

GOMOS Level 2 Daily Report

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

Item	Value
Time of report generation	24APR2013 14:14:15
Data source version	GOMOS/6.01
Start time of products	31-05-2011 (31MAY2011 00:00:00)
Stop time of products	01-06-2011 (01JUN2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	342
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

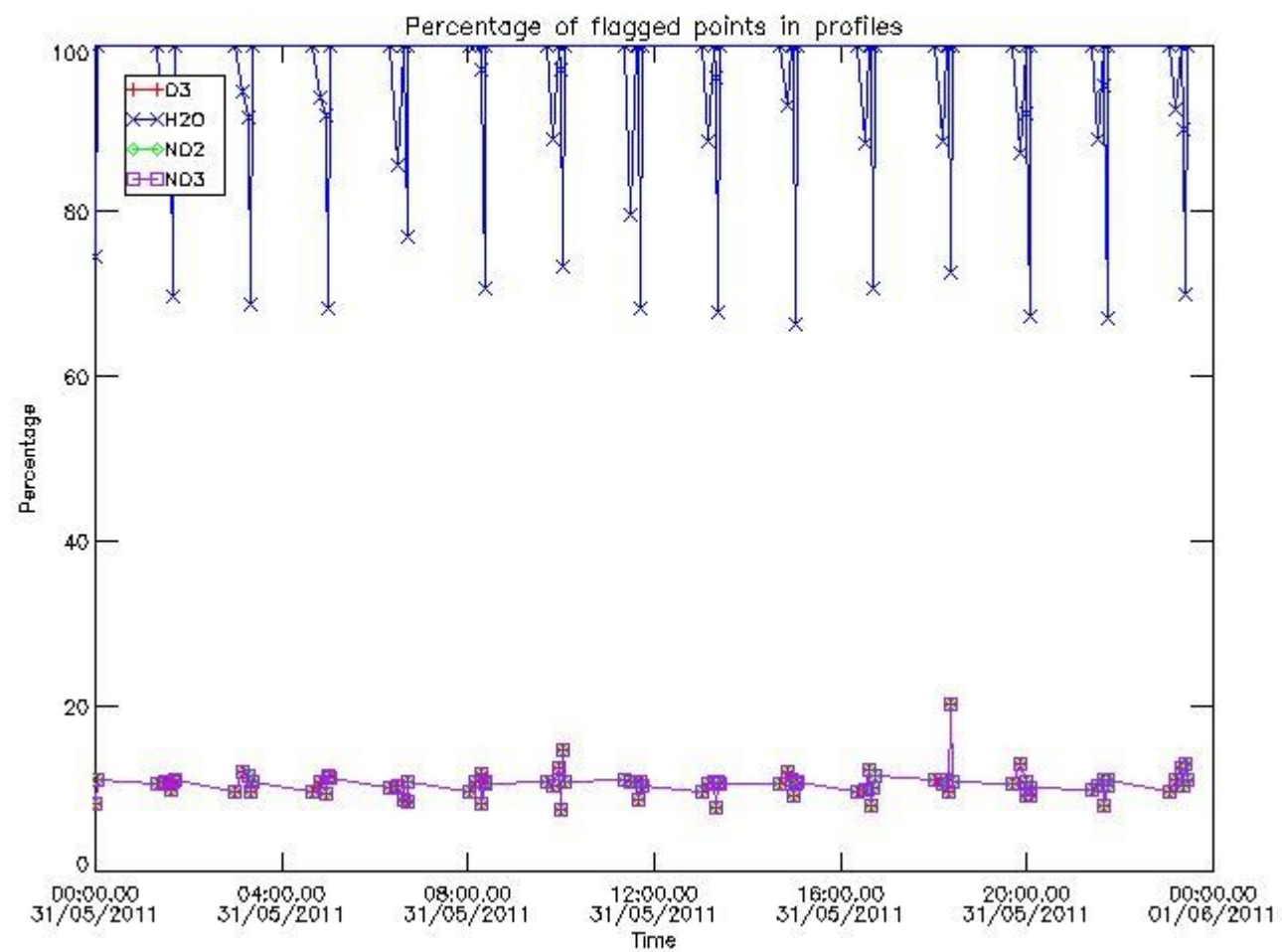
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110531_000015_000000633103_00074_48364_7543.N1	31-MAY-2011 00:00:15	Dark	63.000	63	Bet Gru	2.1500	2800.0	126	48364	No
2	GOM_NL__2PRFIN20110531_000206_000000463103_00074_48364_7544.N1	31-MAY-2011 00:02:06	Dark	46.000	31	Alp Gru	1.7340	15200.	92	48364	No
3	GOM_NL__2PRFIN20110531_000706_000000433103_00074_48364_7545.N1	31-MAY-2011 00:07:06	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	48364	No
4	GOM_NL__2PRFIN20110531_001432_000000423103_00074_48364_7546.N1	31-MAY-2011 00:14:32	Straylight	42.000	147	Alp Ara	2.8770	26000.	84	48364	No
5	GOM_NL__2PRFIN20110531_001613_000000463103_00074_48364_7547.N1	31-MAY-2011 00:16:13	Straylight	46.000	40	The Sco	1.8590	7100.0	92	48364	No
6	GOM_NL__2PRFIN20110531_001800_000000503103_00074_48364_7548.N1	31-MAY-2011 00:18:00	Twilight	49.500	25	35Lam Sco	1.6200	28000.	99	48364	No
7	GOM_NL__2PRFIN20110531_001947_000000463103_00074_48364_7549.N1	31-MAY-2011 00:19:47	Twilight	46.000	75	26Eps Sco	2.2910	4250.0	92	48364	No
8	GOM_NL__2PRFIN20110531_002149_000000433103_00074_48364_7550.N1	31-MAY-2011 00:21:49	Bright	42.500	136	23Tau Sco	2.8220	30000.	85	48364	No
9	GOM_NL__2PRFIN20110531_002354_000000413103_00074_48364_7551.N1	31-MAY-2011 00:23:54	Bright	41.000	80	7Del Sco	2.3160	30000.	82	48364	No
10	GOM_NL__2PRFIN20110531_002527_000000473103_00074_48364_7552.N1	31-MAY-2011 00:25:27	Bright	47.000	86	35Eta Oph	2.4300	10200.	94	48364	No
11	GOM_NL__2PRFIN20110531_002719_000000423103_00074_48364_7553.N1	31-MAY-2011 00:27:19	Bright	42.000	98	13Zet Oph	2.5710	30000.	84	48364	No
12	GOM_NL__2PRFIN20110531_002930_000000403103_00074_48364_7554.N1	31-MAY-2011 00:29:30	Bright	40.000	120	1Del Oph	2.7340	3200.0	80	48364	No
13	GOM_NL__2PRFIN20110531_003230_000000373103_00074_48364_7555.N1	31-MAY-2011 00:32:30	Bright	37.000	102	24Alp Ser	2.6000	4250.0	74	48364	No
14	GOM_NL__2PRFIN20110531_003824_000000373103_00074_48364_7556.N1	31-MAY-2011 00:38:24	Bright	37.000	67	5Alp CrB	2.2210	11000.	74	48364	No
15	GOM_NL__2PRFIN20110531_004104_000000423103_00074_48364_7557.N1	31-MAY-2011 00:41:04	Bright	41.500	133	40Zet Her	2.8070	6000.0	83	48364	No
16	GOM_NL__2PRFIN20110531_004858_000000393103_00074_48364_7558.N1	31-MAY-2011 00:48:58	Bright	39.000	119	14Eta Dra	2.7270	4700.0	78	48364	No
17	GOM_NL__2PRFIN20110531_005919_000000473103_00074_48364_7559.N1	31-MAY-2011 00:59:19	Bright	47.000	89	5Alp Cep	2.4510	8000.0	94	48364	No
18	GOM_NL__2PRFIN20110531_010417_000000563103_00074_48364_7560.N1	31-MAY-2011 01:04:17	Bright	56.000	76	27Gam Cas	2.3000	30000.	112	48364	No
19	GOM_NL__2PRFIN20110531_011159_000000433103_00074_48364_7561.N1	31-MAY-2011 01:11:59	Bright	42.500	53	43Bet And	2.0480	3300.0	85	48364	No
20	GOM_NL__2PRFIN20110531_011439_000000513103_00074_48364_7562.N1	31-MAY-2011 01:14:39	Twilight	51.000	58	21Alp And	2.0730	11000.	102	48364	No
21	GOM_NL__2PRFIN20110531_011933_000000533103_00074_48364_7563.N1	31-MAY-2011 01:19:33	Dark	52.500	140	88Gam Peg	2.8340	26000.	105	48364	No
22	GOM_NL__2PRFIN20110531_012832_000000473103_00074_48364_7564.N1	31-MAY-2011 01:28:32	Dark	46.500	52	16Bet Cet	2.0370	4500.0	93	48364	No
23	GOM_NL__2PRFIN20110531_013708_000000683103_00074_48364_7565.N1	31-MAY-2011 01:37:08	Dark	67.500	18	24Alp PsA	1.1660	9700.0	135	48364	No
24	GOM_NL__2PRFIN20110531_014030_000000473103_00075_48365_7557.N1	31-MAY-2011 01:40:30	Dark	46.500	63	Bet Gru	2.1500	2800.0	93	48365	No
25	GOM_NL__2PRFIN20110531_014221_000000463103_00075_48365_7558.N1	31-MAY-2011 01:42:21	Dark	45.500	31	Alp Gru	1.7340	15200.	91	48365	No
26	GOM_NL__2PRFIN20110531_014720_000000433103_00075_48365_7559.N1	31-MAY-2011 01:47:20	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	48365	No
27	GOM_NL__2PRFIN20110531_015447_000000423103_00075_48365_7560.N1	31-MAY-2011 01:54:47	Straylight	42.000	147	Alp Ara	2.8770	26000.	84	48365	No
28	GOM_NL__2PRFIN20110531_015627_000000463103_00075_48365_7561.N1	31-MAY-2011 01:56:27	Straylight	45.500	40	The Sco	1.8590	7100.0	91	48365	No
29	GOM_NL__2PRFIN20110531_015815_000000483103_00075_48365_7562.N1	31-MAY-2011 01:58:15	Twilight	47.500	25	35Lam Sco	1.6200	28000.	95	48365	No
30	GOM_NL__2PRFIN20110531_020002_000000483103_00075_48365_7563.N1	31-MAY-2011 02:00:02	Twilight	47.500	75	26Eps Sco	2.2910	4250.0	95	48365	No
31	GOM_NL__2PRFIN20110531_020203_000000443103_00075_48365_7564.N1	31-MAY-2011 02:02:03	Bright	44.000	136	23Tau Sco	2.8220	30000.	88	48365	No
32	GOM_NL__2PRFIN20110531_020408_000000423103_00075_48365_7565.N1	31-MAY-2011 02:04:08	Bright	42.000	80	7Del Sco	2.3160	30000.	84	48365	No
33	GOM_NL__2PRFIN20110531_020541_000000463103_00075_48365_7566.N1	31-MAY-2011 02:05:41	Bright	46.000	86	35Eta Oph	2.4300	10200.	92	48365	No
34	GOM_NL__2PRFIN20110531_020732_000000433103_00075_48365_7567.N1	31-MAY-2011 02:07:32	Bright	42.500	98	13Zet Oph	2.5710	30000.	85	48365	No
35	GOM_NL__2PRFIN20110531_020944_000000403103_00075_48365_7568.N1	31-MAY-2011 02:09:44	Bright	40.000	120	1Del Oph	2.7340	3200.0	80	48365	No
36	GOM_NL__2PRFIN20110531_021244_000000373103_00075_48365_7569.N1	31-MAY-2011 02:12:44	Bright	37.000	102	24Alp Ser	2.6000	4250.0	74	48365	No
37	GOM_NL__2PRFIN20110531_021837_000000393103_00075_48365_7570.N1	31-MAY-2011 02:18:37	Bright	39.000	67	5Alp CrB	2.2210	11000.	78	48365	No
38	GOM_NL__2PRFIN20110531_022117_000000453103_00075_48365_7571.N1	31-MAY-2011 02:21:17	Bright	44.500	133	40Zet Her	2.8070	6000.0	89	48365	No
39	GOM_NL__2PRFIN20110531_022911_000000383103_00075_48365_7572.N1	31-MAY-2011 02:29:11	Bright	38.000	119	14Eta Dra	2.7270	4700.0	76	48365	No
40	GOM_NL__2PRFIN20110531_023933_000000463103_00075_48365_7573.N1	31-MAY-2011 02:39:33	Bright	46.000	89	5Alp Cep	2.4510	8000.0	92	48365	No
41	GOM_NL__2PRFIN20110531_024431_000000563103_00075_48365_7574.N1	31-MAY-2011 02:44:31	Bright	56.000	76	27Gam Cas	2.3000	30000.	112	48365	No
42	GOM_NL__2PRFIN20110531_025214_000000423103_00075_48365_7575.N1	31-MAY-2011 02:52:14	Bright	42.000	53	43Bet And	2.0480	3300.0	84	48365	No

338	GOM_NL__2PRFIN20110531_234712_000000453103_00088_48378_7964.N1	31-MAY-2011 23:47:12	Bright	44.500	80	7Del Sco	2.3160	30000.	89	48378	No
339	GOM_NL__2PRFIN20110531_234844_000000463103_00088_48378_7965.N1	31-MAY-2011 23:48:44	Bright	45.500	86	35Eta Oph	2.4300	10200.	91	48378	No
340	GOM_NL__2PRFIN20110531_235035_000000423103_00088_48378_7966.N1	31-MAY-2011 23:50:35	Bright	42.000	98	13Zet Oph	2.5710	30000.	84	48378	No
341	GOM_NL__2PRFIN20110531_235246_000000393103_00088_48378_7967.N1	31-MAY-2011 23:52:46	Bright	39.000	120	1Del Oph	2.7340	3200.0	78	48378	No
342	GOM_NL__2PRFIN20110531_235546_000000373103_00088_48378_7968.N1	31-MAY-2011 23:55:46	Bright	37.000	102	24Alp Ser	2.6000	4250.0	74	48378	No

3. Quality information per product

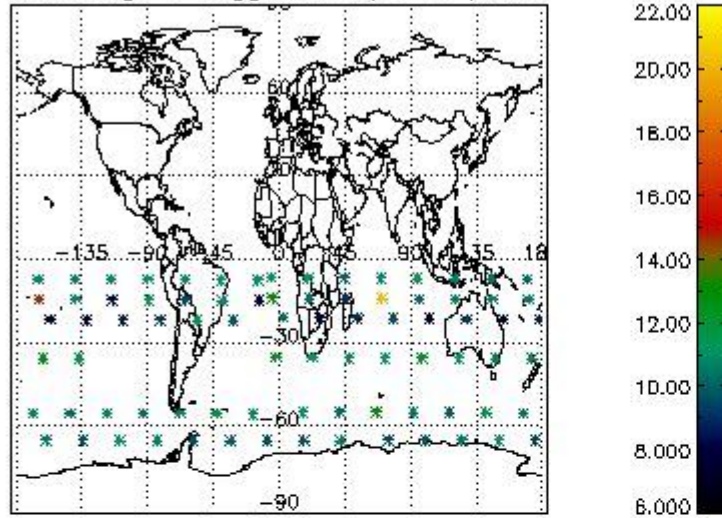
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

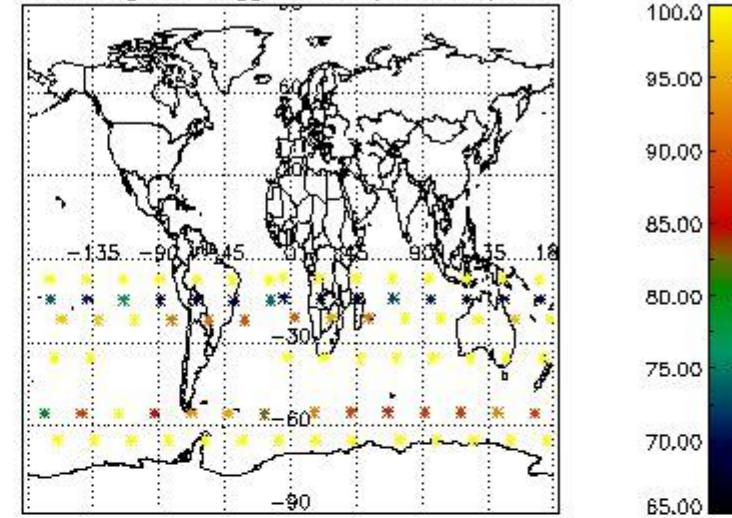


3.2 Plot quality information per product (world map)

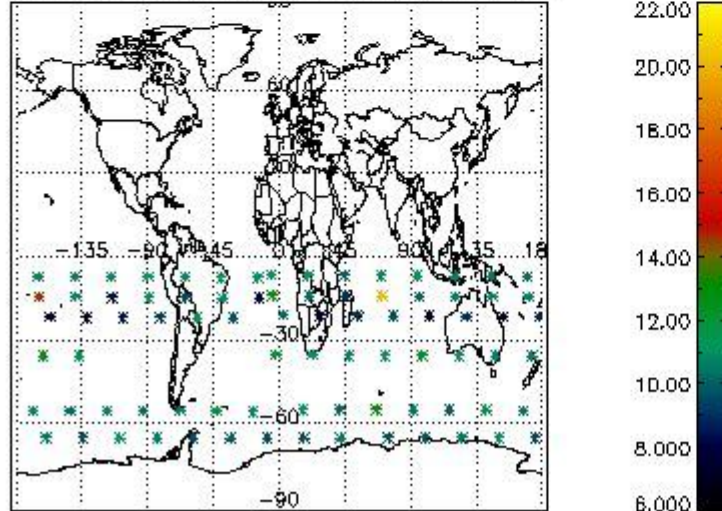
Percentage of flagged data per O3 profile



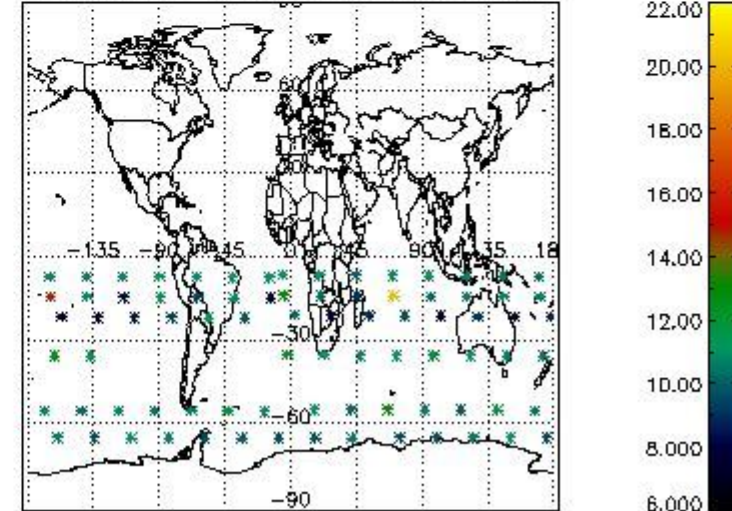
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

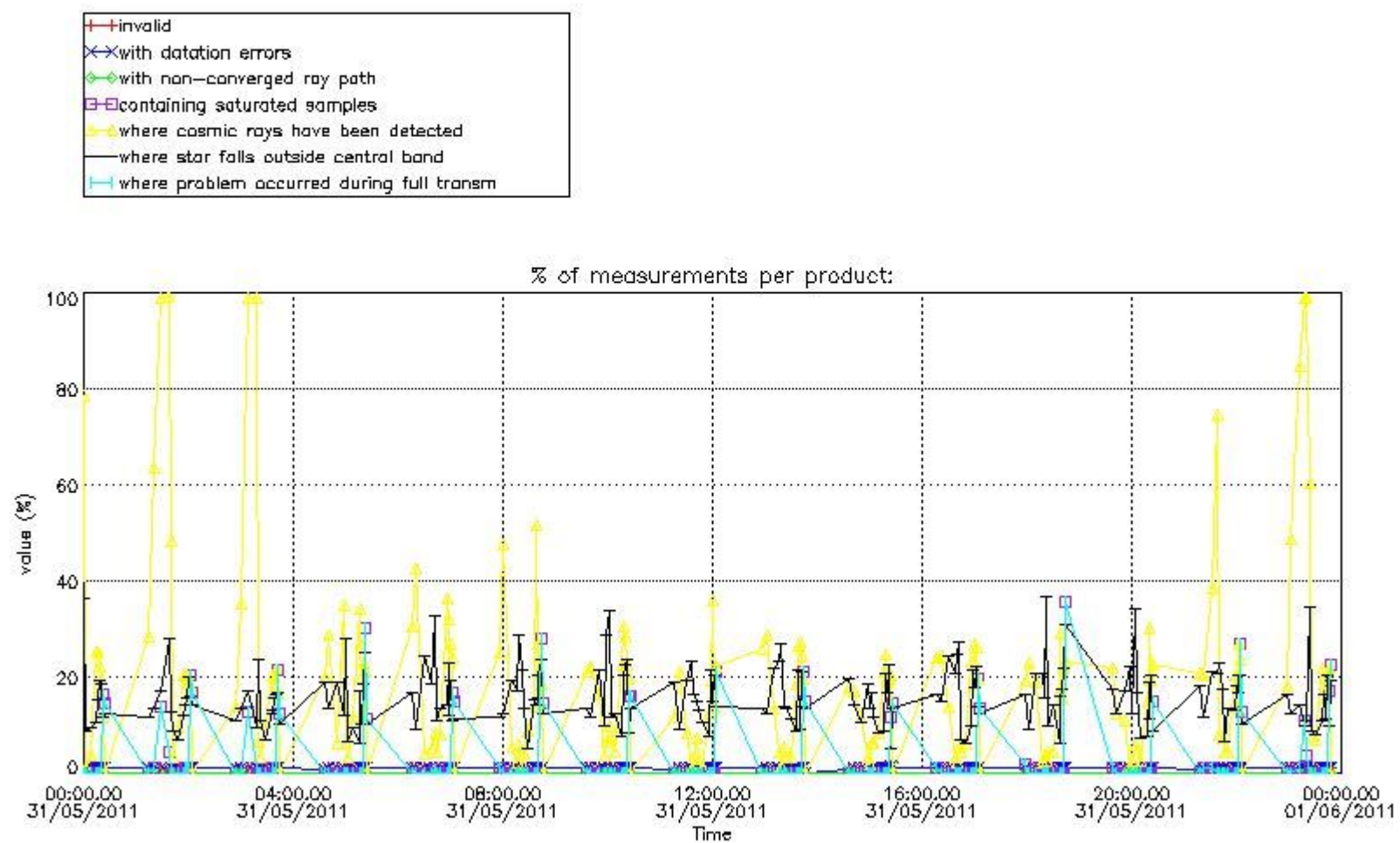


4. Level 1 quality information per product

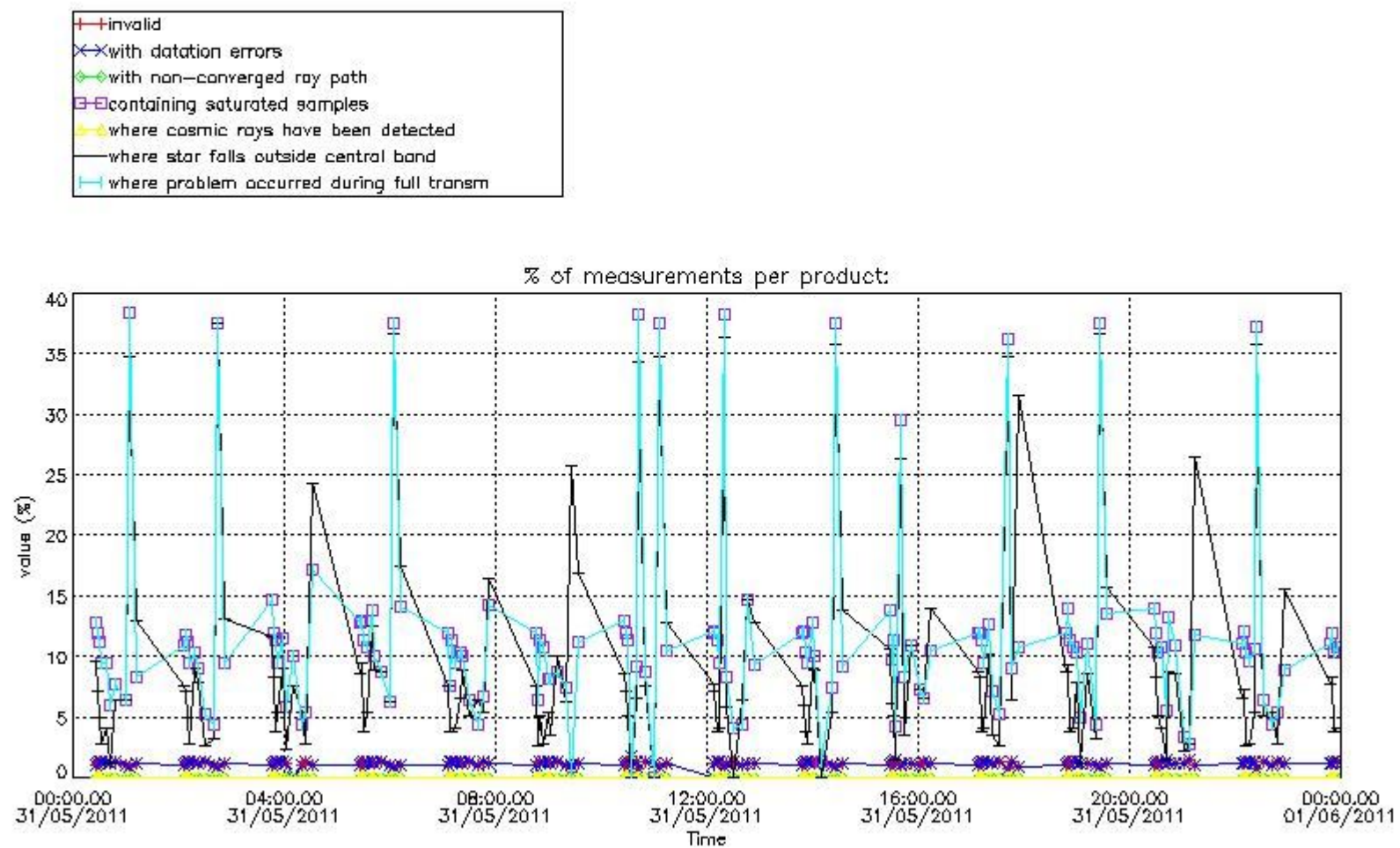
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



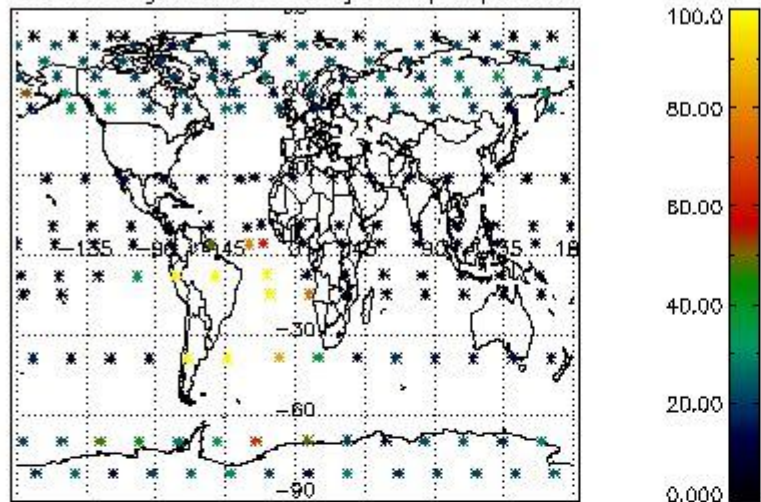
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



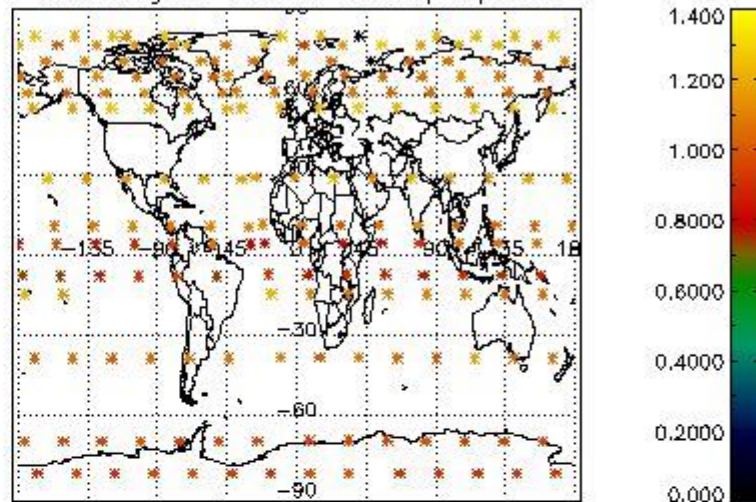
4.2 Plot quality information per product coming from level 1b processing (world map)

