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EPOS-GNSS – Operational Advancements in EPOS GNSS Data and Product Services

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As the European Plate Observing System (EPOS) transitions into its Operational Phase, the EPOS-GNSS Thematic Core Service continues to play a pivotal role in managing and disseminating Global Navigation Satellite Systems (GNSS) data and products across Europe. As EPOS-GNSS advances into its operational stage, the commitment to organizational effectiveness and technical innovation has been reinforced. This ensures that EPOS-GNSS continues to provide valuable services and products tailored for Solid Earth research applications.

In this presentation, we highlight key developments achieved during the pre-operational phase and the ongoing operational status where evolution continues to be a central component for the EPOS-GNSS community. The four critical pillars of EPOS-GNSS are discussed: (a) Governance – we have Intensified efforts to ensure the representation and recognition of the entire community as well as deepening collaboration with data providers, end-users, and pan-European infrastructures, notably EUREF; (b) Metadata and Data – the dissemination of quality controlled GNSS data and associated metadata has been integrated into the operational framework; (c) Products – internally consistent GNSS solutions of dedicated products (time-series, velocities, and strain-rates) using state-of-art methodologies; and (d) Software – GLASS, the dedicated software package that facilitates the dissemination of GNSS data and products using FAIR principles while maintaining rigorous quality control procedures through four different GNSS dedicated web portals and the EPOS Integrated Core Services Data Portal.

Finally, we also present some examples of the usage of the EPOS-GNSS Data Products in multi-, inter-, and trans-disciplinaries studies where we exhibit the importance of the geodetic information for Solid Earth studies particularly in an integrated environment as promoted by EPOS.

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