

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	29APR2013 10:48:53
Data source version	GOMOS/6.01
Start time of products	15-05-2010 (15MAY2010 00:00:00)
Stop time of products	16-05-2010 (16MAY2010 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	284
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

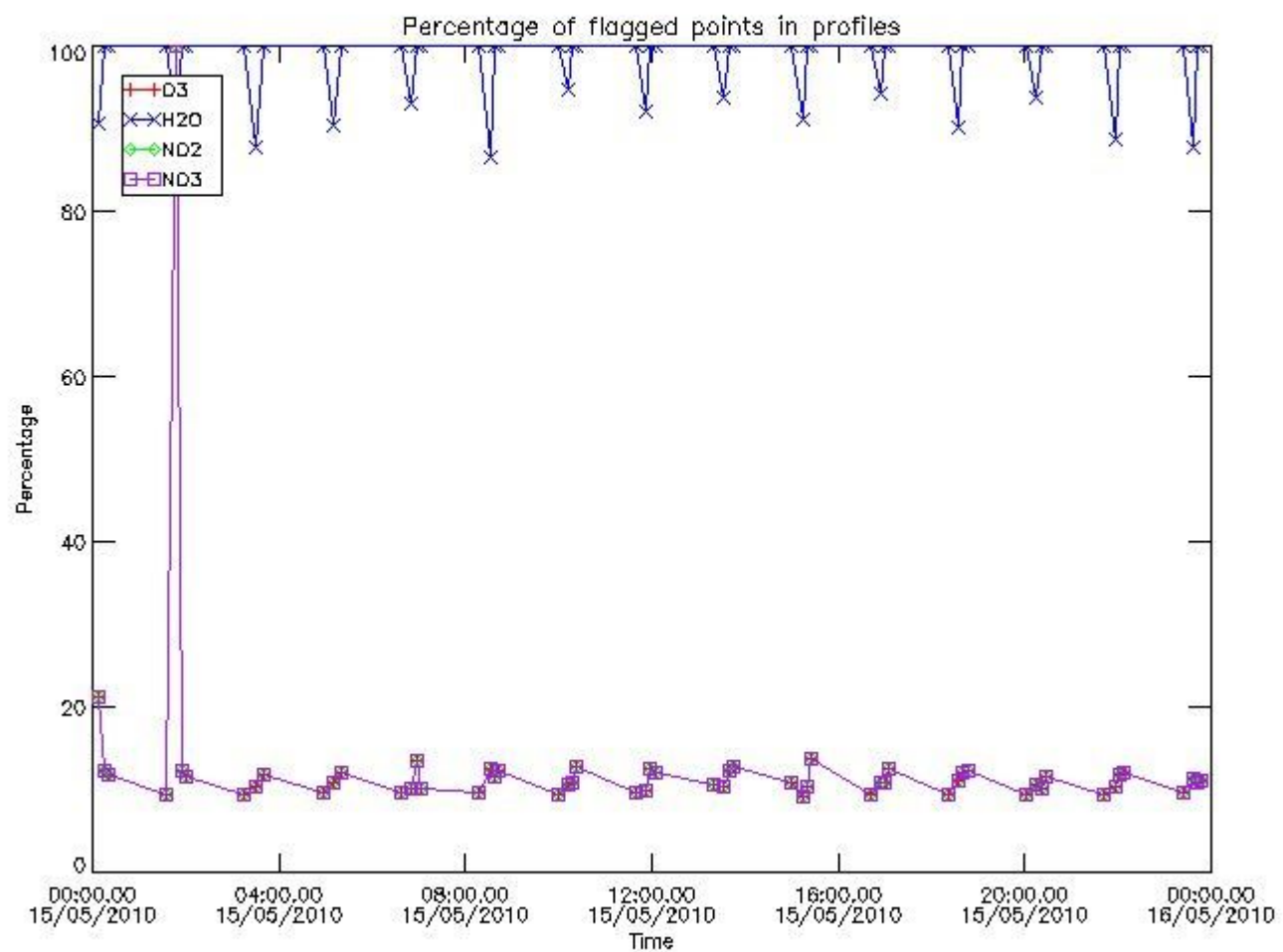
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20100515_000815_000000482089_00259_42898_9718.N1	15-MAY-2010 00:08:15	Dark	48.000	18	24Alp PsA	1.1660	9700.0	96	42898	No
2	GOM_NL__2PRFIN20100515_001406_000000422089_00259_42898_9719.N1	15-MAY-2010 00:14:06	Dark	41.500	31	Alp Gru	1.7340	15200.	83	42898	No
3	GOM_NL__2PRFIN20100515_001940_000000432089_00260_42899_9714.N1	15-MAY-2010 00:19:40	Dark	43.000	45	Alp Pav	1.9400	26000.	86	42899	No
4	GOM_NL__2PRFIN20100515_002655_000000442089_00260_42899_9715.N1	15-MAY-2010 00:26:55	Straylight	44.000	141	Bet Ara	2.8400	4600.0	88	42899	No
5	GOM_NL__2PRFIN20100515_002926_000000612089_00260_42899_9716.N1	15-MAY-2010 00:29:26	Straylight	60.500	40	The Sco	1.8590	7100.0	121	42899	No
6	GOM_NL__2PRFIN20100515_003118_000000552089_00260_42899_9717.N1	15-MAY-2010 00:31:18	Straylight	55.000	25	35Lam Sco	1.6200	28000.	110	42899	No
7	GOM_NL__2PRFIN20100515_003342_000000522089_00260_42899_9718.N1	15-MAY-2010 00:33:42	Twilight	52.000	75	26Eps Sco	2.2910	4250.0	104	42899	No
8	GOM_NL__2PRFIN20100515_003650_000000622089_00260_42899_9719.N1	15-MAY-2010 00:36:50	Twilight	61.500	16	21Alp Sco	1.0200	3000.0	123	42899	No
9	GOM_NL__2PRFIN20100515_003929_000000452089_00260_42899_9720.N1	15-MAY-2010 00:39:29	Bright	44.500	97	8Bet1Sco	2.5610	30000.	89	42899	No
10	GOM_NL__2PRFIN20100515_004311_000000402089_00260_42899_9721.N1	15-MAY-2010 00:43:11	Bright	40.000	104	27Bet Lib	2.6140	13100.	80	42899	No
11	GOM_NL__2PRFIN20100515_004525_000000532089_00260_42899_9722.N1	15-MAY-2010 00:45:25	Bright	52.500	120	1Del Oph	2.7340	3200.0	105	42899	No
12	GOM_NL__2PRFIN20100515_004837_000000452089_00260_42899_9723.N1	15-MAY-2010 00:48:37	Bright	45.000	102	24Alp Ser	2.6000	4250.0	90	42899	No
13	GOM_NL__2PRFIN20100515_005411_000000382089_00260_42899_9724.N1	15-MAY-2010 00:54:11	Bright	37.500	83		2.3780	11000.	75	42899	No
14	GOM_NL__2PRFIN20100515_005719_000000382089_00260_42899_9725.N1	15-MAY-2010 00:57:19	Bright	38.000	180	27Gam Boo	3.0400	8000.0	76	42899	No
15	GOM_NL__2PRFIN20100515_010605_000000612089_00260_42899_9726.N1	15-MAY-2010 01:06:05	Bright	61.000	119	14Eta Dra	2.7270	4700.0	122	42899	No
16	GOM_NL__2PRFIN20100515_011701_000000432089_00260_42899_9727.N1	15-MAY-2010 01:17:01	Bright	43.000	89	5Alp Cep	2.4510	8000.0	86	42899	No
17	GOM_NL__2PRFIN20100515_012028_000000552089_00260_42899_9728.N1	15-MAY-2010 01:20:28	Bright	55.000	74	11Bet Cas	2.2680	6600.0	110	42899	No
18	GOM_NL__2PRFIN20100515_013041_000000582089_00260_42899_9729.N1	15-MAY-2010 01:30:41	Twilight	58.000	93	53Bet Peg	2.5200	3100.0	116	42899	No
19	GOM_NL__2PRFIN20100515_013344_000000422089_00260_42899_9730.N1	15-MAY-2010 01:33:44	Twilight	41.500	140	88Gam Peg	2.8340	26000.	83	42899	No
20	GOM_NL__2PRFIN20100515_013519_000000542089_00260_42899_9731.N1	15-MAY-2010 01:35:19	Dark	54.000	90	54Alp Peg	2.4870	11000.	108	42899	No
21	GOM_NL__2PRFIN20100515_014852_000000572089_00260_42899_9732.N1	15-MAY-2010 01:48:52	Dark	57.000	18	24Alp PsA	1.1660	9700.0	114	42899	No
22	GOM_NL__2PRFIN20100515_015442_000000422089_00260_42899_9733.N1	15-MAY-2010 01:54:42	Dark	41.500	31	Alp Gru	1.7340	15200.	83	42899	No
23	GOM_NL__2PRFIN20100515_020016_000000442089_00261_42900_9722.N1	15-MAY-2010 02:00:16	Dark	44.000	45	Alp Pav	1.9400	26000.	88	42900	No
24	GOM_NL__2PRFIN20100515_020731_000000482089_00261_42900_9723.N1	15-MAY-2010 02:07:31	Straylight	48.000	141	Bet Ara	2.8400	4600.0	96	42900	No
25	GOM_NL__2PRFIN20100515_021002_000000502089_00261_42900_9724.N1	15-MAY-2010 02:10:02	Straylight	50.000	40	The Sco	1.8590	7100.0	100	42900	No
26	GOM_NL__2PRFIN20100515_021154_000000552089_00261_42900_9725.N1	15-MAY-2010 02:11:54	Straylight	54.500	25	35Lam Sco	1.6200	28000.	109	42900	No
27	GOM_NL__2PRFIN20100515_021418_000000522089_00261_42900_9726.N1	15-MAY-2010 02:14:18	Twilight	52.000	75	26Eps Sco	2.2910	4250.0	104	42900	No
28	GOM_NL__2PRFIN20100515_021726_000000582089_00261_42900_9727.N1	15-MAY-2010 02:17:26	Twilight	57.500	16	21Alp Sco	1.0200	3000.0	115	42900	No
29	GOM_NL__2PRFIN20100515_022005_000000492089_00261_42900_9728.N1	15-MAY-2010 02:20:05	Bright	49.000	97	8Bet1Sco	2.5610	30000.	98	42900	No
30	GOM_NL__2PRFIN20100515_022348_000000412089_00261_42900_9729.N1	15-MAY-2010 02:23:48	Bright	40.500	104	27Bet Lib	2.6140	13100.	81	42900	No
31	GOM_NL__2PRFIN20100515_022601_000000512089_00261_42900_9730.N1	15-MAY-2010 02:26:01	Bright	51.000	120	1Del Oph	2.7340	3200.0	102	42900	No
32	GOM_NL__2PRFIN20100515_022913_000000452089_00261_42900_9731.N1	15-MAY-2010 02:29:13	Bright	45.000	102	24Alp Ser	2.6000	4250.0	90	42900	No
33	GOM_NL__2PRFIN20100515_023446_000000432089_00261_42900_9732.N1	15-MAY-2010 02:34:46	Bright	42.500	83		2.3780	11000.	85	42900	No
34	GOM_NL__2PRFIN20100515_023754_000000382089_00261_42900_9733.N1	15-MAY-2010 02:37:54	Bright	37.500	180	27Gam Boo	3.0400	8000.0	75	42900	No
35	GOM_NL__2PRFIN20100515_024640_000000422089_00261_42900_9734.N1	15-MAY-2010 02:46:40	Bright	42.000	119	14Eta Dra	2.7270	4700.0	84	42900	No
36	GOM_NL__2PRFIN20100515_025736_000000452089_00261_42900_9735.N1	15-MAY-2010 02:57:36	Bright	45.000	89	5Alp Cep	2.4510	8000.0	90	42900	No
37	GOM_NL__2PRFIN20100515_030103_000000522089_00261_42900_9736.N1	15-MAY-2010 03:01:03	Bright	51.500	74	11Bet Cas	2.2680	6600.0	103	42900	No
38	GOM_NL__2PRFIN20100515_031117_000000652089_00261_42900_9737.N1	15-MAY-2010 03:11:17	Twilight	64.500	93	53Bet Peg	2.5200	3100.0	129	42900	No
39	GOM_NL__2PRFIN20100515_031421_000000432089_00261_42900_9738.N1	15-MAY-2010 03:14:21	Twilight	42.500	140	88Gam Peg	2.8340	26000.	85	42900	No
40	GOM_NL__2PRFIN20100515_031555_000000542089_00261_42900_9739.N1	15-MAY-2010 03:15:55	Dark	54.000	90	54Alp Peg	2.4870	11000.	108	42900	No
41	GOM_NL__2PRFIN20100515_032928_000000502089_00261_42900_9740.N1	15-MAY-2010 03:29:28	Dark	49.500	18	24Alp PsA	1.1660	9700.0	99	42900	No
42	GOM_NL__2PRFIN20100515_034053_000000432089_00262_42901_9730.N1	15-MAY-2010 03:40:53	Dark	43.000	45	Alp Pav	1.9400	26000.	86	42901	No

279	GOM_NL__2PRFIN20100515_233649_000000492089_00273_42912_9921.N1	15-MAY-2010 23:36:49	Dark	49.000	18	24Alp PsA	1.1660	9700.0	98	42912	No
280	GOM_NL__2PRFIN20100515_234239_000000482089_00273_42912_9922.N1	15-MAY-2010 23:42:39	Dark	47.500	31	Alp Gru	1.7340	15200.	95	42912	No
281	GOM_NL__2PRFIN20100515_234813_000000512089_00274_42913_9916.N1	15-MAY-2010 23:48:13	Dark	51.000	45	Alp Pav	1.9400	26000.	102	42913	No
282	GOM_NL__2PRFIN20100515_235525_000000442089_00274_42913_9917.N1	15-MAY-2010 23:55:25	Straylight	43.500	141	Bet Ara	2.8400	4600.0	87	42913	No
283	GOM_NL__2PRFIN20100515_235820_000000302089_00274_42913_9918.N1	15-MAY-2010 23:58:20	Straylight	30.000	38	20Eps Sgr	1.8360	11000.	60	42913	No
284	GOM_NL__2PRFIN20100515_235950_000000542089_00274_42913_9919.N1	15-MAY-2010 23:59:50	Straylight	54.000	25	35Lam Sco	1.6200	28000.	108	42913	No

3. Quality information per product

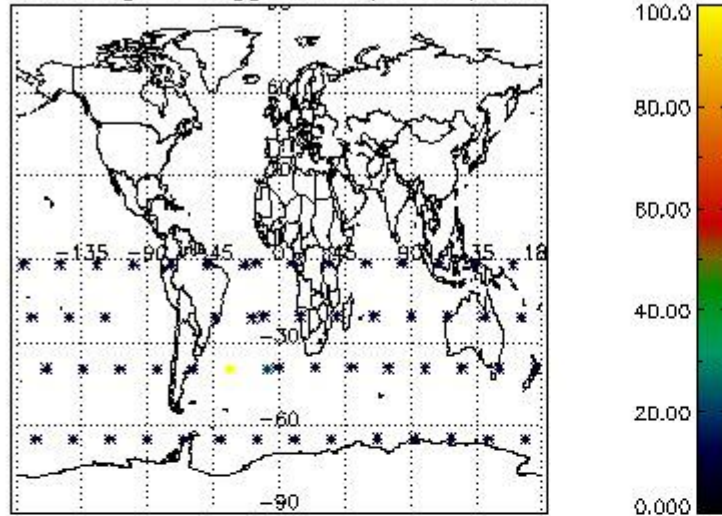
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

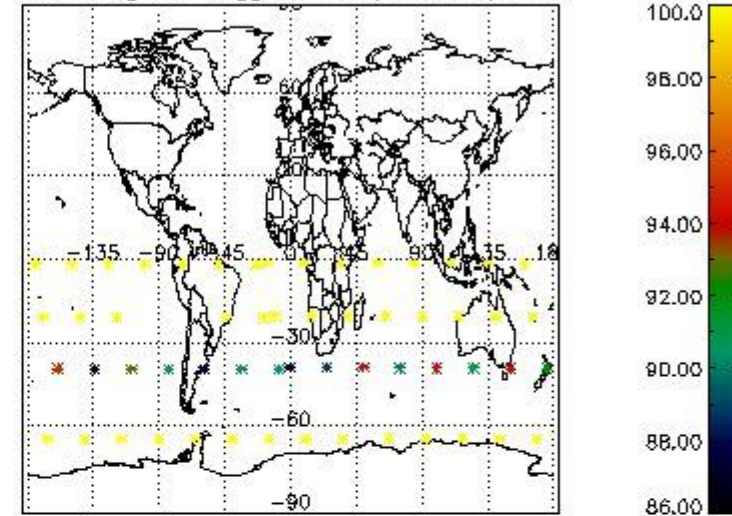


3.2 Plot quality information per product (world map)

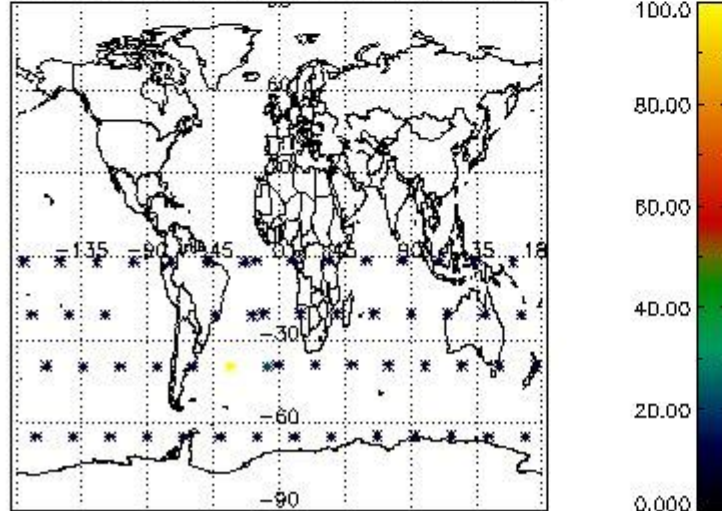
Percentage of flagged data per O3 profile



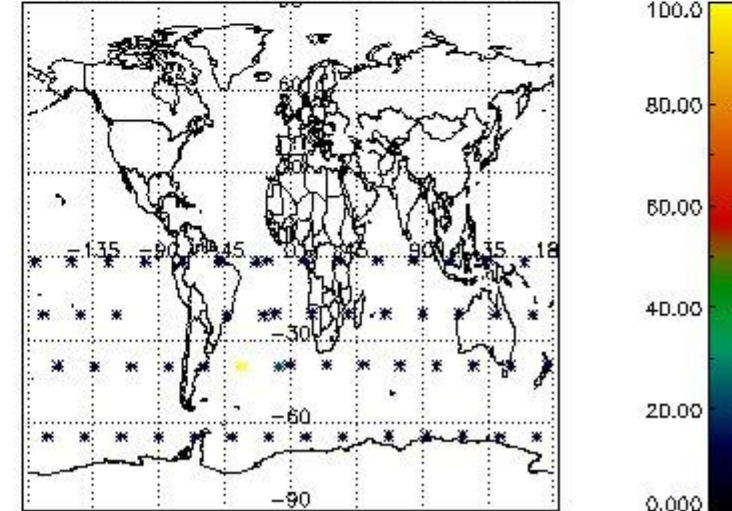
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

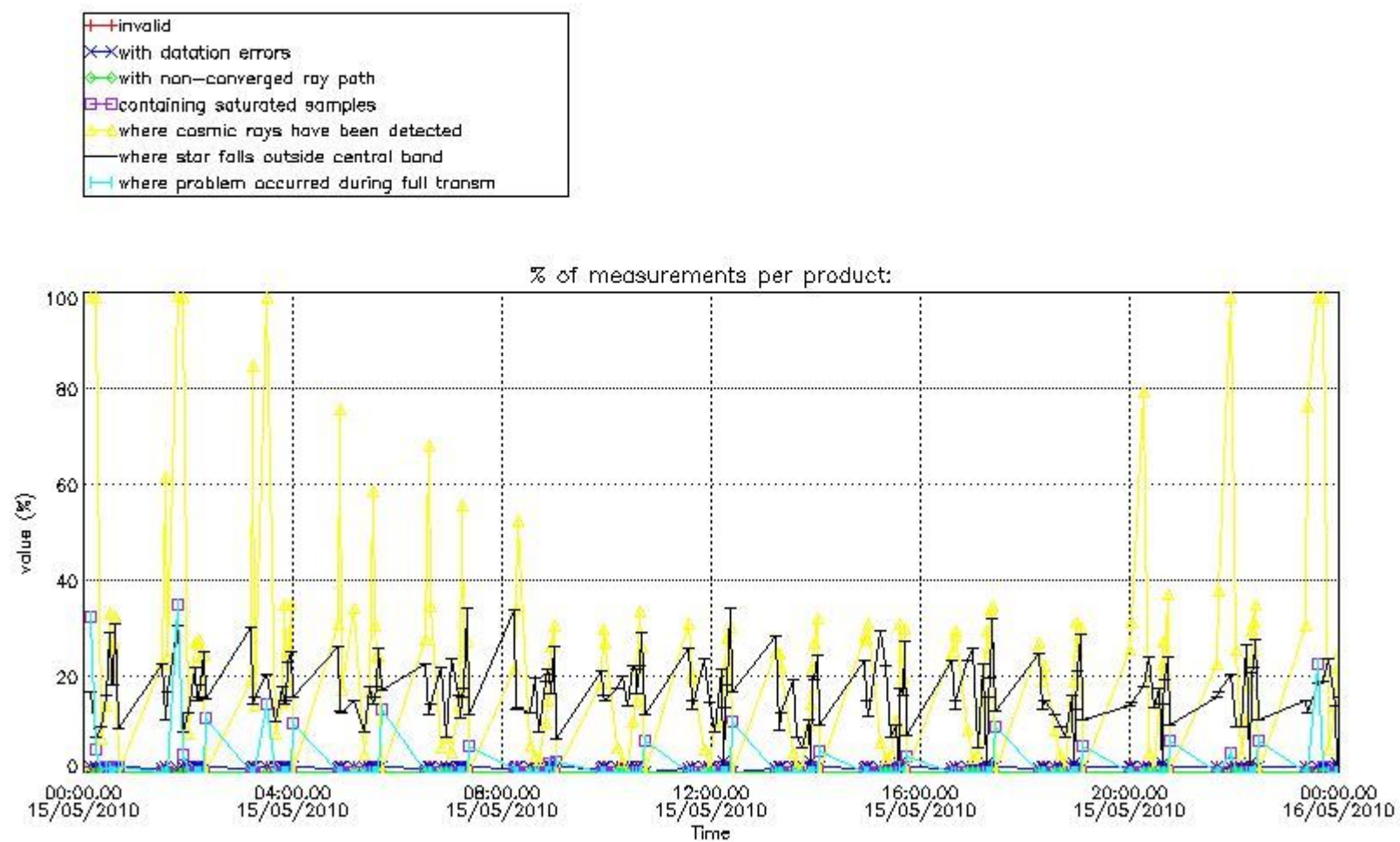


4. Level 1 quality information per product

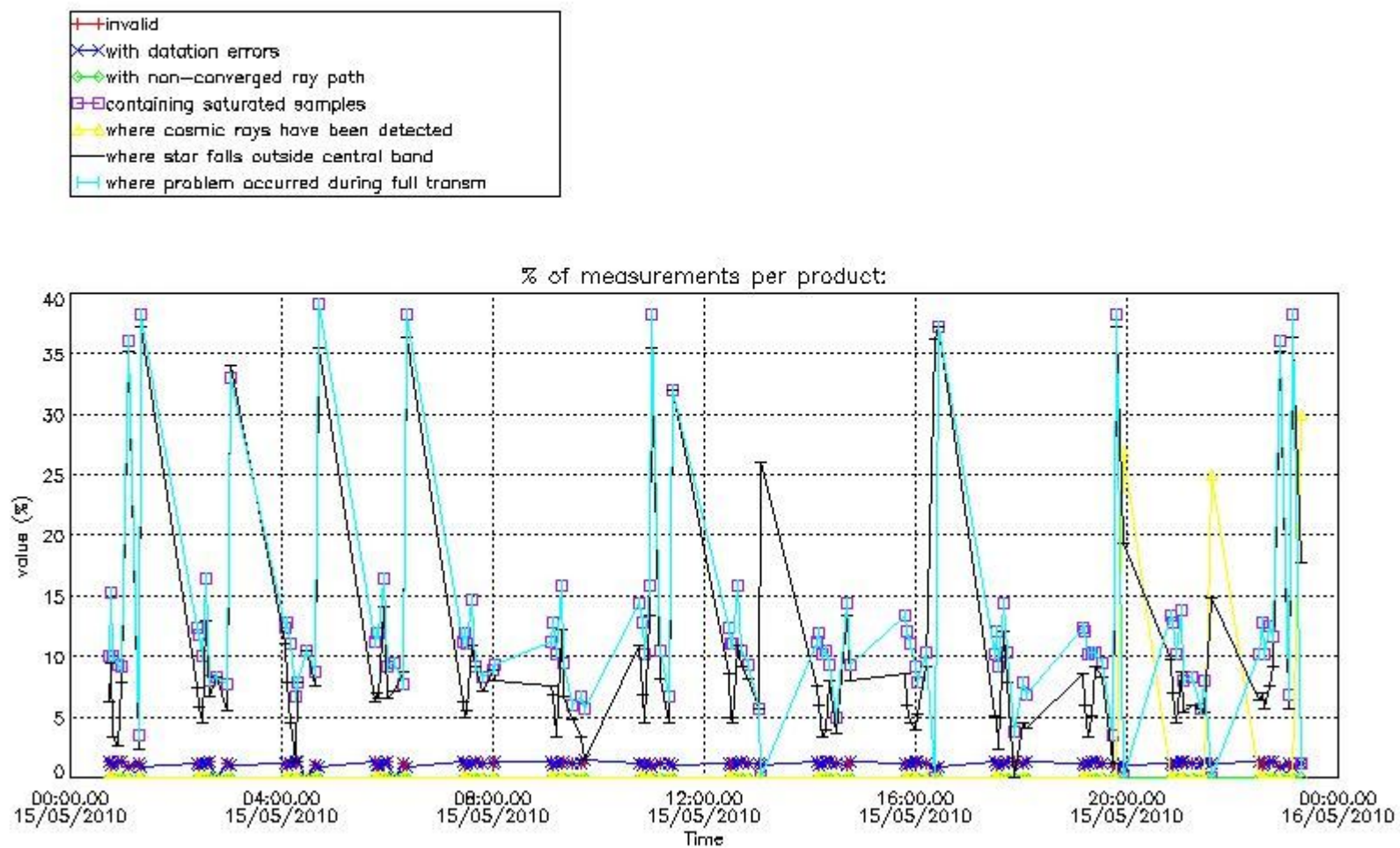
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

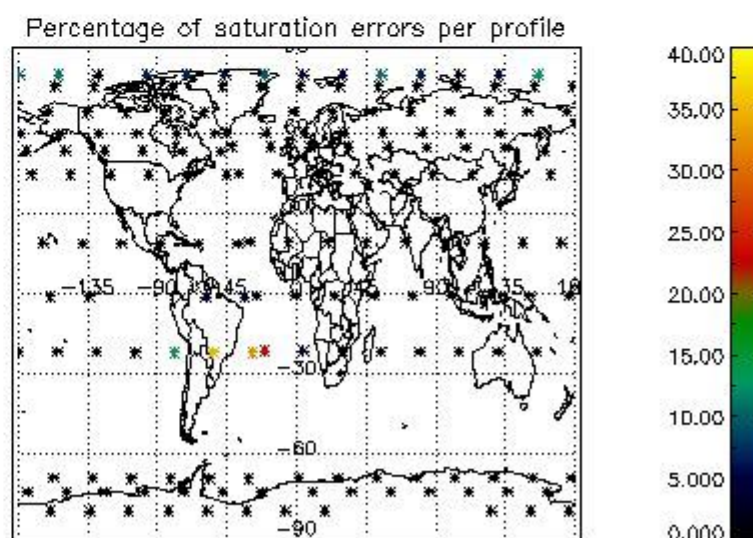
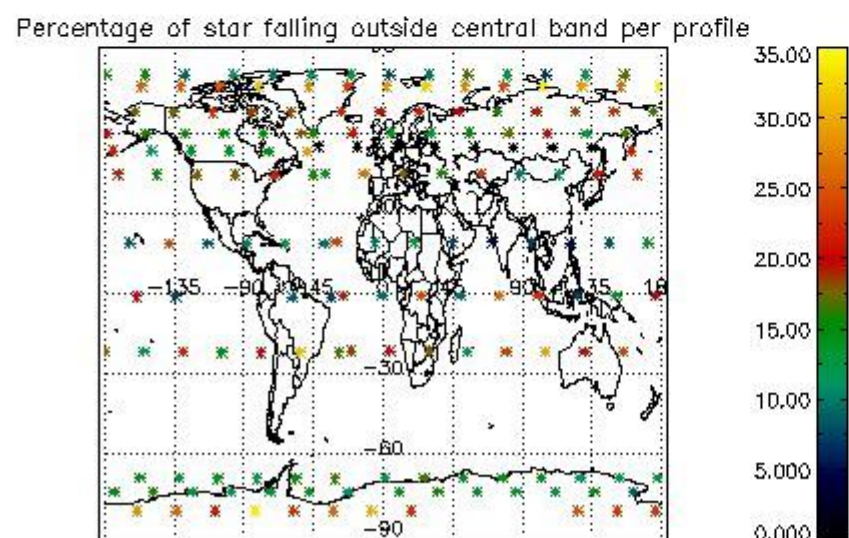
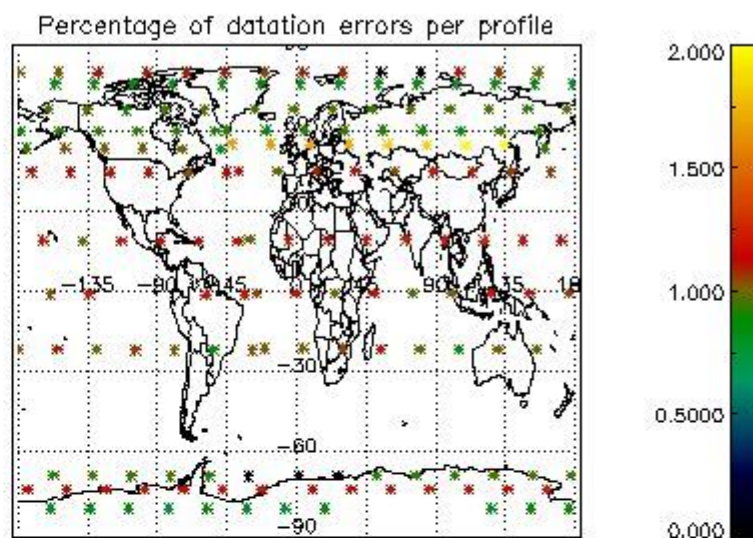
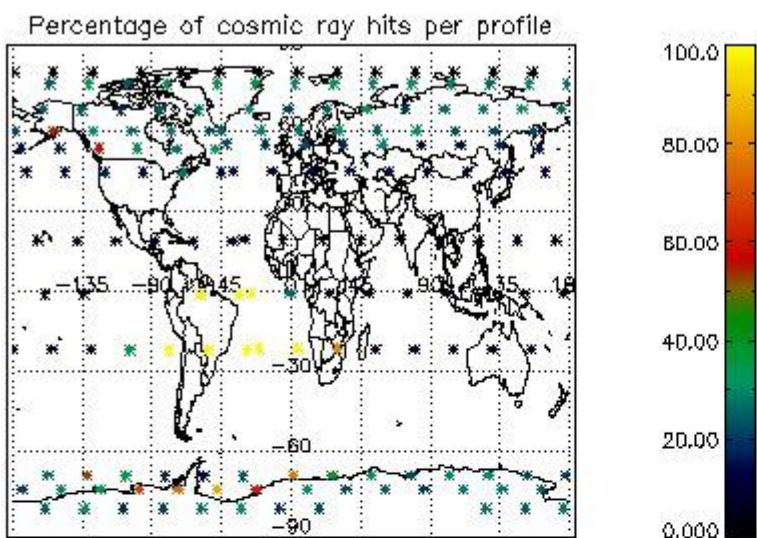


