

Decision table for separating quasars from stars

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With multi-wavelength catalogs are available, the number of features to describe astronomical objects increases. The better features we select to classify objects, the higher the classification accuracy is. In the paper, we obtained the data of stars and quasars from near infrared band and radio band. Then best first search method was applied to select features. For the data with selected features, the algorithm of decision table was implemented. The classification accuracy adds up to 98.0%. The method can be used in other astronomical issues, such as the classification of spectra and morphology, or redshift measurement.