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## Modernizing Canadian Geodetic Survey's precise GNSS orbit and clock system

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In order to enable our new PPP processing engine and online service to work in full multi-GNSS mode, and provide high quality precise GNSS orbit and clock (POD) products to IGS and international geodetic community, Canadian Geodetic Survey (known as EMR) has started to modernize his POD system. The new system is based on GipsyX and in-house software development and will replace our current POD system in near future. When become operational, the new POD system will produce multi-GNSS precise orbit and clock corrections with ambiguity resolution along with wide-lane and phase biases using zero-differenced, dual-frequency, ionosphere-free phase and code observations in RINEX 2 and 3 formats estimated in combined solution. The new system also benefits from advanced features such as removing observations affected by ionospheric scintillation and ground stations affected by earthquake as well as real-time monitoring of estimated position time-series of ground stations, among others.