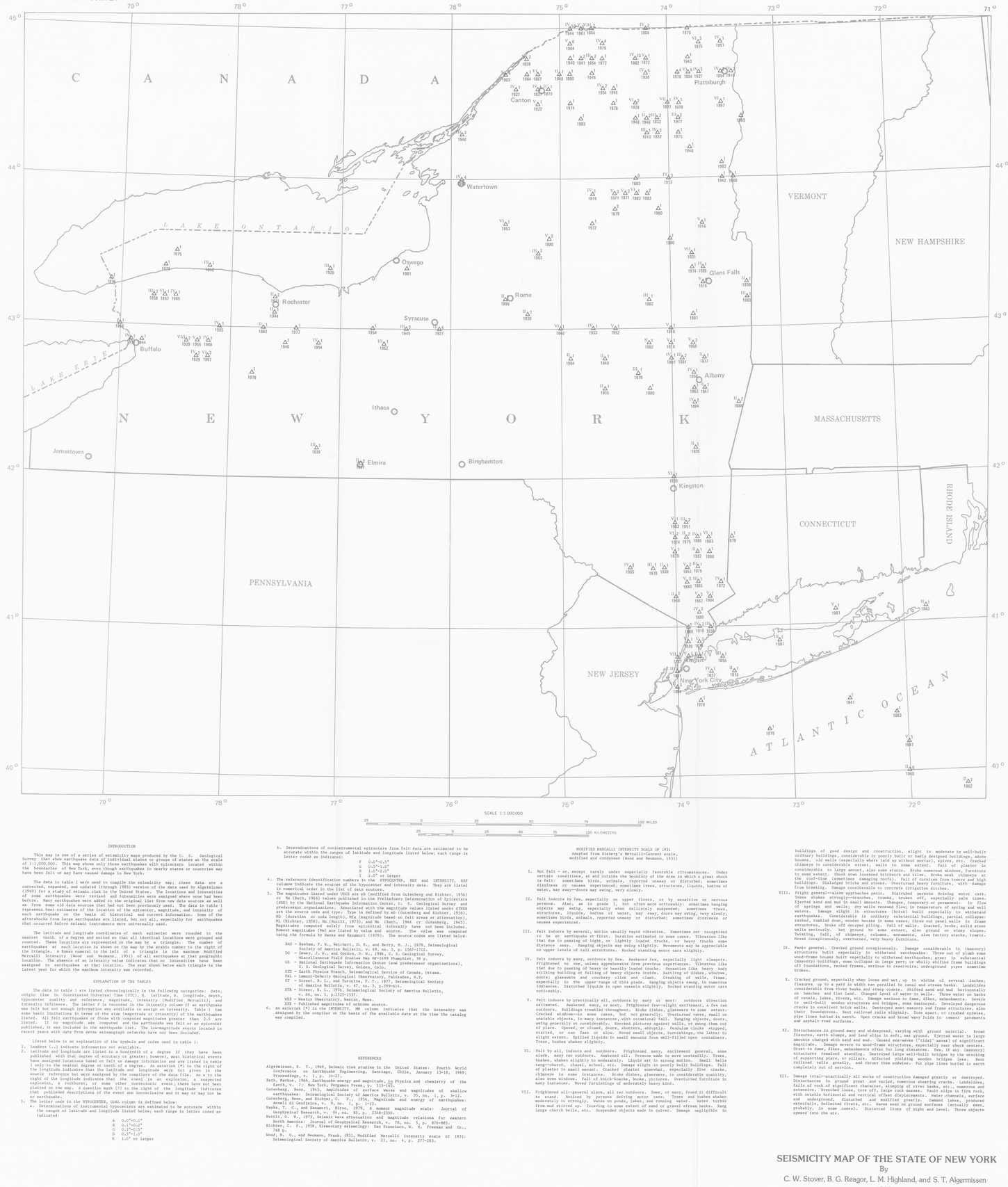
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

MISCELLANEOUS FIELD STUDIES
MAP MF-1282



INTRODUCTION

This map is one of a series of seismicity maps produced by the U. S. Geological Survey that show earthquake data of individual states or groups of states at the scale of 1:1,000,000. This map shows only those earthquakes with epicenters located within the boundaries of New York, even though earthquakes in nearby states or countries may have been felt or may have caused damage in New York.

