

YLARA station development status 2019

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On January 31st, 2018, the Spanish National Center for Geographic Information (CNIG) received, from the Ministry of Economy and Competitiveness (MINECO), a favorable communication for co-financing with ERDS funds the so-called operation "*Infraestructuras de desarrollo de laboratorio para geodesia espacial en el Observatorio de Yebes (YDALGO)*".

One of the objectives of the YDALGO operation is the observatory expansion of the instrumentation for space geodesy by means of the construction and operational setting up of a satellite laser ranging station (SLR) with the characteristics and capacities required for its integration in the international network of SLR stations (ILRS).

The installation of a new generation SLR station at the Yebes Observatory will turn it into a Geodetic Fundamental Station (GFS), unique in Spain, fulfilling the requirements of GGOS (Global Geodetic Observing System), counting with three geodetic measurement techniques: VLBI (VGOS), GNSS and SLR, as well as gravimetry (absolute and relative superconducting) and time and frequency systems. The different techniques will be located at the same place and will be spatially related to each other through a local geodetic network (local tie).

In this poster the current status of the project is presented. Several design alternatives under consideration are discussed and the established future activities for the station development are indicated.