

GOMOS Level 2 Daily Report

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

Item	Value
Time of report generation	24APR2013 13:21:30
Data source version	GOMOS/6.01
Start time of products	08-05-2011 (08MAY2011 00:00:00)
Stop time of products	09-05-2011 (09MAY2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	285
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

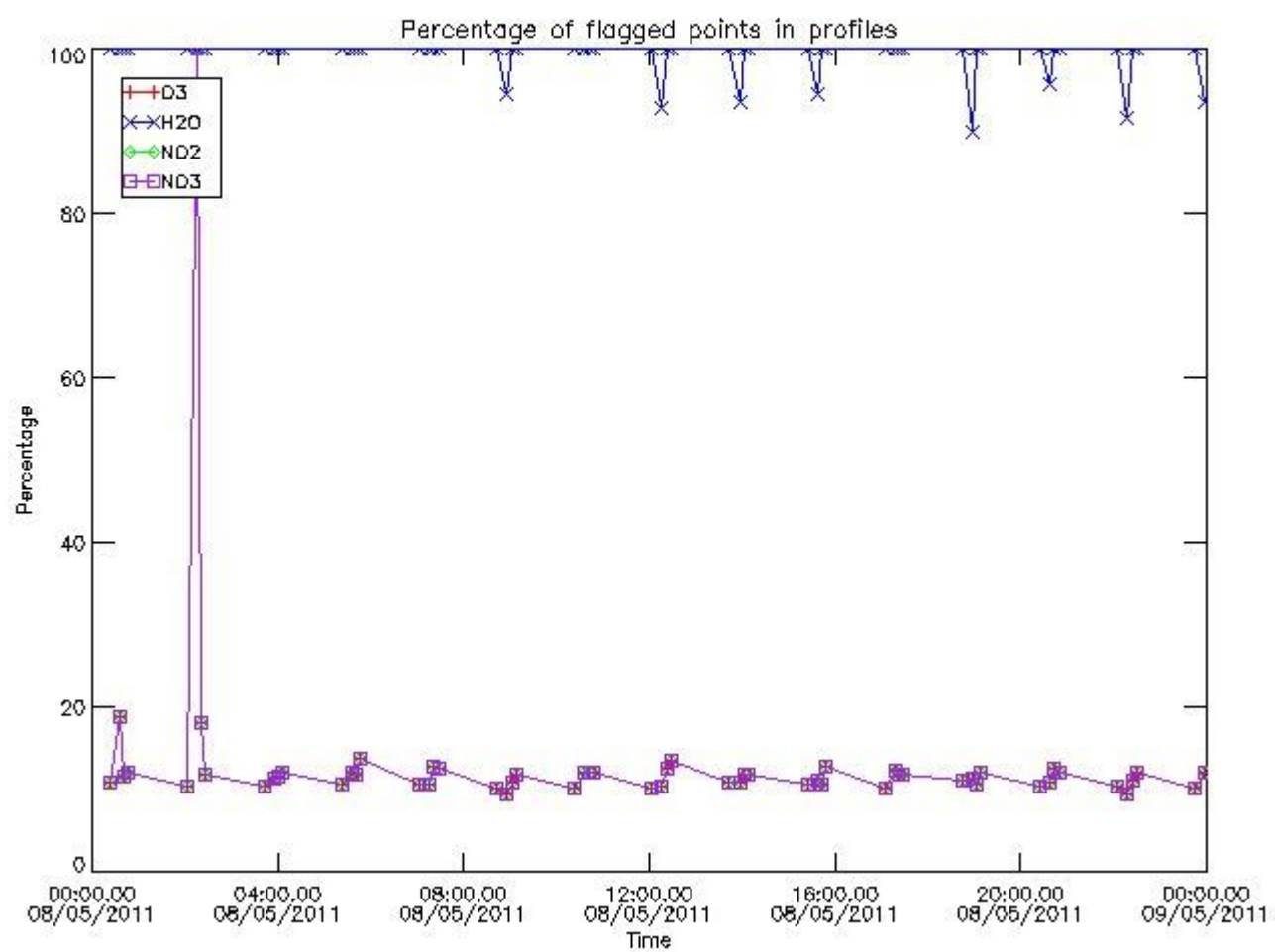
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110508_000449_000000433102_00174_48033_4648.N1	08-MAY-2011 00:04:49	Bright	43.000	89	5Alp Cep	2.4510	8000.0	86	48033	No
2	GOM_NL__2PRFIN20110508_000743_000000543102_00174_48033_4649.N1	08-MAY-2011 00:07:43	Bright	54.000	74	11Bet Cas	2.2680	6600.0	108	48033	No
3	GOM_NL__2PRFIN20110508_001732_000000543102_00174_48033_4650.N1	08-MAY-2011 00:17:32	Twilight	53.500	93	53Bet Peg	2.5200	3100.0	107	48033	No
4	GOM_NL__2PRFIN20110508_002147_000000473102_00174_48033_4651.N1	08-MAY-2011 00:21:47	Dark	46.500	90	54Alp Peg	2.4870	11000.0	93	48033	No
5	GOM_NL__2PRFIN20110508_003455_000000463102_00174_48033_4652.N1	08-MAY-2011 00:34:55	Dark	46.000	18	24Alp PsA	1.1660	9700.0	92	48033	No
6	GOM_NL__2PRFIN20110508_004045_000000453102_00174_48033_4653.N1	08-MAY-2011 00:40:45	Dark	44.500	31	Alp Gru	1.7340	15200.0	89	48033	No
7	GOM_NL__2PRFIN20110508_004619_000000423102_00175_48034_4634.N1	08-MAY-2011 00:46:19	Dark	42.000	45	Alp Pav	1.9400	26000.0	84	48034	No
8	GOM_NL__2PRFIN20110508_005345_000000423102_00175_48034_4635.N1	08-MAY-2011 00:53:45	Straylight	42.000	141	Bet Ara	2.8400	4600.0	84	48034	No
9	GOM_NL__2PRFIN20110508_005600_000000563102_00175_48034_4636.N1	08-MAY-2011 00:56:00	Straylight	55.500	40	The Sco	1.8590	7100.0	111	48034	No
10	GOM_NL__2PRFIN20110508_005750_000000563102_00175_48034_4637.N1	08-MAY-2011 00:57:50	Straylight	55.500	25	35Lam Sco	1.6200	28000.0	111	48034	No
11	GOM_NL__2PRFIN20110508_010032_000000553102_00175_48034_4638.N1	08-MAY-2011 01:00:32	Straylight	54.500	75	26Eps Sco	2.2910	4250.0	109	48034	No
12	GOM_NL__2PRFIN20110508_010354_000000603102_00175_48034_4639.N1	08-MAY-2011 01:03:54	Twilight	59.500	16	21Alp Sco	1.0200	3000.0	119	48034	No
13	GOM_NL__2PRFIN20110508_010551_000000643102_00175_48034_4640.N1	08-MAY-2011 01:05:51	Bright	63.500	80	7Del Sco	2.3160	30000.0	127	48034	No
14	GOM_NL__2PRFIN20110508_010843_000000423102_00175_48034_4641.N1	08-MAY-2011 01:08:43	Bright	42.000	122	9Alp2Lib	2.7470	9700.0	84	48034	No
15	GOM_NL__2PRFIN20110508_011045_000000433102_00175_48034_4642.N1	08-MAY-2011 01:10:45	Bright	43.000	104	27Bet Lib	2.6140	13100.0	86	48034	No
16	GOM_NL__2PRFIN20110508_011900_000000363102_00175_48034_4643.N1	08-MAY-2011 01:19:00	Bright	36.000	111	8Eta Boo	2.6800	6000.0	72	48034	No
17	GOM_NL__2PRFIN20110508_012207_000000433102_00175_48034_4644.N1	08-MAY-2011 01:22:07	Bright	43.000	83		2.3780	11000.0	86	48034	No
18	GOM_NL__2PRFIN20110508_012512_000000393102_00175_48034_4645.N1	08-MAY-2011 01:25:12	Bright	38.500	180	27Gam Boo	3.0400	8000.0	77	48034	No
19	GOM_NL__2PRFIN20110508_012748_000000383102_00175_48034_4646.N1	08-MAY-2011 01:27:48	Bright	38.000	39	85Eta UMa	1.8540	24000.0	76	48034	No
20	GOM_NL__2PRFIN20110508_013420_000000443102_00175_48034_4647.N1	08-MAY-2011 01:34:20	Bright	43.500	119	14Eta Dra	2.7270	4700.0	87	48034	No
21	GOM_NL__2PRFIN20110508_014503_000000433102_00175_48034_4648.N1	08-MAY-2011 01:45:03	Bright	42.500	89	5Alp Cep	2.4510	8000.0	85	48034	No
22	GOM_NL__2PRFIN20110508_014757_000000363102_00175_48034_4649.N1	08-MAY-2011 01:47:57	Bright	35.500	74	11Bet Cas	2.2680	6600.0	71	48034	No
23	GOM_NL__2PRFIN20110508_015746_000000563102_00175_48034_4650.N1	08-MAY-2011 01:57:46	Twilight	56.000	93	53Bet Peg	2.5200	3100.0	112	48034	No
24	GOM_NL__2PRFIN20110508_020201_000000493102_00175_48034_4651.N1	08-MAY-2011 02:02:01	Dark	48.500	90	54Alp Peg	2.4870	11000.0	97	48034	No
25	GOM_NL__2PRFIN20110508_021510_000000453102_00175_48034_4652.N1	08-MAY-2011 02:15:10	Dark	45.000	18	24Alp PsA	1.1660	9700.0	90	48034	No
26	GOM_NL__2PRFIN20110508_022059_000000423102_00175_48034_4653.N1	08-MAY-2011 02:20:59	Dark	42.000	31	Alp Gru	1.7340	15200.0	84	48034	No
27	GOM_NL__2PRFIN20110508_022633_000000433102_00176_48035_4635.N1	08-MAY-2011 02:26:33	Dark	43.000	45	Alp Pav	1.9400	26000.0	86	48035	No
28	GOM_NL__2PRFIN20110508_023400_000000423102_00176_48035_4636.N1	08-MAY-2011 02:34:00	Straylight	41.500	141	Bet Ara	2.8400	4600.0	83	48035	No
29	GOM_NL__2PRFIN20110508_023615_000000603102_00176_48035_4637.N1	08-MAY-2011 02:36:15	Straylight	59.500	40	The Sco	1.8590	7100.0	119	48035	No
30	GOM_NL__2PRFIN20110508_023805_000000563102_00176_48035_4638.N1	08-MAY-2011 02:38:05	Straylight	56.000	25	35Lam Sco	1.6200	28000.0	112	48035	No
31	GOM_NL__2PRFIN20110508_024046_000000603102_00176_48035_4639.N1	08-MAY-2011 02:40:46	Straylight	59.500	75	26Eps Sco	2.2910	4250.0	119	48035	No
32	GOM_NL__2PRFIN20110508_024409_000000643102_00176_48035_4640.N1	08-MAY-2011 02:44:09	Twilight	63.500	16	21Alp Sco	1.0200	3000.0	127	48035	No
33	GOM_NL__2PRFIN20110508_024605_000000553102_00176_48035_4641.N1	08-MAY-2011 02:46:05	Bright	55.000	80	7Del Sco	2.3160	30000.0	110	48035	No
34	GOM_NL__2PRFIN20110508_024857_000000413102_00176_48035_4642.N1	08-MAY-2011 02:48:57	Bright	40.500	122	9Alp2Lib	2.7470	9700.0	81	48035	No
35	GOM_NL__2PRFIN20110508_025059_000000443102_00176_48035_4643.N1	08-MAY-2011 02:50:59	Bright	44.000	104	27Bet Lib	2.6140	13100.0	88	48035	No
36	GOM_NL__2PRFIN20110508_025914_000000373102_00176_48035_4644.N1	08-MAY-2011 02:59:14	Bright	37.000	111	8Eta Boo	2.6800	6000.0	74	48035	No
37	GOM_NL__2PRFIN20110508_030220_000000413102_00176_48035_4645.N1	08-MAY-2011 03:02:20	Bright	41.000	83		2.3780	11000.0	82	48035	No
38	GOM_NL__2PRFIN20110508_030525_000000383102_00176_48035_4646.N1	08-MAY-2011 03:05:25	Bright	38.000	180	27Gam Boo	3.0400	8000.0	76	48035	No
39	GOM_NL__2PRFIN20110508_030802_000000363102_00176_48035_4647.N1	08-MAY-2011 03:08:02	Bright	36.000	39	85Eta UMa	1.8540	24000.0	72	48035	No
40	GOM_NL__2PRFIN20110508_031433_000000403102_00176_48035_4648.N1	08-MAY-2011 03:14:33	Bright	40.000	119	14Eta Dra	2.7270	4700.0	80	48035	No
41	GOM_NL__2PRFIN20110508_032517_000000443102_00176_48035_4649.N1	08-MAY-2011 03:25:17	Bright	43.500	89	5Alp Cep	2.4510	8000.0	87	48035	No
42	GOM_NL__2PRFIN20110508_032811_000000503102_00176_48035_4650.N1	08-MAY-2011 03:28:11	Bright	49.500	74	11Bet Cas	2.2680	6600.0	99	48035	No

279	GOM_NL__2PRFIN20110508_231049_000000353102_00188_48047_5418.N1	08-MAY-2011 23:10:49	Bright	34.500	39	85Eta UMa	1.8540	24000.	69	48047	No
280	GOM_NL__2PRFIN20110508_231715_000000443102_00188_48047_5419.N1	08-MAY-2011 23:17:15	Bright	43.500	119	14Eta Dra	2.7270	4700.0	87	48047	No
281	GOM_NL__2PRFIN20110508_232800_000000453102_00188_48047_5420.N1	08-MAY-2011 23:28:00	Bright	44.500	89	5Alp Cep	2.4510	8000.0	89	48047	No
282	GOM_NL__2PRFIN20110508_233059_000000363102_00188_48047_5421.N1	08-MAY-2011 23:30:59	Bright	35.500	74	11Bet Cas	2.2680	6600.0	71	48047	No
283	GOM_NL__2PRFIN20110508_234050_000000583102_00188_48047_5422.N1	08-MAY-2011 23:40:50	Twilight_stray	58.000	93	53Bet Peg	2.5200	3100.0	116	48047	No
284	GOM_NL__2PRFIN20110508_234508_000000503102_00188_48047_5423.N1	08-MAY-2011 23:45:08	Dark	50.000	90	54Alp Peg	2.4870	11000.	100	48047	No
285	GOM_NL__2PRFIN20110508_235820_000000473102_00188_48047_5424.N1	08-MAY-2011 23:58:20	Dark	46.500	18	24Alp PsA	1.1660	9700.0	93	48047	No

3. Quality information per product

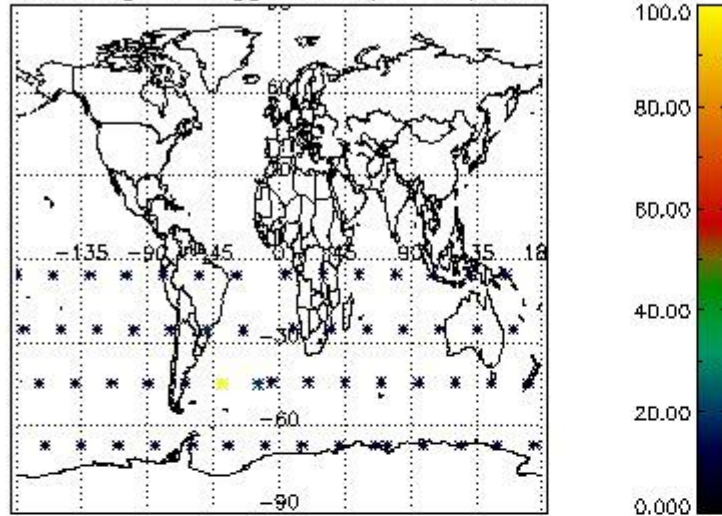
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

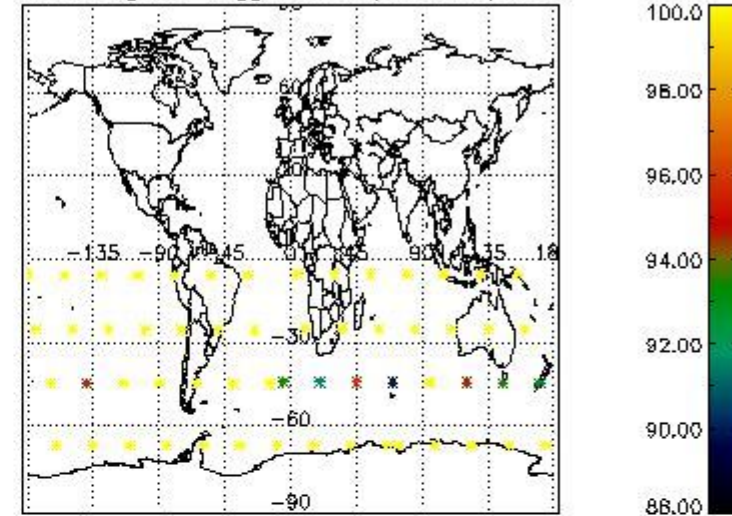


3.2 Plot quality information per product (world map)

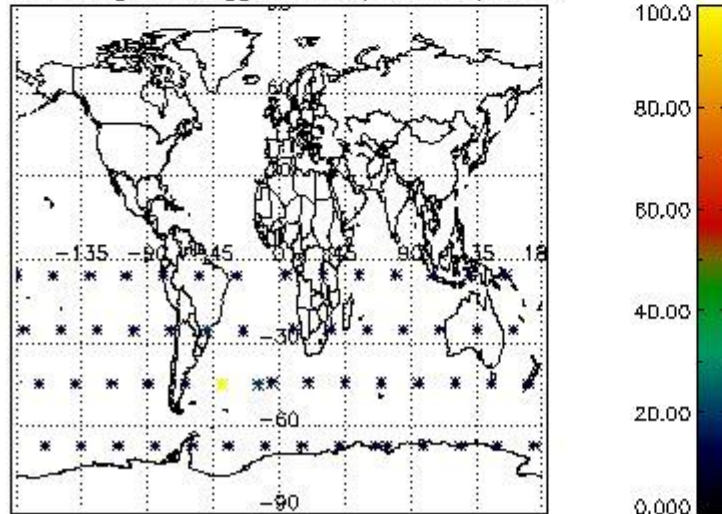
Percentage of flagged data per O3 profile



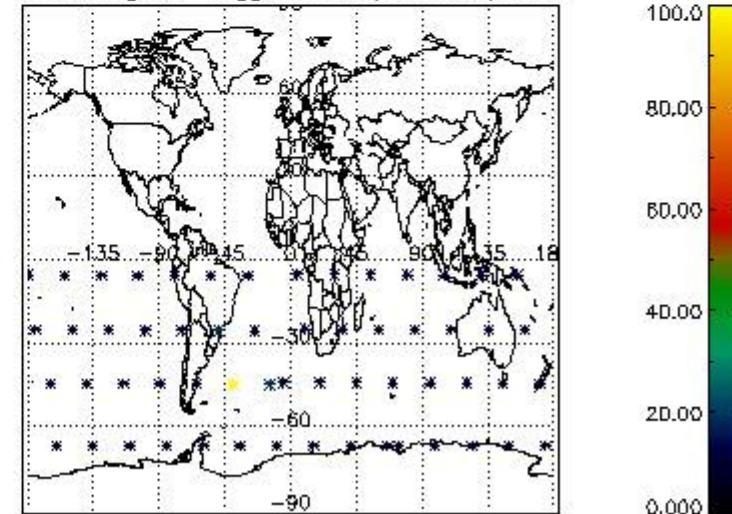
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

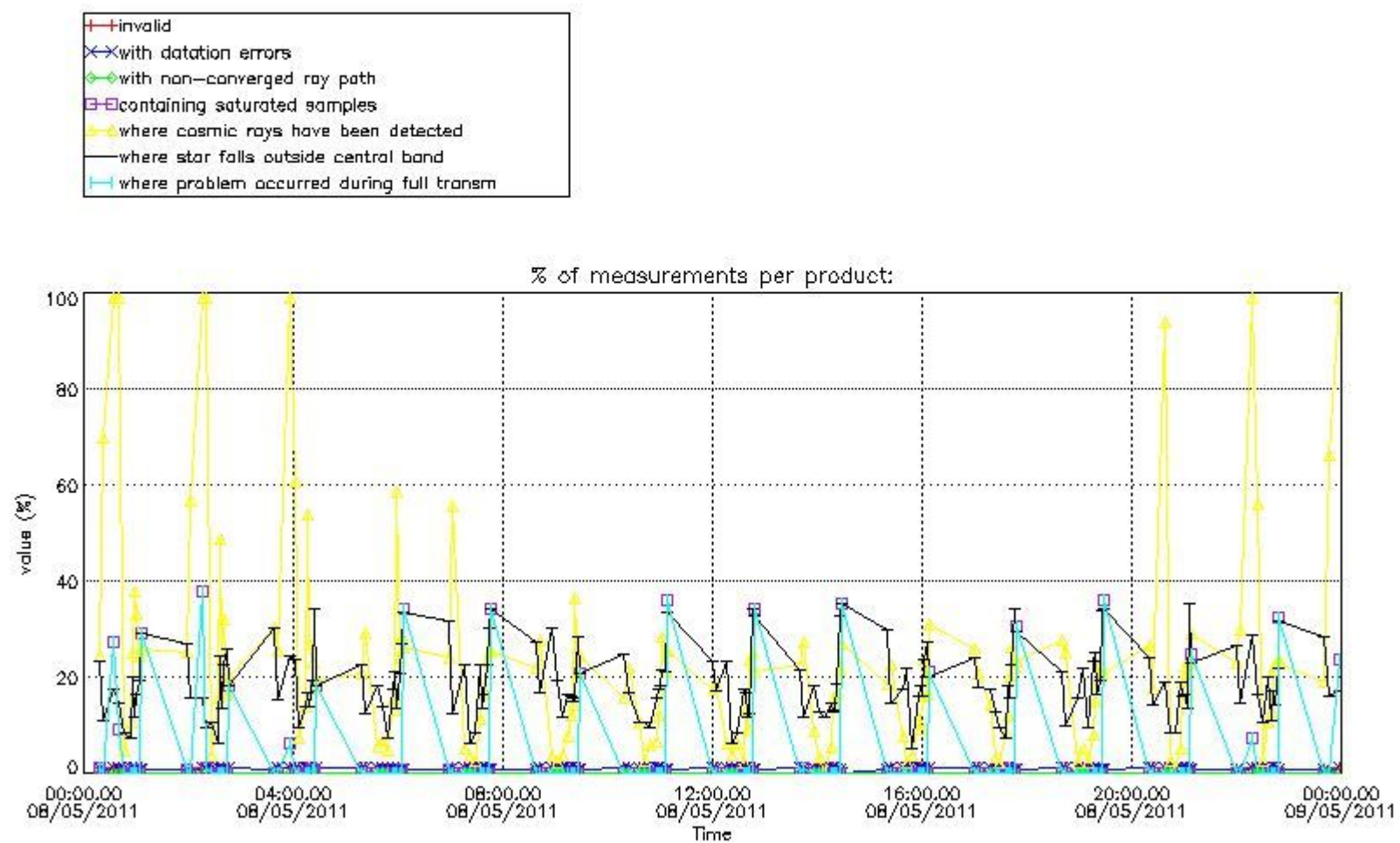


4. Level 1 quality information per product

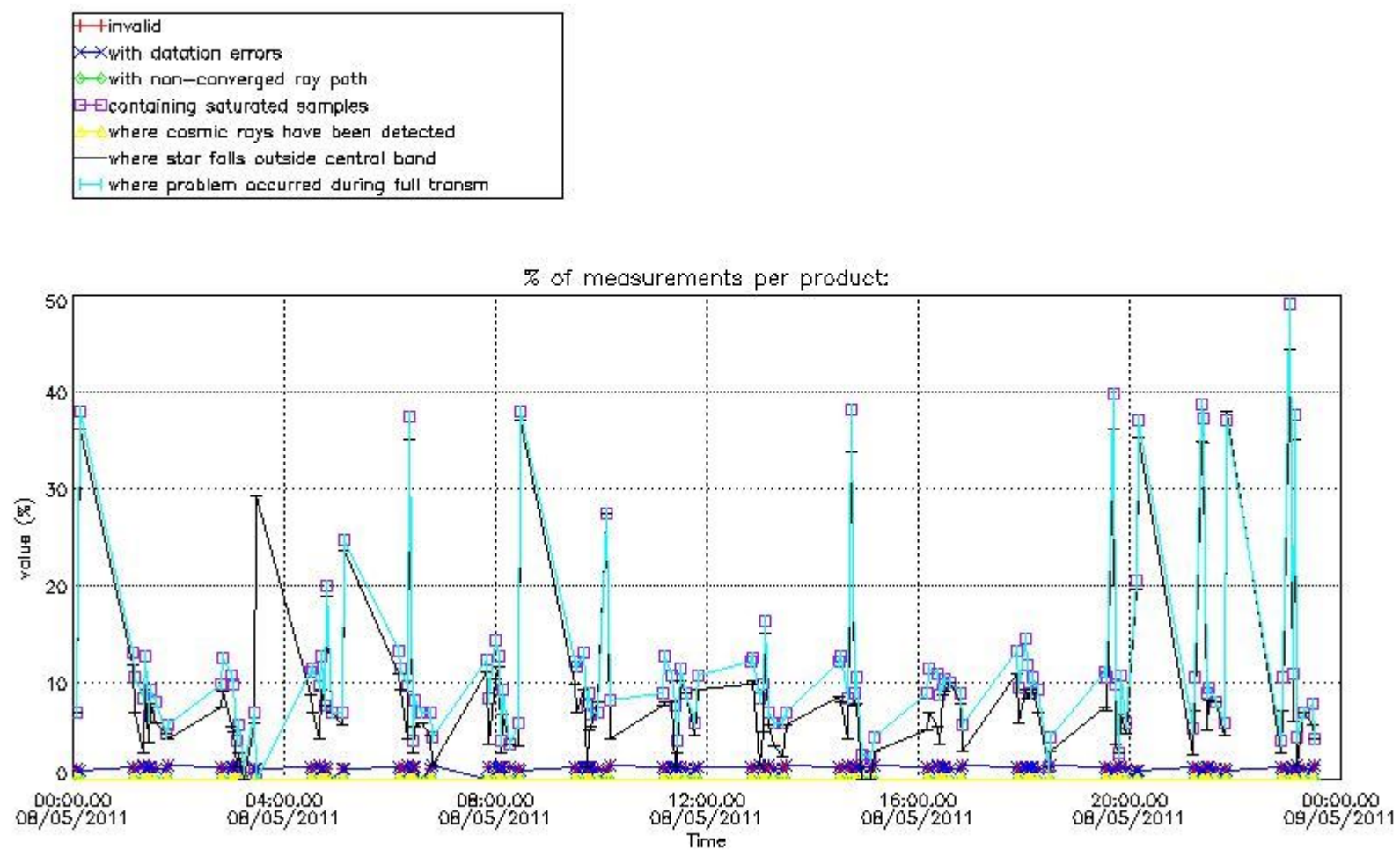
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



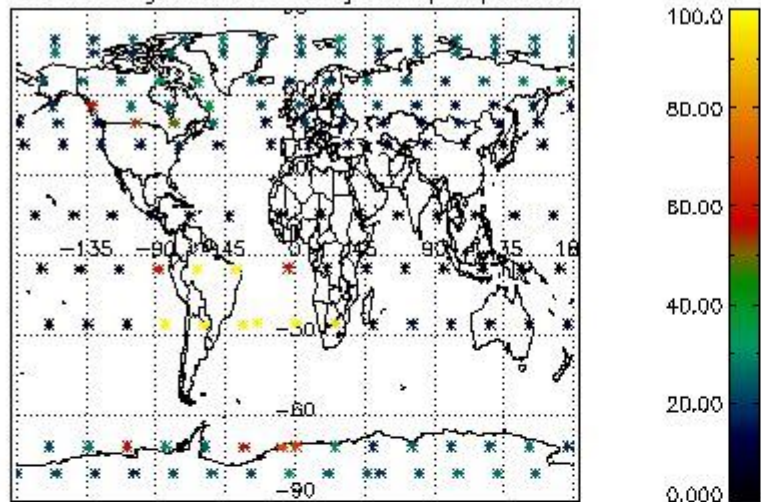
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



