



High frequency Earth rotation variations from CONT11

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The CONT11 campaign was a 15-days period of continuous Very Long Baseline Interferometry (VLBI) measurements performed in the second half of September 2011. One of the main goals of this campaign was to provide time series of Earth Orientation Parameters (EOP) with highest possible temporal resolution. For this purpose, the VLBI data from CONT11 have been analysed with the Vienna VLBI Software (VieVS) in order to determine the EOP with hourly resolution. We compare the obtained sub-daily fluctuations of polar motion and Universal Time (UT1) with the corresponding modelled variations that take into account the effects of ocean tides and thermal tides in the atmosphere. Furthermore, the EOP series are compared to observations acquired by the Wettzell “G” ring laser gyroscope during CONT11, and a combined VLBI – ring laser solution is calculated in an attempt to obtain EOP of even higher accuracy. The results are put into context to the findings from previous continuous VLBI campaigns, like CONT02, CONT05, and CONT08.