

## A Consideration on Annual Signals in GPS Baselines

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Annual signals in baseline components in GPS analysis is studied. Since the solution offset due to change in phase center map has annual signals, it is suggested that a error of annual terms in the observable space is not direct cause of this, but there must be some annual factor in the model space, e.g. structure of design matrix.

A 2-years time-series of a short baseline solved with ambiguity resolved is compared with one without ambiguity resolution. Their difference shows annual changes with the amplitude of 2 mm. It is concluded that the error in ambiguity parameters can be one of factors of the annual signals in GPS baselines.