

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

[3. Level 2 Quality information per product](#)

[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

[3.2 Plot of level 2 quality information per product \(world map\)](#)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Item	Value
Time of report generation	19APR2013 15:41:42
Data source version	GOMOS/6.01
Start time of products	11-06-2003 (11JUN2003 00:00:00)
Stop time of products	12-06-2003 (12JUN2003 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	17
Nb of prods with errors	0

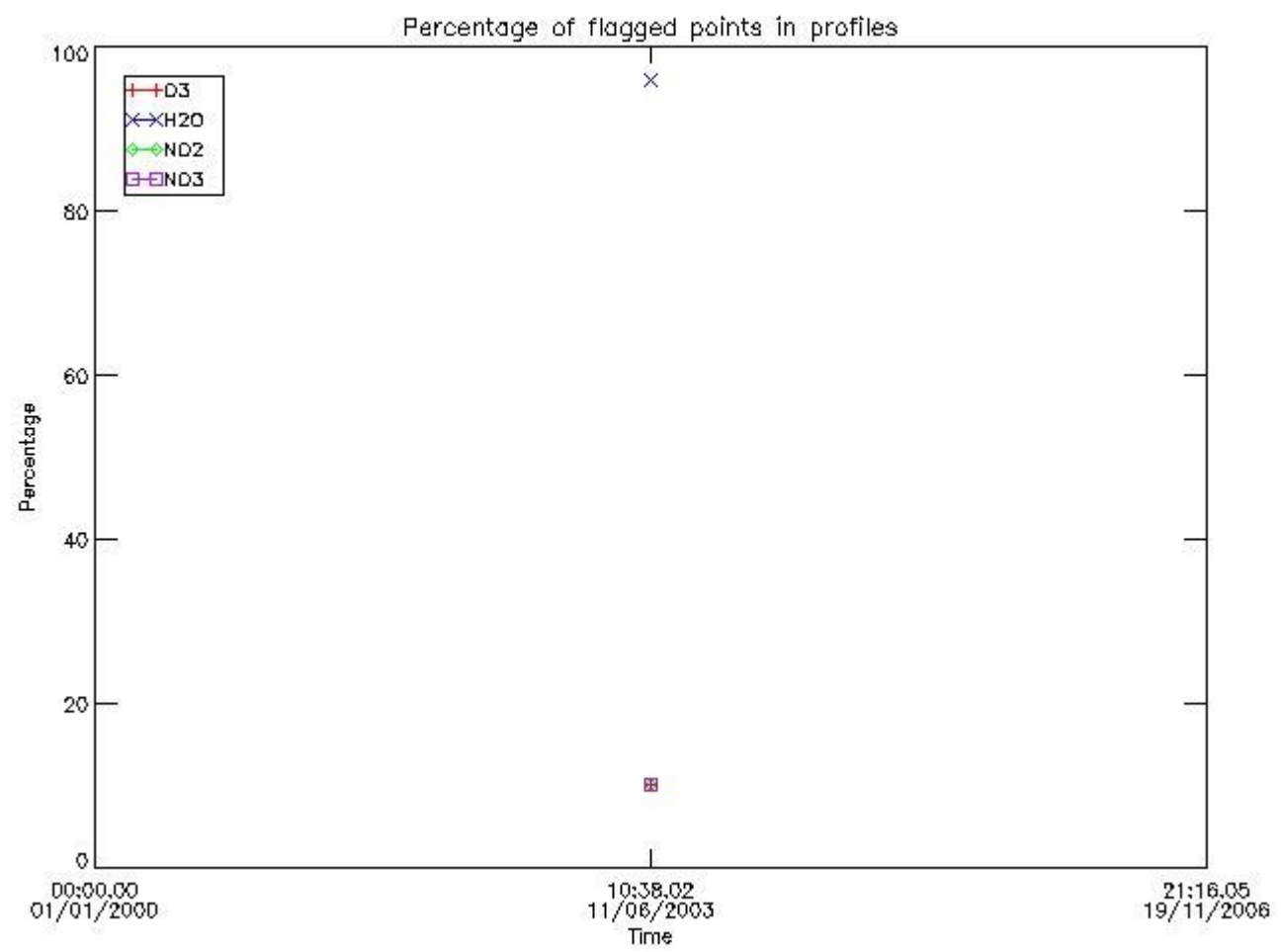
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20030611_103802_000000512017_00123_06690_6568.N1	11-JUN-2003 10:38:02	Dark	50.500	31	Alp Gru	1.7340	15200.	101	6690	No
2	GOM_NL__2PRFIN20030611_103932_000000592017_00123_06690_6569.N1	11-JUN-2003 10:39:32	Straylight	59.000	172	Gam Gru	3.0030	13100.	118	6690	No
3	GOM_NL__2PRFIN20030611_104218_000000422017_00123_06690_6570.N1	11-JUN-2003 10:42:18	Straylight	42.000	45	Alp Pav	1.9400	26000.	84	6690	No
4	GOM_NL__2PRFIN20030611_104744_000000412017_00123_06690_6571.N1	11-JUN-2003 10:47:44	Straylight	41.000	141	Bet Ara	2.8400	4600.0	82	6690	No
5	GOM_NL__2PRFIN20030611_104904_000000392017_00123_06690_6572.N1	11-JUN-2003 10:49:04	Straylight	39.000	147	Alp Ara	2.8770	26000.	78	6690	No
6	GOM_NL__2PRFIN20030611_105048_000000452017_00123_06690_6573.N1	11-JUN-2003 10:50:48	Straylight	45.000	40	The Sco	1.8590	7100.0	90	6690	No
7	GOM_NL__2PRFIN20030611_105232_000000462017_00123_06690_6574.N1	11-JUN-2003 10:52:32	Twilight	45.500	25	35Lam Sco	1.6200	28000.	91	6690	No
8	GOM_NL__2PRFIN20030611_105411_000000612017_00123_06690_6575.N1	11-JUN-2003 10:54:11	Bright	61.000	57	34Sig Sgr	2.0660	26000.	122	6690	No
9	GOM_NL__2PRFIN20030611_105605_000000642017_00123_06690_6576.N1	11-JUN-2003 10:56:05	Bright	63.500	155	41Pi Sgr	2.9000	6600.0	127	6690	No
10	GOM_NL__2PRFIN20030611_105921_000000422017_00123_06690_6577.N1	11-JUN-2003 10:59:21	Bright	41.500	86	35Eta Oph	2.4300	10200.	83	6690	No
11	GOM_NL__2PRFIN20030611_110106_000000392017_00123_06690_6578.N1	11-JUN-2003 11:01:06	Bright	38.500	98	13Zet Oph	2.5710	30000.	77	6690	No
12	GOM_NL__2PRFIN20030611_110313_000000382017_00123_06690_6579.N1	11-JUN-2003 11:03:13	Bright	37.500	120	1Del Oph	2.7340	3200.0	75	6690	No
13	GOM_NL__2PRFIN20030611_110614_000000362017_00123_06690_6580.N1	11-JUN-2003 11:06:14	Bright	36.000	102	24Alp Ser	2.6000	4250.0	72	6690	No
14	GOM_NL__2PRFIN20030611_110859_000000472017_00123_06690_6581.N1	11-JUN-2003 11:08:59	Bright	47.000	59	55Alp Oph	2.0800	8900.0	94	6690	No
15	GOM_NL__2PRFIN20030611_111040_000000402017_00123_06690_6582.N1	11-JUN-2003 11:10:40	Bright	40.000	127	27Bet Her	2.7810	4700.0	80	6690	No
16	GOM_NL__2PRFIN20030611_111349_000000402017_00123_06690_6583.N1	11-JUN-2003 11:13:49	Bright	39.500	133	40Zet Her	2.8070	6000.0	79	6690	No
17	GOM_NL__2PRFIN20030611_112053_000000422017_00123_06690_6584.N1	11-JUN-2003 11:20:53	Bright	41.500	130	23Bet Dra	2.7990	5800.0	83	6690	No

3. Quality information per product

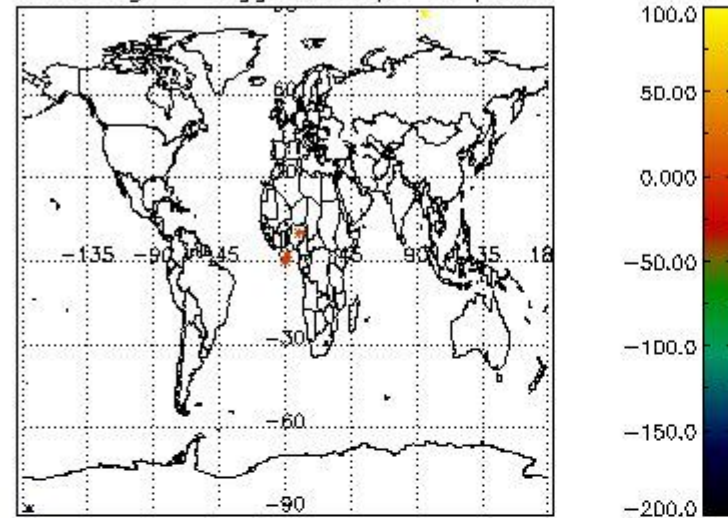
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

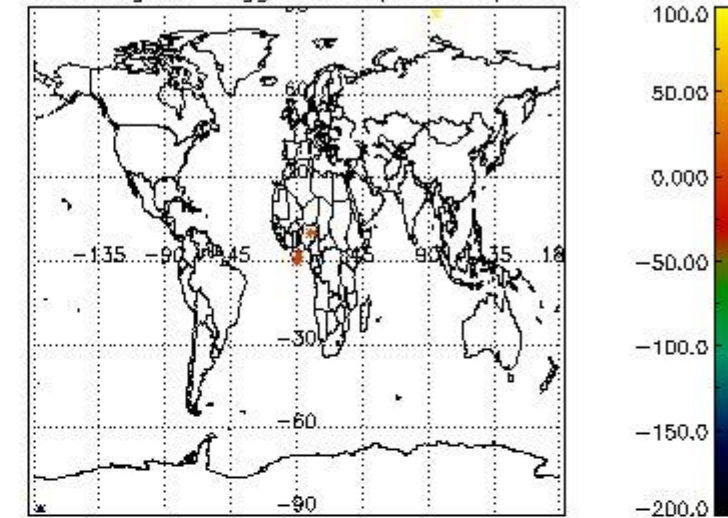


3.2 Plot quality information per product (world map)

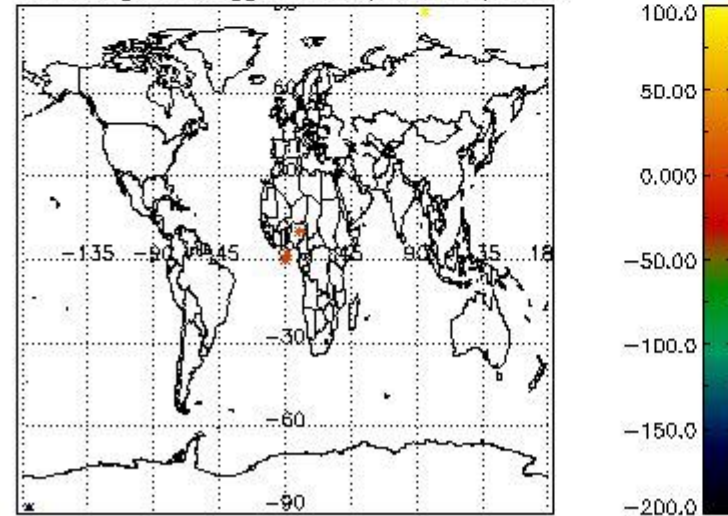
Percentage of flagged data per O3 profile



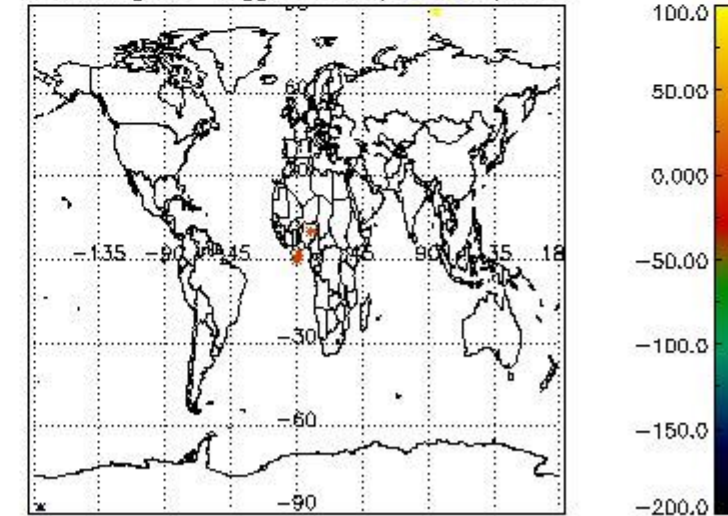
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

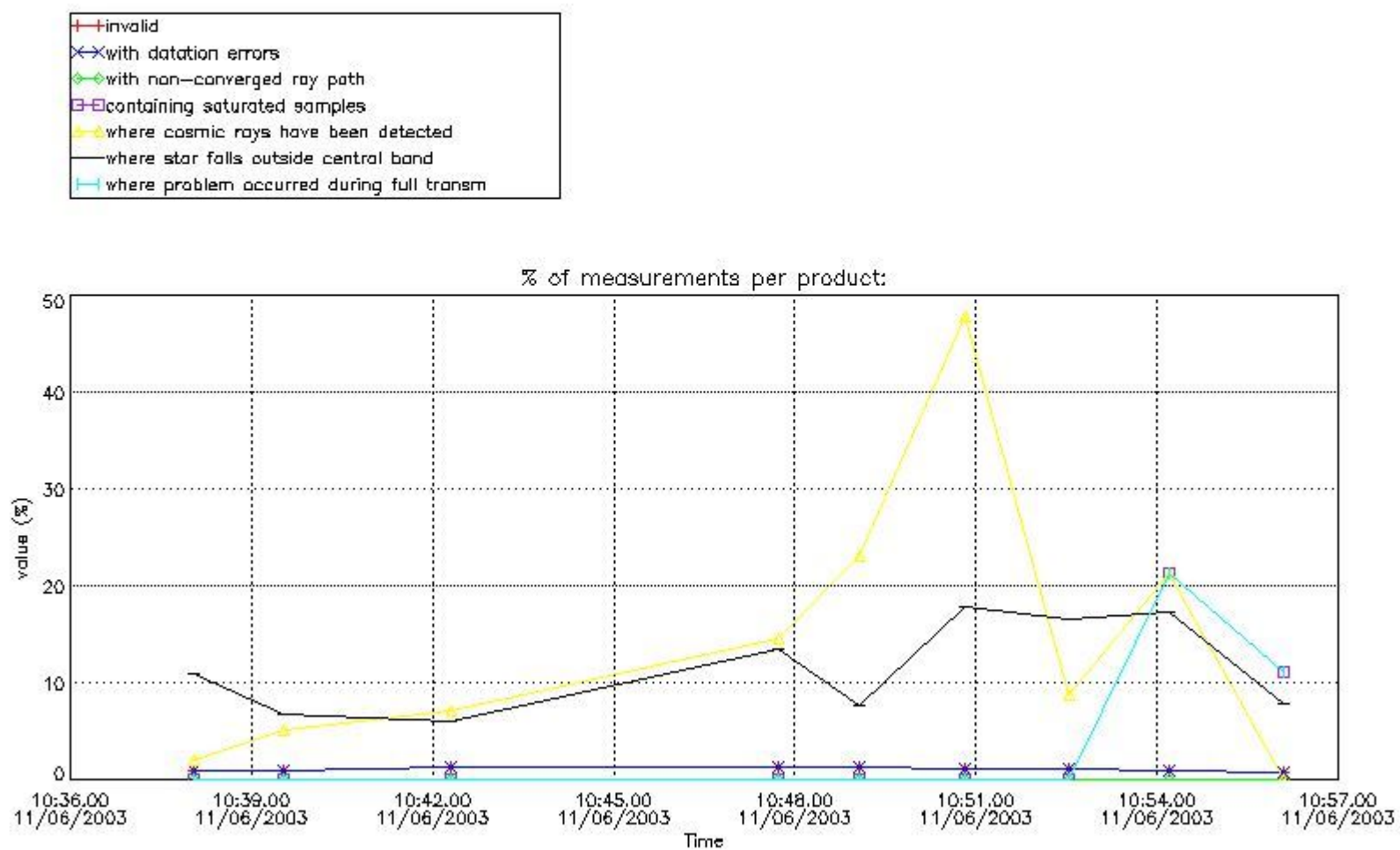


4. Level 1 quality information per product

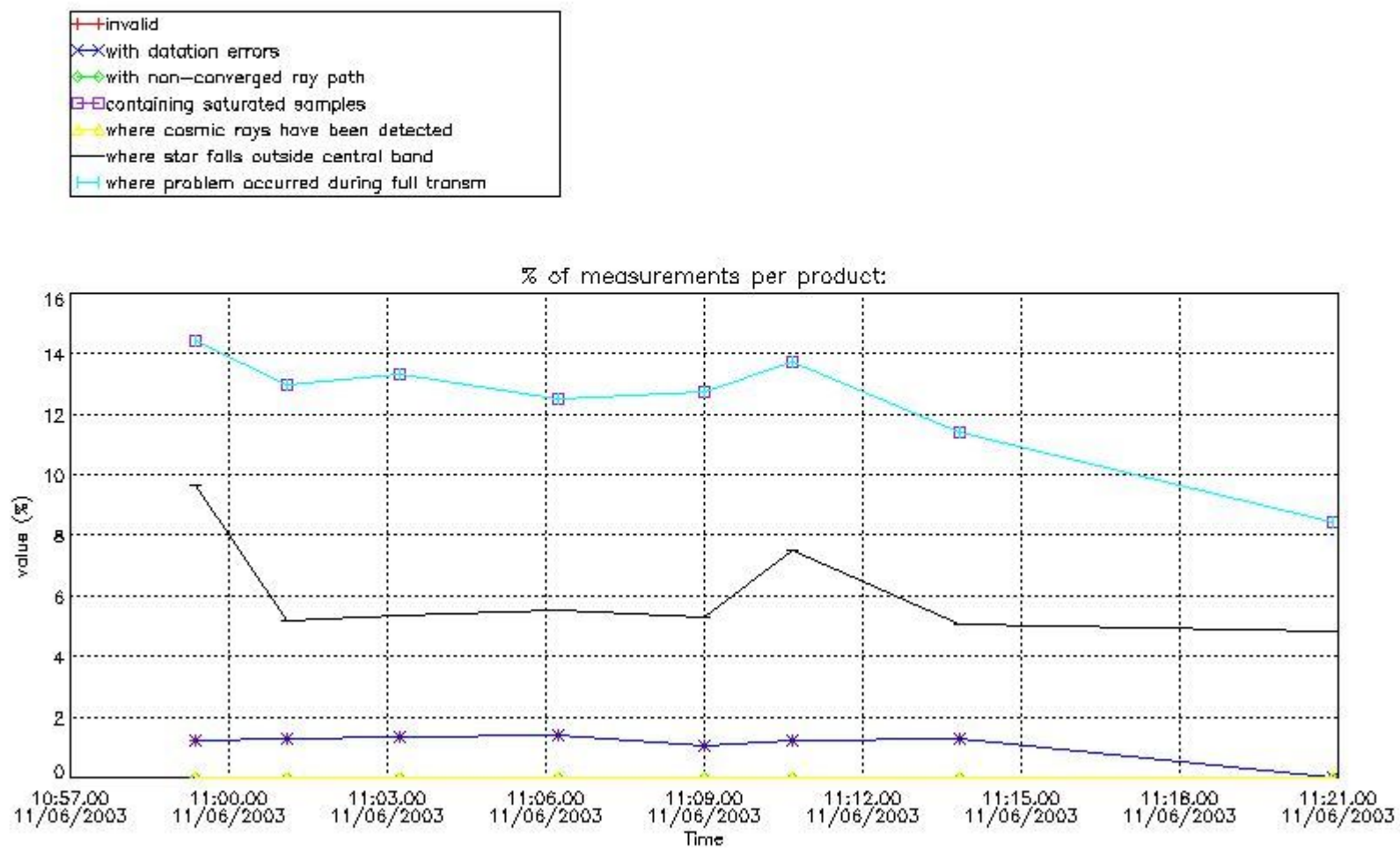
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



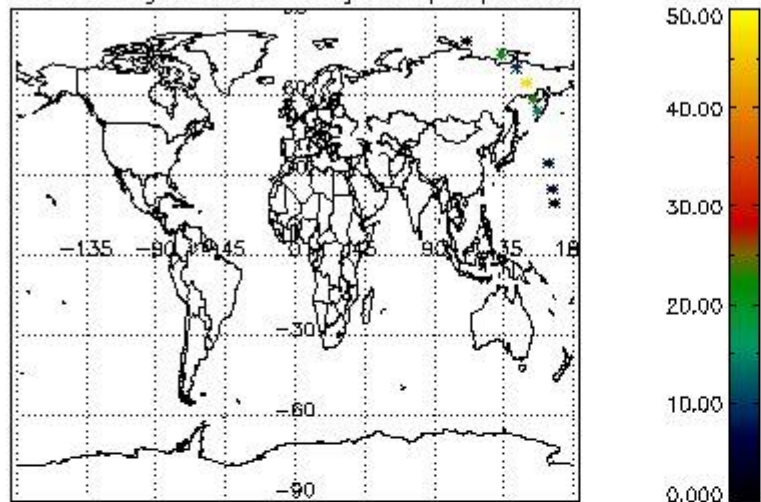
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



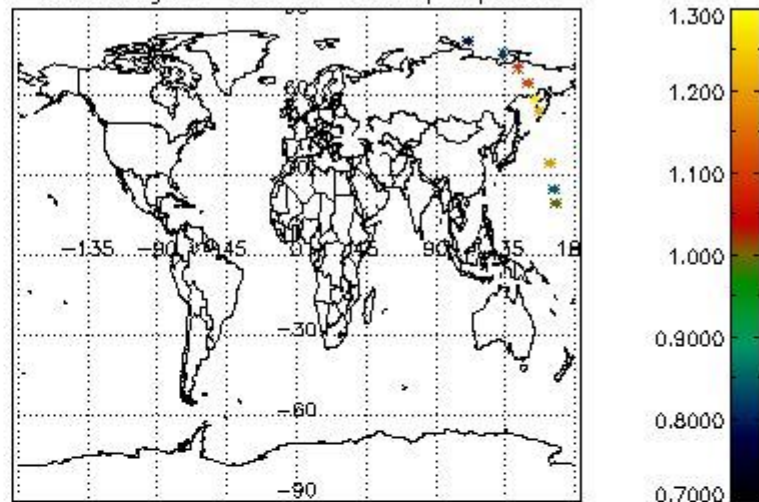
4.2 Plot quality information per product coming from level 1b processing (world map)

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

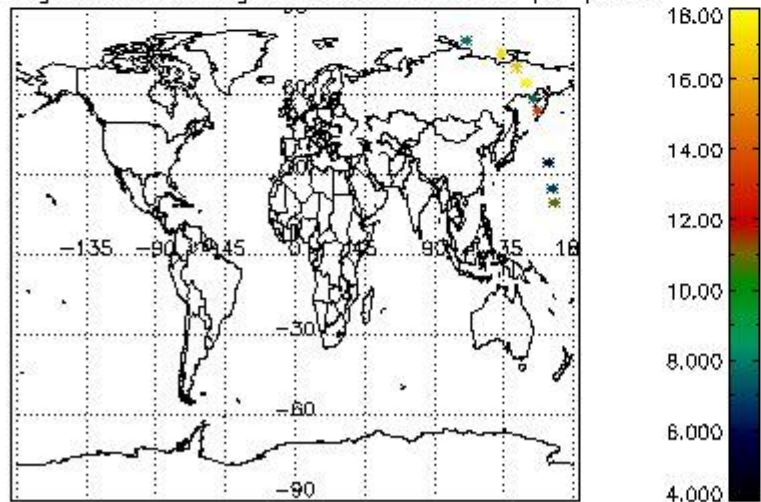
Percentage of cosmic ray hits per profile



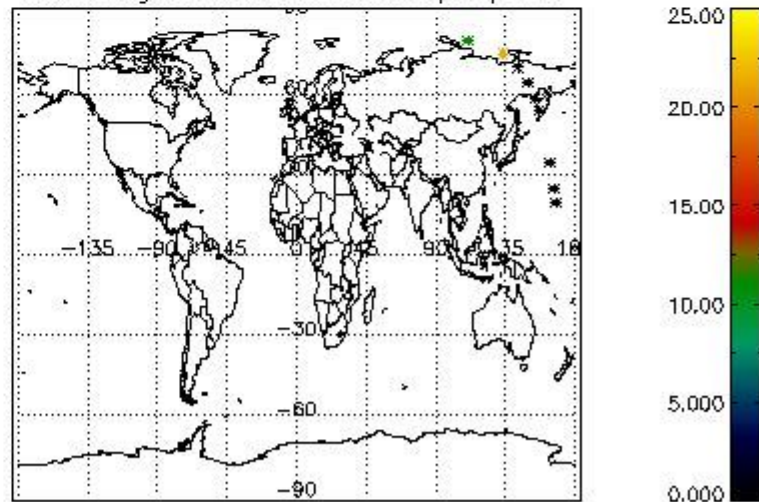
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

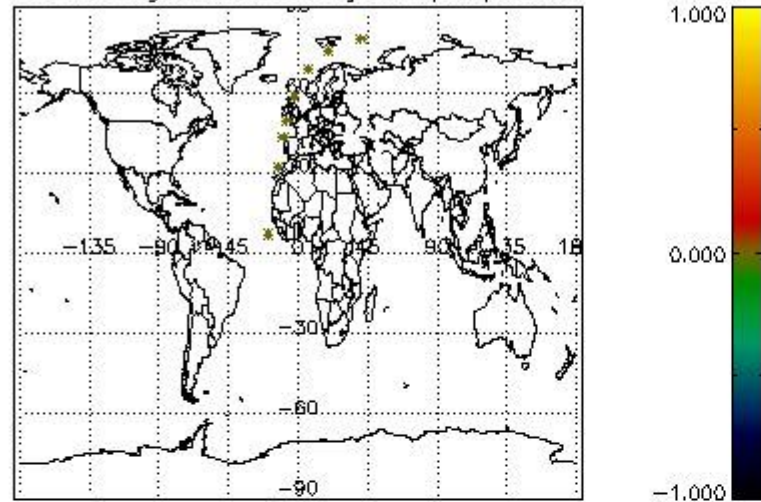


Percentage of saturation errors per profile

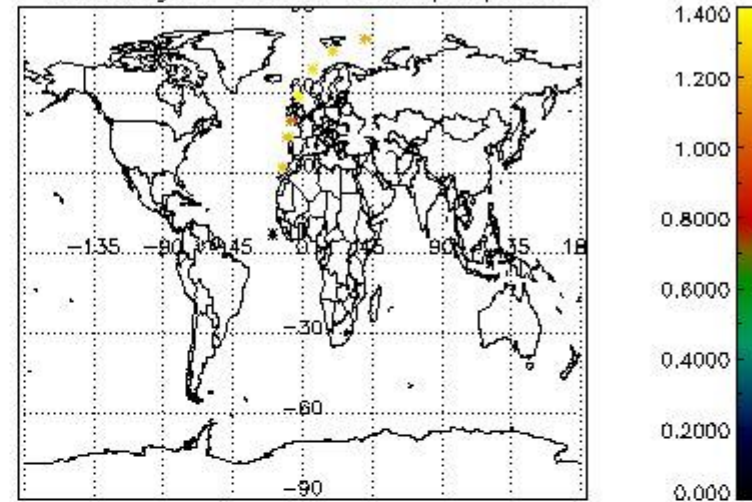


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

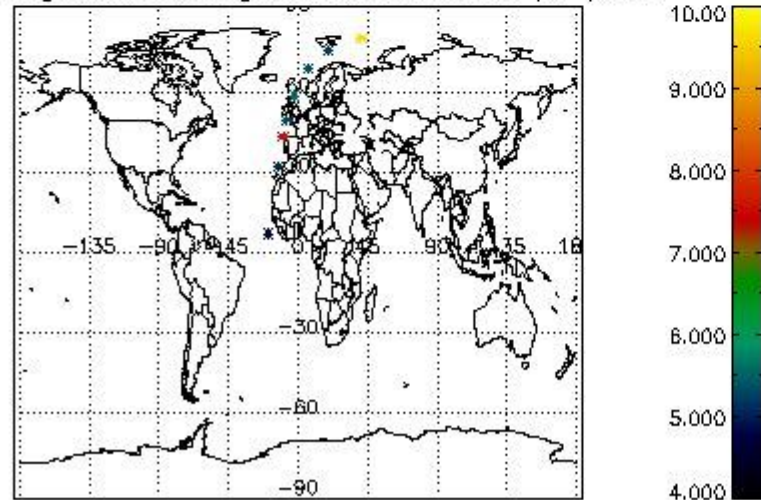
Percentage of cosmic ray hits per profile



