

Habitat use of a population of bottlenose dolphins, *Tursiops truncatus gephyreus*, analyzed by means of Kernel Density Estimation (KDE) method



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Context



What do dolphins do and where do they do it?

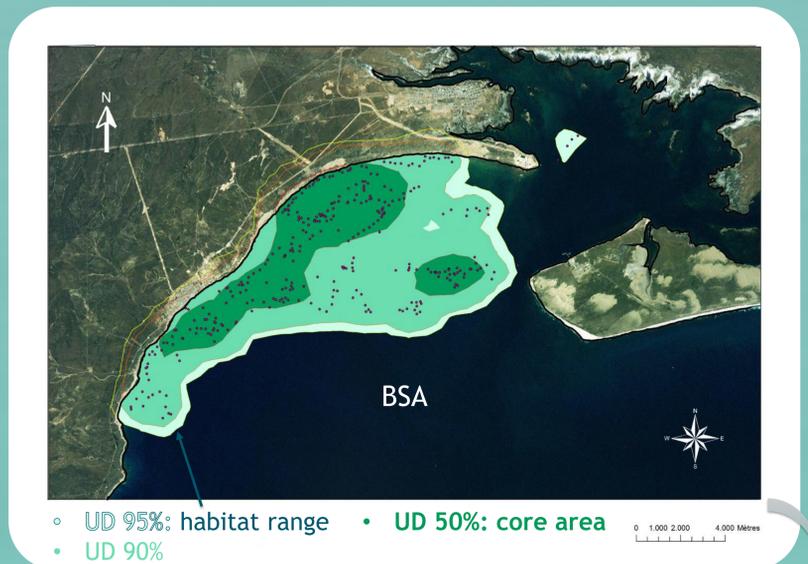
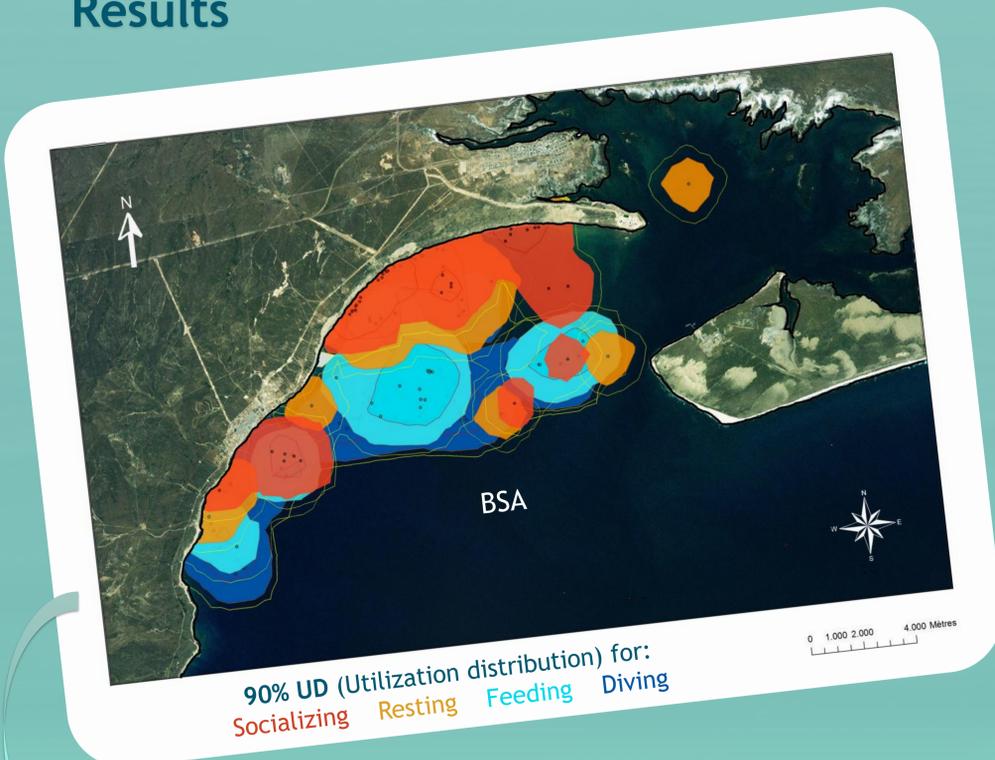
How can this information be used in management strategies?

Method

- ✓ 25 boat-based surveys
- ✓ Collecting Behavioural information
- ✓ Linking to GPS data
- ✓ Testing **KDE** method on behaviours and all data



Results



✓ Habitat use of the bay is heterogeneous: some areas (UD 50%) were more intensely used than others.

✓ Behaviours are not evenly distributed inside the bay: **resting** and **socializing** areas are located in the Northern part while behaviours related to feeding activity (feeding and diving) are located in the middle of the bay.

✓ Habitat core area (UD 50%) does not match feeding areas. This contradicts a general assumption made in other studies.

Take home message

- ✓ We do have a **preference for some areas** and they **depend on our activity**
- ✓ **KDE is an appropriate and advantageous tool** to define critical areas based on behaviours, so now, please, keep away!

