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Oceanic modons (eddy pairs) seen in the southern subtropics and mid-latitudes.

Christopher W. Hughes

University of Liverpool, School of Environmental Sciences, Earth, Ocean and Ecological Sciences, Liverpool, United Kingdom (cwh@liv.ac.uk)

Satellite altimetry shows some clear examples of eddies pairing up into modons and subsequently propagating at speeds much faster than Rossby wave speeds. There are examples in the Tasman Sea, the Indian Ocean west of Australia, and one case in the Atlantic west of South Africa. Some interesting comparisons with theory can be made. Eastward-propagating eddy pairs can meander, but do not reverse direction until they split. Pairs with an initial westward component of propagation tend to turn to the south and then often to the east before splitting. After splitting, the anticyclonic eddy usually drifts to the northwest and the cyclonic eddy to the southwest. All this is in line with theory if the eddies radiate Rossby waves after splitting. The modon speeds can be an order of magnitude faster than Rossby wave speeds, and in either direction. The drift speed after splitting also seems to be somewhat faster than the Rossby wave speed, which is at odds with single vertical mode theory in different ways for the cyclonic and anticyclonic eddies. Examples are also seen of pairs splitting and recombining, before splitting again.