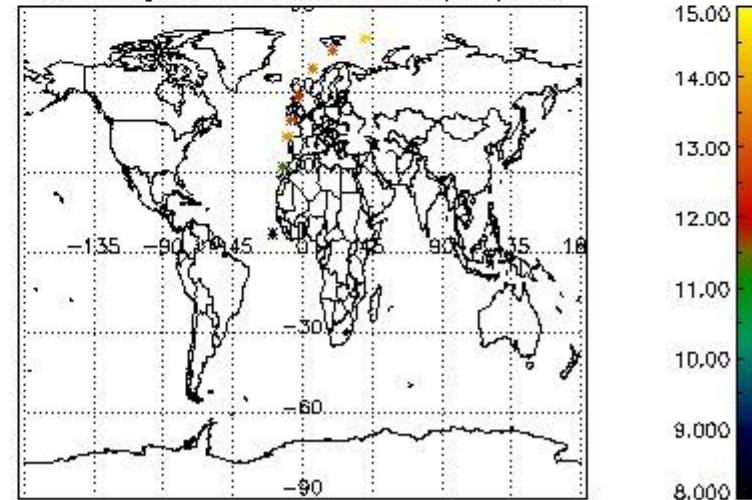
Percentage of datation errors per profile



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

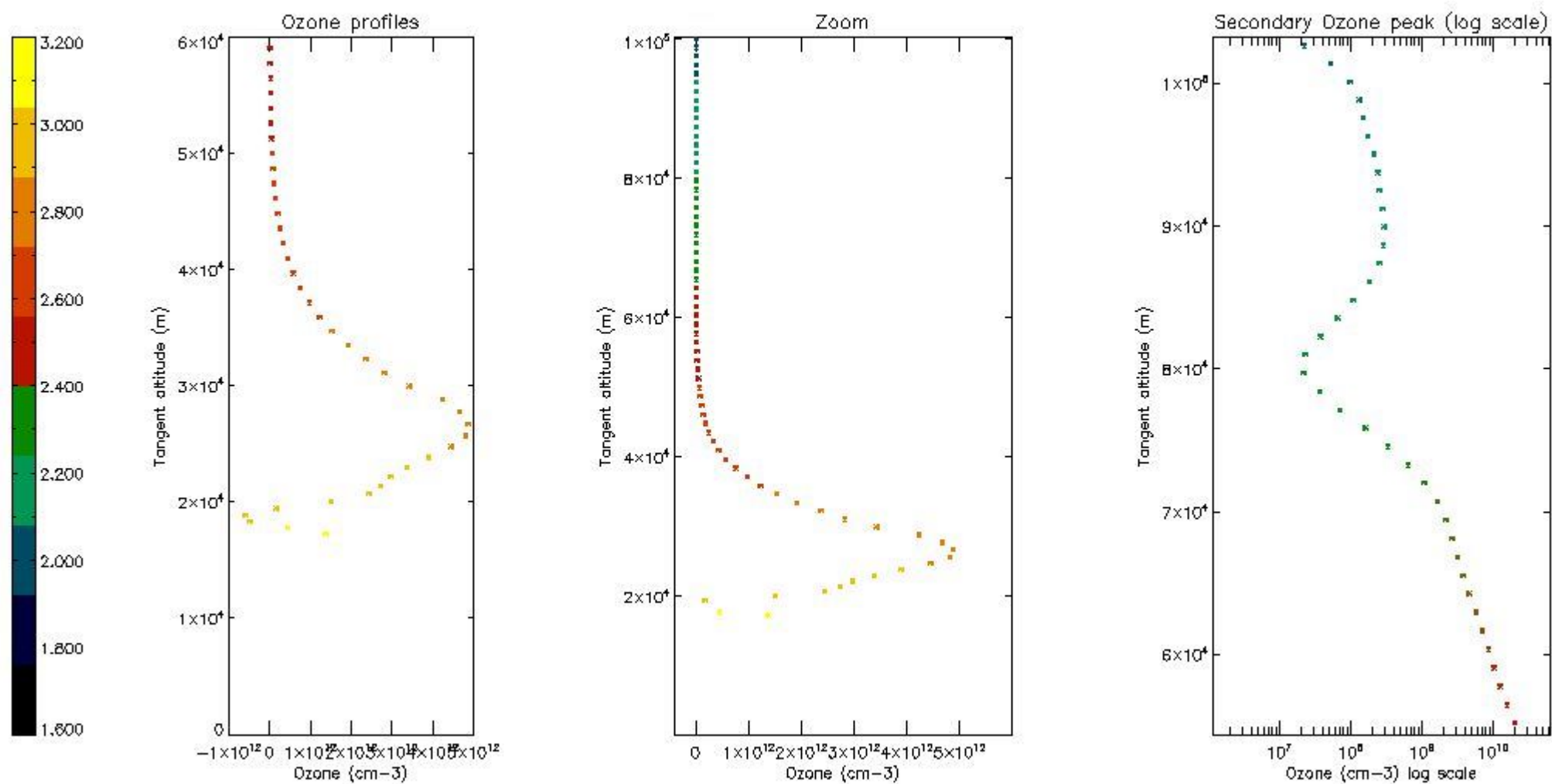
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	7
STD < 20	5

STD < 10	4
STD < 5	3

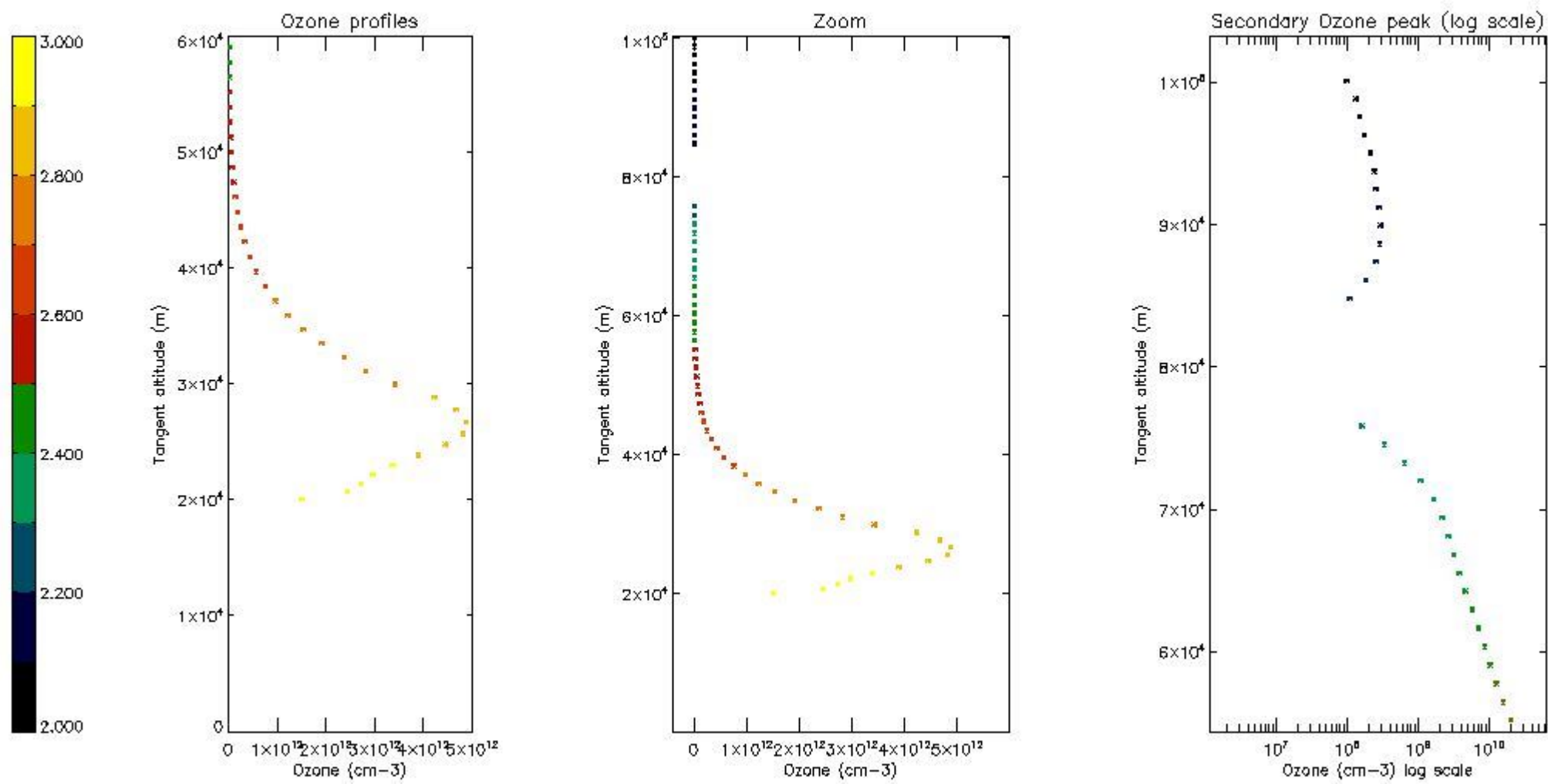
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



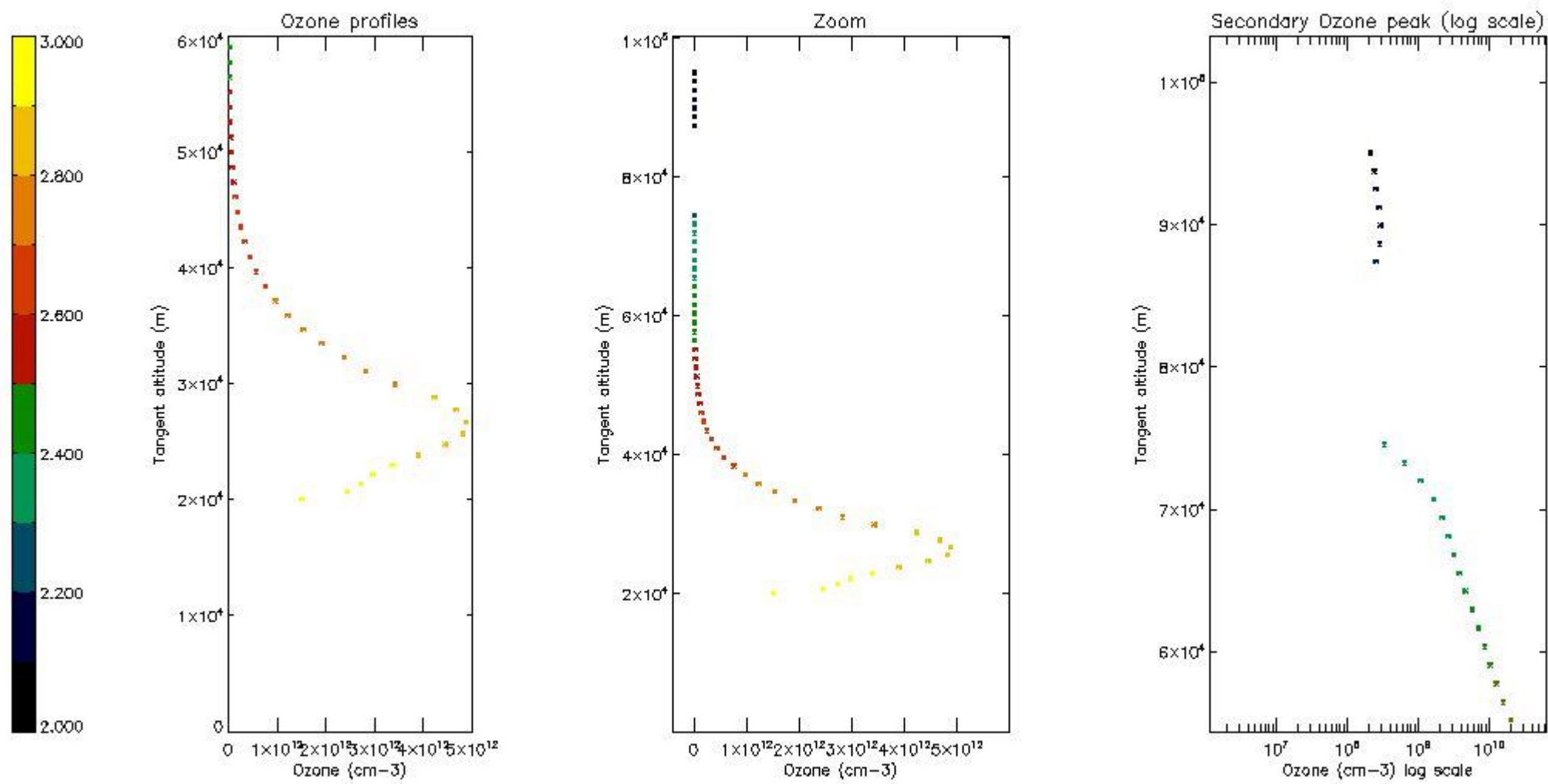
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



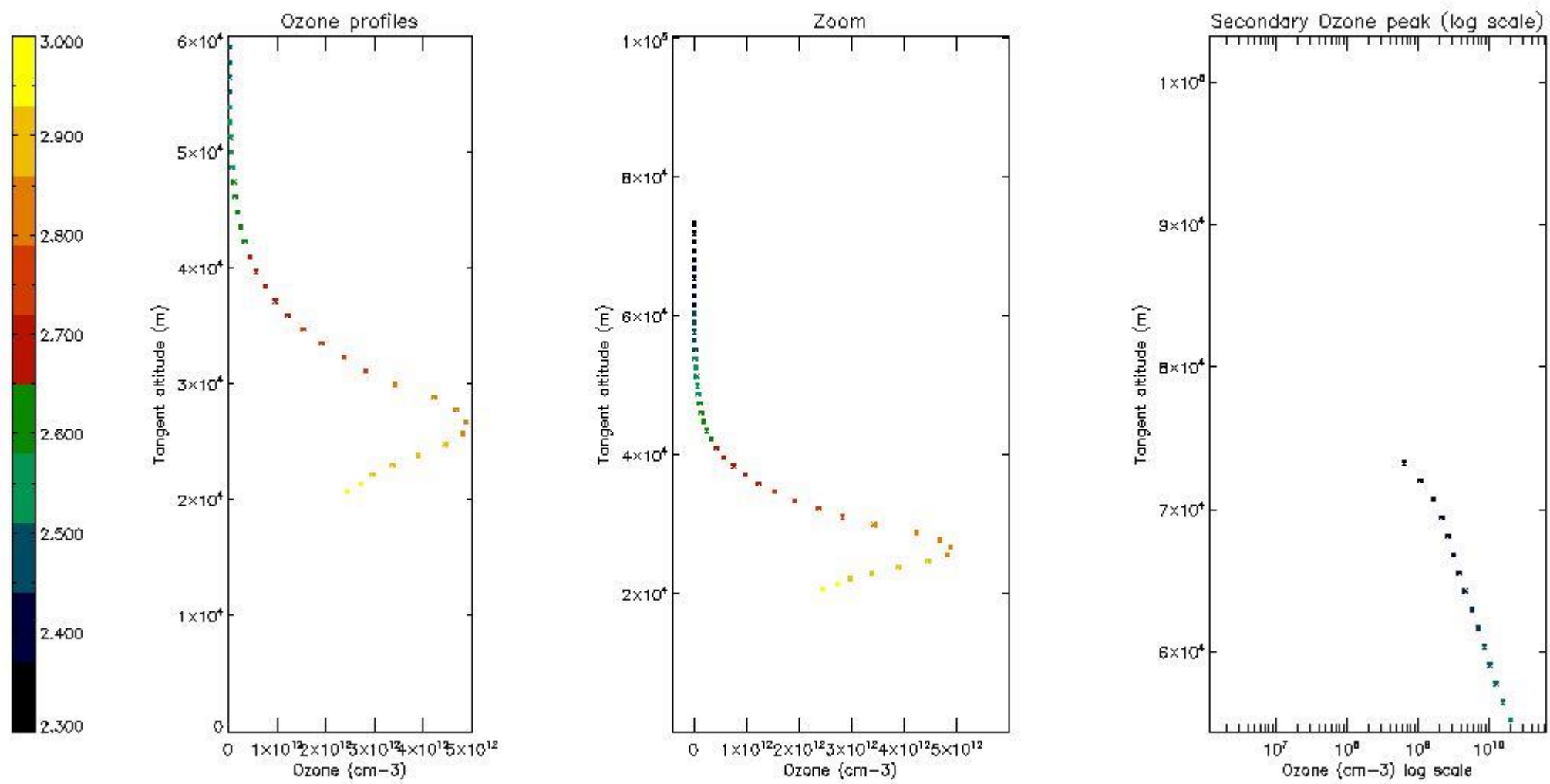
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



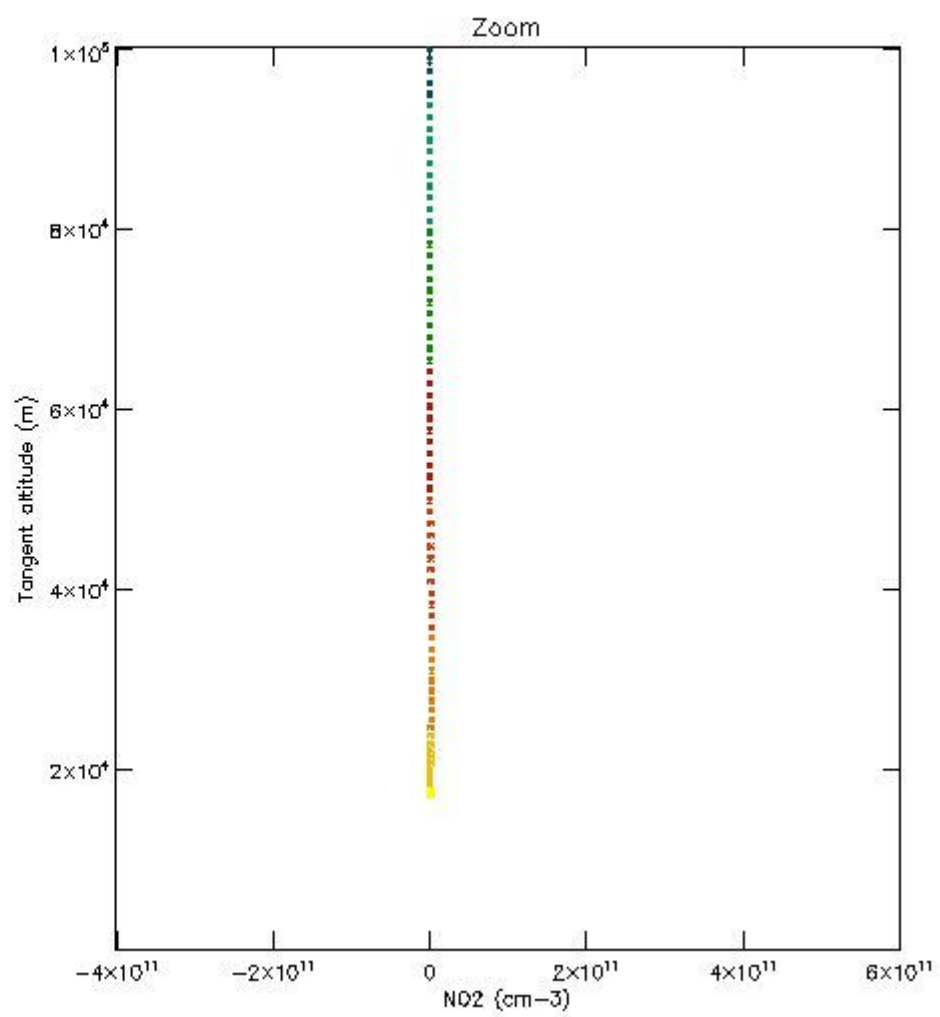
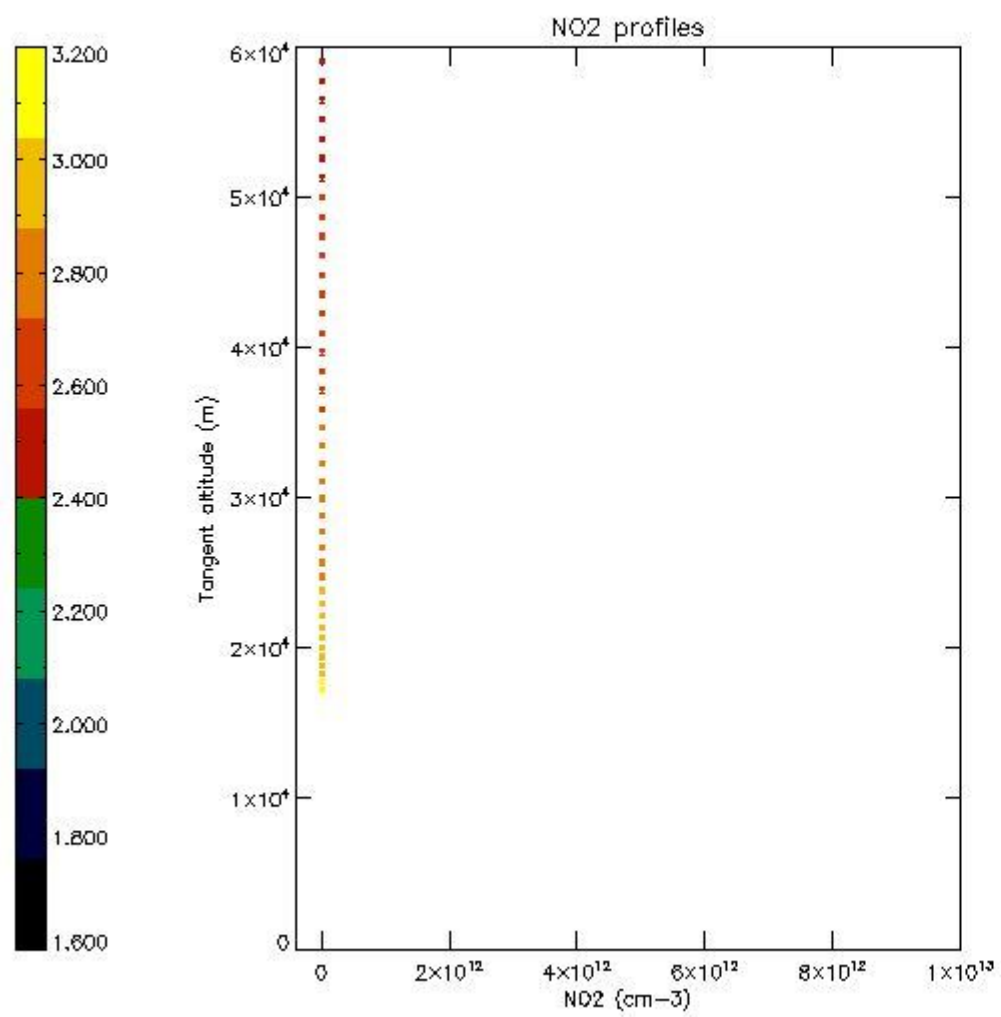
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



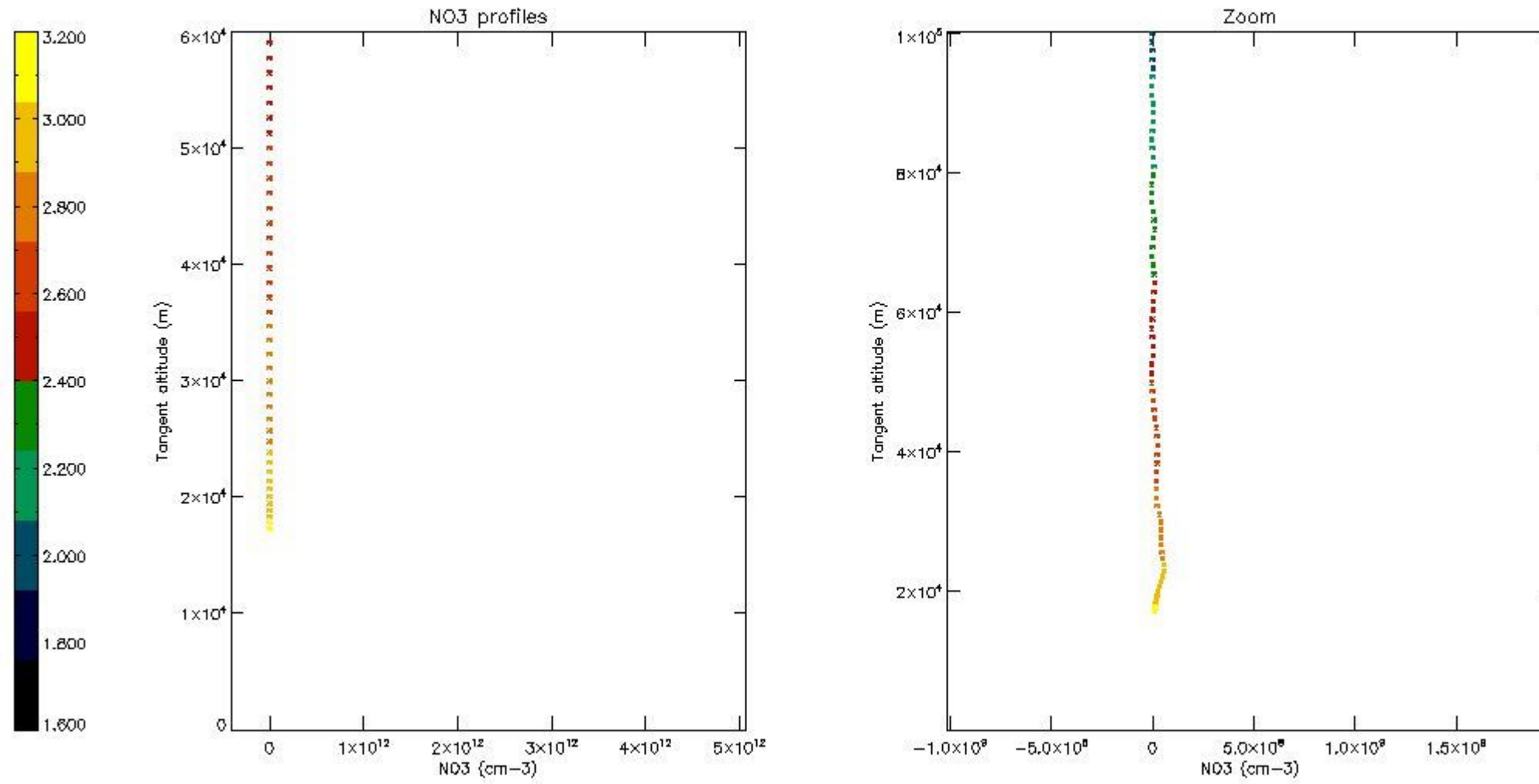
5.6 Plot NO₂ profiles for all STD (dark without errors)

