

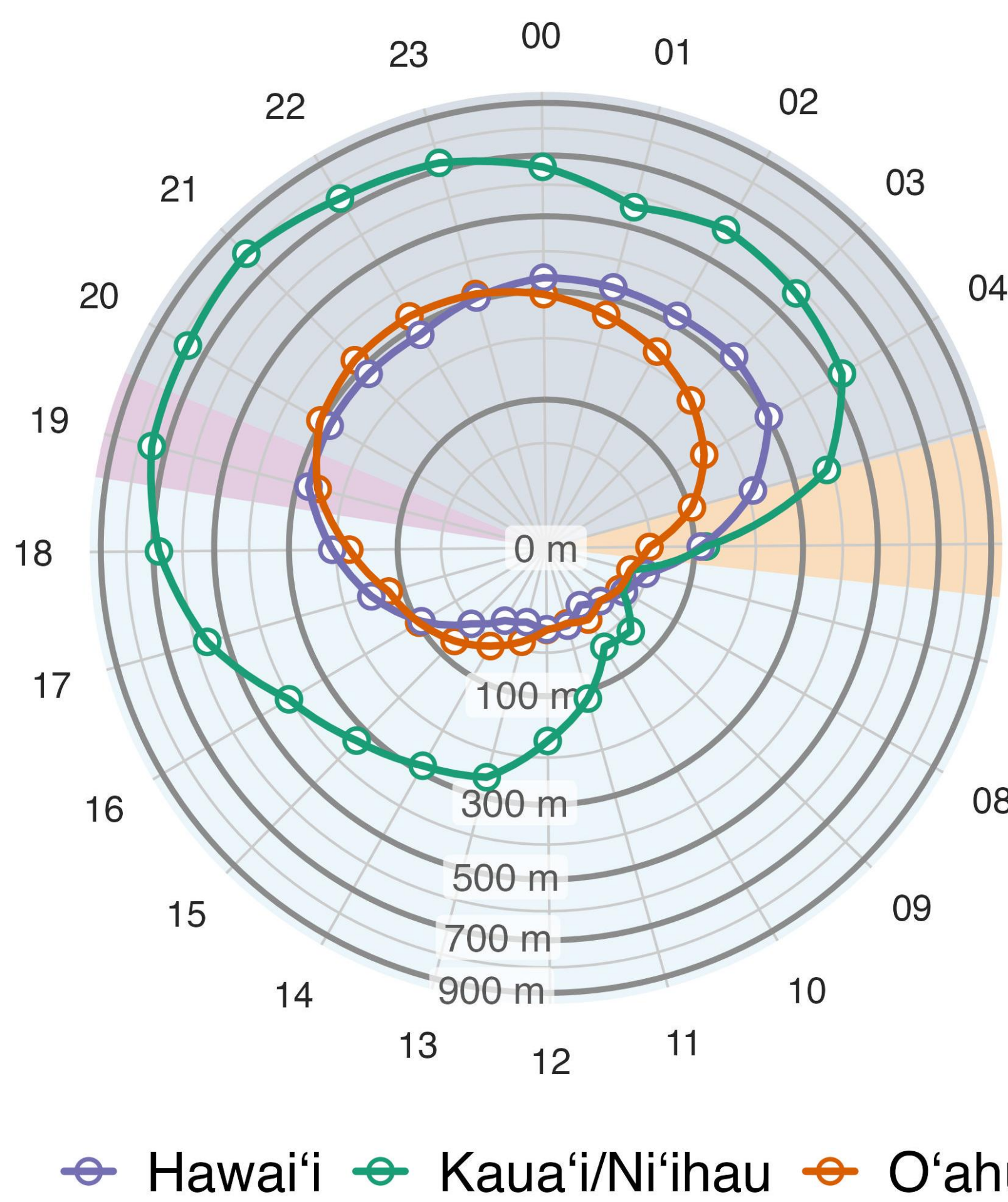
TADpoles and Spinner Dolphins: the First Taggings of Spinner Dolphins in Hawai‘i with Satellite-linked Tags Reveal Detailed Movement Data Over Weeks to Months



