



Tropical Cyclone Imelda (AAL092025)

Wind and Storm Surge

Final Event Briefing

The Bahamas

11 November 2025

1 SUMMARY

Tropical Cyclone Imelda was the ninth named storm of the 2025 Atlantic Hurricane Season. On 28 September, the tropical storm formed just east of Andros Island in The Bahamas and moved northward throughout that day and the next, passing close to New Providence before making landfall on the Abaco Islands on 29 September. Tropical-storm-force winds were primarily felt on the Abaco Islands during the last six hours of 29 September and the first six hours of 30 September. The cyclone intensified after passing over the country, north of The Bahamas. This intensification, combined with the peculiar configuration of the Bahamian seabed—very shallow and complex—generated a storm surge over The Bahamas even at considerable distances.

The final runs of the CCRIF tropical cyclone loss model for wind and storm surge have produced government losses for The Bahamas for all the three Tropical Cyclone policies active for the country, specifically for The Bahamas – Northwest, The Bahamas – Central and The Bahamas – South East, due to Tropical Cyclone Imelda.

The government losses for The Bahamas – Northwest are below the Attachment Point of its Tropical Cyclone policy and therefore Imelda is designated as a Loss Event¹ for The Bahamas – Northwest. Thus, no payout under this policy is due to the Government of The Bahamas.

The government losses for The Bahamas – Central and The Bahamas – Southeast are above the Attachment Point of their respective Tropical Cyclone policies and therefore Imelda is designated as a Triggering Event² for The Bahamas – Central and The Bahamas – Southeast. A payout under these policies is due to the Government of The Bahamas.

Final calculations show that payments are due as follow:

Tropical Cyclone Policy	Payment
The Bahamas - Southeast	US\$ 849,781
The Bahamas - Central	US\$ 448,096

Moreover, the requirements for a payment under the Aggregate Deductible Cover (ADC)³ of the Tropical Cyclone policies for The Bahamas – Northwest were not met; therefore no ADC payment is due.

This event briefing is designed to review the modelled losses due to wind and storm surge calculated by CCRIF's tropical cyclone model for affected CCRIF member countries, to be analyzed with respect to members' Tropical Cyclone policies. A separate report on other CCRIF

¹ Any Tropical Cyclone event which produces a modelled loss greater than zero but lower than the policy Attachment Point (AP) in one or more policyholder countries.

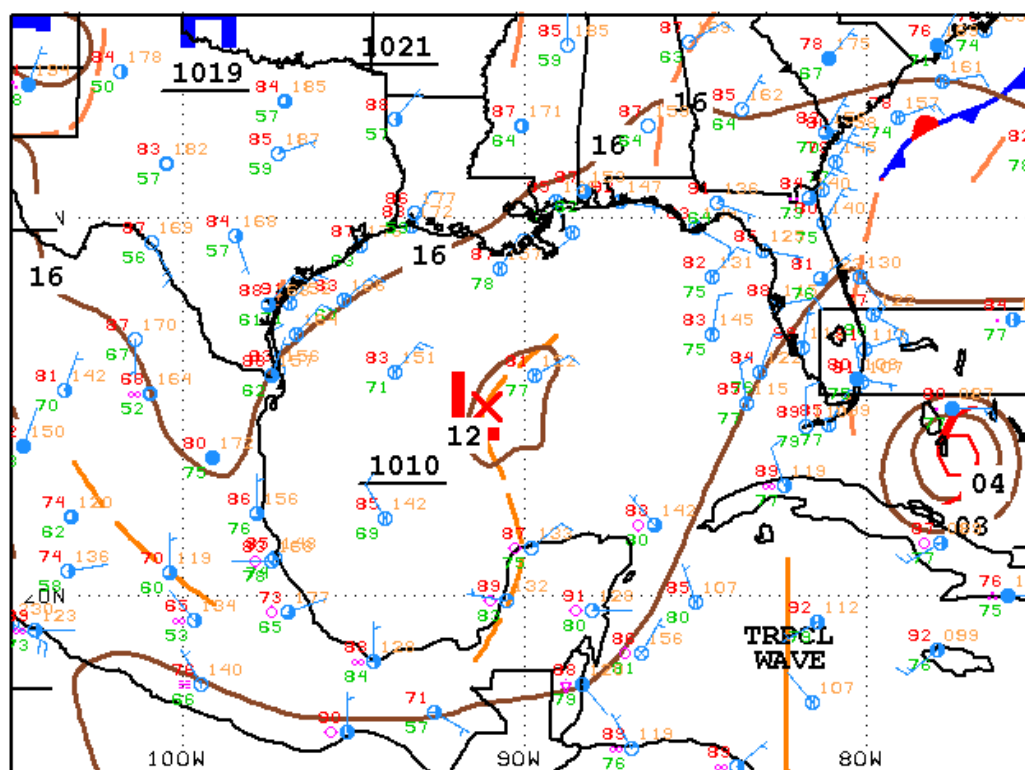
² Any Tropical Cyclone event which produces a modelled loss greater than the policy Attachment Point (AP) in one or more policyholder countries.

