Pro-Am collaboration in stellar astrophysics
„Made in Czech Republic“

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Some historical fragments from two last centuries

Vojtěch Šafařík (1829-1902) – excellent variable star observer (about 20 000 visual estimates) – prof. of chemistry

1918 – establishing of the Czech Astronomical Society (CAS)
1924 – Bohumil Hacar (prof. of math, astronomy) – first president of Variable Star Section of CAS
1930 – Zdeněk Kopal – 17 year old student - president of VSS

1960 – Oto Obůrka – prof. of math, founder and director of Brno public observatory and planetarium – re-establishing of VSS
new observational program for youth – short periodic variables, EBs => beginning of the great tradition of mainly amateur variable star astronomy in CZ

in the observational program – more than 1000 observers, mainly students who were taught how to obtain, process and publish data – future scientists, teachers, … - the first example Pro-Am collaboration

1990‘s – VSS broadened the activities and show usefulness of amateur work for professional
- VSS started to organise international conferences for stellar and variable star astronomers

- Discovery of new variables – e.g. ES UMa – recommended as comparison in world wide campaing of SN1993J (IAUC 5775)

- New programes – not only EBs … - SR, Mira type, exoplanets …
21st century – CCD become widely available for amateurs – any knowledgeable amateur can offer data on the same quality than professional observatories

- advantage - no application for observational time
- possible long-time monitoring of objects
- possible campaigns
- upon requests observations

Necessary interaction Pro-Am – not only requests for data, also training!
- developments of tools for observers – e.g. C-Munipack for aperture photometry

- web service, databases – e.g. Exoplanet Transit Database
- journal – OEJV – more important after the end of IBVS
Astronomical professionals & amateurs – IT amateurs & professionals

IT students – bachelor, diploma thesis for astronomical praxis – the best ones continue as professionals

Mirror of SWASP DR1 - https://wasp.cerit-sc.cz
Photometric Data Retriever (PDR)

https://github.com/m-krajcovic/photometric-data-retriever
Archive of Measurements of PERiodic variable stars

http://amper.physics.muni.cz
Pro-Am collaboration in the Czech Republic

- could be more intensive, however it is working!
- could be an inspiration for others
- it is mutually advantageous
- just do it!
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Thanks for your attention!