



May 11, 2010

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Kate Huckelbridge
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California State Lands Commission 100 Howe Avenue, Suite 100-South
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RE: Monterey Bay Aquarium Research Institute (MBARI) MARS Cable Monitoring

Dear Deirdre, Erica, Kate and Jane:

The first MARS cable route survey was to have taken place within 18 months of our completion of a Post-Lay Burial Survey (PLIB; March 16, 2007 through June 7, 2007). Within 10 months we completed the re-survey of the entire cable route using MBARI's R/V *Point Lobos* and remotely operated vehicle (ROV) *Ventana*. Observations were conducted between November 30, 2007 and April 1, 2008. We have been gathering data for the third survey since January 2010, and have gone to sea 16 days, three of which were aborted due to severe weather conditions. Additionally, seven dives had to be aborted due to poor visibility, and some sites were revisited 2-3 times checking for better conditions. Despite fighting the elements, we have just completed gathering data for the next report. As with previous surveys, we verified that the cable is still buried to the extent indicated during the PLIB survey (Figure 1). Preliminary observations are that the location of the cable remains the same, with no evidence of strumming or other movement. The cable is still buried with no trace of habitat disturbance in shallow sandy areas (roughly 50 % of the route, Figure 1, 2). In other sections, habitat disturbance is less evident compared with the previous surveys and sediment is settling into the trench (Figure 3-7). The number of skates found near the cable at 324 m depth now appears normal.

We are analyzing video and sample data for our Impacts Assessment (Figure 8) and the fully detailed report discussing the biological, geological, and ecological impacts will be submitted within six months of current survey completion date. Please contact us if you have questions or need additional information prior to our full report.

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MBARI MARS Cable Impact Survey

