

# More than metronomes: variation in diving behaviour of Cuvier's Beaked Whales (*Ziphius cavirostris*)



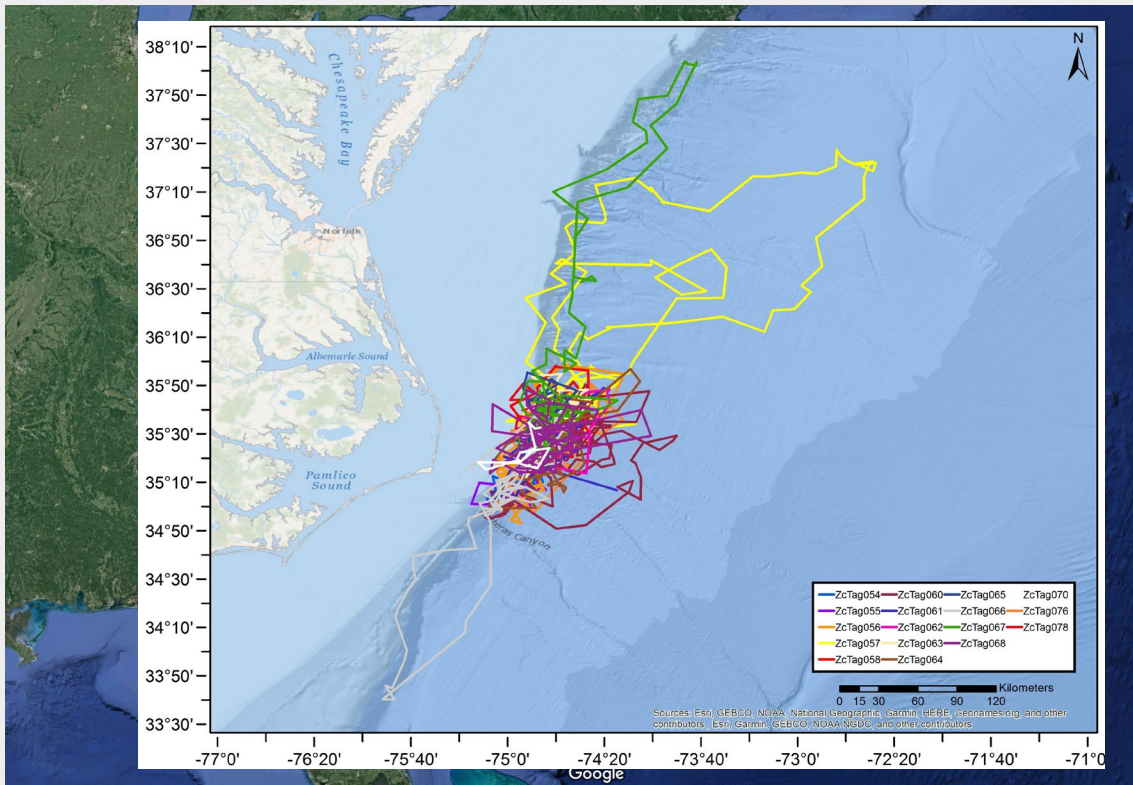
Nicola Quick  
Will Cioffi  
Catriona Harris  
Stacy De Ruiter  
Brandon Southall  
Andy Read



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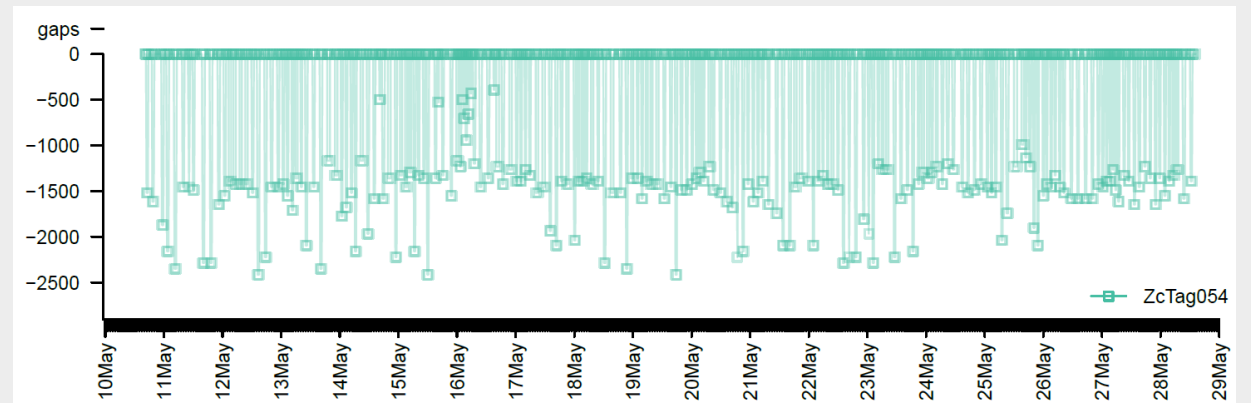




