SUPPLEMENTARY INFORMATION

SPATIAL AND TEMPORAL FEATURES OF SNOW WATER EQUIVALENT ACROSS A HEADWATER CATCHMENT IN THE SIERRA NEVADA

By

Ernesto Trujillo[1, 2*], Andrew Hedrick[2], and Danny Marks[2]

1.   Department of Geosciences, Boise State University, Boise, ID, USA
2.   USDA-ARS Northwest Watershed Research Center, Boise, ID, USA

*Now at HDR, Inc., Sacramento, California, USA.

Correspondence to: Andrew Hedrick (Andrew.Hedrick@usda.gov)

Supplementary Information
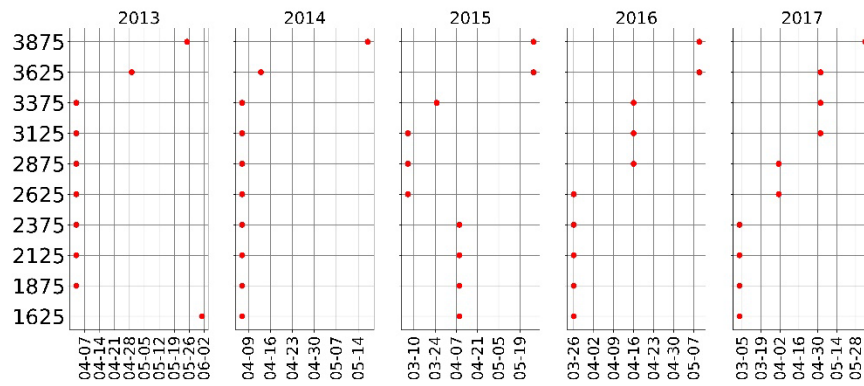