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_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	11-JUN-2003 10:38:02
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	11-JUN-2003 10:38:02
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	11-JUN-2003 10:38:02

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

[2. Summary of processed GOM_NL_2P products](#)

[3. Level 2 Quality information per product](#)

[3.1 Plot of level 2 quality information per product \(time dependant\)](#)

[3.2 Plot of level 2 quality information per product \(world map\)](#)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Item	Value
Time of report generation	19APR2013 15:41:42
Data source version	GOMOS/6.01
Start time of products	11-06-2003 (11JUN2003 00:00:00)
Stop time of products	12-06-2003 (12JUN2003 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	17
Nb of prods with errors	0

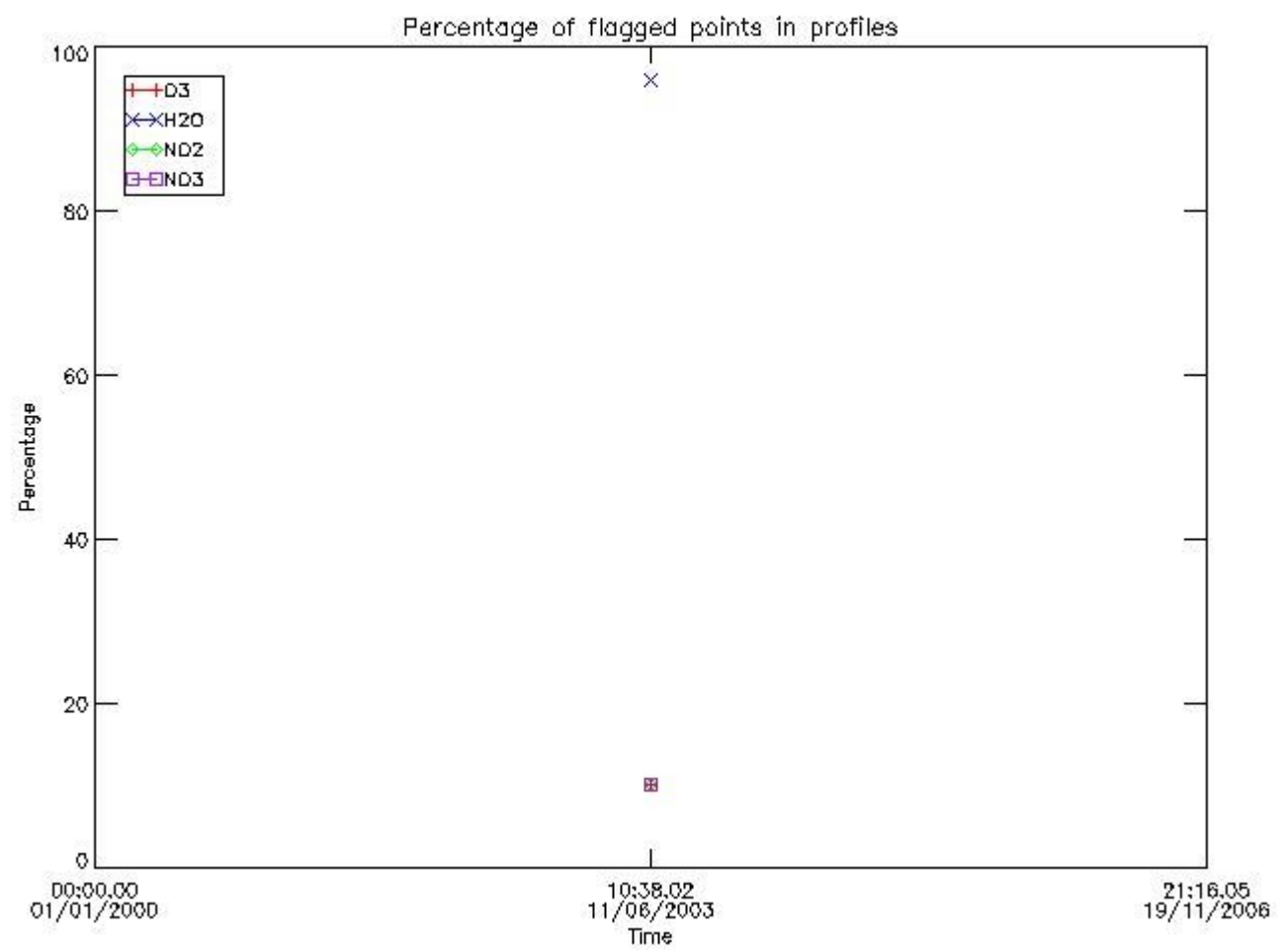
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20030611_103802_000000512017_00123_06690_6568.N1	11-JUN-2003 10:38:02	Dark	50.500	31	Alp Gru	1.7340	15200.	101	6690	No
2	GOM_NL__2PRFIN20030611_103932_000000592017_00123_06690_6569.N1	11-JUN-2003 10:39:32	Straylight	59.000	172	Gam Gru	3.0030	13100.	118	6690	No
3	GOM_NL__2PRFIN20030611_104218_000000422017_00123_06690_6570.N1	11-JUN-2003 10:42:18	Straylight	42.000	45	Alp Pav	1.9400	26000.	84	6690	No
4	GOM_NL__2PRFIN20030611_104744_000000412017_00123_06690_6571.N1	11-JUN-2003 10:47:44	Straylight	41.000	141	Bet Ara	2.8400	4600.0	82	6690	No
5	GOM_NL__2PRFIN20030611_104904_000000392017_00123_06690_6572.N1	11-JUN-2003 10:49:04	Straylight	39.000	147	Alp Ara	2.8770	26000.	78	6690	No
6	GOM_NL__2PRFIN20030611_105048_000000452017_00123_06690_6573.N1	11-JUN-2003 10:50:48	Straylight	45.000	40	The Sco	1.8590	7100.0	90	6690	No
7	GOM_NL__2PRFIN20030611_105232_000000462017_00123_06690_6574.N1	11-JUN-2003 10:52:32	Twilight	45.500	25	35Lam Sco	1.6200	28000.	91	6690	No
8	GOM_NL__2PRFIN20030611_105411_000000612017_00123_06690_6575.N1	11-JUN-2003 10:54:11	Bright	61.000	57	34Sig Sgr	2.0660	26000.	122	6690	No
9	GOM_NL__2PRFIN20030611_105605_000000642017_00123_06690_6576.N1	11-JUN-2003 10:56:05	Bright	63.500	155	41Pi Sgr	2.9000	6600.0	127	6690	No
10	GOM_NL__2PRFIN20030611_105921_000000422017_00123_06690_6577.N1	11-JUN-2003 10:59:21	Bright	41.500	86	35Eta Oph	2.4300	10200.	83	6690	No
11	GOM_NL__2PRFIN20030611_110106_000000392017_00123_06690_6578.N1	11-JUN-2003 11:01:06	Bright	38.500	98	13Zet Oph	2.5710	30000.	77	6690	No
12	GOM_NL__2PRFIN20030611_110313_000000382017_00123_06690_6579.N1	11-JUN-2003 11:03:13	Bright	37.500	120	1Del Oph	2.7340	3200.0	75	6690	No
13	GOM_NL__2PRFIN20030611_110614_000000362017_00123_06690_6580.N1	11-JUN-2003 11:06:14	Bright	36.000	102	24Alp Ser	2.6000	4250.0	72	6690	No
14	GOM_NL__2PRFIN20030611_110859_000000472017_00123_06690_6581.N1	11-JUN-2003 11:08:59	Bright	47.000	59	55Alp Oph	2.0800	8900.0	94	6690	No
15	GOM_NL__2PRFIN20030611_111040_000000402017_00123_06690_6582.N1	11-JUN-2003 11:10:40	Bright	40.000	127	27Bet Her	2.7810	4700.0	80	6690	No
16	GOM_NL__2PRFIN20030611_111349_000000402017_00123_06690_6583.N1	11-JUN-2003 11:13:49	Bright	39.500	133	40Zet Her	2.8070	6000.0	79	6690	No
17	GOM_NL__2PRFIN20030611_112053_000000422017_00123_06690_6584.N1	11-JUN-2003 11:20:53	Bright	41.500	130	23Bet Dra	2.7990	5800.0	83	6690	No

3. Quality information per product

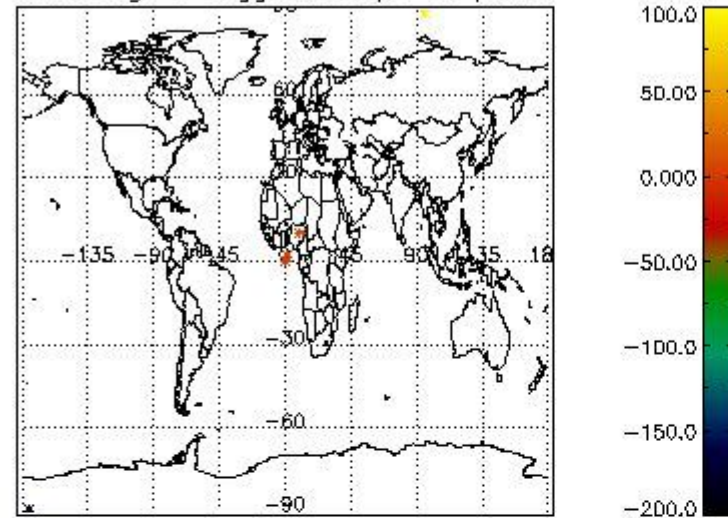
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

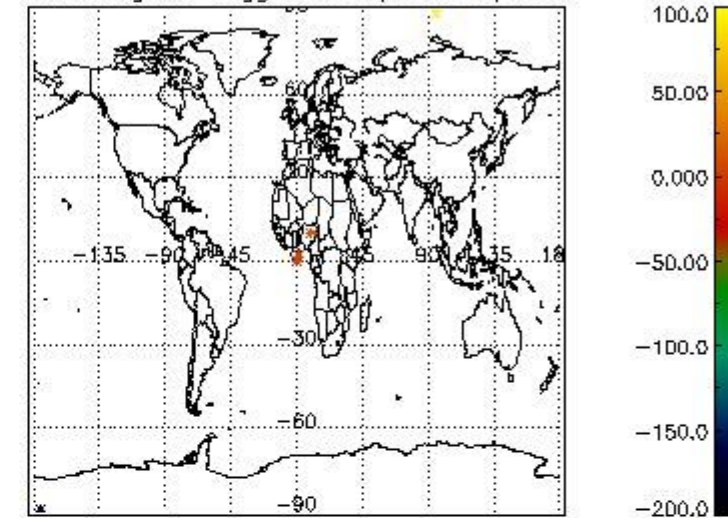


3.2 Plot quality information per product (world map)

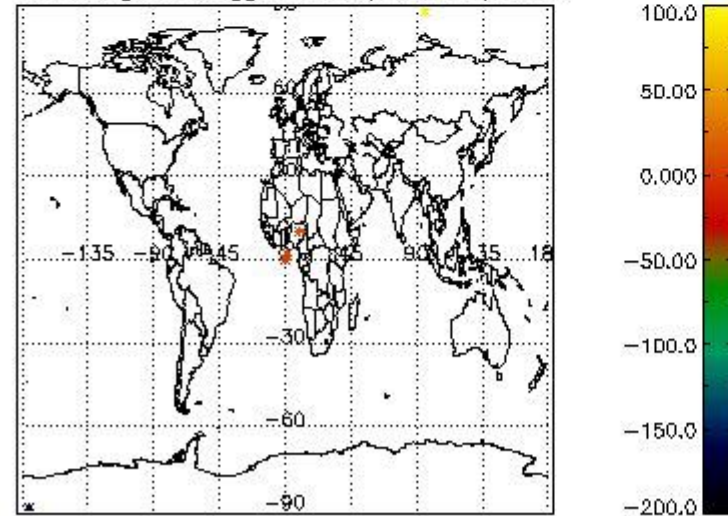
Percentage of flagged data per O3 profile



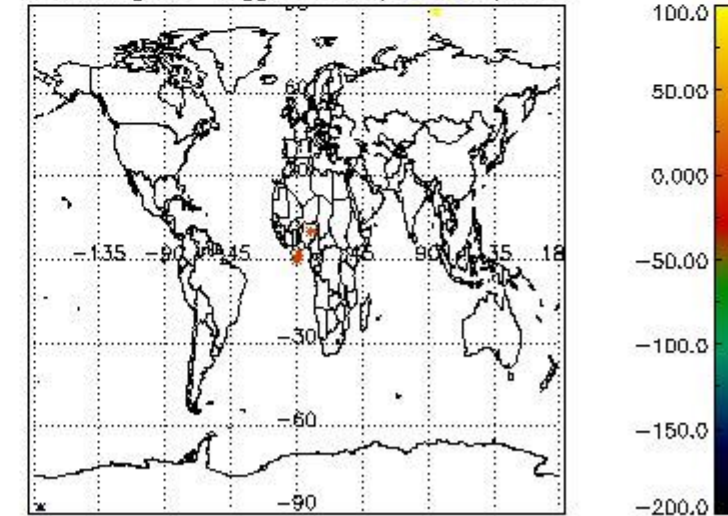
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

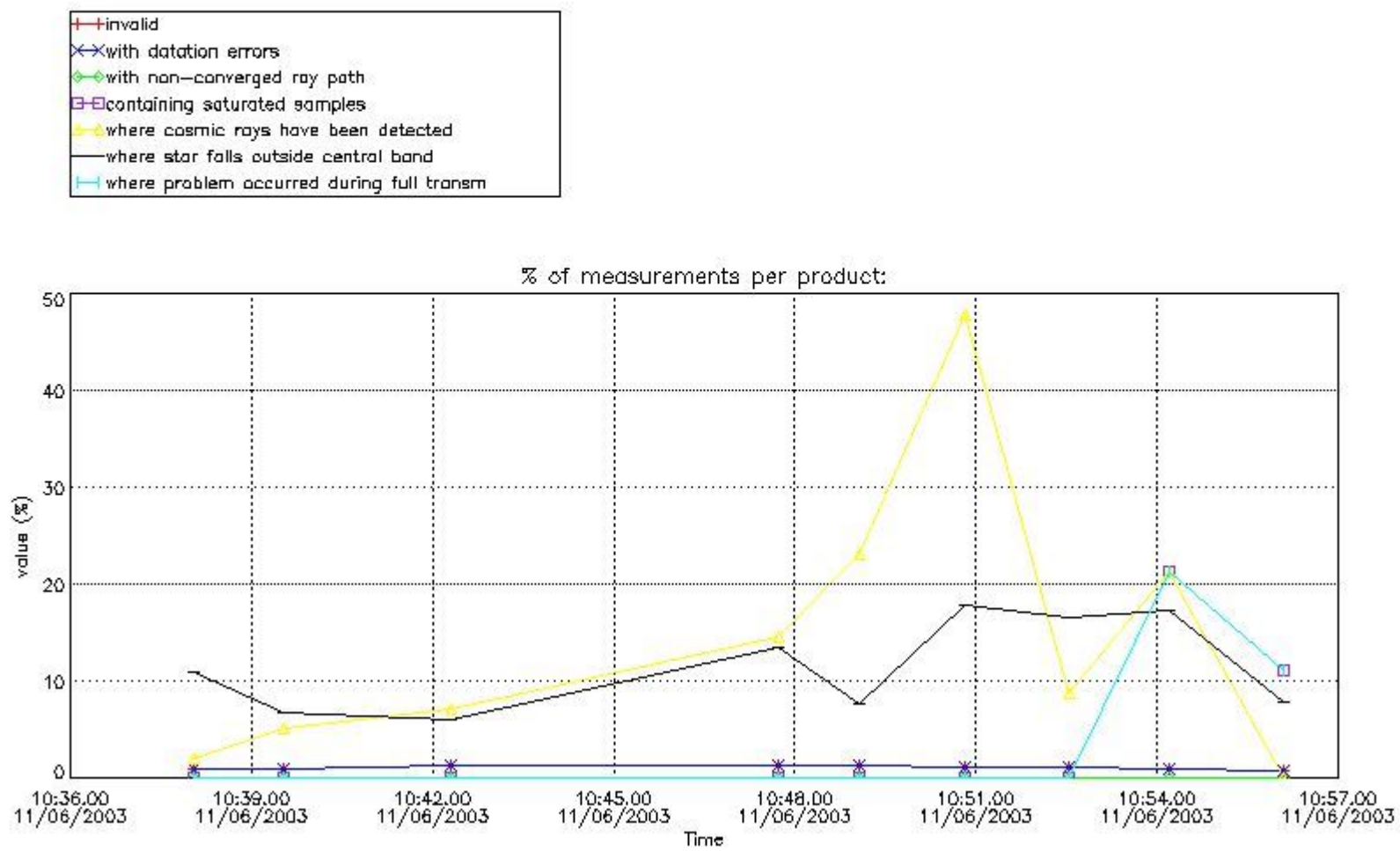


4. Level 1 quality information per product

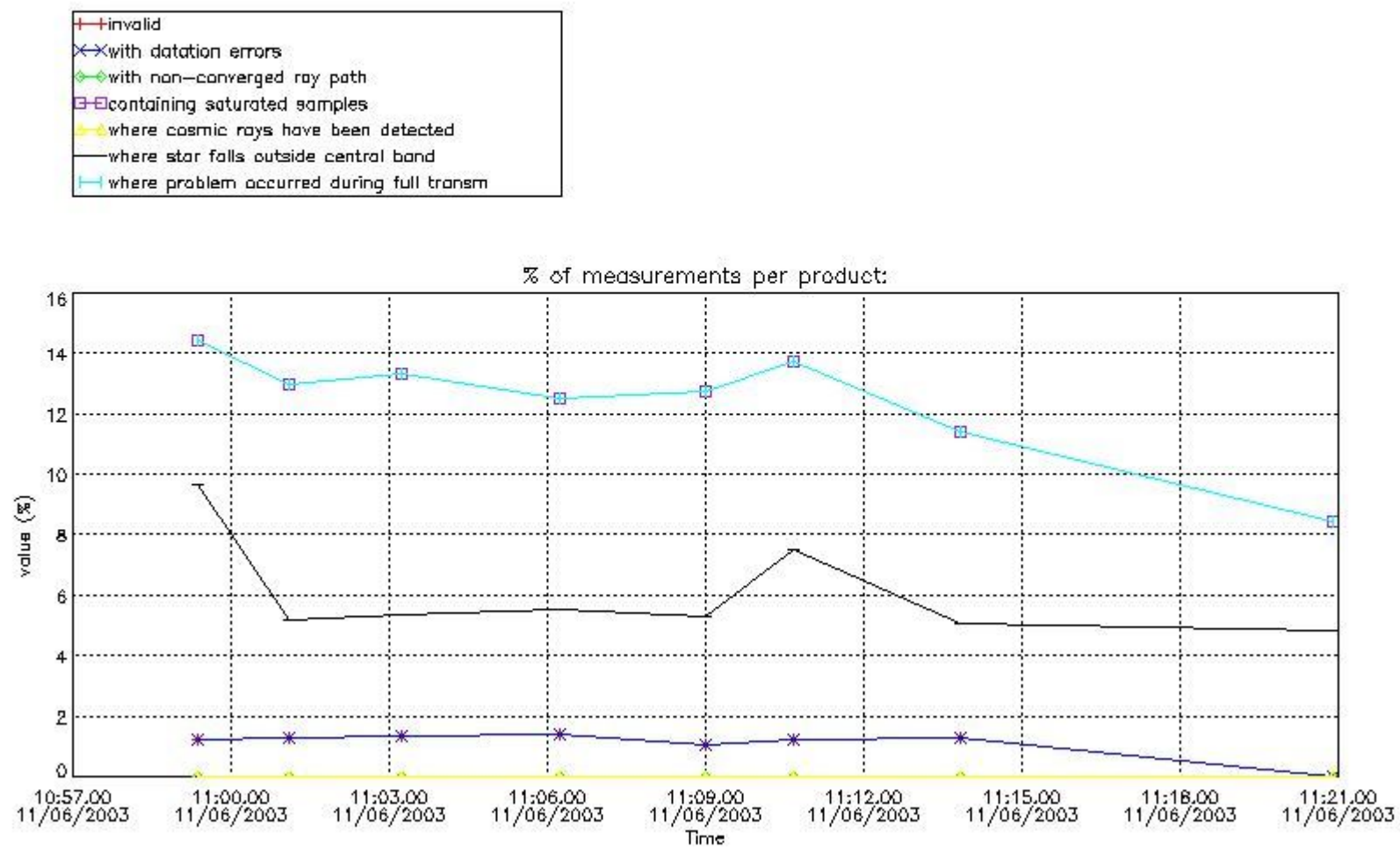
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



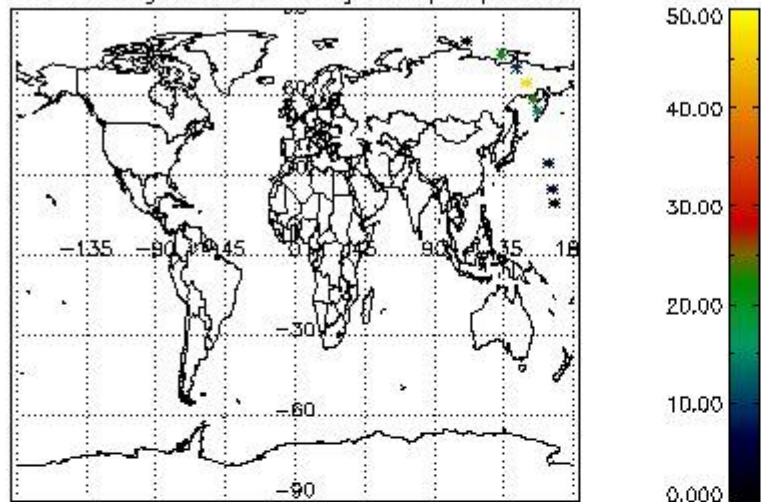
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



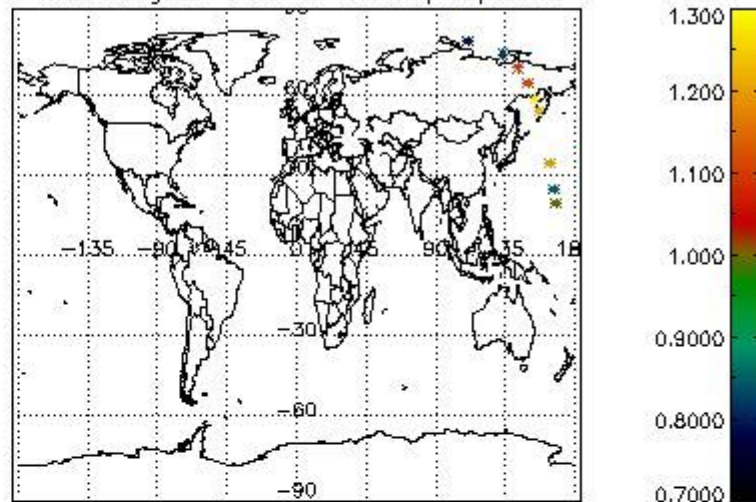
4.2 Plot quality information per product coming from level 1b processing (world map)

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

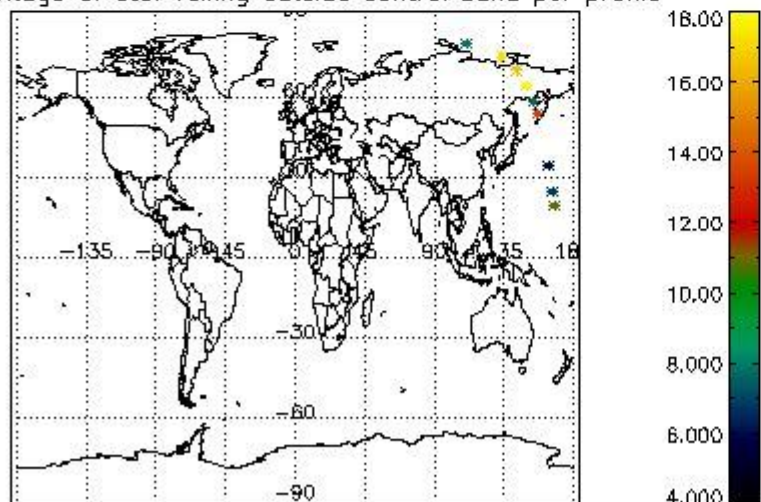
Percentage of cosmic ray hits per profile



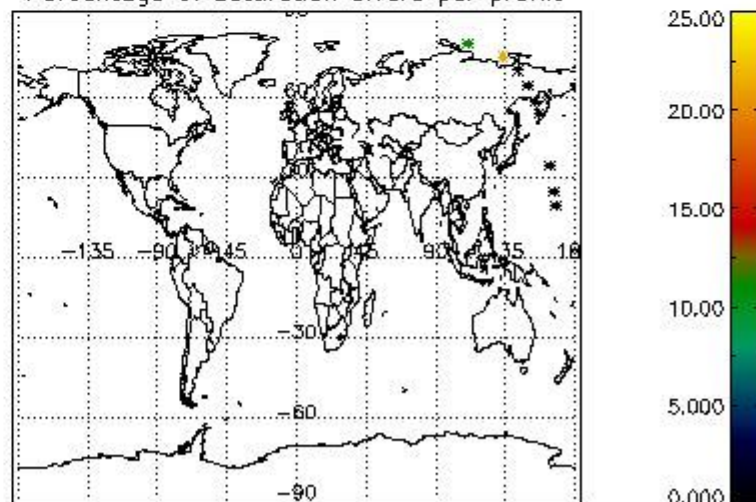
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

