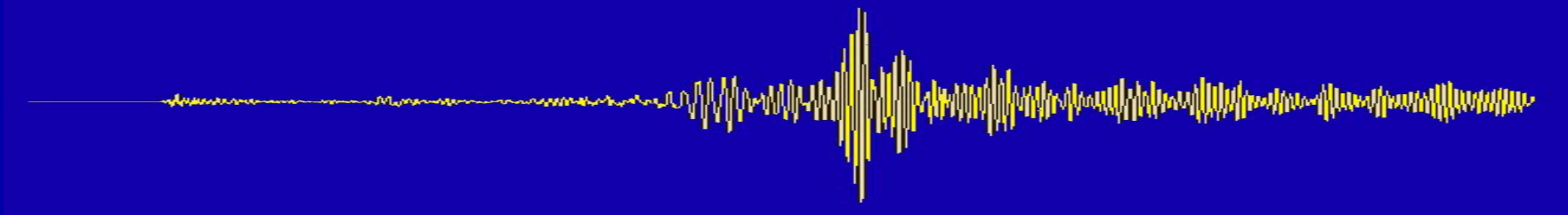


12.103

Strange Bedfellows: The Science and Policy of Natural Hazards

# Earthquake Dynamics



Spring 2008

# Plate tectonics

This image has been removed due to copyright restrictions.

Please see:

[http://epscx.wustl.edu/seismology/book/chapter5/chap5\\_sr/5\\_1\\_02\\_s.jpg](http://epscx.wustl.edu/seismology/book/chapter5/chap5_sr/5_1_02_s.jpg)

