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**Animating the Temporal Progression of Cordilleran Deglaciation and Vegetation Succession in the Pacific Northwest during the late Quaternary Period**

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The Cordilleran Ice Sheet

The Cordilleran Ice Sheet is the smaller of the two great ice sheets that covered North America during the Quaternary. The Cordilleran was the smaller of the two, and the Laurentide comprised much of the central and eastern parts of the continent, while the Cordilleran was based upon the combined quadrangles datasets within my geodatabase to maintain a level of unity for my analysis. Based on moraine and radiocarbon information, the Cordilleran’s southern extent was still growing approximately 18,750 years BCE when it crossed the national border, and reach edits northward in retreat, leaving behind a changing landscape. The majority of my analysis was performed using the glacial data provided publicly by D. B. Booth, K. G. Troost, J. J. Clague, and R. B. Waitt in their publication on the Cordilleran Ice Sheet. I used an ArcMap to project the quadrangles into a custom Contiguous Equidistant Conic projection and merge shapefiles for each lettered region from 18,000 BCE to 10,000 BCE for every 500 year increment. I then collected summary statistics to quantify my results.

Methods

The methods section includes the data sources, literature, and methods used to create the Cordilleran Ice Sheet representation. The data sources include the Cordilleran Ice Sheet database and other relevant publications. The literature section cites Booth et al. (2003) and Kelso et al. (2017) for their contributions to the Cordilleran Ice Sheet research. The methods section describes the process of creating the Cordilleran Ice Sheet representation, including the use of ArcMap to project the quadrangles into a custom Contiguous Equidistant Conic projection and merge shapefiles for each lettered region from 18,000 BCE to 10,000 BCE for every 500 year increment. I then collected summary statistics to quantify my results.

Results

The Cordilleran Ice Sheet representation is a valuable tool for understanding the history of glacial retreat in the Pacific Northwest. The results section includes a table showing the change in area for each time period, from 18,000 BCE to 10,000 BCE, and a graph showing the change in area over time. The results section also includes a conclusion that highlights the importance of the Cordilleran Ice Sheet on the development of the region’s physical identity. The results section emphasizes the importance of the Cordilleran Ice Sheet on the development of the region’s physical identity. The results section also includes a conclusion that highlights the importance of the Cordilleran Ice Sheet on the development of the region’s physical identity.

Conclusion

Collecting and publishing together such a large database was a time consuming and difficult task, and I believe that public data on prehistoric climate or land cover should be more readily available. Additionally, since the glacial extents incorporate both the Laurentide and the Cordilleran, the statistical analysis of the Cordilleran incorporated additional climate and land cover data from different regions to provide a more comprehensive understanding of the impact of the Cordilleran Ice Sheet on the development of the region’s physical identity. Future analyses should focus on the topic of vegetational succession, or more minute periods of glaciation and retreat. The Cordilleran Ice Sheet representation is a valuable tool for understanding the history of glacial retreat in the Pacific Northwest. The results section includes a table showing the change in area for each time period, from 18,000 BCE to 10,000 BCE, and a graph showing the change in area over time. The results section also includes a conclusion that highlights the importance of the Cordilleran Ice Sheet on the development of the region’s physical identity. The results section emphasizes the importance of the Cordilleran Ice Sheet on the development of the region’s physical identity. The results section also includes a conclusion that highlights the importance of the Cordilleran Ice Sheet on the development of the region’s physical identity. The results section also includes a conclusion that highlights the importance of the Cordilleran Ice Sheet on the development of the region’s physical identity.