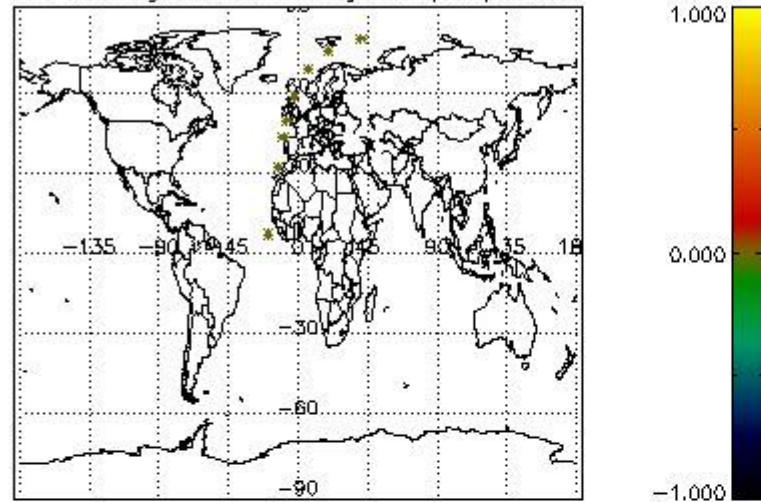


Percentage of saturation errors per profile

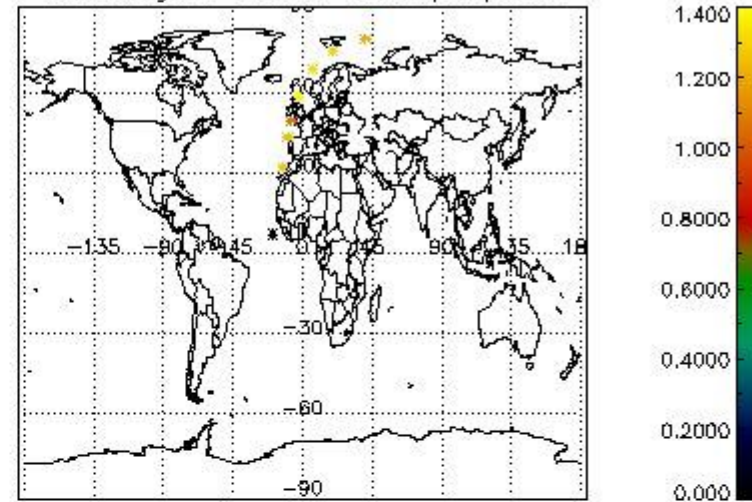


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

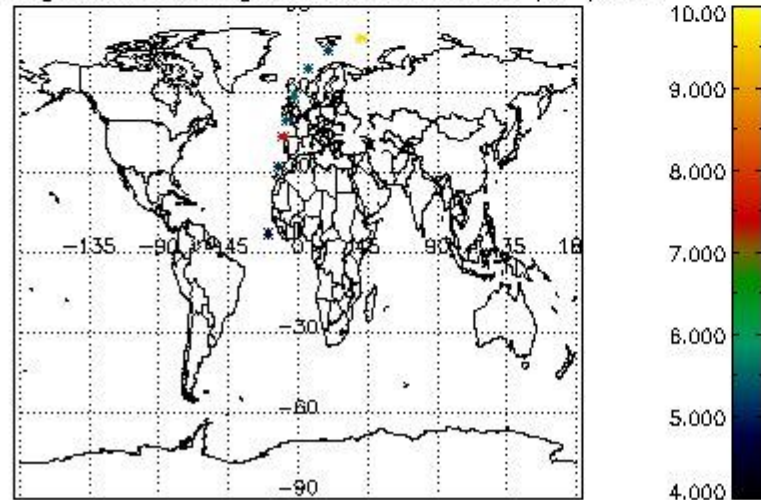
Percentage of cosmic ray hits per profile



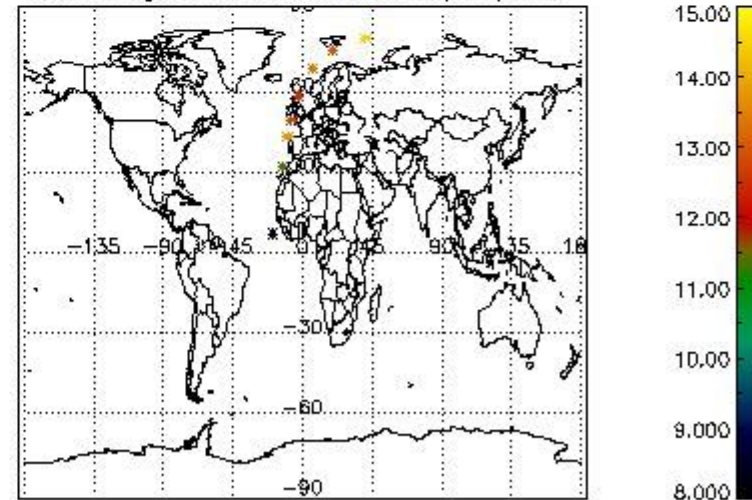
Percentage of datation errors per profile



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

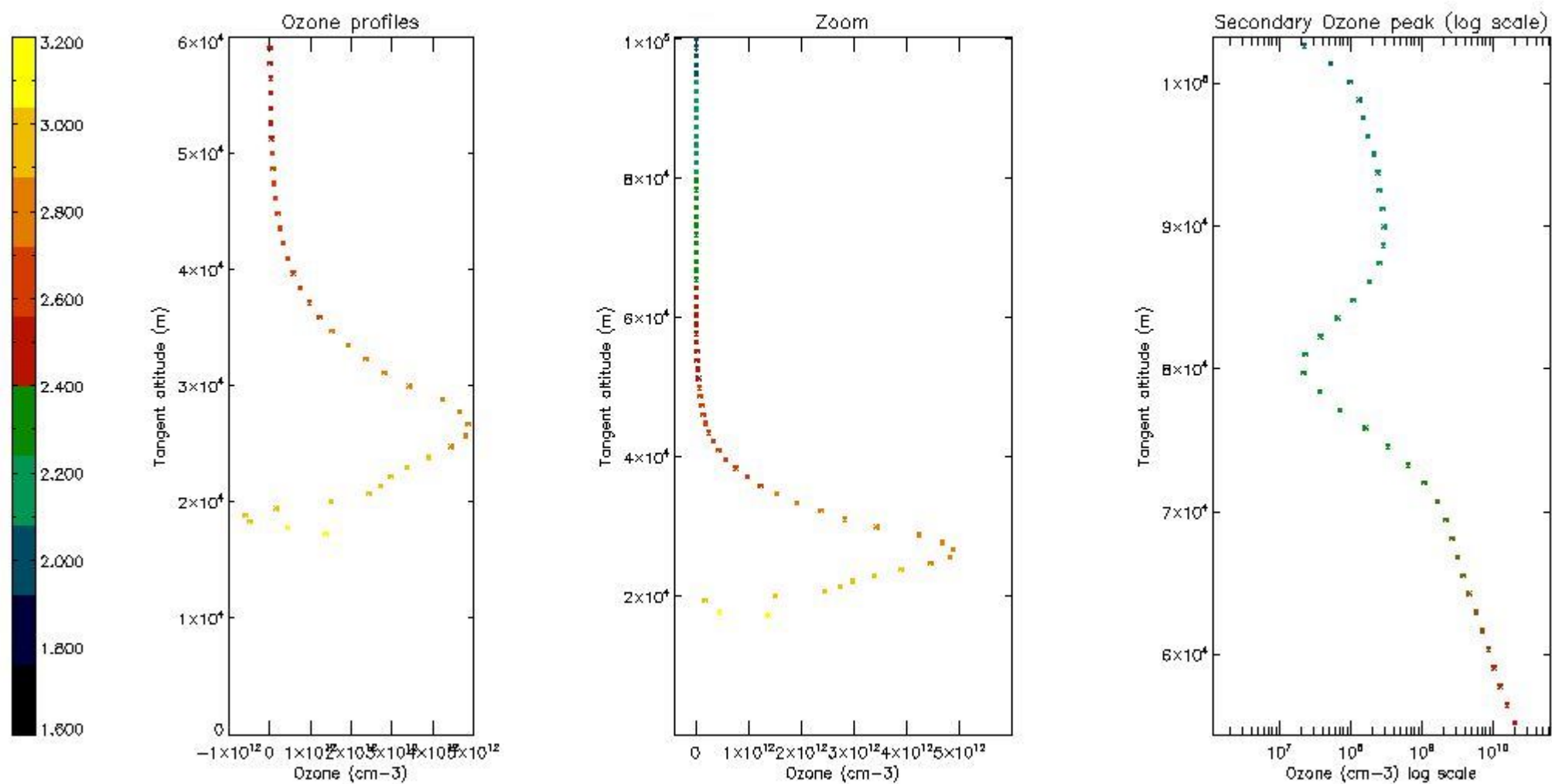
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	7
STD < 20	5

STD < 10	4
STD < 5	3

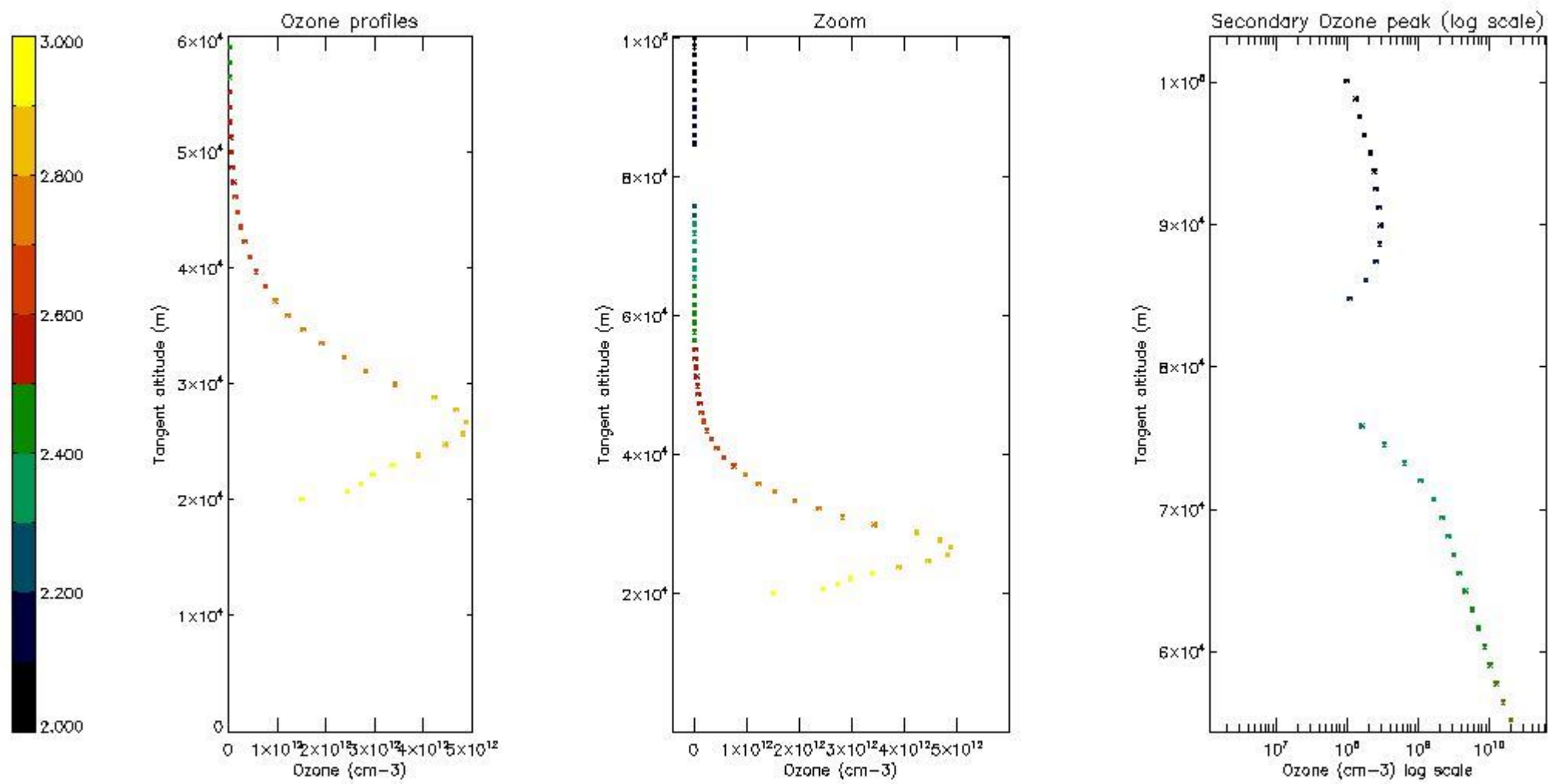
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



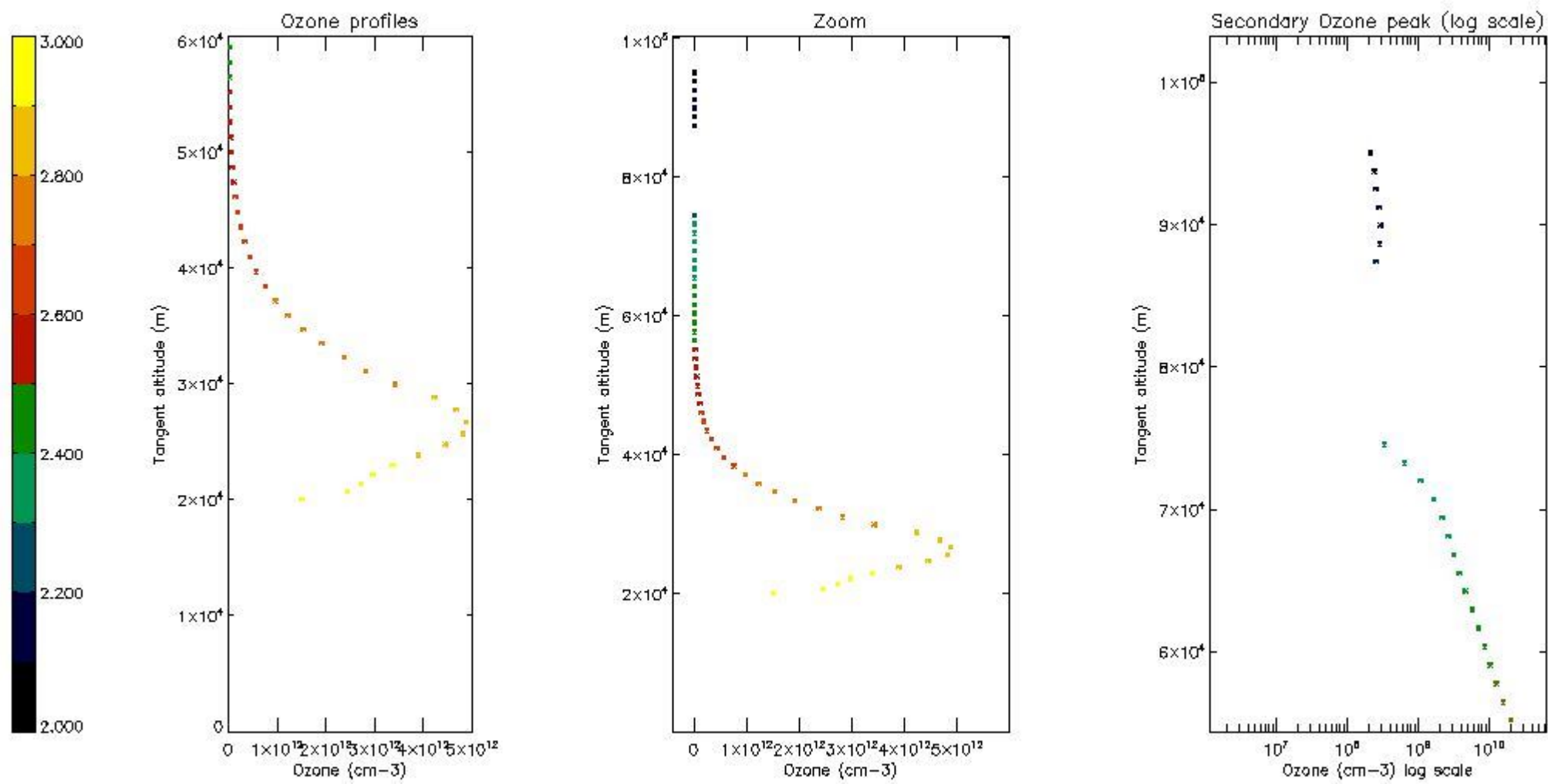
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



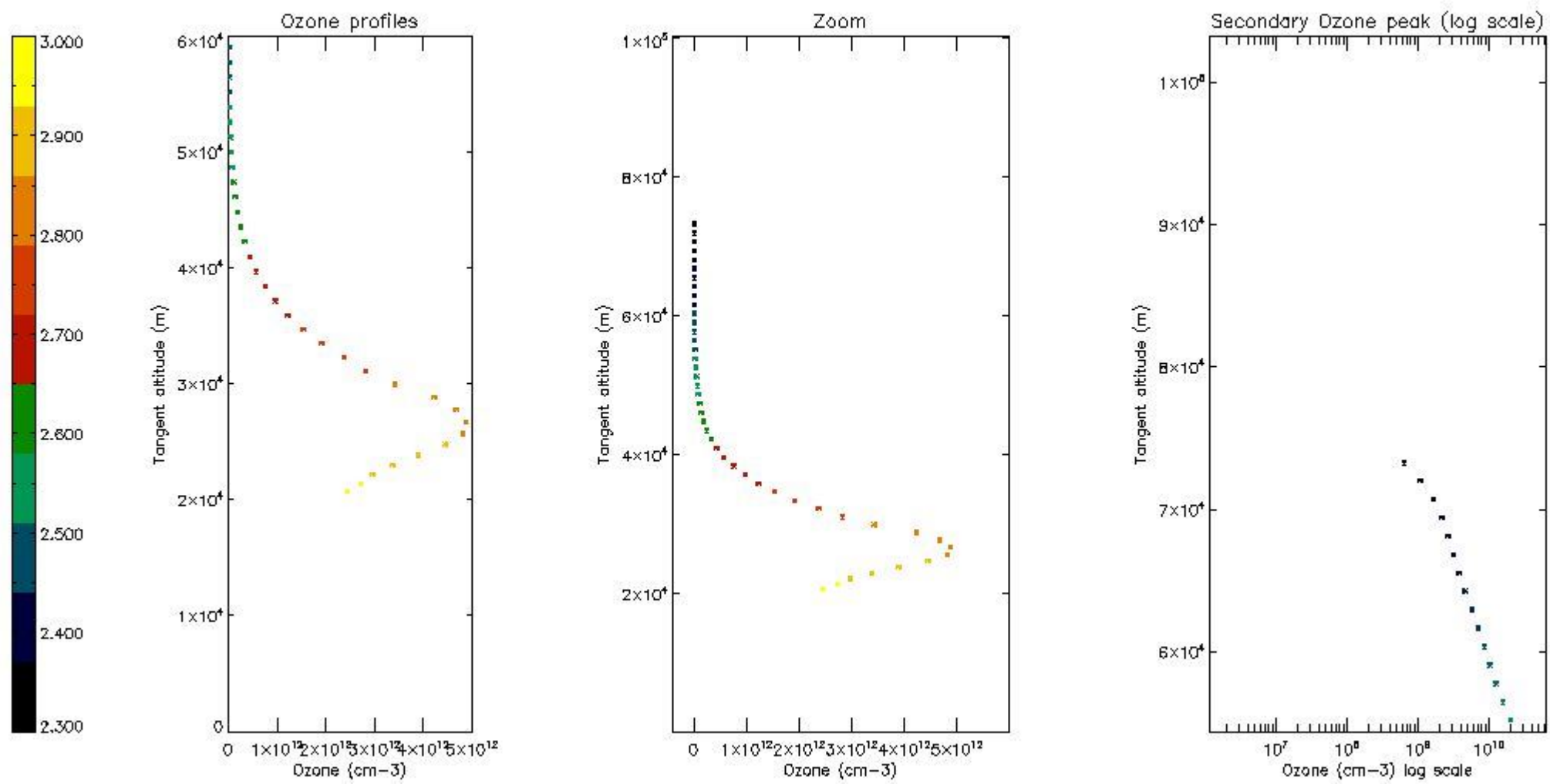
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



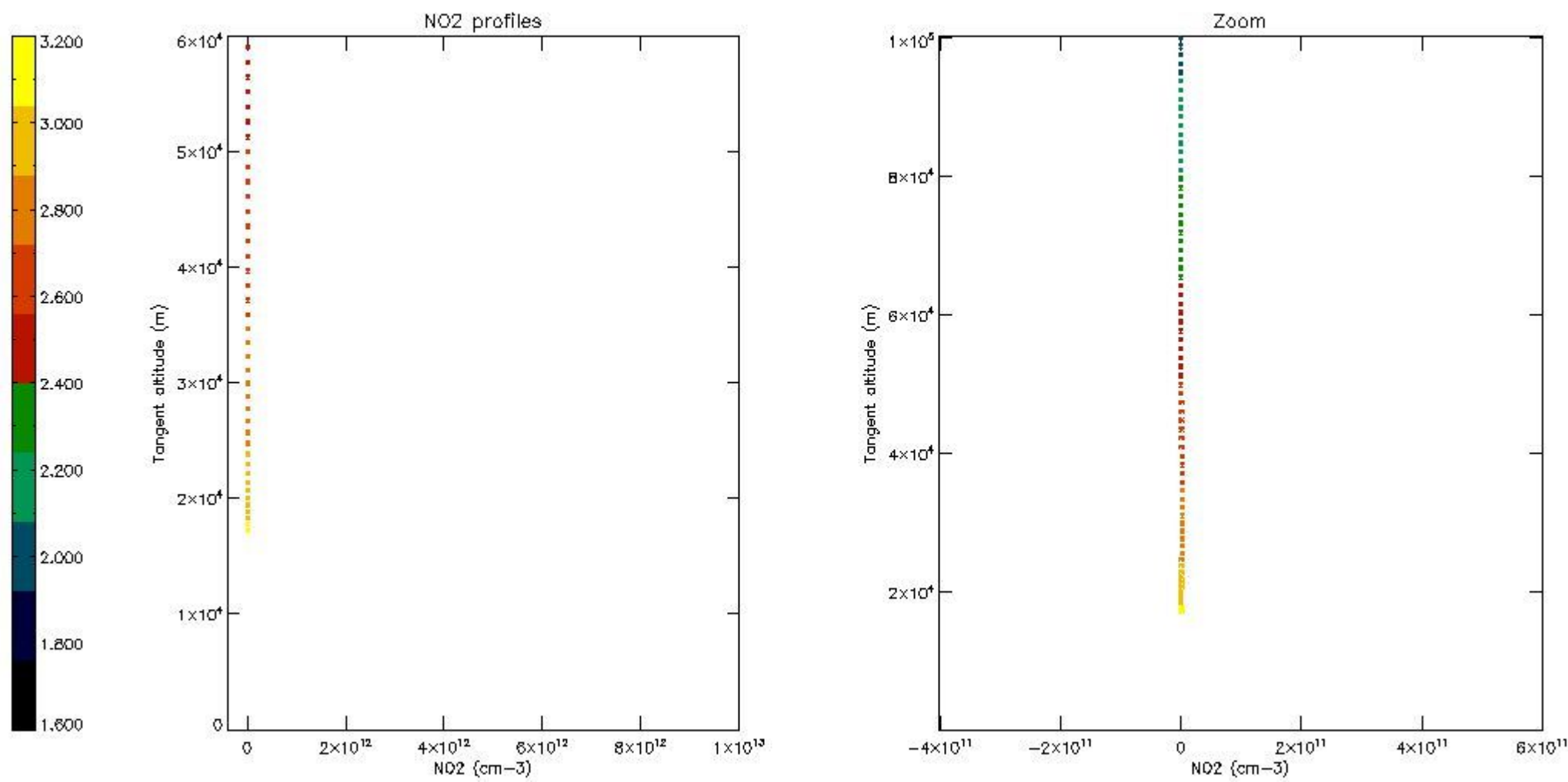
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



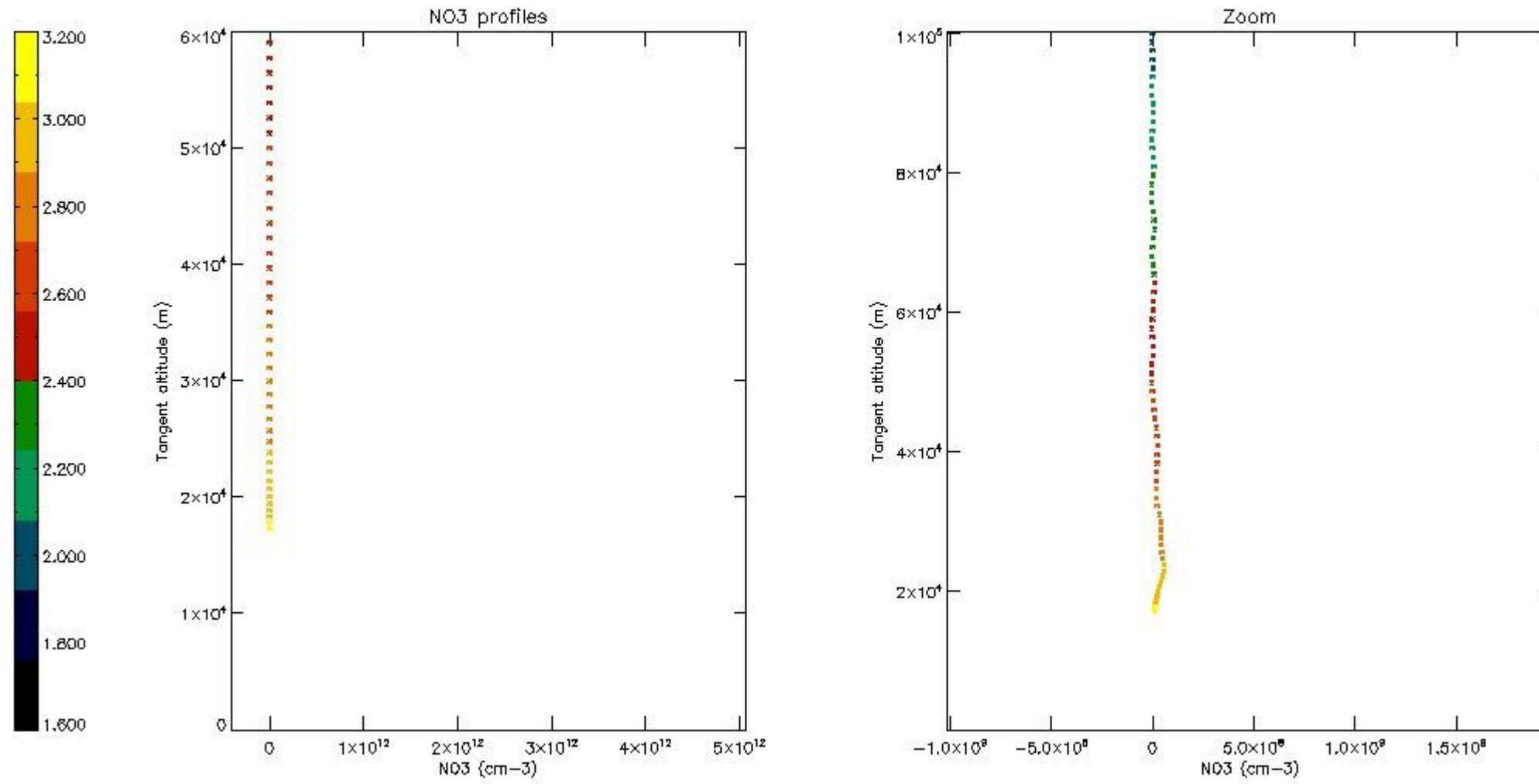
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

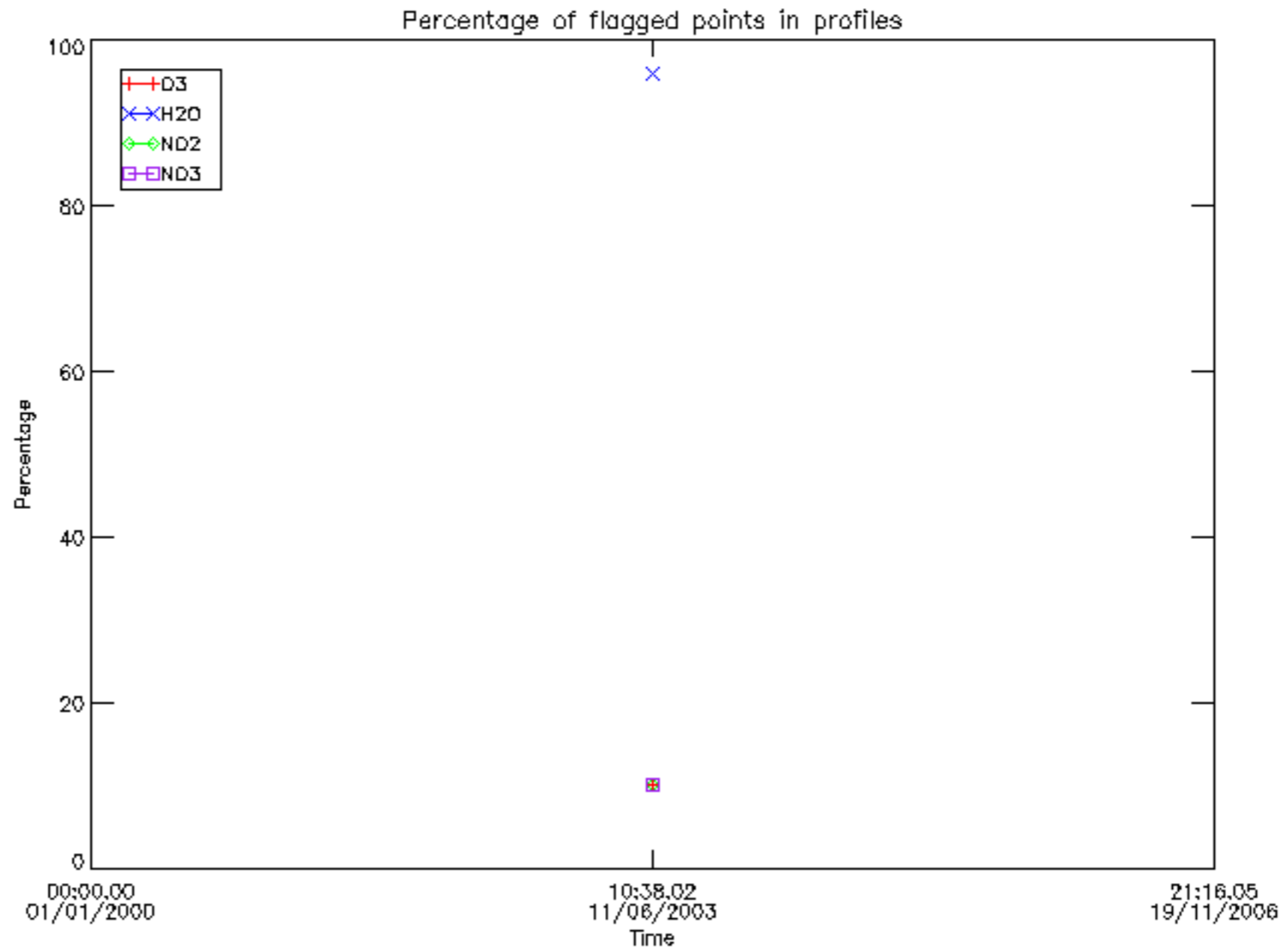
The colorbar represents the latitude.