The data in table 1 were used to compile the seismicity map; these data are a corrected, expanded, and updated (through 1983) version of the data used by Algermissen (1969) for a study of seismic risk in the United States. The locations and intensities of some earthquakes were revised and intensities were assigned where none had been before. Many earthquakes were added to the original list from new data sources as well as from some old data sources that had not been previously used. The data in table 1 represent best estimates of the location of the epicenter, magnitude, and intensity of each earthquake on the basis of historical and current information. Some of the aftershocks from large earthquakes are listed, but not all, especially for earthquakes that occurred before extensive instruments were universally used.

The latitude and longitude coordinates of each epicenter were rounded to the nearest tenth of a degree and sorted so that all identical locations were grouped and counted. These locations are represented on the map by a triangle. The number of earthquakes at each location is shown on the map by the arabic number to the right of the triangle. A Roman numeral to the left of a triangle is the maximum Modified Mercalli intensity (Wood and Neumann, 1931) of all earthquakes at that geographic location. The absence of an intensity value indicates that no intensities have been assigned to earthquakes at that location. The year shown below each triangle is the latest year for which the maximum intensity was recorded.

EXPLANATION OF THE TABLES

The data in table 1 are listed chronologically in the following categories: date, origin time in Coordinated Universal Time (UTC), N. latitude, W. longitude, depth, hypocenter quality and reference, magnitude, intensity (Modified Mercalli), and intensity reference. The letter F is recorded in the intensity column if an earthquake was felt but not enough information is available to assign an intensity. Table 1 has some basic limitations in terms of the size (magnitude or intensity) of the earthquakes listed. It is probably complete for earthquakes of intensities greater than 2-3 are listed. If no magnitude was computed, and the earthquake was felt or an epicenter published, it was included in the earthquake list. The lowermost earthquakes located in recent years with data from dense seismograph networks have not been included.

Listed below is an explanation of the symbols and codes used in table 1:

1. Leaders (..) indicate information not available.
2. Latitude and longitude are listed to a hundredth of a degree if they have been published with that degree of accuracy or greater; however, most historical events have assigned locations based on felt or damage information and are listed in table 1 only to the nearest degree or tenth of a degree. An asterisk (*) to the right of the longitude indicates that the latitude and longitude were not given in the source reference but were assigned by the compilers of the data file. An x to the right of the longitude indicates that the event is an explosion, a suspected explosion, a rockburst, or some other nontectonic event; these have not been plotted on the map. A question mark (?) to the right of the longitude indicates that published descriptions of the event are inconclusive and it may or may not be an earthquake.
3. The letter code in the HYPOCENTER, QUAL column is defined below:
   a. Determinations of instrumental hypocenters are estimated to be accurate within the ranges of latitude and longitude listed below; each range is letter coded as indicated:

A	0.0°–0.1°
B	0.1°–0.2°
C	0.2°–0.5°
D	0.5°–1.0°
E	1.0° or larger

   b. Determinations of noninstrumental epicenters from felt data are estimated to be accurate within the ranges of latitude and longitude listed below; each range is letter coded as indicated:

F	0.0°–0.5°
G	0.5°–1.0°
H	1.0°–2.0°
I	2.0° or larger

4. The reference identification numbers in the HYPOCENTER, REF and INTENSITY, REF columns indicate the sources of the hypocenter and intensity data. They are listed in numerical order in the list of data sources.
5. The magnitudes listed under USCG are mb (modified from Gutenberg and Richter, 1956) or Ms (Bath, 1966) values published in the Preliminary Determination of Epicenters (PDE) by the National Earthquake Information Center, U. S. Geological Survey and predecessor organizations. Associated with the magnitude values listed under OTHER are the source code and type. Type is defined by mb (Gutenberg and Richter, 1956), MD (duration or coda length), Mfa (magnitude based on felt areas or attenuation), ML (Richter, 1958), Mn (Nuttli, 1973), and Ms (Bath, 1966 or Gutenberg, 1945). Magnitudes published solely from epicentral intensity have not been included. Moment magnitudes (Mw) are the best value and source. The value was computed using the formula by Hanks and Kanamori (1979). The source codes are listed below:

