



## The Global Leader in Climate Risk Analytics for Resiliency and Risk

Jupiter’s expertise and its forward-focused, scenario-based physical climate risk projections empower its customers to make informed decisions that identify, disclose, manage, and reduce risk from the impacts of climate change.

Jupiter Intelligence™ is the global market, science, and technology leader in physical climate analytics for resiliency planning, risk management, and disclosure.

Jupiter’s analytics are used across the private and public sectors. Its customers include five percent of the planet’s largest enterprises, many leading companies within the Global 2000, the U.S. Department of Defense and other critical agencies in the U.S. government, and public sector authorities in jurisdictions around the world. In addition, [Jupiter Promise](#) partners with NGOs to provide climate analytics at little or no cost to improve resilience for the planet’s most vulnerable and under-resourced populations.



Jupiter’s enterprise-grade, best-in-science solutions—ClimateScore™ Global, and the ClimateScore Planning suite—together form the world’s only global-to-street resolution climate analytics offering. ClimateScore Global quantifies climate risk at portfolio scale, for all points on the planet’s land surface, for all perils (flooding, wind, severe heat and cold, wildfire, drought, hail, and extreme or prolonged precipitation), and over flexible time horizons and emissions scenarios. ClimateScore Planning delivers very-high-resolution projections of peril-specific climate impacts on individual assets, facilities, neighborhoods, and communities.

The foundation of these solutions, the Jupiter ClimateScore Intelligence Platform, is based on rigorous global climate, weather, ocean, hydrological, and data science. Jupiter’s transparent methodologies couple dozens of the world’s most respected physical models of the atmosphere and hydrosphere; cloud-computing-enabled dynamical and data-driven downscaling techniques; machine learning; land use; elevation data; and extensive observations illuminated by novel data sources such as satellite, air, and ocean- and land-borne sensors. Jupiter integrates robust verification and validation throughout every step of the modeling chain.

## World-class customers use Jupiter solutions

Since the company’s launch early in 2018, Jupiter analytics have been adopted by at least one of the world’s five largest entities in the fields of asset management, banking, chemicals, insurance, oil and gas, minerals and mining, electric utilities and construction. Jupiter’s customers include:

- Over 20 of the world’s 500 largest corporations including the largest retailer, pharmaceutical pioneer AstraZeneca, and two of the largest global food and beverage companies
- Half of the largest lenders in the U.S., several of the world’s largest asset managers and investment banks and SMBC, the largest bank in Japan
- Half of the world’s largest insurance companies, including Zurich Insurance Group, MS&AD, QBE, Liberty Mutual, and leading reinsurance risk investment manager Nephila
- 40% of the largest energy and power producers in the U.S. including BP, ConEd, Entergy, the Hawaiian Electric Companies, and Terna
- Three of the world’s largest accounting firms
- Leading global real estate investors, including JLL
- The U.S. Department of Defense, U.S. Army and Air Force, and NASA
- Public-sector partners New York City, the City of Miami, the U.S. Department of Housing and Urban Development, and Broward County, Florida

Jupiter’s partnerships, most of them global in scope, include some of the world’s largest accounting, consulting, engineering, insurance firms and defense contractors including Aon, Bain, Boston Consulting Group, Guidehouse (formerly Navigant), MS&AD, and Zurich Insurance. Some customers are served directly by these partners using Jupiter services.

Jupiter’s analytics help answer questions such as: How can I quantify, in monetary terms, the potential damage or economic losses inflicted by climate change and extreme weather? How will climate change and future extreme weather events impact my portfolio? How will specific perils impact individual properties, assets, or communities? How can I optimize my risk management, risk disclosure, and resilience planning processes?

Jupiter customers apply ClimateScore’s physical risk modeling solutions across mission-critical use cases within key industries. They’re used for:

Industries	Key Use Cases
<b>Financial Services</b> <b>Real Estate</b>	<i>Portfolio planning, risk avoidance, regulatory response, underwriting</i>
<b>Energy</b> <b>Manufacturing</b> <b>Retail</b>	<i>Risk identification, regulatory response, risk management, risk engineering, supply chain resilience</i>
<b>Agricultural</b>	<i>Resilience planning, market development</i>
<b>Public Sector</b> <b>Government</b>	<i>Risk identification, risk &amp; resilience planning, citizen communication &amp; engagement</i>

## Products: Forward-looking risk analysis, from portfolio to asset level

Jupiter's best-in-science, high-resolution climate risk analysis produces hyper-local hazard estimates based on projected changes in climate. Its products were created by global experts in climate and Earth science, data science, technology, risk management, business (with extensive experience in Fortune 100 companies), government, and academia.