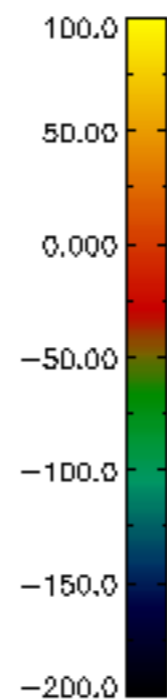
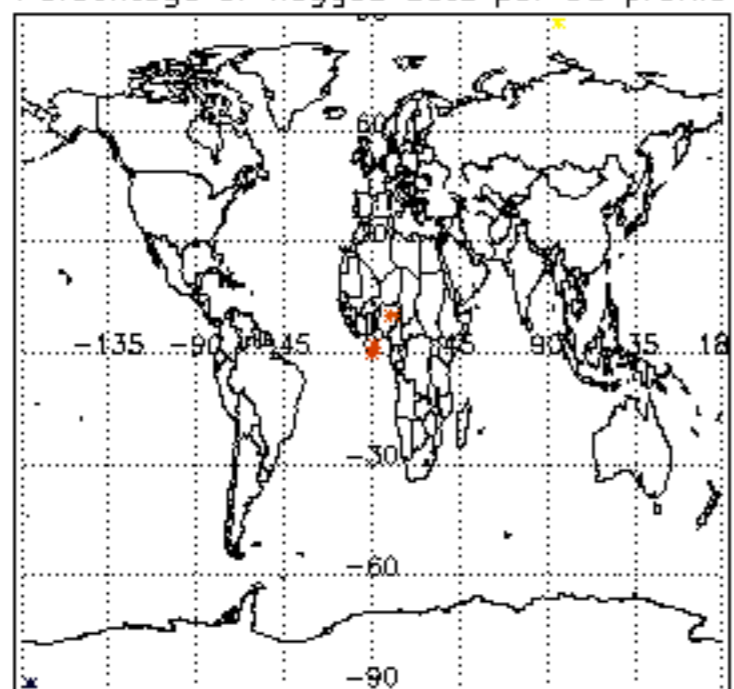
6. Auxiliary Data Files used for the production reported in section 2

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.

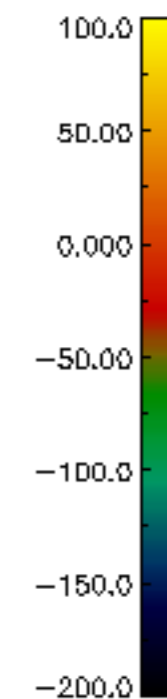
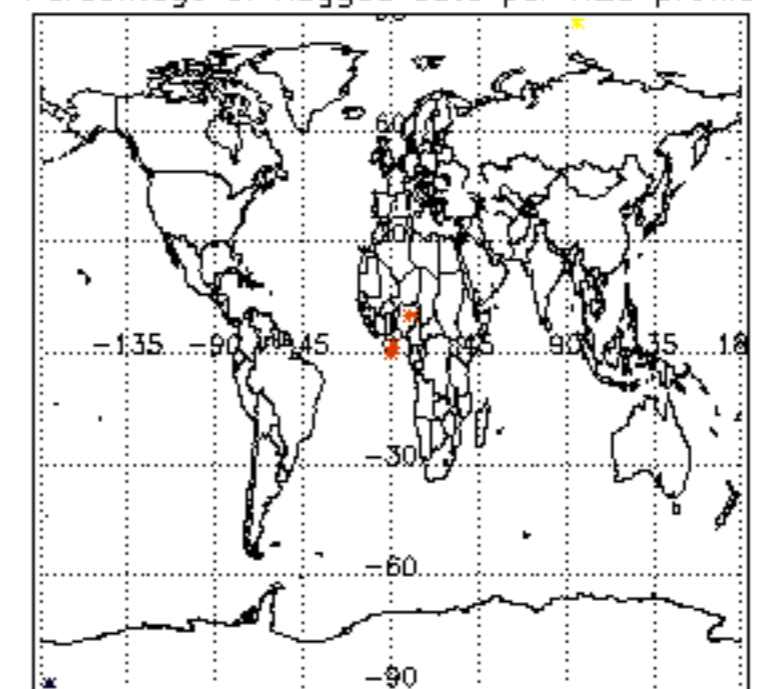
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	11-JUN-2003 10:38:02
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	11-JUN-2003 10:38:02
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	11-JUN-2003 10:38:02



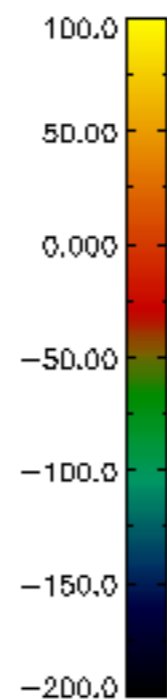
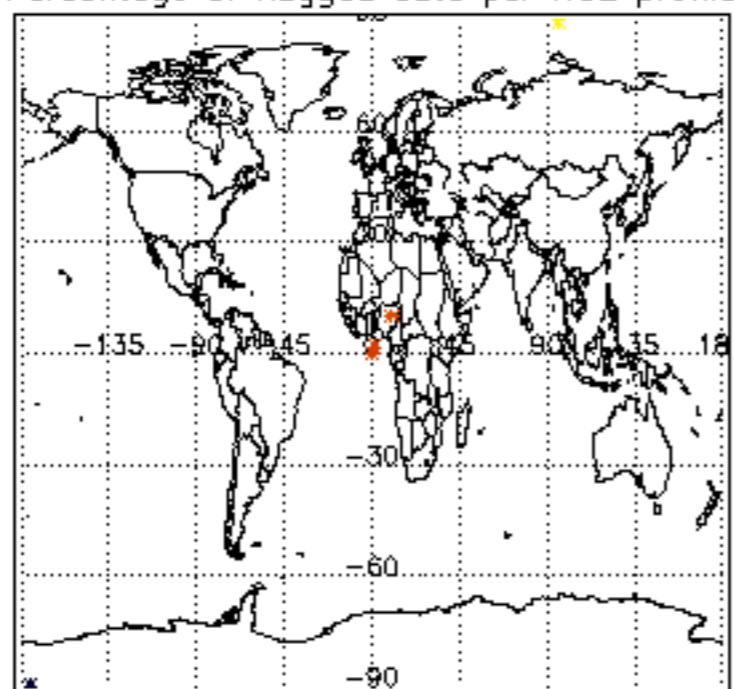
Percentage of flagged data per D3 profile



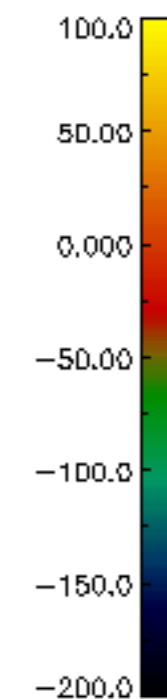
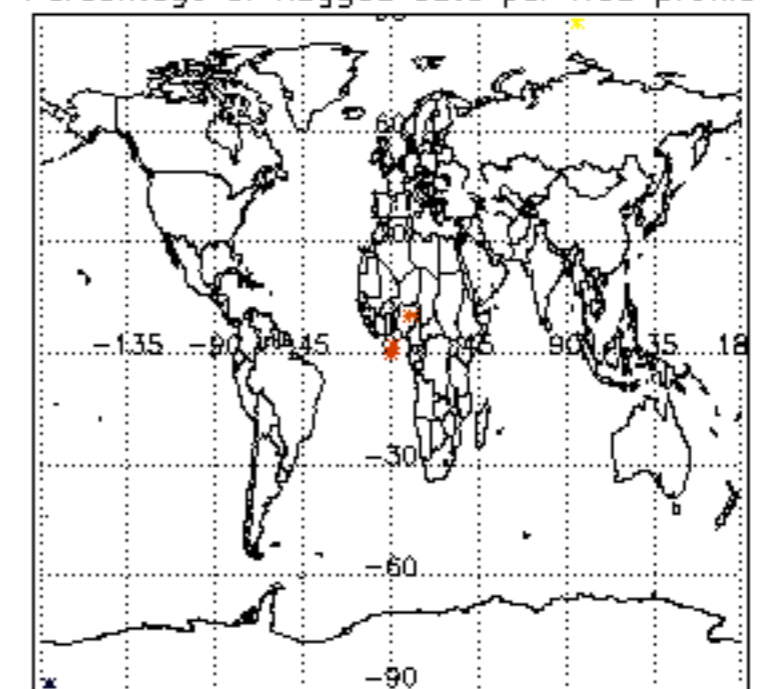
Percentage of flagged data per H2O profile

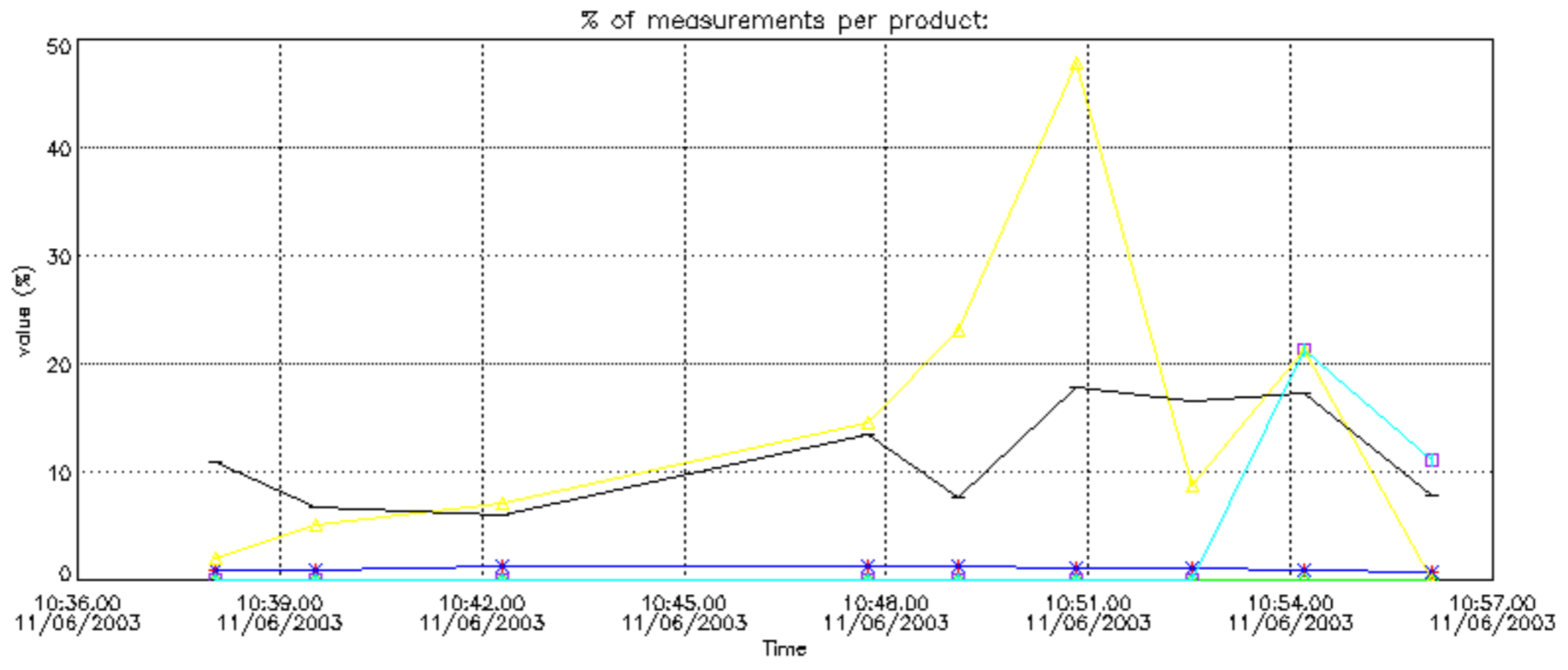
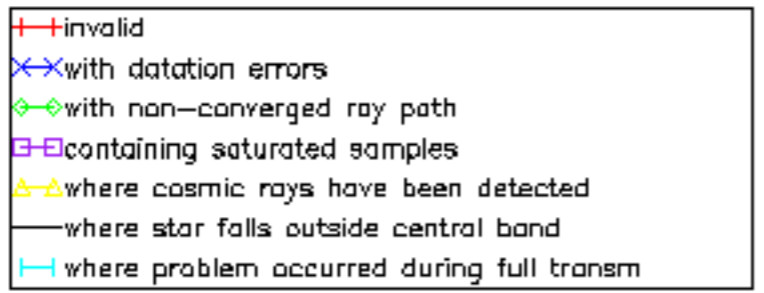


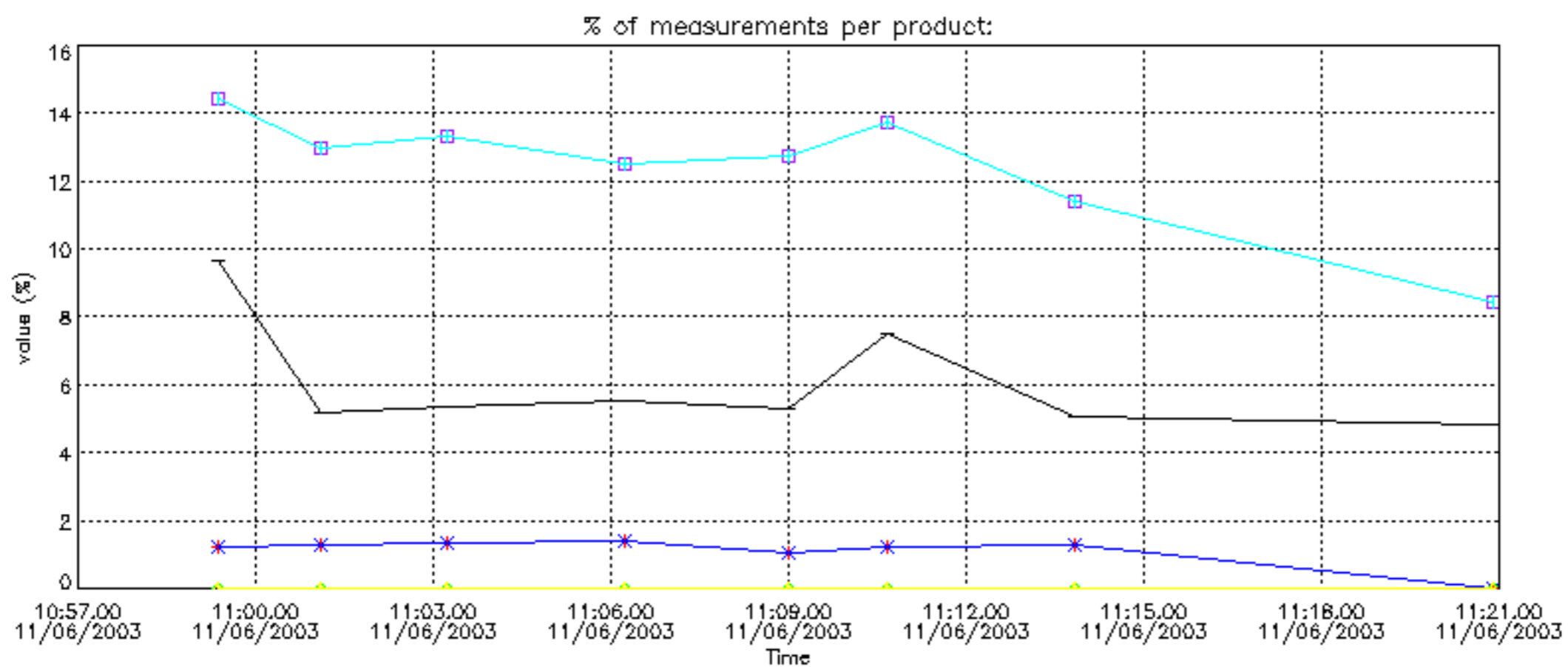
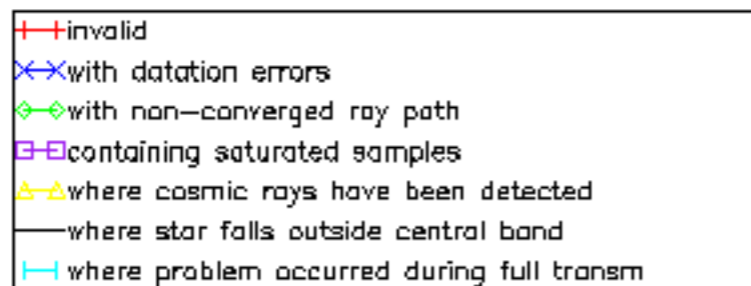
Percentage of flagged data per NO2 profile



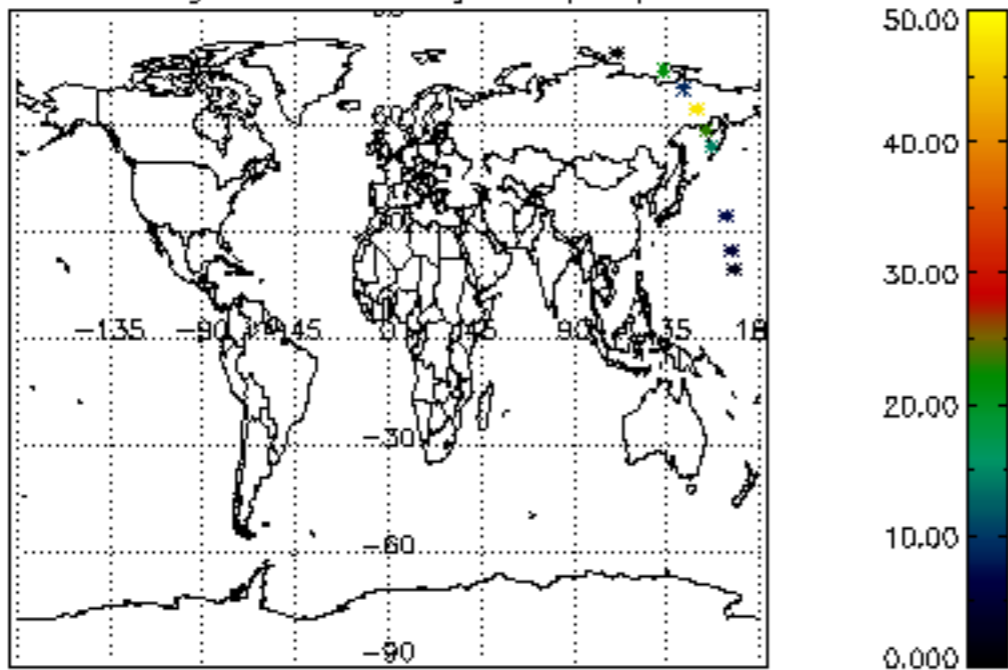
Percentage of flagged data per NO3 profile



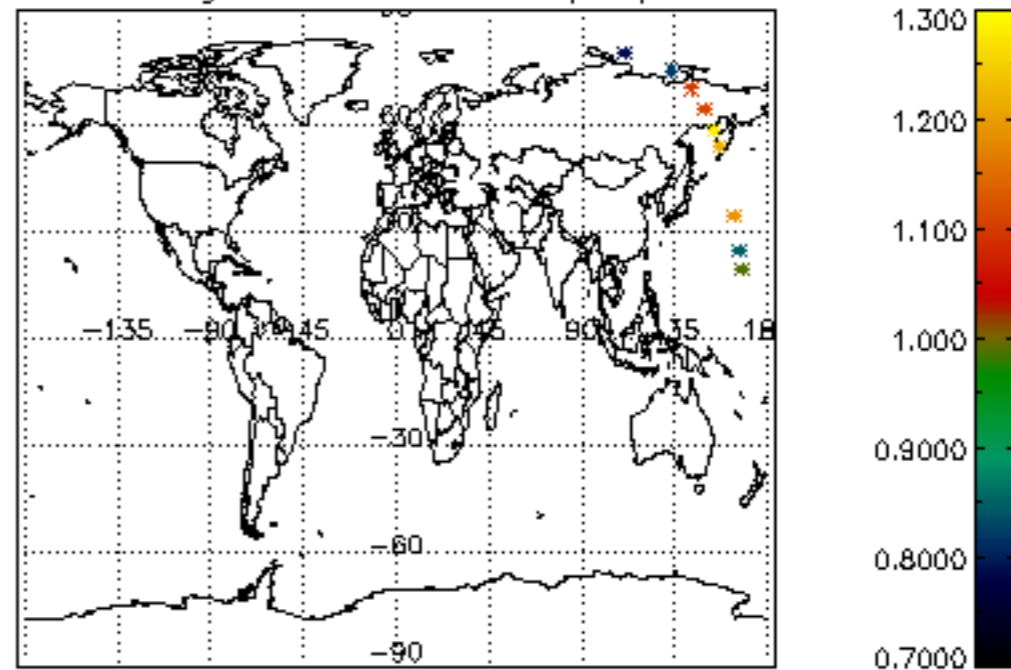




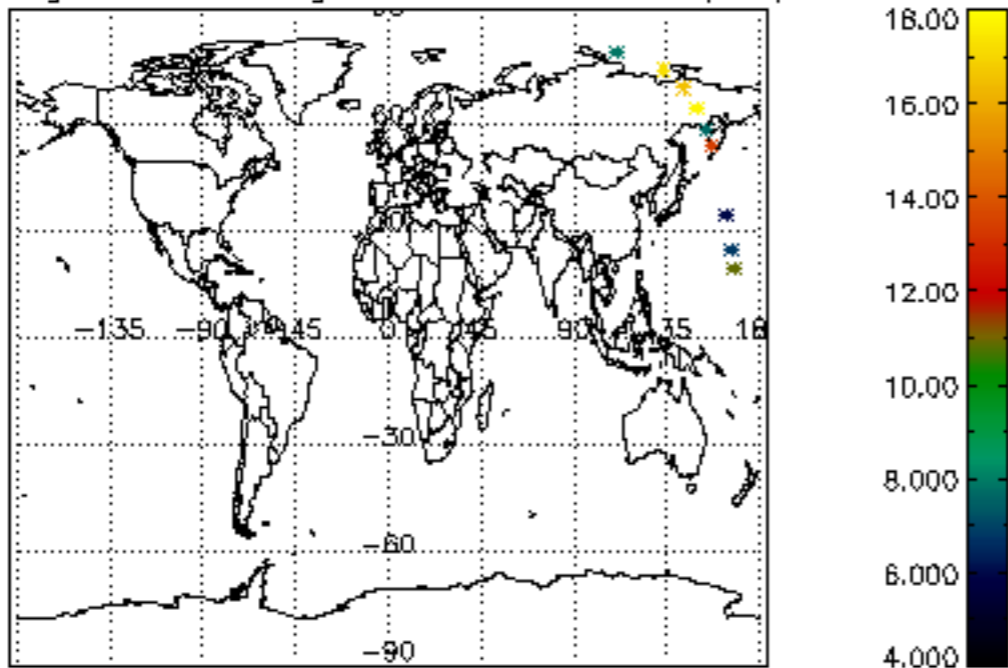
Percentage of cosmic ray hits per profile



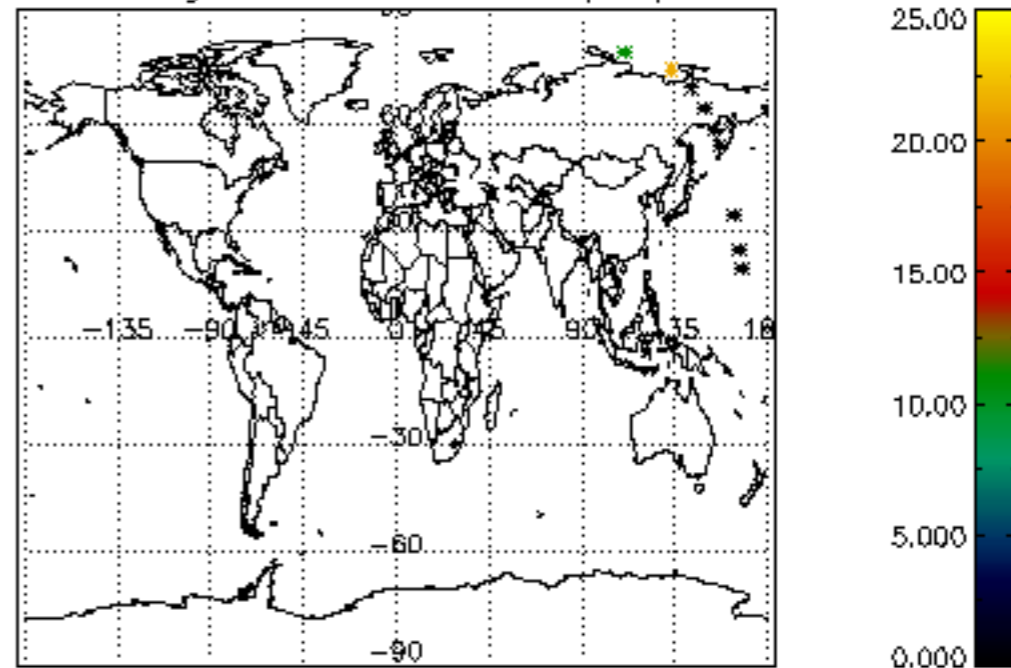
Percentage of datation errors per profile