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

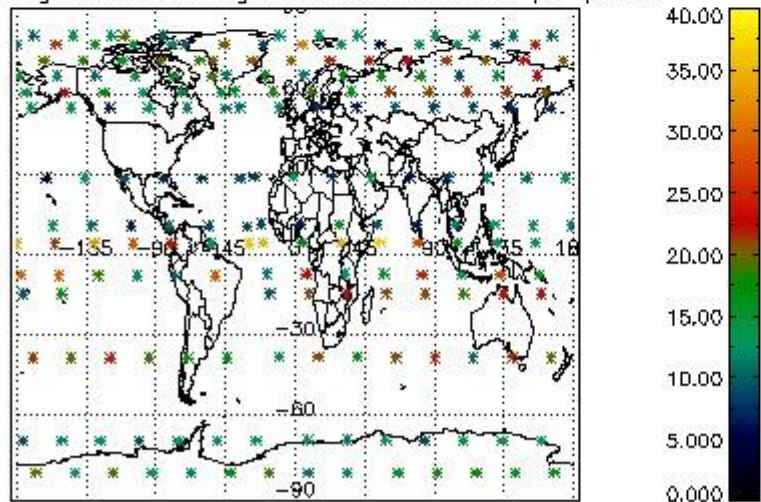
Percentage of cosmic ray hits per profile



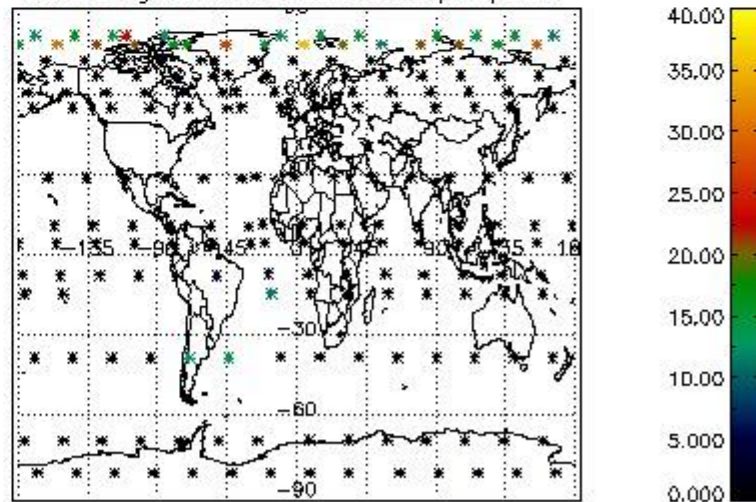
Percentage of datation errors per profile



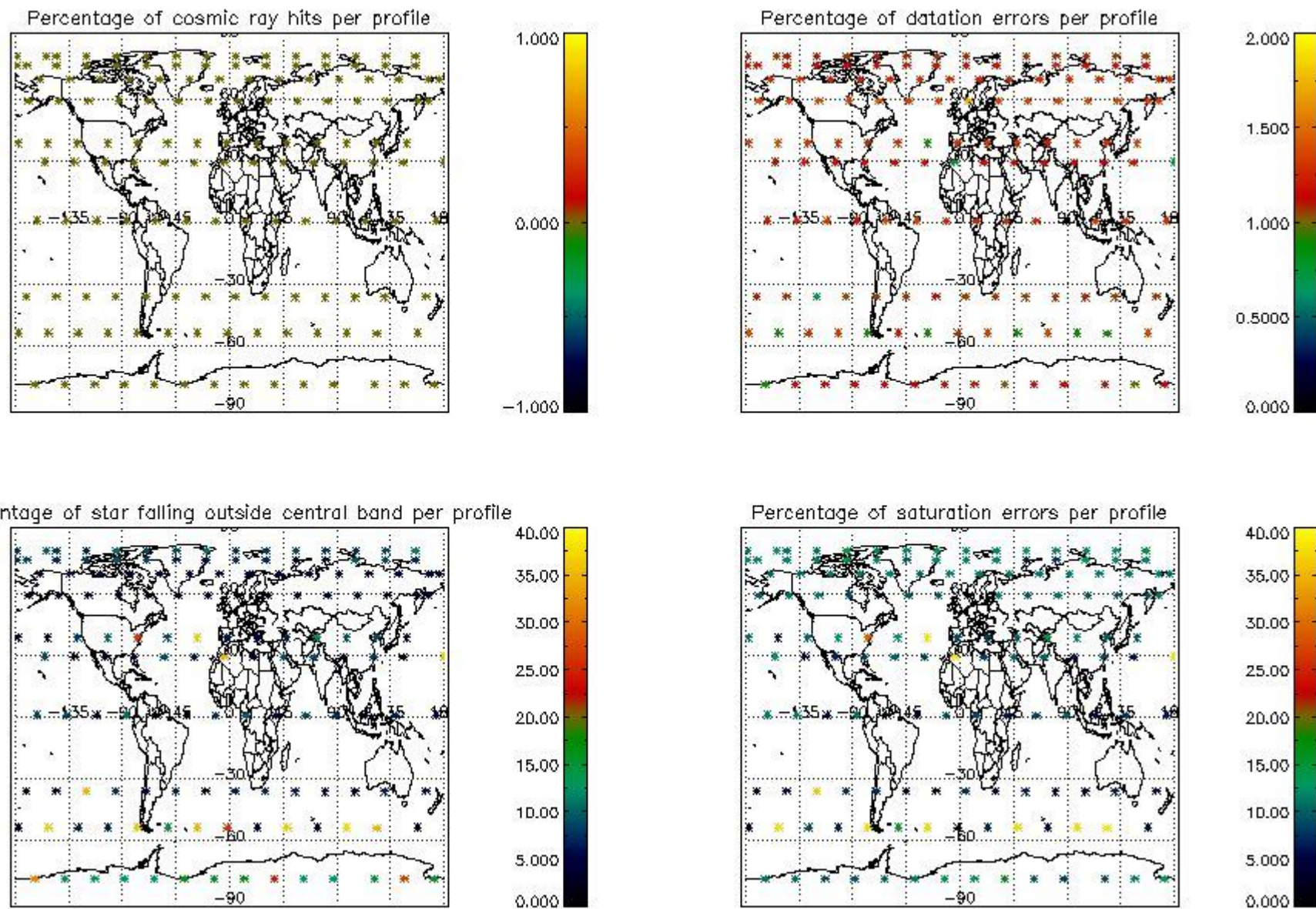
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

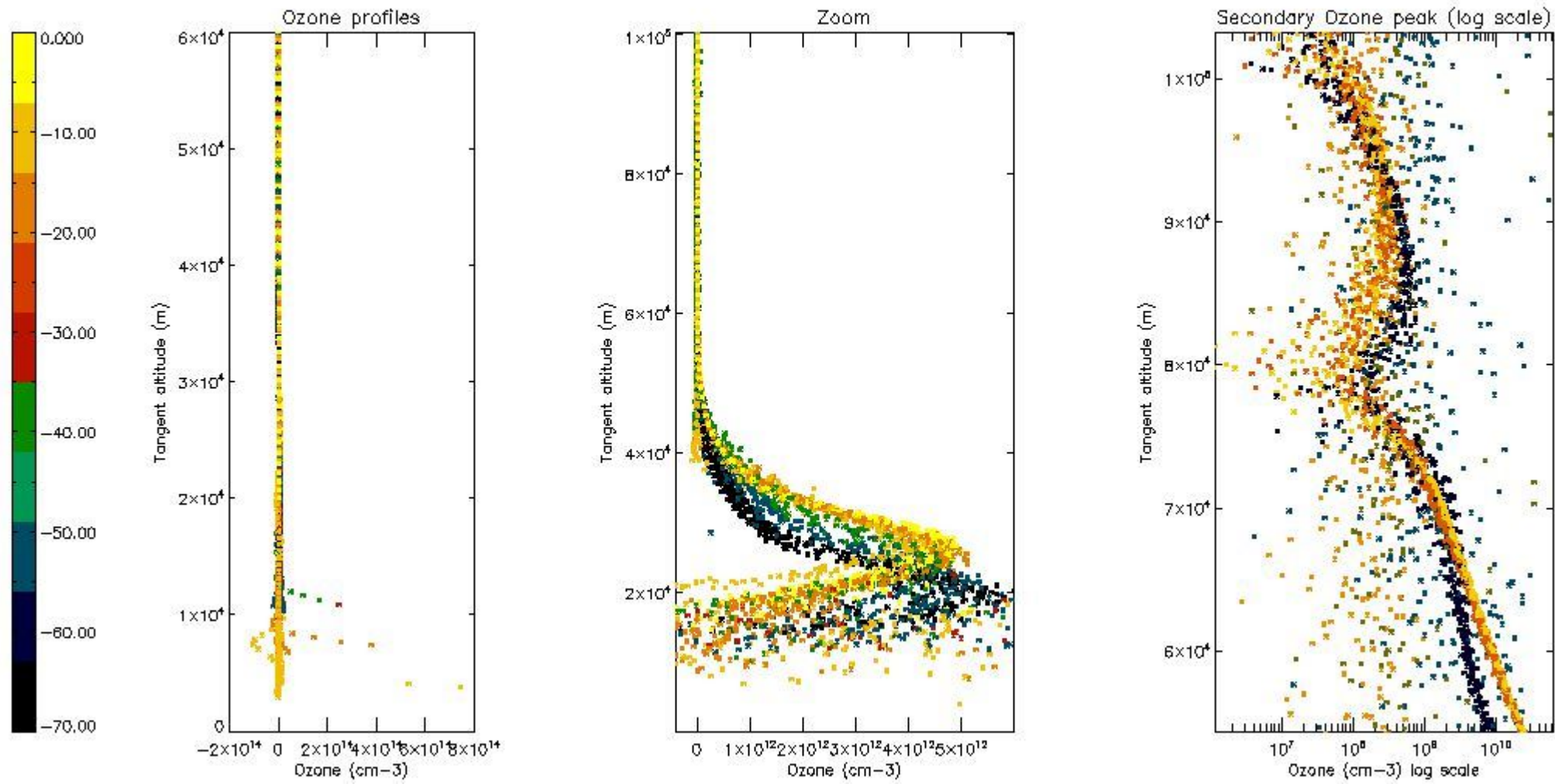
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	28
STD < 20	13

STD < 10	9
STD < 5	6

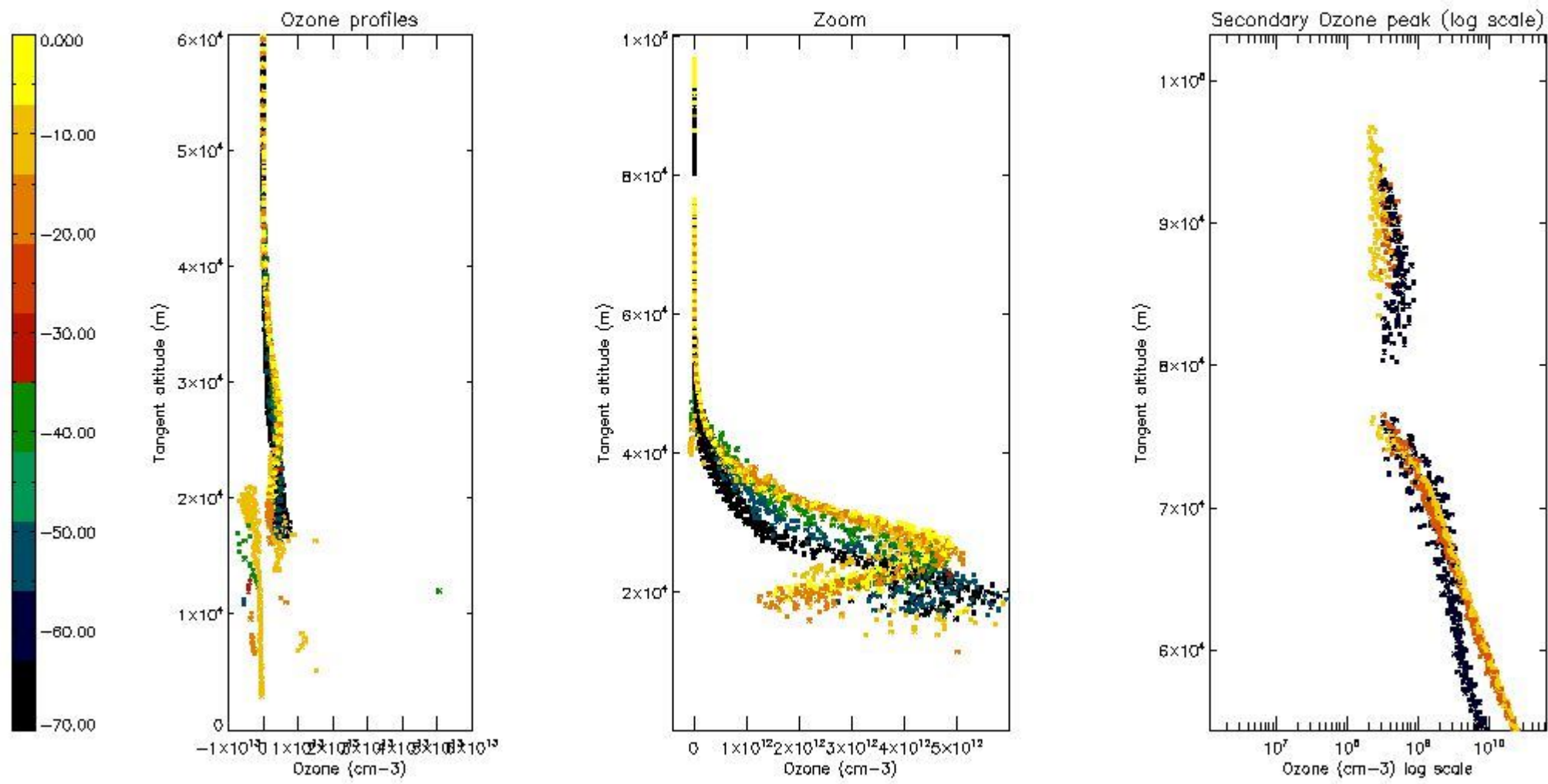
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



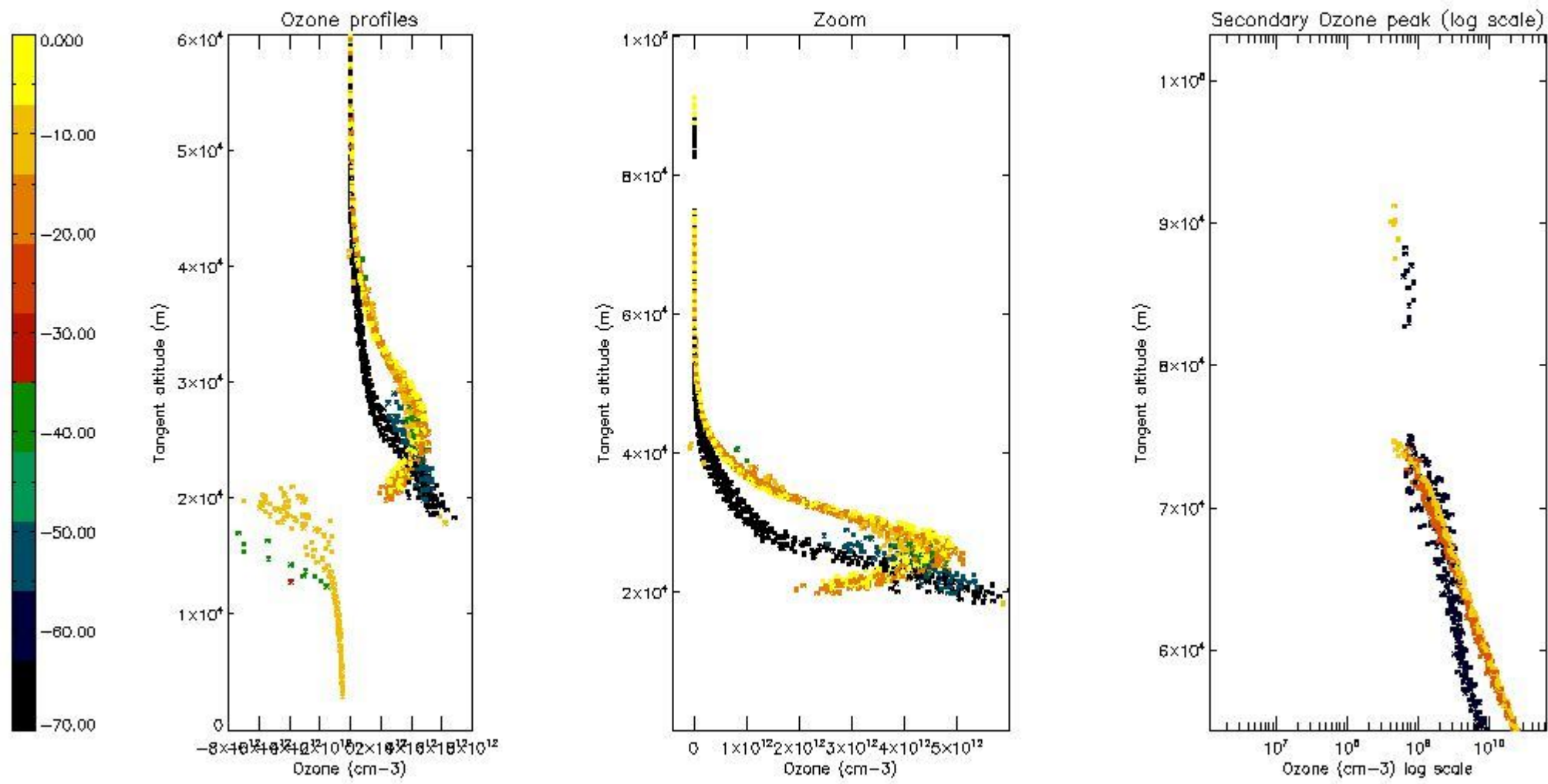
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



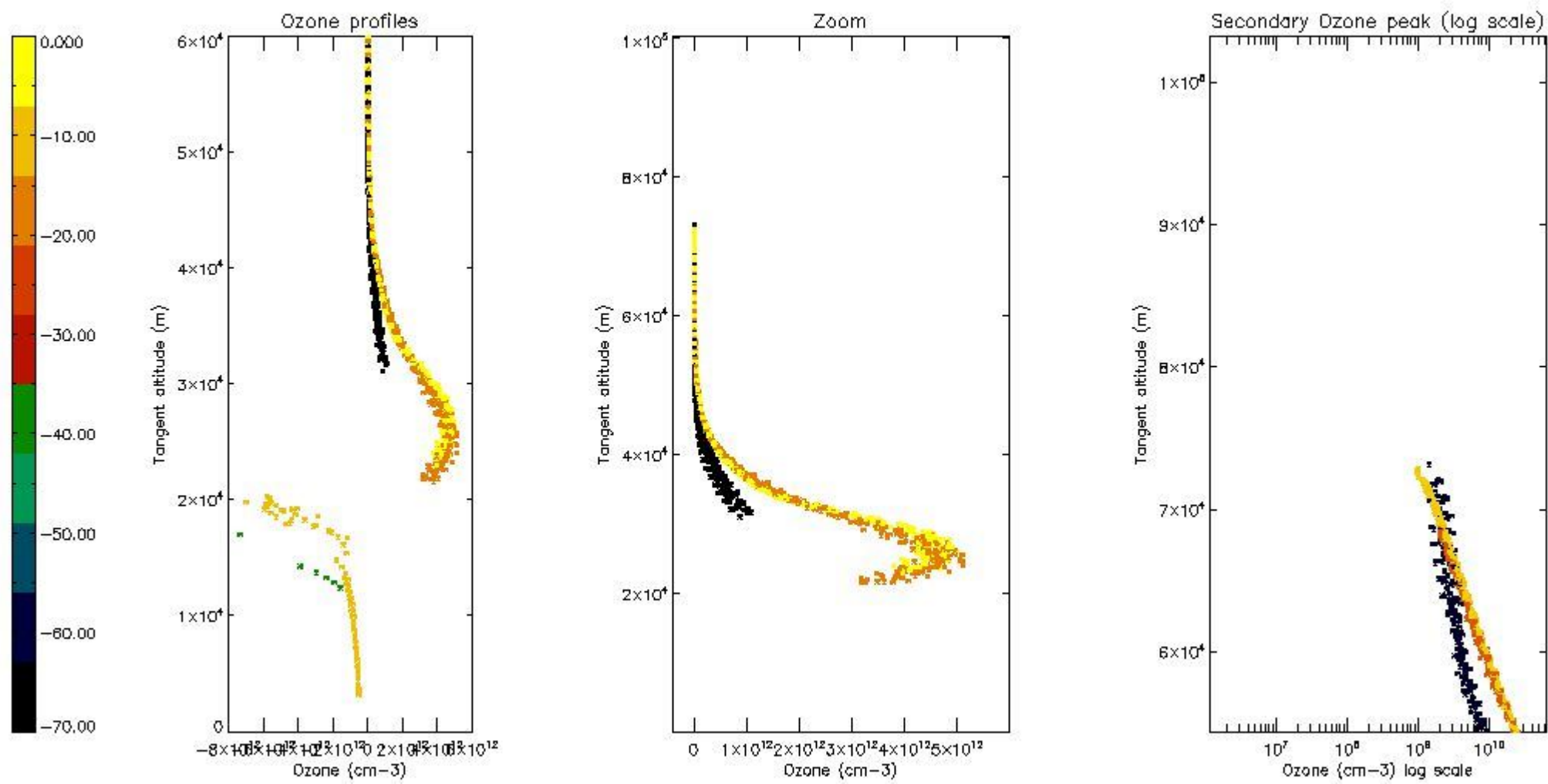
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



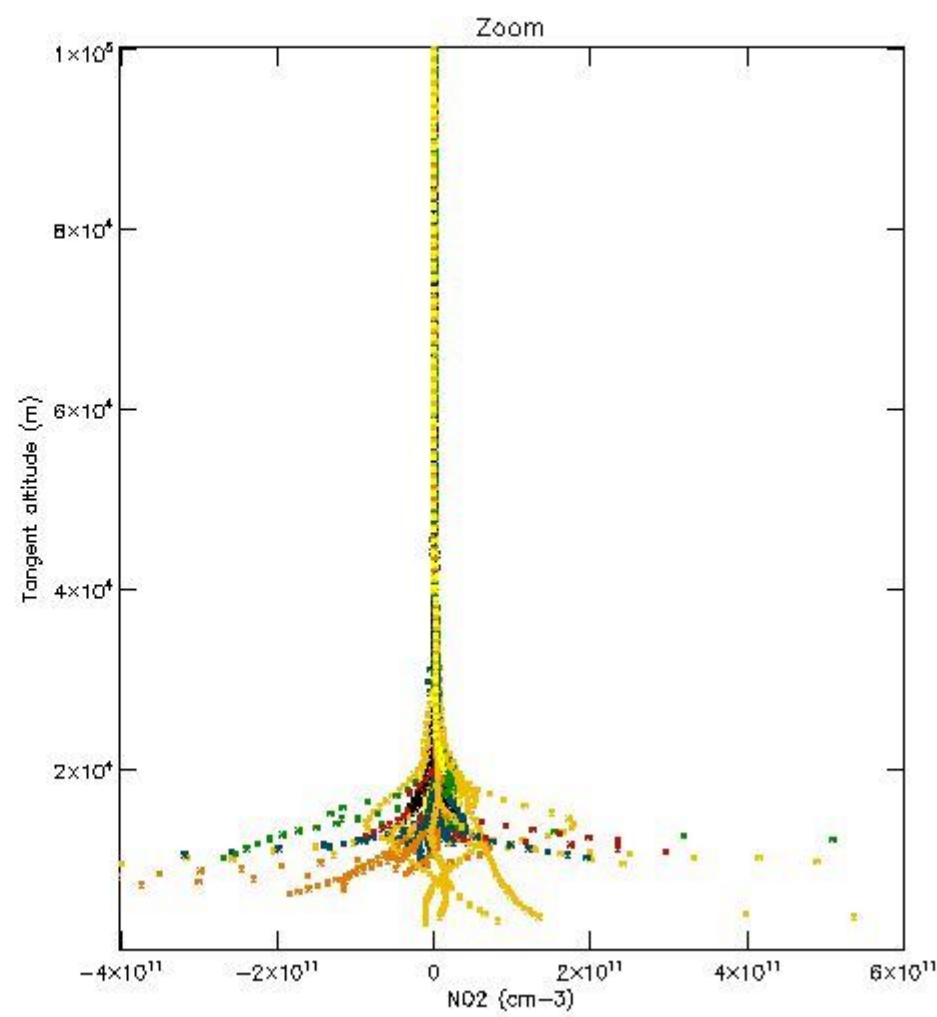
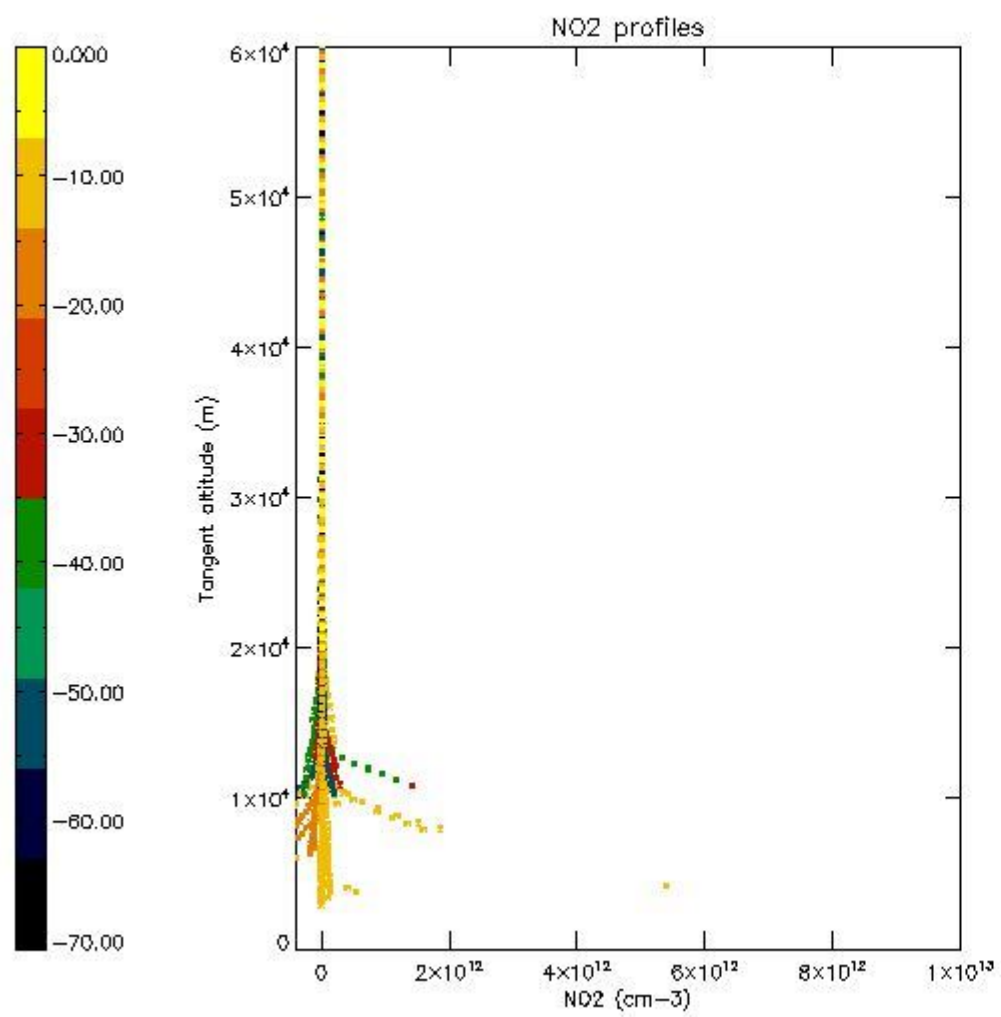
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



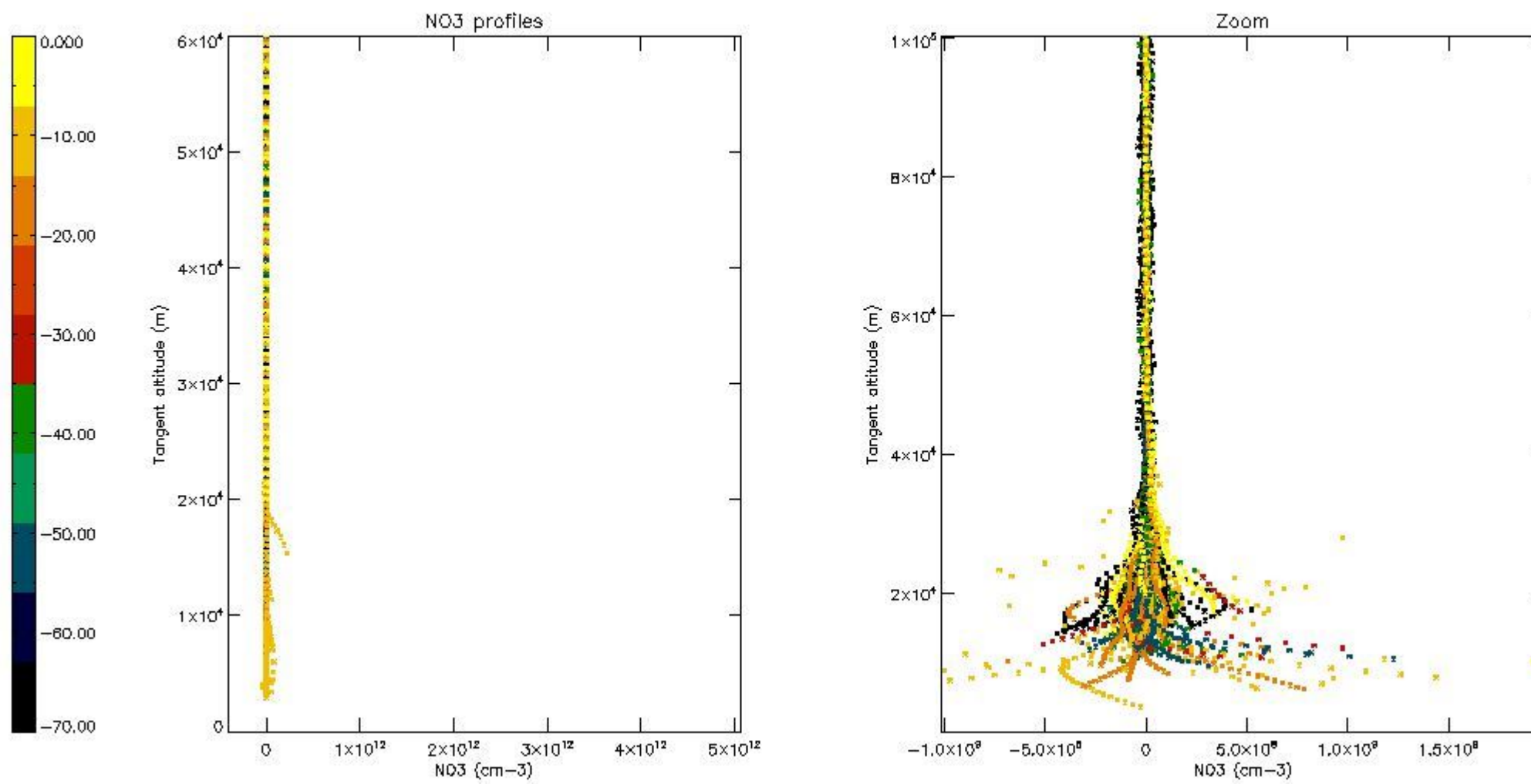
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



