

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 13:50:34
Data source version	GOMOS/6.01
Start time of products	20-05-2011 (20MAY2011 00:00:00)
Stop time of products	21-05-2011 (21MAY2011 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	320
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

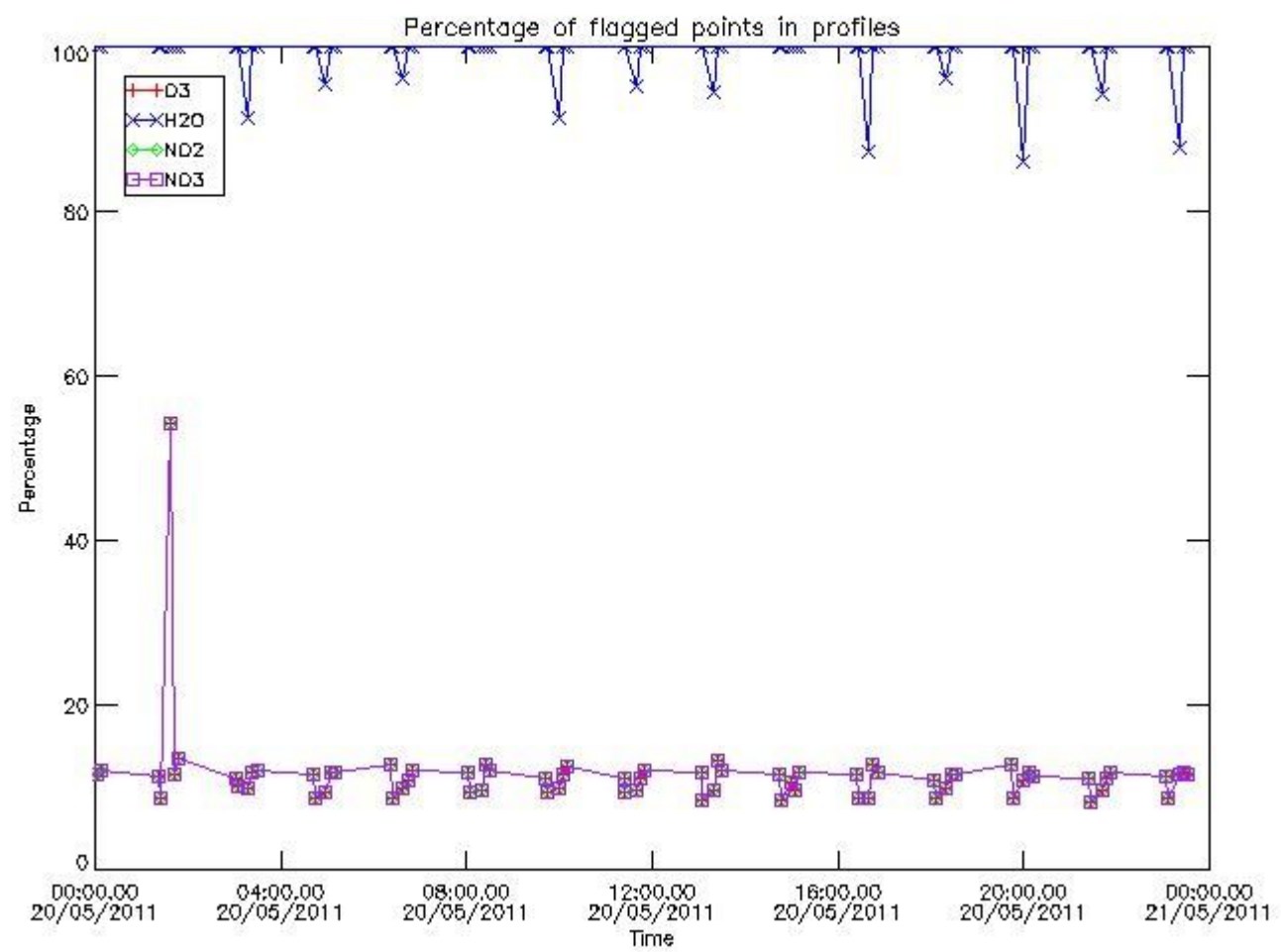
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20110520_000258_000000453102_00347_48206_9750.N1	20-MAY-2011 00:02:58	Dark	44.500	31	Alp Gru	1.7340	15200.	89	48206	No
2	GOM_NL__2PRFIN20110520_000826_000000423102_00347_48206_9751.N1	20-MAY-2011 00:08:26	Dark	42.000	45	Alp Pav	1.9400	26000.	84	48206	No
3	GOM_NL__2PRFIN20110520_001628_000000443102_00347_48206_9752.N1	20-MAY-2011 00:16:28	Straylight	44.000	147	Alp Ara	2.8770	26000.	88	48206	No
4	GOM_NL__2PRFIN20110520_001802_000000573102_00347_48206_9753.N1	20-MAY-2011 00:18:02	Straylight	56.500	40	The Sco	1.8590	7100.0	113	48206	No
5	GOM_NL__2PRFIN20110520_001953_000000533102_00347_48206_9754.N1	20-MAY-2011 00:19:53	Straylight	52.500	25	35Lam Sco	1.6200	28000.	105	48206	No
6	GOM_NL__2PRFIN20110520_002202_000000523102_00347_48206_9755.N1	20-MAY-2011 00:22:02	Twilight_stray	52.000	75	26Eps Sco	2.2910	4250.0	104	48206	No
7	GOM_NL__2PRFIN20110520_002458_000000603102_00347_48206_9756.N1	20-MAY-2011 00:24:58	Twilight_stray	59.500	16	21Alp Sco	1.0200	3000.0	119	48206	No
8	GOM_NL__2PRFIN20110520_002635_000000453102_00347_48206_9757.N1	20-MAY-2011 00:26:35	Bright	45.000	80	7Del Sco	2.3160	30000.	90	48206	No
9	GOM_NL__2PRFIN20110520_002822_000000563102_00347_48206_9758.N1	20-MAY-2011 00:28:22	Bright	56.000	86	35Eta Oph	2.4300	10200.	112	48206	No
10	GOM_NL__2PRFIN20110520_003028_000000493102_00347_48206_9759.N1	20-MAY-2011 00:30:28	Bright	48.500	98	13Zet Oph	2.5710	30000.	97	48206	No
11	GOM_NL__2PRFIN20110520_003251_000000463102_00347_48206_9760.N1	20-MAY-2011 00:32:51	Bright	46.000	120	1Del Oph	2.7340	3200.0	92	48206	No
12	GOM_NL__2PRFIN20110520_003557_000000423102_00347_48206_9761.N1	20-MAY-2011 00:35:57	Bright	41.500	102	24Alp Ser	2.6000	4250.0	83	48206	No
13	GOM_NL__2PRFIN20110520_004210_000000423102_00347_48206_9762.N1	20-MAY-2011 00:42:10	Bright	42.000	67	5Alp CrB	2.2210	11000.	84	48206	No
14	GOM_NL__2PRFIN20110520_004559_000000503102_00347_48206_9763.N1	20-MAY-2011 00:45:59	Bright	49.500	133	40Zet Her	2.8070	6000.0	99	48206	No
15	GOM_NL__2PRFIN20110520_005304_000000423102_00347_48206_9764.N1	20-MAY-2011 00:53:04	Bright	41.500	119	14Eta Dra	2.7270	4700.0	83	48206	No
16	GOM_NL__2PRFIN20110520_005459_000000573102_00347_48206_9765.N1	20-MAY-2011 00:54:59	Bright	56.500	69	33Gam Dra	2.2310	3800.0	113	48206	No
17	GOM_NL__2PRFIN20110520_010355_000000463102_00347_48206_9766.N1	20-MAY-2011 01:03:55	Bright	46.000	89	5Alp Cep	2.4510	8000.0	92	48206	No
18	GOM_NL__2PRFIN20110520_010755_000000363102_00347_48206_9767.N1	20-MAY-2011 01:07:55	Bright	36.000	74	11Bet Cas	2.2680	6600.0	72	48206	No
19	GOM_NL__2PRFIN20110520_011722_000000473102_00347_48206_9768.N1	20-MAY-2011 01:17:22	Twilight_stray	46.500	58	21Alp And	2.0730	11000.	93	48206	No
20	GOM_NL__2PRFIN20110520_012140_000000453102_00347_48206_9769.N1	20-MAY-2011 01:21:40	Dark	45.000	140	88Gam Peg	2.8340	26000.	90	48206	No
21	GOM_NL__2PRFIN20110520_012335_000000583102_00347_48206_9770.N1	20-MAY-2011 01:23:35	Dark	58.000	90	54Alp Peg	2.4870	11000.	116	48206	No
22	GOM_NL__2PRFIN20110520_013730_000000613102_00347_48206_9771.N1	20-MAY-2011 01:37:30	Dark	60.500	18	24Alp PsA	1.1660	9700.0	121	48206	No
23	GOM_NL__2PRFIN20110520_014313_000000443102_00348_48207_9768.N1	20-MAY-2011 01:43:13	Dark	44.000	31	Alp Gru	1.7340	15200.	88	48207	No
24	GOM_NL__2PRFIN20110520_014840_000000423102_00348_48207_9769.N1	20-MAY-2011 01:48:40	Dark	41.500	45	Alp Pav	1.9400	26000.	83	48207	No
25	GOM_NL__2PRFIN20110520_015642_000000443102_00348_48207_9770.N1	20-MAY-2011 01:56:42	Straylight	44.000	147	Alp Ara	2.8770	26000.	88	48207	No
26	GOM_NL__2PRFIN20110520_015817_000000583102_00348_48207_9771.N1	20-MAY-2011 01:58:17	Straylight	58.000	40	The Sco	1.8590	7100.0	116	48207	No
27	GOM_NL__2PRFIN20110520_020008_000000533102_00348_48207_9772.N1	20-MAY-2011 02:00:08	Straylight	52.500	25	35Lam Sco	1.6200	28000.	105	48207	No
28	GOM_NL__2PRFIN20110520_020216_000000493102_00348_48207_9773.N1	20-MAY-2011 02:02:16	Twilight_stray	49.000	75	26Eps Sco	2.2910	4250.0	98	48207	No
29	GOM_NL__2PRFIN20110520_020512_000000563102_00348_48207_9774.N1	20-MAY-2011 02:05:12	Twilight_stray	56.000	16	21Alp Sco	1.0200	3000.0	112	48207	No
30	GOM_NL__2PRFIN20110520_020650_000000463102_00348_48207_9775.N1	20-MAY-2011 02:06:50	Bright	45.500	80	7Del Sco	2.3160	30000.	91	48207	No
31	GOM_NL__2PRFIN20110520_020837_000000563102_00348_48207_9776.N1	20-MAY-2011 02:08:37	Bright	56.000	86	35Eta Oph	2.4300	10200.	112	48207	No
32	GOM_NL__2PRFIN20110520_021042_000000503102_00348_48207_9777.N1	20-MAY-2011 02:10:42	Bright	49.500	98	13Zet Oph	2.5710	30000.	99	48207	No
33	GOM_NL__2PRFIN20110520_021305_000000473102_00348_48207_9778.N1	20-MAY-2011 02:13:05	Bright	46.500	120	1Del Oph	2.7340	3200.0	93	48207	No
34	GOM_NL__2PRFIN20110520_021611_000000423102_00348_48207_9779.N1	20-MAY-2011 02:16:11	Bright	42.000	102	24Alp Ser	2.6000	4250.0	84	48207	No
35	GOM_NL__2PRFIN20110520_022223_000000393102_00348_48207_9780.N1	20-MAY-2011 02:22:23	Bright	39.000	67	5Alp CrB	2.2210	11000.	78	48207	No
36	GOM_NL__2PRFIN20110520_022613_000000503102_00348_48207_9781.N1	20-MAY-2011 02:26:13	Bright	49.500	133	40Zet Her	2.8070	6000.0	99	48207	No
37	GOM_NL__2PRFIN20110520_023317_000000393102_00348_48207_9782.N1	20-MAY-2011 02:33:17	Bright	38.500	119	14Eta Dra	2.7270	4700.0	77	48207	No
38	GOM_NL__2PRFIN20110520_023512_000000543102_00348_48207_9783.N1	20-MAY-2011 02:35:12	Bright	54.000	69	33Gam Dra	2.2310	3800.0	108	48207	No
39	GOM_NL__2PRFIN20110520_024409_000000443102_00348_48207_9784.N1	20-MAY-2011 02:44:09	Bright	43.500	89	5Alp Cep	2.4510	8000.0	87	48207	No
40	GOM_NL__2PRFIN20110520_024809_000000563102_00348_48207_9785.N1	20-MAY-2011 02:48:09	Bright	56.000	74	11Bet Cas	2.2680	6600.0	112	48207	No
41	GOM_NL__2PRFIN20110520_025736_000000483102_00348_48207_9786.N1	20-MAY-2011 02:57:36	Twilight_stray	47.500	58	21Alp And	2.0730	11000.	95	48207	No
42	GOM_NL__2PRFIN20110520_030155_000000463102_00348_48207_9787.N1	20-MAY-2011 03:01:55	Dark	45.500	140	88Gam Peg	2.8340	26000.	91	48207	No

279	GOM_NL__2PRFIN20110520_205547_000000383102_00359_48218_0373.N1	20-MAY-2011 20:55:47	Bright	37.500	119	14Eta Dra	2.7270	4700.0	75	48218	No
280	GOM_NL__2PRFIN20110520_205735_000000563102_00359_48218_0374.N1	20-MAY-2011 20:57:35	Bright	55.500	69	33Gam Dra	2.2310	3800.0	111	48218	No
281	GOM_NL__2PRFIN20110520_210637_000000473102_00359_48218_0375.N1	20-MAY-2011 21:06:37	Bright	46.500	89	5Alp Cep	2.4510	8000.0	93	48218	No
282	GOM_NL__2PRFIN20110520_211042_000000573102_00359_48218_0376.N1	20-MAY-2011 21:10:42	Bright	57.000	74	11Bet Cas	2.2680	6600.0	114	48218	No
283	GOM_NL__2PRFIN20110520_212012_000000463102_00359_48218_0377.N1	20-MAY-2011 21:20:12	Tw_i_and_stray	46.000	58	21Alp And	2.0730	11000.	92	48218	No
284	GOM_NL__2PRFIN20110520_212432_000000463102_00359_48218_0378.N1	20-MAY-2011 21:24:32	Dark	46.000	140	88Gam Peg	2.8340	26000.	92	48218	No
285	GOM_NL__2PRFIN20110520_212630_000000613102_00359_48218_0379.N1	20-MAY-2011 21:26:30	Dark	61.000	90	54Alp Peg	2.4870	11000.	122	48218	No
286	GOM_NL__2PRFIN20110520_214029_000000533102_00359_48218_0380.N1	20-MAY-2011 21:40:29	Dark	53.000	18	24Alp PsA	1.1660	9700.0	106	48218	No
287	GOM_NL__2PRFIN20110520_214611_000000463102_00360_48219_0439.N1	20-MAY-2011 21:46:11	Dark	45.500	31	Alp Gru	1.7340	15200.	91	48219	No
288	GOM_NL__2PRFIN20110520_215137_000000443102_00360_48219_0440.N1	20-MAY-2011 21:51:37	Dark	43.500	45	Alp Pav	1.9400	26000.	87	48219	No
289	GOM_NL__2PRFIN20110520_215937_000000433102_00360_48219_0441.N1	20-MAY-2011 21:59:37	Straylight	42.500	147	Alp Ara	2.8770	26000.	85	48219	No
290	GOM_NL__2PRFIN20110520_220112_000000523102_00360_48219_0442.N1	20-MAY-2011 22:01:12	Straylight	51.500	40	The Sco	1.8590	7100.0	103	48219	No
291	GOM_NL__2PRFIN20110520_220303_000000543102_00360_48219_0443.N1	20-MAY-2011 22:03:03	Straylight	53.500	25	35Lam Sco	1.6200	28000.	107	48219	No
292	GOM_NL__2PRFIN20110520_220509_000000533102_00360_48219_0444.N1	20-MAY-2011 22:05:09	Tw_i_and_stray	52.500	75	26Eps Sco	2.2910	4250.0	105	48219	No
293	GOM_NL__2PRFIN20110520_220804_000000573102_00360_48219_0445.N1	20-MAY-2011 22:08:04	Tw_i_and_stray	56.500	16	21Alp Sco	1.0200	3000.0	113	48219	No
294	GOM_NL__2PRFIN20110520_220940_000000433102_00360_48219_0446.N1	20-MAY-2011 22:09:40	Bright	42.500	80	7Del Sco	2.3160	30000.	85	48219	No
295	GOM_NL__2PRFIN20110520_221126_000000543102_00360_48219_0447.N1	20-MAY-2011 22:11:26	Bright	53.500	86	35Eta Oph	2.4300	10200.	107	48219	No
296	GOM_NL__2PRFIN20110520_221330_000000503102_00360_48219_0448.N1	20-MAY-2011 22:13:30	Bright	49.500	98	13Zet Oph	2.5710	30000.	99	48219	No
297	GOM_NL__2PRFIN20110520_221551_000000453102_00360_48219_0449.N1	20-MAY-2011 22:15:51	Bright	45.000	120	1Del Oph	2.7340	3200.0	90	48219	No
298	GOM_NL__2PRFIN20110520_221857_000000413102_00360_48219_0450.N1	20-MAY-2011 22:18:57	Bright	41.000	102	24Alp Ser	2.6000	4250.0	82	48219	No
299	GOM_NL__2PRFIN20110520_222507_000000543102_00360_48219_0451.N1	20-MAY-2011 22:25:07	Bright	54.000	67	5Alp CrB	2.2210	11000.	108	48219	No
300	GOM_NL__2PRFIN20110520_222851_000000483102_00360_48219_0452.N1	20-MAY-2011 22:28:51	Bright	48.000	133	40Zet Her	2.8070	6000.0	96	48219	No
301	GOM_NL__2PRFIN20110520_223600_000000433102_00360_48219_0453.N1	20-MAY-2011 22:36:00	Bright	42.500	119	14Eta Dra	2.7270	4700.0	85	48219	No
302	GOM_NL__2PRFIN20110520_223748_000000533102_00360_48219_0454.N1	20-MAY-2011 22:37:48	Bright	53.000	69	33Gam Dra	2.2310	3800.0	106	48219	No
303	GOM_NL__2PRFIN20110520_224651_000000503102_00360_48219_0455.N1	20-MAY-2011 22:46:51	Bright	49.500	89	5Alp Cep	2.4510	8000.0	99	48219	No
304	GOM_NL__2PRFIN20110520_225056_000000573102_00360_48219_0456.N1	20-MAY-2011 22:50:56	Bright	57.000	74	11Bet Cas	2.2680	6600.0	114	48219	No
305	GOM_NL__2PRFIN20110520_230026_000000483102_00360_48219_0457.N1	20-MAY-2011 23:00:26	Tw_i_and_stray	48.000	58	21Alp And	2.0730	11000.	96	48219	No
306	GOM_NL__2PRFIN20110520_230447_000000453102_00360_48219_0458.N1	20-MAY-2011 23:04:47	Dark	45.000	140	88Gam Peg	2.8340	26000.	90	48219	No
307	GOM_NL__2PRFIN20110520_230645_000000593102_00360_48219_0459.N1	20-MAY-2011 23:06:45	Dark	58.500	90	54Alp Peg	2.4870	11000.	117	48219	No
308	GOM_NL__2PRFIN20110520_232044_000000533102_00360_48219_0460.N1	20-MAY-2011 23:20:44	Dark	53.000	18	24Alp PsA	1.1660	9700.0	106	48219	No
309	GOM_NL__2PRFIN20110520_232626_000000433102_00361_48220_0445.N1	20-MAY-2011 23:26:26	Dark	43.000	31	Alp Gru	1.7340	15200.	86	48220	No
310	GOM_NL__2PRFIN20110520_233151_000000453102_00361_48220_0446.N1	20-MAY-2011 23:31:51	Dark	44.500	45	Alp Pav	1.9400	26000.	89	48220	No
311	GOM_NL__2PRFIN20110520_233951_000000433102_00361_48220_0447.N1	20-MAY-2011 23:39:51	Straylight	43.000	147	Alp Ara	2.8770	26000.	86	48220	No
312	GOM_NL__2PRFIN20110520_234126_000000503102_00361_48220_0448.N1	20-MAY-2011 23:41:26	Straylight	50.000	40	The Sco	1.8590	7100.0	100	48220	No
313	GOM_NL__2PRFIN20110520_234317_000000523102_00361_48220_0449.N1	20-MAY-2011 23:43:17	Straylight	52.000	25	35Lam Sco	1.6200	28000.	104	48220	No
314	GOM_NL__2PRFIN20110520_234523_000000533102_00361_48220_0450.N1	20-MAY-2011 23:45:23	Tw_i_and_stray	52.500	75	26Eps Sco	2.2910	4250.0	105	48220	No
315	GOM_NL__2PRFIN20110520_234817_000000613102_00361_48220_0451.N1	20-MAY-2011 23:48:17	Tw_i_and_stray	60.500	16	21Alp Sco	1.0200	3000.0	121	48220	No
316	GOM_NL__2PRFIN20110520_234954_000000593102_00361_48220_0452.N1	20-MAY-2011 23:49:54	Bright	59.000	80	7Del Sco	2.3160	30000.	118	48220	No
317	GOM_NL__2PRFIN20110520_235140_000000573102_00361_48220_0453.N1	20-MAY-2011 23:51:40	Bright	56.500	86	35Eta Oph	2.4300	10200.	113	48220	No
318	GOM_NL__2PRFIN20110520_235344_000000483102_00361_48220_0454.N1	20-MAY-2011 23:53:44	Bright	48.000	98	13Zet Oph	2.5710	30000.	96	48220	No
319	GOM_NL__2PRFIN20110520_235605_000000463102_00361_48220_0455.N1	20-MAY-2011 23:56:05	Bright	45.500	120	1Del Oph	2.7340	3200.0	91	48220	No
320	GOM_NL__2PRFIN20110520_235910_000000413102_00361_48220_0456.N1	20-MAY-2011 23:59:10	Bright	41.000	102	24Alp Ser	2.6000	4250.0	82	48220	No

3. Quality information per product

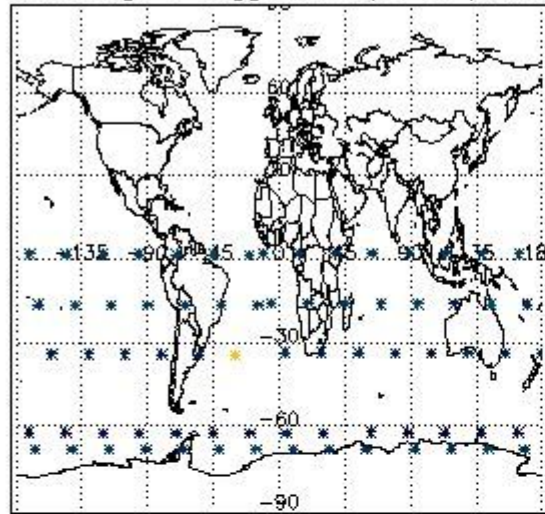
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

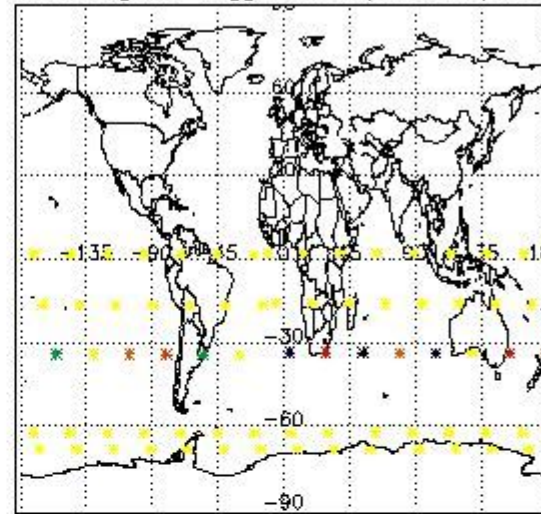


3.2 Plot quality information per product (world map)

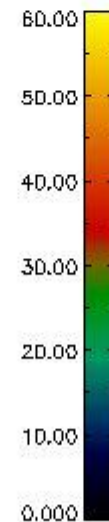
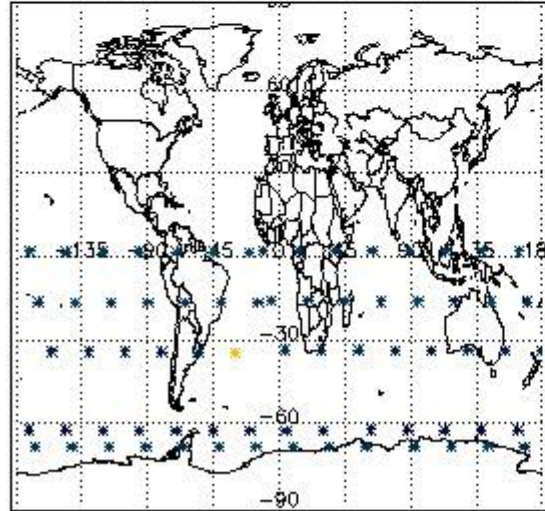
Percentage of flagged data per O3 profile



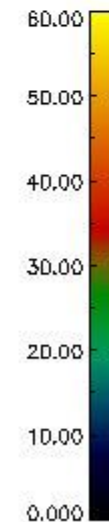
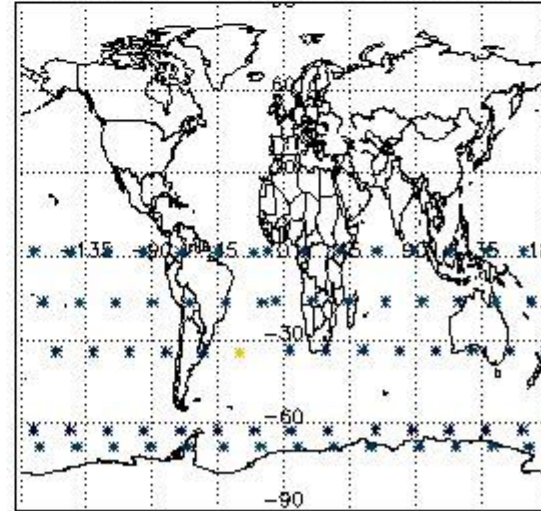
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