BAS	– Basham, P. W., Weichert, D. H., and Berry, M. J., 1979, Seismological Society of America Bulletin, v. 69, no. 5, p. 1567–1702.
DG	– Dewey, J. W., and Gordon, D. W., 1984, U. S. Geological Survey, Miscellaneous Field Studies Map MF-1699 Pamphlet, 39 p.
GS	– National Earthquake Information Center (and predecessor organizations), U. S. Geological Survey, Golden, Colo.
OTT	– Earth Physics Branch, Seismological Service of Canada, Ottawa.
PAL	– Lamont-Doherty Geological Observatory, Palisades, N.Y.
ST	– Street, R. L., and Turcotte, F. T., 1977, Seismological Society of America Bulletin, v. 67, no. 3, p.599–614.
STR	– Street, R. L., 1976, Seismological Society of America Bulletin, v. 66, no. 5, p.1525–1537.
WES	– Weston Observatory, Weston, Mass.
XXX	– Published magnitudes of unknown source.

   c. An asterisk (*) in table 1 to the right of the magnitude indicates that the intensity was assigned by the compiler on the basis of the available data at the time the catalog was compiled.

REFERENCES

Algermissen, S. T., 1969, Seismic risk studies in the United States: Fourth World Conference on Earthquake Engineering, Santiago, Chile, January 13–18, 1969, Proceedings, v. 1, p. 14–27.

Bath, Markus, 1966, Earthquake energy and magnitude, in Physics and chemistry of the Earth, v. 7: New York, Pergamon Press, p. 115–165.

Gutenberg, Beno, 1945, Amplitudes of surface waves and magnitudes of shallow earthquakes: Seismological Society of America Bulletin, v. 35, no. 1, p. 3–12.

Gutenberg, Beno, and Richter, C. F., 1956, Magnitude and energy of earthquakes: Annali di Geofisica, v. 9, no. 1, p. 1–15.

Hanks, T. C., and Kanamori, Hiroo, 1979, A moment magnitude scale: Journal of Geophysical Research, v. 84, no. B5, p. 2348–2350.

Nuttli, O. W., 1973, Seismic wave attenuation and magnitude relations for eastern North America: Journal of Geophysical Research, v. 78, no. 5, p. 876–885.

Richter, C. F., 1958, Elementary seismology: San Francisco, W. H. Freeman and Co., 768 p.

Wood, H. O., and Neumann, Frank, 1931, Modified Mercalli Intensity scale of 1931: Seismological Society of America Bulletin, v. 21, no. 4, p. 277–283.

MODIFIED MERCALLI INTENSITY SCALE OF 1931
Abbreviated from Richter, Elementary Seismology, 1958, modified and condensed (Wood and Neumann, 1931)

I. Not felt – or, except rarely under especially favorable circumstances. Under certain conditions, at and outside the boundary of the area in which a great shock is felt: sometimes birds, animals, reported uneasy or disturbed; sometimes dizziness or nausea experienced; sometimes trees, structures, liquids, bodies of water, may sway—doors may swing, very slowly.

II. Felt indoors by few, especially on upper floors, or by sensitive or nervous persons. Also as in grade I, but more often noticeably: sometimes hanging objects may swing, especially when delicately suspended; sometimes trees, structures, liquids, bodies of water, may sway, doors may swing, very slowly; sometimes birds, animals, reported uneasy or disturbed; sometimes dizziness or nausea experienced.

III. Felt indoors by several, motion usually rapid vibration. Sometimes not recognized to be an earthquake at first. Duration estimated in some cases. Vibration like that due to passing of light, or lightly loaded trucks, or heavy trucks some distance away. Hanging objects may swing slightly. Movements may be appreciable on upper levels of tall structures. Rocked standing motor cars slightly.

IV. Felt indoors by many, outdoors by few. Awakened few, especially light sleepers. Frightened no one, unless apprehensive from previous experiences. Vibration like that due to passing of heavy or heavily loaded trucks. Sensation like heavy body striking building or falling of heavy objects inside. Rattling of dishes, windows, doors; glassware and crockery clink and clash. Creaking of walls, frame, especially in the upper range of this grade. Hanging objects swung, in numerous instances. Disturbed liquids in open vessels slightly. Rocked standing motor cars noticeably.

V. Felt indoors by practically all, outdoors by many or most: outdoors direction estimated. Awakened many, or most. Frightened few—slight excitement, a few ran outdoors. Buildings trembled throughout. Broke dishes, glassware to some extent. Cracked windows—in some cases, but not generally. Overturned vases, small or tall objects often unstable, in many instances, with occasional fall. Hanging objects, doors swing generally or considerably. Knocked pictures against walls, or swung them out of place, in some instances. Moved furniture of unstable kind, or displaced it considerably. Stopped clocks, or started, or ran fast. Moved small objects, furnishings, the latter to slight extent. Spilled liquids in small amounts from well filled containers. Trees, bushes shaken slightly.

