GOMOS Level 2 Daily Report

SUMMARY

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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 14:04:15
Data source version	GOMOS/6.01
Start time of products	11-01-2012 (11JAN2012 00:00:00)
Stop time of products	12-01-2012 (12JAN2012 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	18
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

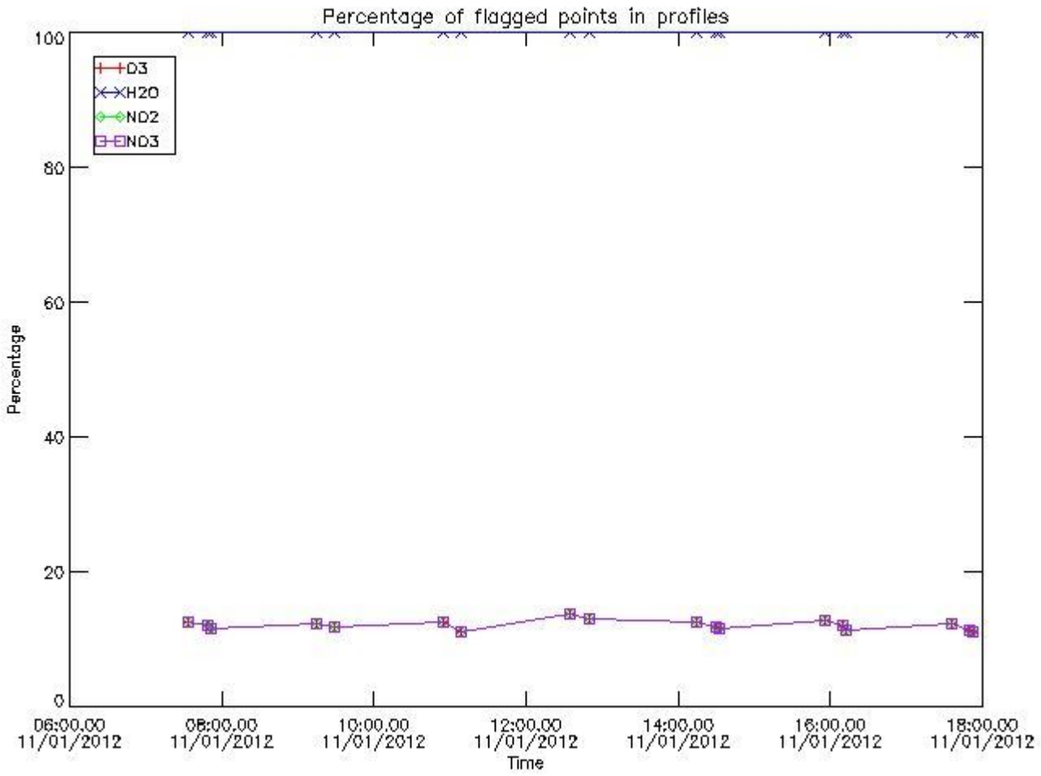
!Warning: No products without errors in BRIGHT limb contitions found

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20120111_073405_000000413110_00294_51601_9451.N1	11-JAN-2012 07:34:05	Dark	41.000	77	Eps Cen	2.3030	28000.	82	51601	No
2	GOM_NL__2PRFIN20120111_074849_000000433110_00294_51601_9452.N1	11-JAN-2012 07:48:49	Dark	42.500	34	Gam2Vel	1.7930	23000.	85	51601	No
3	GOM_NL__2PRFIN20120111_075058_000000443110_00294_51601_9453.N1	11-JAN-2012 07:50:58	Dark	43.500	70	Zet Pup	2.2460	39000.	87	51601	No
4	GOM_NL__2PRFIN20120111_091419_000000423110_00295_51602_9489.N1	11-JAN-2012 09:14:19	Dark	41.500	77	Eps Cen	2.3030	28000.	83	51602	No
5	GOM_NL__2PRFIN20120111_092904_000000433110_00295_51602_9490.N1	11-JAN-2012 09:29:04	Dark	43.000	34	Gam2Vel	1.7930	23000.	86	51602	No
6	GOM_NL__2PRFIN20120111_105434_000000413110_00296_51603_9538.N1	11-JAN-2012 10:54:34	Dark	41.000	77	Eps Cen	2.3030	28000.	82	51603	No
7	GOM_NL__2PRFIN20120111_110918_000000463110_00296_51603_9539.N1	11-JAN-2012 11:09:18	Dark	46.000	34	Gam2Vel	1.7930	23000.	92	51603	No
8	GOM_NL__2PRFIN20120111_123449_000000413110_00297_51604_9563.N1	11-JAN-2012 12:34:49	Dark	40.500	77	Eps Cen	2.3030	28000.	81	51604	No
9	GOM_NL__2PRFIN20120111_124932_000000433110_00297_51604_9564.N1	11-JAN-2012 12:49:32	Dark	43.000	34	Gam2Vel	1.7930	23000.	86	51604	No
10	GOM_NL__2PRFIN20120111_141503_000000413110_00298_51605_9595.N1	11-JAN-2012 14:15:03	Dark	40.500	77	Eps Cen	2.3030	28000.	81	51605	No
11	GOM_NL__2PRFIN20120111_142947_000000443110_00298_51605_9596.N1	11-JAN-2012 14:29:47	Dark	43.500	34	Gam2Vel	1.7930	23000.	87	51605	No
12	GOM_NL__2PRFIN20120111_143156_000000443110_00298_51605_9597.N1	11-JAN-2012 14:31:56	Dark	44.000	70	Zet Pup	2.2460	39000.	88	51605	No
13	GOM_NL__2PRFIN20120111_155518_000000403110_00299_51606_9626.N1	11-JAN-2012 15:55:18	Dark	40.000	77	Eps Cen	2.3030	28000.	80	51606	No
14	GOM_NL__2PRFIN20120111_161001_000000433110_00299_51606_9627.N1	11-JAN-2012 16:10:01	Dark	42.500	34	Gam2Vel	1.7930	23000.	85	51606	No
15	GOM_NL__2PRFIN20120111_161210_000000453110_00299_51606_9628.N1	11-JAN-2012 16:12:10	Dark	44.500	70	Zet Pup	2.2460	39000.	89	51606	No
16	GOM_NL__2PRFIN20120111_173532_000000423110_00300_51607_9678.N1	11-JAN-2012 17:35:32	Dark	41.500	77	Eps Cen	2.3030	28000.	83	51607	No
17	GOM_NL__2PRFIN20120111_175015_000000453110_00300_51607_9679.N1	11-JAN-2012 17:50:15	Dark	45.000	34	Gam2Vel	1.7930	23000.	90	51607	No
18	GOM_NL__2PRFIN20120111_175224_000000463110_00300_51607_9680.N1	11-JAN-2012 17:52:24	Dark	45.500	70	Zet Pup	2.2460	39000.	91	51607	No

3. Quality information per product

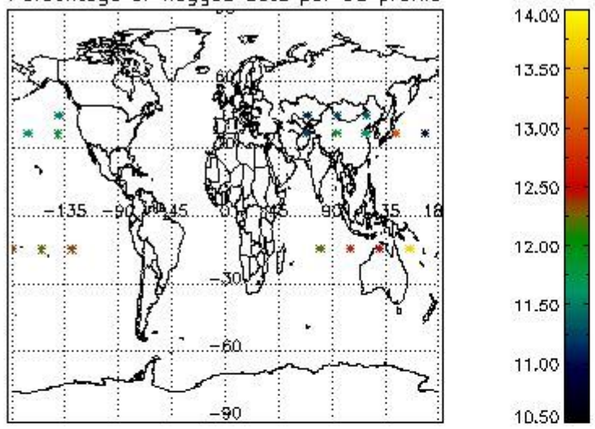
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

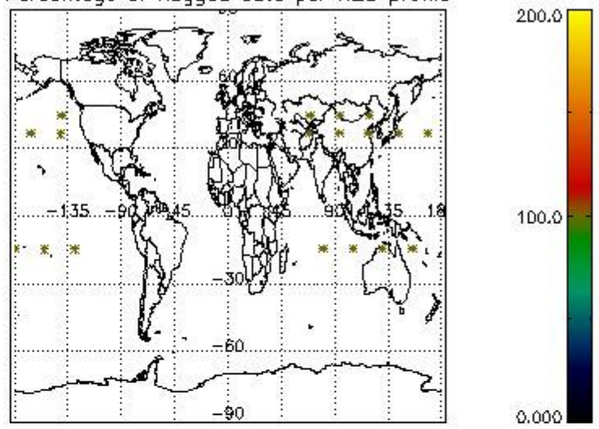


3.2 Plot quality information per product (world map)

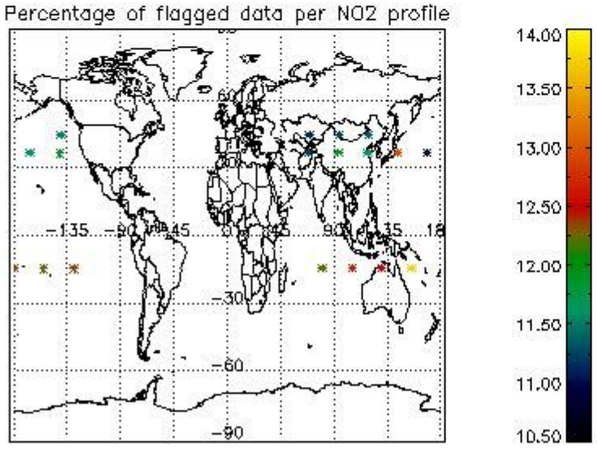
Percentage of flagged data per O3 profile



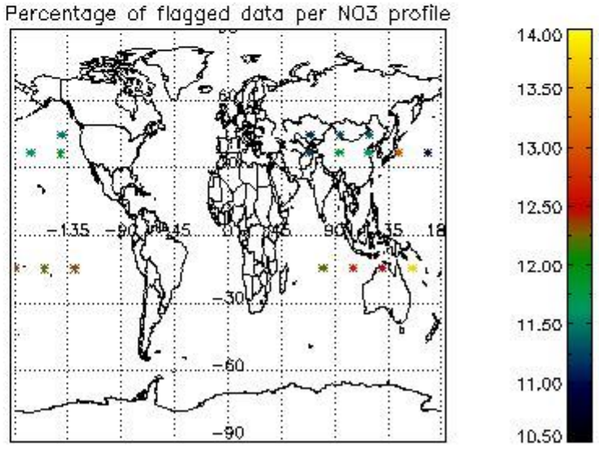
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

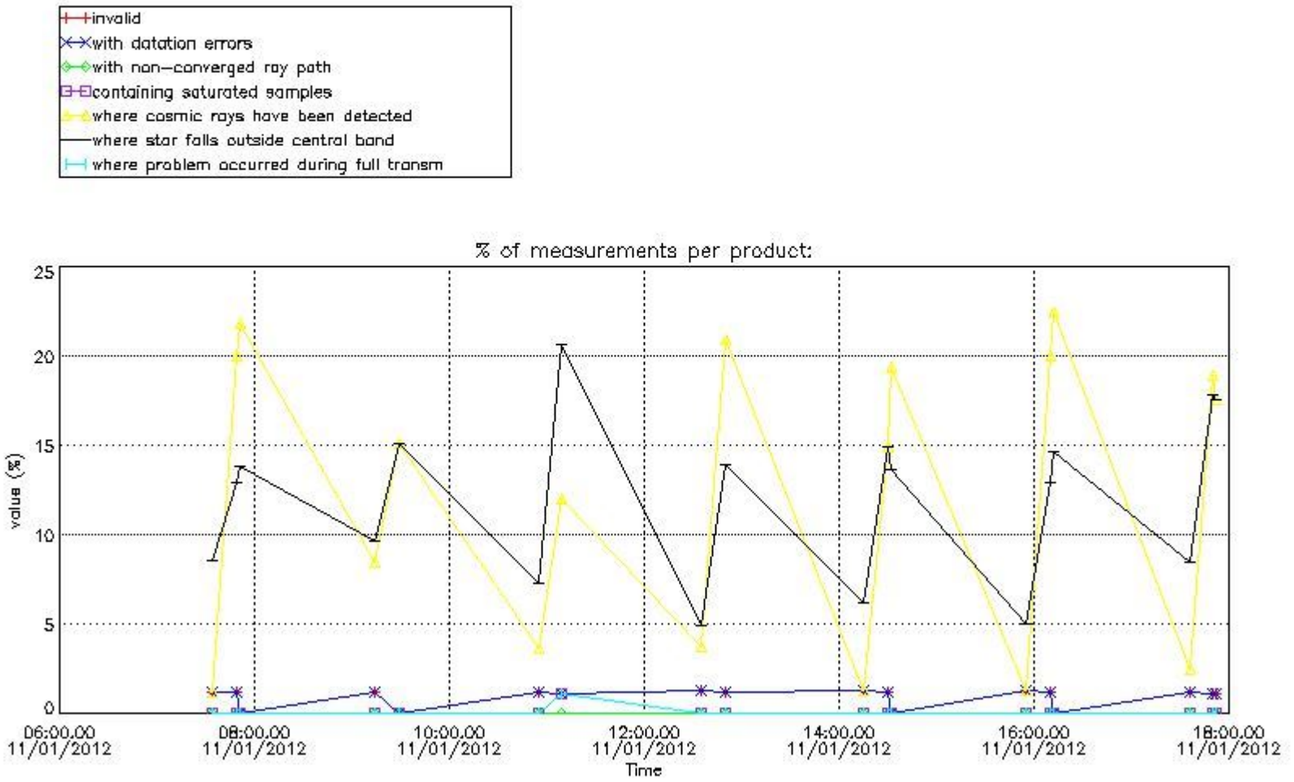


4. Level 1 quality information per product

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

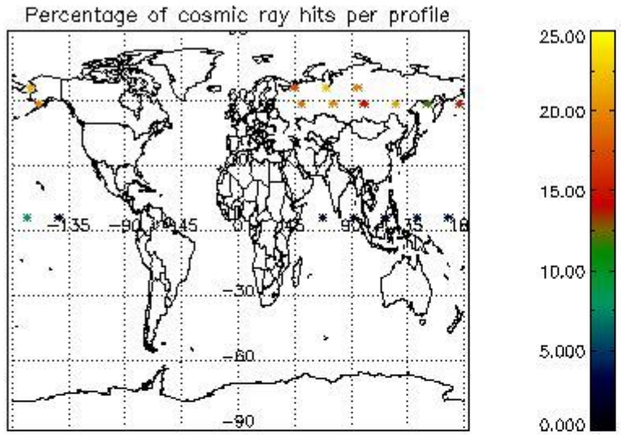


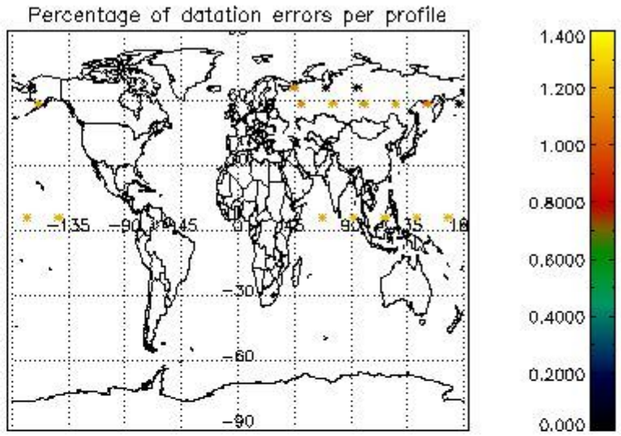
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

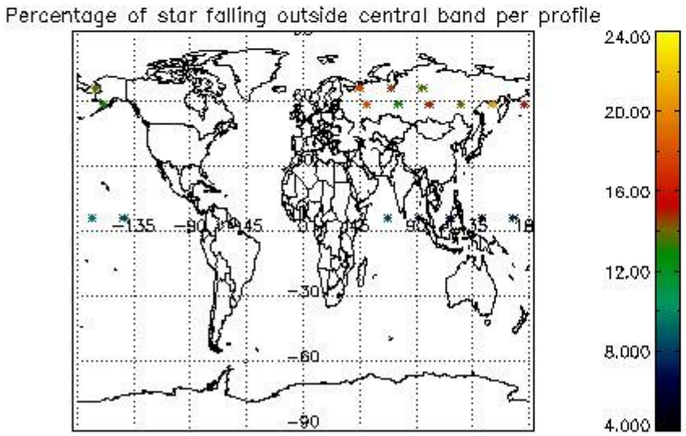
!Warning: No products without errors in descending found

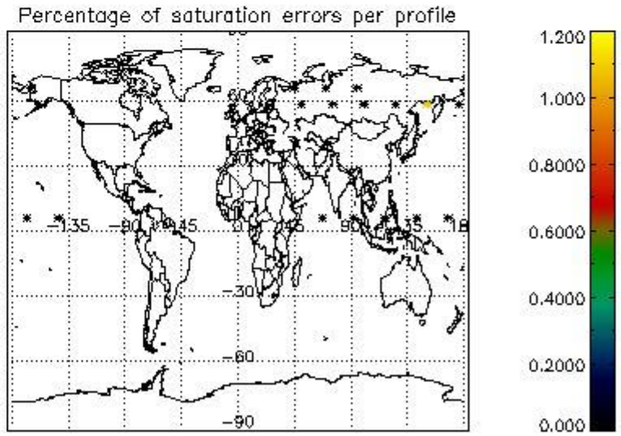
4.2 Plot quality information per product comming from level 1b processing (world map)

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

!Warning: No products without errors in descending found

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:

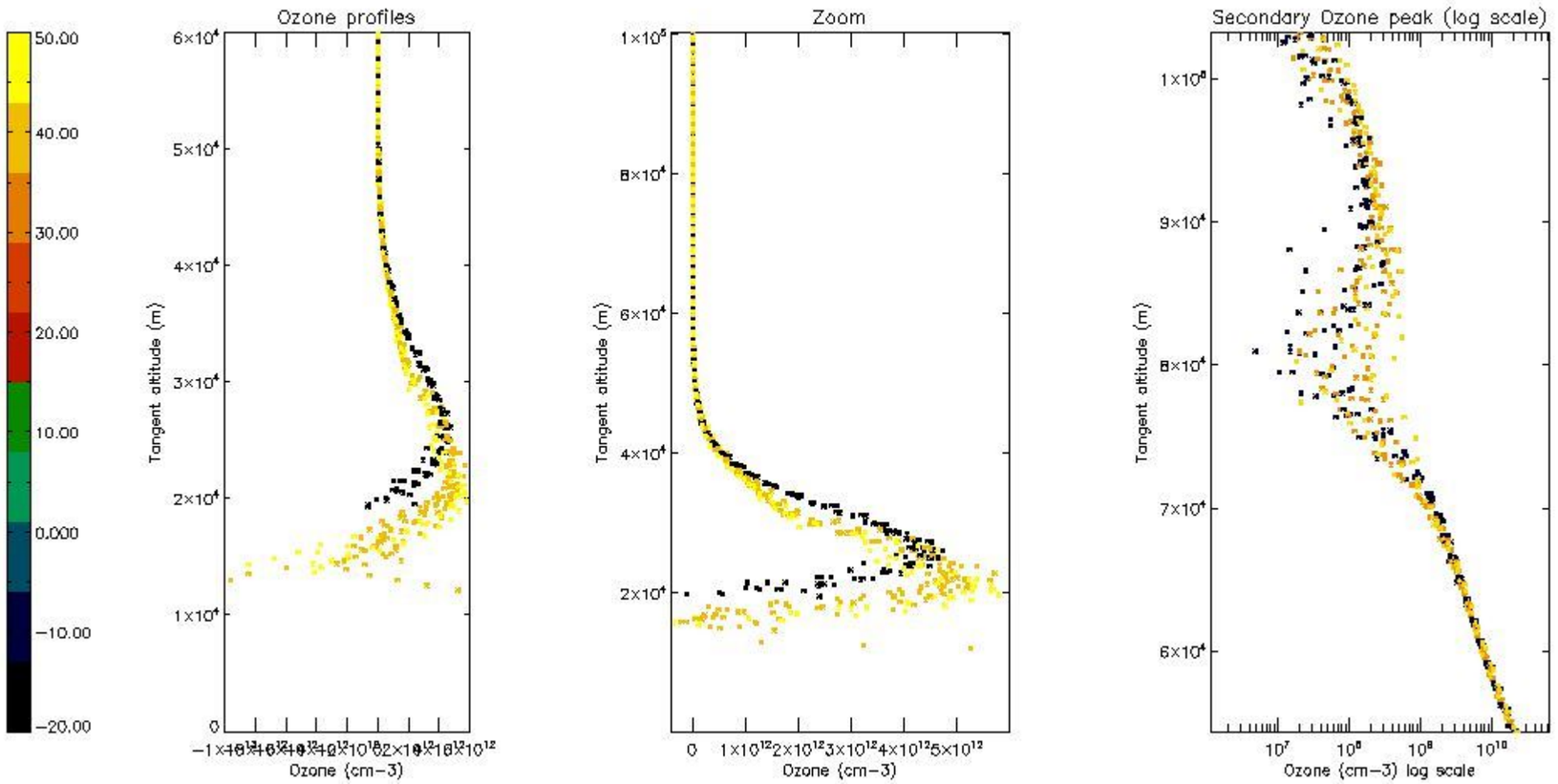
- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
    - Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

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	100
STD < 20	66
STD < 10	55
STD < 5	44

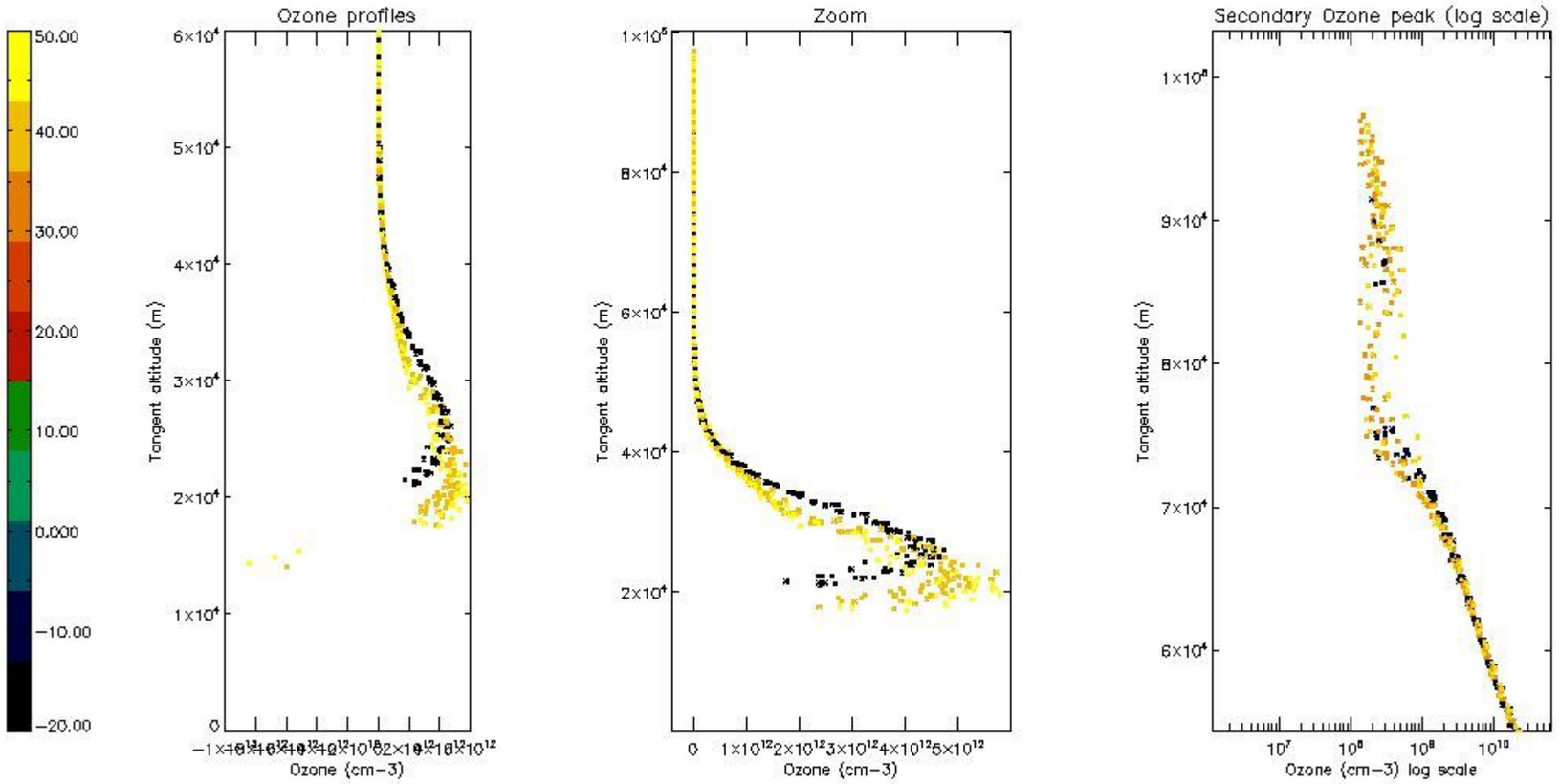
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