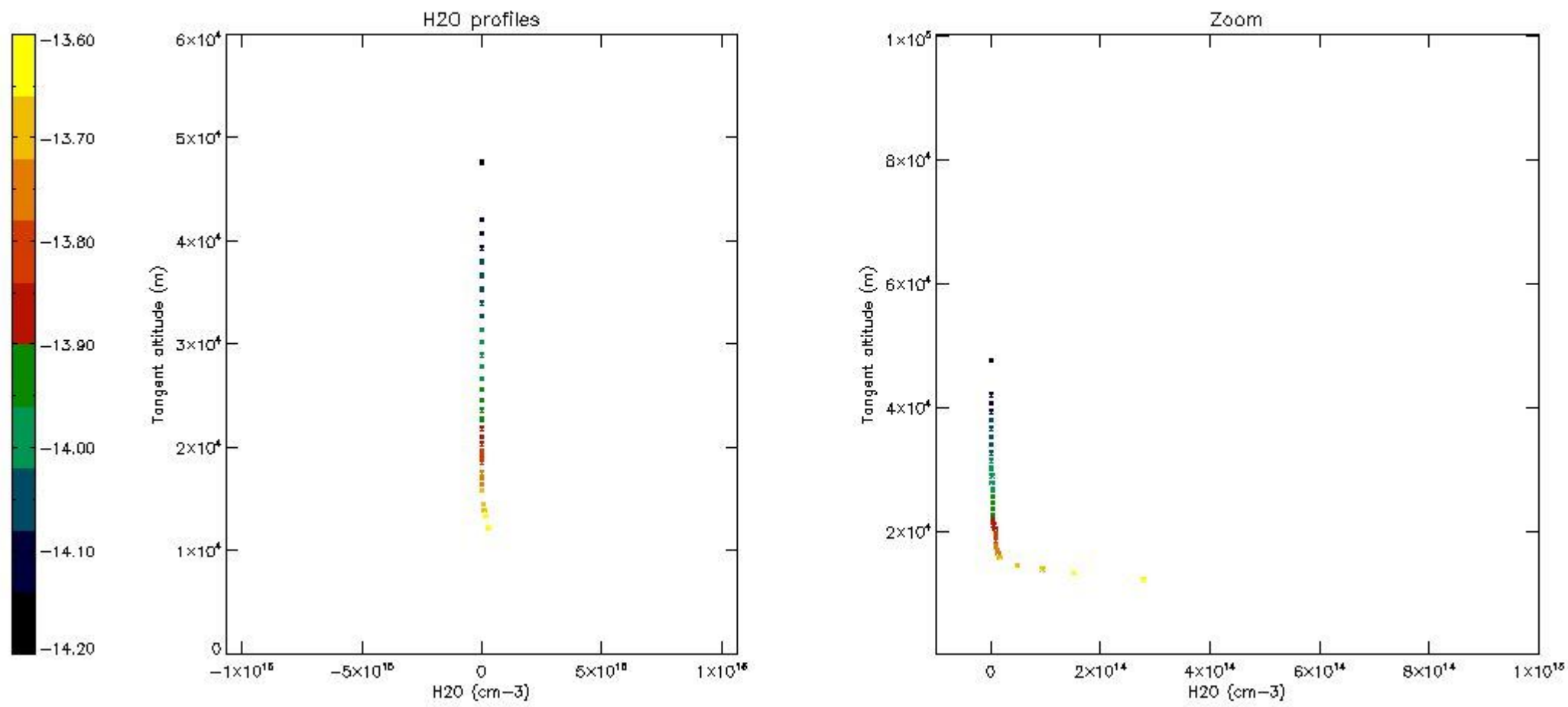
5.7 Plot NO3 profiles for all STD (dark without errors)

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	31-MAY-2011 00:00:15
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	31-MAY-2011 00:00:15
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	31-MAY-2011 00:00:15

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

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[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](#)

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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.

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Time of report generation	24APR2013 14:14:15
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Stop time of products	01-06-2011 (01JUN2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	342
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

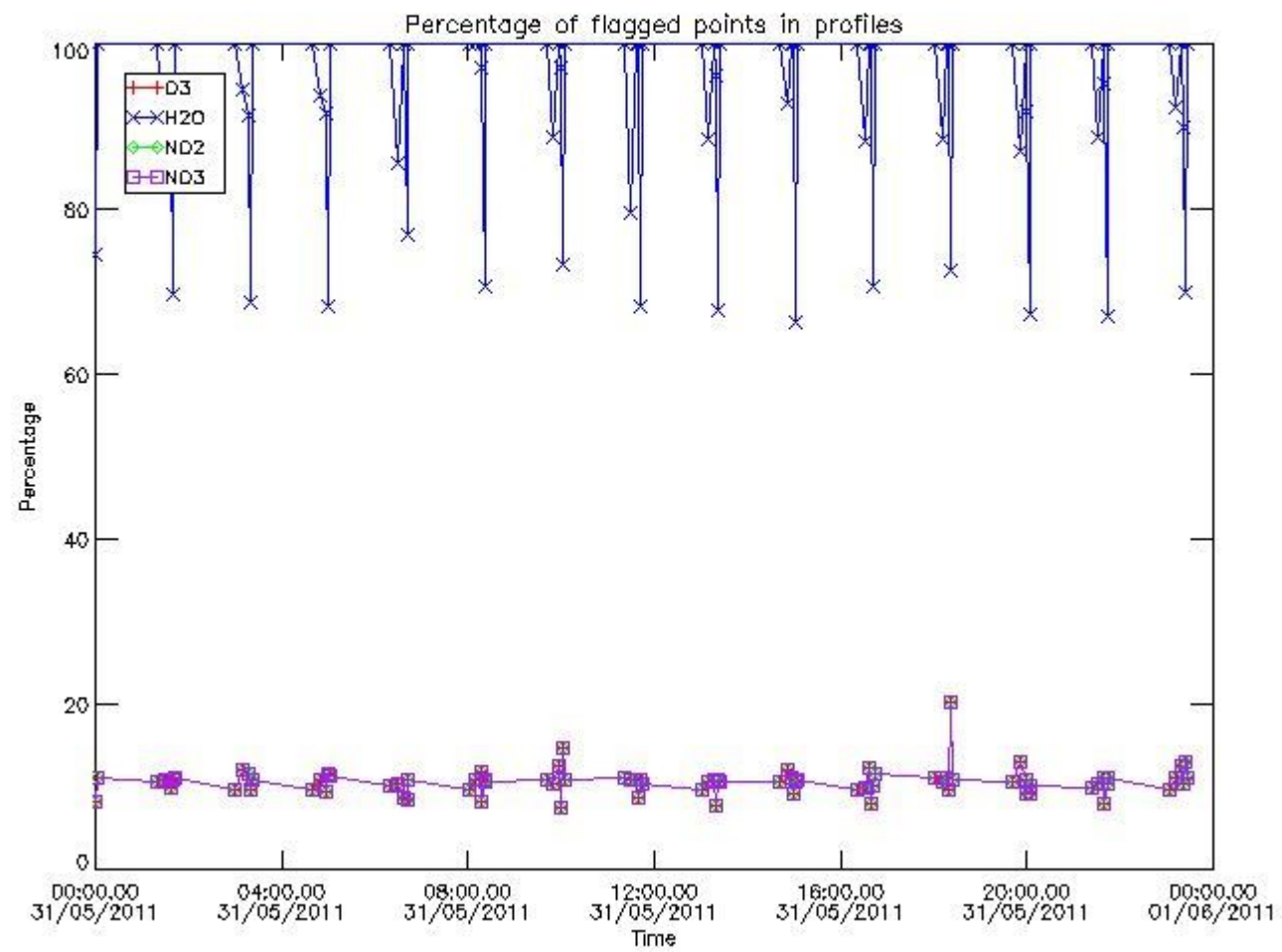
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110531_000015_000000633103_00074_48364_7543.N1	31-MAY-2011 00:00:15	Dark	63.000	63	Bet Gru	2.1500	2800.0	126	48364	No
2	GOM_NL__2PRFIN20110531_000206_000000463103_00074_48364_7544.N1	31-MAY-2011 00:02:06	Dark	46.000	31	Alp Gru	1.7340	15200.	92	48364	No
3	GOM_NL__2PRFIN20110531_000706_000000433103_00074_48364_7545.N1	31-MAY-2011 00:07:06	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	48364	No
4	GOM_NL__2PRFIN20110531_001432_000000423103_00074_48364_7546.N1	31-MAY-2011 00:14:32	Straylight	42.000	147	Alp Ara	2.8770	26000.	84	48364	No
5	GOM_NL__2PRFIN20110531_001613_000000463103_00074_48364_7547.N1	31-MAY-2011 00:16:13	Straylight	46.000	40	The Sco	1.8590	7100.0	92	48364	No
6	GOM_NL__2PRFIN20110531_001800_000000503103_00074_48364_7548.N1	31-MAY-2011 00:18:00	Twilight	49.500	25	35Lam Sco	1.6200	28000.	99	48364	No
7	GOM_NL__2PRFIN20110531_001947_000000463103_00074_48364_7549.N1	31-MAY-2011 00:19:47	Twilight	46.000	75	26Eps Sco	2.2910	4250.0	92	48364	No
8	GOM_NL__2PRFIN20110531_002149_000000433103_00074_48364_7550.N1	31-MAY-2011 00:21:49	Bright	42.500	136	23Tau Sco	2.8220	30000.	85	48364	No
9	GOM_NL__2PRFIN20110531_002354_000000413103_00074_48364_7551.N1	31-MAY-2011 00:23:54	Bright	41.000	80	7Del Sco	2.3160	30000.	82	48364	No
10	GOM_NL__2PRFIN20110531_002527_000000473103_00074_48364_7552.N1	31-MAY-2011 00:25:27	Bright	47.000	86	35Eta Oph	2.4300	10200.	94	48364	No
11	GOM_NL__2PRFIN20110531_002719_000000423103_00074_48364_7553.N1	31-MAY-2011 00:27:19	Bright	42.000	98	13Zet Oph	2.5710	30000.	84	48364	No
12	GOM_NL__2PRFIN20110531_002930_000000403103_00074_48364_7554.N1	31-MAY-2011 00:29:30	Bright	40.000	120	1Del Oph	2.7340	3200.0	80	48364	No
13	GOM_NL__2PRFIN20110531_003230_000000373103_00074_48364_7555.N1	31-MAY-2011 00:32:30	Bright	37.000	102	24Alp Ser	2.6000	4250.0	74	48364	No
14	GOM_NL__2PRFIN20110531_003824_000000373103_00074_48364_7556.N1	31-MAY-2011 00:38:24	Bright	37.000	67	5Alp CrB	2.2210	11000.	74	48364	No
15	GOM_NL__2PRFIN20110531_004104_000000423103_00074_48364_7557.N1	31-MAY-2011 00:41:04	Bright	41.500	133	40Zet Her	2.8070	6000.0	83	48364	No
16	GOM_NL__2PRFIN20110531_004858_000000393103_00074_48364_7558.N1	31-MAY-2011 00:48:58	Bright	39.000	119	14Eta Dra	2.7270	4700.0	78	48364	No
17	GOM_NL__2PRFIN20110531_005919_000000473103_00074_48364_7559.N1	31-MAY-2011 00:59:19	Bright	47.000	89	5Alp Cep	2.4510	8000.0	94	48364	No
18	GOM_NL__2PRFIN20110531_010417_000000563103_00074_48364_7560.N1	31-MAY-2011 01:04:17	Bright	56.000	76	27Gam Cas	2.3000	30000.	112	48364	No
19	GOM_NL__2PRFIN20110531_011159_000000433103_00074_48364_7561.N1	31-MAY-2011 01:11:59	Bright	42.500	53	43Bet And	2.0480	3300.0	85	48364	No
20	GOM_NL__2PRFIN20110531_011439_000000513103_00074_48364_7562.N1	31-MAY-2011 01:14:39	Twilight	51.000	58	21Alp And	2.0730	11000.	102	48364	No
21	GOM_NL__2PRFIN20110531_011933_000000533103_00074_48364_7563.N1	31-MAY-2011 01:19:33	Dark	52.500	140	88Gam Peg	2.8340	26000.	105	48364	No
22	GOM_NL__2PRFIN20110531_012832_000000473103_00074_48364_7564.N1	31-MAY-2011 01:28:32	Dark	46.500	52	16Bet Cet	2.0370	4500.0	93	48364	No
23	GOM_NL__2PRFIN20110531_013708_000000683103_00074_48364_7565.N1	31-MAY-2011 01:37:08	Dark	67.500	18	24Alp PsA	1.1660	9700.0	135	48364	No
24	GOM_NL__2PRFIN20110531_014030_000000473103_00075_48365_7557.N1	31-MAY-2011 01:40:30	Dark	46.500	63	Bet Gru	2.1500	2800.0	93	48365	No
25	GOM_NL__2PRFIN20110531_014221_000000463103_00075_48365_7558.N1	31-MAY-2011 01:42:21	Dark	45.500	31	Alp Gru	1.7340	15200.	91	48365	No
26	GOM_NL__2PRFIN20110531_014720_000000433103_00075_48365_7559.N1	31-MAY-2011 01:47:20	Straylight	42.500	45	Alp Pav	1.9400	26000.	85	48365	No
27	GOM_NL__2PRFIN20110531_015447_000000423103_00075_48365_7560.N1	31-MAY-2011 01:54:47	Straylight	42.000	147	Alp Ara	2.8770	26000.	84	48365	No
28	GOM_NL__2PRFIN20110531_015627_000000463103_00075_48365_7561.N1	31-MAY-2011 01:56:27	Straylight	45.500	40	The Sco	1.8590	7100.0	91	48365	No
29	GOM_NL__2PRFIN20110531_015815_000000483103_00075_48365_7562.N1	31-MAY-2011 01:58:15	Twilight	47.500	25	35Lam Sco	1.6200	28000.	95	48365	No
30	GOM_NL__2PRFIN20110531_020002_000000483103_00075_48365_7563.N1	31-MAY-2011 02:00:02	Twilight	47.500	75	26Eps Sco	2.2910	4250.0	95	48365	No
31	GOM_NL__2PRFIN20110531_020203_000000443103_00075_48365_7564.N1	31-MAY-2011 02:02:03	Bright	44.000	136	23Tau Sco	2.8220	30000.	88	48365	No
32	GOM_NL__2PRFIN20110531_020408_000000423103_00075_48365_7565.N1	31-MAY-2011 02:04:08	Bright	42.000	80	7Del Sco	2.3160	30000.	84	48365	No
33	GOM_NL__2PRFIN20110531_020541_000000463103_00075_48365_7566.N1	31-MAY-2011 02:05:41	Bright	46.000	86	35Eta Oph	2.4300	10200.	92	48365	No
34	GOM_NL__2PRFIN20110531_020732_000000433103_00075_48365_7567.N1	31-MAY-2011 02:07:32	Bright	42.500	98	13Zet Oph	2.5710	30000.	85	48365	No
35	GOM_NL__2PRFIN20110531_020944_000000403103_00075_48365_7568.N1	31-MAY-2011 02:09:44	Bright	40.000	120	1Del Oph	2.7340	3200.0	80	48365	No
36	GOM_NL__2PRFIN20110531_021244_000000373103_00075_48365_7569.N1	31-MAY-2011 02:12:44	Bright	37.000	102	24Alp Ser	2.6000	4250.0	74	48365	No
37	GOM_NL__2PRFIN20110531_021837_000000393103_00075_48365_7570.N1	31-MAY-2011 02:18:37	Bright	39.000	67	5Alp CrB	2.2210	11000.	78	48365	No
38	GOM_NL__2PRFIN20110531_022117_000000453103_00075_48365_7571.N1	31-MAY-2011 02:21:17	Bright	44.500	133	40Zet Her	2.8070	6000.0	89	48365	No
39	GOM_NL__2PRFIN20110531_022911_000000383103_00075_48365_7572.N1	31-MAY-2011 02:29:11	Bright	38.000	119	14Eta Dra	2.7270	4700.0	76	48365	No
40	GOM_NL__2PRFIN20110531_023933_000000463103_00075_48365_7573.N1	31-MAY-2011 02:39:33	Bright	46.000	89	5Alp Cep	2.4510	8000.0	92	48365	No
41	GOM_NL__2PRFIN20110531_024431_000000563103_00075_48365_7574.N1	31-MAY-2011 02:44:31	Bright	56.000	76	27Gam Cas	2.3000	30000.	112	48365	No
42	GOM_NL__2PRFIN20110531_025214_000000423103_00075_48365_7575.N1	31-MAY-2011 02:52:14	Bright	42.000	53	43Bet And	2.0480	3300.0	84	48365	No

338	GOM_NL__2PRFIN20110531_234712_000000453103_00088_48378_7964.N1	31-MAY-2011 23:47:12	Bright	44.500	80	7Del Sco	2.3160	30000.	89	48378	No
339	GOM_NL__2PRFIN20110531_234844_000000463103_00088_48378_7965.N1	31-MAY-2011 23:48:44	Bright	45.500	86	35Eta Oph	2.4300	10200.	91	48378	No
340	GOM_NL__2PRFIN20110531_235035_000000423103_00088_48378_7966.N1	31-MAY-2011 23:50:35	Bright	42.000	98	13Zet Oph	2.5710	30000.	84	48378	No
341	GOM_NL__2PRFIN20110531_235246_000000393103_00088_48378_7967.N1	31-MAY-2011 23:52:46	Bright	39.000	120	1Del Oph	2.7340	3200.0	78	48378	No
342	GOM_NL__2PRFIN20110531_235546_000000373103_00088_48378_7968.N1	31-MAY-2011 23:55:46	Bright	37.000	102	24Alp Ser	2.6000	4250.0	74	48378	No

3. Quality information per product

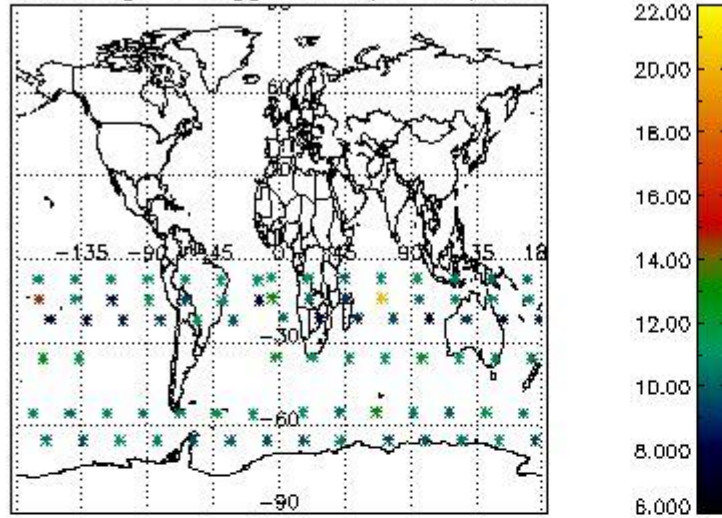
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

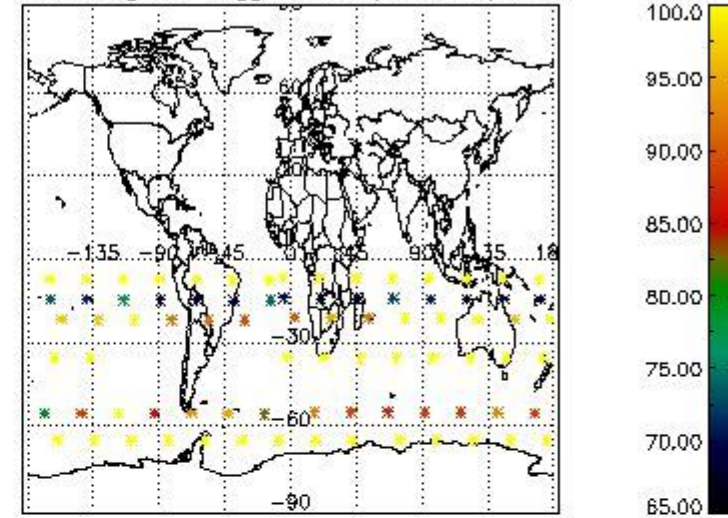


3.2 Plot quality information per product (world map)

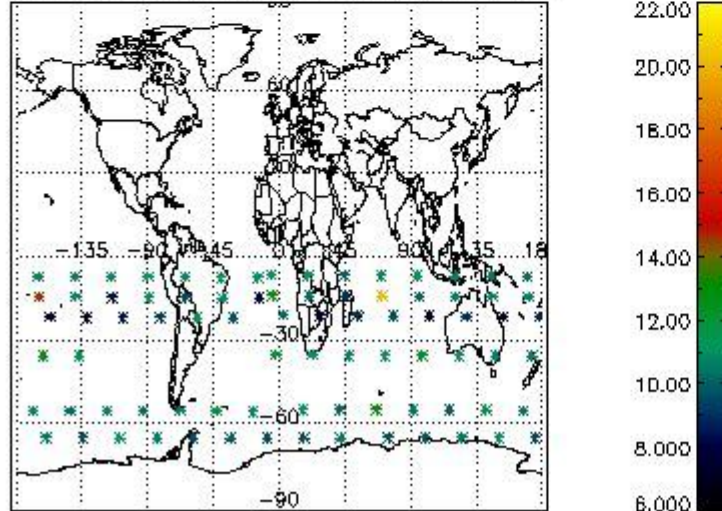
Percentage of flagged data per O3 profile



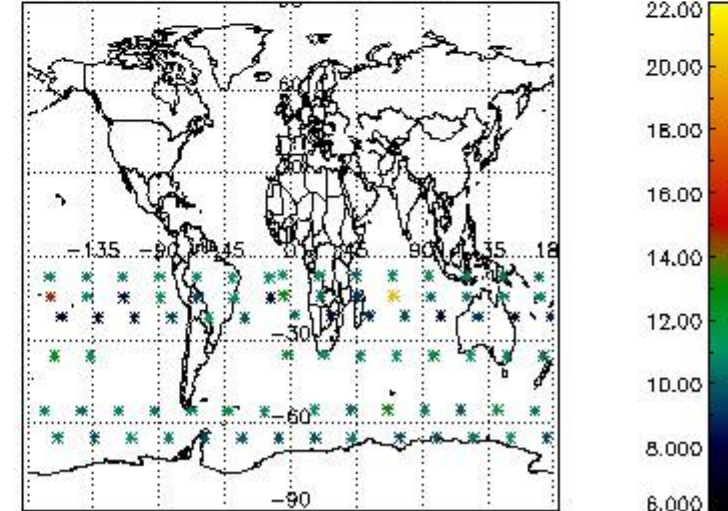
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

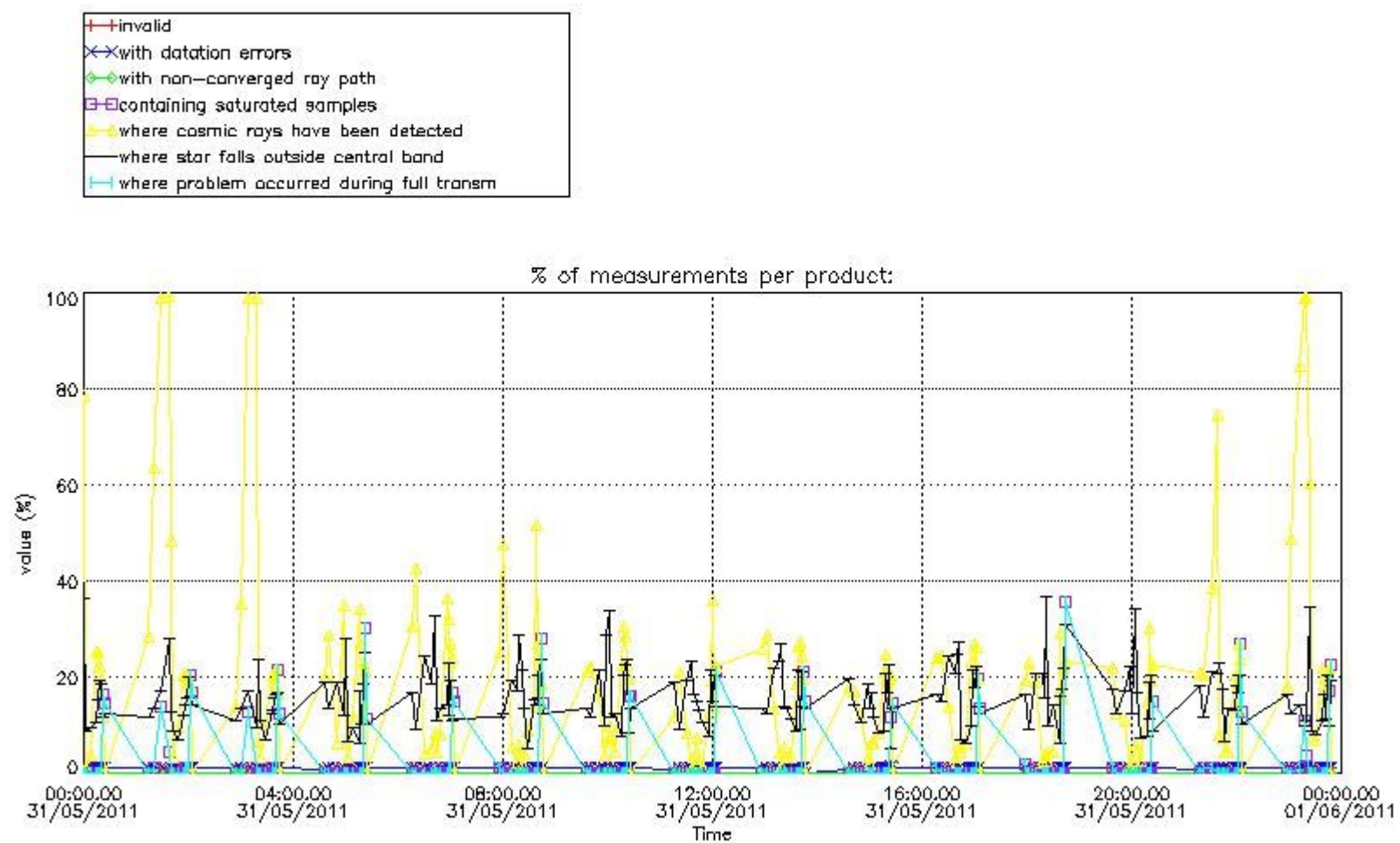


4. Level 1 quality information per product

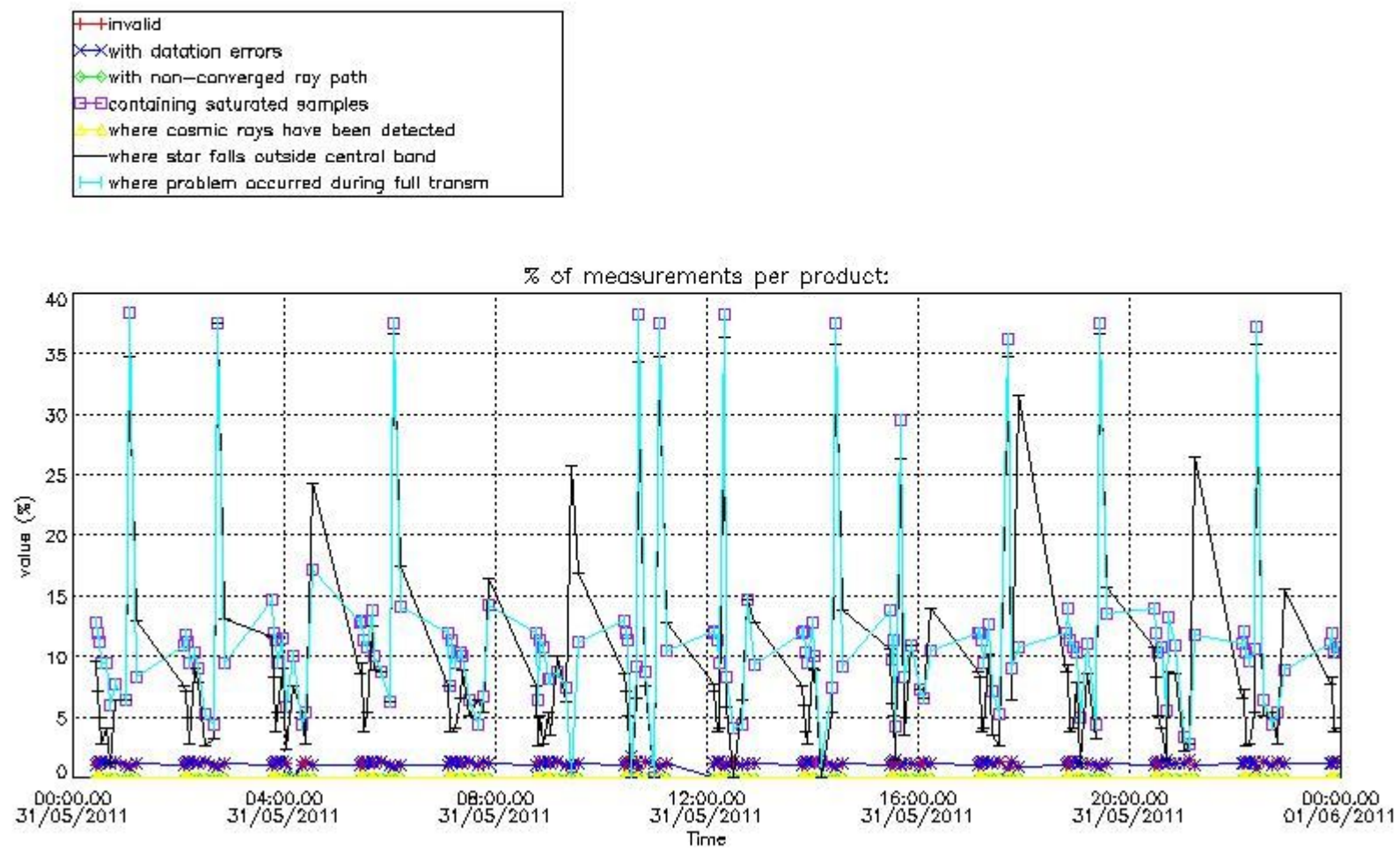
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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