Figure S 1. Dates of peak SWE per elevation bands across the full basin elevational gradient.
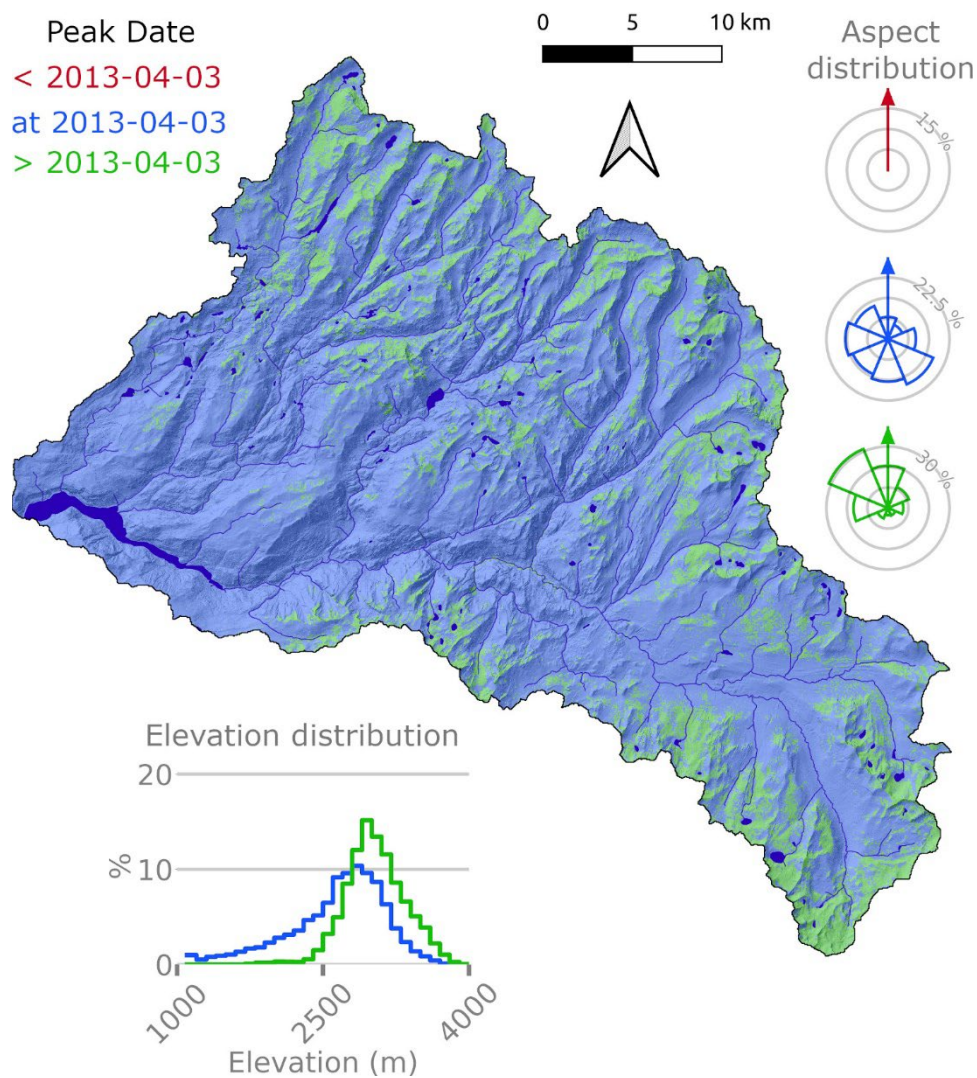
Figure S 2. Spatial organization of peak SWE across the Tuolumne basin for WY 2013. For simplicity, the locations in which peak SWE is reached prior to the date of basin peak SWE storage (i.e., Figure 3a) are in red, at basin peak SWE storage in blue, and later than basin peak SWE storage in green. Aspect and elevation distributions in these three categories