

# Supporting Information for “Structural controls on the hydrology of crevasses on the Greenland ice sheet”

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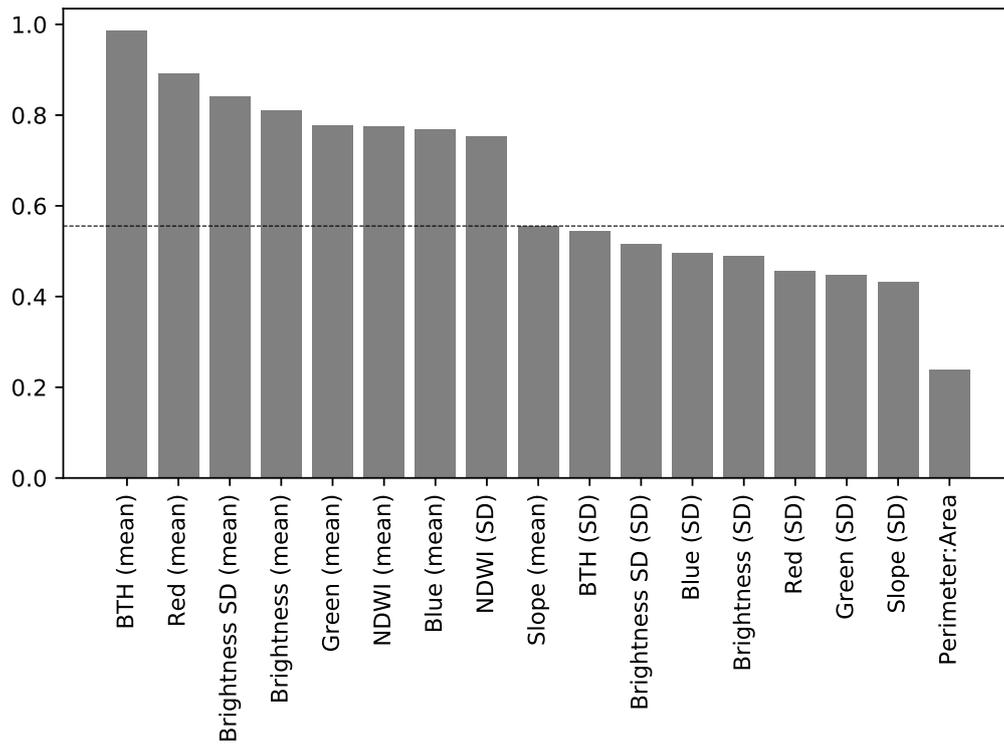
