

Up To 10times  
Longer Lasting  
**Power\***



# BRITE-Constellation – operational state

	BRITE-Austria (BAb) Uni-BRITE (UBr)	25.02.2013 25.02.2013	science operations no fine pointing
	BRITE-Lem (BLb) BRITE-Heweliusz (BHp)	21.11.2013 19.08.2014	no fine pointing science operations
	BRITE-Toronto (BTr) <del>BRITE-Montreal (BMb)</del>	19.06.2014 <del>19.06.2014</del>	science operations

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End of financing at the Austrian and Canadian sides

→ Poland is taking over BTr operations

Warsaw ground station is kept in best possible working condition

BHp and BTr could still deliver useful science data for many years

# BRITE-Constellation – 10 years in space



**EUROPEAN ASTRONOMICAL SOCIETY  
ANNUAL MEETING**

JULY 10<sup>TH</sup> – 14<sup>TH</sup>, 2023  
ICE KRAKÓW, POLAND



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**EAS 2023**

Welcome & News

**Symposium S5**

**From stellar variability to stellar structure and evolution**

13-14 July 2023



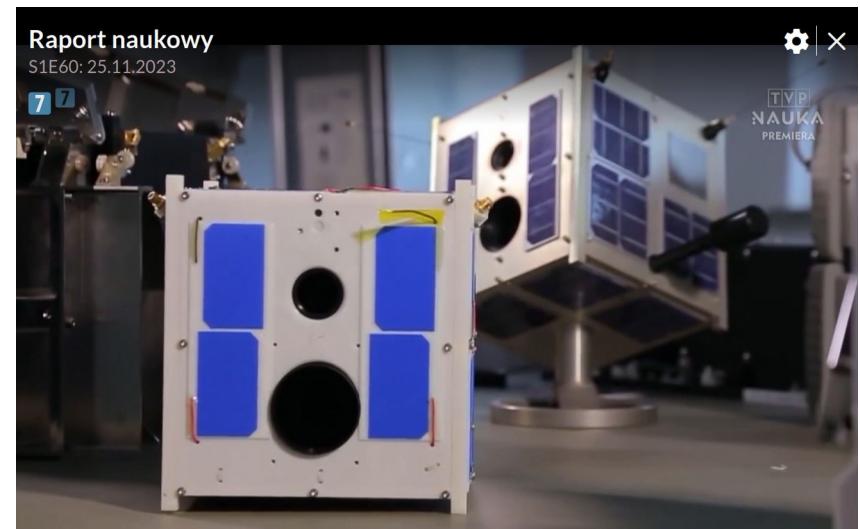
Strona główna > Kosmos

KOSMOS

21.11.2023 aktualizacja 21.11.2023

f X e ©

## Lem - pierwszy polski satelita naukowy już 10 lat na orbicie



# Refereed BRITE publications in 2023

Oplištilová A., Mayer P., Harmanec P., Brož M., Pigulski A., Božić H., Zasche P., Šlechta M., Pablo H., Kołaczek-Szymański P.A., Moffat A.F.J., Lovekin C.C., Wade G.A., Zwintz K., Popowicz A., Weiss W.W. , “Spectrum of the secondary component and new orbital elements of the massive triple star  $\delta$  Ori A”, A&A 672, A31

