

# Accounts of Damage from Historical Earthquakes in the Northeastern Caribbean, to Aid in the Determination of their Location and Intensity Magnitudes

Open-File Report 2011–1133

U.S. Department of the Interior  
U.S. Geological Survey

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By Claudia H. Flores, Uri S. ten Brink, and William H. Bakun

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## Abstract

Earthquakes have been documented in the northeastern Caribbean since the arrival of Columbus to the Americas; written accounts of these felt earthquakes exist in various parts of the world. To better understand the earthquake cycle in the Caribbean, the records of earthquakes in earlier catalogs and historical documents from various archives, which are now available online, were critically examined. This report updates previous catalogs of earthquakes, in particular earthquakes in Hispaniola, to give to the public the most comprehensive documentation of earthquake damage and to further the understanding of the earthquake cycle in the northeastern Caribbean.

Documentation of an event in the past depended on the population and political trends of the island, and the availability of historical documents is limited by the physical resource digitization schedule and by the copyright laws of each archive. Examples of documents accessed are governors' letters, newspapers, and other circulars published within the Caribbean, North America, and Western Europe. Key words were used to search for publications that contain eyewitness accounts of various large earthquakes. Finally, this catalog provides descriptions of damage to buildings used in previous studies for the estimation of moment intensity (MI) and location of significantly damaging or felt earthquakes in Hispaniola and in the northeastern Caribbean, all of which have been described in other studies.

## Introduction

The preparation of this catalog of reports of Caribbean earthquakes felt since 1492 was prompted by the January 12, 2010,  $M_w$  7.0 earthquake that caused significant devastation and more than 222,000 deaths in the city of Port-au-Prince, Haiti, and its immediate surroundings. Parts of the extensive destruction can be attributed to the lack of earthquake awareness and preparedness (Eberhard and others, 2010). If the past is the key to the future, then the accounts of earthquake effects in the Caribbean over the past 5 centuries provide critical information for understanding the seismic hazard and the appropriate preparedness measures for Haiti and other countries throughout the Caribbean. This report constitutes a catalog of accounts of historical earthquakes since 1492 and modified Mercalli intensity assignments for significantly damaging or felt events that can be used to better characterize historical earthquakes, especially on the island of Hispaniola where Haiti and the Dominican Republic are located.

The goal for this catalog is to present as much information as possible on damages from past earthquakes for the purpose of determining earthquake intensities and to improve on past catalogs,

especially for those earthquakes before the 20th century. In the past, comprehensive compilation of damage reports depended on physically accessing documents in libraries around the world. Because many libraries have made their collections available online, documents can now be compared side by side, independent of their originating archive. Moreover, many of these documents are searchable, allowing for rapid, efficient location of particularly relevant damage descriptions. The reader is encouraged to consult Bakun and others (2012) and ten Brink and others (2011) on the research resulting from the intensity assignments for selected earthquakes and their conclusions for the tectonics and earthquake cycle for the northeastern Caribbean. Bakun and others (2012) focus on the research surrounding the Enriquillo-Plantain Fault System in southern Hispaniola. Ten Brink and others (2011) provide a more general view of selected large magnitude earthquakes that have occurred in the northeastern Caribbean and their resulting seismic hazards for the region. The selection of earthquakes in this catalog was based on the scientific questions asked in these two studies. As a result, the focus of this catalog is primarily on earthquakes in Hispaniola, especially before the 20th century. This is why only a few earthquakes from other parts of the Caribbean are included in this catalog, and the 20th century list is not comprehensive.

Much of this work would not have been possible if it were not for the Internet Archives, Digital Library of the Caribbean (dLOC), the Hathi Trust Digital Library, the Google Books Library Project, Gallica–Bibliothèque National de France, the Biblioteca Nacional de España that hosts the Hermeroteca Digital, the Portal de Archivos Españoles (PARES) hosted by the Ministry of Culture of Spain, and other libraries that have made their databases available online. Some documents remain unavailable either because of copyright protection or because they have not yet been digitized. The list of available sources continues to grow; therefore, the reader is encouraged to search for new material as it becomes available online. For the preparation of this publication, many of these online archives were last accessed as of August 2011.

## Features of Interest Included in this Catalog

Several items are included in this catalog, which provide context to the information presented or are possible sources of information for further research. A list is provided of significant historical events that most likely affected the reporting of earthquakes and that help to place damage reports in historical context. The list is not a comprehensive history of the island; therefore, the reader is directed to the other sources for a fuller discussion of history, such as del Monte y Tejada (1890), Heintz and Heintz (1978) and Figueredo and Argote-Freyre (2008). The population of the island of Hispaniola has not been evenly distributed or continuous since its discovery in 1492 nor has the territory been managed by only one country for its entire history. To understand why there are reports for some parts of the island but not for others, a glance at the edited list of significant events provides a quick explanation. A historical context for reports of damage or reports of feeling an earthquake provides an understanding of why some reports can be found in some archives but not in others.

The large number of events included in this catalog necessitates the inclusion of an index to ease the search for a particular event. Although the catalog is divided by century, the majority of events fall within the last three centuries, and tables of descriptions for the larger earthquakes span several pages. The index of earthquakes is organized by year and by island on page 177.

As mentioned in the introduction, several events were studied further by the authors, with the objective of answering fundamental questions that resulted from the 2010 Haitian earthquake. A list of these earthquakes and where to find their descriptions in the catalogue is given in table 1 on page 171. The research focused on only a few earthquakes; therefore, descriptions of those earthquakes and a few



others with a significant number of damage reports are listed in table 1 and contain the authors' contribution, which is the assignment of a moment intensity value.

In addition, the bibliography contains links to reference materials that are currently in the public domain. Considering the large amount of material in the public domain that was accessed for this catalog, the authors decided that providing links to the original sources would be more helpful for future research than integrating the original material, especially the non-English sources, into the catalog. The links direct the reader either to the first page of the source material or to the main document. For sources consulted that contain multiple volumes, individual links have been provided for each volume. The New York Times provides only downloadable PDF copies of their issues, and the availability depends on the time period accessed. For the New York Times issues, a direct link to the archive pages is provided.

Finally, the appendix contains other materials that may be of interest to the reader. Quoted text from de Utrera (1995) concerning the 1562 earthquake and a listing of damage-site geographic coordinates used in this catalog are provided in table form.

## Source Search Method

Jean Vogt contributed much to the methods of evaluating historical seismology by pointing out the pitfalls in many earthquake catalogs and by publishing case studies of individual earthquakes, which has been a benefit to researchers (Vogt, 1991 2009; Fréchet and others, 2008). For further guidance on the techniques and methods of historical seismology, the reader is directed to publications by Fréchet and others (2008) and Guidoboni and Ebel (2009). The most rudimentary process for doing historical seismology work includes searching for as many original accounts of an earthquake as possible, using the reference list in catalogs to help track down these original sources, and taking advantage of online search engines to find previously untapped sources of earthquake information.

For this catalog, the search began with original sources by first identifying modern earthquake catalogues of historical events and looking at their reference materials using the methods suggested by Vogt (2009). Older catalogues from previous centuries and their original source materials are identified if they were referenced. Once those original sources were identified, searches using established library tools were made to obtain copies of the original materials. Many historical documents are now available online or are easily found through online catalogues (see References Cited). The following sources were the most useful in obtaining the original source or documents with information relating to historical earthquakes: Moreau de St. Méry's (1796, 1798) volumes on the history of Hispaniola, Poey's (1857) catalogue of earthquakes from the Caribbean, Mallet and Mallet's (1858) worldwide catalogue of earthquakes, Perrey's yearly catalogues of earthquakes (1843–1873) and catalogue of Caribbean earthquakes, Tippenhauer's (1893) list of Hispaniola earthquakes, and the McCann and others (2011) on earthquakes felt in Puerto Rico.

*Moreau de St. Méry* – This author provides the most in depth information for earthquakes during the early to mid-18th century in Haiti and Dominican Republic (*Moreau de St. Méry*, 1796, 1798). The author lived on the island in the second half of the 18th century. The author self published his volumes on the history of Hispaniola, then known as Santo Domingo, first of the Spanish side in 1796 and then the French side in 1798. As a result, he provides the most information on the effects of the June 3, 1770, earthquake outside of news magazines from France and Spain of that period. The volumes are organized by city or town with a history of their establishment and finally the typical weather, geographical characteristics, and the known earthquakes that were felt and had damage reports. Many modern catalogues and historians cite Moreau de St. Méry's work.

*Poey* – This author provides two sources (Poey, 1855, 1857), a catalog of known earthquakes to have occurred up until 1857 in the Caribbean and a history of hurricanes for the same period and region. Both catalogs describe the source material Poey used to compile these lists of earthquakes and hurricanes with no further information beyond the date and possible times of each event. These catalogs were useful because of the detailed references used to track down the original source materials for damage descriptions of the events, including histories, newspaper reports, scientific publications of the period, and personal letters published in history books. The only caveat for these catalogs is that Poey used what was available to him at the time, and most of the sources, especially closer to his time period, are French biased. Many modern catalogs for both earthquakes and hurricanes cite these catalogs as their main source. Poey originally lived on the island of Cuba and established a meteorological observatory in Habana in 1856; it was shut down, and he was forced to leave Cuba in 1869 due to the Ten Year's War (Figueredo and Argote-Freyre, 2008).

*Mallet and Mallet* – This worldwide catalog (Mallet and Mallet, 1858) of known earthquakes ends at 1842. The authors wrote that Perrey was publishing another yearly catalog of similar information, and therefore, they chose to end theirs with that year. Mallet and Mallet provide a summarized description for each event, but they also provide a list of references for the documents from which they obtained their information. Many of their sources are British and French biased, but they do include newspapers and scientific publications of the time. Events occurring on the same day in the same region tend to be grouped together as one event. For example, for the October 18, 1751, event there are reports for both Hispaniola and Martinique, but most likely, there were two distinct events occurring on the same day. As a consequence, some modern catalogues have attributed the large event felt in Hispaniola as also being felt in Martinique without further documentation. Many modern catalogues cite Mallet and Mallet as their source.

*Perrey* – The catalog of Caribbean earthquakes and subsequent yearly catalogs of world earthquakes (Perrey, 1843–1873) have been useful in tracking down the occurrence of these earthquakes, but descriptions are summarized much like those in Mallet and Mallet. On occasions when an earthquake caused enough news, Perrey provided a citation and a quotation of the damage done by the earthquake. Perrey published a catalog of earthquakes from 1843 to 1873.

*Tippenhauer* – This earthquake catalog is included as a chapter to the publication “Die Insel Haiti” published in 1893. Tippenhauer was initially interested in the science of meteorology by Father Wieck, director of the meteorological observatory at the Spiritans seminary school in Port-au-Prince, who visited Germany in 1885 (Bettembourg and others, 1952).

*McCann and others*—W. McCann, L. Feldman, and M. McCann generated a catalog of damage reports for the historical seismicity of Puerto Rico with some information on the Virgin Islands, Northern Lesser Antilles, and Hispaniola. Their work has been valuable for finding original sources from documents held by the Archivo General de Indias (AGI) that are cataloged online but as yet are not available to view online and Caribbean documents that also are not available to view online. A draft copy of their work was made available to the authors of this current report in 2005; the McCann and others report has now been published in “Revista Geofísica” (McCann and others, 2011).

Other significant ways of finding sources came through the use of the online databases listed below.

*Google News Archives*—<http://news.google.com/newspapers> During 2010, Google initiated a dedicated page for searching through digitized newspapers; however, as of August 2011, this page has been removed. Google now redirects users to their main news page and suggests the use of the advanced search feature. There is a similar feature for finding books digitized and available online for

Google Books. An explanation on the Google Books Library project can be found at <http://books.google.com/googlebooks/library.html>.

*Hemeroteca Digital*—<http://www.bne.es/opencms/es/Catalogos/HemerotecaDigital/index.html>  
This site is hosted by the National Library of Spain (Biblioteca Nacional de España) and is dedicated to newspapers published in Spain from the 17th to the 20th century. The National Library of Spain also hosts other online databases, which can be accessed from the main page at <http://www.bne.es/es/Inicio/>.

*Gallica*—<http://gallica.bnf.fr/> This online database is hosted by the National Library of France (Bibliothèque nationale de France – BnF). A user can access the library catalog and a search engine to look for all the library's available digitized material, such as manuscripts, journals, newspapers, maps, and images.

*Portal de Archivos Españoles*—<http://pares.mcu.es/> This is the General Archive of the Indies, known as the Archivo General de Indias (AGI); it was established in 1785 in Seville, Spain, to gather all documents related to the Indies into one location. The Ministry of Culture of Spain provides an online database to search for documents in this archive and online viewing of digitized documents. The Ministry of Culture of Spain also hosts and connects to other Spanish databases that can be accessed at <http://www.mcu.es/index.html>.

*Hathi Trust Digital Library*—<http://www.hathitrust.org/home> This online database provides a useful catalog search engine for U.S. libraries for holdings and documents available in the public domain. The library has full text search for digitized documents. This site makes clear what resources are available online based on U.S. copyright laws and what, if any, holdings are a result of the Google digitizing project.

*Internet Archives*—<http://www.archive.org/> This online archive is a result of a not-for-profit organization's effort to build an internet library. It is useful for finding digital copies of historical books and documents that currently exist in libraries in the United States, and items can be downloaded from the site in various formats or viewed online.

*Digital Library of the Caribbean*—<http://www.dloc.com/> This online archive is the result of a cooperative effort among Caribbean archives and libraries to preserve historical, cultural, and research materials and make them accessible to the public. Currently, this archive is administered by the Florida International University, in partnership with the University of the Virgin Islands and the University of Florida. A list of all founding partners and contributors can be viewed using a link at this site.

Further concerns for historical earthquake research include taking into account the century and standards of publications for the period; observations by governors and people of political importance tended to be published as either part of the government record or later as news reports about major events. Not until the late 19th century and early 20th century do commentaries from common people become more prominent in newspapers. Historians tend to distill much of the personal testimony, but sometimes a historical publication may be the only place in which edited testimony survives. Testimonies from the Spanish colonial period of Hispaniola survive primarily through letters from governors to the King or from religious persons in requests for money to repair their colonial churches. Many of these documents survive in the Archivos General de Indias in Seville, Spain, and are cataloged. Only a small percentage of these documents are available online. Direct quotes from Archivo General de Indias letters are used in this report as source material where the original document is not available online or is not easy to obtain in publications, such as the history books written by de Utrera (1995) and Sevilla Soler (1980).

## The bulletins from the Meteorological Observatory in Port-au-Prince, Haiti

At the time of the publication of this report, the authors are aware of bulletins published by the l'Observatoire Meteorologique de Seminare-College St. Martial semi-annually first (1909 to 1916) and later annually (1917 to 1937 and 1950 to 1963). For the years 1935 to 1947, the college had no funds to publish a bulletin; therefore, information from those years was not published until 1950 (Bettembourg and others, 1952). The bulletins contain meteorological, as well as seismic, information, but for this report, only the chapters on seismology were used. Scherer was the sole compiler of the bulletins from 1909 to 1916. Scherer (director) and Baltenweck (sub-director) were co-compilers of the bulletins from 1920 to 1924. Bettembourg (director), Schneider (sub-director), and Schumacher (sub-director) were co-compilers of the bulletins from 1950 to 1955.

What is known about the Seminare-College St. Martial is that it was established by the Spiritans, also known as the Fathers of the Holy Ghost and the Holy Heart of Mary, in the middle of the 19th century. Father Weick, then professor of physics at the seminary school, established a meteorological observatory inside the old Fort Thomas in Port-au-Prince after 1878. Father Scherer took over as director of the observatory in 1886, shortly before Father Weick's death in 1887, and began to expand the capabilities of the observatory in 1890. Father Scherer installed pluviometers, also known as rain gauges, and established a correspondence network within parts of Haiti to collect a more complete record of the meteorology of Haiti. A transit telescope and chronometer, a precision clock, were acquired in 1896. With these, the observatory was able to report in mean local time which is + 04h 49m 21s of Greenwich time and changed the local time on February 1, 1917, to the median time for the 75th parallel at + 05h of Greenwich time. After 1913, the observatory adopted Greenwich Mean Time (GMT) to record seismic observations. Scherer had a Cecchi seismometer (vertical pendulum, 100 kilograms (kg)) installed in 1905 and about March 1911 had it replaced with an Omori-Bosch seismometer (SE-NW and SW-NE components, 71 kg, and magnification of 30 times) at the observatory in Port-au-Prince. In 1950, the entire observatory was moved into a new building. All of this historical information comes from the bulletins published in the first few years, 1909–1912, and Bettembourg and others (1952).

## Catalog of Earthquakes with Descriptions

The reporting of the history of the region and of the natural hazards has evolved significantly. During the colonial period (15th to early 18th centuries), documentation of natural events was done either by those governing the colonies or by those employed by the church. Colonies exported their natural resources, and the church tithes supported the construction and maintenance of places of worship. Therefore, any event that might disrupt the flow of funds and resources to and from the colonies would most likely be documented as justification for additional funding for the repair of public and religious buildings or justification for the absence of the expected tithes. During the late 18th and all of the 19th and 20th centuries, many reports originated from news articles and journals, from catalogs of scientific societies, and later from geophysical observatories. For the 20th century, the catalog focuses on significantly large events before 1963. Most of the intensity data comes from the bulletins issued by of the l'Observatoire Meteorologique du Seminaire-College St. Martial, which was renamed after 1953 Petit Seminaire-College St. Martial, in Port-au-Prince, Haiti. At the time of writing this report, the authors are aware only of bulletins issued almost continuously by this observatory from 1909 to 1963; however, this observatory has been in existence since 1873 when it was established by Father Weick (Bettembourg and others, 1952).

This catalog is organized first by earthquakes predominantly felt on Hispaniola, followed by selected events felt in Puerto Rico, the Virgin Islands, and the Northern Lesser Antilles (see Index of Earthquakes by Island and by Year starting on page 187. The descriptions in the catalogue are in English, but some of the sources have been translated from Spanish, French, Italian, or German. Links to original works in the public domain are provided in the References Cited. Table 1 (page 178) lists the earthquakes studied in detail by Bakun and others (2012) and ten Brink and others (2011) with preferred locations and intensity magnitudes. Not all earthquakes listed in other catalogues have been included in this list; therefore, the list is not comprehensive for all earthquakes of the northeastern Caribbean. Each event is described in a table with five major components that are explained in detail below.

*Header* –The header contains the date, time, and a summary of the general effects of the earthquake. Only one earthquake is listed by its original date under the Julian calendar, that of December 2, 1562. Spain did not switch to the Gregorian calendar until 1582. Other Catholic nations that switched to the Gregorian calendar in 1582 are France, Portugal, and Poland; Germany and the Netherlands did not switch to the Gregorian calendar until 1700, and Great Britain did not adopt the calendar until 1752 (Guidoboni and Ebel, 2009). Earthquakes that occurred before the 20th century are referenced to the local time at the location with the highest relative intensity or at the only location with a time of day that is different than the origin time of the earthquake. An exact conversion to Universal Time (UTC) from an inexact description of the local time would only mislead the researcher for two important reasons. First, the convention of GMT as 0° latitude was not adopted until 1884 (Guidoboni and Ebel, 2009), and second, the observatory in Port-au-Prince did not adopt mean local time, using precise astronomical and time clocks, until 1896. All events in the 20th century are listed with local mean time and the UTC equivalent or only in UTC if the earthquake occurred after 1913. In addition, instrumental origin times, location, and magnitudes are listed in the header in bold and are either from the Centennial Catalog (Engdahl and Villaseñor, 2002) or from Sykes and Ewing (1965). The rest of the header contains general information about the earthquake, including land-surface effects, such as liquefaction, mud volcanoes, subsidence, disruption of water flow; tsunamis; submarine landslides; notes on aftershocks; and notes on other phenomena that may include a history, extent of damage, or other issues that do not fit into the previous categories; and finally, the number of locations with an associated observation.

*Longitude and Latitude*—Geographical coordinates in degrees of latitude and longitude are listed for each location that has an earthquake-damage or felt description associated with it.

*City*—This is the name of the location of the city or town with an earthquake-damage or felt description. The list of cities in the tables is organized from the highest relative earthquake intensity to the lowest relative earthquake intensity. The name of the location at the time of the earthquake is listed first; if the name is different than the name of the location today, the current name is in parentheses. All locations are on the island of Hispaniola unless indicated by the name of the island after the name of the location. Because the Caribbean has a long history of changing boundaries and nationality, and because not all the islands in the Caribbean are independent nations, there is less confusion using the designation of city, island instead of city, country. A list of current locations for each city is provided in the appendix on page 220

*Description*—Each earthquake description begins with a citation, followed by the description of damage from that source. Multiple descriptions for each location are organized by source, from those published closest to the time of the earthquake to the most recent. In the case of de Utrera (1995), the first edition of that work was published in 1927; therefore, it would go before source material published after 1927. For some locations, the same source is assigned to different locations nearby. For the research work done by, and described in, Bakun and others (2012) and ten Brink and others (2011), listing each location uniquely instead of grouping them into one single description of damage was necessary. As a result, for this catalog, this convention of listing each location uniquely was adopted with the intention of easily transitioning these locations into mapping software or to a geographic information system (GIS) software mapping tool. In the description field of each earthquake table, the following three font styles are used to indicate to the reader the manner in which the sources are cited.

1. Arial, 9pt is used to indicate text that is paraphrased from the original text by the authors.
2. Times New Roman, 11pt is used to indicate text directly quoted from the source, independent of original language.
3. Times New Roman, 11pt, italics is used to indicate text in which the source is quoting another source.

*Intensity*—This last column contains the assigned Mercalli Intensities, if available, and is ordered from the most recent to the oldest. Author assigned Modified Mercalli Intensity values are based on criteria listed in table 2, page 179. In the Intensity column, assigned moment intensities from other publications are indicated in the following shorthand: C1972 = Campbell (1972), LB1948 = Lynch and Bodle (1948), S&L1992 = Shepherd and Lynch (1992), L&S1995 = Lynch and Shepherd (1995), T&R1977 = Tomblin and Robson (1977), SISF = SisFrance/Antilles (2010); the assigned intensities by the authors are CHF = Claudia H. Flores and WHB = William H. Bakun. Intensities are shown in Arabic numbers instead of Roman numerals. Bakun (WHB) intensities are generally more conservative than Flores (CHF) intensities, and (-) signifies that the authors did not find sufficient detail to allow an intensity assignment or that the event was not large enough to necessitate an intensity assignment.

## Earthquakes from 1500 to the end of the 17th Century:

Intensity, Mercalli Magnitude Intensities (3-10); CHF, assigned by C. H. Flores (author); WHB, assigned by W. H. Bakun (author); SISF, assigned by SiSFrance/Antilles (2010); S&L1992, assigned by Shepherd and Lynch (1992); C1972, assigned by Campbell (1972); -, no assignment given.

<b>December 2, 1562 (Julian Calendar)</b>				
<p><b>Time:</b> Between 8 and 9 in the evening, Conception de la Vega local time.</p> <p><b>Phenomenon Notes:</b> Earthquake resulted in the relocation of Santiago de los Caballeros and Conception de la Vega. In many catalogs this event is listed as occurring in the year 1564, either in April or September, and this date is taken from a personal letter written by Echagoian and later from Garcia's (1900) work on the history of Santo Domingo. From de Utrera (1995), the day and year of this earthquake used in this catalog is taken from four letters written contemporaneously and stored in the Archivo General de Indias (AGI) archives in Seville, Spain. From Utrera (1995), "Let us abide to Echagoian but not by his single and personal testimony because in the Archive of the Indies we find the following papers: Letter from the honorable Herrera to His Majesty, in the Real Council of the Indies, over various matters and among them news of an earthquake that occurred December 2 of the year before which is dated February 16, 1563. Another letter dated February 13, 1563 signed by the Honorable Herrera, the honorable Echagoian and by the doctor Caceres to His Majesty, in the Real Council of the Indies, about the earthquake that occurred on December 2 of the year before, between eight and nine at night, which resulted in the fall of the church cathedral in la Vega. Another letter from the ecclesiastical Council from Conception de la Vega to His Majesty, in the Real Council of de Indies, over the destruction caused by the earthquake of December 2, 1562 and this is a letter dated October 6, 1563." Moreau de St. Méry (1798 describes the ruins of the original establishment of La Vega where masonry work was found to have had iron bars, and Scherer (1912) cites Moreau de St. Méry.</p> <p><b>Number of Observations:</b> 6</p>				
Longitude	Latitude	City	Description	Intensity
-70.7075	19.4502	Santiago de los Caballeros	<p>(del Monte y Tejada, 1890): The city of La Vega was not the only one to be destroyed by the great shaking; the city of Santiago de los Caballeros which had been built in the plain that formed the ranches of Jacagua and Gurabito fell to its foundations and its dwellings saw the same fate as those in La Vega.</p> <p>(de Utrera, 1995): Entire city destroyed to the ground. By this time the church was built of masonry.</p>	<p>CHF(8) WHB(9) SISF(8) S&amp;L1992(9) C1972(9)</p>
-70.5442	19.2937	Concepción de la Vega (old ruin)	<p>(Moreau de St. Méry, 1796): An earthquake toppled almost the entire city.</p> <p>(Scherer, 1912a): The ruins of the old city were found in 1798 and were described by the author: brick columns which the mortar held together perfectly. The arch of the church, the steeple, and the capitals of the columns were on the ground, but in blocks; and these columns had three inch bars of iron running through their length.</p> <p>(de Utrera, 1995): The church and Franciscan monastery were built of stone masonry by this time.</p> <p>The monastery fell and almost the entire church fell to the ground except for the section where the cross stood and this occurred sometime between 8 and 9 in</p>	<p>CHF(9) WHB(8.5) SISF(8.5) S&amp;L1992(9) C1972(9)</p>

December 2, 1562 (Julian Calendar)				
			the evening.	
-70.6937	19.7971	Puerto Plata	(de Utrera, 1995): The dormitory and the convent that was part of it in the Dominican monastery were severely damaged and were the only buildings made out of brick and stone in the town. In 1575 the Dominicans of Puerto Plata wrote a petition for help for their damaged church * * * the following was written: * * * <i>You do know that after it (the monastery) was again rebuilt and after having cost so much, the dormitory of the before mentioned monastery fell again from an earthquake that occurred in the year of sixty-two.</i>	CHF(7) WHB(7)
-69.8877	18.4722	Santo Domingo	(de Utrera, 1995): In this city [Santo Domingo] there was a clergyman by the name of Alonso de Peña * * * gave everything to the church, by luck that today this clergyman is the only one of his contemporaries that has passed through history the admirable aura of having given aid with all his properties for the material and moral restoration of the island after the terrible earthquake of December 2, 1562.  Part of the letter to canonize Peña dated April 20, 1576: ( * * * <i>who has given great service to God and his Royal Highness, has built three important churches, our Lady of High Grace in the village of Savaleon de Higüey [...] built the church in the city of Santiago de los Caballeros and is today building the parish of Santa Barbara of this city of Santo Domingo</i> * * * ) The parish of Santa Barbara was built in 1536 with mud walls.	CHF(6) WHB(7) S&L1992(4) C1972(3)
-71.6507	19.8474	Monte Cristi	(K. Deagan, Florida Museum of Natural History, written commun., 2011 quoting Archivo General de Indias source dated May 13, 1563): A witness on board a vessel at Monte Cristi saw the earth shake ashore in 1562.	-
-	-	Puerto Real (near Fort Liberte today)	(K. Deagan, Florida Museum of Natural History, written commun., 2011): There is no archeological evidence for severe earthquake damage during the 1562 earthquake. The town was burned and abandoned in 1578 by Spanish authorities because of failure to restrict contraband trade by the locals.	-

September 7, 1615				
<b>Time:</b> Between 11 and 12 at night, San Juan, Puerto Rico local time. <b>Aftershocks:</b> Strong aftershocks that lasted for 40 days with 3 to 4 shocks per day (de Utrera, 1995). <b>Phenomenon Notes:</b> Earthquake was reported to have been felt all over the island. A hurricane occurred days after this earthquake starting September 12, 1615 (McCann and others, 2011). There are accounts of damages from both the hurricane and earthquake in the countryside but are not separated as such. <b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(McCann and others, 2011 quoting AGI letter dated July 4, 1623, ref 1, Doc. 166):	CHF(8)



September 7, 1615				
			<p><i>Damage to a council room inside a church such that the cracked connecting wall is at risk of falling and taking a good part of the church with it.</i></p> <p>(de Utrera, 1995): According to the archives of the church, Nuestra Senora de las Mercedes in Santo Domingo, an account written by Fr. Gabriel Tellez describes an earthquake that occurred in the year 1615 (sometimes confused for 1617 because of the date of the original letter), in which the choir loft fell and one of the transverse arches that held up that part of the church was damaged. Earthquakes were felt for forty days about 3 to 4 each day. It was felt throughout the entire island but Santo Domingo received the most damage.</p>	WHB(7) C1972(9)
-66.1057	18.4665	San Juan, Puerto Rico	<p>(McCann and others, unpub data, 2005 quoting AGI letter dated October 1, 1615, ref # 165, written by B. Navarra): Four accounts:</p> <p>1) * * *and you know because it is so public and notorious and having seen it myself that [on September 7] of this year [1615] between 11 and 12 at night, an earthquake occurred that lasted a quarter of an hour, in such a way that it moved all of the people in the city [San Juan] and many people exited their homes for what might happen* * *</p> <p>2) He more than knows for he has witnessed it that earthquakes have occurred and the last earthquake that happened [Sept. 7] of this year [1615] with such force that it was understood that many things fell and subsequently on September 12 there were thunderstorms.</p> <p>3) * * *and after that aforementioned loss in diverse times there have been earthquakes so large that they risk toppling many houses and that on September 7 of spoken year [1615] of the same there was an earthquake about 12 at night, and so strong that everybody exited their houses and asked for prayers of help from God.</p> <p>4) * * *at the aforementioned city [San Juan] that might have been 16 years ago more or less when that the city experienced earthquakes about 4 or 5 times* * *</p>	CHF(5) WHB(4.5)

January, 1665				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> Not reported in Puerto Rico. <b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	<p>(de Utrera, 1995 quoting Archivo General de Indias letter dated January 15, 1665):  <i>The archbishop Cueva y Maldonado writes to the king to say that he had done</i> </p>	CHF(7) WHB(6) C1972(6)

January, 1665				
			<i>the required repairs to the main church and convent in Santo Domingo in which they had been damaged by an earthquake and that the year has started with earthquake.</i>	
-70.8359	18.3504	Old Azua	(de Utrera, 1995): Similar letter from the same archbishop saying that the church in Azua had been ruined by an earthquake and had ordered its repair. De Utrera thinks it is most likely from an earthquake in 1665.	CHF(7) WHB(6)

May 9, 1673				
<b>Time:</b> Unknown				
<b>Phenomenon Notes:</b> Probably felt in other parts of the island but no individual reports.				
<b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(Garcia, 1900): The earthquake caused much damage and some loss of life, five in the city of Santo Domingo* * *and probably much harm was caused in the rest of the island.  (de Utrera, 1995): According to the archives in the church of San Lazaro in Santo Domingo, an earthquake left the entire city in ruins. So much damage was done that the governess of New Spain called to all the subjects to donate funds to repair the homes, forts, churches and hospitals. Of the 2000 pesos, 200 pesos went to the hospital of San Lazaro and 150 pesos went to the repair of the Dominican church and convent of San Nicolas. "An earthquake occurred with such force that it ruined all of the houses in the city".	CHF(8) WHB(9) C1995(10) S&L1992(8)
-70.8359	18.3504	Old Azua	(Taber, 1922): City damaged by earthquake.	CHF(6) WHB(6)

1684				
<b>Time:</b> Unknown				
<b>Phenomenon Notes:</b> Felt and possible minor damages in other towns.				
<b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(Moreau de St. Méry, 1796): Of the buildings that survived Drake's invasion, they were lost in the 1684 and 1691 earthquakes.  (Moreau de St. Méry, 1798): The Spanish part of the island suffered cruelly.  (Tippenhauer, 1893): Suffered very much.	CHF(8) WHB(8) SISF(8)

1684				
			<p>(Garcia, 1900): A most terrible earthquake left most of the cities almost in ruin but it particularly hit Santo Domingo the hardest. Many churches, official and public buildings had to be rebuilt in the city.</p> <p>(de Utrera, 1995): A diocesan makes reference to damage suffered on the island as the reason why it has been difficult for the inhabitants to fulfill their tithe obligations to the church in a letter written in 1685.</p>	
-70.8359	18.3504	Old Azua	(Tippenhauer, 1893): Suffered very much.	CHF(5) WHB(6)

1691				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> Reporting of this event may have been overshadowed by the Kingston, Jamaica, 1692 and Guadeloupe 1690 earthquakes. <b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	<p>(Moreau de St. Méry, 1796): Of the buildings that survived Drake's invasion, they were lost in the 1684 and 1691 earthquakes.</p> <p>(Moreau de St. Méry, 1798): The Spanish part of the island suffered cruelly.</p> <p>(Tippenhauer, 1893): Suffered very much.</p>	CHF(7) WHB(7) S&L1992(8)
-70.8359	18.3504	Old Azua	<p>(Moreau de Jonnes, 1822): Listed as a very destructive earthquake that destroyed the city of Azua and also one of many earthquakes that have been most destructive in the Antilles.</p> <p>(Perrey, 1843; Mallet and Mallet, 1858): It destroyed the town of Azua.</p> <p>(Perrey, 1847): It was destroyed by an earthquake.</p> <p>(Tippenhauer, 1893): Suffered very much.</p>	CHF(8) WHB(8) SISF(8) S&L1992(9)

## Earthquakes of the 18th Century:

Intensity, Mercalli Magnitude Intensities (3-10); CHF, assigned by C. H. Flores (author); WHB, assigned by W. H. Bakun (author); SISF, assigned by SiSFrance/Antilles (2010); S&L1992, assigned by Shepherd and Lynch (1992); T&R1977, Tomblin and Robson (1977); C1972, assigned by Campbell (1972); -, no assignment.

