

河川水と海水の混合域におけるドローン観測

Observation of surface water properties from river mouth to the ocean using drones

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Water mass properties are known to significantly vary from the river mouth to the ocean, which can result in changes in ocean color. A photo-imaging drone was used to examine how much we can observe this feature at Akkeshi, Hokkaido, Japan. We observed the water surface from the river mouth of Bekkanbeushi river, through the Akkeshi lake, to the Akkeshi Bay. Past observations show ocean color in this region changing dramatically within a short distance. We merged the photo-images based on the GPS positions that the images were taken and the merged images indeed show dramatic changes in ocean color from region to region, suggesting a difference in the magnitude of mixing. Some images also contained changes due to bathymetric features which need to be excluded for further detailed analysis. Preliminary results show ocean color variations on a few-meter spatial scale.

キーワード：ドローン観測、河口域、海色

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