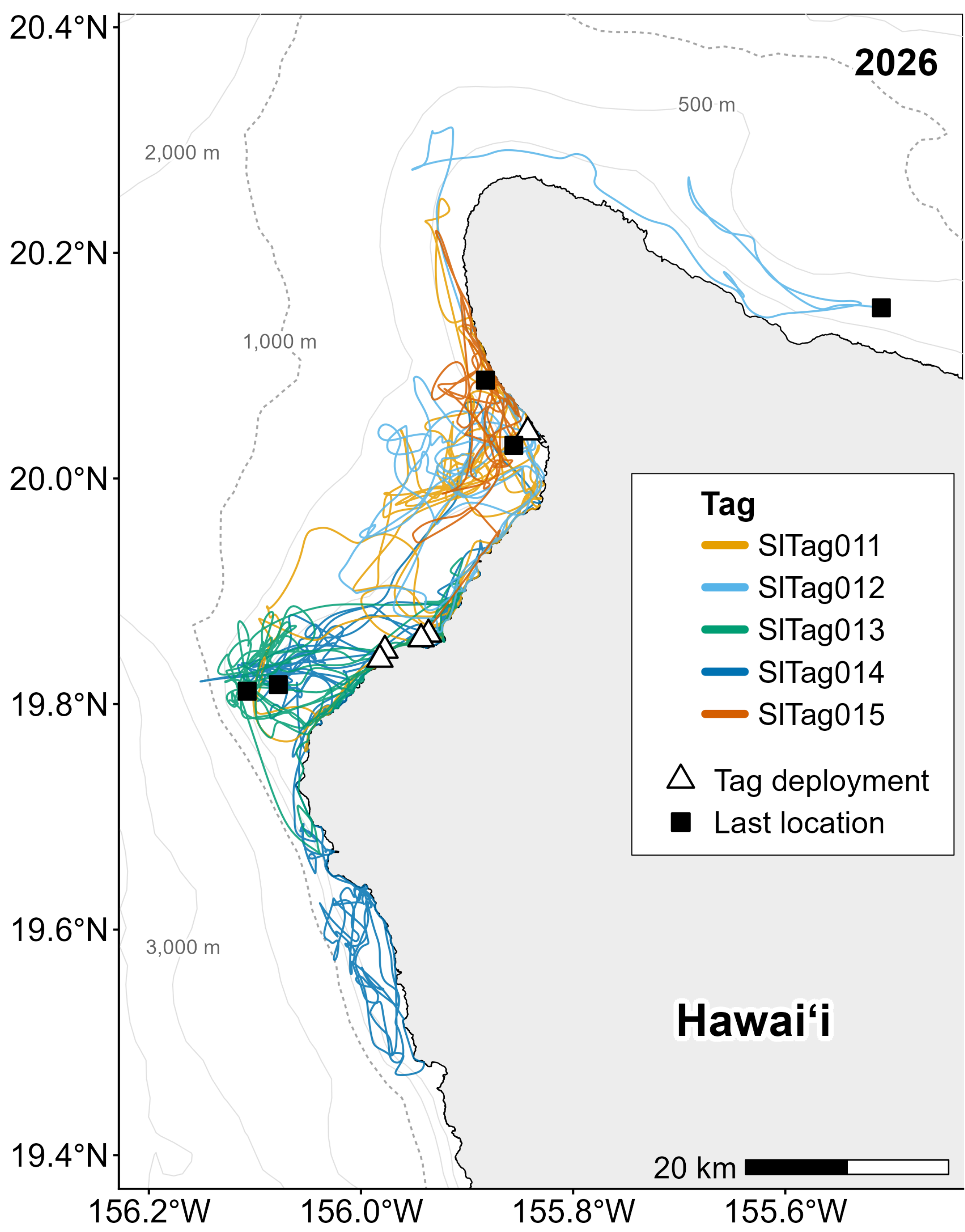
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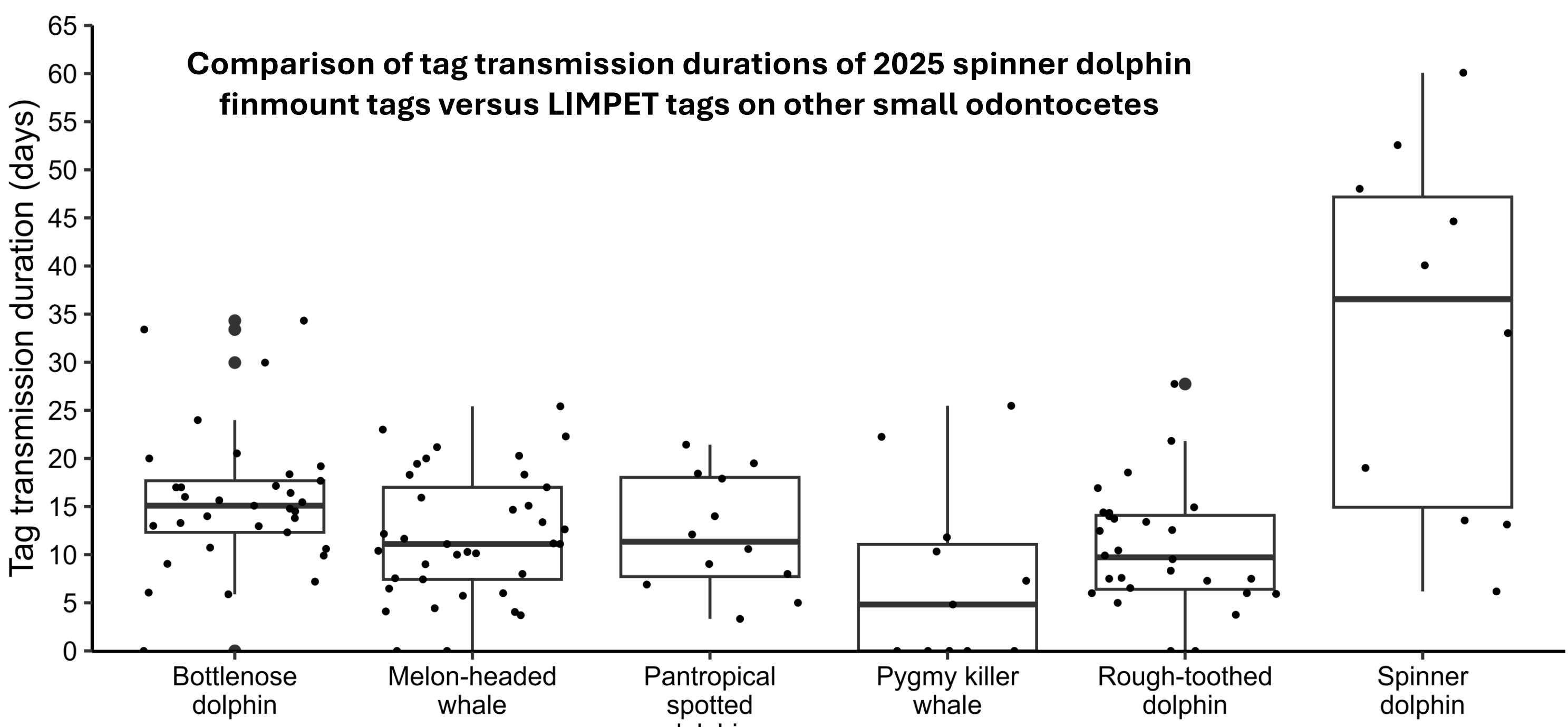
- Deploying tags on small odontocetes has often required catch-and-release, and remote-deployments of LIMPET tags have relatively short attachment durations and may pose a risk to the individuals.
- The recent development of the TADpole (pole-mounted Tag Attachment Device) by Woods Hole Oceanographic Institution and the Sarasota Dolphin Research Program has allowed for deploying single-pin finmount tags on small odontocetes, reducing risks and providing longer attachment durations than for LIMPET tags.



