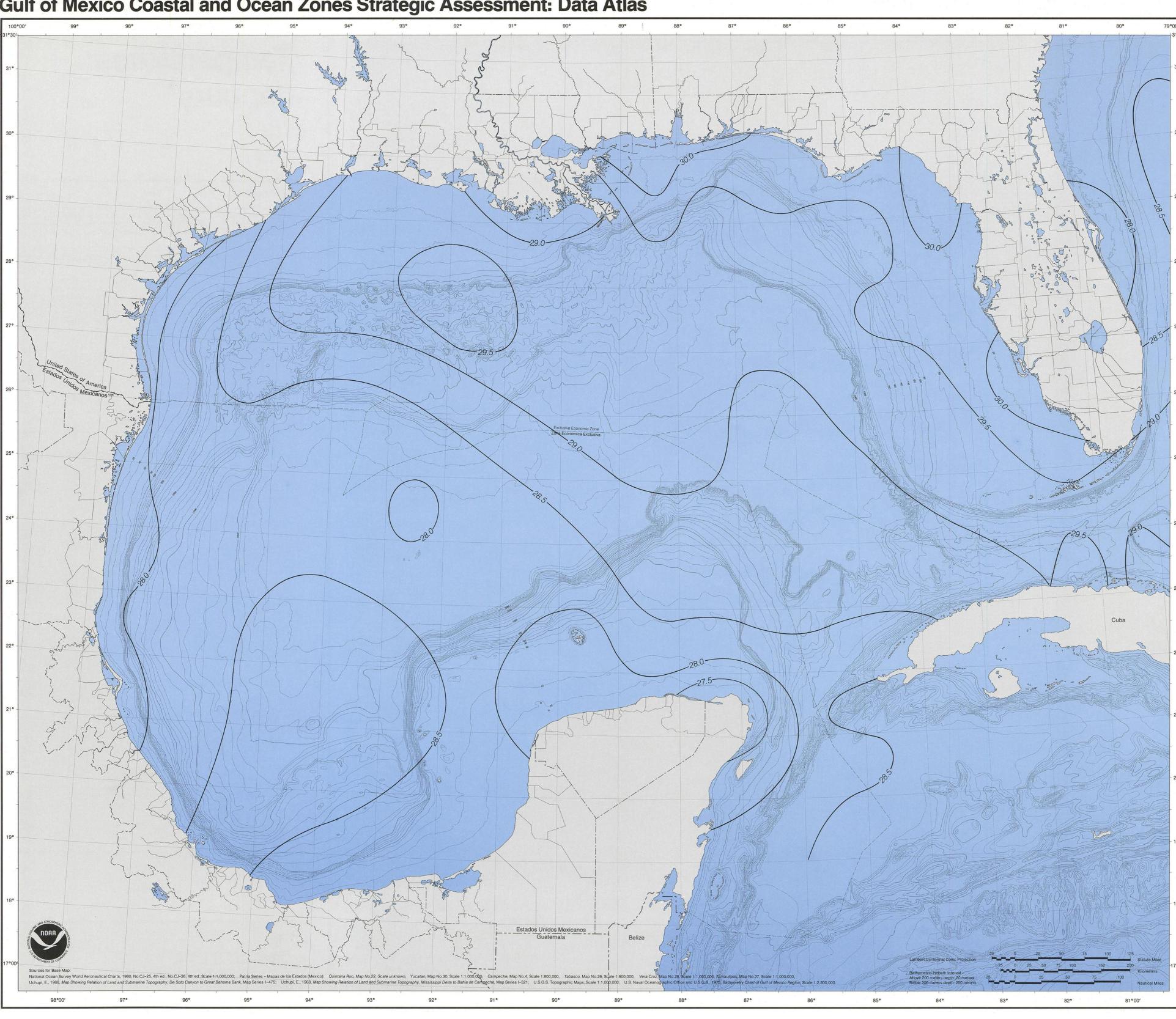
Gulf of Mexico Coastal and Ocean Zones Strategic Assessment: Data Atlas



Surface **Temperatures:** July

Description

This map is the second of the surface temperatures set depicting sea surface temperatures. The description of Map 1.07 provides additional information.

During the summer, sea surface temperatures span a narrow range of about 3°C (27°-30°C). The higher temperatures occur in the northern and eastern Gulf; lower temperatures are reported in the southern and western Gulf. This is a complete reversal from the winter temperature conditions shown on Map 1.07. The satellite images presented on Map 1.15 illustrate variations in sea surface temperature that occur during different periods of the year. Northern coastal waters are typically stratified, with a mixed layer less than 10 m thick. Thickness of the coastal mixed layer is highly variable, depending on local winds and runoff. Stratification in coastal waters is related primarily to salinity patterns.

Sea surface temperatures affect biological processes and productivity in the upper layers of the water column. For example, warmer summer temperatures tend to enhance biological activity. Seasonal patterns in biological productivity within the upper layers of the water column are shown in Map 2.05.

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Sea Surface Temperature in Degrees Celsius

Interval is 0.5°C.

References

Robinson, M.K., 1973.

Strategic Assessment Branch Ocean Assessments Division Office of Oceanography and Marine Assessment National Ocean Service/NOAA Southeast Fisheries Center National Marine Fisheries Service/NOAA