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Presenter: Johnson, Katelyn M., New Zealand

Tue_263_GG-2_848 - Ice Dynamics during the past 37 ka on Ross Sea Continental Shelf, Antarctica
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Tue_264_GG-2_889 - Late Quaternary Lambert Glacier System Dynamics on Prydz Bay East Antarctica
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Tue_265_GG-2_909 - Thinning History and Modelling of a Paleo Ice Stream: David Glacier, Antarctica
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Tue_266_GG-2_988 - XRD-XRF Analysis Insight on Post-LGM Sediments from the NW Barents Sea (Arctic)
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Tue_267_GG-2_1005 - Past Climate Records from the Ross Sea: Initial XRF Results from IODP Exp. 374
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Tue_268_GG-2_1022 - Geothermal Heat Flux Measured in the Amundsen Sea Embayment
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Tue_269_GG-2_1086 - The Eocene Evolution of Bathymetry in the Australian-Antarctic Basin
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Tue_271_GG-2_1124 - OSL Dates of Moraines from Ny-Alesund Indicating Late Quarternary Climate Change
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Tue_272_GG-2_1160 - The Climatic Significance of Laminated Sediments on the NW Barents Sea (Arctic)
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Tue_274_GG-2_1202 - Major Climatic Transitions Linked to the Tasman-Drake Tectonic Evolution
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Presenter: Kim, Sookwan, Korea, Republic of

Tue_276_GG-2_1354 - Diatom Reworking in the Ross Sea: Evidence for Quaternary Bottom Currents?
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Tue_277_GG-2_1373 - Unlocking Atmospheric Temperatures from Antarctica's past
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Tue_278_GG-2_1455 - Buried Landscapes in Antarctica are Records of Ancient Local-scale Ice
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Tue_279_GG-2_1478 - Eastern Ross Sea Shelf and Slope Marine and Glacial Processes
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Presenter: Dorschel, Boris, Germany

Tue_287_GG-2_1734 - Invigorated Southern Ocean Circulation Preceding Oligocene Antarctic Glaciation
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Tue_288_GG-2_1894 - Modelling Long Term Climate and Ice Sheet Changes to Understand Future Warming
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adaptation, and

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That Which Cannot polar regions
Be Transmitted

Tue_275_GG-2_1300 - Clues to Glacial Regime and Bottom-current Changes in the Northwestern Ross Sea

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The sedimentary record in polar continental margins provides useful insights into the glacial regime and bottom-current changes during the past glacial and interglacial periods. Many of the previous seismic stratigraphic studies have been conducted over the Ross Sea embayment to reveal the Cenozoic Antarctic glacial history. Due to lack of data, however, there have been much less studies that could provide a more continuous record of ice-sheet dynamics and bottom-current activity on the Ross Sea slope and rise. Here, we present a seismic stratigraphic analysis of sediments in the Joides Basin mouth and Central Basin, northwestern Ross Sea using the new and existing seismic and adjacent drill site data. The seismic profiles and sequence maps indicate that gravity sedimentation processes dominated the Central Basin infill, and then downslope sediment supply to the lower slope and rise was gradually reduced through the late Neogene and Quaternary. The bottom-current-controlled sedimentary features that may initiated on the surrounding banks and slopes since the mid-Miocene were overlain by glacigenic debris flows near the Joides Basin mouth after the late Pliocene. These results would indicate that the Antarctic glacial regime was evolved toward a cooler, less erosive through the late Neogene and Quaternary and bottom-current activity was diminished near the paleo-shelf edge after the late Pliocene in the northwestern Ross Sea margin.

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