

Commonwealth of The Bahamas

DEPARTMENT OF METEOROLOGY

GROKED ISLAND

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WEATHER LOG FEBRUARY 2024

GENERAL WEATHER SITUATION OVER THE BAHAMAS

A high pressure system replaced a fast-moving cold front as it exited the Southeast Bahamas. A weak high pressure system that provided a gentle breeze with mostly fair conditions developed in its wake. On Saturday, a complex series of low pressure systems over the southern United States brought unsettled weather across the Northwest Bahamas, which sometimes became severe. At 4 pm EST Saturday, 03rd February 2024, a Special Weather Statement was issued by the Bahamas Department of Meteorology (BDM) to inform the public of a developing deep low pressure system in the northern Gulf of Mexico that as it moved toward the Florida Panhandle produced unsettled weather with heavy to severe thunderstorms, damaging gusty winds, rough seas, heavy torrential rainfall, and the elevated risk of a waterspout or tornadic activity. The norm was partly to variably cloudy skies with a gentle breeze except for the occasional light shower. Small Craft Operators were warned to exercise extreme caution due to a nearby Atlantic low pressure system that produced moderate to large sea swells across the Bahamas. Small craft operators and beachgoers were urged to exercise caution when handling rough surf and rip currents along Atlantic-exposed shorelines. Motorists and pedestrians were advised to be cautious of sea spray and crashing waves along exposed Atlantic coastal roadways. The high temperature ranged from the low 70's to the low 80's°F, and the low temperature from the mid 50's to low 70's F across the Bahamas.

A complex series of low pressure systems and their accompanying cold fronts shifted from the Gulf of Mexico across Florida and through parts of the Northwest and Central Bahamas during the week of the 04th through the 10th of February. The BDM issued two Special Weather Statements at 2:00 pm and 9:00 pm EST on Monday, 05th February 2024, advising the public and mariners to pay close attention to future updates on the deep low pressure system in the northern Gulf of Mexico. Thirteen Severe Thunderstorm Warnings and nine Severe Thunderstorm Watches were issued for the Northwest and Central Bahama Islands. The system threatened the area with possible waterspout or tornadic activity, localized flooding from heavy downpours and prolonged rainfall. Small craft operators were advised to remain onshore and secure their boats for the anticipated gale-force winds and hazardous seas. Residents, especially beachgoers, were advised to stay onshore due to dangerous rip currents and rough surf. They were to prepare their homes against possible flooding along coastal roadways and in low-lying and floodprone areas. A Gale Warning was issued for the entire Bahamas from noon Monday, 05th February 2024. Motorists and pedestrians were advised to exercise caution while traversing northern and eastern coastal roads due to possible severe coastal erosion, sea spray, overtopping waves and wind-blown sand. Gale warnings kept Small Craft Operators onshore through Wednesday afternoon, as seas were 8 to 12 feet near shore but built up to 18 feet in northerly through easterly swells across Atlantic exposures. On Thursday through Saturday, the marine conditions gradually improved from Small Craft Operators should remain in the port to a Small Craft Advisory and eventually to a Small Craft Caution for Small Craft Operators in local waters. The high temperature ranged from the low 70's to upper 80's F, and the low temperature from the mid 50's to low 70's F across the Bahamas.

A ridge of high pressure dominated the weather conditions across the Bahamas during the first few days of the week (11th – 17th February). By Tuesday, a weak cold front moved across the Extreme Northwest Bahamas as high pressure ridge retreated east of the islands. There was a slight chance of isolated waterspout activity along the frontal zone, and Small Craft Operators were advised to exercise caution in the Atlantic exposed waters due to lingering sea swells. Beachgoers were urged to be vigilant for the

risk of rip currents along east and south coast beaches. On Wednesday, the weak front continued to move through the Central Bahamas and produced a few isolated showers as it entered the Southeast Bahamas. A ridge of high pressure produced fair and stable conditions as the dissipating front in the Southeast Bahamas produced light to moderate showers in the area. A pre-frontal trough produced showers and isolated thunderstorms across parts of the Northwest and Central Bahamas ahead of a cold front moving southeastwards over South Florida. Mariners and beachgoers were again urged to exercise caution due to the risks of rip currents and se swells along northeast and east coast beaches. The BDM issued warnings for Small Craft Operators as necessary. The high temperature ranged from the mid 70's to upper 80's F and the low temperature from the upper 50's to upper 70's F across the Bahamas.

During the week of the 18th through the 24th of February, a low pressure system developed along a cold front and moved eastward across the area while dragging a cold front with its unsettled weather across the Northwest Bahamas. By Monday, the pre-frontal activity had moved across the Central Bahamas, and a slow-moving frontal boundary produced widespread convection and fresh to strong breezes as it entered the Northwest Bahamas. Small Craft Operators were urged to remain in the port for the Northwest and Central Bahamas, and beachgoers were encouraged to stay onshore due to the high risk of rip currents and dangerous surf conditions. Residents were advised that the system could cause flooding in low-lying and flood-prone areas later on Monday. As the cold front reached the Southeast Bahamas, marine conditions relaxed to a small craft caution with high pressure ridge providing more stable and milder conditions in the Northwest and Central Bahamas. The departure of the front from the Southeast Bahamas was replaced by a surface trough across the Northwest and Central Bahamas that sparked some convective activity. Warnings were reissued for the high risk of rip currents, rough surf and swells across the Bahamas as a low pressure system developed east of the area. Motorists and pedestrians were advised to exercise caution while traversing northern and eastern coastal roads due to possible severe coastal erosion, sea spray, overtopping waves and wind-blown sand. Small Craft Advisory was in effect for Atlantic exposures for most of the period, but a Small Craft Caution occurred on Friday for local seas. High pressure ridge shifted east of the Bahamas into the Atlantic waters as a fast-moving cold front moved through the Northwest and Central Bahamas with some isolated showers and thunderstorms. The high temperature ranged from the lower 70's to upper 80's F, and the low temperature from the upper 50's to low 70's F across the Bahamas.

The last days in February, from the 25th through the 29th, had a cold front that affected the Southeast Bahamas, with unsettled weather as it trekked south of the area on Sunday night. High pressure ridge built across the Bahamas as lingering swells and the moderate risk of rip currents continued along the northeast and east coast beaches or Atlantic exposures. Small craft caution was issued for the Northwest and Central Bahamas, while a Small Craft Advisory was issued for the Southeast Bahamas on Wednesday, but later downgraded for the Central and Southeast Bahamas through Thursday. The high temperature ranged from the lower 70's to mid 80's F and the low temperature from the mid 50's to mid 70's F across the Bahamas.

General Weather Situation over New Providence for February 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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