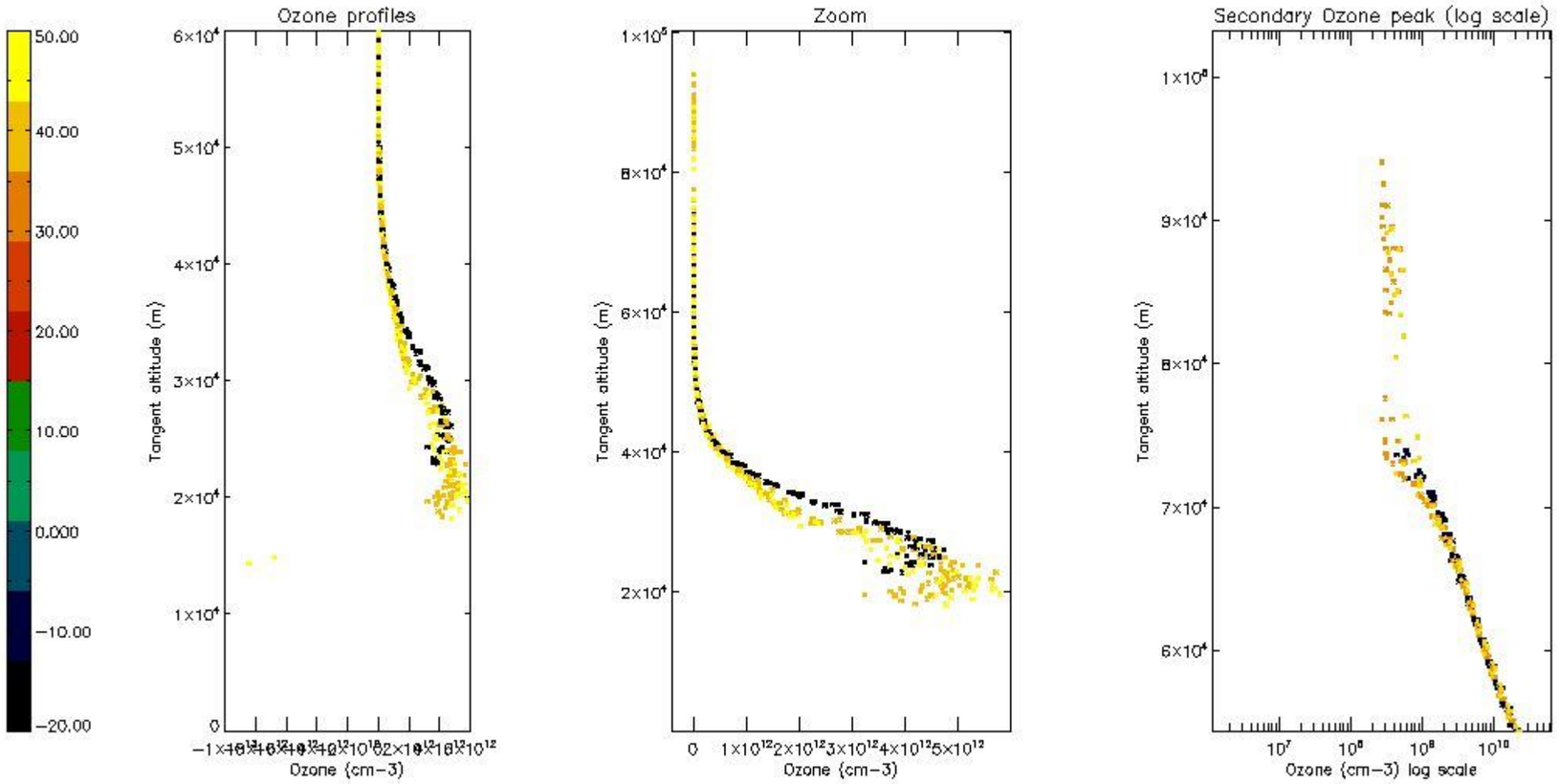
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



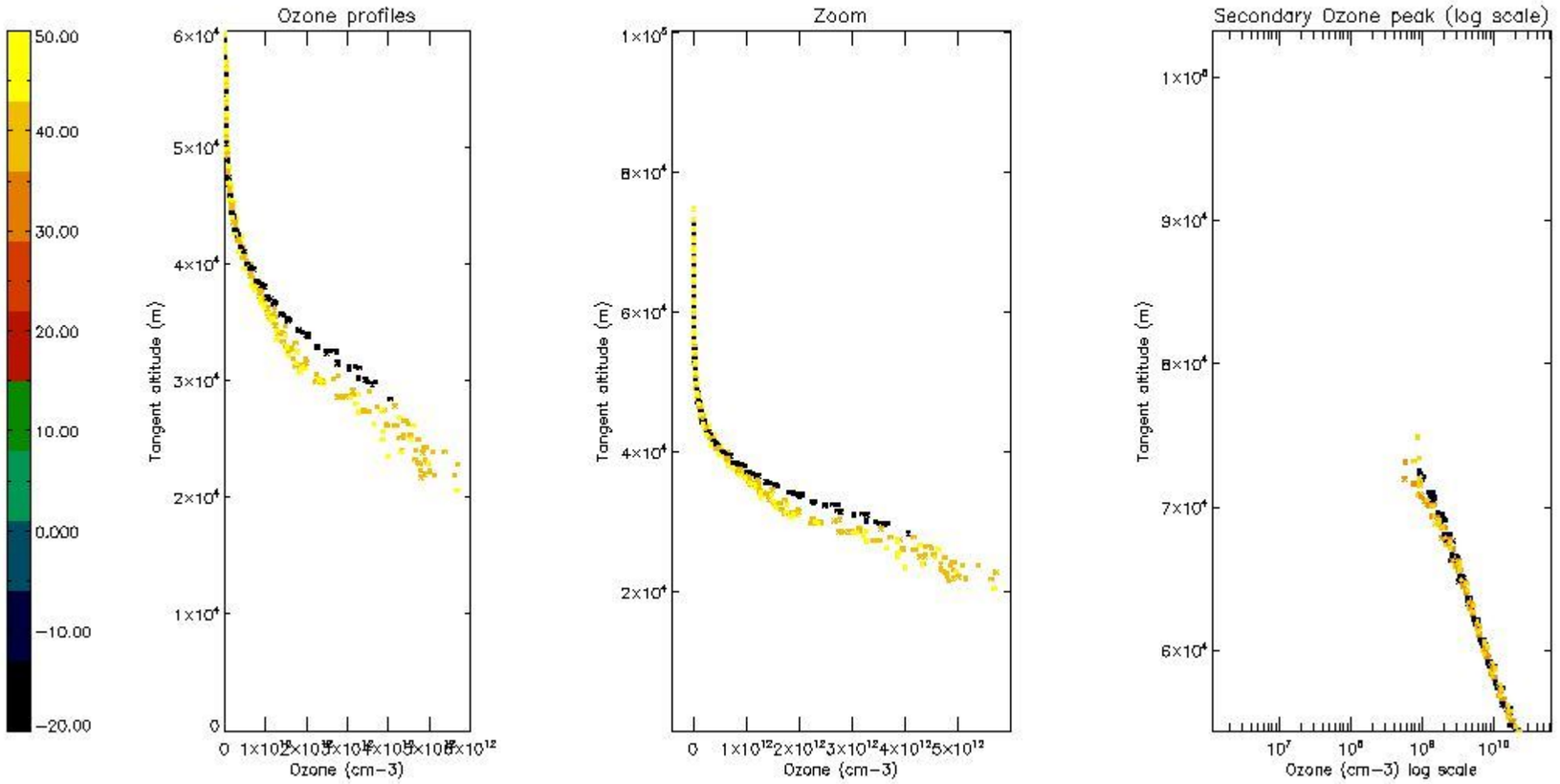
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



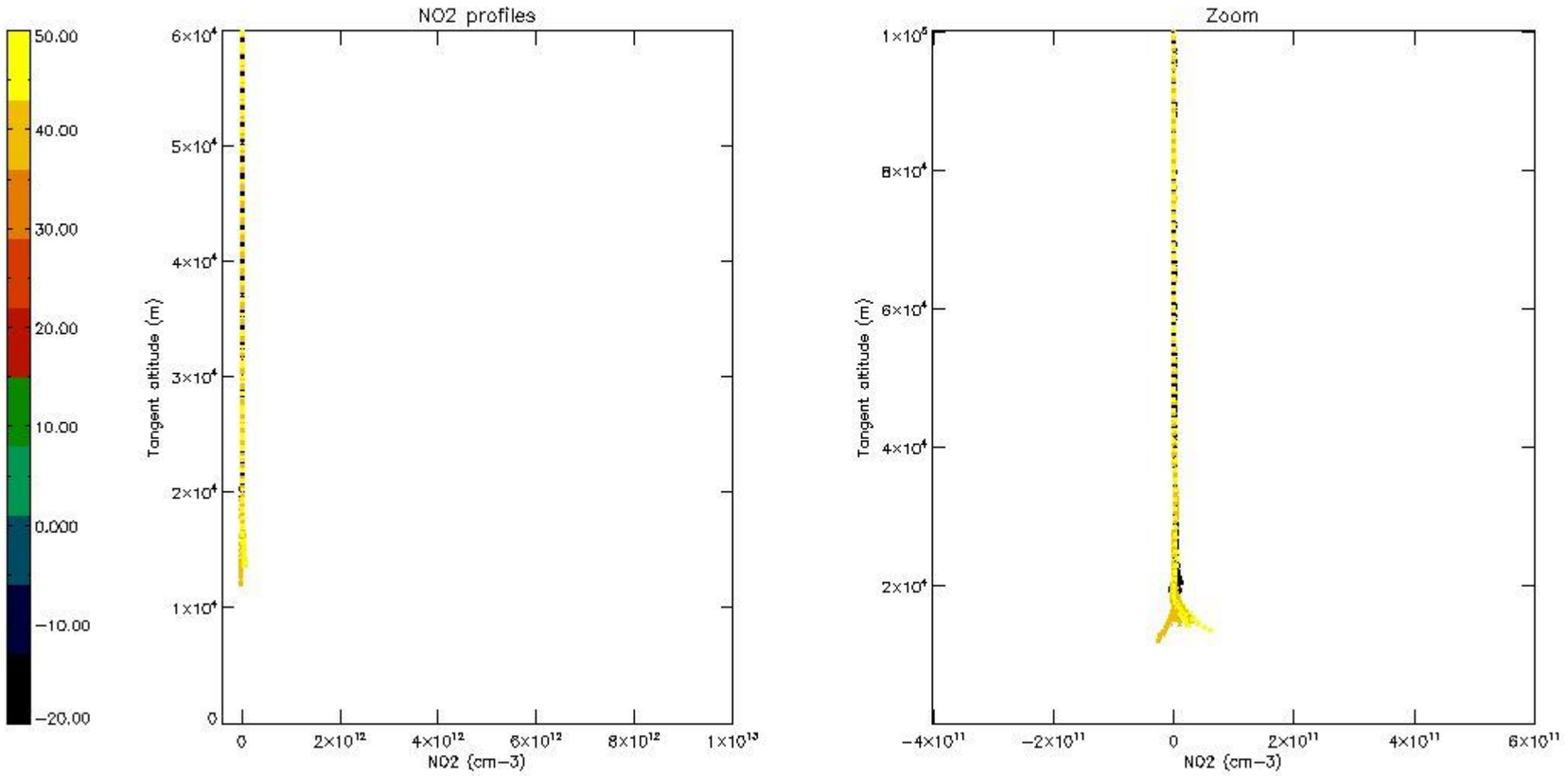
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



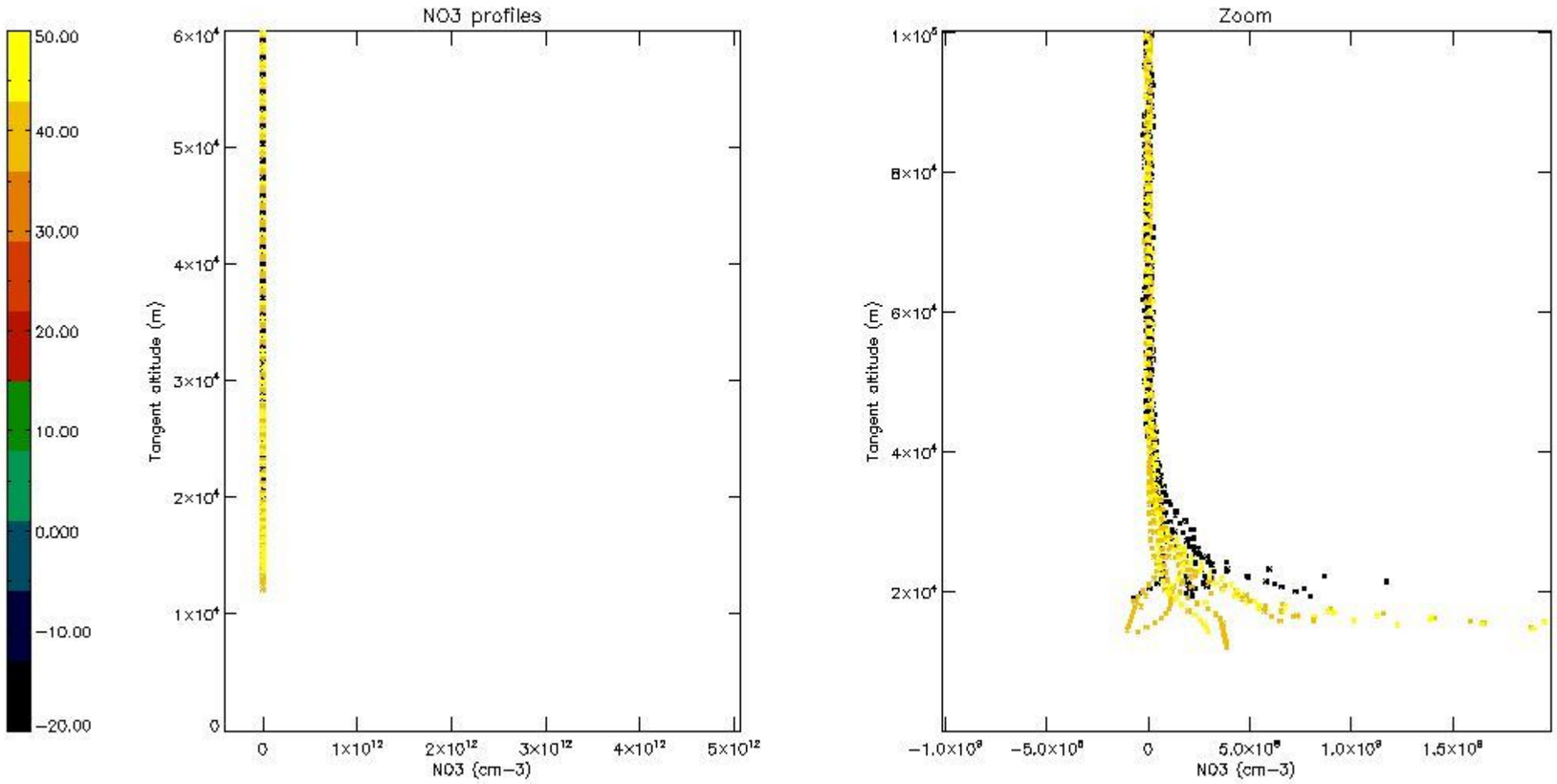
5.6 Plot NO2 profiles for all STD (dark without errors)

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	11-JAN-2012 07:34:05
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	11-JAN-2012 07:34:05
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	11-JAN-2012 07:34:05

GOMOS Level 2 Daily Report

SUMMARY

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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 14:04:15
Data source version	GOMOS/6.01
Start time of products	11-01-2012 (11JAN2012 00:00:00)
Stop time of products	12-01-2012 (12JAN2012 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	18
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

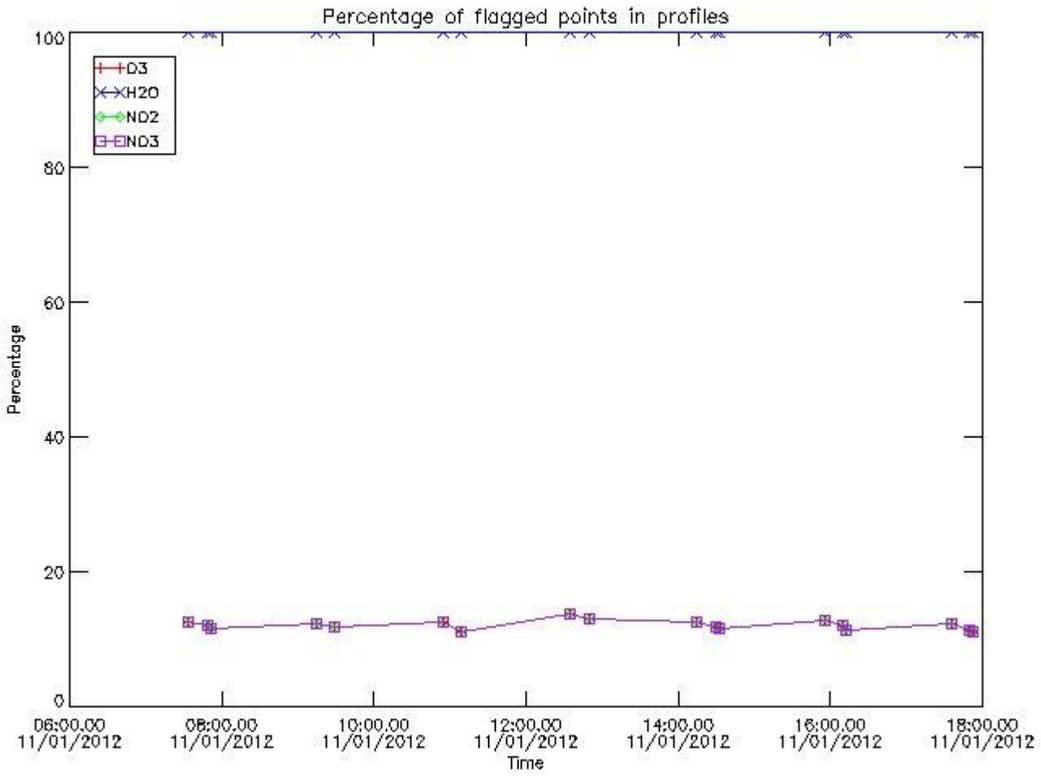
!Warning: No products without errors in BRIGHT limb contitions found

Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20120111_073405_000000413110_00294_51601_9451.N1	11-JAN-2012 07:34:05	Dark	41.000	77	Eps Cen	2.3030	28000.	82	51601	No
2	GOM_NL__2PRFIN20120111_074849_000000433110_00294_51601_9452.N1	11-JAN-2012 07:48:49	Dark	42.500	34	Gam2Vel	1.7930	23000.	85	51601	No
3	GOM_NL__2PRFIN20120111_075058_000000443110_00294_51601_9453.N1	11-JAN-2012 07:50:58	Dark	43.500	70	Zet Pup	2.2460	39000.	87	51601	No
4	GOM_NL__2PRFIN20120111_091419_000000423110_00295_51602_9489.N1	11-JAN-2012 09:14:19	Dark	41.500	77	Eps Cen	2.3030	28000.	83	51602	No
5	GOM_NL__2PRFIN20120111_092904_000000433110_00295_51602_9490.N1	11-JAN-2012 09:29:04	Dark	43.000	34	Gam2Vel	1.7930	23000.	86	51602	No
6	GOM_NL__2PRFIN20120111_105434_000000413110_00296_51603_9538.N1	11-JAN-2012 10:54:34	Dark	41.000	77	Eps Cen	2.3030	28000.	82	51603	No
7	GOM_NL__2PRFIN20120111_110918_000000463110_00296_51603_9539.N1	11-JAN-2012 11:09:18	Dark	46.000	34	Gam2Vel	1.7930	23000.	92	51603	No
8	GOM_NL__2PRFIN20120111_123449_000000413110_00297_51604_9563.N1	11-JAN-2012 12:34:49	Dark	40.500	77	Eps Cen	2.3030	28000.	81	51604	No
9	GOM_NL__2PRFIN20120111_124932_000000433110_00297_51604_9564.N1	11-JAN-2012 12:49:32	Dark	43.000	34	Gam2Vel	1.7930	23000.	86	51604	No
10	GOM_NL__2PRFIN20120111_141503_000000413110_00298_51605_9595.N1	11-JAN-2012 14:15:03	Dark	40.500	77	Eps Cen	2.3030	28000.	81	51605	No
11	GOM_NL__2PRFIN20120111_142947_000000443110_00298_51605_9596.N1	11-JAN-2012 14:29:47	Dark	43.500	34	Gam2Vel	1.7930	23000.	87	51605	No
12	GOM_NL__2PRFIN20120111_143156_000000443110_00298_51605_9597.N1	11-JAN-2012 14:31:56	Dark	44.000	70	Zet Pup	2.2460	39000.	88	51605	No
13	GOM_NL__2PRFIN20120111_155518_000000403110_00299_51606_9626.N1	11-JAN-2012 15:55:18	Dark	40.000	77	Eps Cen	2.3030	28000.	80	51606	No
14	GOM_NL__2PRFIN20120111_161001_000000433110_00299_51606_9627.N1	11-JAN-2012 16:10:01	Dark	42.500	34	Gam2Vel	1.7930	23000.	85	51606	No
15	GOM_NL__2PRFIN20120111_161210_000000453110_00299_51606_9628.N1	11-JAN-2012 16:12:10	Dark	44.500	70	Zet Pup	2.2460	39000.	89	51606	No
16	GOM_NL__2PRFIN20120111_173532_000000423110_00300_51607_9678.N1	11-JAN-2012 17:35:32	Dark	41.500	77	Eps Cen	2.3030	28000.	83	51607	No
17	GOM_NL__2PRFIN20120111_175015_000000453110_00300_51607_9679.N1	11-JAN-2012 17:50:15	Dark	45.000	34	Gam2Vel	1.7930	23000.	90	51607	No
18	GOM_NL__2PRFIN20120111_175224_000000463110_00300_51607_9680.N1	11-JAN-2012 17:52:24	Dark	45.500	70	Zet Pup	2.2460	39000.	91	51607	No

3. Quality information per product

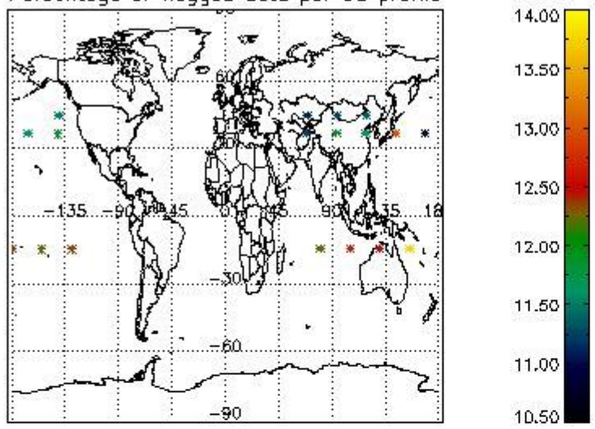
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

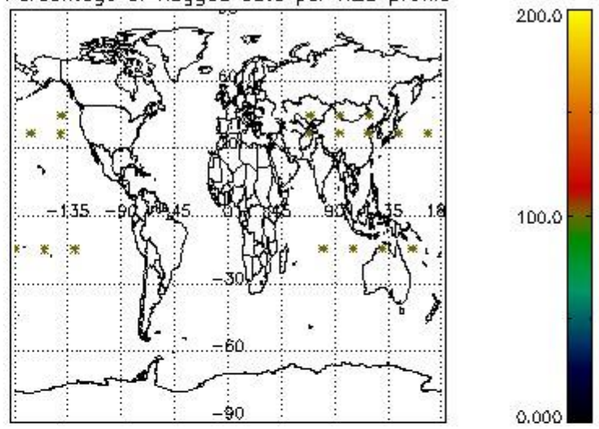


3.2 Plot quality information per product (world map)

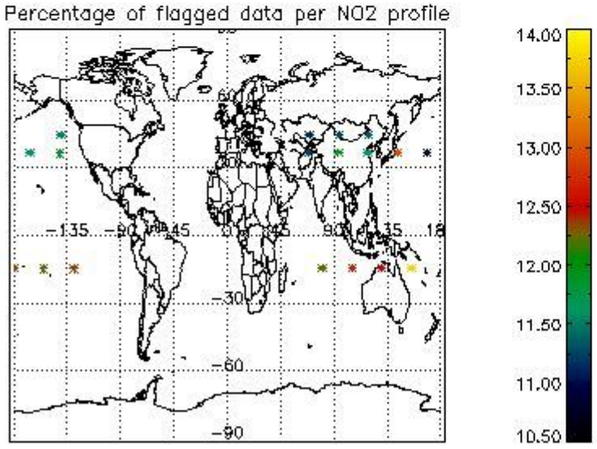
Percentage of flagged data per O3 profile



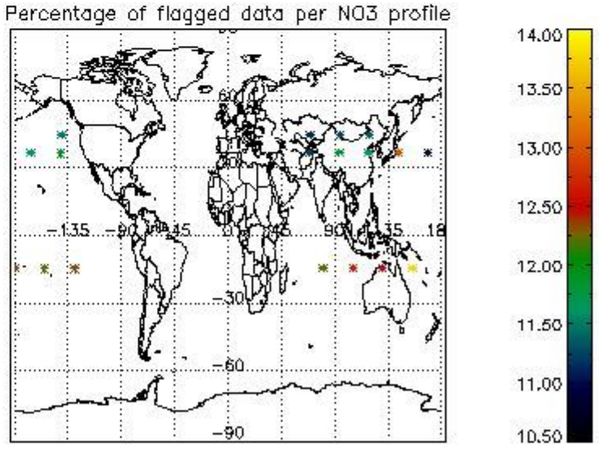
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

