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Late time radio observations of GW170817 ARVIND BALASUBRAMANIAN, DR. ALESSANDRA CORSI, Texas Tech University, ON BEHALF OF A LARGER COLLABORATION TEAM — GW170817 has been instrumental in providing important clues into the physics involved in mergers of neutron stars. Observations at different wavelengths of the electromagnetic spectrum have provided evidence for the formation of heavier elements, insights into jet physics, circum-merger environment etc. and accompanied with gravitational wave measurements, have changed the way we look at such transients. In particular, radio observations track the fastest moving ejecta and have helped to zero in on possible models that could explain the observed radiation. Radio observations of the jet+cocoon afterglow has helped in showing that the jet is structured and has successfully bored through the slower moving cocoon. Models predict that synchrotron emission from the much slower and isotropic, kilonova ejecta, will begin to dominate at late times ($\tilde{3}$-5 years). Here, we present late-time observations of GW170817 carried out with the Jansky VLA more than 3 years after the merger, and discuss these observations in the context of the predictions for the kilonova afterglow.

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