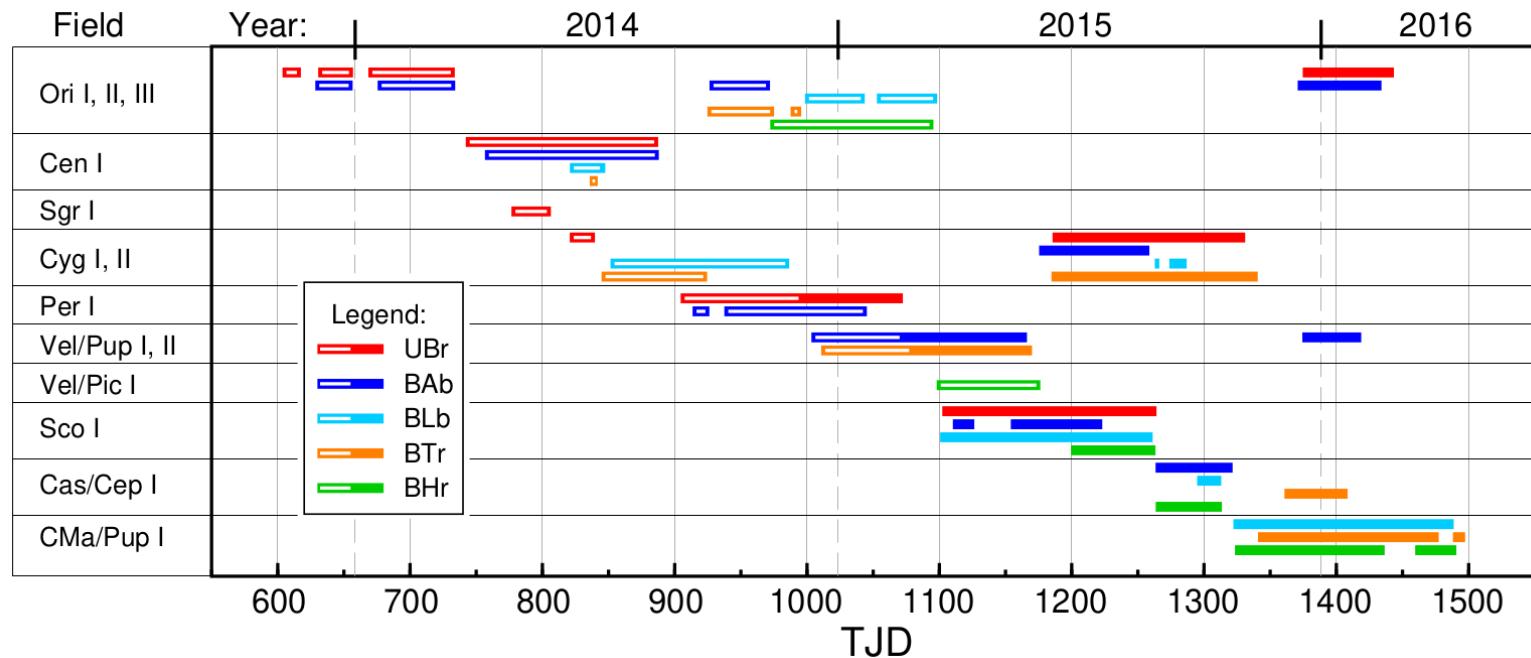
Barclay K.D.G., Rosu S., Richardson N.D., Chené A.-N., St-Louis N., Ignace R., Moffat A.F.J., „Using CHIRON spectroscopy to test the hypothesis of a precessing orbit for the WN4 star EZ CMa“, MNRAS 527, 2198

Zwintz, K., Pigulski, A., Kuschnig, R., ... Handler, G., ... Smolec, R., ... Zocłońska, E., “Catalogue of BRITE-Constellation targets I. Fields 1 to 14 (November 2013 - April 2016)”, A&A, in press (arXiv:2311.18382)

