

AstroGPS - database of all astronomy and space related events in Poland with mobile app

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Abstract. AstroGPS is a mobile app and a web portal which is prepared to launch at the end of 2018. There are hundreds or maybe even more such events organized in Poland, but information about them is much scattered in many sources, and sometimes not easy to find. The idea of AstroGPS is to gather all astronomy and space related events in a country and present information to the users and media in an easy, comfortable and modern way. The idea of AstroGPS was earlier described in Czart *et al.* (2018).

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1. The Genesis of the Project AstroGPS

There are numerous events related to astronomy and space, which are organized in Poland on the various levels: nationwide, regional level, as well as the local. The idea of a system gathering an info about all such events was presented during Spotkanie Organizacji Astronomicznych i Astronautycznych, 6.09.2015 in Poznań, which was a large meeting of astronomy and space organisations. Moreover, during the meeting one of reasons for AstroGPS was unintentionally presented in practise, because at the same time another large event was held in faraway place in Poland: European Rover Challenge (5-6.09.2015 in Podzamcze near Kielce). Unfortunately at the stage of planning organizers of both events didn't know about each other plans. Many organisations wished to participate in both events, but some of them had to decide to choose the only one of them.

2. Who is the AstroGPS dedicated for?

We may distinguish four main groups of users: (1) a community of people who are interested in astronomy and space, (2) organizers of events, (3) teachers and student (schools) and (4) media (journalists). For all these groups AstroGPS might be very helpful in their planning of activities in astronomy-space related areas.

Community - By using the AstroGPS, members society of people who are interested in astronomy and space might be up-to-date with all events in which they are interested in, no matter whether that events are held in their neighbourhood or, for example, in their holiday destination.

Organizers of events - Organizations, institutions, companies and other entities which organize various astronomical and space events usually would like to spread an information about the event to the right target group or as widely as possible. In this case AstroGPS is an additional channel for distribution of information. They may use this nationwide range channel for free.

Schools - Events organized by schools are usually local or regional. But it might be useful for cooperation between schools to exchange information what other schools are planning. AstroGPS might also help teachers to find interesting events for school excursions for their students or pupils.

Media - in the work of journalists time is very precious. AstroGPS will help journalists to easily and quickly check what is going on in astronomy, space research, space industry and choose events which are interesting for readers of their newspapers, web portals or blogs. They may also easier plan in advance media coverage of such events.

We would like to emphasize, that AstroGPS is not a competitor for traditional news web portals about astronomy and space. It is not intended to publish editorial materials or news about discoveries. Information which is presented to users are basic data about events, like title, dates, short description, and link to external website where an user may find more info about the event.

3. Description of AstroGPS functions

3.1. The database function

The main goal of the mobile app and web portal AstroGPS is presenting events related to astronomy and space which are organized in Poland. Frontend interface for users allows searching of events. Various categories and tagging system have been implemented for

