

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	29APR2013 11:11:32
Data source version	GOMOS/6.01
Start time of products	26-05-2010 (26MAY2010 00:00:00)
Stop time of products	27-05-2010 (27MAY2010 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	288
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

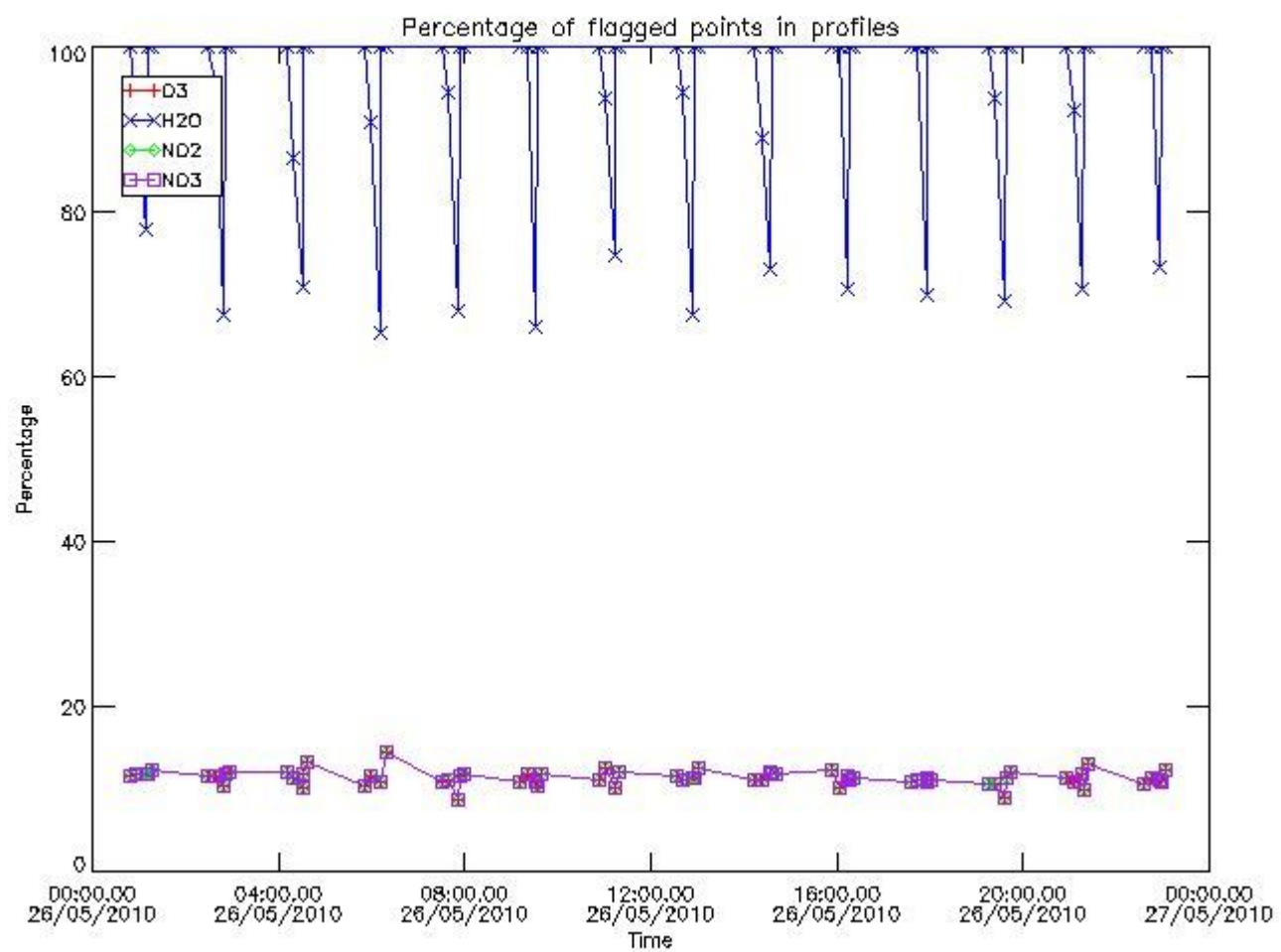
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20100526_000206_000000402089_00417_43056_1626.N1	26-MAY-2010 00:02:06	Bright	39.500	102	24Alp Ser	2.6000	4250.0	79	43056	No
2	GOM_NL__2PRFIN20100526_000810_000000382089_00417_43056_1627.N1	26-MAY-2010 00:08:10	Bright	38.000	67	5Alp CrB	2.2210	11000.	76	43056	No
3	GOM_NL__2PRFIN20100526_001859_000000372089_00417_43056_1628.N1	26-MAY-2010 00:18:59	Bright	36.500	119	14Eta Dra	2.7270	4700.0	73	43056	No
4	GOM_NL__2PRFIN20100526_002115_000000382089_00417_43056_1629.N1	26-MAY-2010 00:21:15	Bright	37.500	60	7Bet UMi	2.0810	3950.0	75	43056	No
5	GOM_NL__2PRFIN20100526_003401_000000542089_00417_43056_1630.N1	26-MAY-2010 00:34:01	Bright	54.000	76	27Gam Cas	2.3000	30000.	108	43056	No
6	GOM_NL__2PRFIN20100526_003512_000000392089_00417_43056_1631.N1	26-MAY-2010 00:35:12	Bright	38.500	68	18Alp Cas	2.2250	4500.0	77	43056	No
7	GOM_NL__2PRFIN20100526_004130_000000402089_00417_43056_1632.N1	26-MAY-2010 00:41:30	Bright	39.500	53	43Bet And	2.0480	3300.0	79	43056	No
8	GOM_NL__2PRFIN20100526_004404_000000492089_00417_43056_1633.N1	26-MAY-2010 00:44:04	Twilight	49.000	58	21Alp And	2.0730	11000.	98	43056	No
9	GOM_NL__2PRFIN20100526_004837_000000452089_00417_43056_1634.N1	26-MAY-2010 00:48:37	Dark	44.500	140	88Gam Peg	2.8340	26000.	89	43056	No
10	GOM_NL__2PRFIN20100526_005729_000000442089_00417_43056_1635.N1	26-MAY-2010 00:57:29	Dark	43.500	52	16Bet Cet	2.0370	4500.0	87	43056	No
11	GOM_NL__2PRFIN20100526_010906_000000442089_00417_43056_1623.N1	26-MAY-2010 01:09:06	Dark	43.500	63	Bet Gru	2.1500	2800.0	87	43056	No
12	GOM_NL__2PRFIN20100526_011050_000000432089_00418_43057_1624.N1	26-MAY-2010 01:10:50	Dark	43.000	31	Alp Gru	1.7340	15200.	86	43057	No
13	GOM_NL__2PRFIN20100526_011608_000000422089_00418_43057_1625.N1	26-MAY-2010 01:16:08	Dark	41.500	45	Alp Pav	1.9400	26000.	83	43057	No
14	GOM_NL__2PRFIN20100526_012246_000000452089_00418_43057_1626.N1	26-MAY-2010 01:22:46	Straylight	44.500	141	Bet Ara	2.8400	4600.0	89	43057	No
15	GOM_NL__2PRFIN20100526_012535_000000492089_00418_43057_1627.N1	26-MAY-2010 01:25:35	Straylight	48.500	40	The Sco	1.8590	7100.0	97	43057	No
16	GOM_NL__2PRFIN20100526_012725_000000492089_00418_43057_1628.N1	26-MAY-2010 01:27:25	Straylight	49.000	25	35Lam Sco	1.6200	28000.	98	43057	No
17	GOM_NL__2PRFIN20100526_012923_000000502089_00418_43057_1629.N1	26-MAY-2010 01:29:23	Twilight	49.500	75	26Eps Sco	2.2910	4250.0	99	43057	No
18	GOM_NL__2PRFIN20100526_013131_000000452089_00418_43057_1630.N1	26-MAY-2010 01:31:31	Twilight	44.500	136	23Tau Sco	2.8220	30000.	89	43057	No
19	GOM_NL__2PRFIN20100526_013431_000000402089_00418_43057_1631.N1	26-MAY-2010 01:34:31	Bright	39.500	97	8Bet1Sco	2.5610	30000.	79	43057	No
20	GOM_NL__2PRFIN20100526_013759_000000372089_00418_43057_1632.N1	26-MAY-2010 01:37:59	Bright	37.000	104	27Bet Lib	2.6140	13100.	74	43057	No
21	GOM_NL__2PRFIN20100526_013939_000000432089_00418_43057_1633.N1	26-MAY-2010 01:39:39	Bright	43.000	120	1Del Oph	2.7340	3200.0	86	43057	No
22	GOM_NL__2PRFIN20100526_014242_000000392089_00418_43057_1634.N1	26-MAY-2010 01:42:42	Bright	39.000	102	24Alp Ser	2.6000	4250.0	78	43057	No
23	GOM_NL__2PRFIN20100526_014846_000000392089_00418_43057_1635.N1	26-MAY-2010 01:48:46	Bright	39.000	67	5Alp CrB	2.2210	11000.	78	43057	No
24	GOM_NL__2PRFIN20100526_015935_000000402089_00418_43057_1636.N1	26-MAY-2010 01:59:35	Bright	40.000	119	14Eta Dra	2.7270	4700.0	80	43057	No
25	GOM_NL__2PRFIN20100526_020151_000000352089_00418_43057_1637.N1	26-MAY-2010 02:01:51	Bright	34.500	60	7Bet UMi	2.0810	3950.0	69	43057	No
26	GOM_NL__2PRFIN20100526_021436_000000542089_00418_43057_1638.N1	26-MAY-2010 02:14:36	Bright	54.000	76	27Gam Cas	2.3000	30000.	108	43057	No
27	GOM_NL__2PRFIN20100526_021548_000000552089_00418_43057_1639.N1	26-MAY-2010 02:15:48	Bright	54.500	68	18Alp Cas	2.2250	4500.0	109	43057	No
28	GOM_NL__2PRFIN20100526_022206_000000402089_00418_43057_1640.N1	26-MAY-2010 02:22:06	Bright	39.500	53	43Bet And	2.0480	3300.0	79	43057	No
29	GOM_NL__2PRFIN20100526_022440_000000482089_00418_43057_1641.N1	26-MAY-2010 02:24:40	Twilight	47.500	58	21Alp And	2.0730	11000.	95	43057	No
30	GOM_NL__2PRFIN20100526_022914_000000452089_00418_43057_1642.N1	26-MAY-2010 02:29:14	Dark	44.500	140	88Gam Peg	2.8340	26000.	89	43057	No
31	GOM_NL__2PRFIN20100526_023805_000000442089_00418_43057_1643.N1	26-MAY-2010 02:38:05	Dark	44.000	52	16Bet Cet	2.0370	4500.0	88	43057	No
32	GOM_NL__2PRFIN20100526_024943_000000502089_00418_43057_1631.N1	26-MAY-2010 02:49:43	Dark	49.500	63	Bet Gru	2.1500	2800.0	99	43057	No
33	GOM_NL__2PRFIN20100526_025127_000000432089_00419_43058_1632.N1	26-MAY-2010 02:51:27	Dark	43.000	31	Alp Gru	1.7340	15200.	86	43058	No
34	GOM_NL__2PRFIN20100526_025644_000000432089_00419_43058_1633.N1	26-MAY-2010 02:56:44	Dark	42.500	45	Alp Pav	1.9400	26000.	85	43058	No
35	GOM_NL__2PRFIN20100526_030322_000000462089_00419_43058_1634.N1	26-MAY-2010 03:03:22	Straylight	46.000	141	Bet Ara	2.8400	4600.0	92	43058	No
36	GOM_NL__2PRFIN20100526_030612_000000472089_00419_43058_1635.N1	26-MAY-2010 03:06:12	Straylight	46.500	40	The Sco	1.8590	7100.0	93	43058	No
37	GOM_NL__2PRFIN20100526_030802_000000482089_00419_43058_1636.N1	26-MAY-2010 03:08:02	Straylight	48.000	25	35Lam Sco	1.6200	28000.	96	43058	No
38	GOM_NL__2PRFIN20100526_030959_000000462089_00419_43058_1637.N1	26-MAY-2010 03:09:59	Twilight	46.000	75	26Eps Sco	2.2910	4250.0	92	43058	No
39	GOM_NL__2PRFIN20100526_031207_000000482089_00419_43058_1638.N1	26-MAY-2010 03:12:07	Twilight	48.000	136	23Tau Sco	2.8220	30000.	96	43058	No
40	GOM_NL__2PRFIN20100526_031507_000000412089_00419_43058_1639.N1	26-MAY-2010 03:15:07	Bright	40.500	97	8Bet1Sco	2.5610	30000.	81	43058	No
41	GOM_NL__2PRFIN20100526_031835_000000382089_00419_43058_1640.N1	26-MAY-2010 03:18:35	Bright	37.500	104	27Bet Lib	2.6140	13100.	75	43058	No
42	GOM_NL__2PRFIN20100526_032317_000000402089_00419_43058_1641.N1	26-MAY-2010 03:23:17	Bright	39.500	102	24Alp Ser	2.6000	4250.0	79	43058	No

279	GOM_NL__2PRFIN20100526_231518_000000512089_00431_43070_1781.N1	26-MAY-2010 23:15:18	Straylight	50.500	25	35Lam Sco	1.6200	28000.	101	43070	No
280	GOM_NL__2PRFIN20100526_231714_000000482089_00431_43070_1782.N1	26-MAY-2010 23:17:14	Twilight_stray	48.000	75	26Eps Sco	2.2910	4250.0	96	43070	No
281	GOM_NL__2PRFIN20100526_231922_000000472089_00431_43070_1783.N1	26-MAY-2010 23:19:22	Twilight_stray	47.000	136	23Tau Sco	2.8220	30000.	94	43070	No
282	GOM_NL__2PRFIN20100526_232220_000000422089_00431_43070_1784.N1	26-MAY-2010 23:22:20	Bright	42.000	97	8Bet1Sco	2.5610	30000.	84	43070	No
283	GOM_NL__2PRFIN20100526_232547_000000382089_00431_43070_1785.N1	26-MAY-2010 23:25:47	Bright	37.500	104	27Bet Lib	2.6140	13100.	75	43070	No
284	GOM_NL__2PRFIN20100526_232725_000000422089_00431_43070_1786.N1	26-MAY-2010 23:27:25	Bright	42.000	120	1Del Oph	2.7340	3200.0	84	43070	No
285	GOM_NL__2PRFIN20100526_233027_000000402089_00431_43070_1787.N1	26-MAY-2010 23:30:27	Bright	40.000	102	24Alp Ser	2.6000	4250.0	80	43070	No
286	GOM_NL__2PRFIN20100526_233630_000000392089_00431_43070_1788.N1	26-MAY-2010 23:36:30	Bright	38.500	67	5Alp CrB	2.2210	11000.	77	43070	No
287	GOM_NL__2PRFIN20100526_234717_000000422089_00431_43070_1789.N1	26-MAY-2010 23:47:17	Bright	41.500	119	14Eta Dra	2.7270	4700.0	83	43070	No
288	GOM_NL__2PRFIN20100526_234937_000000402089_00431_43070_1790.N1	26-MAY-2010 23:49:37	Bright	39.500	60	7Bet UMi	2.0810	3950.0	79	43070	No

3. Quality information per product

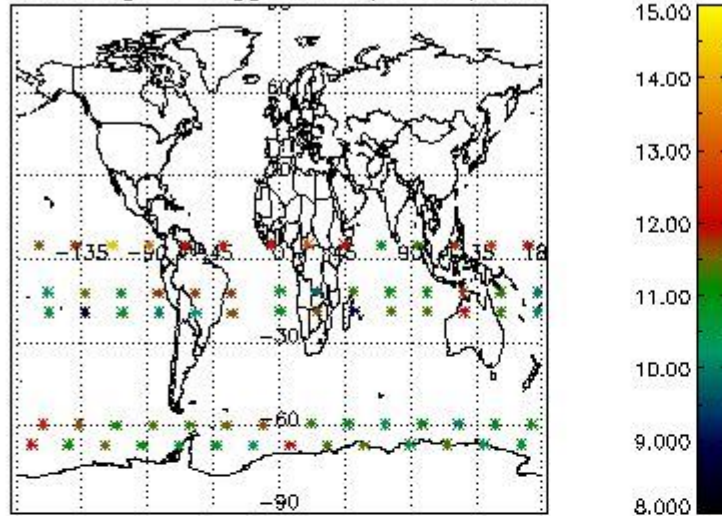
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

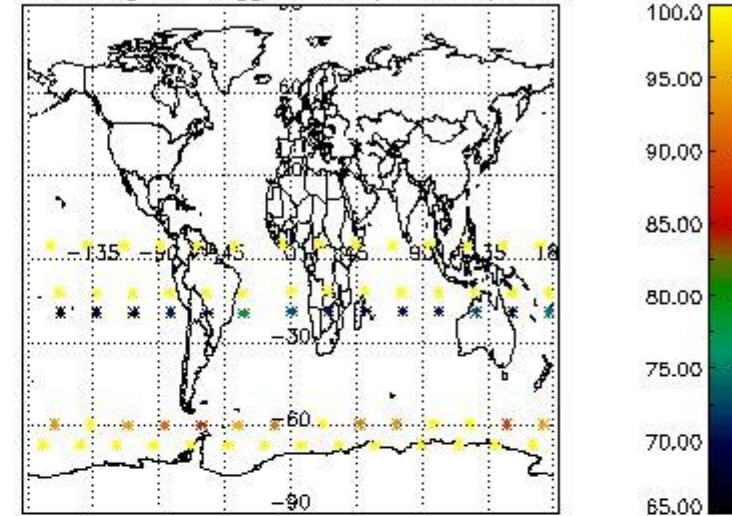


3.2 Plot quality information per product (world map)

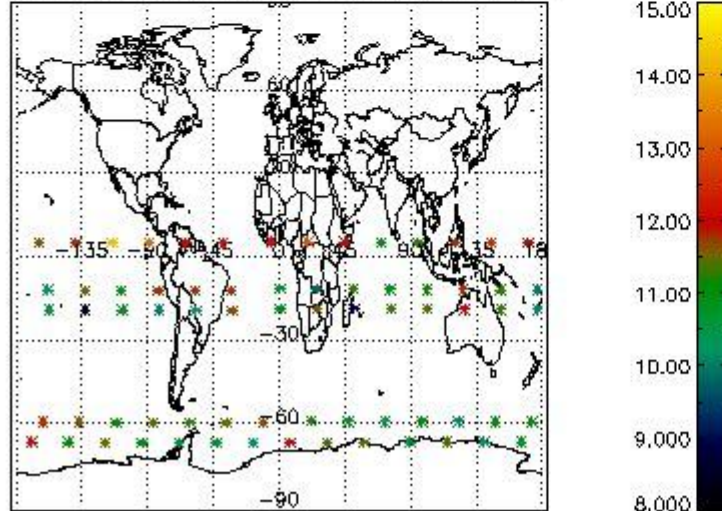
Percentage of flagged data per O3 profile



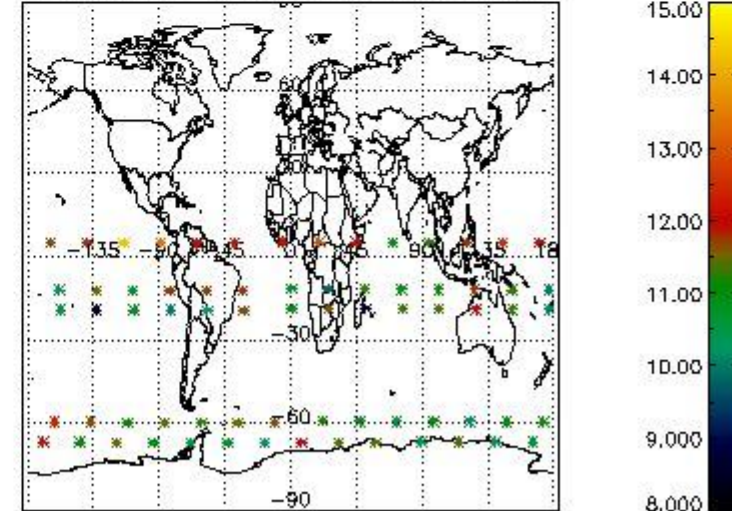
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

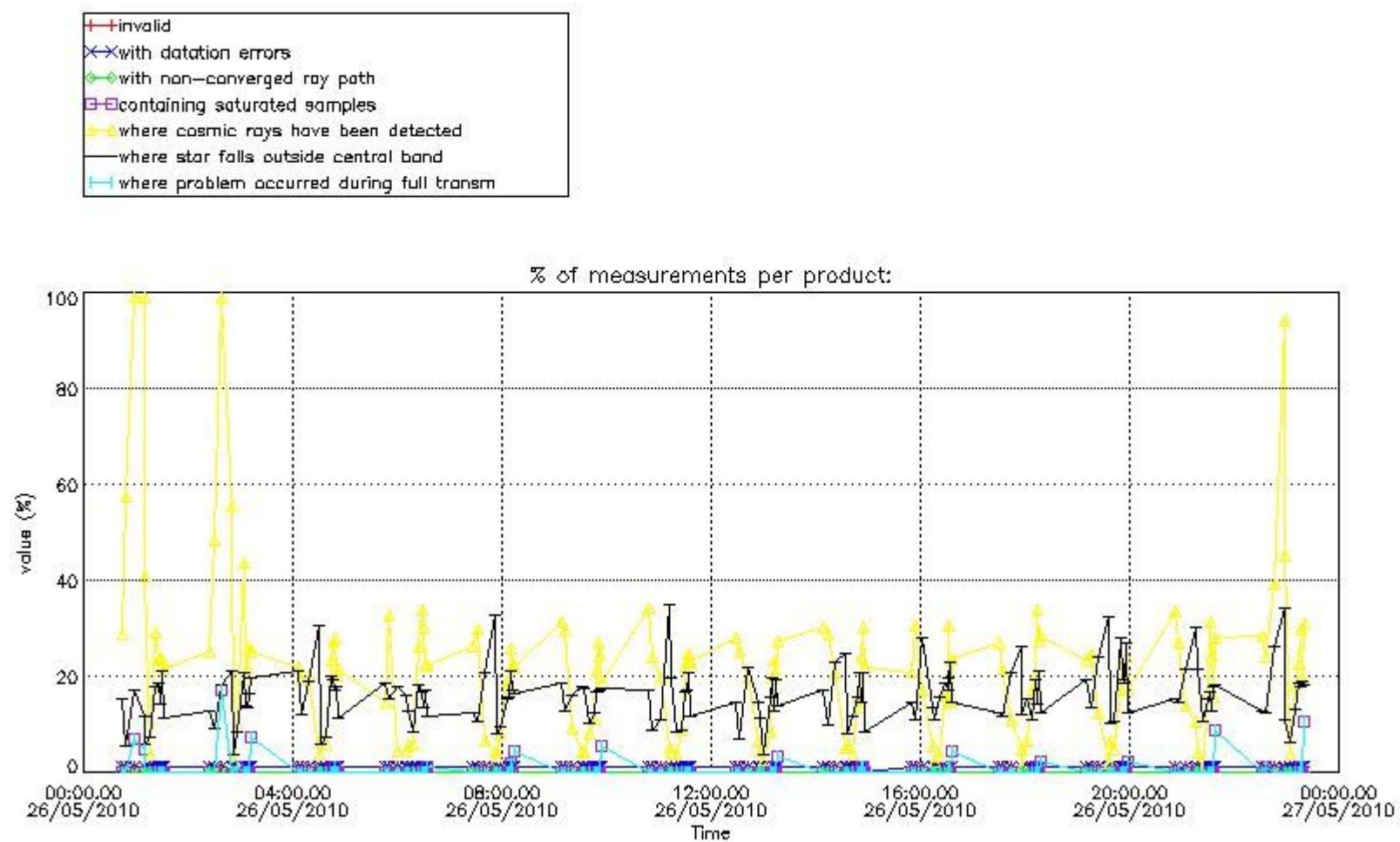


4. Level 1 quality information per product

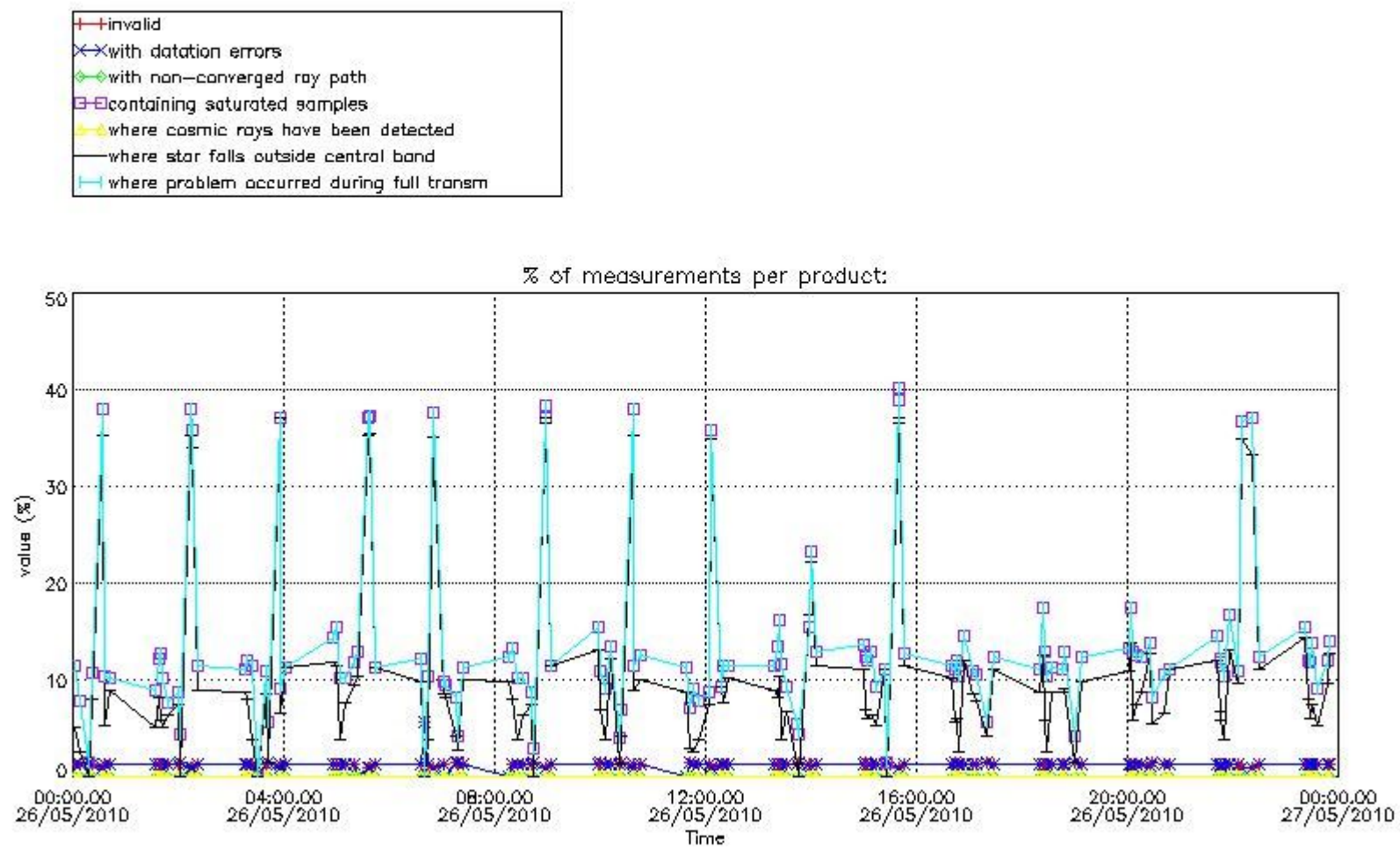
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