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

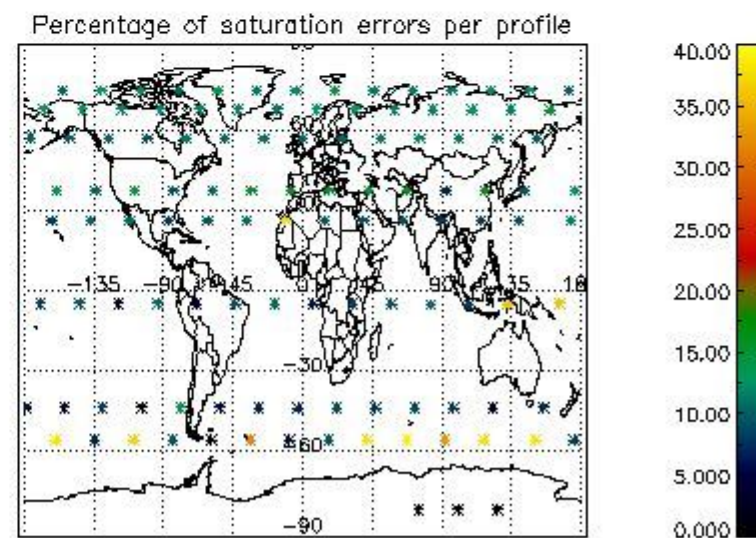
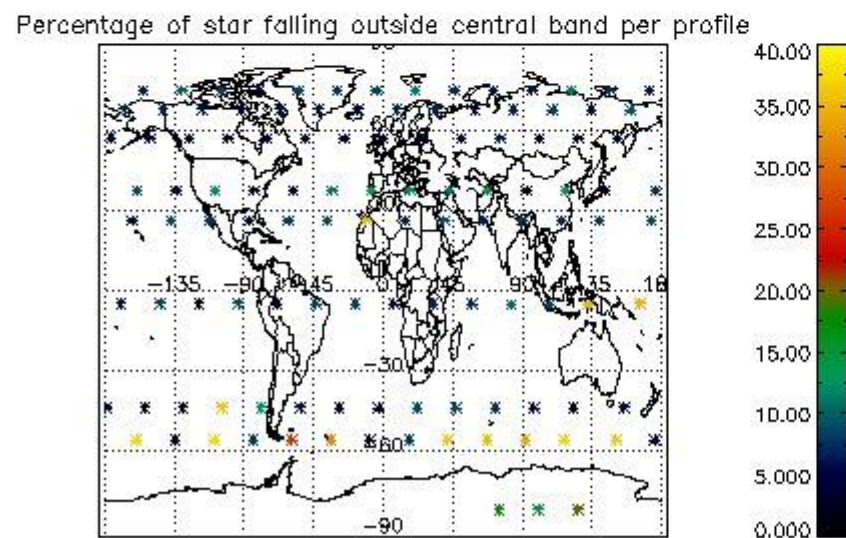
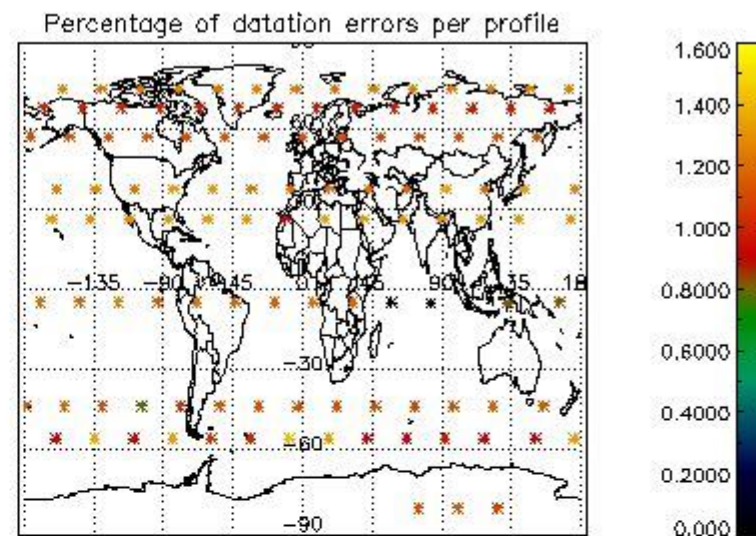
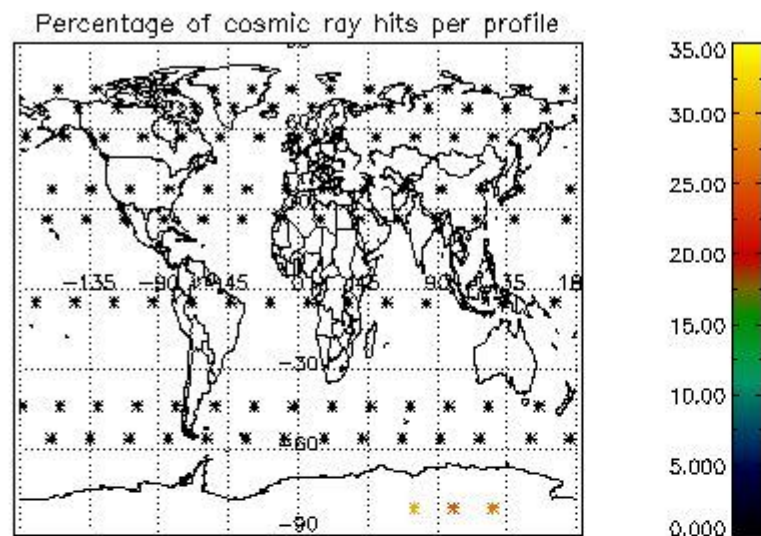


4.2 Plot quality information per product coming from level 1b processing (world map)

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



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

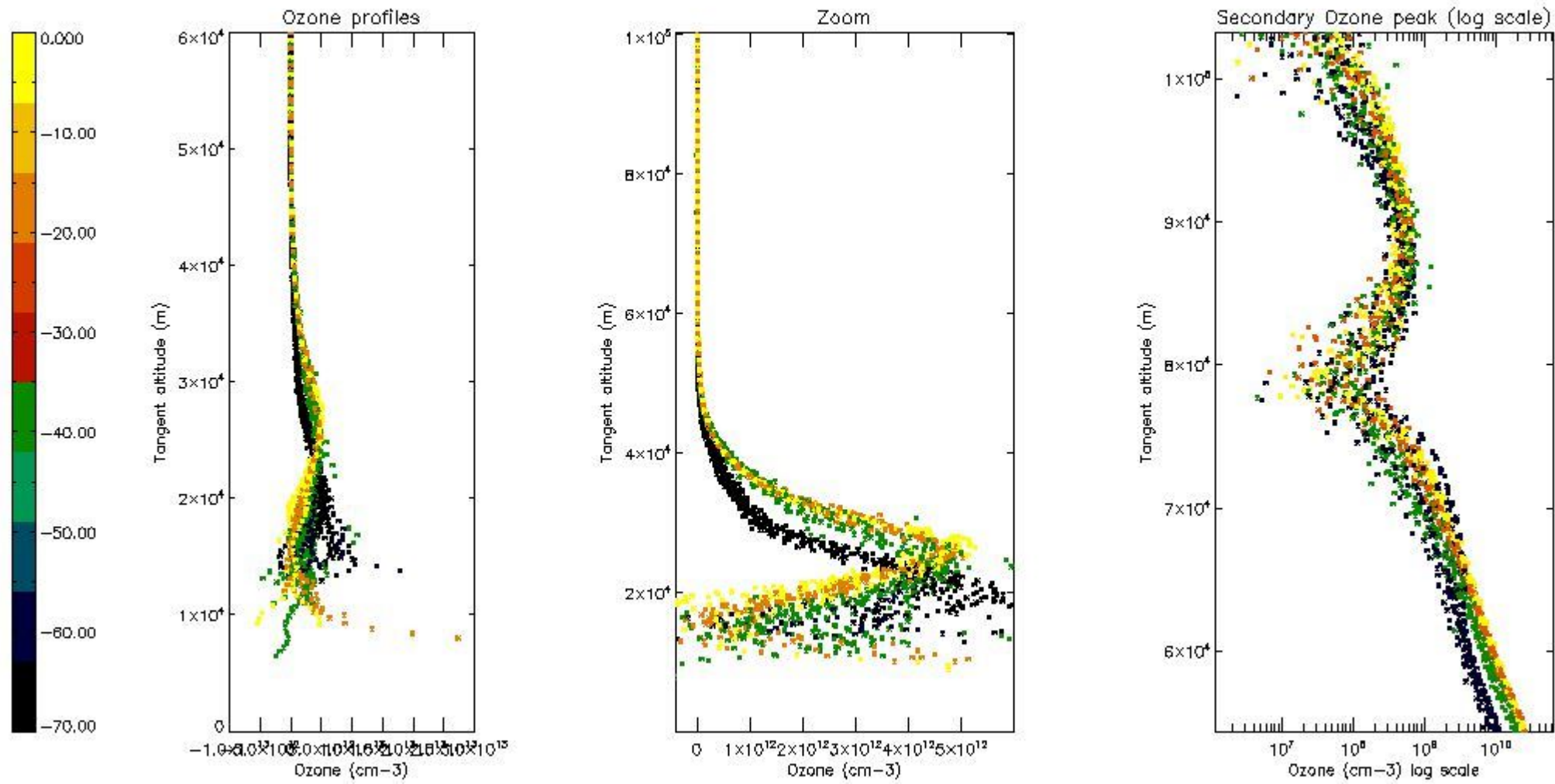
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	20
STD < 20	13

STD < 10	10
STD < 5	6

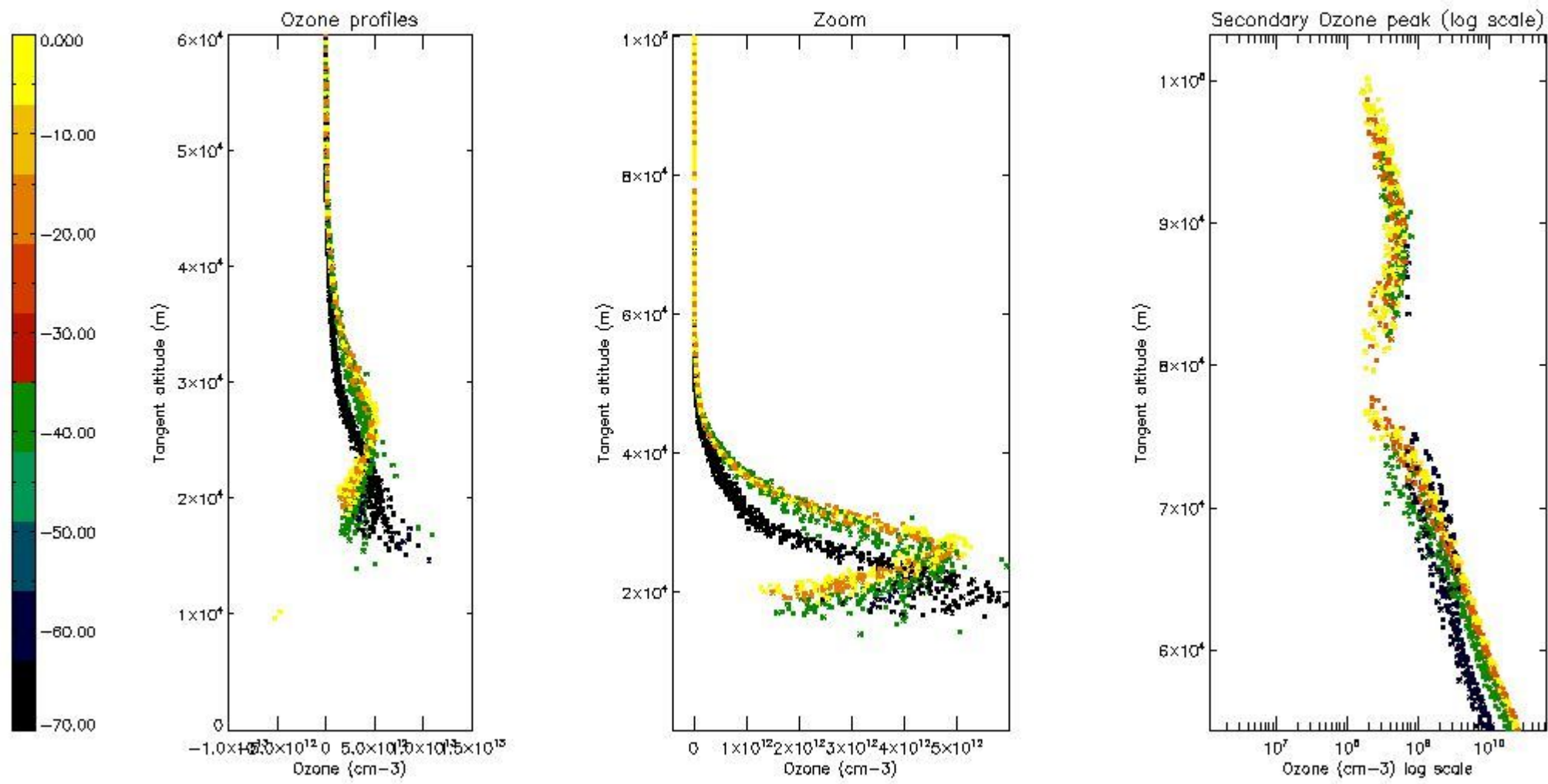
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



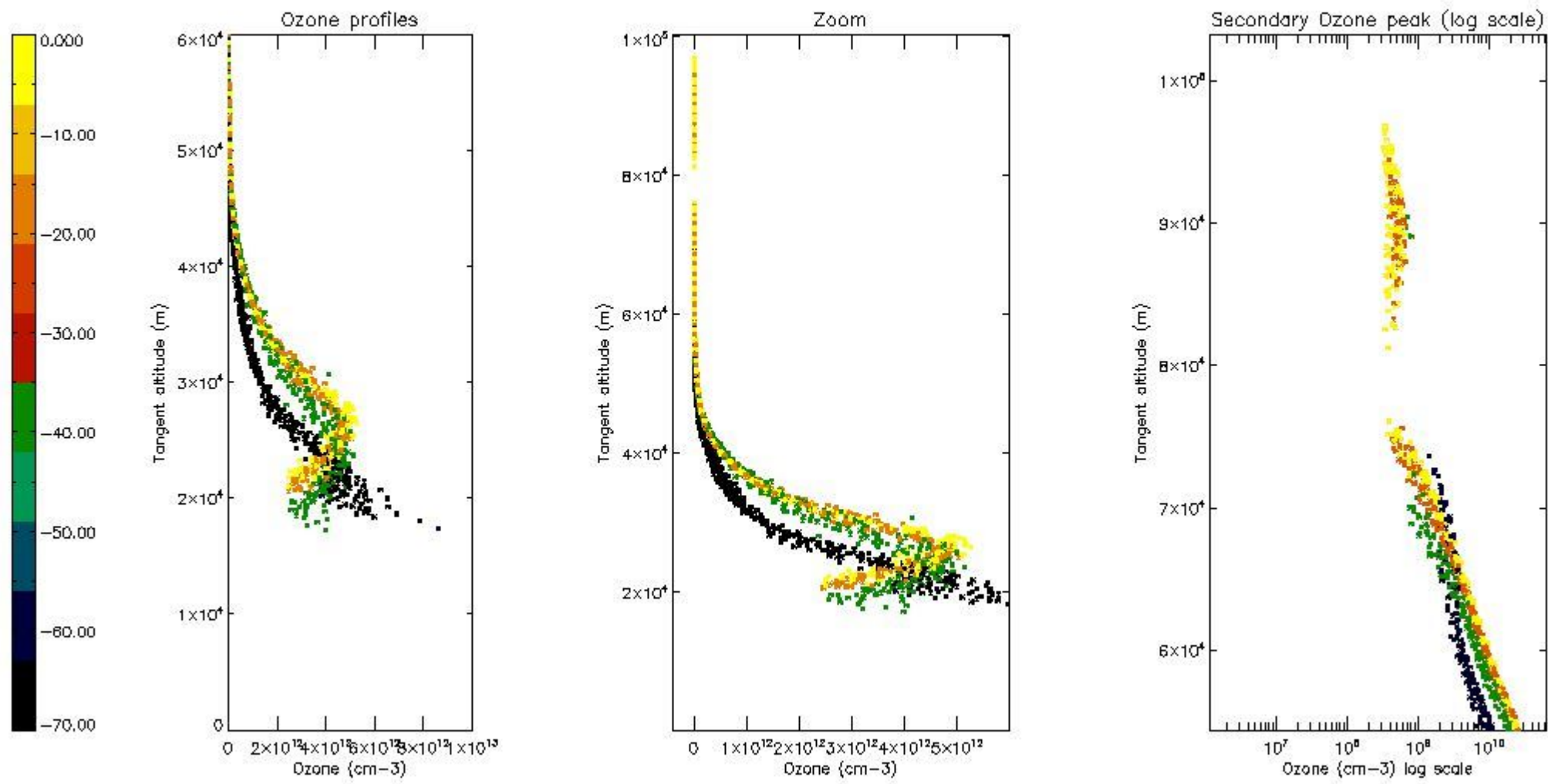
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



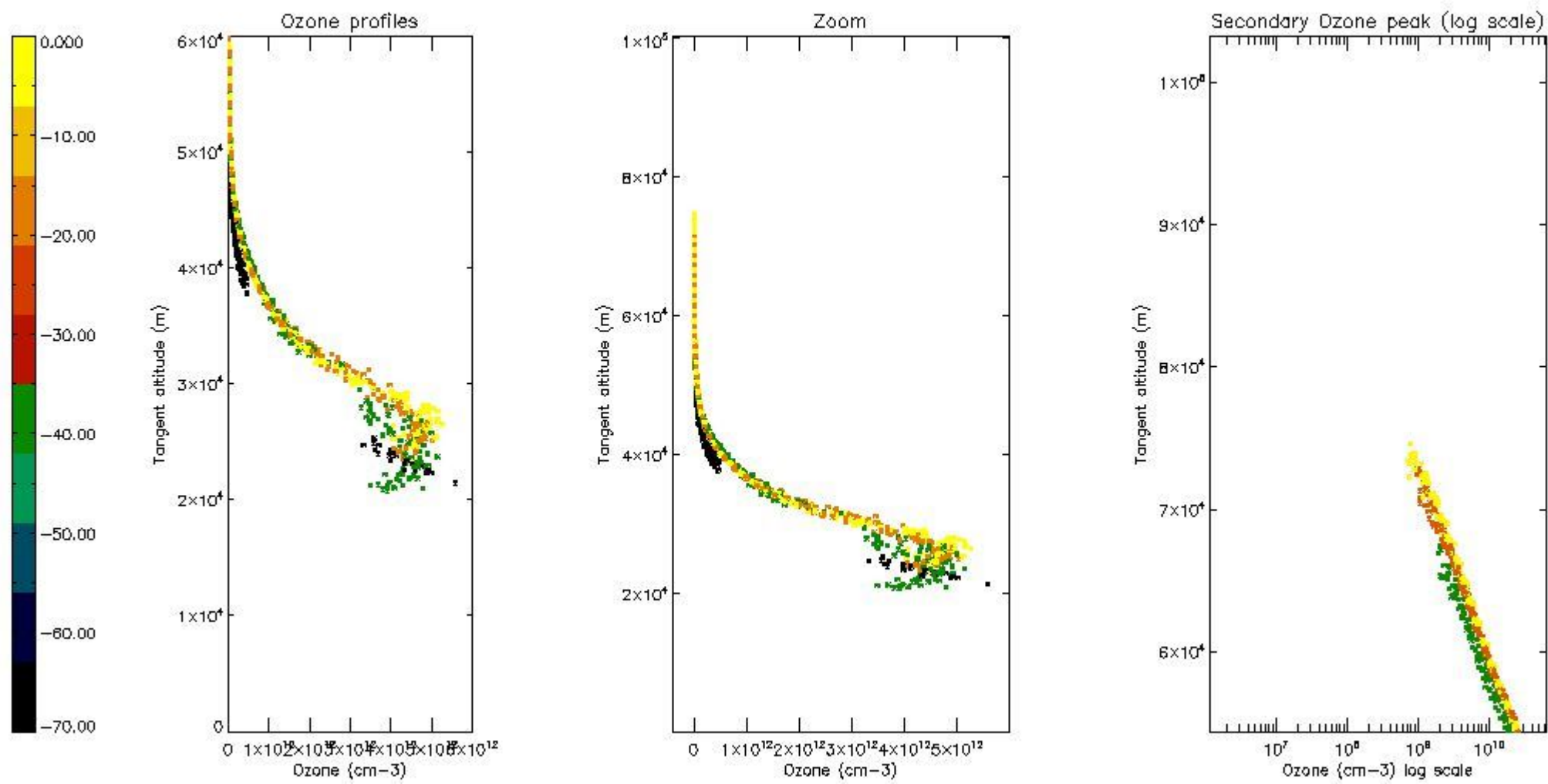
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



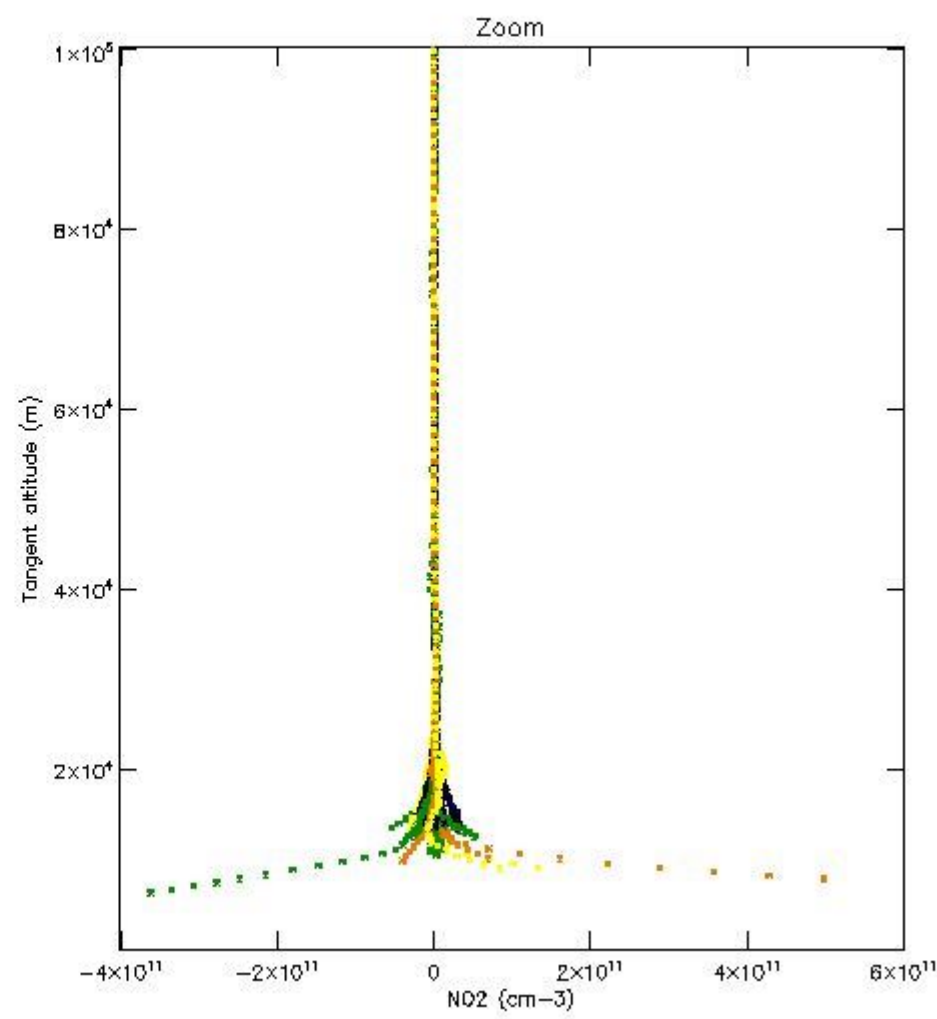
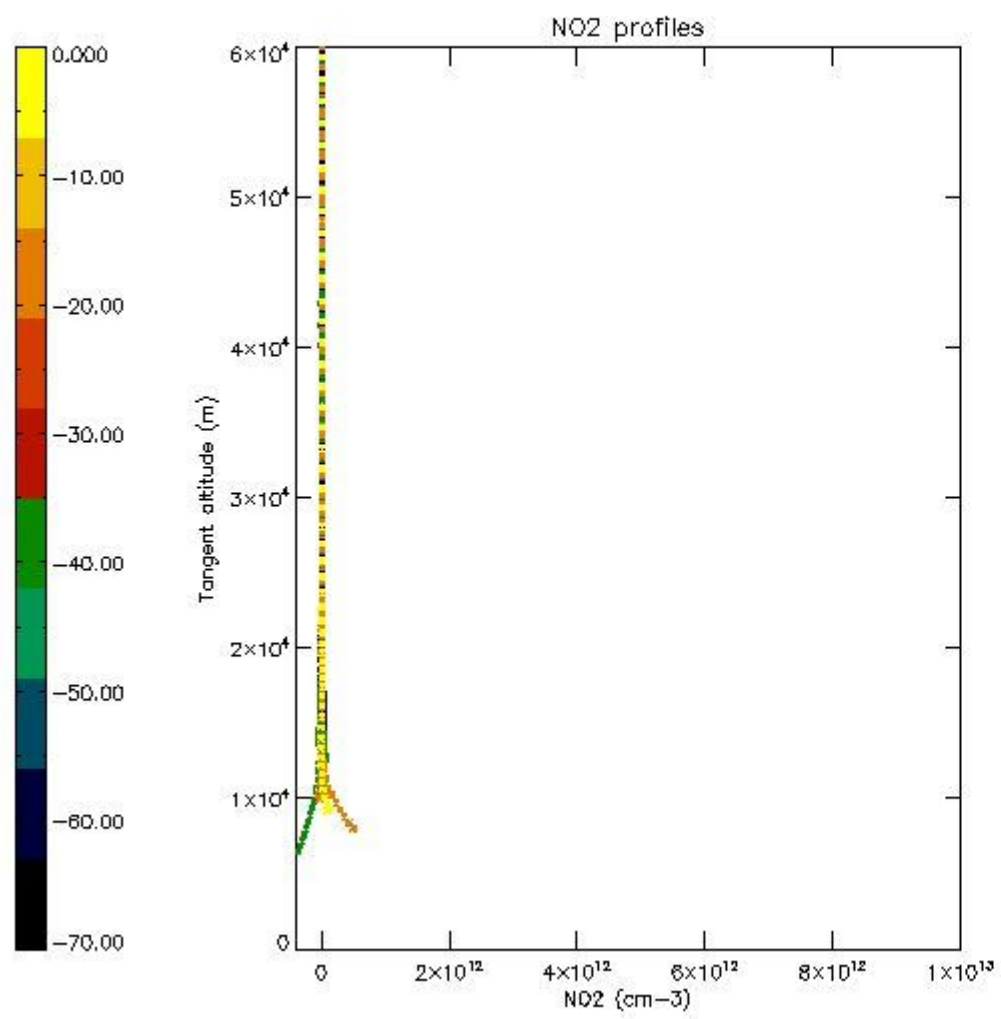
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



