Monitoring of Subsidence Area of Jakarta City using PS-InSAR

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Jakarta city proposed the Jakarta Giant Sea Wall as waterfront city for new urban settlement zone, and deep seaport for new economic zone along coastal area at northern Jakarta. This research investigated land deformation at eleven watersheds of West Java Mega Urban Region (WJMUR) using Persistent Scatterer Interferometry (PSI) technique of ALOS PALSAR data. The result shows that land deformation at study area, especially Bandung city area gives significant impact to sedimentation velocity along eastern Jakarta strait, especially deep seaport for 43 years later. This research recommends to evaluate land conservation at upland watersheds, and well management of artificial canals to reduce the impact of sedimentation at Jakarta strait, especially new depth seaport.

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