Abstract ***Alice McGrath***

An eastward shift in the distribution of adult Cape anchovy (*Engraulisencrasicolus*) in the southern Benguela was observed in 1996 and has persisted since, with >50% of adult biomass now located to the east of Cape Agulhas whereas previously most of the population was distributed to the west of Cape Agulhas. A previous studythat used coarse (1°) resolution satellite-derived SST data on the Agulhas Bank reported a significant relationship between the cross-shelf SST difference and the relative distribution of anchovy spawner biomass east of Cape Agulhas. However, this relationship was not observed when compared to a time-series of *in-situ* data in the region, which adds to the notion that coarse-resolution satellite data may not be very accurate in coastal and near-shore regions. In this study the relative distribution of anchovy on the Agulhas Bank has been compared with the same 1°horizontal resolution satellite data used in the aforementioned study but extended in time. In additiontime-series of two satellite-derived SST products at0.25°horizontal resolutionand data from a regional HYCOM model configurationhave been investigated to further examine whether the anchovy shift was environmentally mediated or not, and whether the relationship previously observed still remains.

Significant positive relationshipsbetween relative anchovy distribution and SST differenceare observed in certain regions of the Agulhas Bank in the HYCOM data, and one of the higher resolution SST satellite data sets. The results highlight the importance of being cautious when using coarse resolution data in coastal areas as corresponding significant results were not yielded from all data sets.