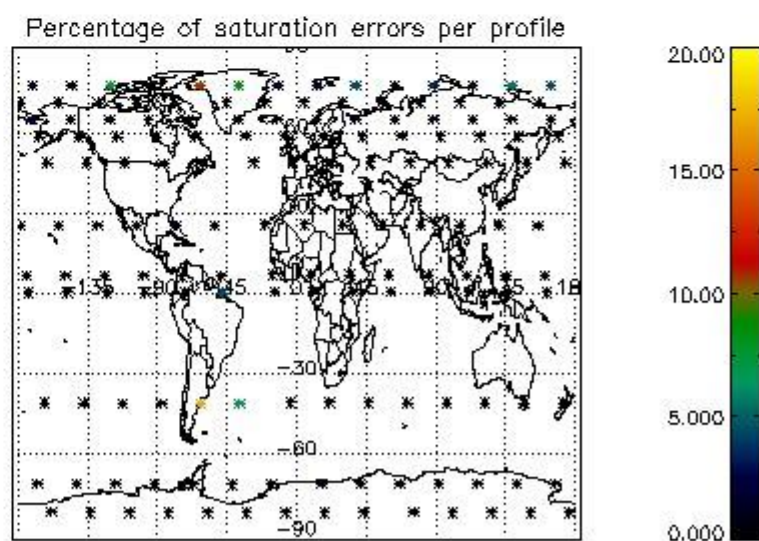
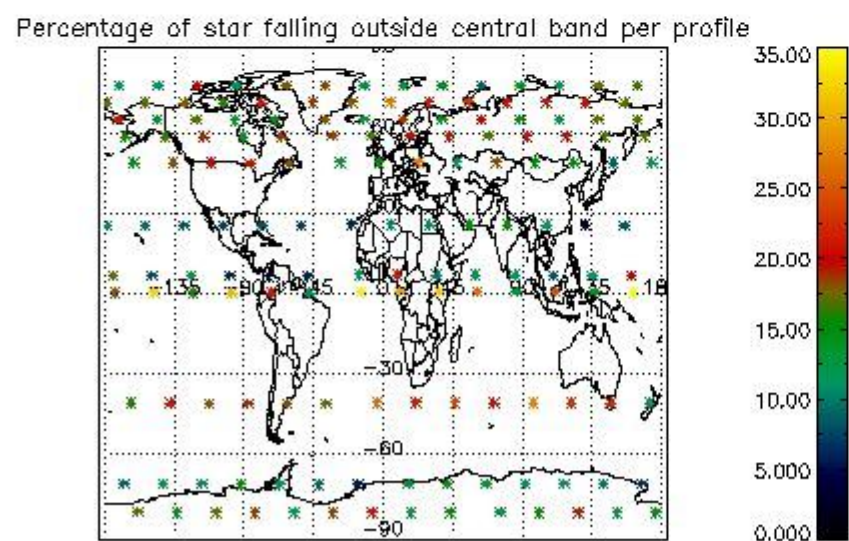
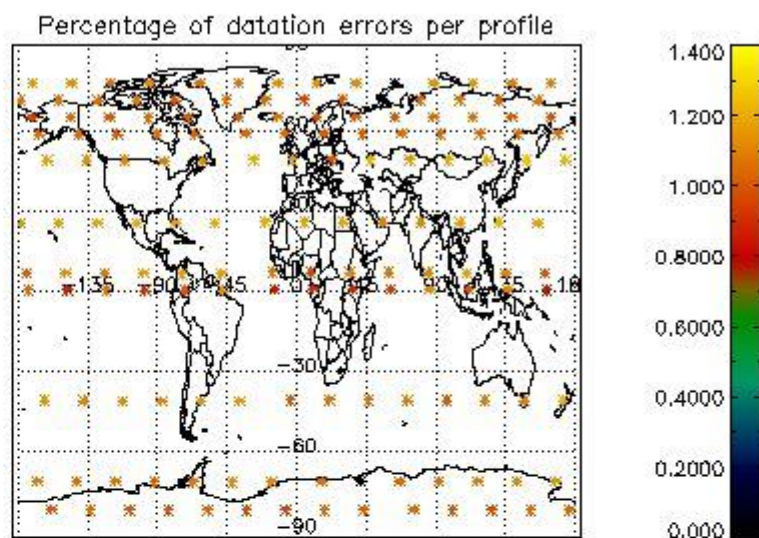
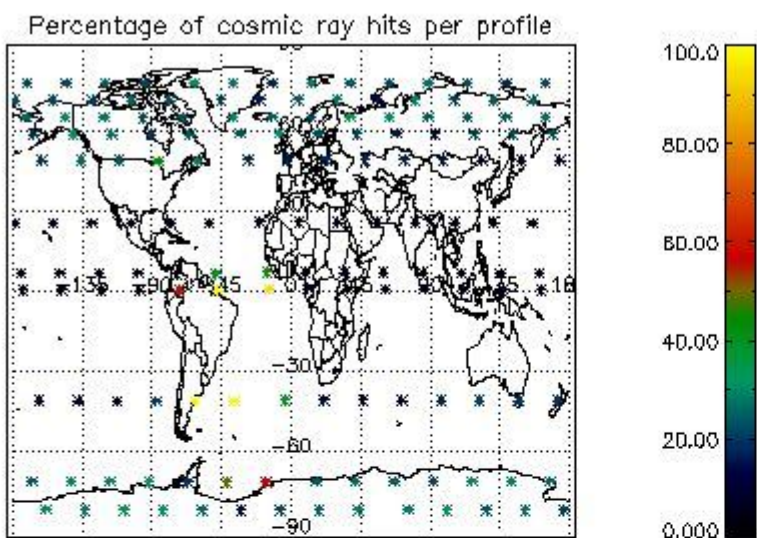


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

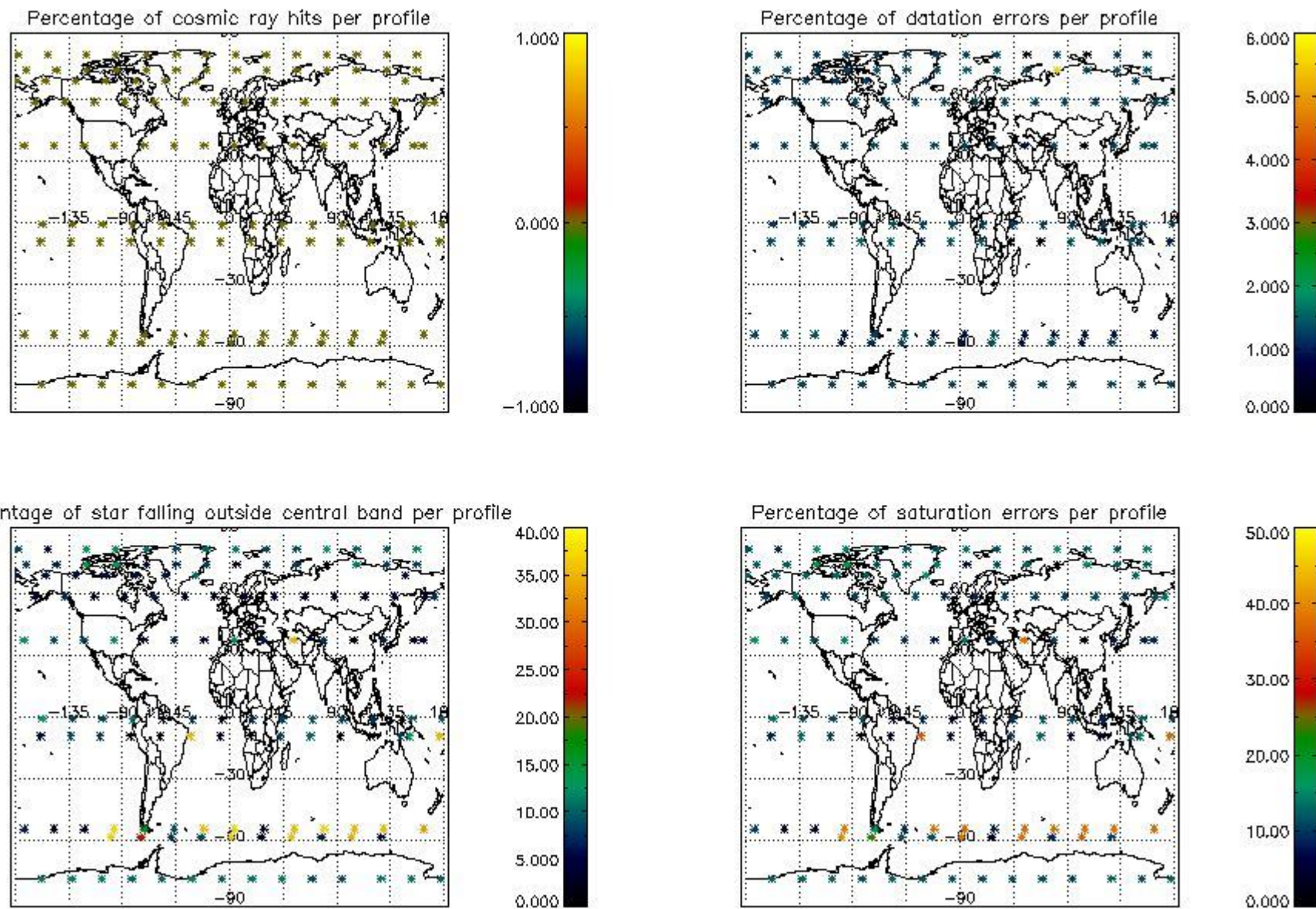


4.2 Plot quality information per product coming from level 1b processing (world map)

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

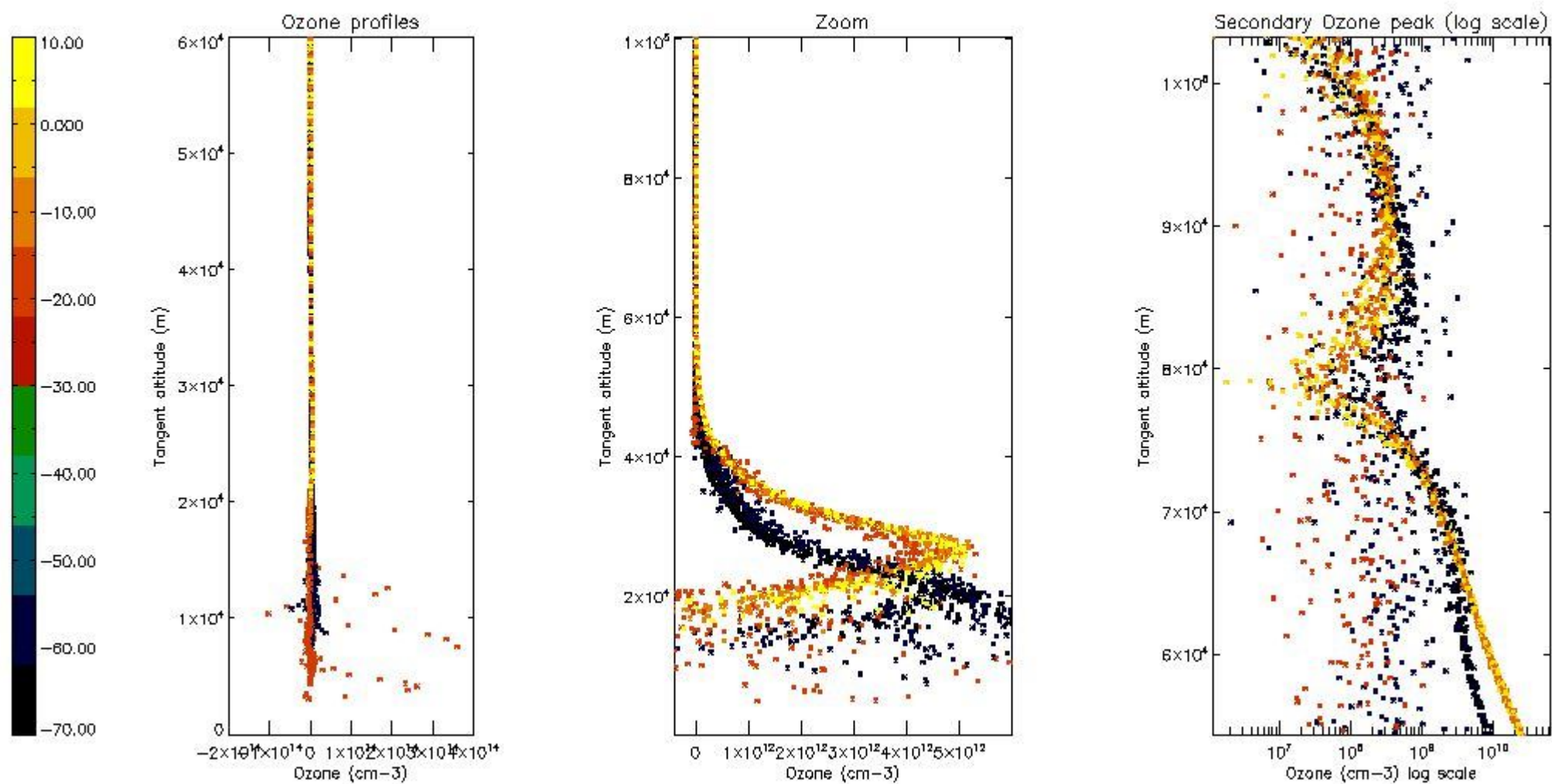
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	13

STD < 10	10
STD < 5	7

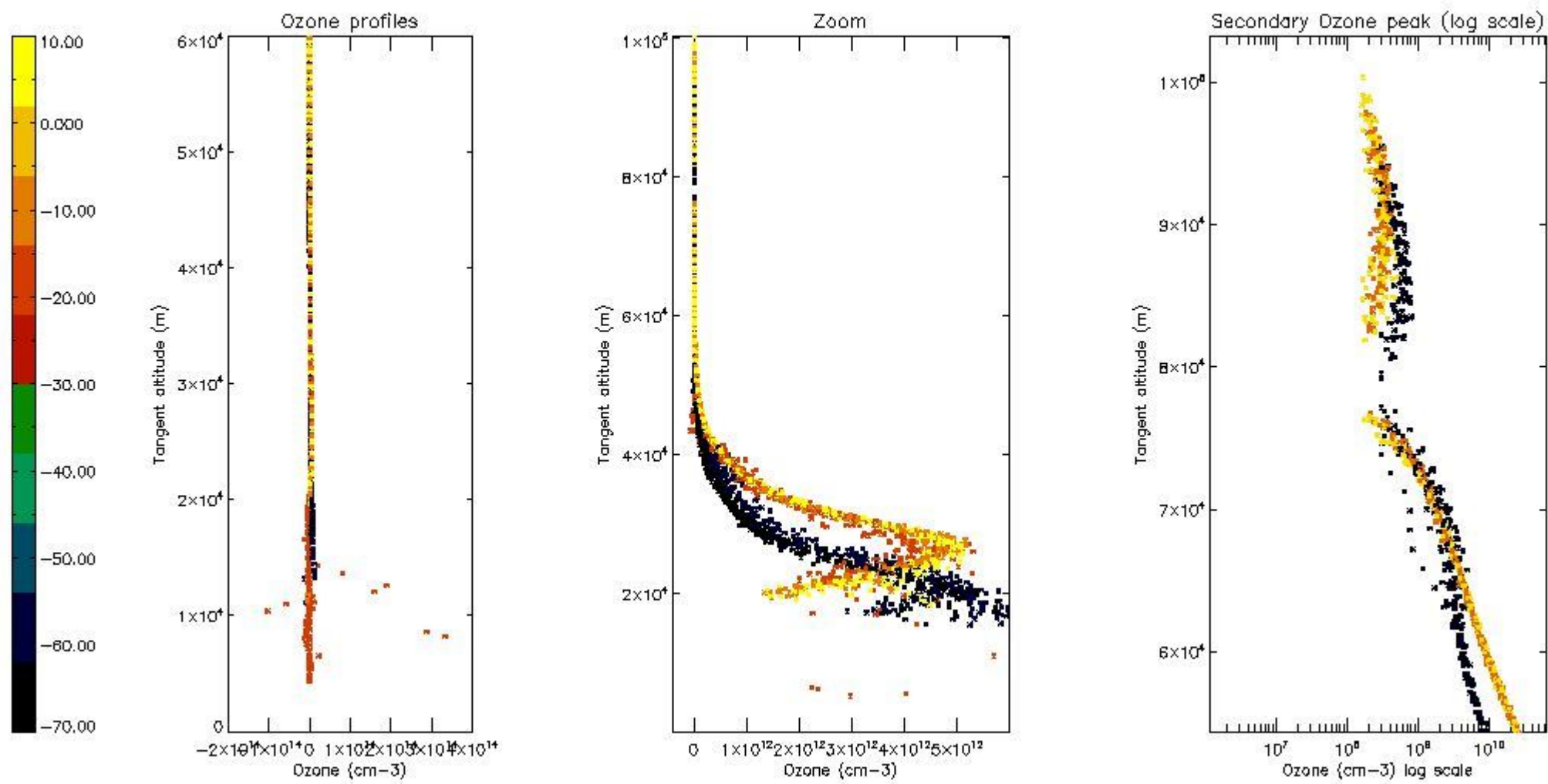
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



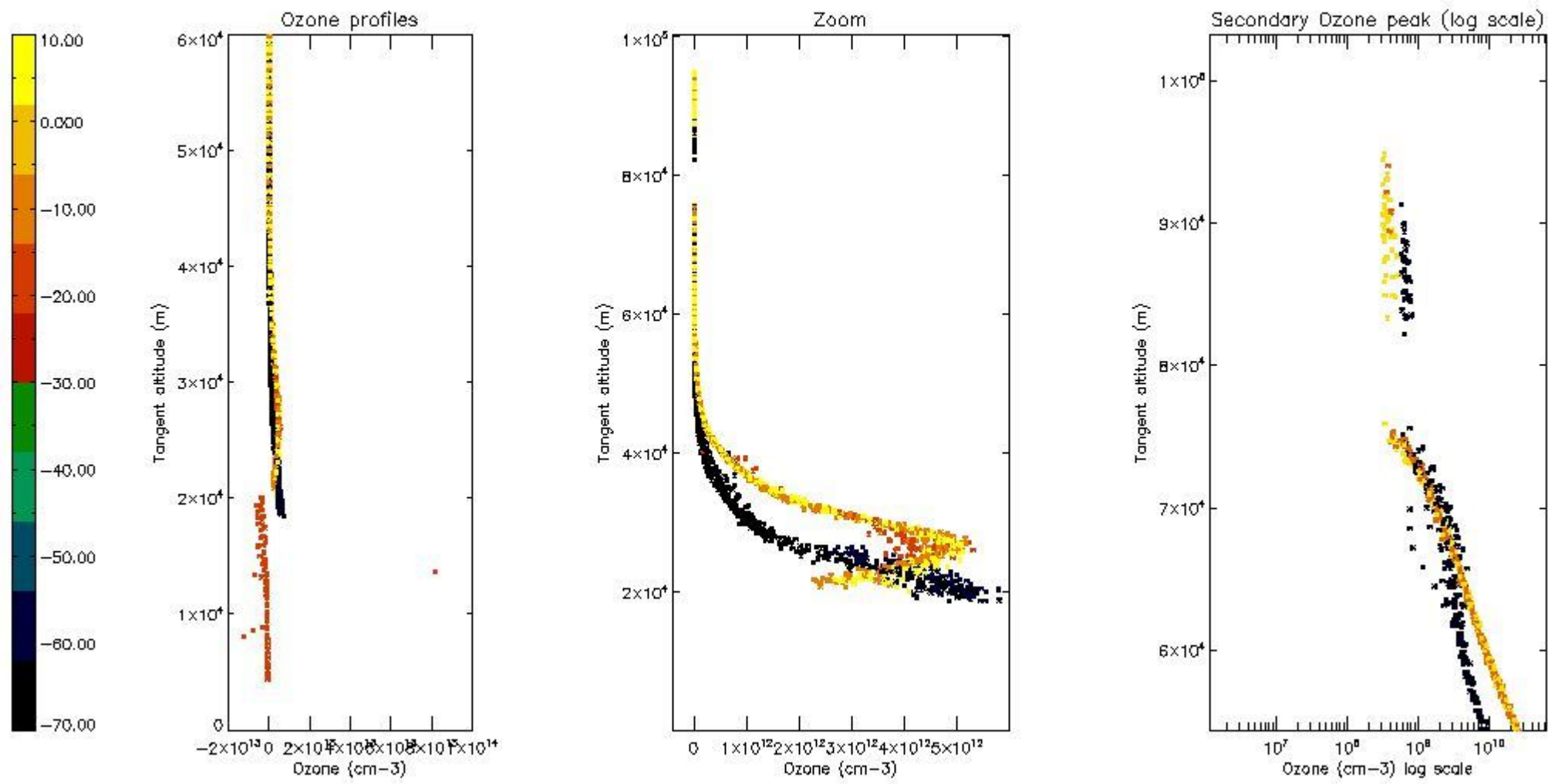
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



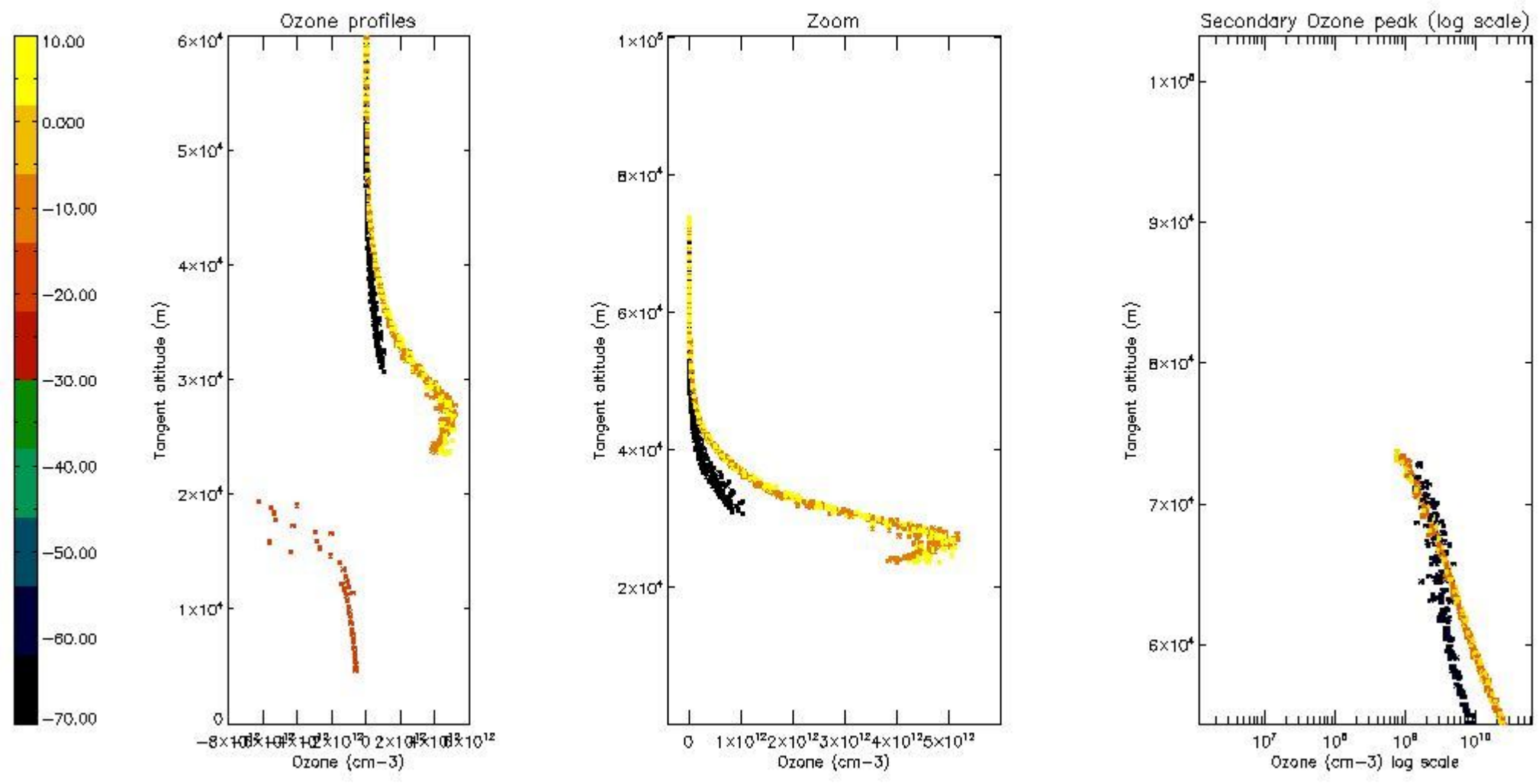
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



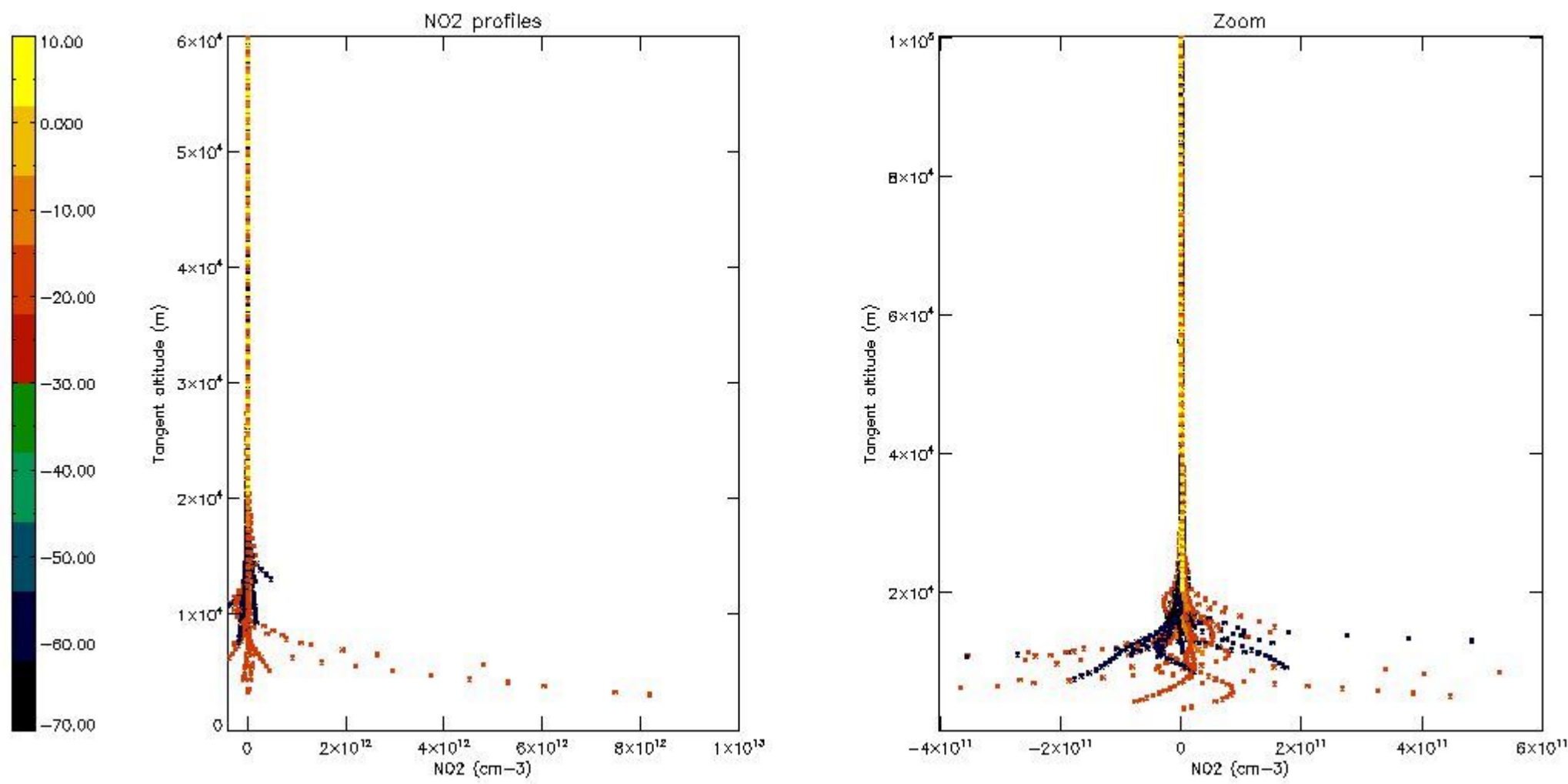
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



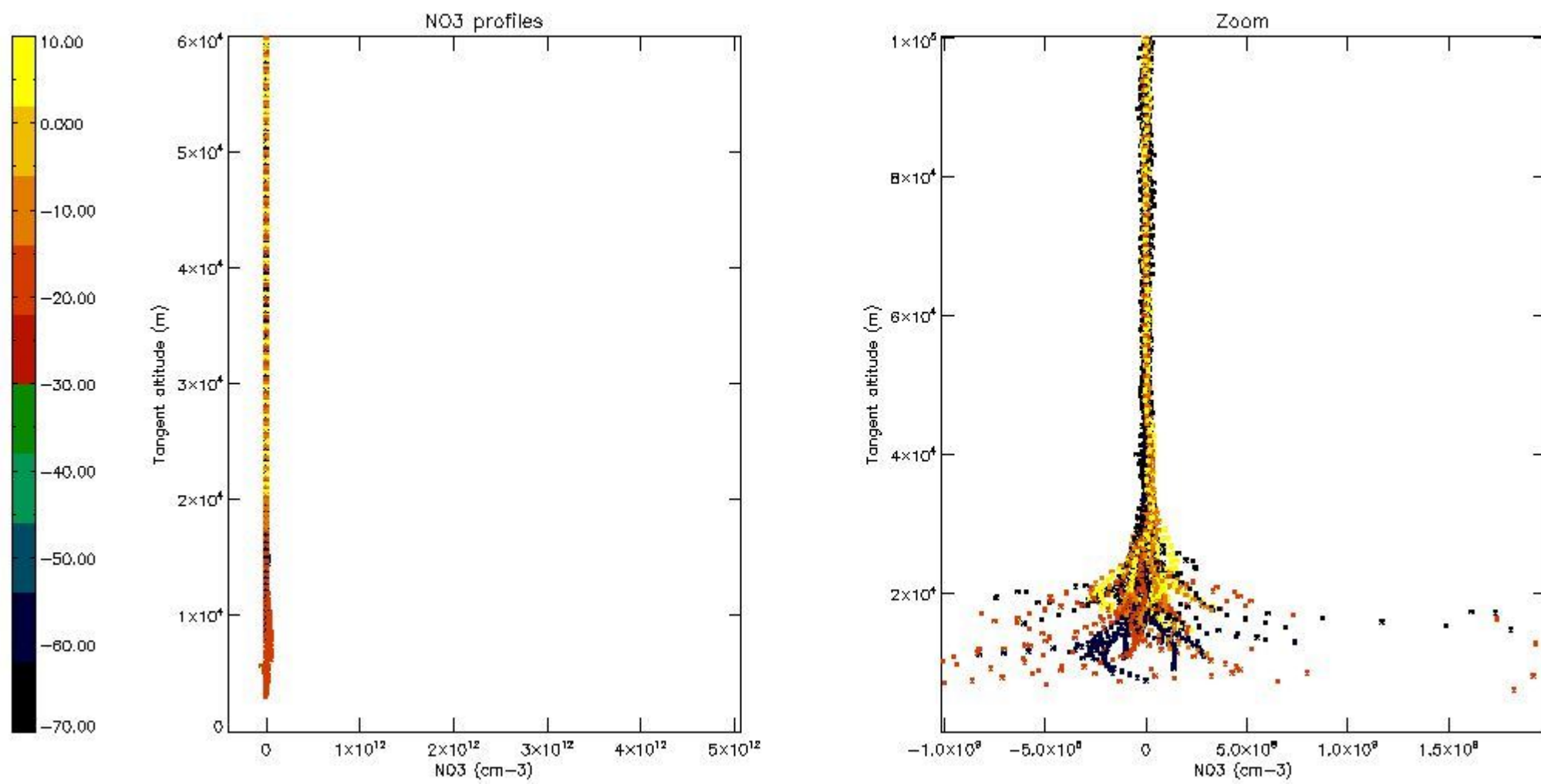
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



