

High Frequency (HF) Voice Broadcasts – VOBRA

Purpose

The U.S. Coast Guard provides basic weather information from the National Weather Service in the form of routine [High Frequency voice broadcasts](#) (also known as "VOBRA") in order to provide service to vessels operating in areas beyond the range of coastal NOAA Weather Radio stations. This information is prepared cooperatively by the [Ocean Prediction Center](#), [National Hurricane Center](#) and [Honolulu Forecast Office](#).

Content

There are two Offshore Waters Forecast provided by the NHC/TAFB. The MIAOFFNT3 (WMO header FZNT23 KNHC) covers the Caribbean Sea, and portions of the Atlantic Ocean south of 31° North and west of 55° West. The MIAOFFNT4 (WMO header FZNT24 KNHC) encompasses the Gulf of Mexico.

The two VOBRA forecasts provide mariners with a general overview of large scale environmental marine conditions out five days, to include winds, seas, and major weather impacts. Marine warnings such as gale warnings or warnings for tropical storms or hurricanes will be headlined for each affected zone through the first 36 hours of the forecast period. In addition, brief, plain-language synopses are included in the forecast for the Gulf of Mexico, the Caribbean Sea and Tropical Atlantic, and the Southwest North Atlantic areas.

Winds represent predominant conditions at 10 meters above the surface of the water. Wind direction is described by the eight points of the compass.

Sea state is described in terms of "significant wave height" which is defined in the NWS Glossary as "the mean or average height of the highest one third of all waves in a swell train or in a wave generating region. It approximates the value an experienced observer would report if visually estimating sea height." Seas will typically be expressed in terms of a range (e.g. 2 to 4 ft). This is to represent uncertainty in the forecast, especially considering the large areas of each marine zone. *In fact, it is important to emphasize that there is a broad spectrum of wave heights at any given time in any part of the ocean, and individual wave heights may be twice the significant wave height.* Unlike the Offshore Waters Forecasts, the VOBRA forecasts do not include swell information. This is due the limited broadcast times available.

The VOBRA forecasts also include weather impacts whenever they are expected to pose a danger to navigation. This may be in the form of widespread areas of fog, smoke, or volcanic ash that limit visibility, or large clusters of moderate to strong thunderstorms.

Coverage

TAFB issues two VOBRA text forecasts, as shown below with the following AWIPS/WMO headers:

| AWIPS/WMO Identifiers | Description of Area |
|--------------------------|---|
| FZNT31 KNHC/MIAOFFN20 | Caribbean Sea and portions of the Western Atlantic Ocean south of 31° North and west of 55°West |
| FZNT32 KNHC/MIAOFFN21 | Gulf of Mexico |