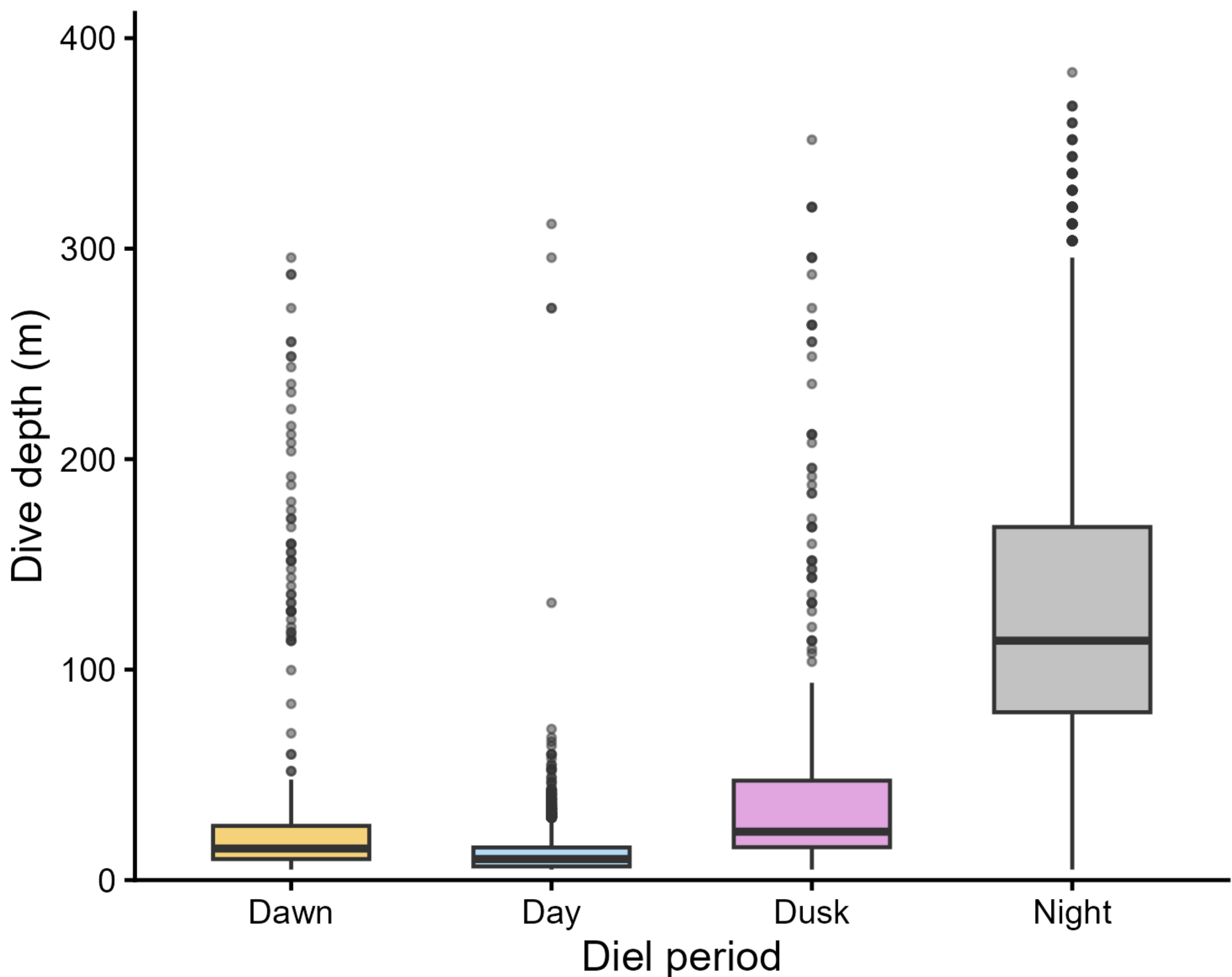
Spinner dolphins off all islands move into shallow water around dawn and into deeper water in the afternoon, but the timing appears to vary by island. The clock plot above shows bathymetric depth.



