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Analysis Journal- Bythmetry and Iala

Observations:

On the days of December 21st and December 22nd of 2011 Iala, the Olive Ridley Sea Turtle, is about 8 miles offshore in water that is about 150 meters deep. She is located off the west coast of Africa in the South Atlantic Ocean. She then travels east towards the shore for about 16 miles. On December 24th she ends up on shore on the coast of Angola. She then travels 35 miles over the continental shelf, west away from the shore. On December 25th she travels right past the continental shelf to water that is about 2,0000 meters deep on the beginning of the continental slope. She then travels about 74 miles north west slightly farther away from the shore but still on the continental slope on the 29th. At this point she is about 106 miles from the coast. Iala then began to move 44 meters east towards the shore on January 2, 2012.

Justification:

Iala arrives on shore on December 24th. Although this is late in the nesting season, the Olive Ridley Turtle nesting season lasts from June to December. Iala most likely arrived on shore for nesting purposes. These turtles use the tides to help them get onto shore. Then on December 25th she begins to move farther away from the shore and by the 29th she is the farthest she has been offshore in this time period. She is now about 106 miles from the shore

line. She still remains on the continental slope. Iala is most likely looking for food sources such as jellyfish, fish, snails, crabs and shrimp. This breed of turtle enjoys the open ocean and can dive up to 150 meters deep for food sources. There is also more chlorophyll in the open ocean during this time period, which typically drives the food web and creates more food sources.

<https://www.worldwildlife.org/species/olive-ridley-turtle>

<https://www.nationalgeographic.com/animals/reptiles/o/olive-ridley-sea-turtle/>

<https://www.fisheries.noaa.gov/species/olive-ridley-turtle>