

Combined GNSS-SLR analysis

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The ILRS stations have been tracking GNSS satellites for many years. A combined analysis of microwave and SLR data to GNSS satellites should be the goal, using the GNSS satellites as co-location with orbit parameters based on both, i.e., microwave and range data.

We performed a combined analysis of GNSS microwave and SLR data with the GPS and GLONASS satellites used as co-locations. SLR data to LAGEOS and Etalon are included additionally in order to improve the stability of the SLR station coordinates' estimates.

The impact of SLR data on the GNSS orbit will be addressed. Furthermore, such type of analysis allows it to validate the space ties (at GNSS satellites) and the local ties (at co-location sites).