Geophysical Research Abstracts
Vol. 17, EGU2015-11494, 2015
EGU General Assembly 2015

CODE's multi-GNSS orbit and clock solution

Lars Prange (1), Etienne Orliac (1), Rolf Dach (1), Daniel Arnold (1), Gerhard Beutler (1), Stefan Schaer (2), and Adrian Jäggi (1)

(1) University of Bern, Astronomical Institute, Bern, Switzerland (lars.prange@aiub.unibe.ch), (2) Bundesamt für Landestopografie swisstopo, Wabern, Switzerland (stefan.schaer@swisstopo.ch)

The Center for Orbit Determination in Europe (CODE) is contributing as a global analysis center to the International GNSS Service (IGS). Since 2012 CODE participates in the "Multi-GNSS EXperiment" (MGEX), launched by the IGS as a testbed for the incorporation of new GNSS and their signals into the existing IGS processing chains and software packages.

We present CODE's latest MGEX solution - a fully integrated 5-system (GPS, GLONASS, Galileo, BeiDou, QZSS) GNSS orbit and clock solution, based on data starting from January 2014. The impact of radiation pressure modeling and orbital arc length on the solution quality will be discussed. The results will be validated with satellite laser ranging (SLR), assessment of satellite clock performance, and precise point positioning (PPP).

The CODE MGEX orbit and clock products are publicly available in the IGS MGEX products directory at the CDDIS data center: ftp://cddis.gsfc.nasa.gov/gnss/products/mgex (the solution ID "com" stands for CODE-MGEX). The CODE MGEX products have been generated occasionally so far. Beginning in early 2015 they are provided in a more operational way with a delay of about two weeks.