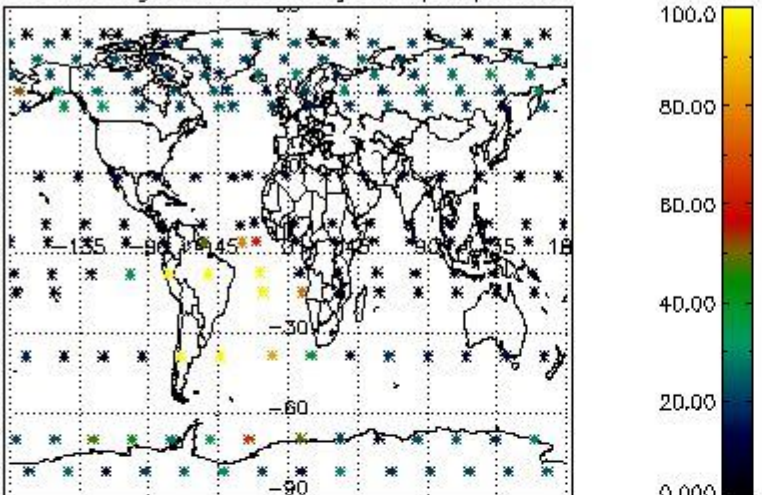
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes



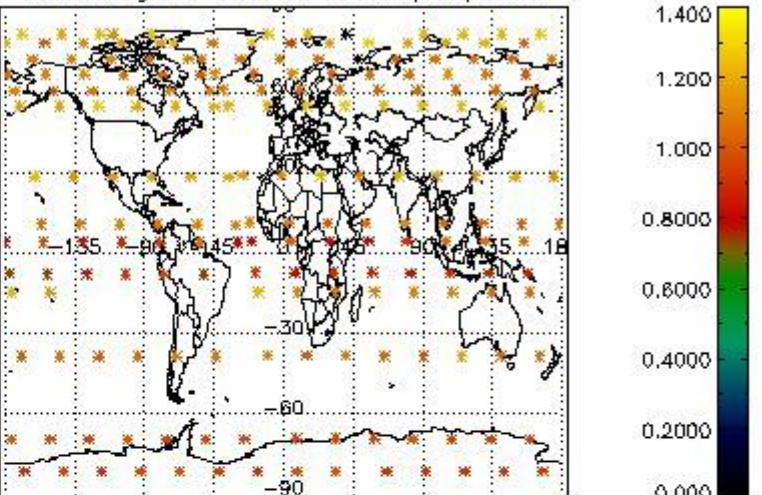
4.2 Plot quality information per product coming from level 1b processing (world map)

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

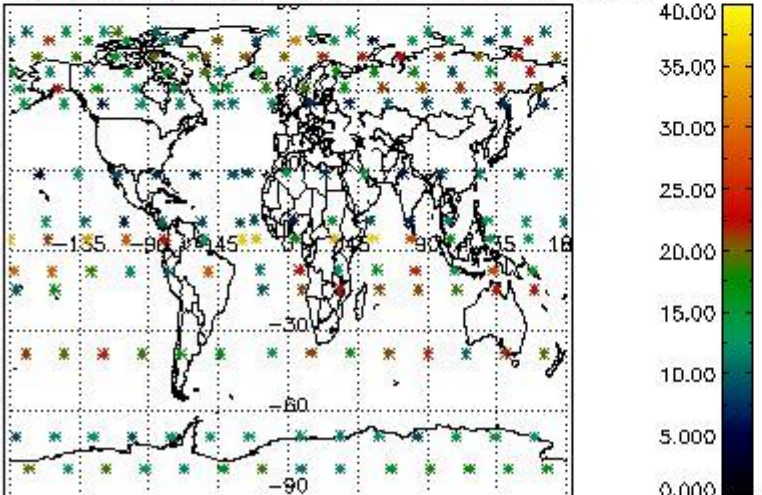
Percentage of cosmic ray hits per profile



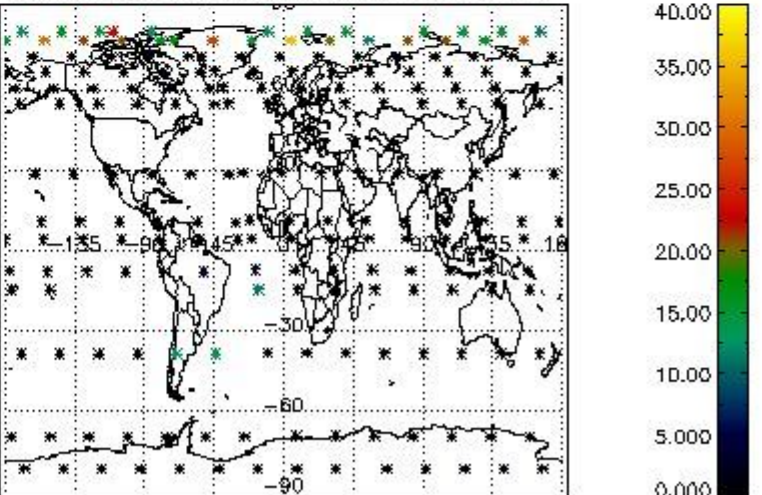
Percentage of datation errors per profile



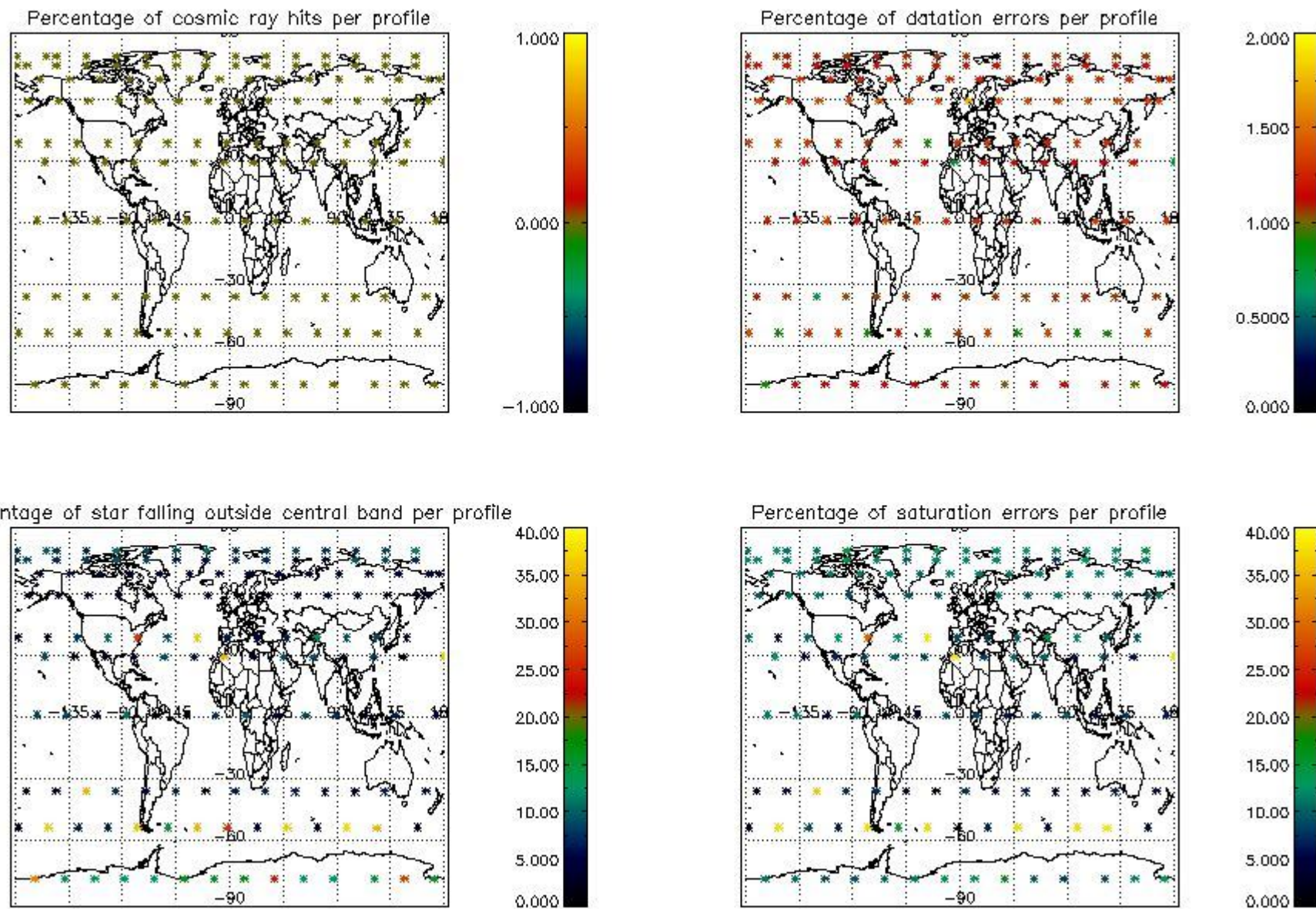
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile



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



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

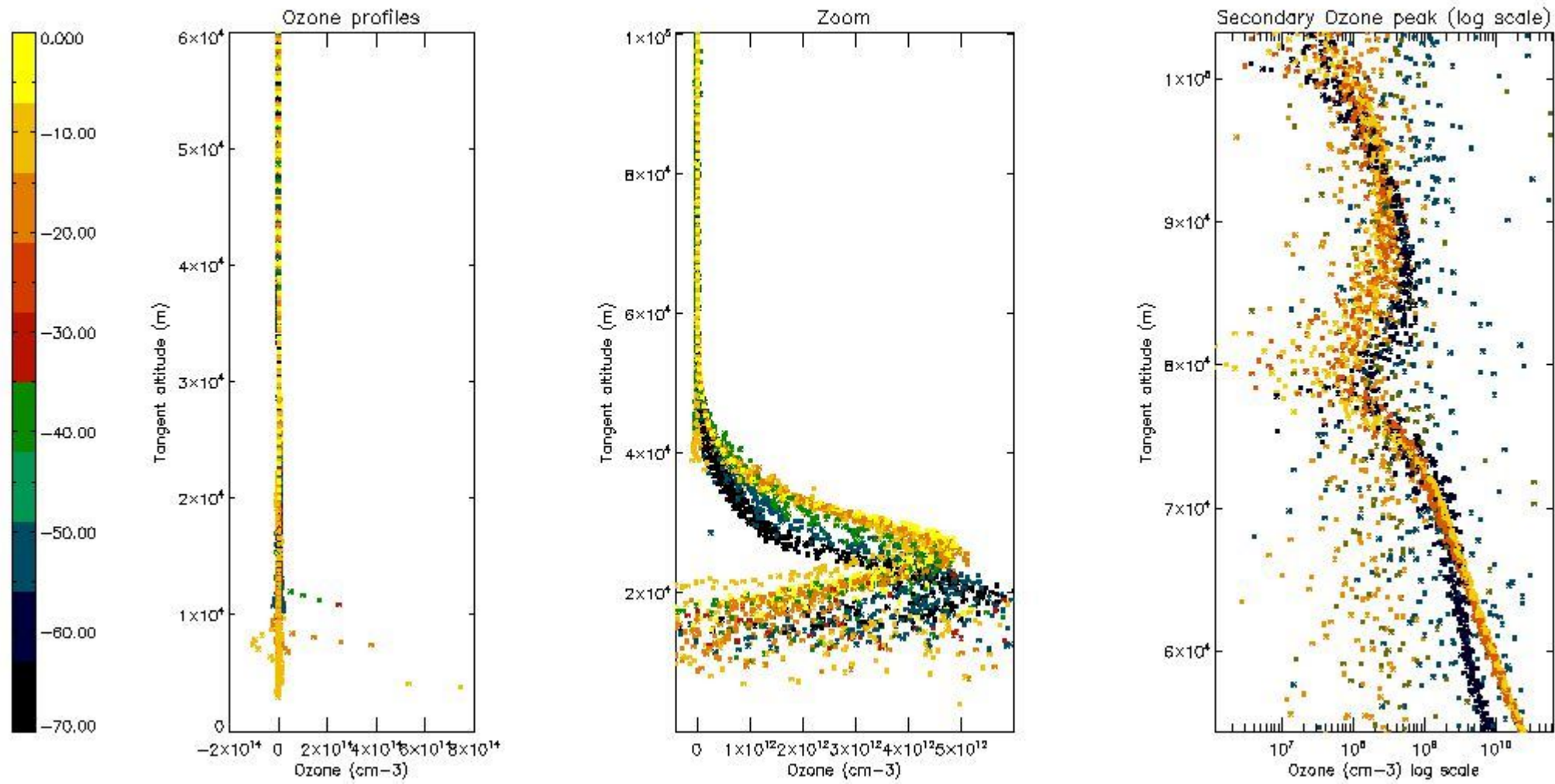
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	28
STD < 20	13

STD < 10	9
STD < 5	6

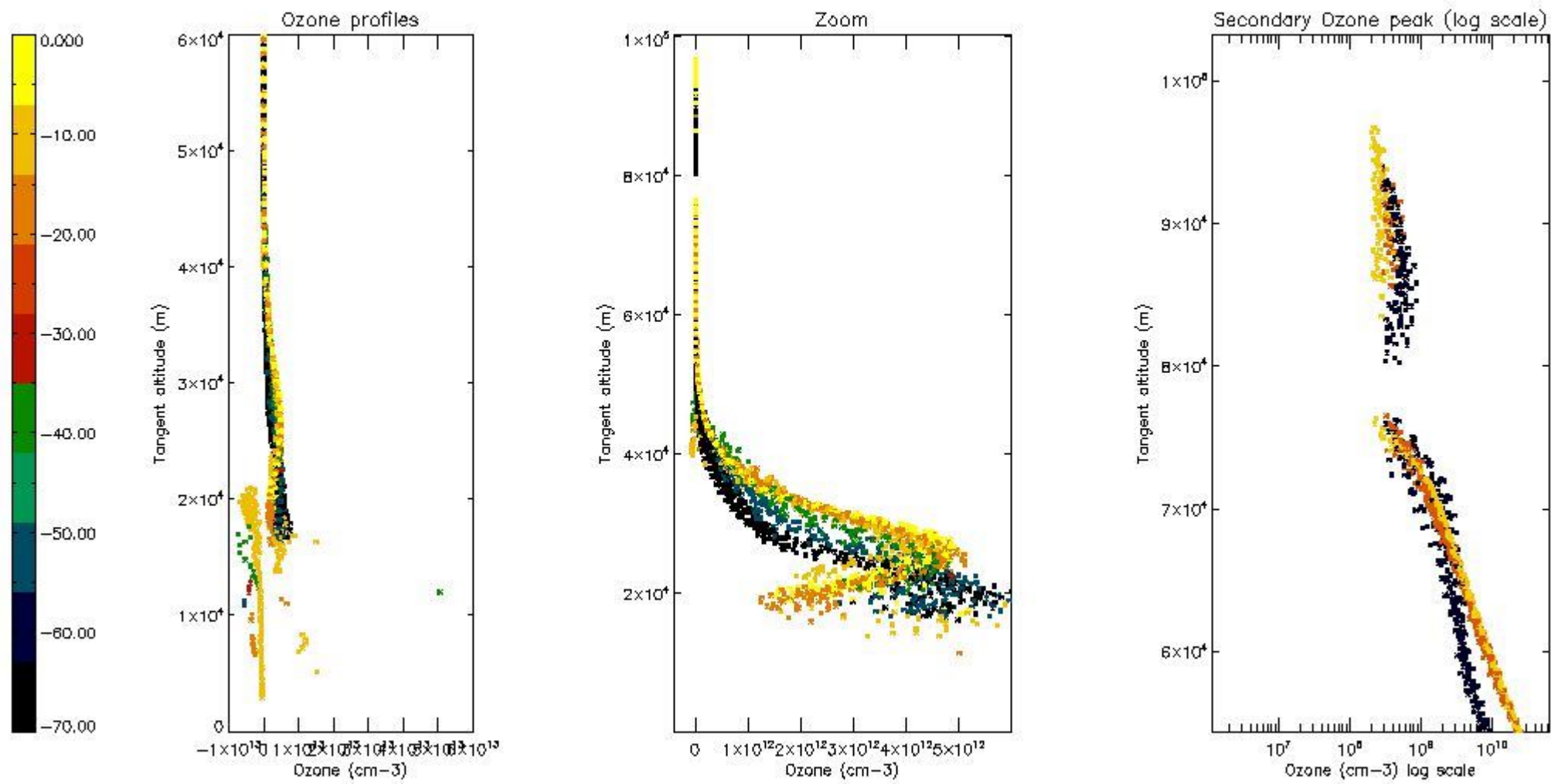
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



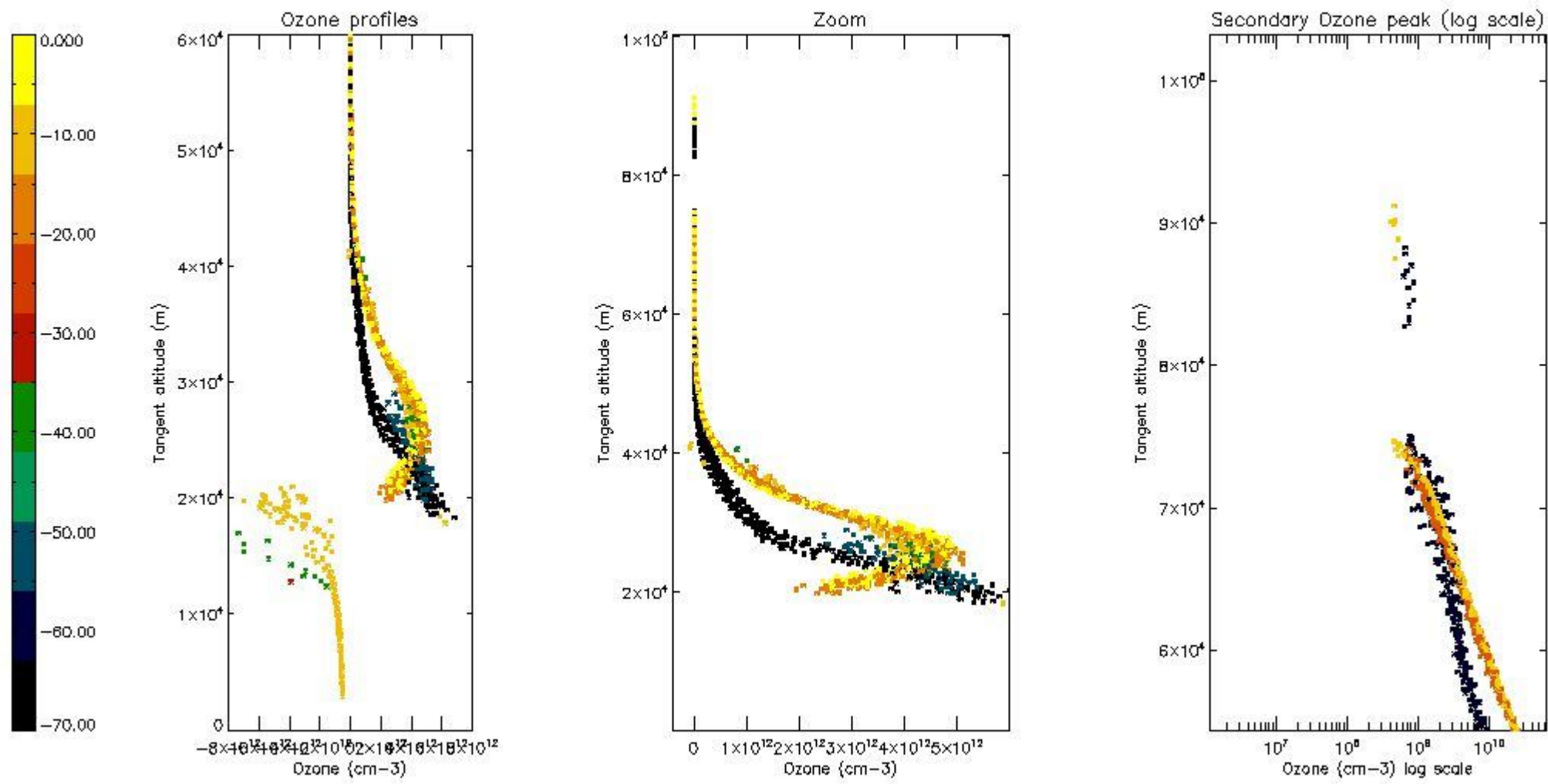
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



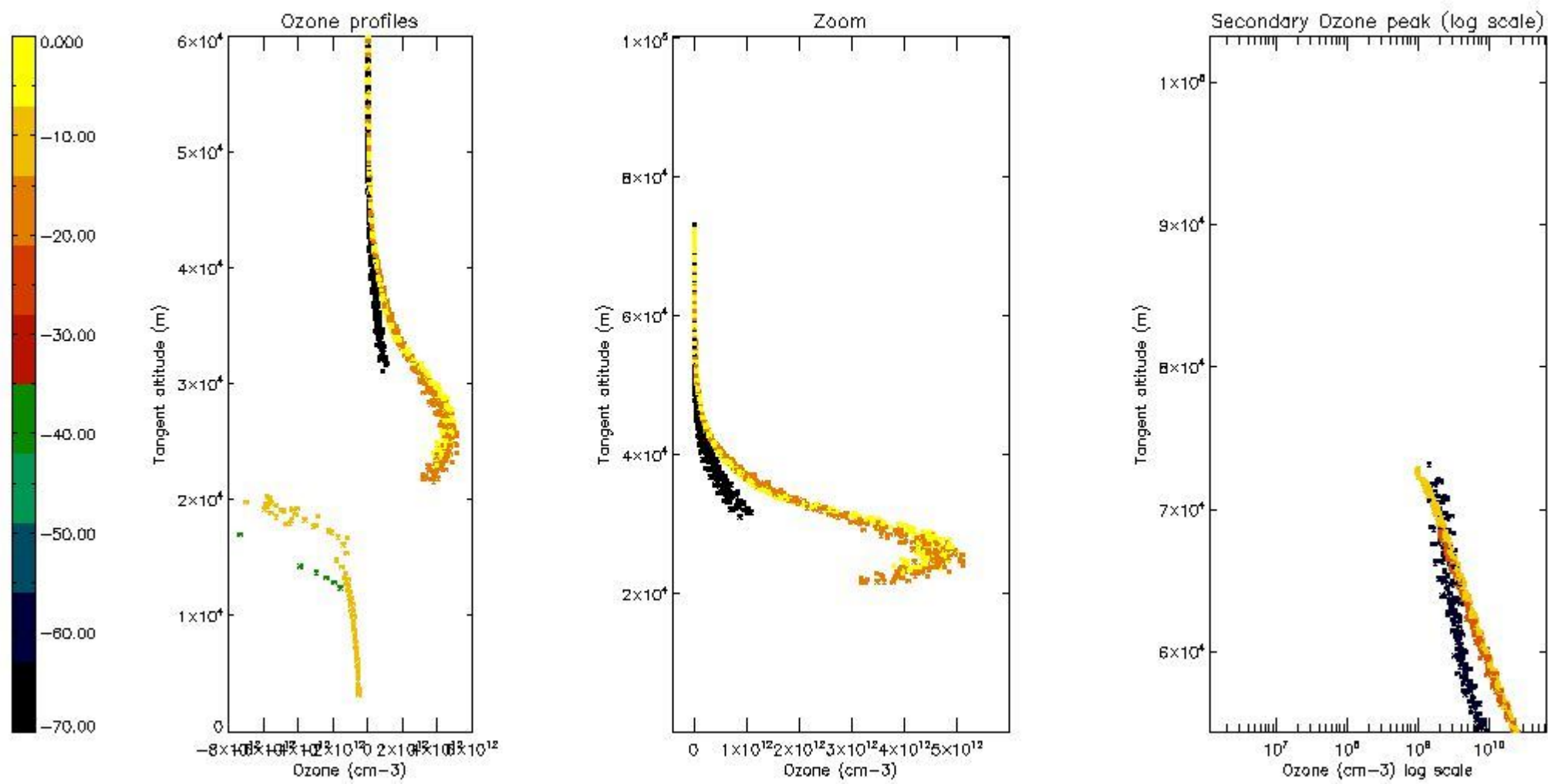
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



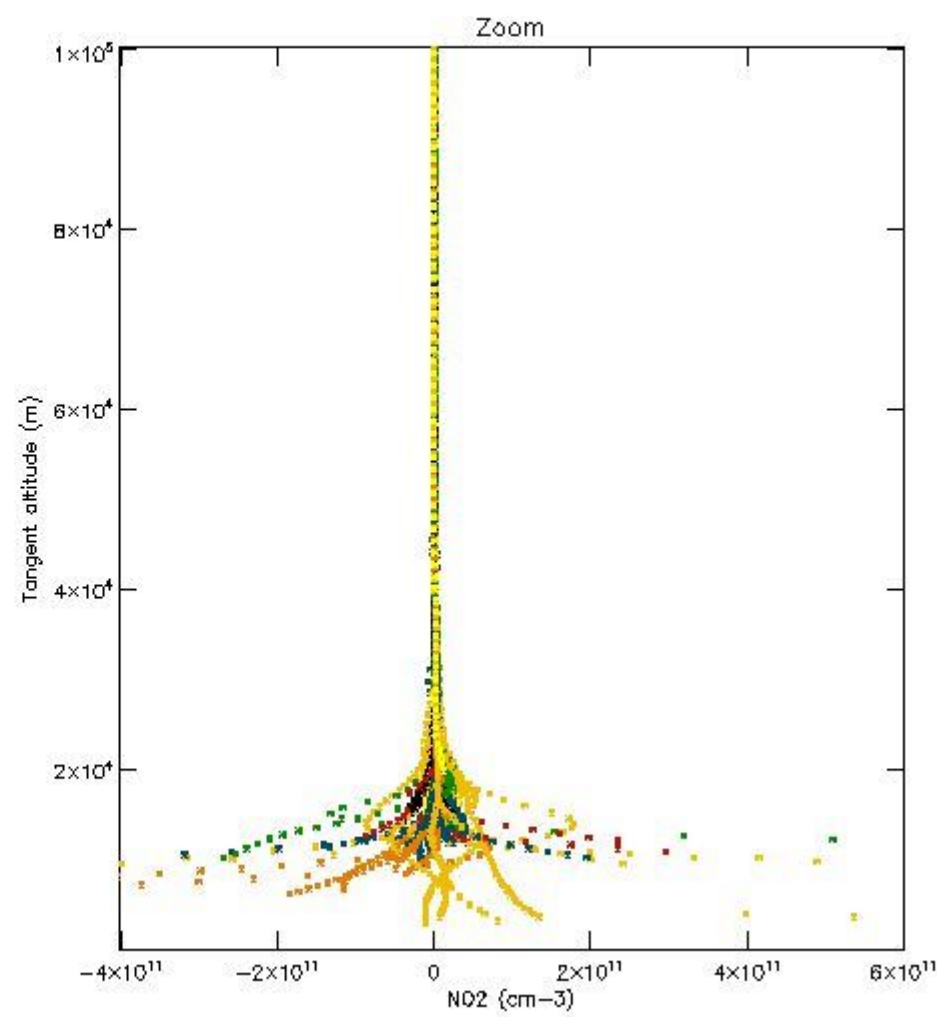
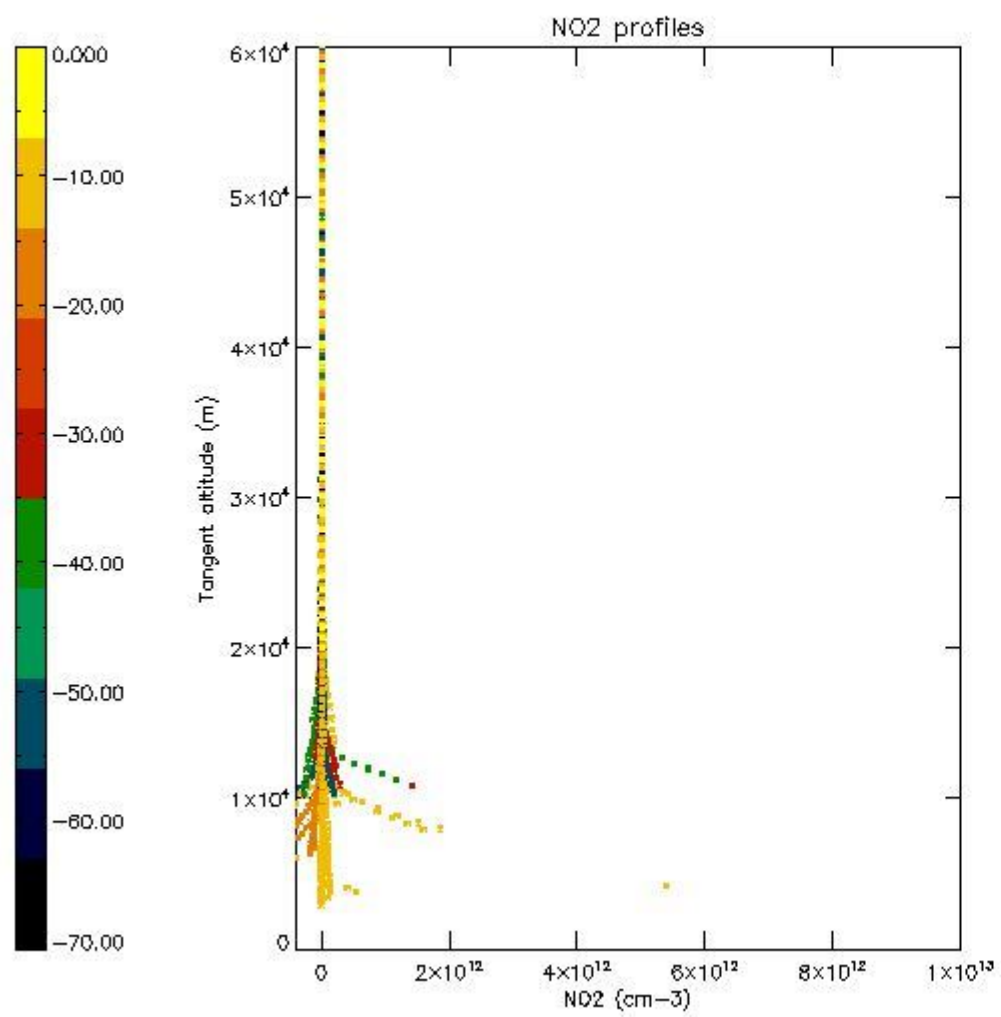
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



