



HEATSCORE™

The Impact of Extreme Heat

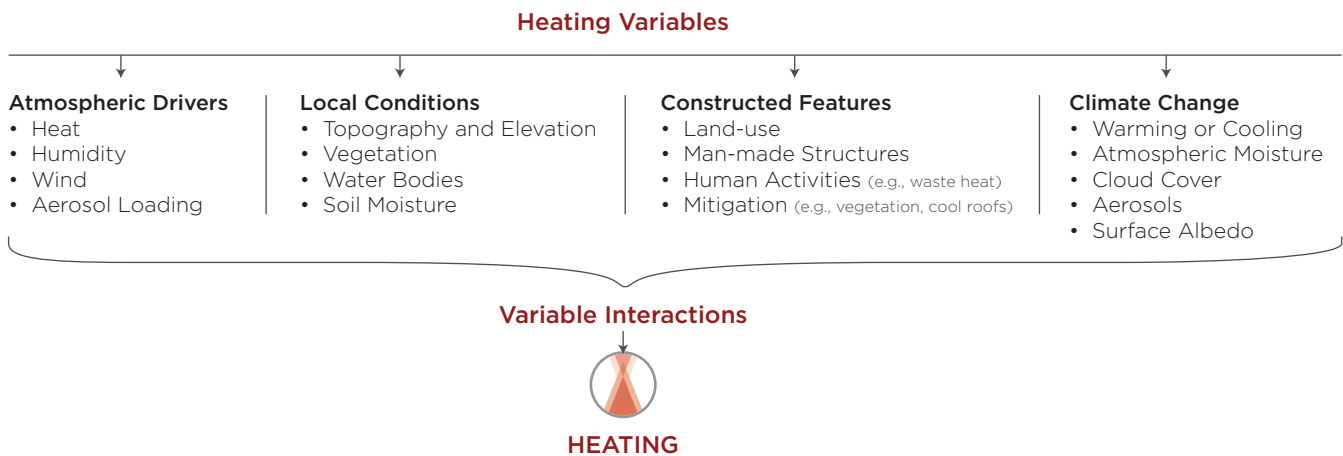
Global temperature rise is increasing the frequency and intensity of heat waves, forest fires, reduced snowpack and earlier snowmelt. Those factors in turn strain water resources, stress electric generation, transmission, and distribution, reduce transportation capacity of airport runways, and increase rates of heat-related medical emergencies. Understanding the intensity and increased frequency and duration of extreme heat can help decision-makers adapt to the heat-related impacts of climate change.

Jupiter HeatScore™ projects the increased risk of more frequent and intense extreme heat events up to 50+ years in the future. Using Jupiter's state-of-the-science models, customers can make informed decisions to prevent asset damage and property loss, and even to save lives.

Jupiter HeatScore

Jupiter HeatScore™ is a service built on top of the Jupiter ClimateScore™ Intelligence Platform that accounts for the urban influences on temperature, i.e., urban heat islands, at building scale. HeatScore predicts the number of extreme temperature days per year above a specified threshold over a 50+ year time frame and can predict the frequency of extreme heat risk as probability distributions for variables, such as multi-day heat events above a defined threshold, and heat stress parameters including humidity (heat index) and winds. The service can also calculate and analyze historical heat events.

Jupiter HeatScore allows our customers to anticipate and plan for heat impacts to utilities, emergency management, and urban infrastructure. Output data can be delivered as interactive maps, reports, or through an API. Predictions are probabilistic and scenario-based.



Jupiter HeatScore analyses incorporate a variety of heating variables.

Jupiter ClimateScore™ Intelligence Platform

All Jupiter services are built on the cloud-based Jupiter ClimateScore Intelligence Platform. Jupiter ClimateScore is based on leading-edge scientific developments by the global earth system science community, including the assumption of a changing climate. The platform is designed specifically for the rigors of dynamic weather analysis and predictive modeling. Its physics-based and artificial intelligence models are continuously fine-tuned, using petabytes of constantly refreshed data from ground-based and orbital sensors. Innovative machine learning techniques reduce local biases of scientific simulations and update the system as new observations become available.

Customers and Use Cases

Customers for Jupiter HeatScore are utilities, enterprises, financial services firms, and the public sector. Jupiter HeatScore data will help these customers better manage risks and take advantage of opportunities related to short-term weather impacts and medium-to-long-term climate change.

Jupiter HeatScore can be used to optimize infrastructure investments for heat mitigation and reduction of urban heat stress, as well as to inform equipment ratings and to help forecast and plan for peak electricity demand. Examples of infrastructure planning for heat mitigation include heating, ventilation and air conditioning (HVAC) systems, transformer and other equipment ratings, and protecting constructed features at commercial air operations that risk major impact from heat stress. Reducing urban heat stress can also dramatically lower impacts on public health, emergency management, worker productivity and other areas.

ABOUT JUPITER

Jupiter is the global leader in data and analytics services to better predict and manage risks from extreme weather, sea-level rise, storm intensification and rising temperatures caused by medium- to long-term climate change. Jupiter's ClimateScore™ Intelligence Platform provides sophisticated, dynamic, hyper-local, current-hour-to-50-plus-year probabilistic risk analysis for weather in a changing climate. The company's FloodScore™ and HeatScore™ services are used for managing climate-related risk assessment and management for New York City, South Florida, Houston and Europe with global expansion underway. Jupiter's models are based on the latest science, as developed by the global Earth and Ocean Systems science community.

Jupiter offers commercial services to asset owners in critical infrastructure, financial services including insurance and banking, energy and real estate, and the public sector. These customers use Jupiter services for a broad range of applications, including capital planning, risk management, site selection, design requirements, supply chain management, investment valuations, and shareholder disclosures.