NEW OBJECTS FROM THE "COLD" SURVEY

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Results of deep surveys of a $\pm 10'$ strip of the sky centered on the declination of SS433 carried out on the Northern sector of the RATAN-600 telescope at 2.7 and 7.6 cm wavelength in 1987-2000 are discussed. About 600 objects at the 7.6 cm wavelength were identified with NVSS sources. Eighteen sources detected at 2.7 cm were not detected at 7.6 cm but could be identified with NVSS objects. It cannot be ruled out that some of these are sources with inverted spectra. At both wavelengths there is a fairly large number of Gaussian profiles which are not identified with NVSS objects (106 at 2.7 cm and 43 at 7.6 cm); it is quite possible that not all of these cases are false.

The survey objects are cross-identified with sources in the NVSS catalog and the corresponding two-frequency spectral indices determined. We find a decrease in the mean spectral index in the transition from objects with flux densities $S_{21} \geq 30$ mJy to those with $15 < S_{21} < 30$mJy. The constructed $\log N - \log S$ relation at 2.7 cm has a slope of 3/2 at flux densities ≥ 300 mJy and flattens at weaker flux densities. The 1.4 GHz (NVSS), 3.94 GHz (RATAN-600), and 11.11 GHz (RATAN-600) data are used to estimate the number of objects per square degree at a wavelength of 1 cm.