

# 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	19APR2013 13:41:53
Data source version	GOMOS/6.01
Start time of products	21-04-2003 (21APR2003 00:00:00)
Stop time of products	22-04-2003 (22APR2003 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	437
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__2PRFIN20030421_000054_000001372015_00388_05953_6312.N1	21-APR-2003 00:00:54	Bright	137.00	5	3Alp Lyr	0.033000	11000.	274	5953	No
2	GOM_NL__2PRFIN20030421_0000540_000000632015_00388_05953_6313.N1	21-APR-2003 00:05:40	Twilight	63.000	92	53Eps Cyg	2.5000	4500.0	126	5953	No
3	GOM_NL__2PRFIN20030421_001012_000000422015_00388_05953_6314.N1	21-APR-2003 00:10:12	Twilight	41.500	90	54Alp Peg	2.4870	11000.	83	5953	No
4	GOM_NL__2PRFIN20030421_001333_000000572015_00388_05953_6315.N1	21-APR-2003 00:13:33	Dark	57.000	61	8Eps Peg	2.1000	3900.0	114	5953	No
5	GOM_NL__2PRFIN20030421_001601_000000492015_00388_05953_6316.N1	21-APR-2003 00:16:01	Dark	48.500	162	34Alp Aqr	2.9440	5350.0	97	5953	No
6	GOM_NL__2PRFIN20030421_001854_000000522015_00388_05953_6317.N1	21-APR-2003 00:18:54	Dark	51.500	154	22Bet Aqr	2.8990	5700.0	103	5953	No
7	GOM_NL__2PRFIN20030421_002242_000000422015_00388_05953_6318.N1	21-APR-2003 00:22:42	Dark	42.000	18	24Alp PsA	1.1660	9700.0	84	5953	No
8	GOM_NL__2PRFIN20030421_002816_000000402015_00388_05953_6319.N1	21-APR-2003 00:28:16	Dark	40.000	31	Alp Gru	1.7340	15200.	80	5953	No
9	GOM_NL__2PRFIN20030421_003119_000000392015_00388_05953_6320.N1	21-APR-2003 00:31:19	Dark	38.500	148	Alp Tuc	2.8780	4100.0	77	5953	No
10	GOM_NL__2PRFIN20030421_003325_000000462015_00389_05954_6293.N1	21-APR-2003 00:33:25	Dark	45.500	45	Alp Pav	1.9400	26000.	91	5954	No
11	GOM_NL__2PRFIN20030421_003949_000000662015_00389_05954_6294.N1	21-APR-2003 00:39:49	Dark	66.000	38	20Eps Sgr	1.8360	11000.	132	5954	No
12	GOM_NL__2PRFIN20030421_004159_000000612015_00389_05954_6295.N1	21-APR-2003 00:41:59	Straylight	60.500	40	The Sco	1.8590	7100.0	121	5954	No
13	GOM_NL__2PRFIN20030421_004503_000000442015_00389_05954_6296.N1	21-APR-2003 00:45:03	Straylight	43.500	4	Alp1Cen	-0.010000	5800.0	87	5954	No
14	GOM_NL__2PRFIN20030421_004709_000000722015_00389_05954_6297.N1	21-APR-2003 00:47:09	Straylight	71.500	75	26Eps Sco	2.2910	4250.0	143	5954	No
15	GOM_NL__2PRFIN20030421_005209_000000502015_00389_05954_6298.N1	21-APR-2003 00:52:09	Straylight	50.000	54	5The Cen	2.0550	4500.0	100	5954	No
16	GOM_NL__2PRFIN20030421_005420_000000742015_00389_05954_6299.N1	21-APR-2003 00:54:20	Twilight	73.500	80	7Del Sco	2.3160	30000.	147	5954	No
17	GOM_NL__2PRFIN20030421_005706_000000422015_00389_05954_6300.N1	21-APR-2003 00:57:06	Twilight	41.500	106	9Bet Crv	2.6480	5600.0	83	5954	No
18	GOM_NL__2PRFIN20030421_010012_000000392015_00389_05954_6301.N1	21-APR-2003 01:00:12	Bright	39.000	15	67Alp Vir	0.97600	28000.	78	5954	No
19	GOM_NL__2PRFIN20030421_010314_000000382015_00389_05954_6302.N1	21-APR-2003 01:03:14	Bright	37.500	121	29Gam Vir	2.7400	7200.0	75	5954	No
20	GOM_NL__2PRFIN20030421_010650_000000382015_00389_05954_6303.N1	21-APR-2003 01:06:50	Bright	38.000	138	47Eps Vir	2.8280	4700.0	76	5954	No
21	GOM_NL__2PRFIN20030421_011449_000000372015_00389_05954_6304.N1	21-APR-2003 01:14:49	Bright	36.500	152	12Alp2CVn	2.8900	11000.	73	5954	No
22	GOM_NL__2PRFIN20030421_011641_000000352015_00389_05954_6305.N1	21-APR-2003 01:16:41	Bright	35.000	174	52Psi UMa	3.0040	4400.0	70	5954	No
23	GOM_NL__2PRFIN20030421_011855_000000362015_00389_05954_6306.N1	21-APR-2003 01:18:55	Bright	35.500	87	64Gam UMa	2.4330	11000.	71	5954	No
24	GOM_NL__2PRFIN20030421_012124_000000372015_00389_05954_6307.N1	21-APR-2003 01:21:24	Bright	37.000	36	50Alp UMa	1.8000	6300.0	74	5954	No
25	GOM_NL__2PRFIN20030421_012609_000000402015_00389_05954_6308.N1	21-APR-2003 01:26:09	Bright	39.500	60	7Bet UMi	2.0810	3950.0	79	5954	No
26	GOM_NL__2PRFIN20030421_012919_000000342015_00389_05954_6309.N1	21-APR-2003 01:29:19	Bright	33.500	49	1Alp UMi	1.9900	6300.0	67	5954	No
27	GOM_NL__2PRFIN20030421_013100_000000622015_00389_05954_6310.N1	21-APR-2003 01:31:00	Bright	62.000	130	23Bet Dra	2.7990	5800.0	124	5954	No
28	GOM_NL__2PRFIN20030421_013252_000000682015_00389_05954_6311.N1	21-APR-2003 01:32:52	Bright	67.500	69	33Gam Dra	2.2310	3800.0	135	5954	No
29	GOM_NL__2PRFIN20030421_014131_000001342015_00389_05954_6312.N1	21-APR-2003 01:41:31	Bright	133.50	5	3Alp Lyr	0.033000	11000.	267	5954	No
30	GOM_NL__2PRFIN20030421_014616_000000612015_00389_05954_6313.N1	21-APR-2003 01:46:16	Twilight	60.500	92	53Eps Cyg	2.5000	4500.0	121	5954	No
31	GOM_NL__2PRFIN20030421_015048_000000432015_00389_05954_6314.N1	21-APR-2003 01:50:48	Twilight	43.000	90	54Alp Peg	2.4870	11000.	86	5954	No
32	GOM_NL__2PRFIN20030421_015409_000000592015_00389_05954_6315.N1	21-APR-2003 01:54:09	Dark	59.000	61	8Eps Peg	2.1000	3900.0	118	5954	No
33	GOM_NL__2PRFIN20030421_015637_000000502015_00389_05954_6316.N1	21-APR-2003 01:56:37	Dark	49.500	162	34Alp Aqr	2.9440	5350.0	99	5954	No
34	GOM_NL__2PRFIN20030421_015931_000000522015_00389_05954_6317.N1	21-APR-2003 01:59:31	Dark	51.500	154	22Bet Aqr	2.8990	5700.0	103	5954	No
35	GOM_NL__2PRFIN20030421_020318_000000422015_00389_05954_6318.N1	21-APR-2003 02:03:18	Dark	42.000	18	24Alp PsA	1.1660	9700.0	84	5954	No
36	GOM_NL__2PRFIN20030421_020852_000000392015_00389_05954_6319.N1	21-APR-2003 02:08:52	Dark	39.000	31	Alp Gru	1.7340	15200.	78	5954	No
37	GOM_NL__2PRFIN20030421_021155_000000382015_00389_05954_6320.N1	21-APR-2003 02:11:55	Dark	37.500	148	Alp Tuc	2.8780	4100.0	75	5954	No
38	GOM_NL__2PRFIN20030421_021402_000000452015_00390_05955_6293.N1	21-APR-2003 02:14:02	Dark	44.500	45	Alp Pav	1.9400	26000.	89	5955	No
39	GOM_NL__2PRFIN20030421_021705_000000682015_00390_05955_6294.N1	21-APR-2003 02:17:05	Dark	68.000	103	38Zet Sgr	2.6000	9700.0	136	5955	No
40	GOM_NL__2PRFIN20030421_022026_000000812015_00390_05955_6295.N1	21-APR-2003 02:20:26	Dark	80.500	38	20Eps Sgr	1.8360	11000.	161	5955	No
41	GOM_NL__2PRFIN20030421_022236_000000552015_00390_05955_6296.N1	21-APR-2003 02:22:36	Straylight	54.500	40	The Sco	1.8590	7100.0	109	5955	No
42	GOM_NL__2PRFIN20030421_022539_000000492015_00390_05955_6297.N1	21-APR-2003 02:25:39	Straylight	49.000	4	Alp1Cen	-0.010000	5800.0	98	5955	No













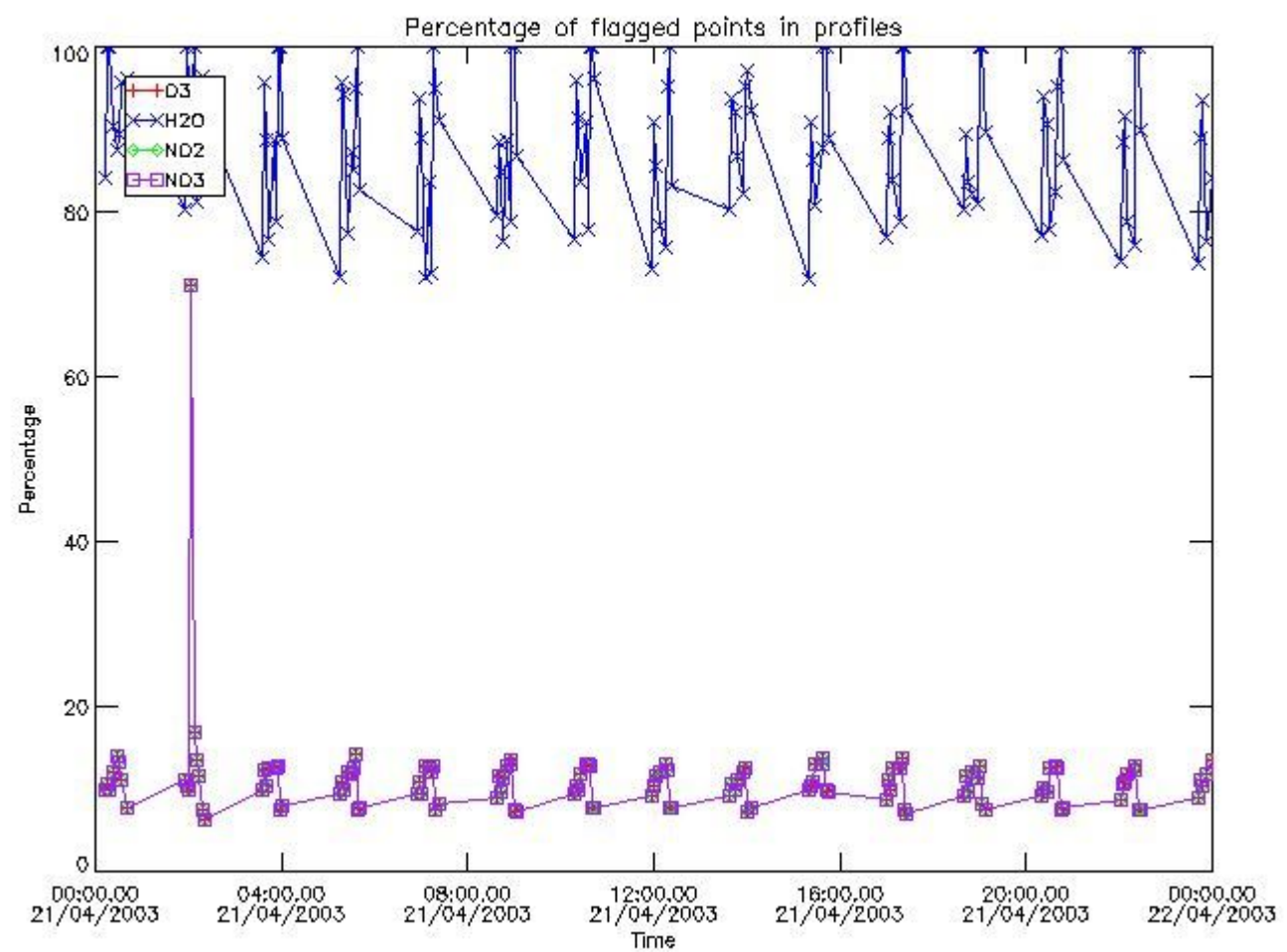


397	GOM_NL__2PRFIN20030421_213951_000000672015_00401_05966_6333.N1	21-APR-2003 21:39:51	Bright	67.000	69	33Gam Dra	2.2310	3800.0	134	5966	No
398	GOM_NL__2PRFIN20030421_214330_000000412015_00401_05966_6334.N1	21-APR-2003 21:43:30	Bright	40.500	89	5Alp Cep	2.4510	8000.0	81	5966	No
399	GOM_NL__2PRFIN20030421_214501_000000362015_00401_05966_6335.N1	21-APR-2003 21:45:01	Bright	35.500	74	11Bet Cas	2.2680	6600.0	71	5966	No
400	GOM_NL__2PRFIN20030421_214831_000001222015_00401_05966_6336.N1	21-APR-2003 21:48:31	Bright	122.00	5	3Alp Lyr	0.033000	11000.	244	5966	No
401	GOM_NL__2PRFIN20030421_215328_000000672015_00401_05966_6337.N1	21-APR-2003 21:53:28	Tw_i_and_stray	66.500	92	53Eps Cyg	2.5000	4500.0	133	5966	No
402	GOM_NL__2PRFIN20030421_215803_000000422015_00401_05966_6338.N1	21-APR-2003 21:58:03	Tw_i_and_stray	42.000	90	54Alp Peg	2.4870	11000.	84	5966	No
403	GOM_NL__2PRFIN20030421_220127_000000582015_00401_05966_6339.N1	21-APR-2003 22:01:27	Dark	58.000	61	8Eps Peg	2.1000	3900.0	116	5966	No
404	GOM_NL__2PRFIN20030421_220355_000000482015_00401_05966_6340.N1	21-APR-2003 22:03:55	Dark	48.000	162	34Alp Aqr	2.9440	5350.0	96	5966	No
405	GOM_NL__2PRFIN20030421_220652_000000482015_00401_05966_6341.N1	21-APR-2003 22:06:52	Dark	47.500	154	22Bet Aqr	2.8990	5700.0	95	5966	No
406	GOM_NL__2PRFIN20030421_221033_000000432015_00401_05966_6342.N1	21-APR-2003 22:10:33	Dark	43.000	18	24Alp PsA	1.1660	9700.0	86	5966	No
407	GOM_NL__2PRFIN20030421_221910_000000402015_00401_05966_6343.N1	21-APR-2003 22:19:10	Dark	40.000	148	Alp Tuc	2.8780	4100.0	80	5966	No
408	GOM_NL__2PRFIN20030421_222120_000000422015_00402_05967_6314.N1	21-APR-2003 22:21:20	Dark	41.500	45	Alp Pav	1.9400	26000.	83	5967	No
409	GOM_NL__2PRFIN20030421_222438_000000692015_00402_05967_6315.N1	21-APR-2003 22:24:38	Dark	69.000	103	38Zet Sgr	2.6000	9700.0	138	5967	No
410	GOM_NL__2PRFIN20030421_222756_000000752015_00402_05967_6316.N1	21-APR-2003 22:27:56	Dark	74.500	38	20Eps Sgr	1.8360	11000.	149	5967	No
411	GOM_NL__2PRFIN20030421_223000_000000632015_00402_05967_6317.N1	21-APR-2003 22:30:00	Straylight	63.000	40	The Sco	1.8590	7100.0	126	5967	No
412	GOM_NL__2PRFIN20030421_223254_000000452015_00402_05967_6318.N1	21-APR-2003 22:32:54	Straylight	44.500	4	Alp1Cen	-0.010000	5800.0	89	5967	No
413	GOM_NL__2PRFIN20030421_223746_000000442015_00402_05967_6319.N1	21-APR-2003 22:37:46	Straylight	43.500	81	Eta Cen	2.3560	28000.	87	5967	No
414	GOM_NL__2PRFIN20030421_223924_000000912015_00402_05967_6320.N1	21-APR-2003 22:39:24	Tw_i_and_stray	90.500	16	21Alp Sco	1.0200	3000.0	181	5967	No
415	GOM_NL__2PRFIN20030421_224213_000000742015_00402_05967_6321.N1	21-APR-2003 22:42:13	Tw_i_and_stray	73.500	80	7Del Sco	2.3160	30000.	147	5967	No
416	GOM_NL__2PRFIN20030421_224456_000000402015_00402_05967_6322.N1	21-APR-2003 22:44:56	Bright	39.500	106	9Bet Crv	2.6480	5600.0	79	5967	No
417	GOM_NL__2PRFIN20030421_224801_000000412015_00402_05967_6323.N1	21-APR-2003 22:48:01	Bright	41.000	15	67Alp Vir	0.97600	28000.	82	5967	No
418	GOM_NL__2PRFIN20030421_225103_000000372015_00402_05967_6324.N1	21-APR-2003 22:51:03	Bright	36.500	121	29Gam Vir	2.7400	7200.0	73	5967	No
419	GOM_NL__2PRFIN20030421_225437_000000382015_00402_05967_6325.N1	21-APR-2003 22:54:37	Bright	37.500	138	47Eps Vir	2.8280	4700.0	75	5967	No
420	GOM_NL__2PRFIN20030421_225731_000000442015_00402_05967_6326.N1	21-APR-2003 22:57:31	Bright	43.500	111	8Eta Boo	2.6800	6000.0	87	5967	No
421	GOM_NL__2PRFIN20030421_230234_000000372015_00402_05967_6327.N1	21-APR-2003 23:02:34	Bright	37.000	152	12Alp2CVn	2.8900	11000.	74	5967	No
422	GOM_NL__2PRFIN20030421_230431_000000342015_00402_05967_6328.N1	21-APR-2003 23:04:31	Bright	33.500	174	52Psi UMa	3.0040	4400.0	67	5967	No
423	GOM_NL__2PRFIN20030421_230642_000000362015_00402_05967_6329.N1	21-APR-2003 23:06:42	Bright	35.500	87	64Gam UMa	2.4330	11000.	71	5967	No
424	GOM_NL__2PRFIN20030421_230912_000000382015_00402_05967_6330.N1	21-APR-2003 23:09:12	Bright	38.000	36	50Alp UMa	1.8000	6300.0	76	5967	No
425	GOM_NL__2PRFIN20030421_231353_000000382015_00402_05967_6331.N1	21-APR-2003 23:13:53	Bright	38.000	60	7Bet UMi	2.0810	3950.0	76	5967	No
426	GOM_NL__2PRFIN20030421_231706_000000352015_00402_05967_6332.N1	21-APR-2003 23:17:06	Bright	35.000	49	1Alp UMi	1.9900	6300.0	70	5967	No
427	GOM_NL__2PRFIN20030421_232026_000000662015_00402_05967_6333.N1	21-APR-2003 23:20:26	Bright	65.500	69	33Gam Dra	2.2310	3800.0	131	5967	No
428	GOM_NL__2PRFIN20030421_232405_000000412015_00402_05967_6334.N1	21-APR-2003 23:24:05	Bright	40.500	89	5Alp Cep	2.4510	8000.0	81	5967	No
429	GOM_NL__2PRFIN20030421_232537_000000362015_00402_05967_6335.N1	21-APR-2003 23:25:37	Bright	36.000	74	11Bet Cas	2.2680	6600.0	72	5967	No
430	GOM_NL__2PRFIN20030421_232905_000001352015_00402_05967_6336.N1	21-APR-2003 23:29:05	Bright	135.00	5	3Alp Lyr	0.033000	11000.	270	5967	No
431	GOM_NL__2PRFIN20030421_233404_000000642015_00402_05967_6337.N1	21-APR-2003 23:34:04	Tw_i_and_stray	64.000	92	53Eps Cyg	2.5000	4500.0	128	5967	No
432	GOM_NL__2PRFIN20030421_233839_000000422015_00402_05967_6338.N1	21-APR-2003 23:38:39	Tw_i_and_stray	41.500	90	54Alp Peg	2.4870	11000.	83	5967	No
433	GOM_NL__2PRFIN20030421_234203_000000582015_00402_05967_6339.N1	21-APR-2003 23:42:03	Dark	57.500	61	8Eps Peg	2.1000	3900.0	115	5967	No
434	GOM_NL__2PRFIN20030421_234431_000000462015_00402_05967_6340.N1	21-APR-2003 23:44:31	Dark	46.000	162	34Alp Aqr	2.9440	5350.0	92	5967	No
435	GOM_NL__2PRFIN20030421_234728_000000542015_00402_05967_6341.N1	21-APR-2003 23:47:28	Dark	54.000	154	22Bet Aqr	2.8990	5700.0	108	5967	No
436	GOM_NL__2PRFIN20030421_235109_000000432015_00402_05967_6342.N1	21-APR-2003 23:51:09	Dark	43.000	18	24Alp PsA	1.1660	9700.0	86	5967	No
437	GOM_NL__2PRFIN20030421_235946_000000382015_00402_05967_6343.N1	21-APR-2003 23:59:46	Dark	38.000	148	Alp Tuc	2.8780	4100.0	76	5967	No

### 3. Quality information per product

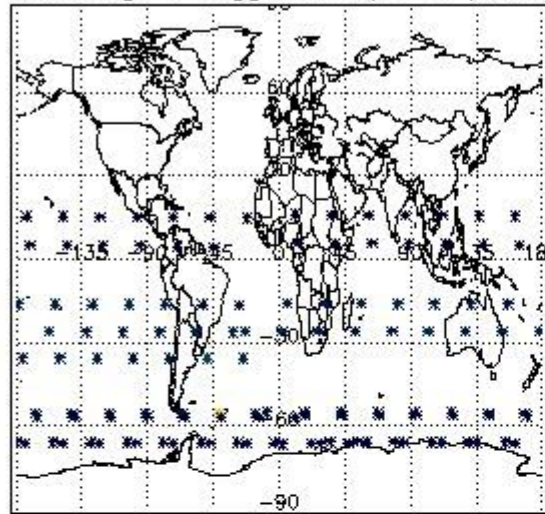
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

#### 3.1 Plot quality information per product (time dependant)

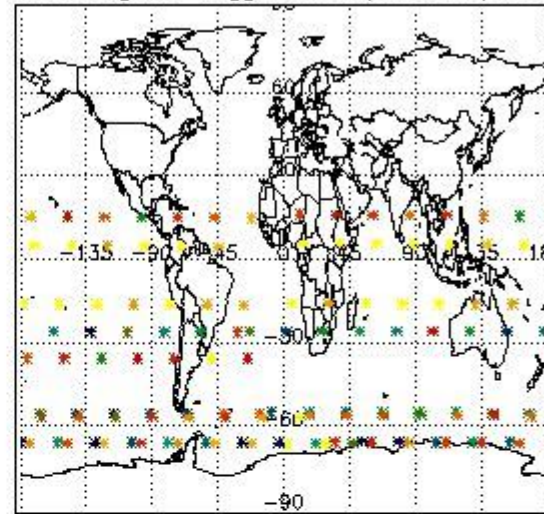


*3.2 Plot quality information per product (world map)*

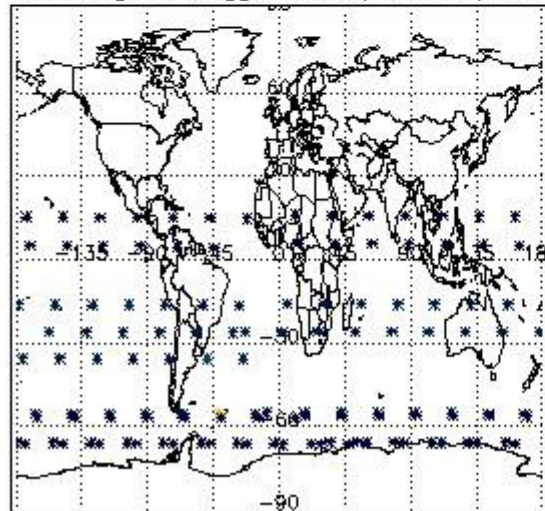
Percentage of flagged data per O3 profile



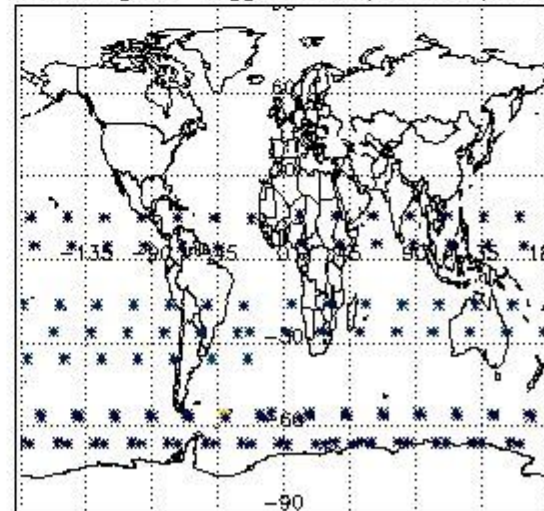
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

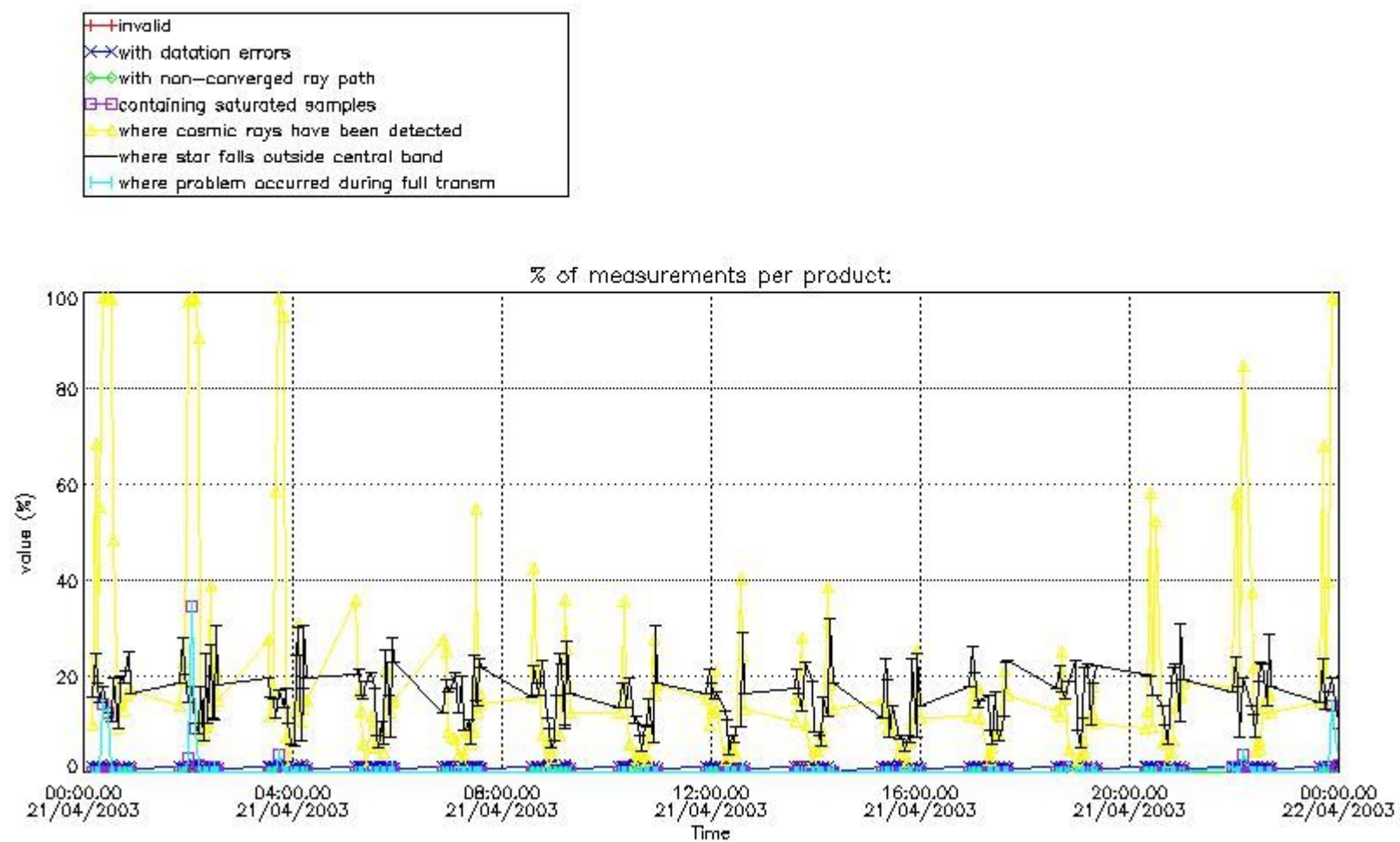


#### 4. Level 1 quality information per product

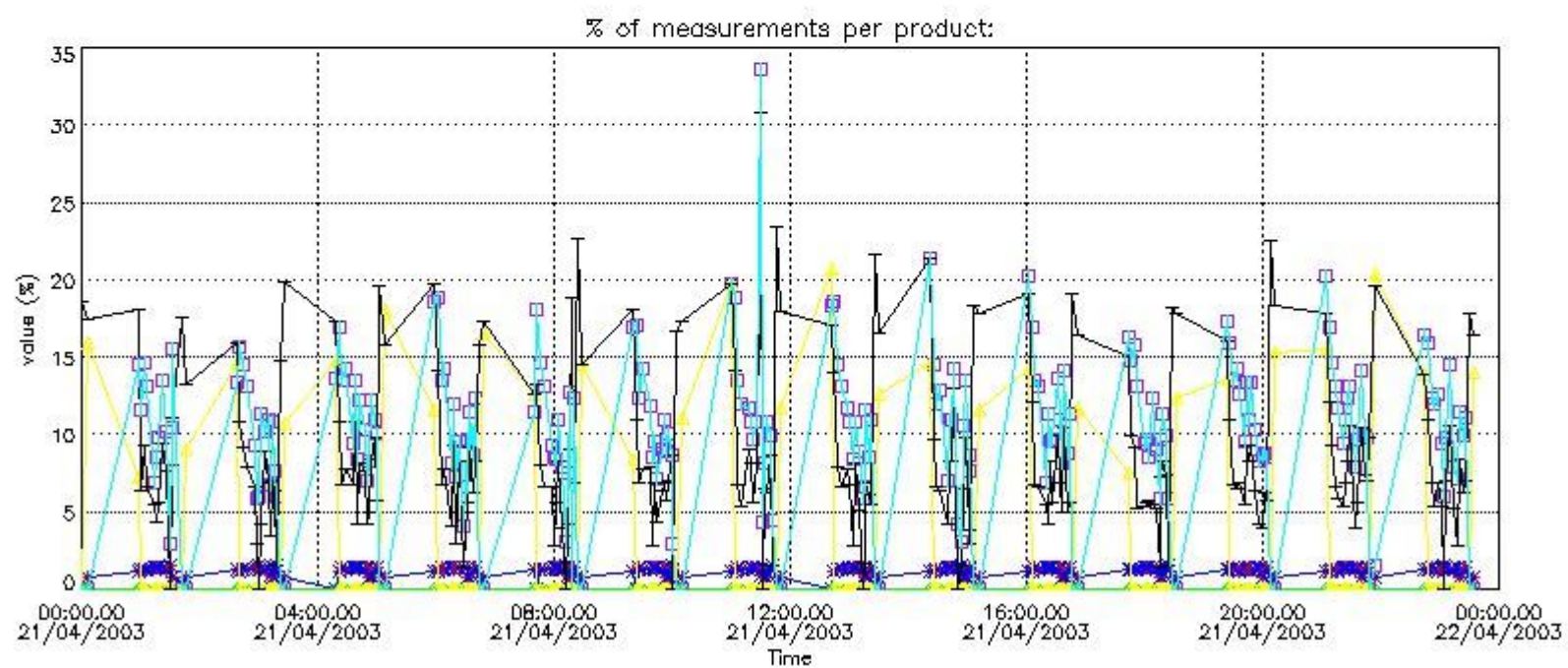
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