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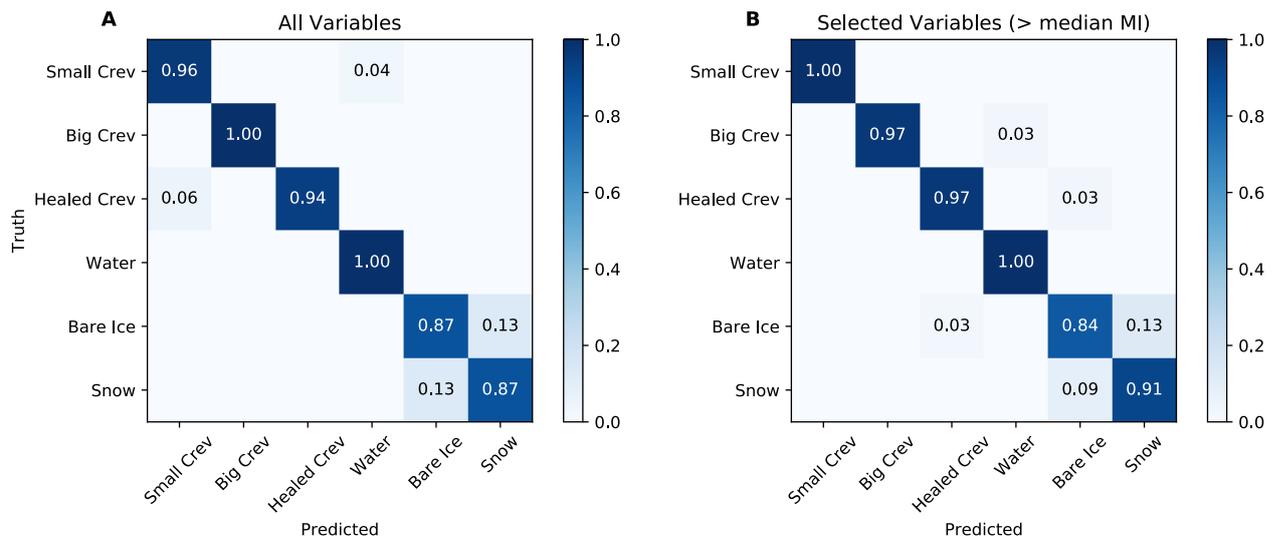
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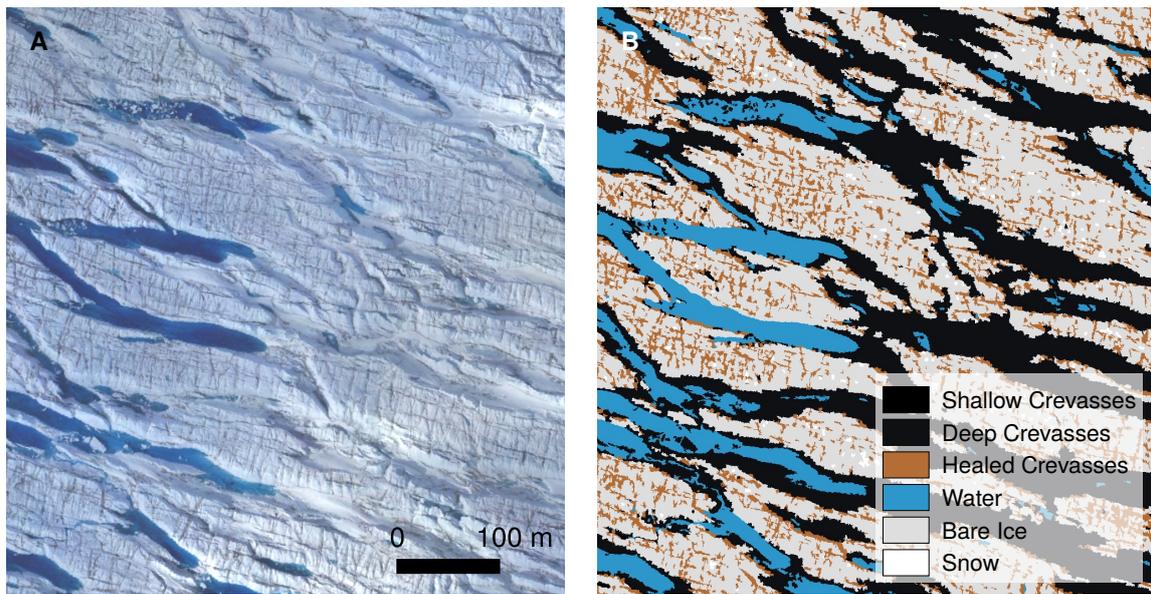
1. Figures S1 to S4
2. Table S1



