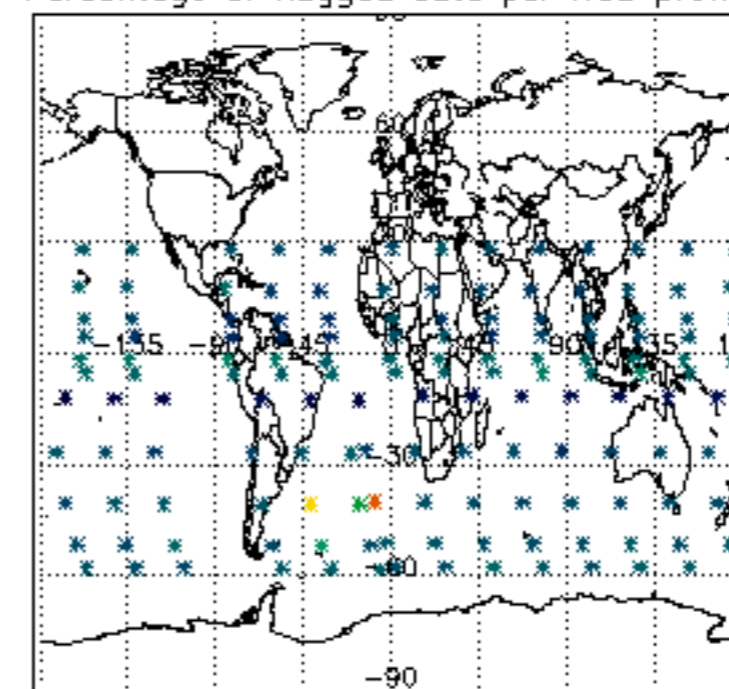
Percentage of flagged data per H2O profile

