

NATIONAL WEATHER SERVICE INSTRUCTION 10-605

JUNE 1, 2008

Operations and Services

Tropical Cyclone Weather Services Program, NWSPD 10-6

**TROPICAL CYCLONE OFFICIAL DEFINING POINTS AND GEOGRAPHIC
DEFINING POINTS**

NOTICE: This publication is available at: <http://www.nws.noaa.gov/directives/>.

OPR: W/OS21 (S. Kiser)

Certified by: W/OS21 (T. Pierce)

Type of Issuance: Routine

SUMMARY OF REVISIONS: This directive supersedes NWS Instruction 10-605 dated June 1, 2007. The following breakpoint revisions were made to this manual:

Addition of breakpoints for:

WFO Houston
Port Bolivar, TX
WFO Tallahassee, FL
Walton/Bay County Line, FL
Mexico Beach, FL
WFO Melbourne, FL
Volusia/Brevard County Line, FL
WFO Taunton, MA
Block Island, RI
Martha's Vineyard, MA
Nantucket, MA
Sagamore Beach, MA
Provincetown, MA
Hull, MA
WFO Portland, ME
Port Clyde, ME
Cape Elizabeth, ME

Deletion of breakpoints for:

WFO Key West, FL
Key Largo, FL
Melbourne, FL
Titusville, FL
Portland, ME
Portland, ME
Rockland, ME

Addition of WFO Guam's tropical cyclone watch/warning points

Signed by David B. Caldwell

May 22, 2008

David B. Caldwell

Date

Director, Office of Climate,
Water, and Weather Services

**OFFICIAL DEFINING POINTS FOR TROPICAL CYCLONE
WATCHES AND WARNINGS**

La Pesca, MX.....	23.76°N	.....	97.78°W
Rio San Fernando, MX.....	25.00°N	.....	97.60°W
Brownsville, TX			
Brownsville, TX.....	26.05°N	.....	97.17°W
Port Mansfield, TX.....	26.59°N	.....	97.29°W
Baffin Bay, TX.....	27.29°N	.....	97.37°W
Corpus Christi, TX			
Baffin Bay, TX.....	27.29°N	.....	97.37°W
Corpus Christi, TX.....	27.67°N	.....	97.19°W
Port Aransas, TX.....	27.83°N	.....	97.07°W
Port O'Connor, TX.....	28.39°N	.....	96.41°W
Houston, TX			
Port O'Connor, TX.....	28.39°N	.....	96.41°W
Matagorda, TX.....	28.63°N	.....	95.93°W
Sargent, TX.....	28.77°N	.....	95.60°W
Freeport, TX.....	28.93°N	.....	95.33°W
San Luis Pass, TX.....	29.07°N	.....	95.13°W
Point Bolivar, TX.....	29.38°N	.....	94.76°W
High Island, TX.....	29.54°N	.....	94.39°W
Lake Charles, LA			
High Island, TX.....	29.54°N	.....	94.39°W
Sabine Pass, TX.....	29.69°N	.....	93.84°W
Cameron, LA.....	29.78°N	.....	93.30°W
Intracoastal City, LA.....	29.62°N	.....	92.04°W
Morgan City, LA.....	29.48°N	.....	91.29°W
New Orleans, LA			
Morgan City, LA.....	29.48°N	.....	91.29°W
Grand Isle, LA.....	29.25°N	.....	89.96°W
Mouth of Mississippi River, LA.....	29.12°N	.....	89.10°W
Mouth of Pearl River, LA.....	30.15°N	.....	89.60°W
Pascagoula, MS.....	30.35°N	.....	88.55°W
MS/AL Border.....	30.40°N	.....	88.40°W
Mobile, AL			
MS/AL Border.....	30.40°N	.....	88.40°W
AL/FL Border.....	30.27°N	.....	87.55°W
Destin, FL.....	30.39°N	.....	86.50°W
Tallahassee, FL			
Destin, FL.....	30.39°N	.....	86.50°W
Walton/Bay County Line, FL.....	30.28°N	.....	85.98°W
Panama City, FL.....	30.12°N	.....	85.70°W
Mexico Beach, FL.....	29.93°N	.....	85.39°W
Indian Pass, FL.....	29.68°N	.....	85.27°W
Apalachicola, FL.....	29.73°N	.....	84.99°W