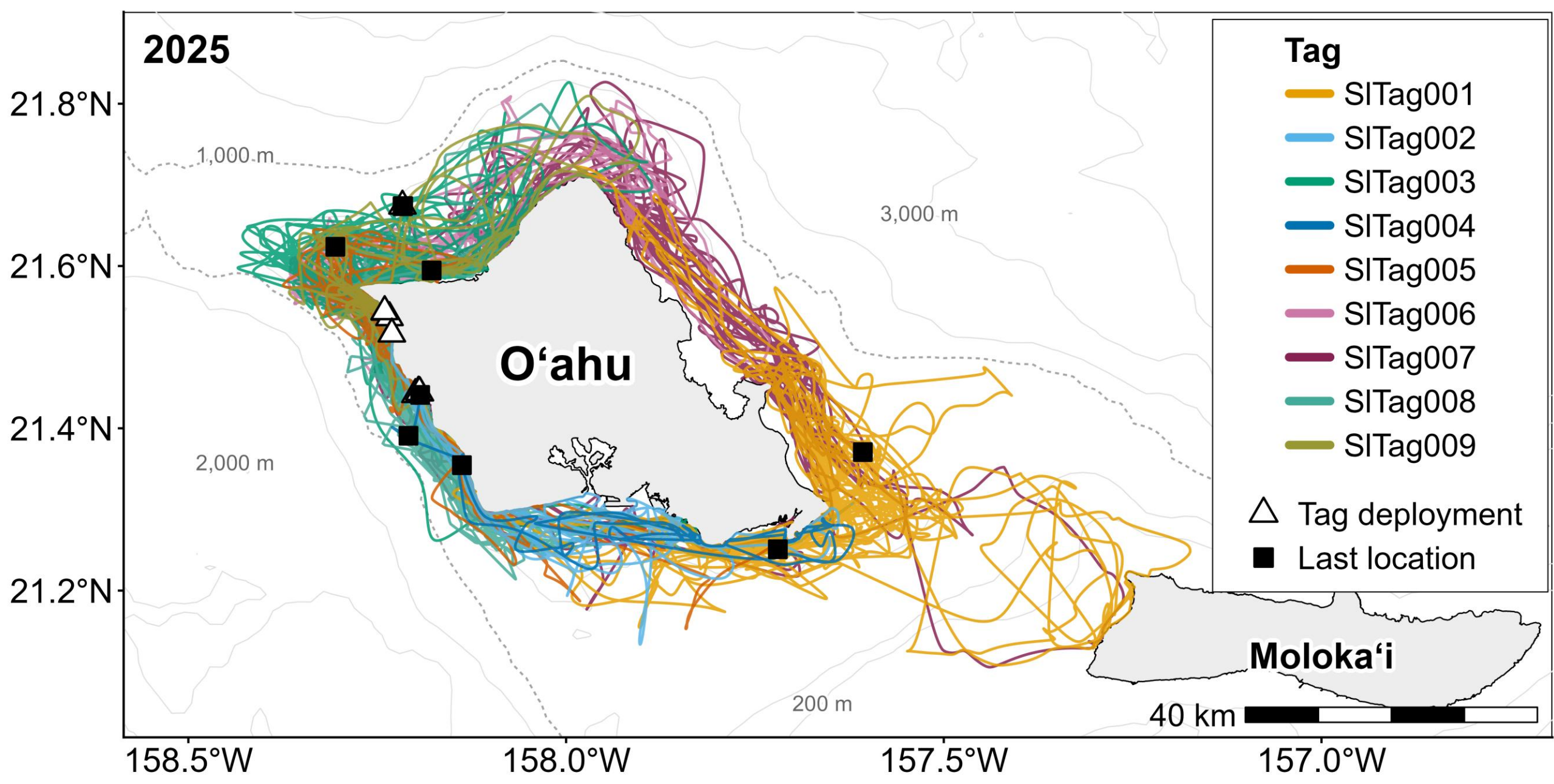
- In 2025 and 2026 we deployed 17 single-pin finmount tags on spinner dolphins in Hawai‘i using the TADpole, with tag deployments off five different islands (Ni'ihau, Kaua'i, O'ahu, Lāna'i*, Hawai'i).
- Three types of tags were used (Wildlife Computers SPOT (n=10), SPLASH (n=5), and SPOT-F (n=2)).



