

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	25APR2013 10:20:22
Data source version	GOMOS/6.01
Start time of products	12-02-2008 (12FEB2008 00:00:00)
Stop time of products	13-02-2008 (13FEB2008 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	142
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

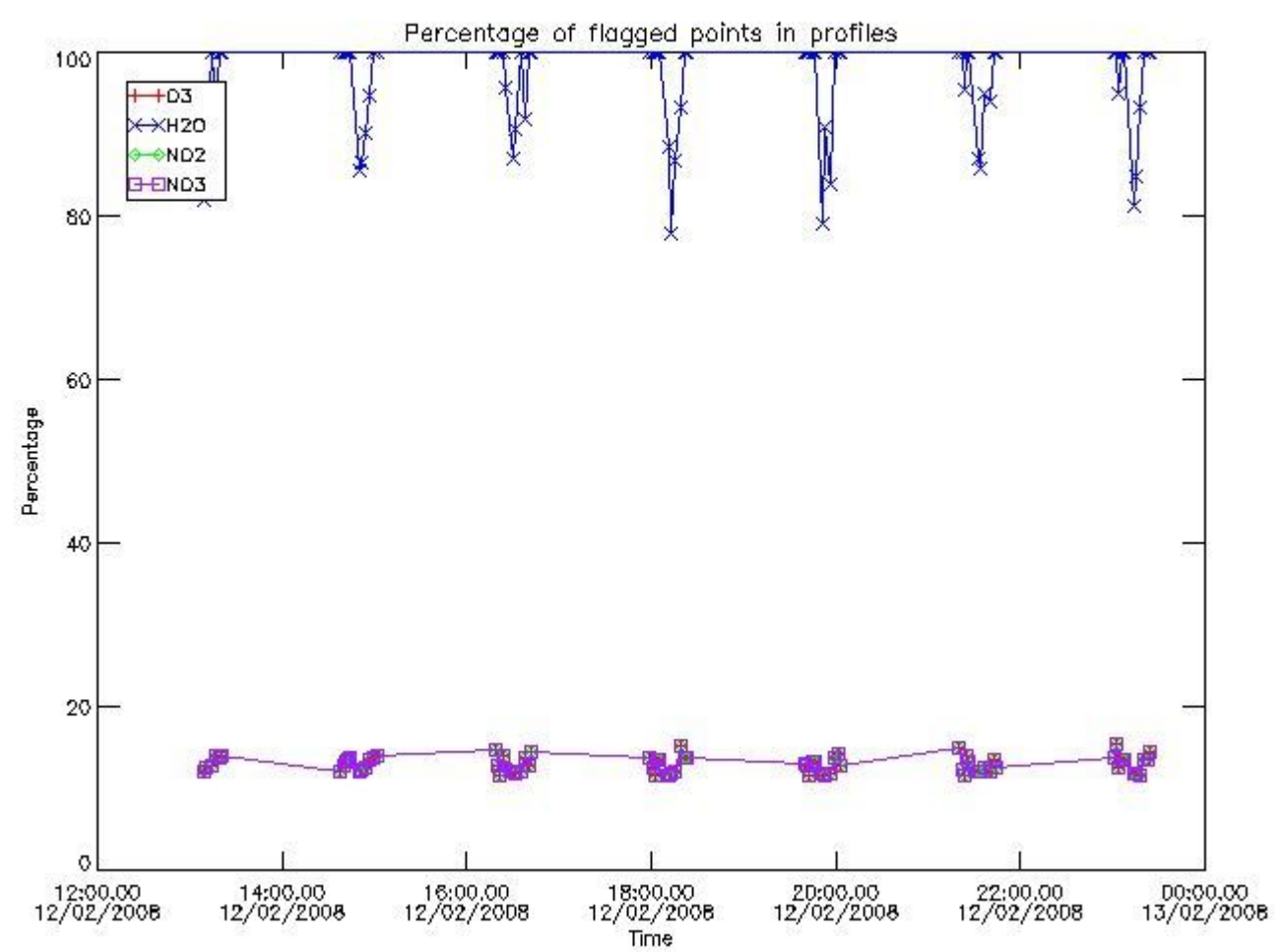
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20080212_130937_000000422066_00010_31126_5228.N1	12-FEB-2008 13:09:37	Dark	42.000	4	Alp1Cen	-0.010000	5800.0	84	31126	No
2	GOM_NL__2PRFIN20080212_131055_000000412066_00010_31126_5229.N1	12-FEB-2008 13:10:55	Dark	41.000	10	Bet Cen	0.610000	28000.	82	31126	No
3	GOM_NL__2PRFIN20080212_131405_000000402066_00010_31126_5230.N1	12-FEB-2008 13:14:05	Dark	40.000	12	Alp1Cru	0.775000	30000.	80	31126	No
4	GOM_NL__2PRFIN20080212_131647_000000372066_00010_31126_5231.N1	12-FEB-2008 13:16:47	Dark	36.500	29	Bet Car	1.6720	10200.	73	31126	No
5	GOM_NL__2PRFIN20080212_131922_000000372066_00010_31126_5232.N1	12-FEB-2008 13:19:22	Dark	37.000	71	lot Car	2.2460	7700.0	74	31126	No
6	GOM_NL__2PRFIN20080212_132101_000000372066_00010_31126_5233.N1	12-FEB-2008 13:21:01	Dark	36.500	46	Del Vel	1.9540	10600.	73	31126	No
7	GOM_NL__2PRFIN20080212_132325_000000412066_00010_31126_5234.N1	12-FEB-2008 13:23:25	Straylight	41.000	34	Gam2Vel	1.7930	23000.	82	31126	No
8	GOM_NL__2PRFIN20080212_132530_000000402066_00010_31126_5235.N1	12-FEB-2008 13:25:30	Straylight	40.000	70	Zet Pup	2.2460	39000.	80	31126	No
9	GOM_NL__2PRFIN20080212_132948_000000412066_00010_31126_5236.N1	12-FEB-2008 13:29:48	Straylight	40.500	132	15Rho Pup	2.8030	6900.0	81	31126	No
10	GOM_NL__2PRFIN20080212_133816_000000462066_00010_31126_5237.N1	12-FEB-2008 13:38:16	Bright	45.500	8	10Alp CMi	0.400000	6500.0	91	31126	No
11	GOM_NL__2PRFIN20080212_134437_000000392066_00010_31126_5238.N1	12-FEB-2008 13:44:37	Bright	38.500	17	78Bet Gem	1.1610	4500.0	77	31126	No
12	GOM_NL__2PRFIN20080212_140202_000000352066_00010_31126_5239.N1	12-FEB-2008 14:02:02	Bright	34.500	49	1Alp UMi	1.9900	6300.0	69	31126	No
13	GOM_NL__2PRFIN20080212_140849_000000352066_00010_31126_5240.N1	12-FEB-2008 14:08:49	Bright	34.500	89	5Alp Cep	2.4510	8000.0	69	31126	No
14	GOM_NL__2PRFIN20080212_141656_000000362066_00010_31126_5241.N1	12-FEB-2008 14:16:56	Bright	36.000	5	3Alp Lyr	0.033000	11000.	72	31126	No
15	GOM_NL__2PRFIN20080212_142345_000000342066_00010_31126_5242.N1	12-FEB-2008 14:23:45	Bright	34.000	168	17Zet Aql	2.9860	11000.	68	31126	No
16	GOM_NL__2PRFIN20080212_143457_000000382066_00010_31126_5243.N1	12-FEB-2008 14:34:57	Twilight	38.000	57	34Sig Sgr	2.0660	26000.	76	31126	No
17	GOM_NL__2PRFIN20080212_143738_000000432066_00010_31126_5244.N1	12-FEB-2008 14:37:38	Dark	42.500	38	20Eps Sgr	1.8360	11000.	85	31126	No
18	GOM_NL__2PRFIN20080212_143937_000000402066_00010_31126_5245.N1	12-FEB-2008 14:39:37	Dark	40.000	25	35Lam Sco	1.6200	28000.	80	31126	No
19	GOM_NL__2PRFIN20080212_144057_000000392066_00010_31126_5246.N1	12-FEB-2008 14:40:57	Dark	38.500	40	The Sco	1.8590	7100.0	77	31126	No
20	GOM_NL__2PRFIN20080212_144245_000000382066_00010_31126_5247.N1	12-FEB-2008 14:42:45	Dark	37.500	147	Alp Ara	2.8770	26000.	75	31126	No
21	GOM_NL__2PRFIN20080212_144414_000000372066_00010_31126_5248.N1	12-FEB-2008 14:44:14	Dark	37.000	141	Bet Ara	2.8400	4600.0	74	31126	No
22	GOM_NL__2PRFIN20080212_145013_000000422066_00011_31127_5238.N1	12-FEB-2008 14:50:13	Dark	42.000	4	Alp1Cen	-0.010000	5800.0	84	31127	No
23	GOM_NL__2PRFIN20080212_145131_000000422066_00011_31127_5239.N1	12-FEB-2008 14:51:31	Dark	41.500	10	Bet Cen	0.610000	28000.	83	31127	No
24	GOM_NL__2PRFIN20080212_145441_000000412066_00011_31127_5240.N1	12-FEB-2008 14:54:41	Dark	41.000	12	Alp1Cru	0.775000	30000.	82	31127	No
25	GOM_NL__2PRFIN20080212_145723_000000382066_00011_31127_5241.N1	12-FEB-2008 14:57:23	Dark	38.000	29	Bet Car	1.6720	10200.	76	31127	No
26	GOM_NL__2PRFIN20080212_145958_000000372066_00011_31127_5242.N1	12-FEB-2008 14:59:58	Dark	37.000	71	lot Car	2.2460	7700.0	74	31127	No
27	GOM_NL__2PRFIN20080212_150137_000000372066_00011_31127_5243.N1	12-FEB-2008 15:01:37	Dark	36.500	46	Del Vel	1.9540	10600.	73	31127	No
28	GOM_NL__2PRFIN20080212_150401_000000412066_00011_31127_5244.N1	12-FEB-2008 15:04:01	Straylight	40.500	34	Gam2Vel	1.7930	23000.	81	31127	No
29	GOM_NL__2PRFIN20080212_150606_000000382066_00011_31127_5245.N1	12-FEB-2008 15:06:06	Straylight	38.000	70	Zet Pup	2.2460	39000.	76	31127	No
30	GOM_NL__2PRFIN20080212_151024_000000412066_00011_31127_5246.N1	12-FEB-2008 15:10:24	Straylight	41.000	132	15Rho Pup	2.8030	6900.0	82	31127	No
31	GOM_NL__2PRFIN20080212_151852_000000442066_00011_31127_5247.N1	12-FEB-2008 15:18:52	Bright	43.500	8	10Alp CMi	0.400000	6500.0	87	31127	No
32	GOM_NL__2PRFIN20080212_152513_000000382066_00011_31127_5248.N1	12-FEB-2008 15:25:13	Bright	38.000	17	78Bet Gem	1.1610	4500.0	76	31127	No
33	GOM_NL__2PRFIN20080212_154238_000000362066_00011_31127_5249.N1	12-FEB-2008 15:42:38	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	31127	No
34	GOM_NL__2PRFIN20080212_154925_000000392066_00011_31127_5250.N1	12-FEB-2008 15:49:25	Bright	39.000	89	5Alp Cep	2.4510	8000.0	78	31127	No
35	GOM_NL__2PRFIN20080212_155514_000000342066_00011_31127_5251.N1	12-FEB-2008 15:55:14	Bright	34.000	144	18Del Cyg	2.8600	11000.	68	31127	No
36	GOM_NL__2PRFIN20080212_155732_000000372066_00011_31127_5252.N1	12-FEB-2008 15:57:32	Bright	37.000	5	3Alp Lyr	0.033000	11000.	74	31127	No
37	GOM_NL__2PRFIN20080212_160422_000000342066_00011_31127_5253.N1	12-FEB-2008 16:04:22	Bright	33.500	168	17Zet Aql	2.9860	11000.	67	31127	No
38	GOM_NL__2PRFIN20080212_161533_000000392066_00011_31127_5254.N1	12-FEB-2008 16:15:33	Twilight	39.000	57	34Sig Sgr	2.0660	26000.	78	31127	No
39	GOM_NL__2PRFIN20080212_161814_000000422066_00011_31127_5255.N1	12-FEB-2008 16:18:14	Dark	41.500	38	20Eps Sgr	1.8360	11000.	83	31127	No
40	GOM_NL__2PRFIN20080212_162014_000000402066_00011_31127_5256.N1	12-FEB-2008 16:20:14	Dark	40.000	25	35Lam Sco	1.6200	28000.	80	31127	No
41	GOM_NL__2PRFIN20080212_162133_000000452066_00011_31127_5257.N1	12-FEB-2008 16:21:33	Dark	44.500	40	The Sco	1.8590	7100.0	89	31127	No
42	GOM_NL__2PRFIN20080212_162321_000000372066_00011_31127_5258.N1	12-FEB-2008 16:23:21	Dark	36.500	147	Alp Ara	2.8770	26000.	73	31127	No

102	GOM_NL__2PRFIN20080212_205920_000000352066_00014_31130_5299.N1	12-FEB-2008 20:59:20	Bright	35.000	5	3Alp Lyr	0.033000	11000.	70	31130	No
103	GOM_NL__2PRFIN20080212_210610_000000342066_00014_31130_5300.N1	12-FEB-2008 21:06:10	Bright	33.500	168	17Zet Aql	2.9860	11000.	67	31130	No
104	GOM_NL__2PRFIN20080212_211721_000000422066_00014_31130_5301.N1	12-FEB-2008 21:17:21	Twilight	42.000	57	34Sig Sgr	2.0660	26000.	84	31130	No
105	GOM_NL__2PRFIN20080212_212003_000000412066_00014_31130_5302.N1	12-FEB-2008 21:20:03	Dark	41.000	38	20Eps Sgr	1.8360	11000.	82	31130	No
106	GOM_NL__2PRFIN20080212_212203_000000422066_00014_31130_5303.N1	12-FEB-2008 21:22:03	Dark	41.500	25	35Lam Sco	1.6200	28000.	83	31130	No
107	GOM_NL__2PRFIN20080212_212323_000000442066_00014_31130_5304.N1	12-FEB-2008 21:23:23	Dark	44.000	40	The Sco	1.8590	7100.0	88	31130	No
108	GOM_NL__2PRFIN20080212_212510_000000372066_00014_31130_5305.N1	12-FEB-2008 21:25:10	Dark	36.500	147	Alp Ara	2.8770	26000.	73	31130	No
109	GOM_NL__2PRFIN20080212_212639_000000392066_00014_31130_5306.N1	12-FEB-2008 21:26:39	Dark	38.500	141	Bet Ara	2.8400	4600.0	77	31130	No
110	GOM_NL__2PRFIN20080212_213240_000000432066_00015_31131_5300.N1	12-FEB-2008 21:32:40	Dark	42.500	4	Alp1Cen	-0.010000	5800.0	85	31131	No
111	GOM_NL__2PRFIN20080212_213358_000000432066_00015_31131_5301.N1	12-FEB-2008 21:33:58	Dark	42.500	10	Bet Cen	0.610000	28000.	85	31131	No
112	GOM_NL__2PRFIN20080212_213707_000000412066_00015_31131_5302.N1	12-FEB-2008 21:37:07	Dark	40.500	12	Alp1Cru	0.775000	30000.	81	31131	No
113	GOM_NL__2PRFIN20080212_213948_000000422066_00015_31131_5303.N1	12-FEB-2008 21:39:48	Dark	42.000	29	Bet Car	1.6720	10200.	84	31131	No
114	GOM_NL__2PRFIN20080212_214222_000000382066_00015_31131_5304.N1	12-FEB-2008 21:42:22	Dark	37.500	71	lot Car	2.2460	7700.0	75	31131	No
115	GOM_NL__2PRFIN20080212_214401_000000412066_00015_31131_5305.N1	12-FEB-2008 21:44:01	Dark	41.000	46	Del Vel	1.9540	10600.	82	31131	No
116	GOM_NL__2PRFIN20080212_214626_000000402066_00015_31131_5306.N1	12-FEB-2008 21:46:26	Straylight	39.500	34	Gam2Vel	1.7930	23000.	79	31131	No
117	GOM_NL__2PRFIN20080212_214830_000000412066_00015_31131_5307.N1	12-FEB-2008 21:48:30	Straylight	40.500	70	Zet Pup	2.2460	39000.	81	31131	No
118	GOM_NL__2PRFIN20080212_215248_000000372066_00015_31131_5308.N1	12-FEB-2008 21:52:48	Straylight	37.000	132	15Rho Pup	2.8030	6900.0	74	31131	No
119	GOM_NL__2PRFIN20080212_220117_000000522066_00015_31131_5309.N1	12-FEB-2008 22:01:17	Bright	52.000	8	10Alp CMi	0.400000	6500.0	104	31131	No
120	GOM_NL__2PRFIN20080212_220737_000000382066_00015_31131_5310.N1	12-FEB-2008 22:07:37	Bright	38.000	17	78Bet Gem	1.1610	4500.0	76	31131	No
121	GOM_NL__2PRFIN20080212_222502_000000362066_00015_31131_5311.N1	12-FEB-2008 22:25:02	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	31131	No
122	GOM_NL__2PRFIN20080212_223150_000000342066_00015_31131_5312.N1	12-FEB-2008 22:31:50	Bright	33.500	89	5Alp Cep	2.4510	8000.0	67	31131	No
123	GOM_NL__2PRFIN20080212_223738_000000332066_00015_31131_5313.N1	12-FEB-2008 22:37:38	Bright	33.000	144	18Del Cyg	2.8600	11000.	66	31131	No
124	GOM_NL__2PRFIN20080212_223956_000000372066_00015_31131_5314.N1	12-FEB-2008 22:39:56	Bright	37.000	5	3Alp Lyr	0.033000	11000.	74	31131	No
125	GOM_NL__2PRFIN20080212_224646_000000332066_00015_31131_5315.N1	12-FEB-2008 22:46:46	Bright	33.000	168	17Zet Aql	2.9860	11000.	66	31131	No
126	GOM_NL__2PRFIN20080212_225757_000000412066_00015_31131_5316.N1	12-FEB-2008 22:57:57	Twilight	41.000	57	34Sig Sgr	2.0660	26000.	82	31131	No
127	GOM_NL__2PRFIN20080212_230039_000000412066_00015_31131_5317.N1	12-FEB-2008 23:00:39	Dark	41.000	38	20Eps Sgr	1.8360	11000.	82	31131	No
128	GOM_NL__2PRFIN20080212_230239_000000402066_00015_31131_5318.N1	12-FEB-2008 23:02:39	Dark	39.500	25	35Lam Sco	1.6200	28000.	79	31131	No
129	GOM_NL__2PRFIN20080212_230359_000000412066_00015_31131_5319.N1	12-FEB-2008 23:03:59	Dark	40.500	40	The Sco	1.8590	7100.0	81	31131	No
130	GOM_NL__2PRFIN20080212_230547_000000382066_00015_31131_5320.N1	12-FEB-2008 23:05:47	Dark	38.000	147	Alp Ara	2.8770	26000.	76	31131	No
131	GOM_NL__2PRFIN20080212_230715_000000382066_00015_31131_5321.N1	12-FEB-2008 23:07:15	Dark	38.000	141	Bet Ara	2.8400	4600.0	76	31131	No
132	GOM_NL__2PRFIN20080212_231316_000000432066_00016_31132_5311.N1	12-FEB-2008 23:13:16	Dark	43.000	4	Alp1Cen	-0.010000	5800.0	86	31132	No
133	GOM_NL__2PRFIN20080212_231434_000000442066_00016_31132_5312.N1	12-FEB-2008 23:14:34	Dark	43.500	10	Bet Cen	0.610000	28000.	87	31132	No
134	GOM_NL__2PRFIN20080212_231744_000000452066_00016_31132_5313.N1	12-FEB-2008 23:17:44	Dark	44.500	12	Alp1Cru	0.775000	30000.	89	31132	No
135	GOM_NL__2PRFIN20080212_232024_000000382066_00016_31132_5314.N1	12-FEB-2008 23:20:24	Dark	37.500	29	Bet Car	1.6720	10200.	75	31132	No
136	GOM_NL__2PRFIN20080212_232258_000000382066_00016_31132_5315.N1	12-FEB-2008 23:22:58	Dark	37.500	71	lot Car	2.2460	7700.0	75	31132	No
137	GOM_NL__2PRFIN20080212_232437_000000392066_00016_31132_5316.N1	12-FEB-2008 23:24:37	Dark	39.000	46	Del Vel	1.9540	10600.	78	31132	No
138	GOM_NL__2PRFIN20080212_232702_000000382066_00016_31132_5317.N1	12-FEB-2008 23:27:02	Straylight	37.500	34	Gam2Vel	1.7930	23000.	75	31132	No
139	GOM_NL__2PRFIN20080212_232906_000000382066_00016_31132_5318.N1	12-FEB-2008 23:29:06	Straylight	37.500	70	Zet Pup	2.2460	39000.	75	31132	No
140	GOM_NL__2PRFIN20080212_233324_000000402066_00016_31132_5319.N1	12-FEB-2008 23:33:24	Straylight	40.000	132	15Rho Pup	2.8030	6900.0	80	31132	No
141	GOM_NL__2PRFIN20080212_234153_000000522066_00016_31132_5320.N1	12-FEB-2008 23:41:53	Bright	52.000	8	10Alp CMi	0.400000	6500.0	104	31132	No
142	GOM_NL__2PRFIN20080212_234813_000000522066_00016_31132_5321.N1	12-FEB-2008 23:48:13	Bright	52.000	17	78Bet Gem	1.1610	4500.0	104	31132	No

3. Quality information per product

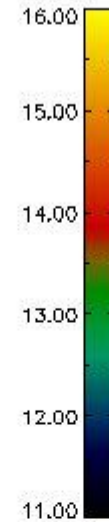
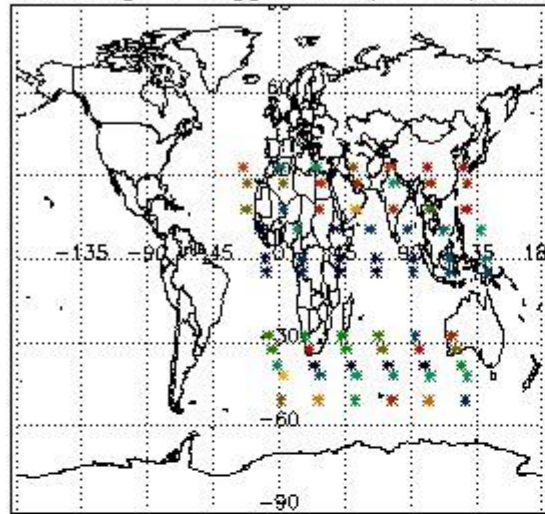
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

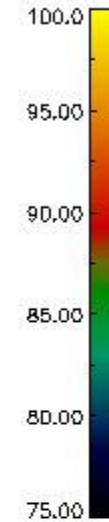
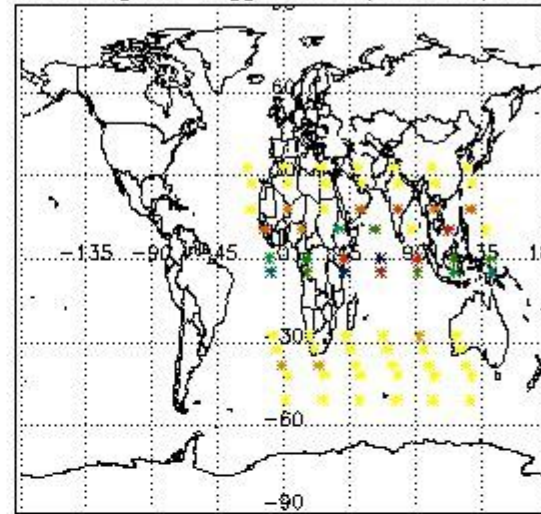


3.2 Plot quality information per product (world map)

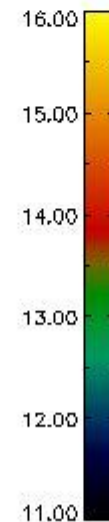
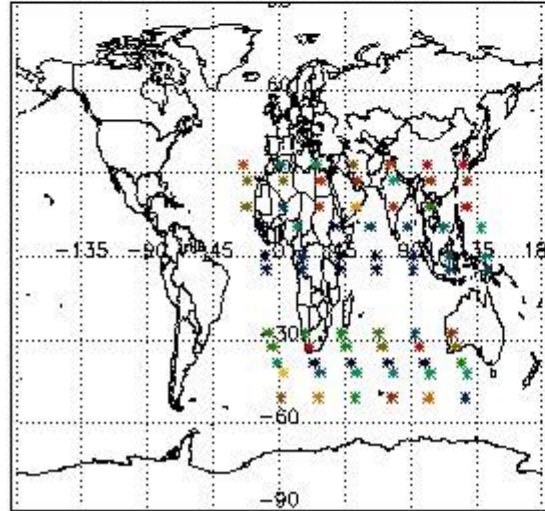
Percentage of flagged data per O3 profile



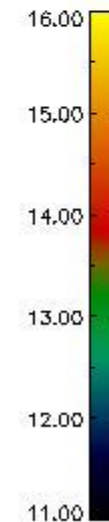
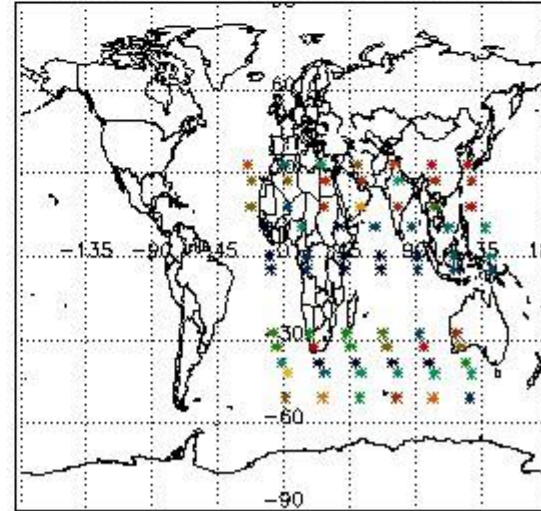
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

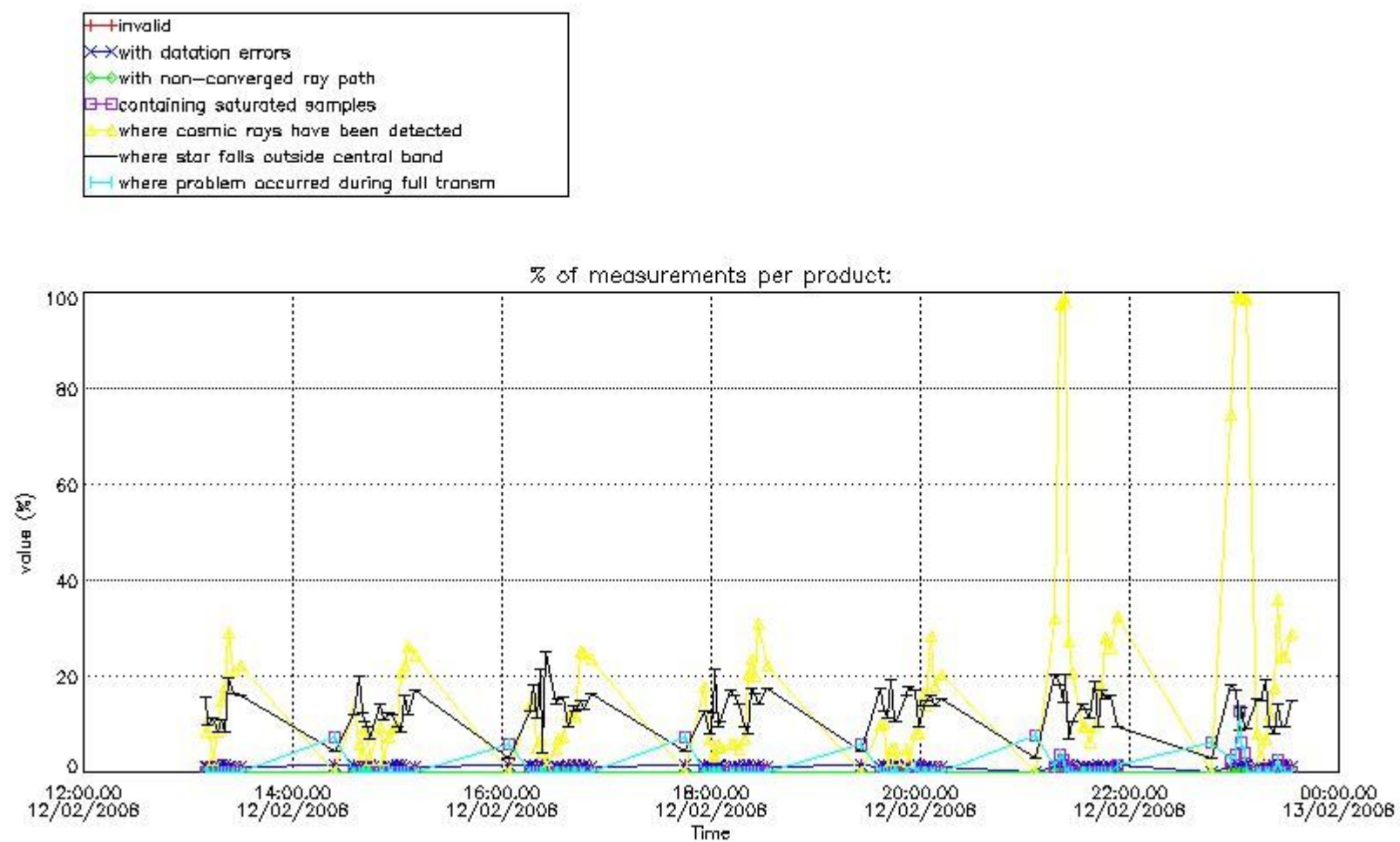


4. Level 1 quality information per product

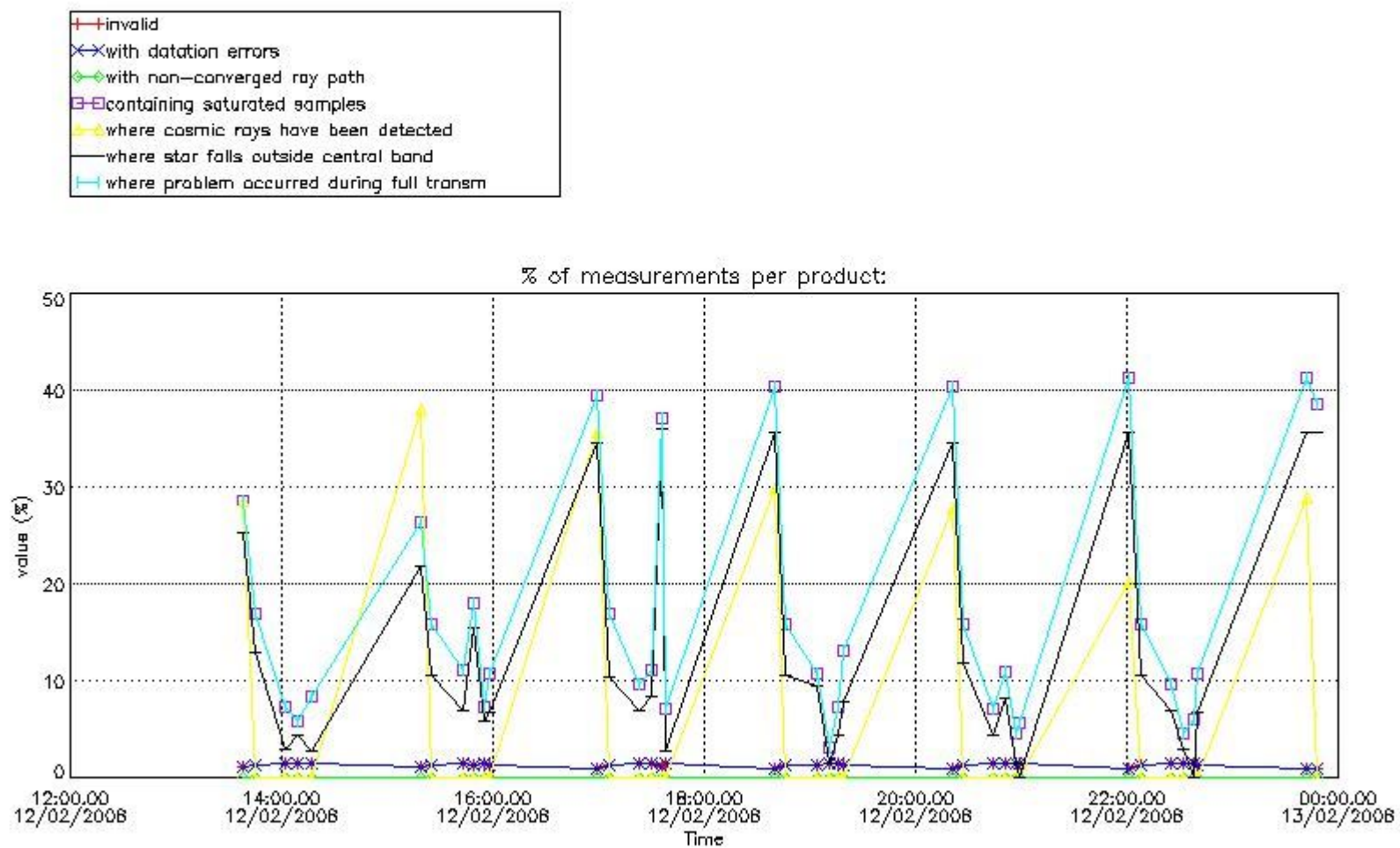
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