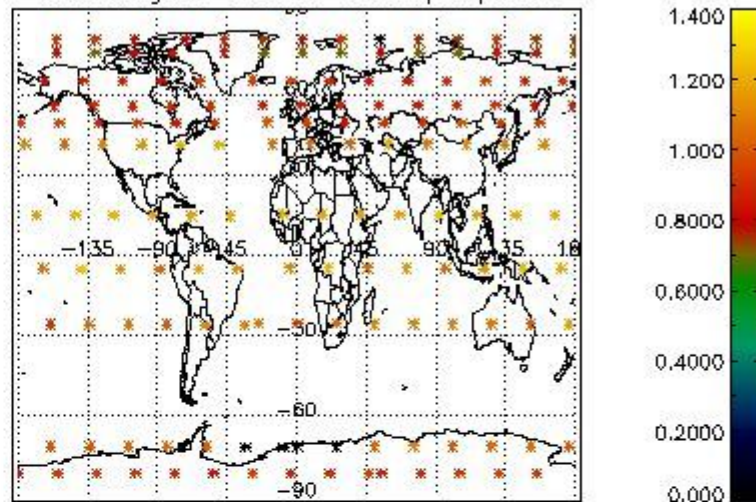
4.2 Plot quality information per product coming from level 1b processing (world map)

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

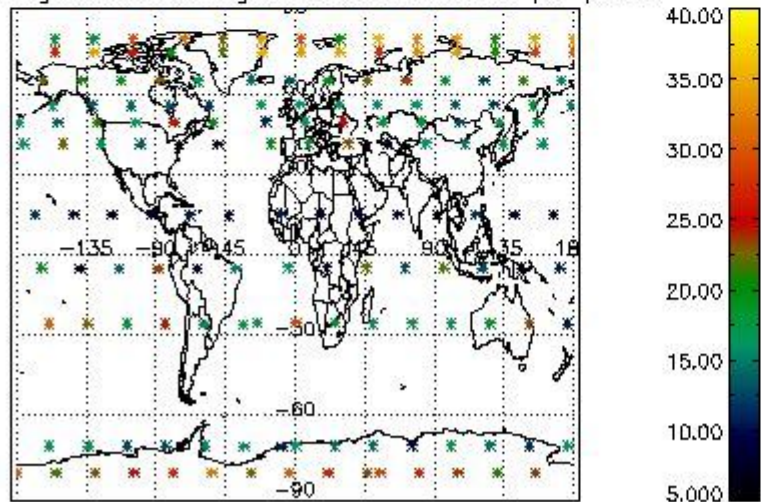
Percentage of cosmic ray hits per profile



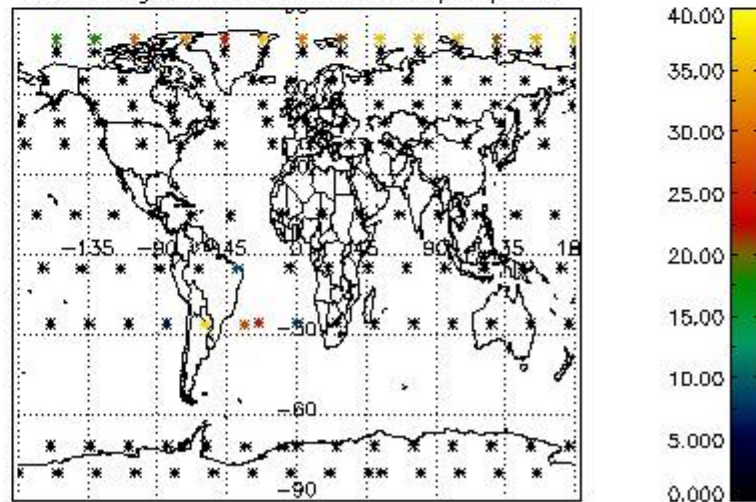
Percentage of datation errors per profile



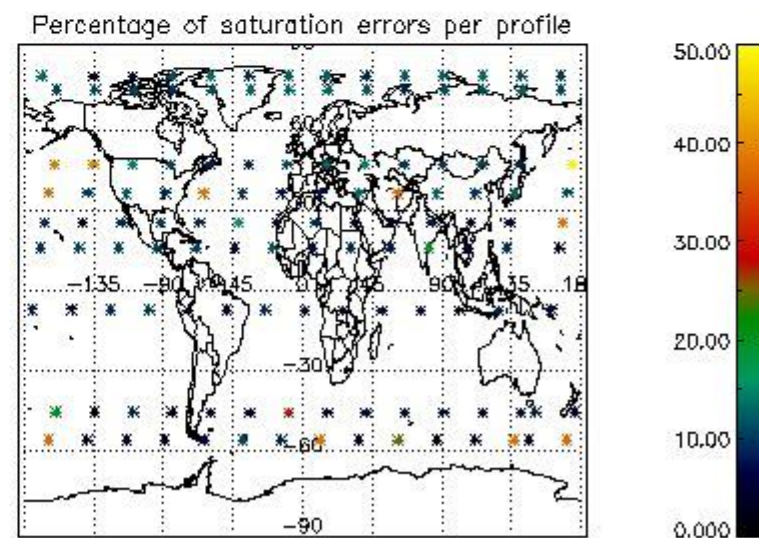
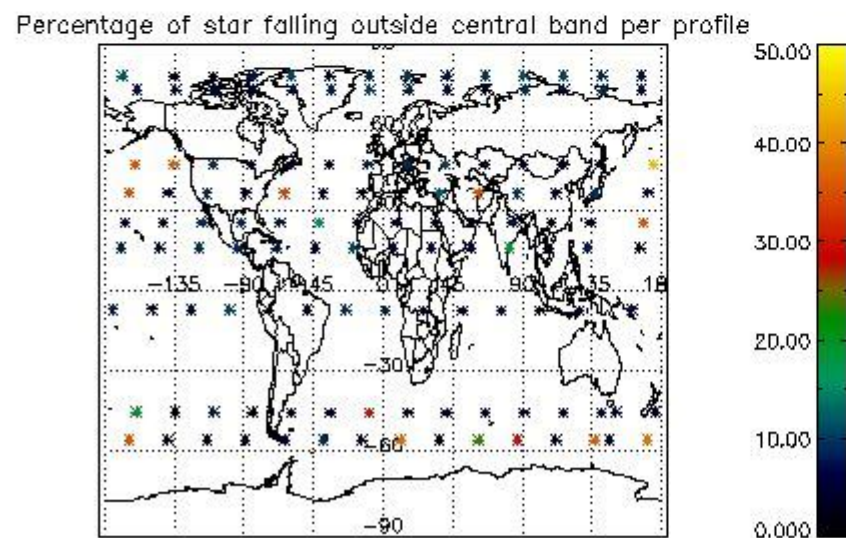
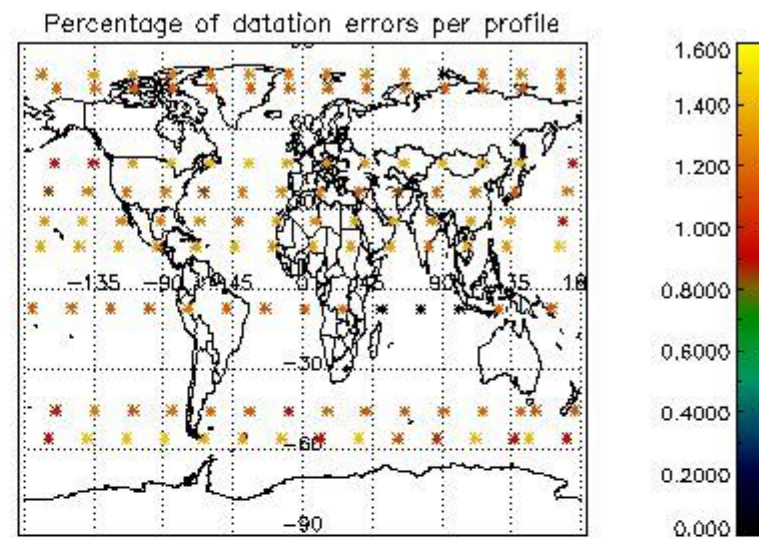
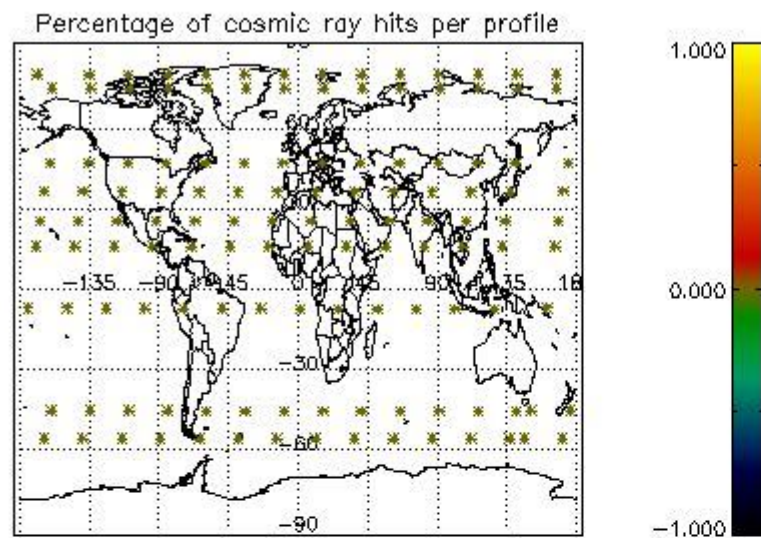
Percentage of star falling outside central band per profile



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

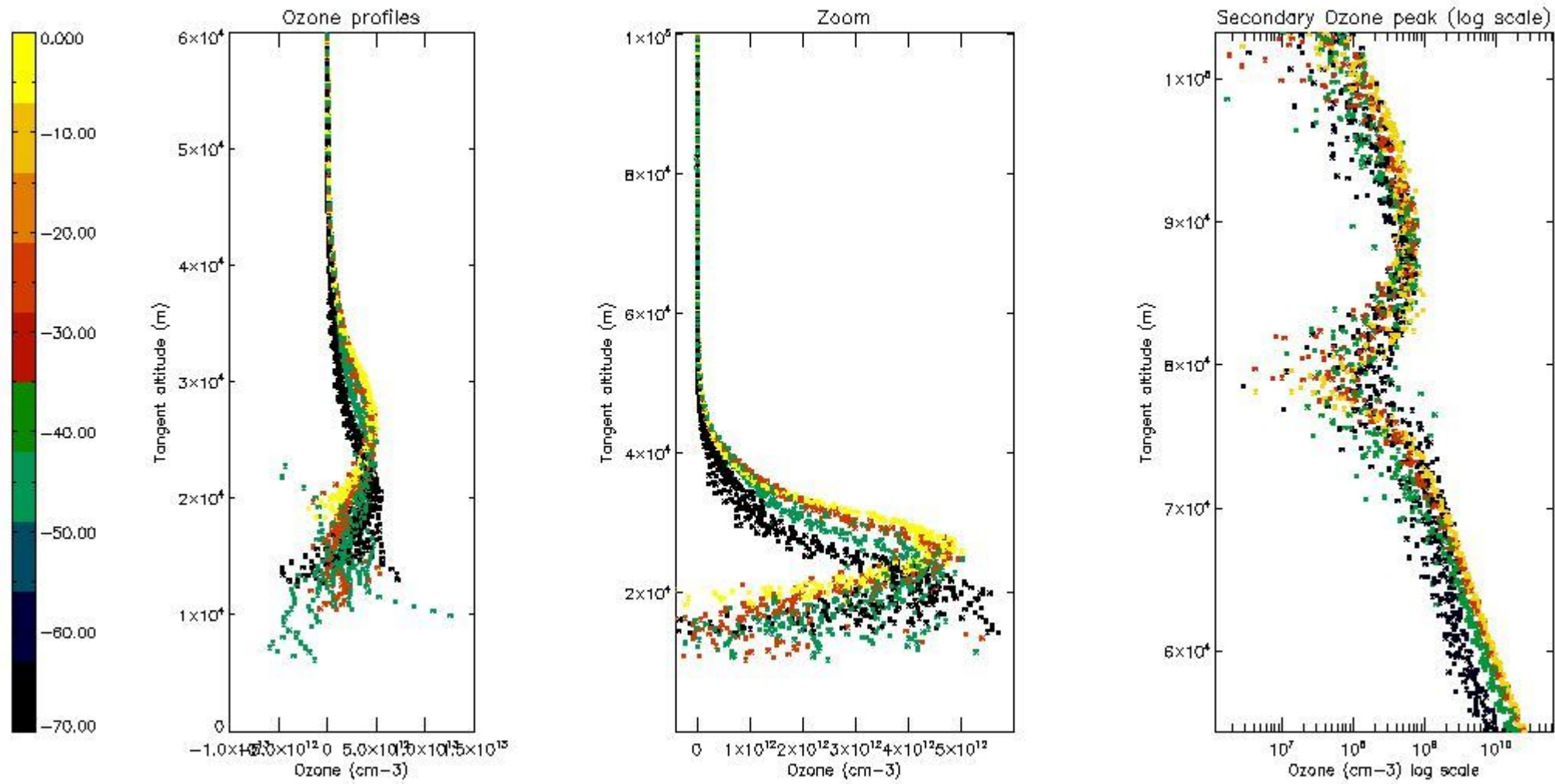
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	20
STD < 20	12

STD < 10	9
STD < 5	5

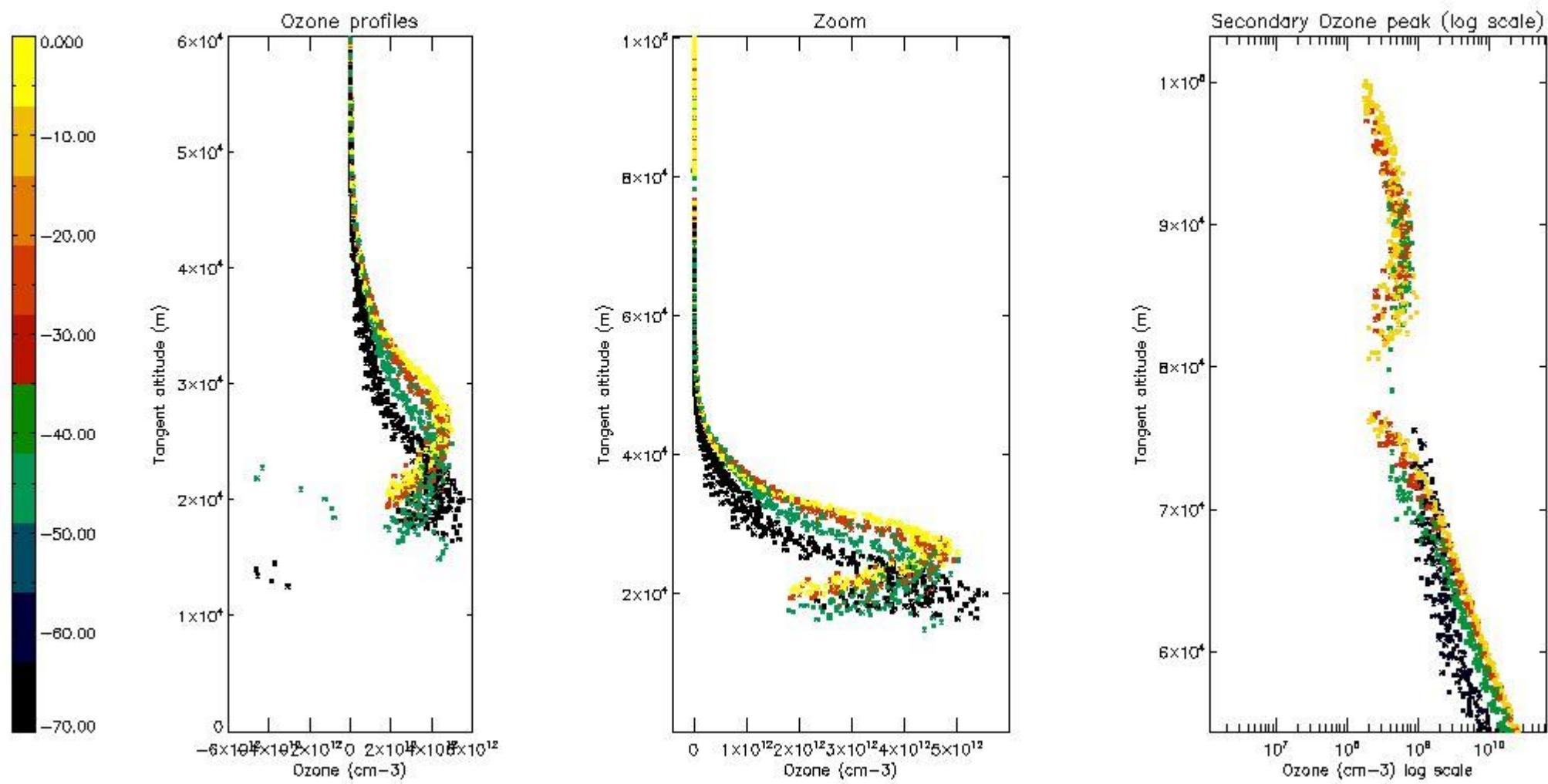
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



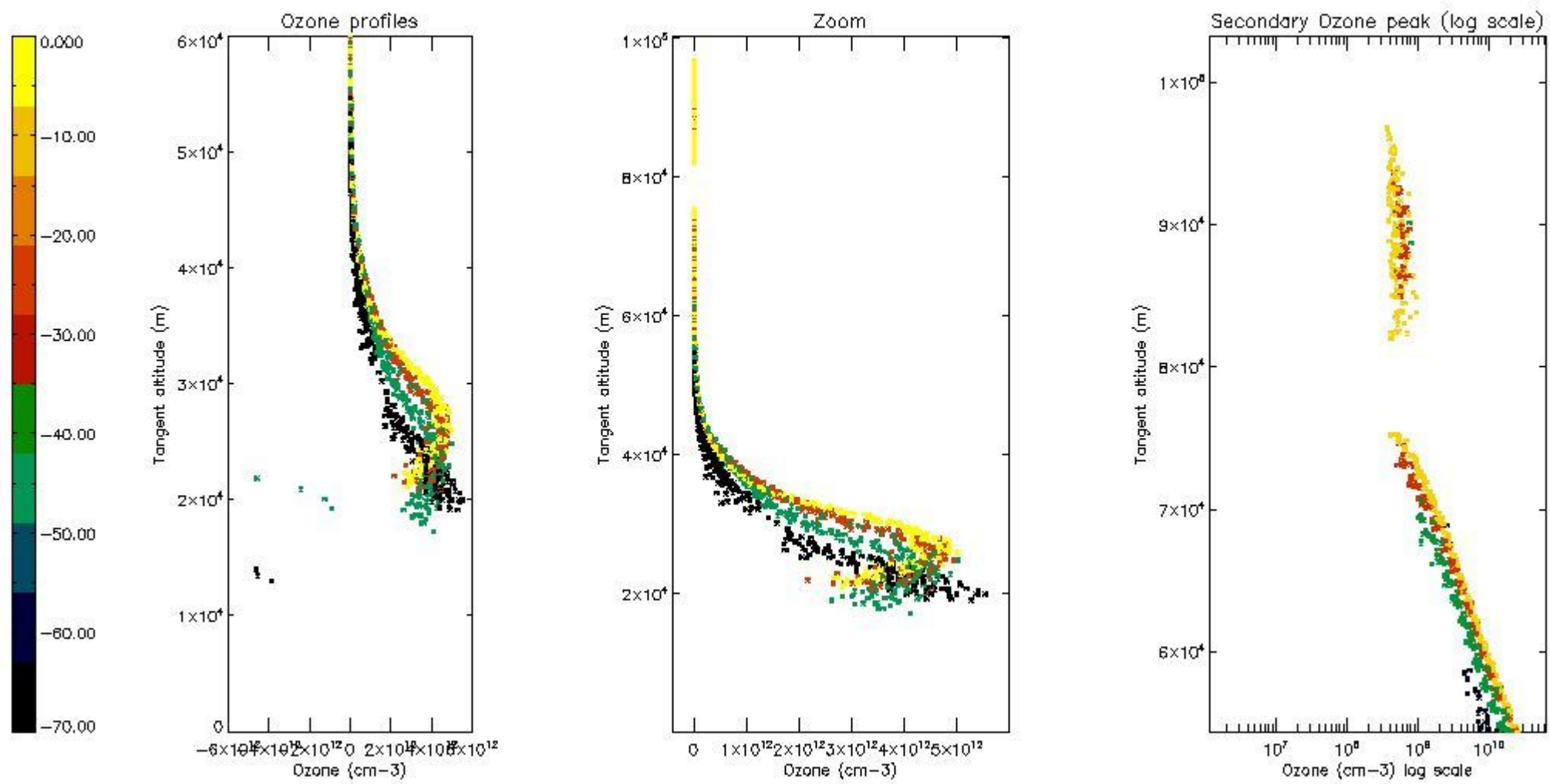
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



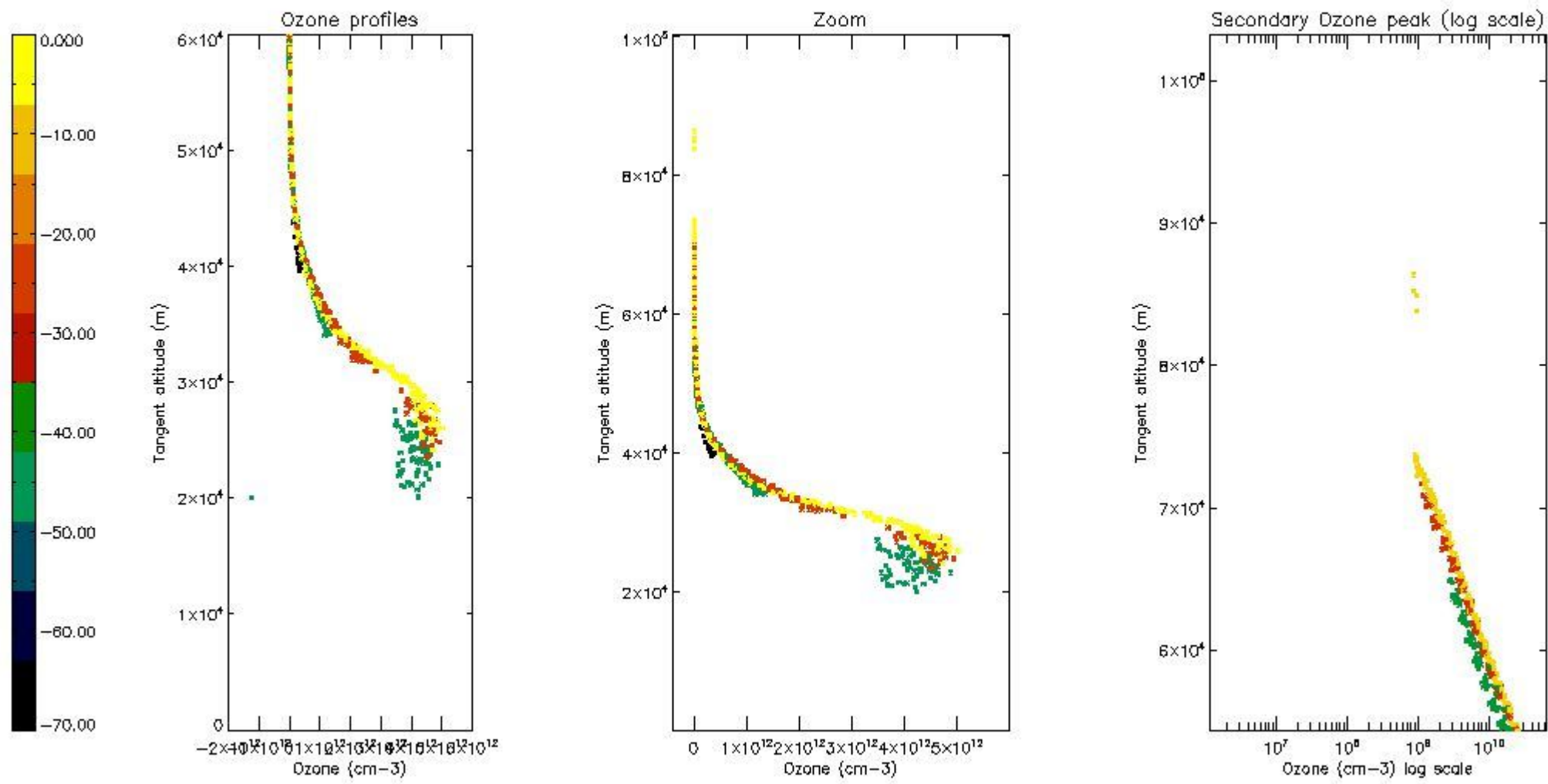
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