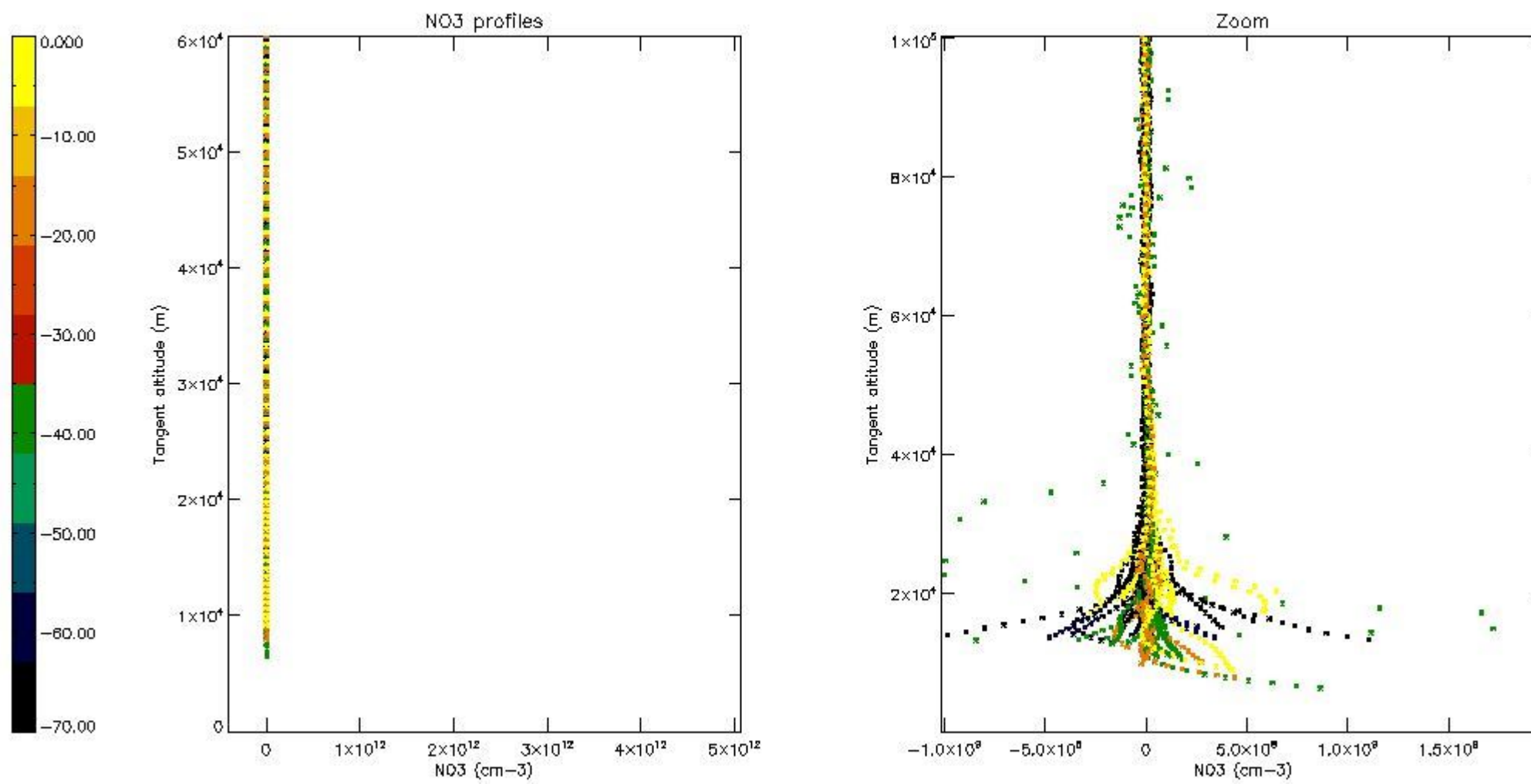
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



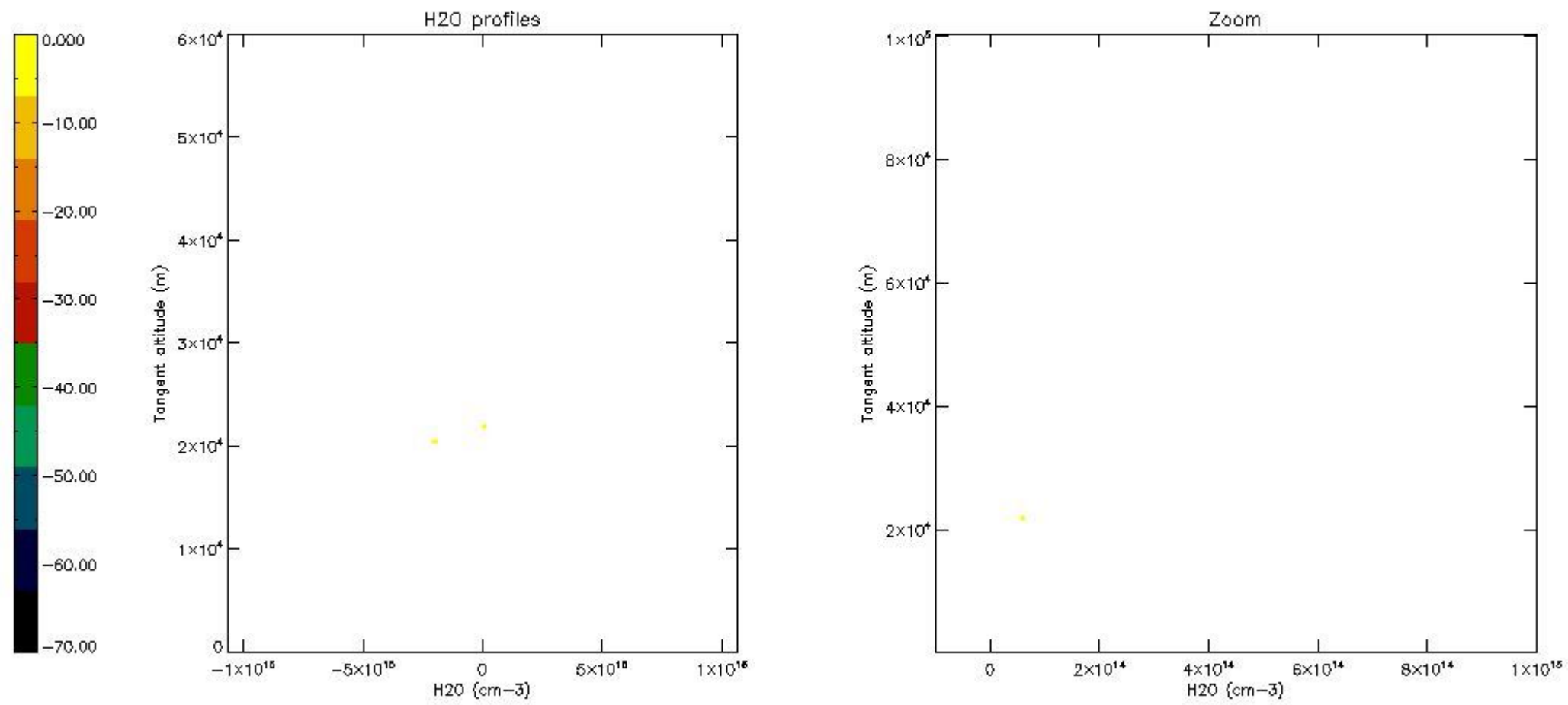
5.7 Plot NO3 profiles for all STD (dark without errors)

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	15-MAY-2010 00:08:15
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	15-MAY-2010 00:08:15
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	15-MAY-2010 00:08:15

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Store outputs in DB	Yes
Nb of level 2 prods	284
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

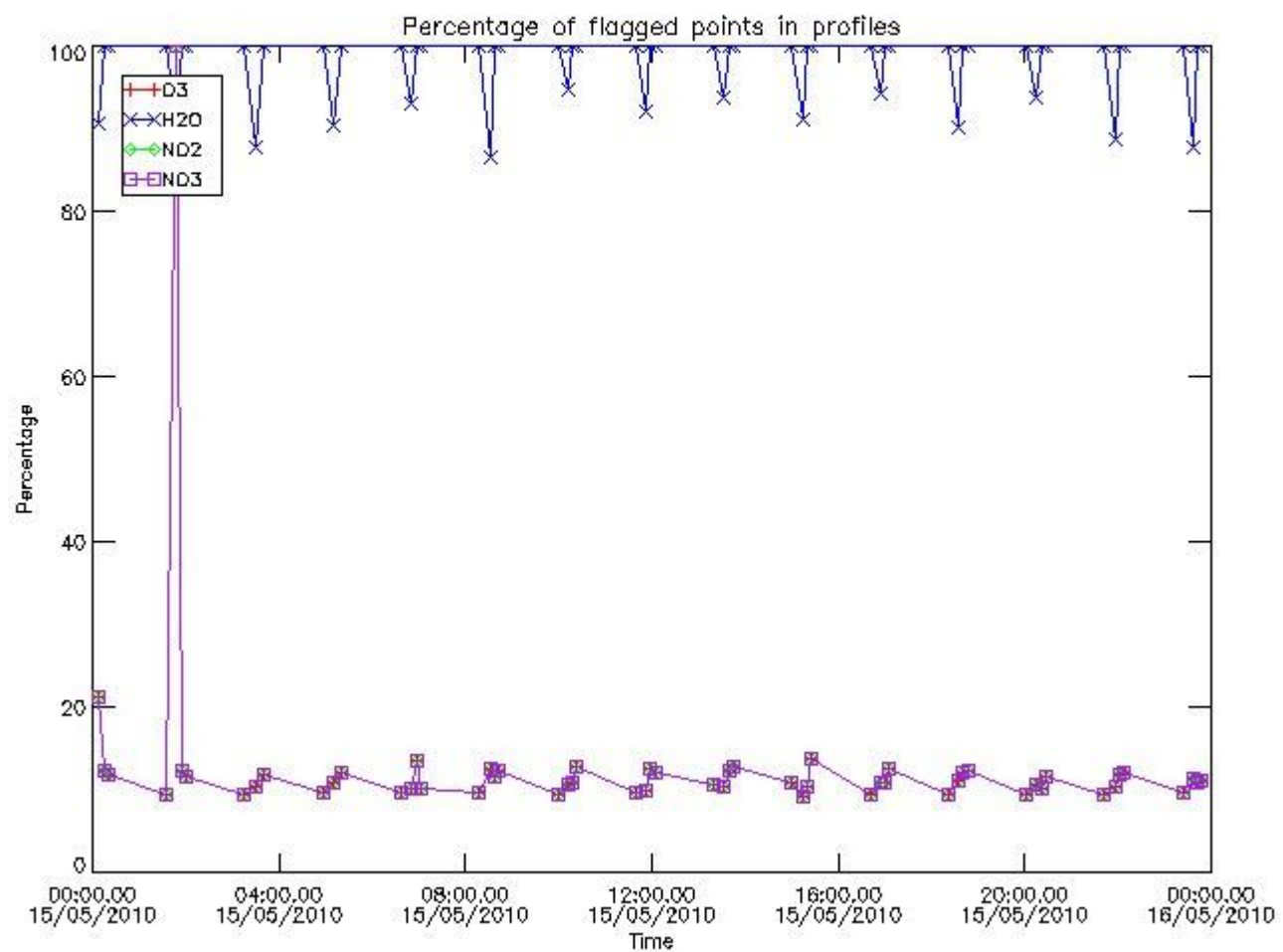
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20100515_000815_000000482089_00259_42898_9718.N1	15-MAY-2010 00:08:15	Dark	48.000	18	24Alp PsA	1.1660	9700.0	96	42898	No
2	GOM_NL__2PRFIN20100515_001406_000000422089_00259_42898_9719.N1	15-MAY-2010 00:14:06	Dark	41.500	31	Alp Gru	1.7340	15200.	83	42898	No
3	GOM_NL__2PRFIN20100515_001940_000000432089_00260_42899_9714.N1	15-MAY-2010 00:19:40	Dark	43.000	45	Alp Pav	1.9400	26000.	86	42899	No
4	GOM_NL__2PRFIN20100515_002655_000000442089_00260_42899_9715.N1	15-MAY-2010 00:26:55	Straylight	44.000	141	Bet Ara	2.8400	4600.0	88	42899	No
5	GOM_NL__2PRFIN20100515_002926_000000612089_00260_42899_9716.N1	15-MAY-2010 00:29:26	Straylight	60.500	40	The Sco	1.8590	7100.0	121	42899	No
6	GOM_NL__2PRFIN20100515_003118_000000552089_00260_42899_9717.N1	15-MAY-2010 00:31:18	Straylight	55.000	25	35Lam Sco	1.6200	28000.	110	42899	No
7	GOM_NL__2PRFIN20100515_003342_000000522089_00260_42899_9718.N1	15-MAY-2010 00:33:42	Twilight	52.000	75	26Eps Sco	2.2910	4250.0	104	42899	No
8	GOM_NL__2PRFIN20100515_003650_000000622089_00260_42899_9719.N1	15-MAY-2010 00:36:50	Twilight	61.500	16	21Alp Sco	1.0200	3000.0	123	42899	No
9	GOM_NL__2PRFIN20100515_003929_000000452089_00260_42899_9720.N1	15-MAY-2010 00:39:29	Bright	44.500	97	8Bet1Sco	2.5610	30000.	89	42899	No
10	GOM_NL__2PRFIN20100515_004311_000000402089_00260_42899_9721.N1	15-MAY-2010 00:43:11	Bright	40.000	104	27Bet Lib	2.6140	13100.	80	42899	No
11	GOM_NL__2PRFIN20100515_004525_000000532089_00260_42899_9722.N1	15-MAY-2010 00:45:25	Bright	52.500	120	1Del Oph	2.7340	3200.0	105	42899	No
12	GOM_NL__2PRFIN20100515_004837_000000452089_00260_42899_9723.N1	15-MAY-2010 00:48:37	Bright	45.000	102	24Alp Ser	2.6000	4250.0	90	42899	No
13	GOM_NL__2PRFIN20100515_005411_000000382089_00260_42899_9724.N1	15-MAY-2010 00:54:11	Bright	37.500	83		2.3780	11000.	75	42899	No
14	GOM_NL__2PRFIN20100515_005719_000000382089_00260_42899_9725.N1	15-MAY-2010 00:57:19	Bright	38.000	180	27Gam Boo	3.0400	8000.0	76	42899	No
15	GOM_NL__2PRFIN20100515_010605_000000612089_00260_42899_9726.N1	15-MAY-2010 01:06:05	Bright	61.000	119	14Eta Dra	2.7270	4700.0	122	42899	No
16	GOM_NL__2PRFIN20100515_011701_000000432089_00260_42899_9727.N1	15-MAY-2010 01:17:01	Bright	43.000	89	5Alp Cep	2.4510	8000.0	86	42899	No
17	GOM_NL__2PRFIN20100515_012028_000000552089_00260_42899_9728.N1	15-MAY-2010 01:20:28	Bright	55.000	74	11Bet Cas	2.2680	6600.0	110	42899	No
18	GOM_NL__2PRFIN20100515_013041_000000582089_00260_42899_9729.N1	15-MAY-2010 01:30:41	Twilight	58.000	93	53Bet Peg	2.5200	3100.0	116	42899	No
19	GOM_NL__2PRFIN20100515_013344_000000422089_00260_42899_9730.N1	15-MAY-2010 01:33:44	Twilight	41.500	140	88Gam Peg	2.8340	26000.	83	42899	No
20	GOM_NL__2PRFIN20100515_013519_000000542089_00260_42899_9731.N1	15-MAY-2010 01:35:19	Dark	54.000	90	54Alp Peg	2.4870	11000.	108	42899	No
21	GOM_NL__2PRFIN20100515_014852_000000572089_00260_42899_9732.N1	15-MAY-2010 01:48:52	Dark	57.000	18	24Alp PsA	1.1660	9700.0	114	42899	No
22	GOM_NL__2PRFIN20100515_015442_000000422089_00260_42899_9733.N1	15-MAY-2010 01:54:42	Dark	41.500	31	Alp Gru	1.7340	15200.	83	42899	No
23	GOM_NL__2PRFIN20100515_020016_000000442089_00261_42900_9722.N1	15-MAY-2010 02:00:16	Dark	44.000	45	Alp Pav	1.9400	26000.	88	42900	No
24	GOM_NL__2PRFIN20100515_020731_000000482089_00261_42900_9723.N1	15-MAY-2010 02:07:31	Straylight	48.000	141	Bet Ara	2.8400	4600.0	96	42900	No
25	GOM_NL__2PRFIN20100515_021002_000000502089_00261_42900_9724.N1	15-MAY-2010 02:10:02	Straylight	50.000	40	The Sco	1.8590	7100.0	100	42900	No
26	GOM_NL__2PRFIN20100515_021154_000000552089_00261_42900_9725.N1	15-MAY-2010 02:11:54	Straylight	54.500	25	35Lam Sco	1.6200	28000.	109	42900	No
27	GOM_NL__2PRFIN20100515_021418_000000522089_00261_42900_9726.N1	15-MAY-2010 02:14:18	Twilight	52.000	75	26Eps Sco	2.2910	4250.0	104	42900	No
28	GOM_NL__2PRFIN20100515_021726_000000582089_00261_42900_9727.N1	15-MAY-2010 02:17:26	Twilight	57.500	16	21Alp Sco	1.0200	3000.0	115	42900	No
29	GOM_NL__2PRFIN20100515_022005_000000492089_00261_42900_9728.N1	15-MAY-2010 02:20:05	Bright	49.000	97	8Bet1Sco	2.5610	30000.	98	42900	No
30	GOM_NL__2PRFIN20100515_022348_000000412089_00261_42900_9729.N1	15-MAY-2010 02:23:48	Bright	40.500	104	27Bet Lib	2.6140	13100.	81	42900	No
31	GOM_NL__2PRFIN20100515_022601_000000512089_00261_42900_9730.N1	15-MAY-2010 02:26:01	Bright	51.000	120	1Del Oph	2.7340	3200.0	102	42900	No
32	GOM_NL__2PRFIN20100515_022913_000000452089_00261_42900_9731.N1	15-MAY-2010 02:29:13	Bright	45.000	102	24Alp Ser	2.6000	4250.0	90	42900	No
33	GOM_NL__2PRFIN20100515_023446_000000432089_00261_42900_9732.N1	15-MAY-2010 02:34:46	Bright	42.500	83		2.3780	11000.	85	42900	No
34	GOM_NL__2PRFIN20100515_023754_000000382089_00261_42900_9733.N1	15-MAY-2010 02:37:54	Bright	37.500	180	27Gam Boo	3.0400	8000.0	75	42900	No
35	GOM_NL__2PRFIN20100515_024640_000000422089_00261_42900_9734.N1	15-MAY-2010 02:46:40	Bright	42.000	119	14Eta Dra	2.7270	4700.0	84	42900	No
36	GOM_NL__2PRFIN20100515_025736_000000452089_00261_42900_9735.N1	15-MAY-2010 02:57:36	Bright	45.000	89	5Alp Cep	2.4510	8000.0	90	42900	No
37	GOM_NL__2PRFIN20100515_030103_000000522089_00261_42900_9736.N1	15-MAY-2010 03:01:03	Bright	51.500	74	11Bet Cas	2.2680	6600.0	103	42900	No
38	GOM_NL__2PRFIN20100515_031117_000000652089_00261_42900_9737.N1	15-MAY-2010 03:11:17	Twilight	64.500	93	53Bet Peg	2.5200	3100.0	129	42900	No
39	GOM_NL__2PRFIN20100515_031421_000000432089_00261_42900_9738.N1	15-MAY-2010 03:14:21	Twilight	42.500	140	88Gam Peg	2.8340	26000.	85	42900	No
40	GOM_NL__2PRFIN20100515_031555_000000542089_00261_42900_9739.N1	15-MAY-2010 03:15:55	Dark	54.000	90	54Alp Peg	2.4870	11000.	108	42900	No
41	GOM_NL__2PRFIN20100515_032928_000000502089_00261_42900_9740.N1	15-MAY-2010 03:29:28	Dark	49.500	18	24Alp PsA	1.1660	9700.0	99	42900	No
42	GOM_NL__2PRFIN20100515_034053_000000432089_00262_42901_9730.N1	15-MAY-2010 03:40:53	Dark	43.000	45	Alp Pav	1.9400	26000.	86	42901	No

279	GOM_NL__2PRFIN20100515_233649_000000492089_00273_42912_9921.N1	15-MAY-2010 23:36:49	Dark	49.000	18	24Alp PsA	1.1660	9700.0	98	42912	No
280	GOM_NL__2PRFIN20100515_234239_000000482089_00273_42912_9922.N1	15-MAY-2010 23:42:39	Dark	47.500	31	Alp Gru	1.7340	15200.	95	42912	No
281	GOM_NL__2PRFIN20100515_234813_000000512089_00274_42913_9916.N1	15-MAY-2010 23:48:13	Dark	51.000	45	Alp Pav	1.9400	26000.	102	42913	No
282	GOM_NL__2PRFIN20100515_235525_000000442089_00274_42913_9917.N1	15-MAY-2010 23:55:25	Straylight	43.500	141	Bet Ara	2.8400	4600.0	87	42913	No
283	GOM_NL__2PRFIN20100515_235820_000000302089_00274_42913_9918.N1	15-MAY-2010 23:58:20	Straylight	30.000	38	20Eps Sgr	1.8360	11000.	60	42913	No
284	GOM_NL__2PRFIN20100515_235950_000000542089_00274_42913_9919.N1	15-MAY-2010 23:59:50	Straylight	54.000	25	35Lam Sco	1.6200	28000.	108	42913	No

3. Quality information per product

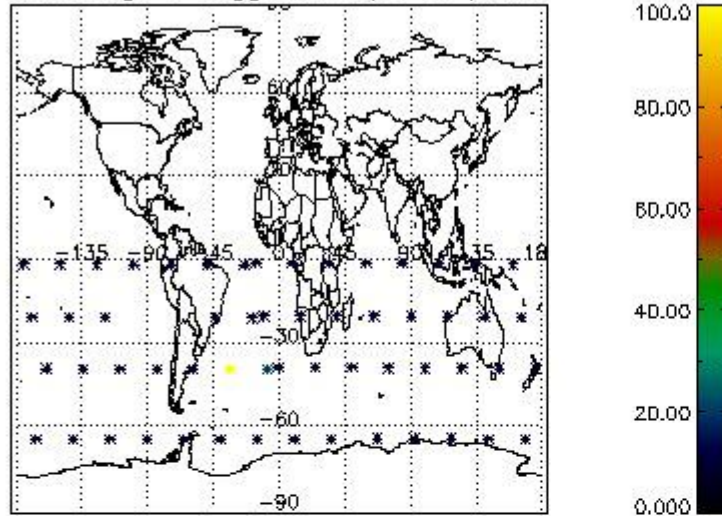
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

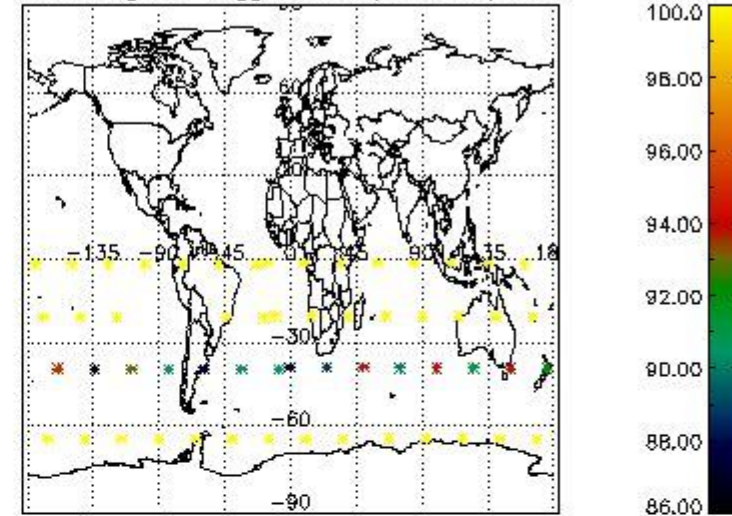


3.2 Plot quality information per product (world map)

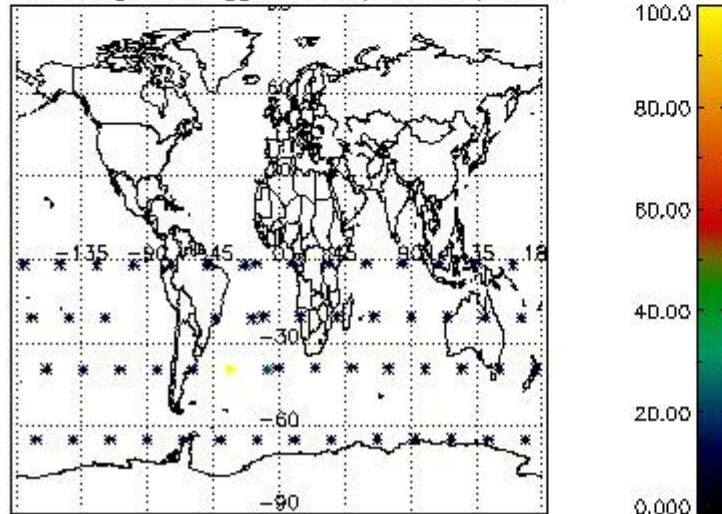
Percentage of flagged data per O3 profile



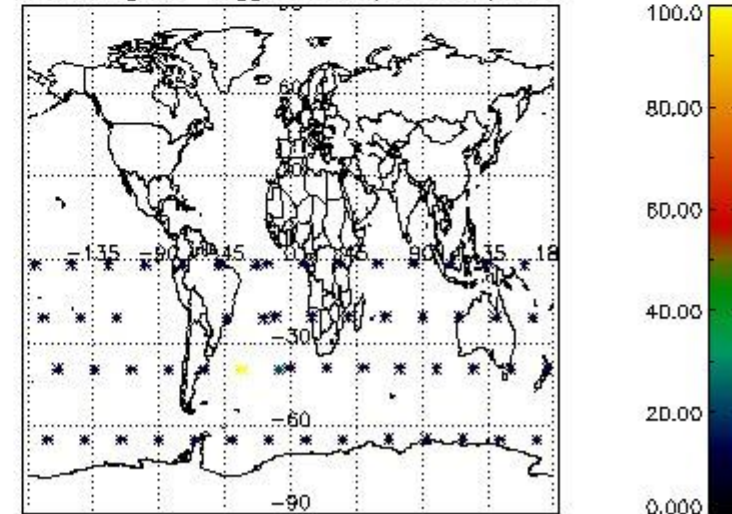
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

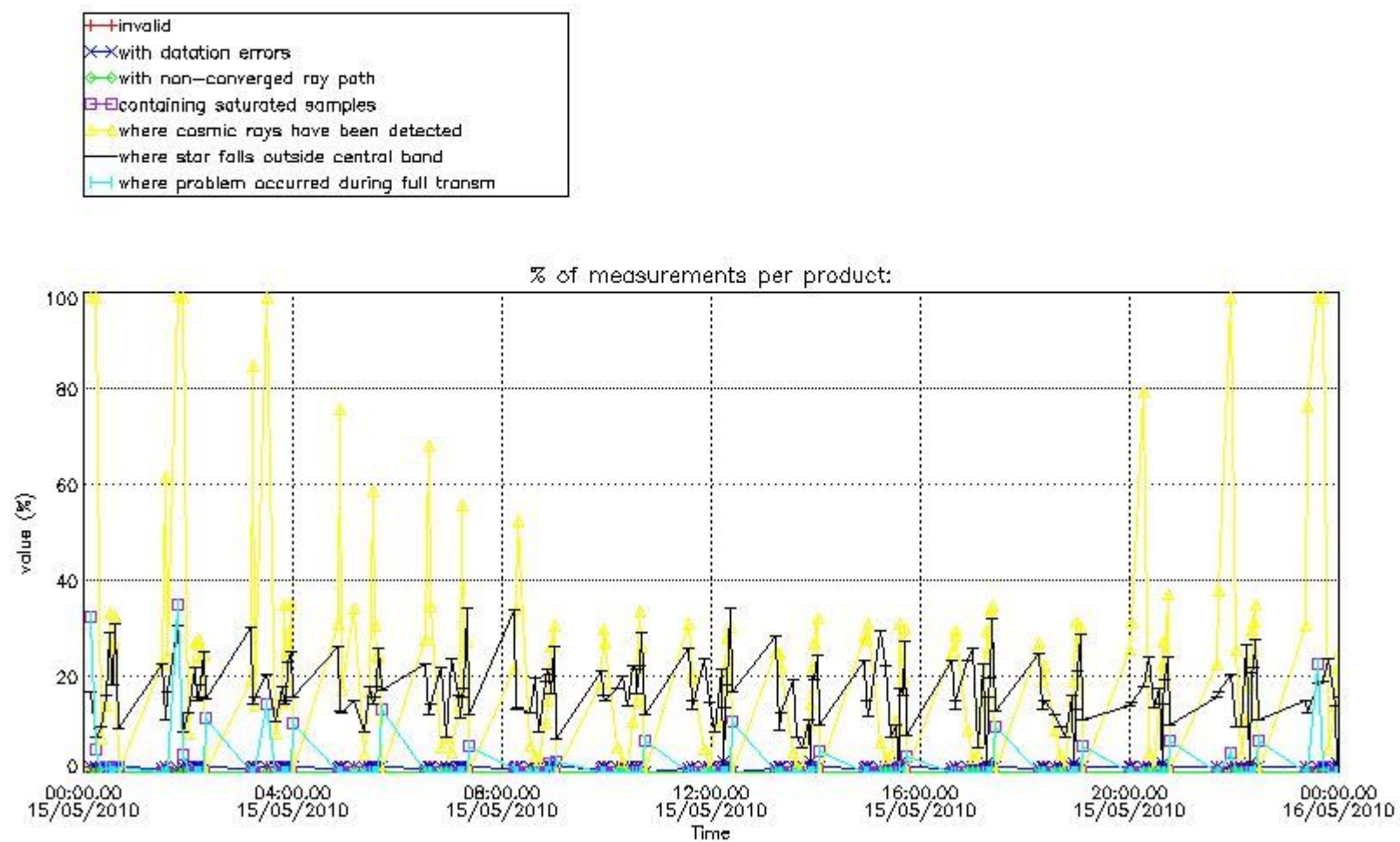


4. Level 1 quality information per product

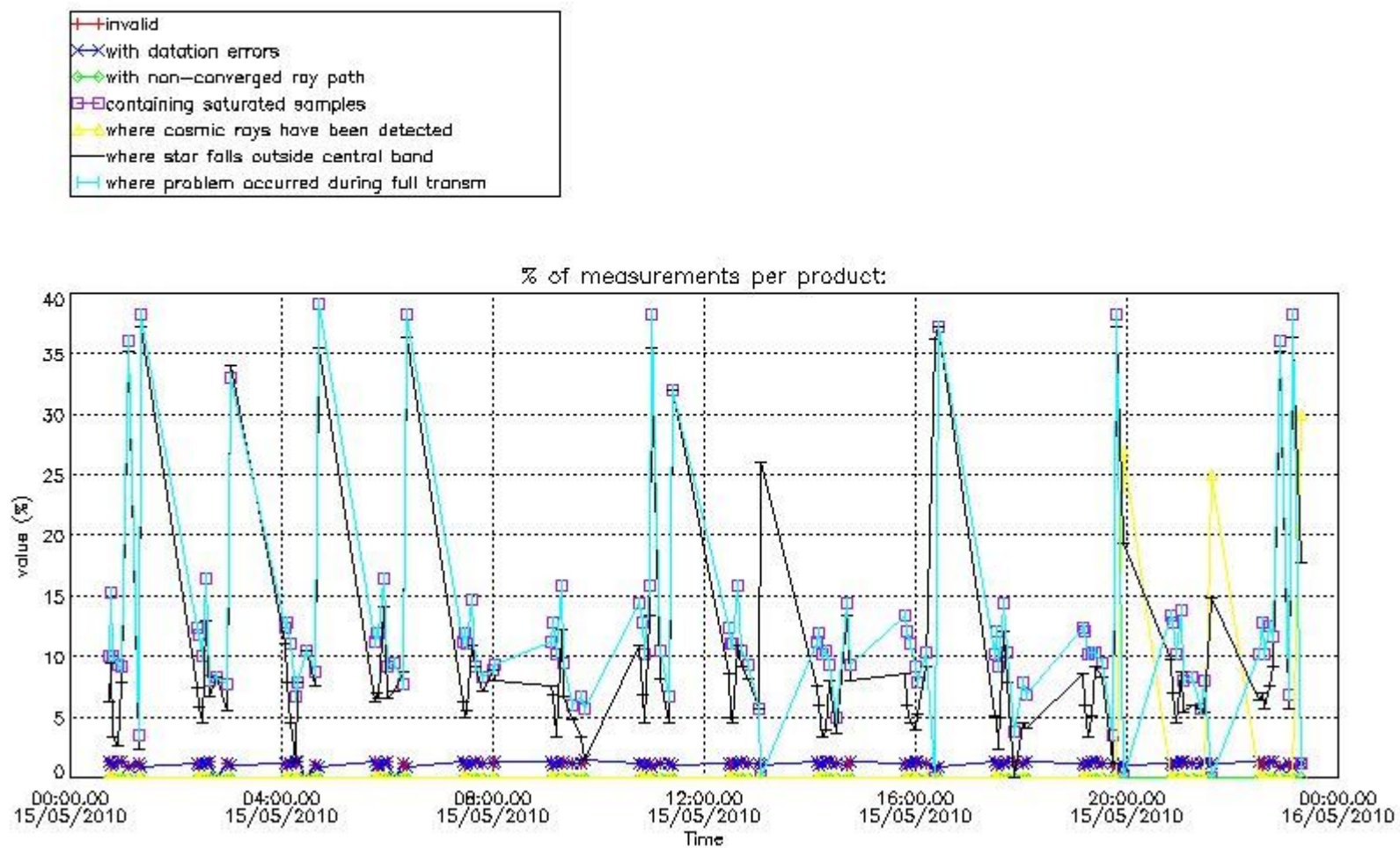
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