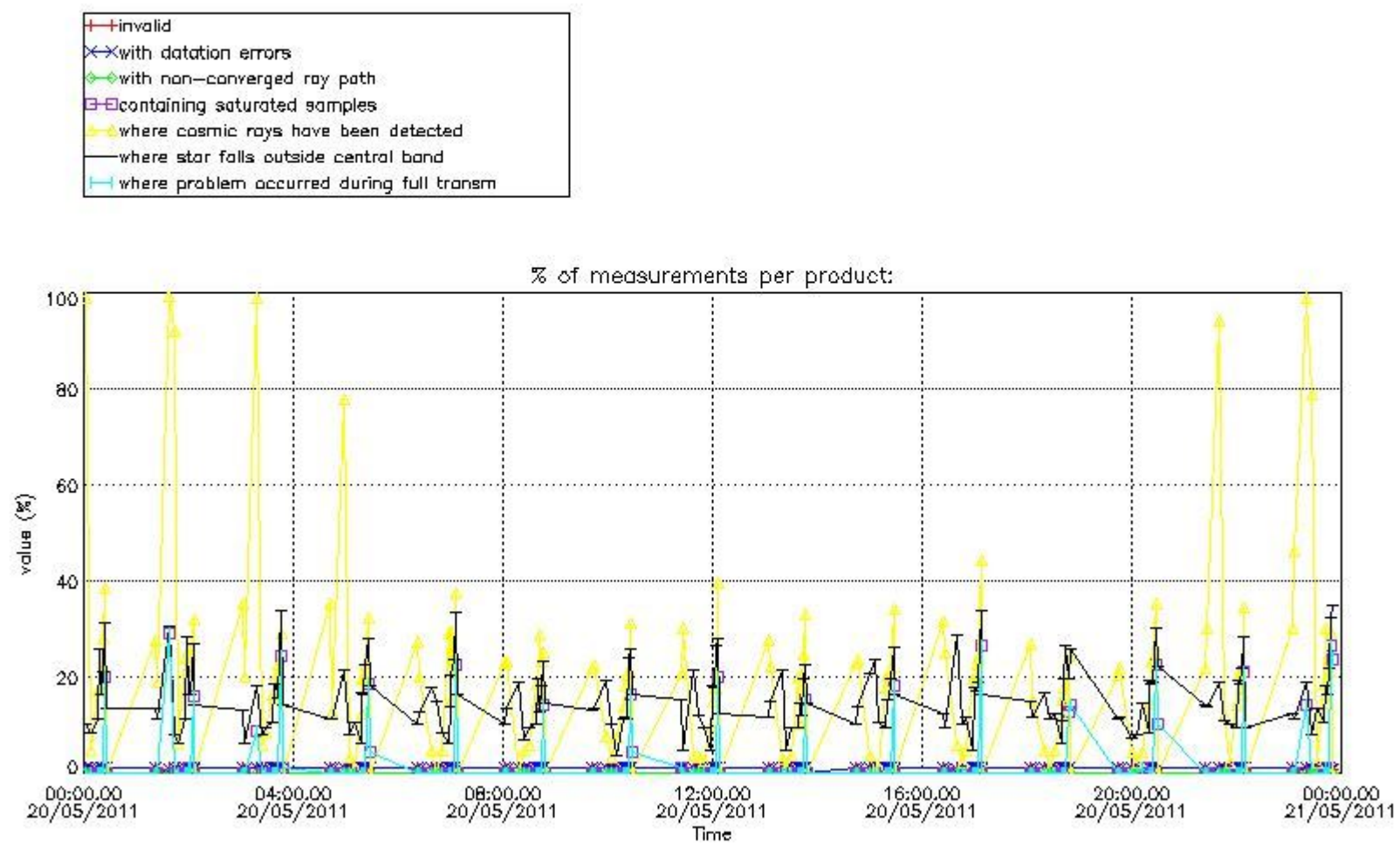


4. Level 1 quality information per product

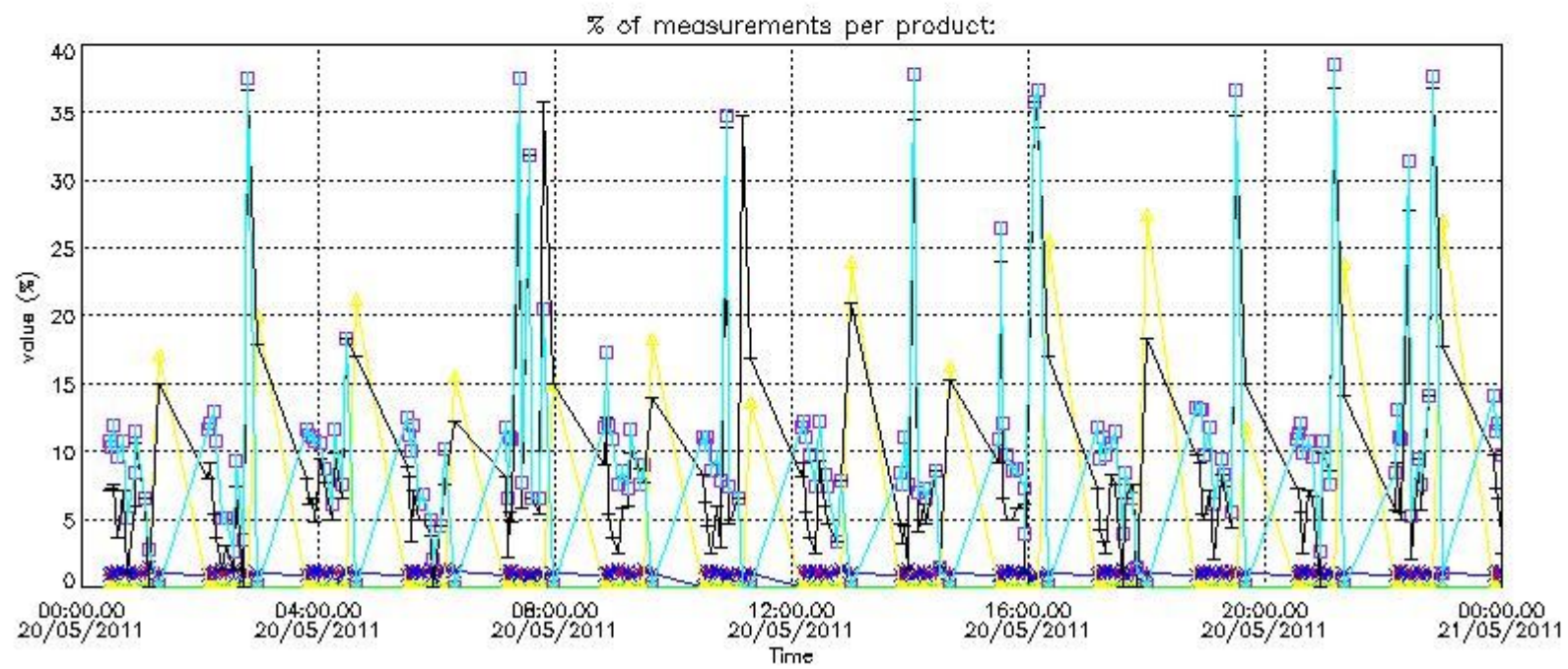
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

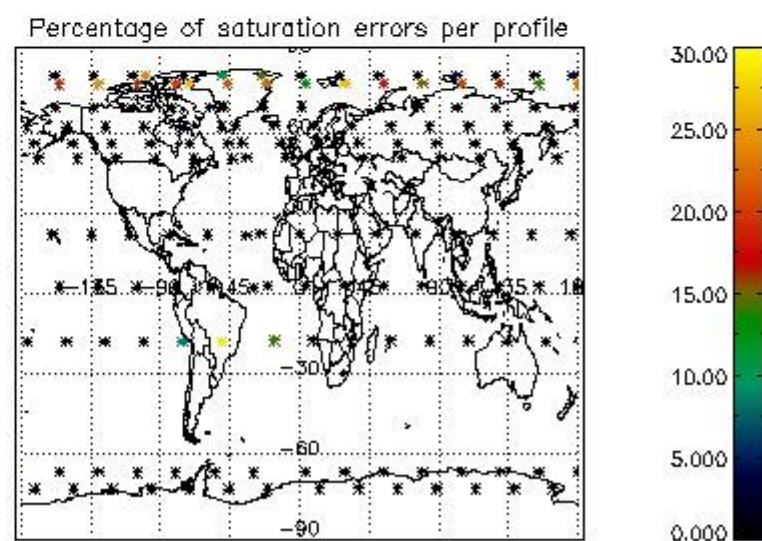
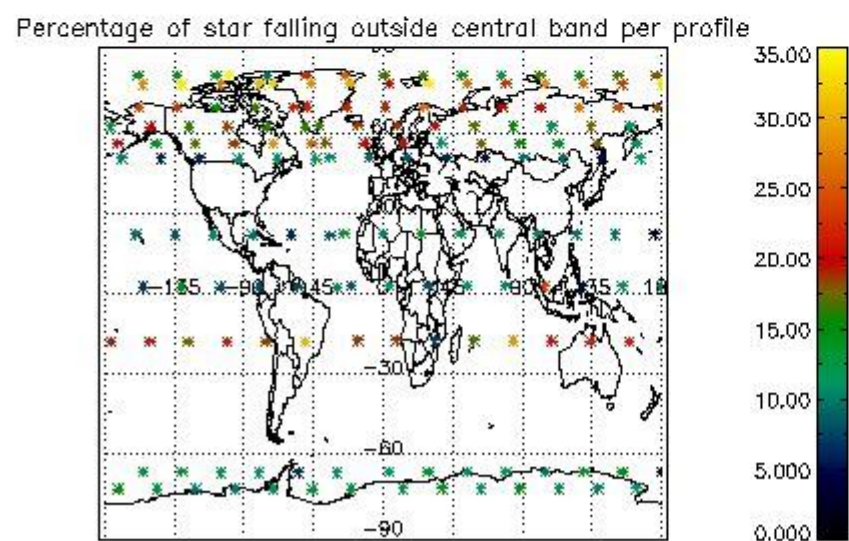
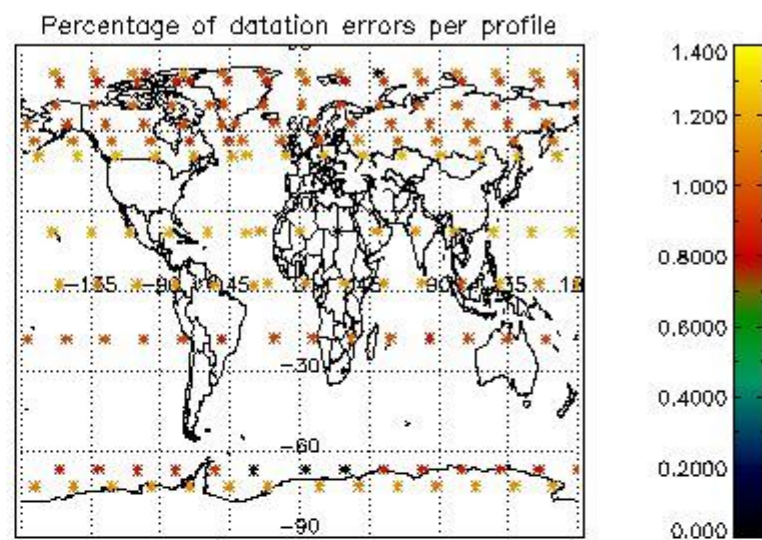
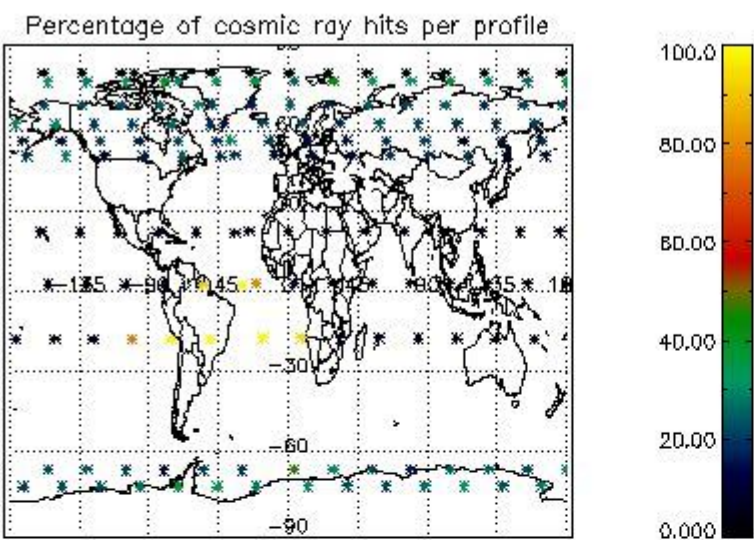


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

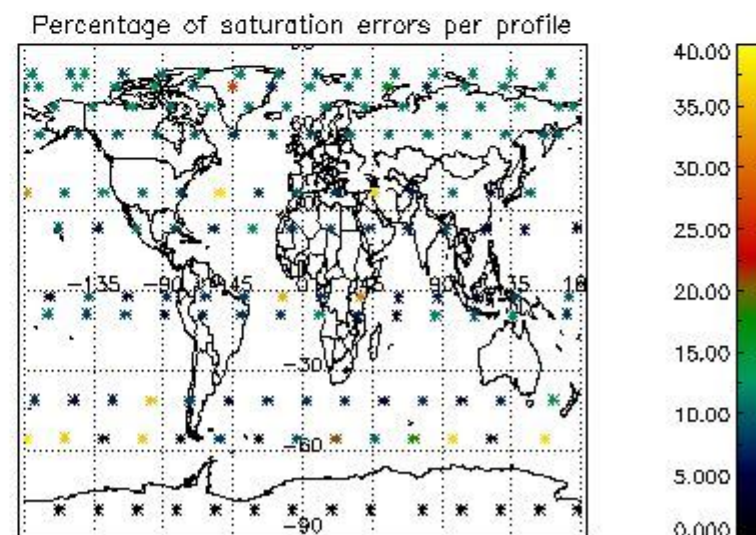
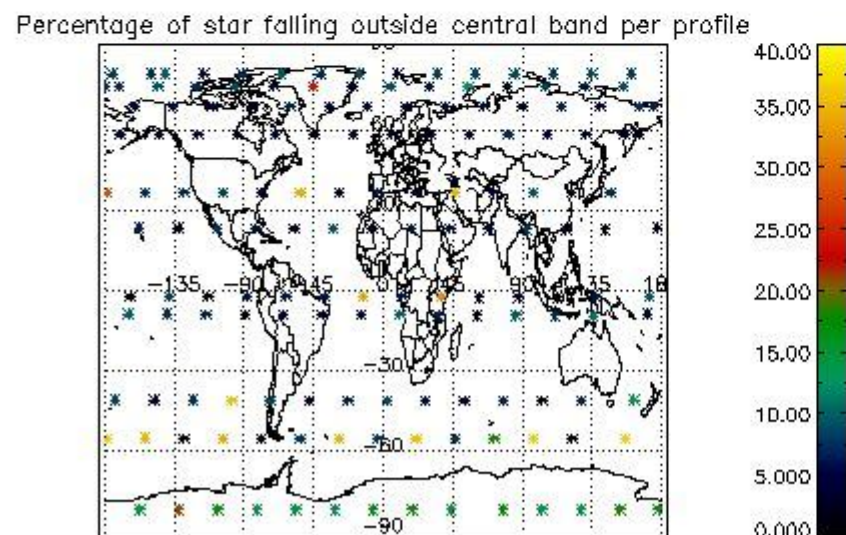
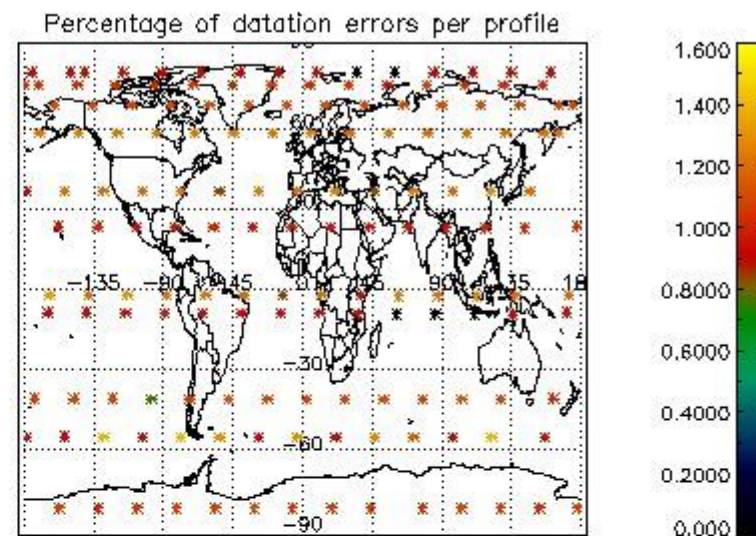
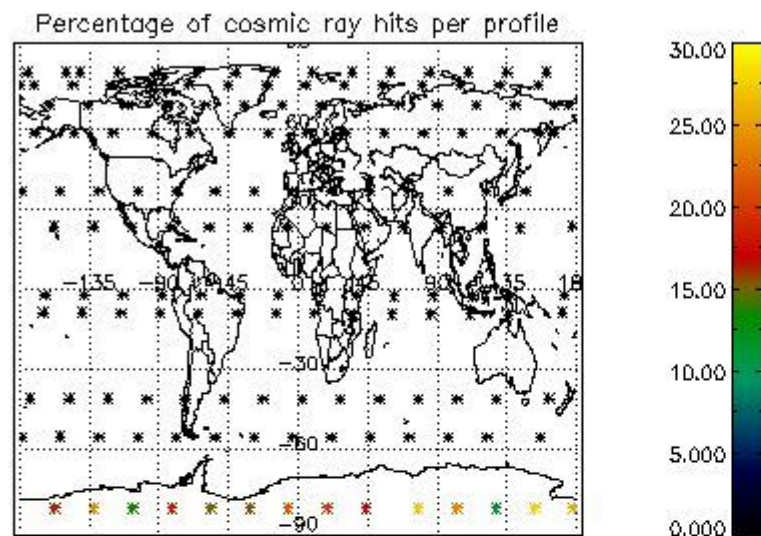


4.2 Plot quality information per product coming from level 1b processing (world map)

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

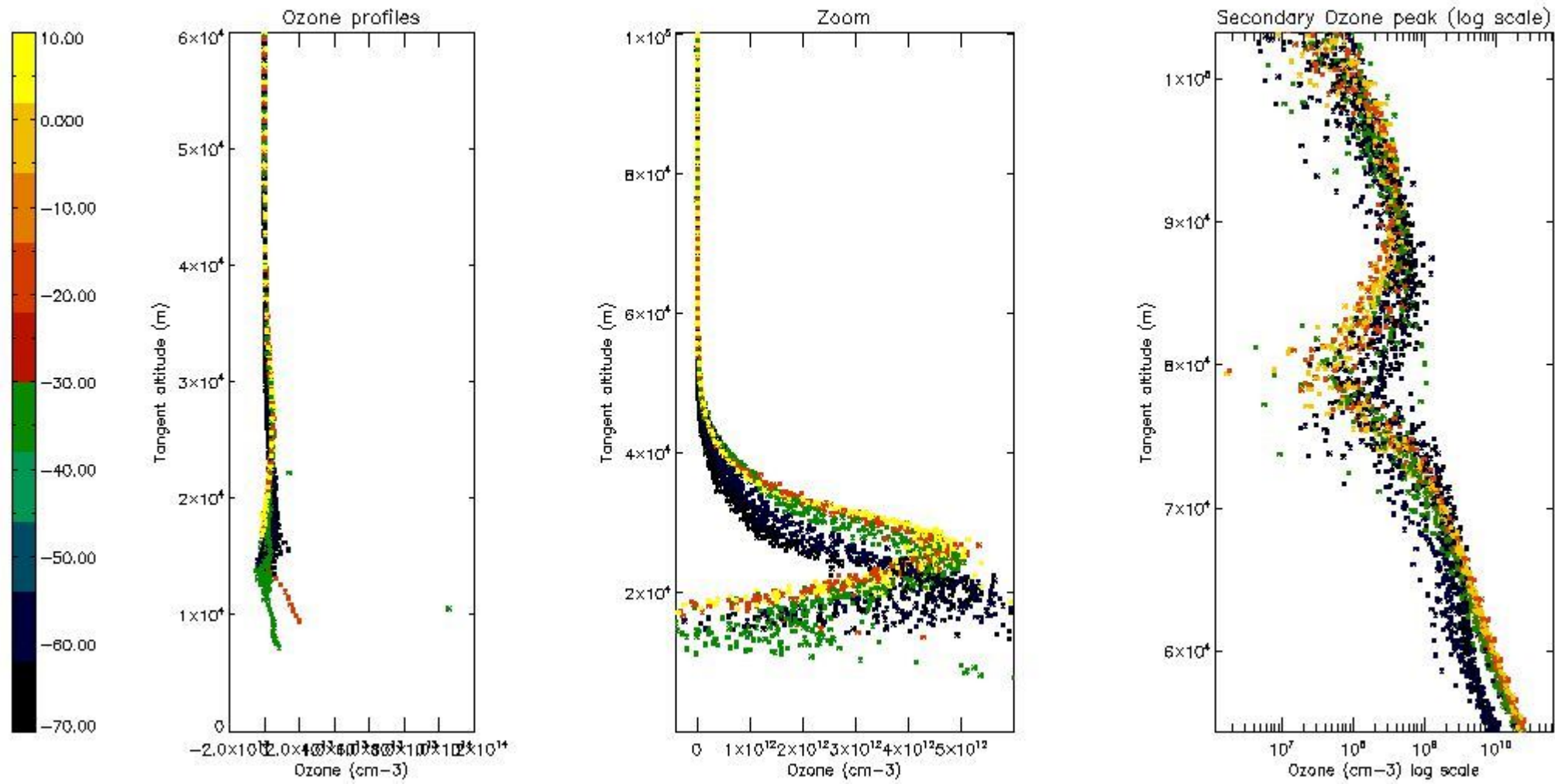
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	23
STD < 20	14

STD < 10	11
STD < 5	7

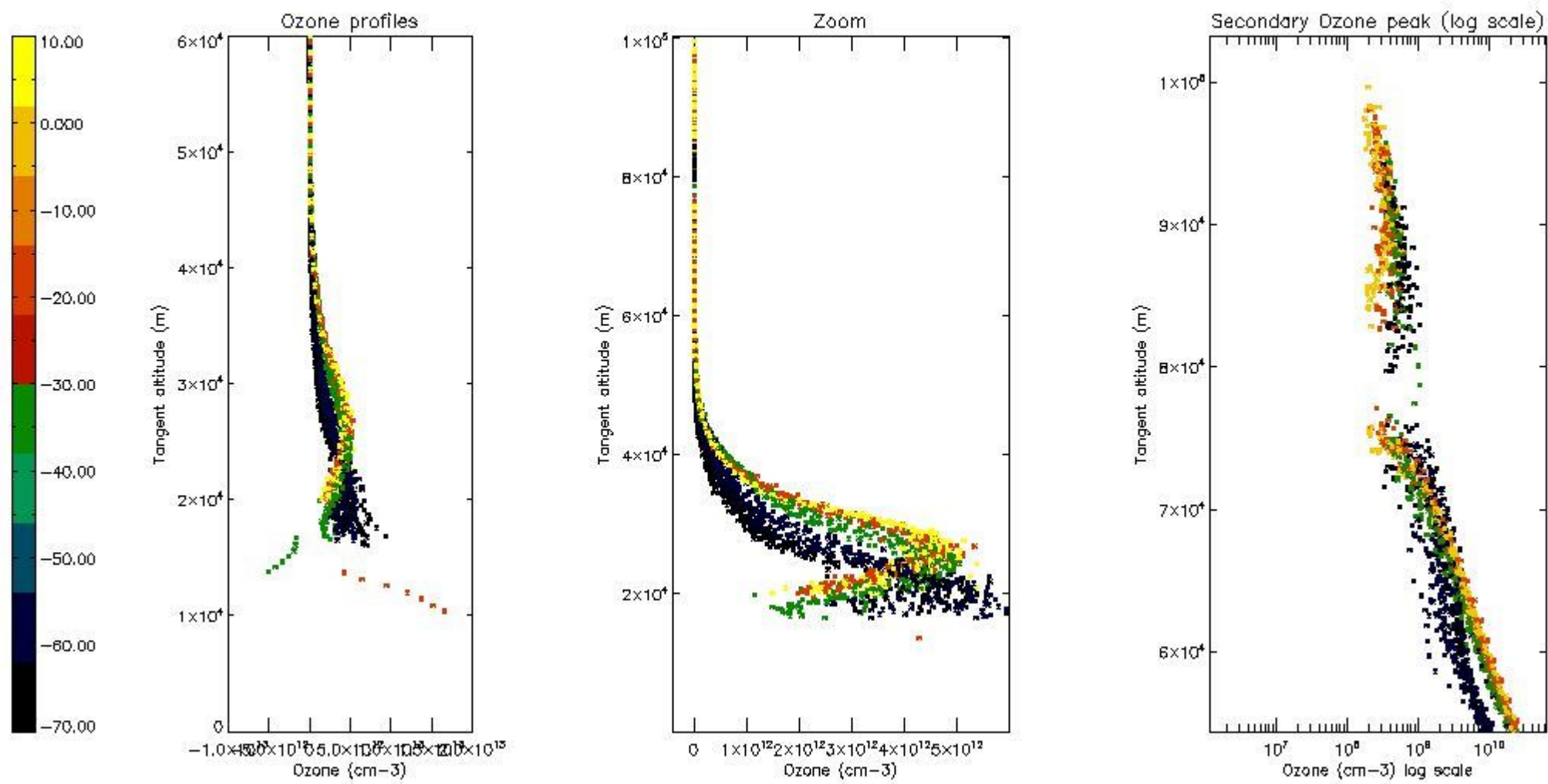
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



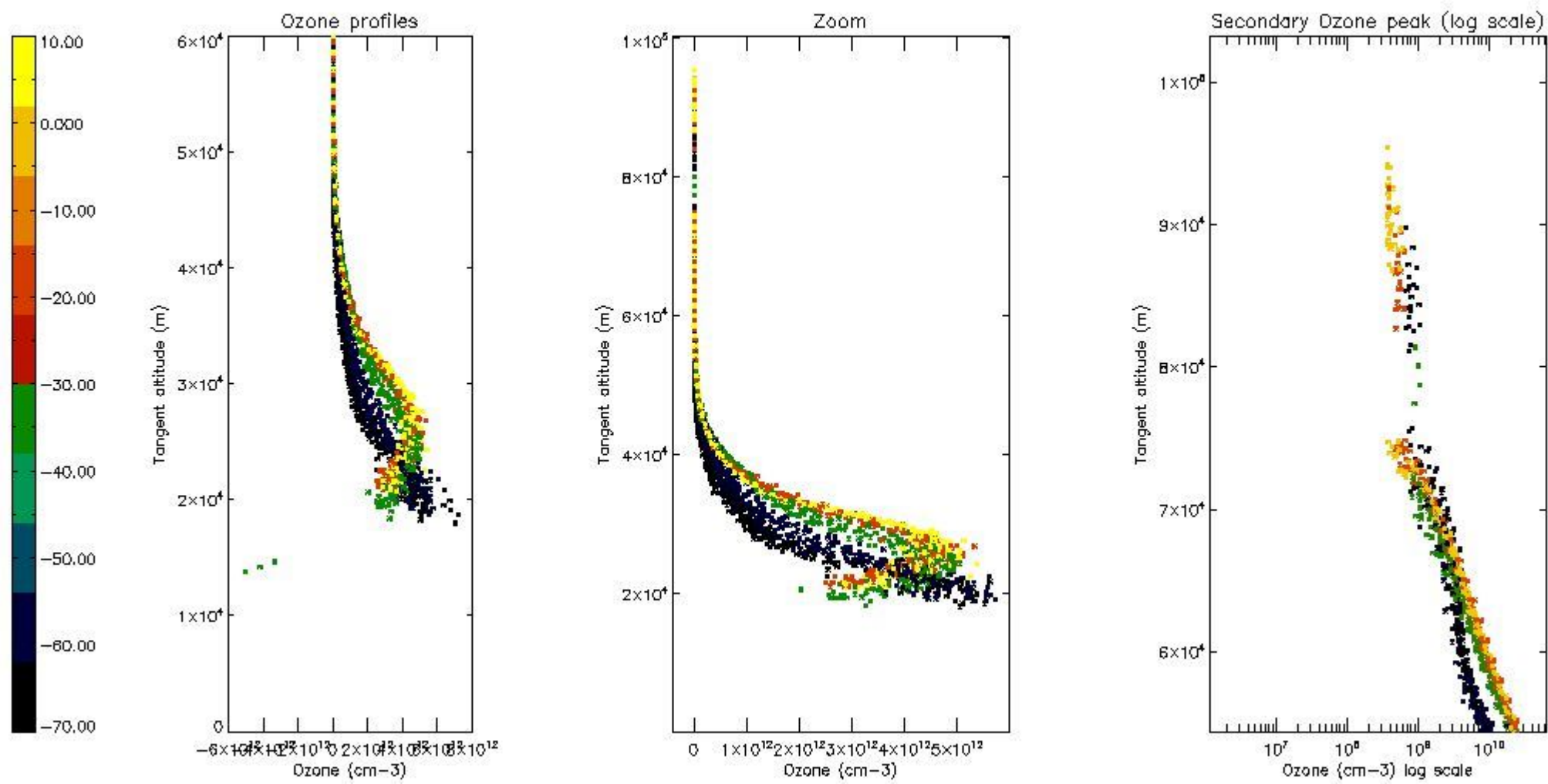
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



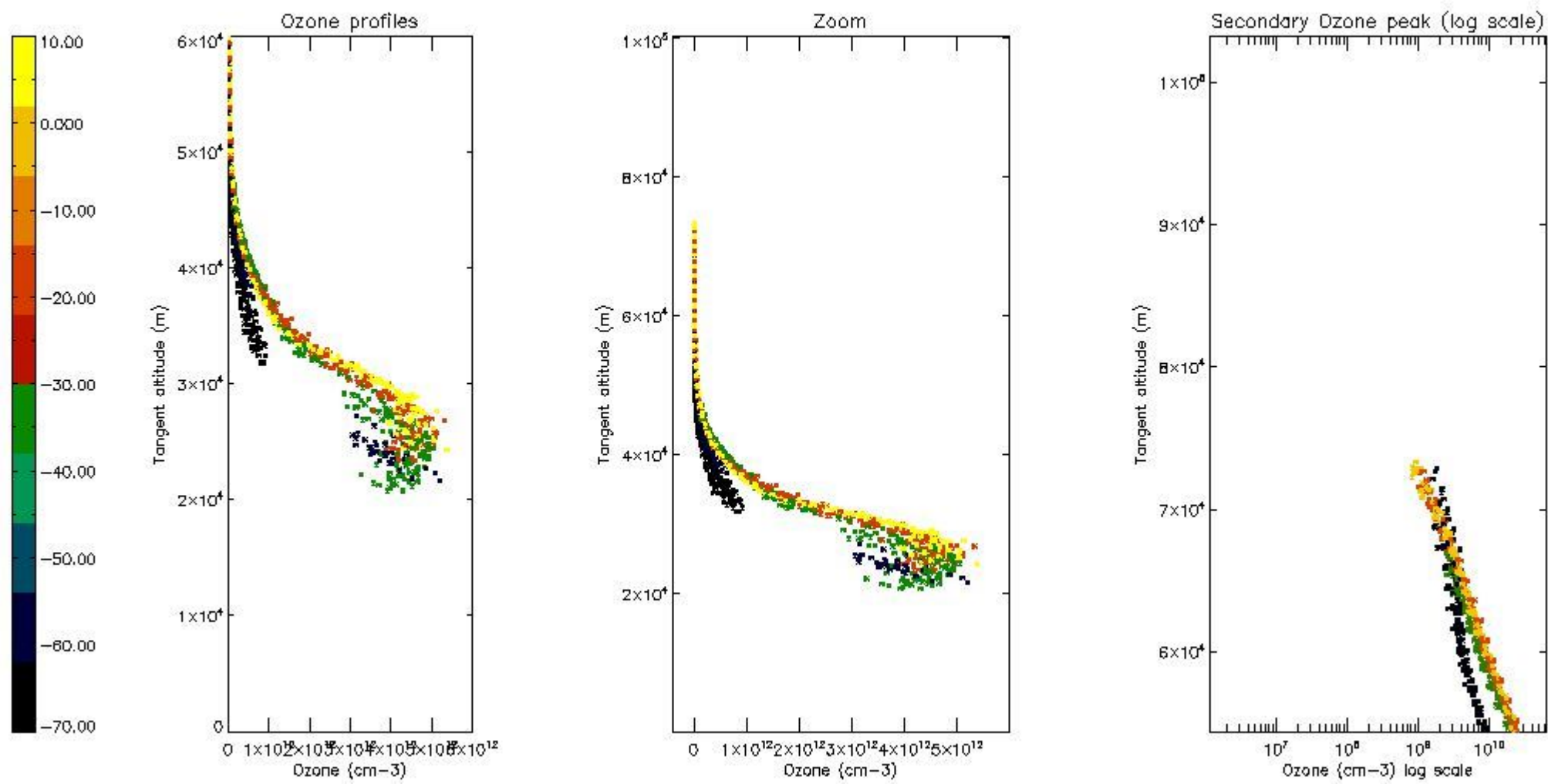
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



