Geophysical Research Abstracts Vol. 13, EGU2011-7472, 2011 EGU General Assembly 2011 © Author(s) 2011



The IGS Real-time Pilot Project – The Development of Real-time IGS Correction Products for Precise Point Positioning

Mark Caissy (1), Georg Weber (2), Loukis Agrotis (3), Gerhard Wübbena (4), and Manuel Hernandez-Pajares (5) (1) Natural Resources Canada, Geodetic Survey Division, Ottawa, Canada (caissy@nrcan.gc.ca), (2) Bundesamt für Kartographie und Geodäsie (BKG) Frankfurt am Main, Germany (georg.weber@bkg.bund.de), (3) European Space Operations Centre Darmstadt, Germany (loukis@symban.co.uk), (4) Geo++ Garbsen, Germany (gerhard.wuebbena@geopp.de), (5) Universitat Politecnica de Catalunya (UPC) Barcelona, Spain (manuel@ma4.upc.edu)

As part of its strategic plan the International GNSS Service is developing real-time products that will meet the needs of the PPP community it serves. The IGS Real-time Pilot Project was initiated in 2007 and is an important element in the implementation of this strategic goal. Guided by recommendations from both the Miami and Newcastle workshops, participants in the IGS Real-time Pilot Project are working towards the implementation of a two year plan. This presentation will focus on key Pilot Project activities including network management, format specifications, product generation and distribution, product accuracy and real-time precise point positioning results. Within the Pilot Project, IGS real-time analysis centers are computing GNSS clock corrections using IGS ultra rapid predicted orbits and real-time data streams from over 100 stations in the IGS network. Independent real-time analysis centers are also generating low latency conventional products, for example ionospheric VTEC maps. Through close cooperation with RTCM, the Pilot Project is helping to influence the development of GNSS data and correction formats and together with the NTRIP protocol participants are exchanging data and real-time products using these new formats. Comparisons with IGS rapid clock products indicate that accuracy targets set for the Pilot Project are being achieved for real-time clock and orbit corrections and real-time PPP results using these products are demonstrating sub-decimetre horizontal positioning 2-drms.