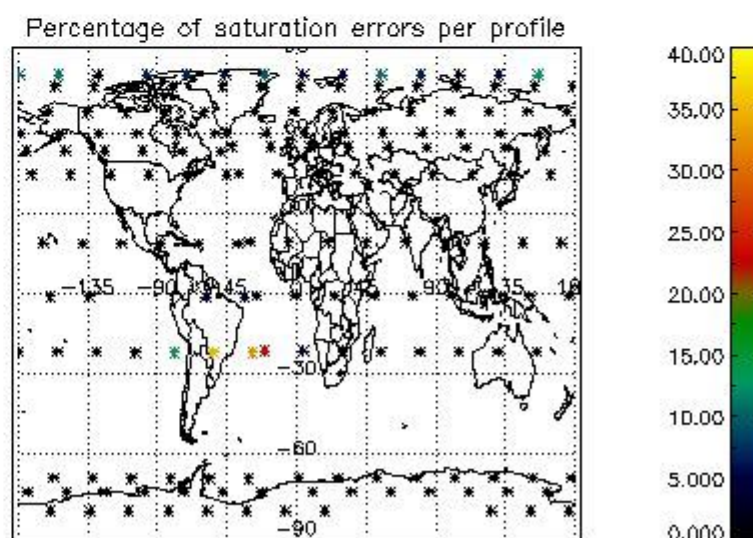
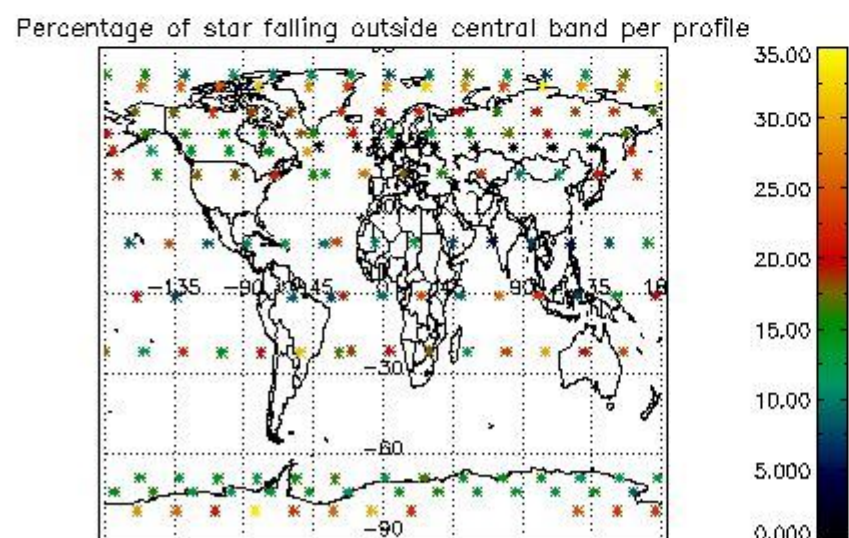
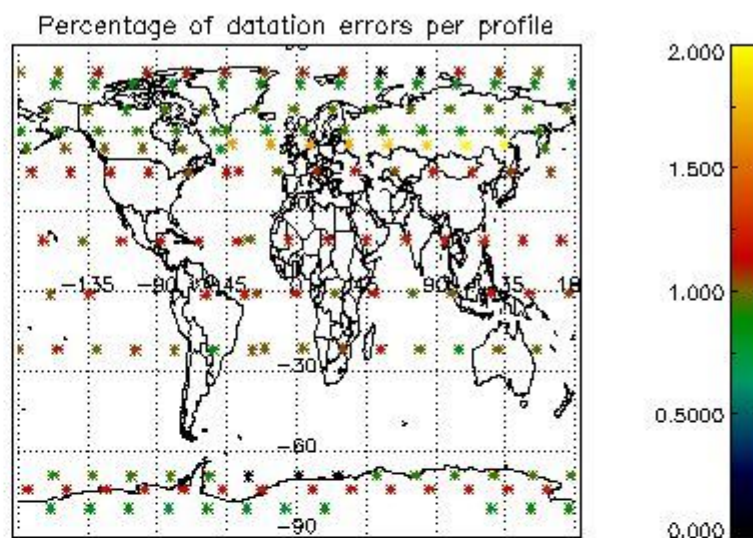
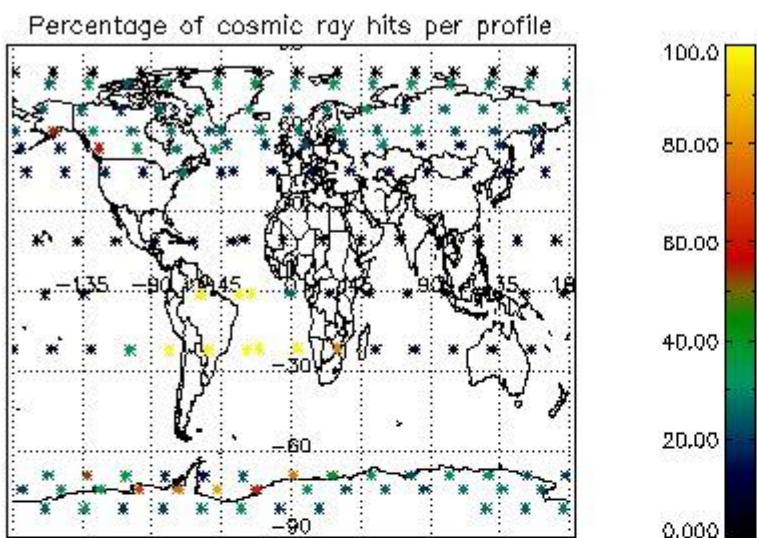


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



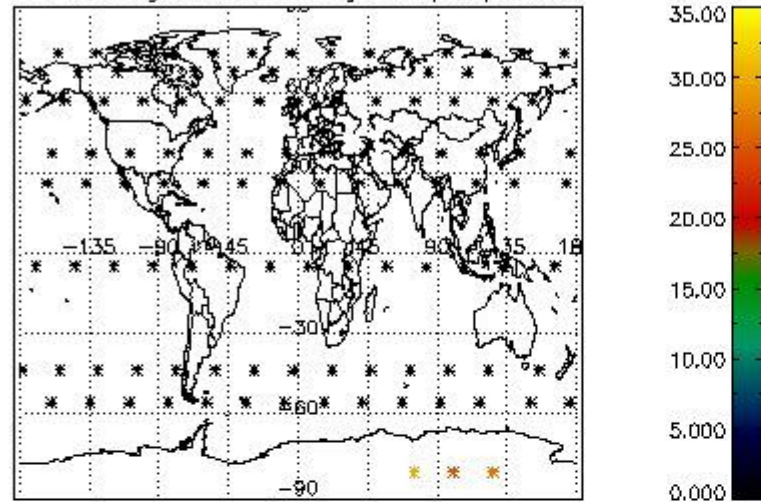
4.2 Plot quality information per product coming from level 1b processing (world map)

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

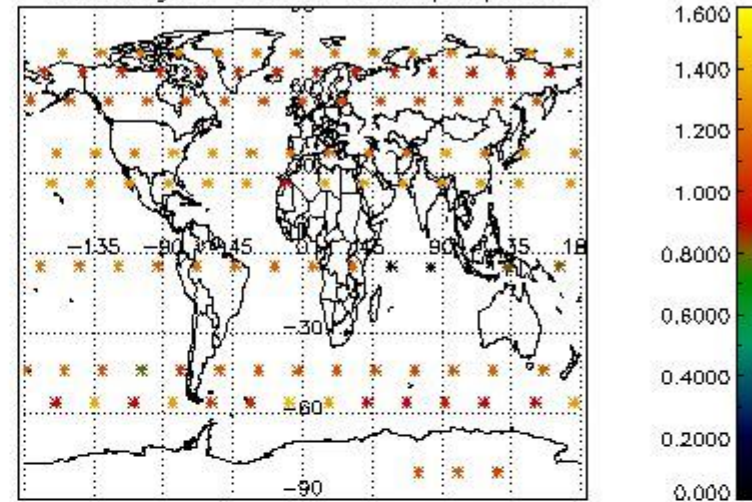


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

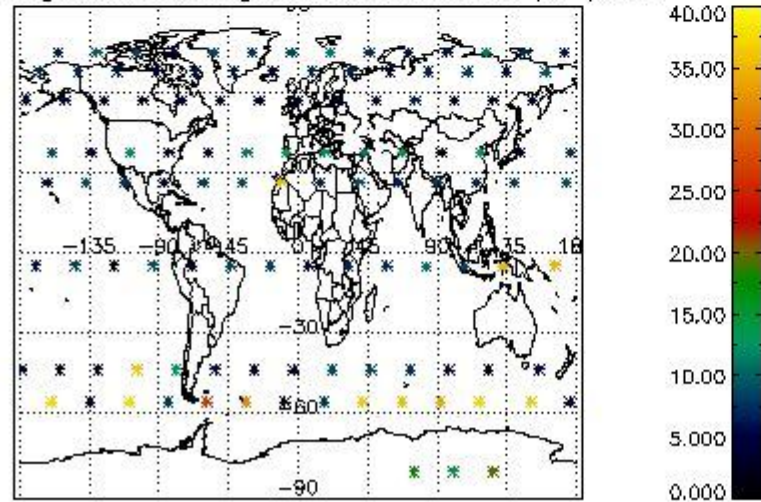
Percentage of cosmic ray hits per profile



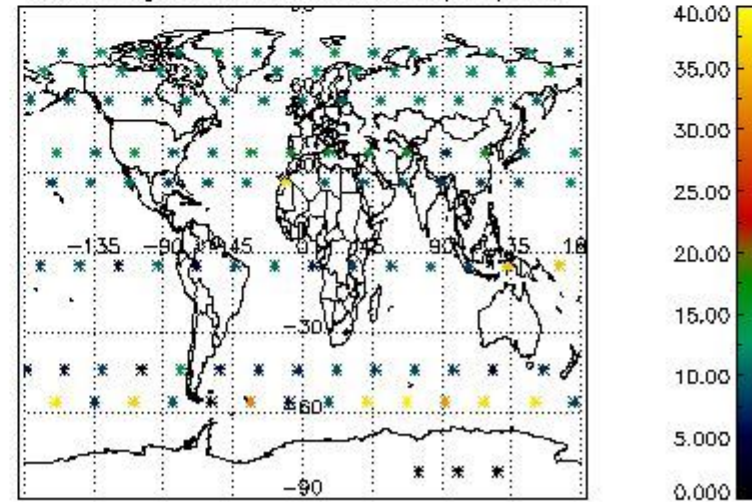
Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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

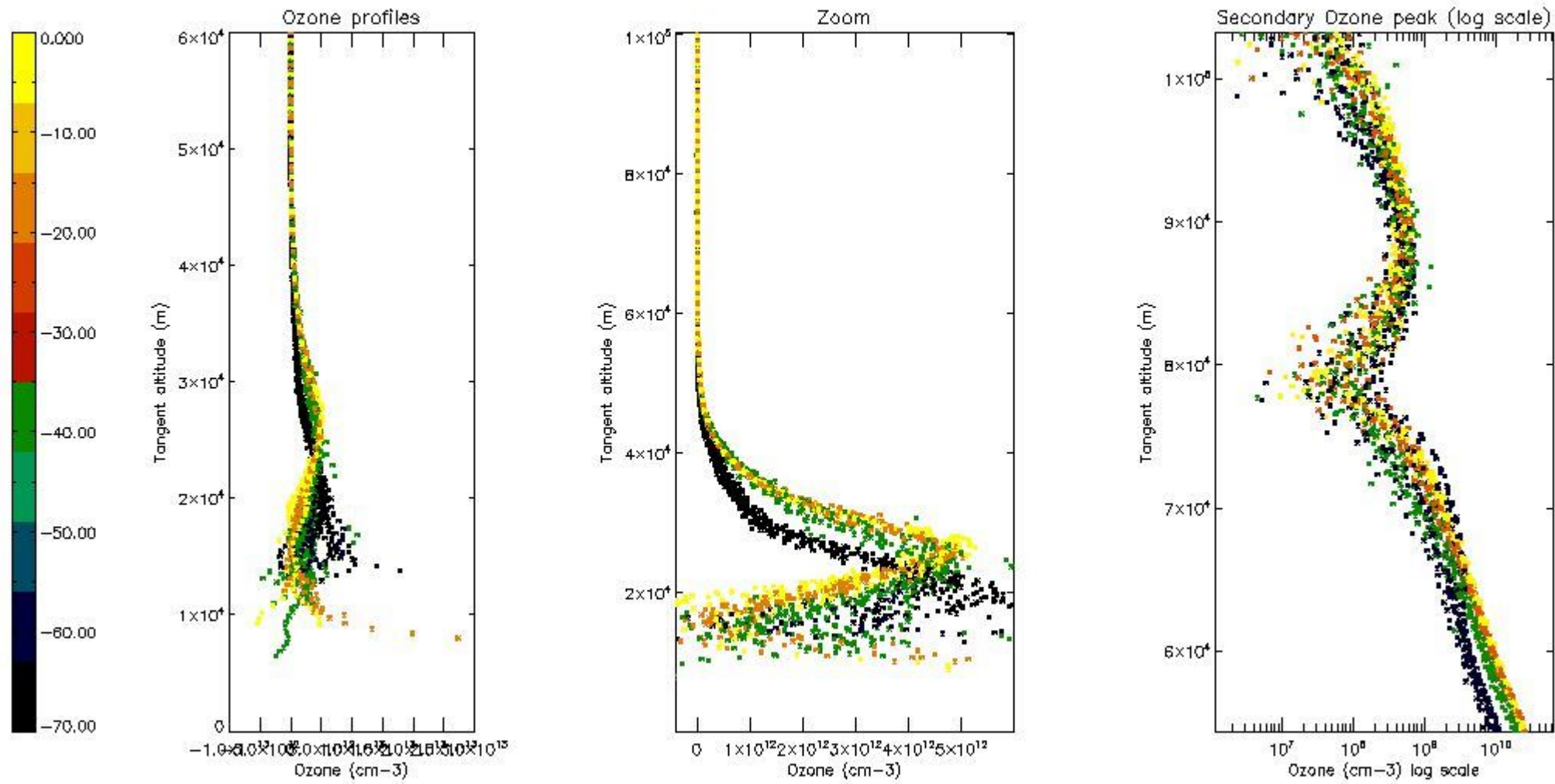
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	20
STD < 20	13

STD < 10	10
STD < 5	6

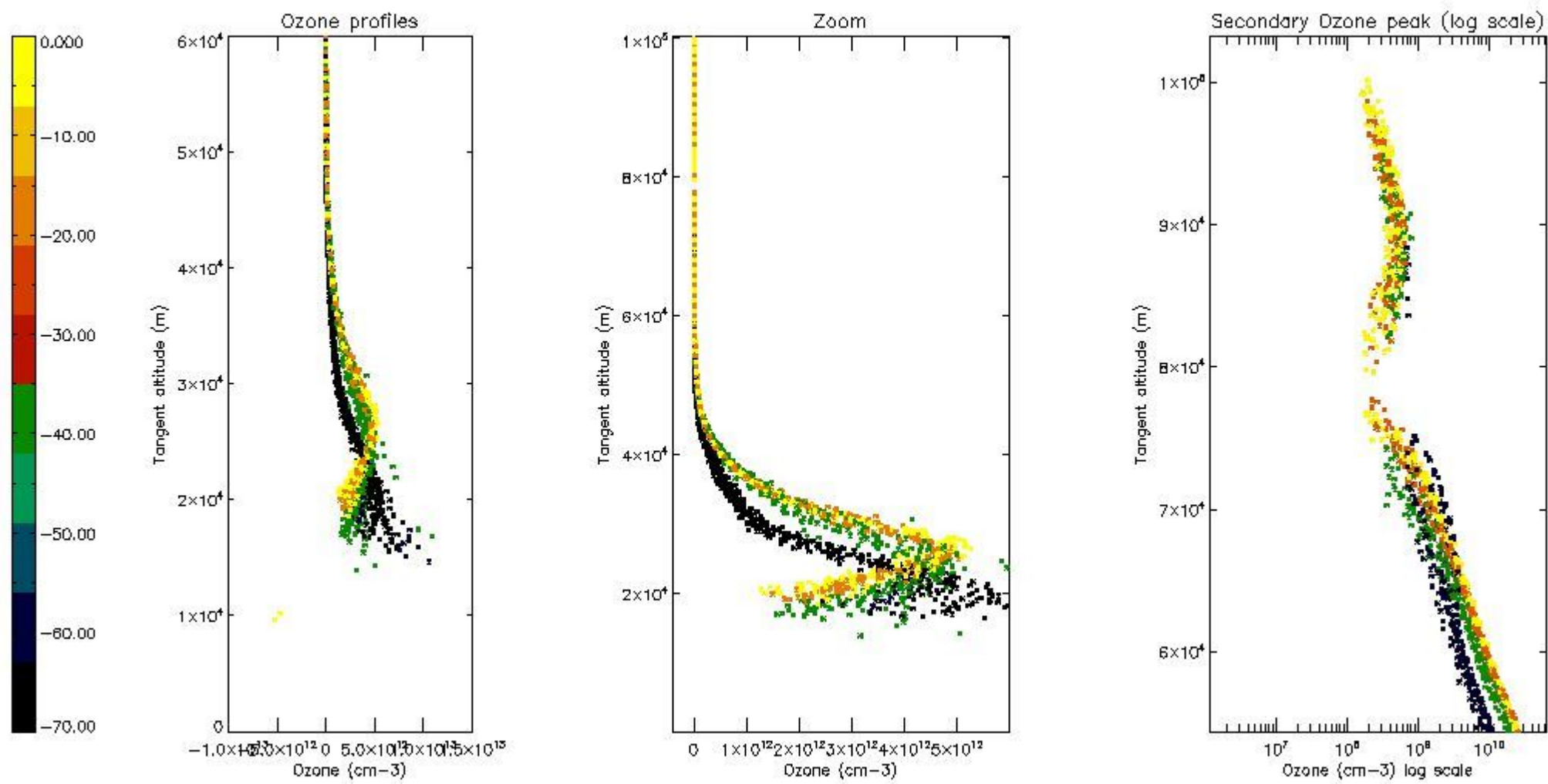
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



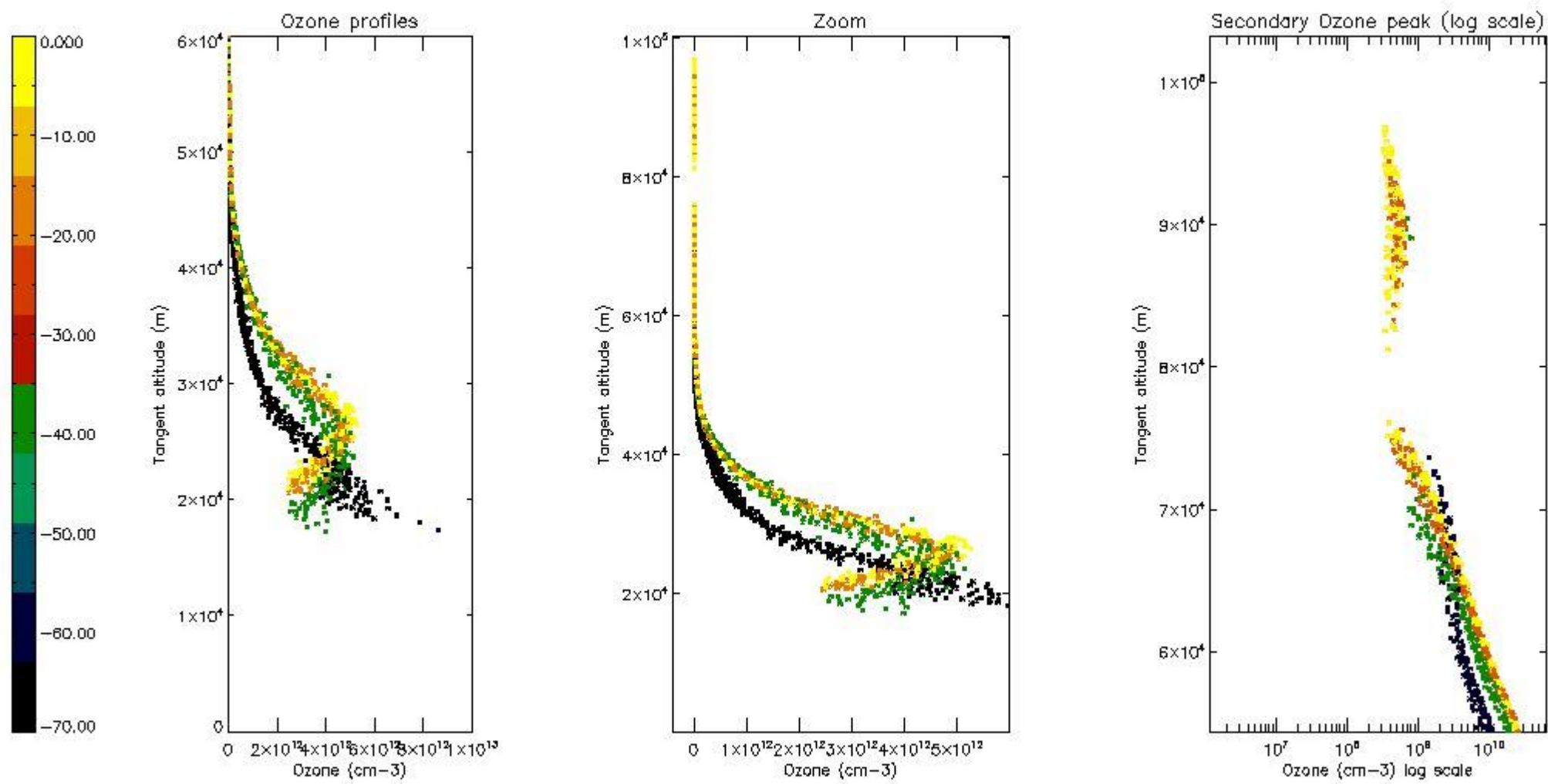
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



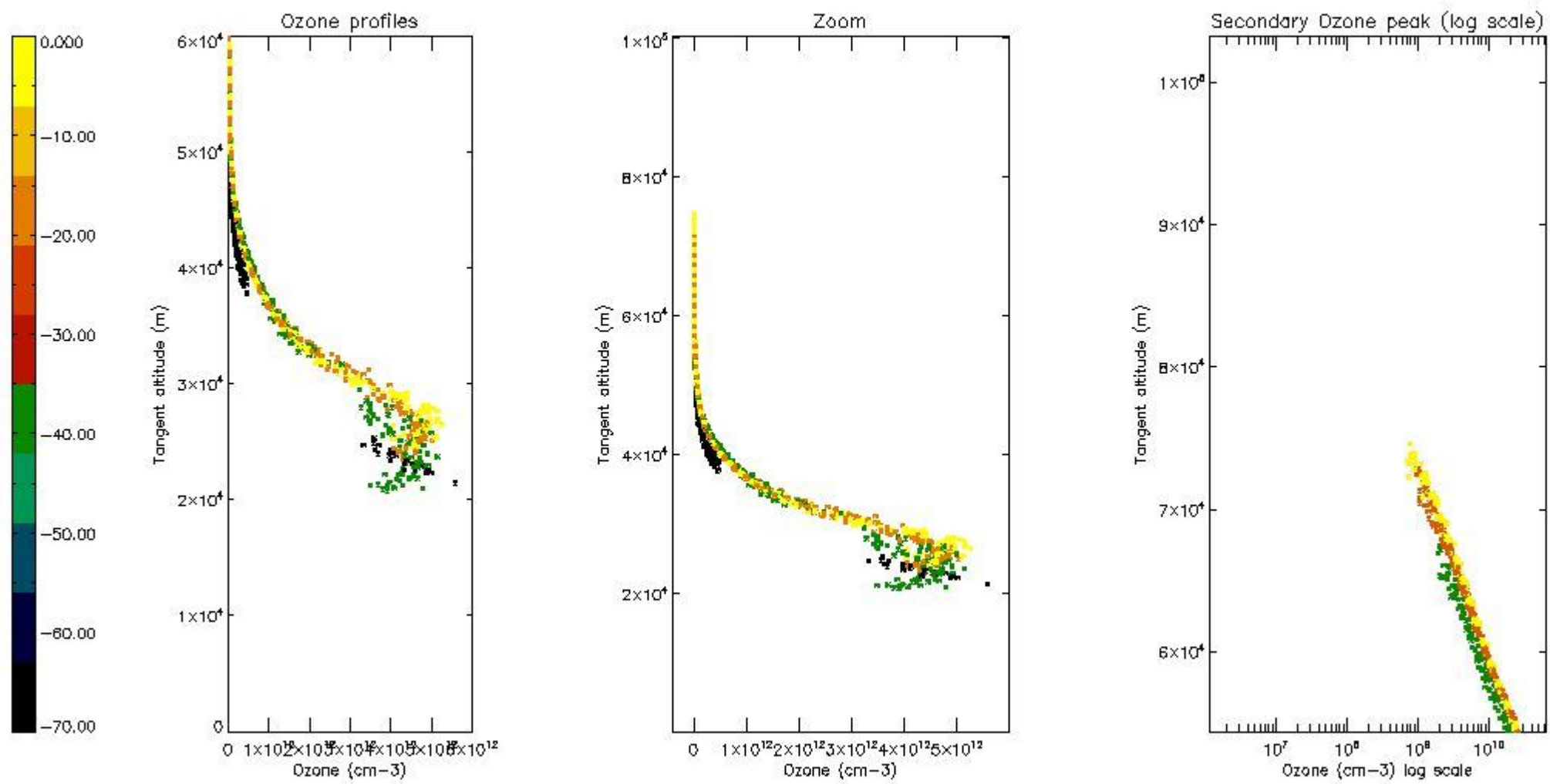
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



