



From noise to information: Comparing GNSS Slant Delay with NWP

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Within the COST-action GNSS4SWEC benchmark campaign a observation data set of slant delay measurements has been constructed. The information content of these measurements are related to the distribution of temperature and humidity. The latter parameter is generally highly under sampled in operational meteorology, although it plays a key role in many atmospheric processes related to severe weather.

Here we discuss shortly the construction of the slant delay equivalent from NWP and give an estimate of the representation error. By comparing analysis and background increments of slant delays at different elevation angles we try to estimate the accuracy of the observation and determine the observation error correlation and scales.