# NOAA Predicts 60% Likelihood of Solar Radiation Storm Following Recent Severe Solar Activity



The National Oceanic and Atmospheric Administration (NOAA) predicts a 60% likelihood of a solar radiation storm starting tomorrow, following recent severe solar activity. This week’s solar radiation storm differs significantly from last weekend's geomagnetic storms, which directly impacted Earth's magnetic field and caused disruptions in the form of communications outages and power grid fluctuations.

Solar events have been initiated by the sunspot AR3664, which has a magnetic field about 2,500 times stronger than Earth's. This sunspot is noted for generating X-class flares, the most intense type of solar flares. Currently, the high-speed radiation from these flares is caught in the Parker Spiral—a magnetic field that curls out from the sun and extends through the solar system—directing charged particles towards Earth.

Problems caused by these solar activities have extended down to Earth as well, affecting satellite operations essential for GPS services, notably impacting farmers in the American Midwest. This has interrupted agricultural activities by disabling GPS-dependent equipment, as reported this past weekend.

NOAA’s space weather satellite, GOES-18, has recorded a surge in proton radiation, indicating heightened solar activity that could lead to more disruptions. Forecasters are keeping a vigilant eye on these developments, as additional impacts on radio communications and further auroral displays are expected.