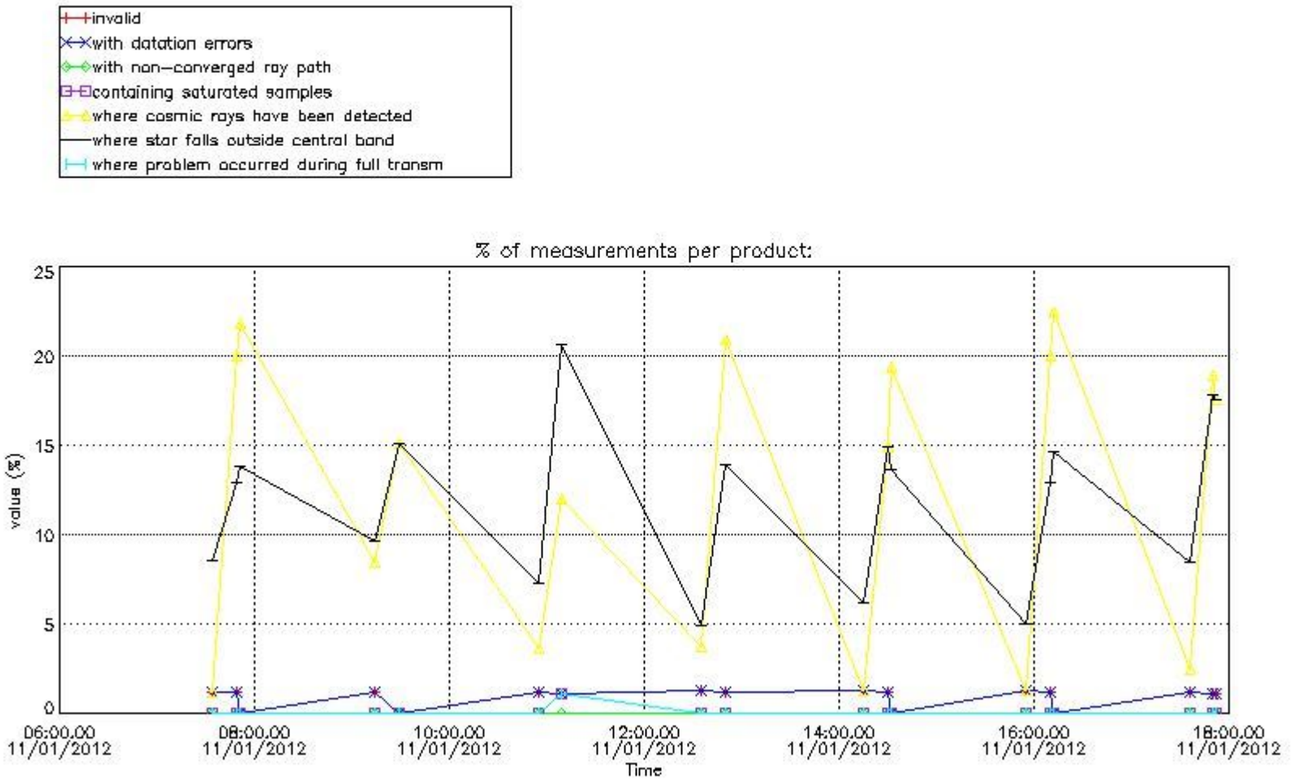


4. Level 1 quality information per product

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

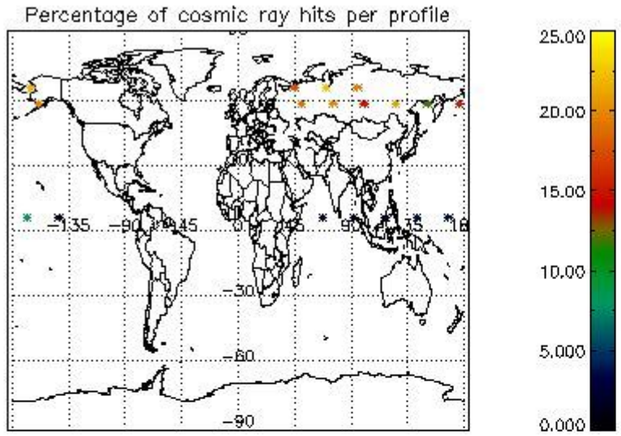


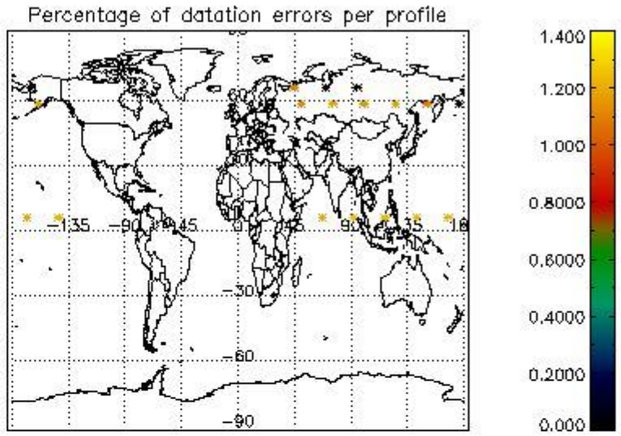
4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

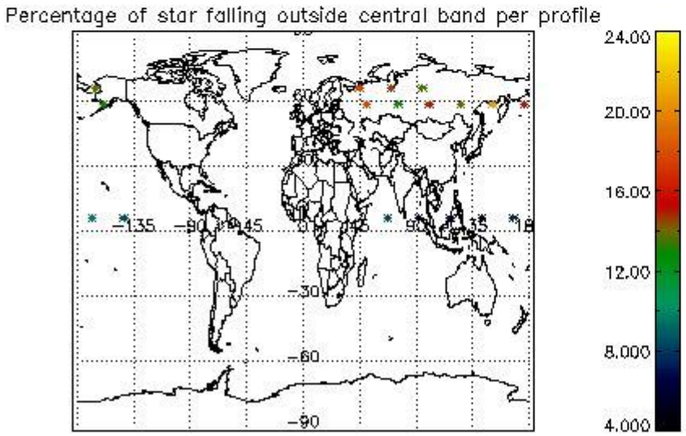
!Warning: No products without errors in descending found

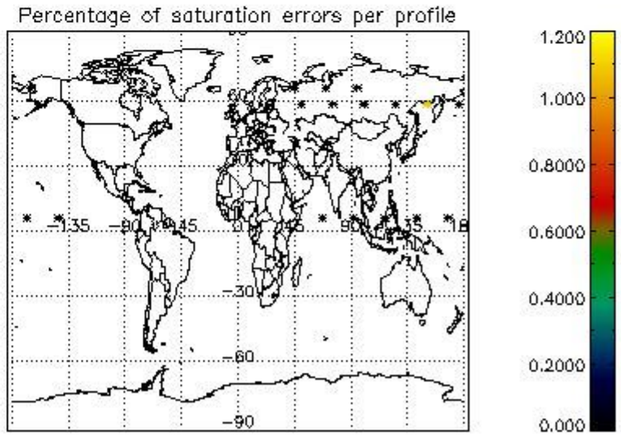
4.2 Plot quality information per product comming from level 1b processing (world map)

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

!Warning: No products without errors in descending found

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:

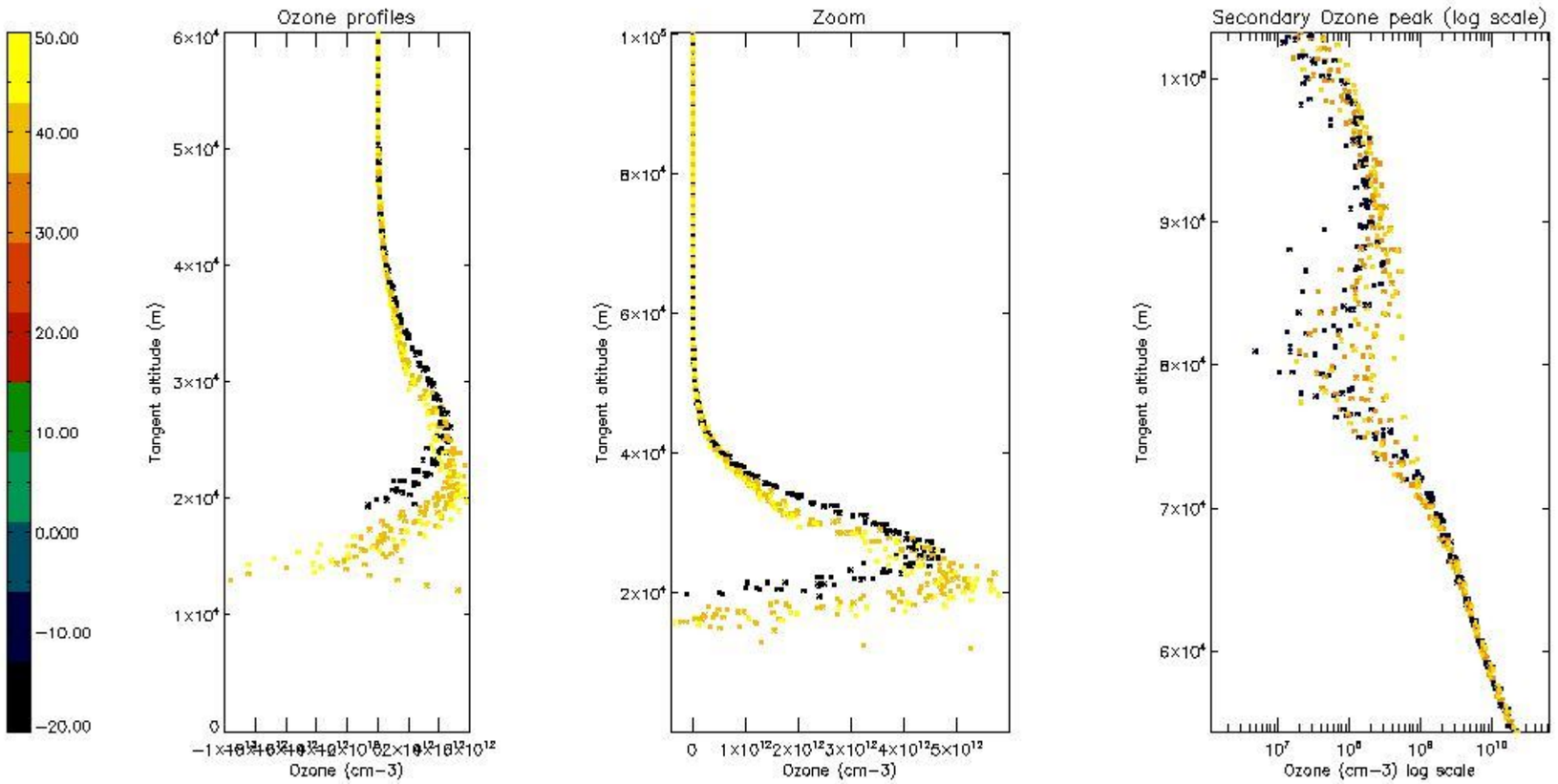
- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
    - Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

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	100
STD < 20	66
STD < 10	55
STD < 5	44

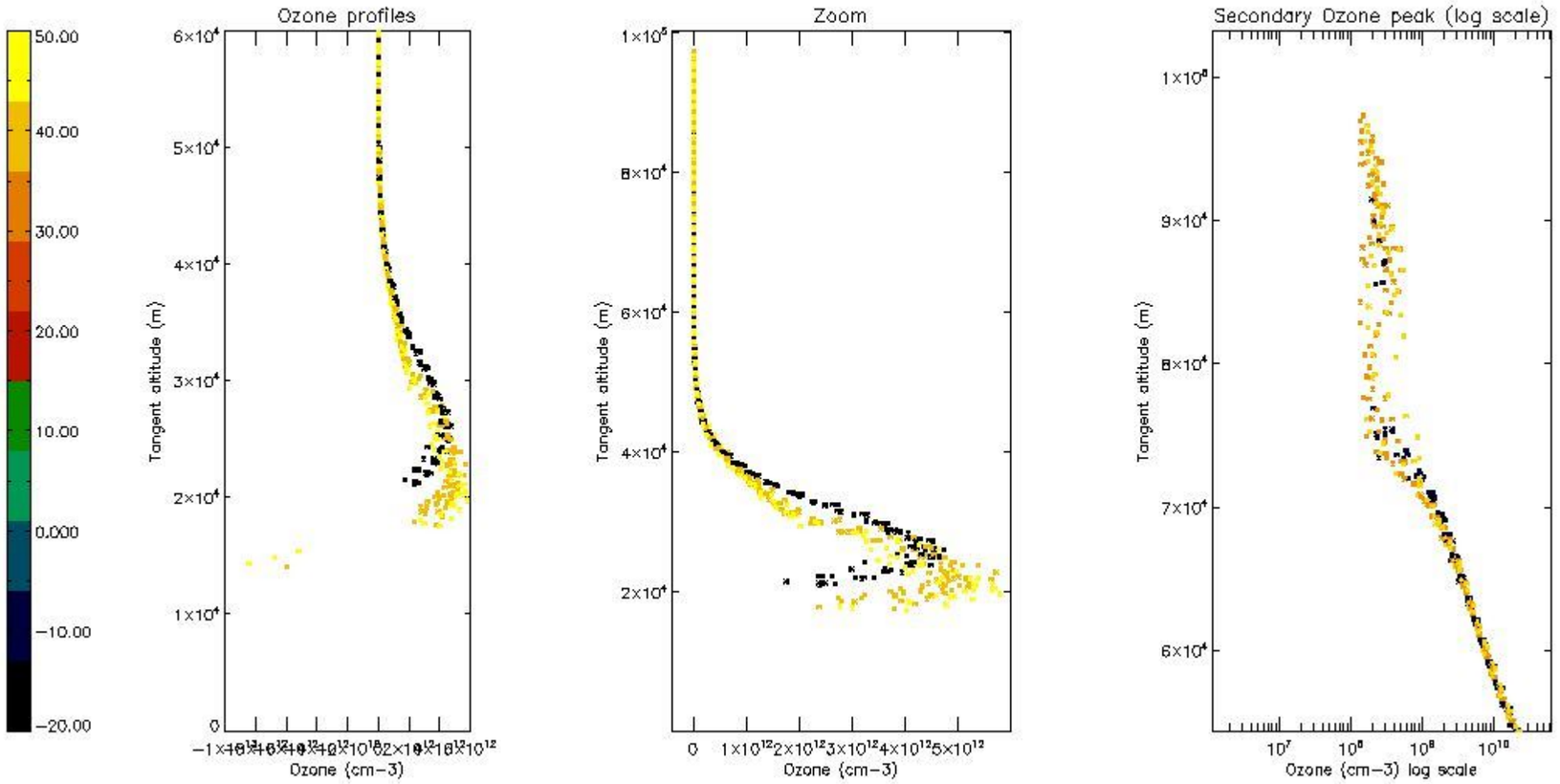
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



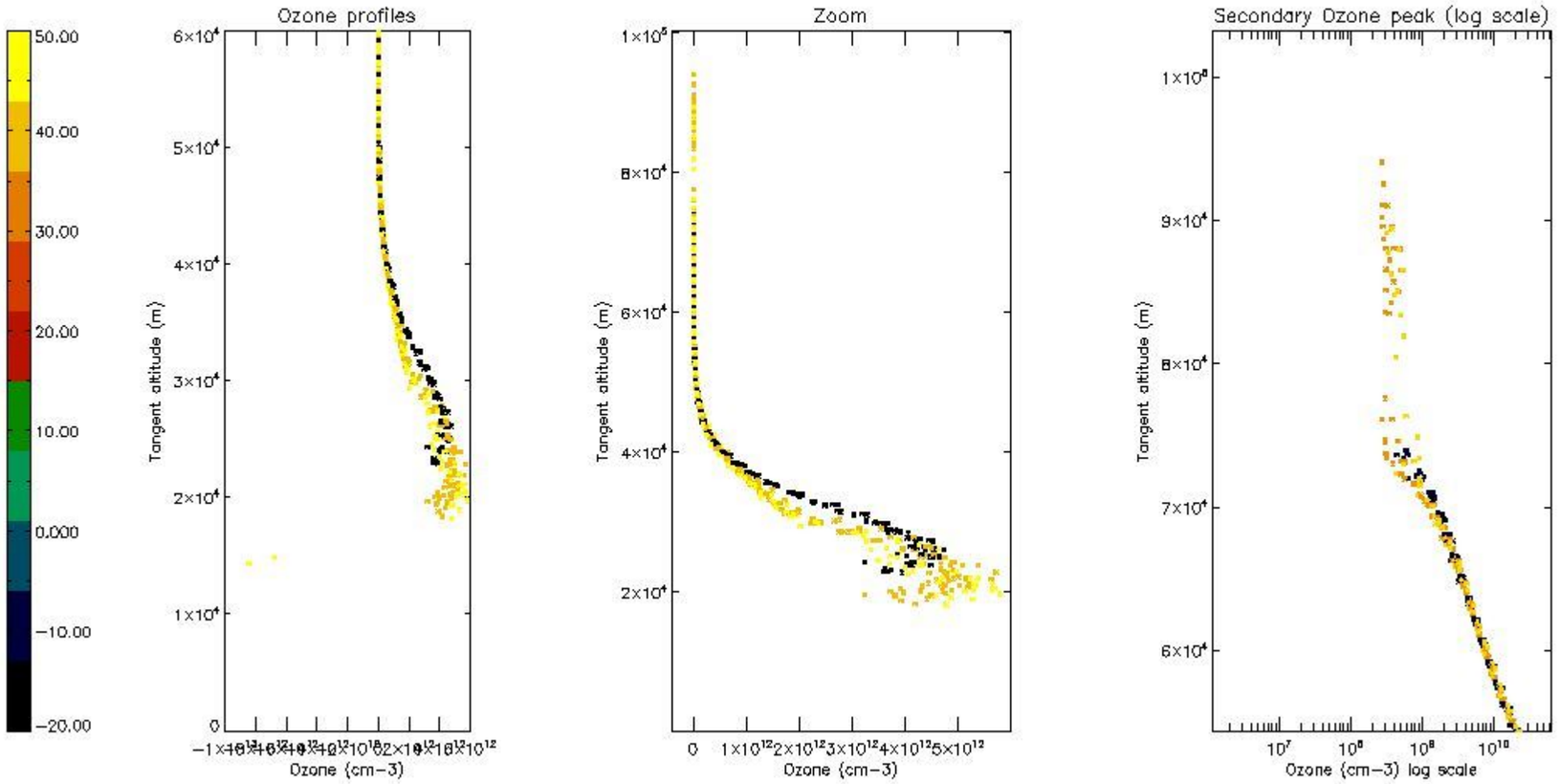
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



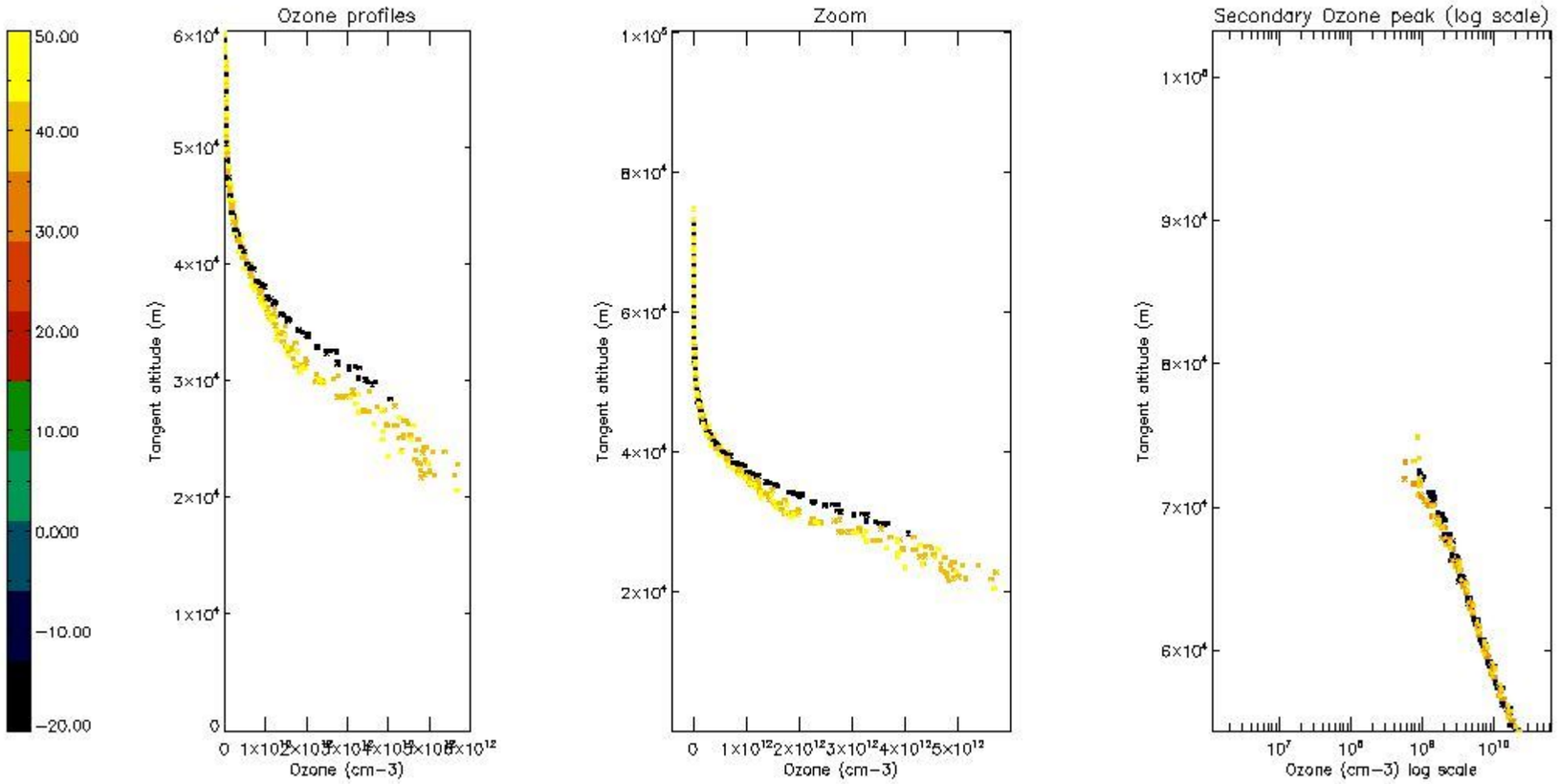
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



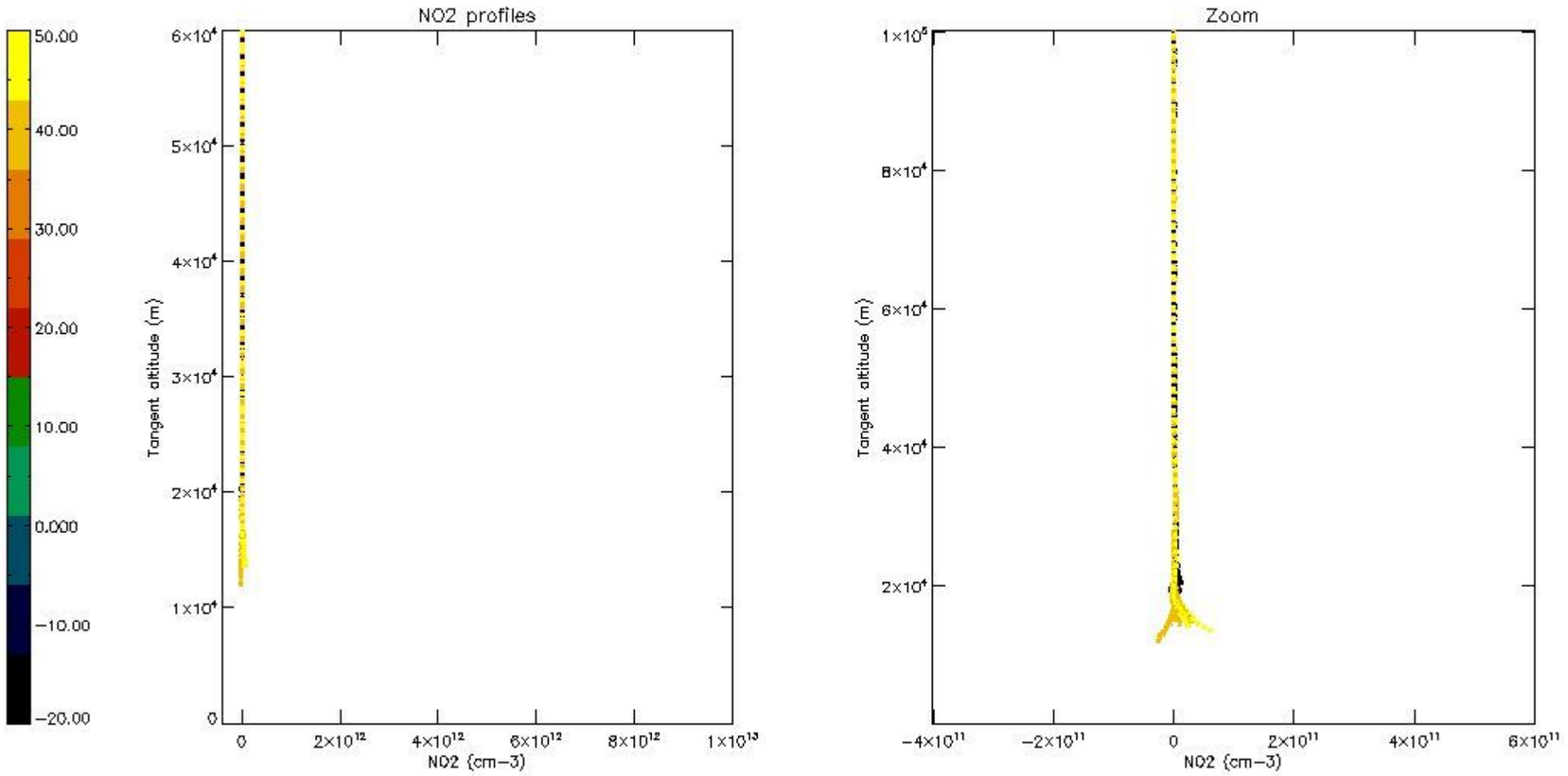
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



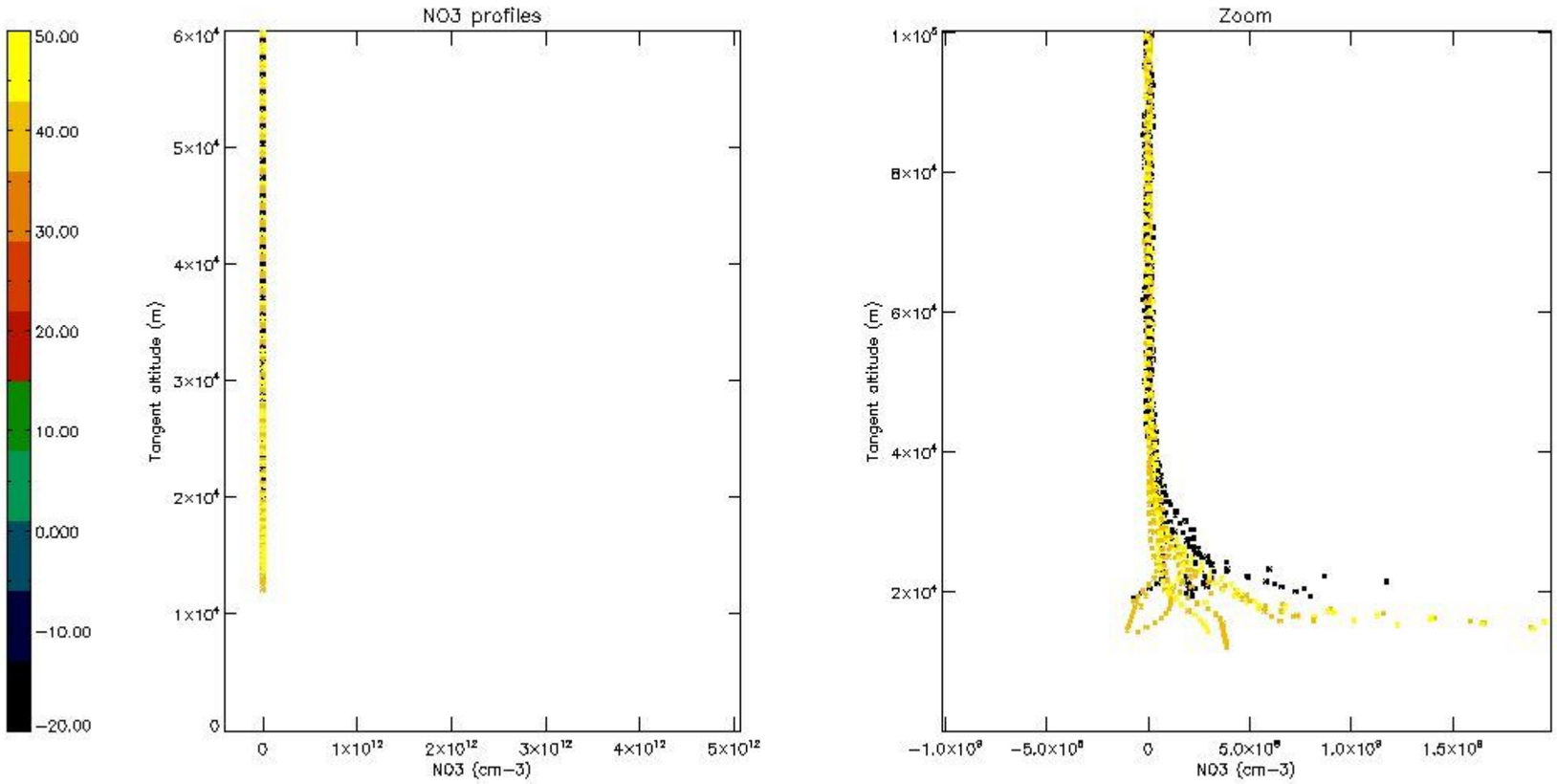
5.6 Plot NO2 profiles for all STD (dark without errors)

The colorbar represents the latitude.



