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ESA's Earth Orientation Parameter product

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The availability of highly accurate Earth Orientation Parameters (EOPs) in near real time is of major importance for any type of positioning and navigation applications on Earth, Sea, Air and also in Space. This is equally true for all ESA missions and the EU space programs Galileo, EGNOS and Copernicus.

To ensure operational capability, ESA's Navigation Support Office developed independent EOP products and services.

The EOPs are estimated based on a rigorous combination of the ESA's contributions to the International Association of Geodesy (IAG) that are used as an input for the generation of the International Earth Rotation Service (IERS) products. For the ESA/ESOC EOP products, the individual parameters are combined on normal equation level and propagated with the contribution of model-based predicted Effective Angular Momentum (EAM) functions.

The ESA/ESOC's EOP product generation is currently running in pre-operational mode.

This presentation will provide a high-level overview of the methodology and the status of ESA's EOP products and services. In this context, the accuracy achieved in the test operations and the roadmap for the publication of ESA's EOP products and services will be outlined.