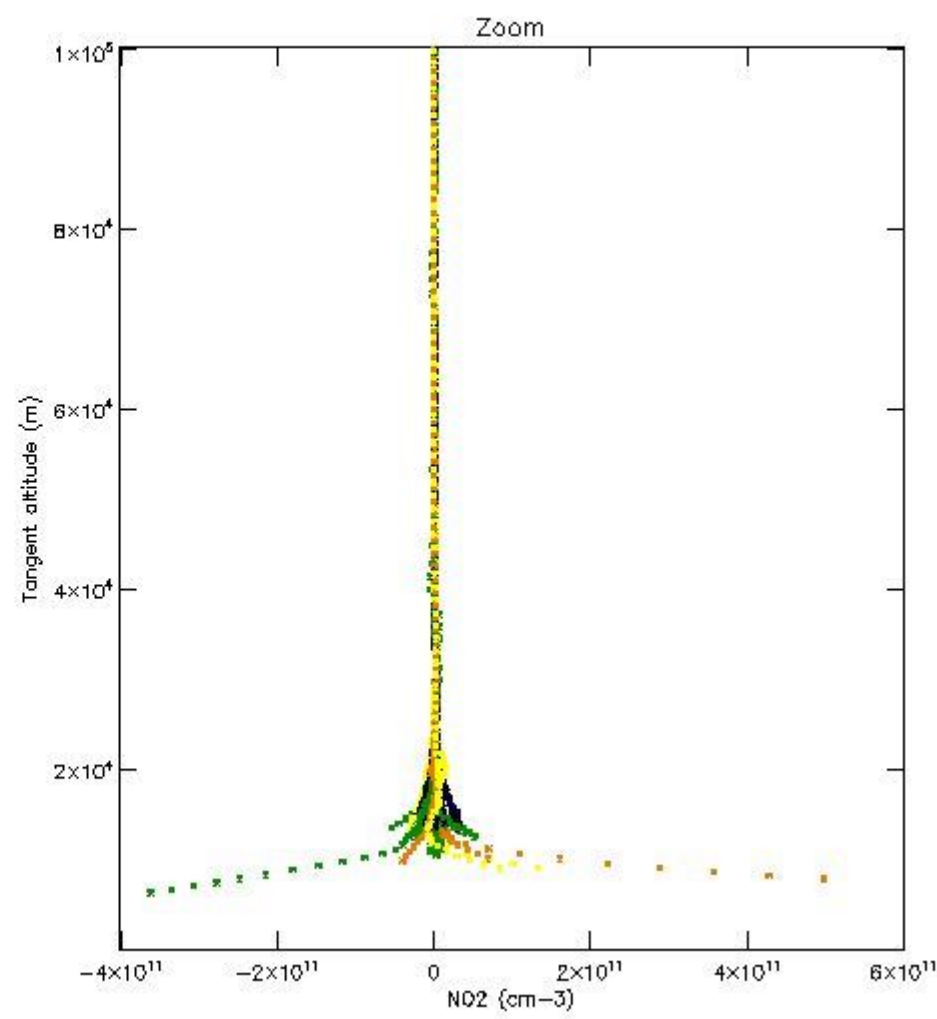
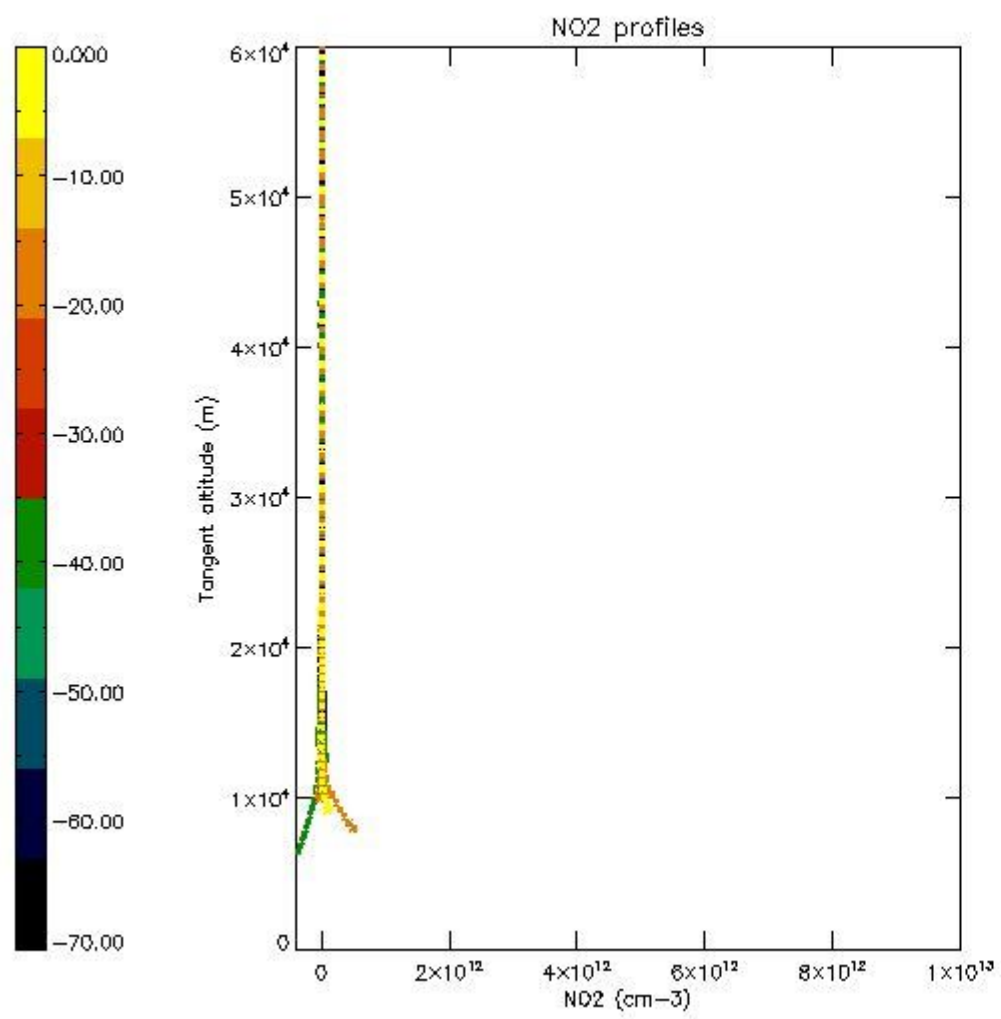
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



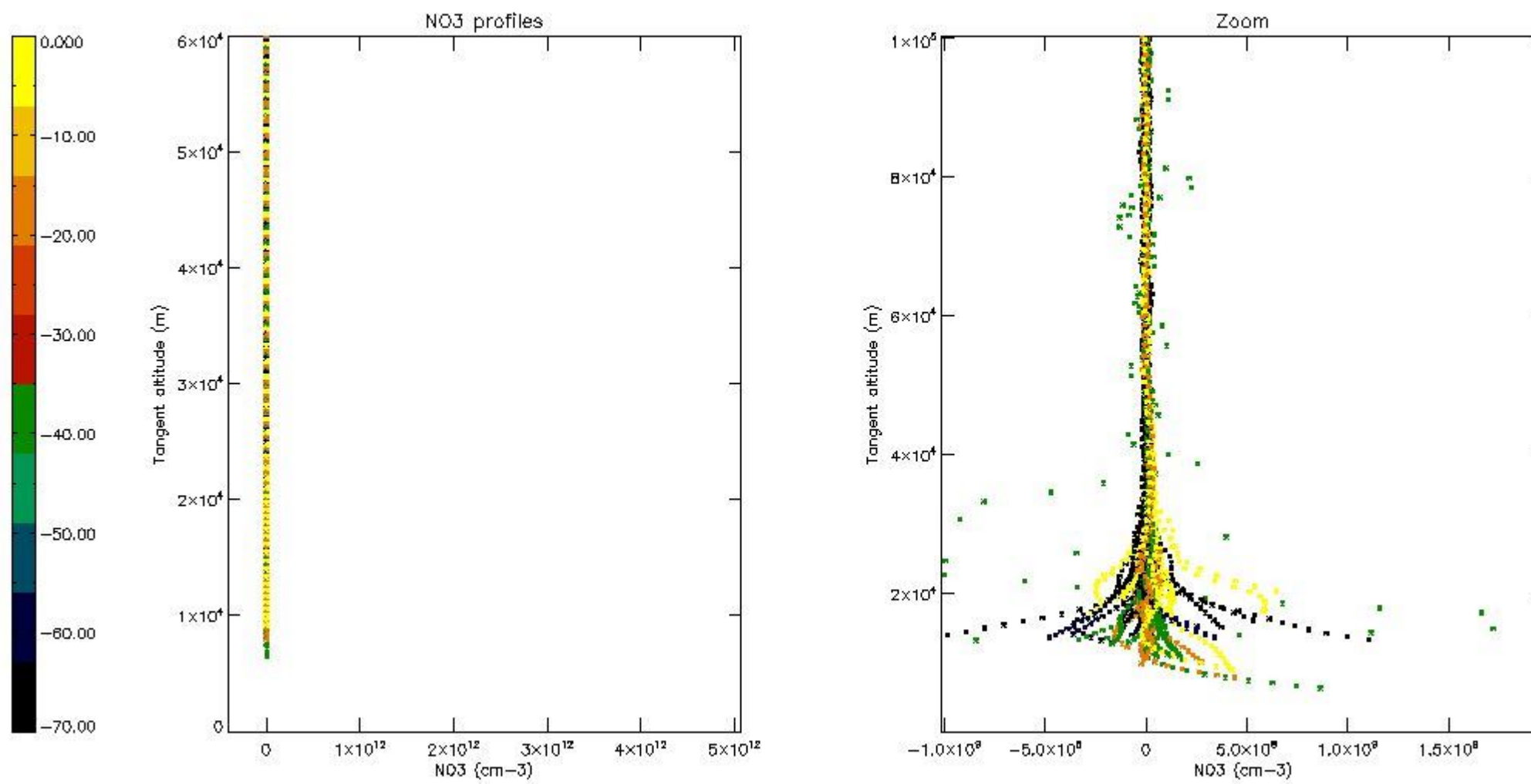
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



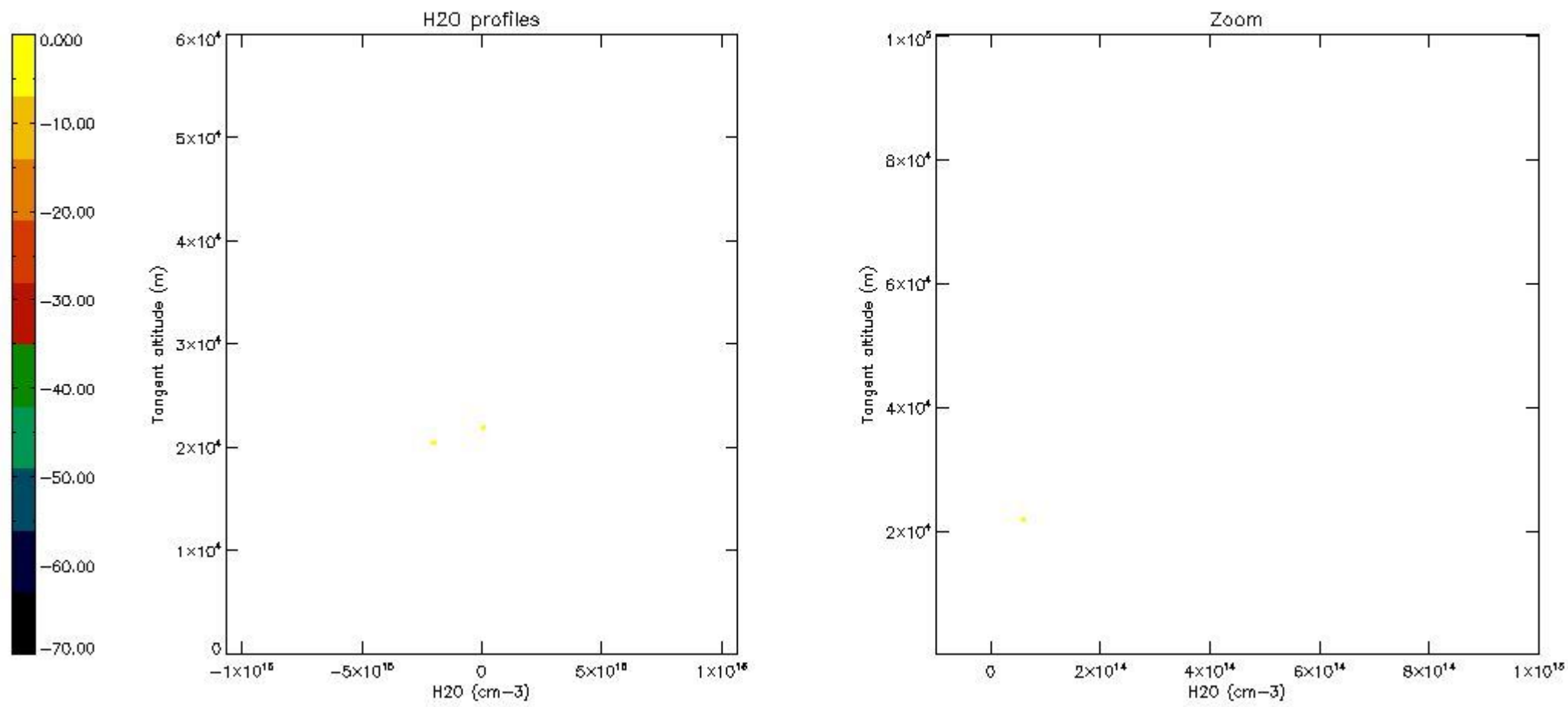
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

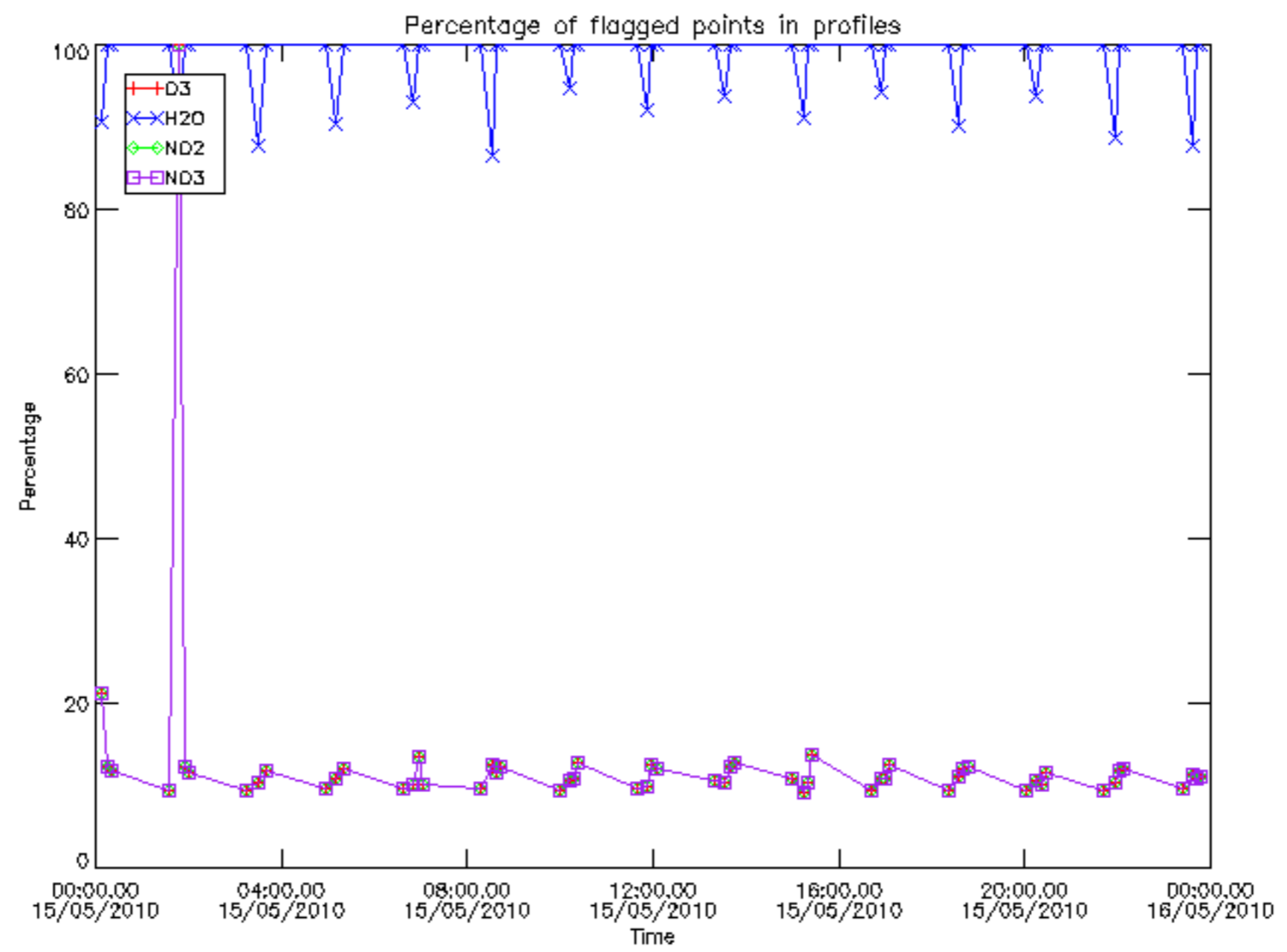
The colorbar represents the latitude.



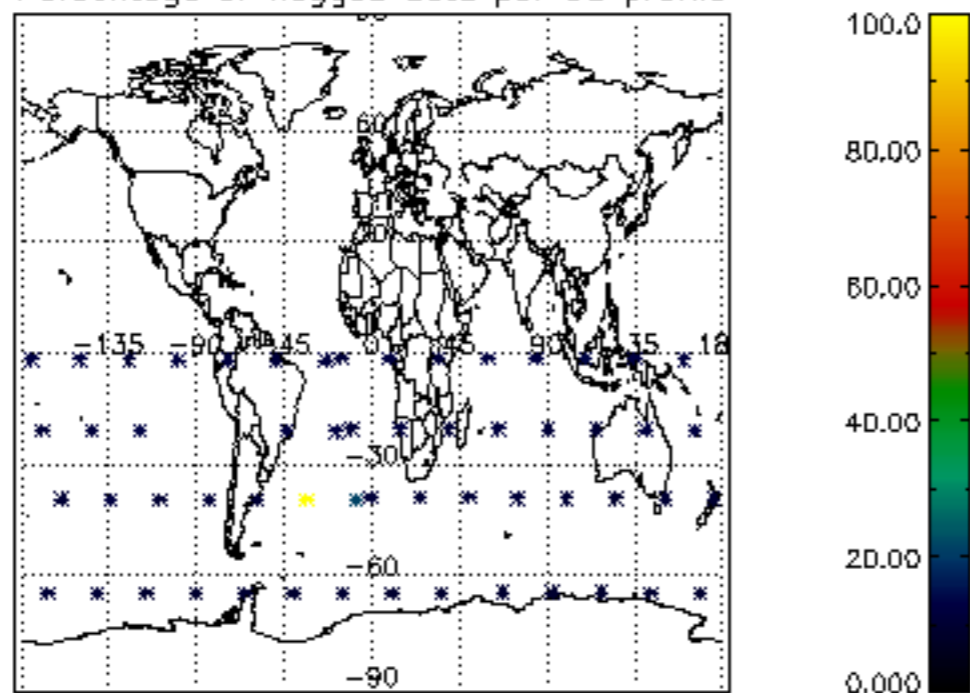
6. Auxiliary Data Files used for the production reported in section 2

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.

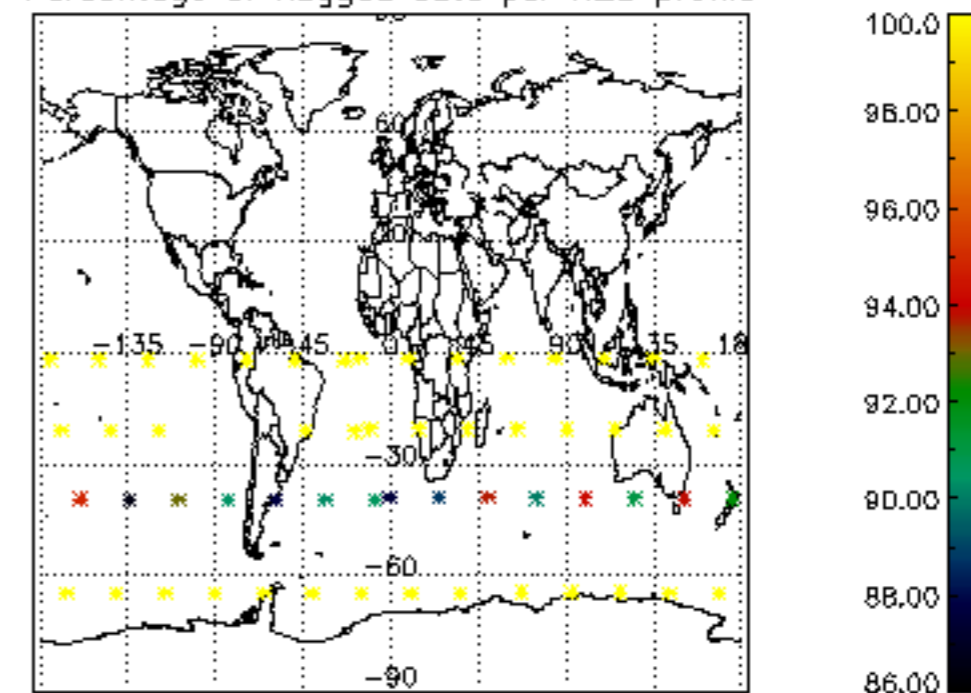
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	15-MAY-2010 00:08:15
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	15-MAY-2010 00:08:15
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	15-MAY-2010 00:08:15



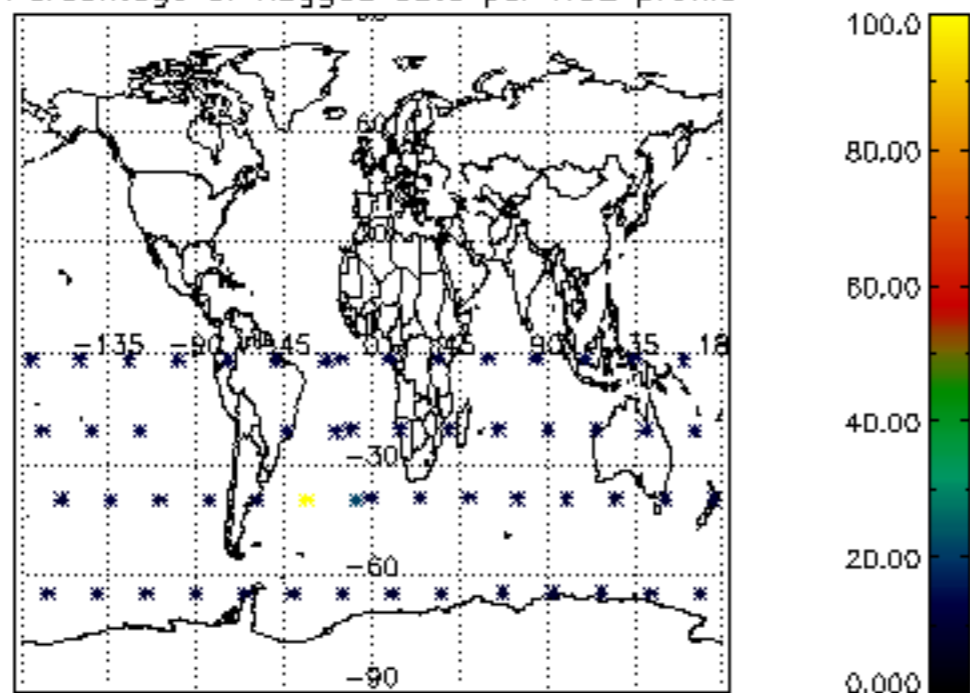
Percentage of flagged data per D3 profile



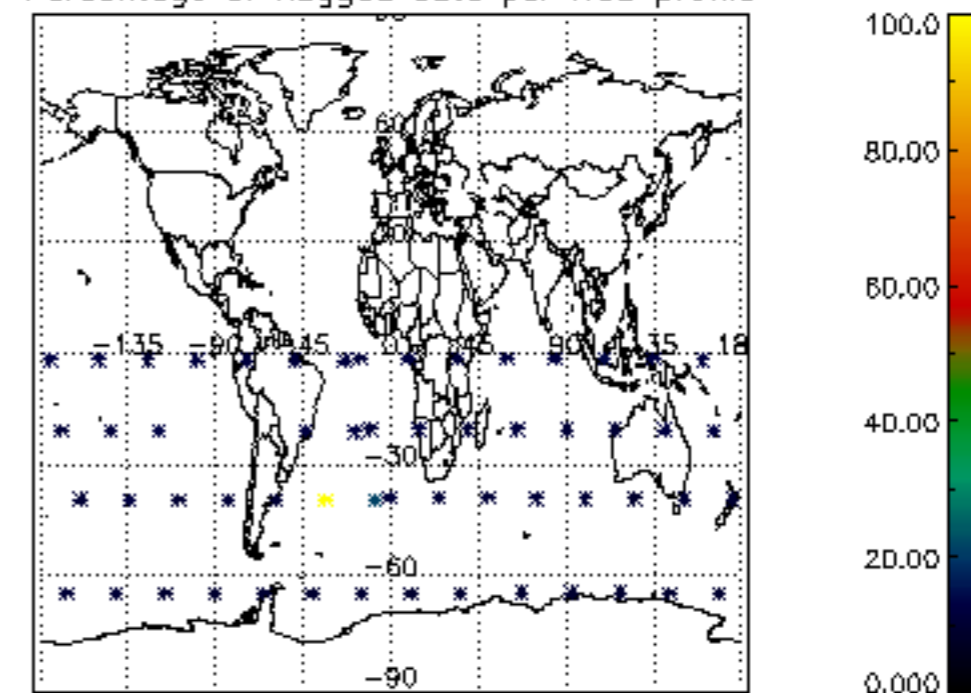
Percentage of flagged data per H2O profile

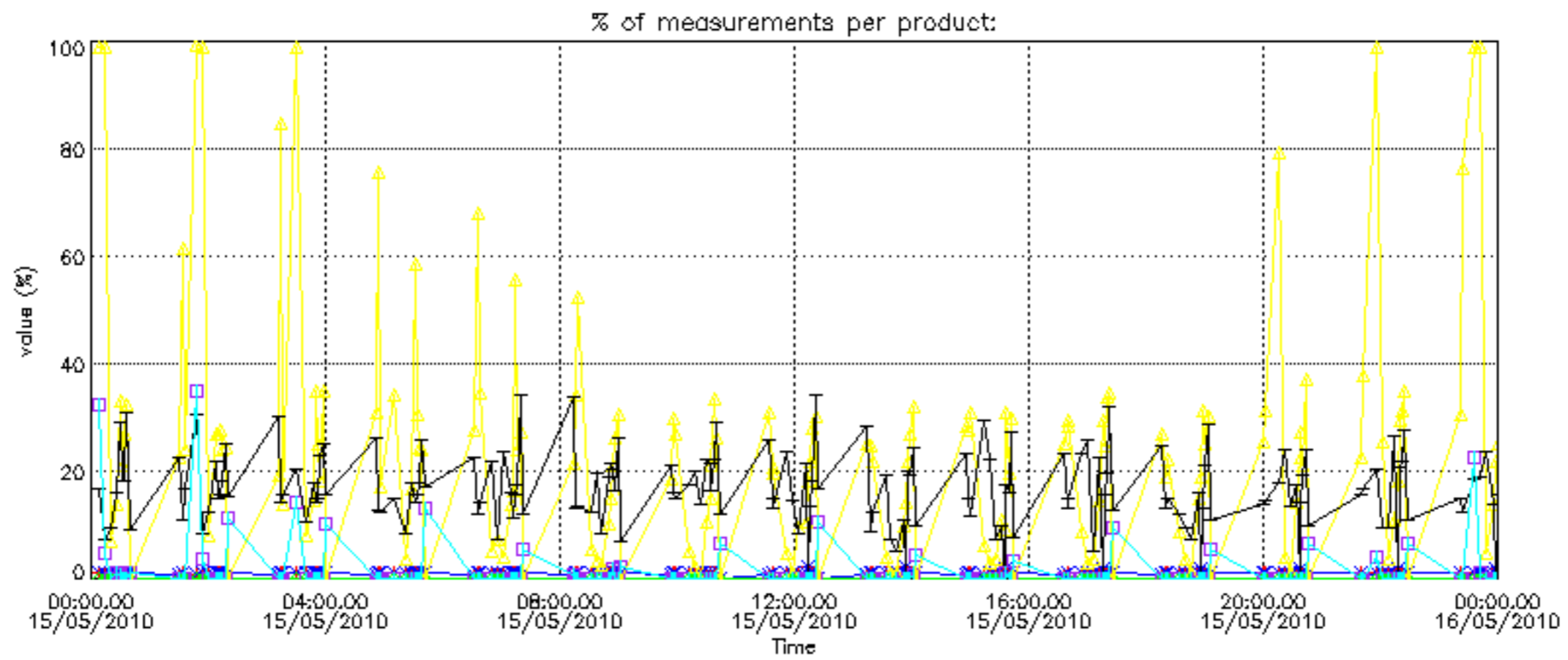
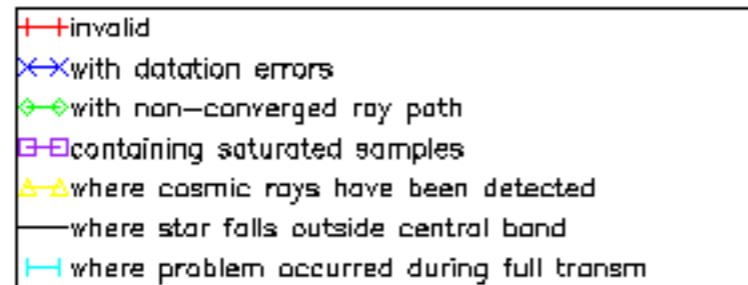


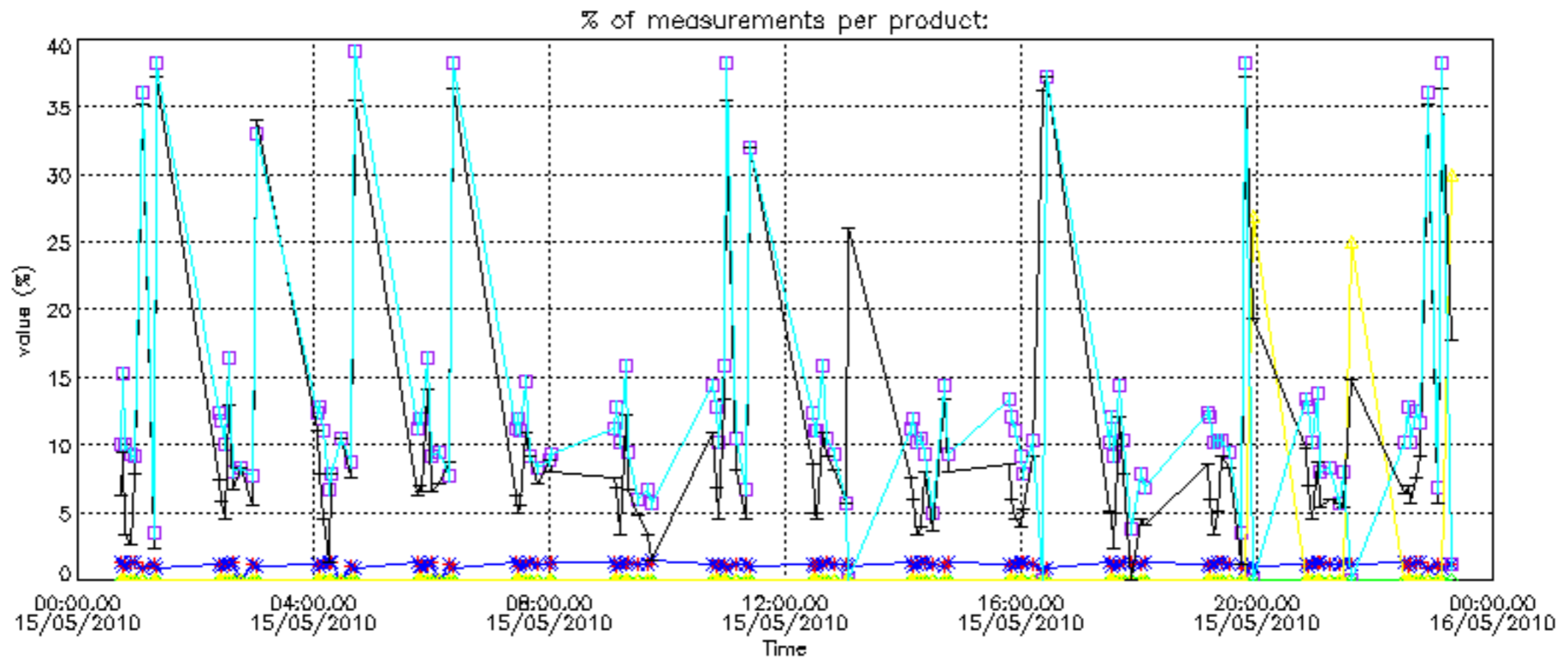
Percentage of flagged data per NO2 profile