<b>November 9, 1701</b>				
<b>Time:</b> Unknown <b>Land Surface Effects:</b> Landslides observed on the road between Leogane and Petit Goave. <b>Tsunami:</b> Some previous catalogues have associated a minor tsunami with this event based on the damage descriptions reported in Scherer (1912a) who translated Moreau de Saint Méry, (1798). The original French text is as follows, “Le 9 Novembre 1701, le tremblement de terre renversa les maçonneries fraîchement élevées dans la plaine, & fit affaler des parties du chemin qui conduisait le long de la mer, de Léogane au Petit-Goave.” (Moreau de St. Méry, 1798) See the Leogane description for the English translation. <b>Phenomenon Notes:</b> This is the first major earthquake documented on the western side of the island of Hispaniola. <b>Number of Observations:</b> 5				
Longitude	Latitude	City	Description	Intensity
-72.6334	18.5111	Leogane	<p>(Moreau de St. Méry, 1798): Taber (1922) and Scherer (1912a) translate Moreau de St. Méry (1798) as: It caused more destruction in the plain (Cul-de-Sac). Several houses built of masonry were thrown down and the road which leads from Leogane to Petit Goave along the sea shore sank into the sea. Our English translation: The November 9, 1701 earthquake toppled masonry freshly built in the plain and collapsed parts of the path which led along the sea from Leogane to Petit Goave.</p> <p>(Tippenhauer, 1893): Quite Strong.</p> <p>(Garcia, 1900): The earthquake of 1701 caused great destruction in various villages especially at Leogane, and in the French part of the island.</p>	CHF(7) WHB(7) S&L1992(7) SISF(8)
-72.8668	18.4315	Petit Goave	(Moreau de St. Méry, 1798): The November 9, 1701 earthquake toppled masonry freshly built in the plain and collapsed parts of the path which led along the sea from Leogane to Petit Goave.	CHF(6) WHB(7)
-72.2808	18.6042	Cul-de-Sac	(Scherer, 1912a): It caused more destruction in the plain [Cul-de-Sac].	CHF(6) WHB(6) SISF(7)
-69.8877	18.4722	Santo Domingo	<p>(Moreau de St. Méry, 1798): The Spanish side of the island felt its cruel effects.</p> <p>(Moreau de Jonnes, 1822): Damages “It was disastrous”, [in reference to the whole island]</p>	CHF(4) WHB(5)

November 9, 1701				
			(Tippenhauer, 1893): Quite Strong. (de Utrera, 1995): In Santo Domingo.	
-72.2006	19.7616	Cap Haitien	(Moreau de St. Méry, 1798): Earthquake felt strongly.	CHF(3) WHB(4)

1713				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(Moreau de St. Méry, 1798): The Spanish side of the island felt its cruel effects.  (Moreau de Jonnes, 1822): It was disastrous. [in reference to the whole island]  (Tippenhauer, 1893): Strong  (de Utrera, 1995): on the island, strong shaking.	CHF(4)
-72.2006	19.7616	Cap Haitien	(Tippenhauer, 1893): Strong (Moreau de St. Méry, 1798): Earthquake felt strongly.	CHF(4)

1734				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 3				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(Moreau de St. Méry, 1798): The Spanish side of the island felt its cruel effects.  (Moreau de Jonnes, 1822): An earthquake on the island.  (Tippenhauer, 1893): quite strong  (de Utrera, 1995): On the island, very strong shaking.	CHF(4)
-72.3388	18.5432	Port-au-Prince	(Tippenhauer, 1893): quite strong	CHF(4)
-72.2006	19.7616	Cap Haitien	(Moreau de St. Méry, 1798): earthquake felt strongly.	CHF(4)

1734				
			(Tippenhauer, 1893): quite strong	

<b>May 15, 1751</b>				
<b>Time:</b> unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.2273	18.5758	Croix de Bouquets	(Moreau de St. Méry, 1798): I have already occasion to mention that the western part of the island is most prone to earthquake disaster and the Croix de Bouquets seems to be one of the places most exposed. On May 15, 1751, we felt a slight tremor.  (Tippenhauer, 1893): Earthquake	CHF(3)

<b>May 25, 1751</b>				
<b>Time:</b> between 12 and 1 at night, Santo Domingo local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(Mallet and Mallet, 1858): Earthquake between 12 and 1 at night (on the island).  (Tippenhauer, 1893): Earthquake	CHF(4)
-72.2006	19.7616	Cap Haitien	(Gentleman's Magazine, 1753): The first shock was on May 25, 1751, between 12 and 1 o'clock at night, it was pretty considerable, but few people felt it. However the reality by letters from several parts of the island, but as it did no damage, it caused no alarm.  (Moreau de St. Méry, 1798): Felt strongly but without injury.	WHB(4) SISF(3)

<b>September 15, 1751</b>				
<b>Time:</b> 10:00 at night, Santo Domingo local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity

September 15, 1751				
-69.8877	18.4722	Santo Domingo	(Perrey, 1843): At 10 in the evening, several shocks.  (Mallet and Mallet, 1858): Earthquake, several shocks.  (Tippenhauer, 1893): Earthquake, at 10 o'clock in the evening.  (de Utrera, 1995): Felt all over the island.	CHF(3)
-72.3388	18.5432	Port-au-Prince	Shepherd and Lynch (1992) quote Lyell (1875) but Shepherd and Lynch mention in their notes that this description is very similar to the later major earthquake of October 18, 1751	S&L1992(9)

September 29, 1751				
<b>Time:</b> unknown				
<b>Phenomenon Notes:</b> More than one shock was felt on this day according to de Mairan, 1756.				
<b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(de Mairan, 1756): On the 29, several earthquakes [occurred] which we did not pay much attention to.  (Mallet and Mallet, 1858): Earthquake.  (Tippenhauer, 1893): Earthquake.  (de Utrera, 1995): Felt all over the island.	-

October 8, 1751				
<b>Time:</b> unknown				
<b>Phenomenon Notes:</b> Possible foreshock?				
<b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(Mallet and Mallet, 1858): Earthquake.  (Tippenhauer, 1893): Earthquake.  (de Utrera, 1995): Felt in Santo Domingo.	CHF(3)
-72.2006	19.7616	Cap Haitien	(Gentleman's Magazine, 1753): On Oct. 8, following, another slight shock was felt, and a like shock on the 12th about noon, but on the 18th was a terrible	CHF(3)

<b>October 8, 1751</b>				
			shock.	

<b>October 12, 1751</b>				
<b>Time:</b> about noon, Cap Haitien local time <b>Phenomenon Notes:</b> Possible foreshock? <b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(Mallet and Mallet, 1858): Earthquake.  (Tippenhauer, 1893): Earthquake.  (de Utrera, 1995): Felt in Santo Domingo.	-
-72.2006	19.7616	Cap Haitien	(Gentleman's Magazine, 1753): On Oct. 8, following, another slight shock was felt, and a like shock on the 12th about noon, but on the 18th was a terrible shock.	-

<b>October 18, 1751</b>				
<b>Time:</b> About 3:00 in the afternoon, Santo Domingo local time <b>Land Surface Observations:</b> Sulfur springs appeared in the mountains north of the town of Azua. <b>Tsunami:</b> Previous catalogues associate a tsunami with this event flooding the town of Azua. With closer inspection of the historical record, it is documented that hurricanes hit Hispaniola on August 21 contributing to flooding all over the southern coasts of the island (Sevilla Soler, 1980) and during the month of September that hit Jamaica from the 18 to 20th resulting in loss of many ships at sea but "In Hispaniola, only a few chimneys and slight buildings were blown down," [in Cape Haitien] (Gentleman's Magazine, 1751a,b). The hurricane is documented in earlier catalogues and described by a contemporary of the period (see Old Azua). The ruins of the old city of Azua were actually located about 6 km inland at an elevation of 23 meters in present day Pueblo Viejo, Dominican Republic. <b>Aftershocks:</b> A major aftershock was felt at 5 o'clock in the evening that same day and the next major aftershock on Oct. 28 (three tremors felt) and Oct. 29 (two tremors felt). Minor tremors were felt for the rest of the month of October into the month of November. <b>Phenomenon Notes:</b> The earthquake destruction contributed to the relocation of the towns of Azua and Seibo to their modern locations. Azua was relocated to the foot of the Cibao mountains; Seibo was relocated a few kilometers north further up and on the other side of the river. Previous earthquakes before this day may or may not have been foreshocks to this event. <b>Number of Observations:</b> 14				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(Sevilla Soler, 1980, quoting letter written by Franciso Rubio y Peñaranda Oct. 19, 1751, Archivo General de Indias, Santo Domingo, ref # 942): * * * <i>a bit after 3 o'clock an attack in the space of 6 minutes, without pause, such a strong earthquake * * * from its impulsive subterranean roar felt and violent motion on all the churches and buildings, such that all of those of masonry in this city reached their total ruin * * * 8 tremors occurred later.</i>	CHF(8) WHB(7) SISF(8) S&L1992(8) T&R1977(8) C1972(10)



October 18, 1751				
			<p>(Gentleman's Magazine, 1752): * * * but in the Spanish part, several convents and churches were thrown down in the city of St. Domingo.</p> <p>(Sevilla Soler, 1980 quoting Luís Josep Pequero, transcribed in 1762, published in 1975): [...] <i>on the 18 of the month of October of before mentioned year [1751] between 2 and 3 in the afternoon a horrific noise was heard, similar to a strong wind in a canyon but could not tell if it came from the air or from the ground and with it an earthquake equally as huge as terrible with continuous motion going from North to South although others claimed from East to West.</i></p> <p>(Moreau de St. Méry, 1796): * * * to the north-east of town Saint-Michel was a hermitage that the earthquake of 1751 ruined.</p> <p>(Moreau de St. Méry, 1798): On October 18, 1751 at 2 o'clock in the afternoon, * * * the city of Santo Domingo lost many buildings.</p> <p>(Scherer, 1912a): Lost its finest buildings, the convents of the monks of La Merci, the Franciscans and the Dominicans as well as the churches of St. Barbe, St. Lazare, St. Antione, and St. Michel. The Cathedral remained intact because it was built entirely of compact hewn, limestone. Considerable damage to houses and main buildings of the city of Santo Domingo.</p> <p>(de Utrera, 1995): At 3 PM and at 5PM * * * considerable damage in the homes and principal buildings in the city of Santo Domingo, the shaking continued up to the 25 (of October).</p>	
-70.8359	18.3504	Old Azua	<p>(Sevilla Soler, 1980 quoting letter written by Francisco Rubio y Peñaranda Dec. 30, 1751, Archivo General de Indias, Santo Domingo, ref# 942): <i>Of the other populations or places on the southern part of the island, the earthquakes have been felt in the before mentioned days and times [18 Oct, 19 &amp; 21 Nov.] in the villages of Hinche, Banica, and Azua* * *In Azua, 3 days walk from the capitol, was found to have experienced the most conflict and was completely destroyed.</i></p> <p>(Sevilla Soler, 1980 quoting Luís Josep Pequero, transcribed in 1762, published in 1975): Commentary on hurricane days before the earthquake: <i>On the second visit on August 21 in that the sea for 4 days horribly bellowed and obscurely</i></p>	CHF(9) WHB(9) SISF(8) S&L1992(8) T&R1977(8) C1972(10)

October 18, 1751				
			<p><i>setting it's salty waters, lifting balls of sea-foam that tried to reach the sky from the most distant parts of the sea, they could be seen on the tops of the mountains, leaving their water-marks behind without regard to their to staying within their limit. It fled into the Bay of Ocoa, and it overtook the top of Datiles, that was more than 30 paces from the edge of the coast. This change in the sea was not only observed on the southern band of the island of Hispaniola, but completely all over the island, leaving dried salt around the girth of trees and leaving the beaches putrid with dead fish the sea had brought up.</i></p> <p>(Moreau de St. Méry, 1796): But the earthquake of 1751 brought with it a fatal blow, destroying its houses and bringing the sea up to the point where the city was built.</p> <p>(Hazard, 1873): The old town * * * was destroyed by an earthquake in 1751. This terrible event led the sea up to the very town, when it was abandoned.</p> <p>(Tippenhauer, 1893): Azua was destroyed on October 18th.</p> <p>(Scherer, 1912a): All its houses were thrown down and the sea overwhelmed the town.</p> <p>(de Utrera, 1995). Destruction of the city of Azua.</p>	
-69.0358	18.7625	Old Seibo	<p>(García, 1900): All the populations of the Spanish side were damaged as a result of the earthquake but those that suffered the most were Azua, Santo Domingo, and Santa Cruz del Seibo. * * * The third, or that being Santa Cruz del Seibo was left completely destroyed and such they had to rebuild the city in another location that had a chapel.</p> <p>(Scherer, 1912a): Same as Azua.</p> <p>(de Utrera, 1995): It ruined the city of Seibo mostly in the plantations.</p>	CHF(7) WHB(-) SISF(8) S&L1992(8) T&R1977(8) C1972(10)
-70.9246	18.6107	Sierra Viajama	<p>(Moreau de St. Méry, 1796): Since the furious earthquake October 18, 1751, which began at 3 o'clock in the afternoon it was discovered in the mountains of Viajama, mineral water springs gushed from everywhere and by their nature, suspect that the mountain contains sulfur.</p>	CHF(8) WHB(-)

October 18, 1751				
			(Scherer, 1912a): <i>Northward from Azua in the Sierra Viajama, one of the ranges of Cibao, sulfur springs appeared.</i>	
-71.2325	18.8074	San Juan de Maguana	(Sevilla Soler, 1980 quoting letter written by Francisco Rubio y Peñaranda Dec. 30, 1751, Archivo General de Indias, Santo Domingo, ref# 942): <i>From here [Azua] the nearby villages of Neyba and San Juan, in various places the earth opened and swallowed several animals and one man haven fallen into a crevasse was found to have many injuries.</i>	CHF(7) WHB(-)
-71.4178	18.4832	Neyba	(Sevilla Soler, 1980 quoting letter written by Francisco Rubio y Peñaranda Dec. 30, 1751, Archivo General de Indias, Santo Domingo, ref# 942): <i>From here [Azua] the nearby villages of Neyba and San Juan, in various places the earth opened and swallowed several animals and one man haven fallen into a crevasse was found to have many injuries.</i>	CHF(7) WHB(-)
-71.7074	19.0793	Banica	(Gentleman's Magazine, 1752): * * * a Spanish village, Baniquo was entirely swallowed up, and a sort of saltish lake appeared in its place.  (Sevilla Soler, 1980, quoting letter written by Francisco Rubio y Peñaranda Dec. 30, 1751, Archivo General de Indias, Santo Domingo, ref# 942): <i>Of the other populations or places on the southern part of the island, the earthquakes have been felt in the before mentioned days and times [18 Oct, 19 &amp; 21 Nov.] in the villages of Hinche, Banica, and Azua * * * In Banica we have also received similar news, put since they are such a poor village and infertile, they have only been companions in experiencing fear.</i>	CHF(6) WHB(-)
-72.0107	19.1453	Hinche	(Sevilla Soler, 1980, quoting letter written by Francisco Rubio y Peñaranda Dec. 30, 1751, Archivo General de Indias, Santo Domingo, ref# 942): <i>Of the other populations or places on the southern part of the island, the earthquakes have been felt in the before mentioned days and times [18 Oct, 19 &amp; 21 Nov.] in the villages of Hinche, Banica, and Azua, and the first location with such violence that all the maize crops and large trees in the field were detached from the ground by the roots * * * their church had fallen to the ground it being built of stone.</i>	CHF(7) WHB(7)
-70.5327	19.2239	La Vega	(Sevilla Soler, 1980, quoting letter written by Francisco Rubio y Peñaranda Dec. 30, 1751, Archivo General de Indias, Santo Domingo, ref# 942): <i>"In the Northern section it was equally experienced in the cities of Santiago, Vega, and the town of Cotuy [Cotui]."</i> As a result the majority of the buildings were found to be in ruins, and according to the governor, the majority of the population, including the governor, found themselves forced to live in the barracks.	CHF(6) WHB(7)

October 18, 1751				
-70.7075	19.4502	Santiago de los Caballeros	(Sevilla Soler, 1980 quoting letter written by Francisco Rubio y Peñaranda Dec. 30, 1751, Archivo General de Indias, Santo Domingo, ref# 942): <i>“In the Northern section it was equally experienced in the cities of Santiago, Vega, and the town of Cotuy [Cotui].”</i> As a result the majority of the buildings were found to be in ruins, and according to the governor, the majority of the population, including the governor, found themselves forced to live in the barracks.	CHF(6) WHB(7)
-70.1531	19.0577	Cotui	(Sevilla Soler, 1980 quoting letter written by Francisco Rubio y Peñaranda Dec. 30, 1751, Archivo General de Indias, Santo Domingo, ref# 942): <i>“In the Northern section it was equally experienced in the cities of Santiago, Vega, and the town of Cotuy [Cotui].”</i> As a result the majority of the buildings were found to be in ruins, and according to the governor, the majority of the population, including the governor, found themselves forced to live in the barracks.	CHF(6) WHB(7)
-72.3400	18.5400	Port-au-Prince	<p>(Gentleman's Magazine, 1752): On Oct, 18th last, about 2 in the afternoon, * * * the earth shook violently; a steeple was thrown down and a few houses demolished in the French part of the island.</p> <p>(de Mairan, 1756): On the 18 of October, we felt one violent enough on the French side, but caused little damage. There were others frequent but barely felt until the 31 and the earth continued to have strong movement, though not marked tremors until [Nov] 21.</p> <p>(Moreau de St. Méry, 1798): On the 18 of October 1751, at two o'clock in the afternoon * * * the earth shook in Port-au-Prince with two violent shakes that lasted 3 minutes.</p> <p>(Scherer, 1912a): The earth trembled * * * with two violent shocks, which lasted 3 minutes.</p>	CHF(5) WHB(6) SISF(7)
-72.2273	18.5758	Croix de Bouquets	<p>(Moreau de St. Méry, 1798): On the 18 of October at two in the afternoon, (the shaking) was very violent.</p> <p>(Scherer, 1912a): The earth shook violently.</p>	CHF(5) WHB(5) SISF(7)
-72.2006	19.7616	Cap Haitien	(Gentleman's Magazine, 1753): * * * but on the 18th was a terrible shock: At two in the afternoon of that day the earth shook twice (with a very short interval) for at least three minutes each time. These shocks were so violent that all were frightened and quitted their houses. At 5 in the evening we were alarmed by another shock, which made us fearful of passing the night in bed.	CHF(4) WHB(4) SISF(6)

October 18, 1751				
			(Moreau de St. Méry, 1798): They have felt strongly, though without injury.	

October 28, 1751				
<b>Time:</b> Various times during the day.				
<b>Phenomenon Notes:</b> Several aftershocks felt on this day.				
<b>Number of Observations:</b> 3				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(Sevilla Soler, 1980, quoting Luís Josep Pequero, transcribed in 1762, published in 1975): * * * <i>and the earthquakes continued until the 28 of the same month.</i> [October]  (Moreau de St. Méry, 1798): On the 28, they experienced 3 tremors.  (de Utrera, 1995): Earthquake.	-
-72.3400	18.5400	Port-au-Prince	(Tippenhauer, 1893): At 8 in the evening 3 strong shocks.	-
-72.2273	18.5758	Croix de Bouquets	(Tippenhauer, 1893): At 2:30 in the morning.	-
-	-	French side of island	(de Mairan, 1756): There were others frequent but barely felt until the 31 and the earth continued to have strong movement, though not marked tremors until [Nov] 21.	-

October 29, 1751				
<b>Time:</b> One shock at 8:00 PM Cap Haitien local time, other time unknown				
<b>Phenomenon Notes:</b> more aftershocks				
<b>Number of Observations:</b> 3				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(Moreau de St. Méry, 1798): On the 29, 2 (tremors were experienced).  (Tippenhauer, 1893): Two strong shocks.  (de Utrera, 1995): Earthquake.	-
-72.3400	18.5400	Port-au-Prince	(Tippenhauer, 1893): Two strong shocks.	-
-72.2006	19.7616	Cap Haitien	(Gentleman's Magazine, 1753): On October 29, at 8 in the evening, was another shock.	-

November 1, 1751				
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November 1, 1751				
<b>Time:</b> Unknown				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(Tippenhauer, 1893): Tremor.  (de Utrera, 1995): Frequent tremors from the 1 to the 22 of November.	-

November 19, 1751				
<b>Time:</b> 3:20 PM, Cape Haitien local time				
<b>Phenomenon Notes:</b> Possible foreshock for the earthquakes of November 21 and 22.				
<b>Number of Observations:</b> 5				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(Sevilla Soler, 1980, quoting letter written by Francisco Rubio y Peñaranda Dec. 30, 1751, Archivo General de Indias, Santo Domingo, ref# 942): <i>Then came the 19 and 21 of November in which they [earthquakes] returned with intensity especially on this last day.</i>  (Moreau de St. Méry, 1798): [...] and on the 19 of November, experienced two more strong [earthquakes].  (de Utrera, 1995): Frequent tremors from the 1 to the 22 of November; violent on those of the 19 of November all over the island.	-
-72.0107	19.1453	Hinche	(Sevilla Soler, 1980, quoting letter written by Francisco Rubio y Peñaranda Dec. 30, 1751, Archivo General de Indias, Santo Domingo, ref# 942): <i>Of the other populations or places on the southern part of the island, the earthquakes have been felt in the before mentioned days and times [18 Oct, 19 &amp; 21 Nov.] in the villages of Hinche, Banica, and Azua, and the first location with such violence that all the maize crops and large trees in the field were detached from the ground by the roots * * * their church had fallen to the ground it being built of stone.</i>	-
-71.7074	19.0793	Banica	(Sevilla Soler, 1980, quoting letter written by Francisco Rubio y Peñaranda Dec. 30, 1751, Archivo General de Indias, Santo Domingo, ref# 942): <i>Of the other populations or places on the southern part of the island, the earthquakes have been felt in the before mentioned days and times [18 Oct, 19 &amp; 21 Nov.] in the villages of Hinche, Banica, and Azua * * * In Banica we have also received similar news, put since they are such a poor village and infertile, they have only been companions in experiencing fear.</i>	-

November 19, 1751				
-72.3400	18.5400	Port-au-Prince	(Tippenhauer, 1893): 2 strong shocks.	-
-72.2006	19.7616	Cap Haitien	(Gentleman's Magazine, 1753): * * * on Nov. 19, at 20 minutes past 3 in the afternoon was another shock which was violent but of short duration.	-

November 21, 1751				
<p><b>Time:</b> About 8:00 in the morning Port-au-Prince local time</p> <p><b>Land Surface Effects:</b> Crevasses, Sulfur (?) smelling springs and sections of mountains collapsed in the Cul-de-Sac area. Rivers in this area were noted to have had their flows altered as a result.</p> <p><b>Aftershocks:</b> Aftershocks were felt that same day in Cap Haitien at 10:00 AM and 5:00 PM.</p> <p><b>Phenomenon Notes:</b> Almost completely destroyed the town of Port-au-Prince. In some locations, a noise similar to a cannon being fired accompanied this event and its subsequent aftershocks.</p> <p><b>Number of Observations:</b> 14</p>				
Longitude	Latitude	City	Description	Intensity
-72.3400	18.5400	Port-au-Prince	<p>(Gentleman's Magazine, 1752): Nov 21, about 8 in the morning, during a profound calm, was felt a slight shock which increased to such violence that almost all the stone houses at Princes Port were thrown down, and the timber houses stood but little longer.</p> <p>(de Mairan, 1756): The city of Port-au-Prince was totally destroyed too except for 19 houses and all the homes in the country-side in the neighborhoods we have mentioned were almost completely thrown down.</p> <p>(Moreau de St. Méry, 1798): A light shaking * * * more violent shaking followed, only one of the brickwork houses did not topple. Some wooden ones fell. The barracks, the general store, and a wing of the quartermaster's (army supply area) fell down * * * it destroyed three quarters of the buildings * * * all the motion contained itself in an East to West direction.</p> <p>(Tippenhauer, 1893): At 7:50 in the morning, 8 in the morning and 10 in the morning, so strong that houses fell.</p> <p>(Scherer, 1912a): Of one hundred houses three quarters were constructed of masonry. Buildings of all sorts of construction, even the strongest, were overthrown. One remained standing. A noise like that of a cannon underneath the ground seemed to forewarn fresh disturbances.</p>	CHF(9) WHB(9) SISF(8) S&L1992(10) T&R1977(10)
-72.2808	18.6042	Cul-de-Sac	(Gentleman's Magazine, 1752): * * * in the plain called Cul de Sac, sugar mills and refining houses were thrown down, apertures were made in the	CHF(8) WHB(8) SISF(8)

November 21, 1751				
			<p>ground, whence issued fetid springs; the tops of three mountains crumbled away, and choked up a river, which has since taken another course; in the plain near the cape above 25000 pots of sugar, etc. were broken and buried under the ruins.</p> <p>(de Mairan, 1756): That day a new earthquake stronger than any before was felt all over the neighborhoods of the island. The shaking was very violent, occurred at a quarter to eight in the morning, and it lasted 5 minutes. The whole plain of the Cul-de-Sac was ruined, and so was Mirebalais, l'Artibonite, Boucassin and the lake itself.</p> <p>(Moreau de St. Méry, 1798): Then on the 21st of November at 8 in the morning, houses and factories were all knocked down in several places in the plain of Cul-de-Sac. Crevasses formed in various places with new sources of foul water, portions of mountains collapsed, forced the rivers to form other beds.</p> <p>(Tippenhauer, 1893): At 7:50 in the morning, 8 in the morning and 10 in the morning, so strong that houses fell.</p> <p>(Scherer, 1912a, translation of Moreau de St. Méry, 1798): Houses and factories were completely thrown down in several places on the plain. Crevices were formed at various points and abundant springs of nauseous water broke forth from them. Shocks were in an East-West direction. In the mountains great landslides were reported and the beds of rivers changed their direction.</p>	
-72.2006	19.7616	Cap Haitien	<p>(Gentleman's Magazine, 1753): But the most dreadful shock of all was on Nov. 21, at 8 in the morning, when we felt the earthquake and tremble for above a minute, after which it shook so violently that one would have thought the whole island was bout to be rent in twain, or shattered to pieces. This furious shock lasted two minutes, and then happily ceased, for if it had continued one minute longer there would not have been a single house left standing. * * * The priests were obliged to suspend the celebration of mass; the candlesticks upon the altars were overthrown. The houses rocked, the walls were cracked and opened, and they seemed to be on the point of falling.</p> <p>(Moreau de St. Méry, 1798): The earth also shook this whole time * * * but</p>	CHF(4) WHB(4) SISF(7.5)



November 21, 1751				
			not a single house fell * * * nevertheless, some people rushed out in fright, jumping out first-floor windows into the streets.	
-72.6334	18.5111	Leogane	<p>(de Mairan, 1756): Leogane and the rest of the Cap [Cap Haitien] were less mistreated.</p> <p>(Moreau de St. Méry, 1798): Things passed more quietly; three stores were badly damaged and the church also suffered * * * the city of Leogane had suffered the earthquake of 1751; it lost administration, council, and royal offices as well as much of its luster.</p> <p>(Tippenhauer, 1893): At 7:50 in the morning, 8 in the morning and 10 in the morning, so strong that houses fell.</p>	CHF(6) WHB(6) SISF(7.5)
-72.6929	19.4458	Gonaïves	<p>(Moreau de St. Méry, 1798): The ravages of the quakes were so angry [strong] that they were felt from Leogane to Gonaïves, the movements East to West.</p> <p>(Scherer, 1912a): Same shock felt, without causing damage.</p>	CHF(4) WHB(4)
-72.5126	18.7701	Arcahaie	<p>(Moreau de St. Méry, 1798): The earthquake of 1751 was known to have caused damages * * * it cracked the buildings like they did in 1770.</p> <p>(Scherer, 1912a): Felt also.</p>	CHF(5) WHB(5) SISF(7.5)
-71.8333	19.6667	Fort Dauphin (Fort Liberte)	(Gentleman's Magazine, 1752): * * * in the district of Fort Dauphin many sugar works and dwelling houses were destroyed. The consternation of the people is inexpressible, most of the inhabitants of the towns pass the night in the fields, the value of plantations is falling away, and everybody talks of returning to France.	CHF(5.5) WHB(6) SISF(7.5)
-72.7000	19.1167	Saint Marc	<p>(Moreau de St. Méry, 1798): The earthquake of November 21, 1751 a few walls cracked in Saint-Marc.</p> <p>(Tippenhauer, 1893): At 7:50 in the morning, 8 in the morning and 10 in the morning, so strong that houses fell.</p>	CHF(5) WHB(5) SISF(7)
-72.4500	18.7167	Boucassin	(de Mairan, 1756): * * * the whole plain of the Cul-de-Sac was ruined as so was Mirebalais, l'Artibonite, Boucassin and the lake itself.	CHF(6) WHB(7) SISF(8)
-72.6833	19.2833	Plain de L'Artibonite	(de Mairan, 1756): * * * the whole plain of the Cul-de-Sac was ruined as so was Mirebalais, l'Artibonite, Boucassin and the lake itself.	CHF(6) WHB(7)

November 21, 1751				
				SISF(8)
-72.1040	18.8336	Mirebalais	(de Mairan, 1756): * * * the whole plain of the Cul-de-Sac was ruined as so was Mirebalais, l' Artibonite, Boucassin and the lake itself.	CHF(6) WHB(7)
-69.8877	18.4722	Santo Domingo	<p>(Sevilla Soler, 1980, quoting letter written by Francisco Rubio y Peñaranda Dec. 30, 1751, Archivo General de Indias, Santo Domingo, ref# 942): <i>Then came the 19 and 21 of November in which they [earthquakes] returned with such intensity, especially on the last date around 8 in the morning, with such long duration, that in general, or the rest replied, lasted about 8 minutes and such that if they had been any stronger like the first ones [18] not a single building would be standing.</i></p> <p>(Sevilla Soler, 1980, quoting Luís Josep Pequero, transcribed in 1762, published in 1975): <i>On the 21 of the month of November * * * between 9 and 10 o'clock in the morning it would last a quarter of an hour the repetitive rumbling on an earthquake such that not on your feet or knees could you stay level to the ground, such was the confusion * * * it wasn't as big or as scary as the first one that was completely unexpected.</i></p> <p>(Mallet and Mallet, 1858): A trembling motion lasting a minute and then a violent shock of two minutes duration.</p>	CHF(4) WHB(5) C1972(3)
-72.0170	19.1453	Hinche	(Sevilla Soler, 1980, quoting letter written by Francisco Rubio y Peñaranda Dec. 30, 1751, Archivo General de Indias, Santo Domingo, ref# 942): <i>Of the other populations or places on the southern part of the island, the earthquakes have been felt in the before mentioned days and times [18 Oct, 19 &amp; 21 Nov.] in the villages of Hinche, Banica, and Azua, and the first location with such violence that all the maize crops and large trees in the field were detached from the ground by the roots * * * their church had fallen to the ground it being built of stone.</i>	CHF(4) WHB(4)
-71.7074	19.0793	Banica	(Sevilla Soler, 1980, quoting letter written by Francisco Rubio y Peñaranda Dec. 30, 1751, Archivo General de Indias, Santo Domingo, ref# 942): <i>Of the other populations or places on the southern part of the island, the earthquakes have been felt in the before mentioned days and times [18 Oct, 19 &amp; 21 Nov.] in the villages of Hinche, Banica, and Azua * * * In Banica we have also received similar news, put since they are such a poor village and infertile, they have only been companions in experiencing fear.</i>	CHF(4) WHB(4)