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

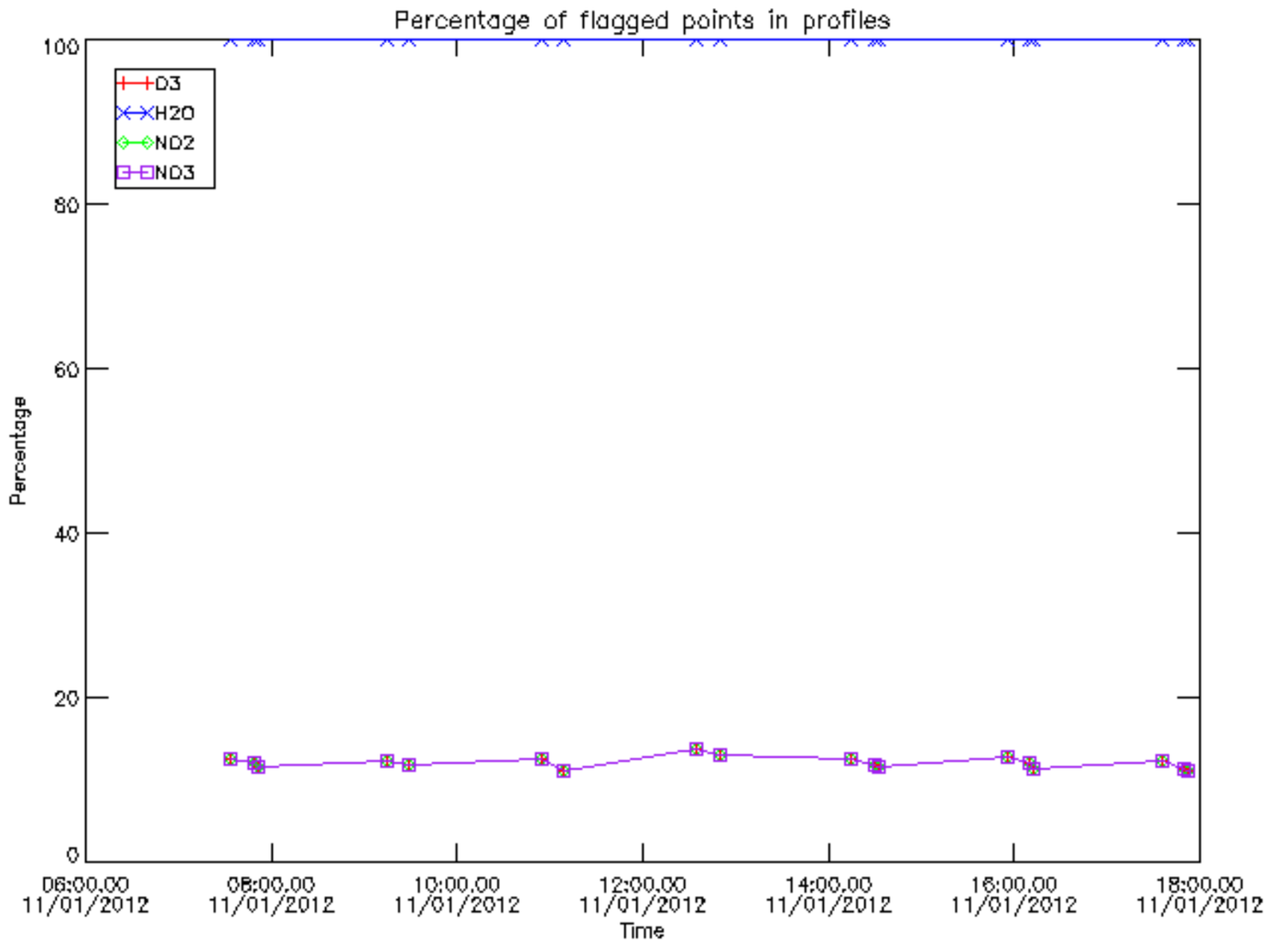
The colorbar represents the latitude.



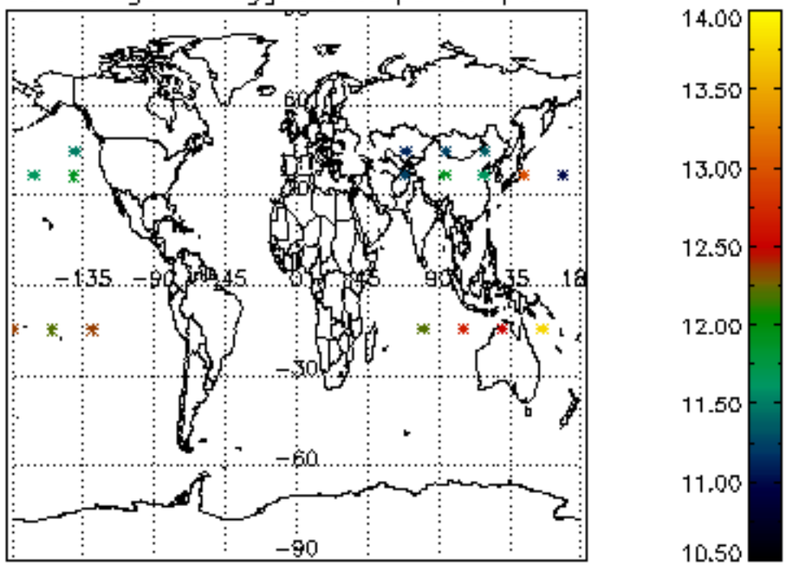
6. Auxiliary Data Files used for the production reported in section 2

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.

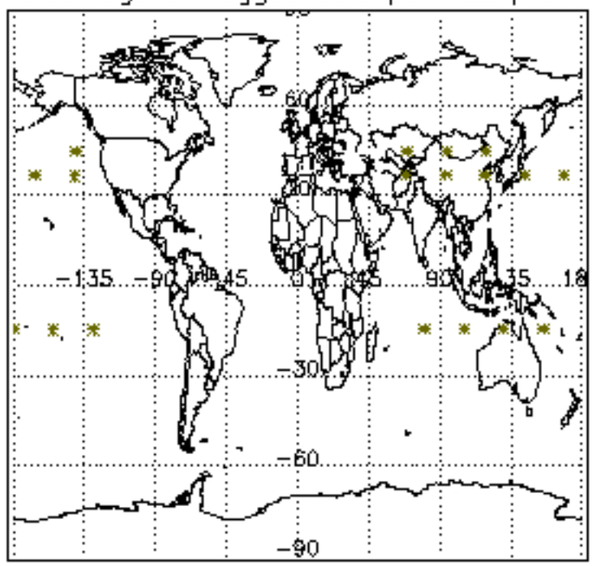
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20111213_163131_20111215_000000_20500101_000000	1	11-JAN-2012 07:34:05
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	11-JAN-2012 07:34:05
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	11-JAN-2012 07:34:05

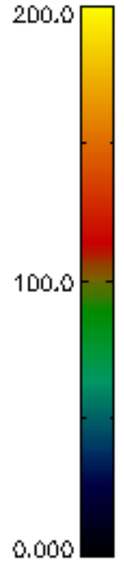

Percentage of flagged points in profiles
O3
H2O
NO2
NO3
100
80
60
40
20
0
Percentage
06:00.00
11/01/2012
08:00.00
11/01/2012
10:00.00
11/01/2012
12:00.00
11/01/2012
14:00.00
11/01/2012
16:00.00
11/01/2012
18:00.00
11/01/2012
Time

Percentage of flagged data per O3 profile

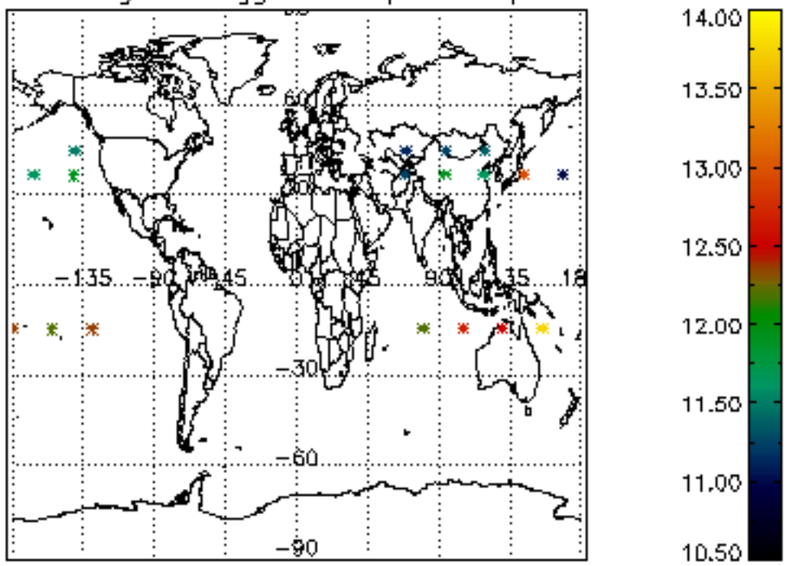


Percentage of flagged data per H2O profile

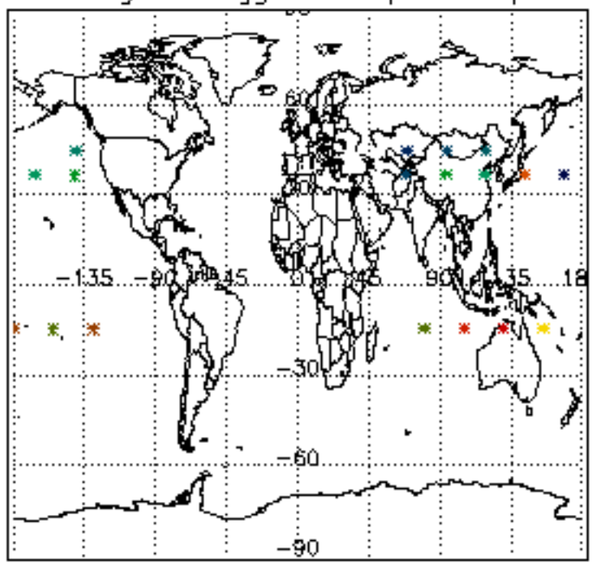


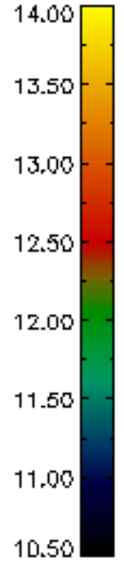


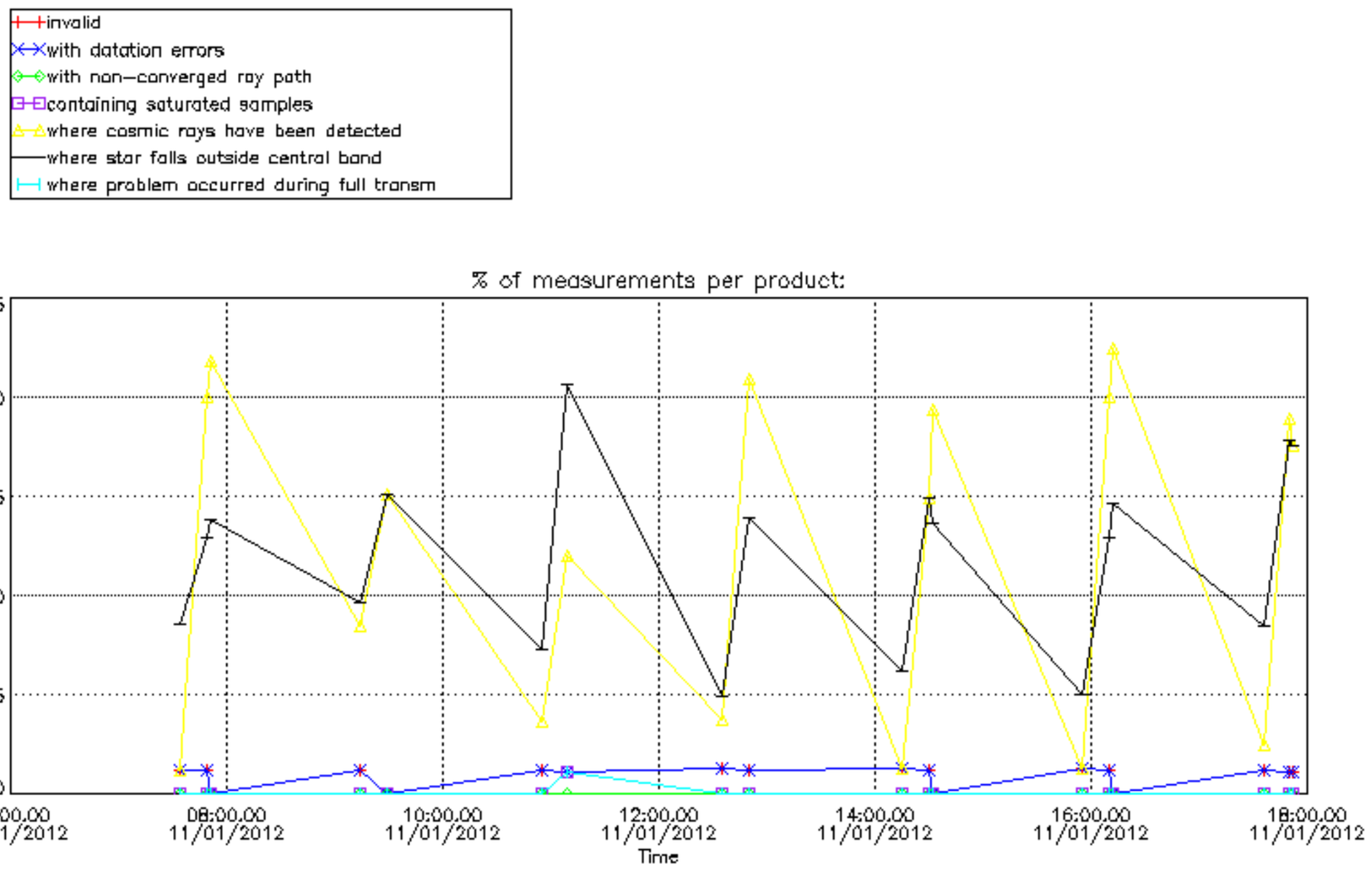
Percentage of flagged data per NO2 profile



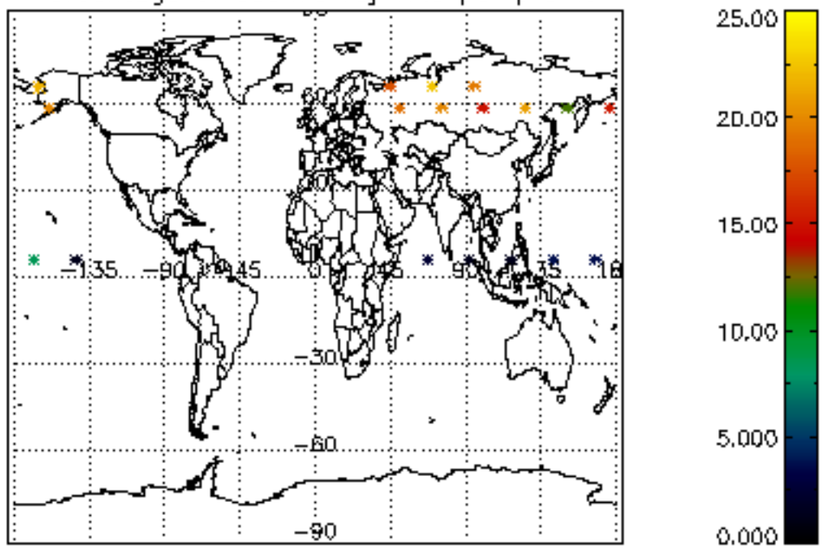
Percentage of flagged data per NO3 profile



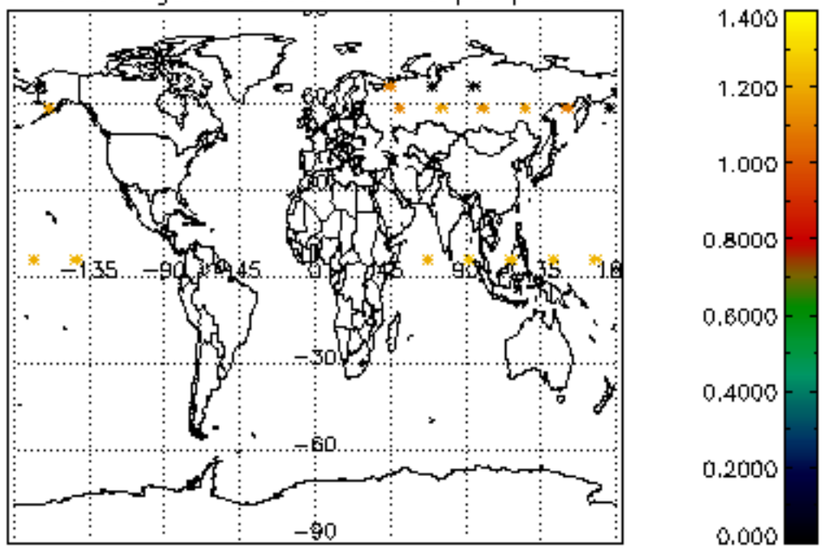



invalid
with datation errors
with non-converged ray path
containing saturated samples
where cosmic rays have been detected
where star falls outside central band
where problem occurred during full transm
% of measurements per product:
value (%)
0
5
10
15
20
25
06:00.00 11/01/2012
08:00.00 11/01/2012
10:00.00 11/01/2012
12:00.00 11/01/2012
14:00.00 11/01/2012
16:00.00 11/01/2012
18:00.00 11/01/2012
Time

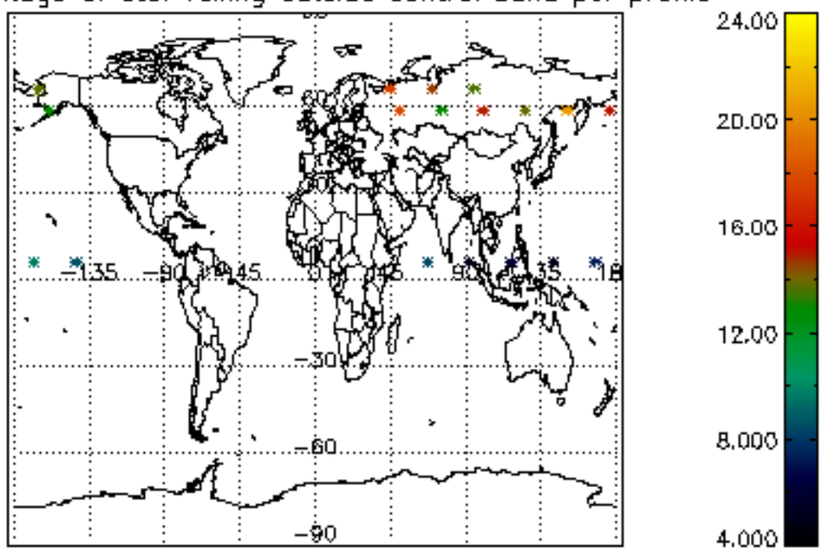
Percentage of cosmic ray hits per profile



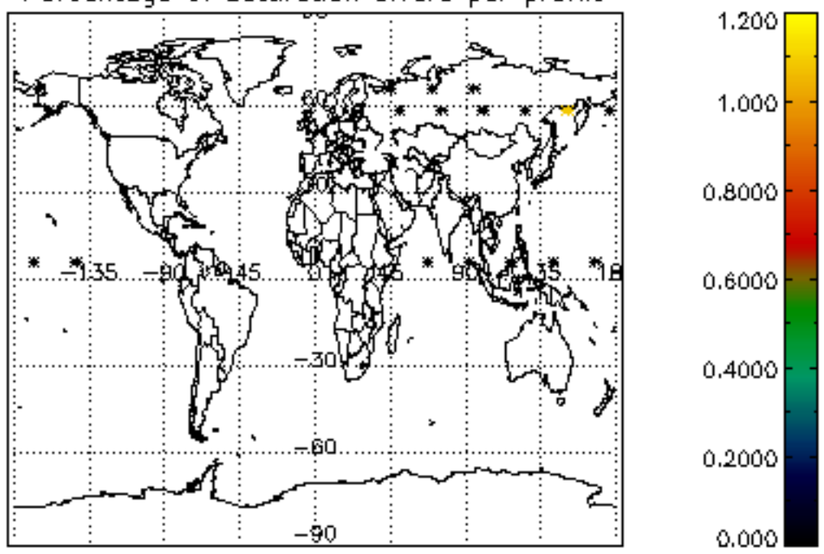
Percentage of datation errors per profile

