U.S. Department of the Interior
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Publications of the U.S. Geological Survey, 2002

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AVAILABILITY OF USGS CATALOGS

This catalog is a list of (1) books and maps[1] that were published during 2002 and (2) articles by U.S. Geological Survey personnel in non-U.S. Geological Survey journals and books that came to our attention in 2002; it supplements the permanent catalogs "Publications of the Geological Survey, 1879–1961," "Publications of the Geological Survey, 1962–1970," and "Publications of the U.S. Geological Survey, 1971 through 1981." These permanent catalogs, as well as some others, are available under the conditions indicated below from USGS Information Services, Box 25286, Federal Center, Denver, CO 80225. A $5 handling charge is applicable on each order. The catalogs are also available over the counter at any of the U.S. Geological Survey offices that sell books.

Permanent catalogs "Publications of the Geological Survey, 1879–1961" and "Publications of the Geological Survey, 1962–1970" may be purchased in paperback book form for $6.

Permanent catalog "Publications of the U.S. Geological Survey, 1971 through 1981" may be purchased in paperback book form (two volumes, publications listing and index) for $15.

Supplements for 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, and 2000 may be purchased in paperback book form and are priced as follows: 1982, $3; 1983, $3; 1984, $3.25; 1985, $3.75; 1986, $4.25; 1987, $4; 1988, $3.75; 1989, $4; 1990, $4.50; 1991, $4.25; 1992, $5; 1993, $7.50; 1994, $7.50; 1995, $7.50; 1996, $7.50; 1997, $7.50; 1998, $7.50; 1999, $7.50; 2000, $7.50. The 2001 Annual Supplement is free and available online only, at http://pubs.usgs.gov/publications/2001.

The quarterly catalog "New Publications of the U.S. Geological Survey" may be obtained free on request. Subscribers to this catalog are requested to provide notice for change of address promptly, giving new and old addresses and zip codes. Those wishing to be placed on a free subscription list for the quarterly catalog "New Publications of the U.S. Geological Survey" or wishing to change their address should write to the U.S. Geological Survey, 903 National Center, Reston, VA 20192.

Prices of available publications, except reports released through the National Technical Information Service (NTIS), are given in current issues of the quarterly catalog "New Publications of the U.S. Geological Survey." Limited quantities of Circulars and publications of general interest are free.

"New Publications of the U.S. Geological Survey" is also available electronically through the USGS at http://pubs.usgs.gov/publications/.

The U.S. Geological Survey Publications Data Base includes comprehensive bibliographic information on USGS reports and maps published from 1880 to the present and references for non-USGS publications with USGS authors published from 1983 to date—a total of approximately 110,000 publications. Free public access to the data base is provided as a public service by the U.S. Geological Survey at http://usgs-georef.cos.com and through the USGS home page at http://www.usgs.gov.

[1]Individual topographic quadrangle maps are not listed; they are shown on State indexes to topographic maps, which are free on application to USGS Information Services, Box 25286, Federal Center, Denver, CO 80225, and to offices where books and maps are sold over the counter. These indexes also show commercial dealers in each State.

AVAILABILITY OF USGS PRODUCTS BY MAIL

An order form for USGS products is provided at the end of each quarterly catalog. In ordering books give the series designation and number, such as U.S. Geological Survey Circular 1178, and the full title. In ordering maps give name or series designation and number, such as Fairfax, Va., 7.5-minute or GQ-851. Include your full address and ZIP Code, plainly printed. Payment (check, money order, purchase order, VISA, MasterCard, American Express, or Discover Card information, or Government account) must accompany order. Make all drafts payable to Department of the Interior - USGS. **Do not send cash.** Customers outside the United States, please send an international money order or check drawn on a U.S. bank in U.S. dollars. VISA, MasterCard, American Express, or Discover Card is also accepted.

Prices listed in the quarterly catalogs include cost of domestic surface transportation. Delivery is by a government-selected courier. For international delivery, actual shipping costs will be billed. Please designate a preferred international carrier (FedEx, DHL, or UPS) and provide the USGS with a carrier account number and telephone number to use when making shipment. A $5.00 handling charge is applicable on each order.

Digital Data Series, Professional Papers, Bulletins, Water-Supply Papers, Techniques of Water-Resources Investigations, Circulars, Fact Sheets, single copies of the annual catalog "Publications of the U.S. Geological Survey," topographic and thematic maps, and some miscellaneous reports, including some from the foregoing series that have gone out of print at the Superintendent of Documents, are obtainable by mail from

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Open-file reports should be ordered according to instructions under appropriate headings in this announcement. An order form for USGS open-file reports is provided at the end of each quarterly catalog.

AVAILABILITY OF USGS PRODUCTS OVER THE COUNTER

Books, Maps, and Other Products

Books, maps, and other products of the U.S. Geological Survey are available over the counter at the following USGS Earth Science Information Centers (ESIC's):

ANCHORAGE, Alaska—Rm. 101, 4230 University Dr.
DENVER, Colorado—Bldg. 810, Federal Center
MENLO PARK, California—Rm. 3128, Bldg. 3, 345 Middlefield Rd.
RESTON, Virginia—Rm. 1C402, USGS National Center, 12201 Sunrise Valley Dr.

Maps Only

Maps may be purchased over the counter at the following U.S. Geological Survey office:

ROLLA, Missouri—1400 Independence Rd.

USGS maps are also sold by commercial dealers throughout the United States. For the nearest authorized USGS Business Partner, call 1-888-ASK-USGS or check http://mapping.usgs.gov/esic/map_dealers/ on the World Wide Web.

AVAILABILITY OF USGS PRODUCTS BY TELEPHONE

USGS products can be ordered by calling 1-888-ASK-USGS.

IMPORTANT NOTICE

Prices of Government publications are subject to change. Increases in costs make it necessary for the Superintendent of Documents to increase the selling prices of many publications offered. As it is not feasible for the Superintendent of Documents to correct the prices manually in all previous announcements and publications stocked, the prices charged may differ from the prices in the announcements and publications.

The minimum for any USGS book publication is $1.50 with the exception of Circulars, which are free in limited quantities. This minimum applies to all publications previously advertised.

FORMAL REPORTS

DIGITAL DATA SERIES

The Digital Data Series encompasses a broad range of digital data, including computer programs, interpreted results of investigations, comprehensive reviewed data bases, spatial data sets, digital images and animation, and multimedia presentations that are not intended for printed release. Scientific reports in this series cover a wide variety of subjects on all facets of U.S. Geological Survey investigations and research that are of lasting scientific interest and value. Releases in the Digital Data Series offer access to scientific information that is available in digital form; the information is primarily for viewing, processing, and (or) analyzing by computer.

DDS-0071. COLORADO. Surficial geologic maps along the riparian zone of the Animas River and its headwater tributaries, Silverton to Durango, Colorado, with upper Animas River watershed gradient profiles, by R. W. Blair, D. B. Yager and S. E. Church. 2002. One CD-ROM. Available on the web at http://geology.cr.usgs.gov/pub/dds/dds-071/

This CD-ROM has been produced in accordance with the ISO 9660 Standard and is therefore capable of being read on any computing platform that has appropriate CD-ROM driver software installed. System requirements are: compatible computers (all computers must have a CD-ROM drive and be capable of displaying at least 256 colors): IBM-compatible running Windows 95 or higher or NT 4.0 or higher with an Intel Pentium or equivalent processor, or Macintosh running Mac OS 8.6 or later with a Power PC or equivalent processor. Software requirements are Adobe Acrobat Reader 4.5 or higher and ArcInfo or ArcView or any software that is capable of importing ArcInfo export files or ArcView shape files.

DDS-0072. OREGON. 2000 multibeam sonar survey of Crater Lake, Oregon; data, GIS, images, and movies, by J. V. Gardner and Peter Dartnell. 2001. One CD-ROM. Available on the web at http://geopubs.wr.usgs.gov/dds/dds-72/

This CD-ROM has been produced in accordance with the ISO 9660 Standard and is therefore capable of being read on any computing platform that has appropriate CD-ROM driver software installed. All computers must have a CD-ROM drive and be capable of displaying at least 256 colors: (1) IBM-compatible computers running Window 95 or higher or NT 4.0 or higher with an Intel Pentium or equivalent processor, (2) Macintosh with a PowerPC processor, or (3) UNIX. Software requirements: (1) web browser, (2) ArcInfo or ArcView with Spatial Analyst, or any GIS software that is capable of importing ArcInfo GRID files, and (3) any software capable of viewing QuickTime movies.

DDS-0073. COLORADO. Hydrogeochemical investigations of historic mining districts, central Western Slope of Colorado, including influence on surface-water quality, by J. T. Nash. 2002. One CD-ROM. Available on the web at http://greenwood.cr.usgs.gov/pub/dds/dds-073/

This CD-ROM has been produced in accordance with the ISO 9660 Standard and is therefore capable of being read on any computing platform that has appropriate CD-ROM driver software installed. Adobe Acrobat Reader 5.0 is required to access the written report. Installers for Reader 5.0 are contained in the Acrobat folder at the root directory of this CD-ROM for Windows and Macintosh platforms (these are the only platforms for which Reader 5.0 is presently available). Data files are located in the Data folder at the root directory of this CD-ROM and are provided in both Microsoft Excel and CSV (comma separated value) formats. Microsoft Excel or Word is required to view files with a .xls extension, and files with a .csv extension can be viewed by most word-processing programs.

DDS-0074. MASSACHUSETTS. Long-term oceanographic observations in western Massachusetts Bay offshore of Boston, Massachusetts; data report for 1989-2000, by Bradford Butman, M. H. Bothner, F. L. Lightsom, B. T. Gutierrez, P. S. Alexander, M. A. Martini, and W. S. Strahle; with significant contributions from R. W. Barton, D. S. Blackwood, Jonathan Borden, M. A. Casso, J. M. Cote, R. E. Davis, P. W. Gill, J. S. Newell, C. M. Parmenter, Andree Ramsey, R. R. Rendigs, and R. P. Signell; and with at-sea support from the U.S. Coast Guard Cutter *White Heath* and the U.S. Coast Guard Cutter *Marcus Hannah*. 2002. One DVD-ROM.

