

**Modeling Water Quality At Low Cost Asv (Autonomous Surface Vehicle)
For Monitoring Damage To Coral Reefs Using A
Fuzzy Neural Network Algorithm,**

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ABSTRACT

The growth of coral reefs affected water conditions with a factor of temperature, dissolved oxygen, ph, turbidity. Where the condition of the coral reefs is very bad in Indonesia reached 35.15%. Hence the need for special handling using the ASV technologies (Autonomous surface Vehicle). With the help of ASV can obtain data of temperature, dissolved oxygen, ph, turbidity so that the water quality can be modeled by using two algorithms namely algorithm neural network and fuzzy algorithm or called with a fuzzy Neural network. The use of a neural network algorithm used to process the data so that it can predict the training/testing process results in estimates. While the use of fuzzy algorithms uses data classes from the classification determination result of calculation of the neural network. The end result of this research in the form of a class with the determination of water quality is good, bad, or simply displayed in the form of a system of monitoring website. As for the results of research using fuzzy neural network algorithm has an accuracy rate of 99.2%.

Key word : ASV(Autonomous Sueface Vehicle), Neural Network, Fuzzy