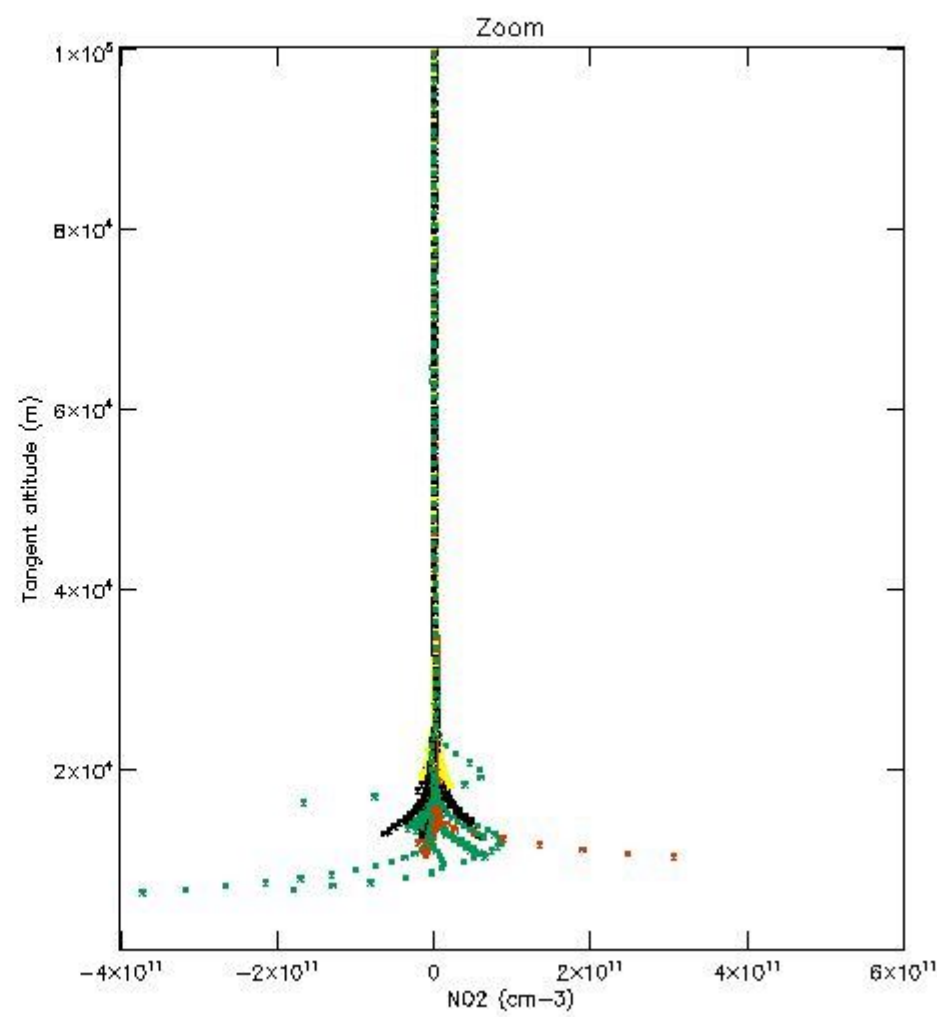
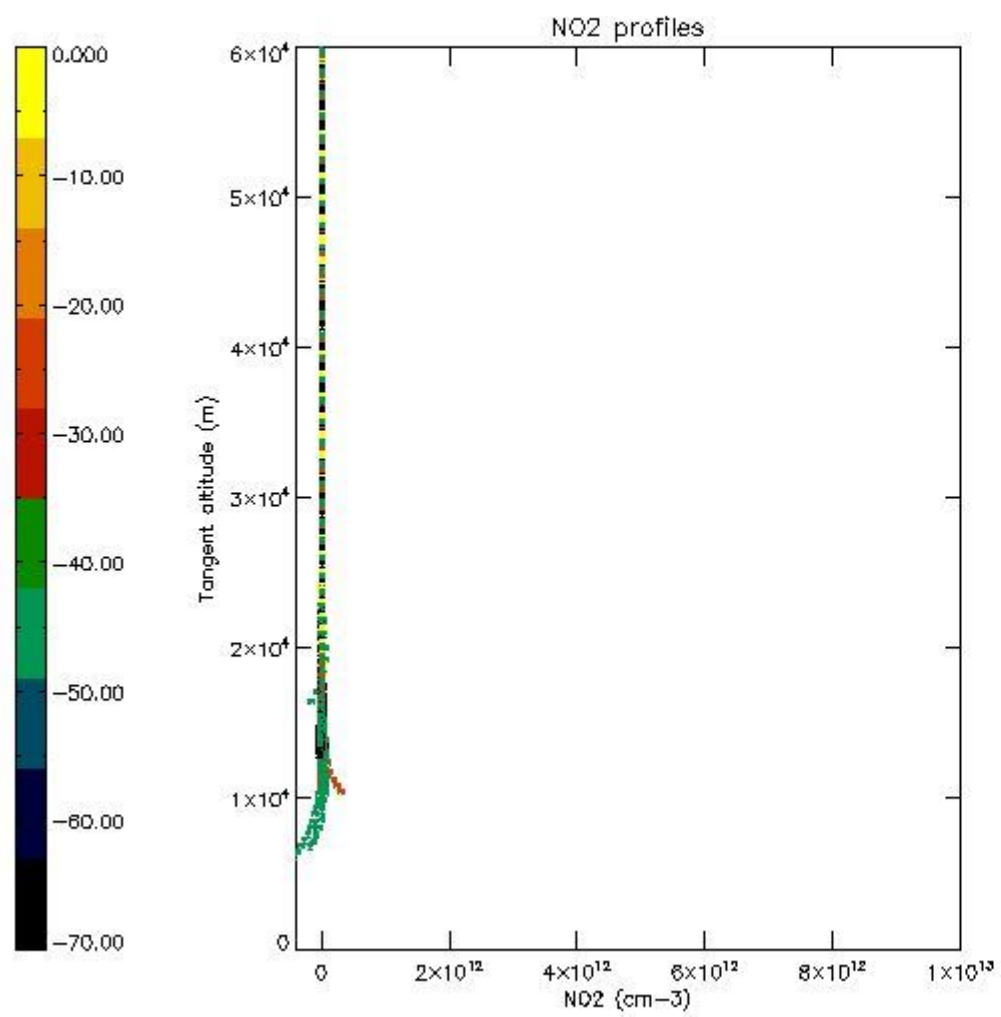
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



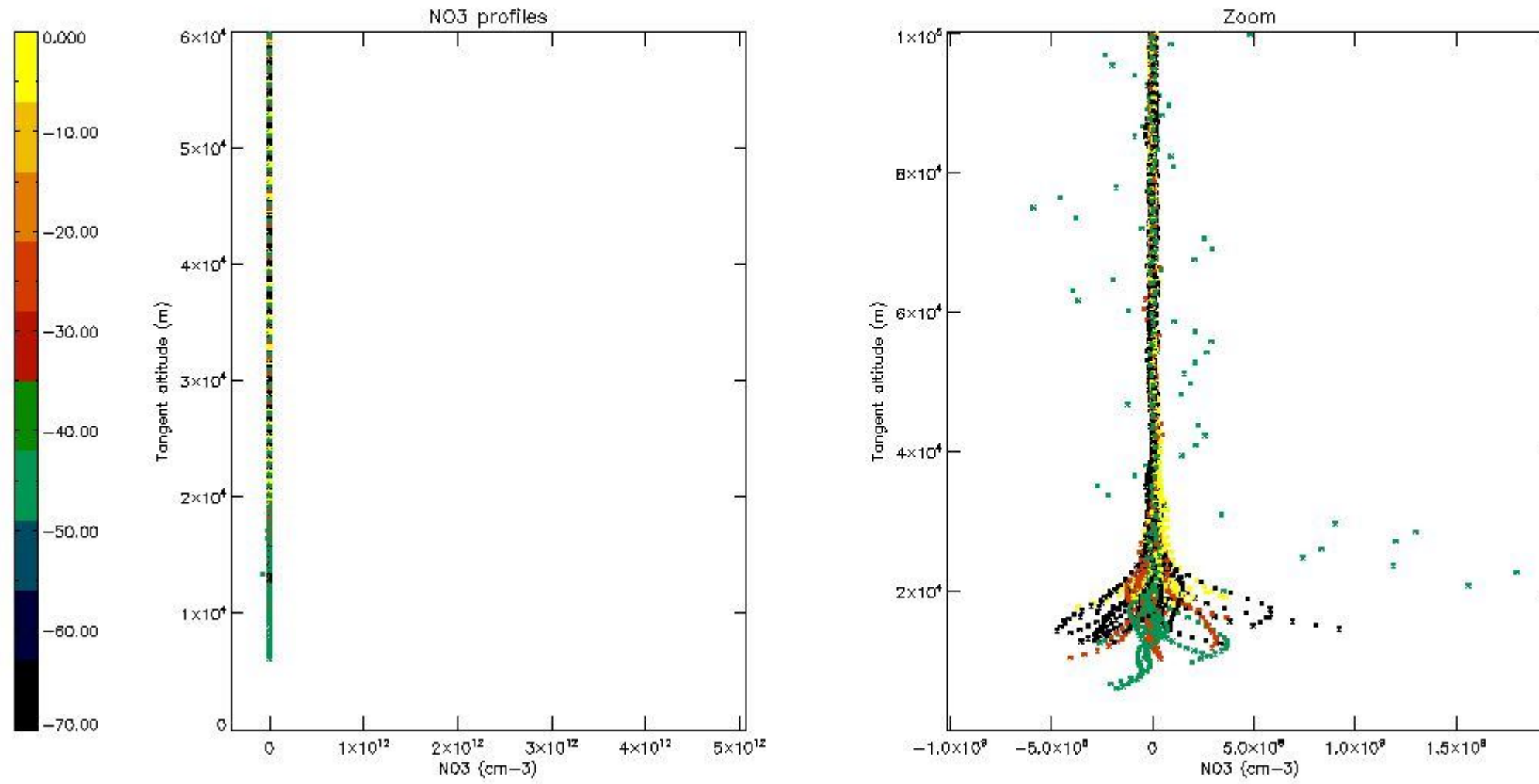
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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	08-MAY-2011 00:04:49
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	08-MAY-2011 00:04:49
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	08-MAY-2011 00:04:49

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Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

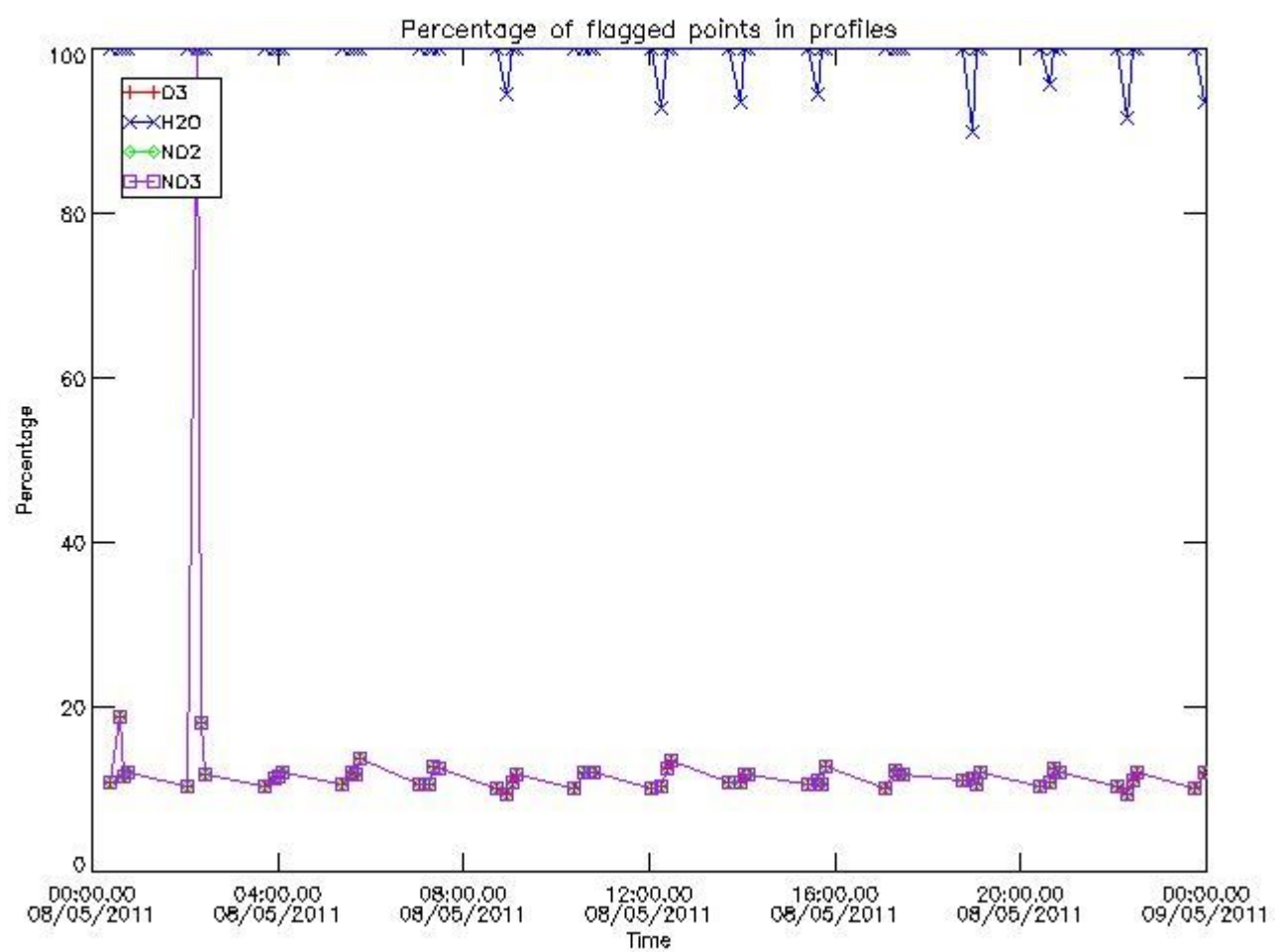
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110508_000449_000000433102_00174_48033_4648.N1	08-MAY-2011 00:04:49	Bright	43.000	89	5Alp Cep	2.4510	8000.0	86	48033	No
2	GOM_NL__2PRFIN20110508_000743_000000543102_00174_48033_4649.N1	08-MAY-2011 00:07:43	Bright	54.000	74	11Bet Cas	2.2680	6600.0	108	48033	No
3	GOM_NL__2PRFIN20110508_001732_000000543102_00174_48033_4650.N1	08-MAY-2011 00:17:32	Twilight	53.500	93	53Bet Peg	2.5200	3100.0	107	48033	No
4	GOM_NL__2PRFIN20110508_002147_000000473102_00174_48033_4651.N1	08-MAY-2011 00:21:47	Dark	46.500	90	54Alp Peg	2.4870	11000.	93	48033	No
5	GOM_NL__2PRFIN20110508_003455_000000463102_00174_48033_4652.N1	08-MAY-2011 00:34:55	Dark	46.000	18	24Alp PsA	1.1660	9700.0	92	48033	No
6	GOM_NL__2PRFIN20110508_004045_000000453102_00174_48033_4653.N1	08-MAY-2011 00:40:45	Dark	44.500	31	Alp Gru	1.7340	15200.	89	48033	No
7	GOM_NL__2PRFIN20110508_004619_000000423102_00175_48034_4634.N1	08-MAY-2011 00:46:19	Dark	42.000	45	Alp Pav	1.9400	26000.	84	48034	No
8	GOM_NL__2PRFIN20110508_005345_000000423102_00175_48034_4635.N1	08-MAY-2011 00:53:45	Straylight	42.000	141	Bet Ara	2.8400	4600.0	84	48034	No
9	GOM_NL__2PRFIN20110508_005600_000000563102_00175_48034_4636.N1	08-MAY-2011 00:56:00	Straylight	55.500	40	The Sco	1.8590	7100.0	111	48034	No
10	GOM_NL__2PRFIN20110508_005750_000000563102_00175_48034_4637.N1	08-MAY-2011 00:57:50	Straylight	55.500	25	35Lam Sco	1.6200	28000.	111	48034	No
11	GOM_NL__2PRFIN20110508_010032_000000553102_00175_48034_4638.N1	08-MAY-2011 01:00:32	Straylight	54.500	75	26Eps Sco	2.2910	4250.0	109	48034	No
12	GOM_NL__2PRFIN20110508_010354_000000603102_00175_48034_4639.N1	08-MAY-2011 01:03:54	Twilight	59.500	16	21Alp Sco	1.0200	3000.0	119	48034	No
13	GOM_NL__2PRFIN20110508_010551_000000643102_00175_48034_4640.N1	08-MAY-2011 01:05:51	Bright	63.500	80	7Del Sco	2.3160	30000.	127	48034	No
14	GOM_NL__2PRFIN20110508_010843_000000423102_00175_48034_4641.N1	08-MAY-2011 01:08:43	Bright	42.000	122	9Alp2Lib	2.7470	9700.0	84	48034	No
15	GOM_NL__2PRFIN20110508_011045_000000433102_00175_48034_4642.N1	08-MAY-2011 01:10:45	Bright	43.000	104	27Bet Lib	2.6140	13100.	86	48034	No
16	GOM_NL__2PRFIN20110508_011900_000000363102_00175_48034_4643.N1	08-MAY-2011 01:19:00	Bright	36.000	111	8Eta Boo	2.6800	6000.0	72	48034	No
17	GOM_NL__2PRFIN20110508_012207_000000433102_00175_48034_4644.N1	08-MAY-2011 01:22:07	Bright	43.000	83		2.3780	11000.	86	48034	No
18	GOM_NL__2PRFIN20110508_012512_000000393102_00175_48034_4645.N1	08-MAY-2011 01:25:12	Bright	38.500	180	27Gam Boo	3.0400	8000.0	77	48034	No
19	GOM_NL__2PRFIN20110508_012748_000000383102_00175_48034_4646.N1	08-MAY-2011 01:27:48	Bright	38.000	39	85Eta UMa	1.8540	24000.	76	48034	No
20	GOM_NL__2PRFIN20110508_013420_000000443102_00175_48034_4647.N1	08-MAY-2011 01:34:20	Bright	43.500	119	14Eta Dra	2.7270	4700.0	87	48034	No
21	GOM_NL__2PRFIN20110508_014503_000000433102_00175_48034_4648.N1	08-MAY-2011 01:45:03	Bright	42.500	89	5Alp Cep	2.4510	8000.0	85	48034	No
22	GOM_NL__2PRFIN20110508_014757_000000363102_00175_48034_4649.N1	08-MAY-2011 01:47:57	Bright	35.500	74	11Bet Cas	2.2680	6600.0	71	48034	No
23	GOM_NL__2PRFIN20110508_015746_000000563102_00175_48034_4650.N1	08-MAY-2011 01:57:46	Twilight	56.000	93	53Bet Peg	2.5200	3100.0	112	48034	No
24	GOM_NL__2PRFIN20110508_020201_000000493102_00175_48034_4651.N1	08-MAY-2011 02:02:01	Dark	48.500	90	54Alp Peg	2.4870	11000.	97	48034	No
25	GOM_NL__2PRFIN20110508_021510_000000453102_00175_48034_4652.N1	08-MAY-2011 02:15:10	Dark	45.000	18	24Alp PsA	1.1660	9700.0	90	48034	No
26	GOM_NL__2PRFIN20110508_022059_000000423102_00175_48034_4653.N1	08-MAY-2011 02:20:59	Dark	42.000	31	Alp Gru	1.7340	15200.	84	48034	No
27	GOM_NL__2PRFIN20110508_022633_000000433102_00176_48035_4635.N1	08-MAY-2011 02:26:33	Dark	43.000	45	Alp Pav	1.9400	26000.	86	48035	No
28	GOM_NL__2PRFIN20110508_023400_000000423102_00176_48035_4636.N1	08-MAY-2011 02:34:00	Straylight	41.500	141	Bet Ara	2.8400	4600.0	83	48035	No
29	GOM_NL__2PRFIN20110508_023615_000000603102_00176_48035_4637.N1	08-MAY-2011 02:36:15	Straylight	59.500	40	The Sco	1.8590	7100.0	119	48035	No
30	GOM_NL__2PRFIN20110508_023805_000000563102_00176_48035_4638.N1	08-MAY-2011 02:38:05	Straylight	56.000	25	35Lam Sco	1.6200	28000.	112	48035	No
31	GOM_NL__2PRFIN20110508_024046_000000603102_00176_48035_4639.N1	08-MAY-2011 02:40:46	Straylight	59.500	75	26Eps Sco	2.2910	4250.0	119	48035	No
32	GOM_NL__2PRFIN20110508_024409_000000643102_00176_48035_4640.N1	08-MAY-2011 02:44:09	Twilight	63.500	16	21Alp Sco	1.0200	3000.0	127	48035	No
33	GOM_NL__2PRFIN20110508_024605_000000553102_00176_48035_4641.N1	08-MAY-2011 02:46:05	Bright	55.000	80	7Del Sco	2.3160	30000.	110	48035	No
34	GOM_NL__2PRFIN20110508_024857_000000413102_00176_48035_4642.N1	08-MAY-2011 02:48:57	Bright	40.500	122	9Alp2Lib	2.7470	9700.0	81	48035	No
35	GOM_NL__2PRFIN20110508_025059_000000443102_00176_48035_4643.N1	08-MAY-2011 02:50:59	Bright	44.000	104	27Bet Lib	2.6140	13100.	88	48035	No
36	GOM_NL__2PRFIN20110508_025914_000000373102_00176_48035_4644.N1	08-MAY-2011 02:59:14	Bright	37.000	111	8Eta Boo	2.6800	6000.0	74	48035	No
37	GOM_NL__2PRFIN20110508_030220_000000413102_00176_48035_4645.N1	08-MAY-2011 03:02:20	Bright	41.000	83		2.3780	11000.	82	48035	No
38	GOM_NL__2PRFIN20110508_030525_000000383102_00176_48035_4646.N1	08-MAY-2011 03:05:25	Bright	38.000	180	27Gam Boo	3.0400	8000.0	76	48035	No
39	GOM_NL__2PRFIN20110508_030802_000000363102_00176_48035_4647.N1	08-MAY-2011 03:08:02	Bright	36.000	39	85Eta UMa	1.8540	24000.	72	48035	No
40	GOM_NL__2PRFIN20110508_031433_000000403102_00176_48035_4648.N1	08-MAY-2011 03:14:33	Bright	40.000	119	14Eta Dra	2.7270	4700.0	80	48035	No
41	GOM_NL__2PRFIN20110508_032517_000000443102_00176_48035_4649.N1	08-MAY-2011 03:25:17	Bright	43.500	89	5Alp Cep	2.4510	8000.0	87	48035	No
42	GOM_NL__2PRFIN20110508_032811_000000503102_00176_48035_4650.N1	08-MAY-2011 03:28:11	Bright	49.500	74	11Bet Cas	2.2680	6600.0	99	48035	No

279	GOM_NL__2PRFIN20110508_231049_000000353102_00188_48047_5418.N1	08-MAY-2011 23:10:49	Bright	34.500	39	85Eta UMa	1.8540	24000.	69	48047	No
280	GOM_NL__2PRFIN20110508_231715_000000443102_00188_48047_5419.N1	08-MAY-2011 23:17:15	Bright	43.500	119	14Eta Dra	2.7270	4700.0	87	48047	No
281	GOM_NL__2PRFIN20110508_232800_000000453102_00188_48047_5420.N1	08-MAY-2011 23:28:00	Bright	44.500	89	5Alp Cep	2.4510	8000.0	89	48047	No
282	GOM_NL__2PRFIN20110508_233059_000000363102_00188_48047_5421.N1	08-MAY-2011 23:30:59	Bright	35.500	74	11Bet Cas	2.2680	6600.0	71	48047	No
283	GOM_NL__2PRFIN20110508_234050_000000583102_00188_48047_5422.N1	08-MAY-2011 23:40:50	Twilight_stray	58.000	93	53Bet Peg	2.5200	3100.0	116	48047	No
284	GOM_NL__2PRFIN20110508_234508_000000503102_00188_48047_5423.N1	08-MAY-2011 23:45:08	Dark	50.000	90	54Alp Peg	2.4870	11000.	100	48047	No
285	GOM_NL__2PRFIN20110508_235820_000000473102_00188_48047_5424.N1	08-MAY-2011 23:58:20	Dark	46.500	18	24Alp PsA	1.1660	9700.0	93	48047	No

3. Quality information per product

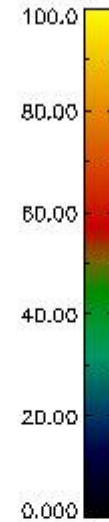
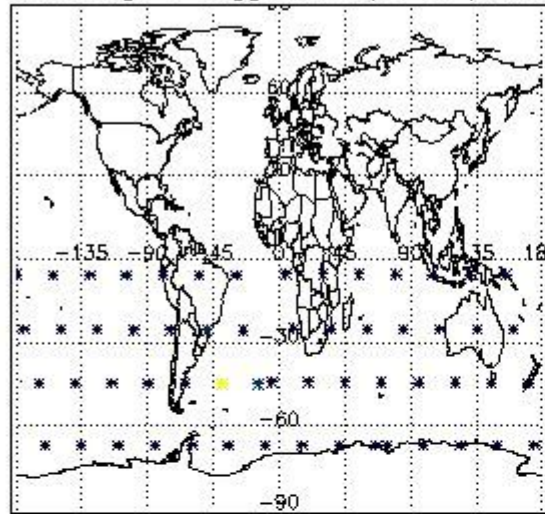
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

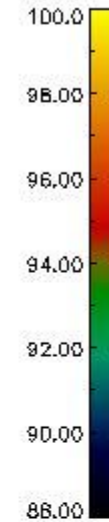
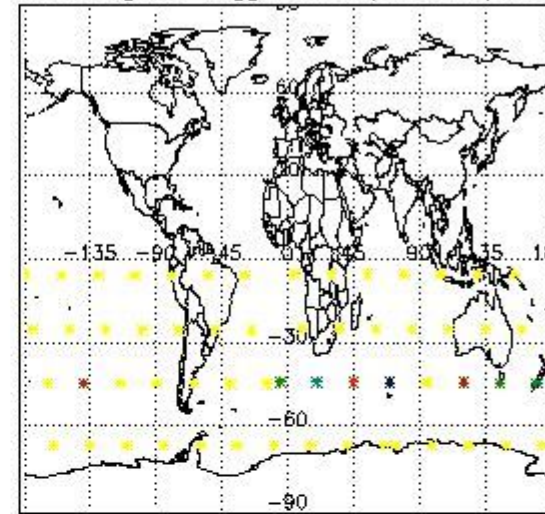


3.2 Plot quality information per product (world map)

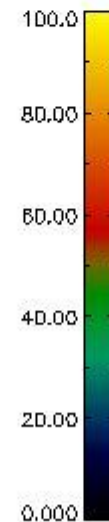
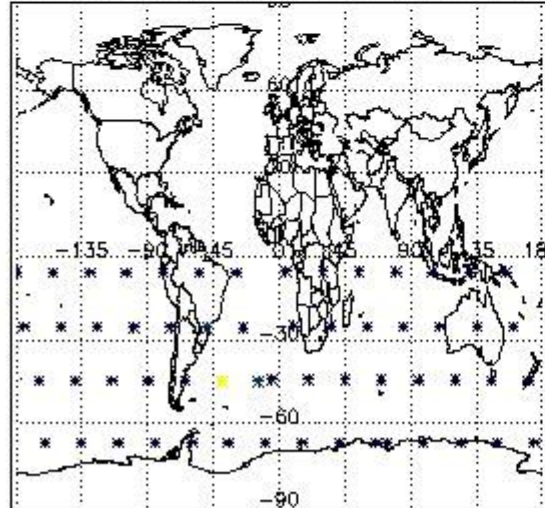
Percentage of flagged data per O3 profile



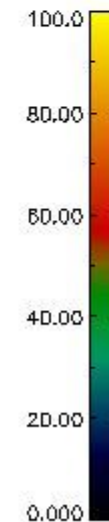
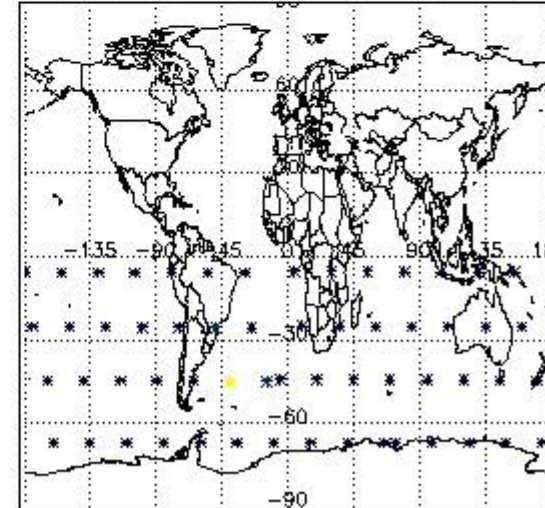
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

