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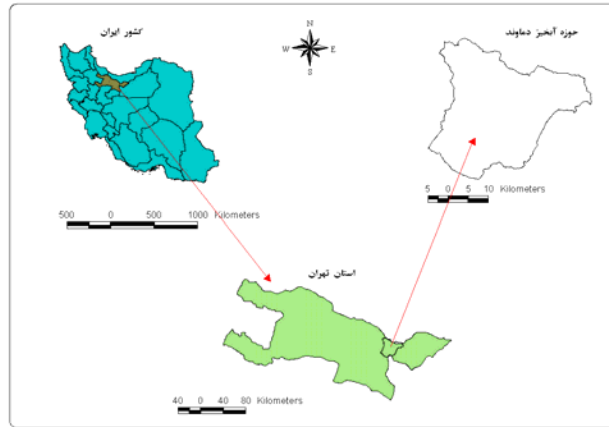
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- Land use
 - Geological formation
 - Rainfall
 - Slope
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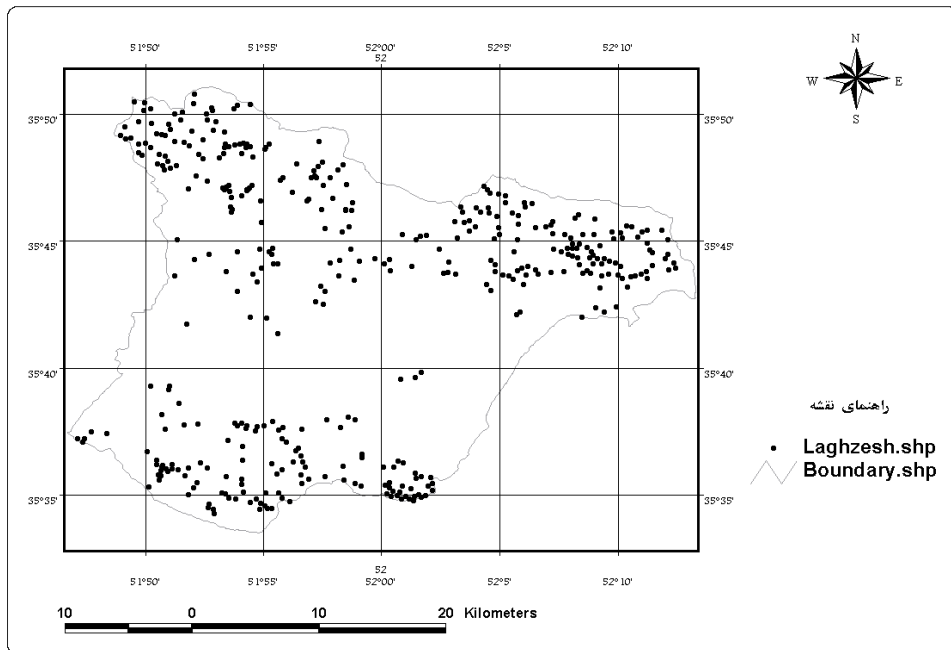
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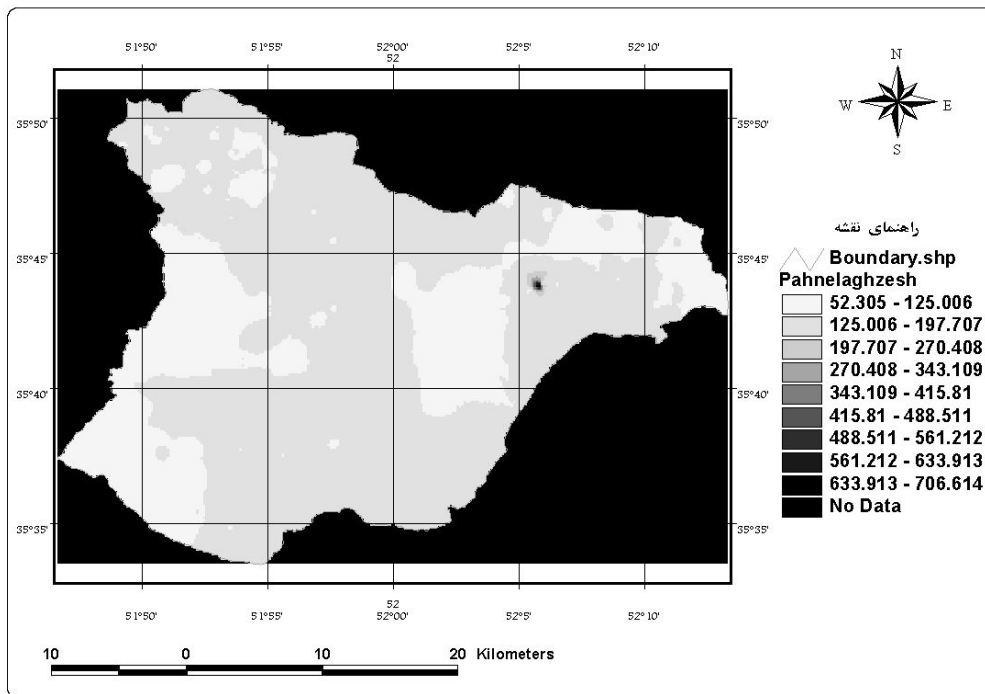
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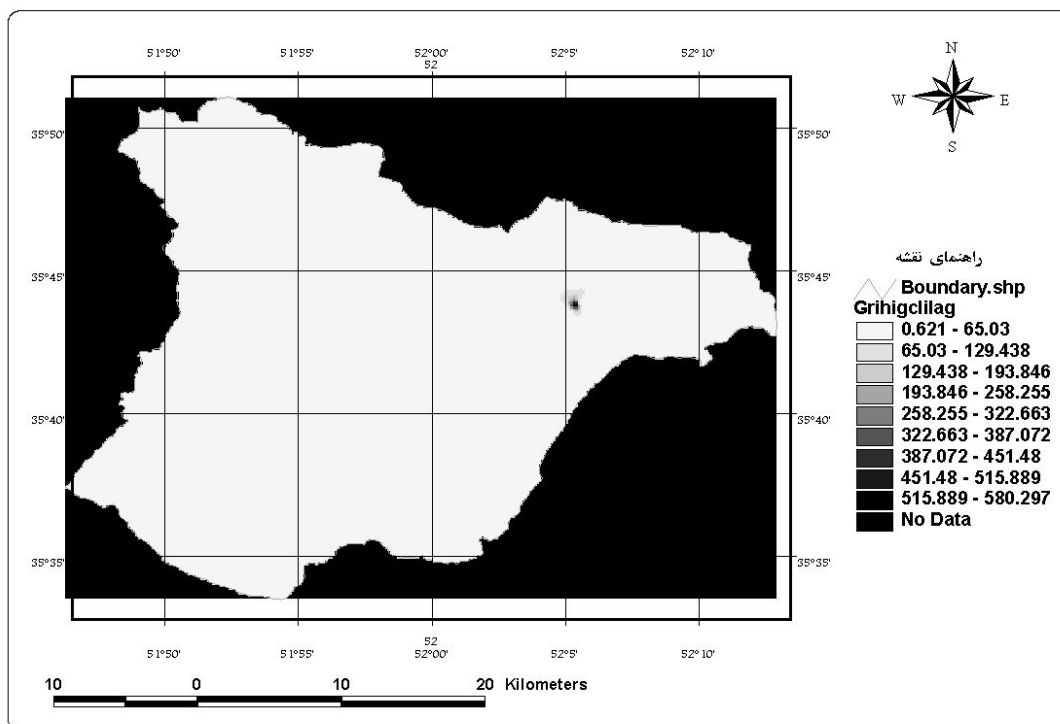
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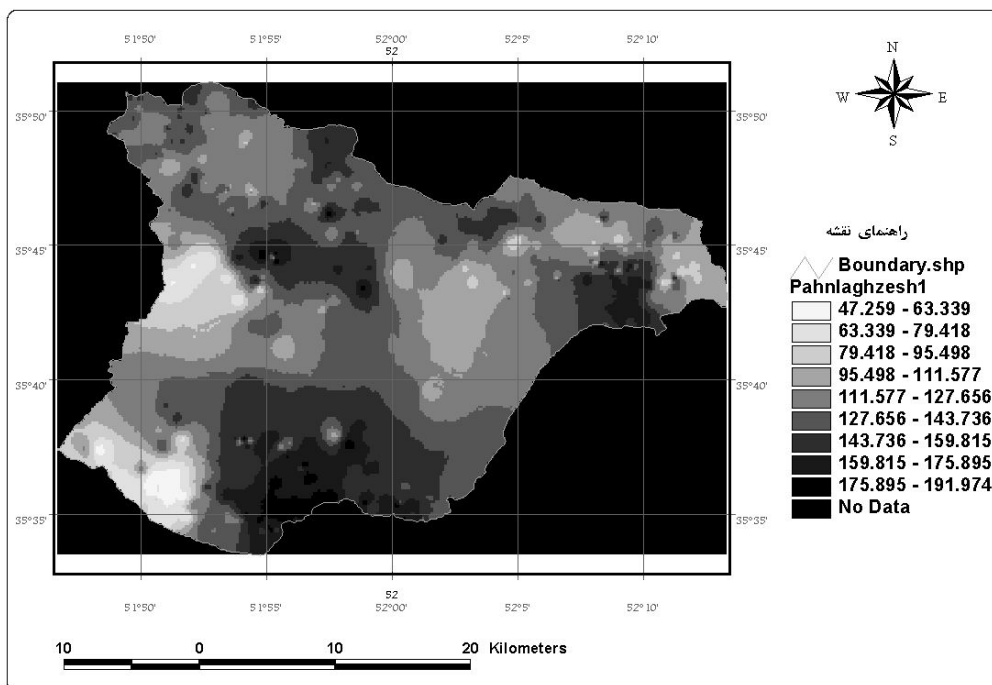
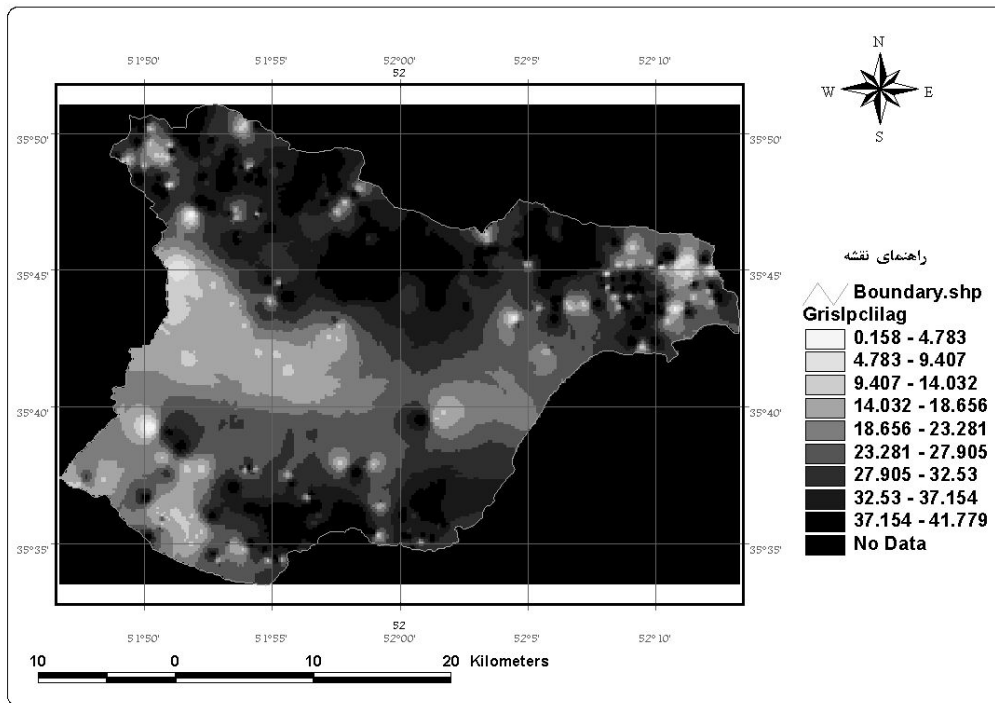