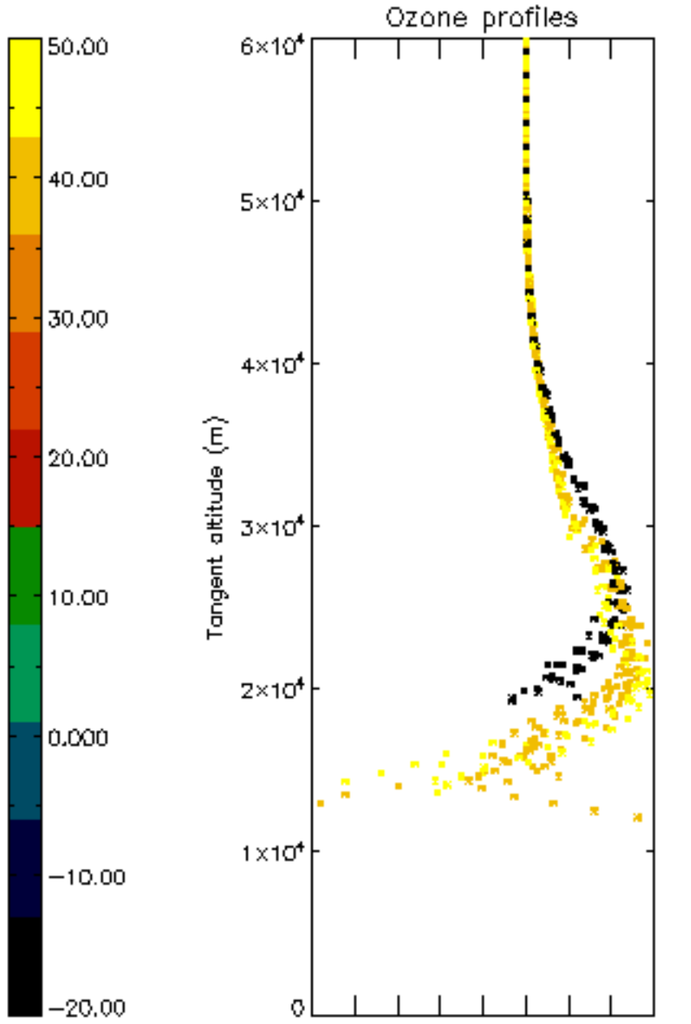


Percentage of star falling outside central band per profile

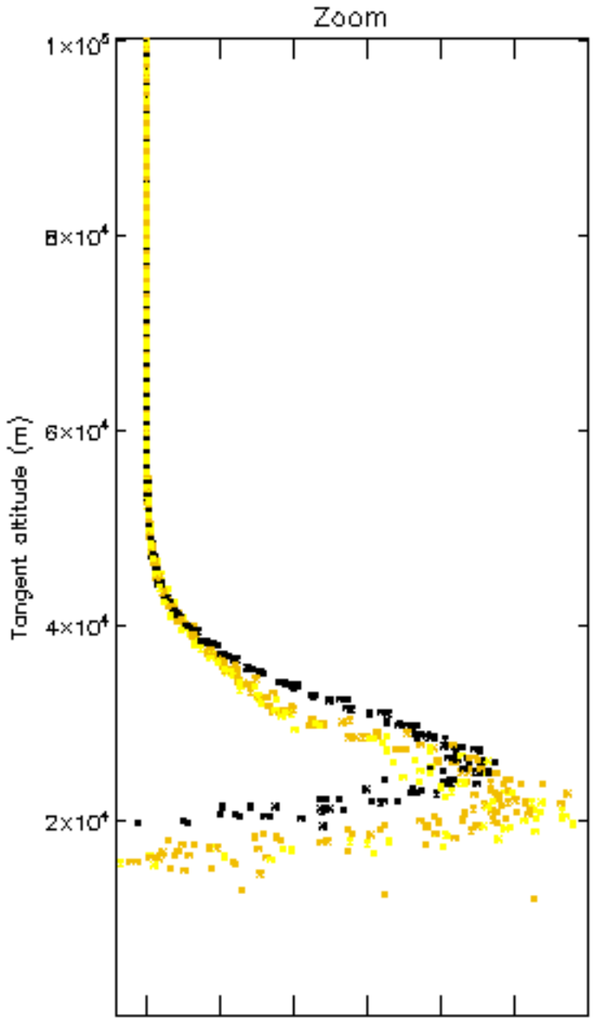


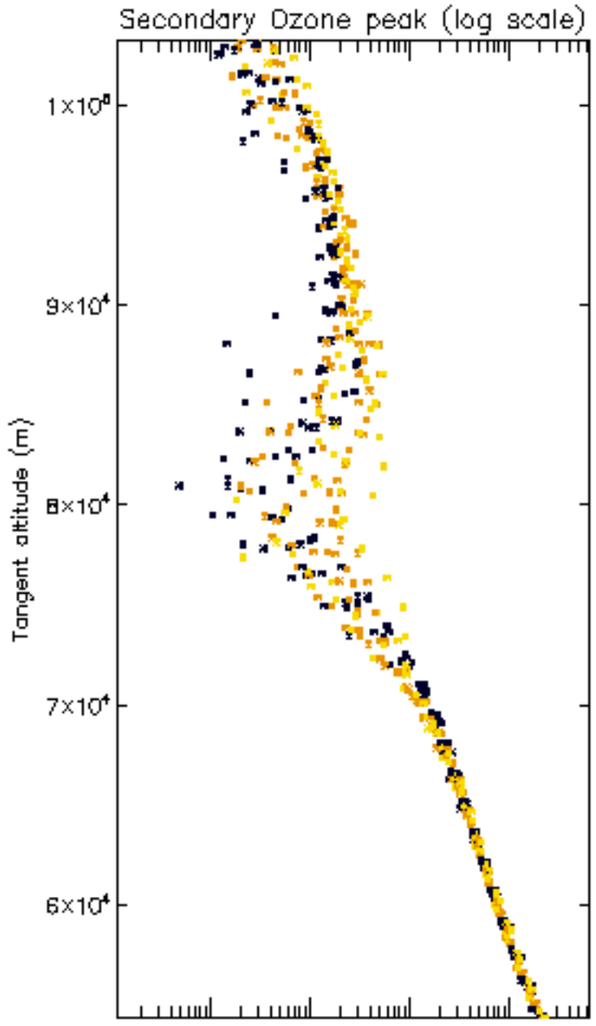
Percentage of saturation errors per profile

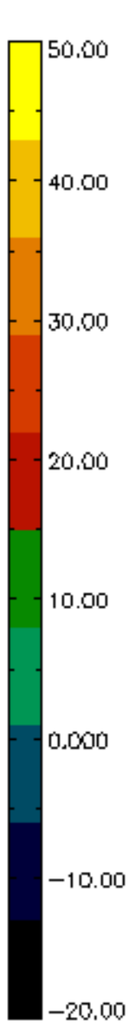


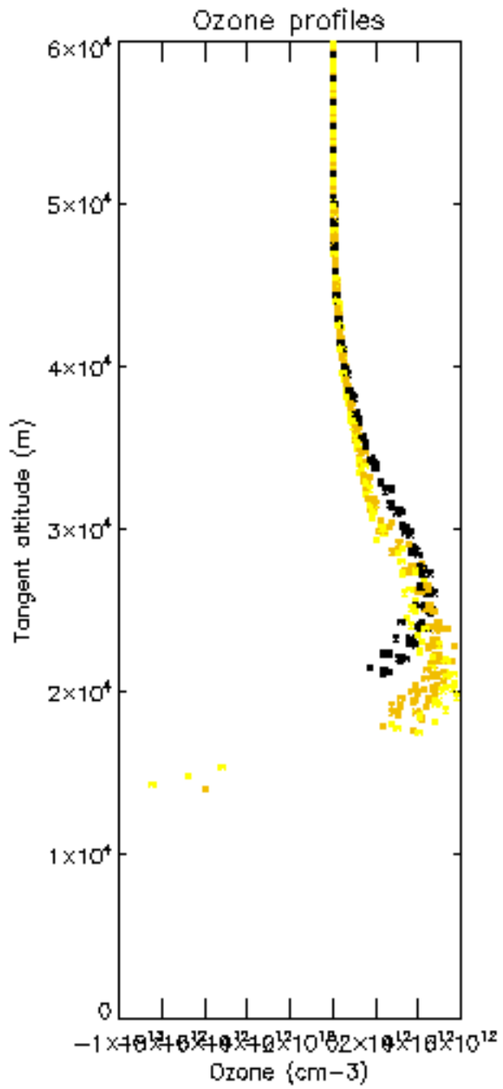

50.00
40.00
30.00
20.00
10.00
0.000
−10.00
−20.00

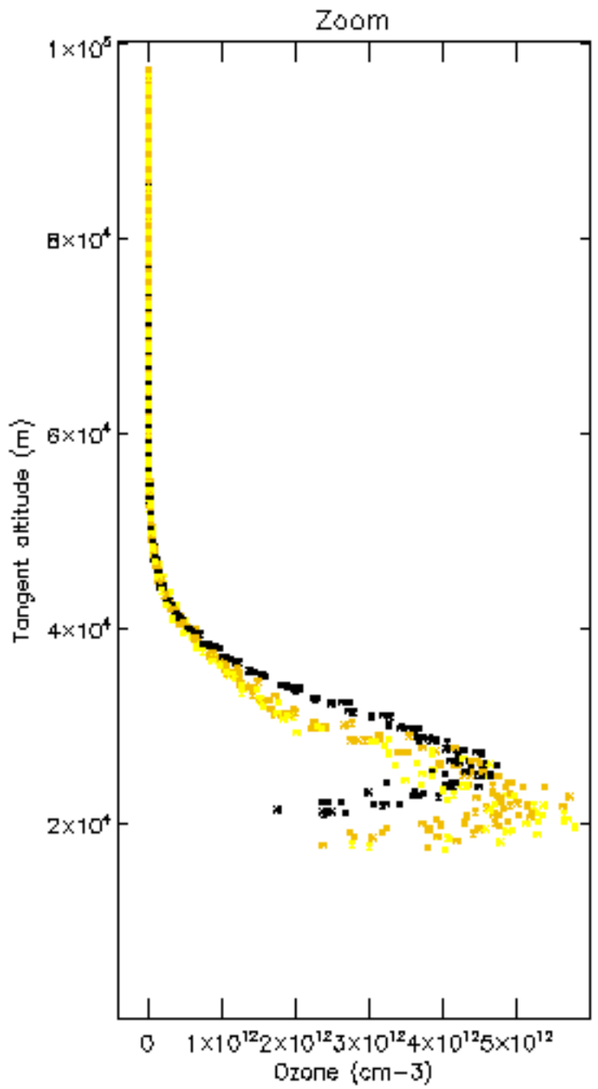
Ozone profiles
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
Tangent altitude (m)
Ozone (cm−3)

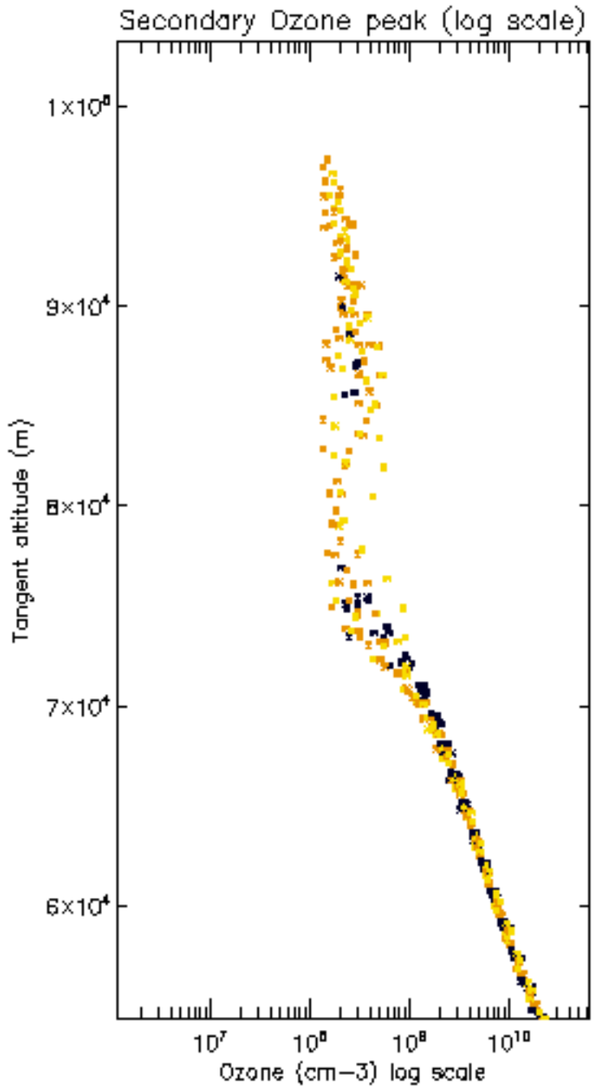

Zoom
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
Tangent altitude (m)
0
1×10¹²2×10¹²3×10¹²4×10¹²5×10¹²
Ozone (cm−3)

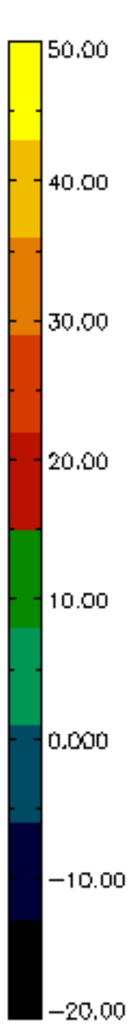

Secondary Ozone peak (log scale)
1×10⁵
9×10⁴
8×10⁴
7×10⁴
6×10⁴
Tangent altitude (m)
10⁷
10⁸
10⁸
10¹⁰
Ozone (cm−3) log scale

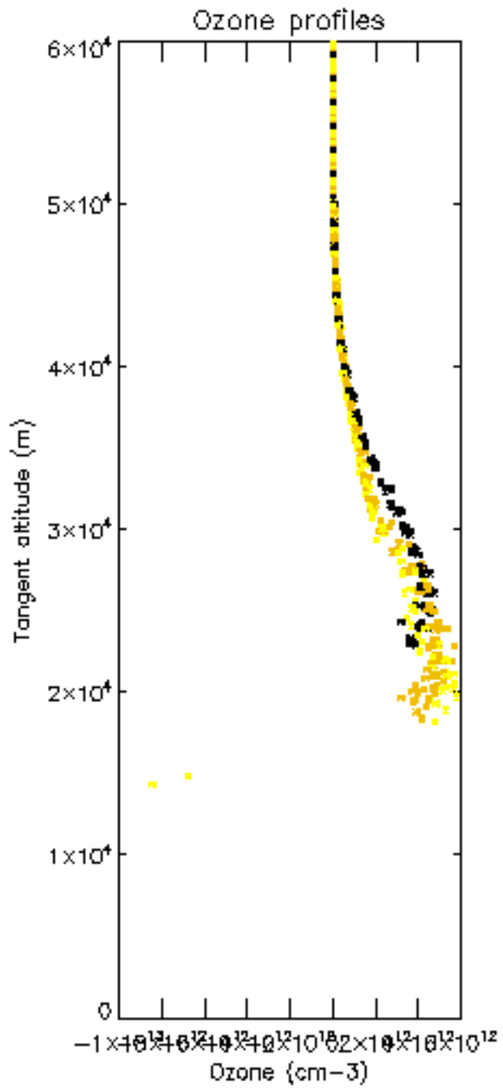

50.00
40.00
30.00
20.00
10.00
0.000
−10.00
−20.00

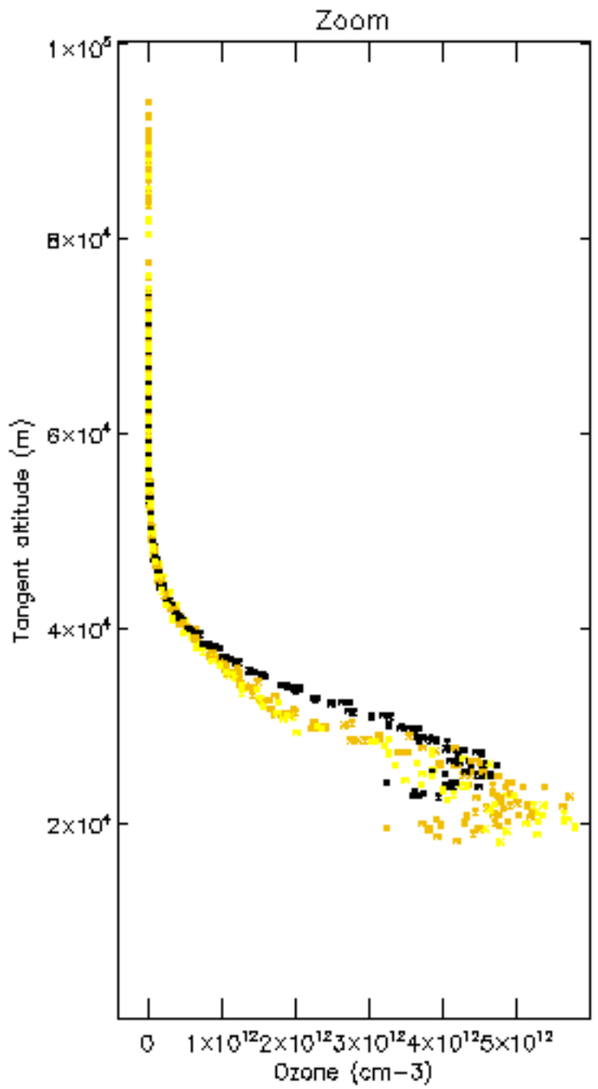

Ozone profiles
Tangent altitude (m)
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
Ozone (cm−3)

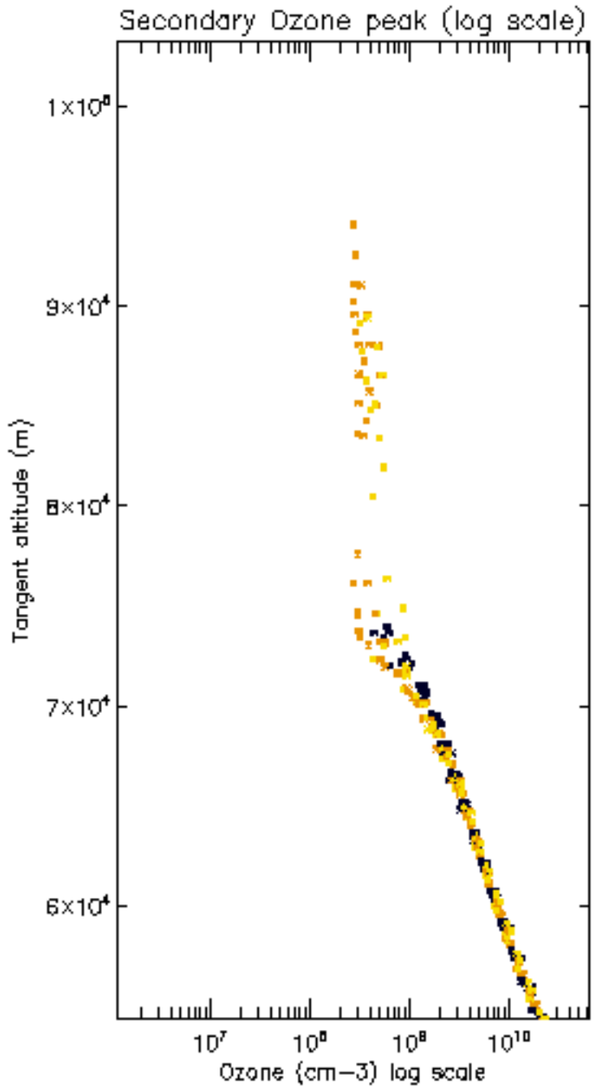

Zoom
Tangent altitude (m)
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
0
1×10¹²
2×10¹²
3×10¹²
4×10¹²
5×10¹²
Ozone (cm−3)

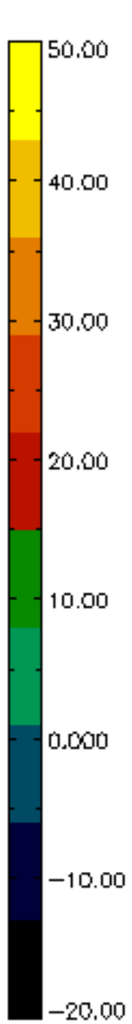

Secondary Ozone peak (log scale)
Tangent altitude (m)
1×10⁵
9×10⁴
8×10⁴
7×10⁴
6×10⁴
10⁷
10⁸
10⁹
10¹⁰
Ozone (cm−3) log scale

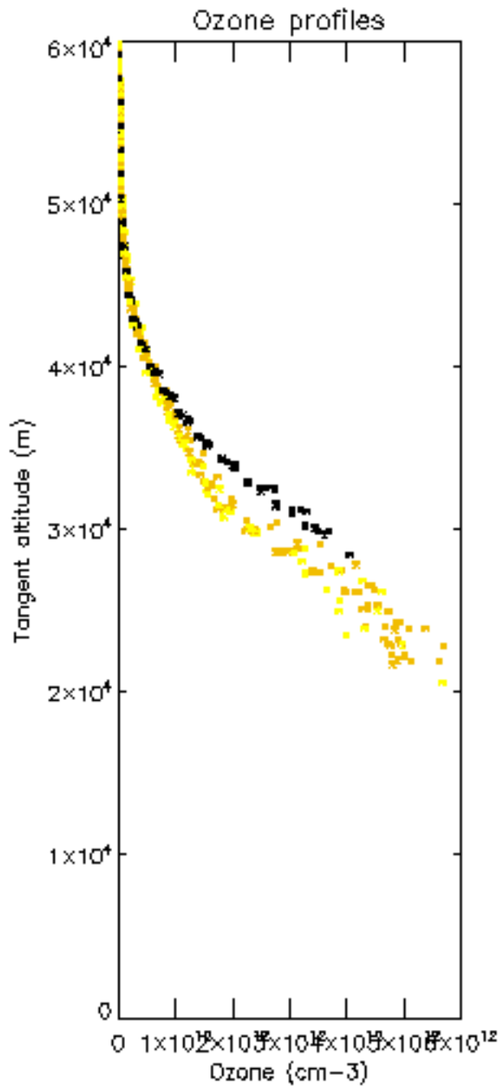

50.00
40.00
30.00
20.00
10.00
0.000
−10.00
−20.00

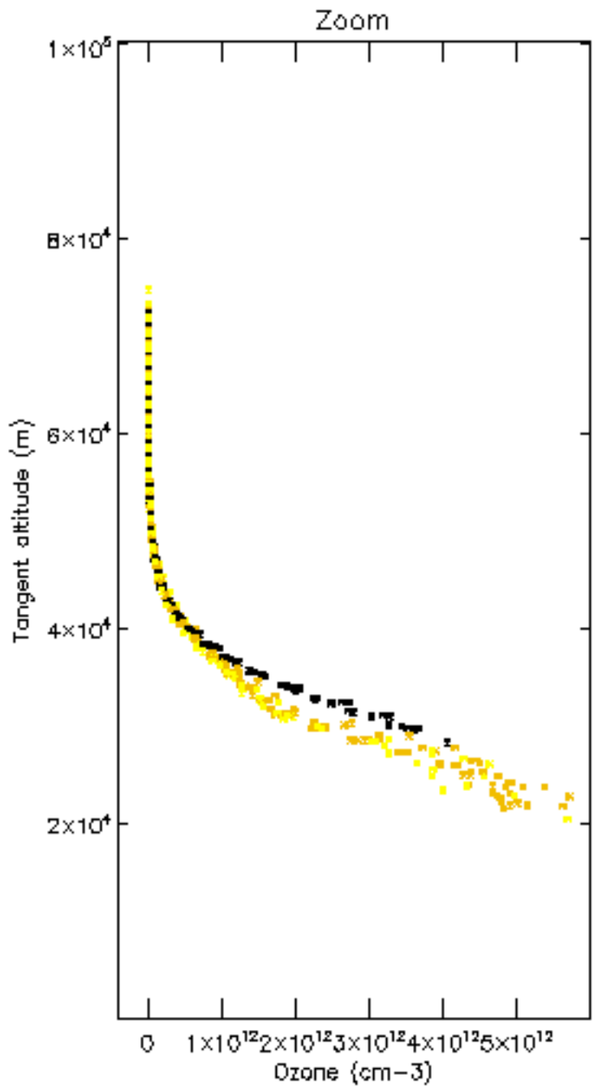

Ozone profiles
Tangent altitude (m)
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
Ozone (cm−3)

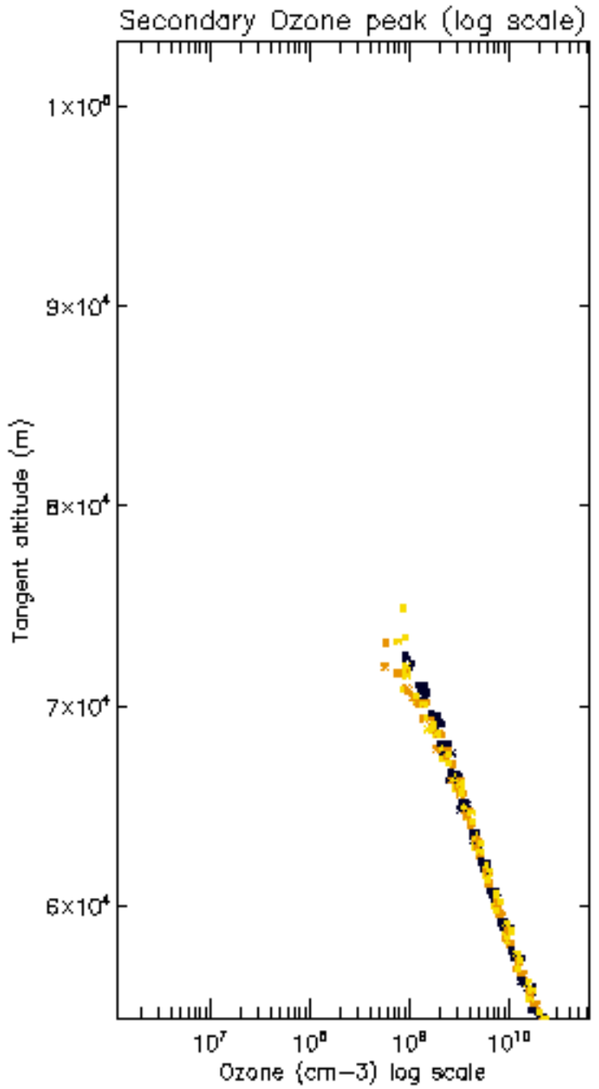

Zoom
Tangent altitude (m)
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
0
1×10¹²
2×10¹²
3×10¹²
4×10¹²
5×10¹²
Ozone (cm−3)