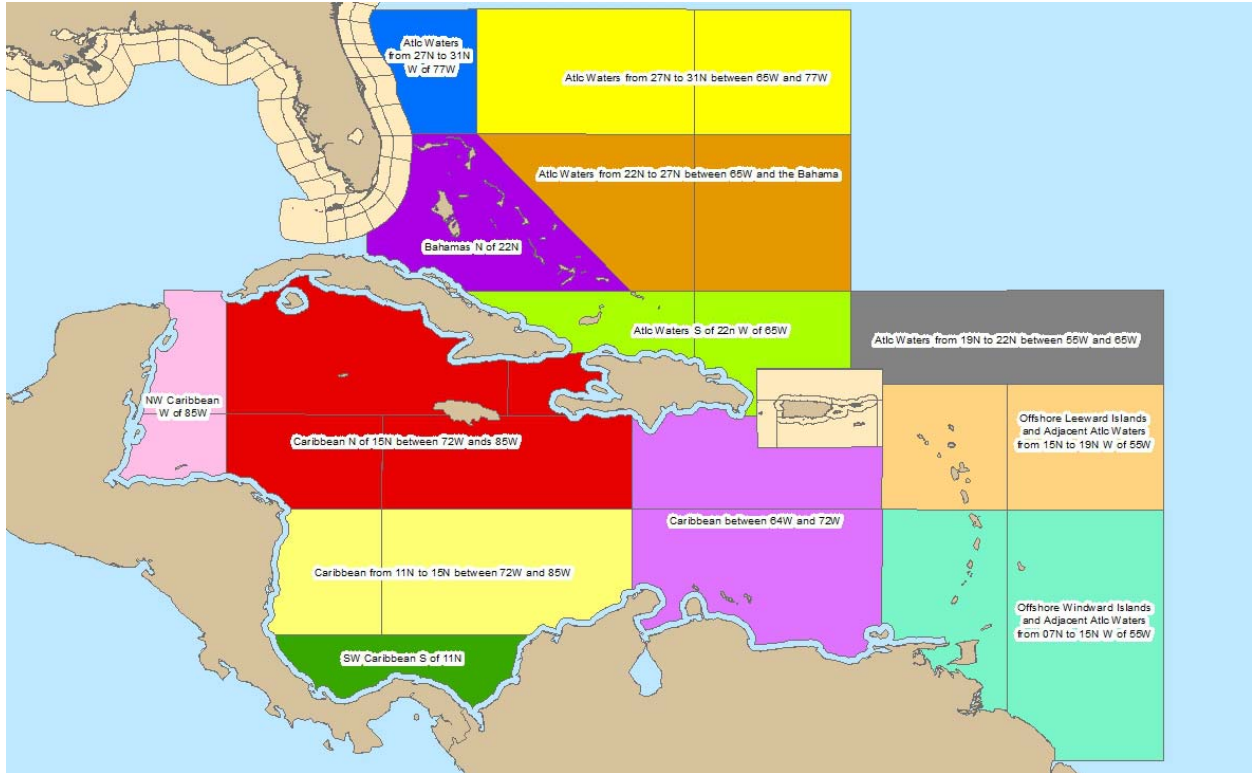
AWIPS Header MIAOFFN20 – WMO Header FZNT31 KNHC

Area of coverage: Caribbean Sea, Southwest North Atlantic (south of 31°North and west of 65° West) and the Tropical North Atlantic (from 07°North to 19°North west of 55°West) and includes the following combination of the offshore waters zones in the Caribbean Sea and Tropical North Atlantic Ocean

- NW Caribbean W of 85W
- Caribbean N of 15N between 72W and 85W
- Caribbean from 11N to 15N W of 70W
- SW Caribbean S of 11N
- Caribbean between 64W and 72W
- Offshore Leeward Islands and adjacent Atlantic waters from 15N to 19N W of 55W
- Offshore Windward Islands and adjacent Atlantic waters from 07N to 15N W of 55W

and the southwest North Atlantic

- Atlantic waters from 27N to 31N W of 77W
- Atlantic waters from 27N to 31N between 65W and 77W
- Bahamas N of 22N
- Atlantic waters from 22N to 27N between 65W and the Bahamas
- Atlantic waters S of 22N W of 65W
- Atlantic waters from 19N to 22N between 55W and 65W



