

Table A-1

## Watermasses in the Eastern Gulf of Mexico

Watermass	Depth (m)	Feature(s)	Sigma-theta ( $\text{mg}/\text{cm}^3$ )
SUW (Subtropical Underwater)	150-250	$S_{\text{max}}$	25.40
18 °C W (18 °C Sargasso Sea Water)	200-400	$O_2_{\text{max}}$	26.50
TACW (Tropical Atlantic Central Water)	400-700	$O_2_{\text{min}}$	27.15
AAIW (Antarctic Intermediate Water)	700-900	$PO_4_{\text{max}}$	27.40
AAIW (Antarctic Intermediate Water)	800-1,000	$S_{\text{min}}, SiO_2_{\text{max}}$	27.50
UNADW*	900-1,200	$SiO_2_{\text{max}}$	27.70

\* Mixture of North Atlantic deep water and high silicate Caribbean midwater.

Table A-2

## Climatological Data for Selected Gulf Coast Locations

Location	Precipitation (annual average, meters)	Temperature (mean annual, °C)	Wind Speed (average annual mean, m/sec)	Humidity (average percent)	Barometric Pressure (average annual millibars)	Stability Conditions Annual Percent		
						Unstable	Neutral	Stable
Corpus Christi, TX	0.77	21.7	5.4	89	1,014	11.0	61.0	28.0
Galveston, TX	1.07	20.9	4.9	83	1,015	16.0	61.4	22.6
Lake Charles, LA	1.35	19.9	3.9	90	1,016	23.0	44.0	33.0
Gulfport, MS	1.50	20.0	3.6	85	1,016	17.5	47.4	35.1
Pensacola, FL	1.55	19.9	3.7	85	1,013	18.0	22.0	60.0
Key West, FL	1.01	25.3	5.0	79	1,014	80.0	18.0	2.0

Sources: USDOC, NOAA, 1961-1986.

Table A-3

Summary of the Most Damaging Hurricanes in the Gulf of Mexico (1900-1999)

Hurricane	Year	Category <sup>1</sup>	Damage <sup>2</sup> (million \$)	Deaths
Texas	1900	4	NA	6,000+
Mississippi/Alabama/Pensacola, Florida	1906	3	NA	134
Southeast Florida	1906	2	NA	164
Louisiana	1909	4	NA	350
Texas	1909	3	NA	41
Louisiana	1915	4	NA	275
North Texas	1915	4	1,177	275
Southwest Louisiana	1918	3	NA	34
Florida Keys	1919	4	NA	600-900
Florida	1926	4	1,315	243
Louisiana	1926	3	NA	25
Texas	1932	4	NA	40
South Texas	1933	3	NA	40
Southwest Florida	1944	3	582	NA
Southeast Florida/Louisiana/Mississippi	1947	4	707	51
Audrey (Louisiana/Texas)	1957	4	696	390
Carla (Texas)	1961	4	1,926	46
Hilda (Louisiana)	1964	3	578	38
Betsy (Florida/Louisiana)	1965	3	6,461	75
Beulah (Texas)	1967	3	844	NA
Camille (Mississippi/Alabama)	1969	5	5,242	256
Celia (Texas)	1970	3	1,560	NA
Eloise (Florida)	1975	3	1,081	NA
Claudette (Texas)	1979	T.S.	609	NA
Frederic (Alabama/Mississippi)	1979	3	3,502	NA
Allen (Texas)	1980	3	410	NA
Alicia (Texas)	1983	3	2,391	NA
Elena (Mississippi/Alabama/Louisiana)	1985	3	1,392	NA
Juan (Louisiana)	1985	1	1,671	NA
Allison (Texas)	1989	T.S.	511	NA
Andrew (Florida/Louisiana)	1992	4	30,475	NA
Gordon (Florida)	1994	T.S.	400	NA
Alberto (Florida/Alabama)	1994	T.S.	500	30
Erin (Florida/Miss/Alabama)	1995	1	700	NA
Opal (Florida/Alabama)	1995	3	3,069	NA
Danny (Louisiana/Florida)	1997	1	NA	NA
Earl (Florida)	1998	1	NA	NA
Georges (Florida/Mississippi)	1998	2	NA	NA
Bret (Texas)	1999	4	NA	NA
Irene (Florida)	1999	1	NA	NA

<sup>1</sup> Storm Category represents the Saffir/Simpson Scale

Category 1 = winds of 74-95 mph

Category 4 = winds of 131-155 mph

Category 2 = winds of 96-110 mph

Category 5 = winds greater than 155 mph

Category 3 = winds of 111-130 mph

<sup>2</sup> Damage in adjusted 1990 U.S. dollars.

T.S. = tropical storm.

NA= Data not available.

Sources: Modified from Herbert et al., 1992 and USDOC, NOAA, 2001.