

APPENDIX B

DEFINING POINTS FOR TROPICAL CYCLONE WATCHES/WARNINGS

The coastal areas placed under tropical storm and hurricane/typhoon watches and warnings are described through the use of "breakpoints" or geographical positions. The primary breakpoints are defined below.

<p style="text-align: center;"><u>Mexico</u></p> <p>La Pesca, MX 23.76°N 97.78°W Rio San Fernando, MX 25.00°N 97.60°W</p>	<p style="text-align: center;"><u>Lake Charles, LA</u></p> <p>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</p>
<p style="text-align: center;"><u>Brownsville, TX</u></p> <p>Mouth of the Rio Grand River 25.96°N 97.15°W Port Mansfield, TX 26.60°N 97.29°W Baffin Bay, TX 27.29°N 97.37°W</p>	<p style="text-align: center;"><u>New Orleans, LA</u></p> <p>Morgan City, LA 29.48°N 91.29°W Lake Maurepas, LA 30.25°N 90.50°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 Lake Maurepas, LA 30.25°N 90.50°W Pascagoula, MS 30.35°N 88.55°W MS/AL Border 30.40°N 88.40°W</p>
<p style="text-align: center;"><u>Corpus Christi, TX</u></p> <p>Baffin Bay, TX 27.29°N 97.37°W North Entrance of the Padre Island National Seashore 27.47°N 97.29°W Port Aransas, TX 27.83°N 97.07°W Port O'Connor, TX 28.39°N 96.41°W</p>	<p style="text-align: center;"><u>Mobile, AL</u></p> <p>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</p>
<p style="text-align: center;"><u>Houston, TX</u></p> <p>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</p>	<p style="text-align: center;"><u>Tallahassee, FL</u></p> <p>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 Ochlockonee 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 Suwanee River, FL 29.30°N 83.17°W</p>

<u>Tampa Bay, FL</u>			<u>Melbourne, FL</u>		
Suwanee River, FL	29.30°N	83.17°W	Jupiter Inlet, FL	26.95°N	80.07°W
Yankeetown, FL	29.03°N	82.75°W	Stuart, FL	27.21°N	80.18°W
Chassahowitzka, FL	28.70°N	82.65°W	Fort Pierce, FL	27.46°N	80.28°W
Aripeka, FL	28.43°N	82.66°W	Vero Beach, FL	27.65°N	80.35°W
Anclote Key, FL	28.18°N	82.85°W	Sebastian Inlet, FL	27.83°N	80.43°W
Tarpon Springs, FL	28.15°N	82.79°W	Cocoa Beach, FL	28.32°N	80.61°W
Anna Maria Island, FL	27.53°N	82.73°W	Volusia/Brevard		
Middle of Longboat			County Line, FL	28.79°N	80.73°W
Key, FL	27.39°N	82.64°W	New Smyrna Beach, FL	29.03°N	80.89°W
Englewood, FL	26.94°N	82.37°W	Flagler Beach, FL	29.47°N	81.12°W
Boca Grande, FL	26.75°N	82.26°W			
Bonita Beach, FL	26.32°N	81.84°W			
<u>Miami, FL (Gulf)</u>			<u>Jacksonville, FL</u>		
Bonita Beach, FL	26.33°N	81.84°W	Flagler Beach, FL	29.47°N	81.12°W
Chokoloskee, FL	25.78°N	81.38°W	St. Augustine, FL	29.88°N	81.27°W
East Cape Sable, FL	25.12°N	81.08°W	Fernandina Beach, FL	30.66°N	81.44°W
Flamingo, FL	25.14°N	80.93°W	Altamaha Sound, GA	31.29°N	81.29°W
<u>Key West, FL (Gulf)</u>			<u>Charleston, SC</u>		
Flamingo, FL	25.14°N	80.93°W	Altamaha Sound, GA	31.29°N	81.29°W
Dry Tortugas, FL	24.66°N	82.86°W	Savannah River, GA	32.03°N	80.86°W
Key West, FL	24.55°N	81.81°W	Edisto Beach, SC	32.49°N	80.32°W
Seven Mile Bridge, FL	24.70°N	81.15°W	South Santee River, SC	33.12°N	79.27°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			
<u>Miami, FL (Atlantic)</u>			<u>Wilmington, NC</u>		
Ocean Reef, FL	25.33°N	80.26°W	South Santee River, SC	33.12°N	79.27°W
Golden Beach, FL	25.97°N	80.12°W	Murrells Inlet, SC	33.56°N	79.01°W
Hallandale Beach, FL	25.99°N	80.12°W	Little River Inlet, SC	33.85°N	78.55°W
Deerfield Beach, FL	26.32°N	80.07°W	Cape Fear, NC	33.84°N	77.96°W
Boca Raton, FL	26.36°N	80.07°W	Surf City, NC	34.44°N	77.52°W
Jupiter Inlet, FL	26.95°N	80.07°W			

