A joint SLR processing between Sentinel-6 and spherical geodetic satellites

AdrianBanos Garcia

In preparation for the future GENESIS mission, where all four geodetic techniques will coexist in the same satellite platform, the CNES/CLS Analysis Center for the IGS, IDS and ILRS have started investigating and evaluating methods to combine the different geodetic techniques at the observation level by taking advantage of LEO satellites that already embark three techniques, such as Sentinel-6. With this in mind, this presentation will focus on the contribution of Sentinel-6 to the ILRS network solution. Currently, the ILRS operational solution comprises 4 spherical satellites (Lageos-1, Lageos-2, Etalon-1 and Etalon-2) processed in 7-day arcs. We process the SLR Sentinel-6 data as closely as possible to the spherical satellites (same standards, same arc length, etc.) in a joint processing at the NEQ level and we assess its impact in terms of station position residuals and transformation parameters with regard to the SLRF2020.