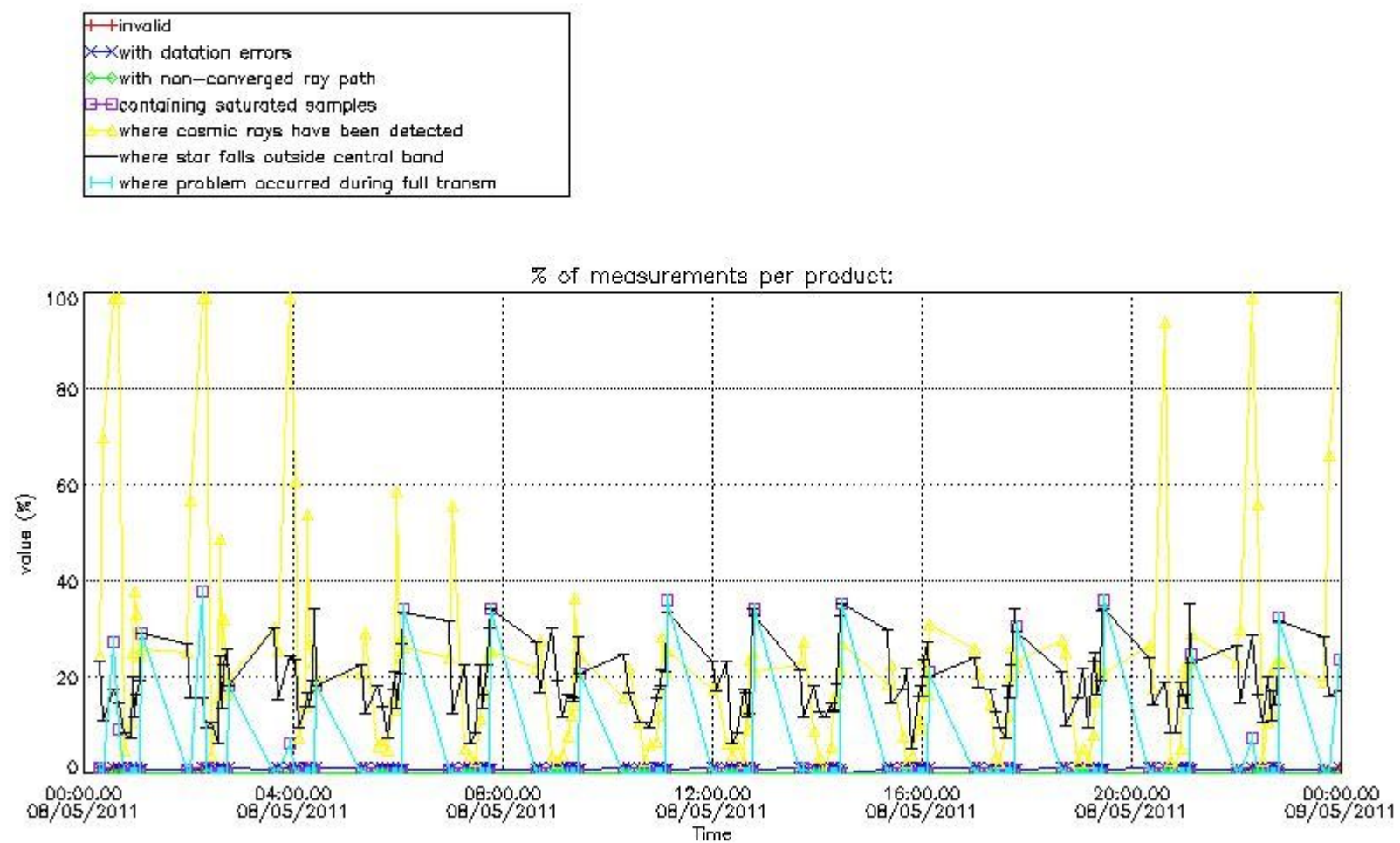


4. Level 1 quality information per product

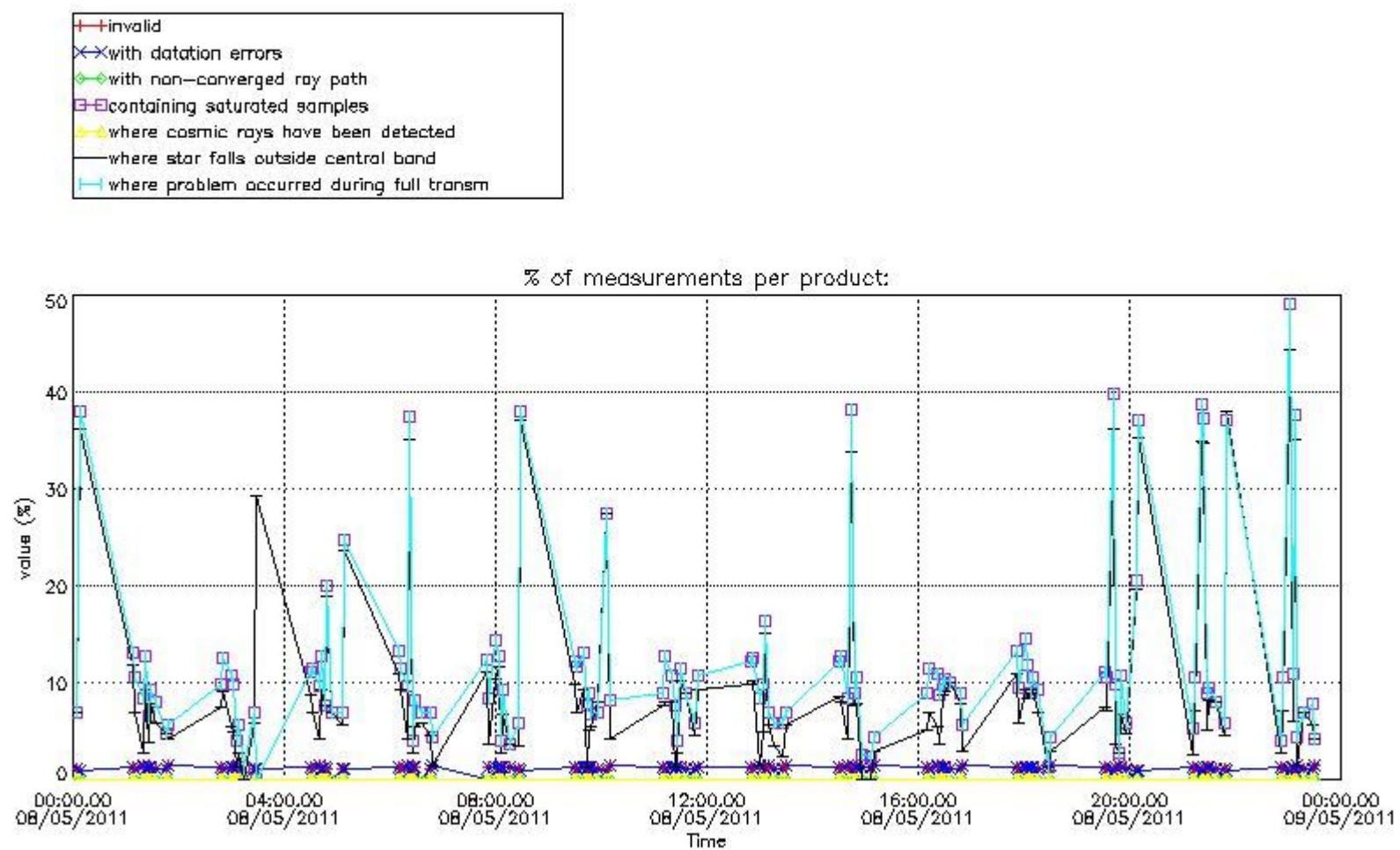
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



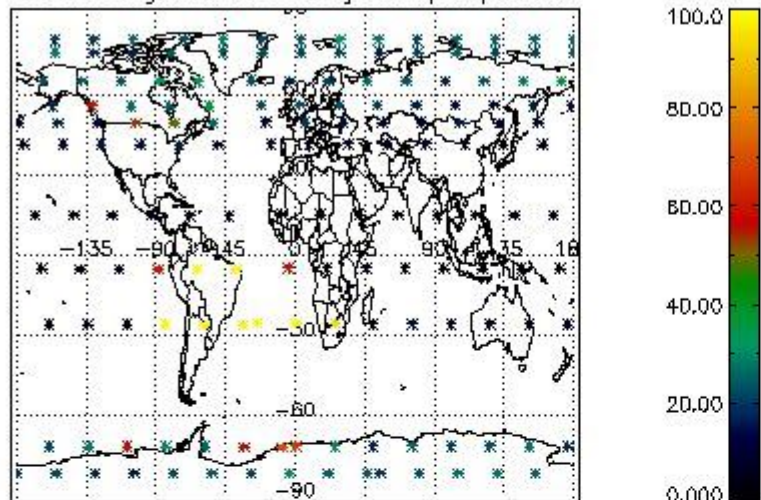
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



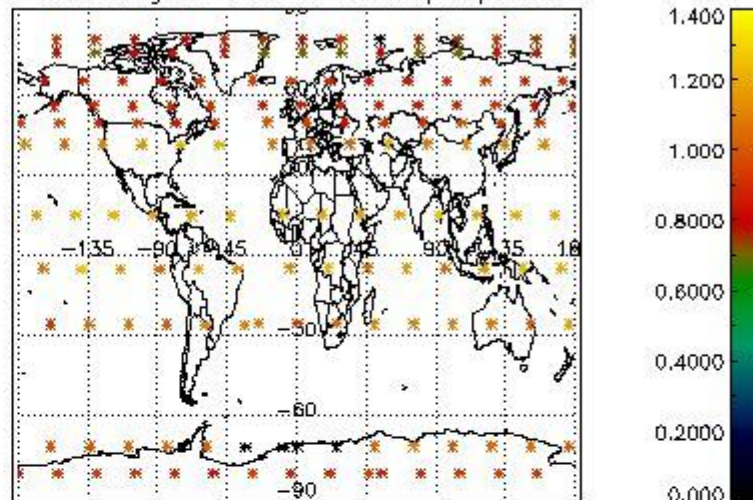
4.2 Plot quality information per product coming from level 1b processing (world map)

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

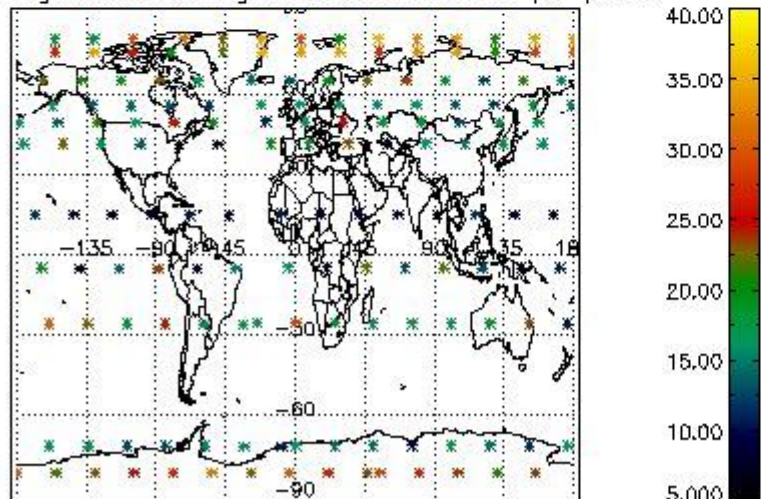
Percentage of cosmic ray hits per profile



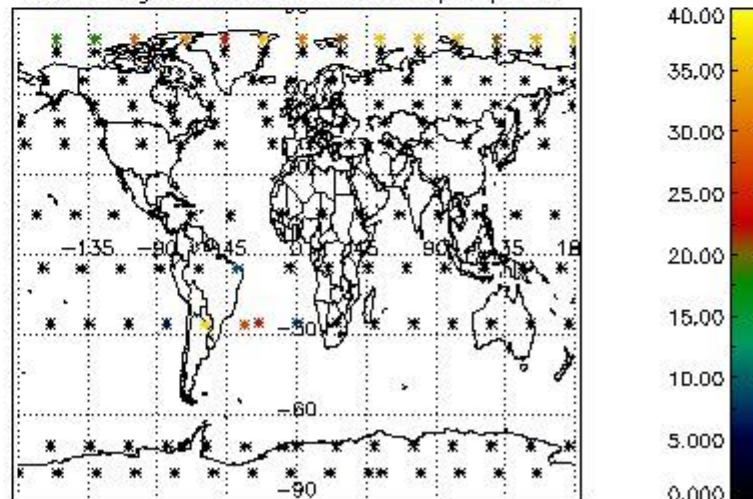
Percentage of datation errors per profile



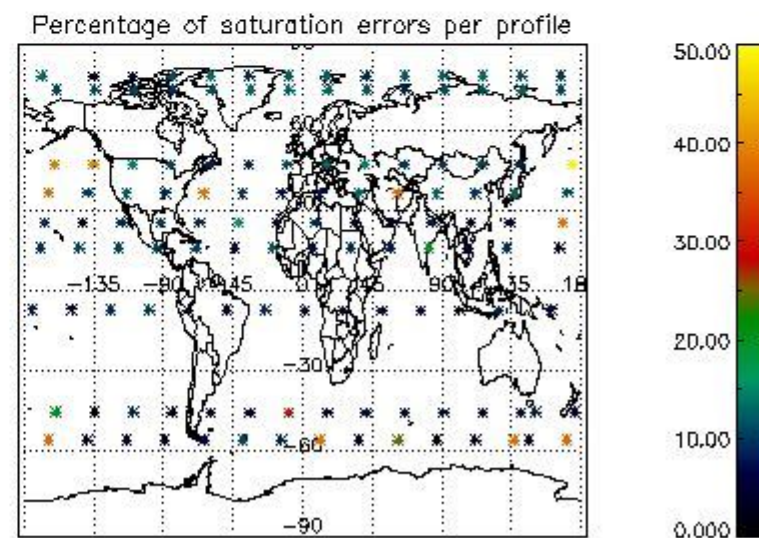
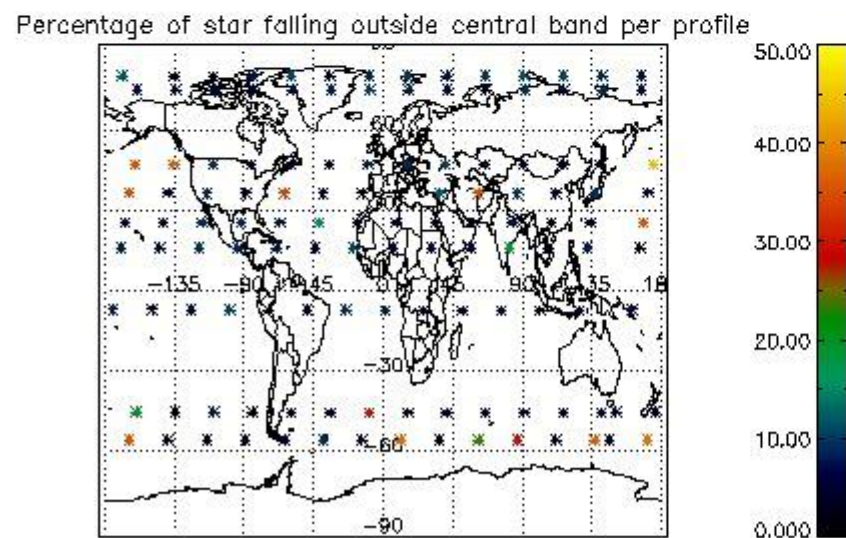
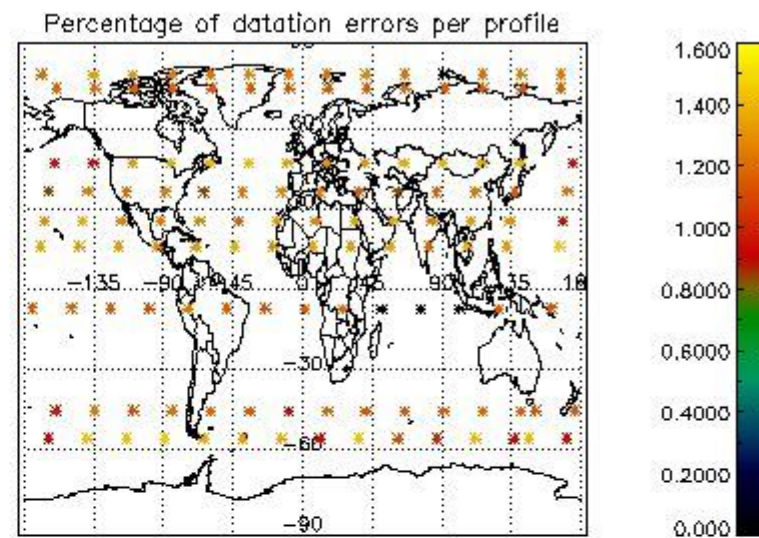
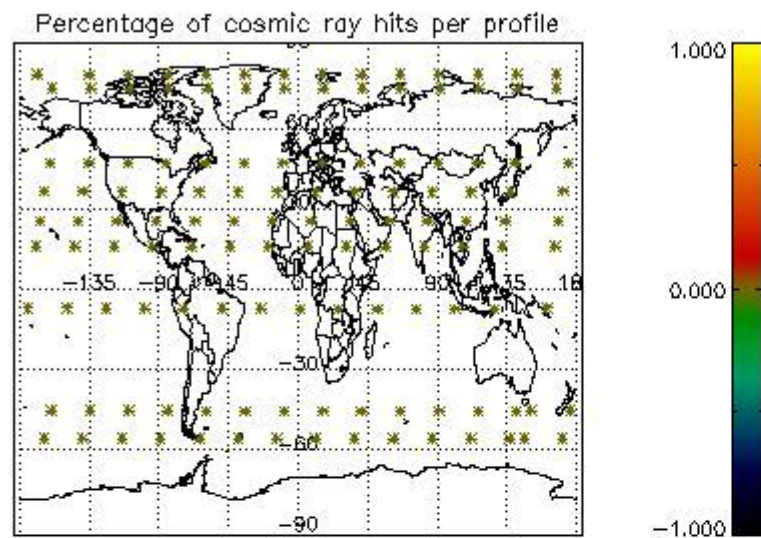
Percentage of star falling outside central band per profile



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

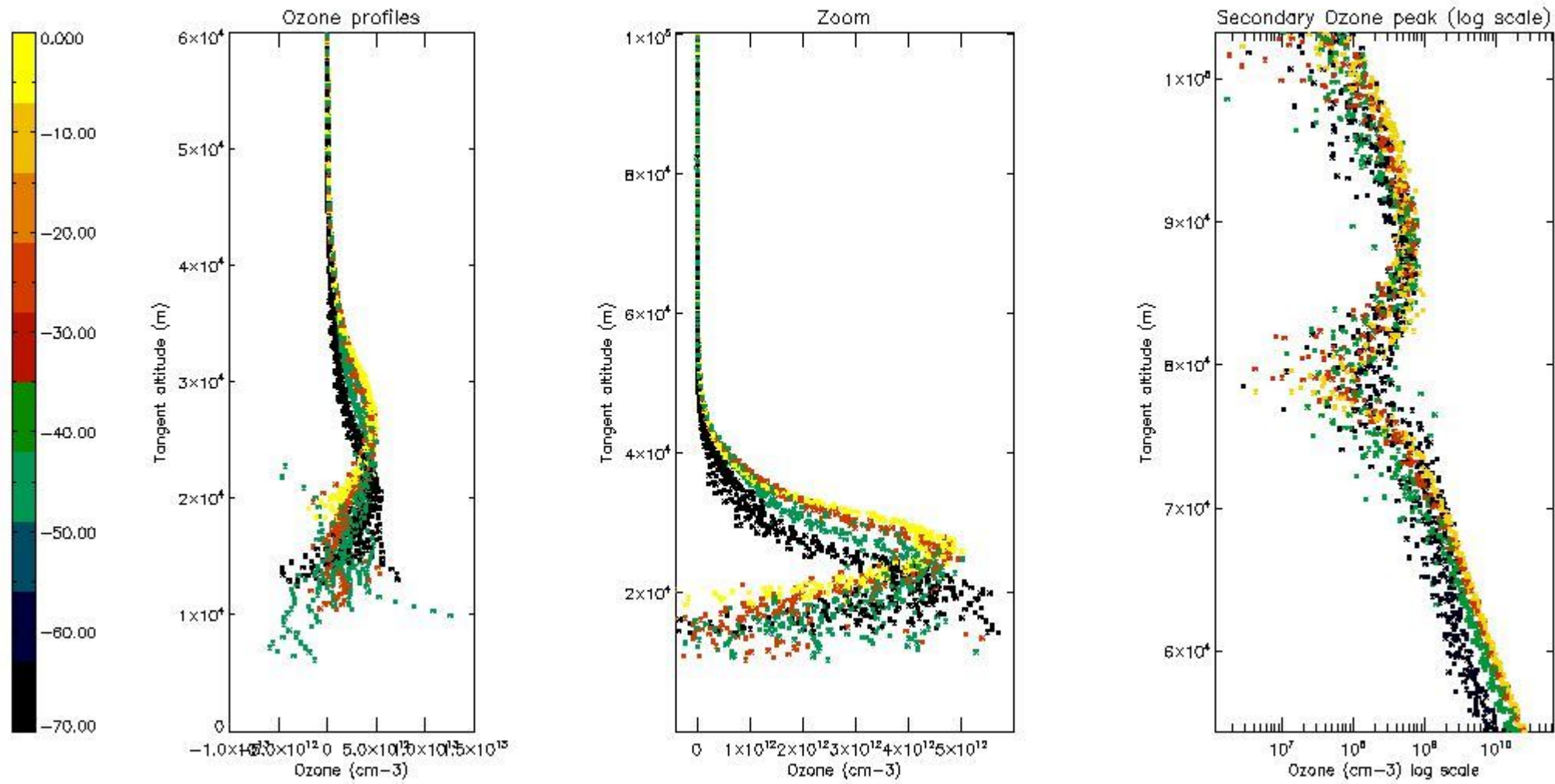
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	20
STD < 20	12

STD < 10	9
STD < 5	5

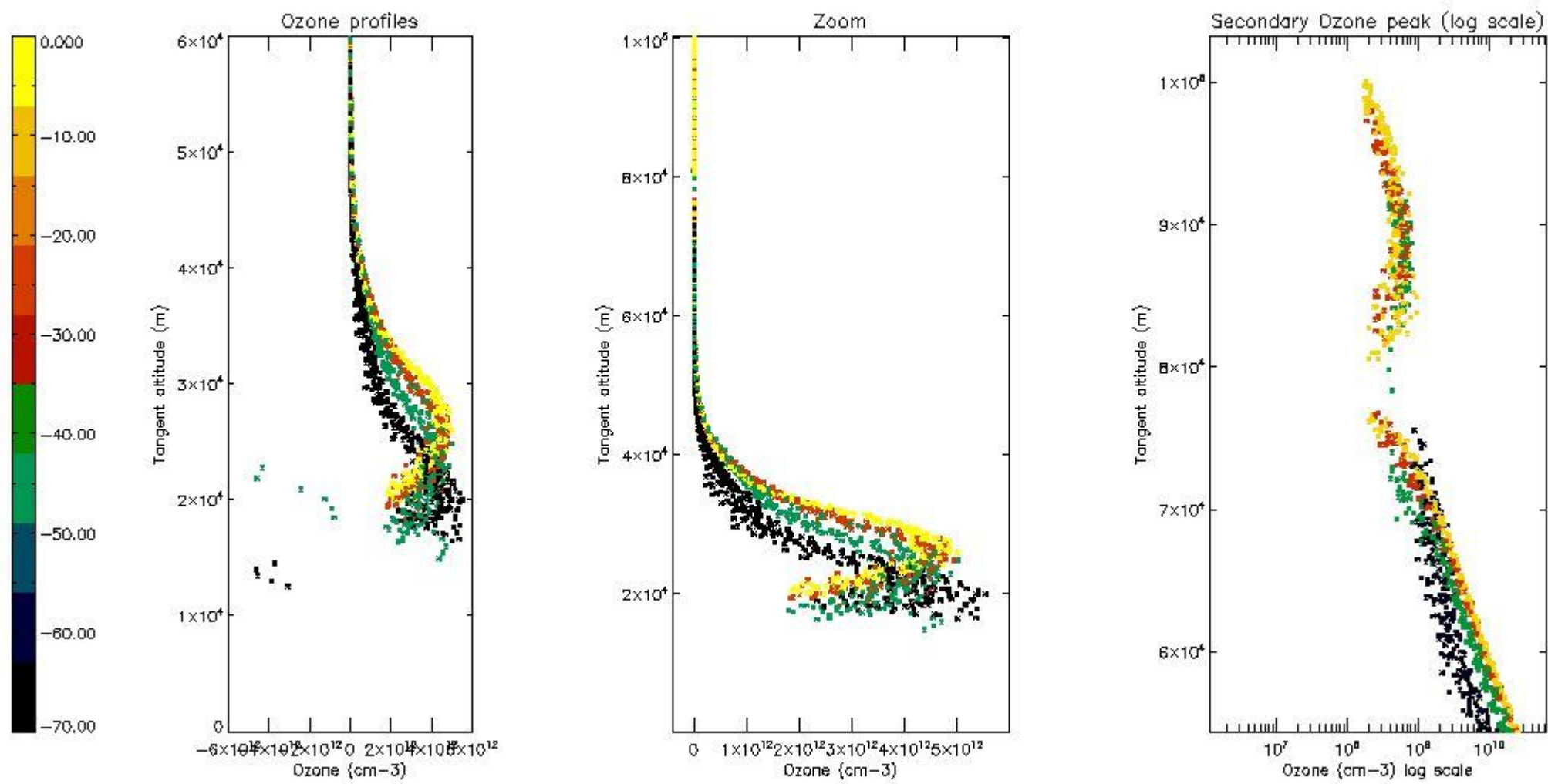
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



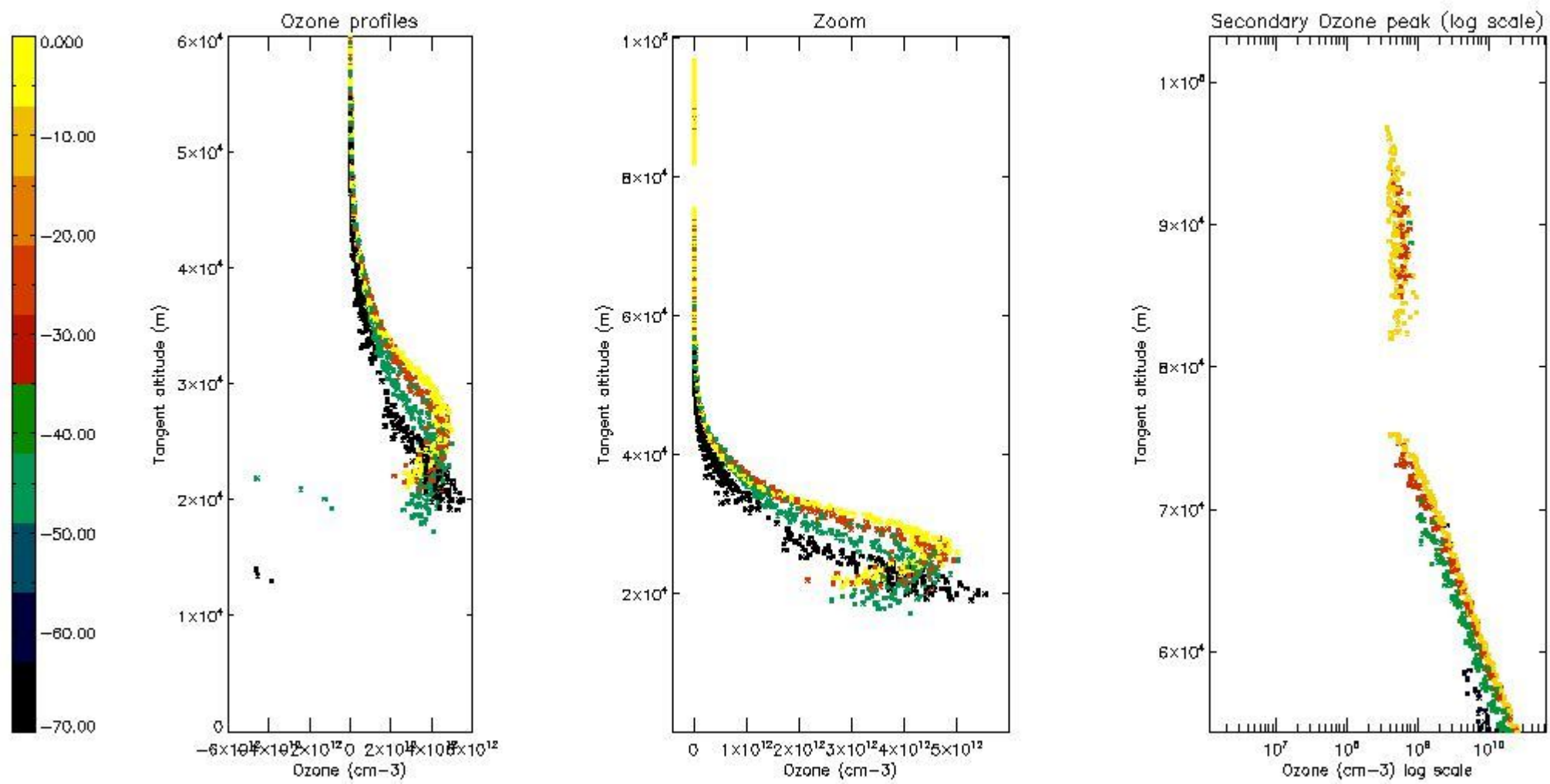
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