VI. Felt by all, indoors and outdoors. Frightened many, excitement general, some alarm, many ran outdoors. Awakened all. Persons made to move unsteadily. Trees, bushes, shaken slightly to moderately. Liquid set in strong motion. Small bells rang—church, chapel, school, etc. Damage slight in poorly built buildings. Fall of plaster in small amount. Cracked plaster somewhat, especially fine cracks, chimneys in some instances. Broke dishes, glassware, in considerable quantity, also some windows. Fall of brick-knacks, books, pictures. Overturned furniture in many instances. Moved furnishings of moderately heavy kind.

VII. Frightened all—general alarm, all ran outdoors. Some, or many, found it difficult to stand. Noticed by persons driving motor cars. Trees, bushes shaken moderately to strongly; by persons on ponds, lakes, and running water. Water thrown out from stirred up. Jarring to some extent of sand or gravel stream banks. Rang large church bells, etc. Suspended objects made to quiver. Damage negligible in buildings of good design and construction, slight to moderate in well-built ordinary buildings, considerable in poorly built or badly designed buildings, adobe houses, old walls (especially where laid up without mortar), spires, etc. Cracked chimneys to considerable extent, walls to some extent. Fall of plaster in considerable to large amount, also some stucco. Broke numerous windows, furniture to some extent. Shook down loosened brickwork and tiles. Broke weak chimneys at the roof-line (sometimes damaging roofs). Fall of cornices from towers and high buildings. Dislodged bricks and stones. Overturned heavy furniture, with damage from breaking. Damage considerable to concrete irrigation ditches.

VIII. Fright general—alarm approaches panic. Disturbed persons driving motor cars. Trees shaken strongly—branches, trunks, broken off, especially palm trees. Ejected sand and mud in small amounts. Changes, temporary or permanent: in flow of springs and wells; dry wells renewed flow; in temperature of spring and well waters. Persons generally disturbed, even those driving motor cars. Noticeable to experienced persons. Considerable to ordinary substantial buildings, partial collapse: racked, tumbled down—conspicuous in many instances. Cracked chimneys to roof, serious structures, fall of walls. Cracked, broke, solid stone walls seriously. Wet ground to some extent, also ground on sloping steep slopes. Twisting, fall of chimneys, columns (monuments), also factory stacks, towers. Moved conspicuously, overturned, very heavy furniture.

IX. Panic general. Cracked ground conspicuously. Damage considerable in (masonry) structures built especially to withstand earthquakes: Threw out of plumb some wood-frame houses built especially to withstand earthquakes; great in substantial (masonry) buildings, some collapse in large part; or wholly shifted frame buildings off foundations, racked frames, serious to reservoirs; underground pipes somewhat broken.

X. Cracked ground, especially when loose and wet, up to widths of several inches; fissures up to yard in width ran parallel to canal and stream banks. Landslides considerable from river banks and steep coasts. Shifted sand and mud horizontally on beaches and flat land. Changes in level of water in lakes. Threw water on banks of canals, lakes, rivers, etc. Damage serious to dams, dikes, embankments, severe to well-built wooden structures and bridges, some destroyed. Developed dangerous cracks in excellent brick walls. Destroyed most masonry and frame structures, also their foundations. Badly cracked dams, dikes, embankments. Tore apart, or crushed endwise pipe lines buried in earth. Open cracks and broad wavy folds in cement pavements and asphalt road surfaces.

XI. Disturbances in ground many and widespread, varying with ground material. Broad fissures, earth slumps, and land slips in soft, wet ground. Ejected water in large amounts charged with sand and mud. Water-supply (“tidal wave”) of significant magnitude. Damage severe to wood-frame structures, especially near shock centers. Great to dams, dikes, embankments, often utterly destroyed. Few, if any (masonry) structures remained standing. Destroyed large well-built bridges by the wrecking of supporting piers, or pillars. Affected yielding wooden bridges less. Best railroad rails greatly, and thrust them endwise. Put pipe lines buried in earth completely out of service.

XII. Damage total—practically all works of construction damaged greatly or destroyed. Disturbances in ground great and varied, numerous shearing cracks. Landslides, falls of rock of significant character, slumping of river banks, etc., over large areas, effects conspicuously noticeable, or extensive, in lakes, rivers, streams, etc., with notable horizontal and vertical offset displacements. Water channels, surface and underground, altered in direction and in velocity. Large falls, produced waterfalls, deflected rivers, etc. Waves seen on ground surfaces (actually seen, probably, in some cases). Distorted lines of sight and level. Threw objects upward into the air.

