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Mapping the underside of an iceberg with a modified underwater glider

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Abstract

Icebergs pose many challenges to offshore operations in the Arctic Ocean and sub-arctic regions. They could damage underwater infrastructure such as pipelines, and disrupt marine transportation. The below-water shape of an iceberg is a key factor for iceberg management in the North Atlantic Ocean because it affects the iceberg towing plans and iceberg drift patterns. In recent years, unmanned platforms have been proposed as potential candidates for underwater iceberg mapping. Compared to a conventional ship-based iceberg survey, using unmanned platforms is more efficient