

Deep ATCA and GMRT observations of the CDFS

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Abstract

The Chandra Deep Field South (CDFS) is one of the most extensively observed regions of the sky, with some of the deepest multiwavelength coverage ever. The richness of the available data makes this the field of choice for performing studies of distant, often elusive, galaxy populations. Deep radio observations of the CDFS have been performed at 1.4 GHz and 327 MHz, with the ATCA and the GMRT, respectively. Using the data available at other wavelengths, we explore the nature of the faint radio population in the CDFS, addressing in particular the optically unidentified microJansky radio sources. Finally, using the 327 MHz data, we offer a first glimpse of a new project aimed at detecting the population of Ultra Steep Spectrum sources, known to be efficient tracers of high redshift radio galaxies, at the very faintest radio flux levels.