

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	18APR2013 14:07:33
Data source version	GOMOS/6.01
Start time of products	21-02-2012 (21FEB2012 00:00:00)
Stop time of products	22-02-2012 (22FEB2012 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	41
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

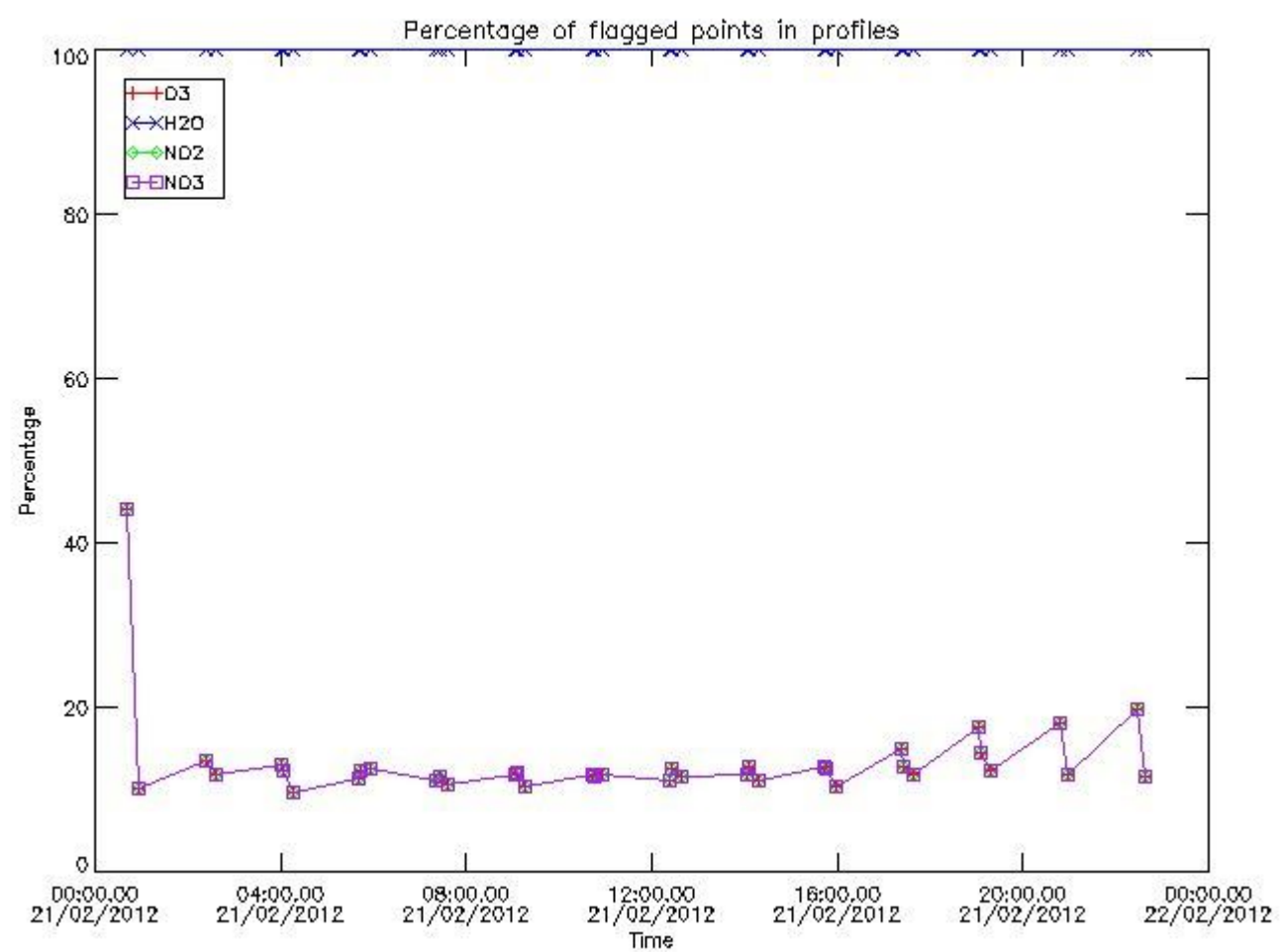
!Warning: No products without errors in BRIGHT limb contitions found

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20120221_004056_000000463112_00016_52185_4750.N1	21-FEB-2012 00:40:56	Dark	46.000	167	10Gam2Sgr	2.9840	4500.0	92	52185	No
2	GOM_NL__2PRFIN20120221_005539_000000503112_00017_52186_4760.N1	21-FEB-2012 00:55:39	Dark	50.000	10	Bet Cen	0.61000	28000.	100	52186	No
3	GOM_NL__2PRFIN20120221_022406_000000423112_00017_52186_4761.N1	21-FEB-2012 02:24:06	Dark	41.500	85	Kap Sco	2.4070	28000.	83	52186	No
4	GOM_NL__2PRFIN20120221_023554_000000433112_00018_52187_4774.N1	21-FEB-2012 02:35:54	Dark	43.000	10	Bet Cen	0.61000	28000.	86	52187	No
5	GOM_NL__2PRFIN20120221_040125_000000403112_00018_52187_4775.N1	21-FEB-2012 04:01:25	Dark	39.500	167	10Gam2Sgr	2.9840	4500.0	79	52187	No
6	GOM_NL__2PRFIN20120221_040421_000000423112_00018_52187_4776.N1	21-FEB-2012 04:04:21	Dark	41.500	85	Kap Sco	2.4070	28000.	83	52187	No
7	GOM_NL__2PRFIN20120221_041609_000000533112_00019_52188_4784.N1	21-FEB-2012 04:16:09	Dark	52.500	10	Bet Cen	0.61000	28000.	105	52188	No
8	GOM_NL__2PRFIN20120221_054140_000000453112_00019_52188_4785.N1	21-FEB-2012 05:41:40	Dark	45.000	167	10Gam2Sgr	2.9840	4500.0	90	52188	No
9	GOM_NL__2PRFIN20120221_054435_000000423112_00019_52188_4786.N1	21-FEB-2012 05:44:35	Dark	41.500	85	Kap Sco	2.4070	28000.	83	52188	No
10	GOM_NL__2PRFIN20120221_055623_000000413112_00020_52189_4907.N1	21-FEB-2012 05:56:23	Dark	40.500	10	Bet Cen	0.61000	28000.	81	52189	No
11	GOM_NL__2PRFIN20120221_072154_000000463112_00020_52189_4908.N1	21-FEB-2012 07:21:54	Dark	45.500	167	10Gam2Sgr	2.9840	4500.0	91	52189	No
12	GOM_NL__2PRFIN20120221_072450_000000453112_00020_52189_4909.N1	21-FEB-2012 07:24:50	Dark	44.500	85	Kap Sco	2.4070	28000.	89	52189	No
13	GOM_NL__2PRFIN20120221_073638_000000483112_00021_52190_4970.N1	21-FEB-2012 07:36:38	Dark	48.000	10	Bet Cen	0.61000	28000.	96	52190	No
14	GOM_NL__2PRFIN20120221_090209_000000433112_00021_52190_4971.N1	21-FEB-2012 09:02:09	Dark	43.000	167	10Gam2Sgr	2.9840	4500.0	86	52190	No
15	GOM_NL__2PRFIN20120221_090504_000000423112_00021_52190_4972.N1	21-FEB-2012 09:05:04	Dark	42.000	85	Kap Sco	2.4070	28000.	84	52190	No
16	GOM_NL__2PRFIN20120221_091652_000000493112_00022_52191_5026.N1	21-FEB-2012 09:16:52	Dark	48.500	10	Bet Cen	0.61000	28000.	97	52191	No
17	GOM_NL__2PRFIN20120221_104223_000000443112_00022_52191_5027.N1	21-FEB-2012 10:42:23	Dark	43.500	167	10Gam2Sgr	2.9840	4500.0	87	52191	No
18	GOM_NL__2PRFIN20120221_104519_000000443112_00022_52191_5028.N1	21-FEB-2012 10:45:19	Dark	44.000	85	Kap Sco	2.4070	28000.	88	52191	No
19	GOM_NL__2PRFIN20120221_105707_000000433112_00023_52192_5102.N1	21-FEB-2012 10:57:07	Dark	43.000	10	Bet Cen	0.61000	28000.	86	52192	No
20	GOM_NL__2PRFIN20120221_122238_000000463112_00023_52192_5103.N1	21-FEB-2012 12:22:38	Dark	45.500	167	10Gam2Sgr	2.9840	4500.0	91	52192	No
21	GOM_NL__2PRFIN20120221_122533_000000413112_00023_52192_5104.N1	21-FEB-2012 12:25:33	Dark	41.000	85	Kap Sco	2.4070	28000.	82	52192	No
22	GOM_NL__2PRFIN20120221_123721_000000443112_00024_52193_5151.N1	21-FEB-2012 12:37:21	Dark	44.000	10	Bet Cen	0.61000	28000.	88	52193	No
23	GOM_NL__2PRFIN20120221_140252_000000443112_00024_52193_5152.N1	21-FEB-2012 14:02:52	Dark	43.500	167	10Gam2Sgr	2.9840	4500.0	87	52193	No
24	GOM_NL__2PRFIN20120221_140548_000000403112_00024_52193_5153.N1	21-FEB-2012 14:05:48	Dark	40.000	85	Kap Sco	2.4070	28000.	80	52193	No
25	GOM_NL__2PRFIN20120221_141736_000000453112_00025_52194_5192.N1	21-FEB-2012 14:17:36	Dark	45.000	10	Bet Cen	0.61000	28000.	90	52194	No
26	GOM_NL__2PRFIN20120221_154307_000000403112_00025_52194_5193.N1	21-FEB-2012 15:43:07	Dark	40.000	167	10Gam2Sgr	2.9840	4500.0	80	52194	No
27	GOM_NL__2PRFIN20120221_154603_000000413112_00025_52194_5194.N1	21-FEB-2012 15:46:03	Dark	41.000	85	Kap Sco	2.4070	28000.	82	52194	No
28	GOM_NL__2PRFIN20120221_155750_000000533112_00026_52195_5205.N1	21-FEB-2012 15:57:50	Dark	53.000	10	Bet Cen	0.61000	28000.	106	52195	No
29	GOM_NL__2PRFIN20120221_172321_000000343112_00026_52195_5206.N1	21-FEB-2012 17:23:21	Dark	34.000	167	10Gam2Sgr	2.9840	4500.0	68	52195	No
30	GOM_NL__2PRFIN20120221_172617_000000403112_00026_52195_5207.N1	21-FEB-2012 17:26:17	Dark	40.000	85	Kap Sco	2.4070	28000.	80	52195	No
31	GOM_NL__2PRFIN20120221_173805_000000433112_00027_52196_5228.N1	21-FEB-2012 17:38:05	Dark	42.500	10	Bet Cen	0.61000	28000.	85	52196	No
32	GOM_NL__2PRFIN20120221_190336_000000293112_00027_52196_5229.N1	21-FEB-2012 19:03:36	Dark	29.000	167	10Gam2Sgr	2.9840	4500.0	58	52196	No
33	GOM_NL__2PRFIN20120221_190632_000000353112_00027_52196_5230.N1	21-FEB-2012 19:06:32	Dark	35.000	85	Kap Sco	2.4070	28000.	70	52196	No
34	GOM_NL__2PRFIN20120221_191819_000000413112_00028_52197_5251.N1	21-FEB-2012 19:18:19	Dark	41.000	10	Bet Cen	0.61000	28000.	82	52197	No
35	GOM_NL__2PRFIN20120221_193941_000000313112_00028_52197_5252.N1	21-FEB-2012 19:39:41	Twilight	31.000	48	30Alp Hya	1.9770	4100.0	62	52197	No
36	GOM_NL__2PRFIN20120221_204646_000000313112_00028_52197_5253.N1	21-FEB-2012 20:46:46	Dark	31.000	85	Kap Sco	2.4070	28000.	62	52197	No
37	GOM_NL__2PRFIN20120221_205834_000000433112_00029_52198_5277.N1	21-FEB-2012 20:58:34	Dark	43.000	10	Bet Cen	0.61000	28000.	86	52198	No
38	GOM_NL__2PRFIN20120221_211955_000000363112_00029_52198_5278.N1	21-FEB-2012 21:19:55	Twilight	35.500	48	30Alp Hya	1.9770	4100.0	71	52198	No
39	GOM_NL__2PRFIN20120221_222701_000000263112_00029_52198_5279.N1	21-FEB-2012 22:27:01	Dark	26.000	85	Kap Sco	2.4070	28000.	52	52198	No
40	GOM_NL__2PRFIN20120221_223848_000000453112_00030_52199_5294.N1	21-FEB-2012 22:38:48	Dark	44.500	10	Bet Cen	0.61000	28000.	89	52199	No
41	GOM_NL__2PRFIN20120221_230009_000000423112_00030_52199_5295.N1	21-FEB-2012 23:00:09	Twilight	41.500	48	30Alp Hya	1.9770	4100.0	83	52199	No

3. Quality information per product

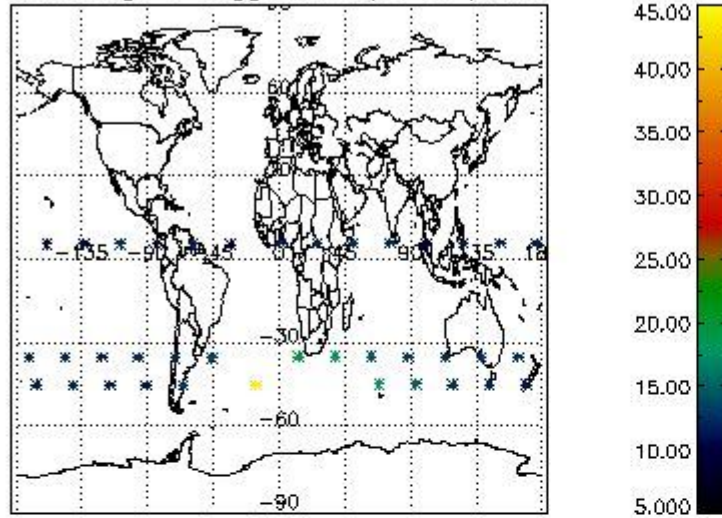
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

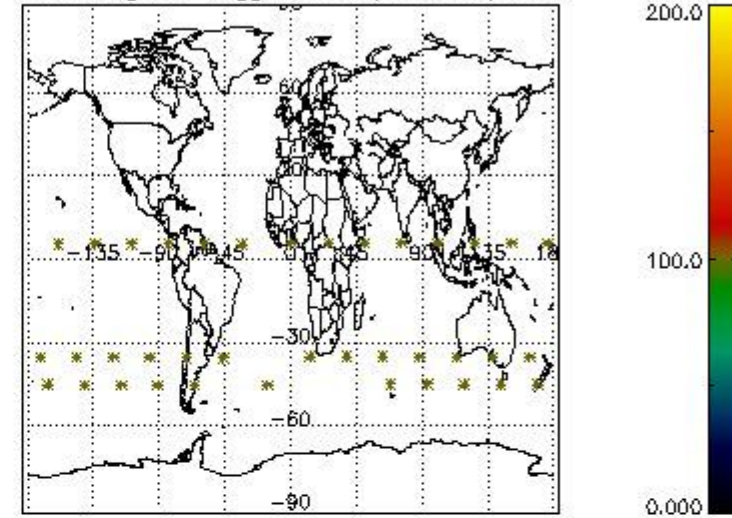


3.2 Plot quality information per product (world map)

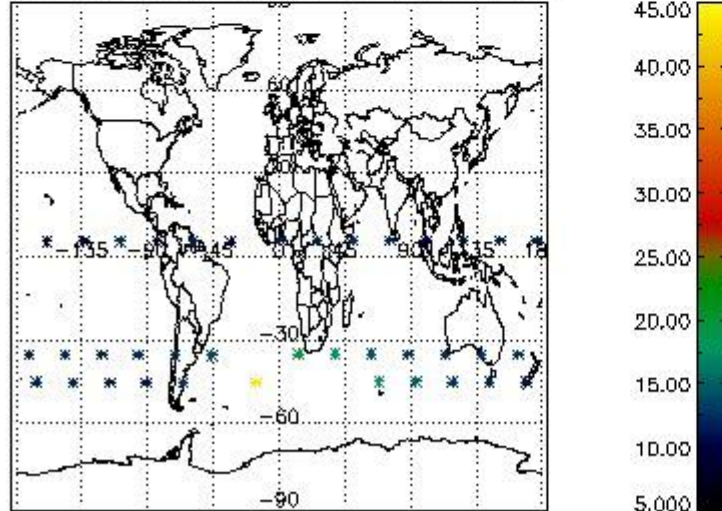
Percentage of flagged data per O3 profile



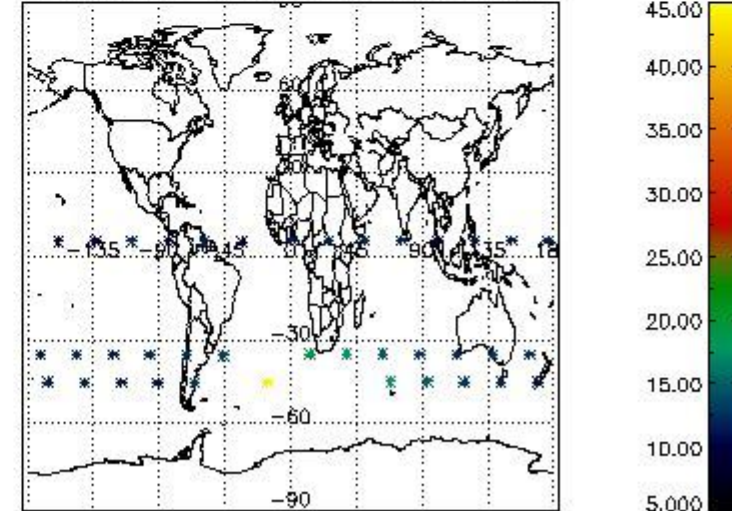
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

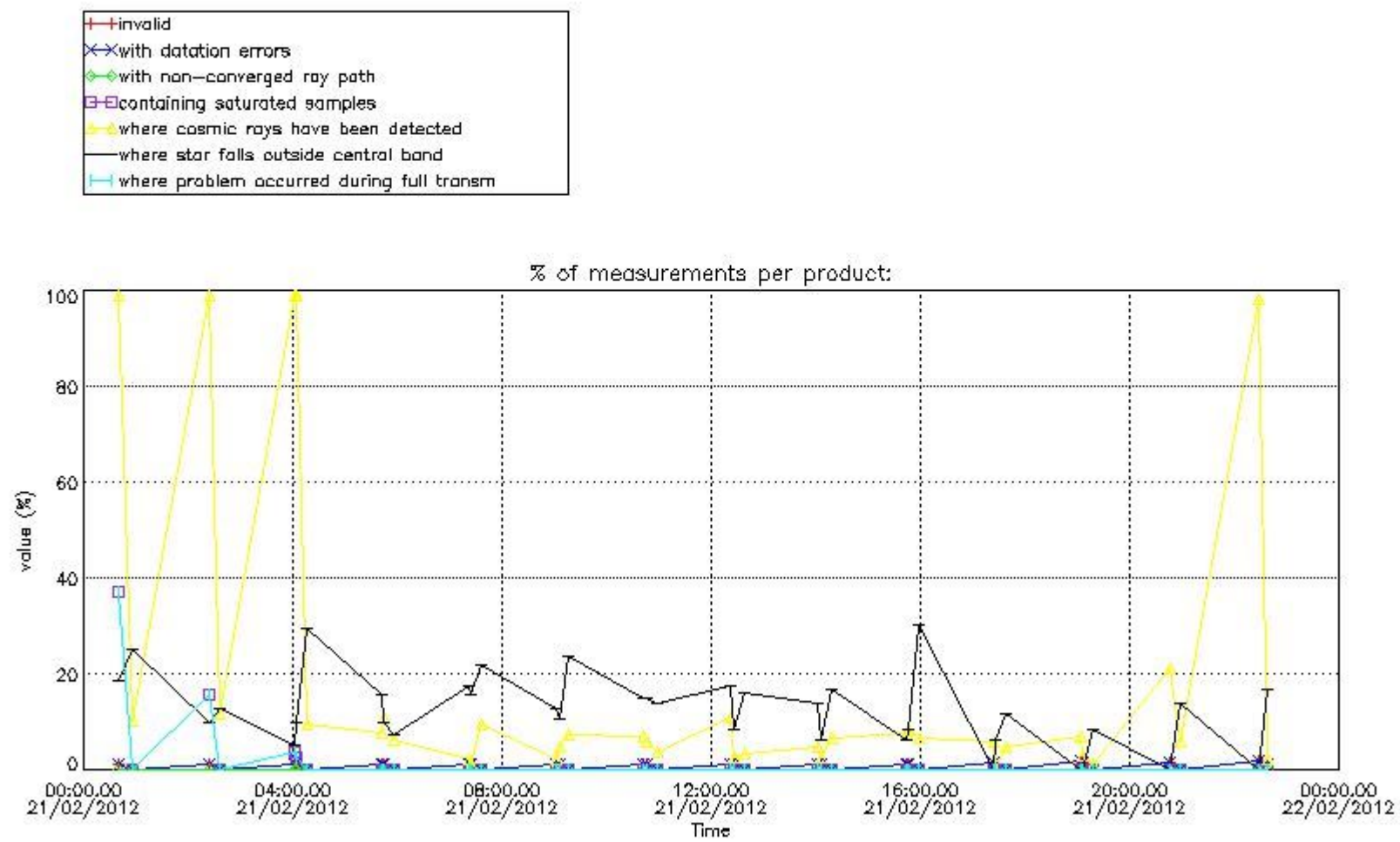


4. Level 1 quality information per product

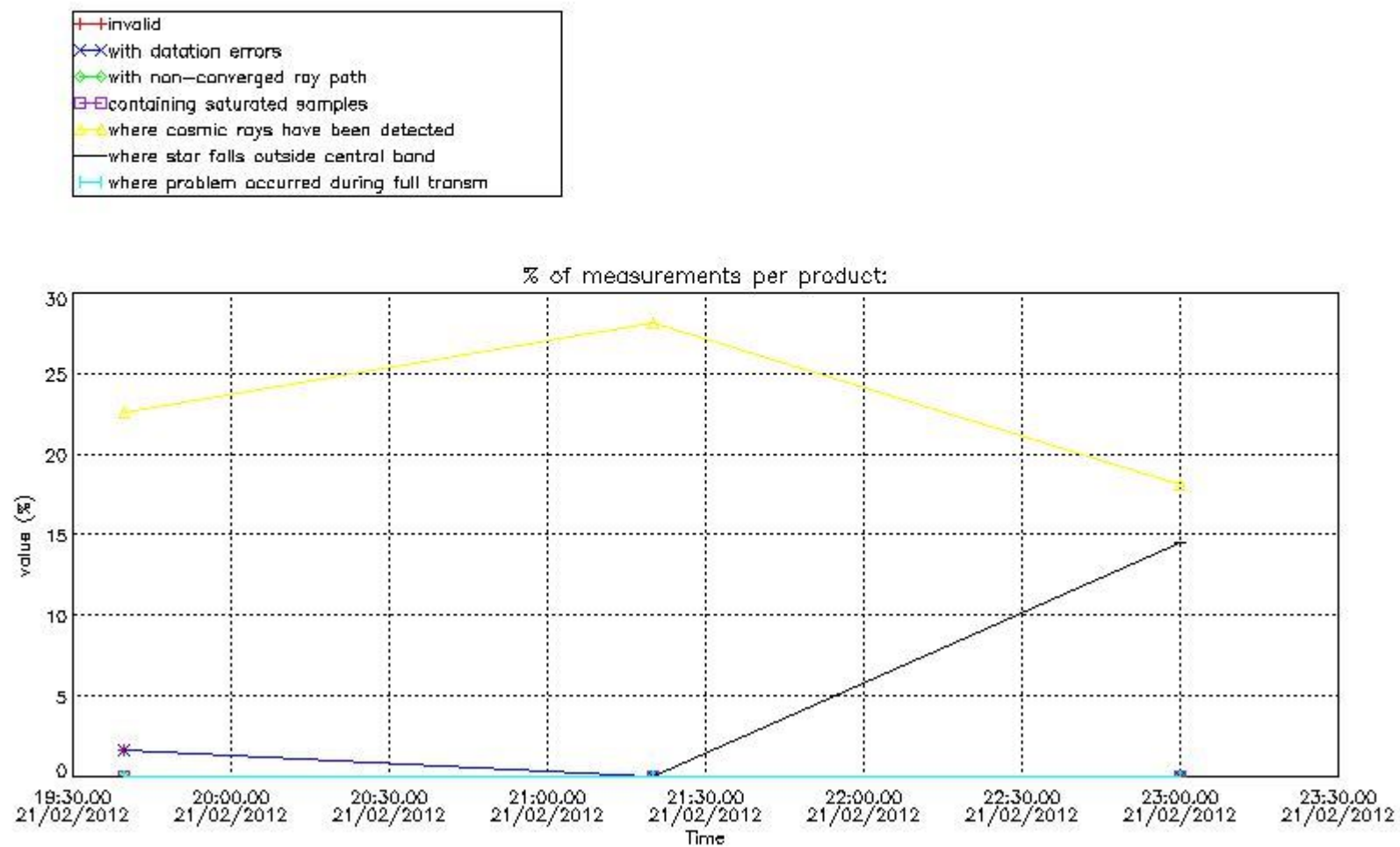
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



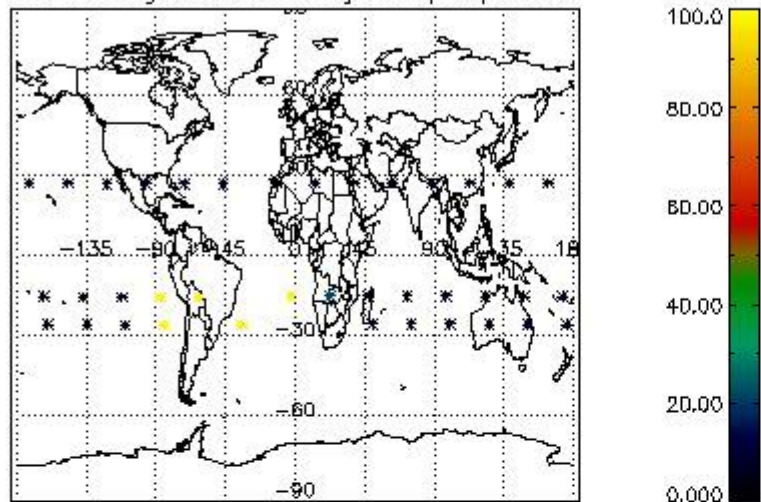
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



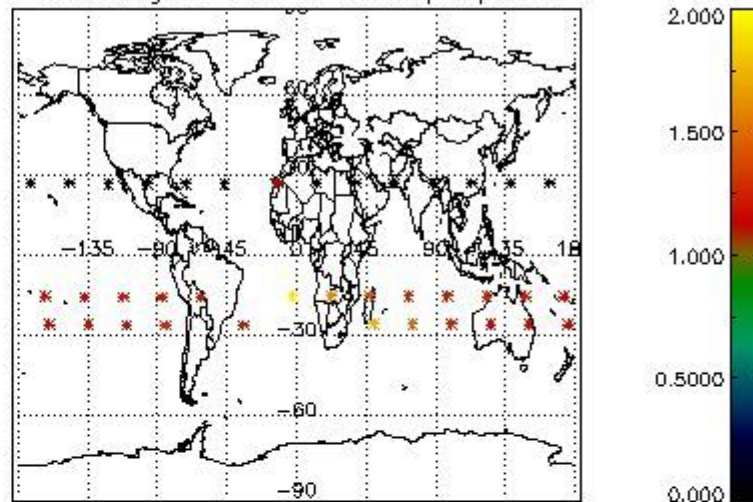
4.2 Plot quality information per product coming from level 1b processing (world map)

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

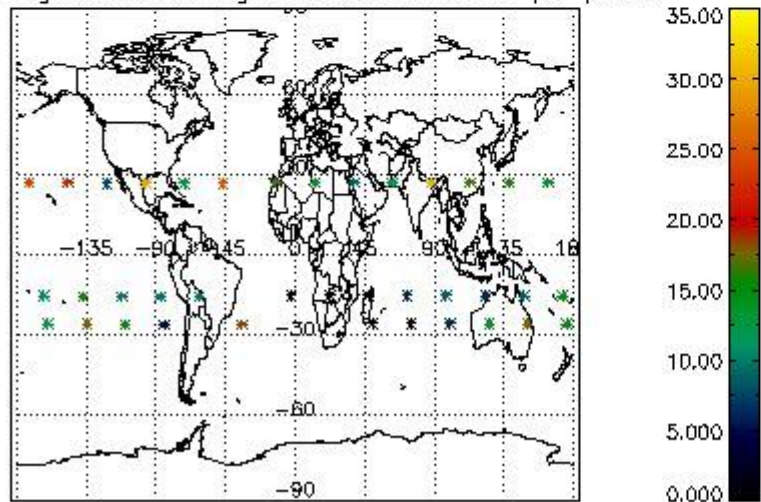
Percentage of cosmic ray hits per profile



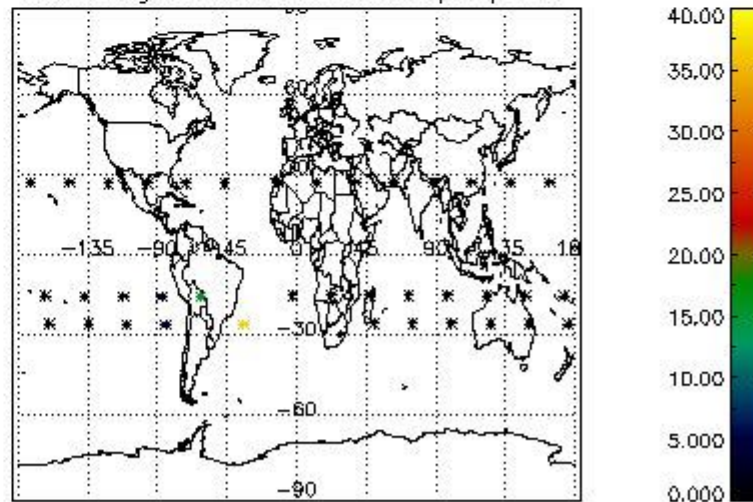
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