are also shown following the same symbology. For WY 2013, early peaks were not detected because the lidar flights did not covered a period prior to 2013-04-03. "<" is used to indicate "earlier than", and ">" is used to indicate "later than".
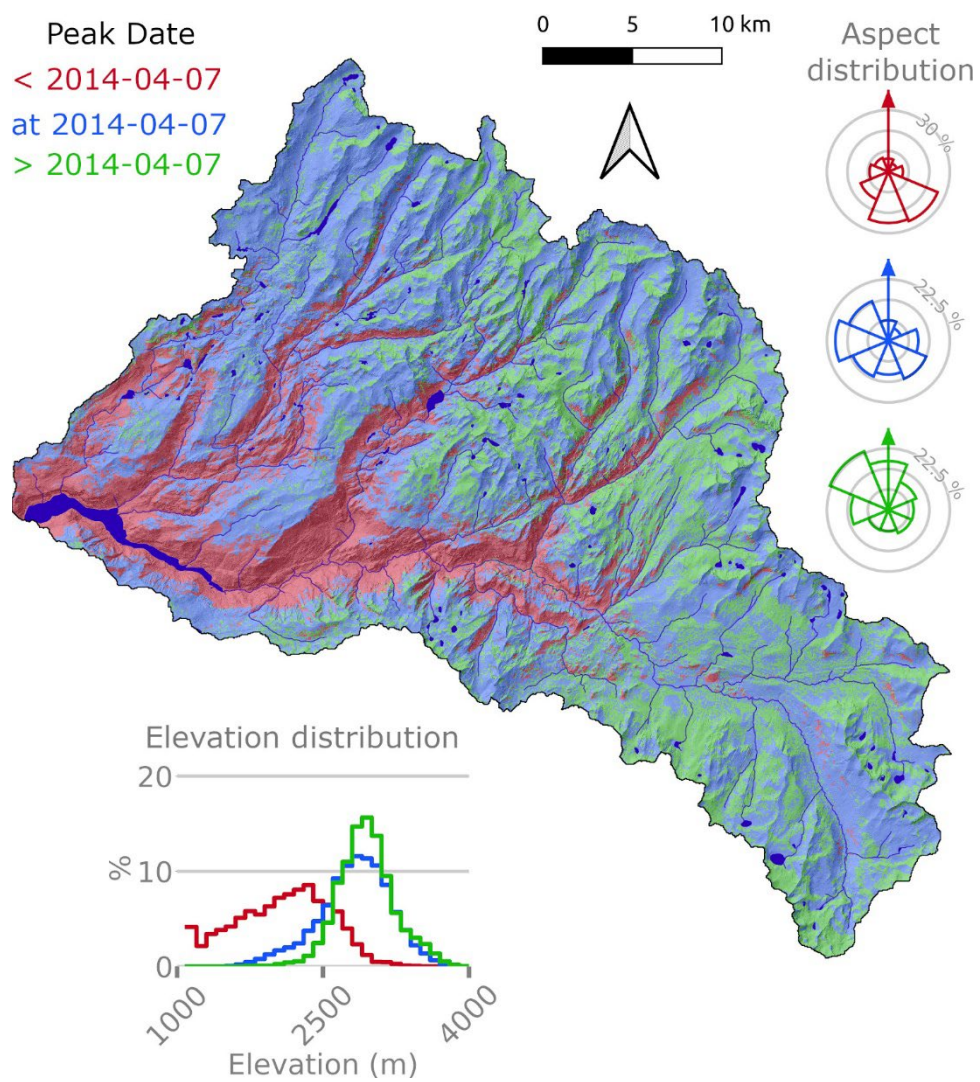
Figure S 3. Same as Figure S 2 and Figures 9-11 but for WY 2014.
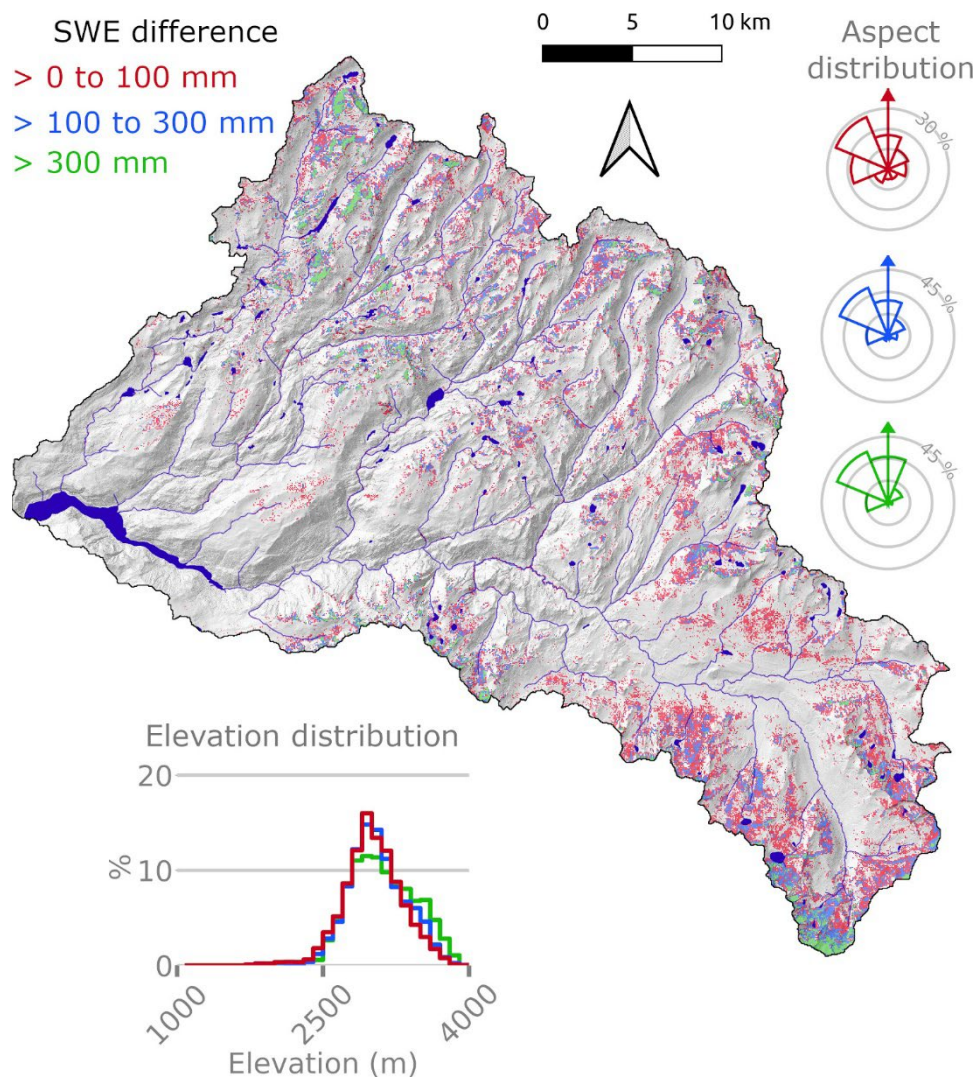
Figure S 4. Difference between the spatially resolved peak SWE minus SWE at basin peak SWE storage (i.e., Figure3a) at