Ochlocknee River, FL.....	29.96°N	84.38°W
St. Marks, FL	30.10°N	84.20°W
Aucilla River, FL	30.04°N	83.92°W
Keaton Beach, FL	29.82°N	83.59°W
Steinhatchee River, FL.....	29.67°N	83.40°W
Suwannee River, FL.....	29.30°N	83.17°W

Tampa Bay, FL

Suwannee River, FL.....	29.30°N	83.17°W
Yankeetown, FL.....	29.03°N	82.75°W
Chassahowitzka, FL	28.70°N	82.65°W
Aripeka, FL.....	28.43°N	82.66°W
Anclote Key, FL	28.18°N	82.85°W
Tarpon Springs, FL	28.15°N	82.79°W
Anna Maria Island, FL	27.53°N	82.73°W
Middle of Longboat Key, FL	27.39°N	82.64°W
Englewood, FL	26.94°N	82.37°W
Boca Grande, FL	26.75°N	82.26°W
Bonita Beach, FL	26.32°N	81.84°W

Miami, FL (Gulf)

Bonita Beach, FL	26.32°N	81.84°W
Chokoloskee, FL.....	25.78°N	81.38°W
East Cape Sable, FL.....	25.12°N	81.08°W
Flamingo, FL.....	25.14°N	80.93°W

Key West, FL (Gulf)

Flamingo, FL.....	25.14°N	80.93°W
Dry Tortugas, FL	24.66°N	82.86°W
Key West, FL	24.55°N	81.81°W
Seven Mile Bridge, FL.....	24.70°N	81.15°W
Craig Key, FL	24.83°N	80.77°W
Card Sound Bridge, FL.....	25.29°N	80.37°W
Ocean Reef, FL	25.33°N	80.26°W

Miami, FL (Atlantic)

Ocean Reef, FL	25.33°N	80.26°W
Golden Beach, FL	25.97°N	80.12°W
Hallandale Beach, FL	25.99°N	80.12°W
Deerfield Beach, FL.....	26.32°N	80.07°W
Boca Raton, FL	26.36°N	80.07°W
Jupiter Inlet, FL.....	26.95°N	80.07°W

Melbourne, FL

Jupiter Inlet, FL.....	26.95°N	80.07°W
Stuart, FL	27.21°N	80.18°W
Fort Pierce, FL	27.46°N	80.28°W
Vero Beach, FL	27.65°N	80.35°W
Sebastian Inlet, FL	27.83°N	80.43°W
Cocoa Beach, FL.....	28.32°N	80.61°W
Volusia/Brevard County Line	28.79°N	80.73°W
New Smyrna Beach, FL.....	29.03°N	80.89°W
Flager Beach, FL.....	29.47°N	81.12°W

Jacksonville, FL

Flagler Beach, FL	29.47°N	.....	81.12°W
St. Augustine, FL	29.88°N	.....	81.27°W
Fernandina Beach, FL	30.66°N	.....	81.44°W
Altamaha Sound, GA	31.29°N	.....	81.29°W

Charleston, SC

Altamaha Sound, GA	31.29°N	.....	81.29°W
Savannah River, GA	32.03°N	.....	80.86°W
Edisto Beach, SC	32.49°N	.....	80.32°W
South Santee River, SC.....	33.12°N	.....	79.27°W

Wilmington, NC

South Santee River, SC	33.12°N	.....	79.27°W
Murrells Inlet, SC.....	33.56°N	.....	79.01°W
Little River Inlet, SC	33.85°N	.....	78.55°W
Cape Fear, NC	33.84°N	.....	77.96°W
Surf City, NC	34.44°N	.....	77.52°W

