DIGITAL COMPUTER MAP SHOWING CONFORMATION OF THE BEDROCK SURFACE,
MONTGOMERY COUNTY, MARYLAND

BY

J. NICHOLAS VAN DRIEL

SCALE 1:48,000 (1) JULY 28, 1975 RESTON, VIRGINIA

SOURCE INFORMATION DIGITIZED BY C. MECONNAGE AND B. ROBINSON
FROM U.S. GEOLOGICAL SURVEY OPEN FILE REPORT NUMBER 74-154

DIGITIZED CELL SIZE IS 5 SECONDS OF LATITUDE BY 5 SECONDS OF LONGITUDE.
APPROXIMATE PHYSICAL CELL DIMENSIONS ARE 500 FT (152M) BY 405 FT (123 M).
CELL AREA IS 4.48 ACRES. EACH CELL IS REPRESENTED BY ONE SYMBOL.

MULTI-SCALE DATA ANALYSIS AND MAPPING PROGRAM PREPARED BY GLENN W. MEAVERS
PROGRAM DEVELOPMENT SPONSORED BY THE LAND USE ANALYSIS LABORATORY AND THE
AGRICULTURE AND HOME ECONOMICS EXPERIMENT STATION, IOWA STATE UNIVERSITY.

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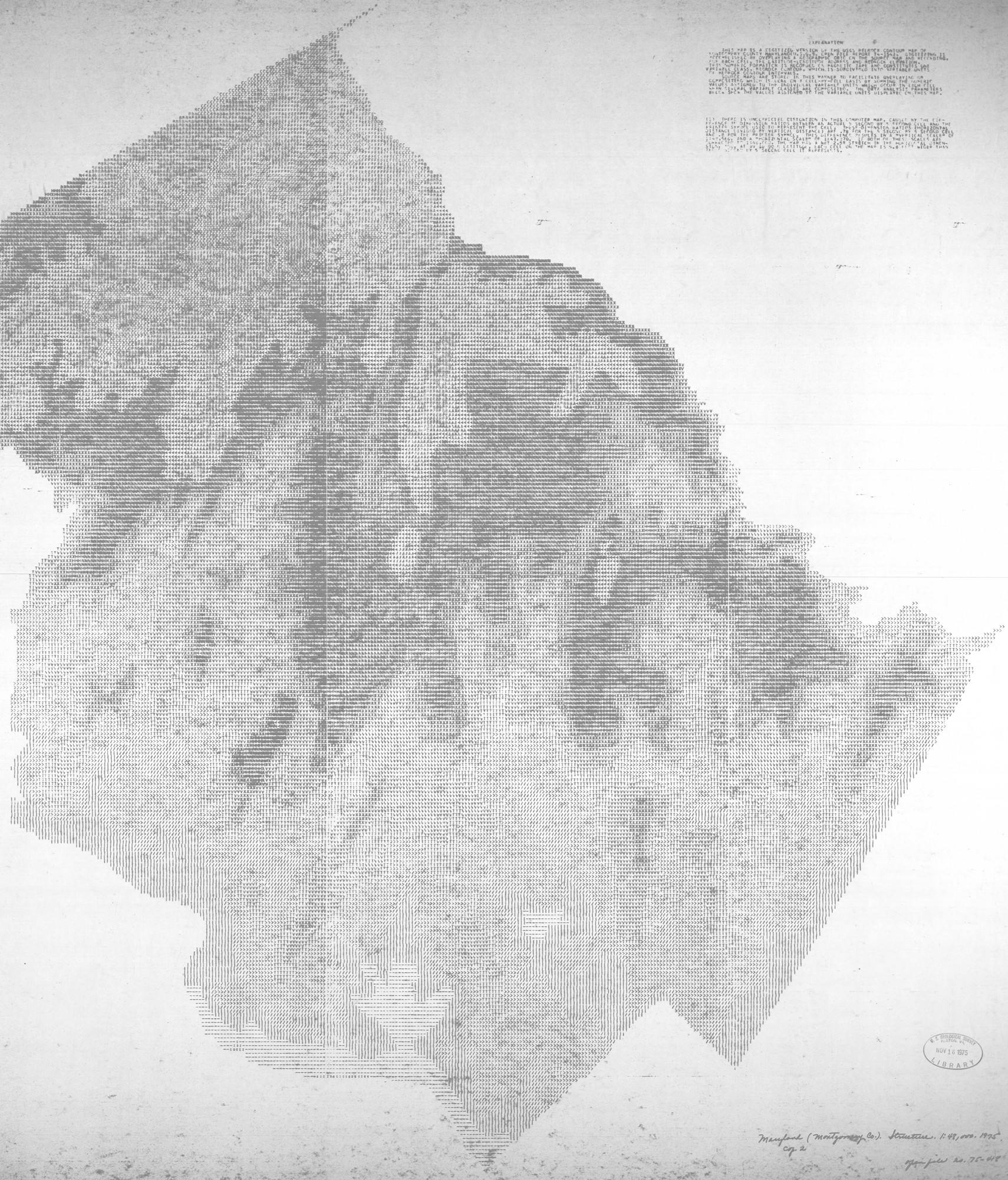
THIS IS A PRELIMINARY EXPERIMENTAL COMPUTER MAP AND MAY NOT MEET CURRENT
FILE FORMATS OR THE FEDERAL SURVEY STANDARDS OR SPECIFICATIONS.



