

## ***Interactive comment on “Attribution of Greenland’s ablating ice surfaces on ice sheet albedo using unmanned aerial systems” by Jonathan C. Ryan et al.***

**Jonathan C. Ryan et al.**

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We thank the reviewers for their thoughtful and constructive comments which will improve the manuscript. We attach our response to all the comments and provide an updated manuscript with the tracked changes.

The main changes include:

1) Moving the description of MODIS albedo to the start of the methods section. By doing this, the source of the medium-scale albedo patterns is defined early on and we no longer have to refer to a future section when describing the UAV camera and pyranometer albedo products.

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- 2) Clarification and better validation of the classification method used.
- 3) Better description of albedo product validation (from both the digital camera and silicon pyranometers) using the CM3 thermopile pyranometers.
- 4) Focused the discussion on the ablation area of the ice sheet.
- 5) Included a new paragraph entitled "Spatial and temporal scales of albedo variability" at the end of the discussion which ties the discussion section together.
- 6) Cautioned reader that conclusions are only applicable to the 25 km survey transect and may not hold over the entire ablation area.

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[Interactive comment on The Cryosphere Discuss.](#), doi:10.5194/tc-2016-204, 2016.

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