# The first “BRITE catalog paper”

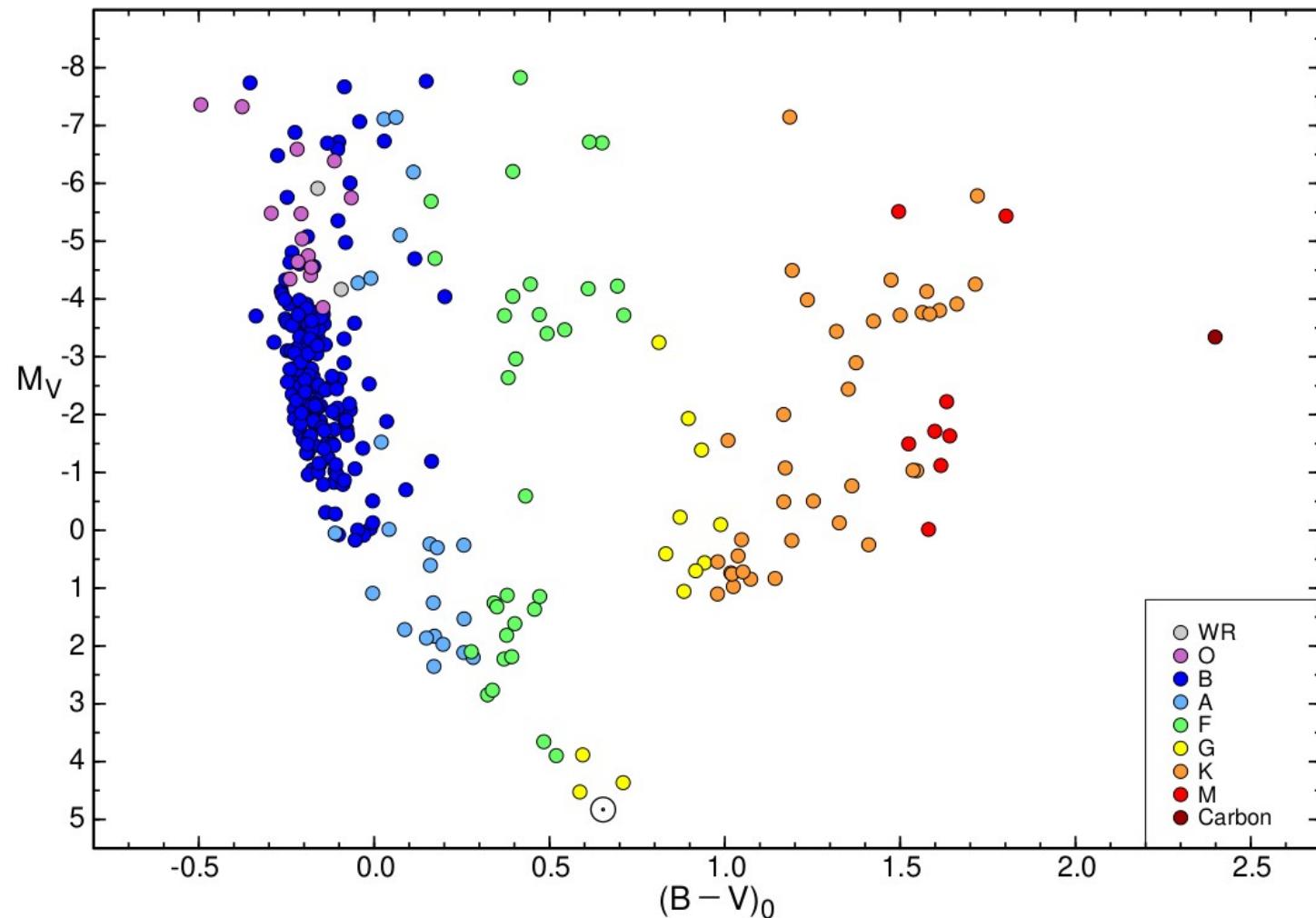
Decorrelated photometry for the first 14 science fields