## Cape Hatteras, USA.

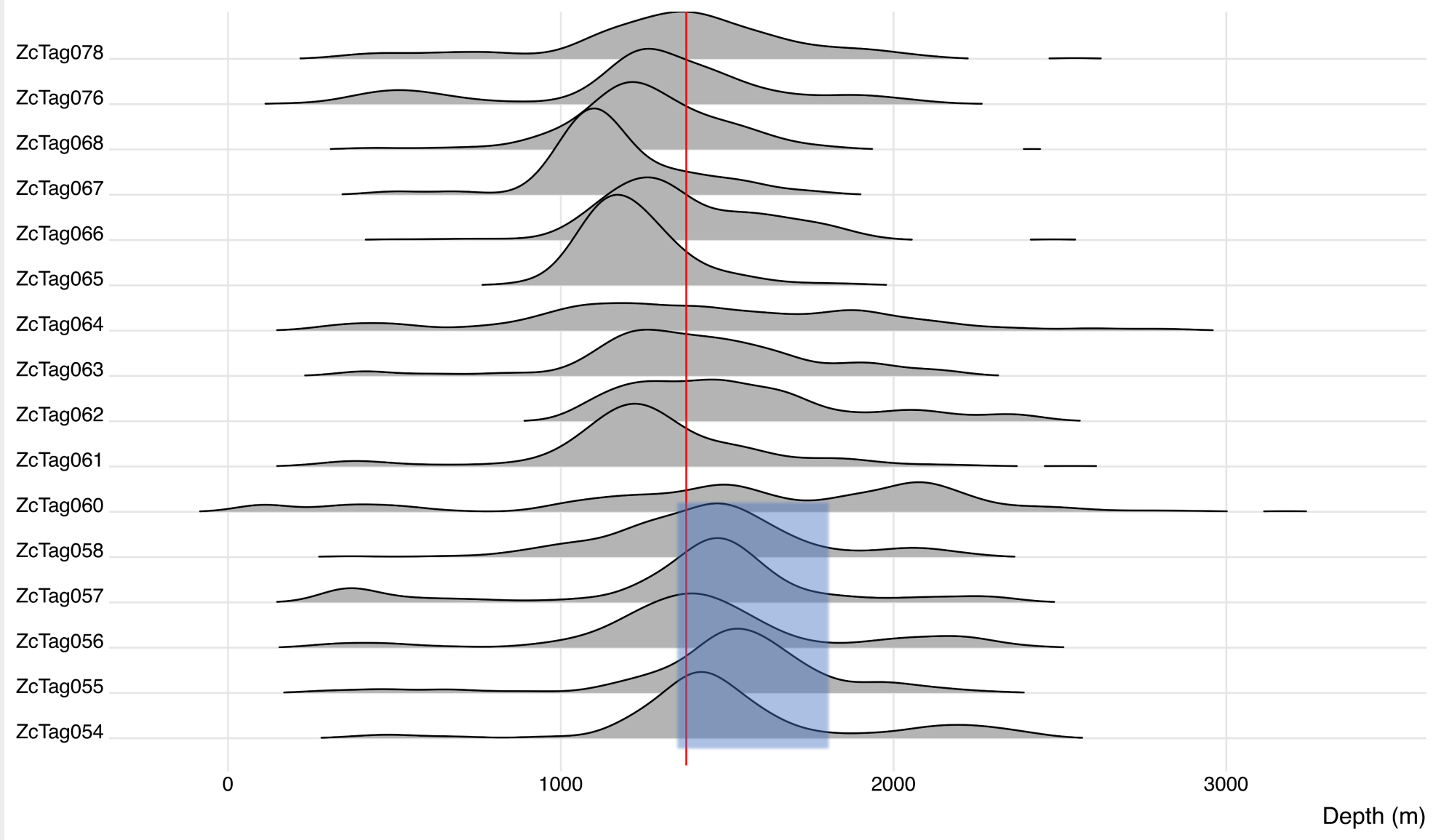
17 Sat tags deployed in 2017-2018  
(part of Atlantic BRS study)

