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The Distribution of Putative Periglacial landforms on the Martian Northern Plains

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Highlights

- A large survey of HiRISE images was conducted for three study areas in Acidalia, Arcadia and Utopia Planitiae on the northern plains of Mars.
- Features including clastic patterned ground, lobate hill slope features and scalloped depressions were catalogued.
- The proximity of these features to medium sized impact craters was assessed to determine whether they occurred in a preferential microclimate associated with such craters.
- It was found that lobate hill slope features and clastic patterns occurred further south than expected, beyond the southern extent of many previous studies.
- Clastic stripes and lobate hill slope features are often found on crater walls, but clastic networks are frequently found on the inter crater plains. This suggests that they do not require a crater associated microclimate in order to form.

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