GOMOS Level 2 Daily Report

SUMMARY

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   - 3.2 Plot of level 2 quality information per product (world map)

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   - 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

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1. General info

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	18APR2013 14:14:25
Data source version	GOMOS/6.01
Start time of products	03-04-2012 (03APR2012 00:00:00)
Stop time of products	04-04-2012 (04APR2012 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	21
Nb of prods with errors	0

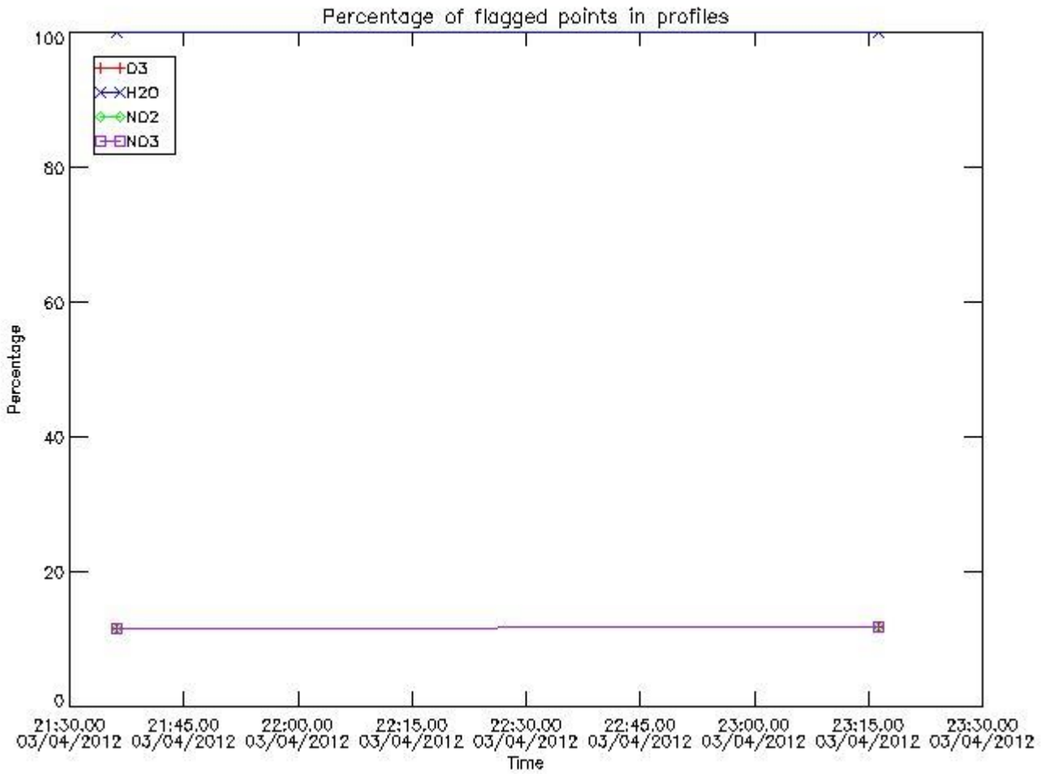
2. Summary of processed GOM_NL__2P products.

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20120403_085348_000000253113_00194_52794_2968.N1	03-APR-2012 08:53:48	Twi_and_stray	24.500	106	9Bet Crv	2.6480	5600.0	49	52794	No
2	GOM_NL__2PRFIN20120403_103403_000000303113_00195_52795_2989.N1	03-APR-2012 10:34:03	Twi_and_stray	29.500	106	9Bet Crv	2.6480	5600.0	59	52795	No
3	GOM_NL__2PRFIN20120403_121417_000000343113_00196_52796_3018.N1	03-APR-2012 12:14:17	Twi_and_stray	33.500	106	9Bet Crv	2.6480	5600.0	67	52796	No
4	GOM_NL__2PRFIN20120403_135431_000000393113_00197_52797_3021.N1	03-APR-2012 13:54:31	Twi_and_stray	39.000	106	9Bet Crv	2.6480	5600.0	78	52797	No
5	GOM_NL__2PRFIN20120403_141707_000000273113_00197_52797_3022.N1	03-APR-2012 14:17:07	Twi_and_stray	26.500	87	64Gam UMa	2.4330	11000.	53	52797	No
6	GOM_NL__2PRFIN20120403_153445_000000433113_00198_52798_3030.N1	03-APR-2012 15:34:45	Twi_and_stray	43.000	106	9Bet Crv	2.6480	5600.0	86	52798	No
7	GOM_NL__2PRFIN20120403_155721_000000323113_00198_52798_3031.N1	03-APR-2012 15:57:21	Bright	31.500	87	64Gam UMa	2.4330	11000.	63	52798	No
8	GOM_NL__2PRFIN20120403_171459_000000433113_00199_52799_3039.N1	03-APR-2012 17:14:59	Twi_and_stray	43.000	106	9Bet Crv	2.6480	5600.0	86	52799	No
9	GOM_NL__2PRFIN20120403_173735_000000373113_00199_52799_3040.N1	03-APR-2012 17:37:35	Bright	36.500	87	64Gam UMa	2.4330	11000.	73	52799	No
10	GOM_NL__2PRFIN20120403_185513_000000453113_00200_52800_3055.N1	03-APR-2012 18:55:13	Twi_and_stray	44.500	106	9Bet Crv	2.6480	5600.0	89	52800	No
11	GOM_NL__2PRFIN20120403_191748_000000393113_00200_52800_3056.N1	03-APR-2012 19:17:48	Bright	39.000	87	64Gam UMa	2.4330	11000.	78	52800	No
12	GOM_NL__2PRFIN20120403_195114_000000463113_00200_52800_3057.N1	03-APR-2012 19:51:14	Twi_and_stray	45.500	61	8Eps Peg	2.1000	3900.0	91	52800	No
13	GOM_NL__2PRFIN20120403_203527_000000433113_00201_52801_3064.N1	03-APR-2012 20:35:27	Twi_and_stray	43.000	106	9Bet Crv	2.6480	5600.0	86	52801	No
14	GOM_NL__2PRFIN20120403_205802_000000373113_00201_52801_3065.N1	03-APR-2012 20:58:02	Bright	36.500	87	64Gam UMa	2.4330	11000.	73	52801	No
15	GOM_NL__2PRFIN20120403_213128_000000453113_00201_52801_3066.N1	03-APR-2012 21:31:28	Twi_and_stray	44.500	61	8Eps Peg	2.1000	3900.0	89	52801	No
16	GOM_NL__2PRFIN20120403_213610_000000443113_00201_52801_3067.N1	03-APR-2012 21:36:10	Dark	44.000	154	22Bet Aqr	2.8990	5700.0	88	52801	No
17	GOM_NL__2PRFIN20120403_221541_000000453113_00202_52802_3067.N1	03-APR-2012 22:15:41	Twi_and_stray	44.500	106	9Bet Crv	2.6480	5600.0	89	52802	No
18	GOM_NL__2PRFIN20120403_223816_000000373113_00202_52802_3068.N1	03-APR-2012 22:38:16	Bright	37.000	87	64Gam UMa	2.4330	11000.	74	52802	No
19	GOM_NL__2PRFIN20120403_231142_000000473113_00202_52802_3069.N1	03-APR-2012 23:11:42	Twi_and_stray	47.000	61	8Eps Peg	2.1000	3900.0	94	52802	No
20	GOM_NL__2PRFIN20120403_231624_000000433113_00202_52802_3070.N1	03-APR-2012 23:16:24	Dark	43.000	154	22Bet Aqr	2.8990	5700.0	86	52802	No
21	GOM_NL__2PRFIN20120403_235555_000000453113_00203_52803_3076.N1	03-APR-2012 23:55:55	Twi_and_stray	44.500	106	9Bet Crv	2.6480	5600.0	89	52803	No

3. Quality information per product

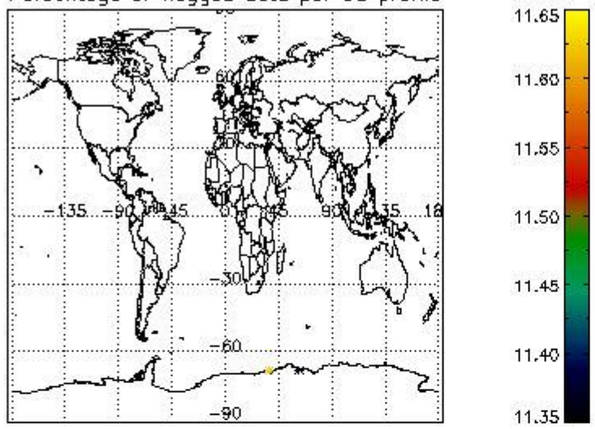
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

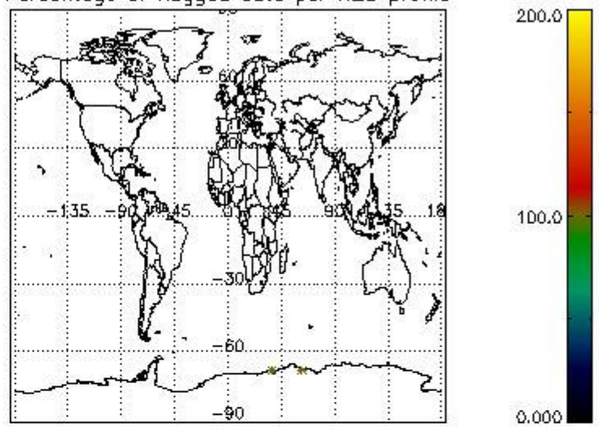


3.2 Plot quality information per product (world map)

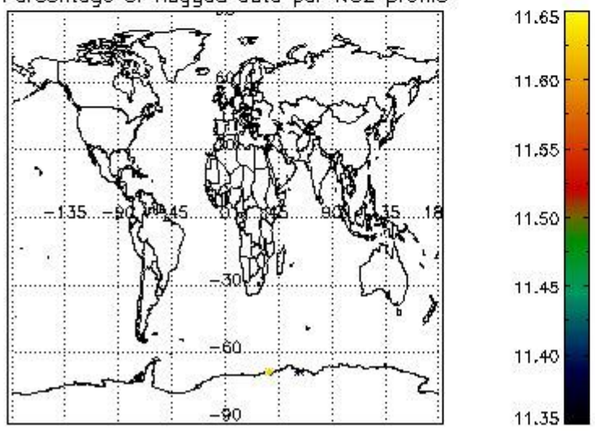
Percentage of flagged data per O3 profile



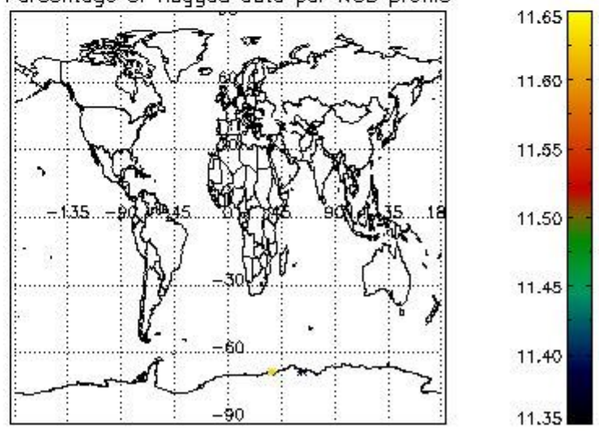
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

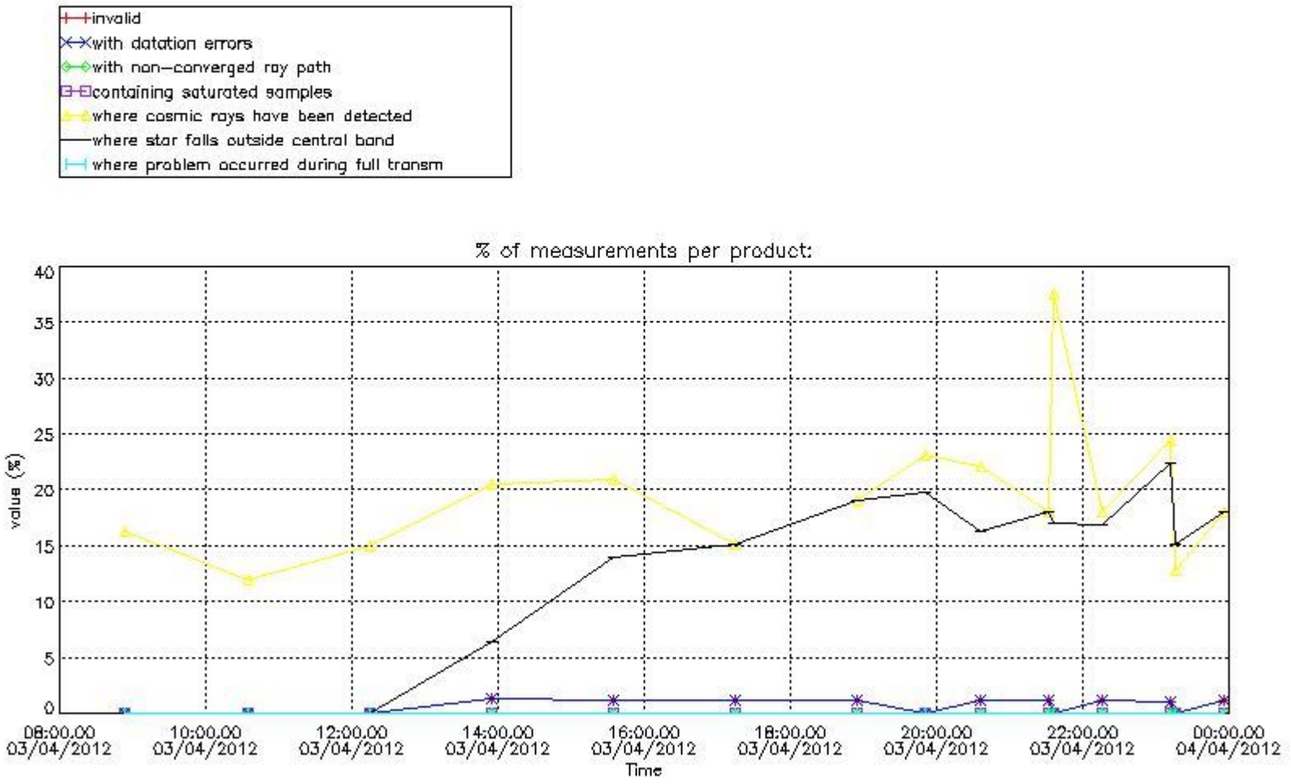


4. Level 1 quality information per product

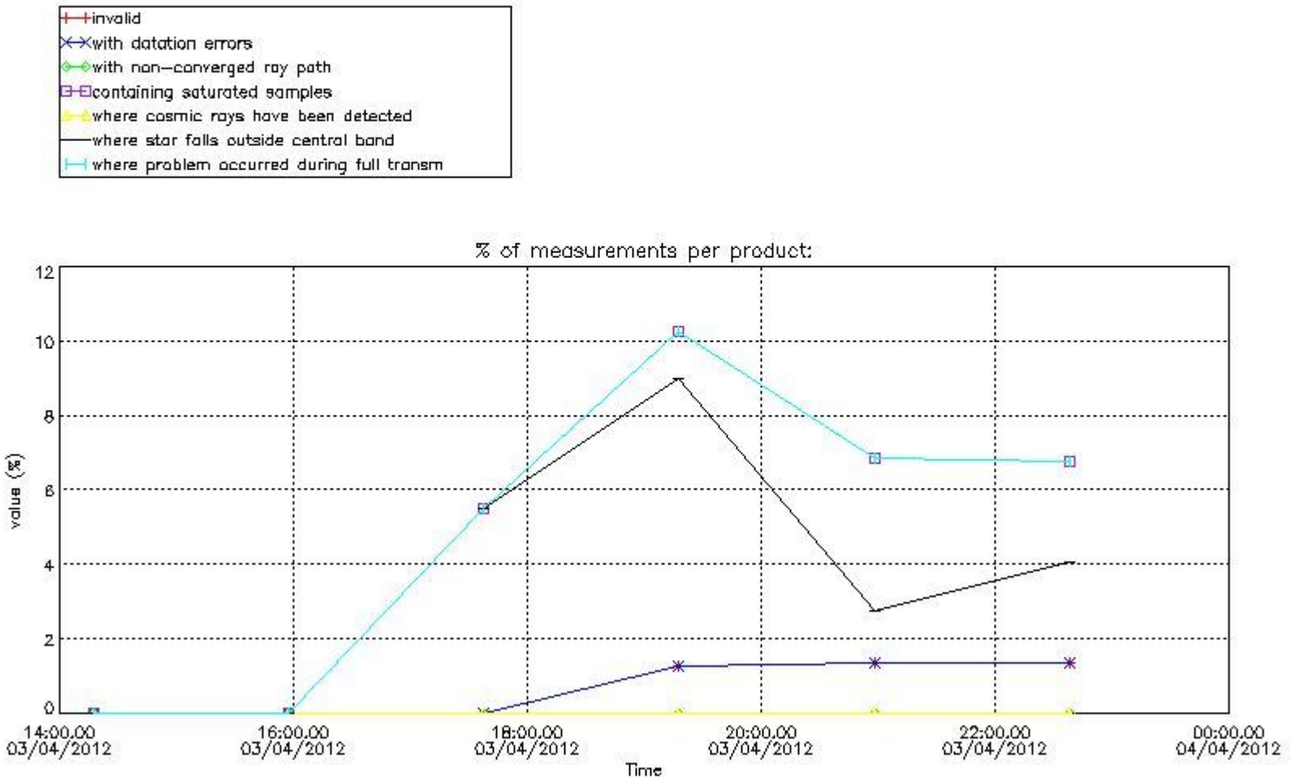
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processsing. Products without errors (error flag in the MPH set to "0") are used.

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

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

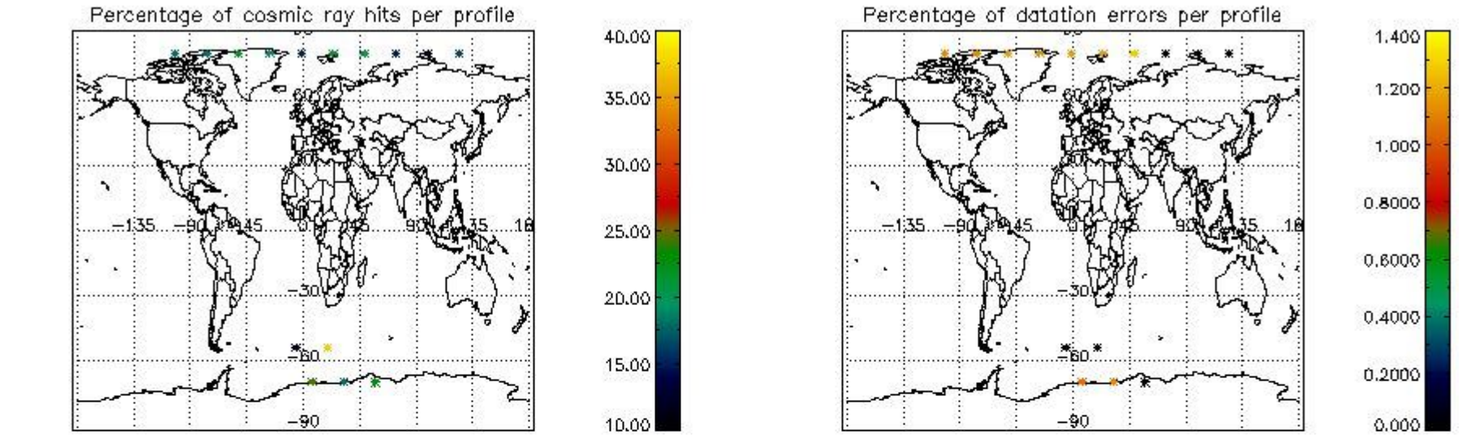


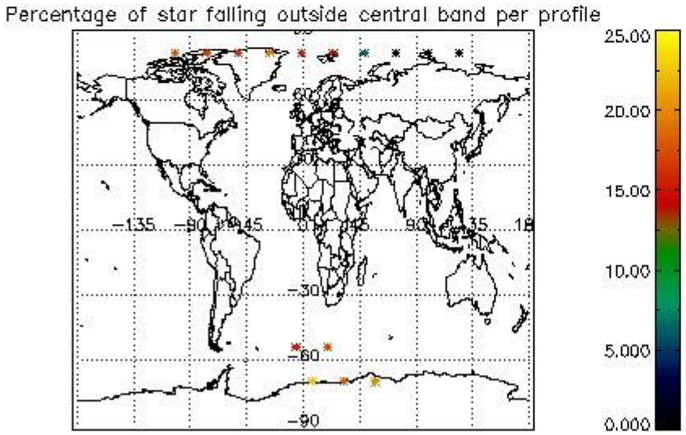
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

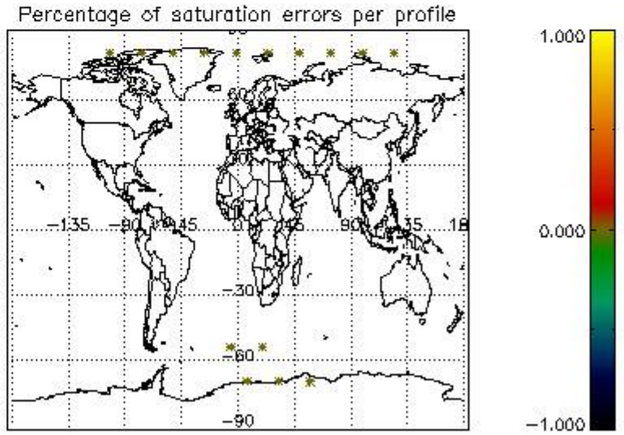


4.2 Plot quality information per product comming from level 1b processing (world map)

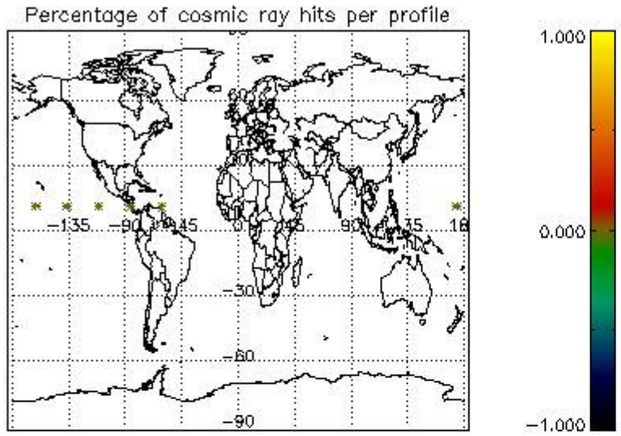
4.2.1 Plot level 1 quality information per product (world map): ENVISAT ASCENDING passes

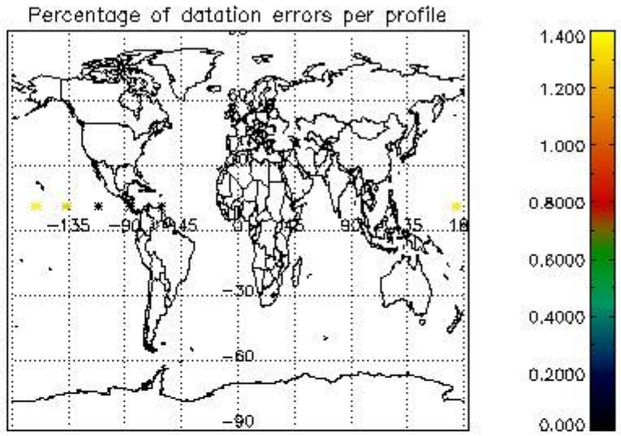


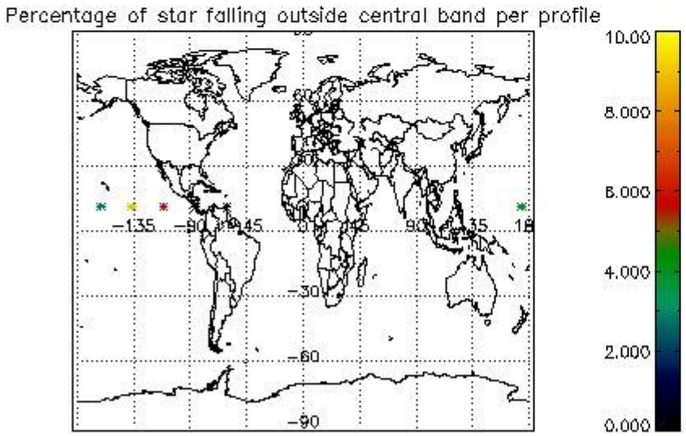


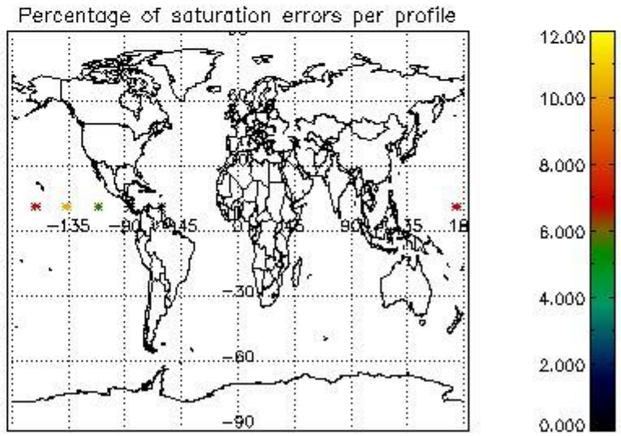


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes









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

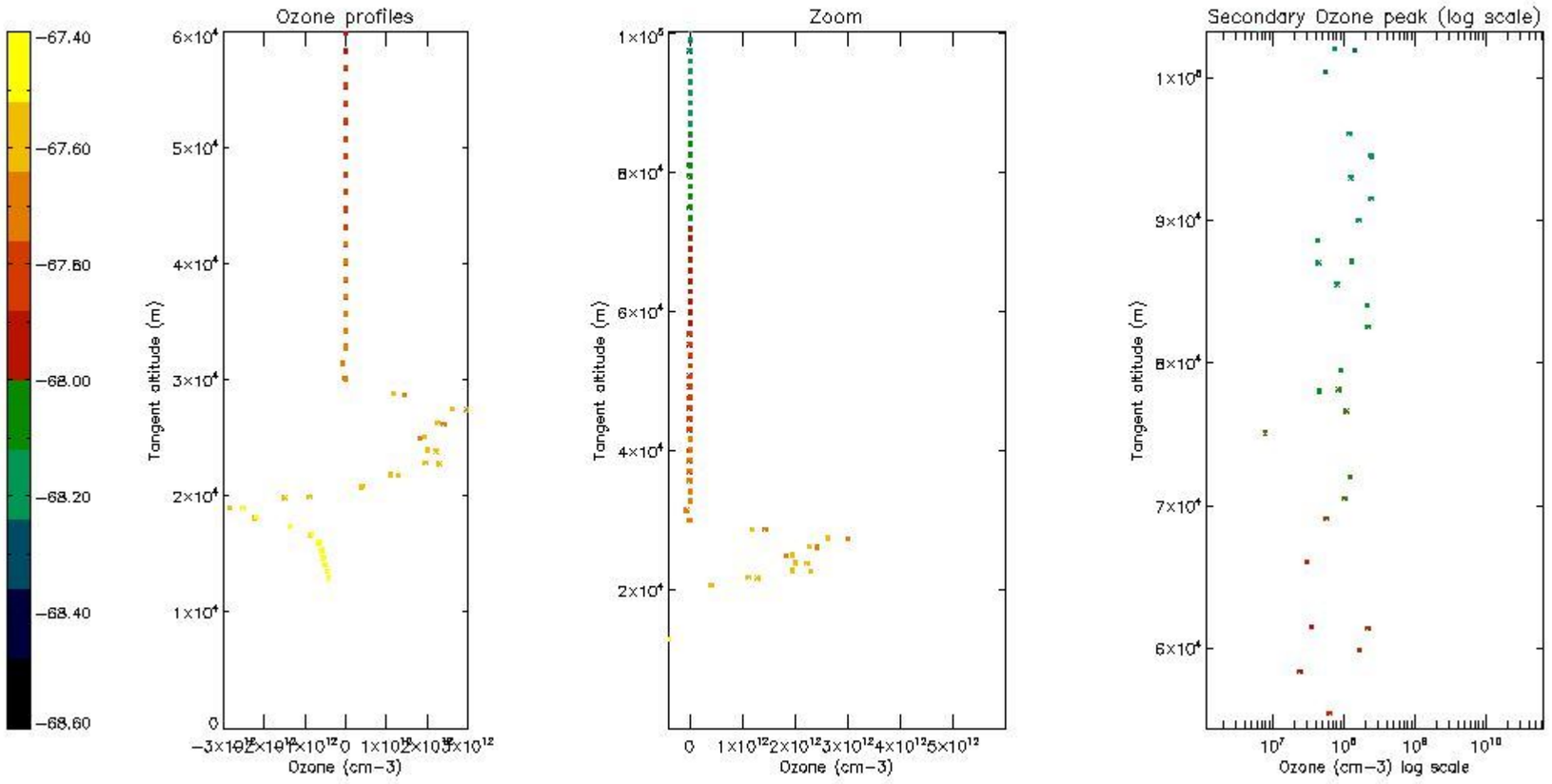
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	11
STD < 20	2

