

MOODY'S

Digitizing the event response workflow

**DELIVERING CONFIDENT INSIGHTS AT
A TIME OF GREATEST UNCERTAINTY**



Insurance Solutions

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Accelerating event response operations with unified technology, shared services, and real-time event data

In our world of exponential risk, the nature of catastrophes has evolved. Catastrophe events are increasing in frequency, their effects are more interconnected, and the challenges they present the insurance industry have never been more formidable:

- Customers' expectations are growing
- Losses are more intertwined
- The market has greater demands

Compounding these challenges is a 24-hour rolling news cycle and a social media ecosystem that can amplify disinformation. When an event strikes, (re)insurers don't have the luxury of time to rely on analytics that can take days or weeks to run. Firms need to get ahead of the curve and understand the potential impact before, during, and after a disaster occurs—in as close to real-time as possible—so they can make accurate, informed decisions.

In fact, during the period of greatest uncertainty of losses, firms often rely on a patchwork of disconnected tools and IT systems, snapshots of the business that could be three to six months old, and technology that can take days or even weeks to analyze a large portfolio. Capturing all sources of loss—including downstream and interconnected losses such as social inflation, supply chain disruption, or business interruption—requires powerful, advanced modeling solutions.

Far too often, relying on legacy technology can slow down business responsiveness, create new sources of uncertainty, and monopolize risk management teams' time and resources. Solutions must be tailored to the event response workflow, so risk stakeholders get clarity—and get it fast.

Insurers can take advantage of today's open standards, shared analytical services, and unified data repositories—all of which are now more commonplace with the cloud. They get higher quality, deeper event response insights in real-time and enable more effective collaboration between stakeholders.



COMMON RISK MANAGEMENT CHALLENGES FOR EVENT RESPONSE

- Too much time spent searching for, engineering, and analyzing relevant data
- Inability to work with large and complex event footprints or run analyses across the entire book of business
- Outdated information used for decision-making due to analytics lags of many hours or days
- Inconsistencies between event loss estimates results from multiple tools and platforms that rely on different methodologies, views of risk, or exposure

Three C's of event response: Confidence in data, command of losses, and communications to stakeholders

Unifying a firm's approach to event response—from conducting an initial assessment of the event to quantifying and communicating losses to the market—includes distinct processes within and across the business. By digitizing the event response workflow with cloud-native technology and unified analytics firms can expect several benefits, such as:

- Minimize the time and effort to confidently communicate anticipated losses to corporate boards, investors, and regulators
- Make more-informed decisions around live cat trading
- Better service customers by understanding the consequences of an event, and responding to their needs

The gap between industry leaders and laggards is not determined at the moment a catastrophe strikes. While industry leaders can respond faster and with greater confidence in their assessments, laggards can find themselves mired in uncertainty: a patchwork of IT systems that utilize different views of risk, multiple snapshots of the business that may be out of date, and custom code and manually workarounds. All of which hinder the event response workflow, making the process of modeling, analyzing, and managing risk less efficient.

Now is the time for insurance leaders to invest in capabilities that increase confidence in the underlying portfolio and hazard data, employ advanced financial engines to capture the flow of losses, and utilize powerful technology that accelerates workflows to facilitate communication with the market.



A fragmented ecosystem of disconnected applications and systems introduces additional uncertainty into event response operations. With growing expectations from the market, customers, and regulators, firms cannot afford to take a business as usual approach.



1.

CONFIDENCE IN DATA FIDELITY TO ASSESS THE IMPACT OF THE EVENT

Assessing the impact of an event on a (re)insurers book of business is often a time-consuming process, and data fidelity is critical. Relevant exposure information may be out of date, inconsistent across stakeholders, or spread across internal systems; while hazard data must be collected from various sources, including model vendors, data providers, and public agencies such as the U.S. Geological Survey (USGS) or Japan Meteorological Agency (JMA).

Every step in the event response workflow influences the accuracy of risk analytics. Even uploading an event footprint into the necessary software introduces additional complexity and uncertainty. Large event files, especially those covering extensive geographical areas or involving high-gradient perils, may exceed the capacity of on-premises tools and systems. Consequently, firms may need to divide footprints into multiple files, leading to repeated analyses of the same footprints and an increase in the number of risk perspectives to manage.

