## The French National Firefly Observatory & Preliminary results on Flaugergues' bioluminescent earthworm

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## Abstract

In 2015 we founded the French National Firefly and Glowworm Observatory, a citizen science project that asks the general public to help the scientific community to know in which regions of France these animals are thriving. The creation of this observatory through a novel approach and first results of the many thousands of observations will be presented. We are also trying to use a similar approach in Italy, Spain and Romania. Amongst the about 7000 known earthworm species, thus far only 40 are reported to produce light. A short review will be given about the current knowledge on these interesting animals and hypotheses concerning the function of producing underground light will be discussed and illustrated with some preliminary data obtained on Flaugergues' worm that we recently rediscovered in the French Loire valley after 250 years of absence from the scientific literature.

**Keywords:** firefly, glowworm, citizen science, earthworm, bioluminescent earthworm.

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