

Terrain Manipulation in North American Mountain Ski Maps

Alex Tait, International Mapping, Ellicott City, Maryland, USA

alex@internationalmapping.com

Mountain ski maps in North America have been created in a wide range of styles and media but throughout their history, hand painted panorama maps have been the dominant form. Multiple artists have created these panoramas and though each map adheres to a similar style, each artist has modified the mountain terrain to create a unique image of the ski trails and mountain resort.

In this paper, I will examine the painted ski mountain panoramas of artists such as Hal Shelton, Bill Brown, and James Niehues, to see how they have manipulated the natural terrain. I will look at maps from an historical period from the 1960s to the 2000s to see if there has been any historical shift in accuracy or distortion in their depictions of mountain terrain.

By evaluating each mountain scene in comparison to a digital recreation of the same camera position and lens, I will evaluate the techniques these artists used to alter their scene. I will also look at what reasons might be behind their changes to a 'natural' depiction of the landscape. The comparison to a digital recreation will look at both an unaltered terrain model and to a model that incorporates as much as possible the modifications that each artist made to the landscape.

Modern digital tools offer flexibility in viewing a mountain landscape quickly and easily, as well as means to modify the digital elevation data behind the view. I will look at how these tools compare to the trained traditional artist's techniques. Finally, I hope to compile suggested terrain manipulations that digital artists can use to improve their mountain panoramas.