AN INTERNATIONAL QUIET OCEAN EXPERIMENT

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The effect of noise on marine life is one of the big unknowns of current marine science. There is considerable evidence that the human contribution to ocean noise has increased during the past few decades; human noise has become the dominant component of marine noise in some regions and noise is directly correlated with the increasing industrialization of the ocean. Sound is an important factor in the lives of many marine organisms and increasing theory and observations suggest that human noise could be approaching levels at which negative effects on marine life may be occurring. Some species show symptoms of effects of sound. Although some of these effects are acute and rare in occurrence, chronic sub-lethal effects may be much more prevalent, but are much more difficult to measure. We need to identify the thresholds of such effects for different species and be in a position to predict how increasing anthropogenic sound will increase the effects. To achieve this, an International Quiet Ocean Experiment (IQOE) is being developed, with the objective of coordinating among the international research community to both quantify the ocean soundscape and examine the functional relationship between sound and the viability of key marine organisms. The results from an Open Science Meeting that has been designed to synthesis the community-based views about how this experiment should be constructed, and that is taking place in Paris during September 2011, will be presented.