

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Lift Off - Secondary Space Education (2)

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THE SPACE GEODESY CENTER OF MATERA OF THE ITALIAN SPACE AGENCY AS A SPACE
EDUCATION CENTER

Abstract

The Space Geodesy Center “G. Colombo” of Matera (CGS) is the most important operative Center of the Italian Space Agency (ASI). Its main operational fields are related to Earth Observation (especially Space Geodesy and Remote Sensing) with advanced space techniques and instruments. The presence of different observing methodologies (geodetic satellite laser telemetry, radio-interferometer on a very long basis, GPS) makes the CGS one of the few main world geodetic network stations. Earth Observation is a sector in which students are highly interested, because it regards the phenomena of our planet (tectonic movements, the geoid, natural hazard such as volcano eruptions, earthquakes, tsunamis, landslides and floods; climate change, air and water pollution, relief efforts, fire etc., and in general the safety and health of our planet. In the Article 1 of the Statute is written that ASI “is the national public organization . . . with the task to promote, develop and disseminate, with the role of agency, scientific and technological research applied to space and aerospace field. . . .” Therefore, one of the most important activities of the CGS is the education and outreach field. Indeed, during the whole year, the CGS hosts educational activities, beginning with visits for secondary schools, but especially high schools and technical institutes. During these visits the students learn what are the techniques used in the Space Center and which results are produced. They observe the instruments and get in touch with ASI experts. The educational program includes not only visits for student, but also events. In the paper will be exposed some of the events hold in the CGS, but also ideas for future. For example on the occasion of the Earth fly-by of NASA spacecraft JUNO October 2013, a special event “Fly-by between science, games and music” for high school students has been organized. In June 2016, approximately 20 students from Roman high schools joined the space activities in the CGS, in the context of the School-Work Alternation Project of the Italian School System National School Reform, and in 2017 ASI/CGS experts followed two high schools for the whole year in their School-Work Alternation Project experiencing innovative space ideas.