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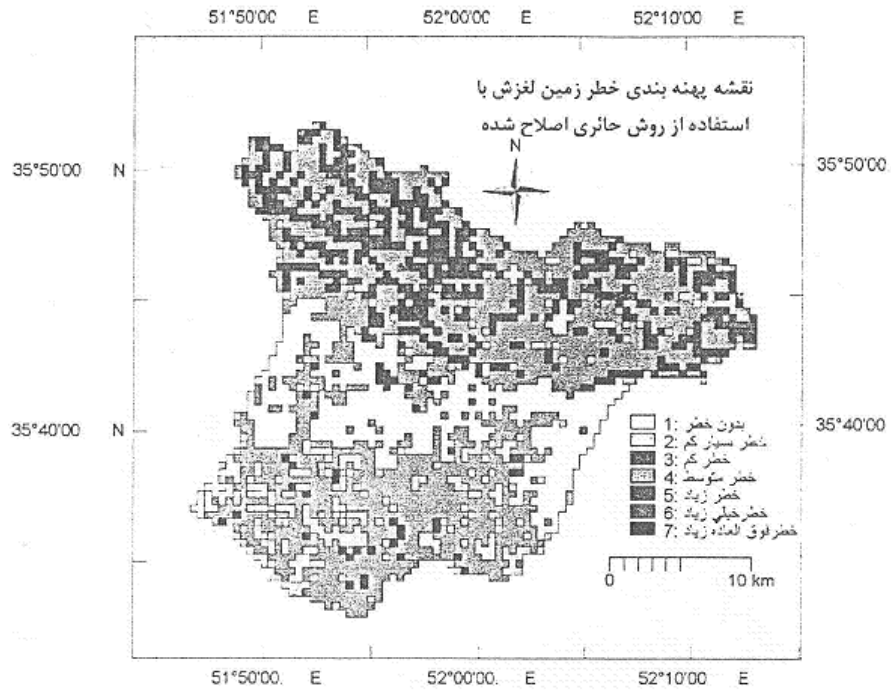


