



ExoClock Newsletter

Dear ExoClock participants,

we hope that you are doing well!

First of all, we are welcoming the new members! To engage with the community, we sent out a newsletter like this at the beginning of every month and we hold a regular meeting on the last Thursday of every month. You can read the past newsletters, watch the past meetings and have access to other educational material at:

www.exoclock.space/users/material

We also organise meetings dedicated to new ExoClock members. These meetings are held on the last Friday of every month, and they are not recorded. In this meeting, newcomers have the opportunity to ask questions of any level related to the operation of the website, observations of transits, data analysis etc.

Finally, we have a Slack channel for more direct communication and if you want to join, please send a request at exoclockproject@gmail.com.

In this newsletter, we discuss:

- 1. ExoClock virtual meeting – July 2021**
 - 1.1 Announcements**
 - 1.2 Website updates**
 - 1.3 Publication updates**
 - 1.4 Working groups updates**
- 2. 1st Annual ExoClock meeting - dates**
- 3. ALERTS**

1. ExoClock virtual meeting – July 2021

Thank you all for attending the meeting! For those who could not make it, this meeting, together with all the previous ones, is accessible from:

www.exoclock.space/users/material

Here we briefly share the main points that were discussed during the meeting:

1.1 Announcements

○ Photos

In the previous meeting we made a call to send us your equipment (telescope and cameras) to be shared with the general Ariel Outreach group. Thank you for sending us your images! The Ariel outreach group will be sharing through its channel some of these images to raise awareness about ExoClock and encourage other observers to join the project.

This is the Ariel official twitter account:

<https://twitter.com/arieltelescope?lang=en>

○ Twinkle space mission

In past meetings, we have discussed the possibility of expanding the use of ExoClock to other missions/projects apart from Ariel. One such space mission is Twinkle, for which you can find more information here:

<https://www.twinkle-spacemission.co.uk/>

We plan to have a related discussion during our next meeting where a presentation with more details will be given. After the brief presentation we will have a voting process to decide whether we will expand the ExoClock use and include more targets in the list.

○ Wiki page

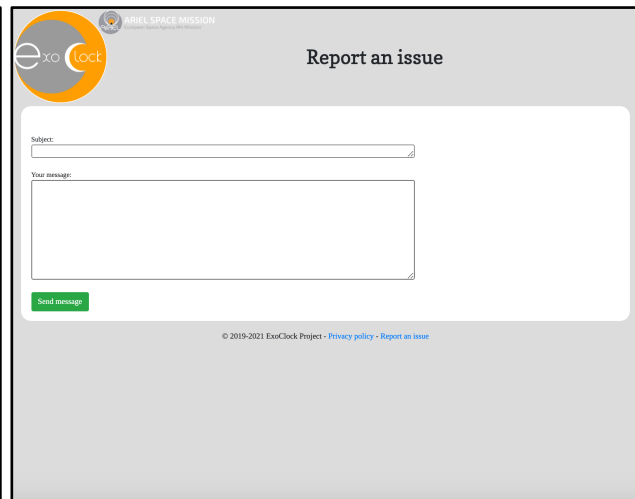
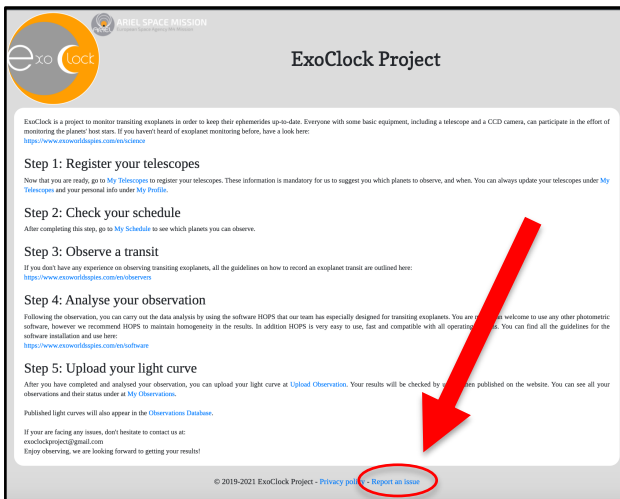
We have started the collection of notes from your experience of using the ExoClock website. We would like to use these notes & material create a dedicated page with guidelines on navigating through the ExoClock website. This page will aim to facilitate new members. Moreover, this page will include frequently asked questions or tips regarding observations, data analysis and upload of light-curves to the website. It will be very useful to get any notes, tips or experience you might have regarding the use of the ExoClock website.

If you would like to support the development of the Wiki page, please send us any material you want to share at exoclockproject@gmail.com!