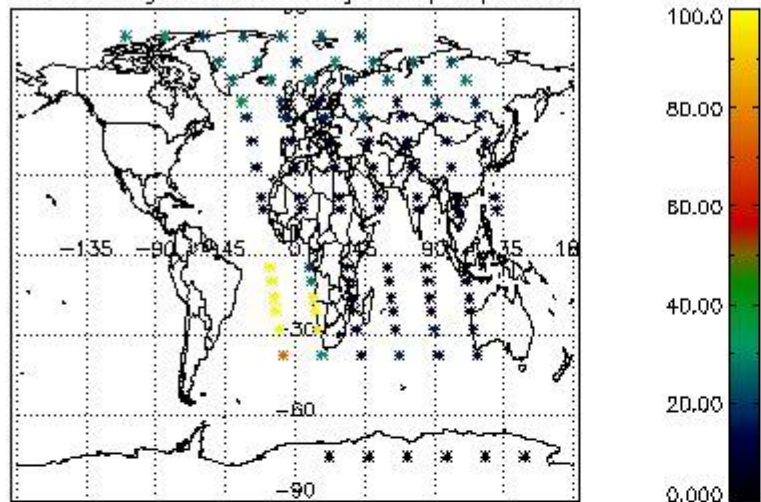
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



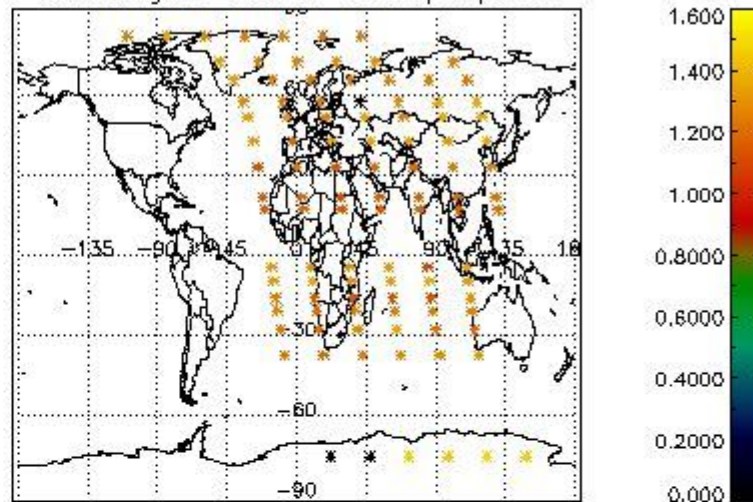
4.2 Plot quality information per product coming from level 1b processing (world map)

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

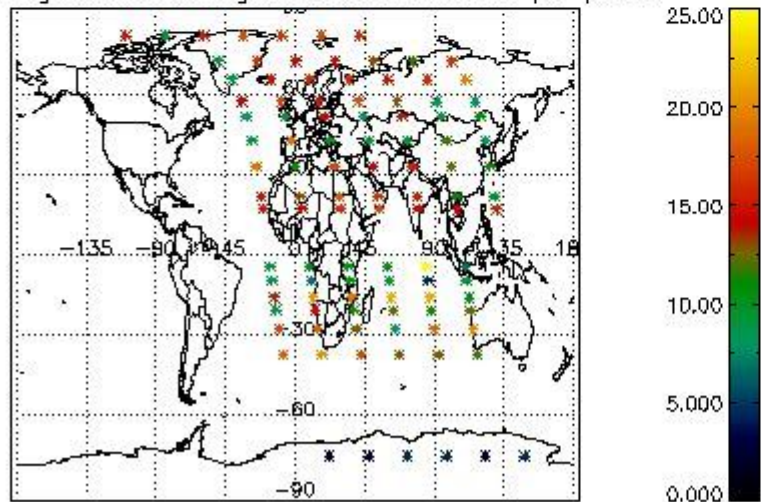
Percentage of cosmic ray hits per profile



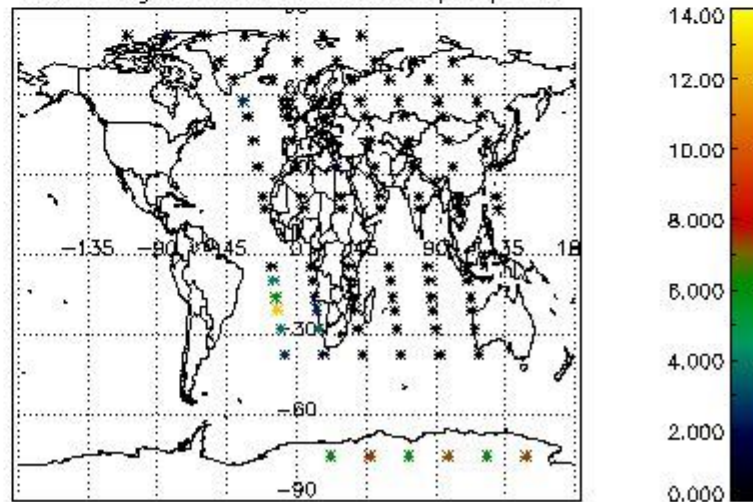
Percentage of datation errors per profile



Percentage of star falling outside central band per profile

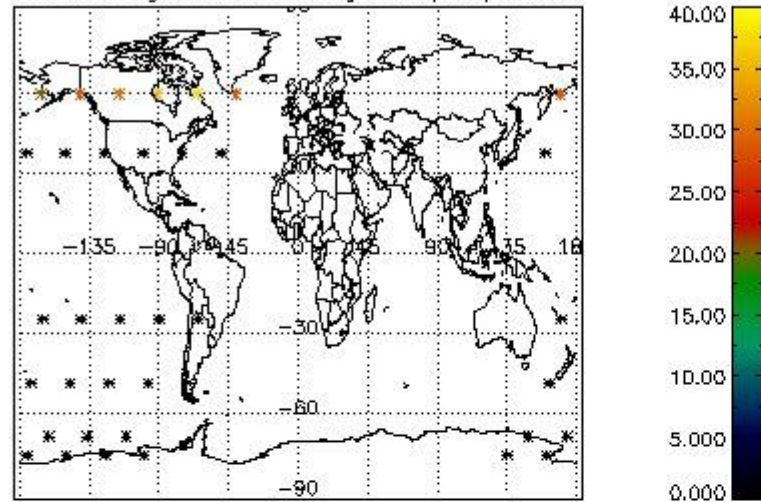


Percentage of saturation errors per profile

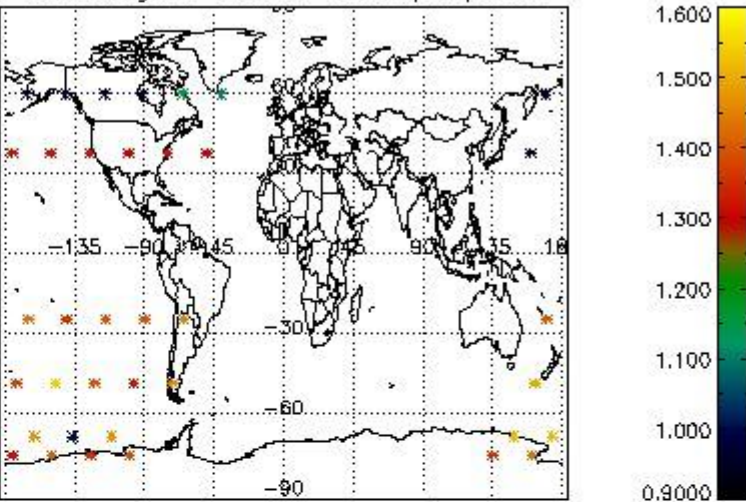


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes

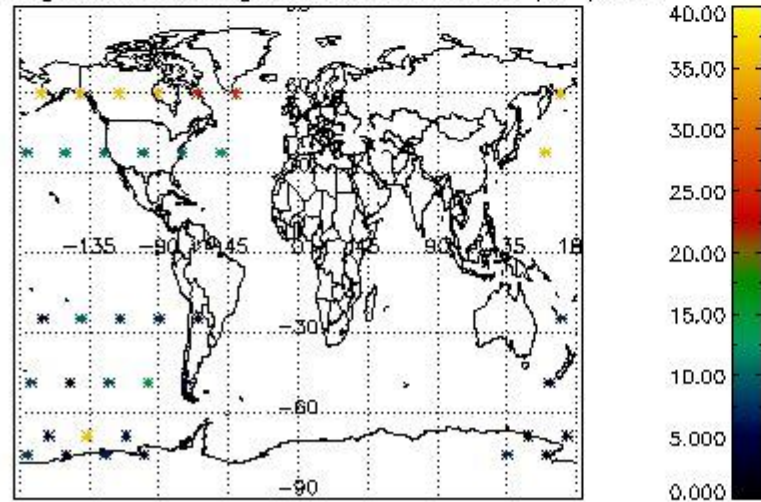
Percentage of cosmic ray hits per profile



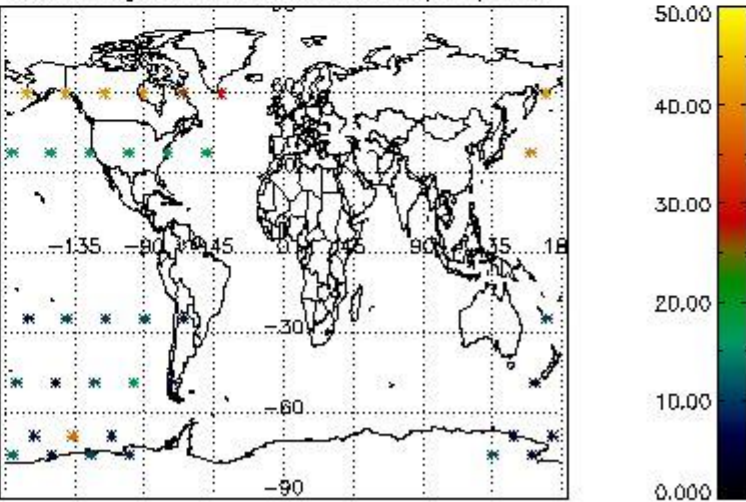
Percentage of datation errors per profile



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

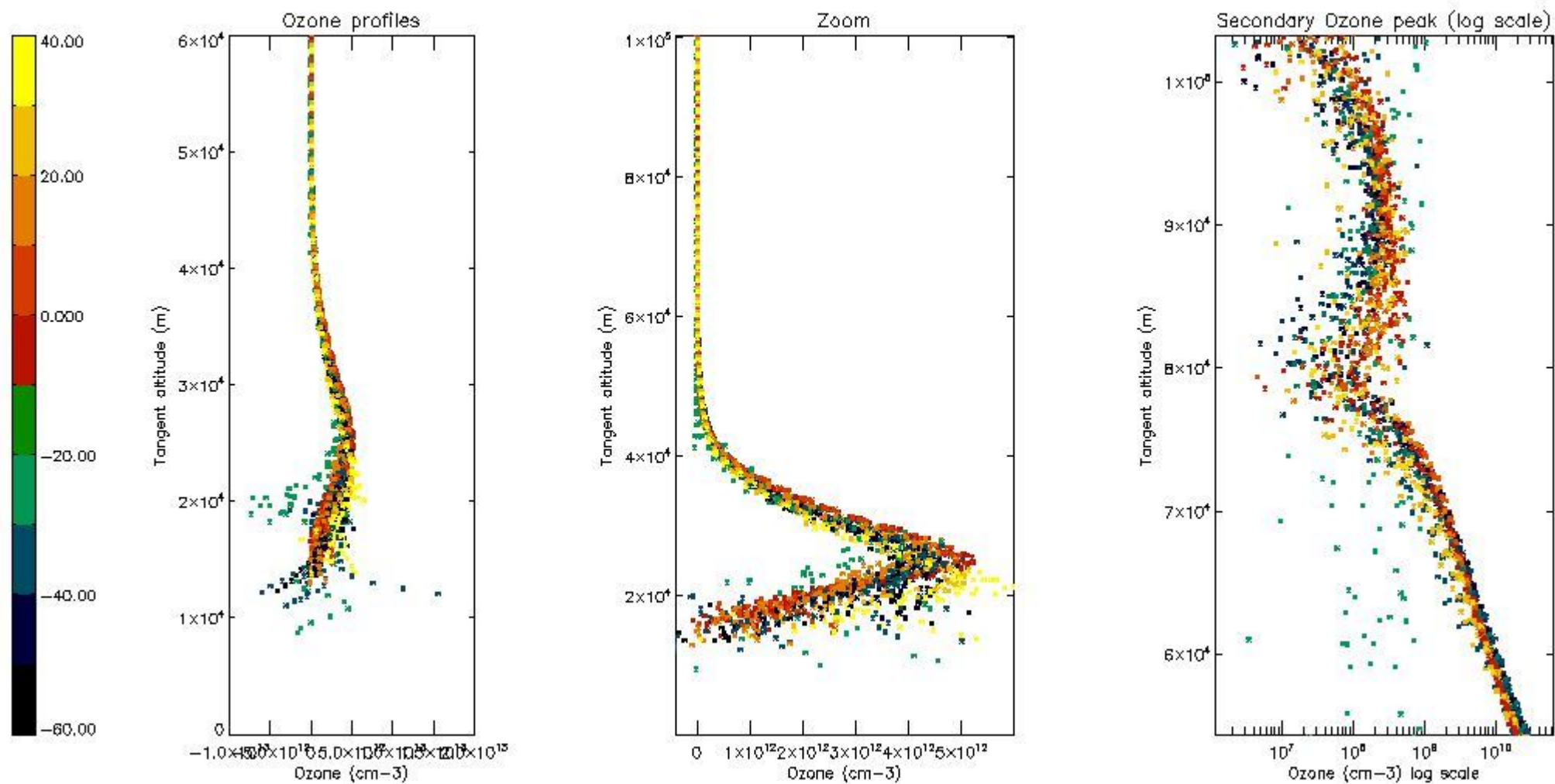
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	53
STD < 20	31

STD < 10	26
STD < 5	18

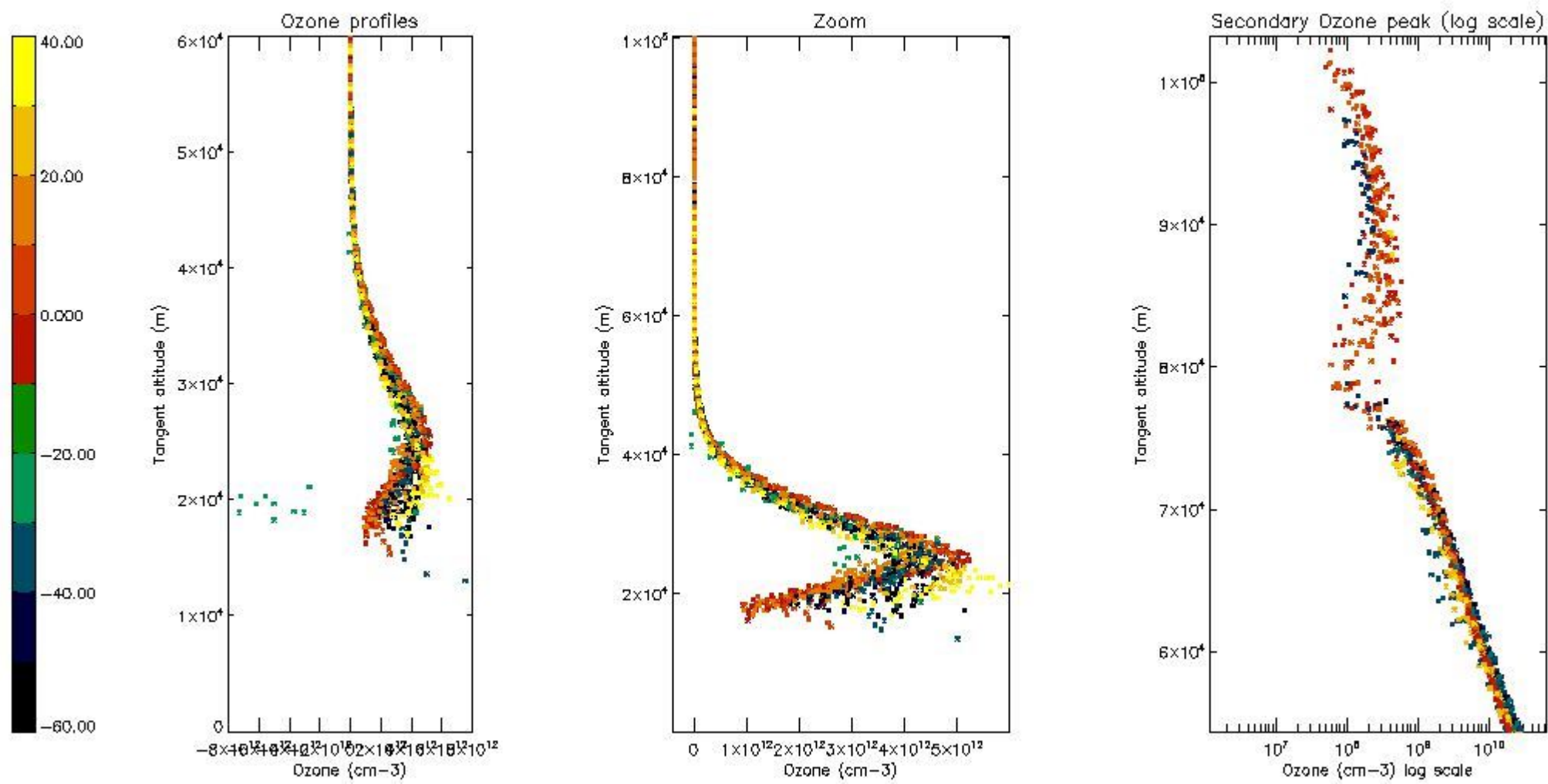
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



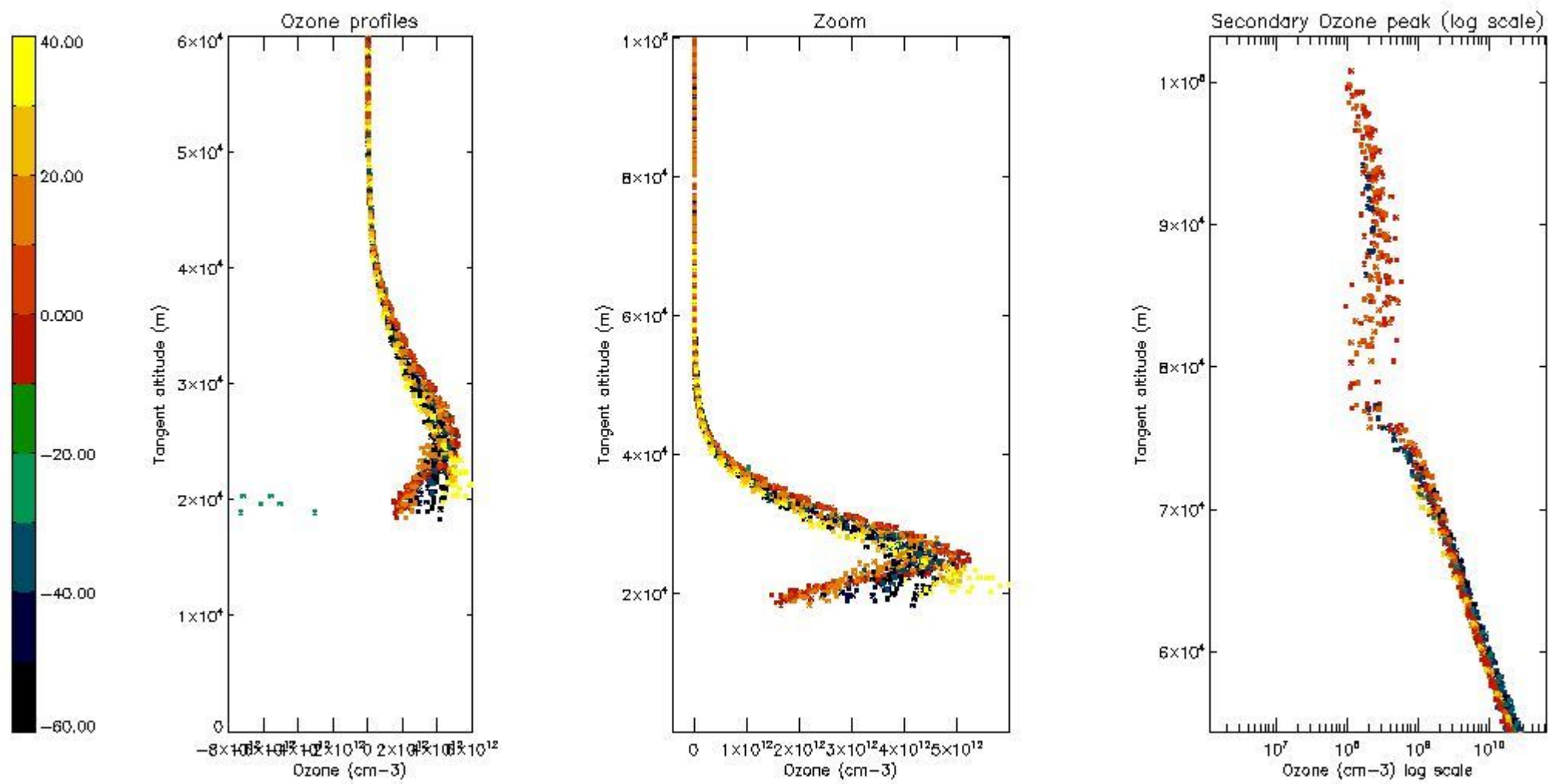
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



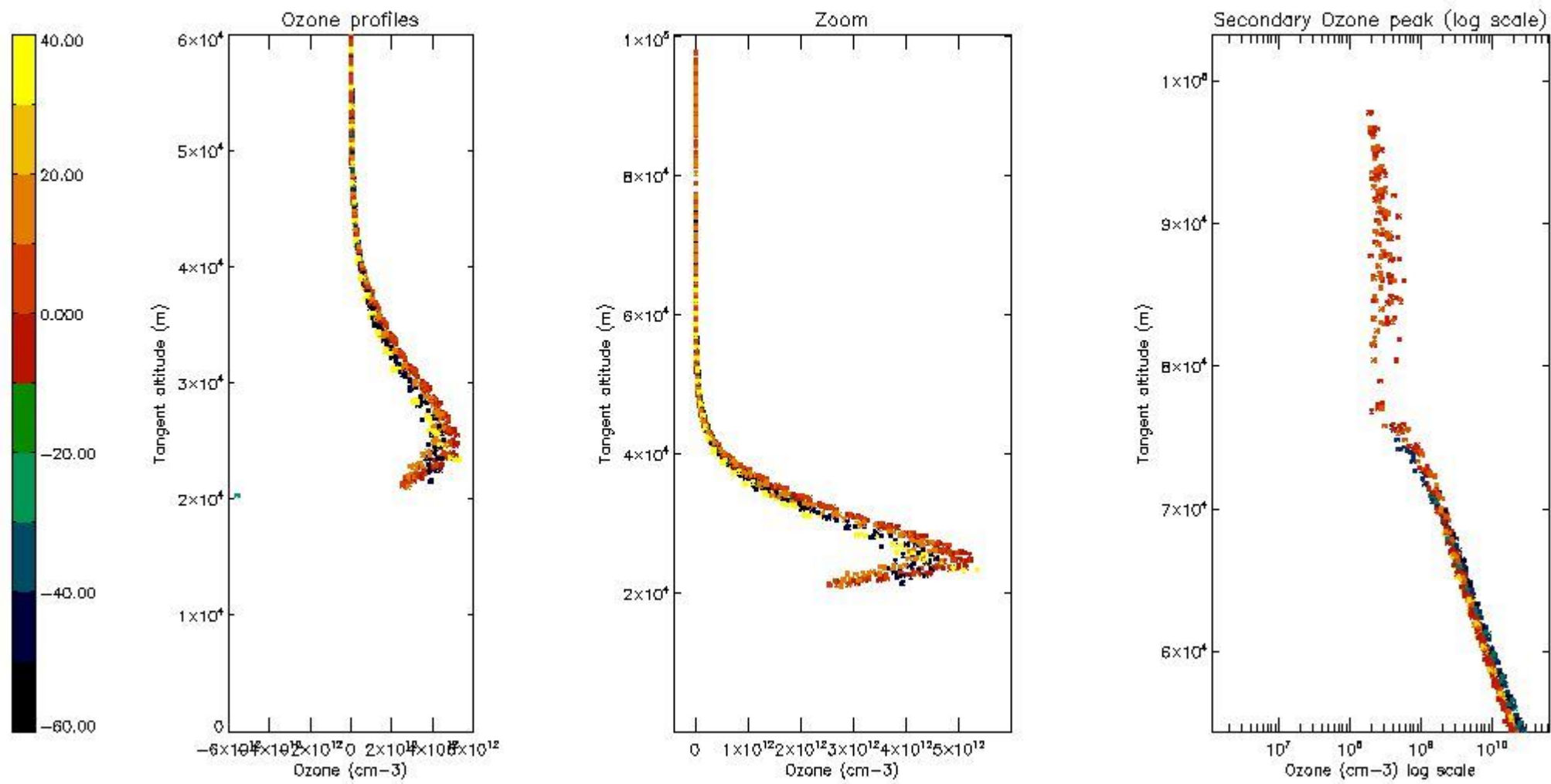
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



