

Peanut Blog

An ounce of information



How the sun threatens your nuts: Inside the \$100 million solar storm peanut problem

Solar storms don't just trigger impressive auroras; they can scramble the GPS systems U.S. farmers rely on.

With solar activity likely to remain elevated for the next couple of years, more powerful geomagnetic storm events are possible. The northern lights may grab the headlines, but it's the invisible GPS turbulence that can disrupt our technological world and determine the fate of your next peanut butter sandwich. Charged particles hurled toward Earth from the sun can trigger geomagnetic storms that light up the sky with brilliant northern lights, but they can also quietly interfere with the satellites and GPS signals our modern world relies on. Space weather can ground airline flights, cancel rocket launches, distort radio signals, confuse navigation systems, and, as in May 2024, even cause farmers' tractors to act like they are demon-possessed.

For a majority of us, a GPS hiccup is just a momentary annoyance. But for farmers in the southeastern United States, a poorly timed outage can mean huge financial losses and lost harvests, especially for one major crop: peanuts. The risk became very real on May 10, 2024, when the first G5 geomagnetic storm in over 20 years, known as the Gannon Storm, triggered incredible auroras and caused GPS-guided tractors in the U.S. to veer off course. Farmers reported issues with their autoguidance systems, including jolting, freezing, and steering problems. For peanut growers, who rely on ultra-precise GPS to plant and harvest their crop from belowground, the timing couldn't have been worse.

Source: <https://www.space.com/astronomy/sun/how-the-sun-threatens-your-nuts-inside-the-usd100-million-solar-storm-peanut-problem>