



A MODEL FOR FUZZY DATA CORREALATION OF AIS AND RADAR

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Abstract- With the development of Automatic Identification System (AIS), more and more vessels are equipped with AIS device, which is a new tool for vessel monitoring and marine safety. In this paper, we compared the function of AIS and radar, the traditional tool for Vessel Traffic Service (VTS). And then we discussed the necessity of data fusion of the same target from the two sensors of AIS and radar. According to the characteristic and the difference of tracking performance of AIS and radar we proposed a fuzzy correlation method for target tracking and data fusion. The experiment shows that the proposed method is correct and efficient and it can improve the performance and the stability of VTS.

Index terms: Data fusion, fuzzy correlation, target tracking, Automatic Identification System (AIS), radar.