2015 ILRS Technical Workshop

1.11 Phases Ambiguities Resolution Combining Precise Point Positioning (PPP) and SBAS Augmentation Methods

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In geodesy the accuracy of coordinates determination and network adjustment is very important, that's why instead of being limited to the classic GPS positioning, we deal in this work with the Precise Point Positioning (PPP) method. It is based not only on GPS observations where the accuracy, availability and reliability are dependent on the number of visible satellites (GDOP), but on the integration of the augmentation systems using all EGNOS constellation. Profiting both on precise orbit and clock data provided by the Constellation and the augmentation system SBAS (Satellite-Based Augmentation Systems) we employ hereafter a number of satellites and ground stations whose positions are known with high accuracy to partially correct or mitigate the positioning errors.