Table 1.—Chronological listing of earthquakes for the State of New York

DATE YEAR	MONTH	DAY	ORIGIN TIME (UTC) H	M	S	LAT. N	LONG. W	DEPTH (KM)	HYPOCENTER QUAL	HYPOCENTER REF	MAGNITUDE USCG	MAGNITUDE OTHER (mb)	MAGNITUDE MOMENT (Mw)	INTENSITY MM	INTENSITY REF
1737	DEC	19	03	45	..	40.8	N. 74.0	W.	..	H	76	..	..	..	VII	76
						Near New York City, New York. Felt at New York City and over southern New England. In New York City, several chimneys were knocked down and bells tolled.										
1804	MAY	18	..	..	..	40.7	N. 74.0	W.	..	H	141	..	..	..	..	III	76
1840	JAN	16	20	00	..	43.0	N. 75.0	W.	..	H	141	..	..	..	..	III	126
						Near Herkimer, New York. No information.											
1841	..	..	..	..	..	40.7	N. 74.0	W.	..	H	141	..	..	..	..	III	76
1842	JAN	12	04	30	..	40.4	N. 73.4	W.	..	H	126	..	..	..	..	III	126
1847	JUL	09	..	..	..	43.3	N. 73.7	W.	..	I	141	..	..	..	..	IV	76
1847	SEP	02	..	..	..	40.2	N. 72.0	W.	..	H	76	..	..	..	..	V	76
1848	JAN	24	..	..	..	43.3	N. 73.7	W.	..	H	141	..	..	..	..	IV	76
1852	DEC	15	21	00	..	43.4	N. 78.2	W.	..	I	126	..	..	..	..	IV	126
1853	MAR	12	07	30	..	43.7	N. 75.5	W.	..	H	76	..	..	..	..	V	76
						Near Loweville, New York. Chimneys were knocked down. Felt in Canada.											
1855	JAN	17	..	..	..	40.8	N. 73.6	W.	..	H	76	..	..	..	..	II	76
1855	FEB	07	04	30	..	42.0	N. 73.9	W.	..	H	76	..	..	..	..	VI	76
						Hudson River Valley. Felt as far as Springfield, Massachusetts. According to Lacroix (see Earthquake Notes, vol. 51, no. 1, Jan-Mar 1980, p. 39), one fur-seismic earthquake caused by freezing of ice, ice-mill, and ice-rock conditions.										
1855	DEC	17	09	00	..	43.7	N. 73.2	W.	..	G	126	..	..	..	..	IV	76
1857	OCT	23	20	15	..	43.7	N. 78.6	W.	..	G	76	..	..	..	..	VI	76
						Shocks felt at Buffalo, New York. “...a man seated on a chair was thrown to the ground; walls vibrated and surged; bells rang; and crocks fell from shelves. This shock was felt over 18,000 sq mi from Pennsylvania to the Montreal, Canada region.										
1858	JAN	01	22	00	..	43.2	N. 78.7	W.	..	G	84	..	..	..	..	III	84
1867	DEC	18	08	00	..	44.7	N. 75.2	W.	..	H	126	..	..	..	..	VI	126
						Northern New York. Felt in New York and adjacent Canada, from Whitehall, New York, near the Vermont boundary, to Belleville, Ontario, and Sackville, New Brunswick. People were awakened at Hamilton, Ontario, Ogdensburg and Syracuse, New York, and Burlington, Vermont.										
1872	JUL	11	10	25	..	40.9	N. 73.8	W.	..	H	76	..	..	..	..	V	38
1873	MAR	18	..	..	..	40.9	N. 73.8	W.	..	H	141	..	..	..	..	IV	76
1873	APR	25	19	00	..	44.8	N. 74.2	W.	..	H	76	..	..	..	..	V	76
1874	JAN	01	21	00	..	44.8	N. 74.2	W.	..	H	76	..	..	..	..	V	76
1874	DEC	11	03	25	..	40.9	N. 73.8	W.	..	G	38	..	..	..	..	V	76
1876	DEC	13	04	10	..	43.2	N. 78.7	W.	..	G	38	..	..	..	..	IV	38
1876	JAN	08	21	30	..	43.2	N. 78.7	W.	..	G	126	..	..	..	..	II	76