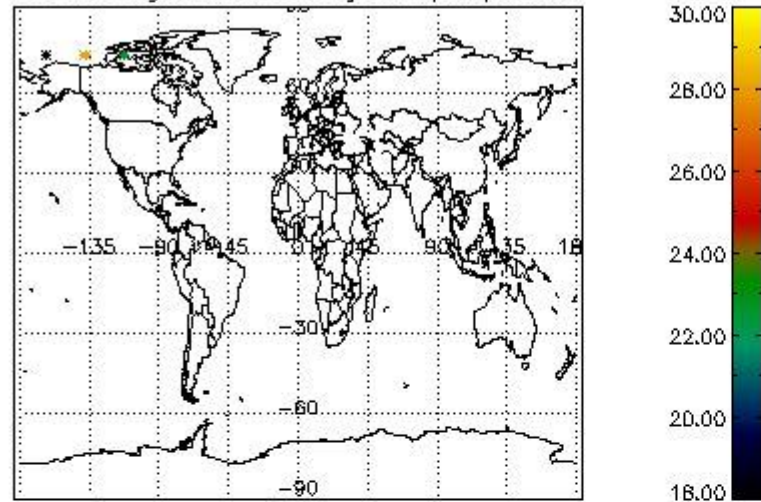


Percentage of saturation errors per profile

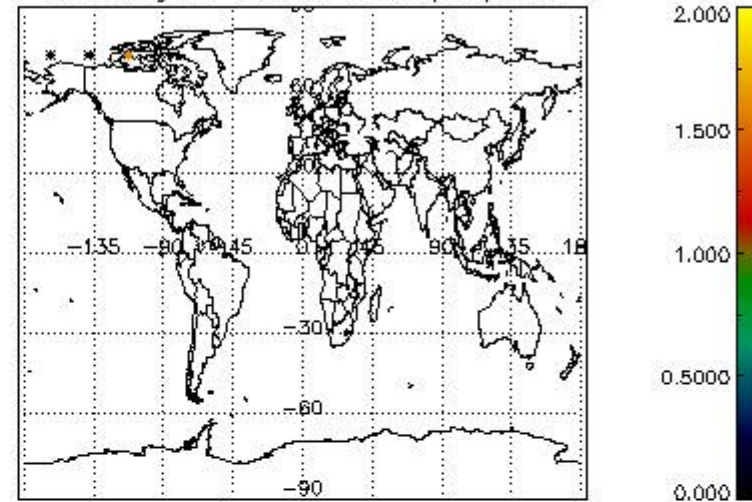


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

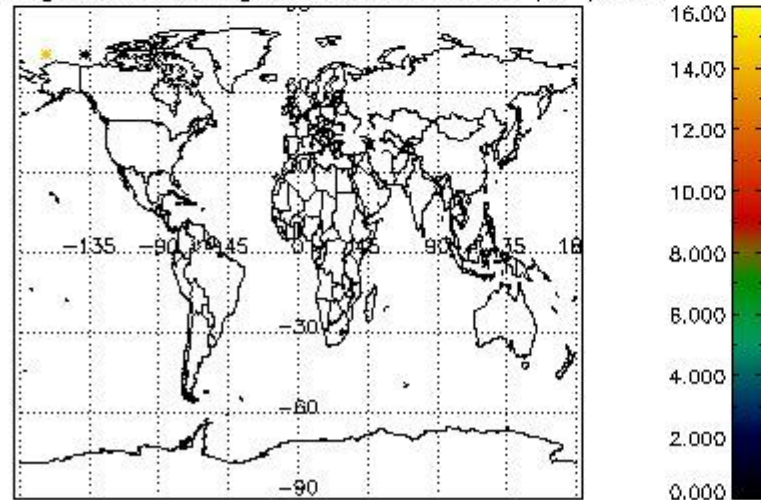
Percentage of cosmic ray hits per profile



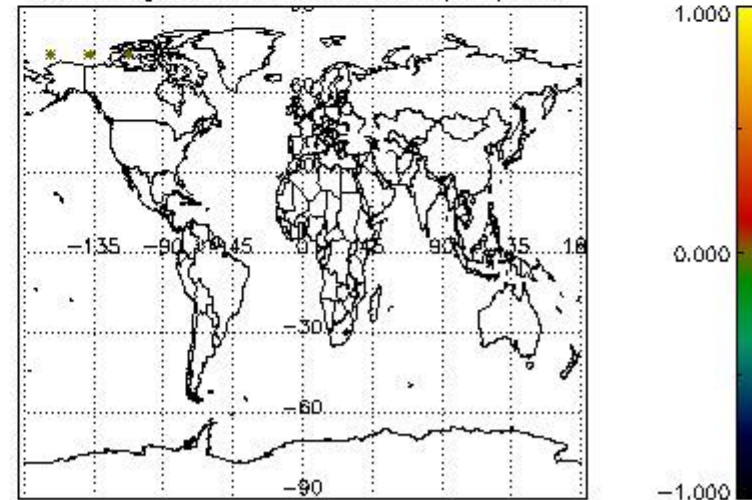
Percentage of datation errors per profile



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

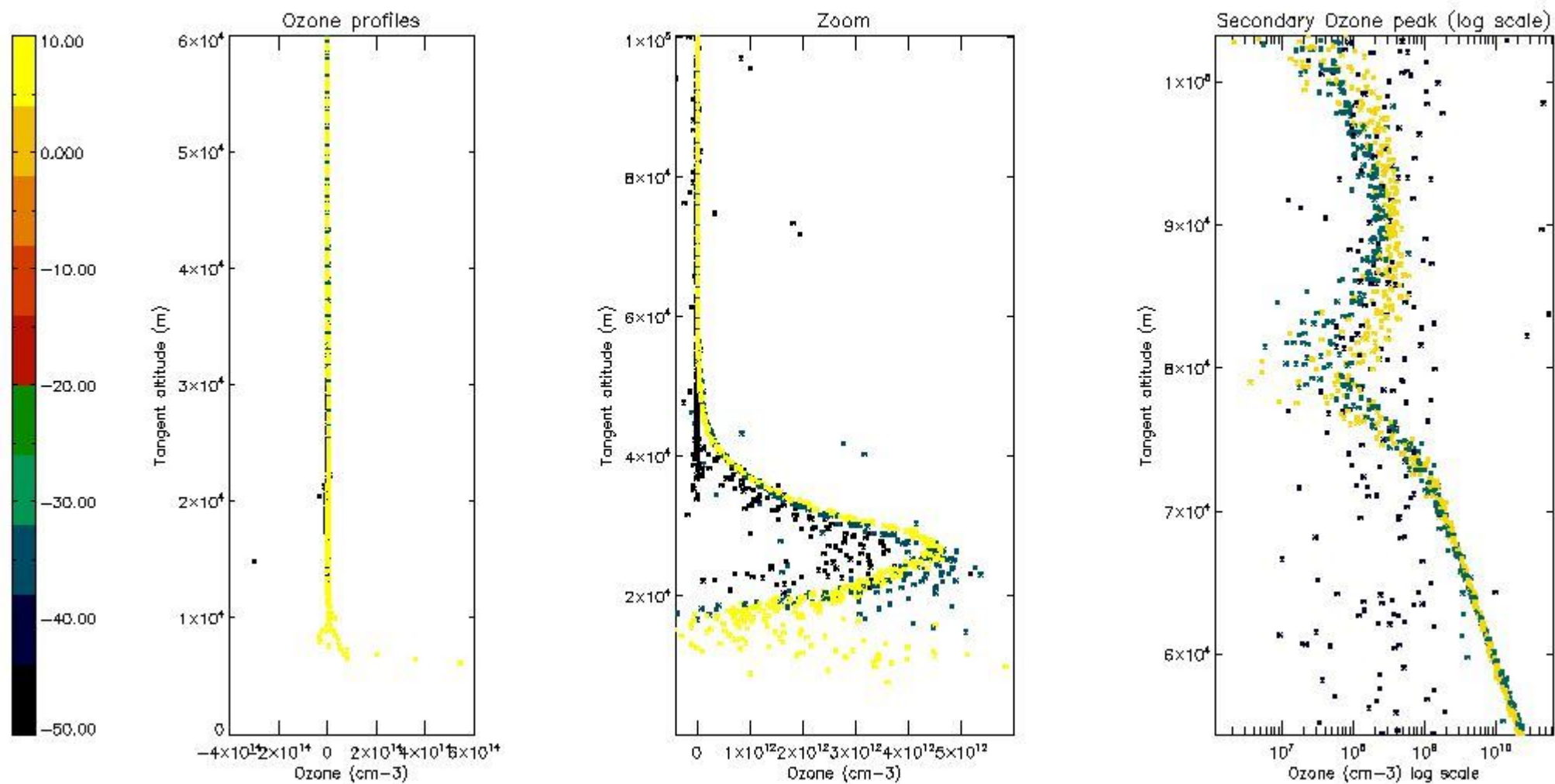
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	94
STD < 20	51

STD < 10	42
STD < 5	34

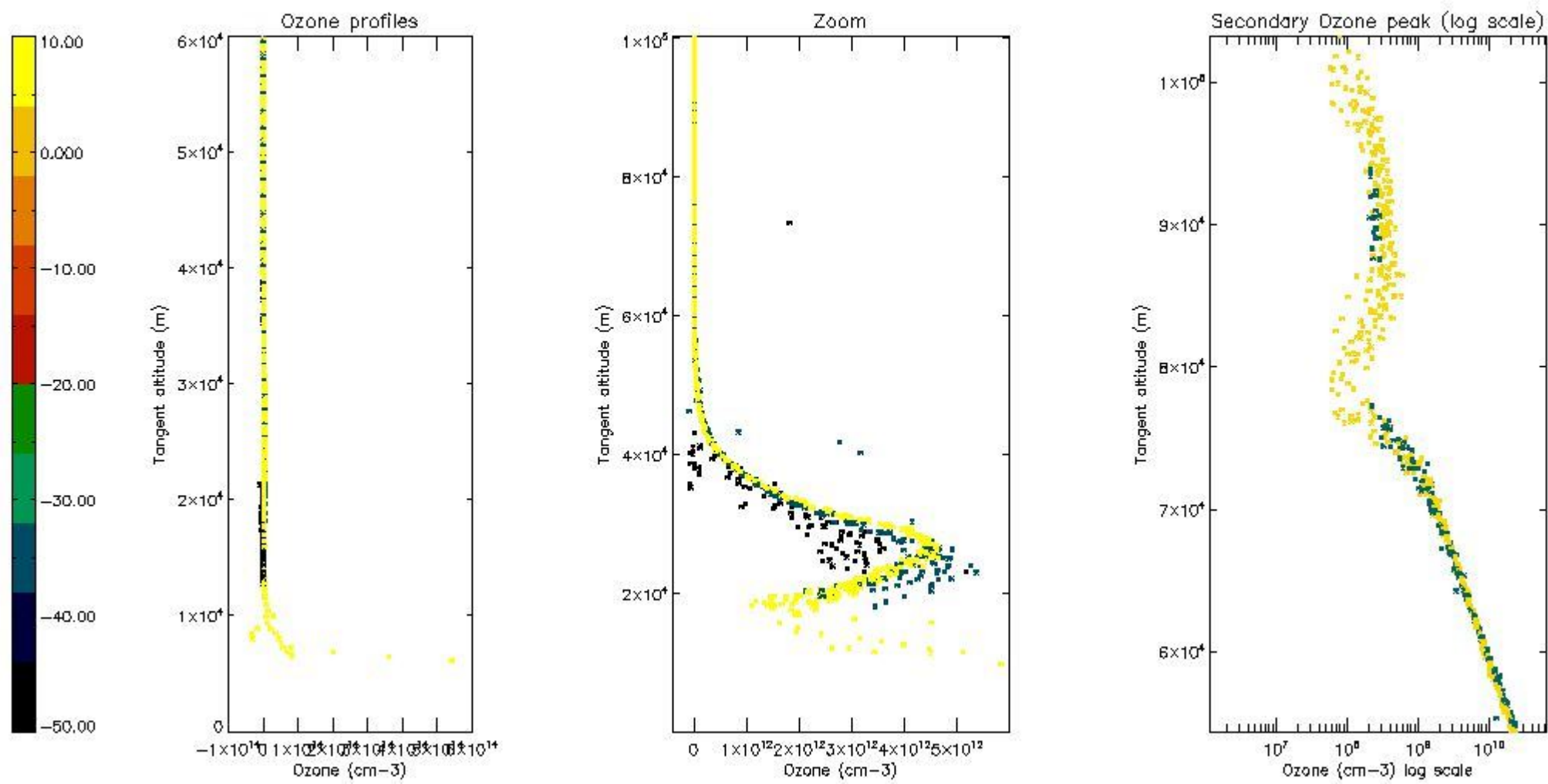
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



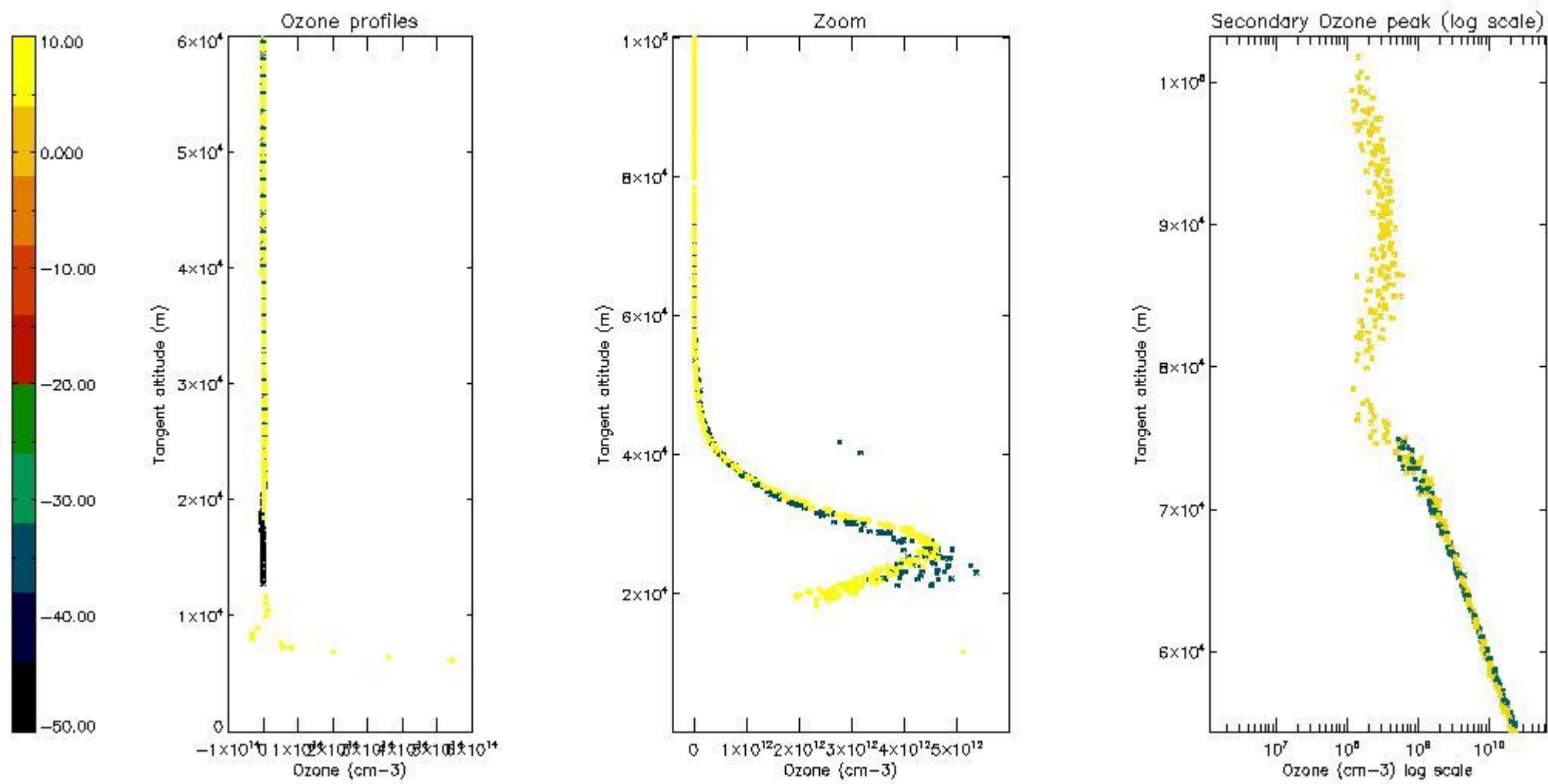
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



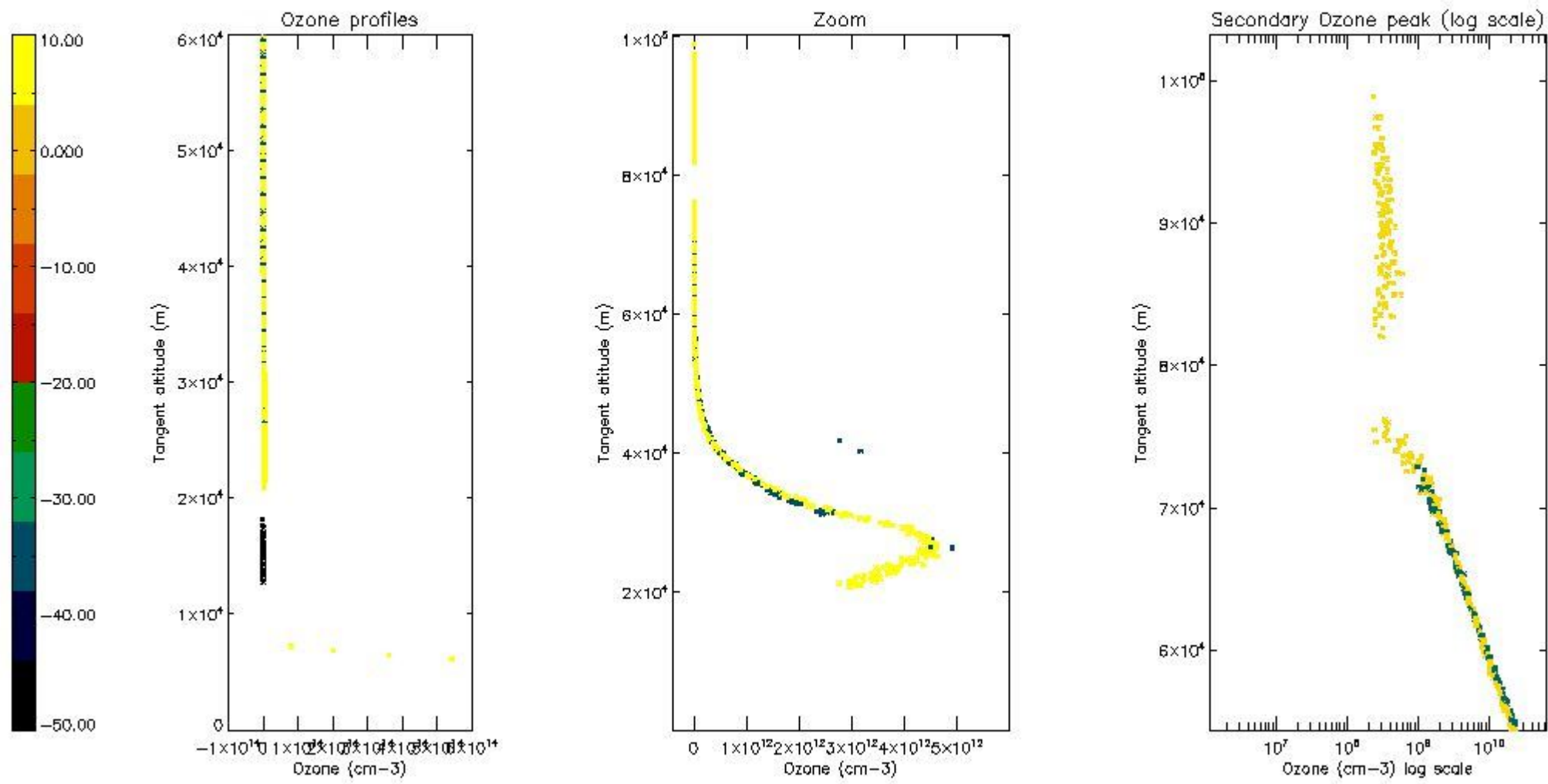
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



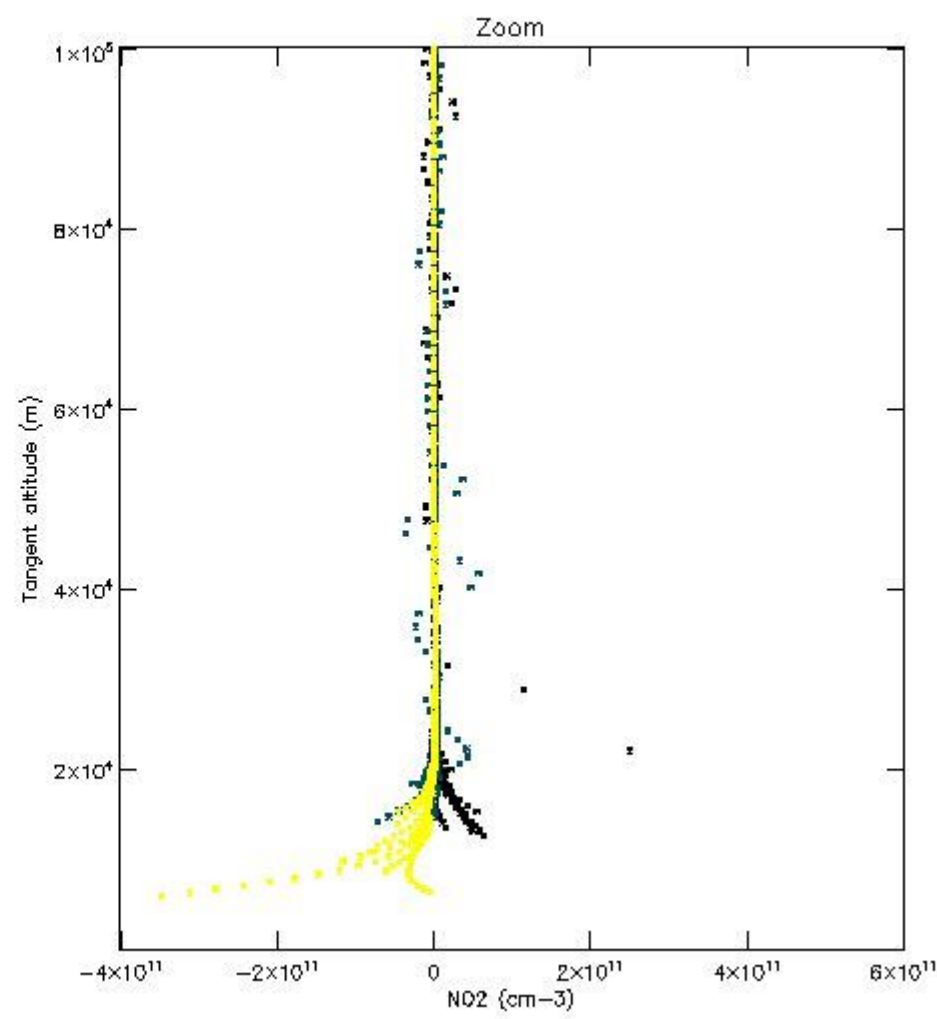
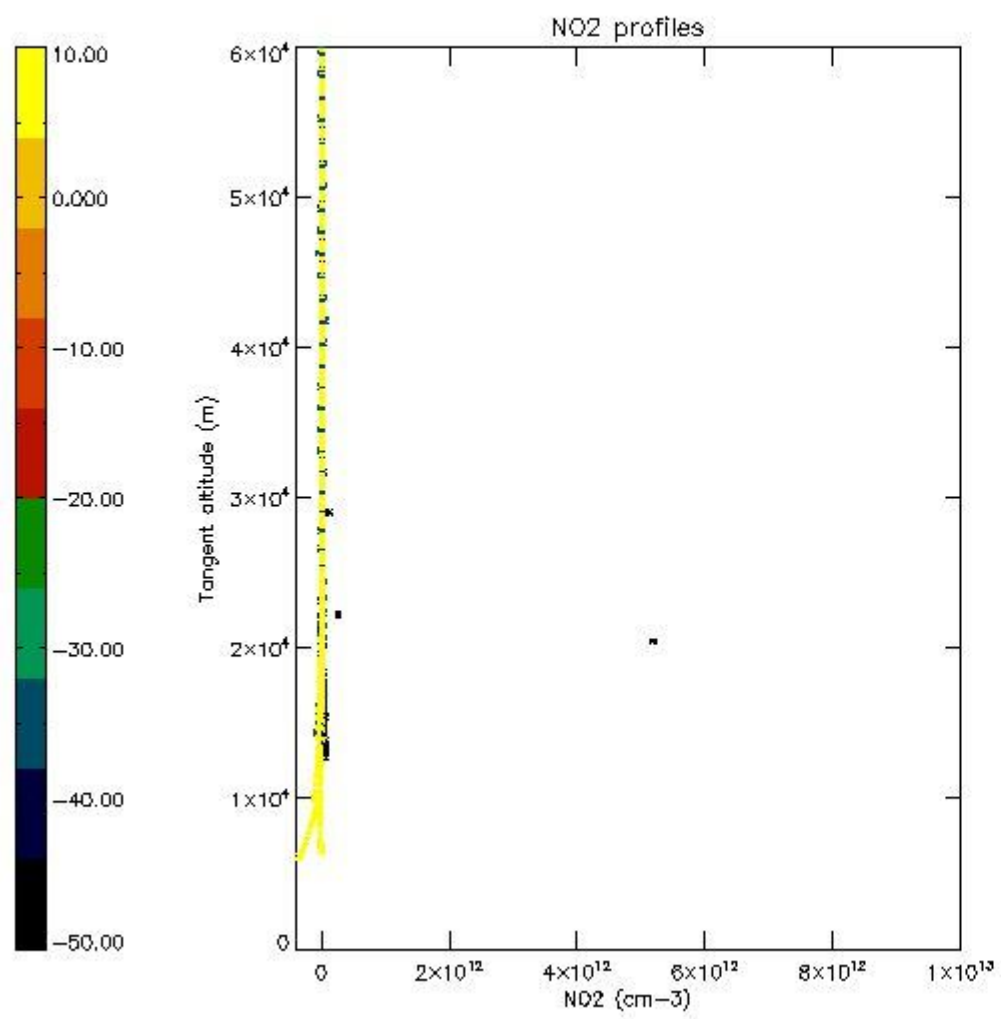
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



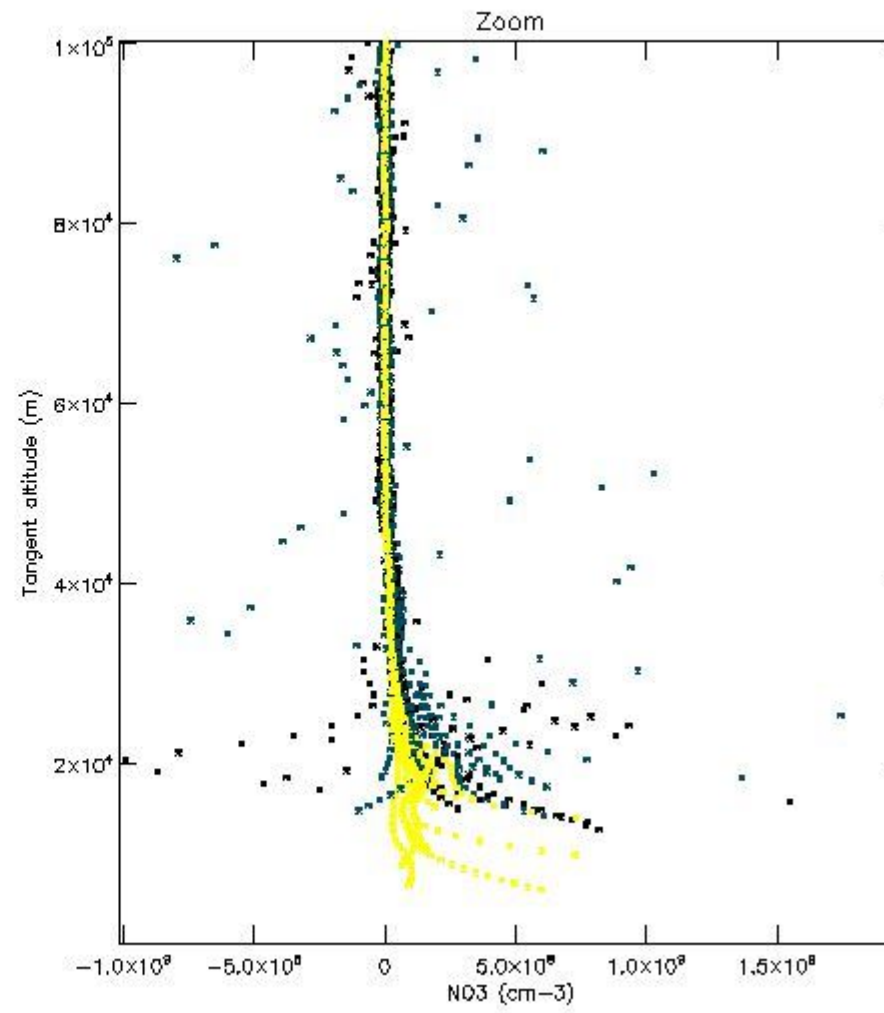
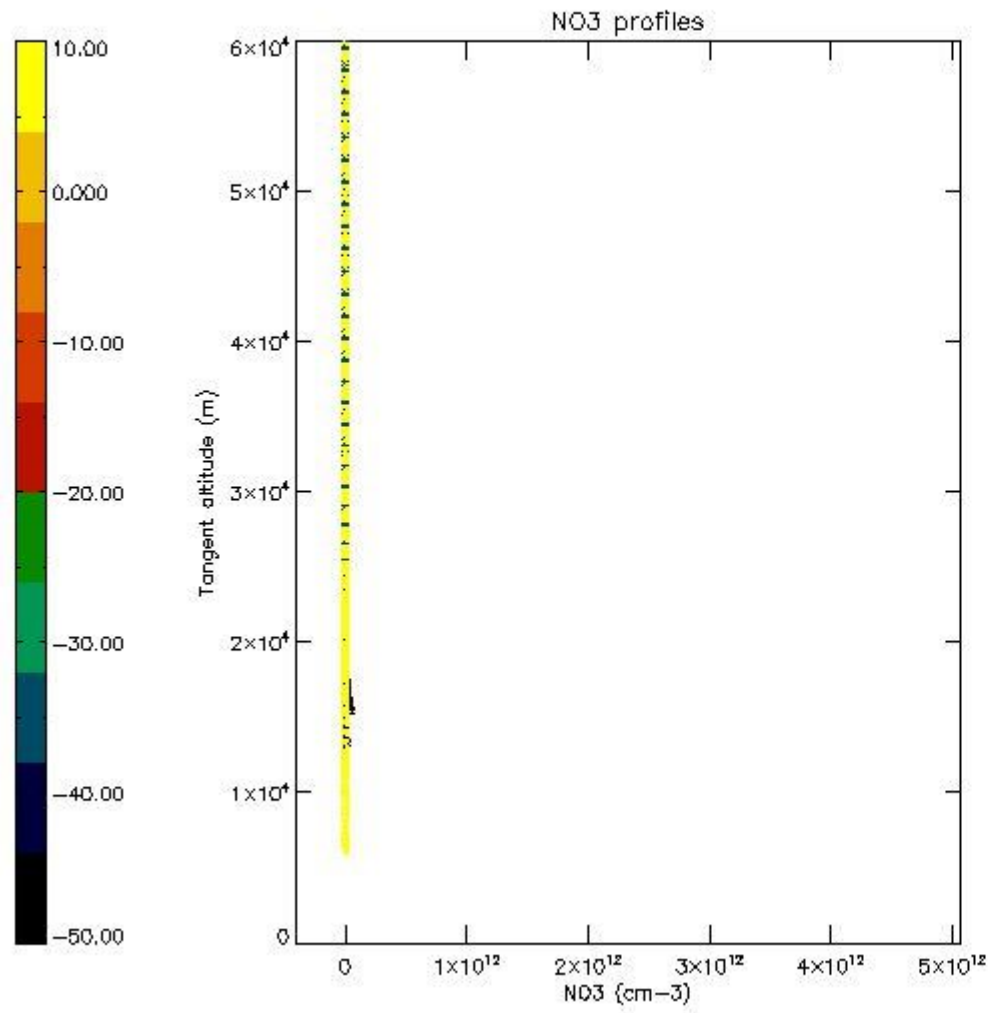
5.6 Plot NO₂ profiles for all STD (dark without errors)

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_AXVIEC20111213_163131_20111215_000000_20500101_000000	1	21-FEB-2012 00:40:56
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	21-FEB-2012 00:40:56
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	21-FEB-2012 00:40:56

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

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

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

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

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

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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.