the Tuolumne Basin for WY 2013. The locations in white have a SWE difference of zero (i.e., areas that peak at the same time as basin SWE storage or did not accumulate any snow). ">" is used to indicate "greater than". The area in red is 10.3 % of the basin area, in blue is 5.2 %, and in green is 1.9 %.
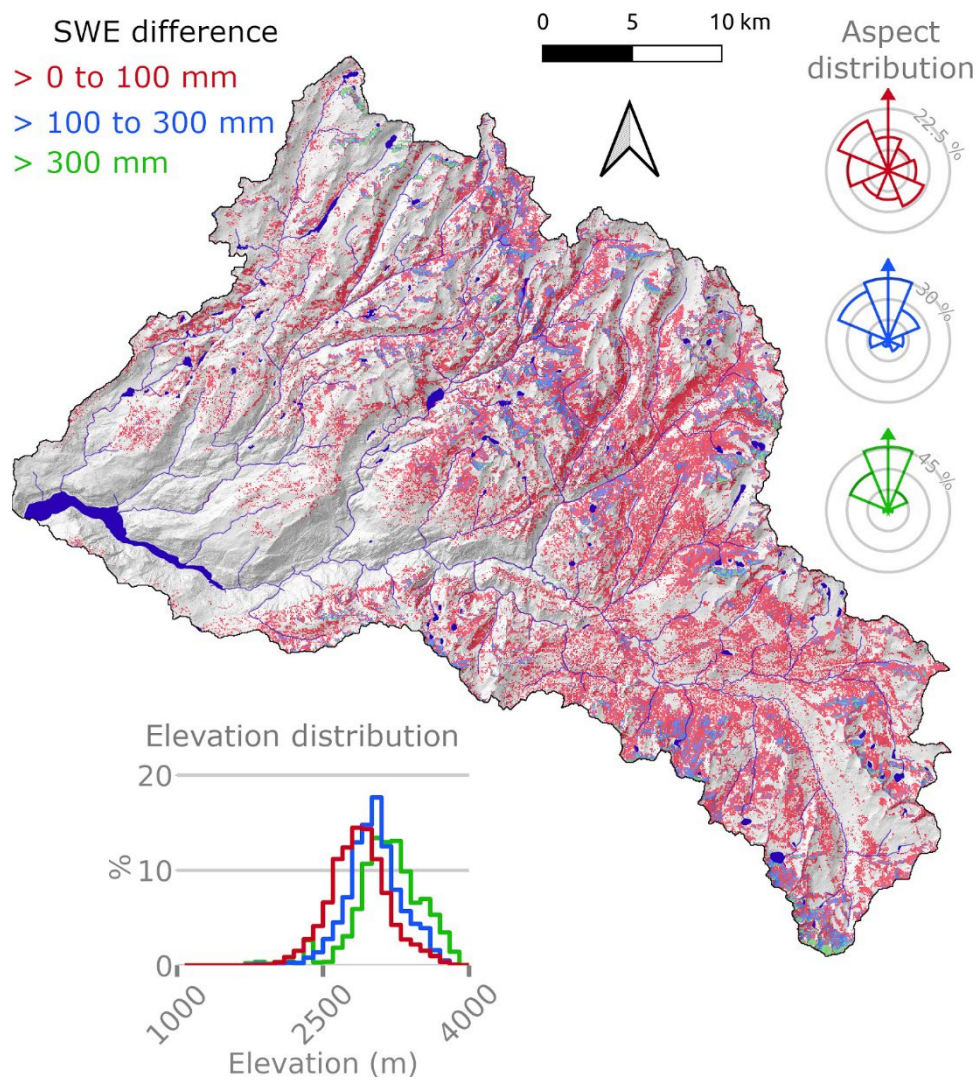
Figure S 5. Same as Figure S 4 and Figures 12-14 but for WY 2014. The area in red is 26.7 % of the basin area, in blue is 5.1 %, and in green is 0.9 %.