300 stars, 2.5 yr of data



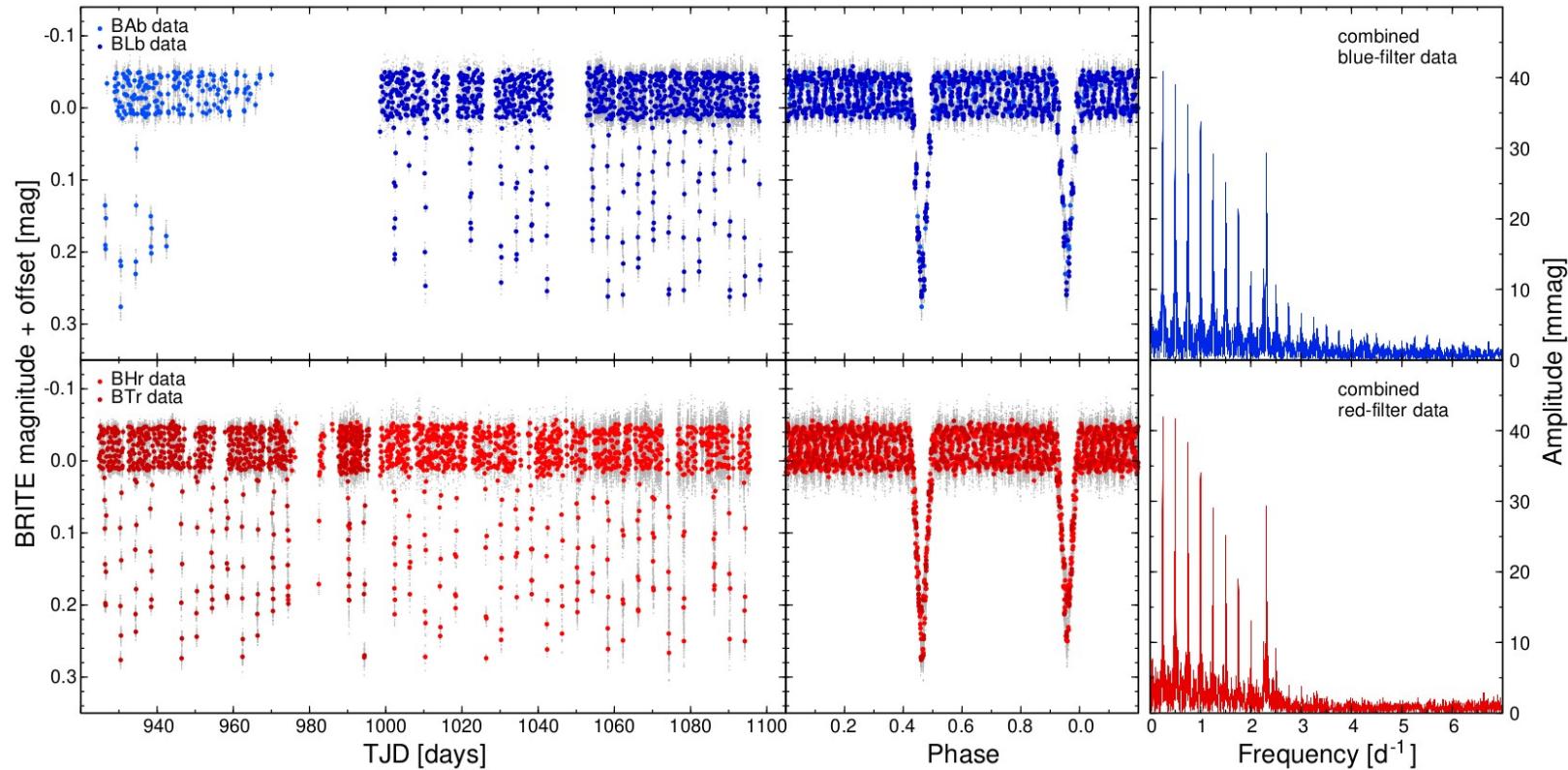
# The first “BRITE catalog paper”

