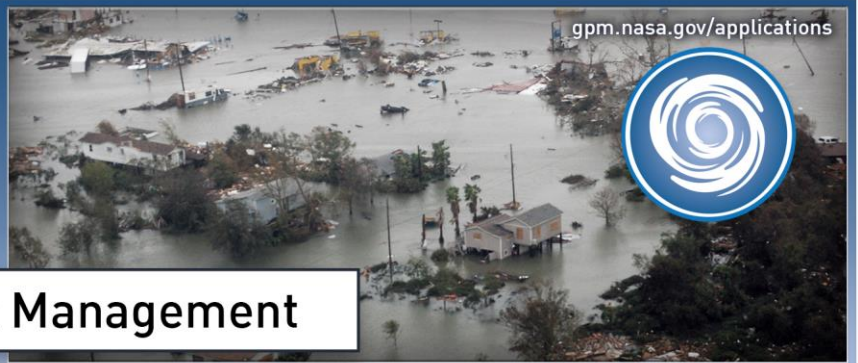


GLOBAL PRECIPITATION MEASUREMENT MISSION APPLICATIONS



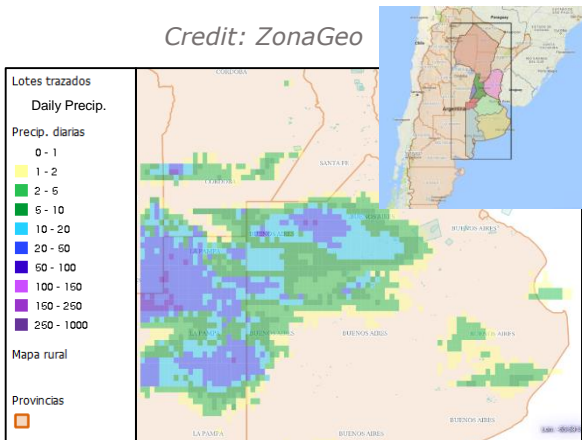
Disasters and Risk Management



Too much or too little rainfall can have significant impacts on populations around the world. Understanding how extreme events and disasters affect populations around the world and how these impacts may change in the future is vital to the prediction of, preparation for, response to, and recovery from natural disasters. GPM's Disasters and Risk Management applications area seeks to use precipitation satellite data from TRMM and GPM to improve forecasting, preparation, response, recovery, mitigation and insurance of natural hazards including tropical cyclones, floods, droughts, wildfires, landslides, and other extreme weather events.

CASE STUDY: Precipitation Data Supports Agroinsurance in Argentina

ZonaGeo, a geospatial technology company, is using NASA's GPM precipitation data to evaluate accumulated daily rainfall in northeast Argentina as a value added product for clients interested in agroinsurance from the company, Paraná Seguros. Paraná Seguros uses ZonaGeo's data products and incorporates it into their online platform that allows customers to get a quote, contract and manage insurance from electronic devices. Over 200 clients are insured by Paraná Seguros, and as a result use GPM products developed by ZonaGeo.



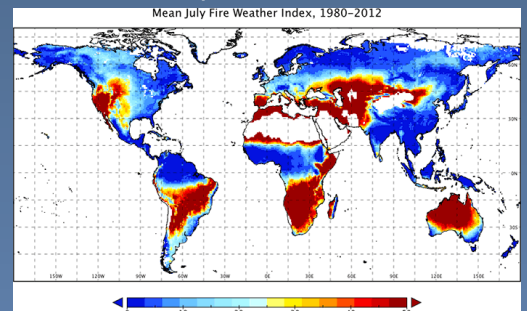
NASA precipitation used to provide agroinsurance quotes in NE Argentina. Black rectangle (right) denotes area that GPM data is used for insurance quotes. Daily precipitation (in mm) for January 26, 2018 (each cell 10Km x 10Km) for NW Buenos Aires, NE La Pampa, and southern Cordoba provinces (left). Green cells represent final insurance clients' assured land.



Have Ideas? Get Involved!
gpm.nasa.gov/contact

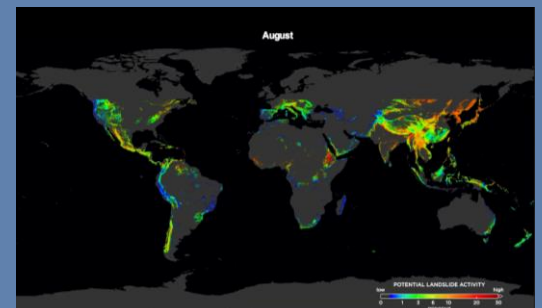
Using GPM Precipitation Data in Near-Real-Time

Determining where, when, and how natural hazards may vary and affect people at the global scale is fundamental to formulating mitigation strategies, appropriate and timely responses, and robust recovery plans. Specifically, NASA near-real-time precipitation estimates are used for regional assessments of current and potential wildfires and landslide activity.



Mean July Fire Weather Index, based on the Chen et al. (2008) daily precipitation estimate over land.

The Global Fire WEather Database (GFVED) integrates different weather factors, including TRMM and GPM data, to help track potential of extreme fire behavior in low latitudes.



Potential landslide activity by month averaged over the last 15 years, shown for August.

GPM precipitation estimates are used as an input to the Landslide Hazard Assessment for Situational Awareness (LHASA) model, which provide situational awareness of landslide hazards in near real time.