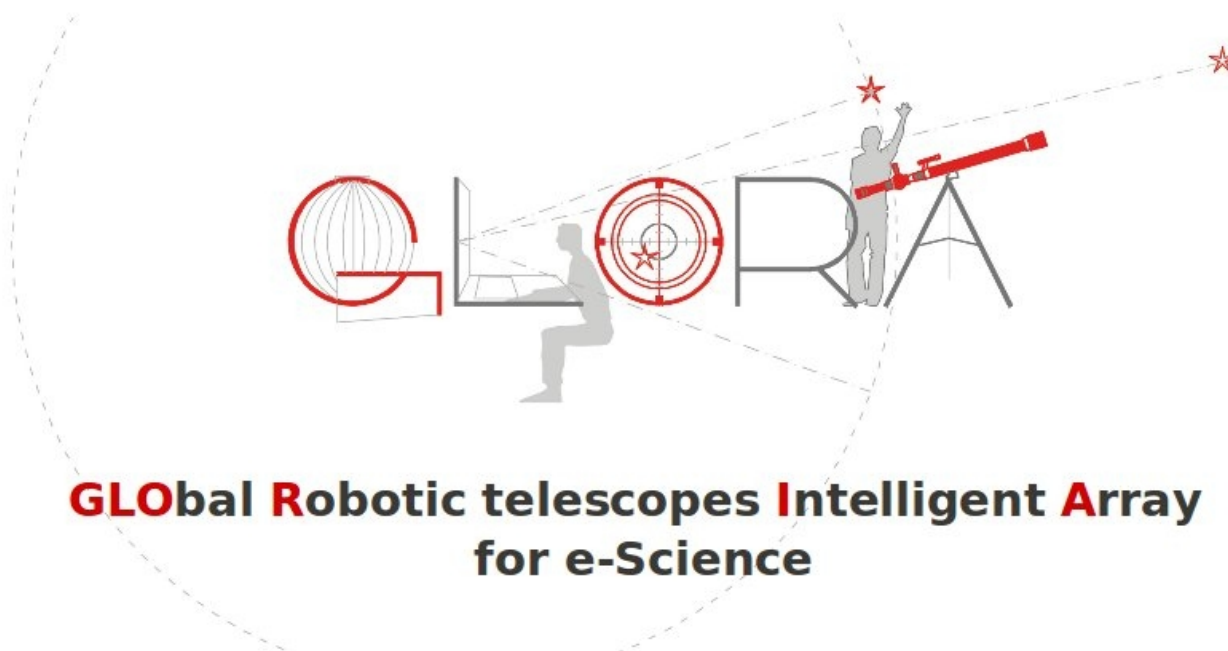




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Reference Documents

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1. Overview

The following document covers the statistics made during the first two astronomical events broadcasted by the GLORIA project and an independent live webcast made by a GLORIA partner. Each section contains figures regarding the visits to the main website as well as the number of viewers watching the phenomena online. This document represents a summary of other documents submitted in the GLORIA project.

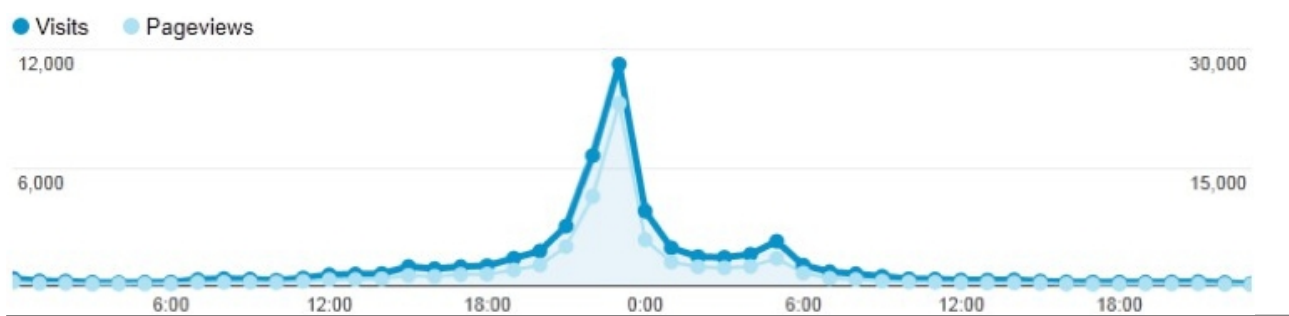
The website section includes also collected information from the web visitors in real-time such as their geographical location, operating system and web browser. The live broadcast section shows the results of concurrent and unique viewers filtered by their IP addresses. The recorded broadcast section analyses the information of viewers after each astronomical event, when they were published in the GLORIA website.

