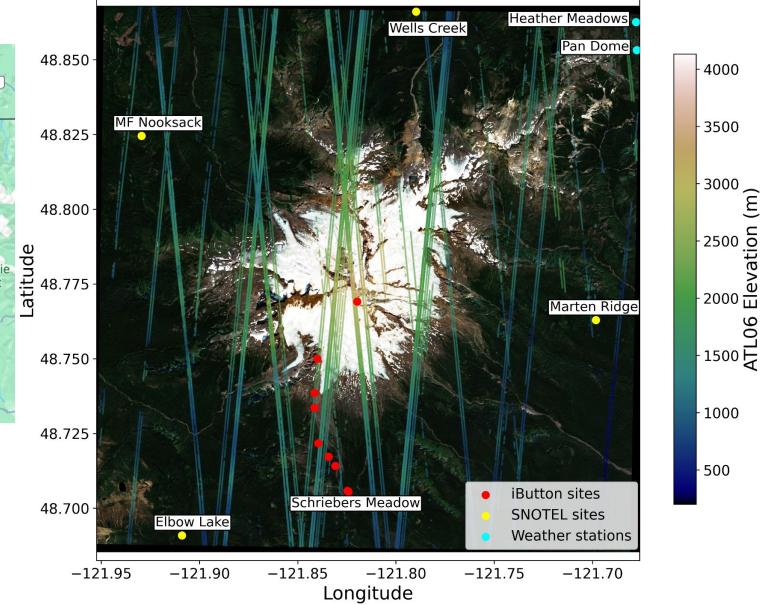
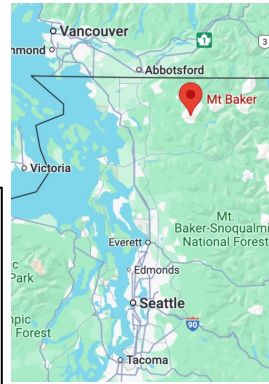


The Mt. Baker Climate Laboratory (MBCL)

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MCBL is a professional/citizen science initiative exploring the climate around Mt. Baker, WA. Since 2018, a network of iButton thermometers has been deployed on the mountain.



During the Hackweek, we used ML methods to investigate, **“How well can proximal AWS observations predict lapse rates on the south side of Mt. Baker?”**

We began an outward-facing, public representation of the project to invite and facilitate future collaborations between citizen scientists and professional scientists.

Right: Actual vs predicted values of monthly-averaged lapse rates using local weather station data (as a proxy test to predict on MBCL iButton data). Here, 2m surface air temperature, snow depth, and relative humidity were used as predictor variables using LSTM. Simultaneous analysis was done using LinearRegression by Miles. Different ML regression models will be considered for future work based on these results.