This disc has been produced in accordance with the UDF Standard and is therefore capable of being read on any computing platform that has a DVD drive.

DDS-0075. ALASKA. National Petroleum Reserve-Alaska (NPRA) core images and well data, edited by D. W. Houseknecht. 2002. Four CD-ROMs.

System requirements: A web browser, Adobe Acrobat Reader, and ArcExplorer (Windows platform only). These CD-ROMs have been produced in accordance with the ISO 9660 Standard and are therefore capable of being read on any computing platform that has appropriate CD-ROM driver software installed.

1. Introduction, by D. W. Houseknecht.

2. GIS of public domain cores, by R. D. Crangle, Jr., M. W. Borella and D. W. Houseknecht.

3. Interactive core photographs, by M. W. Borella, R. D. Crangle, Jr., S. L. D'Agostino and D. W. Houseknecht.

4. ALASKA. Porosity and permeability data and plots for the National Petroleum Reserve-Alaska (NPRA), by P. H. Nelson and J. E. Kibler.

5. Subsurface oil and gas indications in and adjacent to the NPRA, by D. O. Hayba, K. J. Bird and C. P. Garrity.

6. Core photographs; digital archive, by S. L. D'Agostino and D. W. Houseknecht.

DDS-0076. HAZPAC; an interactive map of Pacific Rim natural hazards, population, and infrastructure, by B. L. Bemis, H. V. Goss, E. S. Yurkovich, J. T. Perron and D. G. Howell. Prepared in cooperation with American Red Cross, Circum-Pacific Council, and Stanford University. 2002. One CD-ROM.

This CD-ROM has been produced in accordance with the ISO 9660 Standard and is therefore capable of being read on any computing platform that has appropriated CD-ROM driver software installed. The PDF (Portable Document Format) files require Adobe Acrobat Reader 5.0 (included on this CD-ROM). Both the HAZPAC ArcExplorer and ArcView projects require a Windows PC (an 'industry-standard personal computer with at

least a Pentium or higher Intel-based microprocessor and a hard disk') with 24 MB of RAM (32 MB recommended) and a CD-ROM drive. Only PCs running Windows 98/2000/NT/XP may run the ArcExplorer version of HAZPAC. The ArcExplorer version of HAZPAC requires ESRI's ArcExplorer 2.0 software (included on this CD-ROM). Only PCs running Windows 98/Me, NT 4.0, or 2000 may run the ArcView versions of HAZPAC (ArcView 3.x also is supported with limitations on Windows XP). Both ArcView versions of HAZPAC require ESPI's ArcView 3.x software. The ArcView Spatial Analyst version of HAZPAC also requires ESRI's Spatial Analyst extension.

PROFESSIONAL PAPERS

Professional Papers are mainly comprehensive scientific reports of wide and lasting interest and importance to professional scientists and engineers. Included are reports on the results of resource studies, and of topographic, hydrologic, and geologic investigations. They also include collections of related papers addressing different aspects of a single scientific topic.

P 1606. OREGON. Debris flows from failures of Neoglacial-age moraine dams in the Three Sisters and Mount Jefferson Wilderness Areas, Oregon, by J. E. O'Connor, J. H. Hardison, III and J. E. Costa. 2001. 93 p., 2 plates in pocket.

P 1625-C. 2000 resource assessment of selected coal beds and zones in the Northern and Central Appalachian Basin coal regions, by Northern and Central Appalachian Basin Coal Regions Assessment Team. 2001. Two CD-ROMs. (National Coal Resource Assessment.) Available on the web at http://pubs.usgs.gov/prof/p1625c/

These CD-ROMs have been produced in accordance with the ISO 9660 Standard and are therefore capable of being read on any computing platform that has appropriate CD-ROM driver software installed. Supported systems and minimum requirements to use the data with the software provided are as follows: IBM or compatible personal computer with (1) Windows 95 or higher operating system, (2) 16 megabytes (MB) or more of RAM, (3) CD-ROM drive, (4) Hard disk drive, (5) VGA color graphics system. Macintosh computer with 68020 (Macintosh II series) or greater processor. MacOS 7.0 or later, 24 megabytes (MB) RAM, and 20 MB hard-disc space. Sun SPARCstation, SunOS 4.1.3 or later, or Solaris 2.3 or later, Open Windows 3.0 or later, Motif 1.2.3 or later, OpenLook version 3.0 or Common Desktop Environment (CDE) 1.0, 12MB of available hard disk space, 32 MB RAM. HP workstation, 9000-series workstation model 700 or 800 HP-UX 9.0.3 or later, X Window System XIIR5 with HP-VUE of CDE 1.0, 12 MB hard-disc space, 32 MB RAM. Silicon Graphics workstation, IRIX 5.3 or later, 12 MB of available hard-disk space, 32 MB or RAM. IBM RS/6000 workstation, AIX(R) 4.1 or later operating system, CDE 1.0 or Motif window manager, 12 MB of available hard-disc space, 32 MB RAM.

A. Executive summary; coal resource assessment of selected coal beds and zones in the Northern and Central Appalachian Basin coal regions, by L. F. Ruppert, U.S. Geological Survey. p. A1-A14. Available on the web at http://pubs.usgs.gov/prof/p1625c/

B. Coal resource assessment methodology and geology of the Northern and Central Appalachian Basin coal regions, by L. F. Ruppert, U.S. Geological Survey; and C. L. Rice. p. B1-B21.

C. A digital resource model of the Upper Pennsylvanian Pittsburgh coal bed, Monongahela Group, Northern Appalachian Basin coal region, by S. J. Tewalt, L. F. Ruppert and L. J. Bragg, U.S. Geological Survey; R. W. Carlton, Ohio Division of Geological Survey; D. K. Brezinski, Maryland Geological Survey; R. N. Wallack, Intertox; and D. T. Butler, MTA/Earth Tech. p. C1-C102.

D. A digital resource model of the Middle Pennsylvanian upper Freeport coal bed, Allegheny Group, Northern Appalachian Basin coal region, by L. F. Ruppert and S. J. Tewalt, U.S. Geological Survey; R. N. Wallack, Intertox; L. J. Bragg, U.S. Geological Survey; D. K. Brezinski, Maryland Geological Survey; R. W. Carlton, Ohio Division of Geological Survey; D. T. Butler, MTA/Earth Tech; and F. J. Calef, III, CH2M Hill. p. D1-D97.

E. Geology and geochemistry of the Middle Pennsylvanian lower Kittanning coal bed, Allegheny Group, Northern Appalachian Basin coal region, by R. C. Milici and P. A. Freeman, U.S. Geological Survey; R. W. Carlton, Ohio Division of Geological Survey; L. J. Bragg, U.S. Geological Survey; D. T. Butler, MTA/Earth Tech; and S. J. Tewalt, U.S. Geological Survey. p. E1-E67.

F. A digital resource model of the Middle Pennsylvanian Fire Clay coal zone, Pottsville Group, Central Appalachian Basin coal region, by S. J. Tewalt, L. F. Ruppert and L. J. Bragg, U.S. Geological Survey; G. A. Weisenfluh and E. E. Thacker, Kentucky Geological Survey; R. S. Sites, Virginia Division of Mineral Resources; B. M. Blake, Jr., West Virginia Geological and Economic Survey; P. A. Freeman and L. C. Bryant, U.S. Geological Survey; and D. T. Butler, MTA/Earth Tech. p. F1-F72.

G. A digital resource model of the Middle Pennsylvanian Pond Creek coal zone, Pottsville Group, Central Appalachian Basin coal region, by L. F. Ruppert, S. J. Tewalt and L. J. Bragg, U.S. Geological Survey; G. A. Weisenfluh and E. E. Thacker, Kentucky Geological Survey; B. M. Blake, Jr., West Virginia Geological and Economic Survey; R. S. Sites, Virginia Division of Mineral Resources; P. A. Freeman and D. T. Butler, U.S. Geological Survey; and L. C. Bryant, MTA/Earth Tech. p. G1-G88.

H. A digital resource model of the Lower Pennsylvanian Pocahontas No. 3 coal bed, Pottsville Group, Central Appalachian Basin coal region, by R. C. Milici, P. A. Freeman and L. J. Bragg, U.S. Geological Survey. p. H1-H57.

I. Summary report on the coal resources, coal production, and coal quality of the Allegheny Group No. 5 block, and the Pottsville Group Stockton and Coalburg, Winifrede/Hazard, Williamson/Amburgy, Campbell Creek/Upper Elkhorn No. 3, and Upper Elkhorn Nos. 1 and 2/Powellton coal zones, Central Appalachian Basin coal region, by S. G. Neuzil, U.S. Geological Survey. p. I1-I128.

J. Coal availability, recoverability, and economic evaluations of coal resources in the Northern and Central Appalachian Basin coal regions, by M. D. Carter and T. J. Rohrbacher, U.S. Geological Survey; D. D. Teeters and D. C. Scott, DST and Associates; L. M. Osmonson, U.S. Geological Survey; G. A. Weisenfluh, Kentucky Geological Survey; E. I. Loud, West Virginia Geological and Economic Survey; R. S. Sites, Virginia Division of Mineral Resources; A. G. Axon, Information Technology Services

of North Carolina; M. E. Wolfe, Ohio Division of Geological Survey; and L. J. Lentz, Pennsylvania Bureau of Topographic and Geologic Survey. p. J1-J43.

P 1625-D. Resource assessment of the Springfield, Herrin, Danville, and Baker coals in the Illinois Basin, edited by J. R. Hatch and R. H. Affolter, U.S. Geological Survey. Prepared in cooperation with the Illinois State Geological Survey, Indiana Geological Survey, and Kentucky Geological Survey. 2002. Two CD-ROMs.