2. Transit of Venus June 2012

2.1. Website

The Figure describes the number of visitors to the main website during the astronomical event in UT time. The left Y-axis corresponds to the amount of unique visitors, whereas the right Y-axis refers to the total number of visits to the website.

According to the data collected in real-time, the maximum peak of 11.245 web visitors happened when Venus became fully visible in front of the Sun (June 5, 22:27:26 UT). During the live broadcast, 52.674 visitor navigated through the main website to get information regarding the Transit of Venus. The total number of page views reached 86.581 in different sections of the website, where 23.172 page views correspond to the maximum peak.



On the other hand, the following figures show the geographical location by country of the web visitors, where Spain, Poland and Mexico cover more than half of all the viewers to the main website. They also contain information about the web browser and operating system used by the visitors, where Google Chrome and Firefox were the most popular web browsers and Windows the dominant operating system.

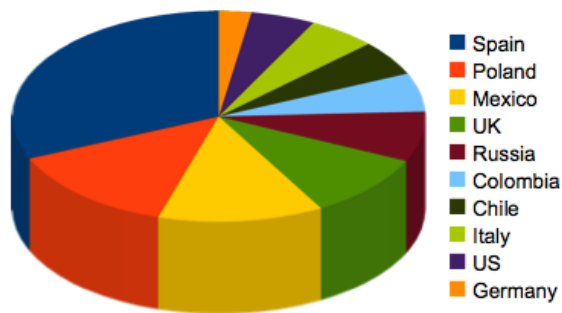


Figure 2: Transit of Venus 2012: user location

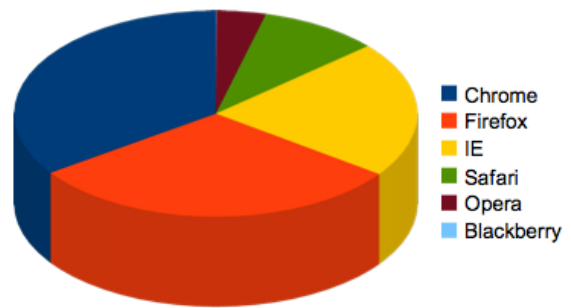


Figure 3: Transit of Venus 2012: web browser

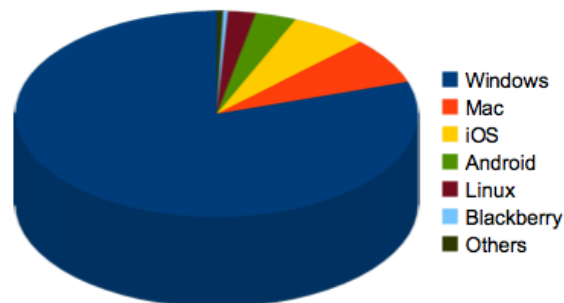
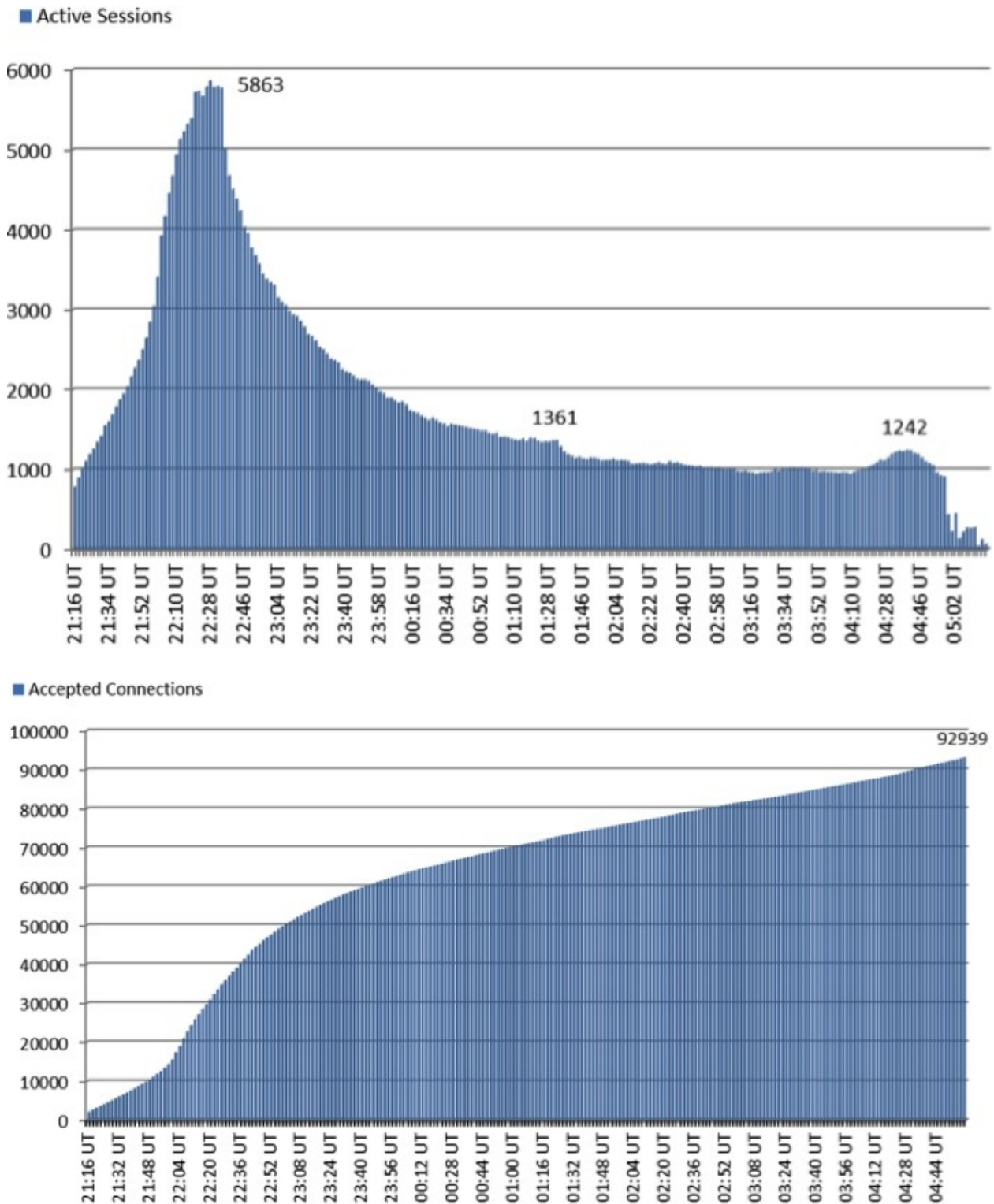