STD < 10	2
STD < 5	1

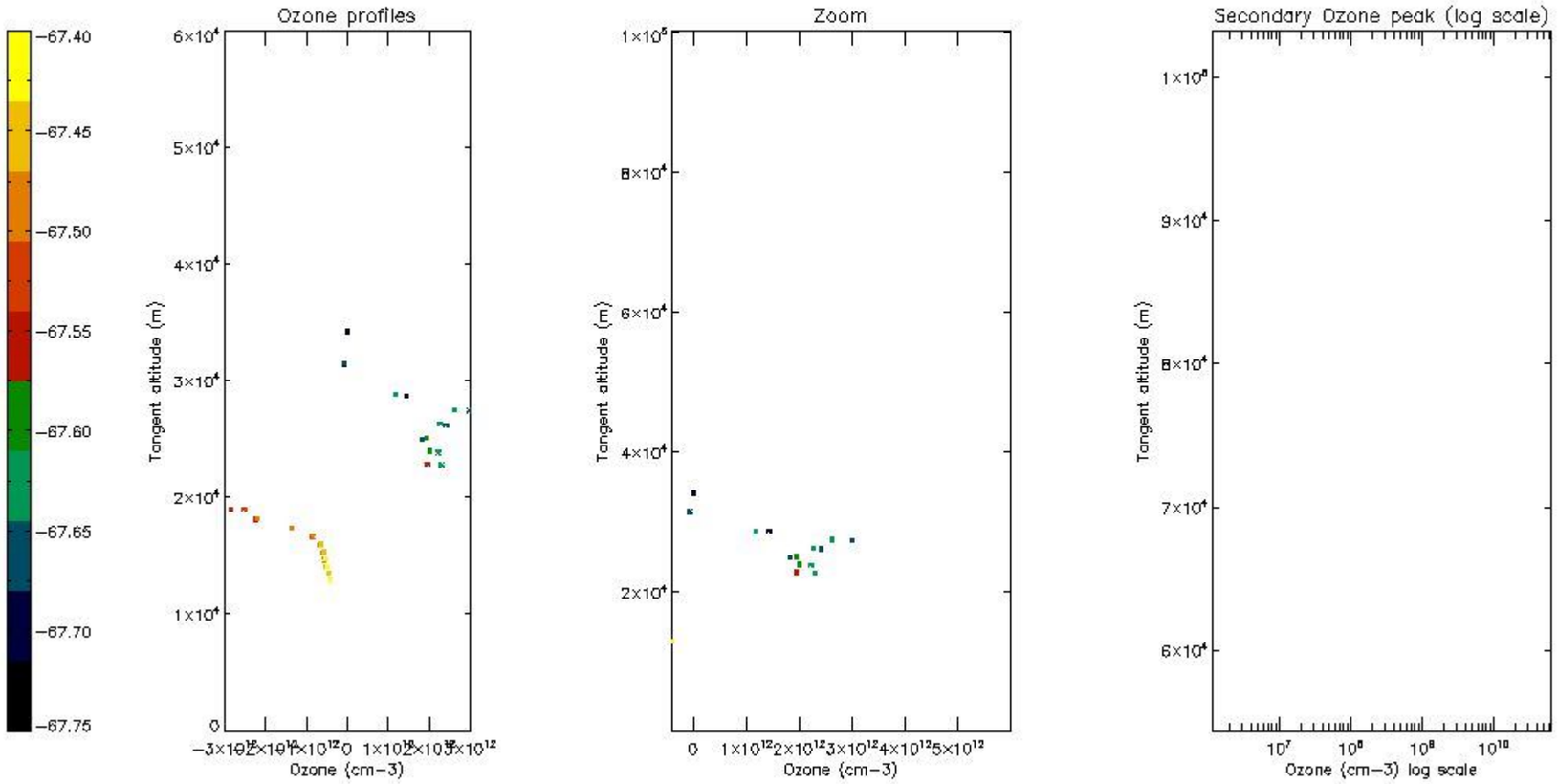
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



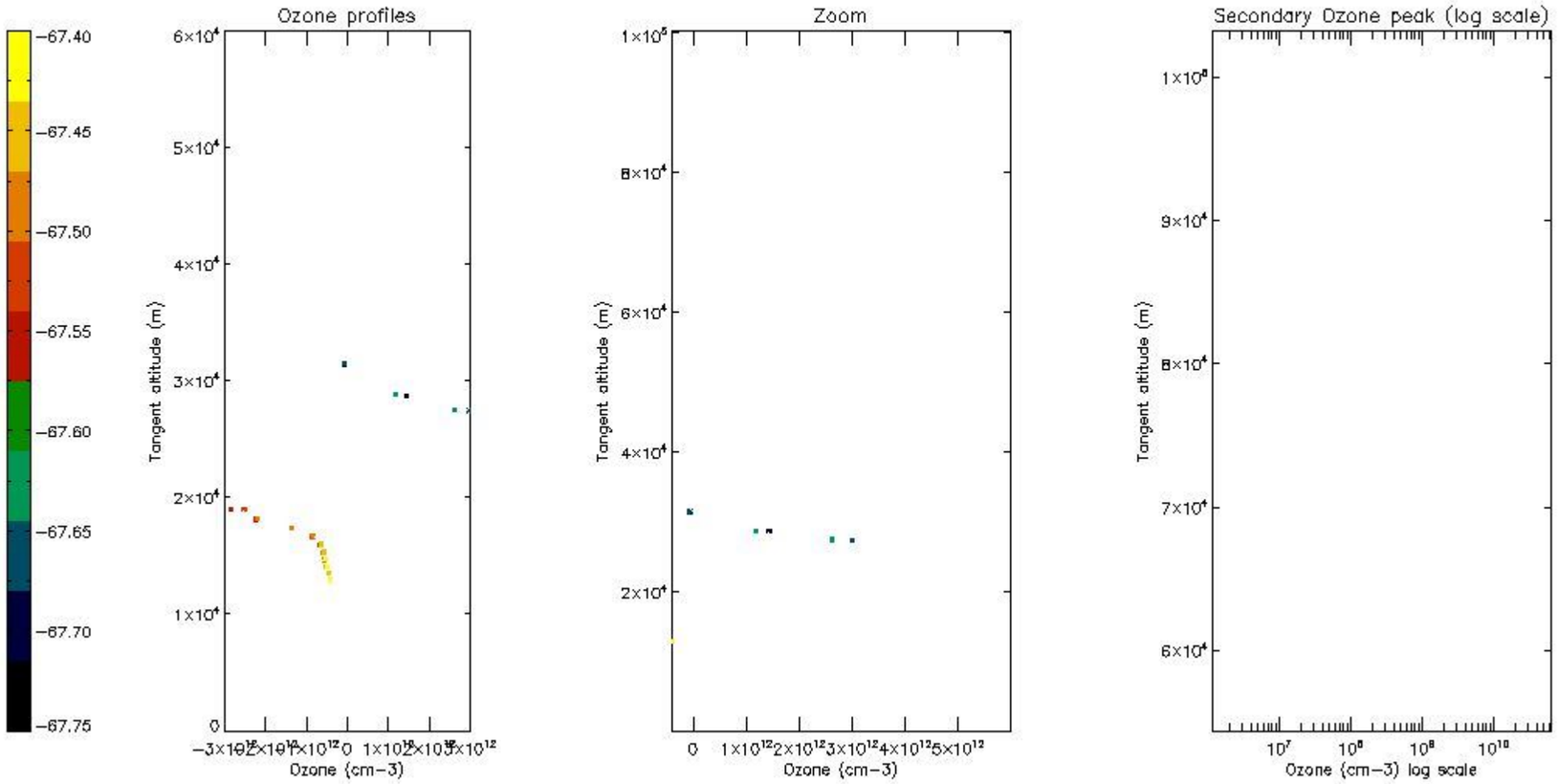
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



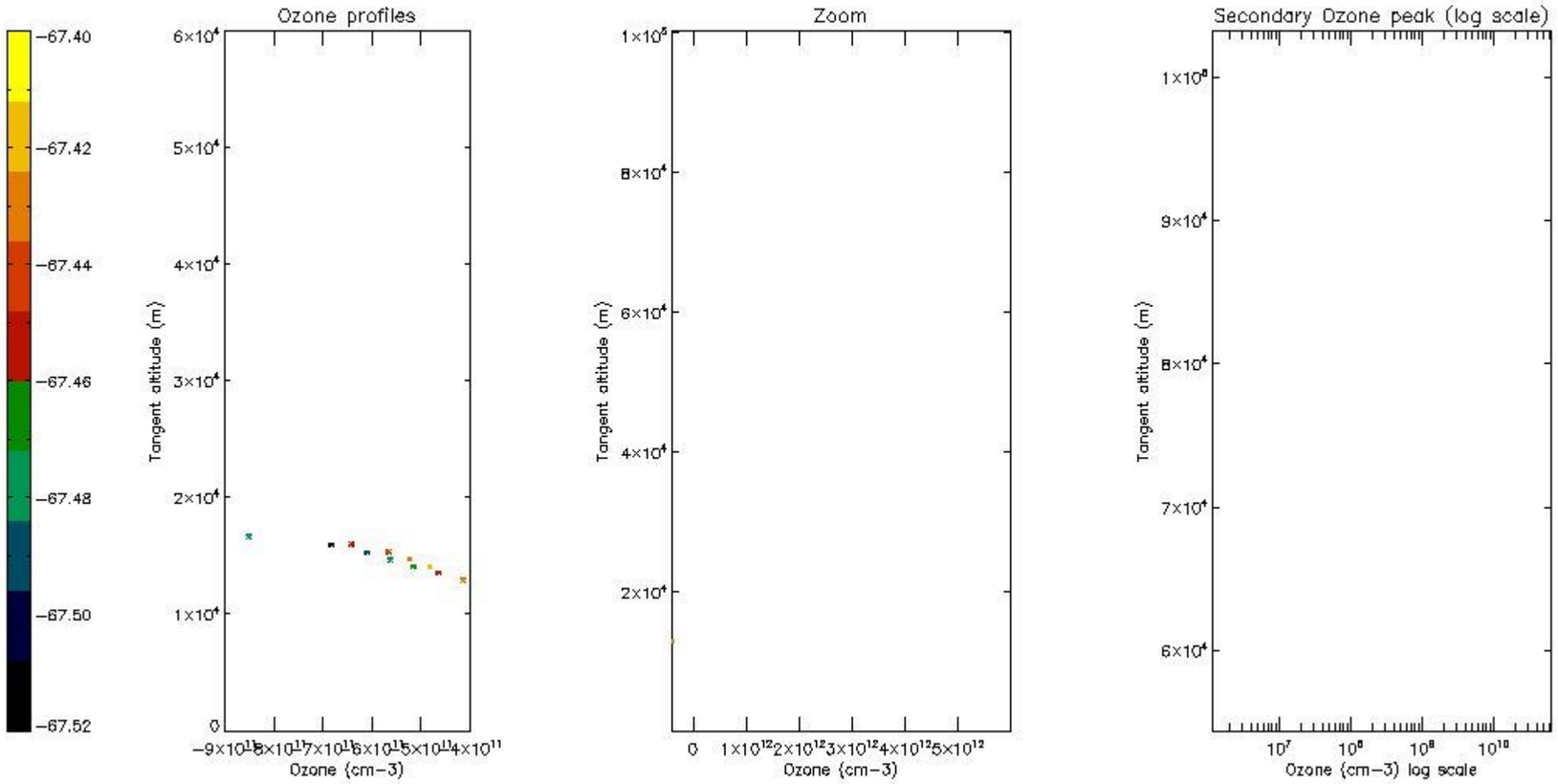
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



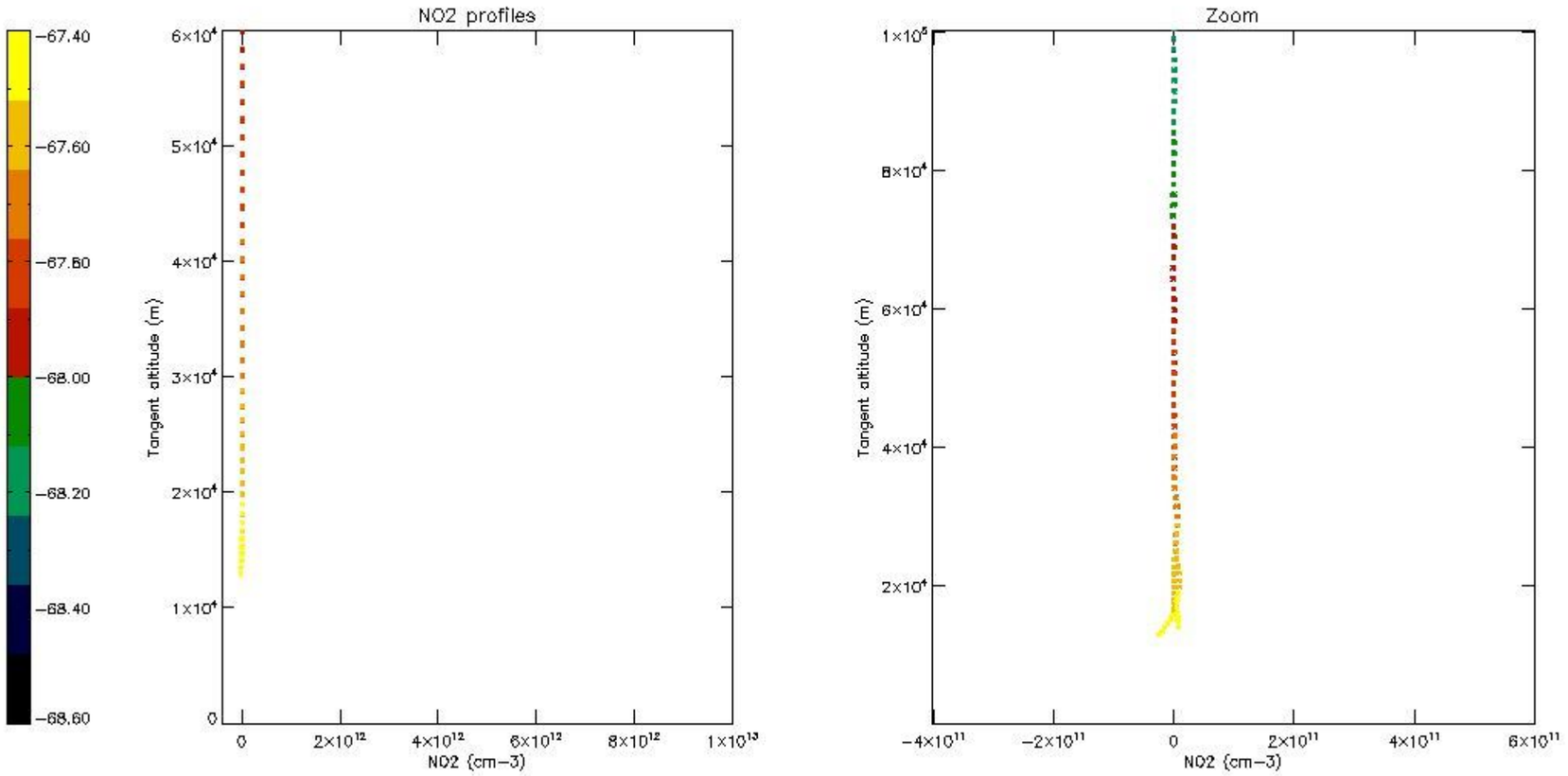
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



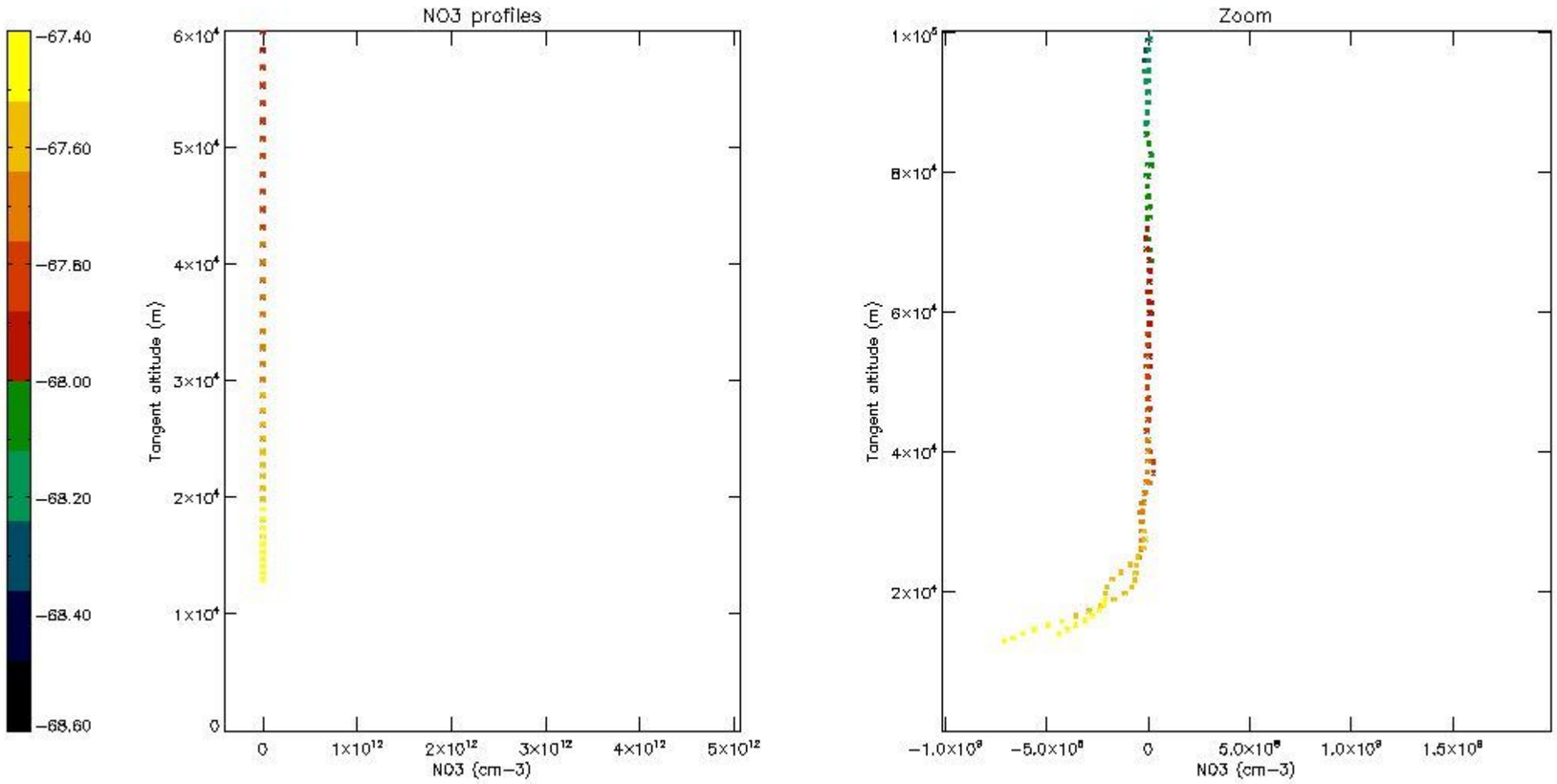
5.6 Plot NO2 profiles for all STD (dark without errors)

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_AXVIEC20111213_163131_20111215_000000_20500101_000000	1	03-APR-2012 08:53:48
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	03-APR-2012 08:53:48
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	03-APR-2012 08:53:48

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5. Ozone profiles based on quality statistics and other trace gas profiles

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

   - 5.8 Plot H2O profiles (only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors) for all STD

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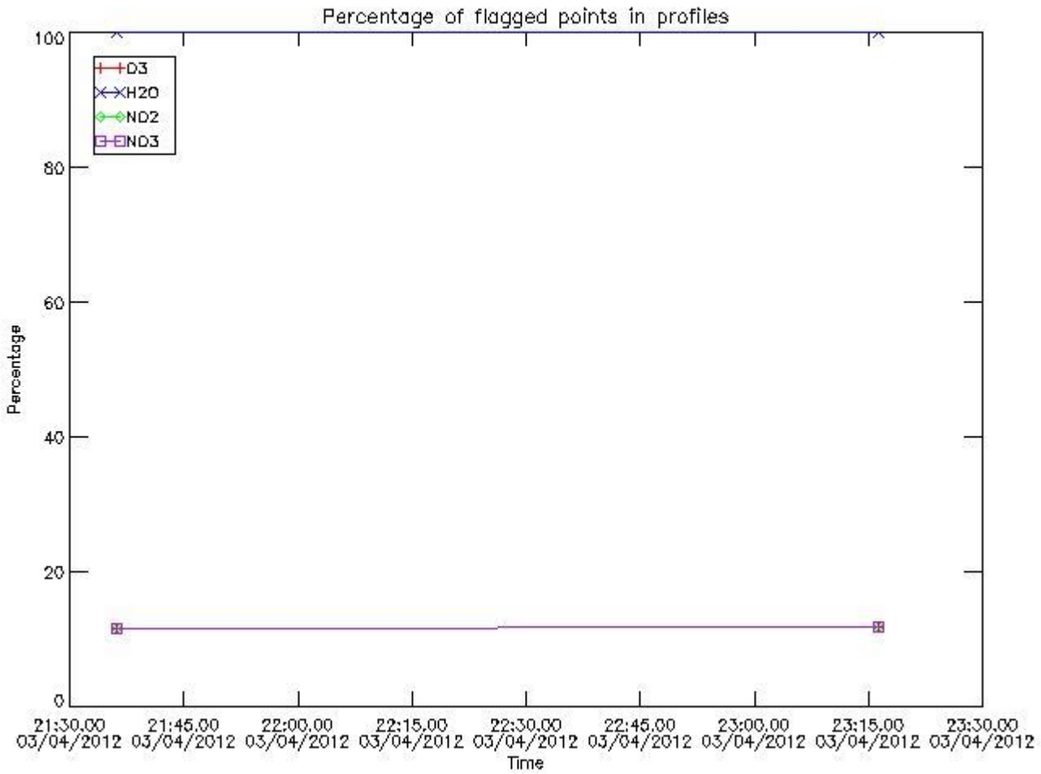
2	GOM_NL__2PRFIN20120403_103403_000000303113_00195_52795_2989.N1	03-APR-2012 10:34:03	Twi_and_stray	29.500	106	9Bet Crv	2.6480	5600.0	59	52795	No
3	GOM_NL__2PRFIN20120403_121417_000000343113_00196_52796_3018.N1	03-APR-2012 12:14:17	Twi_and_stray	33.500	106	9Bet Crv	2.6480	5600.0	67	52796	No
4	GOM_NL__2PRFIN20120403_135431_000000393113_00197_52797_3021.N1	03-APR-2012 13:54:31	Twi_and_stray	39.000	106	9Bet Crv	2.6480	5600.0	78	52797	No
5	GOM_NL__2PRFIN20120403_141707_000000273113_00197_52797_3022.N1	03-APR-2012 14:17:07	Twi_and_stray	26.500	87	64Gam UMa	2.4330	11000.	53	52797	No
6	GOM_NL__2PRFIN20120403_153445_000000433113_00198_52798_3030.N1	03-APR-2012 15:34:45	Twi_and_stray	43.000	106	9Bet Crv	2.6480	5600.0	86	52798	No
7	GOM_NL__2PRFIN20120403_155721_000000323113_00198_52798_3031.N1	03-APR-2012 15:57:21	Bright	31.500	87	64Gam UMa	2.4330	11000.	63	52798	No
8	GOM_NL__2PRFIN20120403_171459_000000433113_00199_52799_3039.N1	03-APR-2012 17:14:59	Twi_and_stray	43.000	106	9Bet Crv	2.6480	5600.0	86	52799	No
9	GOM_NL__2PRFIN20120403_173735_000000373113_00199_52799_3040.N1	03-APR-2012 17:37:35	Bright	36.500	87	64Gam UMa	2.4330	11000.	73	52799	No
10	GOM_NL__2PRFIN20120403_185513_000000453113_00200_52800_3055.N1	03-APR-2012 18:55:13	Twi_and_stray	44.500	106	9Bet Crv	2.6480	5600.0	89	52800	No
11	GOM_NL__2PRFIN20120403_191748_000000393113_00200_52800_3056.N1	03-APR-2012 19:17:48	Bright	39.000	87	64Gam UMa	2.4330	11000.	78	52800	No
12	GOM_NL__2PRFIN20120403_195114_000000463113_00200_52800_3057.N1	03-APR-2012 19:51:14	Twi_and_stray	45.500	61	8Eps Peg	2.1000	3900.0	91	52800	No
13	GOM_NL__2PRFIN20120403_203527_000000433113_00201_52801_3064.N1	03-APR-2012 20:35:27	Twi_and_stray	43.000	106	9Bet Crv	2.6480	5600.0	86	52801	No
14	GOM_NL__2PRFIN20120403_205802_000000373113_00201_52801_3065.N1	03-APR-2012 20:58:02	Bright	36.500	87	64Gam UMa	2.4330	11000.	73	52801	No
15	GOM_NL__2PRFIN20120403_213128_000000453113_00201_52801_3066.N1	03-APR-2012 21:31:28	Twi_and_stray	44.500	61	8Eps Peg	2.1000	3900.0	89	52801	No
16	GOM_NL__2PRFIN20120403_213610_000000443113_00201_52801_3067.N1	03-APR-2012 21:36:10	Dark	44.000	154	22Bet Aqr	2.8990	5700.0	88	52801	No
17	GOM_NL__2PRFIN20120403_221541_000000453113_00202_52802_3067.N1	03-APR-2012 22:15:41	Twi_and_stray	44.500	106	9Bet Crv	2.6480	5600.0	89	52802	No
18	GOM_NL__2PRFIN20120403_223816_000000373113_00202_52802_3068.N1	03-APR-2012 22:38:16	Bright	37.000	87	64Gam UMa	2.4330	11000.	74	52802	No
19	GOM_NL__2PRFIN20120403_231142_000000473113_00202_52802_3069.N1	03-APR-2012 23:11:42	Twi_and_stray	47.000	61	8Eps Peg	2.1000	3900.0	94	52802	No
20	GOM_NL__2PRFIN20120403_231624_000000433113_00202_52802_3070.N1	03-APR-2012 23:16:24	Dark	43.000	154	22Bet Aqr	2.8990	5700.0	86	52802	No
21	GOM_NL__2PRFIN20120403_235555_000000453113_00203_52803_3076.N1	03-APR-2012 23:55:55	Twi_and_stray	44.500	106	9Bet Crv	2.6480	5600.0	89	52803	No

3. Quality information per product

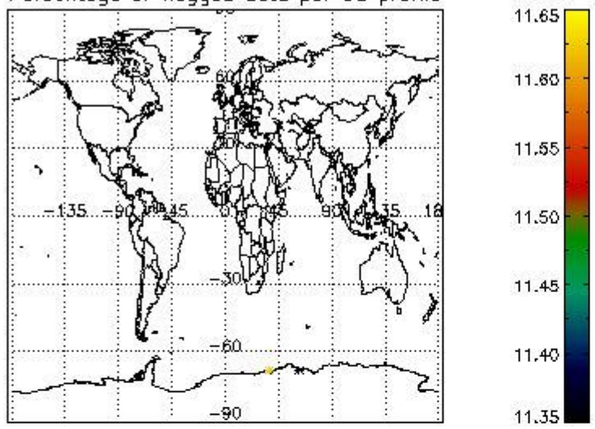
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

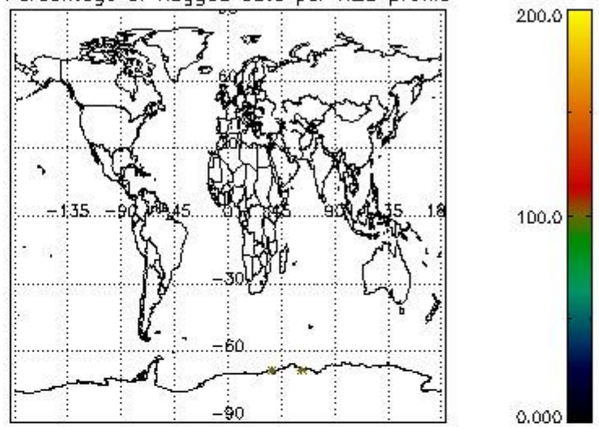


3.2 Plot quality information per product (world map)

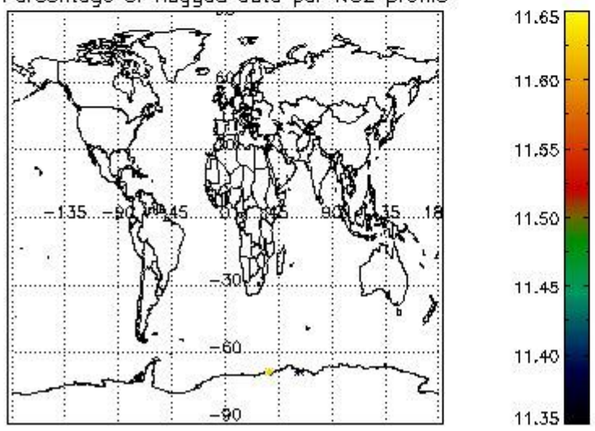
Percentage of flagged data per O3 profile



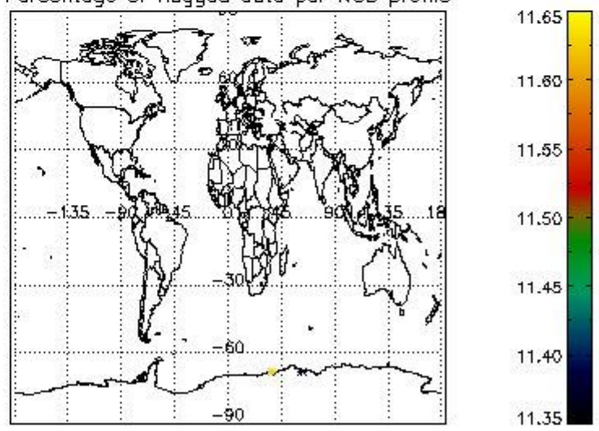
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

