Precise real-time GNSS clock and orbits products have become available over the last years through different services. A new range of real-time orbit products give corrections to the GNSS broadcast ephemeris in regional and national reference systems such as the European ETRS89 and the Australian GDA94.

The products in regional and national reference frames are of interest to PPP users who have a need for position and/or navigation information in other reference systems than IGS05. A PPP user obtains his coordinates in the same reference system as the reference system of satellite orbits. Traditionally, a PPP user who wants to obtain coordinates in a regional or national reference system has to apply a transformation of the positioning results that consist of parameters varying in time. The reason for the time varying transformation parameters is that systems like GDA94 and ETRS89 are defined as a realisation of the ITRF at a certain epoch in time while orbit products are given in IGS05, a realisation of the ITRF, at the epoch at which the satellite position is needed. The availability of the real-time orbit products in regional and national reference systems makes the transformation redundant for the PPP user.

This contribution will analyse and compare for a PPP application the usage of GDA94 orbit corrections versus the method where IGS05 orbit corrections are being used and an IGS05 to GDA94 transformation is applied to obtain GDA94 coordinates. For both cases a scenario is used for which an accurate ground-truth is available.