Building a single source of truth for the event is a more complex task than it needs to be. Limitations of vendor tools make it difficult for risk managers to quickly load, access, and analyze accurate, real-time data. And so decision-making during critical periods can be delayed.

This underscores the need for advanced, connected, collaborative tools that not only provide scalable computing resources but can seamlessly integrate into event response workflows.

2.

COMMAND OF EVENT LOSSES AND COMPLEX FINANCIAL TERMS

The process to convert assessments of event impacts into hypothetical losses, and understand the ripple effects on a (re)insurers business often tests the resiliency and effectiveness of IT systems and workflows. Decisions made months or years in advance to build workflows customized to different lines of business, subsidiaries, and disciplines slow down responsiveness and impact the granularity and confidence of estimations.

To overcome these challenges, technology leaders should consider:

- Interoperability across multiple systems are needed to accurately identify affected accounts, and programs
- Integration with real-time data is essential, especially in scenarios involving dynamic perils such as hurricanes
- Timely, accurate data updates are required for estimated losses, especially as the storm's path changes

Moreover, firms' reliance on third-party services to obtain updated event footprints adds complications because delays in data integration can impact effective loss estimation. And these are just a few of the challenges that firms face when trying to understand the flow of losses across their book of business. Often they rely on tools that utilize different financial engines, analyze different snapshots of the business, and produce inconsistent loss calculations across different stakeholders.

With careful management of data formats and financial terms, firms can align results and compile them into a coherent report with a simple process that requires less time and effort.





3.

COMMUNICATIONS TO STAKEHOLDERS WITH A GREATER CERTAINTY OF LOSSES

Communication of losses often serves as a litmus test of the strength of a firm's risk management. The market could interpret a wide range of potential event losses or future adjustments to event losses as a firm lacking a strong understanding of its book of business. This can have multiple downstream impacts to the business:

- Rating agencies downgrade the firm
- Borrowing costs escalate
- Challenges placing reinsurance

Providing dependable, clear information to all stakeholders can be difficult with inconsistent risk assessment and loss estimations. Technological limitations, such as the lack of advanced data visualization and reporting tools, obstruct the clear presentation of complex loss data. And with long model run times, risk managers are unable to validate losses and conduct sensitivity testing.

Communicating losses to stakeholders is particularly challenging for large insurance groups that write multi-line insurance or reinsurance policies. Understanding the flow of losses across subsidiaries requires understanding complex reinsurance structures that can impact the performance of hundreds of thousands of policies. And if each subsidiary utilizes their own view of risk, then aggregation and reconciliation of the results can increase the range of event losses communicated to the market.

