Variations in terrain undoubtedly have a considerable impact on the development and intensification of weather related disturbances, yet its effects on tornadoes and tornadogenesis are unclear. While prominent examples of terrain influence on weather often refer to large geographic features such as mountain ranges, this project seeks to examine the influence of small scale topography on tornadic frequency and development, particularly in the Tri-State region of Illinois, Iowa, and Missouri. The data used for this assessment was provided by NOAA’s GIS website and ranges from 1950 to 2013. Wind direction and intensity was acquired for each tornado with an intensity of F2+, and the tornado occurrences were split into 6 categories based on wind conditions during genesis. A nonhydrostatic model that included high-resolution (1 km) topography was used to simulate wind conditions over the terrain. The resulting output produced fields of helicity, vertical wind, horizontal convergence, and absolute vorticity. Spatial correlation between these fields and tornado occurrence revealed generally small positive correlations, but overall suggests that there is not a significant relationship between tornadic development and terrain found in the Illinois, Iowa, and Missouri region.