1.2 Website updates

○ Reporting issues

To better organise our workflow and respond more quickly to your requests we have created the “Report an issue” page on the website and we could really appreciate it if you could notify us about any issues or any difficulties you have through there. The link is at the bottom of every page:



- **Official partners page**

We have created a page with our formal partners displayed. Formal partners include universities, institutes, organisations and professional observatories and they are very useful for external support. Let us know if you would like to be included.

<https://www.exoclock.space/partners>

1.3 Publication updates

The manuscript of our second publication has been successfully completed and submitted to AAS journals. All co-authors have been contacted through their emails. Many thanks for your participation and your feedback! We will be in touch when we get the response from the journal.

1.4 Working groups updates

- **Synchronous Observations Working Group** coordinated by Alessandro Nastasi

The synchronous observations working group is trying to establish a strategy for simultaneous observations by observers of different locations. The main objective is to improve the S/N ratio and detect shallower transits with smaller size telescopes. You are welcome to participate in the campaigns that the group organises. The campaign for July is shown here:

<https://docs.google.com/spreadsheets/d/1rkvYP3-u8avfQAv9vERSaZIDxIIINegsvg0btFpJs5g/edit#gid=1819846455>

If you are interested and available to observe any of the provided transits, please fill in the above spreadsheet

- **CMOS Working Group** coordinated by Roland Casali and David Rees

It would be really appreciated if you could read the document that the group has created for CMOS cameras. Please send your comments / questions to us!

You can read the document here:

https://www.exoclock.space/cmos_testing_campaign

2. 1st Annual ExoClock meeting - dates

We would like to establish an annual ExoClock meeting (currently online) where you will have the chance to share your work related to exoplanets, and as a community we will have the opportunity to interact more. We are thinking of arranging separate sessions for observing, data analysis and theory in order to have more dedicated discussions. You are welcome to join any part you want based on your interests/time and you are invited to also present your work/ observatory. Certainly, it will be a good place for the working groups to share their work so far and get some feedback. Additionally, we will have invited speakers/ scientists from the Ariel working groups and you can indicate the topics that you would like to hear about.

We decided that the most suitable dates for organising the meeting are within September, together with the beginning of the academic year. Please note these dates:

25th & 26th of September

You can register through this link:

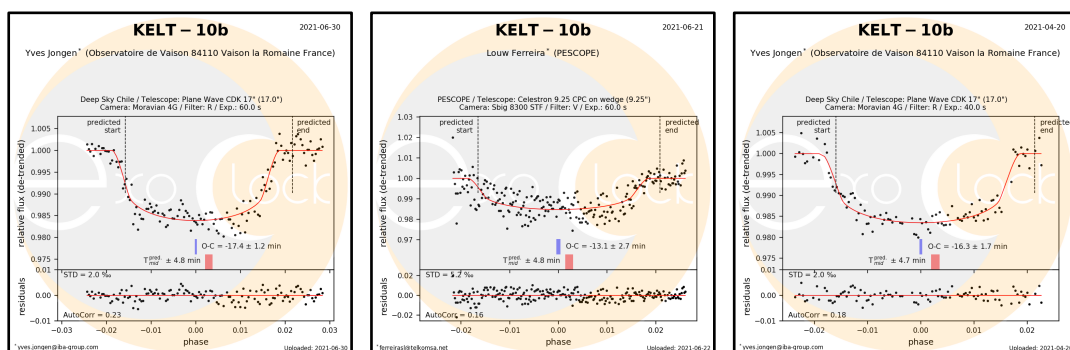
<https://www.eventbrite.co.uk/e/1st-annual-exoclock-meeting-tickets-161901468651>

where you can also:

- suggest themes and sessions,
- suggest topics for talks by invited speakers
- propose a presentation by you
- suggest ideas for activities during the meeting

3. Highlighted observations

We received many observations which we can highlight, thank you everyone. For this month, we have selected **KELT-10b**, a target that was flagged as an ALERT during the last months. A shift of **~16 minutes** was initially identified by Yves Jongen – in April 2021. A second observation by Louw Ferreira indicated a similar shift and more observations by Yves confirmed the shift. Below you can see some of the light-curves. Congratulations for your efforts!



4. ALERTS

Please check your personalised alert schedule at:

www.exoclock.space/schedule/alerts

for the **ALERT** planets and if you get a clear sky and a long-enough night, you can try observing them!

The following targets are in the current **alert system**:

- WASP-38b
- NGTS-2b
- WASP-29b
- WASP-156b

We remind you that many targets were not in the alert list, before an unexpected shift was identified by you, the ExoClock participants. This highlights the importance of observing targets that are also of low and medium priorities.

Clear Skies,
the ExoClock team