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Time of report generation	18APR2013 14:07:33
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Stop time of products	22-02-2012 (22FEB2012 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	41
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

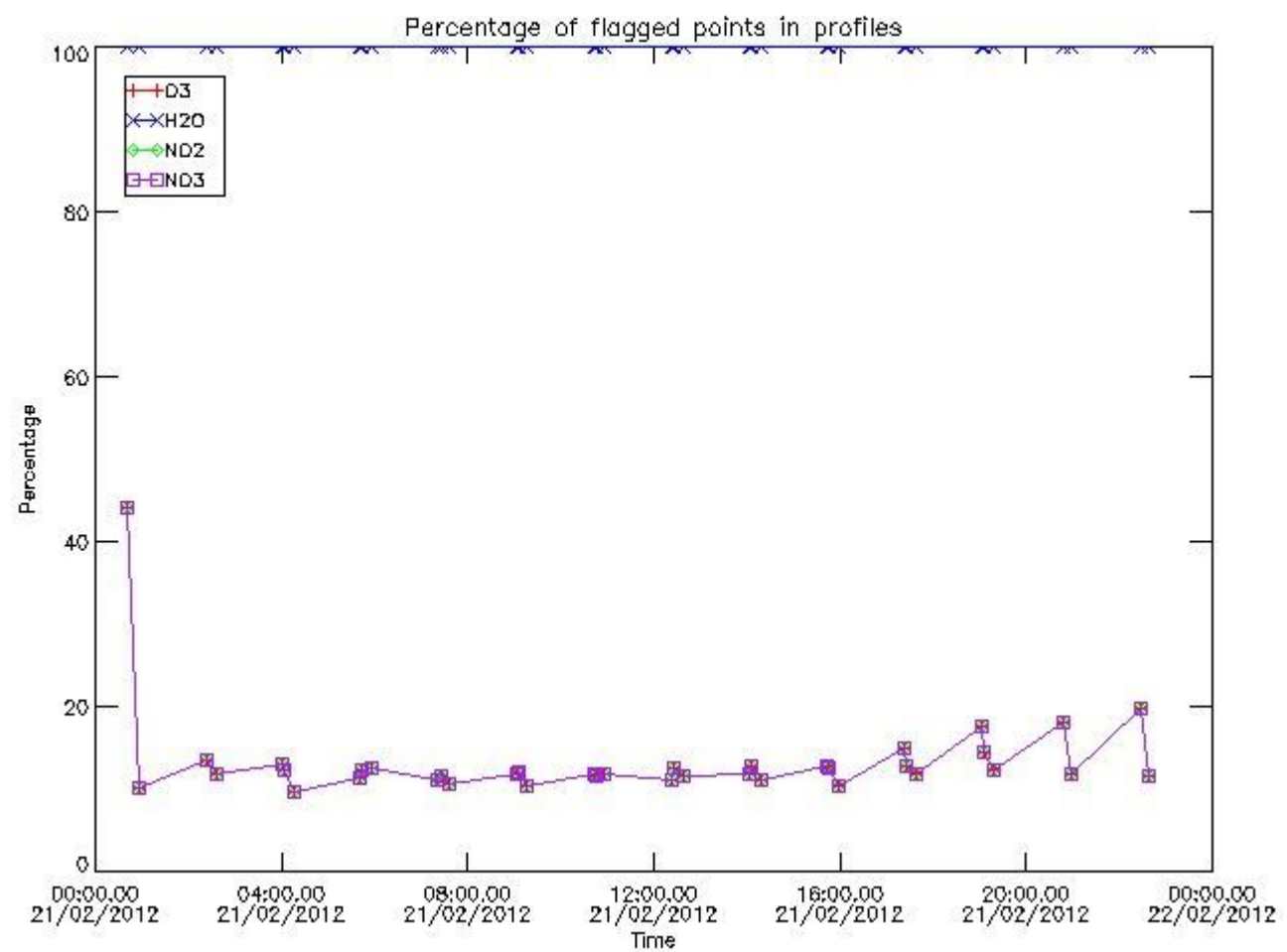
!Warning: No products without errors in BRIGHT limb contitions found

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20120221_004056_000000463112_00016_52185_4750.N1	21-FEB-2012 00:40:56	Dark	46.000	167	10Gam2Sgr	2.9840	4500.0	92	52185	No
2	GOM_NL__2PRFIN20120221_005539_000000503112_00017_52186_4760.N1	21-FEB-2012 00:55:39	Dark	50.000	10	Bet Cen	0.61000	28000.	100	52186	No
3	GOM_NL__2PRFIN20120221_022406_000000423112_00017_52186_4761.N1	21-FEB-2012 02:24:06	Dark	41.500	85	Kap Sco	2.4070	28000.	83	52186	No
4	GOM_NL__2PRFIN20120221_023554_000000433112_00018_52187_4774.N1	21-FEB-2012 02:35:54	Dark	43.000	10	Bet Cen	0.61000	28000.	86	52187	No
5	GOM_NL__2PRFIN20120221_040125_000000403112_00018_52187_4775.N1	21-FEB-2012 04:01:25	Dark	39.500	167	10Gam2Sgr	2.9840	4500.0	79	52187	No
6	GOM_NL__2PRFIN20120221_040421_000000423112_00018_52187_4776.N1	21-FEB-2012 04:04:21	Dark	41.500	85	Kap Sco	2.4070	28000.	83	52187	No
7	GOM_NL__2PRFIN20120221_041609_000000533112_00019_52188_4784.N1	21-FEB-2012 04:16:09	Dark	52.500	10	Bet Cen	0.61000	28000.	105	52188	No
8	GOM_NL__2PRFIN20120221_054140_000000453112_00019_52188_4785.N1	21-FEB-2012 05:41:40	Dark	45.000	167	10Gam2Sgr	2.9840	4500.0	90	52188	No
9	GOM_NL__2PRFIN20120221_054435_000000423112_00019_52188_4786.N1	21-FEB-2012 05:44:35	Dark	41.500	85	Kap Sco	2.4070	28000.	83	52188	No
10	GOM_NL__2PRFIN20120221_055623_000000413112_00020_52189_4907.N1	21-FEB-2012 05:56:23	Dark	40.500	10	Bet Cen	0.61000	28000.	81	52189	No
11	GOM_NL__2PRFIN20120221_072154_000000463112_00020_52189_4908.N1	21-FEB-2012 07:21:54	Dark	45.500	167	10Gam2Sgr	2.9840	4500.0	91	52189	No
12	GOM_NL__2PRFIN20120221_072450_000000453112_00020_52189_4909.N1	21-FEB-2012 07:24:50	Dark	44.500	85	Kap Sco	2.4070	28000.	89	52189	No
13	GOM_NL__2PRFIN20120221_073638_000000483112_00021_52190_4970.N1	21-FEB-2012 07:36:38	Dark	48.000	10	Bet Cen	0.61000	28000.	96	52190	No
14	GOM_NL__2PRFIN20120221_090209_000000433112_00021_52190_4971.N1	21-FEB-2012 09:02:09	Dark	43.000	167	10Gam2Sgr	2.9840	4500.0	86	52190	No
15	GOM_NL__2PRFIN20120221_090504_000000423112_00021_52190_4972.N1	21-FEB-2012 09:05:04	Dark	42.000	85	Kap Sco	2.4070	28000.	84	52190	No
16	GOM_NL__2PRFIN20120221_091652_000000493112_00022_52191_5026.N1	21-FEB-2012 09:16:52	Dark	48.500	10	Bet Cen	0.61000	28000.	97	52191	No
17	GOM_NL__2PRFIN20120221_104223_000000443112_00022_52191_5027.N1	21-FEB-2012 10:42:23	Dark	43.500	167	10Gam2Sgr	2.9840	4500.0	87	52191	No
18	GOM_NL__2PRFIN20120221_104519_000000443112_00022_52191_5028.N1	21-FEB-2012 10:45:19	Dark	44.000	85	Kap Sco	2.4070	28000.	88	52191	No
19	GOM_NL__2PRFIN20120221_105707_000000433112_00023_52192_5102.N1	21-FEB-2012 10:57:07	Dark	43.000	10	Bet Cen	0.61000	28000.	86	52192	No
20	GOM_NL__2PRFIN20120221_122238_000000463112_00023_52192_5103.N1	21-FEB-2012 12:22:38	Dark	45.500	167	10Gam2Sgr	2.9840	4500.0	91	52192	No
21	GOM_NL__2PRFIN20120221_122533_000000413112_00023_52192_5104.N1	21-FEB-2012 12:25:33	Dark	41.000	85	Kap Sco	2.4070	28000.	82	52192	No
22	GOM_NL__2PRFIN20120221_123721_000000443112_00024_52193_5151.N1	21-FEB-2012 12:37:21	Dark	44.000	10	Bet Cen	0.61000	28000.	88	52193	No
23	GOM_NL__2PRFIN20120221_140252_000000443112_00024_52193_5152.N1	21-FEB-2012 14:02:52	Dark	43.500	167	10Gam2Sgr	2.9840	4500.0	87	52193	No
24	GOM_NL__2PRFIN20120221_140548_000000403112_00024_52193_5153.N1	21-FEB-2012 14:05:48	Dark	40.000	85	Kap Sco	2.4070	28000.	80	52193	No
25	GOM_NL__2PRFIN20120221_141736_000000453112_00025_52194_5192.N1	21-FEB-2012 14:17:36	Dark	45.000	10	Bet Cen	0.61000	28000.	90	52194	No
26	GOM_NL__2PRFIN20120221_154307_000000403112_00025_52194_5193.N1	21-FEB-2012 15:43:07	Dark	40.000	167	10Gam2Sgr	2.9840	4500.0	80	52194	No
27	GOM_NL__2PRFIN20120221_154603_000000413112_00025_52194_5194.N1	21-FEB-2012 15:46:03	Dark	41.000	85	Kap Sco	2.4070	28000.	82	52194	No
28	GOM_NL__2PRFIN20120221_155750_000000533112_00026_52195_5205.N1	21-FEB-2012 15:57:50	Dark	53.000	10	Bet Cen	0.61000	28000.	106	52195	No
29	GOM_NL__2PRFIN20120221_172321_000000343112_00026_52195_5206.N1	21-FEB-2012 17:23:21	Dark	34.000	167	10Gam2Sgr	2.9840	4500.0	68	52195	No
30	GOM_NL__2PRFIN20120221_172617_000000403112_00026_52195_5207.N1	21-FEB-2012 17:26:17	Dark	40.000	85	Kap Sco	2.4070	28000.	80	52195	No
31	GOM_NL__2PRFIN20120221_173805_000000433112_00027_52196_5228.N1	21-FEB-2012 17:38:05	Dark	42.500	10	Bet Cen	0.61000	28000.	85	52196	No
32	GOM_NL__2PRFIN20120221_190336_000000293112_00027_52196_5229.N1	21-FEB-2012 19:03:36	Dark	29.000	167	10Gam2Sgr	2.9840	4500.0	58	52196	No
33	GOM_NL__2PRFIN20120221_190632_000000353112_00027_52196_5230.N1	21-FEB-2012 19:06:32	Dark	35.000	85	Kap Sco	2.4070	28000.	70	52196	No
34	GOM_NL__2PRFIN20120221_191819_000000413112_00028_52197_5251.N1	21-FEB-2012 19:18:19	Dark	41.000	10	Bet Cen	0.61000	28000.	82	52197	No
35	GOM_NL__2PRFIN20120221_193941_000000313112_00028_52197_5252.N1	21-FEB-2012 19:39:41	Twilight	31.000	48	30Alp Hya	1.9770	4100.0	62	52197	No
36	GOM_NL__2PRFIN20120221_204646_000000313112_00028_52197_5253.N1	21-FEB-2012 20:46:46	Dark	31.000	85	Kap Sco	2.4070	28000.	62	52197	No
37	GOM_NL__2PRFIN20120221_205834_000000433112_00029_52198_5277.N1	21-FEB-2012 20:58:34	Dark	43.000	10	Bet Cen	0.61000	28000.	86	52198	No
38	GOM_NL__2PRFIN20120221_211955_000000363112_00029_52198_5278.N1	21-FEB-2012 21:19:55	Twilight	35.500	48	30Alp Hya	1.9770	4100.0	71	52198	No
39	GOM_NL__2PRFIN20120221_222701_000000263112_00029_52198_5279.N1	21-FEB-2012 22:27:01	Dark	26.000	85	Kap Sco	2.4070	28000.	52	52198	No
40	GOM_NL__2PRFIN20120221_223848_000000453112_00030_52199_5294.N1	21-FEB-2012 22:38:48	Dark	44.500	10	Bet Cen	0.61000	28000.	89	52199	No
41	GOM_NL__2PRFIN20120221_230009_000000423112_00030_52199_5295.N1	21-FEB-2012 23:00:09	Twilight	41.500	48	30Alp Hya	1.9770	4100.0	83	52199	No

3. Quality information per product

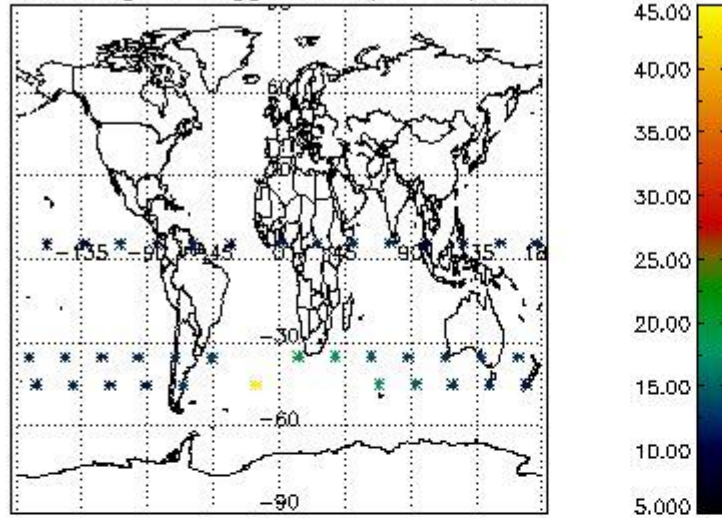
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

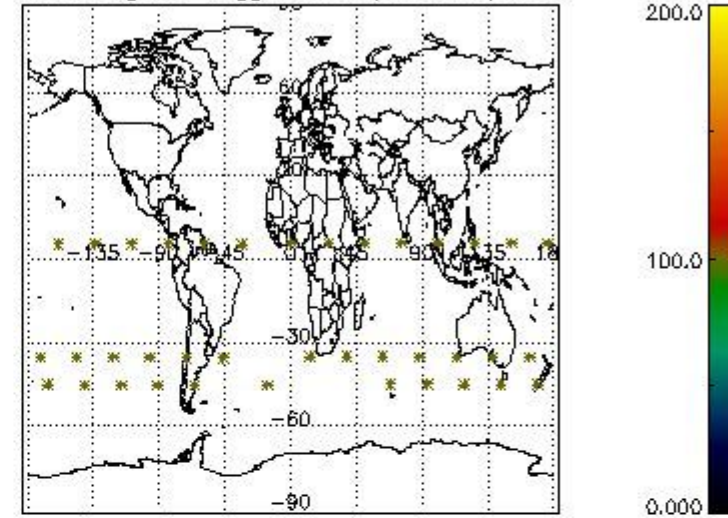


3.2 Plot quality information per product (world map)

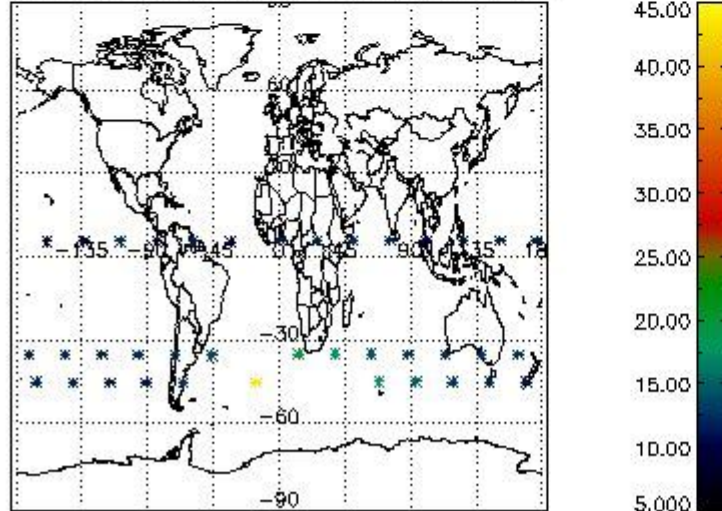
Percentage of flagged data per O3 profile



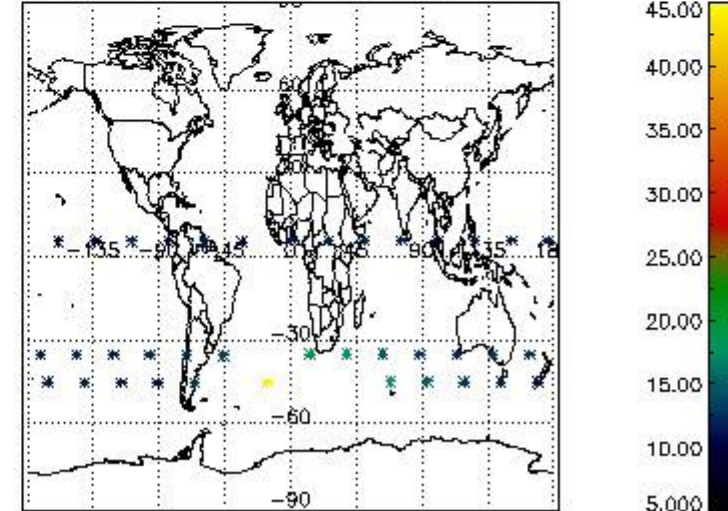
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

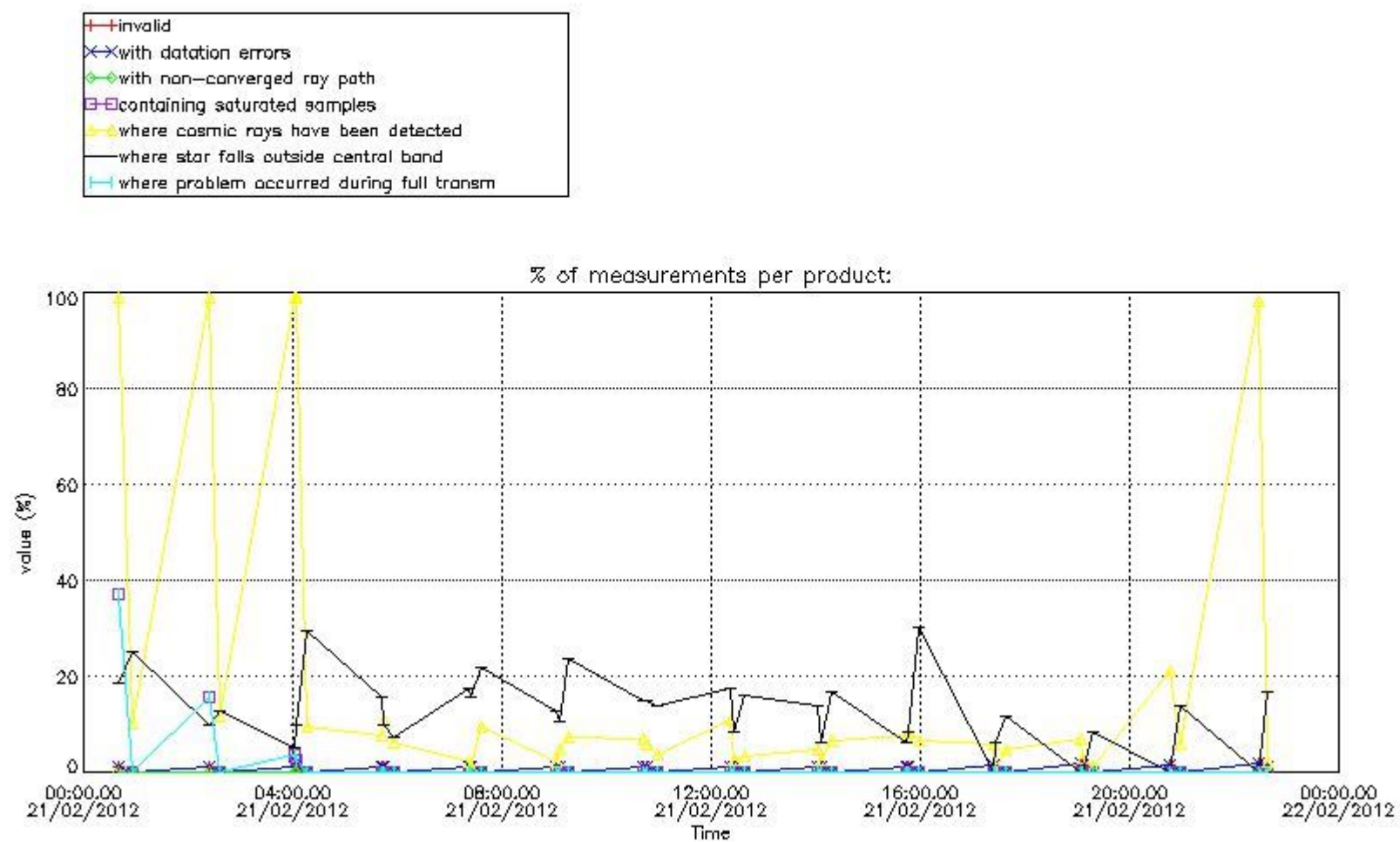


4. Level 1 quality information per product

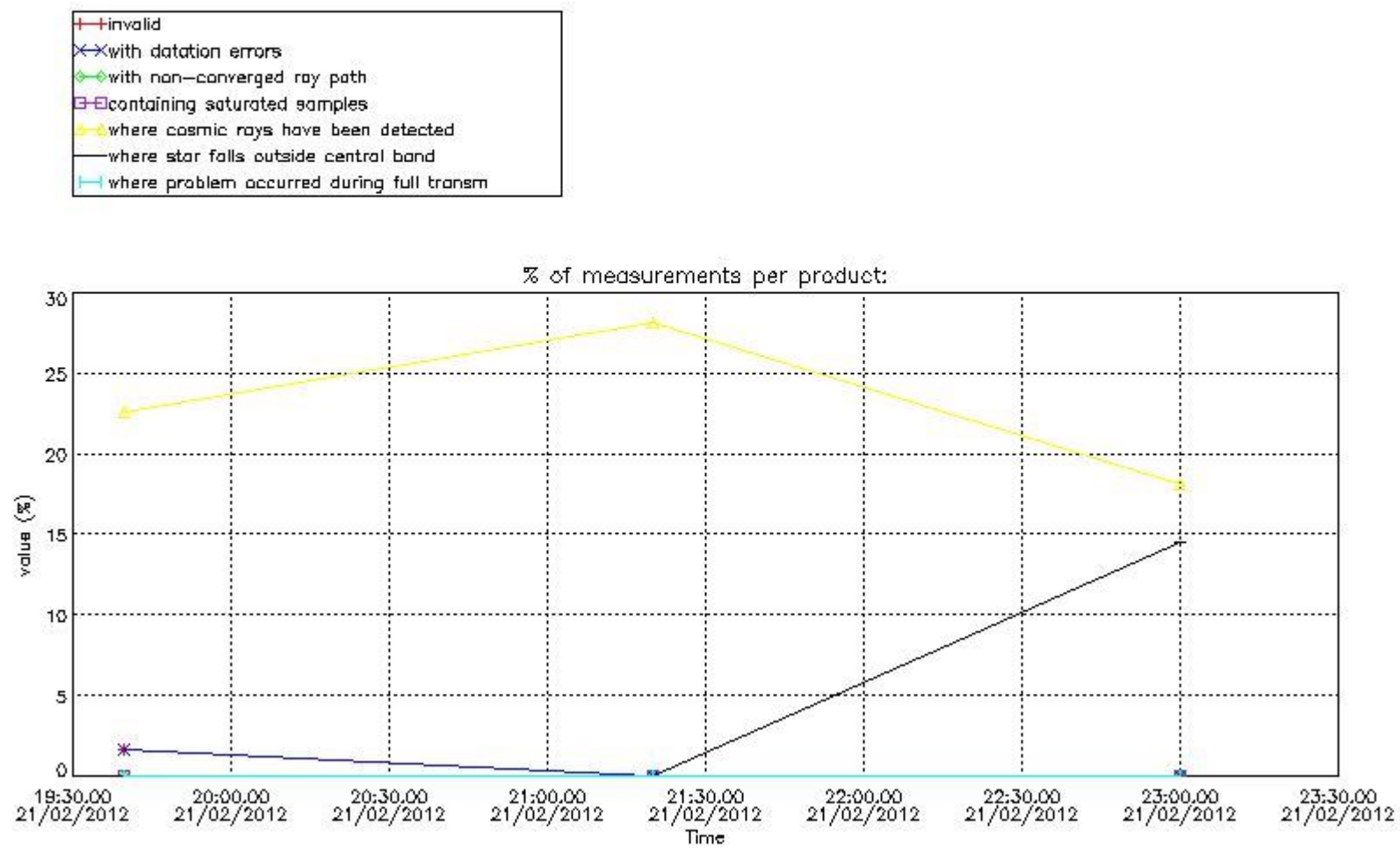
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



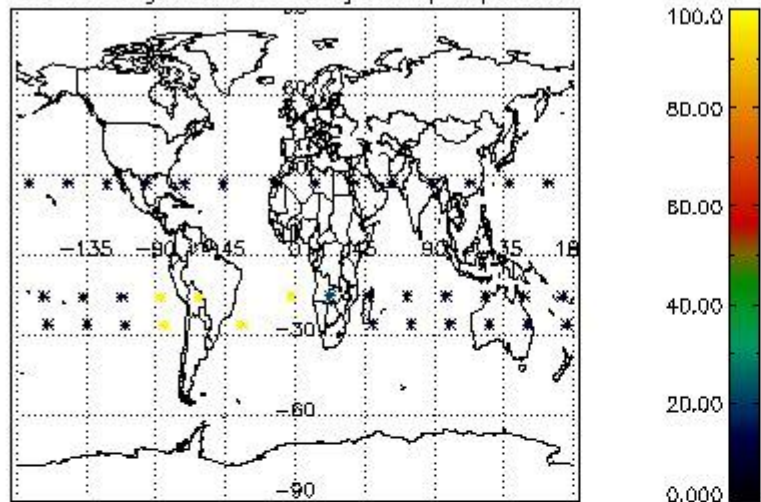
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



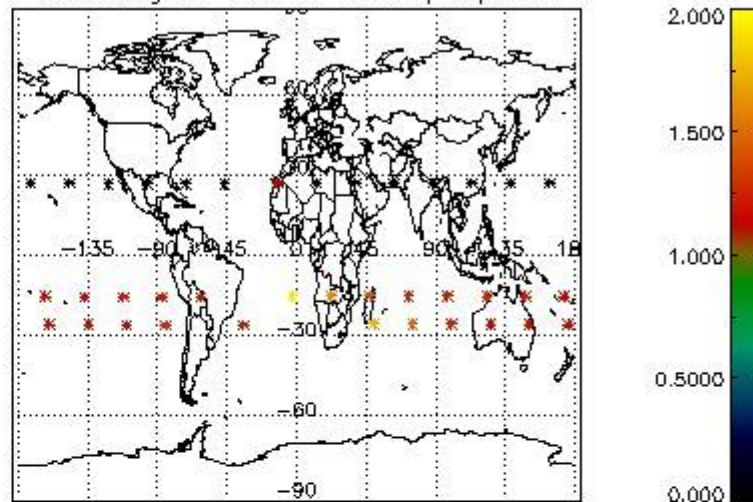
4.2 Plot quality information per product coming from level 1b processing (world map)

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

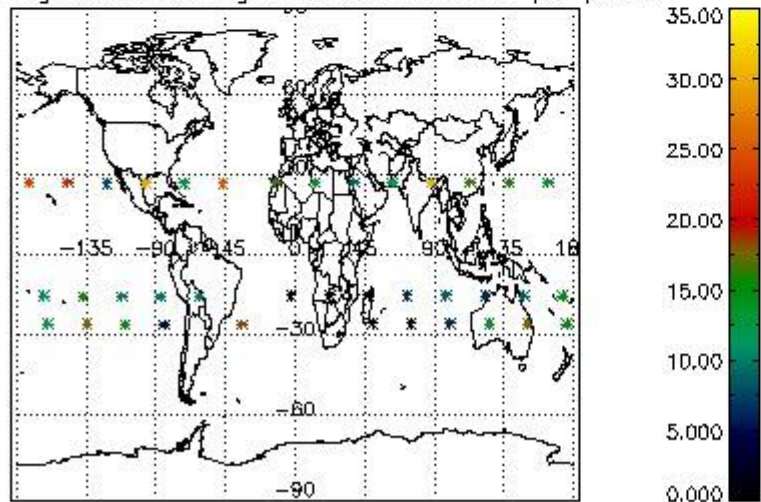
Percentage of cosmic ray hits per profile