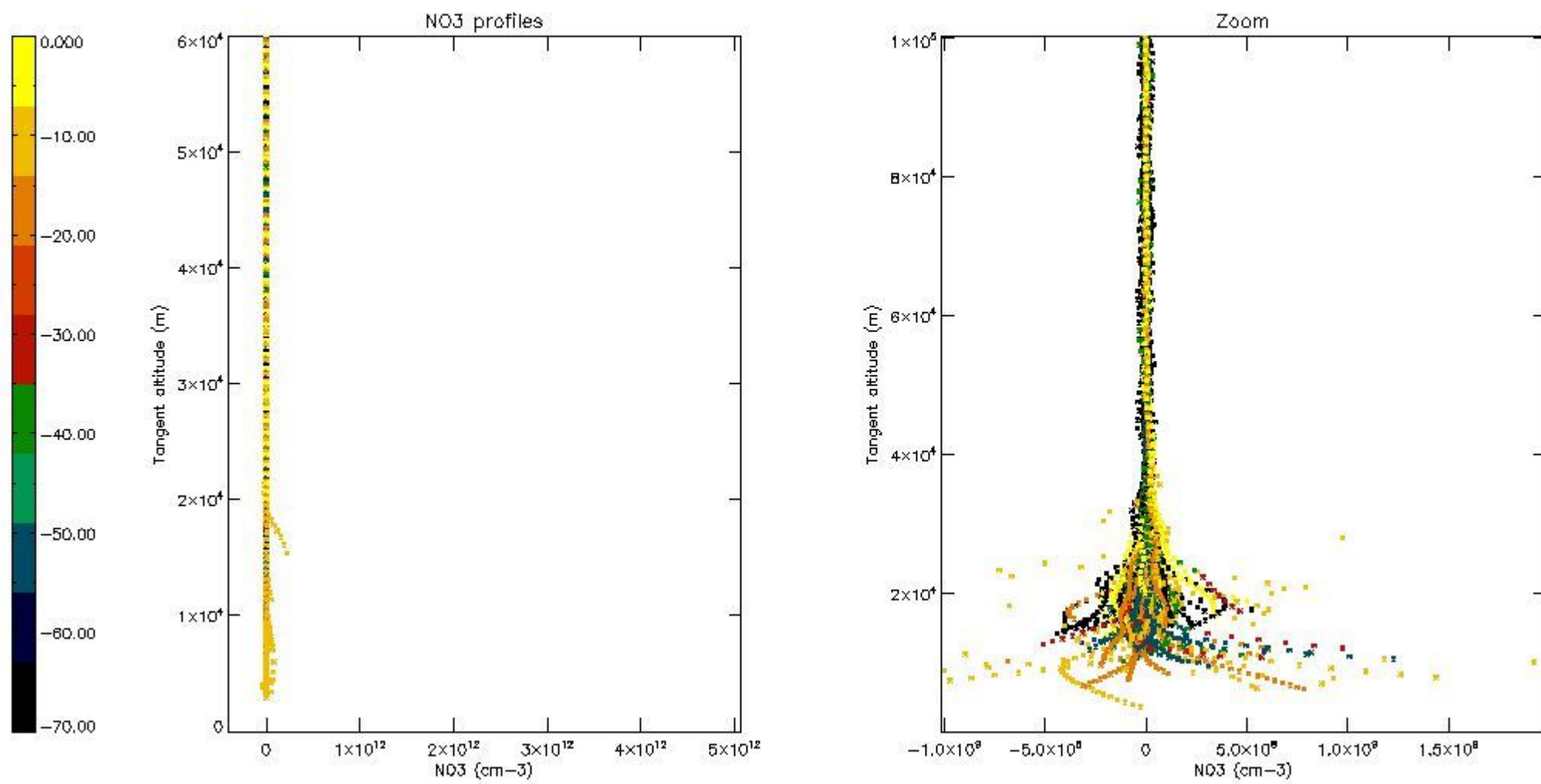
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



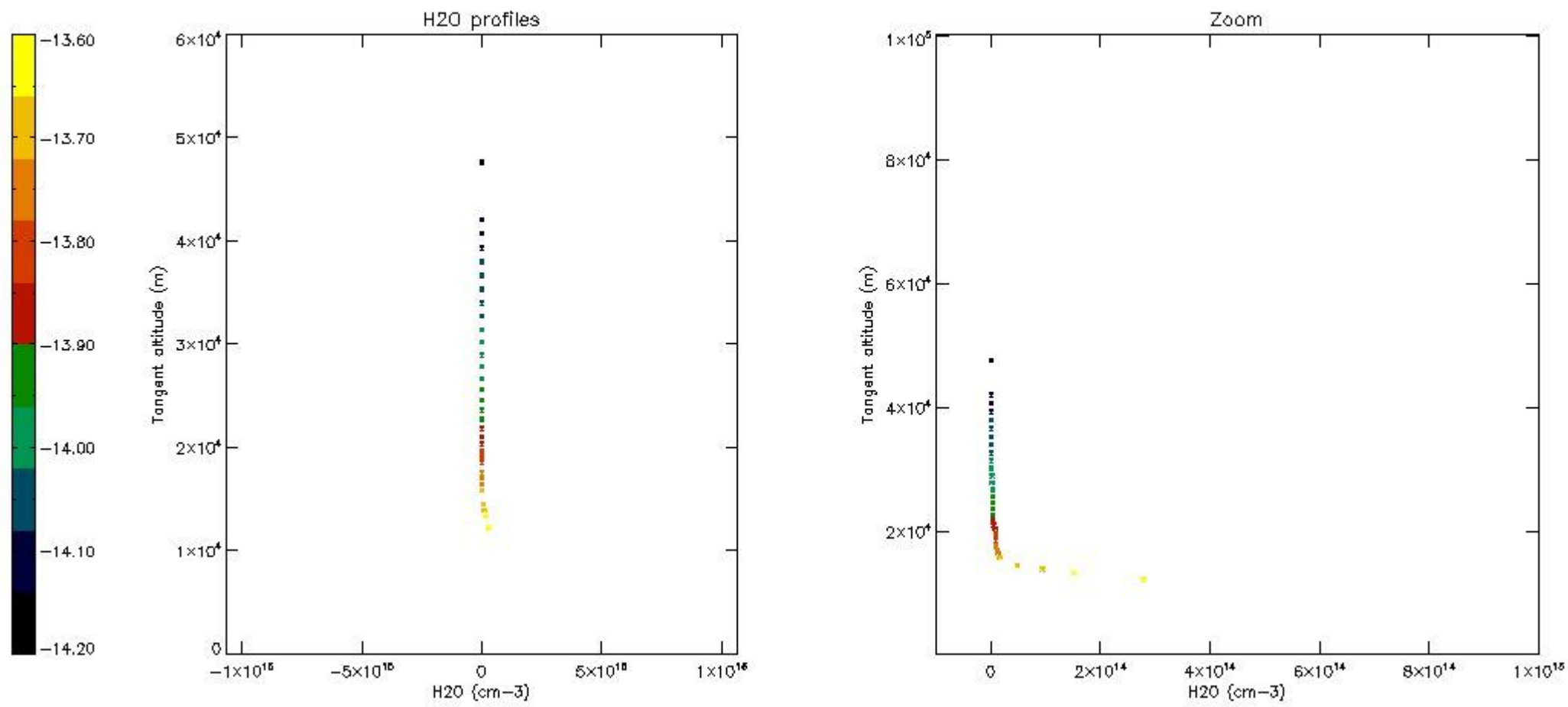
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

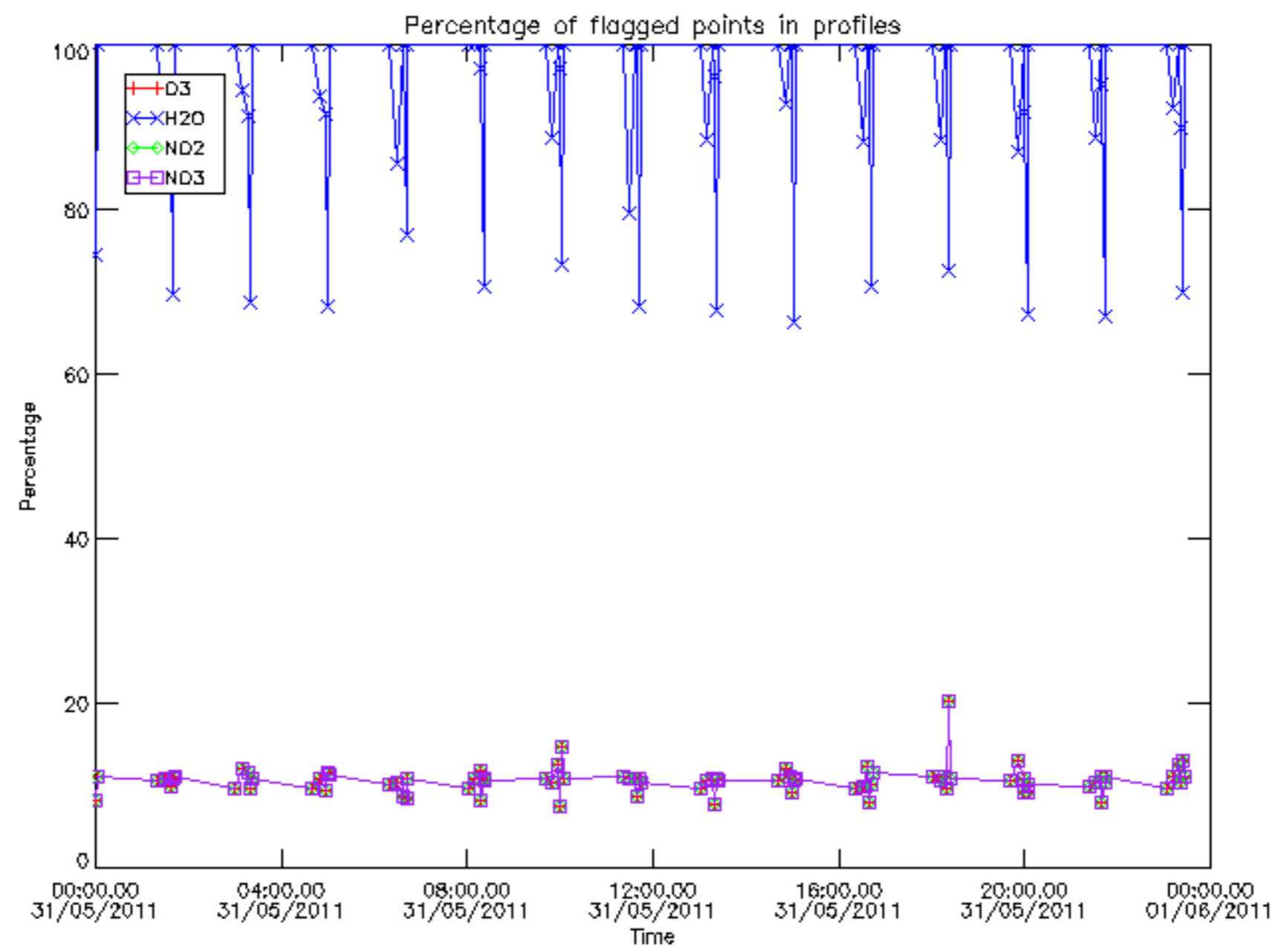
The colorbar represents the latitude.



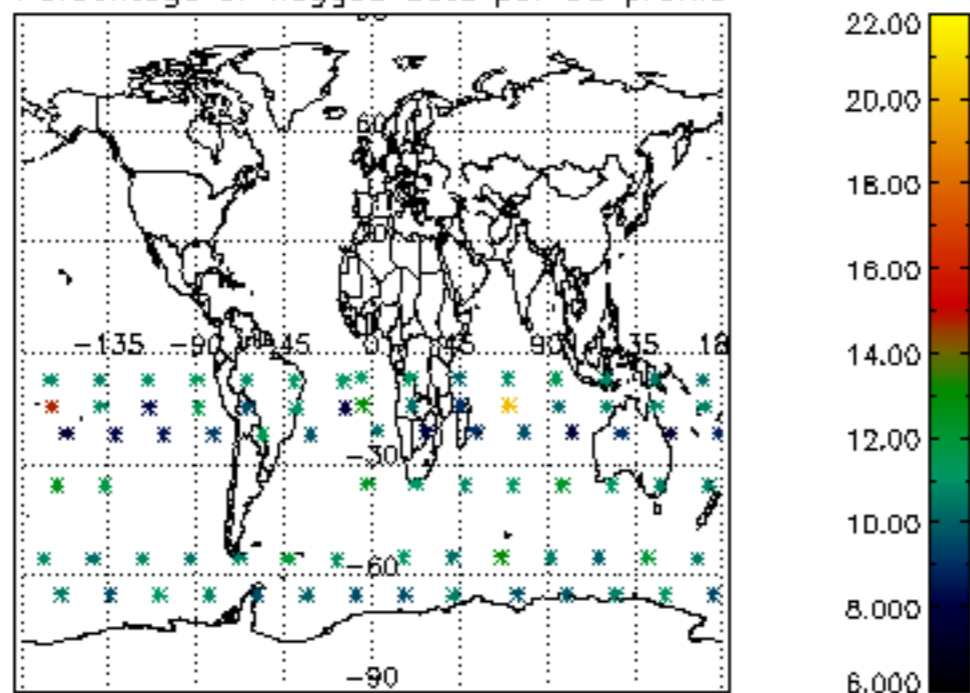
6. Auxiliary Data Files used for the production reported in section 2

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.

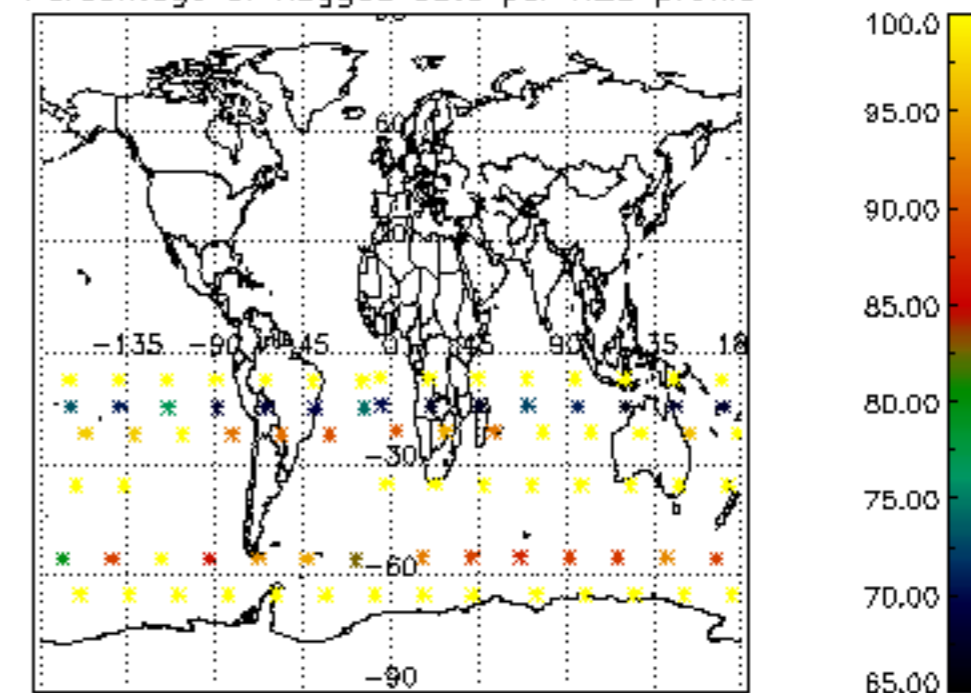
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	31-MAY-2011 00:00:15
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	31-MAY-2011 00:00:15
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	31-MAY-2011 00:00:15



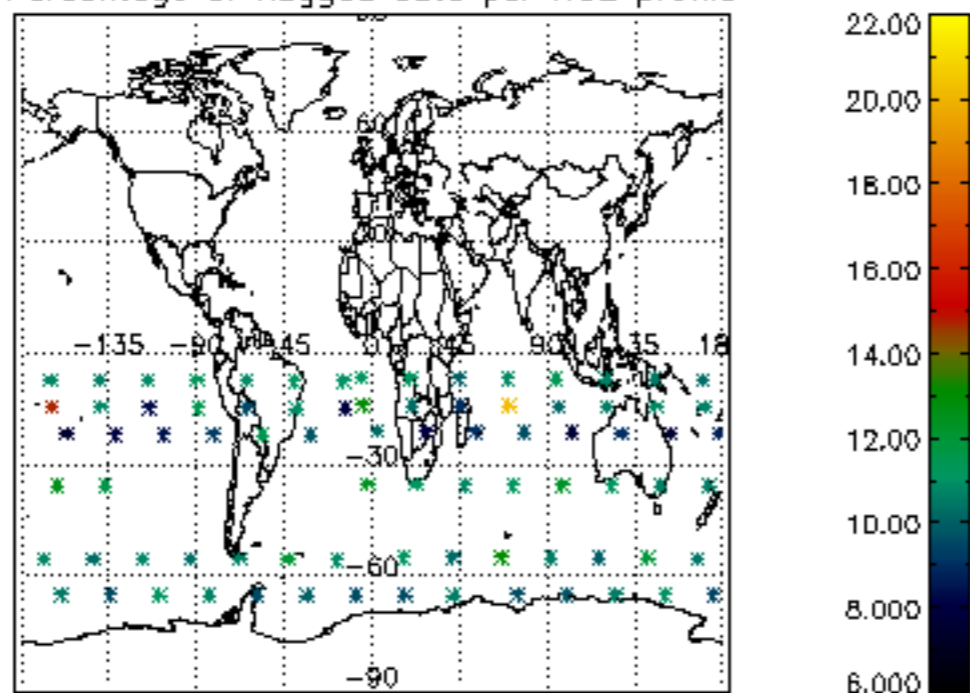
Percentage of flagged data per D3 profile



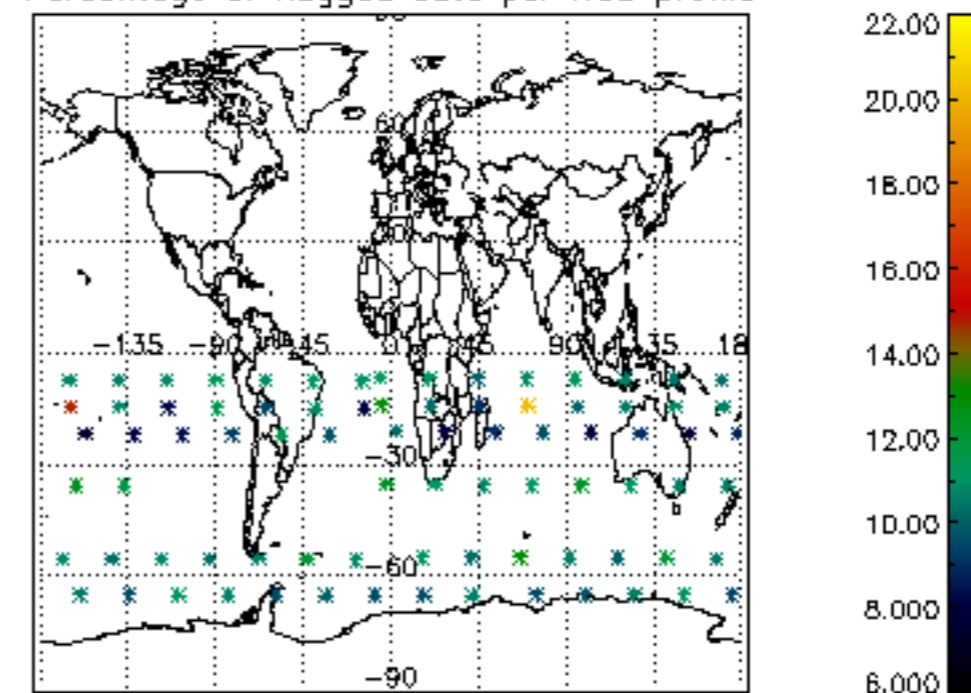
Percentage of flagged data per H2O profile

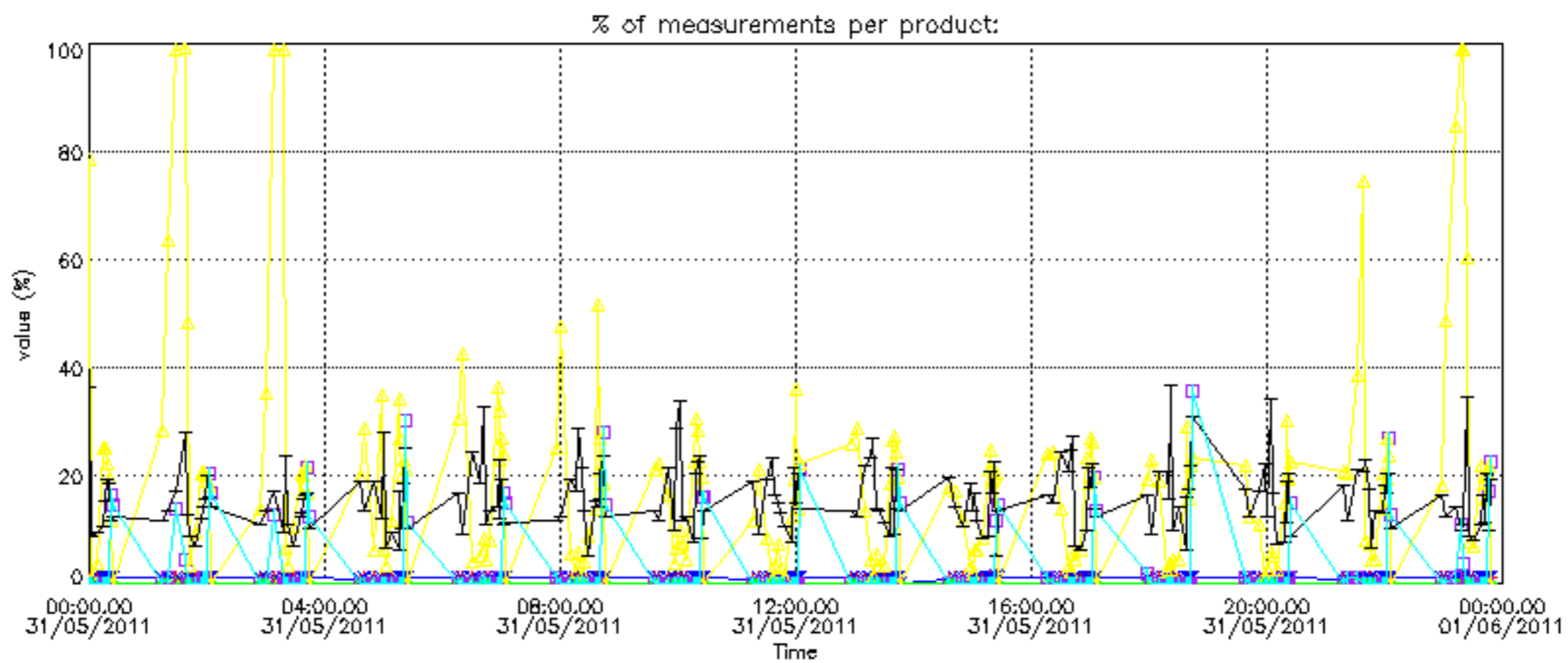


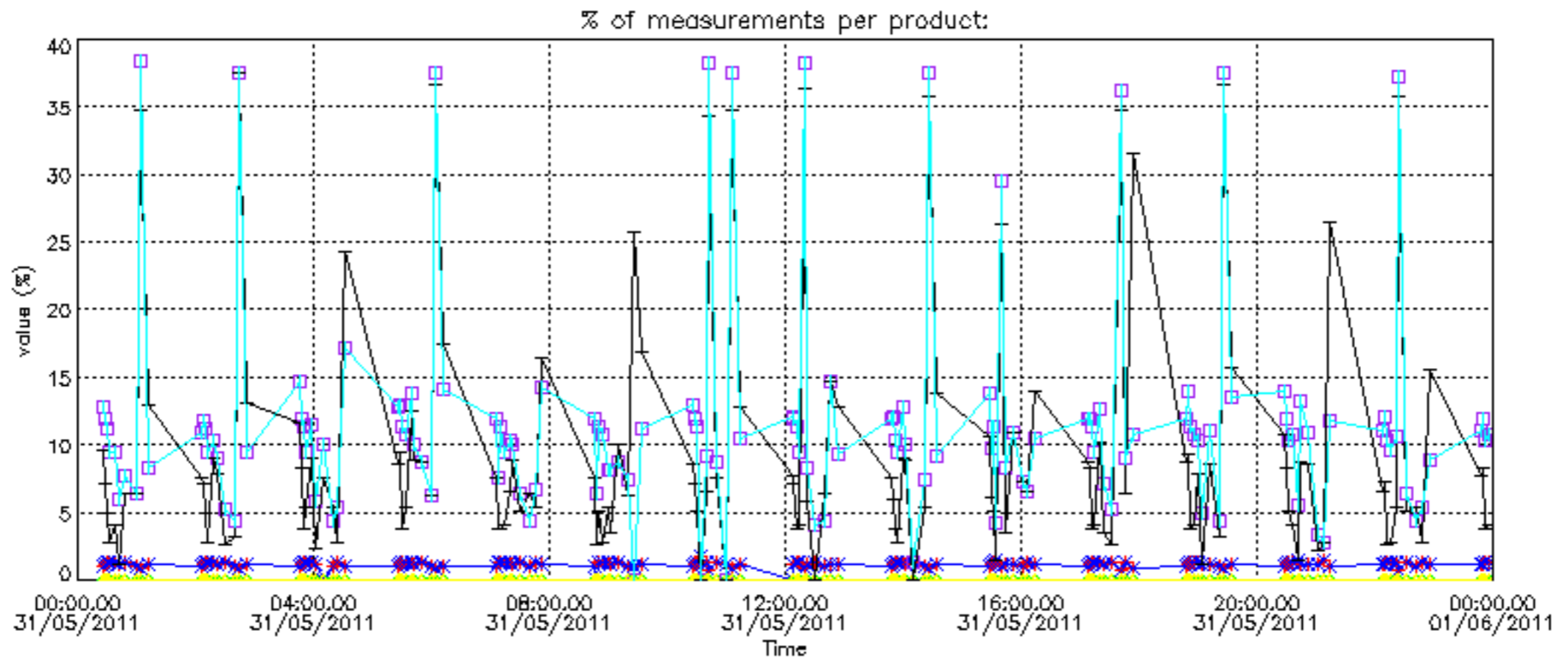
Percentage of flagged data per NO2 profile