Figure 4: Transit of Venus 2012: operating system

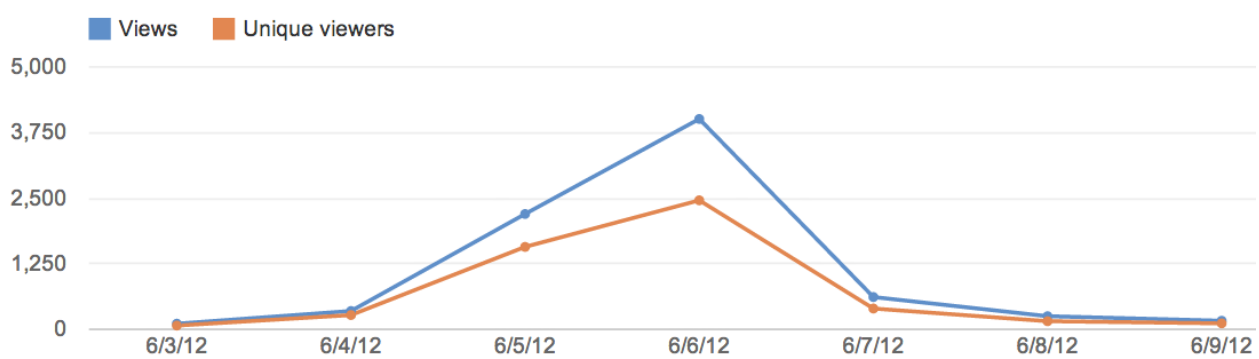
2.2. Live broadcast

During the three live broadcasts of the Transit of Venus 2012, the maximum peak for the first streaming was 5.863 viewers, where 1.361 and 1242 viewers correspond to the second and third live broadcast respectively as shown in the following figures. They represent a cumulative graph of the total viewers during the astronomical event, where 92.939 live streams were dispatched from the content delivery network.



2.3. Recorded broadcast

After the live broadcast, the recorded streams were published in the GLORIA website. The figure and the table show the number of views few days after the astronomical event. In total, 5,040 viewers watched the three recorded streams, where 4,009 views were received on the 6th of June.