³ The ADC is activated if the modelled loss value is between 30% and 50% of a country's policy Attachment Point and a Disaster Alert is issued by ReliefWeb within 7 days after the event. The ADC can also be activated if the modelled loss value is between 50% of the Attachment point and the Attachment point of the country policy.

member countries affected by wind and storm surge, with respect to their Tropical Cyclone policies or rainfall impacts on affected CCRIF member countries will be issued if applicable.

2 INTRODUCTION

On 28 September at 1800 UTC, the National Hurricane centre (NHC) reported the formation of a tropical storm in the vicinity of The Bahamas, officially naming it Imelda. At that time, the storm's centre was located at latitude 23.9°N and longitude 77.3°W, approximately 13 mi (20 km) east of the southern tip of Andros Island (Figure 1). Satellite imagery revealed that Imelda had an asymmetric structure, with most of the convective activity displaced well to the east of the centre and little convection near the inner core (Figure 2a).



18Z GULF SURFACE ANALYSIS NATIONAL HURRICANE CENTER
ISSUED: MIAMI, FLORIDA
Sun Sep 28 20:20:28 UTC 2025 BY TAFB ANALYST: ADAMS
COLLABORATING CENTERS: NHC OPC WPC

Figure 1 Surface analysis over the Gulf of Mexico area on 28 September at 1800UTC. Source: US National Hurricane centre⁴

⁴ National Oceanic and Atmospheric Administration - FTP, National Hurricane centre, review date: 28 September 2025, available at: <https://www.nhc.noaa.gov/tafb/GULF18Z.gif>

