

LEARN PHOTOMETRY WITH US AT THE OBP!

Photometry courses and practical sessions
for amateur astronomers at the
Observatory of Baronnies Provençales



THE OBSERVATORY OF BARONNIES PROVENÇALES

Since 2006 :

- Number of clear nights : between 200 and 240 per year. 244 in 2022. 224 in 2023
- Night sky brightness :
 - Peak $22,02 \text{ mag/arcsec}^2$
 - Mean $21,75 \text{ mag/arcsec}^2$

AFA : Astronomical French Association



TEAM

- 1 director :

Marc Bretton

- 3 professional astronomers (doing outreach and teaching) :

Anaël Wünsche, Sacha Foschino, Anne-Charlotte Perlberg

- 2 dome and telescope operators (doing outreach and teaching) :

Stephane Ferratfiat, Cyrille Aumasson

- 3 technical and logistical support :

Hélène Bretton, Motoko Takai, Henry Bretton



Marc



Hélène



Motoko



Anaël



Sacha



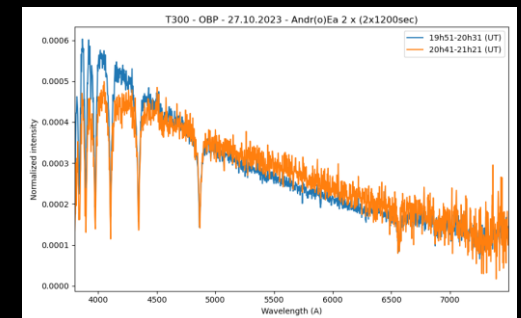
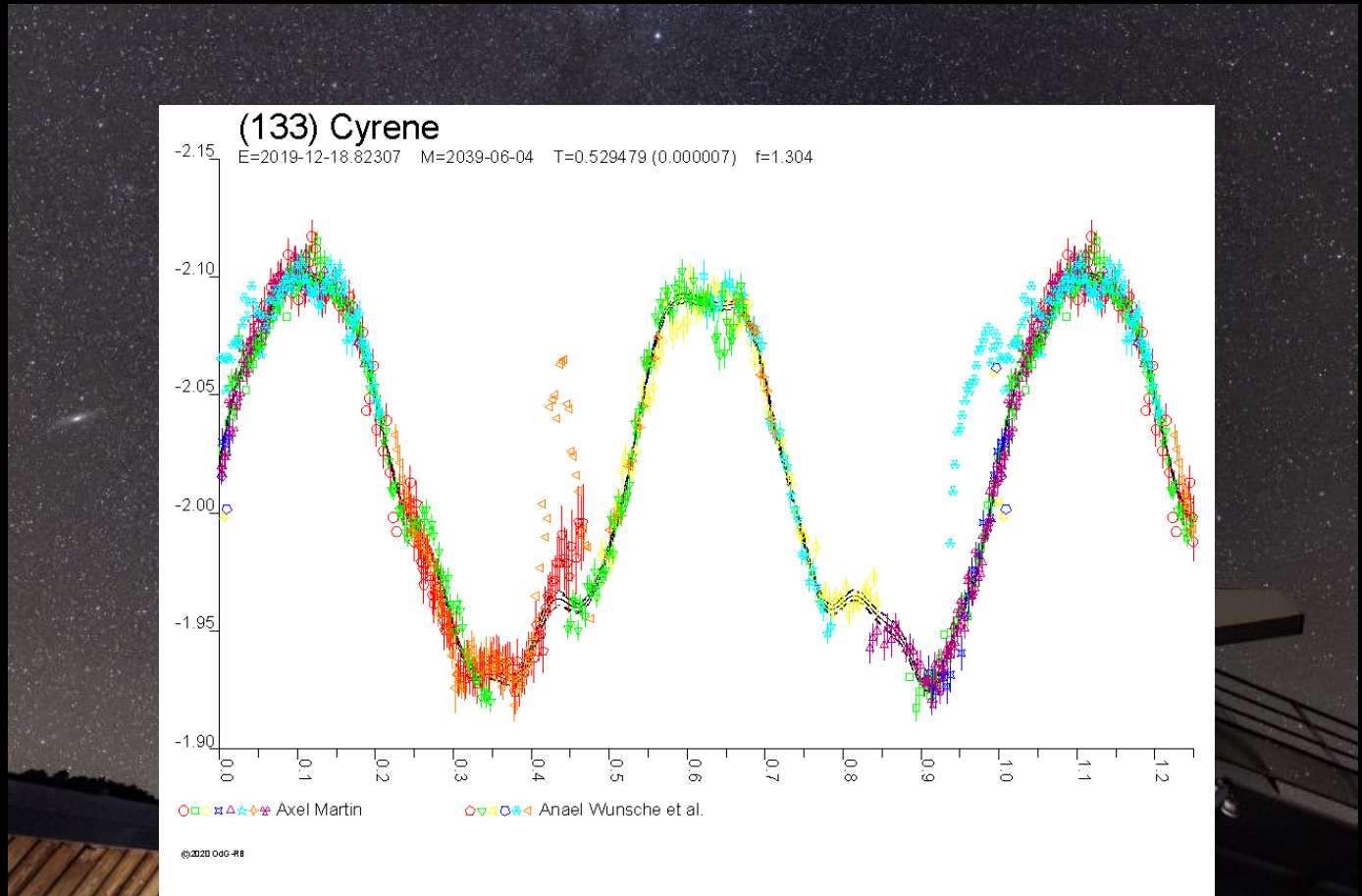
Stéphane