Morehead City, NC

Surf City, NC	34.44°N	.....	77.52°W
New River Inlet, NC	34.53°N	.....	77.34°W
Bogue Inlet, NC	34.64°N	.....	77.11°W
Cape Lookout, NC	34.60°N	.....	76.53°W
Ocracoke Inlet, NC	35.06°N	.....	76.00°W
Cape Hatteras, NC	35.22°N	.....	75.53°W
Oregon Inlet, NC	35.77°N	.....	75.53°W

(The inclusion of Pamlico and Albemarle Sounds, or portions of, should be on a case-by-case basis).

Currituck Beach Light, NC	36.38°N	75.83°W
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Wakefield, VA

Currituck Beach Light NC	36.38°N	75.83°W
(The inclusion of Currituck Sound, NC, should be on a case-by-case basis).			
NC/VA Border	36.55°N	.....	75.87°W
Cape Charles Light, VA	37.12°N	.....	75.90°W
Parramore Island, VA	37.52°N	.....	75.64°W
Chincoteague, VA	37.93°N	.....	75.32°W
Chesapeake Bay, New Point Comfort, VA	37.30°N	.....	76.28°W
Chesapeake Bay, Windmill Point, VA	37.61°N	.....	76.28°W
Chesapeake Bay, Smith Point, VA	37.89°N	.....	76.24°W

Sterling, VA

Chesapeake Bay, Smith Point, VA.....	37.89°N	.....	76.24°W
Tidal Potomac, Cobb Island, MD.....	38.26°N	.....	76.84°W
Tidal Potomac, Indian Head, MD	38.61°N	.....	77.15°W
Tidal Potomac,			

Key Bridge, MD	38.89°N	.....	77.07°W
Chesapeake Bay, Drum Point, MD	38.32°N	.....	76.42°W
Chesapeake Bay, North Beach, MD	38.70°N	.....	76.53°W
Chesapeake Bay, Sandy Point, MD.....	39.02°N	.....	76.40°W
Chesapeake Bay, Pooles Island, MD.....	39.29°N	.....	76.27°W

Mt. Holly, NJ

Cape Henlopen, DE	38.80°N	.....	75.09°W
Cape May, NJ.....	38.94°N	.....	74.90°W
Great Egg Inlet, NJ	39.29°N	.....	74.54°W
Little Egg Inlet, NJ	39.49°N	.....	74.31°W
Manasquan Inlet, NJ	40.10°N	.....	74.03°W
Delaware Bay north/south of Slaughter Beach, DE to	38.91°N	.....	75.30°W
East Point, NJ	39.19°N	.....	75.02°W
Sandy Hook, NJ	40.46°N	.....	74.00°W

New York City, NY

Sandy Hook, NJ	40.46°N	.....	74.00°W
Fire Island Inlet, LI, NY	40.63°N	.....	73.31°W
Moriches Inlet, LI, NY	40.77°N	.....	72.75°W
Montauk Point, LI, NY	41.07°N	.....	71.86°W
Port Jefferson Harbor, LI, NY	40.96°N	.....	73.08°W
New Haven, CT	41.30°N	.....	72.91°W
Watch Hill, RI	41.31°N	.....	71.86°W

Boston, MA

The inclusion of the following islands will be on a case by case basis:

Block Island, RI	41.16°N	.....	71.56°W
Martha's Vineyard, MA.....	41.38°N	.....	70.63°W
Nantucket, MA.....	41.27°N	.....	70.04°W
Watch Hill, RI	41.31°N	.....	71.86°W
Point Judith, RI	41.35°N	.....	71.49°W
Westport, MA	41.50°N	.....	71.11°W
Woods Hole, MA	41.52°N	.....	70.68°W
Chatham, MA	41.67°N	.....	69.95°W
Sagamore Beach, MA.....	41.80°N	.....	70.53°W
Plymouth, MA	41.98°N	.....	70.65°W
Provincetown, MA.....	42.06°N	.....	70.25°W
Hull, MA.....	42.30°N	.....	70.91°W
Gloucester, MA	42.58°N	.....	70.66°W
Merrimack River, MA	42.84°N	.....	70.82°W