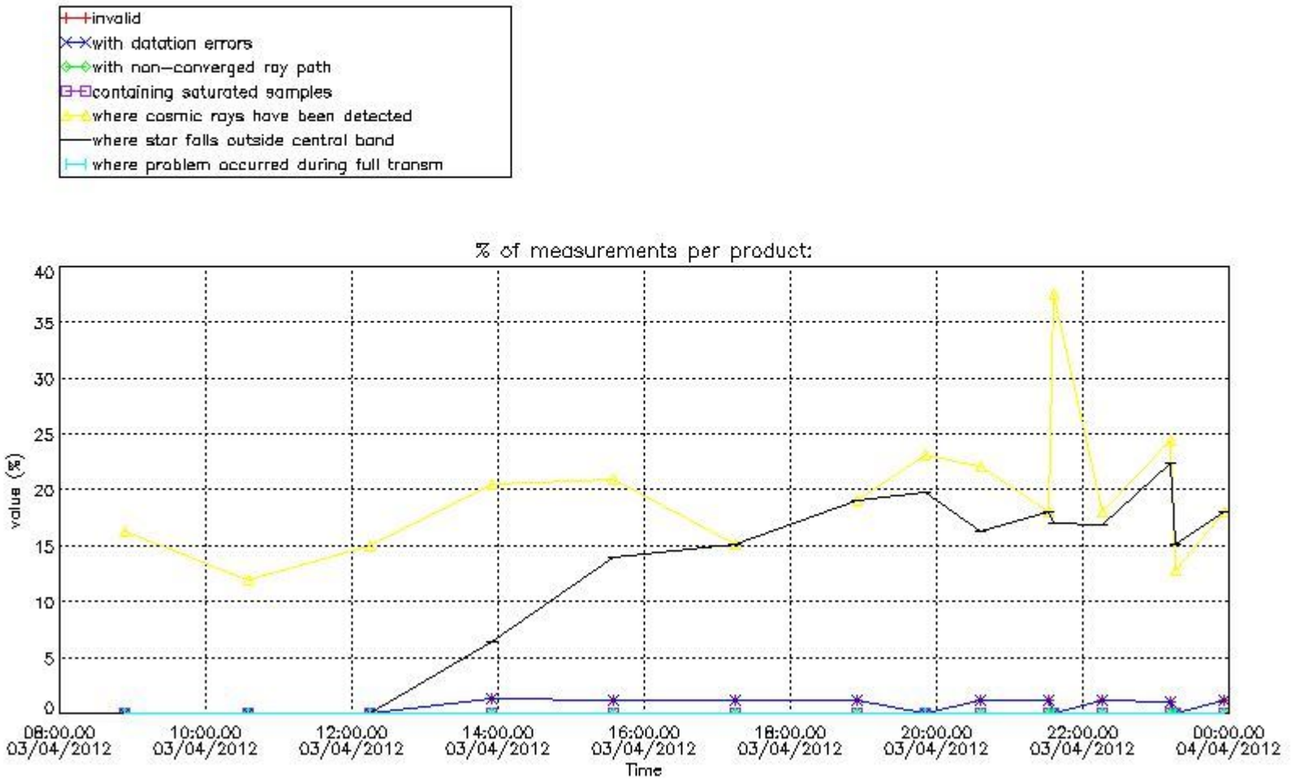


4. Level 1 quality information per product

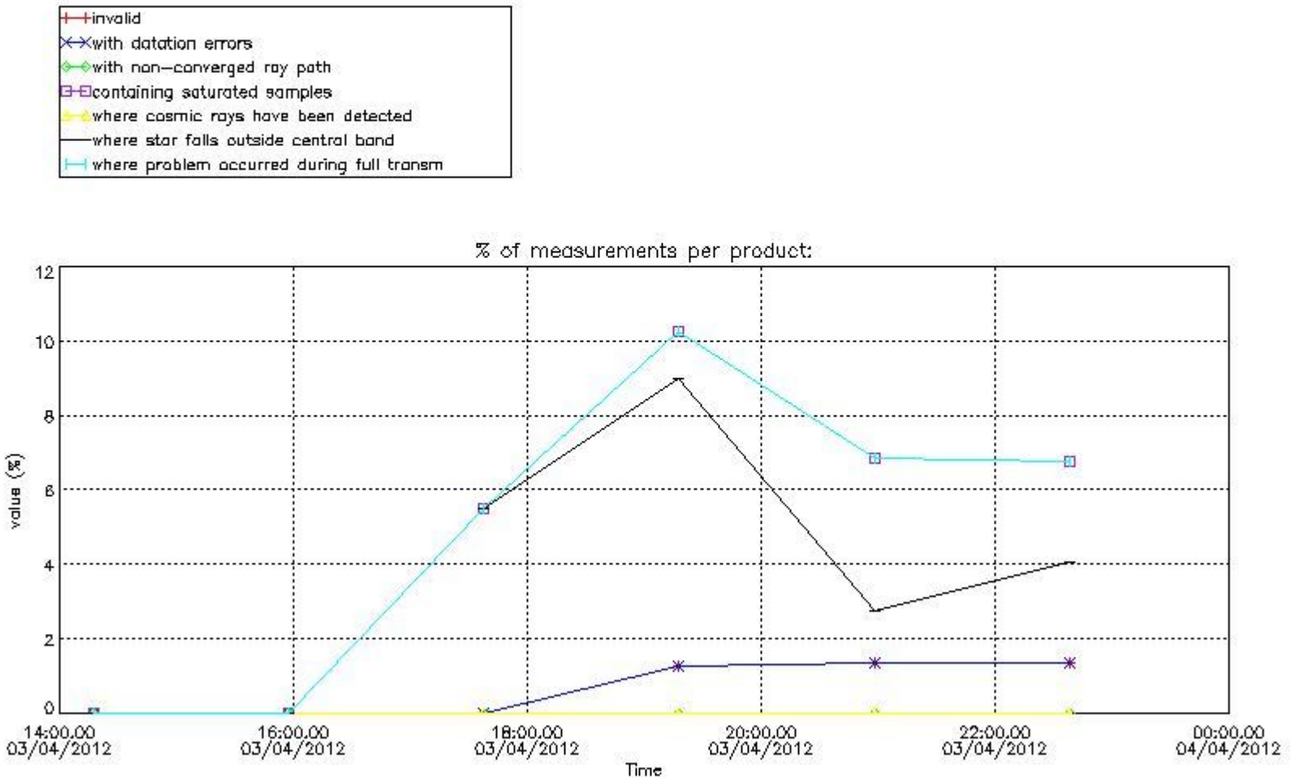
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processsing. Products without errors (error flag in the MPH set to "0") are used.

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

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

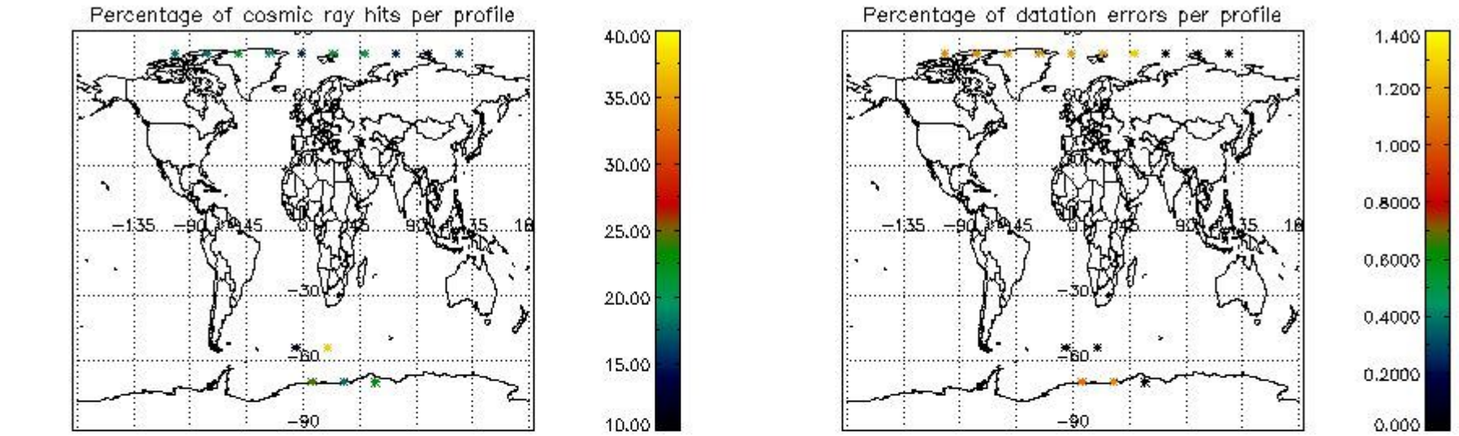


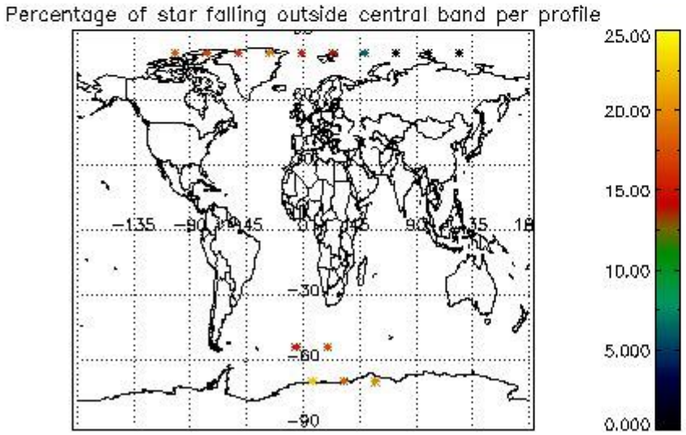
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

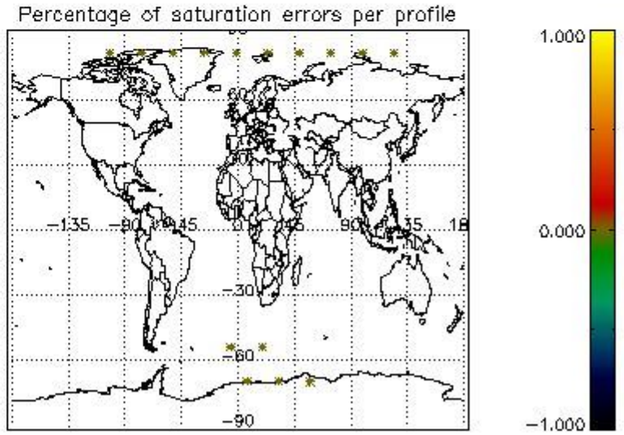


4.2 Plot quality information per product comming from level 1b processing (world map)

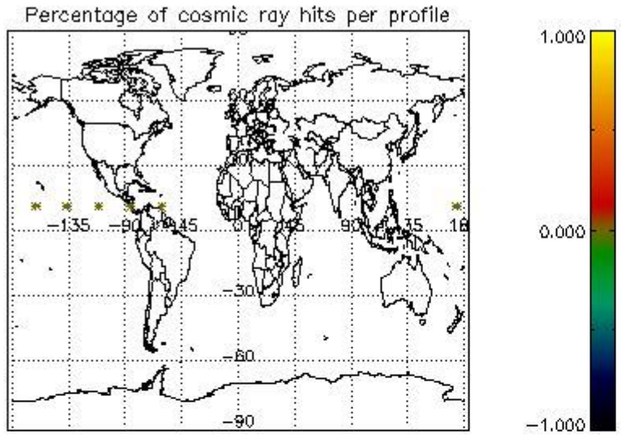
4.2.1 Plot level 1 quality information per product (world map): ENVISAT ASCENDING passes

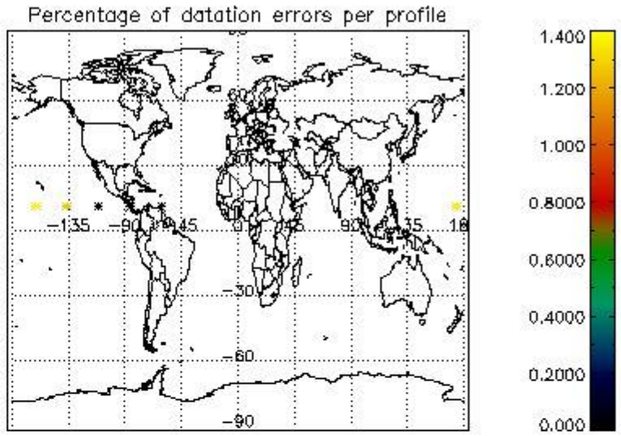


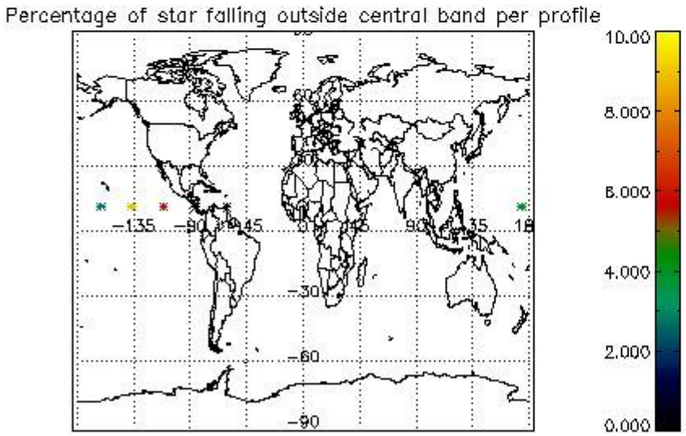


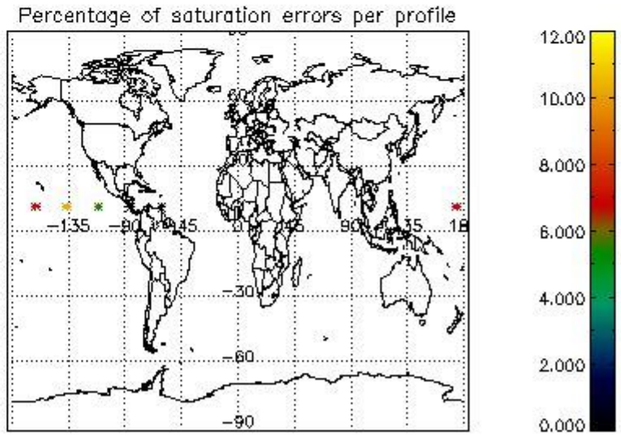


4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes









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

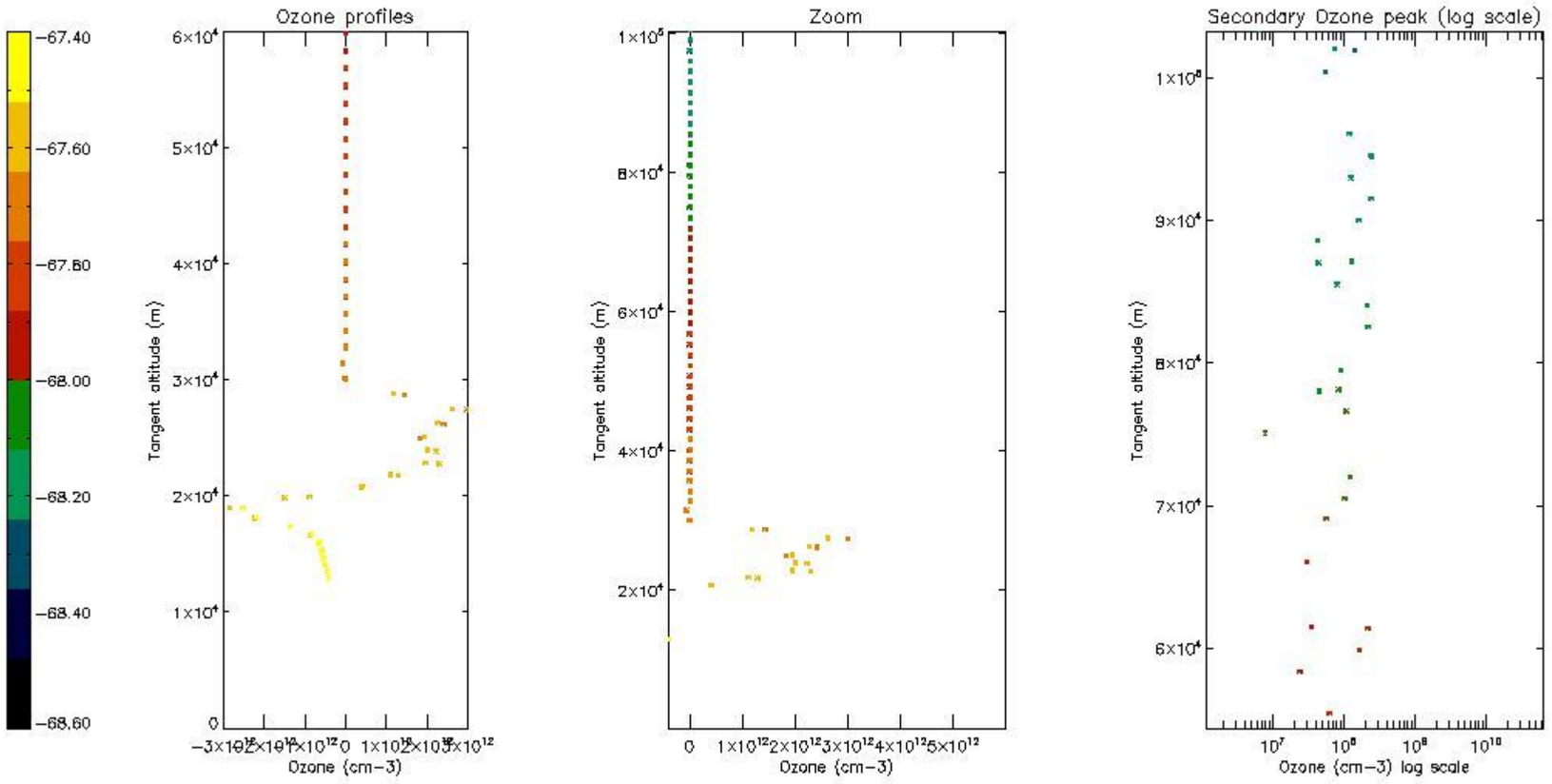
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	11
STD < 20	2

STD < 10	2
STD < 5	1

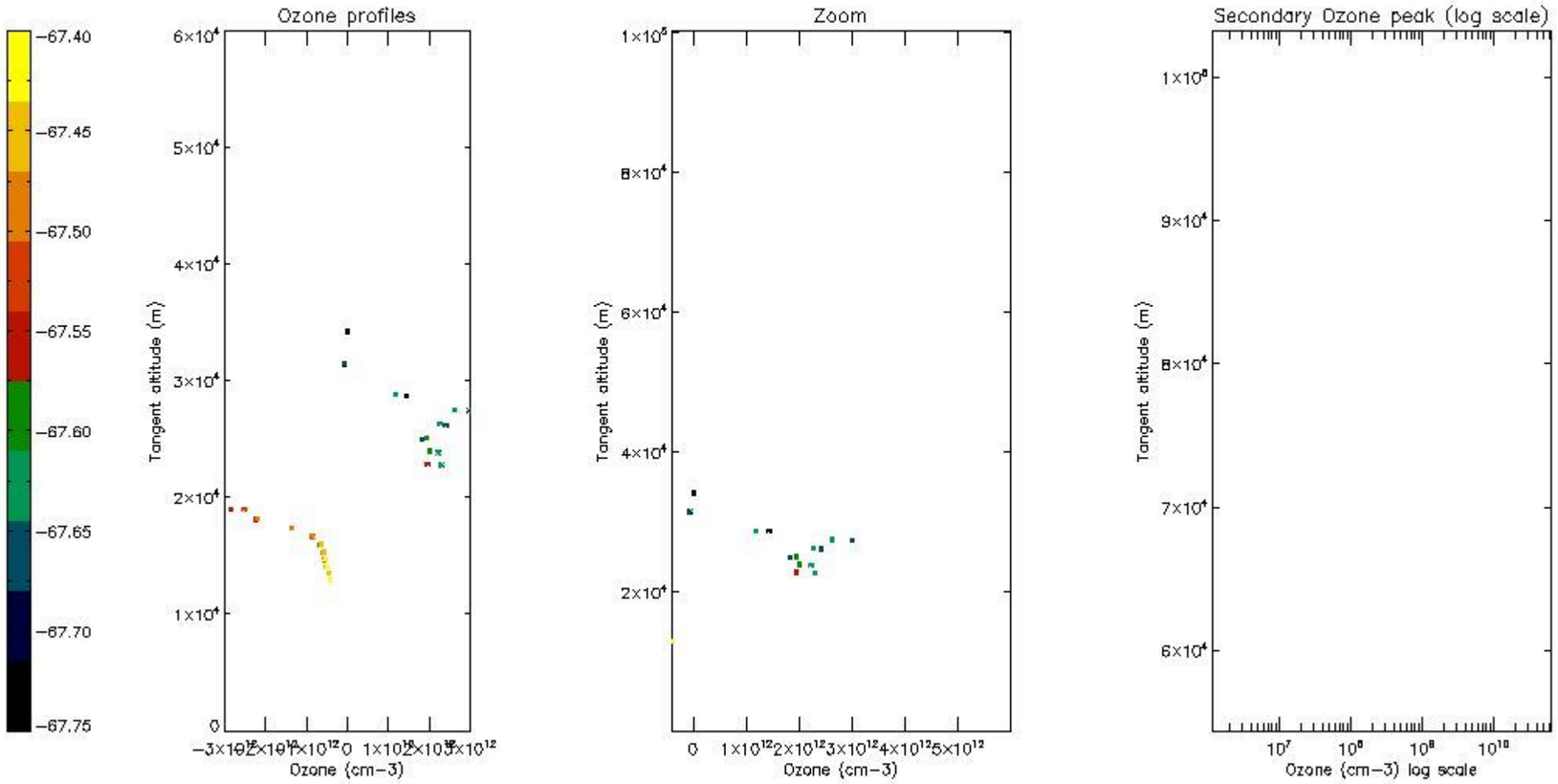
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



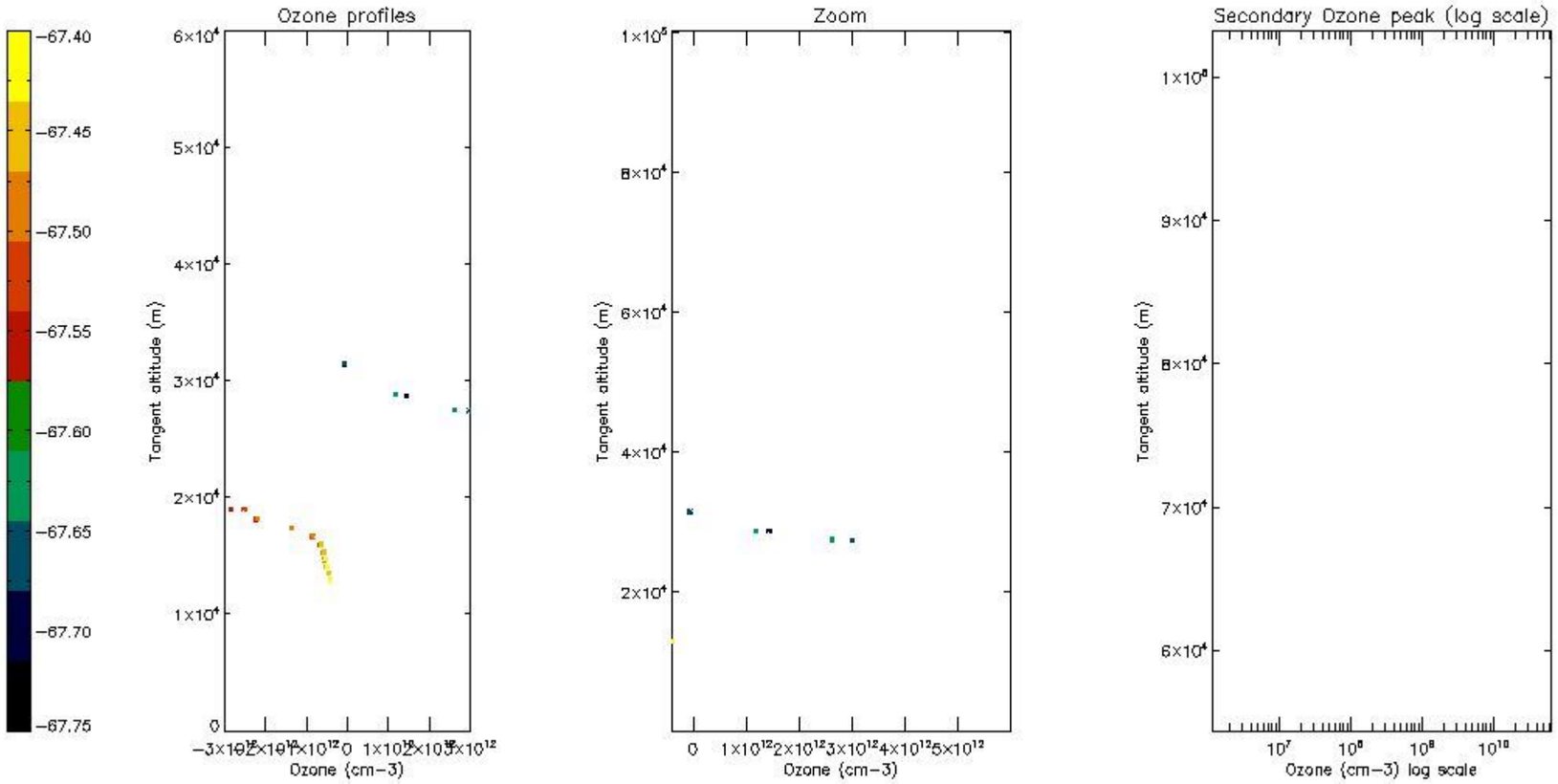
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



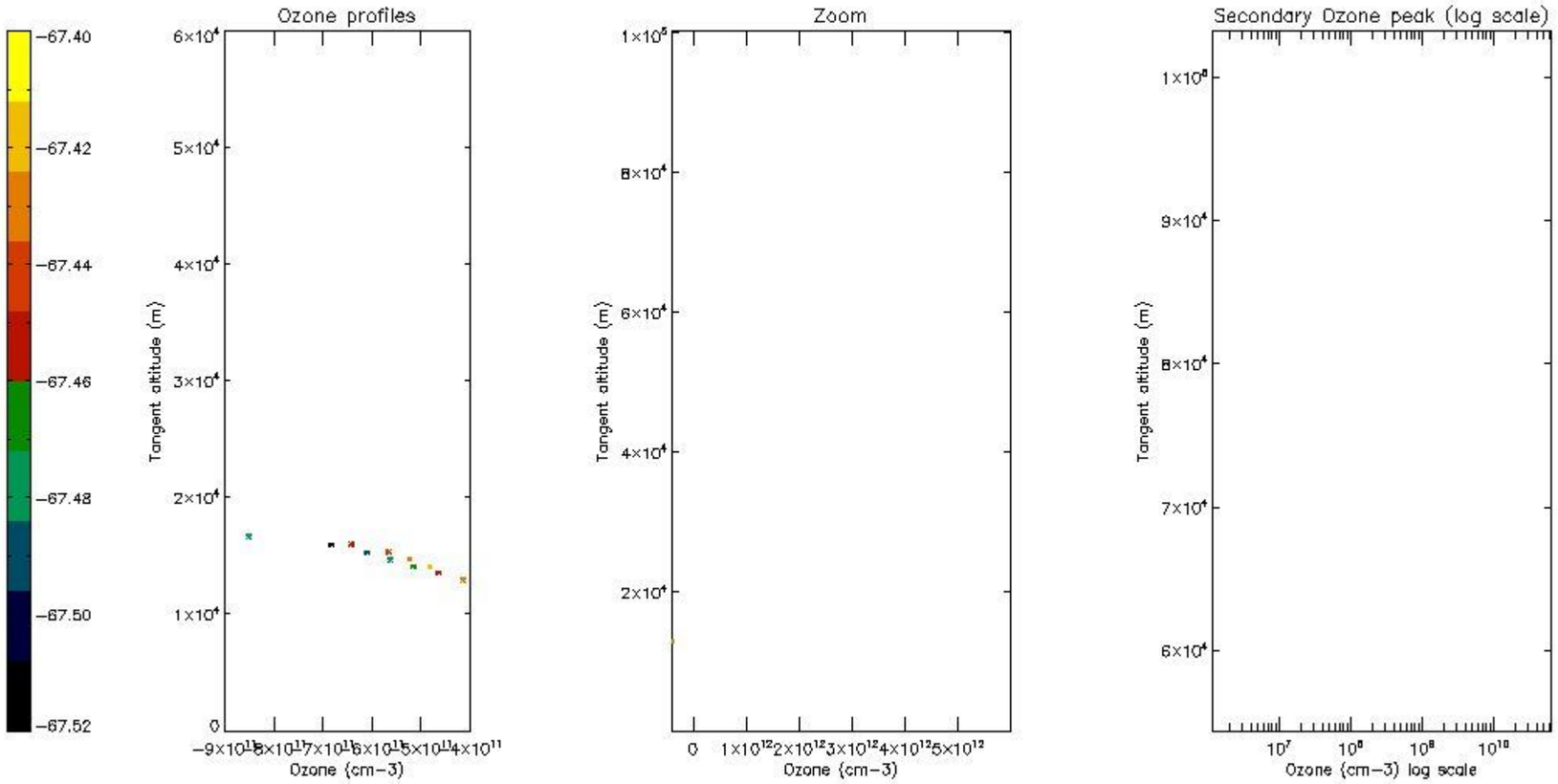
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



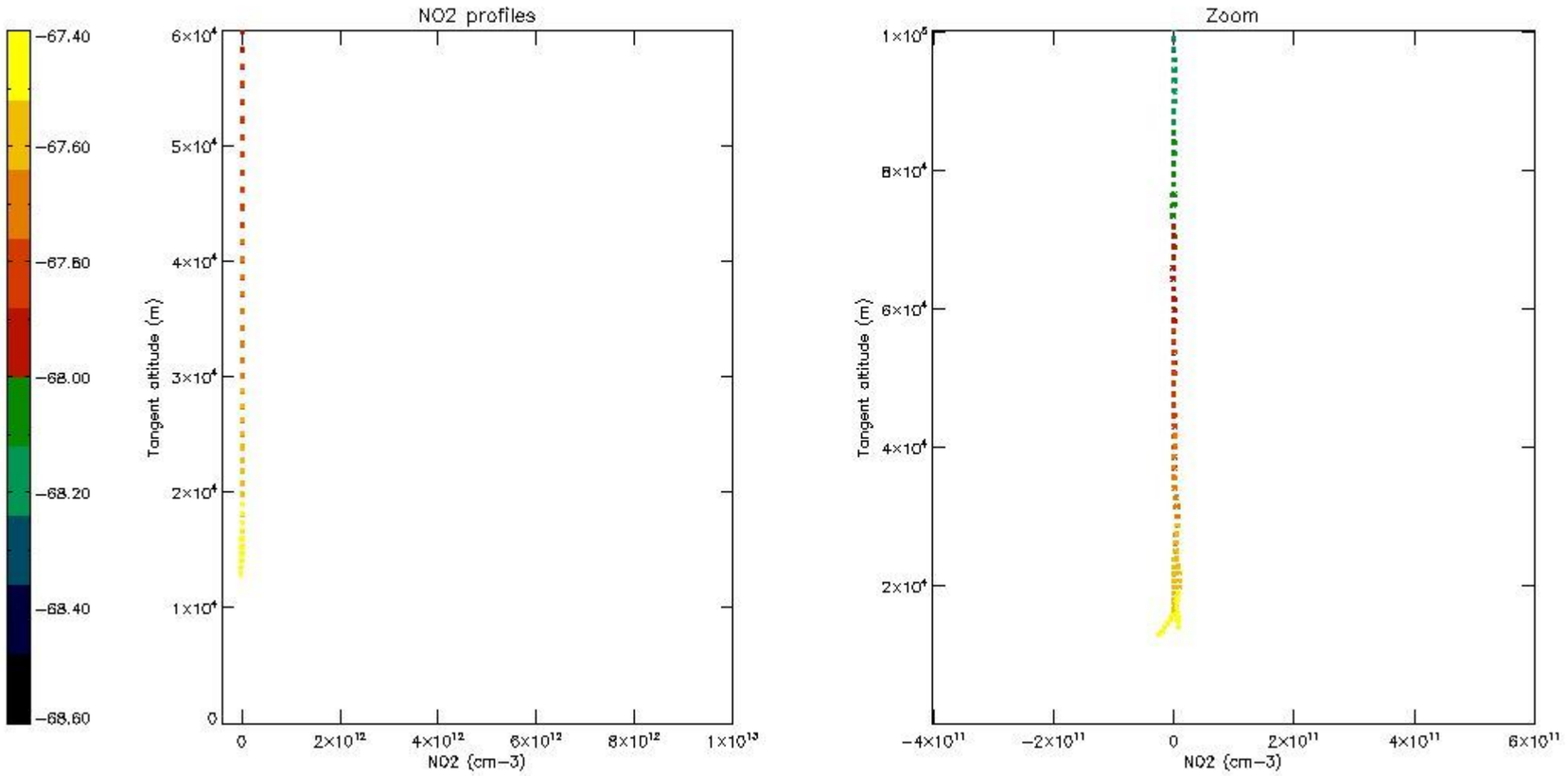
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



