Shelf sea processes observed by gliders and moorings using New Zealand case studies

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ABSTRACT: Ocean gliders are rapidly changing how the ocean is observed and understood for societal and scientific requirements. Long term programmes have existed for more than a decade elsewhere (Canada, US, Australia and Europe). The uptake of glider technology by smaller countries in the last five years has been substantial and New Zealand falls into the latter category. Ocean glider observations in New Zealand have focused on the shelf seas as it is the region of the ocean most poorly observed. Several examples using both gliders and moorings will be presented in this talk: 1) oceanic extent of buoyant river plumes after storm events, 2) biophysical responses from artificial seabed plume generation experiments, and 3) shelf sea interactions with a boundary current. Guardianship or kaitiakitanga is an intrinsic concept in Māori science and will be briefly discussed as the New Zealand science system works to integrate indigenous ocean knowledge with western science and management.

ALL ARE WELCOME!