

Differences in growth of Greater Argentine in coastal and offshore locations



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Hypothesis

The growth of Greater Argentine (*Argentina silus*) is influenced by environmental conditions, such as depth, salinity and temperature, and coastal locations have different growth rates compared to offshore locations.

Methods

The fish was sampled with a bottom trawl on board the RV G.O. Sars in three distinct sites: one (A) coastal location, and two offshore locations, (B) Møre Plateau and (C) the Faroe-Shetland Trench (Fig.1), between 2019 and 2023. The age of the fish was determined by otolith ring reading, and a von-Bertallanfy growth function was applied to model the mean length from age for Greater Argentine.

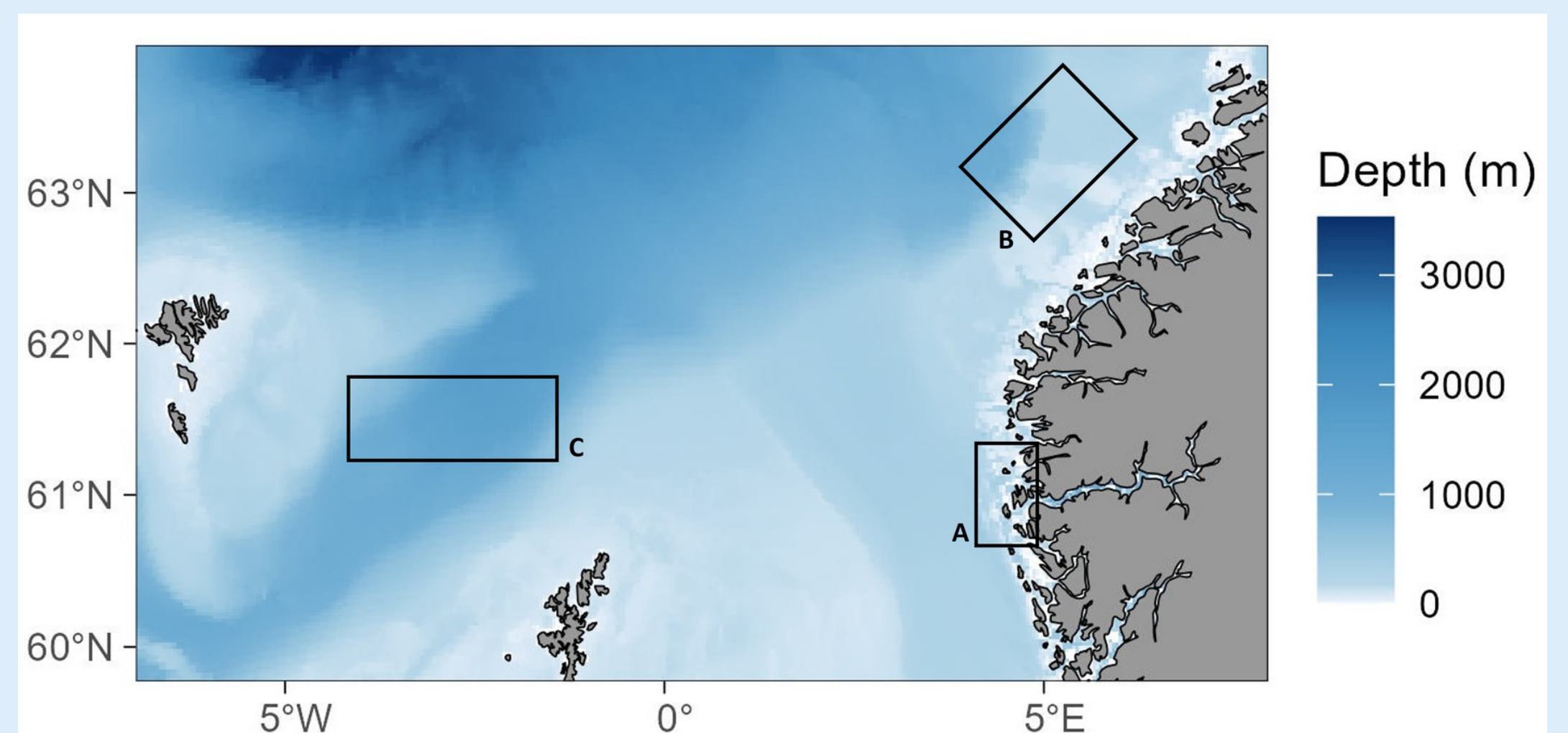


Fig. 1: Map with sampling locations. (A) coastal waters, (B) Møre Plateau and (C) Faroe-Shetland Trench.