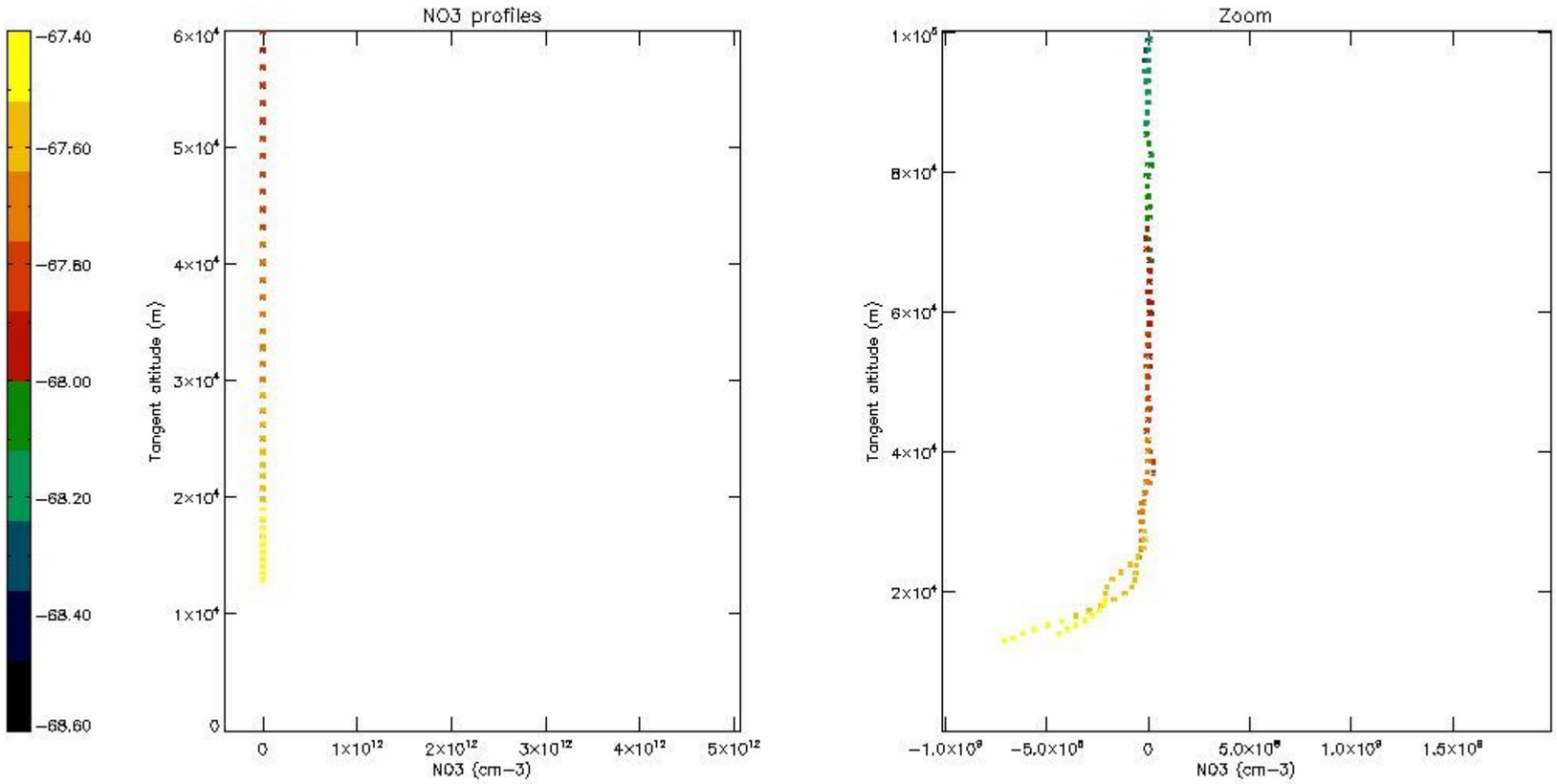
5.6 Plot NO2 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

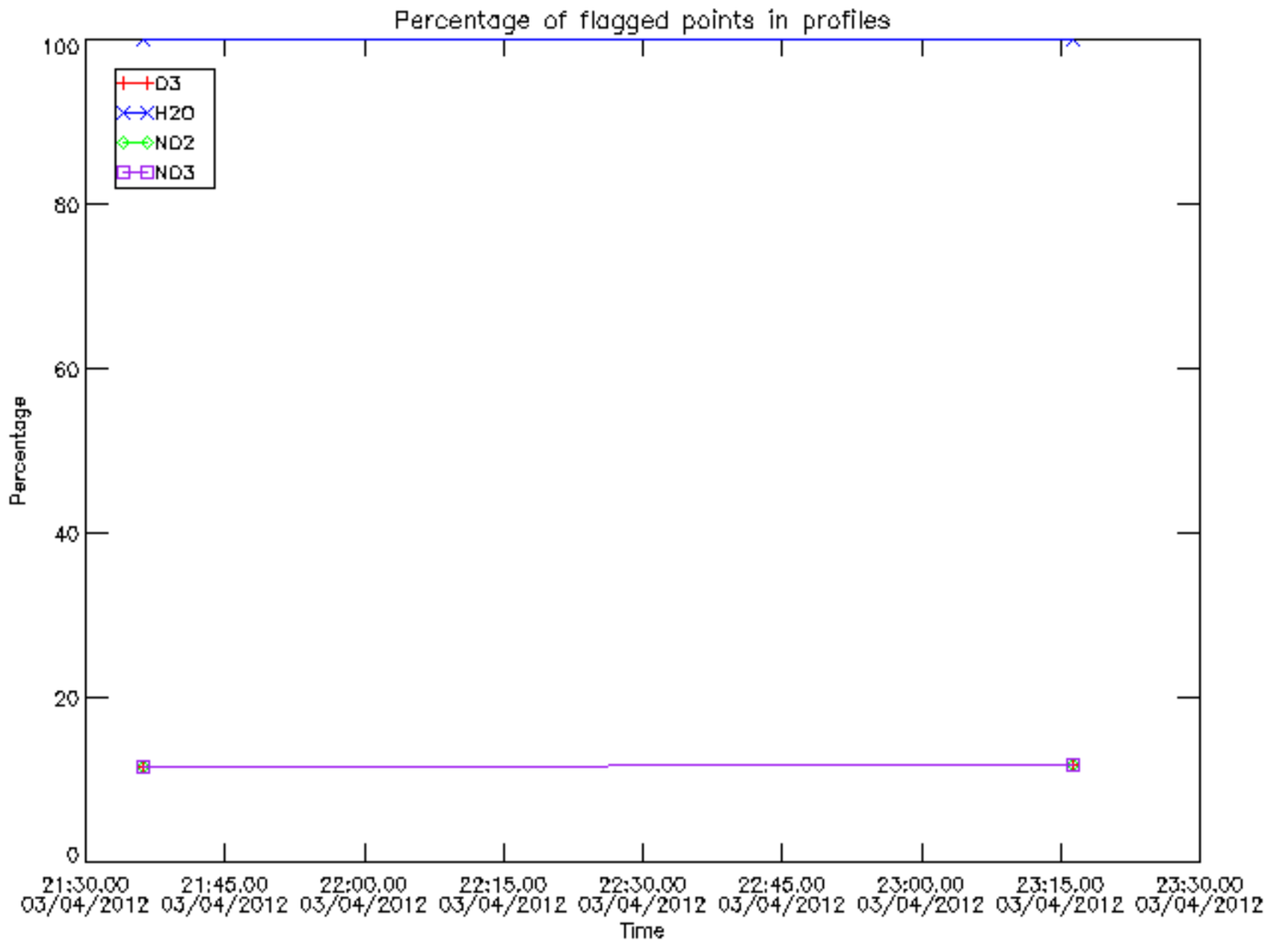
The colorbar represents the latitude.



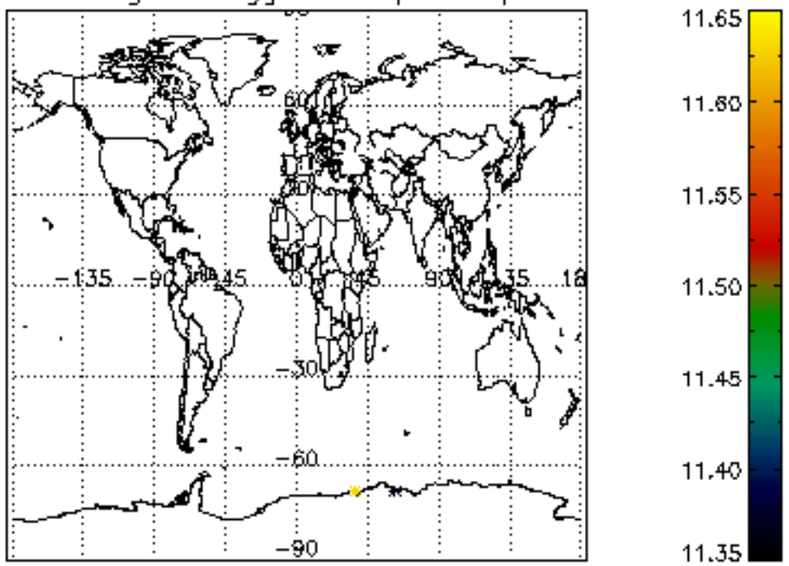
6. Auxiliary Data Files used for the production reported in section 2

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.

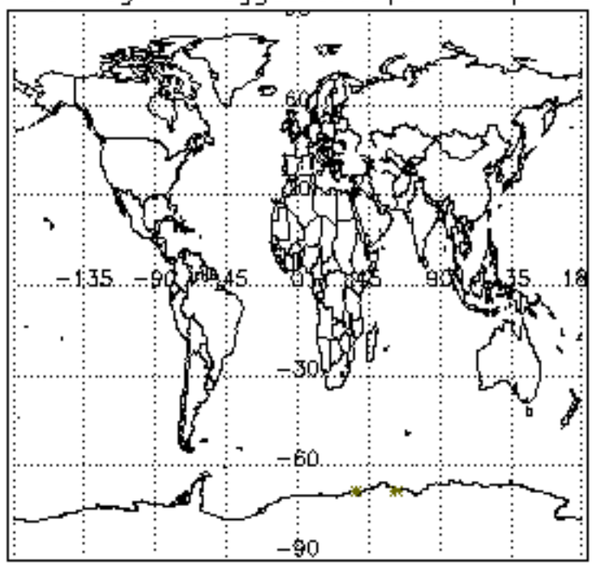
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20111213_163131_20111215_000000_20500101_000000	1	03-APR-2012 08:53:48
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	03-APR-2012 08:53:48
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	03-APR-2012 08:53:48

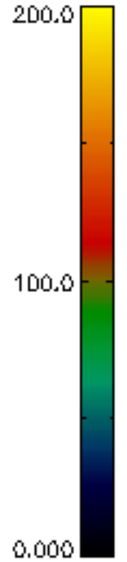

Percentage of flagged points in profiles
O3
H2O
NO2
NO3
100
80
60
40
20
0
Percentage
21:30.00 03/04/2012
21:45.00 03/04/2012
22:00.00 03/04/2012
22:15.00 03/04/2012
22:30.00 03/04/2012
22:45.00 03/04/2012
23:00.00 03/04/2012
23:15.00 03/04/2012
23:30.00 03/04/2012
Time

Percentage of flagged data per O3 profile

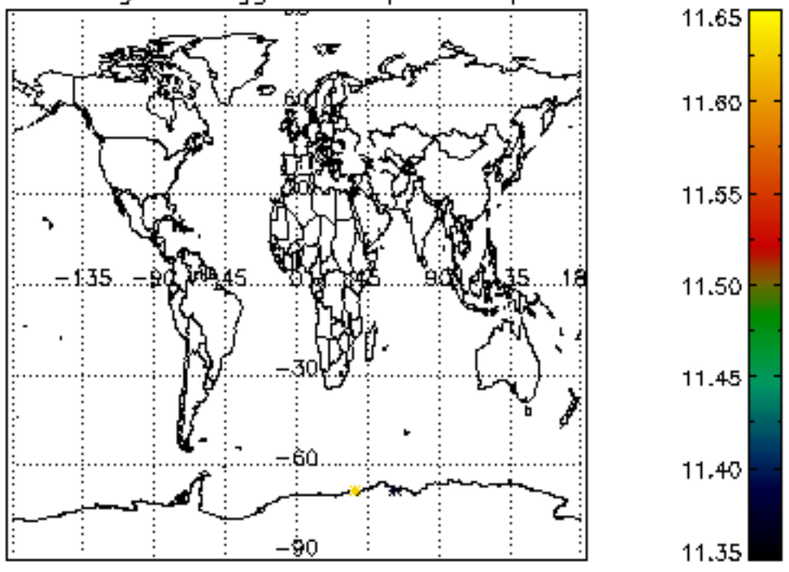


Percentage of flagged data per H2O profile

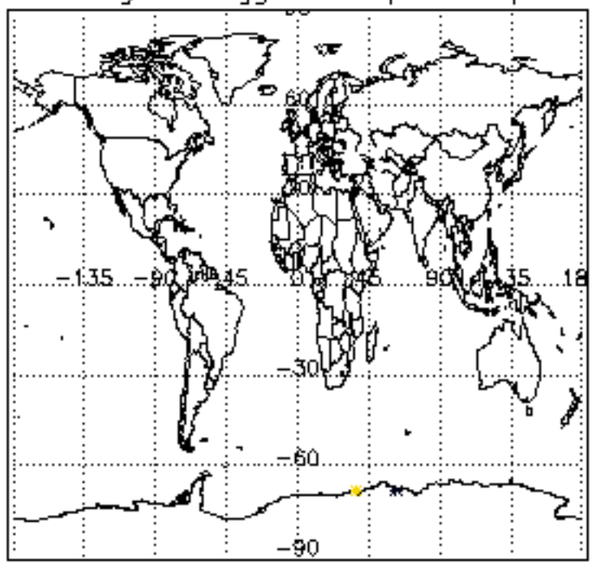


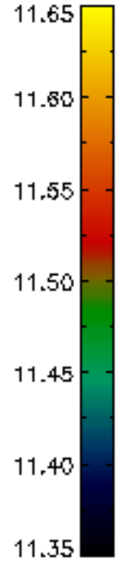


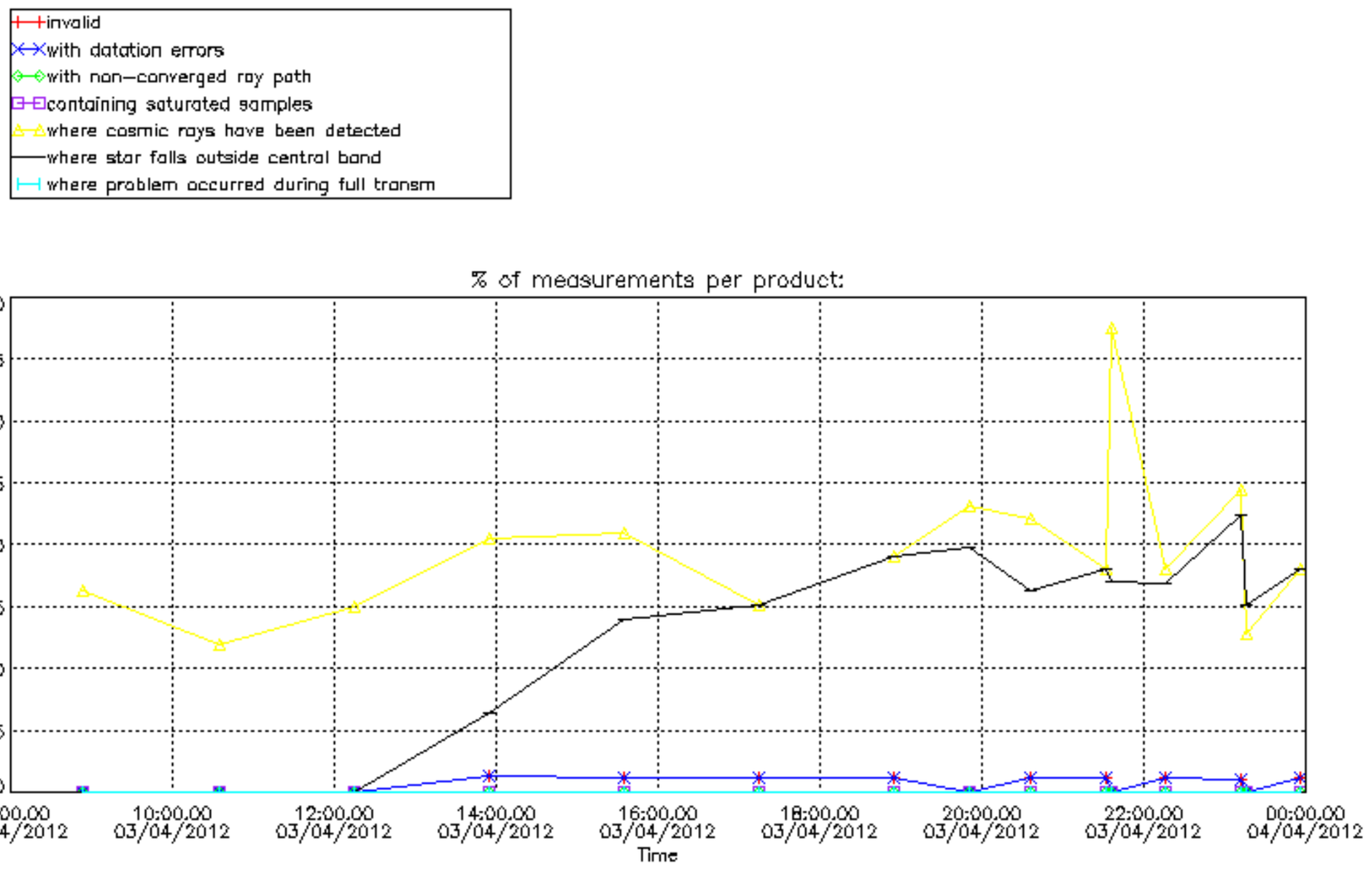
Percentage of flagged data per NO2 profile

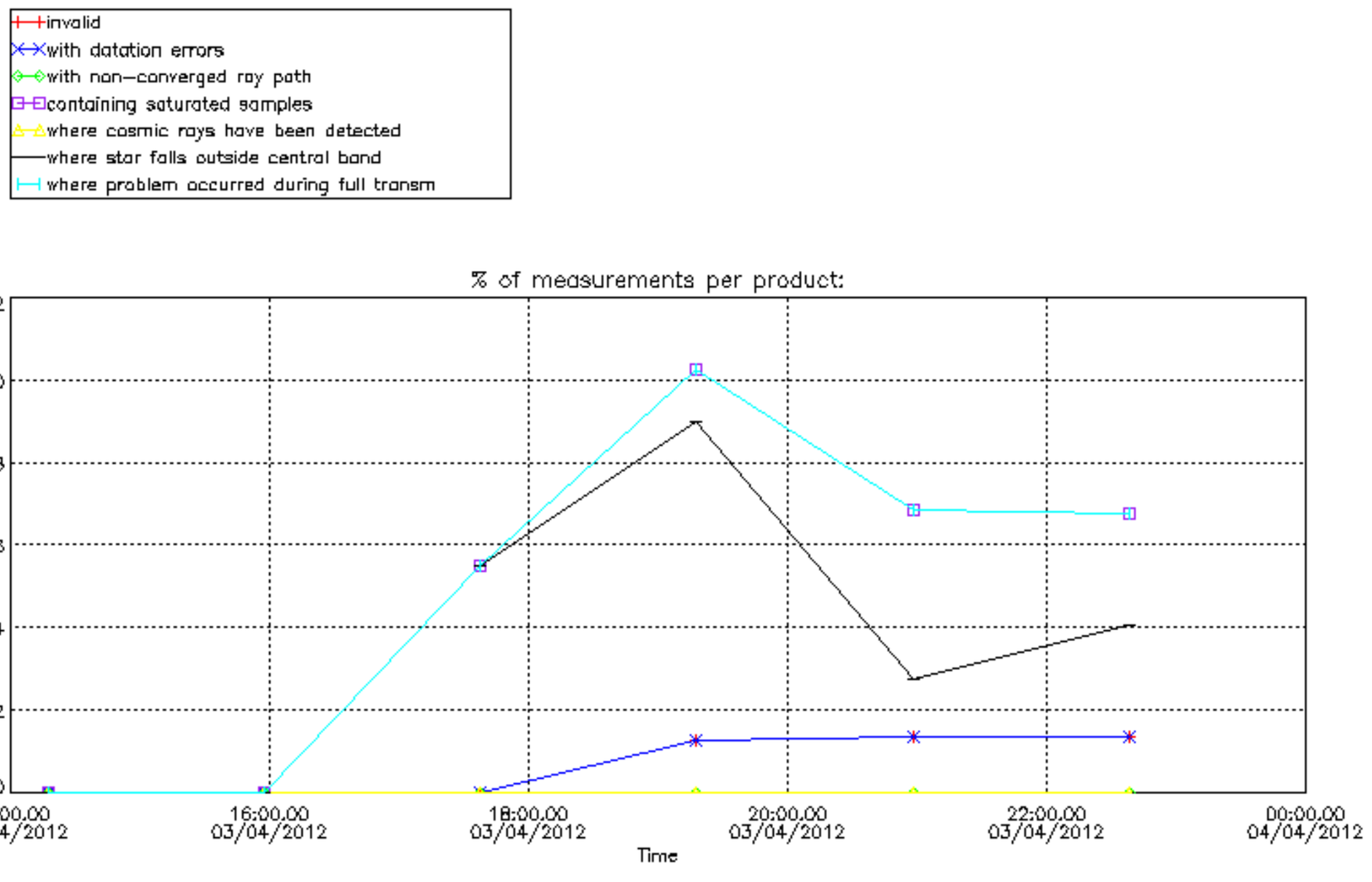


Percentage of flagged data per NO3 profile

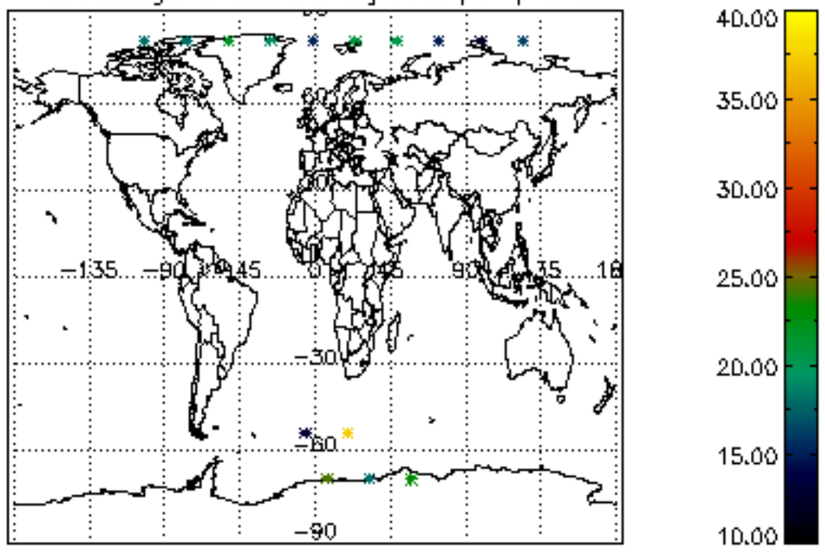




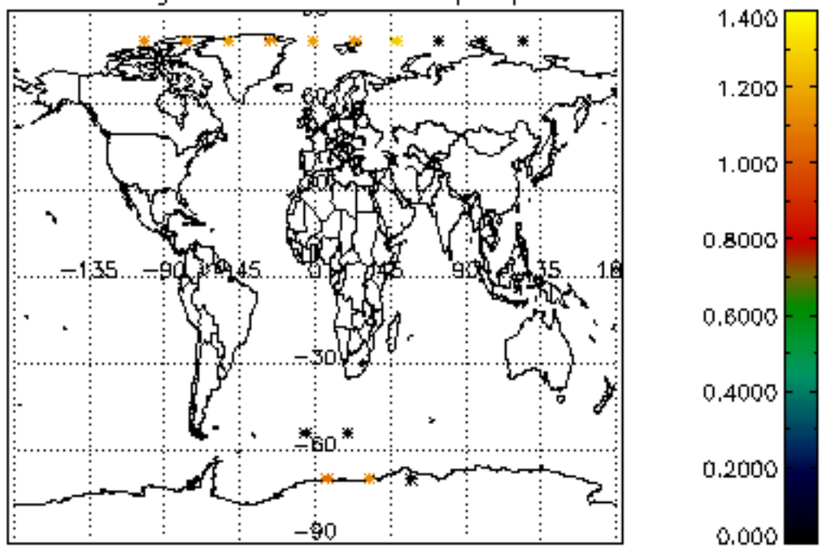

invalid
with datation errors
with non-converged ray path
containing saturated samples
where cosmic rays have been detected
where star falls outside central band
where problem occurred during full transm
% of measurements per product:
value (%)
0
5
10
15
20
25
30
35
40
08:00.00 03/04/2012
10:00.00 03/04/2012
12:00.00 03/04/2012
14:00.00 03/04/2012
16:00.00 03/04/2012
18:00.00 03/04/2012
20:00.00 03/04/2012
22:00.00 03/04/2012
00:00.00 04/04/2012
Time


invalid
with datation errors
with non-converged ray path
containing saturated samples
where cosmic rays have been detected
where star falls outside central band
where problem occurred during full transm
% of measurements per product:
value (%)
0
2
4
6
8
10
12
14:00.00 03/04/2012
16:00.00 03/04/2012
18:00.00 03/04/2012
20:00.00 03/04/2012
22:00.00 03/04/2012
00:00.00 04/04/2012
Time

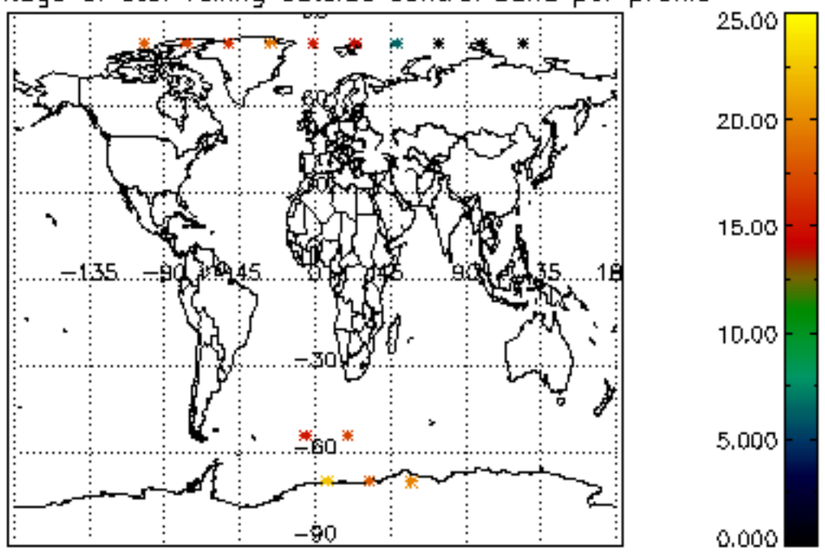
Percentage of cosmic ray hits per profile



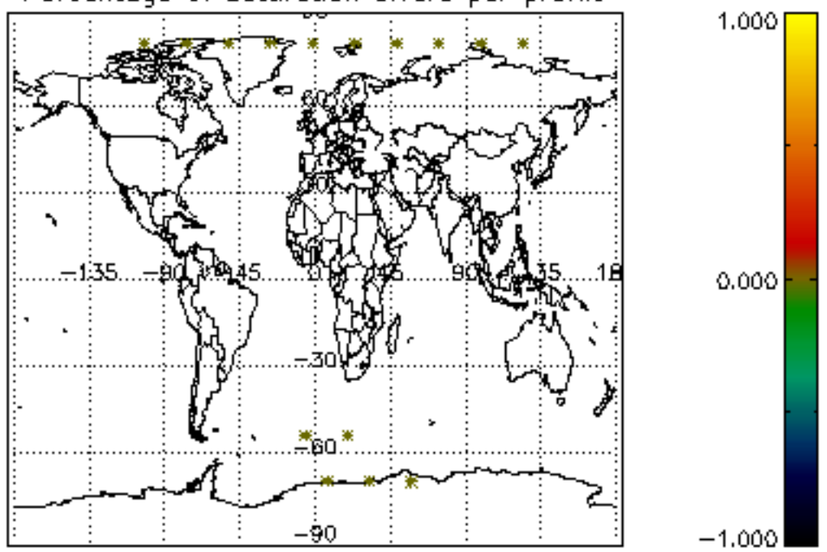
Percentage of datation errors per profile