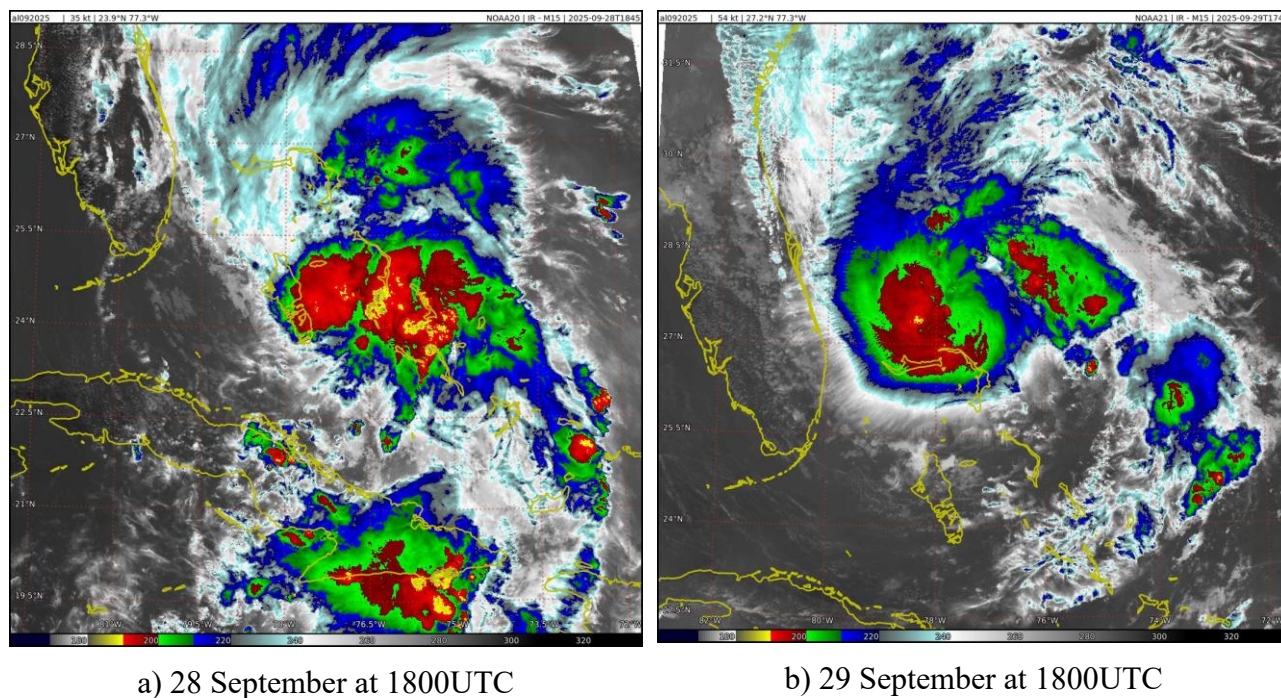


Figure 2 Satellite imagery on 28 and 29 September, 2025 at different times as indicated by the labels from the thermal infrared channel enhanced with colour. Blue/green colours represent high altitude clouds (top cloud temperature between -50°C and -70°C), while the red/yellow colours represent very high altitude clouds (top cloud lower than -70°C). High altitude clouds indicate strong convection associated with intense precipitation. Source: NOAA, National Environmental Satellite, Data and Information Service⁵.

Initial estimates placed maximum sustained winds near 40 mph (65 km/h), with higher gusts. Wind analysis maps (Figure 3a) indicated that tropical-storm-force winds extended outward up to 30 mi (50 km) from the centre, but were confined to the storm's eastern semicircle.

⁵ RAMSDIS Online Archive, NOAA Satellite and Information Service, available at: https://rammb-data.cira.colostate.edu/tc_realtime/storm.asp?storm_identifier=al092025