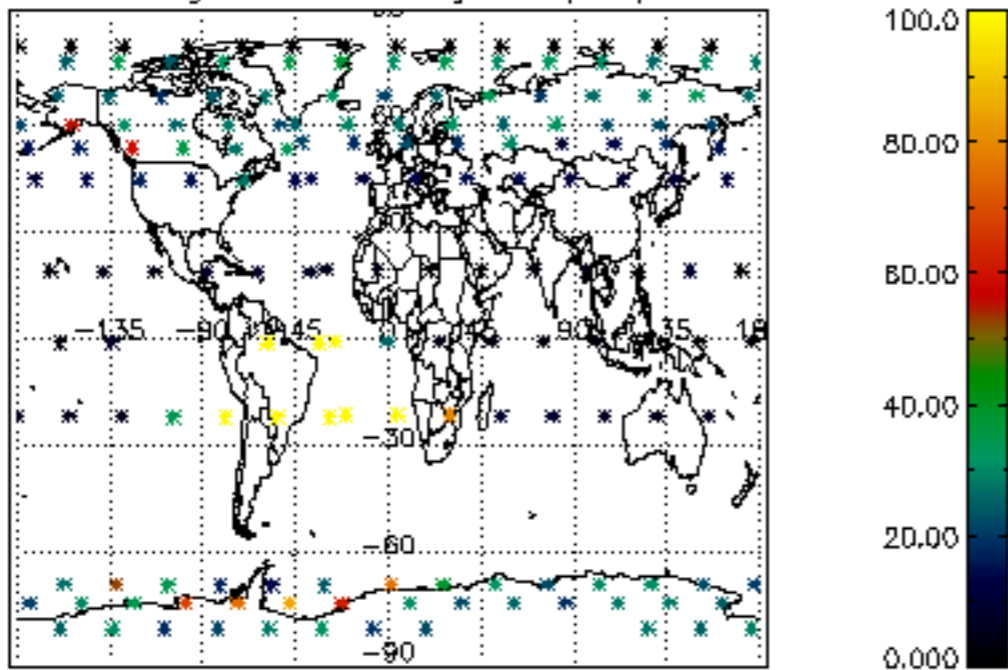
Percentage of flagged data per NO3 profile



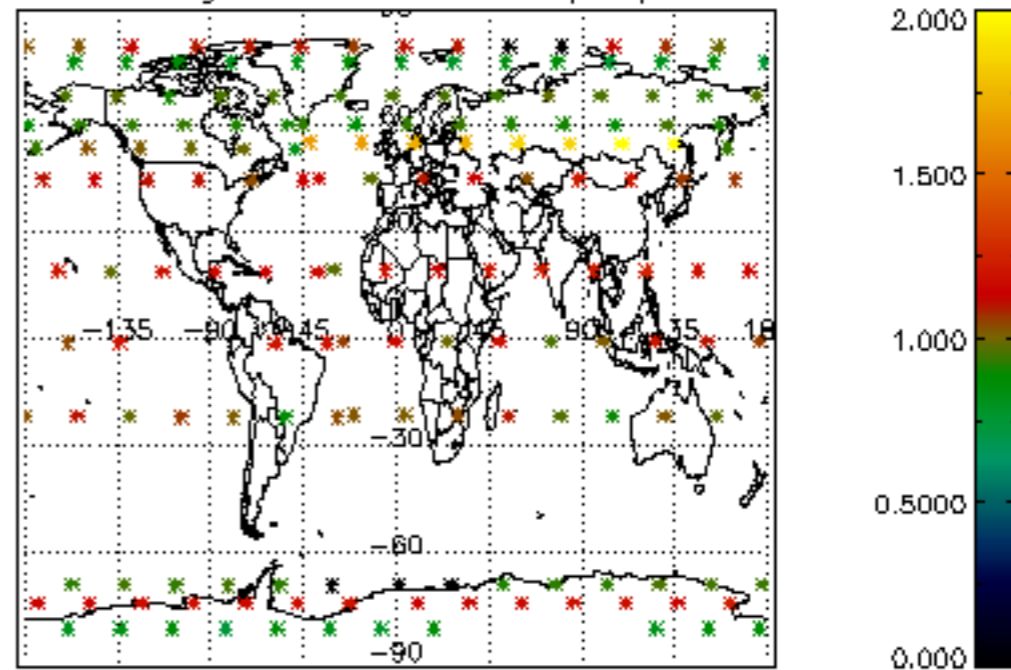




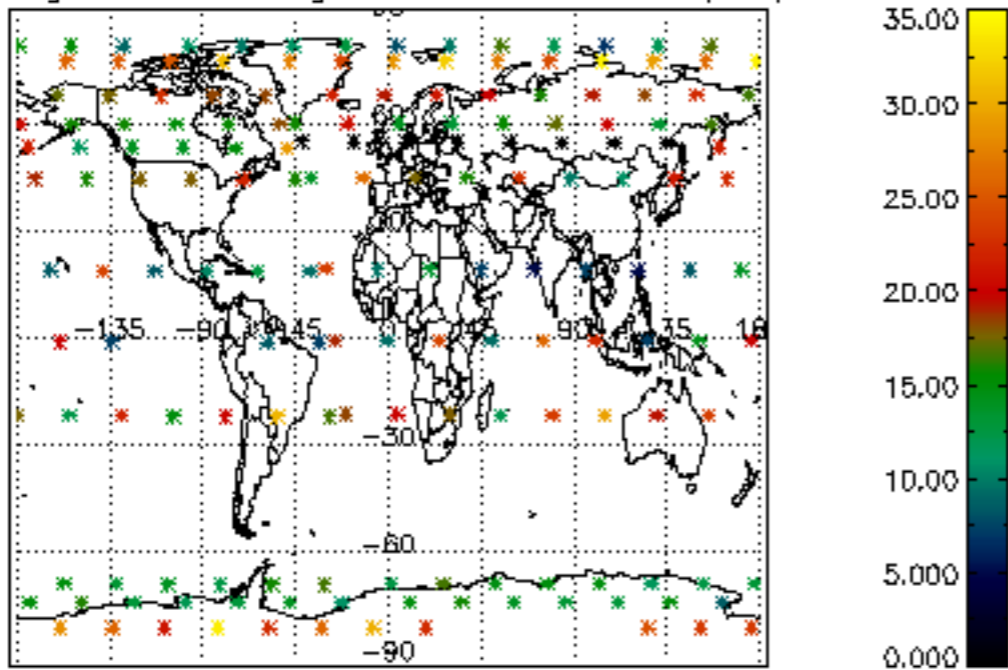
Percentage of cosmic ray hits per profile



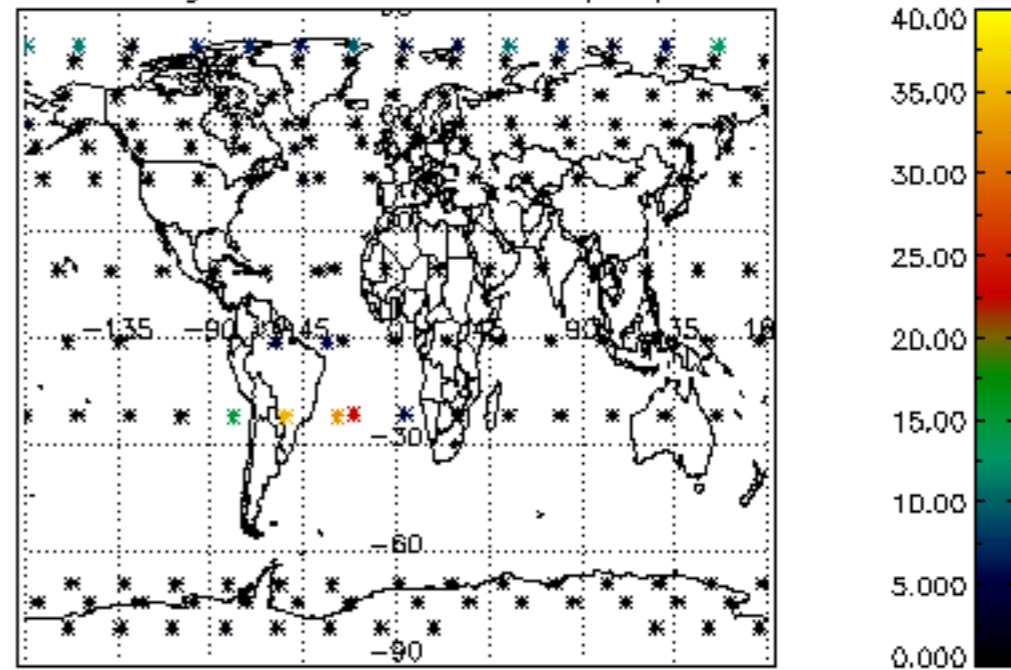
Percentage of datation errors per profile



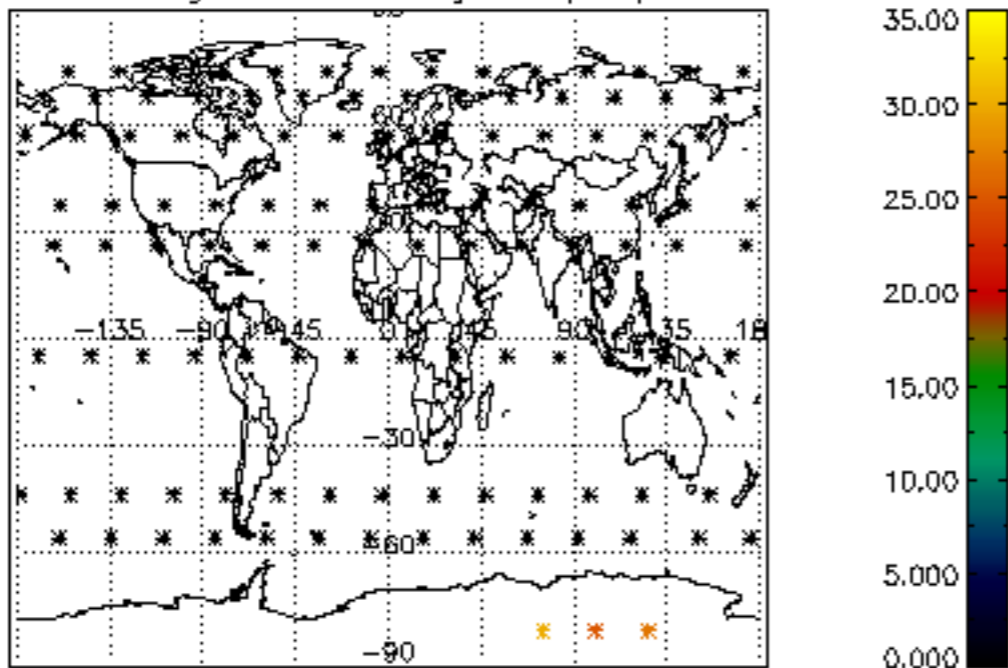
Percentage of star falling outside central band per profile



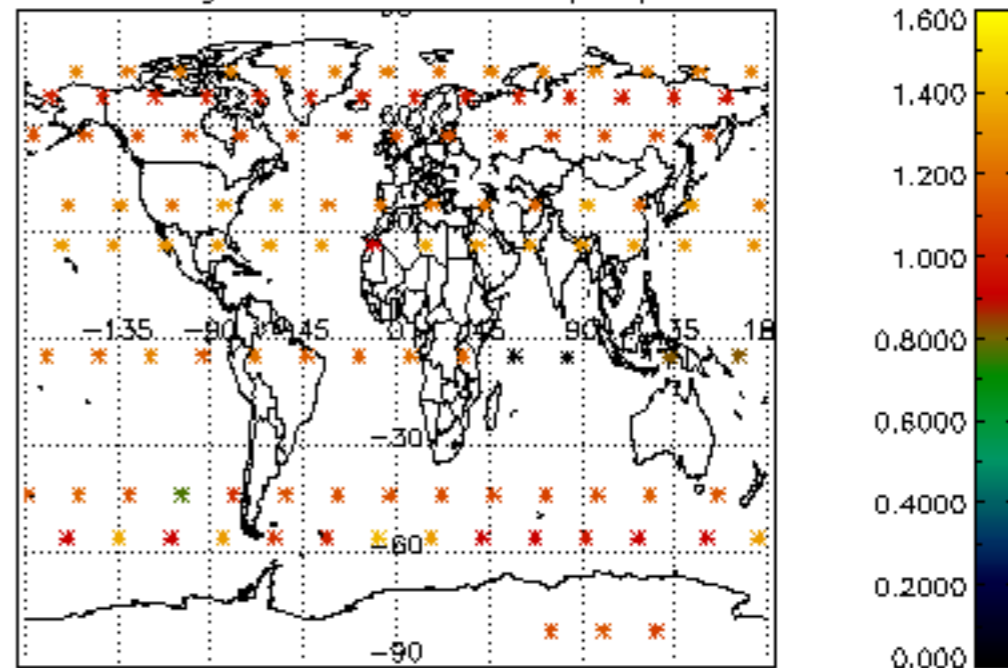
Percentage of saturation errors per profile



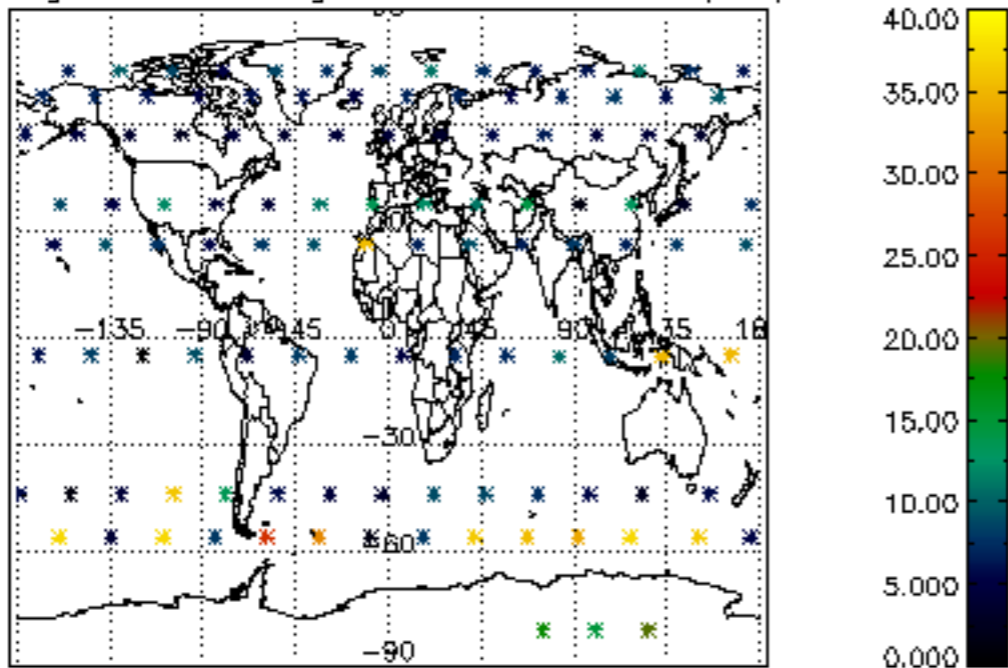
Percentage of cosmic ray hits per profile



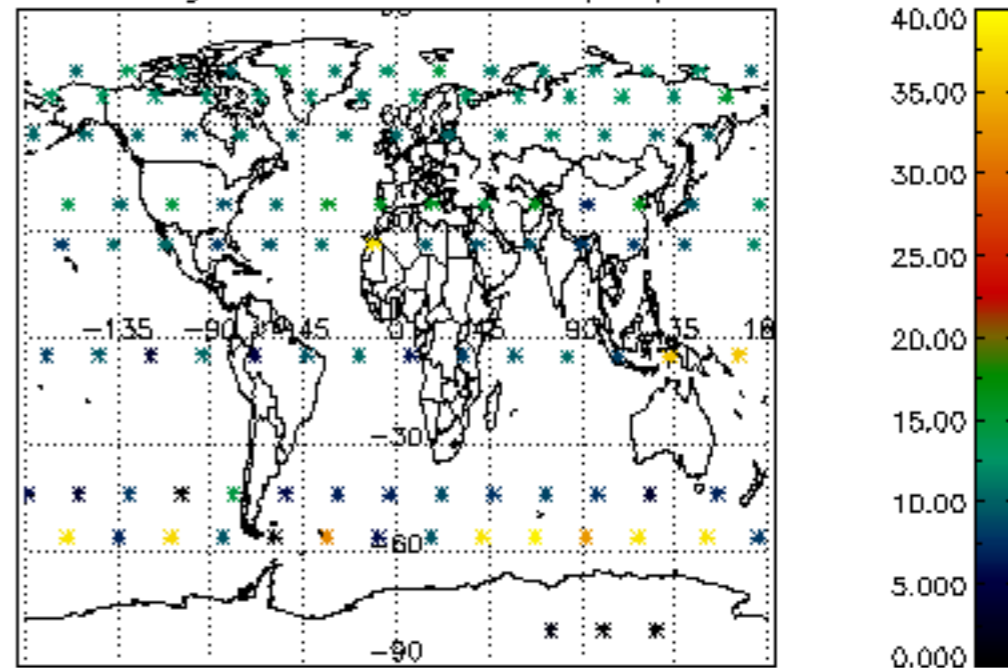
Percentage of datation errors per profile

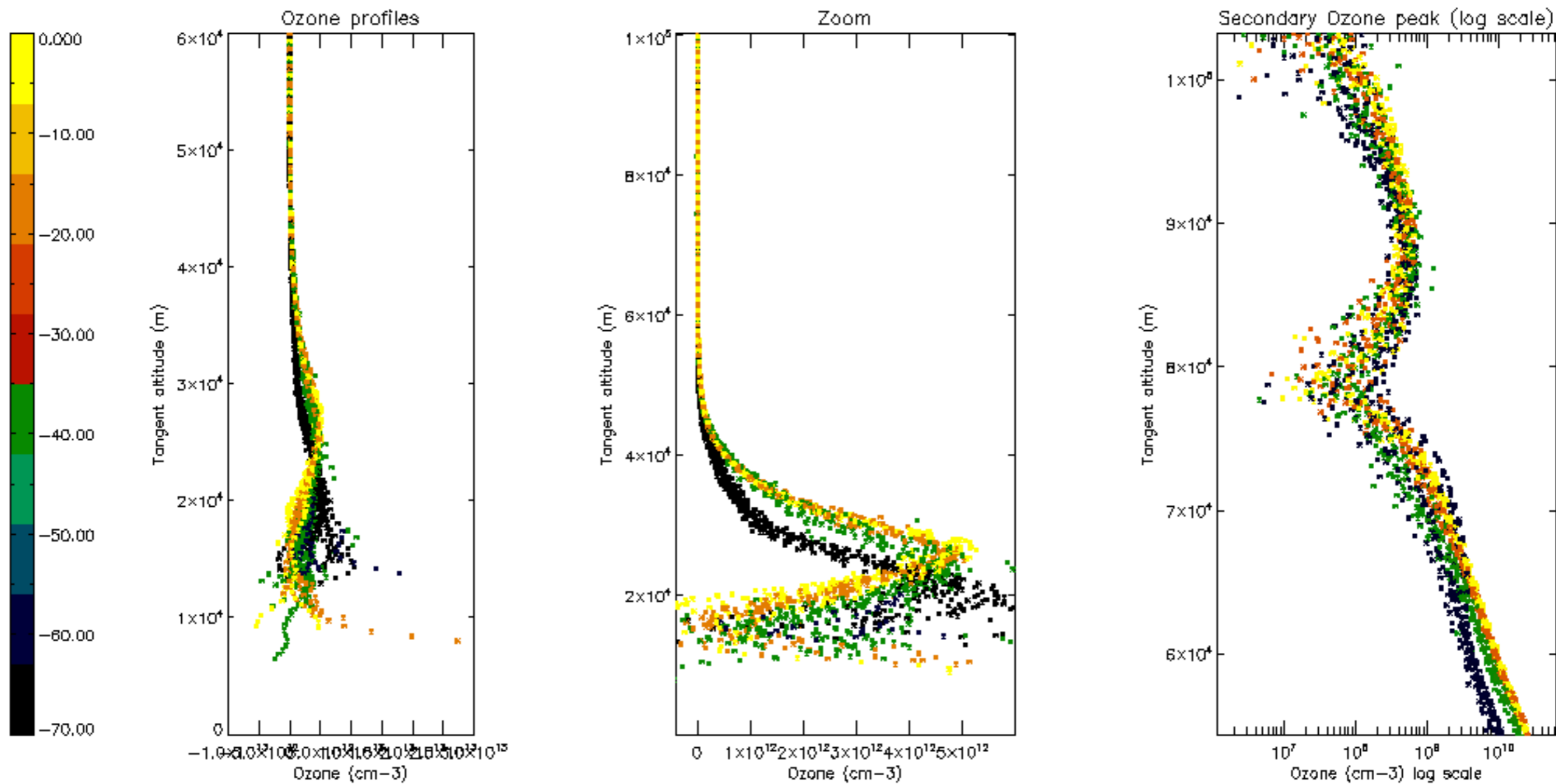


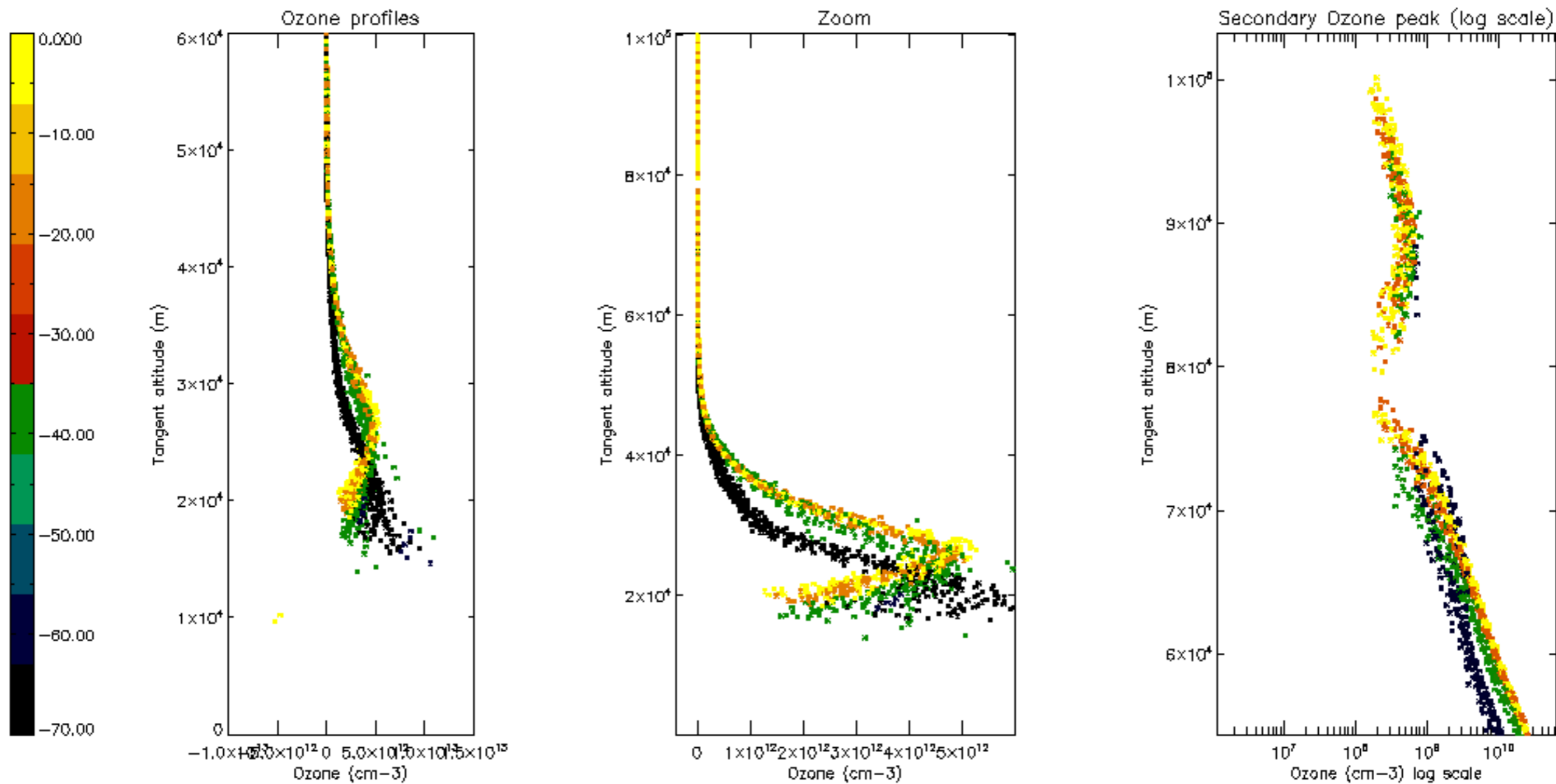
Percentage of star falling outside central band per profile

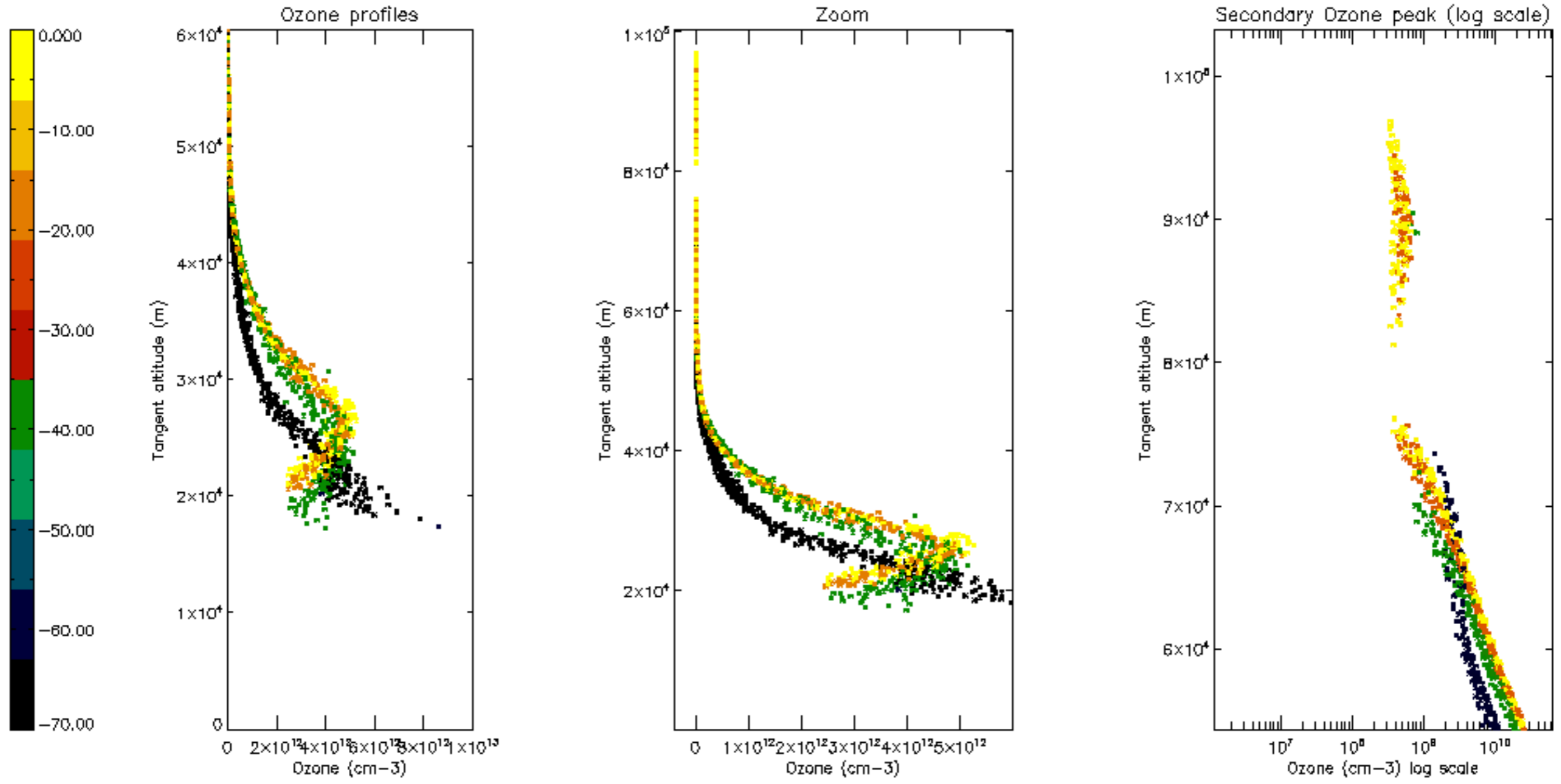


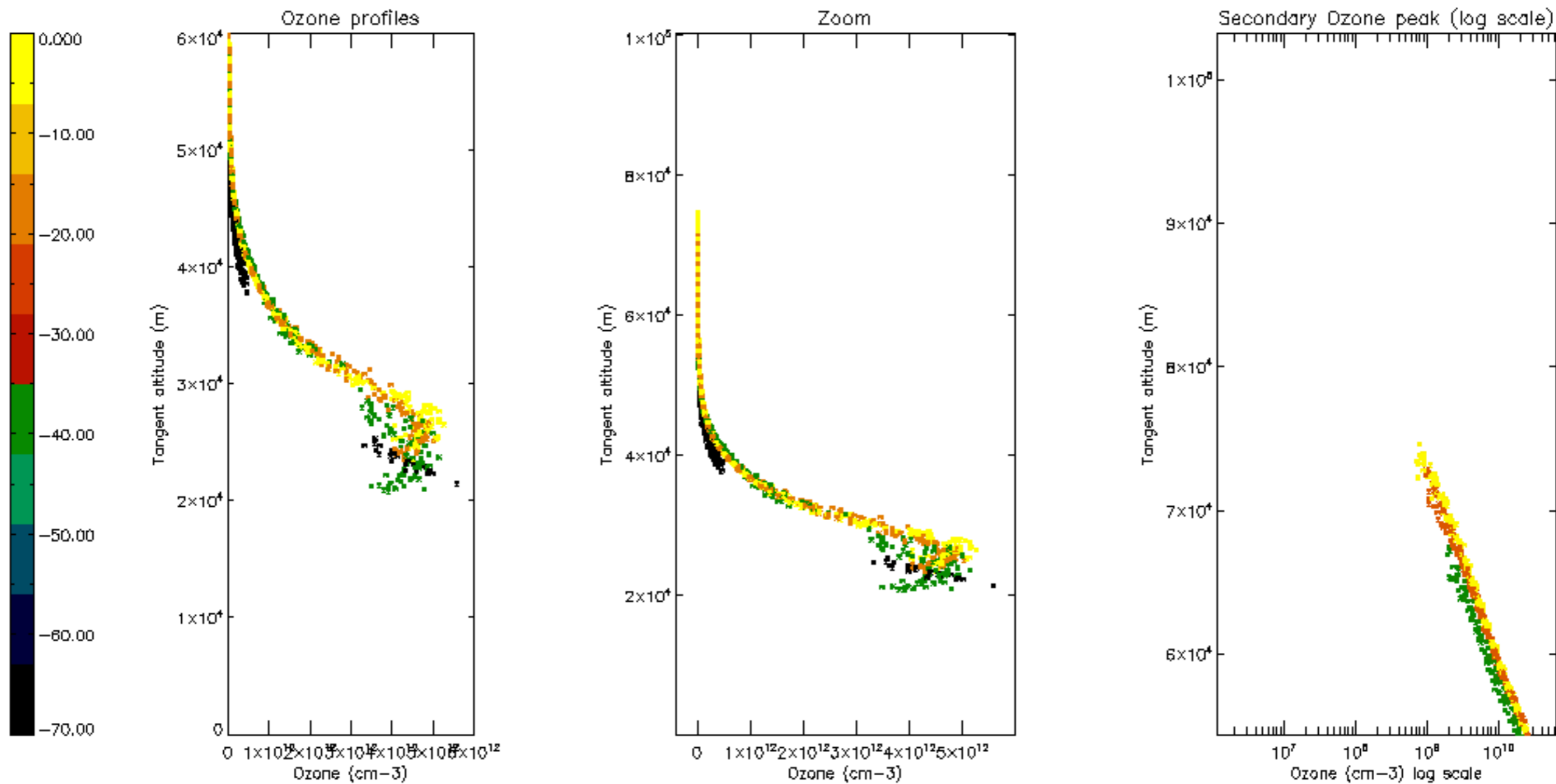
Percentage of saturation errors per profile