<u>Morehead City, NC</u>			<u>Mt. Holly, NJ</u>		
Surf City, NC	34.44°N	77.52°W	Cape Henlopen, DE	38.80°N	75.09°W
New River Inlet, NC	34.53°N	77.34°W	Cape May, NJ	38.94°N	74.90°W
Bogue Inlet, NC	34.64°N	77.11°W	Great Egg Inlet, NJ	39.29°N	74.54°W
Cape Lookout, NC	34.60°N	76.53°W	Little Egg Inlet, NJ	39.49°N	74.31°W
Ocracoke Inlet, NC	35.06°N	76.00°W	Manasquan Inlet, NJ	40.10°N	74.03°W
Cape Hatteras, NC	35.22°N	75.53°W	Delaware Bay North/ South of Slaughter Beach, DE to	38.91°N	75.30°W
Oregon Inlet, NC	35.77°N	75.53°W	Sandy Hook, NJ	40.46°N	74.00°W
(The inclusion of Pamlico and Albemarle Sounds should be on a case-by-case basis).					
5 miles north of Duck, NC					
	36.23°N	75.77°W			
<u>Wakefield, VA</u>			<u>New York City, NY</u>		
5 miles north of Duck, NC			Sandy Hook, NJ	40.46°N	74.00°W
	36.23°N	75.77°W	Fire Island Inlet, LI, NY	40.63°N	73.31°W
NC/VA State Line	36.55°N	75.87°W	Moriches Inlet, LI, NY	40.77°N	72.75°W
Cape Charles Light, VA	37.12°N	75.90°W	Montauk Point, LI, NY	41.07°N	71.86°W
Parramore Island, VA	37.52°N	75.64°W	Port Jefferson Harbor, LI, NY	40.96°N	73.08°W
Chincoteague, VA	37.93°N	75.32°W	New Haven, CT	41.30°N	72.91°W
Chesapeake Bay, New Point Comfort, VA	37.30°N	76.28°W	Watch Hill, RI	41.31°N	71.86°W
Chesapeake Bay, Windmill Point, VA	37.61°N	76.28°W			
Chesapeake Bay, Smith Point, VA	37.89°N	76.24°W			
<u>Sterling, VA</u>			<u>Boston, MA</u>		
Chesapeake Bay, Smith Point, VA	37.89°N	76.24°W	Block Island, RI	41.16°N	71.56°W
Tidal Potomac, Cobb Island, MD	38.26°N	76.84°W	Martha's Vineyard, MA	41.38°N	70.63°W
Tidal Potomac, Indian Head, MD	38.61°N	77.15°W	Nantucket, MA	41.27°N	70.04°W
Tidal Potomac, Key Bridge, MD	38.89°N	77.07°W	(The inclusion of the above points should be on a case-by-case basis).		
Chesapeake Bay, Drum Point, MD	39.32°N	76.42°W	Watch Hill, RI	41.31°N	71.86°W
Chesapeake Bay, North Beach, MD	38.70°N	76.53°W	Point Judith, RI	41.35°N	71.49°W
Chesapeake Bay, Sandy Point, MD	39.02°N	76.40°W	Westport, MA	41.50°N	71.11°W
Chesapeake Bay, Pooles Island, MD	39.29°N	76.27°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

<u>Portland, ME</u>			<u>Caribou, ME</u>		
Merrimack River, MA	42.84°N	70.82°W	Stonington, ME	44.16°N	68.64°W
Portsmouth, NH	43.05°N	70.72°W	Bar Harbor, ME	44.39°N	68.20°W
Cape Elizabeth, ME	43.56°N	70.19°W	Eastport, ME	44.92°N	67.00°W
Port Clyde, ME	43.92°N	69.25°W			
Stonington, ME	44.16°N	68.64°W			
California Breakpoints					
<u>San Diego, CA</u>			<u>Los Angeles/Oxnard, CA</u>		
Mouth of the Tijuana River, CA	32.53°N	117.12°W	Mouth of San Gabriel River, CA	33.75°N	118.11°W
San Mateo Point, CA	33.38°N	117.60°W	Point Mugu, CA	34.11°N	119.12°W
Mouth of San Gabriel River, CA	33.75°N	118.11°W	Point Conception, CA	34.45°N	120.45°W
Central Pacific Hurricane Center Breakpoints					
<u>Honolulu, HI</u>					
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			

For graphical representations of the breakpoints, see http://www.nhc.noaa.gov/breakpoints_graphics.shtml.