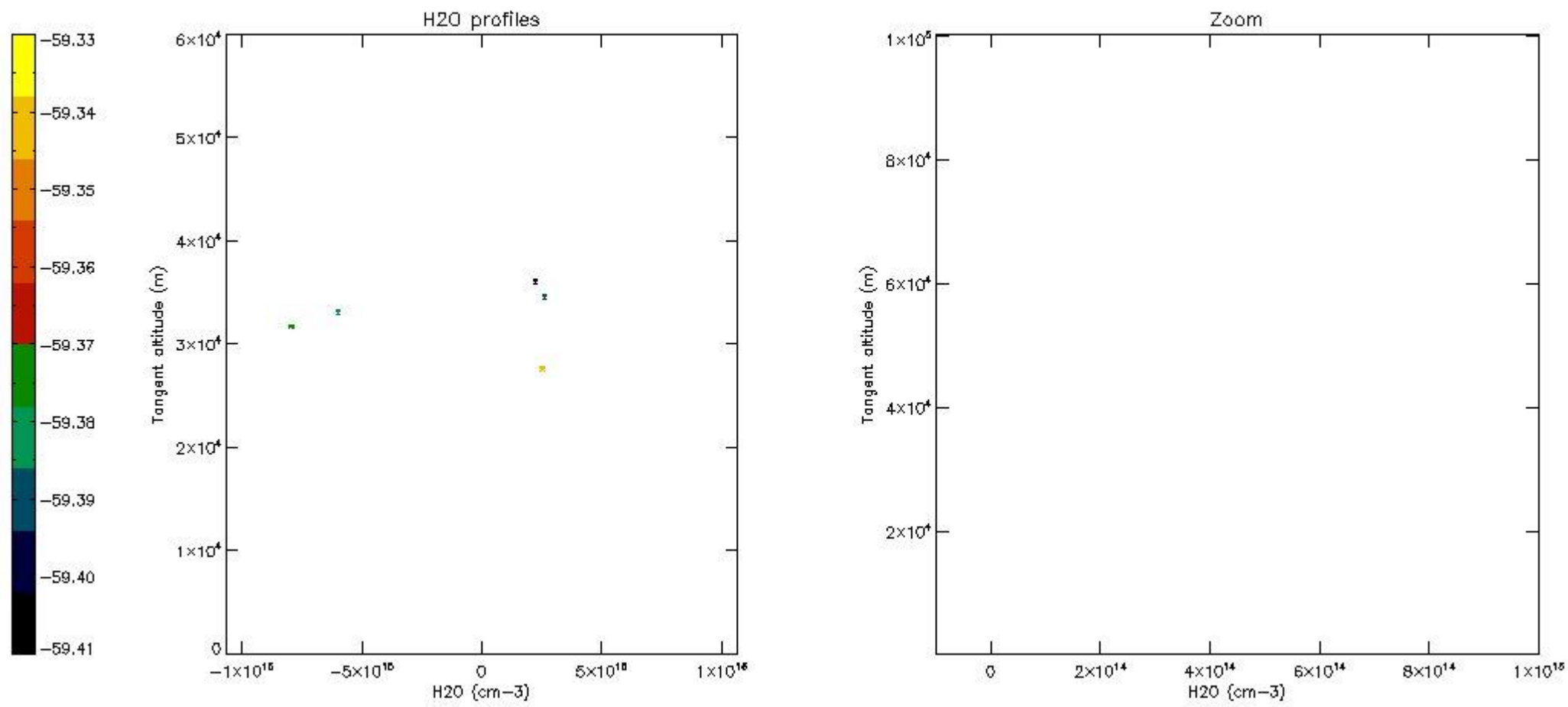
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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	26-MAY-2010 00:02:06
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	26-MAY-2010 00:02:06
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	26-MAY-2010 00:02:06

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[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](#)

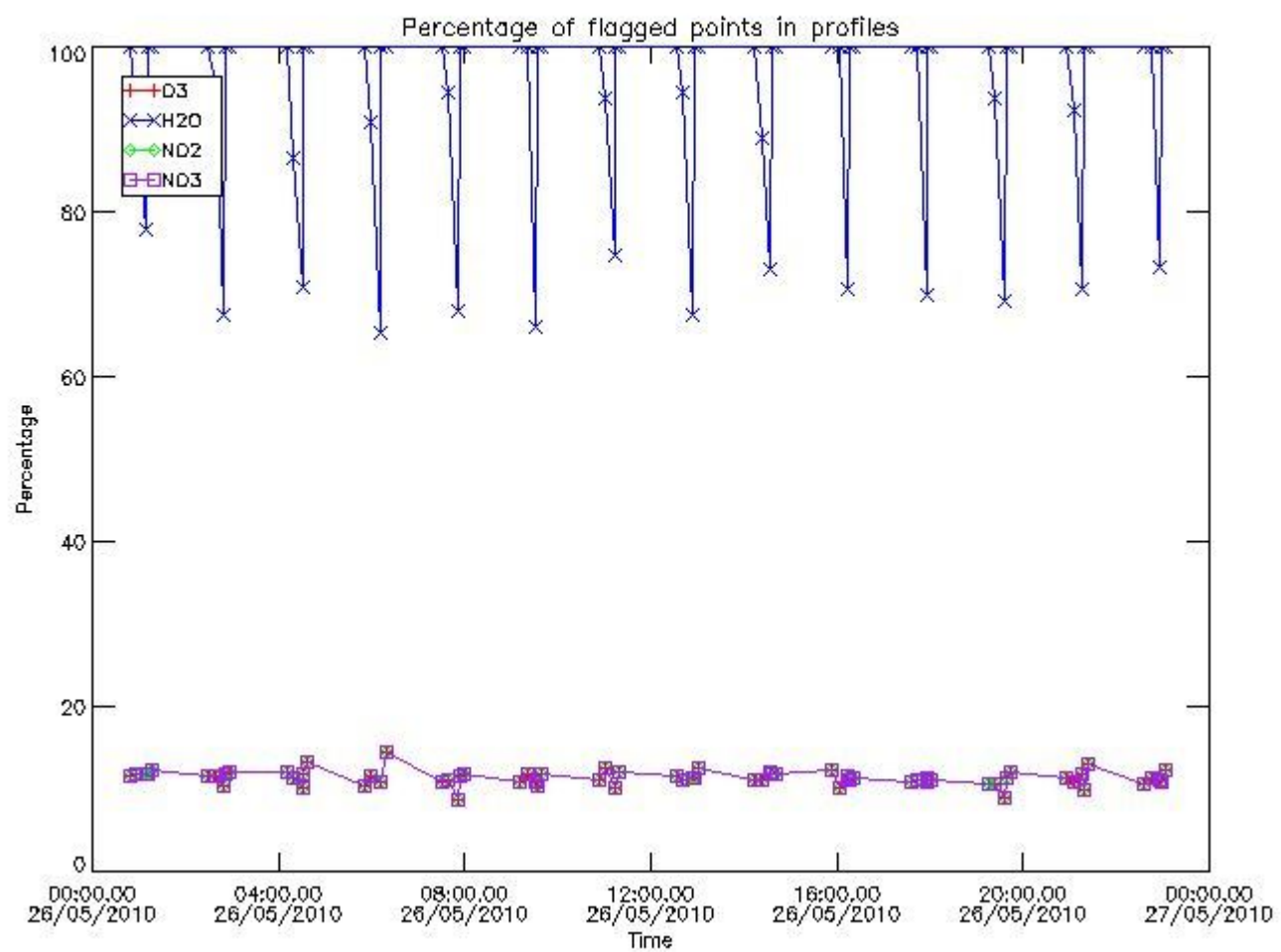
220	GOM_NL__2PRFIN20100526_181526_000000502089_00428_43067_1738.N1	26-MAY-2010 18:15:26	Twilight	49.500	75	26Eps Sco	2.2910	4250.0	99	43067	No
221	GOM_NL__2PRFIN20100526_181733_000000442089_00428_43067_1739.N1	26-MAY-2010 18:17:33	Twilight	44.000	136	23Tau Sco	2.8220	30000.	88	43067	No
222	GOM_NL__2PRFIN20100526_182032_000000412089_00428_43067_1740.N1	26-MAY-2010 18:20:32	Bright	40.500	97	8Bet1Sco	2.5610	30000.	81	43067	No
223	GOM_NL__2PRFIN20100526_182359_000000402089_00428_43067_1741.N1	26-MAY-2010 18:23:59	Bright	40.000	104	27Bet Lib	2.6140	13100.	80	43067	No
224	GOM_NL__2PRFIN20100526_182538_000000432089_00428_43067_1742.N1	26-MAY-2010 18:25:38	Bright	42.500	120	1Del Oph	2.7340	3200.0	85	43067	No
225	GOM_NL__2PRFIN20100526_182840_000000392089_00428_43067_1743.N1	26-MAY-2010 18:28:40	Bright	38.500	102	24Alp Ser	2.6000	4250.0	77	43067	No
226	GOM_NL__2PRFIN20100526_183443_000000402089_00428_43067_1744.N1	26-MAY-2010 18:34:43	Bright	40.000	67	5Alp CrB	2.2210	11000.	80	43067	No
227	GOM_NL__2PRFIN20100526_184531_000000412089_00428_43067_1745.N1	26-MAY-2010 18:45:31	Bright	40.500	119	14Eta Dra	2.7270	4700.0	81	43067	No
228	GOM_NL__2PRFIN20100526_184750_000000392089_00428_43067_1746.N1	26-MAY-2010 18:47:50	Bright	38.500	60	7Bet UMi	2.0810	3950.0	77	43067	No
229	GOM_NL__2PRFIN20100526_190035_000000362089_00428_43067_1747.N1	26-MAY-2010 19:00:35	Bright	35.500	76	27Gam Cas	2.3000	30000.	71	43067	No
230	GOM_NL__2PRFIN20100526_190806_000000412089_00428_43067_1748.N1	26-MAY-2010 19:08:06	Bright	40.500	53	43Bet And	2.0480	3300.0	81	43067	No
231	GOM_NL__2PRFIN20100526_191041_000000522089_00428_43067_1749.N1	26-MAY-2010 19:10:41	Twilight	51.500	58	21Alp And	2.0730	11000.	103	43067	No
232	GOM_NL__2PRFIN20100526_191517_000000492089_00428_43067_1750.N1	26-MAY-2010 19:15:17	Dark	48.500	140	88Gam Peg	2.8340	26000.	97	43067	No
233	GOM_NL__2PRFIN20100526_192410_000000482089_00428_43067_1751.N1	26-MAY-2010 19:24:10	Dark	48.000	52	16Bet Cet	2.0370	4500.0	96	43067	No
234	GOM_NL__2PRFIN20100526_193550_000000572089_00429_43068_1740.N1	26-MAY-2010 19:35:50	Dark	57.000	63	Bet Gru	2.1500	2800.0	114	43068	No
235	GOM_NL__2PRFIN20100526_193735_000000452089_00429_43068_1741.N1	26-MAY-2010 19:37:35	Dark	45.000	31	Alp Gru	1.7340	15200.	90	43068	No
236	GOM_NL__2PRFIN20100526_194251_000000432089_00429_43068_1742.N1	26-MAY-2010 19:42:51	Dark	42.500	45	Alp Pav	1.9400	26000.	85	43068	No
237	GOM_NL__2PRFIN20100526_194926_000000502089_00429_43068_1743.N1	26-MAY-2010 19:49:26	Straylight	50.000	141	Bet Ara	2.8400	4600.0	100	43068	No
238	GOM_NL__2PRFIN20100526_195216_000000492089_00429_43068_1744.N1	26-MAY-2010 19:52:16	Straylight	49.000	40	The Sco	1.8590	7100.0	98	43068	No
239	GOM_NL__2PRFIN20100526_195406_000000512089_00429_43068_1745.N1	26-MAY-2010 19:54:06	Straylight	51.000	25	35Lam Sco	1.6200	28000.	102	43068	No
240	GOM_NL__2PRFIN20100526_195602_000000522089_00429_43068_1746.N1	26-MAY-2010 19:56:02	Twilight	52.000	75	26Eps Sco	2.2910	4250.0	104	43068	No
241	GOM_NL__2PRFIN20100526_195809_000000442089_00429_43068_1747.N1	26-MAY-2010 19:58:09	Twilight	44.000	136	23Tau Sco	2.8220	30000.	88	43068	No
242	GOM_NL__2PRFIN20100526_200108_000000422089_00429_43068_1748.N1	26-MAY-2010 20:01:08	Bright	41.500	97	8Bet1Sco	2.5610	30000.	83	43068	No
243	GOM_NL__2PRFIN20100526_200435_000000402089_00429_43068_1749.N1	26-MAY-2010 20:04:35	Bright	40.000	104	27Bet Lib	2.6140	13100.	80	43068	No
244	GOM_NL__2PRFIN20100526_200613_000000432089_00429_43068_1750.N1	26-MAY-2010 20:06:13	Bright	42.500	120	1Del Oph	2.7340	3200.0	85	43068	No
245	GOM_NL__2PRFIN20100526_200916_000000402089_00429_43068_1751.N1	26-MAY-2010 20:09:16	Bright	40.000	102	24Alp Ser	2.6000	4250.0	80	43068	No
246	GOM_NL__2PRFIN20100526_201518_000000412089_00429_43068_1752.N1	26-MAY-2010 20:15:18	Bright	40.500	67	5Alp CrB	2.2210	11000.	81	43068	No
247	GOM_NL__2PRFIN20100526_202606_000000442089_00429_43068_1753.N1	26-MAY-2010 20:26:06	Bright	43.500	119	14Eta Dra	2.7270	4700.0	87	43068	No
248	GOM_NL__2PRFIN20100526_202826_000000372089_00429_43068_1754.N1	26-MAY-2010 20:28:26	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	43068	No
249	GOM_NL__2PRFIN20100526_204111_000000382089_00429_43068_1755.N1	26-MAY-2010 20:41:11	Bright	38.000	76	27Gam Cas	2.3000	30000.	76	43068	No
250	GOM_NL__2PRFIN20100526_204842_000000412089_00429_43068_1756.N1	26-MAY-2010 20:48:42	Bright	40.500	53	43Bet And	2.0480	3300.0	81	43068	No
251	GOM_NL__2PRFIN20100526_205117_000000502089_00429_43068_1757.N1	26-MAY-2010 20:51:17	Twilight	49.500	58	21Alp And	2.0730	11000.	99	43068	No
252	GOM_NL__2PRFIN20100526_205554_000000492089_00429_43068_1758.N1	26-MAY-2010 20:55:54	Dark	48.500	140	88Gam Peg	2.8340	26000.	97	43068	No
253	GOM_NL__2PRFIN20100526_210446_000000472089_00429_43068_1759.N1	26-MAY-2010 21:04:46	Dark	46.500	52	16Bet Cet	2.0370	4500.0	93	43068	No
254	GOM_NL__2PRFIN20100526_211627_000000572089_00430_43069_1768.N1	26-MAY-2010 21:16:27	Dark	56.500	63	Bet Gru	2.1500	2800.0	113	43069	No
255	GOM_NL__2PRFIN20100526_211812_000000522089_00430_43069_1769.N1	26-MAY-2010 21:18:12	Dark	51.500	31	Alp Gru	1.7340	15200.	103	43069	No
256	GOM_NL__2PRFIN20100526_212327_000000432089_00430_43069_1770.N1	26-MAY-2010 21:23:27	Dark	43.000	45	Alp Pav	1.9400	26000.	86	43069	No
257	GOM_NL__2PRFIN20100526_213002_000000432089_00430_43069_1771.N1	26-MAY-2010 21:30:02	Straylight	42.500	141	Bet Ara	2.8400	4600.0	85	43069	No
258	GOM_NL__2PRFIN20100526_213252_000000482089_00430_43069_1772.N1	26-MAY-2010 21:32:52	Straylight	48.000	40	The Sco	1.8590	7100.0	96	43069	No
259	GOM_NL__2PRFIN20100526_213442_000000472089_00430_43069_1773.N1	26-MAY-2010 21:34:42	Straylight	47.000	25	35Lam Sco	1.6200	28000.	94	43069	No
260	GOM_NL__2PRFIN20100526_213638_000000482089_00430_43069_1774.N1	26-MAY-2010 21:36:38	Twilight	47.500	75	26Eps Sco	2.2910	4250.0	95	43069	No
261	GOM_NL__2PRFIN20100526_213846_000000472089_00430_43069_1775.N1	26-MAY-2010 21:38:46	Twilight	46.500	136	23Tau Sco	2.8220	30000.	93	43069	No
262	GOM_NL__2PRFIN20100526_214145_000000422089_00430_43069_1776.N1	26-MAY-2010 21:41:45	Bright	41.500	97	8Bet1Sco	2.5610	30000.	83	43069	No
263	GOM_NL__2PRFIN20100526_214511_000000372089_00430_43069_1777.N1	26-MAY-2010 21:45:11	Bright	37.000	104	27Bet Lib	2.6140	13100.	74	43069	No
264	GOM_NL__2PRFIN20100526_214649_000000432089_00430_43069_1778.N1	26-MAY-2010 21:46:49	Bright	42.500	120	1Del Oph	2.7340	3200.0	85	43069	No
265	GOM_NL__2PRFIN20100526_214952_000000392089_00430_43069_1779.N1	26-MAY-2010 21:49:52	Bright	38.500	102	24Alp Ser	2.6000	4250.0	77	43069	No
266	GOM_NL__2PRFIN20100526_215554_000000422089_00430_43069_1780.N1	26-MAY-2010 21:55:54	Bright	42.000	67	5Alp CrB	2.2210	11000.	84	43069	No
267	GOM_NL__2PRFIN20100526_220641_000000422089_00430_43069_1781.N1	26-MAY-2010 22:06:41	Bright	41.500	119	14Eta Dra	2.7270	4700.0	83	43069	No
268	GOM_NL__2PRFIN20100526_220902_000000532089_00430_43069_1782.N1	26-MAY-2010 22:09:02	Bright	53.000	60	7Bet UMi	2.0810	3950.0	106	43069	No
269	GOM_NL__2PRFIN20100526_222147_000000542089_00430_43069_1783.N1	26-MAY-2010 22:21:47	Bright	54.000	76	27Gam Cas	2.3000	30000.	108	43069	No
270	GOM_NL__2PRFIN20100526_222918_000000412089_00430_43069_1784.N1	26-MAY-2010 22:29:18	Bright	40.500	53	43Bet And	2.0480	3300.0	81	43069	No
271	GOM_NL__2PRFIN20100526_223154_000000482089_00430_43069_1785.N1	26-MAY-2010 22:31:54	Twilight	47.500	58	21Alp And	2.0730	11000.	95	43069	No
272	GOM_NL__2PRFIN20100526_223630_000000482089_00430_43069_1786.N1	26-MAY-2010 22:36:30	Dark	48.000	140	88Gam Peg	2.8340	26000.	96	43069	No
273	GOM_NL__2PRFIN20100526_224522_000000502089_00430_43069_1787.N1	26-MAY-2010 22:45:22	Dark	49.500	52	16Bet Cet	2.0370	4500.0	99	43069	No
274	GOM_NL__2PRFIN20100526_225703_000000602089_00431_43070_1776.N1	26-MAY-2010 22:57:03	Dark	60.000	63	Bet Gru	2.1500	2800.0	120	43070	No
275	GOM_NL__2PRFIN20100526_225849_000000472089_00431_43070_1777.N1	26-MAY-2010 22:58:49	Dark	46.500	31	Alp Gru	1.7340	15200.	93	43070	No
276	GOM_NL__2PRFIN20100526_230404_000000422089_00431_43070_1778.N1	26-MAY-2010 23:04:04	Dark	41.500	45	Alp Pav	1.9400	26000.	83	43070	No
277	GOM_NL__2PRFIN20100526_231038_000000422089_00431_43070_1779.N1	26-MAY-2010 23:10:38	Straylight	41.500	141	Bet Ara	2.8400	4600.0	83	43070	No
278	GOM_NL__2PRFIN20100526_231329_000000492089_00431_43070_1780.N1	26-MAY-2010 23:13:29	Straylight	48.500	40	The Sco	1.8590	7100.0	97	43070	No

279	GOM_NL__2PRFIN20100526_231518_000000512089_00431_43070_1781.N1	26-MAY-2010 23:15:18	Straylight	50.500	25	35Lam Sco	1.6200	28000.	101	43070	No
280	GOM_NL__2PRFIN20100526_231714_000000482089_00431_43070_1782.N1	26-MAY-2010 23:17:14	Twilight_stray	48.000	75	26Eps Sco	2.2910	4250.0	96	43070	No
281	GOM_NL__2PRFIN20100526_231922_000000472089_00431_43070_1783.N1	26-MAY-2010 23:19:22	Twilight_stray	47.000	136	23Tau Sco	2.8220	30000.	94	43070	No
282	GOM_NL__2PRFIN20100526_232220_000000422089_00431_43070_1784.N1	26-MAY-2010 23:22:20	Bright	42.000	97	8Bet1Sco	2.5610	30000.	84	43070	No
283	GOM_NL__2PRFIN20100526_232547_000000382089_00431_43070_1785.N1	26-MAY-2010 23:25:47	Bright	37.500	104	27Bet Lib	2.6140	13100.	75	43070	No
284	GOM_NL__2PRFIN20100526_232725_000000422089_00431_43070_1786.N1	26-MAY-2010 23:27:25	Bright	42.000	120	1Del Oph	2.7340	3200.0	84	43070	No
285	GOM_NL__2PRFIN20100526_233027_000000402089_00431_43070_1787.N1	26-MAY-2010 23:30:27	Bright	40.000	102	24Alp Ser	2.6000	4250.0	80	43070	No
286	GOM_NL__2PRFIN20100526_233630_000000392089_00431_43070_1788.N1	26-MAY-2010 23:36:30	Bright	38.500	67	5Alp CrB	2.2210	11000.	77	43070	No
287	GOM_NL__2PRFIN20100526_234717_000000422089_00431_43070_1789.N1	26-MAY-2010 23:47:17	Bright	41.500	119	14Eta Dra	2.7270	4700.0	83	43070	No
288	GOM_NL__2PRFIN20100526_234937_000000402089_00431_43070_1790.N1	26-MAY-2010 23:49:37	Bright	39.500	60	7Bet UMi	2.0810	3950.0	79	43070	No

3. Quality information per product

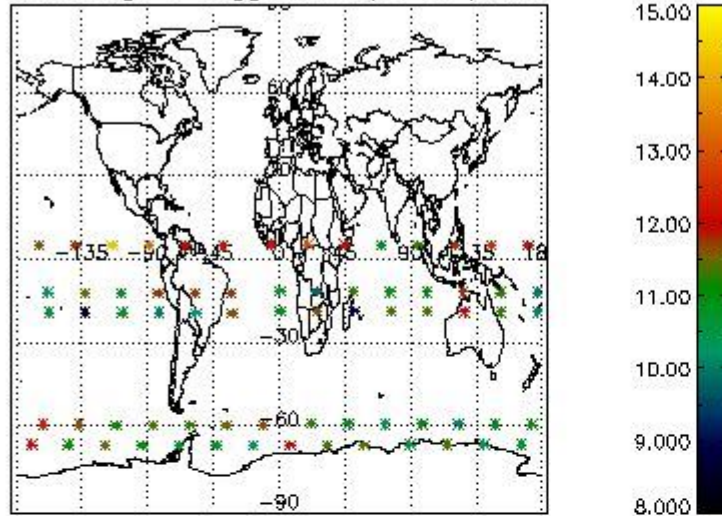
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

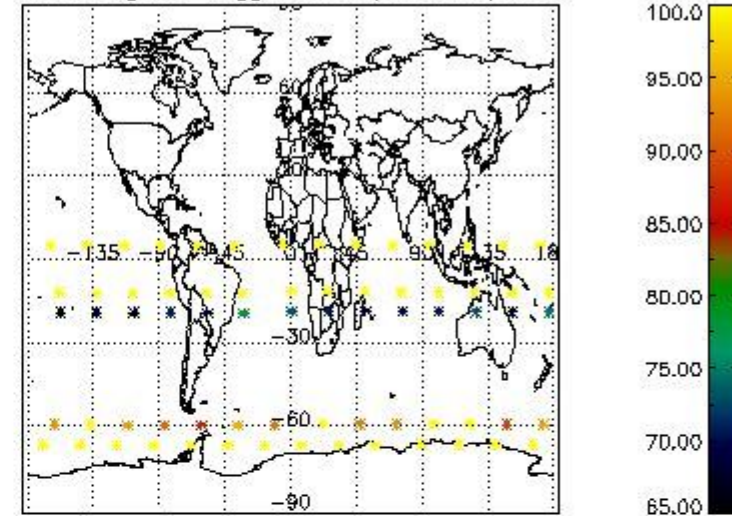


3.2 Plot quality information per product (world map)

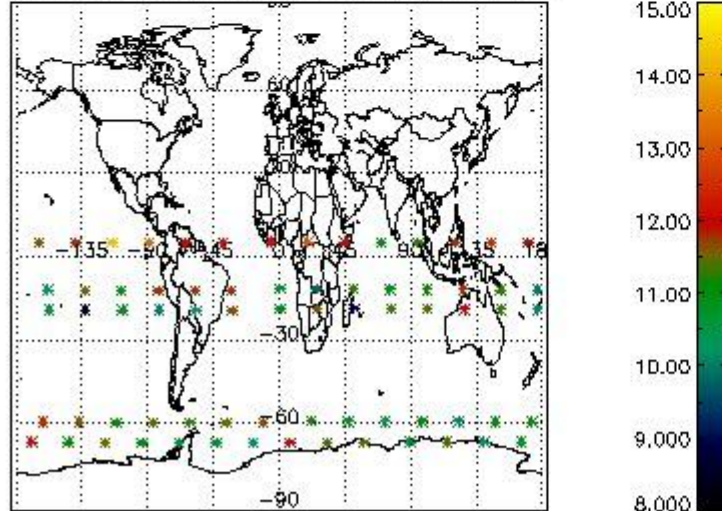
Percentage of flagged data per O3 profile



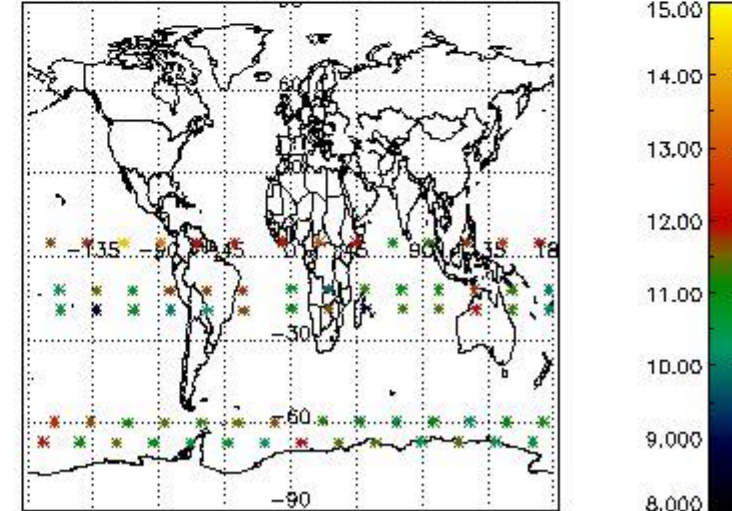
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