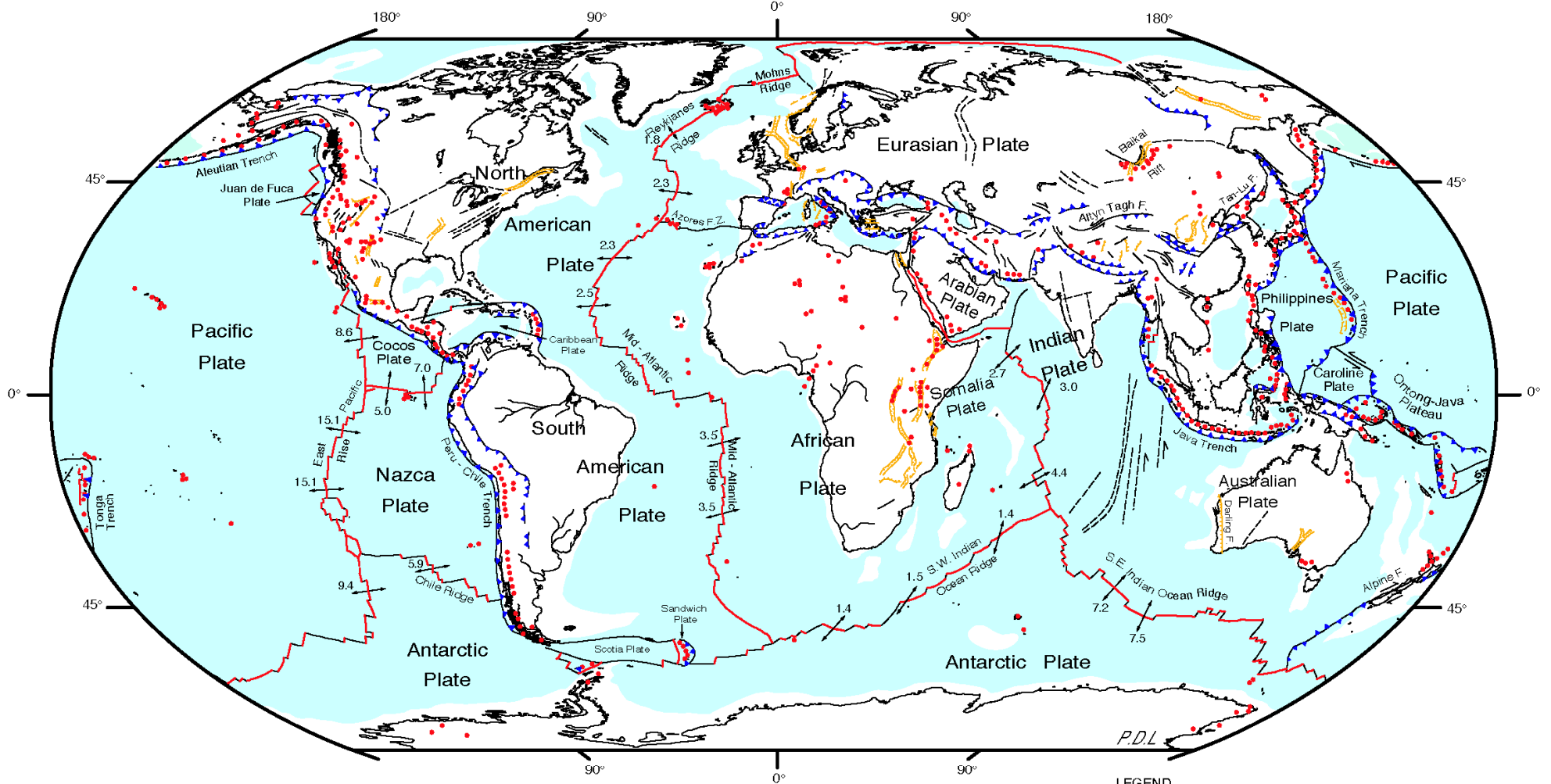
# Plate tectonics

This image has been removed due to copyright restrictions.

Please see:

[http://epscx.wustl.edu/seismology/book/chapter5/chap5\\_sr/5\\_1\\_03\\_s.jpg](http://epscx.wustl.edu/seismology/book/chapter5/chap5_sr/5_1_03_s.jpg)

# Plate tectonics



**GLOBAL TECTONIC ACTIVITY MAP OF THE EARTH**  
Tectonism and Volcanism of the Last One Million Years

**DTAM - 1**



NASA/Goddard Space Flight Center  
Greenbelt, Maryland 20771

Robinson Projection

Light blue box: Mainly oceanic crust  
White box: Mainly continental crust

October 2002

**LEGEND**

- Actively-spreading ridges and transform faults
- Total spreading rate, cm/year
- Major active fault or fault zone; dashed where nature, location, or a ctivity uncertain
- Normal fault or rift; hachures on downthrown side
- Reverse fault (overthrust, subduction zones); generalized; bars on upthrown side
- Volcanic centers active within the last one million years; generalized. Minor basaltic centers and seamounts omitted.

# Plate tectonics

This image has been removed due to copyright restrictions.

Please see upper image on:

[http://epscx.wustl.edu/seismology/book/chapter5/chap5\\_sr/5\\_1\\_04\\_s.jpg](http://epscx.wustl.edu/seismology/book/chapter5/chap5_sr/5_1_04_s.jpg)

Global seismicity 1964-1997,  $M \geq 5$ , all depths

# Plate tectonics

This image has been removed due to copyright restrictions.

Please see lower image on:

[http://epscx.wustl.edu/seismology/book/chapter5/chap5\\_sr/5\\_1\\_04\\_s.jpg](http://epscx.wustl.edu/seismology/book/chapter5/chap5_sr/5_1_04_s.jpg)

Global seismicity 1964-1997,  $M \geq 5$ , depth > 100km

# Plate tectonics

This image has been removed due to copyright restrictions.

Please see:

[http://epscx.wustl.edu/seismology/book/chapter5/chap5\\_sr/5\\_1\\_02\\_s.jpg](http://epscx.wustl.edu/seismology/book/chapter5/chap5_sr/5_1_02_s.jpg)

This image has been removed due to copyright restrictions.

Please see:

[http://epscx.wustl.edu/seismology/book/chapter5/chap5\\_sr/5\\_3\\_01\\_s.jpg](http://epscx.wustl.edu/seismology/book/chapter5/chap5_sr/5_3_01_s.jpg)



# Plate tectonics

This image has been removed due to copyright restrictions.

Please see:

[http://epscx.wustl.edu/seismology/book/chapter5/chap5\\_sr/5\\_1\\_02\\_s.jpg](http://epscx.wustl.edu/seismology/book/chapter5/chap5_sr/5_1_02_s.jpg)

This image has been removed due to copyright restrictions.

Please see:

[http://epscx.wustl.edu/seismology/book/chapter5/chap5\\_sr/5\\_5\\_01\\_s.jpg](http://epscx.wustl.edu/seismology/book/chapter5/chap5_sr/5_5_01_s.jpg)

# Plate tectonics

This image has been removed due to copyright restrictions.

