

Spatial distribution of sediment loading into the Lake Biwa after typhoon 18 (Man-yi) in September, 2013

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The typhoon 18 (Man-yi) in September 16, 2013 brought the highest 24 hours rainfall ever reported in the western part of the Lake Biwa. This event likely induces massive deposition of terrigenous matters to the lake. Here we show the spatial distribution of sediment loading after the event using 23 core samples collected in 15 and 18-October, 2013. Particle size distribution, sediment color, and trace element profile were used to identify the newly deposited layer. The results indicated that highest sediment loading was observed near the mouth of Ado-river in which ca. 3 cm of fresh detritus was newly deposited. This amount corresponds ca. 30 years considering general deposition rate in this area. This result can be utilized as the base-data to assess the material input during this event, e.g., nutrient and metals, which affects changing in eco-system in the lake.

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