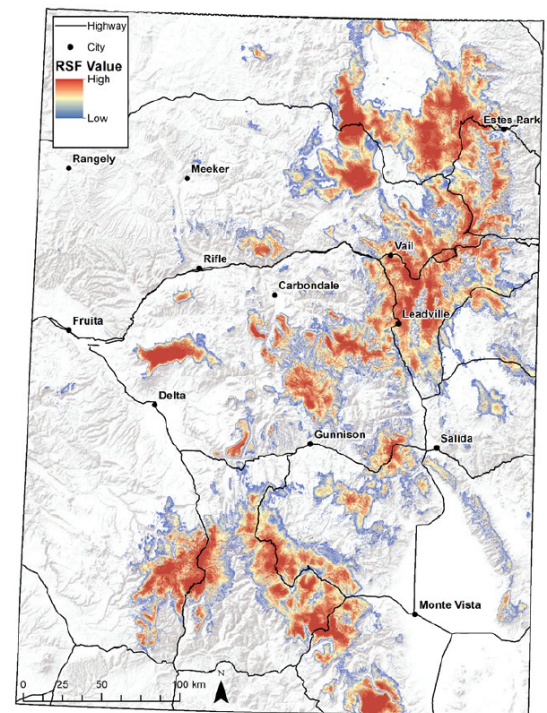
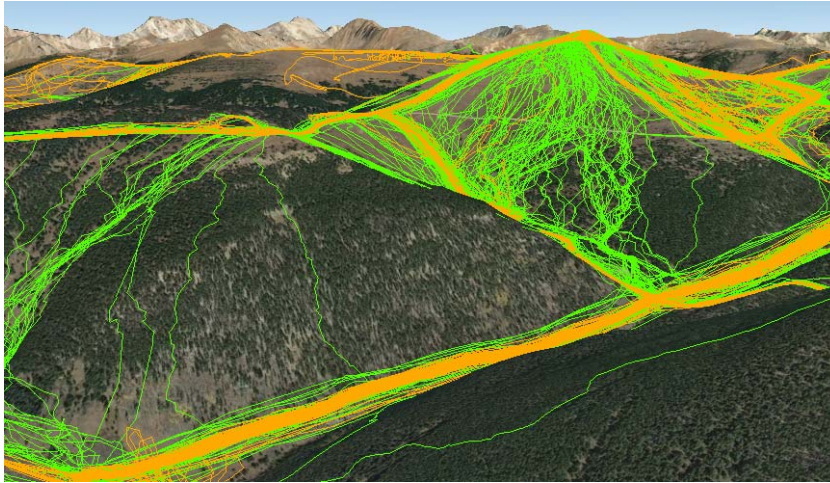


Modeling large-scale winter recreation terrain selection

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Abstract:

Colorado, USA has abundant high quality recreation opportunities on public land. Winter backcountry recreation such as skiing and snowmobiling has gained popularity over the past several decades at the same time that advances in technology have allowed people to access more remote terrain. Increased recreation use has implications for ecosystem health, such as disturbance to wildlife, and the quality of the recreation experience, such as increased conflict between users. Little research has quantified how recreationists use terrain. Using data collected from handheld GPS units carried by backcountry recreationists we modeled the terrain preferences of motorised and non-motorised recreationists. We used logistic regression to model the selection of remotely-sensed environmental characteristics for each recreation mode, i.e., snowmobiler and skier, compared to the availability of suitable terrain within the study area. Variables included topography, vegetation, climate, and access to terrain. The results identify suitable terrain for each activity and highlight where overlapping suitable terrain for motorised and non-motorised recreation occurs. The presentation will explore how the model was applied, what the results of the analysis look like, and how the results can be used by recreation managers to mitigate the negative effects of increasing recreation on public lands.