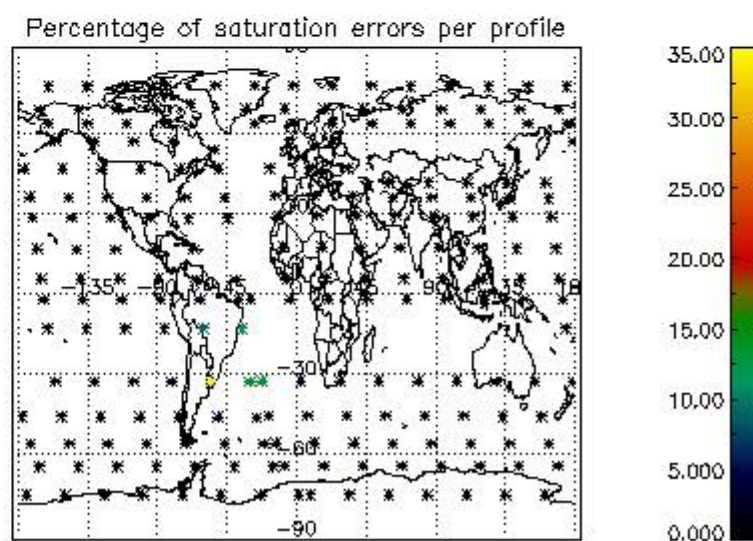
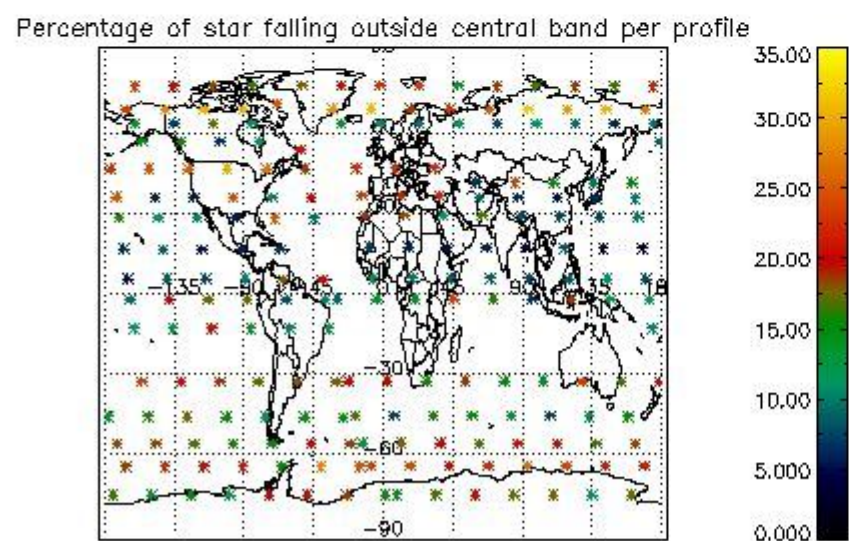
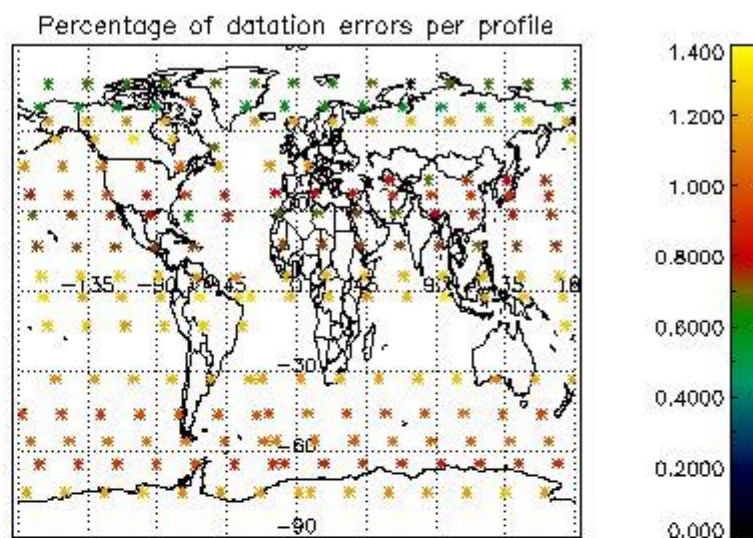
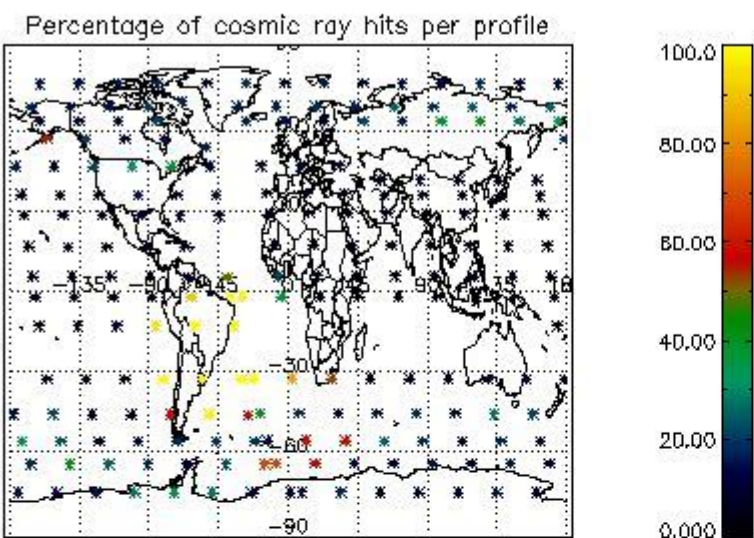


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

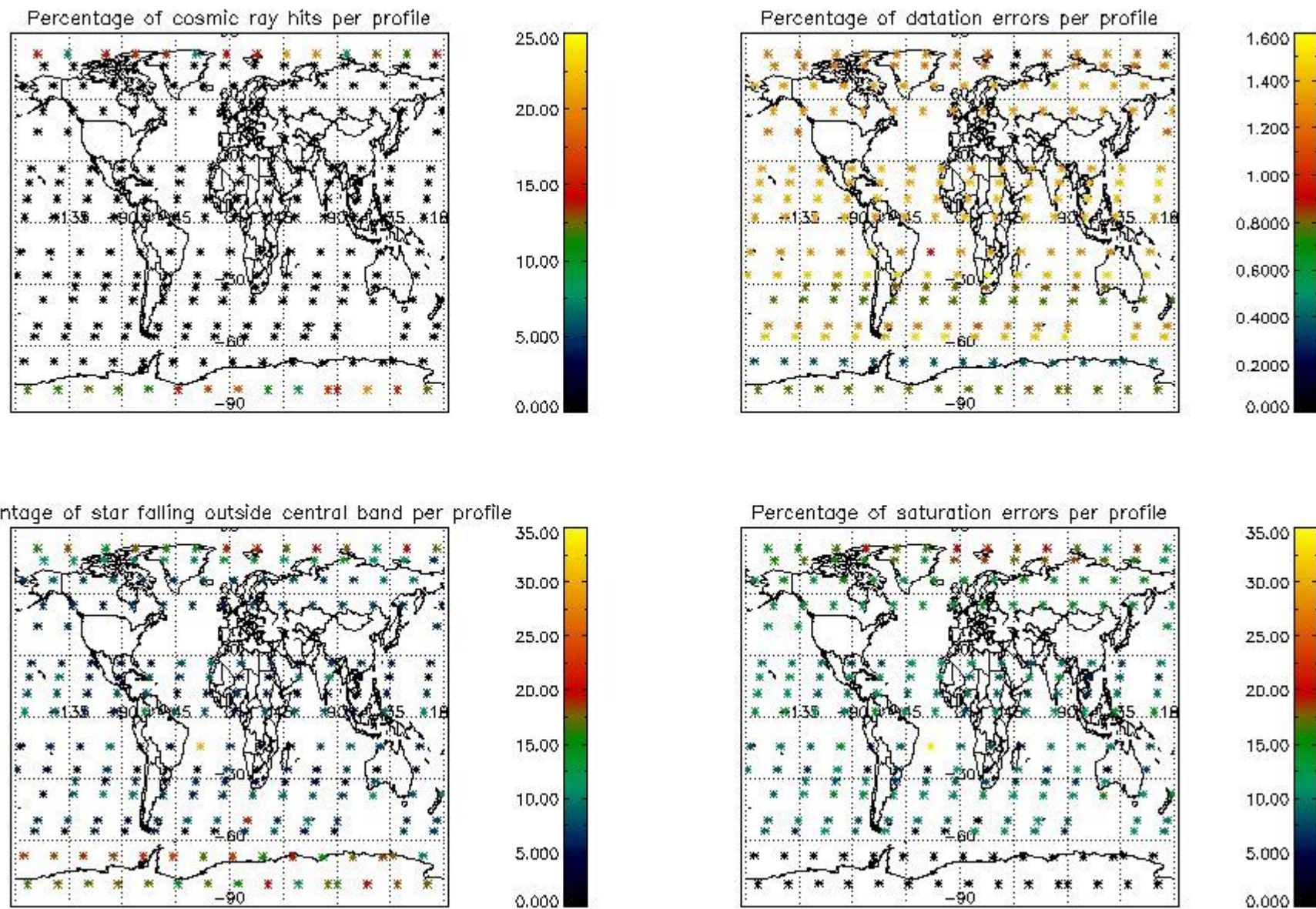


#### 4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



## 5. Trace gas profiles

### 5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/o3\_std of the level 2 products. The table below shows the statistics for given STD ranges.

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

- Products without fatal errors: GOM\_NL\_\_2P/MPH/PRODUCT\_ERR=0
- Valid point profile: GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/pcd(0)=0

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

- Products in dark limb illumination condition: GOM\_NL\_\_2P/NL\_SUMMARY\_QUALITY/obs\_ill\_cond=0
- Products without fatal errors: GOM\_NL\_\_2P/MPH/PRODUCT\_ERR=0
- Valid point profile: GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/pcd(0)=0

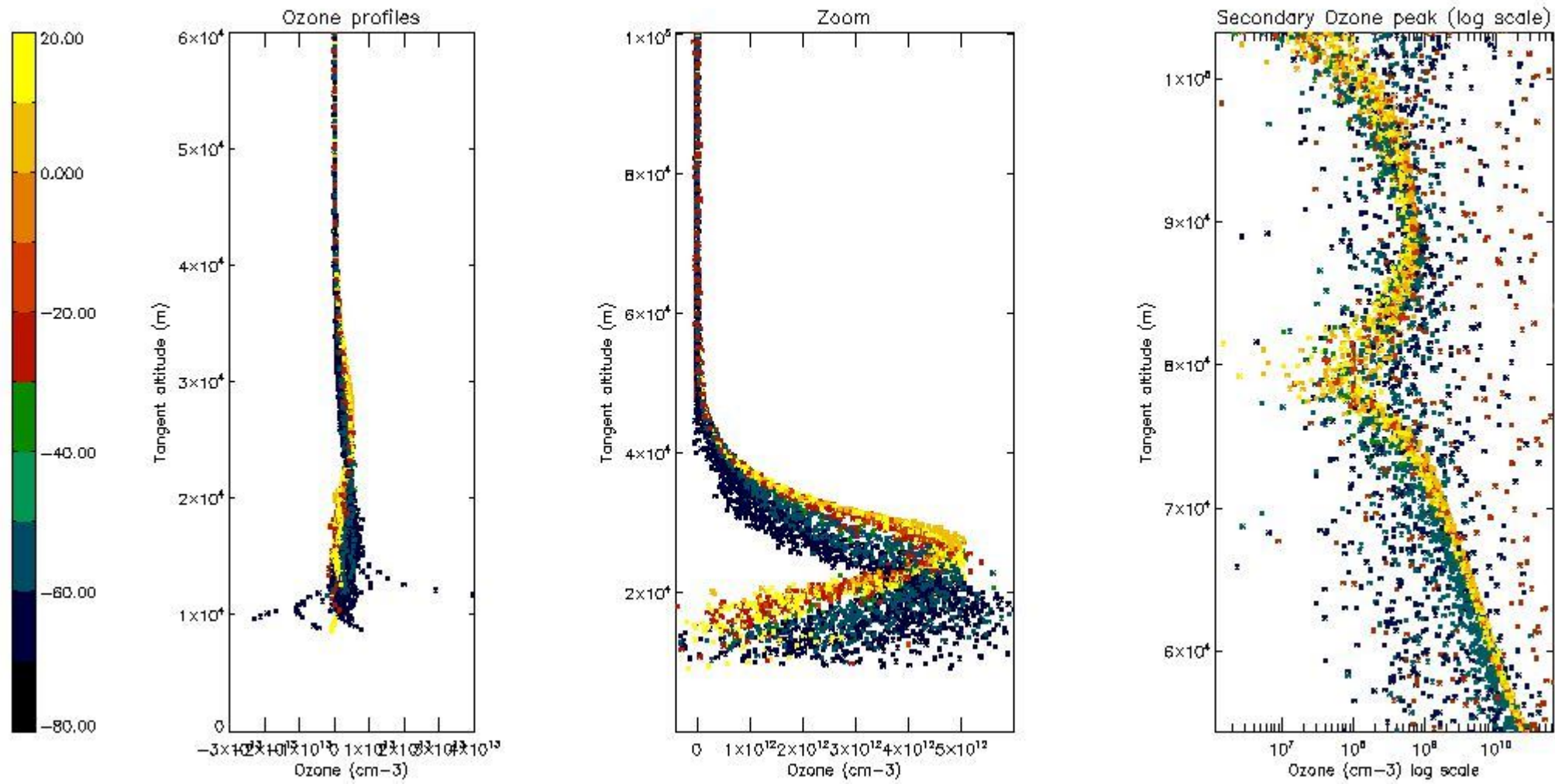
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	28
STD < 20	15

STD < 10	12
STD < 5	8

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

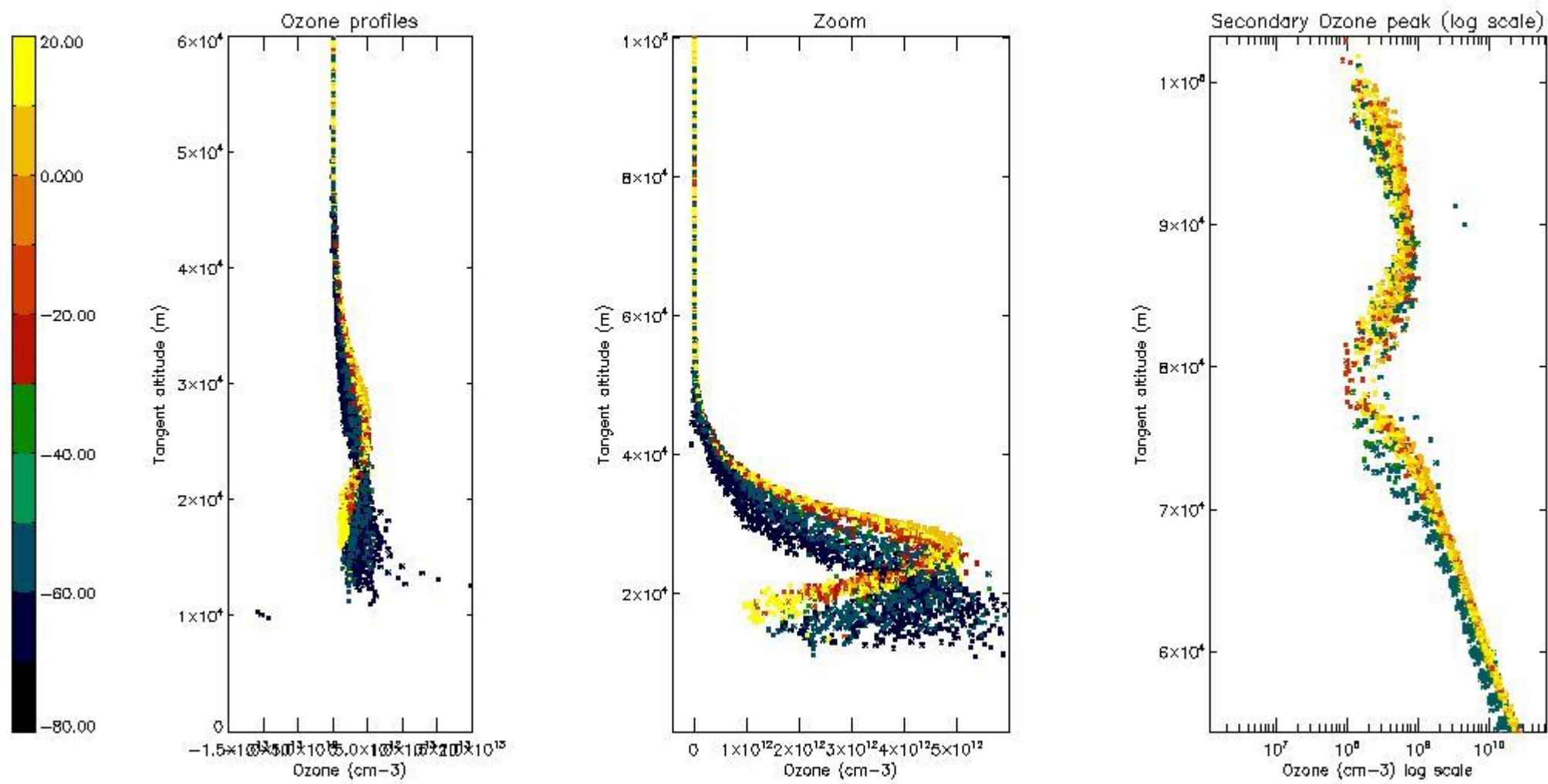
The colorbar represents the latitude.



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

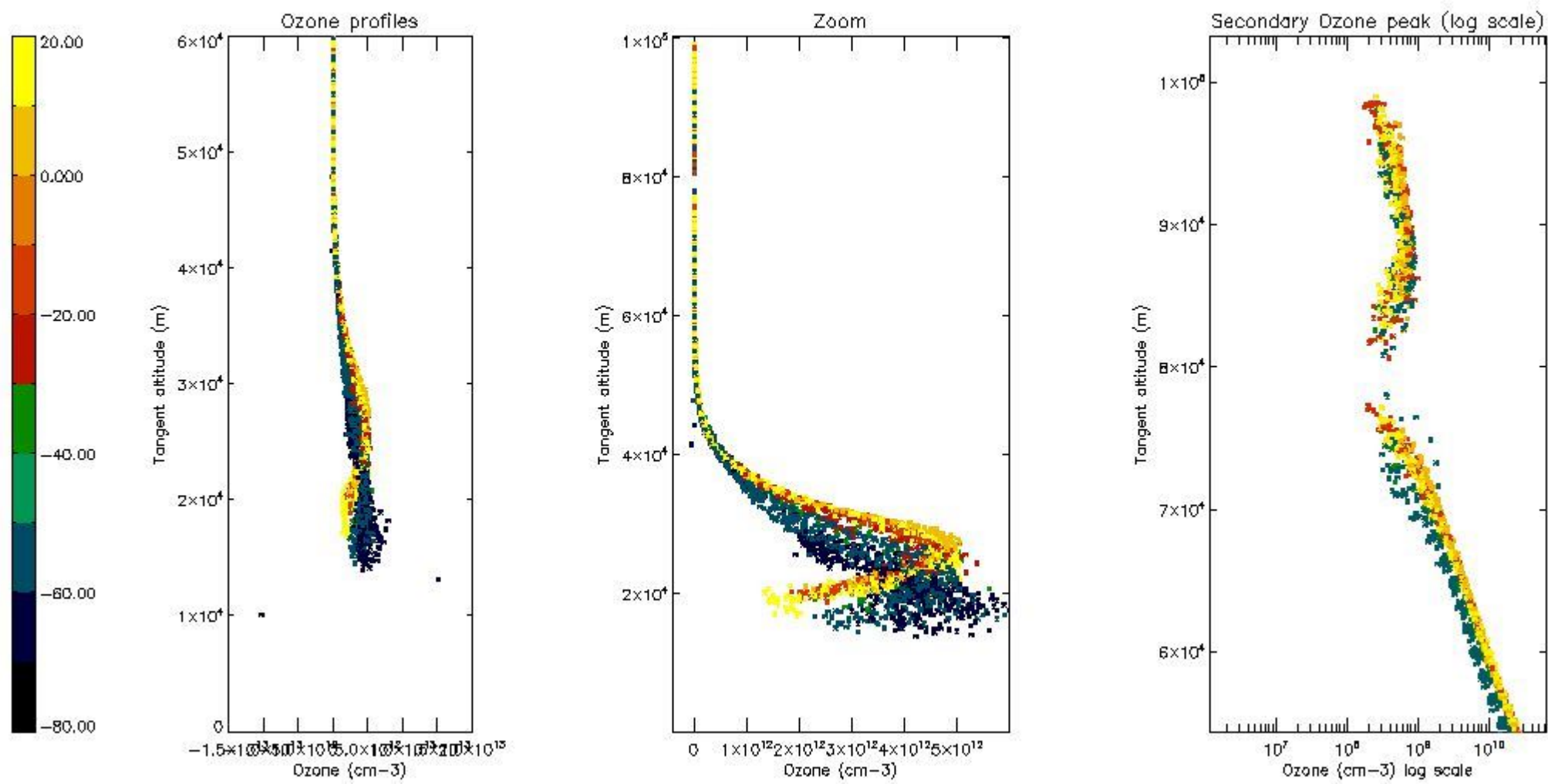
The colorbar represents the latitude.





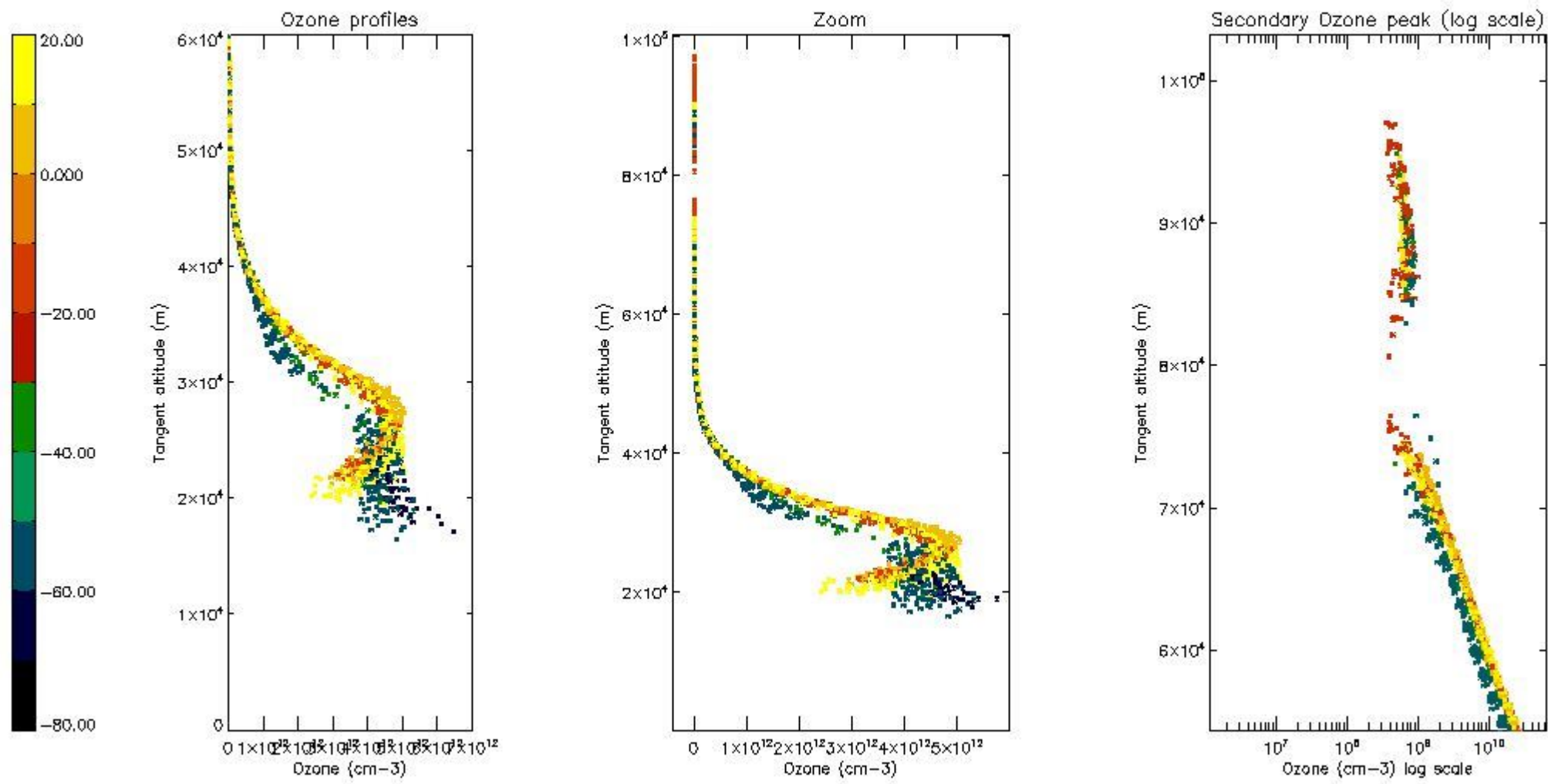
*5.4 Plot ozone profiles where STD < 10% (dark without errors)*

The colorbar represents the latitude.