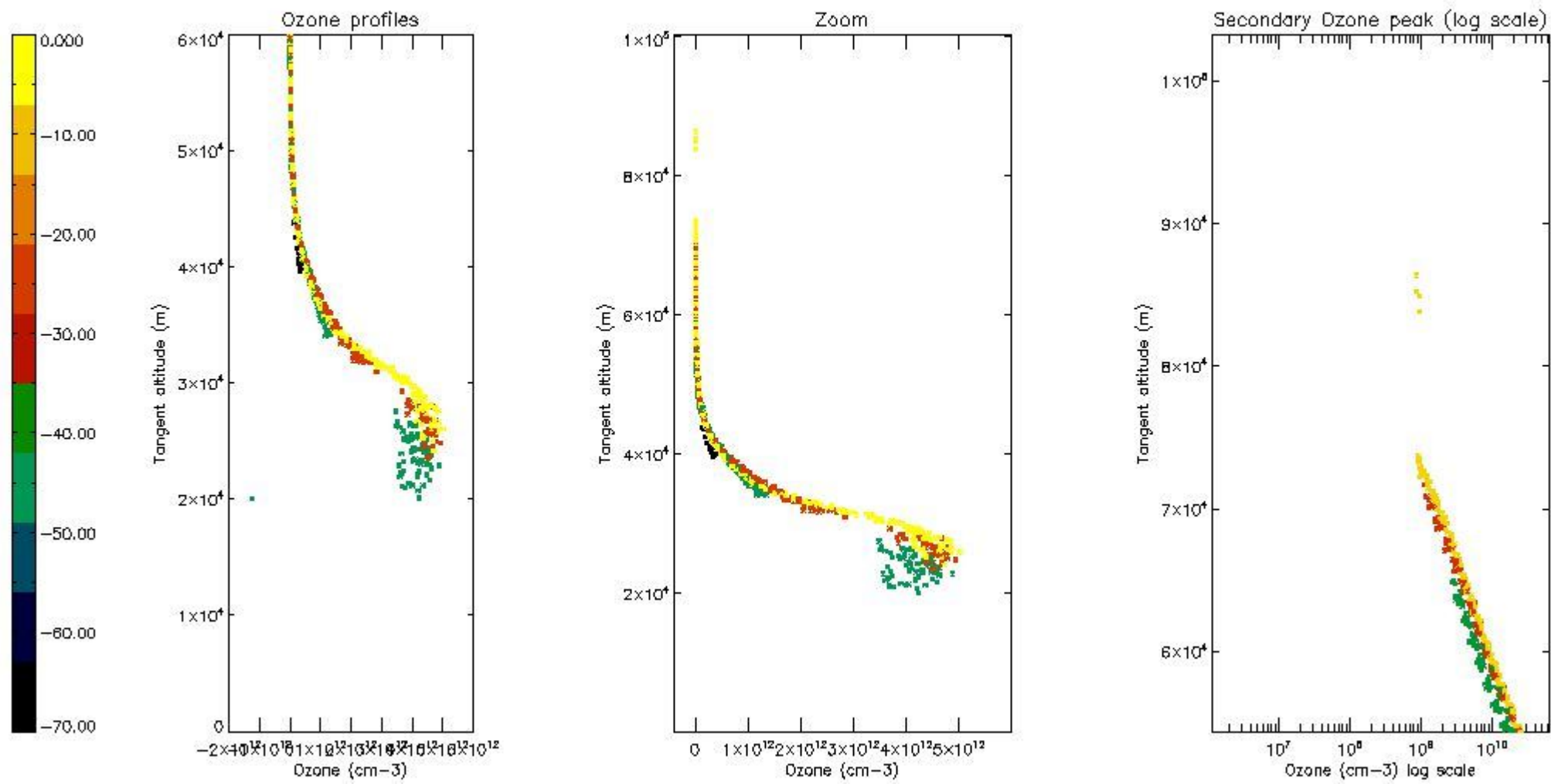
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



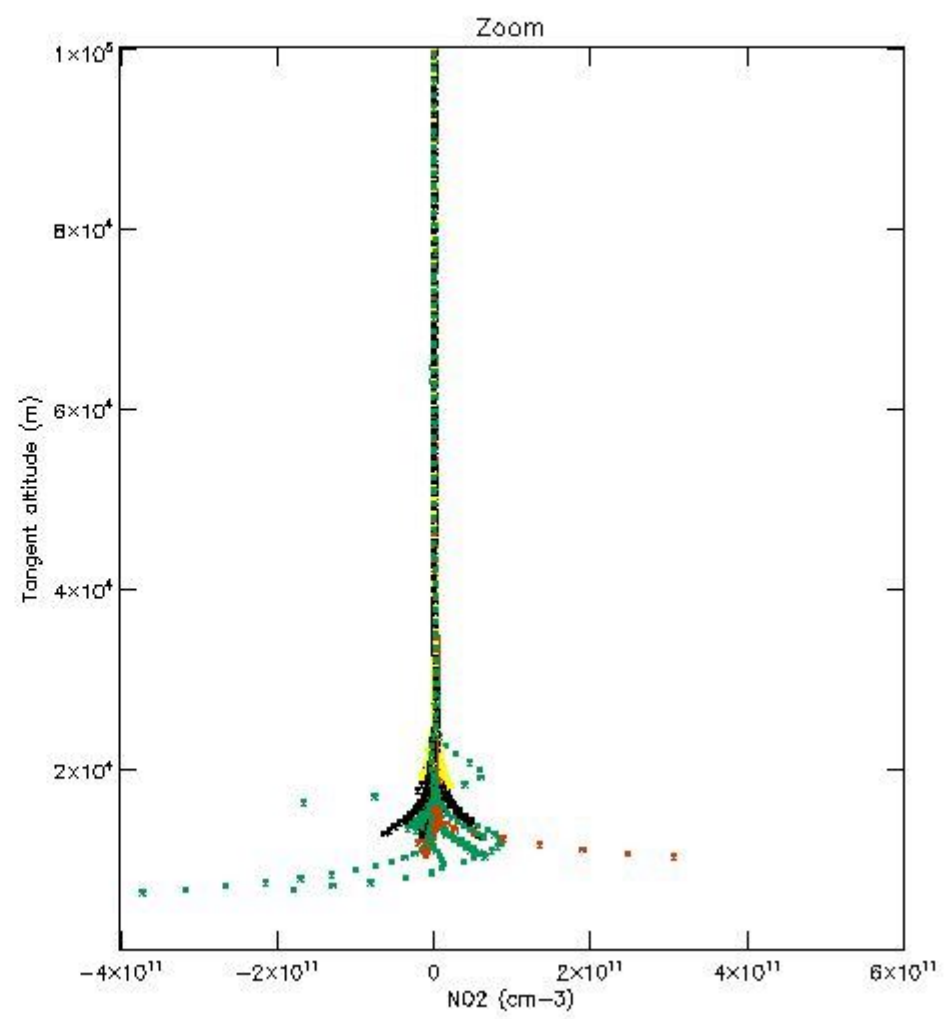
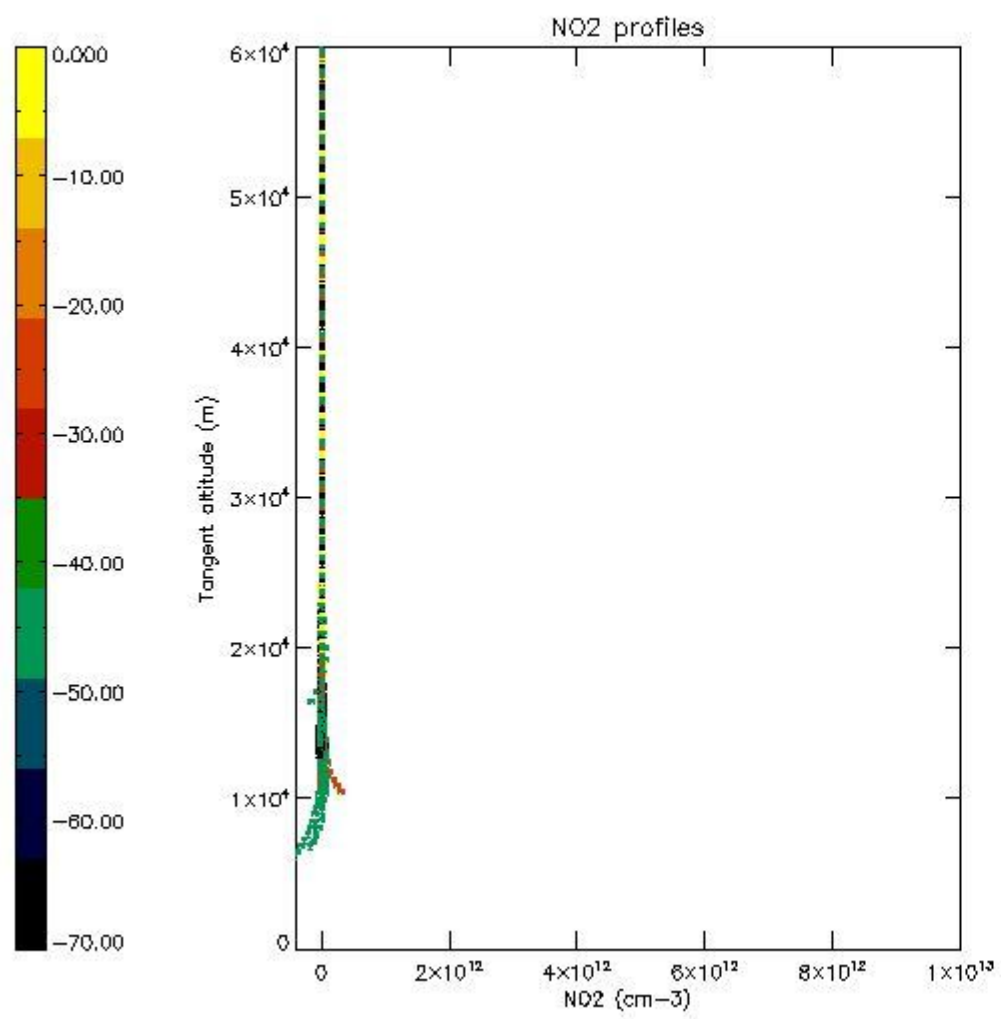
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



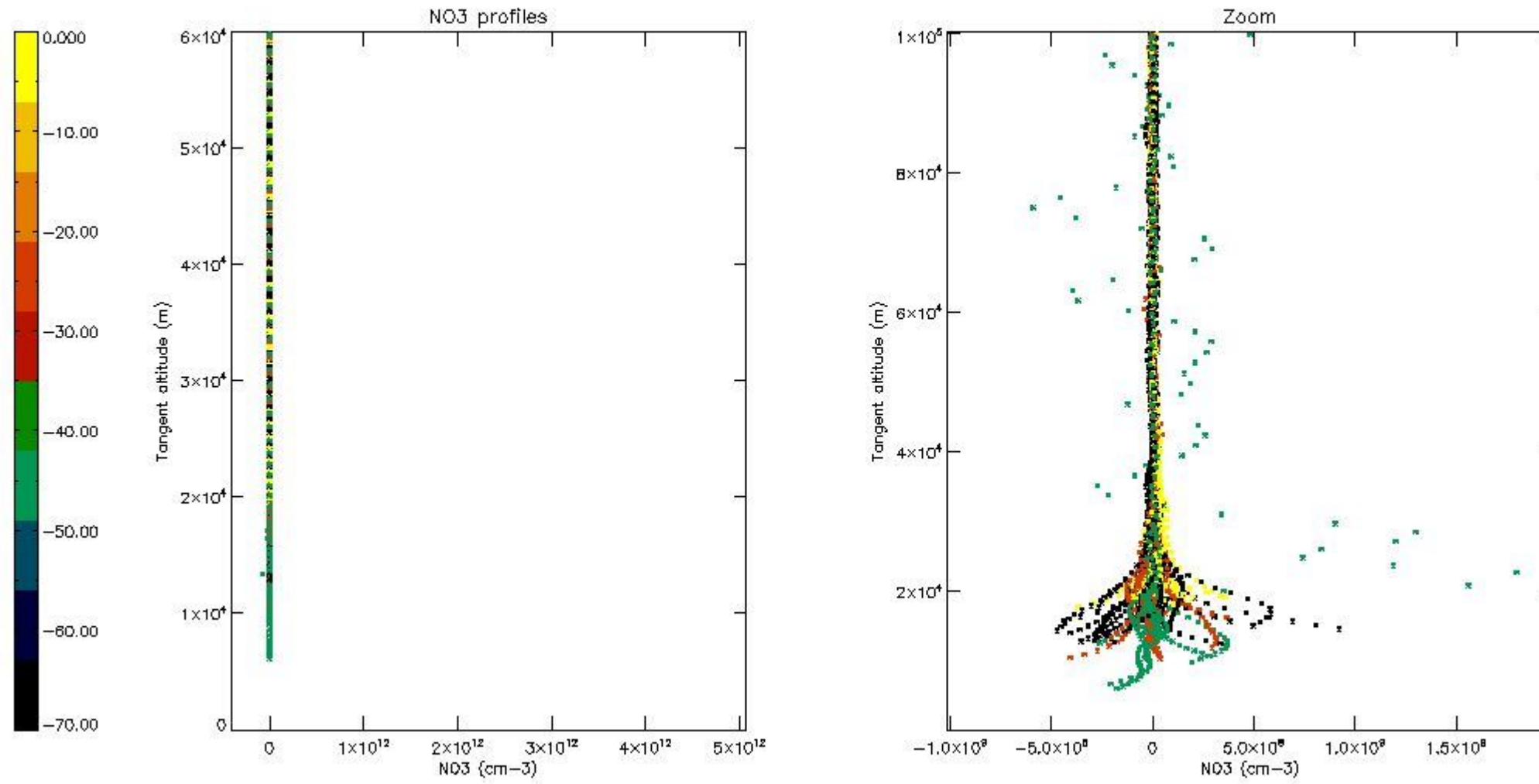
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

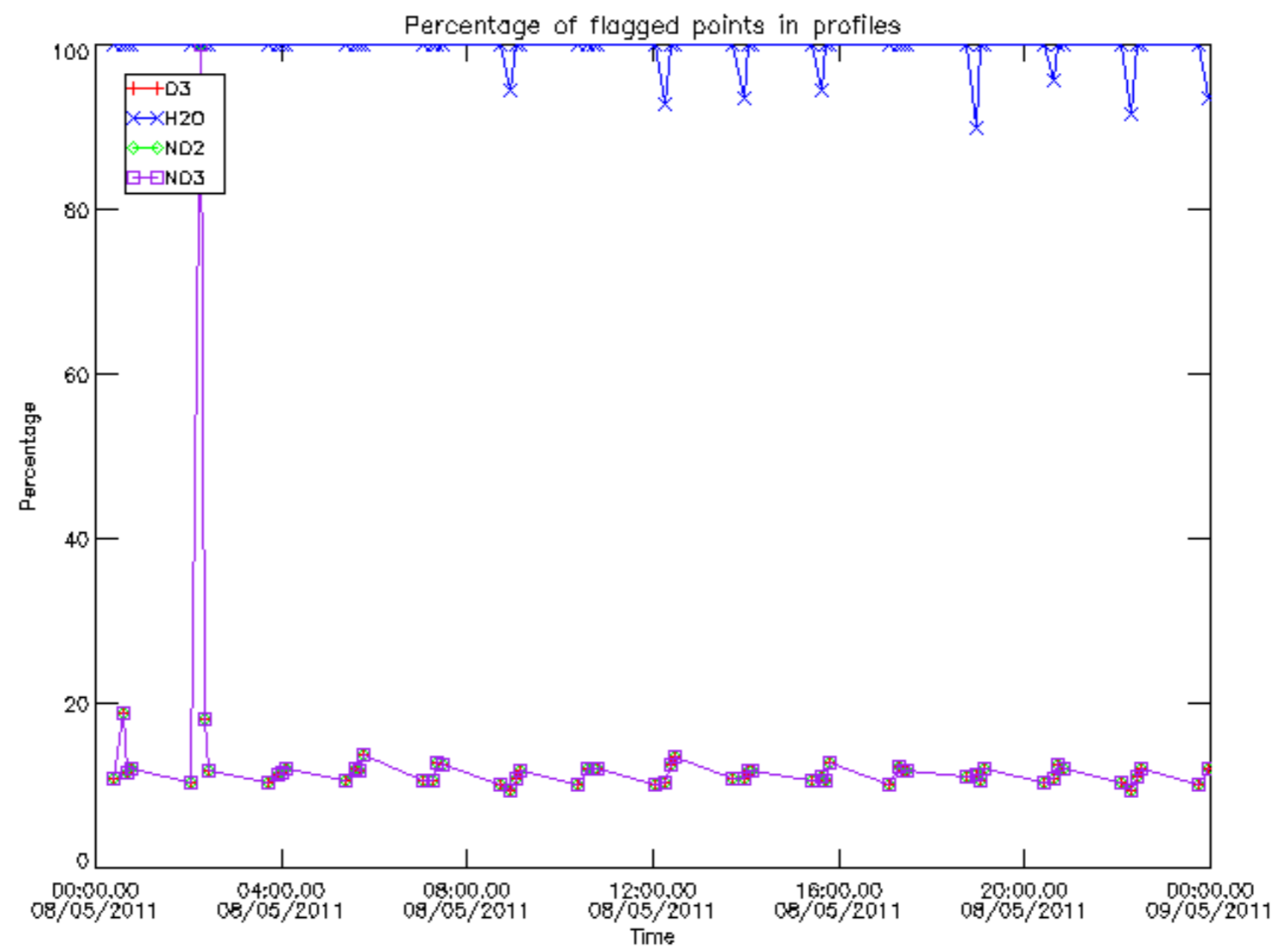
The colorbar represents the latitude.



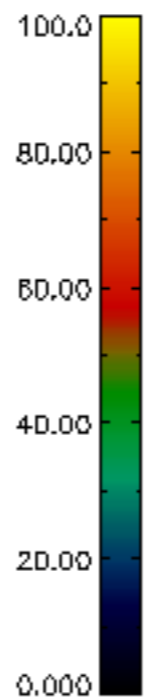
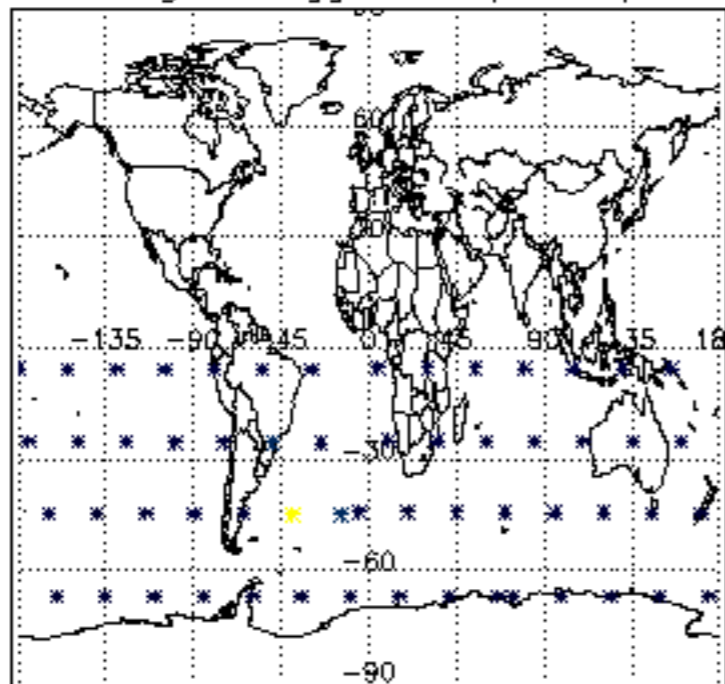
6. Auxiliary Data Files used for the production reported in section 2

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.

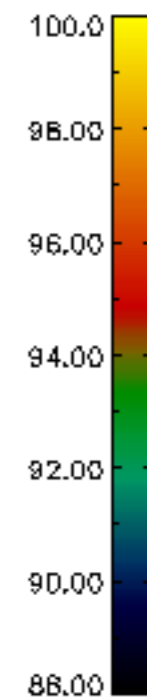
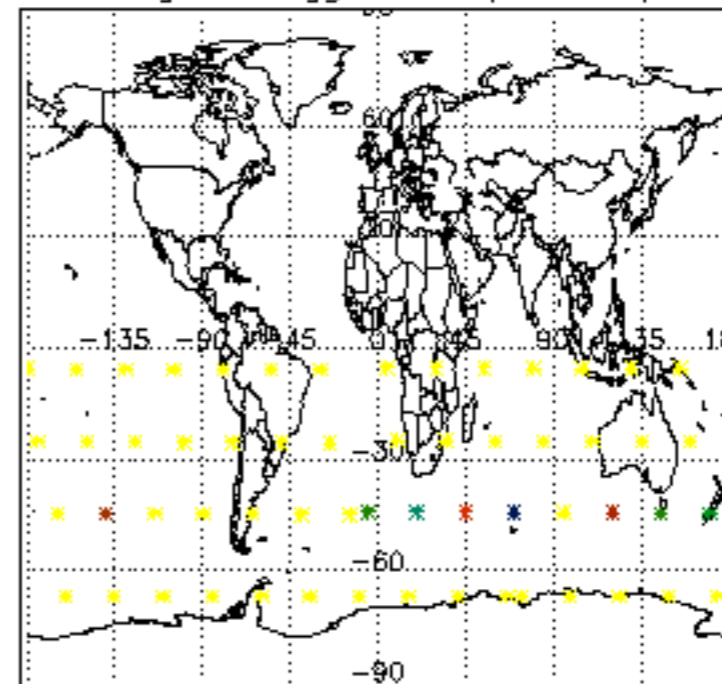
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	08-MAY-2011 00:04:49
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	08-MAY-2011 00:04:49
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	08-MAY-2011 00:04:49



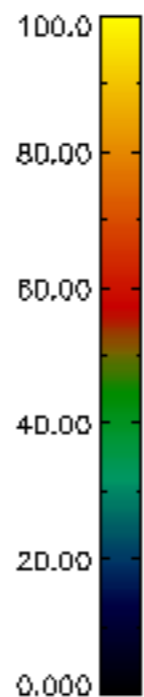
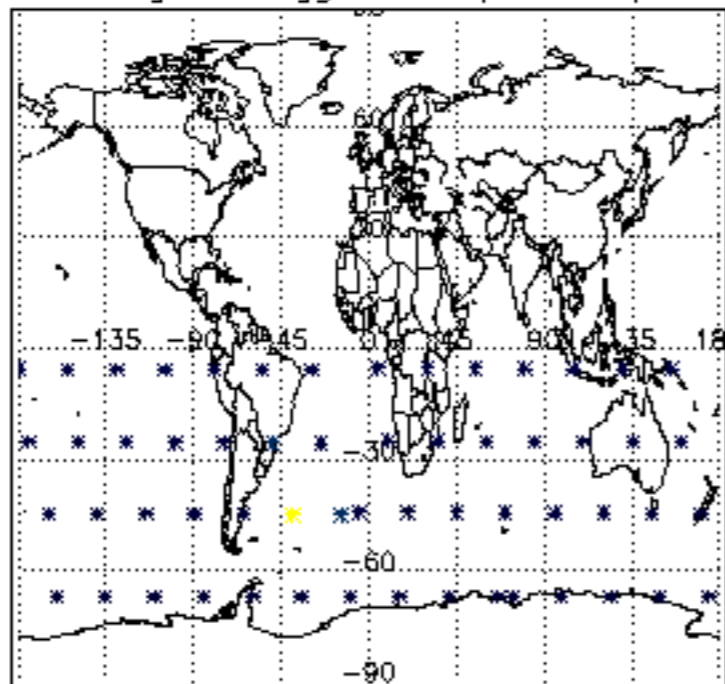
Percentage of flagged data per D3 profile



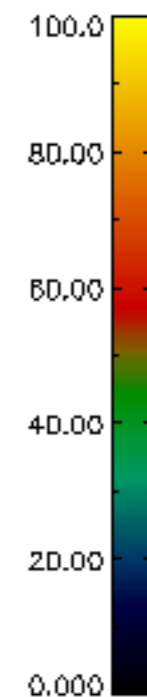
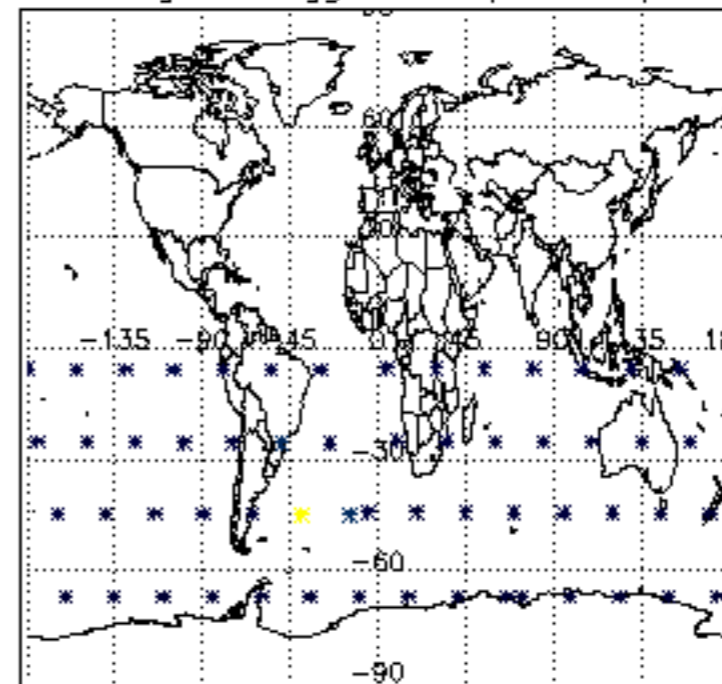
Percentage of flagged data per H2O profile

