11th European Symposium for the Protection of the Night Sky October 6th - 8th 2011 in Osnabrück, Germany

Participatory dark sky quality monitoring in Italy

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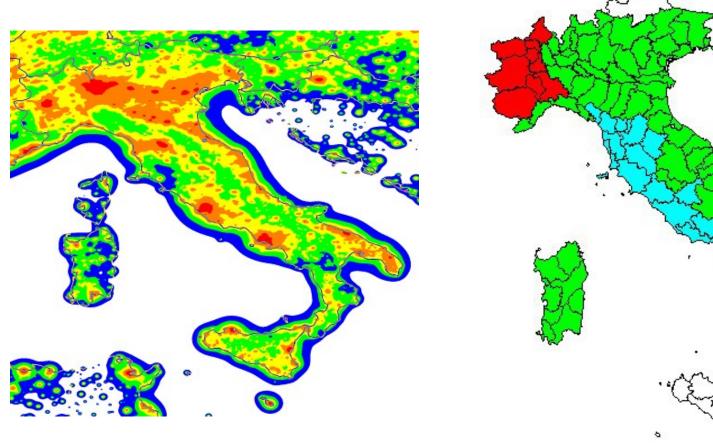


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1. Introduction

Context





2. Buiometria Partecipativa

Participatory Dark Sky Quality Monitoring

- Started in February 2008
- Launched in June 2008
- Currently unique in Italy (and quite original globally)





The core of our project

We invite people to take measurements of night sky quality...



...following well-defined procedures...



...with an accent on participatory methods

Who are we?



Environmental engineers with some extra-engineering (and some extra-environmental) experience



Geospatial folks



Archaeology/open data folks



Local communities



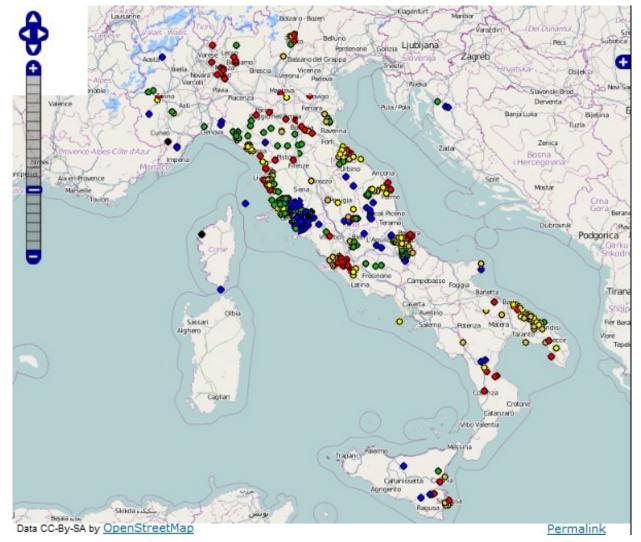


Components of the project

- Awareness raising
- Education
- Communication
- Research
- ICT



BMP Measurements



BMP "community" (5/2008 – 3/2011)



<u>"rest of the world"</u> (2005-2011)



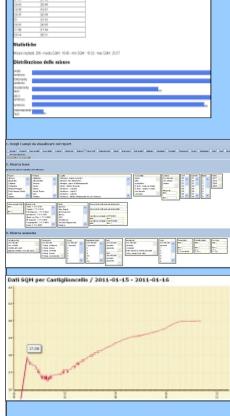
BMP->ICT





WMS

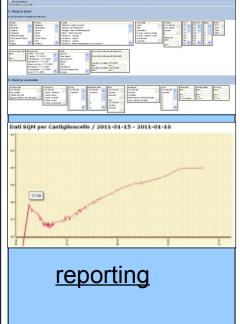
mapping





<u>Catalogue</u> <u>services</u>







...not just ICT (outreach)





















3. CORDILIT

BMP's junior brother (operating with organisations, rather than individuals)





CORDILIT

From hand-held instruments to fixed, continuous monitoring stations

A coordination of various associations in Italy, all active in the area of light pollution prevention and data collection

The BMP team is one of the creators of the coordination (with Veneto Stellato and with endorsement by of Cielobuio and UAI)

The BMP team has developed simple data harvesting utilities to automate collection of data from different stations.

Development Roadmap to date

- 2009-2010: internal testing within the BMP team;
- Nov. 2010 Jan. 2011: initial contacts with other subjects;
- Feb.- Mar. 2011: face-to-face meetings;

- •Jan-Mar. 2011: activation of the system;
- •July 2011 announcement to communities.



Why a coordination (instead of a single system)?

- Data harmonisation without constraints on one single technical option;
- Definition of standards and QA/QC criteria;
- Framework for improved collaboration;
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- Framework for improved collaboration.
- Cost of "unifying" previous systems will be higher than proposing a harmonizations framework

CORDILIT - key features

- "one-stop shop" for publication of raw data (including weather data, where available);
- best practice documentation.
- FAQ
- (parts of the site are under translation into English)









<u>OpenDatabase Licence – ODbL</u>

- Ease of use, and re-use, of the data
- Guarantee on the continued availability of the raw data;
- Currently being adopted (or already adopted) by numerous organisations

 Requires an initial "self-awareness" process (paying off in a short-term)





What CORDILIT is not

It is not a network of SQMs;

•It is not (just) an information system;

It is not a closed context;

•It is not a distributor for "off the shelf" solutions

4. Next steps

Current CORDILIT developments

- Use of different sensors (and related data assimilation);
- Definition of standard monitoring protocols;
- Coverage of specific areas of interest;
- Improved hardware combinations;
- Definition of standard hardware set-up



Co-existence of manual and fixed station measurements

- •For screening purposes (also prior to installing a fixed station)
- Awareness raising





Our plan/call for collaboration

Development of night sky as a resource

- Helping to use better lighting practice
- Contribute to the creation of night sky protection areas
- Conduct specific monitoring and research campaigns

---> Establish partnerships to seek funding

N.B.: the technologies, tools, and methods proposed within the BMP project can be applied "as they are" also to other types of content

The Attivarti.org 2011 campaign

Approx. 20 events

5 European States

5 regions in Italy



<u>Upcoming events</u>

Oct 23, Cielobuio conference

Nov 8 Livorno (I)

Nov 18 Colorno (I)

December (date t.b.d.), Torniella (I)

For more information

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