

Site requirements and challenges for low frequency radio observations

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Abstract

Observing the early universe, in particular the detection of the signature of the EOR is an important science target for the SKA and other new radio telescopes. These high redshift observations require excellent performance at low frequencies, as low as 50 MHz. Observations will be carried out in a crowded part of the radio spectrum, even at the very radio-quiet sites that are considered. Propagation of RFI at these frequencies can be highly variable and the influence of the ionosphere on propagation is felt strongly in this frequency range. An overview of issues and challenges is presented.