EXPLANATION

THIS MAP IS A DIGITIZED VERSION OF THE USGS BEDROCK CONTOUR MAP OF MONTGOMERY COUNTY, MARYLAND (U.S.G.S. OPEN FILE REPORT 74-154). DIGITIZING IS ACCOMPLISHED BY OVERLAYING A GEOGRAPHIC GRID ON THE SOURCE MAP AND RECORDING, FOR EACH CELL, THE LAST(LONG)-LAST(LAT) ALDREKS AND BEDROCK ELEVATION. THIS NUMERIC INFORMATION IS RECORDED ON MAGNETIC TAPE AND CONSTITUTES ONE VARIABLE CLASS, BEDROCK CONTOUR, WHICH IS SUBDIVIDED INTO VARIABLE UNITS OF BEDROCK ELEVATION INTERVALS.

SOURCE MAPS ARE STORED IN THIS MANNER TO FACILITATE OVERLAYING OR COMPUTER ANALYSIS OF LOCAL OR AREA-WIDE BASIS BY JUMPING THE NUMERIC VALUES ASSIGNED TO THE INDIVIDUAL UNITS WHICH OCCUR IN EACH CELL WHEN SEVERAL VARIABLE CLASSES ARE COMPUTED. THE DATA ANALYSIS PROGRAMS BELOW SHOW THE VALUES ASSIGNED TO THE VARIABLE UNITS DISPLAYED ON THIS MAP.

(1) THERE IS UNSPECIFIED DISTORTION IN THIS COMPUTER MAP, CAUSED BY THE DIFFERENCE IN DIMENSION RATIOS BETWEEN AN ACTUAL 5 SECOND BY 5 SECOND CELL AND THE RECTANGULAR SYMBOL USED TO REPRESENT THE CELL. THESE DIMENSION RATIOS EMPHASIZE DISTANCE (LEFT & RIGHT) VERTICAL DISTANCE) ABOUT .78 FOR THE 5 SECOND BY 5 SECOND CELL AND .48 FOR THE PRINTER SYMBOL. THIS DIFFERENCE PRODUCES AN A MYSTERIOUS SCALE OF 1:47,270. BOTH OF THESE SCALES ARE INCORRECT. THE USGS MAP HAS A NORTH-SOUTH STRETCH IN THE HORIZONTAL DIMENSION AT AN UNCOMPUTED FACTOR OF 1.2 (CELL ON THE MAP IS 4.8 TIMES WIDER THAN THEY SHOULD BE, 5 SECONDS CELL IN REPRESENTS).

PERCENT OF TOTAL NUMBER OF CELLS.

	FREQUENCY		
7	0	--> 0	
6	26	--> 1	0-149 FEET
5	1401	--> 2	150-189
4	3584	--> 3	190-229
3	2612	--> 4	230-269
2	7675	--> 5	270-309
1	4015	--> 6	310-339
0	8838	--> 7	340-379
9	4536	--> 8	380-419
8	4822	--> 9	420-439
7	8725	--> 10	440-479
6	3187	--> 11	480-519
5	2470	--> 12	520-539
4	2679	--> 13	540-579
3	979	--> 14	580-619
2	697	--> 15	620-639
1	1113	--> 16	640-679
0	491	--> 17	680-719
9	744	--> 18	720-759
8	0	--> 19	
7	0	--> 20	
6	0	--> 21	
5	80990	--> 22	NO DATA

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