



Directional errors of ship's position in a fairway

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Fairways are a specific type of waterways and restricted navigational areas. They are equipped with additional aids to navigation: stationary and floating marks. Navigation along a fairway is part of a ship's voyage when its position must be exceptionally accurately and frequently determined. While sailing along a fairway, is dangerous to cross the fairway limits (safe depths), that is diverging too far from the fairway center line (or traffic lane center line). Therefore, the distance of the ship from the fairway center line is of primary interest to the navigator. This paper presents the spatial distribution of errors in position determination (directional error) using GPS/DGPS.