Optimised for continuous time series  
of deep foraging dives (Quick et al 2019)



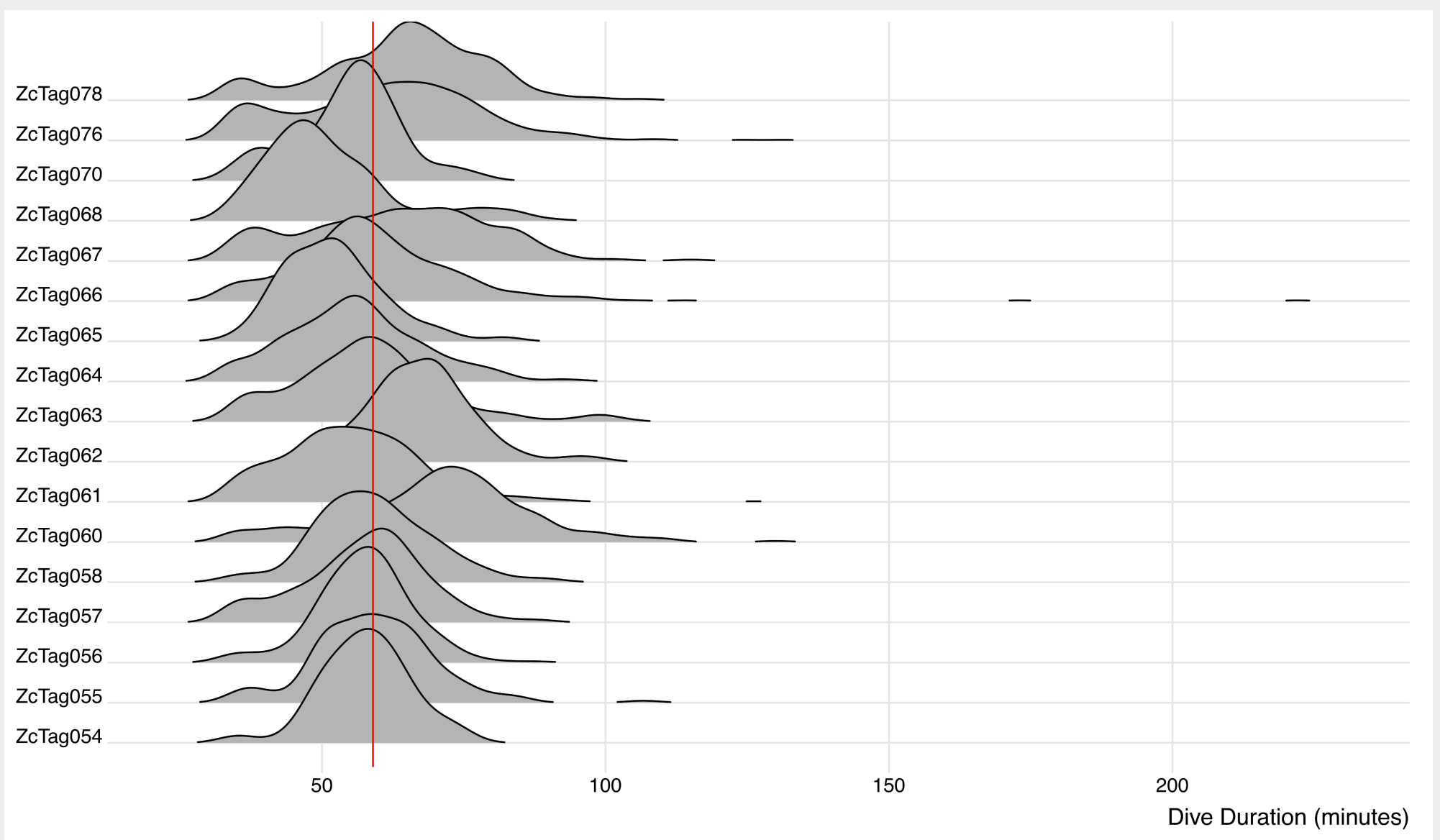
11,093 hours of data, including 4,635 dives  
Total dives per individual ranged from 71 to 524