Growth curves of *A. Silus* in three locations off the Norwegian Coast

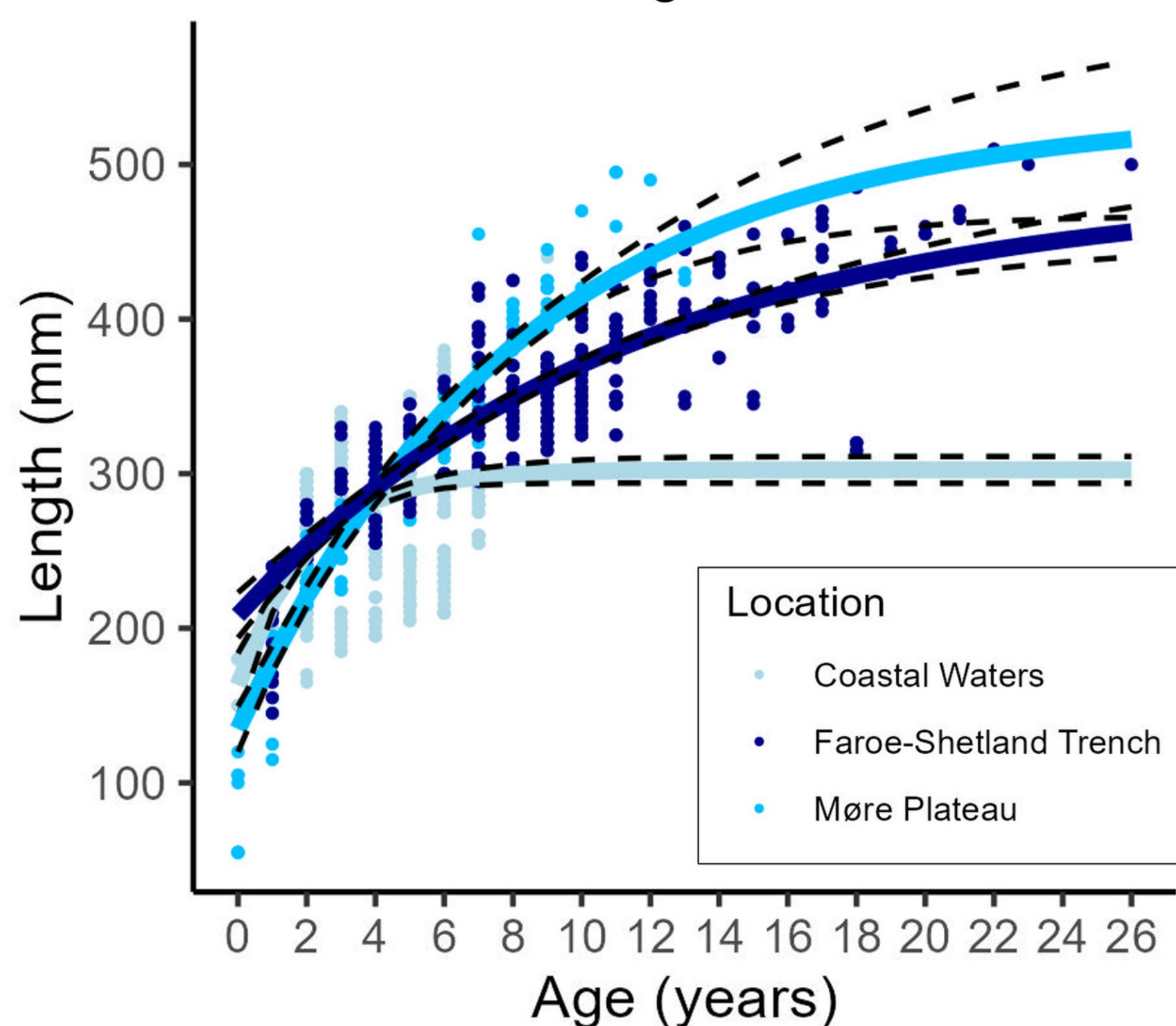


Fig. 2: Growth curves of *A. silus* for coastal waters, Faroe-Shetland Trench and Møre Plateau. X-axis the age of the fish, Y-axis shows the length of *A. silus* in mm.

Results

Our preliminary results indicate significant differences in the growth pattern of Greater Argentines not only between coastal and offshore locations, but also between the two offshore sites (Møre Plateau and Faroe-Shetland Trench) (Fig. 2).



Conclusion

Presumably, the three locations present different environments for the fish to grow. Further analysis will shed light on how these conditions differ between sites. Such results are crucial for a subsequent differentiation of the fisheries management in each location.