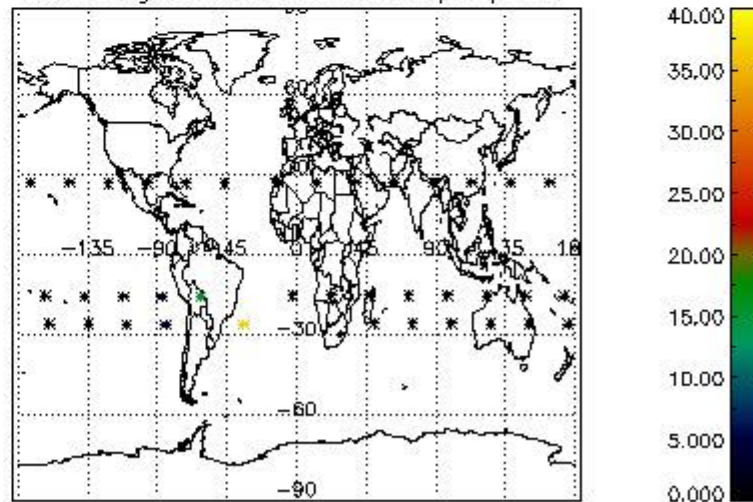
Percentage of datation errors per profile



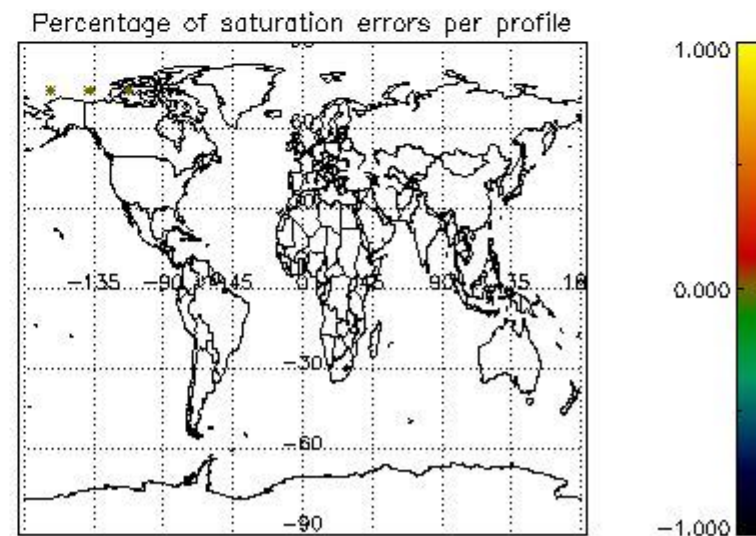
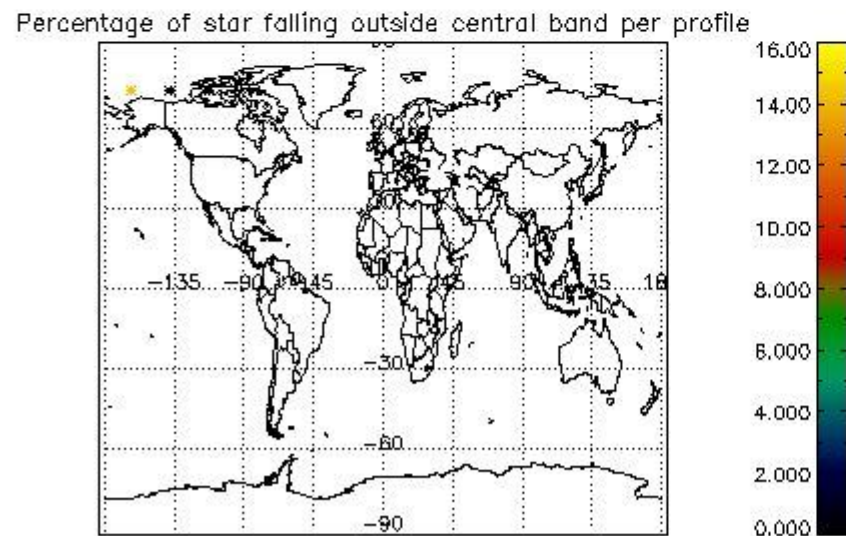
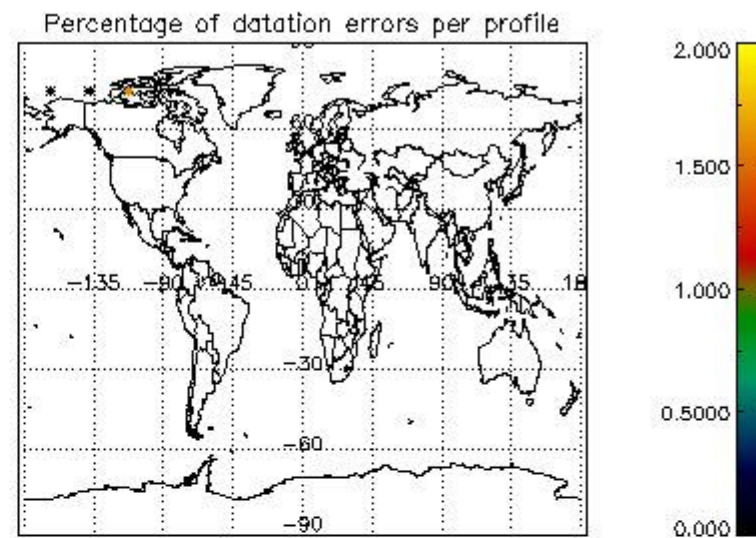
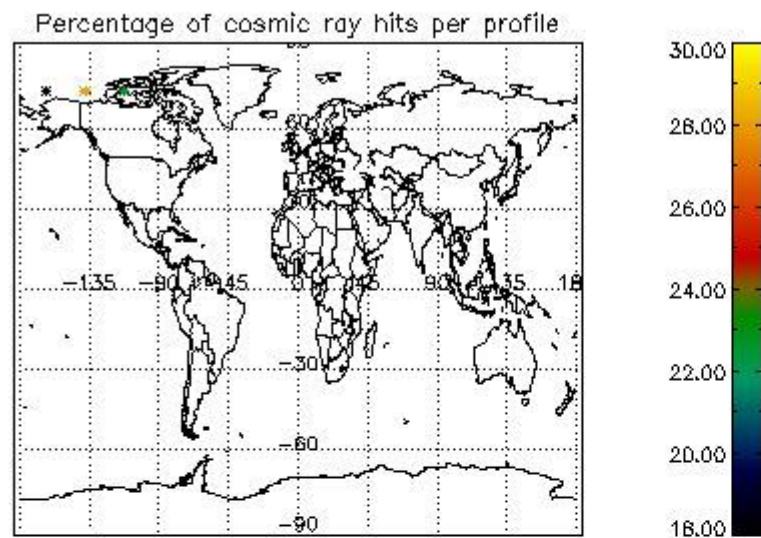
Percentage of star falling outside central band per profile



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

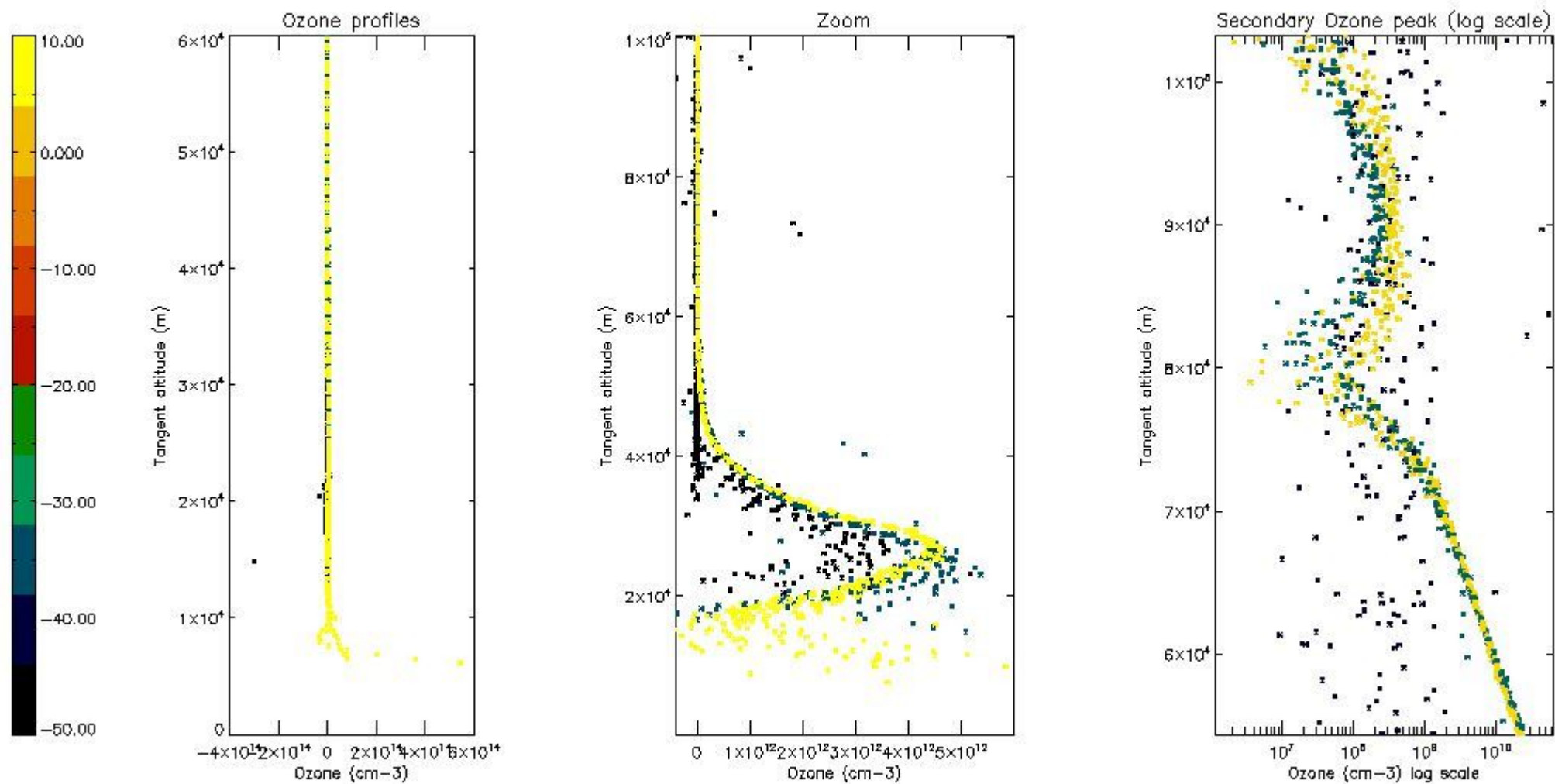
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	94
STD < 20	51

STD < 10	42
STD < 5	34

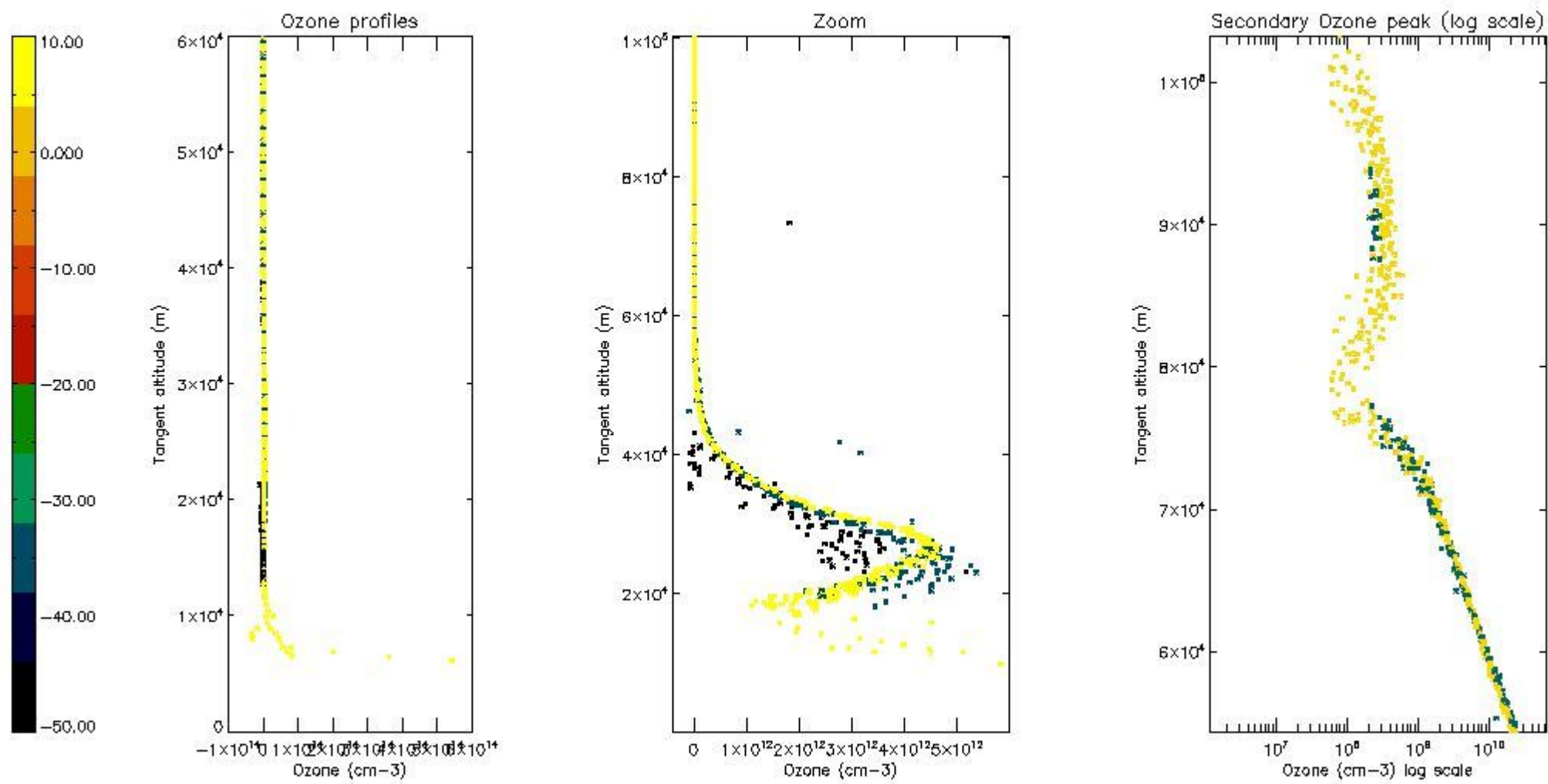
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



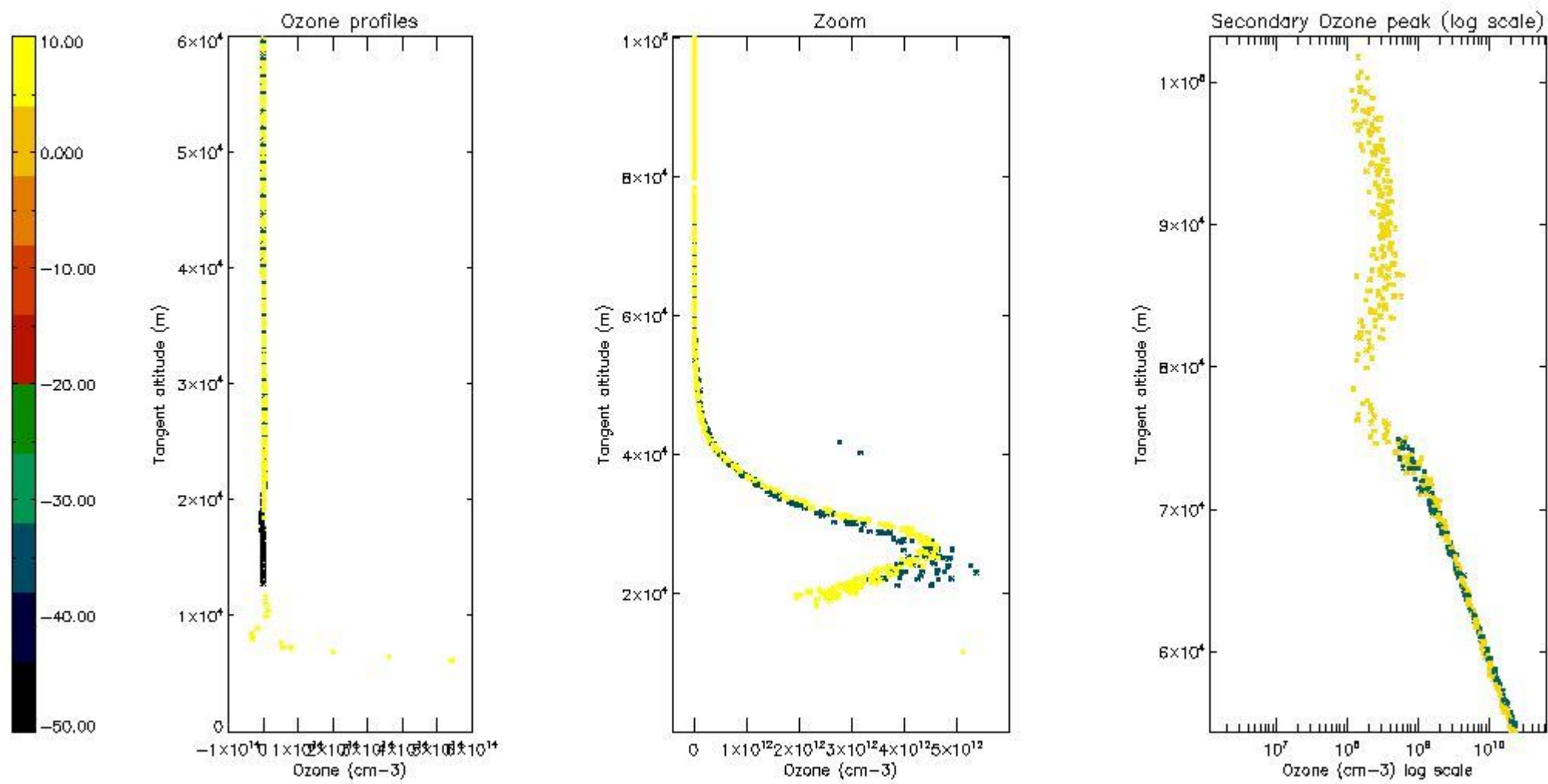
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



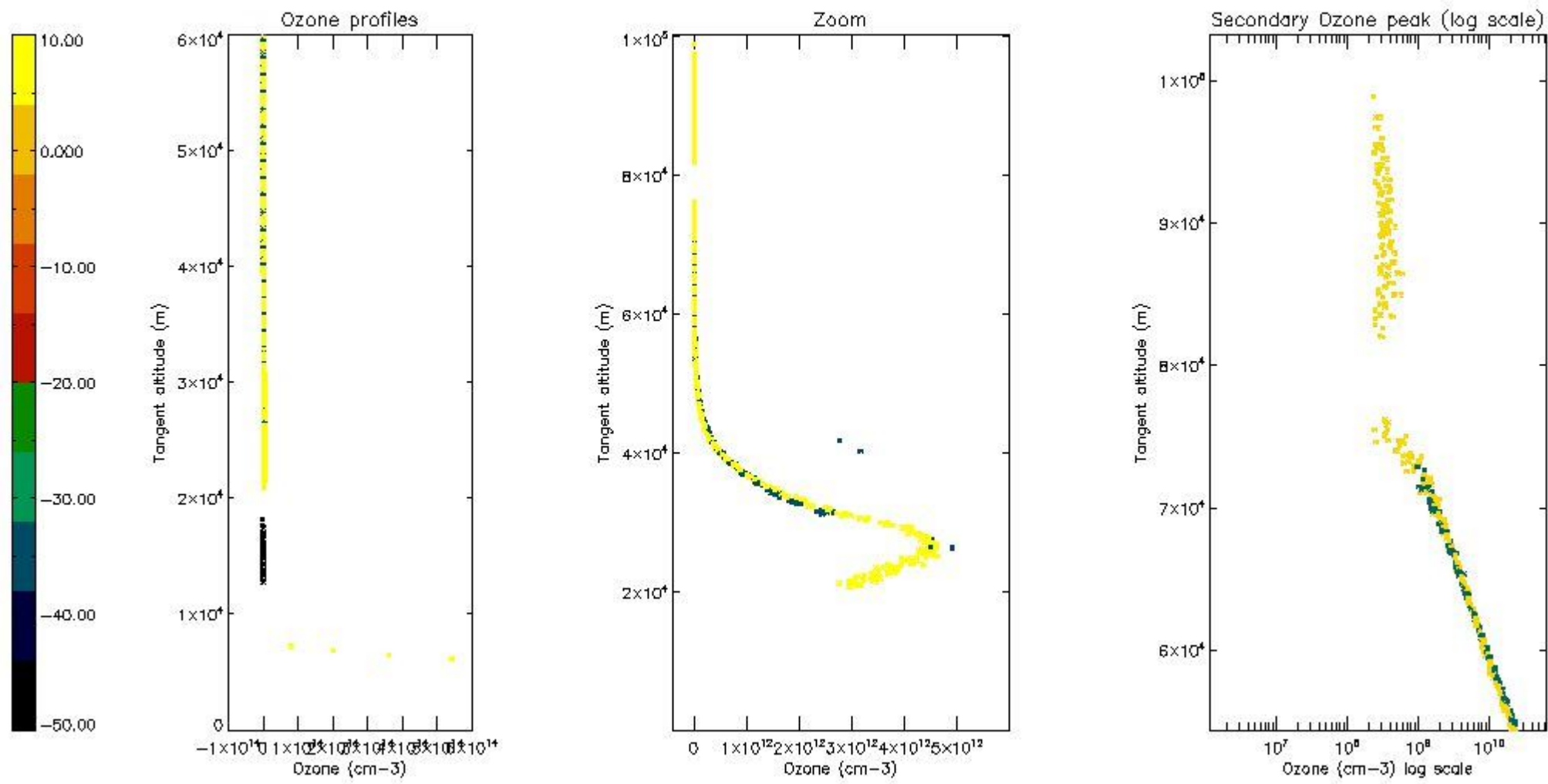
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



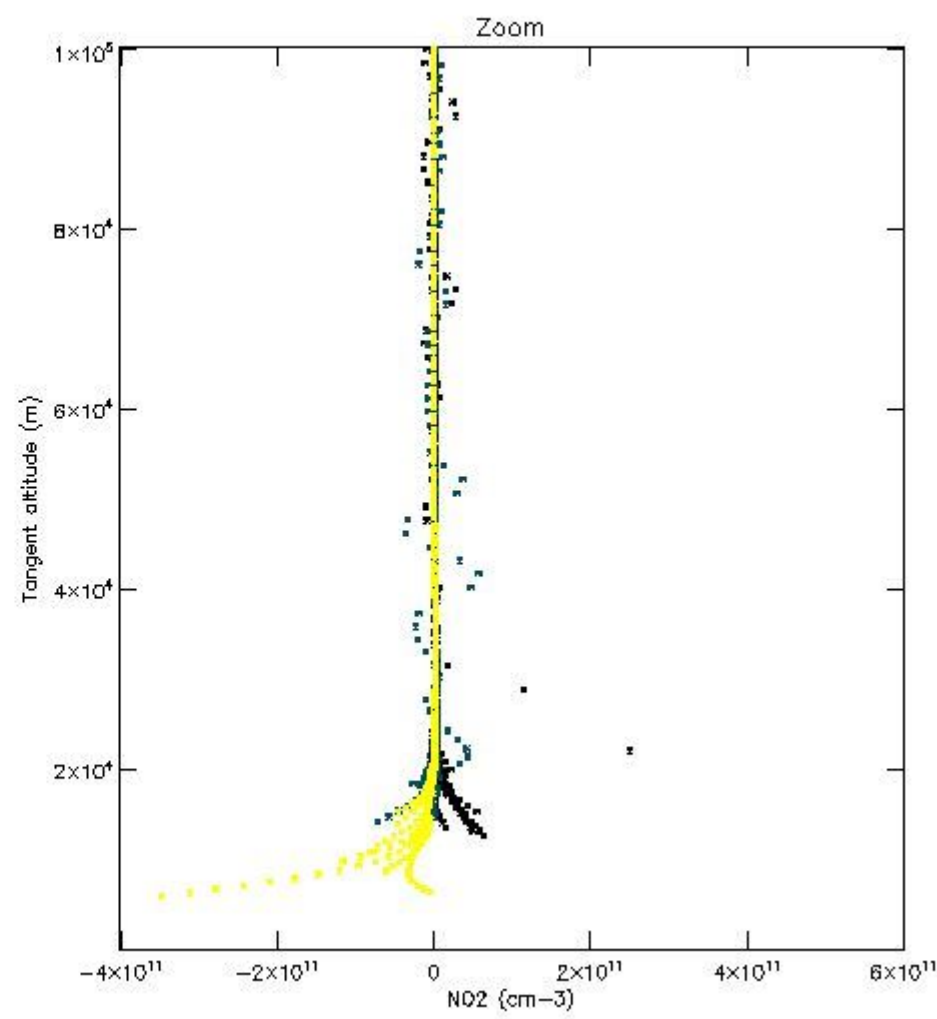
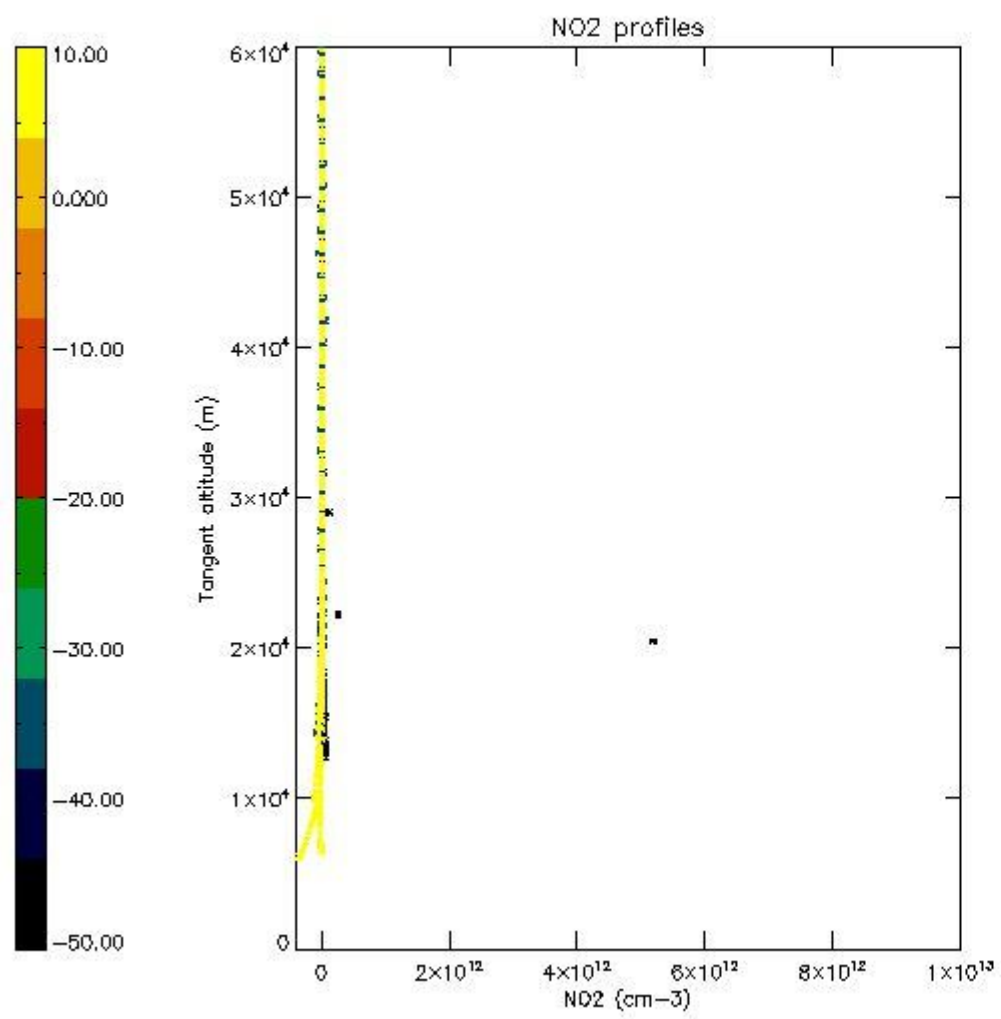
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