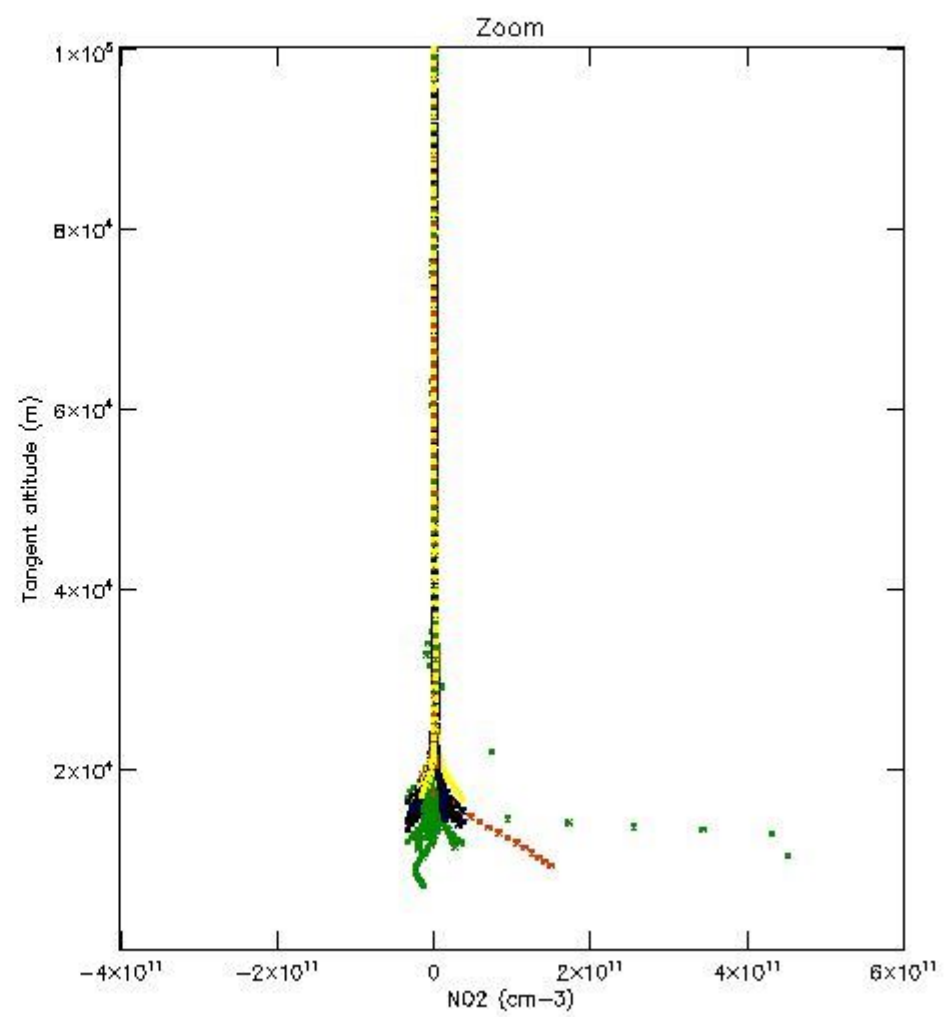
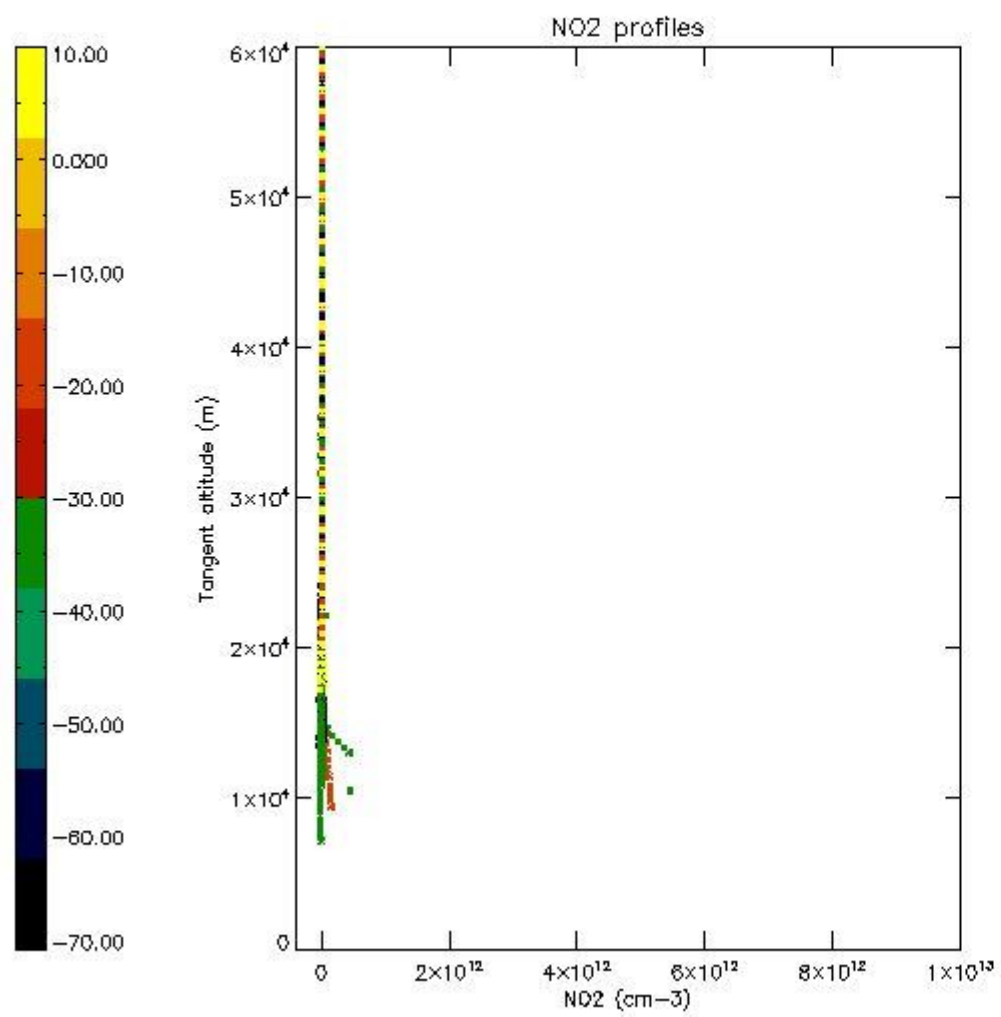
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



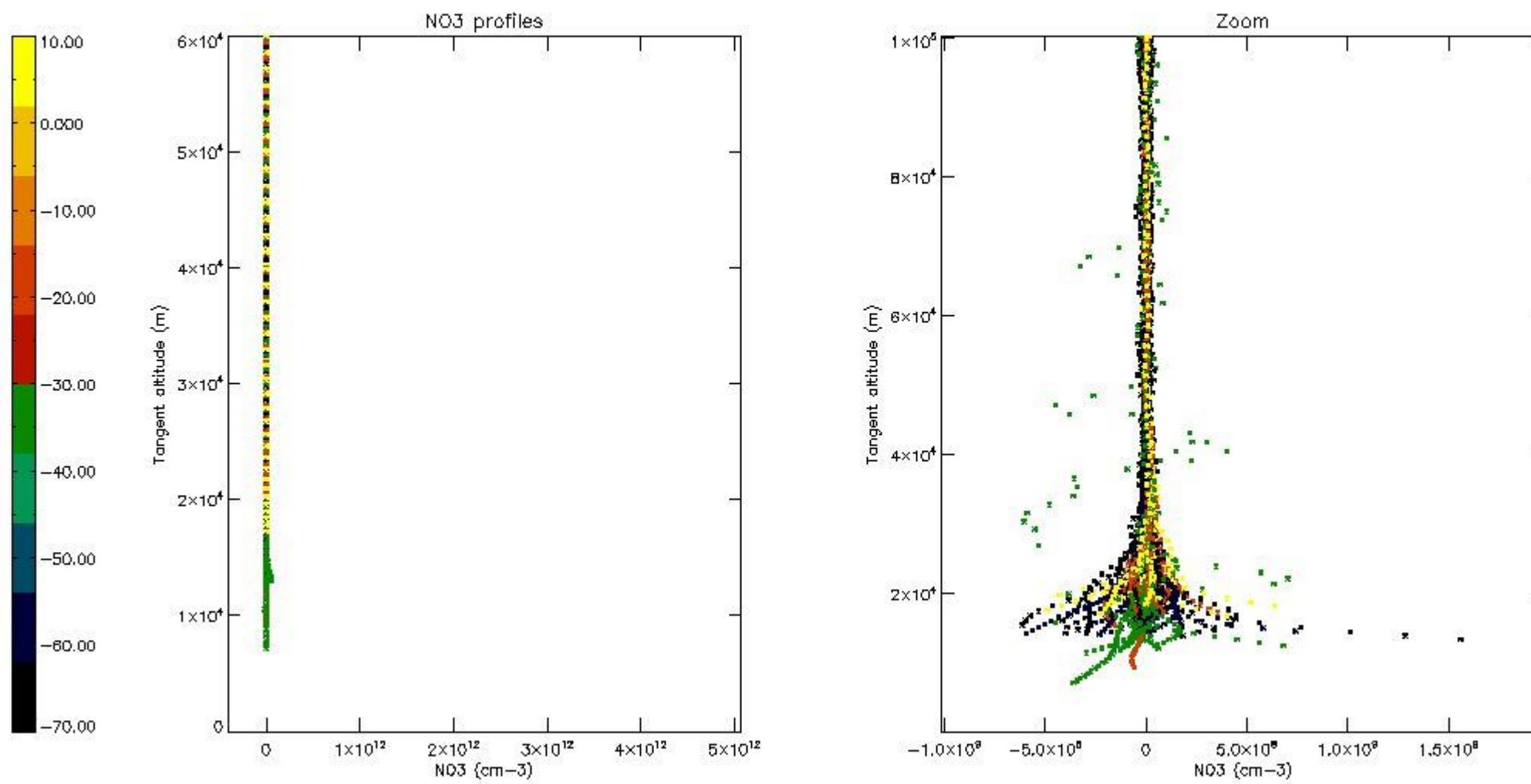
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

The colorbar represents the latitude.



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

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	20-MAY-2011 00:02:58
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	20-MAY-2011 00:02:58
CROSS_SECTIONS_FILE	GOM_CR2_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	20-MAY-2011 00:02:58

GOMOS Level 2 Daily Report

SUMMARY

[1. General Info](#)

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

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

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

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

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

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

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

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

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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% \(dark without errors\)](#)

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[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](#)

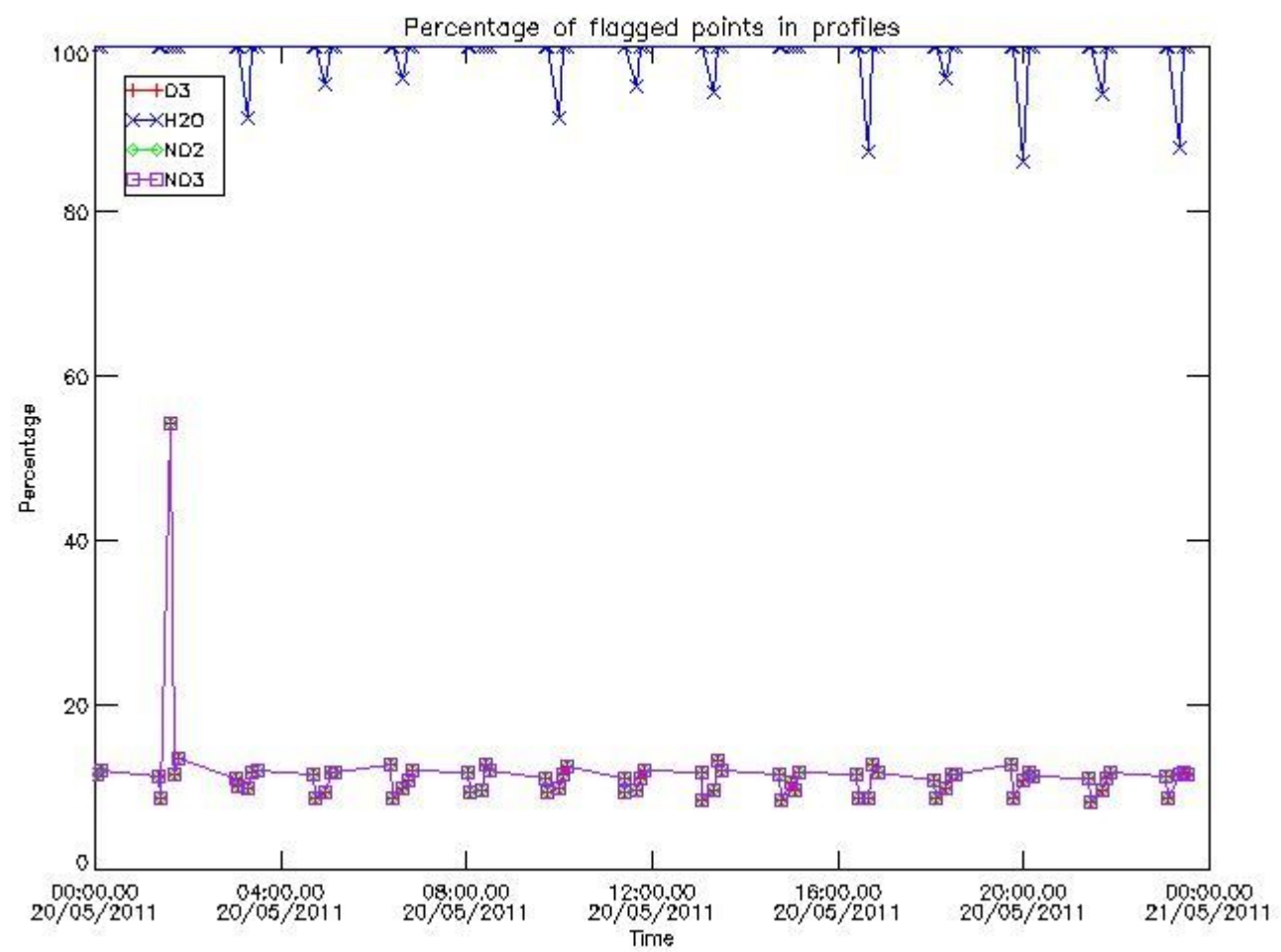
[6. Auxiliary Data Files used for the production reported in section 2](#)

279	GOM_NL__2PRFIN20110520_205547_000000383102_00359_48218_0373.N1	20-MAY-2011 20:55:47	Bright	37.500	119	14Eta Dra	2.7270	4700.0	75	48218	No
280	GOM_NL__2PRFIN20110520_205735_000000563102_00359_48218_0374.N1	20-MAY-2011 20:57:35	Bright	55.500	69	33Gam Dra	2.2310	3800.0	111	48218	No
281	GOM_NL__2PRFIN20110520_210637_000000473102_00359_48218_0375.N1	20-MAY-2011 21:06:37	Bright	46.500	89	5Alp Cep	2.4510	8000.0	93	48218	No
282	GOM_NL__2PRFIN20110520_211042_000000573102_00359_48218_0376.N1	20-MAY-2011 21:10:42	Bright	57.000	74	11Bet Cas	2.2680	6600.0	114	48218	No
283	GOM_NL__2PRFIN20110520_212012_000000463102_00359_48218_0377.N1	20-MAY-2011 21:20:12	Twilight	46.000	58	21Alp And	2.0730	11000.	92	48218	No
284	GOM_NL__2PRFIN20110520_212432_000000463102_00359_48218_0378.N1	20-MAY-2011 21:24:32	Dark	46.000	140	88Gam Peg	2.8340	26000.	92	48218	No
285	GOM_NL__2PRFIN20110520_212630_000000613102_00359_48218_0379.N1	20-MAY-2011 21:26:30	Dark	61.000	90	54Alp Peg	2.4870	11000.	122	48218	No
286	GOM_NL__2PRFIN20110520_214029_000000533102_00359_48218_0380.N1	20-MAY-2011 21:40:29	Dark	53.000	18	24Alp PsA	1.1660	9700.0	106	48218	No
287	GOM_NL__2PRFIN20110520_214611_000000463102_00360_48219_0439.N1	20-MAY-2011 21:46:11	Dark	45.500	31	Alp Gru	1.7340	15200.	91	48219	No
288	GOM_NL__2PRFIN20110520_215137_000000443102_00360_48219_0440.N1	20-MAY-2011 21:51:37	Dark	43.500	45	Alp Pav	1.9400	26000.	87	48219	No
289	GOM_NL__2PRFIN20110520_215937_000000433102_00360_48219_0441.N1	20-MAY-2011 21:59:37	Straylight	42.500	147	Alp Ara	2.8770	26000.	85	48219	No
290	GOM_NL__2PRFIN20110520_220112_000000523102_00360_48219_0442.N1	20-MAY-2011 22:01:12	Straylight	51.500	40	The Sco	1.8590	7100.0	103	48219	No
291	GOM_NL__2PRFIN20110520_220303_000000543102_00360_48219_0443.N1	20-MAY-2011 22:03:03	Straylight	53.500	25	35Lam Sco	1.6200	28000.	107	48219	No
292	GOM_NL__2PRFIN20110520_220509_000000533102_00360_48219_0444.N1	20-MAY-2011 22:05:09	Twilight	52.500	75	26Eps Sco	2.2910	4250.0	105	48219	No
293	GOM_NL__2PRFIN20110520_220804_000000573102_00360_48219_0445.N1	20-MAY-2011 22:08:04	Twilight	56.500	16	21Alp Sco	1.0200	3000.0	113	48219	No
294	GOM_NL__2PRFIN20110520_220940_000000433102_00360_48219_0446.N1	20-MAY-2011 22:09:40	Bright	42.500	80	7Del Sco	2.3160	30000.	85	48219	No
295	GOM_NL__2PRFIN20110520_221126_000000543102_00360_48219_0447.N1	20-MAY-2011 22:11:26	Bright	53.500	86	35Eta Oph	2.4300	10200.	107	48219	No
296	GOM_NL__2PRFIN20110520_221330_000000503102_00360_48219_0448.N1	20-MAY-2011 22:13:30	Bright	49.500	98	13Zet Oph	2.5710	30000.	99	48219	No
297	GOM_NL__2PRFIN20110520_221551_000000453102_00360_48219_0449.N1	20-MAY-2011 22:15:51	Bright	45.000	120	1Del Oph	2.7340	3200.0	90	48219	No
298	GOM_NL__2PRFIN20110520_221857_000000413102_00360_48219_0450.N1	20-MAY-2011 22:18:57	Bright	41.000	102	24Alp Ser	2.6000	4250.0	82	48219	No
299	GOM_NL__2PRFIN20110520_222507_000000543102_00360_48219_0451.N1	20-MAY-2011 22:25:07	Bright	54.000	67	5Alp CrB	2.2210	11000.	108	48219	No
300	GOM_NL__2PRFIN20110520_222851_000000483102_00360_48219_0452.N1	20-MAY-2011 22:28:51	Bright	48.000	133	40Zet Her	2.8070	6000.0	96	48219	No
301	GOM_NL__2PRFIN20110520_223600_000000433102_00360_48219_0453.N1	20-MAY-2011 22:36:00	Bright	42.500	119	14Eta Dra	2.7270	4700.0	85	48219	No
302	GOM_NL__2PRFIN20110520_223748_000000533102_00360_48219_0454.N1	20-MAY-2011 22:37:48	Bright	53.000	69	33Gam Dra	2.2310	3800.0	106	48219	No
303	GOM_NL__2PRFIN20110520_224651_000000503102_00360_48219_0455.N1	20-MAY-2011 22:46:51	Bright	49.500	89	5Alp Cep	2.4510	8000.0	99	48219	No
304	GOM_NL__2PRFIN20110520_225056_000000573102_00360_48219_0456.N1	20-MAY-2011 22:50:56	Bright	57.000	74	11Bet Cas	2.2680	6600.0	114	48219	No
305	GOM_NL__2PRFIN20110520_230026_000000483102_00360_48219_0457.N1	20-MAY-2011 23:00:26	Twilight	48.000	58	21Alp And	2.0730	11000.	96	48219	No
306	GOM_NL__2PRFIN20110520_230447_000000453102_00360_48219_0458.N1	20-MAY-2011 23:04:47	Dark	45.000	140	88Gam Peg	2.8340	26000.	90	48219	No
307	GOM_NL__2PRFIN20110520_230645_000000593102_00360_48219_0459.N1	20-MAY-2011 23:06:45	Dark	58.500	90	54Alp Peg	2.4870	11000.	117	48219	No
308	GOM_NL__2PRFIN20110520_232044_000000533102_00360_48219_0460.N1	20-MAY-2011 23:20:44	Dark	53.000	18	24Alp PsA	1.1660	9700.0	106	48219	No
309	GOM_NL__2PRFIN20110520_232626_000000433102_00361_48220_0445.N1	20-MAY-2011 23:26:26	Dark	43.000	31	Alp Gru	1.7340	15200.	86	48220	No
310	GOM_NL__2PRFIN20110520_233151_000000453102_00361_48220_0446.N1	20-MAY-2011 23:31:51	Dark	44.500	45	Alp Pav	1.9400	26000.	89	48220	No
311	GOM_NL__2PRFIN20110520_233951_000000433102_00361_48220_0447.N1	20-MAY-2011 23:39:51	Straylight	43.000	147	Alp Ara	2.8770	26000.	86	48220	No
312	GOM_NL__2PRFIN20110520_234126_000000503102_00361_48220_0448.N1	20-MAY-2011 23:41:26	Straylight	50.000	40	The Sco	1.8590	7100.0	100	48220	No
313	GOM_NL__2PRFIN20110520_234317_000000523102_00361_48220_0449.N1	20-MAY-2011 23:43:17	Straylight	52.000	25	35Lam Sco	1.6200	28000.	104	48220	No
314	GOM_NL__2PRFIN20110520_234523_000000533102_00361_48220_0450.N1	20-MAY-2011 23:45:23	Twilight	52.500	75	26Eps Sco	2.2910	4250.0	105	48220	No
315	GOM_NL__2PRFIN20110520_234817_000000613102_00361_48220_0451.N1	20-MAY-2011 23:48:17	Twilight	60.500	16	21Alp Sco	1.0200	3000.0	121	48220	No
316	GOM_NL__2PRFIN20110520_234954_000000593102_00361_48220_0452.N1	20-MAY-2011 23:49:54	Bright	59.000	80	7Del Sco	2.3160	30000.	118	48220	No
317	GOM_NL__2PRFIN20110520_235140_000000573102_00361_48220_0453.N1	20-MAY-2011 23:51:40	Bright	56.500	86	35Eta Oph	2.4300	10200.	113	48220	No
318	GOM_NL__2PRFIN20110520_235344_000000483102_00361_48220_0454.N1	20-MAY-2011 23:53:44	Bright	48.000	98	13Zet Oph	2.5710	30000.	96	48220	No
319	GOM_NL__2PRFIN20110520_235605_000000463102_00361_48220_0455.N1	20-MAY-2011 23:56:05	Bright	45.500	120	1Del Oph	2.7340	3200.0	91	48220	No
320	GOM_NL__2PRFIN20110520_235910_000000413102_00361_48220_0456.N1	20-MAY-2011 23:59:10	Bright	41.000	102	24Alp Ser	2.6000	4250.0	82	48220	No

3. Quality information per product

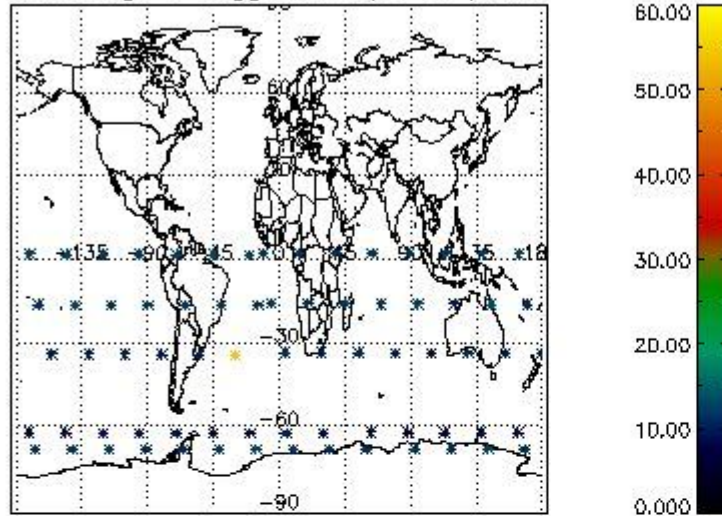
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

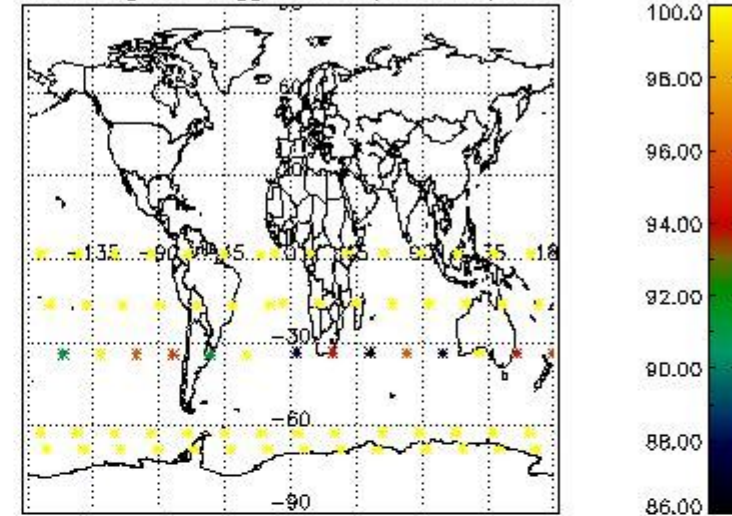


3.2 Plot quality information per product (world map)

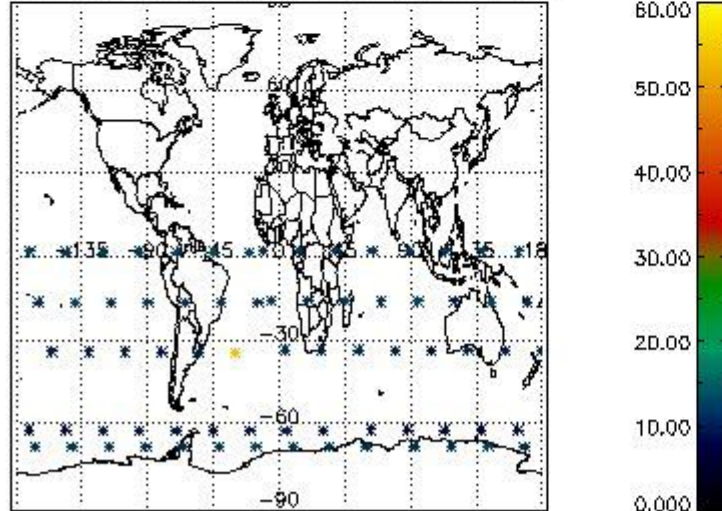
Percentage of flagged data per O3 profile



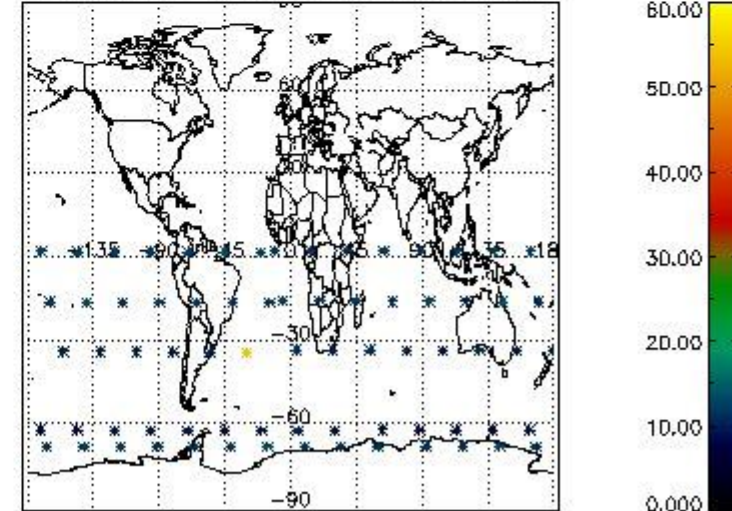
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

