
High-resolution time series in the marine environment using autopiloting drones.

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Project Description:

To monitor changes in populations of aquatic bacterial pathogens, we are using and engineering waterproof drones for creating a high resolution (Daily) time series o in collaboration with the Singapore Marine Environmental Sensing Network (sampling near the buoys). This has already been used by our team to collect water after the 2024 oil spill in Singapore and can produce an amazing datasets with up to two data points a day, and a strong synergy with the 30 parameters measured by the marine sensing network. We are working with aeronautics drone engineer Henrik Hesse (University of Glasgow in Singapore) and Jani Tanzil (SJINML). This will allow correlation of environmental parameters with the presence of marine pathogens and modeling of risks associated with their presence.