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STUDYING MULTIPATH ERROR IN ISRO'S NAVIC SATELLITE SIGNALS

Abstract

It is possible for receivers to receive direct navigation signals from NavIC satellites (formally IRNSS) along with delayed reflections of that particular NavIC signal. Such reflections can be caused by various common items like satellite dishes, car roofs etc. In such cases, the receiver receives the original signal vectorially added to the reflections coming from multiple paths and this introduces an error in the calculations called the Multipath Error. My research focuses on modelling the multipath error alongside the autocorrelation peaks and developing strategies to minimize pseudorange calculation errors for NavIC satellite.