These CD-ROMs have been produced in accordance with the ISO 9660 Standard and are therefore capable of being read on any computing platform that has appropriate CD-ROM driver software installed. Disc 1, Microsoft Windows: Intel Pentium processor-based personal computer (or equivalent), Microsoft Windows ME, Windows 2000, Windows NT 4.0 with Service Pack 5 or later, Windows 98 Second Edition, or Windows 95 Service Release 2 (OSR 2); 64 MB of RAM; 24 MB of available disk space for installation of Acrobat Reader 5.0; and a CD-ROM drive. Macintosh OS: Power PC processor; Mac OS 8.6*, 9.0.4, 9.1, OS X*, 64 MB of RAM; 24 MB of available disk space for installation of Acrobat Reader 5.0; and a CD-ROM drive. *Some features may not be available because of system limitations. Disc 2, Microsoft Windows: IBM or compatible personal computer with a 200-MHz or higher processor and a Windows 95 or higher operating System; 32 MB of RAM (64 MB recommended); ×8 or higher CD-ROM drive; 16-24 bit VGA color display; as much as 500 MB disk space for installation (depending on options).

A. Executive summary, by J. R. Hatch and R. H. Affolter, U.S. Geological Survey. Prepared in cooperation with the Illinois State Geological Survey, Indiana Geological Survey, and Kentucky Geological Survey. p. A1-A21.

B. Introduction, by J. R. Hatch and R. H. Affolter, U.S. Geological Survey. p. B1-B4.

C. Geologic overview, by J. R. Hatch and R. H. Affolter, U.S. Geological Survey. p. C1-C20.

D. Resource assessment, edited by J. R. Hatch and R. H. Affolter, U.S. Geological Survey. p. D1-D65.

Illinois Basin coal production, by J. R. Hatch and R. H. Affolter, U.S. Geological Survey. p. D2-D8.

Previous resource assessments of Illinois Basin coals, by J. R. Hatch and R. H. Affolter, U.S. Geological Survey. p. D9-D16.

Remaining resources of the Springfield, Herrin, Danville, and Baker coals, by J. R. Hatch, U.S. Geological Survey; C. L. Connolly, Indiana Geological Survey; C. G. Treworgy, Illinois State Geological Survey; W. A. Andrews, Kentucky Geological Survey; and R. H. Affolter, U.S. Geological Survey. p. D17-D28.

Confidence limits for resource estimates of Illinois Basin coals, by J. H. Schuenemeyer, U.S. Geological Survey; H.C. Power, University of South Carolina; and J. R. Hatch, U.S. Geological Survey. p. D29-D33.

Availability and recoverability of Illinois Basin coals, by L. M. Osmonson, U.S. Geological Survey; C. G. Treworgy, Indiana Geological Survey; C. L. Connolly, Illinois State Geological Survey; W. A. Andrews, G. A. Weisenfluh, Kentucky Geological Survey; M. D. Carter, and J. R. Hatch, U.S. Geological Survey. p. D34-D35.

E. Characterization of the quality of coals from the Illinois Basin, by R. H. Affolter and J. R. Hatch, U.S. Geological Survey. p. E1-E222.

ArcView project for the resource assessment of the Springfield, Herrin, Danville, and Baker coals in the Illinois Basin, by G. L. Gunther, U.S. Geological Survey; K. K. Like, Indiana Geological Survey; R. H. Affolter, J. R. Hatch, U.S. Geological Survey; C. L. Connolly, C. G. Treworgy, Indiana Geological Survey; W. A. Andrews, Illinois State Geological Survey; and G. A. Weisenfluh, Kentucky Geological Survey.

P 1634. Lake Pontchartrain Basin; bottom sediments and related environmental resources, edited by F. T. Manheim and Laura Hayes, U.S. Geological Survey; LandView IV implementation by E. J. McFaul. 2002. One CD-ROM.

This CD-ROM has been produced in accordance with the ISO 9660 Standard and is therefore capable of being read on any computing platform that has appropriate CD-ROM driver software installed. This CD-ROM was designed to run on computers with Windows or Macintosh operating systems. Most of the text, illustrations, photographs, and tabular material presented can be read with any HTML-compatible browser. Interactive mapping and display software offers additional information and capabilities. LandView IV and ESRI's ArcExplorer are GIS mapping tools available (Windows only) for viewing these data and creating maps incorporating data from other sources.

A. LOUISIANA. Holocene geologic framework of Lake Pontchartrain Basin and lakes of southeastern Louisiana, by J. L. Kindinger, U.S. Geological Survey. Available on the web at http://pubs.usgs.gov/prof/p1634a/index.htm

B. New field sampling techniques and data description, by J. G. Flocks, U.S. Geological Survey; with technical contributions from Marci Marot, U.S. Geological Survey; Phil McCarty, University of New Orleans; Dana Weise, U.S. Geological Survey; Paul Connor, Jr., University of New Orleans; and Scott Noakes, University of Georgia.

C. The continuous sediment sampling and analysis system, by Scott Noakes, University of Georgia.

D. LOUISIANA. Wind-driven circulation and sediment resuspension processes in Lake Pontchartrain, Louisiana, by R. P. Signell and J. H. List, U.S. Geological Survey; R. P. Stumpf, NOAA; and John Evans, University of Maine.

E. Satellite imagery; Lake Pontchartrain Basin and Gulf of Mexico, by R. P. Stumpf, NOAA.

F. CD-ROM development, by Chris Polloni, Laura Hayes and F. T. Manheim, U.S. Geological Survey.

G. Data visualization by use of geographic mapping tools (GIS), by Laura Hayes, Chris Polloni and E. J. McFaul, U.S. Geological Survey.

H. Vibracore sampling strategy interactive training, by Jack Kindinger, James Flocks, Charles Holmes and Chris Polloni, U.S. Geological Survey.

I. Basics of the Basin symposium, edited by John Lopez, Amoco Oil Company.

J. Sediment database and geochemical assessment of Lake Pontchartrain Basin, by F. T. Manheim and Laura Hayes, U.S. Geological Survey.

P 1635. The effect of selected cleaning techniques on Berkshire Lee marble; a scientific study at Philadelphia City Hall, by V. G. Mossotti, A. R. Eldeeb, T. L. Fries, and M. J. Coombs, U.S. Geological Survey; V. N. Naudé, Norton Art Conservation; Lisa Soderberg, Vitetta Group; and G. S. Wheeler, Metropolitan Museum of Art, New York. 2002. One CD-ROM. Available on the web at
http://geopubs.wr.usgs.gov/prof-paper/pp1635/

This CD-ROM has been produced in accordance with the ISO 9660 Standard and is therefore capable of being read on any computing platform that has appropriate CD-ROM driver software installed.

P 1640-A. Mineral deposit density; an update, by D. A. Singer, W. D. Menzie, D. M. Sutphin, D. L. Mosier and J. D. Bliss. 2001. p. A1-A13. (Contributions to global mineral resource assessment research, edited by K. J. Schulz.) Available on the web at
http://pubs.usgs.gov/prof/p1640a

P 1644. NEW MEXICO. Geologic investigations in the Lake Valley area, Sierra County, New Mexico, edited by J. M. O'Neill, U.S. Geological Survey. 2002. 78 p., one plate in pocket. (Supersedes Open-File Report 98-347.) Available on the web at
http://geology.cr.usgs.gov/pub/ppapers/p1644/

A. Geology of the Lake Valley area, by J. M. O'Niell, D. A. Lindsey, D. C. Hedlund, C. J. Nutt, and J. C. Ratté, U.S. Geological Survey. p. 1-17.

B. Geophysical investigations in the Lake Valley area, by M. D. Kleinkopf, D. P. Klein, and R. A. Wise, U.S. Geological Survey. p. 21-33.

C. Mineral deposits of the Lake Valley mining district, by V. T. McLemore, New Mexico Bureau of Geology and Mineral Resources; and C. J. Nutt, U.S. Geological Survey; with a geochemistry appendix by V. T. McLemore and J. R. Herring. p. 37-47.

D. Geochemistry of mining dump material from the Lake Valley mining district, by J. R. Herring, U. S. Geological Survey; and V.T. McLemore, New Mexico Bureau of Geology and Mineral Resources. p. 65-75.

P 1645. An interdisciplinary assessment of regional-scale nonpoint source ground-water vulnerability; theory and application, by R. L. Bernknopf, L. B. Dinitz, U.S. Geological Survey; Keith Loague, Stanford University. 2001. 21 p. Available on the web at
http://geopubs.wr.usgs.gov/prof-paper/pp1645/

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W 2497. PENNSYLVANIA. Use of stable isotopes of carbon, nitrogen, and sulfur to identify sources of nitrogen in surface waters in the lower Susquehanna River basin, Pennsylvania, by C. A. Cravotta, III. Prepared in cooperation with the Pennsylvania Department of Environmental Protection. 2002. 99 p. Available on the web at http://water.usgs.gov/pubs/wsp/wsp2497/

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C 1198. Beyond the Golden Gate; oceanography, geology, biology, and environmental issues in the Gulf of the Farallones, edited by H. A. Karl, J. L. Chin, Edward Ueber, P. H. Stauffer and J. W. Hendley, II. 2001. 78 p. CD-ROM in pocket. Available on the web at http://geopubs.wr.usgs.gov/circular/c1198/

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Techniques and technology of exploration in the Gulf of the Farallones, by Kaye Kinoshita and J. L. Chin. p. 4-5.

Oceanography and geology of the Gulf of the Farallones, by Anonymous. p. 6-29.

Regional setting, by J. L. Chin and R. W. Graymer. p. 8-11.

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Chemical composition of surface sediments on the sea floor, by W. E. Dean and J. V. Gardner. p. 26-27.

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Krill, by Dan Howard. p. 36-39.

