## Reconstruction of the anisotropic part of Slant Tropospheric Delays

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In order to retrieve most of the tropospheric signal in GNSS observations two common processing strategies (precise point positioning and double difference approach) have been set up and compared to each other. At first dual-frequency GNSS observations of a small network of reference stations were simulated – using real GNSS orbit and clock products – and processed using the software packages Bernese v5.2 and Napeos v3.3.1 to obtain tropospheric parameters (zenith total delays and gradients) and observations residuals. Hereby we could highlight the effect of different orbit and clock products, the mapping function and the network size on the estimates and were able to identify the remaining tropospheric signal in the observation residuals. Based on this findings we defined a processing strategy and applied it to real GNSS observations. The resulting tropospheric parameters are compared to the IGS final tropospheric products and ray-traced STDs - derived from operational pressure level data of the ECMWF.