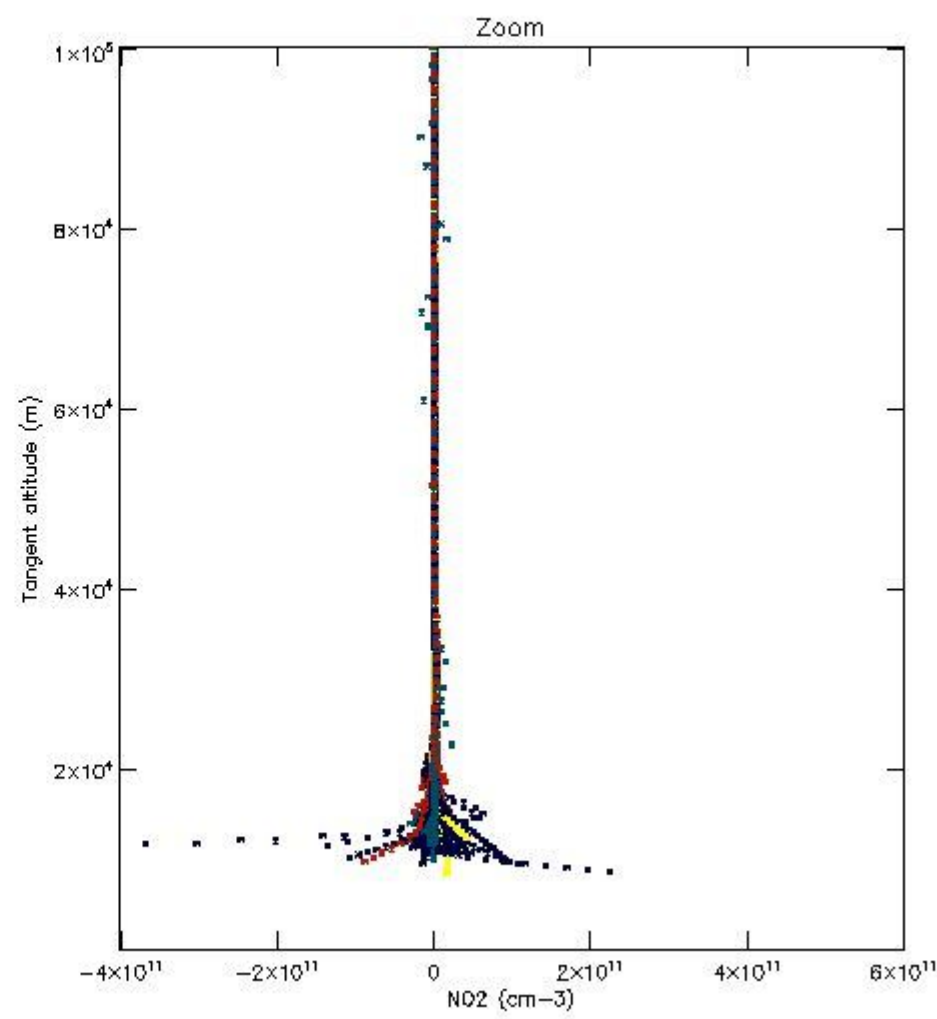
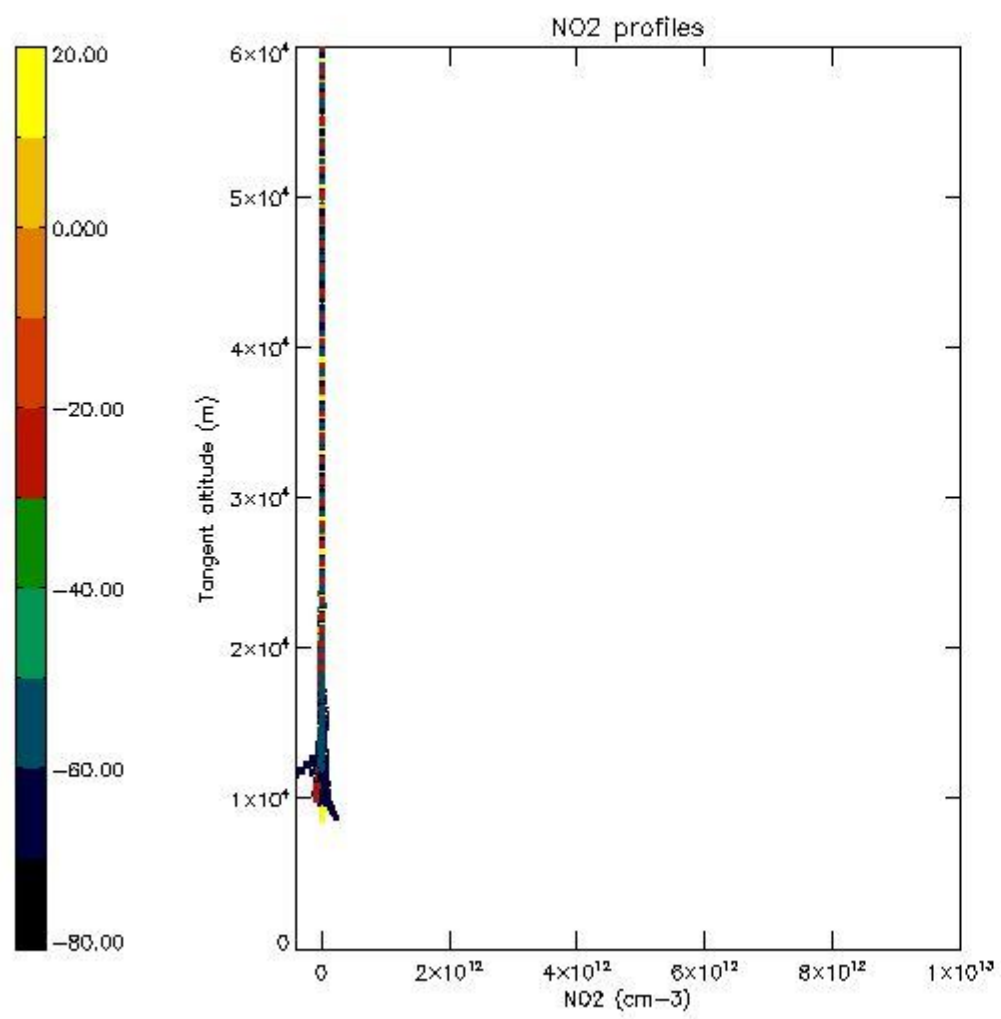
*5.5 Plot ozone profiles where STD < 5% (dark without errors)*

The colorbar represents the latitude.



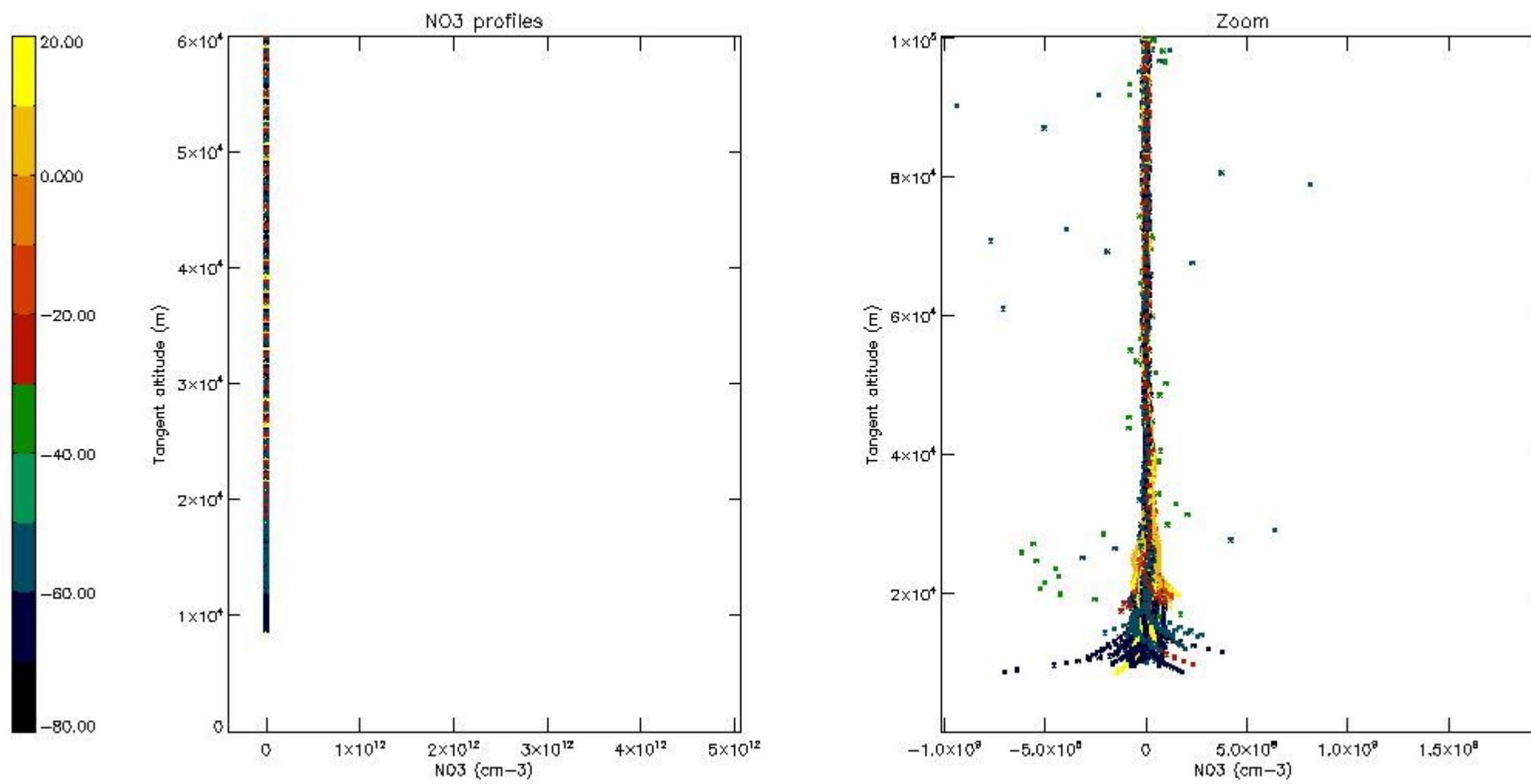
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



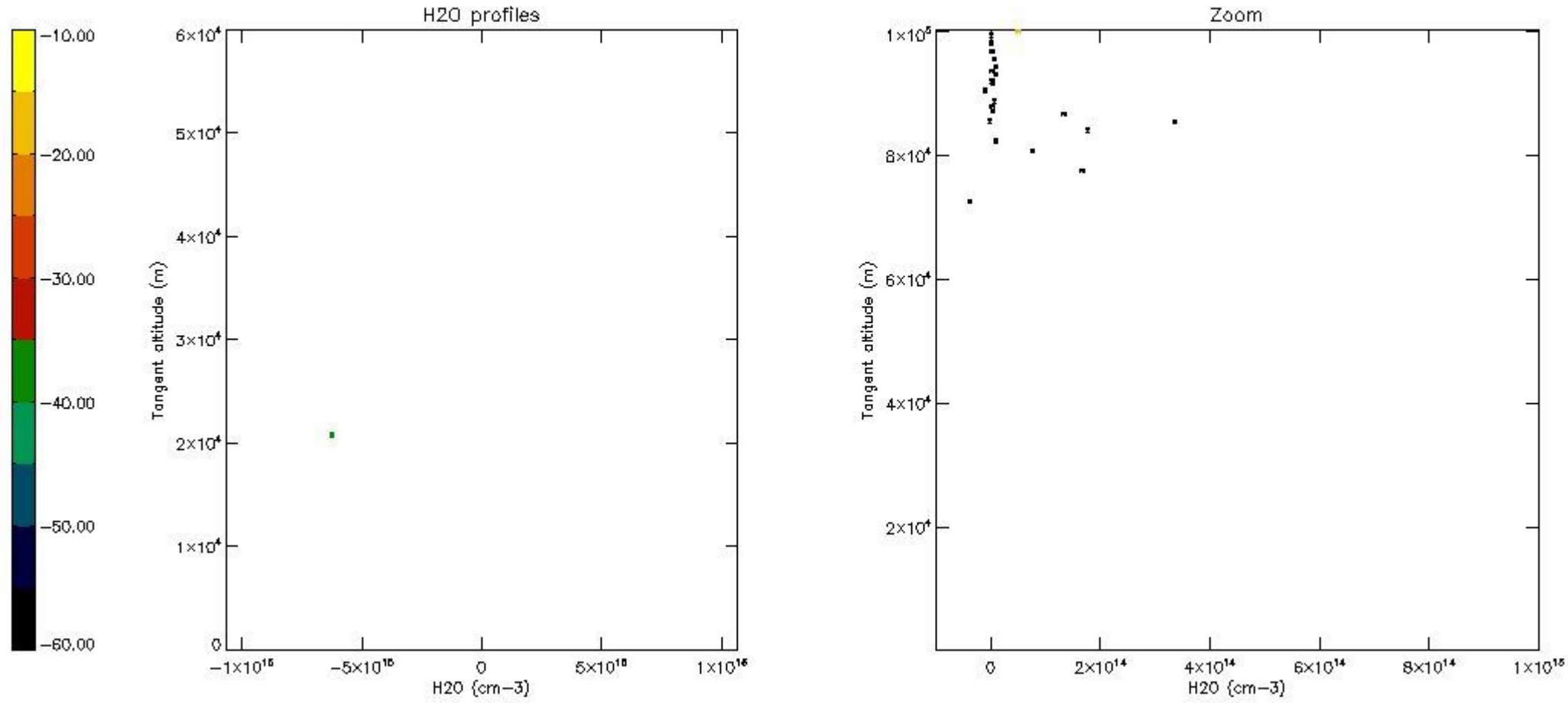
*5.7 Plot NO3 profiles for all STD (dark without errors)*

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_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	21-APR-2003 00:00:54
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	21-APR-2003 00:00:54
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	21-APR-2003 00:00:54

# 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](#)

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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](#)









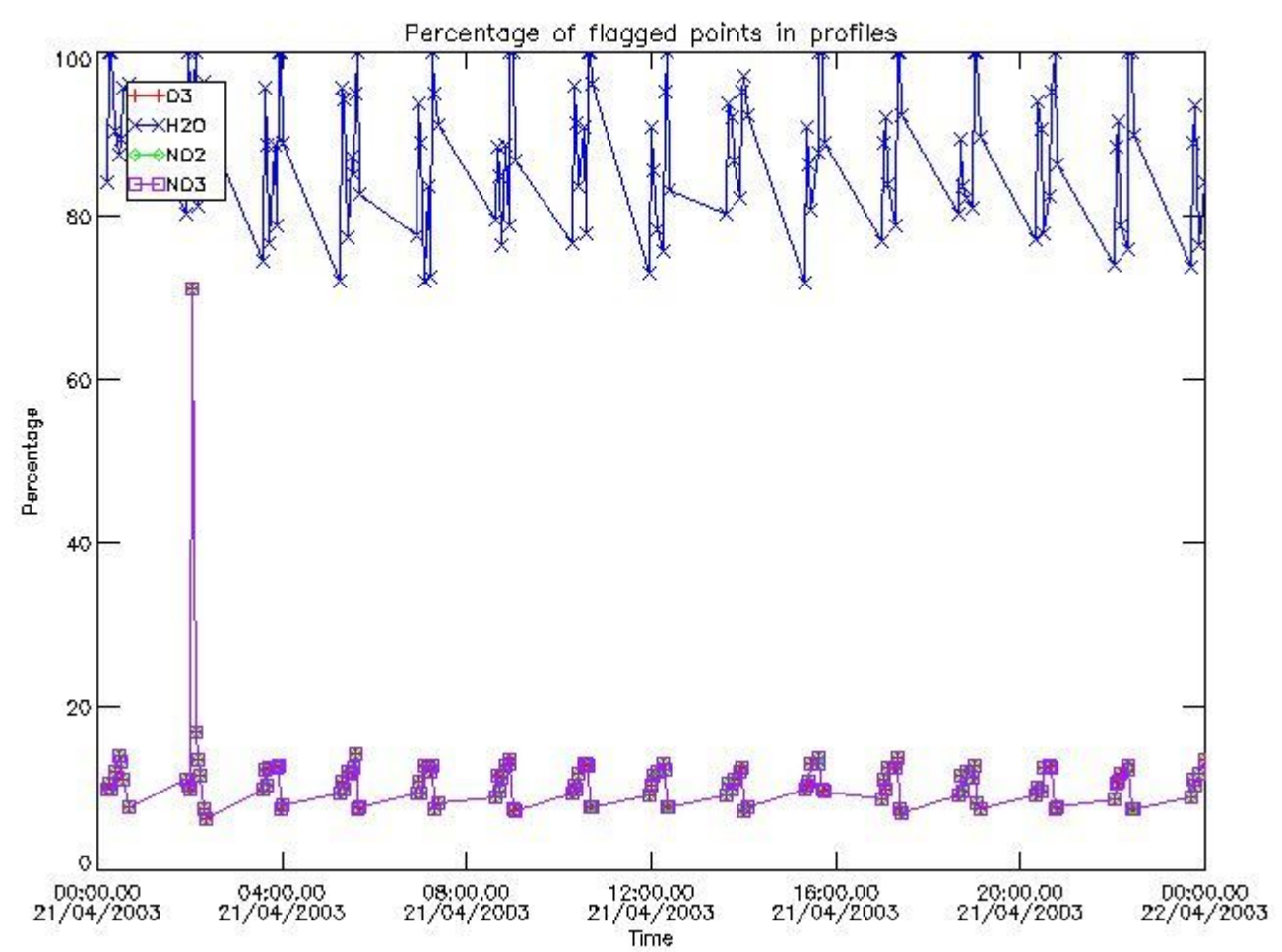








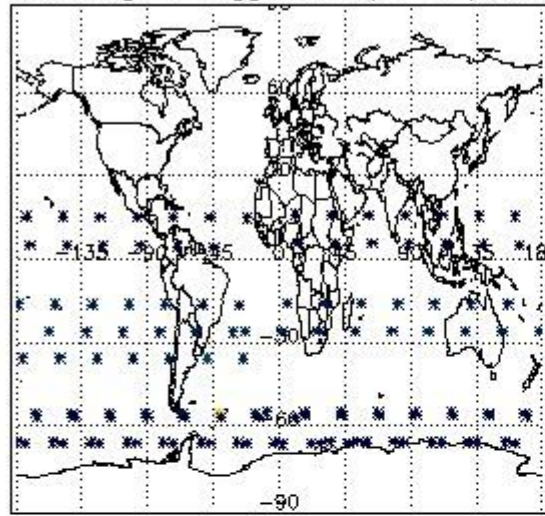




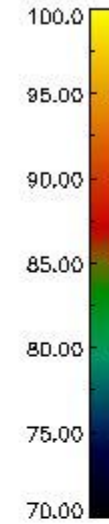
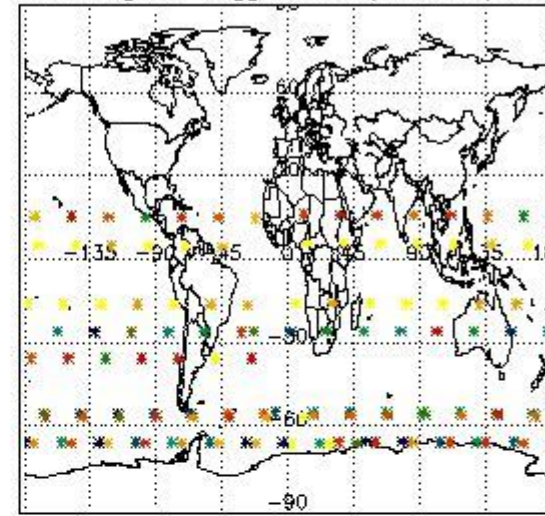
3.2 Plot quality information per product (world map)



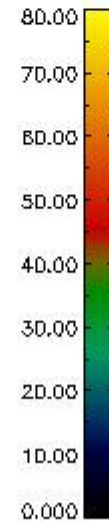
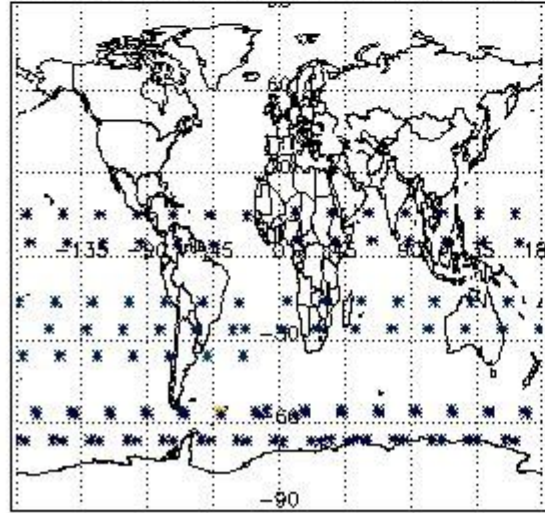
Percentage of flagged data per O3 profile



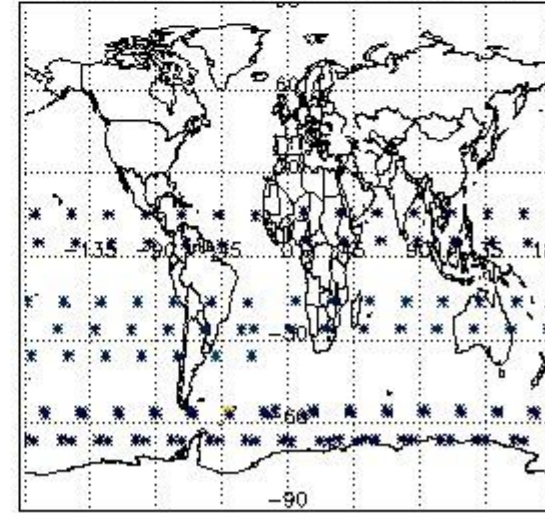
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

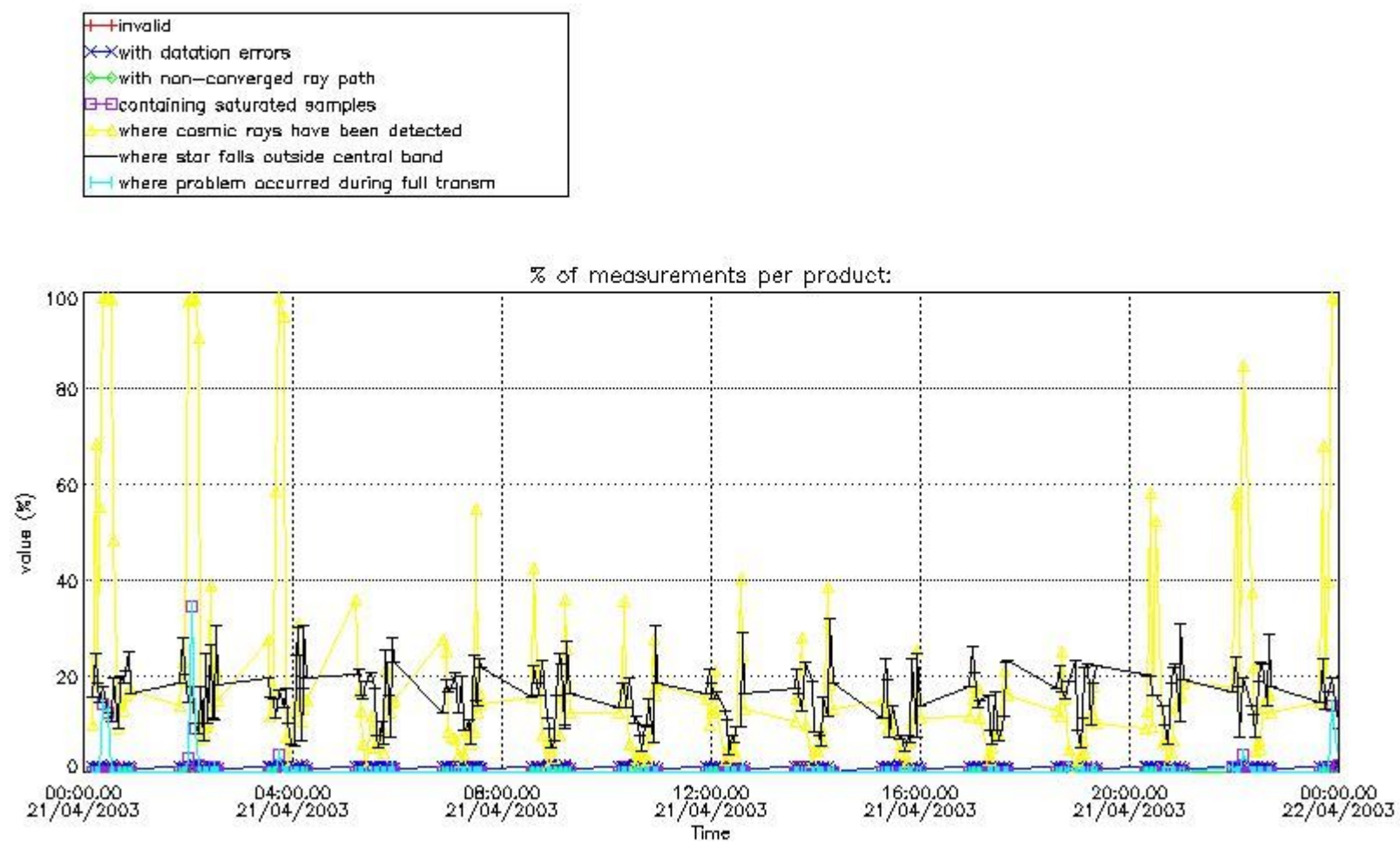


#### 4. Level 1 quality information per product

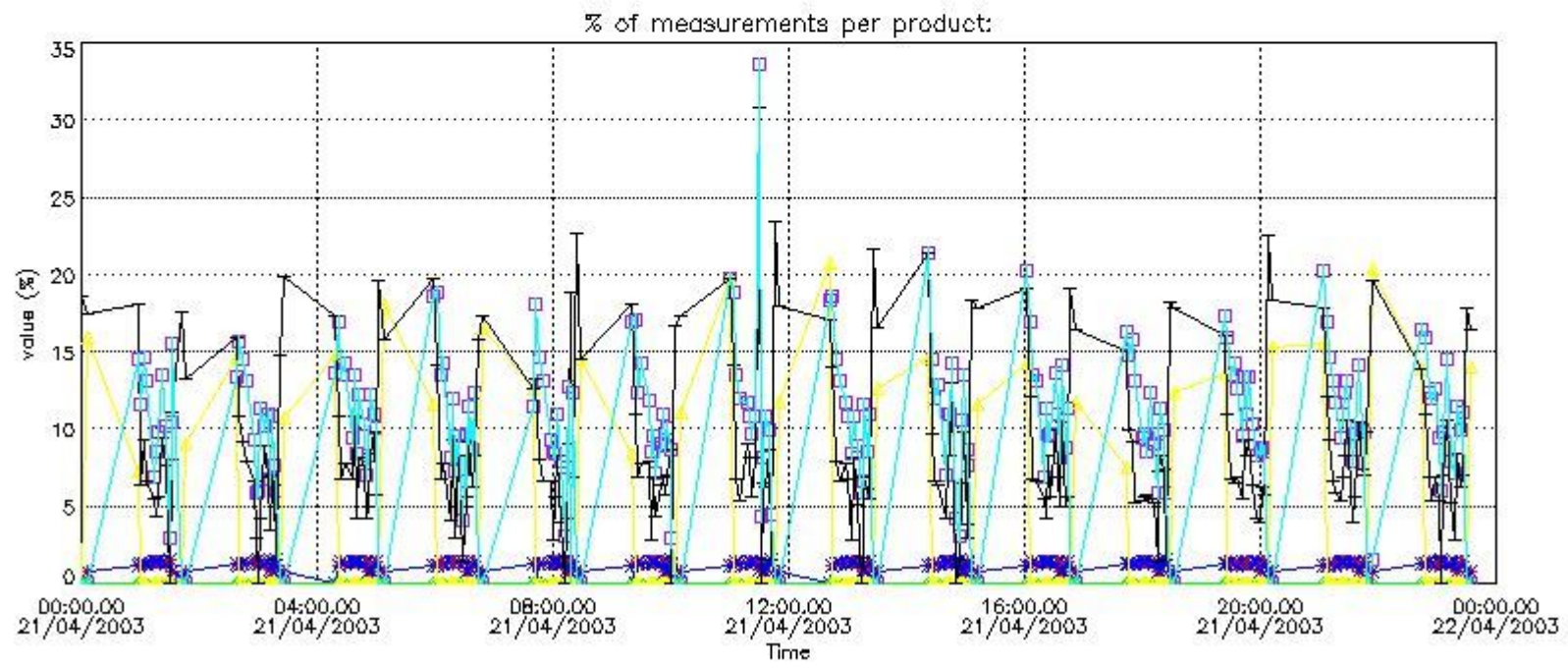
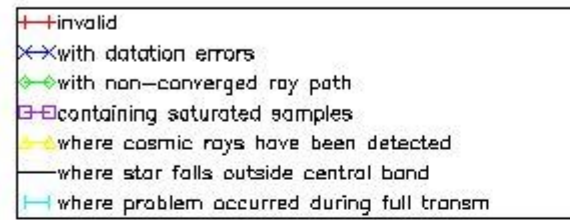
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

