



Digital Files for Northeast Asia Geodynamics, Mineral Deposit Location, and Metallogenic Belt Maps, Stratigraphic Columns, Descriptions of Map Units, and Descriptions of Metallogenic Belts

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U.S. GEOLOGICAL SURVEY**

PURPOSE OF CD-ROM

This publication contains a series of digital files for Northeast Asia geodynamics, mineral deposit location, and metallogenic belt maps, and descriptions of map units and metallogenic belts, references, and stratigraphic columns. This region comprises Eastern Siberia, Russian Far East, Mongolia, northern China, South Korea, and Japan. The files include: (1) a geodynamics map at a scale of 1:5,000,000; (2) page-size stratigraphic columns for major terranes; (3) a generalized geodynamics map at a scale of 1:15,000,000; (4) a mineral deposit location map at a scale of 1:7,500,000; (5) metallogenic belt maps at a scale of 1:15,000,000; (6) detailed descriptions of geologic units, including tectonostratigraphic terranes, cratons, major melange zones, and overlap assemblages, with references; (7) detailed descriptions of metallogenic belts with references; and (8) summary mineral deposit and metallogenic belt tables. The purpose of this publication is to provide high-quality, digital graphic files for maps and stratigraphic columns, and Word files for explanations and descriptions of map units and metallogenic belts to customers and users. This CD-ROM report is for sale by U.S. Geological Survey, Information Services, ESIC Open-File Reports, PO Box 25286, Denver, CO 80225 (Telephone 888-ASK-USGS) and is available on the Web version free at: <http://pubs.usgs.gov/of/2004/1252/> where any updates to it may be found also.

ORGANIZATION OF CD-ROM

At the root level of this CD-ROM are the 1_README.TXT file and the documentation for this publication (of2004-1252.doc and of2004-1252.pdf). The materials on the CD-ROM, including maps, tables, and articles are stored in the following directories under the indicated file names. Maps are in Corel Draw 10 (*.cdr), Adobe Illustrator 7 (*.ai), and Adobe Acrobat Reader 6 (*.pdf) formats. Figures are in Corel Draw (*.cdr) and Adobe Acrobat Reader (*.pdf) formats. Descriptions of map units, metallogenic belts, tables, references, and other text files are in Word 2000 (*.doc) and Adobe Acrobat Reader (*.pdf) formats. Plain-text files are in ASCII (*.txt) format.

This CD-ROM contains the following directories.

Acrobat. This directory contains Adobe Acrobat Reader installation programs for Windows and Macintosh computers. After installing this program, the files in PDF (*.pdf) format (text, figures, and maps) can be viewed and printed.

columns. This directory contains stratigraphic columns for the 179 tectonostratigraphic terranes of NE Asia.

generalized_map. This directory contains a file for a generalized NE Asia Geodynamics Map at a scale of 1:15,000,000, when printed on appropriate size media.

geodynamics_map. This directory contains files for the NE Asia Geodynamics Map at a scale of 1:5,000,000. Also included are files with descriptions of geologic units, including

tectonostratigraphic terranes, cratons, major melange zones, and overlap assemblages, and references.

metallog_belt_map. This directory contains files for a series of mineral deposit location map (sheet 1), and twelve metallogenic belt maps on three sheets (sheets 2-4) of NE Asia. The mineral deposit location map is at a scale of 1:7,500,000, and the metallogenic belt maps are at a scale of 1:15,000,000. The mineral deposit location and metallogenic belts maps are depicted on an underlying NE Asia Generalized Geodynamics Map. Also included are: (1) a file with a summary table of mineral deposits; (and 2) files with descriptions of metallogenic belts and references, and a summary metallogenic belt table.

projmat. This directory contains NE Asia project materials, including the project emblem, and pamphlets for NE Asia and previous projects.

CONTENTS OF DIRECTORIES ON CD-ROM

Directory	File or Subdirectory Names (Alphabetical Order)
Acrobat	Directories Mac and PC containing Adobe Acrobat Reader 5 and 6 installation programs.
columns	1_intro.doc and .pdf. (name).cdr, and .pdf (Names of stratigraphic columns)
generalized_map	generalized_map.cdr, .ai, and .pdf.
geodynamics_map	1_intro.doc and .pdf. overlap_assemb_descript.doc and .pdf. references.doc and .pdf. sheet_1.cdr, .ai, and .pdf. sheet_2.cdr, .ai, and .pdf. terrane_descript.doc and .pdf.
metallog_belt_map	1_intro.doc and .pdf. lode_dep_table.doc and .pdf. metbelt_descript.doc and .pdf. metbelt_refer.doc and .pdf. metbelt_table.doc and .pdf. placer_districts_table.doc and .pdf. sheet_1.cdr, .ai, and .pdf. sheet_2.cdr, .ai, and .pdf. sheet_3.cdr, .ai, and .pdf. sheet_4.cdr, .ai, and .pdf.
projmat	NE Asia Project Emblem.pdf NE Asia Project Pamphlet.pdf Project Area Index Map.pdf RFE-Ak-Can Cord Project Pamphlet.pdf

