



NPZD DYNAMICS ALONG THE FLORIDA KEYS

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Result from a typical NPZD population dynamics model will be presented with an emphasis on the existence of multiple basins of attraction depending on environmental parameters in the model. Then the flow structure of the Loop Current as it passes the Florida Keys and flows into the Florida Straits will be described. Results from a Hybrid Coordinate Ocean Model (HYCOM) applied to the region will then be presented. Finally, the NPZD model will be introduced into the dynamically active flow environment as passive tracers, with a view to comparing results from the “static” models. Spatial distributions are also highly variable and complex as a result. Ultimately one would like to address the question as to what the dynamical consequences are of being stochastically taken from one domain of attraction into another at successive times.