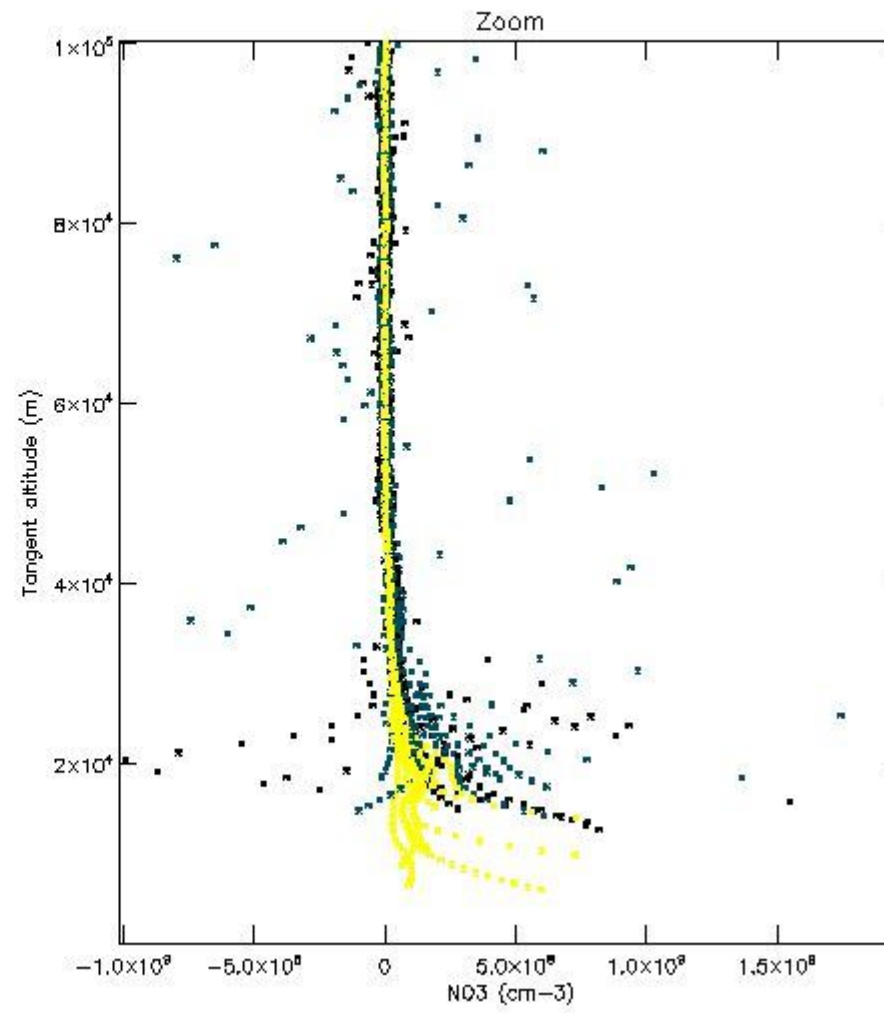
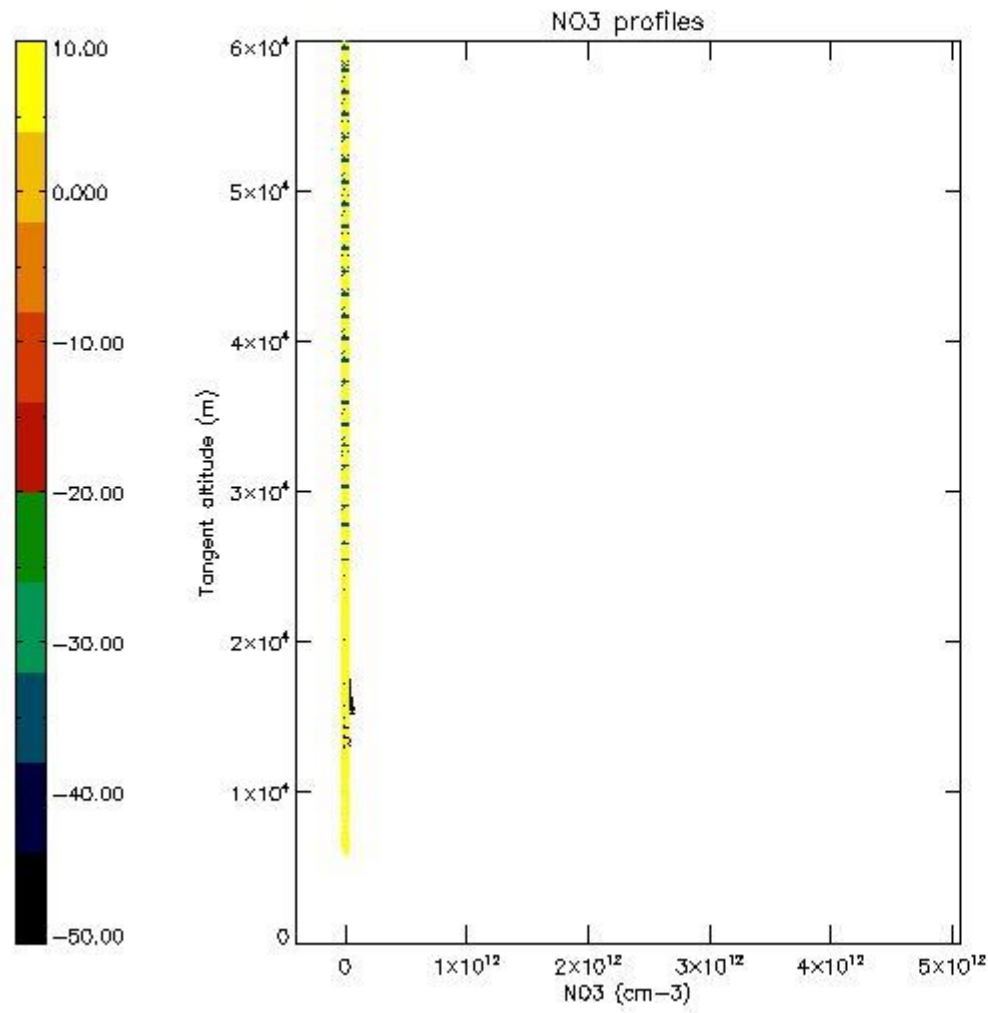
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

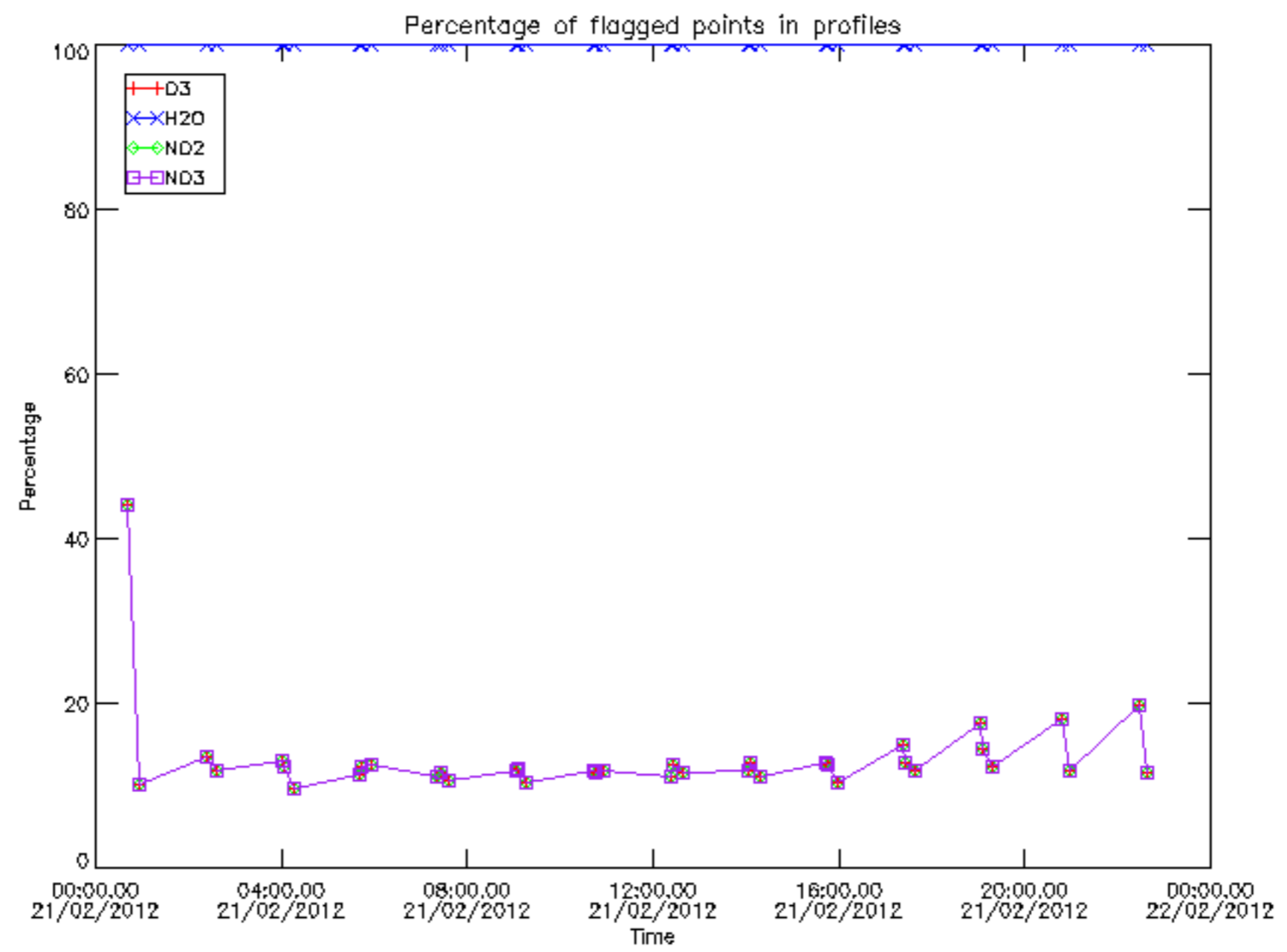
The colorbar represents the latitude.



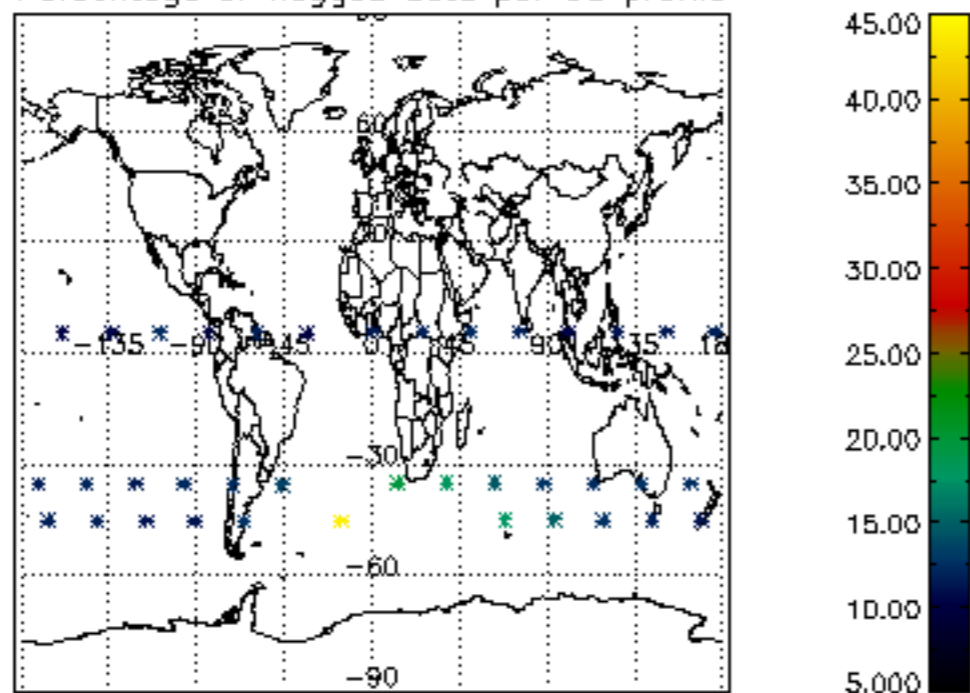
6. Auxiliary Data Files used for the production reported in section 2

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.

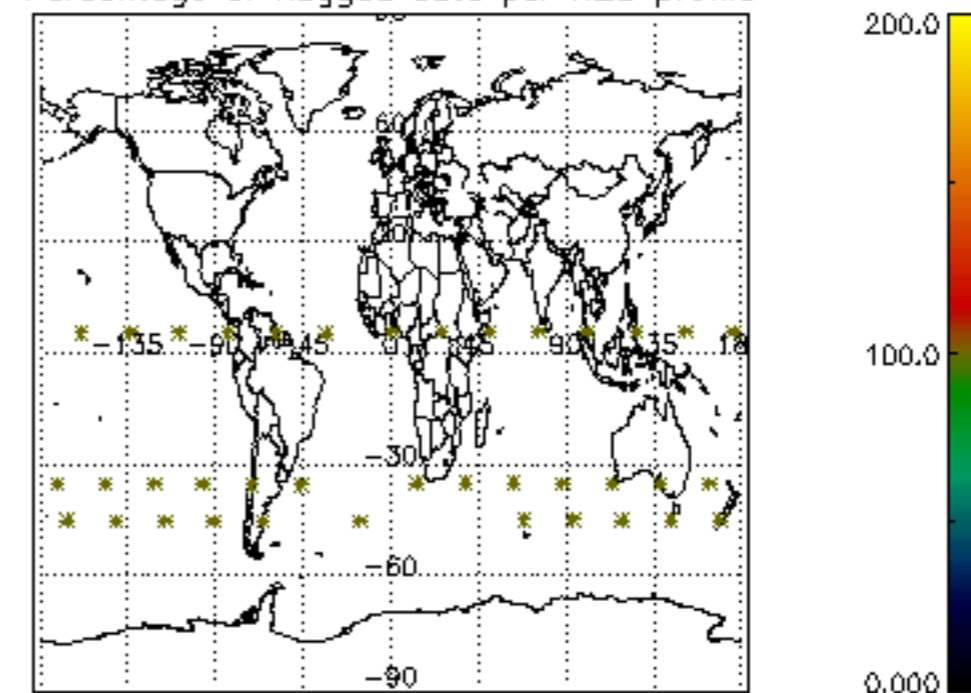
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20111213_163131_20111215_000000_20500101_000000	1	21-FEB-2012 00:40:56
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	21-FEB-2012 00:40:56
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	21-FEB-2012 00:40:56



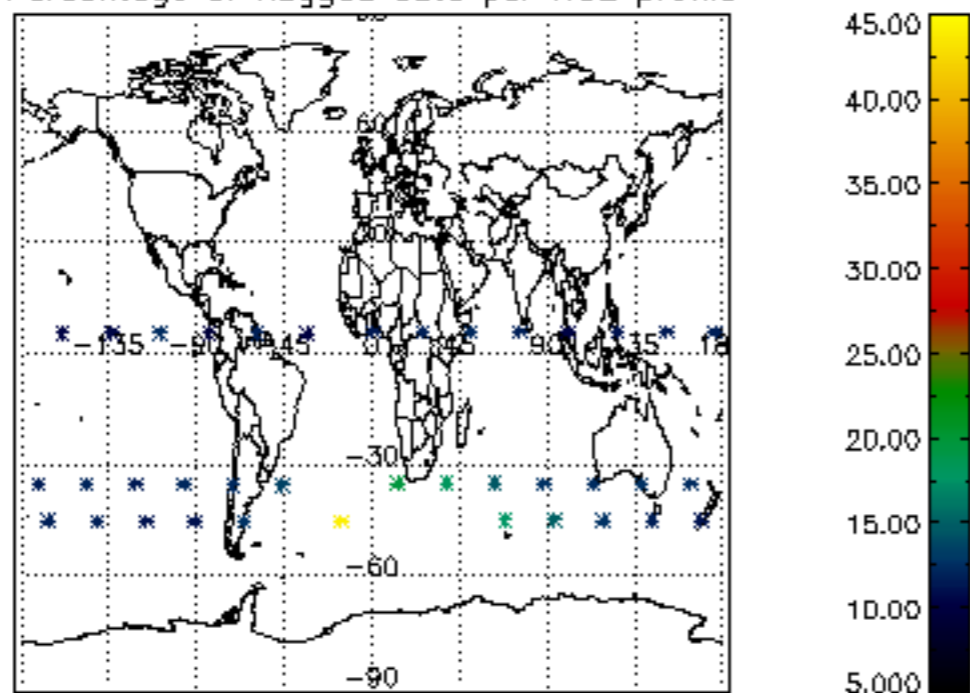
Percentage of flagged data per D3 profile



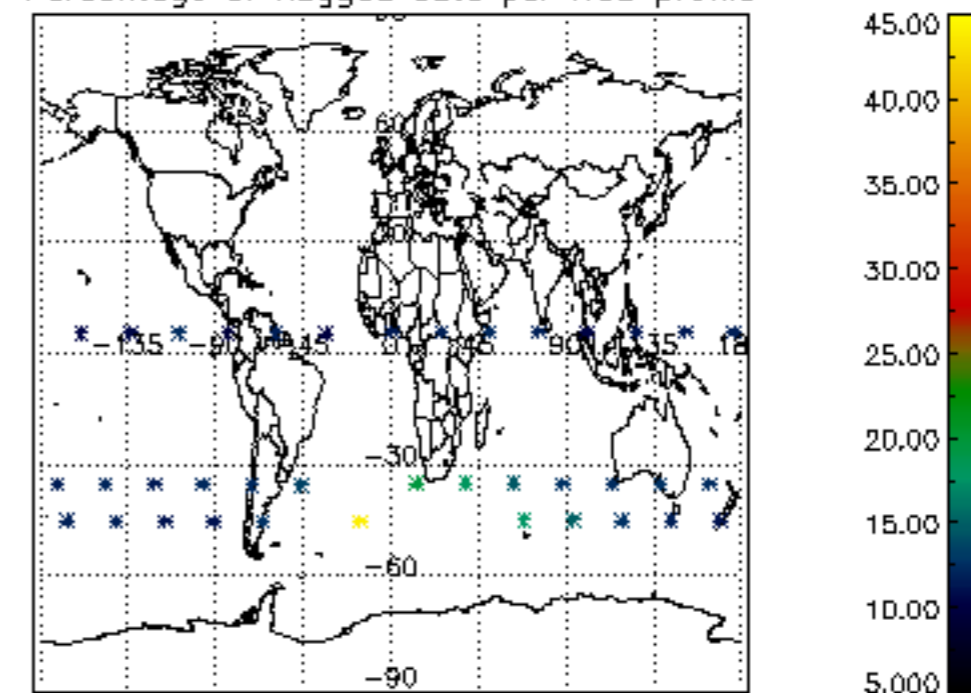
Percentage of flagged data per H2O profile

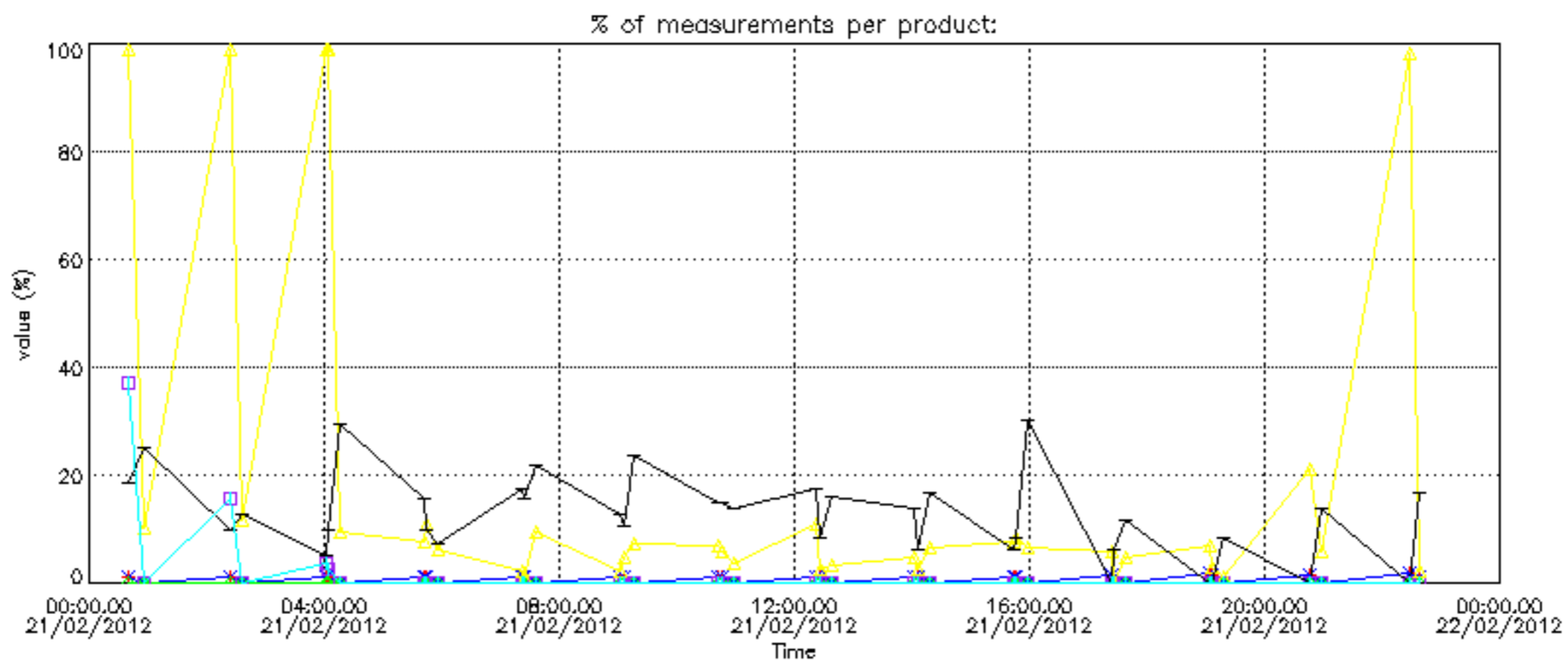


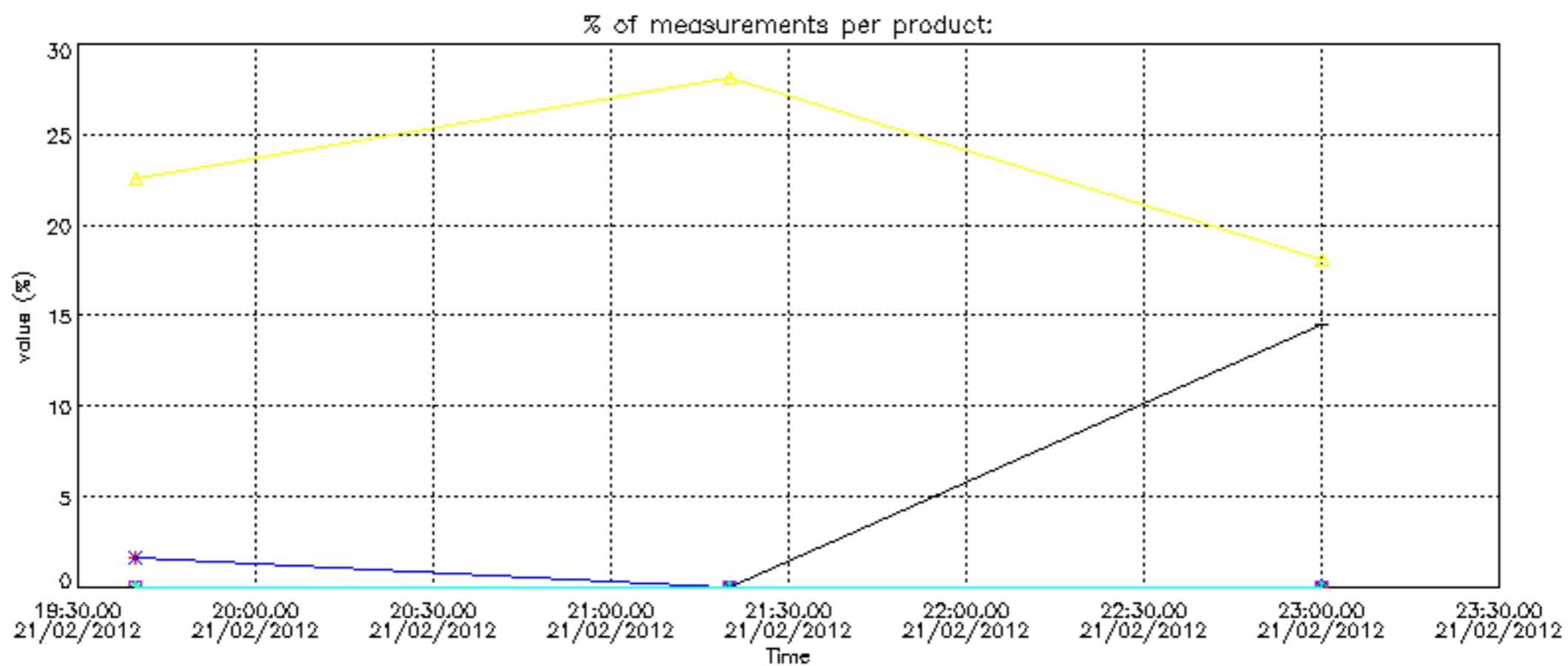
Percentage of flagged data per NO2 profile



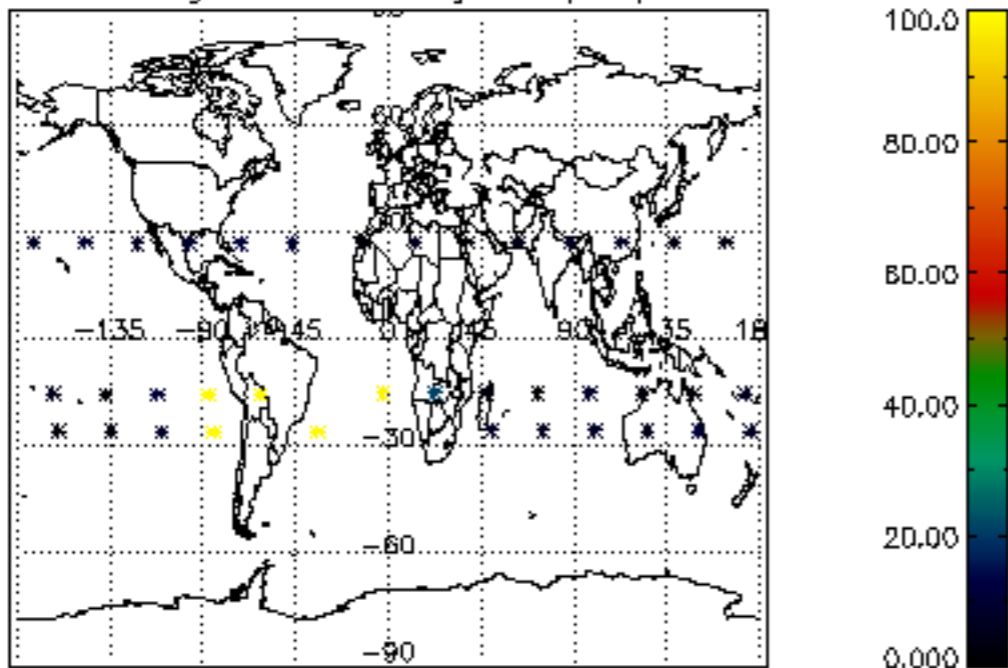
Percentage of flagged data per NO3 profile



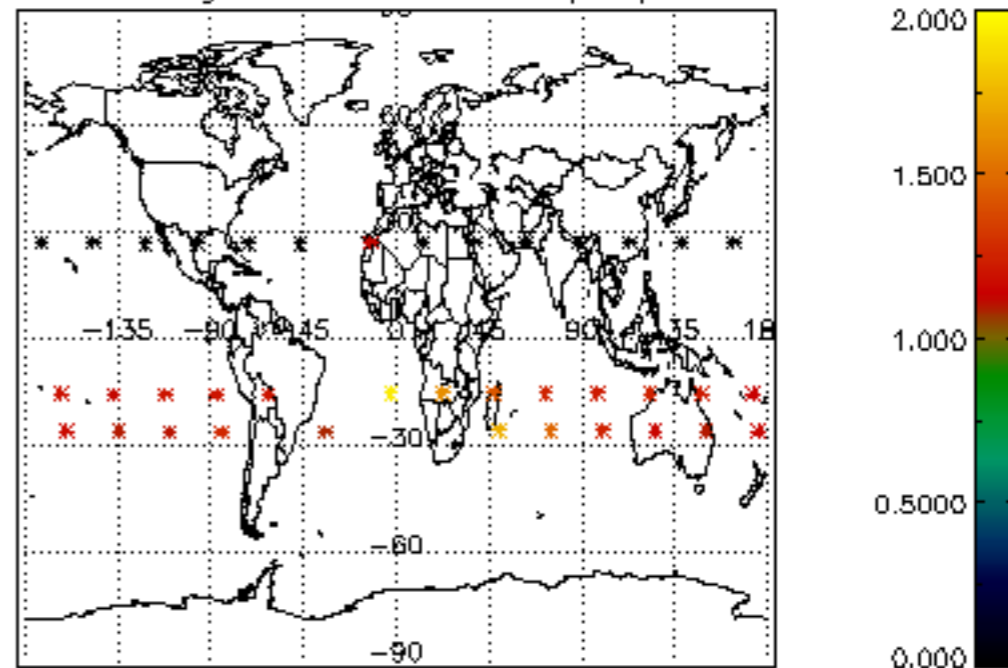




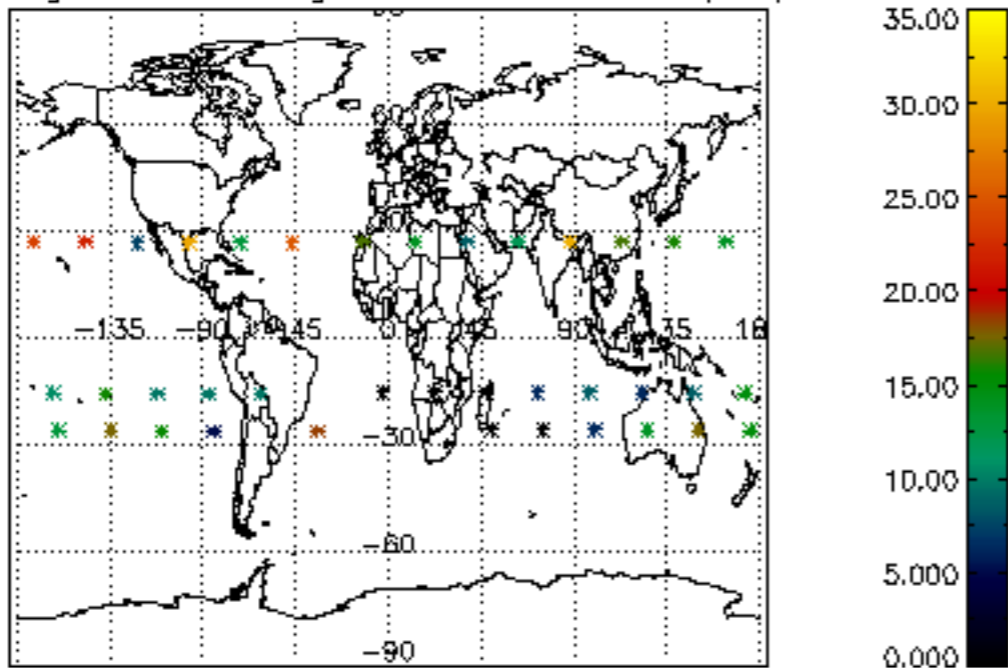
Percentage of cosmic ray hits per profile



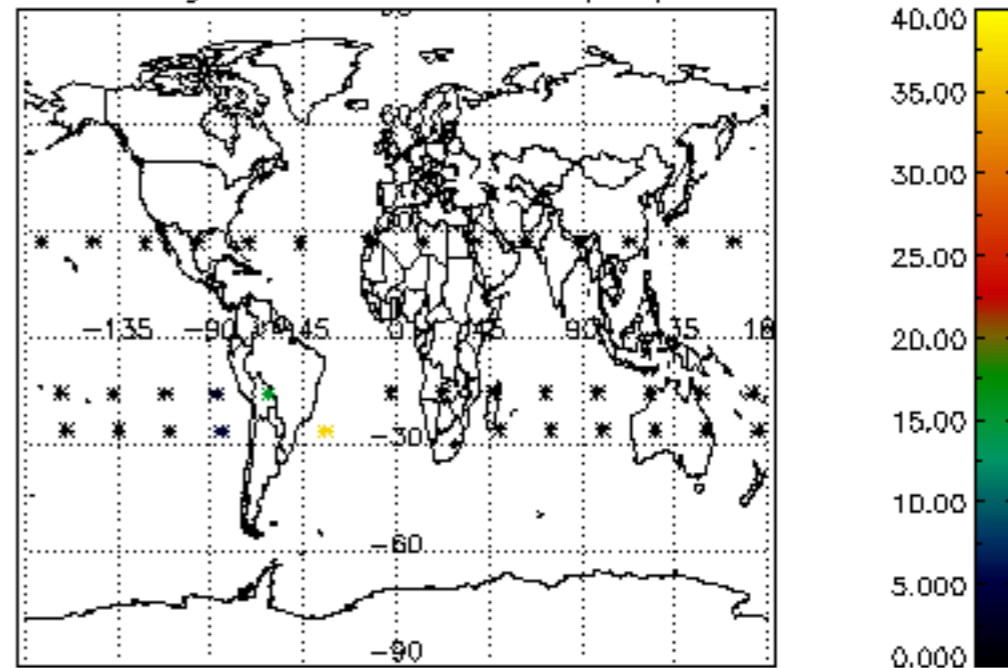
Percentage of datation errors per profile



