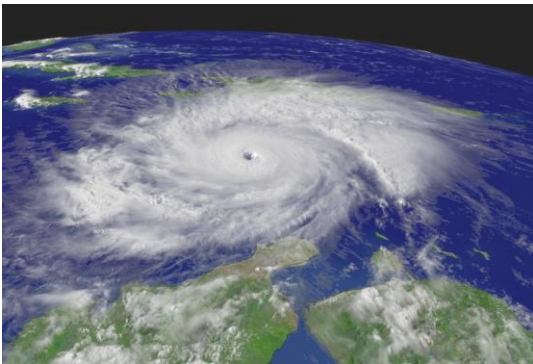## The Storm Impact Forecast Product >>>

As soon as the storm simulation is completed, the storm track, hazard footprint and impact maps will be available for download in KML format from a dedicated link on the CCRIF website. The KML format allows the user to display the storm impact maps as overlays over Google Earth, which provides the user with the necessary context for interpreting the potential impact of the hazard forces for emergency preparedness and evacuation decisions, as well as for contingency planning to secure critical infrastructure and operations.

Designated users in each participating country will be given a user name and password to access the dedicated link on the CCRIF website, where they will have access to the RTFS overview screen that shows storm location, forecasted track, and forecasted wind impact swath. From this screen, they will be able to download the more detailed hazard map and impact layers, and the report on the location-specific hazard trigger values if they have requested this service.
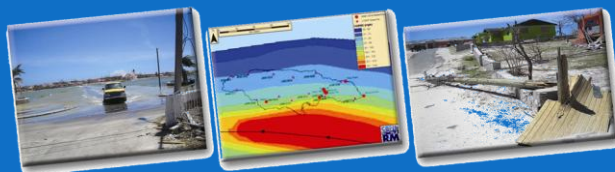
Product License >>>

By accessing the dedicated link on the CCRIF website, users agree to the terms and limitations as displayed on the website.

About CCRIF

The Caribbean Catastrophe Risk Insurance Facility (CCRIF) is the first multi-country risk pool in the world, and is also the first insurance instrument to successfully develop parametric policies backed by both traditional and capital markets. It is a regional catastrophe fund for Caribbean governments designed to limit the financial impact of devastating hurricanes and earthquakes by quickly providing financial liquidity when a policy is triggered. CCRIF was developed through funding from the Japanese Government, and was capitalised through contributions to a multi-donor Trust Fund by the Government of Canada, the European Union, the World Bank, the governments of the UK and France, the Caribbean Development Bank and the governments of Ireland and Bermuda, as well as through membership fees paid by participating governments. Sixteen governments are currently members of the fund: Anguilla, Antigua & Barbuda, Bahamas, Barbados, Belize, Bermuda, Cayman Islands, Dominica, Grenada, Haiti, Jamaica, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, Trinidad & Tobago and Turks & Caicos Islands.

For additional information visit our website at www.ccrif.org or email us at pr@ccrif.org

CCRIF, a not-for-profit company, is the first multi-country risk pool in the world.

TAOS Real Time Impact Forecasting System (RTFS) for CCRIF Countries

Enabling members of CCRIF to access real-time estimates of the expected hazard levels and impacts on population and infrastructure for all tropical cyclones during the 2010 hurricane season...

The Real Time Hazard Forecasting System (RTFS) is a storm impact forecast tool, built on the core TAOS ('The Arbiter of Storms') modelling technology which is the core of CCRIF's second-generation loss model

2010 Hurricane Season

The TAOS RTFS product for the Caribbean is produced by Kinetic Analysis Corporation and is made available to CCRIF under a yearly license agreement between both parties. The 2010 TAOS RTFS product is substantially similar to the 2009 product, apart from several internal processing improvements which make the product more robust. One significant addition is the introduction of site-specific features for Haiti, to support the ongoing management of displaced populations.

The TAOS RTFS enables all active members of CCRIF to access real-time estimates of the expected hazard levels and impacts on population and infrastructure for all tropical cyclones during the 2010 hurricane season. The CCRIF Facility Supervisor believes that this real-time service will provide enhanced value to participants through improving their understanding of hurricane risks and also through providing valuable real-time information to both emergency managers and finance/economy officials.

Special Products for Haiti >>>

CCRIF is working with national and international relief agencies to provide them with relevant and actionable information for management of refugee tent-camps, safekeeping of their occupants, and for general displaced population planning purposes. For critical locations, such as aid operation centers, refugee camps and transportation hubs, TAOS RTFS will produce site specific estimates of expected wind speed and coastal flooding heights during the approach of a storm. Information will be made available in various formats optimised for the required applications.

Product Description >>>

The hazard values that are provided by the RTFS represent the maximum expected hazard intensity at each location (grid cell) across the analysis area for the current storm, as forecasted. The storm simulation is performed at a resolution of 30 arc seconds, corresponding to a spatial grid of 900m cells.

Hazard Footprints - The following mapped hazard information is produced for each storm forecast. All hazard map information is provided for categorised ranges of hazard values:

1. Wind hazard: maximum wind speed in mph
2. Wave hazard: maximum significant wave height in feet
3. Surge hazard: maximum water elevation in feet, above Mean Sea Level (MSL)
4. Precipitation: cumulative rainfall in inches, for the duration of the storm

Impacts – Hazard values are translated into impact estimates by using appropriate vulnerability functions.

The following impact estimates are produced for each storm forecast:

1. Wind impact severity, according to the Beaufort Scale
2. Tabular report of population affected, by hazard level, and by administrative unit (by country, and by parish for some countries)
3. Impact on major ports and airports within the CCRIF area in terms of maximum wind speed and storm surge values at the site, and expected shut-down duration

Location-specific Hazard Trigger Values - A new information product, first introduced for the 2009 season, offers countries the ability to select up to five locations for which the RTFS will produce the maximum wind, wave and storm surge values that can be expected during the course of the storm. This information can be used by emergency managers as triggers for an alert system, such as the WebEOC system being introduced by CDEMA. For example, shelter management can be informed by when a given critical wind speed is expected at that location. The decision to evacuate a low-lying area can be informed by the maximum storm surge height expected just off the coast at that location.

Product Support>>>

CCRIF has granted the Caribbean Institute for Meteorology and Hydrology (CIMH) a sub-license to access TAOS RTFS and use it for training and support purposes. This includes:

1. Briefing the CDEMA country preparedness team each time a storm is approaching one or more of the CDEMA member states
2. Using TAOS RTFS as training material in its teaching program for meteorology students
3. Organising familiarisation and training workshops for Caribbean meteorological officers and disaster management agencies prior to the start of the hurricane season
4. Providing technical support to TAOS RTFS users upon request

Kinetic Analysis Corporation provides the necessary support to CIMH officers involved in the above activities, and maintains a website with online reference and technical support materials, accessible to the license holder and all sub-license holders. Matters related to the technical aspects of product transmission and display will be handled via direct communication between Kinetic Analysis Corporation and the license/sub-license holders.