## The 8th International Ice Drill Symposium



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## **Drilling the South Pole Ice Core (SPICEcore)**

Tuesday 1 October 2019 09:40 (20 minutes)

The Intermediate Depth Drill (IDD), designed and built by the Ice Drilling Design and Operations group (now IDP), was used to drill a 1,751 meter deep ice core during the 2014-2015 and 2015-2016 field seasons at the South Pole for the South Pole Ice core (SPICEcore) project. A team of 10 people worked 6 days per week, 24 hours per day, in 3 shifts to recover the 98 mm diameter ice cores, up to 2 meters in length per run. Dry drilling was completed to 160 meters and casing was set to 130 meters. Wet drilling, using Estisol 140 drilling fluid, was performed to the final depth. In this presentation, drilling operations, techniques, performance, and challenges will be discussed.

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