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

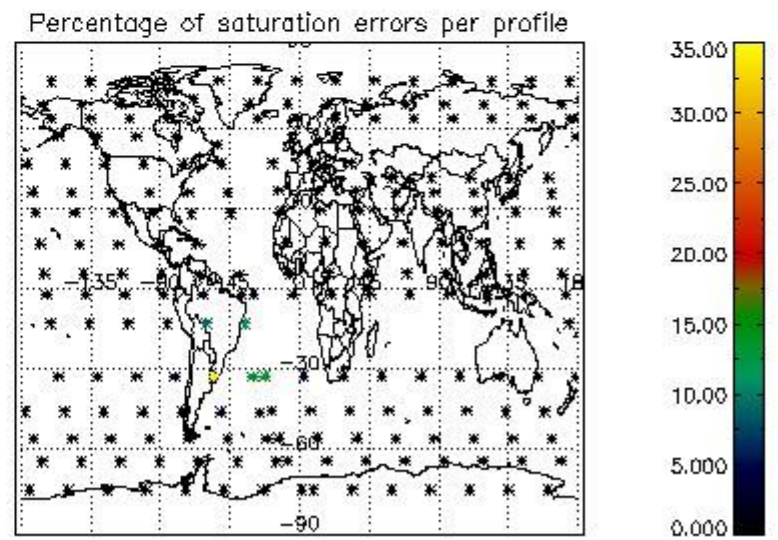
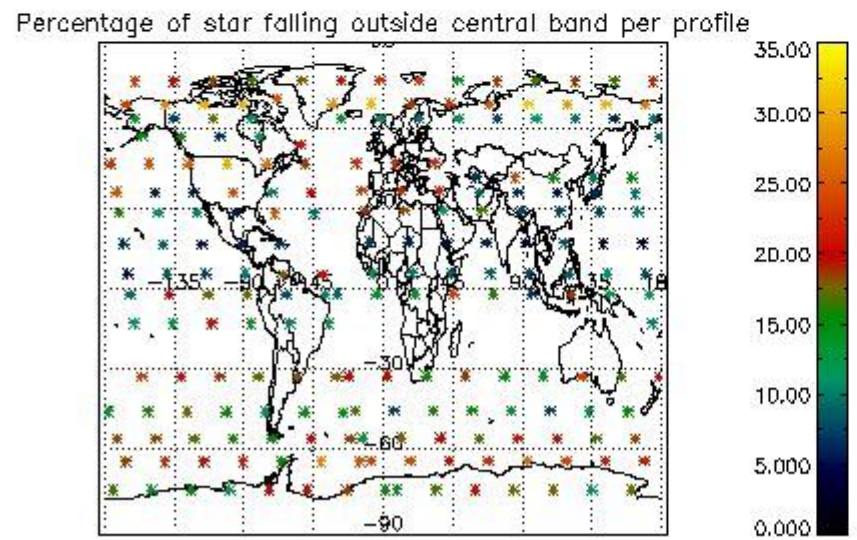
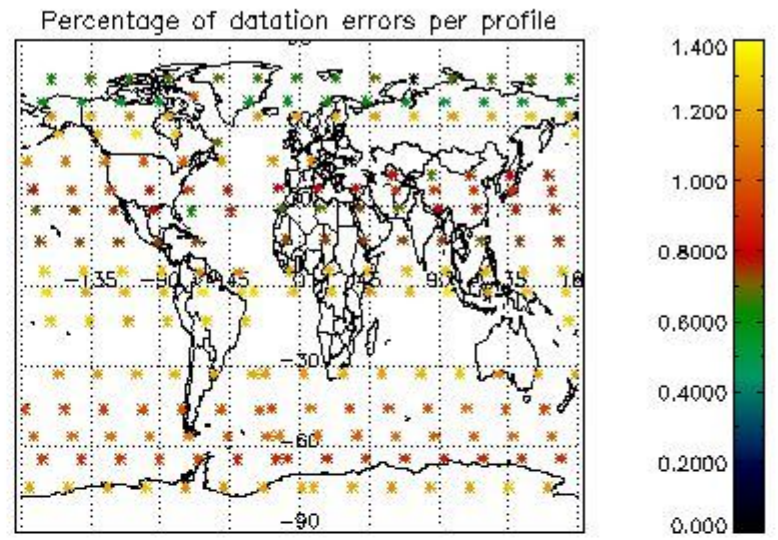
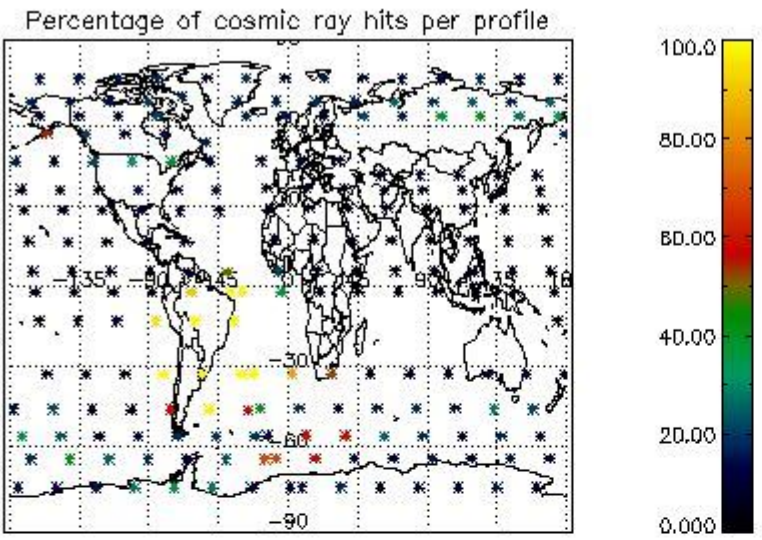


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

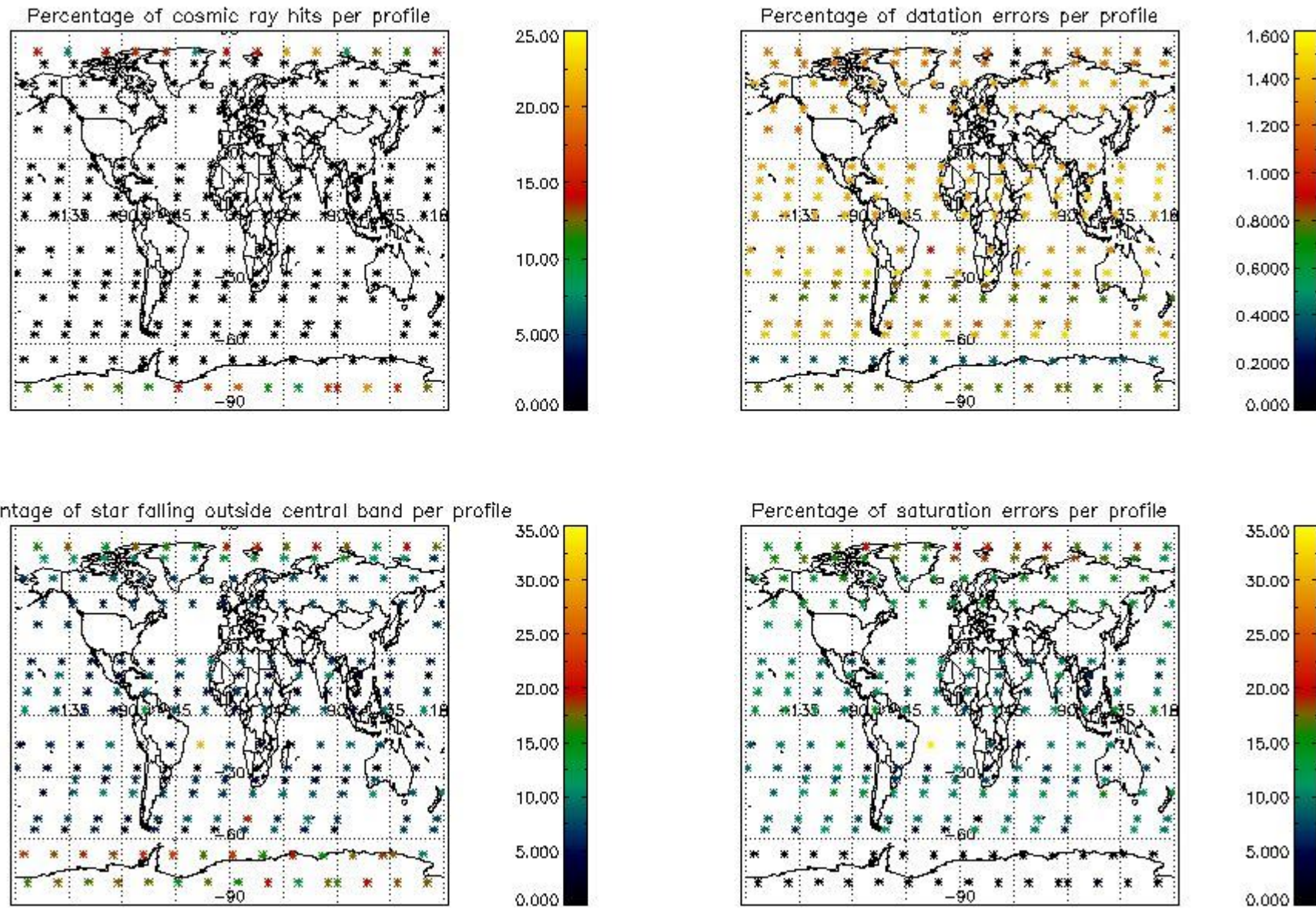


#### 4.2 Plot quality information per product coming from level 1b processing (world map)

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



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



## 5. Trace gas profiles

### 5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/o3\_std of the level 2 products. The table below shows the statistics for given STD ranges.

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

- Products without fatal errors: GOM\_NL\_\_2P/MPH/PRODUCT\_ERR=0
- Valid point profile: GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/pcd(0)=0

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

- Products in dark limb illumination condition: GOM\_NL\_\_2P/NL\_SUMMARY\_QUALITY/obs\_ill\_cond=0
- Products without fatal errors: GOM\_NL\_\_2P/MPH/PRODUCT\_ERR=0
- Valid point profile: GOM\_NL\_\_2P/NL\_LOCAL\_SPECIES\_DENSITY/pcd(0)=0

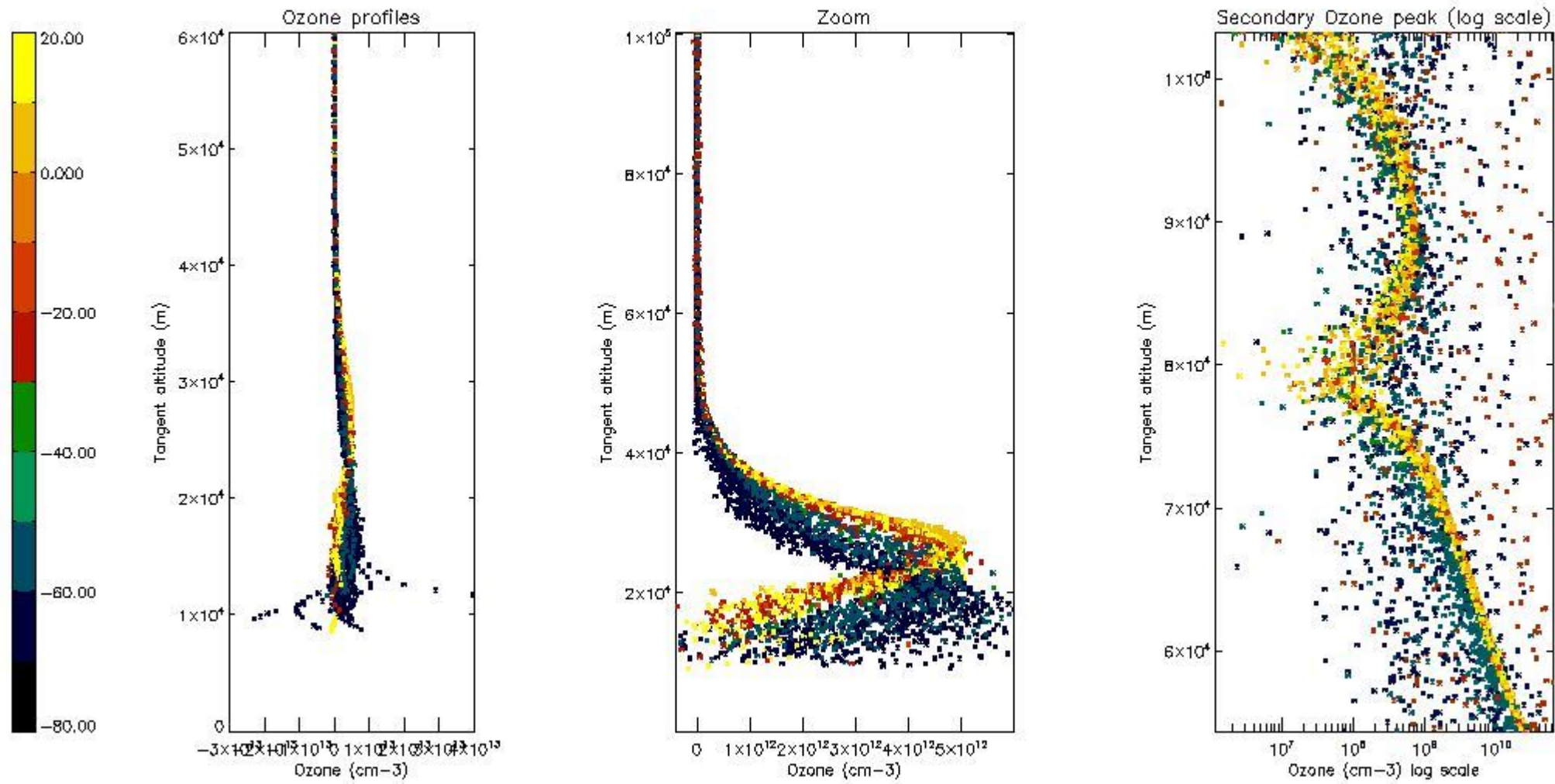
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	28
STD < 20	15

STD < 10	12
STD < 5	8

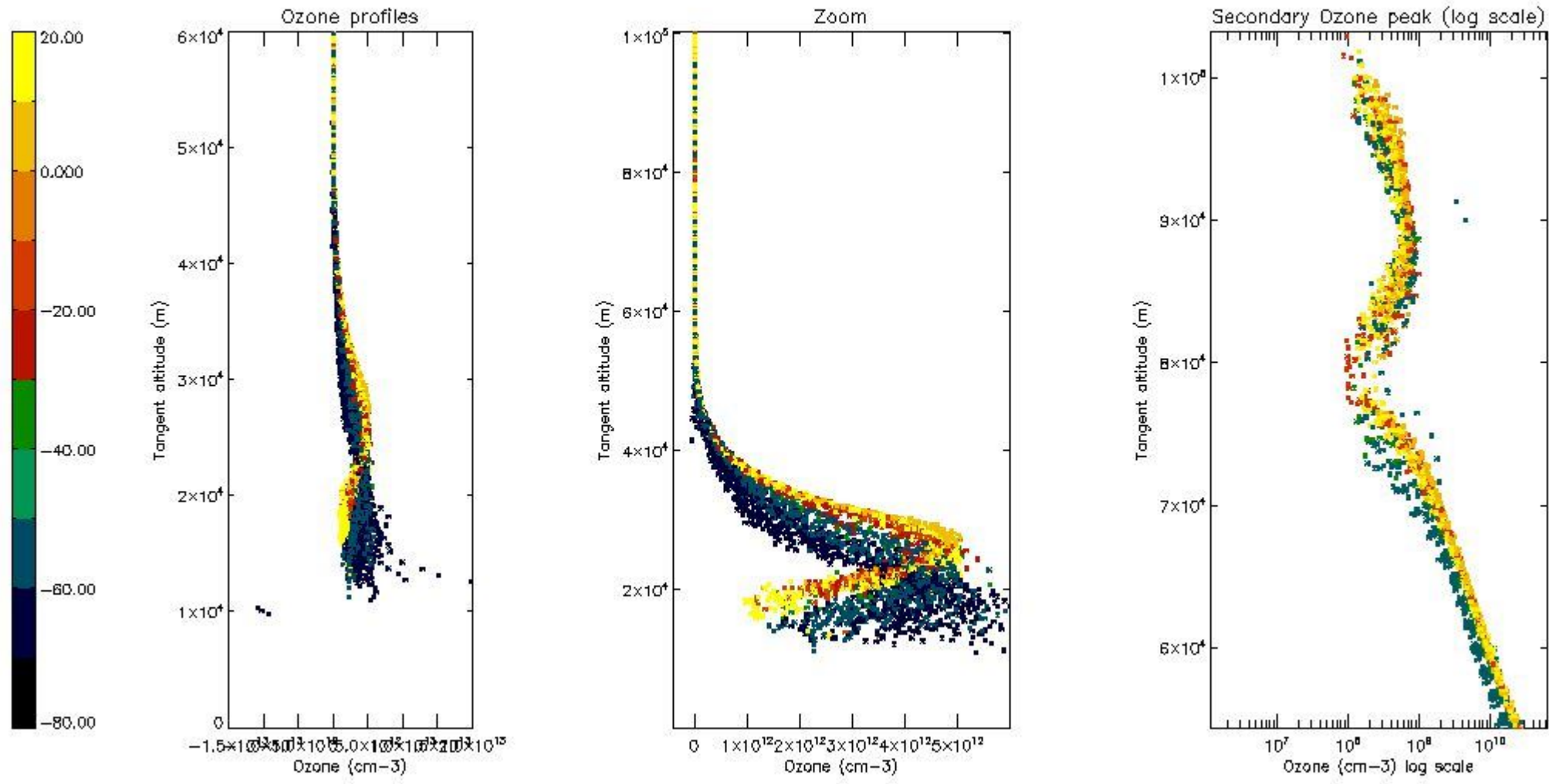
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



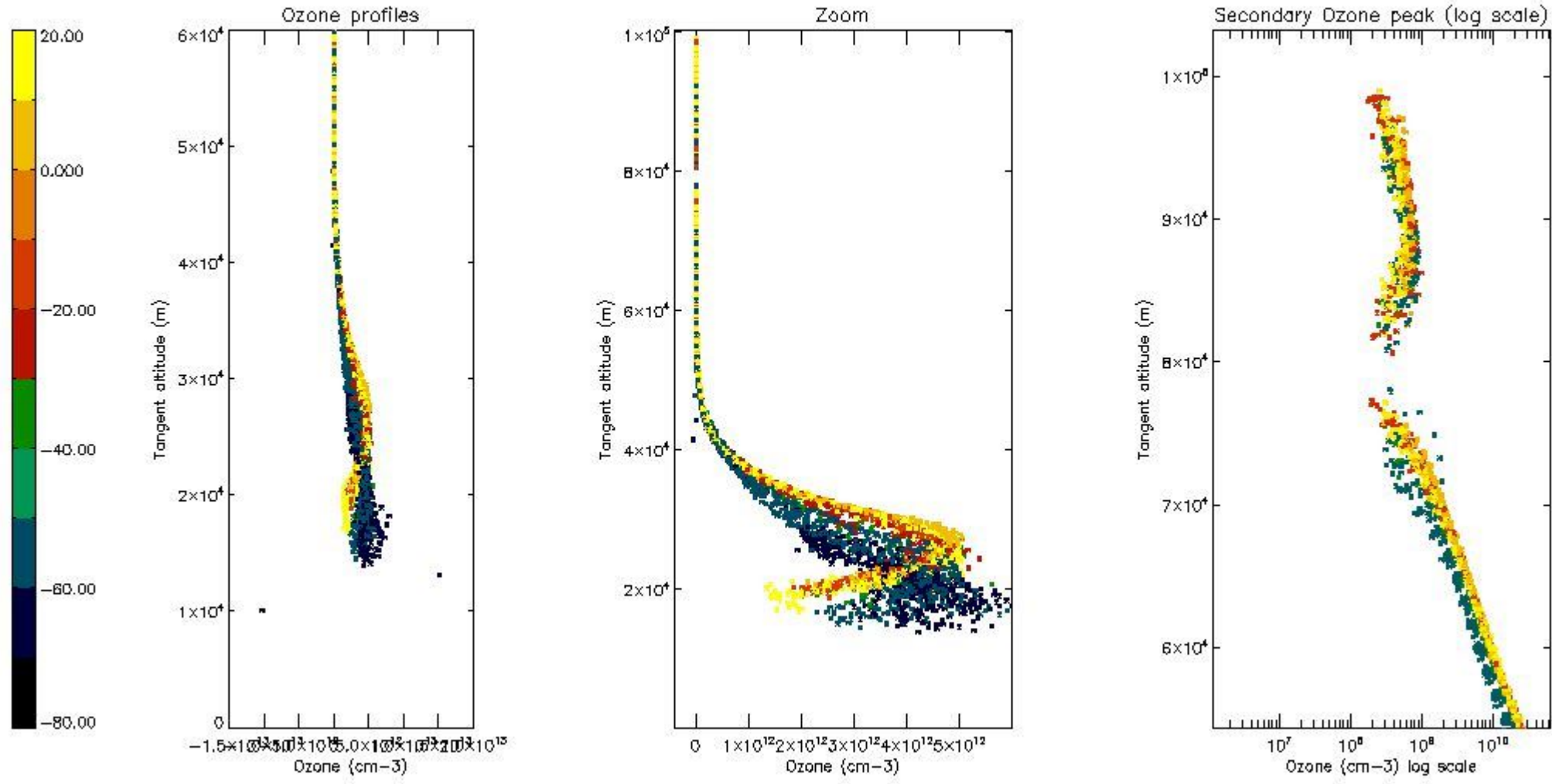
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



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

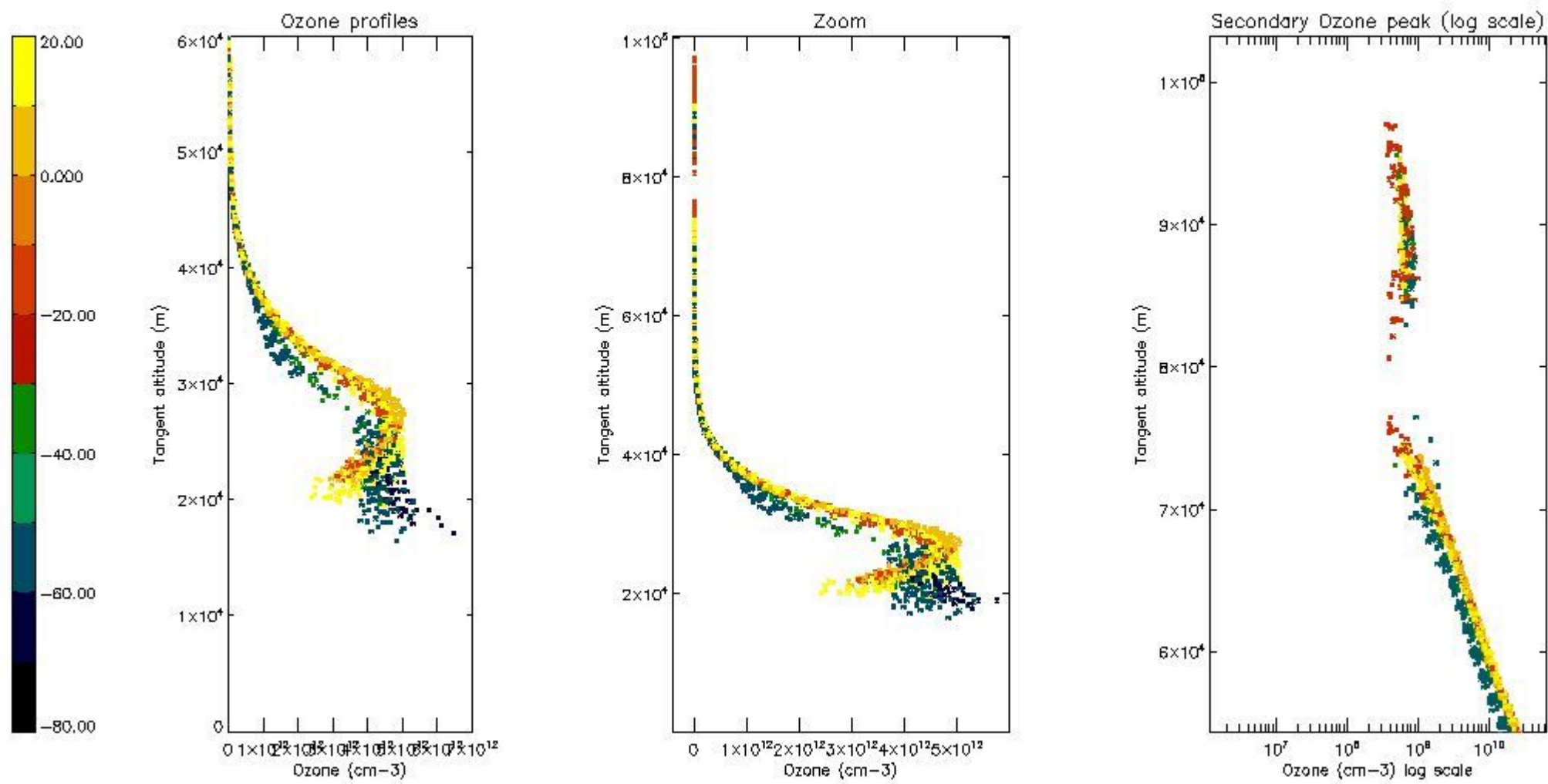
The colorbar represents the latitude.



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

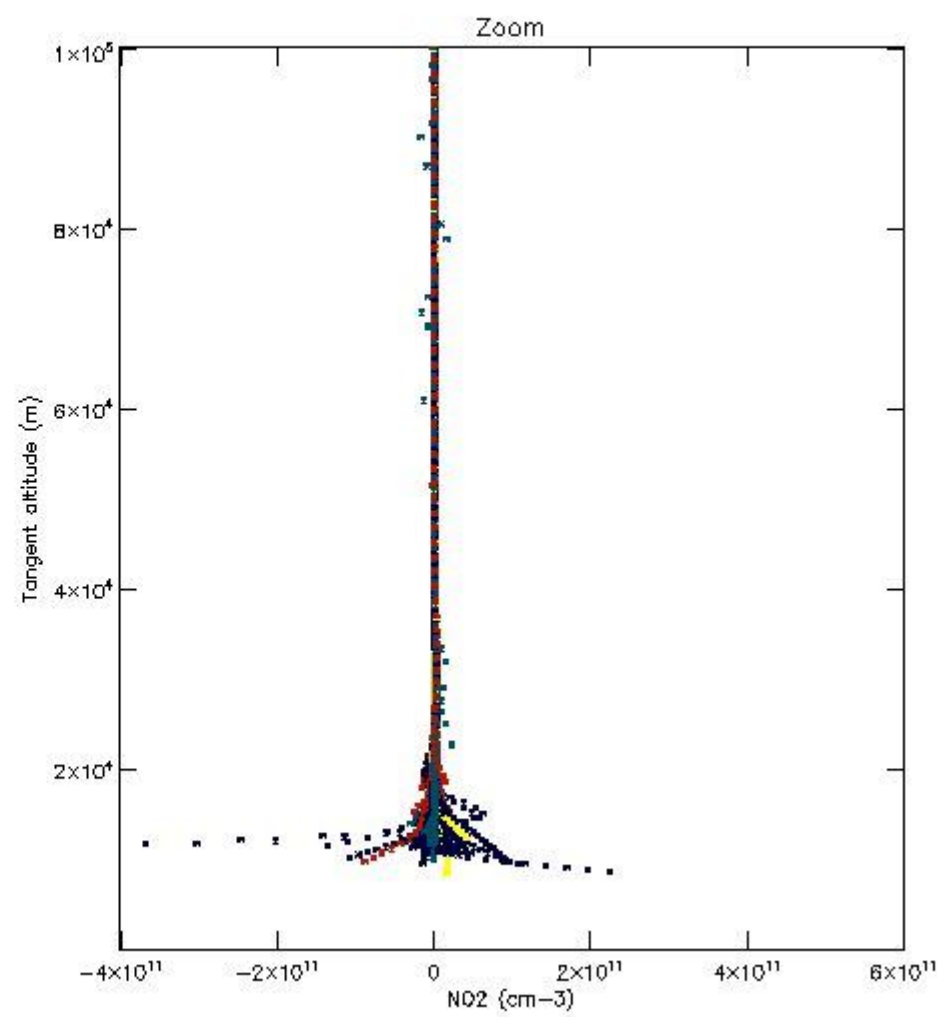
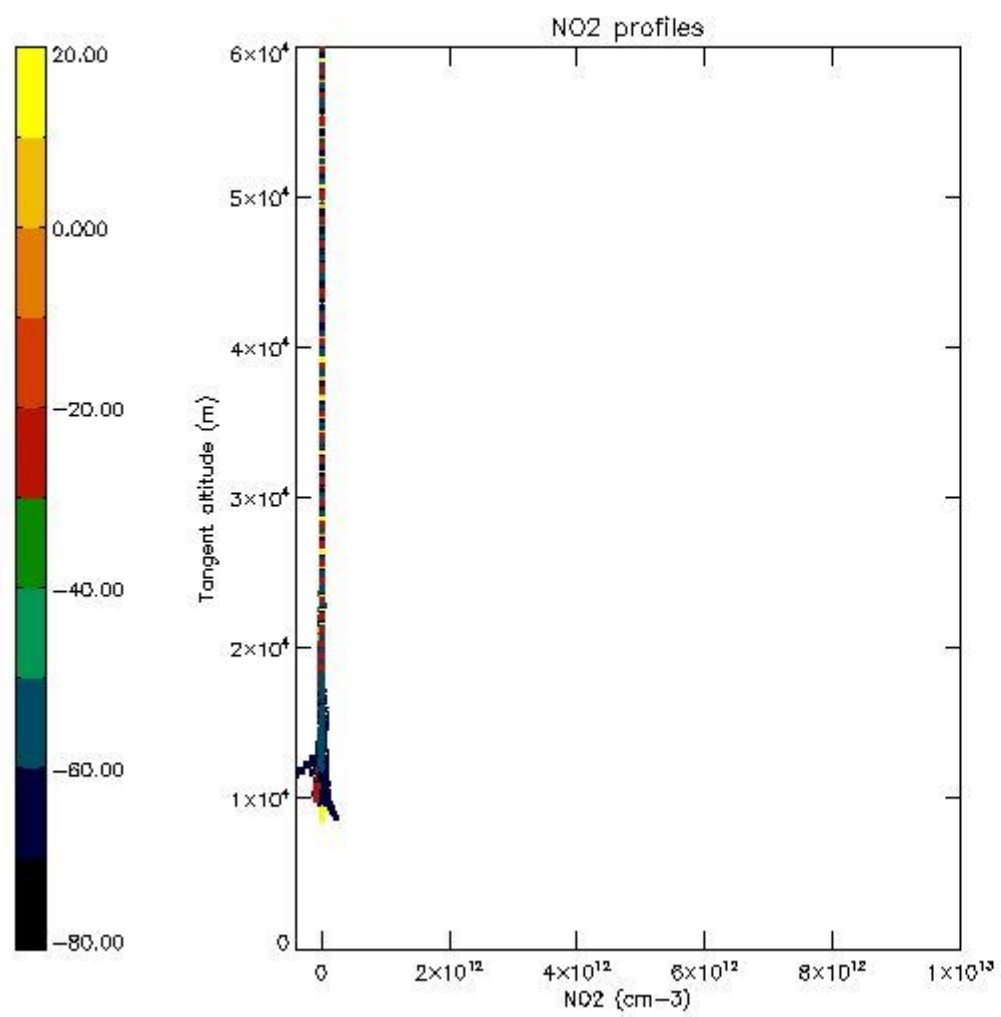
The colorbar represents the latitude.





