



Variable and Transient Radio Sources in the FIRST Survey

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A comprehensive search for variable and transient radio sources has been conducted using ~55,000 snapshot images of the FIRST survey. We present an analysis leading to the discovery of 1,627 variable and transient objects down to mJy levels over a wide range of timescales (few minutes to years). Variations observed range from 20% to a factor of 25. Multi-wavelength matching for counterparts reveals the diverse classes of objects exhibiting variability, ranging from nearby stars and pulsars to galaxies and distant quasars. Interestingly, more than half of the objects in the sample have either no classified counterparts or no corresponding sources at any other wavelength and require multi-wavelength follow-up observations. We discuss these classes of variables and speculate on the identity of objects that lack multi-wavelength counterparts.

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