



Long-term monitoring of harbour porpoise (*Phocoena phocoena*) in the Pomeranian Bay, Baltic Sea, reveals increasing detection rates over the last decade



EM-13

Schubert, A.¹, Rose, A.¹, Voss, J.¹, Vilela, R.¹, Kosarev, V.¹, Gallus, A.², Diederichs, A.¹

1) BioConsult SH GmbH & Co. KG, Schobüller Str. 36, D-25813 Husum, Germany

2) German Oceanographic Museum, Katharinenberg 14-20, D-18439 Stralsund, Germany



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Introduction:

- The Pomeranian Bay is located on the eastern edge of the distribution area of the Belt Sea population of harbour porpoises
- According to the results of SAMBAH, animals from the Baltic Proper population can also occur in the Oderbank area in winter
- Recent studies suggest a population decline in the Belt Sea (Gilles et al. 2023; Owen et al. 2024)

Methods:

- Data from up to 23 C-POD stations (see Figure 1)
- Deployed over a period of 12 years (2010 to 2021, see Figure 2)
- Area covered: approximately 7,000 km²

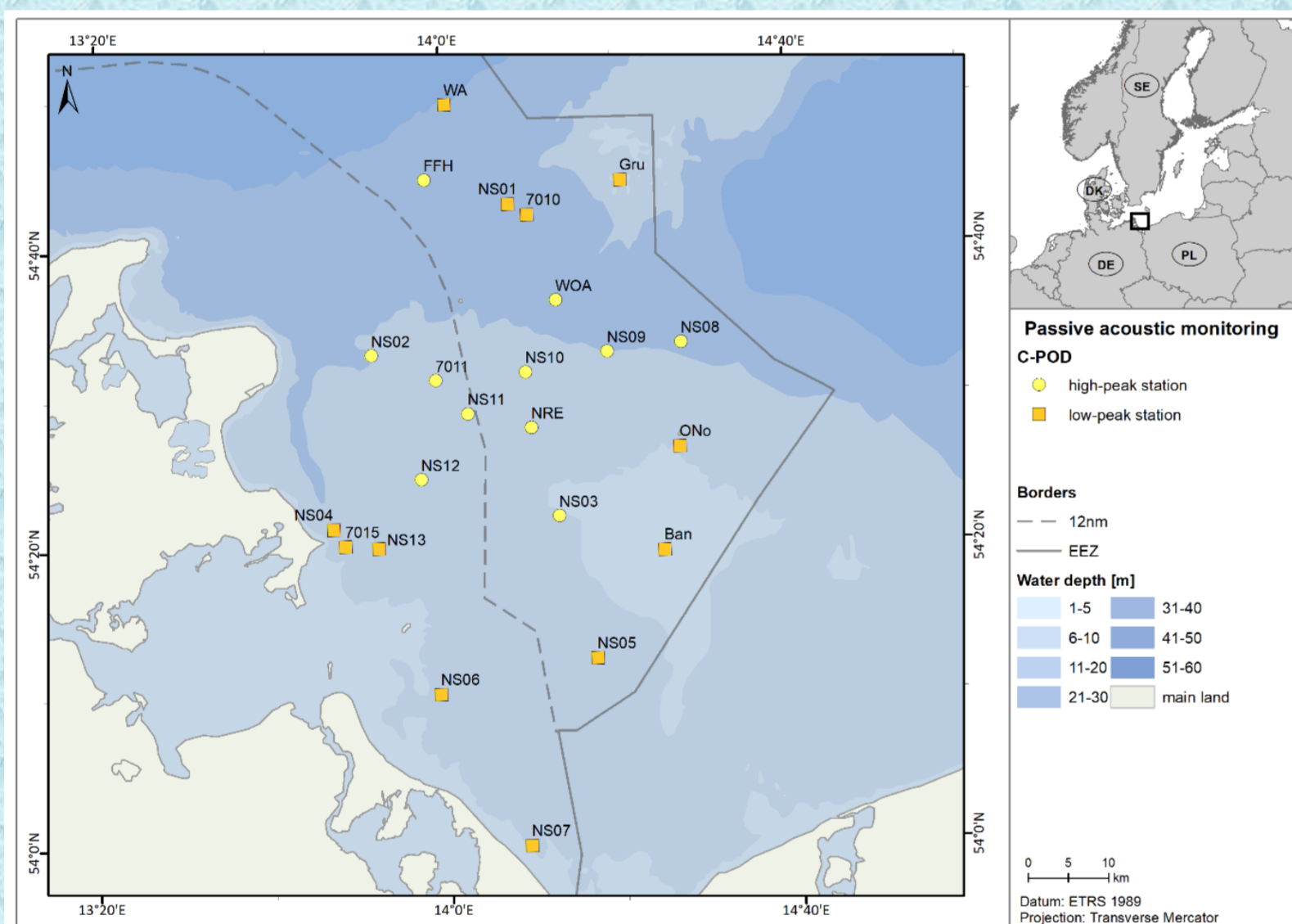


Figure 1: Location map showing the study area of the Pomeranian Bay in the German Baltic Sea and all 23 CPOD positions considered in this study.



