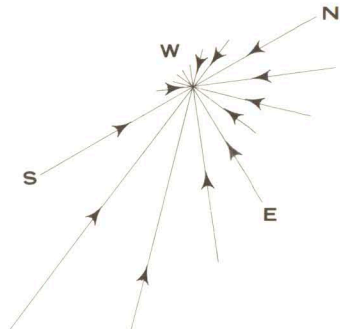




EXPLANATION

- Lower shoreface and shelf, under normal conditions a decrease in wave and current energy occurs below 8 feet, burrowing by marine organisms common, some longshore and onshore sand transport in shallow areas especially during storms, deposition of some fine suspended sediment
  - Normal surf or breaker zone, high wave energy area, shifting sub-aqueous bars, zone extends to depth of about 8 feet, longshore and onshore transport of sand common
  - Area of moderate erosion or scour to slight deposition, tidal channels shift laterally by cut and fill unless artificially stabilized
  - Area of rapid deposition, predominantly tidal delta accretion and aggradation or prodelta progradation
  - Site of active or potential hurricane washover channel
  - Shoreline, erosional, eolian processes active along Gulf side of barriers
  - Shoreline, depositional, accretion, eolian processes active along Gulf side of barriers
  - Shoreline in depositional-erosional equilibrium, eolian processes active along Gulf side of barriers
  - Shoreline stabilized by seawall, dredging, or other man-made structures
  - Area of slow to moderate deposition within bays, predominantly suspension deposition in deeper bay, accretion in some marginal areas
  - Area of active reworking and redistribution of subaqueous spoil by waves and currents within bays
  - Oyster reef deposition, predominantly vertical growth with some lateral growth, mapped reefs not necessarily all live communities
  - Area of wind-tidal flooding, commonly generated by persistent north (winter) or southeast (summer) winds, alternating submergence and emergence, extensive wind-driven sand transport during exposure, algal mat development during submergence, fluvial sand locally deposited on flats at mouth of ephemeral streams entering Baffin Bay and Oso Bay
  - Active clay-dune accretion on the margin of wind-tidal flats adjacent to Petronilla Creek and Oso Creek
  - Eolian sand dunes, active, back-island longitudinal dune fields, barrier island blowouts, areas of active eolian sand transport and deposition, deflation on windward side of migrating dunes
  - Area inundated by marine water, Hurricane Carla storm surge tide
  - 5.6 Hurricane Carla recording tide gage, high water-mark elevation, datum mean sea level
  - 7.5 Hurricane Carla recording site, still, high water-mark elevation, datum mean sea level
  - 4.7 Hurricane Carla storm surge debris or driftline elevation, datum mean sea level
  - Area inundated by marine water, Hurricane Beulah storm surge tide
  - Area inundated by river flooding and rainfall runoff, Hurricane Beulah rainfall and aftermath storms, extensive ponding in depressions and poorly drained areas
  - 6.4 Hurricane Beulah recording tide or river gage, high water-mark elevation, datum mean sea level
  - 6.8 Hurricane Beulah recording site, still, high water-mark elevation, datum mean sea level
  - 8.8 Hurricane Beulah storm surge and river flooding debris or driftline elevation, datum mean sea level
- \*Map color patterns overlap where active processes occur in the same area, resulting in a unique color code as follows:  
a Eolian sand dunes covered by Hurricane Carla storm surge tide  
b Eolian sand dunes covered by Hurricane Beulah storm surge tide



Percentage frequency of surface wind direction, 1951-1960  
Corpus Christi Naval Air Station

Mapping and cartography by Bureau of Economic Geology  
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Sources of data and credit for contributions to maps given in text

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ACTIVE PROCESSES