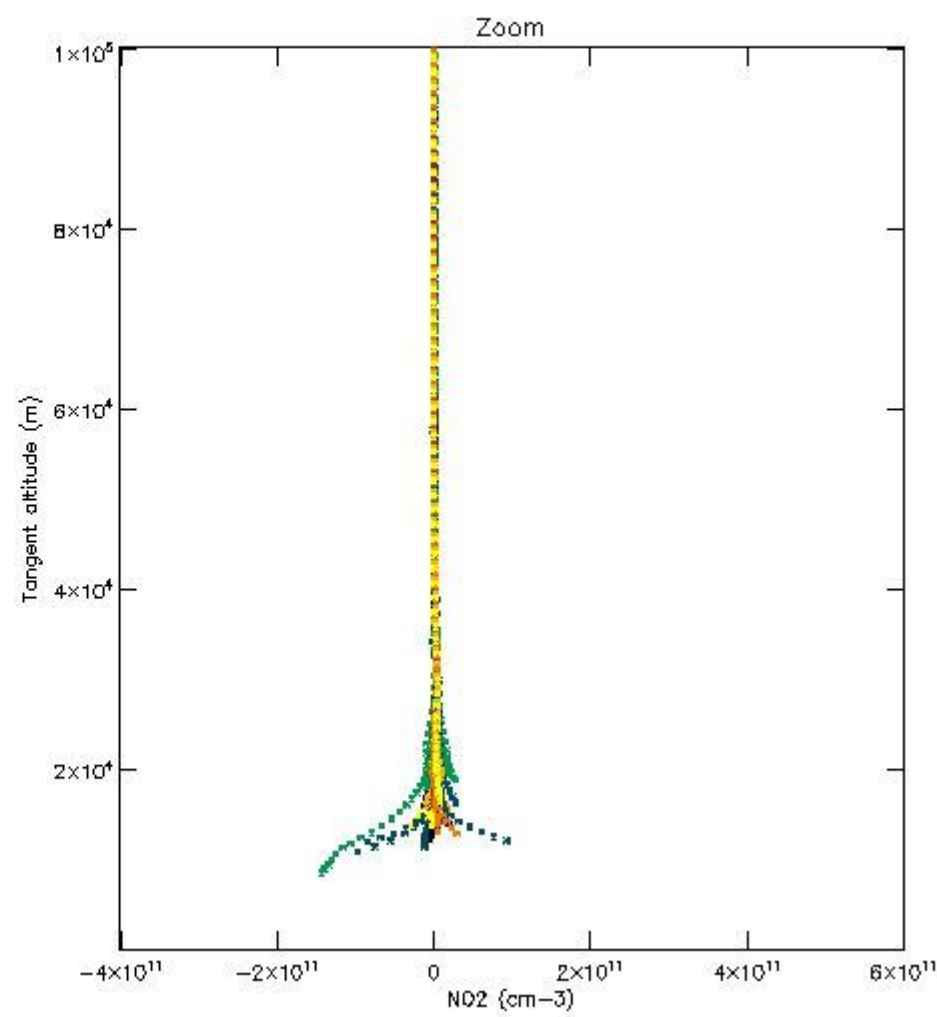
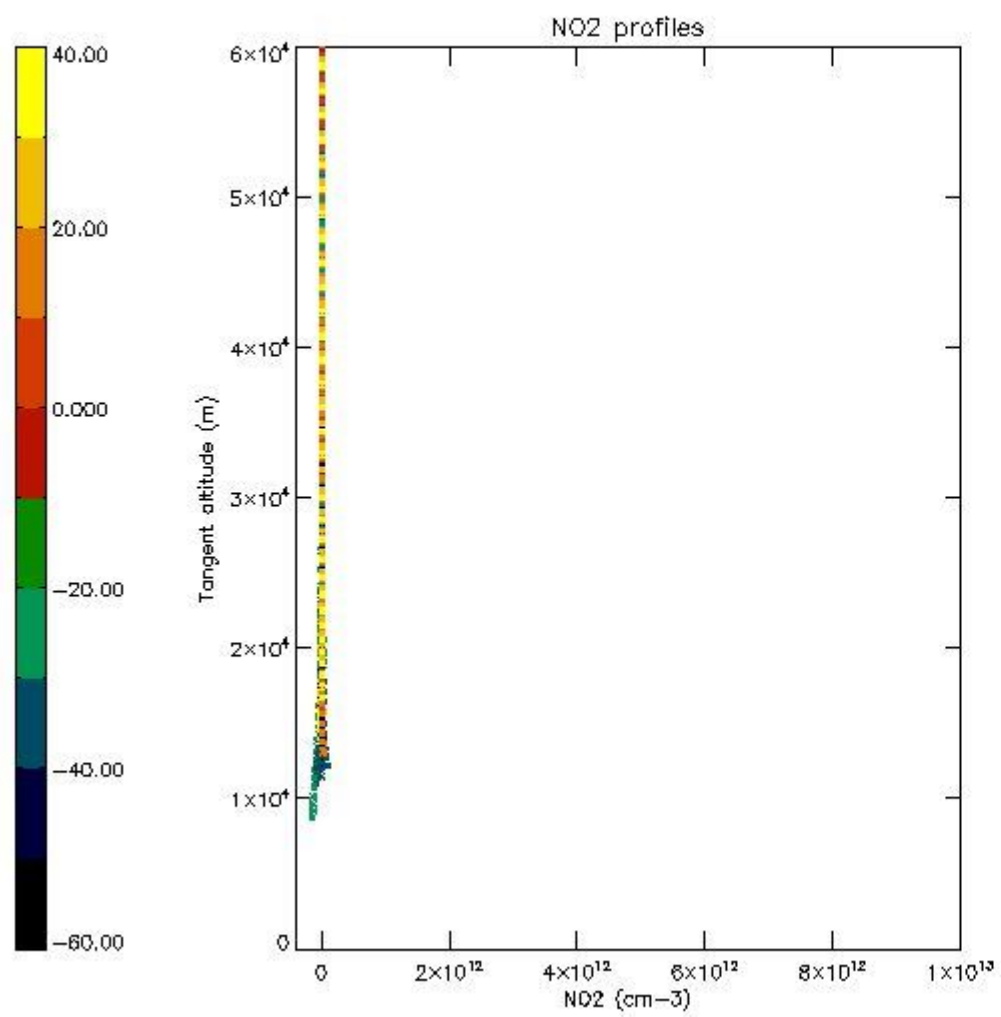
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



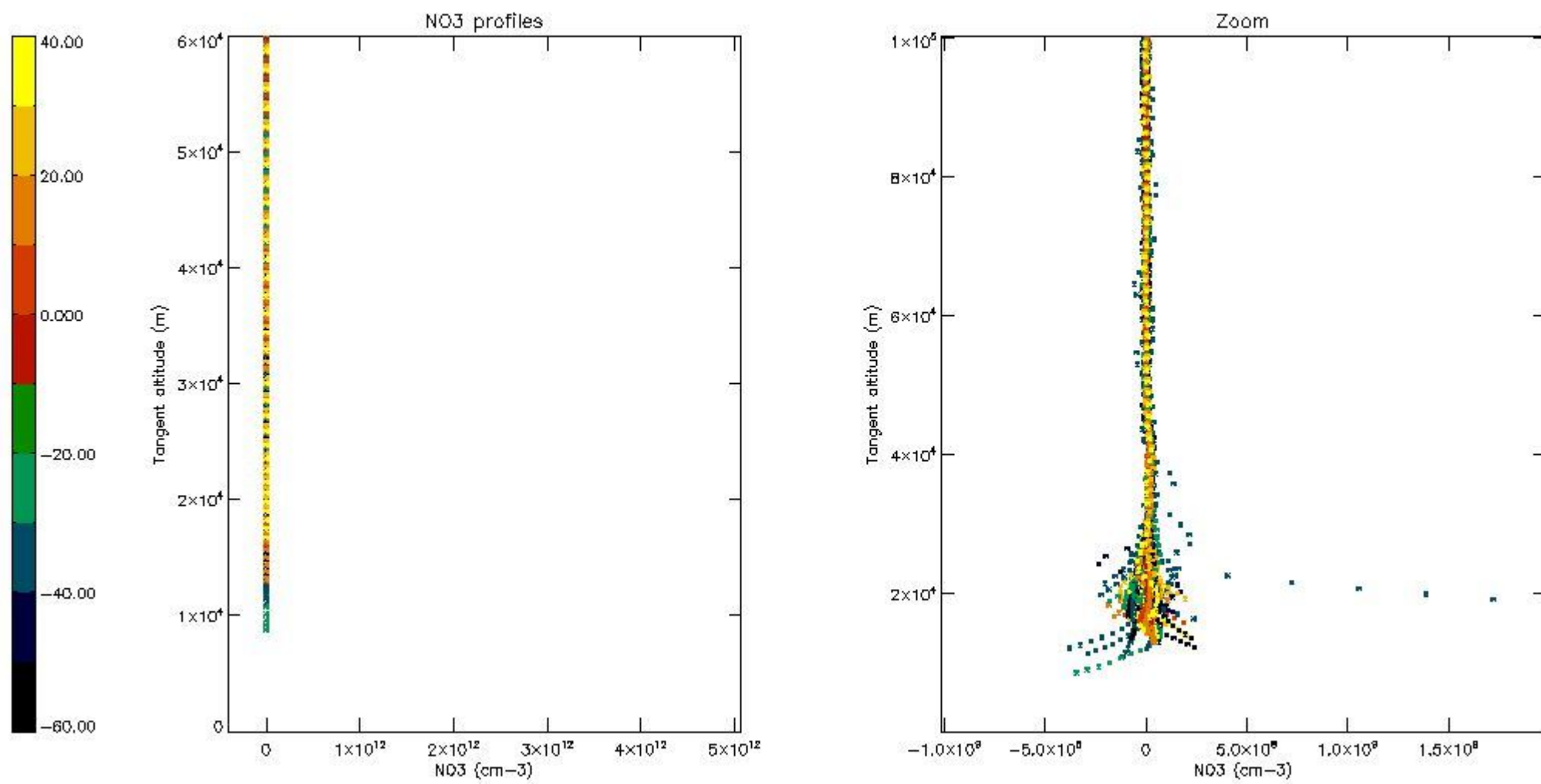
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



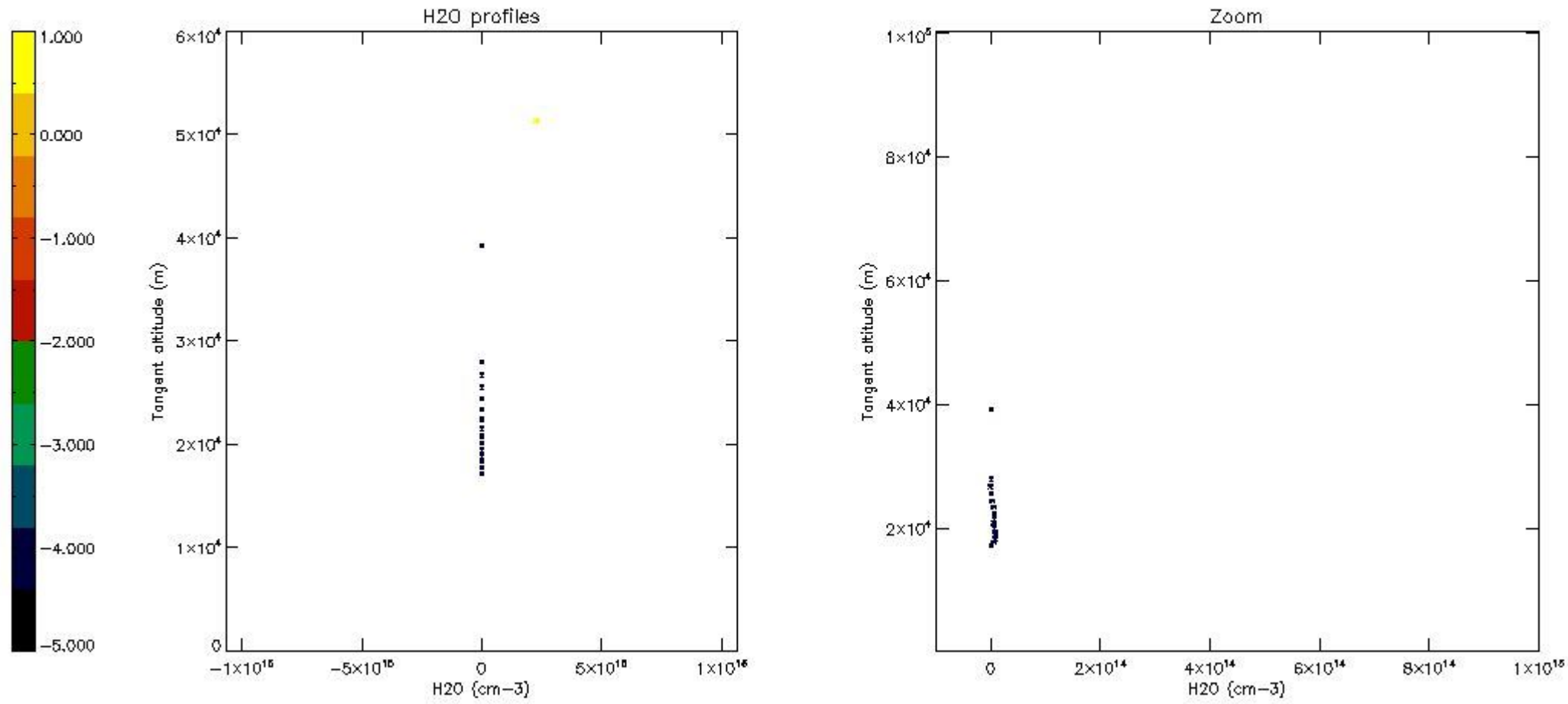
5.7 Plot NO3 profiles for all STD (dark without errors)

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	12-FEB-2008 13:09:37
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	12-FEB-2008 13:09:37
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	12-FEB-2008 13:09:37

GOMOS Level 2 Daily Report

SUMMARY

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[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 \(world map\)](#)

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[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](#)

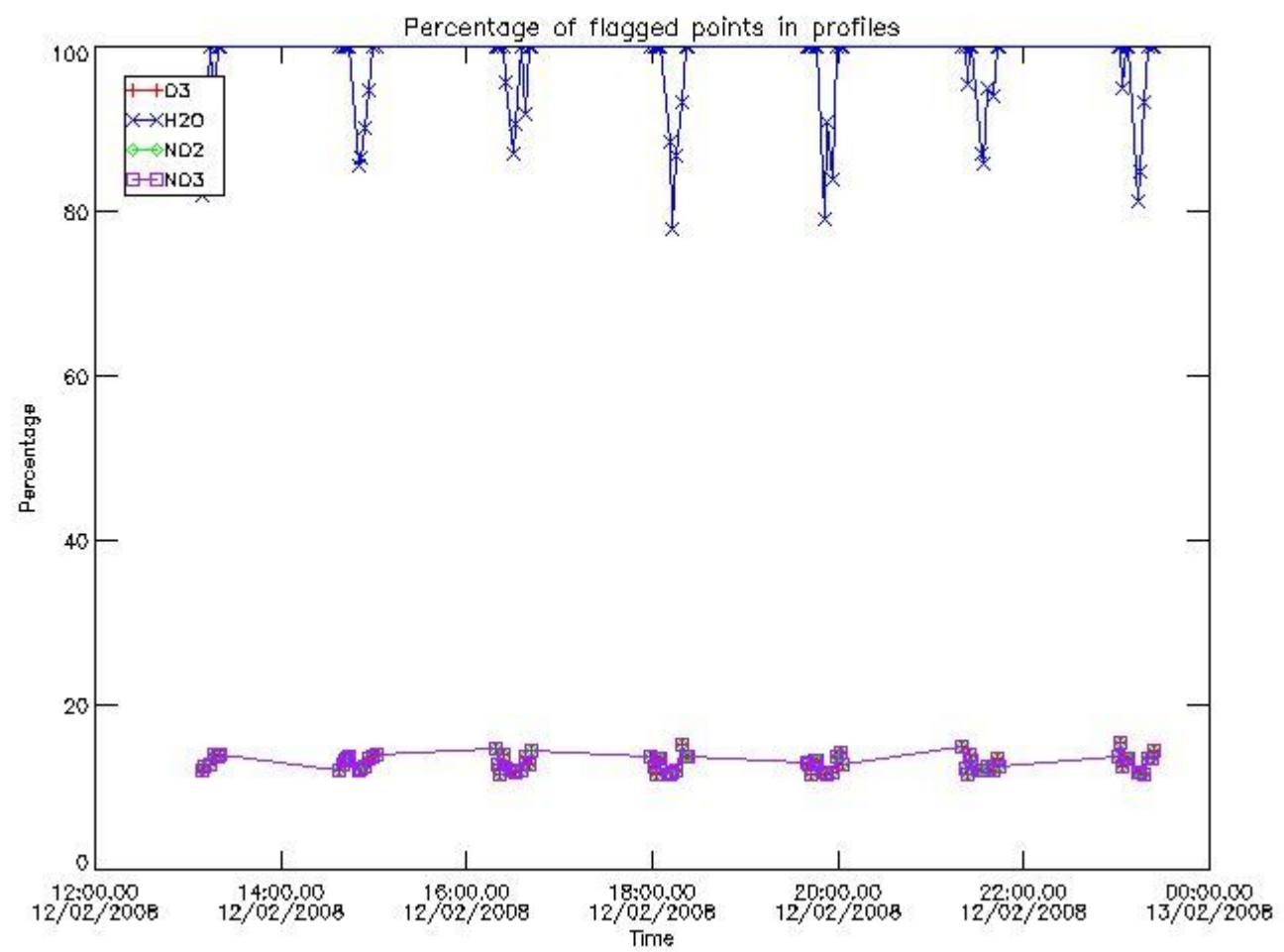
[6. Auxiliary Data Files used for the production reported in section 2](#)

102	GOM_NL__2PRFIN20080212_205920_000000352066_00014_31130_5299.N1	12-FEB-2008 20:59:20	Bright	35.000	5	3Alp Lyr	0.033000	11000.	70	31130	No
103	GOM_NL__2PRFIN20080212_210610_000000342066_00014_31130_5300.N1	12-FEB-2008 21:06:10	Bright	33.500	168	17Zet Aql	2.9860	11000.	67	31130	No
104	GOM_NL__2PRFIN20080212_211721_000000422066_00014_31130_5301.N1	12-FEB-2008 21:17:21	Twilight	42.000	57	34Sig Sgr	2.0660	26000.	84	31130	No
105	GOM_NL__2PRFIN20080212_212003_000000412066_00014_31130_5302.N1	12-FEB-2008 21:20:03	Dark	41.000	38	20Eps Sgr	1.8360	11000.	82	31130	No
106	GOM_NL__2PRFIN20080212_212203_000000422066_00014_31130_5303.N1	12-FEB-2008 21:22:03	Dark	41.500	25	35Lam Sco	1.6200	28000.	83	31130	No
107	GOM_NL__2PRFIN20080212_212323_000000442066_00014_31130_5304.N1	12-FEB-2008 21:23:23	Dark	44.000	40	The Sco	1.8590	7100.0	88	31130	No
108	GOM_NL__2PRFIN20080212_212510_000000372066_00014_31130_5305.N1	12-FEB-2008 21:25:10	Dark	36.500	147	Alp Ara	2.8770	26000.	73	31130	No
109	GOM_NL__2PRFIN20080212_212639_000000392066_00014_31130_5306.N1	12-FEB-2008 21:26:39	Dark	38.500	141	Bet Ara	2.8400	4600.0	77	31130	No
110	GOM_NL__2PRFIN20080212_213240_000000432066_00015_31131_5300.N1	12-FEB-2008 21:32:40	Dark	42.500	4	Alp1Cen	-0.010000	5800.0	85	31131	No
111	GOM_NL__2PRFIN20080212_213358_000000432066_00015_31131_5301.N1	12-FEB-2008 21:33:58	Dark	42.500	10	Bet Cen	0.610000	28000.	85	31131	No
112	GOM_NL__2PRFIN20080212_213707_000000412066_00015_31131_5302.N1	12-FEB-2008 21:37:07	Dark	40.500	12	Alp1Cru	0.775000	30000.	81	31131	No
113	GOM_NL__2PRFIN20080212_213948_000000422066_00015_31131_5303.N1	12-FEB-2008 21:39:48	Dark	42.000	29	Bet Car	1.6720	10200.	84	31131	No
114	GOM_NL__2PRFIN20080212_214222_000000382066_00015_31131_5304.N1	12-FEB-2008 21:42:22	Dark	37.500	71	lot Car	2.2460	7700.0	75	31131	No
115	GOM_NL__2PRFIN20080212_214401_000000412066_00015_31131_5305.N1	12-FEB-2008 21:44:01	Dark	41.000	46	Del Vel	1.9540	10600.	82	31131	No
116	GOM_NL__2PRFIN20080212_214626_000000402066_00015_31131_5306.N1	12-FEB-2008 21:46:26	Straylight	39.500	34	Gam2Vel	1.7930	23000.	79	31131	No
117	GOM_NL__2PRFIN20080212_214830_000000412066_00015_31131_5307.N1	12-FEB-2008 21:48:30	Straylight	40.500	70	Zet Pup	2.2460	39000.	81	31131	No
118	GOM_NL__2PRFIN20080212_215248_000000372066_00015_31131_5308.N1	12-FEB-2008 21:52:48	Straylight	37.000	132	15Rho Pup	2.8030	6900.0	74	31131	No
119	GOM_NL__2PRFIN20080212_220117_000000522066_00015_31131_5309.N1	12-FEB-2008 22:01:17	Bright	52.000	8	10Alp CMi	0.400000	6500.0	104	31131	No
120	GOM_NL__2PRFIN20080212_220737_000000382066_00015_31131_5310.N1	12-FEB-2008 22:07:37	Bright	38.000	17	78Bet Gem	1.1610	4500.0	76	31131	No
121	GOM_NL__2PRFIN20080212_222502_000000362066_00015_31131_5311.N1	12-FEB-2008 22:25:02	Bright	36.000	49	1Alp UMi	1.9900	6300.0	72	31131	No
122	GOM_NL__2PRFIN20080212_223150_000000342066_00015_31131_5312.N1	12-FEB-2008 22:31:50	Bright	33.500	89	5Alp Cep	2.4510	8000.0	67	31131	No
123	GOM_NL__2PRFIN20080212_223738_000000332066_00015_31131_5313.N1	12-FEB-2008 22:37:38	Bright	33.000	144	18Del Cyg	2.8600	11000.	66	31131	No
124	GOM_NL__2PRFIN20080212_223956_000000372066_00015_31131_5314.N1	12-FEB-2008 22:39:56	Bright	37.000	5	3Alp Lyr	0.033000	11000.	74	31131	No
125	GOM_NL__2PRFIN20080212_224646_000000332066_00015_31131_5315.N1	12-FEB-2008 22:46:46	Bright	33.000	168	17Zet Aql	2.9860	11000.	66	31131	No
126	GOM_NL__2PRFIN20080212_225757_000000412066_00015_31131_5316.N1	12-FEB-2008 22:57:57	Twilight	41.000	57	34Sig Sgr	2.0660	26000.	82	31131	No
127	GOM_NL__2PRFIN20080212_230039_000000412066_00015_31131_5317.N1	12-FEB-2008 23:00:39	Dark	41.000	38	20Eps Sgr	1.8360	11000.	82	31131	No
128	GOM_NL__2PRFIN20080212_230239_000000402066_00015_31131_5318.N1	12-FEB-2008 23:02:39	Dark	39.500	25	35Lam Sco	1.6200	28000.	79	31131	No
129	GOM_NL__2PRFIN20080212_230359_000000412066_00015_31131_5319.N1	12-FEB-2008 23:03:59	Dark	40.500	40	The Sco	1.8590	7100.0	81	31131	No
130	GOM_NL__2PRFIN20080212_230547_000000382066_00015_31131_5320.N1	12-FEB-2008 23:05:47	Dark	38.000	147	Alp Ara	2.8770	26000.	76	31131	No
131	GOM_NL__2PRFIN20080212_230715_000000382066_00015_31131_5321.N1	12-FEB-2008 23:07:15	Dark	38.000	141	Bet Ara	2.8400	4600.0	76	31131	No
132	GOM_NL__2PRFIN20080212_231316_000000432066_00016_31132_5311.N1	12-FEB-2008 23:13:16	Dark	43.000	4	Alp1Cen	-0.010000	5800.0	86	31132	No
133	GOM_NL__2PRFIN20080212_231434_000000442066_00016_31132_5312.N1	12-FEB-2008 23:14:34	Dark	43.500	10	Bet Cen	0.610000	28000.	87	31132	No
134	GOM_NL__2PRFIN20080212_231744_000000452066_00016_31132_5313.N1	12-FEB-2008 23:17:44	Dark	44.500	12	Alp1Cru	0.775000	30000.	89	31132	No
135	GOM_NL__2PRFIN20080212_232024_000000382066_00016_31132_5314.N1	12-FEB-2008 23:20:24	Dark	37.500	29	Bet Car	1.6720	10200.	75	31132	No
136	GOM_NL__2PRFIN20080212_232258_000000382066_00016_31132_5315.N1	12-FEB-2008 23:22:58	Dark	37.500	71	lot Car	2.2460	7700.0	75	31132	No
137	GOM_NL__2PRFIN20080212_232437_000000392066_00016_31132_5316.N1	12-FEB-2008 23:24:37	Dark	39.000	46	Del Vel	1.9540	10600.	78	31132	No
138	GOM_NL__2PRFIN20080212_232702_000000382066_00016_31132_5317.N1	12-FEB-2008 23:27:02	Straylight	37.500	34	Gam2Vel	1.7930	23000.	75	31132	No
139	GOM_NL__2PRFIN20080212_232906_000000382066_00016_31132_5318.N1	12-FEB-2008 23:29:06	Straylight	37.500	70	Zet Pup	2.2460	39000.	75	31132	No
140	GOM_NL__2PRFIN20080212_233324_000000402066_00016_31132_5319.N1	12-FEB-2008 23:33:24	Straylight	40.000	132	15Rho Pup	2.8030	6900.0	80	31132	No
141	GOM_NL__2PRFIN20080212_234153_000000522066_00016_31132_5320.N1	12-FEB-2008 23:41:53	Bright	52.000	8	10Alp CMi	0.400000	6500.0	104	31132	No
142	GOM_NL__2PRFIN20080212_234813_000000522066_00016_31132_5321.N1	12-FEB-2008 23:48:13	Bright	52.000	17	78Bet Gem	1.1610	4500.0	104	31132	No

3. Quality information per product

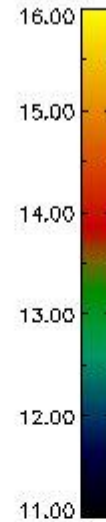
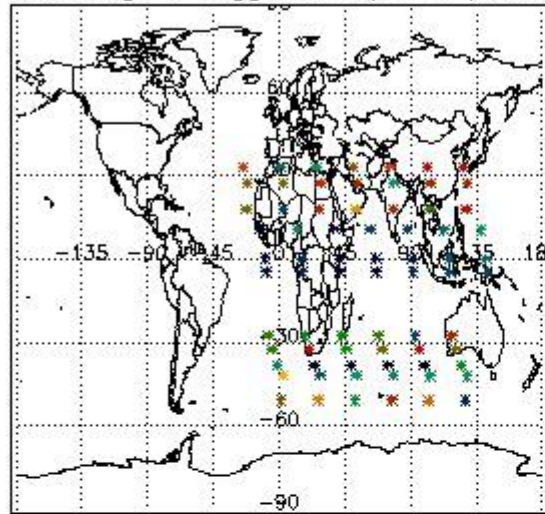
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

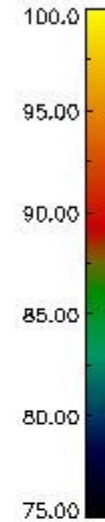
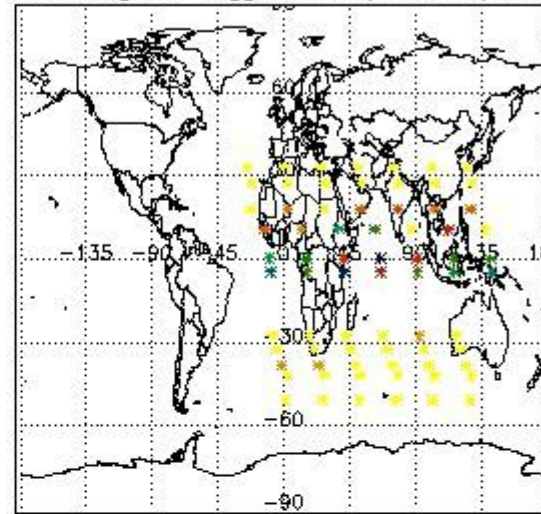


3.2 Plot quality information per product (world map)

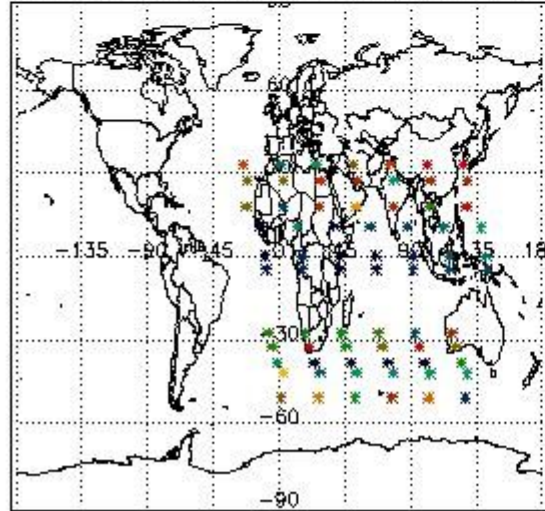
Percentage of flagged data per O3 profile



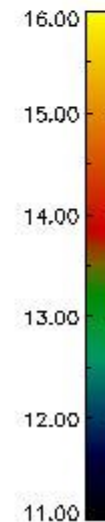
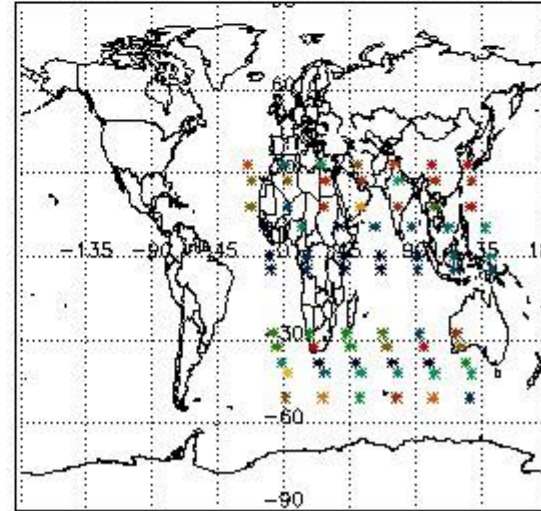
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