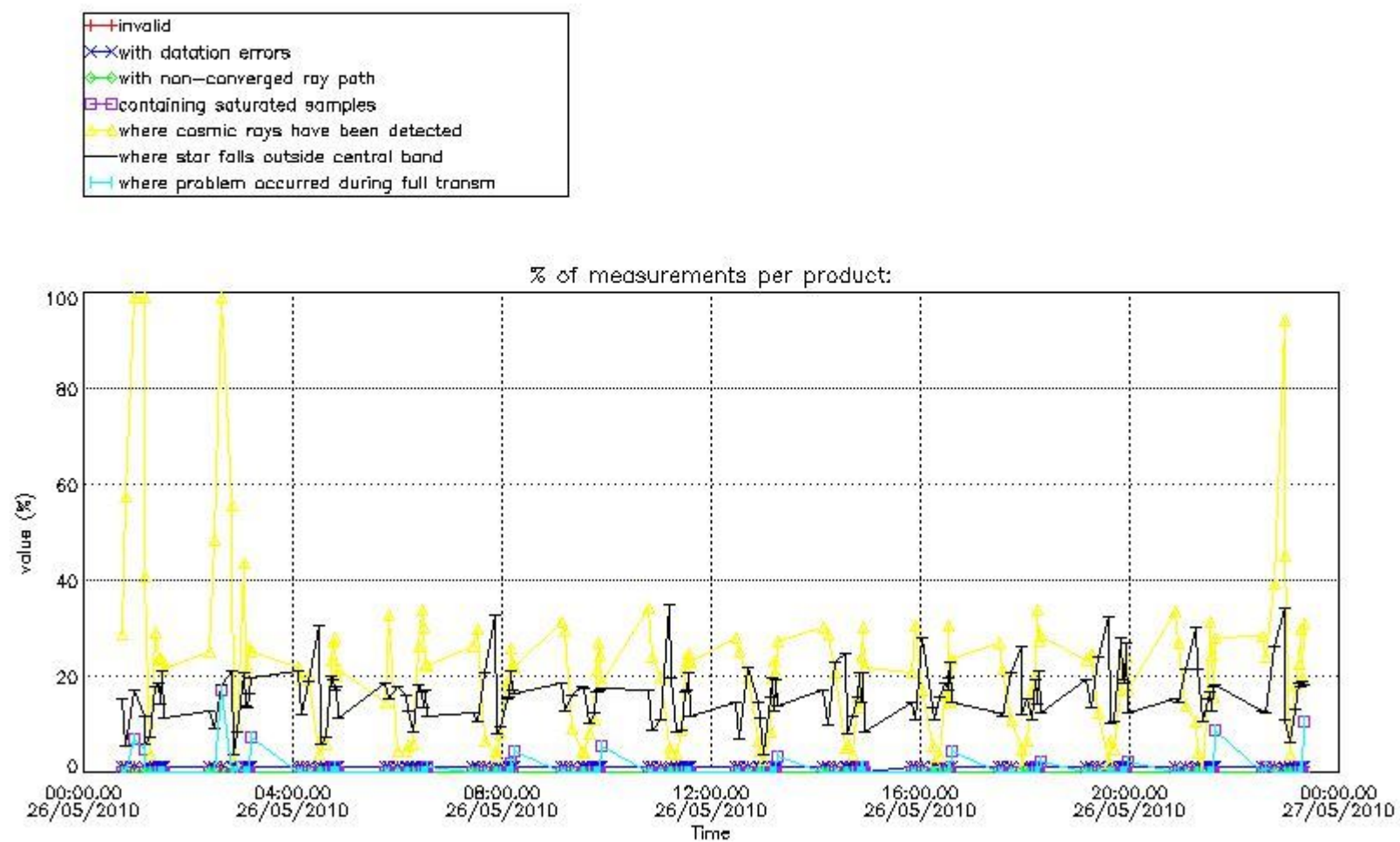


4. Level 1 quality information per product

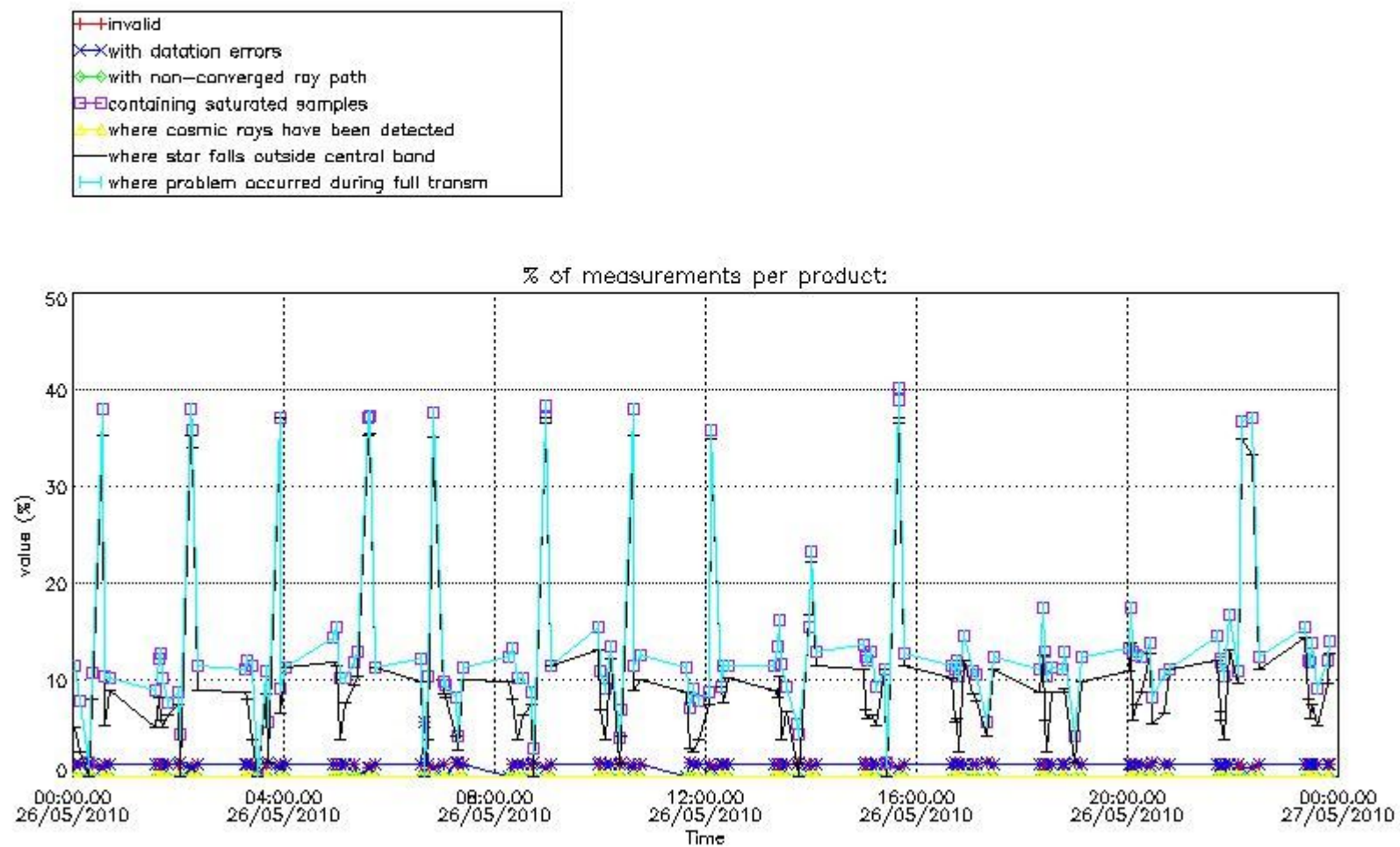
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

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

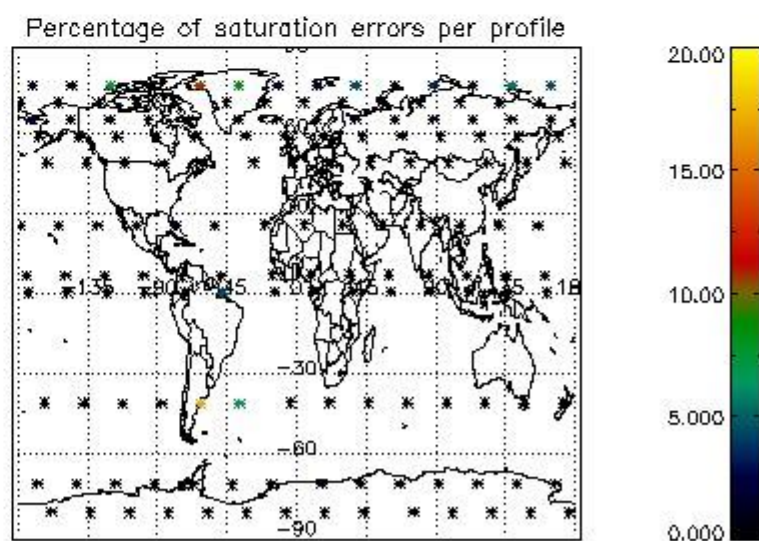
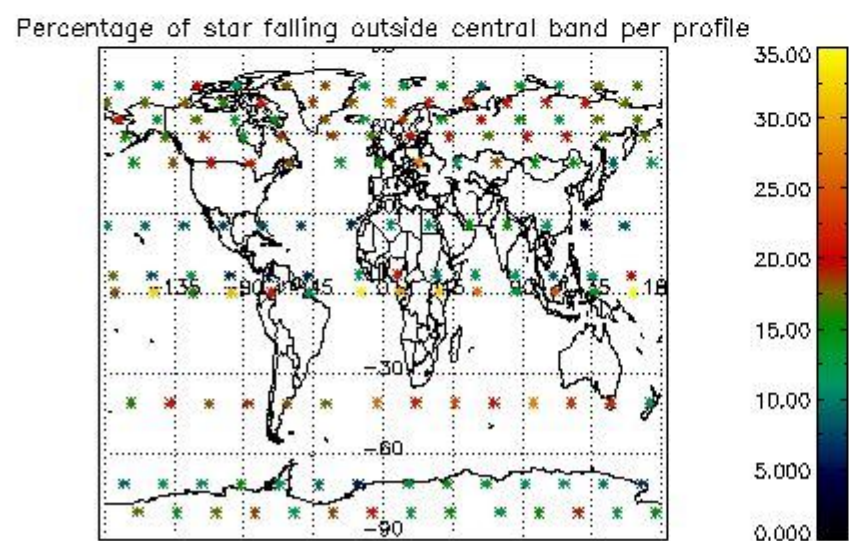
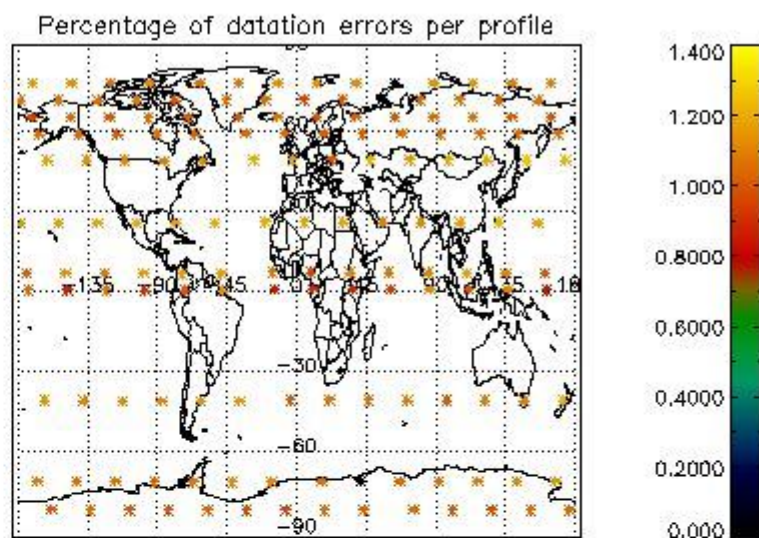
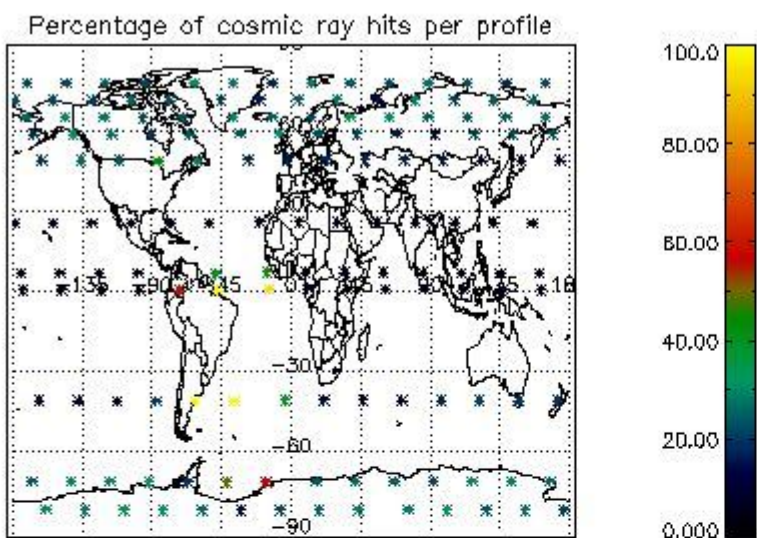


4.1.2 Plot level 1 quality information per product (time dependant): ENVI SAT DESCENDING passes

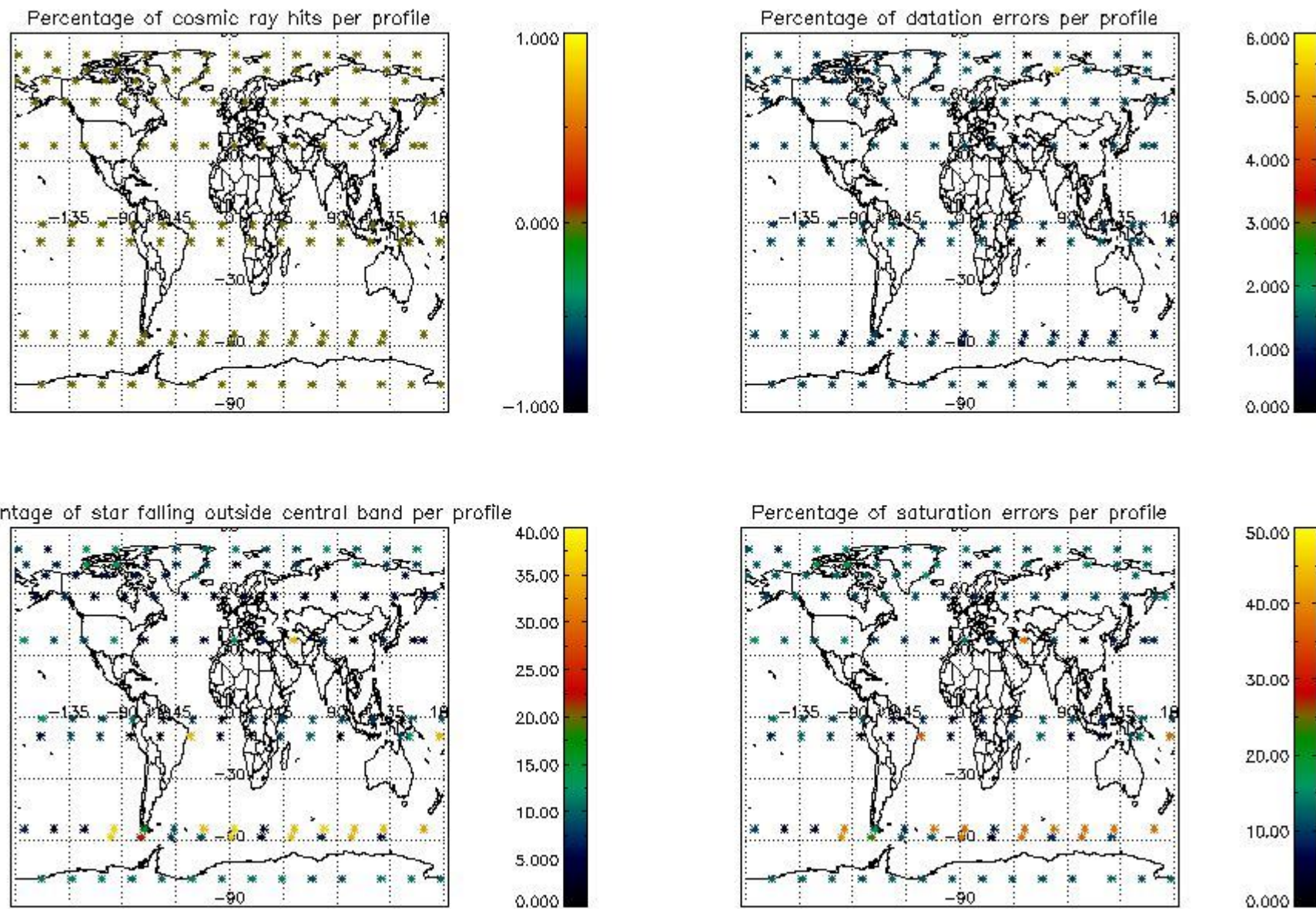


4.2 Plot quality information per product coming from level 1b processing (world map)

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

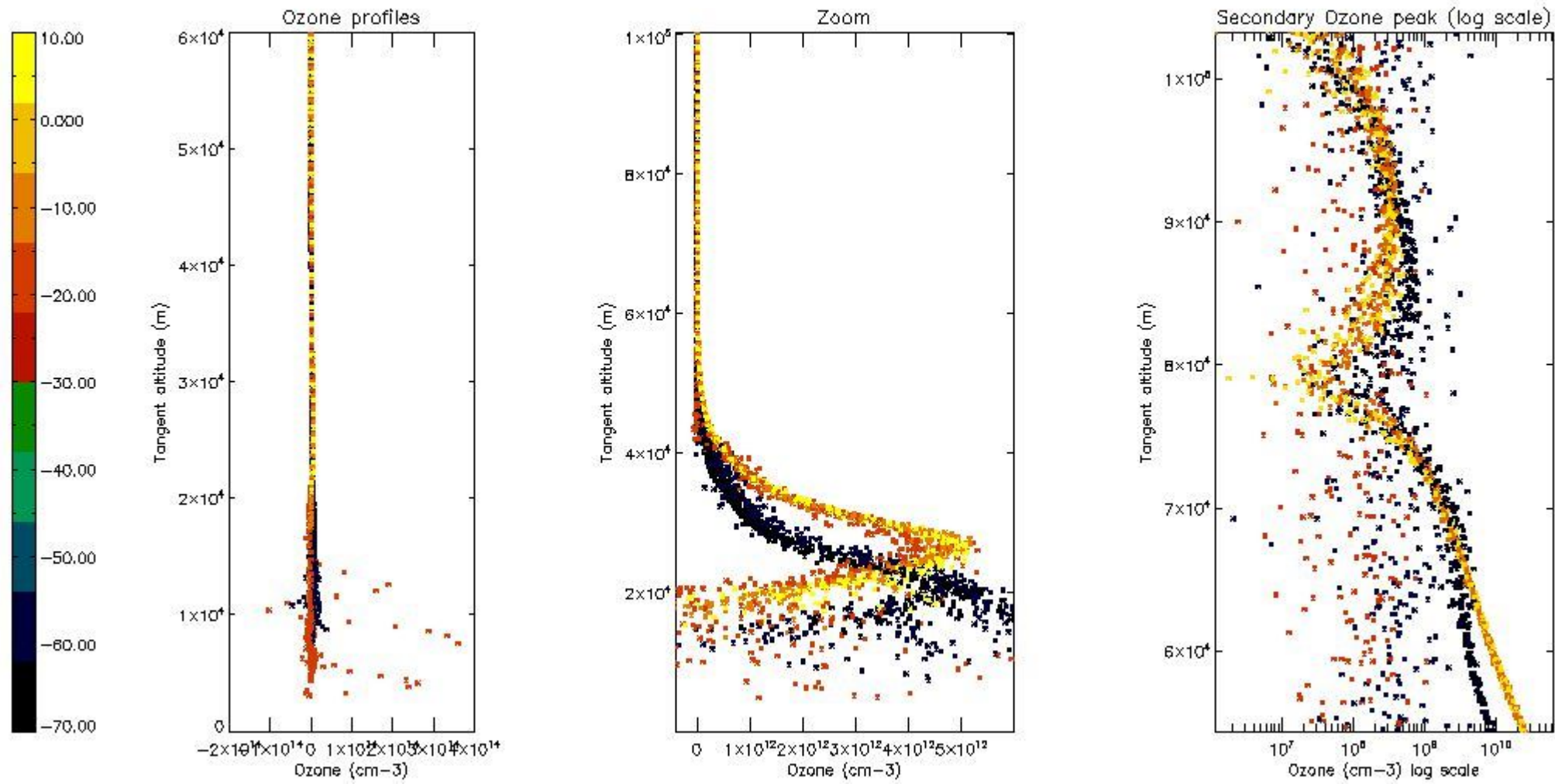
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	26
STD < 20	13

STD < 10	10
STD < 5	7

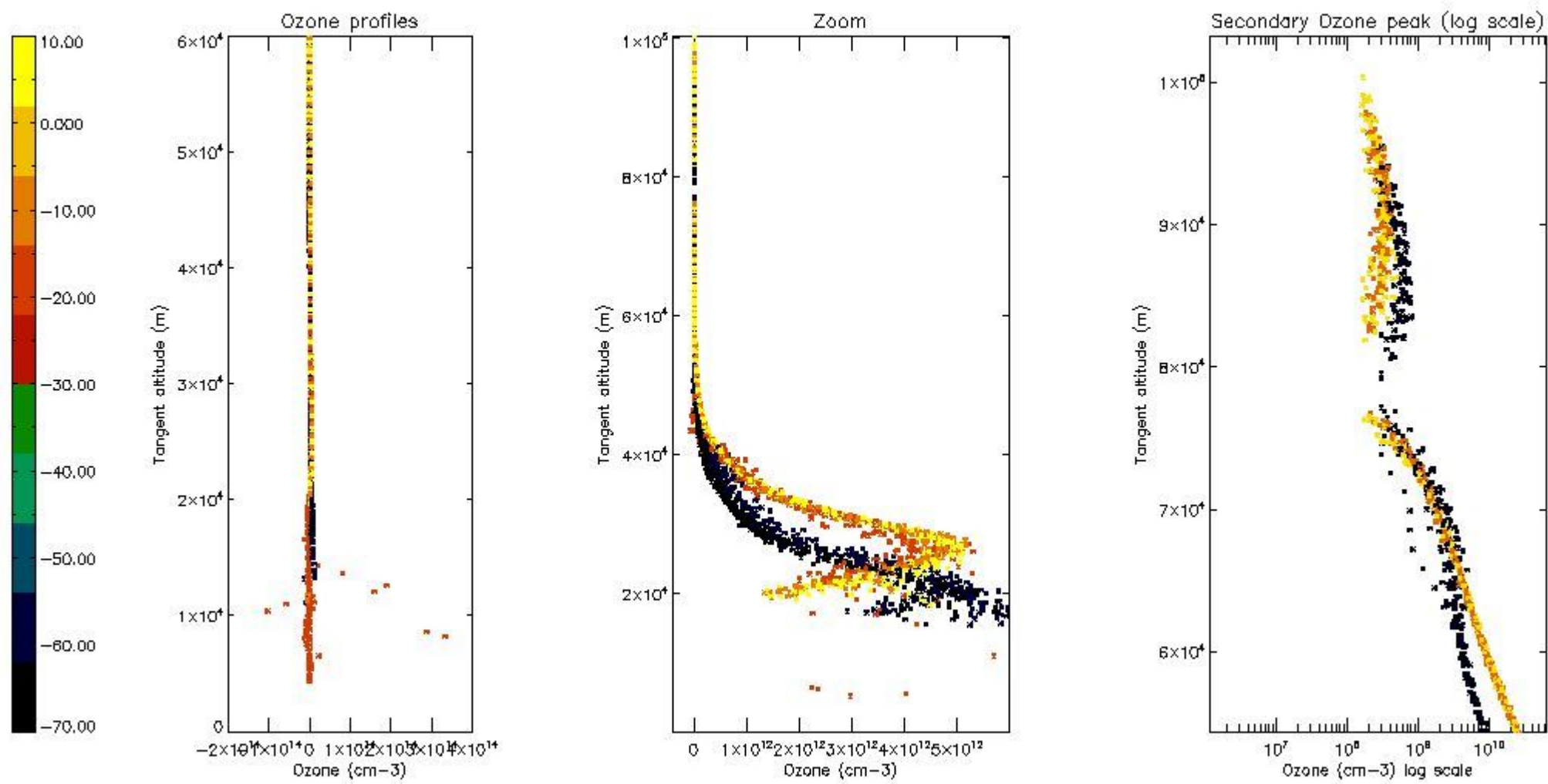
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



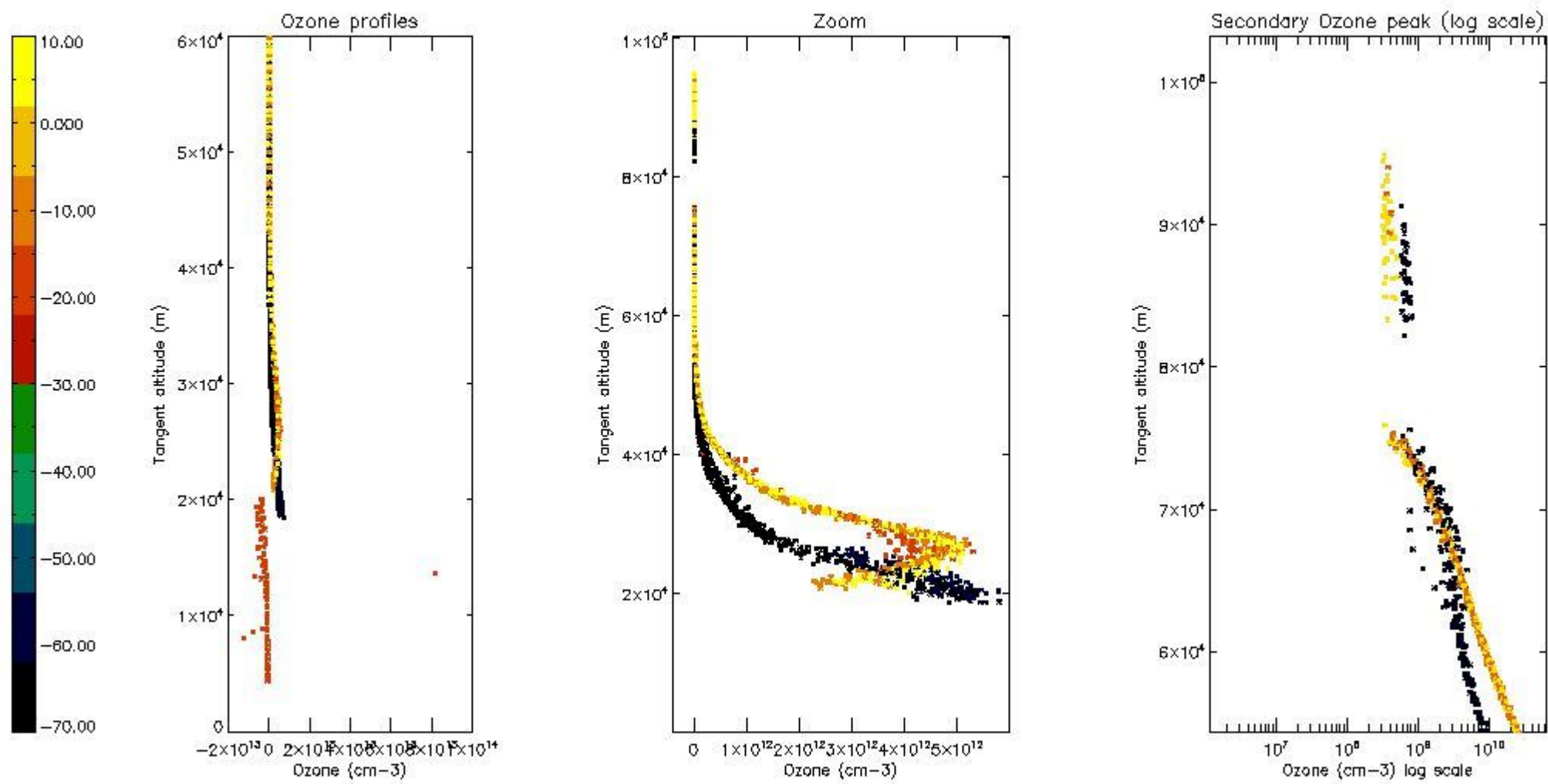
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



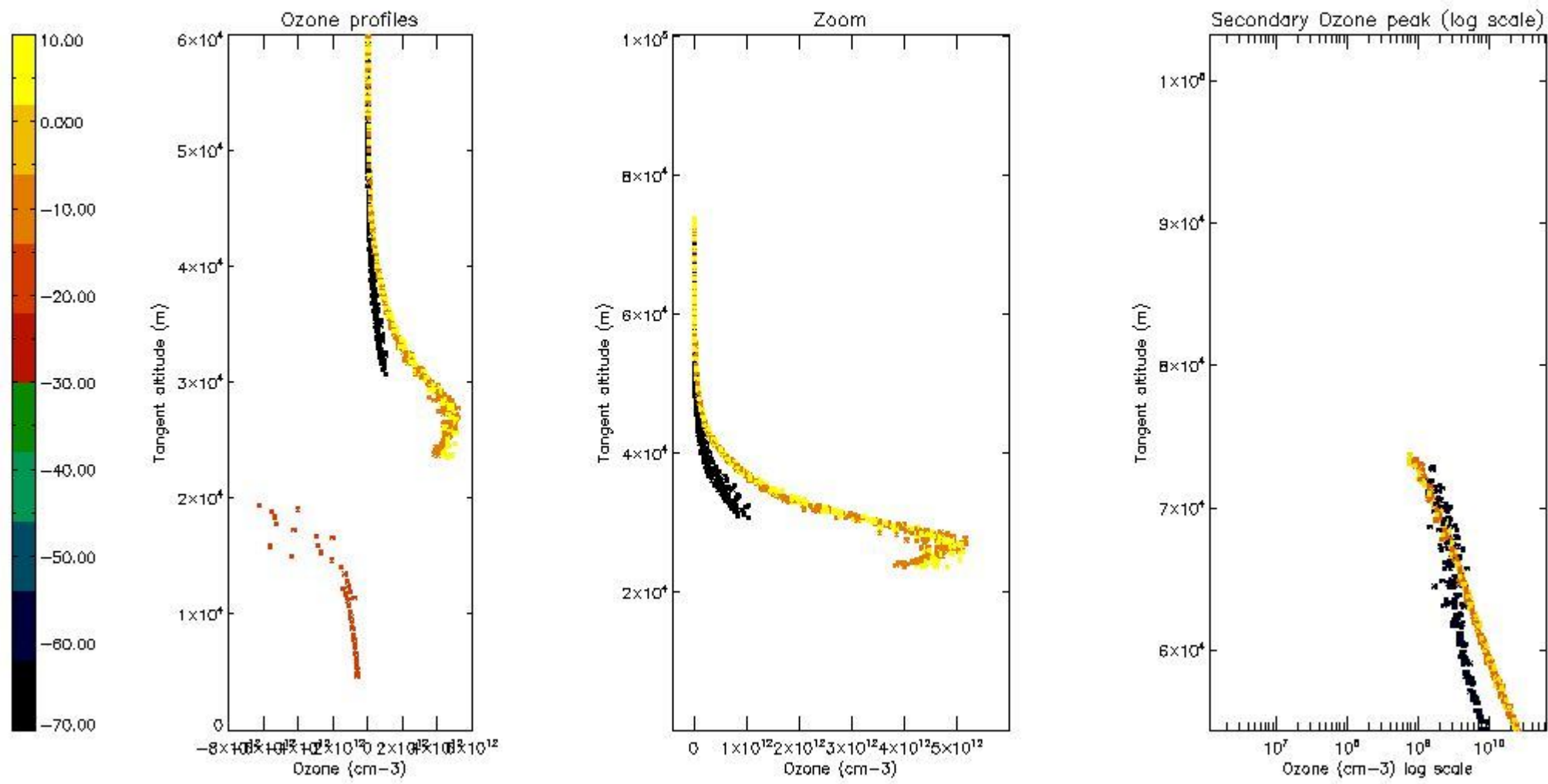
5.4 Plot ozone profiles where $STD < 10\%$ (dark without errors)

The colorbar represents the latitude.



