

Feature selection for high dimensional data in astronomy

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With the quantity increase of astronomical data, the complexity and dimension of astronomical data enhance. To effectively extract information from data is more difficulty. Some algorithms are only applied in low dimensional spaces. So the feature selection and feature extraction become important. Here we describe some feature selection methods and present the characteristics of them. For astronomers, they would like feature selection more than feature extraction, for the former keeps the original physical meanings of attributes while the latter transforms the attributes and cause difficulty to understand the transformed attributes.