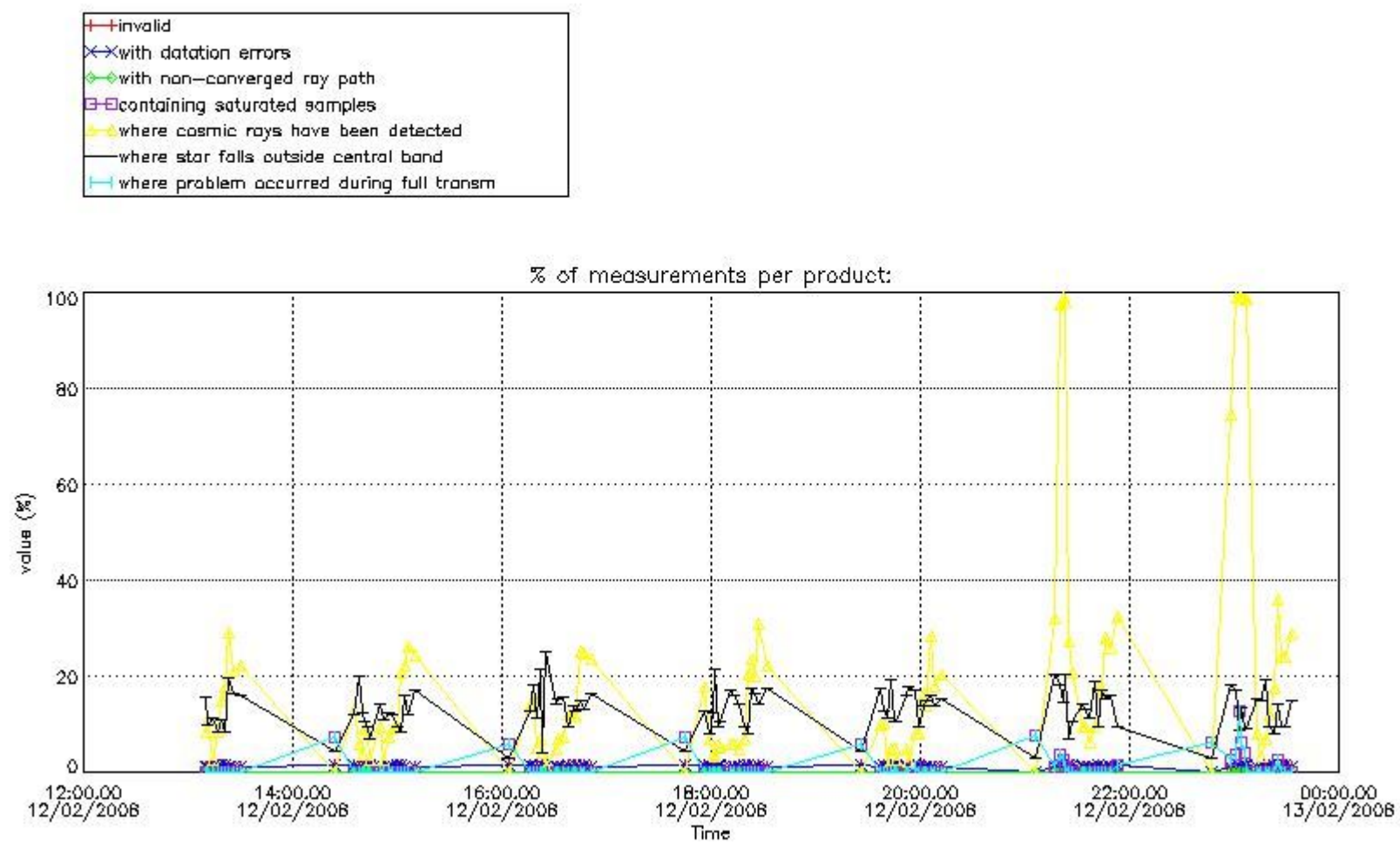


4. Level 1 quality information per product

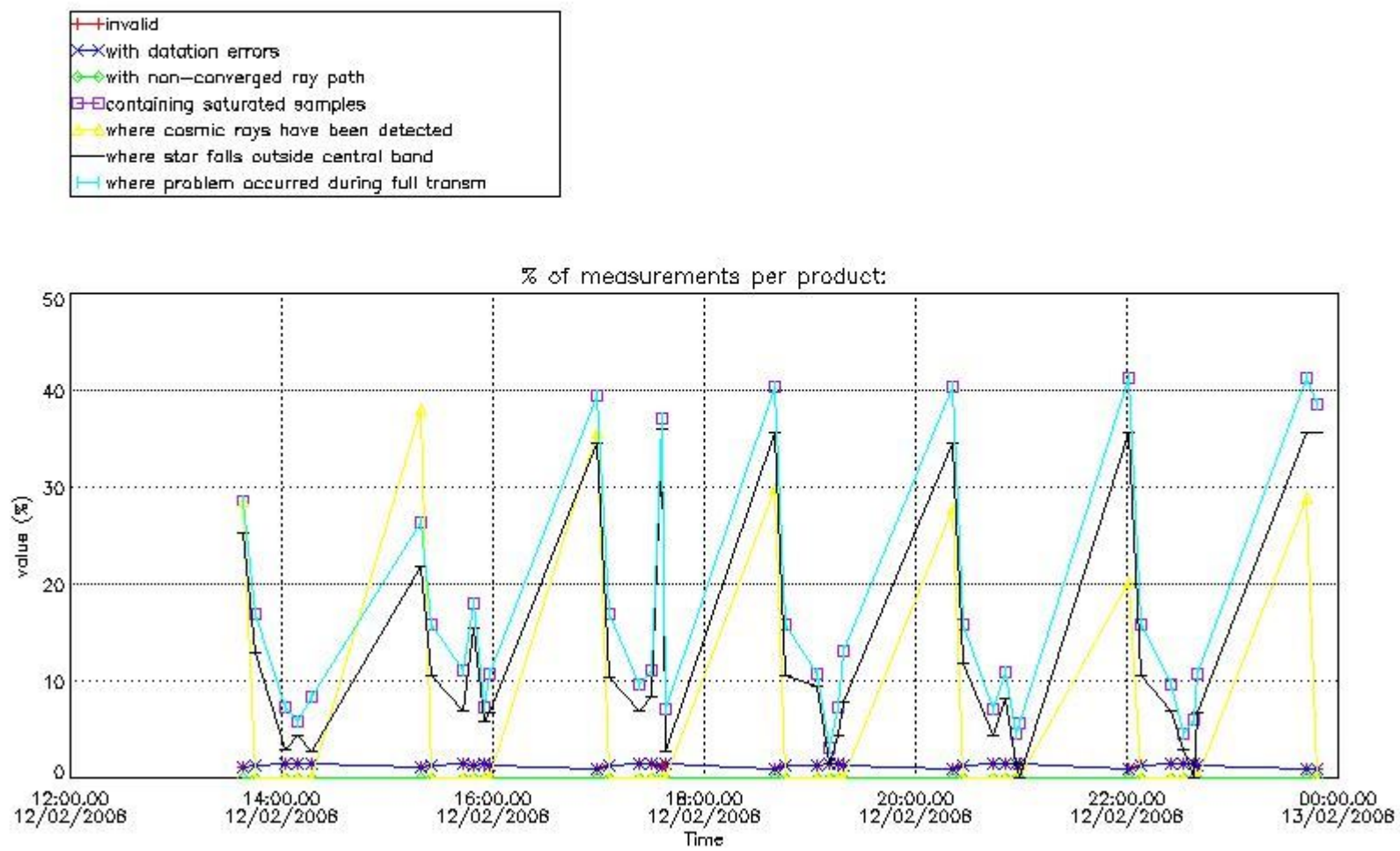
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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



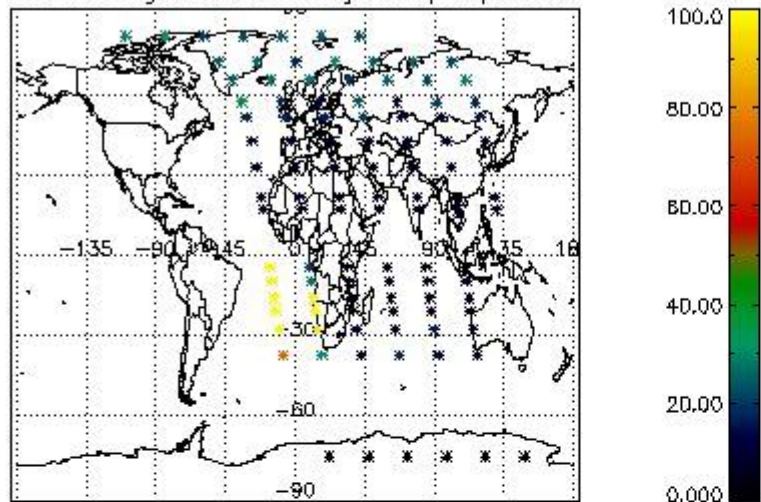
4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes



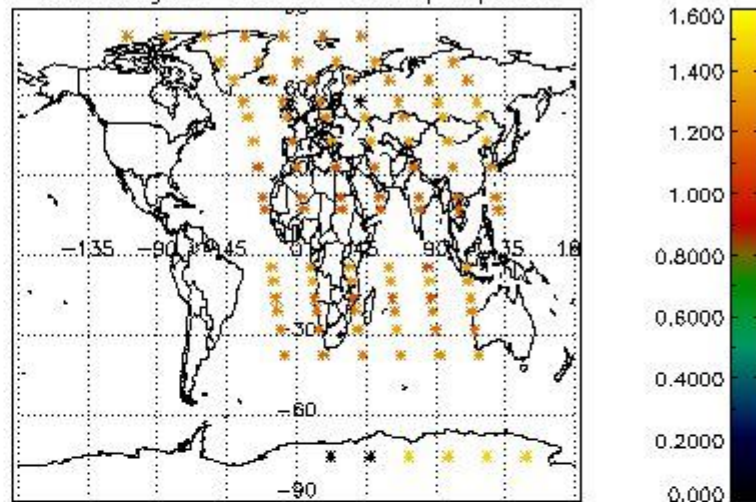
4.2 Plot quality information per product coming from level 1b processing (world map)

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

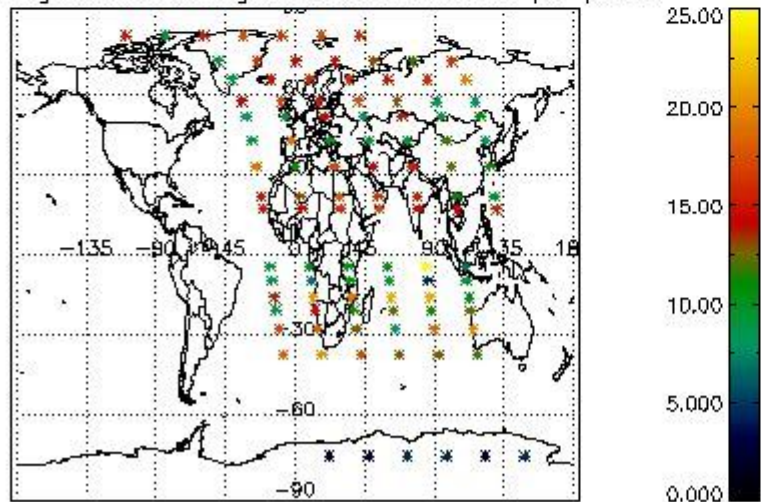
Percentage of cosmic ray hits per profile



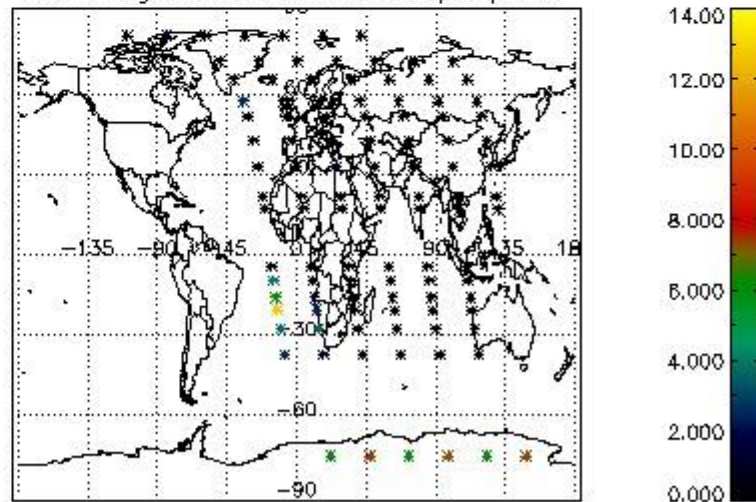
Percentage of datation errors per profile



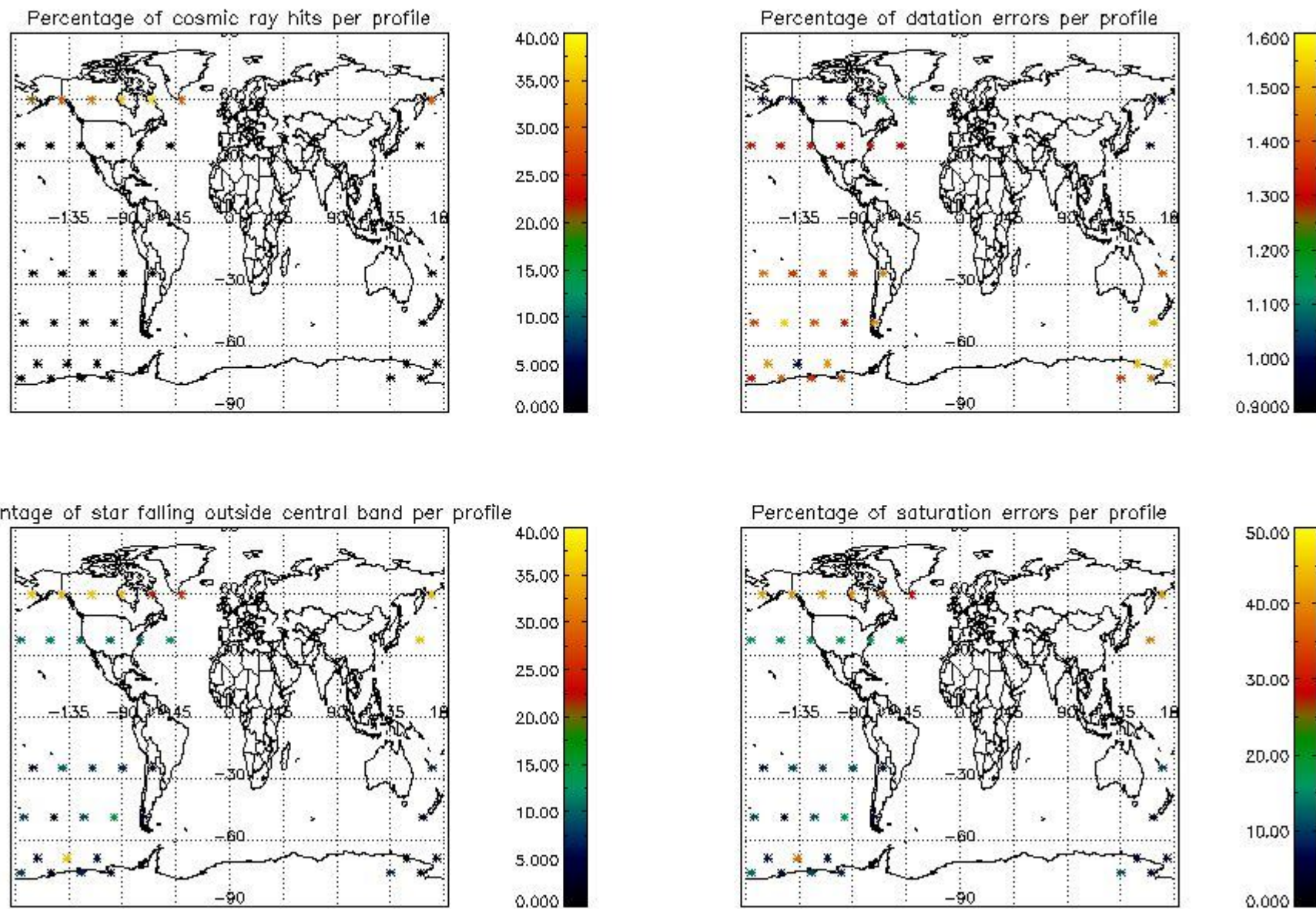
Percentage of star falling outside central band per profile



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

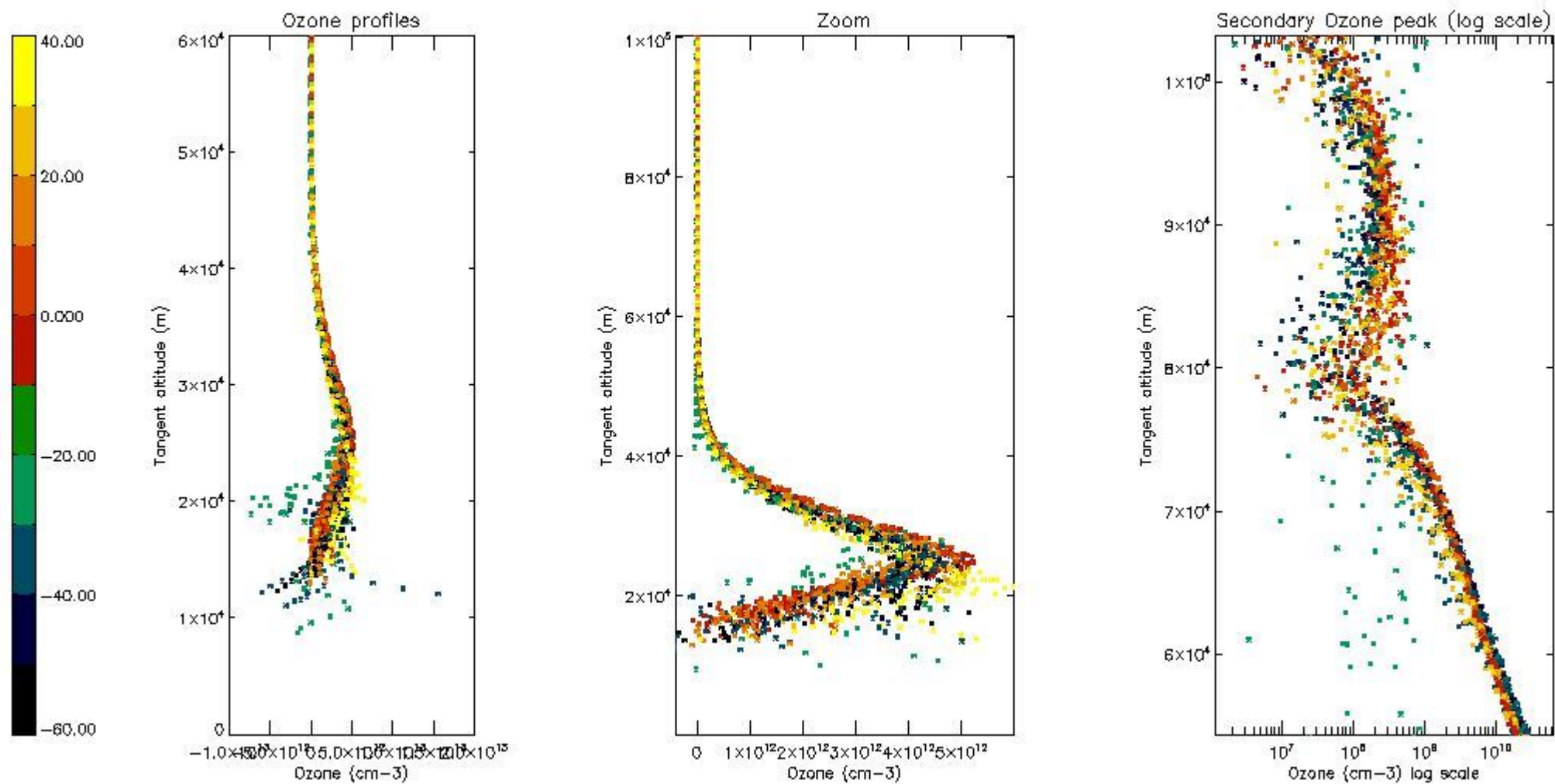
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	53
STD < 20	31

STD < 10	26
STD < 5	18

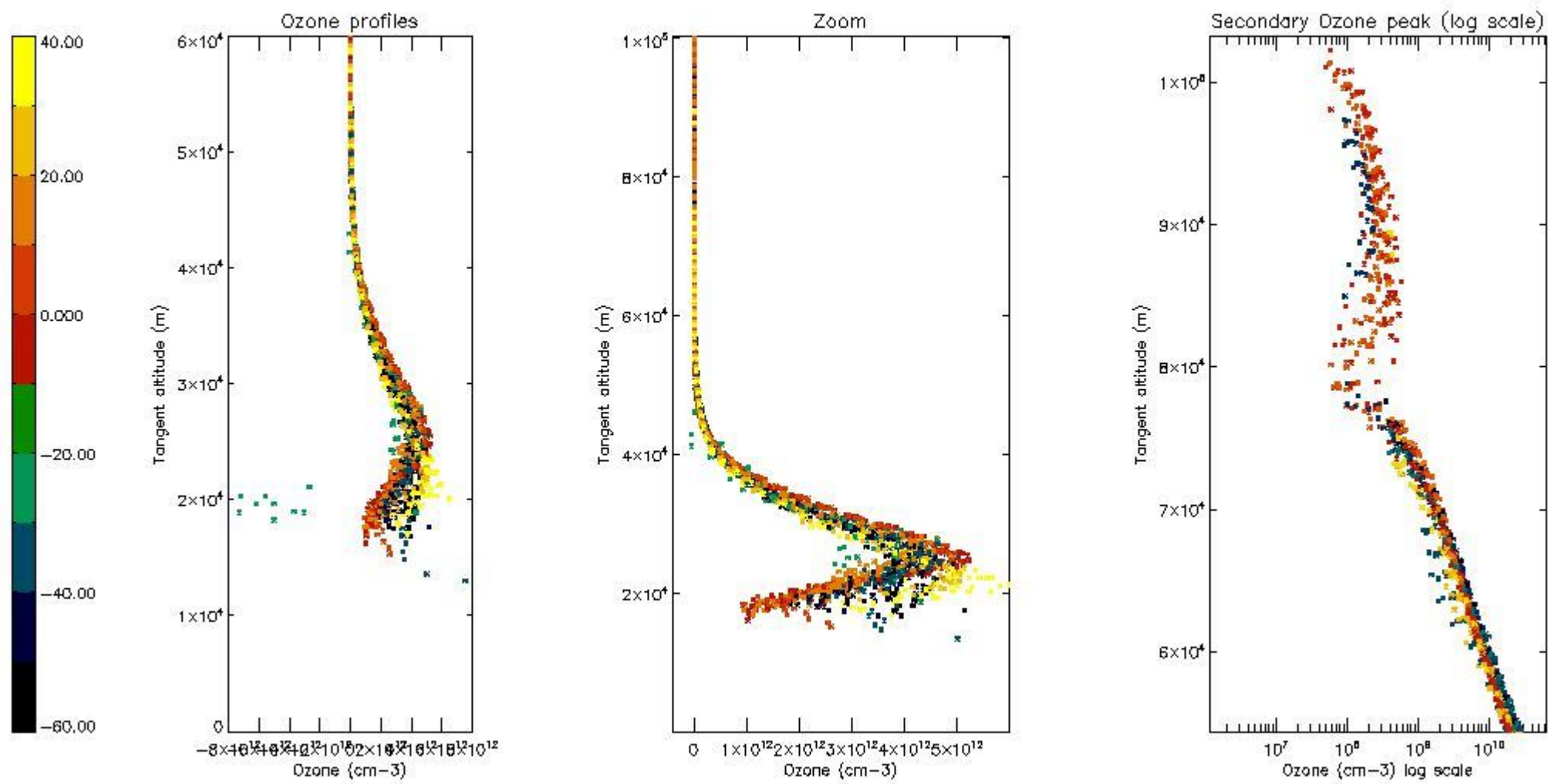
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



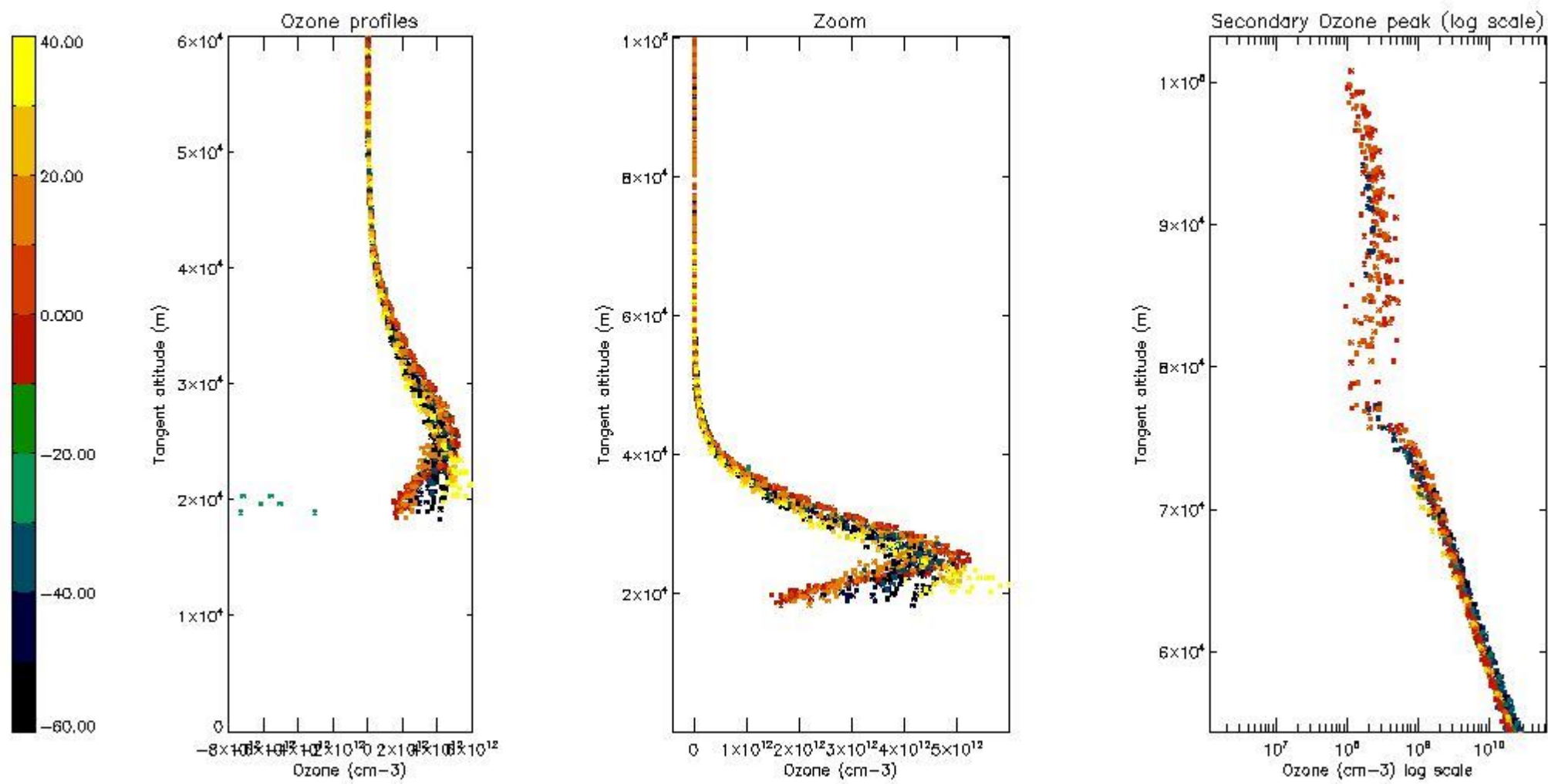
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



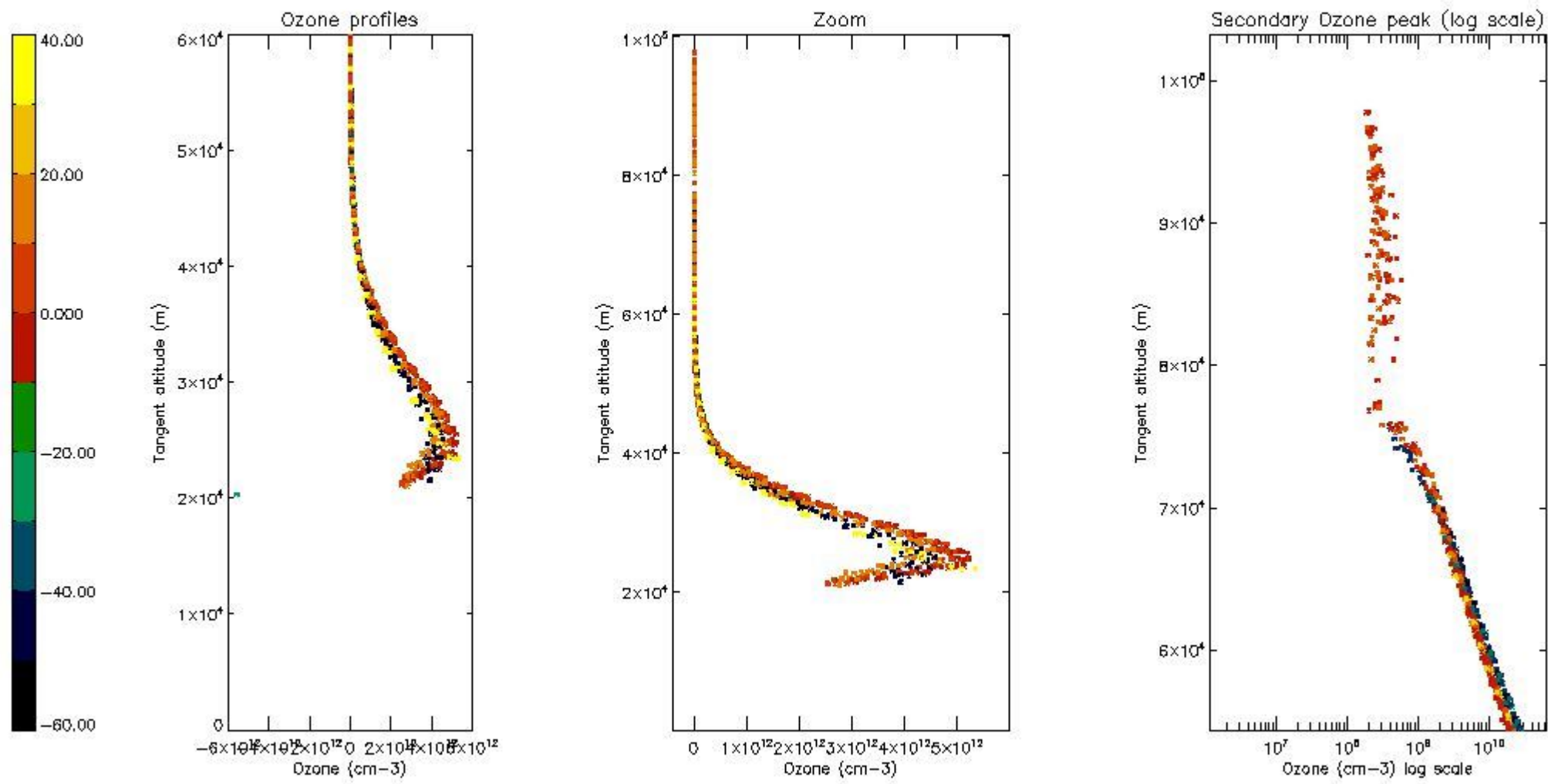
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



