

Precise Variance Detection by Simplified Kinematic GPS Measurements --- KVD (Kinematics for precise Variance Detection) Method

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A GPS antenna installed on a buoy makes the measurement of water surface movements possible. If the kinematic method is used, the noise in low frequency region, a big problem in PVD method, can be eliminated, and the high precision measurements become available. But, in this case, a reference point on land become necessary, and large amounts of data must be sent from the observation point to the reference point. If only the variation components are required, the ambiguity can be neglected, since it belongs to the direct current component. The loads of data transmission and the computation may be reduced drastically. So, a high speed measurement becomes possible. The authors would like to refer the method as KVD (Kinematic for precise Variance Detection) method.