EPOS GNSS - Description of the Products

1 Details of processing options for time series solutions

1.a ROB-EUREF position time series

EUROPEAN PLATE OBSERVING SYSTEM – GNSS products ROB-EUREF Analysis Center Strategy Summary (combined product based on EPN AC solutions)	
Analysis center	ROB-EUREF Royal Observatory of Belgium Avenue Circulaire 3, 1180 Uccle, Belgium
Contact person(s)	Juliette Legrand e-mail: Juliette.Legrand@oma.be
Software used	CATREF Software

The position time series are the result of a multi-year solution based on the daily combined positions provided by WUT-EUREF solution (https://doi.org/10.17388/WUT-EUREF-CMBPOS, https://gnssproducts.epos.ubi.pt/methods/WUT-EUREF.pdf).
The multi-year solution is made with CATREF Software.
Estimated parameters: Positions, Velocities, Transformation parameters between each individual solution and the combined solution
Reference Frame: Position and Velocity solution aligned to IGb14 with minimal constraints on 14 parameters
The outliers have been rejected from the position time series.

2 Details of processing options for velocity solutions

2.a ROB-EUREF velocity field

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Analysis center	ROB-EUREF Royal Observatory of Belgium Avenue Circulaire 3, 1180 Uccle, Belgium
Contact person(s)	Juliette Legrand e-mail: Juliette.Legrand@oma.be
Software used	CATREF and Hector Software

The velocities have been estimated using Hector software (Bos et al., 2013) based on the ROB-EUREF position time series (see 1.a). Hector software has been used to estimate a linear trend, an annual and semi-annual signals assuming a temporal correlated noise (power-law + white noise).

The outliers have been removed and position and velocity changes have been accounted for. In case of velocity changes, only the velocity of the longest period has been provided to EPOS.