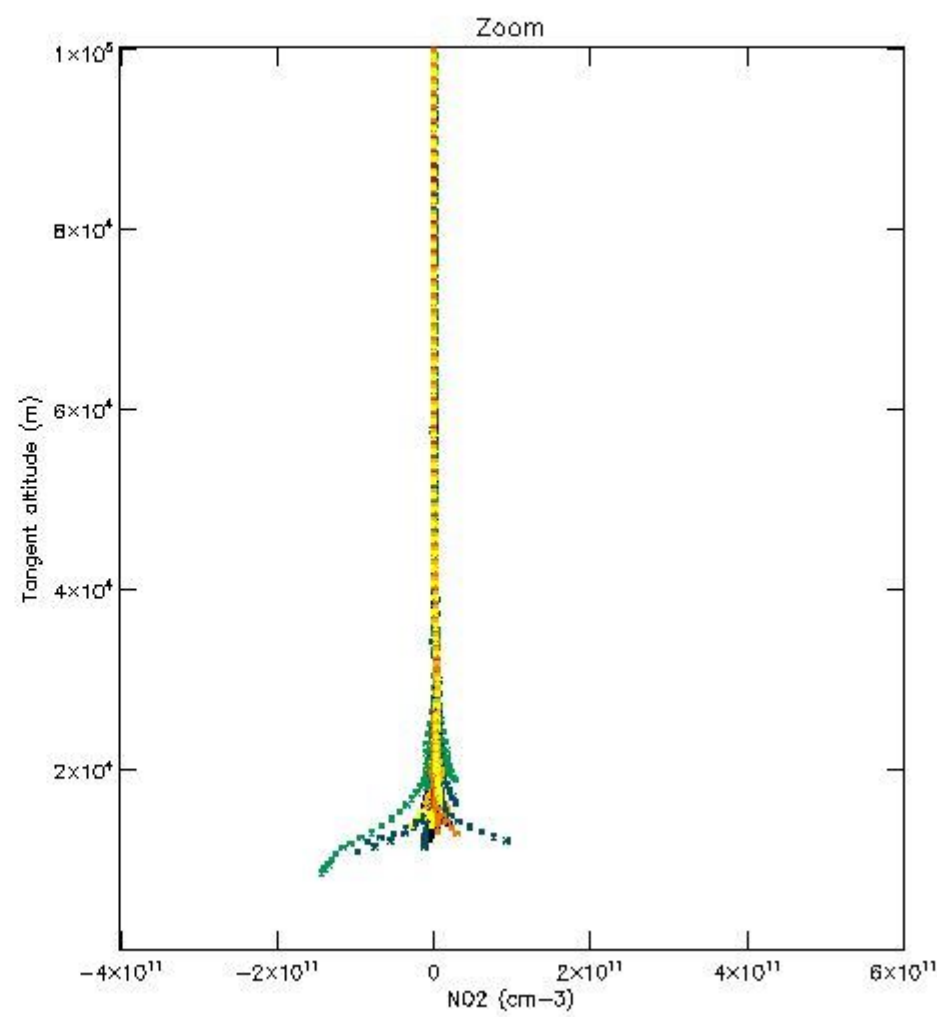
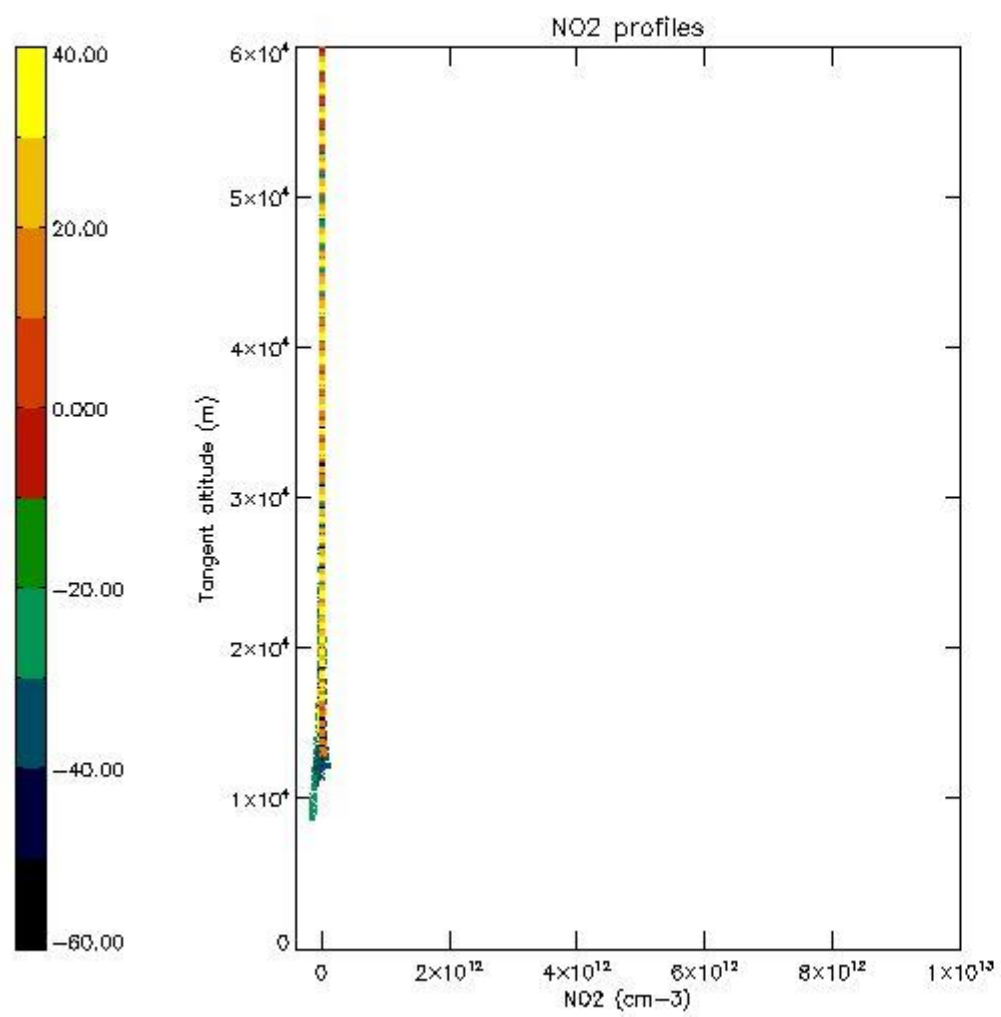
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



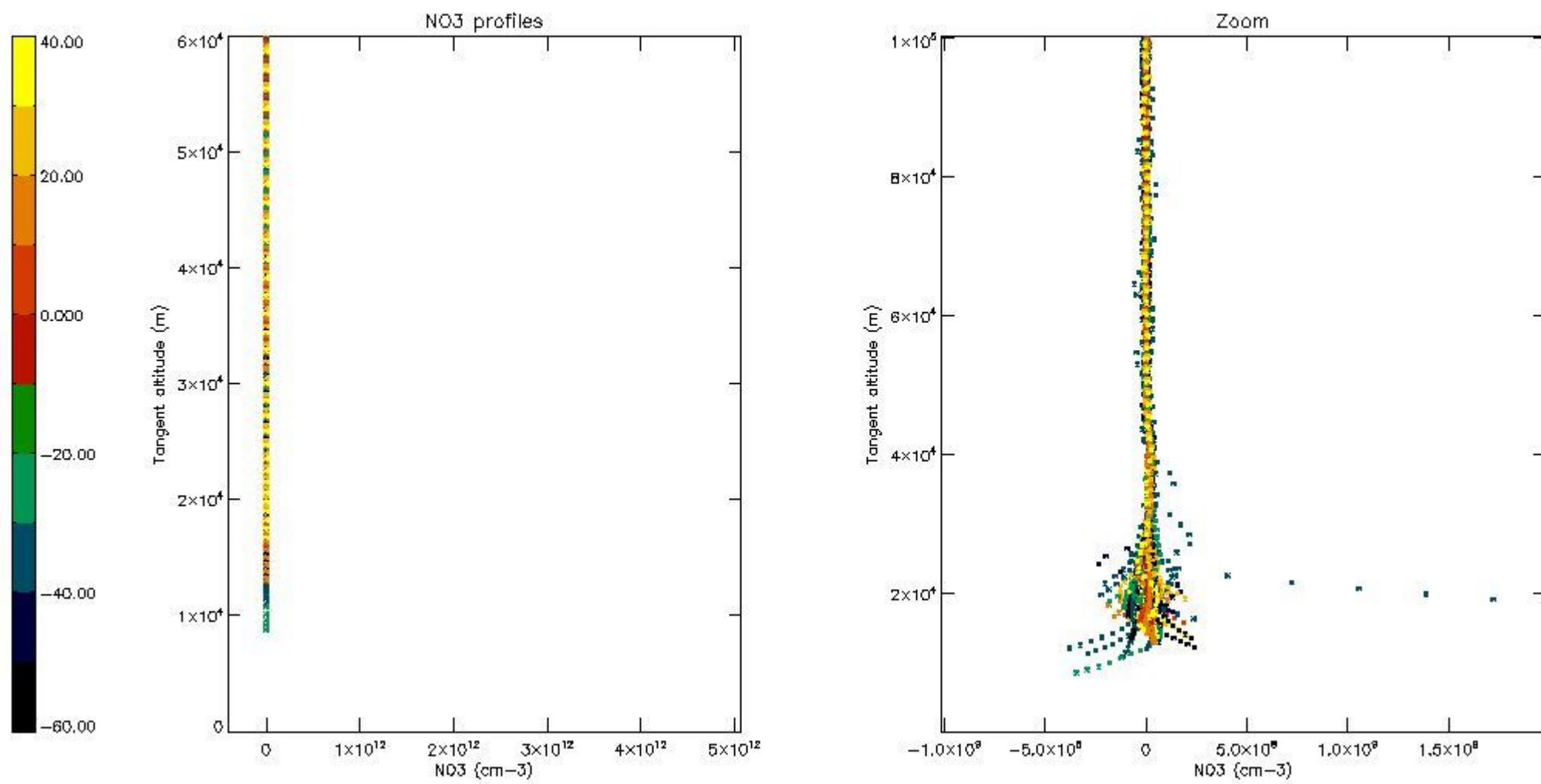
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



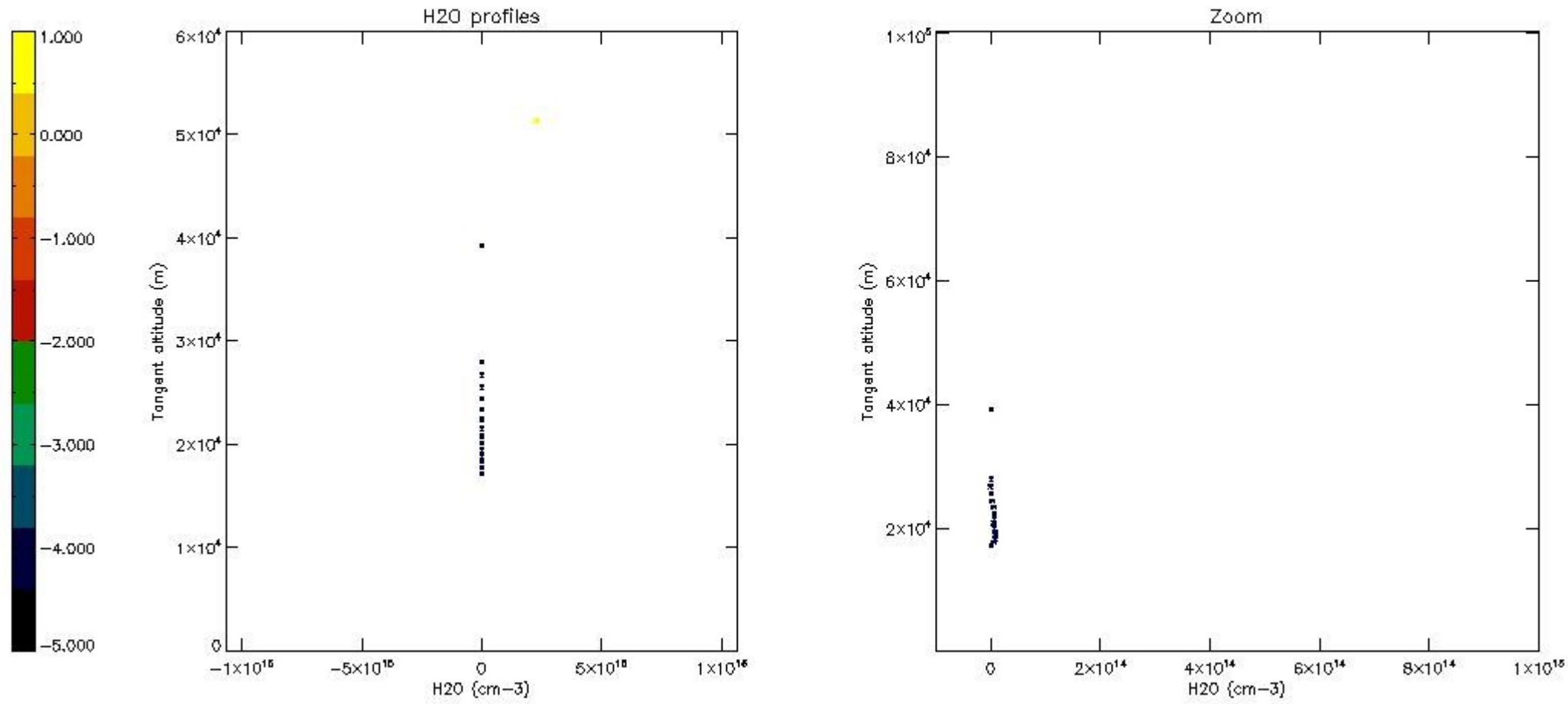
5.7 Plot NO3 profiles for all STD (dark without errors)

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)

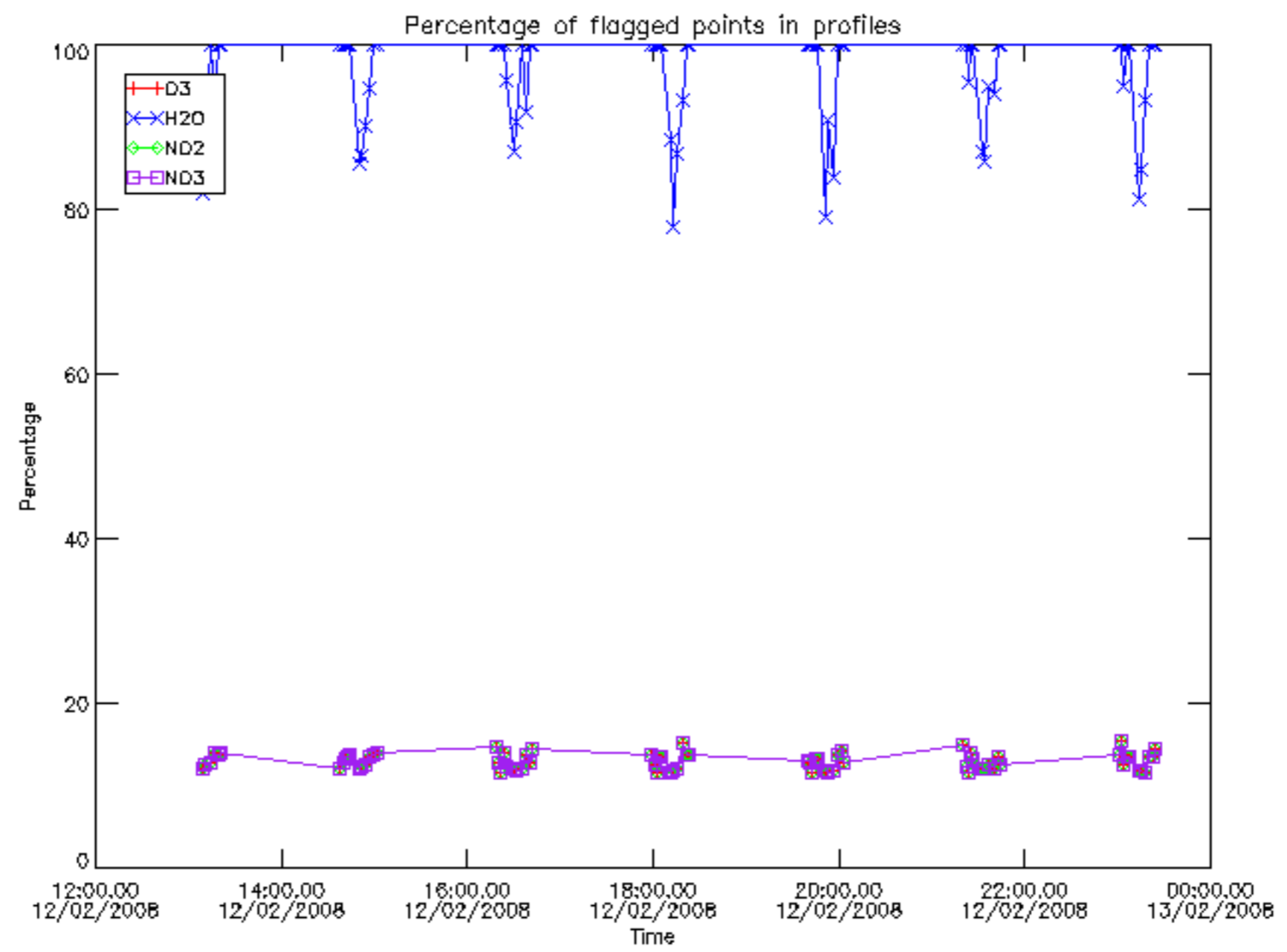
The colorbar represents the latitude.



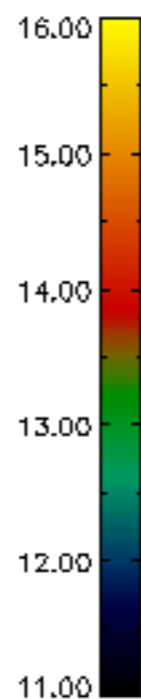
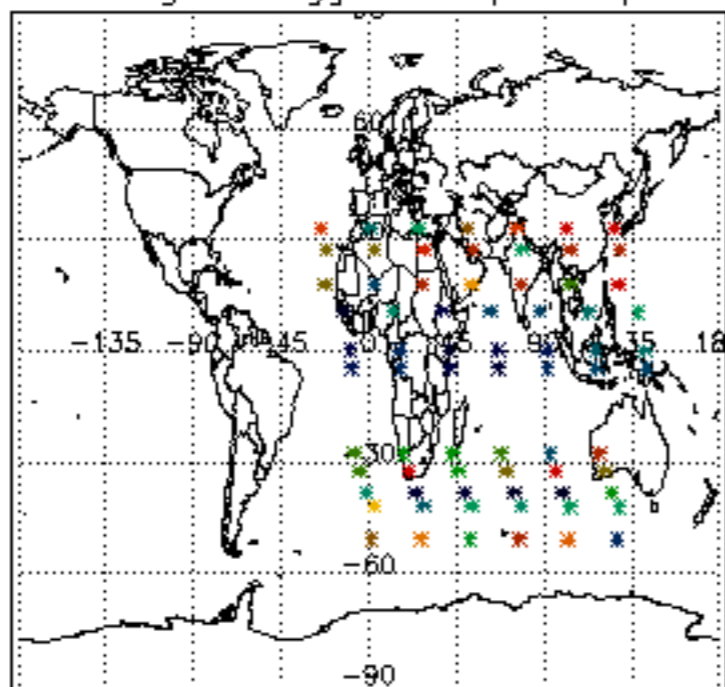
6. Auxiliary Data Files used for the production reported in section 2

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.

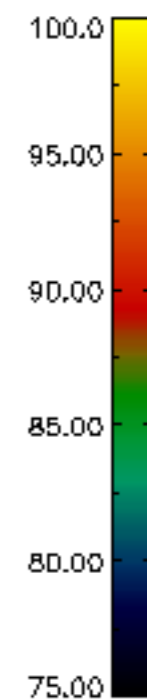
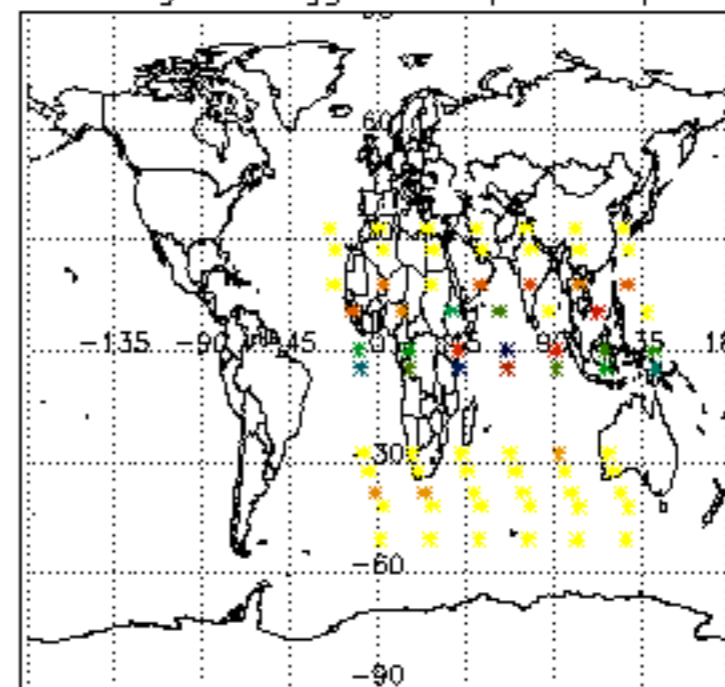
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	12-FEB-2008 13:09:37
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	12-FEB-2008 13:09:37
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	12-FEB-2008 13:09:37



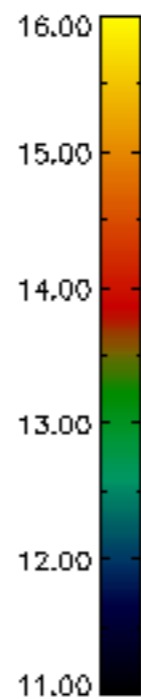
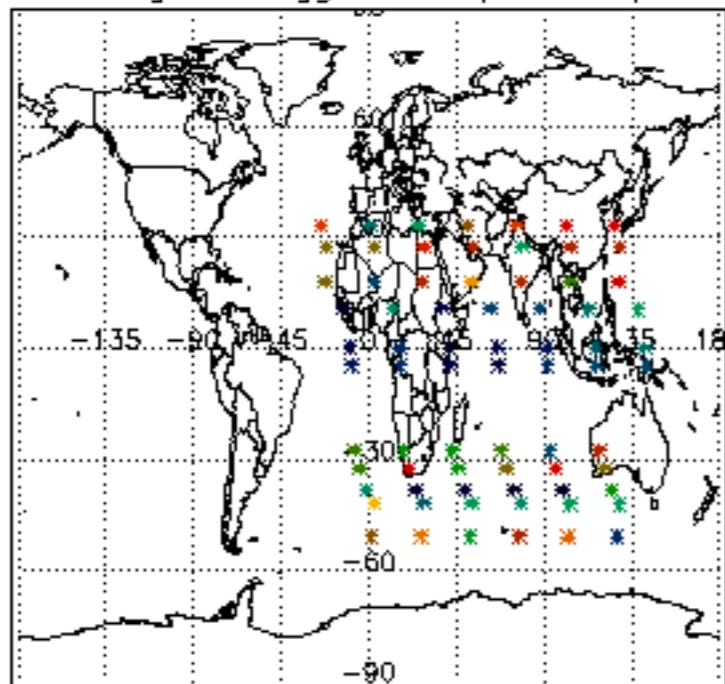
Percentage of flagged data per D3 profile



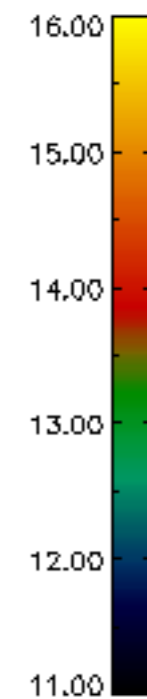
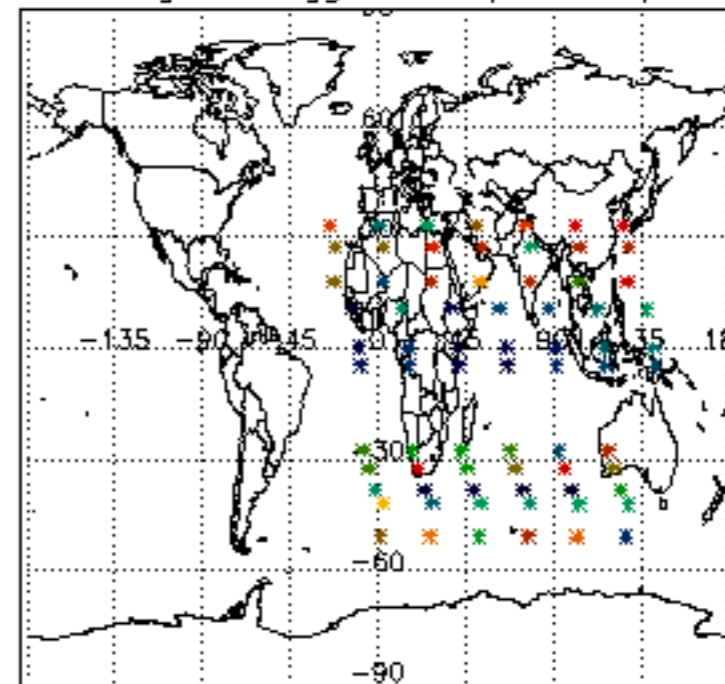
Percentage of flagged data per H2O profile

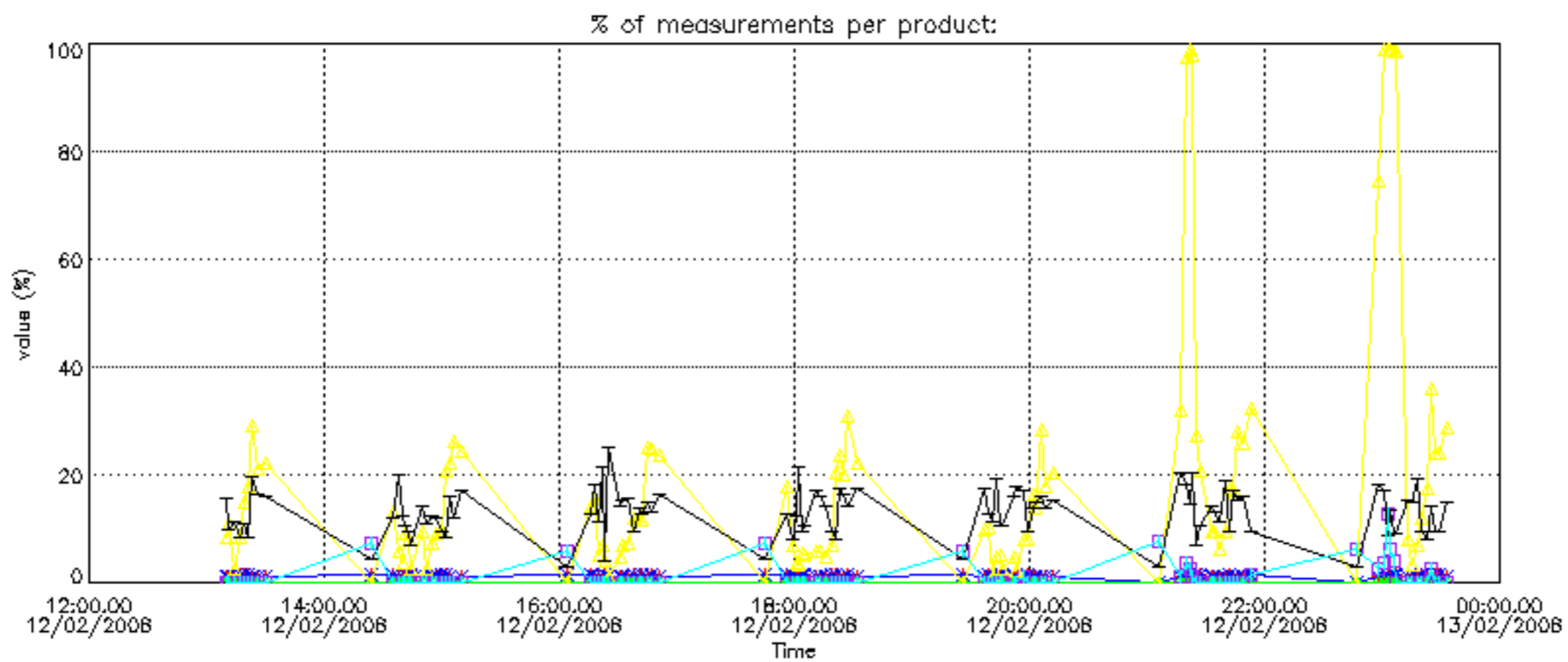


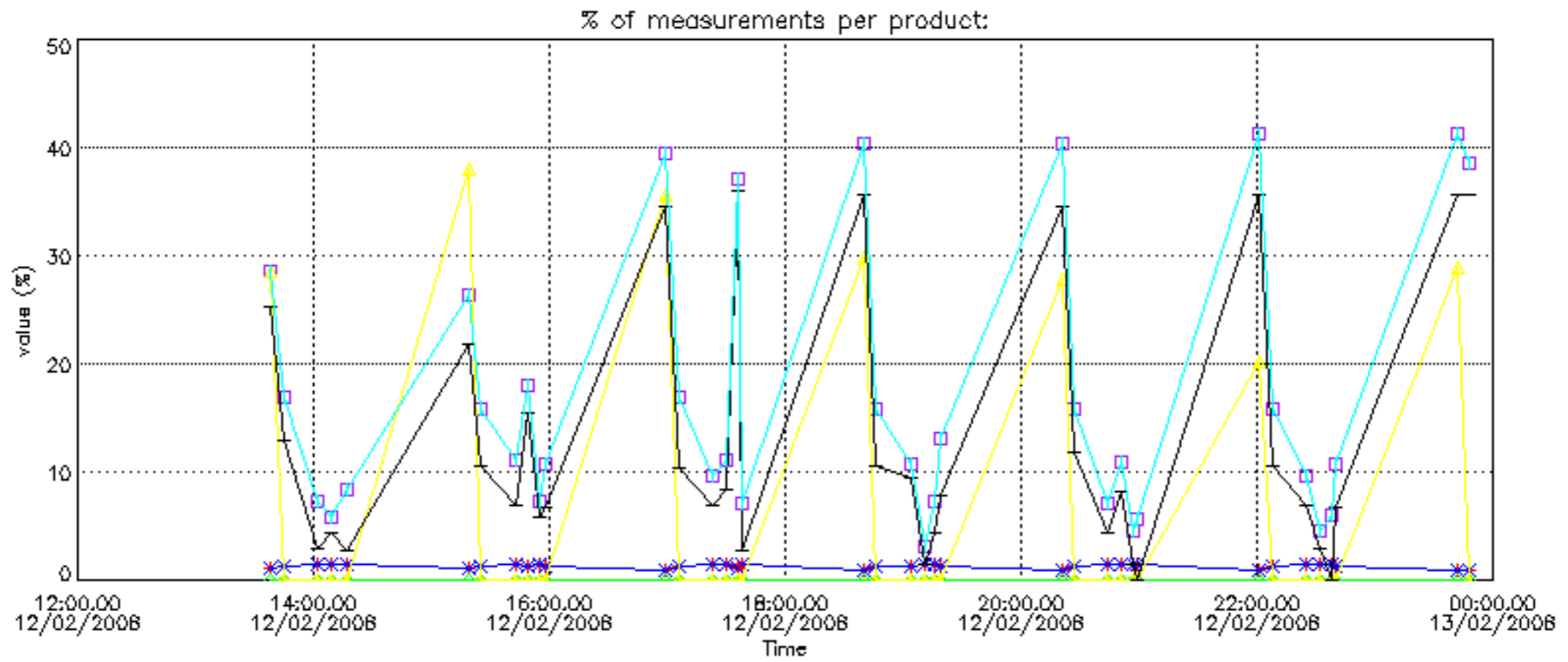
Percentage of flagged data per NO2 profile



