Paper: EGU25-13490

**Update on the activities of the NASA GSFC/JCET ILRS Analysis Center**

**Magdalena Kuzmicz-Cieslak (1),** Keith D. Evans (1), Alexandre Belli (2), and Frank G. Lemoine (3)

The NASA GSFC/UMBC JCET ILRS Analysis Center supports the International Laser Ranging Service (ILRS) by operating as an Analysis Center (AC), submitting regular SINEX solutions on a daily and weekly basis, acting as the backup combination center (ILRSB), and conducting validation of ILRS tracking stations. These validations are essential for new stations or stations implementing significant changes. In support of the ILRS Analysis Standing Committee (ASC), the JCET AC processes data to the ILRS “ITRF” satellites (LAGEOS-1, LAGEOS-2, LARES, LARES-2, Etalon-1, and Etalon-2) and submits different SINEX solutions containing Earth orientation parameters and station coordinates daily and weekly. We provide an overview of these analysis activities and present the methods and results of our recent validation efforts, benchmarking the ILRSB results with the results obtained by ILRSA. We summarize the recent contributions of the Analysis Center, including the v85 (ITRF2020 & extension contributions), v80, v180 (LAGEOS1, LAGEOS2, Etalon1-2), as well as v90, v190 (including LARES-2). Additionally, we report on the validation activities that we perform for the ILRS Analysis Standing Committee, where the performance of new stations or stations undergoing system upgrades are evaluated with respect to the quality of their precision of their data and their bias stability. ILRS Stations that have undergone validation in the last six months include Matera (7941), and Yebes (7817).

Citation: Kuzmicz-Cieslak, M., Evans, K. D., Belli, A., and Lemoine, F. G.: Update on the activities of the NASA GSFC/JCET ILRS Analysis Center, EGU General Assembly 2025, Vienna, Austria, 27 Apr–2 May 2025, EGU25-13490, https://doi.org/10.5194/egusphere-egu25-13490, 2025.