

No, the upcoming solar eclipse will not cause the New Madrid Fault to slip

by Cory Davenport, Contributing Writer
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ALTON - If an earthquake occurs during the upcoming solar eclipse Aug. 21, it will be a sincerely amazing coincidence.

Geophysicist Don Blakemen of the United States Geologic Survey (USGS) National Earthquake Information Center out of Colorado said the strongest astronomical influence on the earth is the moon's gravity. That lunar force controls both sea and "earth tides," but the effect of the latter is "unbelievably tiny," he said. Through years of

studying solar eclipses and planetary alignments, Blakeman said geologists have not seen a correlating pattern connecting earthquakes to any sort of celestial alignment.

"Every time there is a major alignment of planetary bodies, that sort of stuff has no bearing on earthquakes," he said. "If one does happen during the eclipse, it would not be correlated. We would love to see certain patterns like this, but we have studied it for years, and we don't see it."

Blakeman described looking at worldwide earthquake numbers like popping popcorn. He said some weeks and months have many more quakes than others, but it is impossible to predict when those will be - given today's knowledge and technology.

"Earthquakes are random in time, but not random in locations," he said. "They occur at plate boundaries."

Large earthquakes triggering other quakes far away is also a commonly-held, but incorrect, notion of geologic processes, Blakeman said. Large quakes do not trigger other large quakes far away, but they will almost certainly create aftershocks and may even trigger quakes on nearby fault lines.

So, while geologists currently have no fool-proof way of predicting earthquakes, Blakeman said the upcoming solar eclipse will not cause one - even if chance allows one to occur at the same time.

The odds of a New Madrid earthquake of a magnitude 6.0 or larger is 25-40 percent over the next 50 years. The odds of another 7.5-8.0 earthquake - such as those, which occurred during the 1811-1812 earthquakes of lore - is as low as seven to 10 percent over the next 50 years.