<b>November 22, 1751</b>				
<b>Time:</b> Various; 4:00 AM, 6:00 AM, 3:00 PM, 4:00 PM, 8:00 PM, and 11:00 PM Cap Haitien local time				
<b>Phenomenon Notes:</b> The largest aftershock felt in Port-au-Prince also accompanied by cannon-like sounds.				
<b>Number of Observations:</b> 4				
Longitude	Latitude	City	Description	Intensity
-72.3400	18.5400	Port-au-Prince	(Moreau de St. Méry, 1798): * * * on the 22, the structures that survived were destroyed and from the 19 to the 22 the earth was not stable for a moment. Night and day a noise like a cannon announced new underground agitations. From 22 [Nov.] to 8 December, there were 25 shocks * * * the shocks were significant from Leogane to Gonaives.  (Tippenhauer, 1893): At 4 to 6 in the early morning and at 3 to 11 in the afternoon and evening, direction east to west.	-
-72.6334	18.5111	Leogane	(Moreau de St. Méry, 1798): From 22 to 8 December, there were 25 shocks * * * the shocks were significant from Leogane to Gonaives.	-
-72.6929	19.4458	Gonaives	(Moreau de St. Méry, 1798): From 22 to 8 December, there were 25 shocks * * * the shocks were significant from Leogane to Gonaives.	-
-72.2006	19.7616	Cap Haitien	(Gentleman's Magazine, 1753): Nov. 22, 1751 At 4 and 6 A.M. at 3, 4, 8, and 11 P.M. – The shock at 3 o'clock this day was as violent as that of October 18.	-
-69.8877	18.4722	Santo Domingo	(de Utrera, 1995): On the 22 of November felt all over the island with destruction on the western side.	-

<b>November 23, 1751 to November 30, 1751</b>				
<b>Time:</b> Various times				
<b>Phenomenon Notes:</b> Aftershocks felt in the month of November.				
<b>Number of Observations:</b> 4				
Longitude	Latitude	City	Description	Intensity
-72.3400	18.5400	Port-au-Prince	(Moreau de St. Méry, 1798): From 22 to 8 December, there were 25 shocks * * * the shocks were significant from Leogane to Gonaives.  (Tippenhauer, 1893): 25 shocks were felt in total from November 23 to December 5, East to West in direction; November 28 - at 8:45 in the morning, in east to west direction, shock felt; November 30 - shock felt, in east to west direction.	-
-72.6334	18.5111	Leogane	(Moreau de St. Méry, 1798): From 22 to 8 December, there were 25 shocks *	-

November 23, 1751 to November 30, 1751				
			<p>* * the shocks were significant from Leogane to Gonaives.</p> <p>(Tippenhauer, 1893): 25 shocks were felt in total from November 23 to December 5, East to West in direction; November 28 - at 8:45 in the morning, in east to west direction, shock felt; November 30 - shock felt, in east to west direction.</p>	
-72.6929	19.4458	Gonaives	<p>(Moreau de St. Méry, 1798): From 22 to 8 December, there were 25 shocks * * * the shocks were significant from Leogane to Gonaives.</p> <p>(Tippenhauer, 1893): 25 shocks were felt in total from November 23 to December 5, East to West in direction; November 28 - at 8:45 in the morning, in east to west direction, shock felt; November 30 - shock felt, in east to west direction.</p>	-
-72.2006	19.7616	Cap Haitien	<p>(Gentleman's Magazine, 1753): Nov. 23 At 1 ½ and 5 A.M. and at 1 ¾ and 3h. 20m. P.M. [Nov.] 24 At 6 ½, 7 1/2, 10 and 11 ½, A.M. [Nov.] 25 At 6 ½, 7 ¼ A.M. and at 2 and 3 P.M. [Nov.] 26 At 4 ½, 7 ¾, and 8 ½ A.M. [Nov.] 28 At 8 ¾ A.M. – We had two shocks so very terrible that they who hitherto had been hardy enough to lie in their beds (the greatest part of the inhabitants having for 15 days before slept under tents in the streets) were resolved to quit them. We then thought indeed that we should have been all destroyed. [Nov.] 30 At 8 ¼ A.M. A very violent shock.</p> <p>(Tippenhauer, 1893): 5 shocks were felt in total from November 23 to December 5, East to West in direction; November 28 - at 8:45 in the morning, in east to west direction, shock felt; November 30 - shock felt, in east to west direction.</p>	-

December 1, 1751 to January, 1752	
<p><b>Time:</b> Various times</p> <p><b>Phenomenon Notes:</b> Aftershocks felt in the month of December and into January of 1752. The account written by de Langrene living in Cap Haitien (then Cap Francois) dated December 16, 1751 and published in the July 1753 issue of The Gentleman's Magazine and has additional descriptions of damage from the 1751 earthquakes but he does not attribute an exact date to when they happened. Some of de Langrene's descriptions include: In the isle of Cows [Ile a Vache (-73.64, 18.07), southeast of Les Cayes] the cottages are all so shattered that they must be rebuilt * * * A village upon the sea coast two leagues from St. Domingo, the Spanish capital, was entirely swallowed up, but so gradually that the inhabitants had time to remove their effects, sloops and canoes at present sail over the place where this village stood * * * Near Banie [Bani] a volcano broke out and threw out fire, smoke, water, and stones, but it hath disappeared, and where it was there is now a salt water lake, the bottom whereof cannot be found * * * The ships that arrived about the time of the great shocks, felt them at 100 leagues distance from the island. The sailors perceived such an agitation in the sea as made them imagine that the</p>	

<b>December 1, 1751 to January, 1752</b>				
vessel was foundering or that she struck. All the vessels at anchor in our road [Cap Haitien] were very much tossed and agitated, and everything in their holds overturned. <b>Number of Observations: 5</b>				
Longitude	Latitude	City	Description	Intensity
-72.3400	18.5400	Port-au-Prince	(Moreau de St. Méry, 1798): From 22 to 8 December, there were 25 shocks.  (Tippenhauer, 1893): December 1 - at 7 in the morning, shock felt, in east to west direction; December 5 - at 2 in the morning, shock felt, in east to west direction; December 8, 1751 – shock; January 1752 – shock.	-
-72.6334	18.5111	Leogane	(Tippenhauer, 1893): December 1 - at 7 in the morning, shock felt, in east to west direction; December 5 - at 2 in the morning, shock felt, in east to west direction.	-
-72.6929	19.4458	Gonaives	(Tippenhauer, 1893): December 1 - at 7 in the morning, shock felt, in east to west direction; December 5 - at 2 in the morning, shock felt, in east to west direction.	-
-72.2006	19.7616	Cap Haitien	(Gentleman's Magazine, 1753): Dec 1. At 7 P.M. A quick strong tremor. [Dec.] 5 At 2 A.M. [Dec.] 12 At 7 ½ A.M. A slight shock.  (Tippenhauer, 1893): December 1 - at 7 in the morning, shock felt, in east to west direction; December 5 - at 2 in the morning, shock felt, in east to west direction.	-
-69.8877	18.4722	Santo Domingo	(Tippenhauer, 1893): December 12, 1751 at 7:30 in the morning, shock.	-
<b>1753, 1754 and Nov (?) 1755</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> Tippenhauer (1893) notes a November (?) for the 1755 earthquake. <b>Number of Observations: 1</b>				
Longitude	Latitude	City	Description	Intensity
-	-	Hispaniola island	(Maret, 1783): We have among our academics a witness to those [earthquakes] that shook the island of St. Domingo in 1753, and that shook again in 1754 and 1755.  (Tippenhauer, 1893): Shock, Haiti.  (de Utrera, 1995): Island.	-

<b>March 8, 1764</b>				
<b>Time:</b> 10:55 in the evening, Saint Marc local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.7000	19.1167	Saint Marc	(Moreau de St. Méry, 1798): On March 8, 1764, we felt there, at 10:55 in the evening, two shocks from earthquakes that each lasted 15 seconds.  (Tippenhauer, 1893): At 10 hrs 55 minutes in the evening, lasting 15 seconds, 2 shocks.	-

<b>September 1765</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-72.7709	18.4256	Grand Goave	(Moreau de St. Méry, 1798): At the beginning of September 1765, there were several shocks of an earthquake.  (Tippenhauer, 1893): Earthquake.	-
-72.6334	18.5111	Leogane	(Moreau de St. Méry, 1798): * * * in 1765 the earth shook five times.	-

<b>January 27, 1766</b>				
<b>Time:</b> 6:30 in the evening, Cap Haitien local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.2006	19.7616	Cap Haitien	(Moreau de St. Méry, 1798): The earth shook on 27 January, 1766, at half past 6 o'clock in the evening, and the shaking was quite strong.  (Tippenhauer, 1893): At 6:30, quite strong.	-

<b>January 30, 1766</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity

-	-	Spanish half of island	(Perrey, 1857): Spanish part. (Tippenhauer, 1893): January 30, Spanish part. (de Utrera, 1995): January 30, eastern part.	-
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April 26, 1766				
<b>Time:</b> Few minutes after 9:00 in the evening, Cap Haitien local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.2006	19.7616	Cap Haitien	(Moreau de St. Méry, 1798): There was another shake, a bit violent, on April 26 a few minutes after 9 o'clock in the evening.  (Tippenhauer, 1893): April 26, at 9:08 and 9:15, Cap Haitien, weakly.	-

December 27, 1767				
<b>Time:</b> 4:30 in the morning, Port-au-Prince local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3400	18.5400	Port-au-Prince	(Moreau de St. Méry, 1798): The land was quiet until December 27, 1767; the earth trembled very much at half past four in the morning but without causing any damage.  (Moreau de Jonnes, 1822): In Santo Domingo island.  (Tippenhauer, 1893): December 27, 4:30 early, Port-au-Prince, light shock without damage.	-

January 21, 1768				
<b>Time:</b> 6:30 in the evening, Cap Haitien local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.2006	19.7616	Cap Haitien	(Moreau de Jonnes, 1822): 20 January. [on the island]  (Perrey, 1843): 21 of January, 6:30 in the evening, in Cap Français, a slight	-

January 21, 1768				
			shaking from West to East. (Tippenhauer, 1893): January 21, 6:30 early, West to East, Cap Haitien.	

October 4, 1768				
<b>Time:</b> Evening <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.8668	18.4315	Petit Goave	(Moreau de St. Méry, 1798): On October 4, 1768 in the evening, there were two strong shocks from earthquakes.  (Tippenhauer, 1893): October 4, evening, Petit Goave.	-

October 10, 1768				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3400	18.5400	Port-au-Prince	(Moreau de St. Méry, 1798): On October 10, 1768, there were three shocks.  (Moreau de Jonnes, 1822): 10 October. [on the island]  (Tippenhauer, 1893): October 10, Port-au-Prince, 3 shocks.	-

August 14, 1769				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3400	18.5400	Port-au-Prince	(Moreau de St. Méry, 1798): * * * and one [earthquake] on August 14, 1769.  (Tippenhauer, 1893): August 14, Port-au-Prince, 1 shock.	-

January 20, 1770 and April 12, 1770				
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January 20, 1770 and April 12, 1770				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> possible foreshocks? <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3400	18.5400	Port-au-Prince	<p>(Moreau de St. Méry, 1798): The earth shook on January 20 and on April 12, 1770.</p> <p>(Moreau de Jonnes, 1822): April 12, in Santo Domingo [island].</p> <p>(Tippenhauer, 1893): January 20, Port-au-Prince, soft shaking of the ground; April 12.</p>	-

June 3, 1770				
<b>Time:</b> About 7:30 in the evening, Port-au-Prince local time (Pentecost – Christian holiday) <b>Land Surface Observations:</b> Crevasses formed around Enriquillo and Laguna lakes, landslides occurred somewhere on the Grand Riviere near Leogane blocking river flow for several hours. Springs appeared in the Artibonite region. Liquefaction effects were observed in the Croix-de-Bouquets area. <b>Tsunami:</b> The sea flowed in about a league and a half up into the land (Gentleman's Magazine, 1770b). Another account from Port-au-Prince describes: the sea rose twenty feet high by a tidal wave and it came ravaging into the land ¼ of a league. (Hippeau, 1864) <b>Aftershocks:</b> For a period of a month after the main earthquake, aftershocks were felt on the island. <b>Phenomenon Notes:</b> According to the historian Garcia (1900), in 1770 * * * an earthquake, like no other ever was felt in the Antilles, which was felt from one extreme part of the island to the other on June 3, and as a consequence the whole population in general experienced either great or little damage. Potentially the major towns on the Spanish side of the island felt this earthquake as suggested in The Gentleman's Magazine (1770b): This earthquake was more severely felt at St. Domingo, where the whole island was agitated; and in the Annual Register (1771b): Letters from St. Domingo confirm the melancholy account, of the calamity which happened there on the 3d of last month. It is said the earthquake extended thirty-five leagues. <b>Number of Observations:</b> 34				
Longitude	Latitude	City	Description	Intensity
-72.3400	18.5400	Port-au-Prince	<p>(Moreau de St. Méry, 1798): It was June 3, of the same year [1770], day of the Pentecost. At a quarter after 7 in the evening the entire island was hit by an earthquake that was preceded by a noise that sounded like a roar. The first two shocks, felt in Port-au-Prince were followed very closely together lasted less than four minutes and during this succession of undulating motion from East to West pulsation, the entire city was thrown down; the gun-powder room alone resisted and opened a little. * * * It was said that the earth boiled and that it became liquid, for this movement resembled that of the waves of the ocean. The earth was open in thousand places * * * soldiers were buried under the ruins of the barracks and hospitals, and</p>	CHF(9) WHB(9) SISF(8) S&L1992(10) T&R1977(10)

June 3, 1770				
			<p>prisoners were crushed by the debris of the jail. The public edifices, such as the Government building, the Intendancy, the Council building, and most solid structures, like the new church * * * the powder magazine, and private houses were no more than heaps. Only the rows of trees made the streets recognizable * * * The earthquake toppled the council building except the south wing, which was being repaired in its lower part * * * The hospital was overthrown in 1770 by the earthquake.</p> <p>(Moreau de Jonnes, 1822): June 3, at 7 o'clock in the evening, in [Hispaniola] and most of the West Indies; Leogane, Petit-Goave and Port-au-Prince, were destroyed, the shocks were in the East to West direction. For a month, there was not a day that shocks were not felt.</p> <p>(Southey, 1827): * * * but the city of Port-au-Prince was entirely destroyed; not one house was left standing and above 500 persons were buried in the ruins * * * The plains of Leogane, Port-au-Prince, Petit-Goave, suffered considerably – all the sugar works were destroyed.</p> <p>(Perrey, 1847): June 3, in the western part of the island of Santo Domingo, earthquake. The first tremor began at 7:03 in the evening and lasted 3 minutes in an East to West direction. The aftershocks have been around the compass. All buildings in Port-au-Prince and other places have been thrown down * * * The shocks continued until June 5, almost without interruption.</p> <p>(Scherer, 1912a): At a quarter after seven o'clock in the evening, the whole island experienced an earthquake, preceded by a dull noise like rumbling, and by considerable agitation directed from East to West * * * being all outdoors or on their porches had time at the first sound to rush into the middle of the street, which were broad and bordered by elms.</p>	
-72.6929	19.4458	Leogane	<p>(Moreau de St. Méry, 1798): The church, the presbytery, the Government building, the powder magazine, the military hospital, fell to the ground * * * the rest of the city presented only ruins * * * the plain did not suffer less * * * buildings on the sugar and coffee plantations were destroyed or considerably damaged.</p> <p>(Moreau de St. Méry, 1798; Scherer, 1912a): Several springs dried up and didn't flow again for ten years. Road from Leogane to Jacmel was entirely blocked</p>	<p>CHF(9) WHB(-) SISF(8) S&amp;L1992(10) T&amp;R1977(10)</p>

June 3, 1770				
			<p>by landslides and rock falls.</p> <p>(Moreau de Jonnes, 1822): June 3, at 7 o'clock in the evening, in [Hispaniola] and most of the West Indies; Leogane, Petit-Goave and Port-au-Prince, were destroyed, the shock were in the East to West direction. For a month, there was not a day that shocks were not felt.</p> <p>(Southey, 1827): Petit Goave and Leogane were also destroyed. The plains of Leogane, Port-au-Prince, Petit-Goave, suffered considerably – all the sugar works were destroyed.</p>	
-72.2273	18.5758	Croix-de-Bouquets	<p>(Moreau de St. Méry, 1798): Finally, the dreadful earthquake of June 3, 1770 overthrew all the houses and all the factories; the earth opened and furrowed in a number of places. The mountains showed signs of the destruction. The Great River that had disappeared returned 16 hours later with impetuosity.</p> <p>(Southey, 1827): * * * and La Croix de Bouquet, a small town, the greatest part of its inhabitants was swallowed up. The earthquake extended thirty-five leagues, and the sea rose a league and a half up into the island.</p>	SISF(8)
-72.2808	18.6042	Cul-de-Sac	<p>(Moreau de St. Méry, 1798): * * * the tremors were so violent across the Cul-de-Sac; we thought that the whole island had arrived to the moment of its destruction.</p> <p>(Scherer, 1912a): The misfortunes of the plain of the Cul de Sac were no less than those of the city [Port-au-Prince]. All the houses and the factories were thrown down.</p>	CHF(8) WHB(-) SISF(7.5)
-72.4105	18.5528	Carrefour	<p>(Scherer, 1912a): The districts of Trou Bordet and of Lamentin (Carrefour, Mariani, Cresser) underwent, with their plantations and their factories, the same accidents as the Cul de Sac. Everything was destroyed or overthrown and there were again several deaths to mourn.</p>	CHF(7.5) WHB(-) SISF(8)
-72.6101	18.5383	Mariani	<p>(Scherer, 1912a): The districts of Trou Bordet and of Lamentin (Carrefour, Mariani, Cresser) underwent, with their plantations and their factories, the same accidents as the Cul de Sac. Everything was destroyed or overthrown and there were again several deaths to mourn.</p>	CHF(7.5) WHB(-) SISF(8)
-72.5290	18.5379	Gressier	<p>(Scherer, 1912a): The districts of Trou Bordet and of Lamentin (Carrefour, Mariani, Cresser) underwent, with their plantations and their factories, the same accidents as the Cul de Sac. Everything was destroyed or overthrown</p>	CHF(7.5) WHB(-)

June 3, 1770				
			and there were again several deaths to mourn.	
-72.7709	18.4256	Grand Goave	(Moreau de St. Méry, 1798): In the earthquake of 1770, the sea, as I noted earlier, a portion of the land submerged at the bottom of the hill La Saline, and parts of Tapion [mountain] collapsed, while other places formed sink holes which interrupted the path.	-
-72.3297	18.5324	Turgeau	(Scherer, 1912a): As for the effects on the earth itself, the spring of Turgeau was diminished by half its flow and about the capital the hills even subsided.	CHF(6) WHB(-)
-72.1892	18.4909	Grande Riviere	(Moreau de St. Méry, 1798): * * * ceased to flow for sixteen hours and began again with a flood of water.	CHF(6) WHB(-)
-72.5126	18.7701	Arcahaie	(Moreau de St. Méry, 1798): The earthquake of 1751, it cracked the buildings like they did in June 3, 1770, the masonry from sugar mills and the water drains * * * disappeared.  (Scherer, 1912a): The market town of Arcahaie had only slight losses. The church was badly damaged and rendered unfit for use; it only resisted, thanks to the buttresses with which it was shored up. Altogether the repairs cost the inhabitants more than eighty thousand francs. Fifteen sugar refineries were destroyed in the plain and a house in the Canton des Vases partly submerged.	CHF(7) WHB(7) SISF(7)
-72.1040	18.8336	Mirebalais	(Scherer, 1912a): At Mirebalais a very fine church was slightly damaged, but the curé [priest] and the inhabitants abandoned it in excessive fear and before any appearance of danger.	CHF(6) WHB(6) SISF(7)
-72.3953	18.2311	Cayes Jacmel	(Moreau de St. Méry, 1798): The earthquake of 1770 damaged the indigo plantations.	CHF(7) WHB(7) SISF(7.5)
-72.5345	18.2359	Jacmel	(Moreau de St. Méry, 1798): The earthquake of 1770 threw down the houses in the city made of masonry, while others suffered more or less, the vessels storing the indigo were damaged; a lot of indigo was lost.	CHF(7.5) WHB(7) SISF(7.5)
-73.3971	18.2816	Aquin	(Moreau de St. Méry, 1798): The earthquake of 1770 did little damage although it did knock down the church.	CHF(6.5) WHB(7) SISF(7)
-73.6552	18.2992	Cavaillon	(Moreau de St. Méry, 1798): The earthquake of 1770 cracked the buildings and not much was thrown down since Cavaillon is small.	CHF(7) WHB(7) SISF(7)
-73.5466	18.2630	Saint Louis du Sud	(Moreau de St. Méry, 1798): The earthquake of 1770, it caused a few	CHF(7)

June 3, 1770				
			damages.	WHB(6.5) SISF(6)
-73.3447	18.5028	Anse-a-Veau	(Moreau de St. Méry, 1798): The church that is made of masonry * * * it was very cracked by the earthquake of 1770 and the presbytery and the buildings seem to be marking the North-Western point of the Southern part where this event made itself cruelly felt in a remarkable way.	CHF(7) WHB(6.5) SISF(7)
-72.0984	18.3755	Saint Michel du Sud	(Scherer, 1912a): St. Michel du Sud did indeed have its church and its presbytery badly dealt with.	CHF(7) WHB(6.5) SISF(6.5)
-72.8668	18.4315	Petit Goave	(Moreau de Jonnes, 1822): June 3, at 7 o'clock in the evening, in [Hispaniola] and most of the West Indies; Leogane, Petit-Goave and Port-au-Prince, were destroyed, the shocks were in the East to West direction. For a month, there was not a day that shocks were not felt.  (Southey, 1827): Petit Goave and Leogane were also destroyed. The plains of Leogane, Port-au-Prince, Petit-Goave, suffered considerably – all the sugar works were destroyed.  (Scherer, 1912a): Petit Goave also did not escape unharmed. A single house remained standing and in the city all the important buildings, the fort even, was destroyed. * * * At Petit Goave enormous masses of earth slipped from Mont Tapion and made the roads impassable.	CHF(9) WHB(9) SISF(8) S&L1992(8)
-73.7500	18.1945	Les Cayes	(Moreau de St. Méry, 1798): At the same hour as in Port-au-Prince, we felt in Cayes the earthquake of June 3, 1770. The buildings for inventory made of masonry suffered greatly and some of them fell. The barracks that housed three and a half companies were rendered inhabitable. The cross that is above the facade of the church was turned in a direction that put it at a right angle from its ordinary direction. The earth opened in several places near the sea and part of the shore was lowered nearly six inches. Out of these openings came a sulfurous smell and it seemed to come from several sources. Half an hour after the earthquake, there was a fairly violent jerk and a minute later a very small one and that was the last one. The little Carpes River grew nine feet and overcame its banks flooding the fields. It then returned to its natural course. The plain suffered very little and during this earthquake nobody lost their life.	CHF(7) WHB(7) SISF(7) S&L1992(7)
-74.3959	18.3242	Tiburon	(Scherer, 1912a): The earthquake was felt severely in the extreme west, at Tiburon and at the island Pierre Joseph.	CHF(6) WHB(-)

June 3, 1770				
				S&L1992(6) T&R1977(6)
-74.4673	18.4588	Isle Pierre Joseph	(Scherer, 1912a): The earthquake was felt severely in the extreme west, at Tiburon and at the island Pierre Joseph.	CHF(6) WHB(-)
-72.6978	19.1081	Saint Marc	(Gentleman's Magazine, 1770a; Annual Register, 1771a): St. Mark's [St. Marc], Port de Paix, the Cape [Cape Haitien], and Fort Dauphin [Fort Liberte], only felt the shock as they did at the Mole [Mole-St.Nicolas]  (Scherer, 1912a): More to the north, at St. Marc, the shock was scarcely perceptible.	-
-72.6933	19.2464	Plain Artibonite	(Scherer, 1912a): The plain of the Artibonite however, sustained some hurt and it was claimed that the Eaux de Boyenes (Port-au-Piment) a cold mineral spring disappeared.	CHF(6) WHB(-)
-72.9872	19.6123	Port-au-Piment	(Moreau de St. Méry, 1798): Earthquakes are fairly common in Eaux de Boyenes, and these waters then exhale a larger amount of sulfur dioxide. It is claimed that the June 3, 1770 caused the disappearance of a cold water spring.	CHF(6) WHB(-)
-71.8370	19.6668	Fort Liberte (Fort Dauphin)	(Gentleman's Magazine, 1770a; Annual Register, 1771a): St. Mark's [St. Marc], Port de Paix, the Cape [Cape Haitien], and Fort Dauphin [Fort Liberte], only felt the shock as they did at the Mole [Mole-St.Nicolas]  (Scherer, 1912a): But this earthquake of the Southern depression behaved in a much more remarkable manner from Mole St. Nicolas to Fort Liberte in the Northern Depression. Houses were damaged.	CHF(6) WHB(-) SISF(6)
-72.2006	19.7616	Cap Haitien	(Gentleman's Magazine, 1770a; Annual Register, 1771a): St. Mark's [St. Marc], Port de Paix, the Cape [Cape Haitien], and Fort Dauphin [Fort Liberte], only felt the shock as they did at the Mole [Mole-St.Nicolas]  (Moreau de St. Méry, 1798): [...] felt strongly, though without injury.	CHF(4) WHB(-) SISF(6)
-72.8370	19.9408	Port-de-Paix	(Moreau de St. Méry, 1798): Besides the earthquake of June 3, 1770 * * * we felt a jolt.  (Scherer, 1912a): [...] and at Port de Paix for instance the facade and the doorway of the church were thrown down.	CHF(5) WHB(6) SISF(7) S&L1992(6)
-73.3745	19.8052	Mole-St. Nicolas	(Gentleman's Magazine, July 1770a): An account received at the General Post Office, that on Sunday the 3d of June, about 15 minutes after seven in the	CHF(6) WHB(6.5)

June 3, 1770				
			<p>evening they felt, at Cape Nicola Mole, four violent shocks of an earthquake; the most severe lasted two minutes and a half, accompanied with a noise much like the echo that is heard from the hills after the firing of cannon, but the town fortunately received no damage.</p> <p>(Southey, 1827): Upon the 3rd of June, about a quarter past seven in the evening, four violent shocks of an earthquake were felt at Cape Nicola Mole, in St. Domingo (island): the most severe lasted two minutes and a half, accompanied with a noise much like the echo from the hills after the firing of a cannon. The town did not receive any damage.</p>	SISF(7) S&L1992(5) T&R1977(6)
-69.8877	18.4744	Santo Domingo	<p>(Scherer, 1912a): To the east region of the lakes was covered with cracks several feet in depth and it is presumed that the plains of Neyba and of Azua had again to suffer for at Santo Domingo the shock was felt vigorously but without great damage it seems.</p> <p>(Taber, 1922): It was strong at Santo Domingo City but no great damage resulted.</p> <p>(de Utrera, 1995): June 3 at 7:25 PM. Island, almost all the population suffered great damage; Santo Domingo saw the repeat of the effects of May 9, 1673.</p>	CHF(5) WHB(6) S&L1992(5) C1972(8)
-70.7291	18.4534	Azua	<p>(Garcia, 1900): In 1770 * * * an earthquake, like no other ever felt in the Antilles, which was felt from one extreme part of the island to the other on June 3, and as a consequence the whole population in general experienced either great or little damage.</p> <p>(Scherer, 1912a): To the east region of the lakes was covered with cracks several feet in depth and it is presumed that the plains of Neyba and of Azua had again to suffer for at Santo Domingo the shock was felt vigorously but without great damage it seems.</p>	CHF(6) WHB(-)
-71.4178	18.4832	Neiba	<p>(Garcia, 1900): In 1770 * * * an earthquake, like no other ever felt in the Antilles, which was felt from one extreme part of the island to the other on June 3, and as a consequence the whole population in general experienced either great or little damage.</p> <p>(Scherer, 1912a): To the east region of the lakes was covered with cracks several feet in depth and it is presumed that the plains of Neyba and of Azua</p>	-

June 3, 1770				
			had again to suffer for at Santo Domingo the shock was felt vigorously but without great damage it seems.	
-71.7151	18.4211	Laguna Icotea (pond south of Enriquillo Lake)	<p>(Moreau de St. Méry, 1796): L'Etang Salé [Enriquillo Lake] and L'Etang Doux [Laguna Icotea] were bordered by crevasses a few of which are up to six feet deep. They are regarded as signs of earthquakes, notably that of June 3, 1770.</p> <p>(Garcia, 1900): In 1770 * * * an earthquake, like no other ever felt in the Antilles, which was felt from one extreme part of the island to the other on June 3, and as a consequence the whole population in general experienced either great or little damage.</p> <p>(Scherer, 1912a): To the east region of the lakes was covered with cracks several feet in depth and it is presumed that the plains of Neyba and of Azua had again to suffer for at Santo Domingo the shock was felt vigorously but without great damage it seems.</p>	CHF(6) WHB(-)
-76.7909	17.9840	Kingston, Jamaica	<p>(Gentleman's Magazine, 1770c; Annual Register, 1771c): By Letters received from Jamaica it appears that the late earthquake, which happened in Hispaniola, was felt all over that island, but no considerable damage happened.</p> <p>(Gentleman's Magazine, 1770b): Between seven and eight in the evening an earthquake was felt at Kingston, and the adjacent Country. It was not preceded, as usual, with a rumbling subterraneous noise; but in its motion from North and South, resembled the rolling of the waves of the sea. It lasted about a minute and caused in many people a swimming in the head and a sickness at the stomach.</p> <p>(Long, 1774): The shock felt in June, 1770, which broke out somewhere about Port au Prince, in Hispaniola, and about 230 miles distance from the Eastern district of Jamaica [...] Yet its efforts were so much spent, before they reached Jamaica, that only a few old chimneys, slightly built, and two or three crazy walls in the country, were thrown down by the shock in this island.</p> <p>(Tomblin and Robson, 1977): Some old chimneys and two or three hovels (shed or hut) on the island of Jamaica also tumbled down Tomblin &amp;</p>	CHF(6) WHB(6) SISF(6) S&L1992(6) T&R1977(6)



<b>June 3, 1770</b>				
			Robson note that most likely it was felt on the eastern end of Jamaica.	

<b>July, 1770</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> Aftershocks of June 3, 1770 <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-	-	Hispaniola	(Perrey, 1857): During the month of July there were twenty tremors.  (Tippenhauer, 1893): July 1770, 20 shocks.	-

<b>August, 1770</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> Aftershocks of June 3, 1770 <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-	-	Hispaniola	(Perrey, 1857): There were only nine during the month of August; the number and violence (of the shocks) decreasing the rest of the year.  (Tippenhauer, 1893): August 1770, 9 shocks.	-

<b>December 3, 1770</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> Possible Aftershock <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.8668	18.4315	Petit Goave	(Moreau de St. Méry, 1798): * * * that of December 3, 1770 there was only one house left in the city, and two cracked wings of the barracks that were made of masonry.  (Tippenhauer, 1893): December 3.	-

<b>July 10, 1771</b>				
<b>Time:</b> 6:14 in the morning, Cap Haitien local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 2				

July 10, 1771				
Longitude	Latitude	City	Description	Intensity
-72.2006	19.7616	Cap Haitien	(Moreau de St. Méry, 1798): A small one was observed in July 10, 1771 at 6:14 in the morning, with a stronger one at 4 o'clock in the morning on the October 3, of that same year, right before the collapse of the church arch, and one violent one on August 4, 1776 at 4 in the morning.  (Tippenhauer, 1893): July 10, 6:00 early, duration 2 seconds, N-S direction, Cap Haitien.	-
-72.3400	18.5400	Port-au-Prince	(Moreau de St. Méry, 1798): On the July 10, 1771, the earth shook at 6 in the morning from the direction of North to South. The shaking lasted 2 seconds.  (Tippenhauer, 1893): July 10, 6:15 evening, Port-au-Prince.	-

October 3, 1771				
<b>Time:</b> 4:00 in the morning, Cap Haitien local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.2006	19.7616	Cap Haitien	(Moreau de St. Méry, 1798): A small one was observed in July 10, 1771 at 6:14 in the morning, with a stronger one at 4 o'clock in the morning on the October 3, of that same year, right before the collapse of the church arch, and one violent one on August 4, 1776 at 4 in the morning.	-

January 30, 1776				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-	-	Hispaniola - Spanish side	(de Utrera, 1995): 30 of January, eastern side of the island.  (Tippenhauer, 1893): January 30, Spanish side.	-

August 4, 1776				
<b>Time:</b> 4:00 in the morning, Cap Haitien local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				

<b>August 4, 1776</b>				
<b>Longitude</b>	<b>Latitude</b>	<b>City</b>	<b>Description</b>	<b>Intensity</b>
-72.2006	19.7616	Cap Haitien	(Moreau de St. Méry, 1798): A small one was observed in July 10, 1771 at 6:14 in the morning, with a stronger one at 4 o'clock in the morning on the October 3, of that same year, right before the collapse of the church arch, and one violent one on August 4, 1776 at 4 in the morning.	-

<b>February 11, 1783</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 2				
<b>Longitude</b>	<b>Latitude</b>	<b>City</b>	<b>Description</b>	<b>Intensity</b>
-70.7075	19.4502	Santiago de los Caballeros	(de Utrera, 1995): 11 and 12 of February, Santiago de los Caballeros, serious damage to the churches and houses made of brick.	-
-72.3400	18.5400	Port-au-Prince	(Moreau de St. Méry, 1798): We did not feel earthquakes until 11 and 12 of February 1783, there were three of which 2 were quite strong.	-

<b>July 25, 1784</b>				
<b>Time:</b> 6:14 in the morning, Cap Haitien local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 2				
<b>Longitude</b>	<b>Latitude</b>	<b>City</b>	<b>Description</b>	<b>Intensity</b>
-72.2006	19.7616	Cap Haitien	(Moreau de St. Méry, 1798): In the year 1784, there were four strong earthquakes in the Cape; one on July 25, at 6:14 in the morning, with three tremors of considerable strength and movement directed in a South-West to North-East direction. The second on August 24, at 1:03 in the morning; the third on September 29, at 11:25 in the evening and the fourth on November 27.  (Tippenhauer, 1893): July 25, 6:45 evening, SW-NE direction, Cap Haitien and Fort Dauphin [Fort Liberte], fairly strong, 3 shocks.	-
-72.3400	18.5400	Port-au-Prince	(Moreau de St. Méry, 1798): In July, 1784, we felt two slight (tremors) directed in an East to West direction. One on August 28, and one on December 11.  (Tippenhauer, 1893): July 25, 6:14 evening, E-W (?) direction, Port-au-Prince, 2 shocks.	-

<b>July 29, 1784</b>				
<b>Time:</b> 9:10 in the evening (?) Cap Haitien local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 3				
Longitude	Latitude	City	Description	Intensity
-72.2006	19.7616	Cap Haitien	(Perrey, 1843): 29 of July in the Cape, strong shaking. The Cape had 12 houses thrown down.  (Tippenhauer, 1893): July 29, 9:10 evening, Cap Haitien.	-
-72.6929	19.4458	Leogane	(Perrey, 1843): Leogane suffered greatly and Goave was completely ruined.	-
-72.8668	18.4315	Petit Goave	(Perrey, 1843): Leogane suffered greatly and Goave was completely ruined.	-

<b>January 10, 1785</b>				
<b>Time:</b> 9:30 in the morning, Cap Haitien local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.2006	19.7616	Cap Haitien	(Moreau de St. Méry, 1798): January 10, at 9:03 in the morning, violent shaking from an earthquake * * * there were three in 1785; one on January 10, the second on February 19, and the third and strongest one on July 10 at night.  (Tippenhauer, 1893): January 10, before 9:30, Fort Liberté and Cap Haitien, the shock was accompanied by a startling noise.	-

<b>December, 1786</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-72.2006	19.7616	Cap Haitien	(Moreau de St. Méry, 1798): One was felt in 1786 in the month of December.  (Tippenhauer, 1893): December, Cap Haitien and Plaisance.	-
-72.4685	19.5974	Plaisance	(Moreau de St. Méry, 1798): During the two months of November and December 1786, it was felt in Plaisance four tremors from earthquakes from the North-East.	-

## Earthquakes of the 19<sup>th</sup> Century:

Intensity, Mercalli Magnitude Intensities (3-10); CHF, assigned by C. H. Flores (author); WHB, assigned by W. H. Bakun (author); SISF, assigned by (SiSFrance/Antilles (2010); S&L1992, assigned by Shepherd and Lynch (1992); T&R1977, Tomblin and Robson (1977); C1972, assigned by Campbell (1972); -, no assignment given.