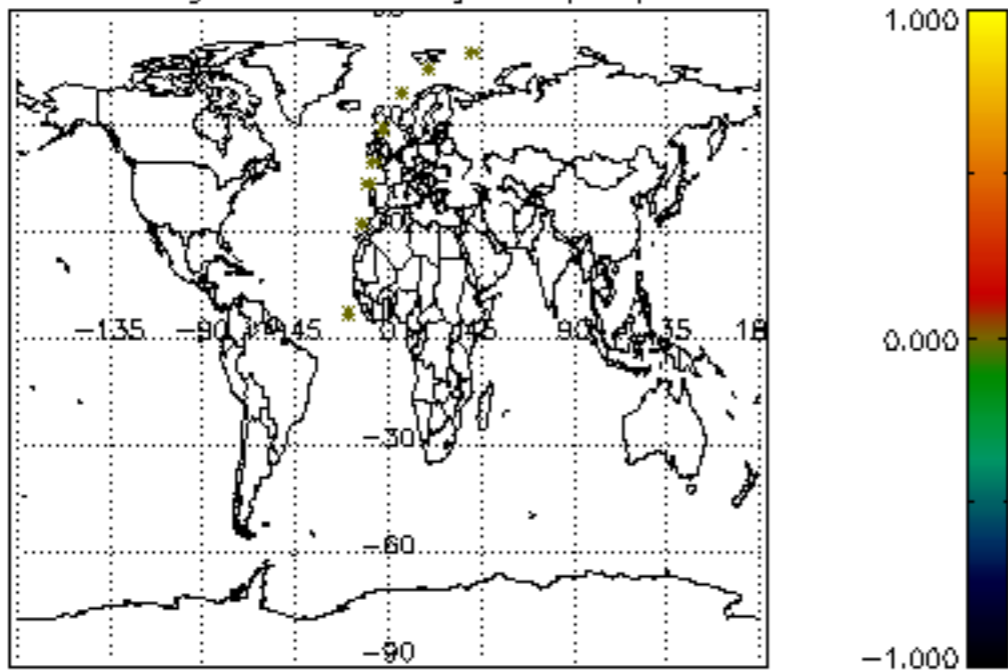
Percentage of star falling outside central band per profile



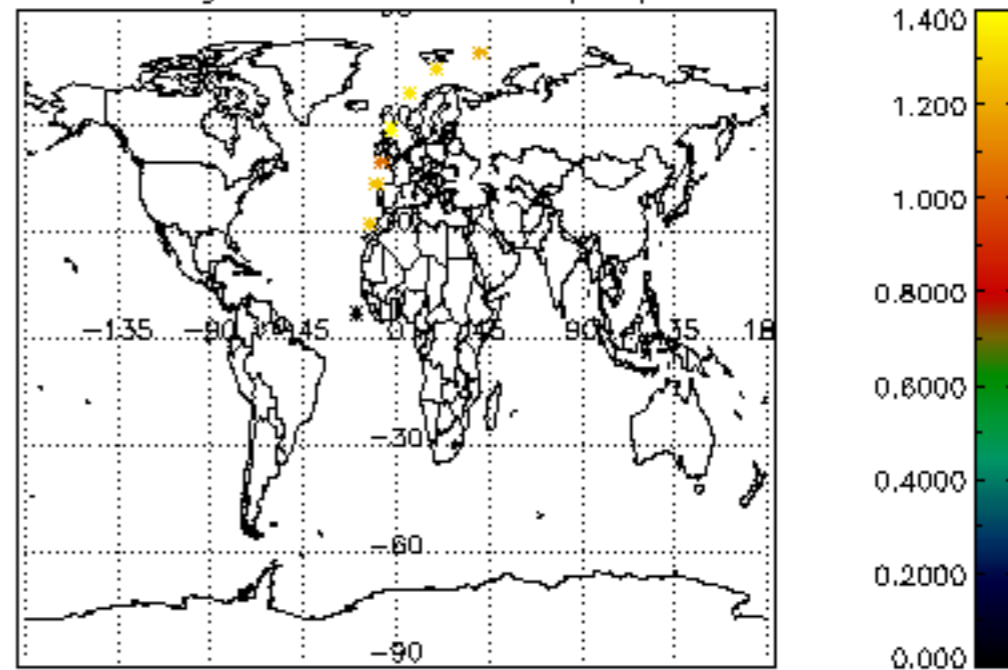
Percentage of saturation errors per profile



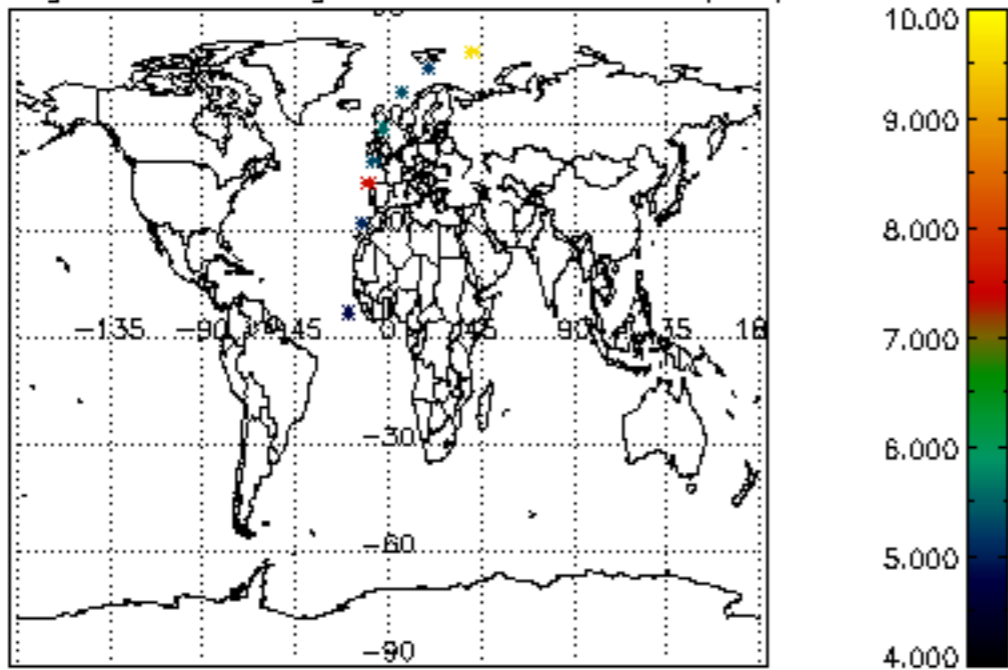
Percentage of cosmic ray hits per profile



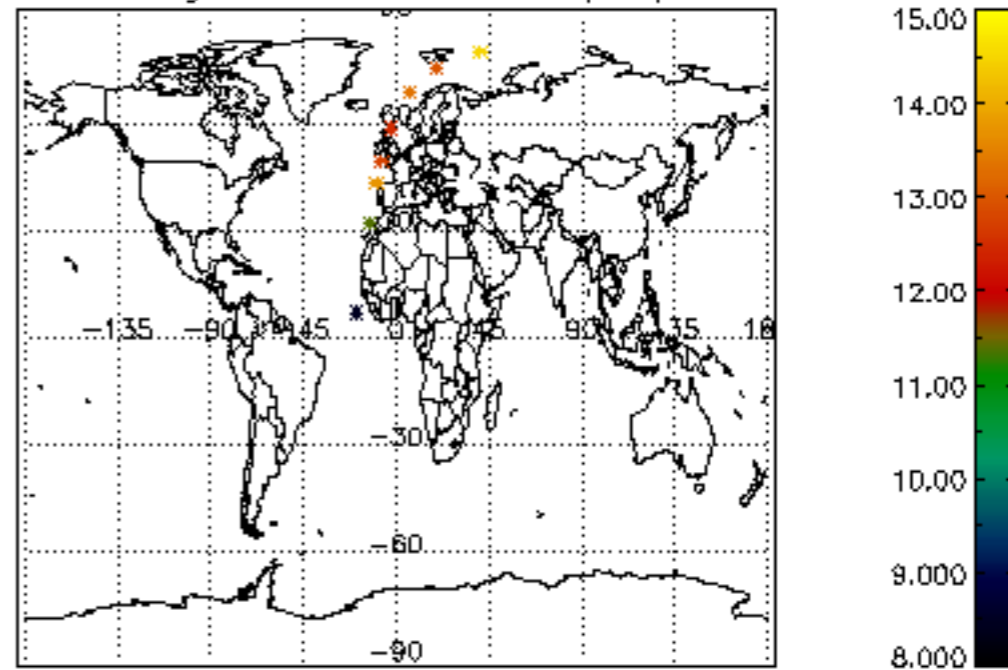
Percentage of datation errors per profile

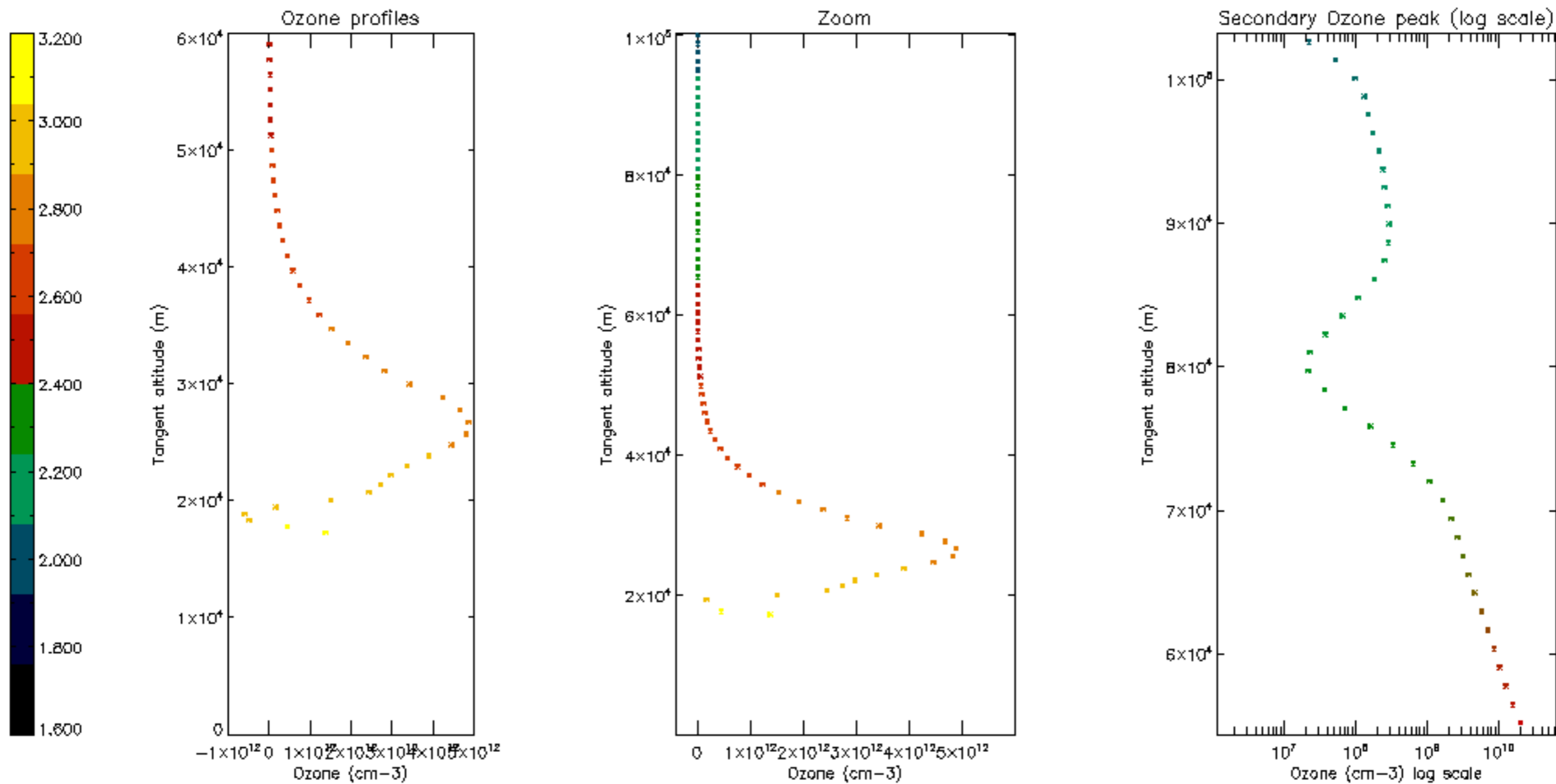


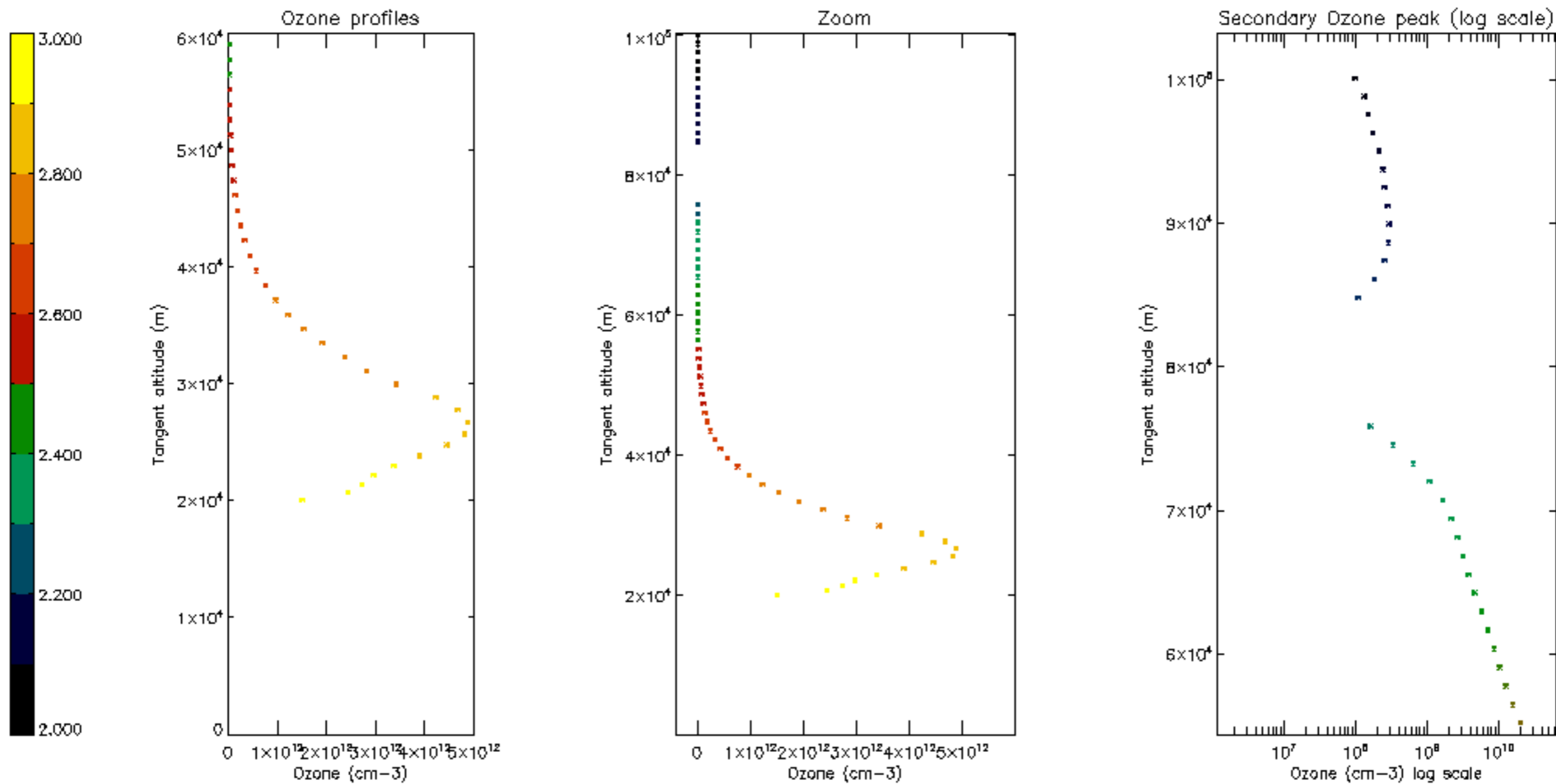
Percentage of star falling outside central band per profile

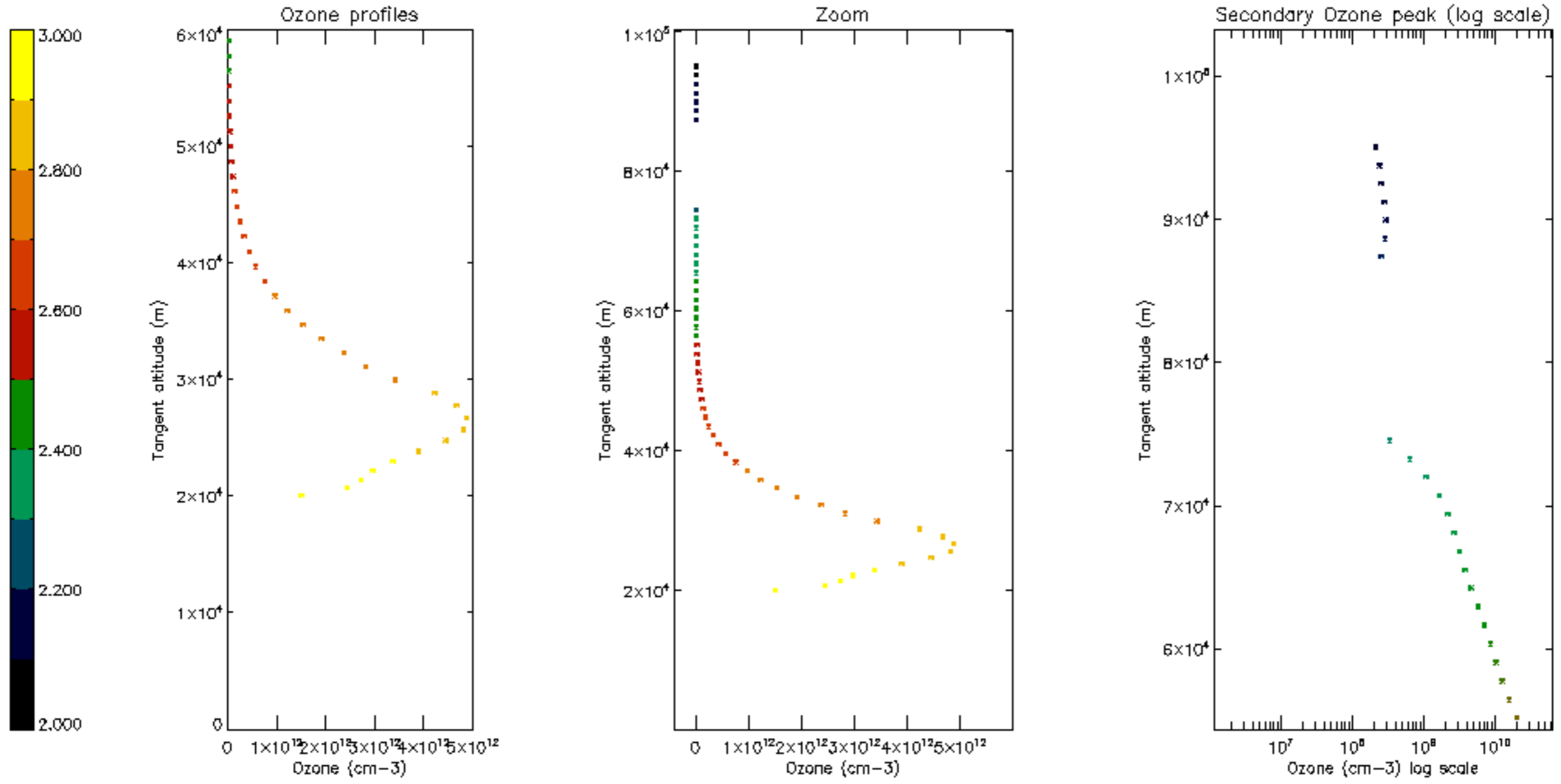


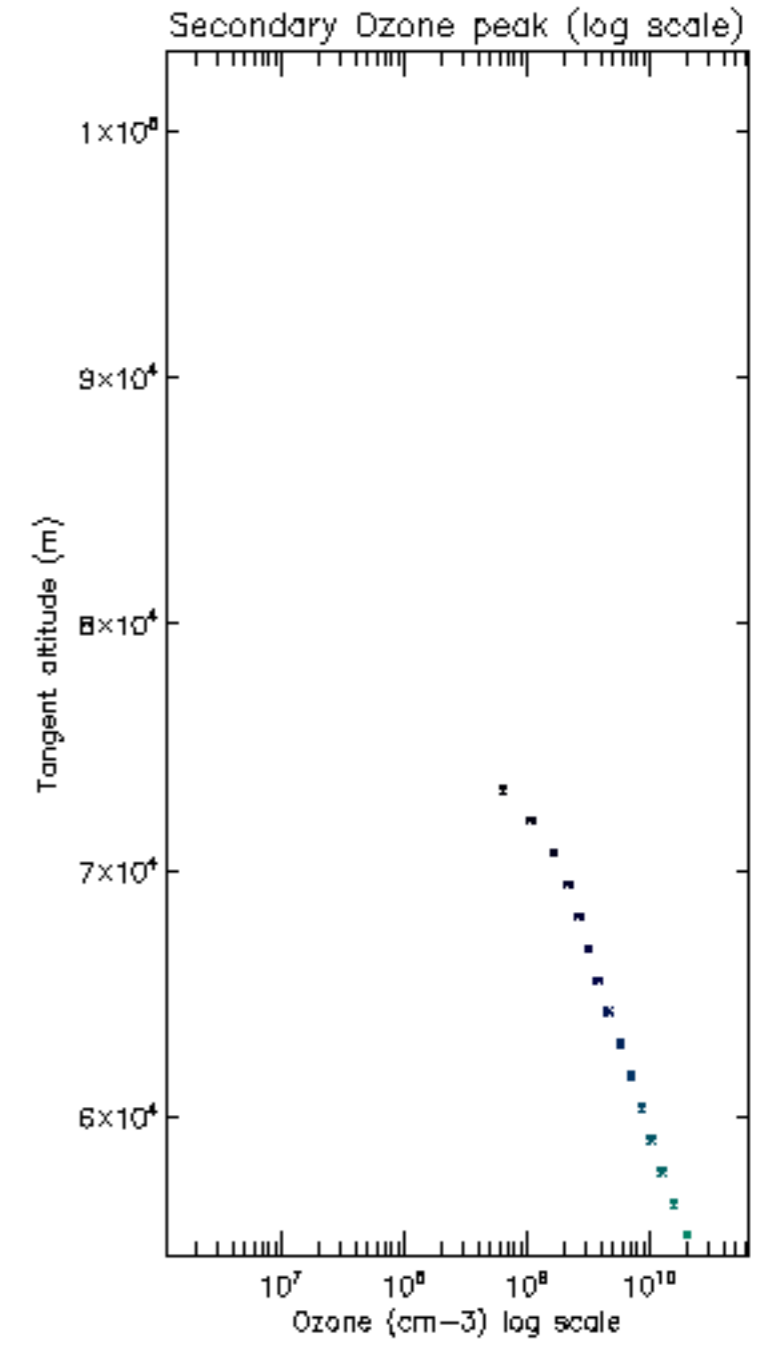
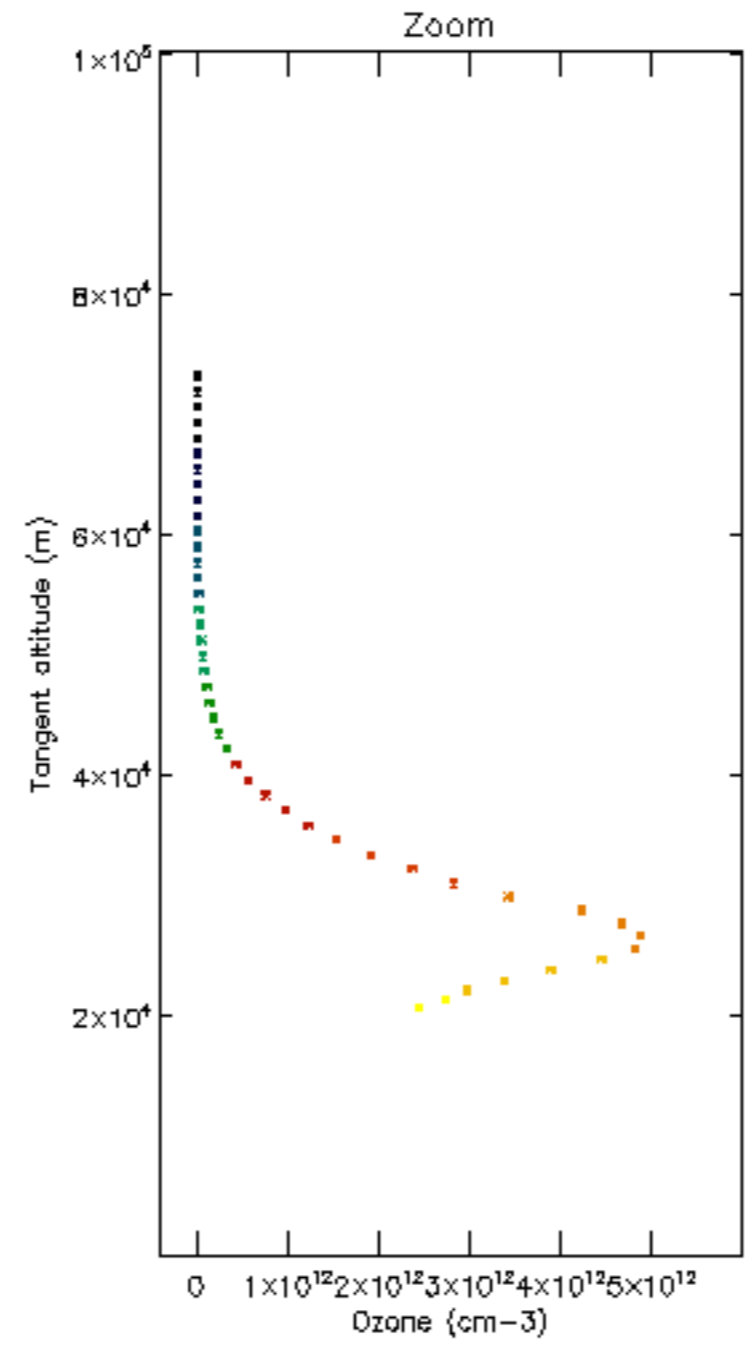
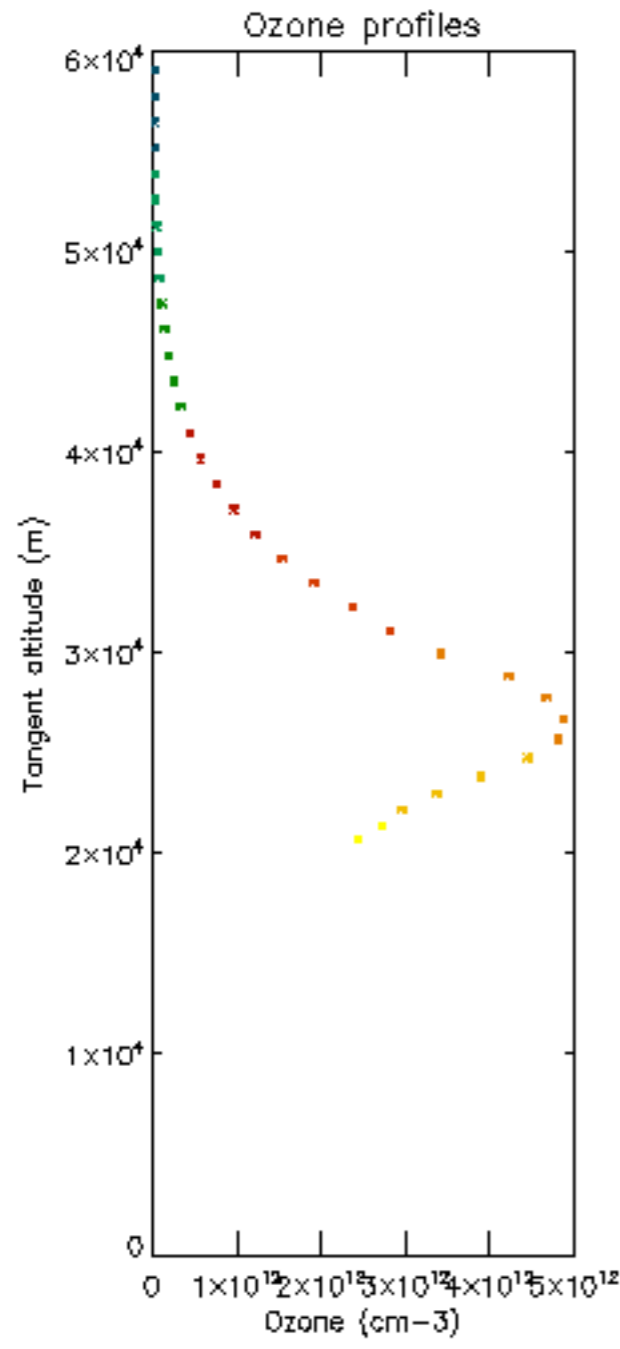
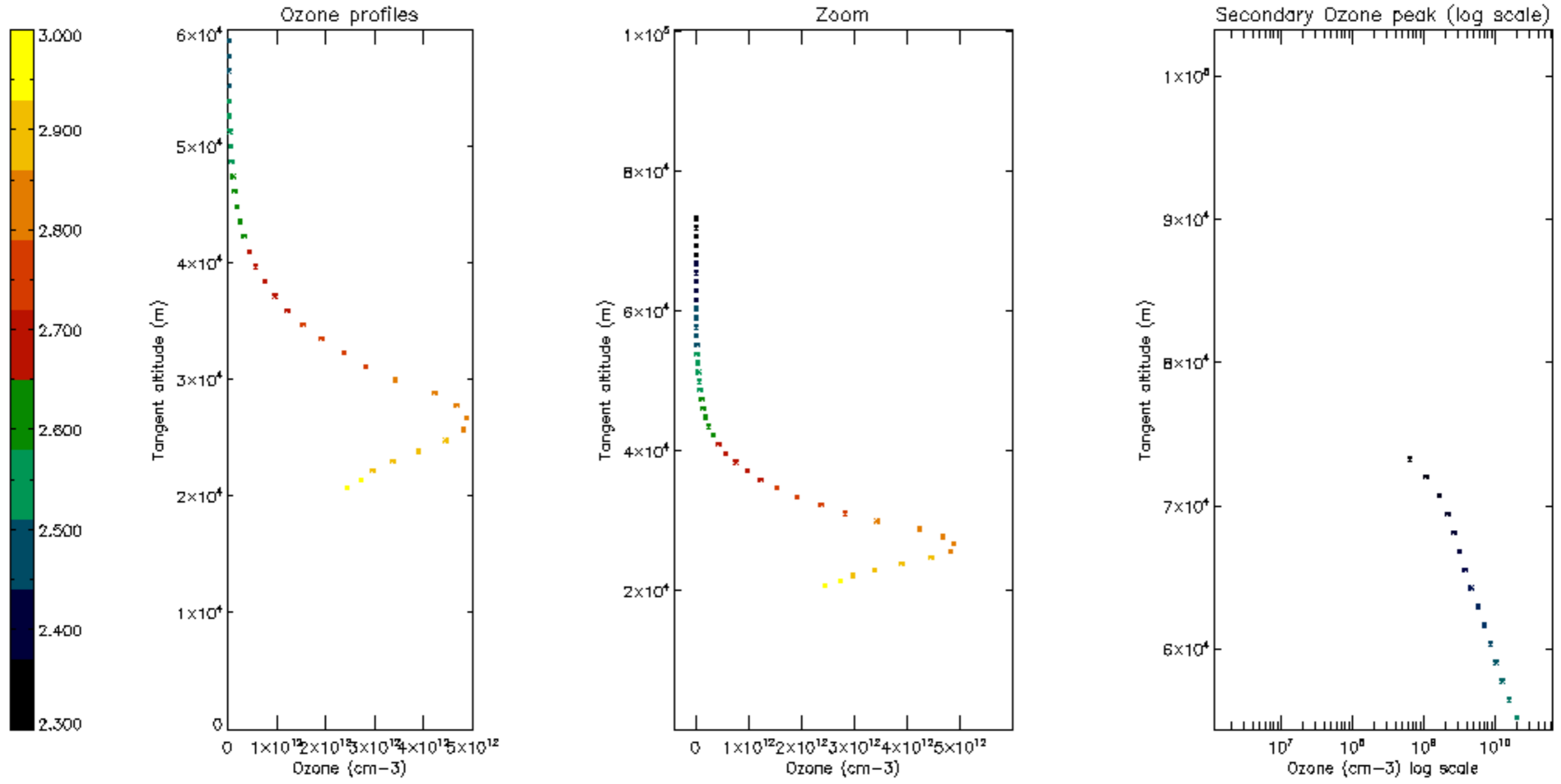
Percentage of saturation errors per profile