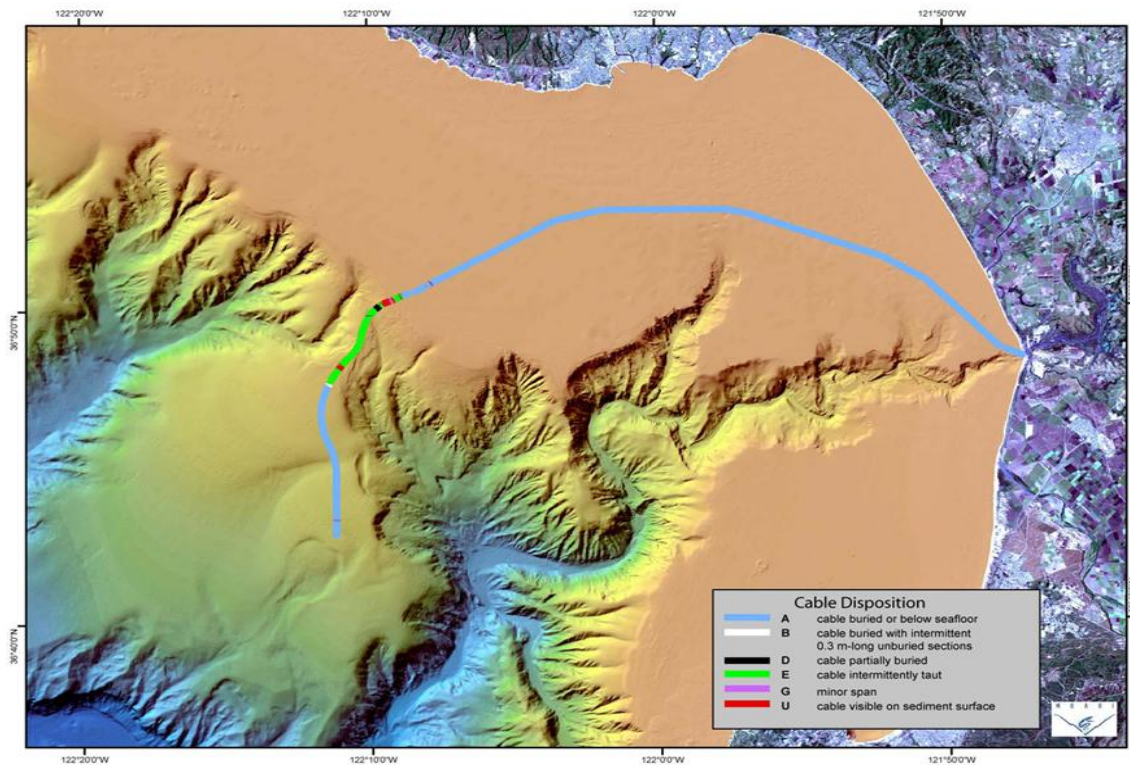


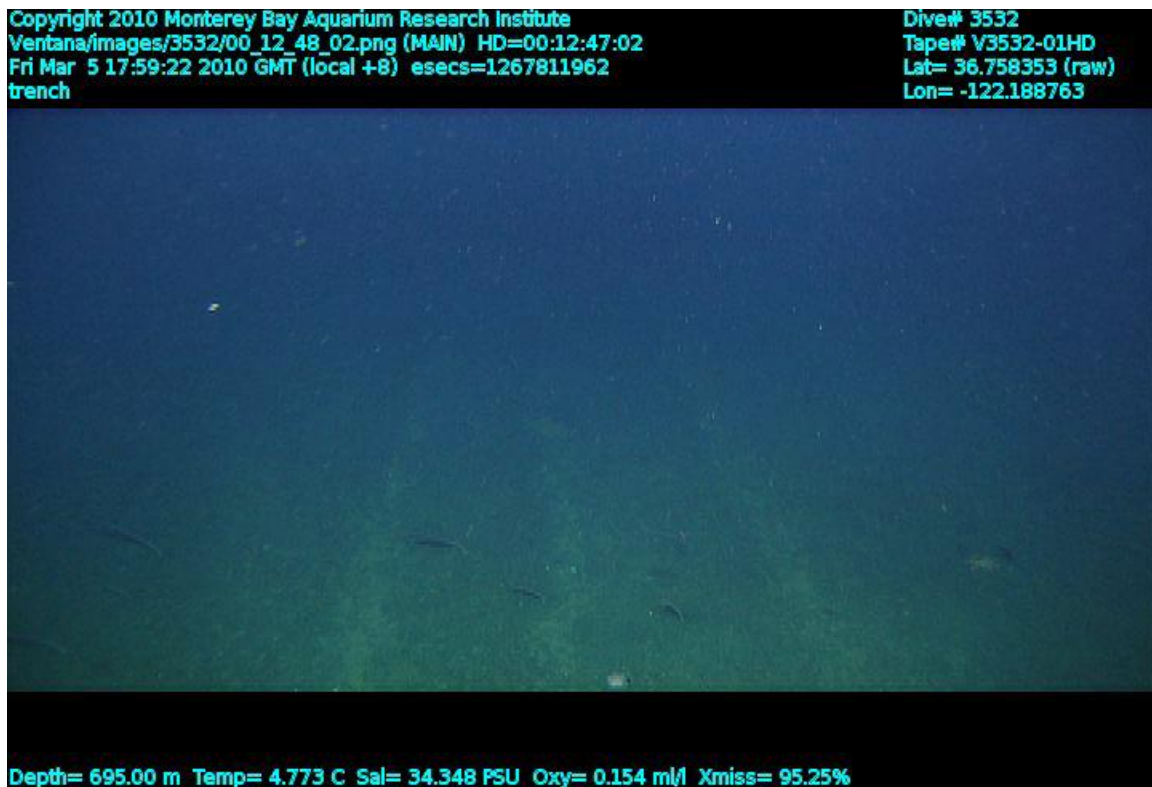