1876	JAN	17	..	..	..	43.2	N. 78.7	W.	..	G	126	..	..	..	..	IV	76
1877	MAY	14	..	..	..	42.8	N. 73.9	W.	..	G	76	..	..	..	..	II	76
1877	NOV	04	06	00	..	44.3	N. 76.0	W.	..	G	77	..	..	..	..	VI	38
						Northern New York. Shock was felt in the area bounded by a line from Pembroke, Ontario to Three Rivers, Quebec on the north, to a line from Boston to Hartford to Auburn, New York, on the south. The shock was severe along the northern side of the St. Lawrence River Valley and Lake Champlain. At Montreal, Quebec, it was felt by nearly all persons and caused alarm throughout the city. The shock was felt slightly in Rhode Island; felt area was estimated at 90,000 sq mi.										
1877	NOV	14	14	40	..	45.0	N. 74.8	W.	..	H	126	..	..	..	..	III	126
1878	FEB	05	16	30	..	40.8	N. 73.9	W.	..	G	76	..	..	..	..	V	76
1878	OCT	04	07	30	..	41.3	N. 74.0	W.	..	G	76	..	..	..	..	V	76
1878	DEC	02	07	30	..	41.3	N. 74.0	W.	..	G	76	..	..	..	..	V	76
1878	DEC	29	02	32	..	42.7	N. 74.3	W.	..	G	141	..	..	..	..	III	76
1879	APR	14	15	51	..	43.0	N. 74.8	W.	..	G	38	..	..	..	..	III	76
1880	SEP	06	07	00	..	45.0	N. 74.8	W.	..	H	126	..	..	..	..	III	76
1881	JUL	06	07	00	..	45.0	N. 74.8	W.	..	H	126	..	..	..	..	III	76
1881	AUG	21	16	30	..	40.9	N. 73.8	W.	..	G	141	..	..	..	..	III	76
1881	SEP	25	..	..	..	42.1	N. 76.8	W.	..	G	141	..	..	..	..	III	76
1882	APR	02	..	..	..	42.9	N. 74.2	W.	..	H	76	..	..	..	..	V	76
1882	AUG	10	19	00	..	42.9	N. 74.2	W.	..	H	76	..	..	..	..	III	76
1882	AUG	10	19	20	..	40.8	N. 74.0	W.	..	H	126	..	..	..	..	II	126
						Near New York City, New York. Strong shock in New England and middle states, light in Canada. Felt over 70,000 sq mi. Damage was greatest at points in Connecticut and New York where bells were cracked. Thirty towns from Hartford, Connecticut to West Chester, Pennsylvania, reported fallen bricks and cracked plaster.										
1884	AUG	11	..	..	..	40.8	N. 74.0	W.	..	H	126	..	..	..	..	Y	126
1885	JAN	04	11	00	..	41.2	N. 73.9	W.	..	G	141	..	..	..	..	III	76
1885	JAN	31	10	05	..	41.3	N. 73.8	W.	..	G	141	..	..	..	..	III	76
1886	JAN	25	00	00	..	42.5	N. 73.9	W.	..	G	141	..	..	..	..	III	76
1886	SEP	03	..	..	..	42.5	N. 73.4	W.	..	H	126	..	..	..	..	II	126
1886	SEP	04	..	..	..	42.5	N. 73.4	W.	..	H	126	..	..	..	..	II	126
1889	AUG	10	..	..	..	43.4	N. 73.7	W.	..	H	126	..	..	..	..	IV	126
1893	MAR	08	..	..	..	43.4	N. 73.7	W.	..	H	126	..	..	..	..	IV	126
1894	DEC	17	..	..	..	42.1	N. 73.8	W.	..	H	126	..	..	..	..	III	126
1896	MAY	26	03	15	..	42.1	N. 73.8	W.	..	H	126	..	..	..	..	III	126
1897	JUL	20	01	30	..	44.0	N. 74.0	W.	..	H	126	..	..	..	..	III	126
						Northeastern New York. Felt in New York, New Hampshire, Vermont, Massachusetts, and in Montreal and Quebec, Canada. Shock was felt over a 50,000 sq mi area. Isoseismal felt area was 150,000 sq mi.										
1903	DEC	25	12	30	..	44.7	N. 75.5	W.	..	G	76	..	..	..	..	V	76
