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A. Siebert, K. Baillié, E. Lagadec, N. Lagarde, J. Malzac, J.-B. Marquette, M. N'Diaye, J. Richard, O. Venot (eds)

ATELIER ETN - WORKSHOP VIRTUAL - HUB SPAIN AND PORTUGAL 15-05-2021

S. García Marín[1, 2], J. Álvaro[3, 4], I. Garate Lopez[5, 6], G. Gilli[4, 7], R. Hueso[6], A. Leroy[2, 8] and I. Ordóñez Etxeberria[5, 9]

Abstract. The Federation of Astronomical Associations of Spain, the Spanish Society of Astronomy, and the Spain & Portugal Regional hub of the Europlanet Society, organized on 15 May 2021 a virtual workshop on the use of the Europlanet Telescope Network for amateur astronomers. The Europlanet Telescope Network is one of the activities of the ongoing Europlanet 2024 Research Infrastructure, and it aims to provide accesibility to professional and amateur astronomers to different telescopes on solar system and exoplanet research topics. After two sessions focused on the presentation of the general characteristics of the network and the closest telescopes, as well as on the writing of funding applications, the 1.23 m telescope of the Calar Alto Observatory was used remotely during the nighttime session to observe two comets, an exoplanet's transit, and Saturn with some of its satellites.

Keywords: Europlanet Telescope Network, virtual workshop, Solar System, amateur astronomer

1 Introduction

One of the activities of the Europlanet 2024 Research Infrastructure project is the Europlanet Telescope Network (ETN), a program to fund access and costs of use to a network of telescopes for observations of Solar System objects and exoplanets. One of the goals of the network is to widen the participation of amateur astronomers in professional and amateur (Pro-Am) collaborations. However amateur astronomers have little to no experience in the subtleties of writing proposals. To counteract this disadvantage the Europlanet Society, through its Spain & Portugal regional hub, together with the Federation of Astronomical Associations of Spain and the Spanish Society of Astronomy decided to organize a workshop on the use of the ETN and on the writing of funding applications. It was held on May 15, Saturday, in order to reach a larger number of attendees and was conducted in Spanish to better communicate with the participants, many of whom are not fluent in foreign languages.

2 Europlanet Telescope Network

The ETN is a network of almost twenty small telescopes scattered all over the world. Although Europlanet does not provide observing time (this should be requested directly to the observatory, preferably before applying for funding), it provides funding for costs associated to observation nights at the telescopes and reimburses travel, accommodation, and per diem of the observer. Proposals eligible for funding are evaluated by an external comittee and eligible topics are those of scientific interest in planetary science (planets, asteroids, comets, exoplanets...).

[1] Société d'Astronomie Populaire de la Côte Basque (SAPCB)
[2] Société Astronomique de France (SAF)
[3] Federación de Asociaciones Astronómicas de España (FAAE)
[4] Spain & Portugal Regional Hub of the Europlanet Society
[5] Comisión Pro-Am de la Sociedad Española de Astronomía (SEA)
[6] Dpto. de Física Aplicada, Euskal Herriko Unibertsitatea (UPV/EHU)
[7] Instituto de Astrofísica e Ciências do Espaço (IACE)
[8] Uranoscope de l'Ile de France
[9] Planetario de Pamplona

3 Agenda and results of the Workshop

The workshop was a virtual event with three live sessions, one in the morning, one in the afternoon and one observation session during the evening/night. In the first one, we presented the telescope network, emphasizing on the closest ones (the 1.23 m of Calar Alto, the IAC80 on Teide and the 1.06 m of Pic du Midi de Bigorre), and we summarized the Pro-Am collaborations or activities carried out by Europlanet and by the Spanish Society of Astronomy, to which the amateurs could contribute. In the afternoon session, we focused on the access to the network and on the process of writing the funding applications, highlighting the potential of amateur proposals and the necessary scientific approach for a successful proposal. The night session was organized around observations of objects previously proposed by the participants. These were the transiting exoplanet WASP-14b (Fig. 1 left), the comets C2021A1 and C2017K2 (Fig. 1 right, top and center), and Saturn and 6 of its moons (Fig. 1 right, bottom). We operated the Calar Alto Observatory's 1.23 m telescope remotely from home.