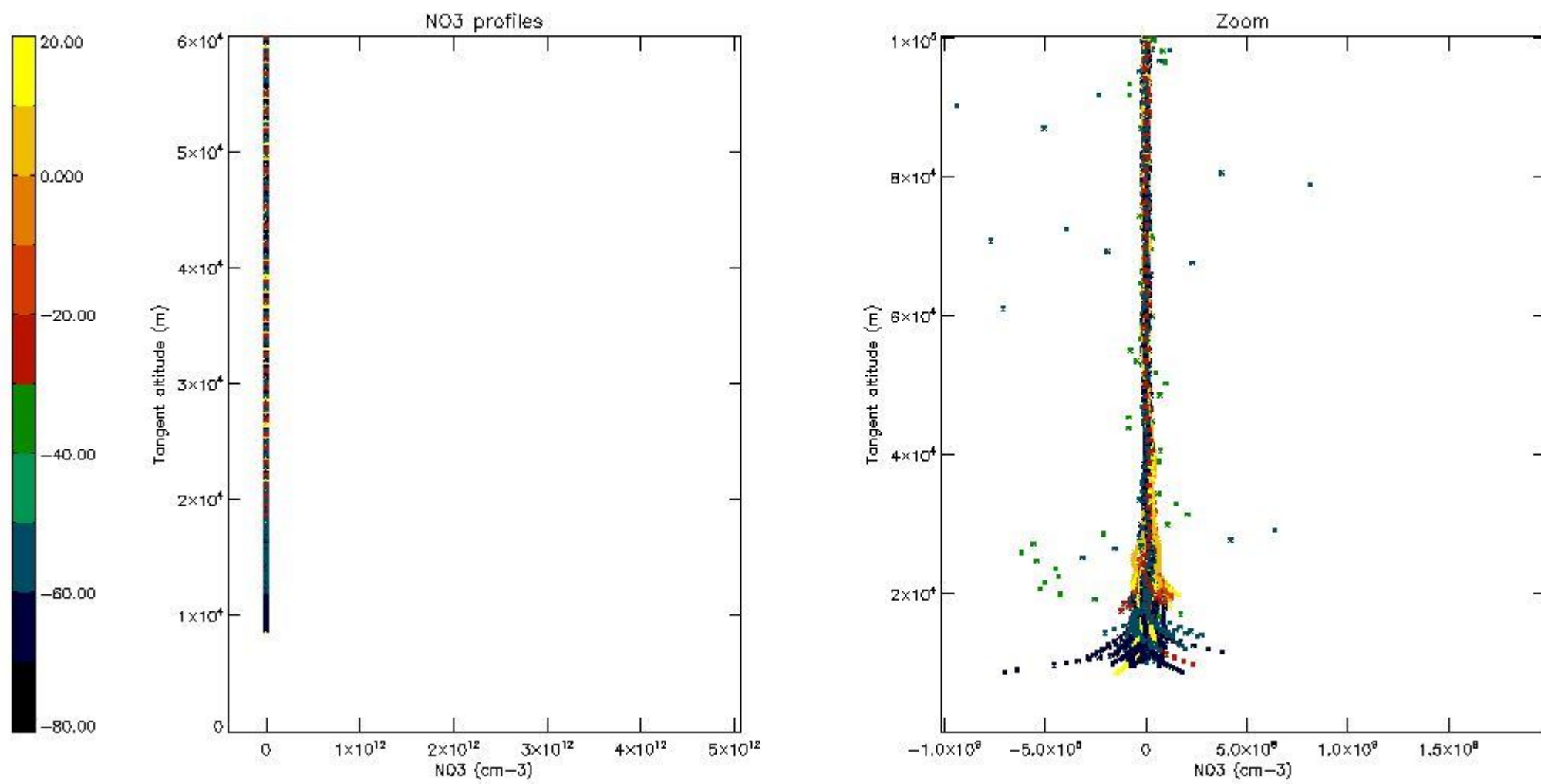
*5.6 Plot NO<sub>2</sub> profiles for all STD (dark without errors)*

The colorbar represents the latitude.



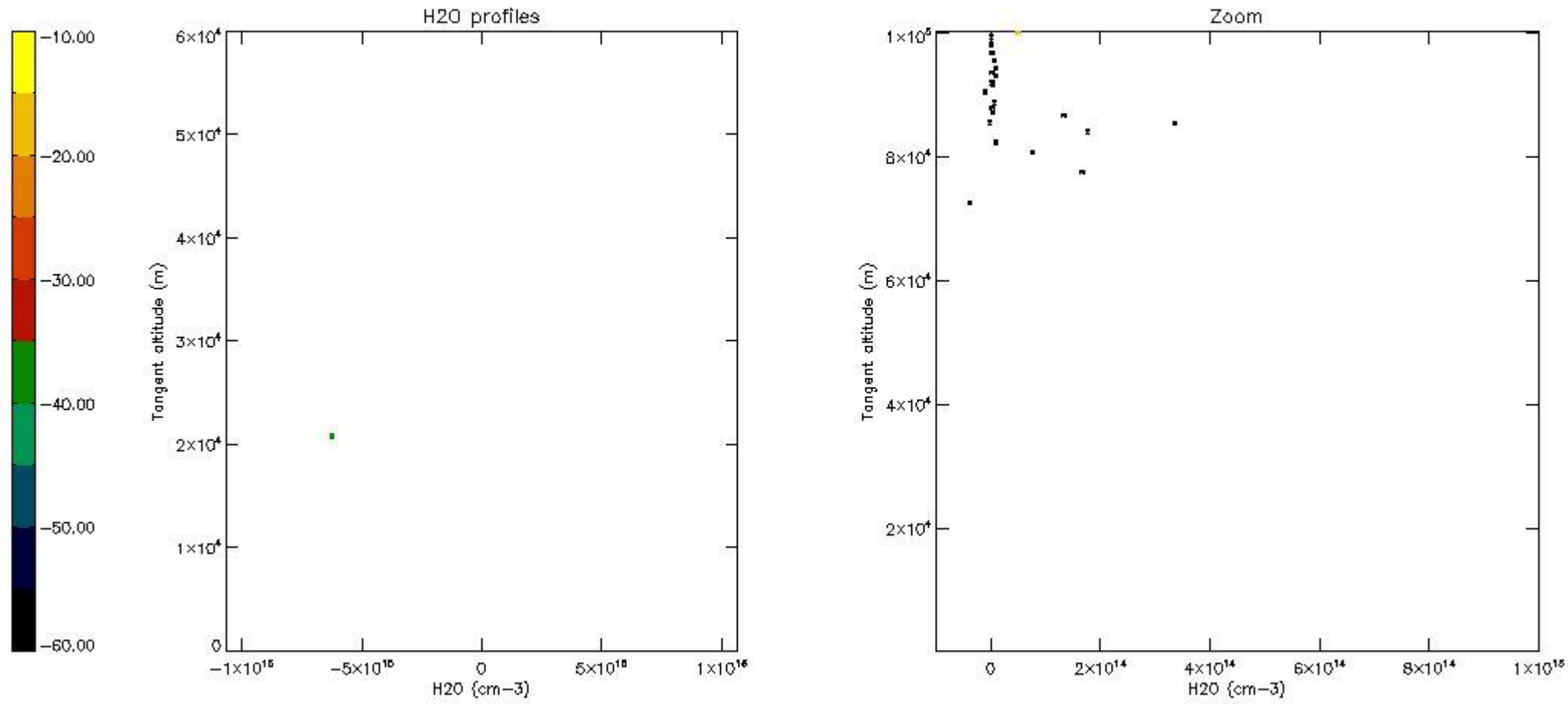
*5.7 Plot NO3 profiles for all STD (dark without errors)*

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)*

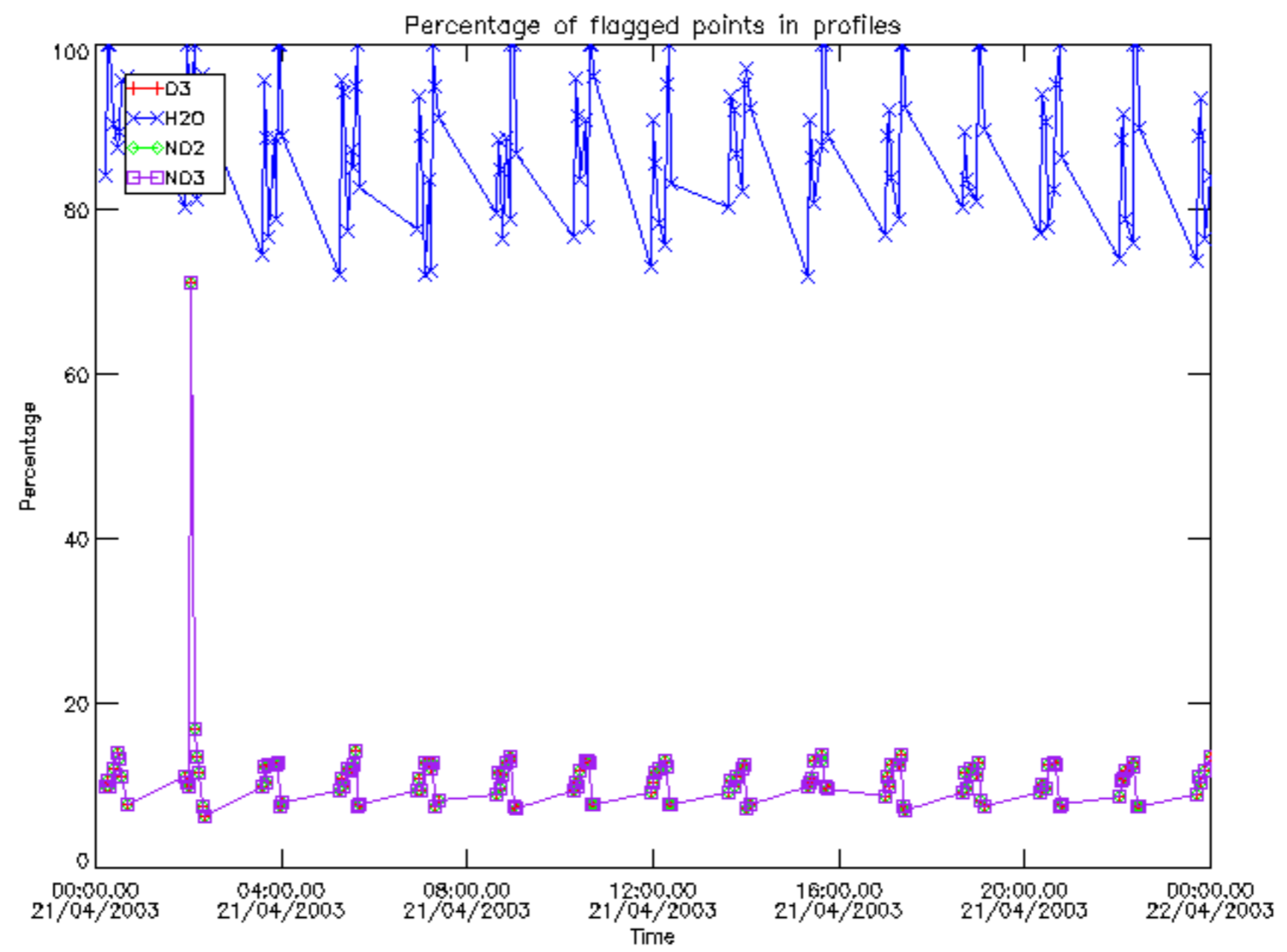
The colorbar represents the latitude.



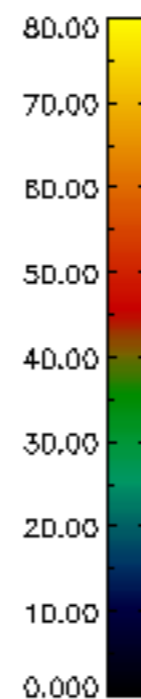
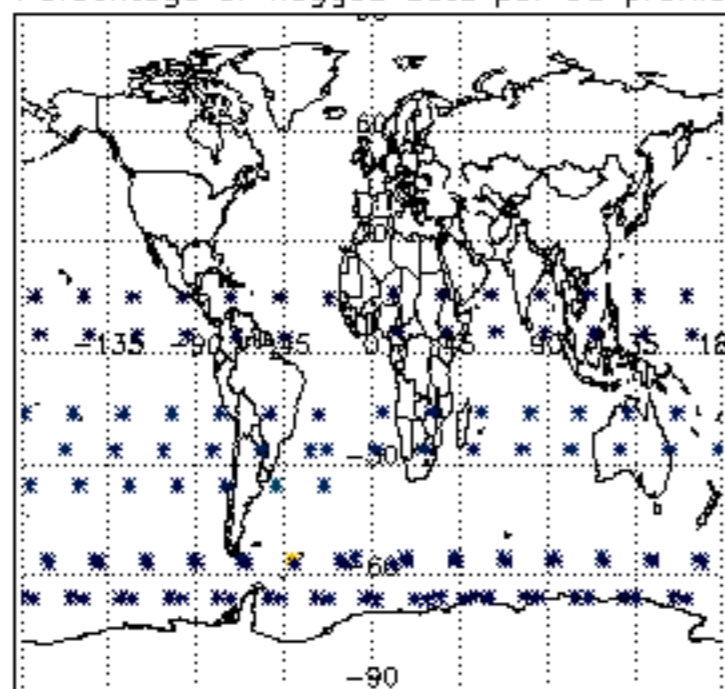
## 6. Auxiliary Data Files used for the production reported in section 2

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.

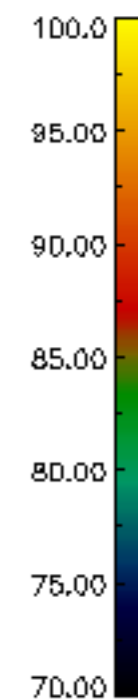
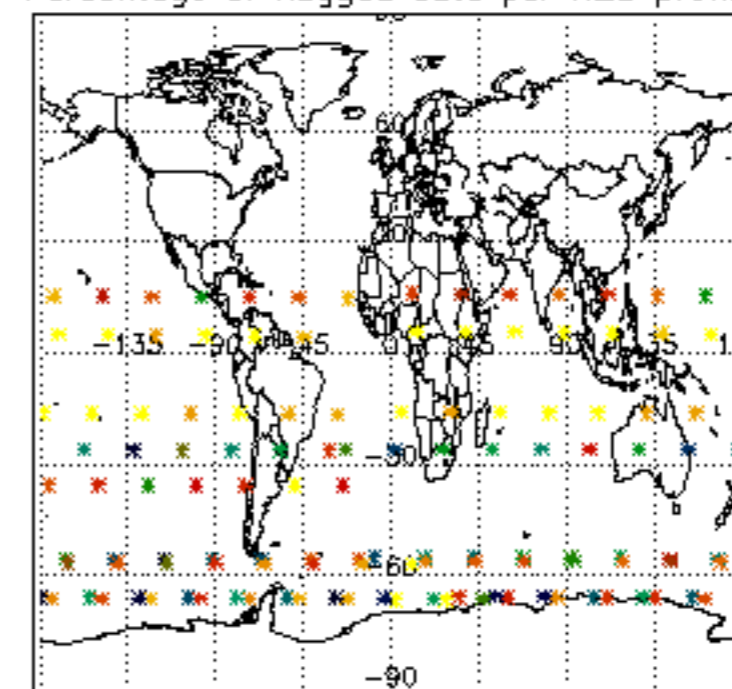
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXNIEC20050627_150440_20020301_000000_20100101_000000	1	21-APR-2003 00:00:54
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	21-APR-2003 00:00:54
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	21-APR-2003 00:00:54



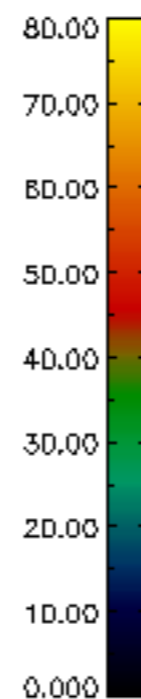
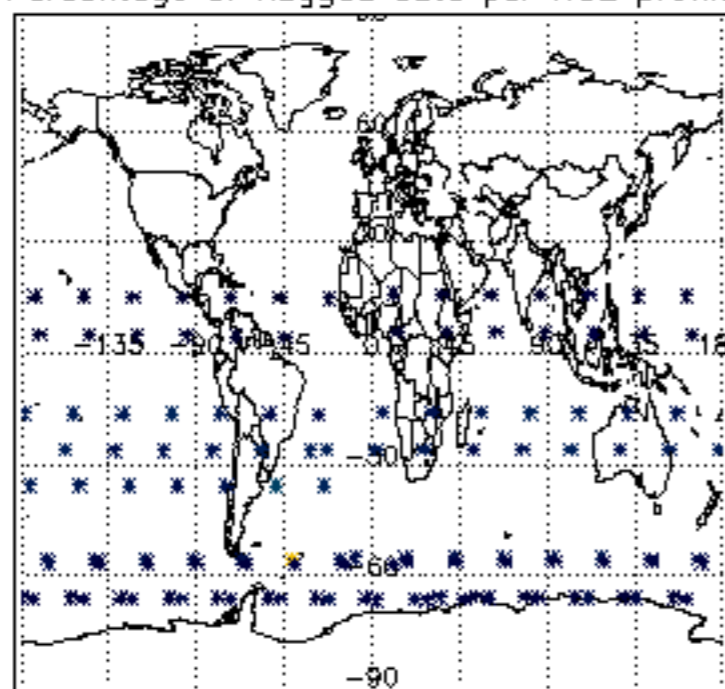
Percentage of flagged data per D3 profile



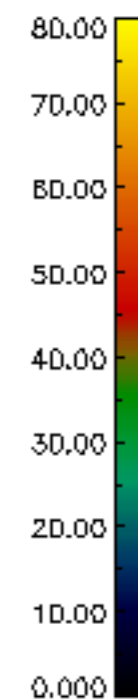
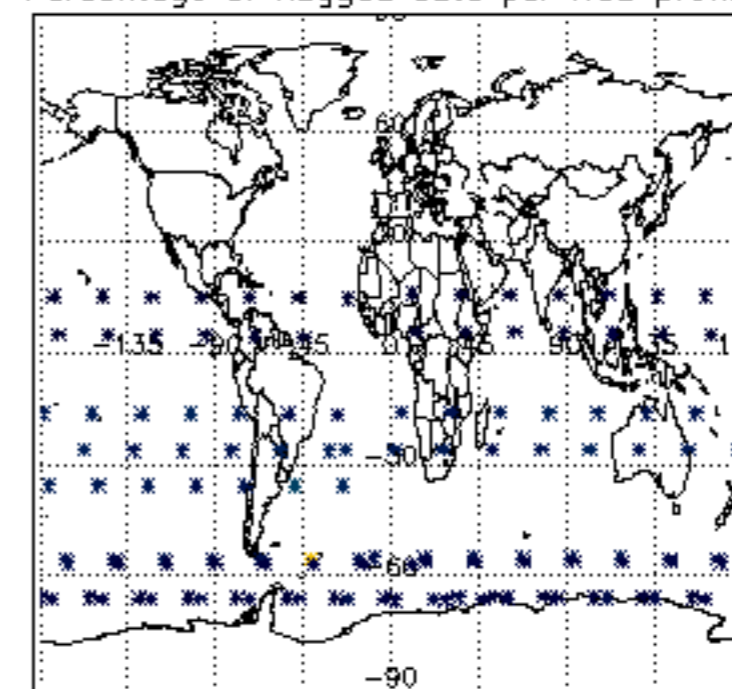
Percentage of flagged data per H2O profile

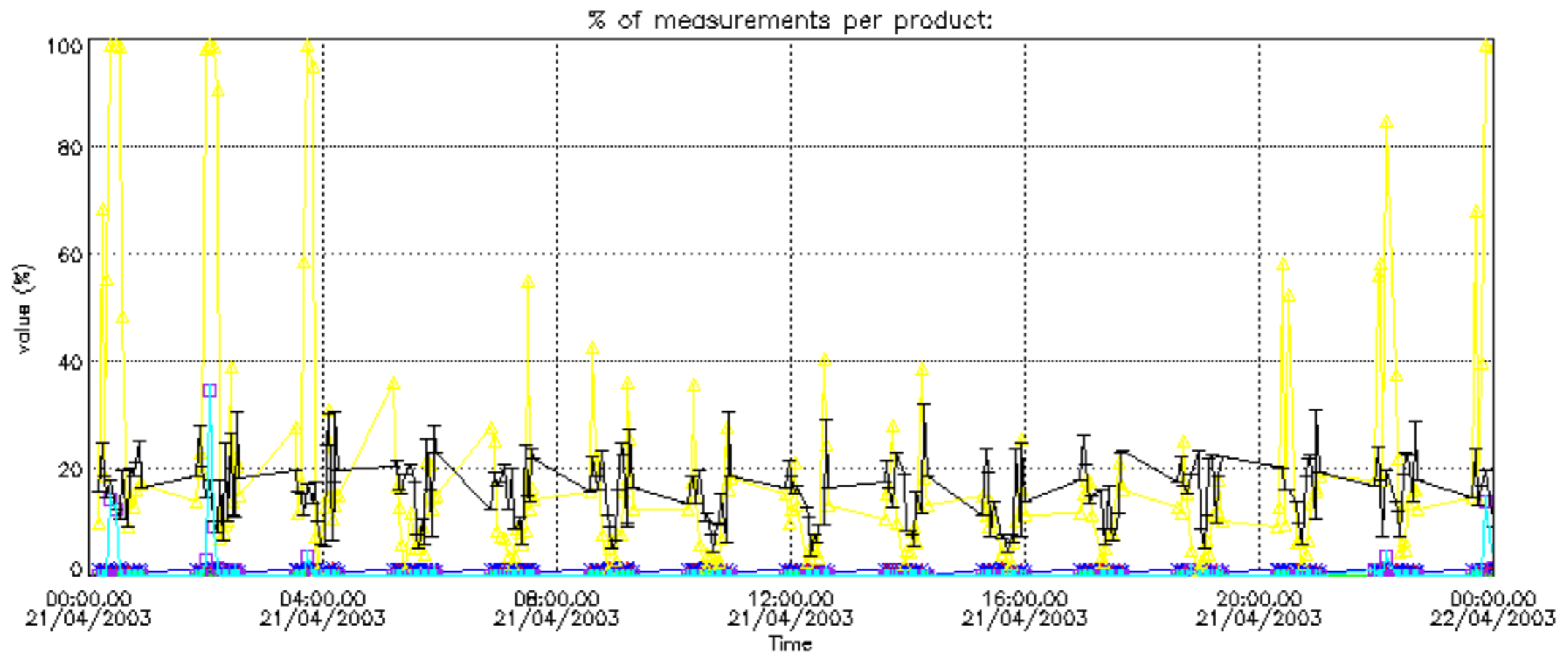


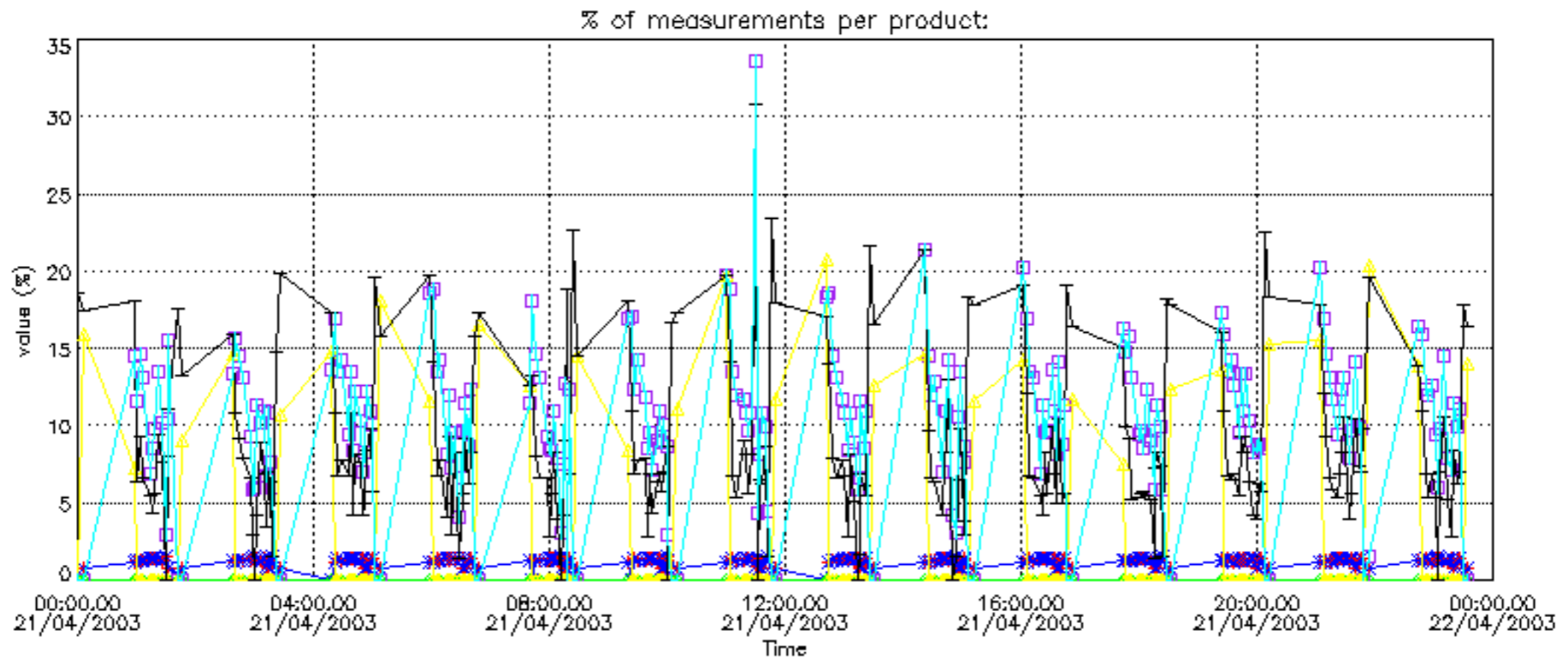
Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