Free-floating larvae of crabs, sea urchins, and rockfishes, by S. R. Wing. p. 40-41.

Salmon, by Peter Adams. p. 42-43.

Seabirds, by Peter Pyle. p. 44-47.

Marine mammals, by Jan Roletto. p. 48-51.

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Search for containers of radioactive waste on the sea floor, by H. A. Karl. p. 66-67.

Measuring radioactivity from waste drums on the sea floor, by D. G. Jones, P. D. Roberts and Johannes Limburg. p. 68-71.

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MISCELLANEOUS AND SPECIAL BOOKS

Geographic Names Information System (GNIS)

GNIS, developed by the Geographic Names Office, Mapping Applications Center, is the basis for the Digital Gazetteer of the United States (CD-ROM) and includes all names in the data base as of July 1999, as well as the necessary software for searching, analyzing, and exporting the data. The software must be installed onto an IBM-compatible hard disk before the data can be used. The CD-ROM, which can be purchased for $57 plus $5.00 shipping, contains the National Geographic Names Data Base (NGNDB), Antarctica Geographic Names Data Base (AGNDB), Topographic Map Names Data Base (TMNDB), and Reference Data Base (RDB). Each record in the NGNDB, AGNDB, and TMNDB can contain a variety of location and description fields. All can be displayed, and most can be searched. Not all fields, however, contain data. The RDB contains one field bibliography. The CD-ROM is no longer accompanied by a users manual. The installation procedures, readme file, and trouble shooting guide are provided in WordPerfect, HTML, and PDF formats. All necessary information regarding startup procedures are listed in the "Getting_Started" directory on the CD.

The GNIS CD-ROM may be ordered from Information Services, U.S. Geological Survey, DFC, Building 810, MS 306, Denver, CO 80225, or by telephoning 1-888-ASK-USGS. Prepayment is required. Please make check or money order payable to Department of the Interior–USGS. VISA, MasterCard, American Express, and Discover Card are accepted. Prices are subject to change.

Information and Technical Specifications may be requested from U.S. Geological Survey, Manager GNIS, 523 National Center, Reston, VA 20192. 703-648-4544.

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OF 02-0407. UTAH, NEVADA, NEW MEXICO. Descriptions, spectral plots, and digital reflectance spectra of samples applied to spectral analysis of imaging spectroscopy data; Utah (East Tintic Mountains, Oquirrh Mountains, Wasatch Mountains, Tushar Mountains), Nevada (Goldfield Hills), and New Mexico (Jemez Mountains), USA, 1999-2002, by B. W. Rockwell. 2002. (NC, Da, M; Utah Geol. Surv., 1594 West North Temple, Suite 3110, P.O. Box 146100, Salt Lake City, UT 84114-6100; Nevada Bur. of Mines & Geol., Univ. of Nevada-Reno, Reno, NV 89557-0088; New Mexico Bur. of Mines & Mineral Resources, Campus Station, Socorro, NM 87801.) Available on the web at
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nia Dep of Conservation, Div. of Mines and Geol., Mail Stop 14-34, Library, 801 K St., Sacramento, CA 95814-3532; 185 Berry St., Suite 210, San Francisco, CA 94107-1728; and State Office Bldg., 107 South Broadway, Los Angeles, CA 90012; Arizona Geol. Surv., 416 West Congress, Suite 100, Tucson, AZ 85701; Nevada Bur. of Mines and Geol., Univ. of Nevada-Reno, Reno, NV 89557-0088.) Available on the web at http://pubs.usgs.gov/of/2002/ofr-02-486

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D. Sun-illuminated sea floor topography of Quadrangle 2, by P. C. Valentine, J. T. Malczyk and T. J. Middleton. Lat 41°01′N to 41°08′N, long 68°48′W to 69°03′W. Scale 1:25,000 (1 inch = about 2083 feet). Sheet 37.5 by 38 inches (in color).

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I-2708. MASSACHUSETTS. Sun-illuminated sea floor topography of Quadrangle 8 in the Stellwagen Bank National Marine Sanctuary off Boston, Massachusetts, by P. C. Valentine, T. S. Unger and J. L. Baker. Prepared in cooperation with the National Oceanic and Atmospheric Administration. 1999. Lat 42°20′ to 42°26′, long 70°14′ to 70°24′. Scale 1:25,000 (1 inch = about 2,083 feet). Sheet 27 by 35 inches.

I-2719. MISSOURI. Geologic map of the Low Wassie Quadrangle, Oregon and Shannon counties, Missouri, by R. E. Weems. 2002. Lat 36°52′30″ to 37°, long 91°15′ to 91°22′30″. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 54 by 40 inches (in color).

I-2723. CALIFORNIA. Geologic map of the Lassen Peak, Chaos Crags, and Upper Hat Creek area, California, by R. L. Christiansen, M. A. Clynne and L. J. P. Muffler. 2002. Lat 40°30′ to 40°35′, long 121°27′30″ to 121°35′. Scale 1:24,000 (1 inch = 2,000 feet) and 1:2,500 (1 inch = about 208 feet). Sheet 56 by 36 inches (in color). (Accompanied by 17 page text.)

I-2729. MASSACHUSETTS. Distribution and structure of Holocene sediments in Cape Cod Bay, Massachusetts, by R. R. Rendigs and H. J. Knebel. 2002. Lat 41°N to 42°25′, long 70°W to 70°45′. Scale 1:150,000 (1 inch = about 2.4 miles). Sheet 56 by 39 inches (in color).

I-2730. Geologic map of MTM-40252 and -40257 quadrangles, Reull Vallis region of Mars, by S. C. Mest and D. A. Crown. Prepared for the National Aeronautics and Space Administration. 2002. Lat -42.5° to -37.5°, long 250° to 260°. Scale 1:1,004,000 (1 mm = 1.004 km) at 255° longitude. Sheet 46 1/2 by 38 inches (in color). (Transverse Mercator projection.)

I-2739. WISCONSIN. Geology and tectonic significance of Early Proterozoic rocks in the Monico area, northern Wisconsin, by G. L. LaBerge and J. S. Klasner. 2001. Lat 45°30′ to 45°37′30″, long 89°02′30″ to 89°17′30″. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 57 by 41 inches (in color). (Accompanied by 8 page text.)

I-2743. Geologic map of the Bell Regio Quadrangle (V-9), Venus, by B. A. Campbell and P. G. Campbell. Prepared for the National Aeronautics and Space Administration. 2002. Lat 25° to 50°, long 60° to 30°. Scale 1:5,000,000 (1 inch = about 80 miles). Sheet 46 by 50 inches (in color).

I-2745. COLORADO. Historic trail map of the Trinidad 1° × 2° quadrangle, southern Colorado, by G. R. Scott. Prepared in cooperation with the Denver Public Library, Western History and Genealogy Department. 2001. Lat 37° to 38°, long 104° to 106°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 56 by 40 inches (in color). (Accompanied by 62 page text.) Available on the web at http://greenwood.cr.usgs.gov/pub/i-maps/i-2745/

I-2746. Geologic map transecting the highland/lowland boundary zone, Arabia Terra, Mars; quadrangles 30332, 35332, 40332, and 45332, by G. E. McGill, University of Massachusetts. Prepared for the National Aeronautics and Space Administration. 2002. Lat 27.5° to 47.5°, long 330° to 335°. Scale 1:1,004,000 (1 mm = 1,004 km) at 50° latitude. Sheet 52 1/2 by 39 inches (in color). (Transverse Mercator projection.)

I-2747. Geological map of the Kaiwan Fluctus Quadrangle (V-44), Venus, by N. T. Bridges, U.S. Geological Survey; and G. E. McGill, University of Massachusetts. Prepared for the National Aeronautics and Space Administration. 2002. Two sheets. Lat

-50° to -25°, long 30° to 0°. Sheet 1, scale, 1:4,711,886 (1 mm = 4.712 km) at -25° latitude; sheet 2, scale 1:5,000,000 at -34° and -73° latitudes (Lambert projection). Sheet 1, 46 by 40 inches (in color); sheet 2, 54 by 36 inches.

I-2749. MISSOURI. Geologic map of the Winona Quadrangle, Shannon County, Missouri, by R. C. Orndorff and R. W. Harrison. 2001. Lat 37° to 37°07′30″, long 91°15′ to 91°22′30″. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 53 by 33 1/2 inches (in color).

I-2751. CALIFORNIA. Geologic map of the Yosemite Quadrangle, central Sierra Nevada, California, by D. L. Peck. 2002. Lat 37°30′ to 37°45′, long 119°30′ to 119°45′. Scale 1:62,500 (1 inch = about 1 mile). Sheet 45 by 31 inches (in color).

I-2752. Geologic map of the Diana Chasma Quadrangle (V-37), Venus, by V. L. Hansen and H. R. DeShon. Prepared for the National Aeronautics Space Administration. 2002. Lat -25° to 0°, long 180° to 150°. Scale 1:5,198,991 (1 mm = 5.199 km) at 0° latitude; 1:4,711,886 at -25° latitude (Mercator projection). Sheet 54 by 40 inches (in color).

I-2755. NEVADA. Geologic map of the Yucca Mountain region, Nye County, Nevada, by C. J. Potter, U.S. Geological Survey; R. P. Dickerson, S. M. Stoller Corporation; D. S. Sweetkind, R. M. Drake, II, E. M. Taylor, C. J. Fridrich, C. A. San Juan, and W. C. Day; U. S. Geological Survey. Prepared in cooperation with the U.S. Department of Energy, National Nuclear Security Administration, Nevada Operations Office. 2002. Lat 36°37′30″ to 36°52′30″, long 116°22′30″ to 116°37′30″. Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 39 by 57 inches (in color). (Accompanied by 44 page text.) Available on the web at http://pubs.usgs.gov/imap/2002/i-2755/

I-2757. Controlled photomosaic map of Europa. Prepared for the National Aeronautics and Space Administration. 2002. Lat -57° to 57°, long 0° to 360°. Scale 1:15,000,000 (1 mm = 15 km) at 0°; 1:8,388,000 (1 mm = 8.39 km) at -56° latitude. Sheet 28 1/2 by 31 1/2 inches. (Mercator projection from 57°N to 57°S; Polar Stereographic projection from 55° to 90°N and from 55° to 90°S.)