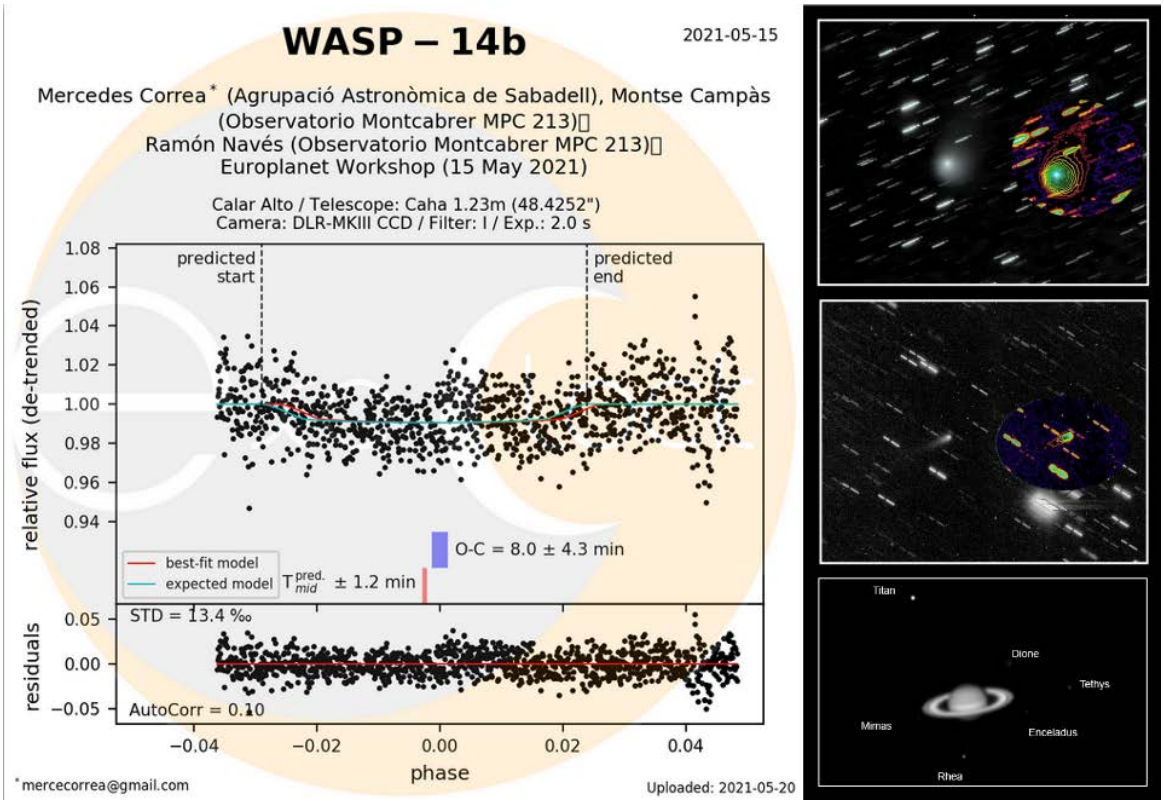

Fig. 1. Left: Lightcurve of exoplanet WASP-14b based on 2 seconds exposures. **Right:** Comet C/2017K2 (top), comet C/2021A1 (center), and Saturn with six moons (bottom). Cometary images are stacks of 25 (top) and 21 (center) exposures of 2 minutes with brightness isolines represented in color in the insets. Saturn was observed with a single shot of 0.01 seconds near dawn. All the data was analyzed by participants of the workshop.

4 Conclusions

The workshop was a great success and Europlanet intends to replicate it in other countries by adapting it to the local amateur community and the language of the country. However, we encourage amateur communities (if interested) to contact the corresponding regional hub of the Europlanet Society to speed things up.

More information at: `https://www.europlanet-society.org/europlanet-2024-ri/telescope-network/`

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