Transparent and customisable modelling: ELEMENTS 13 catastrophe modelling platform

In response to the industry’s need for understandable, transparent and customisable catastrophe models, Impact Forecasting has enhanced its ELEMENTS catastrophe modelling platform. ELEMENTS is an open modelling platform designed to help companies create their own view of risk.

**Embracing today’s catastrophe modelling needs**
- Supports [Impact Forecasting and Oasis model definition formats](#) ensuring re/insurers can leverage best-in-class models from a range of vendors and research organisations.
- **Transparency** of Impact Forecasting models and loss calculations assist in forming your own view of risk faster.
- Runs on-premise or on the cloud providing **flexible deployment options**.
- **Client-server application** means better performance, easier client installation (also available via Citrix), and improved speed.
- **High-speed loss calculation** is achieved by using multiple server cores and 64-bit technology.
- Users can **visualize hazard, exposure and loss data** from without the need to create maps manually or use separate Geographic Information Systems (GIS) software.

**Customization and transparency**
- **Understand**: ELEMENTS offers complete access and insight into Impact Forecasting hazard and vulnerability components and how they are connected to streamline model evaluation and customisation projects.
- **Customise and adjust**: Leverage in-house model development expertise and data to modify key model parameters, adjust and add events, customize vulnerability functions or implement full model components to derive more appropriate model results. Advanced features like Parameter Adjustment and Model Development Studio help ensure customisation projects can be completed on schedule.
- **Quantify uncertainty**: Communicate with re/insurers for more appropriate rates or with regulators and rating agencies for an informed and smoother model approval process. ELEMENTS helps visualise and quantify uncertainty within the catastrophe model and how this can be mitigated with the use of more accurate data.

**We’re here to empower results:**
Contact us to understand more about the ELEMENTS platform and our transparent and customizable models.

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New features for ELEMENTS 13

- Additional **treaty** loss breakouts.
- **Exposed limit calculation** allows decision makers to quantify portfolio exposures after applying all location, policy and reinsurance terms and conditions.
- Custom model type to **host and model unconventional perils** such as volcano and cloudburst.
- **Generate detailed uncertainty reports** without having to store vast amounts of sample-level data.
- **Quicker processing of Quantile Loss Tables**, up to four times faster.
- "**Out of domain**" reporting quantifies portfolio exposure falling outside of the model domain.
- **Full set of enhanced APIs** allows easy integration of ELEMENTS with any other in-house products.

New and updated models for ELEMENTS 13

- **New models**: European hail model, Manhattan terrorism blast model, Southwest Pacific earthquake and tropical cyclone and South Africa flood scenario model
- **Updated models**: U.S. earthquake, South Africa earthquake
- **Additional model updates due later in 2019**: U.S. tropical cyclone, U.S. wildfire and Canada flood

Enhanced functionality

- **Workflow Manager Tool** enables batch processing of import data and analysis tasks.
- **Control model run times** by adjusting the default number of Monte Carlo samples for analyses depending on your desired level of modelled loss stability.