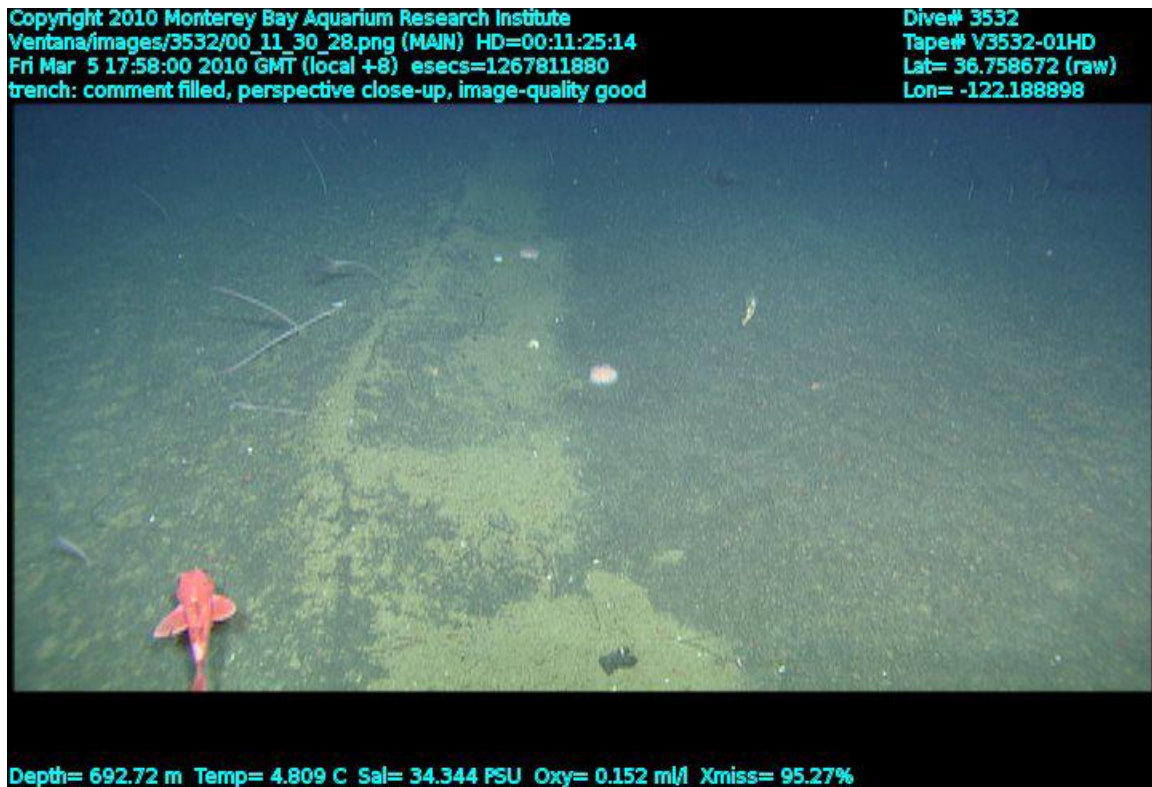
Figure 1. Map of the MARS cable route showing position and burial status.