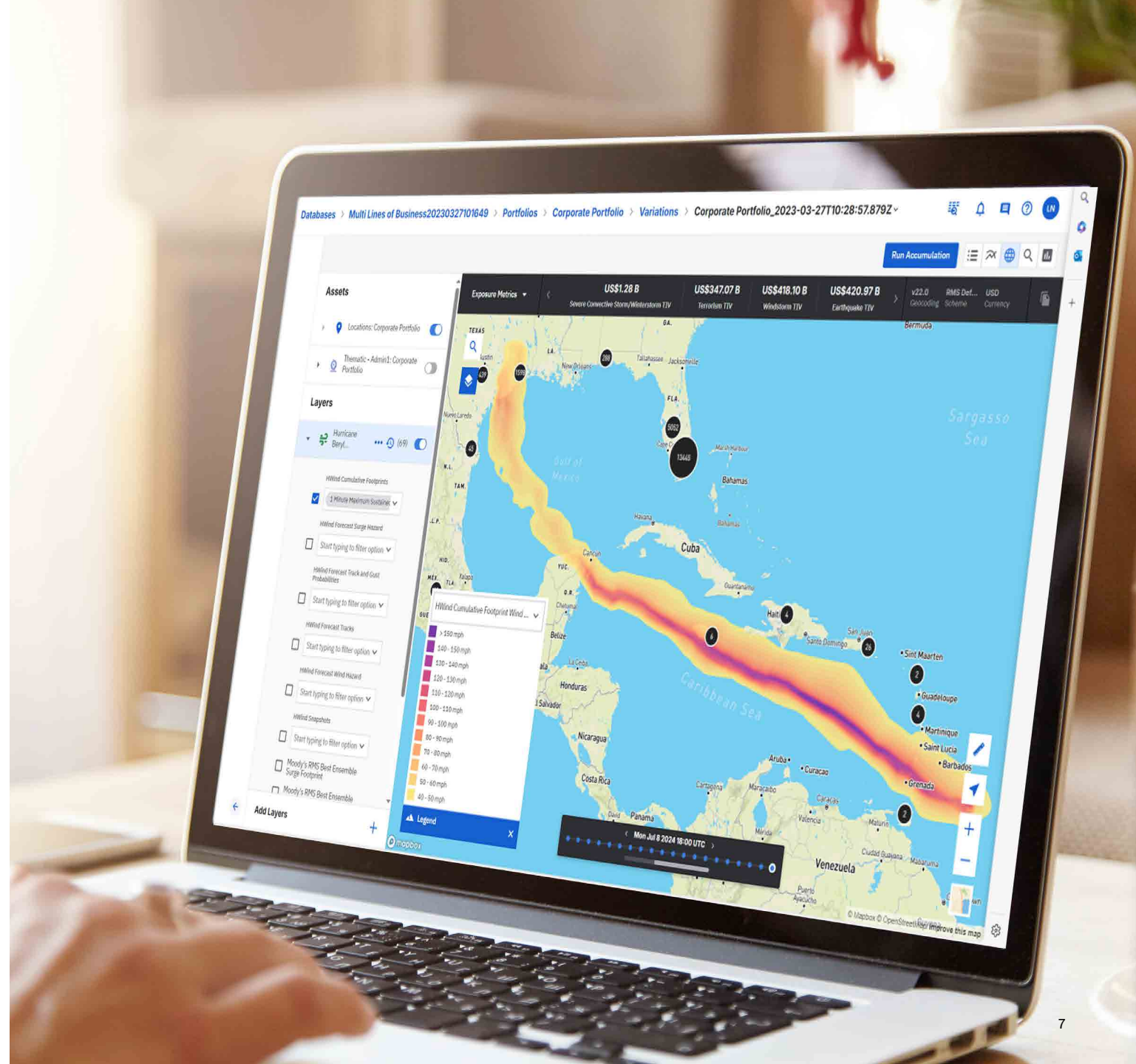
When firms address the challenges to event response workflows—and can access consistent, clear information—then effective, transparent communication with all stakeholders is within reach.

UNLOCK GREATER EFFICIENCIES IN EVENT RESPONSE WORKFLOWS WITH MOODY'S

Moody's unlocks greater efficiencies in event response workflows with open standards, real-time data, industry-leading analytics, and modular technology. Firms can achieve increased business agility from faster modeling, greater continuity of risk perspectives, and improved data mobility, supporting business decision-making during high-stress periods.

Moody's continued investment in event response services is built on three pillars: consistent and trusted data, modular cloud-native technology, and a unified view of risk. We apply these principles to digitizing event response workflows on the Moody's Intelligent Risk Platform™.

- **Event response data**, ranging from exposure information and event footprints to forecasts and claims from Moody's RMS™ models and third-parties, is automatically available and updated in real-time across the platform
- **Connected, collaborative applications** deliver tailored risk perspectives to business stakeholders, using the same underlying event response data, portfolio analytics, and modeling methodologies
- **Unified APIs across applications and services** help firms automate event response workflows when an event has the potential to materially impact the business
- **Software as a service infrastructure** significantly reduces run-times for event response analyses, allowing for more validation and sensitivity testing
- **Generative AI capabilities embedded into applications** enable users to craft custom interactive event reports and share them with stakeholders who can interrogate the results
- **Analytics support data-driven decision-making** for all types of insurance products, such as parametric or indemnity policies



Unify the event response workflow on the Intelligent Risk Platform

The Moody's Intelligent Risk Platform is an open, modular, and unified platform for risk insights. Its suite of connected, collaborative applications for risk modeling, exposure management, and treaty management share a common set of services that enable a more effective, efficient event response workflow.

