

EARTH ORIENTATION PARAMETERS (EOP'S) USING SLR DATA FROM ILRS 7406 STATION AT SAN JUAN – ARGENTINA A. Pacheco¹, R. Podestá¹, Z. Yin², S. Adarvez¹, W. Liu², H. Alvis Rojas¹, E. Actis¹, L. Zhao², J. Quinteros¹ and J. Alacoria¹, ¹- Universidad Nacional de San Juan, San Juan, Argentina ²- National Astronomical Observatories of China, Chinese Academy of Sciences, Beijing, China

Introduction: It is already known that space geodetic techniques as VLBI, SLR and GNSS collaborate with IERS in permanent monitoring of Earth rotation through studies of Earth Orientation Parameters (EOP's). In this paper we show the first estimations of EOP's calculated from Satellite Laser Ranging data (SLR) obtained by ILRS 7406 Station of Observatorio Astronómico Félix Aguilar (OFA) at San Juan – Argentina. We process results of SLR observations of LAGEOS 2 satellite by means of NAOC – SLR software, whose principal objective is precise determination of orbits, but allows estimation of EOP's also. Among them short period parameters DUT1 and Coordinates of the Pole [1]

The telescope we are using in this task is the SLR system placed at OFA accomplishing International Cooperation Agreement between Universidad Nacional de San Juan and Chinese Academy of Sciences. This last generation instrument is working continuously from 2006 providing excellent results in precision and performance, becoming one of the most important station on ILRS global net [2]. The successful test period of SLR at OFA allows processing of our observational data from three years ago. Results we obtained make this first experience useful to enhance the cooperation OFA traditionally gives to international services as ILRS, IERS and NASA.

Finally we show the little differences we found between our results and those given by IERS for the same epochs.

References:

- [1] Thaller D. (2008) Inter-technique combination based on homogeneous normal equation systems including station coordinates and Earth Orientation. Scientific Technical Report STR08/15 GFZ
- [2] Podestá R. et al. (2007) San Juan Satellite Laser Ranging. Performance and Precision in the Observations XII Reunión Latinoamericana de Astronomía. Venezuela