Failure modes observed in geobag revetment using EDEM

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Abstract

In recent years, sand filled geotextile bags (geobags) have been used as a means of long term riverbank revetment stabilization. However, despite their deployment in a significant number of locations, the failure modes of such structures are not well understood. Three interactions influence the geobag performance, i.e., geobag–geobag, geobag–water flow and geobag–water flow–river bank. The aim of the research reported here is to develop a detailed understanding of the failure mechanisms in a geobag revetment using a DEM model.

Keywords

DEM; failure modes; geobags