

Transparent and customisable modelling: ELEMENTS catastrophe modelling platform

In response to market need for understandable, transparent and customisable catastrophe models, Impact Forecasting – Aon’s catastrophe model development centre of excellence – has enhanced its ELEMENTS catastrophe modelling platform. ELEMENTS is a completely open, customisable, multi-vendor and Oasis-supporting modelling platform, enabling insurers to create their own view of risk and identify growth opportunities.

Embracing today’s catastrophe modelling needs

- Complete transparency in the models and platform to enable insurers to form their own view of risk with less effort.
- Supporting Oasis model definition format and native multi-vendor modelling capabilities directly in ELEMENTS.
- Providing flexible deployment options - run ELEMENTS in-house or on the cloud.
- Client-server application allows faster performance across all models and easier client installation (also available via Citrix).
- High speed catastrophe modelling is achieved through multiple server cores and 64-bit technology to run analyses.

We’re here to empower results:

Contact us to understand more about ELEMENTS catastrophe modelling platform and our transparent and customisable models.

Nehal Naik
+1.312.381.5884
nehal.naik@aonbenfield.com

Adam Podlaha
+44 (0)20 7522 3820
adam.podlaha@aonbenfield.com

Automated Event Response

- Intense and costly 2017 US hurricane and 2017/2018 European windstorm seasons fuelled the need for forecasting the effects of large scale events.
- Impact Forecasting’s Automated Event Response (AER) helps insurers to quantify potential losses to their portfolios and to direct claims adjuster resources through both pre- and post-event response
- AER is a fully automated solution that leverages meteorological forecast data and ELEMENTS APIs to develop hazard footprints in real-time. These are modelled against insured portfolios to estimate ground-up, gross and net losses.
- Clients receive loss and wind speed forecasts for their portfolio directly via email in a fraction of the time compared to typical pre- and post-event modelling workflows.

Customisation and transparency

- Complete insight into the hazard and vulnerability components and how they are connected results in a better understanding of the model outputs.
- Create and customise models by adding historical or hypothetical events. Use the Parameter Adjustment to see the effect of modifying event frequencies or particular occupancies.
- Customise models using claims data to derive more fit to measure results.
- Quantify uncertainty to help communication with pricing teams, reinsurers, regulators and rating agencies through a better-informed model approval process.
- ELEMENTS helps to visualise uncertainty within the catastrophe model and how this can be managed with the use of more accurate data.

New features in ELEMENTS 12

- Workflow integration with Impact WorkBench to provide exposure data audit, exposure data conversion, and data management to enhance productivity through automation.
- Enhanced APIs allow seamless integration of ELEMENTS into existing and future platforms.
- Up to 10 times speed improvement for full (sample-based) EP curve and uncertainty calculation with an enhanced loss engine.
- Ability to run multiple vendors / versions of models for the same territory and peril in the Oasis or Impact Forecasting model definition formats as well as supporting up to two secondary perils.
- Enhanced financial engine including support for inuring order in reinsurance treaties to deal with complex conditions.
- Enhanced user interface with faster location level maps, project / portfolio search functionality and to improve user experience.
- Introducing address level geocoding for Canada flood model.

New and enhanced models in ELEMENTS 12

- **US:** new wildfire model, updated inland flood model and CFD-based terrorism blast model for Manhattan, NYC
- **Europe:** European severe convective storm model
- **Asia:** new version of Thailand flood model
- **Africa:** Hail storm model for South Africa covering property and motor