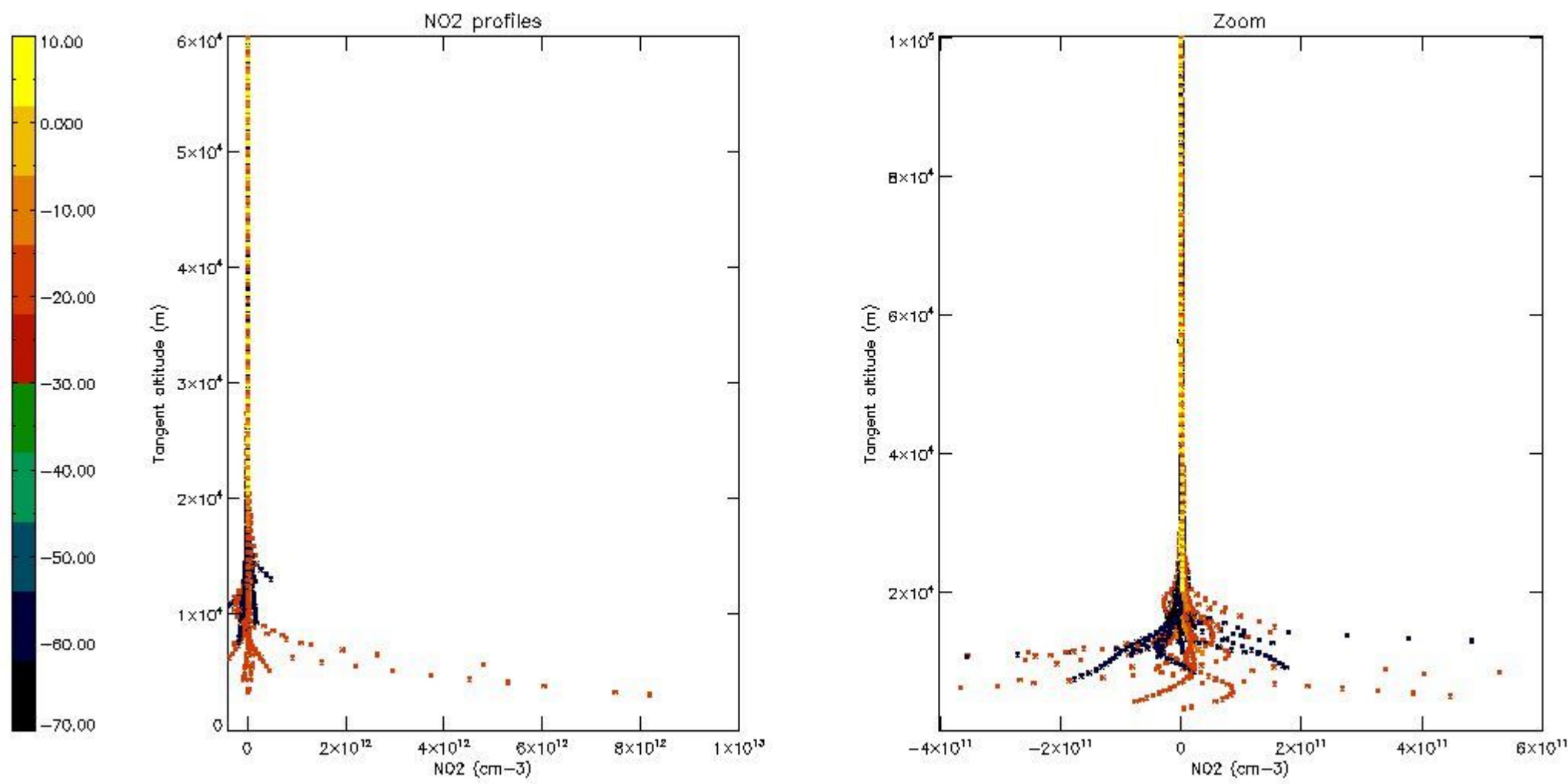
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



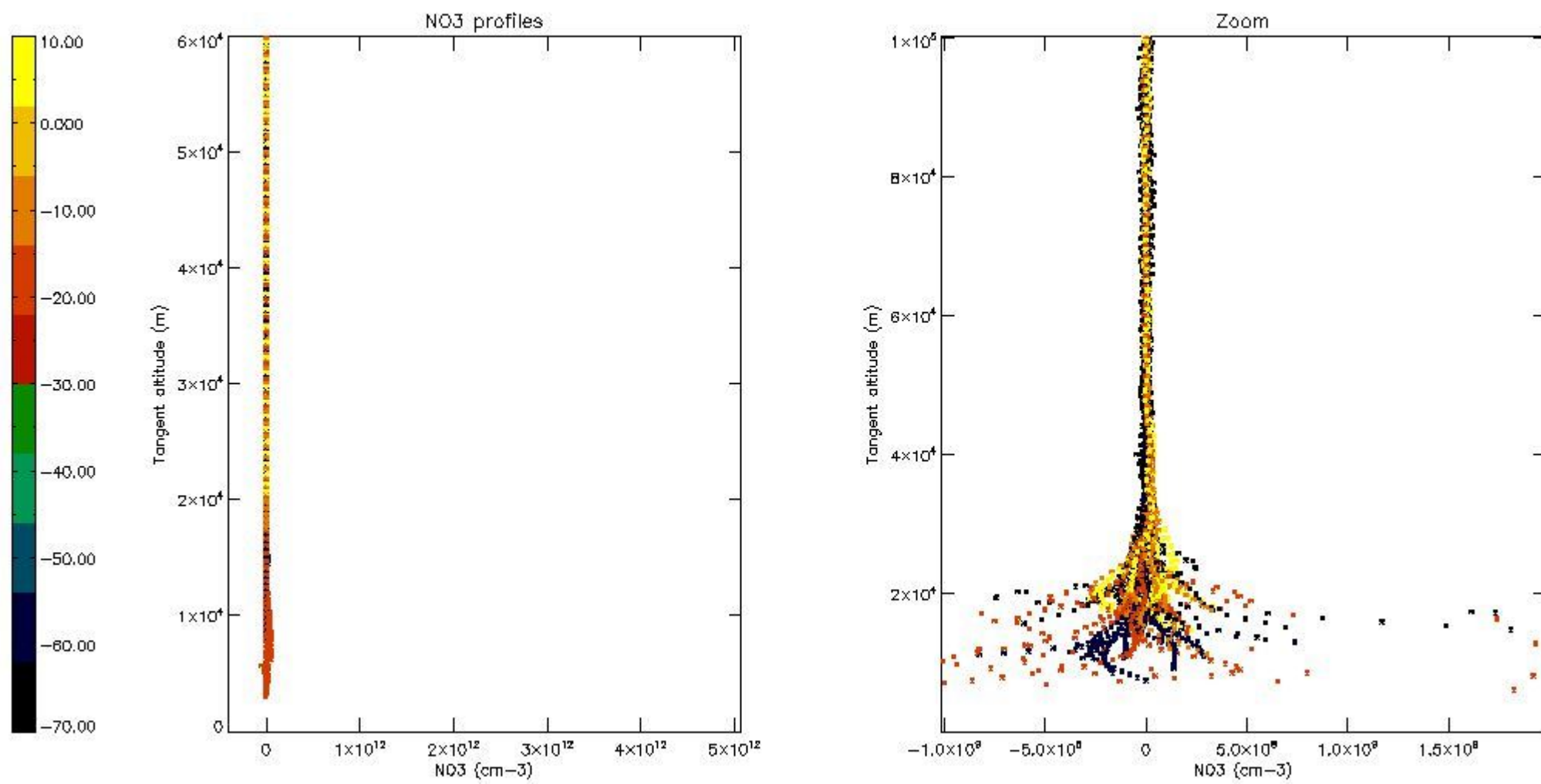
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



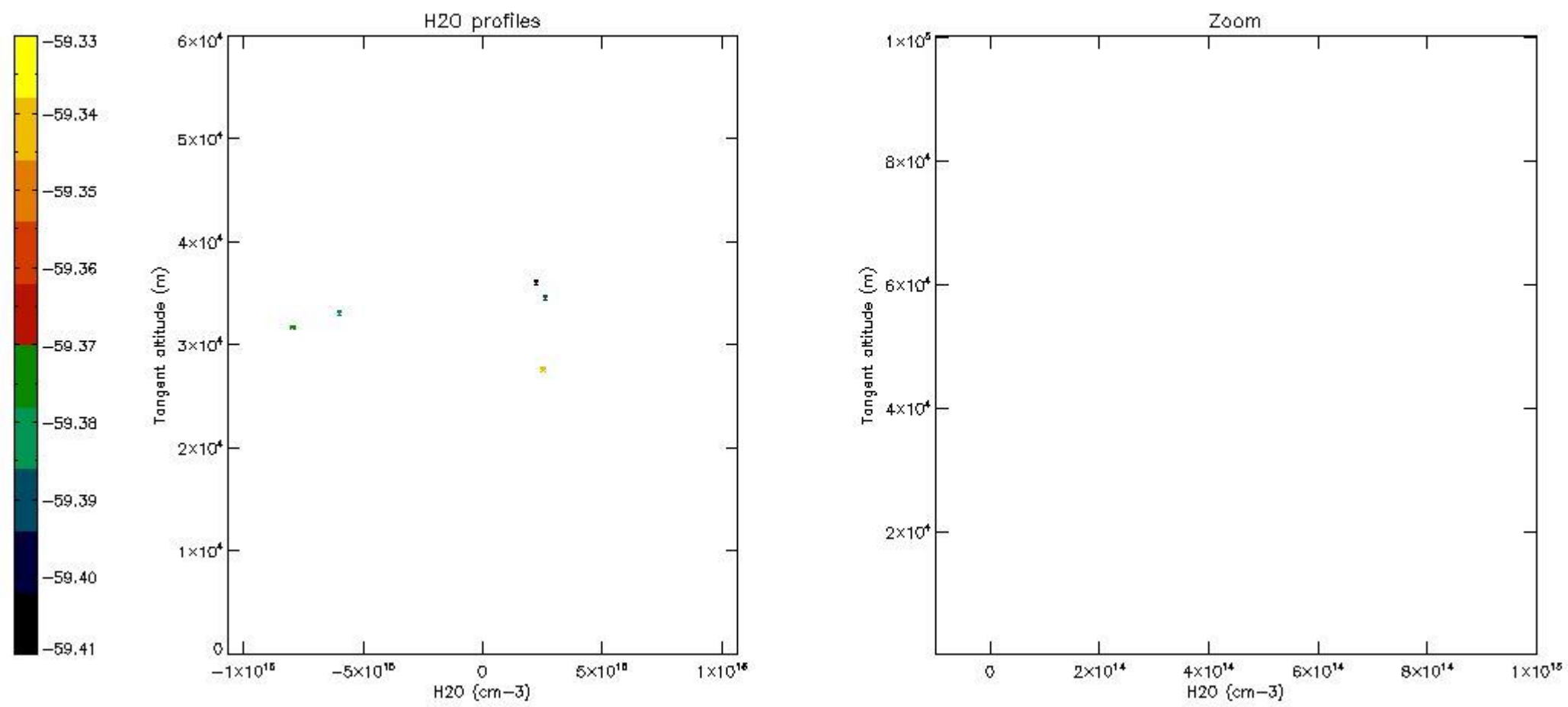
5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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)

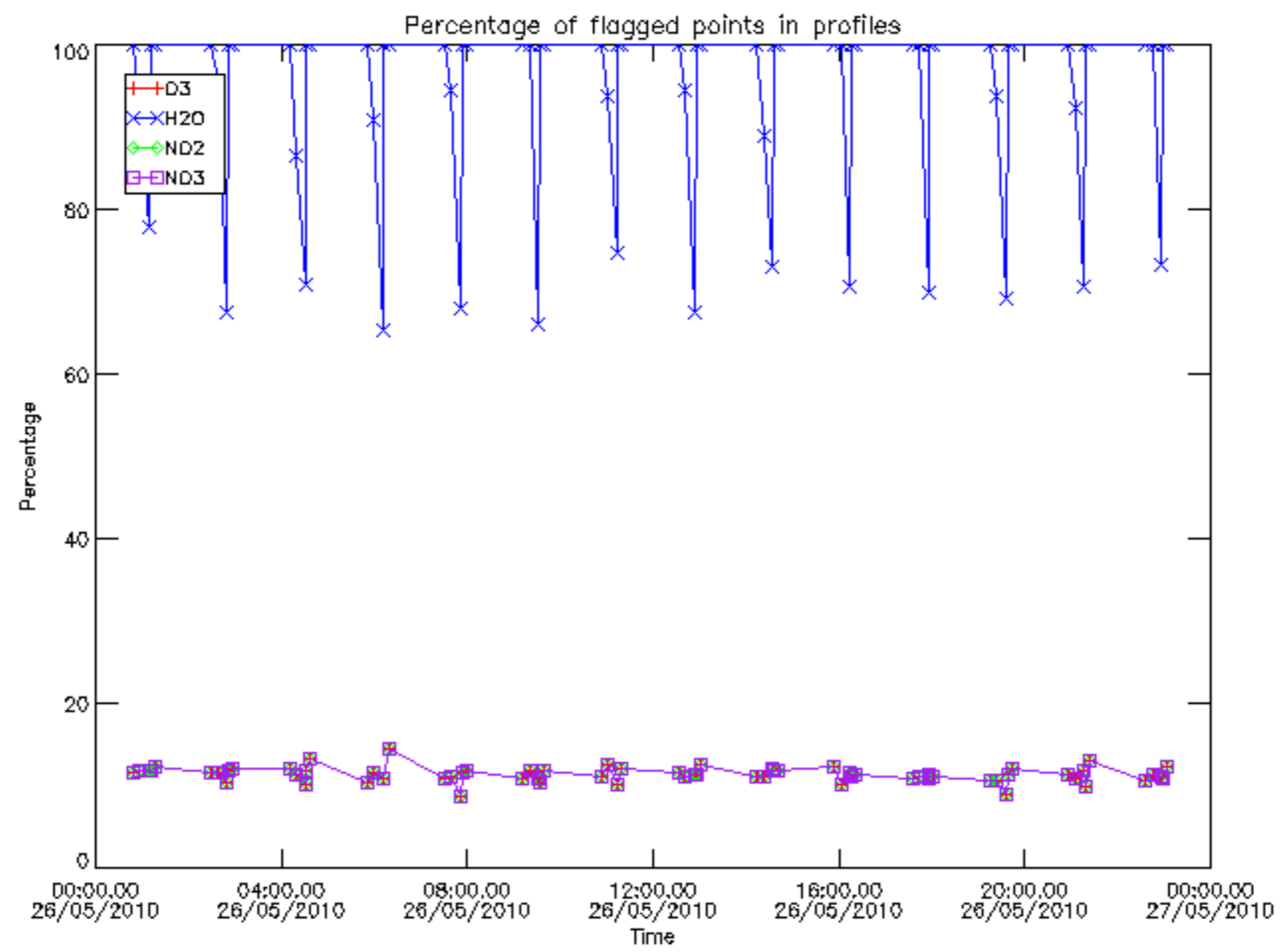
The colorbar represents the latitude.



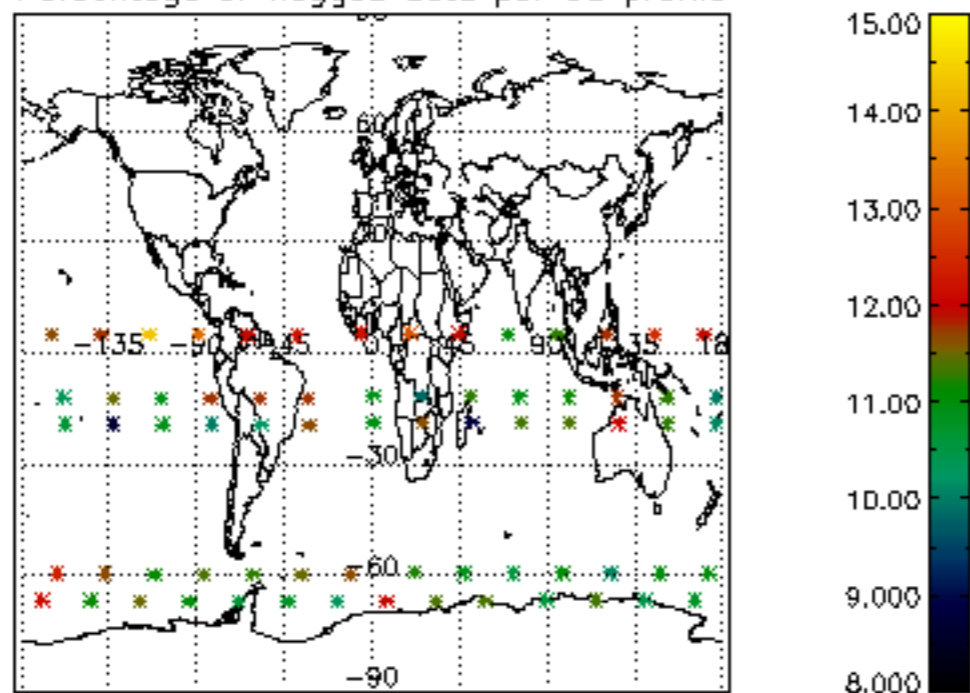
6. Auxiliary Data Files used for the production reported in section 2

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.

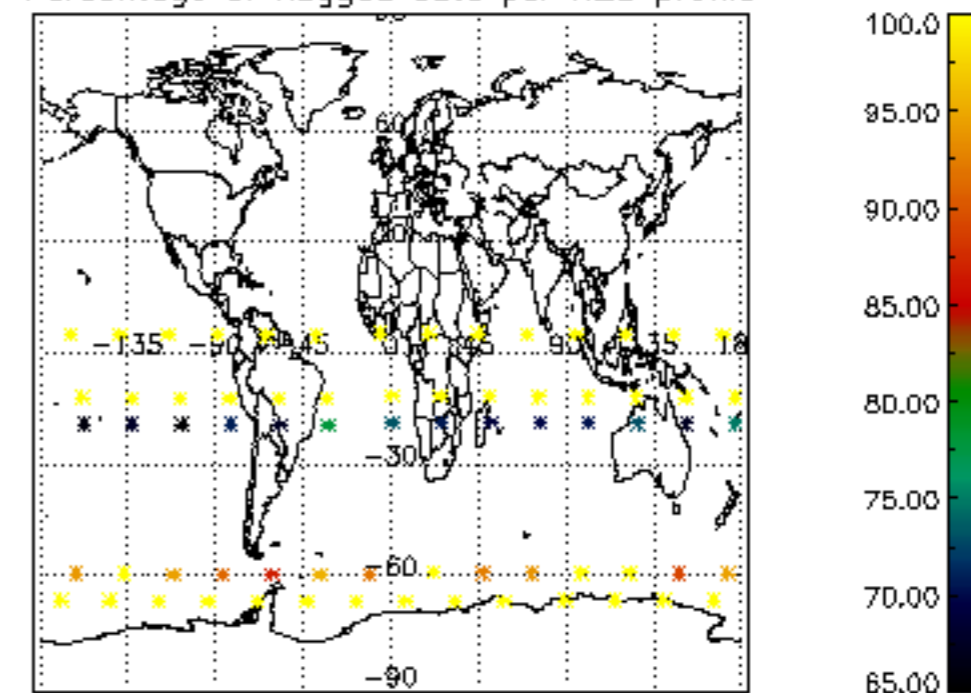
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	26-MAY-2010 00:02:06
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	26-MAY-2010 00:02:06
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	26-MAY-2010 00:02:06



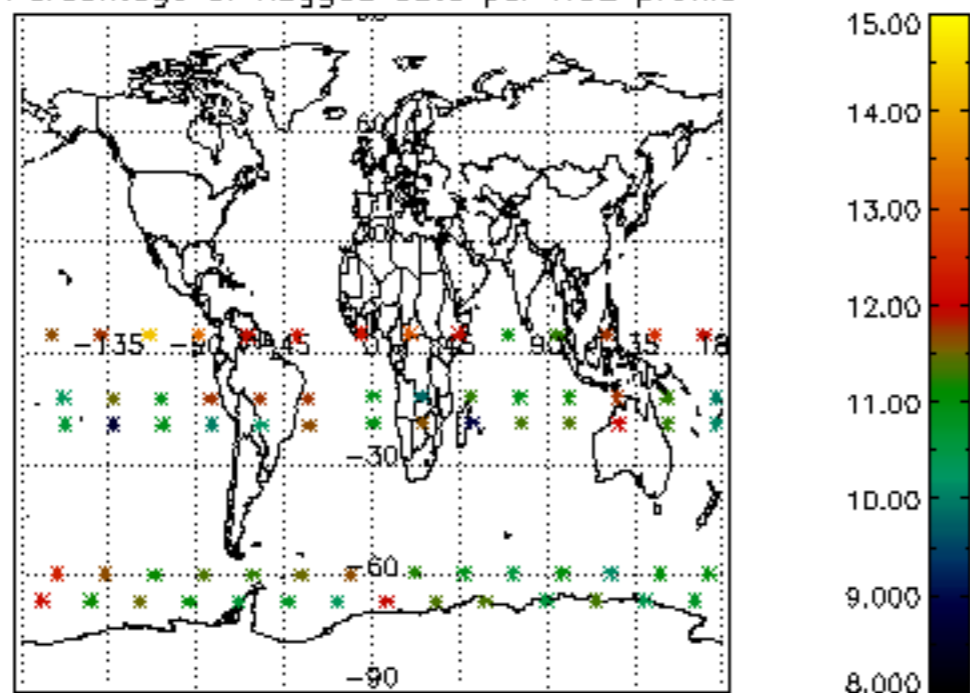
Percentage of flagged data per D3 profile



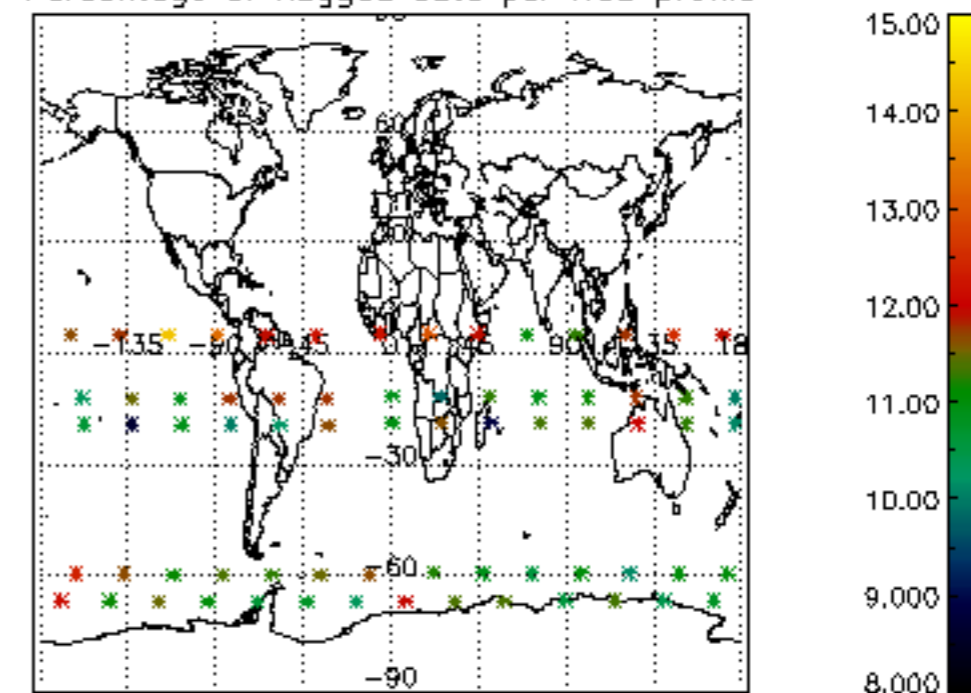
Percentage of flagged data per H2O profile

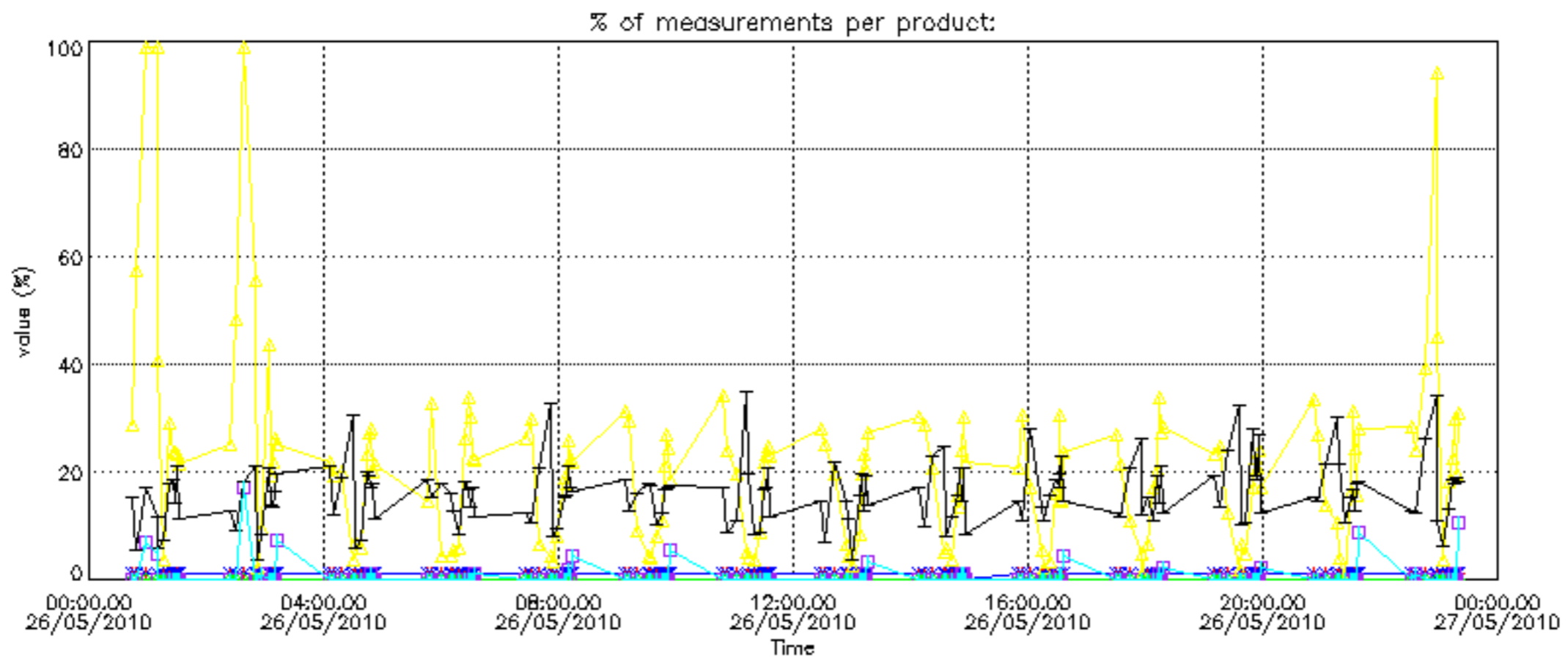


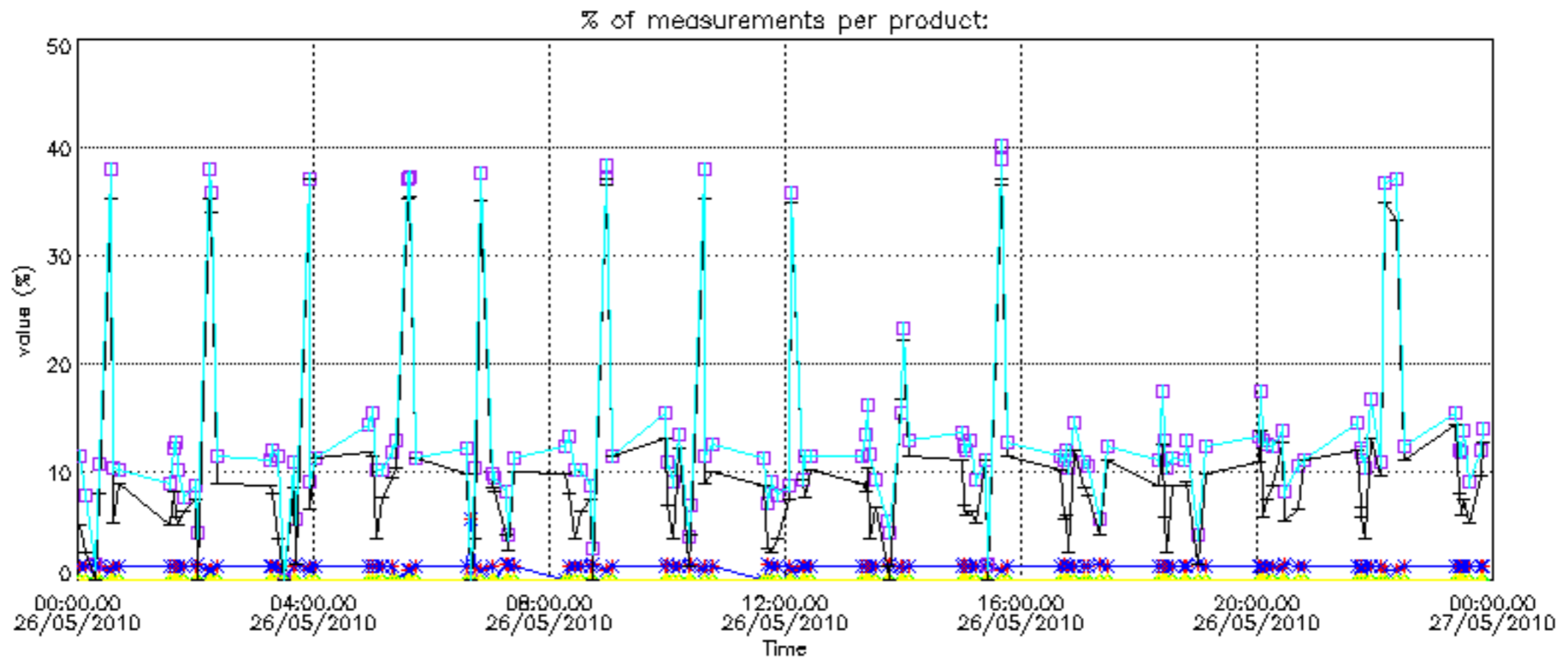
Percentage of flagged data per NO2 profile



