Climate Impacts on North Pacific Albatrosses

Summary:
Animal movement plays a central role in the ability of species to respond to climate-driven environmental change and is a major driver of biological processes from individuals to ecosystems. In the context of climate change, animal movement can be influenced both by changes to the distribution of resources, and by direct effects of environmental factors on movement and energetic expenditure. Albatrosses are ideal study species for examining the impacts of both of these climate impacts due to their foraging strategy of exploiting ephemeral, widely separated prey patches using energetically efficient gliding flight. Telemetry and colony-based studies in the North Pacific Ocean have shown that El Nino-Southern Oscillation (ENSO) conditions affect both foraging habitat and wind fields available to albatrosses, and that these factors combine to influence albatross movement and life history.

Bio:
Lesley Thorne is an Assistant Professor in the School of Marine and Atmospheric Sciences at Stony Brook University. Lesley received a BSc at the University of Guelph in Canada and a PhD from Duke University. Lesley’s work is broadly focused on ecological questions in pelagic systems, and much of her research focuses on understanding the biophysical and trophic interactions driving the habitat use and foraging behavior of different marine predators (primary marine mammals and seabirds). She has worked in a wide range of marine systems, including the Bay of Fundy, the South Atlantic Bight, the Caribbean and Sargasso Seas, the western Antarctic Peninsula, and the Main and Northwestern Hawaiian Islands.