

Public Education and Communication

HUMANS AND HAZARDOUS ASTEROIDS
30 YEARS OF EXPERIENCE IN EDUCATION AND COMMUNICATION

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Keywords: *Near Earth Objects, education, communication, public outreach*

ABSTRACT

What to say the public about Near Earth Objects(NEO), asteroid hazard and planetary defense? How to do it?

Klet Observatory, Czech Republic represents a unique liaison of the small professional research institution devoted especially to NEO (Klet Observatory) and the educational branch the Observatory and Planetarium in Ceske Budejovice. Klet Observatory has been participating in an international NEO research efforts since 1992 as a prolific astrometric NEO follow-up station, since 2002 using a new 1.06-m KLENOT Telescope. Klet serves as a cooperating sensor in the NEO segment of European Space Agency (ESA-SSA) programme since 2014. The latest important follow-up case at Klet was a small Earth impactor 2022 EB5 measured just before its impact near Jan Mayen island.

We started NEO presentations just as a public outreach of Klet Observatory work and an explanation to taxpayers about what such research can be useful for. All the time we have been seeking the most suitable way to educate the public about NEOs, asteroid hazard and planetary defense including NEO detections, physical studies, computing of close encounters, impact effects, options of mitigation, space missions to asteroids and so on.

We begun with public lectures. Later we continued using specialized websites, opening hours at Observatory, social media, more contacts with journalists, educational multimedia presentations for school excursions, activities for talented youth, community days, geocaching events and TEDx talk. The newest NEO and planetary defense activities contain outdoor exhibitions in a municipal park, public meetings and discussions with NEO researchers from different institutions, workshops for teachers and invited lectures for emergency services. In the near future we plan to start with a virtual reality technology in as well as increase use of STEM (Science, Technology, Engineering and Mathematic) system in public activities. Ideas of Science & Beauty has been also inspiring.

We got many lessons learnt from public regarding NEO education. After thirty years of continuous experience we understand that education of wide public, students, journalists and also decision makers on hazardous asteroids and planetary defense belongs to the most important tasks of NEOs scientists and research institutions. Finally, our role embraces to inspire the next generation, children and students towards the natural sciences and smart technologies for a sustainable society, with no difference according to their gender, nationality and so on. International collaboration is necessary for all of the tasks mentioned above.

ACKNOWLEDGEMENT

South Bohemian Region, Czech Republic ESA project S2P-S1-PD-06.1 (CARMEN)
contract No. 4000134667/21/D/MRP

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