300 stars, 2.5 yr of data



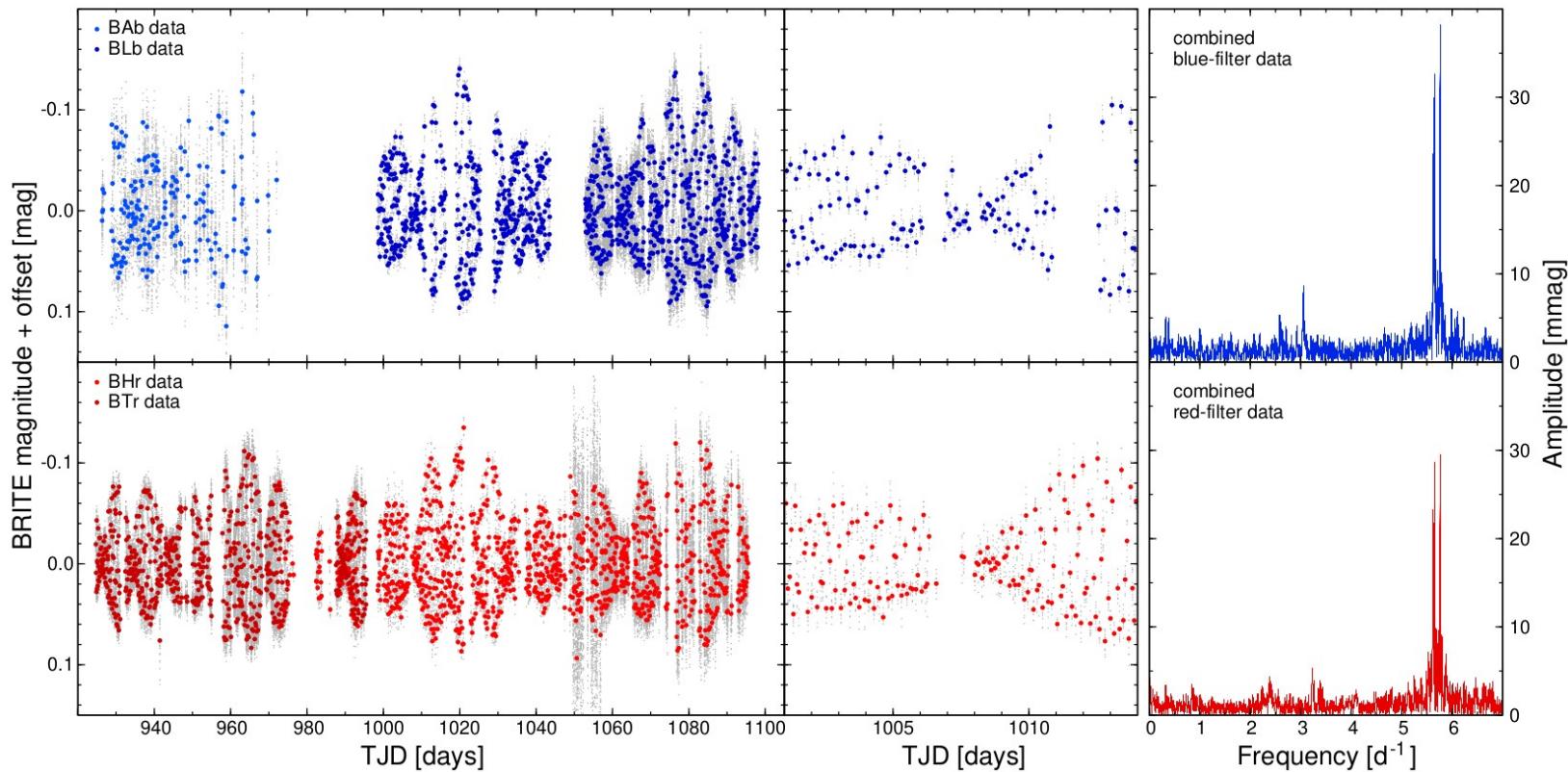
# The first “BRITE catalog paper”

