



Student Snow Depth Observations with Western Colorado University

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Snowpack acts as a natural aquifer that provides our nation with enough fresh water to last over the summer months. Snow affects people in multiple ways, such as weather forecasts, avalanche risks, travel hazards, and infrastructure design. Snow affects ecology in multiple ways, such as wildlife migration and survival, and the timing of spring blooms. By studying snow, how it forms, where it falls, and how the snowpack changes over time, scientists can better understand how snow affects our planet and our society (SNIDC).

A Citizen-Science Campaign is a way Measure Snow: We need your help to measure snow depths in mountain regions, in places where researchers can't possibly cover the ground alone. Every one of your snow observations helps predict snow conditions and improve snow safety in

the mountains (CSO). Through the app ‘Mountain Hub’, as citizens, we can use our mobile devices to record and measure snowpack depth in our local areas.



March 8, 2020: A small group of college students embarked on a snow depth data collection expedition in the rural Colorado Rockies. A four-mile loop was selected in the West Elk Mountain Range just north of Gunnison, CO. Though much of the Front Range of the state has many data retrieval points, the western slope of

the state had little to no data registered with Mountain Hub. Every five minutes or so, snow depth was measured, and the collected data was uploaded to the ‘Mountain Hub’ app.

Why does knowing how deep the snow is at your secret backcountry spot matter, you might ask? According to the CSO website, “The snowpack data gathered by citizen scientists is being used to help us better interpret satellite and airborne snow measurements collected by NASA and other agencies.” Essentially, the information you can help gather will improve the quality of existing information and help scientists interpret data from traditional sources more effectively (POW).



To become a Citizen Scientist and to learn more, check out communitysnowobs.org. To get the Mountain Hub app itself, check out www.mountainhub.com, or search for Mountain Hub on the Apple App Store or on Google Play.



Works Cited

“Become a Citizen Scientist for the Community Snow Observations Project.” *Protect Our Winters*, 29 Mar. 2018, protectourwinters.org/community-snow-observations/.

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