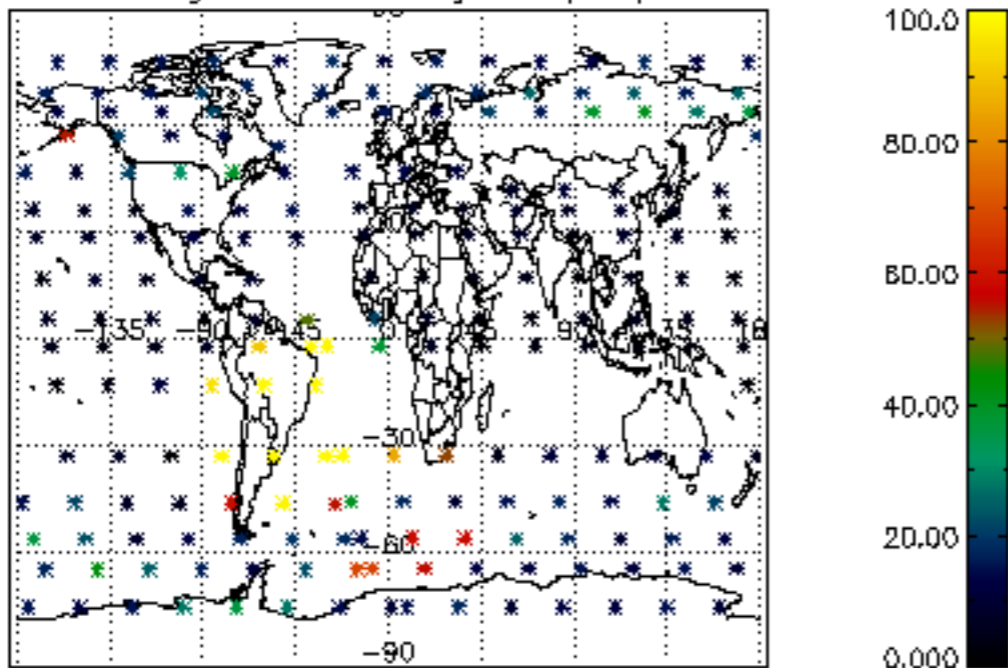




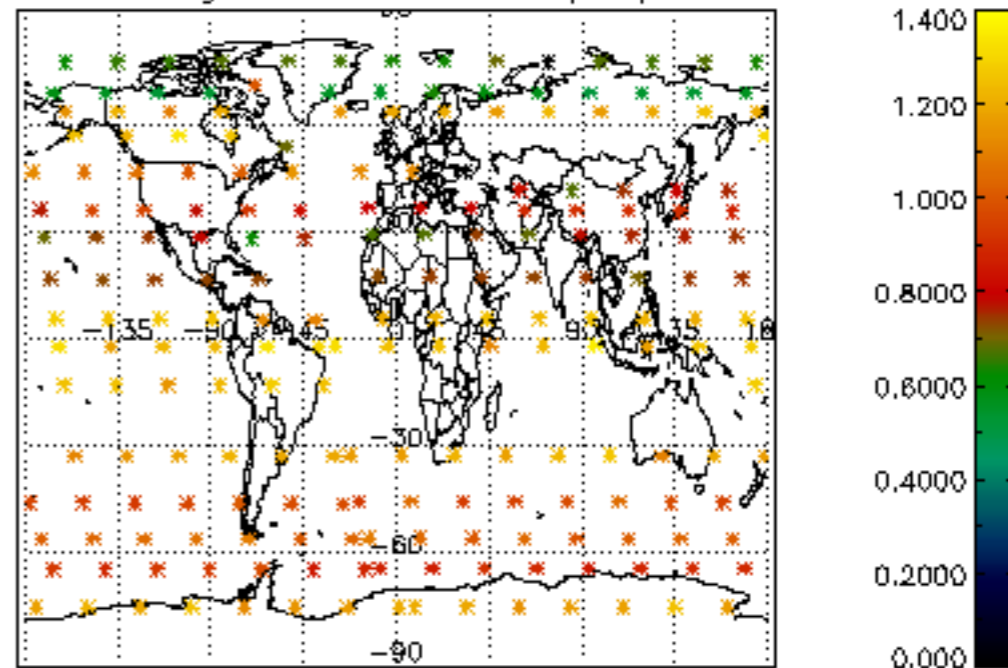




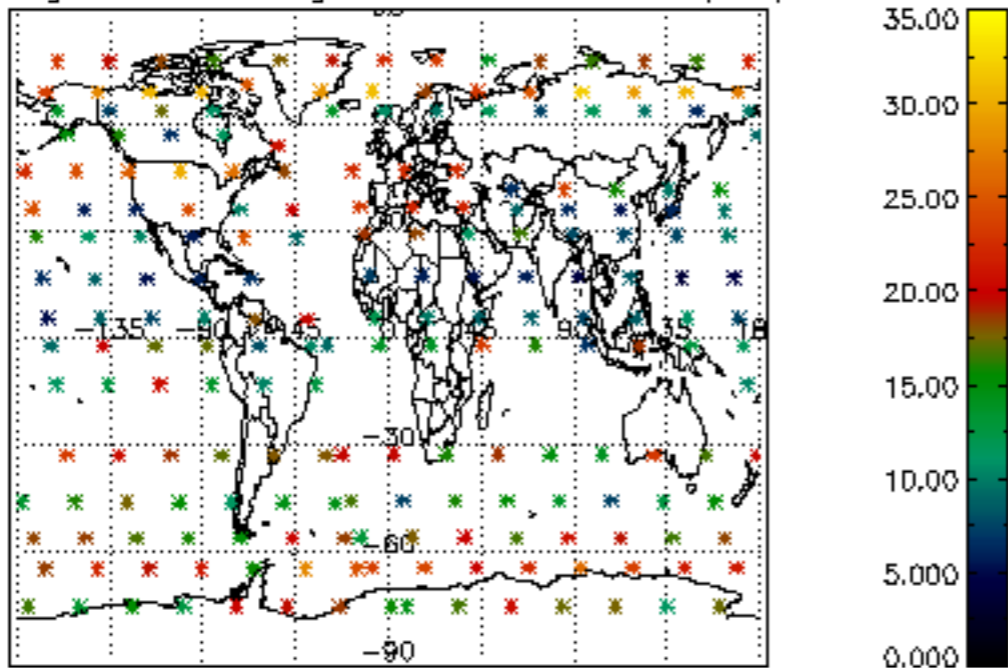
Percentage of cosmic ray hits per profile



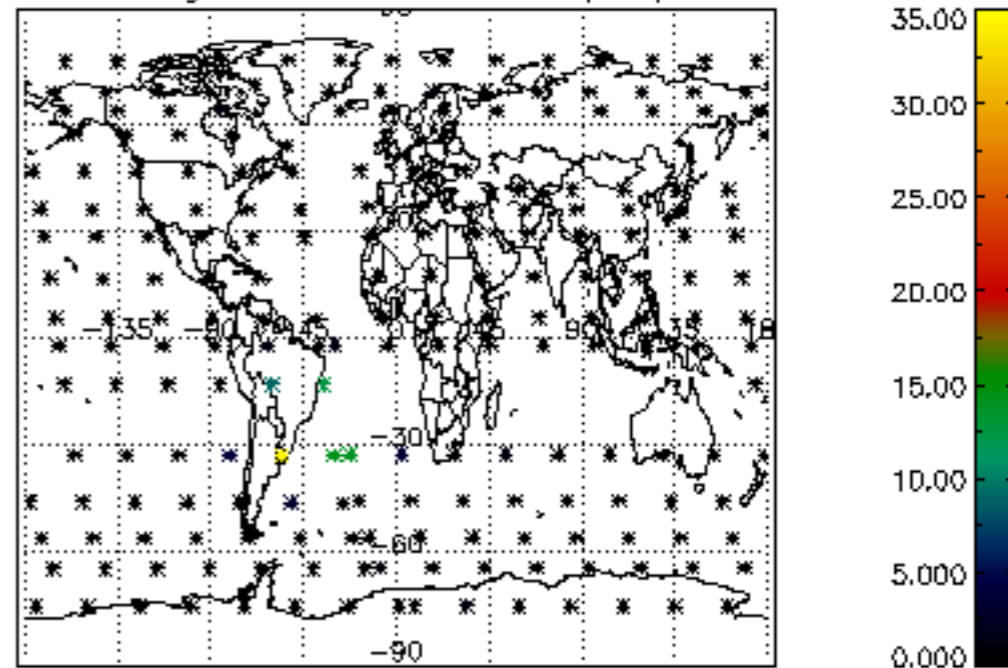
Percentage of datation errors per profile



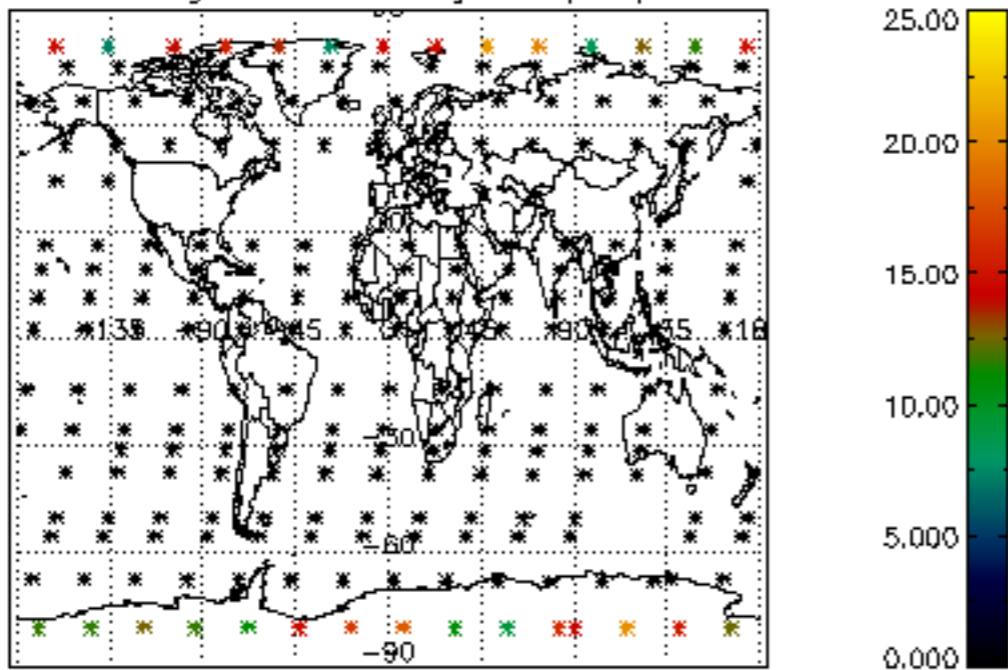
Percentage of star falling outside central band per profile



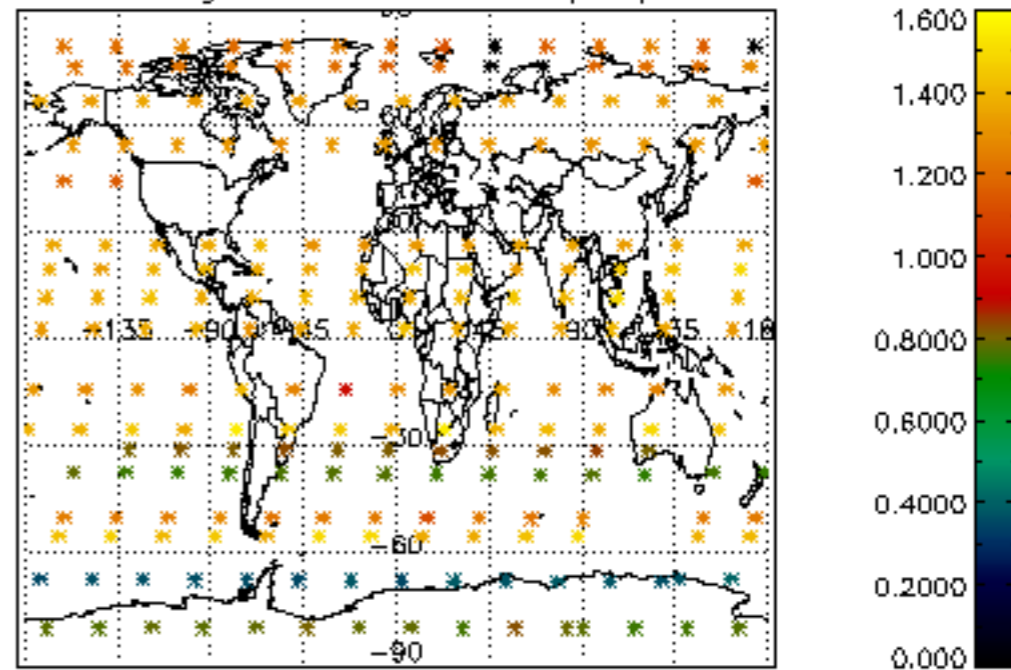
Percentage of saturation errors per profile



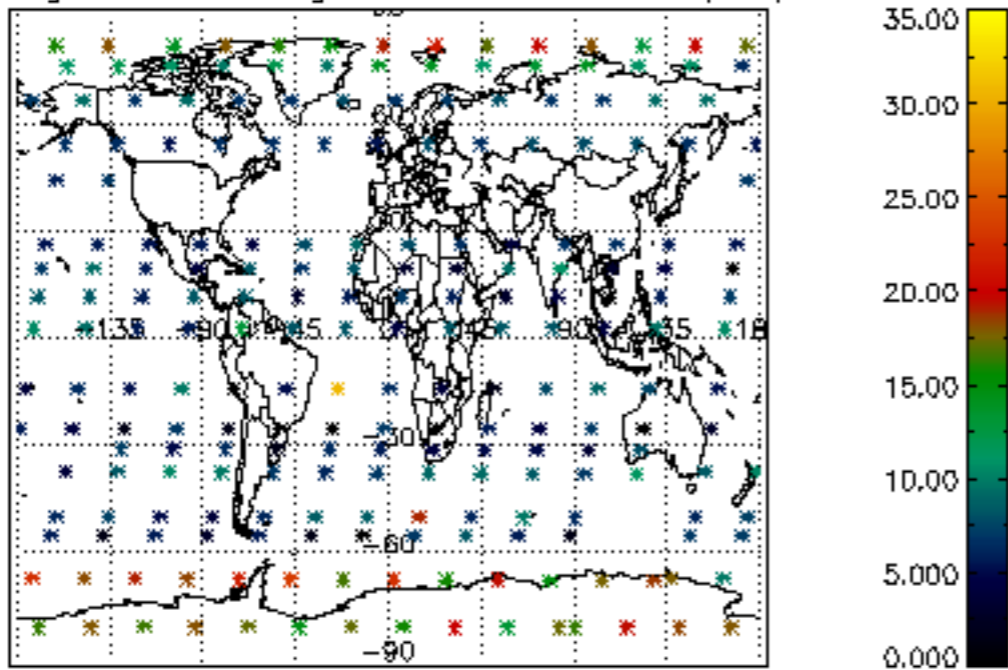
Percentage of cosmic ray hits per profile



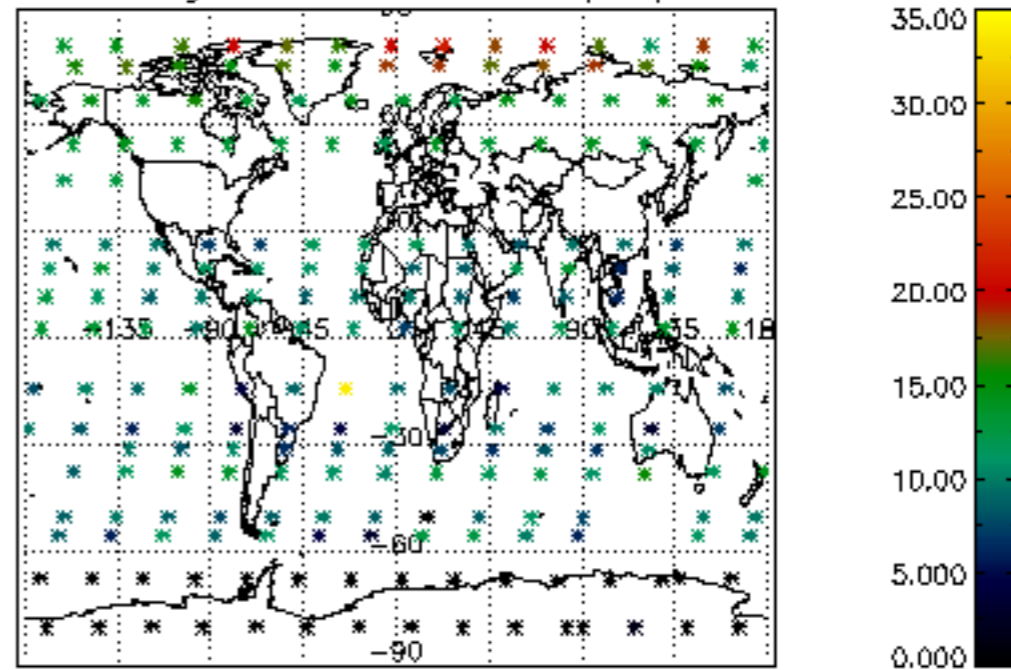
Percentage of datation errors per profile

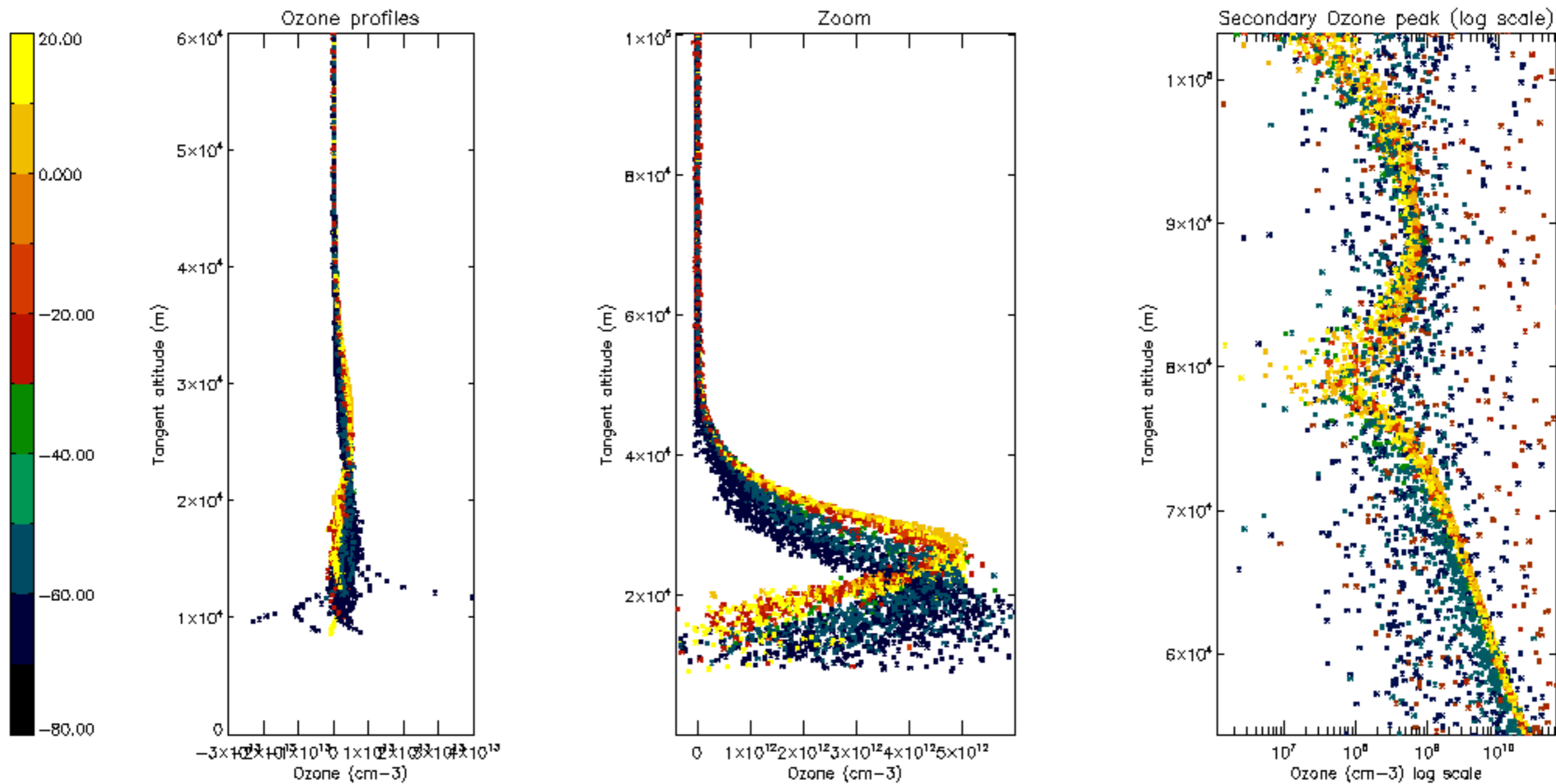


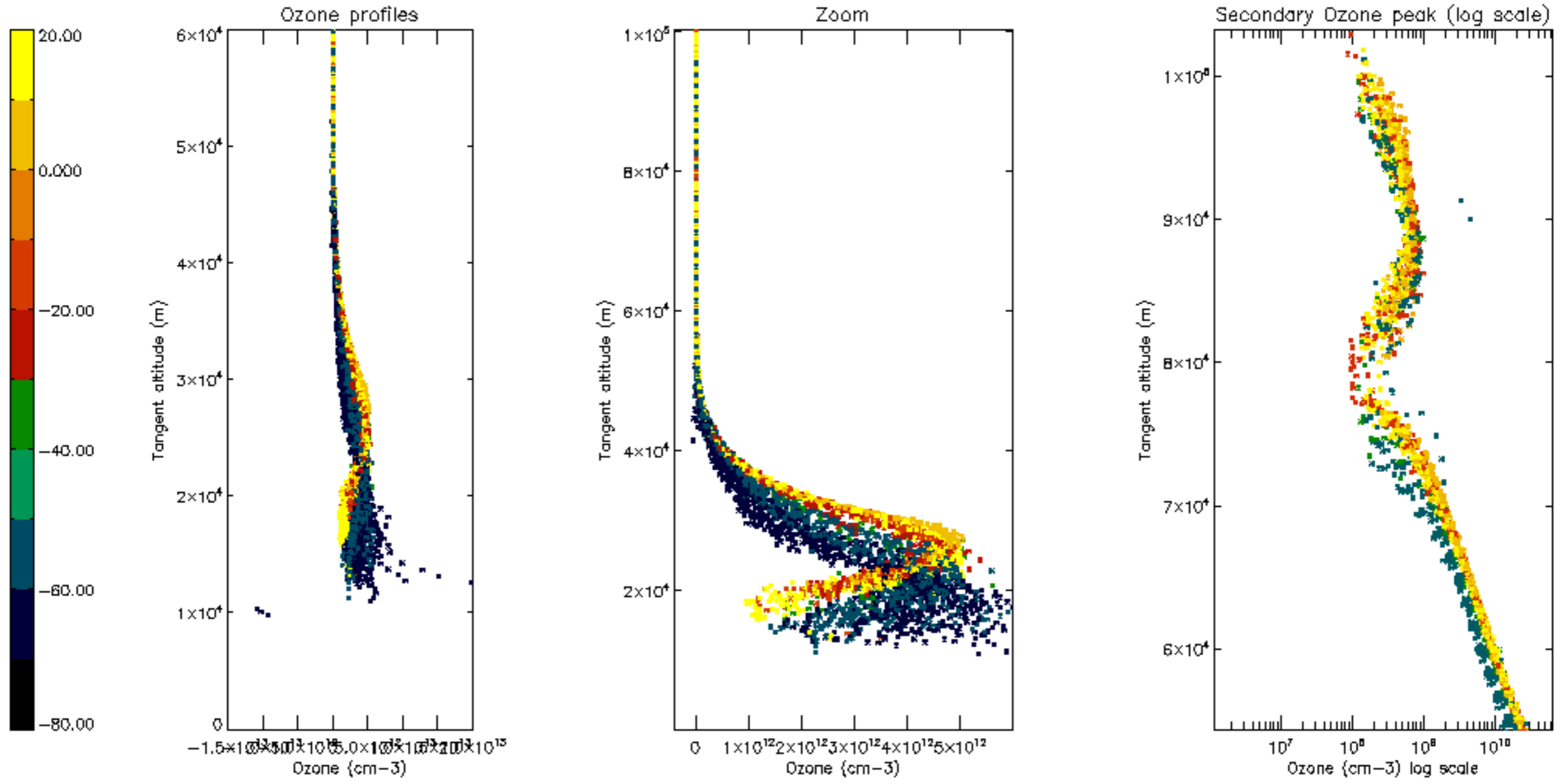
Percentage of star falling outside central band per profile

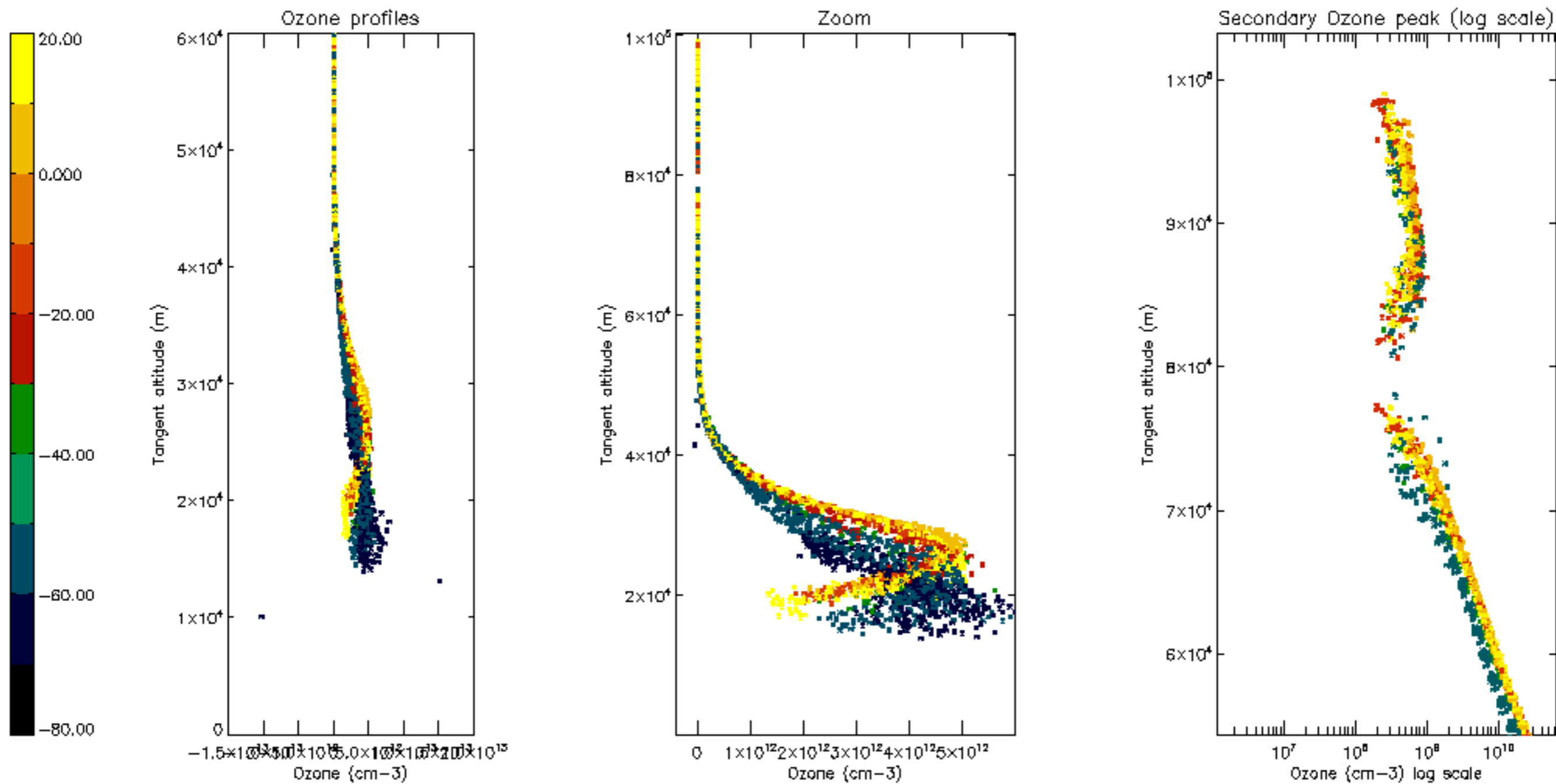


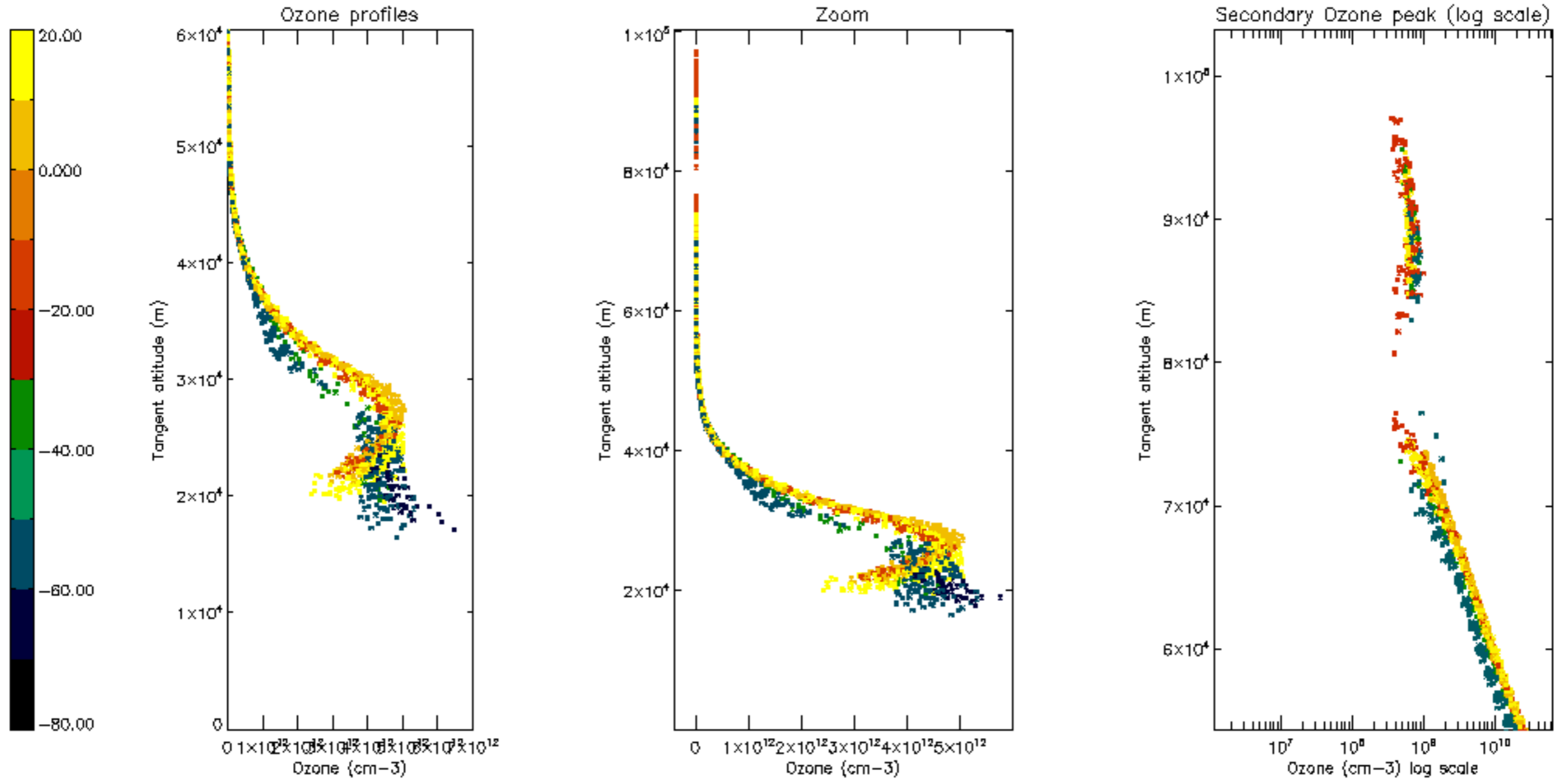
Percentage of saturation errors per profile