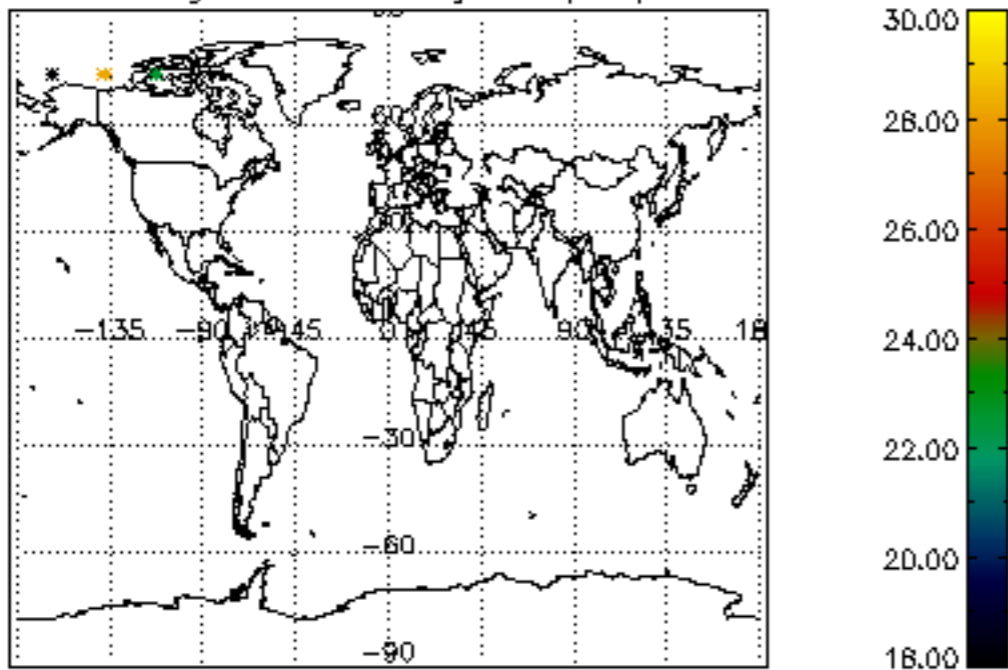
Percentage of star falling outside central band per profile



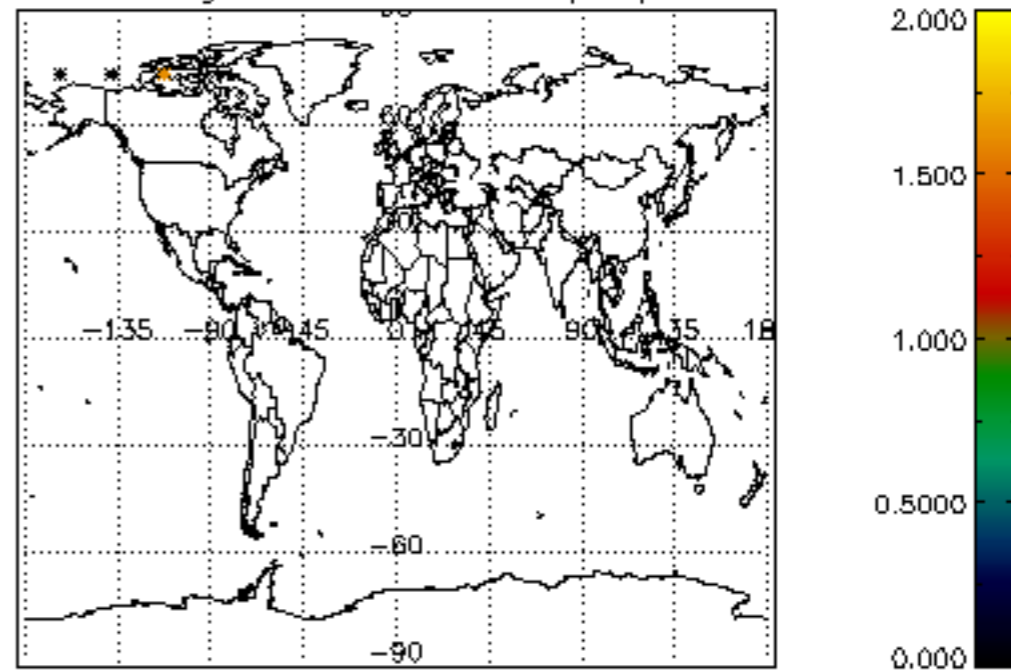
Percentage of saturation errors per profile



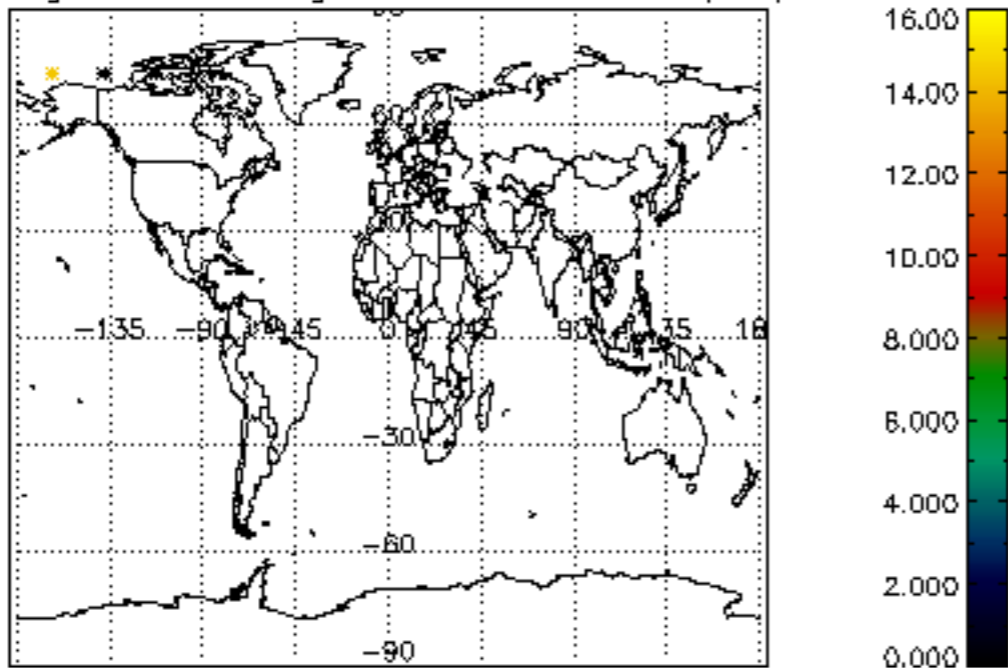
Percentage of cosmic ray hits per profile



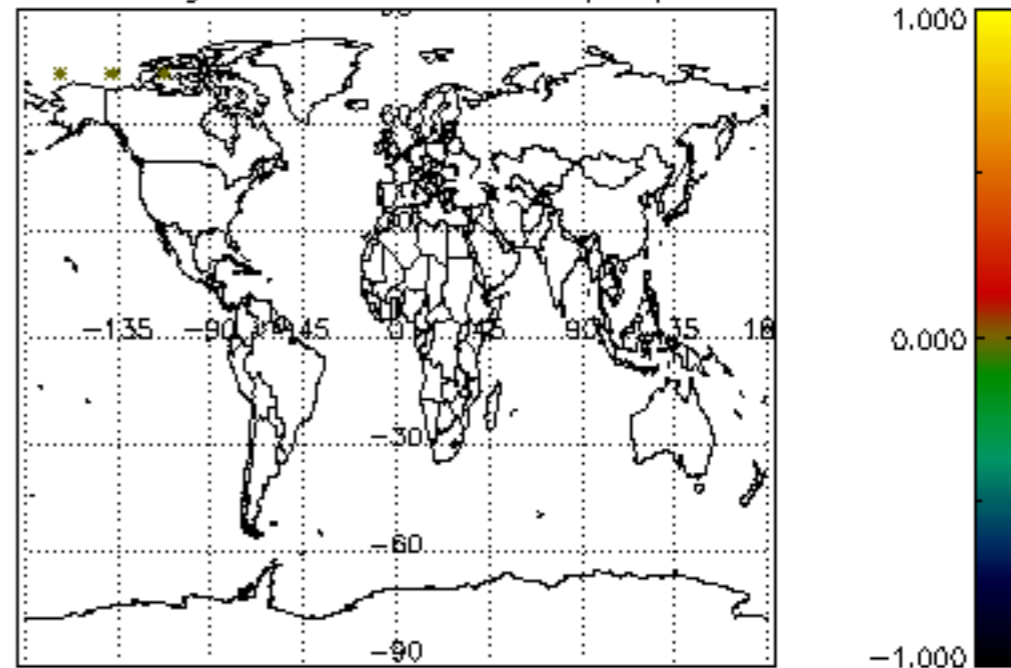
Percentage of datation errors per profile

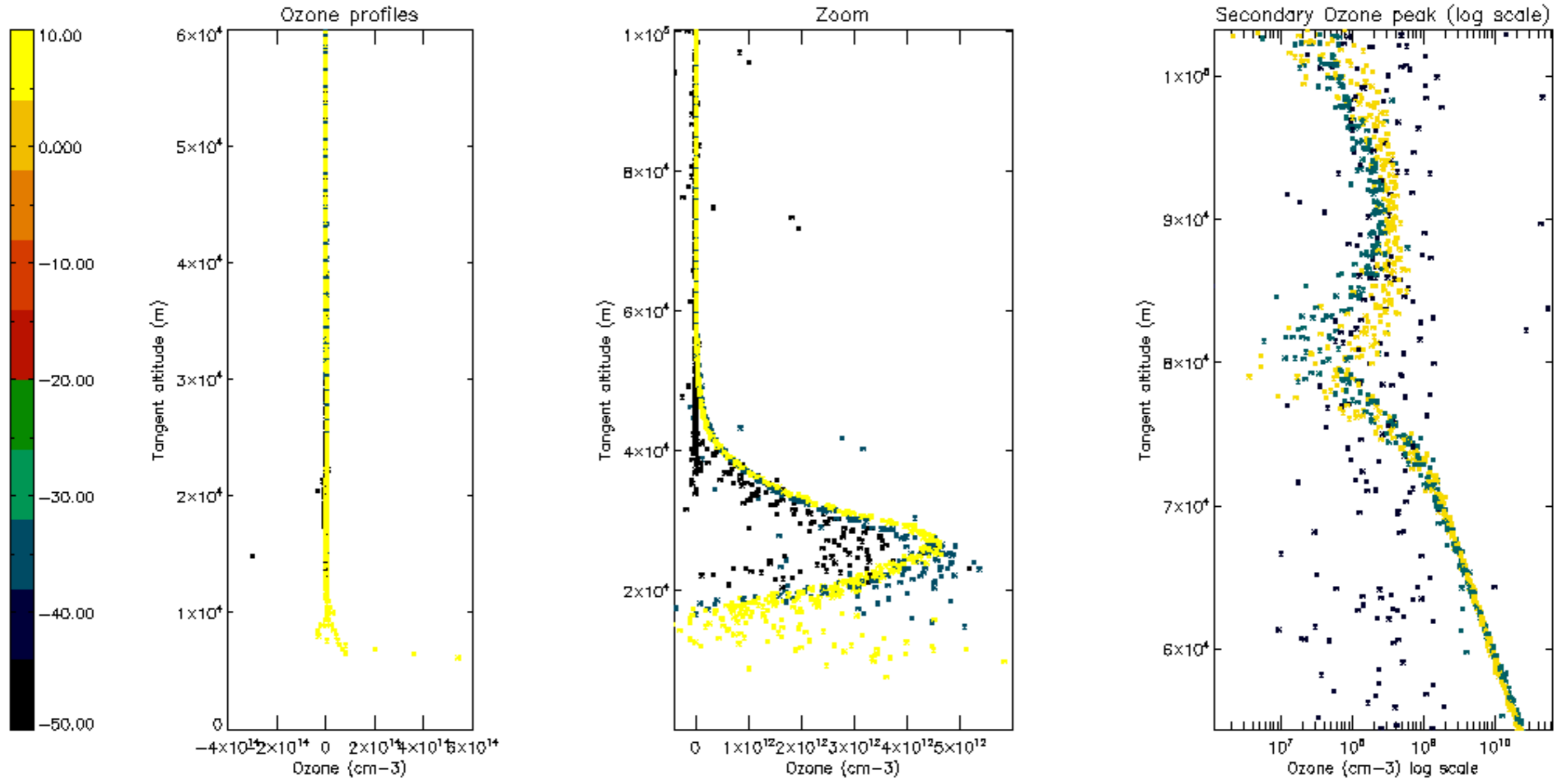


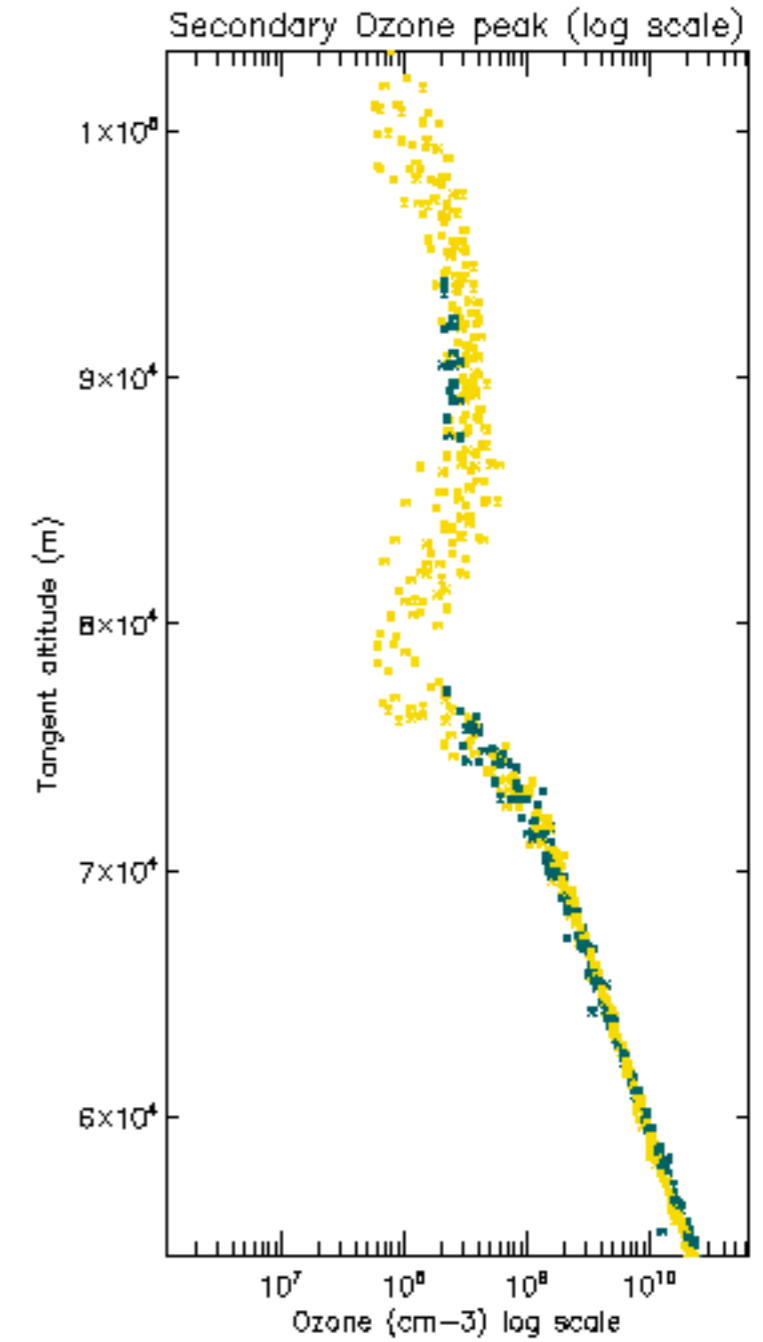
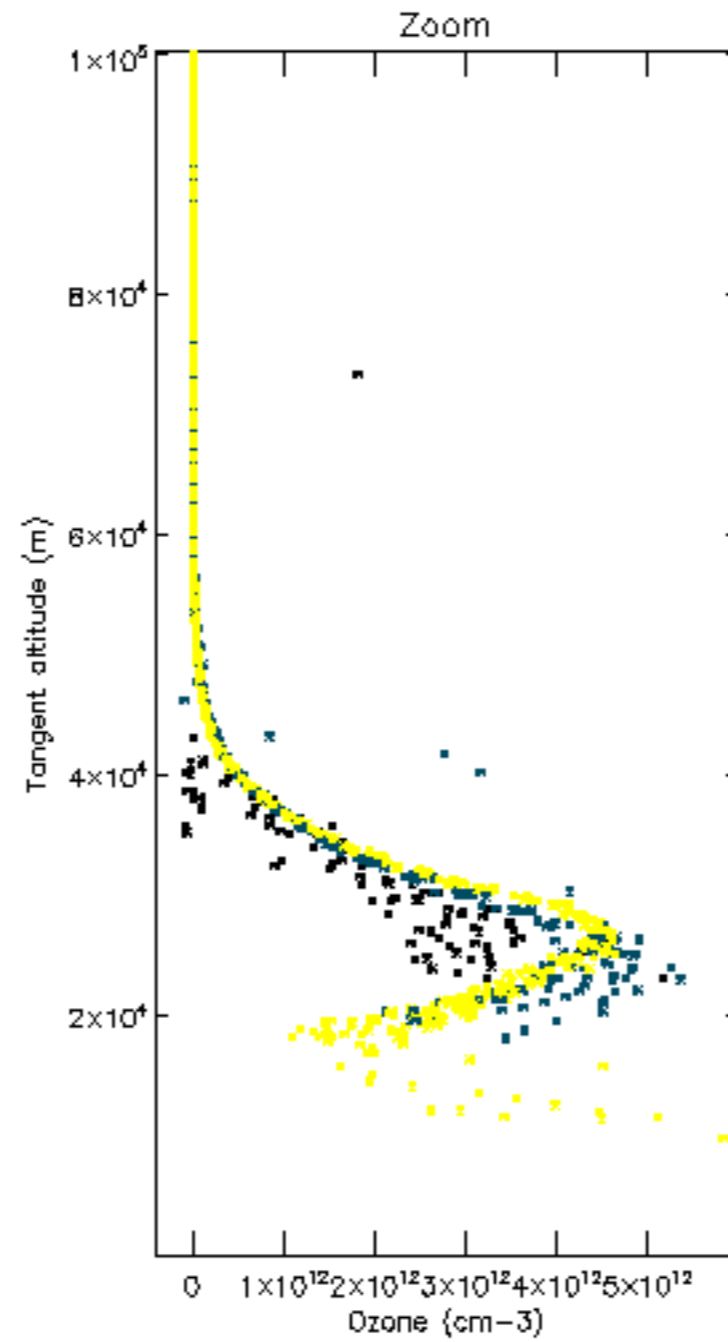
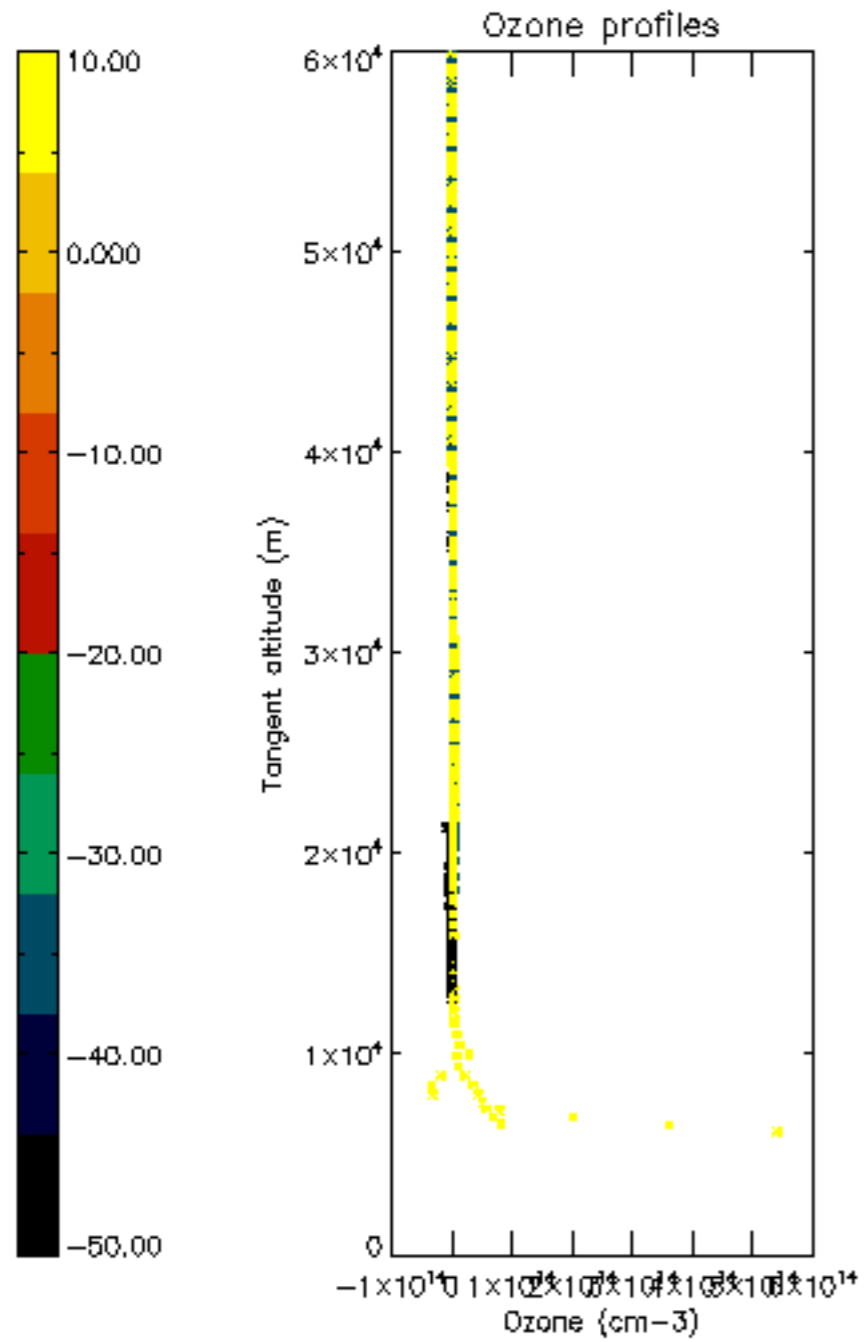
Percentage of star falling outside central band per profile

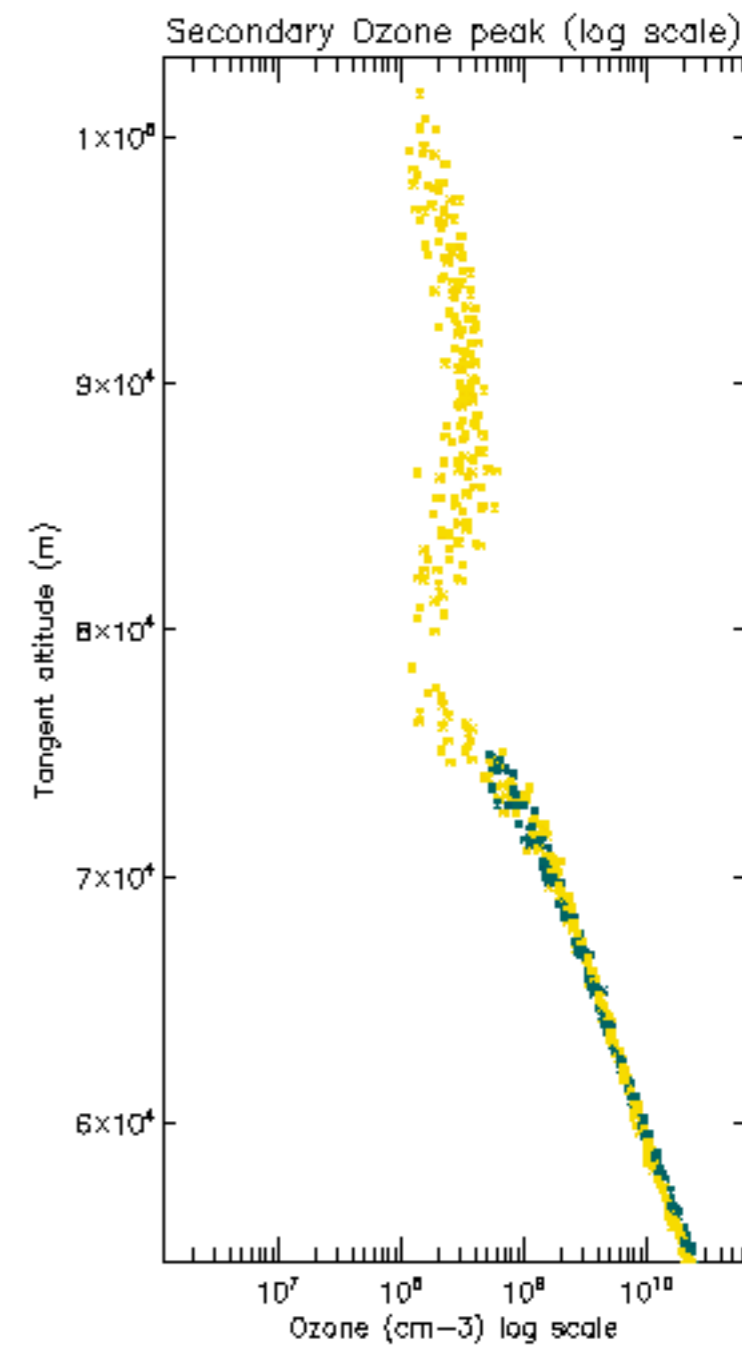
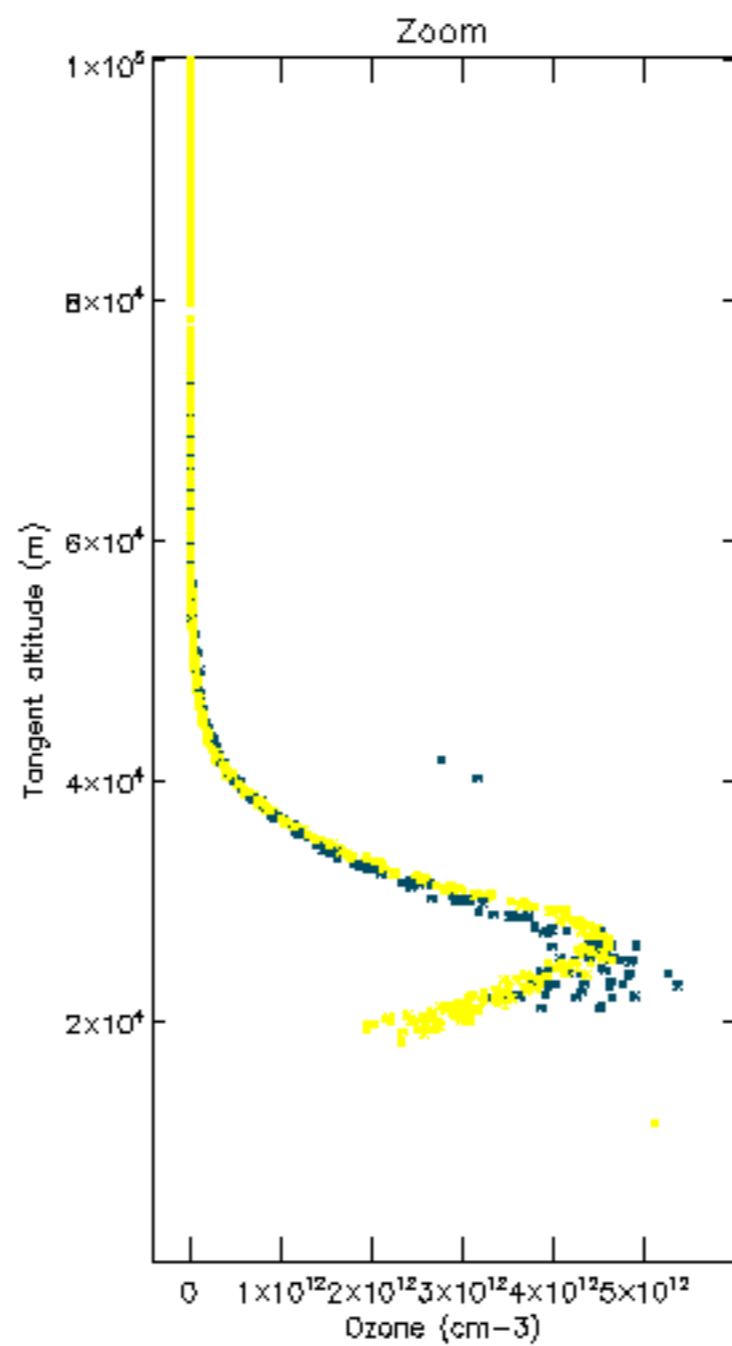
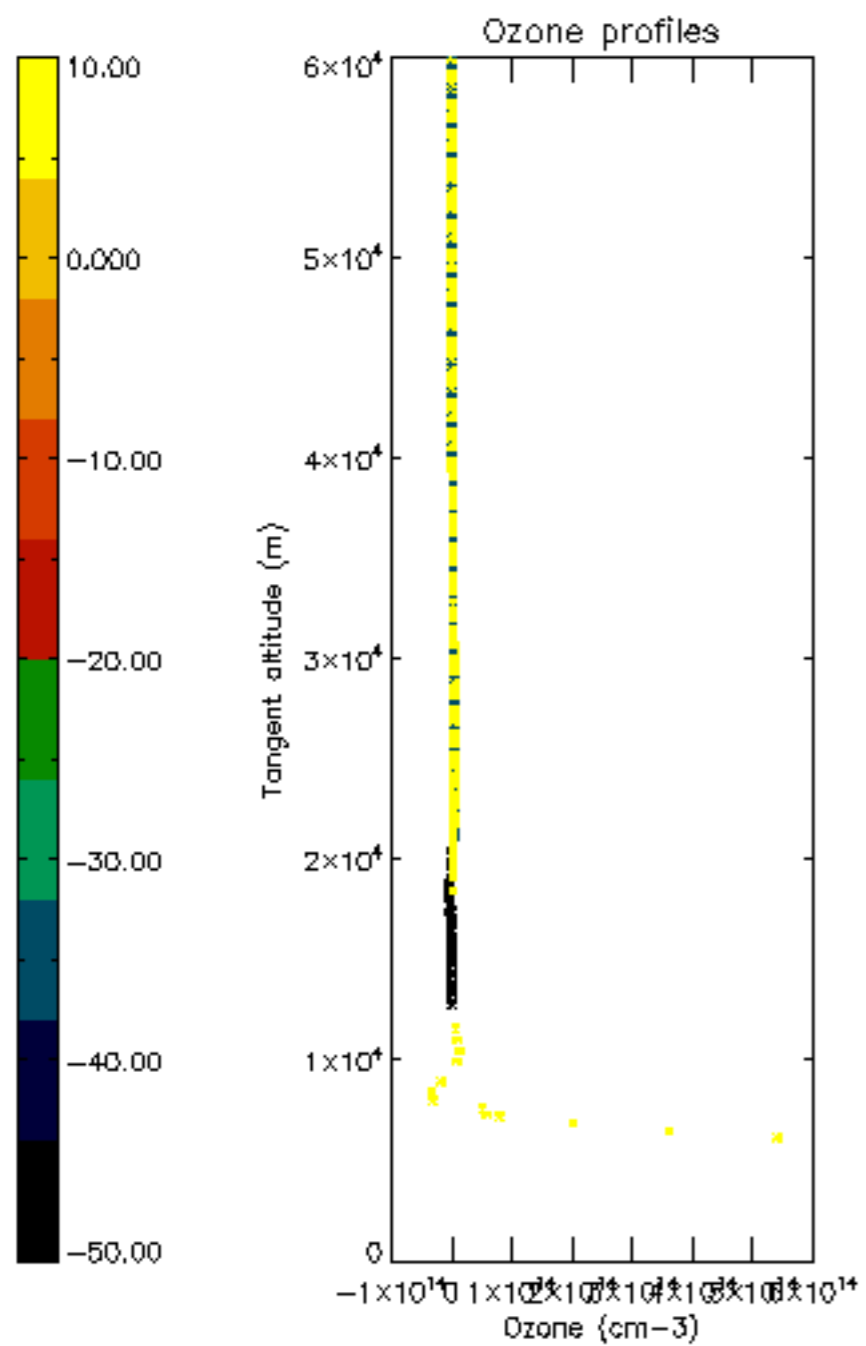