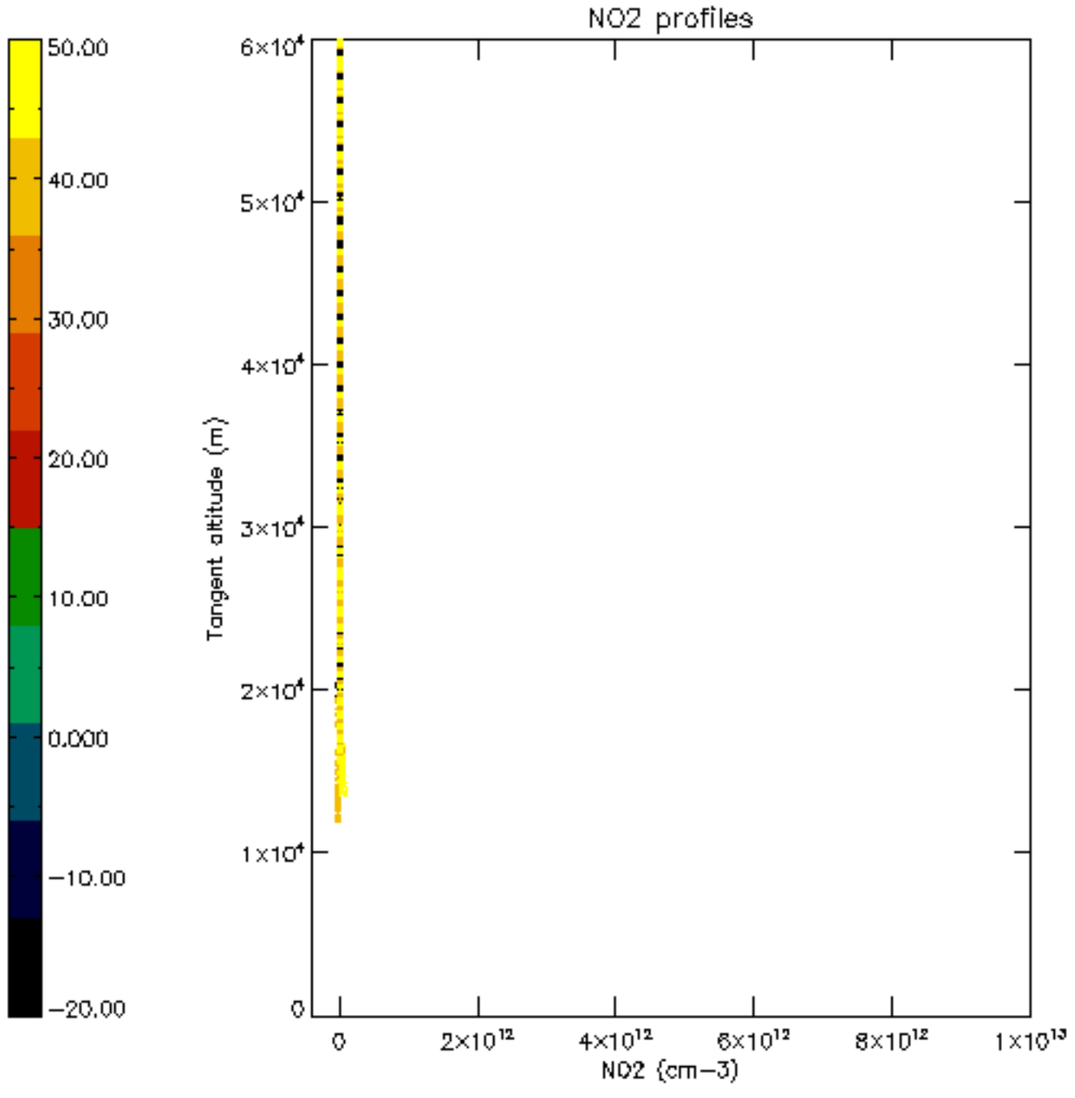

Secondary Ozone peak (log scale)
Tangent altitude (m)
1×10⁵
9×10⁴
8×10⁴
7×10⁴
6×10⁴
10⁷
10⁸
10⁹
10¹⁰
Ozone (cm−3) log scale

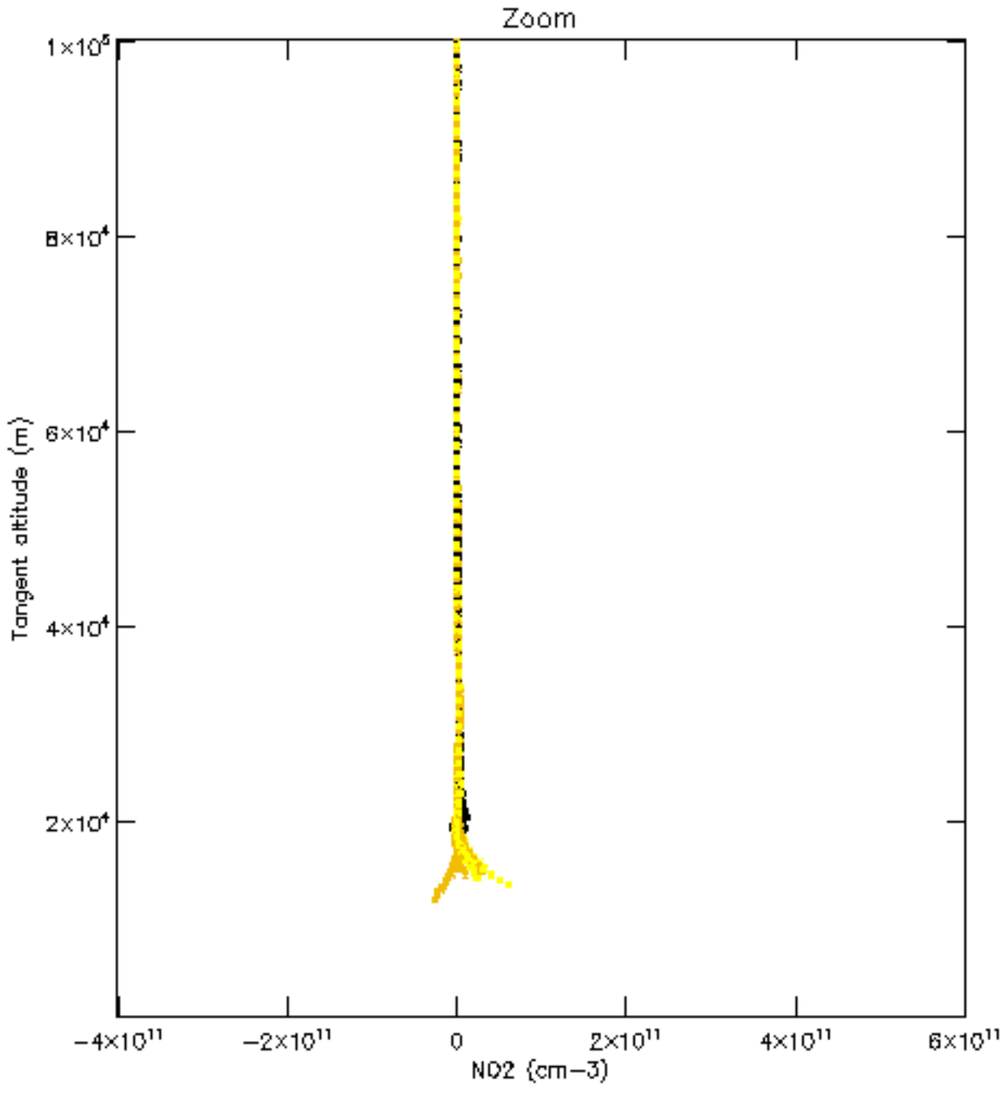

50.00
40.00
30.00
20.00
10.00
0.000
−10.00
−20.00

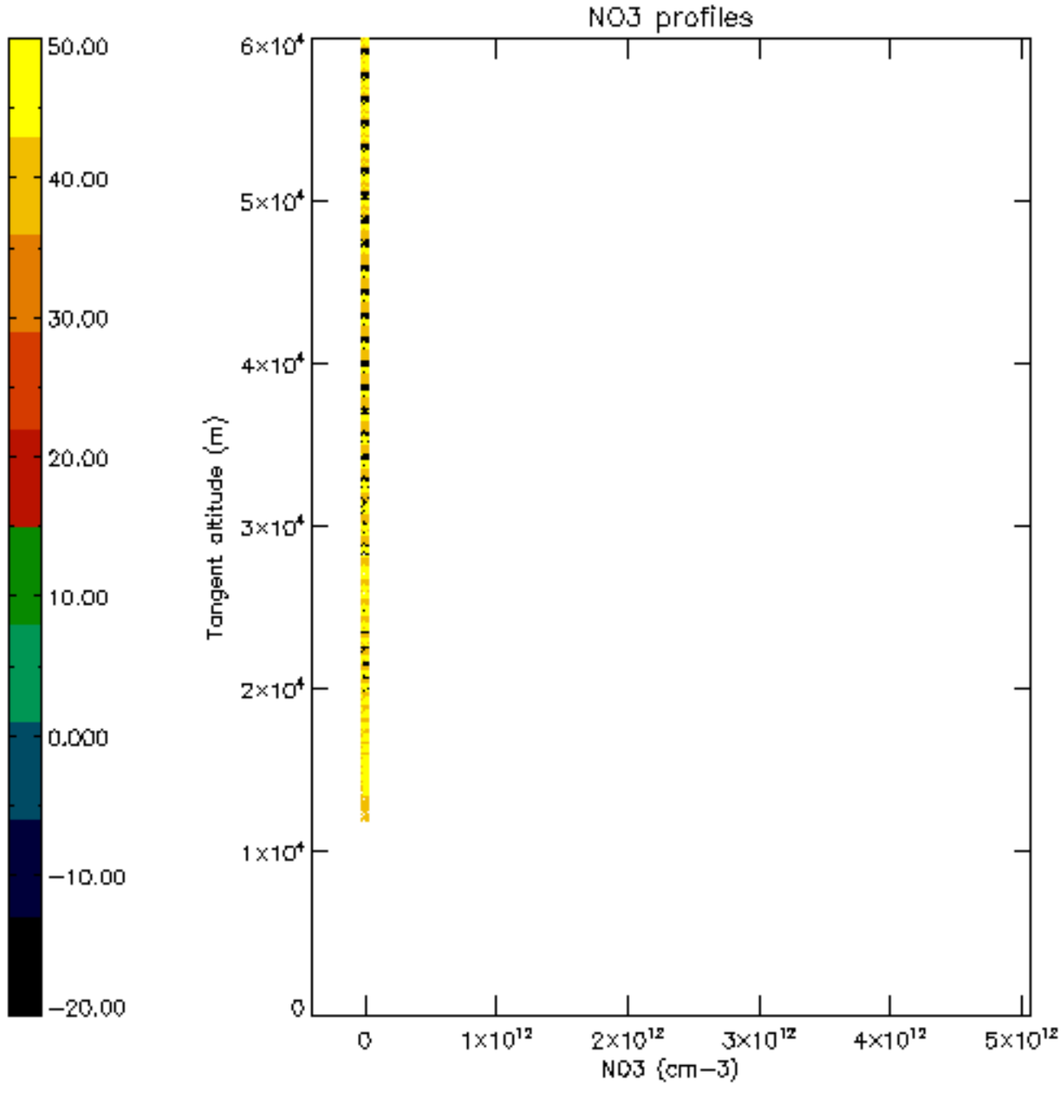

Ozone profiles
Tangent altitude (m)
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
0 1×10¹² 2×10¹² 3×10¹² 4×10¹² 5×10¹² 6×10¹²
Ozone (cm−3)

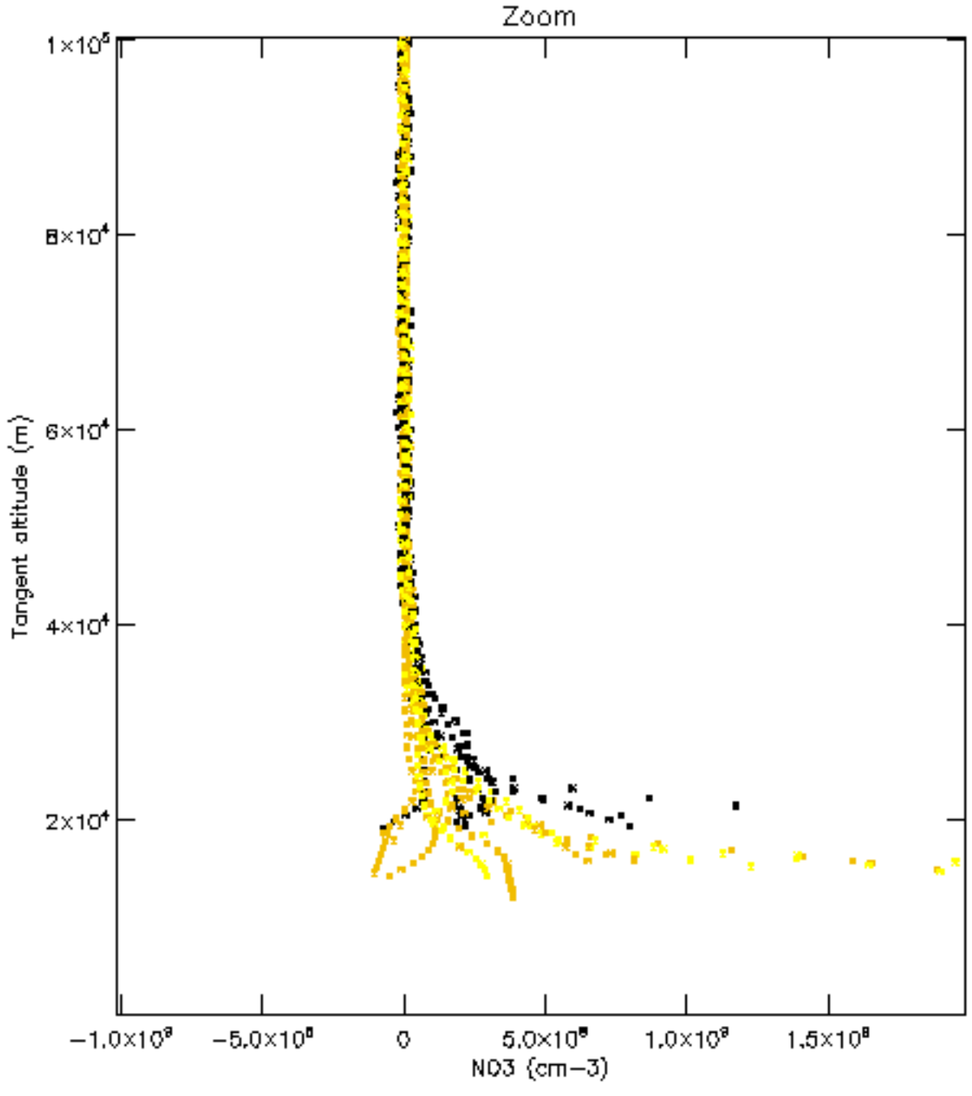

Zoom
Tangent altitude (m)
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
0 1×10¹² 2×10¹² 3×10¹² 4×10¹² 5×10¹²
Ozone (cm−3)

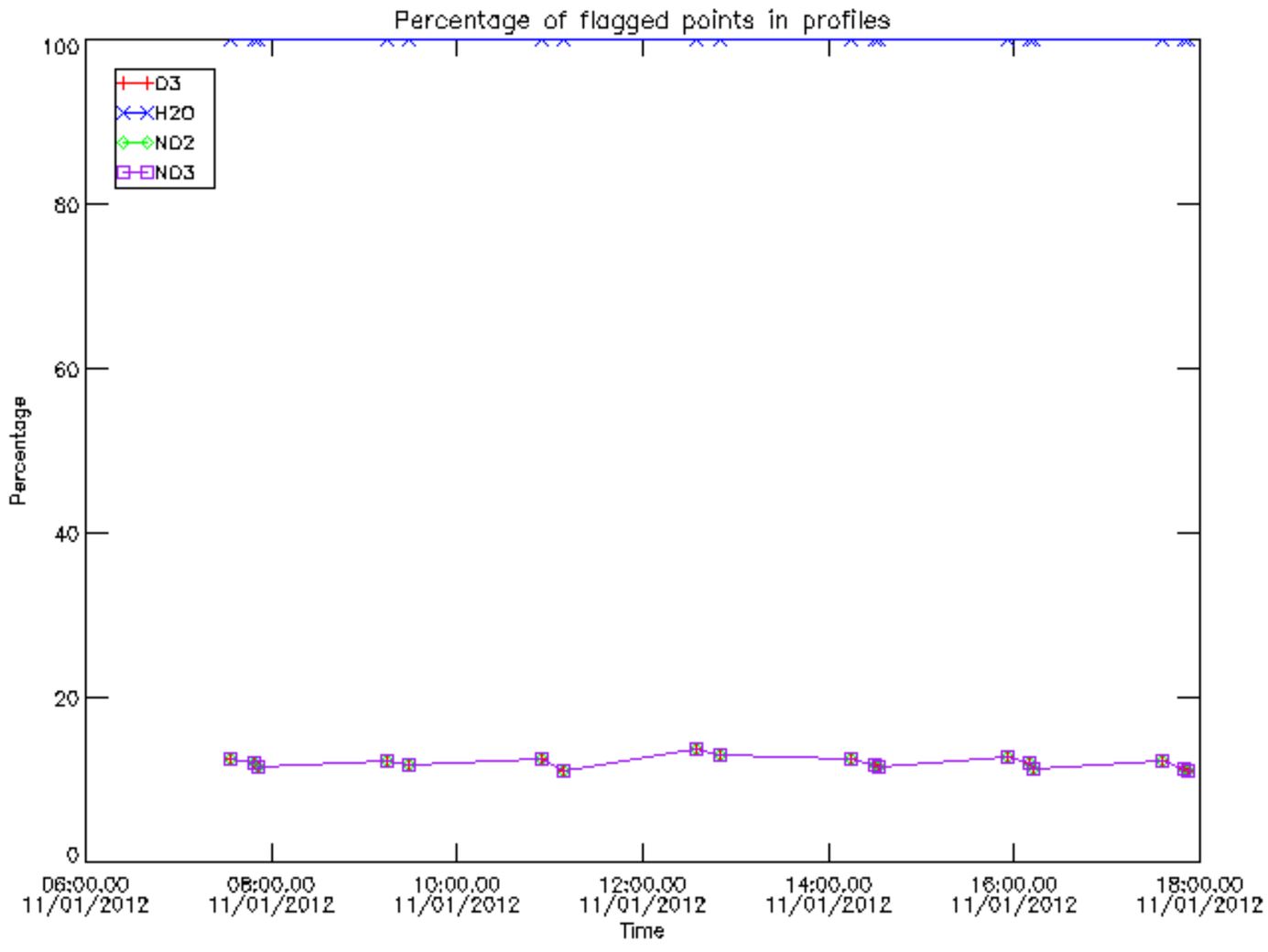

Secondary Ozone peak (log scale)
Tangent altitude (m)
1×10⁵
9×10⁴
8×10⁴
7×10⁴
6×10⁴
10⁷ 10⁸ 10⁹ 10¹⁰
Ozone (cm−3) log scale


NO2 profiles
50.00
40.00
30.00
20.00
10.00
0.000
−10.00
−20.00
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)

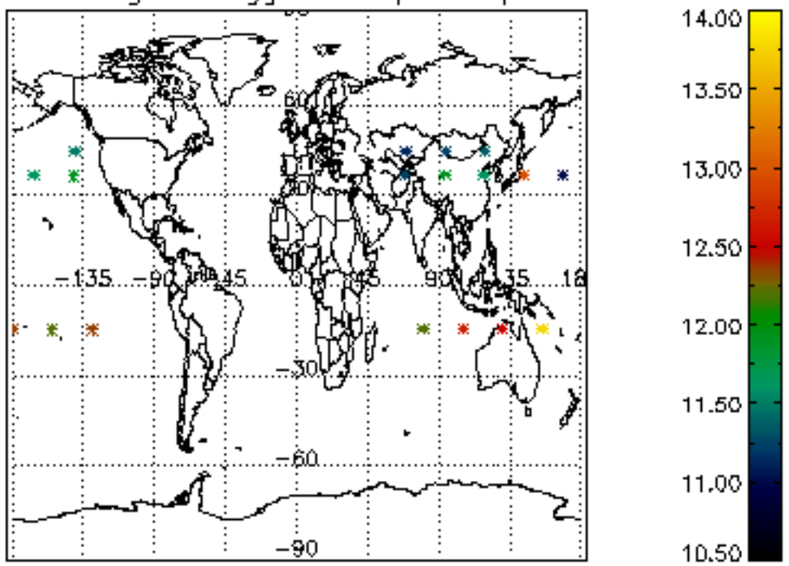

Zoom
Tangent altitude (m)
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
−4×10¹¹
−2×10¹¹
0
2×10¹¹
4×10¹¹
6×10¹¹
NO2 (cm−3)


NO3 profiles
50.00
40.00
30.00
20.00
10.00
0.000
−10.00
−20.00
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)

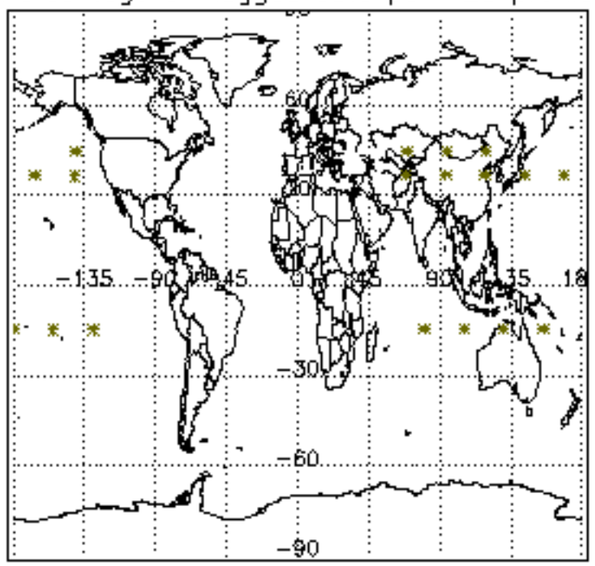

Zoom
Tangent altitude (m)
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
−1.0×10⁹
−5.0×10⁸
0
5.0×10⁸
1.0×10⁹
1.5×10⁹
NO3 (cm−3)

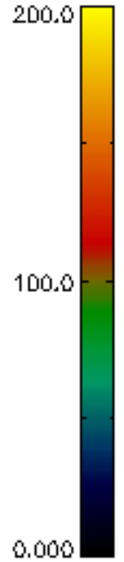

Percentage of flagged points in profiles
O3
H2O
NO2
NO3
100
80
60
40
20
0
Percentage
06:00.00
11/01/2012
08:00.00
11/01/2012
10:00.00
11/01/2012
12:00.00
11/01/2012
14:00.00
11/01/2012
16:00.00
11/01/2012
18:00.00
11/01/2012
Time

Percentage of flagged data per O3 profile

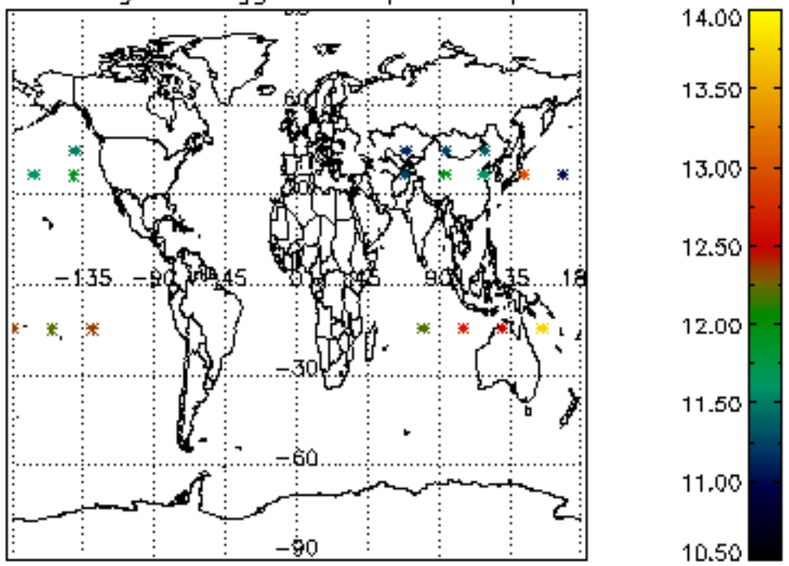


Percentage of flagged data per H2O profile

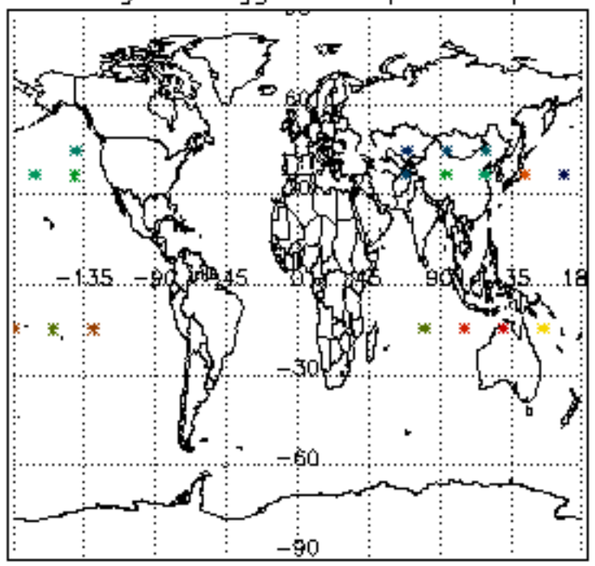


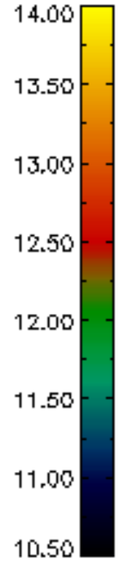


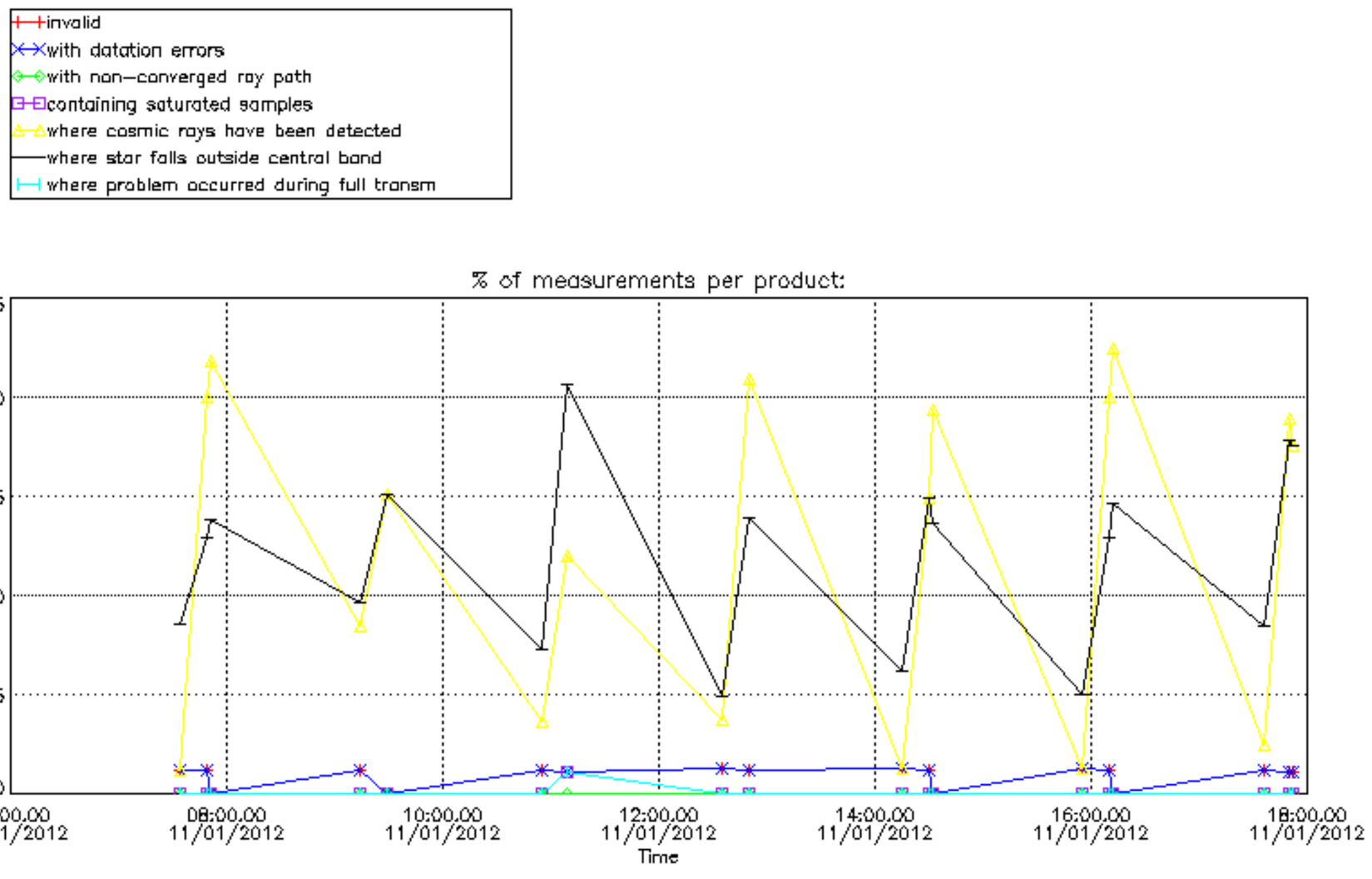
Percentage of flagged data per NO2 profile