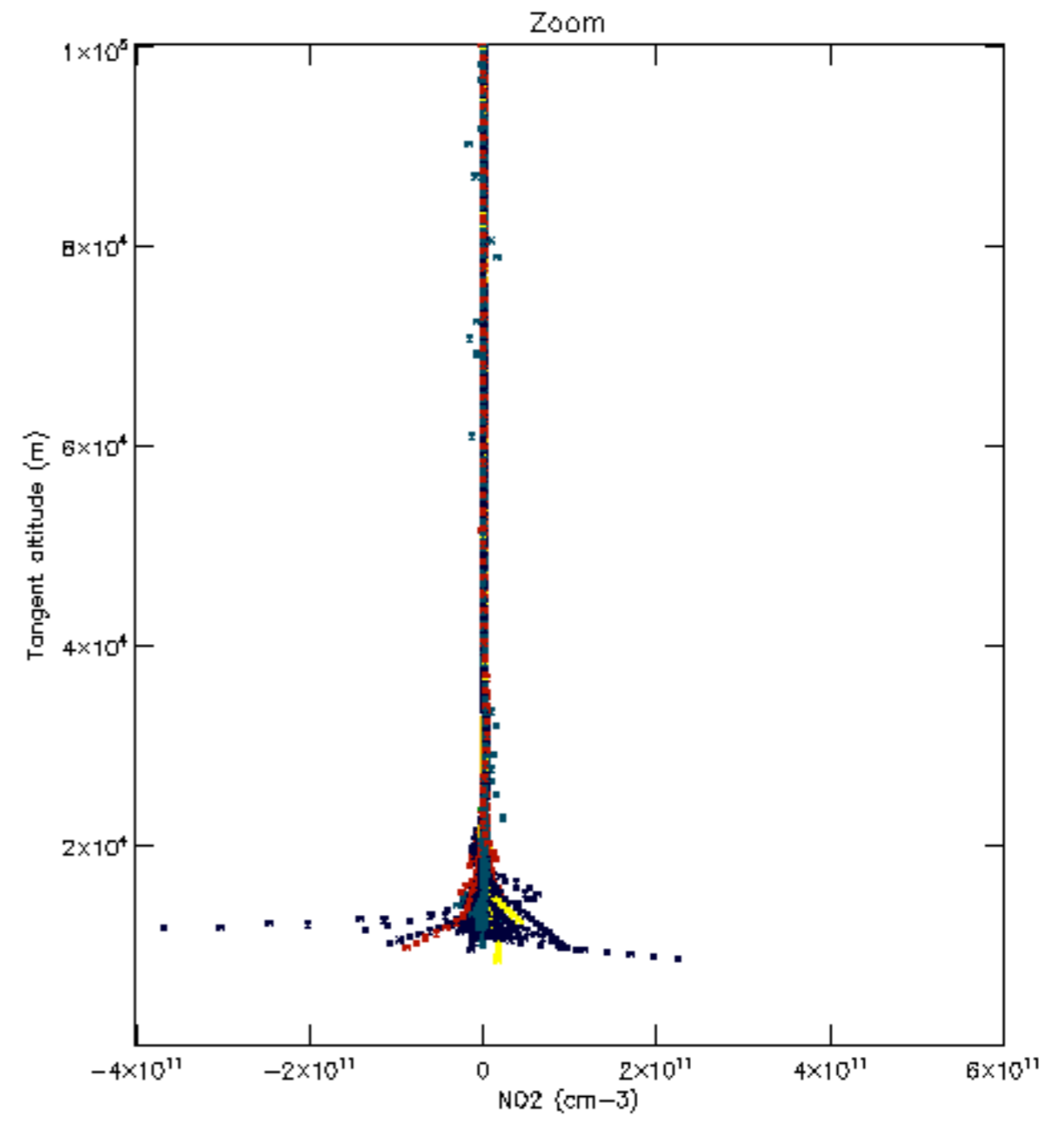
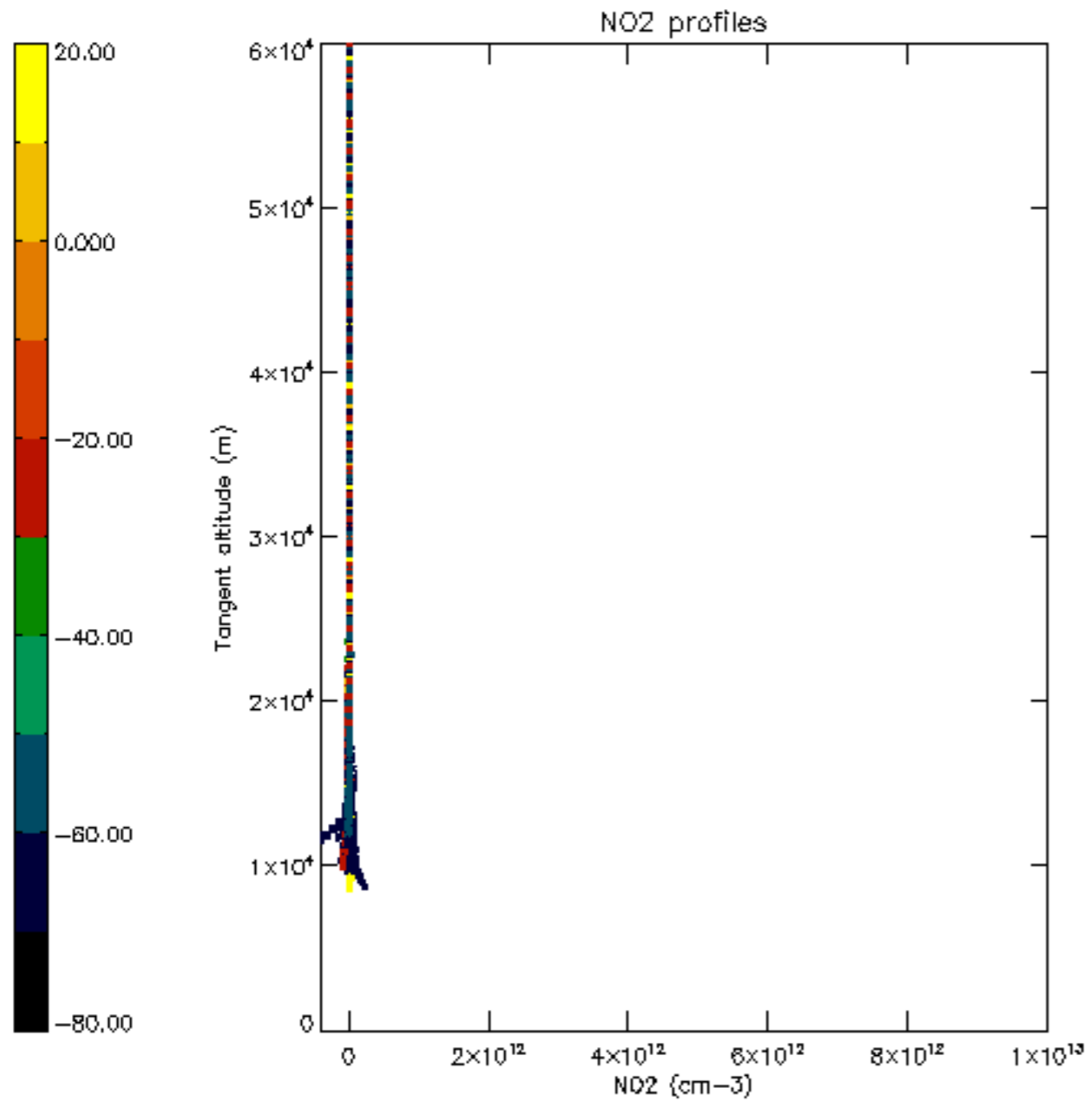


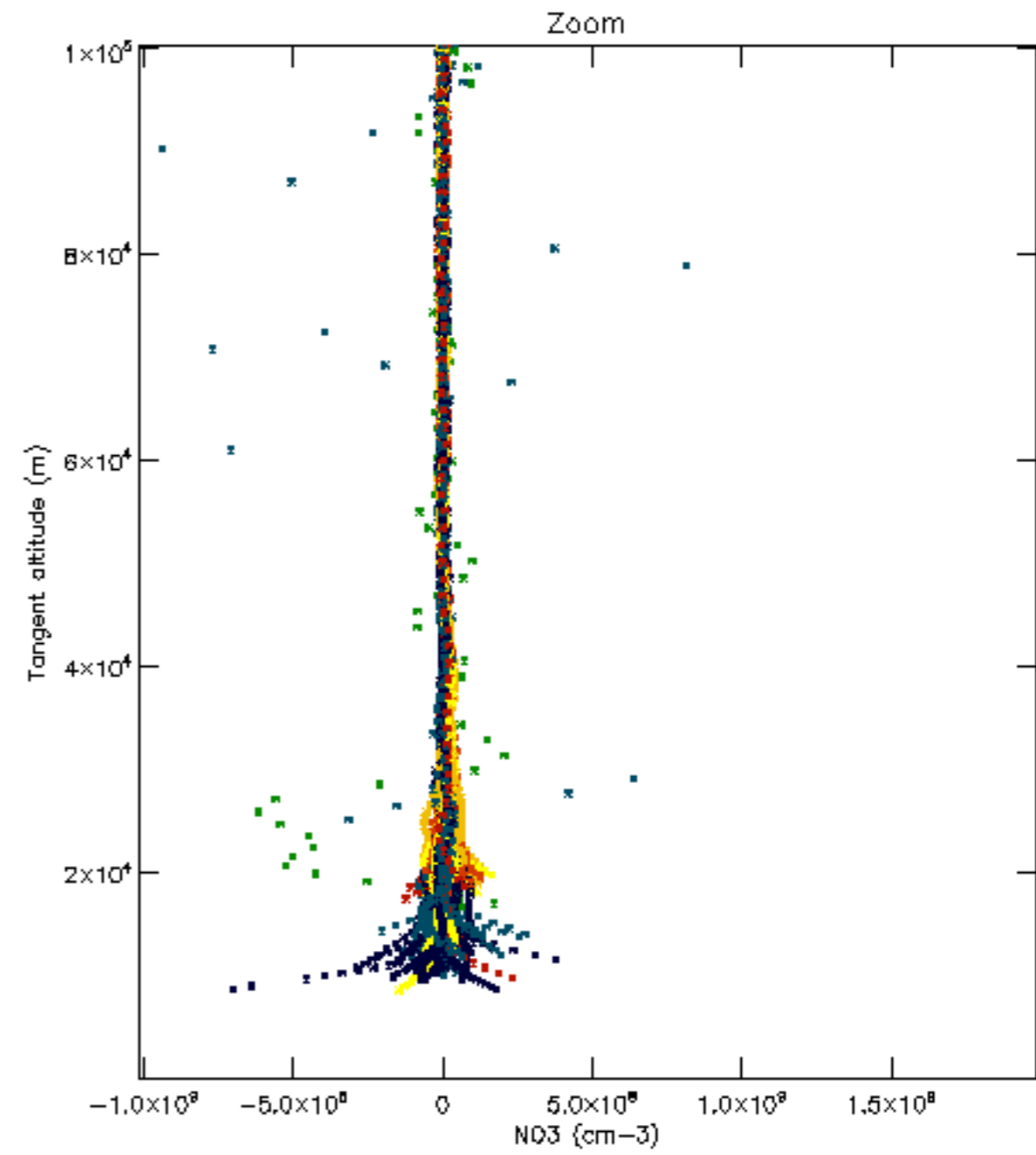
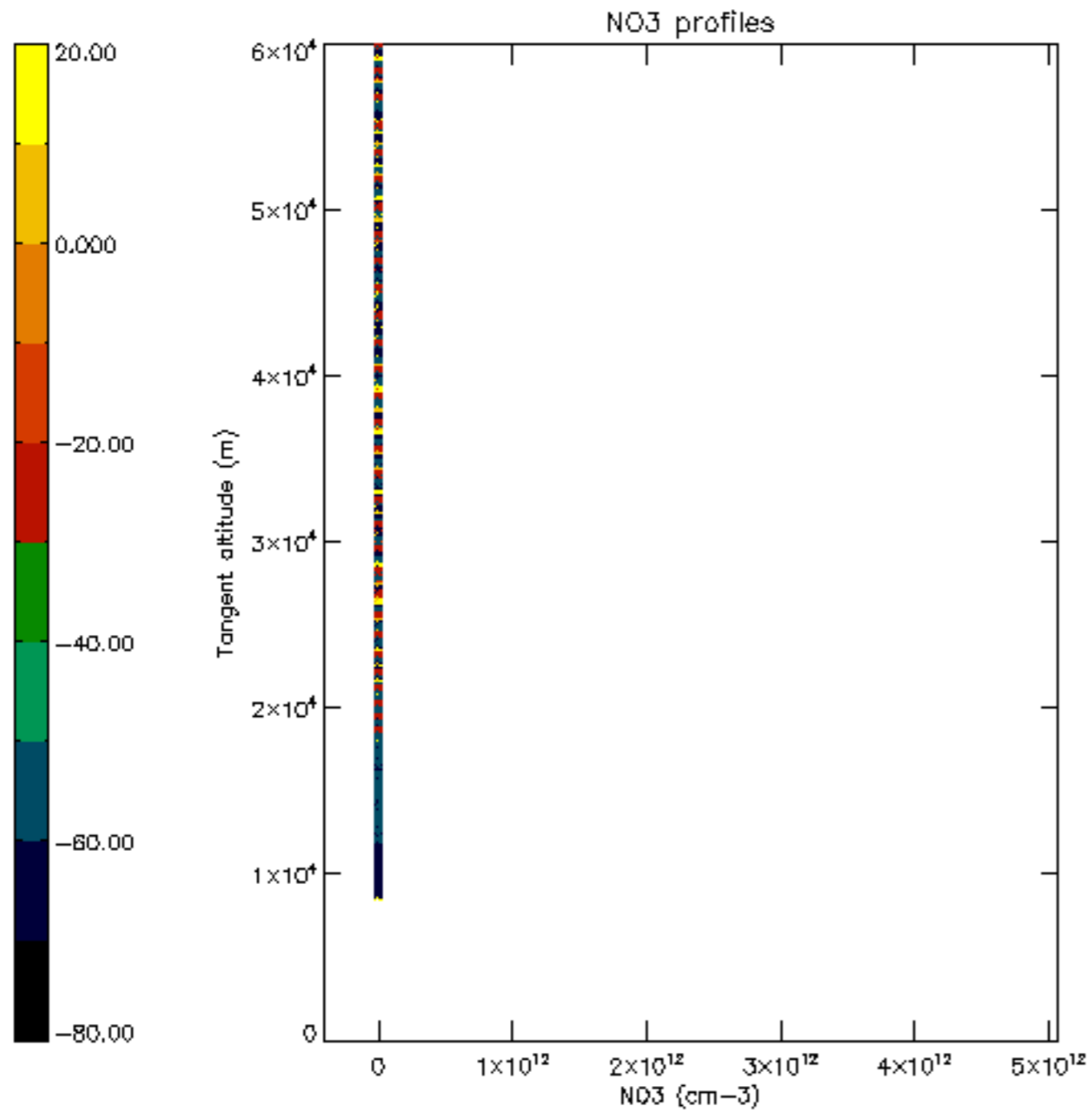




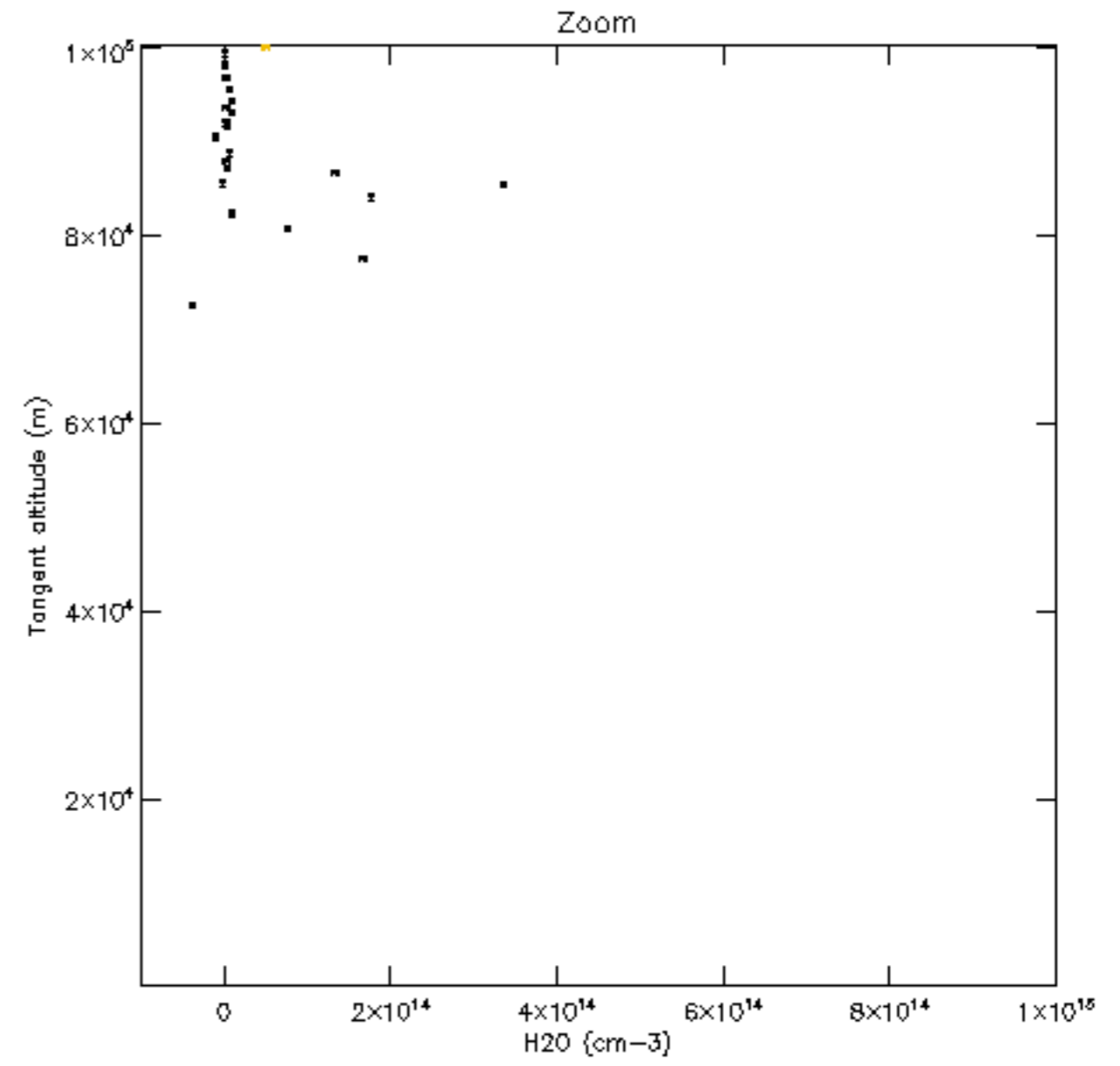
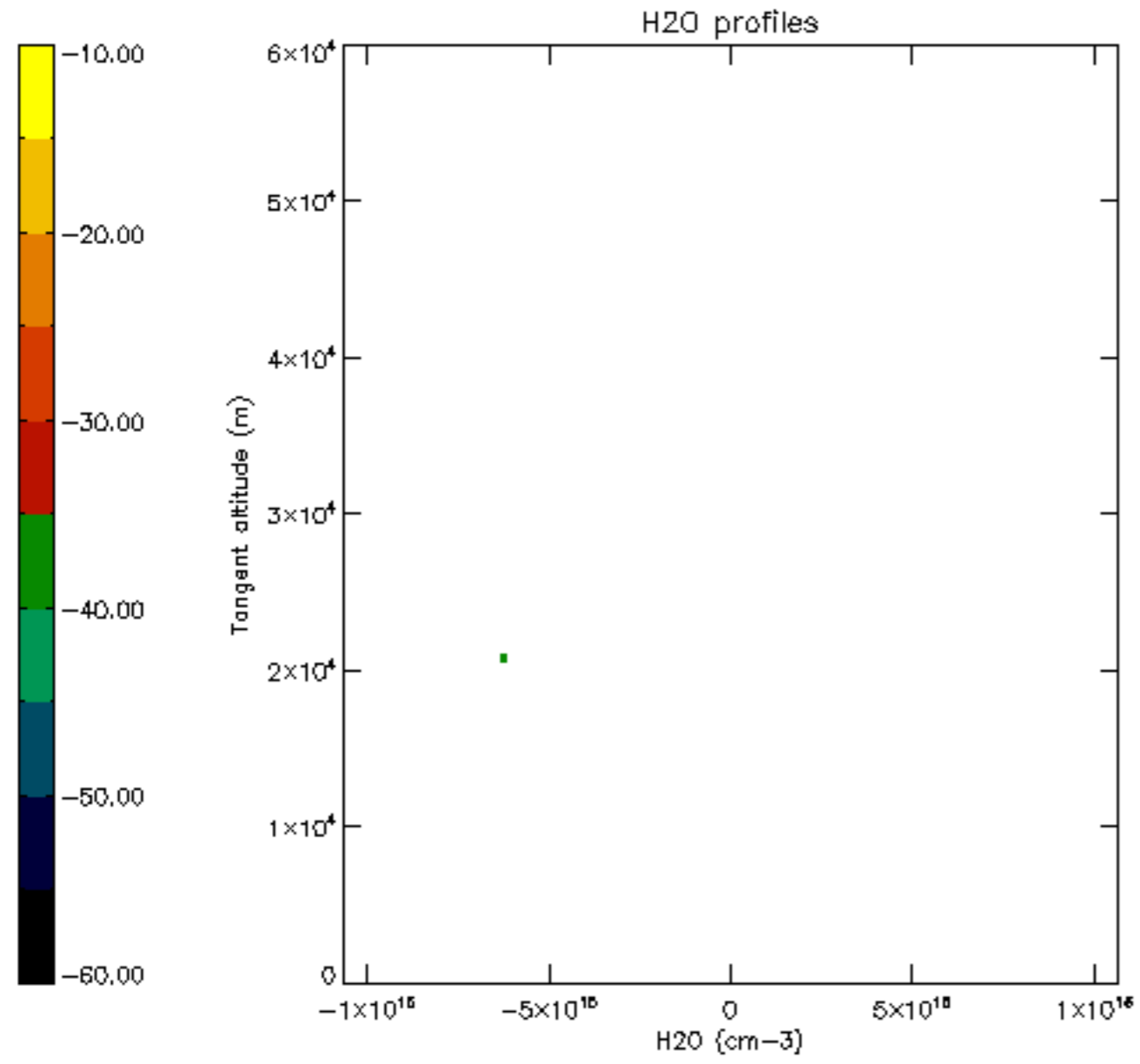