Transmission durations in 2025 (median=39.2, max=65.5 days, n=10) were more than three times longer than LIMPET tags deployed on small odontocetes in Hawai'i (median=12.6, max=34.3 days, n=111).

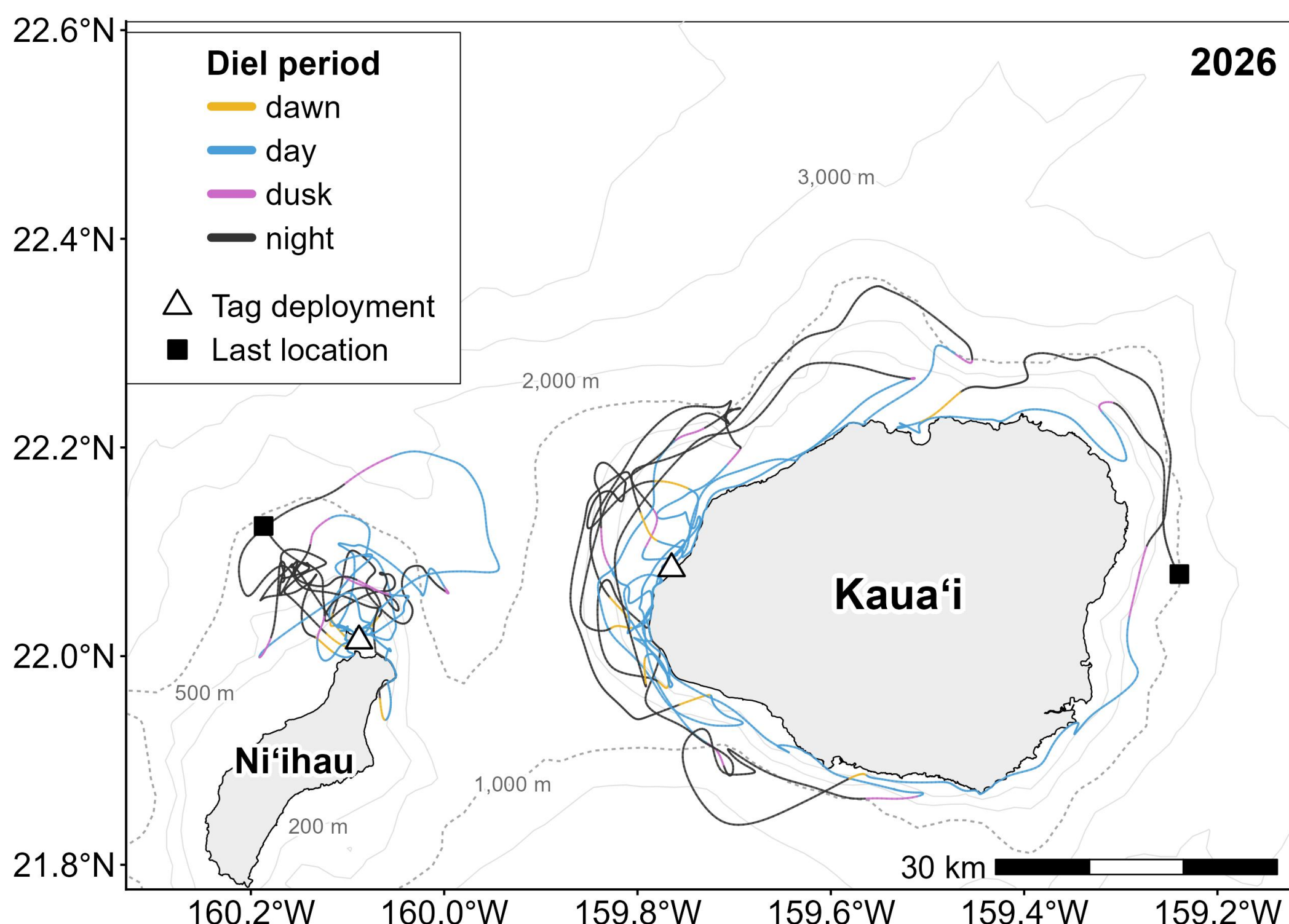


Dive depths vary by time of day, with much deeper dives at night reflecting night-time foraging. This plot shows all 9,265 dives.



Tagged individuals have shown extensive movements and when multiple individuals in a group were tagged they would typically separate and travel independently, consistent with previously documented fission/fusion patterns.

- On longer deployments in 2025 biofouling and backward migration of the tags was documented, so we switched to a magnesium ring to intentionally shorten attachment durations, and coated tags with Propspeed to reduce biofouling.
- Transmission durations in 2026 were shorter (median=6.9 days, max=11.7 days, n=7) but still provided detailed information on movements and behavior.
- SPLASH tags recorded depth and duration of all dives ≥ 5 m and duration of “surface” periods between dives, resulting in 26.7 days of behavior data (n=9,265 dives). The deepest dive was 383.7 m, while the longest dive was 9.16 minutes.



Individuals tagged off Ni'ihau (SITag017) & Kaua'i (SITag016) occasionally moved offshore in the afternoon



Download Moore et al. (2024) on the TADpole tool

The spinner dolphin tagging work was funded by grants from **Dolphin Quest**. Field work where tags were deployed was also funded by contracts from the State of Hawai'i and the U.S. Navy (Pacific Fleet), and a grant from the Pacific Islands Fisheries Science Center. Thanks to those who have contributed follow-up photos or helped out in the field. Tagging was undertaken under NMFS Permit 26596 and with approval from the Cascadia Institutional Animal Care and Use Committee.

*Limited night-time data were obtained from the single tag deployed off Lāna'i (SITag010) so are not included in the clock plot or maps.
Poster presentation at the 26th Biennial Conference on the Biology of Marine Mammals, October 2026, San Juan, Puerto Rico

Learn more about our work on Hawaiian cetaceans

