

عنوان مقاله:

Fixing of Cycle Slips in Dual-Frequency GPS Phase Observables using Discrete Wavelet Transforms

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خلاصه مقاله:

The occurrence of cycle slips is a major limiting factor for achievement of sub-decimeter accuracy in positioning with GPS (Global Positioning System). In the past, several authors introduced a method based on different combinations of GPS data together with Kalman filter to solve the problem of the cycle slips. In this paper the same philosophy is used but with discrete wavelet transforms. For experiments we simulated artificial cycle slips in real data. Studies show that the selection of a proper wavelet basis functional basis for wavelet is a very important problem in wavelet .transforms. Wavelet transforms accurately detects the place of cycle slips, especially in low noise test quantities

کلمات کلیدی:

GPS, Cycle Slip, Geodetic Positioning, Phase Observations, Discrete Wavelet transform

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