**Marine heatwaves and mystery of the dead puffers**

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**Abstract**

Fish died because of a marine heatwave in the Agulhas Current.

Chart, surface chart

Description automatically generated

**Figure 1:** Map of study region around southern Africa, including portions of the South Western Indian Ocean and South East Atlantic Ocean. The large grey rectangle (-36.25 to -27.5°S and 20 to 35°E) indicate the larger region for which OISST and AVISO data were obtained. The smaller lightly-shaded rectangles indicate the St. Helena Bay to Cape Agulhas region (-34.9 to -32.3°S and 17.6 to 20.0°E), a region from East London to Cape St. Francis (-34.5 to -32.8°S and 24.6 to 28.1°E), and a region on the south of the Natal Bight extending from Durban to Port Edward (-31.2 to -29.8°S and 30.1 to 31.7°E). The pink-shaded polygon is the area of long-term mean kinetic energy, and hence it indicates the mean path of the Agulhas Current. The turquoise-outlined polygon indicates the area of most intense eddy kinetic energy, which can generally be taken as the area where the Agulhas Current meanders most frequently, where the Agulhas retroflection is formed, and where eddies spinning off the mean current originate.