November 20, 1818				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.2006	19.7616	Cap Haitien	(Gay-Lussac and Arago, 1818): * * * there have been eight earthquakes since the months of December up to that of May.  (Moreau de Jonnes, 1822): Two strong tremors.  (Gay-Lussac, 1826): November 20; Cap Henry (Haiti); two strong tremors.  (Mallet and Mallet, 1858): Nov. 20, 1818 – Cape Henri [Cap Haitien] in St. Domingo, Two severe shocks, Five persons were killed and some houses were destroyed.  (Tippenhauer, 1893): November 20, Cap Haitien.	-

December 20, 1818				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-	-	Island/ Haiti	(Gay-Lussac and Arago, 1818): * * * there have been eight earthquakes since the months of December up to that of May.  (Moreau de Jonnes, 1822): violent shock.  (Gay-Lussac, 1826): December 20, St. Domingo, violent shock.  (Mallet and Mallet, 1858): violent shock.  (Tippenhauer, 1893): December 20, Haiti.	-

November 19, 1825				
<b>Time:</b> In the morning <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	<p>(Gay-Lussac and Arago, 1825): November 19, 1825 – in the morning, Port-au-Prince, Violent tremors.</p> <p>(Perrey, 1847; Perrey, 1843): In the morning, in Port-a-Prince, violent shaking for 4 to 5 seconds with a thud from the south-east; the 3<sup>rd</sup> this year.</p> <p>(Mallet and Mallet, 1858): Violent shocks lasting four or five seconds. This is said to have been the third earthquake of the year, Accompanied by a dull noise coming from the SE.</p>	-

March 31, 1829				
<b>Time:</b> 4:30 in the evening, Port-au-Prince local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	<p>(Le Constitutionnel, 1829): It was felt here [Port-a-Prince], March 31, at half past four in the evening, two strong shocks from earthquakes, which fortunately have not been detrimental.</p> <p>(Gay-Lussac and Arago, 1829): On March 31, 4h. ½ in the afternoon; Port-au-Prince, Haiti, two strong tremors.</p> <p>(Perrey, 1843): March 31, 4:30 in the evening, in Port-au-Prince (Haiti), 2 strong shocks.</p>	-

March 29, 1830 to March 30, 1830				
<b>Time:</b> 11: 30 at night, 12:30 (half past midnight) and 1:00 in the morning, Port-au-Prince local time <b>Phenomenon Notes:</b> Three shocks occurred over a period of 3 hours. <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Eyries and others, 1830): A captain who was in Santo Domingo [island] where the latest earthquakes were felt on this island, has recounted this event in the following manner: “ <i>On March 29, three violent shakes shook</i>	-

March 29, 1830 to March 30, 1830				
			<p><i>the entire city of Port-au-Prince, the first movement took place at half past eleven in the evening, the second at half past midnight, and the last at one in the morning. These consecutive shocks, which alarmed all the people already deep in sleep, produced no fatal accidents. The undulation of each lasted more than two seconds”.</i></p> <p>(Perrey, 1843): Night of 29 to 30 March, 11:30, 00:30, 1:00, three violent shakes. Each lasted more than 2 seconds.</p> <p>(Mallet and Mallet, 1858): March 29, 1830, 11h 30m PM, Port-au-Prince in St. Domingo, A violent shock, lasting more than two seconds, March 30, 1830, 0h 30m AM, ditto.</p>	

April 14, 1830				
<b>Time:</b> 6:30 in the evening, Port-au-Prince local time <b>Phenomenon Notes:</b> Also felt by ships at sea. <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	<p>(Eyries and others, 1830): More captain description: <i>“Fifteen days after, April 14, at half past six in the evening, a shock more violent than any they had previously experienced spread terror everywhere, which lasted from four to five seconds, and was accompanied by a noise resembling the strike of thunder, when it is lost in distant echoes in the cavities of huge hills that dominate our cities in the tropics. The houses built of stone and brick suffered greatly. All objects that were fragile that you find on shelves or on tables in the pharmacies and restaurants were shattered. The terror was general.”</i> [Also describes being felt by a ship at sea].</p> <p>(Perrey, 1843): [quotes part of captain account] The first shock was from E-W and the second W-E.</p> <p>(Mallet and Mallet, 1858): April 14, 1830, about 6h 30m PM, Island of St. Domingo, two other shocks more violent than those of March 29, 30. Duration = 4 or 5 seconds. The first shock was from E. to W. and the second from W. to E. The shocks were felt on board vessels both in port and on the open sea. Accompanied by noise like distant thunder when it loses itself in the echoes of mountain ravines. Houses of brick and stone suffered</p>	-

April 14, 1830				
			severely.	

September 6, 1840				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Perrey, 1843): An earthquake in Port-au-Prince.  (Mallet and Mallet, 1858): September 6, 1840, Port-au-Prince in St. Domingo.	-

April 13, 1841				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Perrey, 1843): An earthquake in Port-au-Prince.  (Mallet and Mallet, 1858): March 13, 1841 Port-au-Prince in St. Domingo.	-

May 7, 1842				
<b>Time:</b> About 5:37 in the evening, Santo Domingo local time <b>Land Surface Observations:</b> The Yaque River near Santiago split and one of the splits reversed flow direction for a short period before returning to its normal flow (Ardouin, 1860). Salt and bitumen (?) springs appeared along the coastal mountains. The Ozama river in Santo Domingo overflowed causing ships tied along the river to run aground and pitch strongly. The mountain behind St. Marc was said to have divided in two with a fissure wide enough for a carriage to pass (El Constitucional, 1842a). <b>Tsunami:</b> Observed first outflow of 200 paces and then inflow 15 feet tall at Port-de-Paix and the sea overtook the river deltas of the Yaque in Monte Cristi and Massacre near Fort Liberte flooding the neighboring regions (Ardouin, 1860). High waves were noticed in Anse-a-Veau and Jeremie on the southern peninsula. <b>Aftershocks:</b> Several aftershocks felt for hours and many felt for days after the event. Besides the cities most affected by the initial shocks, aftershocks were felt as far away as Añasco, Puerto Rico. <b>Phenomenon Notes:</b> Some sources record this event as being as long as five minutes. However, Puerto Plata and Port-au-Prince describe two shocks in very close succession, the second of the two being stronger and more powerful. About half of the population of Cap Haitien died and about 2,000 died combined between Santiago de los Caballeros and La Vega. This earthquake was far reaching in that ground oscillations were observed in various bodies of water in Louisiana (L'Ami de la Religion, 1842b). <b>Number of Observations:</b> 50				
Longitude	Latitude	City	Description	Intensity
-72.2006	19.7616	Cap Haitien	(L'Ami de la Religion, 1842a): A correspondent has written to us from Cap Haitien, on board the Condor, on May 12, and that not a single house stands	CHF(9) WHB(9) SISF(9.5)



May 7, 1842				
			<p>after the terrible catastrophe of the 7th. Our correspondent was on a balcony with a few people at the moment the earthquake began; at each shake a piece of wall was falling; they lasted forty to fifty seconds, during which a hail of cinder blocks and stones fell on the unfortunate who sought to escape. The noise from the falling houses was frightening. The church which was the pride of the city was ruined from top to bottom. For six hours, for three to five minutes long, there were repeated shocks * * * Our correspondent spent a frightful night at the Foselle, among the dead, the dying and the wounded that did not cease to bring in their friends, after having withdrawn with difficulty from under the rubble. On the banks there has been established ambulances filled with the wounded. Port-au-Prince suffered little. The houses made of wood resisted better than the stone houses. The fire that burst after the first shock has lasted four days and four nights. It took only forty-eight hours for the population from the surrounding villages to come to the city and pillage. At the edge of the sea, we saw the poor wretches compete for each other's spoils and each other's throats and remain rightful owners. Many have been killed like ferocious animals by the armed inhabitants defending their property. Half of the population perished, and among the foreigners and their clerks, only three were killed. On May 14, slight shocks still continued, it has not rained and we dread new misfortunes.</p>	S&L1992(9) T&R1977(9)
-72.8370	19.9408	Port-de-Paix	<p>(Public Ledger, 1842): The other towns and villages besides our own and those enumerated above, which have most seriously suffered (some of which are entirely demolished,) are Porto Paix, Gonaives, St. Marc, Mole-St. Nichols, St. Louis du Nord, Fort Dauphine [Fort Liberte] , Limbeport, Margot, Borgne, La Grande Riviere, Laxavon and Altamira, which, together with Porto Plata [Puerto Plata], Cape Haitien, Santiago, St. Osero [Santa Cerro] , and La Vega, before mentioned, make in all 17 towns and villages, with loss of lives in nearly all...The direction taken by the earthquake, which proved the most severe in its effects, was along the Northern and North-eastern part; all the other parts of our Island have experienced the shock, though only in a partial and limited degree.</p> <p>(Scherer, 1912a): The town of Port de Paix had even more to suffer; it was thrown down by the shock and overwhelmed by a wave.</p>	CHF(9) WHB(9) SISF(9) S&L1992(9) T&R1977(9)
-73.3745	19.8052	Mole-Saint Nicolas	<p>(SisFrance/Antilles, 2010 quoting Journal de la Drome, June 22, 1842): <i>The cities</i></p>	CHF(9) WHB(9)

May 7, 1842				
			<p><i>of Saint-Nicolas and Port-Paix were destroyed. It is assumed that the northern towns on the island are also a mass of ruins.</i></p> <p>(Scherer, 1912a): Mole St. Nicolas, firmly constructed of stone, was fortified; it had warehouses, barracks, a fine church and aqueducts bringing water from a distance. The earthquake ruined it entirely. Of the city only a “plan par terre” remained and nothing more.</p>	<p>SISF(9) S&amp;L1992(9) T&amp;R1977(9)</p>
-71.8397	19.6668	Fort Liberte	<p>(McCann and others, 2011 quoting the Jamaica Morning Journal, June 16, 1842): <i>The villages of Port-Margot, Borgne, Ouanaminthe and the town of Fort Liberte experienced somewhat approaching a coup-de-grace.</i></p> <p>(Scherer, 1912a): The churches of Borgne, of Port Margo, of Fort Liberté – the most beautiful one in the island – of Limonade, of Quartier Morin, those of Cap Haitien and of Acul du Nord were completely destroyed or badly damaged.</p>	<p>CHF(9) WHB(9) SISF(8) S&amp;L1992(9) T&amp;R1977(9)</p>
-70.7075	19.4502	Santiago de los Caballeros	<p>(El Constitucional, 1842b): The horrific earthquake that has devastated Haiti did not spare the ancient Spanish part of the island. The city of Santiago has been completely destroyed: it is reported that up to 2000 persons have died.</p> <p>(Public Ledger, 1842): The fine town of Santiago, about 60 miles distant in the interior, and the center of our agricultural commerce in this part, has been entirely destroyed – the population, consisting of about 6,000 souls, of which 500 are buried in the ruins. Further in the interior, the towns of Vega and St. Osero [Santa Cerro] have met with similar fates.</p> <p>(Scherer, 1912a): The houses were well constructed, low and without stories, the parochial church resembled a strong castle, all were thrown down in an instant, around Santiago, springs appeared and the ground cracked in many places, Yaqui River suddenly heaved up, drove its waters in a torrent up and down the stream. The subsidence came about as suddenly and the stream again took its course.</p>	<p>CHF(9) WHB(9) SISF(8) S&amp;L1992(9) T&amp;R1977(9)</p>
-70.7816	19.4521	Hato Yaque	<p>(McCann and others, 2011 quoting the Jamaica Morning Journal June 22, 1842): <i>Saint Yague – * * * lay in ruins. All its edifices had fallen.</i></p> <p>(McCann and others, 2011 quoting Nouel, 1979): <i>From the place called “Paso de los Borbones” at the edges of the River Yague in Santiago, to the river Gurabito, a distance of about half a league, the earth opened along its</i></p>	<p>CHF(9) WHB(9)</p>

May 7, 1842				
			<i>longitude making a wide and deep crevice cutting part of the city.</i>	
-72.7239	19.9337	Saint Louis du Nord	(McCann and others, 2011 quoting the Jamaica Morning Journal, June 22, 1842): <i>St. Louis- in the north, there has been much damage done, as also at Montecristi.</i>	CHF(8) WHB(-)
-72.4291	19.7512	Port Margot	(McCann and others, 2011 quoting the Jamaica Morning Journal, June 16, 1842): <i>The villages of Port-Margot, Borgne, Ouanaminthe and the town of Fort Liberte experienced somewhat approaching a coup-de-grace.</i>  (Scherer, 1912a): Severe damage, church destroyed or severely damaged.	CHF(8) WHB(-)
-70.6937	19.7971	Puerto Plata	(Public Ledger, 1842, printed letter dated May 20, 1842): On the 7th day of May the Island of Hayti was visited with an earthquake, which in its destructive effects has proven itself to be the severest which we have ever had on record * * * In the afternoon of that day, at about half-past 5 o'clock, I was standing on the square, which is situated in an elevated part of this town. The sky was uncommonly serene, and the descending sun promised to be bright and glorious in its setting. Just then, casting my eyes towards Mount Isabella, which overlooks the town, I perceived a dark vapor ascending and enveloping its base and sides – a rolling, rumbling sound immediately succeeded, and instantaneously came a shock which nearly dashed me to the ground. The level of the square appeared undulating like the waves of the sea – a faint and sickly sensation came over me and dizziness and difficulty in breathing. The houses rocked to and fro like vessels in a storm. The ground was rent in various parts. Many persons were thrown down by the force of the concussion; others were reeling as in a state of drunkenness. Every moment we expected the earth to open and engulf us. A second shock followed, yet stronger than the former, accompanied by the same appearances, effects and terrors. The church, a strong, and massive building, seemed tottering to its fall, - the bricks flew from the solitary masonry as if from projectiles; while fissures appeared in the walls and arches, and the whole would have been leveled but for the uncommon strength of the outside buttresses, and the lowness of the building * * * The second shock must have lasted about 60 seconds. Fortunately for us, our town is almost entirely constructed of wood, which alone accounts for its preservation. The stone buildings suffered materially, and some of the finest were entirely destroyed. From the 7th up to the present date, we have been in a continued state of alarm – upwards of 40 shocks having taken place during that	CHF(8) WHB(7) SISF(7.5)

May 7, 1842				
			interval, some more or less severe.	
-70.5327	19.2239	La Vega	<p>(El Constitucional, 1842b): In La Vega they suffered in part a great disruption.</p> <p>(Public Ledger, July 15, 1842): The fine town of Santiago, about 60 miles distant in the interior, and the center of our agricultural commerce in this part, has been entirely destroyed – the population, consisting of about 6,000 souls, of which 500 are buried in the ruins. Further in the interior, the towns of Vega and St. Osero [Santa Cerro] have met with similar fates.</p> <p>(McCann and others, 2011 quoting the Saint Thomas Tidende May 25, 1842): <i>The news arrived from the Vega and Santiago this morning. The mortality in those places is estimated to two thousand buried under the ruins.</i></p> <p>(Scherer, 1912a): Destroyed at the same time were the churches of La Véga, of Santa Cerro, of San Francisco de Macoris, of Moca, and of Cotui.</p>	CHF(8) WHB(8) SISF(7)
-71.6507	19.8474	Monte Cristi	<p>(McCann and others, 2011 quoting the Jamaica Morning Journal, June 22, 1842): <i>St. Louis- in the north, there has been much damage done, as also at Montecristi.</i></p>	CHF(7.5) WHB(-)
-72.1260	19.6688	Limonade	<p>(Scherer, 1912a): The churches of Borgne, of Port Margo, of Fort Liberté – the most beautiful one in the island – of Limonade, of Quartier Morin, those of Cap Haitien and of Acul du Nord were completely destroyed or badly damaged.</p>	CHF(7) WHB(7)
-72.3197	19.6803	Acul du Nord	<p>(Scherer, 1912a): The churches of Borgne, of Port Margo, of Fort Liberté – the most beautiful one in the island – of Limonade, of Quartier Morin, those of Cap Haitien and of Acul du Nord were completely destroyed or badly damaged.</p>	CHF(7) WHB(7)
-72.5230	19.8463	Borgne	<p>(McCann and others, 2011 quoting the Jamaica Morning Journal, June 16, 1842): <i>The villages of Port-Margot, Borgne, Ouanaminthe and the town of Fort Liberte experienced somewhat approaching a coup-de-grace.</i></p> <p>(Scherer, 1912a): Severe damage, church destroyed or severely damaged.</p>	CHF(7) WHB(7)
-72.2186	19.6047	Sans Souci Palace	<p>(Scherer, 1912a): And the majestic palace, Sans Souci, of king Christopher, with the church, suffered the same fate. [completely destroyed or badly damaged]</p>	CHF(7) WHB(7)
-72.1575	19.6973	Quartier Morin	<p>(Scherer, 1912a): The churches of Borgne, of Port Margo, of Fort Liberté – the most beautiful one in the island – of Limonade, of Quartier Morin, those</p>	CHF(7) WHB(7)

May 7, 1842				
			of Cap Haitien and of Acul du Nord were completely destroyed or badly damaged.	
-71.7223	19.5501	Ouanaminthe	(McCann and others, 2011 quoting the Jamaica Morning Journal, June 16, 1842): <i>The villages of Port-Margot, Borgne, Ouanaminthe and the town of Fort Liberte experienced somewhat approaching a coup-de-grace.</i>  (Scherer, 1912a): Severe damage.	CHF(7) WHB(7)
-72.6929	19.4458	Gonaives	(Adams Sentinel, 1842): We learn * * * that Captain Varins of the brig. Pandora, which arrived at this port, this morning, states that an earthquake took place on the 7th of May at Gonaives, at half past four o'clock P.M. It was preceded by a groaning of the earth, and thus the inhabitants were warned in time to escape; they rushed into the streets as it were by instinct and consequently the loss of life was small, two only being killed. He states further that there were four distinct shocks in the course of a minute, two of them horizontal and two of them perpendicular, and at each he judges the earth moved about 6 feet. Nearly all the buildings were destroyed, and the few left standing were of wood, and so shattered as to be useless; they would be taken down. Most of the buildings at Gonaives were of wood and only one story, which would account for the small loss of life.  (SisFrance/Antilles, 2010 quoting Journal de la Drome, June 22, 1842): In Gonaives, the prison, the church, the National Palace, the stock market, the arsenal, were overthrown and destroyed. The city presented a lamentable appearance. All inmates that were not buried in the ruins fled * * * The main shock, which disrupted Gonaives, lasted five minutes. It was followed during the night by twenty others, shorter and less violent.	CHF(7) WHB(7) SISF(8)
-70.5246	19.3929	Moca	(Scherer, 1912a): Destroyed at the same time were the churches of La Véga, of Santa Cerro, of San Francisco de Macoris, of Moca, and of Cotui.	CHF(7) WHB(7)
-70.1531	19.0577	Cotui	(Hazard, 1873): We paid a visit to the old church that had been standing many hundred years, and bore over the main door a crack caused by the great earthquake of 1842.  (Scherer, 1912a): Destroyed at the same time were the churches of La Véga, of Santa Cerro, of San Francisco de Macoris, of Moca, and of Cotui.	CHF(7) WHB(7)
-70.2593	19.2969	San Francisco de Macoris	(Scherer, 1912a): Destroyed at the same time were the churches of La Véga, of Santa Cerro, of San Francisco de Macoris, of Moca, and of Cotui.	CHF(7) WHB(7)

May 7, 1842				
-70.5468	19.2797	Santa Cerro	<p>(Public Ledger, 1842): The fine town of Santiago, about 60 miles distant in the interior, and the center of our agricultural commerce in this part, has been entirely destroyed – the population, consisting of about 6,000 souls, of which 500 are buried in the ruins. Further in the interior, the towns of Vega and St. Osero [Santa Cerro] have met with similar fates.</p> <p>(Scherer, 1912a): Destroyed at the same time were the churches of La Véga, of Santa Cerro, of San Francisco de Macoris, of Moca, and of Cotui.</p> <p>(de Utrera, 1995): The church fell to the ground in 1842.</p>	CHF(7) WHB(7)
-69.8877	18.4722	Santo Domingo	<p>(La Presse, 1842): The letters from Saint-Domingue, May 14, announce that the city shook, on the 7, by an earthquake that lasted 2 minutes. The city suffered greatly; the inhabitants in fear deserted their homes. The Ozama river grew suddenly three meters.</p> <p>(Journal de Débats Politiques et Littéraires, 1842): Letters come directly from Santo Domingo; we provide details on the cursed effects from the southern part of the island. Here are excerpts from letters contained in the Journal du Havre from the 27th: May 14, 1842. “Since the 7th instant, at five hours thirty-two minutes in the afternoon, our poor city of Santo Domingo plunged into the deepest desolation as a result of the horrible earthquake that lasted about eighty-five seconds and whose oscillations and violent shaking put our houses in a state of ruin making them uninhabitable. Three quarters of the inhabitants of the town have been compelled to take refuge in the suburbs and surrounding areas. The tremors continued with less violence until yesterday...” Here is an extract from the captain Ducormier, commanding Le Jean-Maurice who brought the letters from Santo Domingo previously: “On May 7, 1842, at five hours thirty-seven minutes in the evening, in Santo-Domingo was felt, and well as in its surroundings, a very violent earthquake, accompanied by a strong thud from inside the earth. The first shock was felt from the bottom to top, and the second from north to south. The sun, which was still above the horizon, no longer gave a low brightness, and a very thick dust covered the area of the city. For a minute and a few seconds the earthquake lasted, it would be difficult to express dismay of the population, saving or jumping from windows, to take refuge in the squares or middle of the streets to avoid the debris from houses falling to the ground. The cathedral and many other churches were</p>	CHF(6.5) WHB(6.5) SISF(7) S&L1992(6)

May 7, 1842				
			damaged, and in general all the houses were more or less mistreated; many among them are uninhabitable. The land near the customs opened in many places and emitted a strong smell of sulfur. The ships in the river ran aground on their anchors and pitched strongly, the river flowed over its bank usually three to four feet way and then resumed back to its usual level. At night, the entire population had fled outside the city or camped in the streets; at half past eleven in the evening of the same day, there was a shock but weak; and for eight days the earth shook three or four times every twenty four hours. At my departure, the city was entirely deserted. There was no serious accident, thanks to the solidity of the houses and because this shock arrived during the day.”	
-70.5068	18.5471	Maniela (Ocoa)	(U.S. Commission Inquiry to Santo Domingo, 1871): [Interview of Gen. Jean Cheri Victoria, February 25, 1871. Eyewitness lived in the village of Maniela which is in a valley at the foot of mountains on the road between Azua and Bani in what is today Ocoa.] I have seen heavy earthquakes here, especially the great earthquake of 1842 * * * I remember that I had mutton dinner, to which I had invited guests, on the day that the great earthquake of 1842 took place, and the earthquake interrupted us by rattling the dishes.	CHF(6.5) WHB(-)
-70.7333	18.4532	Azua	(Scherer, 1912a): The churches of Azua, of Bayaguana, Bani, San Christobal, Boya, Monte Plata, San Carlos and of Higüey were seriously damaged.	CHF(6.5) WHB(6.5)
-70.3321	18.2799	Bani	(Scherer, 1912a): The churches of Azua, of Bayaguana, Bani, San Christobal, Boya, Monte Plata, San Carlos and of Higüey were seriously damaged.	CHF(6.5) WHB(6.5)
-69.6370	18.7520	Bayaguana	(Scherer, 1912a): The churches of Azua, of Bayaguana, Bani, San Christobal, Boya, Monte Plata, San Carlos and of Higüey were seriously damaged.	CHF(6.5) WHB(6.5)
-70.1092	18.4158	San Cristobal	(Scherer, 1912a): The churches of Azua, of Bayaguana, Bani, San Christobal, Boya, Monte Plata, San Carlos and of Higüey were seriously damaged.	CHF(6.5) WHB(6.5)
-69.7923	18.9458	Boya	(Scherer, 1912a): The churches of Azua, of Bayaguana, Bani, San Christobal, Boya, Monte Plata, San Carlos and of Higüey were seriously damaged.	CHF(6.5) WHB(6.5)
-69.7845	18.8103	Monte Plata	(Scherer, 1912a): The churches of Azua, of Bayaguana, Bani, San Christobal, Boya, Monte Plata, San Carlos and of Higüey were seriously	CHF(6.5) WHB(6.5)

May 7, 1842				
			damaged.	
-69.8940	18.4754	San Carlos Iglesia (near Santo Domingo)	(Scherer, 1912a): The churches of Azua, of Bayaguana, Bani, San Christobal, Boya, Monte Plata, San Carlos and of Higüey were seriously damaged.	CHF(6.5) WHB(6.5)
-68.7168	18.6154	Higüey	(Scherer, 1912a): The churches of Azua, of Bayaguana, Bani, San Christobal, Boya, Monte Plata, San Carlos and of Higüey were seriously damaged.	CHF(6.5) WHB(6.5)
-69.0364	18.7648	Seybo	(Scherer, 1912a): South of the zone of disaster, from Gonaïves to Santo Domingo and Higüey, the shock was exceedingly violent.  (McCann and others, 2011 quoting Nouel, 1979): <i>Of the churches at San Carlos, Monte Plata, Boya, Bani, Azua, Bayaguana, Seybo, Higüey, San Cristobal, Moca, Cotui, and Macoris, some were damaged and others were in a ruined state.</i>	CHF(6.5) WHB(6.5)
-72.6978	19.1081	Saint Marc	(SisFrance/Antilles, 2010 quoting Journal de la Drome, June 22, 1842): In Saint-Marc, many houses were damaged, some destroyed but nobody perished.  (El Constitucional, 1842a; L'Ami de la Religion, 1842b): The mountain which is behind Saint Marc has divided itself into two pieces, with a fissure so wide that carriages can pass through.	CHF(6) WHB(6) SISF(8)
-72.3388	18.5432	Port-au-Prince	(SisFrance/Antilles, 2010 quoting Journal de la Drome, June 22, 1842): <i>In the city of Port-au-Prince, there were two distinct shocks. The later one lasted three minutes. The first one was less prolonged. The streets were filled with people rushing out of their homes, which were expecting a similar catastrophe like in 1770. According to the newspaper Patriote, there is not a house that has been more or less damaged. The pediment of the Senate palace, on which were carved the arms of the republic, has detached and was broken. The shocks were repeated for several days, but they had lost their violence.</i>  (Annual Register, 1843): Port-au-Prince has suffered also, but only as regards breakage of glass, &c. ware and the walls (of two feet thick bricks) cracked in many places half an inch wide; at one place a brick pillar fell down also. Even here we could hardly keep on our legs, and the vessels rolled about very much.	CHF(5) WHB(5) SISF(7) S&L1992(7) T&R1977(7)
-73.3447	18.5028	Anse-a-Veau	(McCann and others, 2011 quoting the Jamaica Morning Journal, June 16, 1842):	CHF(3.5)



May 7, 1842				
			<i>7th May, at half past 5 * * * terrible commotion is felt, which lasts four minutes and some seconds. The oscillation from north to south * * * many houses[?] have been greatly damaged * * * suddenly the sea * * * burst with fury against the steep rocks with bind the coast * * * mighty gigantic waves * * * On the following night we continued to feel many shocks.</i>	WHB(-)
-73.0861	18.4395	Miragoave	(McCann and others, 2011 quoting the Jamaica Morning Journal, June 6, 1842): <i>It appears that all the south- Miragoave, St. Michel, Aquin, Les Cayes and Jeremie, have very slightly felt the shock.</i>	CHF(3) WHB(3)
-73.0984	18.3755	Saint Michel du Sud	(McCann and others, 2011 quoting the Jamaica Morning Journal, June 6, 1842): <i>It appears that all the south- Miragoave, St. Michel, Aquin, Les Cayes and Jeremie, have very slightly felt the shock.</i>	CHF(3) WHB(3)
-73.3971	18.2816	Aquin	(McCann and others, 2011 quoting the Jamaica Morning Journal, June 6, 1842): <i>It appears that all the south- Miragoave, St. Michel, Aquin, Les Cayes and Jeremie, have very slightly felt the shock.</i>	CHF(3) WHB(3)
-73.7500	18.1950	Les Cayes	(McCann and others, 2011 quoting the Jamaica Morning Journal, June 6, 1842): <i>It appears that all the south- Miragoave, St. Michel, Aquin, Les Cayes and Jeremie, have very slightly felt the shock.</i>	CHF(3) WHB(3)
-74.1145	18.6446	Jeremie	(L'Ami de la Religion, 1842b): The tremor was felt at Jeremie but it did not cause havoc. The waters were instantly elevated to a height of six feet.	CHF(3) WHB(3)
-75.8296	20.0209	Santiago, Cuba	(Scherer, 1912a): * * * and crossing the Windward Passage, the shock was felt the length of the Sierra Maestra in Cuba. Santiago de Cuba also counts this earthquake among the strongest the eastern part of the island of Cuba has experienced.  (Chuy and Pino, 1982): * * * strongest the eastern part of the island has experienced, almost all the walls of the houses were cracked and very little more would have leveled the town.	CHF(5) WHB(-) S&L1992(7) T&R1977(7)
-74.4963	20.3459	Baracoa, Cuba	(Chuy and Pino, 1982): Strong earthquake, along the outcrops of Yunque and Marcos Reyes, sections of the outcrops fell that measured about 20 meters long and about the same width.	CHF(5) WHB(-) S&L1992(8)
-71.1462	21.4674	Cockburn Town, Grand Turks Island	(McCann and others, 2011 quoting The Morning Journal Kingston Jamaica, May 17, 1842): <i>On the arrival of the Tweed at Turk's Island on the following evening [May 8] it was ascertained that a smart shock of an earthquake had been felt on the previous evening at five o'clock but no damage had been sustained.</i>	CHF(4) WHB(4) SISF(5) S&L1992(5) T&R1977(5)

