

**TEST TEST TEST - - - THIS IS AN EXERCISE - - - TEST TEST TEST
TEST TEST TEST --- THERE IS NO ACTUAL TSUNAMI - - - TEST TEST TEST**

BULLETIN

TSUNAMI MESSAGE NUMBER 4

NWS WEST COAST/ALASKA TSUNAMI WARNING CENTER PALMER AK

1031 AM AST WED MAR 23 2011

THIS MESSAGE CONTAINS UPDATED TSUNAMI OBSERVATIONS AND
DAMAGE INFORMATION.

...THE TSUNAMI WARNING CONTINUES IN EFFECT FOR PUERTO RICO
AND THE VIRGIN ISLANDS...

...A TSUNAMI ADVISORY CONTINUES IN EFFECT FOR COASTAL
AREAS OF FLORIDA - GEORGIA AND SOUTH CAROLINA FROM
FLAMINGO FLORIDA TO SOUTH SANTEE RIVER SOUTH CAROLINA...

...THIS MESSAGE IS INFORMATION ONLY FOR COASTAL AREAS OF
TEXAS - LOUISIANA - MISSISSIPPI - ALABAMA - NORTH CAROLINA
- VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK
- CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE
- MAINE - NEW BRUNSWICK - NOVA SCOTIA - NEWFOUNDLAND AND
LABRADOR FROM BROWNSVILLE TEXAS TO CAPE CHIDLEY LABRADOR...

RECOMMENDED ACTIONS

A TSUNAMI HAS BEEN GENERATED WHICH IS EXPECTED TO DAMAGE THE
WARNING REGIONS LISTED IN THE HEADLINE. PERSONS IN LOW-LYING
COASTAL AREAS SHOULD BE ALERT TO INSTRUCTIONS FROM THEIR LOCAL
EMERGENCY OFFICIALS. EVACUATIONS ARE ONLY ORDERED BY EMERGENCY
RESPONSE AGENCIES.
- PERSONS IN TSUNAMI WARNING COASTAL AREAS SHOULD MOVE INLAND TO
HIGHER GROUND.

- PERSONS IN TSUNAMI ADVISORY AREAS SHOULD MOVE OUT OF THE
WATER... OFF THE BEACH AND OUT OF HARBORS AND MARINAS.

A TSUNAMI HAS BEEN OBSERVED AT THE FOLLOWING SITES

| LOCATION | LAT | LON | TIME | AMPL |
|---------------------|-------|-------|----------|-----------------|
| CHRISTIANSTED VI | 17.7N | 64.7W | 906 AST | 8.23 FT/2.51 M |
| LIMETREE BAY VI | 17.6N | 64.6W | 909 AST | 15.41 FT/4.70 M |
| LAMESHUR BAY VI | 18.3N | 64.7W | 918 AST | 9.37 FT/2.86 M |
| VIRGIN GORDA BVI | 18.5N | 64.5W | 919 AST | 4.59 FT/1.40 M |
| CULEBRA PR | 18.3N | 65.3W | 921 AST | 6.79 FT/2.07 M |
| CHARLOTTE AMALIE VI | 18.4N | 64.9W | 945 AST | 8.27 FT/2.52 M |
| MONA ISLAND PR | 18.1N | 67.9W | 948 AST | 0.85 FT/0.26 M |
| MAGUEYES ISLAND PR | 18.2N | 67.2W | 951 AST | 2.48 FT/0.76 M |
| SAN JUAN PR | 18.5N | 66.1W | 1005 AST | 1.94 FT/0.59 M |
| MAYAGUEZ PR | 18.2N | 67.1W | 1008 AST | 0.66 FT/0.20 M |
| AGUADILLA PR | 18.4N | 67.1W | 1027 AST | 4.82 FT/1.47 M |

TIME - TIME OF MEASUREMENT

AMPL - TSUNAMI AMPLITUDES ARE MEASURED RELATIVE TO NORMAL SEA LEVEL.

IT IS ...NOT... CREST-TO-TROUGH WAVE HEIGHT.

VALUES ARE GIVEN IN BOTH METERS(M) AND FEET(FT).

