Spatial Analysis and Visualization of Climate Data Using R

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Abstract

R's spatial libraries and its efficient data handling abilities make it a very effective tool for spatial analysis and visualization of climate data. At the NOAA Southern Regional Climate Center, R is being used for the spatial analysis and visualization of climate data. This talk will demonstrate how climate maps are generated using the spatial and interpolation packages in R. The talk will also outline how R serves as an effective GIS tool in the development of climate data driven map layers. R-generated maps that visualize a number of climatological elements will be demonstrated. Techniques used in developing the maps will be discussed.