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COMPARISON OF SUPERVISED CLASSIFICATION METHODS ACCURACIES USING SENTINEL-2 DATA

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The understanding and sustainability of the earth we live in is one of the important research topics, and the quality of the data held in such research is of importance. Land use and land cover (LULC) analyzes are frequently used in research. Today there are remote sensing satellites that are shared with all the world's users and enable the environmental analysis to be done temporally. As a result of analysis using remote sensing, meaningful outputs can be produced and interpretations can be made for study areas. One of the most important of the used satellites is Landsat. In order to carry out analyzes with Landsat satellites, the data for Sentinel-2 satellite, which are among the aims, are shared with researchers free of charge. The most important steps taken in the analysis of LULC are the classification of one of the steps. The comparison of the accuracy of supervised classification methods with Sentinel-2 satellite data, which is used today and intensively in the future, has been carried out. The image at the 1C level of the Sentinel-2 was upgraded to 2A level by the transformations performed. The study area is located in the province of Istanbul in Turkey. Analyzes of Binary Encoding, Mahalanobis Distance, Maximum Likelihood, Minimum Distance, Neural Net, Parallelepiped and Support Vector Machine supervised classification methods were obtained separately from the commonly used methods in the literature and the accuracy percentages of each method were obtained.