



PLATE MOTION DATA

No.	Location	Fixed Plate	Moving Plate	Relative Velocity	Direction (Azimuth)
1	88.4 W/10.7 N	Caribbean	Cocos	13.2 cm	320
2	88.4 W/16.6 N	Caribbean	North America	0.3 cm	43
3	89.4 W/16.0 N	North America	Caribbean	0.3 cm	226

MAP EXPLANATION

TIME OF MOST RECENT SURFACE RUPTURE

- 1992: Historic (year)
- 1972: Holocene (<10,000 yrs) or post glacial (<15,000 yrs)
- 1765: Quaternary, undifferentiated (<1,600,000 yrs)

SLIP RATE

- > 5 mm/yr
- 1-5 mm/yr
- < 1 mm/yr

QUALITY

- Continuous at map scale
- Poor or discontinuous at map scale
- Inferred or concealed

STRUCTURE TYPE

- Thrust or reverse fault (teeth on upper block)
- Strike-slip fault (sense unknown)
- Right-lateral (dextral) strike-slip fault
- Left-lateral (sinistral) strike-slip fault
- Normal fault

SIMBOLOGIA DEL MAPA

EDAD DE ULTIMA RUPTURA SUPERFICIAL

- 1992: Histórica (año)
- 1972: Holocena (<10,000 años) o post glacial (<15,000 años)
- 1765: Cuaternaria, sin diferenciar (<1,600,000 años)

TASA DE DESPLAZAMIENTO

- > 5 mm/año
- 1-5 mm/año
- < 1 mm/año (o desconocida)

CALIDAD

- Continua a la escala del mapa
- Pobre o discontinua a la escala del mapa
- Inferida u oculta

TIPO DE ESTRUCTURA

- Falla inversa o corrimiento (triángulos en bloque superior)
- Transcurante (senso desconocida)
- Falla de rumbo dextral
- Falla de rumbo sinistral
- Falla normal (círculo en bloque hundido)

QUATERNARY FAULTS OF NICARAGUA LAS FALLAS CUATERNARIAS DE NICARAGUA

Number	Name of structure	Sense of movement (maj/minor)	Time of most recent movement	Slip rate (mm/yr)
Número	Nombre de estructura	Sentido de movimiento (mayor/menor)	Edad del último movimiento	Tasa de movimiento (mm/año)
NI-01	La Pelona fault zone	Unknown	<15 ka	<1.0
NI-02	La Paz Centro fault zone	Unknown	<15 ka	0.2-1.0
NI-03	Mateare fault zone	Unknown	<1.6 Ma	0.2-1.0 (?)
NI-04	Asosoca-Acahualinca and San Judas fault zone (Managua graben)	Unknown	<15 ka	0.2-1.0 (?)
NI-05	Estadio fault	Left-lateral	Historic (1931)	0.2-1.0 (?)
NI-06	Tiscapa fault	Left-lateral	Historic (1972)	0.2-1.0 (?)
NI-07	Aeropuerto fault	Strike slip	Historic (1650-1880, possibly 1765 or 1772)	0.2-1.0 (?)
NI-08	Unnamed faults, Eastern Managua graben	Strike slip	<15ka, possibly historic (1772?)	0.2-1.0 (?)
NI-09	Cofradía Fault, Eastern Managua graben	Normal	<15 ka	<1.2
NI-10	Ochomogo fault zone	Not reported	<15 ka	0.2-1.0 (?)

Map of Quaternary faults in the vicinity of Managua, Nicaragua

A project of International Lithosphere Program Task Group II-2, Major Active Faults of the World

A cooperative project between the U.S. Geological Survey (USGS) and Institute of Geosciences, University of Panama

Data compiled by Hugh Cowan and Xavier Amador. Digital representation by Karen S. Morgan and Richard L. Dart. Graphical representation by Lee-Ann Bradley. Project coordination by Michael N. Machette (Co-chairman, ILP Task Group II-2).

2000

Scale 1:750,000 Mercator Projection (Longitude of central meridian, 85 W; latitude of true scale, 0; Clarke 1866 spheroid)

Mapa de fallas Cuaternarias del region de Managua, Nicaragua

Como parte del Programa Internacional de la Litósfera, Grupo de Trabajo II-2, Principales Fallas Activas del Mundo

Un proyecto de cooperación entre el U.S. Geological Survey (USGS) and Instituto de Geociencias, University of Panama

Datos compilados por Hugh Cowan and Xavier Amador. Representación digital por Karen S. Morgan and Richard L. Dart. Representación gráfica por Lee-Ann Bradley. Proyecto coordinado por Michael N. Machette (Co-chairman, ILP Grupo de Trabajo II-2).

2000

Escala 1:750,000 Proyección de Mercator (longitud de meridiano central, 85 W; latitud de escala verdadera 0; con base en el esteroide de Clarke 1866)

This map was produced on request, directly from digital files, on an electronic plotter. It is also available as a PDF file at <http://geology.usgs.gov>. Digital data prepared with ARCGIS version 7.2.1 running under Windows version 2.1 on a Unix workstation. Last revision July 2000. Map prepared by L.A. Bradley using Adobe Illustrator version 9.0. Last revision September 2000. This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey national standards. Any use of trade, product, or firm names is for descriptive purposes and does not imply endorsement by the U.S. Government.