I-2760. COLORADO. Evolution of the landscape along the Clear Creek Corridor, Colorado; urbanization, aggregate mining and reclamation, by Belinda Arbogast, D. H. Knepper, Jr., R. A. Melick, U.S. Geological Survey; John Hickman, Cumberland Company. 2002. Two sheets. Lat 39°45′ to 39°52′30″, long 104°52′30″ to 105°15′. Sheets 1 and 2, 56 by 40 inches (both in color). (Accompanied by 41 page text.)

I-2762. Controlled color photomosaic map of Ganymede. Prepared for the National Aeronautics and Space Administration. 2002. Lat 180° to 180°, long -57° to 57°; lat 180° to 180°, long 55° to 90°; lat 180° to 180°, long -55° to -90°. Scale 1:15,000,000 (1 mm = 15 km) at 0° latitude, Mercator projection; 1:8,388,000 (1 mm = 8.39 km) at -56° and 56° latitude, Polar Stereographic projection; 1:9,172,068 (1 mm = 9.17 km) at -90° and 90° latitude, Polar Stereographic projection. Sheet 46 by 40 inches (in color).

I-2764. UTAH, COLORADO. Stratigraphy of the Upper Cretaceous Mancos Shale (upper part) and Mesaverde Group in the southern part of the Uinta and Piceance basins, Utah and Colorado, by R. D. Hettinger and M. A. Kirschbaum. 2002. Two sheets. Sheet 1, lat 38°30′ to 40°30′, long 107° to 112°. Sheet 1, 58 by 41 inches; sheet 2, 53 by 41 inches (both in color). (Accompanied by 21 page text.) Available on the web at http://greenwood.cr.usgs.gov/pub/i-maps/i-2764/

I-2769. Color-coded topography and shaded relief maps of the lunar hemispheres. Prepared for the National Aeronautics and Space Administration. 2002. Three sheets. Scale 1:10,000,000 (1 mm = 10 km). All sheets 42 by 32 inches (in color).

I-2770. Controlled photomosaic map of Callisto. Prepared for the National Aeronautics and Space Administration. 2002. Lat 180° to 180°, long -57° to 57°; lat 55° to 90°, long 0° to 0°; and lat -55° to -90°, long 180° to 180°. Scale 1:15,000,000 (1 mm = 15 km) at 0° latitude (Mercator projection); 1:8,388,000 (1 mm = 8.39 km) at -56° latitude (Polar Stereographic projection); 1:8,388,000 (1 mm = 8.39 km) at 56° latitude (Polar Stereographic projection). Sheet 42 by 37 inches.

I-2772. Debris-flow and flooding deposits in coastal Venezuela associated with the storm of December 14-16, 1999, by G. F. Wieczorek, M. C. Larsen, L. S. Eaton, B. A. Morgan and J. L. Blair. Prepared in cooperation with the U.S. Agency for International Development. 2002. Two sheets. Sheet 1, lat 10°35′, long 66°50′; sheet 2, lat 10°36′18″ to 10°37′30″, long 66°50′24″ to 66°51′54″. Sheet 1, scale 1:25,000 (1 inch = about 2,083 feet); sheet 2, scale 1:6,000 (1 inch = 500 feet). Both sheets 50 by 40 inches (in color).

MISCELLANEOUS FIELD STUDIES MAPS

Multicolor or black and white maps on topographic or planimetric bases; quadrangle or irregular areas; various scales. Pre-1971 maps show bedrock geology in relation to specific mining or mineral-deposit problems; the majority of post-1971 maps are preliminary black and white maps on various subjects such as environmental studies or Wilderness mineral investigations.

MF-2323. Extent of Pleistocene lakes in the western Great Basin, by M. C. Reheis. 1999. Lat 37° to 42°, long 114° to 121°. Scale 1:800,000 (1 inch = about 12.6 miles). Sheet 36 by 45 inches (in color). Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2323/

MF-2325-A. CALIFORNIA. Map showing locations of damaging landslides in Napa County, California, resulting from 1997-98 El Niño rainstorms, by J. W. Godt, W. Z. Savage and R. C. Wilson. 1999. Lat 38°16′48″ to 38°27′28″, long 122°09′07″ to 122°27′25″. Scale 1:125,000 (1 inch = about 2 miles). Sheet 21 by 36 inches (in color). (Accompanied by 12 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2325-a/

MF-2325-B. CALIFORNIA. Map showing locations of damaging landslides in Alameda County, California, resulting from 1997-98 El Niño rainstorms, by J. A. Coe, J. W. Godt, Dianne Brian and Nicolas Houdre. 1999. Lat 37°22′30″ to 38°, long 121°31′ to 122°22′30″. Scale 1:125,000 (1 inch = about 2 miles). Sheet 35 by 23 inches (in color). (Accompanied by 12 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2325-b/

MF-2325-C. CALIFORNIA. Map showing locations of damaging landslides in Marin County, California, resulting from 1997-98 El Niño rainstorms, by M. M. Morrissey, G. F. Wieczorek and J. W. Godt. 1999. Lat 37°52′33″ to 38°16′33″, long 122°31′58″ to 122°57′36″. Scale 1:125,000 (1 inch = about 2 miles). Sheet 27 by 26 inches (in color). (Accompanied by 12 page text.)

(Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2325-c/

MF-2325-D. CALIFORNIA. Map showing locations of damaging landslides in Santa Cruz County, California, resulting from 1997-98 El Niño rainstorms, by R. L. Baum, R. L. Schuster and J. W. Godt. 1999. Lat 36°54′46″ to 37°12′21″, long 121°15′39″ to 121°37′40″. Scale 1:125,000 (1 inch = about 2 miles). Sheet 27 by 26 inches (in color). (Accompanied by 12 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2325-d/

MF-2325-E. CALIFORNIA. Map showing locations of damaging landslides in Contra Costa County, California, resulting from 1997-98 El Niño rainstorms, by R. W. Graymer and J. W. Godt. 1999. Lat 37°30′ to 38°30′, Lat 121° to 123°. Scale 1:125,000 (1 inch = about 2 miles). Sheet 33 by 23 inches (in color). (Accompanied by 12 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2325-e/

MF-2325-F. CALIFORNIA. Map showing locations of damaging landslides in Sonoma County, California, resulting from 1997-98 El Niño rainstorms, by D. W. Ramsey and J. W. Godt. 1999. Lat 38°22′58″ to 38°37′30″, lat 122°49′58″ to 123°04′58″. Scale 1:125,000 (1 inch = about 2 miles). Sheet 38 by 36 inches (in color). (Accompanied by 12 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2325-f/

MF-2325-G. CALIFORNIA. Map showing locations of damaging landslides in San Francisco City and County, California, resulting from 1997-98 El Niño rainstorms, by J. W. Hillhouse and J. W. Godt. 1999. Lat 37°42′28″ to 37°47′09″, long 122°24′57″ to 122°29′56″. Scale 1:125,000 (1 inch = about 2 miles). Sheet 25.5 by 20 inches (in color). (Accompanied by 12 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2325-g/

MF-2325-H. CALIFORNIA. Map showing locations of damaging landslides in San Mateo County, California, resulting from 1997-98 El Niño rainstorms, by A. S. Jayko, Jean De Mouthe, K. R. Lajoie, D. W. Ramsey and J. W. Godt. 1999. Lat 37°15′38″ to 37°41′49″, long 122°11′38″ to 122°30′46″. Scale 1:125,000 (1 inch = about 2 miles). Sheet 23 by 31.5 inches (in color). (Accompanied by 12 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2325-h/

MF-2325-I. CALIFORNIA. Map showing locations of damaging landslides in Solano County, California, resulting from 1997-98 El Niño rainstorms, by D. G. Howell and J. W. Godt. 1999. Lat 38°04′30″ to 38°27′43″, long 121°59′34″ to 122°14′16″. Scale 1:125,000 (1 inch = about 2 miles). Sheet 31 by 26.5 inches (in color). (Accompanied by 12 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2325-i/

MF-2325-J. CALIFORNIA. Map showing locations of damaging landslides in Santa Clara County, California, resulting from 1997-98 El Niño rainstorms, by W. L. Ellis, E. L. Harp, C. H. Arnal and J. W. Godt. 1999. Lat 37° to 37°30′, long 121° to 122°. Scale 1:125,000 (1 inch = about 2 miles). Sheet 35 by 28.5 inches (in color). (Accompanied by 12 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2325-j/

MF-2327-A. NEVADA. Geologic map of part of the southern Toquima Range and adjacent areas, Nye County, Nevada, by D. R. Shawe. 2002. Lat 38°30′ to 38°45′, long 116°45′ to 117°07′30″. Scale 1:48,000 (1 inch = 4,000 feet). Sheet 55 1/2 by 24 inches (in color). (Accompanied by 16 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2327-a/

MF-2328. NEW MEXICO. Preliminary map of landslide deposits in the Los Alamos 30′ × 60′ quadrangle, New Mexico, by P. E. Carrara and D. P. Dethier. 1999. Lat 35°30′ to 36°, long 106° to 107°. Scale 1:100,000 (1 inch = about 1.6 miles). Sheet 39 by 34 inches (in color). (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2328/

MF-2333. ALABAMA. Distribution of a suite of elements including arsenic and mercury in Alabama coal, by M. B. Goldhaber, R. C. Bigelow, J. R. Hatch and J. C. Pashin. 2000. Lat 33.2° to 34°, long 87.6° to 87°. Sheet 58 by 46.5 inches (in color). (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2333/

