

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Open Space: Participatory Space Education and Outreach (8)

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REMOTE SENSING, SPACE, AND GEO-PHYSICS IN SCIENTIFIC EDUCATION AND AS AN
OUTREACH TRIGGER AT BGU

Abstract

Over the past decade, the Earth and Planetary Image Facility (EPIF) at Ben-Gurion University of the Negev has developed extensive education and public outreach (EPO) activities regarding remote sensing, space, and the planetary and geo-physical sciences. These activities, sponsored by the BGU community action department and the EPIF, promote the development and delivery of quality learning and outreach opportunities for the local community, school pupils, students, and educators. The EPO agenda of the EPIF is to make science and technology more familiar and accessible to non-academic community, in the process empowering the local community. Thus, we provide a wide spectrum of formal and informal education activities, from daily workshops in the university to weekly courses, based on the abilities of the pupils and the needs of the community. To promote more widespread learning of the scientific and technologic disciplines, we developed an experiential educational technique that makes science more enjoyable and memorable. For example, to teach the principles of GPS taught at a formal class session, we created an informal activity—a "treasure hunt" game—that implements the formal session. We also offer specific activities for students and supervised projects and experiments for youth, in which we use Earth observation and remote sensing for educational purposes, teach about remote sensing applications, and offer tours in laboratories and "mini project based learning (PBL) experiments" using state of the art research equipment. In this paper, we provide a detailed description of the laboratory activities and highlight individual and group projects, all of which are intended to raise awareness of the benefits of remote sensing and space activities.