Tracing migration of larger benthic foraminifera across atolls in the South China Sea

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The distribution of modern benthic foraminifera is studied from offshore reefs of Brunei Darussalam located in northwest Borneo with enhanced siliclastic influence, and from Louisa Reef, an atoll in the Southern Spratly Islands under fully carbonatic environment. The main families of larger benthic foraminifera found from offshore reefs of Brunei are the Calcarinidae, Amphisteginidae and the Operculinidae, while at the Louisa Reef are the Calcarinidae, Amphisteginidae and the Soritidae. Larger benthic foraminifera are mainly concentrated in the tropical regions and in shallow waters, and their distribution depends on important environmental factors such as water depth, sunlight and type of sediment. Migration of LBF has been recorded since the Paleogene from the Americas to Africa and the Mediterranean Sea, and later to the Indo-Pacific where the modern biodiversity hotspot occurs. Hence looking into any possible migration throughout certain groups of LBF could help in understanding their biogeographic distribution through time within the Indo-Pacific region. Along the atolls in South China Sea the marine environments meet their living preferences, hence tracing their presence, distributions, and abundances could shed further light on their regional migration pattern.