Cyrille

THE ACTIVITIES

- Outreach
 - Discovery nights (outside)
 - Dome nights (in the dome)
 - Exoplanets (in the LABSCAN)
- Trainings : 1 to 5 levels from the French association (AFA)
 - *Stars 1, 2, 3*
 - *4th star: Photometry or Spectrometry and soon astrometry*
 - *5th star: Astro tourism*
- Web based Observatory:
 - Roll on roof
 - Remote control of your own telescope
- Science !



PHOTOMETRY COURSES

Since 2018

Few tenth of amateur astronomers

Small community rising (linked to other communities)



PROGRAM : (6 DAYS 6 NIGHTS)

- Review on how to handle a telescope and its mount
- All we need to know about CCD and CMOS camera
- The softwares : THESKYX, MaximDL, NINA, SIRIL, ASI STUDIO, SHARPCAP, HOPS, MUNIWIN
- All we need to know about aperture photometry, differential photometry, transiting exoplanets
- Some practical tips for improvement, personalised
- Conferences about other subjects



PHOTOMETRY: WELCOME TO YOUR LAB

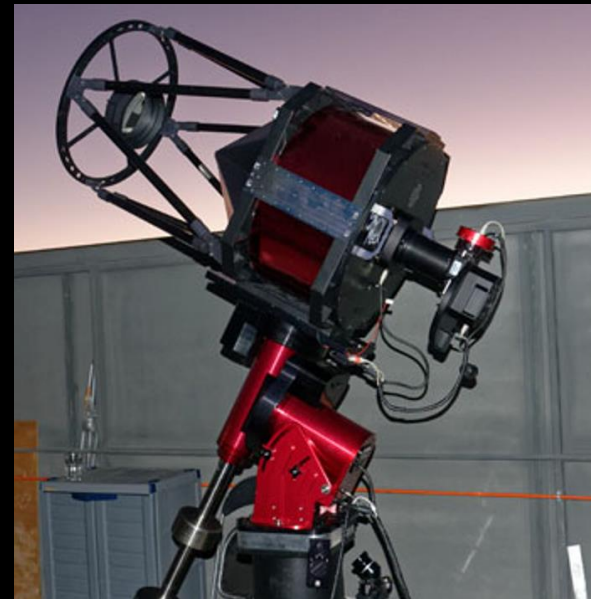
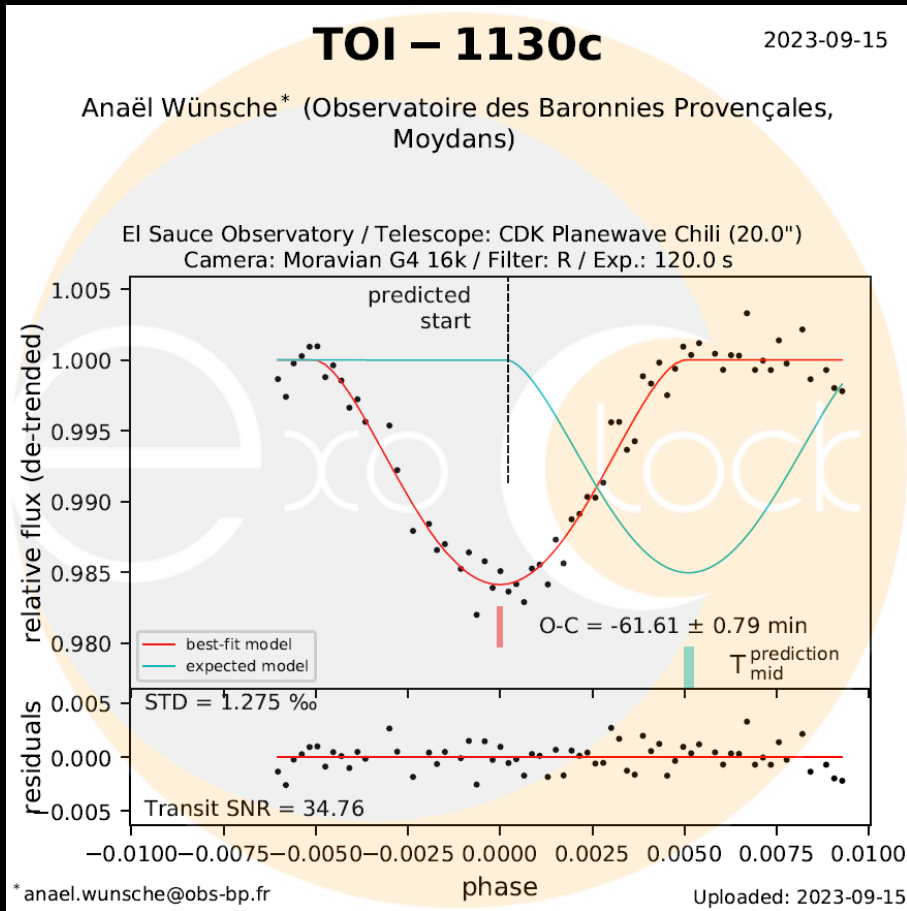
- Dedicated spaces in our laboratory to prepare the night or to learn
- 4 telescopes from the OBP can be used as well :
 - 2 in France, (800mm + CCD FLI, 430mm + CMOS ZWO 6200)
 - 2 remotely controlled in Chile, (500mm + CCD MORAVIAN, 350mm+CMOS ZWO6200)



SOME RESULTS!