Portland, ME

Merrimack River, MA	42.81°N	.....	70.82°W
Portsmouth, NH	43.05°N	.....	70.72°W
Cape Elizabeth, ME.....	43.56°N	.....	70.19°W
Port Clyde, ME	43.92°N	.....	69.25°W

Stonington, ME44.16°N.....68.64°W

Caribou, ME

Stonington, ME44.16°N.....68.67°W

Bar Harbor, ME44.39°N.....68.20°W

Eastport, ME44.92°N.....67.00°W

San Diego, CA

Mouth of Tijuana River, CA.....32.53°N.....117.12°W

San Mateo Point, CA33.38°N.....117.60°W

Mouth of San Gabriel River, CA.....33.75°N.....118.11°W

Los Angeles/Oxnard, CA

Mouth of San Gabriel River, CA33.75°N.....118.11°W

Point Mugu, CA34.11°N.....119.12°W

Point Conception, CA34.45°N.....120.45°W

Honolulu, HI

Northwest Hawaiian Islands

Nihoa..... 23.05°N 161.92°W

French Frigate Shoals 23.86°N 166.27°W

Maro Reef 25.33°N 170.50°W

Lisianski..... 26.08°N 174.00°W

Pearl and Hermes Atoll..... 27.83°N 175.83°W

Midway 28.02°N ... 177.37°W

Kure Atoll 28.42°N 178.33°W

WFO Guam Warning Area

Mariana Islands United States (CNMI-Commonwealth of the Northern Mariana Islands)

Agrihan 18.80°N 145.70°E

Saipan (CNMI) 15.20°N 145.80°E

Tinian (CNMI) 15.00°N 145.60°E

Rota (CNMI) 14.10°N 145.20°E

Guam 13.50°N 144.80°E

Republic of Palau

Sonsorol 5.30°N 132.20°E

Koror 7.30°N 134.40°E

Kayangel 8.10°N 134.70°E

Federated States of Micronesia

Ngulu (Yap State) 8.30°N 137.50°E

Yap 9.50°N 137.10°E

Ulithi (Yap State) 9.90°N 139.60°E

Fais (Yap State) 9.80°N 140.50°E

Fareulap (Yap State) 8.60°N 144.60°E

Woleai (Yap State) 7.40°N 143.90°E

Satawal (Yap State) 7.40°N 147.10°E

Puluwat Atoll (Chuuk State) 7.10°N 149.00°E

Ulul (Chuuk State)	8.60°N	149.70°E
Chuuk	7.50°N	151.90°E
Fananu (Chuuk State)	8.60°N	151.90°E
Losap (Chuuk State)	6.90°N	152.70°E
Lukunor (Chuuk State)	5.60°N	154.00°E
Nukuoro (Pohnpei State)	3.90°N	154.90°E
Sapwuafik (Pohnpei State)	5.90°N	157.40°E
Pakin (Pohnpei State)	7.00°N	157.90°E
Pohnpei	6.90°N	158.20°E
Mokil (Pohnpei State)	6.80°N	159.80°E
Pingelap Atoll (Pohnpei State)	6.20°N	160.70°E
Kosrae	5.30°N	163.00°E

Republic of the Marshall Islands

Enewetak Atoll	11.08°N	162.50°E
Ujae	8.90°N	165.80°E
Kwajalein	8.70°N	167.80°E
Ailinglaplap	7.50°N	168.90°E
Jaluit Atoll	5.90°N	169.60°E
Utirik	11.20°N	169.60°E
Wotje Atoll	9.30°N	170.20°E
Majuro	7.10°N	171.20°E
Mili Atoll	6.10°N	171.90°E