Shearer et al., 2019, Royal Society Open Science  
Quick et al., 2019 Animal Biotelemetry



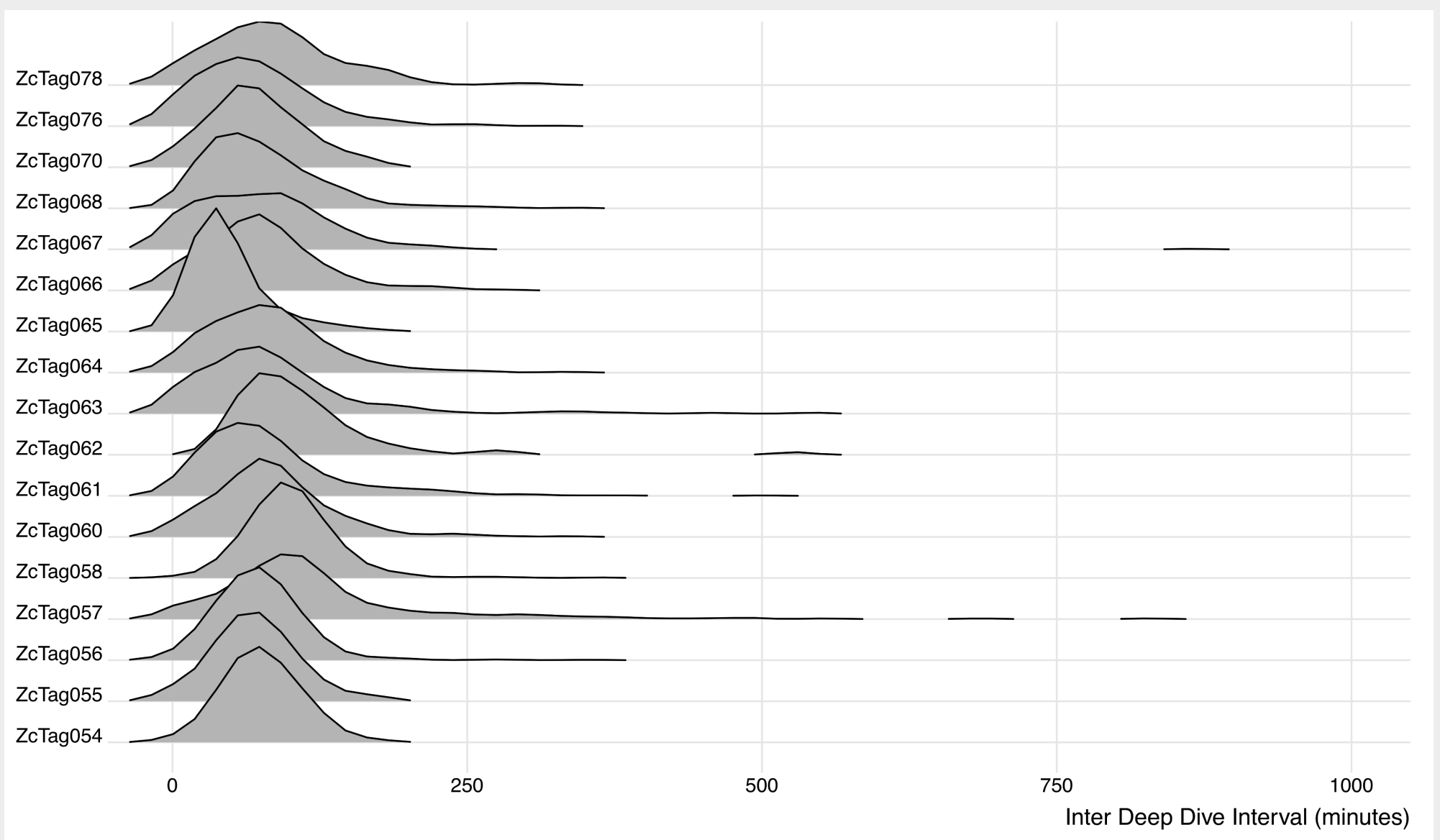
Significant variation ( $p < 0.001$ ) amongst individuals