- 70%+ for exoplanets
- 50-50 North-South

T500 OBP-South



THE FRENCH COMMUNITY WITH EXOCLOCK

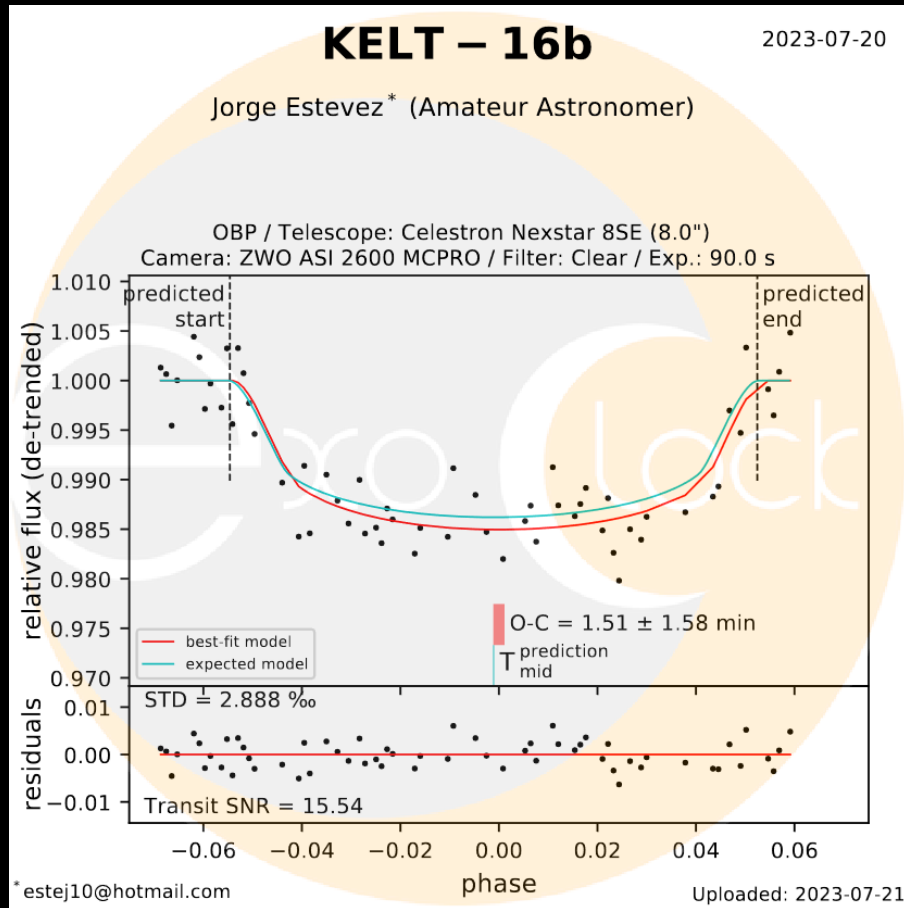
- More than 40 observers from France and French speaking countries have observed for Exoclock
- Some tens of participants for the trainings in situ at the OBP have learned about it
 - Some became active participants of Exoclock
- A relation inside and outside associations, clubs
 - Announcements on our discord for our community from OBP - school of astronomy
 - Announcements for special alerts in ASTRO-FR discord 
 - Announcements for special events and alerts through the french astronomical society (SAF)
 - Events with and through the French association for astronomy (AFA)
 - Our link with ETD

To be continued ...



SOME AMATEUR ASTRONOMERS' RESULTS!