May 7, 1842				
			(Tomblin and Robson, 1977): Turks Island - A severe shock of earthquake, Glassware rattled, salt ponds agitated.	
-67.1414	18.2885	Añasco, Puerto Rico	(McCann and others, 2011 quoting Rodriguez, 1842): * * * <i>that we need in this sacred parochial church [Añasco] to make repairs from the damages suffered as a result of the fierce earthquake that was experienced on May 7th last with frequent reoccurrences</i> * * * <i>the roof work has been moved and broken by the effects of before mentioned earthquake.</i>	CHF(5) WHB(5)
-66.6141	18.0115	Ponce, Puerto Rico	(McCann and others, 2011 quoting The Charleston Daily Courier, June 6, 1842): <i>Earthquake at Ponce, PR – We are indebted to Capt. York, of the schooner Independence from Ponce, for the following account of the shock felt at that place on the 7th inst. Capt. York states that he was sitting with a friend, when they suddenly felt a dizziness and excessive faintness, and upon attempting to walk found themselves acting like persons intoxicated. His companion then observed that the house rocked. They went out of doors and saw that the house rocked at least two feet. So great was the motion of the earth, that the casks of sugar and molasses on the beach rolled round making great havoc. The inhabitants were filled with the greatest terror</i> * * * <i>The shock was felt at 3 pm of 7th inst. And lasted about three minutes.</i>	CHF(5) WHB(5)
-67.1407	18.2009	Mayaguez, Puerto Rico	(L'Ami de la Religion, 1842a): Apparently the tremor was felt in a wide range of locations. A ship arrived in New York from Mayaguez (island of Puerto Rico), to declare that a violent earthquake was felt in that city on May 7, on the same day as in Saint-Domingue (island). The terror and confusion was large in Mayaguez, the ground oscillated seeming to have some sort of ebbs and flows, but there are no reports of major disaster.  (McCann and others, 2011 quoting The Charleston Daily Courier, June 20, 1842): <i>Earthquake – Capt. Ward of the barque Condor which arrived yesterday morning from Mayaguez, informs us that the earthquake on the 7th of May was very severely felt there; and that up to the 30 of May when he sailed, there were from two to three shocks a day. The inhabitants were very fearful of a similar shock to that which was felt on the 7th in other places.</i>	CHF(4) WHB(4)
-66.1057	18.4665	San Juan, Puerto Rico	(El Constitucional, 1842c): By communication of the Captain General - Governor of Puerto Rico dated June 4 past, we know that tranquility continues on the island; and even though they experienced on that evening of May 7 last the strong earthquake that caused such destruction on the island of Santo Domingo, it did not produce more destruction other than the	CHF(3) WHB(3) S&L1992(5) T&R1977(5)

May 7, 1842				
			injury of only a few buildings.	
-76.9525	17.9943	Spanish Town, Jamaica	(McCann and others, 2011 quoting The Morning Journal Kingston, Jamaica May 13, 1842): <i>At Saint Jago [Spanish Town, Jamaica] where the Tweed arrived on Sunday morning, the shock was felt more severely than any previous one for the last eighteen years. Almost all the walls of the houses are cracked.</i>	CHF(4) WHB(4)
-76.7929	17.9711	Kingston, Jamaica	(McCann and others, 2011 quoting The Morning Journal Kingston, Jamaica May 13, 1842): <i>The Falmouth Post reports that the earthquake which was felt in this town on Saturday evening last [by Jamaican count this would be May 7], was also felt at Falmouth. There were three distinct shocks; it adds which appeared to vibrate from N.W. to S.</i>  (Hall, 1922): 1842, May 7, 3:15 PM, III – Shock sufficient to make houses rock.  (Tomblin and Robson, 1977): Smart shock felt.	CHF(3) WHB(3) S&L1992(5) T&R1977(5)
-77.6575	18.4928	Falmouth, Jamaica	(McCann and others, 2011 quoting The Morning Journal Kingston, Jamaica May 13, 1842): <i>The Falmouth Post reports that the earthquake which was felt in this town on Saturday evening last (by Jamaican count this would be May 7), was also felt at Falmouth. There were three distinct shocks; it adds which appeared to vibrate from N.W. to S.</i>	CHF(3) WHB(3)

May 7, 1842, to June 28, 1842				
<b>Time:</b> after 5:30 PM Santo Domingo local time on May 7th				
<b>Phenomenon Notes:</b> Description of aftershocks in various places at various times of the day.				
<b>Number of Observations:</b> 4				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(Mallet and Mallet, 1858): Succeeded by many slighter shocks on the 8th, 9th, and perhaps 10th. June 24 5h 30m AM, island St. Domingo, very severe shocks.  (Garcia, 1900): [Aftershocks felt] Between 8 and 9 at night there was a small tremor that was repeated again between 9 and 10 at night, adding to the panic already caused by the catastrophe. On the 9th the earth shook again between 9 and 10 in the morning and at 11:30 there was another stronger tremor that was repeated at around 1 in the afternoon. On the 10th, there were two shocks at 7:30 and at 8:30 at night although both lightly and this was repeated at midnight. On the 11th, at about 2:30 in the morning there	-

May 7, 1842, to June 28, 1842				
			<p>was also a shock, another between 4:30 and 5 in the morning and again at 10 at night. On the 12th there was also a tremor at about 6 in the morning, on the 14 at about 8 at night, on the 15th there were two late at night, on the 16th there was one at 2 in the morning, on the 23rd there were two, one around 4 in the afternoon and another at about 6:30 at night, on the 6th of June it was said that three shocks occurred at night and another on the 27th of June at about 11 at night, and two on the 28th, one at 3 in the morning and the other between 4 and 5 in the morning with very strong shaking.</p> <p>(de Utrera, 1995): June 21, 1842, eastern part. [Hispaniola]</p>	
-67.1407	18.2009	Mayaguez, Puerto Rico	<p>(McCann and others, 2011 quoting The Charleston Daily Courier, June 20, 1842): <i>Earthquake – Capt. Ward of the barque Condor which arrived yesterday morning from Mayaguez, informs us that the earthquake on the 7th of May was very severely felt there; and that up to the 30 of May when he sailed, there were from two to three shocks a day. The inhabitants were very fearful of a similar shock to that which was felt on the 7th in other places.</i></p>	-
-70.6937	19.7971	Puerto Plata	<p>(Public Ledger, 1843): [printed letter dated May 20, 1842] From the 7th up to the present date, we have been in a continued state of alarm – upwards of 40 shocks having taken place during that interval, some more or less severe.</p>	-
-72.3388	18.5432	Port-au-Prince	<p>(Annual Register, 1843): On the Saturday night succeeding and on Sunday there were other shocks * * * On Monday morning at twelve o'clock there was another shock * * * On Tuesday, again there was another shock, and since then, says the Patriote, “it seems to us that we walk upon a quaking earth.</p>	-

February 22, 1843, and March 22, 1843				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> Tippenhauer (1893) and de Utrera (1995) also mention another earthquake on March 22, 1843. <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-	-	Eastern part of Hispaniola	<p>(Perrey, 1843): Three large shakes were felt, on the eastern part of Santo Domingo [island].</p> <p>(Tippenhauer, 1893): February 22, east of Santo Domingo, 3 shocks; March 22, east of Santo Domingo.</p>	-

<b>February 22, 1843, and March 22, 1843</b>				
			(de Utrera, 1995): February 22 and March 22, eastern part.	

<b>September 15, 1846</b>				
<b>Time:</b> 11:00 PM, Cap Haitien local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.2006	19.7616	Cap Haitien	(Perrey, 1856): September 15, 1846, 11 o'clock at night, in Cap Haitien, Santo Domingo [Hispaniola].	-

<b>September 16, 1846</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(Perrey, 1856): September 16, 1846, city of Santo Domingo, two tremors.  (Tippenhauer, 1893): September 16, Santo Domingo.  (de Utrera, 1995): September 16, 1846 – Santo Domingo.	-

<b>September 18, 1846</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.2006	19.7616	Cap Haitien	(Perrey, 1856): September 18, 1846; again at Cap Haitien, Santo Domingo [Hispaniola].  (Tippenhauer, 1893): September 18, Cap Haitien.	-

<b>June(?) 1849</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> Poey (1857) suggests this event might have occurred in the month of June. The sources refer to the island of Hispaniola and not the city of Santo Domingo. <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity

<b>June(?) 1849</b>				
-	-	Hispaniola	<p>(La Presse, 1849): There is no new politics in Santo Domingo, where there has been an earthquake that fortunately has not caused great damage.</p> <p>(Perrey, 1850 a &amp; b): La Presse July 18 also said there was at St. Domingo an earthquake that fortunately has not caused great damages.</p> <p>(Poey, 1857): Probably in June?</p> <p>(de Utrera, 1995): 1849 Santo Domingo.</p>	-

<b>April 8, 1852</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.2006	19.7616	Cap Haitien	<p>(New York Times, 1852): The schooner Charles Alstrum, from Cape Haytien, 17th last, reports that on the 8th, a severe shock of an earthquake was experienced at the Cape, but no damage was done.</p> <p>(Meriam, 1853): Shock of Earthquake at Cape Haytien, St. Domingo, West Indies.</p> <p>(Perrey, 1854): The 8 [April, 1852], at Cap (Haiti), strong tremors without damages.</p> <p>(Tippenhauer, 1893): April 8, Cap Haitien.</p>	-

<b>August 18, 1852</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	<p>(Meriam, 1853): Aug. 18, Shock of Earthquake at Port au Prince and Gonaives, St. Domingo.</p> <p>(Perrey, 1856): August 18, 1852, at Port-au-Prince and Gonaives (St. Domingue).</p>	-

August 18, 1852				
			(Tippenhauer, 1893): August 18, Port-au-Prince and Gonaives.	
-72.6833	19.4500	Gonaives	(Meriam, 1853): Aug. 18, Shock of Earthquake at Port au Prince and Gonaives, St. Domingo.  (Perrey, 1856): August 18, 1852, at Port-au-Prince and Gonaives (St. Domingue).  (Tippenhauer, 1893): August 18, Port-au-Prince and Gonaives.	-

August 19, 1852				
<b>Time:</b> 3:00 and 4:00 in the morning, Port-au-Prince local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Meriam, 1853): Aug. 19, Two heavy shocks at Port au Prince – one at 3 and one at 4 A.M.  (Perrey, 1856): August 19, 1852, at Port-au-Prince, two tremors, one at 3 o'clock and the other 4 o'clock in the morning.	-

August 28, 1852				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> Tippenhauer (1893) suggests it was on the 28th and 29th in his entry. <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.6833	19.4500	Gonaives	(Meriam, 1853): Aug. 28, Two shocks of earthquake at Hayti, W.I. [West Indies]: shock at Gonaives, St. Domingo, and at St. Jago de Cuba.  (Perrey, 1856): August 28, 1852, in Haiti, Gonaives (St-Domingue) two tremors.  (Tippenhauer, 1893): 1852, 28/29 August – Cape Haitien, Gonaives, and Santo Domingo.  (de Utrera, 1995): Utrera has earthquakes listed as August 28 and 29 somewhere on the island.	-

<b>November 25, 1852</b>				
<b>Time:</b> At night, Port-au-Prince local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Meriam, 1853): Nov. 25, Severe shock of Earthquake at Port au Prince in the night.  (Perrey, 1855): November 25, 1852, at night, at Port-au-Prince (Haiti), violent tremor.  (Tippenhauer, 1893): November 25, night, Port-au-Prince.	-

<b>September 11, 1853</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Perrey, 1855): September 11, 1853, in Port-au-Prince (Haiti).  (Tippenhauer, 1893): September 11, Port-au-Prince.	-

<b>July 8, 1855</b>				
<b>Time:</b> Early in the morning, Port-au-Prince local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Perrey, 1857): July 8, 1855, very early in the morning, in Port-au-Prince and its surroundings, slight tremors.  (Tippenhauer, 1893): July 8, morning, Port-au-Prince and surrounding area.	-

<b>August 26, 1855</b>				
<b>Time:</b> 10:00 AM, Santo Domingo local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity



August 26, 1855				
-69.8877	18.4722	Santo Domingo	(Perrey, 1861): August 26, 10 h (sic), In Santo Domingo, earthquake without accompanying details from M. Poey.  (Tippenhauer, 1893): August 26, 1855, 10 o'clock, Santo Domingo.  (de Utrera, 1995): August 26, Santo Domingo.	-

April 8, 1860				
<b>Time:</b> 5:00 AM, Port-au-Prince local time (Easter) <b>Tsunami:</b> A tsunami was observed in Anse-a-Veau and Miragoane (New York Times, 1860b; Scherer, 1912a). <b>Phenomenon Notes:</b> The shock at 5 in the morning could have been the foreshock to the stronger later one that occurred at 10 in the evening that day Port-au-Prince local time, or 9 PM Gonaives local time. <b>Number of Observations:</b> 16				
Longitude	Latitude	City	Description	Intensity
-73.3447	18.5028	Anse-A-Veau	(New York Times, 1860b): In the town of Anse-a-Veau, in the south, 124 houses were thrown down and a great many of their inmates severely wounded.  (Perrey, 1862): The place called Anse-au-Veau appears to have been the most abused. A hundred and twenty-four houses were damaged or destroyed.  (Scherer, 1912a): At Anse à Veau one hundred twenty four houses were destroyed or cracked. * * * Crevasses running from north to south crossed the streets. The sea drew back and then broke with a crash on the shore. The people took refuge in La Haute Ville [uptown] which had suffered less.	CHF(7) WHB(7) SISF(8)
-73.0861	18.4423	Miragoane	(New York Times, 1860b): At the seaport of Miragoane the sea rose to a tremendous height, and made considerable progress into the land, doing much damage to parts of the town lying near the shore.  (Scherer, 1912a): At Miragoane, the bridge sank, several houses were thrown down and fire broke out in three places.	CHF(6) WHB(6) SISF(7.5)
-72.8668	18.4315	Petit Goave	(Scherer, 1912a): At Petit Goave several houses with stone walls crumbled; others half of wood and half of stone had their doors unhinged. One factory was nearly destroyed. All the houses were abandoned.	CHF(6) WHB(6) SISF(7.5)
-72.8344	18.4395	Mont Tapion	(Scherer, 1912a): Rocks obstructed the highway. [This location is between Petit Goave and Grande Goave and is an area prone to landslides and rock falls.]	CHF(6) WHB(-)

April 8, 1860				
-73.5079	18.5264	Petit Trou de Nippes	(Scherer, 1912a): At Petit Trou de Nippes and at Baradères the damage was less [than at Miragoane].	CHF(5) WHB(5) SISF(7)
-73.6387	18.5432	Baradères	(Scherer, 1912a): At Petit Trou de Nippes and at Baradères the damage was less [than at Miragoane].	CHF(5) WHB(5) SISF(7)
-72.3388	18.5432	Port-au-Prince	<p>(New York Times, 1860b): The earthquakes which I have stated were felt here [Kingston] were also experienced in Hayti, where they occasioned serious injury. The concussions were so great that the impression was that had the undulations lasted a second longer it was probably that not a single house would have been left standing at Port-au-Prince. There were repeated convulsions, which threw the inhabitants into such a state of alarm and excitement that they abandoned their houses, which they momentarily expected to fall and cover them, and took up their abode in tents.</p> <p>(Perrey, 1862): On the 8th, 5 o'clock in the morning in Port-au-Prince (Haiti), a first shock was felt throughout the departments. The movements continued until the 13th. We did not account it being said, that at least thirty shocks in twenty-four hours. The largest was felt on the 8th between 10:00 and 10:30 in the evening.</p> <p>(Scherer, 1912a): At Port-au-Prince the shock at half-past ten at night caused terror in all and the population fled into the streets from every quarter and passed the night outdoors. Several houses were badly damaged and one not yet finished was thrown down. From the 8th to the 11th of April twenty to thirty shocks were felt.</p> <p>(Taber, 1922): Towns * * * as far east as Port-au-Prince had some houses thrown or badly damaged.</p>	CHF(5) WHB(5) SISF(7)
-73.3971	18.2816	Aquin	<p>(Perrey, 1862): At Aquin, where they had not felt the one at 5 in the morning, they were repeated for a quarter of an hour by quarter of an hour after the one at 10:30 in the evening up until the 13th. Several houses were damaged there. The length of the longest shock (the one others reported at 10 at night) did not exceed fifteen to twenty seconds.</p> <p>(Scherer, 1912a): It again crossed the valley of L'Asile and made itself strongly felt in the south at Aquin and at Cayes. Various houses were seriously damaged.</p>	CHF(5) WHB(5) SISF(7)

April 8, 1860				
-73.7500	18.1945	Les Cayes	<p>(Perrey, 1862): In Les Cayes, they did not report the two strong tremors, the 8th, at 5 o'clock in the morning, and 10 o'clock at night. The walls were cracked.</p> <p>(Scherer, 1912a): It again crossed the valley of L'Asile and made itself strongly felt in the south at Aquin and at Cayes. Various houses were seriously damaged.</p>	CHF(5) WHB(5) SISF(7)
-72.5167	18.2333	Jacmel	<p>(Scherer, 1912a): It caused a flurry in Port-au-Prince, Jacmel, Leogane, and St. Marc. Moreover, people were impressed after that by the least shock.</p> <p>(Taber, 1922): Towns * * * as far east as Port-au-Prince had some houses thrown or badly damaged.</p>	CHF(5) WHB(-) SISF(7)
-72.6333	18.5167	Leogane	<p>(Scherer, 1912a): It caused a flurry in Port-au-Prince, Jacmel, Leogane, and St. Marc. Moreover, people were impressed after that by the least shock.</p> <p>(Taber, 1922): Towns * * * as far east as Port-au-Prince had some houses thrown or badly damaged.</p>	CHF(5) WHB(-) SISF(7)
-72.7000	19.1167	Saint Marc	<p>(Scherer, 1912a): It caused a flurry in Port-au-Prince, Jacmel, Leogane, and St. Marc. Moreover, people were impressed after that by the least shock.</p> <p>(Taber, 1922): Towns * * * as far east as Port-au-Prince had some houses thrown or badly damaged.</p>	CHF(5) WHB(-) SISF(6)
-73.9277	18.0938	Port Salud	(Scherer, 1912a): The shock was further strongly felt at Port Salud.	CHF(4) WHB(4) SISF(6)
-72.2006	19.7616	Cap Haitien	(New York Times, 1860a): Cape Haytien [Cap Haitien] reports no loss of life, although several walls and a few houses fell.	CHF(-) WHB(-)
-72.6833	19.4500	Gonaives	(New York Times, 1860a): By the kindness of Capt. J.R. Lavender, of the brig. Foster, we have been enabled to examine correspondence from Gonaives, giving an account of a series of earthquakes which startled the inhabitants of the island of Hayti from the 8th to the 13th of April, when the brig left port. The first shock was a heavy one, and occurred on the morning of Sunday April 8. * * * Capt. Lavender says the first shock was very perceptible among the shipping, causing a trembling sensation and a sound similar to the rumbling of chain cables over a rocky bottom. * * * The only damage was the cracking of a few walls: but when the brig left the excitement	CHF(3) WHB(-) SISF(5)

April 8, 1860				
			continued. * * * The first motion perceived by the correspondent at Gonaives, on the morning of the 8th, was a slight undulation of the earth, apparently from South to North, then a cracking and creaking sound in all the timbers of the house; and finally a jumping or heaving motion of the whole building, as if the ground were alternately raised and depressed, creating a very unpleasant sensation.  (Perrey, 1862): On the 8, at dawn and at 9 o'clock in the evening in Gonaives (Haiti), two violent tremors.	
-76.7929	17.9711	Kingston, Jamaica	(New York Times, 1860b): Correspondence of the New York times: Kingston (Jamaica) Friday April 20, 1860 - * * * Several slight shocks of earthquake were left in this island during the past fortnight. As I explain elsewhere, these same convulsions occasioned very serious damage in Hayti.	CHF(3) WHB(-)

April 9, 1860 to May 5, 1860				
<b>Time:</b> Various <b>Phenomenon Notes:</b> Aftershocks of April 8, 1860. <b>Number of Observations:</b> 4				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Perrey, 1862): On the 9th at midnight, and on the next morning, at Port-au-Prince, many tremors. On the 10 and the 12, at Port-au-Prince, new tremors.	-
-72.6833	19.4500	Gonaives	(The New York Times, 1860a): During the night of the 11th the shocks were very frequent, but on the 12th and 13th there were but two shocks.  (Perrey, 1862): The same day [April 9] hours not indicated, at Gonaives, two light tremors.	-
-75.8296	20.0209	Santiago, Cuba	(Perrey, 1862): On the 9th, again, in the morning, at Santiago, Cuba, one strong tremor.	-
-	-	Haiti (island)	(Perrey, 1862): As of the 16th, the Travail, Haitien newspaper, we burrow the following details, "It has been three days we have been at rest." According to a letter I received from Mr. Ardouin, Minister of Haiti in Paris, the shocks were reported for fifteen days. They were felt as far as Jamaica, Cuba, and in the north up to the island of New Providence [Bahamas]. The same day (times not indicated) at Inagua [Bahamas], two violent shocks, but without damages.	-

April 9, 1860 to May 5, 1860				
			(Perrey, 1873): April – the 8 to May 5, in Haiti, continuous tremors that were reported in great part by M. A. Lancaster...On the 8th at 4h. 20 m. in the morning, strong tremor, a second one at 6 o'clock. Both were accompanied by a loud noise. The 9th, ten tremors. The 10th, at 10 o'clock at night and at midnight, then on the 11th, almost at every hour new tremors. Until the 29th, they are almost daily. In all sixty-eight tremors from south-southwest to north-northeast, without counting the vibrations.	

December 1, 1860				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(Perrey, 1862): 1860, On the first day of the month (December) at Saint-Domingue, many tremors more or less strong. (Letter from M. B. Ardouin, minister of Haiti, close to the French government).	-

April 8, 1861				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.2006	19.7616	Cap Haitien	(Tippenhauer, 1893): 1861, April 8 – Cap Haitien.	-

August 22, 1863				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> Sounds were heard before the arrival of the shaking (Perrey, 1865). <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Perrey, 1865): 1863, August 22, 9h 54 m. 36s. mean local time, at Port-au-Prince (Haiti), one undulatory tremor, preceded by a subterranean noise like in years before. Trustworthy people heard an underground detonation like a cannon shot, others clearly heard a loud roll, the two descriptions may exist at the same time, given the different terrains on which the city is built. (Moniteur Haitien of August 29. Comm. of M. Ardouin, minister of Haitien government in Paris).	-

<b>February 17, 1864</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Tippenhauer, 1893): 1864, February 17, Port-au-Prince.	-

<b>April 20, 1864</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Tippenhauer, 1893): 1864, April 20 – Port-au-Prince, 3 shocks.	-

<b>May 19, 1864</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> Two tremors occurred on this day, the second weaker than the first. <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.5167	18.2333	Jacmel	(Perrey, 1866): 1864, May, 19: Jacmel (Haiti), violent earthquake felt in the port by the schooner George Prescott; It has destroyed many houses on the coast. An hour later, a second weaker tremor.	-

<b>May 21, 1864</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> Aftershock of May 19, 1864. <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.5167	18.2333	Jacmel	(Perrey, 1866): 1864, May 21, third tremor, that again knocked down houses.	-

<b>June 1, 1864</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> Possible aftershock of May 19, 1864 (?). <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity

<b>June 1, 1864</b>				
-72.5167	18.2333	Jacmel	(Perrey, 1866): 1864, June 1: Jacmel (Haiti), a fourth tremor. No accidents.	-

<b>February 14, 1866</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
<b>Longitude</b>	<b>Latitude</b>	<b>City</b>	<b>Description</b>	<b>Intensity</b>
-69.8877	18.4722	Santo Domingo	(Perrey, 1870): The same day [February 14, 1866] hour not indicated, at Santo Domingo, one strong tremor; many houses knocked down or damaged.	CHF(5) SISF(7)

<b>December 1867 to January 1868</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> Multiple events occurring from December to January. <b>Number of Observations:</b> 1				
<b>Longitude</b>	<b>Latitude</b>	<b>City</b>	<b>Description</b>	<b>Intensity</b>
-69.8877	18.4722	Santo Domingo	(Perrey, 1872a): 1868 January 17 and 18, at the island of Haiti, tremors (M.W. Mallet.) “In January”, said M. Dr. Rojas, “the earthquakes were frequent in Cuba and in Santo Domingo, which are influenced by the volcanic axis of Central America. New earthquakes shake the Lesser Antilles which seem to rest after the earthquakes of November and December, and the seismic waves, leaving the island group south of the Virgin Islands, takes its direction to the NW. (L.C. p.47) ”.  (de Utrera, 1995): 1867 – End of the year to New Year's; Santo Domingo.	-

<b>August, 1878</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
<b>Longitude</b>	<b>Latitude</b>	<b>City</b>	<b>Description</b>	<b>Intensity</b>
-72.3388	18.5432	Port-au-Prince	(Tippenhauer, 1893): 1878, August, Port-au-Prince – several days weak shake.	-

<b>August 19, 1881</b>				
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<b>August 19, 1881</b>				
<b>Time:</b> 8:00 AM, Higüey local time <b>Phenomenon Notes:</b> Some sources use the year 1882, instead of 1881 see Higüey entry. <b>Number of Observations:</b> 3				
Longitude	Latitude	City	Description	Intensity
-68.7168	18.6154	Higüey	(de Utrera, 1995): 1881 August 19, one tremor at 8 AM; another at 8:30 approximately, followed by a third. The sanctuary at Higüey very damaged. The catalog [Scherer and Baltenweck, 1914] does not record this event on this date. Instead it records as event in 1882. However the date we provide here comes from the official correspondence by the priest in Higüey Francisco Ciccone to the priesthood.  (Scherer, 1912a): In 1882 a slight shock was felt at Santo Domingo, Seybo and Higüey. The churches of the two last places were damaged.	CHF(6) SISF(7) T&R1977(6)
-69.0364	18.7648	Seibo	(Scherer, 1912a): In 1882 a slight shock was felt at Santo Domingo, Seybo and Higüey. The churches of the two last places were damaged.	CHF(5) SISF(7) T&R1977(7)
-69.8877	18.4722	Santo Domingo	(Scherer, 1912a): In 1882 a slight shock was felt at Santo Domingo, Seybo and Higüey. The churches of the two last places were damaged.	CHF(3) T&R1977(3)

<b>September 15, 1884</b>				
<b>Time:</b> 2:30 AM, Port-au-Prince local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Tippenhauer, 1893): 1884 September 15 2:30 early, weakly.  (Scherer and Baltenweck, 1914): September 15 at 2:30 a.m. Port-au-Prince, weak tremor.	-

<b>October, 1886</b>				
<b>Time:</b> Around noon, Port-au-Prince local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Tippenhauer, 1893): 1886 October (?) 12 midday Gonaïves and Port-au-Prince, 1 weak tremor.	-



October, 1886				
-72.6833	19.4500	Gonaives	(Tippenhauer, 1893): 1886 October (?) 12 midday Gonaives and Port-au-Prince, 1 weak tremor.  (Scherer and Baltenweck, 1914): October at noon, Gonaives.	-

January, 1887				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-74.1145	18.6446	Jeremie	(Tippenhauer, 1893): 1887, early, Jeremie.  (Scherer and Baltenweck, 1914): January, Jeremie.	-

September 15, 1887				
<b>Time:</b> 8:15 PM, Port-au-Prince local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Tippenhauer, 1893): 1887 September 15, 8:15 evening, Port-au-Prince, weak.	-

September 22, 1887				
<b>Time:</b> 4:50 AM, Port-au-Prince local time <b>Phenomenon Notes:</b> Possible foreshock (?) <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Tippenhauer, 1893): 1887 September 22, 4:50 morning, lasting 2 seconds, E to W, Port-au-Prince.  (Scherer and Baltenweck, 1914): September 22 at 5:00 a.m. Port-au-Prince. Direction NE, duration 5 seconds.	-

September 23, 1887				
<b>Time:</b> 12:50 AM, Port-au-Prince local time <b>Phenomenon Notes:</b> Possible foreshock (?)				

September 23, 1887				
Number of Observations: 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Tippenhauer, 1893): 1887 September 23, 12:50 night, Port-au-Prince.  (Scherer and Baltenweck, 1914): September 23 at 55 after midnight, Port-au-Prince, one shock.	-

September 23, 1887				
<b>Time:</b> 6:43 AM Kingston, Jamaica local time <b>Tsunami:</b> According to Scherer (1912a) there was a tsunami associated with this earthquake that affected from Mole-St. Nicolas to Anse d'Hainault; on the western most coastline in the southern peninsula of Haiti, north of Tiburon. <b>Phenomenon Notes:</b> Recorded in Kingston Jamaica (Hall, 1922). Many Spanish newspapers republished the same story that came out in The New York Times (1887a). <b>Number of Observations:</b> 22				
Longitude	Latitude	City	Description	Intensity
-72.8370	19.9408	Port-de-Paix	(Tippenhauer, 1893): 7:00 early one house completely destroyed, several damaged, the church under construction was destroyed.  (Scherer, 1912a): At Port de Paix the church recently erected was struck down, several houses were overthrown and others of brick badly damaged.  (de Utrera, 1995): Considerable damages in Haiti, with almost complete destruction of Cape Haitien, Port-de-Paix, and Mole St. Nicolas.  (Shepherd and Lynch, 1992 quoting, Colonial Office Records): <i>The city is reported to have been partly destroyed.</i>	CHF(7) WHB(7) SISF(8) S&L1992(8)
-73.3745	19.8052	Mole-St. Nicolas	(Tippenhauer, 1893): 6:30 early, a great many houses were destroyed, the waters from the Ravine, dry since 1877, reappeared.  (Scherer, 1912a): The disaster struck Mole St. Nicolas especially, and the interior region to the south of the central Hilera suffered heavily. * * * At Mole St. Nicolas, as was said, disaster was heaviest. Nearly all the houses were overthrown and the city was covered in ruins. Springs of hot water burst forth in the middle of the town, the river La Gorge, that had been dry since 1878, reappeared in all its force and the sea at the moment of the shock drew back to a great distance from the city.	CHF(8) WHB(8) SISF(9) S&L1992(9) T&R1977(9)

September 23, 1887				
-72.2006	19.7616	Cap Haitien	<p>(Tippenhauer, 1893): 7:15 early, direction NE to SW, 80 houses completely damaged.</p> <p>(Scherer, 1912a): At Cap Haitien the shocks were numerous; eighty-eight houses were cracked and the few which had resisted the 1842 fell. The shocks began with trembling. In the city the fright was general and many people took refuge in the open places, and this was the case for many parts of the Plaine du Nord.</p>	CHF(6.5) WHB(6.5) SISF(8) S&L1992(7) T&R1977(7)
-72.6929	19.4458	Gonaives	<p>(Tippenhauer, 1893): 7:00 early, direction NE to SW, several houses damaged.</p> <p>(Scherer, 1912a): At Gonaives the shocks came from the northeast and lasted one minute. Several houses were destroyed, other half fell leaving none of their furniture unharmed. The population bivouacked outdoors.</p> <p>(de Utrera, 1995): Port-au-Prince, Gonaives, etc. also damaged.</p>	CHF(6.5) WHB(6.5) SISF(8) S&L1992(7) T&R1977(7)
-72.4685	19.5974	Plaisance	<p>(Tippenhauer, 1893): 7:00 early, roof of the church was lost.</p> <p>(Scherer, 1912a): At Plaisance, Gros Morne and Marmelade the havoc was very considerable.</p>	CHF(6) WHB(-) SISF(8)
-72.6836	19.6699	Gros Morne	<p>(Scherer, 1912a): At Plaisance, Gros Morne and Marmelade the havoc was very considerable.</p>	CHF(6) WHB(-) SISF(8)
-72.3459	19.5091	Marmelade	<p>(Scherer, 1912a): At Plaisance, Gros Morne and Marmelade the havoc was very considerable.</p>	CHF(6) WHB(-) SISF(8)
-75.8296	20.0209	Santiago, Cuba	<p>(New York Times, 1887a): Sept. 23 – A severe shock of earthquake was felt in Santiago de Cuba today, the vibrations lasting half a minute. It was followed an hour later by two other shocks, but of less intensity. Two persons were injured and some houses were damaged. Shocks were also felt in Guantanamo and Manzanillo.</p> <p>(El Correo Militar, 1887): A telegram received from Havana [Cuba] gives news that it was felt on Friday [Sept. 23] in Santiago de Cuba an earthquake that as a consequence was felt by several buildings. Also it has resulted in two injured persons. They know that the earthquake was felt at the same time in Guantanamo, in Manzanillo and on the island of Jamaica.</p>	CHF(6) WHB(6) S&L1992(8) T&R1977(8)

