Tidal Energy Test Site Survey in Cape Cod Canal

On 28 and 29 June 2016, equipment was deployed in the Cape Cod Canal, USA. Scientists from UMass Dartmouth conducted a survey to understand the sea bed at the place where a tidal test site will be installed (in the autumn of 2016). They lowered a tripod camera down to take detailed photos of the sea floor in the Cape Cod Canal.

The researchers used the very same camera that was used to survey scallop beds offshore, enabling strict quotas to be relaxed for the fishing industry several years ago. The system is called the Pyramid Camera and it was used to take over 30,000 photos of the sea bed at regular intervals. The photos will be displayed on a grid which will be used to determine what types of organisms, plants and fish are there. They can also tell what type of material is on the bottom such as sand, silt, mud or gravel. All this information is going to be used to determine the best spot to place the structure that will hold the experimental turbines.

Sidescan Sonar Survey

The second survey, performed by the company 3-D Cube, was a bottom survey. This used a remotely operated surface vehicle, called Z-Boat, equipped with a sidescan sonar. This information will be important in developing an installation plan for the test structure.

This type of work would have taken a week or longer years ago because the instruments would have had to remain in the water for longer periods of time to get the same data. The survey in June resulted in real-time data as well as data storage, so that the data can be aggregated and displayed for all to see.

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