1907	JAN	24	11	30	..	42.8	N. 74.0	W.	..	G	76	..	..	..	..	IV	76
1909	JAN	13	21	50	..	42.8	N. 73.9	W.	..	G	141	..	..	..	..	III	76
1910	MAY	01	20	10	..	44.3	N. 73.5	W.	..	G	76	..	..	..	..	IV	76
1911	JAN	29	07	..	..	44.7	N. 75.5	W.	..	G	141	..	..	..	..	III	76
1913	AUG	10	15	15	..	44.0	N. 74.0	W.	..	H	76	..	..	..	..	V	76
1914	JAN	03	13	50	..	43.2	N. 73.7	W.	..	G	76	..	..	..	..	IV	76
1916	JAN	21	23	53	..	42.9	N. 73.7	W.	..	G	76	..	..	..	..	IV	76
1916	FEB	02	16	26	..	42.9	N. 74.0	W.	..	G	141	..	..	..	..	V	38
1916	FEB	03	04	30	..	43.0	N. 74.0	W.	..	G	126	..	..	..	..	IV	126
1916	JUN	28	21	15	..	41.0	N. 73.8	W.	..	G	76	..	..	..	..	IV	76
1916	OCT	30	..	..	..	43.3	N. 73.7	W.	..	H	226	..	..	..	..	III	226
1917	JAN	26	..	..	..	44.4	N. 74.1	W.	..	H	76	..	..	..	..	III	76
1917	JAN	26	..	..	..	44.4	N. 74.1	W.	..	H	76	..	..	..	..	III	126
1917	MAY	17	10	08	..	44.7	N. 75.5	W.	..	H	76	..	..	..	..	IV	76
1917	OCT	02	02	14	..	43.3	N. 73.7	W.	..	G	76	..	..	..	..	III	76
1917	OCT	02	10	00	..	43.3	N. 73.7	W.	..	G	76	..	..	..	..	III	76
1921	JAN	27	..	..	..	43.3	N. 73.7	W.	..	G	76	..	..	..	..	III	76
1922	DEC	08	21	24	..	44.5	N. 75.2	W.	..	G	76	..	..	..	..	IV	76
1923	APR	07	20	18	..	43.0	N. 75.1	W.	..	H	141	..	..	..	..	III	76
1925	MAY	27	..	..	..	43.4	N. 77.1	W.	..	G	76	..	..	..	..	III	76
1926	JAN	27	..	..	..	44.3	N. 73.8	W.	..	G	76	..	..	..	..	IV	76
1926	MAY	12	03	30	..	40.9	N. 73.8	W.	..	G	76	..	..	..	..	IV	76
1926	MAY	13	01	30	..	40.9	N. 73.8	W.	..	G	76	..	..	..	..	IV	76
1927	MAR	12	22	14	..	44.6	N. 73.2	W.	..	G	76	..	..	..	..	IV	76
1927	MAR	14	15	..	..	44.6	N. 73.4	W.	..	G	76	..	..	..	..	IV	76
1927	MAR	20	14	15	..	44.6	N. 73.4	W.	..	G	76	..	..	..	..	IV	76
1927	MAR	21	06	00	..	43.0	N. 74.1	W.	..	G	76	..	..	..	..	III	76
1927	MAR	31	21	30	..	43.0	N. 74.1	W.	..	G	76	..	..	..	..	III	76
1927	OCT	24	11	30	..	44.7	N. 73.7	W.	..	G	76	..	..	..	..	III	76
1928	MAR	18	15	20	..	44.3	N. 74.3	W.	..	G	38	4.4MLGTT	..	..	..	VI	38
						Saranac Lake, New York. Dishes fell from shelves at Saranac Lake and Malone. Many residents fled from homes. Felt throughout northeastern New York and on the Canadian side of the St. Lawrence River. Felt area estimated at 12,000 sq mi.										
1928	MAY	19	03	30	..	44.5	N. 74.3	W.	*	G	1	..	..	..	..	III*	1
1928	JUN	05	07	00	..	44.8	N. 74.3	W.	..	G	72	..	..	..	..	III	77
1928	AUG	12	08	45	..	42.5	N. 77.8	W.	..	G	72	..	..	..	..	III	77
1929	AUG	12	11	28	48.7	42.910h	78.402W.	009	B	349	..	..	5.2Ms ST	..	..	VIII	77
						Attica, New York. The earthquake was widely felt in New England, though only in a restricted area in Canada. The earthquake was felt by nearly all persons in Attica and Varysburg, New York, in northern Pennsylvania, eastern Connecticut, western Maine, southeastern New Hampshire, and most of New York. The shock was strongest in the eastern part of Attica and the region to the east. Two hundred and fifty chimneys were thrown down. Felt area was estimated at 100,000 sq mi (Ref. 38).										
