

KASSEI VALLES Analysis of the Outflow Channels on the Mars.

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Abstract:

Traditionally, geography with the GIS tools was bound to modeling the surface of Earth. However, exploration of the extraterrestrial planets by various missions have led to creation of databases storing the models of extraterrestrial relief, images, and thematic maps. This case study is focused on creating the thematic map of the surface of the Mars, which outlines the hydrological features such as ancient river channels. The surface of the Mars contains numerous evidence of the past hydrologic activities, such as the outflow channels, which indicate the downslope flow of the water. Capturing these channels in Kassei Valles was done using the digitizing method one and flow accumulation method 2 using the GIS software. Both methods have their own limitations, although given the higher spatial resolution the second method should produce more results that are accurate. Both methods rely on the concept of water flowing from areas of higher elevation to areas of lower elevation. Creating the hydrologic maps containing the outflow channels of the Martian surface using the improved version of the second method will allow for further understanding of the ancient fluvial processes that shaped the surface of the planet.

Key Words: Urban Growth, Land use/ change and Agricultural

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Biography:

Anar M Samedi has received his BSc in Geography from University of Calgary, as well as degree in Population Health Sciences. His research interests include climate change, air quality and population respiratory health monitoring and his last research was conducted in conjunction with Health Canada. He has 10 publications to his credit..

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