Datasets on spatial and temporal distribution of heavy metals concentration in recent sediment at merang river system, Terengganu, Malaysia

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Abstract

Heavy metal pollution in an aquatic environment has become of the main concern to the world due to their non biodegradable properties, toxicity, persistence, and their ability to adsorb into food chains. With rapid industrialization and development nowadays, heavy metals are introduced continuously into the estuaries and coastal region through rivers, runoff, and land-based point sources. These heavy metals may degrade the aquatic environment and harm the living organisms and toward human indirection through secondary contact. The dataset provided is to give an overview of the spatial and temporal distribution of the heavy metals concentration in Merang River surficial sediment collected from September 2017 to July 2018, subsequently every two months dataset. Sediment samples were collected in 44 sta tions along the river and 20 stations in the coastal area, which total up to 64 stations. Teflon Bomb closed digestion method with mixed acid was used to digest the sediments. The concentration of heavy metals in the sediment were analysed by using Inductively Coupled Plasma Mass Spectrometer (ICP-MS). The spatial distribution of heavy metals shows the effect of monsoon and wet and dry seasons in the sampling area. Thus, this dataset reveals six months of information on natural and anthropogenic sources intrusion at the Merang River and may also help in monitoring the pollution in the area. (c) 2020 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY license. (http://creativecommons.org/licenses/by/4.0/)

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