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## A case study of colliding tornadic storms

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Tornadoes occur frequently across the United States each year, causing millions of dollars in damage. Meteorologists are constantly searching for new and improved methods for predicting these weather phenomenon's in order to increase public awareness and warning times. In this case study, one event was found in which two storm cells collided and produced a tornado over the Kansas City, Missouri area, causing an extensive amount of damage. The goals of this study is to first determine what caused the collision between the two storm cells, secondly, whether the collision between the two storm cells increased the intensity of the tornado using NSSL/SPC (National Severe Storms Laboratory/ Storm Prediction Center) meteorologist Stephen F. Corfidi's "vector approach." A method that involves the use of mathematics to find the mean of the wind directions throughout the cloud layers in the storms and also the location of the low-level jet. Radar imagery was also used in determining the location, time, intensity, and other details of the two storm cells. It is our hope, that the completion of this study will produce results that are conducive to the development of more innovative methods for forecasting this type of event.