Study of meandering of river Ganga near Allahabad (India), using remote sensing and GIS techniques

M. KUMAR, D.M. DENIS AND P. GOURAV

ABSTRACT: The present work deals with Sinuosity Index which determines the meandering and sinuosity of the river Ganga. The study depends upon using TM and ETM+ acquired through 1990, 2000 and 2010 years. Remote sensing and Geographical System Information (GIS) analysis, and sinuosity index were used in this study to investigate and classify the river into straight, sinuous and meander category. The analysis of the Landsat imagery revealed the migration of the river coarse with time and space. The study reveals that the length of the river falls in only two categories i.e. sinuous and meander. The study measures the various silt of selected segments in many part of the river. The study reveals that Landsat images/remote sensed images can be successfully used to classify lengths of the river.


Key Words:
Remote sensing,
GIS, landsat
MSS.TM. ETM+,
Meandering,
Sinuosity index

Author for correspondence:
M. KUMAR
Department of Soil
Water Land Engineering and Management, Vaugh
School of Agricultural Engineering and Technology (SHIATS),
ALLAHABAD (U.P.) INDIA
Email : mukesh_fo@yahoo.co.in

See end of the article for Coopted authors’