

ID 152

Emerging Frontiers: Recent Advances in Geographic Information Systems for Military Applications

CMMP Chandrasekara^{1#} and PRD Wijesinghe¹

¹Faculty of Computing, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

#38-it-6267@kdu.ac.lk

Abstract

This paper explores the significance of automated military passability map generation systems in contemporary military operations, emphasizing the importance of passability maps in military decision-making and their role in enhancing operational efficiency, safety, and tactical precision. The study examines the limitations of traditional manual mapping techniques and the need for sophisticated automated systems to improve operational efficiency and safety. The research focuses on the use of geographic information systems (GIS) in geospatial analysis, intelligence, logistics, supply chain management, environmental and disaster management, highlighting the revolutionary impact of GIS in modern warfare. The comprehensive nature of the research paper "Emerging Frontiers: Recent Advances in Geographic Information Systems for Military Applications" provides a detailed exploration of the significance of automated military passability map generation systems and their far-reaching implications for modern military operations. The paper concludes with a discussion on the substantial influence of these developments on contemporary warfare and the importance of automated military passability map generation systems in enhancing operational safety and effectiveness.

Keywords: Automated military passability map, Geographic information system, Military applications