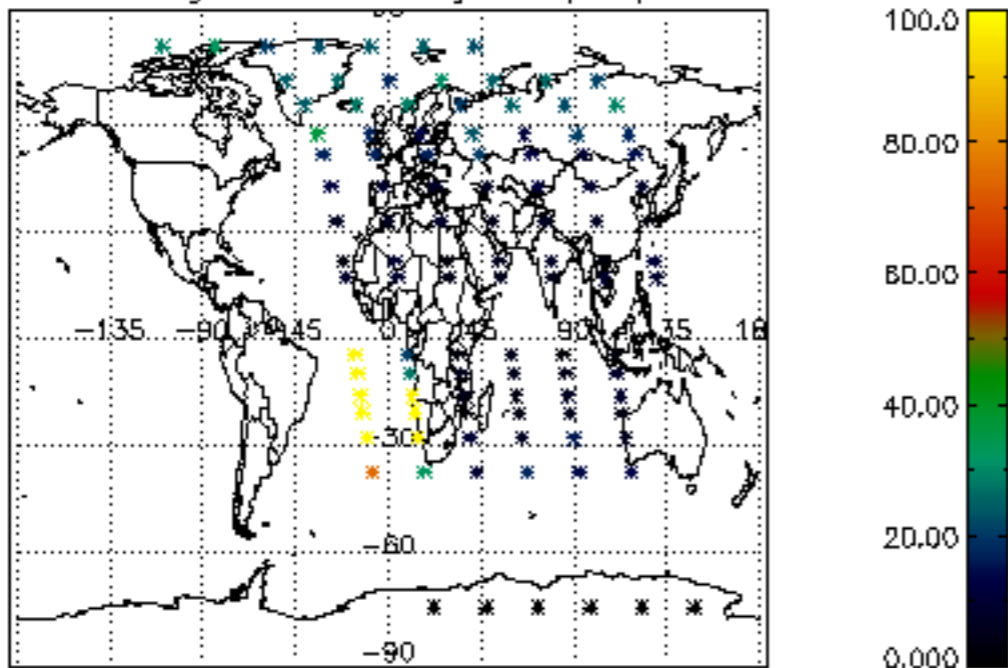
Percentage of flagged data per NO3 profile



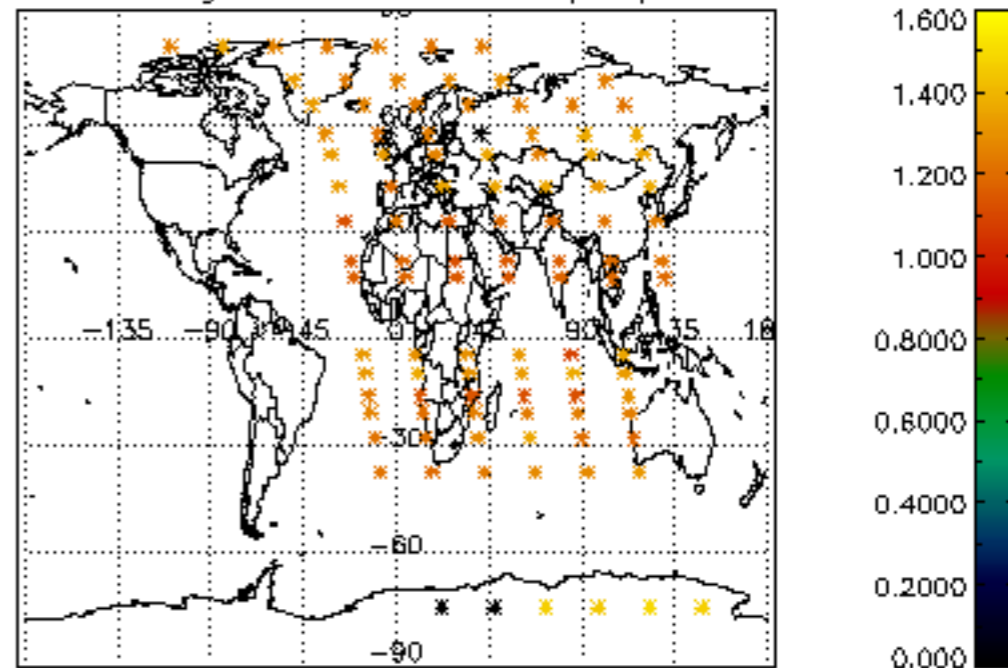




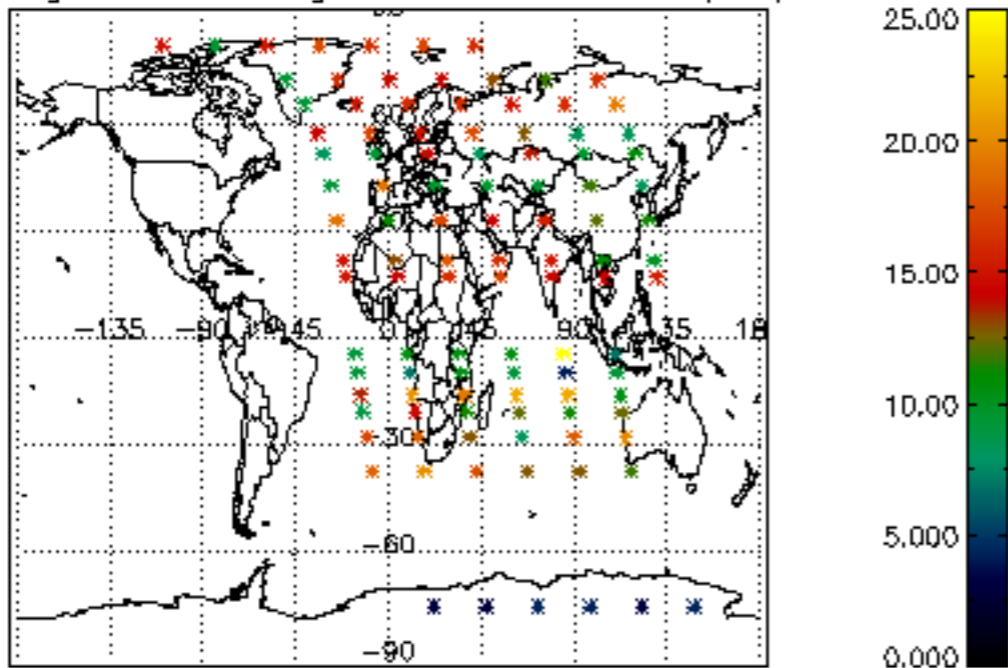
Percentage of cosmic ray hits per profile



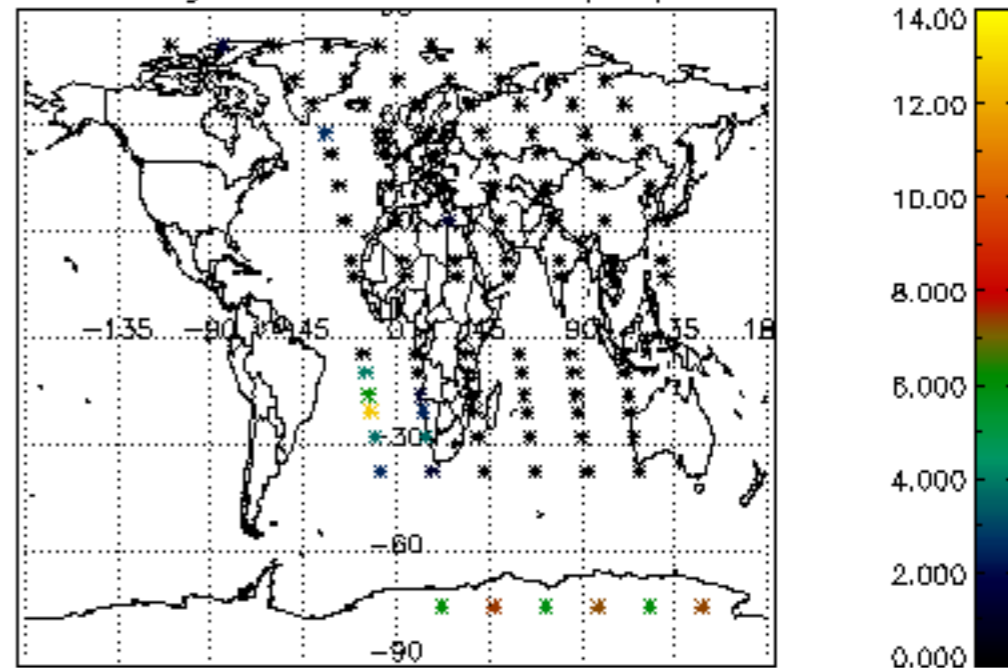
Percentage of datation errors per profile



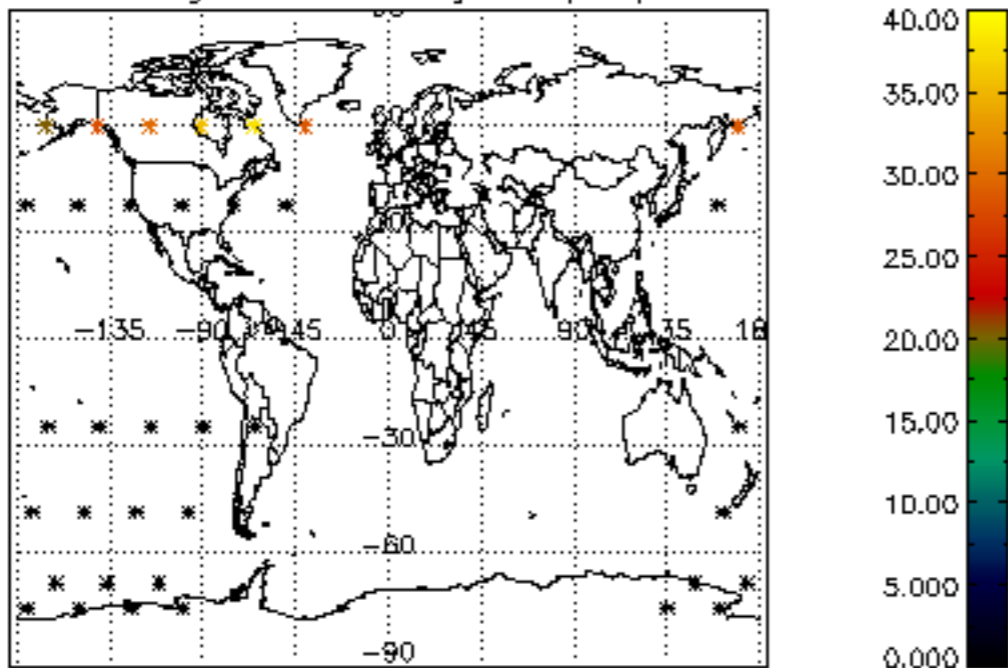
Percentage of star falling outside central band per profile



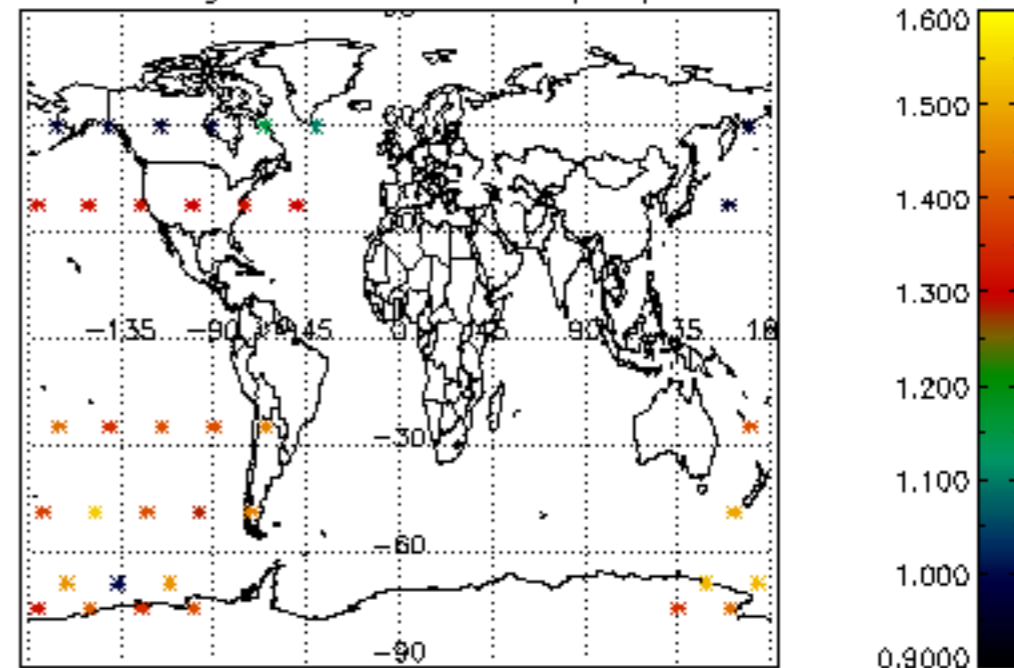
Percentage of saturation errors per profile



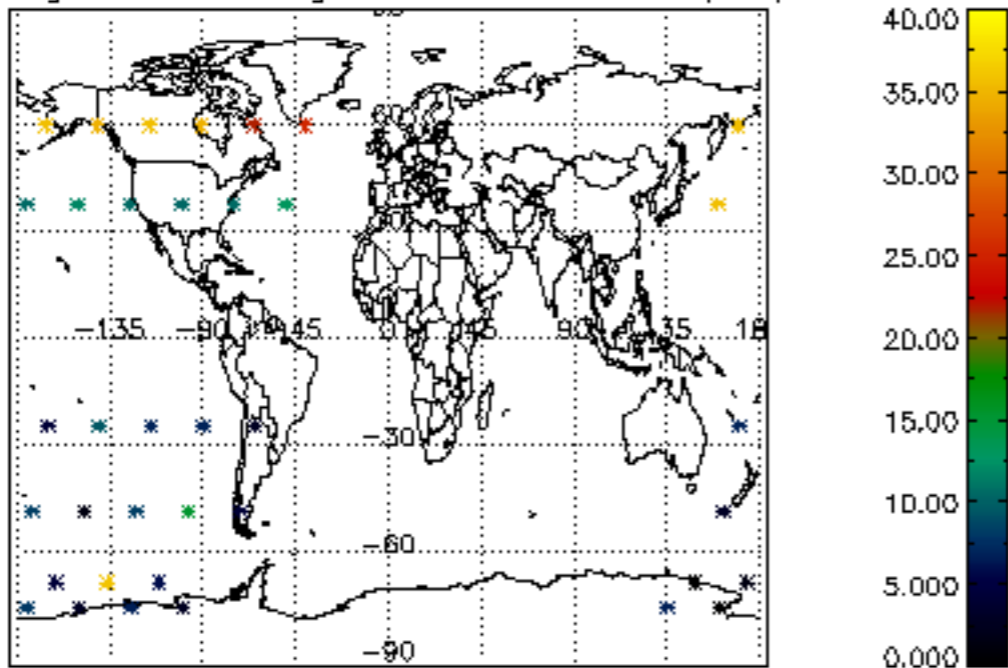
Percentage of cosmic ray hits per profile



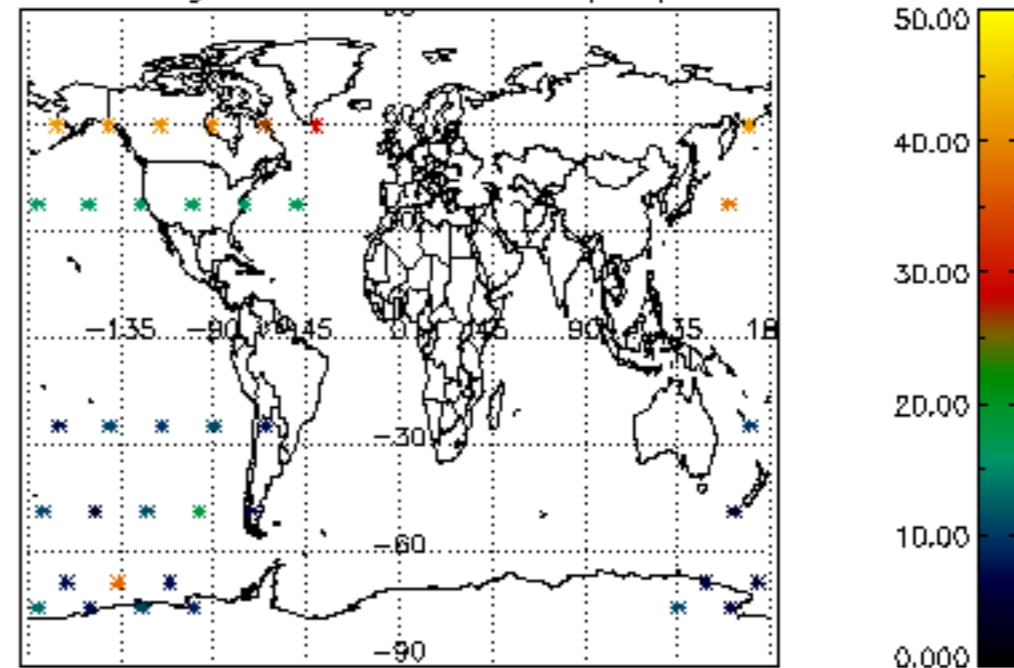
Percentage of datation errors per profile

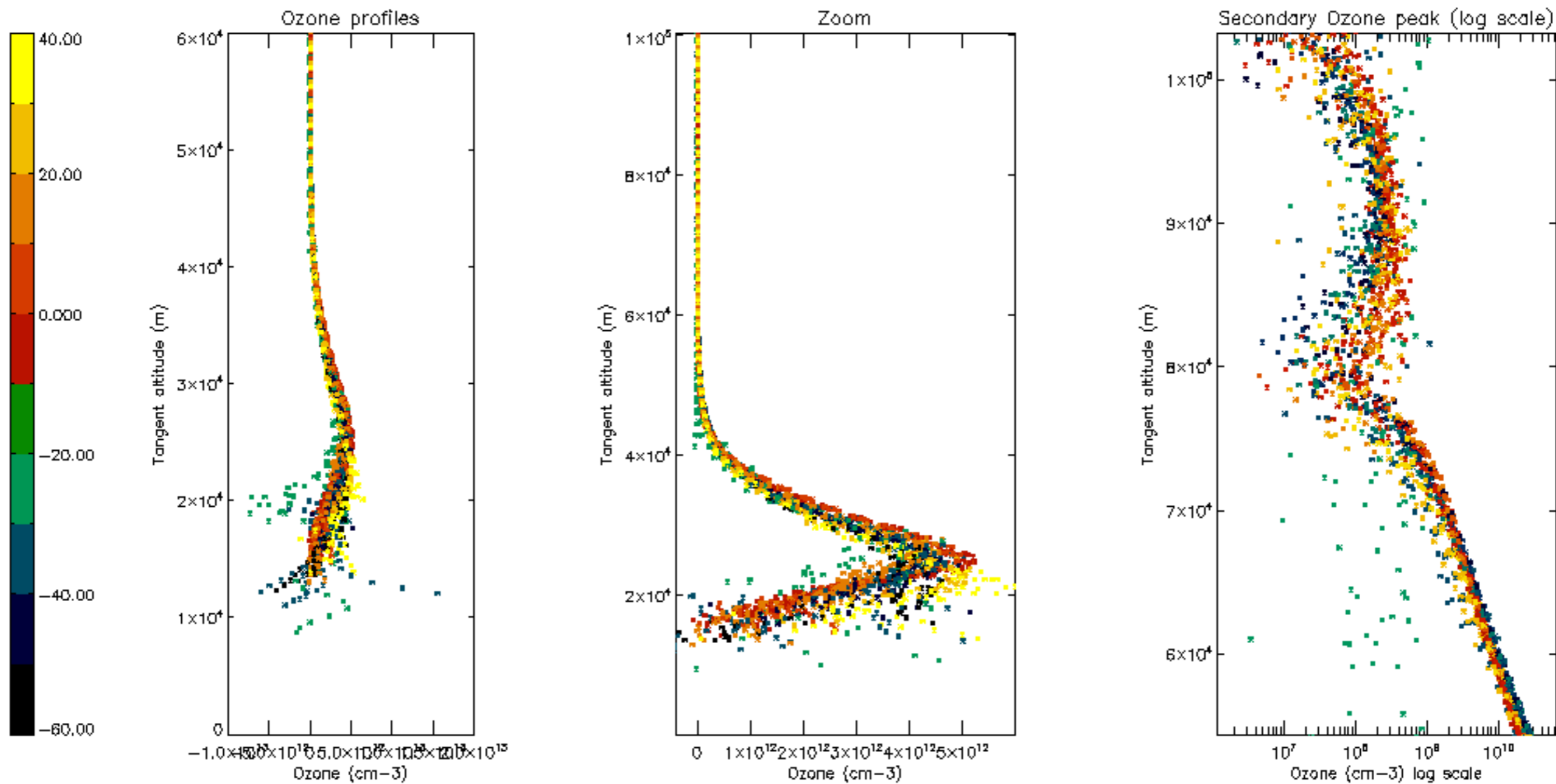


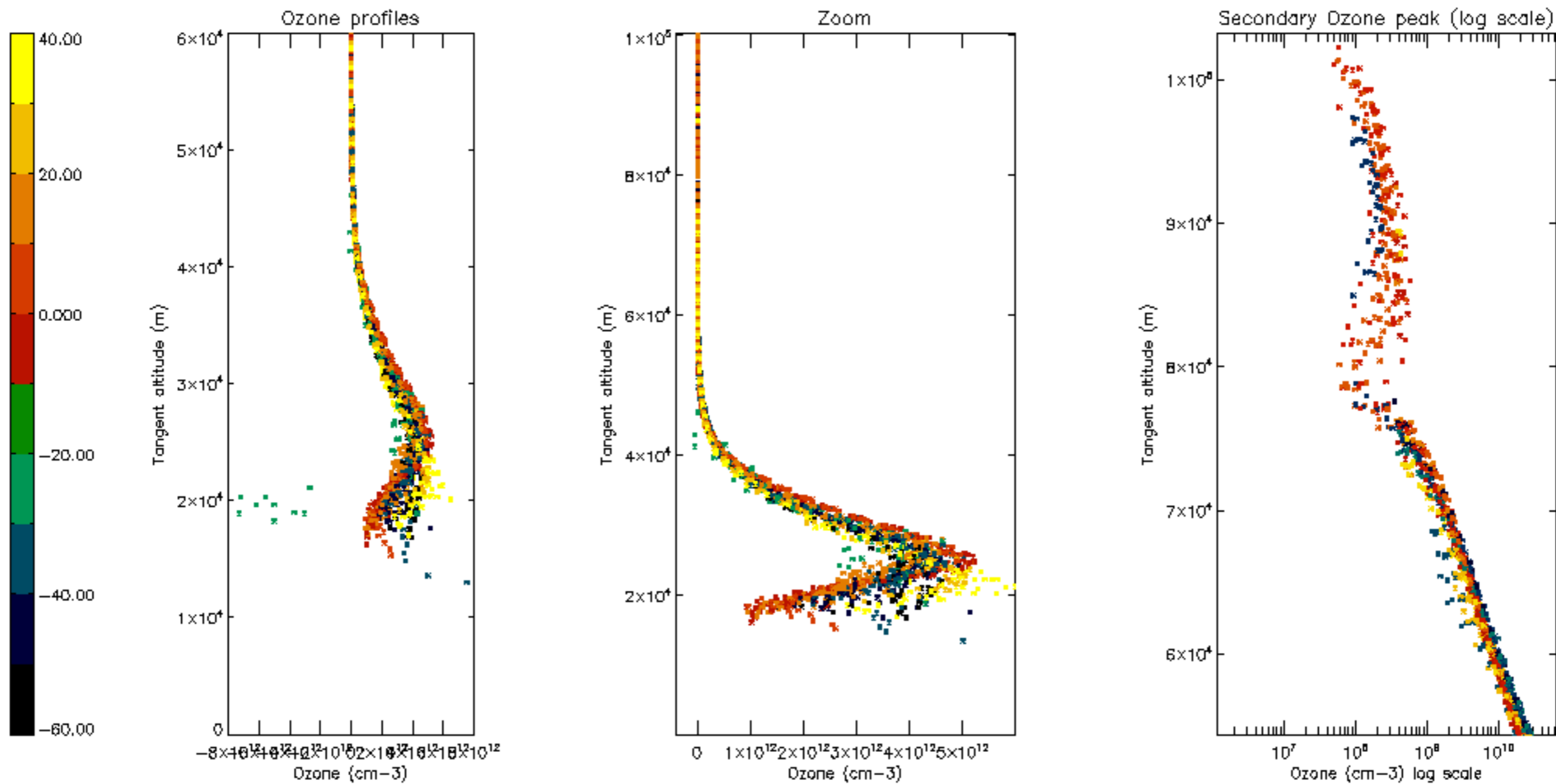
Percentage of star falling outside central band per profile