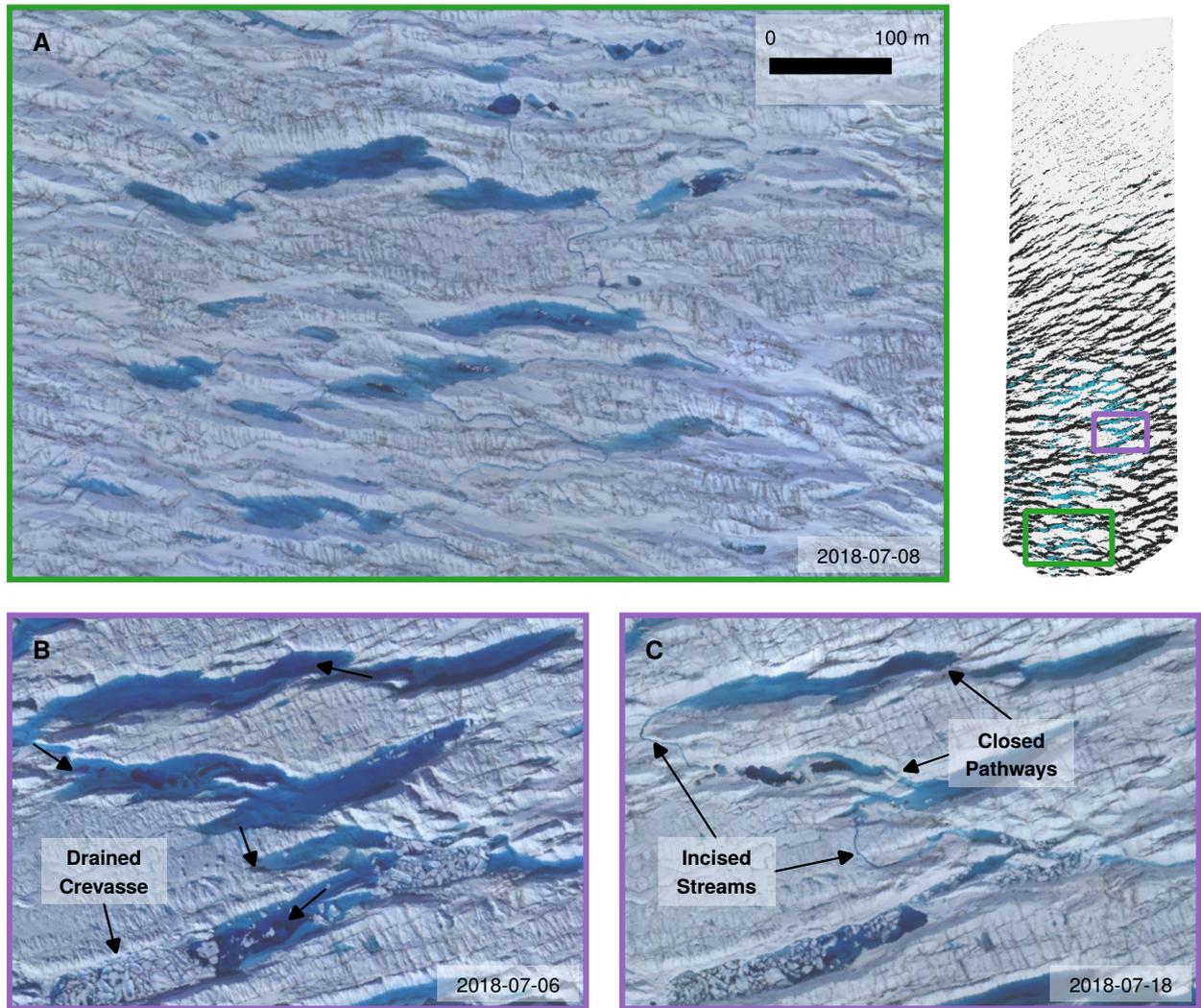
**Figure S1.** Results of mutual information tests for all potential input variables against training data. Median value is marked by the dotted line. BTH is black top-hat filter. SD is standard deviation.



**Figure S2.** Confusion diagrams for object-based image analysis of 2018-07-08 imagery for (A) all input variables; and (B) selected input variables with mutual information test results greater than median.



**Figure S3.** Example results for object-based image analysis of 2018-07-08 imagery. (A) Segmented orthophoto. (B) Full classification into six surface types.



**Figure S4.** Supraglacial connections between crevasses. (A) Southwestern extent of UAV survey area, displaying clear incised supraglacial pathways between crevasses. (B–C) Crevasse system identified in main figure 7A–B in the 24 hours following (B) and 12 days following (C) drainage, showing the development of incised streams as water level lowers. Inset: subfigure extents identified in full UAV survey extent.

**Table S1.** UAV survey date and times of flight midpoints (rounded to the nearest 5 minutes).

All times in Coordinated Universal Time (UTC).

| Survey Date | Time (UTC) |
|-------------|------------|
| 2018-07-05  | 21:10      |
| 2018-07-06  | 19:25      |
| 2018-07-07  | 17:25      |
| 2018-07-08  | 19:25      |
| 2018-07-18  | 14:20      |