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GNSS Station Metadata Revisited in Response to Evolving Needs

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The IGS (International GNSS Service) site log format is the worldwide standard for exchanging GNSS station metadata. It contains, among other things, a description of the GNSS site and its surroundings, the contact persons, and an historical overview of the GNSS equipment. This information is valuable for reliable GNSS data analysis and interpretation of the results.

This IGS site log is also used within the EUREF Permanent Network (EPN, Bruyninx et al., 2019) and the GNSS component of the European Plate Observing System (EPOS, <https://www.epos-eu.org/>). However, due to their specific needs, these networks collect additional GNSS metadata. For example, within the EPN, individual receiver antenna calibration values are collected, as well as the information on the data provided by the station. EPOS is collecting in addition data licences. Within the Creative Commons permitted licence scheme, two licences will be adopted by EPOS, CC:BY and CC:BY:NC. Both licenses require that the data user acknowledges (cites) the data owner. To facilitate this data citation, EPOS recommends attributing Digital Object Identifiers (DOI) to the GNSS data and therefore also includes the DOI in the collected GNSS station metadata.

Many IGS and EPN stations also contribute to EPOS and therefore it is imperative to harmonize the collection and distribution of the additional metadata. The GeodesyML (<http://geodesyml.org>) format already allows including more metadata compared to the IGS site log format. In this poster, we will review the challenges and propose how to tackle them. We will finish by showing the choices made within the “Metadata Management and Distribution System for Multiple GNSS networks” (M³G) which collects and disseminates GNSS station metadata within both the EPOS and EPN networks.

Bruyninx C., Legrand J., Fabian A., Pottiaux E. (2019) GNSS Metadata and Data Validation in the EUREF Permanent Network. *GPS Sol.*, 23(4), [https://doi: 10.1007/s10291-019-0880-9](https://doi:10.1007/s10291-019-0880-9)