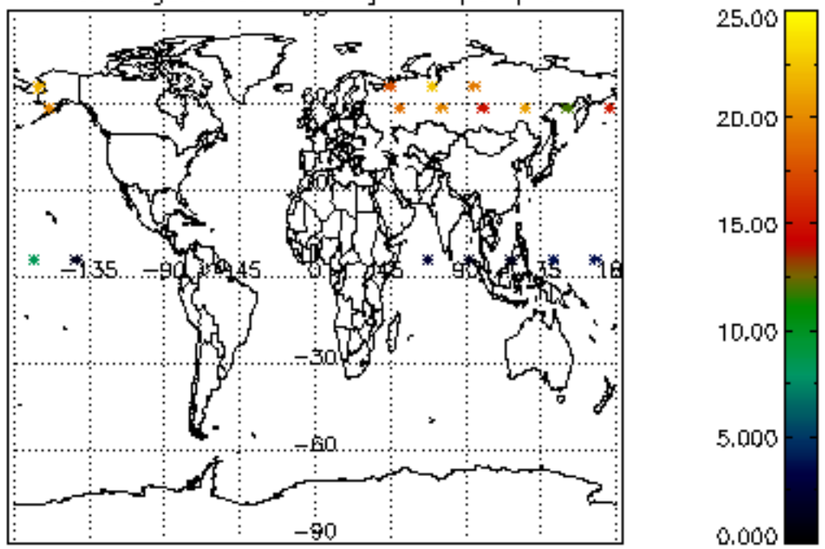
Percentage of flagged data per NO3 profile



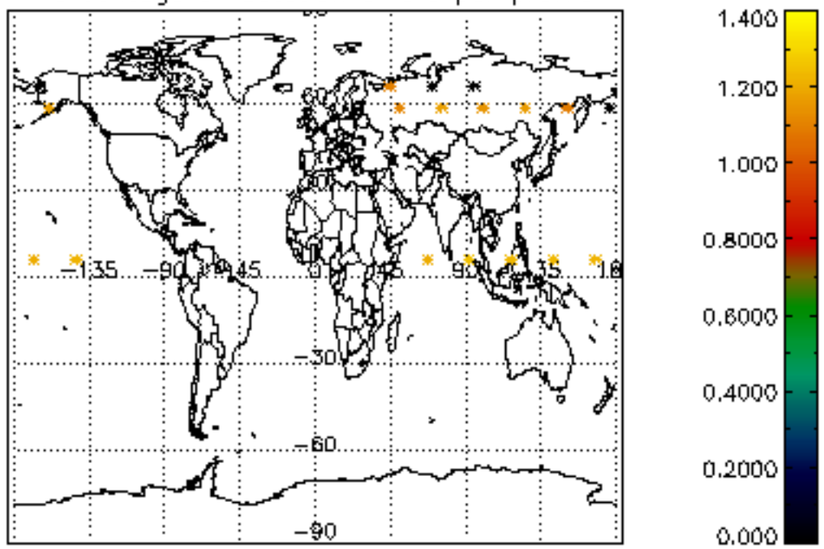



invalid
with datation errors
with non-converged ray path
containing saturated samples
where cosmic rays have been detected
where star falls outside central band
where problem occurred during full transm
% of measurements per product:
value (%)
0
5
10
15
20
25
06:00.00 11/01/2012
08:00.00 11/01/2012
10:00.00 11/01/2012
12:00.00 11/01/2012
14:00.00 11/01/2012
16:00.00 11/01/2012
18:00.00 11/01/2012
Time

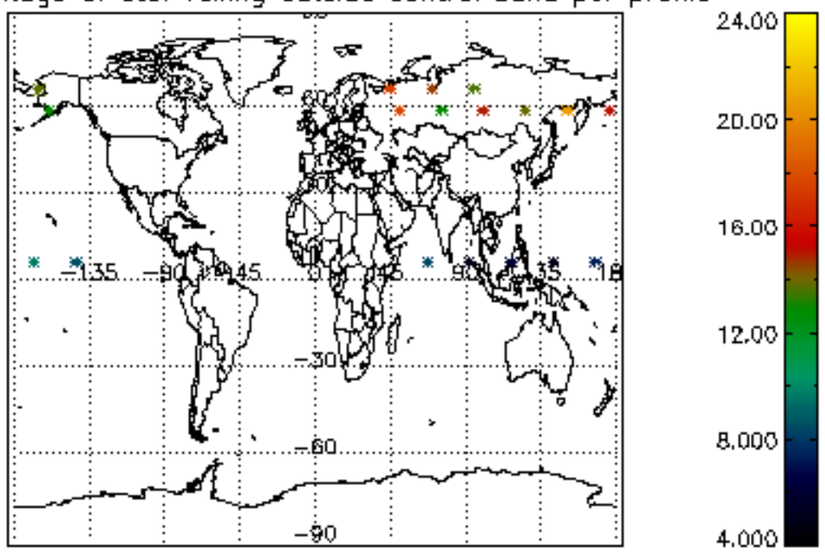
Percentage of cosmic ray hits per profile



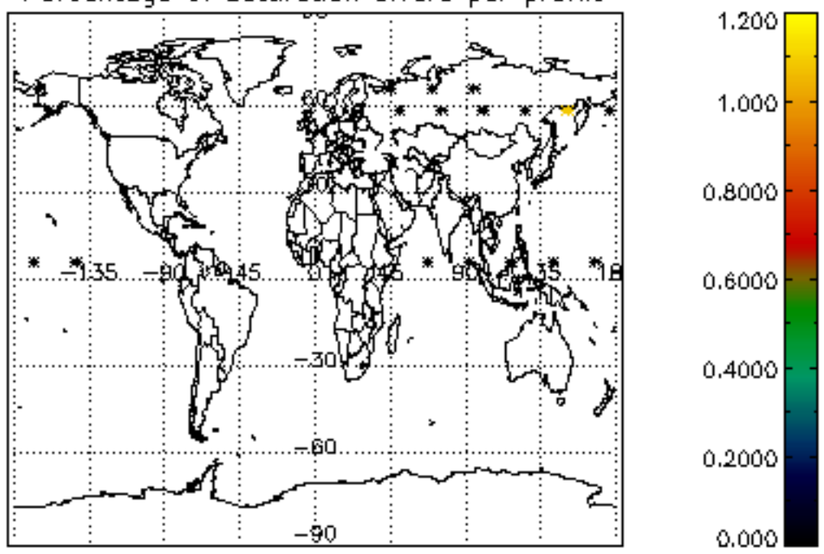
Percentage of datation errors per profile

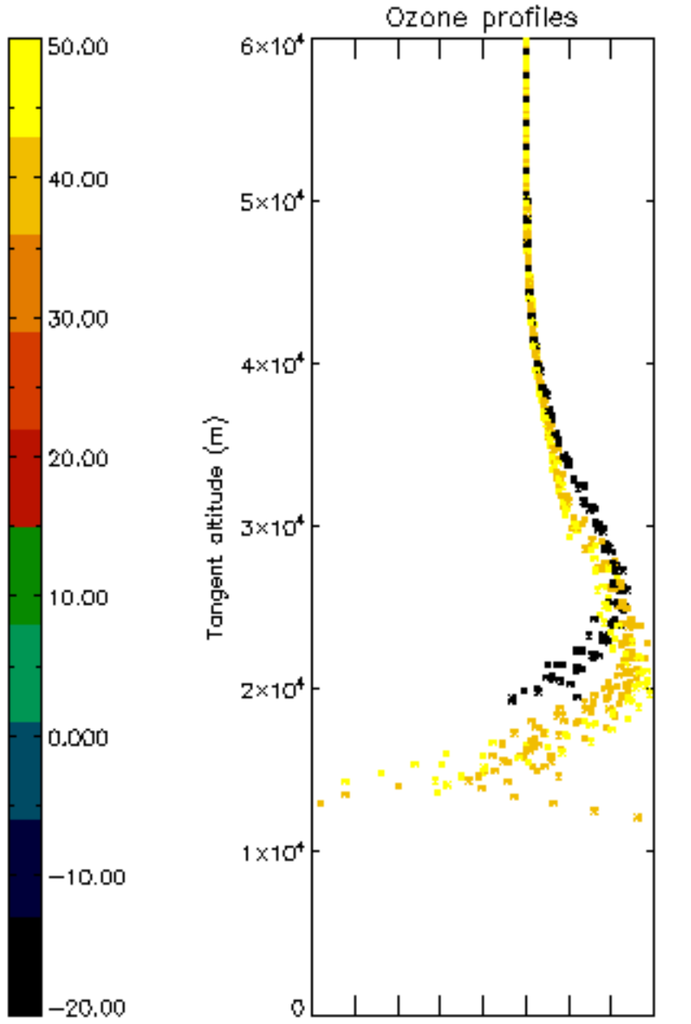


Percentage of star falling outside central band per profile

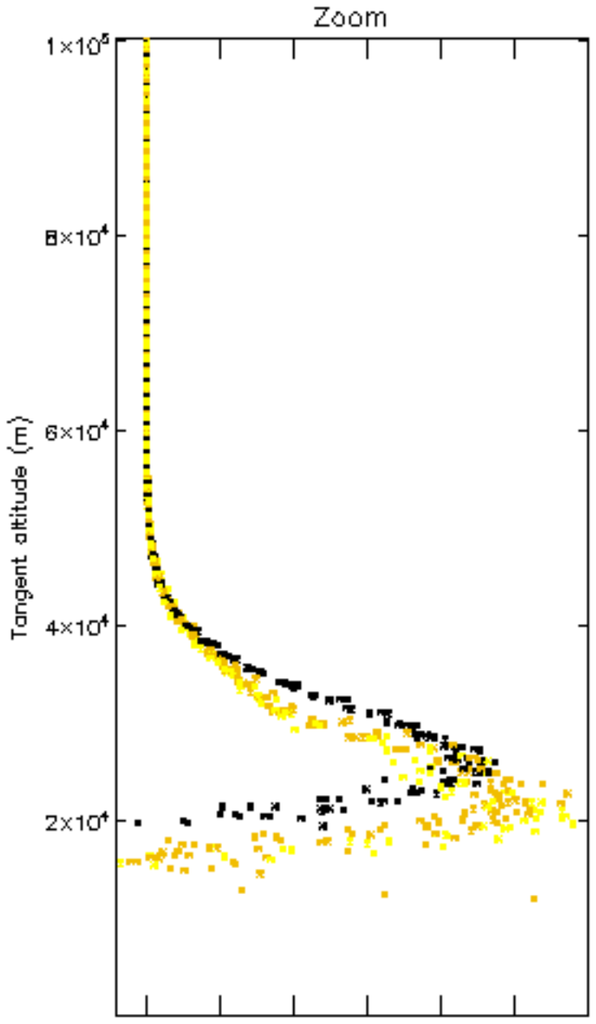


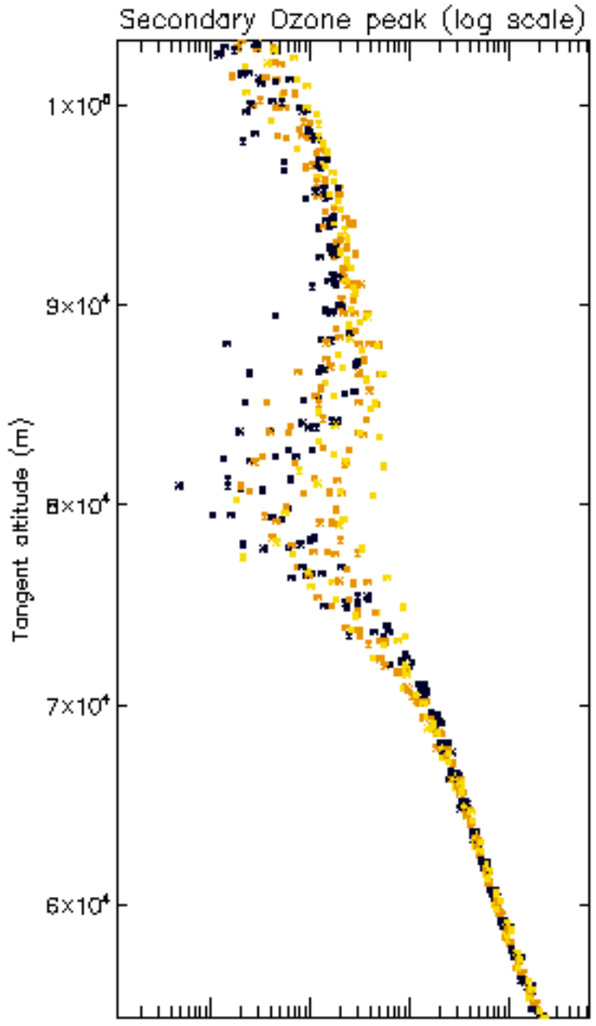
Percentage of saturation errors per profile

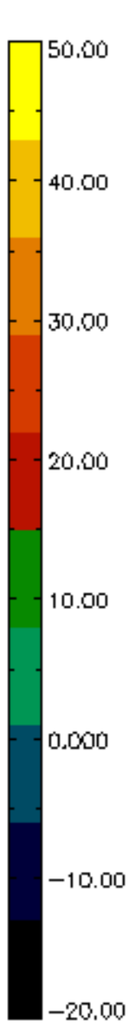


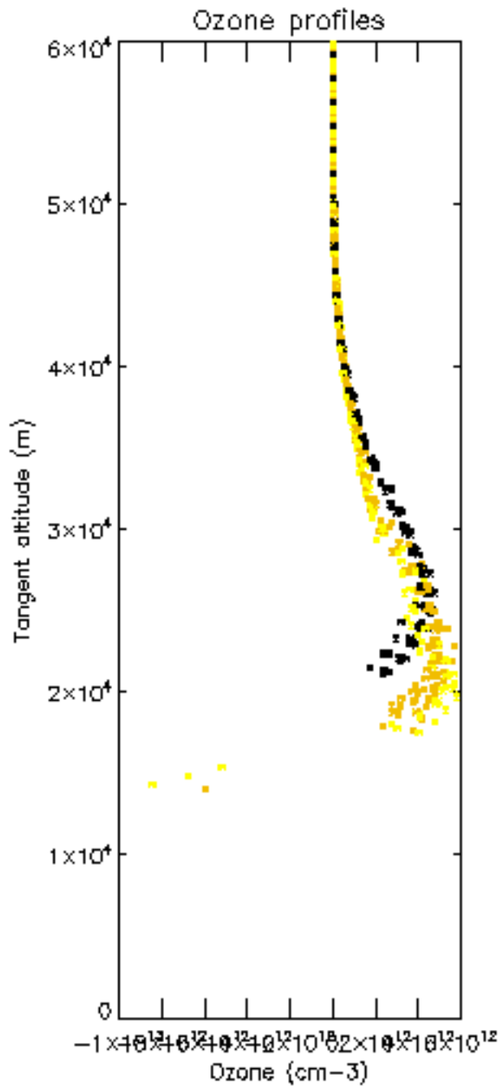

50.00
40.00
30.00
20.00
10.00
0.000
−10.00
−20.00

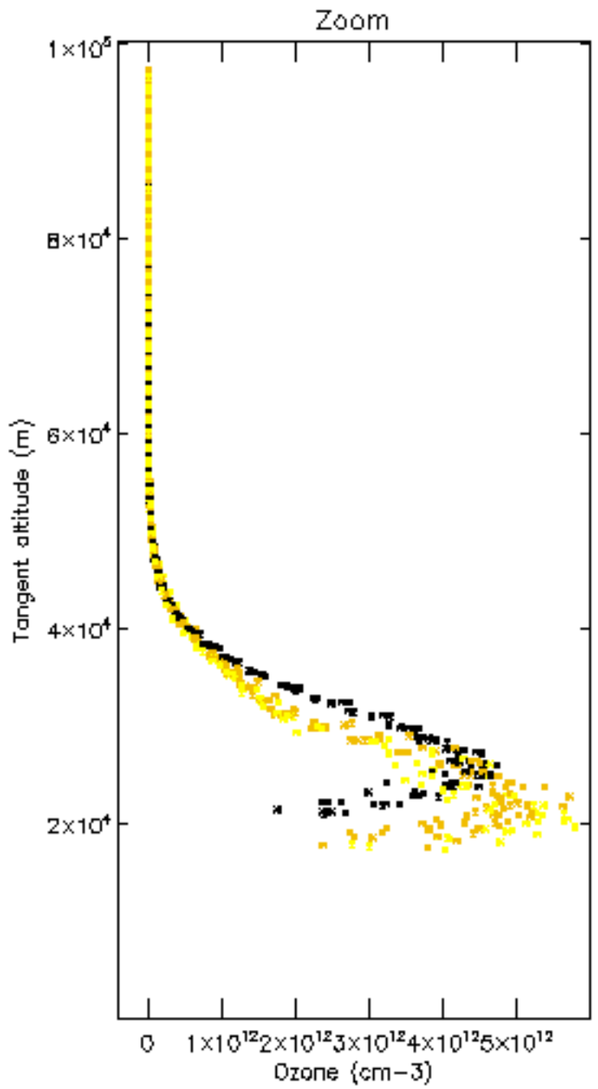
Ozone profiles
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
Tangent altitude (m)
Ozone (cm−3)

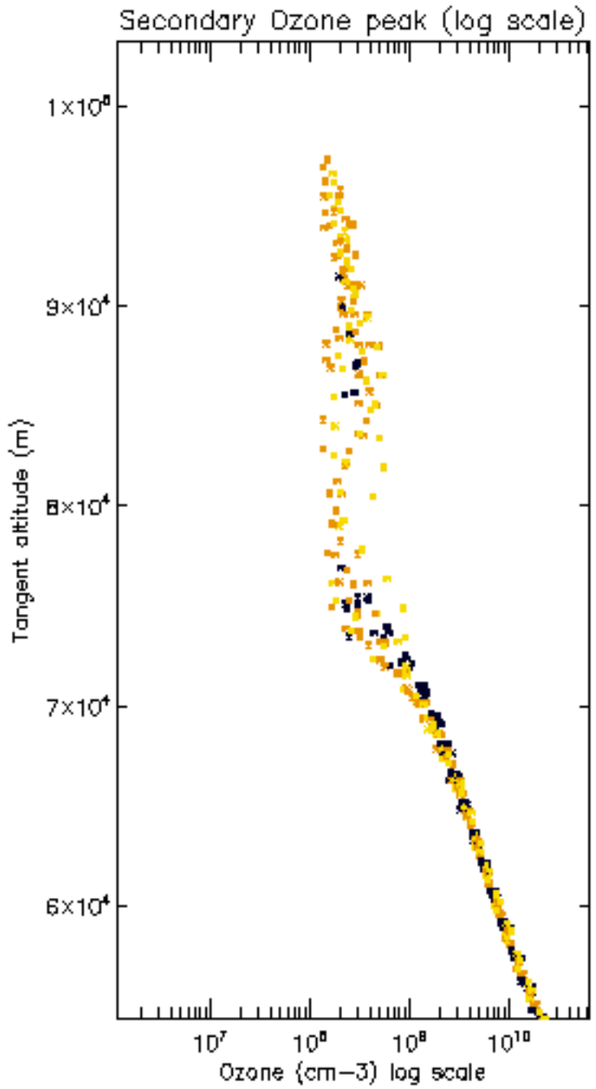

Zoom
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
Tangent altitude (m)
0
1×10¹²2×10¹²3×10¹²4×10¹²5×10¹²
Ozone (cm−3)

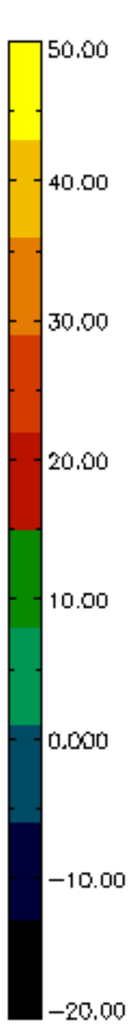

Secondary Ozone peak (log scale)
1×10⁵
9×10⁴
8×10⁴
7×10⁴
6×10⁴
Tangent altitude (m)
10⁷
10⁸
10⁸
10¹⁰
Ozone (cm−3) log scale

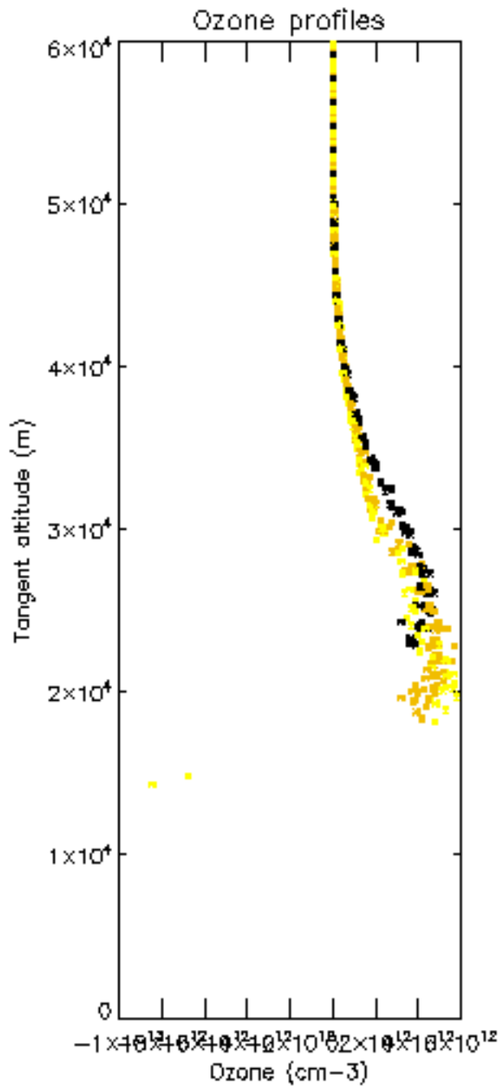

50.00
40.00
30.00
20.00
10.00
0.000
−10.00
−20.00

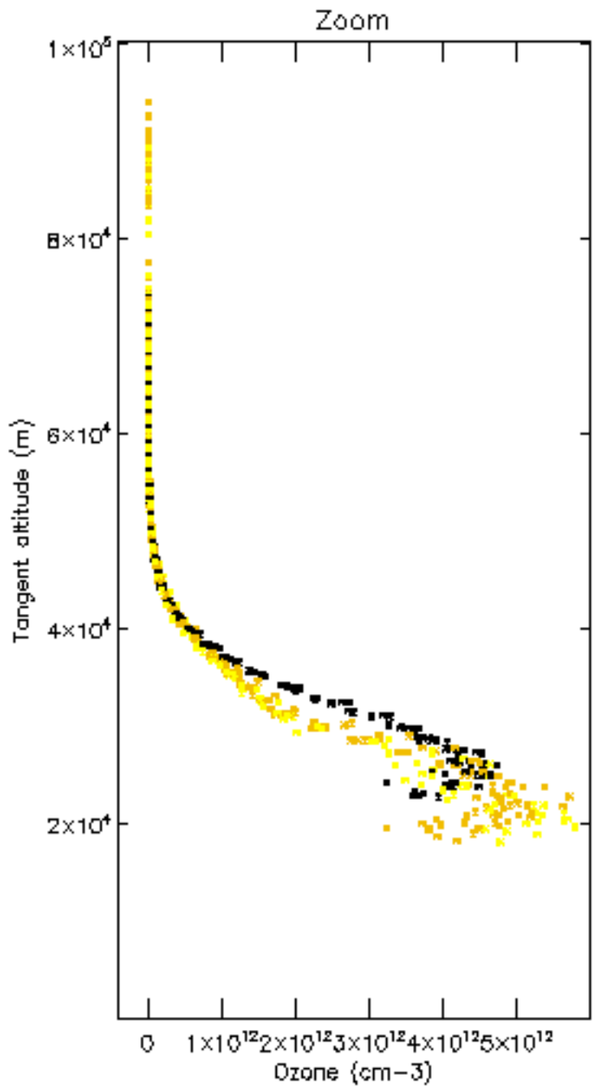

Ozone profiles
Tangent altitude (m)
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
Ozone (cm−3)

