

COMPARISON OF INDICES OF 2 SPH's 1959 vs. 1979

National Hurricane Research Project, Report 33, "Meteorological Considerations Pertinent to Standard Project Hurricane, Atlantic and Gulf Coasts of the United States", Nov 1959.

Report No. 33 defines the Standard Project Hurricane (SPH) as "the most severe storm that is considered reasonably characteristic of a region." The SPH index is based on an analysis of past hurricanes of record. Hurricane characteristics are correlated with intensity criterion, location, and other features.

NOAA Technical Report NWS 23, "Meteorological Criteria for Standard Project Hurricane and Probable Maximum Hurricane Windfields, Gulf and East Coasts of the United States," 1979.

Report 23 defines the SPH as "a steady state hurricane having a severe combination of values of meteorological parameters that will give high sustained wind speeds reasonably characteristic of a specified coastal location." Reasonably characteristic means, "only a few hurricanes of record over a large region have had more extreme values of the meteorological parameters."

Table 1
SPH Indices for New Orleans Area

Meteorological Parameter		Report 33	Report 23
Central Pressure Index	CPI or p_0	27.60 inches	27.35 inches
Peripheral Pressure	p_w	29.92 inches	29.77 inches
Radius of Maximum Winds, R	Small Radius	7 N miles	6 N miles
	Mean Radius	14 N miles	Not determined
	Large Radius	30 N miles	28.5 N miles
Forward Speed, T	Slow	4 knots	4 knots
	Moderate	11 knots	Not determined
	High	28 knots	25 knots
Wind Speeds			
Maximum theoretical gradient wind speed	Slow T	107 mph	Need to identify
Maximum 30 ft wind speed	Moderate T	101 mph	Need to identify
	High T	111 mph	Need to identify

Note – table is incomplete; still need to identify the wind speeds from Report 23.