September 23, 1887				
			<p>(Le Gaulois, 1887): A dispatch from Cuba confirms the news of an earthquake in Santiago. They add that the oscillations lasted 25 seconds, they repeated twice in the space of one hour, but with less intensity.</p> <p>(El País, 1887): The earthquake felt on the 23rd in Santiago, Cuba did not result in any serious injuries; only two people were slightly injured. Many buildings suffered damages among them the civil government building, the Hacienda of Administration building, the customs building and school.</p> <p>(Tomblin and Robson, 1977 quoting the Barbados Herald, Sept. 26, 1887): <i>7:00 A very severe oscillating earthquake lasting 30 seconds followed by 3 shorter shocks. 54 buildings reported in ruins and 3 people seriously injured by falling masonry. The rest of the province also experienced a severe shock causing damage in various places.</i></p>	
-75.2162	20.1419	Guantanamo, Cuba	<p>(New York Times, 1887a): Shocks were also felt in Guantanamo and Manzanillo.</p> <p>(El Correo Militar, 1887): They know that the earthquake was felt at the same time in Guantanamo, in Manzanillo and on the island of Jamaica.</p> <p>(Chuy and Pino, 1982): It was felt.</p>	CHF(6) WHB(-)
-72.6978	19.1081	Saint Marc	(Scherer, 1912a): At St. Marc some pieces of wall fell.	CHF(5) WHB(5) SISF(7)
-72.3388	18.5432	Port-au-Prince	<p>(Tippenhauer, 1893): 6:55 early, duration 1 minute, direction NE to SW.</p> <p>(Scherer, 1912a): At Port-au-Prince the oscillatory movement lasted two minutes and a half. The direction was first N-S and then E-W. The clock of the observatory was stopped and the furniture moved out of place. Some old ruins gave way.</p>	CHF(4) WHB(4) SISF(6.5) S&L1992(6) T&R1977(6)
-74.1145	18.6446	Jeremie	<p>(Tippenhauer, 1893): 8:05 early, the sea withdrew itself 60 feet back, 8:15 early, 2 shocks.</p> <p>(Scherer, 1912a): At Jeremie strong shocks were felt during several minutes. The inhabitants abandoned their dwellings and the stores were closed. The sea drew back twenty meters, leaving numbers of fine fish out of water, and</p>	CHF(5) WHB(-) SISF(7) S&L1992(6)

September 23, 1887				
			the people were still disputing about these, when the water returned with a rush upon the beach. There was no accident however. The same movement of the sea made itself felt in all the neighborhood ports and especially at Anse d'Hainault.	
-73.7500	18.1945	Les Cayes	(Tippenhauer, 1893): 7:50 early, duration 15 minutes.  (Scherer, 1912a): At Cayes the earthquake lasted several minutes. Some old buildings were thrown down and others were badly damaged.	CHF(5) WHB(5) SISF(7)
-72.5167	18.2333	Jacmel	(Tippenhauer, 1893): 7:03 early.  (Scherer, 1912a): At Aquin and Jacmel shocks lasted only a few minutes without doing any harm.	CHF(4) WHB(-) SISF(5)
-73.3971	18.2816	Aquin	(Scherer, 1912a): At Aquin and Jacmel shocks lasted only a few minutes without doing any harm.	CHF(4) WHB(4) SISF(5)
-73.6742	20.9335	Great Inagua, Bahamas	(Montadon, 1962): With one strong reverberation on the island of Inagua, Bahamas.  (Shepherd and Lynch, 1992): Strong shaking, the lighthouse keeper at Inagua reported a very severe shock.	CHF(4) WHB(4) S&L1992(7)
-77.1199	20.3457	Manzanillo, Cuba	(New York Times, 1887a): Shocks were also felt in Guantanamo and Manzanillo.  (El Correo Militar, Sept. 26, 1887): They know that the earthquake was felt at the same time in Guantanamo, in Manzanillo and on the island of Jamaica.  (Chuy and Pino, 1982): It was felt.	CHF(3) WHB(3)
-76.2579	20.8854	Holguin, Cuba	(Shepherd and Lynch, 1992 quoting Chuy, 1980): <i>Felt</i> .	CHF(3) WHB(3)
-76.6501	20.3734	Bayamon, Cuba	(Chuy and Pino, 1982): It was felt.	CHF(3) WHB(3)
-76.6742	20.9335	Cristo Cautu, Cuba	(Chuy and Pino, 1982): It was felt.	CHF(3) WHB(3)
-76.7929	17.9711	Kingston, Jamaica	(New York Times, 1887a): Shocks were also felt * * * in Kingston, Jamaica.  (Hall, 1922): Hayti, 1887 September 23 6:43 AM (III) Shock sufficient to make houses rock, Whole Island (Weather Report No. 86) Great earthquake	CHF(3) WHB(-) S&L1992(4) T&R1977(4)

September 23, 1887				
			in Hayti.  (Tomblin and Robson, 1977 quoting Colonial Standard and Jamaica Dispatch, Sept. 23, 1887): <i>An earthquake of unusual duration. Oscillations North to South. The shocks were not of equal severity to those of previous similar visitations.</i>	
-69.8877	18.4722	Santo Domingo	(Scherer, 1912a): On the contrary at Santo Domingo there was much damage.	CHF(3) WHB(-) SISF(6) T&R1977(7)

September 23, 1887, to October 4, 1887				
<b>Time:</b> Various				
<b>Phenomenon Notes:</b> Aftershocks of September 23, 1887.				
<b>Number of Observations:</b> 7				
Longitude	Latitude	City	Description	Intensity
-75.8296	20.0209	Santiago, Cuba	(Le Gaulois, 1887): They add that the oscillations lasted 25 seconds, they repeated twice in the space of one hour, but with less intensity.  (El Siglo Futuro, 1887): Telegram from Santiago, Cuba October 4, - Trepidations tremors, fast and repetitive at nine in the morning today. As a result, sinister prognostications were circulated alarming the public permanently and paralyzing businesses.  (Tomblin and Robson, 1977 quoting Barbados Herald, Oct. 6, 1887): <i>October 4, 1887, 9:45 – severe shocks. Shocks of more or less severity have occurred since the earthquake of September 23. 9:55 A slighter shock.</i>	-
-72.2006	19.7616	Cap Haitien	(Tippenhauer, 1893): Sept 23, 8:45 evening, 2 shocks.	-
-72.3388	18.5432	Port-au-Prince	(Tippenhauer, 1893): 1887, Sept 23, 8:00 evening, duration 2 minutes; Sept. 26, 12:57 at night, 1 -2 seconds duration, direction E to W; Oct. 3 7:40 early, 1 second duration, SE to NW; Oct. 4, 7:50 early 1 second duration, SE to NW.  (Tomblin and Robson, 1977, quoting Barbados Herald, Oct. 20, 1887): <i>A shock of earthquake, lasting about one minute, September 25, 1887 1:00.</i>	-
-74.1145	18.6446	Jeremie	(Tippenhauer, 1893): 1887, Sept. 24, 12:30 at night 3 shocks.	-
-72.0683	18.2398	Sale-Trou	(Tippenhauer, 1893): 1887, Sept 23, 8:03 evening, duration 2 minutes,	-

September 23, 1887, to October 4, 1887				
			direction E to W.	
-75.0128	18.4018	Navassa Island	(New York Times, 1887b): Shaken by an earthquake. The steamer Alene, which arrived from Savanilla last night, touched at Navassa on the way here. There the officers were told that on Sept. 25 a severe shock of earthquake had caused the island to sway to and fro for at least five minutes. No damage however was done.	-
-	-	Hispaniola	(Milne, 1912): 1887, Sept. 23, 7h. A.M. also 9h. 10m. AM also Sept. 24 – 26. West Indies, Bahamas, Inagua Island, Haiti, Port-de-Paix.	-

March 28, 1889				
<b>Time:</b> 12:59 AM, Port-au-Prince local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Tippenhauer, 1893): 1889, March 28, 12:59 early, 40 seconds duration, ESE to WNW direction, 2 shocks.  (Scherer and Baltenweck, 1914): March 28 at 59 minutes after midnight, Port-au-Prince, 2 shocks, the first oscillation ESE, the second vibration lasted 40 seconds total.	-
-72.8668	18.4315	Petit Goave	(Tippenhauer, 1893): 1889, March 28 1:05 early, 40 seconds duration, ESE – WNW direction, 2 shocks.  (Scherer and Baltenweck, 1914): March 28 at 1:05 a.m., Petit Goave, 2 shocks, direction ENE, duration 40 seconds.	-

November 6, 1889				
<b>Time:</b> 6:00 PM, Port-au-Prince local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Tippenhauer, 1893): 1889, November 6, 6:00 evening, 3 seconds duration, 1 weak shock.  (Scherer and Baltenweck, 1914): November 6 at 6:00 p.m. Port-au-Prince, duration 3 seconds.	-

<b>March 13, 1890</b>				
<b>Time:</b> 8:45 AM, Port-au-Prince local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Tippenhauer, 1893): 1890, March 13, 8:45 early, 10 seconds duration, SW to NE? , 1 fairly strong shock.	-

<b>July 3, 1890</b>				
<b>Time:</b> Before 11 (AM/PM?) Jacmel local time <b>Phenomenon Notes:</b> Tippenhauer (1893) does not clarify if it was at 11 AM or 11 PM. <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.5167	18.2333	Jacmel	(Tippenhauer, 1893): 1890, before July 3, before 11, 3 shocks.	-

<b>July (late), 1890</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-73.7500	18.1945	Les Cayes	(Tippenhauer, 1893): 1890, end of July (?), several shocks.	-

<b>August 15, 1890</b>				
<b>Time:</b> 1:27 AM, Port-au-Prince local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Tippenhauer, 1893): 1890, August 15, 1:27 early, 5 seconds duration, E – W, 2 shocks moderately strong.	-

<b>October 29, 1897</b>				
<b>Time:</b> 09:33:34 PM Port-au-Prince local mean time (02:22:55 UTC, October 30, 1897) <b>Phenomenon Notes:</b> The observatory in Port-au-Prince finally acquires precise clocks to calculate the local mean time that was +04:49:21 of Greenwich time. <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity



October 29, 1897				
-72.3388	18.5432	Port-au-Prince	(Scherer and Baltenweck, 1914): 9 h. 33 m. 34 sec p.m., three strong tremors, direction NE, 42 seconds duration, predominately vertical component.	-

December 29, 1897				
<p><b>Time:</b> 6:32:31 AM, Port-au-Prince local mean time (11:21:52 UTC)</p> <p><b>Land Surface Observations:</b> In the mountains north of Santiago the peak Diego Campo of 1,220 meters had enormous landslides. Also in the Yaque River valley west of Santiago de los Caballeros, the earth opened up into gullies or collapsed, and some meadows turned into swamps. (Le Cosmos, 1898)</p> <p><b>Submarine Landslide Observation:</b> In Puerto Plata there were two submarine cables that left the mouth of the nearby Plata River and it was noted that the cable going east to Martinique was cut once and the cable going west to Cap Haitien in three places during the earthquake (Le Cosmos, 1898).</p> <p><b>Phenomenon Notes:</b> This earthquake was recorded in Port-au-Prince at the Seminare-College St-Martial that had a Cecchi seismograph and a Bertelli microseismometer operating at the time. The time and observations of the waveform are taken from Le Cosmos (1898) article. According to Agamennone (1898) other instruments also recorded this earthquake in Toronto, Canada; Strasburg, Germany; Nicolas, Russia; and Shide, England, as well as in Italy, Rocca di Papa (Frascati, Roma) and the island of Ischia (Napoli). Agamennone gave a preliminary epicenter location of -71.0 W, 19.5 N based on their interpretation of the reported damages on the island. In Abe (1994), this earthquake was located only using the seismogram recorded in Europe to 11:18 UTC, 19 N Lat, -73 E Lon. Ms = 6.8.</p> <p><b>Number of Observations:</b> 16</p>				
Longitude	Latitude	City	Description	Intensity
-70.8305	19.6717	Altamira	<p>(New York Times, 1898a): The cathedral at Altamira on the crest of the mountain range between Puerto Plata and Santiago was badly damaged.</p> <p>(Agamennone, 1898): The walls and the tombs of the cemetery are no more than a heap of ruins. On the railway, 70 km long, that runs through the mountains between Puerto Plata and Santiago has a bridge of 15 meters in the North direction where one of its pillars toppled and fell into the stream Guanabano that it traverses; later a rock of 4 tons fell onto the track, then at the large bend in Altamira, the rails were broken and thrown out of their tracks where it runs in the N-S direction. However, neither the Cumbre tunnel nor the great Guanabano viaduct has been damaged.</p> <p>(Le Cosmos, 1898): At Altamira, the bounding walls and tombs of the cemetery are a heap of rubble.</p> <p>(Tomblin and Robson, 1977 quoting Jamaica Post Jan. 28, 1898): <i>“Partly disappeared” during the earthquake, but there was no loss of life. The cemetery sank “as if nature has dropped an enormous pile-driver on the spot” and tombs were ruined.</i></p> <p>(Scherer, 1912a): But at Altamira, north of Santiago, all the monuments in the cemetery and on the enclosing wall remain in a heap of ruins.</p>	CHF(8) SISF(8) T&R1977(8)

December 29, 1897				
-70.6937	19.7971	Puerto Plata	<p>(New York Times, 1898a): The Central Dominican Railroad was more or less damaged all along the line. In the neighborhood of Puerto Plata many of the embankments along the line were cracked and settled, and in one instance one of the abutments was shaken entirely out of a fifty-foot span, and one end of the bridge fell fifteen feet. Huge boulders were hurled down from the mountains, breaking the rails and filling up many of the cuts. One large storehouse at Puerto Plata was wrecked.</p> <p>(de Utrera, 1995): The submarine cable tore in Puerto Plata.</p> <p>(Tomblin and Robson, 1977 quoting Jamaica Post Jan. 28, 1898): <i>There was little damage, but the submarine cable, running from this city in two directions, was interrupted once to the East between Rio Plata and Martinique, and three times to the West between Rio Plata and Cape Haitien, which occurred at the time of the same phenomenon. A violent earthquake, lasting about 25 seconds. Sleepers ran outdoors. Followed by eight brief shocks between 7:05 and 12:20.</i></p>	CHF(7) S&L1992(8) T&R1977(8)
-70.7075	19.4502	Santiago de los Caballeros	<p>(New York Times, 1898a): At Santiago the City Hall was badly cracked and two churches partially destroyed.</p> <p>(Le Cosmos, 1898): On December 29, 1897, I found myself in the countryside, two miles northeast of the city of Santiago de los Caballeros, when at 6:30 in the morning I felt the house creak and shake vigorously. It was an earthquake. Barely out of the house in the courtyard, I felt another jolt, and the ground continued to oscillate like a ship on a wave. The trees were swaying from one side to the other. A hanging lamp in the room and that I saw from the courtyard swayed with oscillations of about 20 degrees. These movements lasted approximately fifty seconds. Barely the earthquake passed and I mounted a horse and rushed towards town to my family. Our house, like most houses of Santiago, is built of brick, and the walls are covered with a thick lime plaster. I found the floor of the house covered with detached plaster from the walls and the walls heavily cracked. Many houses were in the same state. Fortunately none had fallen. * * * The direction of motion, which was well observed in the North-East of Santiago, was north to south. At Santiago, the direction and amplitude of the oscillations were indicated by the lightning rods that remained of the great church, which remains inclined at 2 degrees towards the south-west.</p>	CHF(7) SISF(7) S&L1992(8) T&R1977(8)

December 29, 1897				
			<p>(de Utrera, 1995): 6:32 AM; In Santiago de los Caballeros, the churches were left in a ruinous state including the Carmen, La Mayor and less damaged the one in Altagracia.</p> <p>(Tomblin and Robson, 1977 quoting Jamaica Post Jan. 28 1898): <i>In this town of about 12,000 inhabitants, public buildings and all the business sections were severely damaged. Ninety-two houses were damaged. Many houses were evacuated by their fearful occupants, and all business places were closed for three days. The cathedral appeared to be damaged beyond repair. Santiago cemetery was reduced to a pile of ruins.</i></p>	
-70.8751	19.5625	Navarette	<p>(Agamennone, 1898): The shaking was in the E-W direction. A statue turned on its pedestal.</p> <p>(Tomblin and Robson, 1977 quoting Jamaica Post, Jan 28, 1898): <i>Jets of hot water flowed from large cracks in the earth.</i></p>	CHF(6) T&R1977(8)
-70.6150	19.4865	Tamboril	(Tomblin and Robson, 1977 quoting Jamaica Post, Jan 28, 1898): <i>Springs of water appeared temporarily.</i>	CHF(6) T&R1977(8)
-71.0276	19.6400	Maizal	(Tomblin and Robson, 1977 quoting Jamaica Post, Jan 28, 1898): <i>Mountain landslips occurred.</i>	CHF(6) T&R1977(8)
-70.5327	19.2239	La Vega	(Tomblin and Robson, 1977 quoting Jamaica Post, Jan 28, 1898): <i>No great damage reported.</i>	CHF(5) T&R1977(6)
-71.3984	19.6687	Guayubin	<p>(Agamennone, 1898): River Yacque – It is precisely in the lower reaches of this river that the disruption of soil was the deepest. In some places the earth opened to form gullies, in other places it lowered such that where before there were grasslands currently are now only ponds. Fortunately in this district, wooden houses are all built on top of pilings and because of it, not one was overturned.</p> <p>(Scherer, 1912a): At Guyaubin [sic] great cracks were formed, and there was even subsidence of the ground. The houses in this district were of wood and furthermore rested on pilings. None were thrown down in spite of the shocks which were of intensity of IX to X, Rossi-Forel scale.</p>	CHF(5) SISF(7.5)
-71.0735	19.5539	Mao	(Tomblin and Robson, 1977 quoting Jamaica Post, Jan 28, 1898): <i>Earthquake felt but no great damage reported.</i>	CHF(5) T&R1977(6)

December 29, 1897				
-70.5468	19.2797	Santa Cerro	(New York Times, 1898a): The church at Santo Cerro was shaken to the ground and more or less serious damage was done to buildings in a half dozen villages and towns in the Yaqui Valley.	CHF(5)
-72.3388	18.5432	Port-au-Prince	<p>(New York Times, 1897): Port-au-Prince, Haiti, Dec. 29 – This morning at 6:40 o'clock there was an earthquake, the disturbances running from north to south, lasting half a minute, and causing slight cracks in the earth. There were no accidents, but the population was greatly alarmed.</p> <p>(Scherer, 1912a): On December 29, 1897, at 6:32:31 in the morning, the city of Port-au-Prince experienced a very strong earthquake * * * The intensity according to the Rossi-Forel scale was V; the direction east-northeast and northeast; the duration was one minute and thirty-one seconds according to the diagrams of our Cecchi seismograph.</p>	CHF(4) SISF(6) S&L1992(5)
-72.1040	18.8336	Mirebalais	<p>(Agamennone, 1898): The earthquake was felt there with the same characteristics as in Port-au-Prince.</p> <p>(Scherer, 1912a): The shock was also felt very forcibly at Mirebalais and at Jacmel.</p>	CHF(4) SISF(6)
-72.5345	18.2359	Jacmel	<p>(Agamennone, 1898): id. [same as Mirebalais and Port-au-Prince].</p> <p>(Scherer, 1912a): The shock was also felt very forcibly at Mirebalais and at Jacmel.</p>	CHF(3) SISF(6)
-69.8877	18.4722	Santo Domingo	<p>(Agamennone, 1898): The earthquake was felt without much impression.</p> <p>(Scherer, 1912a): It was feeble in Santo Domingo.</p>	CHF(3) S&L1992(5)
-71.1462	21.4674	Cockburn Town, Great Turks Island	(Agamennone, 1898): At 6h 37m a.m. was felt a slight shock lasting a few seconds. Several clocks stopped and no damage.	CHF(4)
-76.7909	17.9840	Kingston, Jamaica	(Agamennone, 1898): On this day, no shock was felt. Weather Office.	CHF(-)

December 29, 1897, to January 25, 1898				
<b>Time:</b> Various times				
<b>Phenomenon Notes:</b> Aftershocks of the December 29, 1897, earthquake.				
<b>Number of Observations:</b> 3				
Longitude	Latitude	City	Description	Intensity
-70.7075	19.4502	Santiago de los Caballeros	(Agamennone, 1898): Thus at Santiago on the same December 29, another six	-

December 29, 1897, to January 25, 1898				
			<p>shocks were felt, of which one at 8h. a.m., a very strong one at 1h. p.m. and then four light ones. The day after, on Sunday the 30th, a violent shock occurred at 10h p.m.; and particularly some were observed at 6h. a.m. on January 13, [1898] and at 10h p.m. on January 21. In all, between December 29 and January 25, 36 shocks were felt, and then the ground became quiet again.</p> <p>(Scherer and Baltenweck, 1914): 1898 January 2 at 10 H. pm- strong tremor; 1898 January 13 at 6H am – strong tremor, 1898 January 21 at 10H am, quite strong tremor.</p> <p>(de Utrera, 1995): In Santiago de los Caballeros it was felt from this date to January 25 1898, 36 tremors, the strongest ones on the days of 2, 13, and 21 of the same month.</p>	
-70.6937	19.7971	Puerto Plata	<p>(Tomblin and Robson, 1977 quoting Jamaica Post Jan. 28, 1898): 1897, December 29, 07:05 – shock lasting 2 seconds; 07:17 – shock lasting 2 seconds; 07:45 – shock lasting 4 seconds; 08:35 – shock lasting 1 second; 09:00 – shock lasting 1 second; 09:54 – shock lasting 2 seconds, 10:20 – shock lasting 1.5 seconds, 12:20 – shock lasting 2 seconds; 13:25 – another severe shock.</p>	-
-	-	Hispaniola	<p>(Tomblin and Robson, 1977, quoting Jamaica Post, Jan 28, 1898): 1897 December 29 to 1898 January 2, St. Domingo – Earthquakes continued at intervals, the last severe shock occurring at 10:30 on January 2; 1898 January 2 to January 27, several light shocks.</p> <p>(Scherer, 1912a): The seismic disturbance lasted from December 29th to January 25th and thirty-six shocks, more or less strong, were counted during that time, about the region shaken since December 29th.</p>	-

July 11, 1898				
<b>Time:</b> 3:00 PM, Port-au-Prince mean local time (19:49:21 UTC) <b>Phenomenon Notes:</b> Local mean time in Port-au-Prince is +04:49:21 of Greenwich time). <b>Number of Observations:</b> 7				
Longitude	Latitude	City	Description	Intensity
-72.2006	19.7616	Cap Haitien	(New York Times, 1898b): Earthquake at Cape Haitien – Advices received here yesterday afternoon declare that an earthquake was felt in Cape	CHF(4)

July 11, 1898				
			Haytien, Haiti at 3 o'clock yesterday afternoon. The disturbance lasted 5 seconds, and was so severe as to have driven the inhabitants from their homes in terror. No news of extent of damage or loss of life, if any was received.	
-72.3388	18.5432	Port-au-Prince	(Scherer and Baltenweck, 1914): 3h. PM fairly strong earthquake, intensity IV [Rossi-Forel scale] direction NE, at 5 PM and 6:37 PM two other tremors, direction E.	CHF(3)
-72.2272	18.5758	Croix-de-Bouquets	(Scherer and Baltenweck, 1914): 3H PM, felt.	CHF(3)
-72.0630	18.5331	Ganthier	(Scherer and Baltenweck, 1914): 3H PM, felt.	CHF(3)
-72.6929	19.4458	Gonaives	(Scherer and Baltenweck, 1914): 3H PM, felt; a French liner harbored in Gonaives felt an impact similar to a collision at 3:00 p.m.	CHF(3)
-73.5466	18.2630	Saint Luis du Sud	(Scherer and Baltenweck, 1914): 3H PM, felt.	CHF(3)
-73.7500	18.1945	Les Cayes	(Scherer and Baltenweck, 1914): 3H PM, felt.	CHF(3)

## Selected Earthquakes of the 20th Century:

Intensity, Mercalli Magnitude Intensities (3-10); CHF, assigned by C. H. Flores (author); WHB, assigned by W. H. Bakun (author); SISF, assigned by SiSFrance/Antilles (2010); L&S1995, assigned by Lynch and Shepherd (1995); C1972, assigned by Campbell (1972); LB1948, assigned by Lynch and Bodle (1948); -, no assignment.

January 5, 1902				
<b>Time:</b> 04:30:00 AM, Port-au-Prince local mean time (09:19:21 UTC)				
<b>Phenomenon Notes:</b> Port-au-Prince local mean time is equal to +04:49:21 Greenwich time.				
<b>Number of Observations:</b> 4				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Scherer and Baltenweck, 1921): A very strong tremor at 4h. 30m. a.m., also felt at Petionville, Furcy, and Ganthier.	-
-72.2864	18.5107	Petionville	(Scherer and Baltenweck, 1921): A very strong tremor at 4h. 30m. a.m., also felt at Petionville, Furcy, and Ganthier.	-
-72.3062	18.4165	Furcy	(Scherer and Baltenweck, 1921): A very strong tremor at 4h. 30m. a.m., also felt at Petionville, Furcy, and Ganthier.	-
-72.0630	18.5331	Ganthier	(Scherer and Baltenweck, 1921): A very strong tremor at 4h. 30m. a.m., also felt at Petionville, Furcy, and Ganthier.	-

August 16, 1903				
<b>Time:</b> 08:50:28 AM, Port-au-Prince local mean time (13:39:49 UTC)				
<b>Phenomenon Notes:</b> The Cecchi seismometer in Port-au-Prince recorded this earthquake.				
<b>Number of Observations:</b> 9				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Le Nouvelliste, 1903): Yesterday morning around 5 minutes before 9 a.m. a quite strong shake from an earthquake was felt, that lasted several seconds. The oscillations were from E-W. We do not believe there were damages to the city.  (Scherer and Baltenweck, 1921): At 8h. 50m. 28s. Lasted 64 seconds. The earthquake was recorded by the Cecchi seismograph [Continues into a description of the physical recording of the seismogram.] This earthquake was not very violent, no damage or cracks in the ground and no underground noise was reported.	-
-72.2864	18.5107	Petionville	(Scherer and Baltenweck, 1921): Petionville-Furcy, Direction NNW at first and then N-E.	-

<b>August 16, 1903</b>				
-72.3062	18.4165	Furcy	(Scherer and Baltenweck, 1921): Petionville-Furcy, Direction NNW at first and then N-E.	-
-73.3447	18.5028	Anse-a-Veau	(Scherer and Baltenweck, 1921): Anse-a-Veau and Aquin, St. Marc, Port-de-Paix, Direction E.	-
-73.3971	18.2816	Aquin	(Scherer and Baltenweck, 1921): Anse-a-Veau and Aquin, St. Marc, Port-de-Paix, Direction E.	-
-72.6978	19.1081	St. Marc	(Scherer and Baltenweck, 1921): Anse-a-Veau and Aquin, St. Marc, Port-de-Paix, Direction E.	-
-72.8370	19.9408	Port-de-Paix	(Scherer and Baltenweck, 1921): Anse-a-Veau and Aquin, St. Marc, Port-de-Paix, Direction E.	-
-72.2006	19.7616	Cap Haitien	(Scherer and Baltenweck, 1921): Cap-Haitien, lasted 4 minutes 50 seconds.	-
-72.8296	20.9335	Santiago, Cuba	(Scherer and Baltenweck, 1921): Santiago de Cuba at 8h. 35m.	-
-	-	Dalmarie, Haiti [?]	(Scherer and Baltenweck, 1921): Dalmarie, strong shaking, village church damaged, lasted 30 seconds.	-

<b>April 4, 1905</b>				
<b>Time:</b> 10:06:00 AM, Port-au-Prince local mean time (14:55:21 UTC)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 4				
Longitude	Latitude	City	Description	Intensity
-72.5345	18.2359	Jacmel	(Scherer and Baltenweck, 1921): Strong tremor around 10 in the morning.	-
-72.6334	18.5111	Leogane	(Scherer and Baltenweck, 1921): Tremor from an earthquake at 10 in the morning.	
-72.3388	18.5432	Port-au-Prince	(Scherer and Baltenweck, 1921): Very light tremor at 10h. 6m. in the morning, direction E.	-
-72.2864	18.5107	Petionville	(Scherer and Baltenweck, 1921): Light tremor at 10h. 6m. in the morning, direction E.	-

<b>October 12, 1905</b>				
<b>Time:</b> About 05:00:00 PM, Jeremie local time (about 21:49:21 UTC)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity



<b>October 12, 1905</b>				
-74.1145	18.6446	Jeremie	(Scherer and Baltenweck, 1921): Earthquake around 5 o'clock in the evening.	-
-73.7500	18.1945	Les Cayes	(Scherer and Baltenweck, 1921): Earthquake around 5 o'clock in the evening.	-

<b>October 13, 1905</b>				
<b>Time:</b> About 05:00:00 PM, Petit-Goave local time (about 21:49:21 UTC)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 3				
Longitude	Latitude	City	Description	Intensity
-72.8668	18.4315	Petit-Goave	(Scherer and Baltenweck, 1921): Earthquake around 5 o'clock in the evening.	-
-74.1145	18.6446	Jeremie	(Scherer and Baltenweck, 1921): Earthquake around 5 o'clock in the evening.	-
-73.7500	18.1945	Les Cayes	(Scherer and Baltenweck, 1921): Earthquake around 5 o'clock in the evening.	-

<b>October 14, 1905</b>				
<b>Time:</b> 09:51:00 AM, Port-au-Prince local mean time (14:40:21 UTC)				
<b>Phenomenon Notes:</b> A second earthquake was recorded at Port-au-Prince at 08:10 PM, local mean time (00:59:21 UTC, October 15, 1905)				
<b>Number of Observations:</b> 8				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	<p>(Le Nouvelliste,1905a): While we were at work, the tremor of an earthquake was felt at 9h. 51m. with a low intensity. The oscillations lasted about 4 seconds and had the direction North-East.</p> <p>(Le Nouvelliste,1905b): Saturday and Sunday last on the 14th and 15 of October, there were four earthquakes felt – 1st on the 14th at 9 hours 51 minutes in the morning, direction ENE; duration 4 seconds, intensity II. – 2nd on the 14th at 8 hours 10 minutes in the evening; direction ENE duration 2 seconds, intensity I. Intensity I – felt by seismometers only; Intensity II – felt by a few persons at rest.</p> <p>(Scherer and Baltenweck, 1921): Earthquake at 9h. 51m in the morning, earthquake at 8h. 10m. in the evening.</p>	-
-73.3745	19.8052	Mole-St. Nicolas	(Scherer and Baltenweck, 1921): Earthquake at 9h. 51m in the morning.	-
-72.1040	18.8336	Mirebalais	(Scherer and Baltenweck, 1921): Earthquake at 9h. 51m in the morning.	-
-72.5345	18.2359	Jacmel	(Scherer and Baltenweck, 1921): Earthquake at 9h. 51m in the morning.	-
-72.8668	18.4315	Petit-Goave	(Scherer and Baltenweck, 1921): Earthquake at 9h. 51m in the morning.	-

<b>October 14, 1905</b>				
-73.0861	18.4423	Miragoane	(Scherer and Baltenweck, 1921): Earthquake at 9h. 51m in the morning.	-
-74.1145	18.6446	Jeremie	(Scherer and Baltenweck, 1921): Earthquake at 9h. 51m in the morning.	-
-73.7500	18.1945	Les Cayes	(Scherer and Baltenweck, 1921): Earthquake at 9h. 51m in the morning.	-

<b>October 15, 1905</b>				
<b>Time:</b> 04:52:41 PM, Port-au-Prince local mean time (21:42:02 UTC).				
<b>Phenomenon Notes:</b> A second earthquake was recorded in Port-au-Prince at 06:19 PM, local mean time (23:08:21 UTC). Father J. Scherer reported observations in the Nouvelliste newspaper for October 17, 1905.				
<b>Number of Observations:</b> 9				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Le Nouvelliste, 1905b): Saturday and Sunday last on the 14th and 15 of October, there were four earthquakes felt – 3rd on the 15th at 4 hours 54 minutes 41 seconds in the evening, direction NE; intensity III, duration 42 seconds total. There were five successive shakes separated by short calm periods. First tremor lasted 6 seconds, calm for 1 second. Second tremor duration 9 seconds, calm for 3 seconds with horizontal oscillations, while the vertical component was very significant. Third tremor duration 8 seconds, calm for 6 seconds. Fifth tremor duration 4 seconds. – 4th on the 15th at 6 hours 19 minutes, direction NE duration 3 seconds, intensity I. Intensity I – felt by seismometers only; intensity III felt by everyone at rest; they can perceive the direction of motion and duration.  (Scherer and Baltenweck, 1921): First earthquake at 4h. 54m. 41s in the evening, second earthquake at 6h. 19m. in the evening.	-
-72.8668	18.4315	Petit-Goave	(Scherer and Baltenweck, 1921): Strong tremor from an earthquake.	-
-74.1145	18.6446	Jeremie	(Scherer and Baltenweck, 1921): Strong tremor from an earthquake.	-
-72.1260	19.6688	Limonade	(Scherer and Baltenweck, 1921): Two tremors from earthquakes.	-
-73.0861	18.4423	Miragoane	(Scherer and Baltenweck, 1921): Two tremors from earthquakes.	-
-73.7500	18.1945	Les Cayes	(Scherer and Baltenweck, 1921): Two tremors from earthquakes.	-
-73.3745	19.8052	Mole-St. Nicolas	(Scherer and Baltenweck, 1921): Weak tremor of an earthquake.	-
-72.6836	19.6699	Gros-Morne	(Scherer and Baltenweck, 1921): Weak tremor of an earthquake.	-
-72.5345	18.2359	Jacmel	(Scherer and Baltenweck, 1921): Weak tremor of an earthquake.	-

