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OPPORTUNISTIC DATA: use it or lose it?

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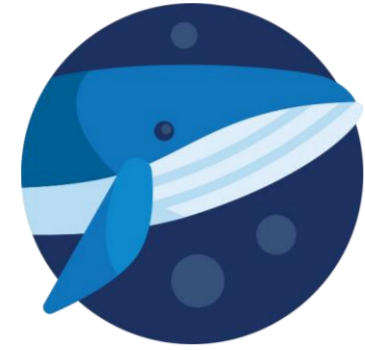
Session B
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16h-17h30

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BACKGROUND



CETUS Project is a cetacean monitoring programme that uses platforms of opportunity to survey long line-transect routes in the Eastern North Atlantic.



The CETUS dataset contains occurrence data collected during dedicated monitoring effort and opportunistically (with monitoring effort interrupted).



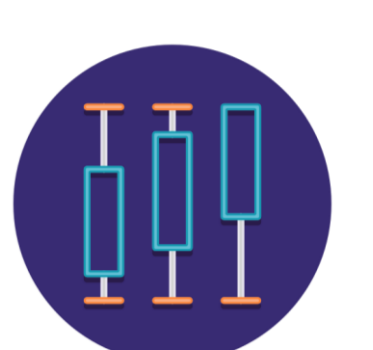
Compare the opportunistic and dedicated datasets for the assessment of cetacean diversity, distribution and habitat range.



With a nine-year time period (2012-2020) we were able to compile a sufficient amount of dedicated & opportunistic data to characterize cetacean community in the area.



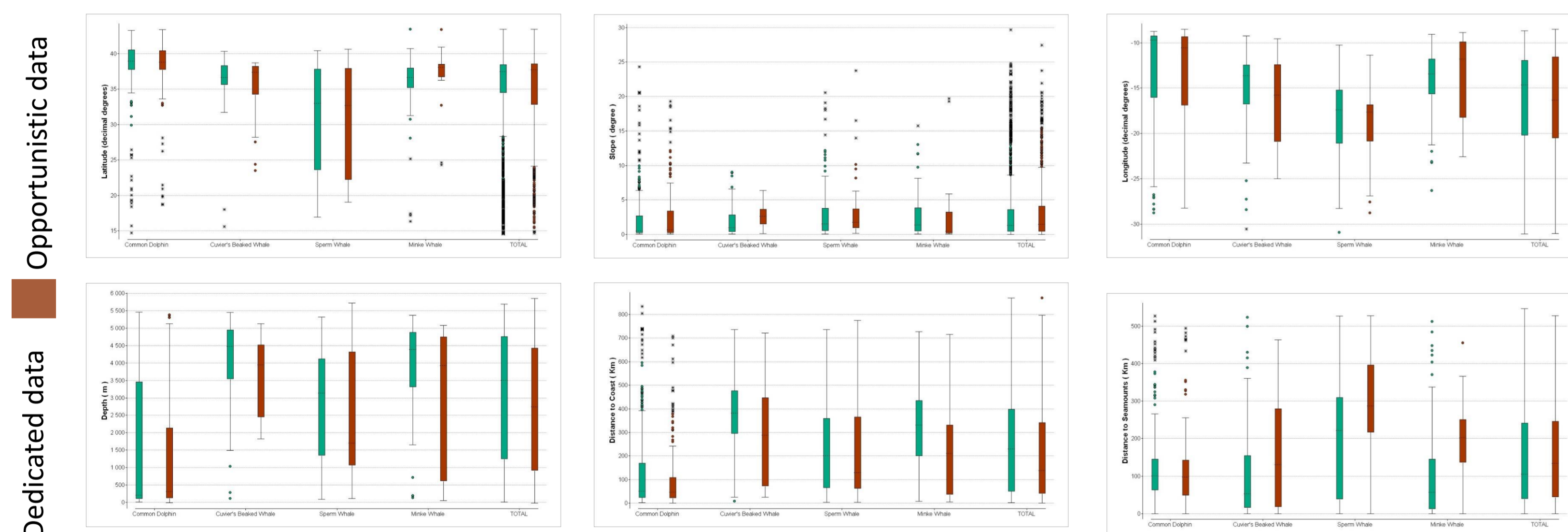
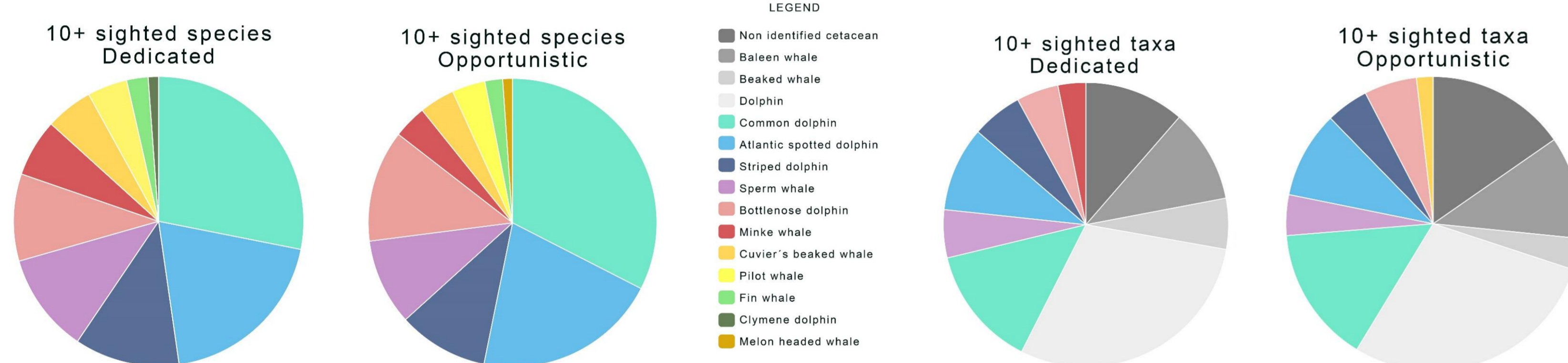
Prevalence was computed spatially, on a grid of 30 km resolution to assess distribution:
(Number of sightings of target species / Number of total cetacean sightings) X 100