When Jupiter ClimateScore Global's portfolio-level analysis is combined with the hyperlocal ClimateScore Planning suite, they form the world's only global-to-street-resolution climate risk analytics solution.



### ClimateScore Global

ClimateScore Global predicts and helps quantify future physical risk from flood, severe heat and cold, wind, wildfire, drought, water stress, hail, and extreme precipitation. Its scope and granularity, and its ease of customization together with support of multiple time horizons, help users to project how an asset portfolio may be affected by climate change: the perils it will be exposed to, the driving segments and locations—and how that will change over time, and across varying carbon emissions scenarios, from today through the year 2100.

By distilling the complex interactions between expected changes in sea levels, surge, storm intensity, land and sea surface temperatures, and pressure and precipitation patterns, it pinpoints what decision-makers need to know: the depth of the water, the speed of the wind, the intensity of the heat and rain, and the probability of drought, wildfires, and hail, at best-in-class spatial resolution, available worldwide.



### ClimateScore Planning

ClimateScore Planning is a comprehensive suite of asset-level physical risk analysis applications—FloodScore™, WindScore™, HeatScore™, and FireScore™—that offers very-high-resolution climate risk analysis of target geographies, over customer-selected time horizons and multiple scenarios.

Through a computationally intensive process, ClimateScore Planning dynamically downscales global climate models and data from CMIP6, the most advanced in the scientific community, to project the probable impacts of extreme weather perils on specific assets down to resolutions of one to three meters (and, by special customer request, even higher resolutions) over time horizons that range from hours to 50+ years into the future.

## Why customers choose Jupiter

Science	Transparency	Scale
<p><b>Scientifically rigorous</b> Dozens of the latest (CMIP6), vetted, and de-biased global climate models</p> <p><b>Forward-looking</b> Predictive climate models vs backward-looking catastrophic risk modeling</p> <p><b>Expert validation</b> Validation and verification integrated throughout the modeling chain</p>	<p><b>No black box</b> Transparency in modeling components, from metrics to scoring to loss</p> <p><b>Quantified uncertainty</b> Measure and provide known sources of modeling uncertainty for all metrics</p> <p><b>Open methodology</b> Customers can view and adjust all scoring and financial modeling functions</p>	<p><b>Breadth of metrics</b> 7,100+ metrics per location matching metrics and time horizons to use cases</p> <p><b>Highly dimensional</b> Global scale with high resolution, multiple scenarios in 5-year increments</p> <p><b>Enterprise scale</b> Tens of millions of locations and more than a petabyte of data</p>

## A company with exceptional expertise

Jupiter's team is composed of global experts in scaling technologies and companies; cloud computing and sensor development; disciplines encompassing climate, weather, hydrological, and data science; and risk planning and risk management. The former head of the U.S. National Climate Assessment is a key member of its leadership team. The U.S.' former chief climate envoy, and its former deputy Secretary of the Treasury, are Jupiter co-founders. Leaders from the realms of science, technology, public policy and administration, academia, law, and the world's most influential investment banks and insurance firms, serve as key advisors.

CEO and co-founder Rich Sorkin led machine-learning pioneer Kaggle as president, while COO and co-founder Eric Wun oversaw operations at VISA and Cybersource. Wun also ran operations for the private satellite imaging company Skybox. Sorkin and Wun also led Zip2, one of the world's first internet-based geographic information systems companies.

Co-founder Josh Hacker is an expert in evaluating the accuracy of weather models, and former director of the Joint Numerical Testbed Program and science lead for the National Security Applications Program at the National Center for Atmospheric Research (**NCAR**). Co-founder Alan Blumberg is a world-renowned urban oceanographer and innovator of predictive modeling and ocean physics, as well as the developer of the Princeton Ocean Model (**POM**). Nobel Prize laureate Dr. Betsy Weatherhead, former director of the U.S. National Climate Assessment, is a Jupiter science fellow and serves as its special representative to the scientific community. Its co-founders also include Neal Wolin, former Deputy Secretary of the U.S. Treasury, and Todd Stern, former chief U.S. climate envoy.

Strategic investors, venture firms, and high net worth individuals have invested almost \$100 million in Jupiter. Investors include three of the world's largest property and casualty firms—Liberty Mutual, Mitsui MS&AD, and QBE—as well as CDPQ (Caisse de dépôt et placement du Québec), Clearvision Ventures, DCVC, Energize Ventures, Ignition Partners, MPower Partners, Nephila, SYSTEMIQ, and one of the world's largest university endowments. Jupiter has received additional funding from the National Science Foundation, NASA, Elemental Excelsator, and the Gordon and Betty Moore Foundation.

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