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REWIND: BRITISH ANTARCTIC SURVEY ICE CORE DRILLING PROJECT

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The British Antarctic Survey (BAS) have recently undertaken numerous ice drilling projects, including the first phase of the multi-year REWIND project. This project proposes to drill through the Antarctic Peninsula ice sheet to bedrock, retrieving an ice core from the entire depth of approximately 716 m using the BAS shallow and intermediate ice core drills. The principal scientific objective is to obtain new reconstructions and a high-resolution record of sea ice, westerly winds, and $\rm CO_2$ in the Pacific sector of the Southern Ocean, during the Holocene which spans approximately the past 11,000 years.

During the 2024-2025 season, geophysical surveys were conducted to finalise the drilling location, and cores to a depth of 70 m were drilled at the chosen site. A new firn-air sampling system was successfully tested, providing CO_2 measurements to a depth of 65 m. Equipment is currently overwintered at the camp, and drilling will continue in the 2025-26 season to bedrock. This contribution will focus on the progress and future of the REWIND project, and briefly highlight other recent drilling project achievements.

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