SYSTEM REQUIREMENTS

The data and text on this CD-ROM require either a UNIX® system-based or Linux® workstation, Macintosh® or compatible computer, or an IBM® or compatible personal computer, all equipped with a CD-ROM drive and a color monitor that can display 256 colors (16.7 million recommended). To use this CD-ROM, a PC should have: Intel® Pentium® or equivalent processor, Microsoft® Windows® 95 OSR 2.0, Windows 98 SE, Windows Millennium, Windows NT® 4.0 with Service Pack 5, Windows 2000, or Windows XP, and 64 MB of RAM. To use this CD-ROM, a Macintosh should have a PowerPC® processor, Mac OS software version 8.6, 9.0.4, 9.1, 9.2, or OS X, and 64 MB of RAM. Almost any UNIX system-based or Linux workstation can read these files.

On any platforms, you will need Adobe® Acrobat® Reader 5.0 or higher (included on this disk for Macintosh and Windows) or other software that can translate PDF files. This CD-ROM contains a full-text index (index.pdx and associated files in the index directory) that is for use in searching the PDF files for words or sets of words; this *Search* index was created in Acrobat 6 so you will need that version or higher to use this tool. The *Find* tool in Acrobat 5 works but only within one file at a time.

PORTABLE DOCUMENT FORMAT (PDF) FILES

This CD-ROM contains Portable Document Format (PDF) files for viewing and searching documents. The Acrobat directory contains installers for Adobe Acrobat Reader 5.0.5, 5.1 and 6.0 for both Windows (PC directory) and Macintosh (Mac directory). The installers are provided on this disc, or can be downloaded as the latest version of Adobe Acrobat Reader, free, via the Internet from the Adobe homepage on the World-Wide Web at <http://www.adobe.com/>. In order to view PDF files you will need a reader that can translate PDF files. This CD-ROM contains a full-text index (index.pdx and associated files in the index directory) that is for use in searching the PDF files for words or sets of words using the search tool in Acrobat Reader 6 or higher.

DISCLAIMERS

This Compact Disc-Read-Only-Memory (CD-ROM) publication was prepared by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed in this report, or represents that its use would not infringe privately owned rights. Reference therein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof.

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such warranty, and no responsibility is assumed by the USGS in the use of this data, software, or related materials.

ASSOCIATED PROJECT

The materials on this CD-ROM are the result of major compilations and syntheses accomplished during a six-year project was conducted by the U.S. Geological Survey and collaborating resource agencies to provide a critical data base and companion geologic information on the Mineral Resources, Metallogensis, and Tectonics of Northeast Asia. Data from the project is benefiting participants and customers by: (1) providing a comprehensive international data base on the mineral resources of the region that will be the first, extensive knowledge available in English; (2) providing major new interpretations of the origin and crustal evolution of mineralizing systems and their host rocks, thereby enabling enhanced, broad-scale metallogenic and tectonic reconstructions; and (3) promoting trade and scientific and technical exchanges between North America and Eastern Asia.

Products from the Northeast Asia project are providing sound scientific data and interpretations for commercial firms, governmental agencies, universities, and individuals that are developing new ventures and studies in the project area, and for land-use planning studies that deal with mineral potential and environmental issues. Northeast Asia has vast potential for known and undiscovered mineral deposits; however, before this project, no detailed mineral deposit databases were published in English in the West.

CUSTOMERS AND COLLABORATING AGENCIES

Customers for the Northeast Asia project include: (1) major and minor mining, petroleum, environmental, construction, investment, and information companies, agencies, and organizations, (2) federal and state government agencies; (3) professional organizations; (4) earth science departments at universities; (5) news media; and (6) mineral resource, petroleum, and information company consultants. A major international customer is the Commerce Working Group of the Russian-U.S.A. Commission.

The collaborating agencies for the project are the Russian Academy of Sciences, Academy of Sciences of the Sakha Republic (Yakutia), VNIIOkeangeologia and Ministry of Natural Resources of the Russian Federation, Yakutian Academy of Sciences, Mongolian Academy of Sciences, Mongolian University of Science and Technology, Mongolian National University, Jilin University, Changchun, China, the China Geological Survey, the Korea Institute of Geosciences and Mineral Resources, the Geological Survey of Japan/AIST, University of Texas Arlington, and the U.S. Geological Survey. Other U.S.A. project participants are the Colorado School of Mines, University of Alaska Fairbanks, Stanford University, and the Northwest Mining Association, Spokane, Washington.

