

SPATIO-TEMPORAL VARIATIONS AND INFLUENCE OF ENVIRONMENTAL PARAMETERS IN THE BIOMASS OF LONG-FINNED SQUID (LOLIGO SPP) IN THE ENGLISH CHANNEL

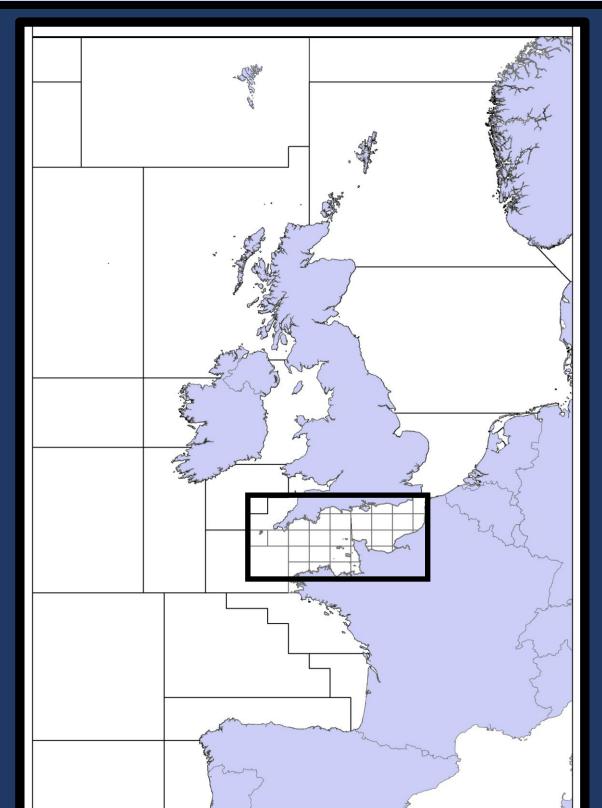
Anna Marcout¹, Eric Foucher², Jean-Paul Robin¹

¹Normandie Université, UNICAEN, Alliance Sorbonne Université, MNHN, UA, CNRS, IRD, Biologie des Organismes et Ecosystèmes Aquatiques (BOREA), Esplanade de la Paix, 14032 Caen, France

