



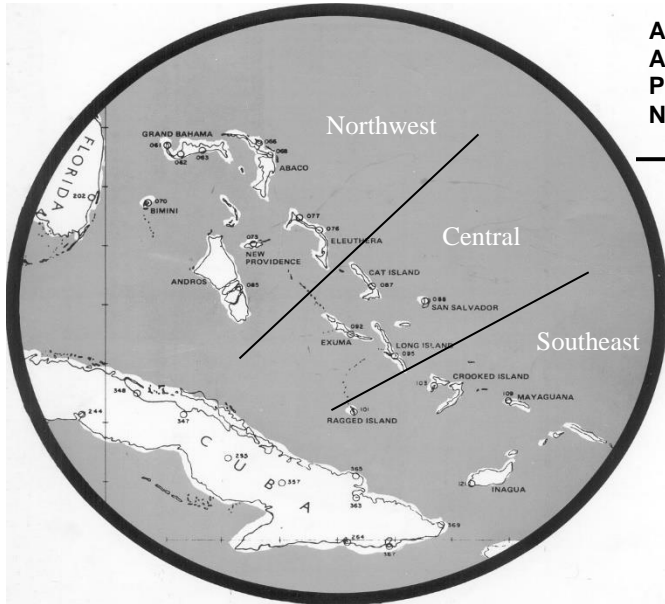
Commonwealth of The Bahamas

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WEATHER LOG MARCH 2024

GENERAL WEATHER SITUATION OVER THE BAHAMAS

During the first two days of March (01st - 02nd), a tight pressure gradient generated moderate to strong breezes throughout the Bahamas archipelago, while hazardous marine conditions were in place due to dangerous ocean swells, rip currents, and high surf. The weather was partly to variably cloudy, windy, and warm, with quick passing showers. The Bahamas Department of Meteorology (BDM) issued Small Craft Cautions and Small Craft Advisories for mariners and advised beachgoers to exercise caution due to the moderate to high risk of rip currents, large swells, and high surf along Atlantic-exposed beaches. Later, mariners were advised to remain in or near the port and beachgoers to remain onshore as conditions worsened. The high temperatures ranged from the upper 70's to high 80's°F, and low temperatures from the low 60's to upper 70's°F across the Bahamas.

From Sunday, the 03rd through Tuesday, the 05th of March, multi-level troughing along with rich tropical moisture supported showers and thunderstorms across the Northwest and parts of the Central Bahamas. At times, a ridge of high pressure produced moderate to fresh breezes across the islands that kept mariners and beachgoers hypervigilant for ocean swells and the elevated risk of rip currents. As the troughing moved toward the east Gulf of Mexico and interacted with rich tropical moisture, it generated unsettled weather across the Extreme Northwest and parts of the remainder of the Northwest Bahamas from Wednesday, 06th to Thursday, 07th of March 2024. The BDM issued eight Severe Thunderstorm Warnings between the 04th of March to the 07th of March 2024 for the Berry Islands, South Eleuthera, Exuma Cays, Cat Island, Long Island, West Grand Bahama, Abaco, and their adjacent waters at various times. Simultaneously, a Severe Thunderstorm Watch was issued for Central Abaco and north and central Andros, as well as their adjacent waters. By Friday, the 09th through Saturday, 10th of March, high pressure ridge produced mostly stable and warm conditions, except for lingering showers near a dissipating frontal boundary north of the northern Bahamas. The high temperatures ranged from the upper 70's to upper 80's°F, and the low temperatures from the mid 60's to upper 70's°F across the Bahamas.

As time changed to daylight savings time early Sunday, the 10th of March 2024, a cold front quickly moved through the Northwest Bahamas, which produced light to moderate showers with few isolated thunderstorms, as it shifted into the Central Bahamas on Monday. Following the front was a building high pressure system that produced moderate to fresh breezes in a cooler and drier air mass. The high pressure system pushed the cold front through the Southeast Bahamas that night, allowing tranquil and cooler conditions in its wake through Tuesday. The remnant moisture from the front near the Southeast Bahamas triggered some lingering showers as sea swells built along the northeast and Atlantic shorelines through Wednesday, 13th of March. The BDM issued a Small Craft Caution for mariners and beachgoers to urge them to exercise caution due to the risk of rip currents, especially along the eastern shorelines in the Central and Southeast Bahamas through Friday afternoon. The high temperature ranged from the upper 70's to upper 80's°F, and low temperature from the low 60's to mid 70's°F across the Bahamas.