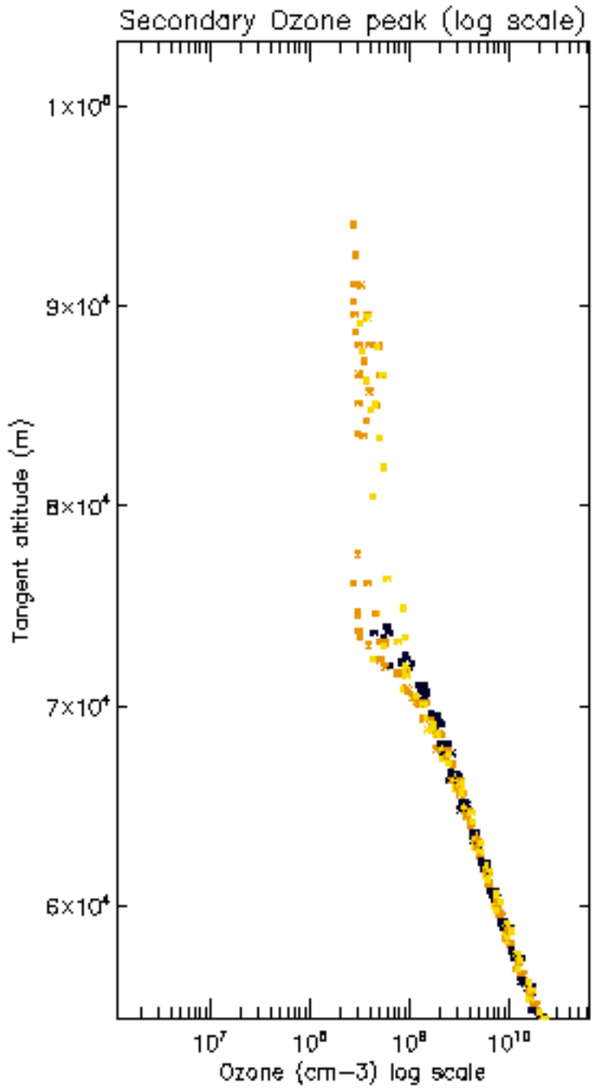

Zoom
Tangent altitude (m)
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
0
1×10¹²
2×10¹²
3×10¹²
4×10¹²
5×10¹²
Ozone (cm−3)

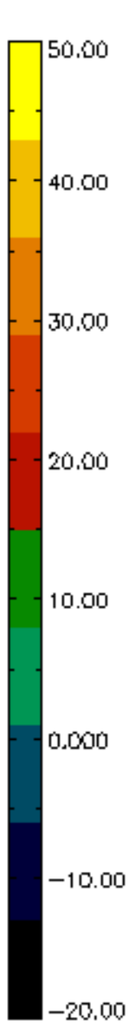

Secondary Ozone peak (log scale)
Tangent altitude (m)
1×10⁵
9×10⁴
8×10⁴
7×10⁴
6×10⁴
10⁷
10⁸
10⁹
10¹⁰
Ozone (cm−3) log scale

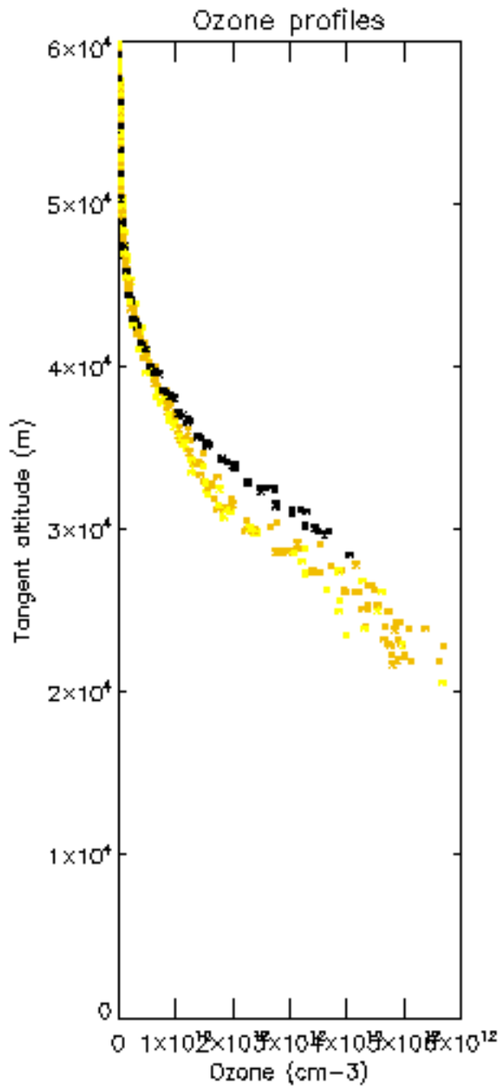

50.00
40.00
30.00
20.00
10.00
0.000
−10.00
−20.00

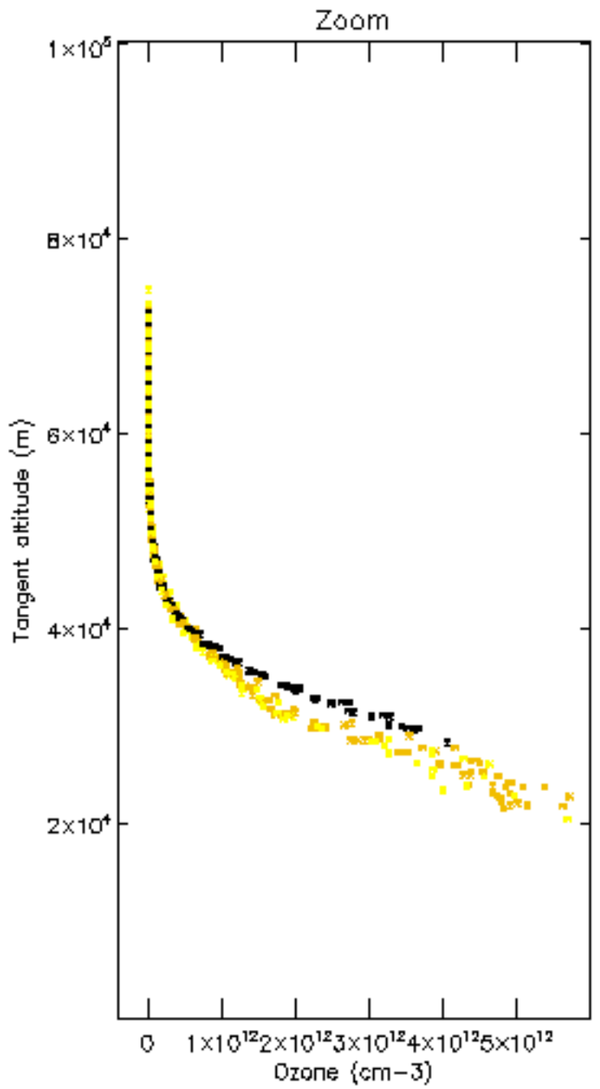

Ozone profiles
Tangent altitude (m)
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
Ozone (cm−3)

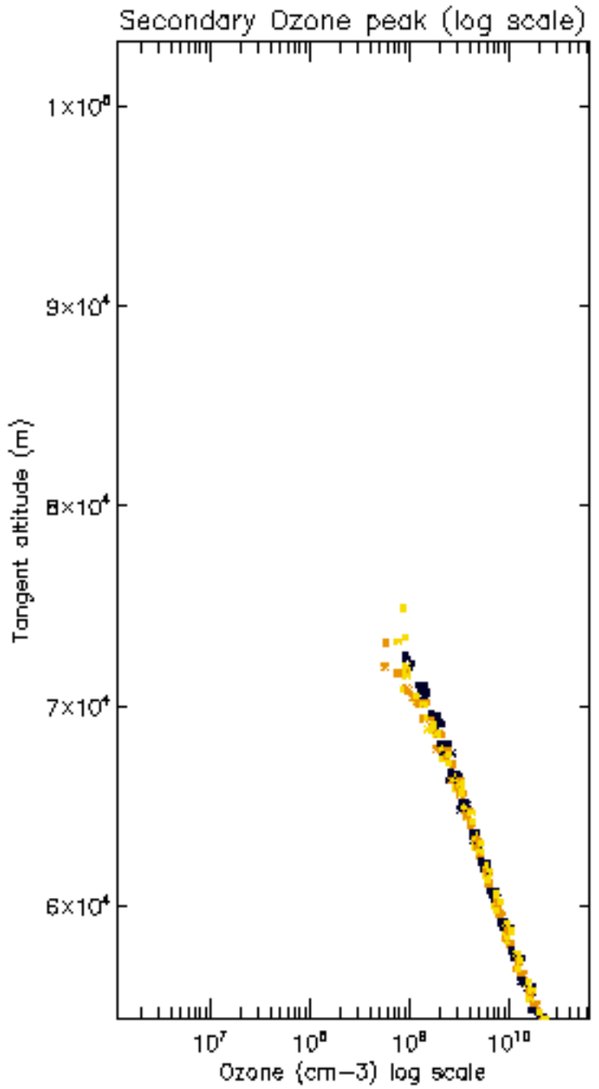

Zoom
Tangent altitude (m)
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
0
1×10¹²
2×10¹²
3×10¹²
4×10¹²
5×10¹²
Ozone (cm−3)

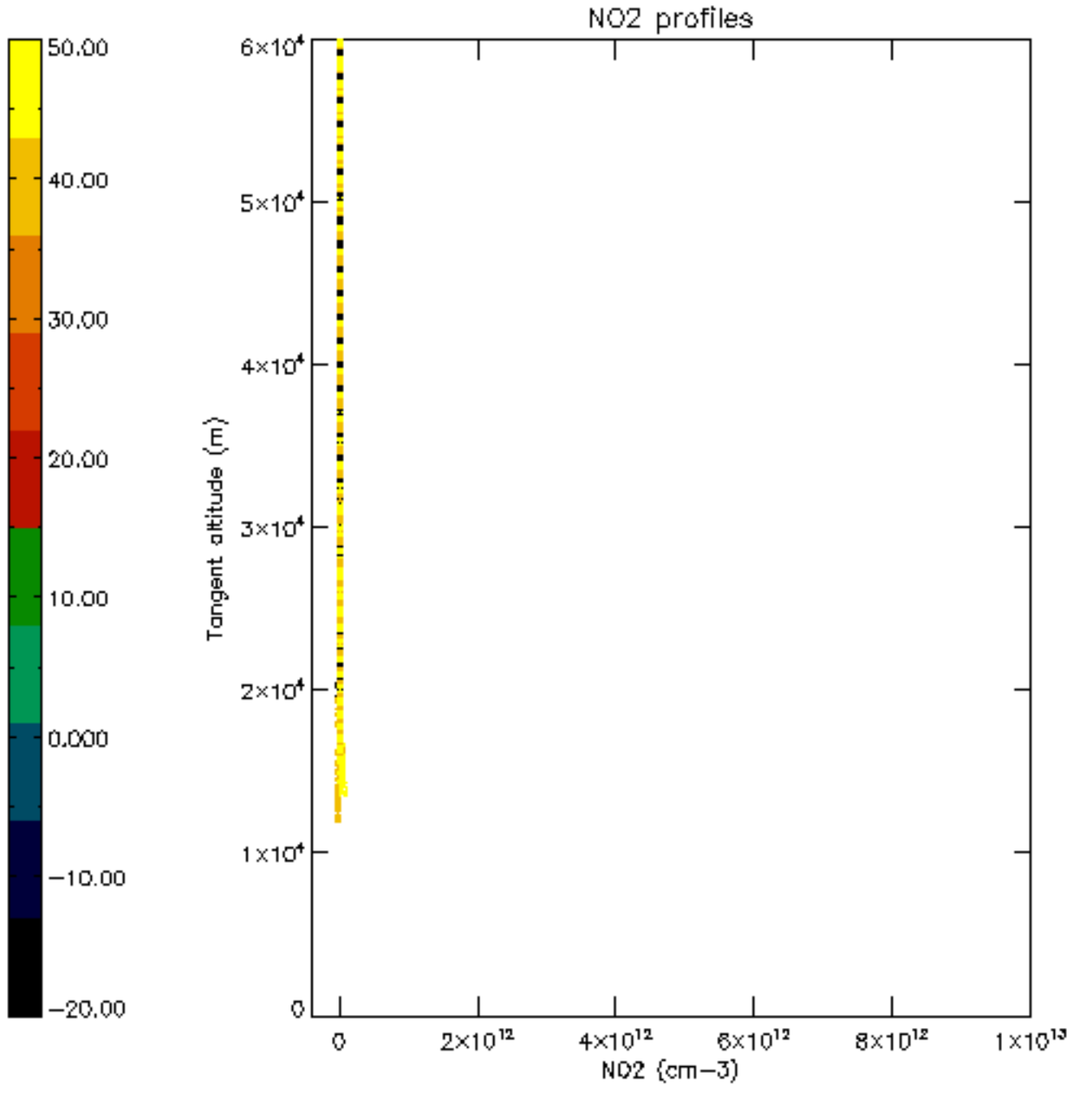

Secondary Ozone peak (log scale)
Tangent altitude (m)
1×10⁵
9×10⁴
8×10⁴
7×10⁴
6×10⁴
10⁷
10⁸
10⁹
10¹⁰
Ozone (cm−3) log scale

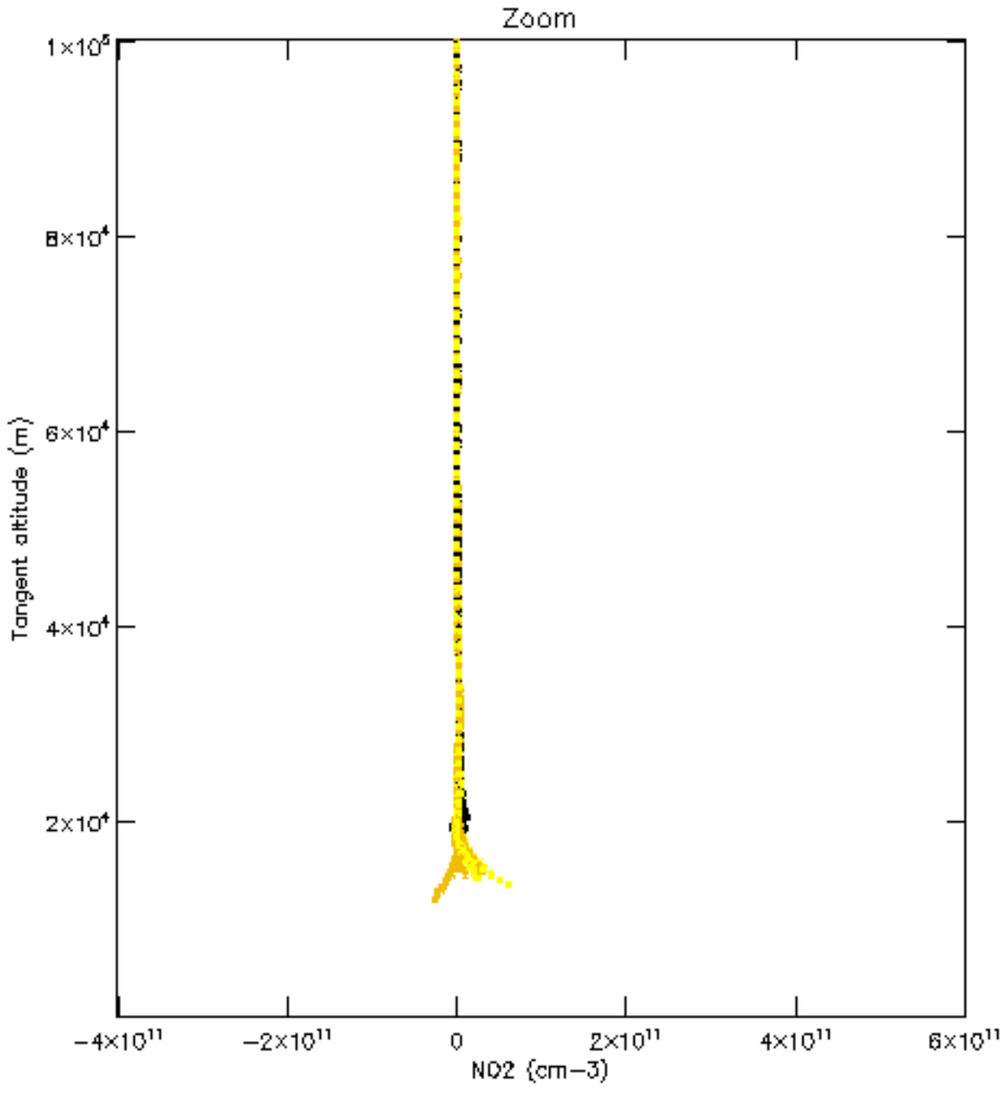

50.00
40.00
30.00
20.00
10.00
0.000
−10.00
−20.00

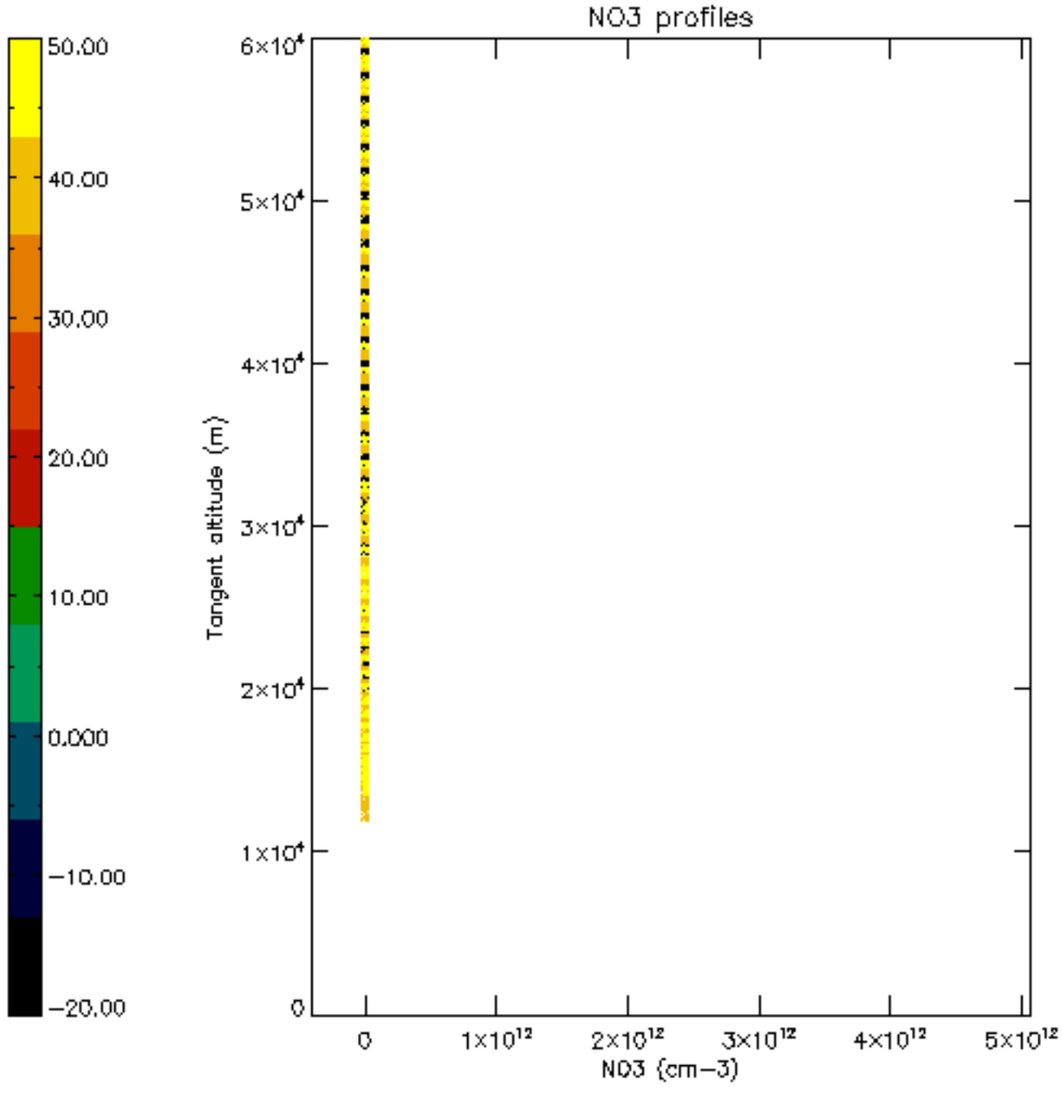

Ozone profiles
Tangent altitude (m)
6×10⁴
5×10⁴
4×10⁴
3×10⁴
2×10⁴
1×10⁴
0
0 1×10¹² 2×10¹² 3×10¹² 4×10¹² 5×10¹² 6×10¹²
Ozone (cm−3)

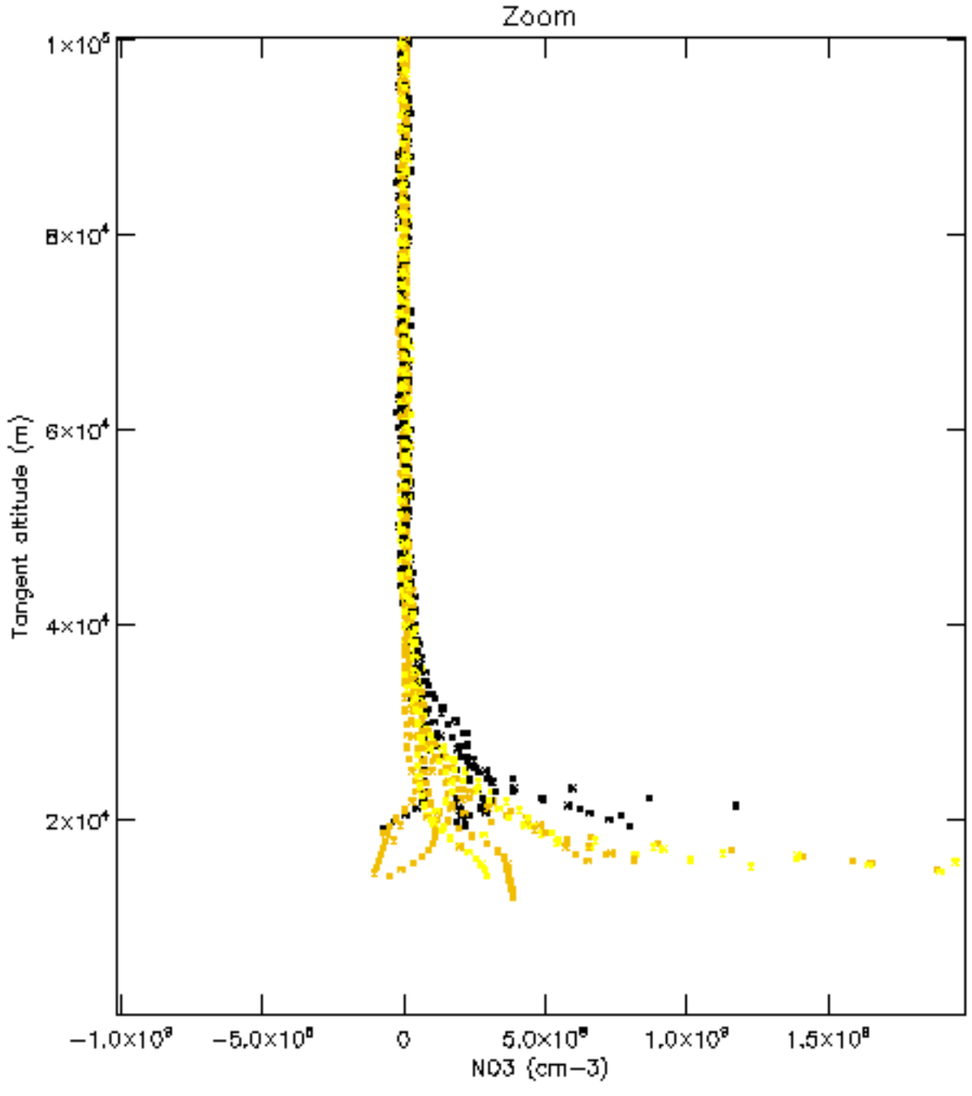

Zoom
Tangent altitude (m)
1×10⁵
8×10⁴
6×10⁴
4×10⁴
2×10⁴
0 1×10¹² 2×10¹² 3×10¹² 4×10¹² 5×10¹²
Ozone (cm−3)


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


NO2 profiles
50.00
40.00
30.00
20.00
10.00
0.000
−10.00
−20.00
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
50.00
40.00
30.00
20.00
10.00
0.000
−10.00
−20.00
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)