

ABSTRACT

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Variability in the nearshore physical environment of St Francis Bay on the South African south coast.

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Monitoring of the near shore physical and chemical environment in the St Francis Bay region has been undertaken by the SFRI since early 1991. The overall aim of this project is to describe and understand the variability of oceanographic conditions in and around this coastal embayment, ultimately with a view to determine its influence on the early stages of the life cycle of the squid *Loligo vulgaris reynaudii* and other biota.

This poster focuses on one aspect of this project, namely the major driving force of oceanographic variability along this coast, in showing that the zonally-aligned western shores of Cape Recife and Seal are centers of coastal divergence upwelling under summertime easterly winds. We show that the cold, upwelled water is not confined to the regions offshore of these capes, but intrudes into the sheltered embayment. It is shown from laboratory trails that the resultant variable environment in St Francis Bay may affect the development rate of squid eggs.