EUROLAS Data Center (EDC) – A new website for tracking the SLR data flow
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Introduction

Since the foundation of the International Laser Ranging Service (ILRS) in 1998, the EDC acts as one of the two global ILRS data centers, the Crustal Dynamics Data Information System (CDDIS) and the EUROLAS data center (EDC) at the DGFI. In 2009, the EDC also became an ILRS Operation Center (OC) which has the responsibility of verifying the format of all incoming SLR observations. The EDC maintains all SLR observations submitted by stations. This includes Normal Point data in the New Consoliated Laser Ranging Data (CRD) and the old CSTG format. Additionally, Full-Rate data in the new CRD and the old MERIT-II format are handled. Beside derived products from SLR observations such as predictions (CPF), orbits and station coordinates are maintained.

Data Flow of EDC at the ILRS

The data exchange between EDC and ITT/CDDIS, SLR-Stations, Prediction Providers, Analysis- and Combination Centers is next to the data management an important task for the EDC as Data Center (DC) to keep both up to date. Therefore an hourly and daily data exchange of all SLR observation submitted by stations is made between EDC and ITT/CDDIS.

As already mentioned, the EDC operates as Operation (OC) and Data Center (DC). The task of the OC is to manage all data sets whereas the DC keeps the holding. Figure 2 shows the interaction between OC and DC and the simplified working steps of the OC.

The new EDC website

The new website of the EUROLAS Data Center (EDC) was launched on 2011-11-15 and enables the ILRS community, especially stations, to track submitted SLR observations. The new website is available under:

http://edc.dgfi.badw.de

List of Stations

The list displays all stations which are/were tracking satellites. Next to the station information the date of the first and last measurement is displayed. Furthermore the current status for each data type is displayed.

Satellite View

The satellite view displays all stations which have tracked this satellite. This information for each data type is available. Additionally the first and last measurement, the number of passes and observations and the duration are available.

Statistics

The new website provides statistics about the data holding at the EDC. Monthly and yearly statistics for Normal Points (CSTG), Normal Points (CRD), Full-Rate (MERIT-II) and Full-Rate (CRD) are available. For example, the number of observations is displayed for every station and satellite.

References