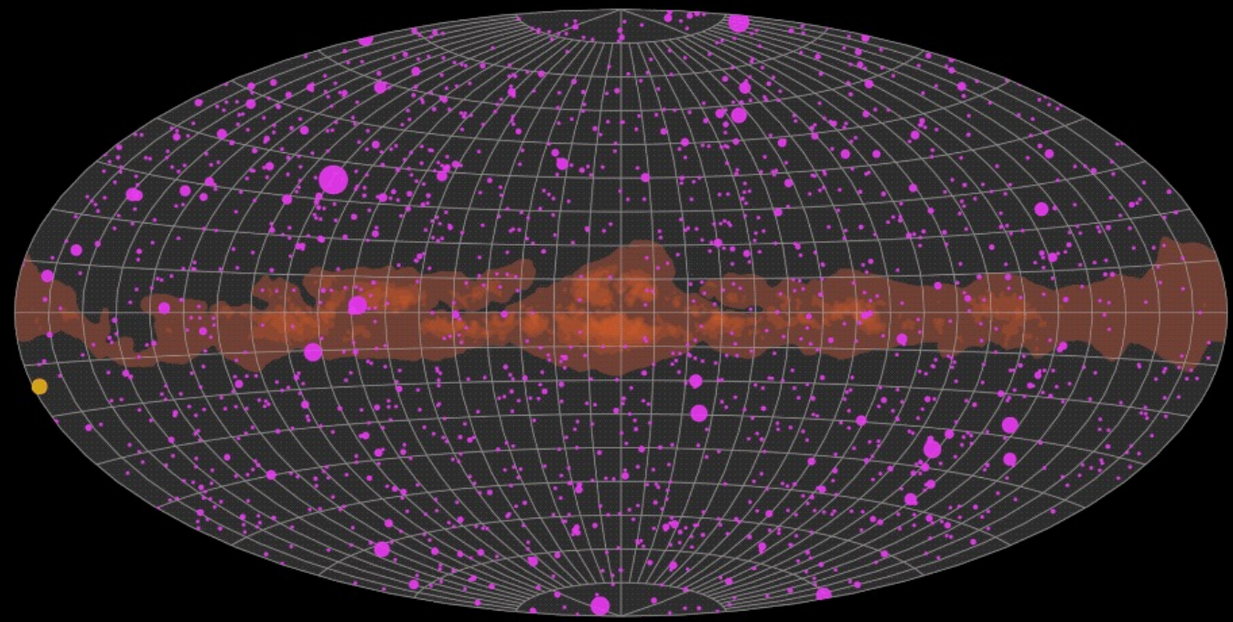
NASA's Fermi Captures Dynamic Gamma-Ray Sky in New Repository

Cosmic fireworks, invisible to our eyes, fill the night sky. We can get a glimpse of this elusive light show thanks to the Large Area Telescope (LAT) aboard the Fermi Gamma-ray Space Telescope, which is managed by Goddard.

An international team of astronomers have published more than 1,500 light curves collected by the LAT over nearly 15 years in space.

Over 90% of the sources in the dataset are blazars, central regions of galaxies hosting active supermassive black holes that produce powerful particle jets pointed almost directly at Earth. Blazars are important sources for astronomy.

The data are now publicly available in a continually updated interactive library. The catalog took about three months of processing time on a computer cluster at the SLAC National Accelerator Laboratory.



Watch a cosmic gamma-ray fireworks show in this animation using just a year of data from the LAT. Each object's magenta circle grows as it brightens and shrinks as it dims. The yellow circle represents the Sun following its apparent annual path across the sky.

Paper: https://iopscience.iop.org/article/10.3847/1538-4365/acbb6a
Story: https://www.nasa.gov/feature/goddard/2023/nasa-s-fermi-captures-dynamic-gamma-ray-sky-in-new-animation
Repository: https://fermi.gsfc.nasa.gov/ssc/data/access/lat/LightCurveRepository/index.html