A 15.0-FOOT/4.6-METER TSUNAMI IN LIMETREE BAY VI HAS TORN BOARDS
FROM A PIER AND PUSHED THREE BOATS ASHORE. TWO PEOPLE ARE
REPORTED DEAD FROM DROWNING IN CHRISTIANSTED VI AND TWO SEASIDE
HOMES IN LAMESHUR BAY VI HAVE BEEN TORN FROM THE FOUNDATIONS.

TSUNAMI AMPLITUDES ARE EXPECTED TO REACH 0.3 TO 0.5 METERS IN SOME REGIONS UNDER ADVISORY. TSUNAMIS OF THIS AMPLITUDE ARE ACCOMPANIED BY STRONG CURRENTS CAPABLE OF INFLECTING DAMAGE TO COASTAL STRUCTURES.

PRELIMINARY EARTHQUAKE PARAMETERS

MAGNITUDE - 7.6
TIME - 0900 EDT MAR 23 2011
0900 AST MAR 23 2011
0800 CDT MAR 23 2011
1300 UTC MAR 23 2011
LOCATION - 18.2 NORTH 65.3 WEST
25 MILES/40 KM SE OF FAJARDO PUERTO RICO
60 MILES/97 KM SE OF SAN JUAN PUERTO RICO
DEPTH - 56 MILES/90 KM

TSUNAMI WARNINGS MEAN THAT A TSUNAMI WITH SIGNIFICANT WIDESPREAD INUNDATION IS IMMINENT OR EXPECTED. WARNINGS INDICATE THAT WIDESPREAD DANGEROUS COASTAL FLOODING ACCOMPANIED BY POWERFUL CURRENTS IS POSSIBLE AND MAY CONTINUE FOR SEVERAL HOURS AFTER THE INITIAL WAVE ARRIVAL.

TSUNAMI ADVISORIES MEAN THAT A TSUNAMI CAPABLE OF PRODUCING STRONG CURRENTS OR WAVES DANGEROUS TO PERSONS IN OR VERY NEAR THE WATER IS IMMINENT OR EXPECTED. SIGNIFICANT WIDESPREAD INUNDATION IS NOT EXPECTED FOR AREAS UNDER AN ADVISORY. CURRENTS MAY BE HAZARDOUS TO SWIMMERS... BOATS... AND COASTAL STRUCTURES AND MAY CONTINUE FOR SEVERAL HOURS AFTER THE INITIAL WAVE ARRIVAL.

CARIBBEAN COASTAL REGIONS OUTSIDE PUERTO RICO AND THE VIRGIN ISLANDS SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES FOR INFORMATION ON THIS EVENT AT WWW.PRH.NOAA.GOV/PR/PTWC.

THIS MESSAGE IS BASED ON EARTHQUAKE DATA... OBSERVED TSUNAMI AMPLITUDES... HISTORICAL INFORMATION AND FORECAST MODELS.

THIS MESSAGE WILL BE UPDATED IN 30 MINUTES OR SOONER IF THE SITUATION WARRANTS. THE TSUNAMI WARNING WILL REMAIN IN EFFECT UNTIL FURTHER NOTICE. REFER TO THE INTERNET SITE WCATWC.ARH.NOAA.GOV FOR MORE INFORMATION.

AMZ712-715-725-735-742-745-PRZ001>003-005-007-008-010-011-
VIZ001-002-231531-
/T.CON.PAAQ.TS.W.0003.000000T0000Z-000000T0000Z/
COASTAL AREAS OF PUERTO RICO AND THE VIRGIN ISLANDS.
1031 AM AST WED MAR 23 2011

...THE TSUNAMI WARNING CONTINUES IN EFFECT FOR PUERTO RICO AND THE VIRGIN ISLANDS...

PERSONS IN TSUNAMI WARNING COASTAL AREAS SHOULD MOVE INLAND TO HIGHER GROUND.

TSUNAMI WARNINGS MEAN THAT A TSUNAMI WITH SIGNIFICANT WIDESPREAD INUNDATION IS IMMINENT OR EXPECTED. TSUNAMIS ARE A SERIES OF WAVES POTENTIALLY DANGEROUS SEVERAL HOURS AFTER INITIAL ARRIVAL TIME. ESTIMATED TIMES OF INITIAL WAVE ARRIVAL FOR SELECTED SITES IN THE WARNING ARE PROVIDED BELOW.

