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The impact of the Missouri Ozarks on mesoscale convective events

Ancedotal evidence suggests that the Missouri Ozarks have a discernable impact on the movement of mesoscale convective systems, and thus, on the occurrence of severe weather. A climatology demonstrates that there is a discernable minimum in the occurrence of tornado and hail events in the area of the Ozarks, even when accounting for population bias in the observation of these events. This climatology used severe storm reports archives from 1950 - 2003. Additionally, RADAR imagery from 20 events, representing cold frontal, warm frontal, and warm sector MCSs suggest that the tracks are impacted by the Ozarks in that these events will slow down and/or weaken as they cross the region.