

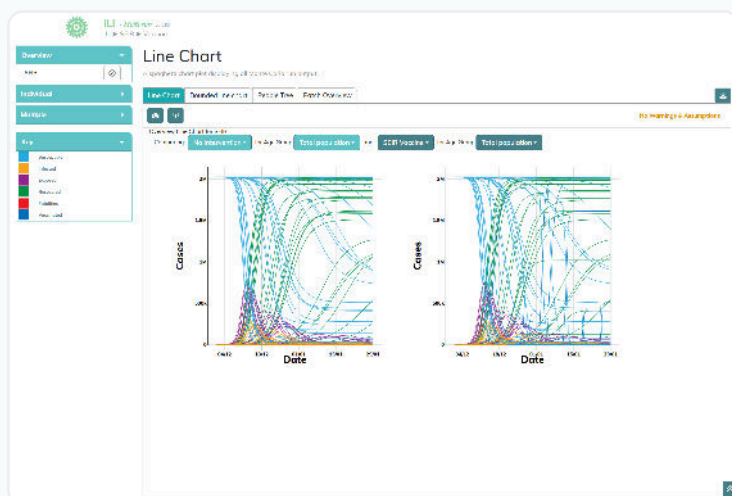


CrystalCast | Biosurveillance & Epidemiological Modelling

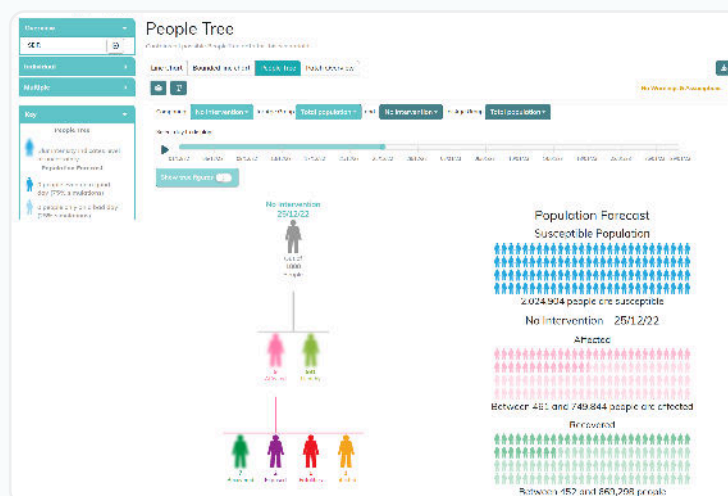
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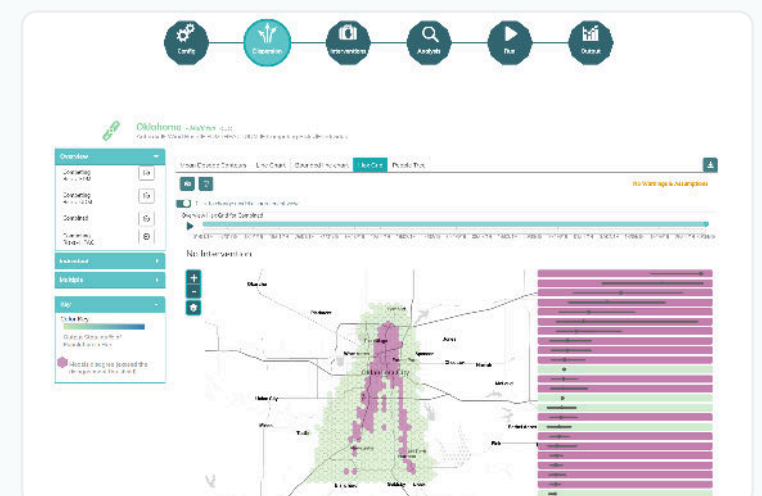
PRODUCT SCREENSHOTS



Line charts



People tree



Interventions

Product overview

CrystalCast is a disease forecasting tool that combines multiple epidemiological models to predict outbreaks and anticipate impacts on the population.

