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CURRENT STATUS AND PERSPECTIVES FOR SETI SEARCHES AT THE SARDINIA RADIO TELESCOPE

Abstract

The Sardinia Radio Telescope (SRT) is a 64-m single-dish antenna of the Italian National Institute for Astrophysics (INAF), which is strongly involved in SETI activities. Specifically, in the framework of the Breakthrough Listen (BL) Program, 100 hours of SRT telescope time were spent in 2021 for a deep survey of the Galactic Center and to look at 45 TESS targets, both in C and K-band; the BL Foundation has also financed an Italian internship both in 2022 and 2023 to analyze these data. The telescope has been upgraded to be able to work efficiently up to 115 GHz, and a few high-frequency receivers were commissioned and will be available to allow SETI search at these new bands as well. Here we present the results that we achieved during these years, the new capabilities of the SRT at high-frequency as well as how we are preparing to start SETI observations again across 2023-2025.