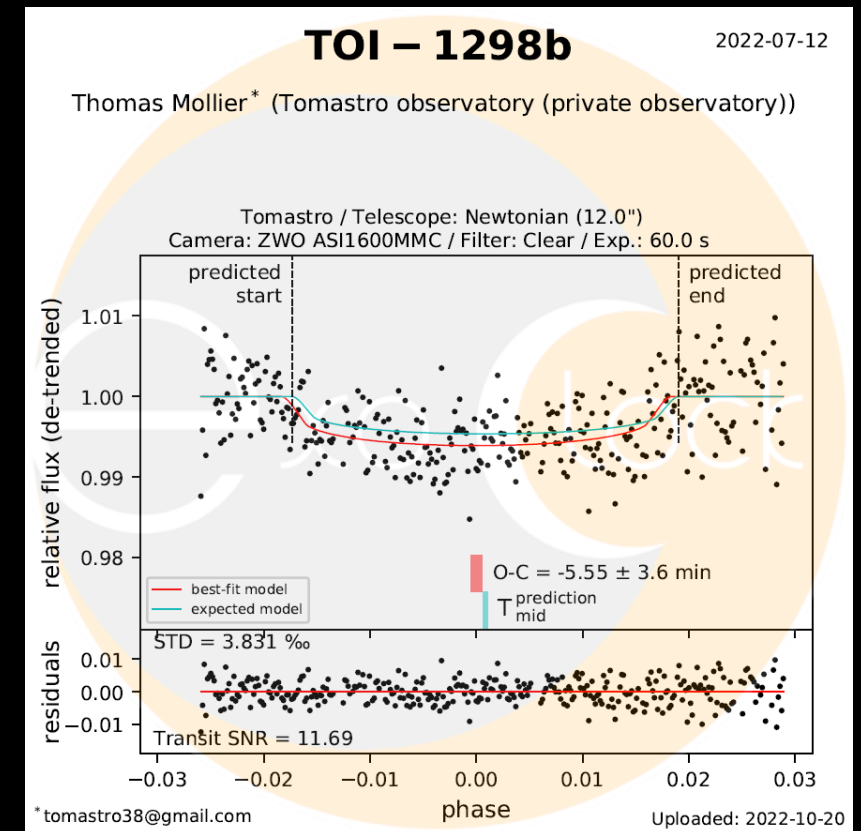
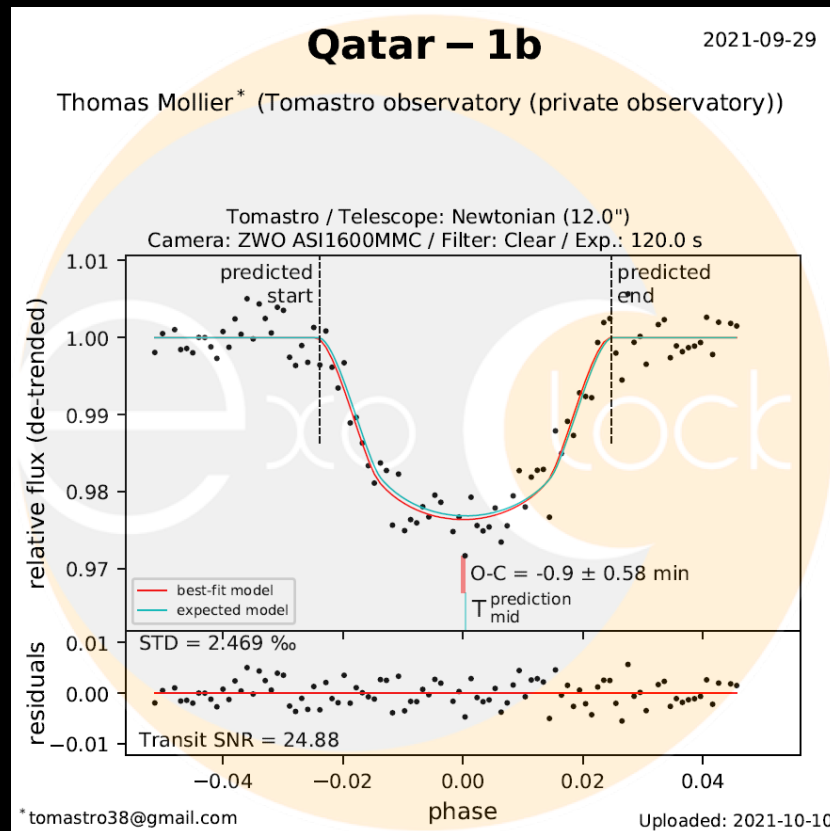
Jorge Estevez – Geneva, Switzerland



SOME AMATEUR ASTRONOMERS' RESULTS!



