GENETIC ALGORITHM FOR TSUNAMI IMPACTS ON WATER MASS VARIATIONS

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Abstract:
There is no query that the tsunami performs remarkable roles to alternate the physical properties of the ocean through mixing turbulent approaches. **:** This study has proposed and demonstrated a new approach to retrieve the water mass pattern from remote sensing data. This examination has proposed and shown another way to deal with recovering water mass example from remote detecting information. The MODIS satellite information is procured pre, during and boxing day 2004. In this way, GA delivered another equation to recover the water mass by upgrading mistakes because of overcast spreads, and SST and SSS straight calculation executions. The investigation demonstrates that GA can diminish the blunder of recovering ocean surface thickness with±2.87 kg/m^3. Further, during and post tsunami 2004, the coastal waters are commanded by most extreme density estimation of 25.8 kg/m^{3}which initially organized along Aceh coastal waters. It can be alleged that GA can be utilized to recover water mass qualities utilizing MODIS satellite information.

Keywords: Tsunami, Water mass, MODIS satellite data, Genetic algorithm, Sea surface temperature, Sea surface Salinity.