



ExoClock Newsletter

Dear ExoClock participants,

Hope you are all doing well!

We would like to welcome the new members!

We send out a newsletter like this at the beginning of every month, while 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 just after our regular monthly meeting. The beginner's meeting is usually held on the Friday after our regular meeting or the week after. In these meetings, newcomers have the opportunity to ask questions of any level related to the operation of the website, observations of transits, data analysis etc. Note that these meetings are not recorded.

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. Announcements

1.1. Paper III is out!

1.2. Remote Observing workshop recording available

1.3. Recognition certificate to ExoClock participants

1.4. Special offer for ExoClock participants from telescope live

2. Observations campaigns

3. Highlighted Observations

1. Announcements

1.1 Paper III – the paper is officially out!

Our last paper is officially published, and we are very happy! It has 217 co-authors, 18000 data points and an update of 450 ephemerides. With this publication we prove once again the power of collective efforts where all data are used to increase a mission's efficiency. The integration of space and ground-based data helps achieving the best results and this integration is now established at ExoClock.

You can find the paper here:

<https://iopscience.iop.org/article/10.3847/1538-4365/ac9da4>

There was press coverage with special tweets from the ESA team!



Warm congratulations again to all participants!

For the next paper, if you are an observer with contributions in **2022**, we remind you again to check if everything is correct in the preliminary list of the observers that will be co-authors. The list can be found here:

https://www.exoclock.space/users/material/data_release_d_observers

You can request co-observers to be added in the list. However, **remember that the rule is that each observer should have at least one observation**. The list will be finalised in May 2023.

1.2 Remote Observing Workshop – recording available

During the previous month we held a workshop for the use of remote observatories for exoplanet transits.

The workshop was introductory, and the following topics were covered:

- Remote observatories: how they work and their costs
- How to write a proposal
- How to choose targets for remote observatories
- How to schedule the transits

If you are interested in the topic, the recording is now available on the tab “monthly meetings and recordings” under the “material page”.

1.3 Recognition certificate to ExoClock participants

In ExoClock every observation counts! Apart from the acknowledgments of observers in both publications and the website, we recognise the contribution of observers that have provided a large number of observations, through a recognition certificate.

New awards go to:

- Silver observers (100+ observations): **Martin Valentine Crow, Jean-Pascal Vignes, Adam Popowicz**
- Bronze observers (50+ observations): **Fabio Mortari**

Special thanks and congratulations!

Observers will receive their certificate via email.

1.4 Special offer for ExoClock members from Telescope Live

Telescope Live - <https://telescope.live/home> - is one of our partners and the founders have kindly contributed some transits to ExoClock.

Many of you have expressed an interest in performing remote transit observations due to several reasons (e.g., lack of equipment, bad weather, light pollution). Telescope Live has kindly suggested to provide a special offer for ExoClock members in order to fulfil their desire for remote observations.

ExoClock participants are entitled to get **50% of the normal price**. If you are interested, please send an email to Telescope and Live for further information and mention that you are an ExoClock participant.

2. Observations campaigns

Our previous open campaign was about **K2-198b**, and we received four observations so far. If you have performed an observation and have not submitted yet the light curve, please submit it to ExoClock so we can start the analysis.

Apart from this planet, we have initiated a separate campaign for **K2-19b** (yes seems like the previous one but it's a different target!).

K2-19b is of particular interest as it has **TTVs** (Transit Time Variations) due to the presence of an additional planet, K2-19c.

There are some transits happening on the next months, so please go ahead and observe it if you have clear skies.

There is no limitation for the size of telescope, however the transit may not appear in your scheduler. Please organise the observation yourselves by checking the ExoworldsSpies scheduler to see if the transit is observable from your location (you should use a telescope aperture of at least 13 inches, otherwise the planet will not appear).