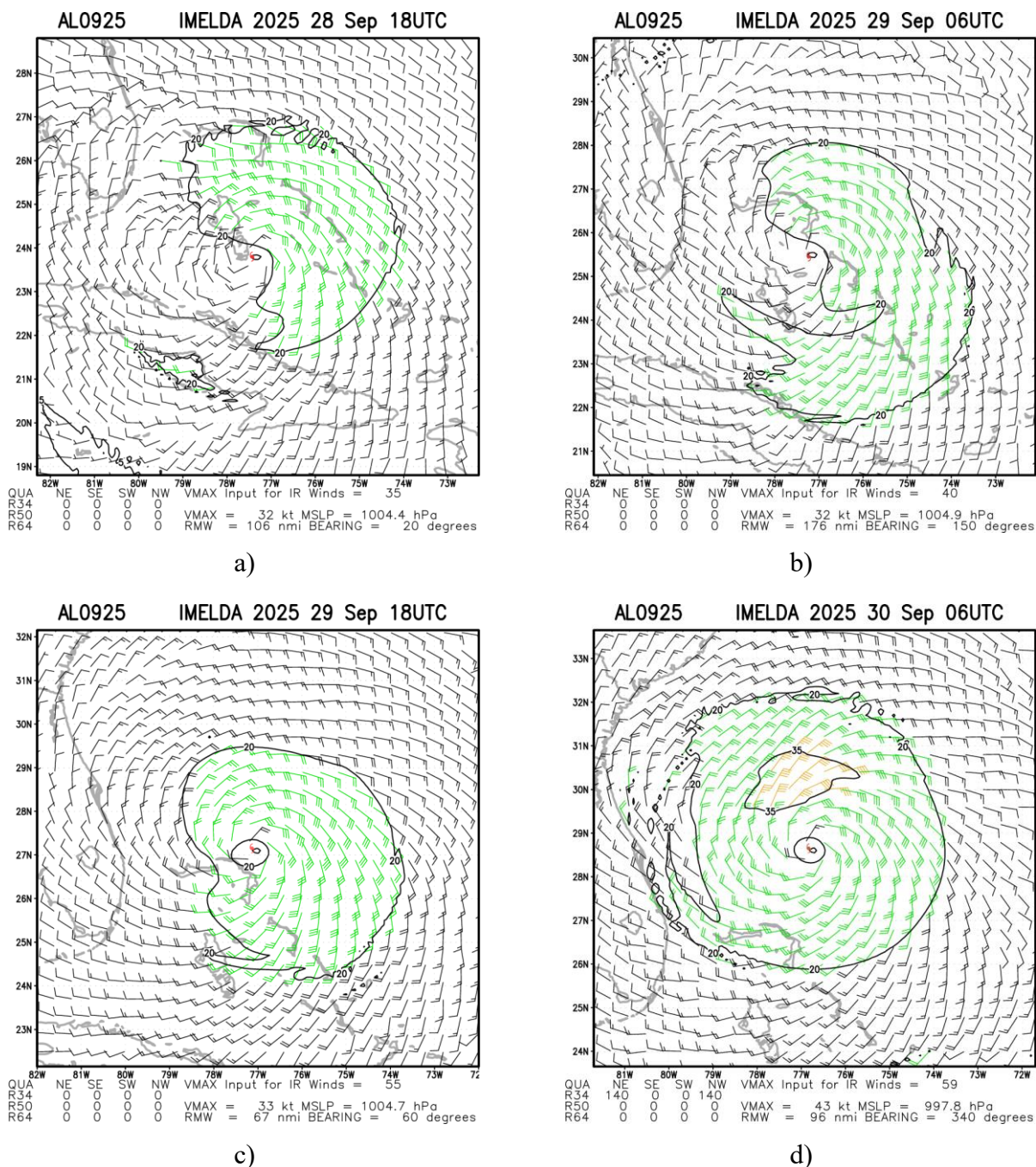


Figure 3 Multi-platform satellite based tropical cyclone surface wind analysis estimated on 28, 29 and 30 September, 2025 at different times as indicated by the labels. Contouring indicates wind intensity at 20 kn (23 mph, 37 km/h), and 35 kn (40 mph, 65 km/h). Source: NOAA, National Environmental Satellite, Data and Information Service⁶

⁶ RAMSDIS Online Archive, NOAA Satellite and Information Service, available at: https://rammb-data.cira.colostate.edu/tc_realtime/storm.asp?storm_identifier=al092025

Imelda was moving slowly northward at about 7 mph (11 km/h), tracking along the western periphery of a mid-level high-pressure system. Environmental conditions over the region were marginally favorable for intensification, with warm sea surface temperatures and a relatively moist atmosphere acting to support development, while moderate vertical wind shear acted as a limiting factor.

Over the following 24 hours, Imelda underwent gradual strengthening. Convection began to consolidate closer to the centre, leading to a more symmetric cloud pattern and wind field, and a broader area affected by tropical-storm-force winds. During this period, the storm's core passed just east of New Providence (approximately 18 mi or 29 km) around 0300 UTC on 29 September, and later—between 1200 and 1500 UTC—made landfall over the Abaco Islands. Tropical-storm-force winds or winds close to this intensity were observed over the Abaco Islands, Grand Bahama, Eleuthera, and New Providence starting from 0000 UTC on 29 September.

By 1800 UTC on 29 September, Imelda exhibited a more symmetric wind field, with enhanced winds wrapping around the western side of the system, and had developed a nascent inner core (Figure 2b). Its centre was located at latitude 27.2°N, longitude 77.3°W—approximately 55 mi (90 km) north of the Abaco Islands. From this point onward, and for the next six to twelve hours, Imelda intensified rapidly, aided by a decrease in wind shear. Despite the increasing distance from the storm's centre, wind analysis (Figure 3) indicated that the Abaco Islands continued to experience tropical-storm-force winds during this phase, as the system progressed northward at a steady pace.

Subsequently, Imelda moved away from The Bahamas. Winds near tropical-storm-force intensity persisted over the Abaco Islands and Grand Bahama until around 0900 UTC on 30 September (Figure 3), gradually diminishing thereafter. On 30 September, despite the considerable distance from the tropical storm, the system intensification combined with the peculiar configuration of the Bahamian seabed—very shallow and complex—generated a storm surge over The Bahamas.

3 CCRIF SPC MODEL OUTPUTS

A CCRIF System for Probabilistic Hazard Evaluation and Risk Assessment (SPHERA) report is issued for any tropical cyclone affecting at least one member country with winds greater than 39 mph (62.7 km/h). For The Bahamas - Northwest it qualifies as a Loss Event⁷, for The Bahamas – Central and The Bahamas – South East it qualifies as a Triggering event⁸.

The wind footprint is one of the outputs from CCRIF's model. Figure 4 shows the wind footprint for the regions affected by Tropical Cyclone Imelda.

⁷ Any Tropical Cyclone event which produces a modelled loss greater than zero in one or more policyholder countries.

