

*JGR Oceans*

Supporting Information for

**Direct observations of wave-sea ice interactions in the Antarctic Marginal Ice Zone**

S. Wahlgren<sup>1</sup>, J. Thomson<sup>2</sup>, L. C. Biddle<sup>1,3</sup>, S. Swart<sup>1</sup>

<sup>1</sup> Department of Marine Sciences, University of Gothenburg, Gothenburg, Sweden

<sup>2</sup> Applied Physics Laboratory, University of Washington, Seattle, Washington

<sup>3</sup> Voice of the Ocean, Gothenburg, Sweden

**Contents of this file**

Figures S1 to S3

**Additional Supporting Information (Files uploaded separately)**

Captions for Videos S1 to S3

**Introduction**

The supporting information contains additional imagery of local sea ice condition. We provide photos taken from the ship during deployment and recovery of the SWIFT buoys, as well as time lapse videos with photos taken by the cameras mounted on the SWIFT buoys.



**Figure S1.** Photo of the sea ice taken from the research vessel during the deployment of SWIFT20 in austral spring (October 27 2019).



**Figure S2.** Photo of the sea ice taken from the research vessel during the deployment of SWIFT21 in austral spring (October 27 2019). The sea ice consisted of densely packed floes, and the buoy was deployed in the relatively open ship track.



**Figure S3.** Photo of the sea ice taken from the research vessel during the recovery of SWIFT21 in austral spring (November 8 2019).

**Video S1.** Time lapse of the on-board imagery captured by SWIFT21 during the winter deployment. Due to size restriction, only every 10<sup>th</sup> photo is shown. The full time lapse can be found here <https://doi.org/10.5281/zenodo.7845764>.

**Video S2.** Time lapse of the on-board imagery captured by SWIFT20 during the spring deployment. Due to size restriction, only every 10<sup>th</sup> photo is shown. The full time lapse can be found here <https://doi.org/10.5281/zenodo.7845764>.

**Video S3.** Time lapse of the on-board imagery captured by SWIFT21 during the spring deployment. Due to size restriction, only every 10<sup>th</sup> photo is shown. The full time lapse can be found here <https://doi.org/10.5281/zenodo.7845764>.