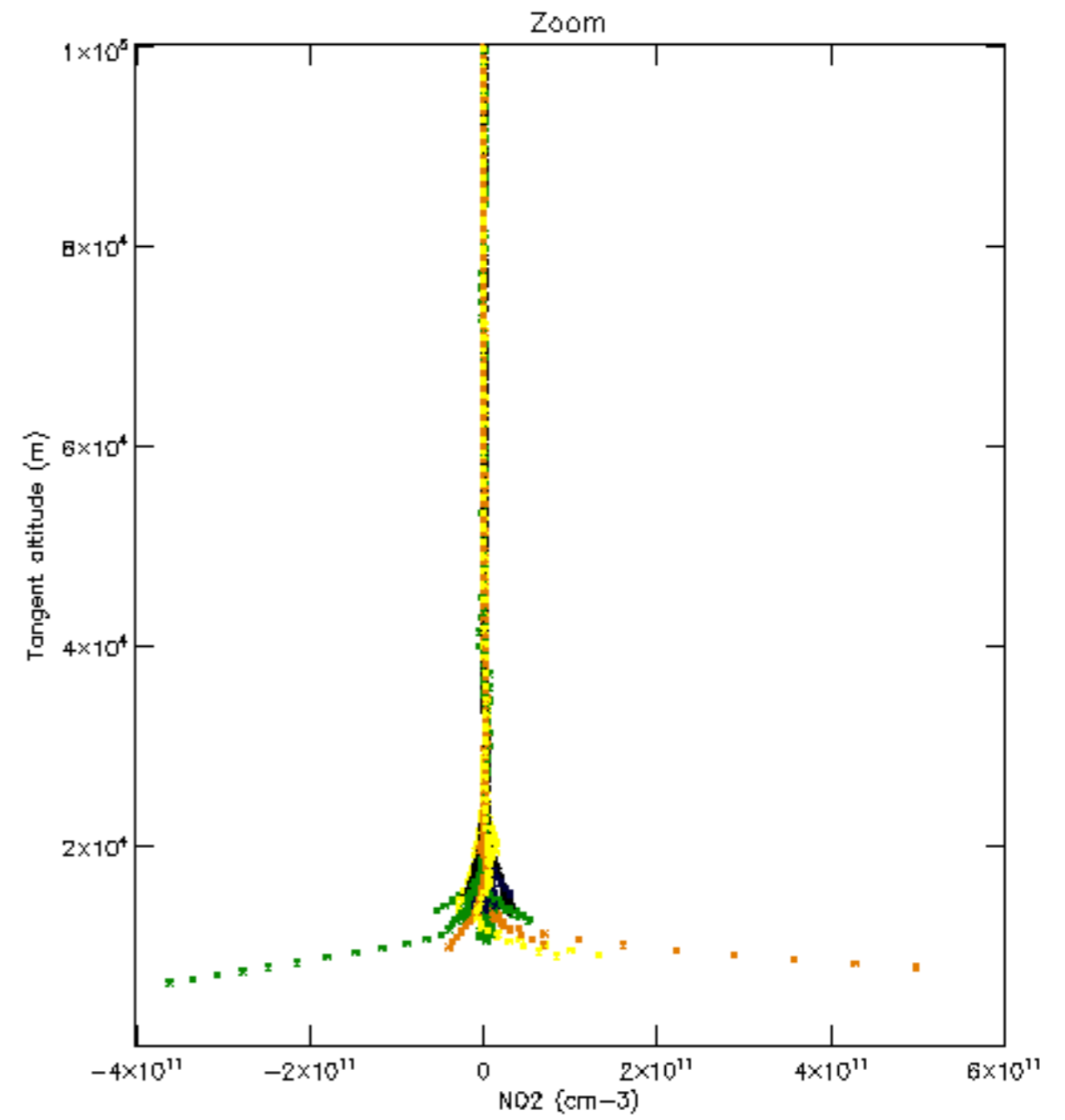
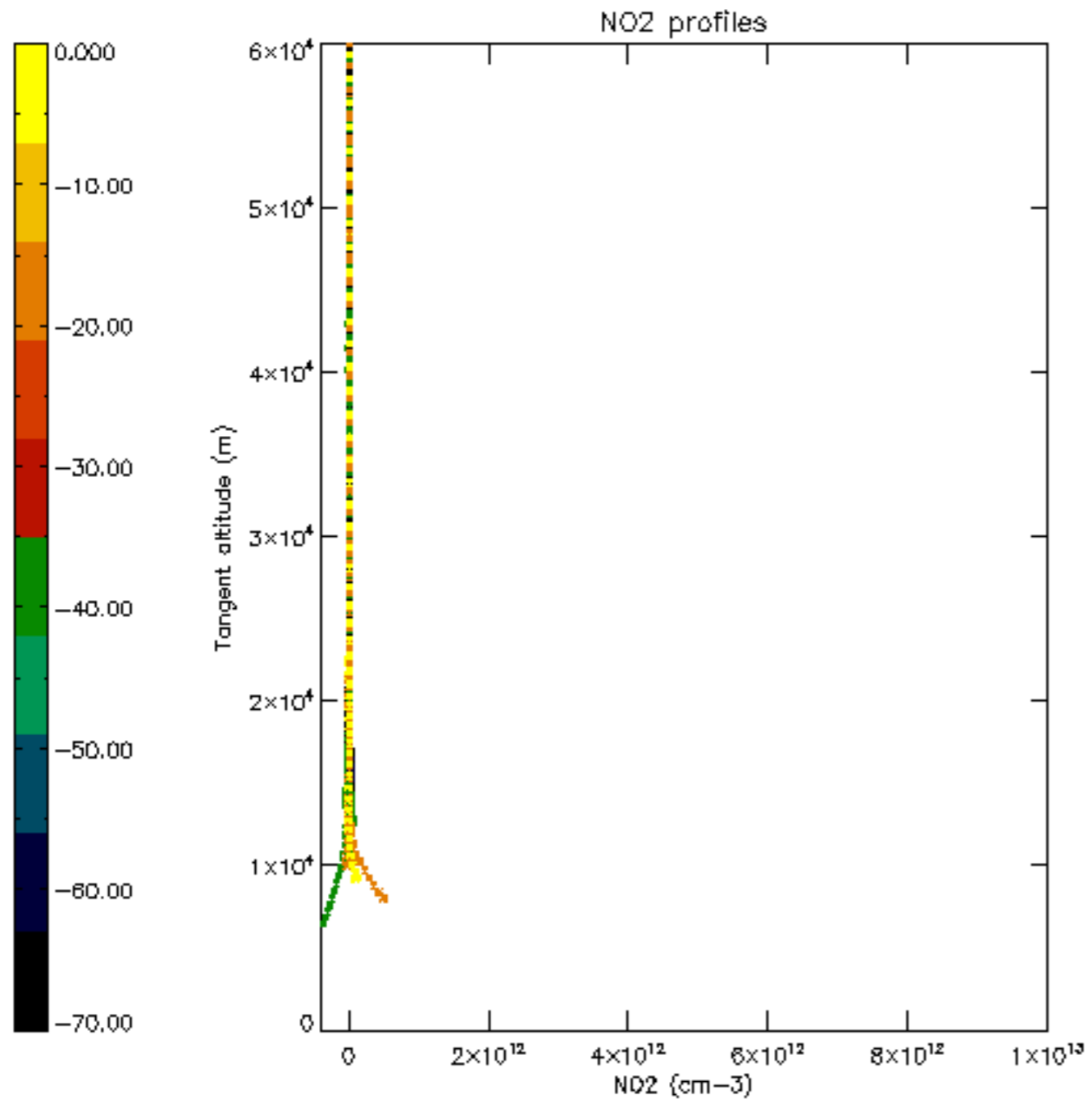


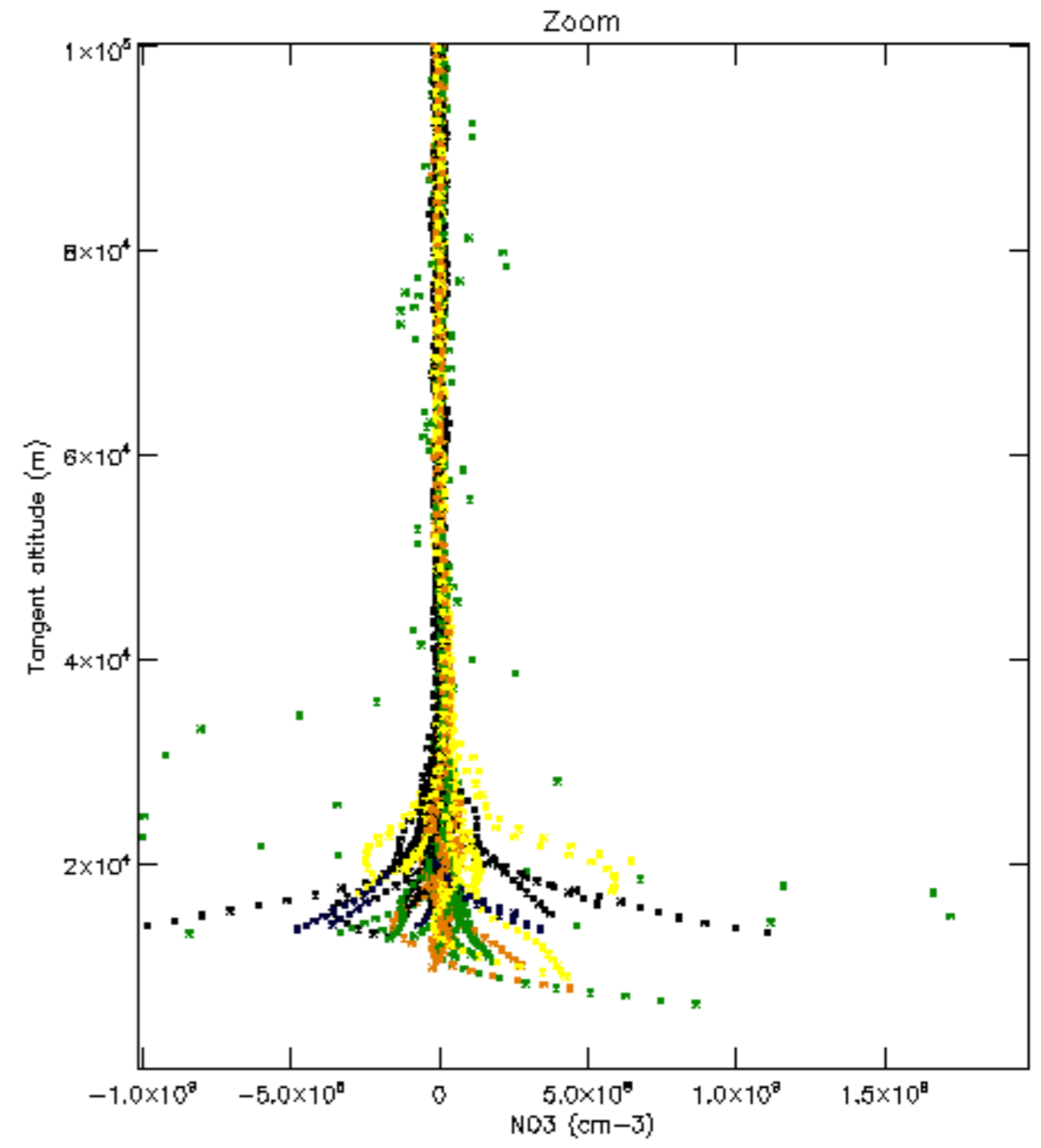
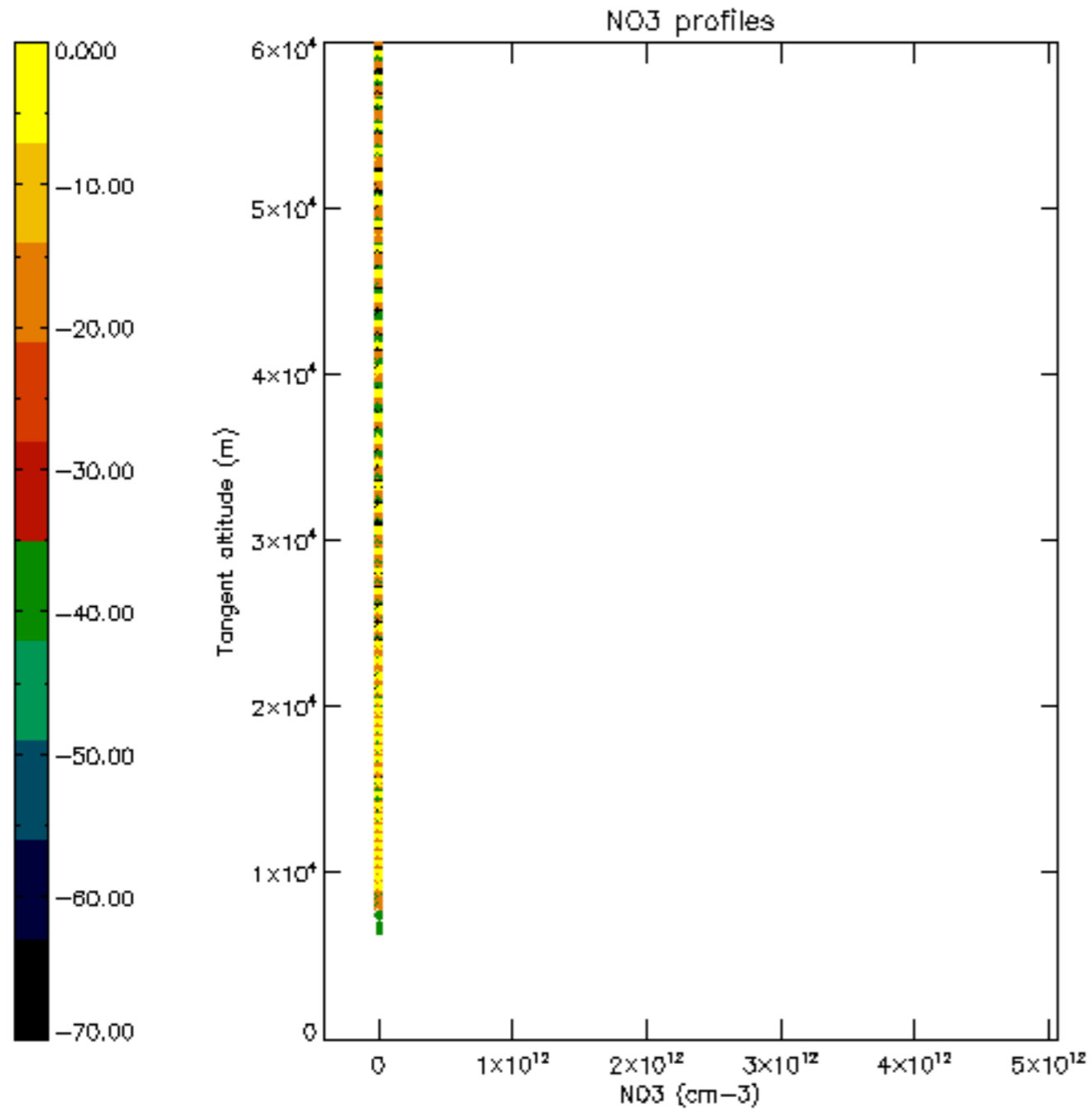


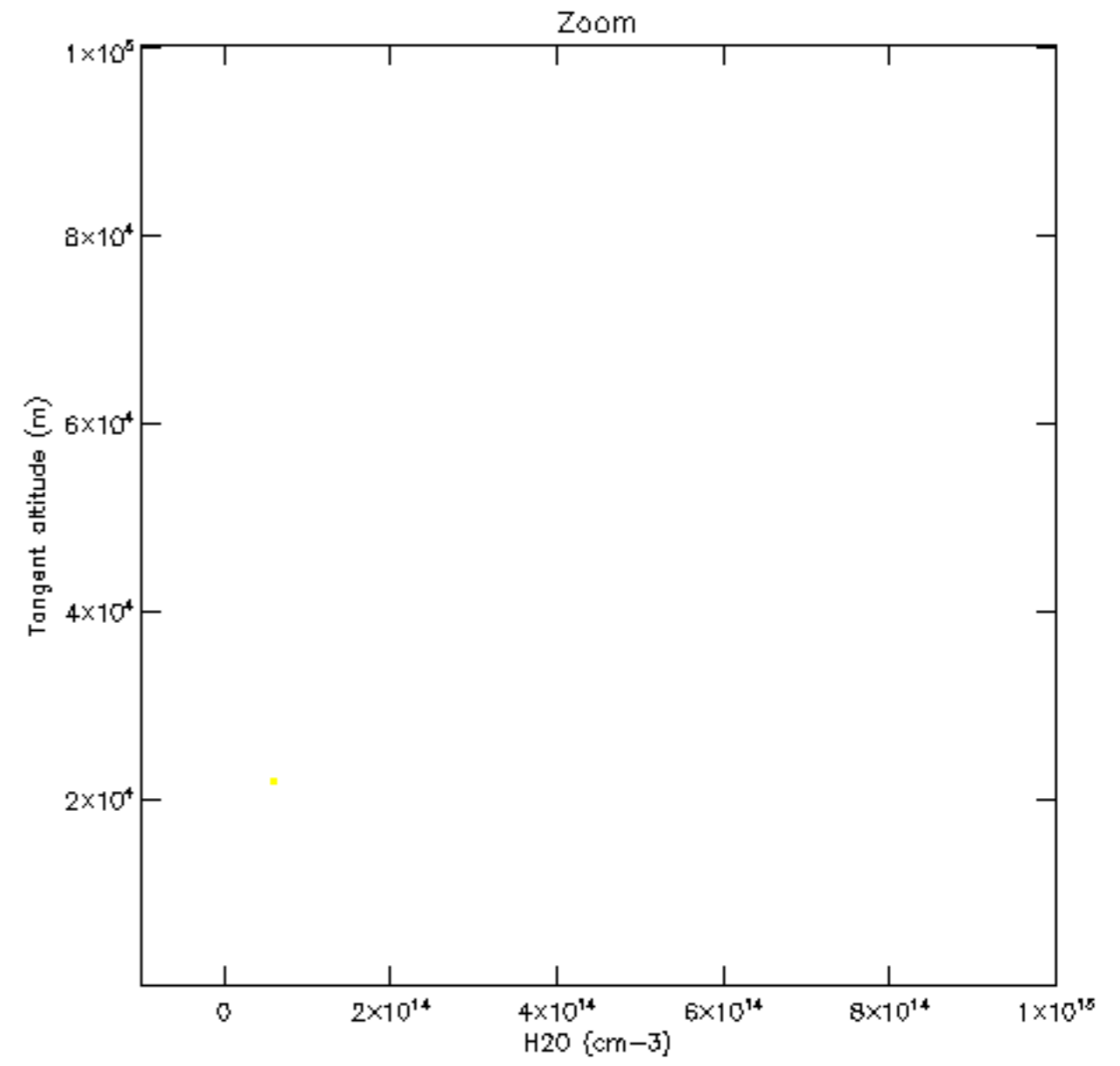
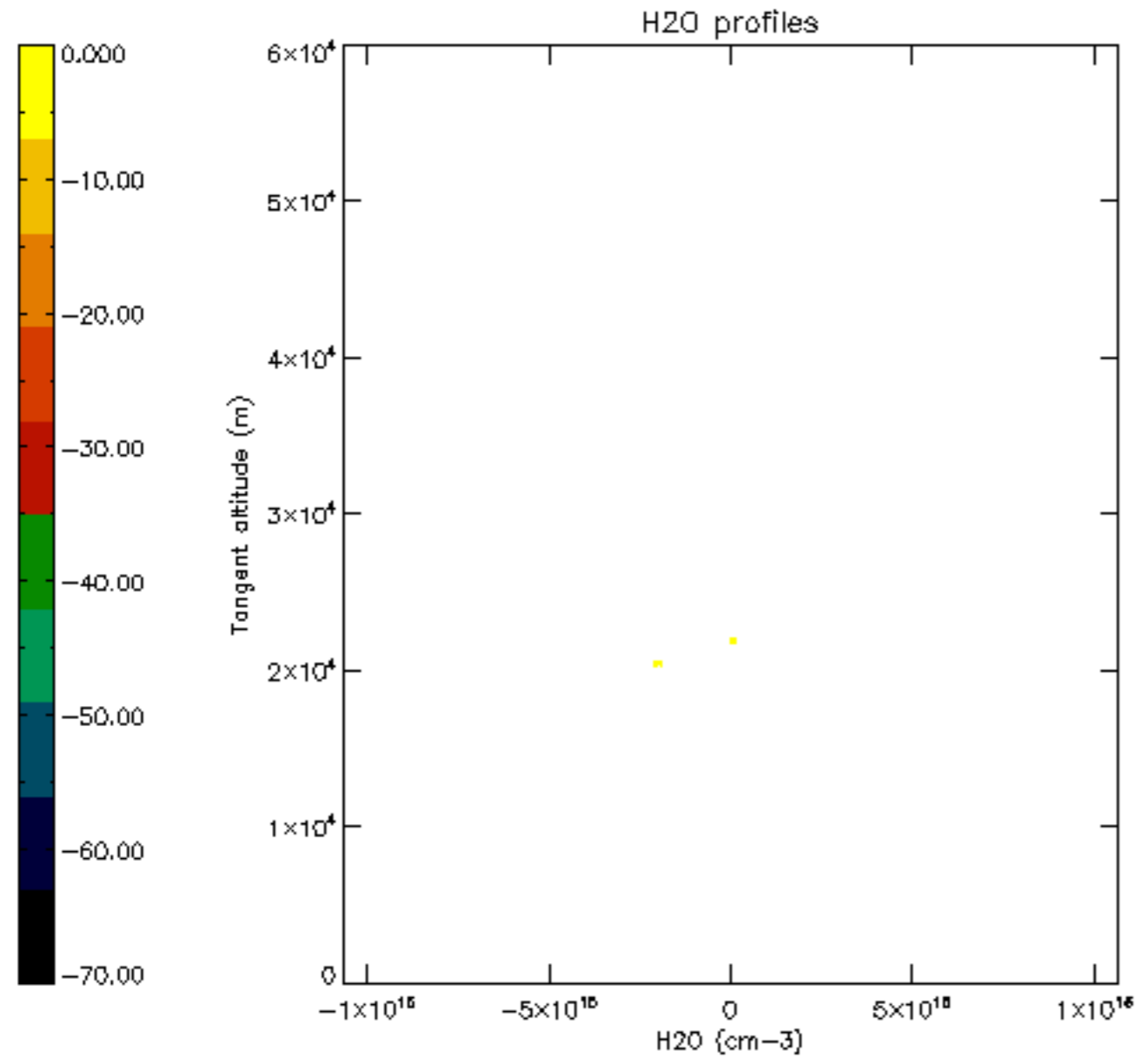


