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UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

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COMPUTER PROGRAMS RELEASED AS  
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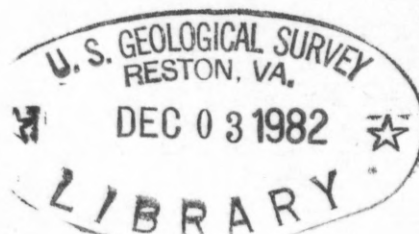
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The following list is composed of citations of U.S. Geological Survey (USGS) of Open-File computer programs, cataloged by year of release for reports issued through A 1974 and by Open-File Report number for reports issued after numbering began in 1975. The citations are indexed by author, subject, and computer program name. In providing an indexed source of reference information on open-file computer programs, the list opens an avenue of communication between computer authors and users, eliminating the need for the personal contact networks that have been used in the past. Expected long-term benefits include more efficient use of computers, increased computer program documentation, and construction of computer programs in response to feedback from users.

The Open-File Report references were selected from three sources. Depending on the year of release, USGS reports and maps released in the Open Files between 1942 and 1974 are cited in a series of 25 USGS Circulars. Open-File Report citations are listed in the annual catalogs, PUBLICATIONS OF THE GEOLOGICAL SURVEY, beginning with the 1974 issue. The most recent Open-File Reports are cited in the monthly lists, NEW PUBLICATIONS OF THE GEOLOGICAL SURVEY. The USGS' records of Open-File Reports were used as a check against omissions and errors. In constructing the subject index, I consulted copies of those Open-File Reports whose titles were unclear or not descriptive.

Effort was made to include in the list all, but especially the most recent, Open-File computer programs. Other computer-related Open-File Reports, particularly those concerning data-base operations, have been omitted from this list. Most of the data-base materials are described in USGS Circular 817, SCIENTIFIC AND TECHNICAL, SPATIAL, AND BIOGEOGRAPHIC DATA BASES OF THE U.S. GEOLOGICAL SURVEY, 1974.

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## INTRODUCTION

### REFERENCE LIST

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1 A COMPUTER PROGRAM FOR CREATING KEYWORD INDEXES TO TEXTUAL DATA FILES, by D. W. Moody, 21 p. \$4.15.

2 COMPUTER PROGRAMS FOR TIME AND SPACE ADAPTIVE DECONVOLUTION OF SINGLE CHANNEL MARINE SEISMIC REFLECTION DATA, by D. C. Bue, 181 p. \$18.50.

3 MAGDEF - A COMPUTER PROGRAM FOR FINDING DEPTH TO BASEMENT FROM TOTAL FIELD MAGNETIC PROFILES, by A. K. Cooper, 75 p. \$12.75.

4 GEOPAC, by R. H. Godson, 146 p., 17 figs. \$19.75.

5 COMPUTER PROGRAM DESIGNED TO COMPUTE OIL SHALE THICKNESS (FT AVERAGE VALUE/GAL PER TON), AND RESOURCE (BARRELS PER ACRE) FROM PUNCHER ASSAY DATA, by George Van Trump, Jr., and J. K. Pitman, 18 p. \$2.75.

# REFERENCE LIST

- 1965        **COMPUTER SIMULATION PROGRAM FOR INVESTIGATION OF GEOCHEMICAL SAMPLING PROBLEMS**, by R. N. Eicher and A. T. Miesch, 48 p., 12-p. appendix. \$10.25.
- 1967        **A COMPUTER PROGRAM FOR PROCESSING ELECTRON MICROPROBE DATA**, by M. H. Beeson, 10 p., 31-p. appendix. \$6.25.
- 1967        **DEVELOPMENT OF COMPUTER PROGRAMS FOR ANALYSIS OF LUNAR GEO-PHYSICAL SURVEY DATA**, by R. D. Regan and J. L. Herskovits, 24 p. \$3.75.
- 1969        **COMPUTER CONTRIBUTION NUMBER 1, WEIGHTED TRIANGULATION ADJUSTMENT**, by W. L. Anderson, 52 p. \$8.00.
- 1969        **HYPOLAYR, A COMPUTER PROGRAM FOR DETERMINING HYPOCENTERS OF LOCAL EARTHQUAKES IN AN EARTH CONSISTING OF UNIFORM FLAT LAYERS OVER A HALFSpace**, by J. P. Eaton, 106 p., 49 p. of tables. \$21.50.
- 1970        **COMPUTER CONTRIBUTION NUMBER 4, HOT PIPE**, by P. C. Doherty, 63 p. \$9.75.
- 1970        **COMPUTER CONTRIBUTION NUMBER 3, NONCONSTANT VARIANCE REGRESSION ANALYSIS PROGRAM**, by M. S. Hellmann, 106 p. \$16.50.
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- 1970        **A PROGRAM TO SIMULATE AN AQUIFER USING ALTERNATING DIRECTION IMPLICIT-ITERATIVE PROCEDURE**, by Thomas Maddock, III, 73 p. \$11.25.
- 1971        **LINEAR COMBINATION READING PROGRAM FOR CAPTURE GAMMA RAYS**, by A. B. Tanner, 9 p. \$1.00.
- 1972        **HYPO71 — A COMPUTER PROGRAM FOR DETERMINING HYPOCENTER MAGNITUDE AND FIRST MOTION PATTERN OF LOCAL EARTHQUAKES**, by W. H. K. Lee and J. C. Lahr, 100 p. \$15.25.
- 1972        **A COMPUTER PROGRAM FOR CREATING KEYWORD INDEXES TO TEXTUAL DATA FILES**, by D. W. Moody, 27 p. \$4.25.
- 1973        **COMPUTER PROGRAMS FOR TIME AND SPACE ADAPTIVE DECONVOLUTION OF SINGLE CHANNEL MARINE SEISMIC REFLECTION DATA**, by D. C. Riley, 101 p. \$15.50.
- 1974        **MAGDEP — A COMPUTER PROGRAM FOR FINDING DEPTH TO BASEMENT FROM TOTAL FIELD MAGNETIC PROFILES**, by A. K. Cooper, 75 p. \$12.75.
- 1974        **GEOPAC**, by R. H. Godson, 146 p., 17 figs. \$19.75.
- 75-110      **COMPUTER PROGRAM DESIGNED TO COMPUTE OIL SHALE THICKNESS (FT.), AVERAGE VALUE (GAL. PER TON), AND RESOURCE (BARRELS PER ACRE) FROM FISCHER ASSAY DATA**, by George Van Trump, Jr., and J. K. Pitman, 18 p. \$2.75.



- 75-127 A PROGRAM FOR MASS SPECTROMETER CONTROL AND DATA PROCESSING ANALYSES IN ISOTOPE GEOLOGY - WRITTEN IN BASIC FOR AN 8K NOVA 1120 COMPUTER, by J. S. Stacey and J. Hope, 48 p., 1 fig., 3 tables. \$6.50.
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- 75-159 A FORTRAN IV PROGRAM FOR ANALYTIC CONTINUATION OF VLF ELECTROMAGNETIC DATA, by R. D. Watts, 28 p., 7 figs. \$4.25.
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- 77-580 COMPUTER PROGRAM FOR THE CALCULATION OF GRAIN SIZE STATISTICS BY THE METHOD OF MOMENTS, by M. B. Sawyer, 21 p. \$2.50.
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- 77-784 DOCUMENTATION FOR SUBROUTINE **REDUC3**: AN ALGORITHM FOR THE LINEAR FILTERING OF GRIDDED MAGNETIC DATA, by R. J. Blakely, 25 p., 5 figs. \$4.00.
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