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Poster Title: Methods for Evaluation of the Alberta Hail Suppression Project Using Radar Observations
Author: David Delene<sup>1</sup> and Sankha Maitra<sup>1</sup>

<sup>1</sup>Department of Atmospheric Sciences, University of North Dakota, Grand Forks, North Dakota

**Abstract:** To reduce hailstone induced property damage, the Alberta Hail Suppression Project has been conducted in the area between Calgary and Red Deer since 1996. The Alberta Hail Suppression Project is evaluated using 2017 data from the project's C-band radar located at Olds and from an Environment Canada operated C-band radar at Strathmore. An in-depth, manual review of radar data from the 2017 seeding operations has identified 21 seed cases and 15 non-seed cases. The effectiveness of seeding is determined using hail indicators of Maximum Vertically Integrated Liquid (MaxVIL) and storm area greater than or equal to 60 dBZ (Ar60) by comparing before and during seeding observations. The Increasing Hail Ratio seeding effectiveness with storm area greater than or equal to 60 dBZ is 0.22 which is the highest of the calculated seeding effectiveness metrics. A positive metric indicates a reduction in damaging hail, with 1 being the highest possible value. With only 21 cases, the 2017 results are not statistically significant; however, the data set could be expanded by incorporating all years between 2014 to 2020 since the radar configuration is similar.