ABSTRACT:

The use of satellite wave altimetry has increased the possibility of getting better temporal and spatial coverage of wave data collection. Whilst the method to obtain wave heights is well established, such is not the case with methods of derivations of wave periods. This study presents a review of four available methods to derive wave periods and describes the implementation of such methods to obtain Malaysian ocean waves joint probabilities of wave heights and wave periods data from TOPEX/Poseidon satellite altimetry. Data is presented in formats similar to the commonly used Global Wave Statistics. Comparisons are made with measured data from a petroleum company offshore platform. Results indicate that two methods produced almost identical wave periods data to the measured data.