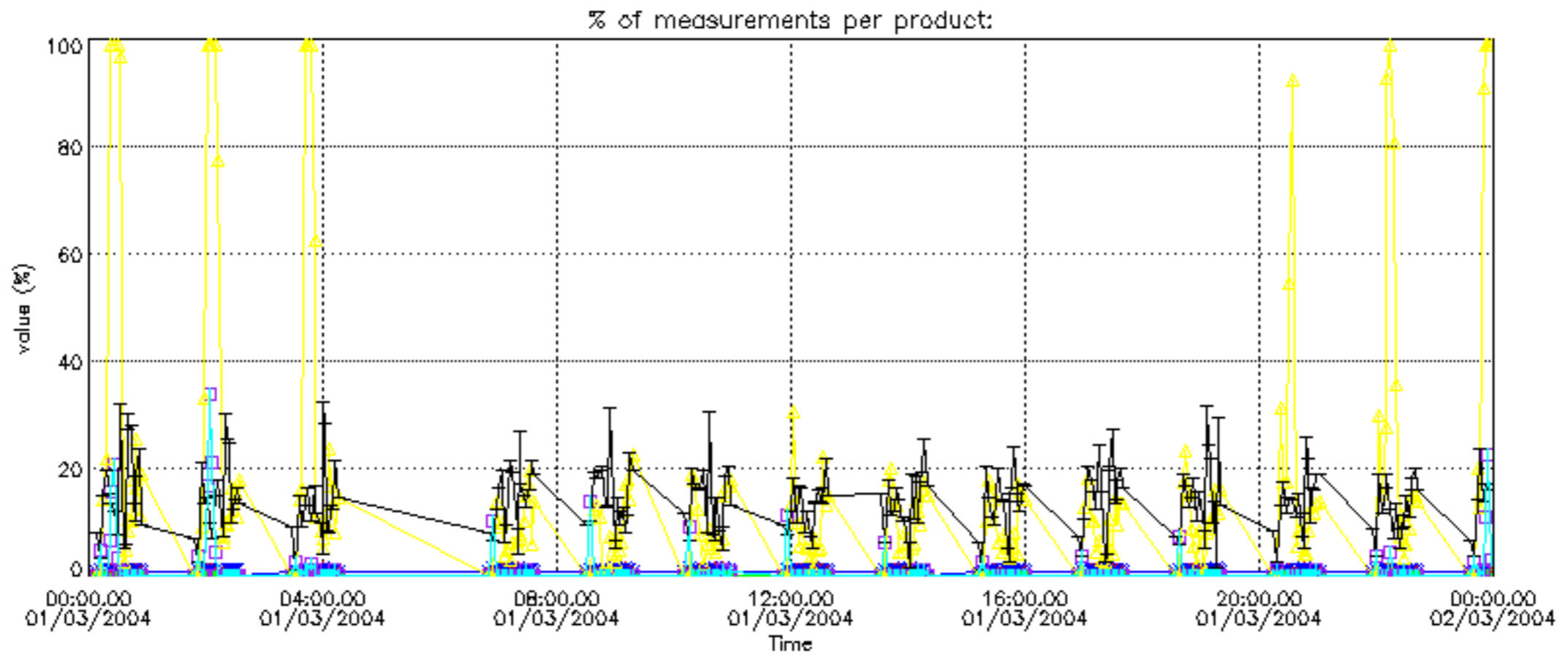


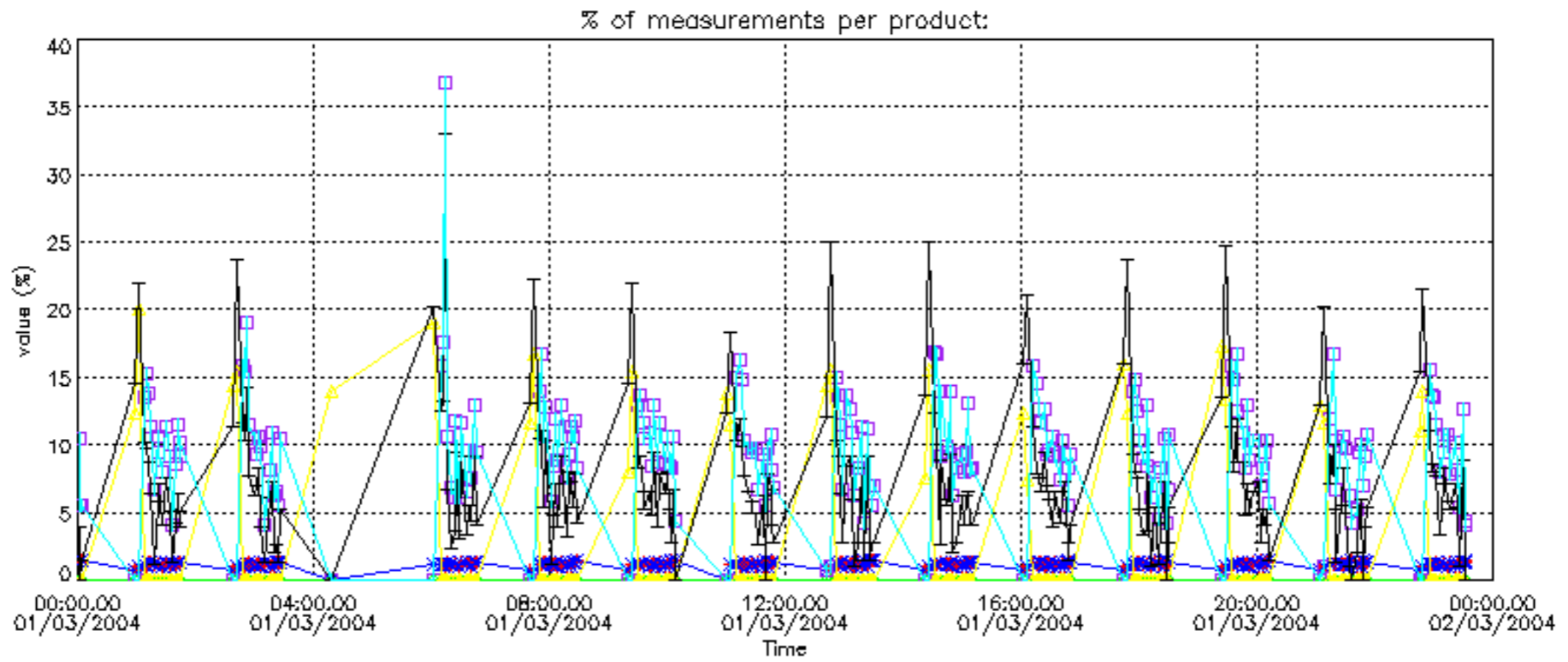
Percentage of flagged data per NO2 profile



