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# Evaluation of accuracy the position of the vessel designated stereoscopic cameras system

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In this article a research to assess the applicability of CCD cameras in a stereoscopic system for determining the position of the vessel in the coastal zone has been presented. As a basic criteria for this assessment was adopted for determining the accuracy of the position coordinates of the vessel dimensioned of the root mean square error value.
Construction of stereoscopic system measuring the distance from the vessel, method of determining distances to navigation aids identified in the images recorded two cameras and brief analysis of measurement errors in vision system have been presented in the first part of the article.
A scientific experiment that involving the computation of the accuracy diagram (root mean square error distribution) position of the vessel assigned to the stereoscopic system of the Gulf of Gdansk have been presented in the second part of the article. In the description that characterized method of determining the accuracy diagrams of the items referred to two or more measurements of the distance from the ship to the selected navigation aids. The results of the experiment was carried out in the accuracy diagrams for the position determined stereoscopic system against the Gulf of Gdansk navigation aids system.
In the final section an analysis of the results obtained in the experiment, taking into account the International Maritime Organization positioning accuracy requirements of the vessel in coastal shipping and generalized conclusions have been presented.