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D2.9 Tutorial material for using Loss of the Night App

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Authors

Author name	Organization	E-Mail
Kat Austen	FVB-IGB	austen@igb-berlin.de





Abstract	This report provides orientation to the tutorial videos that show how to use the Loss of the Night App.
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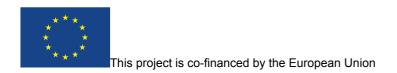
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Executive Summary

This report provides orientation to the tutorial videos that show how to use the Loss of the Night App.





1 Introduction

The Loss of the Night App invites citizen scientists worldwide to take part in a research project that measures light pollution by using the human visual system as a light meter. Specifically, participants are asked to look for specific stars, and report if they can see them from their location. The observations are sent anonymously to the Globe at Night project (www.globeatnight.org) where they are archived. Participants can also view the data at http://www.myskyatnight.com.

The research is timely as illumination of the night sky continues to increase annually. In addition to outshining the stars, light pollution is a signal of energy waste, and it disturbs sensitive nocturnal species. Scientists are concerned that light pollution might have a big impact on nocturnal ecosystems, but they have very little information on how skyglow is changing especially considering the recent transition to LED lighting. This cannot be achieved with current satellites, and in general is difficult to do via remote sensing because satellites look at the ground, not towards the sky.

Repetitions increase the accuracy of measurement and, through repeated use, participants tend to learn familiarity with the stars. Measurements can be made wherever the sky is observable, for example in parks or in open spaces.

The best timing is a few hours after sunset before the new moon. In the northern hemisphere summer months of May to July, the nights are too short at high latitudes to make observations. The best locations are inside of cities.

The app can be used from a balcony or garden, but will not work if in too close vicinity to glaring lamps, or in places far from cities with no artificial light. In ideal conditions the number of visible stars is overwhelming, participants are therefore encouraged to take part in a related project, such as Globe at Night.

The Loss of the Night App is downloadable for free for Android (http://tinurl.com/vdn-app) and iOS (http://tinyurl.com/vdn-ios) in 11 different languages: Arabic, Catalan, Chinese, English, French, German, Italian, Japanese, Polish, Romanian, and Spanish.

2 Tutorial Material

Tutorial material for the Loss of the Night App was completed through a collaboration between FVB-IGB, the Loss of the Night team (GFZ Potsdam) and project students at the Worcester Polytechnic Institute through the WPI "Interactive Qualifying Project" programme.

Tutorials were made both for iOS and Android. Both tutorials are accessible via the <u>Loss of the Night page on the ACTION website</u>¹, and the ACTION Youtube channel: <u>Android</u>² and <u>iOS</u>³.

³ https://youtu.be/TRRsOOx-JeQ



^{1 &}lt;a href="https://actionproject.eu/citizen-science-pilots/loss-of-the-night/">https://actionproject.eu/citizen-science-pilots/loss-of-the-night/

² https://youtu.be/8i4EH-KJsXo