<https://www.exoworldsspies.com/en/scheduler/>

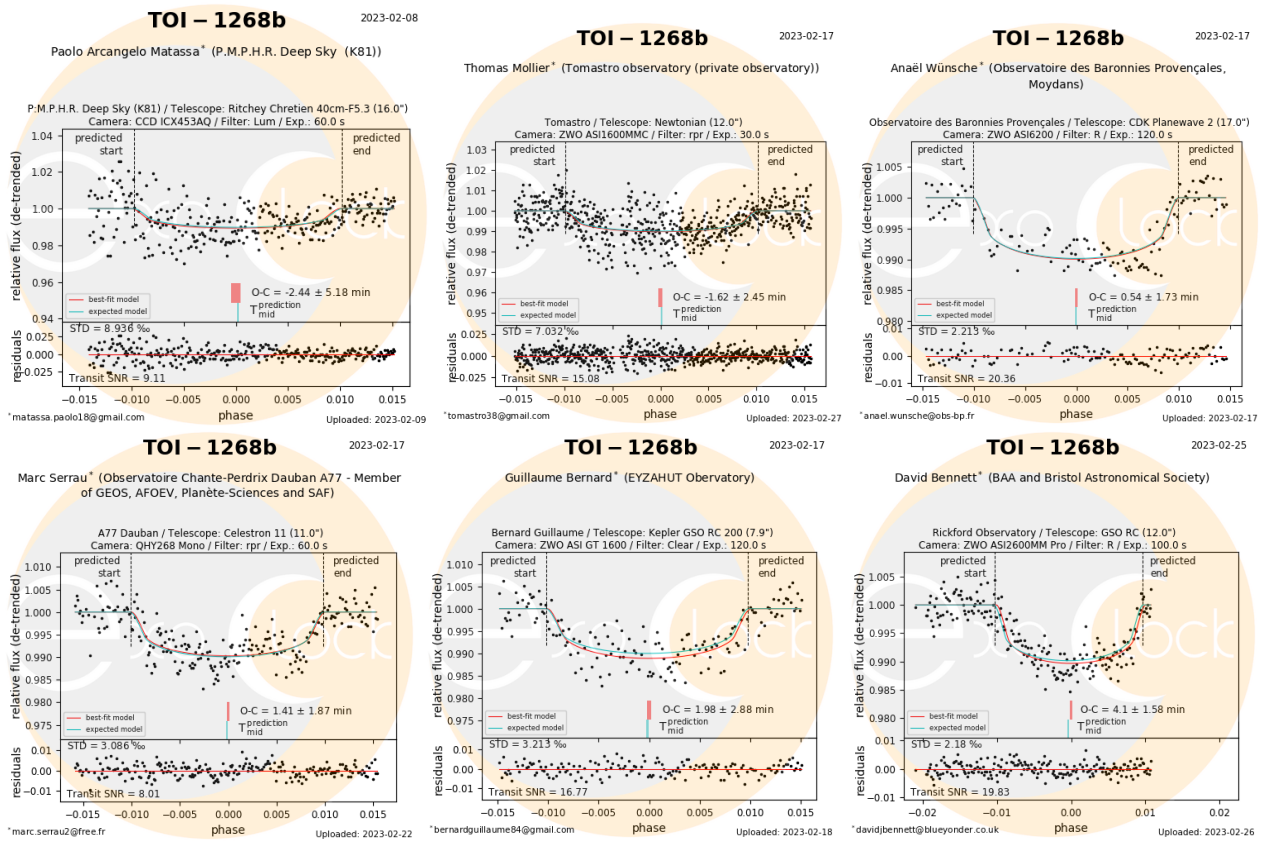
Remember that the exposure time should be longer than your overheads (dead time between exposures). To be able to have a decent exposure time you may need to use a filter -preferably Red Cousins- or to defocus your telescope.

You wouldn't need to do anything special in terms of the analysis, just upload the observations to ExoClock in the normal fashion. Please indicate in the comment section that the observation is "part of the K2-19b campaign".

3. Highlighted Observations

We would like to thank you all for the observations you contributed to the previous months!

We have selected **TOI-1268b**, a new target that has been flagged as **high priority** and has been added recently to the database. During February we received six observations (four of them at the same night!) Thank you, David Bennett, Guillaume Bernard, Marc Serrau, Anaël Wünsche, Thomas Mollier and Paolo Arcangelo Matassa for your observations, the planet is **now low priority**!



Many thanks to all observers for all the efforts so far!

Clear Skies,
the ExoClock team