To study habitat range, boxplots were constructed, for each variable. The results were statistically compared through a MWW test, with a significance level set to 0.05.

MAIN RESULTS

The cetacean community composition was similar between the two datasets (dedicated VS opportunistic), considering the 10 most frequently sighted taxa and species.



Where statistically significant differences ($p < 0.05$) exist between the two datasets, these are marked with a red star.

For Common dolphins, no significant differences were found between the two datasets. With opportunistic data, when comparing the results obtained with the dedicated dataset, Sperm and Minke whales appeared further from the seamounts, with the later species closer to the coast; and Cuvier's beaked whales occurred in shallower waters, in higher slope areas.

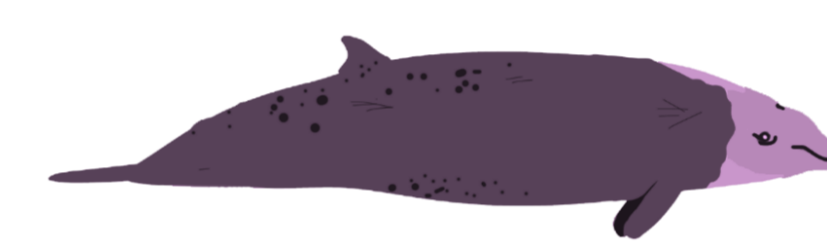
CONCLUSIONS

Although opportunistically collected data on cetacean occurrence yields a smaller dataset and it often lacks associated information, usually available with dedicated records (e.g., survey effort), both types of data provide similar results in terms of trends in total sightings, number of species recorded, and cetacean community composition (at least, for the most frequently sighted taxa / species).

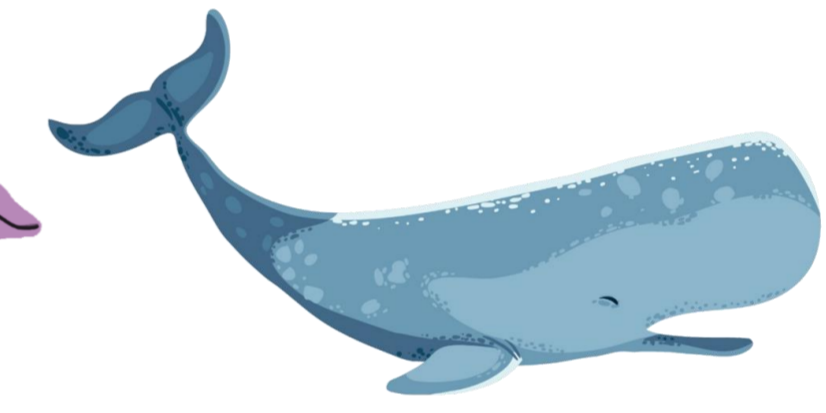
Four target species were selected:



Delphinus delphis (Common dolphin): the most frequently sighted species, easily detected and identified.



