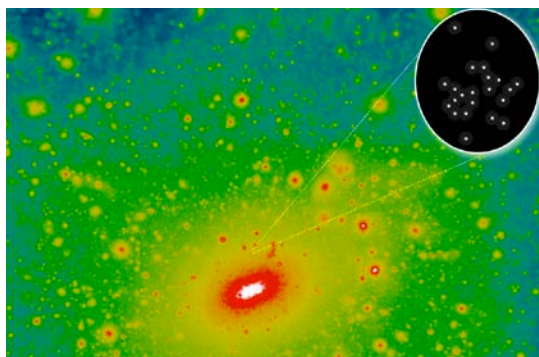


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The Tiniest Galaxy in the Universe

→ Astronomers can measure a galaxy's mass by how stars move within it: The faster they move, the more massive it is. With this knowledge, a University of California, Irvine, team found that Segue 2, discovered in 2009, weighs at most 150,000 times more than our sun — the puniest galaxy known. (Our normal-size Milky Way is 10 million times more massive.) Segue 2 is probably just one of many such astronomical miniatures orbiting the Milky Way, says UCI astronomer Evan Kirby: "Simulations predict that there should be tens of thousands of these things." — LIZ KRUESI



SEGUE 2, the smallest known galaxy, is just one of many similar diminutive galaxies astronomers expect to find around the Milky Way, as shown in this colorful simulation.

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Climate Change May Lead to More Wars

→ Police chiefs have long observed that on sweltering summer nights, crime rates go up. Now a University of California, Berkeley study links climate-change-induced weather patterns — sizzling heat, droughts, torrential rains — with increases in ethnic clashes, riots and wars.

Agricultural economist Marshall Burke and his colleagues conducted a meta analysis of

60 previous studies that looked at climatic events and their link to human conflict, including the fall of the Mayan Empire, civil conflicts in Africa, ethnic clashes in India, road rage in the U.S. and even the type of pitches thrown during Major League Baseball games when temperatures rise. The researchers then used a mathematical model that combined the conflict data with temperature and rainfall projections through 2050 to come up with predictions about the likelihood of climate-related violence in the future.

What they found: War and civil unrest may spike by up to 56 percent between now and 2050, while acts of aggression — murder, assault, domestic violence — could increase by 16 percent.

The study was published in *Science* in August, but some experts are skeptical. "It's a tremendous leap to draw these conclusions — that climate

change is linked to violence — and factors such as economics, technology, poverty, group dynamics, cultural nationalism and personalities play significant roles in outbreaks of war," says William Martel, an international securities expert at the Fletcher School of Law and Diplomacy at Tufts University.

While UC Berkeley researchers haven't identified the exact link between higher temperatures and aggression, they point out that scarcer resources — a likely outcome of droughts, floods and other extreme weather — can lead to economic strife and food shortages, and those desperate situations can enhance the propensity for social conflict.

"Climate affects economic productivity, institutions and human physiology," says Burke. "It's likely that climate is important for conflict precisely because it shapes so many of these other factors that also affect conflict." — LINDA MARSA

