

**NASA's High Resolution Microwave Survey:
The First Year of the Sky Survey**

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ABSTRACT

The Sky Survey observing program is one of two complementary strategies that constitute NASA's High Resolution Microwave Survey (HRMS) project. HRMS observations began October 12, 1992 and since that date the Sky Survey Prototype System has been operating an average of 30 hours per week at the Venus Development Station of the Goldstone Deep Space Communication Complex. These observations are designed to test the detection algorithms and the observational strategies, to improve the final design of the operational system and to complete small parts of the survey that are selected to provide radio astronomy spinoff.

This paper gives an overview of the prototype system and compares it with the capability of the Sky Survey operational system, which is scheduled to be completed in 1996. The results of the first year of observations are summarized and the "lessons learned" are discussed. The degree of automation of the prototype system is described and the value of the automation is discussed with emphasis on the signal detection and confirmation procedures,