SAN JUAN-PR 0945 AST MAR 23 CHARLOT AMALI-VI 0955 AST MAR 23
MAYAGUEZ-PR 0952 AST MAR 23
FOR ARRIVAL TIMES AT ADDITIONAL LOCATIONS SEE
WCATWC.ARH.NOAA.GOV

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GMZ032-075-052>054-AMZ630-650-651-550-552-555-450-452-454-
330-350-352-354-FLZ174-076>078168-172-173-047-054-059-064-141-
147-024-025-033-038-GAZ154-166-117-119-139-141-SCZ048>050-
051-231531-
COASTAL AREAS FROM FLAMINGO FLORIDA TO SOUTH SANTEE RIVER SOUTH
CAROLINA
1031 AM AST WED MAR 23 2011

...A TSUNAMI ADVISORY REMAINS IN EFFECT FOR THE COASTAL AREAS
OF FLORIDA - GEORGIA - SOUTH CAROLINA FROM FLAMINGO
FLORIDA TO SOUTH SANTEE RIVER SOUTH CAROLINA...

TSUNAMI ADVISORIES MEAN THAT A TSUNAMI CAPABLE OF PRODUCING
STRONG CURRENTS OR WAVES DANGEROUS TO PERSONS IN OR VERY NEAR
WATER IS IMMINENT OR EXPECTED. SIGNIFICANT WIDESPREAD INUNDATION
IS NOT EXPECTED FOR AREAS IN AN ADVISORY. TSUNAMIS ARE A SERIES OF
WAVES POTENTIALLY DANGEROUS SEVERAL HOURS AFTER INITIAL ARRIVAL
TIME. ESTIMATED TIMES OF INITIAL WAVE ARRIVAL FOR SELECTED
SITES IN THE ADVISORY ARE PROVIDED BELOW.

| | | | |
|-------------------|-----------------|------------------|-----------------|
| MYRTLE BEACH-SC | 1202 EDT MAR 23 | FLAGLER BEACH-FL | 1413 EDT MAR 23 |
| VIRGINIA KEY-FL | 1217 EDT MAR 23 | SUNSET BEACH-NC | 1424 EDT MAR 23 |
| PORT CANAVERAL-FL | 1329 EDT MAR 23 | | |

FOR ARRIVAL TIMES AT ADDITIONAL LOCATIONS SEE
WCATWC.ARH.NOAA.GOV

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**SPECIAL WEATHER STATEMENT
NATIONAL WEATHER SERVICE MELBOURNE FL
1040 AM EDT WED MAR 23 2011**

AMZ550-552-555-570-572-575-FLZ047-054-059-064-141-147-231540-
COASTAL WATERS FROM FLAGLER BEACH TO VOLUSIA BREVARD COUNTY LINE
OUT 20 NM-
COASTAL WATERS FROM VOLUSIA BREVARD COUNTY LINE TO SEBASTIAN
INLET OUT 20 NM-
COASTAL WATERS FROM SEBASTIAN INLET TO JUPITER INLET OUT 20 NM-
WATERS FROM FLAGLER BEACH TO VOLUSIA BREVARD COUNTY LINE 20 TO
60 NM OFFSHORE-
WATERS FROM VOLUSIA BREVARD COUNTY LINE TO SEBASTIAN INLET 20 TO
60 NM OFFSHORE-
WATERS FROM SEBASTIAN INLET TO JUPITER INLET 20 TO 60 NM OFFSHORE-
SOUTHERN BREVARD-INDIAN RIVER-ST. LUCIE-MARTIN-COASTAL VOLUSIA-
NORTHERN BREVARD-
1040 AM EDT WED MAR 23 2011

...DRILL TSUNAMI ADVISORY IN EFFECT...
...SMALL TSUNAMI WAVES ALONG WITH STRONG AND DANGEROUS CURRENTS EXPECTED...
...LOCAL ACTION STATEMENT FOLLOWS...