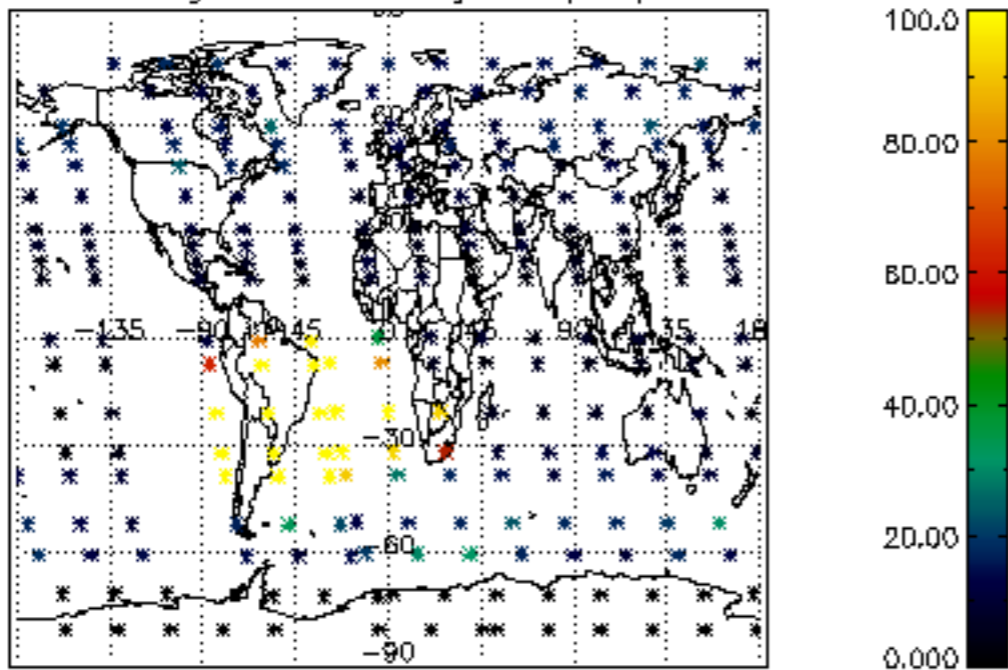
Percentage of flagged data per NO3 profile



