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## Towards assembling the internal ice stratigraphy in coastal regions of Dronning Maud Land, East Antarctica

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The internal ice stratigraphy as imaged by radar is an integrated archive of the atmospheric-oceanographic, and ice-dynamic history that the ice sheet has experienced. It provides an observational constraint for ice flow modeling that has been used for instance to predict age-depth relationships at prospective ice-coring sites in Antarctica's interior. The stratigraphy is typically more disturbed and more difficult to image in coastal regions due to faster ice flow. Yet, knowledge of ice stratigraphy across ice shelf grounding lines and further seawards is important to help constrain ocean-induced melting and associated stability.

Here, we present preliminary results of synthesizing information from radar stratigraphic characteristics from airborne and ground-based radar surveys that have been collected for specific projects starting from the 1990s onwards focusing on ice marginal zones of Antarctica. The key data is based on airborne surveys from the German Alfred Wegener Institute's polar aircrafts equipped with a 150 MHz radar. In the meantime this system has been replaced by an ultra-wide band 150-520 MHz radar. The older data will provide a baseline with extensive coverage that can be used for model calibration and change detection over time. We aim to provide metrics of the radio stratigraphy (e.g. shape and slope of internal reflection horizons) as well as classified prevalent stratigraphy types that can be used to calibrate machine learning approaches such as simulation based inference. The data obtained will be integrated in coordination efforts within the SCAR AntArchitecture Action Group.