Abstract Submitted for the TSF06 Meeting of The American Physical Society

Using Seismology to Map and Characterize the Glacial Bed in the Onset Region of Ice Stream D, West Antarctica¹ BRIDGET MCEWEN, University of Dallas — Climate change has affected the flow of ice streams in the West Antarctic Ice Sheet (WAIS). In order to predict the future behavior of the ice streams in the WAIS, an understanding and characterization of the glacial bed is necessary. From analyzing the strength of the seismic reflection of the bed information can be extracted about the composition of the bed, such as the reflection coefficient. It had been determined, from previous research, that the bed under Ice Stream D is composed of glacial till. After analysis, my results further verify previous conclusions. Future research on Ice Stream D could further verify these findings and help predict flow behavior and how this will affect the drainage and the future of the WAIS.

¹Special thanks to Dr. Sridhar Anandakrishnan, Peter Burkett, and the Pennsilvania State SROP program.

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Date submitted: 08 Sep 2006 Electronic form version 1.4