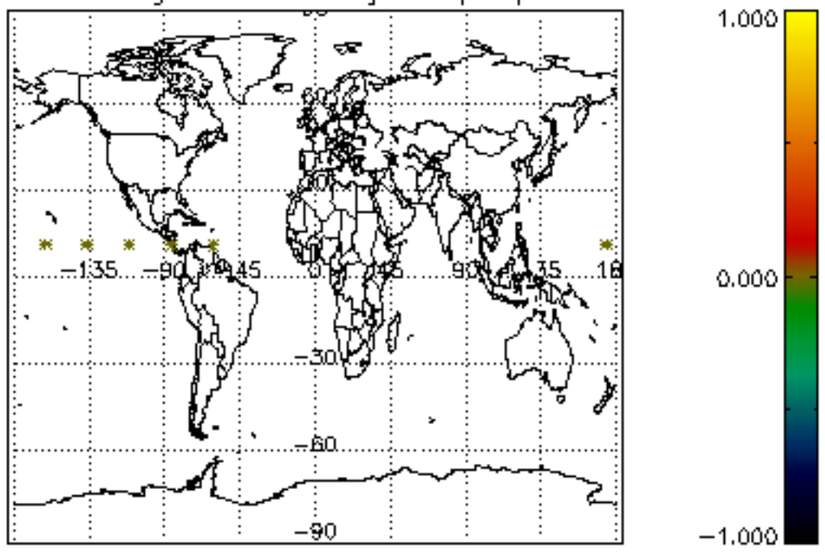
Percentage of star falling outside central band per profile



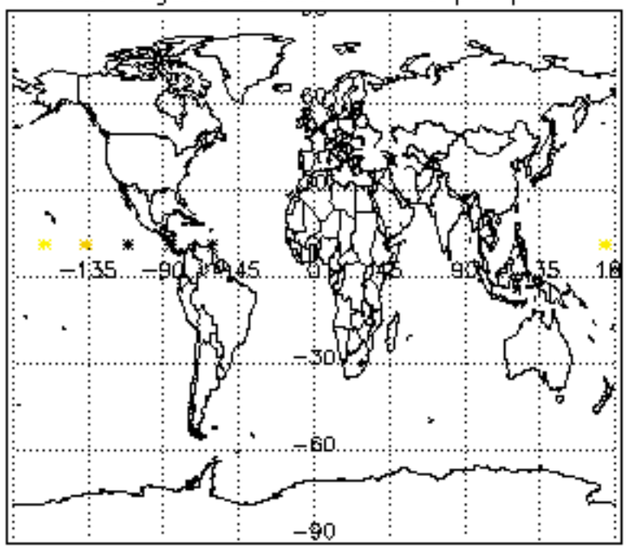
Percentage of saturation errors per profile

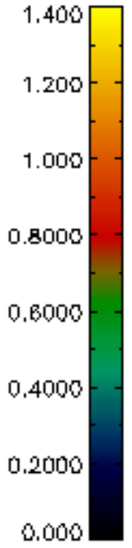


Percentage of cosmic ray hits per profile

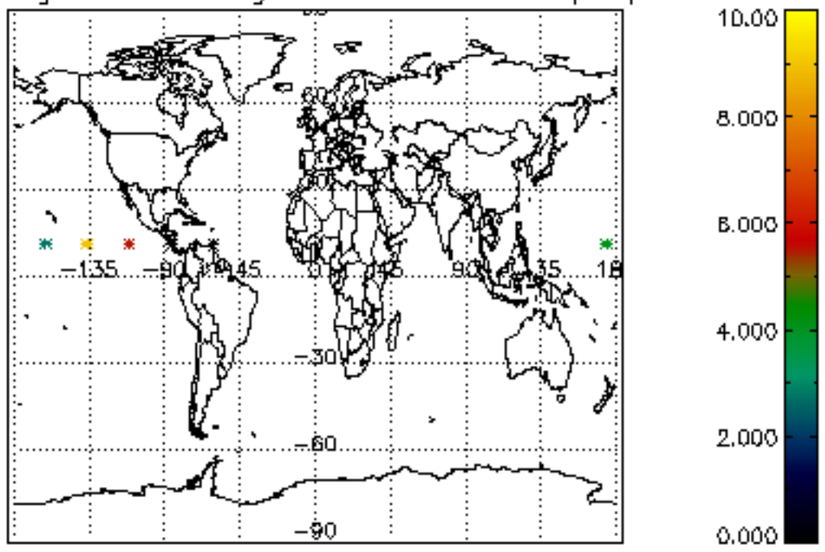


Percentage of datation errors per profile

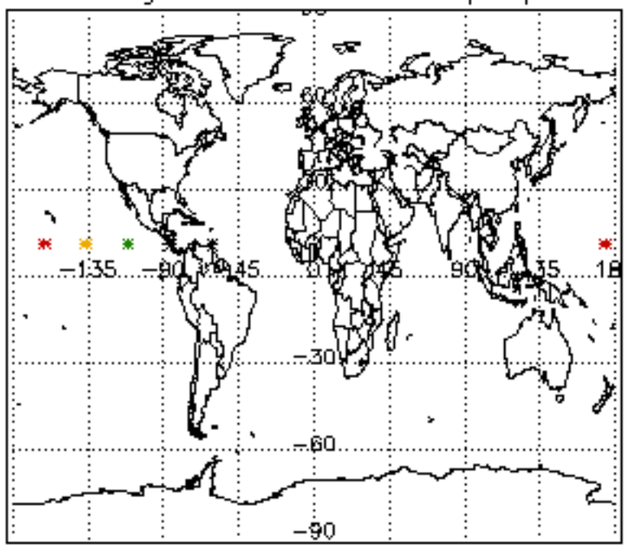


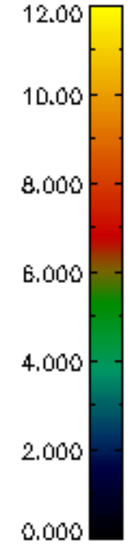


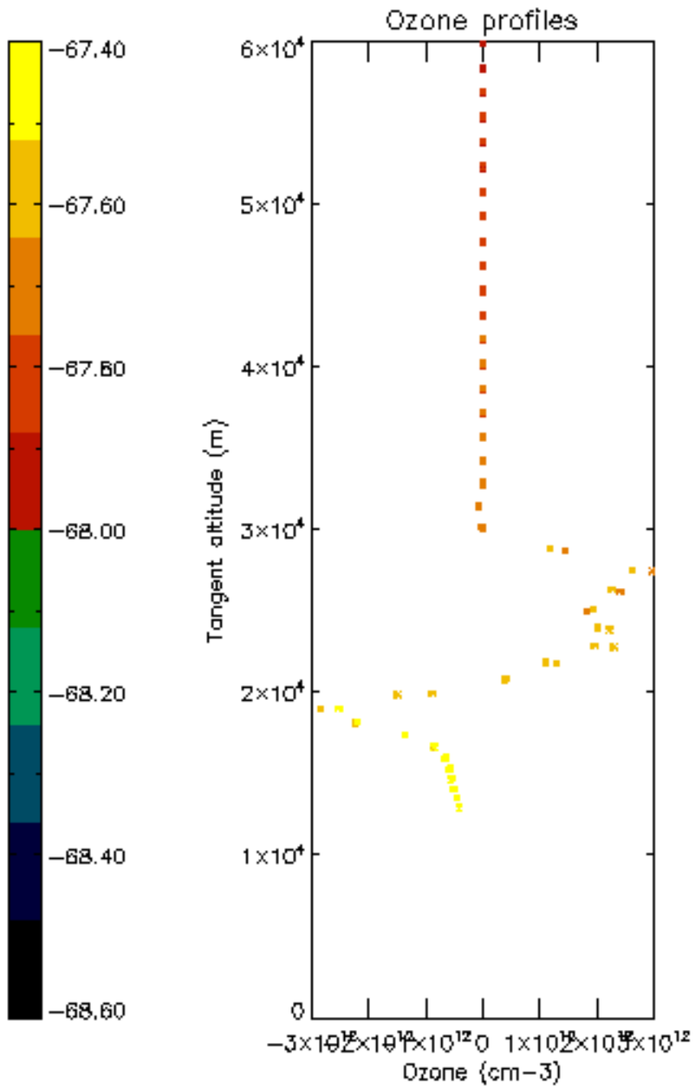
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

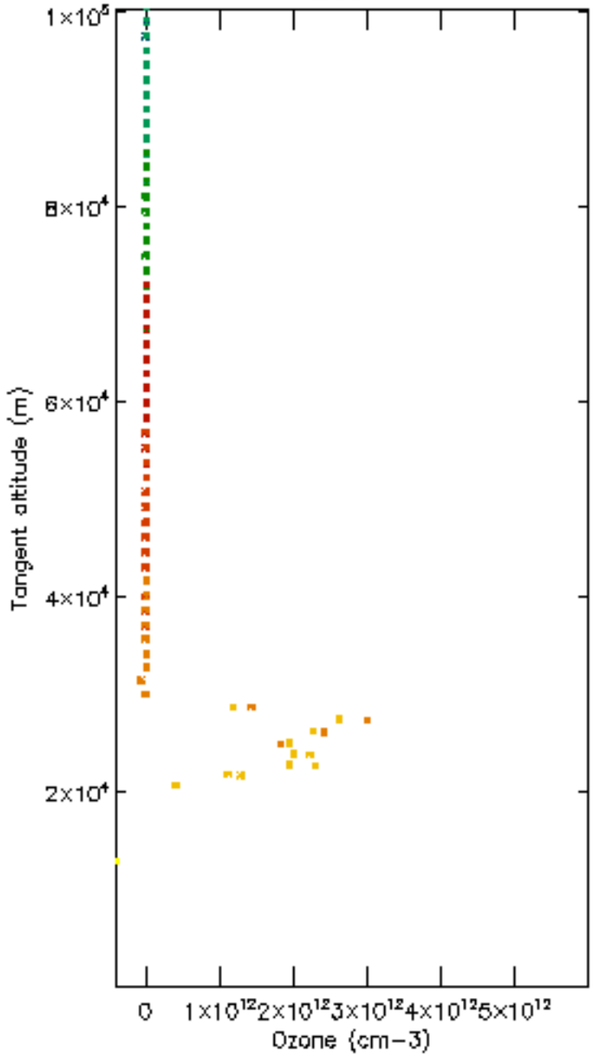




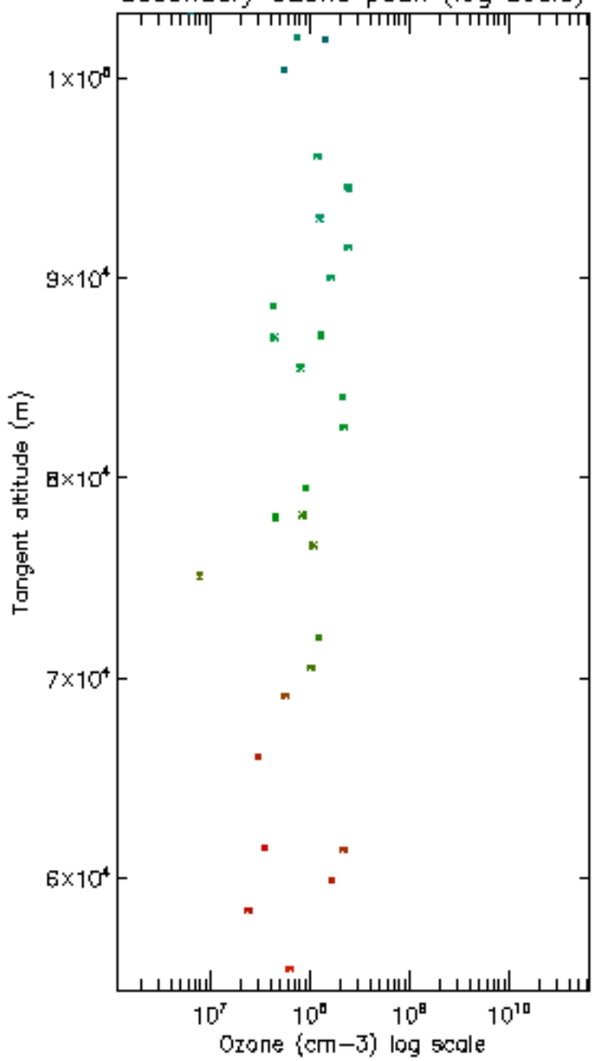


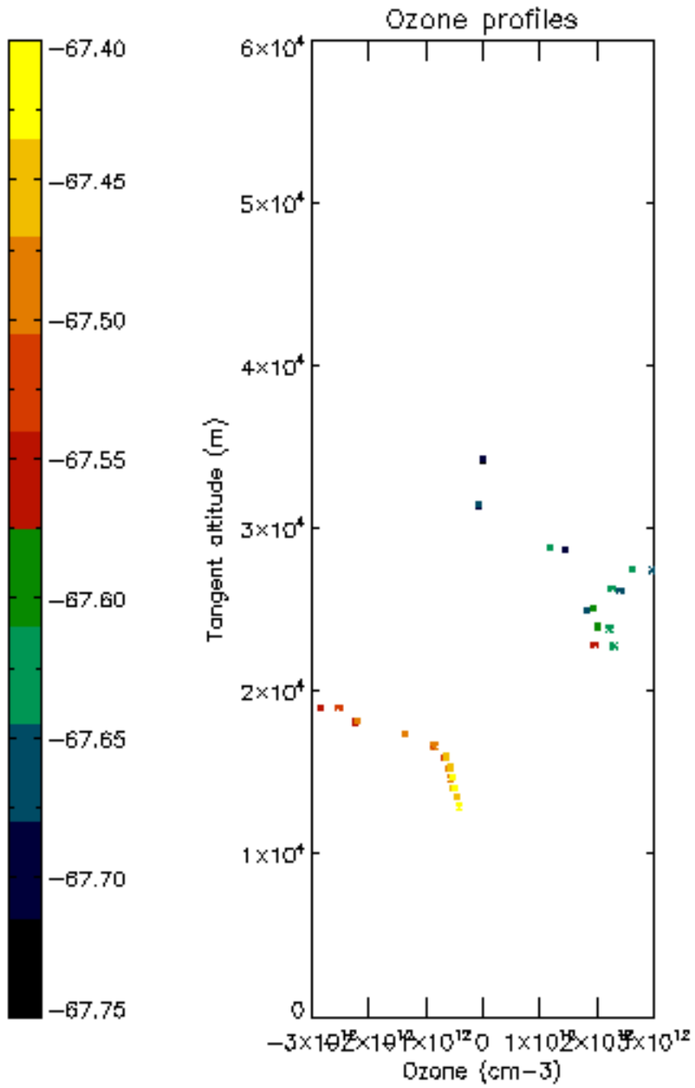
Ozone profiles

Zoom

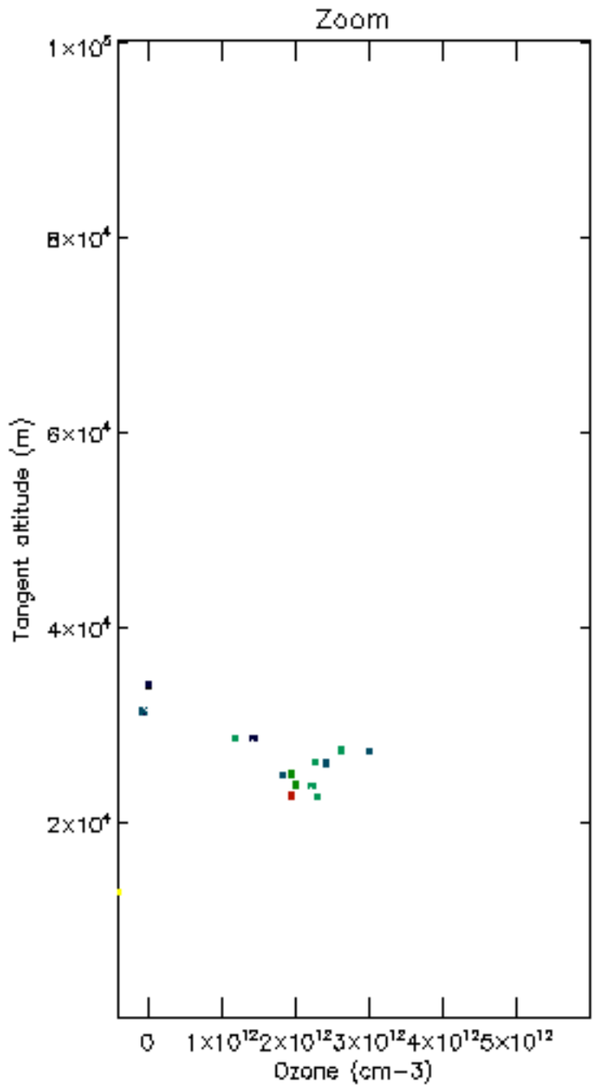


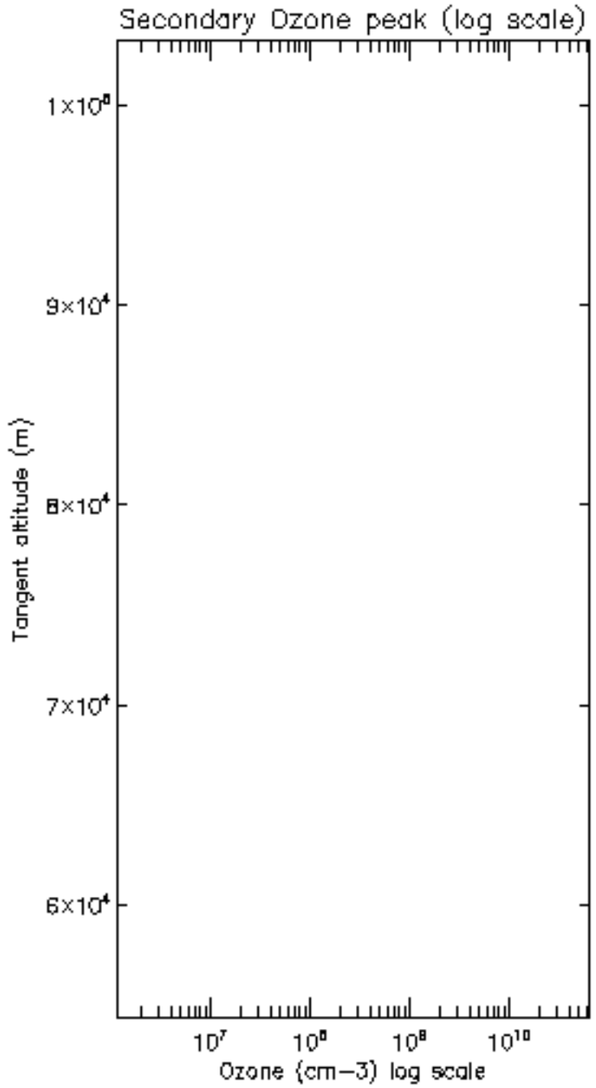
Secondary Ozone peak (log scale)

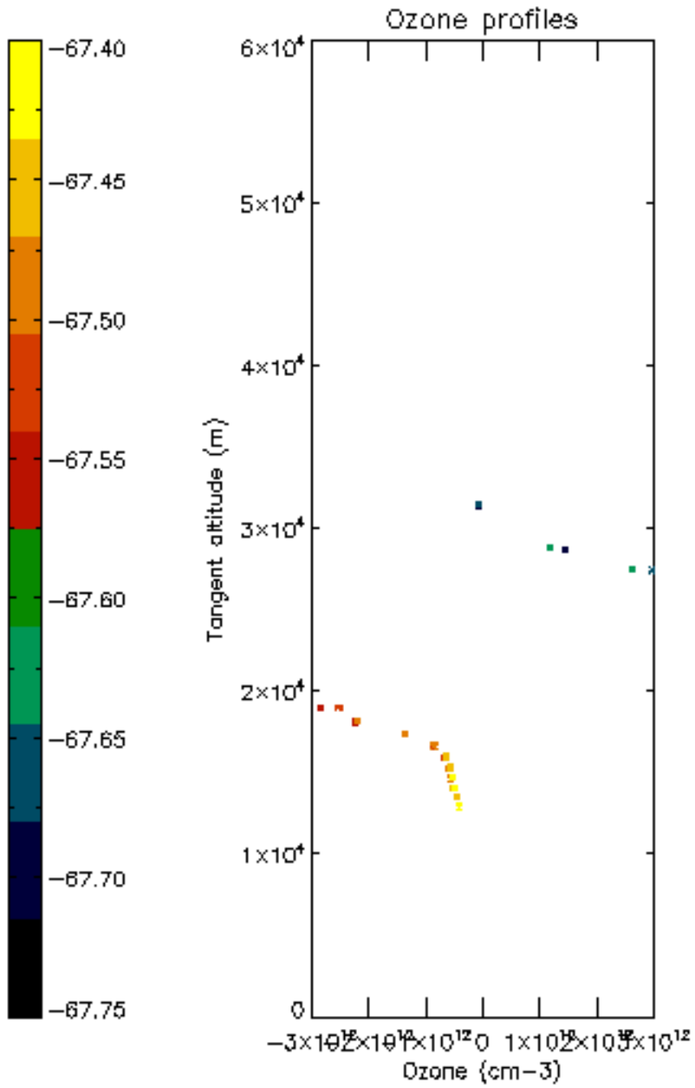



−67.40
−67.45
−67.50
−67.55
−67.60
−67.65
−67.70
−67.75

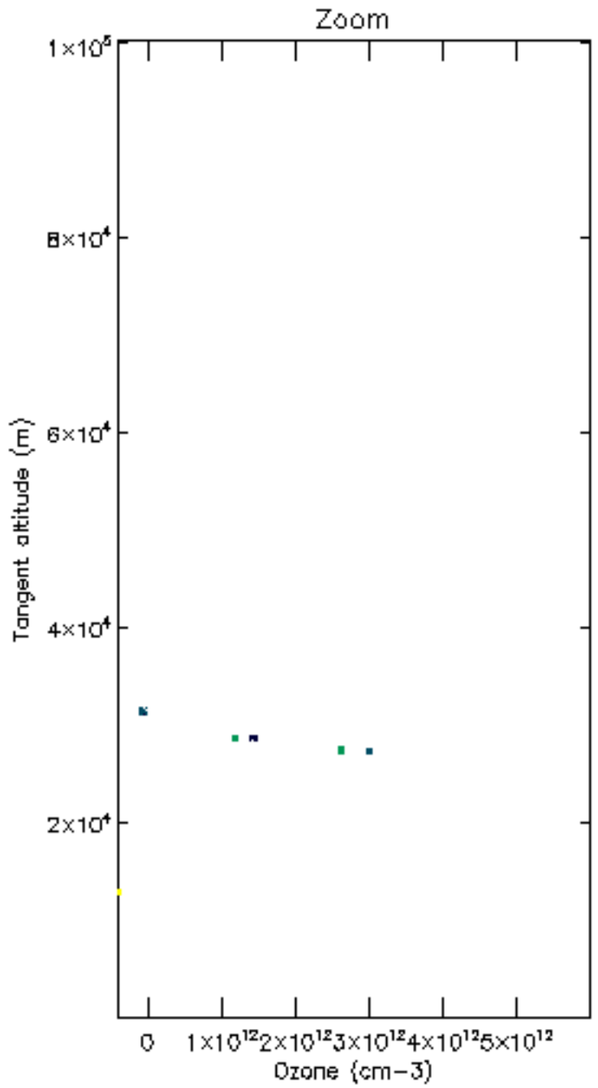
Ozone profiles
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
Tangent altitude (m)
−3×10¹²
−2×10¹²
−1×10¹²
0
1×10¹²
2×10¹²
3×10¹²
Ozone (cm−3)

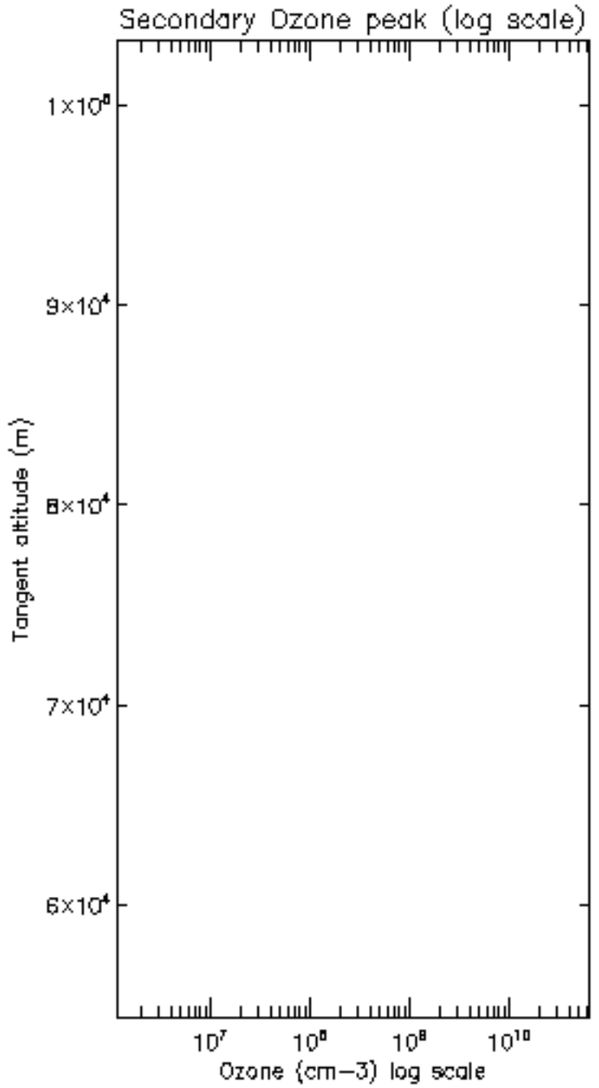

Zoom
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
Tangent altitude (m)
0
1×10¹²
2×10¹²
3×10¹²
4×10¹²
5×10¹²
Ozone (cm−3)

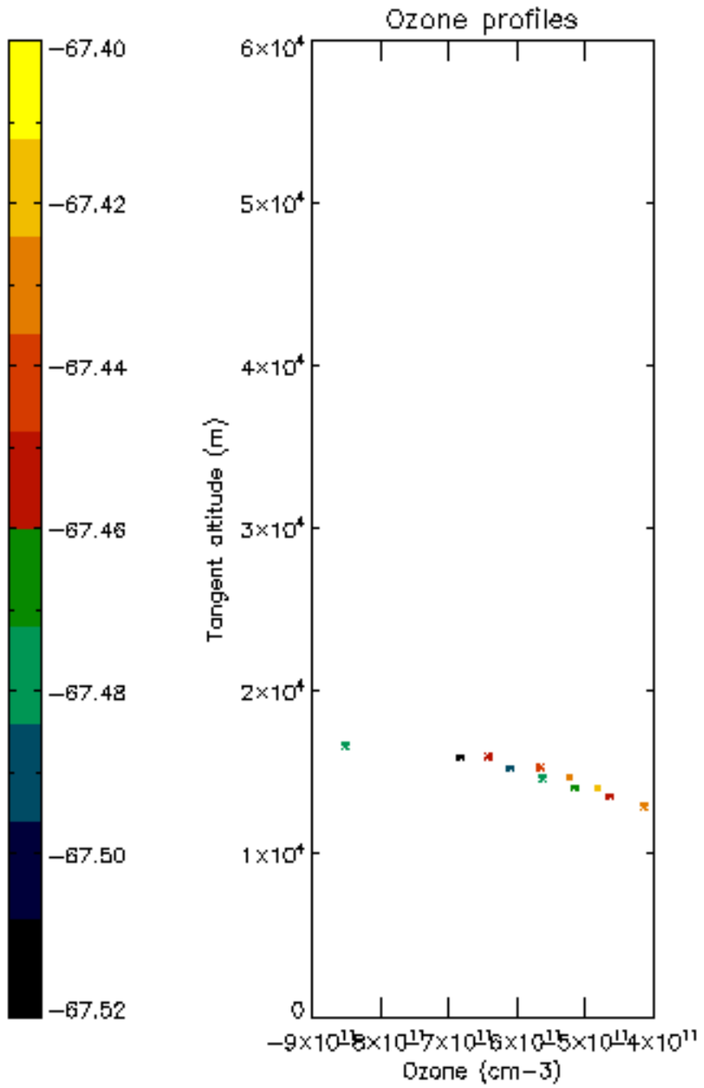

Secondary Ozone peak (log scale)
1×10⁵
9×10⁴
8×10⁴
7×10⁴
6×10⁴
Tangent altitude (m)
10⁷
10⁸
10⁹
10¹⁰
Ozone (cm−3) log scale

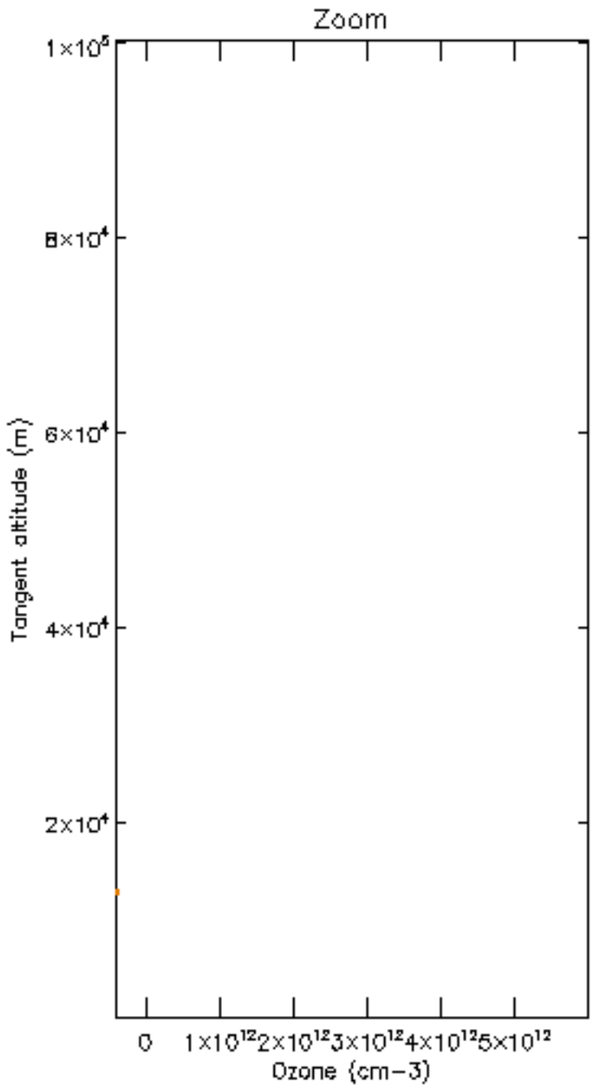

−67.40
−67.45
−67.50
−67.55
−67.60
−67.65
−67.70
−67.75

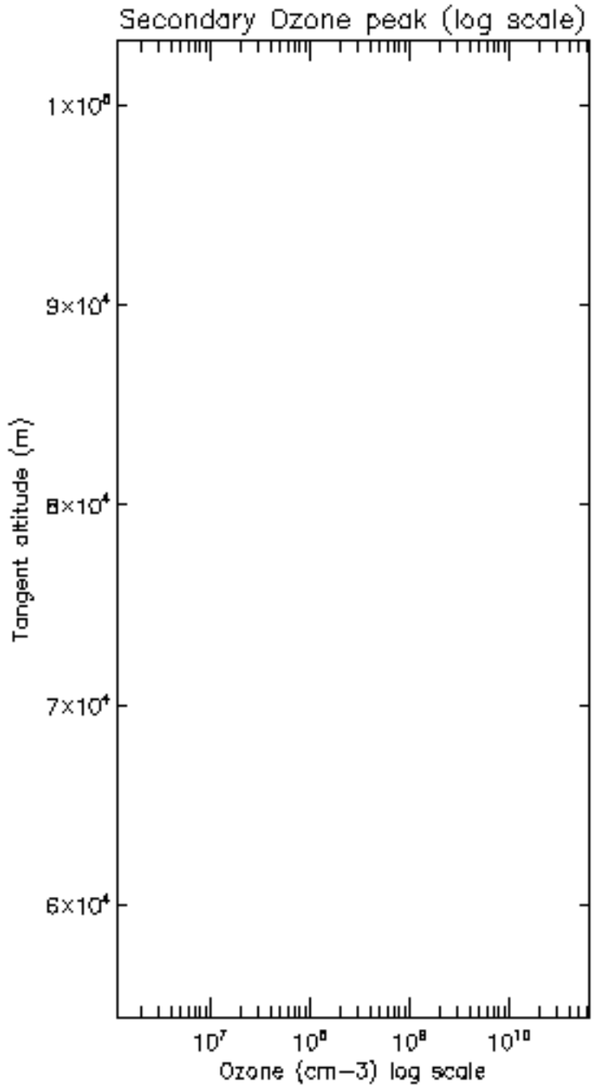
Ozone profiles
Tangent altitude (m)
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
−3×10¹²
−2×10¹²
−1×10¹²
0
1×10¹²
2×10¹²
3×10¹²
Ozone (cm−3)

