

UNESP_PP real time clock corrections estimation for supporting PPP

João Monico (1), Haroldo Marques (2), Rogerio Oyama (1), Milton Shimabukuro (1), and Italo Tsuchiya (1)

(1) UNESP, Faculdade de Ciência e Tecnologia, Presidente Prudente, Brazil (galera@fct.unesp.br), (2) Universidade Federal de Pernambuco

In this contribution we will present the UNESP Campus Presidente Prudente (UNESP_PP) efforts related to the estimation of GPS satellite clock corrections to provide support for real time Precise Point Positioning (PPP). The model assumes that stations and satellites positions are known from the latest efforts carried out within the context of Spatial Geodesy. For the former, we have used the latest ITRF solution and for satellite orbits we have used the IGU (Ultra rapid IGS) solution. The other parameters (satellites and receiver clocks, troposphere and ambiguities) are estimated in the approach, where ion free observables are used. The satellite clock corrections are made available at the UNESP Ntrip Caster. In a first attempt to assess its quality, we compared with other stable products, such those provide by IGS/BKG. In a step further, real time PPP with IGS and UNESP_PP clock products will be carried out to assess the quality of both, once we will have ground truth from relative positioning. The first results and quality assessment will be presented together with the additional efforts being carried out to improve the clock product and contribute with the development of high accuracy positioning methods.