

## FIRST SATELLITE TRACKS OF NEONATE SEA TURTLES IN THE SOUTH ATLANTIC

Gustave Gilles Lopez, Maria Angela Marcovaldi, Milagros Lopez-Mendilaharsu, Yonat Swimmer, Nathan Putman, Kate Mansfield

1 Projeto TAMAR - Caixa Postal 2219 - Rio Vermelho - Salvador / BA - CEP 41950-970 Brazil

2 Research Fishery Biologist, NOAA Fisheries, Pacific Islands Fisheries Science Center, Honolulu, Hawaii 96822 USA

3 Postdoctoral Scholar, Dept. of Fisheries & Wildlife, Oregon State University, Corvallis, OR USA 97330 USA

4 Marine Turtle Research Group, Department of Biology, University of Central Florida, 4000 Central Florida Blvd. Bldg. 20, BIO402B Orlando, Florida 32816-2368 USA

NOAA, the University of Central Florida, and TAMAR are working to understand the migratory behavior and dispersal patterns of oceanic stage loggerheads in the South Atlantic Ocean. Fifteen neonate loggerhead sea turtles were satellite tagged using modified small-scale solar-powered satellite tags. Fifteen turtles were lab-reared to 4-8 months old, 10.8-19.2 cm straight carapace length (SCL), and 235-1360 grams. Turtles were released at different times throughout the nesting season to coincide with changes in the current pattern along the coast of Praia do Forte (e.g. southern direction in early/mid season and northern direction in late season). Oceanographic drifters were released along with the turtles to collect concurrent information on current patterns, and to examine the probability that turtles were passively drifting with the prevailing ocean currents.

We examined turtle movements in relation to ocean circulation measured from drifters released alongside turtles, as well as numerical current models. Initially, all turtles followed a general circulation pattern observed with initial drifter trajectories following large-scale current patterns. Young turtles in the South Atlantic appear to be influenced by seasonal changes in current regimes—possibly impacting the connectivity of Brazilian turtles in the western Hemisphere. Our data will be used to compare movements and migratory behavior of neonate loggerhead turtles in the North Atlantic.

These preliminary results will be analyzed together with the results of future releases, including data on environmental variables encountered by the turtles and other biological information.