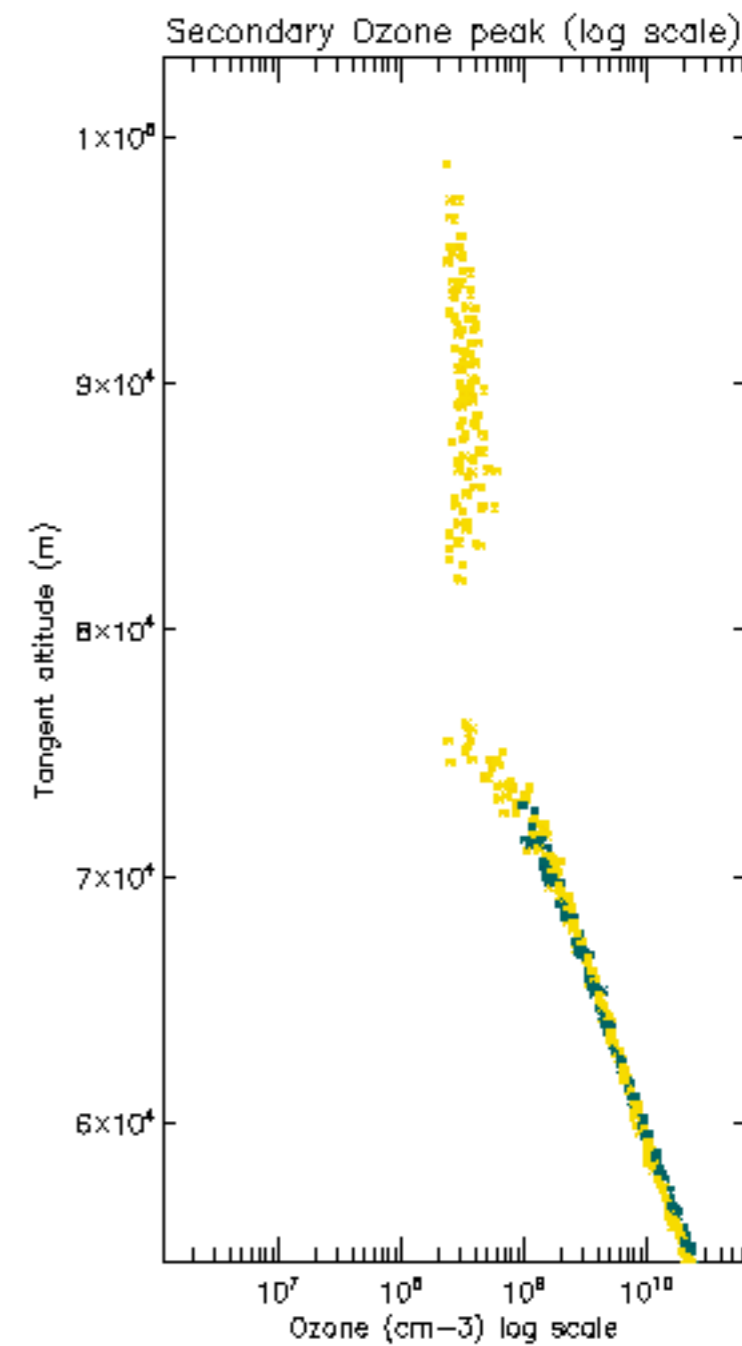
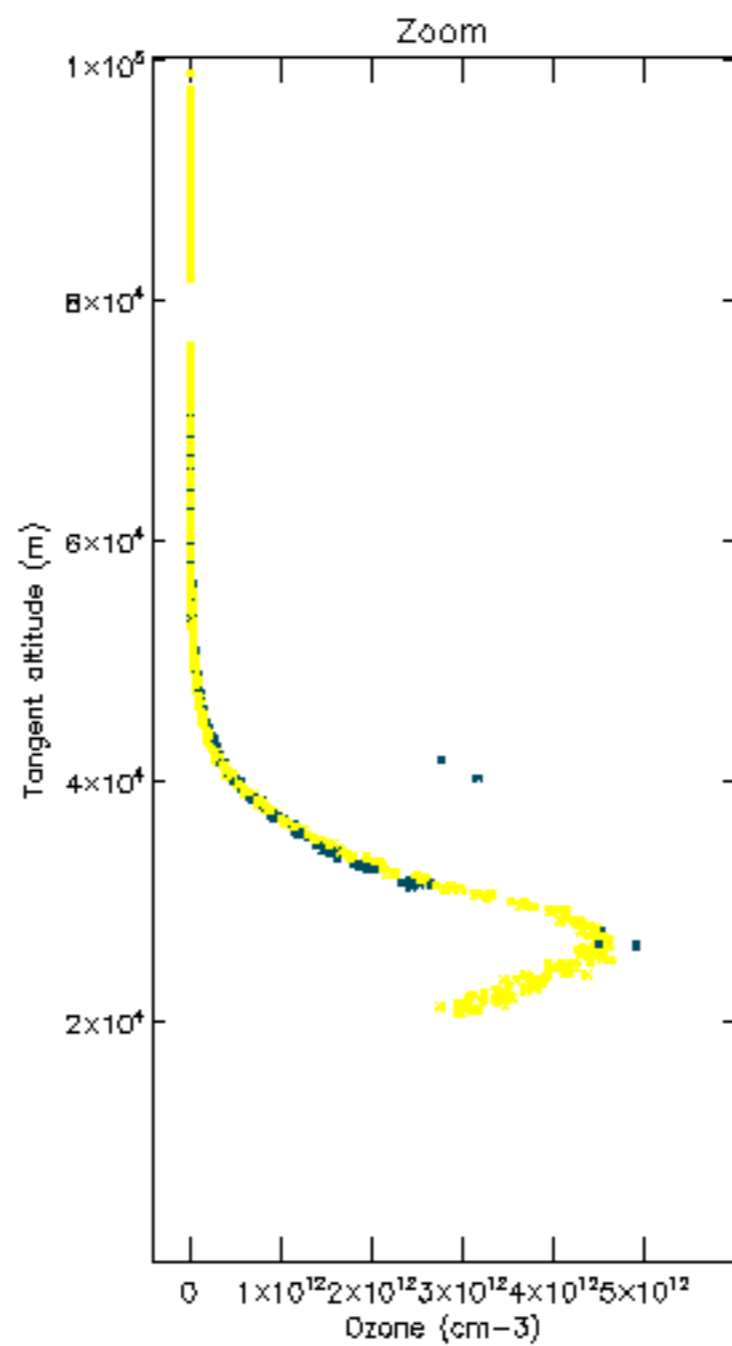
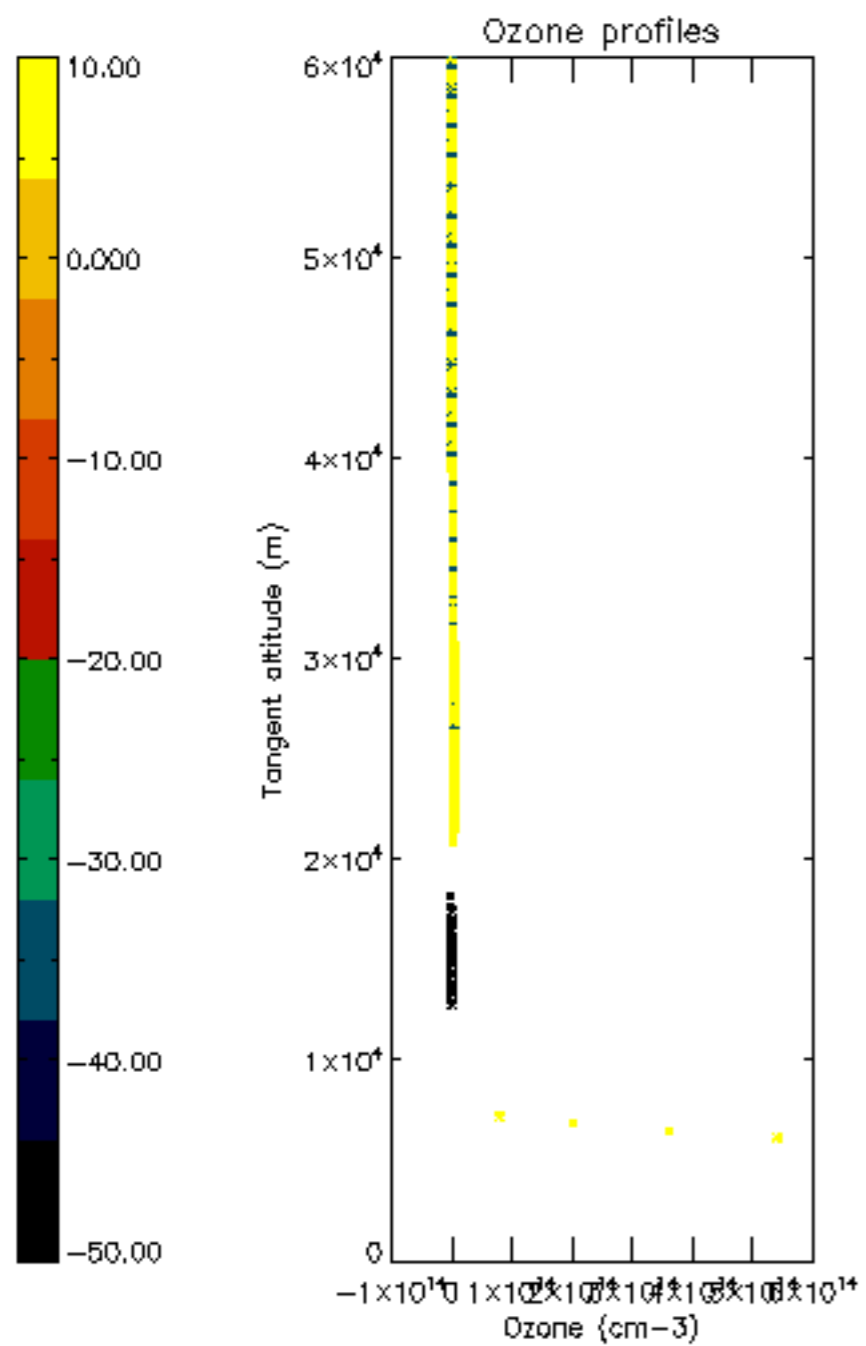
Percentage of saturation errors per profile

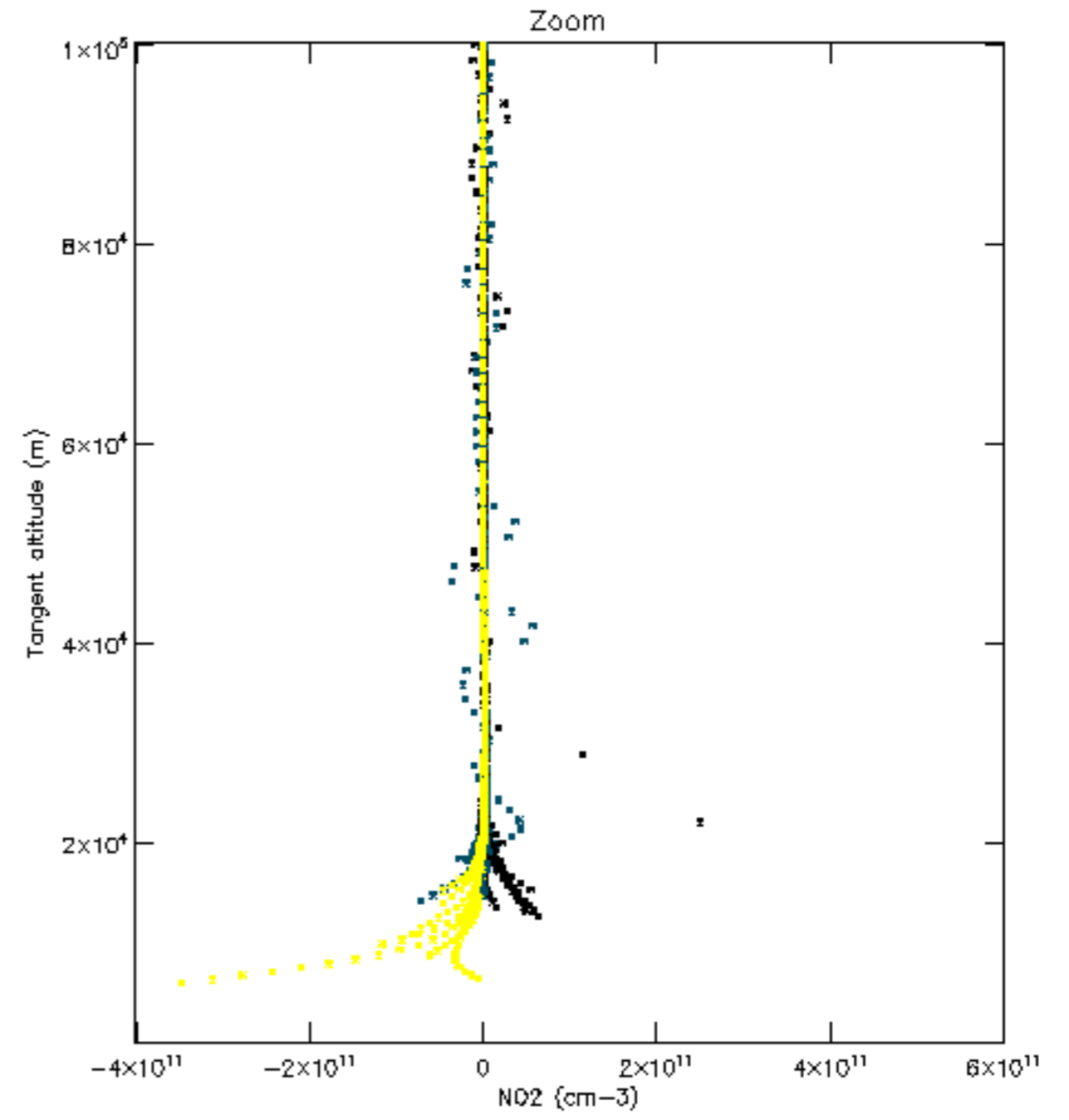
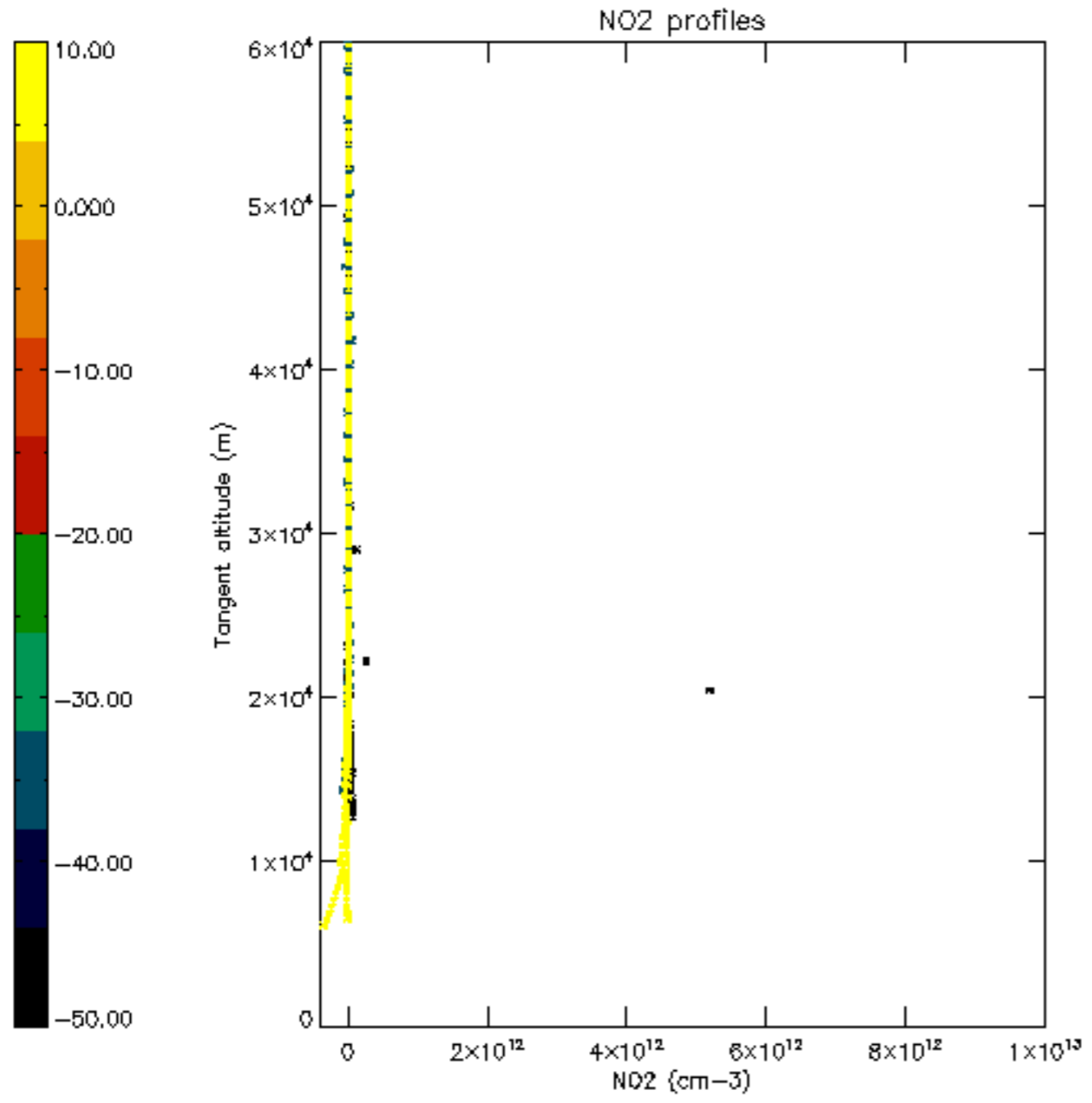


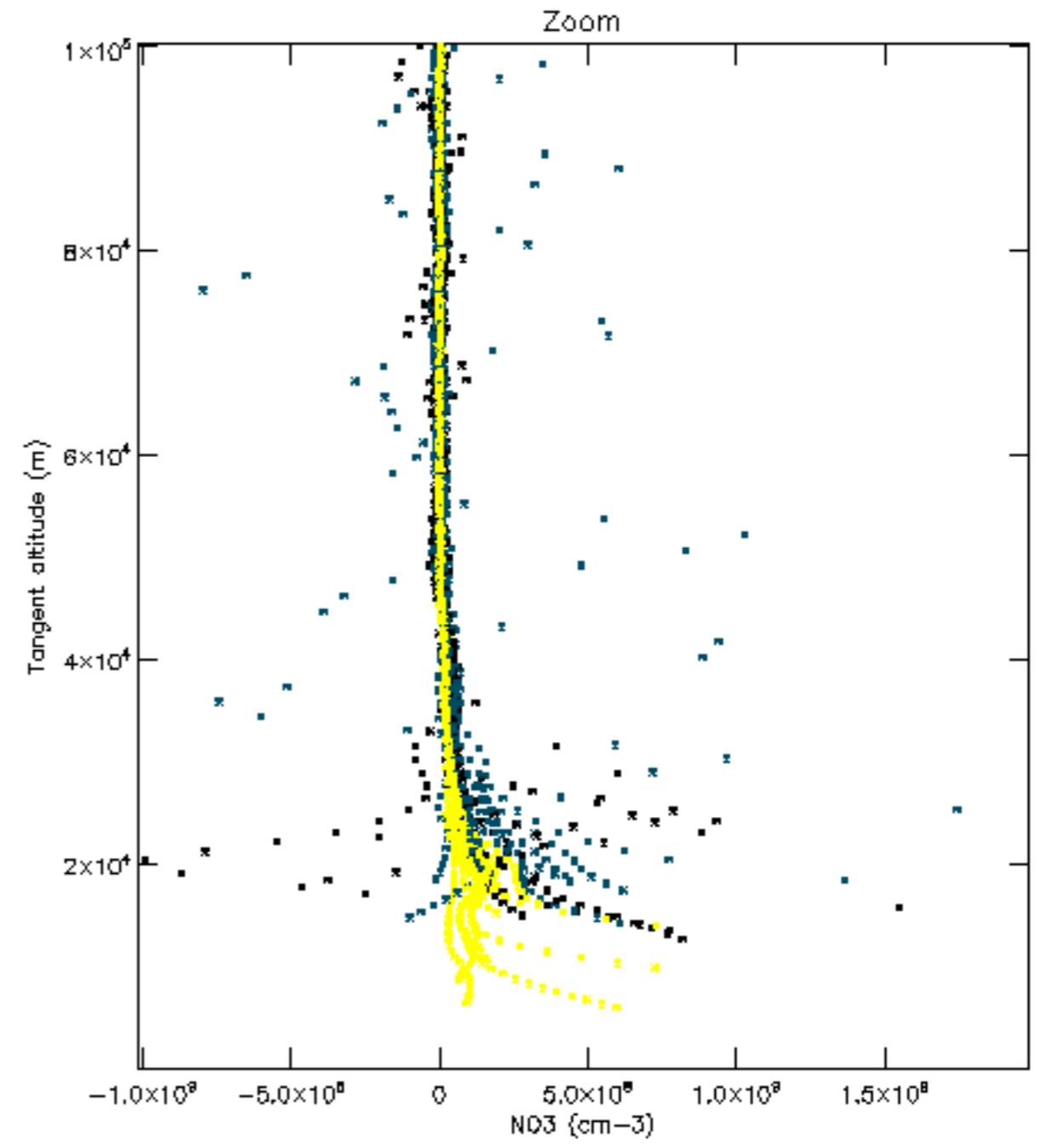
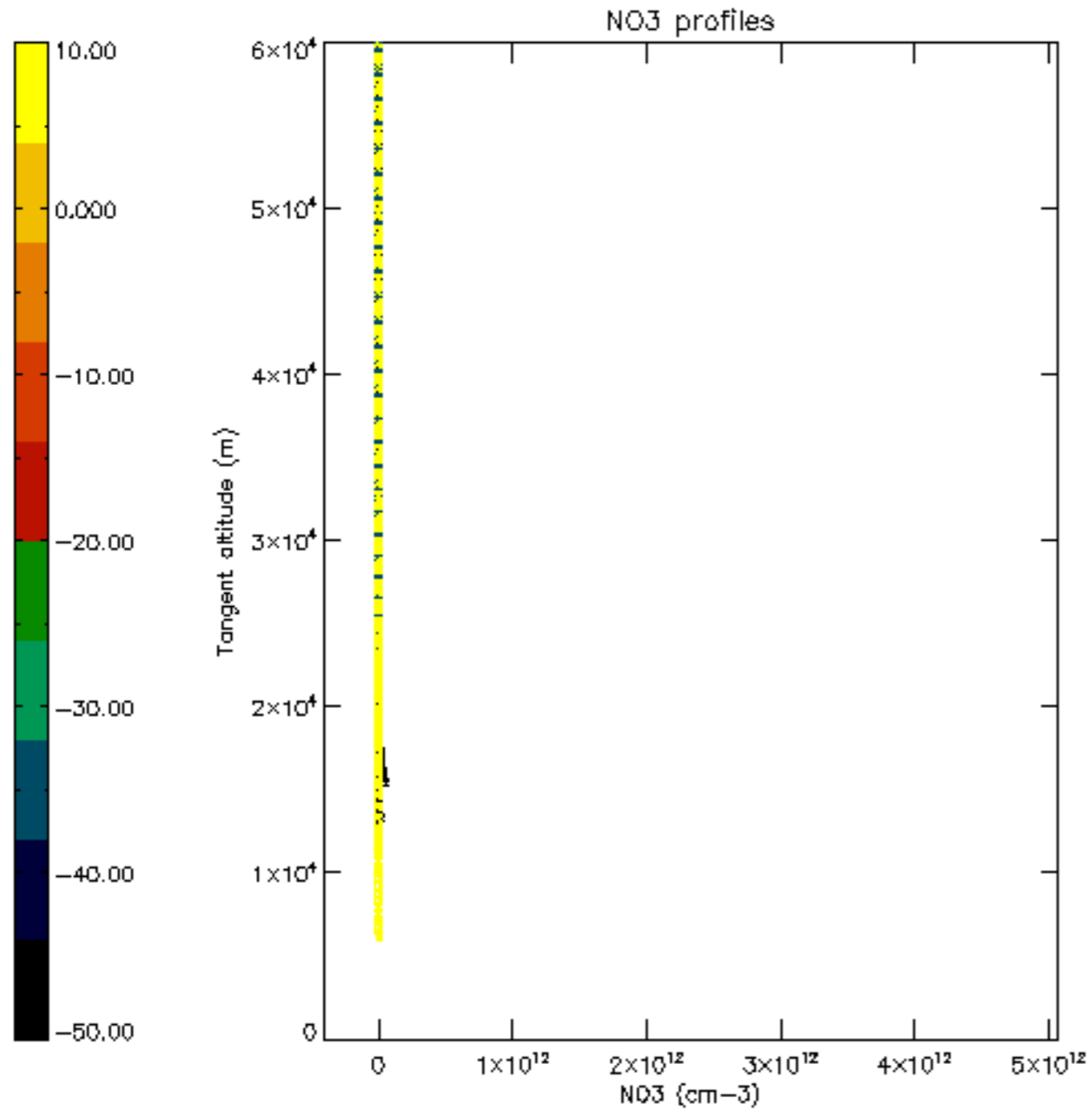


