

S29c A new IDV source candidate for annual modulation

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Short time-scale radio variations of compact extragalactic radio quasars and blazars known as IntraDay Variability (IDV) can be explained in at least some sources as a propagation effect; the variations are interpreted as scintillation of radio waves in the turbulent interstellar medium of the Milky Way. One of the most convincing observational arguments in favor of a propagation-induced variability scenario is the observed annual modulation in the characteristic time scale of the variation due to the Earth's orbital motion. So far there are only a few sources known with a well-constrained seasonal cycle. J1128+592 is a highly variable IDV source. Previous, densely time-sampled flux-density measurements with the Effelsberg 100-m radio telescope (Germany) and the Urumqi 25-m radio telescope (China), strongly indicate an annual modulation of the time scale. Recent VLBA observations reveal that source intrinsic structure is in good agreement with the anisotropy suggested by the fitted annual modulation model.