When the Moody's RMS™ Event Response team responds to an event with accumulation and modeling information, it is instantly available across the Intelligent Risk Platform. All applications on the platform use a common set of exposure, science, financial engines, and unified APIs so risk managers are better equipped to provide consistent and correlated risk insights tailored to the unique needs of the business.

Users quickly generate the insights they need and view the results within in-app results dashboards. These dashboards can then be directly shared with internal business stakeholders for an up-to-date view on the potential impact of an event.

All of this happens quickly and easily, without extensive data engineering, data taxiing, or financial reconciliation of results. And with our public APIs, users can automate many of their event response processes and effortlessly export reliable, consistent data to their internal tools, such as standardized reports in Excel or event dashboards for senior leadership.

MOODY'S EXPOSUREIQ™ APPLICATION

Exposure managers can use the ExposureIQ application to visually drill into an event to see risk accumulations and hot spots. They can also quickly establish their exposed limit as the net of both inward and outward reinsurance and compare actual claims against predicted losses to identify property types and locations that drive losses.

MOODY'S RISK MODELER™ APPLICATION

Catastrophe modelers and exposure managers can use the Risk Modeler application to run event response accumulation footprints, generate a probabilistic view of losses from an event based on a stochastic event selection, and model losses from reconstructed event footprints.

MOODY'S TREATYIQ™ APPLICATION

Treaty managers with large, complex treaty books can more easily run stochastic event selections via a scenario analysis across their entire treaty portfolio. The TreatyIQ application enables firms to operate faster, more frequent portfolio roll-ups for up-to-date insights on assumed and net risk positions across the entire book of business.

MOODY'S HWIND SERVICE

Moody's HWind provides regularly derived pre-landfall forecasting products for the North Atlantic Basin, plus observation-based snapshots and cumulative hazard footprints leading up to and following landfall events in the North Atlantic, East Pacific, and Central Pacific Basins. HWind informs continuous monitoring of damaging tropical cyclone characteristics to support real-time event preparation and response as a stand-alone solution or integrated into the Risk Modeler and ExposureIQ applications.

MOODY'S RISK DATA EXCHANGE

Firms can seamlessly and securely share data with internal stakeholders. For large insurance groups operating in multiple geographic regions and across multiple business entities, Risk Data Exchange ensures the fast delivery of data without exporting or importing exposure or results outside the Intelligent Risk Platform.

Digitize your event response workflows with Moody's

Drawing on more than 30 years of risk analytics leadership, Moody's helps customers decode risk and unlock opportunities with cutting-edge solutions underpinned by unified technology and trusted data. Organizations that partner with Moody's can significantly diminish sources of uncertainty throughout their response processes. They can ensure that the most up-to-date information is utilized across the entire business.

Firms find that automating workflows and analyses leads to substantial time and cost savings. It frees analysts to spend their valuable time delving deeper into higher-value tasks, so they can develop their own unique perspectives on the event. Analysts can also engage with the results in greater detail, reducing the burden on analytics teams to answer repeated follow-up questions.

Moody's can help your firm respond more effectively, make more-informed decisions, and drive greater business value across event response workflows and beyond.

[Contact us to learn more.](#)