MF-2338. MONTANA. Generalized geologic map of the Absaroka-Beartooth study area, south-central Montana, compiled by B. S. Van Gosen, J. E. Elliott, E. J. LaRock, E. A. du Bray, R. R. Carlson and M. L. Zientek. 2000. Lat 45° to 45°45′, long 109° to 111°. Scale 1:126,720 (1 inch = 2 miles). Sheet 58 by 42 inches (in color). (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2338/

MF-2341. COLORADO. Geologic map of the Rifle Falls Quadrangle, Garfield County, Colorado, by R. B. Scott and R. R. Shroba, U.S. Geological Survey; and A. E. Egger, Stanford University. 2001. Lat 39°37′30″ to 39°45′, long 107°37′30″ to 107°45′. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 34 by 32 inches (in color). (Accompanied by 19 page text.) (Map-on-demand.) (Supersedes Open-File Report 93-700.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2341/

MF-2344. CALIFORNIA. Geologic map of the Sheep Hole Mountains 30′ × 60′ quadrangle, San Bernardino and Riverside counties, California, by K. A. Howard. 2002. Two sheets. Lat 34° to 34°30′, long 115° to 116°. Scale 1:100,000 (1 inch = about 1.6 miles). Sheet 1, 57 by 32 inches; sheet 2, 46 by 31 inches (both in color). (Map-on-demand.) Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2344/

MF-2352. NEW MEXICO. Geologic map of the Tetilla Peak Quadrangle, Santa Fe and Sandoval counties, New Mexico, by D. A. Sawyer, R. R. Shroba, S. A. Minor and R. A. Thompson. 2002. Lat 35°30′ to 35°37′30″, long 106°07′30″ to 106°15′. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 33 1/2 by 28 1/2 inches (in color). (Accompanied by 25 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2352/

MF-2356. ARKANSAS. Geologic map of the Jasper Quadrangle, Newton and Boone counties, Arkansas, by M. R. Hudson, K. E. Murray and Deborah Pezzutti. 2001. Lat 36° to 36°07′30″, long 93°07′30″ to 93°15′. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 38 1/2 by 35 inches (in color). (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2356/

MF-2360. CALIFORNIA. Surface fractures formed in the Potrero Canyon, Tapo Canyon, and McBean Parkway areas in association with the 1994 Northridge, California, earthquake, by M. J. Rymer, J. A. Treiman, T. J. Powers, T. E. Fumal, D. P. Schwartz, J. C. Hamilton and F. R. Cinti. 2001. Lat 34°05′ to 34°25′, long 118°30′ to 118°45′. Scale 1:4,000 (1 inch = about 333 feet); 1:6,000 (1 inch = 500 feet); 1:12,000 (1 inch = 1,000 feet). Sheet 50 by 34 inches (in color). (Map-on-demand.) Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2360/

MF-2361. COLORADO. Geologic map of the Eagle Quadrangle, Eagle County, Colorado, by D. J. Lidke. 2002. Lat 39°37′30″ to 39°45′, long 106°45′ to 106°52′30″. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 38 by 32 inches (in color). (Accompanied by 18 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2361/

MF-2363. COLORADO. Geologic map of the Grand Junction Quadrangle, Mesa County, Colorado, by R. B. Scott, P. E. Carrara, W. C. Hood and K. E. Murray. 2002. Lat 39° to 39°07′30″, long 108°30′ to 108°37′30″. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 32 1/2 by 33 inches (in color). (Accompanied by 21 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2363/

MF-2369. COLORADO. Geologic map of the Vail West Quadrangle, Eagle County, Colorado, by R. B. Scott, D. J. Lidke and D. J. Grunwald. 2002. Lat 39°37′30″ to 39°45′, long 106°22′30″ to 106°30′. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 34 1/2 by 35 1/2 inches (in color). (Accompanied by 18 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2369/

MF-2372. NEVADA, CALIFORNIA. Hydrostructural maps of the Death Valley region flow system, Nevada and California, by C. J. Potter, D. S. Sweetkind, R. P. Dickerson and M. L. Killgore. Prepared in cooperation with the U.S. Department of Energy, National Nuclear Security Administration, Nevada Operations Office. 2002. Two sheets. Lat 35° to 38°15′, long 115° to 118°. Scale 1:350,000 (1 inch = about 6 miles). Both sheets 34 by 50 inches (in color). (Accompanied by 12 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2372/

MF-2373. CALIFORNIA. Geologic maps and structure sections of the southwestern Santa Clara Valley and southern Santa Cruz Mountains, Santa Clara and Santa Cruz counties, California, by R. J. McLaughlin, J. C. Clark, E. E. Brabb, E. J. Helley and C. J. Colón. 2001. Eight sheets. (Accompanied by 13 page text.) (Map-on-demand.) Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2373/

SHEET 1. Los Gatos Quadrangle, by R. J. McLaughlin, J. C. Clark, E. E. Brabb and E. J. Helley. Lat 37°07′30″ to 37°15′, long 121°52′30″ to 122°. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 21 by 31 inches (in color). Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2373/lgmap.pdf

SHEET 2. Laurel Quadrangle, by J. C. Clark, E. E. Brabb and R. J. McLaughlin. Lat 37° to 37°07′30″, long 121°52′30″ to 122°. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 21 by 31 inches (in color). Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2373/lrmap.pdf

SHEET 3. Loma Prieta Quadrangle, by R. J. McLaughlin, J. C. Clark and E. E. Brabb. Lat 37° to 37°07′30″, long 121°45′ to 122°52′30″. Scale 1:24,000 (1 inch = 2000 feet). Sheet 21 by 31 inches (in color). Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2373/lpmap.pdf

SHEET 4. Santa Teresa Hills and southwestern part of the Morgan Hill quadrangles, by R. J. McLaughlin and E. J. Helley. Lat 37°07′30″ to 37°15′, long 121°37′30″ to 121°52′30″. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 38 by 26 inches (in color). Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2373/sth-mhmap.pdf

SHEET 5. Mt. Madonna and southwestern part of the Gilroy quadrangles, by R. J. McLaughlin, E. J. Helley and C. J. Colón. Lat 37° to 37°07′30″, long 121°32′45.6″ to 121°45′. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 31 by 30 inches (in color). Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2373/mm-glmap.pdf

SHEET 7. Structure sections of the Los Gatos Quadrangle and structure section of the Santa Teresa Hills Quadrangle, by R. J. McLaughlin, J. C. Clark, E. E. Brabb, E. J. Helley and C. J. Colón. Sheet 36 by 43 inches (in color). Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2373/scvxsec1.pdf

SHEET 8. Structure sections of the Laurel Quadrangle and structure sections of the Loma Prieta Quadrangle, by R. J. McLaughlin, J. C. Clark, E. E. Brabb, E. J. Helley and C. J. Colón. Sheet 28 by 38 inches (in color). Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2372/scvxsec2.pdf

MF-2374. MISSOURI, KANSAS. Geologic map of the Saint Joseph area, Missouri and Kansas, by W. H. Langer, L. L. Brady, David Smith and R. A. Melick. 2001. Lat 39°30′ to 40°, long 94°37′30″ to 95°. Scale 1:63,360 (1 inch = 1 mile). Sheet 45 by 51 inches (in color). (Map-on-demand) Available on the web at http://pubs.usgs.gov/mf/2002/mf-2374/

MF-2377. COLORADO. Generalized geologic map of part of the upper Animas River watershed and vicinity, Silverton, Colorado, by D. B. Yager and D. J. Bove. 2002. Lat 37°45′ to 38°, long 107°30′ to 107°52′30″. Scale 1:48,000 (1 inch = 4,000 feet). Sheet 49 by 30 inches (in color). (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2377/

MF-2380. Geologic map of the Nor Arvik coal site, southern Armenia, by E. A. Johnson, Artur Martirosyan, B. S. Pierce, Gourgen Malkhassian and M. E. Brownfield. 2002. Lat 39° to 41°, long 47° to 44°. Scale 1:1,000 (1 inch = about 83 feet). Sheet 30 by 22 inches (in color). (Accompanied by 16 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2380/

MF-2381-B. NEVADA, CALIFORNIA. Tectonic map of the Death Valley ground-water model area, Nevada and California, by J. B. Workman, C. M. Menges, W. R. Page, E. B. Ekren, P. D. Rowley and G. L. Dixon. Prepared in cooperation with the U.S. Department of Energy, Nevada Operations Office, National Nuclear Security Administration. 2002. Lat 35° to 38°15′, long 115° to 118°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 48 by 64 inches (in color). (Accompanied by 58 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2381/

MF-2382. ARIZONA, OKLAHOMA. Regional stratigraphic cross sections of Cretaceous rocks from east-central Arizona to the Oklahoma Panhandle, by C. M. Molenaar, W. A. Cobban, E. A. Merewether, C. L. Pillmore, D. G. Wolfe and J. M. Holbrook. 2002. Three sheets. Lat 34° to 38°, long 103° to 110°. Sheet 1, 57 by 36 inches; sheet 2, 44 by 33 inches; sheet 3, 42 by 32 inches (all in color). (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2382/

MF-2384. CALIFORNIA. Debris flows triggered by the El Niño rainstorm of February 2-3, 1998, Walpert Ridge and vicinity, Alameda County, California, by J. A. Coe and J. W. Godt. 2001. Three sheets. Sheets 1 and 3, lat 37°32′30″ to 37°40′, long 121°52′30″ to 122°04′30″. Scale 1:24,000 (1 inch = 2,000 feet). All sheets 58 by 36 inches (in color). (Map-on-demand) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2384/

MF-2385. CALIFORNIA. Map and map database of susceptibility to slope failure by sliding and earthflow in the Oakland area, California, by R. J. Pike, R. W. Graymer, Sebastian Roberts, N. B. Kalman and Steven Sobieszczyk. 2001. Lat 37°37′30″ to 38°, long 122° to 122°22′30″. Scale 1:50,000 (1 inch = about 4,200 feet). Sheet 30 by 50 inches (in color). (Accompanied by 37 page text.) (Map-on-demand.) Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2385/