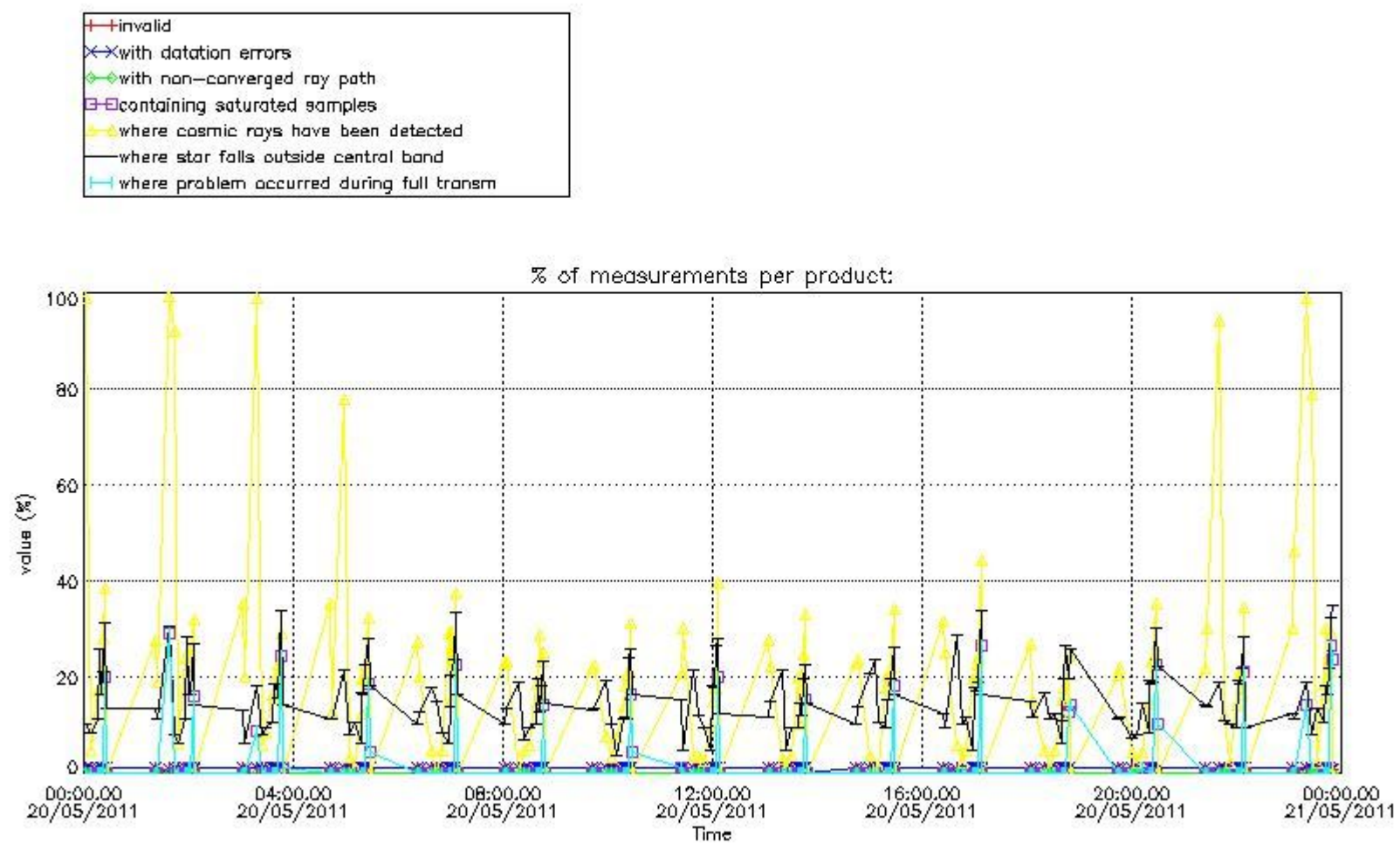


4. Level 1 quality information per product

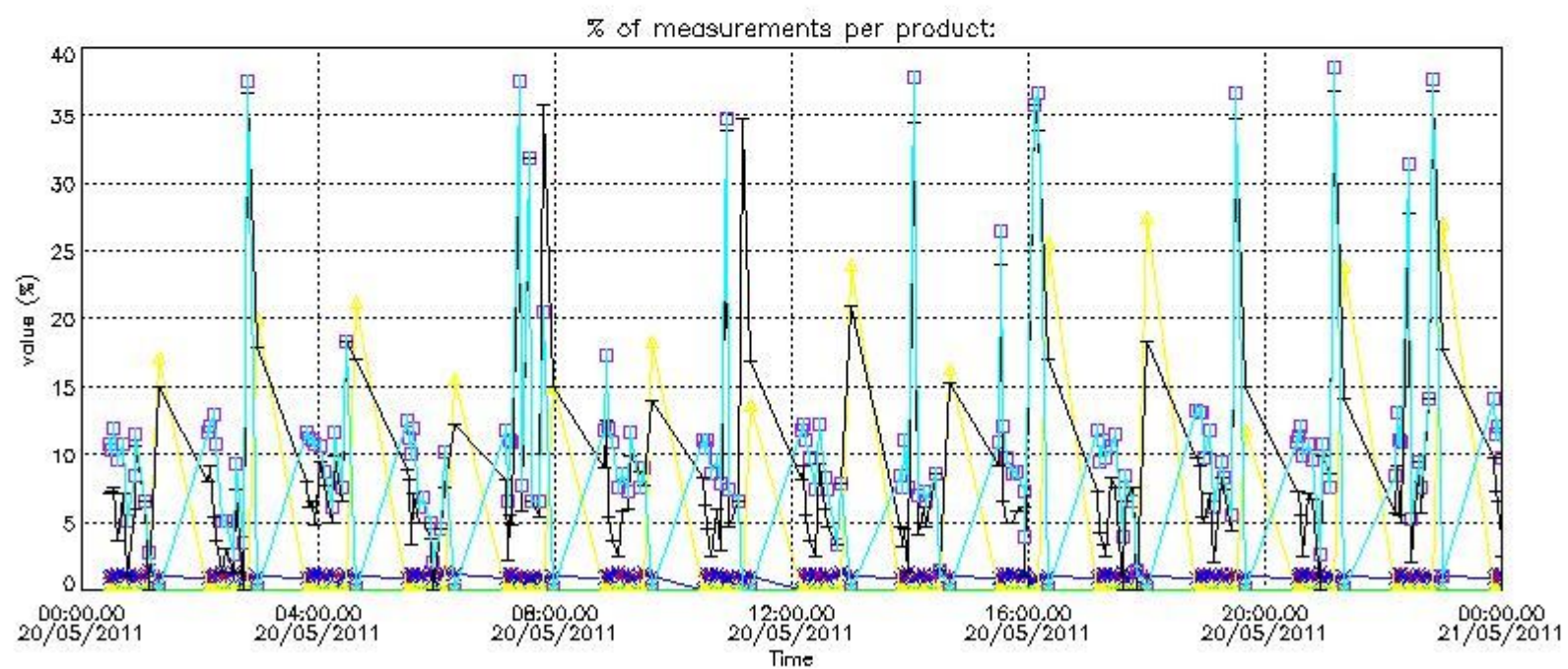
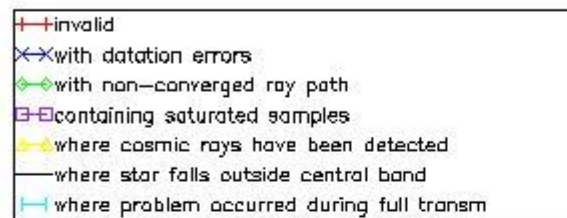
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

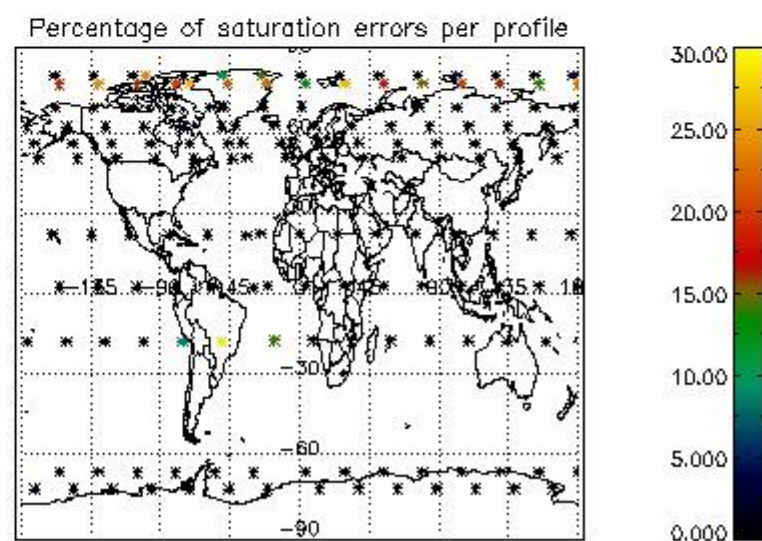
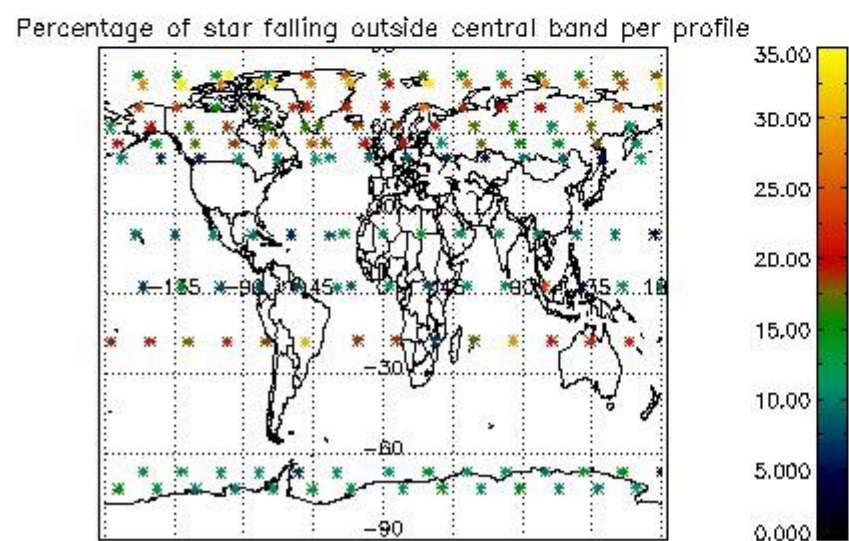
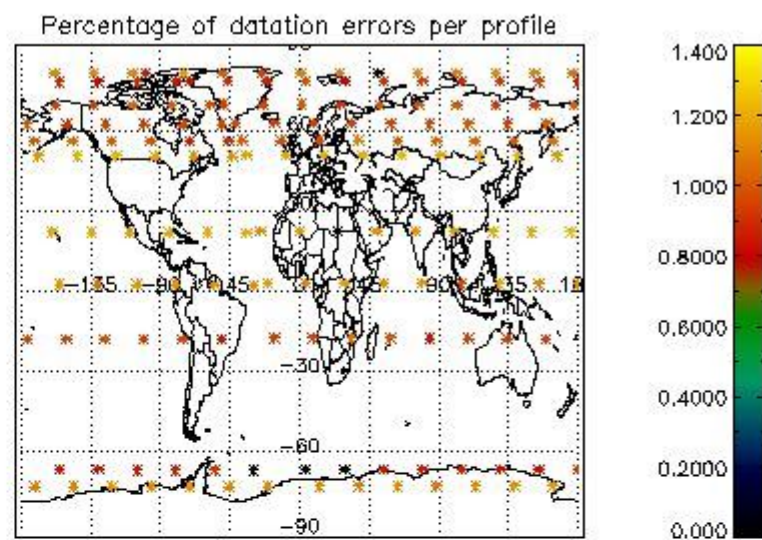
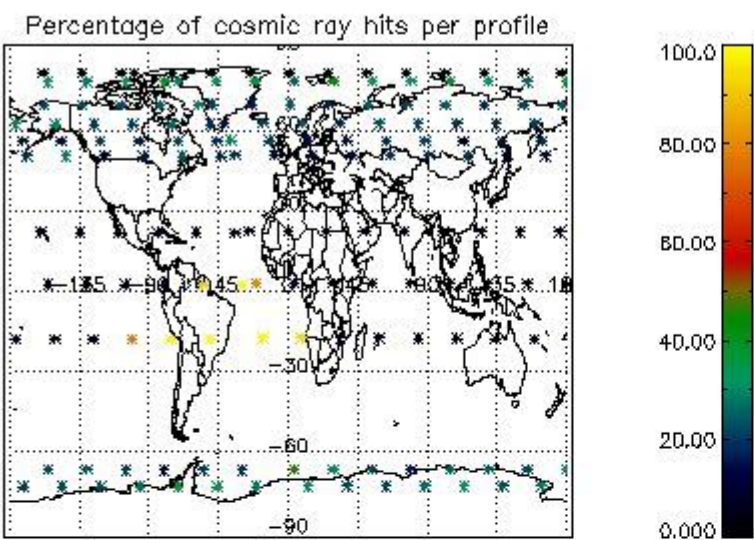


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

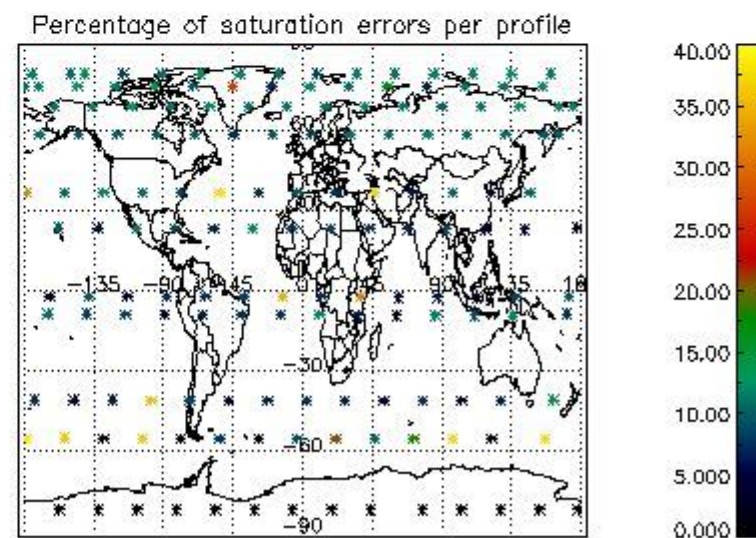
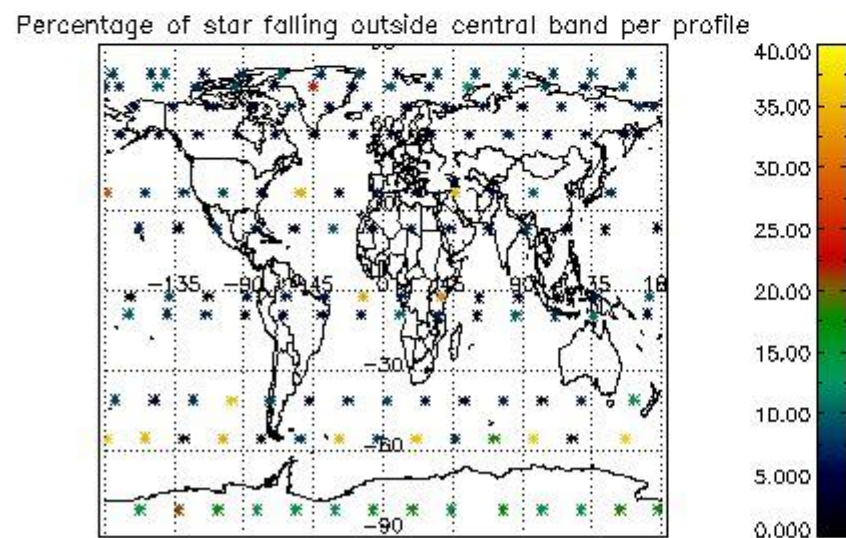
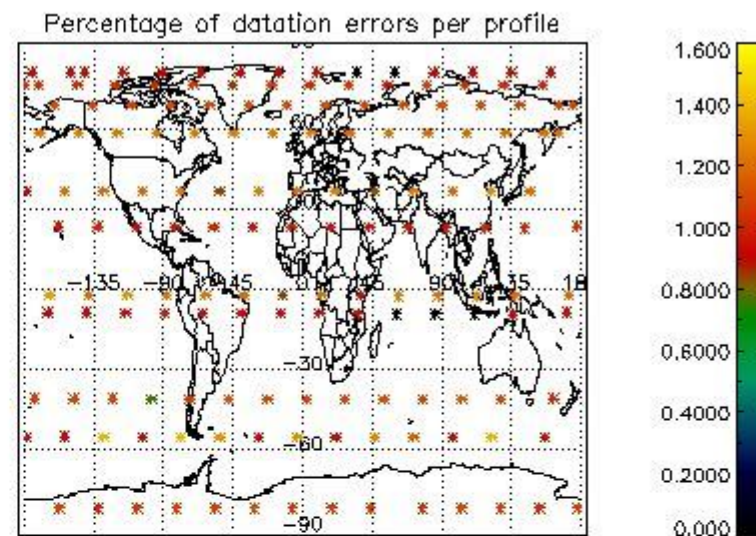
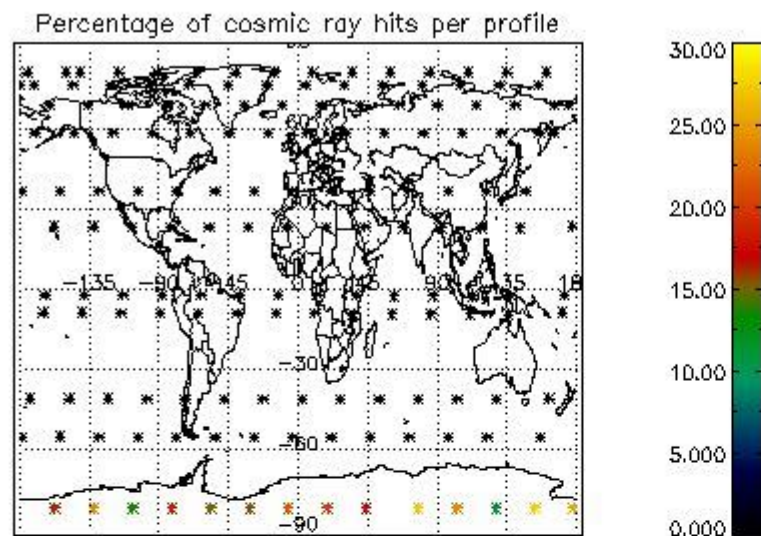


4.2 Plot quality information per product coming from level 1b processing (world map)

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

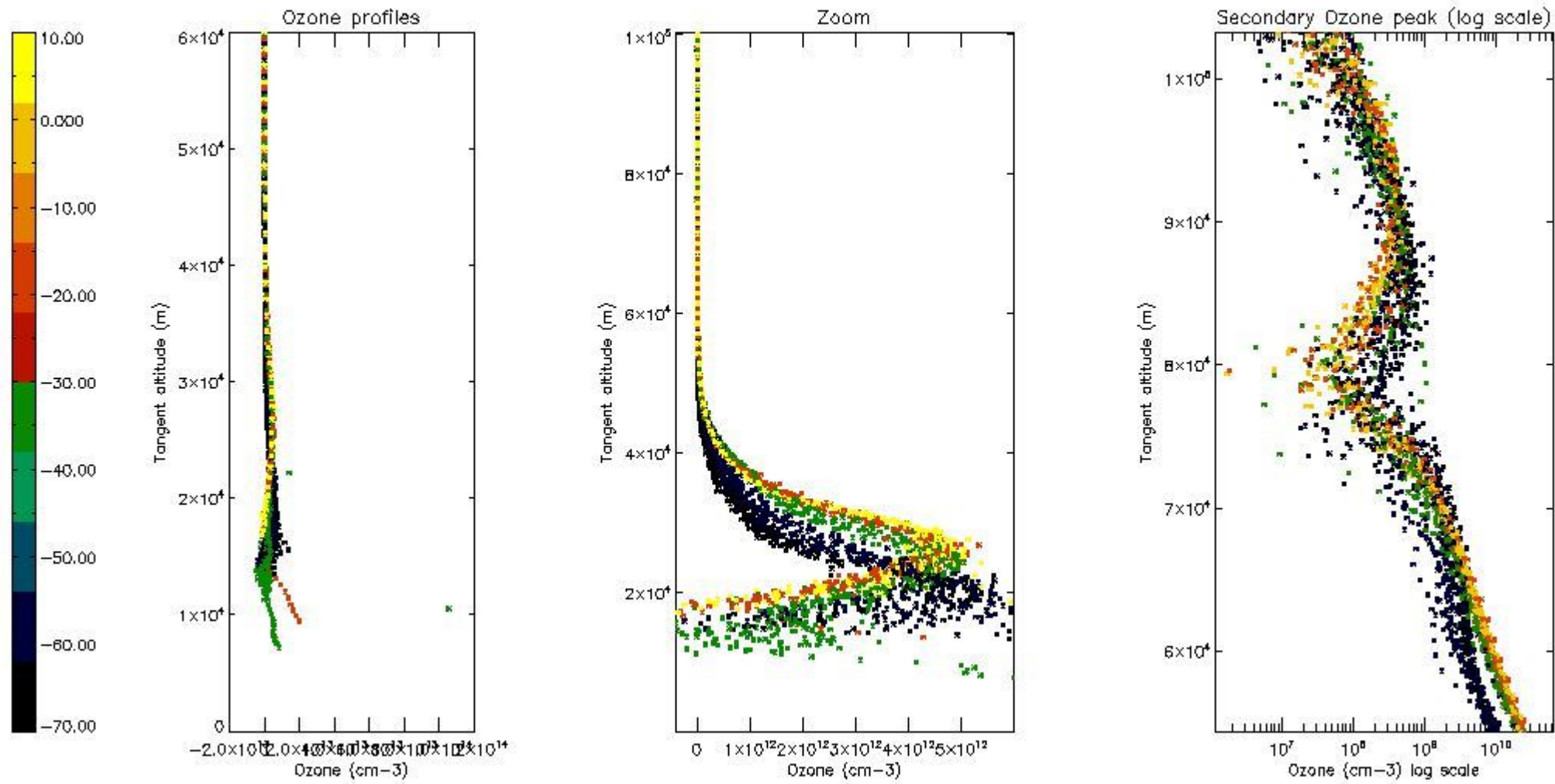
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	23
STD < 20	14

STD < 10	11
STD < 5	7

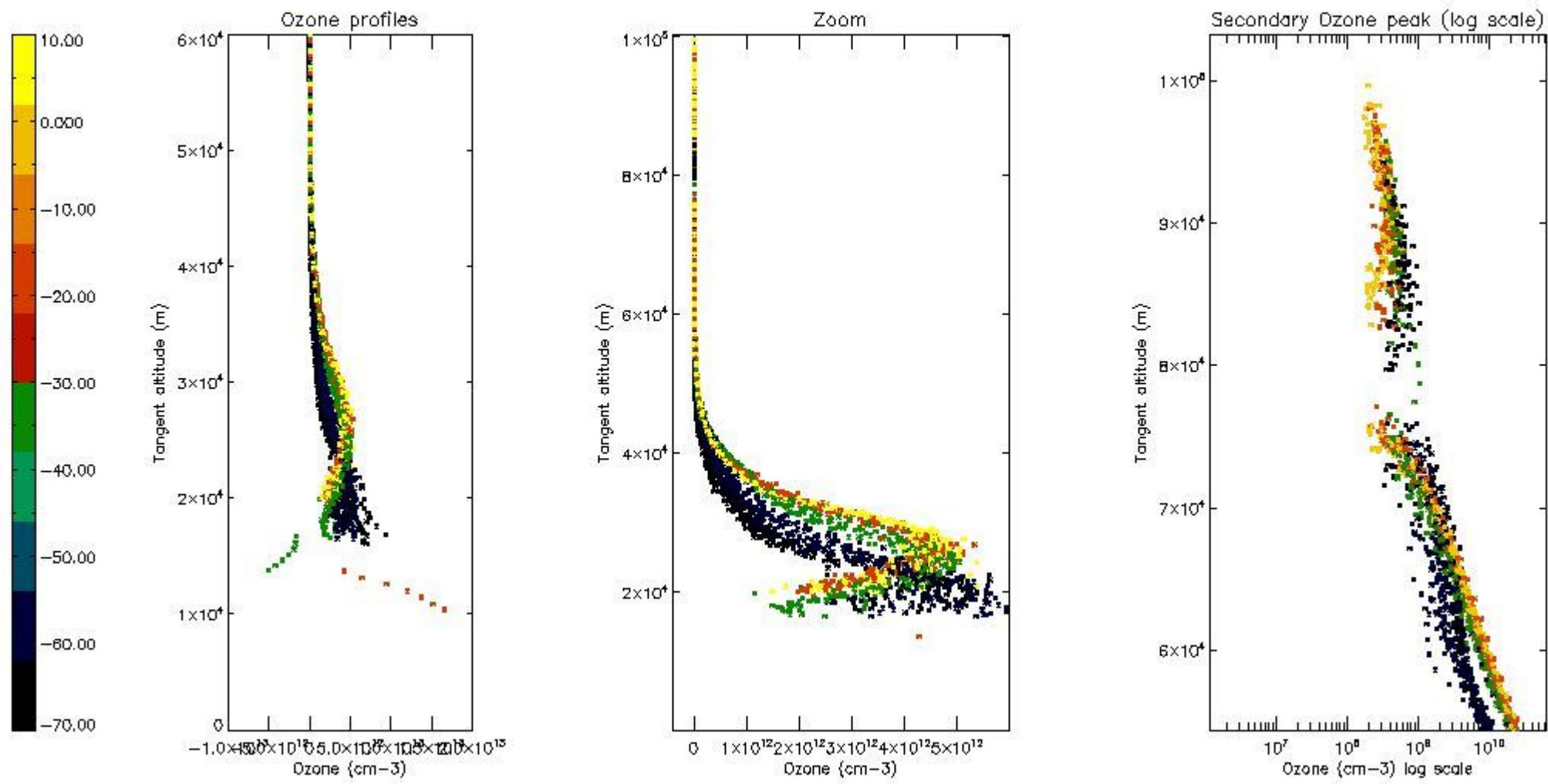
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



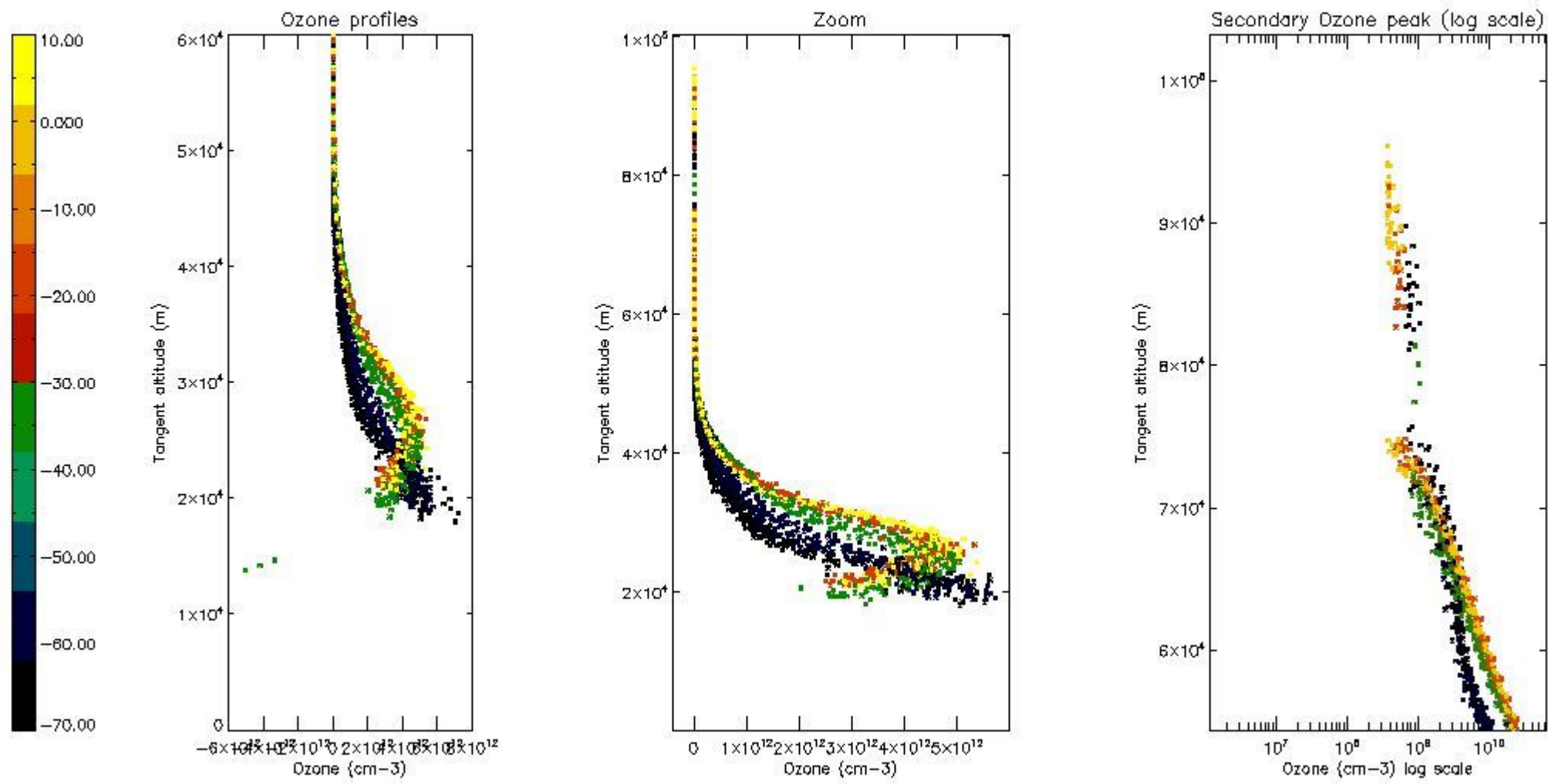
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