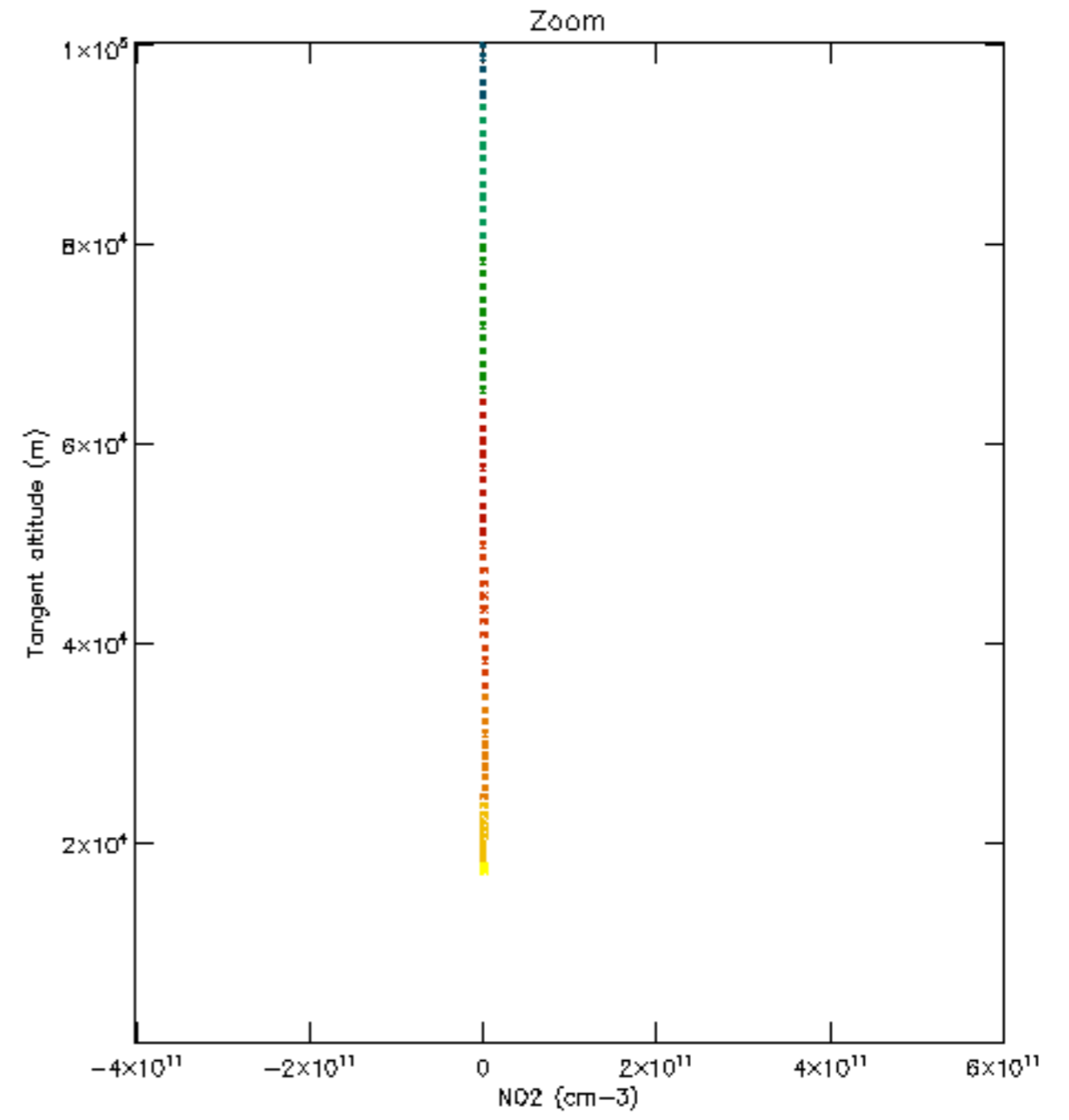
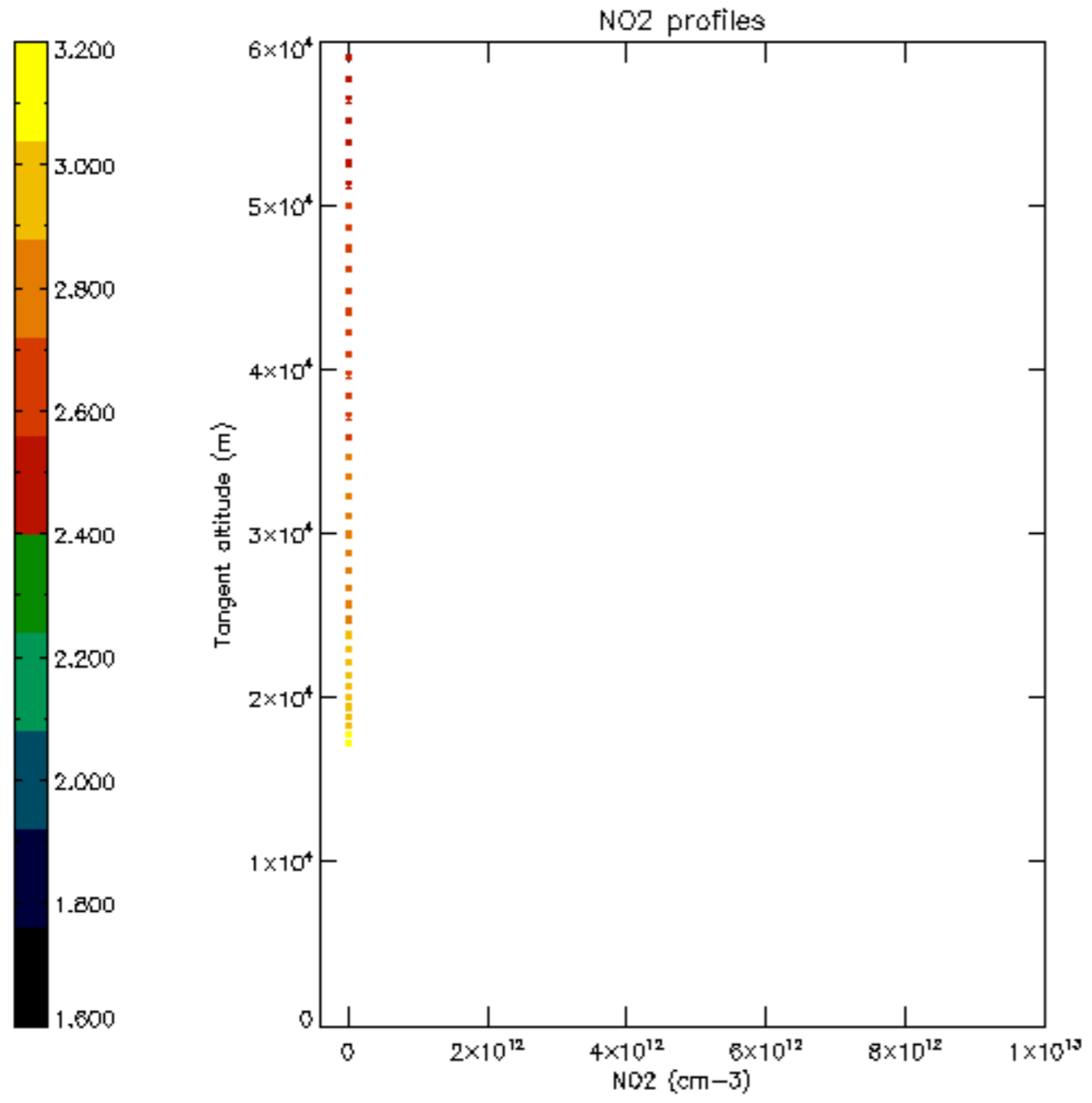


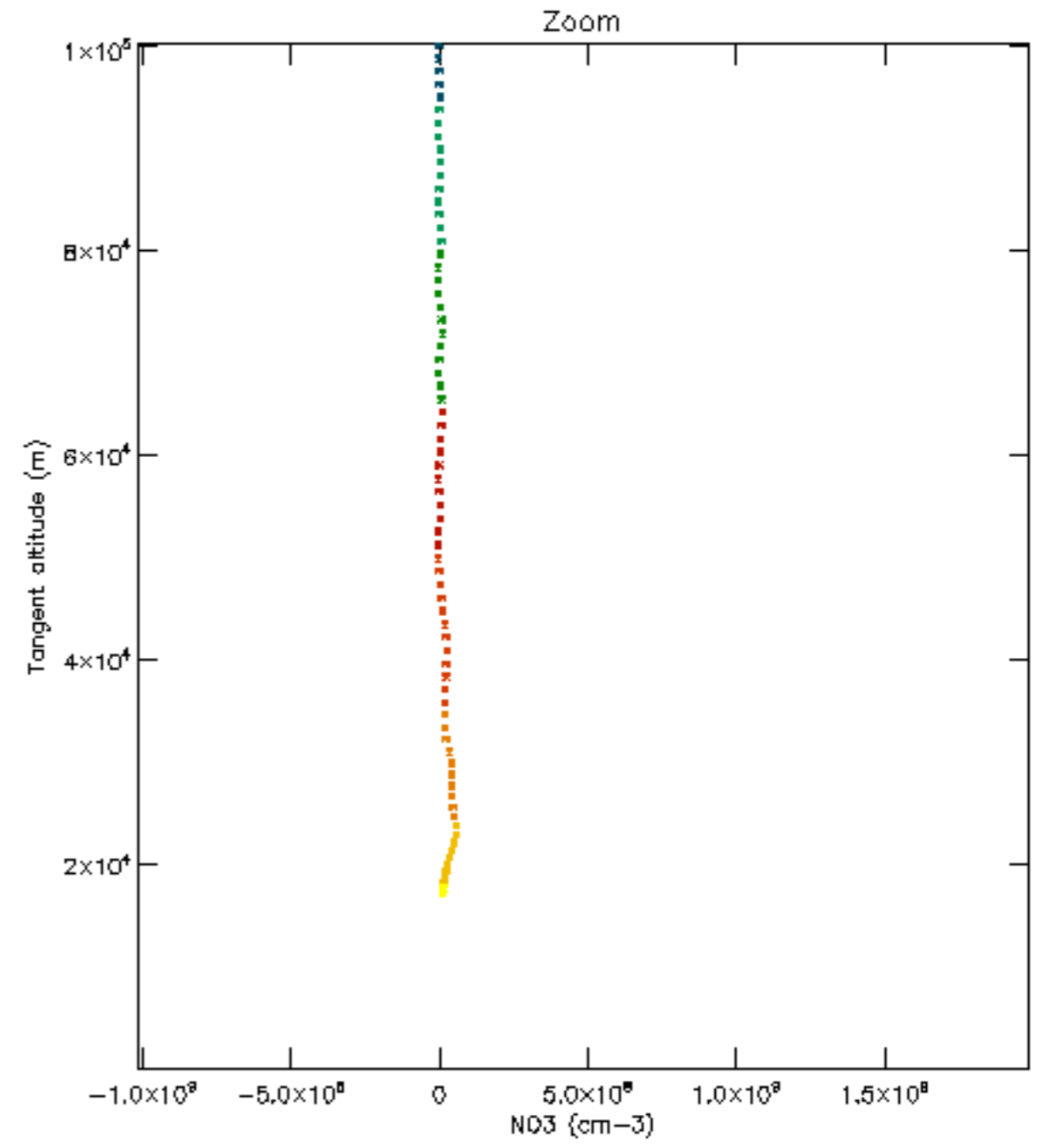
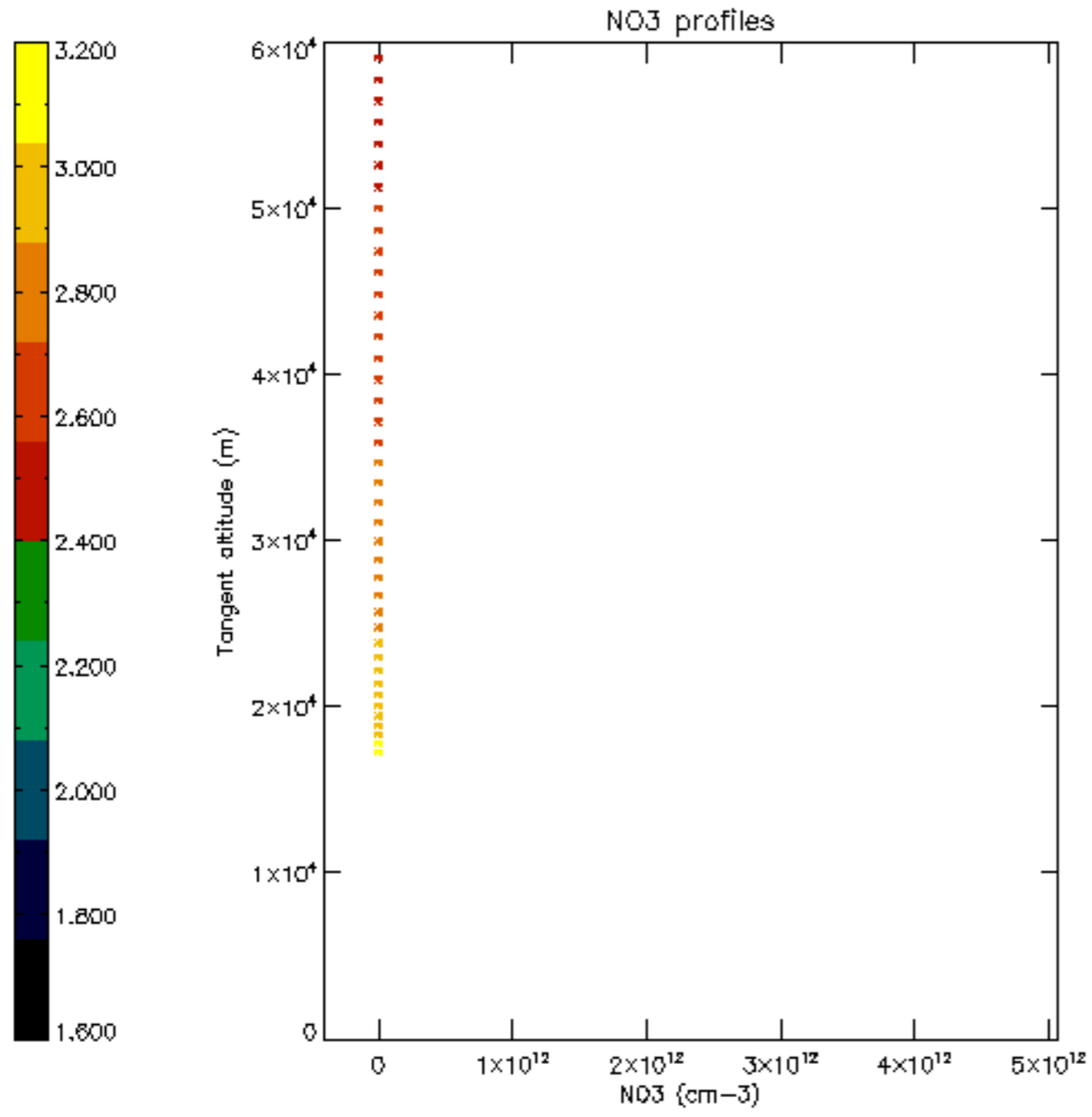


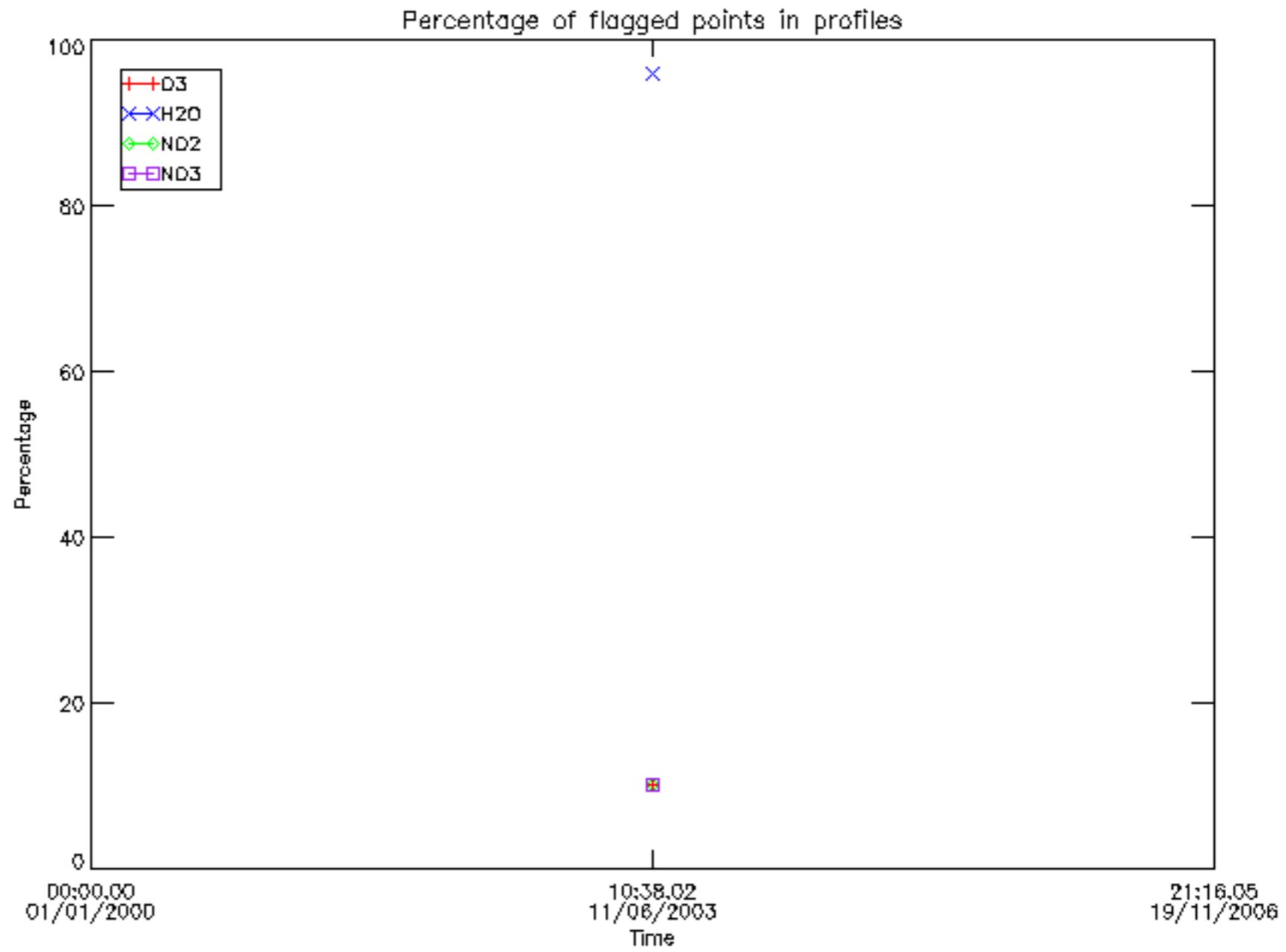




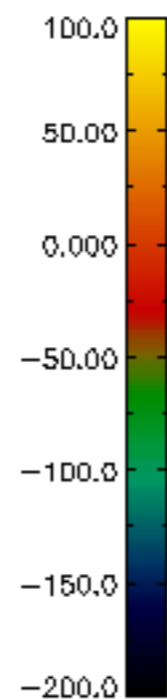
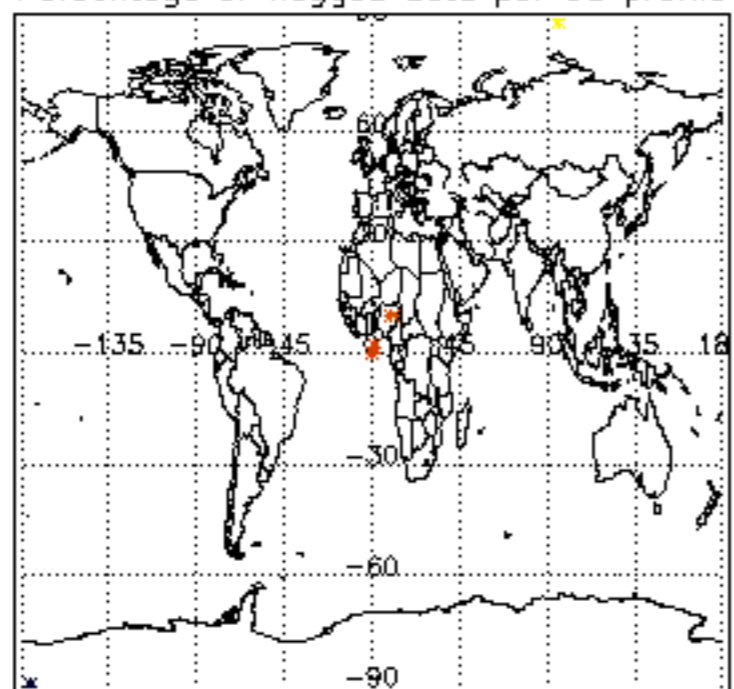




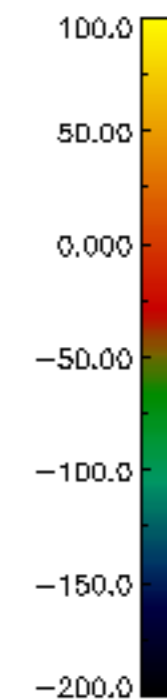
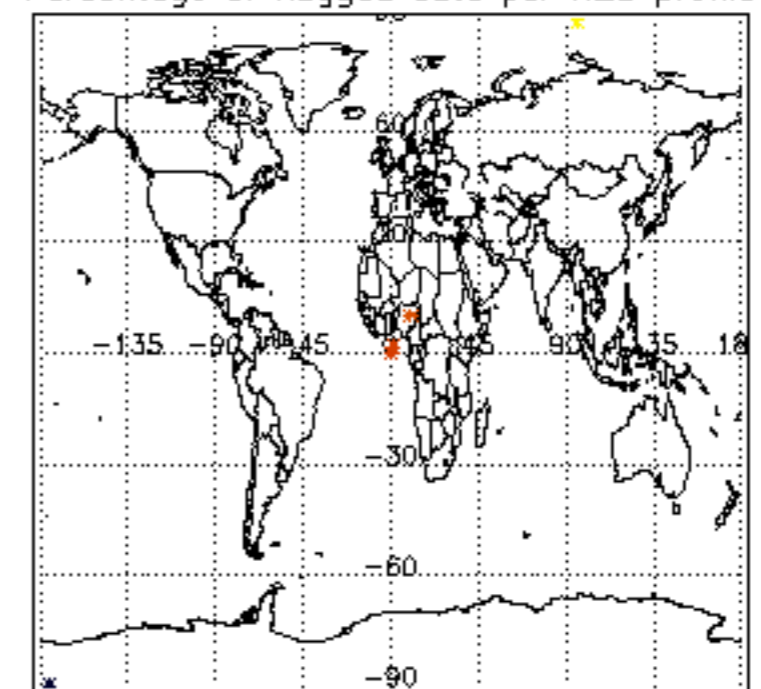