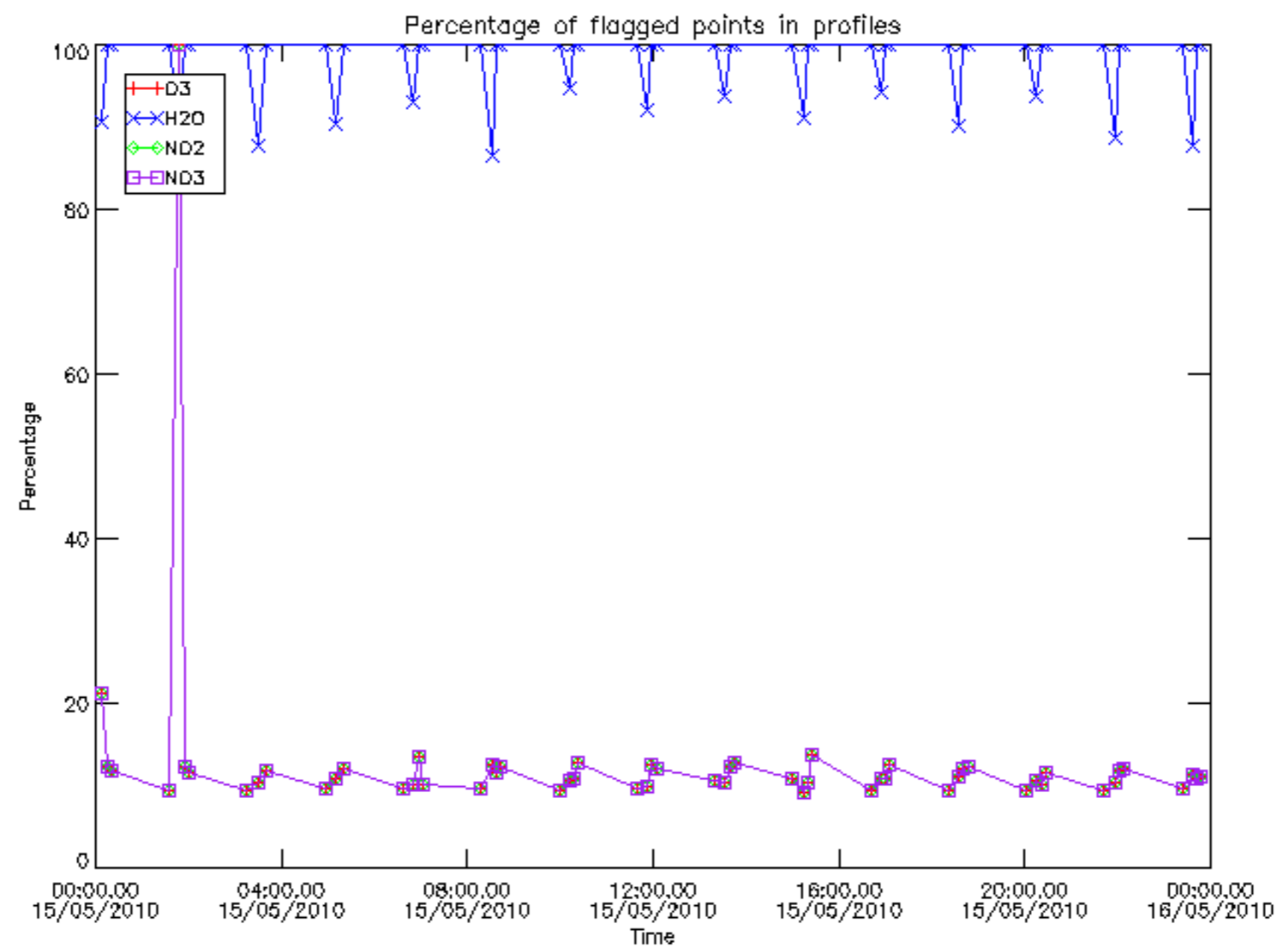




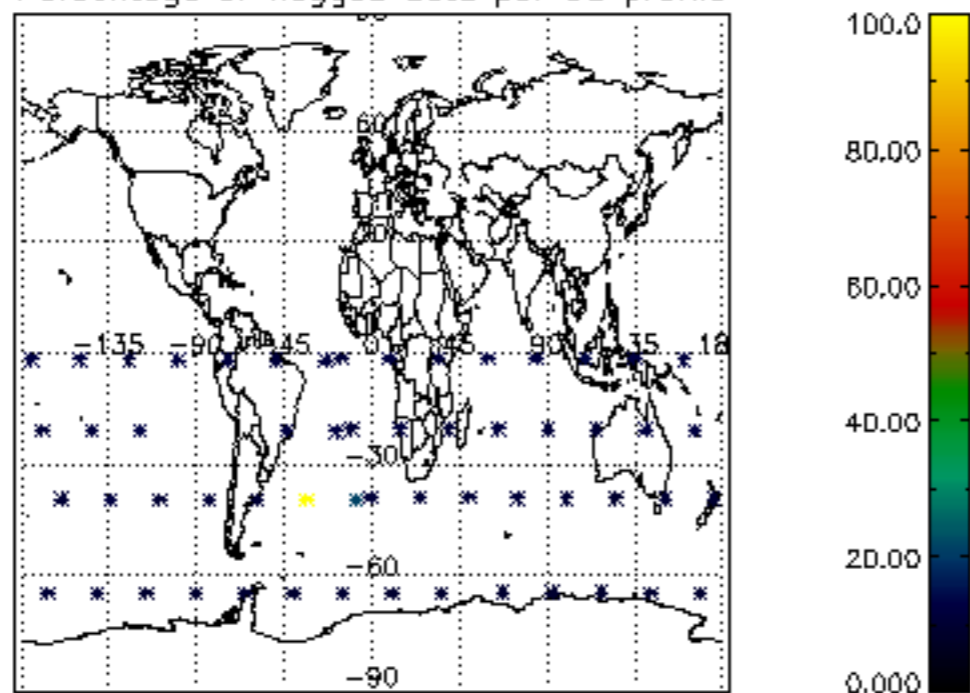




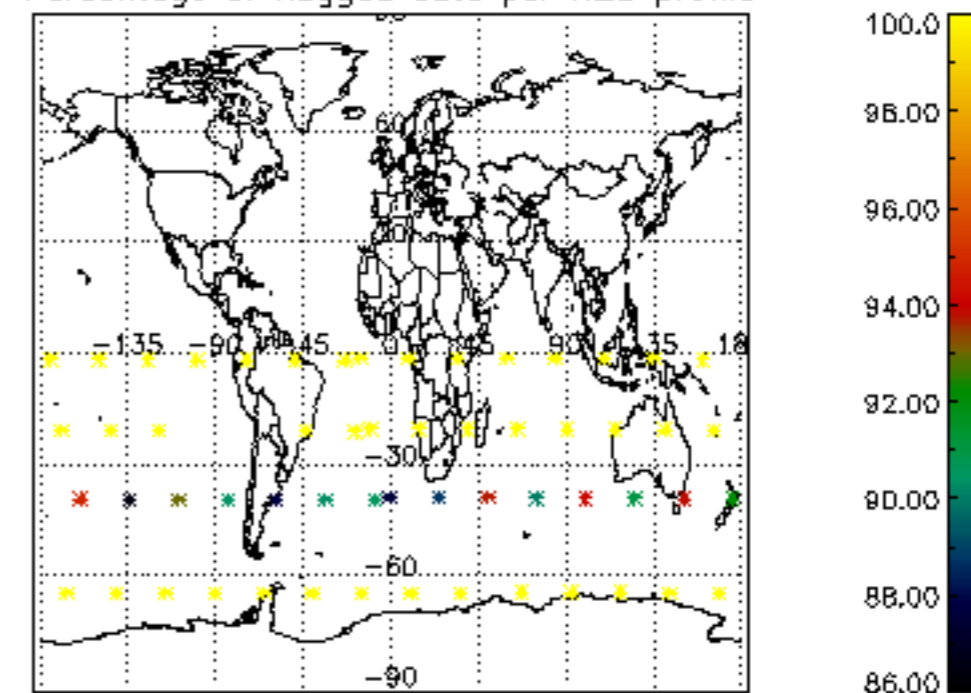




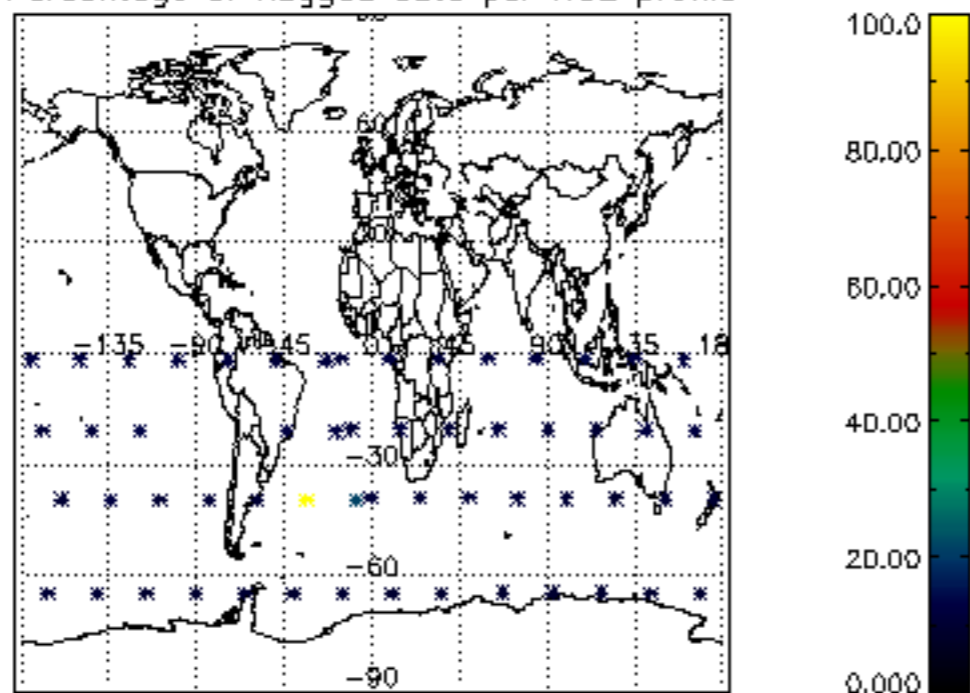
Percentage of flagged data per D3 profile



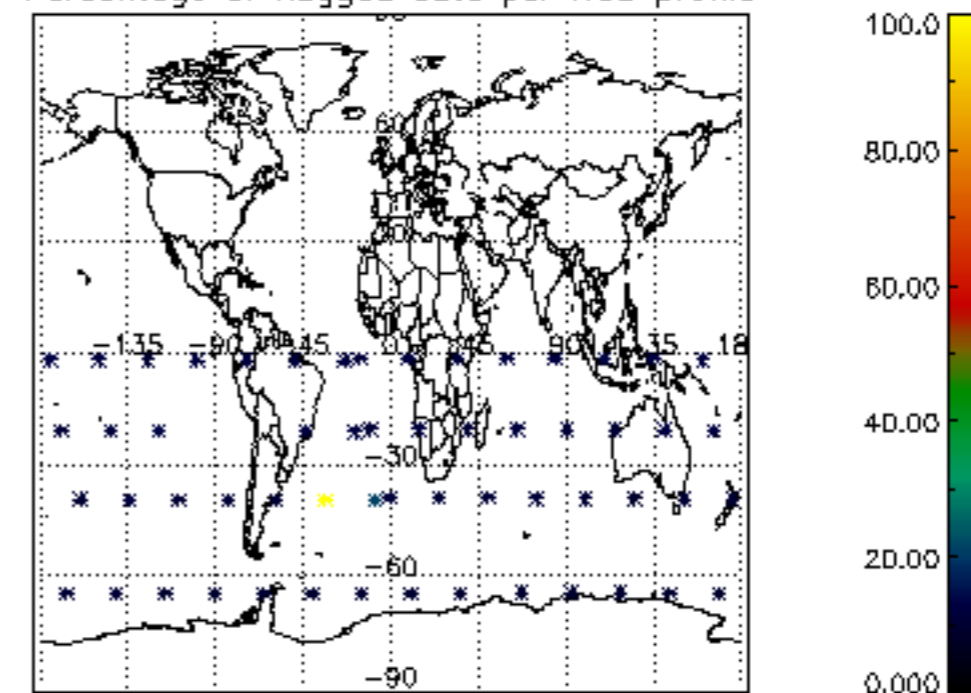
Percentage of flagged data per H2O profile

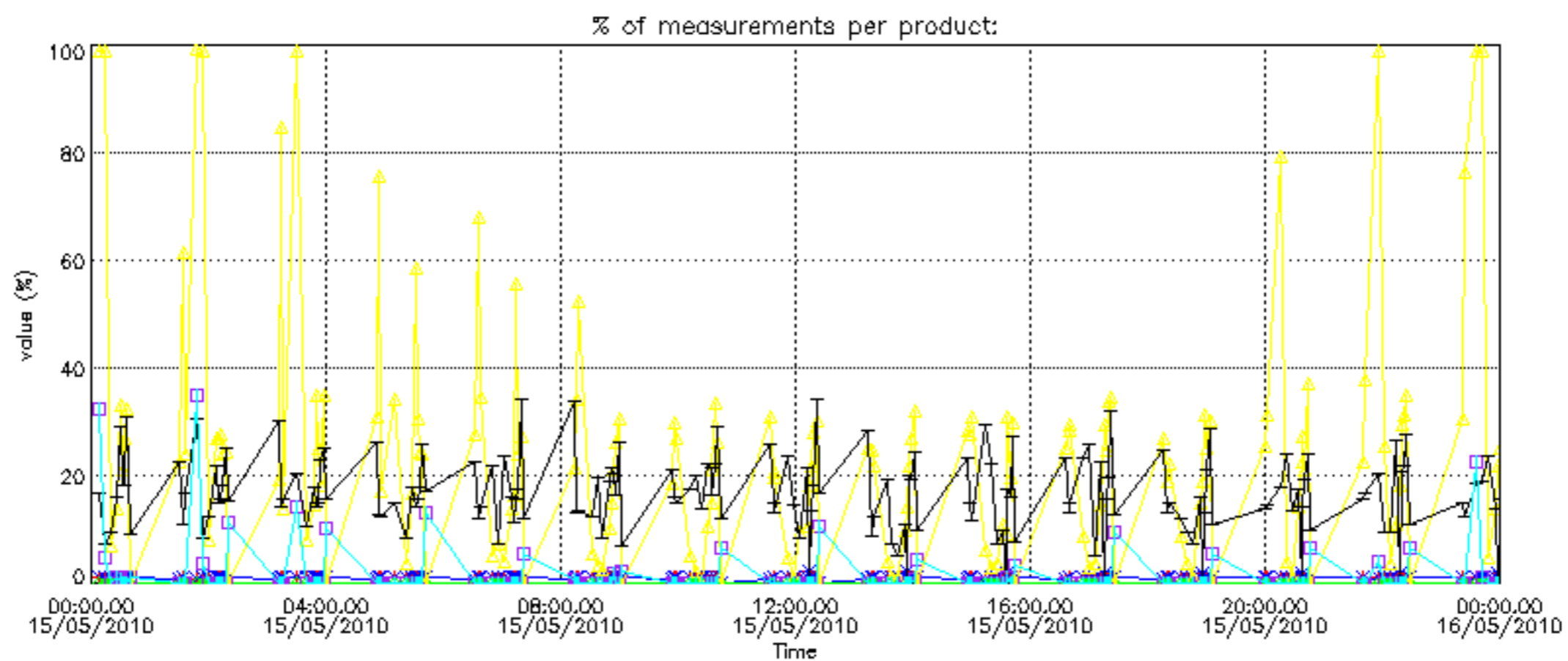
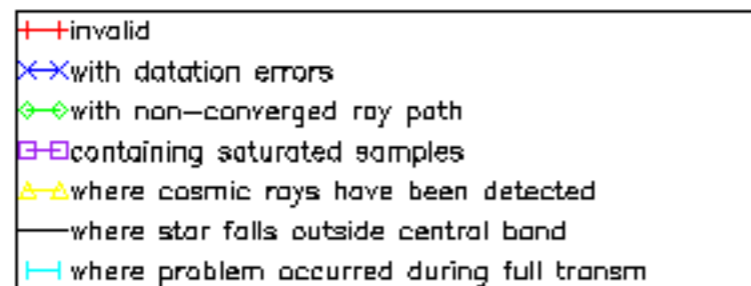


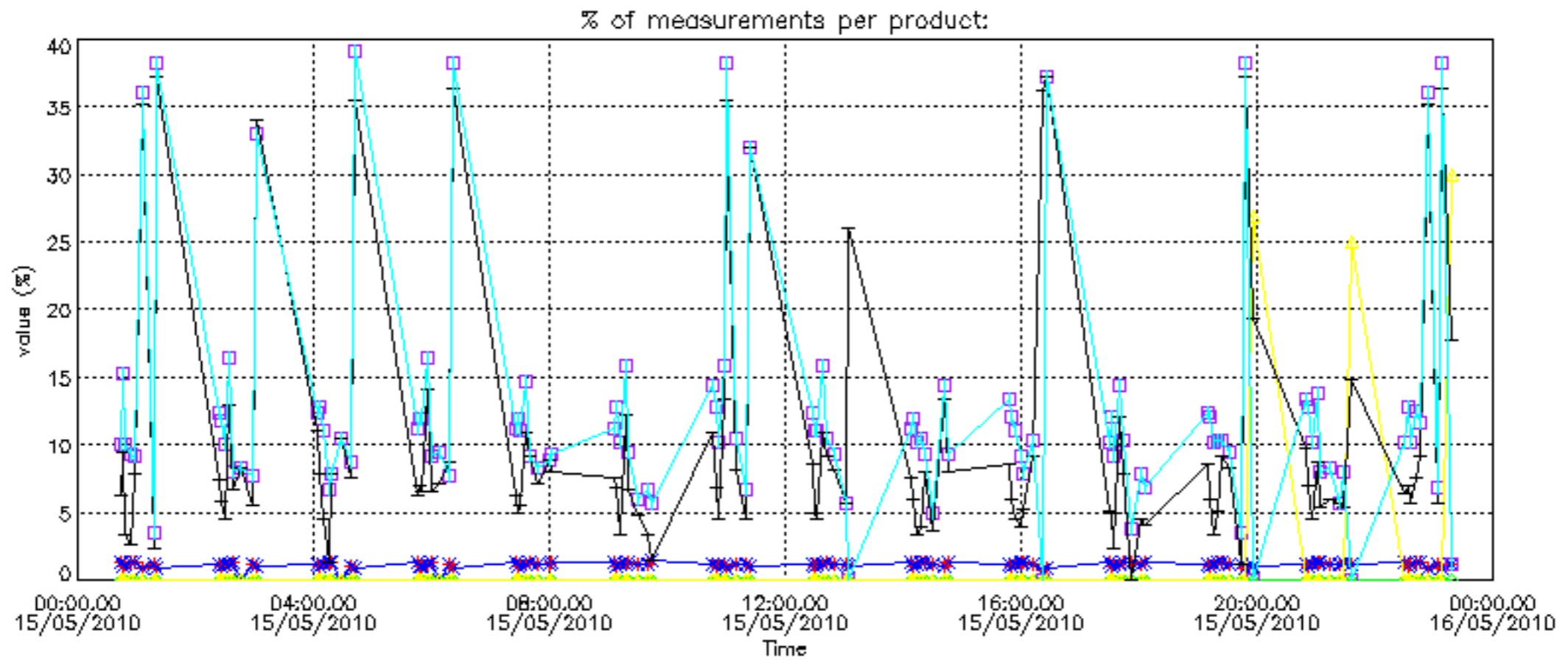
Percentage of flagged data per NO2 profile



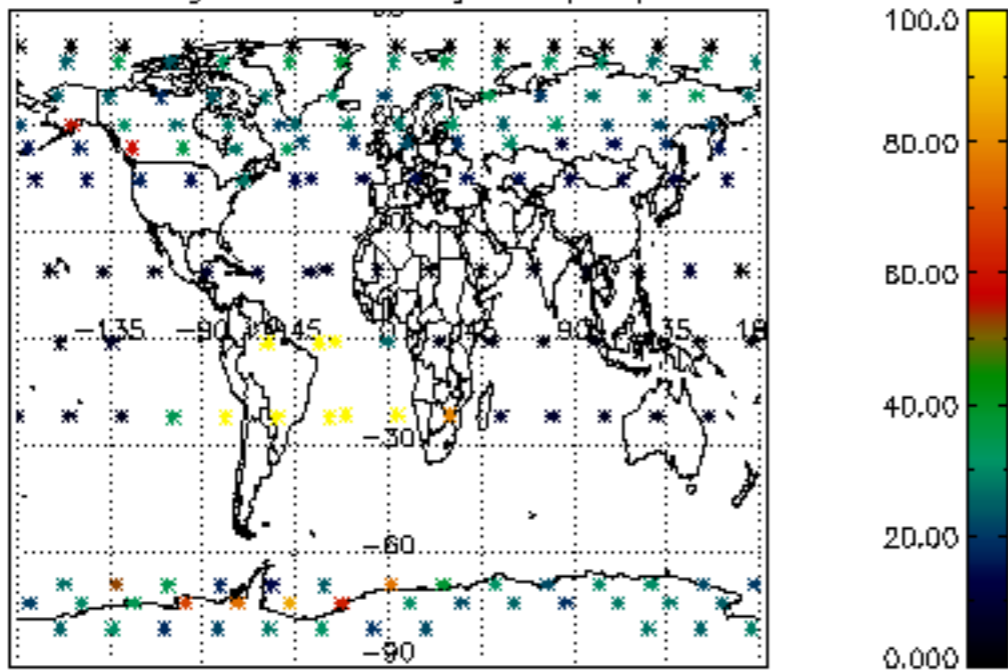
Percentage of flagged data per NO3 profile



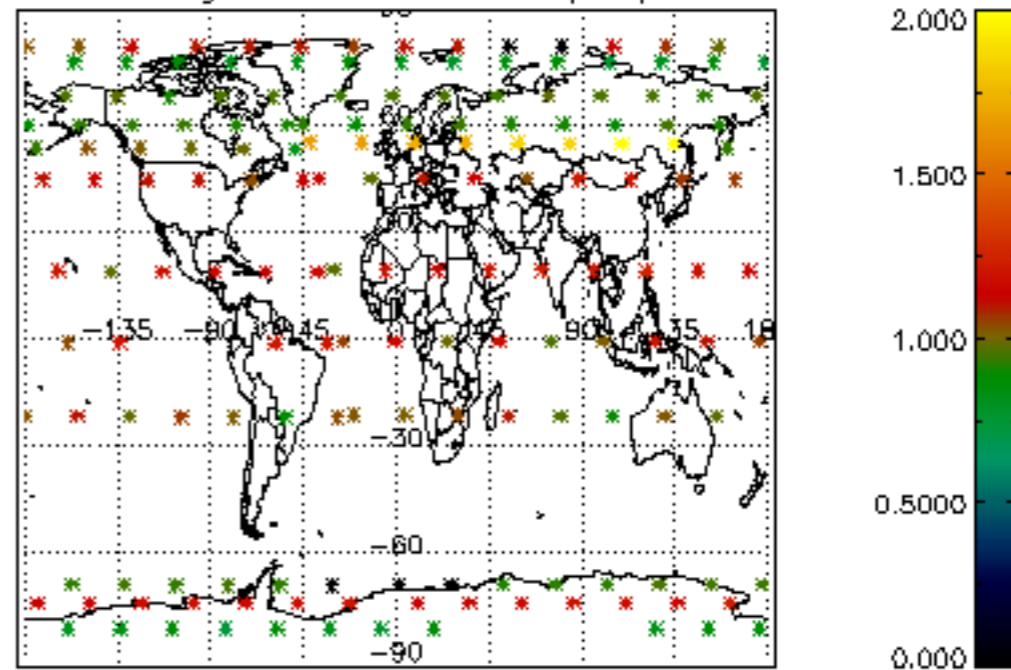




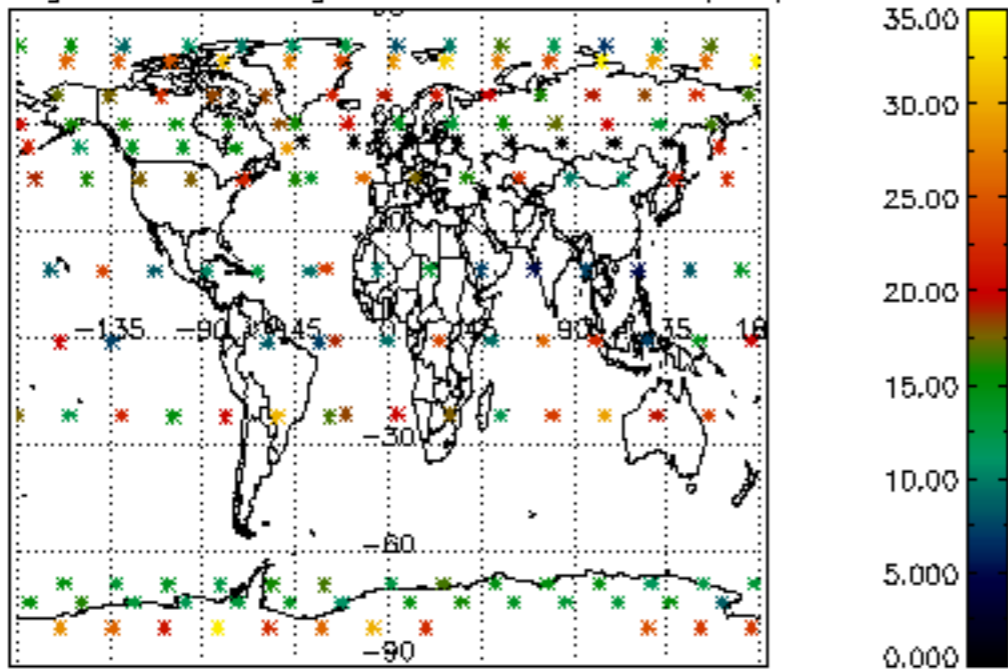
Percentage of cosmic ray hits per profile



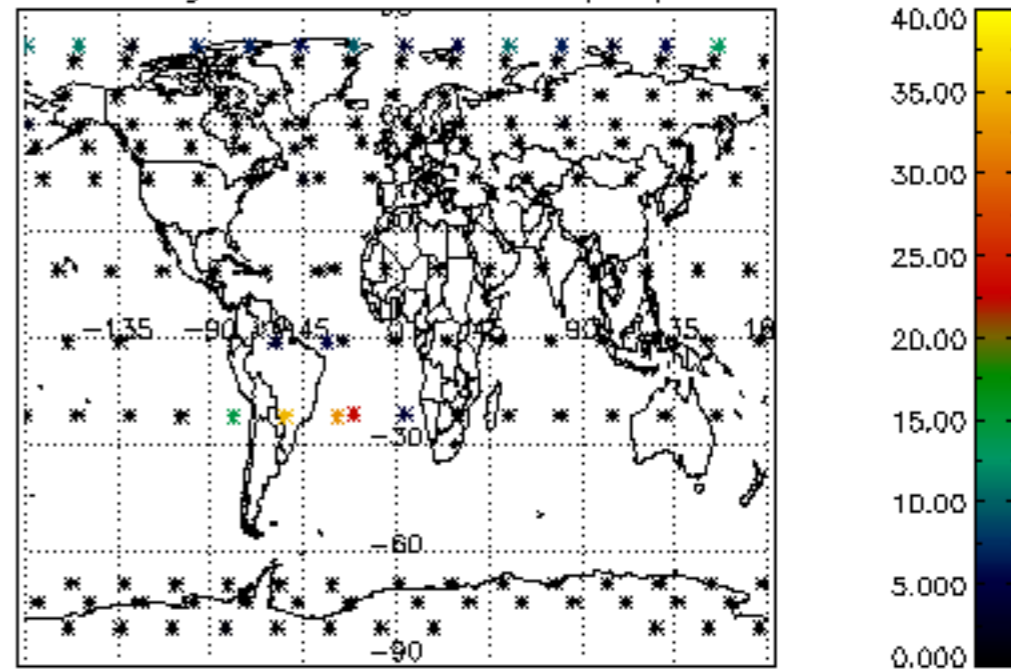
Percentage of datation errors per profile



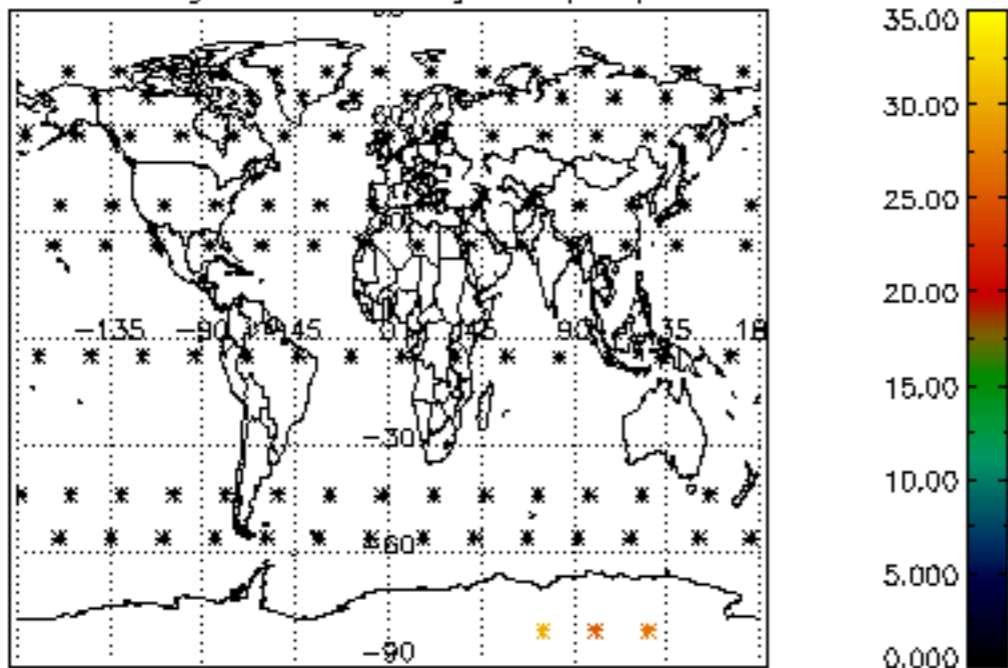
Percentage of star falling outside central band per profile



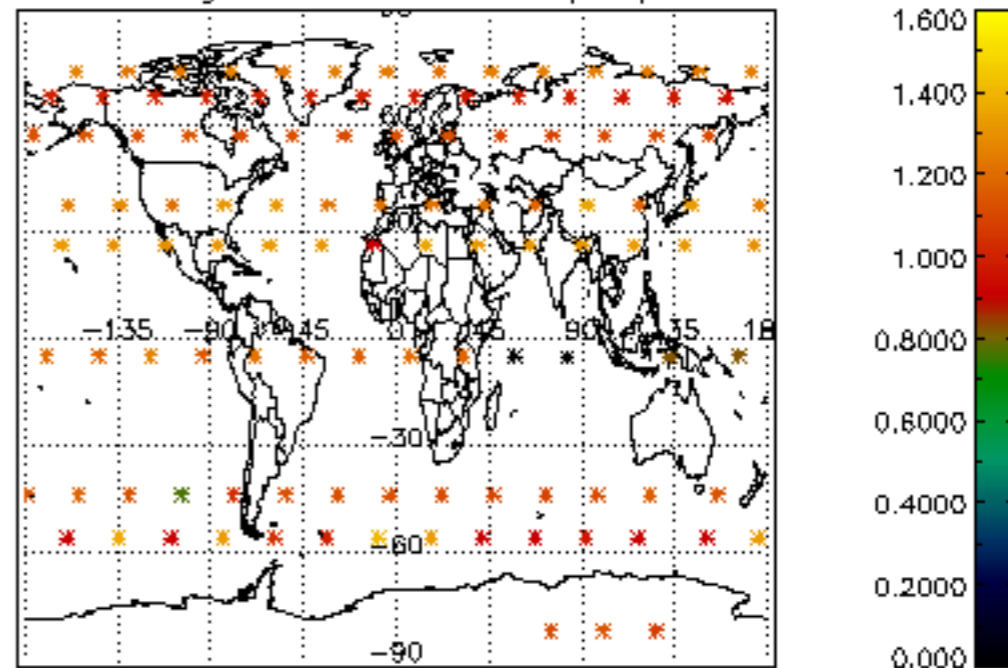
Percentage of saturation errors per profile



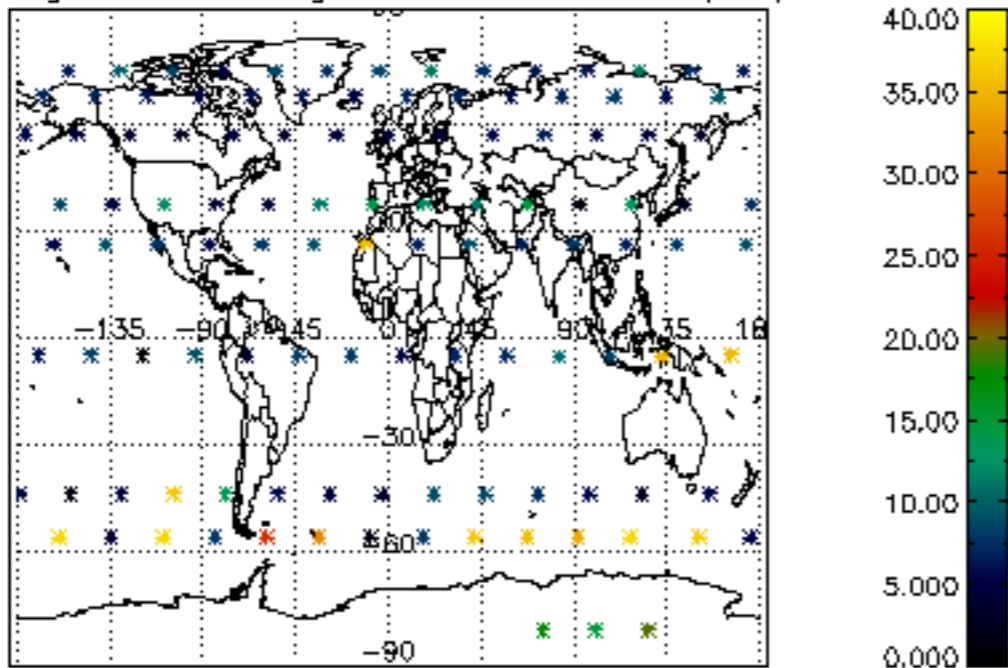
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

