



## **Small scale operational oceanography in Zihuatanejo Bay, Mexico**

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Two field measurements campaigns were performed in Zihuatanejo bay in order to simulate the hydrodynamics of the bay. The main objective of the study was to understand the water quality of the bay, based on the hydrodynamics and physical processes. The measurements included the basic parameters to initiate and to feed a 3d hydrodynamic model (tide or water level, discharge into the bay, temperature and salinity water profiles, wind velocity and air temperature and humidity). The model used was developed in the Center for Water Research from UWA and it has the option to be coupled to a water quality model as is CAYDEM. We will present the currents velocity, temperature and bacteria concentration resulted from the simulation. The results show a good agreement with the measurements.