MF-2386. CALIFORNIA. Logs and data from trenches across the Hayward Fault at Tyson's Lagoon (Tule Pond), Fremont, Alameda County, California, by J. J. Linenkaemper, T. E. Dawson, T. E. Davson, U.S. Geological Survey; G. G. Seitz, Lawrence Livermore National Laboratory; L. M. Reidy, University of California; and D. P. Schwartz, University of California. 2002. Two sheets. Lat 37°N to 38°N, long 122°W to 123°W. Sheet 1, 45 by 30 inches; sheet 2, 33 by 44 inches (both in color). (Accompanied by 12 page text.) (Map-on-demand.) Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2386/

MF-2387. ARIZONA. Geologic map of Hidden Hills and vicinity, Mohave County, northwestern Arizona, by G. H. Billingsley, J. L. Wellmeyer, Michelle Harr and S. S. Priest. Prepared in cooperation with the National Park Service and the Bureau of Land Management. 2002. Lat 36°15′ to 36°30′, long 113°30′ to 113°45′. Scale 1:31,680 (1 inch = 2,640 feet). Sheet 31 by 51 inches (in color). (Accompanied by 23 page text.) (Map-on-demand.) Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2387/

MF-2388. COLORADO. Generalized surficial geology map of the Pueblo 1° × 2° quadrangle, Colorado, by D. W. Moore, A. W. Straub, M. E. Berry, M. L. Baker and T. R. Brandt. 2002. Lat 38° to 39°, long 104° to 106°. Scale 1:250,000 (1 inch = about 4 miles). Sheet 56 by 24 inches (in color). (Accompanied by 25 page text.) (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2388/

MF-2389. COLORADO. Geologic map of the Storm King Mountain Quadrangle, Garfield County, Colorado, by Bruce Bryant, R. R. Shroba, A. E. Harding and K. E. Murray. 2002. Lat 39°30′ to 39°37′30″, long 107°22′30″ to 107°30′. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 33 1/2 by 38 inches (in color). (Accompanied by 25 page text.) (Map-on-demand.) Available on the web at http://pubs.usgs.gov/mf/2002/mf-2389/

MF-2391. NEBRASKA, IOWA. Surficial geologic map of the greater Omaha area, Nebraska and Iowa, by R. R. Shroba, T. R. Brandt and J. C. Blossom. 2001. Lat 41° to 41°22′30″, long 95°52′30″ to 96°15′. Scale 1:100,000 (1 inch = about 1.6 miles). Sheet 36 by 29 inches (in color). (Map-on-demand.) Available on the web at http://greenwood.cr.usgs.gov/pub/mf-maps/mf-2391/

MF-2392. OREGON, WASHINGTON. Geologic map of the Deer Island Quadrangle, Columbia County, Oregon and Cowlitz County, Washington, by R. C. Evarts. 2002. Lat 45°52′30″ to 46°, long 122°45′ to 122°52′30″. Scale 1:24,000 (1 inch = about 4 miles). Sheet 46 by 35 inches (in color). (Accompanied by 45 page text.) (Map-on-demand.) Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2392/

MF-2393. CALIFORNIA. Digital bathymetric model of Mono Lake, California, by C. G. Raumann, U.S. Geological Survey; Scott Stine, California State University; Alexander Evans, U.S. Geological Survey; and Jerry Wilson, Racal Pelagos Corporation. 2002. Two sheets. Lat 37°56′15″N to 38°03′45″N, long 118°56′15″W to 119°07′30″W. Sheet 1, scale 1:32,900 (1 inch = about 2,741 feet); sheet 2, scale 1:56,690 (1 inch = about 4,724 feet). Sheet 1, 30 by 35 inches; sheet 2, 34 by 27 inches (both in color). (Accompanied by 9 page text) (Map-on-demand.) Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2393/

MF-2394. ARIZONA. Geologic map of Clayhole Wash and vicinity, Mohave County, northwestern Arizona, by G. H. Billingsley, S. S. Priest and S. L. Dudash. Prepared in cooperation with the National Park Service and the Bureau of Land Management. 2002. Lat 36°45′ to 37°, long 113° to 113°15′. Scale 1:31,680 (1 inch = 2,640 feet). Sheet 38 by 45 inches (in color). (Accompanied by 21 page text.) (Map-on-demand.) Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2394/

MF-2395. WASHINGTON. Geologic map of the Battle Ground 7.5-minute quadrangle, Clark County, Washington, by K. A. Howard. 2002. Lat 45°45′ to 45°52′30″, long 122°30′ to 122°37′30″. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 30 by 35 inches (in color). (Accompanied by 18 page text.) (Map-on-demand.) Available on the web at http://geopubs.wr.usgs.gov/map-mf/mf2395/

MF-2398. CALIFORNIA. Map showing seacliff response to climate and seismic events, Depot Hill, Santa Cruz County, California, by C. J. Hapke, B. M. Richmond and M. M. D'Iorio. 2002. Lat 36°58′12″ to 36°58′48″, long 121°56′24″ to 122°55′48″. Sheet 59 by 37 inches (in color). (Map-on-demand.)

MF-2399. CALIFORNIA. Map showing seacliff response to climatic and seismic events, Seacliff State Beach, Santa Cruz County, California, by C. J. Hapke, B. M. Richmond and M. M. D'Iorio. 2002. Lat 36°53′24″ to 37°, long 121°49′48″ to 121°54′36″. Sheet 55 by 36 inches (in color). (Map-on-demand.)

MF-2400. CALIFORNIA. Map showing seacliff response to climatic and seismic events, Seabright Beach, Santa Cruz County, California, by C. J. Hapke, B. M. Richmond and M. M. D'Iorio. 2002. Lat 36°57′36″ to 36°58′12″, long 121°59′24″ to 122°. Sheet 55 by 36 inches (in color). (Map-on-demand.)

HYDROLOGIC INVESTIGATIONS ATLASES

Multicolored or black and white maps on topographic or planimetric bases presenting a wide range of geohydrologic data; both regular and irregular areas.

HA-0747. SOUTH DAKOTA. Atlas of water resources in the Black Hills area, South Dakota, by J. M. Carter, D. G. Driscoll, J. E. Williamson, U.S. Geological Survey; and V. A. Lindquist, West Dakota Water Development District. Prepared in cooperation with the South Dakota Department of Environment and Natural Resources and the West Dakota Water Development District. 2002. 120 p. Lat 43°15′ to 44°45′, long 103° to 104°. All sheets 11 by 17 inches (in color).

HA-0748. WYOMING. Potentiometric surfaces, altitudes of the tops, and hydrogeology of the Minnelusa and Madison aquifers, Black Hills area, Wyoming, by T. T. Bartos, L. L. Hallberg and K. M. Ogle. Prepared in cooperation with the Wyoming State Engineer's Office. 2002. Four sheets. Sheets 1 and 3, lat 44°07′30″ to 44°37′30″, long 104°07′30″ to 104°22′30″; sheets 2 and 4, lat 43°30′ to 44°, long 104°07′30″ to 104°22′30″. Scale 1:100,000 (1 inch = about 1.6 miles). All sheets 42 by 34 inches (in color). Available on the web at http://water.usgs.gov/pubs/ha/ha748/

SPECIAL MAP

Carte des anomalies magnétiques de l'Amérique du Nord/Magnetic anomaly map of North America/Mapa de la anomalía magnética de Norteamérica, by North American Magnetic Anomaly Group, Canada, Geological Survey, U. S. Geological Survey and Mexico, Consejo de Recursos Minerales. 2002. Lat 10° to 50°, long 50° to 140° and lat 18°30′ to 20°30′, long 154°30′ to 156°30′. Scale 1:10,000,000 (1 inch = about 160 miles) and scale 1:3,500,000 (1 inch = about 55 miles). Sheet 57 by 40 inches (in color). (Accompanied by 31 page text.) Available on the web at http//pubs.usgs.gov/sm/mag_map/index.html

OUTSIDE PUBLICATIONS

ARTICLES AND REPORTS

Articles by USGS personnel in non-USGS publications recently cited in the GeoRef data base of the American Geological Institute are listed below. Non-USGS personnel who share authorship in articles with USGS personnel are indicated by an asterisk (*) immediately following the name. **These publications are not available from the U.S. Geological Survey.**

OP-1. P. L. Abbott*, D. P. Smith*, W. V. Sliter and L. R. Saul*. Paleogeography of three Paleocene limestones in Baja California, Mexico. Book - Pacific Section, Society of Economic Paleontologists and Mineralogists, *in* Cenozoic paleogeography of the Western United States-II. (A. E. Fritsche, editor). 75, May 1995. p. 1-8.

OP-2. Steffen Abe*, J. H. Dieterich, Peter Mora* and David Place*. Simulation of the influence of rate- and state-dependent friction on the macroscopic behavior of complex fault zones with the lattice solid model. Pure and Applied Geophysics, *in* Earthquake processes; physical modelling, numerical simulation and data analysis; Part I. (Mitsuhiro Matsu'ura, editor and others). v. 159, no. 9, 2002. p. 1967-1983.

OP-3. S. S. Agard and L. C. S. Gundersen. PENNSYLVANIA. The geology and geochemistry of soils in Boyertown and Easton, Pennsylvania, *in* Field studies of radon in rocks, soils, and water. (L. C. S. Gundersen, editor and others). Boca Raton, FL: CRC Press, 1993. p. 51-63.

OP-4. D. C. Agnew*, Susan Owen*, Zheng-Kang Shen*, Gregory Anderson*, J. L. Svarc, Hadley Johnson*, K. E. Austin* and Robert Reilinger*. CALIFORNIA. Coseismic displacement from the Hector Mine, California, earthquake; results from survey-mode Global Positioning System measurements. Bulletin of the Seismological Society of America, *in* The Hector Mine, California, earthquake of 16 October 1999. (M. J. Rymer, editor and others). v. 92, no. 4, May 2002. p. 1355-1364.

