From piedmont to floodplain - Late Holocene landscape change in the environs of Pergamon in western Turkey

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This paper investigates the late Holocene landscape development and settlement history of the central Bakırcay valley (the ancient Kaikos valley) in western Turkey. It exemplifies a buried archaeological site approximately 12 km southwest of Pergamon. A minimally intrusive geoarchaeological approach was applied by coupling an archaeological survey, geophysical exploration, geomorphological mapping and sedimentological analysis of drilling cores and pre-existing outcrops. The geomorphological and lithostratigraphical results imply that in the early and middle Holocene the site was situated on a depositional piedmont plain that was protected from the annual Bakırcay floods. Over the past two millennia, the Bakırcay flood plain was gradually aggraded and the site became prone to flooding. Despite the limitations of non-intrusive archaeological investigations, three scenarios were developed on the function and age of the buried site. Hence, the site was a sanctuary from the 2nd century AD, or a luxurious estate from the 4th-8th century AD, or a lime kiln from late Antique/Byzantine times.



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