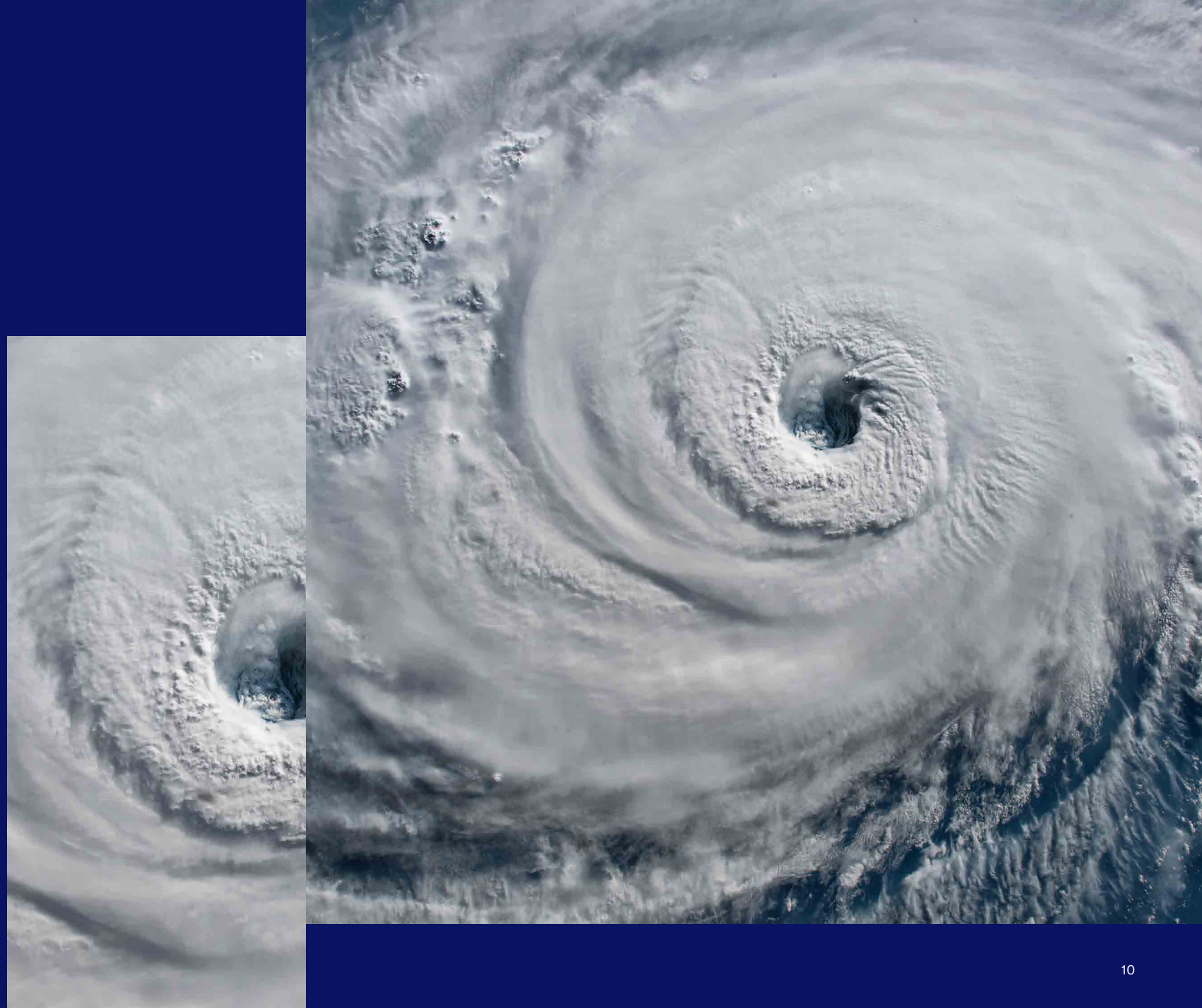


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Moody's shapes the world's view of risk for insurers, reinsurers, financial services organizations, and the public sector, with Moody's Models underlying the nearly \$2 trillion USD Property & Casualty industry. We empower organizations to evaluate and manage global risk from natural and man-made catastrophes, including hurricanes, earthquakes, floods, climate change, cyber, and pandemics.

Our unmatched science, technology, and 300+ catastrophe risk models help (re) insurers and other organizations evaluate and manage the risks of natural and man-made disasters. Leaders can address the risks of tomorrow with the Intelligent Risk Platform™, the only open cloud with collaborative applications and unified analytics that can power risk management excellence across organizations and industries.

Today's risk professionals trust Moody's to help them manage and navigate the risks of natural and man-made catastrophes.



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