A listing of international breakpoints can be found at:
http://www.nhc.noaa.gov/breakpoints_list.shtml

GEOGRAPHICAL DEFINING POINTS AND PHONETIC PRONUNCIATIONS

Abaco	AB-a-KO	Exuma	ek-SOO-ma
Abrejos	aahbray-oh-hoes		
Amalie	a-MAHL-ye	Flores	FLO-rish
Angel	aan-hel	Fort de France	for-de-FRAHCS
Anguilla	ang-GWIL-a		
Antigua	an-TEE-ga	Galera	gaa-lehra
Arena	aah-ray-nah	Grenada	gre-NAY-dah
Arista	ah-ree-staa	Guadaloupe	GWAH-deh-loop
Aruba	ah-ROO-ba	Guasave	gwaa-saa-ve
Antilles	an-TILL-leez	Guaymas	gwhy-maahs
Azores	uh-ZOHRZ		
		Huatulco	whaa-tool-coe
Bahia	ba-e-yuh		
Ballenas	ba-yaynas	Islas	eeslas
Barahona	ba-ra-HO-na		
Barbados	bar-BAY-dohz	Jalisco	ha-lee-sco
Barbuda	bar-BOO-dah	Juanico	whaa-nee-coe
Barra	baa-rra		
Barranquilla	Bahr-rah-n-KEE-yah	Lazaro	laasa-roe
Basse-Terre	baha-TER	Loreto	lo-ae-toe
Bimini	BIM-I-ni	Leeward	LEE-werd
Bonaire	ba-NAIR		
Burros	bhoorroes	Manzanillo	manza-nee-oh
		Maracaibo	mar-a-KYE-boh
Cap	Haitien kahp ah-ee-SYAN	Maracay	mah-rah-KYE
Caracas	kah-RAH-kahs	Marigot	ma-ree-GOH
Cardenas	car-denaass	Mateo	muh-ta-yo
Caribbean	kar-a-BE-an	Mayaguez	may-yah-GWAYS
Castries	KAS-tree	Medano	may-daa-no
Cayman	kay-MAHN	Melaque	may-laa-kay
Champerico	chaam-per-e-coe	Merida	MAY-re-thah
Charlotte		Mochis	mo-chees
Colima	coleema	Montego	mon-TEE-go
Corrientes	cor-re-ehn-tays	Montserrat	mont-se-RAT
Cozumel	koh-soo-MEL	Mugu	muhgu
Curacao	koor-a-SOH	Mulege	moo-lay-hay
Cuyutlan	coo-yootlaan		
		Nicaragua	nik-a-RAH-gwah
Dominica	dom-I-NEE-ka		
		Ocho Rios	OH-cho REE-os
Eleuthera	el-OO-thera	Oranjestad	o-RAHN-yuh-stat
Escondido	es-cond-dee-dow		
Eugenia	ayuh-hen-yuh	Paramaribo	par-a-MAR-I-boh

Parguera	par-GWER-a	Surinam	SOOR-I-nam
Penasco	pen-yaas-co	Tampico	tam-PEE-ko
Pointe-a-Pitre	pwan-ta-PEE-tr	Tehuantepec	te-whaan-te-pec
Ponce	PON-sa	Tela	TAY-lah
Port-au-Prince	port-oh-PRINS	Tobago	to-BAY-go
Punta	poonta	Todos	todohs
Revillagigedo	ray-veeaheehaydo	Tomas	tow-maas
Saba	SAH-ba	Tonala	ton-aahla
Sao Miguel	soun ME-gel	Tosca	toesca
Sipacate	see-paa-caa-tay	Vallarta	vah-yar-ta
St Croix	ST croy	Yavaros	yaa-vaa-roce
St Lucia	ST LOO-she-a	Yucatan	yoo-ka-TAN
Soufriere	soo-free-AR	Zihuatanejo	zeeh-whaa-tanay-ho