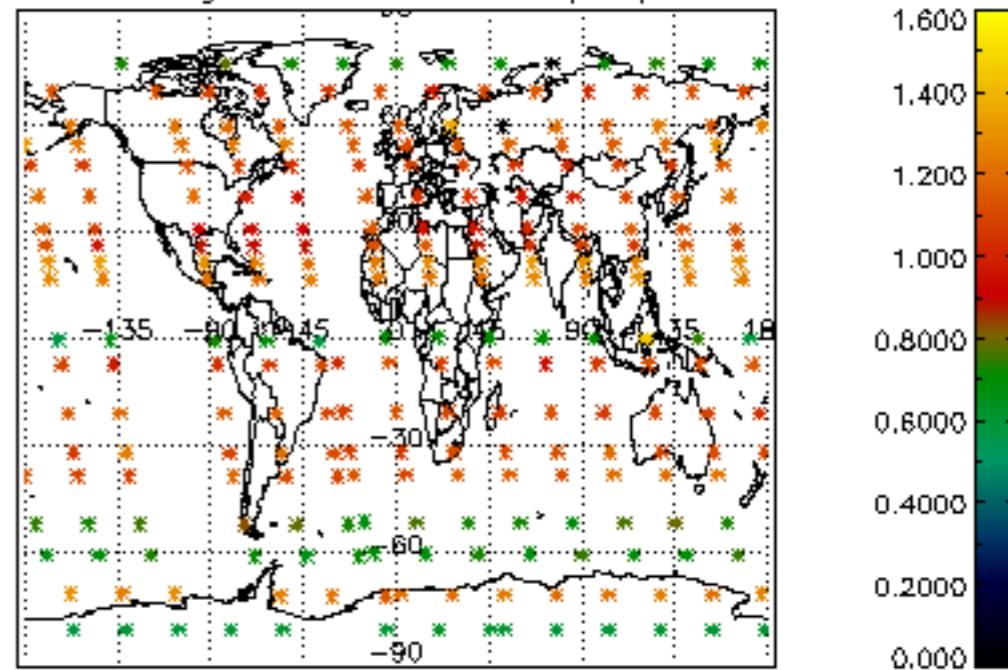




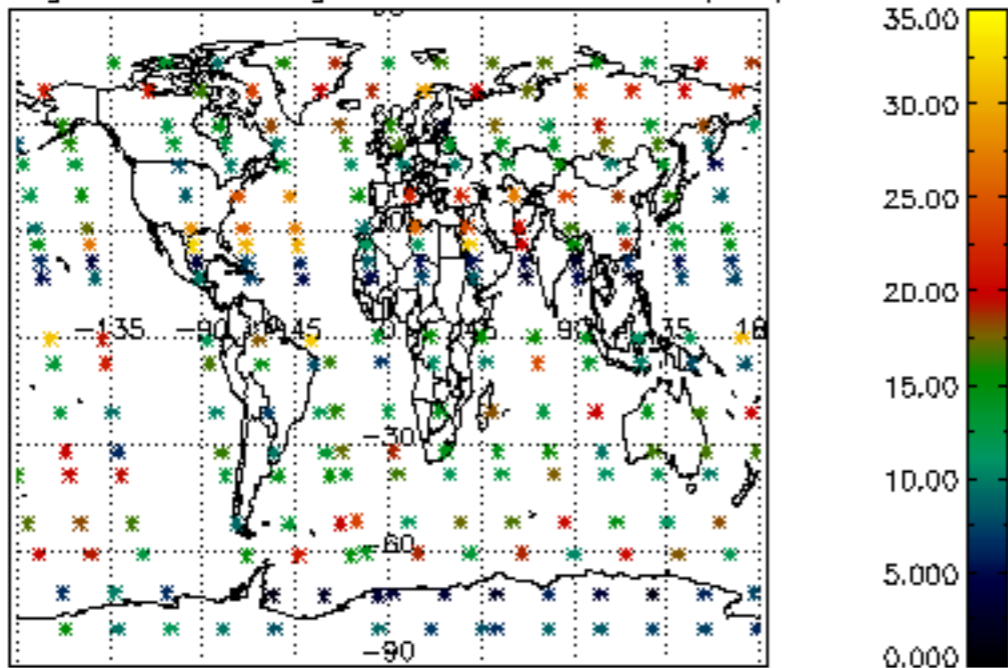
Percentage of cosmic ray hits per profile



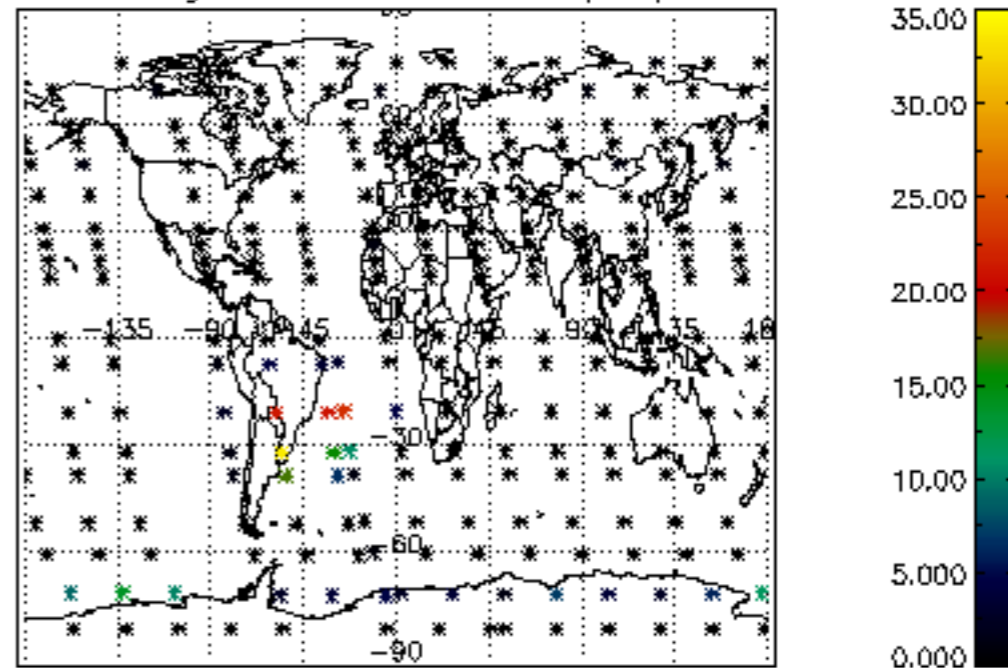
Percentage of datation errors per profile



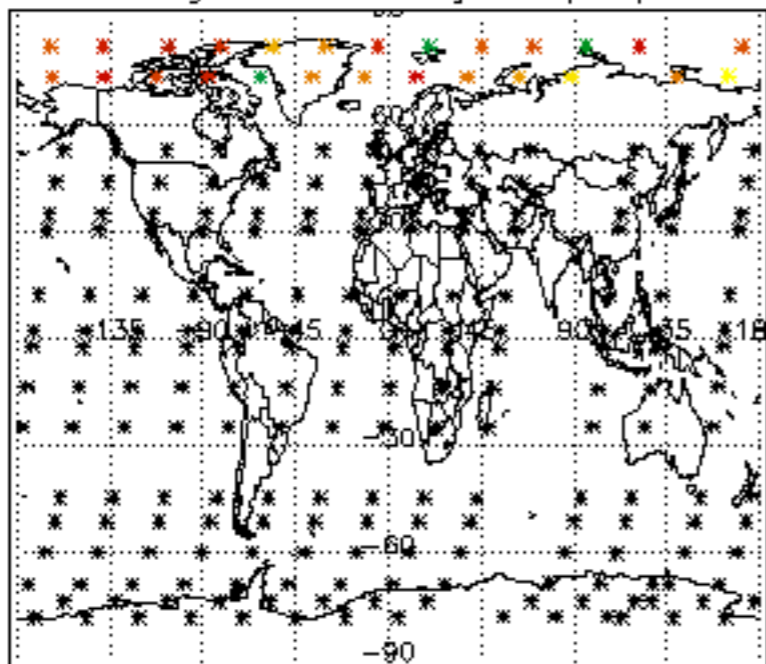
Percentage of star falling outside central band per profile



