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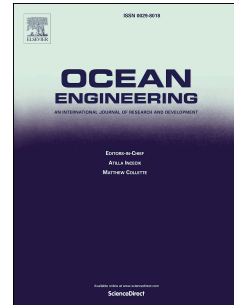
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Modeling perceived collision risk in vessel encounter situations

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Abstract

[Risk perception of the situation](#) by an officer on watch is the basis for improving situational awareness, which is crucial in preventing ship collisions in vessel encounter situations. Defining risk perception for a vessel collision situation requires identifying the perceived risk. This paper derives a multiple linear regression model for studying risk perception on a ship in various collision encounter situations. To illustrate the procedure, the collision risk perceived by Korea Coast Guard officers on a patrol ship was obtained and applied to calibrate the regression model. The results demonstrate that the proposed model can be used to define risk perception and to

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