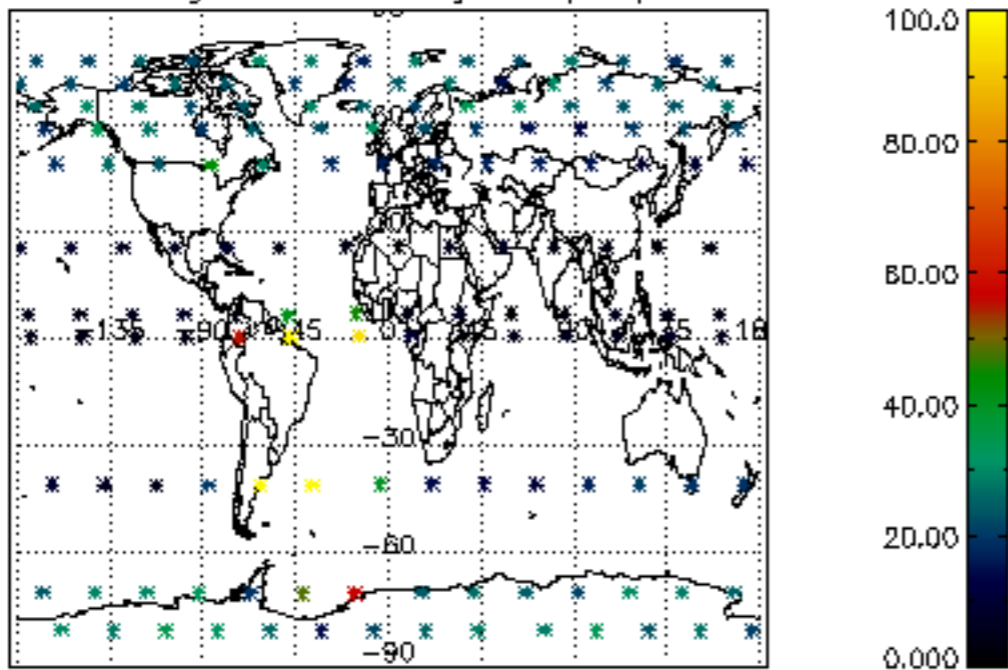
Percentage of flagged data per NO3 profile



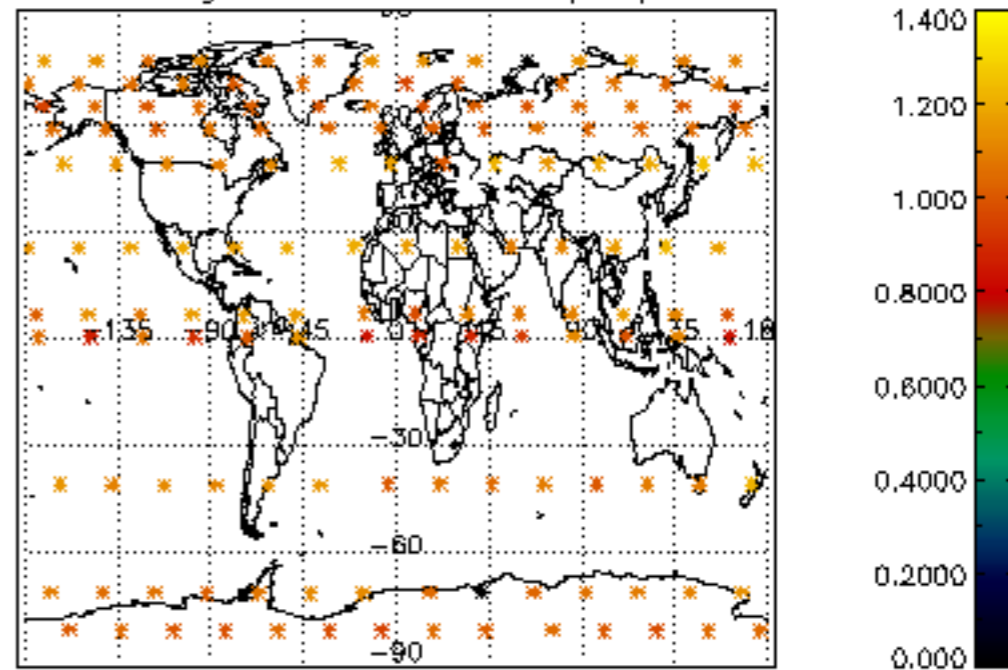




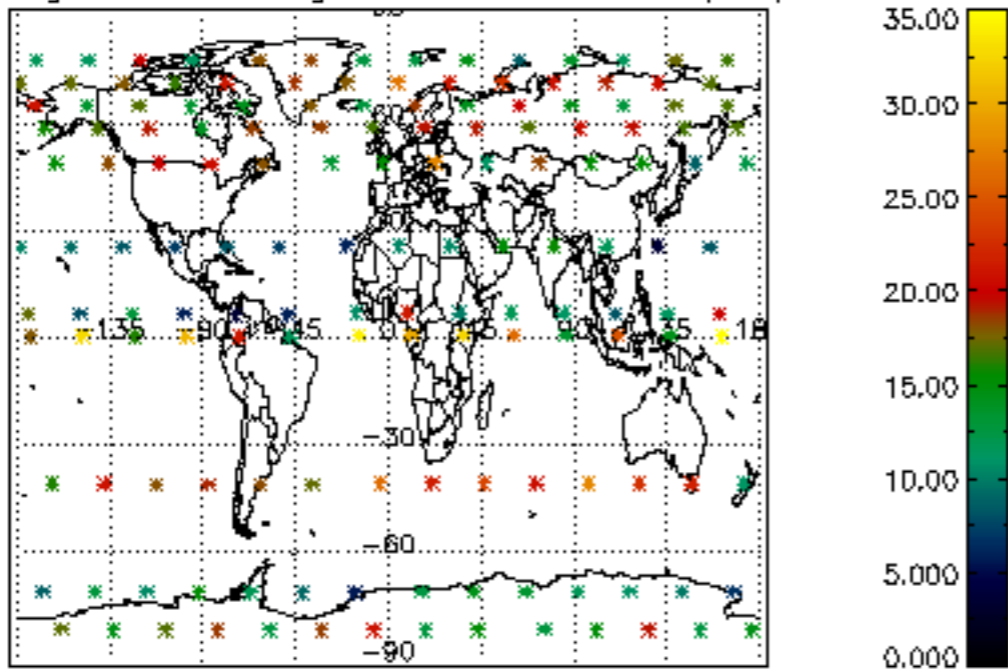
Percentage of cosmic ray hits per profile



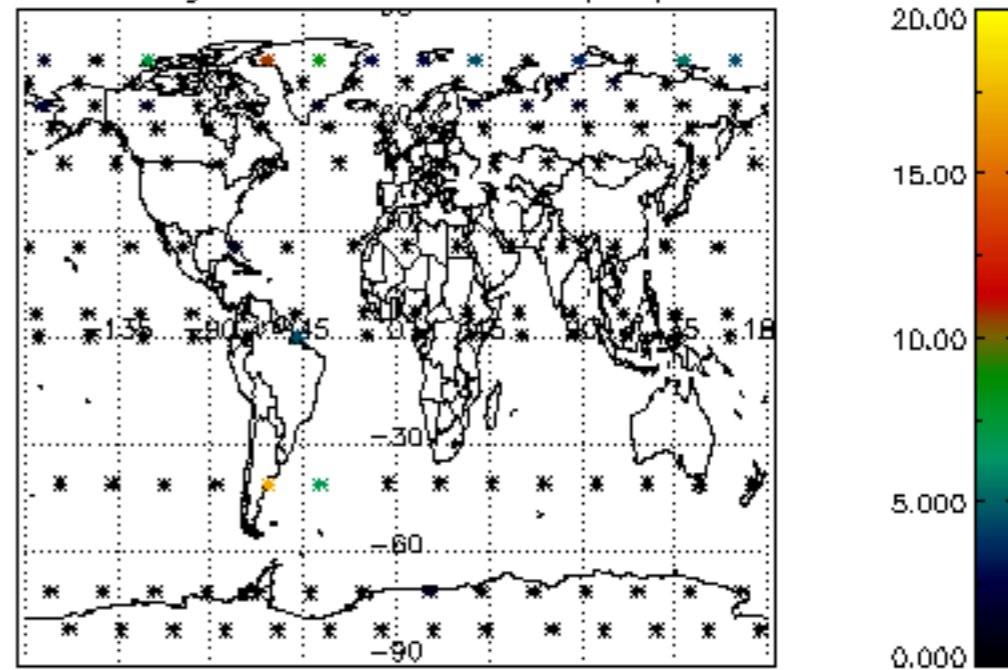
Percentage of datation errors per profile



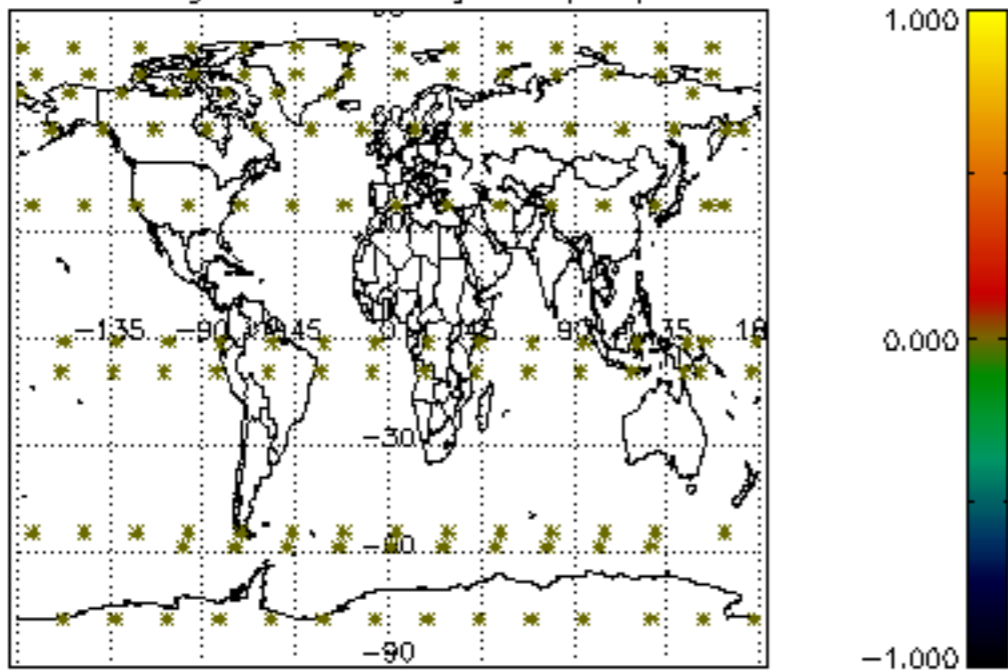
Percentage of star falling outside central band per profile



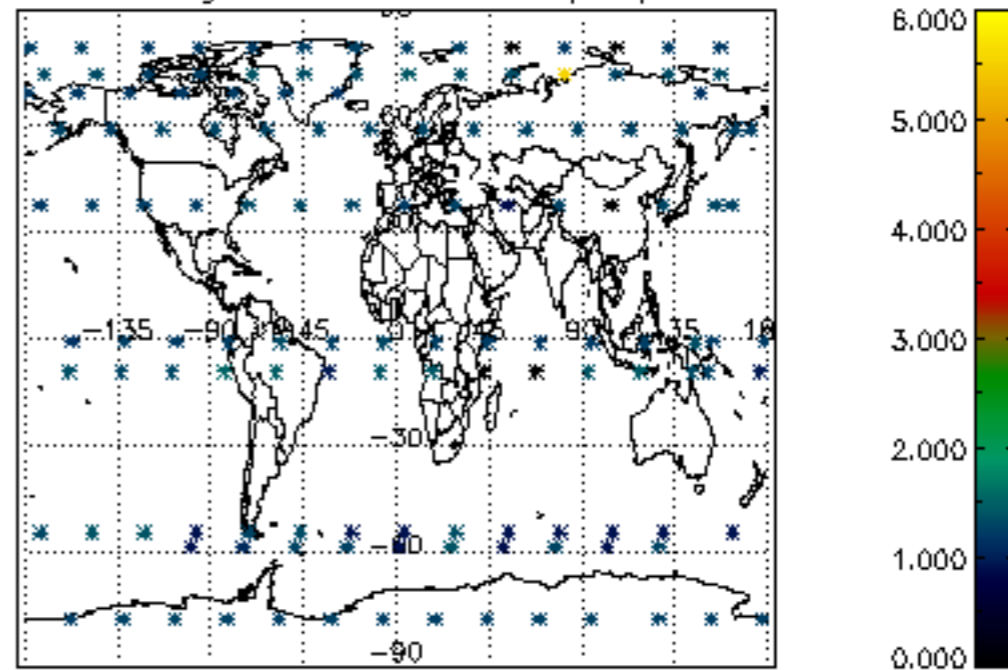
Percentage of saturation errors per profile



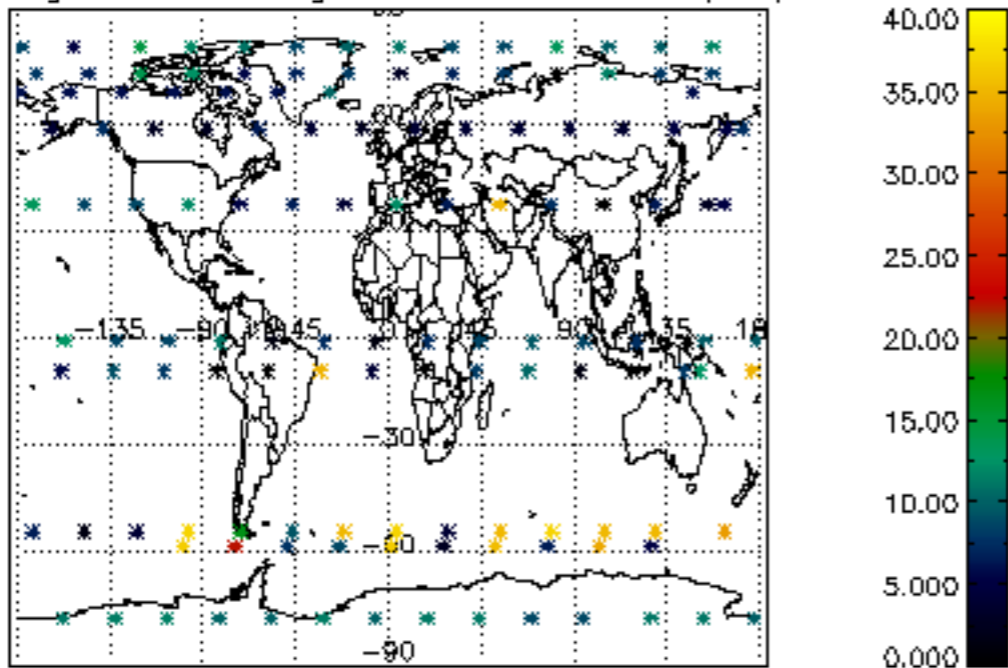
Percentage of cosmic ray hits per profile



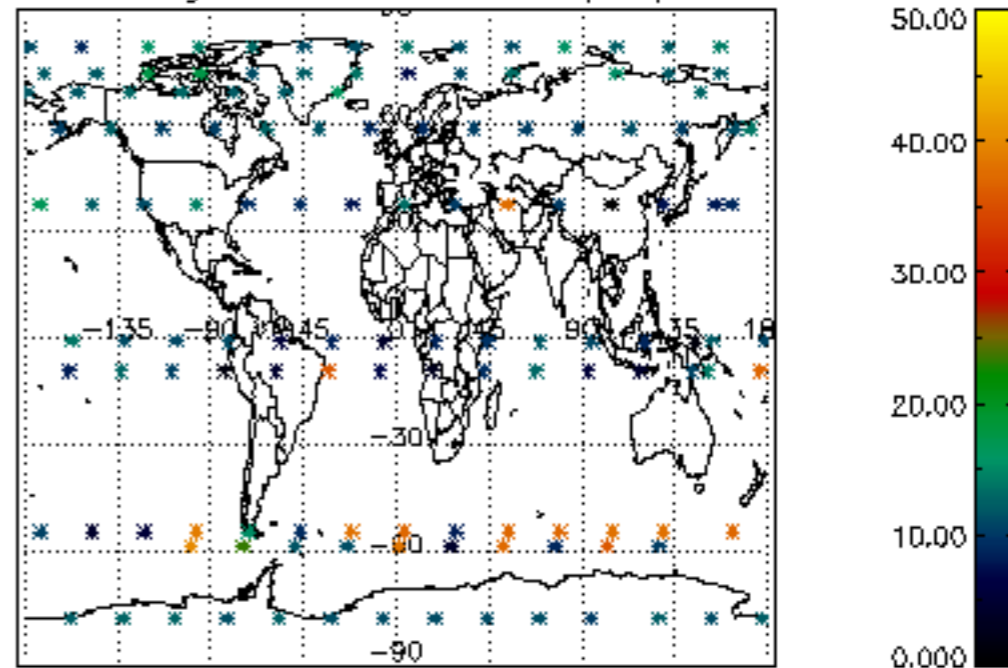
Percentage of datation errors per profile

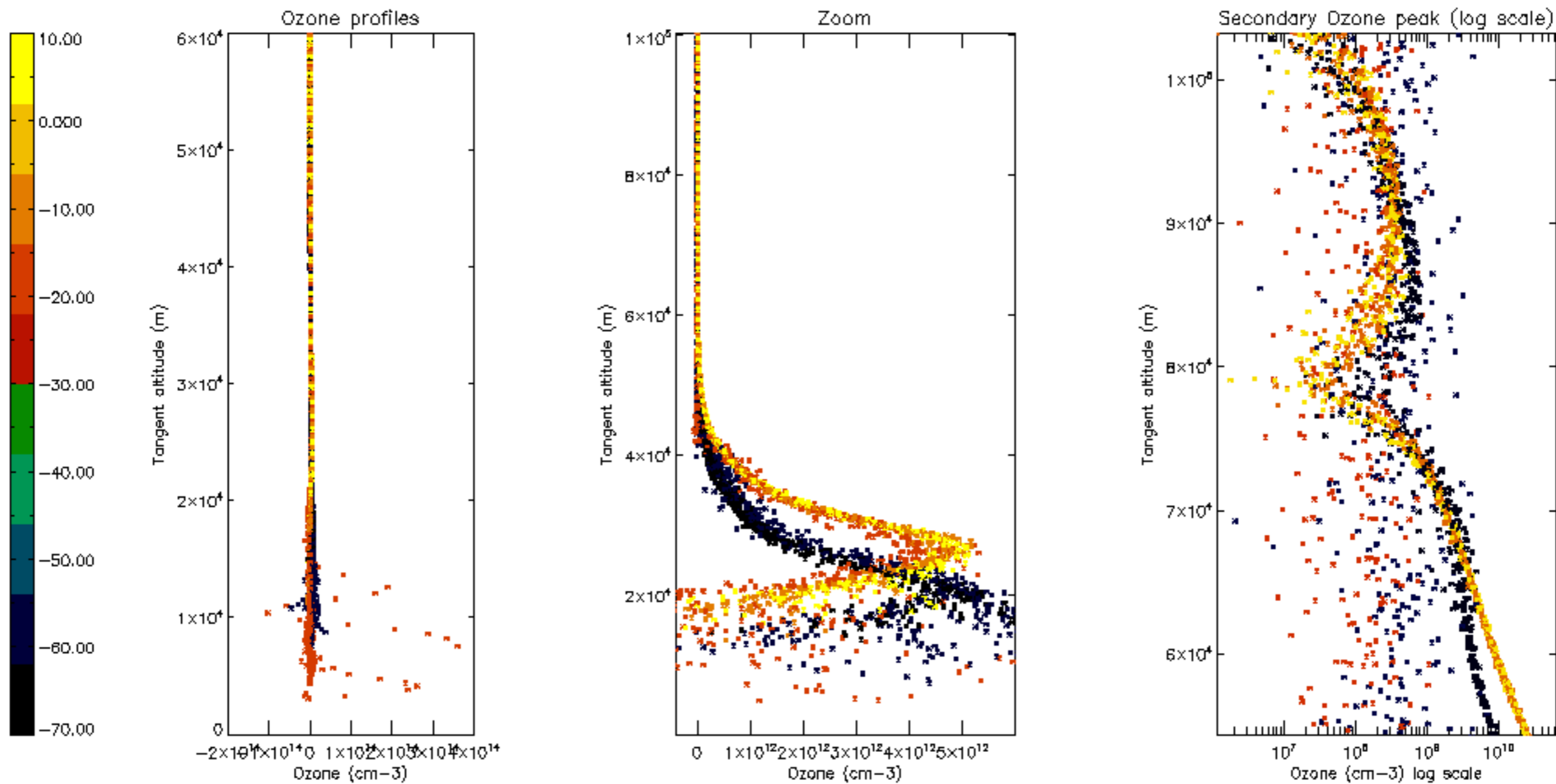


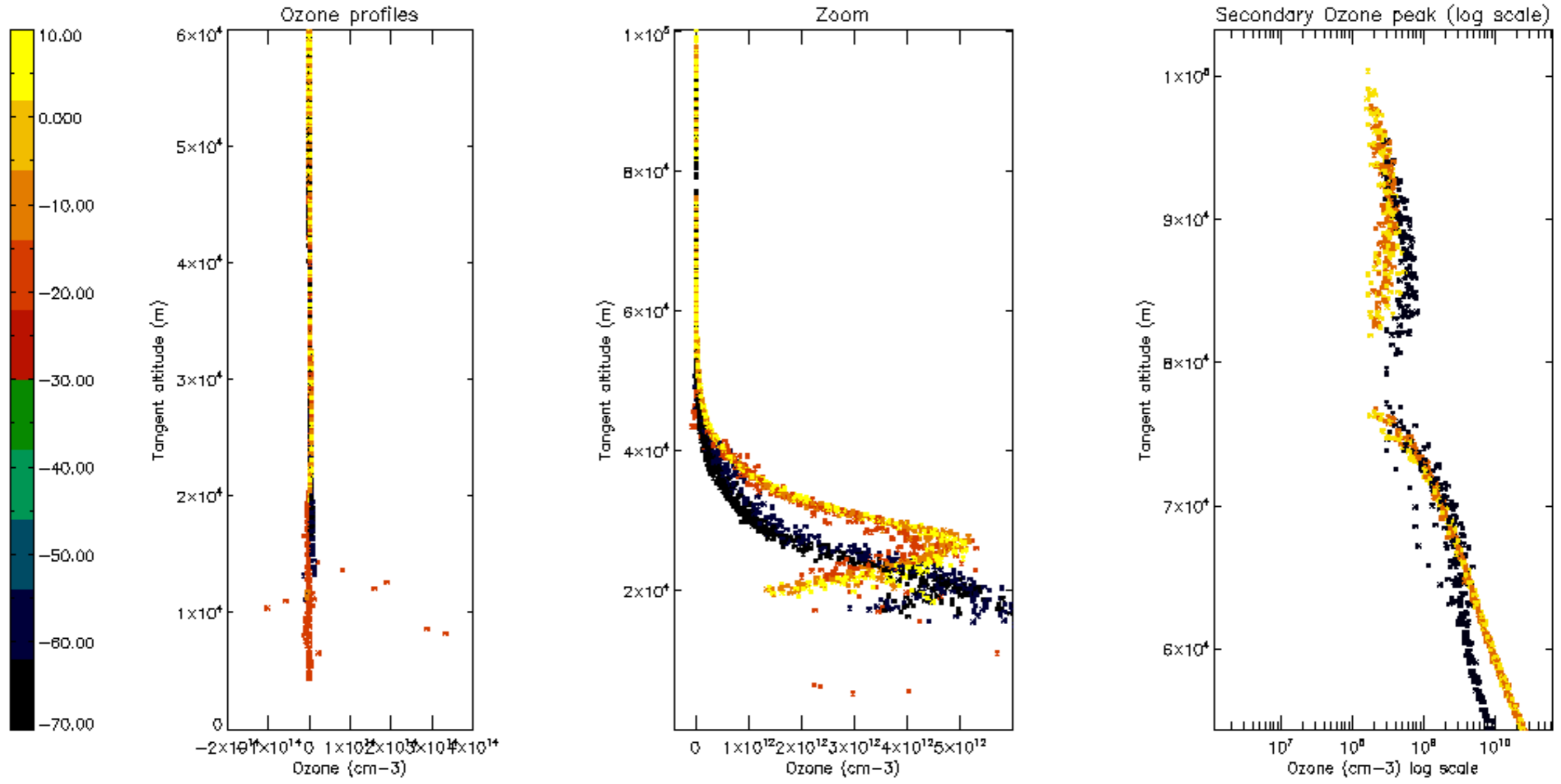
Percentage of star falling outside central band per profile

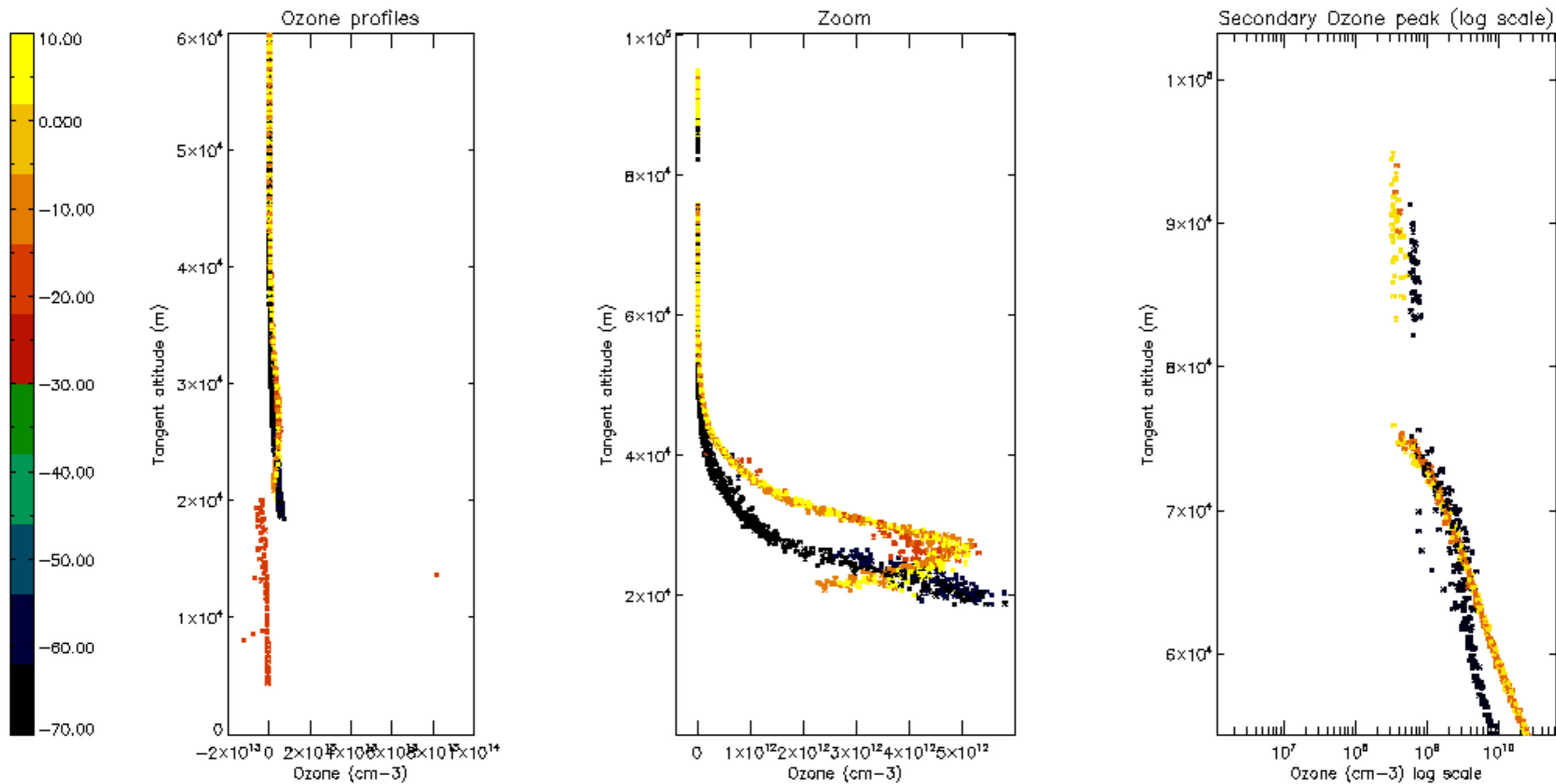


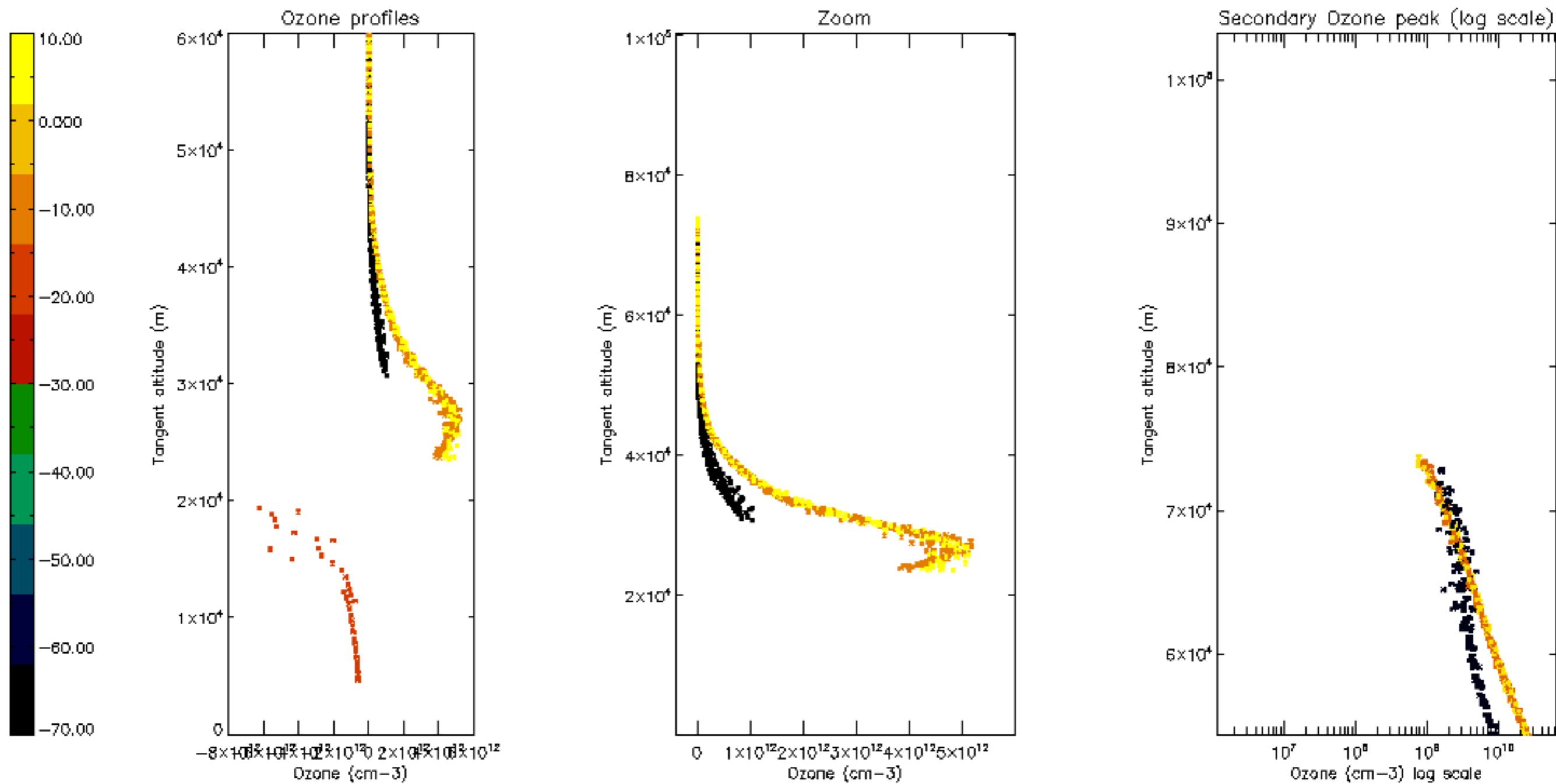
Percentage of saturation errors per profile

