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Southwestern GIN Sea Upper Layer >

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Category: Non-linear Geophysics

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Title: (NL3) Multifractal Thermal Characteristics of the Southwestern GIN S
Upper Layer

Abstract:

Multifractal characteristics of the upper layer thermal structure in the southwestern Greenland Sea, Iceland Sea, and Norwegian Sea (GIN S) are analyzed using high-resolution, digital thermistor chain data. The spectrum at 20 m depth (cold sublayer) shows the existence of a spill the scale of approximate 3 km representing the chimney scale. The g dimension varies from higher values such as 1.89 at the surface to 1 1.50 in the warm intermediate layer. The stationarity decreases from ocean surface to the warm intermediate layer. However, the informat dimension varies slightly (0.92 to 0.90) that indicates low singularity.

Presentation Mode:

Keywords: GIN Sea, Ocean Mixed Layer, Multi-fractal Structure, Thermister Cha
Stationarity, Information Dimension

Status: Reviewed.

Co-Authors

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