	Views	Unique views
Maximum	4009	2459
Total	5040	3127

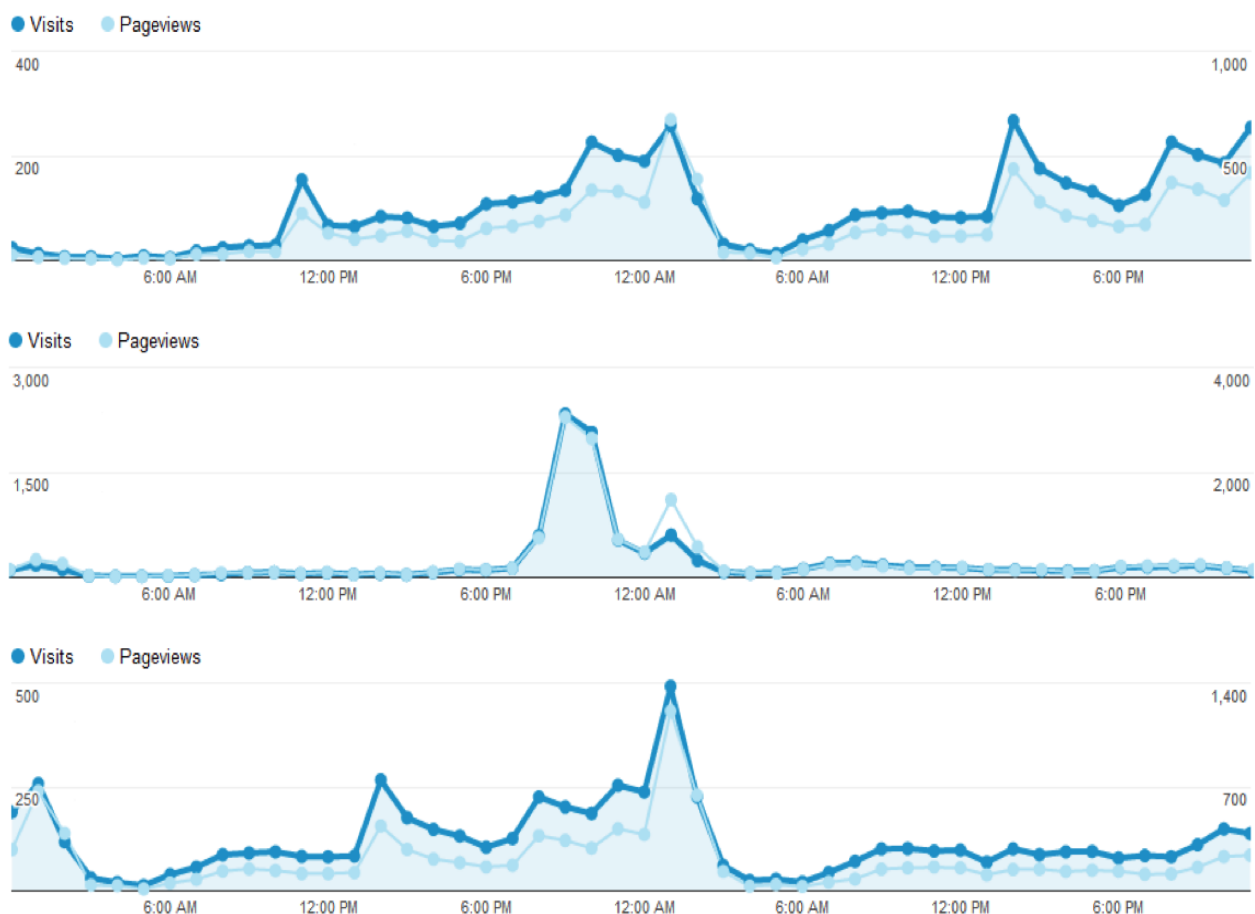
3. Northern lights August 2012

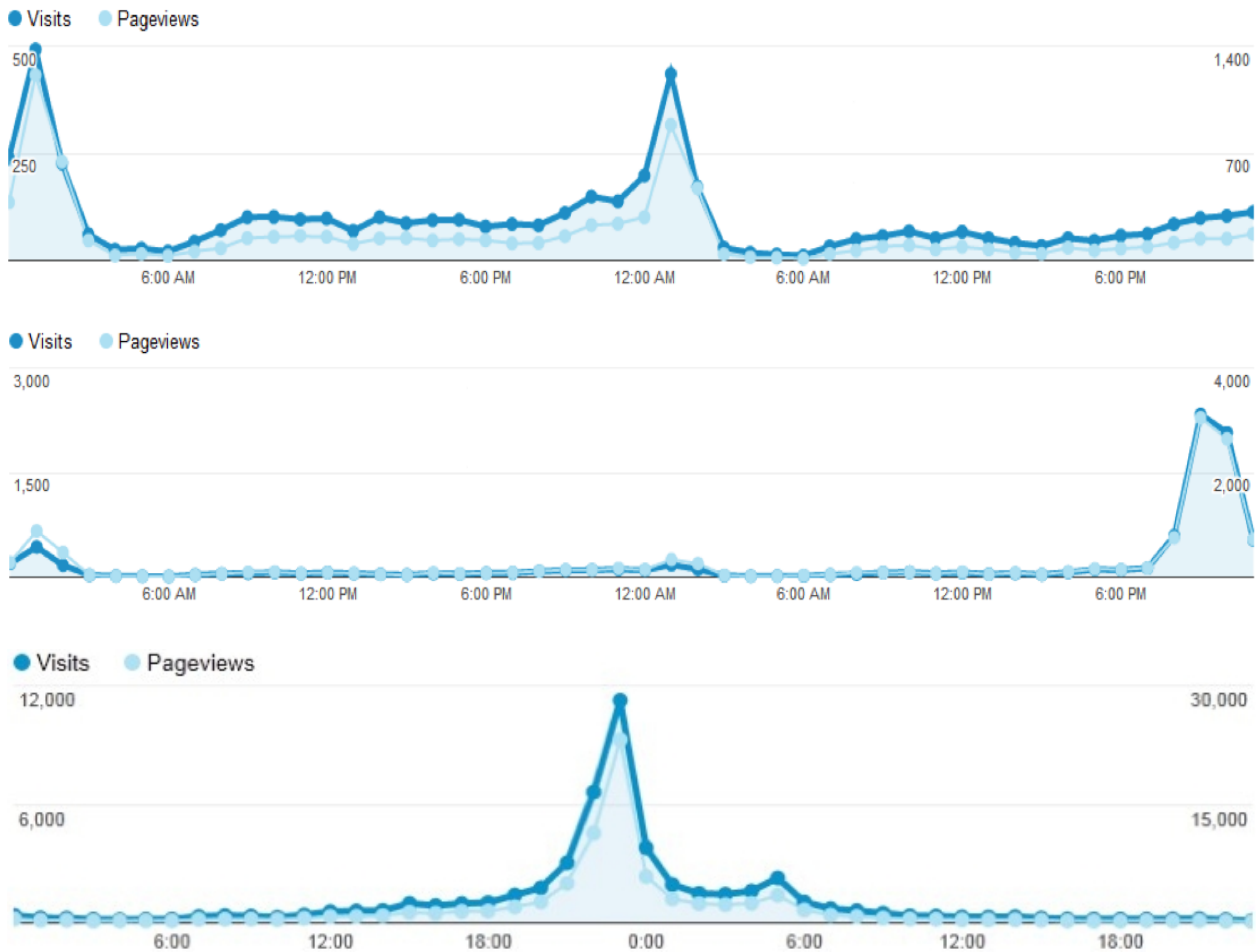
3.1.1. Website

The following figures contain the number of viewers who accessed the main website on each day in UT time during the five live broadcasts of the northern lights in southern Greenland. The left Y-axis corresponds to the amount of unique visitors, whereas the right Y-axis refers to the total number of visits to the website.

According to the data collected, the main website reached 32.769 page views and 21.163 visits in total. During the live broadcasts, the website reached 4.588 page views and 1.969 visits. The references from other websites are not covered by these results.

