

INTRODUCTION:

This CD-ROM contains computer programs and earthquake strong-motion data files required to conduct Newmark sliding-block analyses on slopes that are potentially susceptible to seismically triggered landslides. To open the main program, double-click on the icon for the Newmark.exe file in the root directory of this CD-ROM.

CD-ROM CONTENTS:

ReadMe.doc	This file (in Microsoft Word format).
ReadMe.pdf	This file (in PDF format). This file must be viewed using Acrobat Reader, which is freely downloadable and contained on this CD-ROM.
TitlePage.pdf	Title page of this report in PDF format. This file must be viewed using Acrobat Reader, which is freely downloadable and contained on this CD-ROM.
Newmark.exe	This is the main program that contains several algorithms that are intended to facilitate performing Newmark sliding-block analyses. In addition to the actual program to perform Newmark analysis, several other programs are provided to assist users in determining important properties of strong-motion records and in preparing digital strong-motion files for use in the Newmark program.
SMrecords.xls	This is an Excel worksheet containing information on the 555 strong-motion records included on this CD-ROM. The first page of the worksheet is a master list containing data on all of the records. Subsequent pages are named for the 13 earthquakes from which the strong-motion records were gathered; each page contains the strong-motion records from that earthquake.
SMrecords.pdf	This is a PDF file of the first page of the Excel worksheet, which contains data on the 555 strong-motion records included on this CD-ROM. This file must be viewed using Acrobat Reader, which is freely downloadable and contained on this CD-ROM.
NewmarkDocumentation.doc	This is a Microsoft Word file containing detailed background and references on how to conduct a Newmark analysis. It is essential that any user thoroughly understand the principles set forth in this document before applying Newmark's method to a specific problem.
NewmarkDocumentation.pdf	This is a PDF file identical to the Word file described above. This file must be viewed using Acrobat Reader, which is freely downloadable and contained on this CD-ROM.

[Adobe] This is a directory containing Adobe Acrobat Reader 5.0, used to read PDF files on this CD-ROM.

[EQrecs] This is a directory containing strong-motion records from 13 earthquakes. Subdirectories are named for each of the earthquakes for which strong-motion records are provided. Subdirectories are named as follows:

Kern	1952 Kern County, California, earthquake
DalyCity	1957 Daly City, California, earthquake
Parkfld	1966 Parkfield, California, earthquake
SanFern	1971 San Fernando, California, earthquake
Hilo	1975 Hilo, Hawaii, earthquake
SBarbara	1978 Santa Barbara, California, earthquake
Tabas	1978 Tabas, Iran, earthquake
Coyote	1979 Coyote Lake, California, earthquake
Imperial	1979 Imperial Valley, California, earthquake
Super	1987 Superstition Hills, California, earthquake
Whittier	1987 Whittier Narrows, California, earthquake
LPrieta	1989 Loma Prieta, California, earthquake
Nridge	1994 Northridge, California, earthquake

Each of these subdirectories contains files of strong-motion records. Files are named by station code and azimuth. For example, in the LPrieta directory, the file named FRE-090 contains the record from Fremont (station code FRE) having an azimuth of 90 degrees. In most cases, each station code has two horizontal records (e.g., FRE-090 and FRE-180). Station codes are from the U.S. Geological Survey and the California Division of Mines and Geology.

FEEDBACK:

If you encounter any problems or questions with this CD-ROM or have any ideas for its improvement, please contact the first author at jibson@usgs.gov.

WEB SITE:

These programs, strong-motion files, and documents can also be accessed on the following web site: <http://newmark.sourceforge.net/>

DISCLAIMER:

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards nor with the North American Stratigraphic code. Any use of trade names in this publication is for descriptive purposes only and does not imply endorsement by the U.S. Government.