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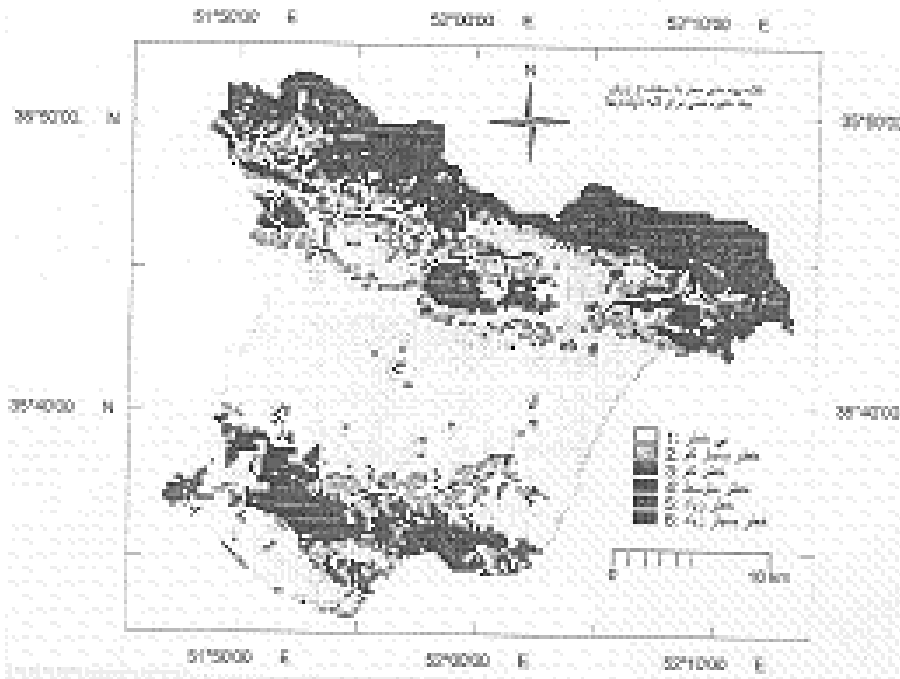