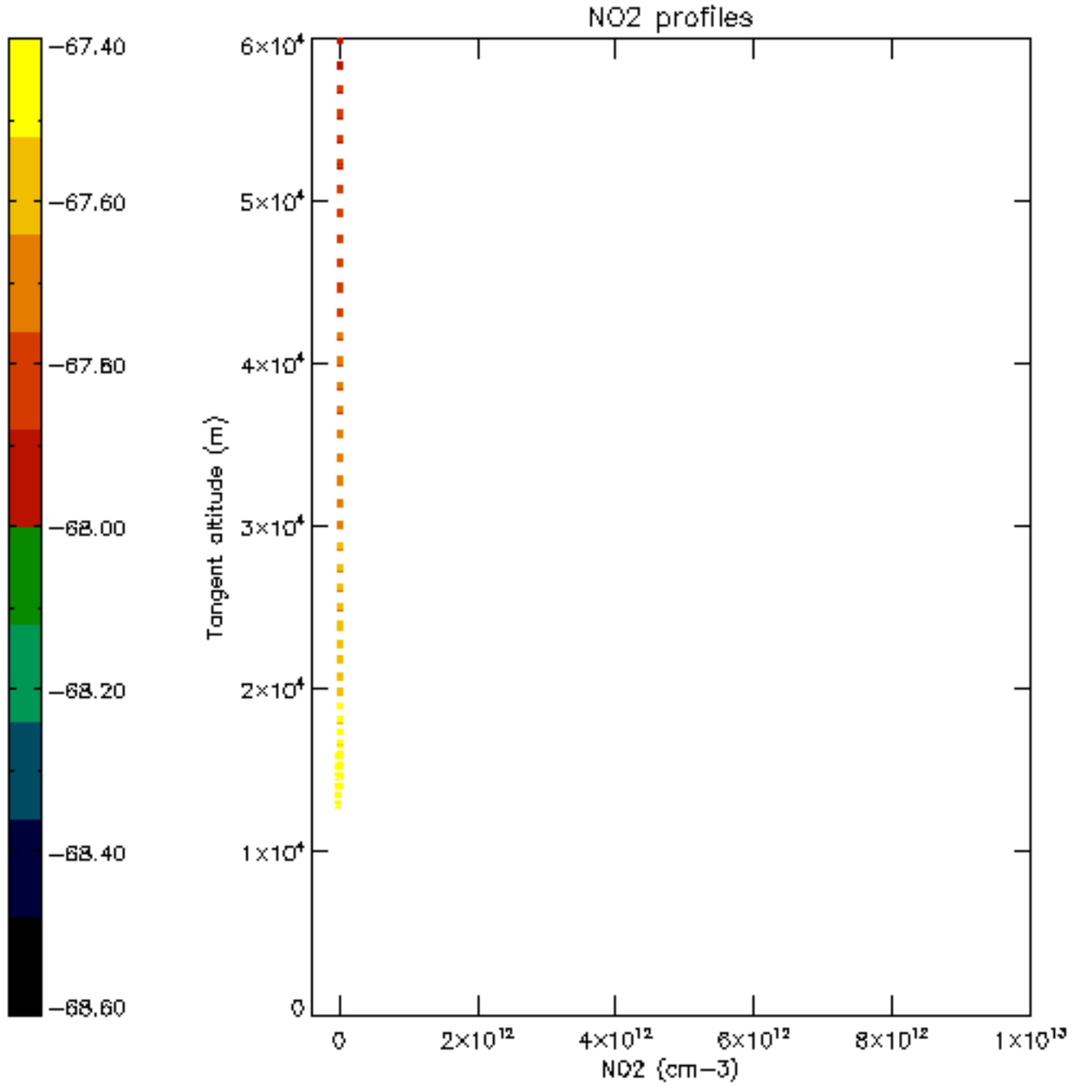

Zoom
Tangent altitude (m)
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
0
1×10¹²
2×10¹²
3×10¹²
4×10¹²
5×10¹²
Ozone (cm−3)

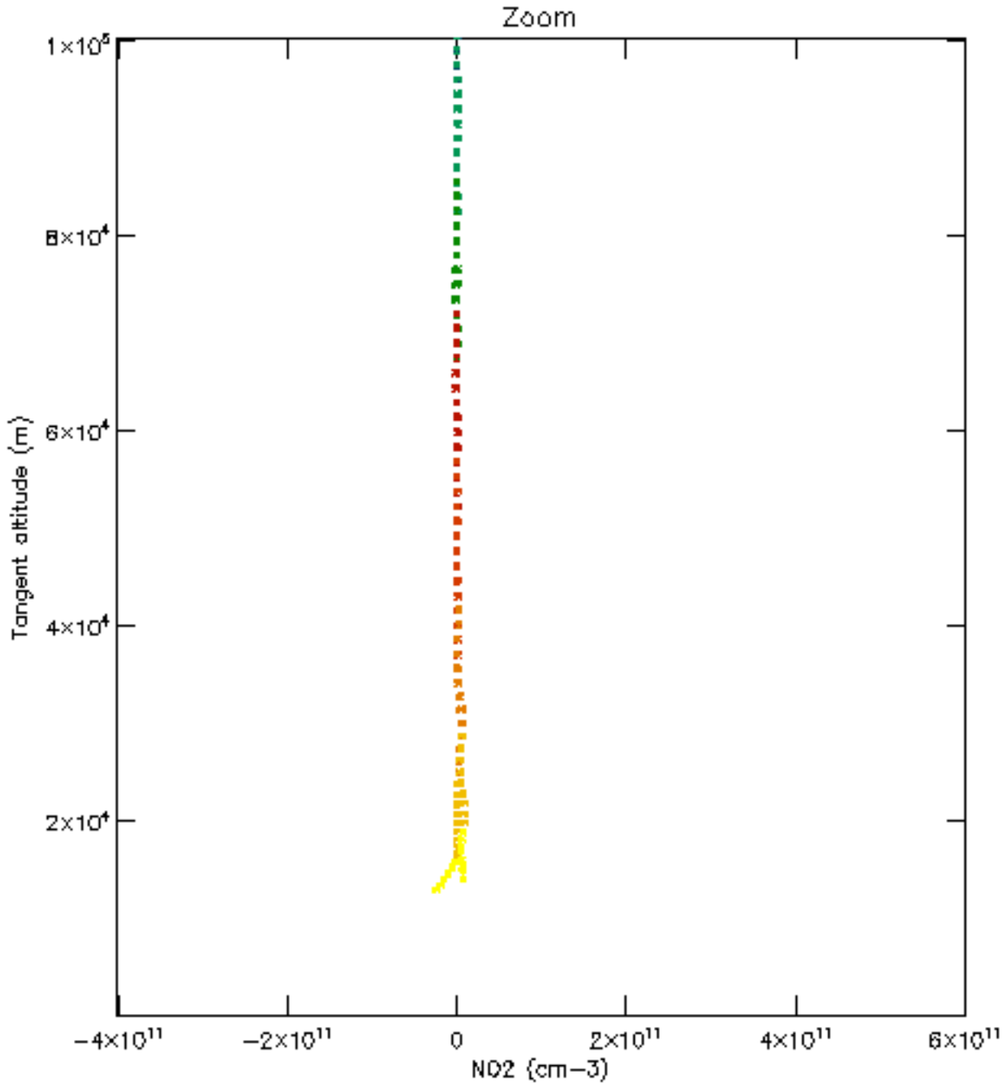

Secondary Ozone peak (log scale)
Tangent altitude (m)
1×10⁵
9×10⁴
8×10⁴
7×10⁴
6×10⁴
10⁷
10⁸
10⁹
10¹⁰
Ozone (cm−3) log scale

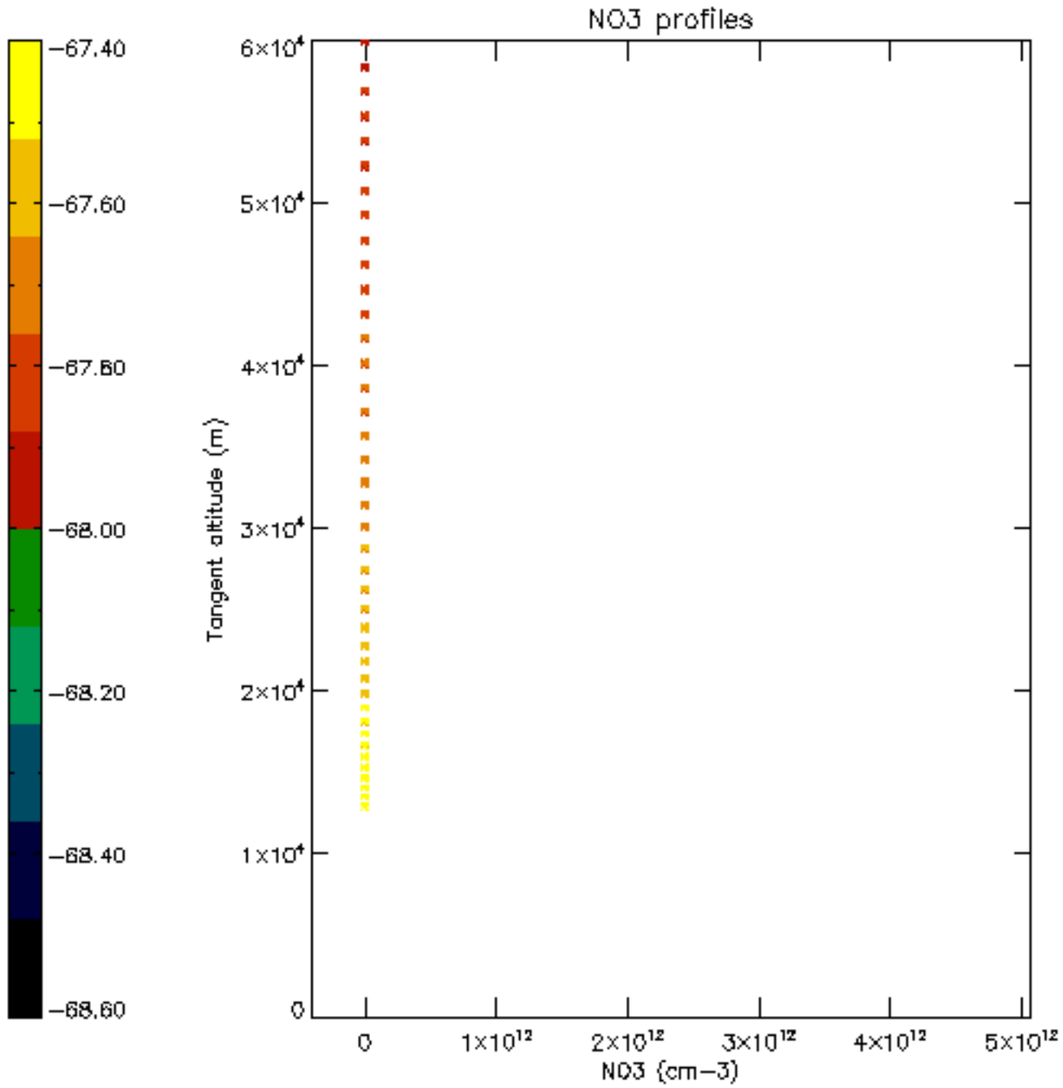

−67.40
−67.42
−67.44
−67.46
−67.48
−67.50
−67.52
Ozone profiles
Tangent altitude (m)
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
−9×10¹¹ −8×10¹¹ −7×10¹¹ −6×10¹¹ −5×10¹¹ −4×10¹¹
Ozone (cm−3)

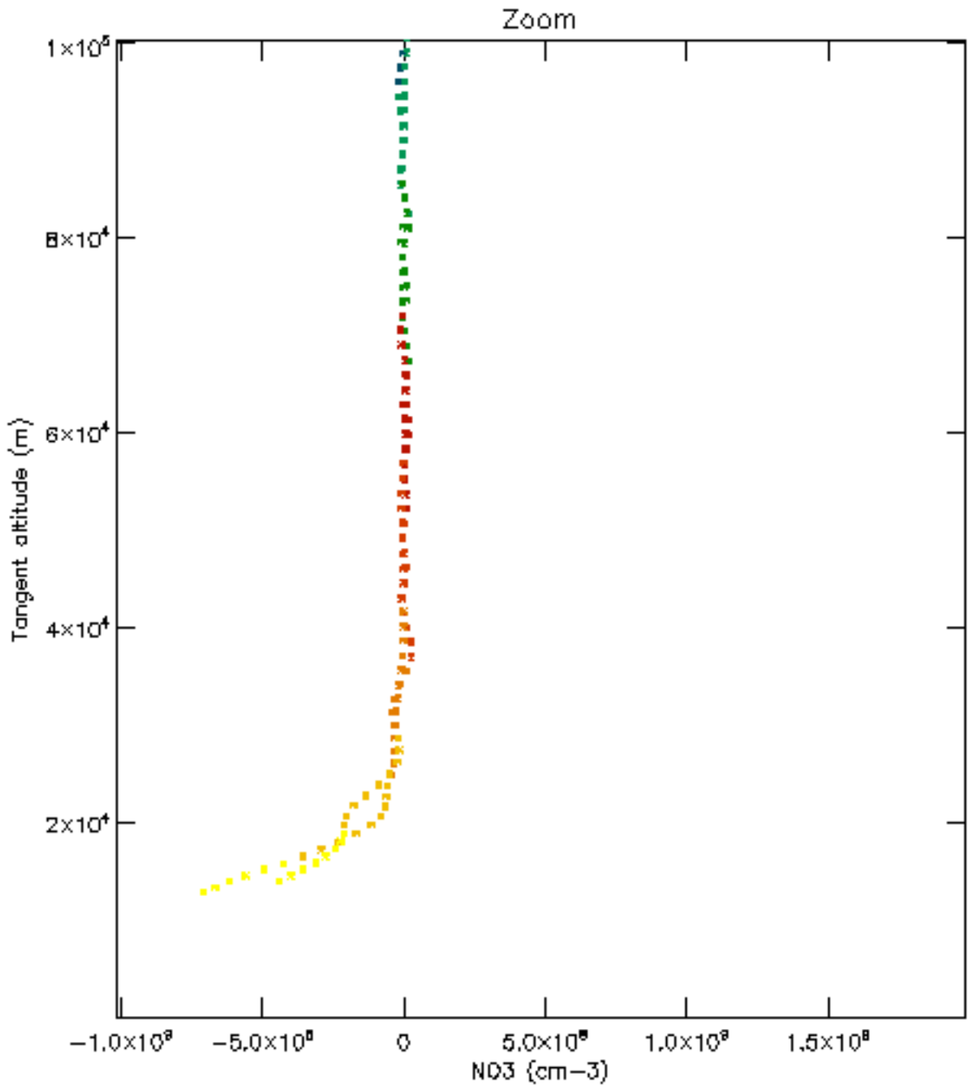

Zoom
Tangent altitude (m)
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
0
1×10¹² 2×10¹² 3×10¹² 4×10¹² 5×10¹²
Ozone (cm−3)

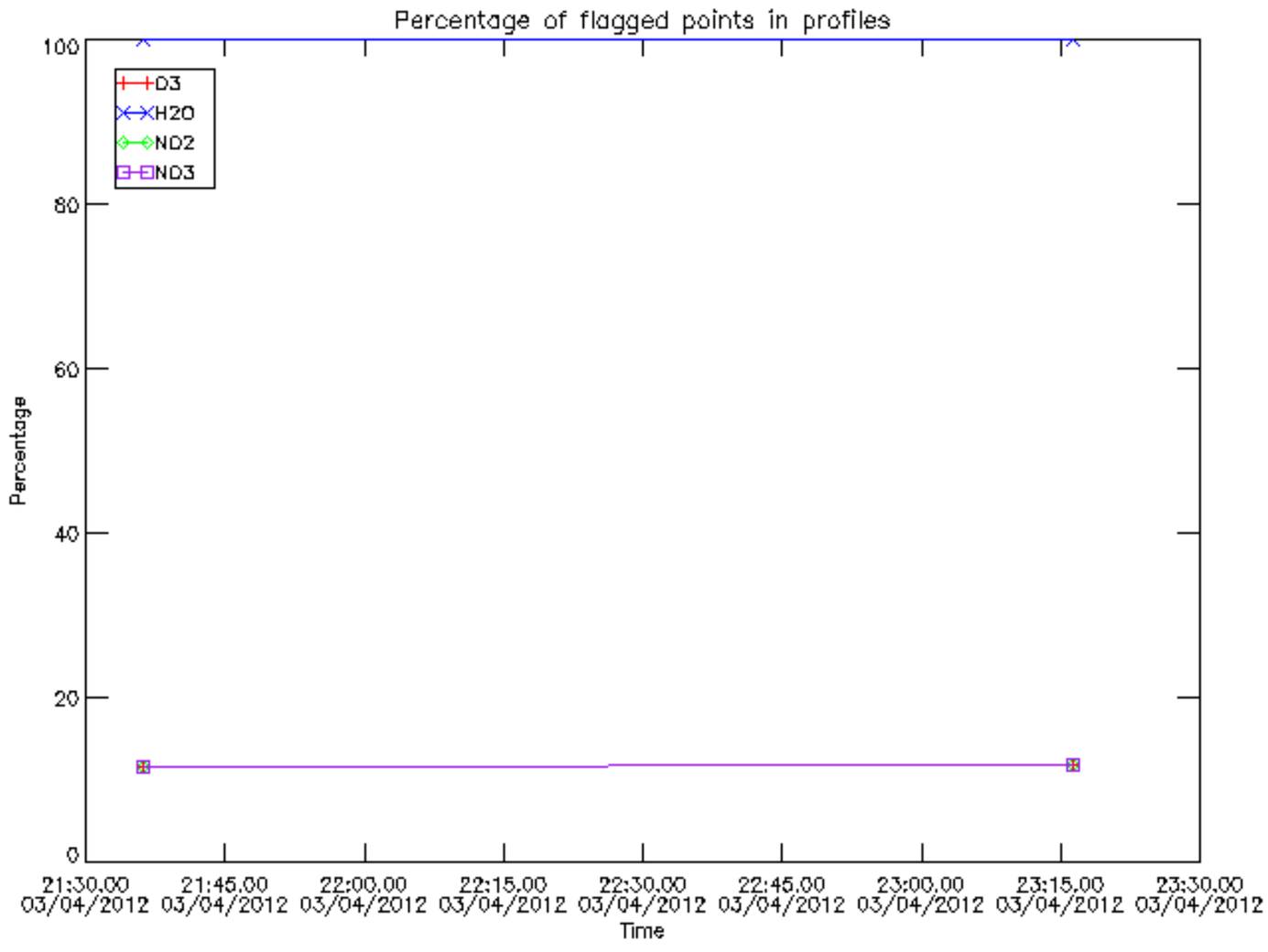

Secondary Ozone peak (log scale)
Tangent altitude (m)
1×10⁵
9×10⁴
8×10⁴
7×10⁴
6×10⁴
10⁷ 10⁸ 10⁹ 10¹⁰
Ozone (cm−3) log scale


NO2 profiles
−67.40
−67.60
−67.80
−68.00
−68.20
−68.40
−68.60
Tangent altitude (m)
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
0
2×10¹²
4×10¹²
6×10¹²
8×10¹²
1×10¹³
NO2 (cm−3)

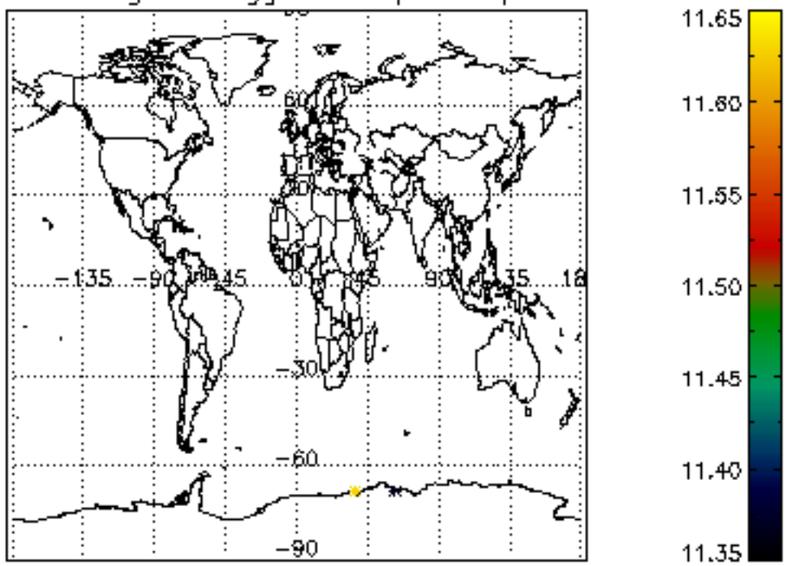

Zoom
Tangent altitude (m)
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
−4×10¹¹
−2×10¹¹
0
2×10¹¹
4×10¹¹
6×10¹¹
NO2 (cm−3)


NO3 profiles
−67.40
−67.60
−67.80
−68.00
−68.20
−68.40
−68.60
Tangent altitude (m)
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
0
1×10¹²
2×10¹²
3×10¹²
4×10¹²
5×10¹²
NO3 (cm−3)

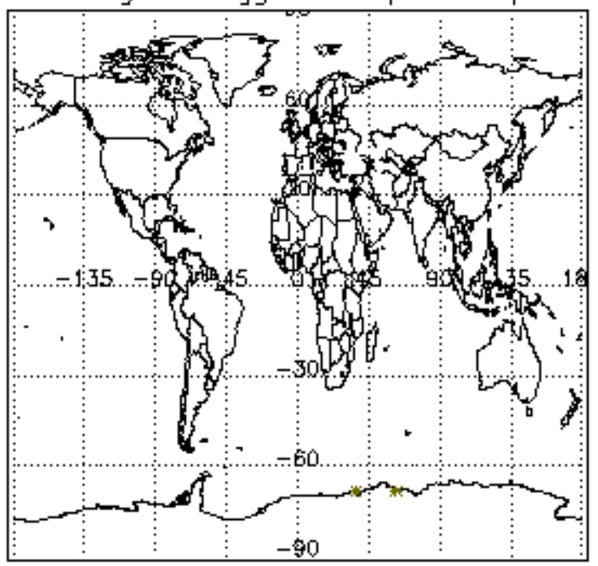

Zoom
Tangent altitude (m)
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
−1.0×10⁹
−5.0×10⁸
0
5.0×10⁸
1.0×10⁹
1.5×10⁹
NO3 (cm−3)

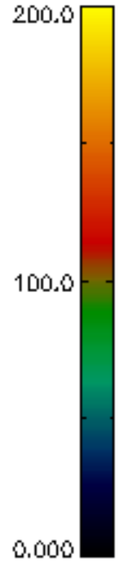

Percentage of flagged points in profiles
O3
H2O
NO2
NO3
100
80
60
40
20
0
Percentage
21:30.00 03/04/2012
21:45.00 03/04/2012
22:00.00 03/04/2012
22:15.00 03/04/2012
22:30.00 03/04/2012
22:45.00 03/04/2012
23:00.00 03/04/2012
23:15.00 03/04/2012
23:30.00 03/04/2012
Time

Percentage of flagged data per O3 profile

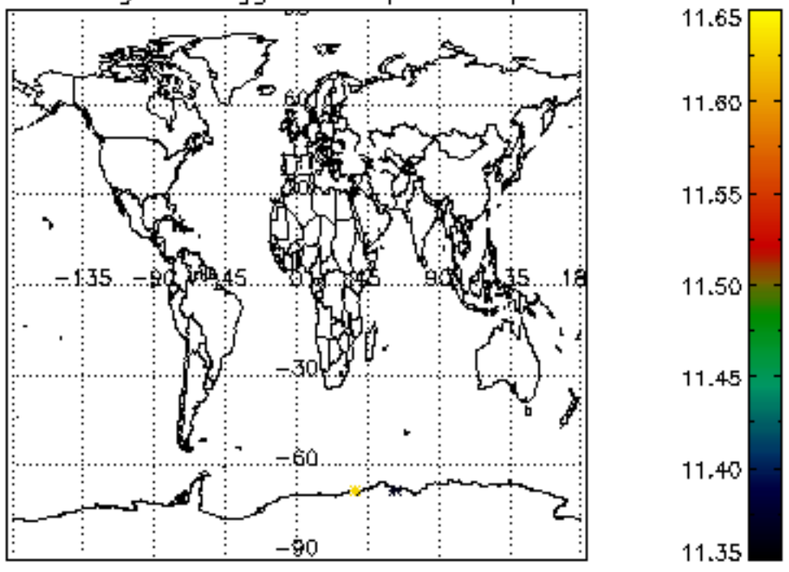


Percentage of flagged data per H2O profile

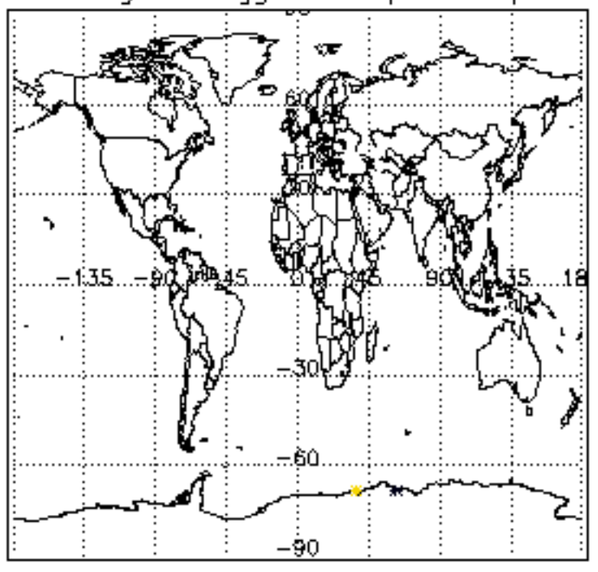


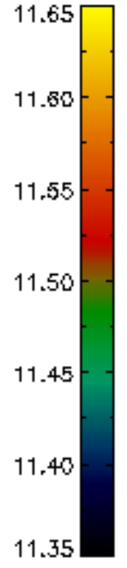


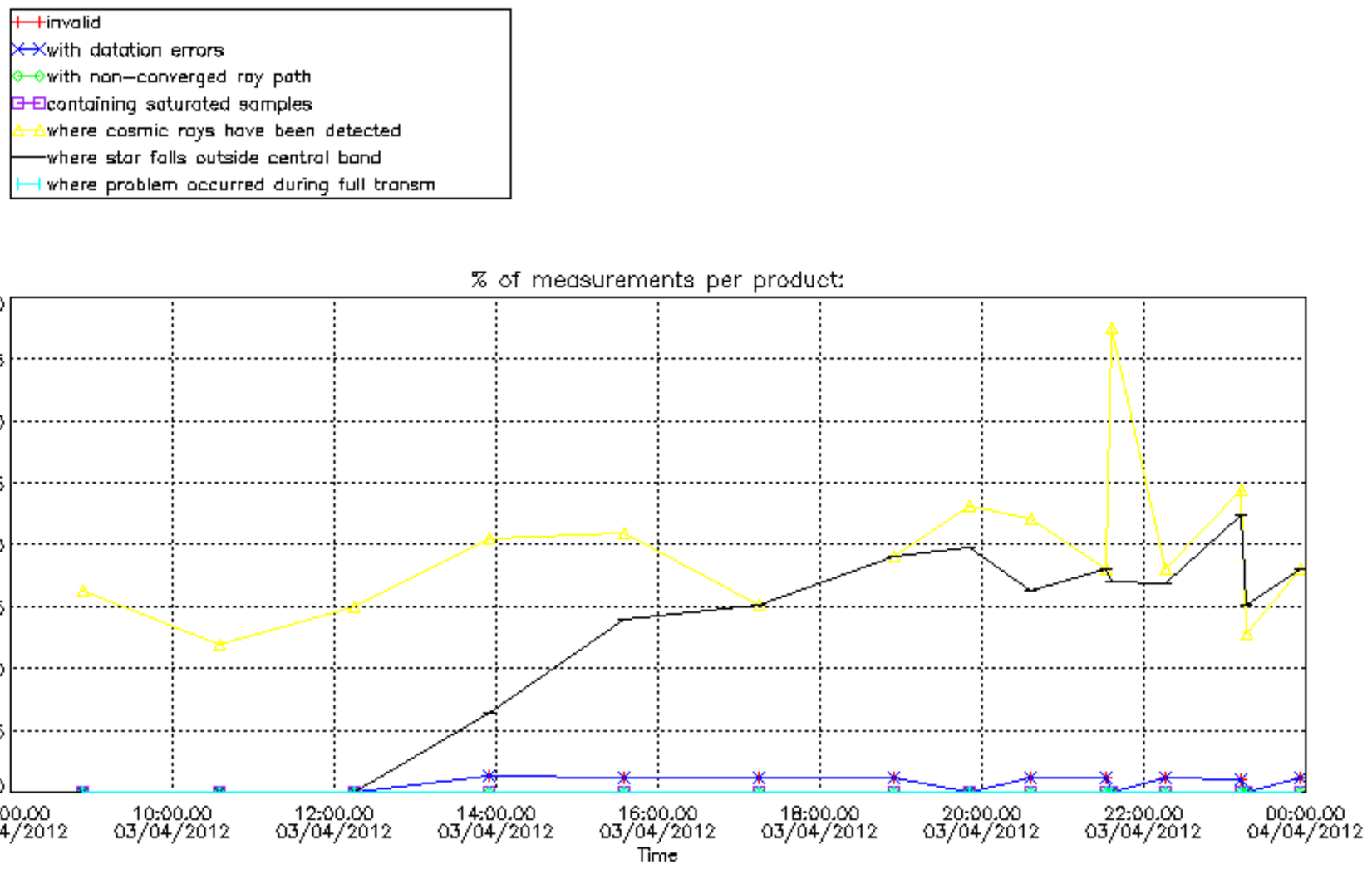
Percentage of flagged data per NO2 profile

