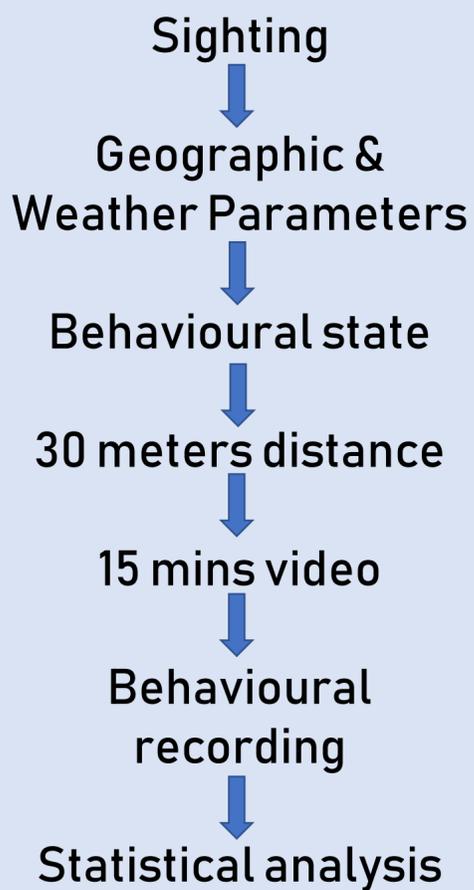


Introduction

Whale watching tourism is a billion dollar industry that could represent a two edged sword. In fact, it brings income to poor areas, and creates an interest for threatened species but at the same time it could potentially disturb the cetacean species observed. Previous studies have indeed shown that disturbance from boats can make cetaceans change their behaviour. The aim of this study was to observe the interaction behaviour of cetacean species towards the boat in order to identify stress behaviours that could be used by whale-watching boat captains to decide when to interrupt the observation.

Methods



Results

Species	Common name	Sightings	Observation Minutes (Mean ± SD)
<i>Stenella attenuata</i>	Pantropical spotted dolphin	9	12.44 ± 4.16
<i>Tursiops truncatus</i>	Bottlenose dolphin	5	8.60 ± 4.28
<i>Physeter macrocephala</i>	Spermwhale	5	4.40 ± 1.82
<i>Lagenodelphis hosei</i>	Fraser's dolphin	2	3.00 ± 2.83
<i>Stenella longirostris</i>	Spinner dolphin	1	14

- Different species behaved differently when approached by a boat.
- Same species behaved differently when approached by a boat depending on the behavioural state they were in.
- A negative correlation was observed between tourist season and approach face to face (with less face to face in high tourist season)
- Tail tapping was the most frequently observed distress behaviour in *Stenella attenuata* and *Tursiops truncatus*

Discussion

- Dolphins sensitive to the increase of vessels
- Different reaction based on the species and on the behavioural state

Therefore, Whale watching codes of conduct should take in consideration species / behavioural state and should be more strict in high tourist season (more boats involved)



1. *Tursiops truncatus*
2. *Lagenodelphis hosei*
3. *Stenella longirostris*
4. *Stenella attenuata*
5. *Physeter Macrocephala*