

CONTROL ID: 2565305

TITLE: Gaia-GOSA: An interactive service for coordination of asteroid observation campaigns

ABSTRACT BODY:

Abstract (2,250 Maximum Characters): We describe the Gaia–Ground-based Observational Service for Asteroids (www.gaiagosa.eu), which is a website aiming to facilitate asteroid observers in contributing to the Gaia mission by gathering lightcurves of selected targets.

There are many asteroids which lightcurves cannot be covered during one observing run, like slow rotators, with periods longer than 12 hours. There are also targets with periods commensurate with the Earth's day, so their lightcurves cannot be covered by observing from one site only. There are also targets of special interest, like binary objects, where a large amount of data is needed. For all targets like those mentioned above, a coordination of observers is needed, also to avoid unnecessary duplication of data gathering.

To that end we have created Gaia-GOSA, a web service which allows coordination between observers, focuses on interesting targets and may avoid observers to unnecessary gather data of the same object at the same time. Furthermore, it is not necessary to be an advanced observer to contribute to the project. The website prepares the observing plan, providing all the necessary information to point your telescope. The subscription is free and observers with any level of experience are welcome.

All the data gathered by Gaia-GOSA users will be reduced and analyzed by astronomers from the Astronomical Observatory of Adam Mickiewicz University in Poznan (AO AMU). The resulting catalogue, containing all the lightcurves obtained, will be used to enhance the results of the Gaia (cornerstone European Space Agency's mission) inversion algorithm.

The project has been developed under funding from the European Space Agency (ESA) and initially was only devoted to help users in planning photometric observations of asteroids. However, in this poster we also present an extended version of the website, which also aims to publish predictions of stellar occultations for selected targets. This work has been done in the framework of the Small Bodies: Near and Far (SBNAF) research project, which has received funding from the European Union's Horizon 2020 Research and Innovation Programme, under Grant Agreement no 687378.

CURRENT * CATEGORY: Asteroids: Observational Surveys

CURRENT : None

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