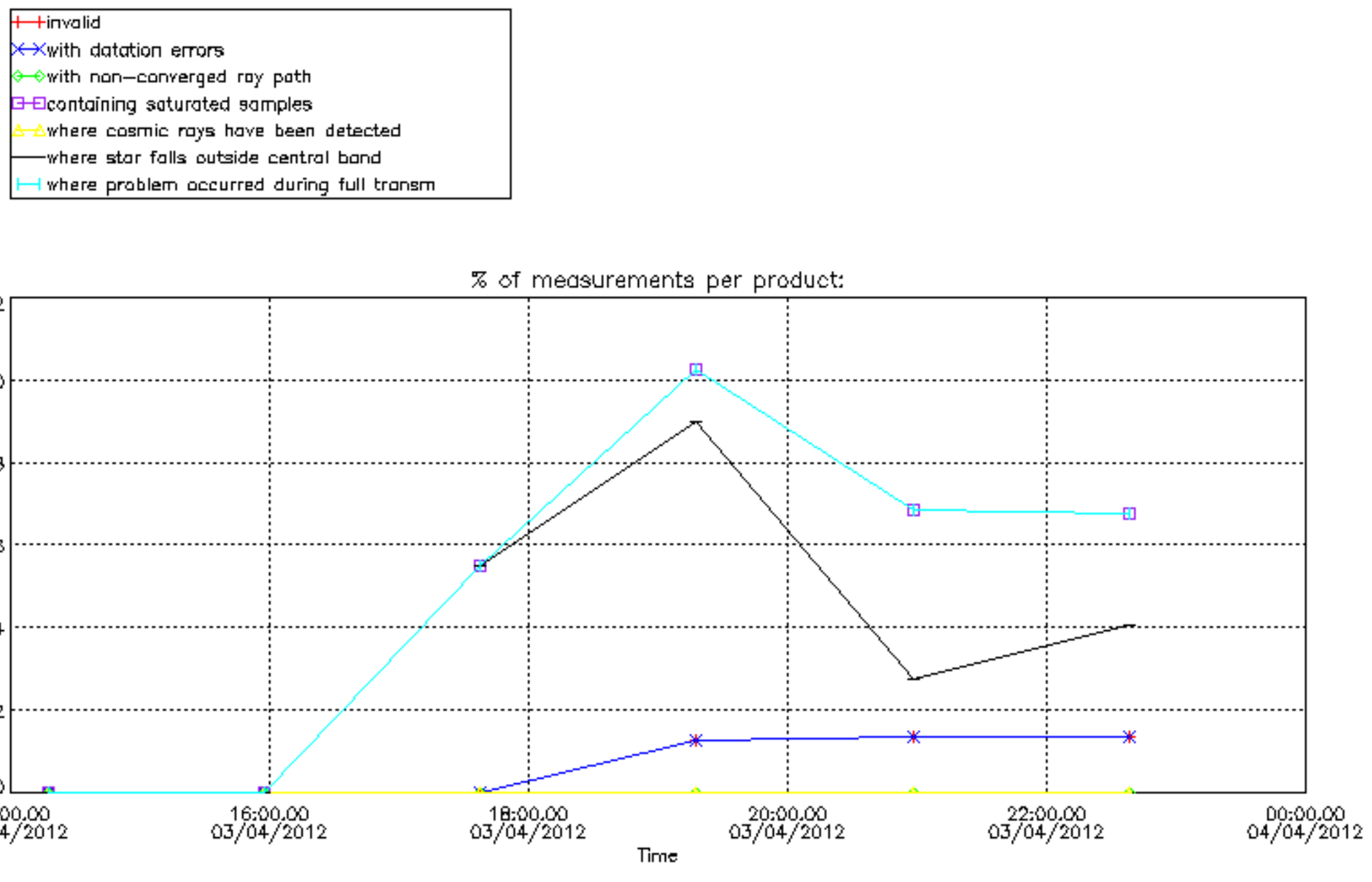


Percentage of flagged data per NO3 profile

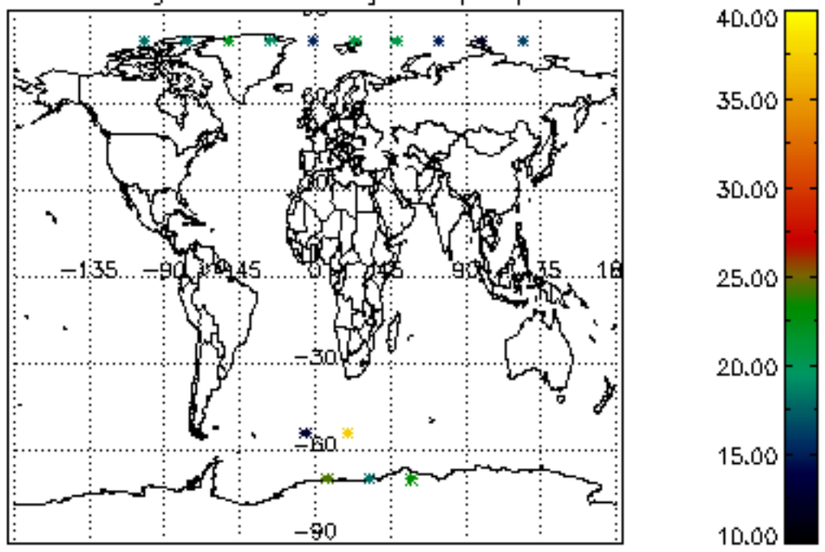




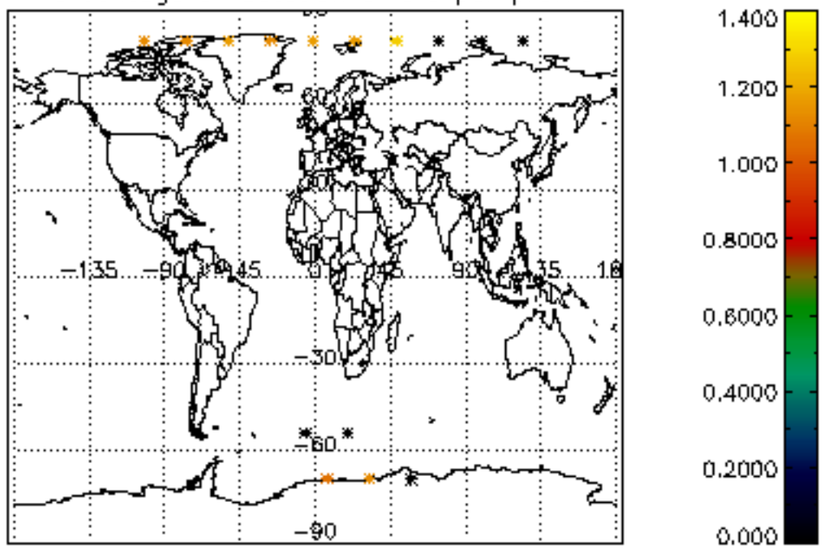

invalid
with datation errors
with non-converged ray path
containing saturated samples
where cosmic rays have been detected
where star falls outside central band
where problem occurred during full transm
% of measurements per product:
value (%)
0
5
10
15
20
25
30
35
40
08:00.00 03/04/2012
10:00.00 03/04/2012
12:00.00 03/04/2012
14:00.00 03/04/2012
16:00.00 03/04/2012
18:00.00 03/04/2012
20:00.00 03/04/2012
22:00.00 03/04/2012
00:00.00 04/04/2012
Time


invalid
with datation errors
with non-converged ray path
containing saturated samples
where cosmic rays have been detected
where star falls outside central band
where problem occurred during full transm
% of measurements per product:
value (%)
0
2
4
6
8
10
12
14:00.00 03/04/2012
16:00.00 03/04/2012
18:00.00 03/04/2012
20:00.00 03/04/2012
22:00.00 03/04/2012
00:00.00 04/04/2012
Time

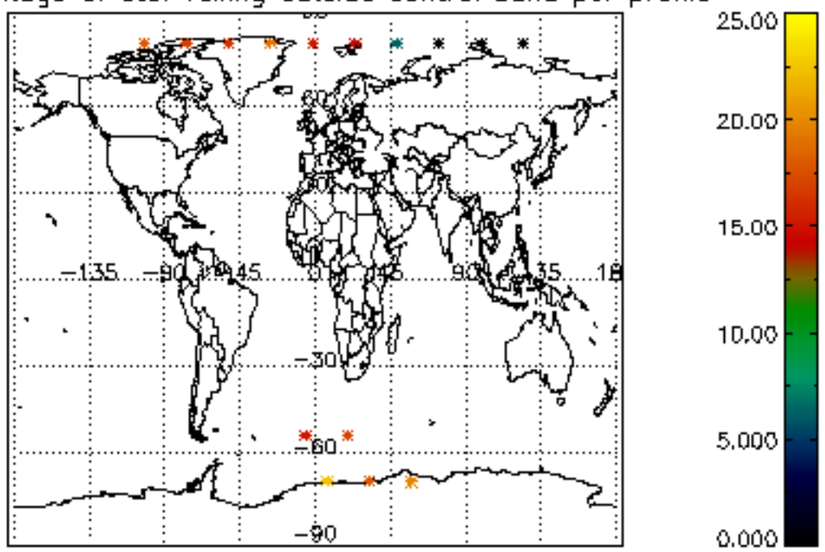
Percentage of cosmic ray hits per profile



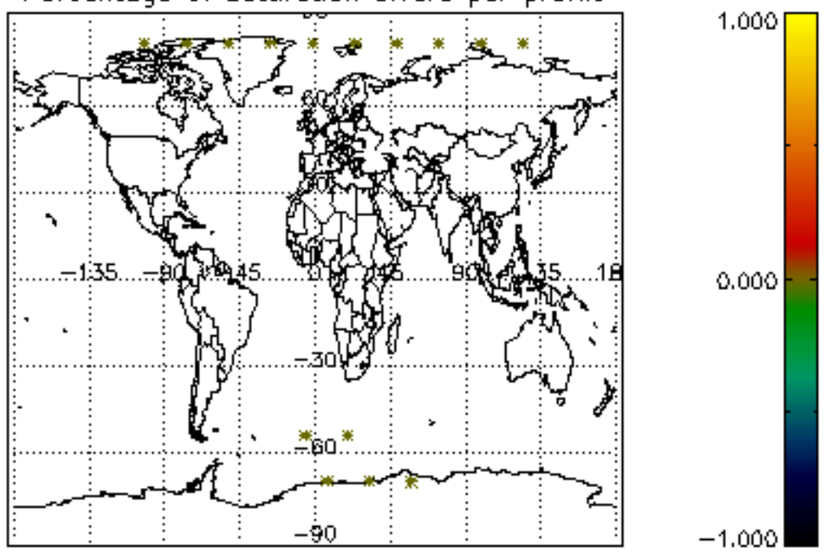
Percentage of datation errors per profile



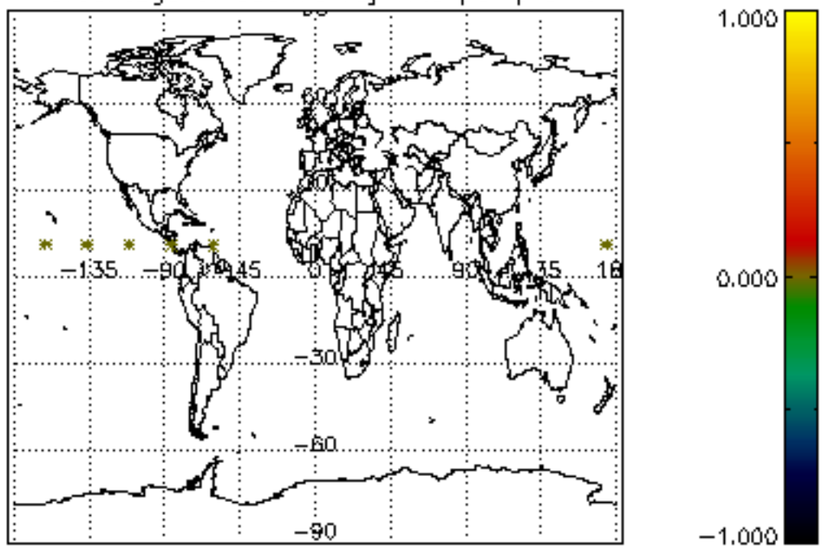
Percentage of star falling outside central band per profile



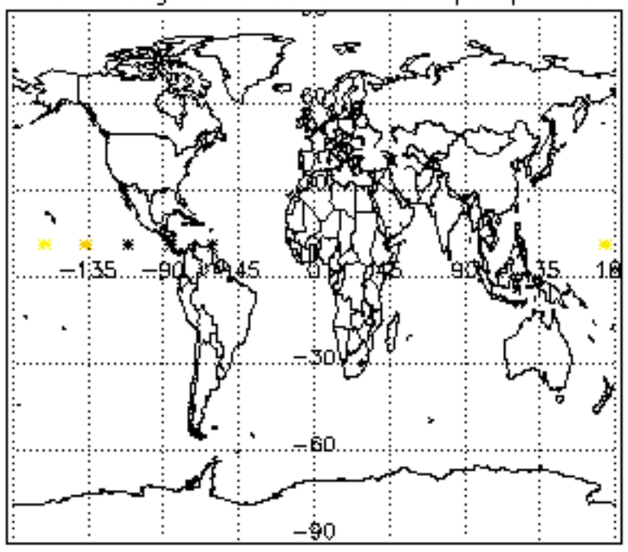
Percentage of saturation errors per profile

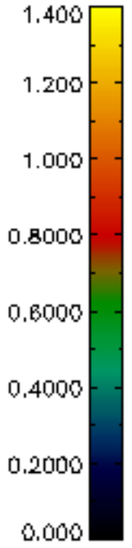


Percentage of cosmic ray hits per profile

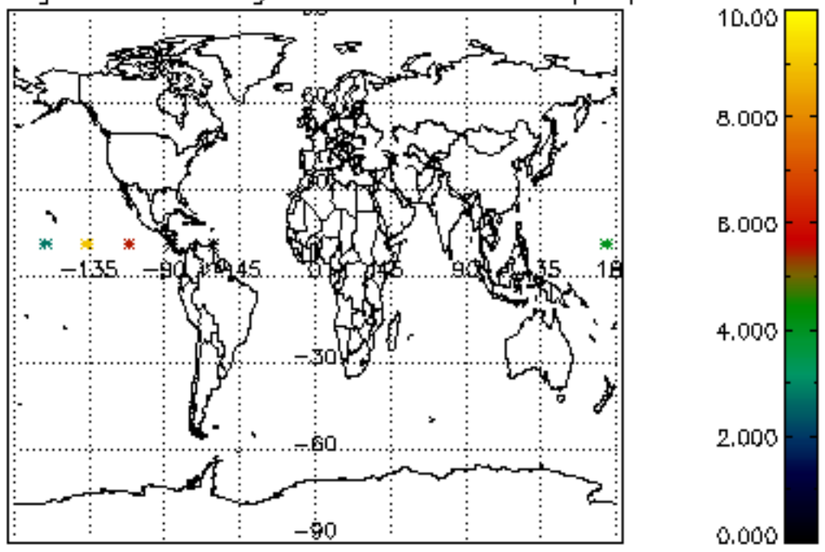


Percentage of datation errors per profile

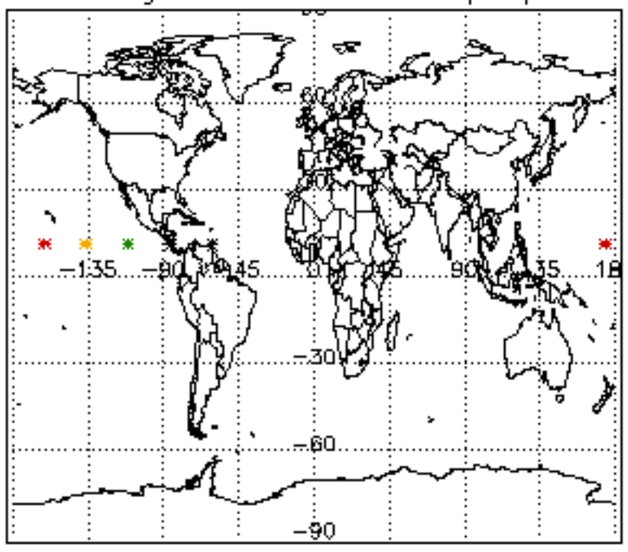


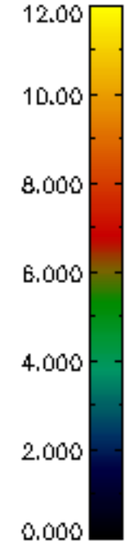


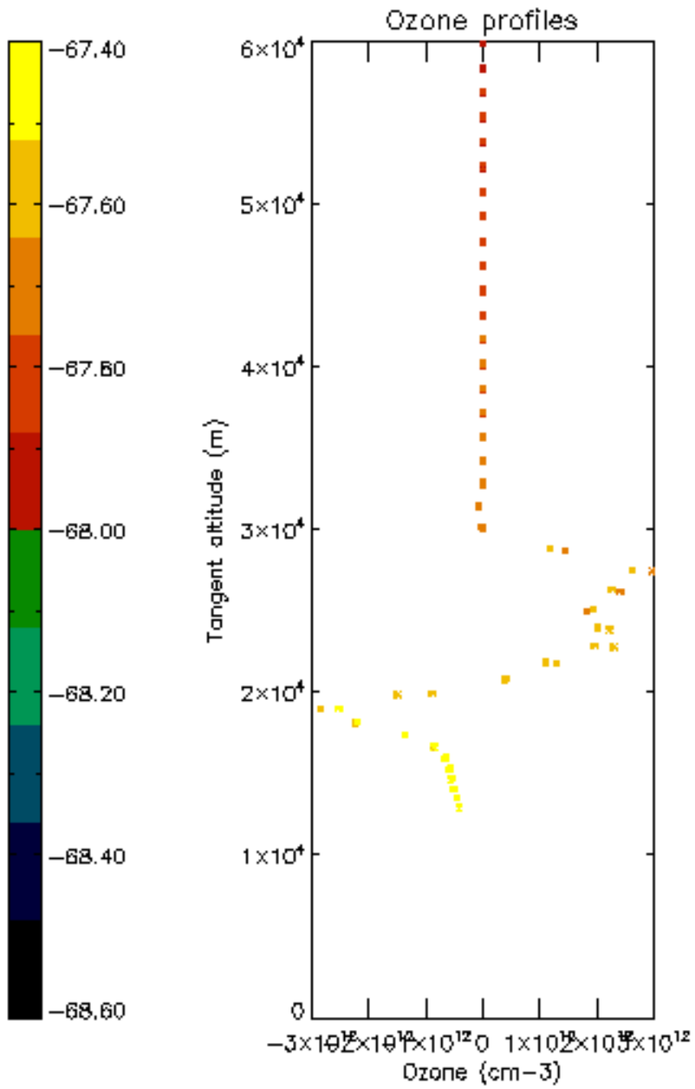
Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

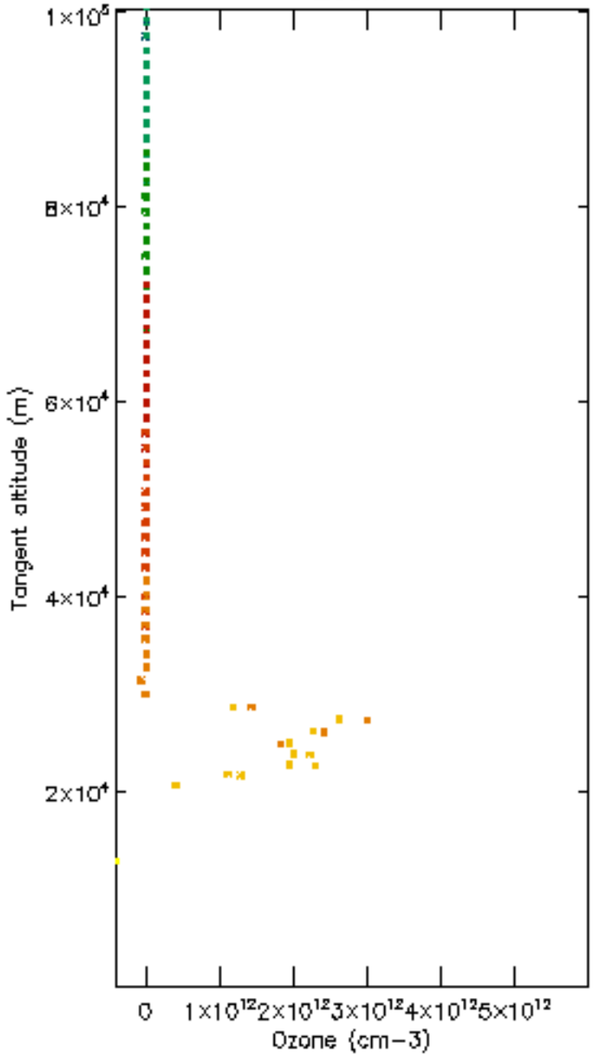




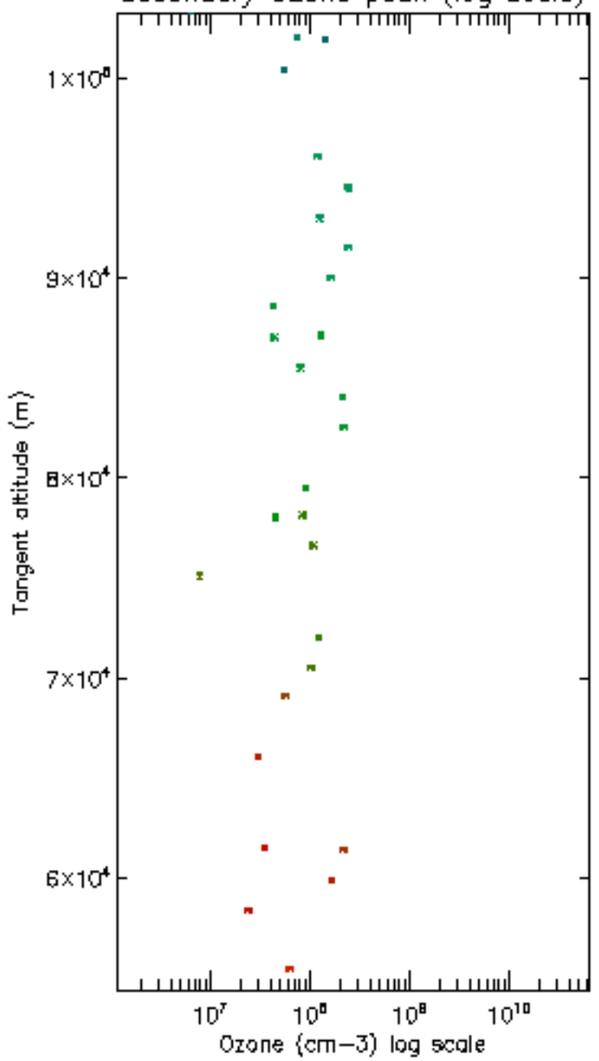


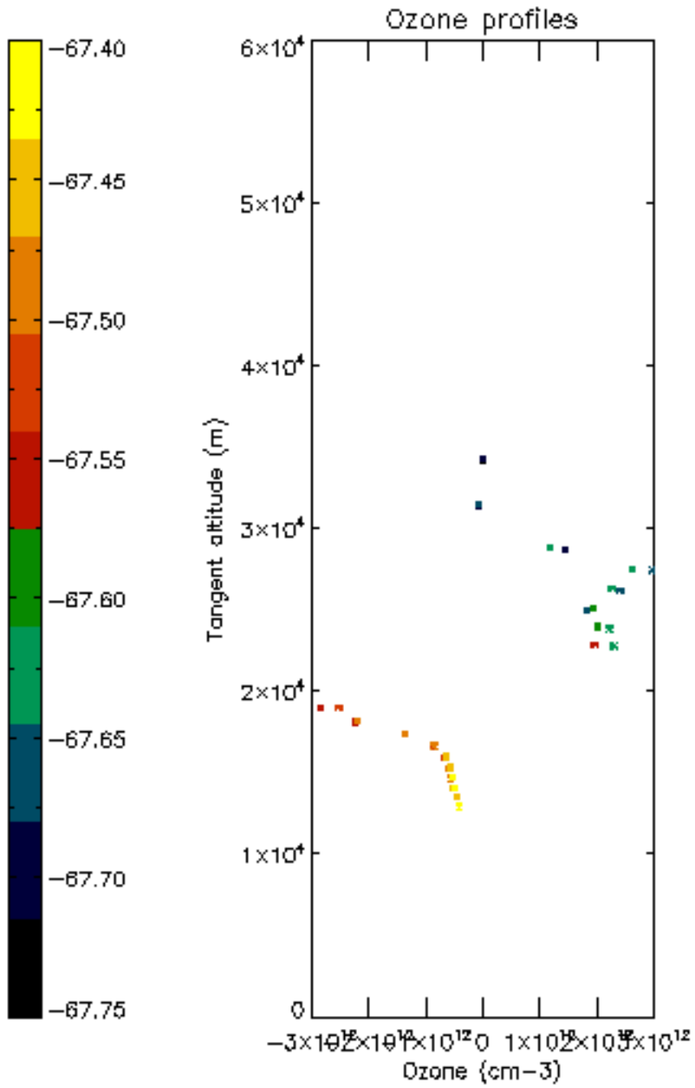
Ozone profiles

Zoom

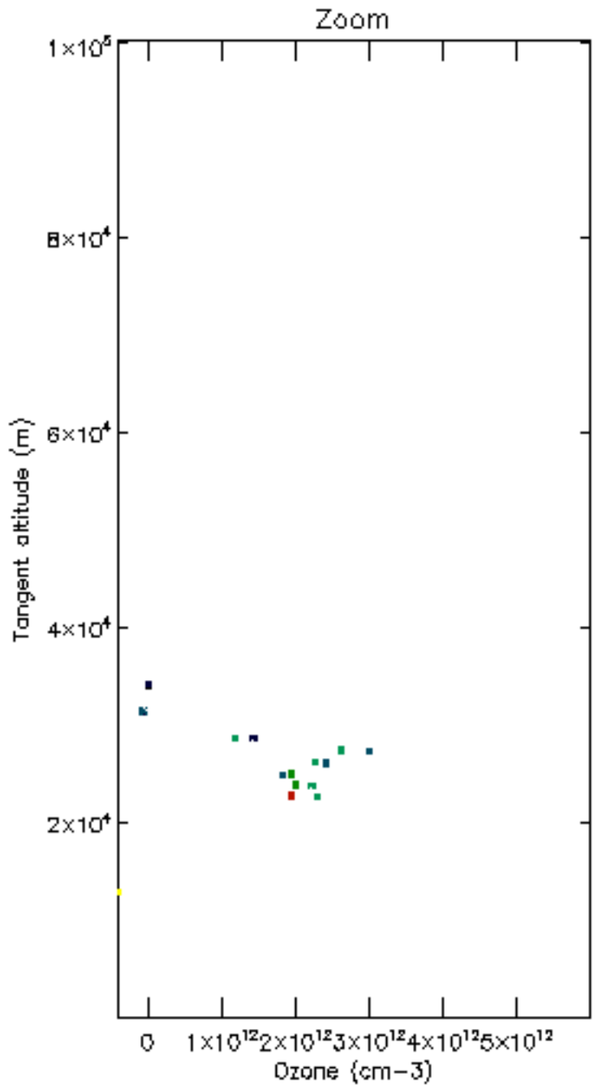


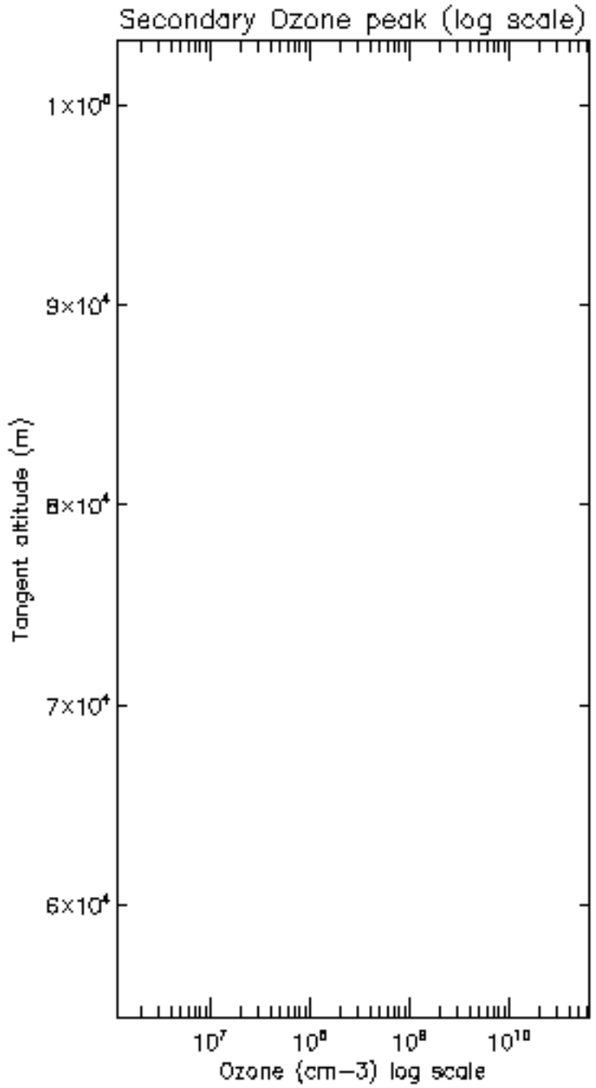
Secondary Ozone peak (log scale)