Please see:

[http://epscx.wustl.edu/seismology/book/chapter5/chap5\\_sr/5\\_1\\_02\\_s.jpg](http://epscx.wustl.edu/seismology/book/chapter5/chap5_sr/5_1_02_s.jpg)

This image has been removed due to copyright restrictions.

Please see:

[http://epscx.wustl.edu/seismology/book/chapter5/chap5\\_sr/5\\_4\\_02\\_s.jpg](http://epscx.wustl.edu/seismology/book/chapter5/chap5_sr/5_4_02_s.jpg)

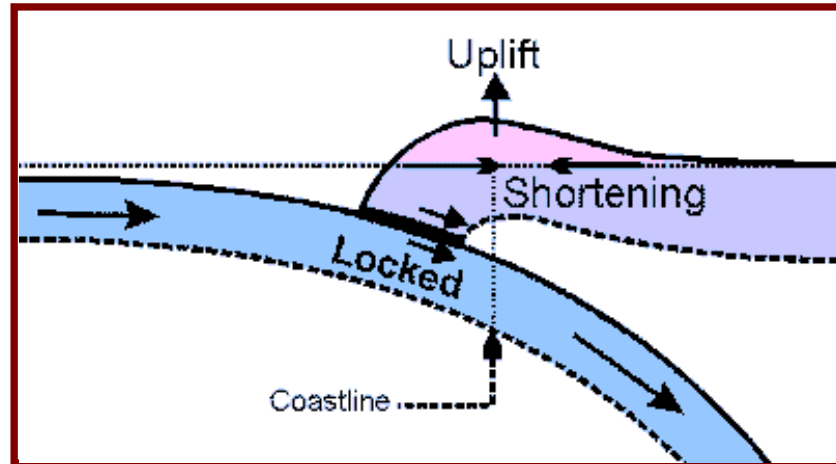
This image has been removed due to copyright restrictions.

Please see:

[http://epscx.wustl.edu/seismology/book/chapter5/chap5\\_sr/5\\_4\\_24\\_s.jpg](http://epscx.wustl.edu/seismology/book/chapter5/chap5_sr/5_4_24_s.jpg)

# great subduction zone earthquakes

## interseismic deformation



## coseismic deformation

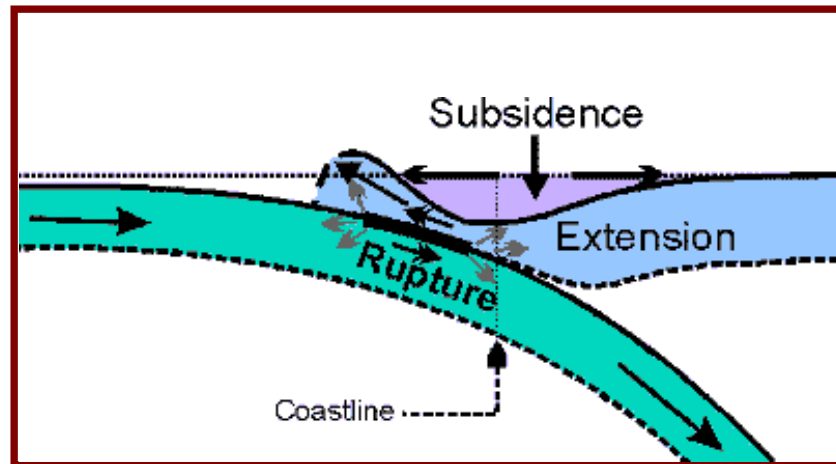


Image courtesy of GSC.

# Plate tectonics

This image has been removed due to copyright restrictions.

Please see:

[http://epscx.wustl.edu/seismology/book/chapter5/chap5\\_sr/5\\_1\\_02\\_s.jpg](http://epscx.wustl.edu/seismology/book/chapter5/chap5_sr/5_1_02_s.jpg)

# San Andreas fault



Image courtesy of USGS.





MIT OpenCourseWare  
<http://ocw.mit.edu>

12.103 Science and Policy of Natural Hazards  
Spring 2010

For information about citing these materials or our Terms of Use, visit: <http://ocw.mit.edu/terms>.