

SAN FERNANDO SLR STATION: PRESENT STATUS AFTER THE LAST YEARS IMPROVEMENTS.

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By the end of 60's a first generation movable SLR station was installed at San Fernando Naval Observatory (ROA) as a collaboration with CNES. Later on 1979, this station was installed as a permanent one, and successively improved. Finally, by the end of 80's, a new third generation SRL station based on a Yag-Nd laser replaced the old one. It is the south-westernmost of EUROLAS stations, and is strategically located in the vicinities of Gibraltar Straight, near the Eurasia-Africa plate boundary zone. The station is collocated with the SFER IGS station, a GEOFON Very Broad Band seismic station, a permanent Geomagnetic station and with the Spanish first standards time/frequency laboratory.

Since 1996, and specially 1998 on, several deep modifications have been carried out by ROA personnel in order to improve the quantity and quality of the tracking data. These modifications have implied to replace the dome, to redesign the electronic systems, to modify the reception system by replacing the old one based on photomultiplier by a new one based both on a SPAD detector or a Photomultiplier, to change the calibration system from a long distance external target to an inside dome target, etc. Nowadays the tracking period is during night time, but first successful tests during daytime have been carried out. All these modifications have allowed to track in a routinely manner LAGEOS type satellites and to San Fernando contribute to the ITRF. In this work we will present the present status of the station, the quality/quantity data improvements and the next future planned steps.