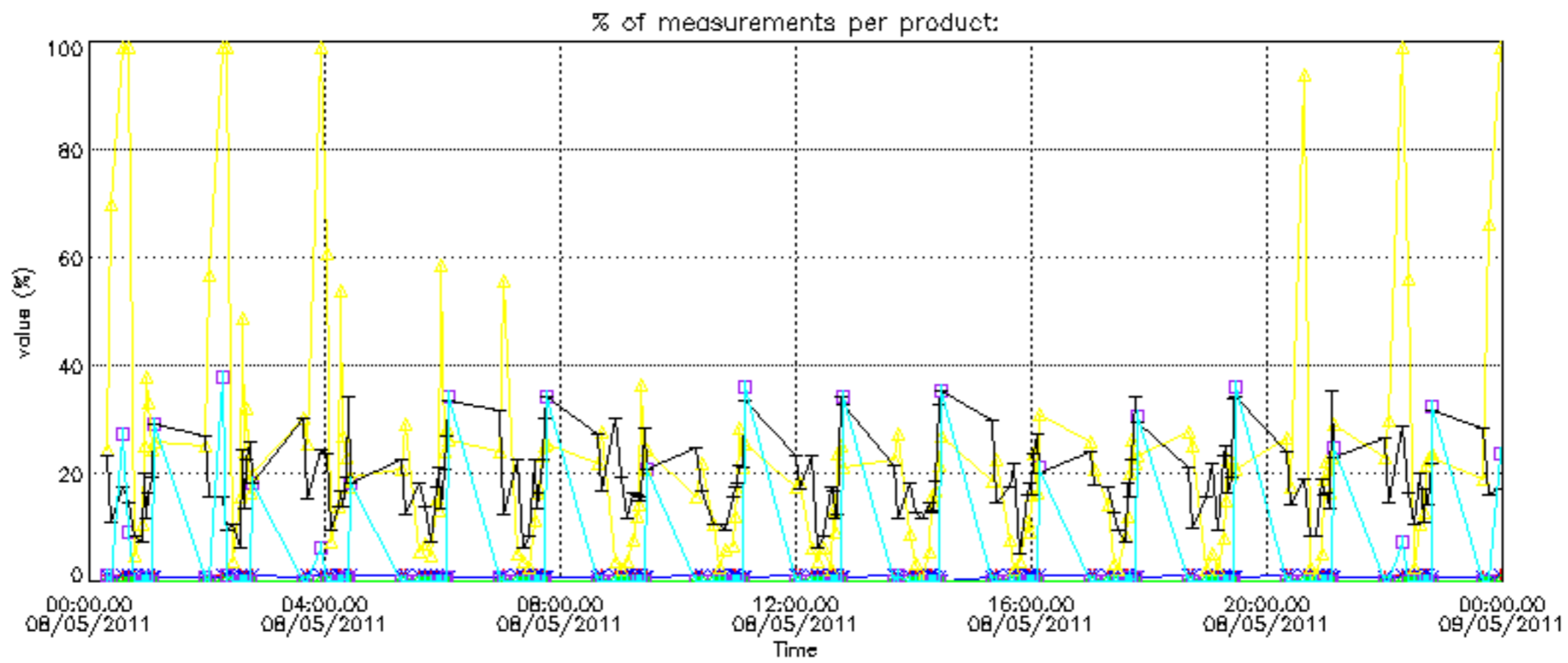


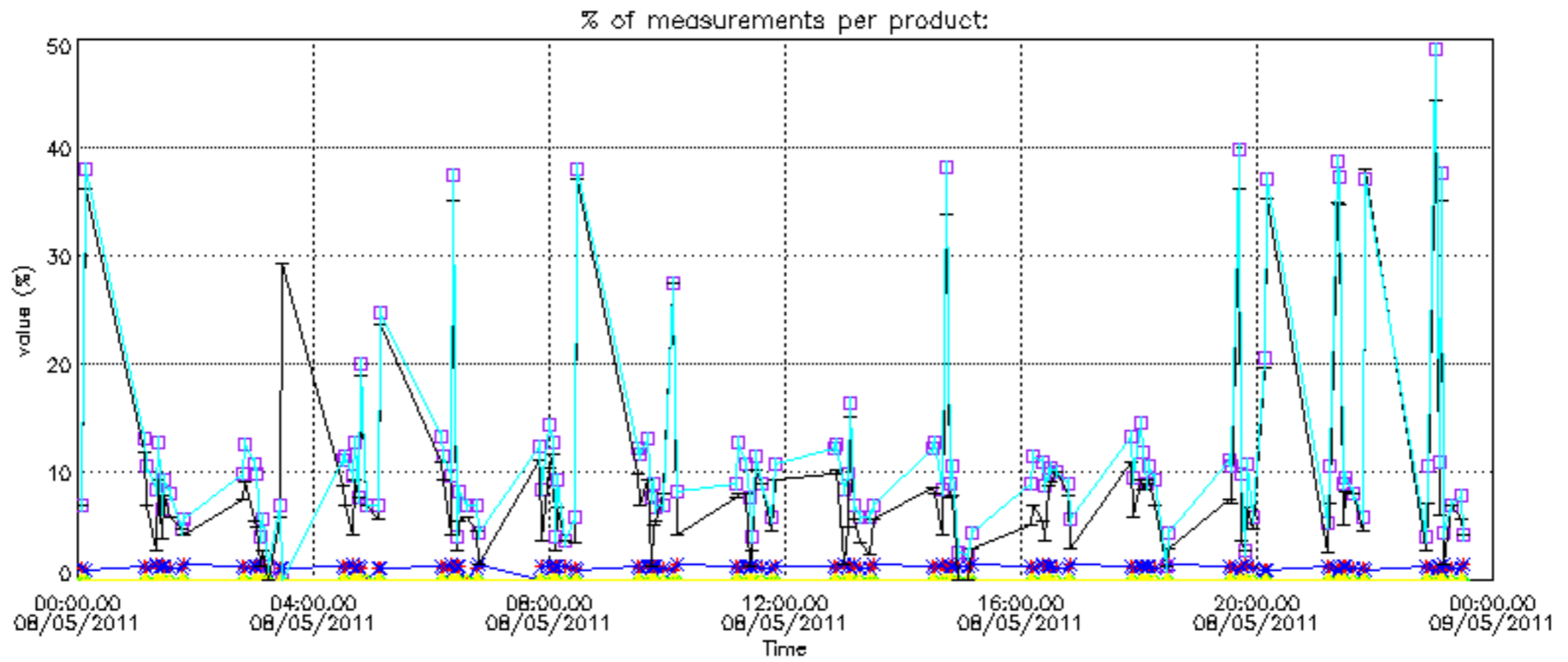
Percentage of flagged data per NO2 profile



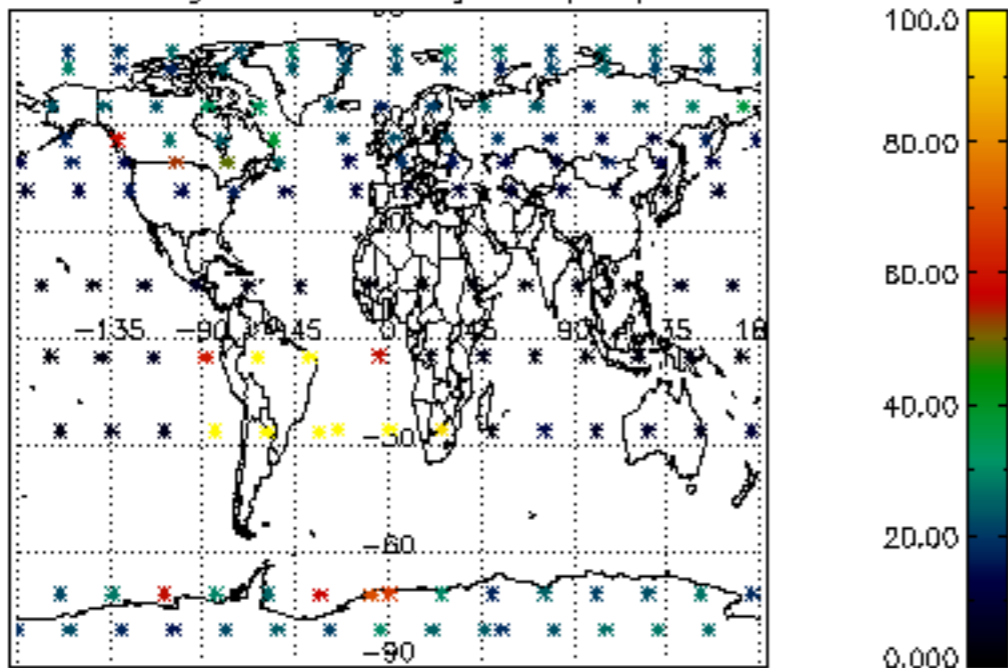
Percentage of flagged data per NO3 profile



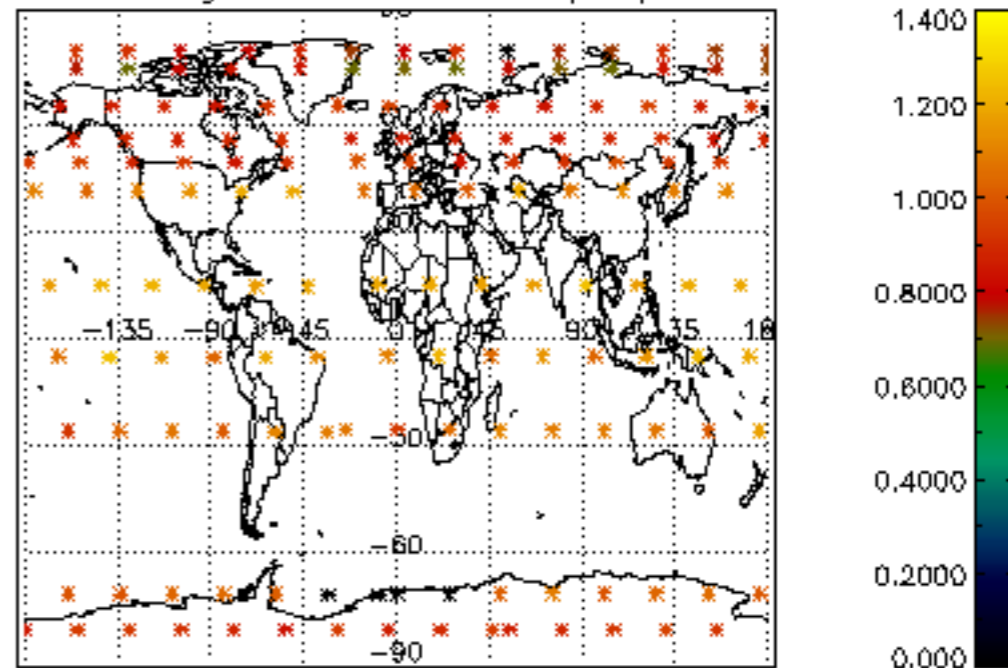




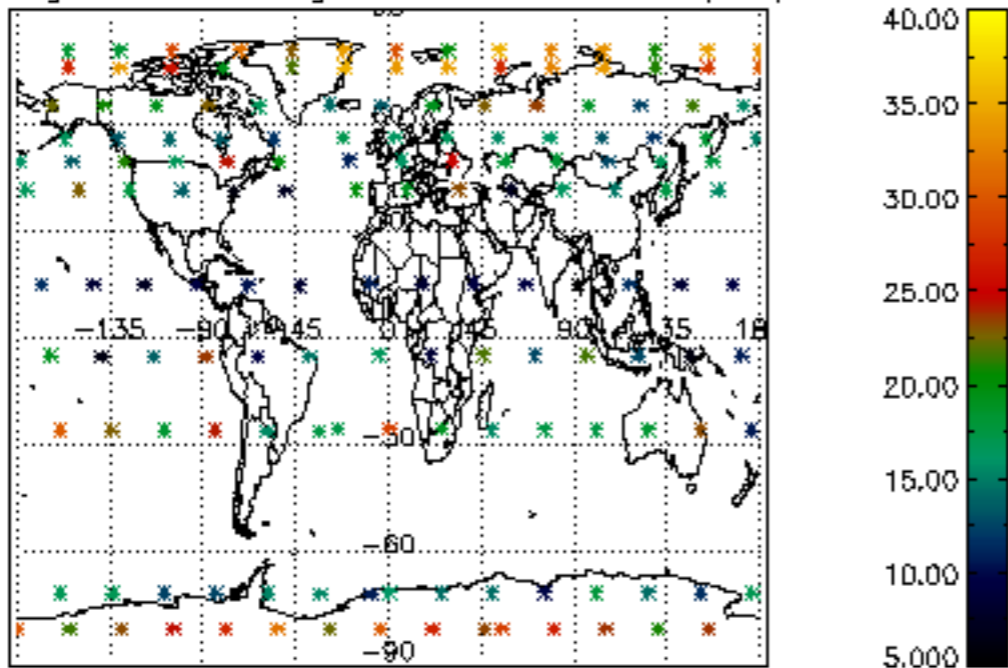
Percentage of cosmic ray hits per profile



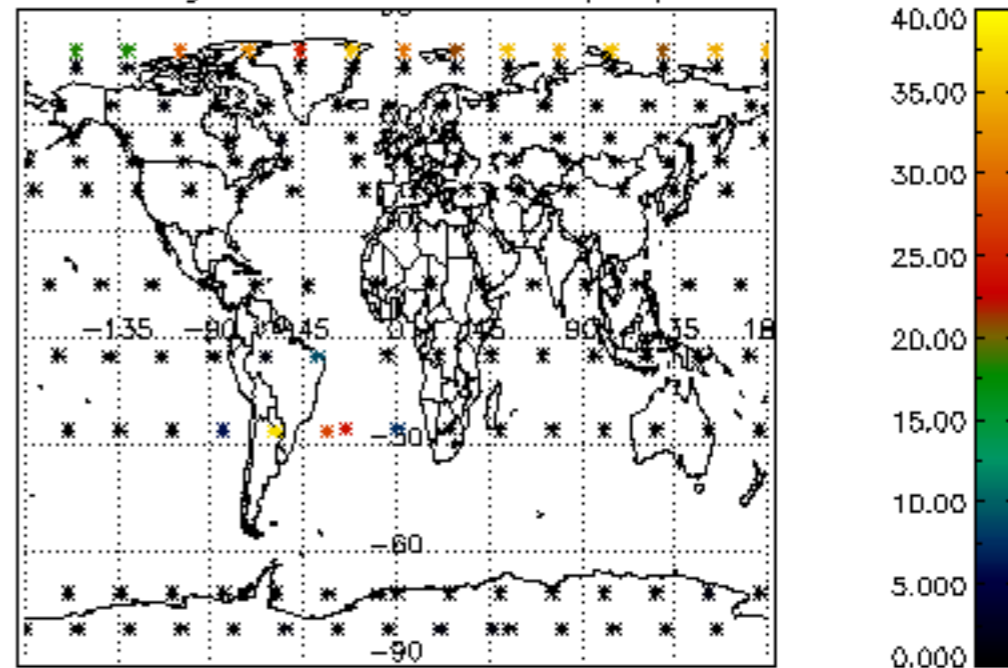
Percentage of datation errors per profile



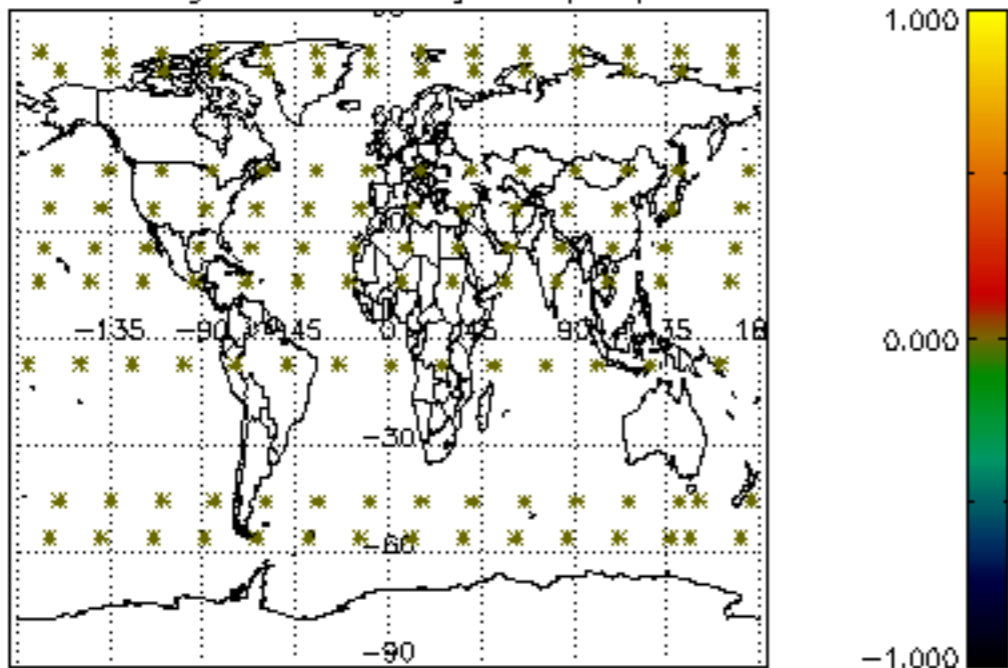
Percentage of star falling outside central band per profile



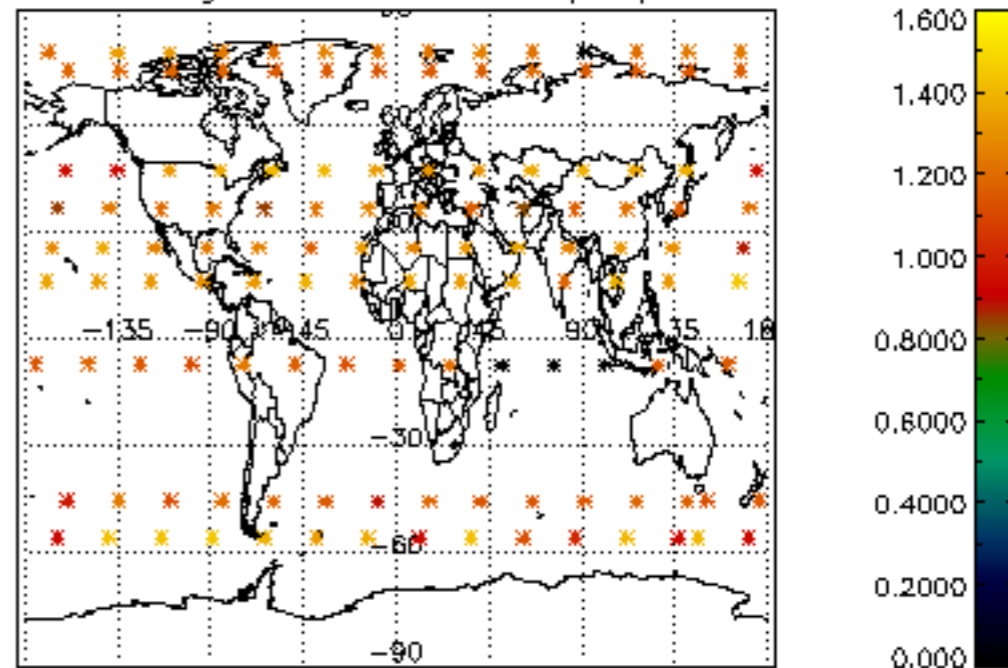
Percentage of saturation errors per profile



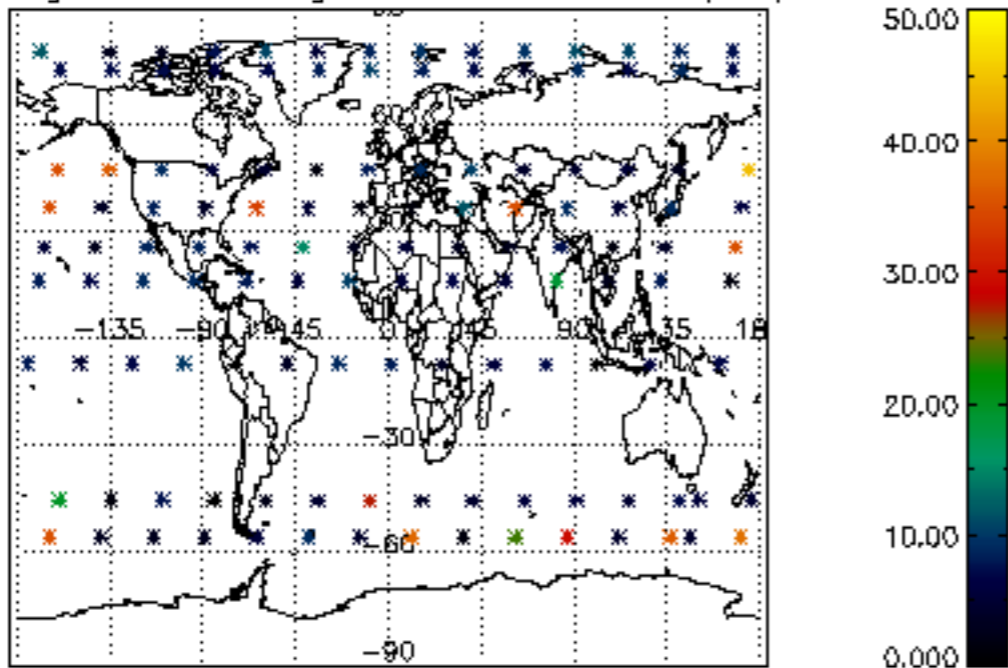
Percentage of cosmic ray hits per profile



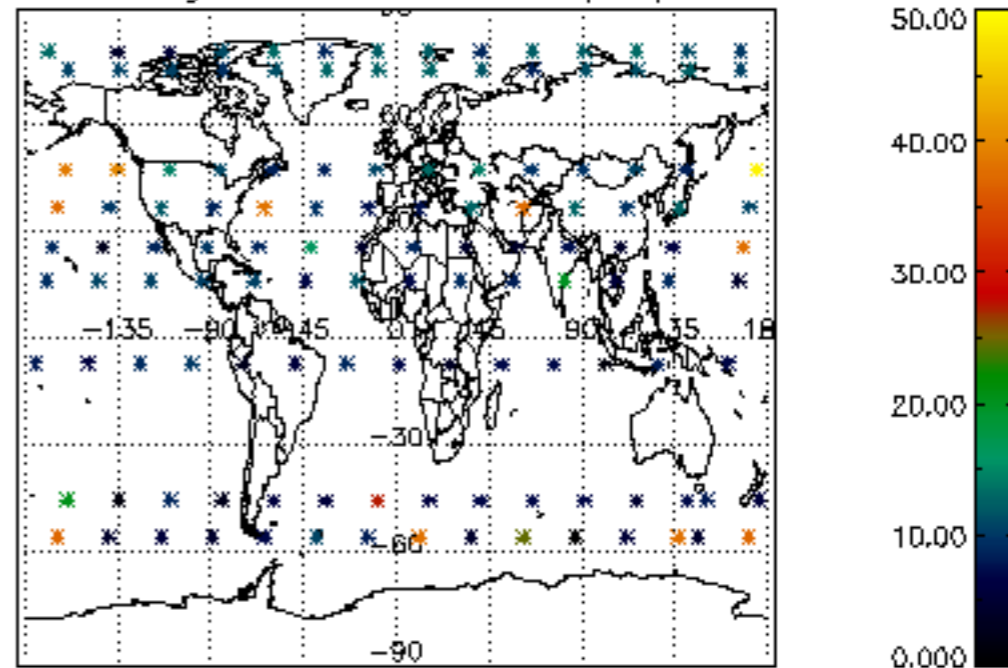
Percentage of datation errors per profile

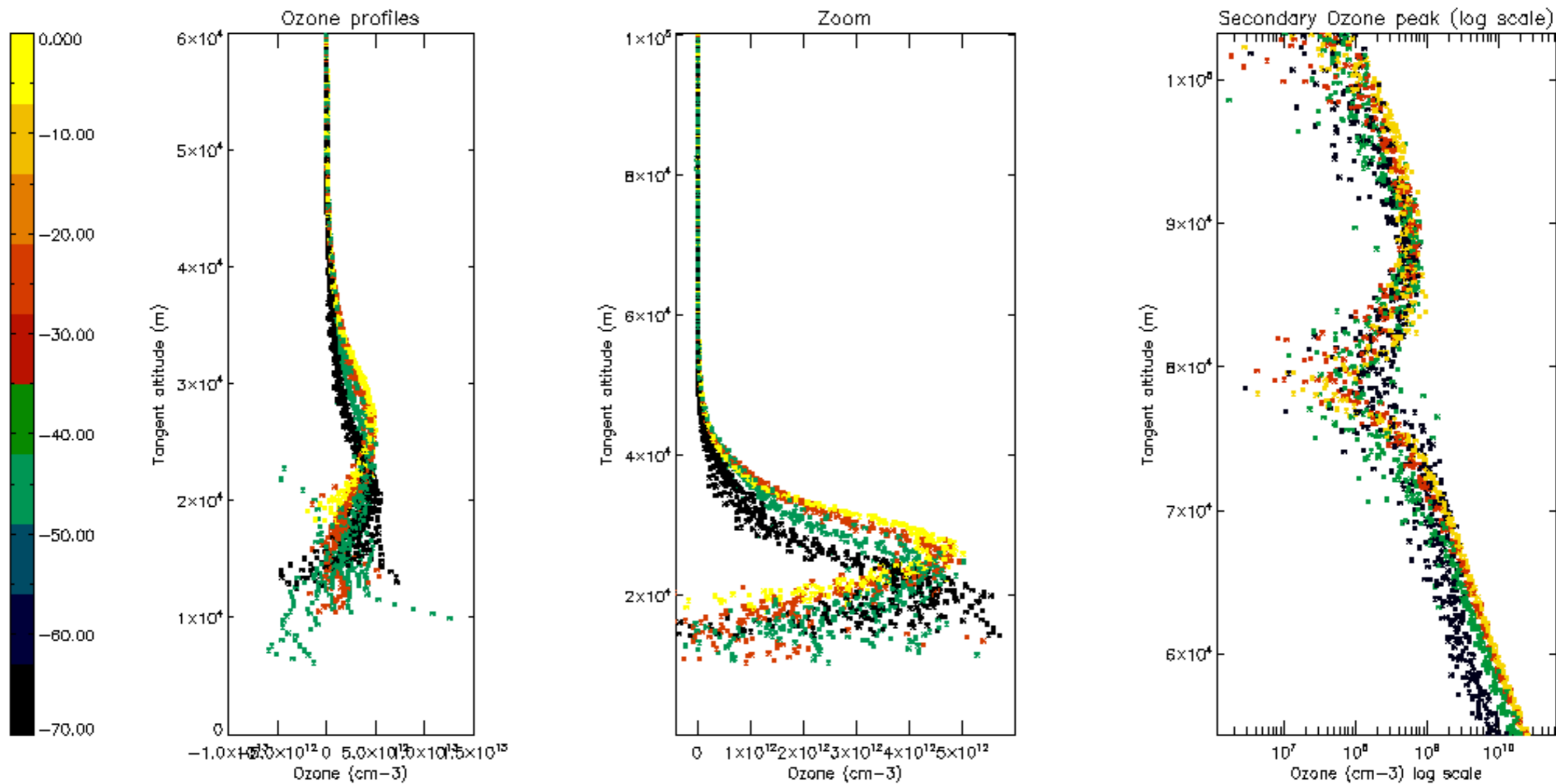


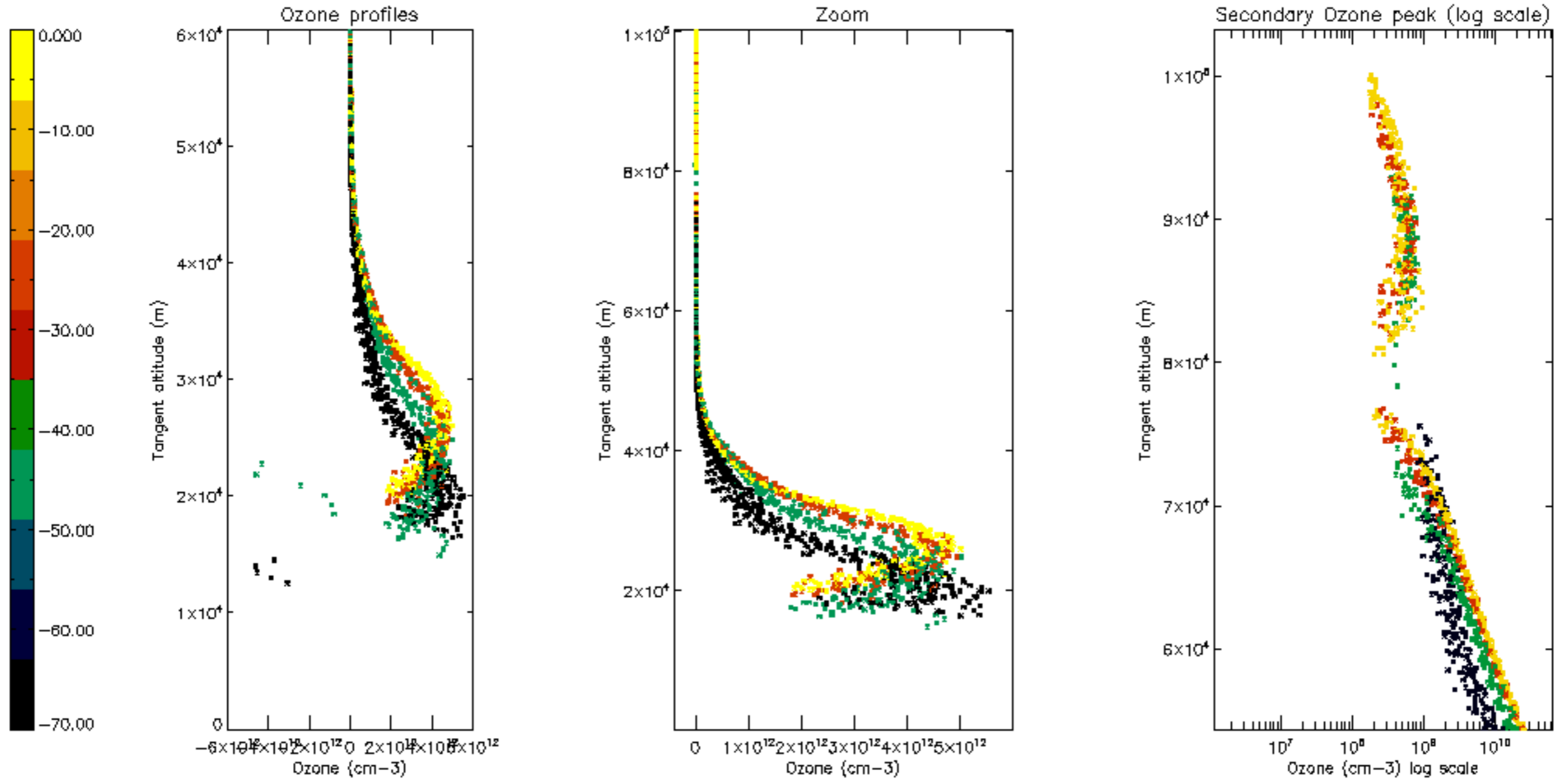
Percentage of star falling outside central band per profile