<b>February 8, 1906</b>				
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<b>February 8, 1906</b>				
<b>Time:</b> February 9, at 00:04:00 AM, Port-au-Prince local mean time (04:53:21 UTC)				
<b>Phenomenon Notes:</b> Second tremor felt at 00:21:00 AM (05:10:21 UTC).				
<b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-72.8668	18.4315	Petit-Goave	(Destouches, 1906a): Earthquakes on the 9th [February] at 0h. 04m. and 0h 21m., felt at Petit-Goave and Leogane.  (Scherer and Baltenweck, 1921): Light tremor from an earthquake.	-
-72.6334	18.5111	Leogane	(Destouches, 1906a): Earthquakes on the 9th [February] at 0h. 04m. and 0h 21m., felt at Petit-Goave and Leogane.	-
-73.0861	18.4423	Miragoane	(Scherer and Baltenweck, 1921): Light tremor from an earthquake.	-

<b>May 19, 1906</b>				
<b>Time:</b> 05:13:00 PM, Port-au-Prince local mean time (22:19:21 UTC).				
<b>Phenomenon Notes:</b> According to the other observatory in Port-au-Prince reported by the Society of Astronomy and Meteorology of Port-au-Prince, there were two more earthquakes felt on the 22nd and 31st of the same month.				
<b>Number of Observations:</b> 7				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Destouches, 1906b): Earthquake on the 19th at 5h 42m 30' in the evening, intensity 3, three tremors. From 22 to 31 additionally, number of microseismic tremors, plus strong and frequent from midnight to 7 o'clock in the morning. A total of 58 grouped shocks represented in a duration of 4 h 21 m.  (Scherer and Baltenweck, 1921): 5h 13m in the evening. Two vertical shocks, duration 3 seconds, intensity II, preceded by a loud sound resembling rolling thunder.	-
-72.2006	19.7616	Cap-Haitien	(Scherer and Baltenweck, 1921): The same earthquake was registered at Cap Haitien, St. Marc – three shocks, Thomazeau – direction E, Ganthier – direction NE, Petit-Goave shaking accompanied with rumbling noise. Furcy.	-
-72.6978	19.1081	St. Marc	(Scherer and Baltenweck, 1921): The same earthquake was registered at Cap Haitien, St. Marc – three shocks, Thomazeau – direction E, Ganthier – direction NE, Petit-Goave shaking accompanied with rumbling noise. Furcy.	-
-72.0943	18.6519	Thomazeau	(Scherer and Baltenweck, 1921): The same earthquake was registered at Cap	-

May 19, 1906				
			Haitien, St. Marc – three shocks, Thomazeau – direction E, Ganthier – direction NE, Petit-Goave shaking accompanied with rumbling noise. Furcy.	
-72.0630	18.5331	Ganthier	(Scherer and Baltenweck, 1921): The same earthquake was registered at Cap Haitien, St. Marc – three shocks, Thomazeau – direction E, Ganthier – direction NE, Petit-Goave shaking accompanied with rumbling noise. Furcy.	-
-72.8668	18.4315	Petit-Goave	(Scherer and Baltenweck, 1921): The same earthquake was registered at Cap Haitien, St. Marc – three shocks, Thomazeau – direction E, Ganthier – direction NE, Petit-Goave shaking accompanied with rumbling noise. Furcy.	-
-72.3062	18.4165	Furcy	(Scherer and Baltenweck, 1921): The same earthquake was registered at Cap Haitien, St. Marc – three tremors, Thomazeau – direction E, Ganthier – direction NE, Petit-Goave shaking accompanied with rumbling noise. Furcy.	-

June 15, 1906				
<b>Time:</b> 02:33:00 PM, Port-au-Prince local mean time (19:22:21 UTC)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Scherer and Baltenweck, 1921): Light shock at 2 h 33 m in the afternoon. Intensity I, direction ENE, 4 seconds duration.	-

June 22, 1906				
<b>Time:</b> 02:30:00 AM and 03:00 AM, Jeremie local time (about 07:19:21 UTC)				
<b>Phenomenon Notes:</b> A second tremor was felt at 03:00:00 AM Jeremie local time (about 07:49:21 UTC)				
<b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-74.1145	18.6446	Jeremie	(Scherer and Baltenweck, 1921): Two earthquakes at 2 h 30 m and 3 h in the morning.	-

July 20, 1906				
<b>Time:</b> 04:00:00 AM, Les Cayes local time (about 08:49:21 UTC)				
<b>Phenomenon Notes:</b> None				

<b>July 20, 1906</b>				
<b>Number of Observations:</b> 1				
<b>Longitude</b>	<b>Latitude</b>	<b>City</b>	<b>Description</b>	<b>Intensity</b>
-73.7500	18.1945	Les Cayes	(Scherer and Baltenweck, 1921): Light tremor at 4 h in the morning.	-

<b>August 3, 1906</b>				
<b>Time:</b> 05:00:00 AM, Jacmel local time (about 09:49:21 UTC)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 1				
<b>Longitude</b>	<b>Latitude</b>	<b>City</b>	<b>Description</b>	<b>Intensity</b>
-72.5345	18.2359	Jacmel	(Scherer and Baltenweck, 1921): Light tremor at 5 h in the morning, direction E.	-

<b>October 16, 1906</b>				
<b>Time:</b> 09:00:00 PM, Bainet local time (about 01:49:21 UTC, October 17, 1906)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 1				
<b>Longitude</b>	<b>Latitude</b>	<b>City</b>	<b>Description</b>	<b>Intensity</b>
-72.7558	18.1819	Bainet	(Scherer and Baltenweck, 1921): Light tremor at 9 h at night.	-

<b>January 24, 1907</b>				
<b>Time:</b> 11:00:00 PM, Jacmel local time (about 03:49:21 UTC, January 25, 1907)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 1				
<b>Longitude</b>	<b>Latitude</b>	<b>City</b>	<b>Description</b>	<b>Intensity</b>
-72.5345	18.2359	Jacmel	(Scherer and Baltenweck, 1921): Light tremor at 11 h at night.	-

<b>January 25, 1907</b>				
<b>Time:</b> 03:14:50 AM, Port-au-Prince local mean time (08:04:11 UTC)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 6				
<b>Longitude</b>	<b>Latitude</b>	<b>City</b>	<b>Description</b>	<b>Intensity</b>
-72.5345	18.2359	Jacmel	(Scherer and Baltenweck, 1921): Very strong tremor about 3 h in the morning.	-
-72.7558	18.1819	Bainet	(Scherer and Baltenweck, 1921): Very strong tremor about 3 h in the morning, duration 5 seconds.	-

<b>January 25, 1907</b>				
-73.0861	18.4423	Miragoane	(Scherer and Baltenweck, 1921): Strong tremor about 3 h 25 m in the morning, duration 5 seconds.	-
-72.6929	19.4458	Gonaives	(Scherer and Baltenweck, 1921): Light tremor about 3 h in the morning, duration 6 seconds.	-
-72.8370	19.9408	Port-de-Paix	(Scherer and Baltenweck, 1921): Light tremor at 3 h 40 m in the morning, direction W, duration 3 seconds.	-
-72.3388	18.5432	Port-au-Prince	(Scherer and Baltenweck, 1921): Tremor at 3 h 14 m 50 s in the morning. Direction W with a vertical component. Intensity above I.	-

<b>March 11, 1907</b>				
<b>Time:</b> 03:25:00 AM, Jacmel local time (about 08:14:21 UTC)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-72.5345	18.2359	Jacmel	(Scherer and Baltenweck, 1921): An earthquake at 3 h 25 m in the morning.	-

<b>April 19, 1907</b>				
<b>Time:</b> 06:00:00 AM, Les Cayes local time (about 10:49:21 UTC)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-73.7500	18.1945	Les Cayes	(Scherer and Baltenweck, 1921): Light tremor at 6 h. a.m.	-

<b>April 30, 1907</b>				
<b>Time:</b> 05:00:00 PM, Les Cayes local time (about 21:49:21 UTC)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-73.7500	18.1945	Les Cayes	(Scherer and Baltenweck, 1921): Light tremor at 5 h. p.m.	-

<b>May 3, 1907</b>				
<b>Time:</b> 04:40:00 AM, Port-au-Prince local mean time (09:29:21 UTC)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 11				
Longitude	Latitude	City	Description	Intensity

<b>May 3, 1907</b>				
-72.2006	19.7616	Cap Haitien	(Scherer and Baltenweck, 1921): One strong tremor at 4 h 35 a.m. lasting 9 seconds and preceded by a rolling sound. Direction WNW to ESE, the same at Limonade, Trou, and Ouanaminthe.	-
-72.1260	19.6688	Limonade	(Scherer and Baltenweck, 1921): One strong tremor at 4 h 35 a.m. lasting 9 seconds and preceded by a rolling sound. Direction WNW to ESE, the same at Limonade, Trou, and Ouanaminthe.	-
-72.0223	19.6186	Trou-du-Nord	(Scherer and Baltenweck, 1921): One strong tremor at 4 h 35 a.m. lasting 9 seconds and preceded by a rolling sound. Direction WNW to ESE, the same at Limonade, Trou, and Ouanaminthe.	-
-71.7223	19.5501	Ouanaminthe	(Scherer and Baltenweck, 1921): One strong tremor at 4 h 35 a.m. lasting 9 seconds and preceded by a rolling sound. Direction WNW to ESE, the same at Limonade, Trou, and Ouanaminthe.	-
-72.837	19.9408	Grande Riviere	(Scherer and Baltenweck, 1921): Strong tremor at 5 h a.m. the same at Bahun.	-
-72.4308	19.8144	Bayeux	(Scherer and Baltenweck, 1921): Very strong tremor at 4 h in the morning.	-
-72.837	19.9408	Port-au-Paix	(Scherer and Baltenweck, 1921): Strong tremor at 5 h. in the morning, direction S to N.	-
-72.6929	19.4458	Gonaives	(Scherer and Baltenweck, 1921): Strong tremor at 5 h. a.m., lasting 5 seconds.	-
-72.6978	19.1081	St. Marc	(Scherer and Baltenweck, 1921): Three successive tremors at 4 h 30 a.m.	-
-72.0943	18.6519	Thomazeau	(Scherer and Baltenweck, 1921): Two tremors with three seconds intervals at 4 h 40 a.m.	-
-72.3388	18.5432	Port-au-Prince	(Scherer and Baltenweck, 1921): Strong microseismic agitation at 4 h.; 4 h 40m and 6 h 10 m a. m.	-

<b>May 9, 1907</b>				
<b>Time:</b> 02:15:00 PM, Jacmel local time (about 19:04:21 UTC)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 1				
<b>Longitude</b>	<b>Latitude</b>	<b>City</b>	<b>Description</b>	<b>Intensity</b>
-72.5345	18.2359	Jacmel	(Scherer and Baltenweck, 1921): Light tremor at 2h 15m p.m.	-

<b>August 28, 1907</b>				
<b>Time:</b> 05:10:00 AM, Baraderes local time (about 09:59:21 UTC)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 1				

August 28, 1907				
Longitude	Latitude	City	Description	Intensity
-73.6387	18.4829	Baraderes	(Scherer and Baltenweck, 1921): Light tremor at 5h 10m a.m.	-

April 8, 1908				
Time: 09:15:00 PM, Miragoane local time (about 02:04:21 UTC, April 9, 1908)				
Phenomenon Notes: None				
Number of Observations: 1				
Longitude	Latitude	City	Description	Intensity
73.0861	18.4423	Miragoane	(Scherer and Baltenweck, 1921): Weak tremor at 9h 15m p.m.	-

May 12, 1908				
Time: 02:00:00 PM, Ganthier local time (about 18:49:21 UTC)				
Phenomenon Notes: None				
Number of Observations: 1				
Longitude	Latitude	City	Description	Intensity
-72.0630	18.5331	Ganthier	(Scherer and Baltenweck, 1921): Fonds-Verrette (Ganthier): Tremor, quite sensitive at 2 h p.m.	-

May 25, 1908				
Time: 04:20:00 PM, Jacmel local time (about 21:09:21 UTC)				
Phenomenon Notes: None				
Number of Observations: 1				
Longitude	Latitude	City	Description	Intensity
-72.5345	18.2359	Jacmel	(Scherer and Baltenweck, 1921): Light tremor at 4 h 20 m p.m., direction NS.	-

August 17, 1908				
Time: 06:00:00 AM, Les Cayes local time (about 10:49:21 UTC)				
Phenomenon Notes: None				
Number of Observations: 1				
Longitude	Latitude	City	Description	Intensity
-73.7500	18.1945	Les Cayes	(Scherer and Baltenweck, 1921): Tremor at 6 h a.m.	-

September 28, 1908				
Time: 04:00:00 AM, Les Cayes local time (about 08:49:21 UTC)				
Phenomenon Notes: Other earthquakes felt on this same day but at very different times. In Saltrou at 00:25:00 AM, arrival time recorded at Port-au-Prince				



<b>September 28, 1908</b>				
(05:14:21 UTC). In Pestel at 04:30:00 AM (about 09:19:21 UTC) and in Mirebalais at 04:45:00 AM (about 09:34:21 UTC). Times taken from Scherer and Baltenweck (1921). <b>Number of Observations:</b> 3				
Longitude	Latitude	City	Description	Intensity
-73.7500	18.1945	Les Cayes	(Scherer and Baltenweck, 1921): A tremor at 4 h a.m.	-

<b>October 25, 1908</b>				
<b>Time:</b> 11:00:00 AM, Miragoane local time (about 15:49:21 UTC) <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-73.0861	18.4423	Miragoane	(Scherer and Baltenweck, 1921): Very strong tremor at 11 h. a.m.	-

<b>October 28, 1908</b>				
<b>Time:</b> 05:00:00 AM, Miragoane local time (about 09:49:21 UTC) <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-73.0861	18.4423	Miragoane	(Scherer and Baltenweck, 1921): Light tremor at 5 h. a.m.	-

<b>March 31, 1909</b>				
<b>Time:</b> 06:10:00 AM Miragoane local time, recored in Port-au-Prince at 06:20:00 AM (11:09:21 UTC) <b>Phenomenon Notes:</b> Three more earthquakes were felt at Miragoane on the same day at 08:40:00 PM, 09:40:00 PM and 11:00:00 PM local time. Earthquakes were also felt in Mole-St.Nicolas and Port-de-Paix but may be too far north to be associated with the ones centering at Miragoane. The earthquakes were recorded at Port-au-Prince with times of 06:20:00 AM (11:09:21 UTC), 01:20:00 PM to 02:00:00 PM (06:09:21 UTC to 06:49:21 UTC), and 08:50:00 PM (01:39:21 UTC, April 1, 1909). Descriptions first published by the Port-au-Prince observatory for January–June, 1909 (Scherer, 1909). <b>Number of Observations:</b> 8				
Longitude	Latitude	City	Description	Intensity
-73.0861	18.4423	Miragoane	(Scherer and Baltenweck, 1921): 6h 10 a.m. Strong tremor; at 8h 40 p.m. two tremors at one minute intervals; 4 tremors between 9h 40 and 11h p.m.	-
-73.3447	18.5028	Anse-a-Veau	(Scherer and Baltenweck, 1921): 6 h 10 a.m. Strong tremor.	-
-72.8668	18.4315	Petit-Goave	(Scherer and Baltenweck, 1921): 6 h 30 m a.m. Tremor recognized by everybody; Tremor recognized by everybody at 8 h 45 p.m.	-
-72.3388	18.5432	Port-au-Prince	(Scherer and Baltenweck, 1921): Microseismic movement at 6 h 20 m a.m.; One quite sensitively felt by many persons at 8 h 52 p.m., direction NE,	-

March 31, 1909				
			intensity I.	
-72.5126	18.7701	Arcahaie	(Scherer and Baltenweck, 1921): Weak tremor at 8 h 45 p.m.	-
-72.7558	18.1819	Bainet	(Scherer and Baltenweck, 1921): Light tremor at 9 h 40 p.m. lasting 3 seconds.	-
-73.3745	19.8052	Mole-St. Nicolas	(Scherer and Baltenweck, 1921): Tremor sensibly felt at 9 h p.m. lasting one second.	-
-72.8370	19.9408	Port-de-Paix	(Scherer and Baltenweck, 1921): Tremor at 8 h 40 p.m. Direction NE.	-

April 1, 1909				
<b>Time:</b> Between 02:00 and 03:00 AM, Miragoane local time (between about 06:49:21 UTC and 07:49:21 UTC)				
<b>Phenomenon Notes:</b> Probable aftershocks of March 31, 1909. Original descriptions were published by the Port-au-Prince observatory for January–June 1909 (Scherer, 1909).				
<b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-73.0861	18.4423	Miragoane	(Scherer and Baltenweck, 1921): Between 2 h and 3 h a.m. two weak tremors.	-
-72.7558	18.1819	Bainet	(Scherer and Baltenweck, 1921): Two weak tremors at 4 h a.m.	-

April 2, 1909				
<b>Time:</b> 02:20 AM, Miragoane local time (about 07:09:21 UTC)				
<b>Phenomenon Notes:</b> Aftershocks of April 1 with a second one at 02:30:00 PM Miragoane local time. Original description published by the Port-au-Prince observatory for January–June 1909 (Scherer, 1909).				
<b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-73.0861	18.4423	Miragoane	(Scherer and Baltenweck, 1921): 2 h 20 a.m. two strong tremors; 2 h 30 p.m. two strong tremors.	-

April 6, 1909				
<b>Time:</b> 02:00:00 AM, Miragoane local time (about 06:49:21 UTC)				
<b>Phenomenon Notes:</b> Possible aftershock; the original description published by the Port-au-Prince observatory for January–June 1909 (Scherer, 1909).				
<b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-73.0861	18.4423	Miragoane	(Scherer and Baltenweck, 1921): 2 h. a.m. one weak tremor.	-

April 10, 1909				
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<b>April 10, 1909</b>				
<b>Time:</b> 04:30:00 PM, Miragoane local time (about 21:19:21 UTC) <b>Phenomenon Notes:</b> Possible aftershock; the original description published by the Port-au-Prince observatory for January–June 1909 (Scherer, 1909). <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-73.0861	18.4423	Miragoane	(Scherer and Baltenweck, 1921): 4 h 30 p.m. weak tremor. “During this time of the earthquakes there was general panic and people have slept outside in the porches. There was no material damage, except for a few walls cracked.” Mr. A. Tovar.	-

<b>August 2, 1909</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> Description originally published by the Port-au-Prince observatory for July–December 1909 (Scherer, 1910a). <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-74.1145	18.6446	Jeremie	(Scherer and Baltenweck, 1921): Earthquake within the surrounding area without indication of the time.	-

<b>August 17, 1909</b>				
<b>Time:</b> 12:00:00 PM, Tiburon local time (about 16:49:21 UTC) <b>Phenomenon Notes:</b> Second earthquake felt at 01:00:00 PM, Tiburon local time (about 17:49:21 UTC). Description originally published by the Port-au-Prince observatory for July–December 1909 (Scherer, 1910a). <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-74.3959	18.3242	Tiburon	(Scherer and Baltenweck, 1921): Two tremors, one at midday and the other at 1 h p.m. direction N.	-

<b>October 31, 1909</b>				
<b>Time:</b> Unknown <b>Phenomenon Notes:</b> Description originally published by the Port-au-Prince observatory for July–December 1909 (Scherer, 1910a). <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-74.4222	18.5605	Dame-Marie	(Scherer and Baltenweck, 1921): One strong tremor without indication of the time.	-

<b>November 11, 1909</b>				
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<b>November 11, 1909</b>				
<b>Time:</b> At night <b>Phenomenon Notes:</b> Description originally published by the Port-au-Prince observatory for July–December 1909 (Scherer, 1910a). <b>Number of Observations:</b> 2				
Longitude	Latitude	City	Description	Intensity
-72.5345	18.2359	Jacmel	(Scherer and Baltenweck, 1921): One light tremor during the night.	-
-74.1145	18.6446	Jeremie	(Scherer and Baltenweck, 1921): One light tremor during the night.	-

<b>February 3, 1910</b>				
<b>Time:</b> 08:32:00 PM, Port-au-Prince local mean time (01:21:21 UTC, February 4, 1910) <b>Phenomenon Notes:</b> Description originally published by the Port-au-Prince observatory for July–December 1909 (Scherer, 1910a). <b>Number of Observations:</b> 5				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Scherer and Baltenweck, 1921): One tremor at 8 h. 31 p.m., direction NNE, vertical component very sensibly felt, intensity IV accompanied by a loud sound resembling heavy rain. The microseismometer was agitated for two hours after the earthquake.	-
-72.2864	18.5107	Petionville	(Scherer and Baltenweck, 1921): The same earthquake was felt at Petionvill (weakly) at Furcy (very strong) at Thomazeau and Mirebalais (strong).	-
-72.3062	18.4165	Furcy	(Scherer and Baltenweck, 1921): The same earthquake was felt at Petionvill (weakly) at Furcy (very strong) at Thomazeau and Mirebalais (strong).	-
-72.0943	18.6519	Thomazeau	(Scherer and Baltenweck, 1921): The same earthquake was felt at Petionvill (weakly) at Furcy (very strong) at Thomazeau and Mirebalais (strong).	-
-72.1040	18.8336	Mirebalais	(Scherer and Baltenweck, 1921): The same earthquake was felt at Petionvill (weakly) at Furcy (very strong) at Thomazeau and Mirebalais (strong).	-

<b>February 10, 1910</b>				
<b>Time:</b> 01:20:00 AM, Cavaillon local time (about 06:09:21 UTC) <b>Phenomenon Notes:</b> Description originally published by the Port-au-Prince observatory for July–December 1909 (Scherer, 1910a). <b>Number of Observations:</b> 1				
Longitude	Latitude	City	Description	Intensity
-73.6552	18.2992	Cavaillon	(Scherer and Baltenweck, 1921): Tremor at 1h 20 m a.m., preceded by a detonation like that of a cannon.	-

<b>May 11, 1910</b>				
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<b>May 11, 1910</b>				
<b>Time:</b> 02:41:02 AM, Port-au-Prince local mean time (07:30:23 UTC)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 12				
Longitude	Latitude	City	Description	Intensity
-70.7333	18.4532	Azua	(Scherer, 1912a): On May 11, 1910, a severe shock was felt at Azua and Santo Domingo, and houses were cracked. The strongest part of the earthquake occurred in the bay of Ocoa where the sea wall was broken.	CHF(5) SISF(7) L&S1995(6) T&R1977(6)
-69.8877	18.4722	Santo Domingo	(Day, 1910): A severe earthquake shock was felt here at 3 o'clock this morning. There was no loss of life nor damage to property in the city, but reports from the interior have not been received.  (Scherer, 1912a): On May 11, 1910, a severe shock was felt at Azua and Santo Domingo, and houses were cracked.	CHF(5) SISF(7)
-70.3320	18.2799	Bani	(Scherer, 1912a): It was equally strong at Bani, Christobal, and Barahona.	CHF(5) SISF(7) L&S1995(7) T&R1977(7)
-71.0925	18.2051	Barahona	(Scherer, 1912a): It was equally strong at Bani, Christobal, and Barahona.	CHF(5) SISF(7) L&S1995(7) T&R1977(7)
-70.1092	18.4135	San Cristobal	(Scherer, 1912a): It was equally strong at Bani, Christobal, and Barahona.	CHF(5) SISF(7) L&S1995(7) T&R1977(7)
-70.5327	19.2239	La Vega	(Scherer, 1912a): In the interior from La Vega to Cap Haitien and even to Port-de Paix the shock was still very severe, while it was moderate at Port-au-Prince.	CHF(4) SISF(6) L&S1995(6) T&R1977(6)
-72.8370	19.9408	Port-de-Paix	(Scherer, 1910b): 2h. 15 m. am [local time] slight shaking, lasting two seconds, direction E-W.	CHF(3) SISF(6) L&S1995(6) T&R1977(6)
-72.2006	19.7616	Cap Haitien	(Scherer, 1910b): 2h 25 m a.m. [local time] very strong shaking, SE to NW, it appears that there were two shocks before.	CHF(3) SISF(6) L&S1995(6) T&R1977(6)
-72.3388	18.5432	Port-au-Prince	(Scherer, 1910b): 2 h. 41 m. 2 s. [local time ] shock woke up several people who were asleep, direction SE, lasting 6 seconds, intensity III [Rossi-Forel	CHF(3) SISF(5)

May 11, 1910				
			Intensity ] all devices actuated, a pendulum swinging in the East to West direction stopped. Seismograph [Omori-Bosch seismograph ] N-S 120 mm, W-E 90 mm, vertical 15 mm. The shaking was followed by another very weak one. Microseismic agitation several hours before and after the shock.	L&S1995(5) T&R1977(5)
-72.1892	18.4909	Grande-Riviere	(Scherer, 1910b): 2 h 30 m. a.m. [local time] shock E-W.	CHF(3)
-72.2403	19.5257	Dondon	(Scherer, 1910b): 2 h 30 m. a.m. [local time] shock E-W.	CHF(3)
-72.6929	19.4458	Gonaives	(Scherer, 1910b): 2 h 25 m. a.m. [local time] 2 shocks.	CHF(3)

August 3, 1910				
<b>Time:</b> 05:58:45 PM Port-au-Prince, local mean time (22:48:06 UTC)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 25				
Longitude	Latitude	City	Description	Intensity
-72.3062	18.4165	Furcy	(Scherer, 1910b): 5 h 58 m p.m. [local time] Based on the details of the tremor, it was stronger than that in Port-au-Prince; intensity VI [Rossi-Forel Intensity] direction SE, lasted 50 seconds. The vertical motion was so strong that objects placed on the floor or table were raised and rattled. People standing were trying to maintain their balance. It was the second phase that was the strongest.	CHF(5)
-72.2864	18.5107	Petionville	(Scherer, 1910b): Several successive tremors for one minute, direction E. The main shock displaced furniture and unhooked doors, which denotes strong vertical shaking, intensity VI [Rossi-Forel Intensity].	CHF(5) WHB(6)
-72.0630	18.5331	Ganthier	(Scherer, 1910b): A strong tremor, S direction.	CHF(5)
-72.0943	18.6519	Thomazeau	(Scherer, 1910b): Shake strong enough to ring the bell inside the clock tower of the church.	CHF(5)
-72.7558	18.1819	Bainet	(Scherer, 1910b): Many successive tremors, lasting one minute, S direction. Objects placed on tables were overthrown.	CHF(5) WHB(5)
-72.1892	18.4909	Grande Riviere	(Scherer, 1910b): Strong tremor, NE direction, lasting one minute.	CHF(4)
-72.5345	18.2359	Jacmel	(Scherer, 1910b): The shaking started lightly growing stronger, direction SE, lasting 50 seconds. The objects were thrown down and furniture displaced. Four kilometers from the village, a retaining wall collapsed.	CHF(5) WHB(6)
-72.6334	18.5111	Leogane	(Scherer, 1910b): A strong tremor, SE direction; lasted 15 seconds in the city; the duration was longer in the heights. Heard a noise similar to that of the collapse of a wall.	CHF(4)

<b>August 3, 1910</b>				
-72.3388	18.5432	Port-au-Prince	(Scherer, 1910b): 5 h 58 m 45 s. p.m. [local time] strong earthquake, intensity V [Rossi-Forel Intensity] ESE direction, approximately one minute in duration. Can distinguish on the seismogram 6 phases, the second of which was stronger for the horizontal component; it was accompanied by a strong vertical component [Omori-Bosch seismograph]. Small bells were tolled. The strongest earthquake felt in Port-au-Prince since September 23, 1887.	CHF(4)
-73.3447	18.5028	Anse-a-Veau	(Scherer, 1910b): Strong shaking, E direction, lasting 10 seconds. The dishes were broken. Have not felt for several years an earthquake so violent.	CHF(4) WHB(5)
-73.0861	18.4423	Miragoane	(Scherer, 1910b): Weak tremor but long duration, followed by two stronger tremors.	CHF(4)
-72.8668	18.4315	Petit-Goave	(Scherer, 1910b): The tremor was felt by everyone, but people on horseback did not notice it.	CHF(4)
-73.8890	18.5671	Corail	(Scherer, 1910b): The first earthquake at 5 h 58 m p.m. [local time] direction SE. The signs on many houses fell. The next shock was weaker.	CHF(4)
-74.1145	18.6446	Jeremie	(Scherer, 1910b): Very strong tremor; many sections of walls cracked and objects overthrown with force. Intensity VII [Rossi-Forel Intensity], S direction.	CHF(4)
-72.6978	19.1081	St. Marc	(Scherer, 1910b): A strong tremor lasting one minute; it composes of three phases, the first medium, the second heavy, the third weak, ESE direction. The population was terrified. The earthquake of Miragoane April 6, 1909, was stronger according to M. A. Tovar who witnessed both.	CHF(4)
-73.0366	18.8388	Ile de la Gonave	(Scherer, 1910b): A strong tremor overthrowing dishes and jugs of water, S direction, lasting 35 seconds. The sea has remained calm as a lake.	CHF(4) WHB(5)
-72.5126	18.7701	Arcahaie	(Scherer, 1910b): Tremor weaker than in Gonaives, S direction.	CHF(4)
-73.7500	18.1945	Les Cayes	(Scherer, 1910b): Two tremors felt by everyone, S direction. The first shock started with vibrations became oscillatory and lasted 11 seconds, the second oscillatory lasted 15 seconds.	CHF(4)
-74.3959	18.3242	Tiburon	(Scherer, 1910b): Strong tremor of short duration.	CHF(4)
-72.6929	19.4458	Gonaives	(Scherer, 1910b): Two tremors, lasting 30 seconds, E direction.	CHF(4)
-73.3745	19.8052	Mole-St. Nicholas	(Scherer, 1910b): Strong tremor, NE direction. The tremor reminded of the earthquake of September 23, 1887 when many houses were damaged.	CHF(3)
-72.2006	19.7616	Cap Haitien	(Scherer, 1910b): First shock easily felt lasting 5 seconds, the second very strong, which made everyone leave the houses, lasting 12 seconds, intensity	CHF(3) WHB(4)

August 3, 1910				
			V [Rossi-Forel Intensity ] E direction, a third weak tremor lasting 3 seconds.	
-72.4308	19.8144	Bayeux	(Scherer, 1910b): The tremor was relatively weak and passed unnoticed for three quarters of the population.	CHF(3)
-72.8370	19.9408	Port-de-Paix	(Scherer, 1910b): Two tremors were noticed of a total duration of 5 seconds. The first was longer, SE direction, no sound was heard in the city but in the countryside, the sound was similar to that of a storm.	CHF(3)
-	-	Mt. Holstein, Jamaica	(Hall, 1922): Seismometer at Mt. Holstein, Jamaica recorded a light shock at 6:00 PM [local time], from N.W., .022 [period?].	-

August 4, 1910				
<b>Time:</b> 02:20:00 AM, Port-au-Prince local mean time (07:09:21 UTC)				
<b>Phenomenon Notes:</b> Aftershocks of August 3, 1910				
<b>Number of Observations:</b> 10				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Scherer, 1910b): 2 h 20 m a.m. [local time] A tremor, ESE direction, intensity II [Rossi-Forel Intensity].	-
-72.6334	18.5111	Leogane	(Scherer, 1910b): The 4th at 2 h 20 m a.m. [local time] another smaller tremor, accompanied by rolling, SE direction.	-
-72.5345	18.2359	Jacmel	(Scherer, 1910b): The 4th at 2 h 20 m a.m. [local time] New tremor very weak, woke up many people.	-
-73.8890	18.5671	Corail	(Scherer, 1910b): The 4th at 2 h 20 m a.m. [local time] another small tremor, NE direction.	-
-72.6929	19.4458	Gonaïves	(Scherer, 1910b): The 4th at 2 h 20 m a.m. [local time] another tremor lasting 10 seconds, E direction.	-
-73.0366	18.8388	Ile de la Gonave	(Scherer, 1910b): The 4th at 2 h 20 m a.m. [local time] another tremor not as strong. (Mr. l'abbe Collin)	-
-72.0943	18.6519	Thomazeau	(Scherer, 1910b): The 4th at 2 h 20 m a.m. [local time] another tremor lasting 2 minutes.	-
-72.7558	18.1819	Bainet	(Scherer, 1910b): The 4th at 2 h 20 m a.m. [local time] another tremor very weak, S direction.	-
-72.1892	18.4909	Grande Riviere	(Scherer, 1910b): In the night at 2 h 20 another tremor, NW direction.	-
-72.2006	19.7616	Cap Haitien	(Scherer, 1910b): The 4th 2 h 20 m a.m. [local time] another tremor very weak.	-