OP-5. T. S. Ahlbrandt and P. J. McCabe. Global petroleum resources; a view to the future. Geotimes. v. 47, no. 11, November 2002. p. 14-18.

OP-6. Abdallah Al-Zoubi* and U. S. ten Brink. Lower crustal flow and the role of shear in basin subsidence; an example from the Dead Sea basin. Earth and Planetary Science Letters. v. 199, no. 1-2, May 30, 2002. p. 67-79.

OP-7. J. N. Aleinikoff, J. W. Horton, Jr., A. A. Drake, Jr. and C. M. Fanning*. SHRIMP and conventional U-Pb ages of Ordovician granites and tonalites in the central Appalachian Piedmont; implications for Paleozoic tectonic events. American Journal of Science. v. 302, no. 1, January 2002. p. 50-75.

OP-8. J. N. Aleinikoff, R. P. Wintsch*, C. M. Fanning* and M. J. Dorais*. CONNECTICUT. U-Pb geochronology of zircon and polygenetic titanite from the Glastonbury Complex, Connecticut, USA; an integrated SEM, EMPA, TIMS, and SHRIMP study. Chemical Geology. v. 188, no. 1-2, August 30, 2002. p. 125-147.

OP-9. R. B. Alexander, P. J. Johnes*, E. W. Boyer* and R. A. Smith. A comparison of models for estimating the riverine export of nitrogen from large watersheds. Biogeochemistry (Dordrecht), *in* The nitrogen cycle at regional to global scales. (E. W. Boyer, editor and others). 57-58, 2002. p. 295-339.

OP-10. S. J. Alhadeff, J. W. Musser, A. C. Sandercock* and T. R. Dyar. GEORGIA. Digital environmental atlas of Georgia. Publication CD - Georgia Geologic Survey. Report no. 1, 2001. 1 disc.

OP-11. W. M. Alley. Some reflections on the sustainability of water resources, *in* Sustainability of energy and water through the 21st century; proceedings of the Arbor Day Farm conference. (L. C. Gerhard, editor and others). 2002. p. 81-87. *Available at:* Kansas Geological Survey, Lawrence, KS, United States.

OP-12. W. M. Alley, R. W. Healy, J. W. LaBaugh and T. E. Reilly. Flow and storage in groundwater systems. Science. v. 296, no. 5575, June 14, 2002. p. 1985-1990.

OP-13. Javier Almendros, B. A. Chouet, P. B. Dawson and Timothy Bond*. HAWAII. Identifying elements of the plumbing system beneath Kilauea Volcano, Hawaii, from the source locations of very-long-period signals. Geophysical Journal International. v. 148, no. 2, February 2002. p. 303-312.

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OP-15. C. N. Alpers, J. L. Jambor* and D. K. Nordstrom (editors). Sulfate minerals; crystallography, geochemistry, and environmental significance. Reviews in Mineralogy and Geochemistry. 40, 2000. 602 p.

OP-16. Y. V. Amelin*, E. Y. Rytsk*, R. S. Krymskii*, L. A. Neimark* and S. G. Skublov. Vendian age of enderbite from a granulite complex of the Baikal-Muya ophiolite belt, northern Baikal region. Doklady Earth Sciences. v. 371A, no. 3, April 2000. p. 455-457.

OP-17. Gregory Anderson, Hadley Johnson* and D. C. Agnew*. Comparing tests for static stress triggering using aftershock sequences. 2000. 18 p. *Available at:* U. S. Geological Survey, Library, Reston, VA, United States.

OP-18. K. E. Anderson and K. D. Kline*. A reference framework for global environmental data, *in* Global environmental databases; present situation, future directions. (Ryutaro Tateishi, editor and others). Chiba: International Society for Photogrammetry and Remote Sensing, Working Group IV/6, 2000. p. 21-40. *Available at:* Geocarto International Centre, Hong-Kong.

OP-19. M. P. Anderson*, R. J. Hunt, J. T. Krohelski and Kuopo Chung*. Using high hydraulic conductivity nodes to simulate seepage lakes. Ground Water. v. 40, no. 2, March 2002. p. 117-122.

OP-20. D. J. Andrews. A suggestion for fitting ground-motion attenuation near an extended earthquake source. Seismological Research Letters. v. 72, no. 4, August 2001. p. 454-461.

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OP-23. T. C. Annear*, Wayne Hubert, Darin Simpkins and Lance Hebdon*. WYOMING. Behavioural and physiological response of trout to winter habitat in tailwaters in Wyoming, USA. Hydrological Processes, *in* Hydrology of ice-covered rivers and lakes. (M. G. Ferrick, editor and others). v. 16, no. 4, March 2002. p. 915-925.

OP-24. Belinda Arbogast. An overview of reclamation law dealing with mineral resource development in the USA, *in* Industrial minerals and extractive industry geology. (P. W. Scott, editor and others). Bath: Geological Society Publishing House, 2002. p. 283-293.

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OP-26. B. R. Arora*, W. H. Campbell and E. R. Schiffmacher*. Upper mantle electrical conductivity in the Himalayan region. Journal of Geomagnetism and Geoelectricity. v. 47, no. 7, 1995. p. 653-665.

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OP-28. I. M. Artemieva* and W. D. Mooney. On the relations between cratonic lithosphere thickness, plate motions, and basal drag. Tectonophysics, *in* Structure of the continental lithosphere and upper mantle. (I. M. Artemieva, editor and others). v. 358, no. 1-4, November 14, 2002. p. 211-231.

OP-29. I. M. Artemieva*, W. D. Mooney, Edward Perchuc* and Hans Thybo* (prefacers). Processes of lithosphere evolution; new evidence on the structure of the continental crust and uppermost mantle. Tectonophysics, *in* Structure of the continental lithosphere and upper mantle. (I. M. Artemieva, editor and others). v. 358, no. 1-4, November 14, 2002. p. 1-15.

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OP-31. Sigrid Asher-Bolinder, D. E. Owen and R. R. Schumann. A preliminary evaluation of environmental factors influencing day-to-day and seasonal soil-gas radon concentrations, *in* Field studies of radon in rocks, soils, and water. (L. C. S. Gundersen, editor and others). Boca Raton, FL: CRC Press, 1993. p. 23-31.

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OP-35. E. D. Attanasi and J. H. DeYoung, Jr. Introduction. Mining Engineering, *in* Annual review 1993; exploration, mining, minerals processing, coal. v. 46, no. 5, May 1994. p. 405-406.

OP-36. Olivier Bachmann*, M. A. Dungan* and P. W. Lipman. COLORADO. The Fish Canyon magma body, San Juan volcanic field, Colorado; rejuvenation and eruption of an upper-crustal

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OP-47. A. A. Barka*, H. S. Akyuz*, Erhan Altunel*, G. Sunal*, Ziyadin Cakir*, Aynur Dikbas*, Baris Yerli*, T. K. Rockwell*, J. Dolan*, R. D. Hartleb*, T. E. Dawson*, T. E. Fumal, R. M. Langridge, H. D. Stenner, S. A. Christofferson*, A. Tucker*, Rolando Armijo*, Bertrand Meyer*, Jean-Bernard de Chabalier*, W. R. Lettis*, W. D. Page* and Jeff Bachhuber*. The August 17, 1999 Izmit earthquake, M = 7.4, eastern Marmara region, Turkey; study of surface rupture and slip distribution, *in* The 1999 Izmit and Duzce earthquakes; preliminary results. (Aykut Barka, editor and others). Istanbul: Istanbul Technical University, 2000. p. 15-30.

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ABSTRACTS

Abstracts are condensed but informative summaries of presentations made at meetings of scientific and professional organizations. Typically they summarize the principal conclusions of an author's current work but contain little supporting data. Non-USGS personnel who share authorship in abstracts with USGS personnel are indicated by an asterisk (*) immediately following the name. **These publications are not available from the U.S. Geological Survey.**

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ABBREVIATIONS USED

A-	Antarctic Geologic Map
B	Bulletin
C	Circular
C-	Coal Investigations Map
CAT	Catalog
CF	Coal Map
CP-	Circum-Pacific Map Series
DDS-	Digital Data Series
EV	Earthquakes and Volcanoes
FS	Fact Sheet
GN	General Interest Publication
GP-	Geophysical Investigations Map
GQ-	Geologic Quadrangle Map
HA-	Hydrologic Investigations Atlas
HUM	Hydrologic Unit Map
I-	Miscellaneous or Geologic Investigations Series Map
L-	Land Use and Land Cover Map
MF-	Miscellaneous Field Studies Map
MR-	Mineral Investigations Resources Map
MSB	Miscellaneous and Special Books
OC-	Oil and Gas Investigations Chart
OM-	Oil and Gas Investigations Map
OF	Open-File Report
OP	Outside Publication
P	Professional Paper
PB-,ADA	Report available only through the National Technical Information Service
PDE	Preliminary Determination of Epicenters
SGM	Special Geologic Map
SGMI	Geologic Map Index
SM	Special Map
STM	State Geologic Map
TWI	Techniques of Water-Resources Investigations
W	Water-Supply Paper
WRI	Water-Resources Investigations Report
YR	Yearbook

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SUBJECT AND GEOGRAPHIC INDEX

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Connecticut WRI 02-4011
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Georgia WRI 02-4020; OP-1467
Idaho WRI 02-4120
Indiana WRI 01-4260
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Kansas WRI 02-4107; FS 0096-01
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Missouri WRI 02-4107
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New York WRI 00-4193
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Rhode Island WRI 02-4149
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Washington WRI 02-4114
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chlorine
chloride ion
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California WRI 02-4003; OP-897
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Far East OP-2065
Florida OP-72; OP-1619; OP-1962
Georgia WRI 02-4020; OP-1467
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Mississippi River valley *see* Mississippi Valley

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