

Increase in massive blooms of the toxic dinoflagellate

Alexandrium tamarensis with warming in the eastern Bering Sea



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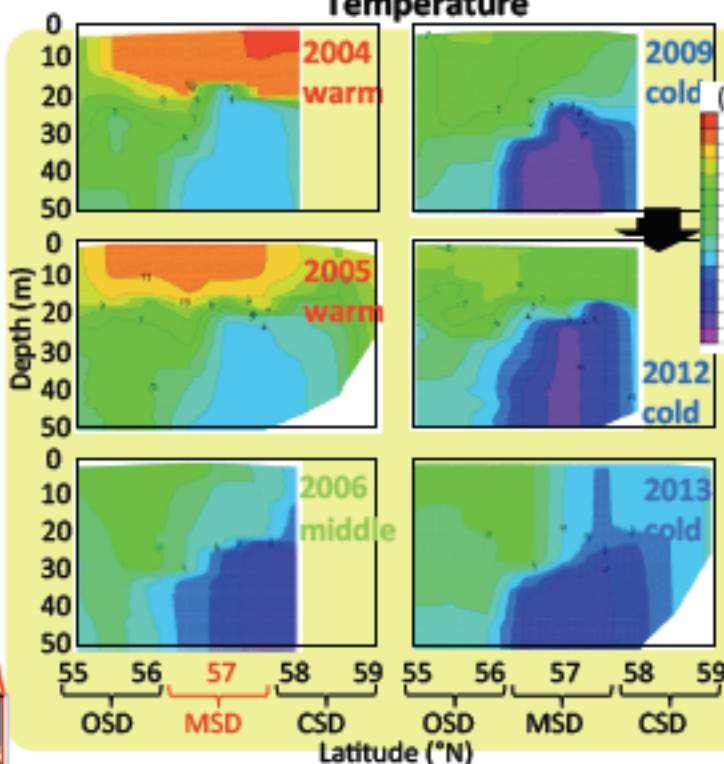
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Introduction

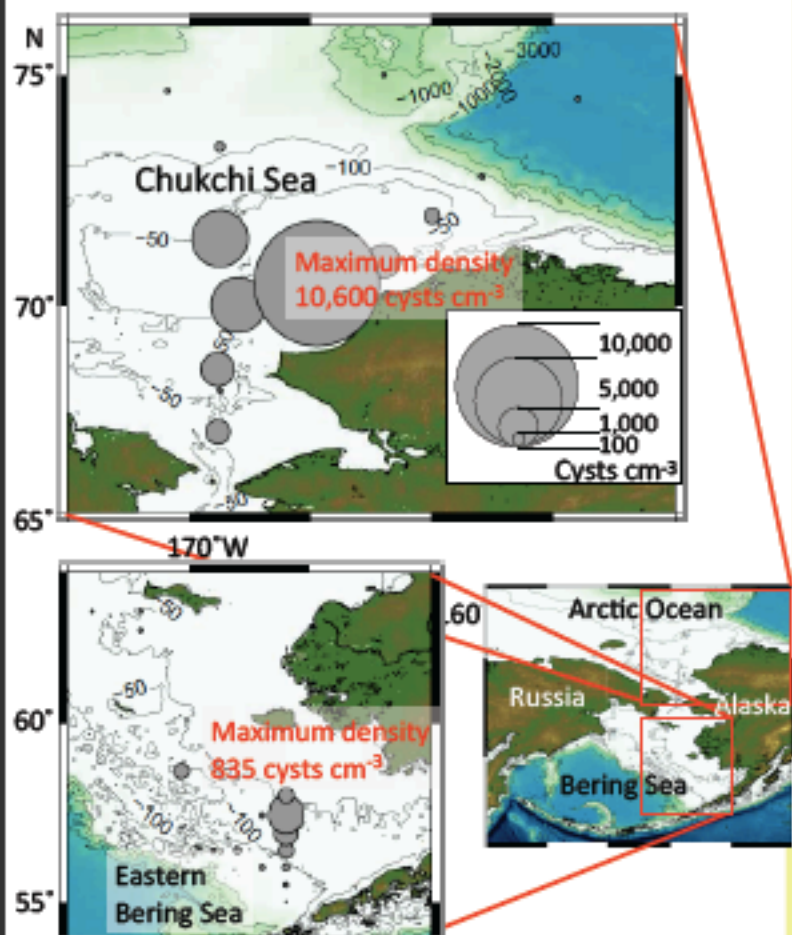
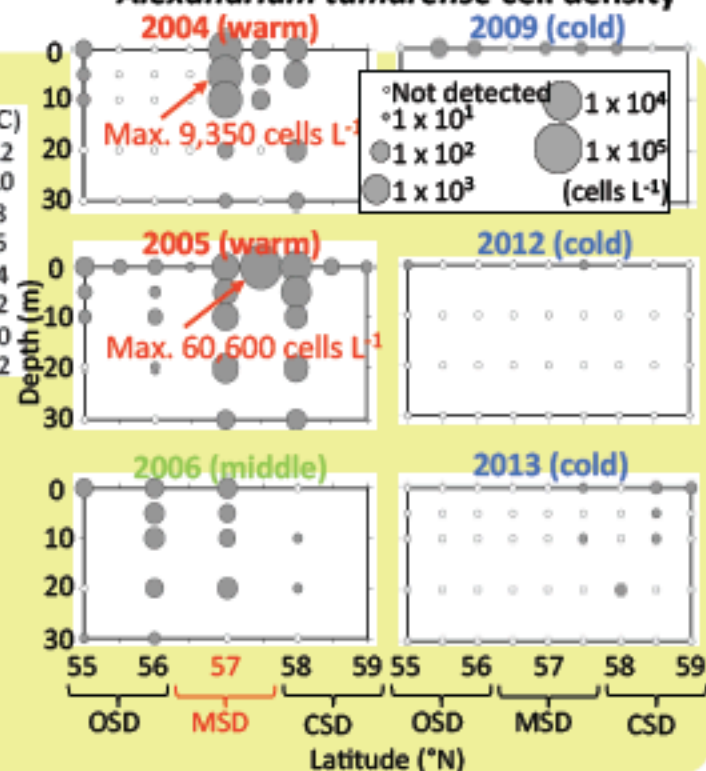
☆ We observed abundant resting cysts of the *Alexandrium tamarensis* in sediments surface in these shelves (Natsuike et al. 2013).

Results and Discussion

Temperature



Alexandrium tamarensis cell density



☆ Abundant depositions of the cysts in these shelves were highly suggested that massive *A. tamarensis* blooms recently occurred in the eastern Bering Sea and the Chukchi Sea.

☆ Warming climate has recently occurred in these areas as well.

☆ We hypothesized that there is a relationship between *A. tamarensis* blooms and recent warming in the eastern Bering Sea shelf and the Chukchi Sea.

Materials and Methods