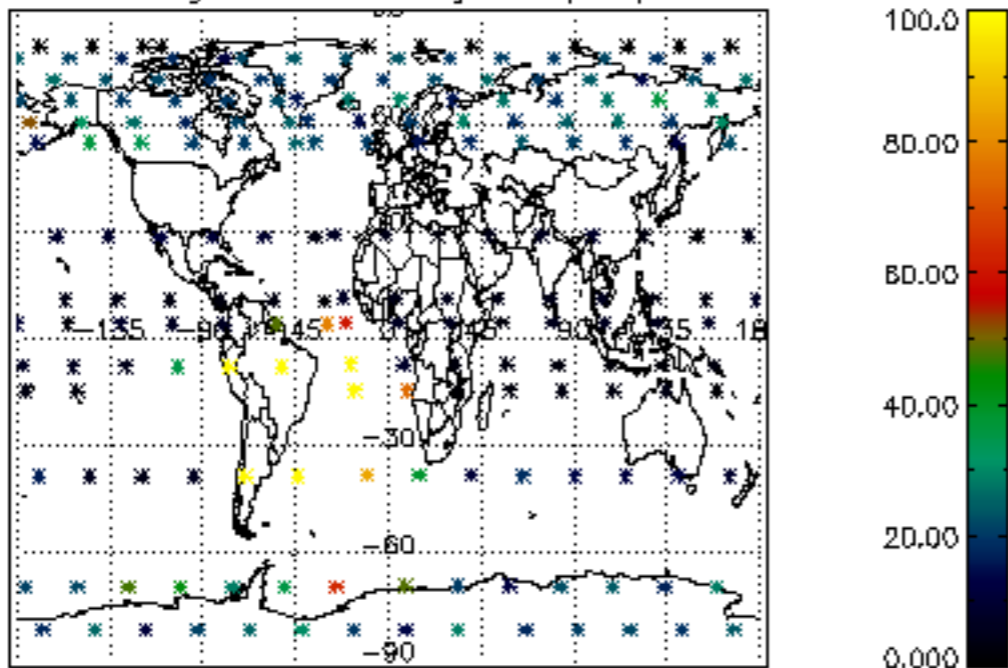
Percentage of flagged data per NO3 profile



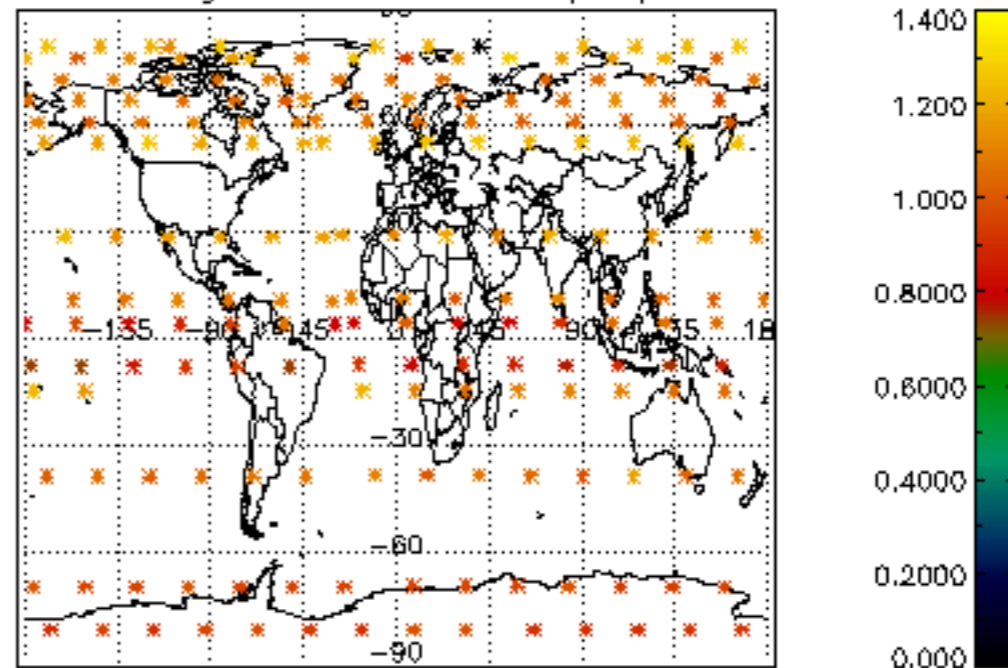




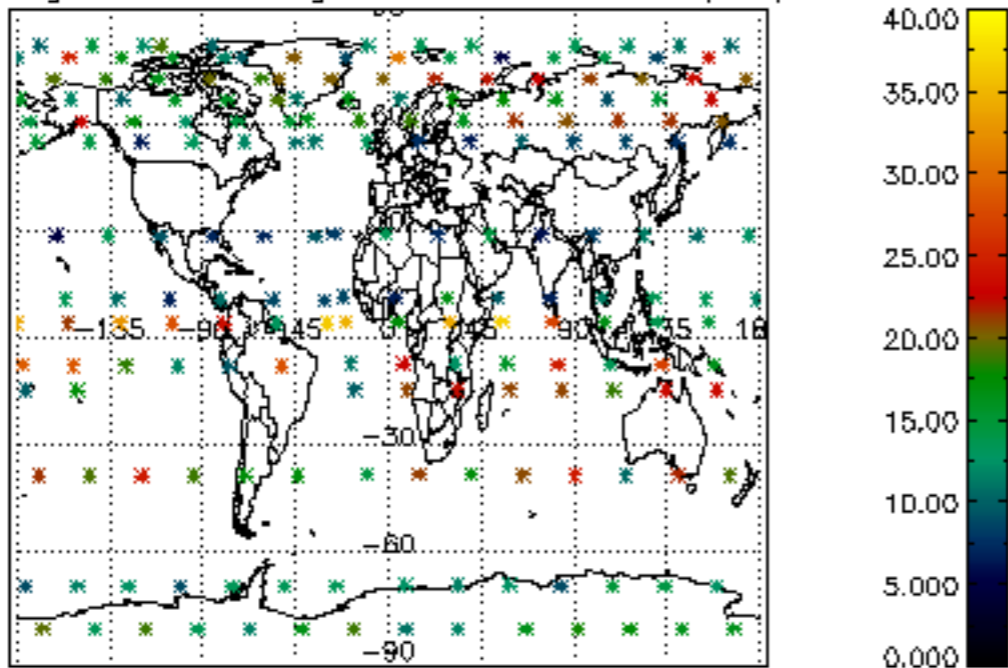
Percentage of cosmic ray hits per profile



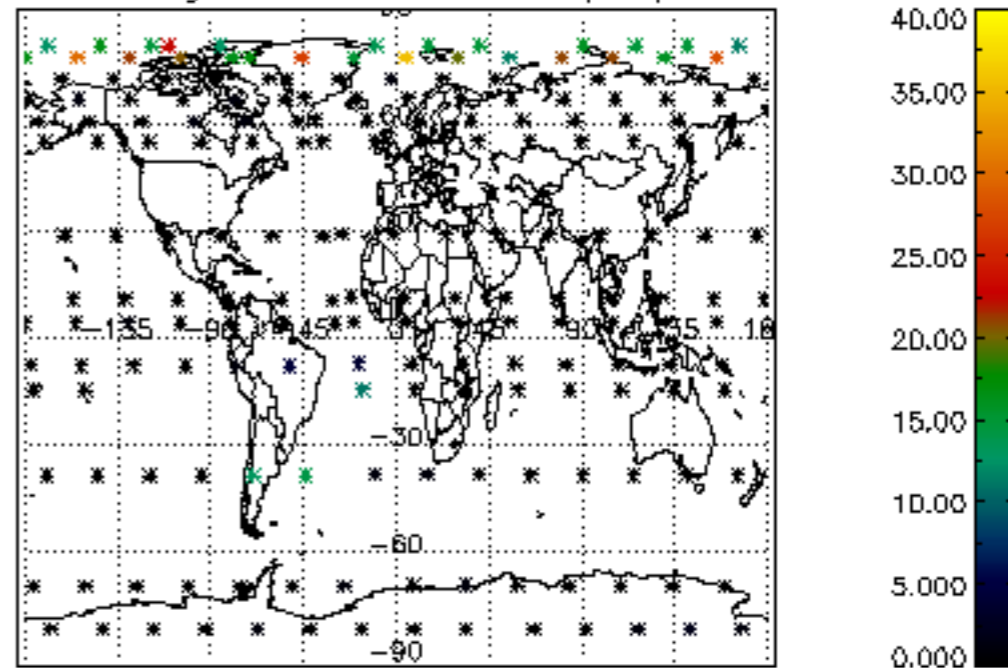
Percentage of datation errors per profile



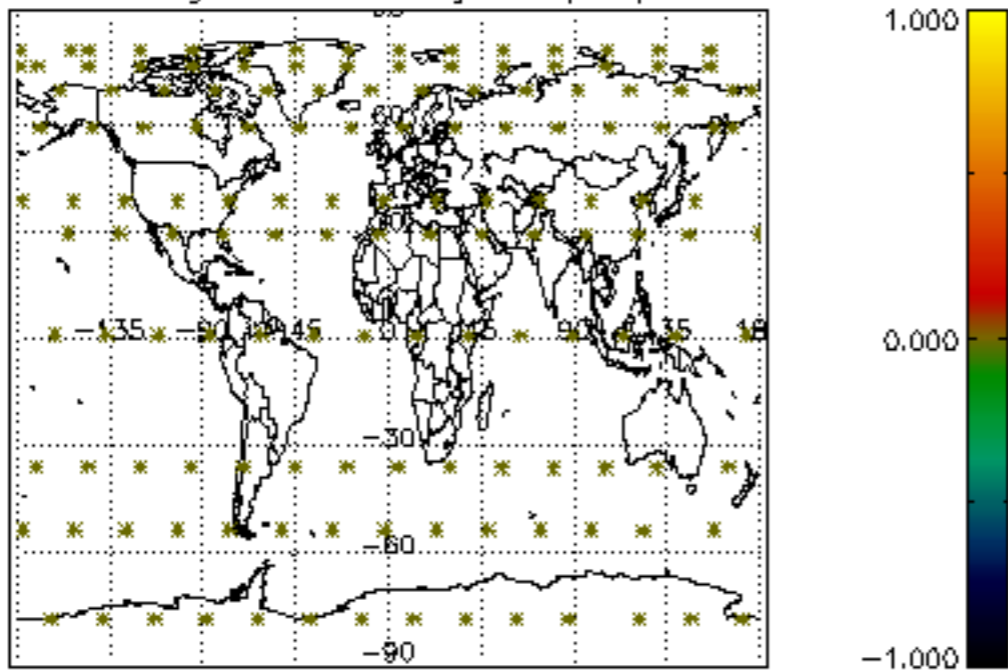
Percentage of star falling outside central band per profile



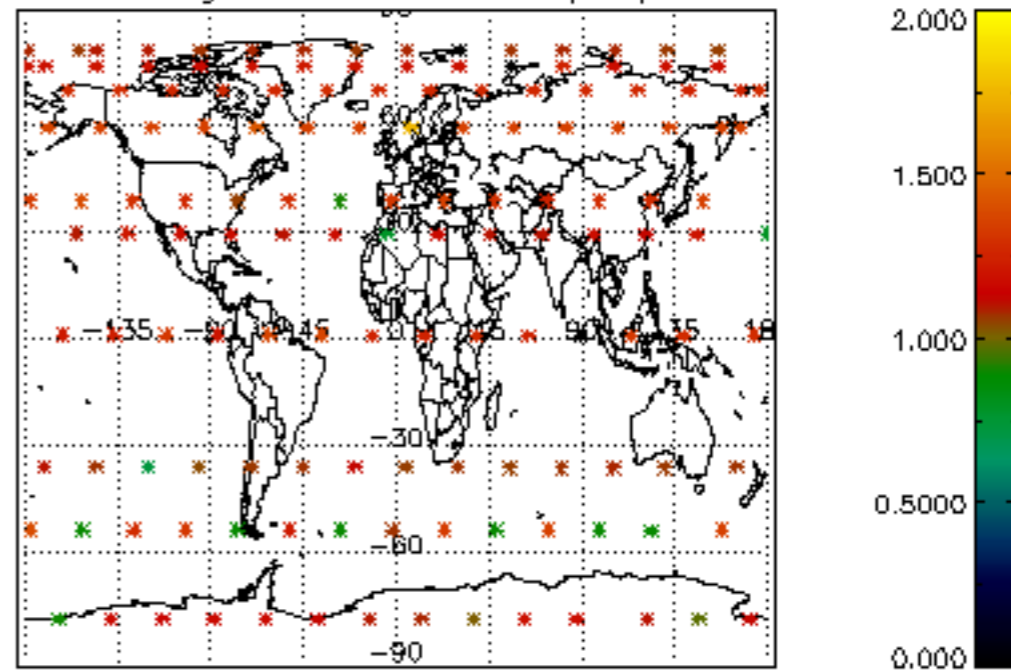
Percentage of saturation errors per profile



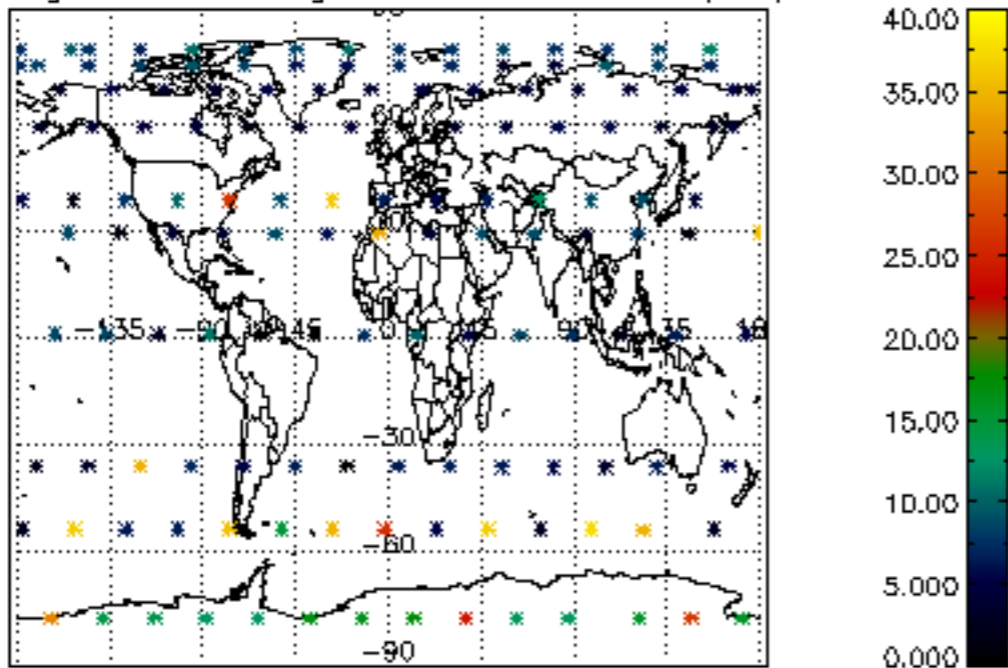
Percentage of cosmic ray hits per profile



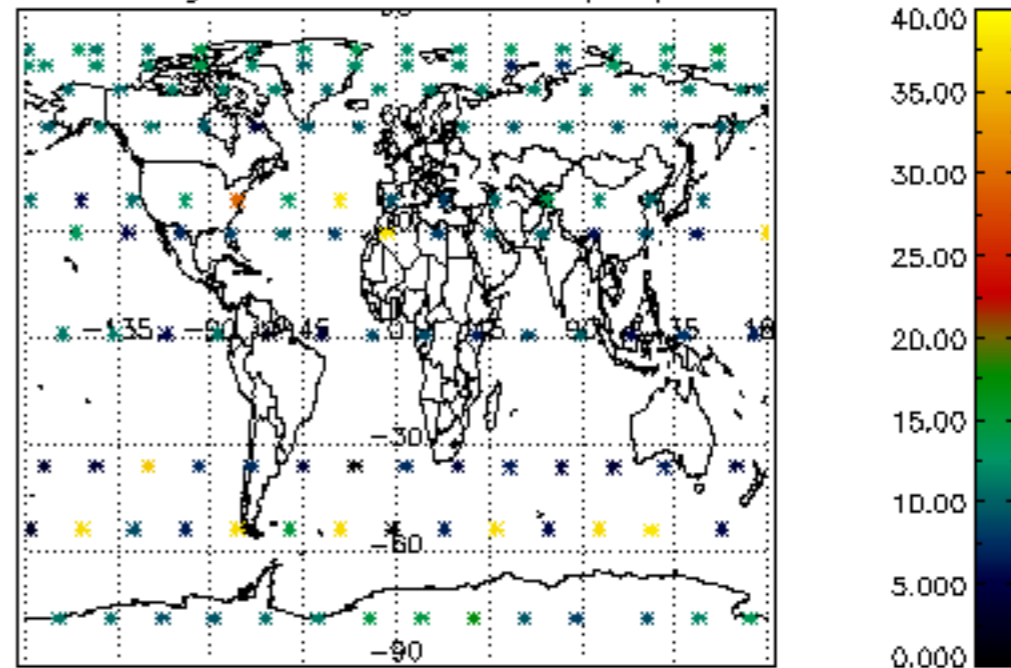
Percentage of datation errors per profile

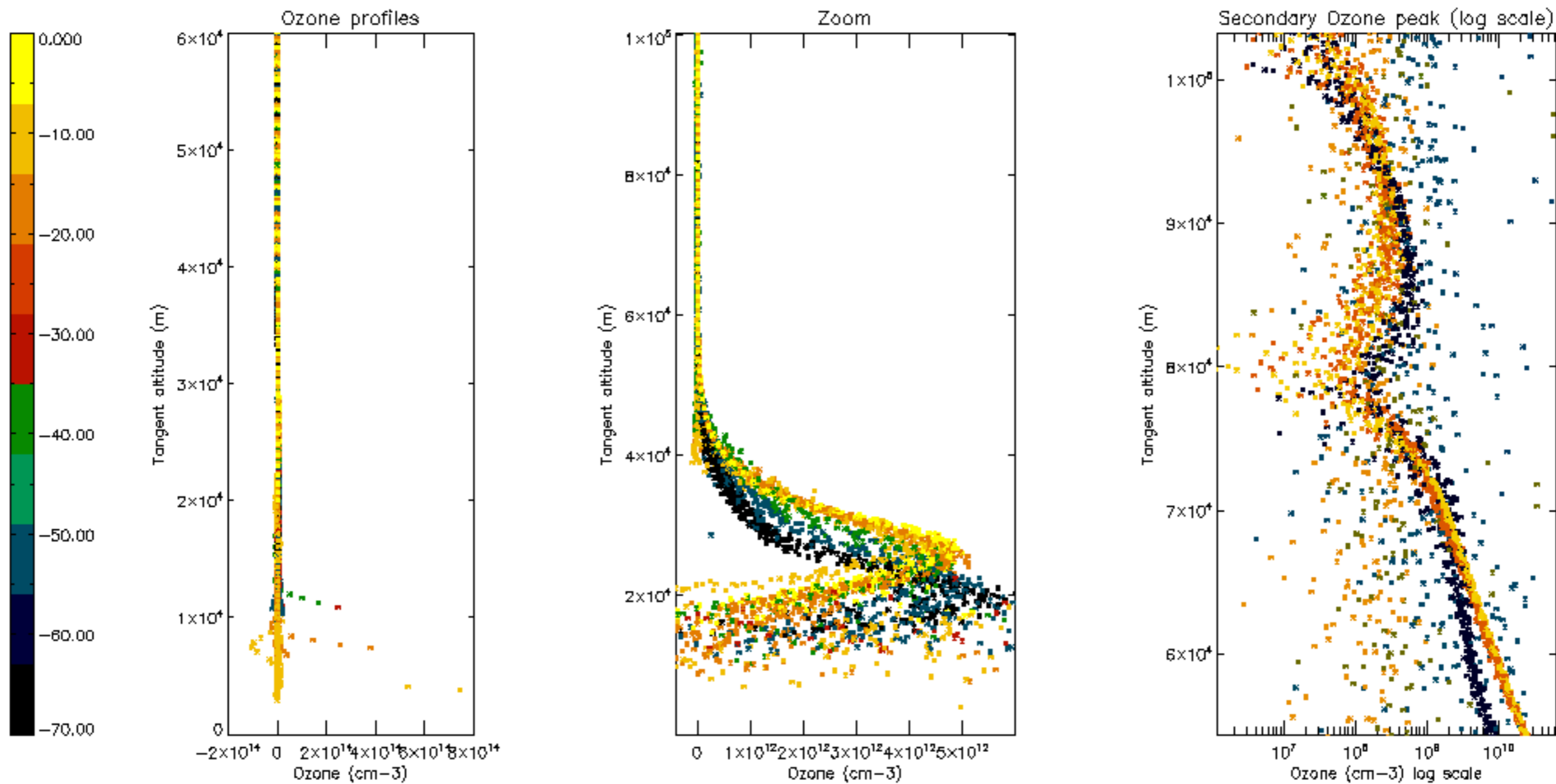


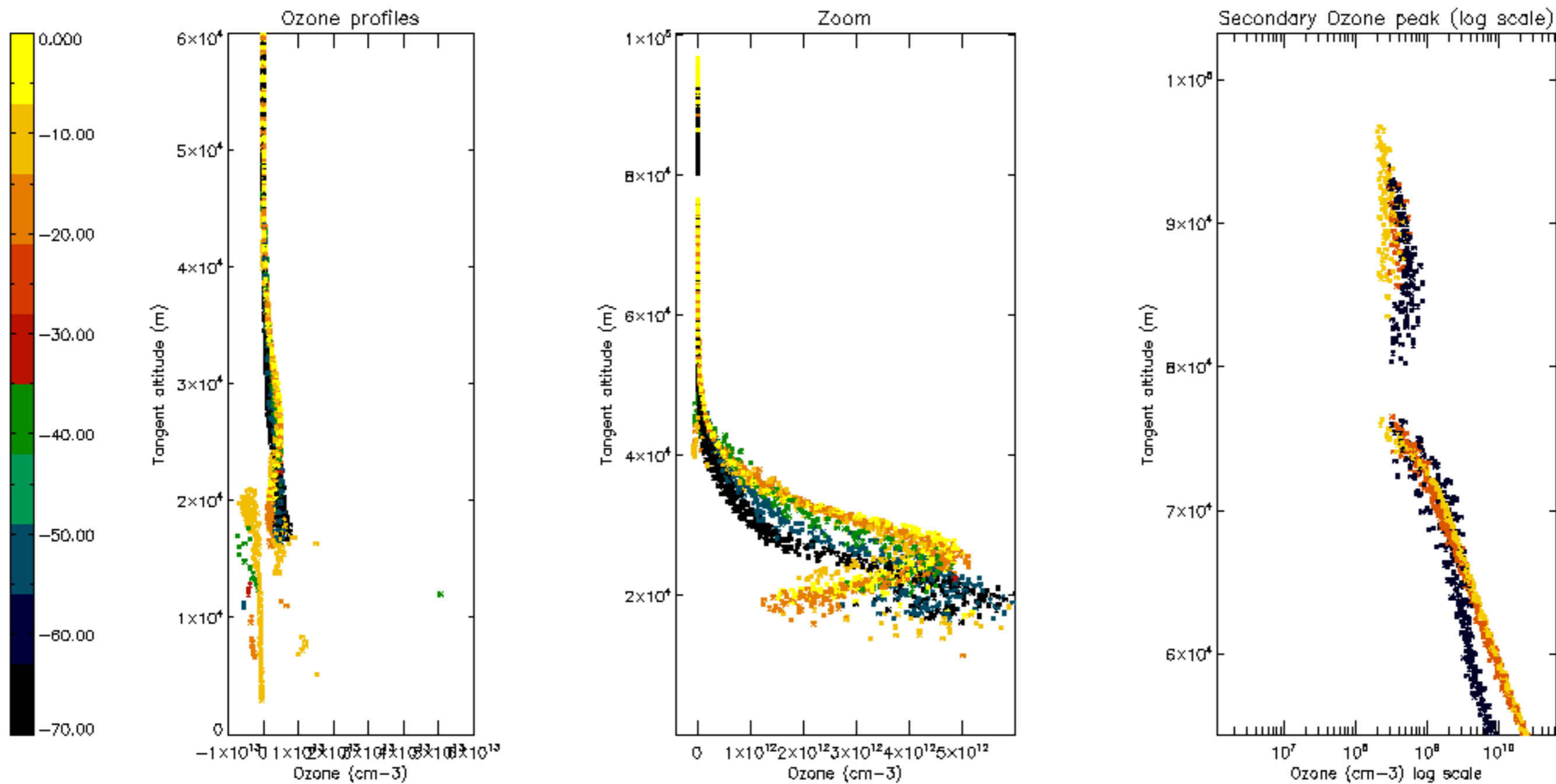
Percentage of star falling outside central band per profile

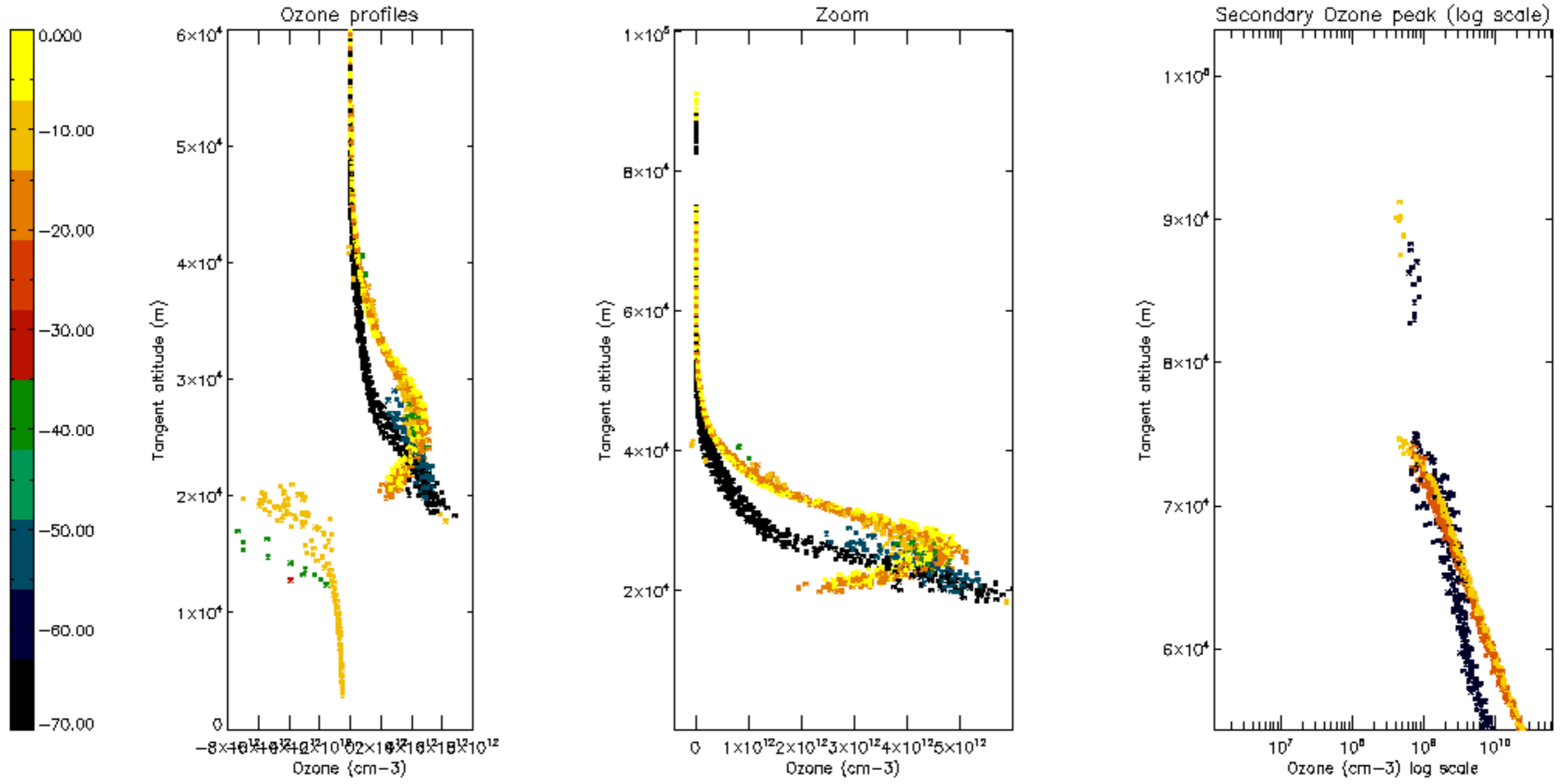


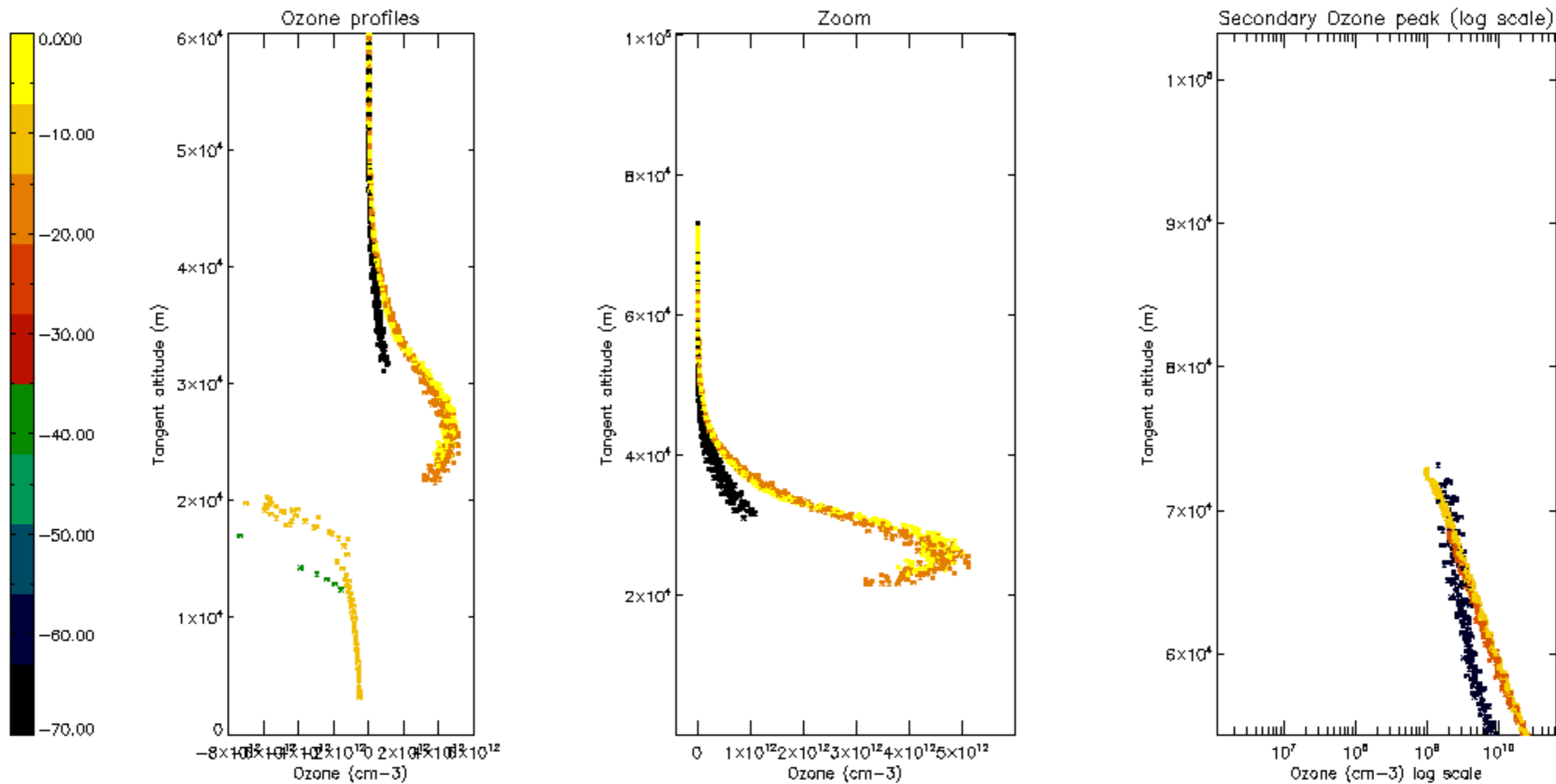
Percentage of saturation errors per profile