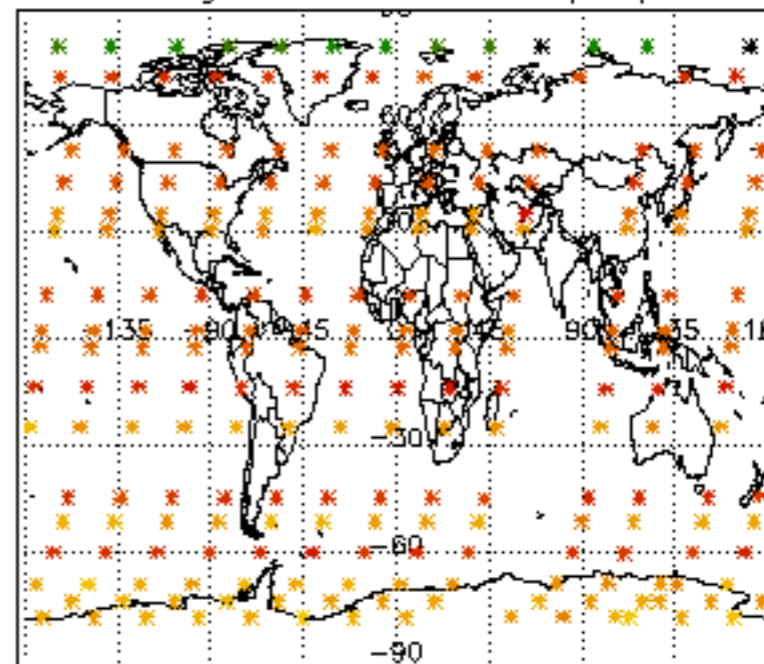
Percentage of saturation errors per profile



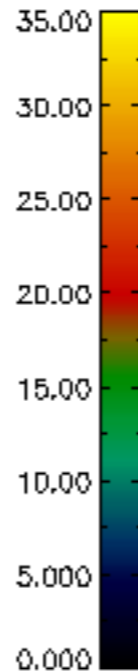
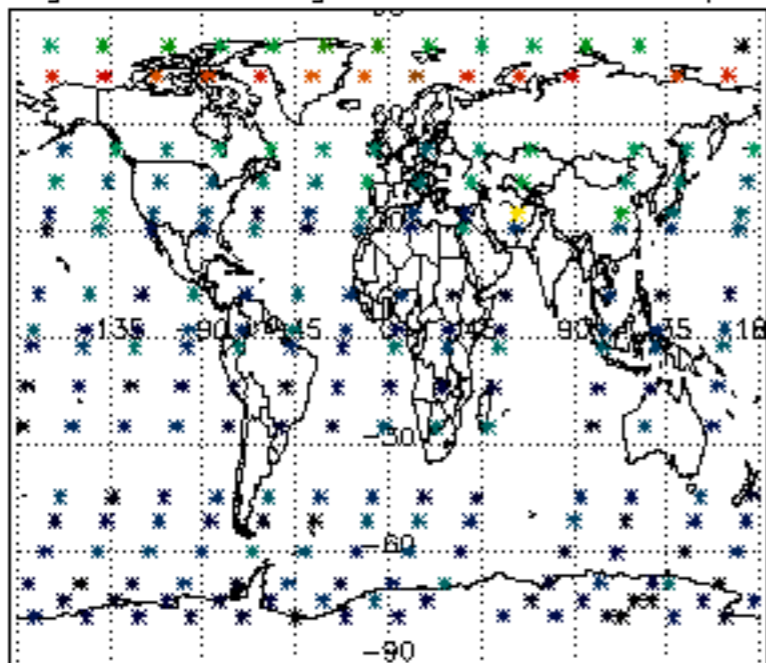
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

