

GLOBAL POSITIONING SYSTEM (GPS) IN MISSISSIPPI, A STATUS REPORT
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The Global Positioning System is a satellite navigation and location system operated by the U. S. military. Satellites orbiting the earth transmit radio ranging signals to receivers on the ground to give ground positions with an accuracy previously unattainable by any other means. Civilian use of this system has revolutionized GIS applications allowing direct digitization in the field of accurate position and attribute information. In order to achieve maximum accuracy from GPS, reference base stations are needed to correct normal errors in the radio wave transmissions. The Miss. Dept. of Environmental Quality has established a network of three recording base stations in Jackson, Oxford, and Biloxi for this purpose. The base stations record GPS data files for distribution by modem to users around the state, and support differential solutions for mapping-grade GPS units with accuracies of 1 to 3 meters horizontal. Specific hardware and software are required to use this system. The base stations are part of the High Accuracy Reference Network (HARN) being established this year in Mississippi by the National Geodetic Survey.