² Ifremer, Laboratoire Ressources Halieutiques, Port-en-Bessin, France

Email: anna.marcout@unicaen.fr





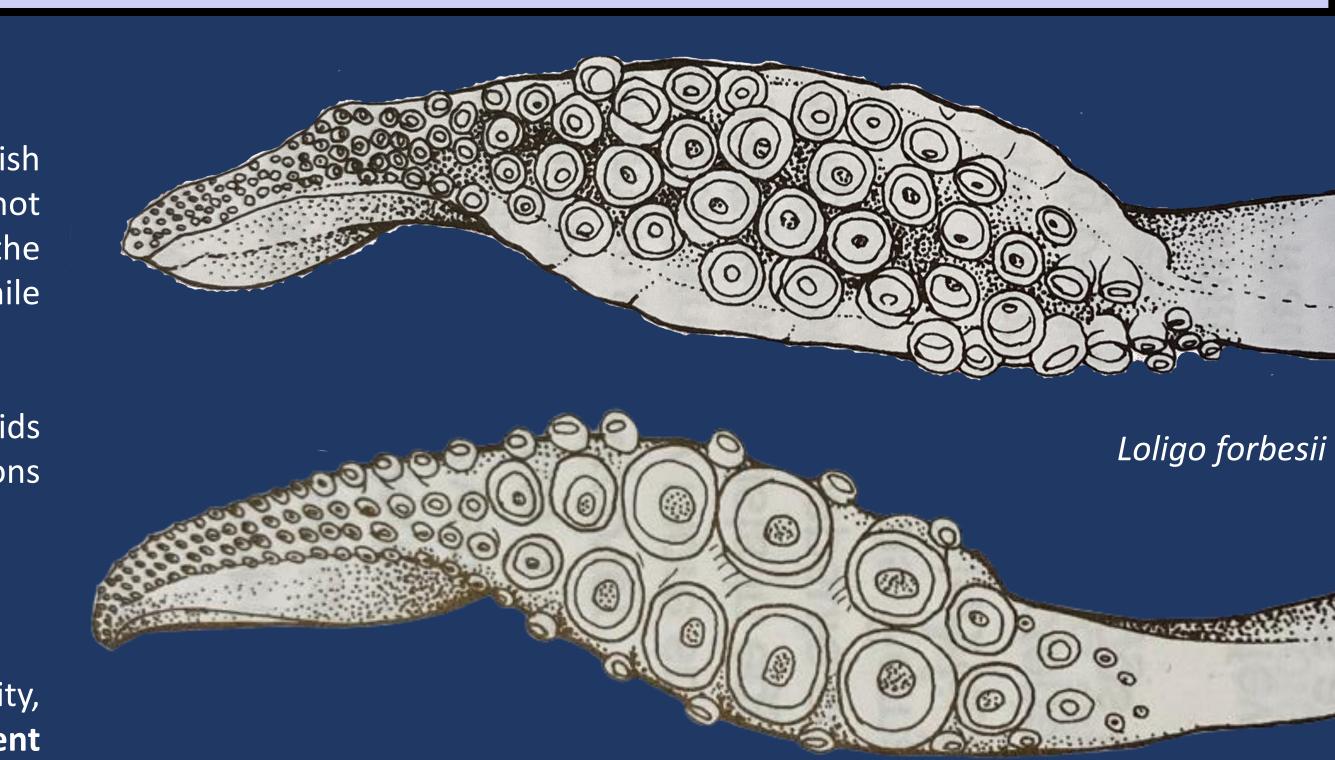
Introduction

Long-finned squids are among the most valuable resources exploited by English Channel demersal fisheries. This resource consists of two short-life species (not distinguished by fishers): **Loligo forbesii** and **Loligo vulgaris** which differ in the timing of their life cycle. For *L. forbesii*, the recruitment peak occurs in July while for *L. vulgaris* recruitment peak occurs in October.

Abundance and distribution of cephalopod species, such as long-finned squids (Loligo spp), depends on **favorable environmental conditions**. Those conditions are paramount for growth and successful recruitment.

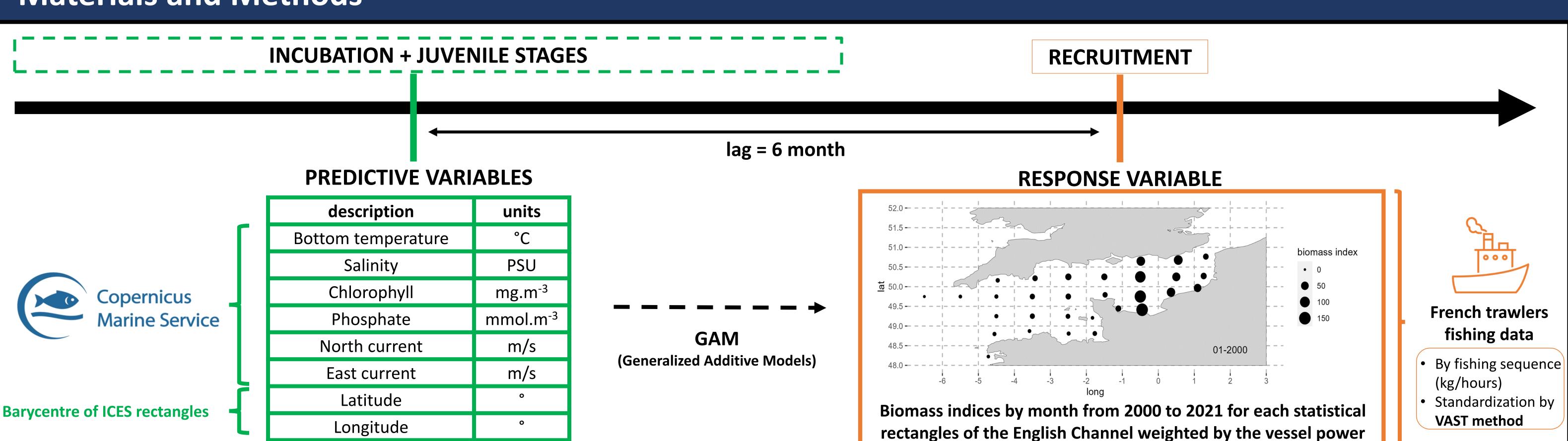
Objectives of this study

To investigate the **role of environmental variables** (bottom temperature, salinity, current velocity, phosphate and chlorophyll concentrations) on **recruitment biomass indices** (in July for *L. forbesii* and October for *L. vulgaris*).