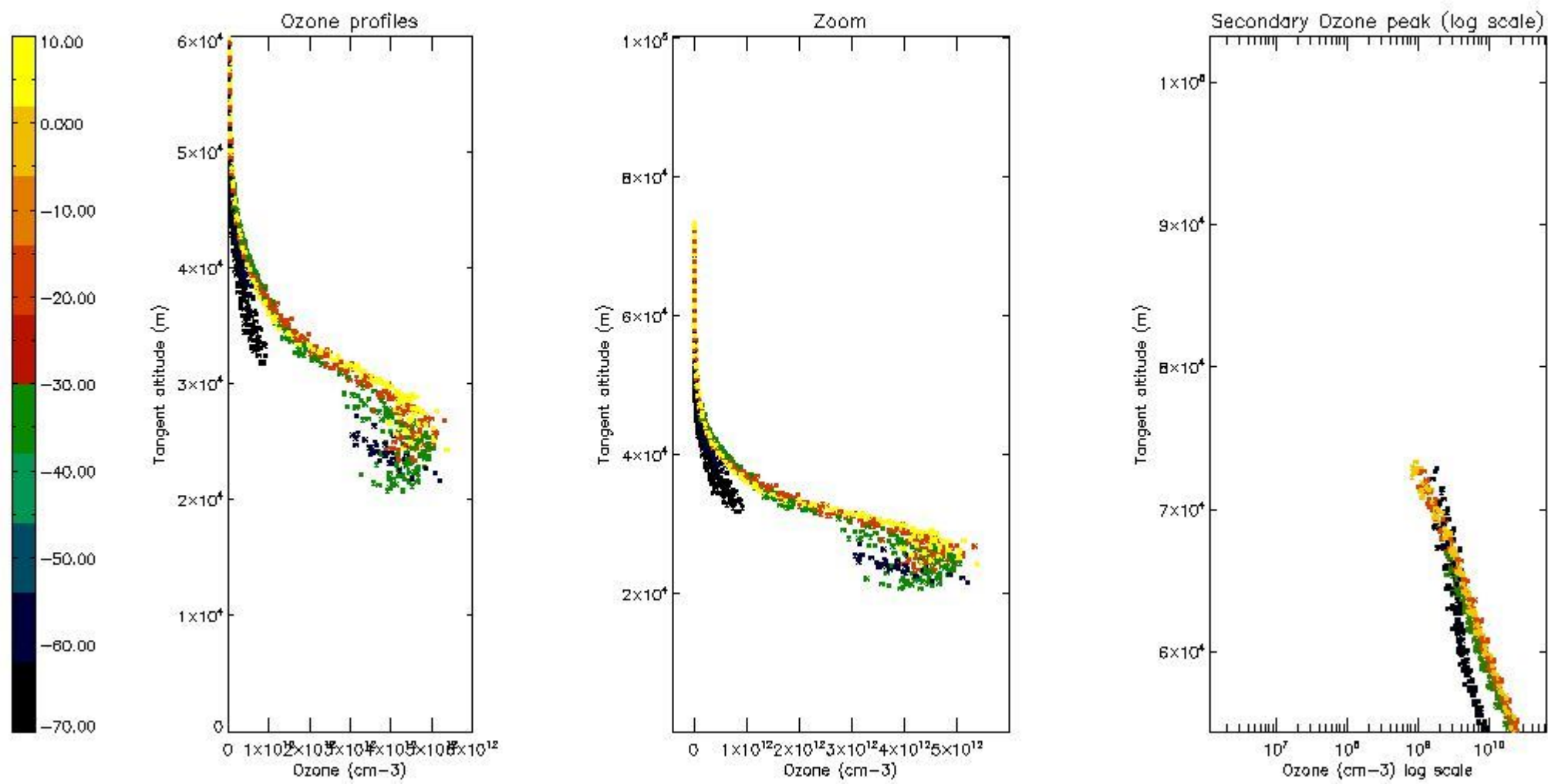
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



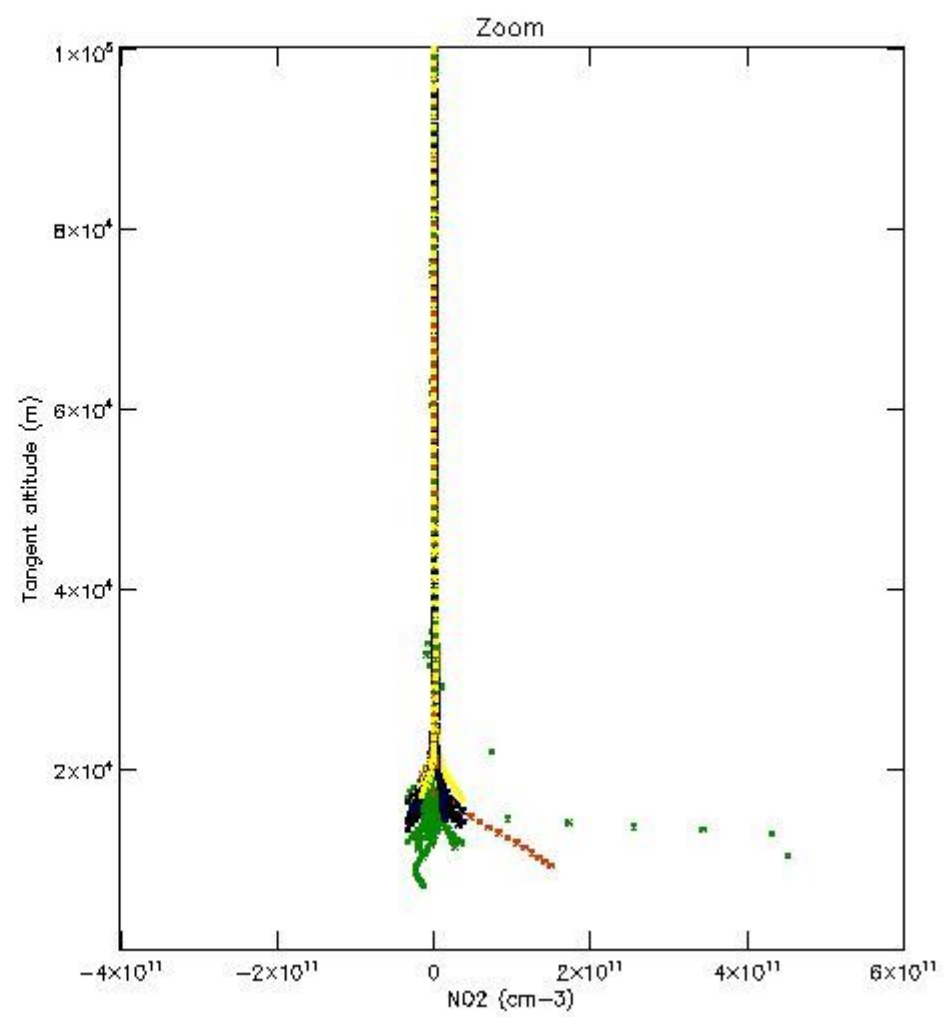
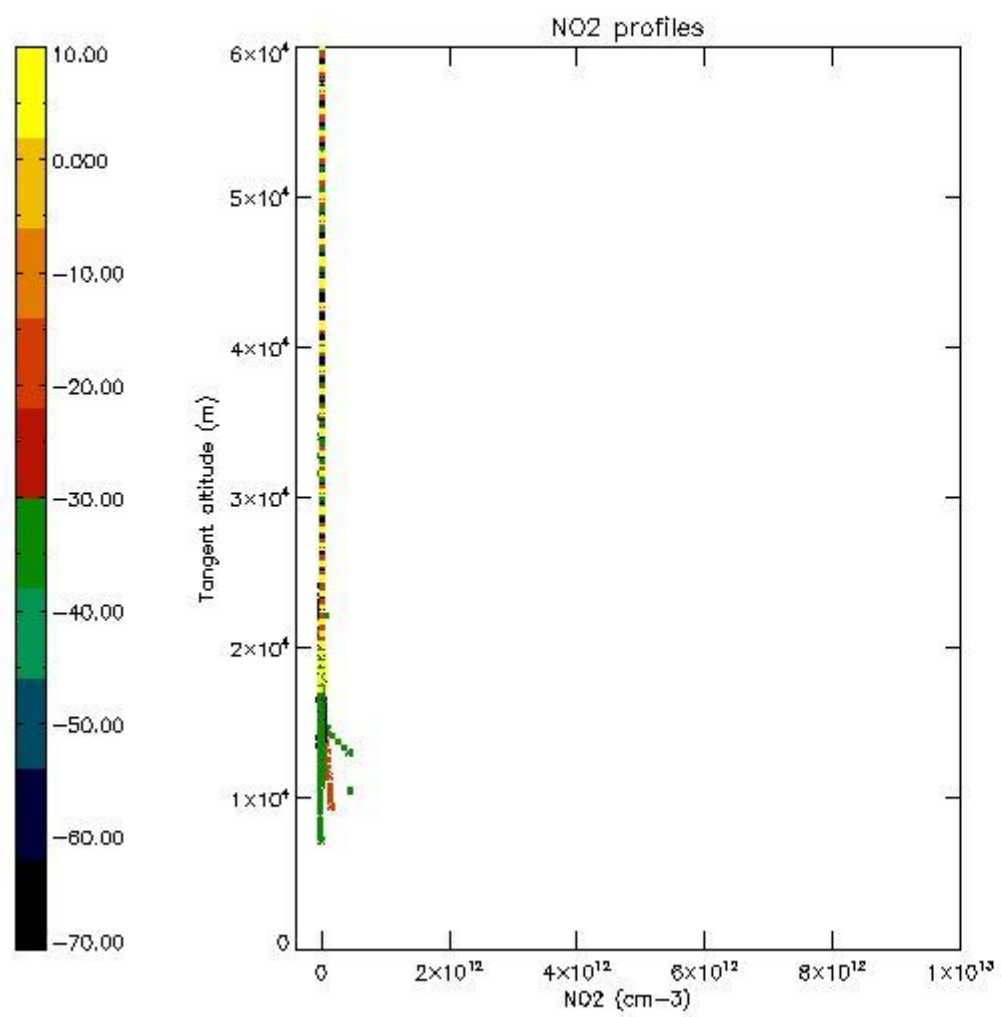
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



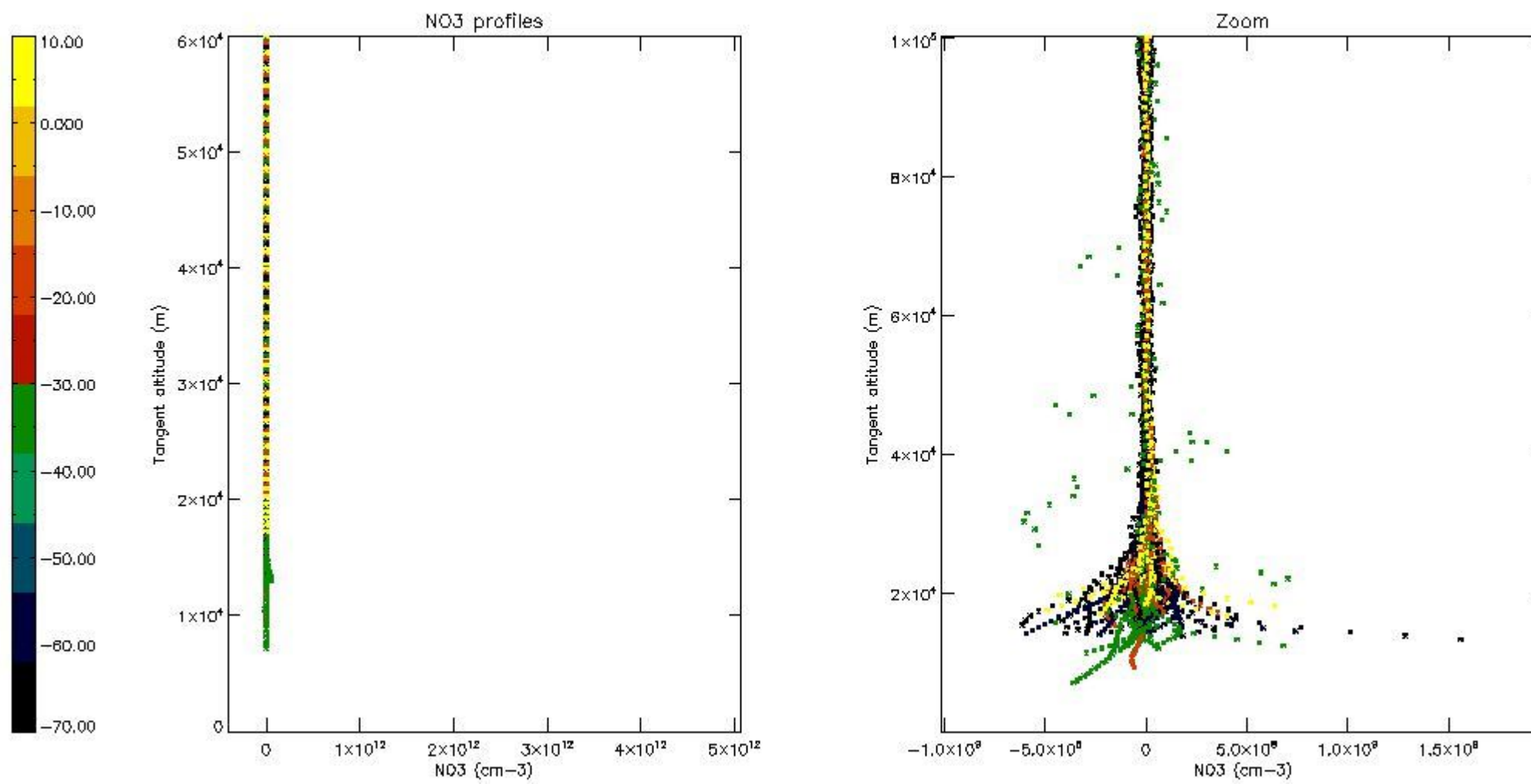
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

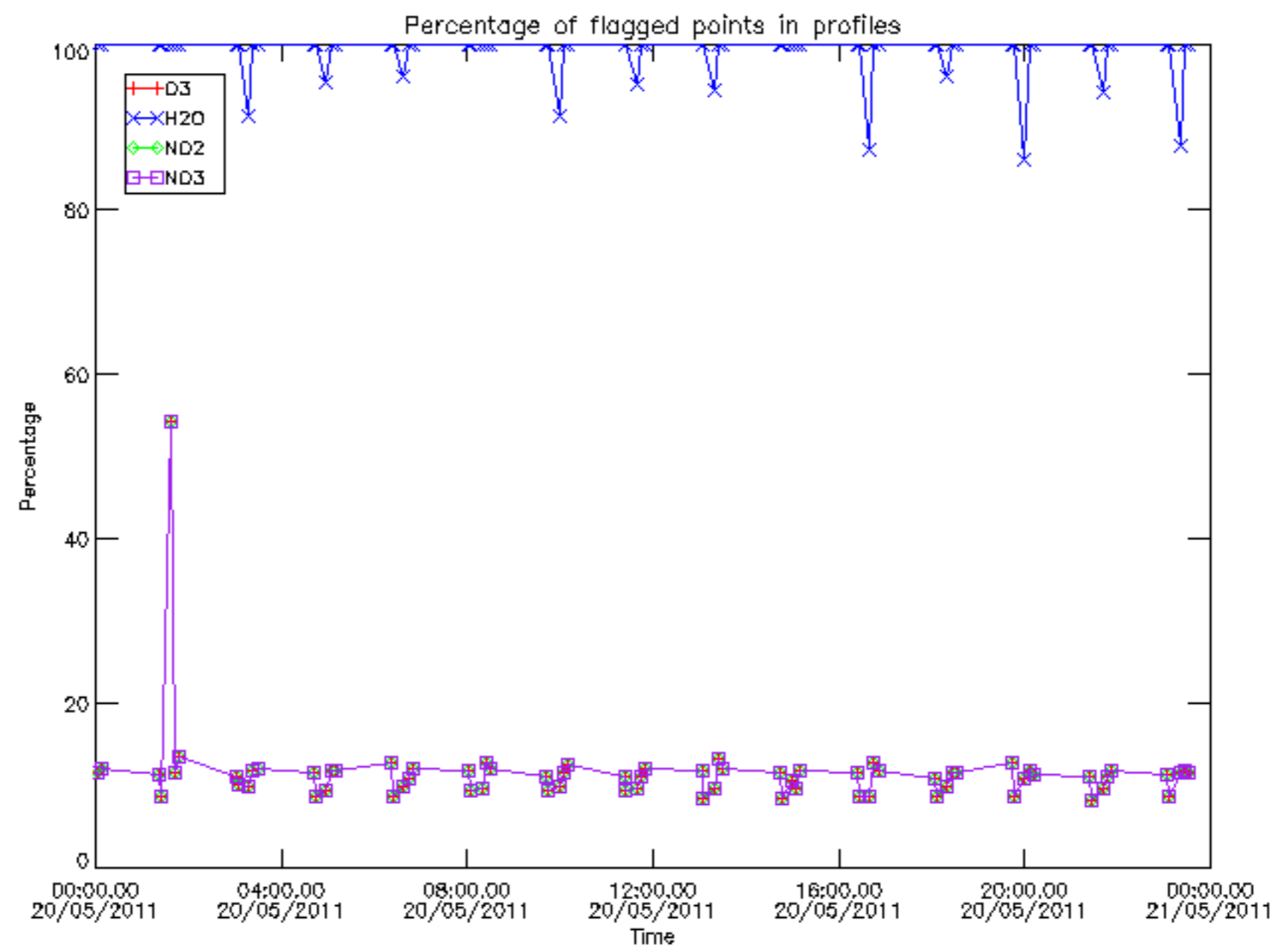
The colorbar represents the latitude.



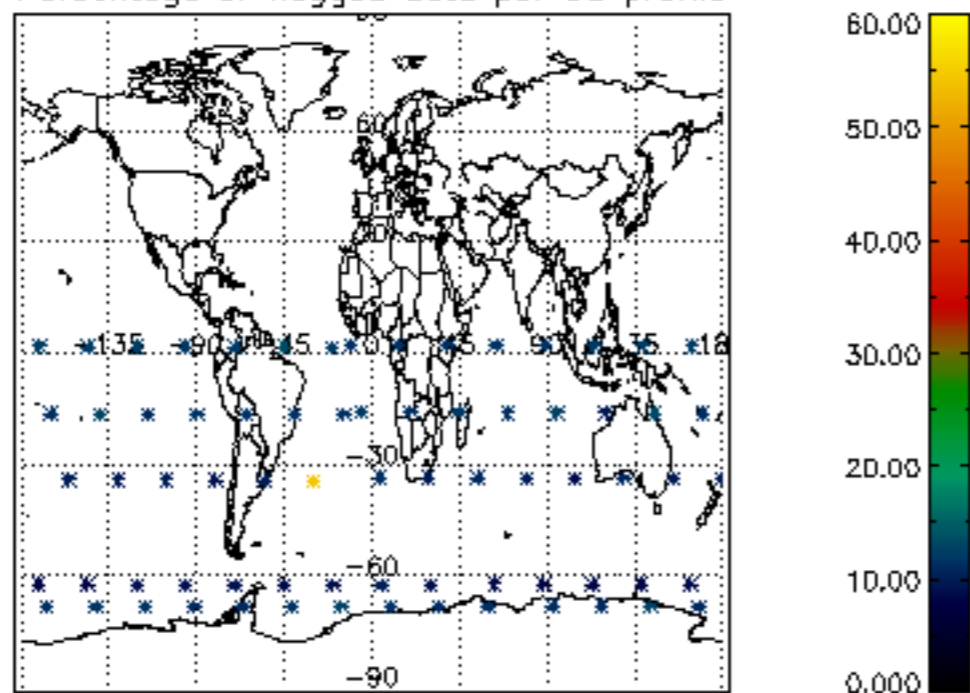
6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

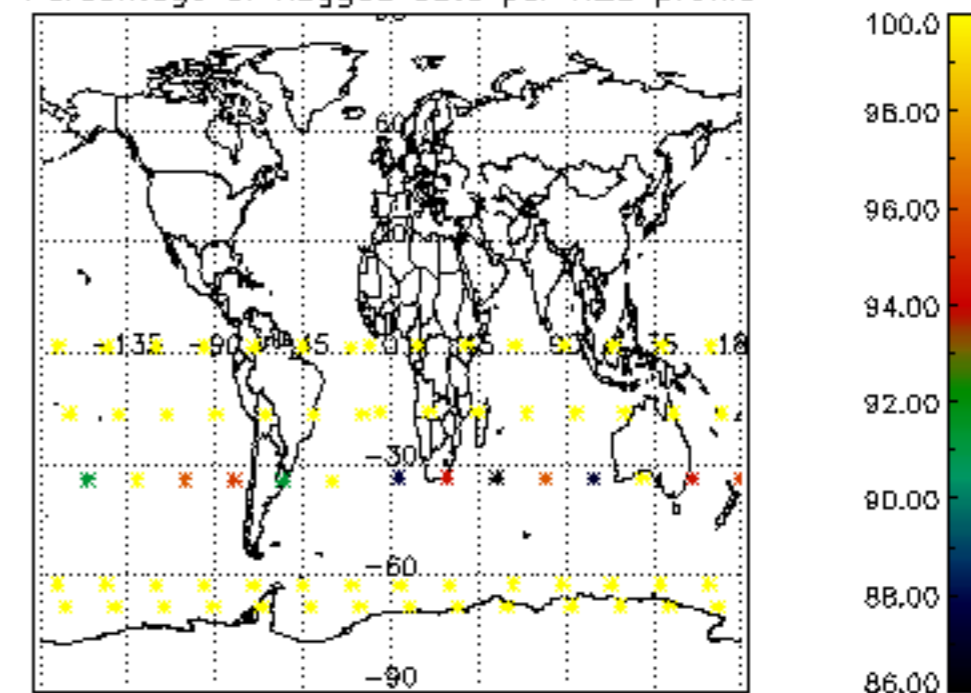
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	20-MAY-2011 00:02:58
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	20-MAY-2011 00:02:58
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	20-MAY-2011 00:02:58



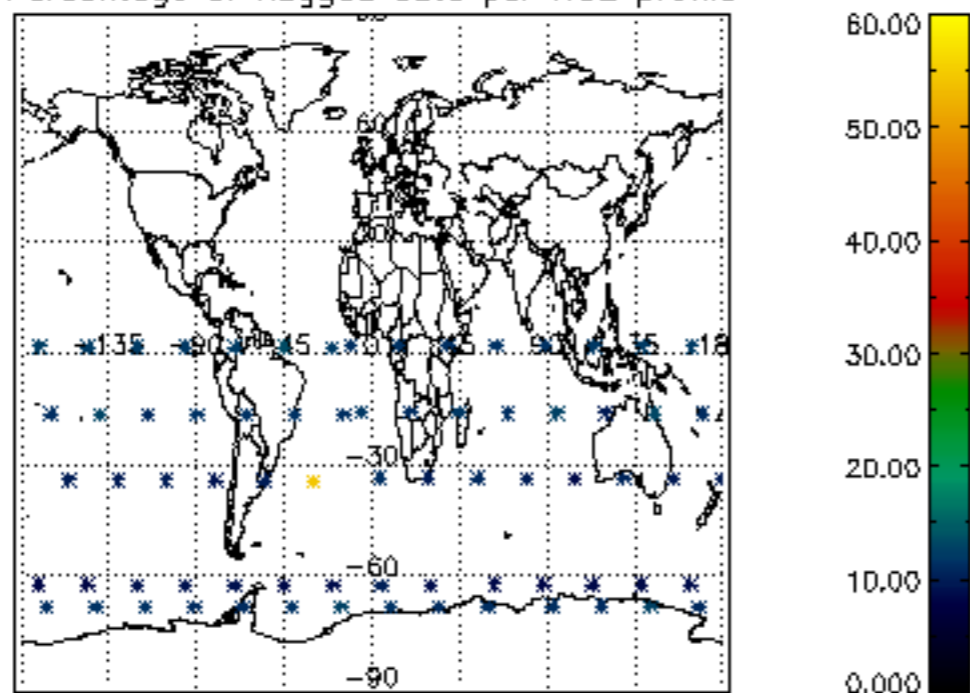
Percentage of flagged data per D3 profile



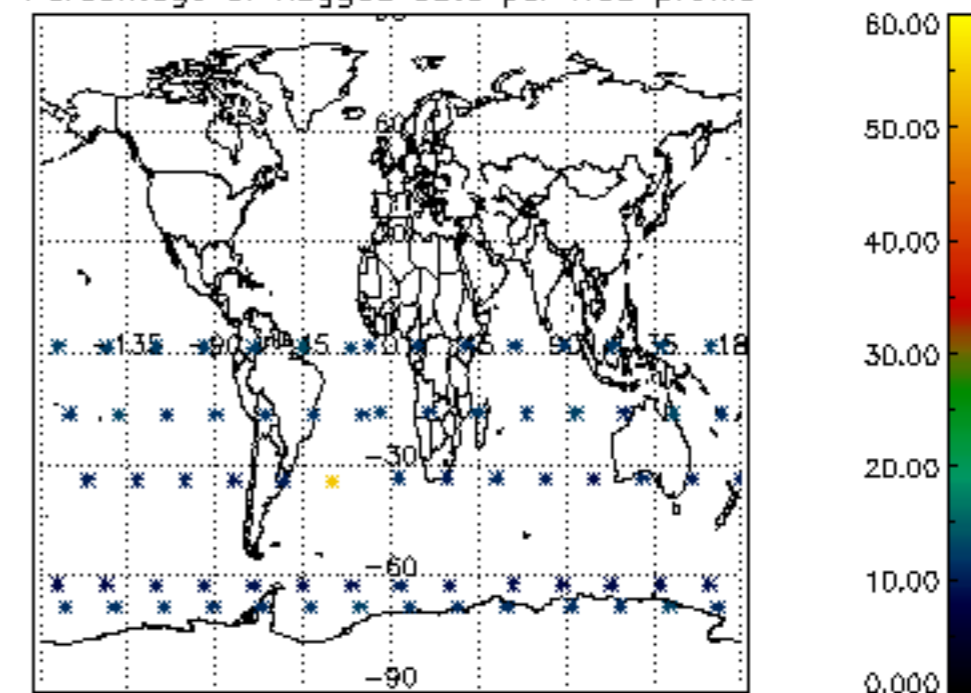
Percentage of flagged data per H2O profile