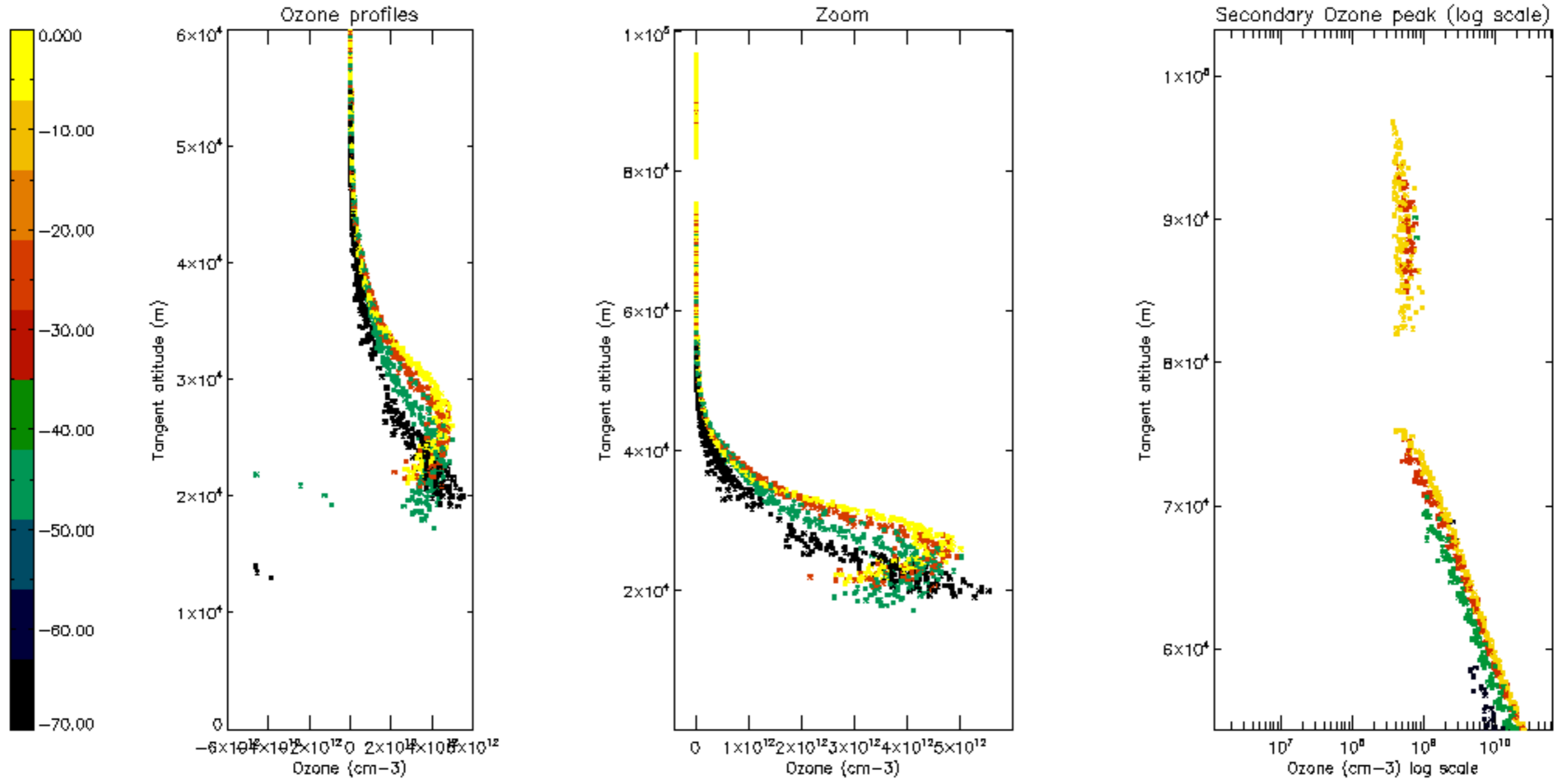


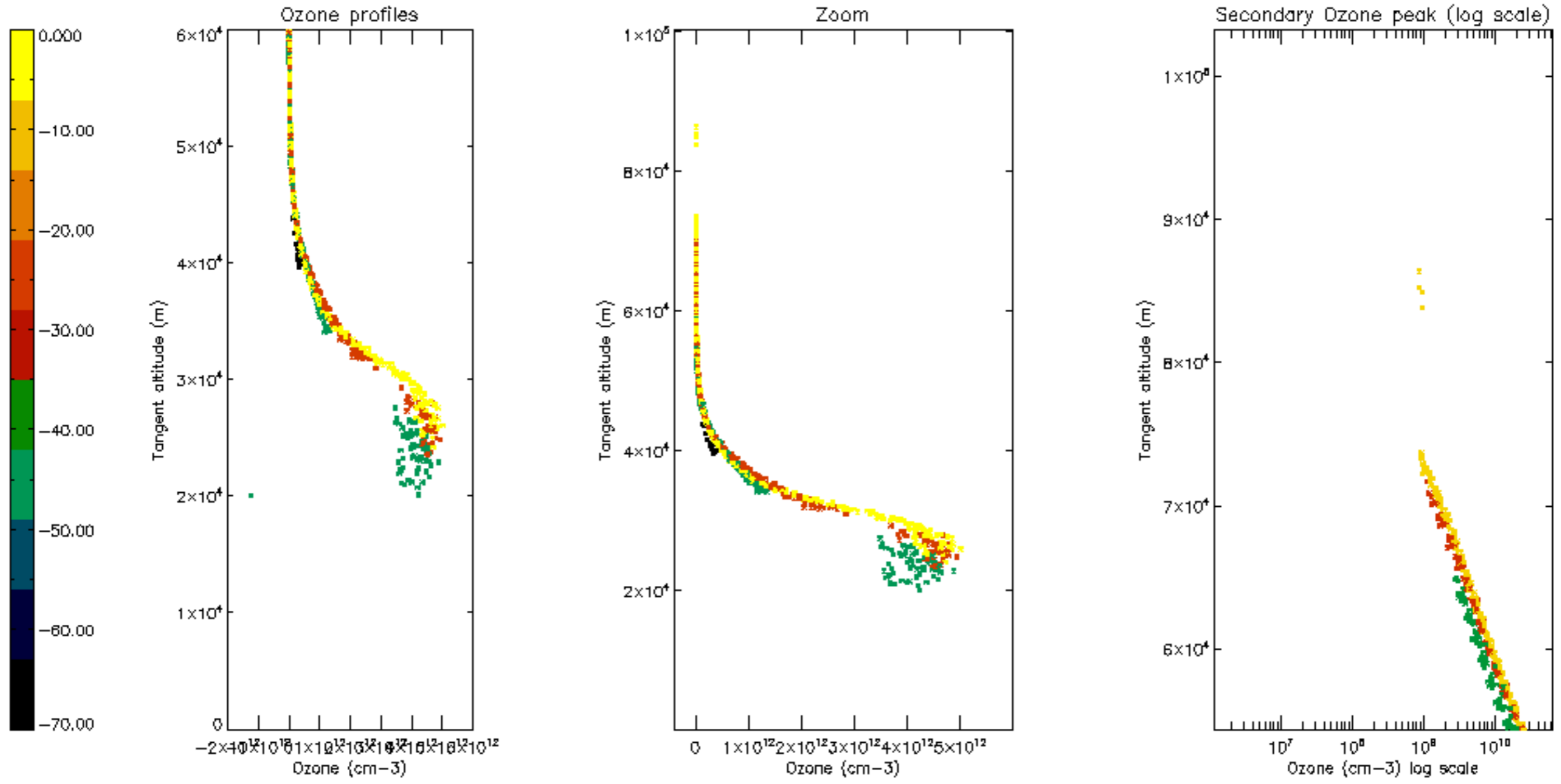
Percentage of saturation errors per profile

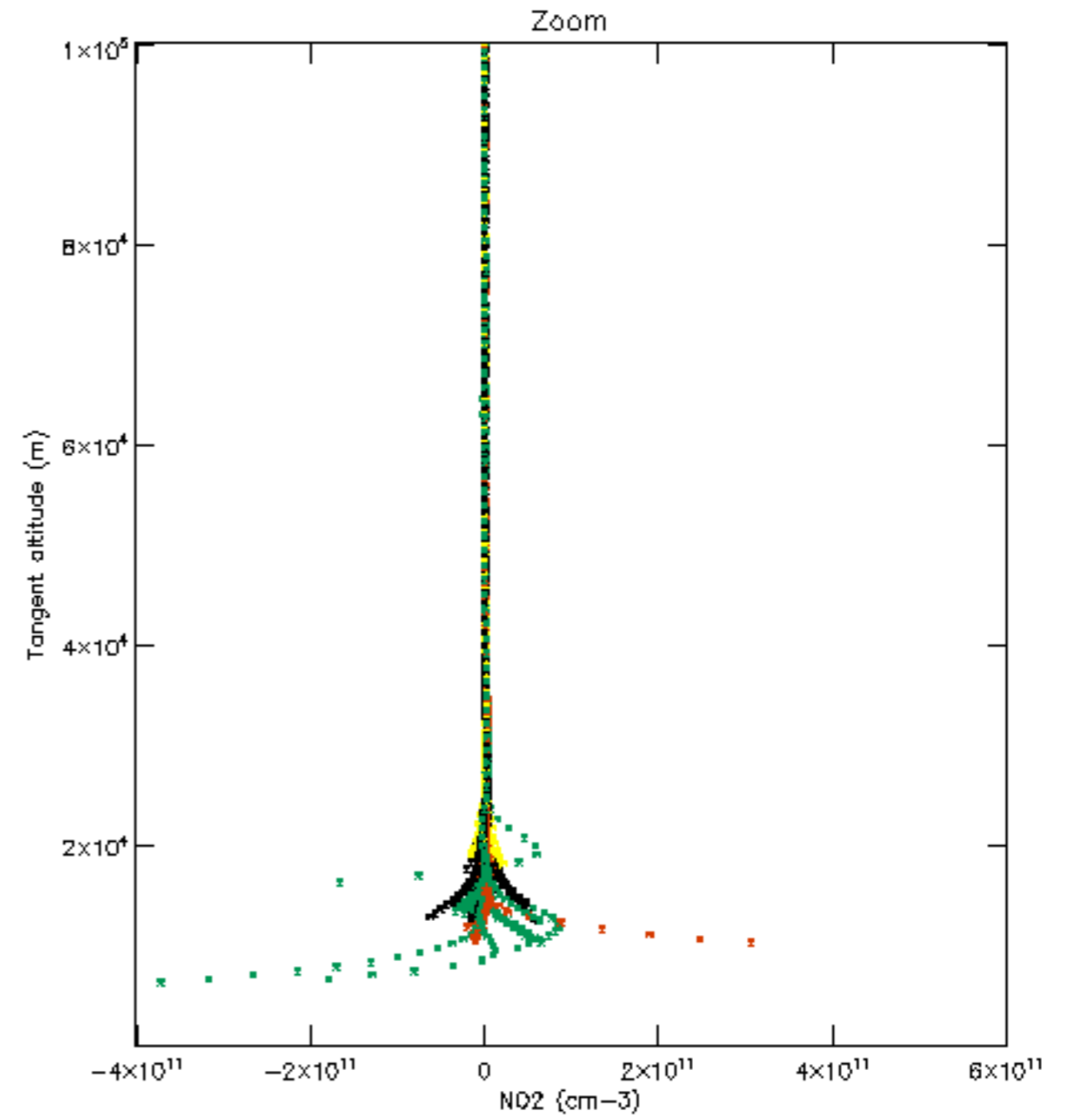
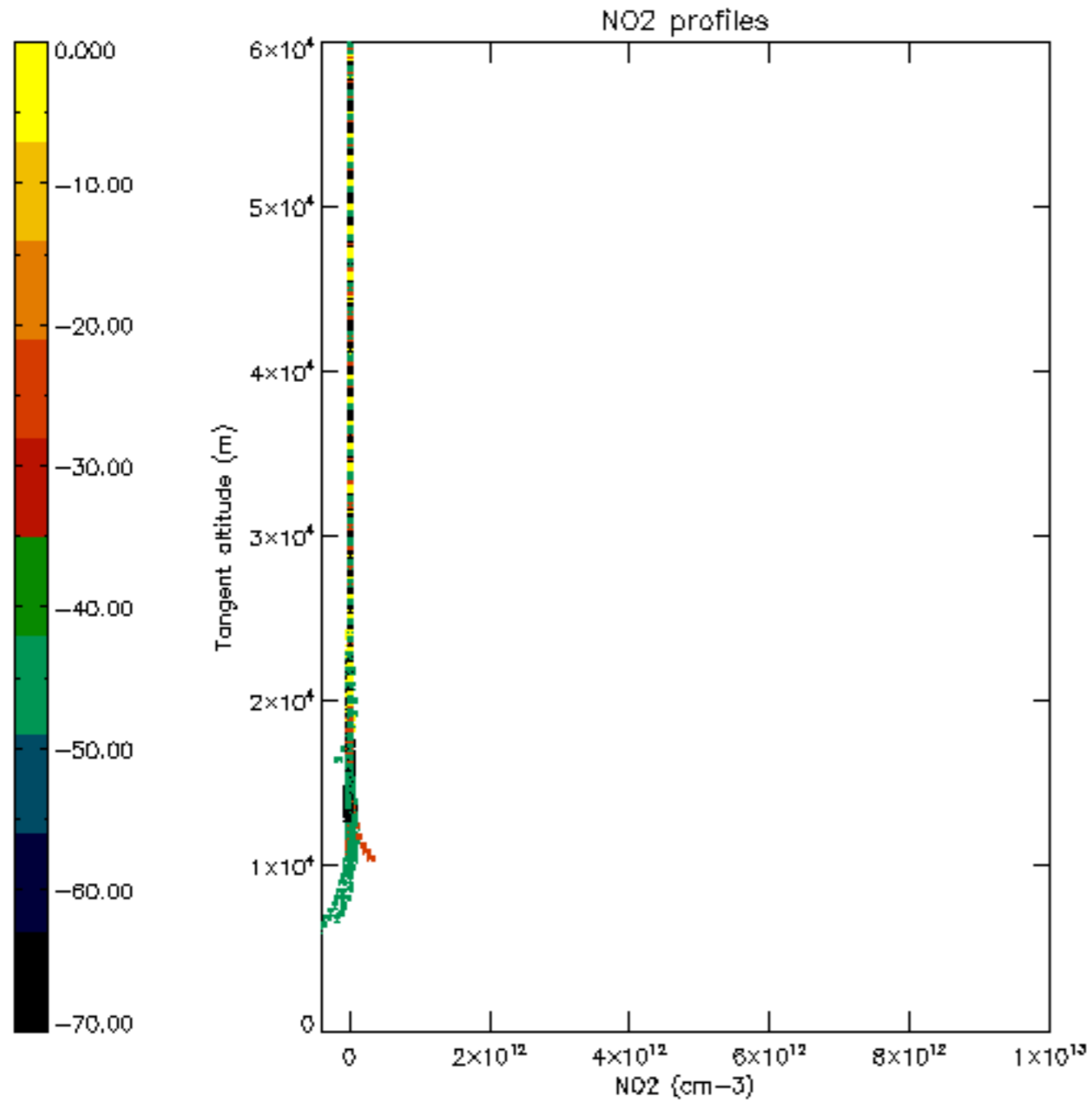


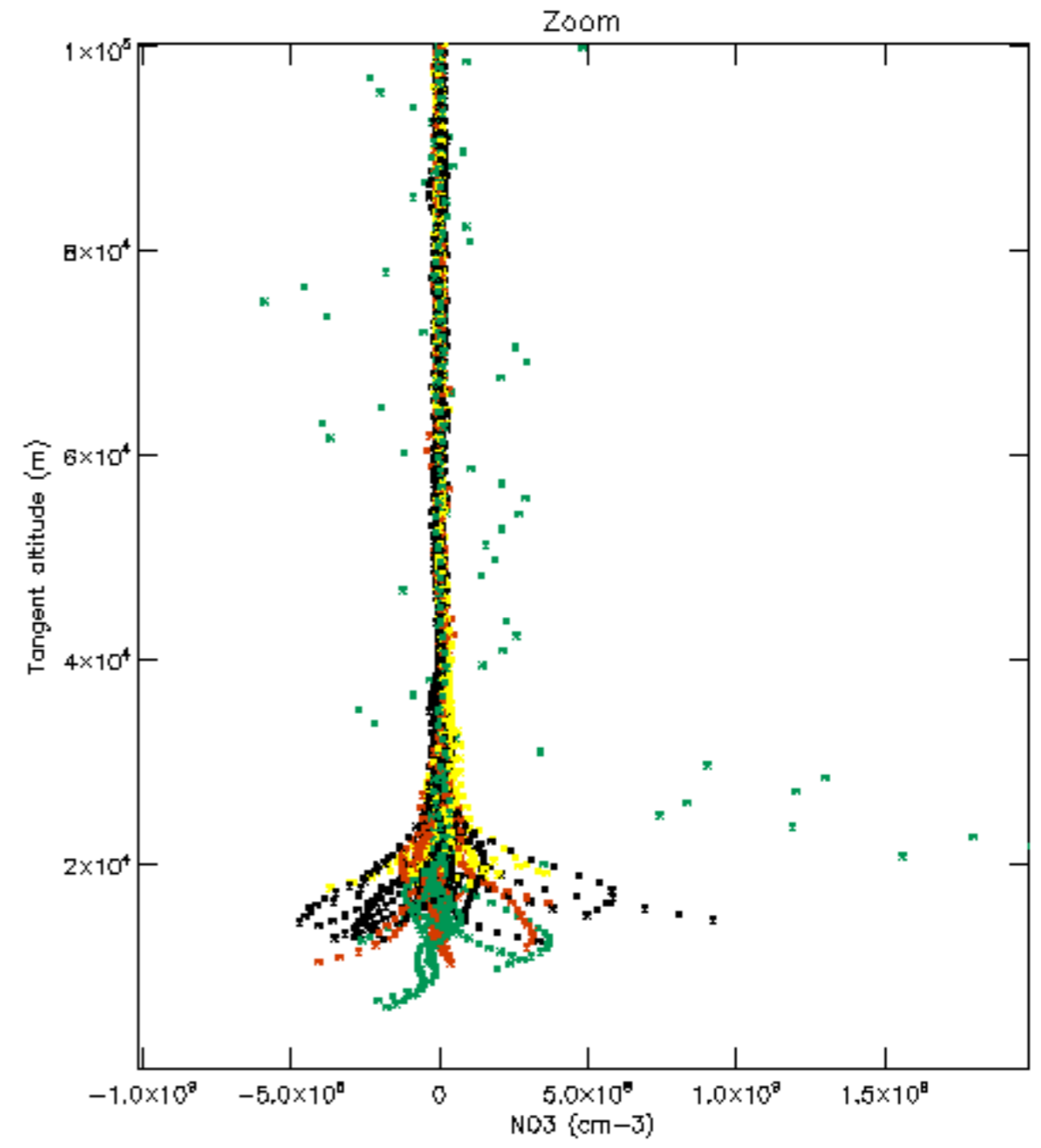
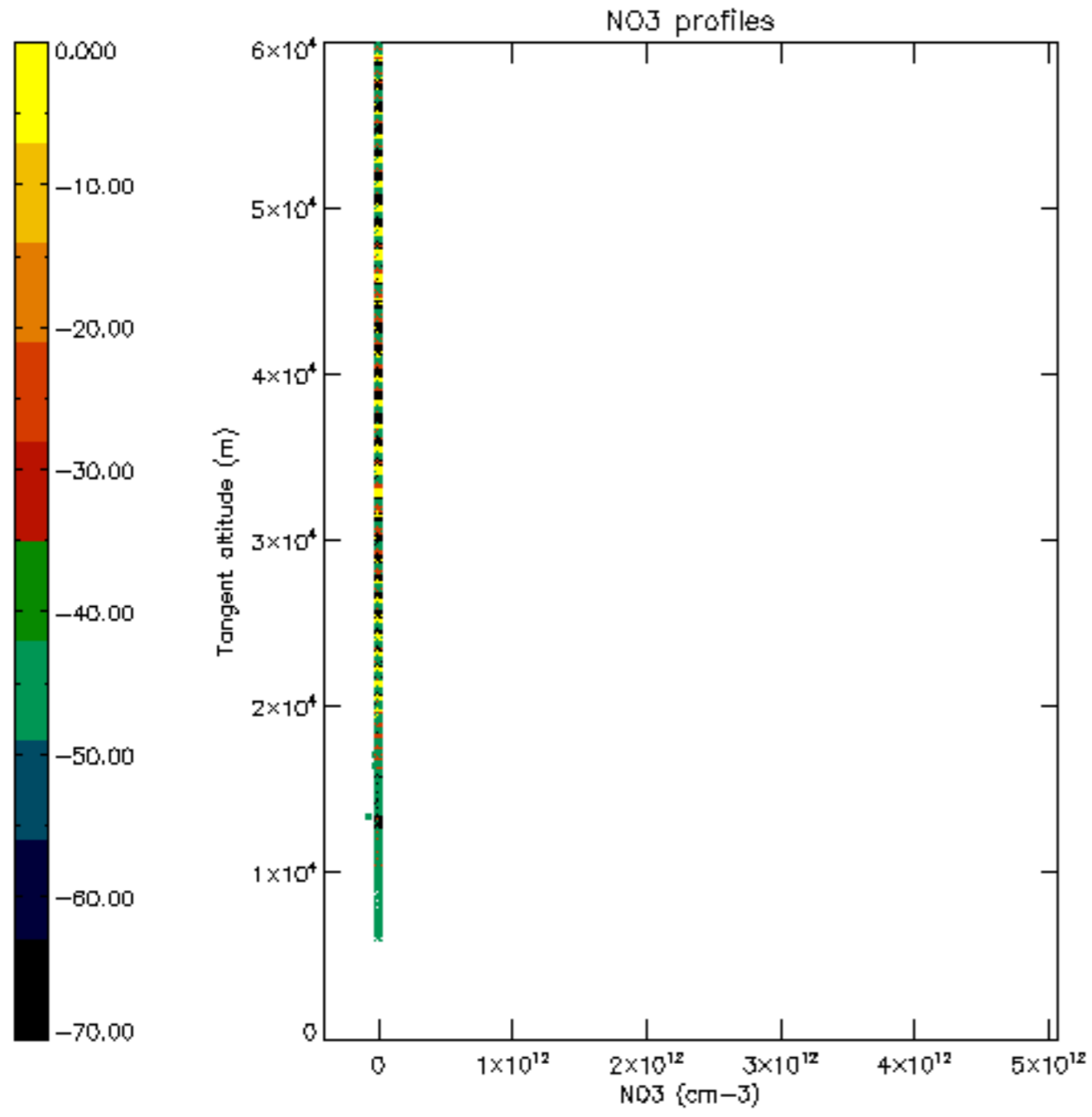


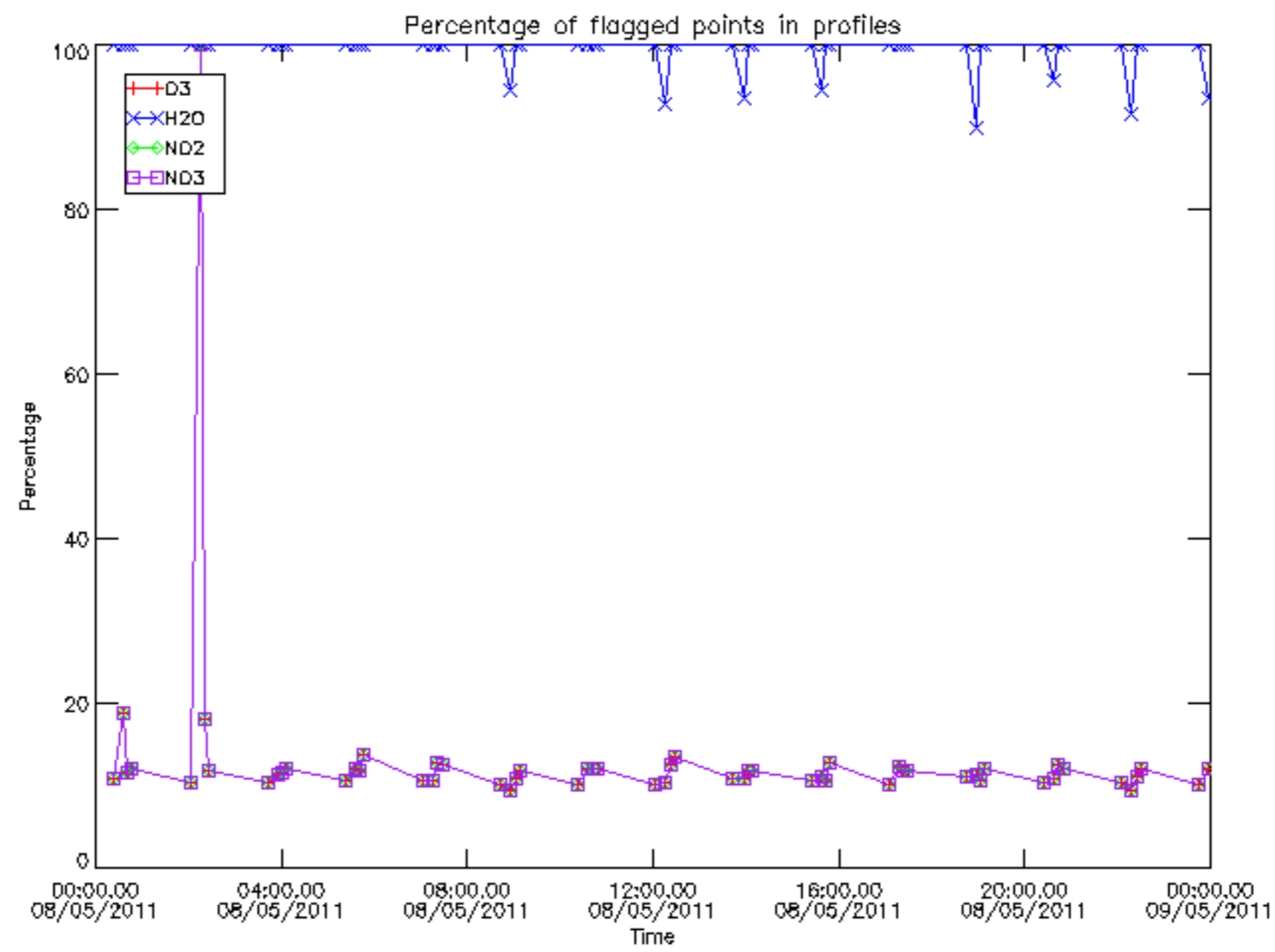




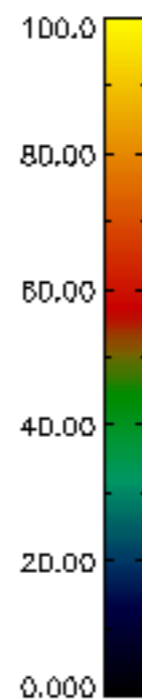
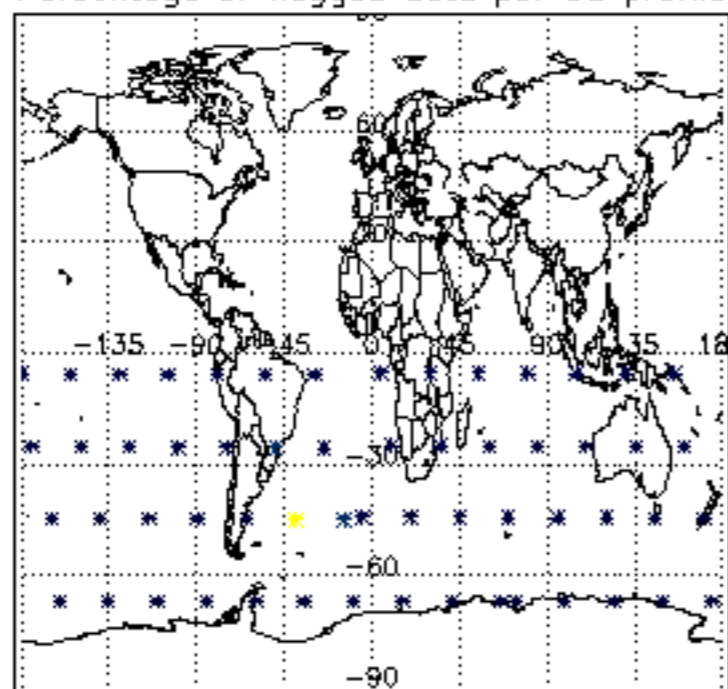




