

# Progetto Buiometria Partecipativa (Participatory Night Sky Monitoring) 2013 Activity Report



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## **Foreword**

The Buiometria Partecipativa project (which would literally translate to “participatory dark-ometry”, but which we normally refer to as “participatory night sky quality monitoring”) is an initiative born in Italy in 2008 to raise awareness on the topic of light pollution and its various forms of impact, while at the same time collecting quantitative data on this issue. Since 2010 we started proposing an annual activity report. All our annual reports are available from the main project website ([www.buiometriapartecipativa.org](http://www.buiometriapartecipativa.org), and are also downloadable from the [www.attivarti.org/bmp/annual-reports](http://www.attivarti.org/bmp/annual-reports) page).

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## **The measurement campaign**

The first version of the participatory monitoring campaign, based on the “relay” of hand-held sky quality meters, has been proceeding in 2013, albeit with a slower pace in terms of number of measurements and number of users. We have been pleased to receive new unsolicited requests for participation, while in the past years most of the volunteers were coming from groups of people who were following our activities or who heard from us from specific media events. In particular, we had expressions of interest from areas where measurements were quite limited (Sicily) or absent (Campania). In parallel, we have noted some long-running volunteers, for example in Emilia and in Puglia.

How should we read this change of pace? Surely the project has moved from an initial phase of drive for a new interesting initiative to a more mature moment. This does not mean that the collection of data via the hand-held sky quality meters has lost its value, as demonstrated by the fact that since 2008 (when we started the BMP project), other similar efforts have been triggered in various parts of the globe.

The investment which we made, starting in 2008, in the creation of an infrastructure to collect the data now allows the continuation of our measurement campaign with minimal effort. On the other hand, in the past year we had to deal with the lack of new significant funds. This prevented us from

putting the proper amount of energy in some of the enhancements which are in the plans, and from conducting a full maintenance program on the instrument pool (three of the sensors are currently not available, in a combination of theft, loss, and damage).

## ***Education and dissemination***

In the months of July and August, the Eighth edition of the “Nuove Figure” Festival was held. This is an international festival of puppetry and street theatre for children, with performances in various locations in Alta Maremma (the Northern part of the Grosseto Province). For 2013 the festival had a specific focus on stars, with a play dedicated to this topic, and with invitations to two associations -a stargazing group from Follonica and Attivarti.org- to animate some of the program. Attivarti.org gave a presentation in Montieri, together with an exhibition of the light pollution simulation model created by Francesco Giubbilini in 2011. Furthermore, during performance nights with favourable sky conditions, a sky quality meter was available for the collection of measurements.

One of our instruments is currently deployed at Parco Nord Milano, one of the main parks surrounding the city. The BMP project was presented here during the Biodiversity Festival which was held in September.

During October we took part in an initiative promoted by another association, called Tuscany Wild Tuscany, interested in the promotion of a part of the provinces of Siena and Grosseto which is currently less known compared to other areas in the region. The association hosted a delegation from the Schumacher College (UK), an institution focused on the topics of environment and sustainability. During this visit, Attivarti.org gave a presentation of the BMP and CORDILIT projects.

## ***Collaboration with other organizations***

At the national level, we have continued our fixed station data collection activities within the CORDILIT project, where Attivarti.org has set up and is managing the web infrastructure for data harvesting and reporting. In this operation, the Veneto Region maintains a primary role, both in terms of number of stations and amount of data, and for this we continue to acknowledge the effort made by the Veneto Stellato association. We are also now receiving data from two stations in Lombardia (in the Mantova area). It should also be noted that the station in Castiglioncello, Tuscany, which was used as a prototype within the CORDILIT system, has been phased out and replaced by a data logger sensor. This is currently located in the northern parts of the Roccastrada municipality, actually where the BMP project was started in 2008.

Between March and November the Tuscan Mining Geopark proposed a participatory project for the definition of an European Charter for Sustainable Tourism<sup>1</sup>. Attivarti.org attended the five meetings which composed the participatory process and proposed in this context the topic of protection and promotion of “the other half of landscape”, i.e. the night sky. The topic was accepted and if, as we hope, the Charter will be formally accepted by the European authorities, we are looking forward to propose during 2014 and the following years actions which will find synergies with other stakeholders involved in tourism, local production, and management of facilities in the area covered by the Park.

At the very end of December, the Regional Government of Tuscany approved a new interim version of its master plan on energy and environment. This version was to account for comments made by

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<sup>1</sup><http://www.european-charter.org/home/>

public and private stakeholders between November 2012 and January 2013. Attivarti.org presented various observations pertaining to light pollution and night sky quality, as noted also in our 2012 annual report. We were glad to find that various of the proposed observations were accepted in the new version of the plan. At the same time, we also noted that the document also presents some parts which may be improved, if we compare these with what we see as the best practice for the mitigation of light pollution (namely attachment 1 to section C.2 and some aspects related to monitoring). We hope that in the coming months it will be possible for the Regional Administration to reconsider these aspects.

At the international level, January Attivarti.org entered a European research team operating in the “Loss of the Night Network” (LoNNe) COST Action, participating to meetings of the management committee and working groups, and to an sensor intercomparison campaign in the island of Lastovo (Croatia).

This activity represents the continuation of the work we conducted in the past years, with the participation to the CABAUW intercomparison campaign (The Netherlands, 2012), and to the International Dark Sky Association symposia in Ireland (2009), Germany (2011), and Poland (2012).

## ***Technology***

From the standpoint of accessibility to the information we produce, we added the possibility of displaying data through the Eye on Earth platform, managed by the European Environment Agency. This required tuning the KML export of our data, which has been available now for some time.

Concerning CORDILIT data, in addition to the standard download procedure (allowing the download by specifying a station and a date range), we are now making available the complete SQL data dump on a weekly basis.

We also improved the data harvesting section of the CORDILIT infrastructure, by enabling the connection via direct IP access to the fixed stations, while in the previous years we were relying on file-based data transfer, thus requiring the stations to be connected to a computer.

We also devoted some resources to improve the configuration of the Attivarti.org server, which is hosting most of our infrastructure, and we are periodically evaluating new ideas and software solutions to enhance the access to the data we collect, which remains freely available through an Open Database Licence.

## ***Future developments***

2013 has not been an easy year, in general and -as many other activities- our participatory night sky monitoring project, together with other actions developed by Attivarti.org concerning light pollution have been impacted. Nevertheless, the project goes on: we are active on the topic, and we look forward to the European Charter for Sustainable Tourism and to our international relations as primary areas for the development of new ideas. As usual, we are always open to collaborate with old and new contacts, with respect to initiatives to complement the data collection work.

## ***Supporting the project***

The BuioMetria Partecipativa project is maintaining a prevailing self-funded nature. We are periodically monitoring opportunities for funding, but if you feel that our initiatives on awareness raising on light pollution and on night sky quality data collection are interesting and/or useful, please consider supporting the project with a **donation**. You will find more instructions about this at the page: [http://www.attivarti.org/?page\\_id=886](http://www.attivarti.org/?page_id=886).