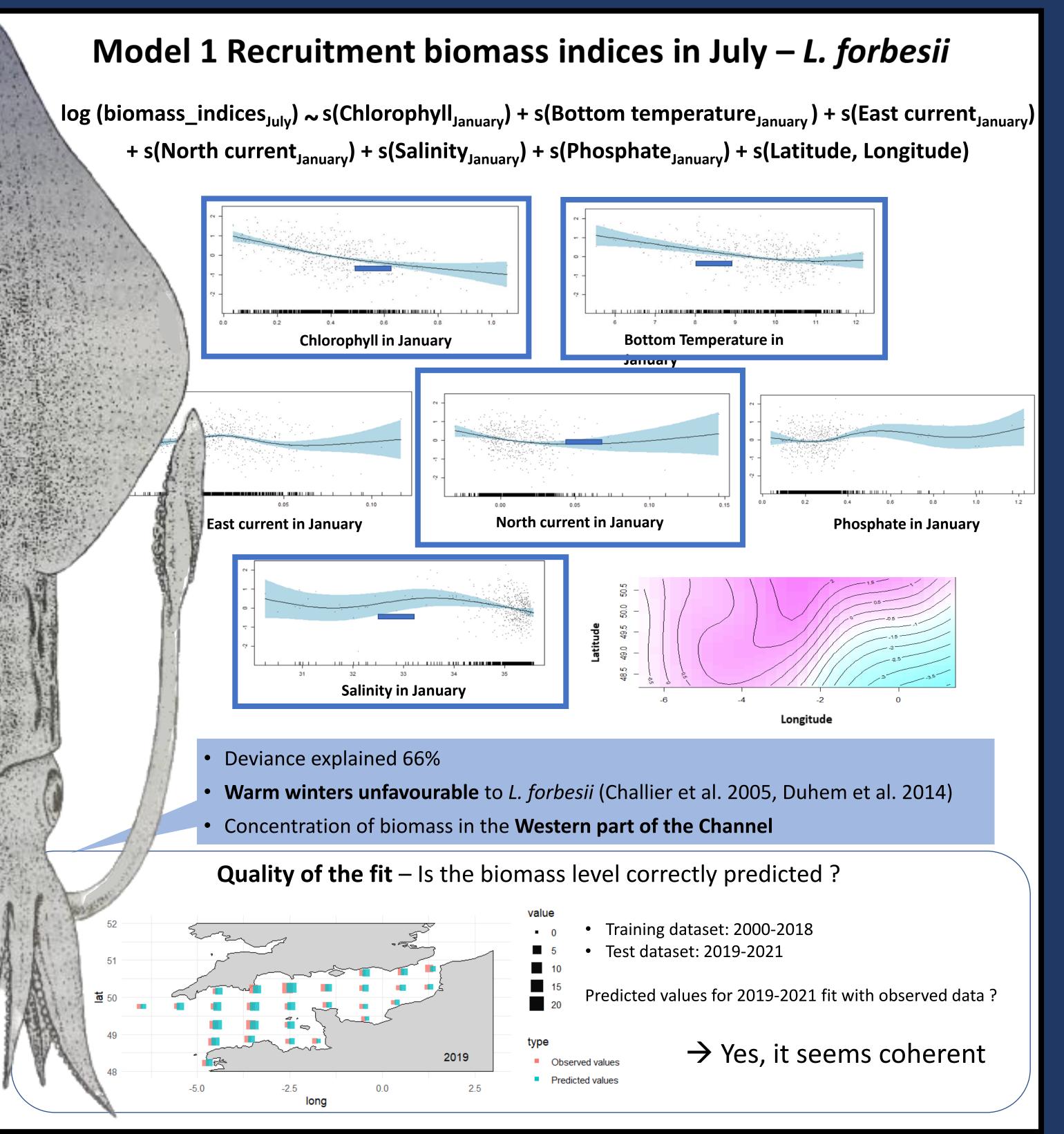


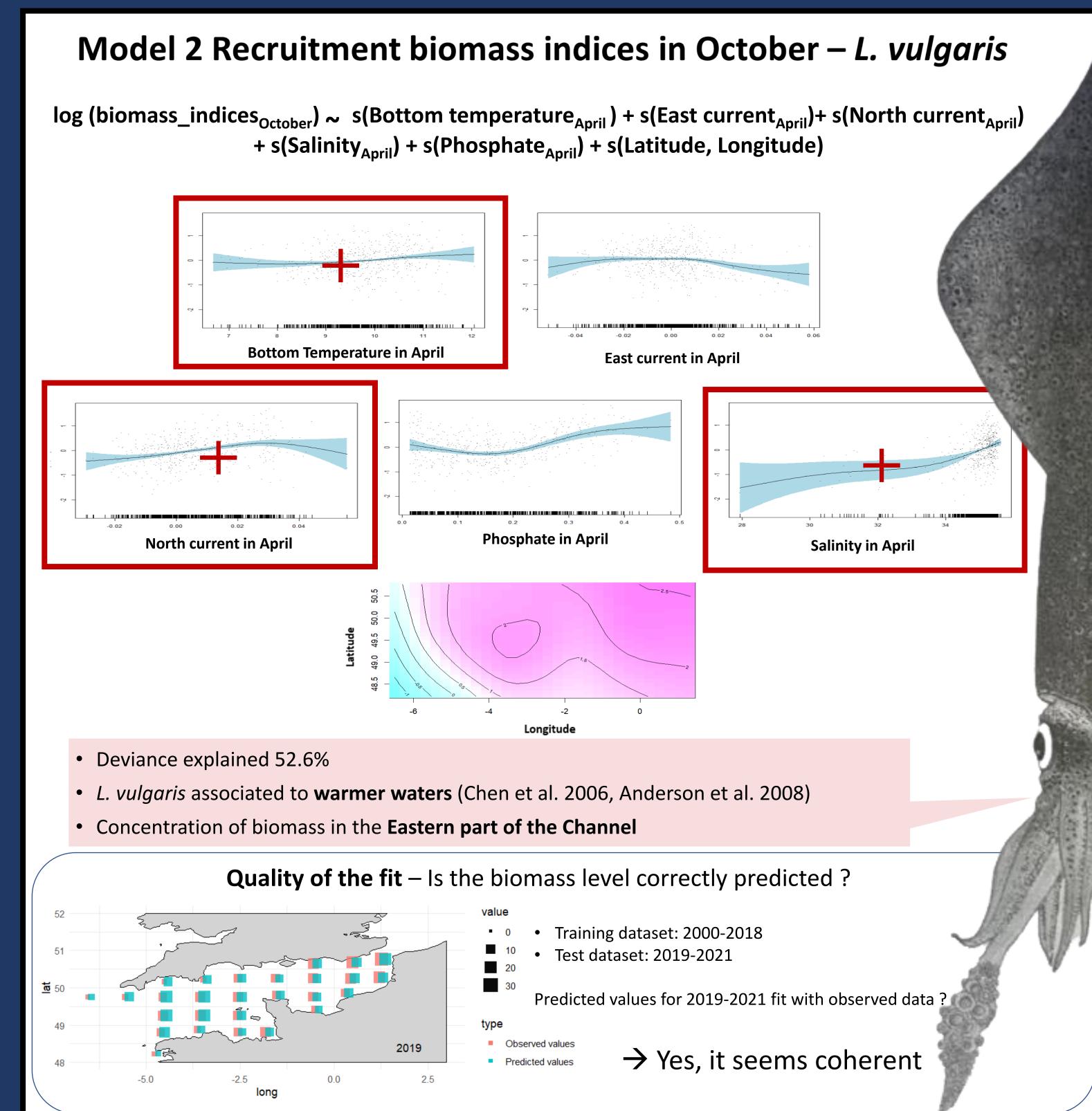
Loligo vulgaris

Materials and Methods



Results





Conclusion

- Identification of environmental drivers
- Predictions of recruitment

Indicators on the status of resources and enable fisheries managers to provide adapted responses to local and regional fisheries

BOREA

Biologie des organismes et écosystèmes aquatiques