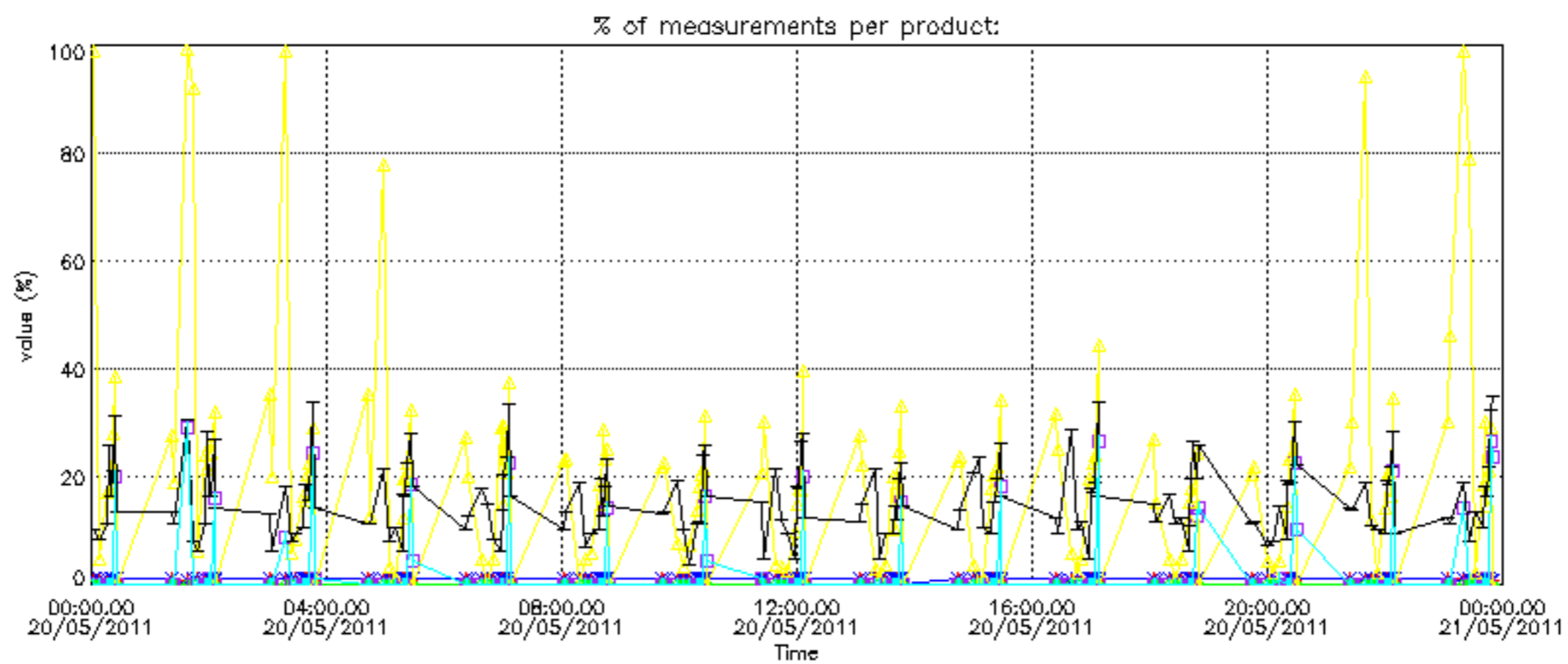


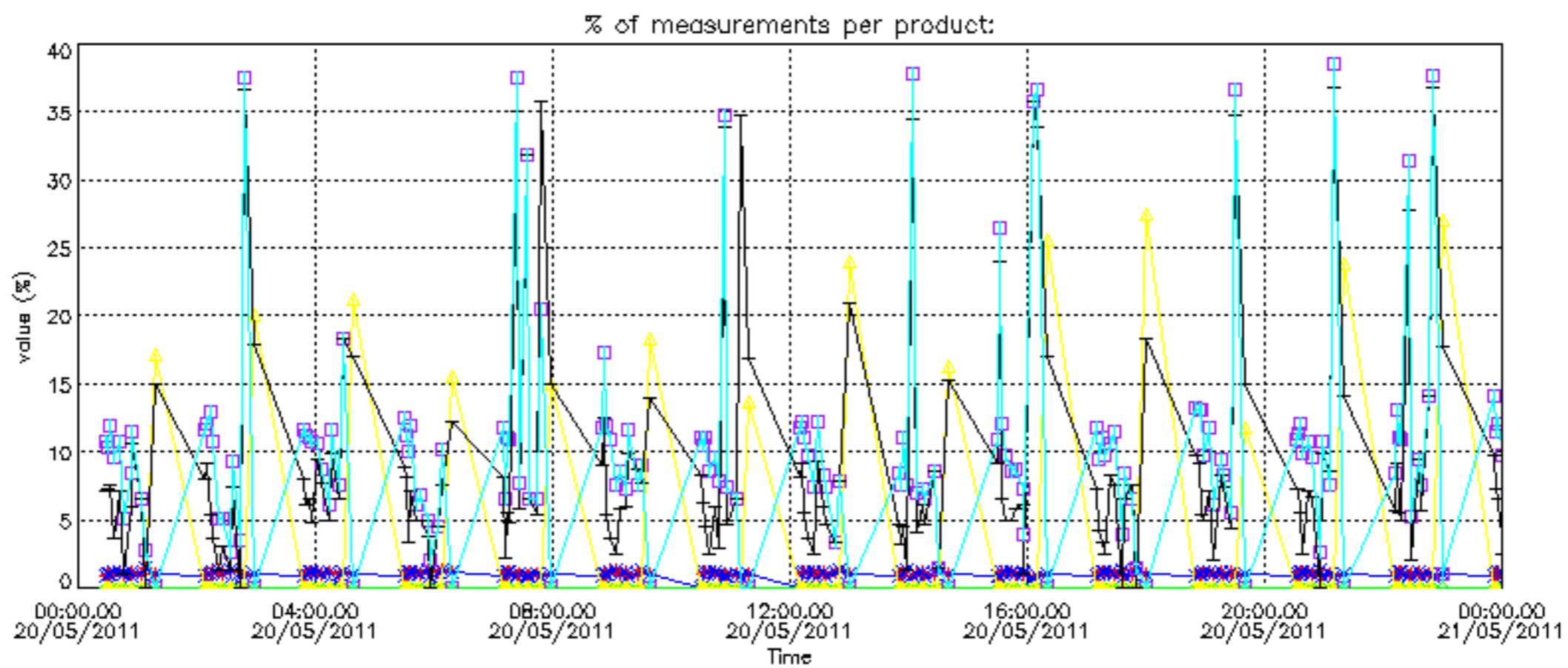
Percentage of flagged data per NO2 profile



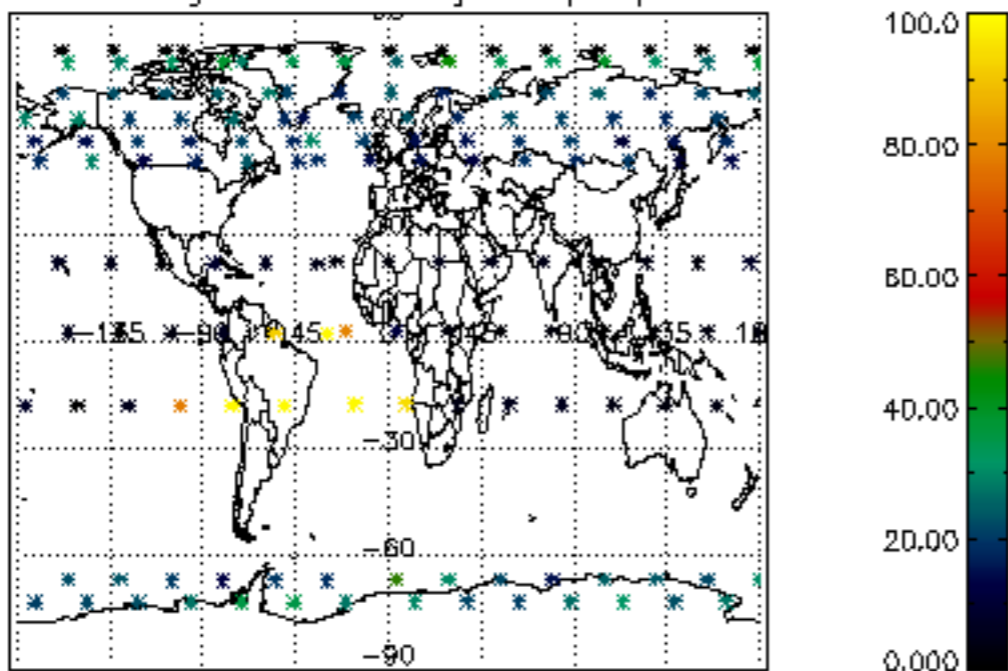
Percentage of flagged data per NO3 profile



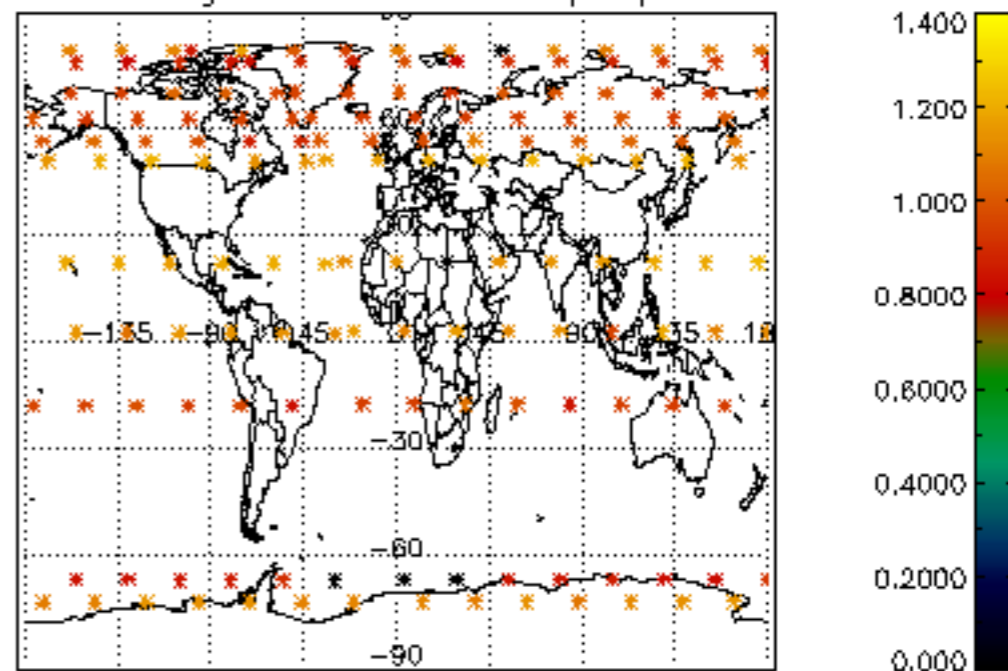




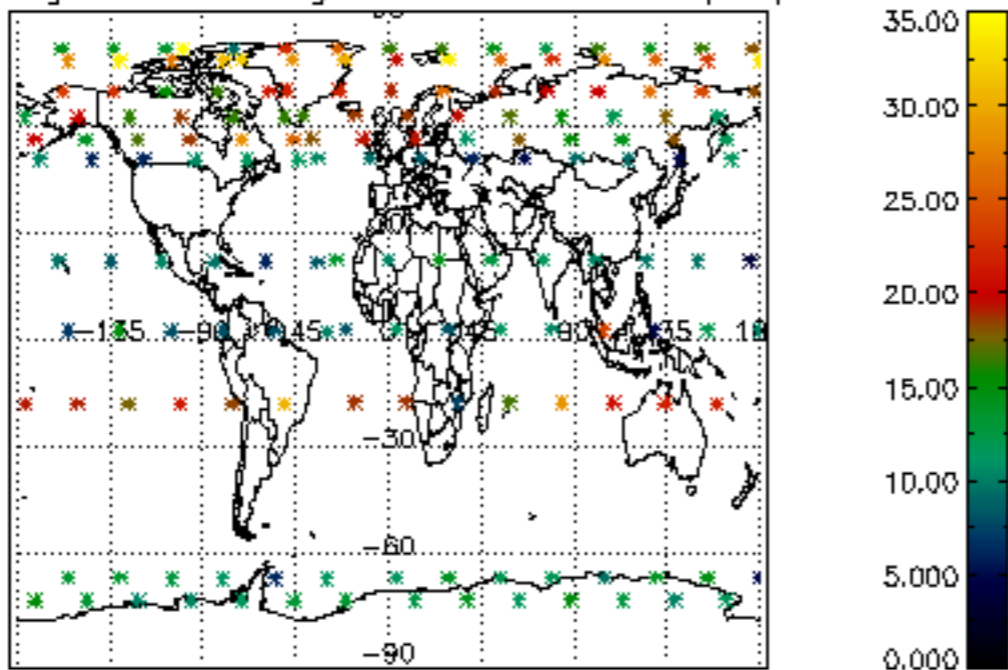
Percentage of cosmic ray hits per profile



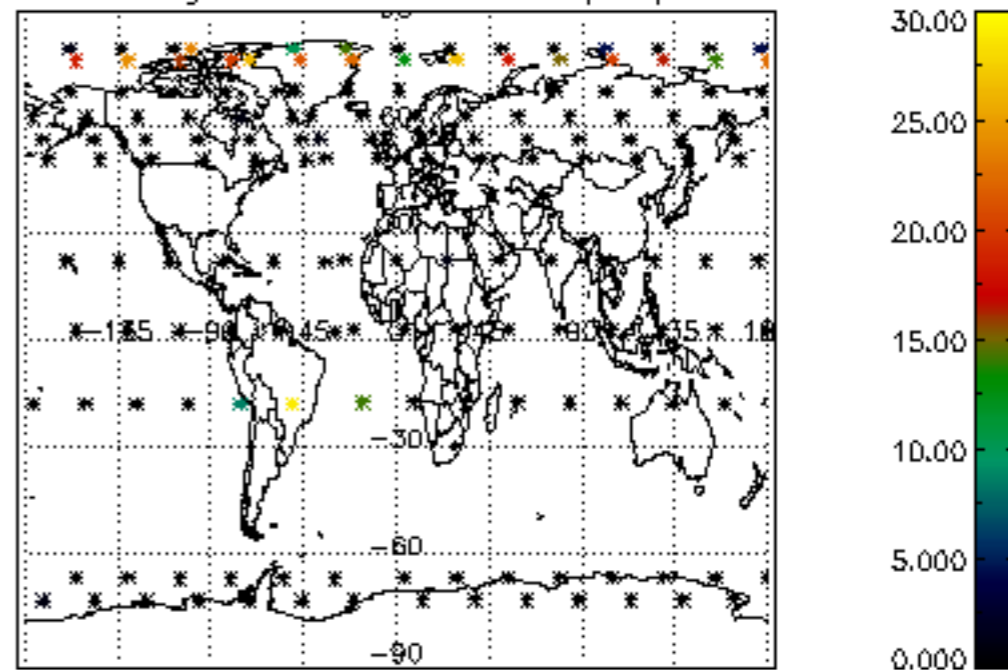
Percentage of datation errors per profile



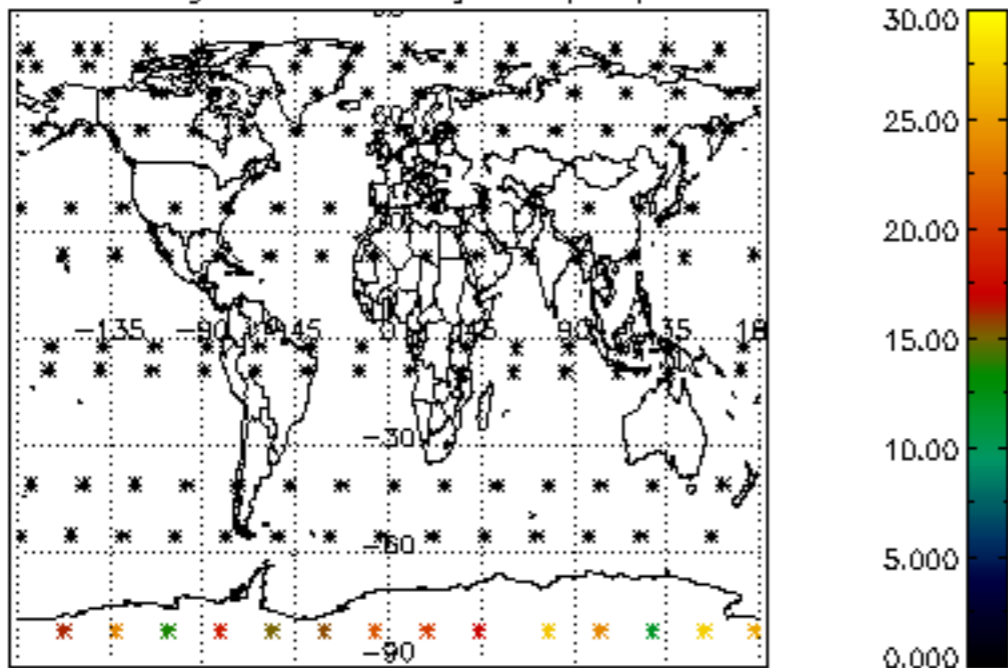
Percentage of star falling outside central band per profile



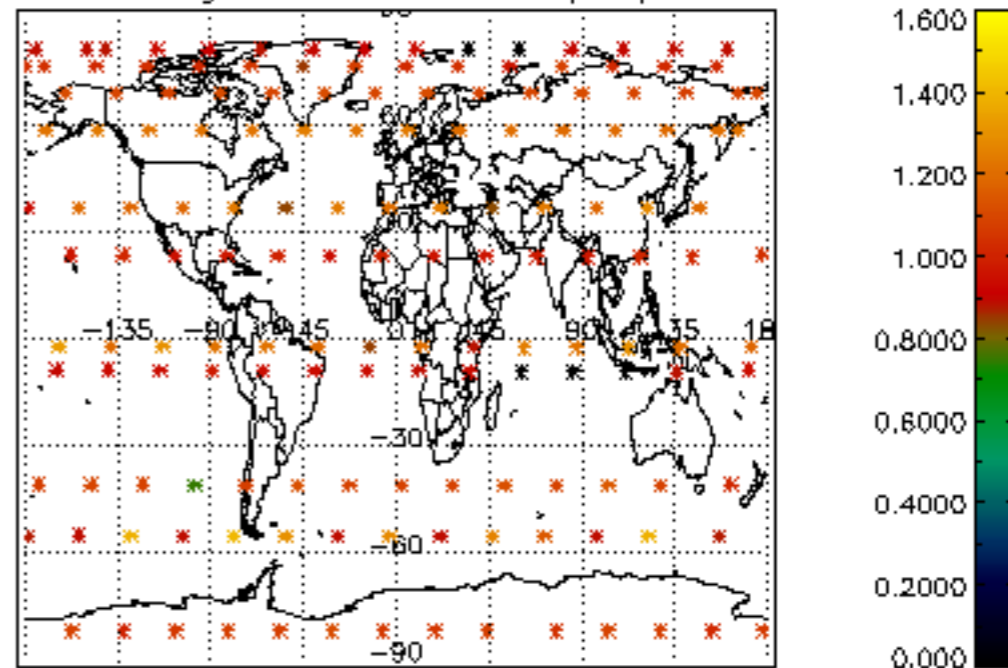
Percentage of saturation errors per profile



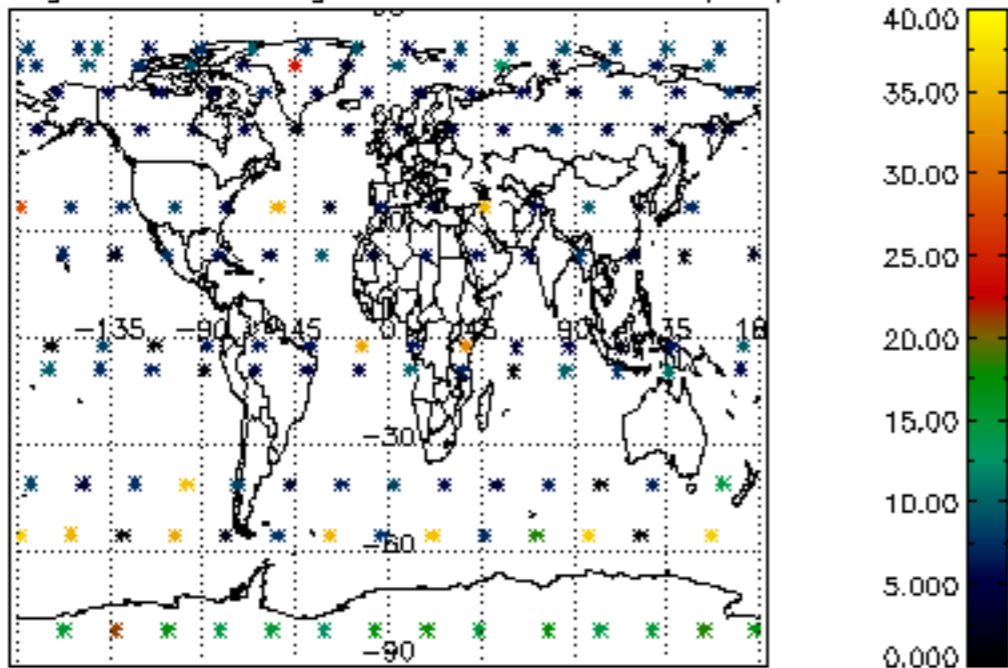
Percentage of cosmic ray hits per profile



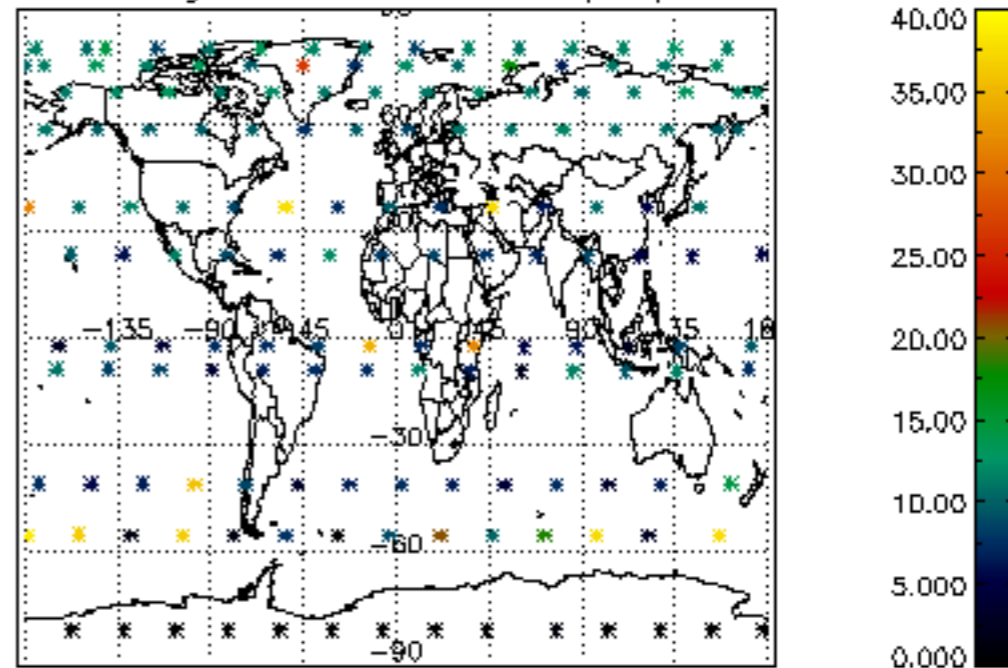
Percentage of datation errors per profile

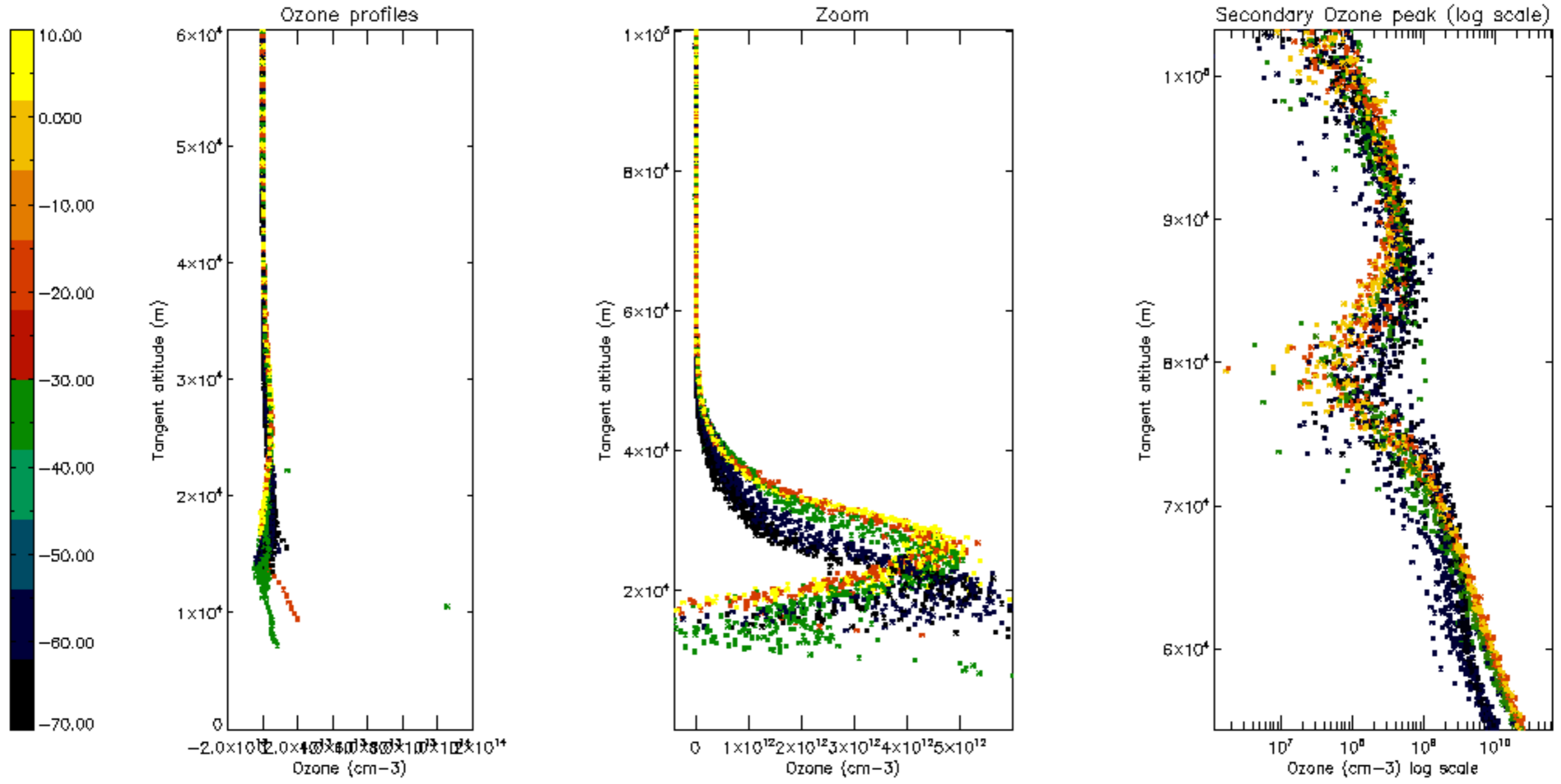


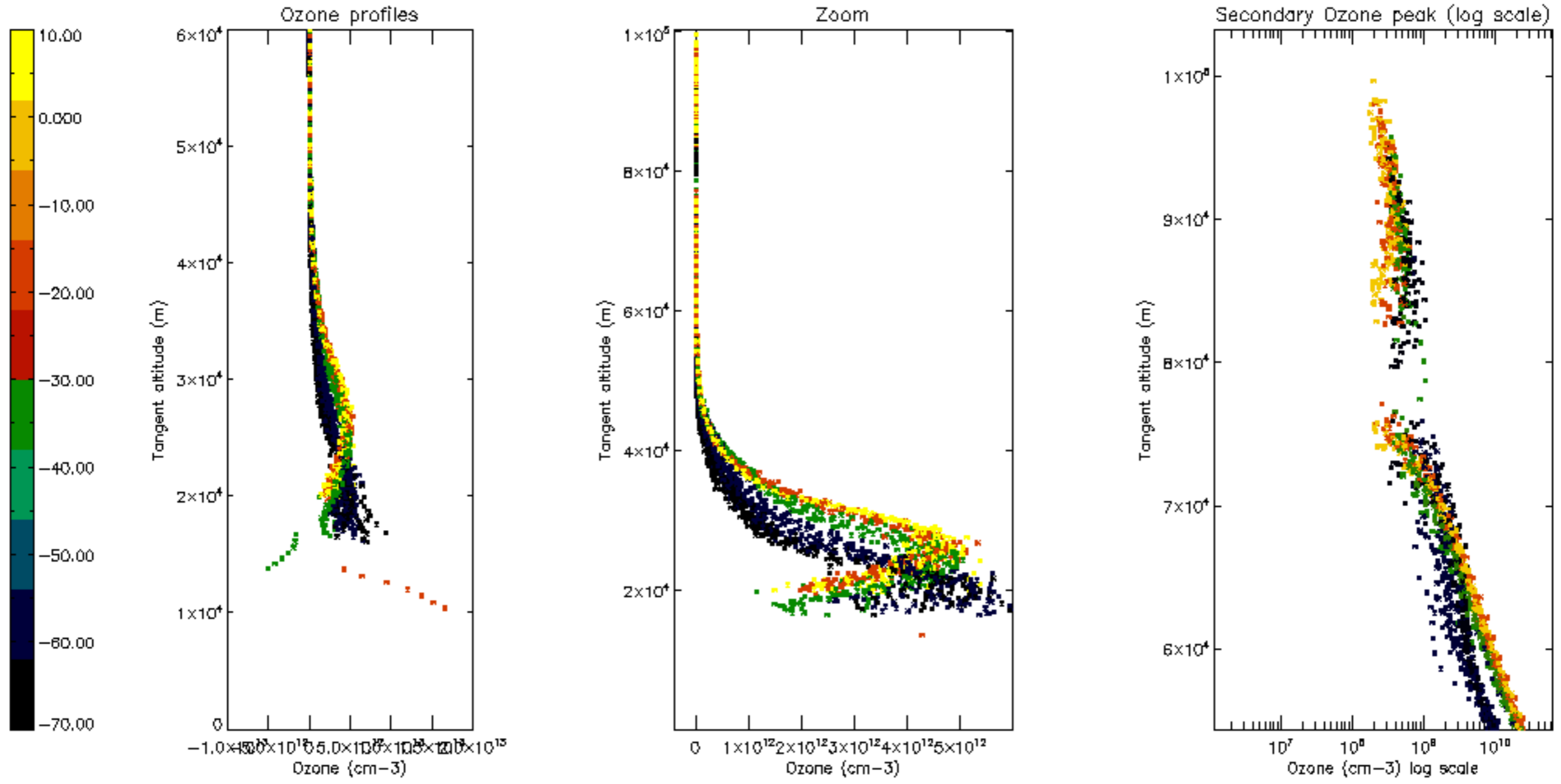
Percentage of star falling outside central band per profile