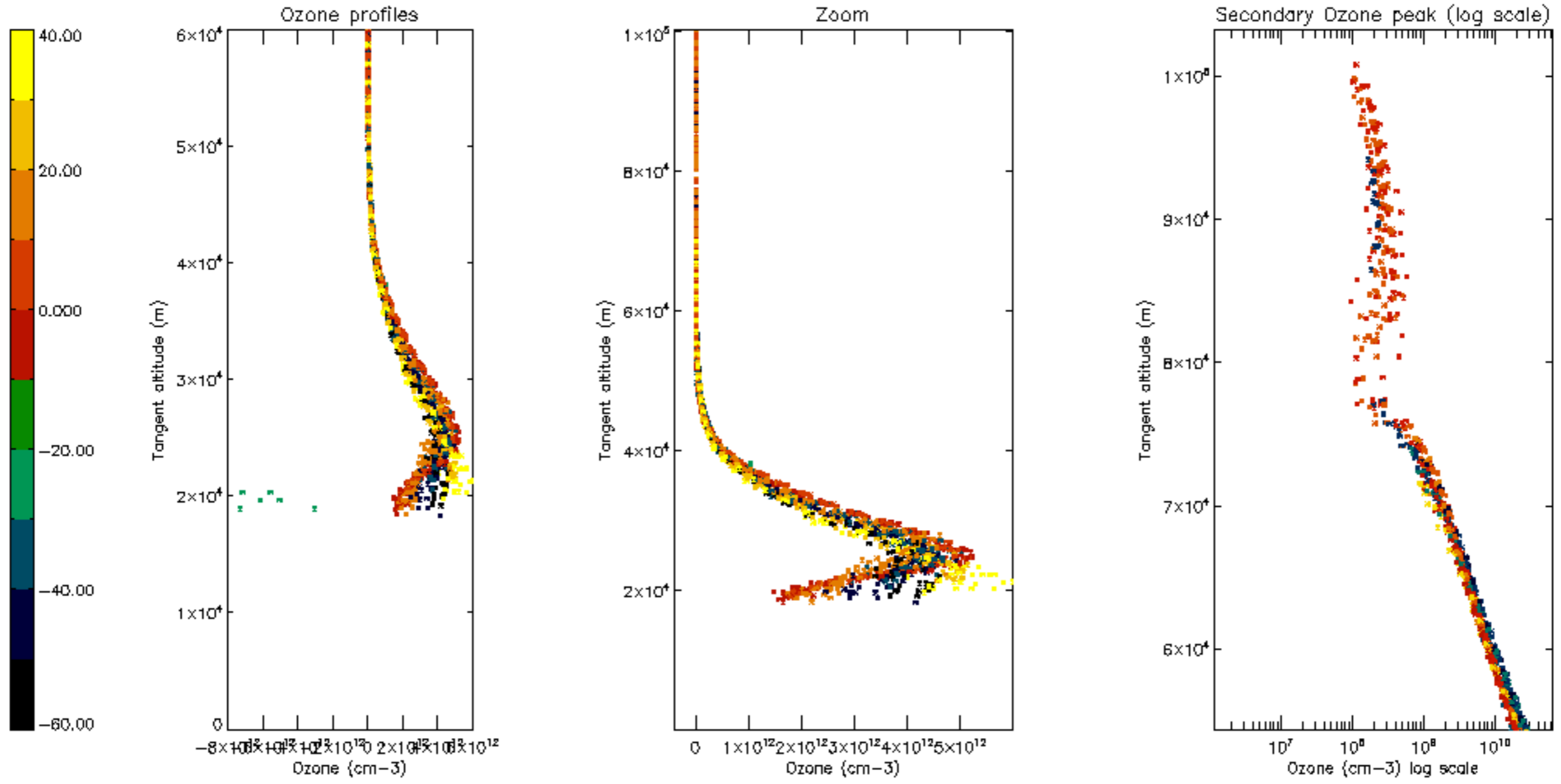


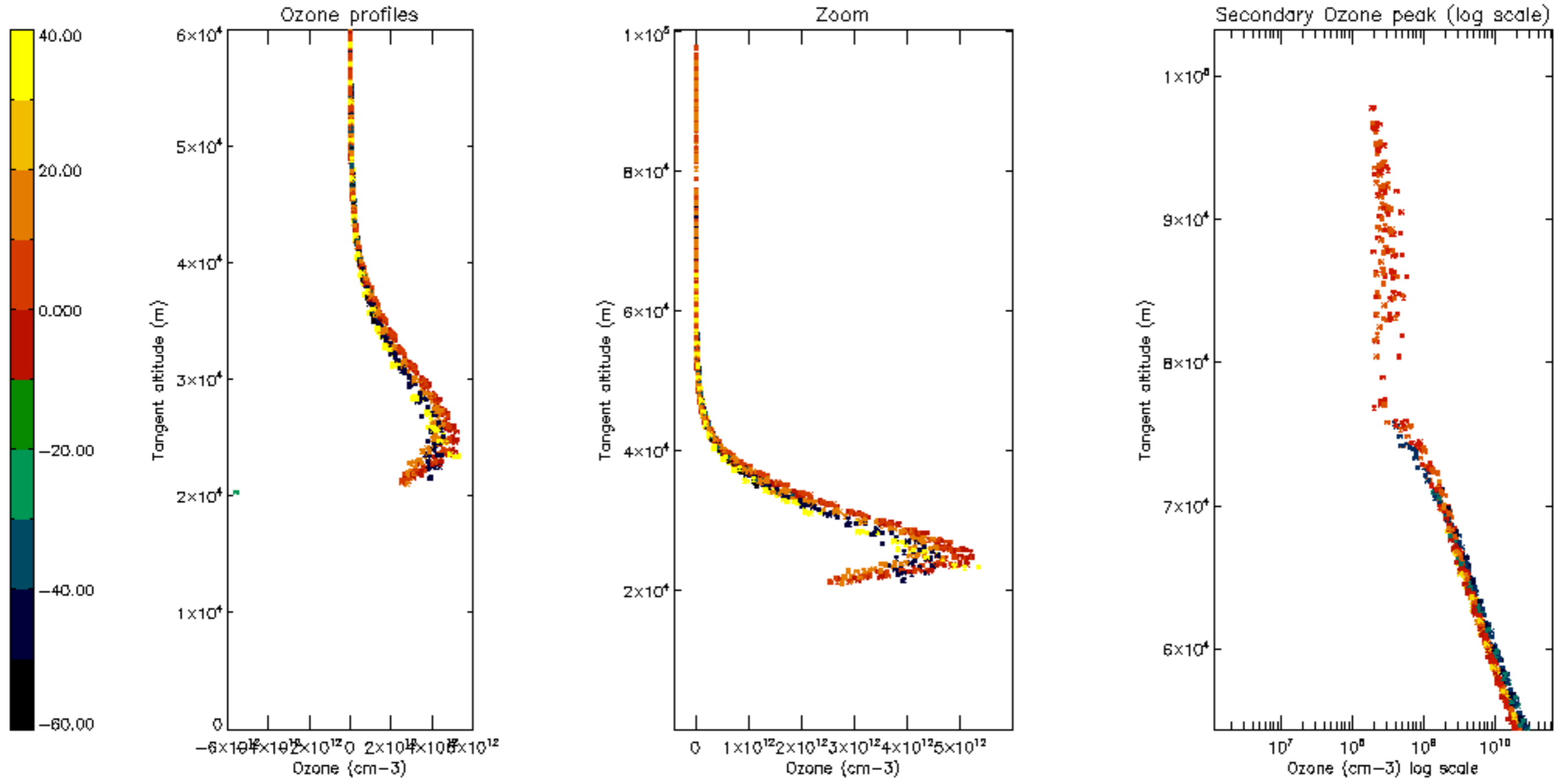
Percentage of saturation errors per profile

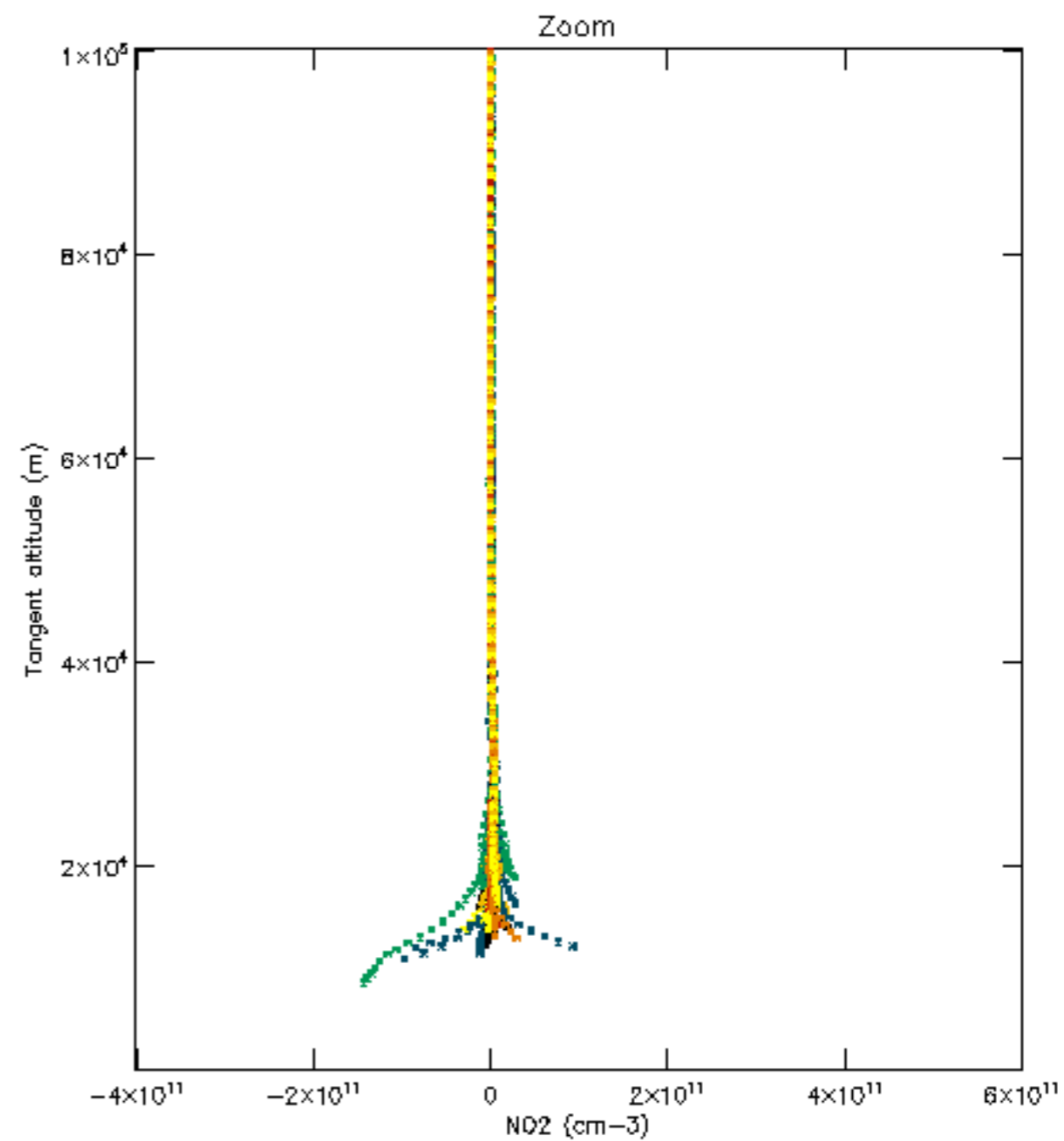
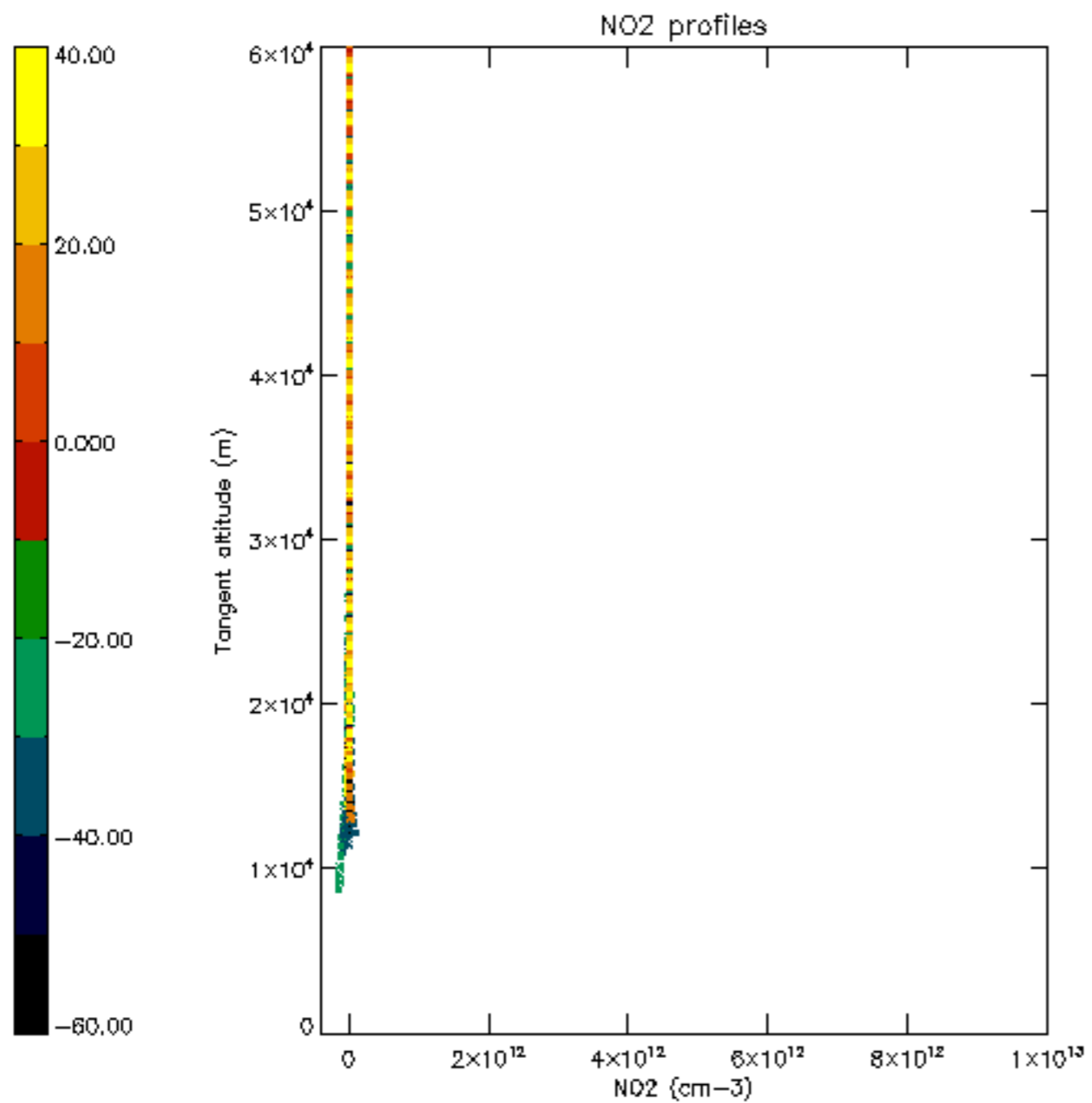


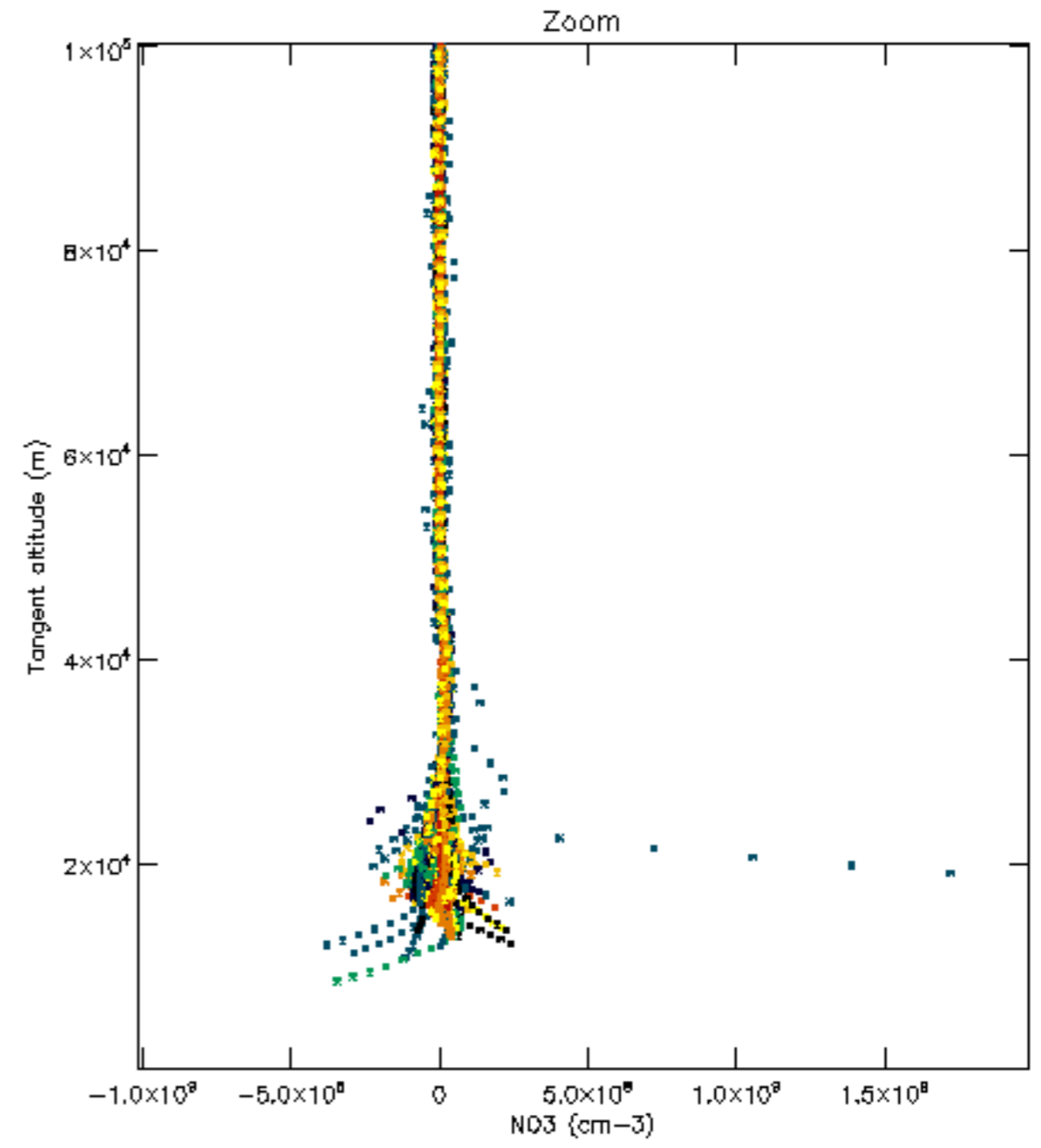
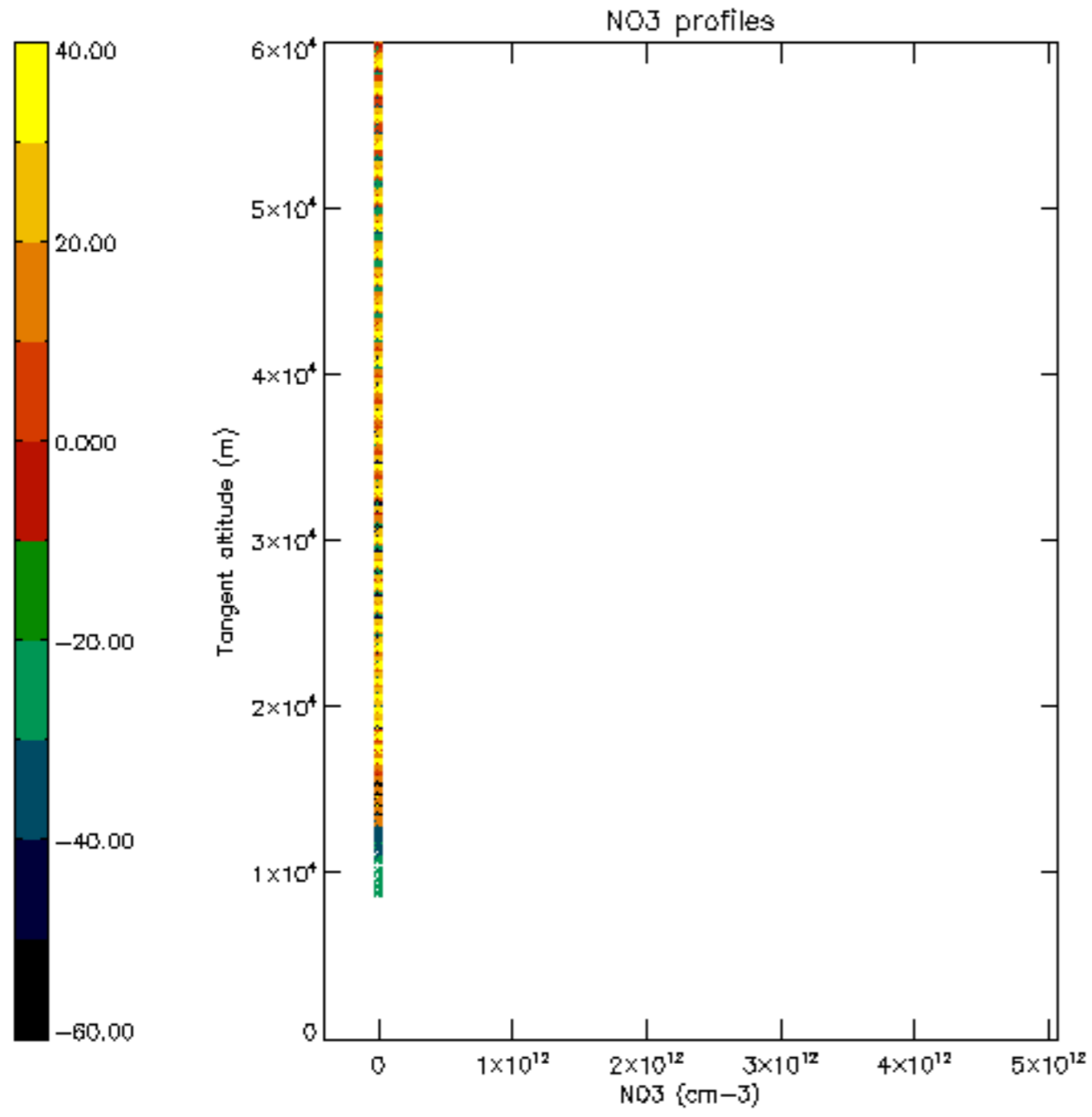


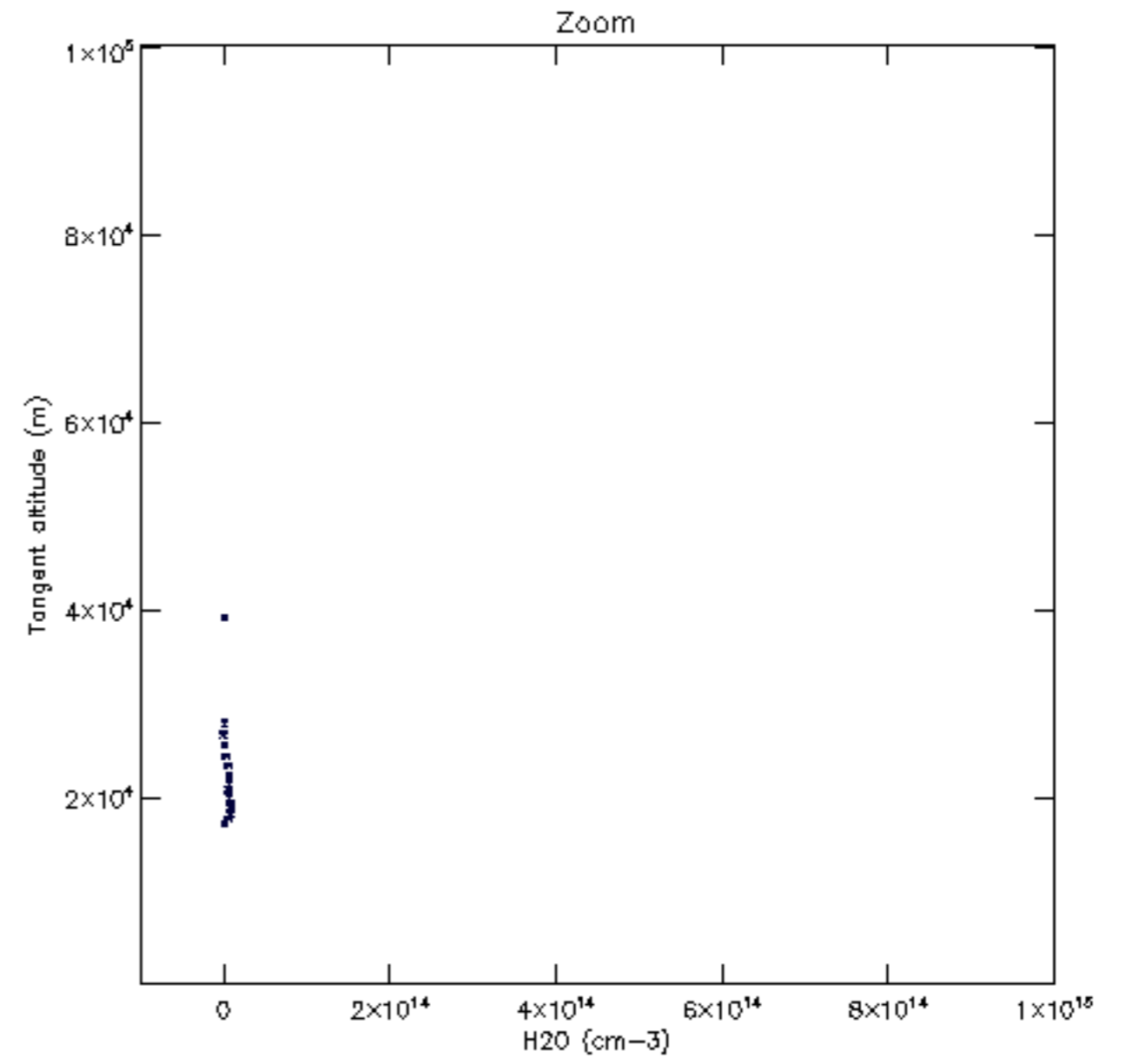
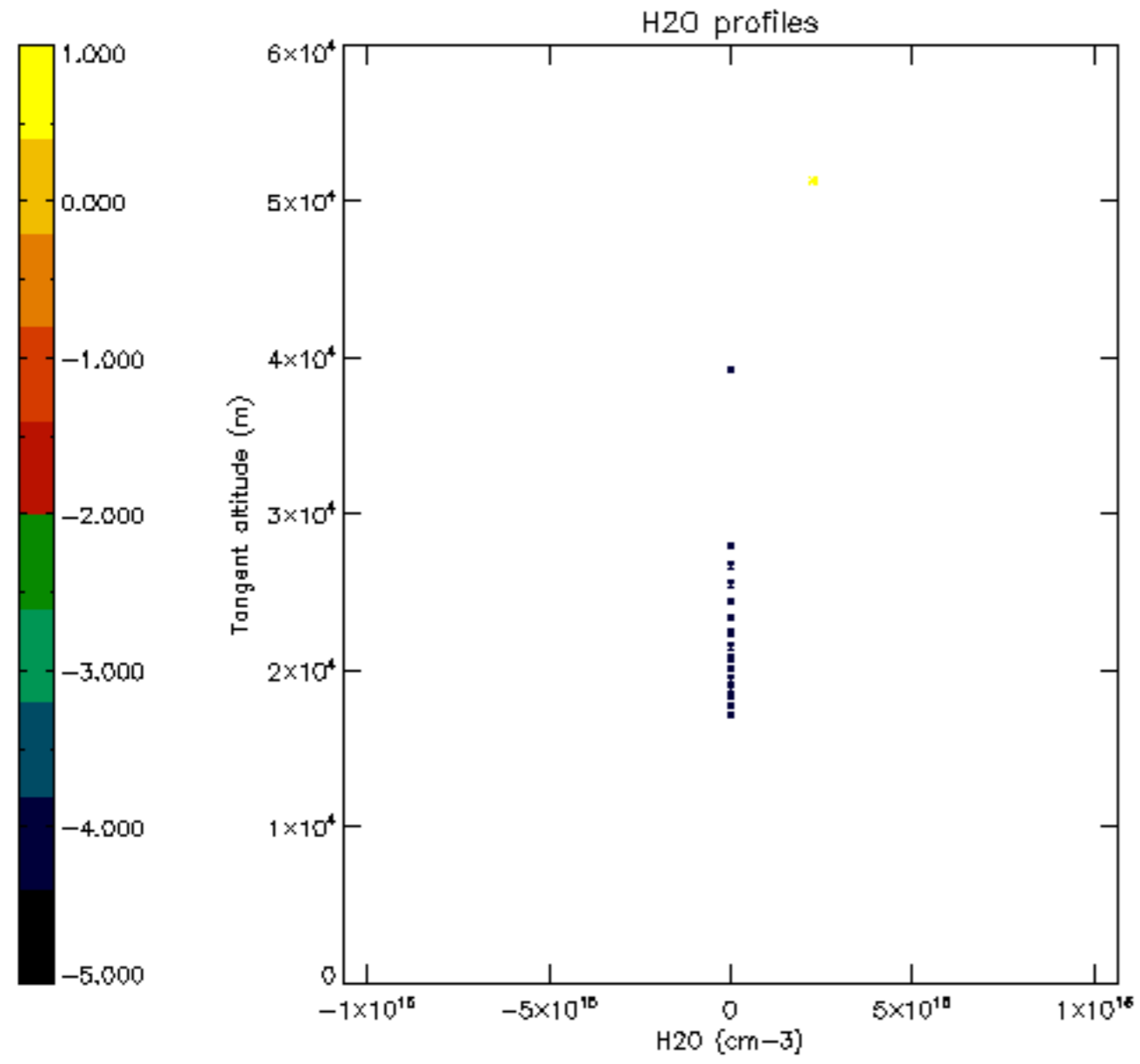


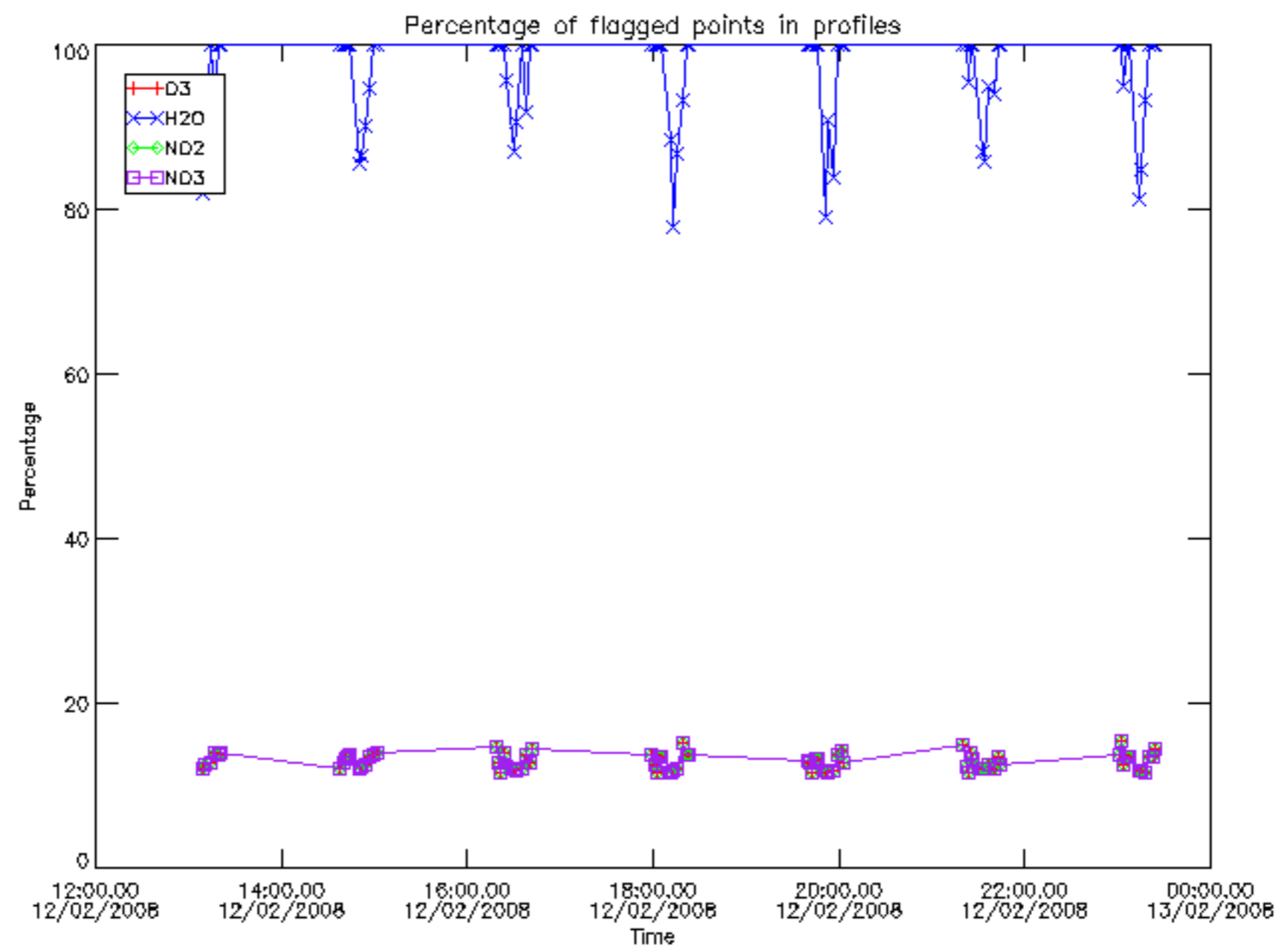




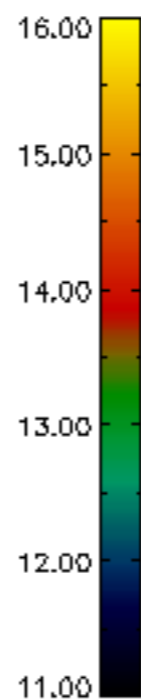
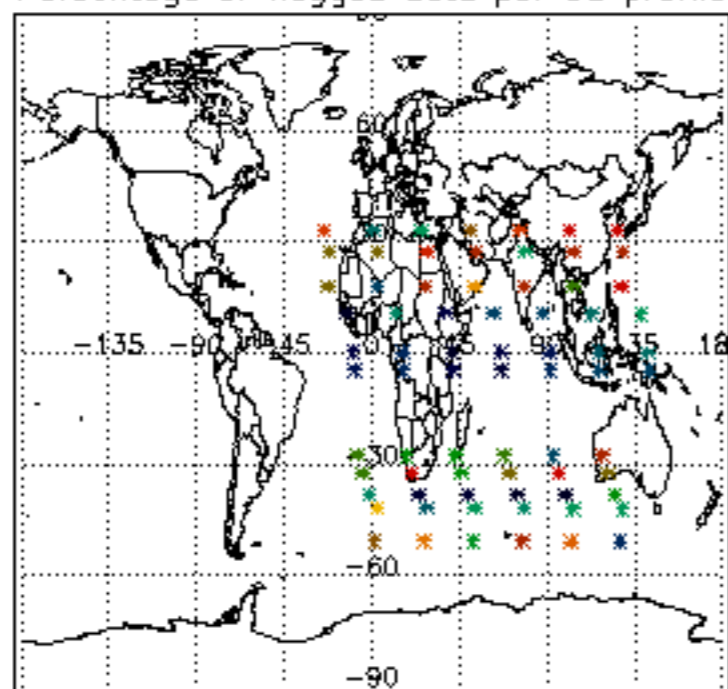




