

HURRICANE

MAXIMUM TIDES AND LOWEST SEA LEVEL PRESSURES OF RECORD, PUNTA RASSA AND FORT MYERS, FLORIDA 1873 - 1979

Stephen M. Blumel
National Weather Association
Tropical Meteorology Committee

ABSTRACT

In response to the rapid, large-scale growth of the SW Florida coastline, coupled with the fact that most of this development has occurred in a coastal hurricane-prone, low-lying floodplain, with mean sea level elevations primarily from 5 to 15 feet, this report lists a 110-year summary of the highest tides and lowest pressures that can reliably be confirmed from Fort Myers to Punta Rassa, Florida.

It is hoped that this information will assist land planners, coastal and traffic engineers, and the general populace in assessing their local flood-disaster potential from a hurricane.

MAXIMUM TIDE DATA (MSL)

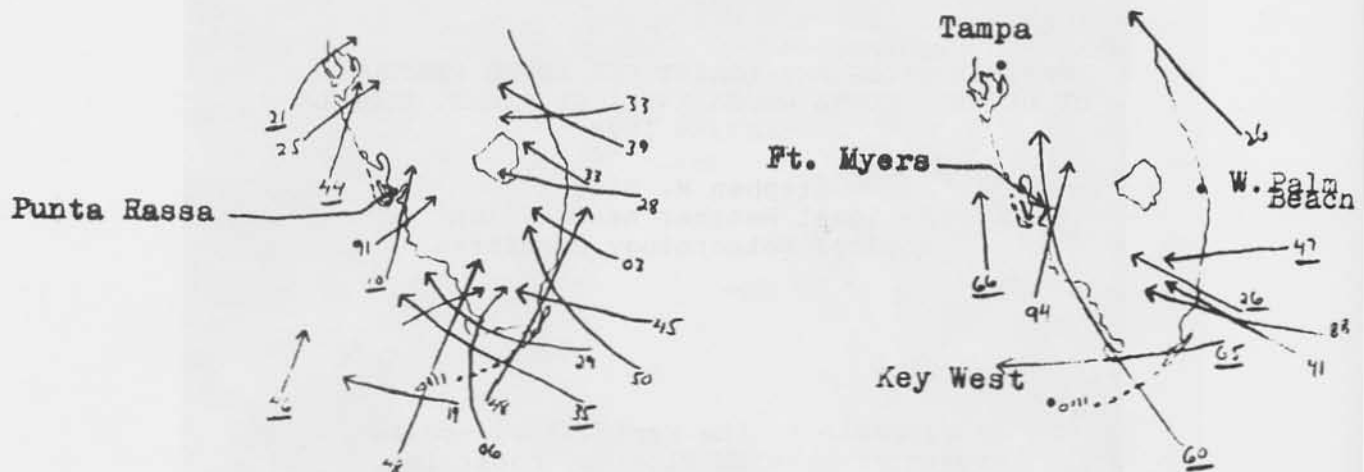
YEAR	DATE	NAME	MAXIMUM TIDES	LOCATION
1873	Oct.	----	14.0 Ft.	Punta Rassa
1921	Oct.	----	11.0 Ft.	Punta Rassa
			9.0 Ft.	Ft. Myers Yacht Basin
1926	Sept.	Miami	12.0 Ft.	Punta Rassa
1944	Oct.19	----	4.5 Ft.	Ft. Myers Yacht Basin
1946	Oct. 7	----	4.8 Ft.	Ft. Myers Yacht Basin
1960	Sept.10	----	10.4 Ft.	Ft. Myers Beach

MINIMUM SEA LEVEL PRESSURE DATA (in Hg)

1837	Oct.	----	28.40	Punta Rassa
1910	Oct.	----	28.20	Ft. Myers
1921	Oct.	----	29.37	Ft. Myers
1926	Sept.	----	28.05	Punta Rassa
			28.14	Ft. Myers
1944	Oct.	----	29.02	Ft. Myers
1946	Oct.	----	29.29	Punta Rassa
1960	Sept.	----	28.08	Ft. Myers

NATIONAL WEATHER DIGEST

POINTS OF ENTRY OF SELECTED HURRICANES IN SOUTH AND SOUTH-CENTRAL FLORIDA FROM 1885 THROUGH 1978.



Numbers are last two digits of year storm occurred. Example: 46=1946.

Numbers underlined in the above illustrations are storms that had a significant impact on SW Florida.

SOURCES

1. Climatological Data, National Summary. Volumes 1-28, Annuals, 1950-1978. National Climatic Center, Asheville, NC.
2. Harris, D., 1963. Characteristics of the Hurricane Storm Surge. Weather Bureau Tech. Paper 48.
3. Sugg and Carrodus, January 1969. Memorable Hurricanes of the United States since 1873. Weather Bureau Tech. Paper SR-42, National Hurricane Center.
4. Bruun, Chiu, Gerritsen, and Morgan, January 1962. Storm Tides in Florida as Related to Coastal Topography. University of Florida, Coastal Engineering Lab, Bulletin Series #109, vol. 16, no. 1.
5. U.S. Army Corps of Engineers, May 1968. Flood Plain Information for Charlotte and North Lee Counties, Florida.

6. Special Flood Hazard Information Report, May 1968. Author Unknown, Lee County, FL.
7. National Ocean Survey Storm Evacuation Map, #T-15064, 1976. Ft. Myers, FL.
8. National Ocean Survey Storm Evacuation Map, #T-15063, 1976. Cape Coral, FL.
9. Eden, Edwin W., Jr., Chief, Planning and Reports Division, U.S. Army Corps of Engineers, Jacksonville District, Oct. 27, 1960. Certified Listing of Peak Tidal High Water Marks from Hurricane Donna.
10. Dunn and Miller, 1964. Atlantic Hurricanes. National Hurricane Center, Louisiana State University Press, Revised Edition.
11. U.S. Army Corps of Engineers, Sept. 29, 1961. Analysis of Hurricane Problems in Coastal Areas of Florida, Period 1831-1960. Office of the District Engineer, Jacksonville, FL.