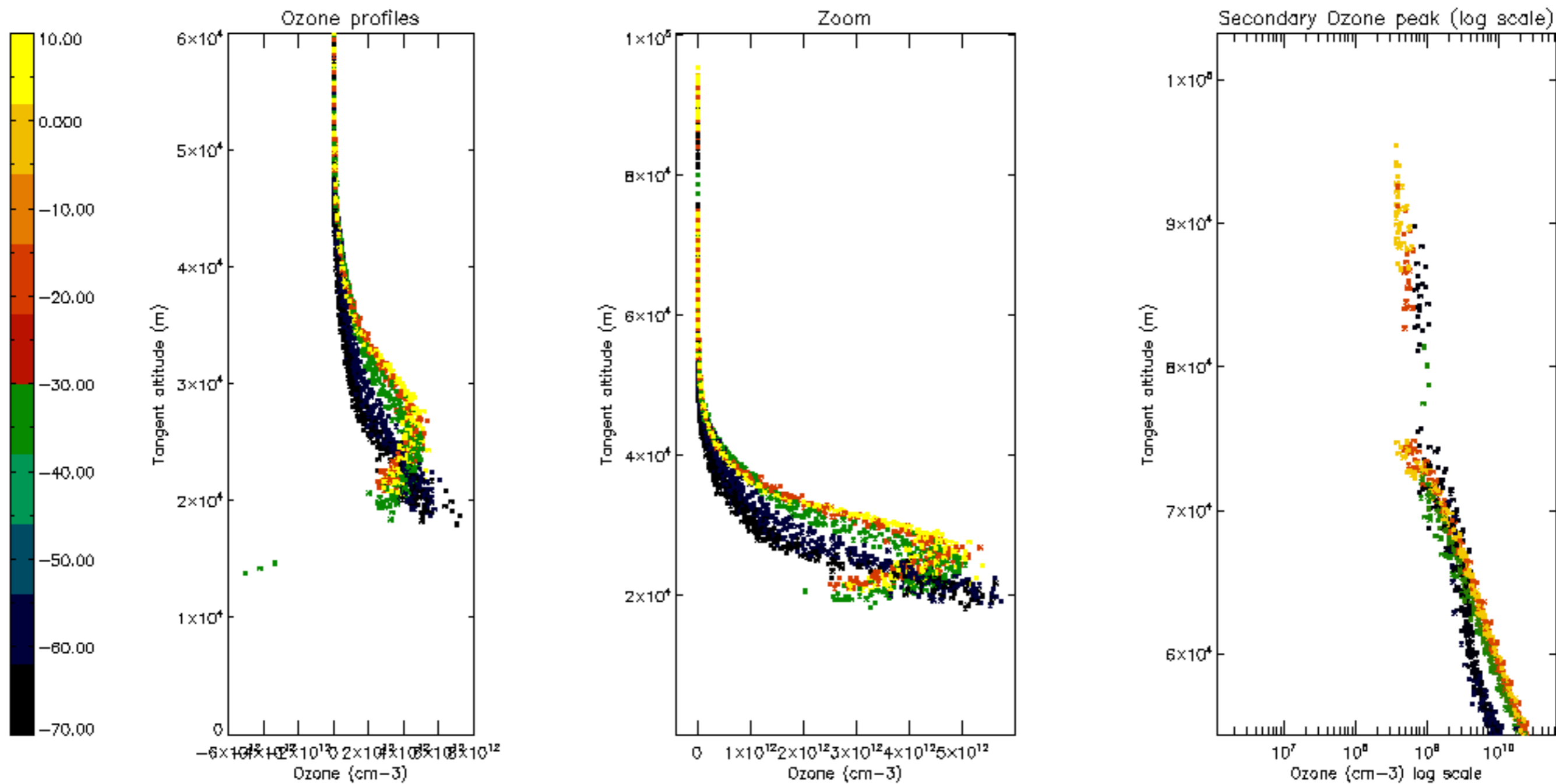


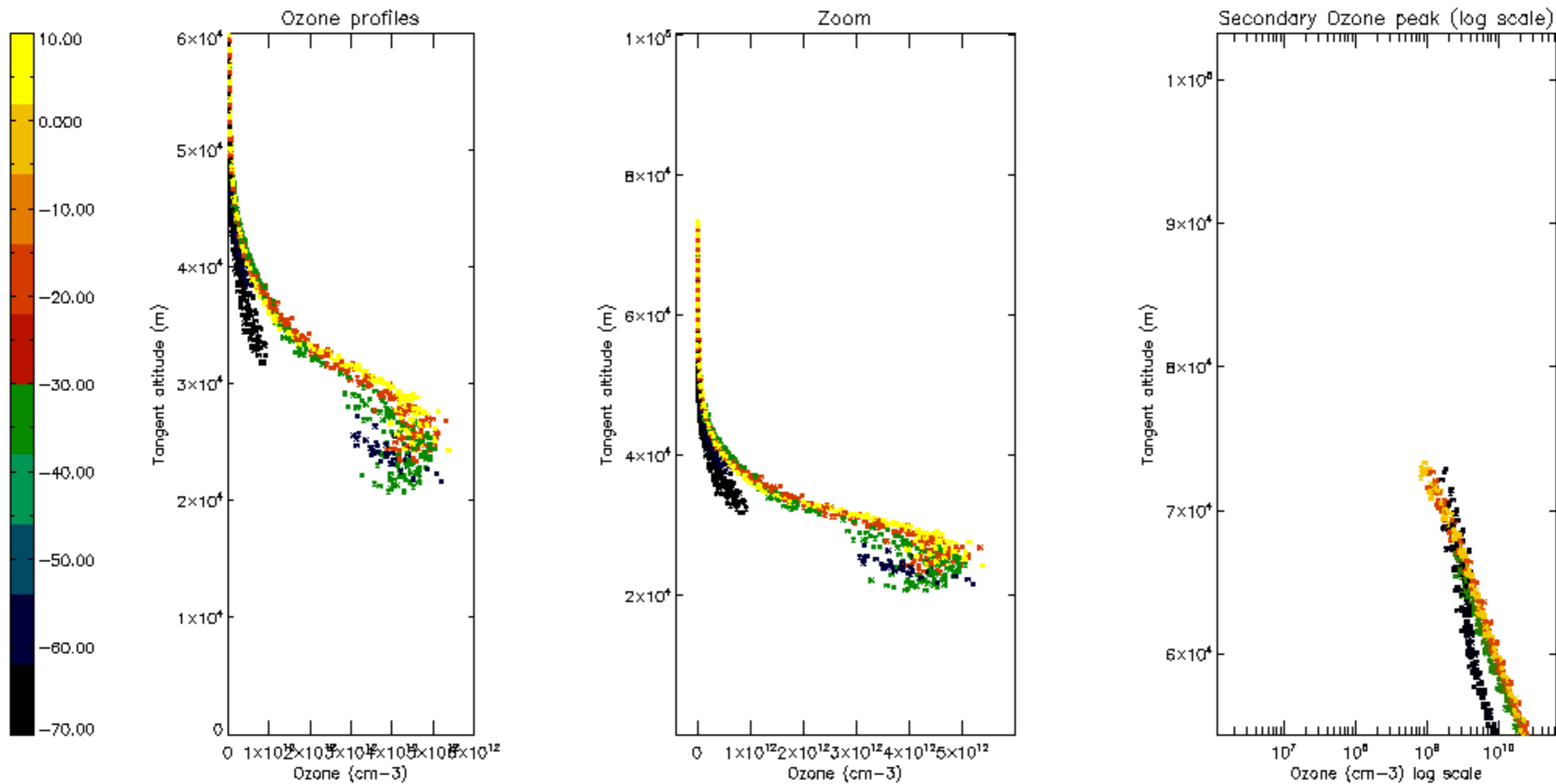
Percentage of saturation errors per profile

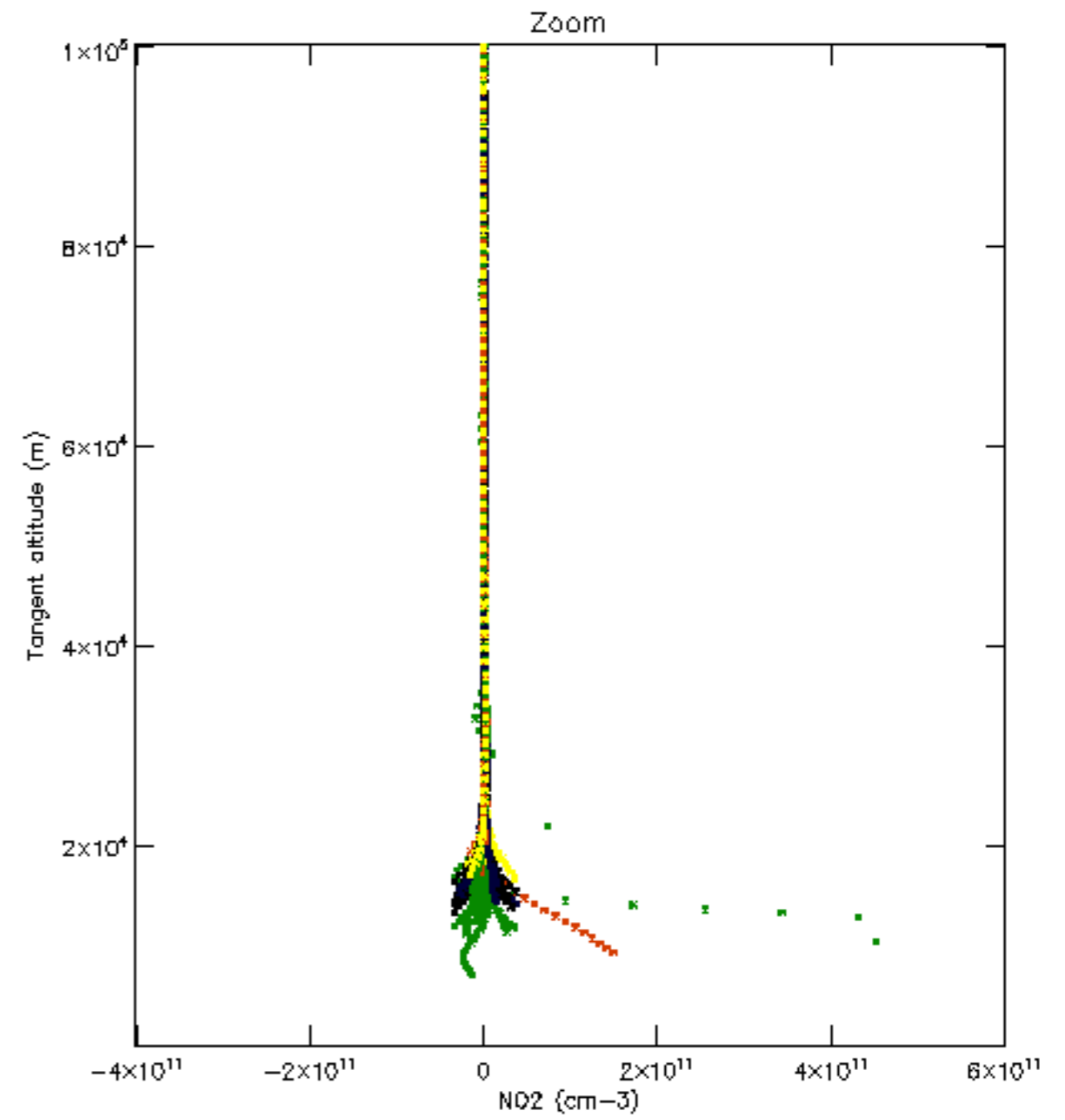
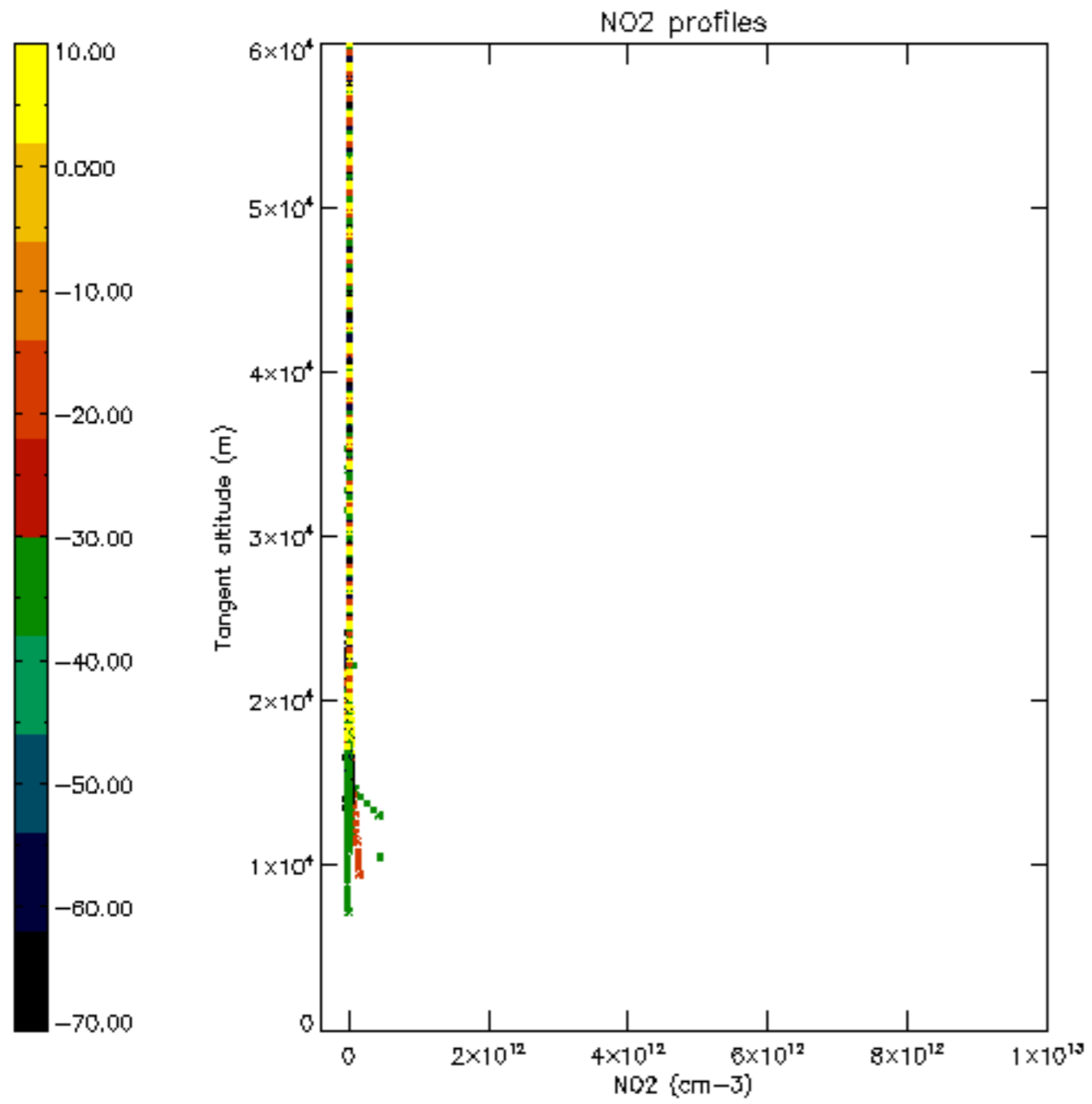


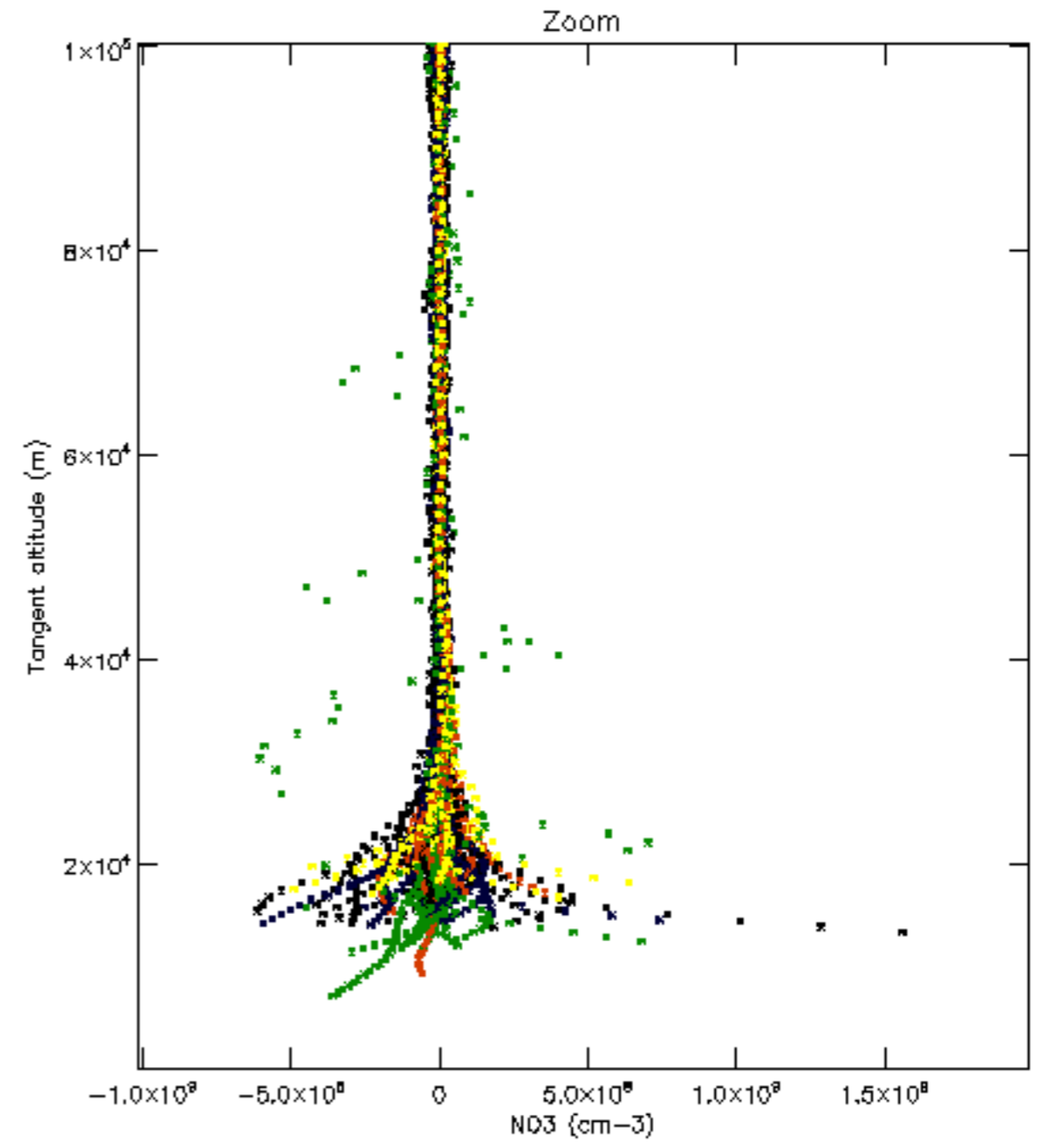
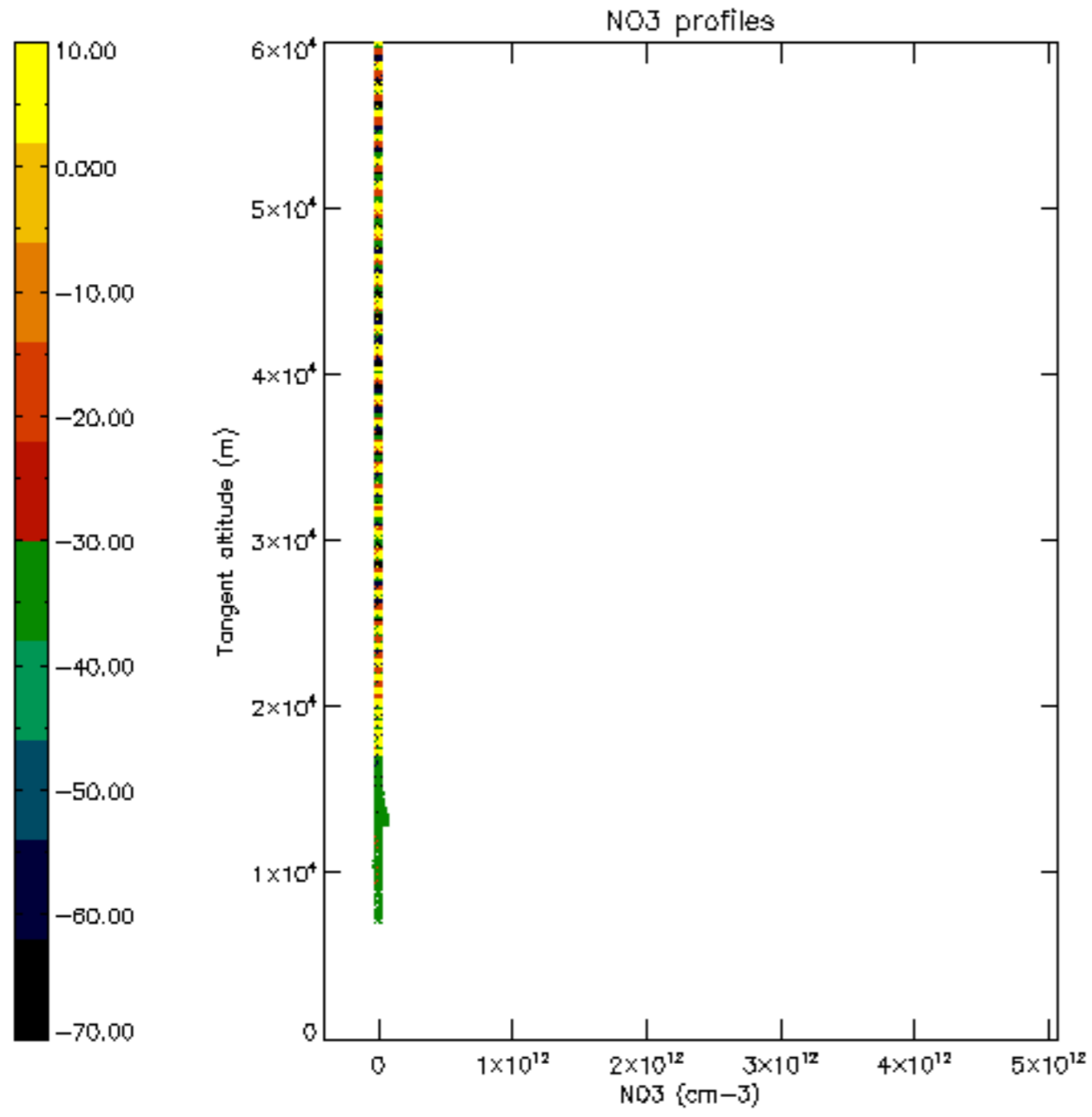


