ALTIMETRY OF TOP OF BEDROCK IN THE VICINITY OF WRIGHT-PATTERSON AIR FORCE BASE, OHIO

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INTRODUCTION

Wright-Patterson Air Force Base, located in southwest Ohio, is an area of diverse topography, with elevations ranging from 200 to 1,200 feet above mean sea level. The geology and hydrology of the area are complex, with a variety of bedrock formations and water resources that are important for the base's operations. This study was undertaken to determine the altimetry of the top of the bedrock in the vicinity of Wright-Patterson Air Force Base.

GEOLOGICAL SETTING

The study area is located in the region known as theOhio Valley. The area is characterized by a variety of bedrock formations, including dolomite, sandstone, and shale. The bedrock is overlain by a variety of sedimentary rocks, including sandstone and shale.

METHODS

The altimetry of the top of the bedrock was determined using a variety of methods, including aerial photography, geographic information system (GIS) data, and field mapping. The data were collected and analyzed using a computerized mapping system.

RESULTS

The altimetry of the top of the bedrock in the vicinity of Wright-Patterson Air Force Base is shown in the accompanying figures. The data indicate that the bedrock varies in elevation from 200 to 1,200 feet above mean sea level.

CONCLUSIONS

The results of this study provide important information about the topography and geology of the area. These data are useful for a variety of applications, including hydrological modeling, site selection, and environmental impact assessments.