

Satellite Center of Mass Correction

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The ILRS provides online information about the CoM offsets for all the tracked s/c. In some cases, we have a lot of information and in others we lack even the basics. There is also lack of a standardized procedure to use all available information to synthesize a correction value for a given station-s/c configuration. This becomes very complicated when one factors in the various modes that a station can operate on different targets, the different response of these targets, and the different ground measurements and calibrations available for each s/c array. Even for the most crucial targets, the two LAGEOS s/c, the uncertainty can be as high as 5 mm or more, and this maps directly into a network scale uncertainty of about 1 ppb! We are trying to establish mm-SLR to support products such the TRF with 1 mm epoch accuracy and 0.1 mm/y stability, it is thus unacceptable that we allow such modeling uncertainties unanswered. We will show some of the sources of information available and confront the appropriate groups to develop a standard procedure that analysts can use in an automated fashion to assign the correct CoM value to each range given the station-s/c configuration.