The most popular day was the live broadcast of August 28th when the main website reached 1.481 page views and 605 visits. The maximum amount of viewers every day matches with the time of each live broadcast (00:00 – 01:00 UT) except for the broadcast on August 27th when most of the viewers were originally from Poland thanks to the media impact.





As in the previous astronomical event, the following figures shows the geographical location of the web visitor by country, where Spain and Poland cover more than 82% of all the viewers to the main website. They contain information about the web browser and operating system used by the visitors, where Google Chrome, Firefox and Internet Explorer were the most popular web browsers. Windows is also the dominant operating system.

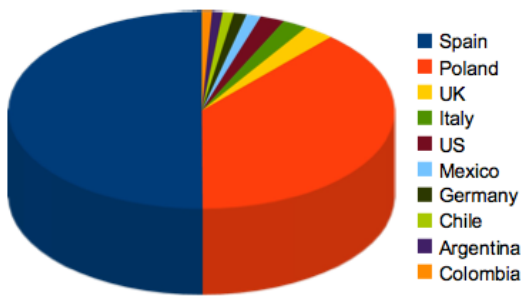


Figure 13: Northern lights Aug 2012: user location

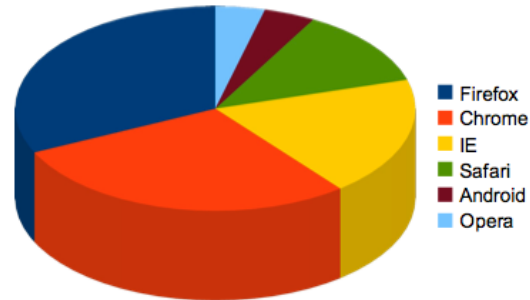


Figure 14: Northern lights Aug 2012: web browser

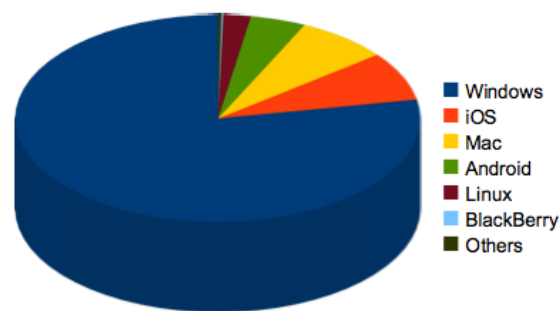


Figure 15: Northern lights Aug 2012: operating system

3.2. Live broadcast

During the five broadcasts of the Northern Lights 2012, a total number of 39.881 viewers could fetch the live stream, whereas 1.665 active users were watching the astronomical event simultaneously through different websites.

Most of the viewers got access to the live streaming through external websites such as public TV channels, except for the last broadcast of August 28th when the live broadcast reached its maximum number of viewers with 12.492 connections coming mainly from the main website. On the other hand, a maximum peak of 442 active viewers was reached on August 26th.

