MGEX data analysis at CODE - current status

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The Center for Orbit Determination in Europe (CODE) is contributing as an analysis center to the International GNSS Service (IGS) since many years. The processing of GPS and GLONASS data is well established in CODE's ultra-rapid, rapid, and final product lines.

In 2012 the IGS started its "Multi GNSS EXperiment" (MGEX). Meanwhile (status end of 2012) about 50 new or upgraded MGEX tracking stations offer their data to the user community meeting the IGS standards (e.g., correct equipment information, calibrated antennas, RINEX data format). MGEX supports the RINEX3 data format, new signal types for the established GNSS (e.g., L5 for GPS), and new GNSS, such as Galileo, Compass, and QZSS. It is therefore well suited as a testbed for future developments in GNSS processing.

CODE supports MGEX by providing a three-system orbit solution (GPS+GLONASS+Galileo) on a non-operational basis. The CODE MGEX products are freely available at ftp://cddis.gsfc.nasa.gov/gnss/products/mgex (solution ID "com" stands for CODE-MGEX).

The current status of the MGEX processing at CODE will be presented focusing on the consistency of GNSS-derived results based on different frequencies/signals. An outlook about CODE's future multi-GNSS activities will be given.