The week of the 17th of March started with a dominant high pressure ridge creating dry and stable weather across the Bahamas, which was interrupted by some unsettled weather as a cold front moved across the Northwest Bahamas on Monday evening. The strong cold front shifted across the Central Bahamas as it moved southeastwards on Tuesday evening, and crossed into the Southeast Bahamas by Wednesday night. The high pressure system brought cooler and drier conditions in its wake early Thursday. At the

same time a low pressure system developed in the eastern Gulf of Mexico on Friday, causing a tighter pressure gradient between the high pressure system, which produced strong to near gale-force winds with scattered showers and thunderstorms as the system moved eastwards across the Northwest Bahamas. The BDM issued three Special Weather Statements from Wednesday, the 20th of March to Friday, 22nd of March 2024, as an upper level trough that interacted with unseasonably warm and moist surface conditions to produce squally and severe weather in gale to near gale-force winds in portions of the Northwest and Central Bahamas. The BDM issued 17 Severe Thunderstorm Warnings, and 13 Severe Thunderstorm Watches for most of the Bahamas islands between 6:25 am EDT on the 19th of March to 11:15 pm EDT on the 23rd of March 2024. The system produced total rainfall amounts from Friday through Sunday of 4.63 inches at Grand Bahama International Airport (GBIA), 3.96 inches for Lynden Pindling International Airport (LPIA), 4.90 inches at Governor's Harbour, Eleuthera, 2.23 inches at Cockburn Town, San Salvador, 1.76 inches at Galloway Landing, Long Island, 1.10 inches at Andros Town, Andros, 1.10 inches at Crossing Rock, Abaco, 0.74 of an inch in George Town, Exuma, and 1 to 2 inches across Providenciales and the Turks and Caicos Islands. The average wind speed for New Providence and Grand Bahama was about 10 knots, but the maximum wind speeds in gusts were 35 and 37 knots, respectively. Mariners, especially Small Craft Operators were asked to remain in or near the port. Mariners and beachgoers were advised of dangerous lightning, waterspout activity, and the high risk of rip currents and rough surf. Residents were advised of the possibility of flooding in flood-prone or low-lying areas during heavy downpours or prolonged rainfall activity. Motorists and pedestrians on some islands were advised to use extreme caution when traversing coastal roads, as the likelihood of sea spray and overtopping waves could make the area unsafe. The high temperature ranged from the mid 70's to upper 80's°F, and the low temperature from the mid 50's to upper 70's°F across the Bahamas.

A cold front brought unsettled weather across the Central Bahamas as a second reinforcing front pushed into the Northwest Bahamas with little fanfare on Sunday. On Monday, the 25th of March, the second cold front entered the Southeast Bahamas and caught up to the first front as they exited the area ahead of a high pressure system building across the islands in its wake. At the same time, a low pressure system in the western Atlantic Ocean generated north and northeasterly swells over the area. Residents in the Southeast Bahamas were advised of the possibility of heavy rain that could lead to localized flooding in low-lying and flood-prone areas. Hazardous marine conditions existed throughout the Bahamas due to strong to severe thunderstorms, locally heavy rainfall, and the threat of waterspout or tornadic activity that lasted through mid-week, especially in the Southeast Bahamas. Beachgoers were urged to remain onshore due to moderate to large north to northeasterly swells, dangerous rip currents, and high surf along north and east coast beaches or Atlantic exposures. The BDM issued Gale Warnings for the Extreme Northwest Bahamas, (Grand Bahama, Abaco, and Bimini) on Thursday until Friday morning, as the ridge weakened with the movement of a cold front into the Northwest Bahamas that tightened gradients. The BDM, at that point, issued warnings for motorists and pedestrians to exercise extreme caution when traversing the Glass Window Bridge and areas of the Queen's Bath in Eleuthera due to the overtopping waves, inundation of seawater, and sea spray affecting parts of the island. By Friday night, the cold front continued through the Central and Southeast Bahamas as a rebuilding high pressure system supported mild and pleasant conditions through Monday. The high temperature ranged from the mid 70's to mid 80's°F, and the low temperature from the mid 50's to upper 70's°F across the Bahamas.

General Weather Situation over New Providence for March 2024

The mean maximum daytime temperature (77.6°F) fell 2.3°F below the normal average, and the mean minimum nighttime temperature (64.8°F) fell 0.5°F below the normal average. The total rainfall was 2.28 inches, 0.38 inches above the mean average. The monthly mean relative humidity (70.1 percent) was 6.9 percent below the long-term mean. The daily average sunshine hours (8.0) was 0.3 of an hour below the 30-year norm. Wind speed averaged 7.5 knots, precisely the same as the average. The wind direction blew from the east to southeast across the Bahamas. The standard deviation for the month was 1.960°C, 0.060°C below the norm.

Geoffrey Greene



For (Director)

Supplementary

BDM – Bahamas Department of Meteorology

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