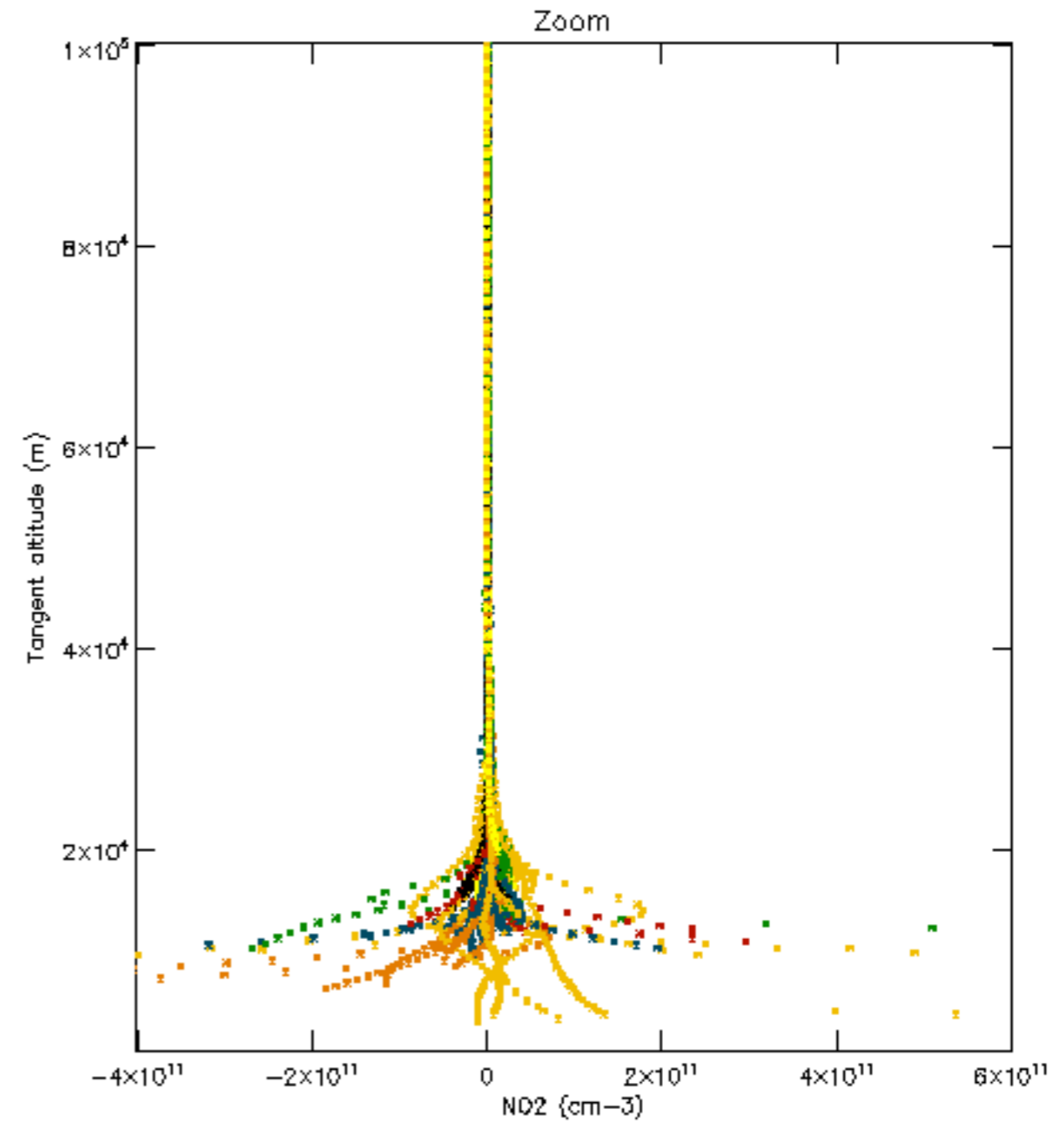
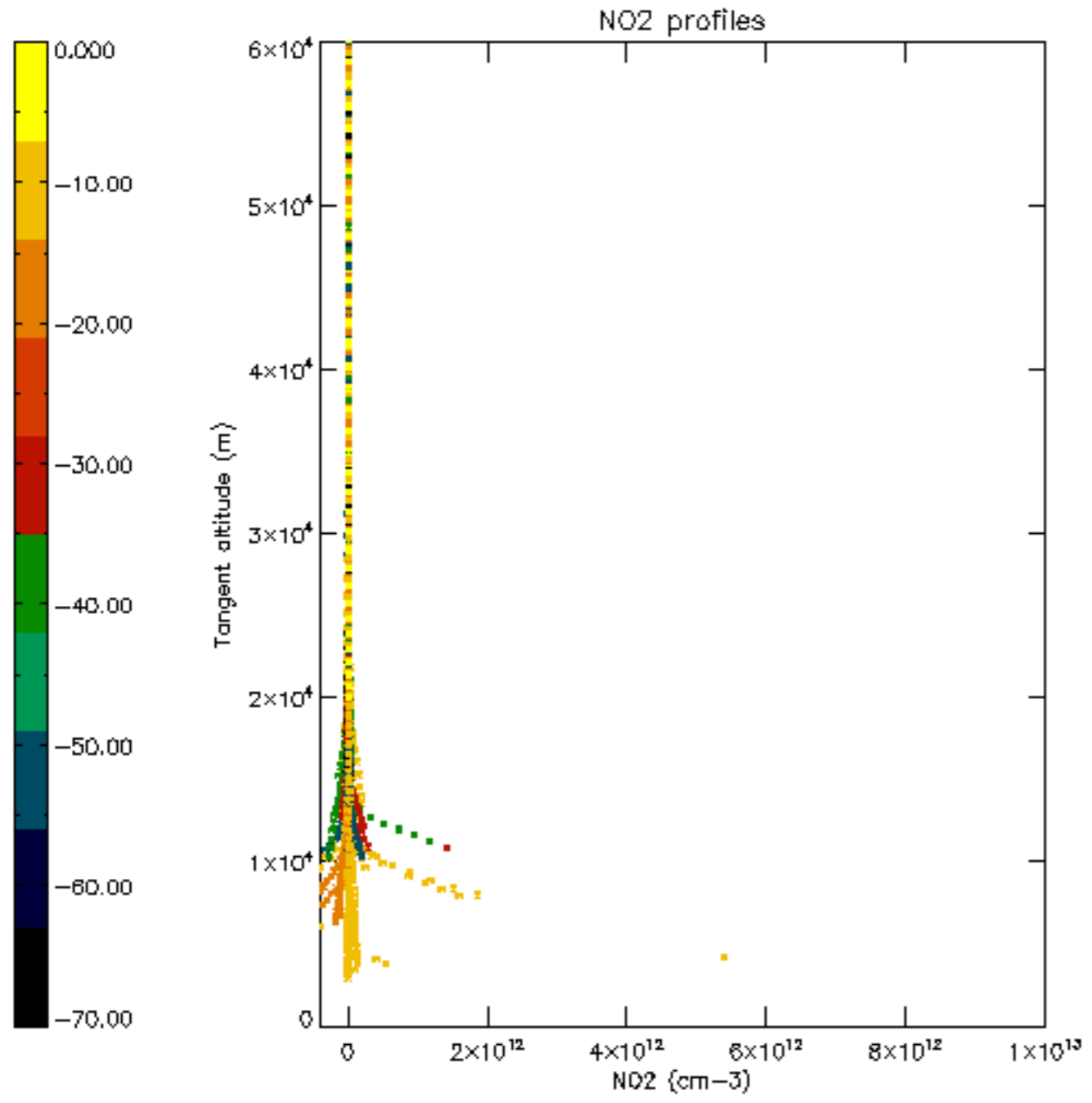


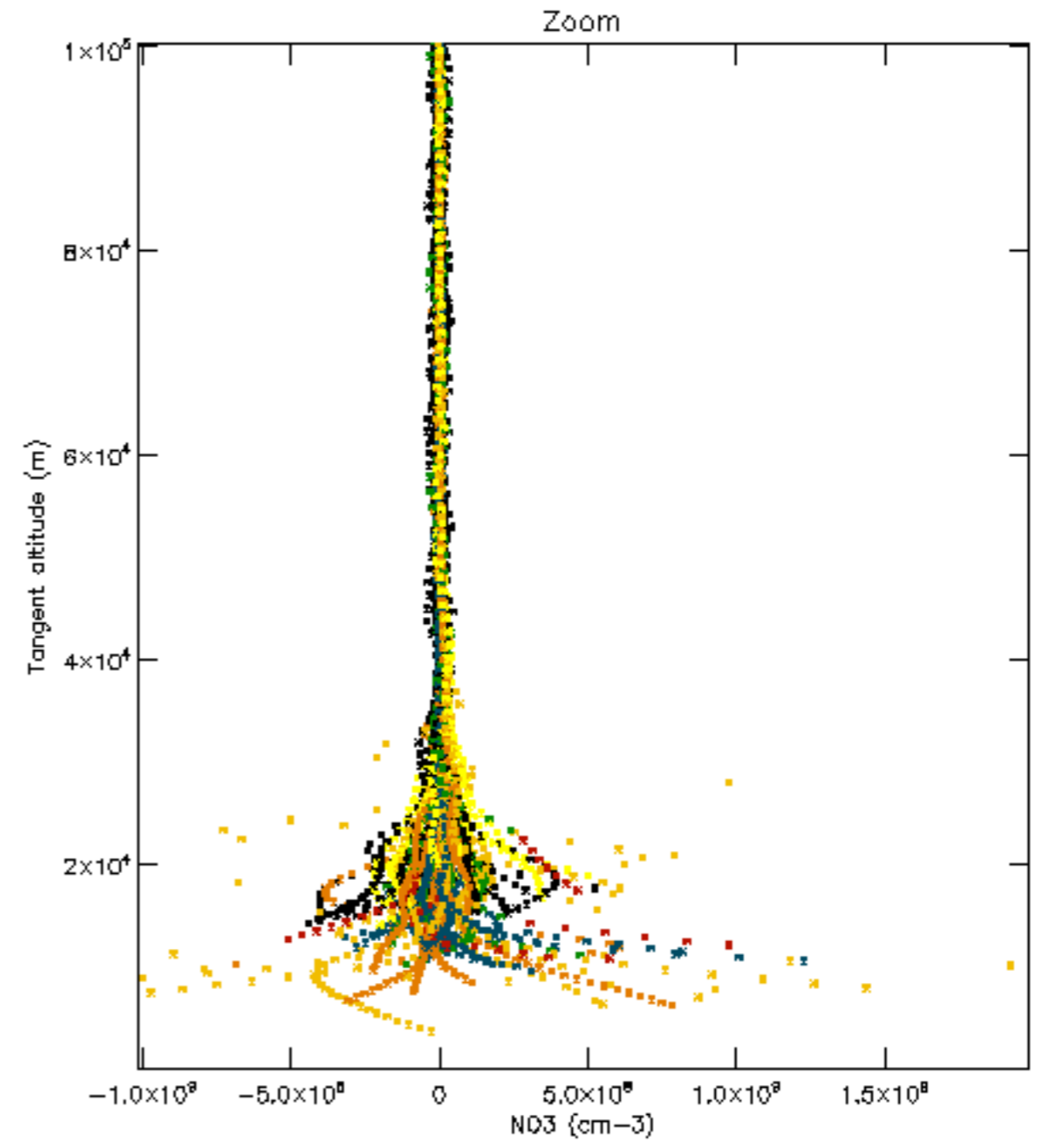
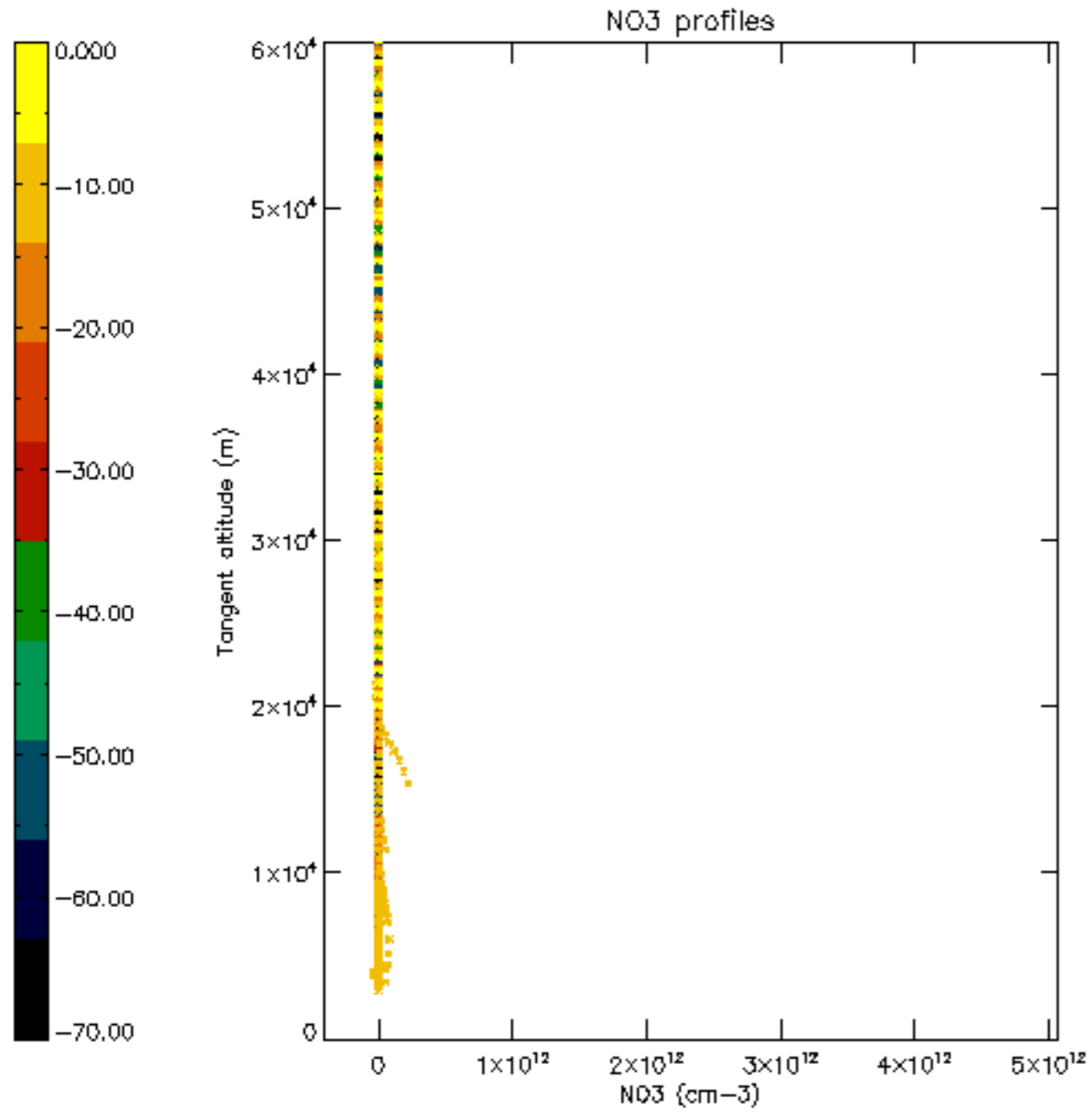


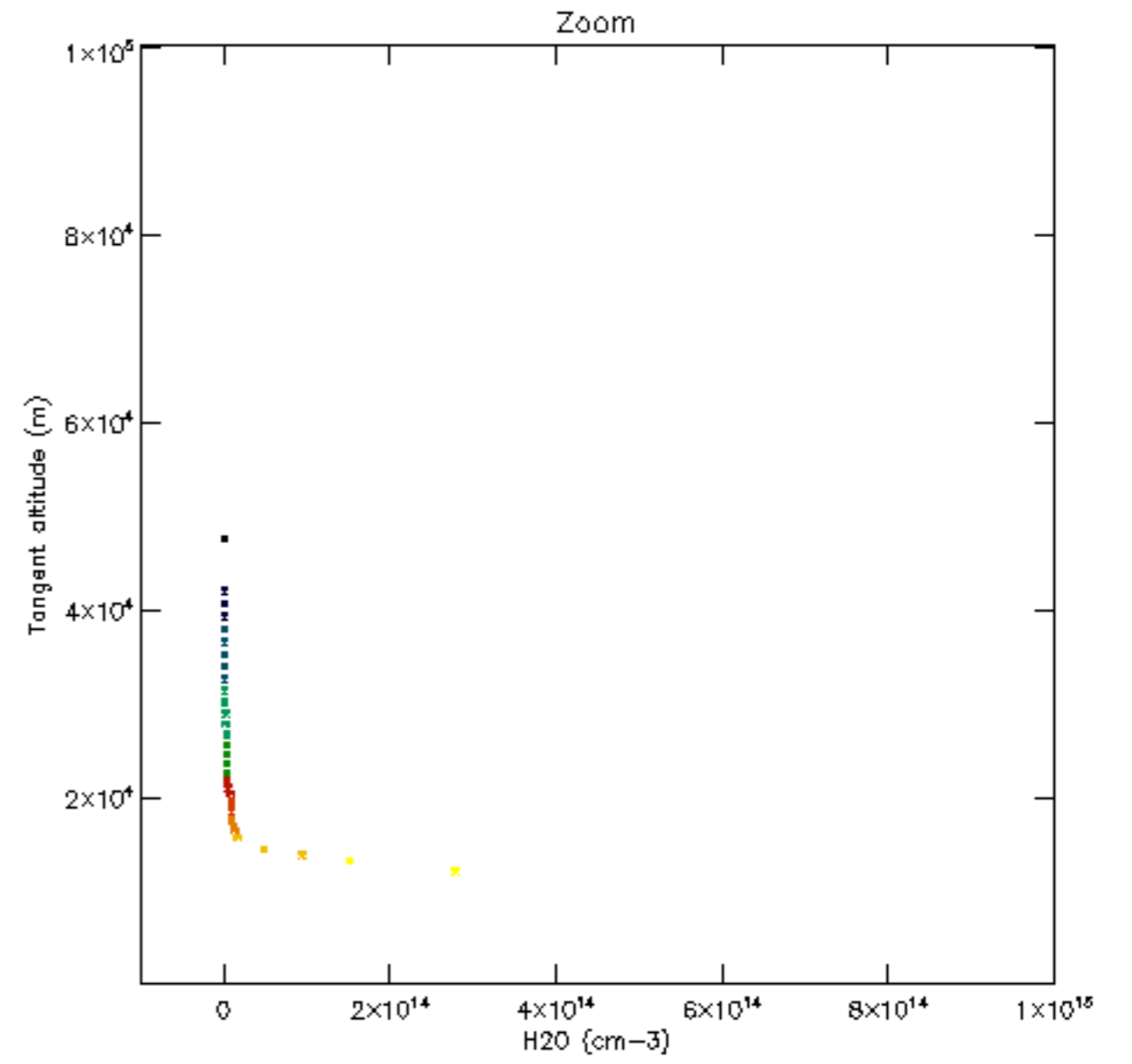
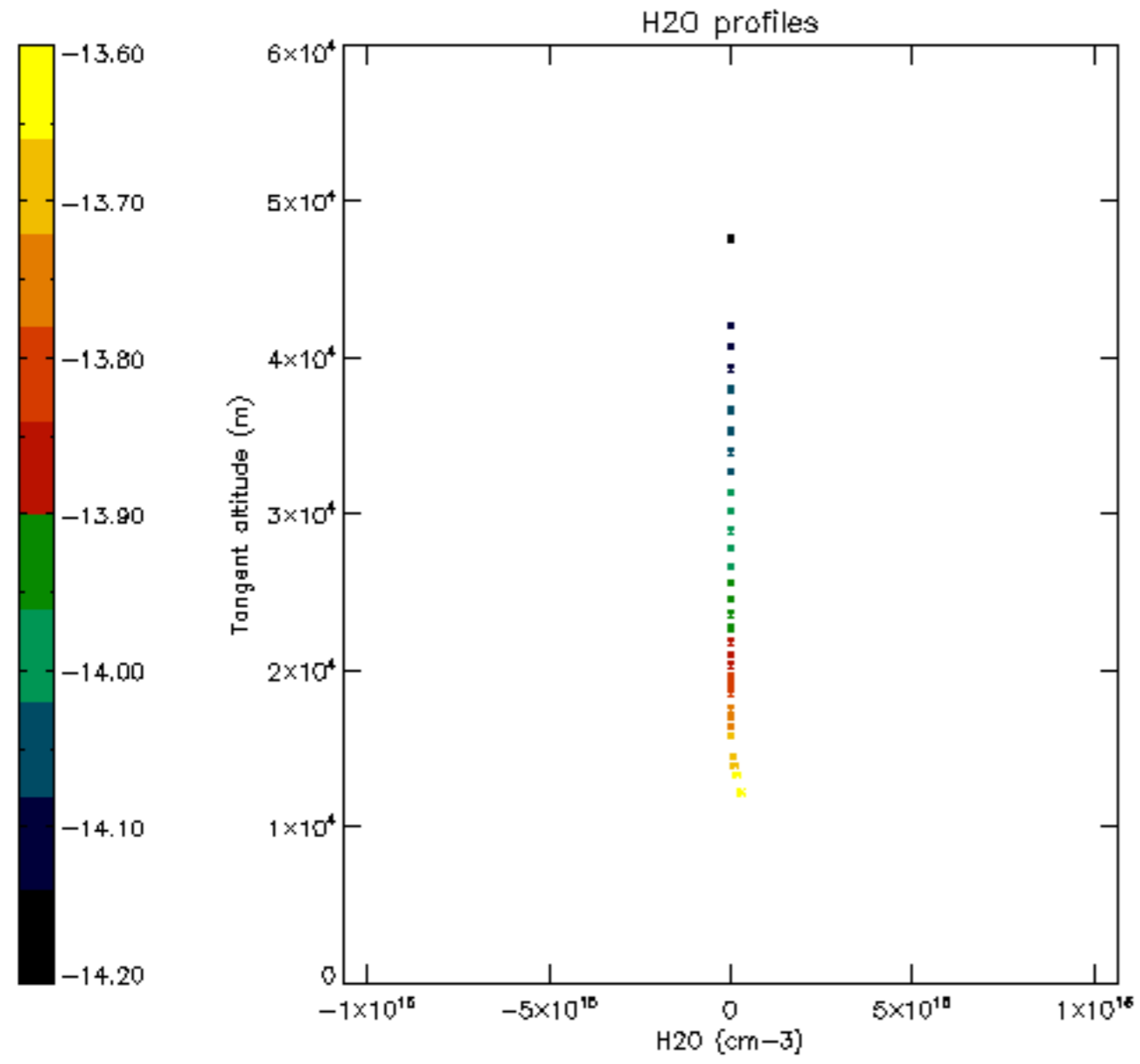


