

# Dynamic periods and building damage at Charleston, South Carolina during the 1886 earthquake

There are many reasons why a cookie could not be set correctly. Below are the most common reasons:

- You have cookies disabled in your browser. You need to reset your browser to accept cookies or to ask you if you want to accept cookies.
- Your browser asks you whether you want to accept cookies and you declined. To accept cookies from this site, use the Back button and accept the cookie.
- Your browser does not support cookies. Try a different browser if you suspect this.
- The date on your computer is in the past. If your computer's clock shows a date before 1 Jan 1970, the browser will automatically forget the cookie. To fix this, set the correct time and date on your computer.
- You have installed an application that monitors or blocks cookies from being set. You must disable the application while logging in or check with your system administrator.

## Why Does this Site Require Cookies?

This site uses cookies to improve performance by remembering that you are logged in when you go from page to page. To provide access without cookies would require the site to create a new session for every page you visit, which slows the system down to an unacceptable level.

## What Gets Stored in a Cookie?

This site stores nothing other than an automatically generated session ID in the cookie; no other information is captured.

In general, only the information that you provide, or the choices you make while visiting a web site, can be stored in a cookie. For example, the site cannot determine your email name unless you choose to type it. Allowing a website to create a cookie does not give that or any other site access to the rest of your computer, and only the site that created the cookie can read it.

The earthquake caused severe damage in Charleston, South Carolina, damaging 2,000 buildings and causing \$6 million worth in damages (over \$141 million in 2009 dollars), while in the whole city the buildings were only valued at approximately \$24 million. Between 60 and 110 lives were lost. Some of the damage is still seen today. Very little to no historical earthquake activity occurred in the Charleston area prior to the 1886 event, which is unusual for any seismic area. This may have contributed to the severity of the tremor. The 1886 earthquake is a heavily studied example of an intraplate earthquake. The earthquake is believed to have occurred on faults formed during the break-up of Pangaea. The modern seismicity at Charleston is occurring at depths equal to or greater than the known extent of these older structures, and rejuvenation of an older fault in the modern stress field is a possible cause of the seismicity. Accordingly, several chapters discuss the possible relationships of the various pre-Cretaceous structures to faults identified near Charleston that have a known Cretaceous and Cenozoic movement history and to the historic and instrumentally recorded seismicity. Part A: Geochemistry and tectonic significance of subsurface basalts near Charleston, South Carolina: Clubhouse crossroads test holes #2 and #3. Part F: Seismic-refraction study in the area of the Charleston, South Carolina, 1886 earthquake.