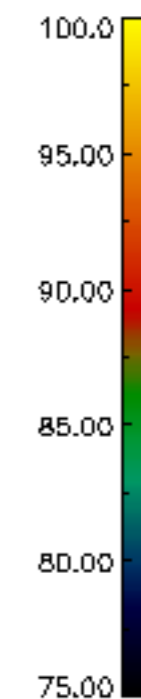
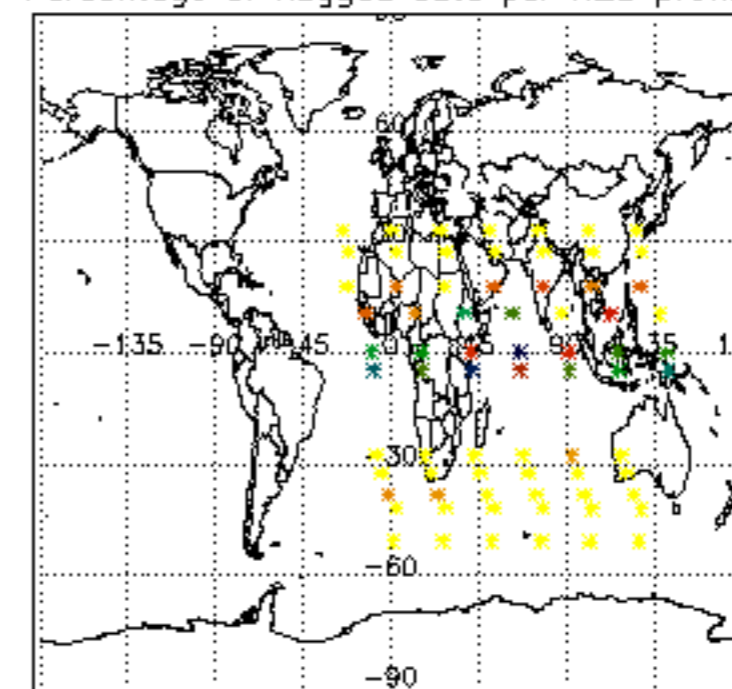




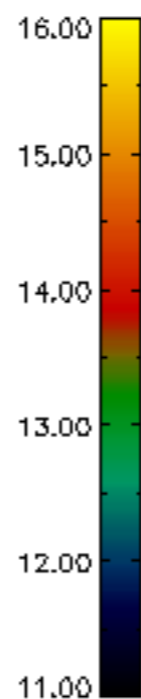
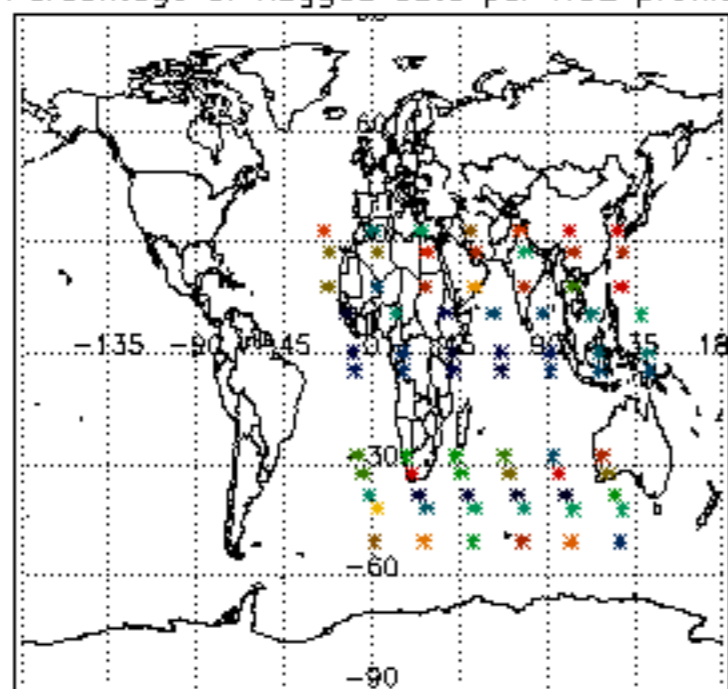
Percentage of flagged data per D3 profile



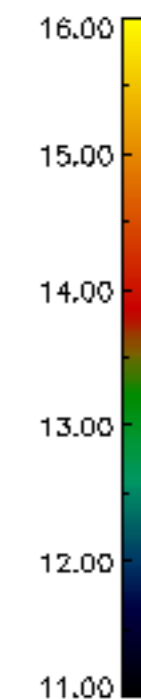
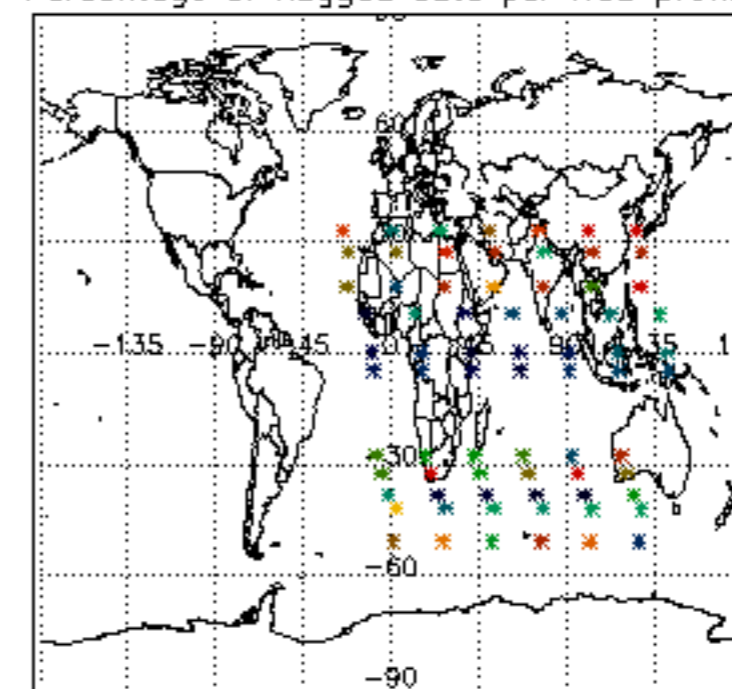
Percentage of flagged data per H2O profile

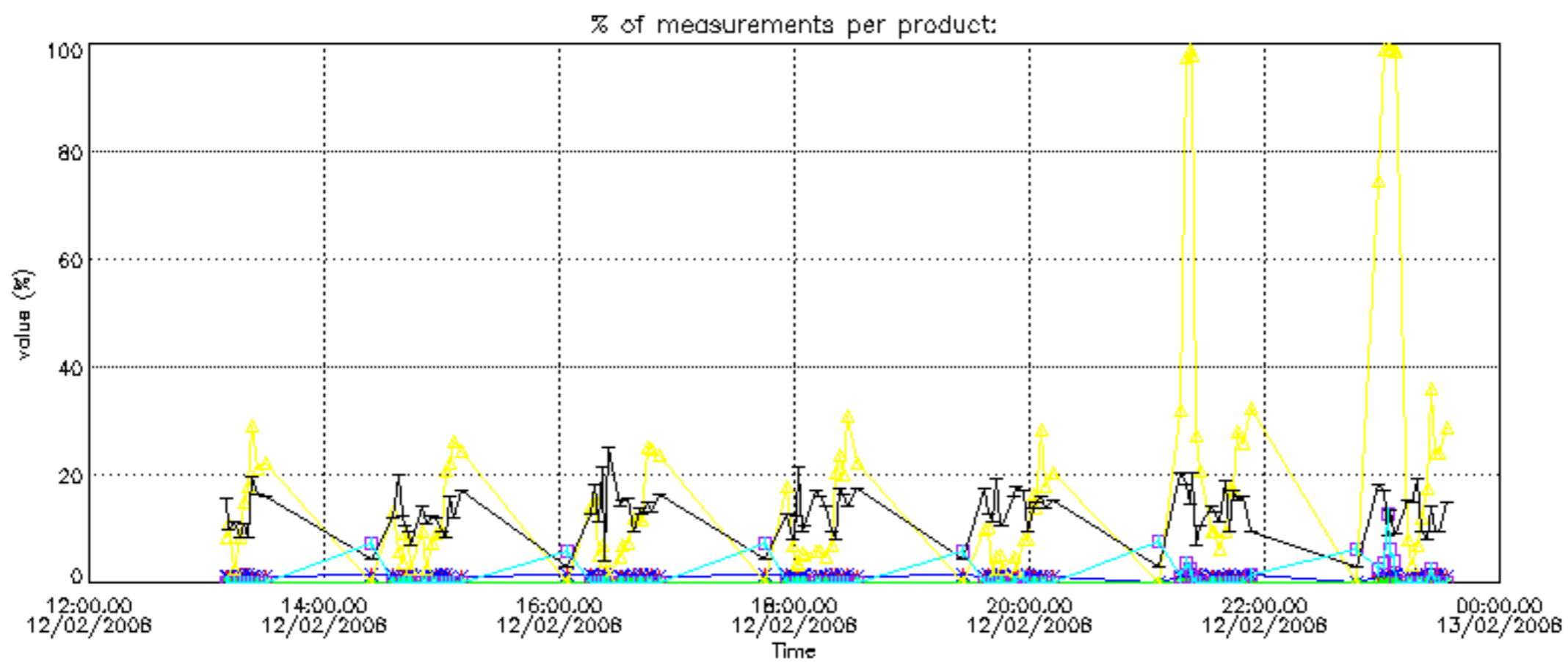


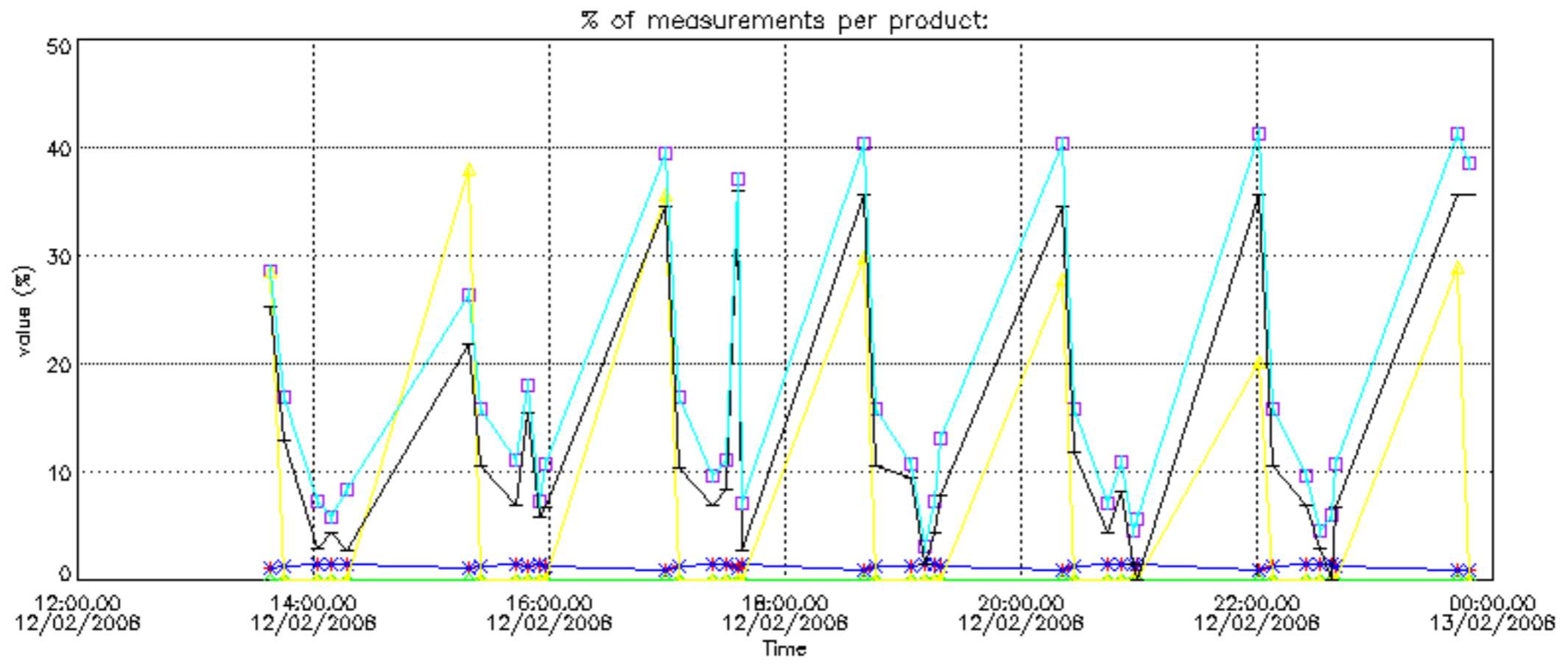
Percentage of flagged data per NO2 profile



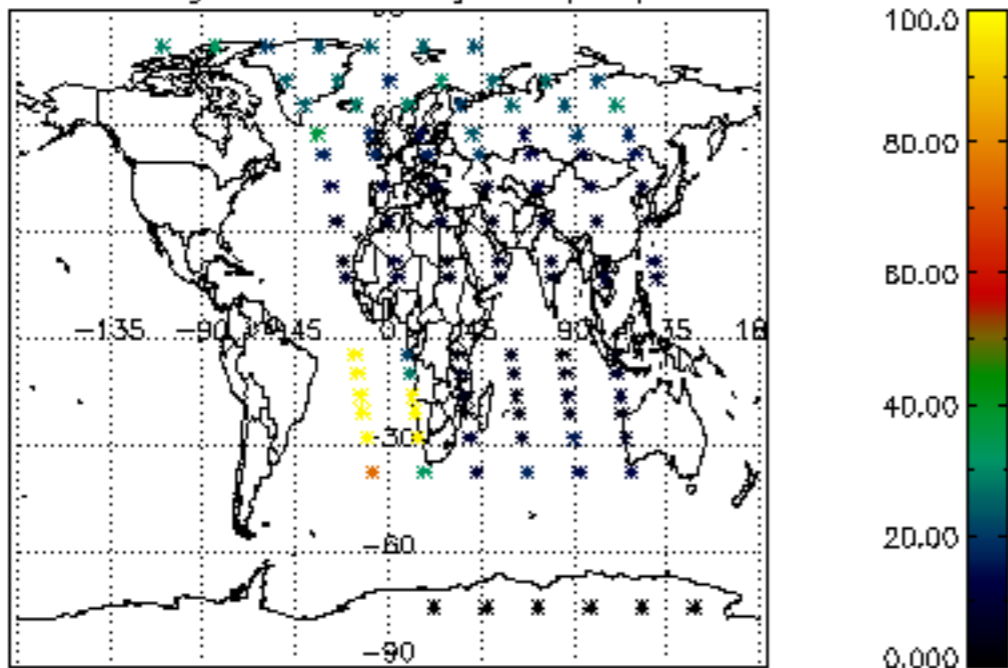
Percentage of flagged data per NO3 profile



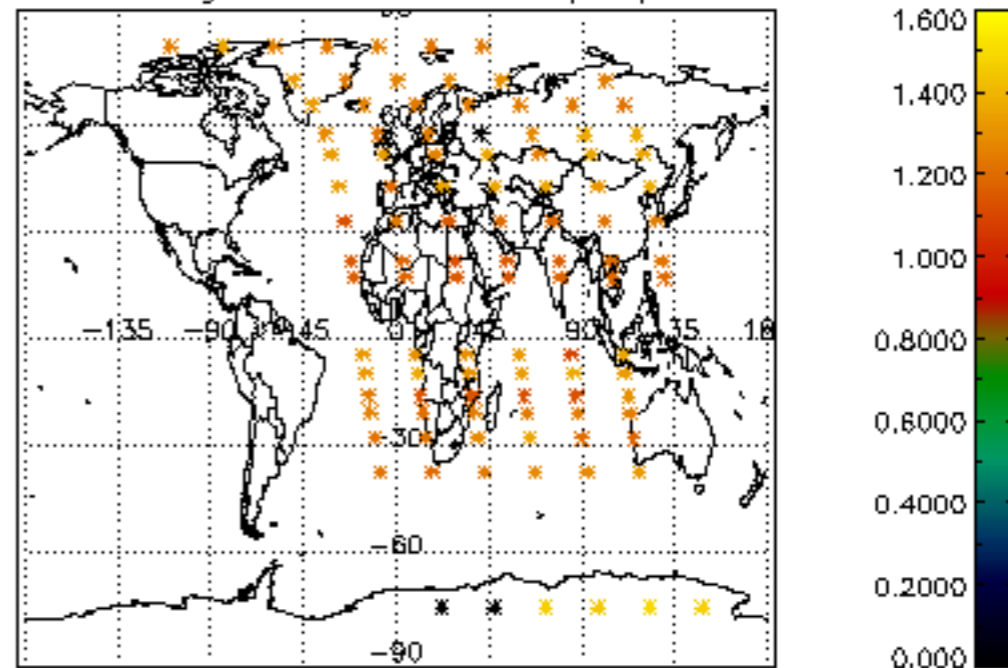




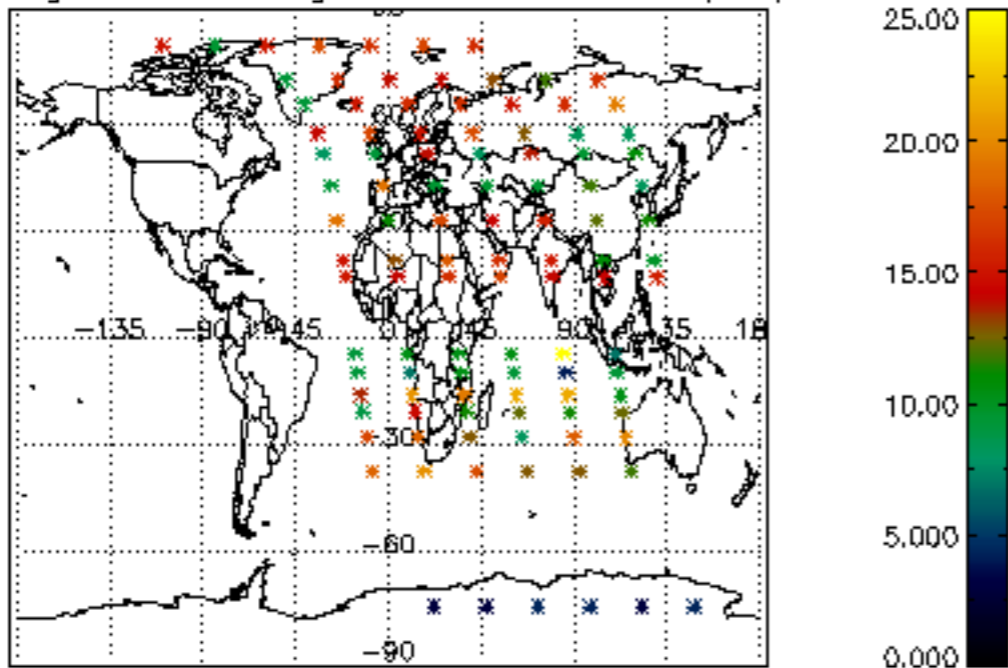
Percentage of cosmic ray hits per profile



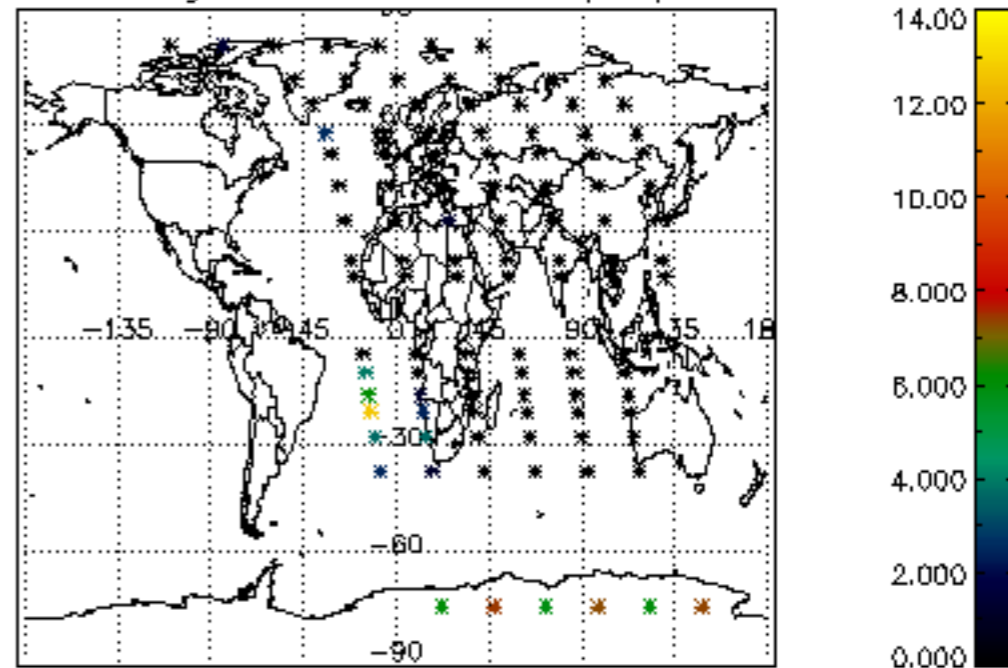
Percentage of datation errors per profile



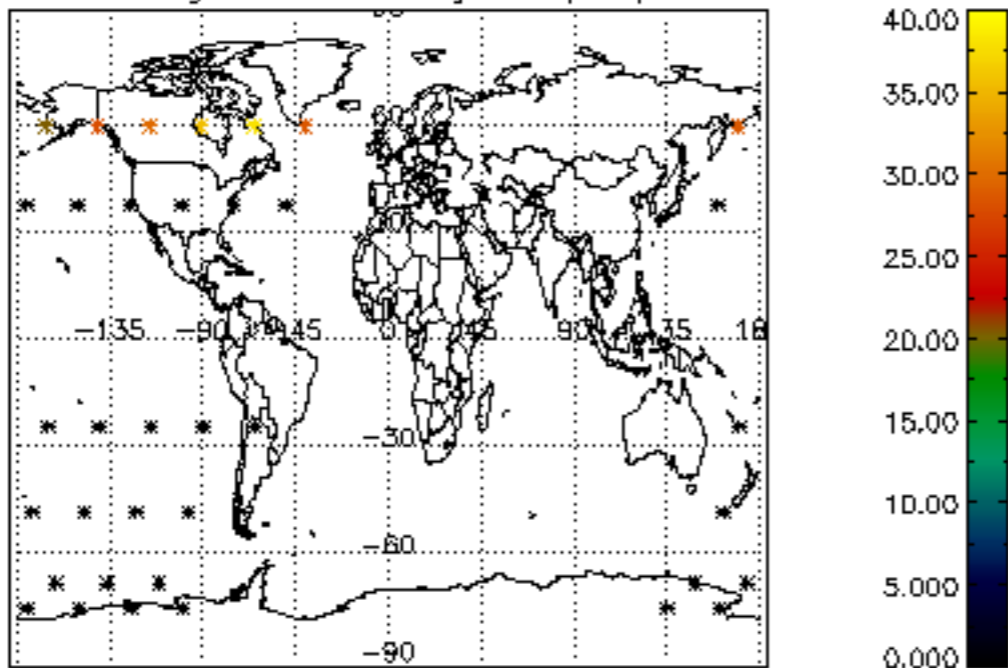
Percentage of star falling outside central band per profile



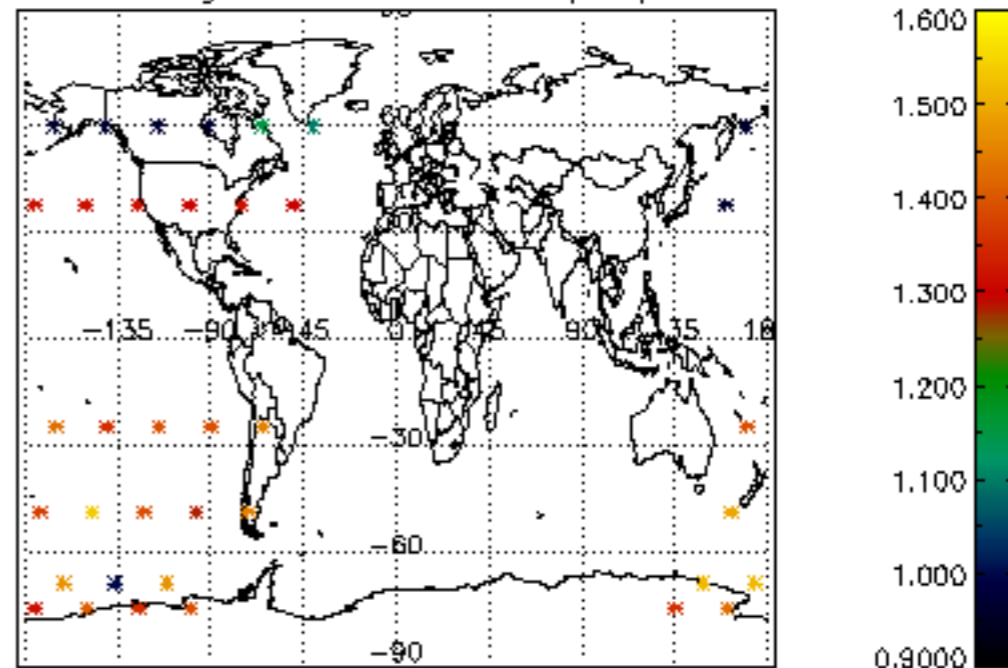
Percentage of saturation errors per profile



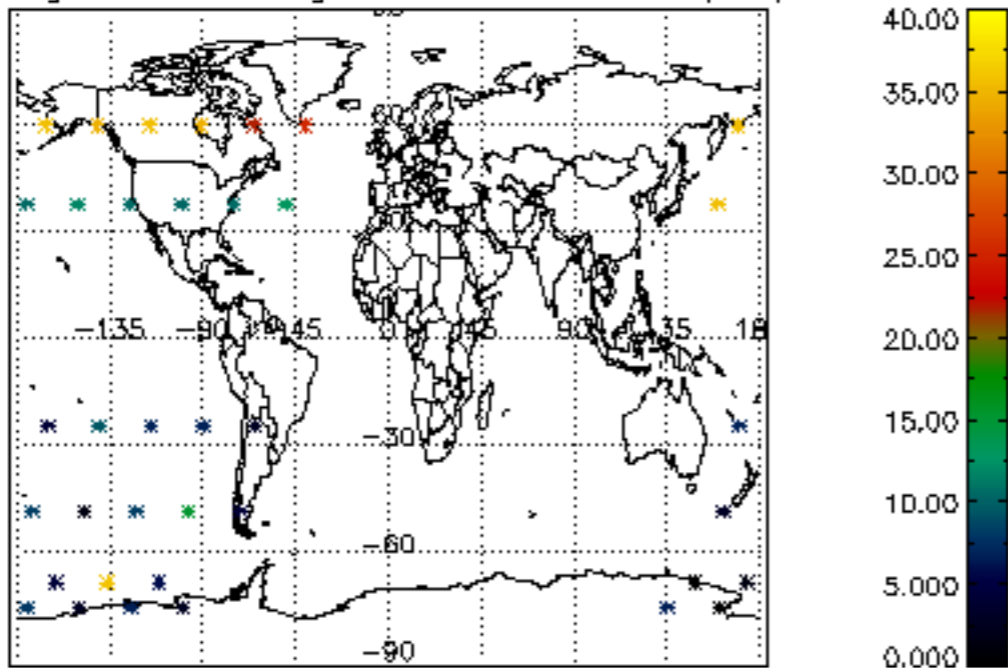
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

