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## the Development of an Annual Iceberg Calving Dataset of the Antarctic Ice Shelves

Mengzhen Qi<sup>1</sup>, Yan Liu<sup>1</sup>, and Xiao Cheng<sup>2</sup>

<sup>1</sup>State Key Laboratory of Remote Sensing Science, and College of Global Change and Earth System Science, Beijing Normal University, Beijing, China (201921490035@mail.bnu.edu.cn, liuyan2013@bnu.edu.cn)

<sup>2</sup>School of Geospatial Engineering and Science, Sun Yat-Sen University, Zuhua, China (chengxiao9@mail.sysu.edu.cn)

Iceberg calving, one of the key processes of Antarctic mass balance, has been regarded as an important variable in fine monitoring the changes of ice shelves. Based on multi-source satellite imagery, all annual calving events larger than 1 km<sup>2</sup> that occurred from August 2005 to August 2019 were extracted. Also, their area, thickness, mass, and calving recurrence cycle were calculated to derive the annual iceberg calving dataset. This dataset contains the distribution of 14-year annual calving events, along with the attributes of each calving event including calving year, length, area, average thickness, mass, recurrence interval, and calving type, and it can directly reflect the magnitude characteristics and distribution of Antarctic iceberg calving in different years, which fills the gap of fine monitoring dataset of iceberg calving and provides fundamental data for subsequent research on calving mechanism and mass balance of Antarctic ice shelf-ice sheet system.