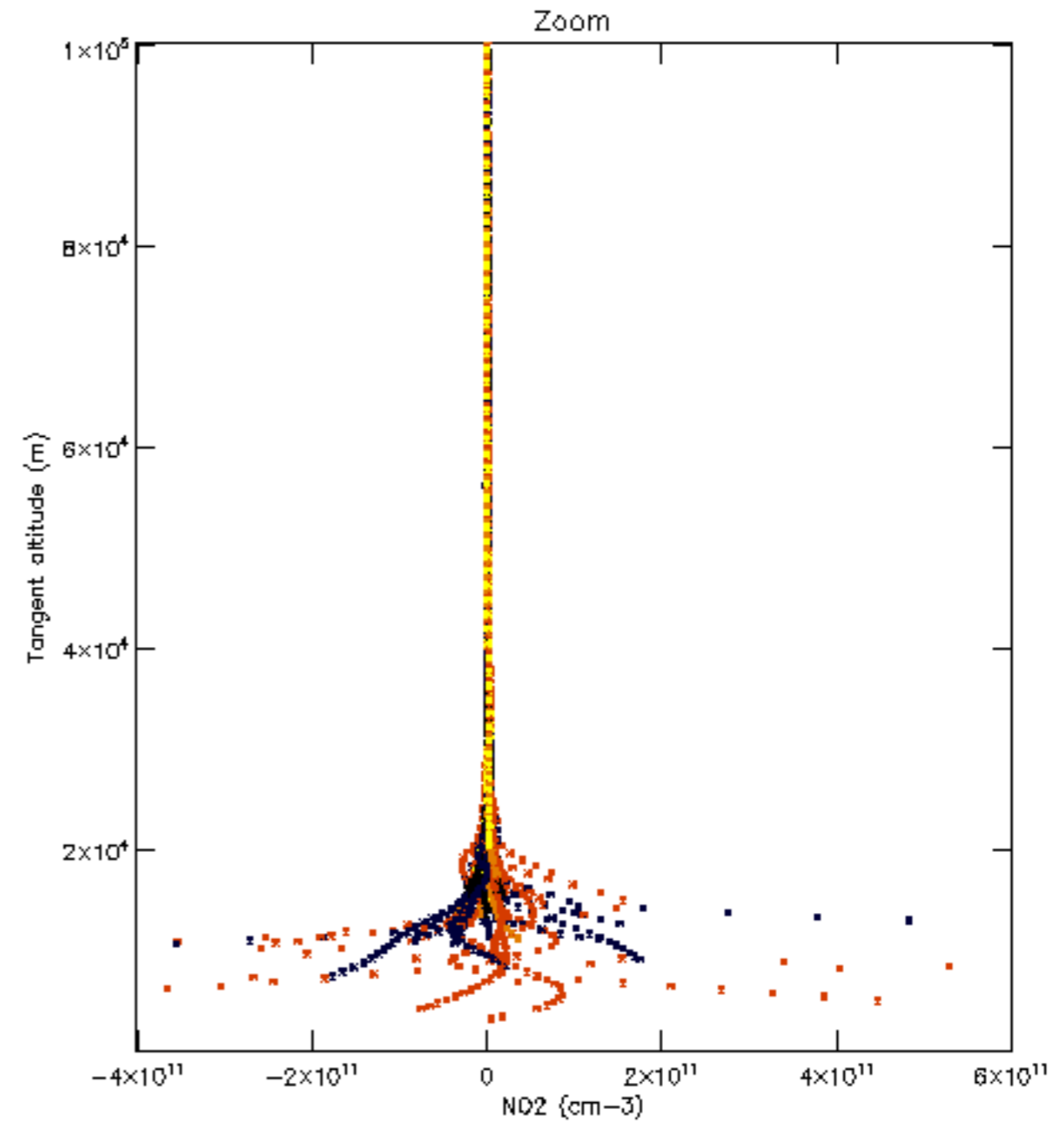
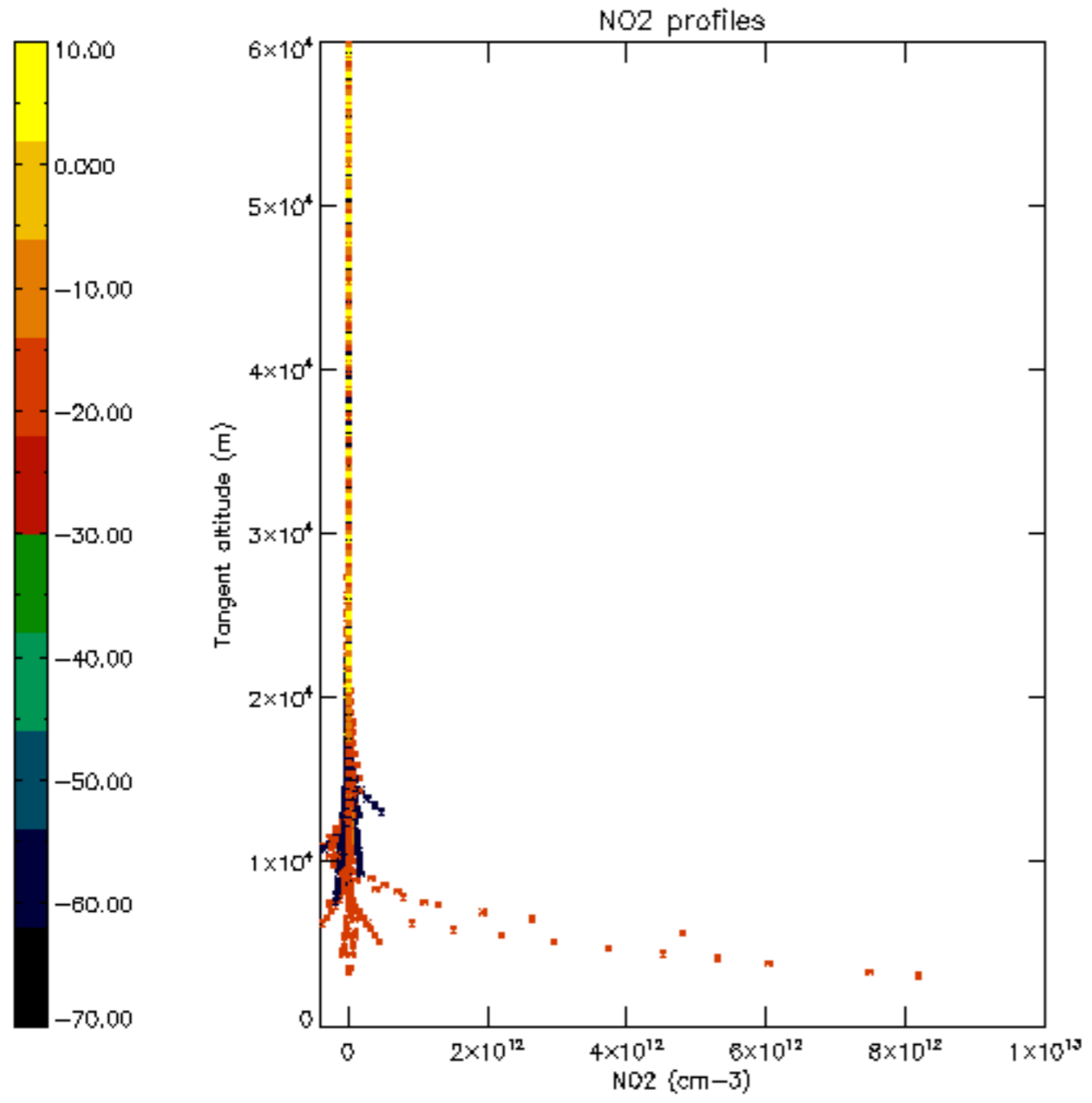


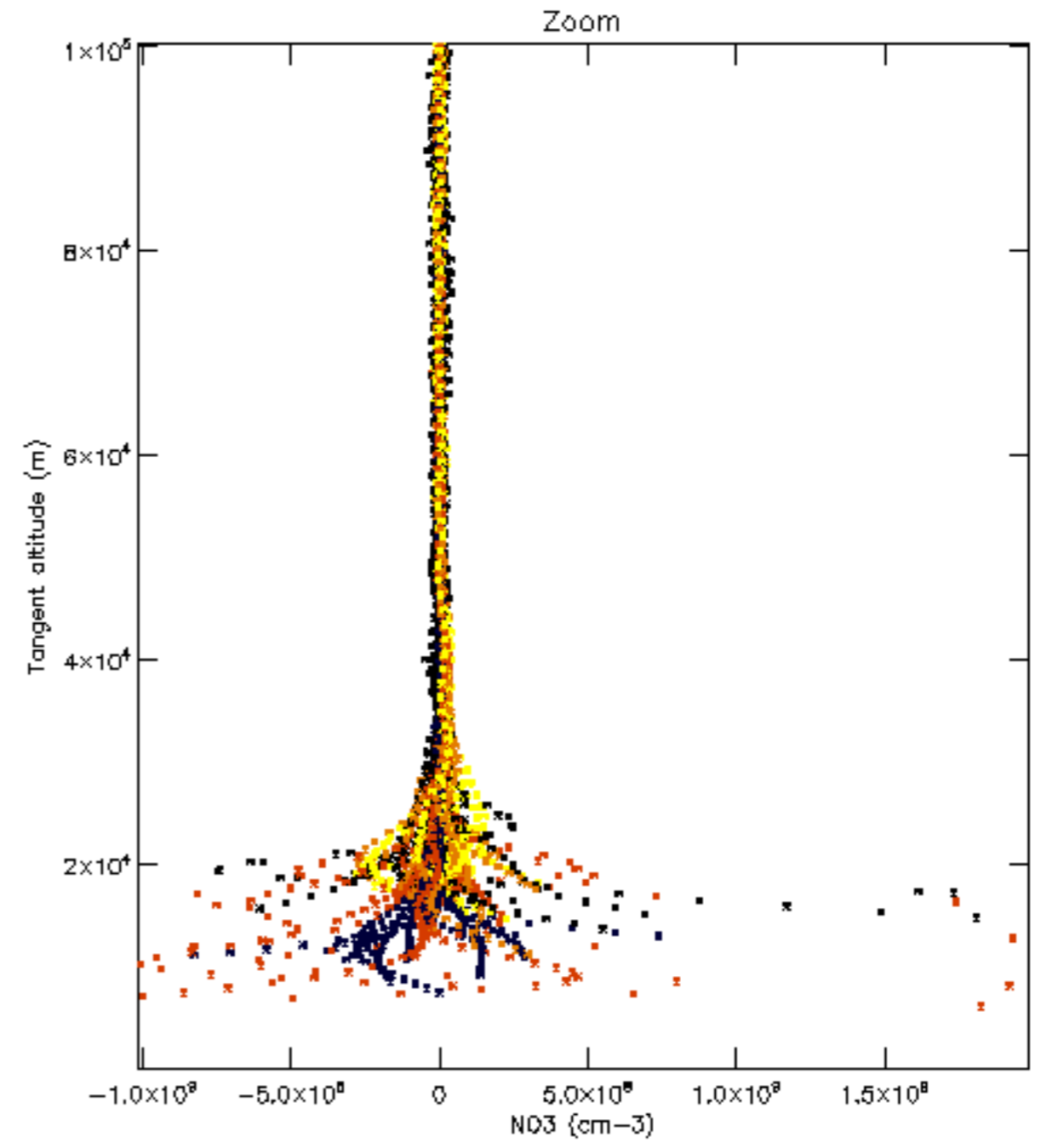
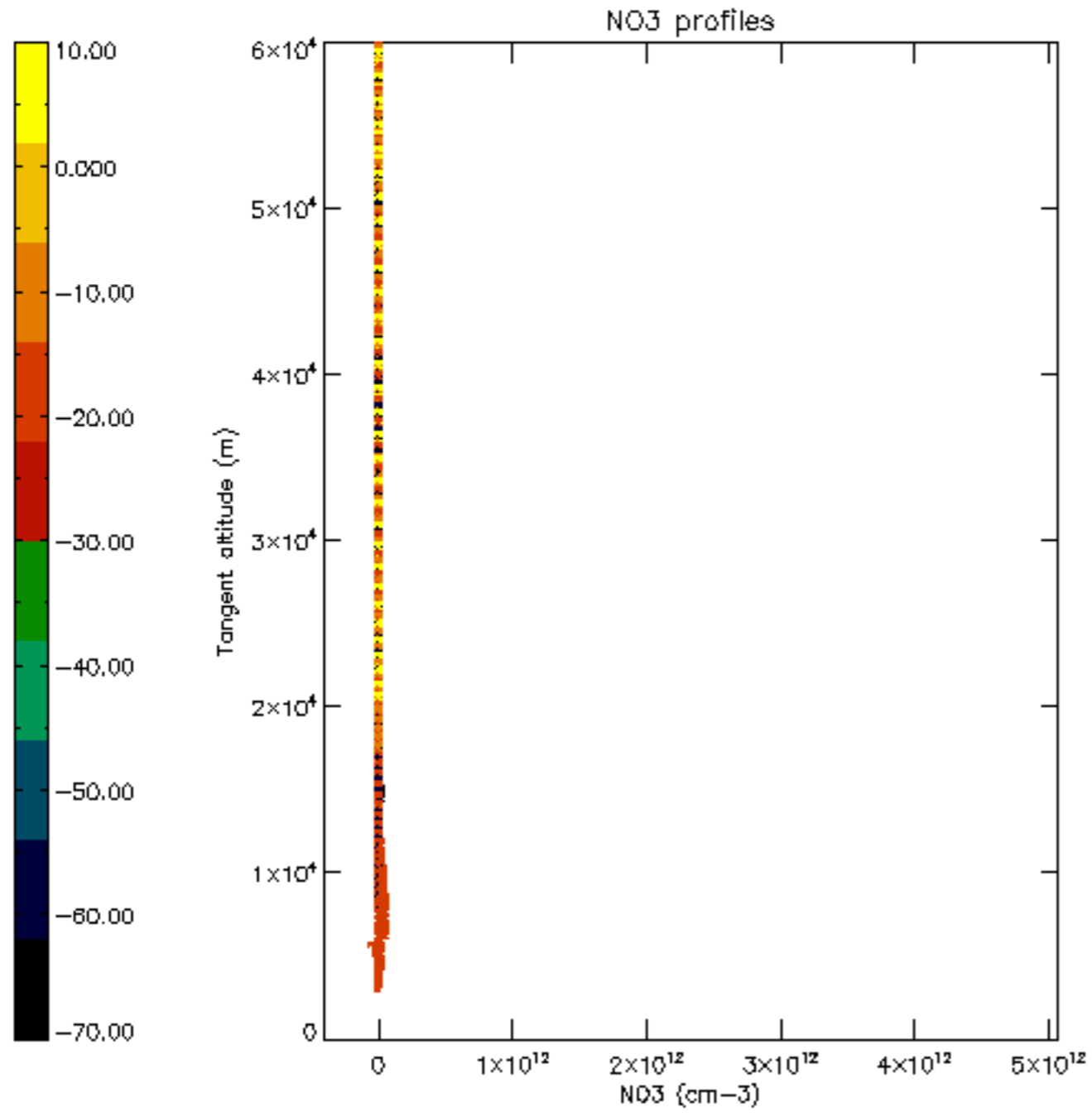


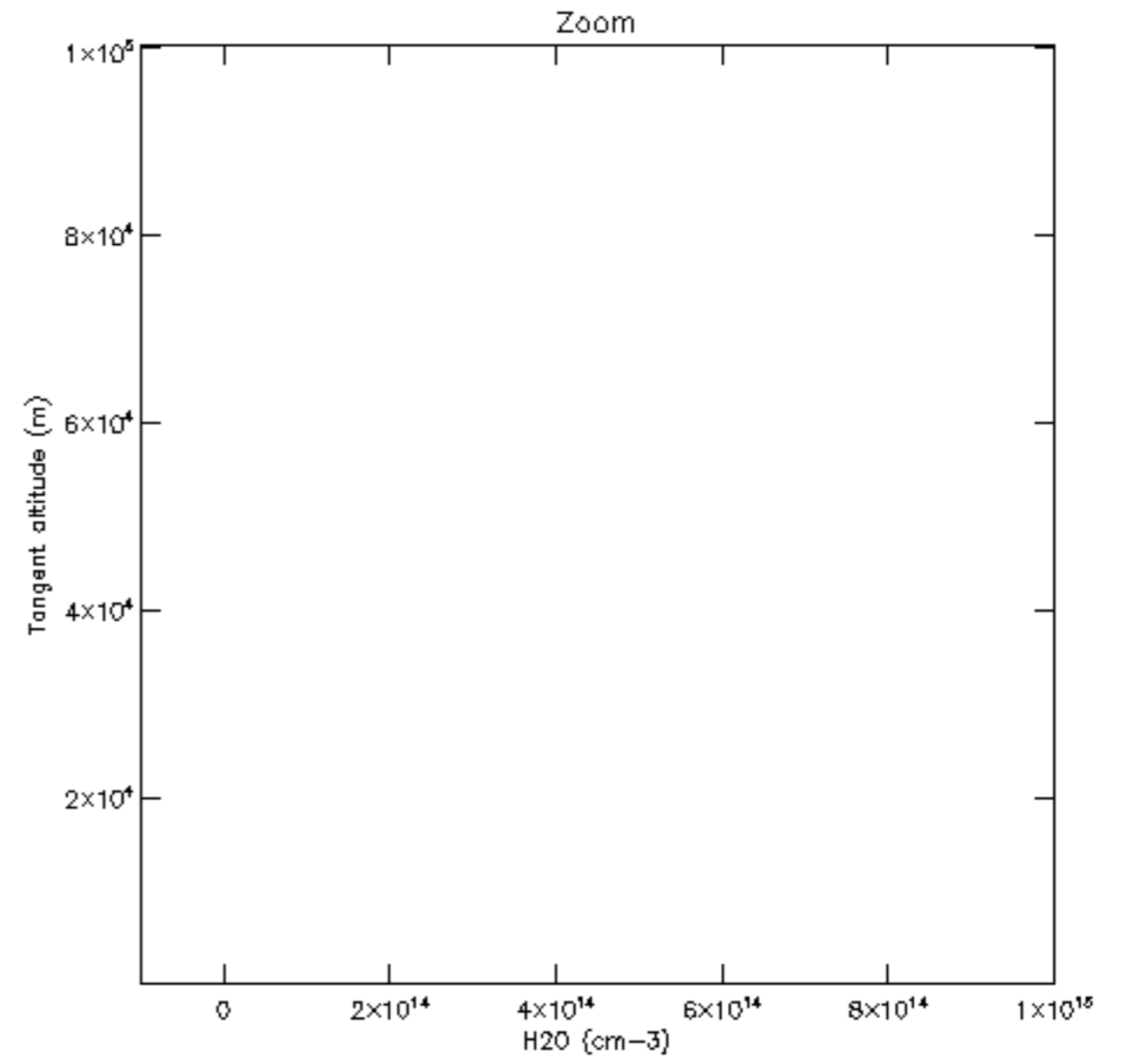
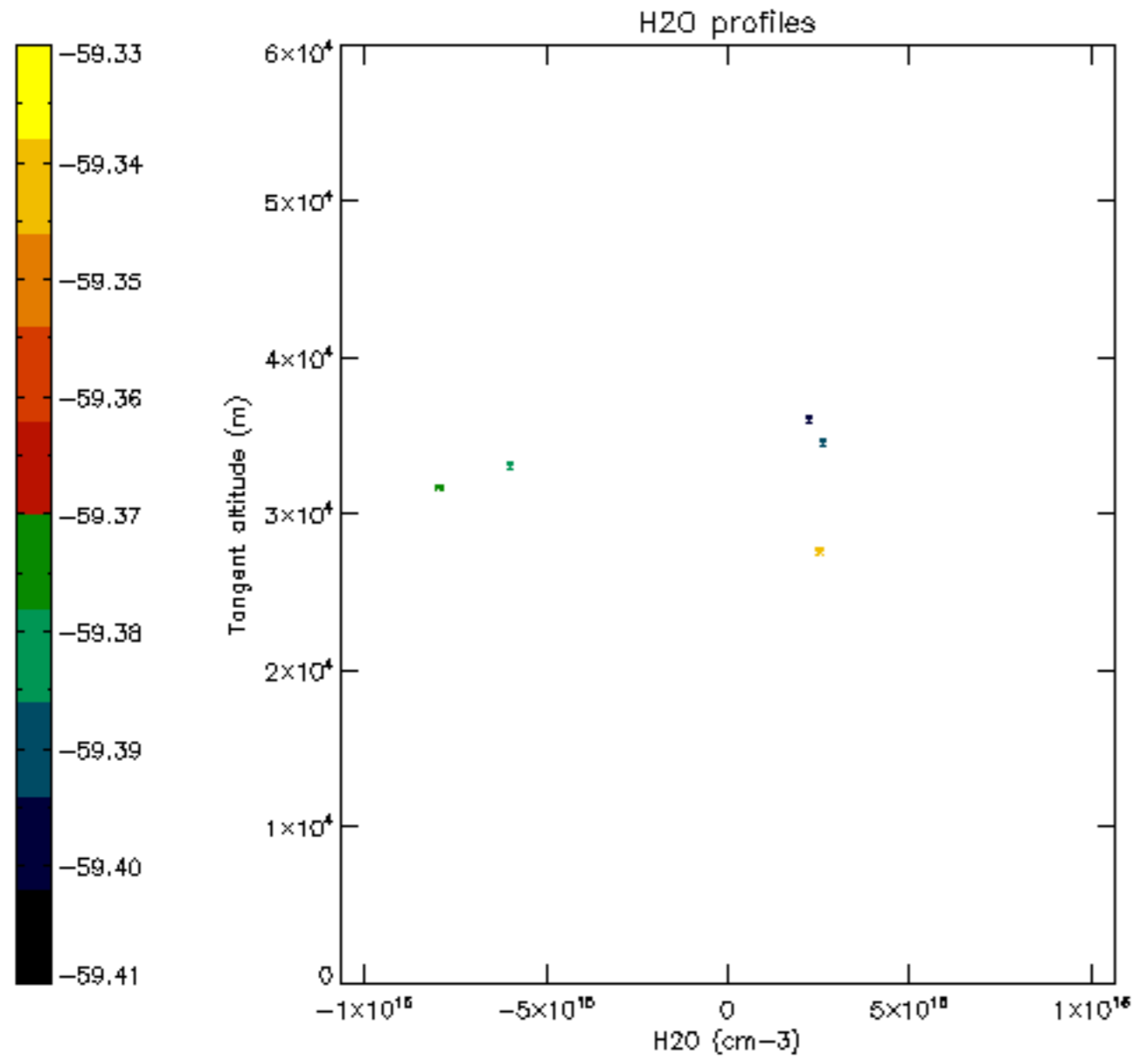


