

Marine Environment Integrative Analysis –from coast to world ocean, from seasonal to 10,000 year scale–

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Climate and ocean environment fluctuate from a few days to several decades, and their mean state is also changing on time scales longer than a few decades to astronomical time scales. All of them combine to cause the on-going ecosystem degradation and biodiversity crisis. To elucidate the climate-ocean-ecosystem variability, changes and interactions, Marine Environment Integrative Analysis Unit conducts (1) research and development for monitoring the physical and chemical environment from coastal areas to the open ocean, (2) developing new analytical techniques for detecting and reconstructing marine environmental changes and research on co-variations between marine environment and ecosystems using bioindicators, and (3) integrated geophysical analysis for clarifying the mechanisms of changes in the marine environment and climate.

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