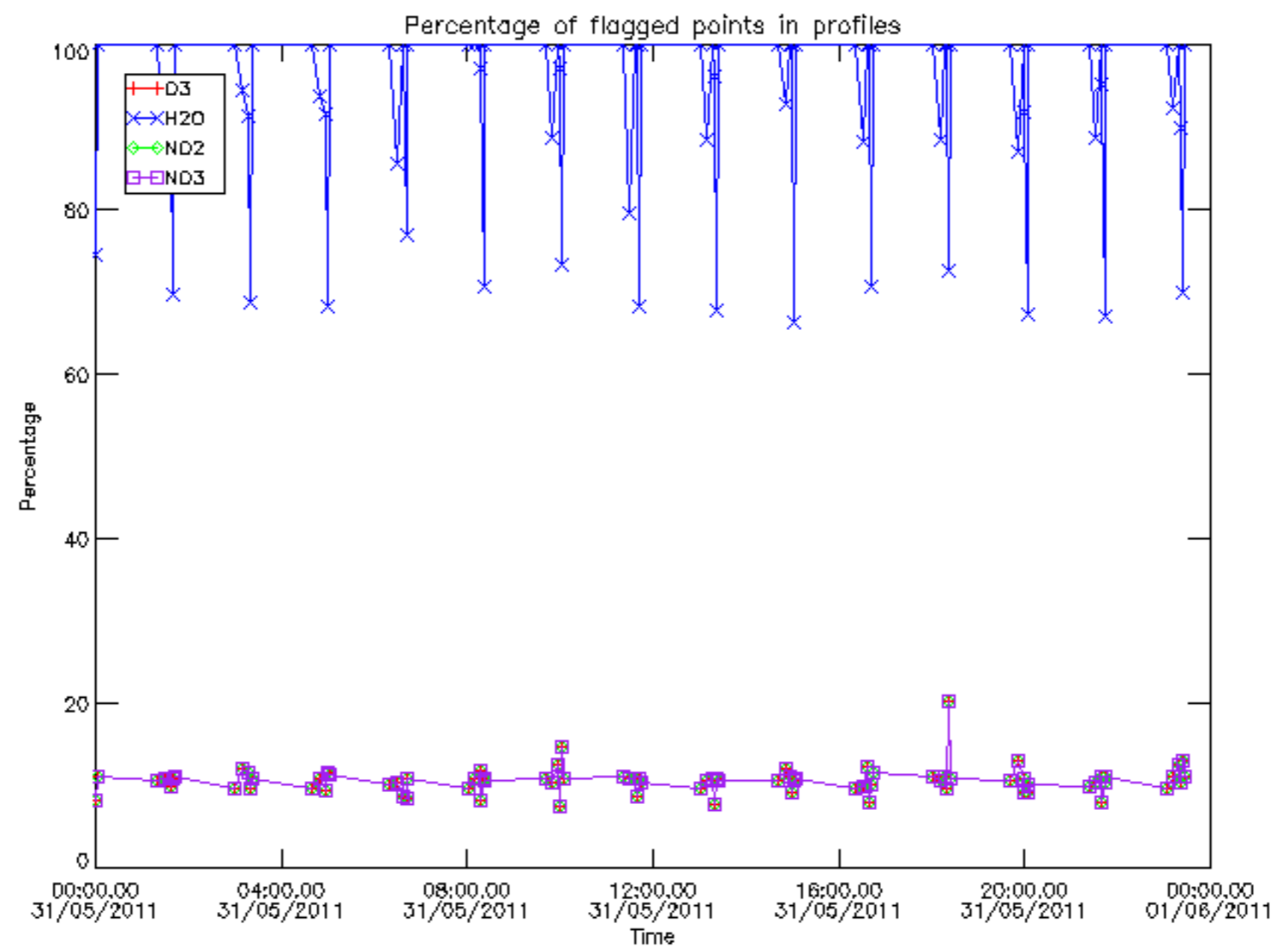




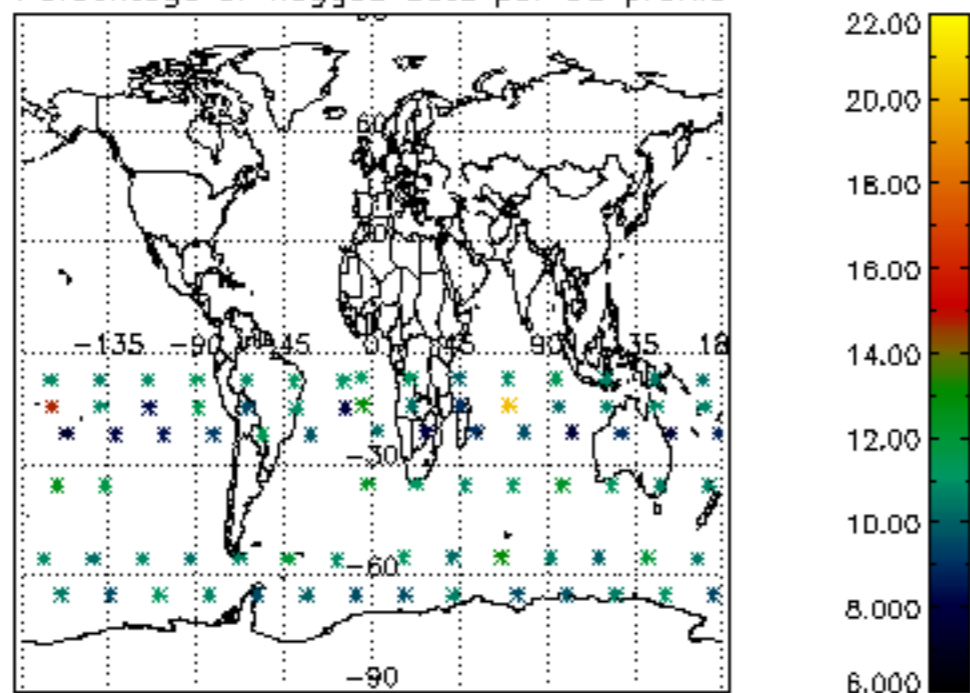




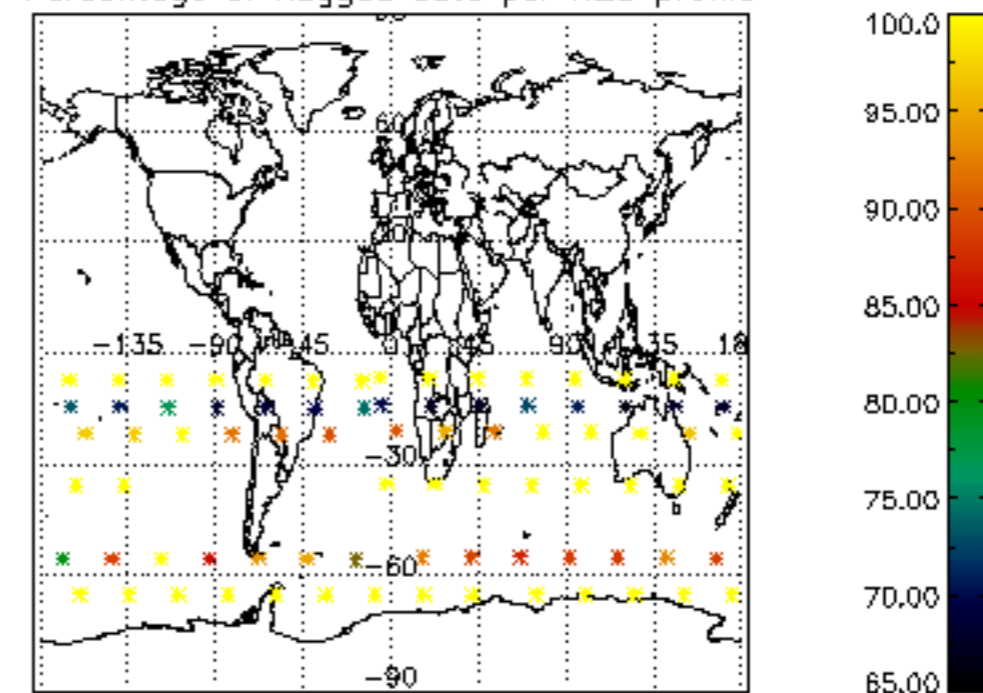




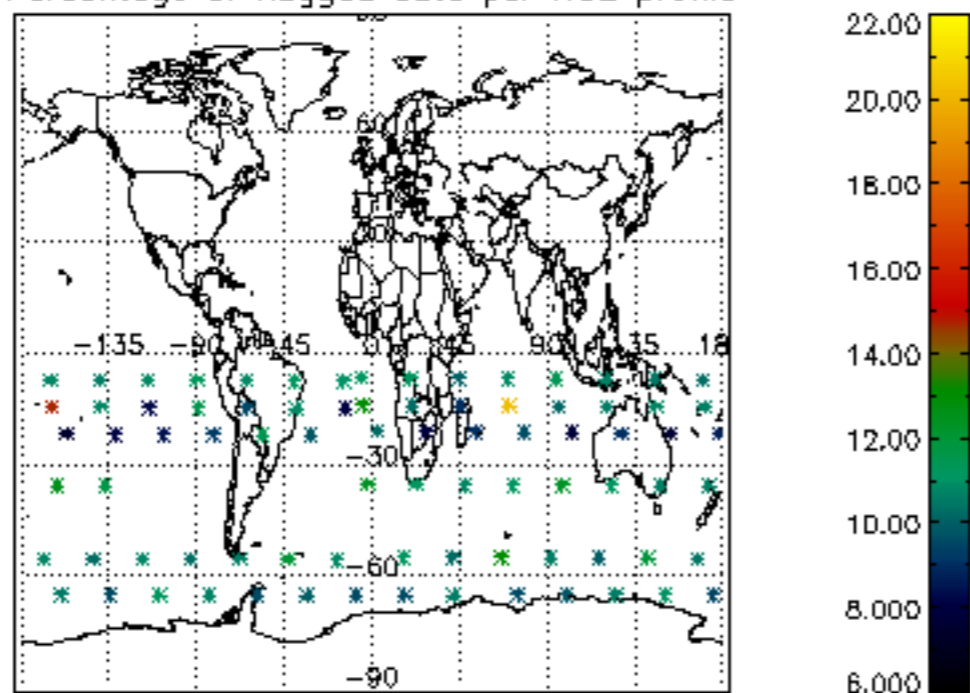
Percentage of flagged data per D3 profile



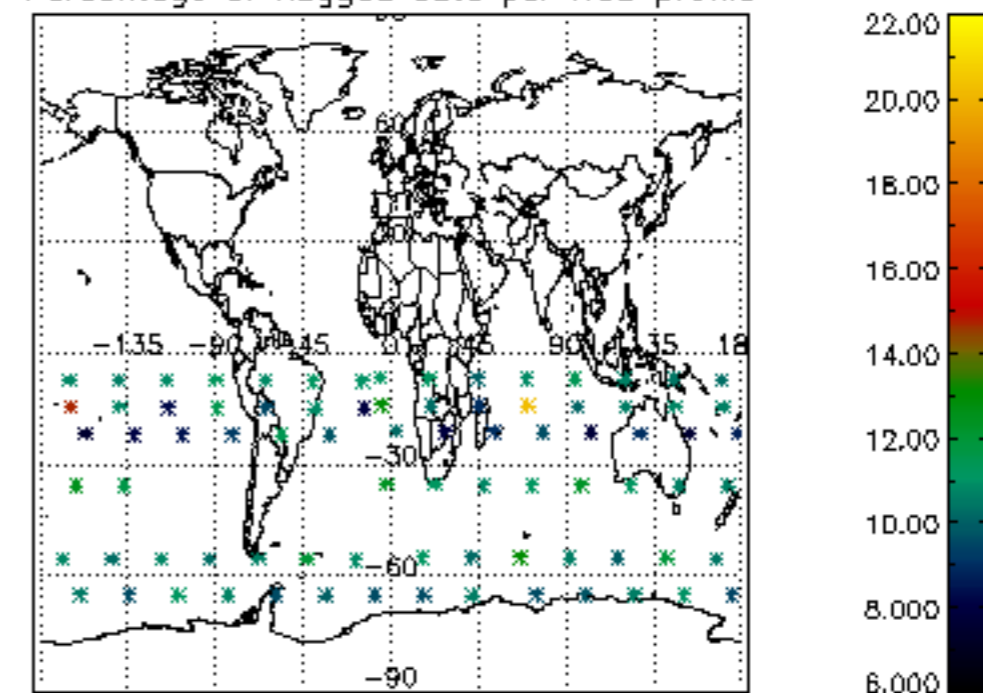
Percentage of flagged data per H2O profile

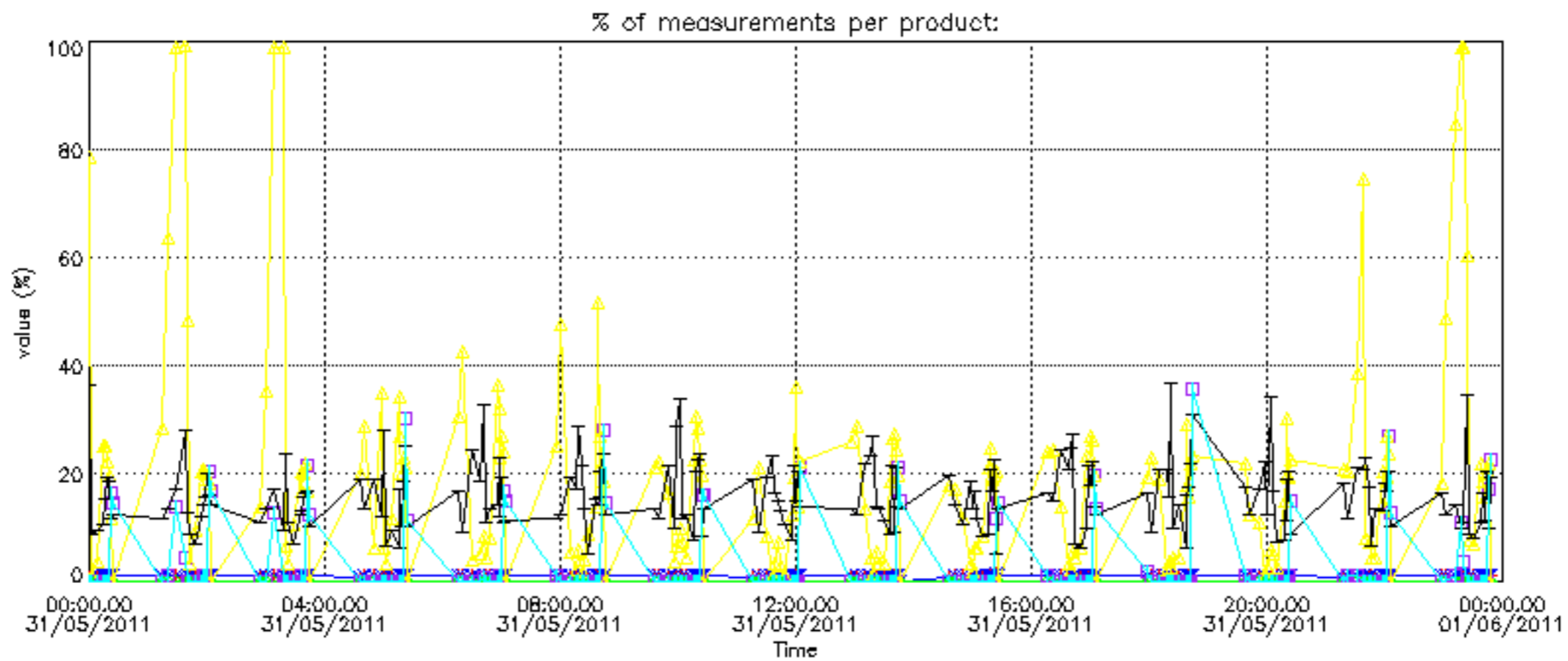


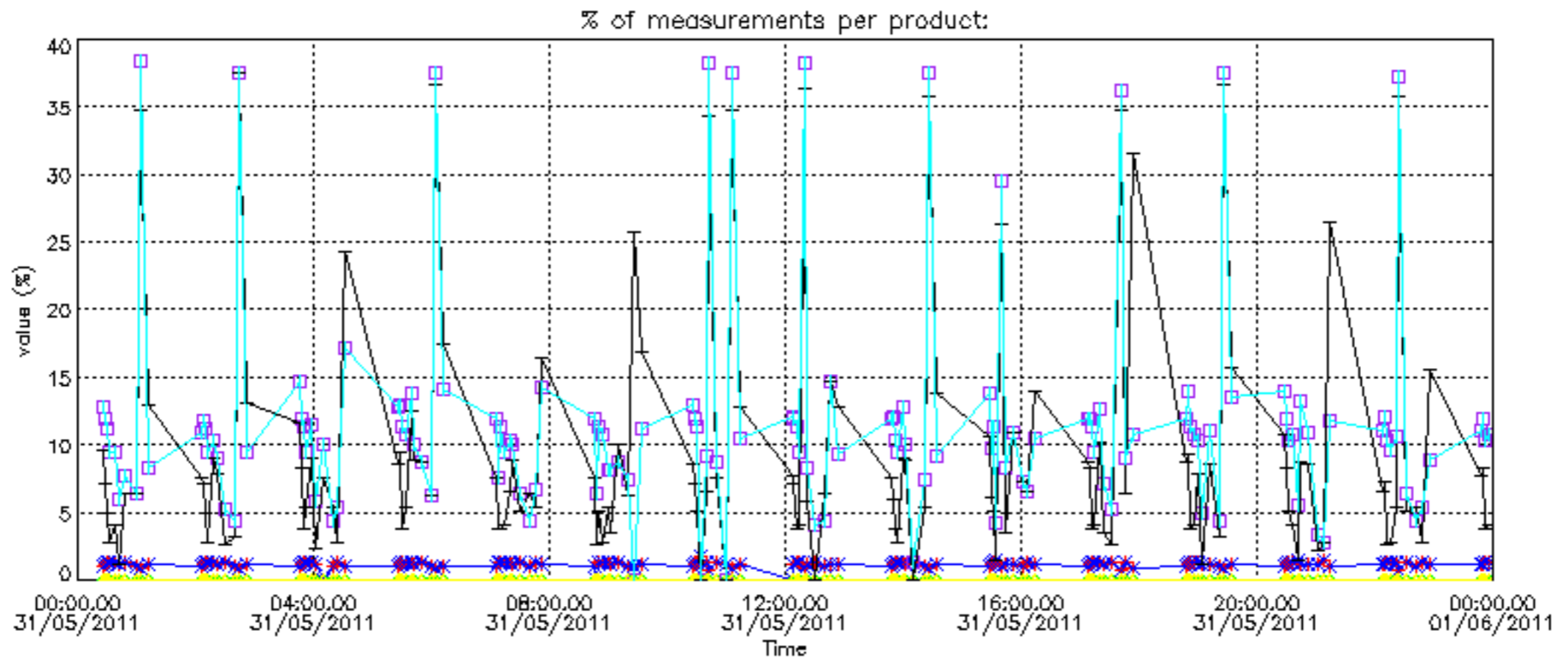
Percentage of flagged data per NO2 profile



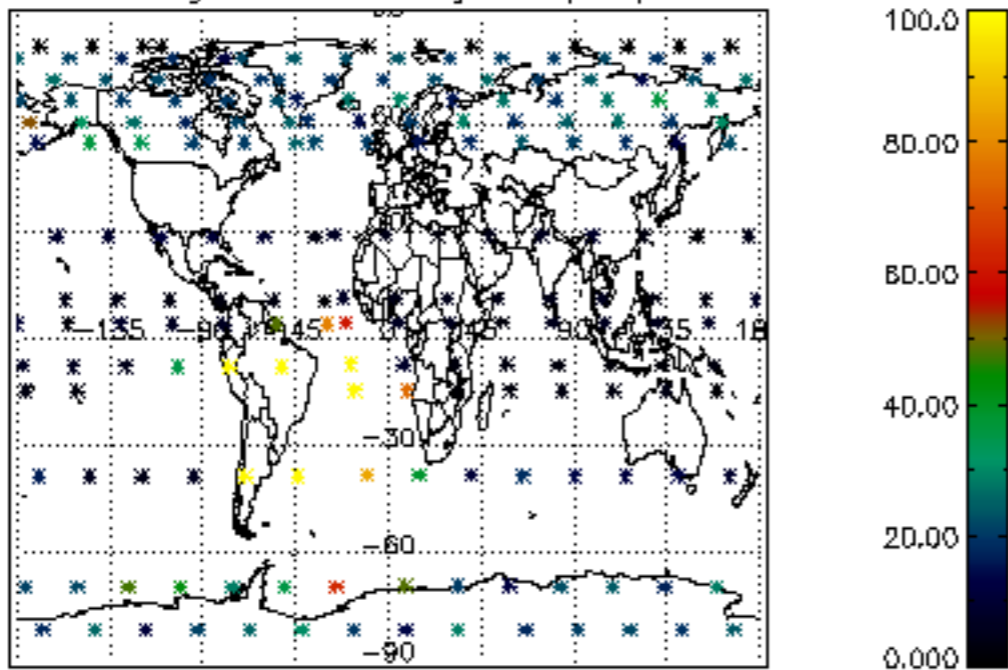
Percentage of flagged data per NO3 profile



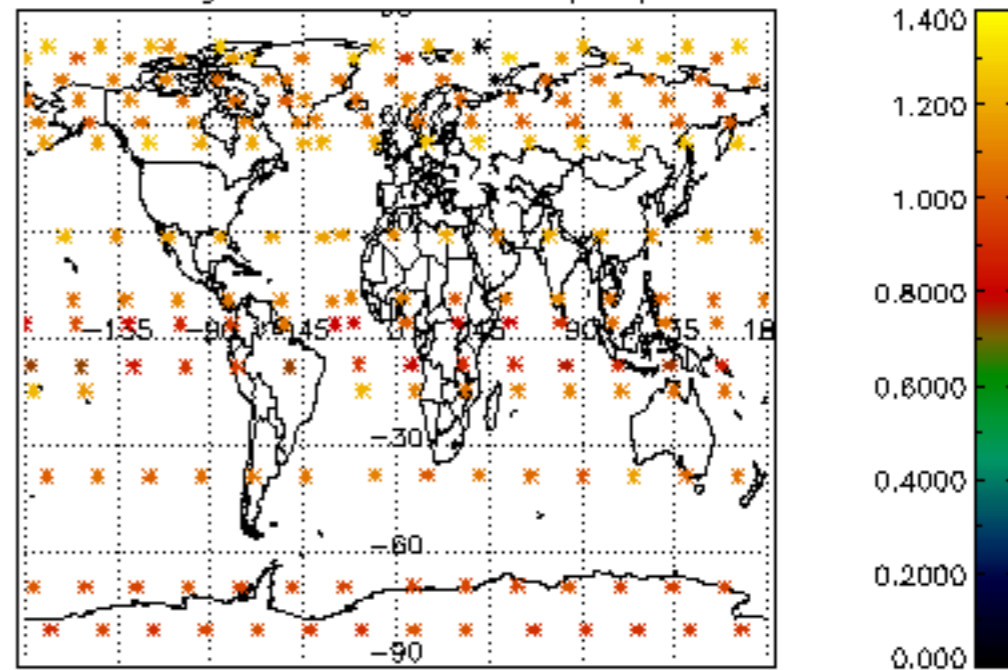




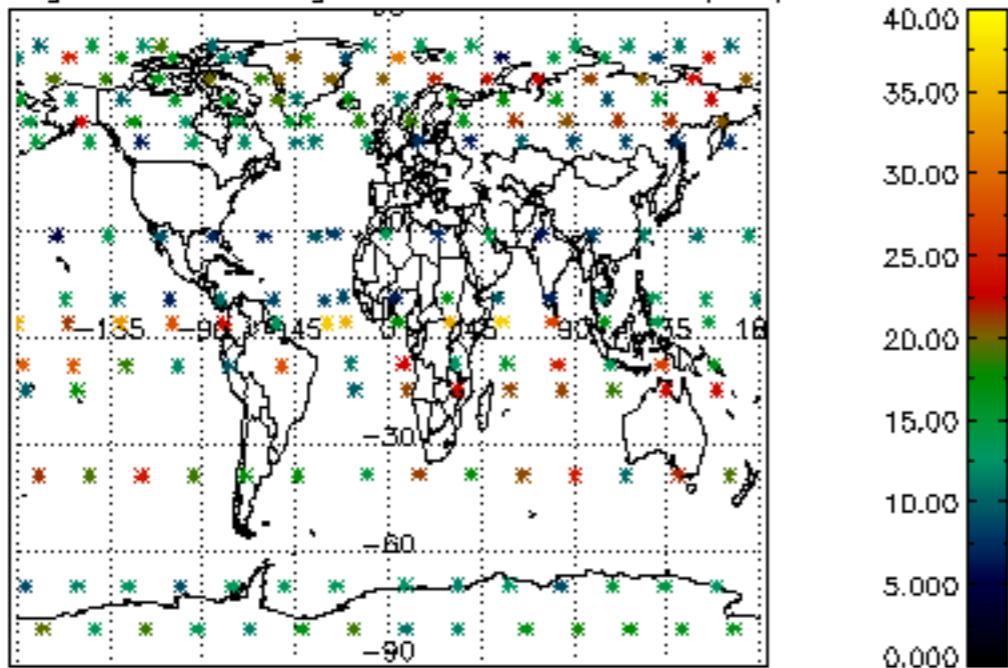
Percentage of cosmic ray hits per profile



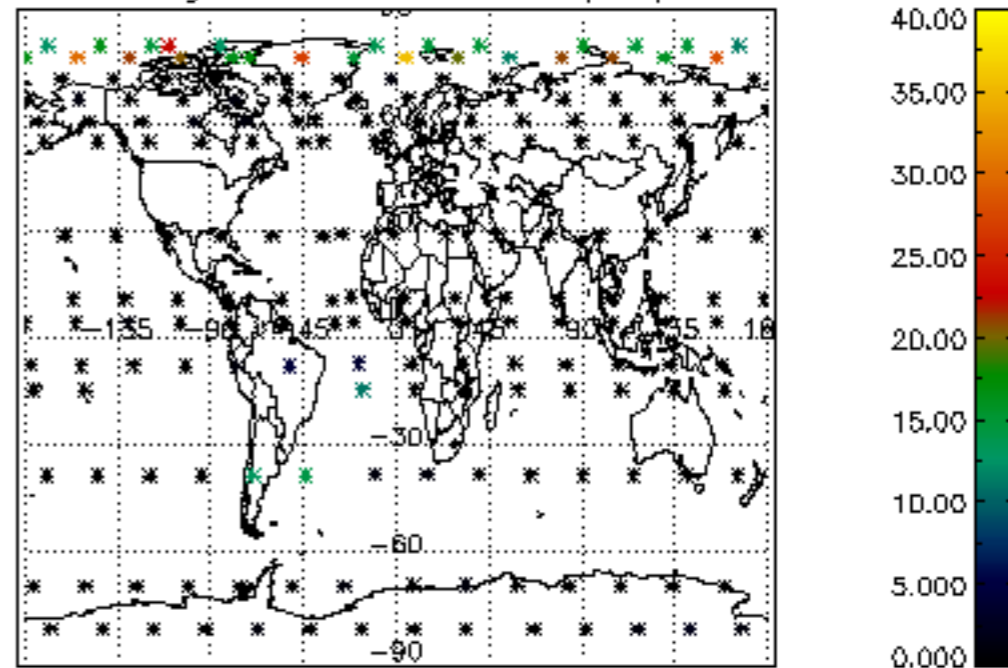
Percentage of datation errors per profile



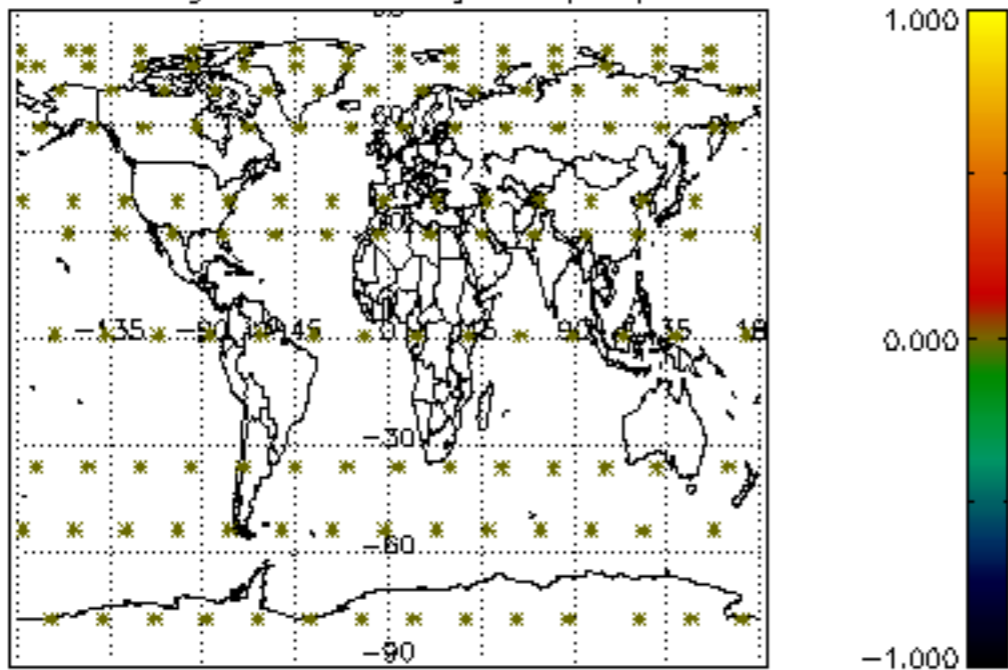
Percentage of star falling outside central band per profile



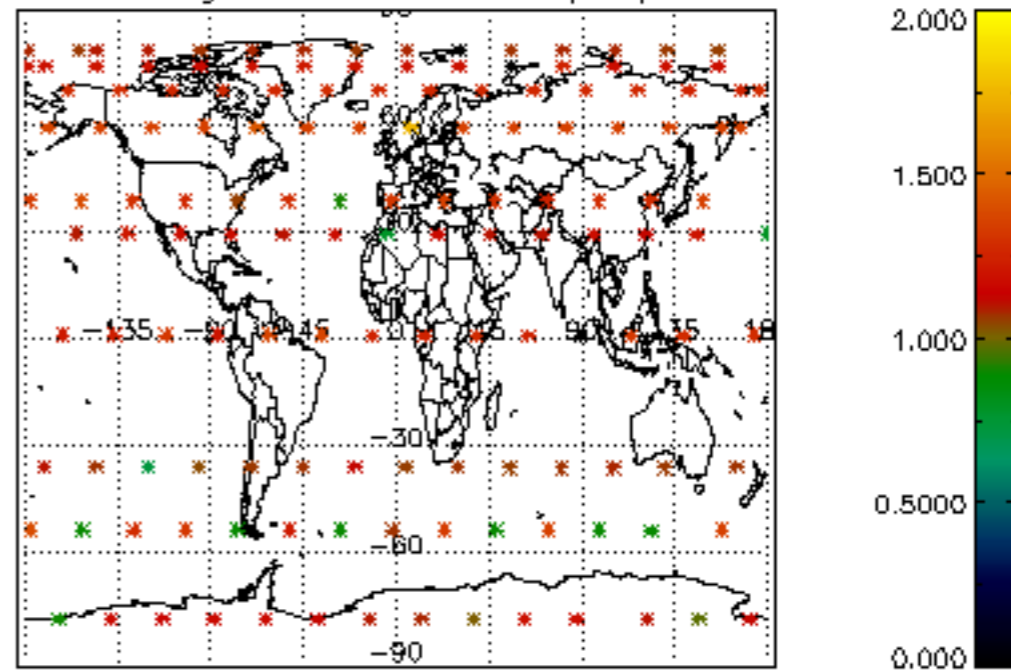
Percentage of saturation errors per profile



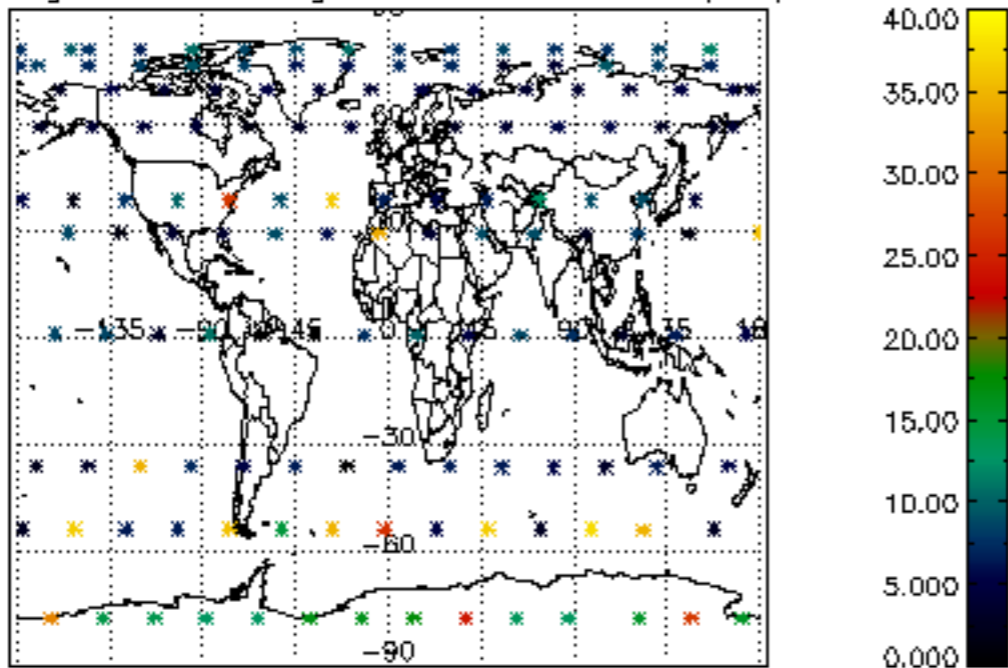
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