The software provides statistical outputs relating to “what-if” scenarios, allowing key stakeholders to weigh up uncertain conditions and parameters before taking appropriate action.

CrystalCast was used operationally by the UK Health Security Agency (UKHSA) through the COVID-19 pandemic to support government decision makers, up to the end of 2023.

CrystalCast’s data visualisation functionality means that stakeholders can leverage intelligence faster and with increased conviction.

Features and benefits

CrystalCast's unique model combination functionality allows stakeholders to respond more strategically to disease outbreaks. The solution identifies and highlights model disagreements as well as providing a holistic view of combined model predictions.

User benefits

MODEL OUTBREAKS OF DIFFERENT DISEASE SCENARIOS, SUCH AS:

- › Disease type
- › Location of outbreak
- › Population density
- › Demographics

MODEL INTERVENTIONS, SUCH AS:

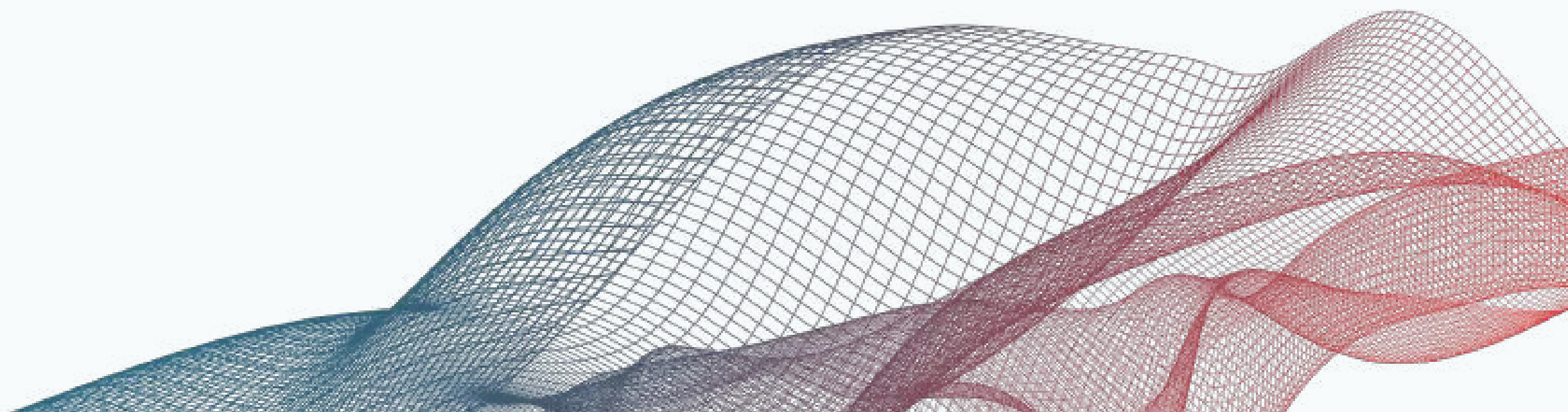
- › Movement restriction
- › Medication
- › Vaccination

COMPARING AND CONTRASTING UNCERTAIN IMPACTS OF DISEASE OUTBREAKS:

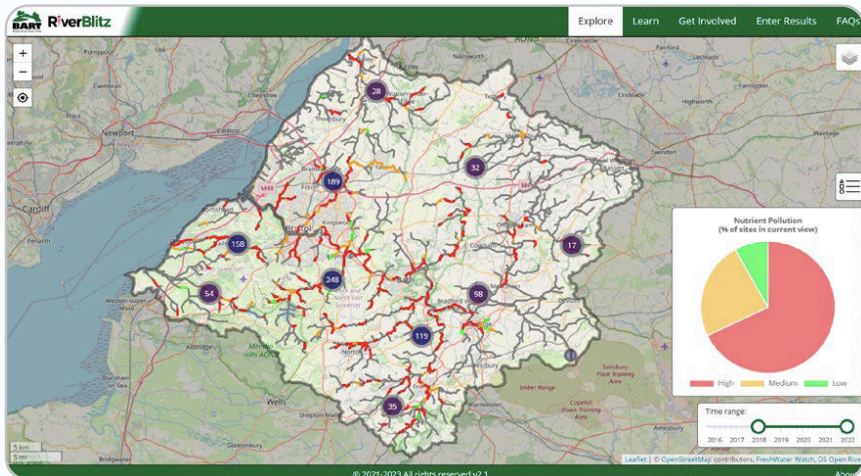
- › Time series charts of number of people hospitalised, recovered & dead
- › Visualisation of population effects in spatial patches
- › Visualisation of population effects in frequency trees
- › Visualisation of statistical outputs, such as median, quartiles, minimum, maximum and more

Further use cases

CrystalCast's model comparison and combination functionality could also be used for chemical hazard mitigation. The solution is also appropriate for usage where real-time threat intelligence is required because of its forecasting capability and advanced data visualisation.



Related products



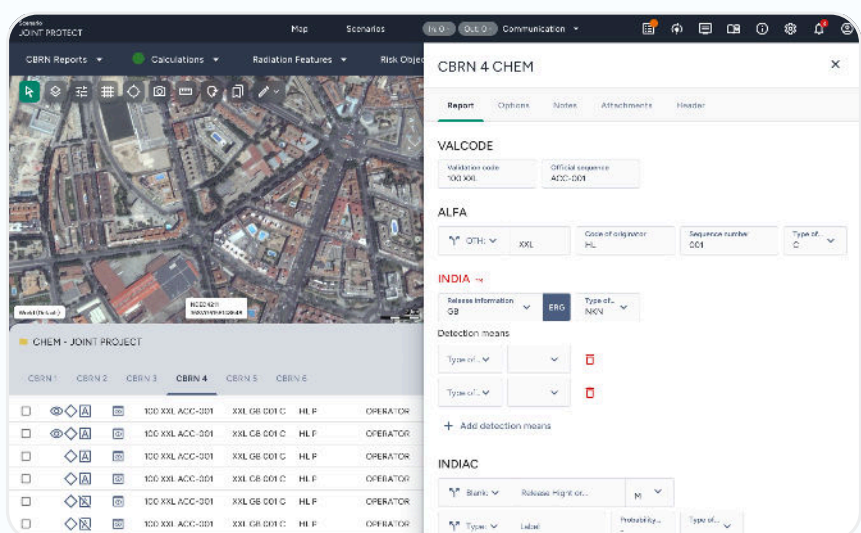
Congregate

- Congregate is the all-in-one platform for running environmental crowdsourcing projects.
- As the challenges facing our environment continue to grow, more people are looking for ways to drive distinct change. Crowdsourcing and citizen science is a great way in which they can be part of the solution.
- Congregate allows you to effectively coordinate projects, manage data collection teams, and explore results with industry-leading visualisation tools.



UrbanAware

- Optimise real-time decision making with superior situational awareness. UrbanAware is a next-generation CBRN Information Management (IM) tool for the military, first responders, and local government.
- Its aim is to provide lifesaving situational awareness and decision support in the context of urban CBRN and HazMat incidents, helping stakeholders to develop more effective response processes.



CBRN-Analysis NG

- CBRN-Analysis is an advanced, off-the-shelf software-based CBRN Knowledge Management Application that includes Hazard Prediction and Warning and Reporting.
- Configurable and modular, it provides commanders with rapid and accurate information to increase their CBRN situational awareness within an area where CBRN materials may be used.
- CBRN-Analysis effectively supports and enhances risk-management in all phases of an operation, both in the planning and pre-deployment phase, in-theatre and in the post-conflict or recovery phase.

More information can be found at: www.bruhn-newtech.com.