Figure 2: C-POD station names, deployment times and data gaps.

Results:

- Strong and significant increase of porpoise detections over the study period (Figure 3)
- Positive trend of porpoise detection rates in the period May to October, when seasonal population peaks also occur further to the West
- Consistently low detection rates in winter without any trend

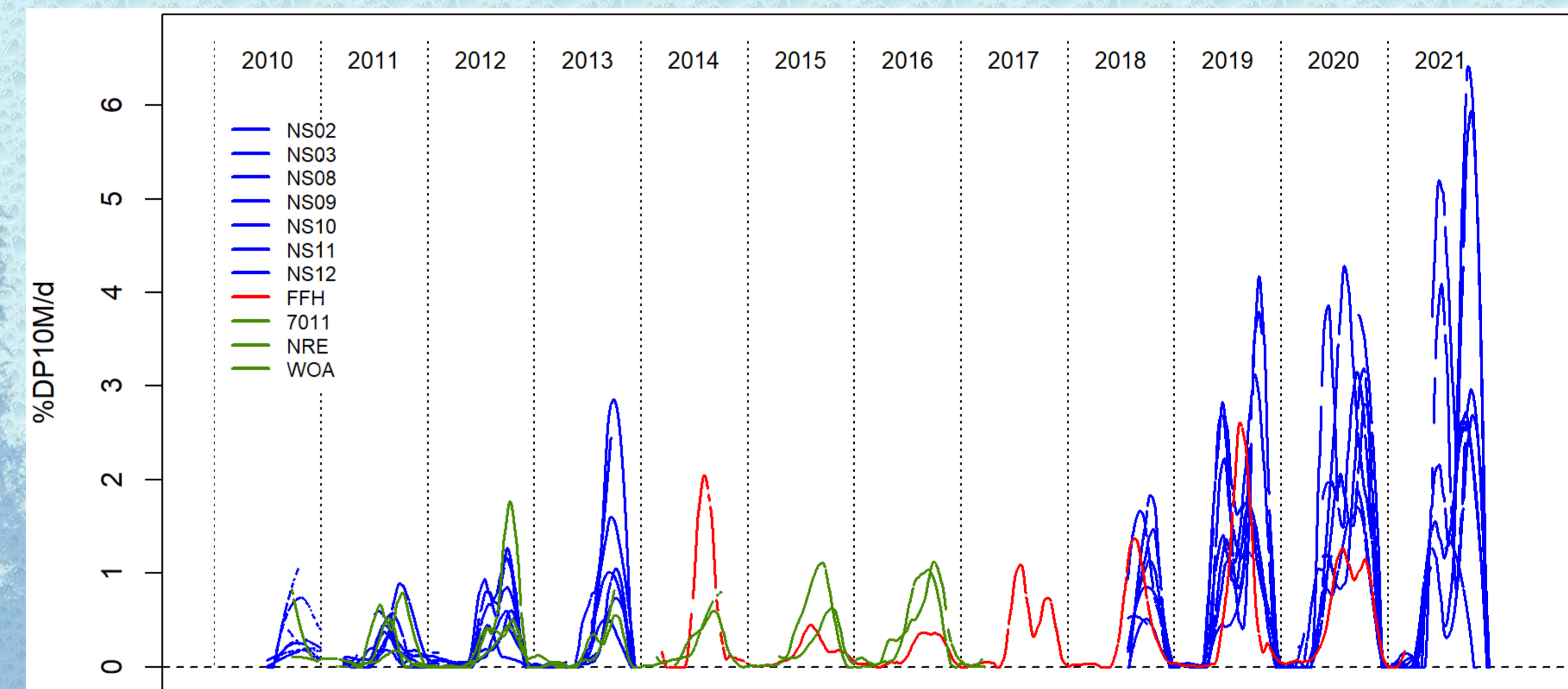


Figure 3: Percentage detection rates per day (DP10M/d) at the monitoring stations for the entire monitoring period. All stations were equipped with one C-POD.

Conclusions:

The number of harbour porpoises in the Oderbank area during the summer months has increased significantly over the last 12 years

→ Distribution shift within the Belt Sea towards east?

No evidence of the presence of Baltic Proper harbour porpoises in winter on the Oderbank based on POD data