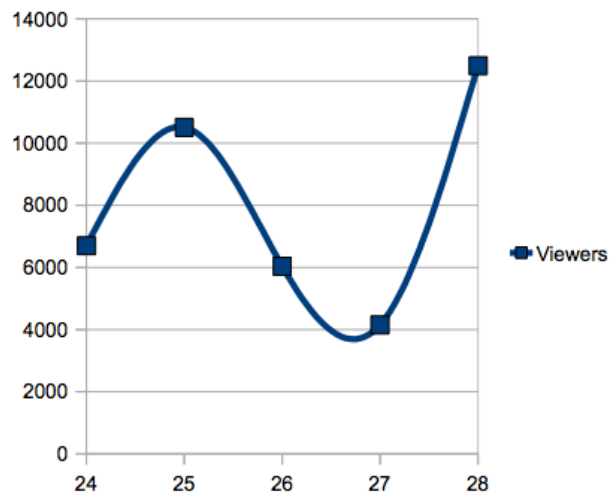


Figure 16: Northern lights 2012: live viewers

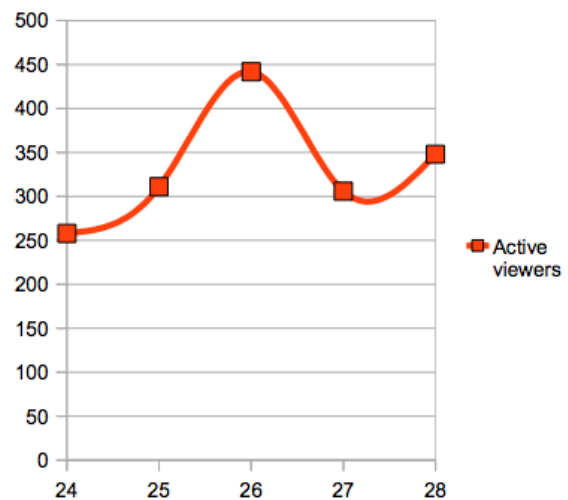
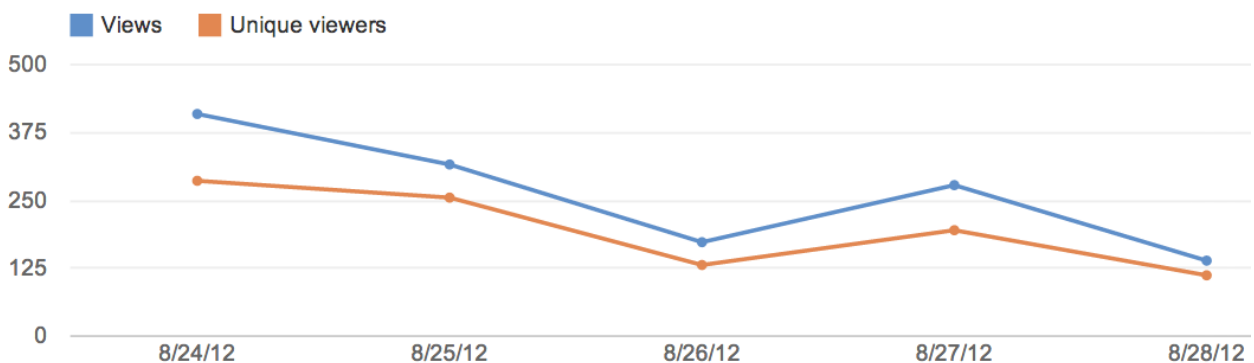


Figure 17: Northern lights 2012: live active viewers

3.3. Recorded broadcast

After the live broadcast each day, the recorded streams were published in the GLORIA website. The figure and the table show the number of views accessing the media content. In total, 1,315 viewers could watch the five recorded streams and the most popular day was August 24th.