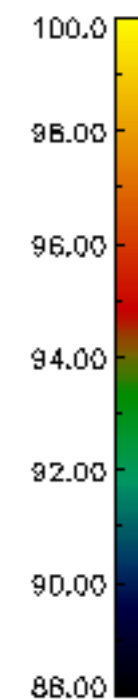
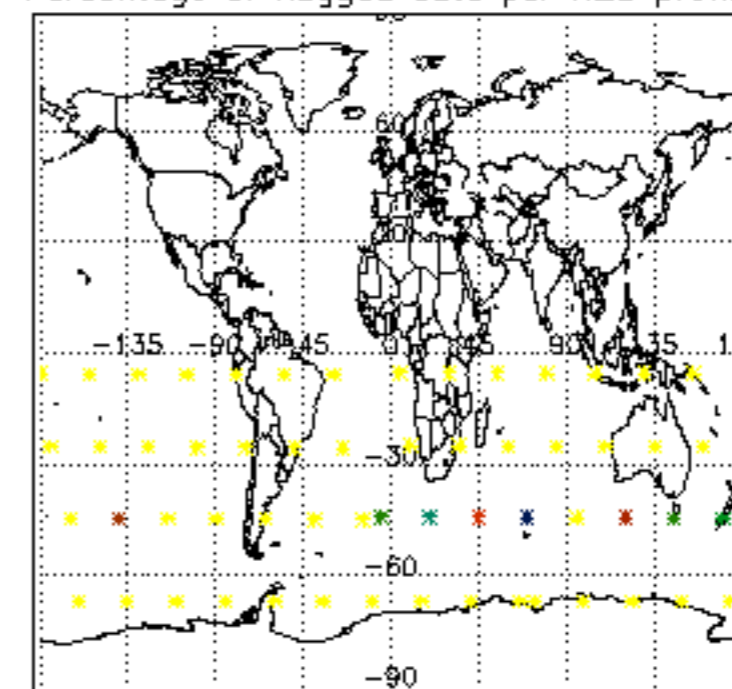




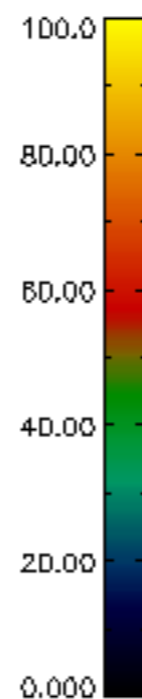
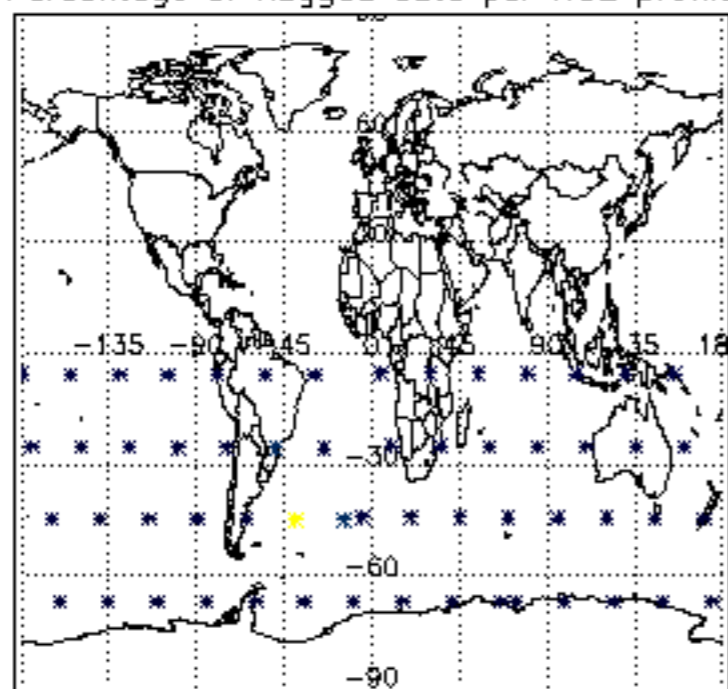
Percentage of flagged data per D3 profile



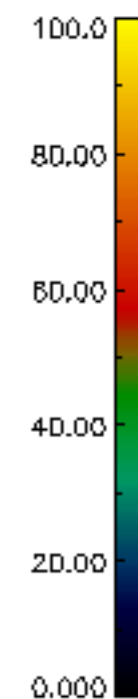
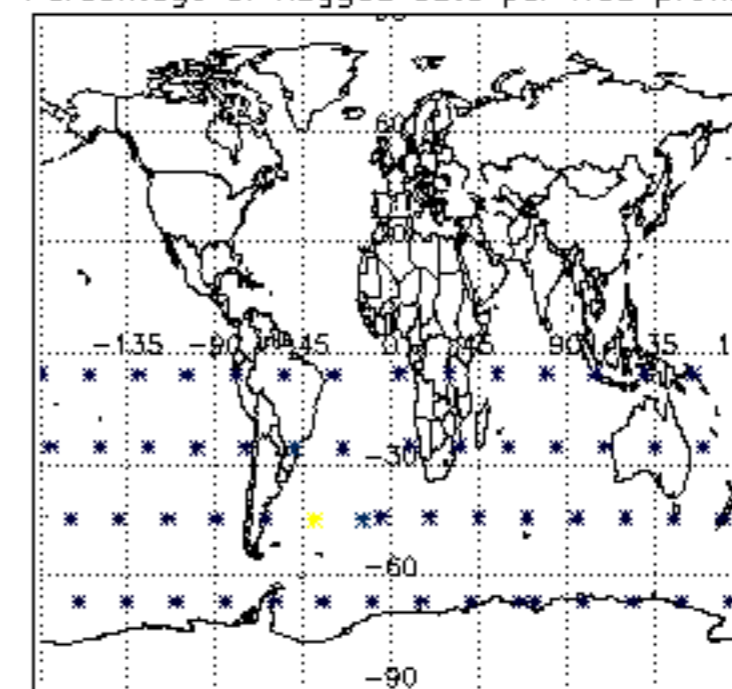
Percentage of flagged data per H2O profile

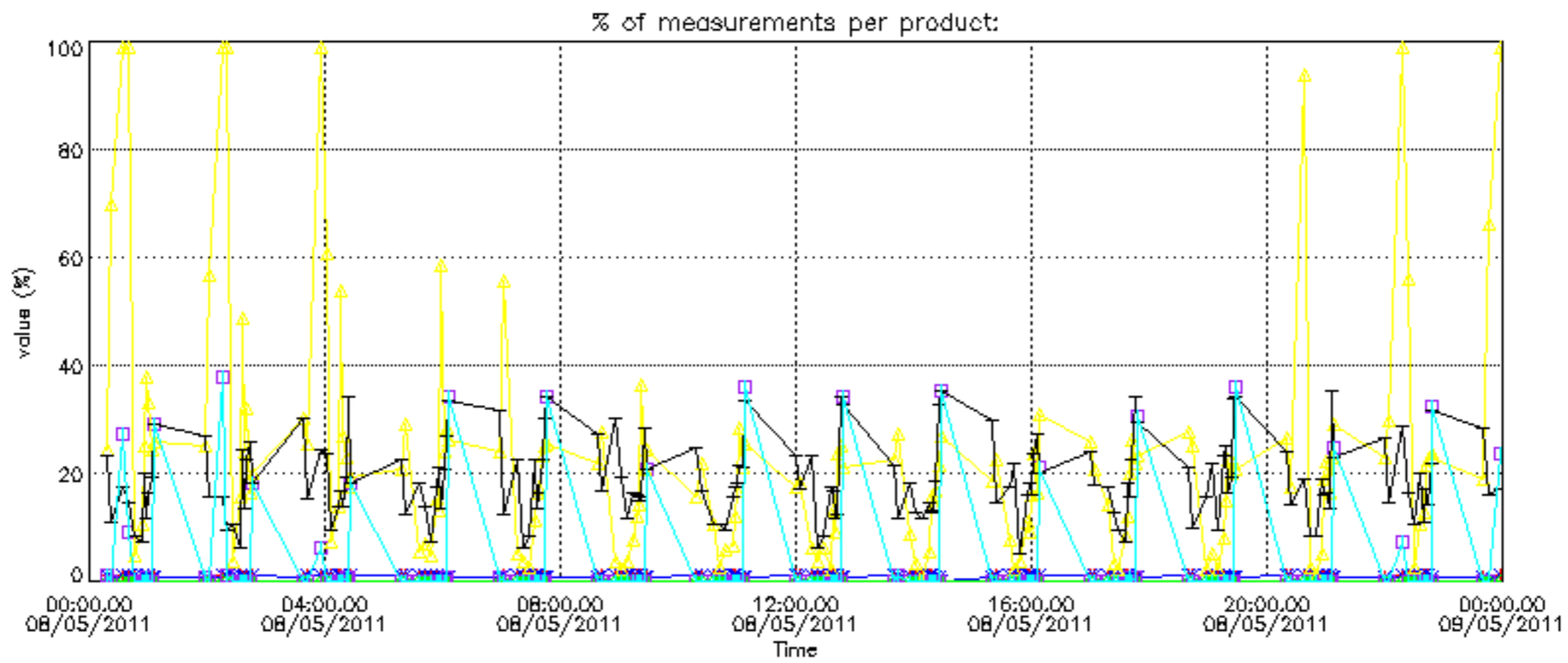


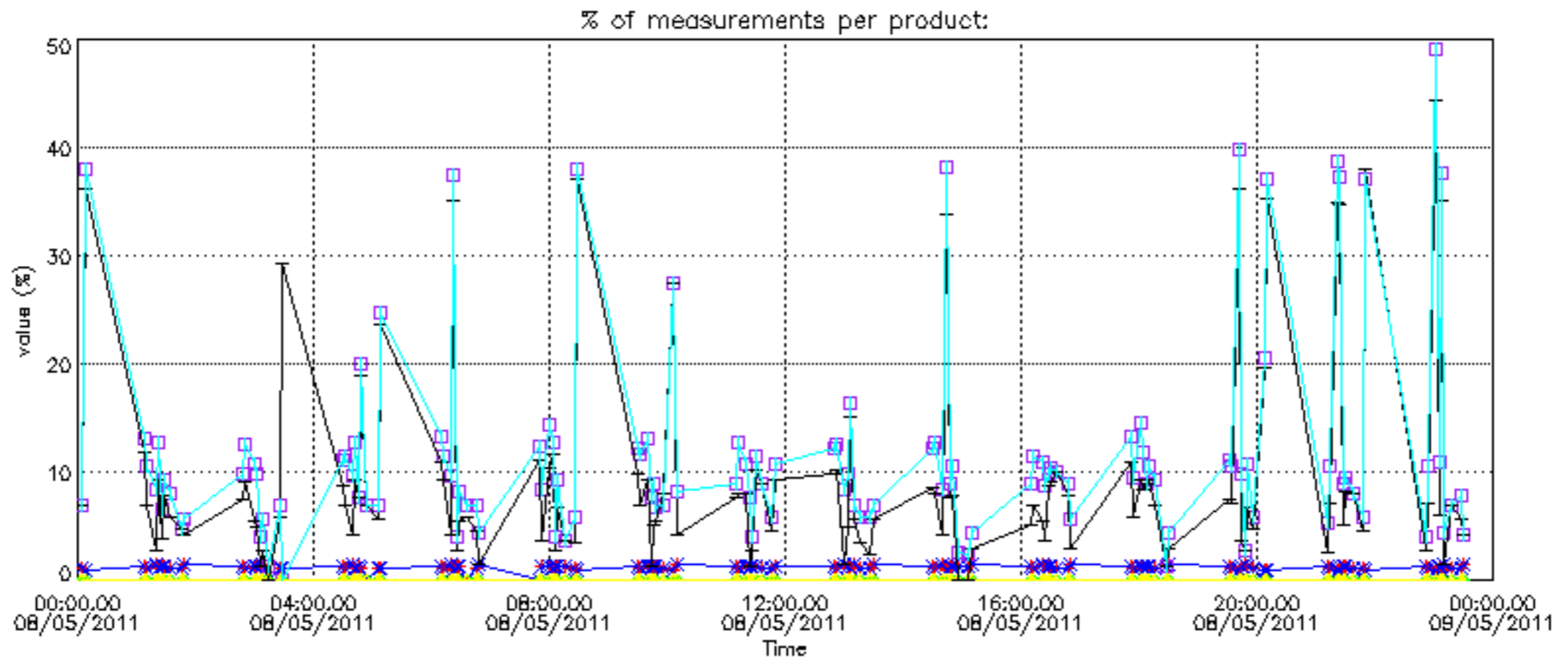
Percentage of flagged data per NO2 profile



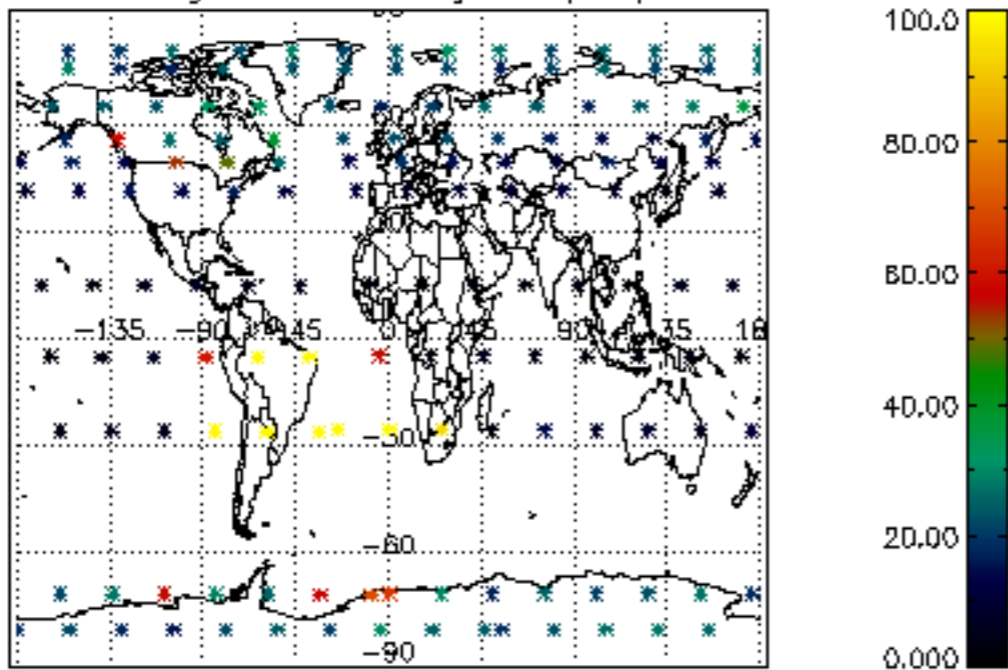
Percentage of flagged data per NO3 profile



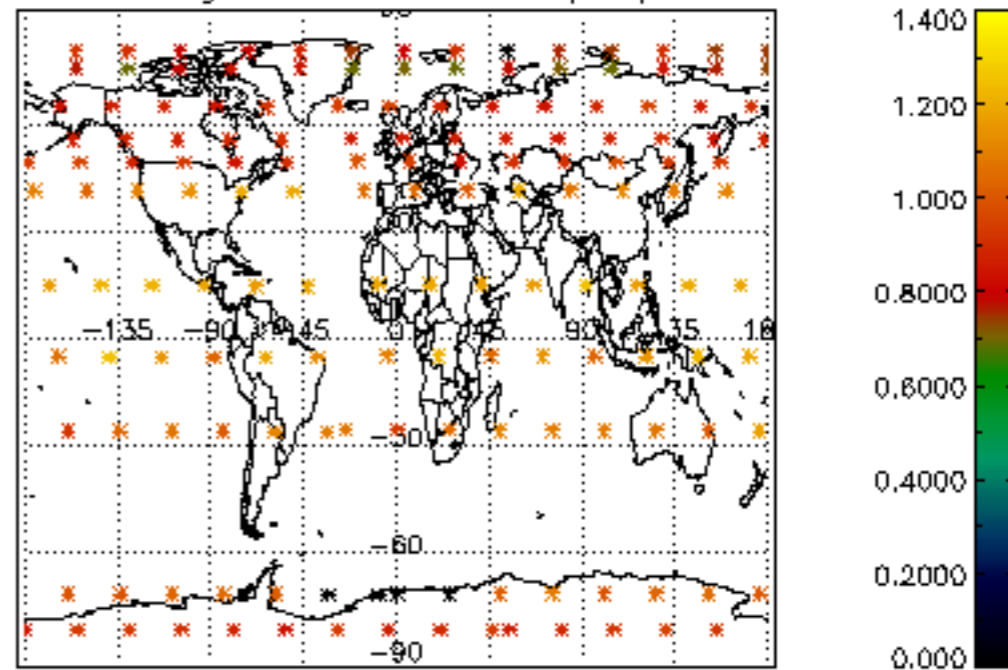




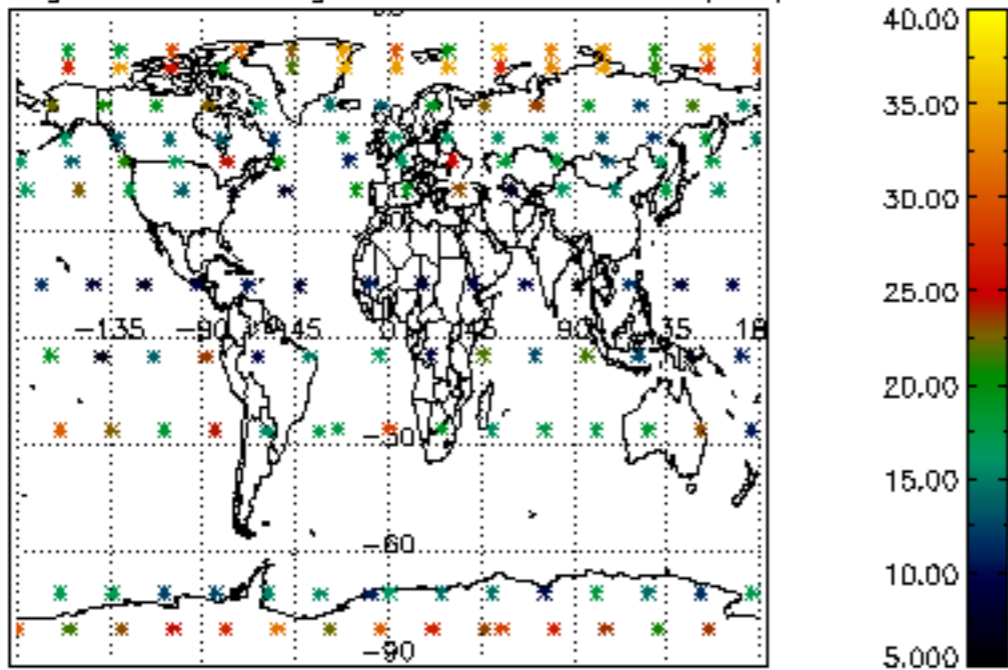
Percentage of cosmic ray hits per profile



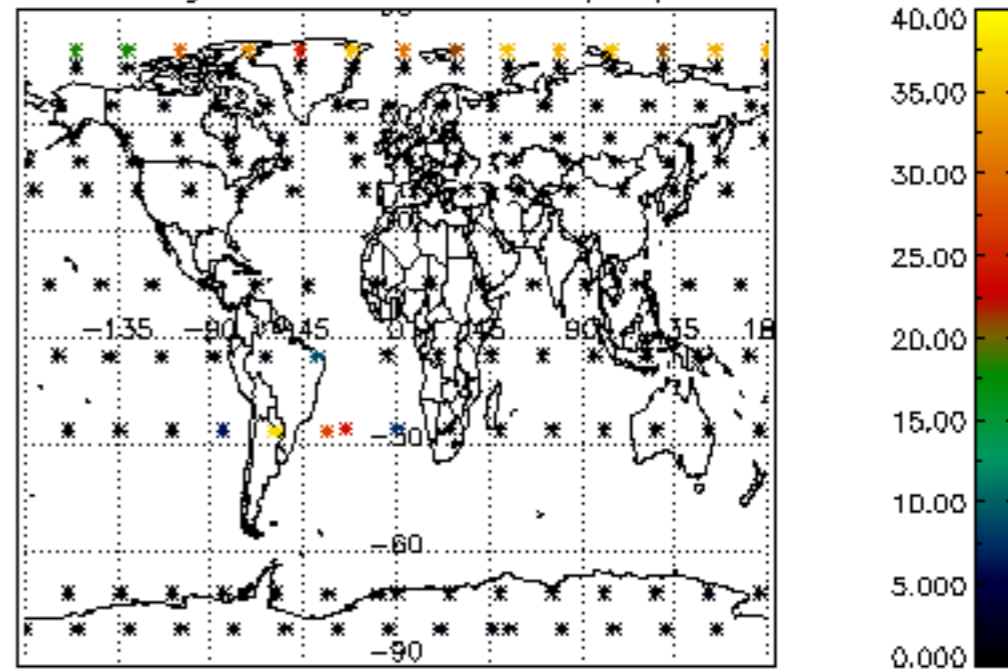
Percentage of datation errors per profile



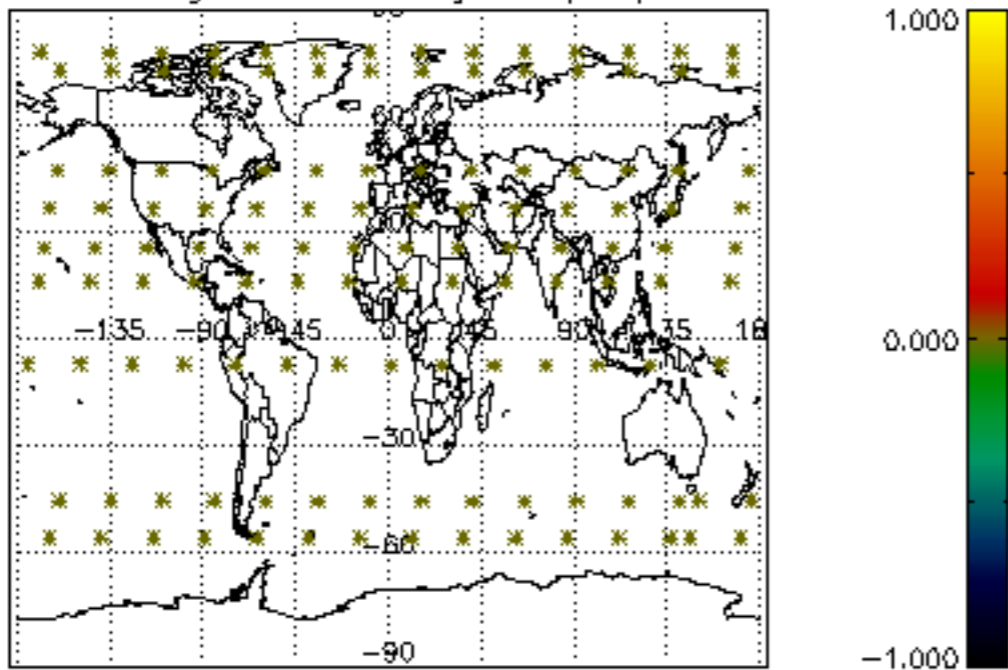
Percentage of star falling outside central band per profile



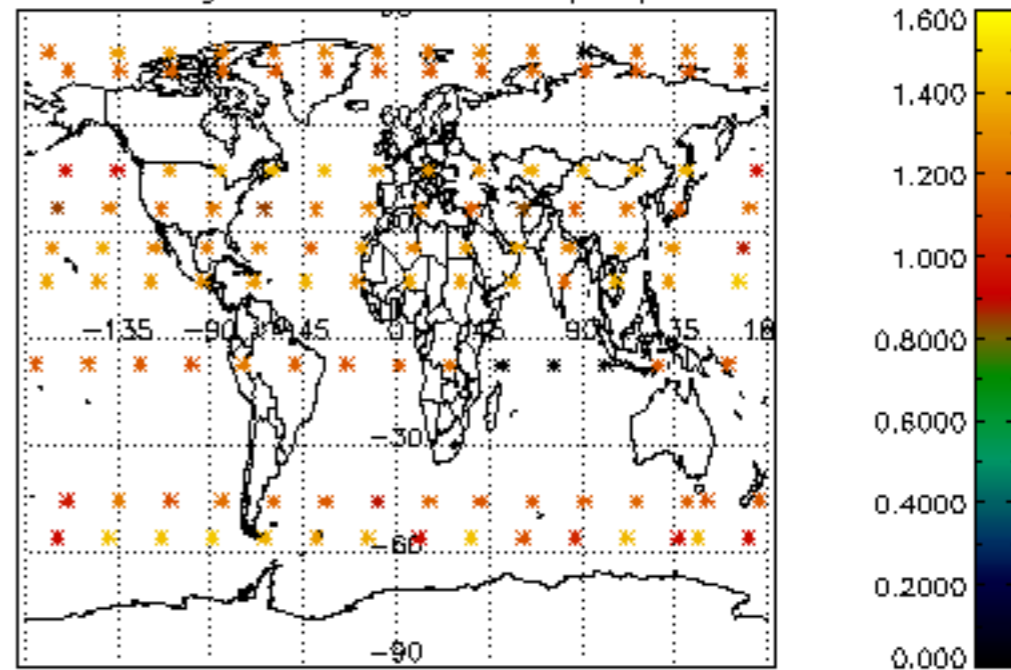
Percentage of saturation errors per profile



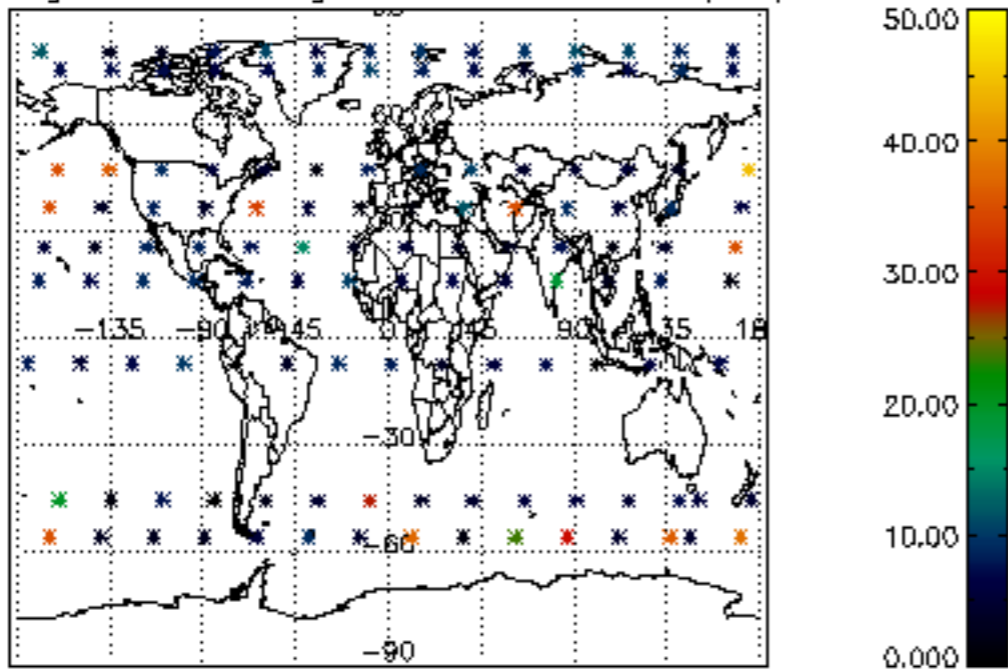
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

