IAA-99-IAA.9.1.07

Southern SERENDIP Project: SETI Candidate Analysis Using Neural Network and Statistical Techniques

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The Southern SERENDIP spectrometer has been recording data since March 1998. It is piggybacked onto the Parkes Radio Telescope in Australia and collecting data as part of several significant neutral HI surveys. This paper presents two techniques for extraction of ETI signals; a neural network method and a statistical technique. The performance of both are compared on live spectral data with low signal to noise and the relative merits of each appraised.