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Landslide hazard zonation using specific interpolation and giving percentage to each subfactors in Damavand Drainage basin

S. Feiznia¹ and A. A. Mohammadi^{*2}

¹ Professor, Faculty of Natural Resources, University of Tehran, Karaj, I. R. Iran

²Ph.D. Student in Watershed Management, Azad University, Science and Research Branch, Tehran, I. R. Iran

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Abstract

Recognition of effective factors in mass movement occurrence and land slide hazard zonation is one of the most important measures in prevention and reduction of their hazards. In this research, first landslide inventory map of the area which was prepared using air photos with the scale of 1:20000 and 1:50000 and field works, was used. In this map 410 landslides were shown. Effective factors for land slide occurrence were recognized which are as follows: Landuse, geological formation, rainfall, slope, aspect and elevation. Landslide inventory map was quantified by giving percentages to each subfactor of above-mentioned factors. Fore doing this, all the factors that were quantified, were entered into Arcview software environment as quantified, descriptive tables. Here, all 410 landslides were entered into quantified, descriptive tables according to the mentioned factors and subfactors. Then each factor and its quantitative number was prepared as raster map. This process was performed using extentional facilities of ArcView which is called "Extension Spatial Analyst". The raster maps of six factors with cellular resolution of 0.0014 meters, were added together, in order to obtain hazard zonation map. For evaluation of hazard zonation accuracy and separation ability of the used method, landslide hazard maps were overlaid with vector maps of landslides inventory map and necessary changes of the considered factors were made. The privilage of this method is as follows: It uses actual data obtained from the field works; by using this method, effective factors in land slide occurrence could be identified; it can be performed in any area; and the accuracy of hazard zonation is dependent on the accuracy of informations gathered in the field.

Keywords: Hazard zonation, Landslide, Speciefic interpolation