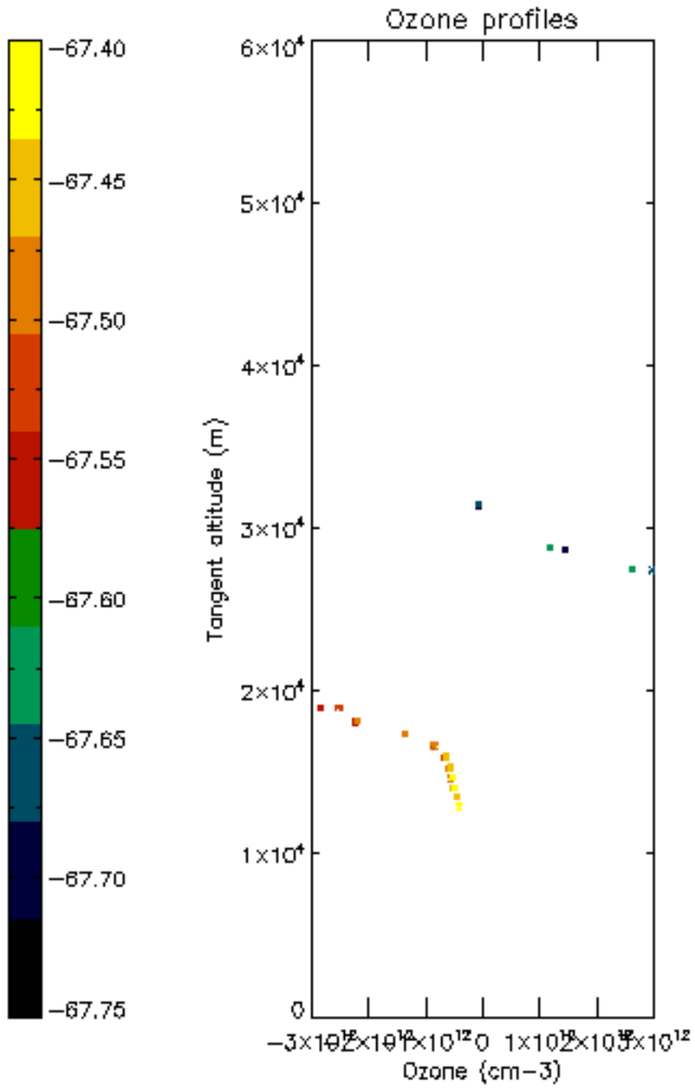



−67.40
−67.45
−67.50
−67.55
−67.60
−67.65
−67.70
−67.75

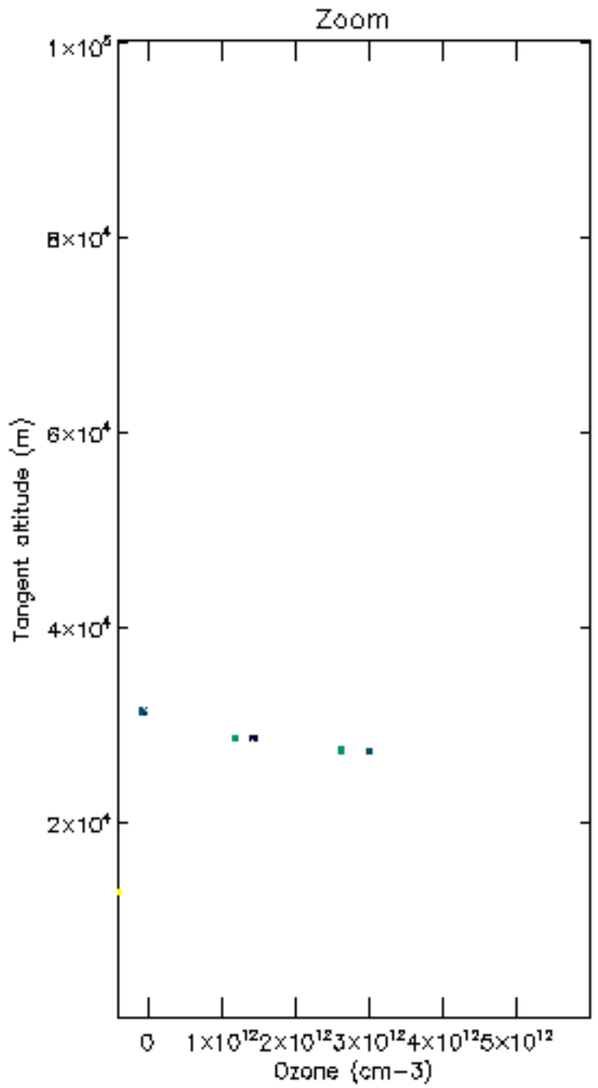
Ozone profiles
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
Tangent altitude (m)
−3×10¹²
−2×10¹²
−1×10¹²
0
1×10¹²
2×10¹²
3×10¹²
Ozone (cm−3)

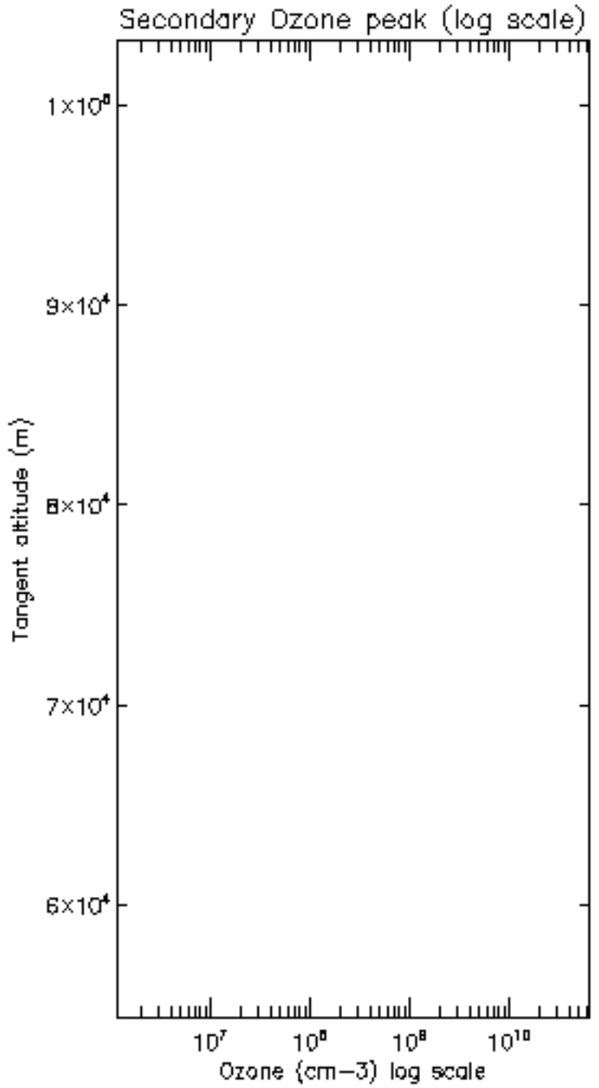

Zoom
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
Tangent altitude (m)
0
1×10¹²
2×10¹²
3×10¹²
4×10¹²
5×10¹²
Ozone (cm−3)

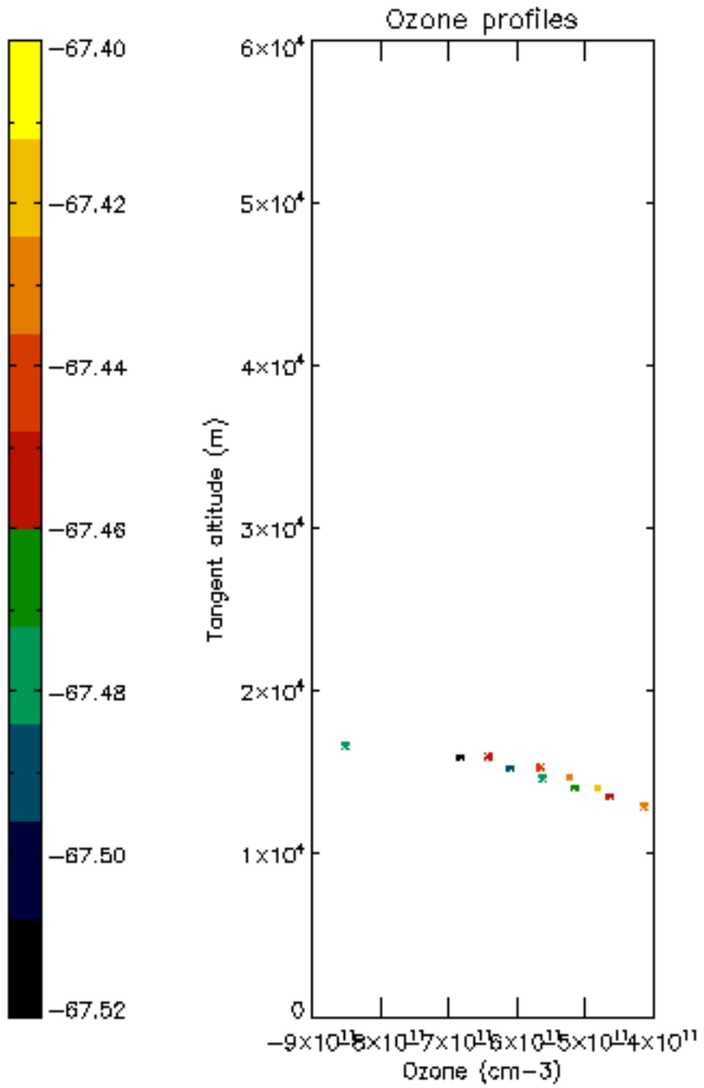

Secondary Ozone peak (log scale)
1×10⁵
9×10⁴
8×10⁴
7×10⁴
6×10⁴
Tangent altitude (m)
10⁷
10⁸
10⁹
10¹⁰
Ozone (cm−3) log scale

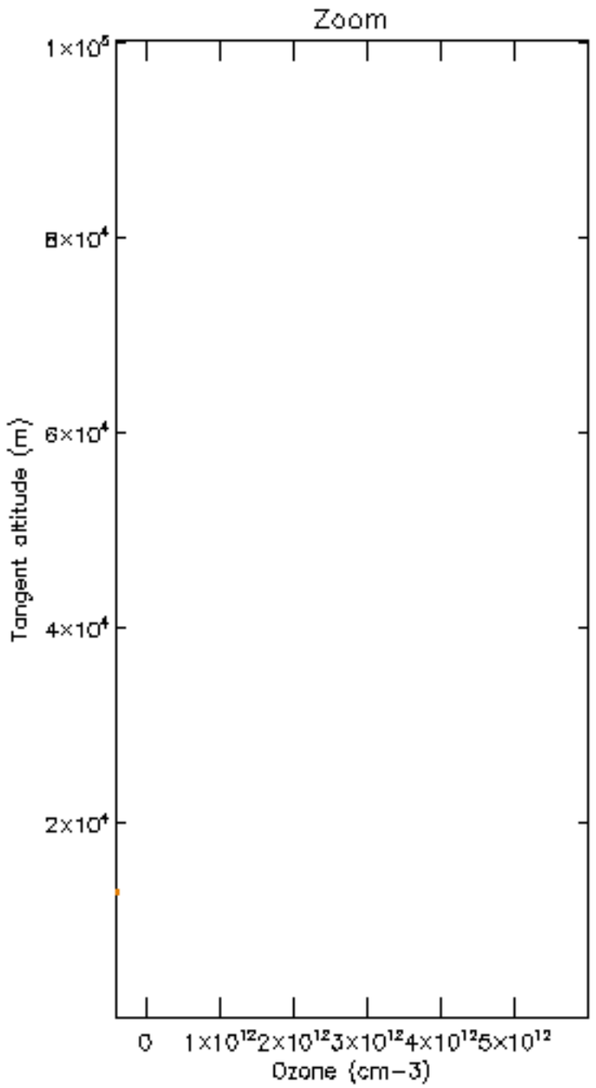

−67.40
−67.45
−67.50
−67.55
−67.60
−67.65
−67.70
−67.75

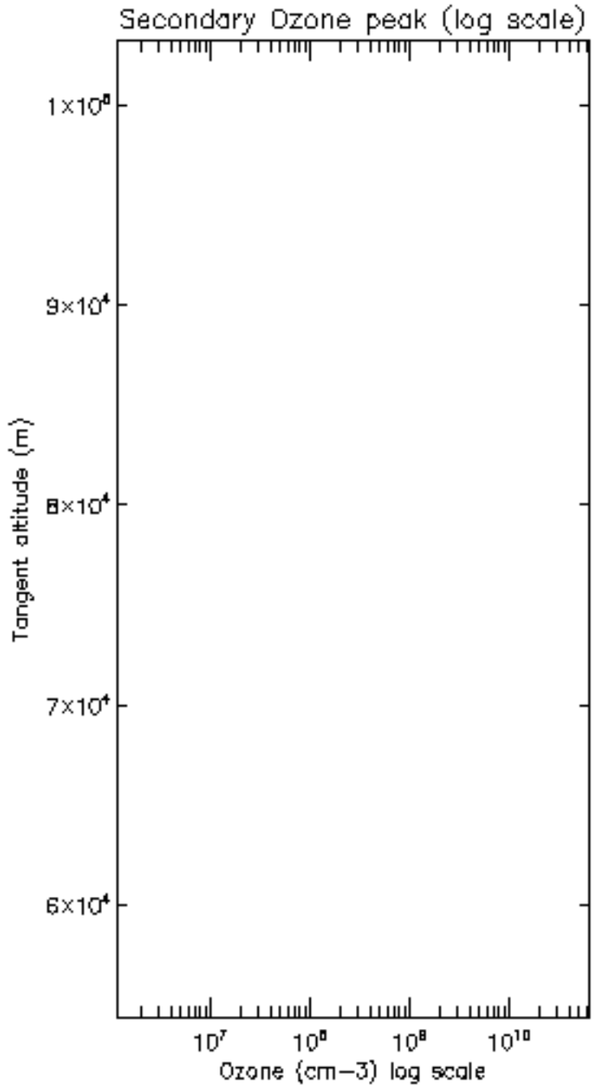
Ozone profiles
Tangent altitude (m)
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
−3×10¹²
−2×10¹²
−1×10¹²
0
1×10¹²
2×10¹²
3×10¹²
Ozone (cm−3)

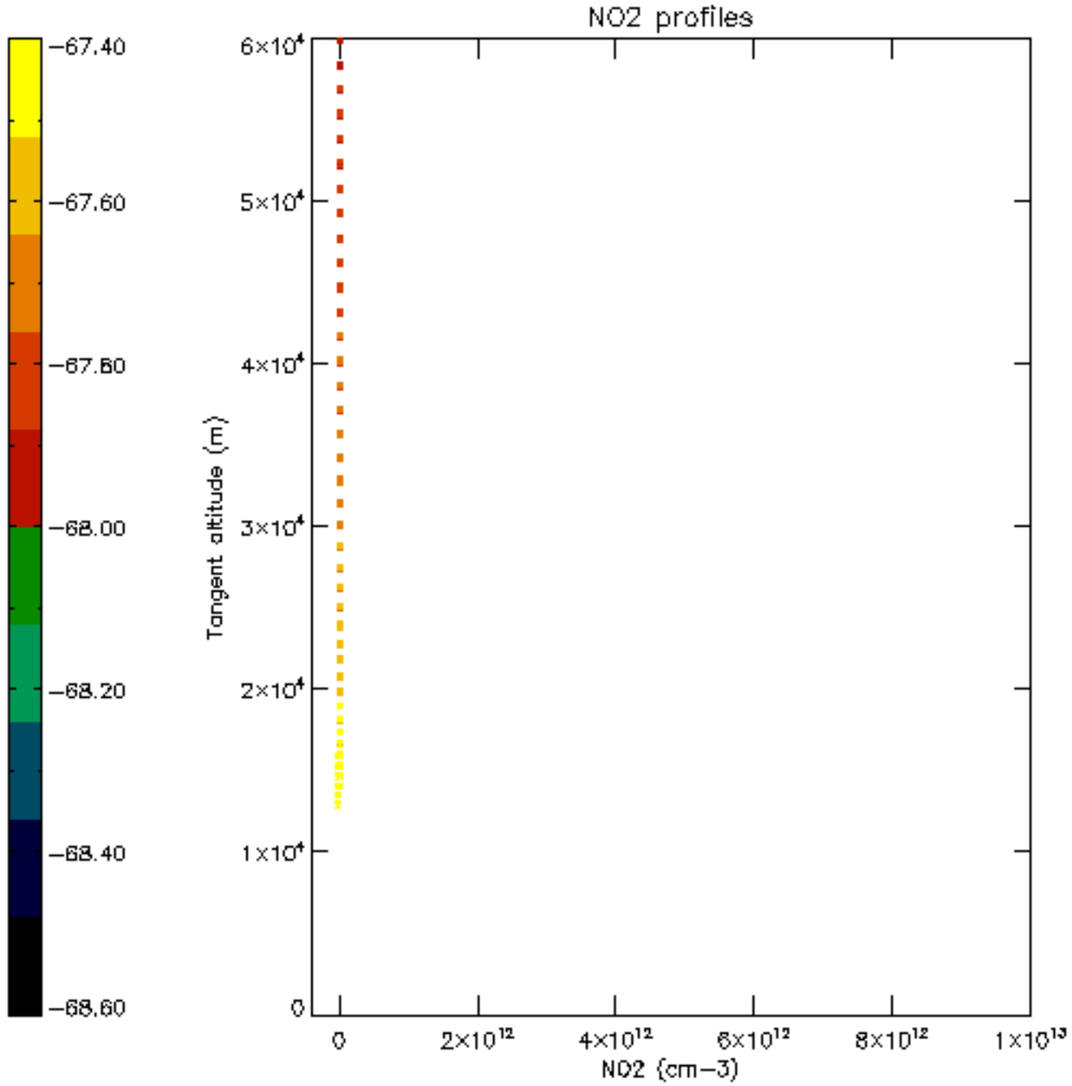

Zoom
Tangent altitude (m)
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
0
1×10¹²
2×10¹²
3×10¹²
4×10¹²
5×10¹²
Ozone (cm−3)

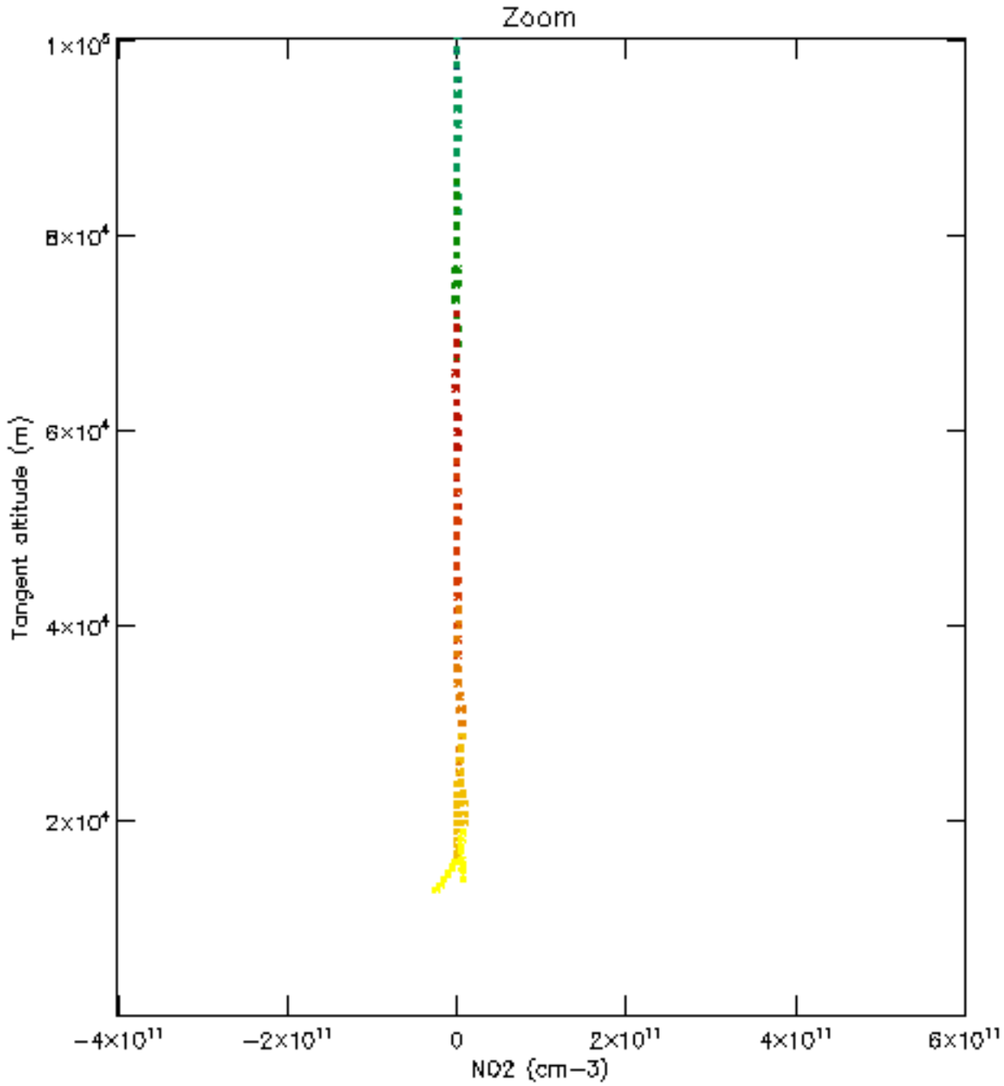

Secondary Ozone peak (log scale)
Tangent altitude (m)
1×10⁵
9×10⁴
8×10⁴
7×10⁴
6×10⁴
10⁷
10⁸
10⁹
10¹⁰
Ozone (cm−3) log scale

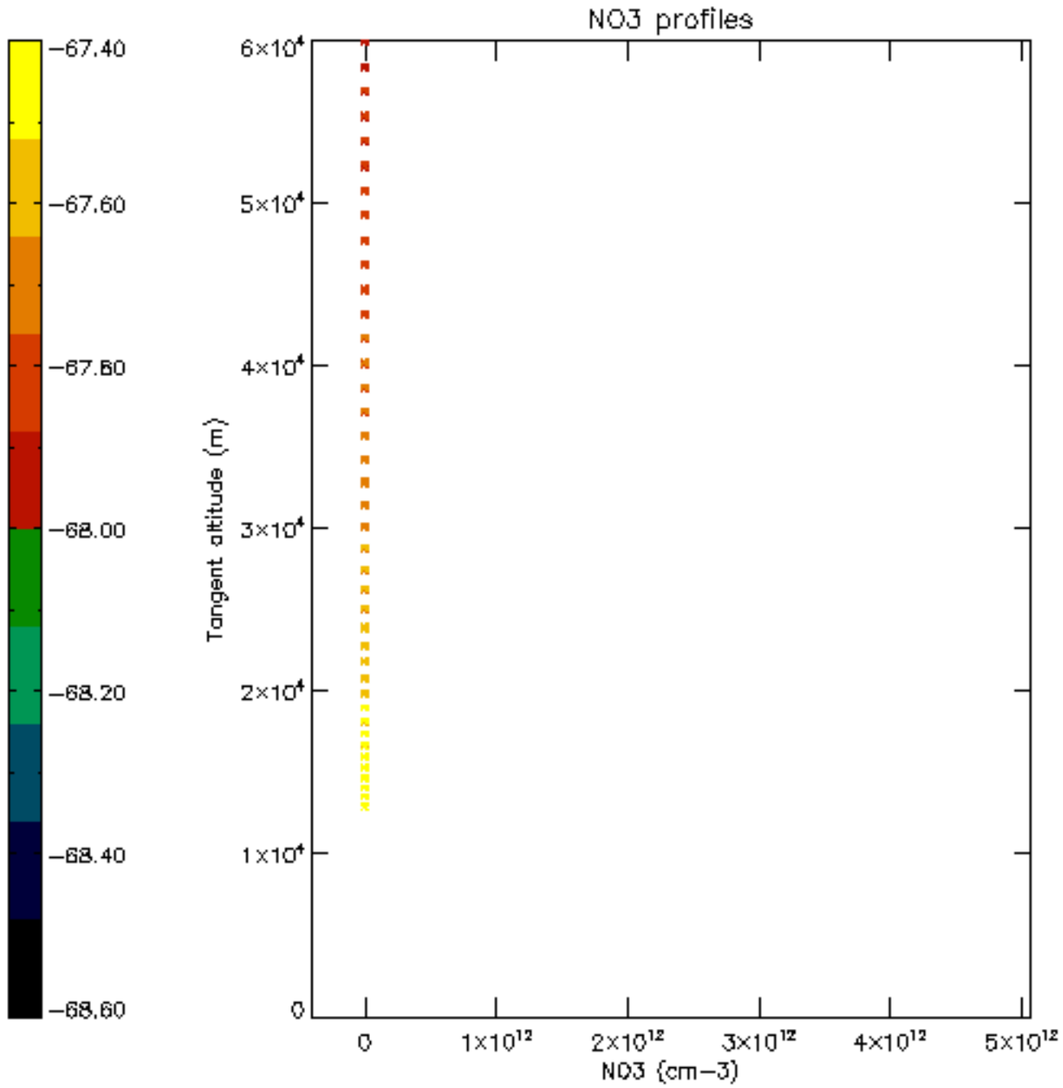

−67.40
−67.42
−67.44
−67.46
−67.48
−67.50
−67.52
Ozone profiles
Tangent altitude (m)
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
−9×10¹¹ −8×10¹¹ −7×10¹¹ −6×10¹¹ −5×10¹¹ −4×10¹¹
Ozone (cm−3)

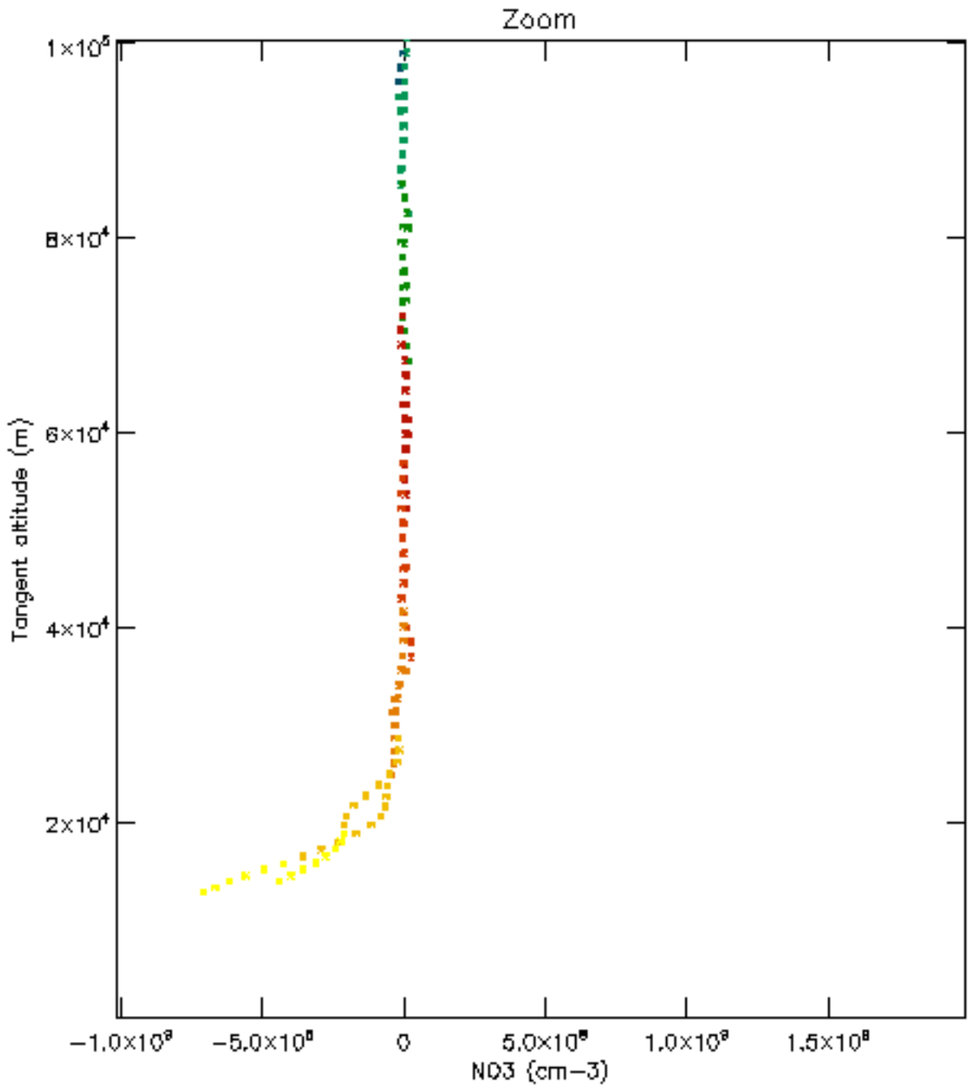

Zoom
Tangent altitude (m)
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
0
1×10¹² 2×10¹² 3×10¹² 4×10¹² 5×10¹²
Ozone (cm−3)


Secondary Ozone peak (log scale)
Tangent altitude (m)
1×10⁵
9×10⁴
8×10⁴
7×10⁴
6×10⁴
10⁷ 10⁸ 10⁹ 10¹⁰
Ozone (cm−3) log scale


NO2 profiles
−67.40
−67.60
−67.80
−68.00
−68.20
−68.40
−68.60
Tangent altitude (m)
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
0
2×10¹²
4×10¹²
6×10¹²
8×10¹²
1×10¹³
NO2 (cm−3)


Zoom
Tangent altitude (m)
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
−4×10¹¹
−2×10¹¹
0
2×10¹¹
4×10¹¹
6×10¹¹
NO2 (cm−3)


NO3 profiles
−67.40
−67.60
−67.80
−68.00
−68.20
−68.40
−68.60
Tangent altitude (m)
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
0
1×10¹²
2×10¹²
3×10¹²
4×10¹²
5×10¹²
NO3 (cm−3)


Zoom
Tangent altitude (m)
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
−1.0×10⁹
−5.0×10⁸
0
5.0×10⁸
1.0×10⁹
1.5×10⁹
NO3 (cm−3)