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Landscape of dynamical Changes Analysis Based on RS in Ganjiahu Wetland

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With remote sensing data and GIS, using the land use dynamic degree model, Markov model and landscape pattern index model, land use and landscape pattern of the dynamic changes of quantitative were studied in ecological fragile areas of Xinjiang Ganjiahu wetland. The results showed that the land use and landscape pattern changed significantly in Ganjiahu from 1972 to 2008. [U+FF08]1[U+FF09]The land use integrated dynamic degree of wetland was 1.05%, indicating that the wetland area is increasing as a whole. Types of land use were tending to decline except sandy land and saline land. [U+FF08]2[U+FF09]The dimensional shift of each landscape type is more complex. The area of grassland and marsh reduce largely, the area of grassland and marsh which reduced have changed into sandy land. [U+FF08]3[U+FF09]The area scale of forestland, grassland, water and marsh were reduced while the area scale of sandy land and saline land were increased. [U+FF08]4[U+FF09]Spatial distribution of forestland, sandy land, saline land were tended to disperse and break continuously, while grassland, water and marsh were presented broken and scattered at first and then were distributed together and covered a huge area. [U+FF08]5[U+FF09]The fractal dimension of wetland landscape patches was great ,which declared that human disturbance activities make the landscape morphology trend complicate and the self-similarity of landscape decrease. [U+FF08]6[U+FF09]The proportion of the difference of each landscape type increased in Ganjiahu wetland, while landscape heterogeneity decreased. [U+FF08]7[U+FF09]The overall degree of fragmentation of wetlands increased and showed a tendency to improve.