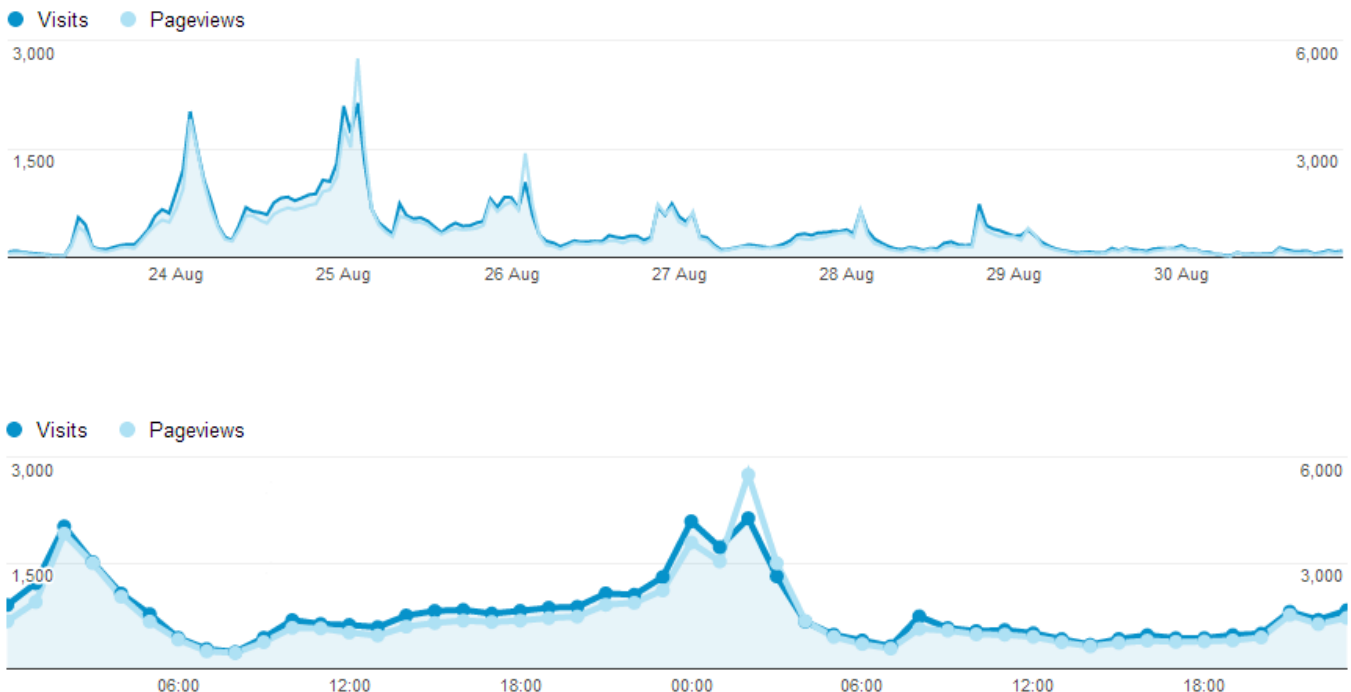
	Views	Unique views
Maximum	409	286
Total	1315	979

4. Northern lights August 2013

4.1. Website

The following figures contain the number of viewers who accessed the main website on each day in UT time during the live webcast of the northern lights in southern Greenland from August 23rd until August 30th. This live webcast was a parallel event promoted by a GLORIA partner. The left Y-axis corresponds to the amount of unique visitors, whereas the right Y-axis refers to the total number of visits to the website.

According to the data collected from Google Analytics, the website reached 124.166 page views and 69.201 visits in total. The most popular day was the live broadcast of August 25th when the main website reached 2.132 visits and 5.498 page views during the broadcast. During that day, 2.017 visitors accessed the website and 3.827 page were fetched after the live event. Collaborators using statistical services such as AWStats obtain 119.248 visits and 3.987.360 page views.



Apart from the GLORIA website, several collaborators and independent websites were promoting the astronomical event since the webcast was available to the public as a live feed. Six independent websites published the astronomical event online reaching 144.747 web visits and 11.426 video viewers. In terms of geographic location, most of the users watching the event resided in spanish speaking countries such as Spain (37.95%), Chile (16.49%) and Mexico (9.75%).

GLORIA Partners



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