Routine United States Mining Seismicity

Catalogs and Data

From May 1997 through July 2013, the USGS/NEIC produced monthly catalogs of large routine explosions and planned roof collapses at mines and quarries in the United States. Events in these catalogs were not included in the regular USGS/NEIC catalog of seismic events. Beginning in August 2013, routine mining-associated events have been listed in the same on-line catalog as earthquakes, rather than in separate catalogs. The current on-line catalog also lists, for some regions of the U.S., mining events that were located by regional networks prior to August 2013 and that were not originally listed in catalogs produced by the USGS/NEIC.

Data

Phase arrival times for months from May 1997 to July 2013 are available in the MCHEDR format, and arrival-times for months from October 1999 through July 2013 are available in the ISF format.

- Data in ISF Format (1997-July 2013) - file names are isfexpYYYYMM.dat.Z
- Data in MCHEDR Format (1997-July 2013) - file names are mchedrYYMM.dat.Z
- Data (August 2013-Present) - select Advanced Options - Event Type - Non-Earthquakes

Catalogs

Maps of Routine Mining Seismicity – May 1997 to March 2000

- Conterminous U.S.
- West Virginia, Maryland, Virginia, eastern Kentucky, southeastern Ohio, southern Pennsylvania
- Northern Minnesota, northern Wisconsin, northern Michigan
- Northern Wyoming, southern Montana, southeastern Idaho
- Southern Wyoming, Colorado, Utah
- Nevada, Utah
- Arizona, New Mexico
- Washington, Oregon, western Idaho

Mining–Induced Events

Unusually large mining-induced events that are listed in regular earthquake catalogs of the USGS/NEIC are not listed in the catalogs of "Routine Mining Seismicity in the United States."

Background Information

Please see Goal and Scope of the Catalog for notes on catalog variations and completeness.

1997 Catalog

May | June | July | August | September | October | November | December

1998 Catalog

January | February | March | April May | June | July | August | September | October | November | December

1999 Catalog

January | February | March | April | May | June | July -- September (REB events only) | October | November | December

2000 Catalog

January | February | March | April | May | June | July | August | September | October | November | December

2001 Catalog

January | February | March | April | May | June | July | August | September | October | November | December

2002 Catalog

January | February | March | April | May | June | July | August | September | October | November | December

2003 Catalog

January | February | March | April | May | June | July | August | September | October | November | December

2004 Catalog

- Goal and Scope of the Catalog explains the seismological context in which the routine explosions and collapses are recorded and their locations calculated: we discuss uncertainties in the magnitudes of the cataloged seismic events and variations in the completeness of the catalog.

- Evidence Used in Identifying Routine Mining Seismicity explains the evidence that is used to identify routine explosions or planned collapses, and we note that in some areas a few natural earthquakes or unplanned rockbursts may be listed in the catalogs of routine mining seismicity.

- Explanation of Catalog Listings explains the parameters listed in "Routine Mining Seismicity in the United States".

- State-by-State List of Mining Regions summarizes what we know about mining districts from which we have recorded explosions, planned collapses, and rockbursts.

January | February | March | April | May | June | July | August | September | October | November | December

2005 Catalog

January | February | March | April | May | June | July | August | September | October | November | December

2006 Catalog

January | February | March | April | May | June | July | August | September | October | November | December

2007 Catalog

January | February | March | April | May | June | July | August | September | October | November | December

2008 Catalog

January | February | March | April | May | June | July | August | September | October | November | December

2009 Catalog

January | February | March | April | May | June | July | August | September | October | November | December

2010 Catalog

January | February | March | April | May | June | July | August | September | October | November | December

2011 Catalog

January | February | March | April | May | June | July | August | September | October | November | December

2012 Catalog

2013 Catalog