The useof digital datato detectvegetationchanges(case studyTaftan)

Abstract

Ground-surface complicationsTimemonitoringbyremote sensinghasgreat importance to understand theinterrelationshipsbetween human andnatural phenomenaandoptimal decision. Landsat TMimages (years: 2001 and 2011) of Taftanpasturesin Khashcity, with225,701hectares area, were analyzedusingidrisisoftwareinthisstudy.Indexeswere builtinidrisisoftwarein the first phase.Bands andindicesas the dependent variableandtheamount of cover vegetation in measured siteswereusedasindependent variables, at correlations reviews. spss softwareand t-testwas usedtodetermine thecorrelation.In this study,indicatorsthathad thehighestcorrelation withvegetation wereidentifiedand appropriateindicatorsto assesstrendswere determined,also.Index withthe highestcorrelationwas used tomapcoverageusingclassification method.In the next phaseusingsurveydmapstransfertoArcgisenvironment,standard coverage classeswere prepared.The results showed that6of8used indicators,MSAVI, TSAVI, TSAVI, SAVA and ARVIhave the highestcorrelationwithcanopy cover thatbetweenthemTSAVIandRVIindicatorsis the best indicator toassessingchanges. Non-significant correlationwas betweenNDVIandNDVI index.The result indicates anegativecoverage trendin this period,approximately200,000ha ofrangland;have decrease inthe canopy level.

Keywords:Taftanranges, Digital data, vegetation changes

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