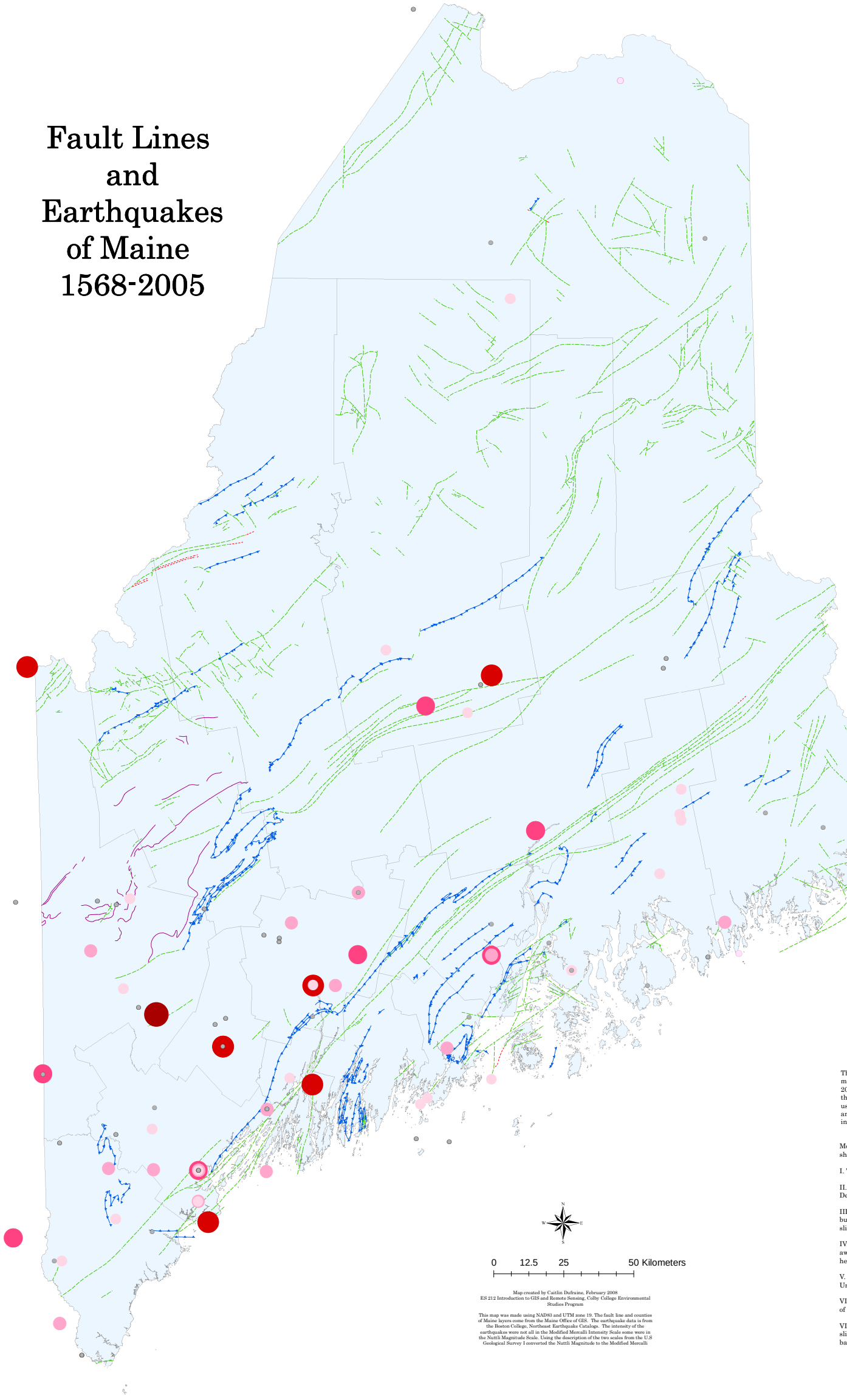
Fault Lines and Earthquakes of Maine 1568-2005



Legend

Modified Mercalli Earthquake Intensity

- Intensity information not available
- I
- II
- III
- IV
- V
- VI
- VII

Fault lines

- Thrust
- Listric
- Inferred
- Normal reverse
- Counties

N
W E
S

0 12.5 25 50 Kilometers

Map created by Caitlin Dufraine, February 2008
ES 212 Introduction to GIS and Remote Sensing, Colby College Environmental Studies Program

This map was made using NAD83 and UTM zone 19. The fault line and counties of Maine layers come from the Maine Office of GIS. The earthquake data is from the Boston College, Northeast Earthquake Catalogs. The intensity of the earthquakes were not all in the Modified Mercalli Intensity Scale some were in the Nuttli Magnitude Scale. Using the description of the two scales from the U.S Geological Survey I converted the Nuttli Magnitude to the Modified Mercalli

This map shows the fault lines in the state of Maine, and respresents the locations and magnitudes of all of the earthquakes that have occurred in the state of Maine from 1568 to 2005. It also includes the epicenters of earthquakes that occurred outside of Maine but that may have been felt in Maine. The magnitudes of the earthquakes are represented using the Modified Mercalli Intensity Scale, a scale that reflects an earthquake's impact and severity. It is not a mathematical scale, but rather ranks earthquakes based on the intensity of the shaking and its observed effects.

Modified Mercalli Intensity (MMI) (Source: U.S. Geological Survey scale I-XII only I-VII shown here)

I. The earthquake was felt but no Modified Mercalli Intensity was assigned.

II. An earthquake felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing.

III. An earthquake felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibration similar to the passing of a truck. Duration estimated in some cases.

IV. An earthquake felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.

V. An earthquake felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.

VI. An earthquake felt by all; many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.

VII. An earthquake causing negligible damage in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.