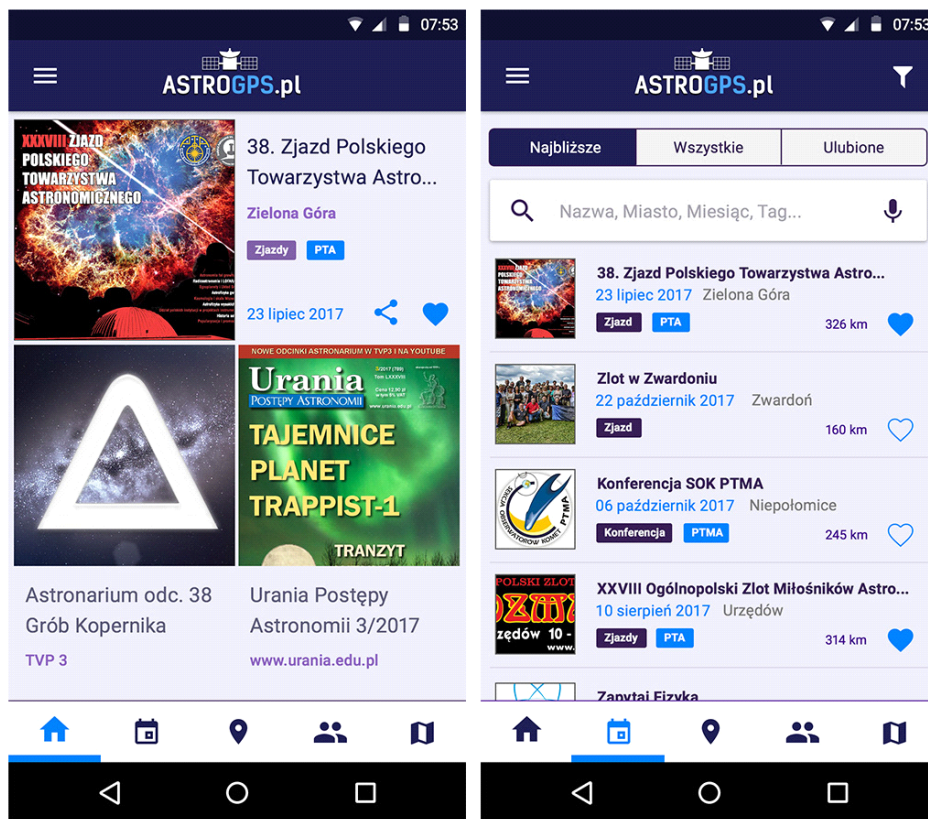


Figure 1. Sample screenshots from the AstroGPS mobile app beta version.

better usability. A user may easily filter the results of searching, according to his or her own preferences. For example, one may display events for a chosen town, or in an area with a defined radius. A functionality of push notifications is also planned to be implemented.

3.2. The social function

The database functionality depends on the effectiveness of editors in searching information about events and is relatively independent of the number of users. However social functions of AstroGPS will work the better, the more users use the service.

For example users might increase an effectiveness of the service in gathering really all events, as they might submit events which are not yet in database. But a mobile app might have also other social functions, like for example, it could help to find other astronomy amateurs or space fans in the neighbourhood, or allow creating own, unofficial events by a group of people, like common observations or trips.

4. Who is behind AstroGPS?

The database and service were developed thanks to the Polish Astronomical Society (as publisher of the portal and mobile app) and thanks to the efforts of editors of magazine and web portal Urania (www.urania.edu.pl), with financial support of the Polish Ministry of Science and Higher Education.

5. You are welcome!

We invite to cooperation anyone: individual users, as well as institutions, organizations and media. You may contact us by e-mail: redakcja@astrogps.pl. The start of the AstroGPS for general public is planned at the end of 2018 and it will be intensively used in 2019 for example during IAU100. If you represent an organisation or institution which organize many events, you may obtain a special account in AstroGPS which allows in fast and easy way import all your events. Our service could be also co-created by everyone among astronomy amateurs and space fans. If you know about an event which is not presented in the database you may suggest it to be included. In this way you will help the whole society.

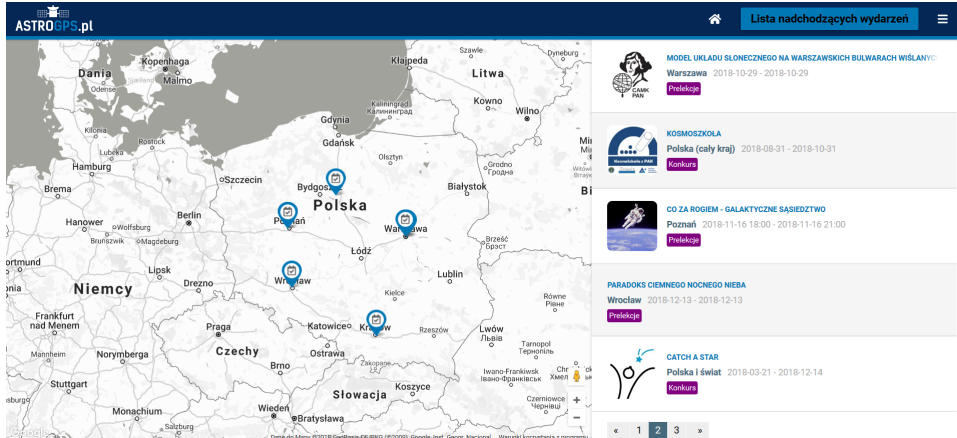


Figure 2. Sample screenshot from a test version of the AstroGPS.pl website.

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