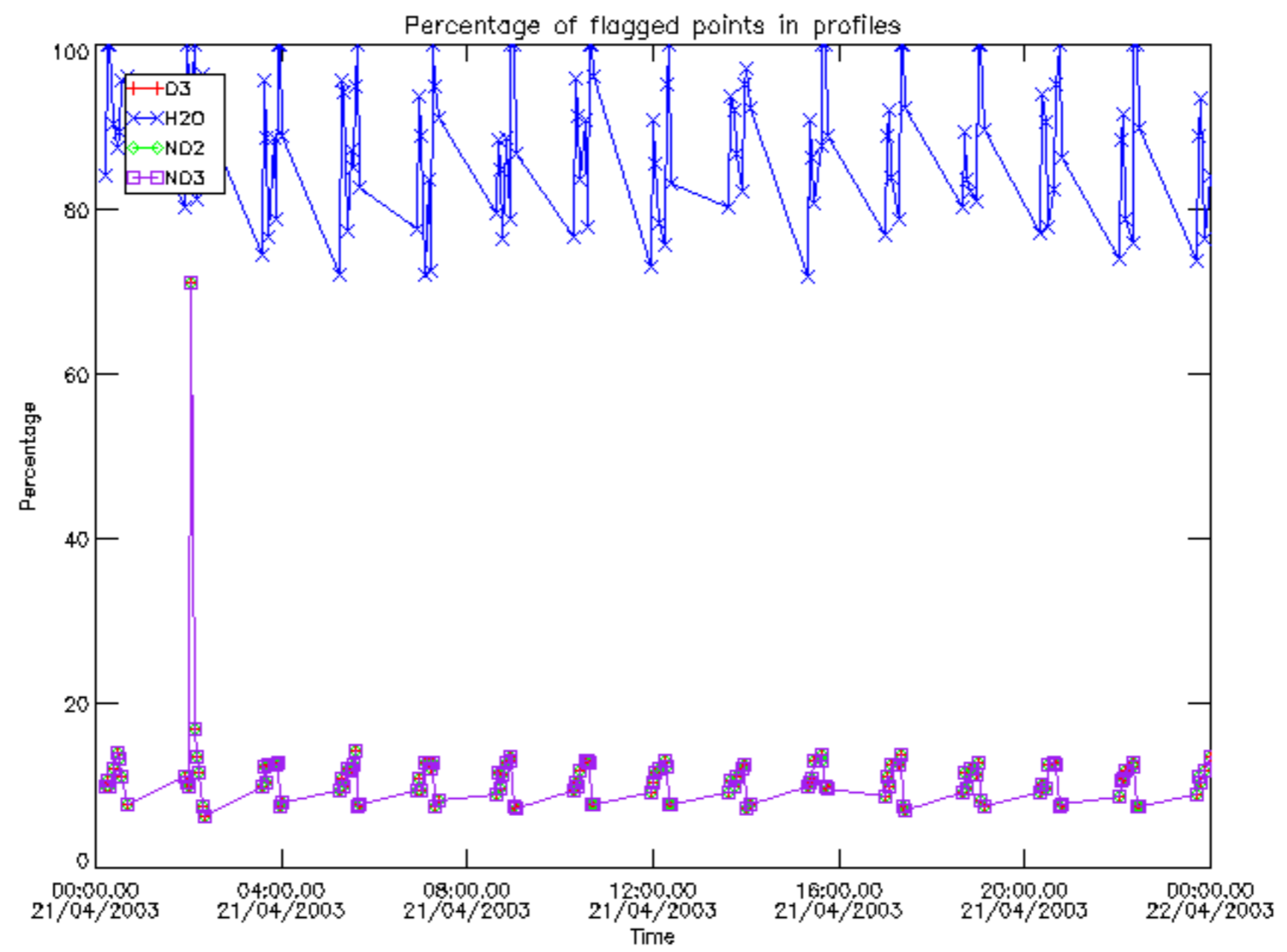




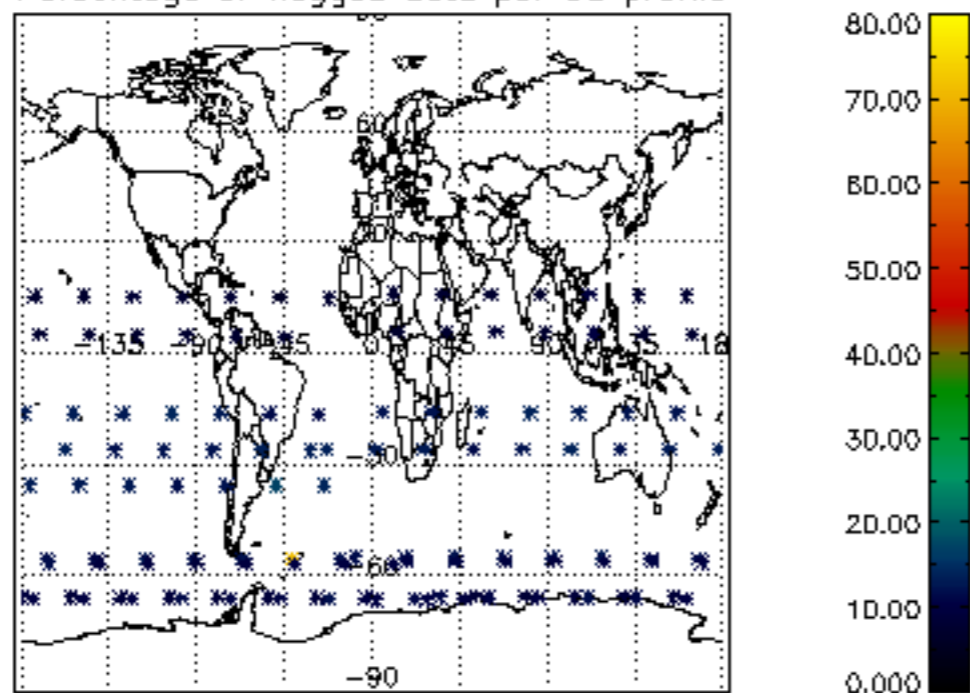




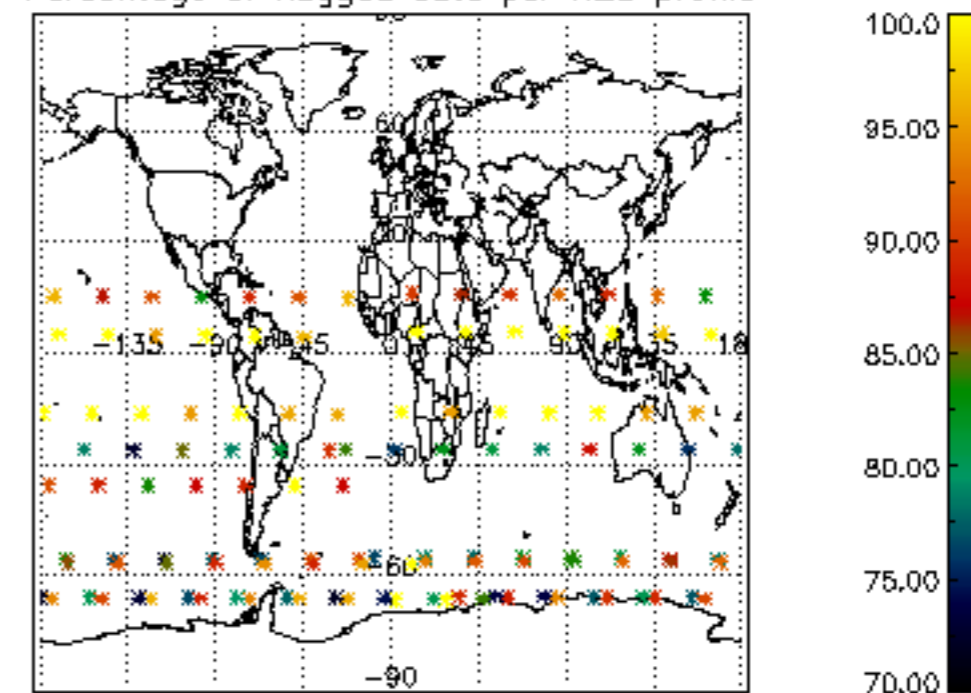




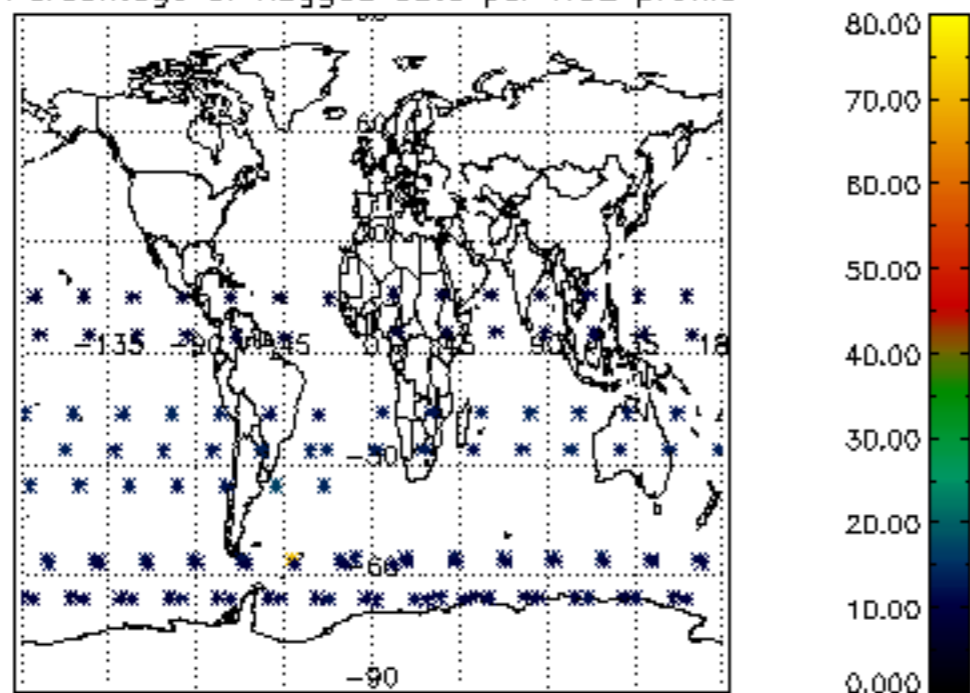
Percentage of flagged data per D3 profile



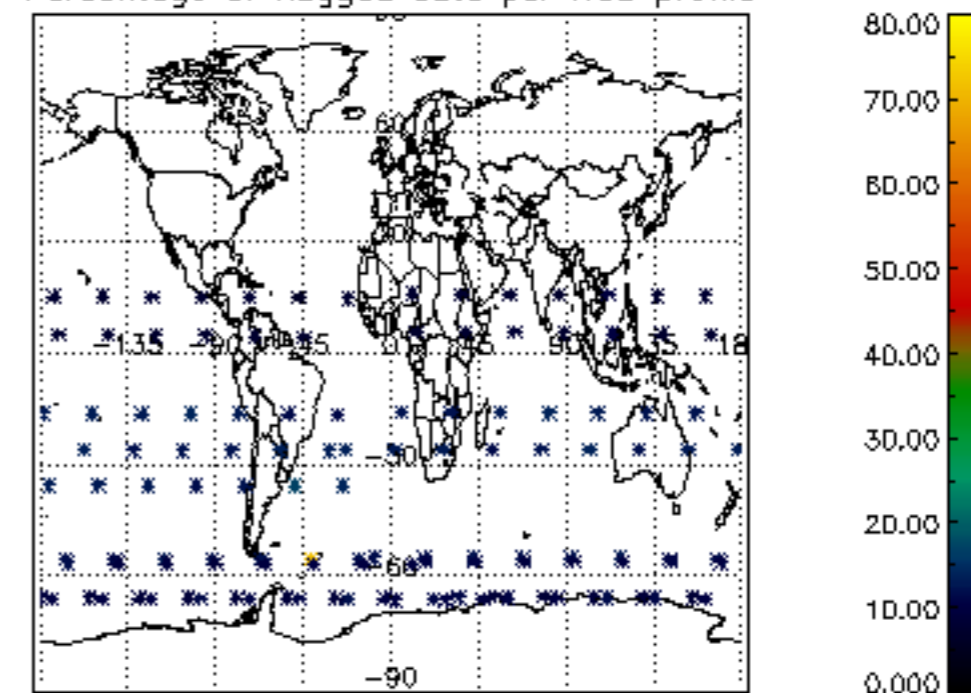
Percentage of flagged data per H2O profile

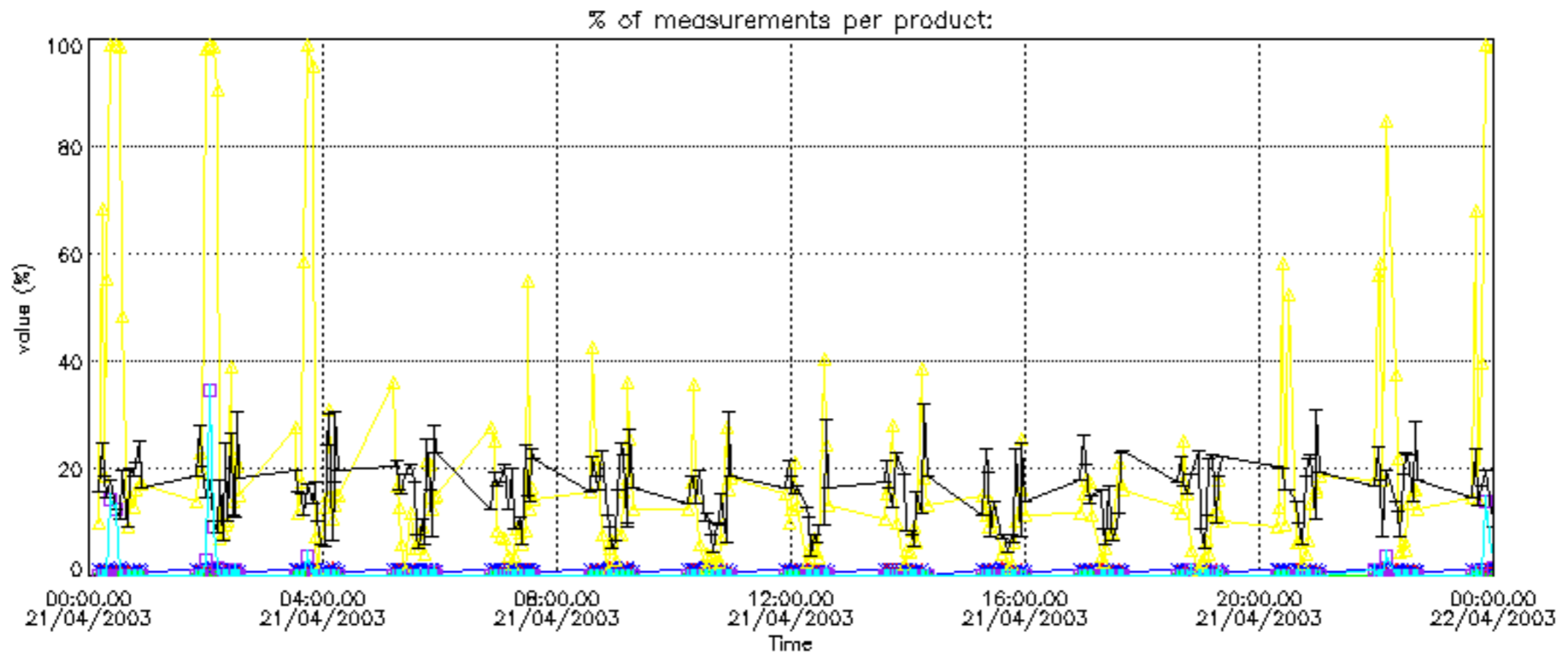


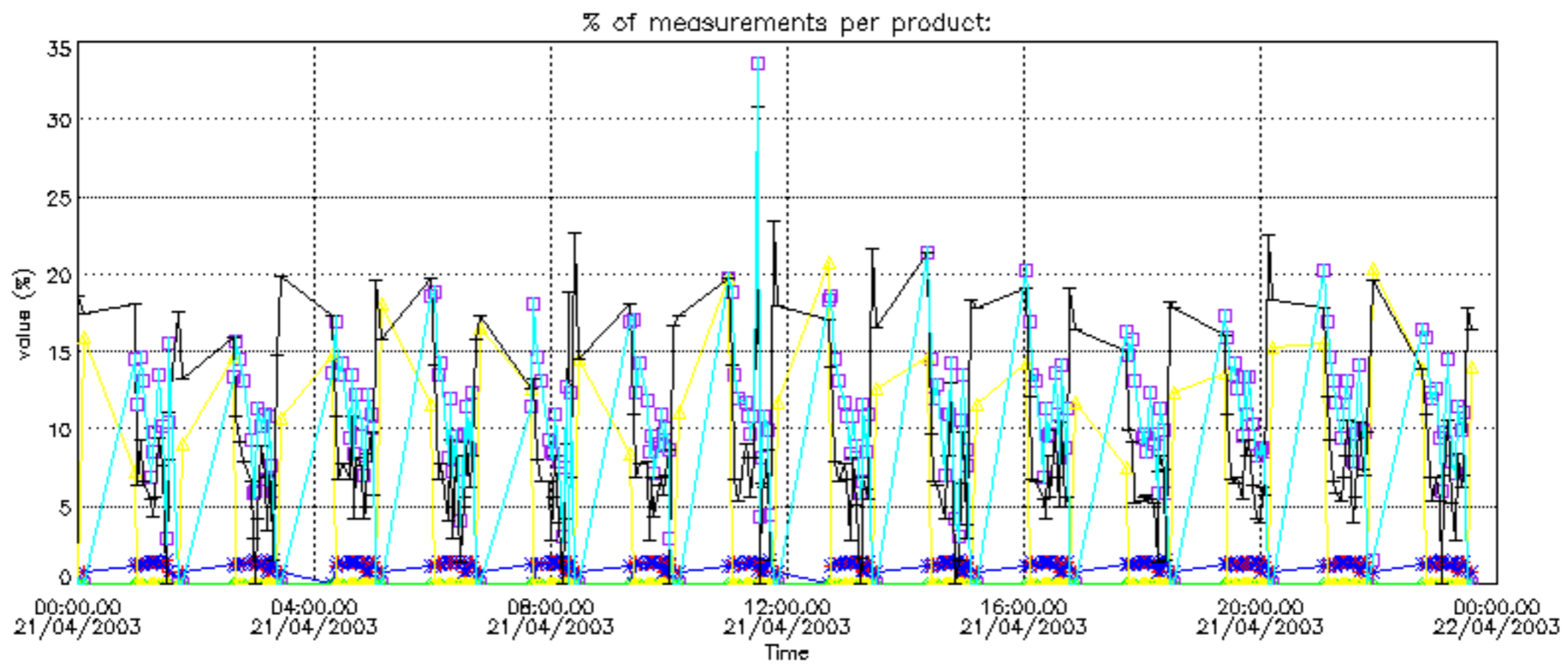
Percentage of flagged data per NO2 profile



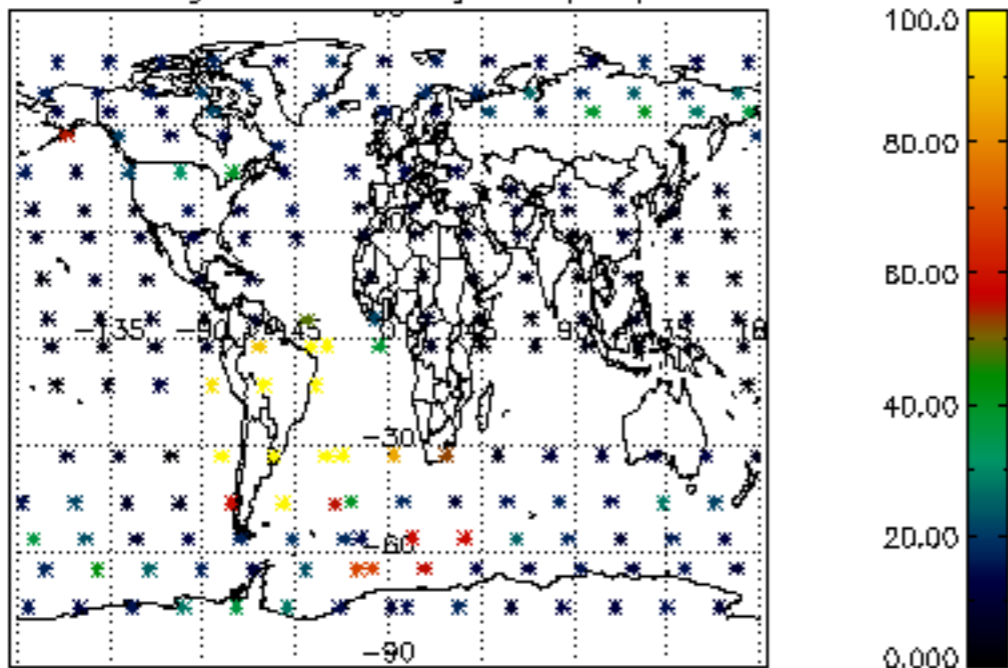
Percentage of flagged data per NO3 profile



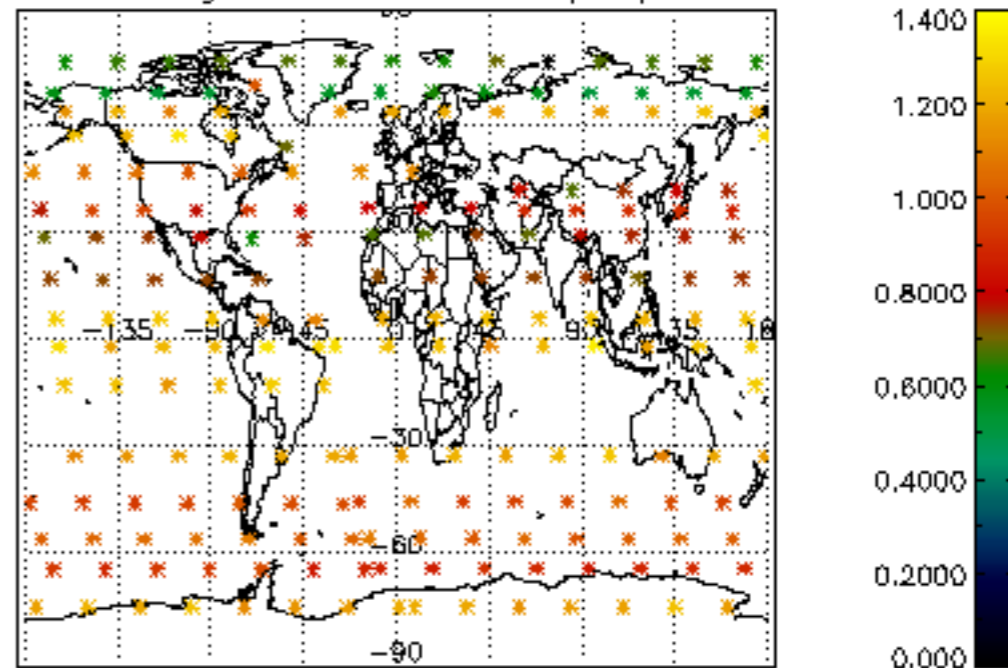




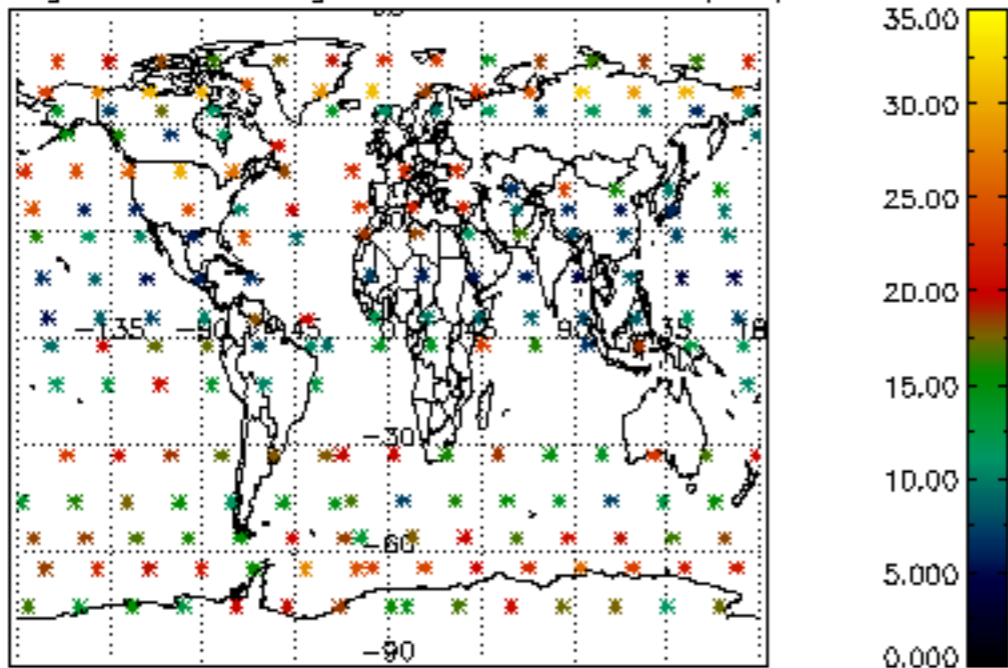
Percentage of cosmic ray hits per profile



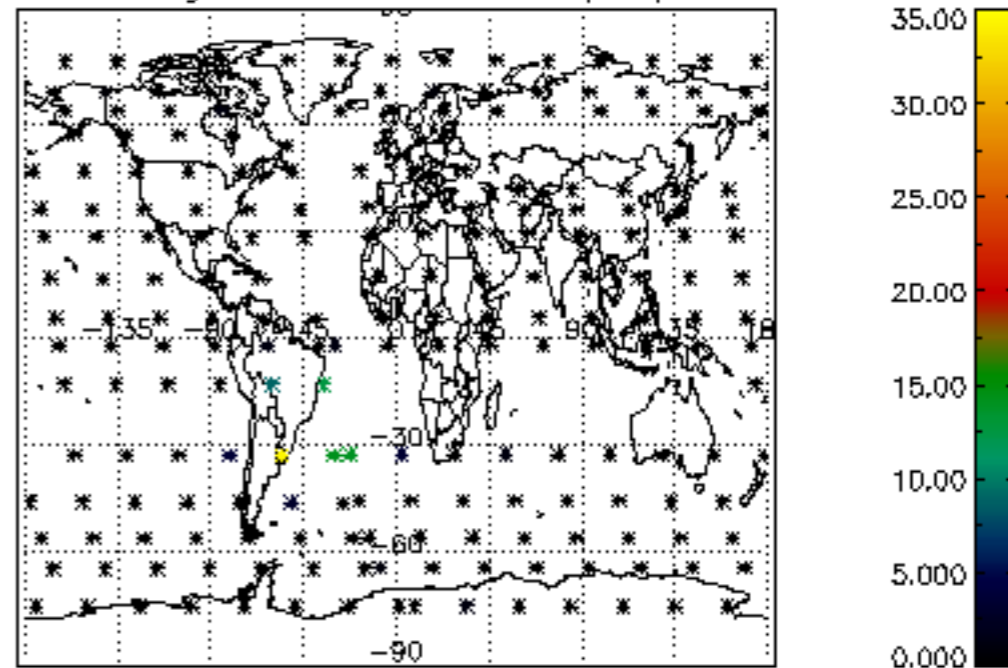
Percentage of datation errors per profile



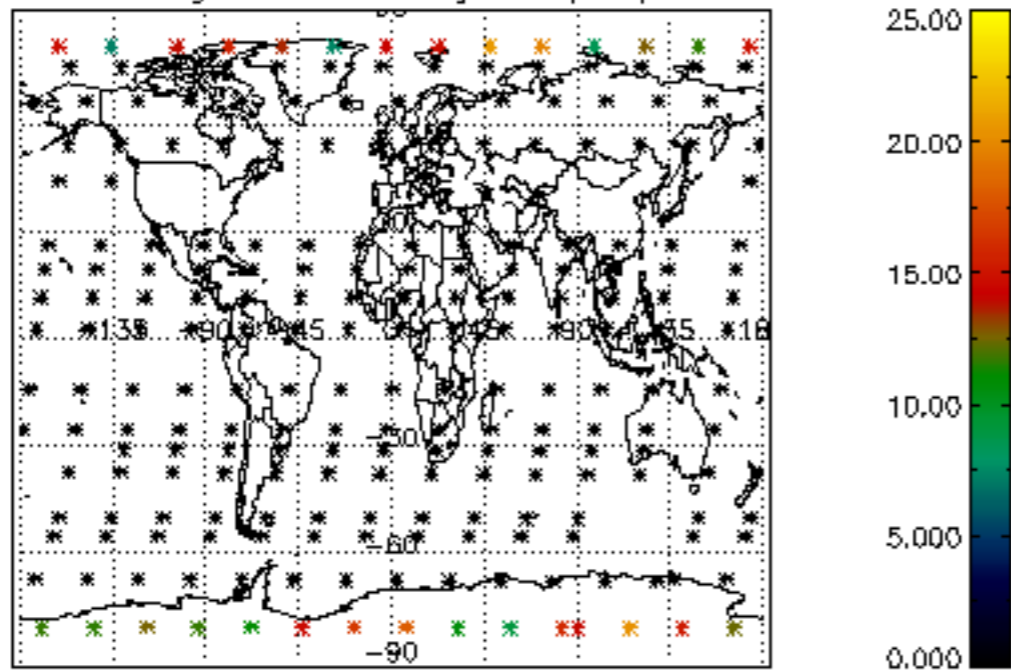
Percentage of star falling outside central band per profile



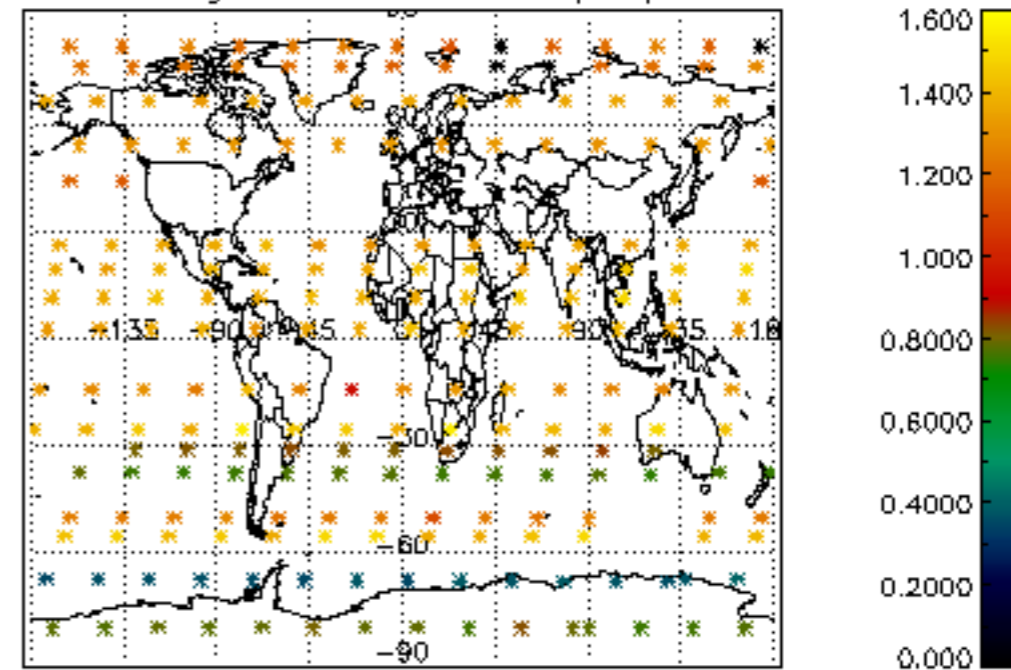
Percentage of saturation errors per profile



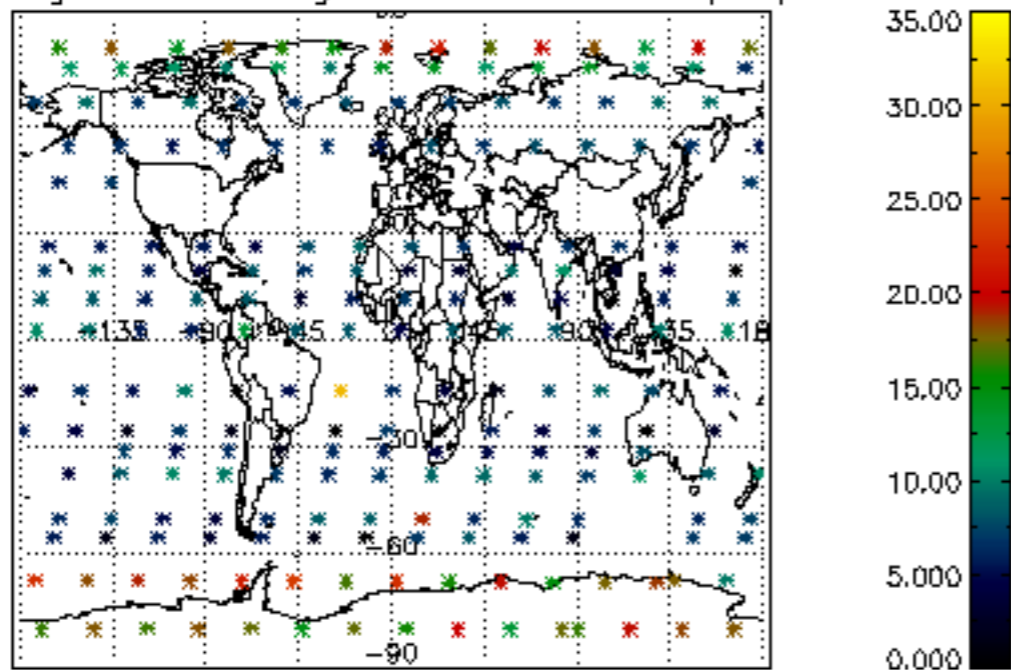
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