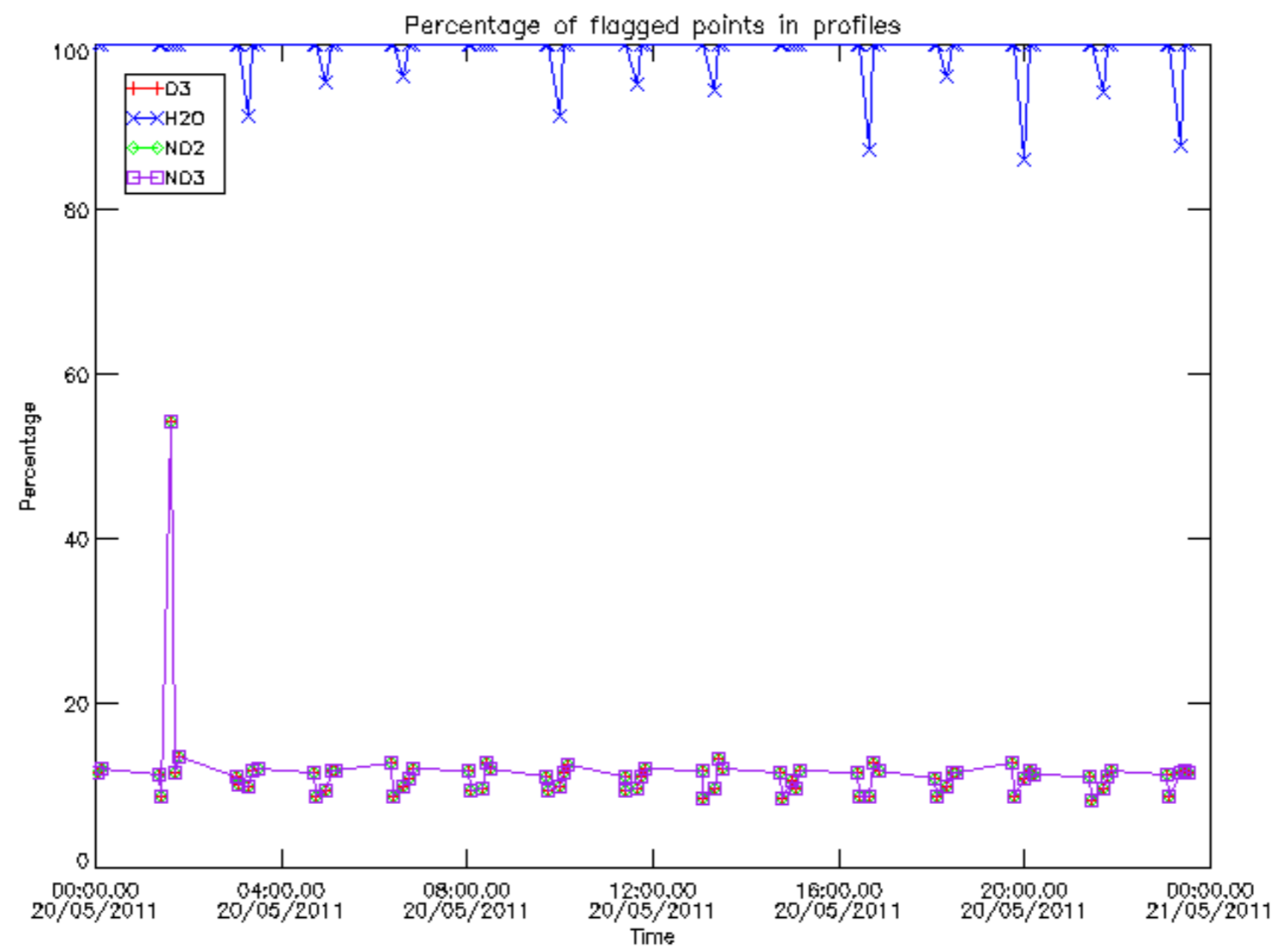




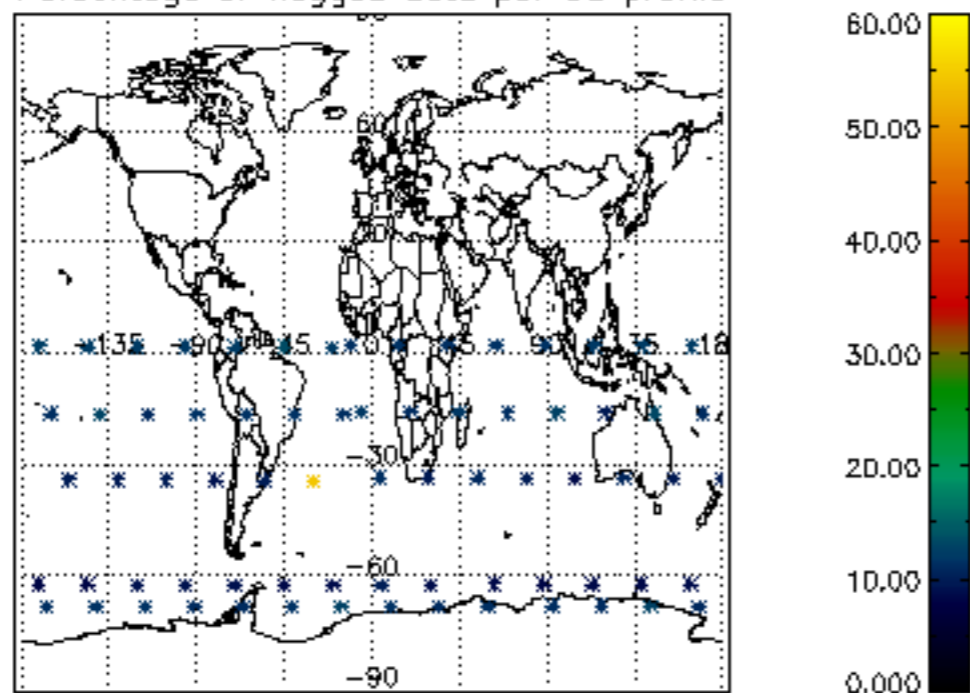




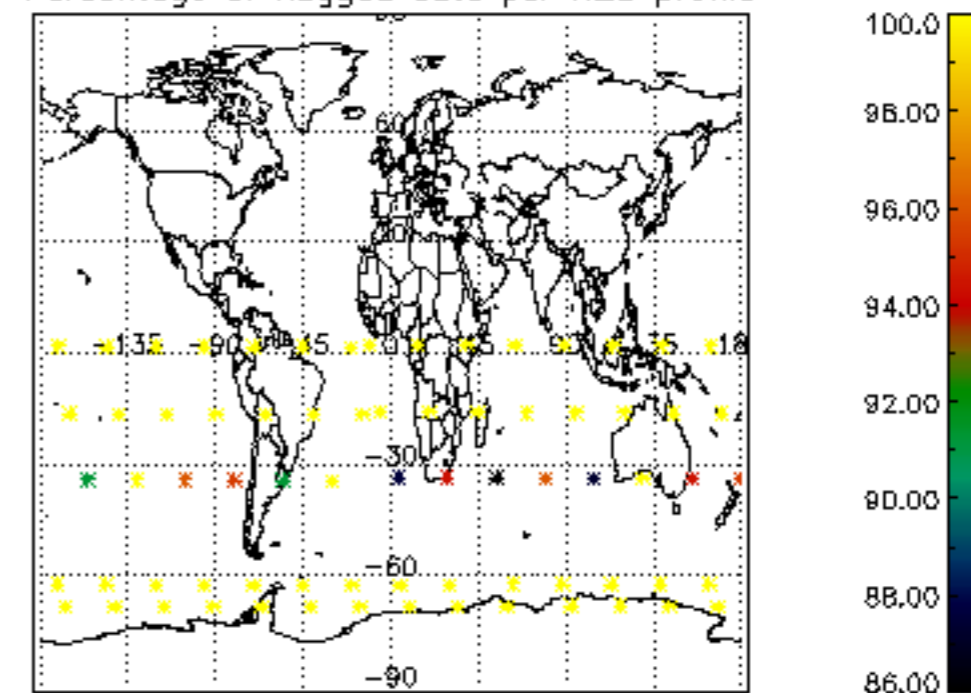




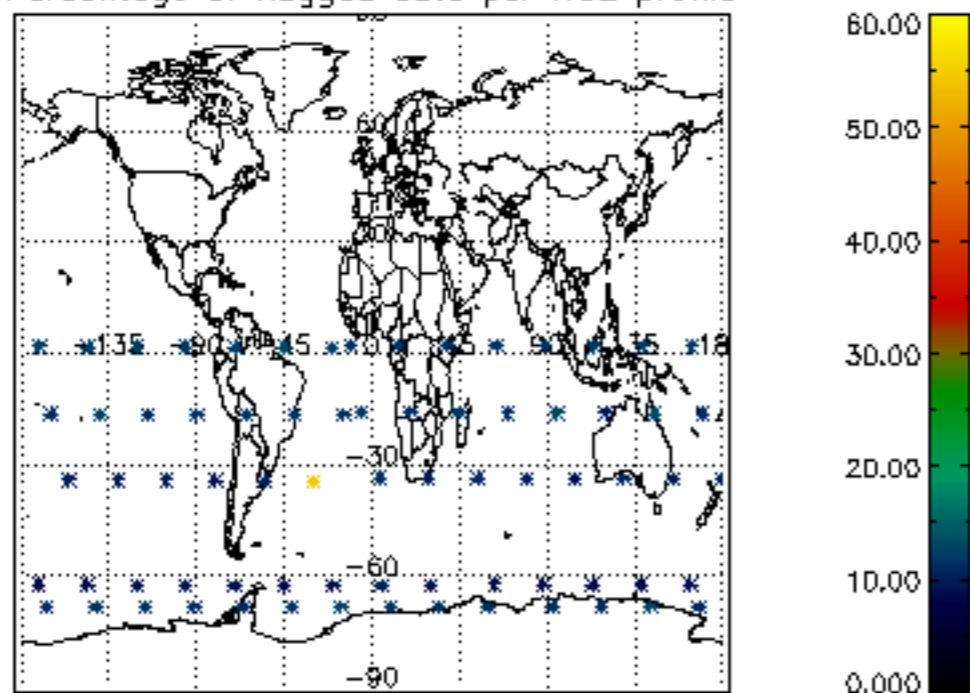
Percentage of flagged data per D3 profile



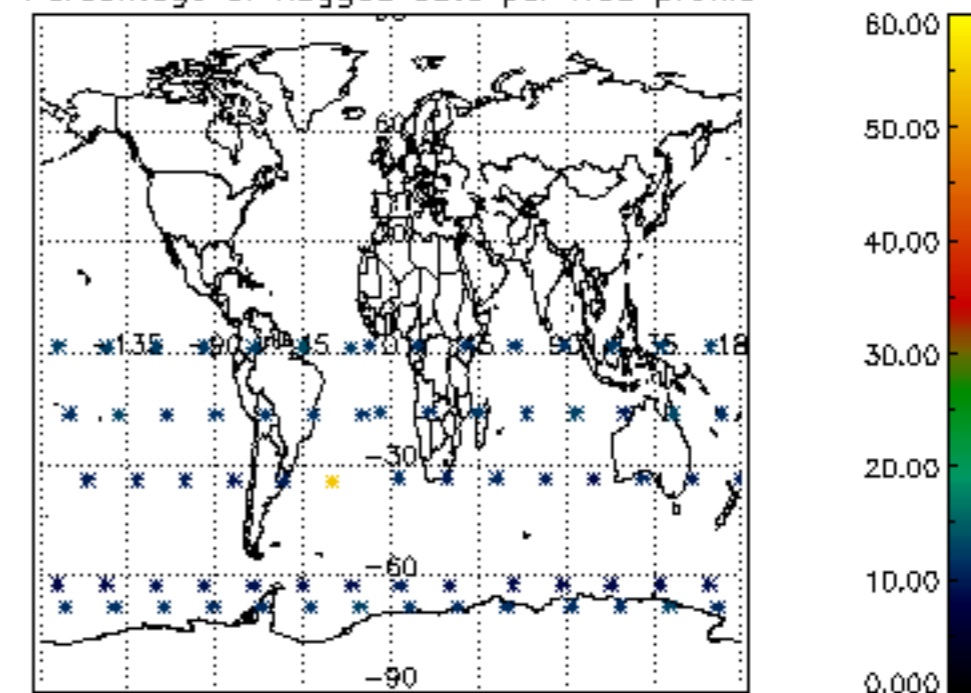
Percentage of flagged data per H2O profile

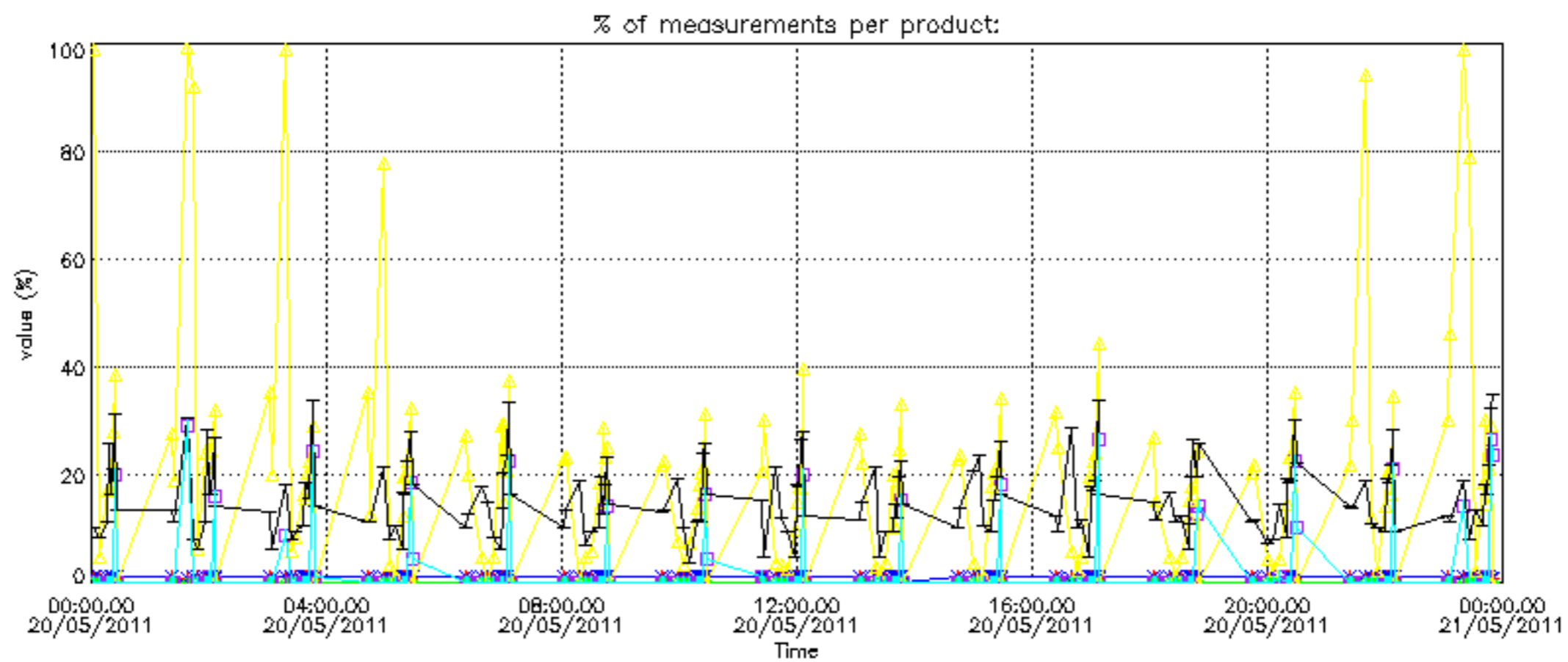
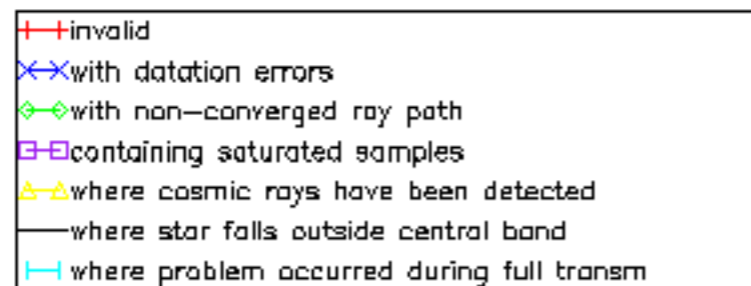


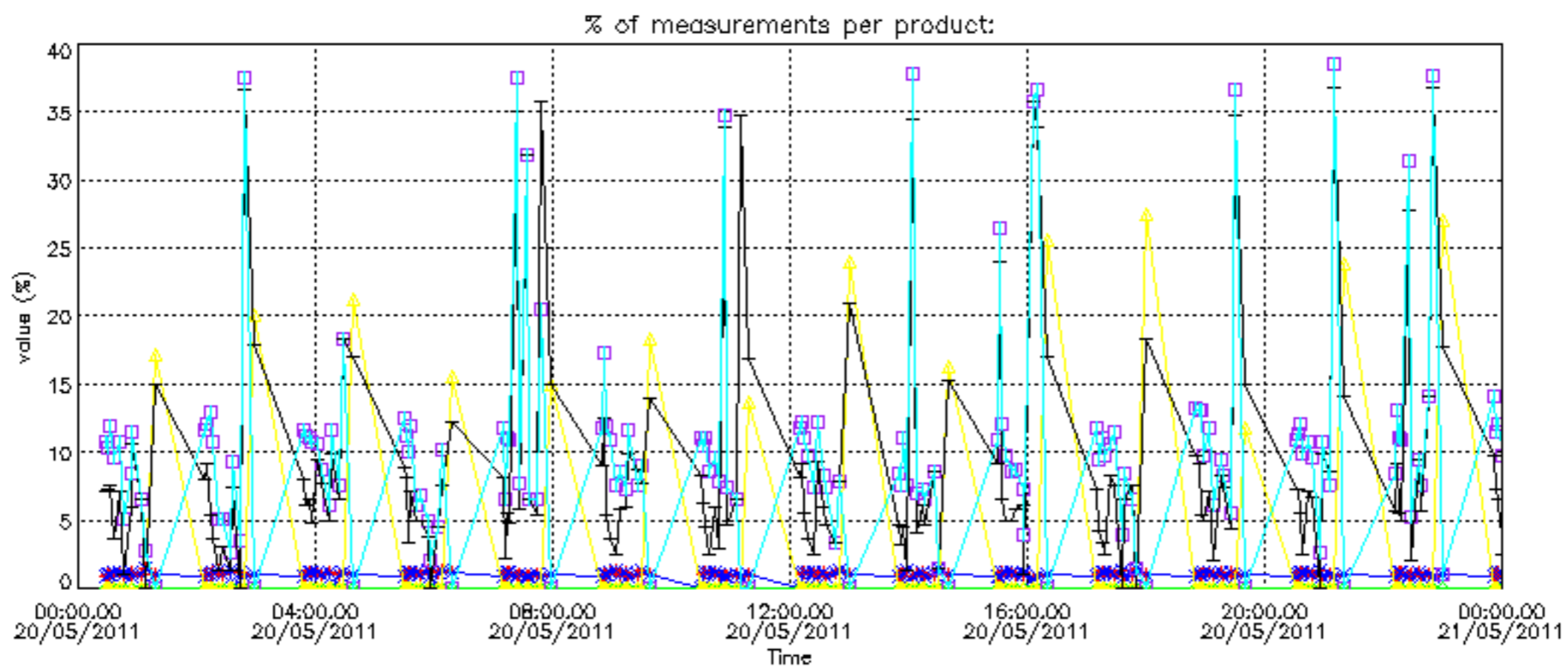
Percentage of flagged data per NO2 profile



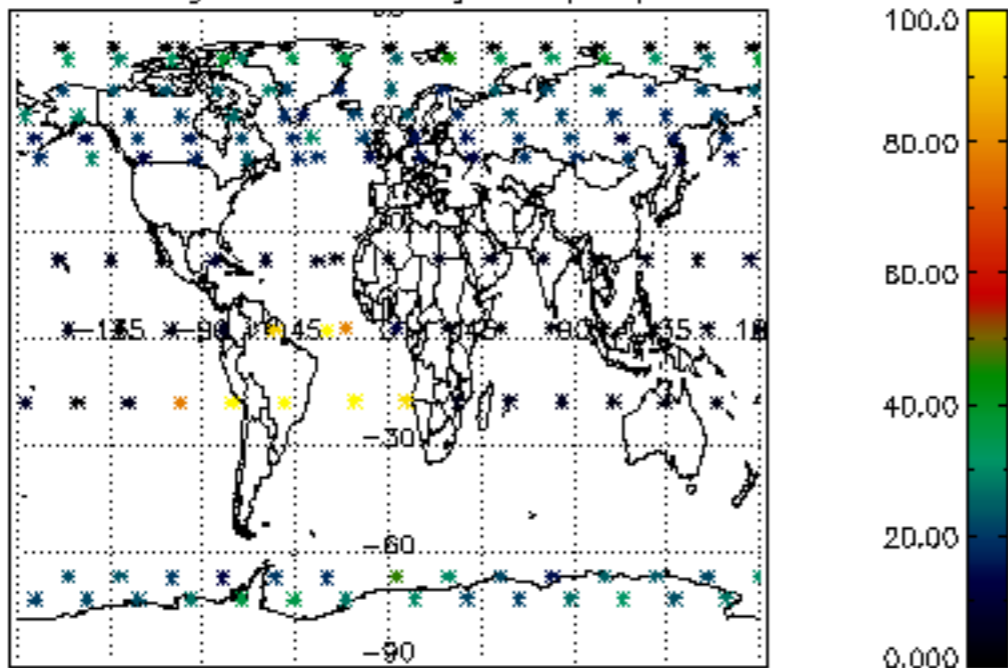
Percentage of flagged data per NO3 profile



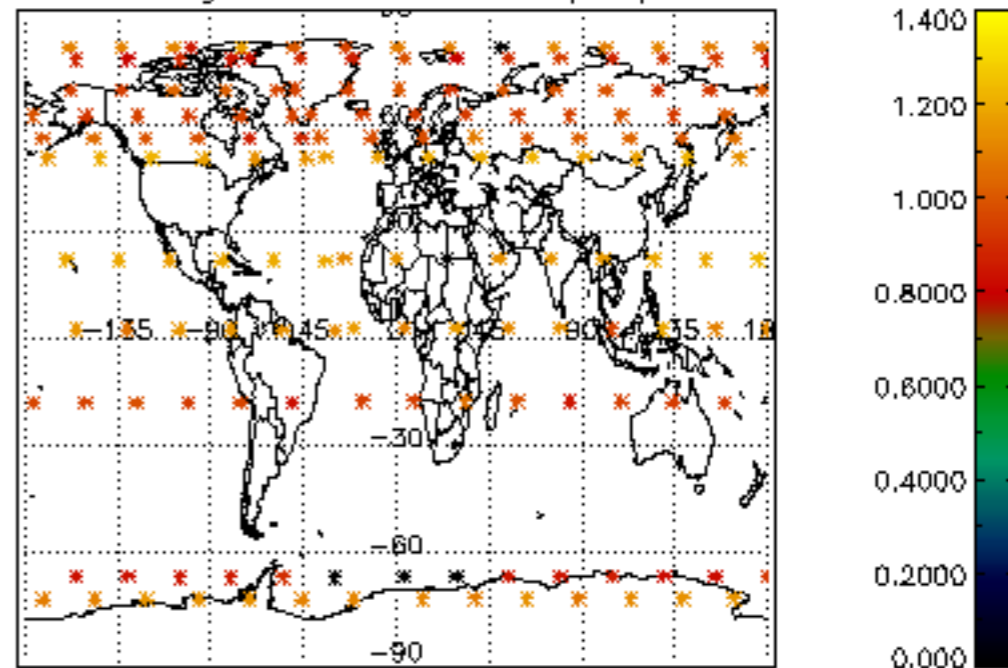




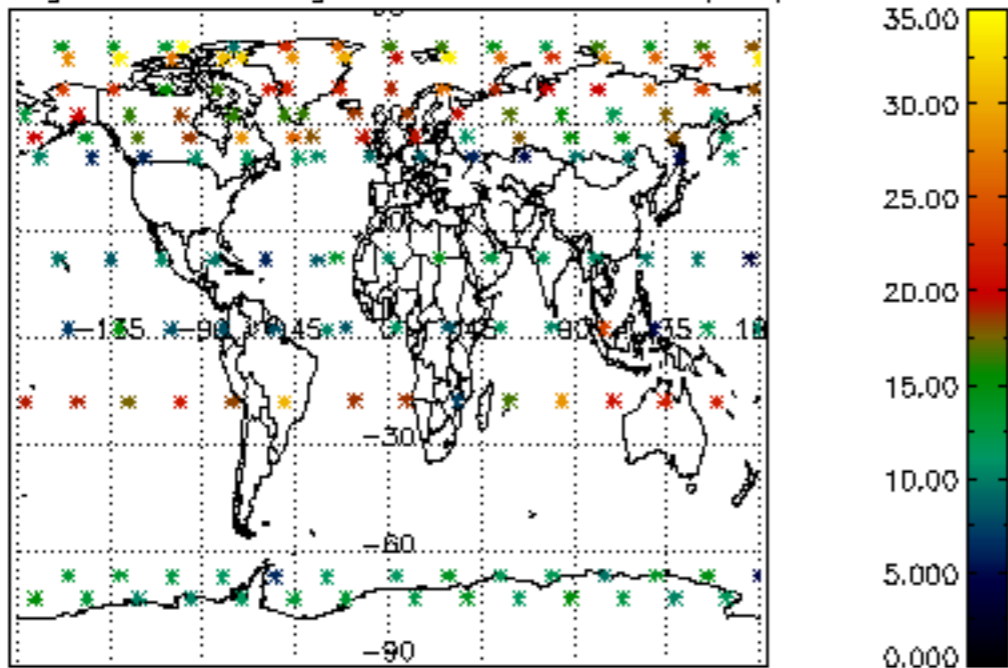
Percentage of cosmic ray hits per profile



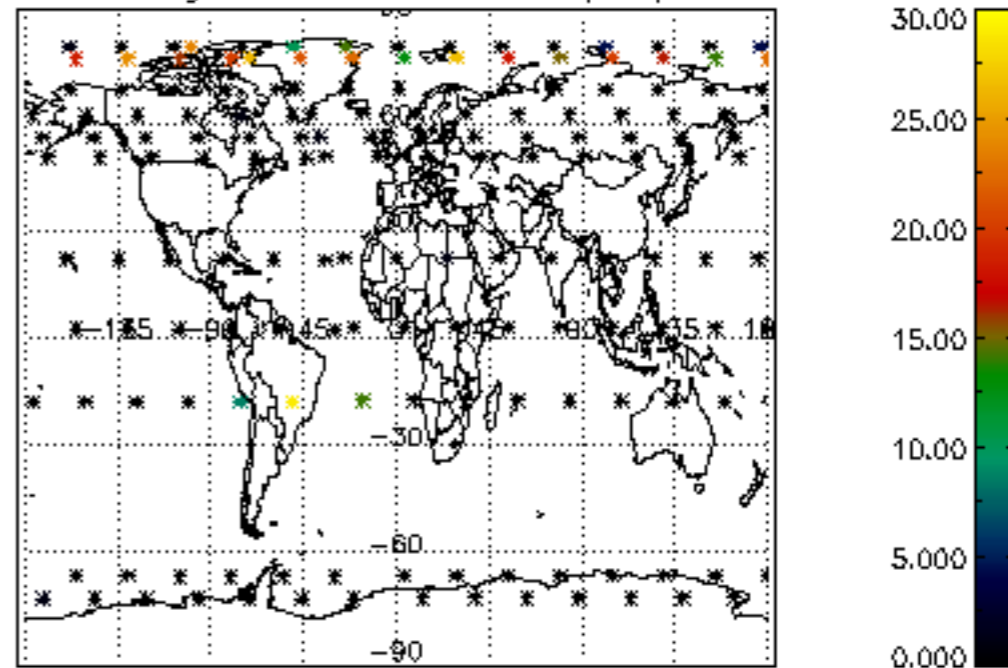
Percentage of datation errors per profile



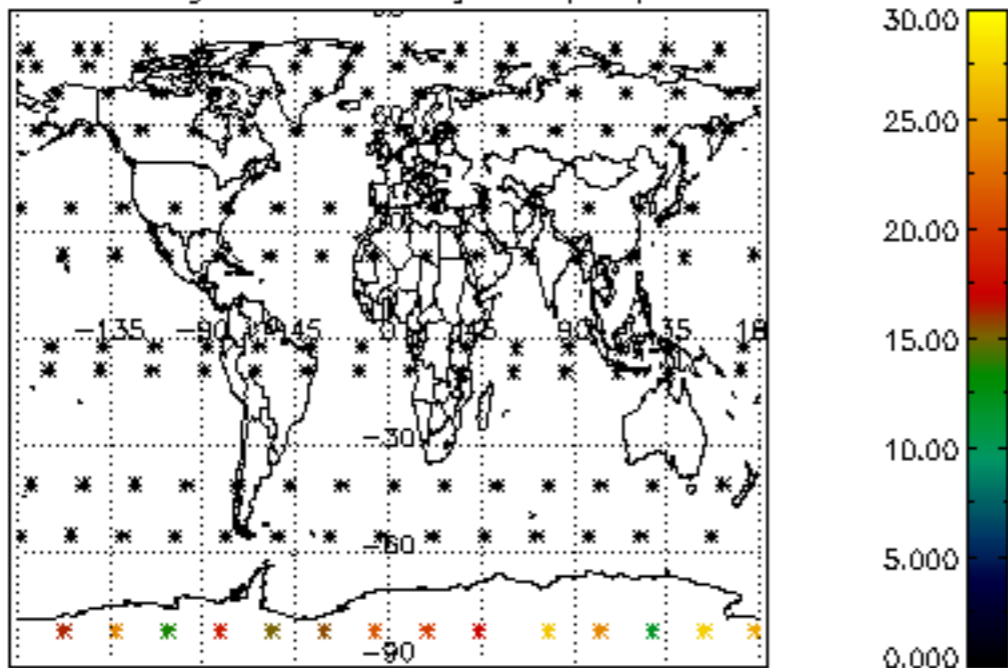
Percentage of star falling outside central band per profile



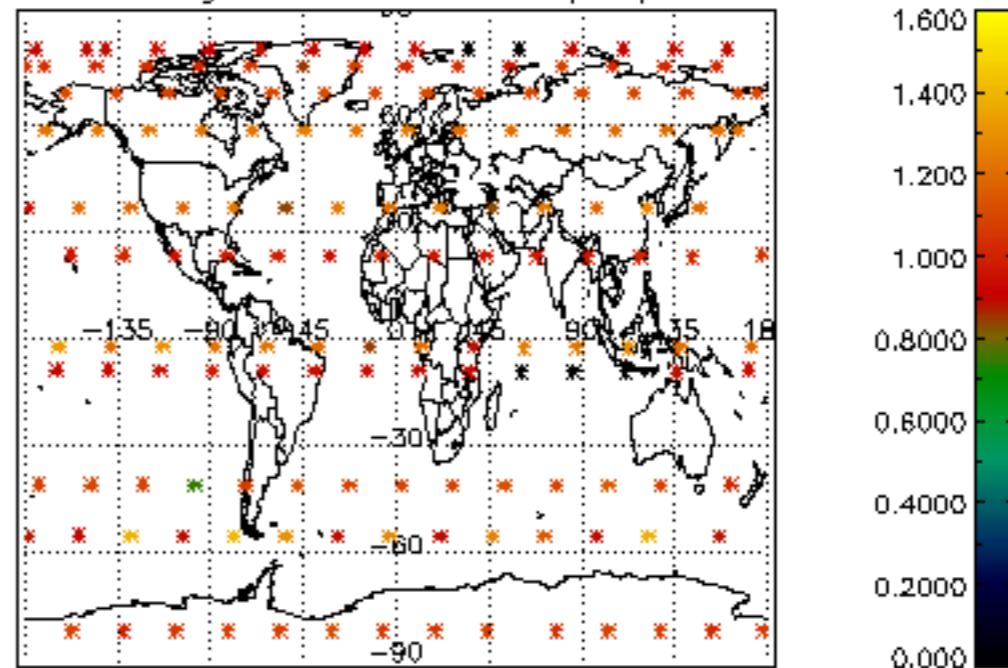
Percentage of saturation errors per profile



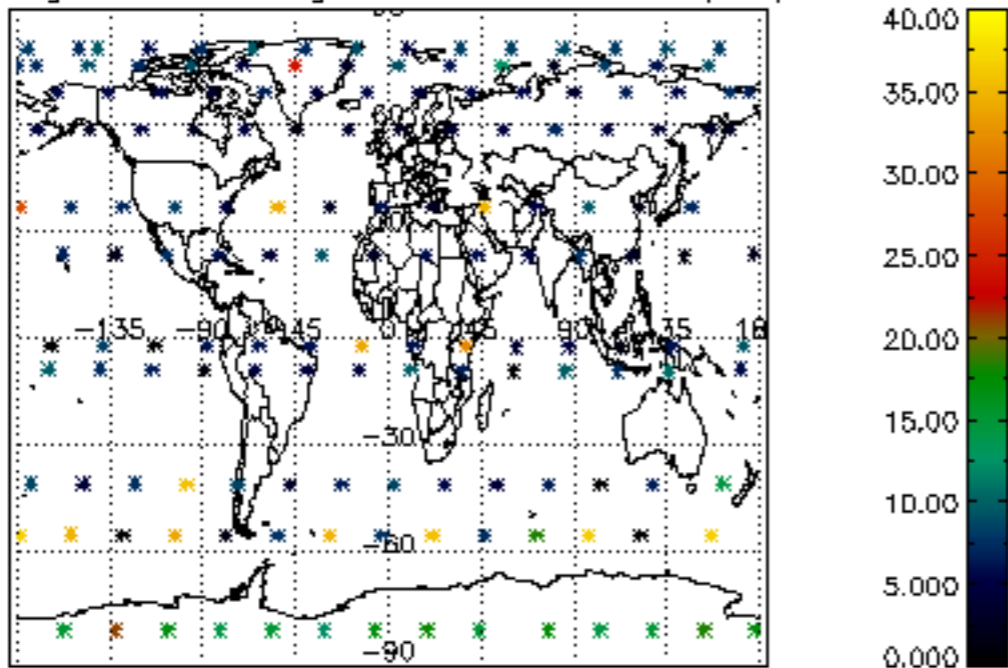
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