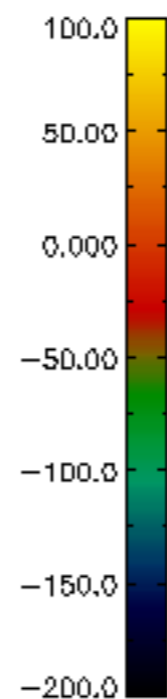
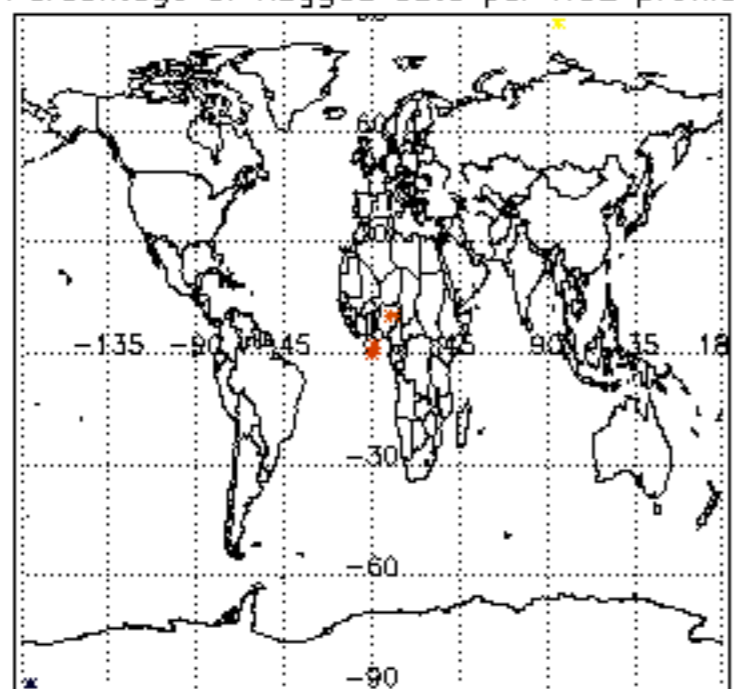
Percentage of flagged data per D3 profile



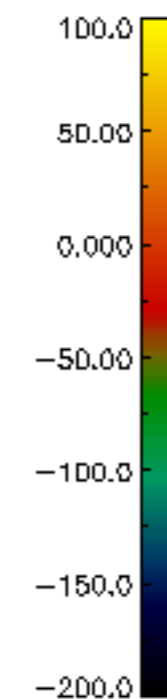
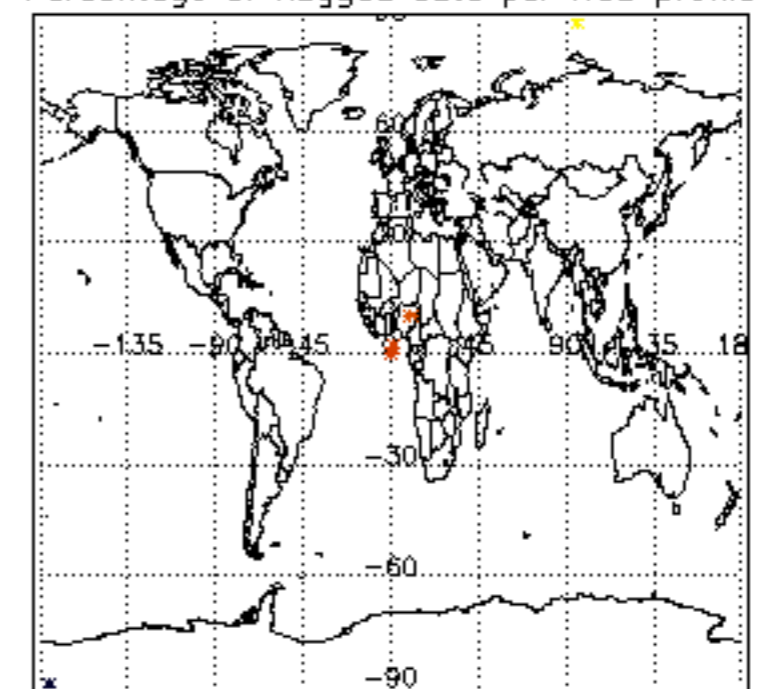
Percentage of flagged data per H2O profile

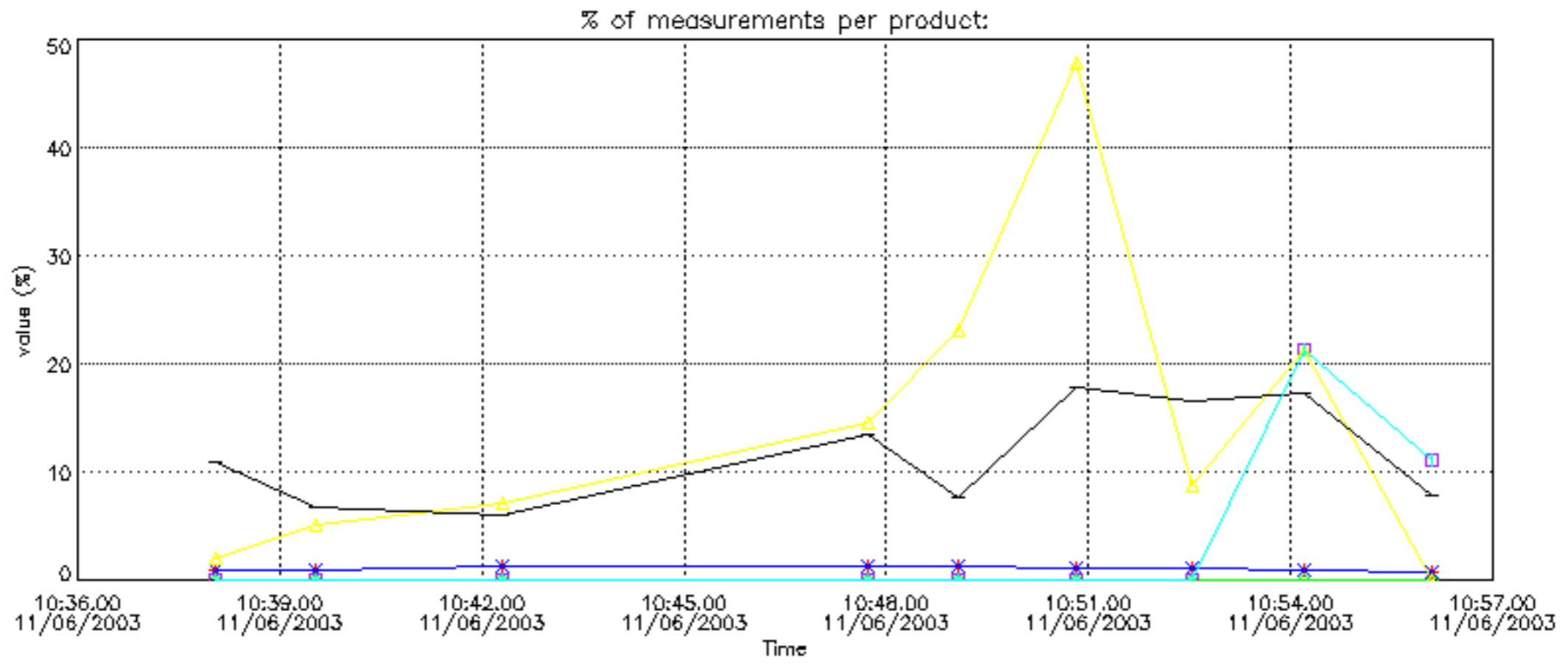
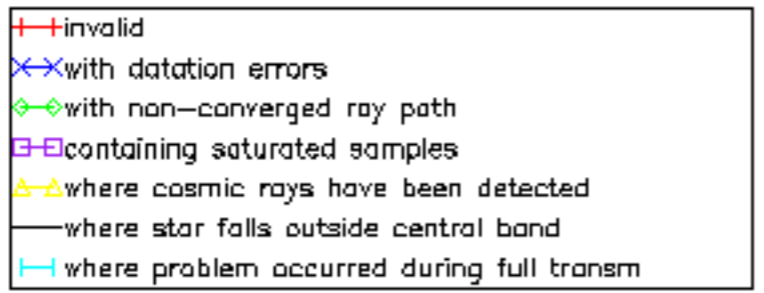


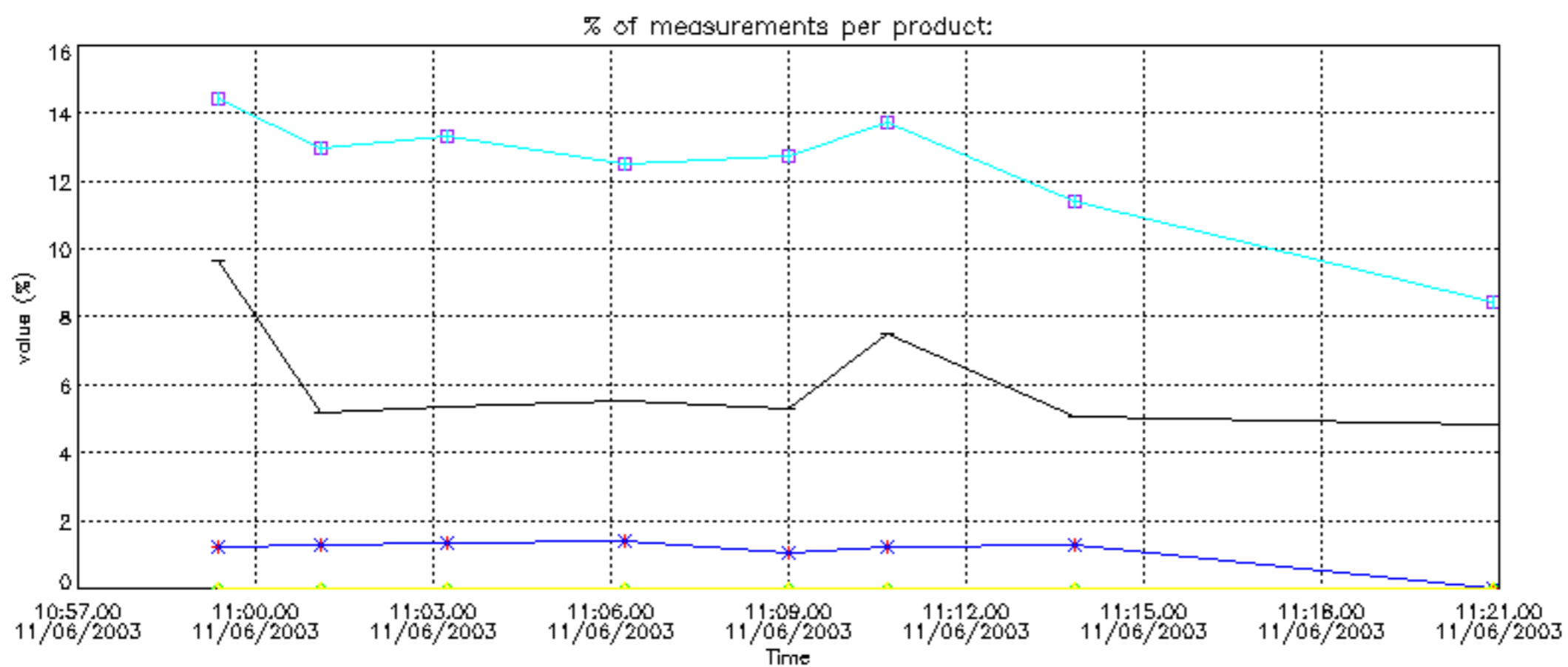
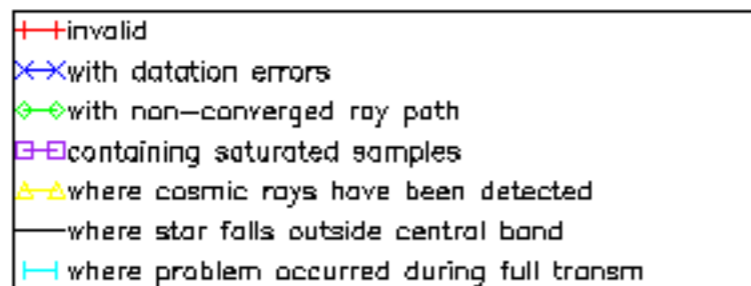
Percentage of flagged data per NO2 profile



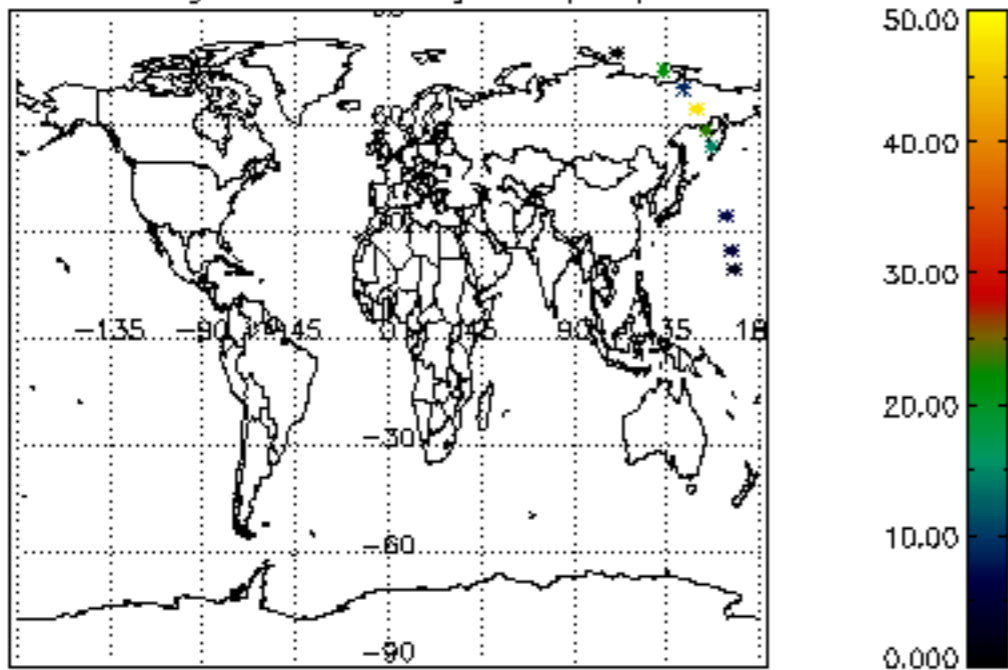
Percentage of flagged data per NO3 profile



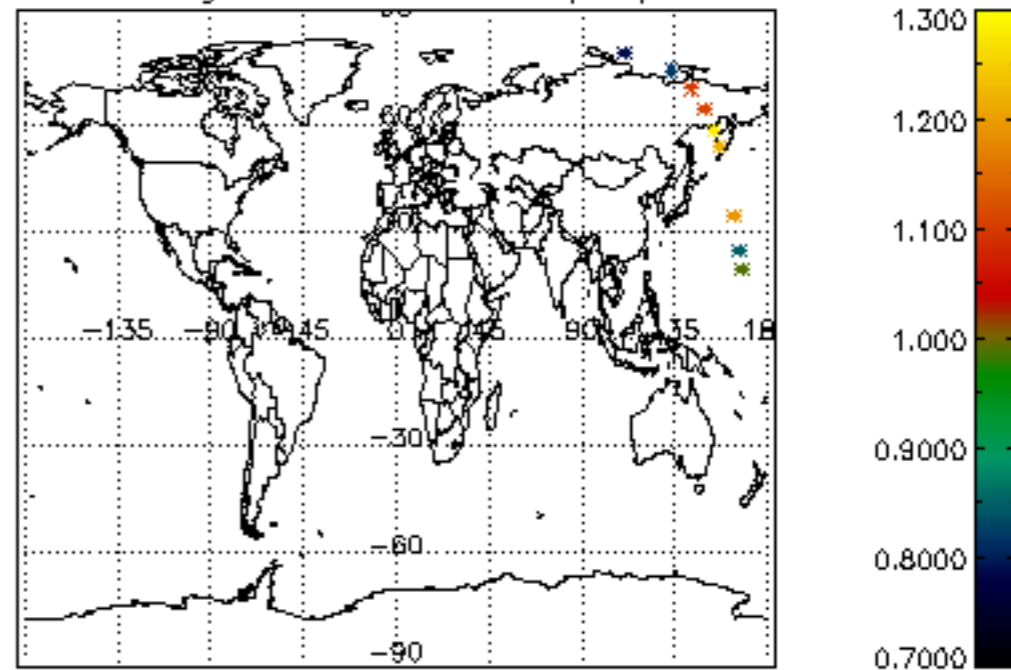




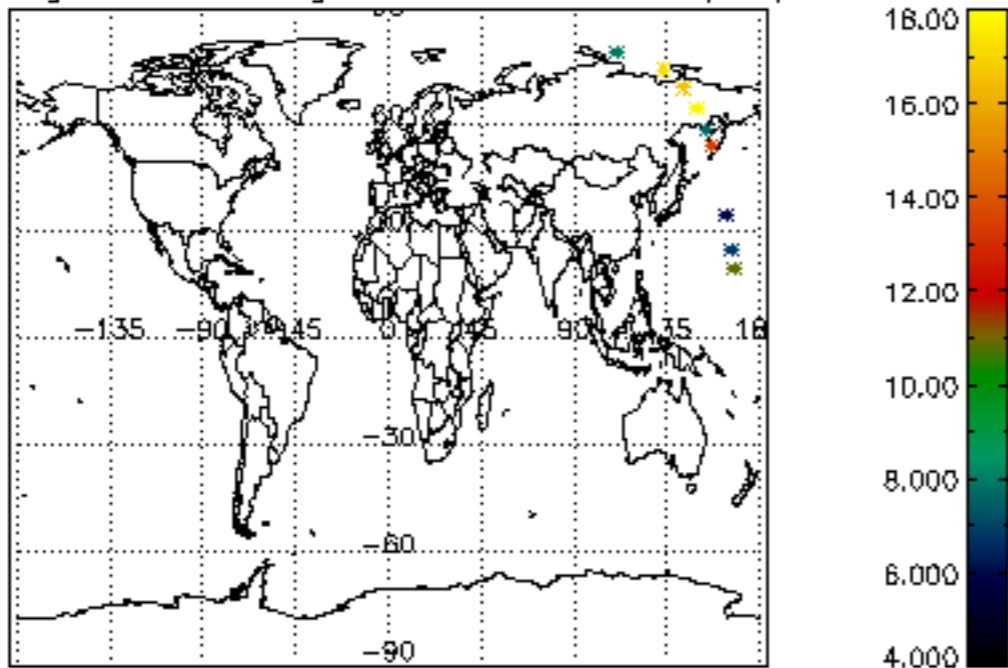
Percentage of cosmic ray hits per profile



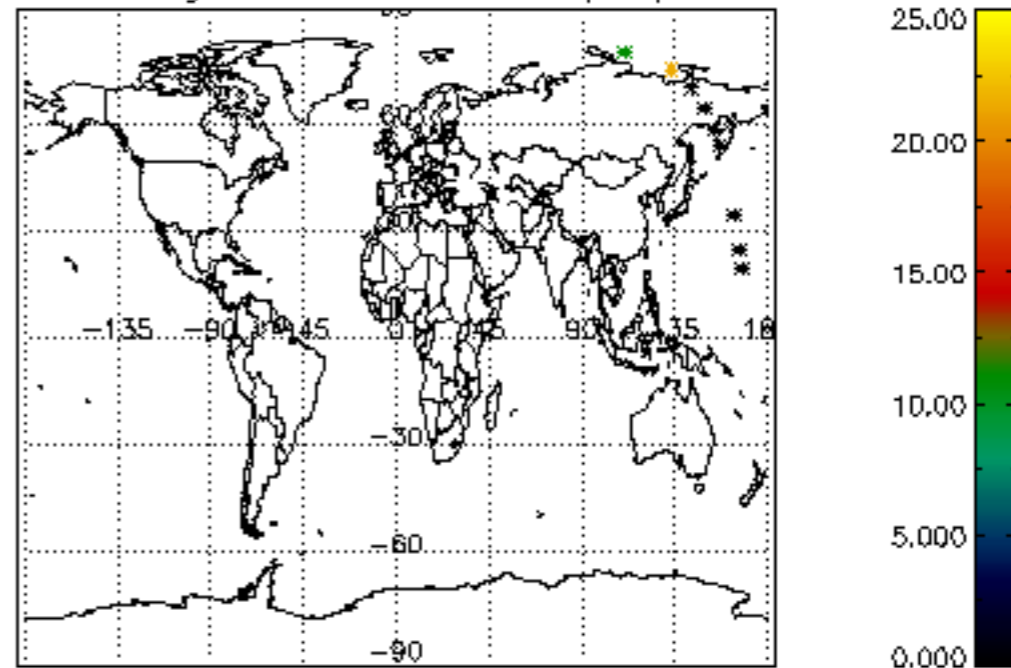
Percentage of datation errors per profile



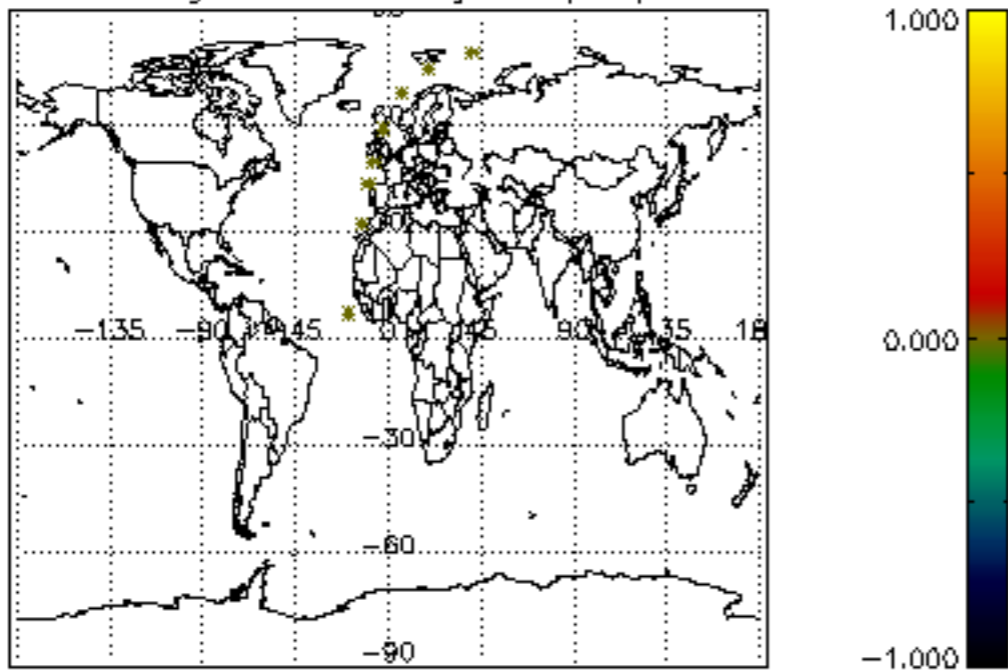
Percentage of star falling outside central band per profile



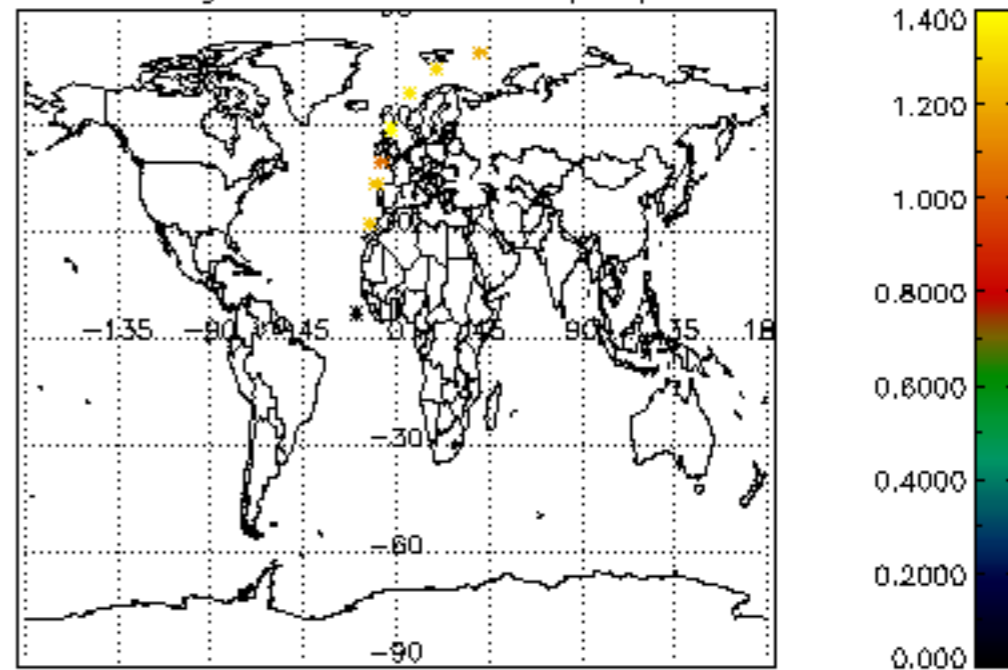
Percentage of saturation errors per profile



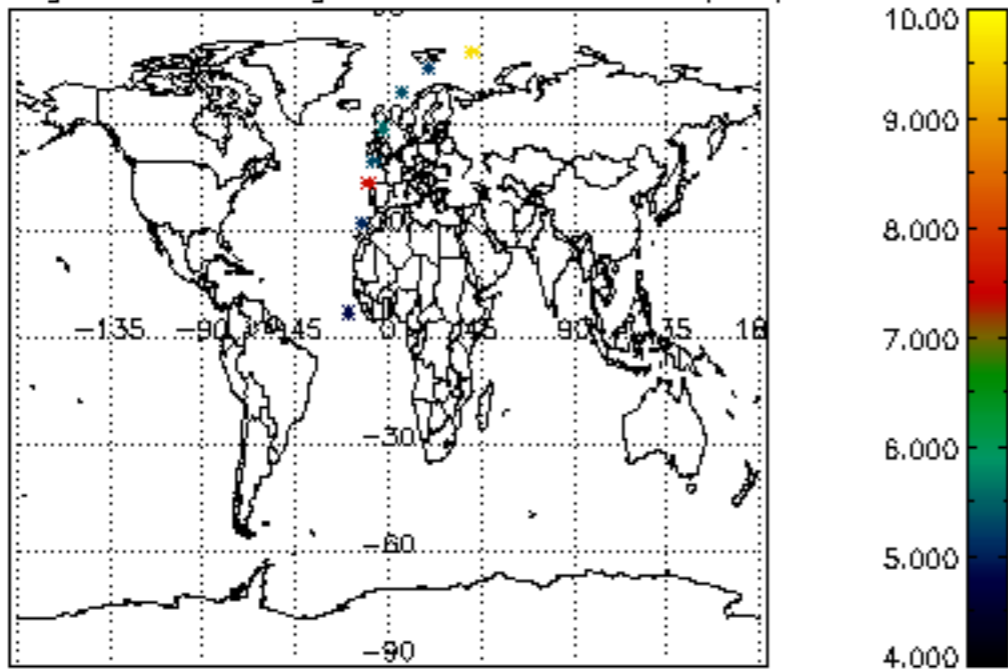
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