Figure 2. The majority of the MARS cable (over 50%) is buried in sandy mud. No sediment disturbance is evident.

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MBARI MARS Cable Impact Survey



Figures 3 and 4. The trench created when the cable was installed continues to fill with sediment, and disturbance is less obvious than in previous surveys.



Figure 4. Along a short section of the route at around 106 m depth, clay blocks displaced during cable installation are still evident on either side of the cable trench.



Figure 5. The cable is not buried along the neck of Smooth Ridge. In many sections, the cable is on the seafloor and sinking into the mud.

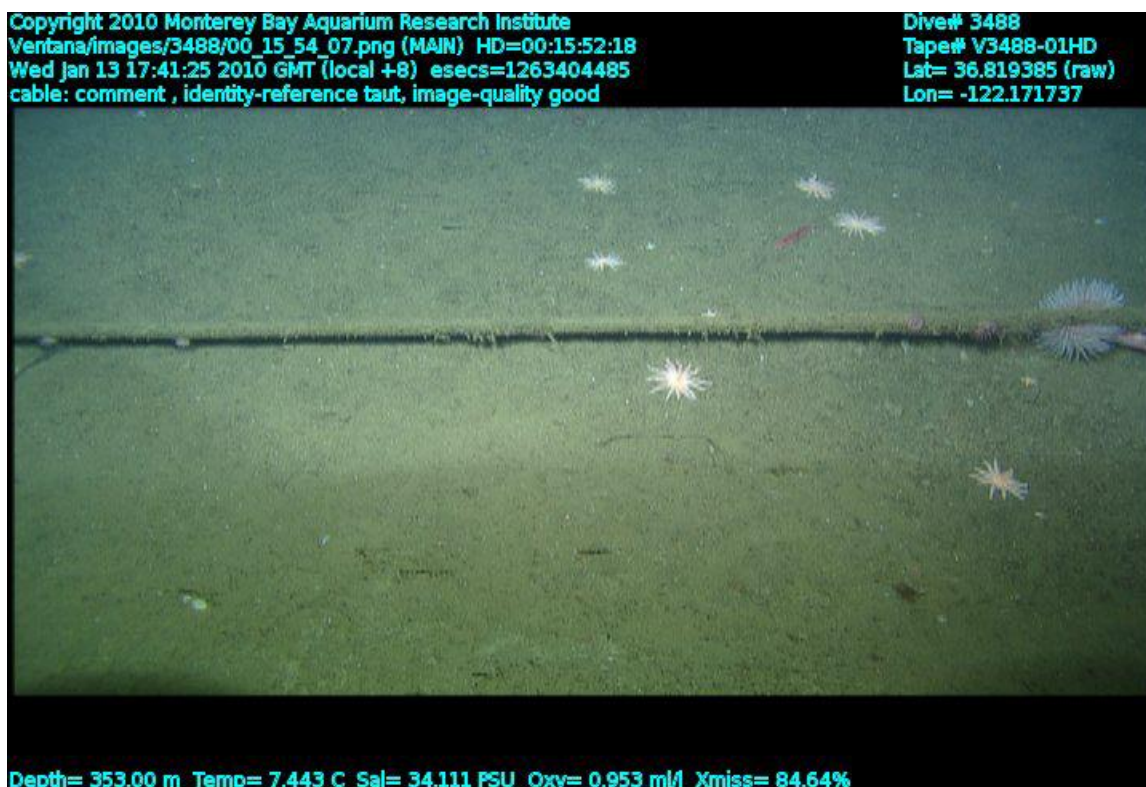


Figure 6. Along some sections of Smooth Ridge, the cable is taut due to heterogeneous substrates. Minor spans caused by rocks and small outcrops appear unaltered from previous surveys.



Figure 7. The MARS node with cables attached to four working science instruments.

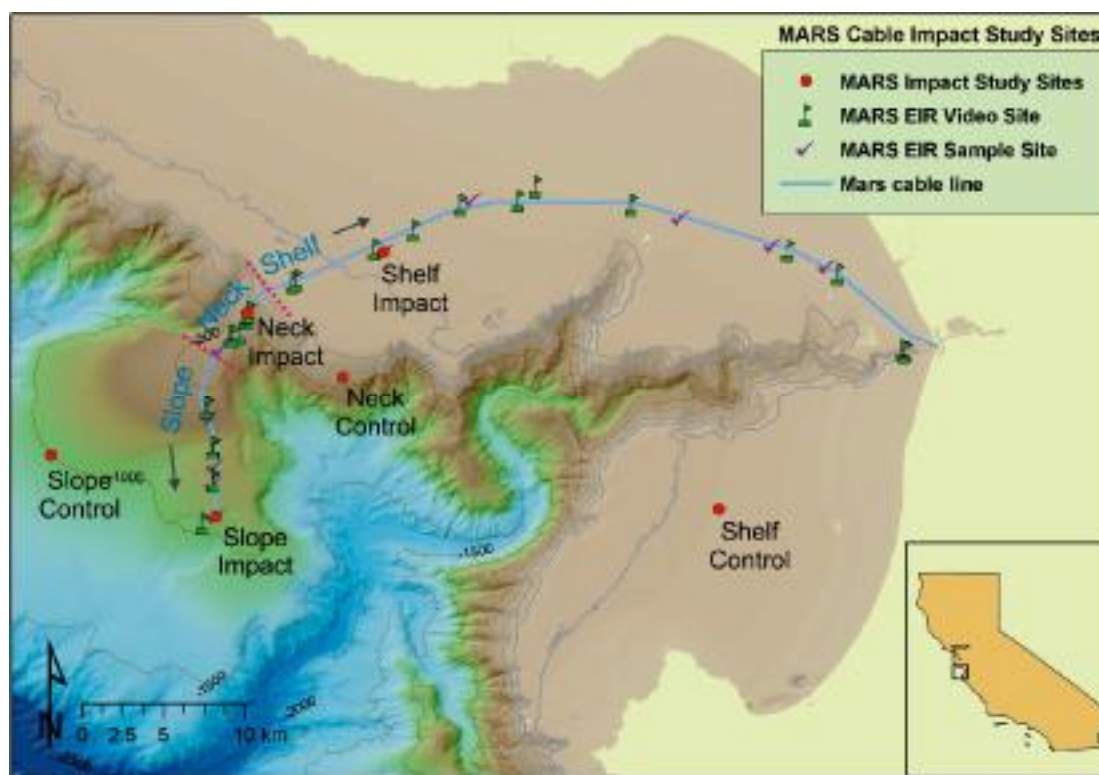


Figure 8. Map of the MARS cable route showing locations of EIR Cable route samples and video; study sites for MARS biological and geological studies.