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Contouring with Small Computers:
A Review.

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Gridding and contouring are of major concern to surveyors, geologists and cartographers. There has been a considerable amount of debate in the last few years about the most appropriate techniques for computer solutions to these problems, and several analytical tests have been carried out on mainframe programs.

The recent increase in the availability of micro-computers has lead to the development of several gridding and contouring programs for these small computers, but to date little has been published about the utility of these programs, so to this end some of the routines available for the IBM PC are reviewed and compared.

The tests are carried out with two distinctly different topographic surfaces, data being derived from photogrammetrically plotted contours. Data sets containing 50, 100 and 200 points, selected both randomly over the surface and selectively at critical points (ridges, valleys, etc.). Contour maps produced by the different programs will be compared with the original map and with each other.

Mathematical descriptions of the solutions employed are discussed (when known) as well as other aspects of the programs, including ease of use, flexibility, devices supported, related software and documentation.