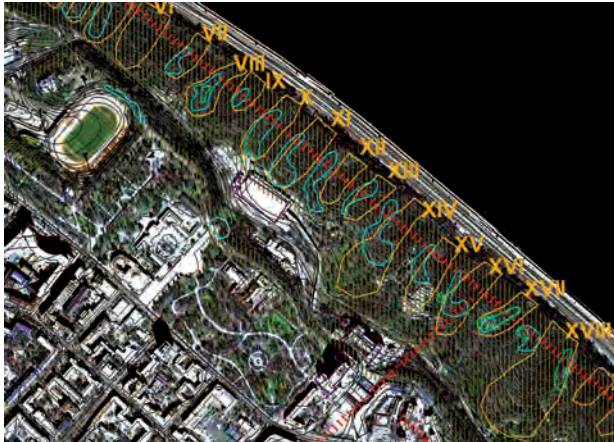# FORECASTING OF LANDSLIDES USING MULTISPECTRAL SATELLITE IMAGES

Fragment of the resulting maps of Central Dnieper landslide zone, Kyiv city

Fragment of satellite image of the Zamkova Hora with high landslide risk areas selected

Areas of Application

The method is to be used for identifying and forecasting landslide-prone areas to prevent activation of landslides within urban areas and areas exposed to anthropogenic load, which leads to significant environmental problems and financial losses

Specification

The forecast results are the Geographic Information System (GIS) for landslide-prone areas and some areas of possible landslide activation using multispectral satellite data, analysis of morpho-dynamic surface by means of the digital elevation model, and analysis of changes in anthropogenic load in the monitoring mode
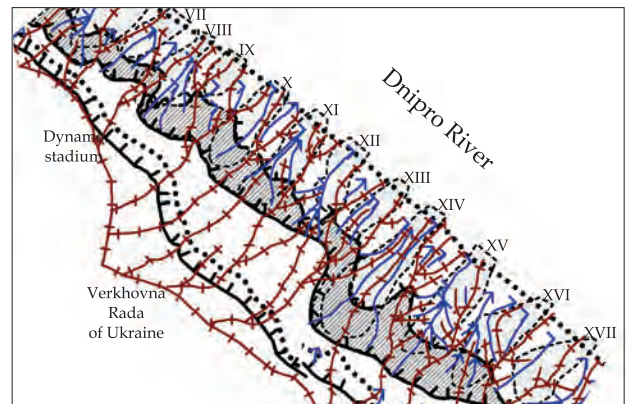
Morphodynamic analysis of Central Dnieper landslide zone, Kyiv city: 1 — landslide and its number: 2 — drainage grid; 3 — ridge lines; 4 — upper slope brow; 5 — lower slope brow; 6 — slope bend; 7 — landslide risk area

Advantages

Advantages of the multispectral satellite images over the similar ground observation data are better visibility, efficiency and a relatively low cost of this method, as well as creation of GIS for the landslide areas

Stage of Development. Suggestions for Commercialization

IRL6, TRL6
Upon request, the works for landslide prevention can be done for planning, civil engineering, and government bodies and city public administrations

IPR Protection

IPR2

Contact Information

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