⁸ Any Tropical Cyclone event which produces a modelled loss greater than the policy Attachment Point (AP) in one or more policyholder countries.

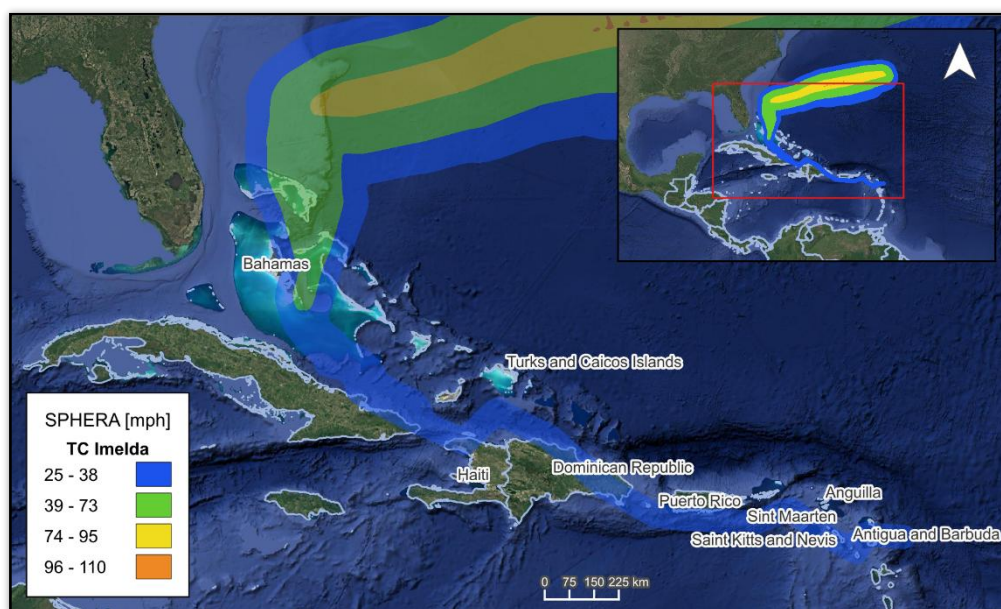


Figure 4 Map showing the wind field associated with Tropical Cyclone Imelda around The Bahamas Islands.
Source: NHC & CCRIF/SPHERA

4 REPORTED IMPACTS

At the time of writing this report, the available information on damage in The Bahamas due to Hurricane Imelda was limited. According to local news⁹, power outages were reported in some areas of the northwest Bahamas, while mandatory evacuation orders were issued for some islands during 4 October to 5 October. Flights to and from the Bahamas were canceled, however, as weather conditions improved, they reopened.

5 TRIGGER POTENTIAL

The final runs of the CCRIF tropical cyclone loss model for wind and storm surge have produced government losses for The Bahamas for all the three Tropical Cyclone policies active for the country, specifically for The Bahamas – Northwest, The Bahamas – Central and The Bahamas – South East, due to Tropical Cyclone Imelda.

The government losses for The Bahamas – Northwest are below the Attachment Point of its Tropical Cyclone policy and therefore Imelda is designated as a Loss Event¹⁰ for The Bahamas – Northwest. Thus, no payout under this policy is due to the Government of The Bahamas.

⁹ [Tropical Storm Imelda brings chaos to Caribbean – DW – 09/30/2025](#)

¹⁰ Any Tropical Cyclone event which produces a modelled loss greater than zero but lower than the policy Attachment Point (AP) in one or more policyholder countries.

The government losses for The Bahamas – Central are above the Attachment Point of its respective Tropical Cyclone policy and therefore Imelda is designated as a Triggering Event¹¹ and a payout of US\$ 448,096 is due to the Government of The Bahamas under this policy.

The government losses for The Bahamas – South East are above the Attachment Point of its respective Tropical Cyclone policy and therefore Imelda is designated as a Triggering Event and a payout of US\$ 849,781 is due to the Government of The Bahamas under this policy.

The Aggregate Deductible Cover (ADC) endorsement under the Tropical Cyclone Policy for The Bahamas – Northwest, was not activated because the modelled losses were below 30% of the Attachment point of the policy and no Disaster Alert was released. Therefore, no ADC payment is due.

For additional information, please contact CCRIF SPC at: pr@ccrif.org

¹¹ Any Tropical Cyclone event which produces a modelled loss greater than the policy Attachment Point (AP) in one or more policyholder countries.
