More than 179 people died and 50,000 were left homeless when a 6.3 magnitude earthquake shook central Italy early Monday.

The quake’s epicenter was in L’Aquila. The narrow streets of the historic center were filled with rubble, and parked cars were crushed under large blocks of debris.

An aerial view of the area around the Abruzzo capital L'aquila.

REUTERS/Livio Anticoli/Pool

AP Photo/Alessandra Tarantino
Magnitude 6.3 CENTRAL ITALY
Monday, April 06, 2009 at 01:32:42 UTC

Before and After Photos

Cathedral Dome in L'Aquila

AP Photo/Pier Paolo Cito
Magnitude 6.3 CENTRAL ITALY
Monday, April 06, 2009 at 01:32:42 UTC

The state archive in L'Aquila

Before and After Photos

Photo: Alessandro Bianchi/Reuters
This earthquake in Central Italy (~90 km or 55 miles NE of Rome) occurred as a result of normal faulting on a NW-SE oriented structure in the central Apennines, a mountain belt that runs through Italy.
The Apennines Mountains

- ~ 1,350 km long (the length of the Italian Peninsula)
- Formed when the Eurasian and African plates collided
  - Initially formed as a fold and thrust belt striking NW-SE
  - Thrusting is no longer active in the Central Appennines
  - It is experiencing E-W extensional tectonics related to
    - opening of the Tyrrhenian basin
    - subducted slab retreat
- Includes two active volcanoes (Etna and Vesuvius)
Around half past 3 a.m. I distinctly felt the bed trembling and the whole house shaking, much like a tree when a strong wind is blowing, and a window opened, too. This happened two times in a short interval, the second time in a stronger and more persistent way: it was 3:34 a.m.

**Witness location:** Latina (107 km / 66 miles from epicenter)
Aftershocks are common following a large earthquake and often hamper rescue efforts that are underway.

Aftershocks following the Magnitude 6.3 event

Multiple significant aftershocks occurred in the hours following the main earthquake.

Source: European-Mediterranean Seismological Centre
Magnitude 6.3 CENTRAL ITALY
Monday, April 06, 2009 at 01:32:42 UTC

Paulet High School
Burton on Trent, UK

Sakarya University
Sakarya, Turkey

Bangkok, Thailand

Location of the origin of the central Italy 6.3 earthquake.
Schools that have uploaded data for this earthquake.
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Earthquake
Seismometers

Note the attenuation of energy by the time waves reach the US.
Earthscope Transportable Array

This earthquake plotted across the array. Using this type of display, scientists are able to interpret arrivals and evaluate the variability over short distances.

More Information:

http://www.earthscope.org/observatories/usarray