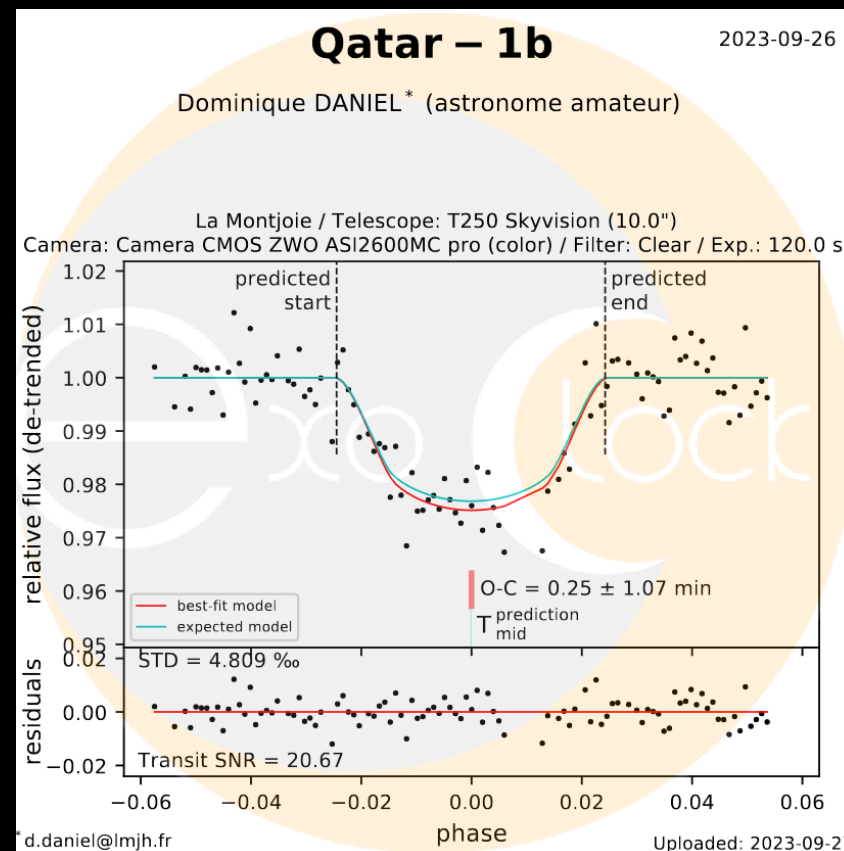
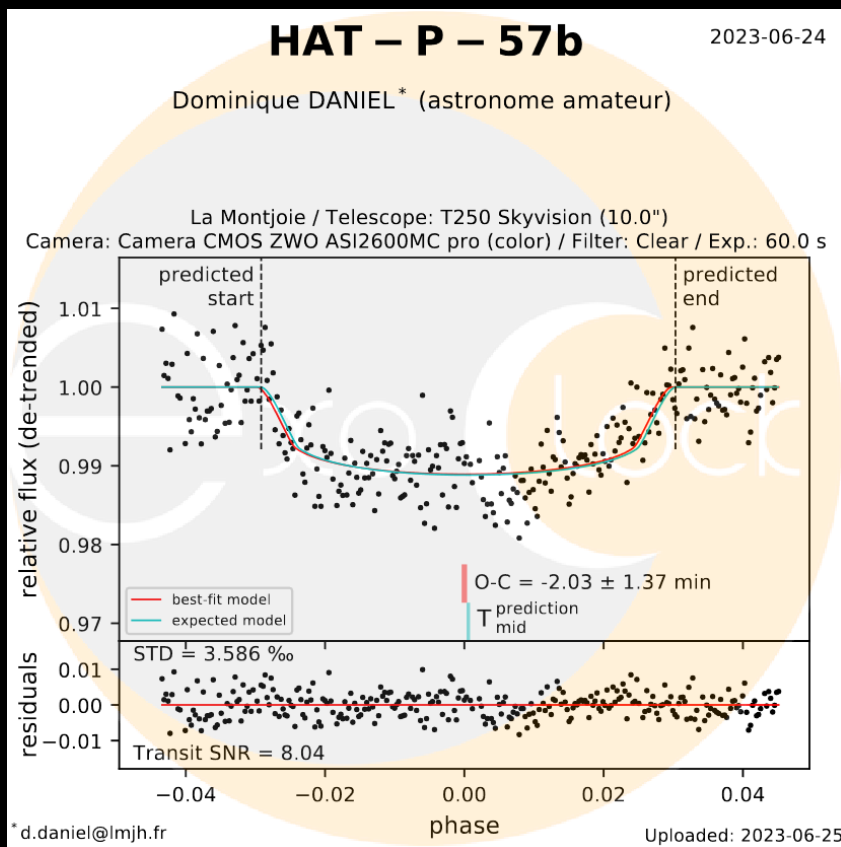
Thomas Mollier – Hautes-Alpes, France



SOME AMATEUR ASTRONOMERS' RESULTS!