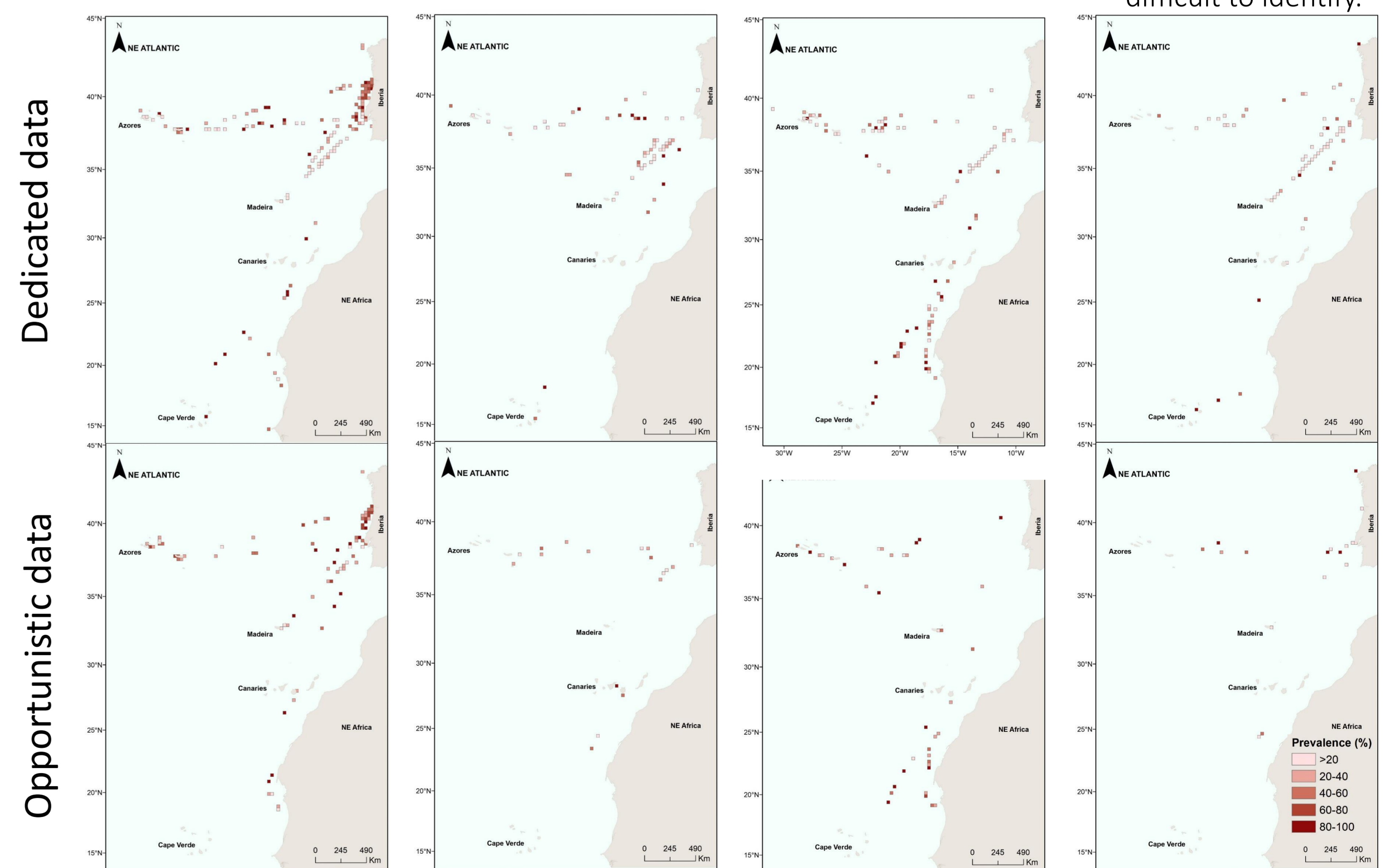
Ziphius cavirostris (Cuvier's beaked whale): less frequent in the area, difficult to detect and identify.



Physeter macrocephalus (Sperm whale): frequent in the area, often difficult to detect but easy to identify.



Balaenoptera acutorostrata (Minke whale): less frequent in the area, often easy to detect but difficult to identify.



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