

KAC Real-Time Forecasting System Features

Conditions

Current conditions

Sea surface temperature
Tropical cyclone potential

Current sea surface temperatures.
Factors contributing to tropical cyclone development.

Event Information and Warnings

Characteristics of active hazard events

Storm forecast tracks: all models
Storm track
Storm track (points)
Watch/warning areas

Forecast tracks and characteristics from all available models.
Storm track and characteristics used for simulation.
Storm forecast track points.
Areas designated for official tropical storm warnings or watches.

Hazards

Detailed hazard information (current and forecasted)

Rainfall
Storm surge
Tropical storm wind probability
Wave heights
Wind speeds

Rainfall from active tropical cyclones, cumulative over forecast period.
Maximum storm surge height generated by active tropical cyclones.
Probability of tropical storm force winds from active tropical cyclones.
Maximum wave heights generated by active tropical cyclones.
Maximum wind speeds generated by active tropical cyclones.

Impacts and Consequences

Impacts generated by active storms and their consequences

Agricultural impacts

Banana impacts
Orange tree mortality
Rice yield impacts

Impacts on typical banana trees and crops from active storms.
Orange tree mortality rate due to active tropical storm impacts.
Rice yield impacts from active tropical storms.

Basic impacts

Country impact report
Country impact report by admin region
Damage: Commercial
Damage: Residential
Wind effects

Population and land areas affected by active storms, by country.
Population and land areas affected by active storms, by country/administrative area.
Damage potential to commercial structures.
Damage potential to single-family residential structures.
Qualitative wind effects, based on the Beaufort scale

Electrical generation, distribution and transmission impacts

Electrical generator impacts (US)
Electrical outages (US)
Power outage potential

Damage and operational impacts US electrical generators.
US electrical outages: population affected (summarized by US Census Place).
Electrical power outage potential, based on a US-style distribution system.

Impacts and Consequences

Petroleum (oil and gas) production, refining and distribution impacts

<i>Oil refinery impacts</i>	Maximum hazard levels and operational impacts on oil refineries from active storms.
<i>PEMEX facility impacts</i>	Maximum hazard levels and operational impacts on PEMEX offshore facilities (Gulf of Mexico) from active storms.
<i>US GOM well impacts</i>	Maximum hazard levels and operational impacts on oil wells in the US Gulf of Mexico from active storms.

Transportation impacts

<i>Airport impacts</i>	Maximum hazard levels and operational impacts on airports.
<i>Aviation operations Impacts</i>	Operational impacts on aviation.
<i>Port impacts</i>	Maximum hazard levels and operational impacts on ports.

Sectoral consequences of hazard and impacts

Petroleum (oil and gas) production, refining and distribution impacts

<i>US GOM oil/gas production shortfall</i>	Shortfall in oil and gas production in the US Gulf of Mexico due to storm impacts.
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