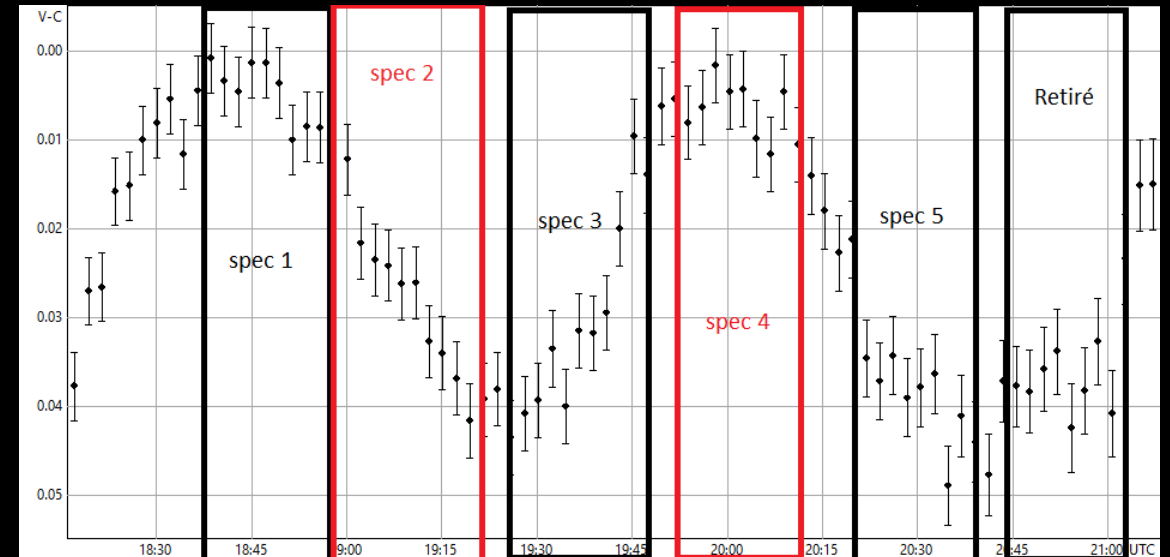
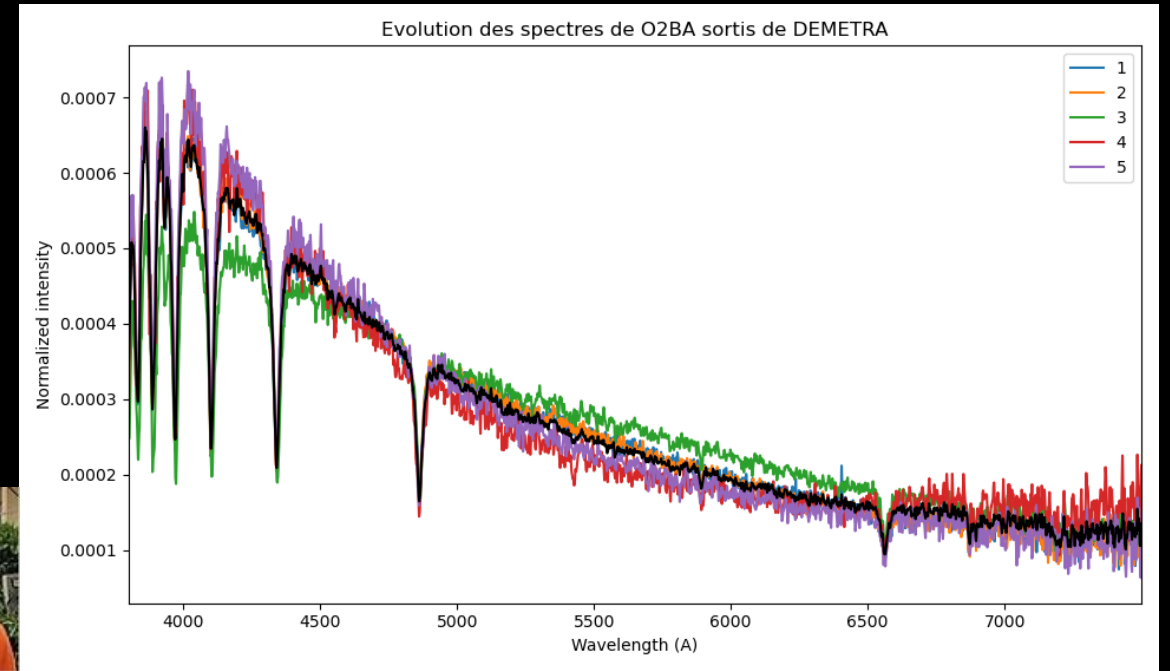


Dominique Daniel – Vaucluse, France



OTHER IMPACTS IN PHOTOMETRY

- Automatization of all our research telescopes with potential simultaneous observations
- Variable star and binary star research with Sacha Foschino (photometry + spectrometry)
- More photometry for small solar system bodies
- More photometry for transient events



COME
PRACTICE
PHOTOMETRY !

