

Progress In The Search For Ultra-narrow-band Extraterrestrial Artificial Signals From Argentina

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Project META II (Megachannel Extra Terrestrial Assay), a full-sky survey for artificial ultra-narrow-band signals, has been conducted in Argentina, since October 1990, from one of the two 30-m radiotelescopes of the Instituto Argentino de Radioastronomia (IAR). The search was performed near the 1.4 GHz line of neutral hydrogen, using an 8.4×10^6 channel Fourier spectrometer of 0.05 Hz spectral resolution and 400 kHz of instantaneous bandwidth. The observing frequency was corrected both for motions with respect to three astronomical inertial frames, and for the effect of Earth's rotation, which provides a characteristic changing signature for narrow-band signals of extraterrestrial origin. In 1996, with the economical sponsorship of The Planetary Society, an up-grade of the original META data acquisition system was made. New hardware was installed and new software was developed allowing a more comprehensive data analysis of the detected signals. The search was expanded to the 1.667 and 3.3 GHz observing frequencies. A description of the new system's characteristics as well