A STRONG EARTHQUAKE NORTHEAST OF PUERTO RICO HAS CREATED A TSUNAMI. WHILE THE GREATEST IMPACT WILL REMAIN OVER THE CARIBBEAN...SMALL TSUNAMI WAVES ALONG WITH STRONG AND DANGEROUS CURRENTS ARE EXPECTED TO IMPACT THE EAST CENTRAL FLORIDA COAST. A DRILL TSUNAMI ADVISORY IS IN EFFECT FOR THE U.S. EAST COAST...INCLUDING COASTAL AREAS OF VOLUSIA...BREVARD...INDIAN RIVER...ST. LUCIE AND MARTIN COUNTIES. STRONG CURRENTS OR WAVES WILL PRESENT A DANGER TO PERSONS IN OR VERY NEAR THE WATER. SIGNIFICANT WIDESPEAD INUNDATION IS NOT EXPECTED. TSUNAMIS ARE A SERIES OF WAVES POTENTIALLY DANGEROUS FOR SEVERAL HOURS AFTER INITIAL ARRIVAL TIME. BEACHES SHOULD BE EVACUATED...HOWEVER COASTAL RESIDENCES AND BUSINESSES SHOULD NOT BE IMPACTED.

THE FIRST WAVE IS ESTIMATED TO ARRIVE ALONG THE EAST CENTRAL FLORIDA COAST...AT JUPITER INLET AT 1220 PM...PORT CANVERAL AT 129 PM...MELBOURNE AT 147 PM...AND FLAGLER BEACH AT 213 PM. UNUSUAL WAVE ACTION IS POSSIBLE FOR SEVERAL HOURS AFTER ARRIVAL OF THE FIRST TSUNAMI WAVE. TSUNAMI WAVES WILL VARY IN HEIGHT ALONG THE COAST DUE TO LOCAL COASTLINE CONFIGURATION AND THE SLOPE OF THE OCEAN FLOOR. FORECAST MODEL DATA INDICATES WAVE HEIGHTS OF 1.5 FEET AT PORT CANAVERAL AND 1.6 FEET AT FLAGLER BEACH. TSUNAMI WAVES ARE MUCH MORE POWERFUL THAN WIND GENERATED WAVES AND MAY SPREAD TO THE DUNE LINE IN SOME LOCATIONS. STRONG AND DANGEROUS CURRENTS WILL BE THE GREATEST HAZARD. TSUNAMI WAVES OF ONLY 1.5 FEET CAN CAUSE DAMAGE DUE TO THE STRONG CURRENTS.

EMERGENCY MANAGEMENT OFFICIALS ADVISE ALL RESIDENTS AND VISITORS TO EVACUATE AREA BEACHES AND TO REMAIN INLAND OF THE DUNE LINE UNTIL FURTHER NOTICE. TSUNAMI WAVES ARE NOT EXPECTED TO REACH STRUCTURES ALONG THE BEACH...BUT BEACHES SHOULD REMAIN EVACUATED DUE TO THE LIKELIHOOD OF STRONG AND DANGEROUS CURRENTS. LISTEN TO SPECIFIC ADVICE FROM LOCAL EMERGENCY MANAGEMENT OFFICIALS.

TSUNAMI WAVES ARE AMPLIFIED AS THEY ENTER INLETS...HARBORS...AND PORTS.
BOATERS SHOULD PREPARE FOR SURGES WITHIN PONCE INLET...PORT CANAVERAL...
SEBASTIAN INLET...FT. PIERCE INLET...ST. LUCIE INLET...AND JUPITER INLET.
DEBRIS MOVING WITHIN STRONG CURRENTS CAN CAUSE DAMAGE TO DOCKS AND BOAT
HOUSES.

STAY TUNED TO NOAA WEATHER RADIO AND YOUR LOCAL MEDIA FOR FURTHER UPDATES.
THIS STATEMENT WILL BE UPDATED AS ADDITIONAL INFORMATION BECOMES AVAILABLE
FROM THE ALASKA TSUNAMI WARNING CENTER.

THIS IS A TSUNAMI DRILL...A REAL TSUNAMI HAS NOT OCCURRED. THIS IS A TSUNAMI
DRILL.

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EXERCISE