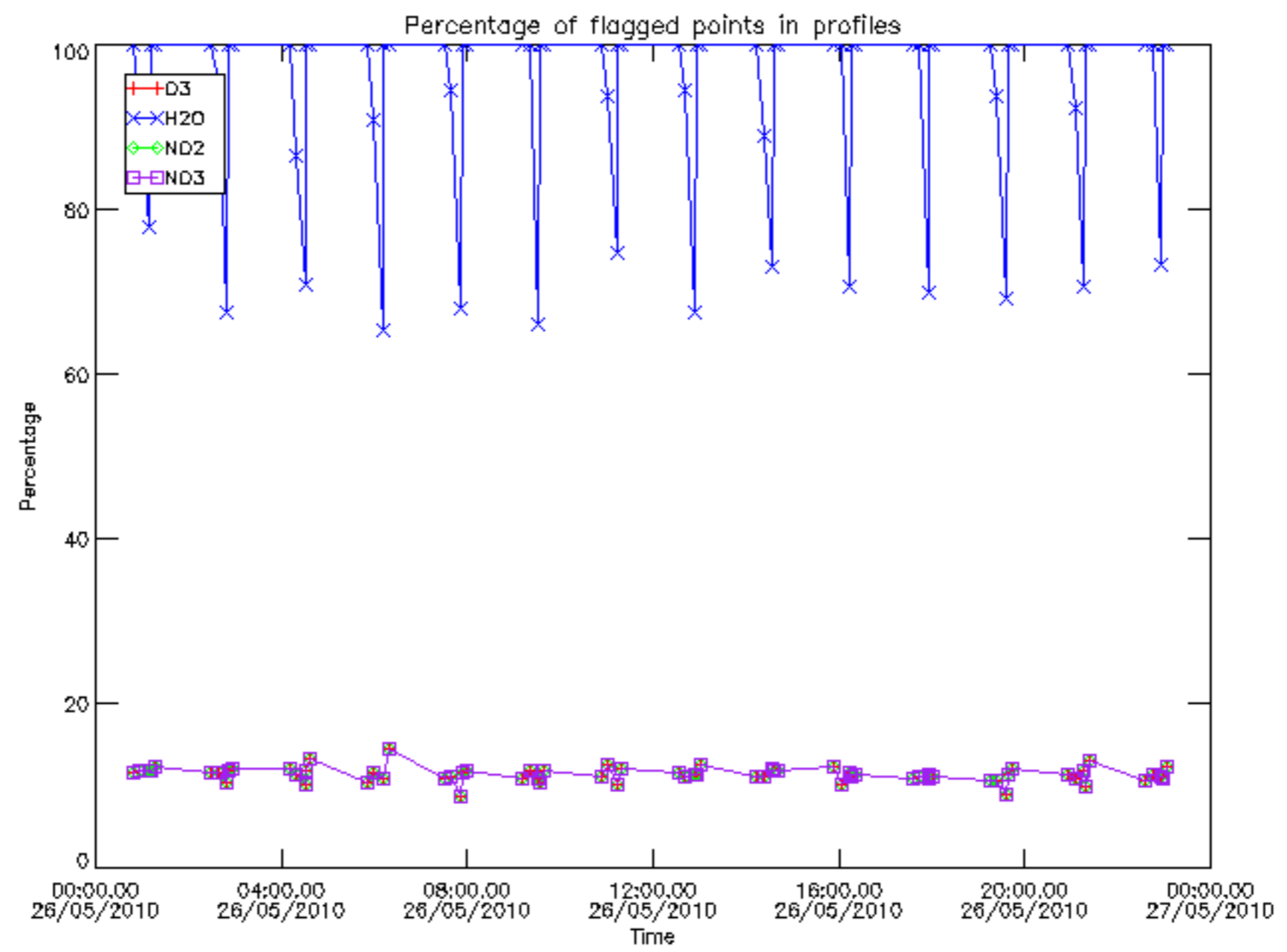




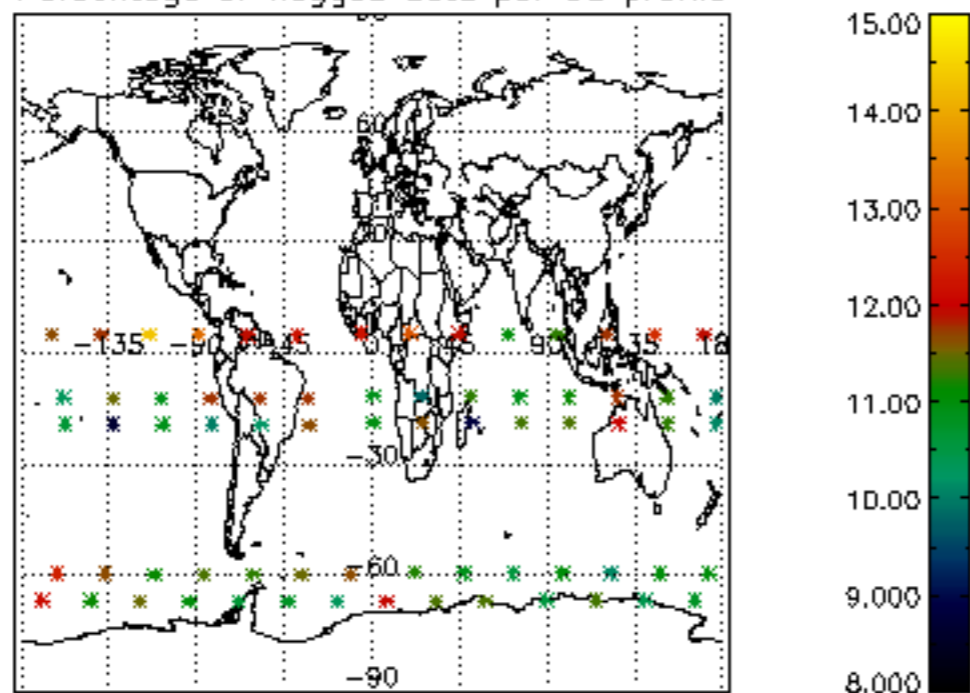




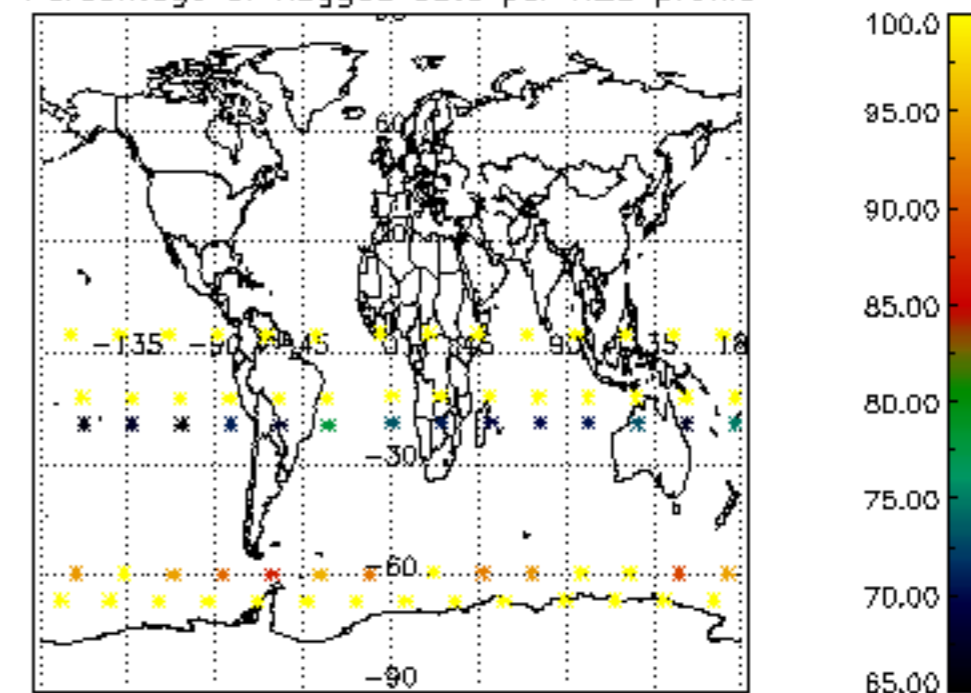




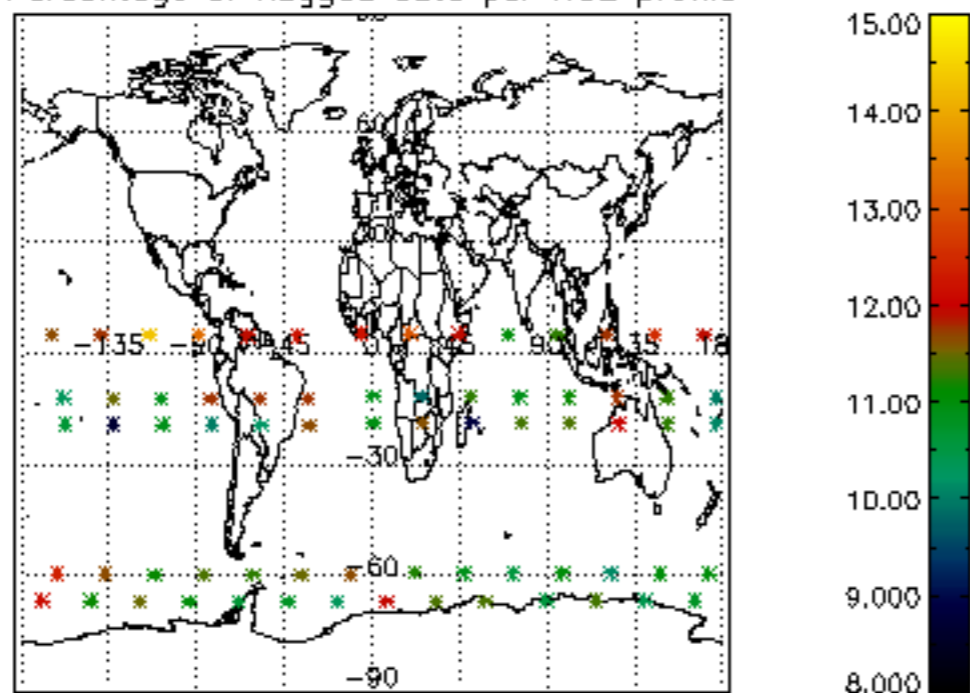
Percentage of flagged data per D3 profile



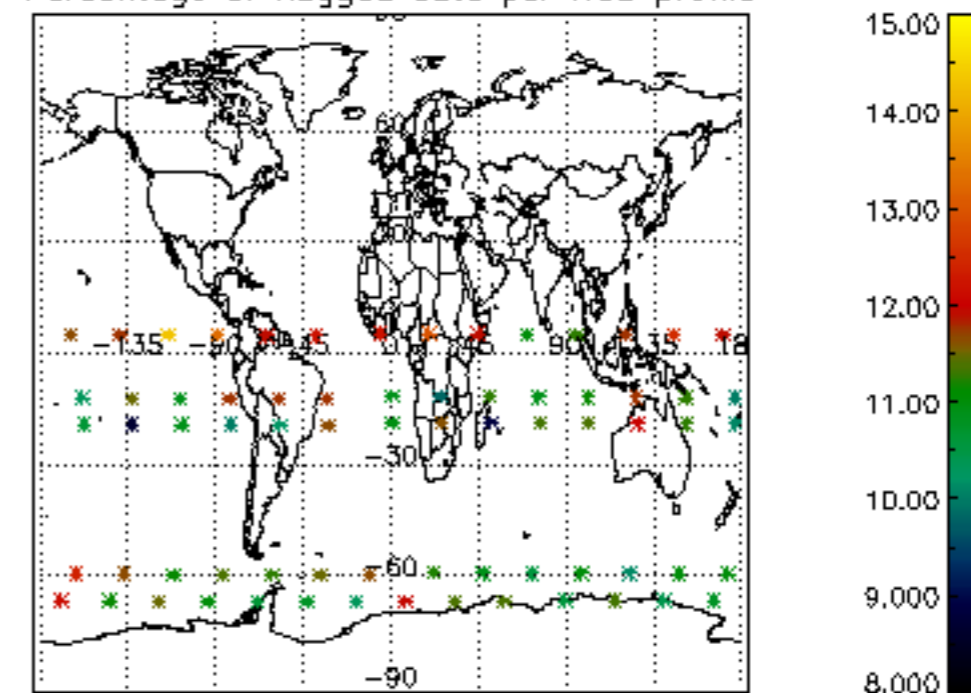
Percentage of flagged data per H2O profile

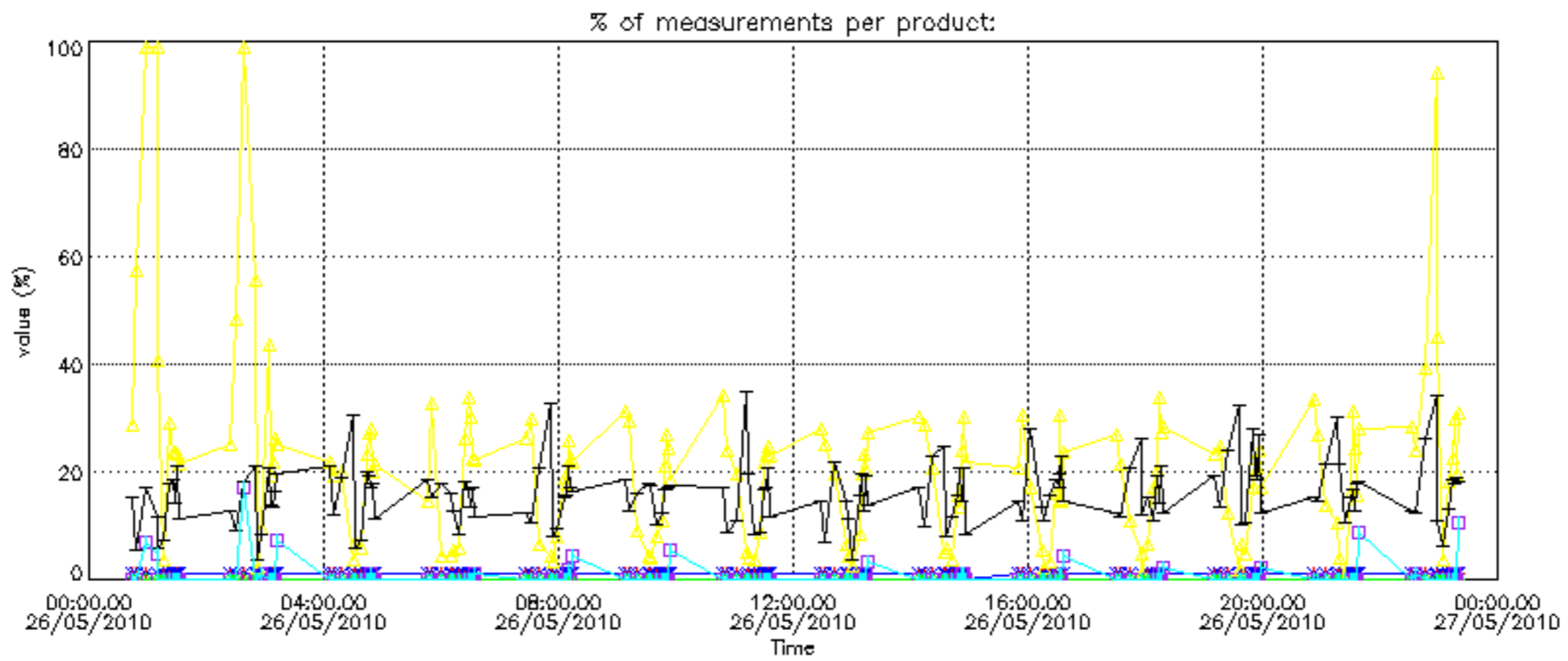


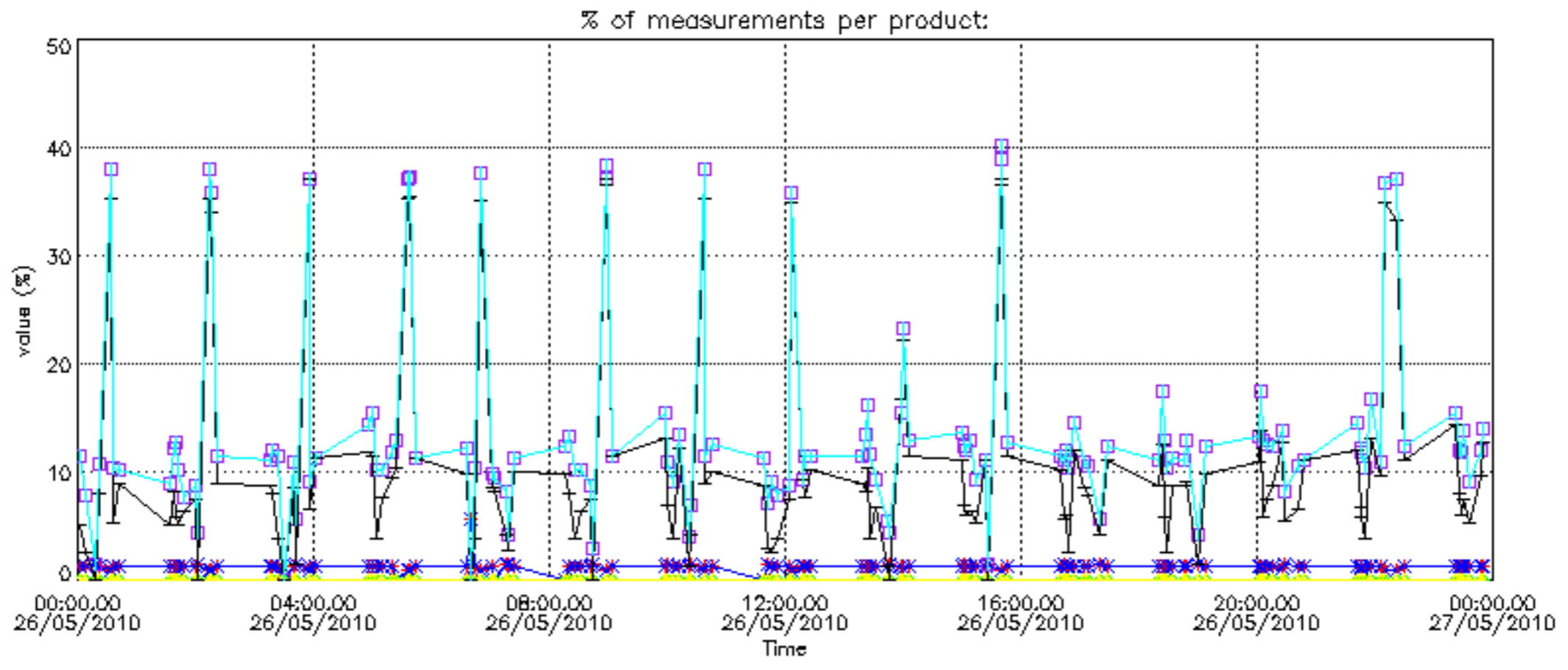
Percentage of flagged data per NO2 profile



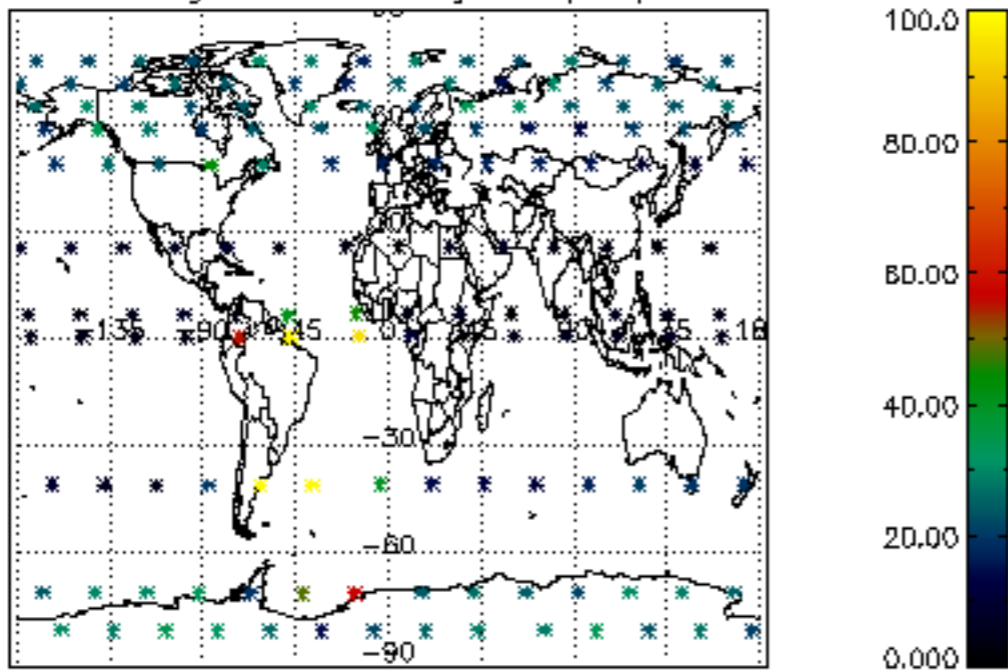
Percentage of flagged data per NO3 profile



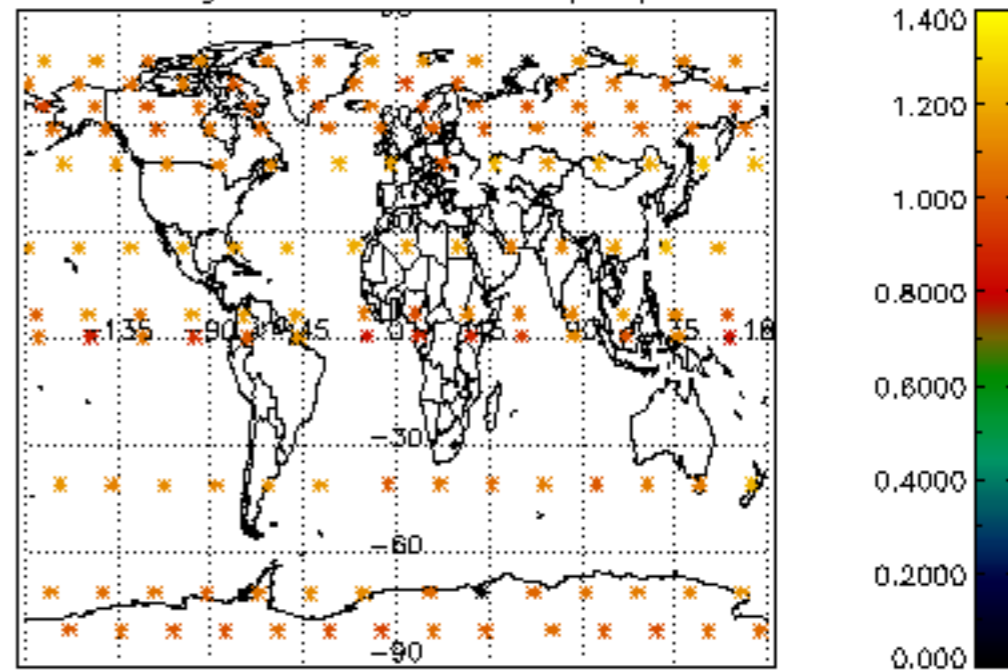




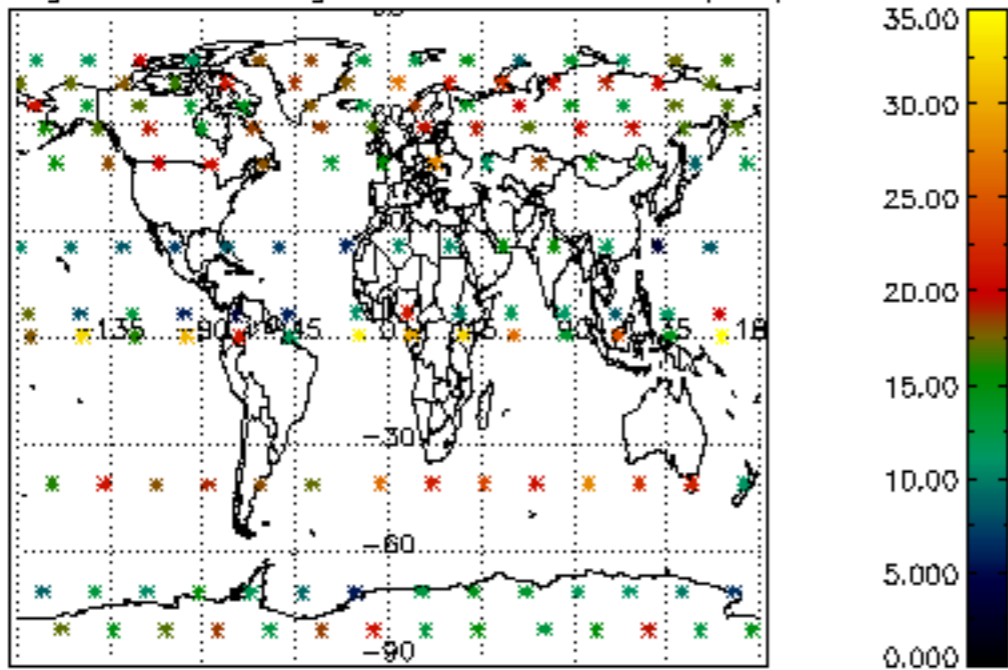
Percentage of cosmic ray hits per profile



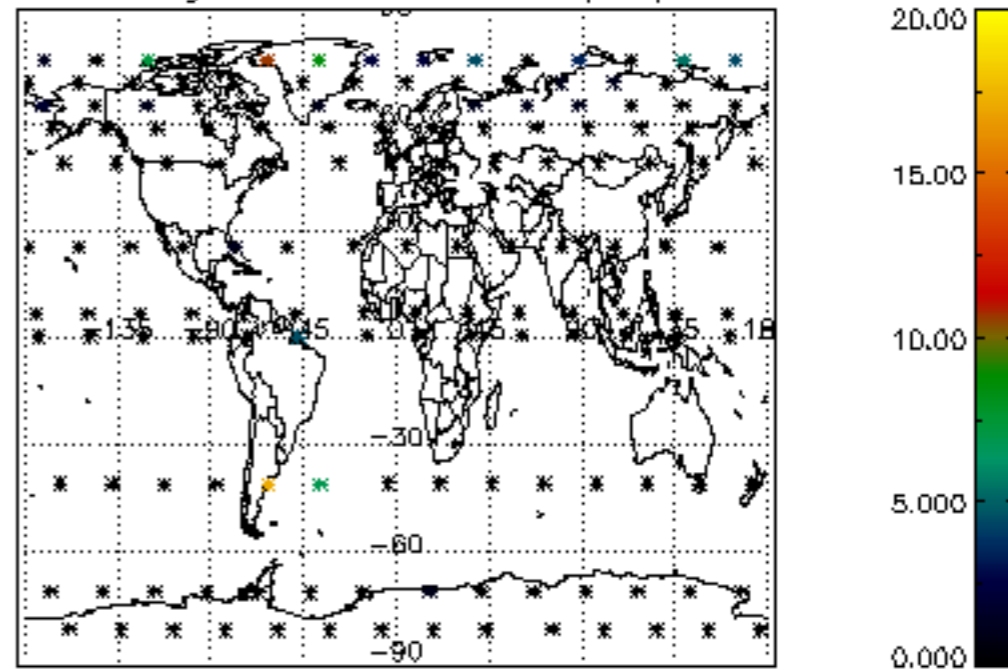
Percentage of datation errors per profile



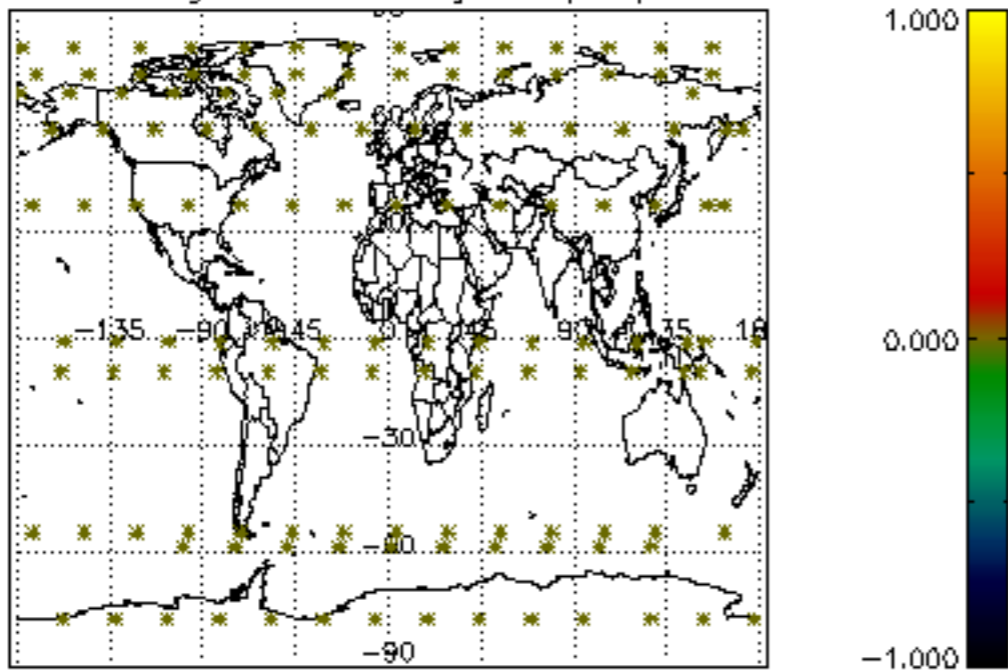
Percentage of star falling outside central band per profile



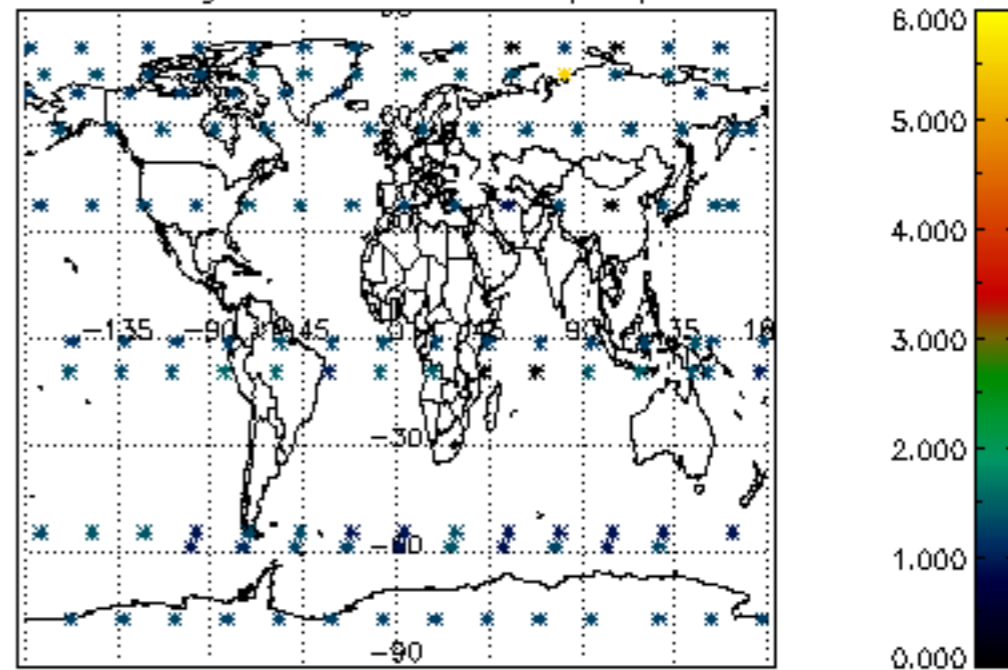
Percentage of saturation errors per profile



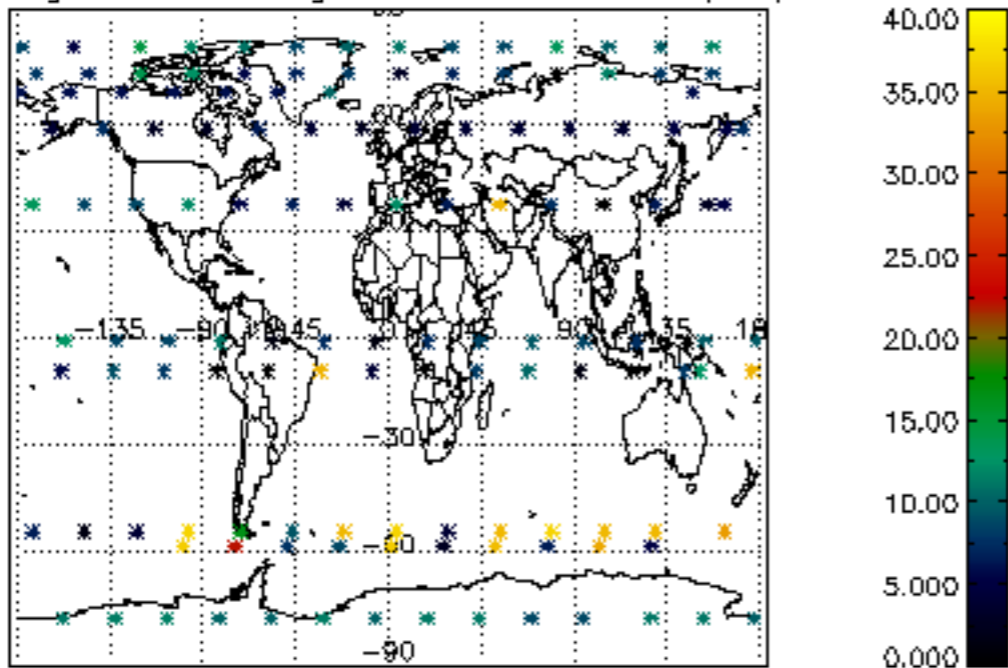
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