Some examples: eclipsing binary  $\eta$  Ori



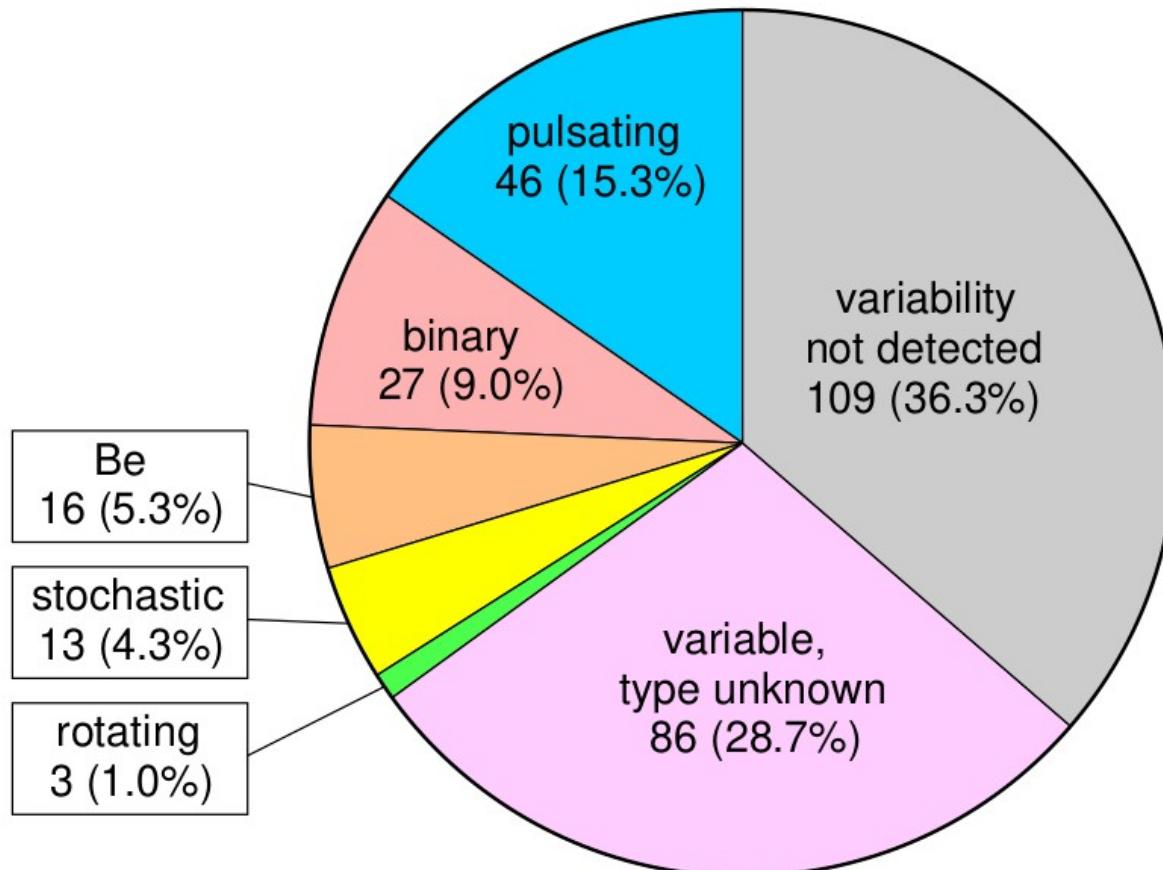
# The first “BRITE catalog paper”

Some examples:  $\beta$  Cep pulsator  $\nu$  Eridani



# The first “BRITE catalog paper”

Variable star classification – something to do for the community



# **Plans for idle satellites**

What to do with the satellites that no longer deliver science data?

BLb can be used as a trial object for a space junk cleaning mission

It can also be used as a test object for tracking space debris not designed for being tracked

Development of a different ADCS system for trying to bring BLb back into fine pointing (or gaining experience in its development)

Investigations of the response of technical components to long expositions to conditions in space