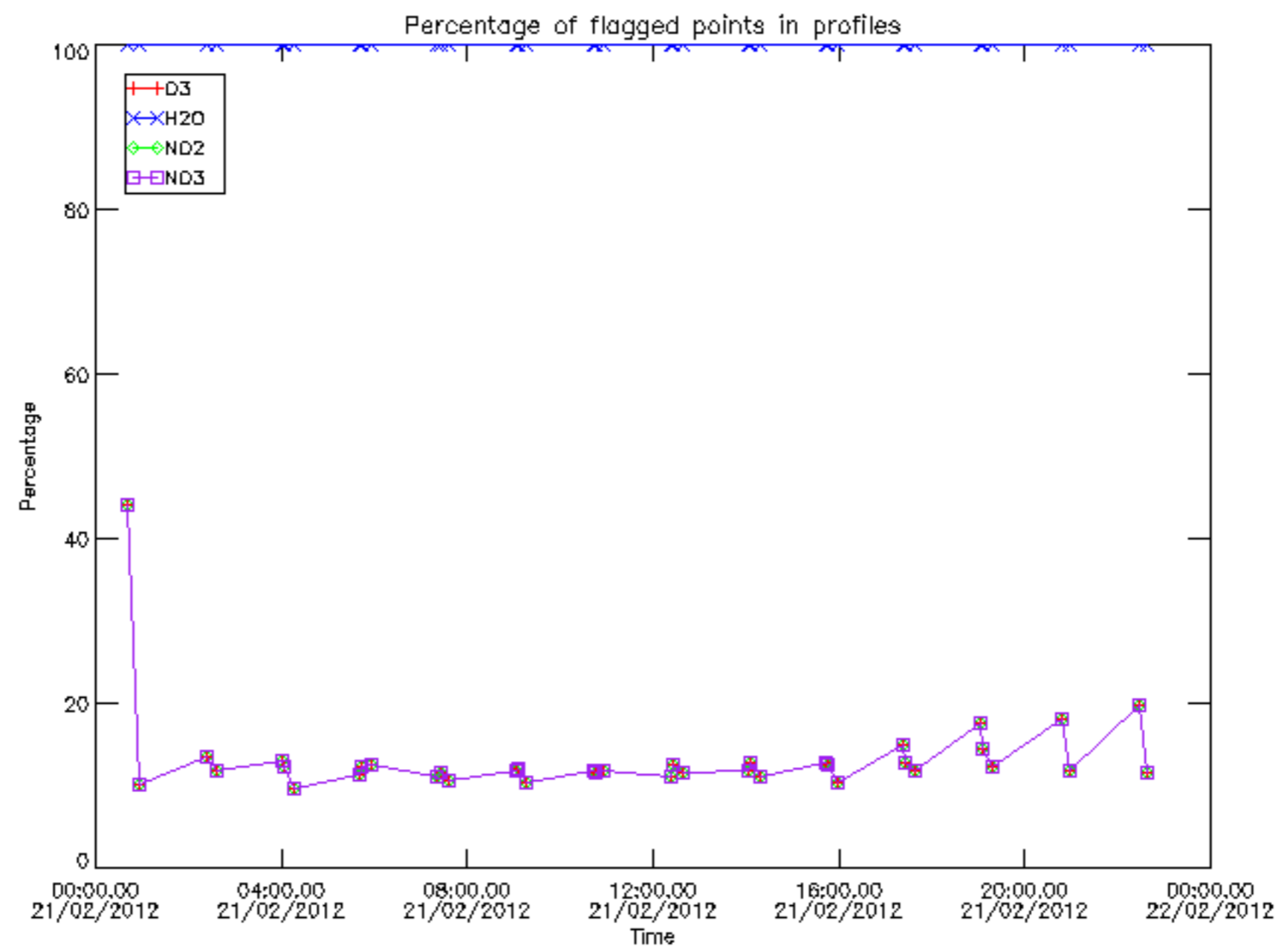




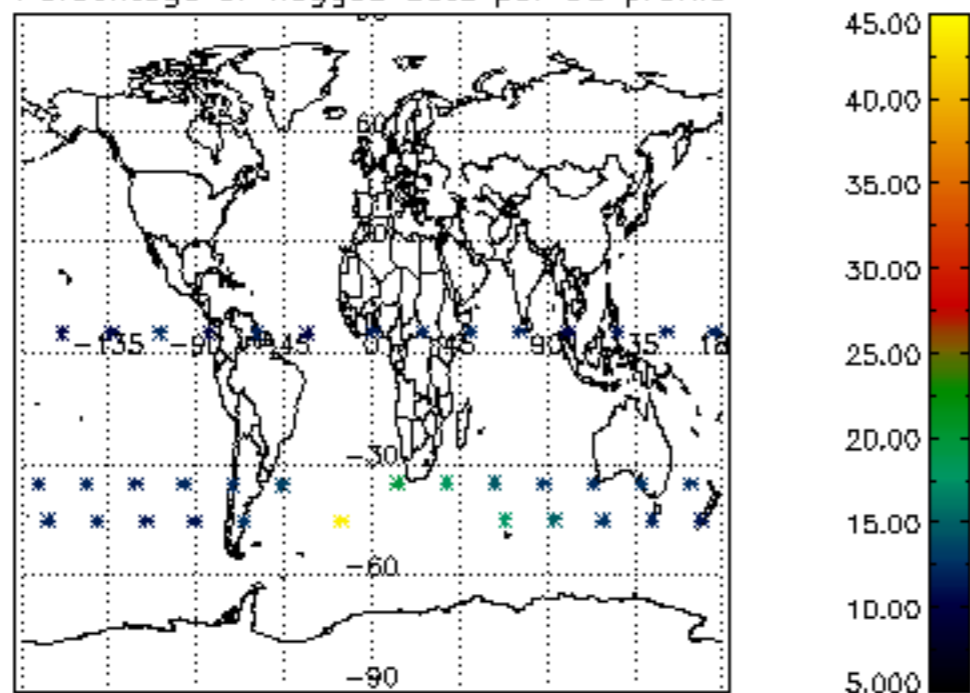




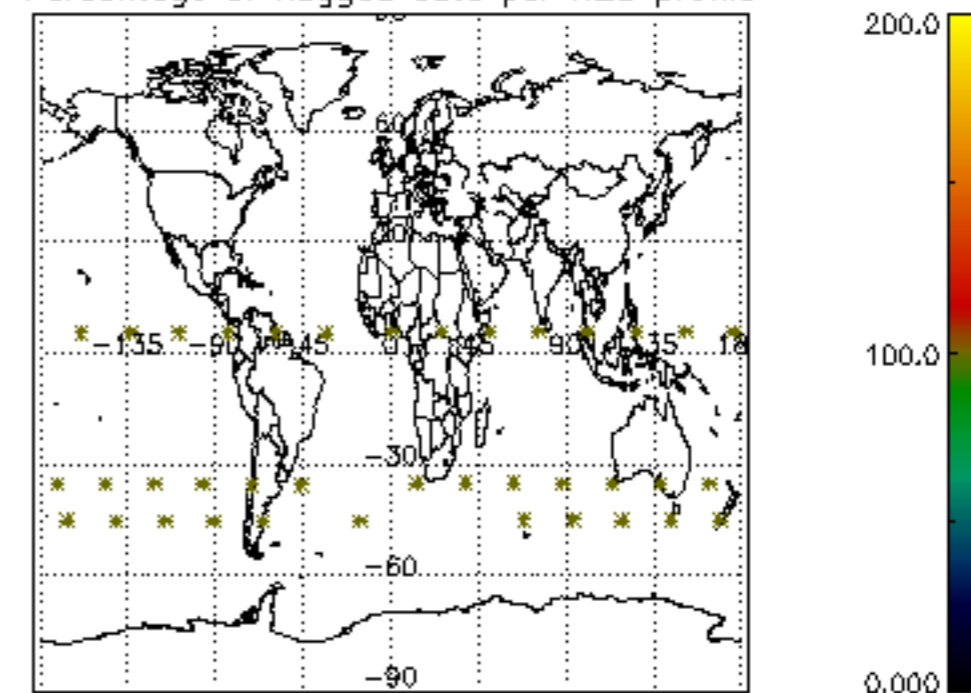




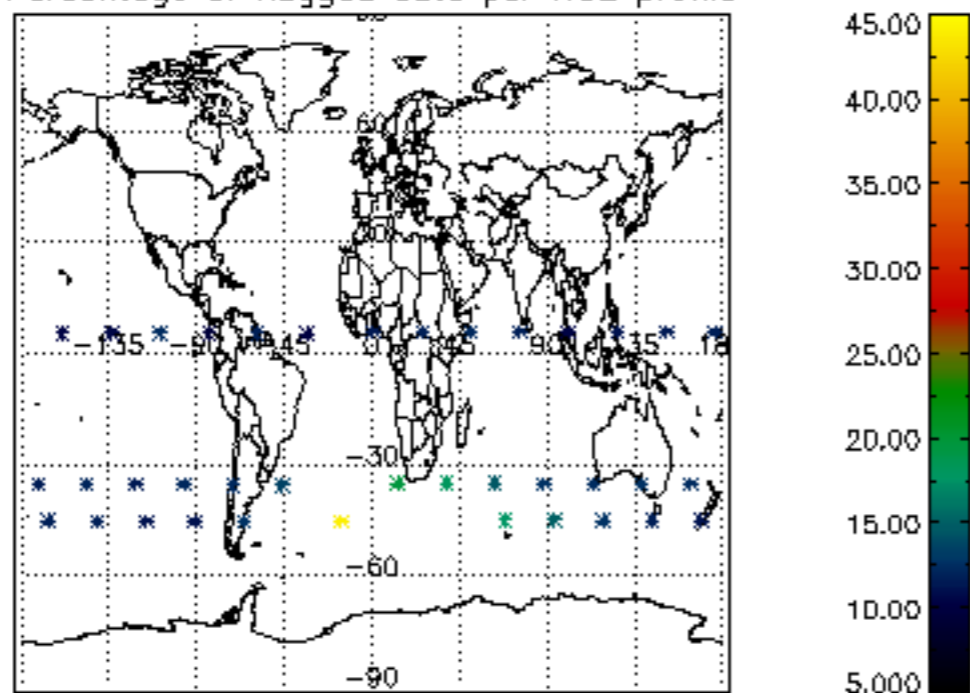
Percentage of flagged data per D3 profile



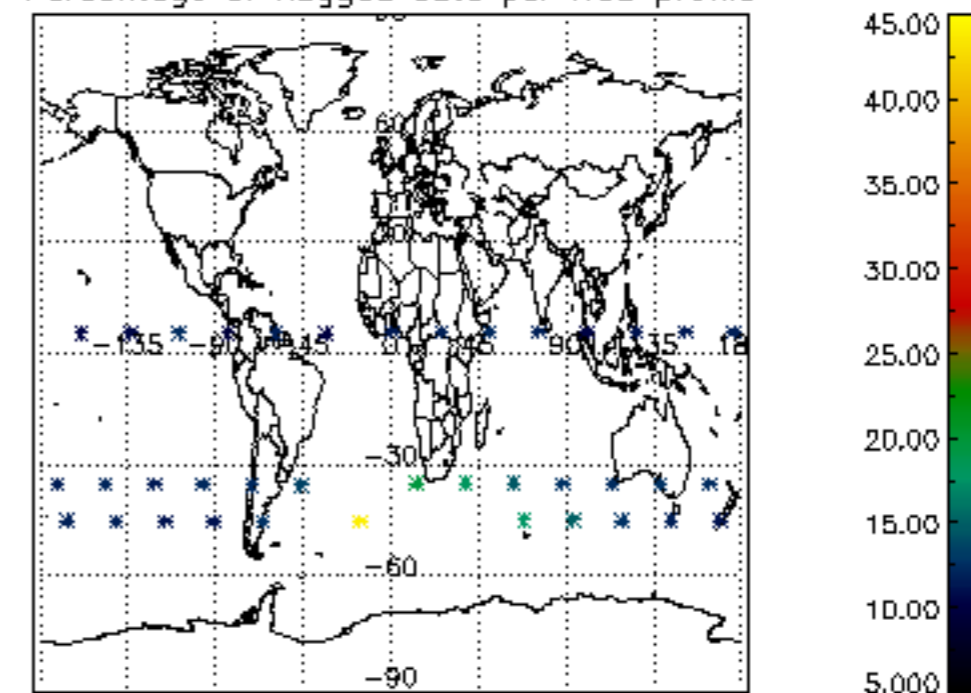
Percentage of flagged data per H2O profile

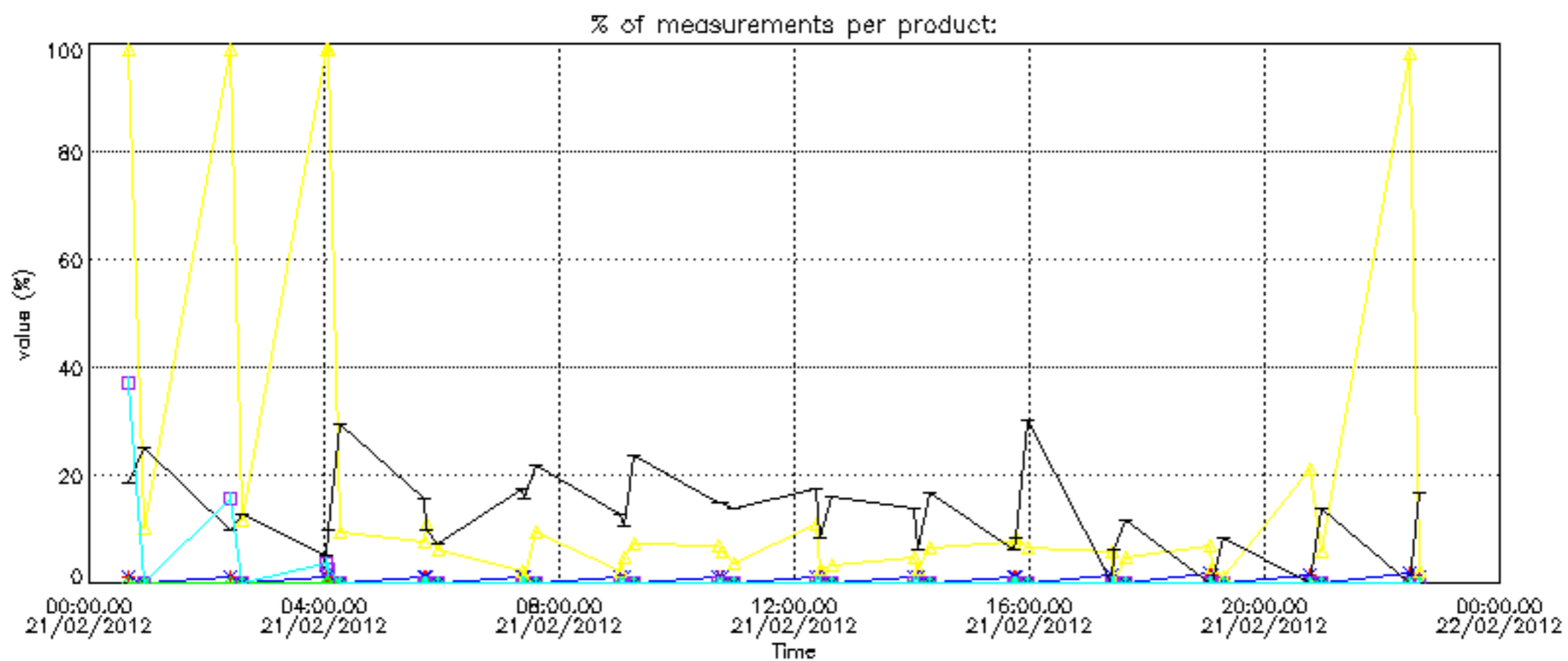


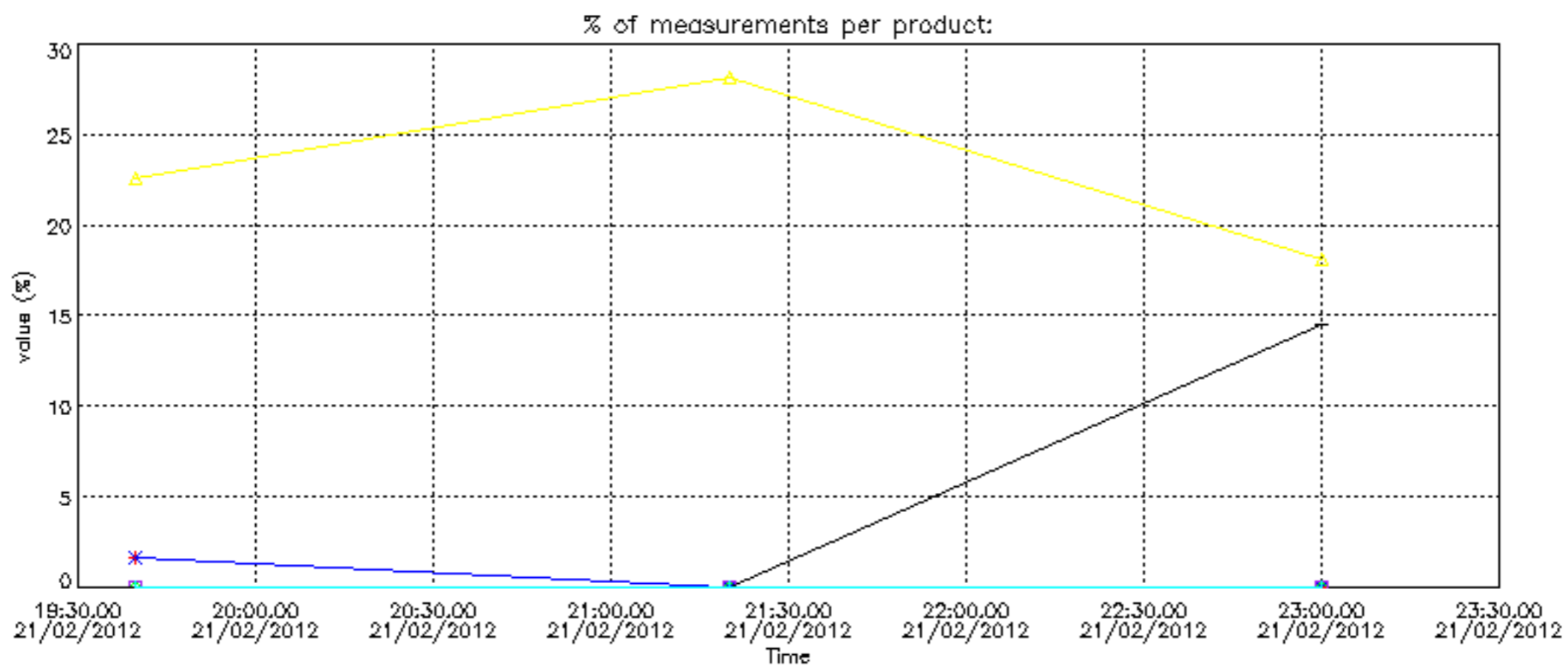
Percentage of flagged data per NO2 profile



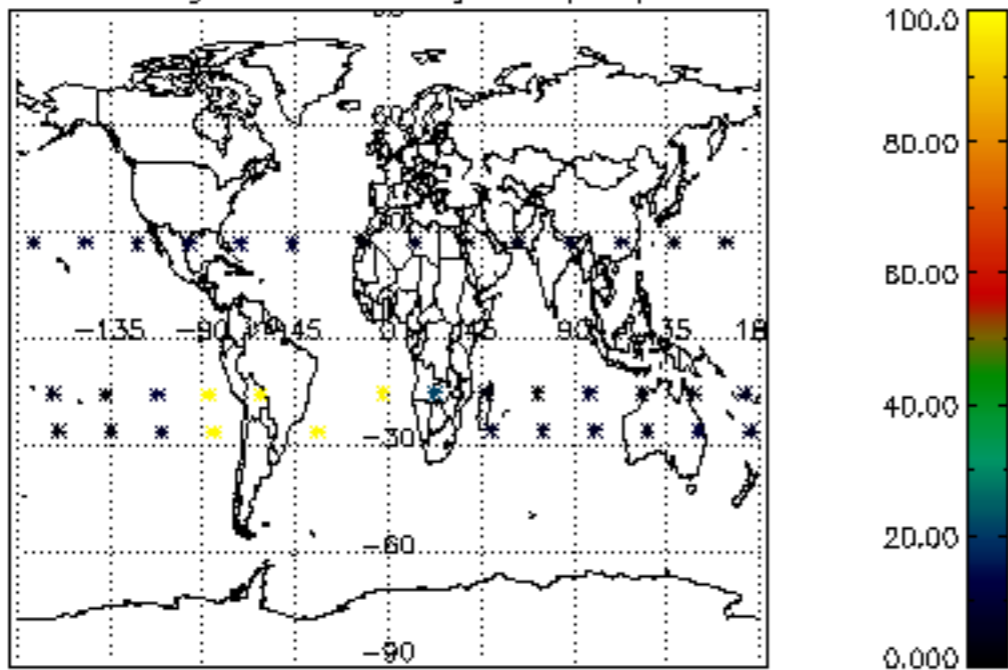
Percentage of flagged data per NO3 profile



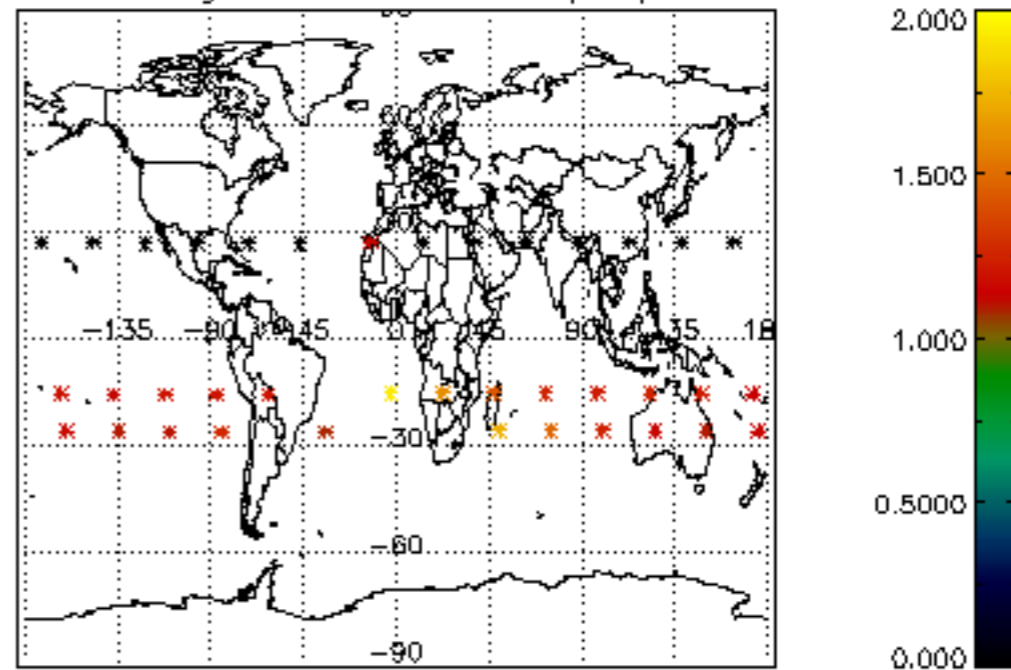




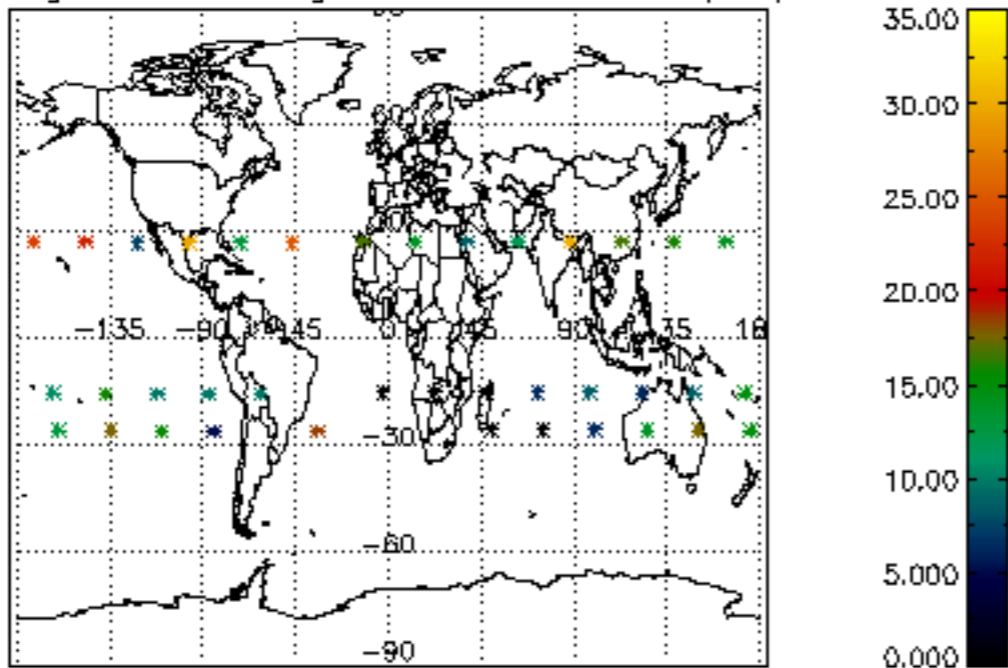
Percentage of cosmic ray hits per profile



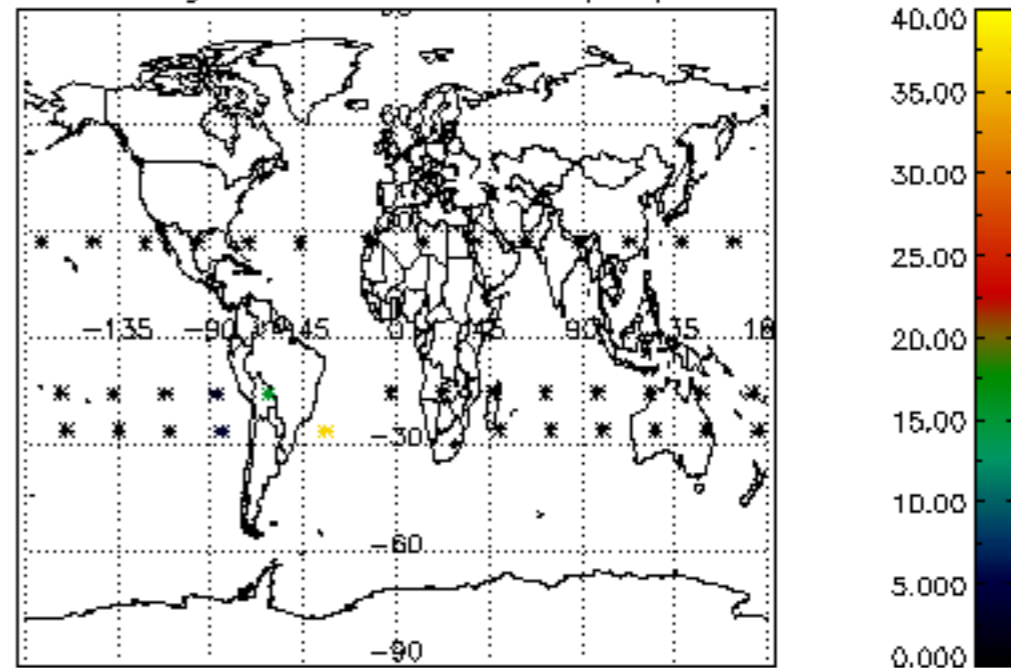
Percentage of datation errors per profile



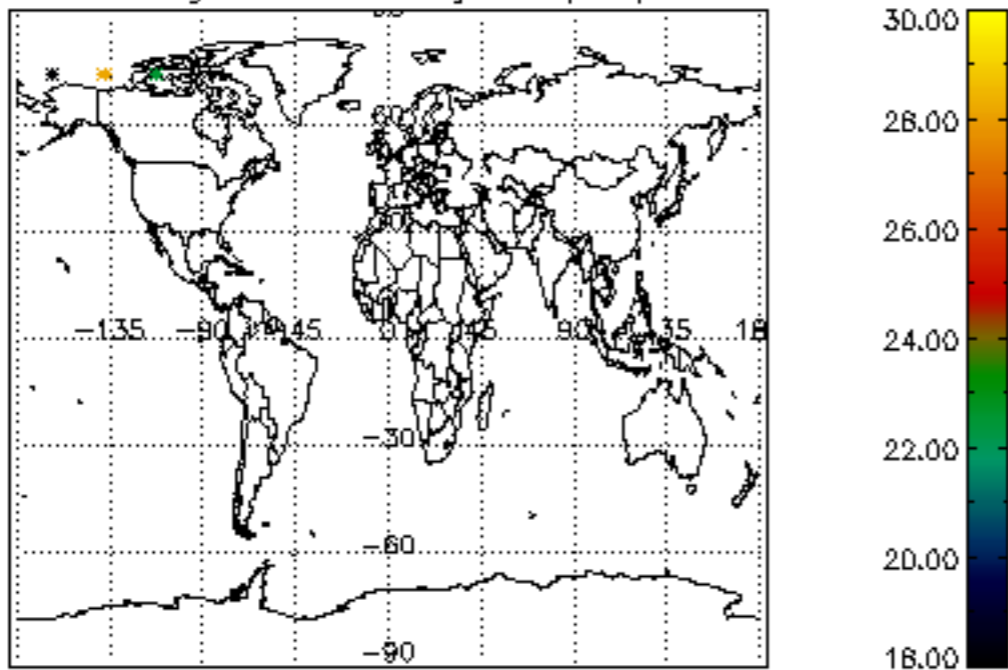
Percentage of star falling outside central band per profile



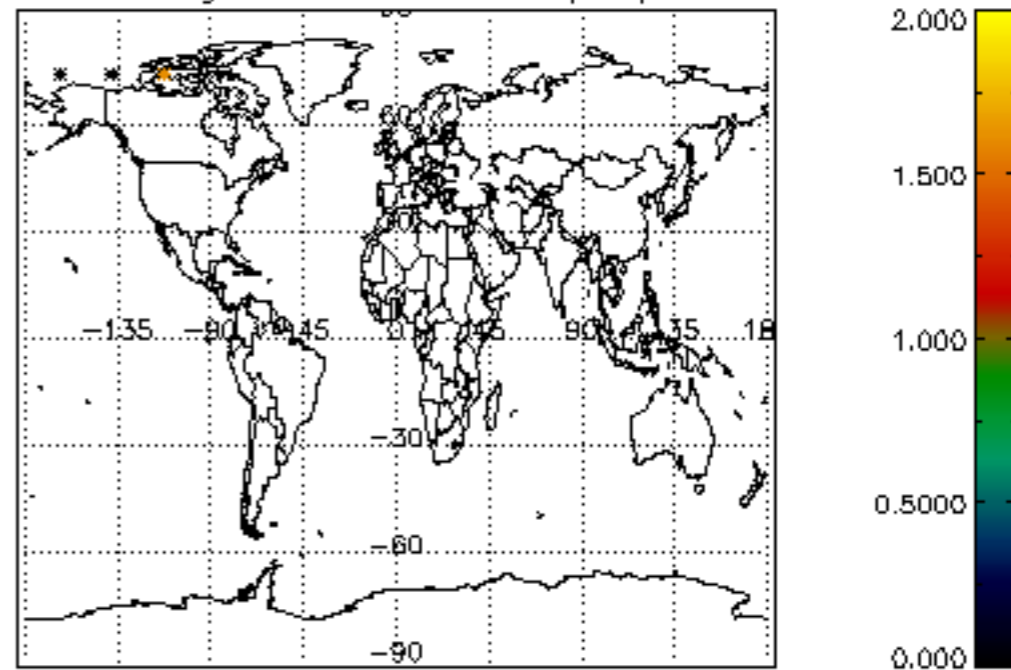
Percentage of saturation errors per profile



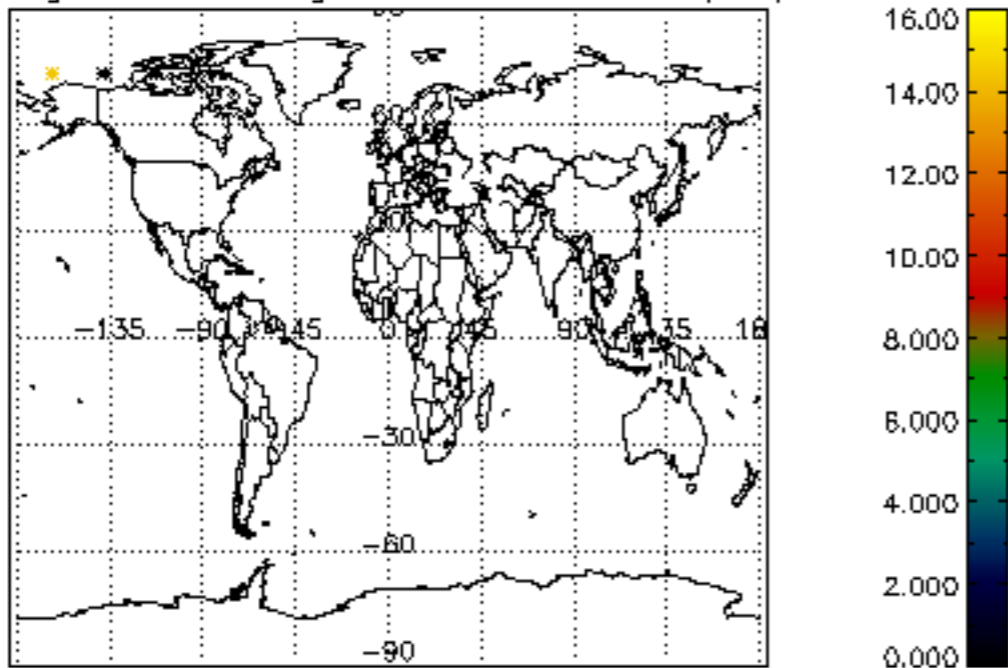
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