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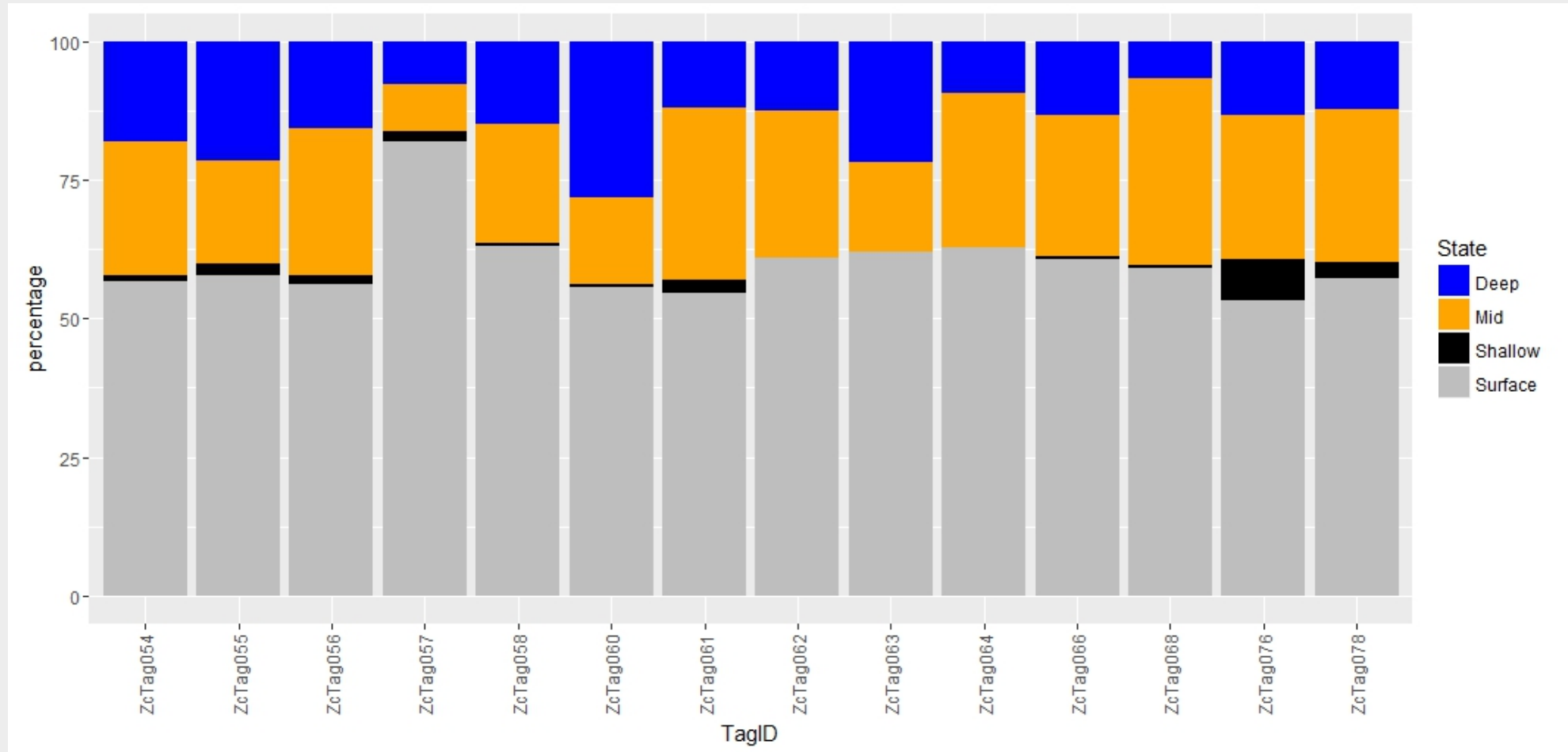
# Behavioural State

**Deep** = >1500m

**Mid** = 801-1499m

**Shallow** = < 800m

**Surface** = All dives less than 33 minutes and surface time





# Conclusions

Large Individual variation in foraging dive durations, depths and inter deep dive intervals

Seasonal difference may be due to location or prey

Over 50% of time spent not foraging

Continuous data over longer time frames will help with defining baseline behaviour

Consider individual differences during behavioural response studies of human disturbance