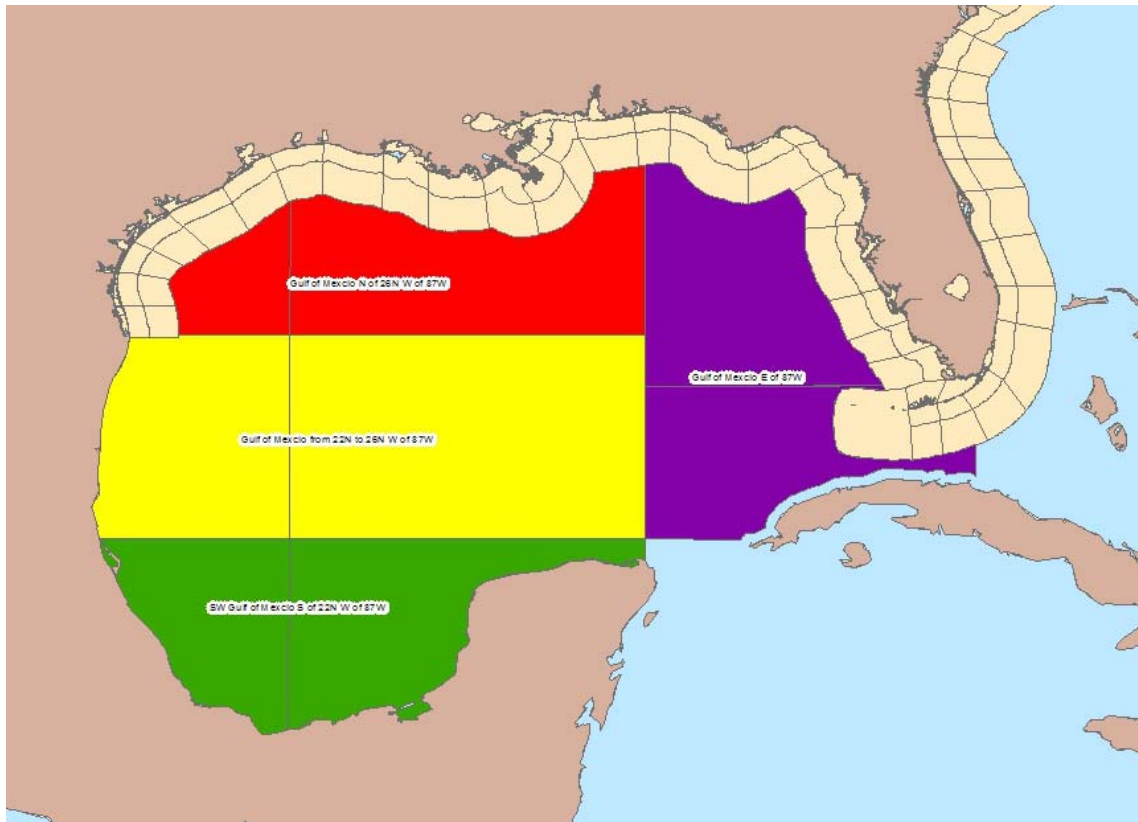
Combination of offshore zones for the MIAOFFN20 VOBRA text product

AWIPS Header MIAOFFN21 – WMO Header FZNT32 KNHC

Area of coverage: Gulf of Mexico and includes the following combination of the offshore waters zones in the Gulf of Mexico

Portions of Offshore Waters Forecasts parsed into the Broadcast:

- Gulf of Mexico N of 26N W of 87W
- Gulf of Mexico from 22N to 26N W of 87W
- Gulf of Mexico S of 22N W of 87W
- Gulf of Mexico E of 87W



Combination of offshore zones for the MIAOFFN21 VOBRA text product

Issuance/Transmission

The transmissions originate from six sites located around the country and the transmission range is dependent upon operating frequency, time of day and atmospheric conditions and can vary from only short distances to several thousand miles. Best reception can be achieved by proper selection of frequency and an adequate antenna system. [HF Voice Broadcasts](#) covering TAFB's marine area of responsibility are conducted by the USCG from transmitter sites in Chesapeake, VA, and (New Orleans) Belle Chase, LA. See tables below for station broadcast schedules.

HF Voice Broadcast Schedule (Times in UTC)

Zone forecast broadcast times indicated by orange shading. High Seas forecast broadcast times are unshaded.

Chesapeake (NMN)

| | | | | | | | | |
|------------------------------|------|------|------|------|------|------|------|------|
| 4426, 6501, 8764 kHz (USB) | 0330 | 0515 | 0930 | | | | | |
| 6501, 8764, 13089 kHz (USB) | | | | 1115 | 1530 | | 2130 | 2315 |
| 8764, 13089, 17314 kHz (USB) | | | | | | 1715 | | |

New Orleans (NMG)

| | | | | | | | | |
|-----------------------------|------|------|------|------|------|------|------|------|
| 4316, 8502, 12788 kHz (USB) | 0330 | 0515 | 0930 | 1115 | 1530 | 1715 | 2130 | 2315 |
|-----------------------------|------|------|------|------|------|------|------|------|