

The Chesil Multi-Media Project

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The Chesil Multi-Media Project (CMMP) aims to provide live and recorded pictures and sound in order to portray the Fleet and Chesil Beach to the visiting public. It also collects data on various aspects of the area in order to further our understanding of the area and seeks to convey this information to the visiting public.

Video

CMMP operates a number of television cameras above and below the Lower Fleet. The aim is to capture aspects of the wildlife of the area that the visiting public may not be able to see for themselves. This has included several underwater cameras located in the main channel of the Fleet and cameras looking at the nesting birds on Chesil beach, including the little terns. Other cameras have attempted to capture the effect of storms on the beach.



The underwater cameras use cheap and readily available high quality PCB cameras housed in clear polycarbonate electrical junction boxes. These can survive for extended periods of time underwater, but need frequent cleaning because of the high growth rate of algae in the Fleet. The currently operational underwater camera has now been in operation continuously for 3 1/2 years.



The cameras used to monitor the nesting birds are based on security cameras, a market that has produced high quality cameras at a low cost. The cameras used to monitor the beach under storm conditions are security cameras with additional protection, but are proving difficult to keep working during the extreme weather encountered on Chesil Beach.

Live pictures are conveyed to the Chesil Beach Visitors Centre using fibre-optic cables. Two pictures can be displayed to the visiting public.

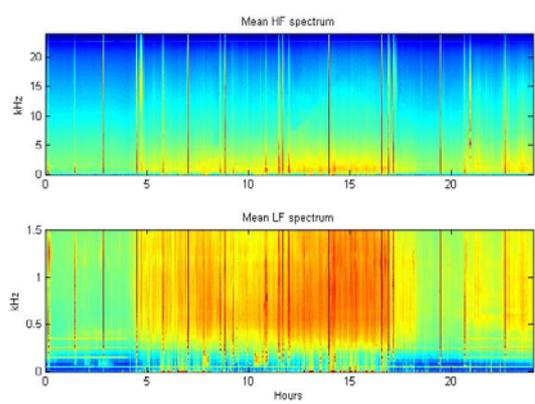


Hydrophone

Audio

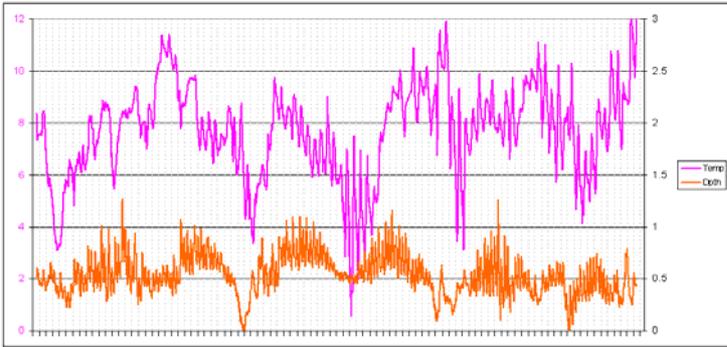
The CMMP system includes an audio capability, although at present the sound is not available to the visiting public. Sounds can be picked up from two underwater microphones known as hydrophones, or from a normal microphone on the beach. These sounds are currently recorded remotely and are being used for a PhD project by a student from Southampton University.

The sounds are processed to show how the sound level varies during a typical day. An example plot is shown here. The major increase in noise during the day is from several biological sources including snapping shrimp and at least one fish species. The vertical bars are the noise of passing boats.



Instrumentation

CMMP operate a number of dataloggers throughout the Fleet recording water temperature and depth. The aim is to understand what affects water levels and water temperature in the Fleet. A typical output from one of these loggers is shown below. The spring/neap tide cycle is reflected in the depth plot.



The water temperature of the lower Fleet has been measure at one location for the last four years and the plot is shown here. It can be seen that 2010 has generally been colder than the last four years.