STUDY AREA AND PRODUCTS

The study area for the project consists of Eastern and Southern Siberia, Russian Far East, Mongolia, northern China, South Korea, and Japan. The area is approximately bounded by 40° to 82° N. latitude and 75° to 144° E. longitude.

The products resulting from the project include: (a) detailed mineral resource tables and location maps based on original, cited references; (b) regional terrane and overlap-assemblage maps and detailed explanations that will provide the geologic setting for mineral deposits and metallogenic belts; (c) metallogenic-belt and mineral resource maps and interpretations; and (d) metallogenic and tectonic interpretations, including a four-dimensional time-space model depicting the crustal origin and evolution of mineral deposits. Publications for the project consist of, preliminary reports, and new and important regional geologic maps, map explanations, mineral deposit database (this report), and metallogenic belt maps. Publications are being released in paper format (professional scientific journals and USGS publications), digital format (CD-ROM), GIS (ARC-View) format on CD-ROM, and Internet/Web) format.

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PROJECT SUMMARIES AVAILABLE ON INTERNET/WEB

Summary of project on Mineral Resources, Metallogenesis, and Tectonics of Northeast Asia (Eastern and Southern Siberia, Mongolia, Northeastern China, South Korea, and Japan)
<http://minerals.er.usgs.gov/wr/projects/minres.shtml>

Summary of project on Mineral Deposits, Metallogenesis, and Tectonics of the Russian Far East, Alaska, and the Canadian Cordillera: <http://minerals.usgs.gov/west/projects/majdeps.pdf>

MAJOR PROJECT PUBLICATIONS AVAILABLE ON INTERNET/WEB

Preliminary Publications Book 1 From Project on Mineral Resources, Metallogenesis, and Tectonics of Northeast Asia: U.S.G.S. Open-File Report 99-165:
<http://geopubs.wr.usgs.gov/open-file/of99-165/>

Preliminary Publications Book 2 From Project on Mineral Resources, Metallogenesis, and Tectonics of Northeast Asia: U.S.G.S. Open-File Report 03-203:
<http://geopubs.wr.usgs.gov/open-file/of03-103/>

Preliminary Northeast Asia geodynamics map: U.S. Geological Survey Open-File Report 03-205: <http://rockyweb.cr.usgs.gov/mod/ak.html>

Preliminary metallogenic belt and mineral deposit location maps for Northeast Asia: U.S. Geological Survey Open-File Report 03-204: <http://geopubs.wr.usgs.gov/open-file/of03-204/>

Significant metalliferous and selected non-metalliferous lode deposits, and selected placer districts of Northeast: U.S. Geological Survey Open-File Report 03-220: <http://geopubs.wr.usgs.gov/open-file/of03-220/>

MAJOR PUBLICATIONS FROM PREVIOUS CIRCUM-NORTH PACIFIC PROJECT AVAILABLE ON INTERNET/WEB

Significant Metalliferous and Selected Non-Metalliferous Lode Deposits and Placer Districts for the Russian Far East, Alaska, and Canadian Cordillera: U.S.G.S. Open-File Report 96-513-B: <http://geopubs.wr.usgs.gov/open-file/of96-513-b/>

Summary Terrane, Mineral Deposit, and Metallogenic Belt Maps of the Russian Far East, Alaska, and the Canadian Cordillera: U.S.G.S. Open-File Report 98-136: <http://geopubs.wr.usgs.gov/open-file/of98-136/>

Geographic Information Systems (GIS) Compilation of Geophysical, Geologic, and Tectonic Maps for the Circum-North Pacific: U.S. Geological Survey Open-File Report 99-422: <http://geopubs.wr.usgs.gov/open-file/of99-422/>

Phanerozoic Tectonic Evolution of the Circum-North Pacific: U.S. Geological Survey Professional Paper 1626: <http://geopubs.wr.usgs.gov/prof-paper/pp1626/>

Dynamic Computer Model for the Metallogenesis and Tectonics of the Circum-North Pacific: U.S. Geological Survey Open-File Report 01-161: <http://geopubs.wr.usgs.gov/open-file/of01-261/>

Metallogenesis and Tectonics of the Russian Far East, Alaska, and the Canadian Cordillera: U.S. Geological Survey Open-File Report 03-434: <http://geopubs.wr.usgs.gov/open-file/of03-434/>

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