S06a DIVAS – Deep Interferometric VSOP-Arecibo Survey

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The DIVAS program is undertaking space VLBI observations of a faint population of flat-spectrum sources in the limited declination range available by using the HALCA satellite together with the Arecibo telescope, providing the highest possible space VLBI sensitivity at 5 GHz. We selected flat-spectrum ($\alpha \geq -0.5$ between 1.4 and 5 GHz) sources in a restricted declination range which have 5 GHz flux densities greater than 50 mJy. This flux-density limit is a factor of 20 beneath the lower limit for sources in the VSOP (continuum) Survey Program. The results from the first DIVAS observations will be presented. The aim of the survey is to compare statistical results on the source structures (e.g., brightness temperatures, sizes, visibilities) with results from the VSOP Survey Program to determine whether there are systematic differences in the compact structures of sources over a range of nearly two orders of magnitude in luminosity.