1930	NOV	02	02	35	..	44.8	N. 74.9	W.	..	F	77	..	..	..	..	IV	77
1931	APR	29	19	30	26	43.783h	75.785W.	005	B	349	..	..	4.2MLGTT	..	..	VII	4
						Lake George, New York. Snow avalanches and created a church spire at Warrensburg, N.Y. Lacerne, New York, chimneys were damaged and windows were broken; at Glen Falls, New York, walls were cracked and dishes broken; and at Lake George, store goods were knocked from shelves. Felt area was estimated at 60,000 sq mi. The shock was widely felt, but with less intensity in the Catskills than at equal distances in other directions.										
1931	JUN	07	02	30	..	43.2	N. 77.6	W.	..	G	4	..	..	..	..	II*	4
1931	JUN	07	15	30	..	44.5	N. 74.2	W.	..	G	5	..	..	..	..	II*	5
1931	DEC	07	03	25	..	44.3	N. 74.1	W.	..	G	77	..	..	..	..	V*	5
1932	DEC	07	16	45	..	44.3	N. 74.2	W.	..	G	77	..	..	..	..	V*	5
1932	DEC	29	04	28	..	44.0	N. 73.9	W.	x	G	5	..	..	..	..	V*	5
1933	MAY	27	19	57	..	44.8	N. 74.7	W.	..	G	77	..	..	..	..	III	77
1933	JUL	10	21	30	..	43.0	N. 74.1	W.	..	G	38	..	..	..	..	III	38
1933	OCT	29	..	..	..	43.0	N. 74.1	W.	..	G	38	..	..	..	..	III	38
1934	APR	15	02	08	13.0	44.7	N. 73.8	W.	..	G	77	..	4.0ML OTT	..	..	VI	126
						Adirondack Mountains, New York near Lake Champlain. Felt strongest at Beekmantown, Keeseville, and Flattsburg. Slight plaster cracks, swaying of buildings, and disturbed furniture was observed. Felt area estimated at 8,000 sq mi N of Northern New York, Vermont, and southern Quebec, Canada.										
1934	APR	15	18	00	..	44.8	N. 74.3	W.	..	G	77	..	..	..	..	III	77
1934	JUN	05	20	11	..	44.8	N. 74.3	W.	..	G	77	..	..	..	..	III	77
1935	JAN	28	06	00	..	44.8	N. 74.3	W.	..	G	77	..	..	..	..	III	77
1935	JAN	28	09	02	32	44.8	N. 74.3	W.	..	G	77	..	3.0ML OTT	..	..	IV*	11
1935	NOV	01	06	30	..	44.8	N. 74.3	W.	..	G	77	..	..	..	..	III	77
1936	JUN	21	03	40	..	44.7	N. 74.2	W.	..	G	77	..	..	..	..	III	77
1936	JUN	21	05	..	..	44.7	N. 74.2	W.	*	G	9	..	..	..	..	II*	9
1936	JUN	21	04	..	..	44.7	N. 74.2	W.	*	G	9	..	..	..	..	II*	9
1936	JUN	21	04	30	..	44.7	N. 74.2	W.	*	G	9	..	..	..	..	II*	9
1936	JUN	21	04	40	..	44.7	N. 74.2	W.	*	G	9	..	..	..	..	II*	9
1937	FEB	21	12	..	..	42.1	N. 76.8	W.	..	G	77	..	..	..	..	II	77
1937	MAR	10	03	30	..	44.6	N. 75.2	W.	..	G	77	..	..	..	..	IV	77
1937	MAY	31	01	31	..	44.6	N. 75.2	W.	..	G	77	..	..	..	..	IV	77
1937	JUL	12	03	..	..	41.2	N. 73.8	W.	..	G	77	..	..	..	..	II	77
1937	AUG	17	07	30	..	44.8	N. 74.3	W.	..	G	77	..	..	..	..	III	77
1938	MAY	05	00	35	..	44.8	N. 74.3	W.	*	G	11	..	3.0ML OTT	..	..	IV*	11
1938	JUL	29	07	46	23	44.8	N. 74.3	W.	..	G	77	..	..	..	..	III	77
1938	AUG	23	03	18	22	41.2	N. 73.7	W.	..	G	77	..	..	..	..	II	77
1938	SEP	21	07	18	55	41.2	N. 73.7	W.	..	G	77	..	..	..	..	II	77
1938	OCT	21	07	18	55	41