October 6, 1911				
<b>Time: 10:16:12.0 UTC earthquake origin time;</b> 05:28:30 AM, Port-au-Prince local mean time (10:17:51 UTC) <b>Land Surface Effects:</b> In the village of Cotte-Plage that is now in Carrefour the train rails were shifted out of place. Landslides on the mountain Le Selle, near Furcy. <b>Phenomenon Notes: (-70.5° W, 19.0° N) depth = 0.0 km, Ms = 6.8 (Engdahl and Villaseñor, 2002)</b> This earthquake most severely affected the central region of Hispaniola and the aftershocks were mostly felt in that region. <b>Number of Observations:</b> 64				
Longitude	Latitude	City	Description	Intensity
-72.0107	19.1453	Hinche	<p>(Le Nouvelliste,1911): This Friday the 6th, at 6 in the morning, we felt two strong shocks from earthquakes. The first, the strongest I have felt since living here, lasted a long time; the second much less, only a few seconds long. * * * The noise produced by the first tremor can be compared to, for those that were outdoors, like the rolling by of a cavalry at a strong run; for those who were indoors, the shock felt like when one is in a terrible train wagon from the P.C.S, whose locomotive was at full speed to the plain of Cul-de-Sac. * * * and behold, at the moment I sign this letter (half past noon) a new tremor just happened that lasted a few seconds.</p> <p>(Scherer, 1912b): Lasted two minutes, S direction, intensity VIII to IX [Rossi-Forel Intensity]. The tremors were jerky and finished with undulations. A loud noise like a furious wind had preceded the shock. The church was damaged, a large door that was blocked was unleveled and part of the cornice in the south-east fell down. The large crucifix on the high altar and many statues fell to the ground. A prison wall collapsed. We had some difficulty standing. A horse with its rider fell to his knees. Second tremor at 6 h 15 m. Third at 11h 50 m. Fourth at 28 minutes past noon (very strong jerking). Fifth at 7 h 30 m and a sixth between 10 and 11 at night. Other shocks after midnight and the following days.</p>	CHF(8) WHB(6) SISF(7) L&S1995(8) T&R1977(8)
-71.7894	19.1634	Cerca-La-Source	<p>(Scherer, 1912b): Lasted 30 seconds, SE direction, intensity IX [Rossi-Forel Intensity]. Motion oscillatory and very fast. The church was strongly constructed of stone, the arches of brick. The choir rotunda is greatly damaged. Four arches are broken; the one to the North-East fell. The corner of the front door, to the South-West is heavily cracked. The high altar crucifix fell down. The rectory solidly built of stone is obliquely cracked in ten locations, one inside wall is so cracked that it lets through daylight. The inhabitants were frightened, the oldest not remembering an earthquake as strong. The region was not yet inhabited in 1887. Second tremor at half past</p>	CHF(7) WHB(6) SISF(7)

October 6, 1911				
			10h. Third at half past noon. Fourth at 2h 30 m. Fifth at 7 h 25 m. and a sixth around 10 h at night.	
-71.2325	18.8074	San Juan de la Maguana	<p>(Scherer, 1912b): Lasted 30 seconds, intensity IX to X [Rossi-Forel Intensity]. The parish church constructed of stone was reduced to ruins, much damage to the cemetery. Individual losses were very considerable. Among the houses damaged, the pharmacy Esperanza collapsed. The printing house of the journal “Eco de Santome” was turned upside down. There were no accidents to report except for a few bruises. But in Vallejuelo, a section of San Juan, a woman and two children died as a result of the earthquake. In the countryside to the East and West of San Juan, the tremors caused great disruption. The earth opened in Palomino, situated between Loma Tina (3140 meters of elevation) and San Juan, and there came a torrent. The same for Las Matas or Fanfan, a crevasse brought forth a gush of water that went to the river Macasia. Landslides are reported along the shores of Yague del Sur and especially near Tubano. The tremors lasted for several days in the area of San Juan.</p> <p>(de Utrera, 1995): Very strong tremors on October 6, 1911 (named the earthquake of San Bruno) [...] Completely ruined the church in San Juan de la Maguana.</p>	CHF(7) SISF(7) L&S1995(8) T&R1977(8)
-71.9362	18.8303	Las Caobas	(Scherer, 1912b): Tomonde, Belladere. The houses are constructed of wood and the panels between the posts are filled with limestone and mortar, others with cob. Many panels fell or cracked. Cracks were found at the church. Throughout the region, it is clear that it is the strongest earthquake felt since 1842.	CHF(7) WHB(5) SISF(6) L&S1995(5) T&R1977(5)
-71.7074	19.0793	Banica	(Scherer, 1912a): The region disturbed on October 6th last is indeed the long strip of land passing by Azua, San Juan, Cerca la Source, Banica, Hinche and especially that which runs along near the Grande Hilera, commonly called Cibao.	CHF(8) WHB(-) SISF(7)
-72.1892	18.4909	Grande Riviere	(Scherer, 1912b): The primary school was greatly damaged. The walls were cracked, the arches were thrown down and crevasses fell from all the corner crevices. The establishment has become uninhabitable. Intensity VII [Rossi-Forel Intensity].	CHF(6) SISF(7)
-72.2403	19.5257	Dondon	(Scherer, 1912b): Lasted 30 to 40 seconds. Tremors were in the form of pulses. Intensity VII [Rossi-Forel Intensity]. The keystone to two arches of	CHF(6) SISF(7)

October 6, 1911				
			the rectory fell, four slits on the walls. The gabled sacristy fell. Two houses were greatly damaged. A table in the middle of a room turned around itself and objects placed on top of it fell down. There was a big stir among the inhabitants. Second tremor at 30 past noon.	
-72.1260	19.6688	Limonade	(Scherer, 1912b): Lasted 66 seconds, S direction, intensity VI to VII [Rossi-Forel Intensity]. Many objects fell over and broke. A floor tiled with bricks well compiled overturned and had hundreds of breaks. About thirty slates of the church fell. One house newly constructed is cracked. An old house collapsed. A water mill was greatly disrupted. The tremor was weaker than that of September 23, 1887. The sound of the abyss was heard on October 4 at half past 5 h in the morning from the NE direction.	CHF(6)
-71.9207	19.4350	Valliere	(Scherer, 1912b): Many objects fell or detached from the walls. Some sections of wall crumbled. Minimal damages. Intensity VI [Rossi-Forel Intensity].	CHF(6)
-71.7223	19.5501	Ouanaminthe	(Scherer, 1912b): The majority of objects from the church fell or were displaced. The rectory floor, built with thick walls, was cracked in several places especially along the west edge. On the south edge of the church tower has a large crack. A house wall, built on very solid ground suffered more than the rectory. But the earthquake of September 23, 1887 was stronger than that of October 6. The church then was so strongly shaken that it had to be strengthened. Intensity VII [Rossi-Forel Intensity].	CHF(6)
-69.8877	18.4722	Santo Domingo	(Scherer, 1912b): Lasted 15 to 20 seconds, W direction, intensity VII to VIII [Rossi-Forel Intensity]. The tremor commenced with a soft oscillatory motion accompanied by an underground noise, then immediately followed by strong vibrations and very irregular. The bells from the public clock, the Cathedral and Santa Clara were set into motion and rang. In the countryside of San Carlos, many houses were damaged. At the Cathedral, the tower not only suffered but also the church. Old crevasses opened further and it will take considerable work to repair. Second tremor at half past noon. Third around 8 h in the evening.	CHF(6) SISF(7)
-70.3321	18.2799	Bani	(Scherer, 1912b): Violent shaking and very prolonged. They feared a catastrophe.	CHF(6)
-71.4178	18.4832	Neyba	(Scherer, 1912b): Yaguata. Strong tremor lasting 8 seconds, the same at Bahardua and Neyba.	CHF(6)
-70.7333	18.4532	Azua	(Scherer, 1912b): Lasted 30 seconds, intensity IX [Rossi-Forel Intensity]. The	CHF(6)

October 6, 1911				
			<p>earthquake was composed of a series of oscillations and vibrations very distinct, and all of a sudden the oscillations and vibrations were simultaneous. The belfry and parish church were seriously damaged. A wall of the training college and another of the former convent of the sisters of mercy collapsed. Many trading houses built of stone and a pharmacy subsequently had great material losses, estimated at several thousand dollars. In the property of S. Oviedo there were a large number of cracks where water gushed out in abundance. Several aftershocks were felt during the day: at 8 h, and 10 h in the evening at about 2 o'clock in the morning.</p>	SISF(7)
-72.1395	19.1747	Maissade	<p>(Scherer, 1912b): ESE direction, Tremor noticed for its long duration. Many cracks appeared on houses made of cob [mud]. Nobody was scared. Abyssal noise heard several times.</p>	CHF(6) WHB(4) SISF(6) L&S1995(5) T&R1977(5)
-72.3340	19.3708	St. Michel de l'Atalaye	<p>(Scherer, 1912b): Lasted 30 seconds, E direction, intensity V to VI [Rossi-Forel Intensity]. The first tremor resembled a formidable gale. Loud cracking sounds in the buildings. No damage. Heard the "sound of the abyss" in the morning.</p>	CHF(4) SISF(6) L&S1995(5) T&R1977(5)
-72.3388	18.5432	Port-au-Prince	<p>(Le Matin, 1911): The microseismic activity has lasted day and night. Four felt tremors, the first at 10 o'clock in the morning; the second at midday and 36 minutes, the third at 7 h. 30 m and the fourth at 10h 46 m at night. Intensity II; direction varies between SSE and E.</p> <p>(Scherer, 1911a; Scherer, 1911c): [Originally published in the paper Le Matin of Oct 6, 1911.] <i>5h 28m 30s in the morning. A very strong tremor preceded by a loud rumble, together lasting one minute. NE-SW direction, on the 30th second the motion seemed to be vertical and eventually finished South. Intensity VI [Rossi-Forel Intensity] The motion is oscillatory, resembling the pitching of a ship. The trees swayed heavily, several clocks stopped. People standing tried to remain upright. Some walls cracked. However, their solidity was no longer secure. The shock exceeds that of August 3, 1910 and approaches that of September 23, 1887.</i></p> <p>(Scherer, 1912b): Lasted one minute, NE direction, in the end from the South, intensity VI [Rossi-Forel Intensity] motion oscillatory. Some walls cracked. See the previous bulletin.</p>	CHF(6) L&S1995(5) T&E1977(5)
-72.2864	18.5107	Petionville	<p>(Scherer, 1912b): Lasted 10 to 15 seconds, NE direction, intensity VI [Rossi-</p>	CHF(6)

October 6, 1911				
			Forel Intensity] The chandelier in the church strongly swayed; objects fell. A strong thud like that of a violent wind preceded the two tremors.	
-72.3062	18.4165	Furcy	(Scherer, 1912b): (near Selle) the tremor was so strong that they could not stand and had to lie on the floor. Objects placed on tables fell to the ground. They talk about a rock fall on the side of la Selle.	CHF(6) SISF(6)
-72.2273	18.5758	Croix de Bouquets	(Scherer, 1912b): E direction, intensity VI [Rossi-Forel Intensity]. Everyone was frightened and got out of the houses.	CHF(6)
-72.0630	18.5331	Ganthier	(Scherer, 1912b): Lasted one minute, ENE direction, intensity VI [Rossi-Forel Intensity] Large cracks along the framework of the houses. The books in the library fell down. Movement oscillatory. A second tremor at 11h 4 ½ minutes in the morning. Motion pulsating and not as strong.	CHF(6)
-72.0943	18.6519	Thomazeau	(Scherer, 1912b): Parish pendulum clock stopped. Cracks in some walls, tossing of church chandeliers, large cracks on the roofs. Intensity VI [Rossi-Forel Intensity].	CHF(6)
-72.5126	18.7701	Arcahaie	(Scherer, 1912b): Lasted 30 seconds, E direction, Intensity VI [Rossi-Forel Intensity]. Large cracks in structures. Great emotion in the church; they remained on site. The clock oscillating E to W stopped. Great noises from the trees. Motion resembled the roll of a ship. The very old thought of the earthquakes of 1842 and 1860.	CHF(6)
-72.7000	19.1167	Saint Marc	(Scherer, 1912b): The first tremor at 4h in the morning. The tremor at half past 5h lasted 64 seconds, S direction, Intensity VI [Rossi-Forel Intensity]. Hard swaying of suspended objects. Minor cracks seemed to widen. A third tremor 26 minutes past noon and a fourth one at 7h 25 m in the evening.	CHF(6)
-72.6933	19.2464	Petit Riviere de l'Artibonite	(Scherer, 1912b): E direction, tremor very strong but less than that of September 23, 1887 because at that time the church had been heavily cracked. This time the palace of King Christopher, an arch on the east fell. The rest of the palace was already in ruins. Several shocks were felt in the day.	CHF(5)
-72.2004	18.8160	Saut-D'Eau	(Scherer, 1912b): Very strong tremors at 5h 28m, at 26 past noon at 7h 25 m and at 10 h 45m in the evening.	CHF(6)
-72.1040	18.8336	Mirebalais	(Scherer, 1912b): Two successive tremors lasting 50 seconds, the first very long. SSW and NE directions, everything seemed to bounce in place, Intensity VI to VII [Rossi-Forel Intensity]. Very large cracks on the buildings, many walls damaged, a part of a wall fell down. Tremor preceded by a thud	CHF(6)

October 6, 1911				
			sound. The people were scared and many say that this earthquake was the strongest felt in a very long time. A second tremor at 8h 36 m in the morning almost as strong and the earlier one in the morning but of short duration. A third one at 10 h 30 m (weak). Afterwards the inhabitants continued to feel tremors during the day.	
-72.6929	19.4458	Gonaives	(Scherer, 1912b): Lasted 50 seconds, SW direction, intensity VI [Rossi-Forel Intensity]. Maximum intensity at about the 10th second. Cracks on buildings, objects fell, one house was damaged. Second tremor at 30 past noon, intensity III [Rossi-Forel Intensity] lasting 4 seconds. A third tremor at 7 h 35 m, intensity II [Rossi-Forel Intensity] lasting 3 seconds. A fourth tremor in the night.	CHF(5)
-72.4685	19.5974	Plaisance	(Scherer, 1912b): E direction, The walls that were damaged in 1887, was damaged more. The rectory that was deteriorating is now quite damaged.	CHF(5)
-72.4308	19.8144	Bayeux	(Scherer, 1912b): Lasted 30 seconds, NE direction, intensity VI [Rossi-Forel Intensity]. Tremor was strong enough to the point it rang the village bell, suspended on a fig tree branch. Second tremor at 8h 35 m in the morning. Third tremor at 25 minutes past noon. Movement undulating.	CHF(6) WHB(5)
-72.4025	19.7066	Limbe	(Scherer, 1912b): NE direction, intensity VI [Rossi-Forel Intensity]. The church and rectory seesawed like shaking trees in the wind, so much so they feared it would collapse. No accident occurred. Second tremor at 25 past noon. Third tremor at 7 h 25 m and a fourth one around half past 11 at night.	CHF(5)
-72.2006	19.7616	Cap Haitien	(Scherer, 1912b): Lasted 35 to 40 seconds, SE direction, intensity VI to VII [Rossi-Forel Intensity]. Furniture displaced, dishes on shelves fell down. Ringing of bells in the house. Pendulum clocks stopped; large cracks on the arches of the cathedral. A part of the wall that was badly constructed was knocked down, fell to the SE. The wall is E to W. Many houses were cracked. Everyone was very frightened and many lied down, the following night they took shelter in the higher fortifications. In the cathedral panic occurred; many people fell and got trampled. The tremor struck in a form like a regular swing and very regular. Second tremor at 25 minutes past noon. The third at 7 h 35 m; the latest tremors were felt by everyone.	CHF(5) SISF(6)
-71.8397	19.6668	Fort Liberte	(Scherer, 1912b): Lasted 35 to 40 seconds, S direction, motion undulating. The rectory rolled like on a ship and the old structure groaned miserably. The trees made oscillations 30 degrees in amplitude. All this without accidents. Several people on boat came from Cap Haitien, heard in front of	CHF(5)

October 6, 1911				
			Caracol a thud, appearing to come from offshore. The ship suddenly stopped and was tossed around. The sea begins to boil as one sees when the water becomes hot enough. There were no tidal waves at Fort Liberte.	
-71.6507	19.8474	Monte Cristi	(Scherer, 1912b): Three strong tremors of a long duration.	CHF(4)
-70.6937	19.7971	Puerto Plata	(Scherer, 1912b): SSW direction, intensity V [Rossi-Forel Intensity], loud cracking in buildings, pendulum clocks stopped, swaying of trees, no effect on the walls and no noise. The population was alarmed.	CHF(4)
-70.7075	19.4502	Santiago de los Caballeros	(Scherer, 1912b): Lasted one minute, intensity VI [Rossi-Forel Intensity]. Second tremor very weak at 20 minutes past noon.	CHF(4)
-70.4180	19.3796	Salcedo	(Scherer, 1912b): Great panic, they left their houses, intensity VI [Rossi-Forel Intensity].	CHF(4)
-70.1099	19.1824	Pimentel	(Scherer, 1912b): Violent tremor, few damages.	CHF(5) WHB(4)
-70.5246	19.3929	Moca	(Scherer, 1912b): Violent tremor, few damages.	CHF(5) WHB(4)
-70.5327	19.2239	La Vega	(Scherer, 1912b): Violent tremor, few damages.	CHF(5) WHB(4)
-70.1531	19.0577	Cotui	(Scherer, 1912b): Lasted one minute, W direction, intensity V [Rossi-Forel Intensity]. A tank shy of a few inches full of water spilled out East to West. No damage. All the houses are wooden. The tremor was preceded by a faint noise. A second tremor between 11 and noon. A third about 8 h in the evening and a fourth one in the night.	CHF(5)
-69.3390	19.2061	Samana	(Scherer, 1912b): Strong tremor, lasting 8 seconds.	CHF(4) SISF(6)
-69.3112	18.4526	San Pedro de Macoris	(Scherer, 1912b): A strong tremor without producing much emotion. Intensity V to VI [Rossi-Forel Intensity].	CHF(4)
-74.2572	18.5613	Moron	(Scherer, 1912b): (near the Hotte) 3 distinct tremors a few seconds apart, the second tremor very violent. The dew drops accumulated in the trees fell like rain. Large cracks along the framework, some pieces of mortar fell. The people came out of the houses. Intensity V [Rossi-Forel Intensity]. The second is much weaker than that of August 3, 1910, but it was stronger to the Sources-Chaudes between Moron and Tiburon.	CHF(4) SISF(6)
-73.7500	18.1945	Les Cayes	(Scherer, 1912b): Two successive tremors, lasting 15 seconds, NE direction, intensity IV [Rossi-Forel Intensity]. Stopped a pendulum clock; swaying of water in a pond, cracking along framework. However, not everyone noticed	CHF(4)

October 6, 1911				
			the phenomenon.	
-73.3971	18.2816	Aquin	(Scherer, 1912b): Lasting 10 seconds, N direction, intensity III to IV [Rossi-Forel Intensity]. Not everyone noticed the tremor. Movement oscillatory.	CHF(3)
-73.3447	18.5028	Anse-a-Veau	(Scherer, 1912b): Short duration, E direction, intensity III to IV [Rossi-Forel Intensity].	CHF(3)
-73.0861	18.4423	Miragoane	(Scherer, 1912b): Two distinct tremors, each lasting 3 seconds, NE direction, intensity III [Rossi-Forel Intensity], they made people worry.	CHF(4)
-72.8668	18.4315	Petit-Goave	(Scherer, 1912b): Lasted one minute, E direction, intensity IV [Rossi-Forel Intensity]. Awoke those sleeping.	CHF(4) SISF(5)
-72.7558	18.1819	Bainet	(Scherer, 1912b): Lasted one minute and a half, NE direction, intensity IV [Rossi-Forel Intensity]. Cracks in frameworks, tremor noticed by everyone, very strong in the hills.	CHF(5)
-72.6334	18.5111	Leogane	(Scherer, 1912b): NE direction, intensity V [Rossi-Forel Intensity]. In the hills, people were scared.	CHF(4)
-72.4105	18.5528	Carrefour	(Le Matin, 1911): As a result of the earthquake yesterday there was a violent opening of the rails on the P.C.S. at Cotte-Plage. Over a distance of about 50 meters, the rails were bent by the shock and nails pulled out. As a result the train from Leogane derailed. Although the traffic was interrupted for several minutes, in that time the passengers from Leogane and from the town changed trains and the locomotives returned to each station of departure. Therefore the schedule was kept. During the day the track was completely repaired.	-
-72.5345	18.2359	Jacmel	(Scherer, 1912b): Lasted one minute, SE direction, intensity V [Rossi-Forel Intensity]. Motion oscillatory; pendulum clock stopped, it worked E to W. Furniture displaced slightly. Two old buildings collapsed, the earthquake appears to be the strongest since 1860.	CHF(4)
-72.7275	19.5622	Terre-Neuve	(Scherer, 1912b): Weak tremor, E direction, intensity II to III [Rossi-Forel Intensity]. Similarly in the Bay of Henne.	CHF(3)
-73.3745	19.8052	Mole-St. Nicholas	(Scherer, 1912b): Bombarde to Jean-Rabel. Rather weak tremor, felt by everyone, intensity III [Rossi-Forel Intensity].	CHF(3)
-72.8370	19.9408	Port-de-Paix	(Scherer, 1912b): Lasted 20 seconds, S direction like a ripple of water in a bowl, intensity IV to V [Rossi-Forel Intensity]. A few cracks in the roofs. People left the church immediately. It was the same for St. Louis du Nord.	CHF(4)



<b>October 6, 1911</b>				
-72.8024	19.7799	Bassin-Bleu	(Scherer, 1912b): Weak tremor and of short duration.	CHF(3)
-72.8043	20.0507	Ile de la Tortue	(Scherer, 1912b): Lasted 3 seconds, S direction, intensity III [Rossi-Forel Intensity].	CHF(3)
-72.6836	19.6699	Gros-Morne	(Scherer, 1912b): Lasting 30 seconds, S direction, intensity V [Rossi-Forel Intensity] Large cracks on the structure of the village church which dates to 1785. The faithful left it immediately. The isolated columns of a brick church under construction did not suffer. The village church survived the earthquake of 1842; however the building suffered then. The strongest earthquake felt was that of September 23, 1887. The grand river was then diverted from its course to Passe-Moulin.	CHF(4)
-72.5230	19.8463	Borgne	(Scherer, 1912b): Lasted one minute, SW direction, intensity V [Rossi-Forel Intensity]. Population terrified, intensity VI.	CHF(4)
-74.3959	18.3242	Tiburon	(Scherer, 1912b): The tremor was preceded by a noise we thought was like a gun in the distance, intensity III [Rossi-Forel Intensity].	CHF(3) SISF(5)
-74.4222	18.5605	Dame-Marie	(Scherer, 1912b): Lasted one minute. Noise from furniture and objects hanging on the wall. Out in the countryside, the phenomenon was barely observed. Intensity III [Rossi-Forel Intensity]. The last earthquake of this intensity to date is January, 1909.	CHF(3)
-74.1657	18.2746	Chardonnières	(Scherer, 1912b): A slight tremor, almost unnoticed. Intensity II [Rossi-Forel Intensity].	CHF(3)
-74.1145	18.6446	Jeremie	(Scherer, 1912b): Tremor observed by a certain number of people, lasting 30 seconds, E direction, intensity III [Rossi-Forel Intensity]. Much lower than that of August 30, 1910. There is talk of a shock already felt the day before.	CHF(3)

<b>October 6, 1911 to March 5, 1912</b>				
<b>Time:</b> Various times				
<b>Phenomenon Notes:</b> Aftershocks of October 6, 1911; according to Branner (1912) up to March 5, 1912. Times are in Port-au-Prince local mean time, +04:49:21 Greenwich time.				
<b>Number of Observations:</b> 16				
Longitude	Latitude	City	Description	Intensity
-72.0630	18.5331	Ganthier	(Scherer, 1912b): Second tremor at 11:04.5 in the morning.	-
-72.7000	19.1167	Saint Marc	(Scherer, 1912b): A third at 12:26 PM and a fourth at 7:25 in the evening.	-
-72.2004	18.8160	Saut-D'Eau	(Scherer, 1912b): 12:26 PM, 7:25 PM, 10:45 PM.	-
-72.1040	18.8336	Mirebalais	(Scherer, 1912b): Second tremor at 8:36 AM, third at 10:30 PM, continued to	-

October 6, 1911 to March 5, 1912				
			feel tremors during the day.	
-72.6929	19.4458	Gonaives	(Scherer, 1912b): Second tremor at 12:30PM, a third tremor at 7:35 PM a fourth felt at night.	-
-72.4308	19.8144	Bayeux	(Scherer, 1912b): Second tremor at 8:35 AM, third at 12:25 PM.	-
-72.4025	19.7066	Limbe	(Scherer, 1912b): Second tremor at 12:25 PM, third at 12:25 PM and fourth at 11:30 PM.	-
-72.2006	19.7616	Cap Haitien	(Scherer, 1912b): Second tremor at 12:25 PM, third at 7:35 PM.	-
-72.2403	19.5257	Dondon	(Scherer, 1912b): Second tremor at 12:30 PM.	-
-70.1531	19.0577	Cotui	(Scherer, 1912b): Second tremor between 11 and noon, a third around 8 at night and a fourth at midnight.	-
-69.8877	18.4722	Santo Domingo	(Scherer, 1912b): Second tremor at 12:30 PM, third around 8 at night.	-
-70.7333	18.4532	Azua	(Scherer, 1912b): Several aftershocks were felt during that day, at 8:00 AM, 10:00 PM and at about 2 AM.	-
-71.2325	18.8074	San Juan de la Maguana	(Scherer, 1912b): The tremors lasted for several days in the region of San Juan.	-
-71.7894	19.1634	Cerca-La-Source	(Scherer, 1912b): Second tremor at 10:30AM, a third at 12:30PM, a fourth at 2:30 PM a fifth at 7:25 PM and a sixth around 10:00 PM at night.	-
-72.0107	19.1453	Hinche	(Scherer, 1912b): Second tremor at 6:15 AM, third at 11:50 AM, a fourth at 12:28 PM (very strong and jerky) a fifth at 7:30 PM and a sixth between 10 and 11 at night. Several shocks after midnight and the following days after.	-
-	-	Hispaniola (Haiti)	(Branner, 1912): Other shocks occurred in Haiti as follows: September 7; October 4, 8, 10, 13, 14, 15, 16, 18, 20, 23; November 5 and 28; December 11 and March 5. None of these however had an intensity greater than IV [Rossi-Forel Intensity].	-

July 20, 1912				
<b>Time:</b> 08:50:00 AM, Port-au-Prince local mean time (13:39:21 UTC)				
<b>Phenomenon Notes:</b> Second earthquake at 09:03:00 AM (13:52:21 UTC).				
<b>Number of Observations:</b> 4				
Longitude	Latitude	City	Description	Intensity
-69.8877	18.4722	Santo Domingo	(Scherer, 1912c): According to the newspapers from Santo Domingo, the bells of the cathedral and clock were set into motion.	CHF(5) SISF(6.5)
-70.6937	19.7971	Puerto Plata	(Scherer, 1912c): At 8h 50 m, intensity II [Rossi-Forel Intensity] lasting 5	CHF(4)

July 20, 1912				
			seconds; a second tremor at 9h 4m intensity III [Rossi-Forel Intensity] Direction SE. According to the newspapers from Santo Domingo, the bells of the cathedral and clock were set into motion.	
-72.2403	19.5257	Dondon	(Scherer, 1912c): At 9h 3m light tremor lasting 4 to 5 seconds, intensity II [Rossi-Forel Intensity].	CHF(3)
-72.3388	18.5432	Port-au-Prince	(Scherer, 1912c): At 9h 3m weak tremor, intensity III [Rossi-Forel Intensity] E direction; registered on the Omori-Bosch seismogram, July 20 at 8:50 to 8:54 amplitude 7 mm and July 20 at 9:03 to 9:08 amplitude 56 mm: this movement and the next were felt on the Dominican side.	CHF(3)

September 6, 1912				
<b>Time:</b> 11:59:00 PM Port-au-Prince local mean time (04:48:21 UTC, September 7, 1912)				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 29				
Longitude	Latitude	City	Description	Intensity
-72.0107	19.1453	Hinche	(Scherer, 1912c): Strong undulating tremor, direction SE, lasting 25 seconds. The earthquake was less fearful than the one on October 6th last, because the motion was not as jerky, intensity VI [Rossi-Forel Intensity].	CHF(5)
-72.1892	18.4909	Grande Riviere	(Scherer, 1912c): Strong vibrations enough to scare. A few cracks in a house, intensity VII [Rossi-Forel Intensity]. At Bahon, strong tremor.	CHF(4)
-72.3340	19.3708	St. Michel de l'Atalaye	(Scherer, 1912c): Strong tremor, direction N, statue fell and broke, house cracked, intensity VII [Rossi-Forel Intensity].	CHF(5)
-72.4025	19.7066	Limbe	(Scherer, 1912c): Strong tremor, direction E, lasting 25 seconds. At the beginning and at the end the motion was oscillatory and strong vibrations in the middle for 10 seconds. Damages unimportant, the ancient cracks in the church grew larger, intensity VII [Rossi-Forel Intensity].	CHF(5)
-72.4685	19.5974	Plaisance	(Scherer, 1912c): A pillar of the new presbytery collapsed and a second is heavily damaged. Following the earthquake the church received new cracks and the vestry is about to fall. Initial reports indicate that the mortar was not of good quality at that locality. intensity VII [Rossi-Forel Intensity].	CHF(5) WHB(6)
-71.7223	19.5501	Ouanaminthe	(Scherer, 1912c): Two tremors seeming to be stronger than that of October 6th last, the shaking was regular and undulating and there were no damages, direction E, intensity VI [Rossi-Forel Intensity].	CHF(4)
-74.1145	18.6446	Jeremie	(Scherer, 1912c): One could distinguish two successive shocks; the first	CHF(4)

September 6, 1912				
			vertical and very strong, the second horizontal, direction E. Six seconds duration, the structures were lightly cracked, intensity IV [Rossi-Forel Intensity].	
-73.3447	18.5028	Anse-a-Veau	(Scherer, 1912c): Two successive tremors, of which the first one is of 10 seconds duration, direction N, houses cracked, awoke many persons, windows moved, intensity IV [Rossi-Forel Intensity].	CHF(4) WHB(5)
-73.0861	18.4423	Miragoane	(Scherer, 1912c): A tremor, lasting more than a minute, direction N, cracked the roofs; objects were in motion, intensity IV [Rossi-Forel Intensity].	CHF(4) WHB(5)
-72.8668	18.4315	Petit-Goave	(Scherer, 1912c): Abrupt tremor awaking many people, 8 seconds duration, direction N, intensity IV [Rossi-Forel Intensity].	CHF(4)
-72.7558	18.1819	Bainet	(Scherer, 1912c): Two strong tremors each lasting 3 to 4 seconds, cracking noises, woke up everyone, intensity IV [Rossi-Forel Intensity].	CHF(4)
-72.5345	18.2359	Jacmel	(Scherer, 1912c): Tremor relatively weak, 30 seconds in duration, direction W, intensity III [Rossi-Forel Intensity].	CHF(3)
-72.3062	18.4165	Furcy	(Scherer, 1912c): Tremor very strong, felt by the inhabitants, direction E, 30 seconds duration, intensity IV [Rossi-Forel Intensity].	CHF(4)
-72.3388	18.5432	Port-au-Prince	(Scherer, 1912c): Tremor very strong, waking up pretty much everyone, direction NNE, intensity IV to V [Rossi-Forel Intensity] Omori-Bosch seismometer 6-7 Sept. 23:59 to 00:07, amplitude 65 mm, earthquake local intensity IV to V [Rossi-Forel Intensity].	CHF(4)
-72.0630	18.5331	Ganthier	(Scherer, 1912c): Strong Tremor, direction N, intensity V [Rossi-Forel Intensity], it was not noticed in the hills (from Pays-Pourri to Fonds-Verrette).	CHF(4)
-72.0943	18.6519	Thomazeau	(Scherer, 1912c): Two tremors very strong. Everyone was awakened. Later reports say the tremors were very strong at Grands-Bois (district to the NE of Thomazeau).	CHF(4)
-72.5126	18.7701	Arcahaie	(Scherer, 1912c): Two strong tremors.	CHF(4)
-72.1040	18.8336	Mirebalais	(Scherer, 1912c): Two tremors each 15 to 20 seconds, the first one an intensity of IV [Rossi-Forel Intensity] the second one very strong, capable of causing damage, intensity VI [Rossi-Forel Intensity] direction SE. The population was not alarmed, however the force of the second tremor approached that of October 6th's point of damage.	CHF(4)
-72.7275	19.5622	Terre-Neuve	(Scherer, 1912c): Tremor very strong, direction ESE, intensity IV to V	CHF(4)

September 6, 1912				
			[Rossi-Forel Intensity].	
-72.6929	19.4458	Gonaives	(Scherer, 1912c): One strong tremor, many objects fell, clocks stopped, direction E, intensity VI [Rossi-Forel Intensity] On the 5th at 5 in the morning a loud “noise of the abyss” was heard.	CHF(4)
-73.3745	19.8052	Mole-St. Nicholas	(Scherer, 1912c): Strong tremor, direction ENE, lasting 15 to 20 seconds, intensity V [Rossi-Forel Intensity] Vibrating motion, beginning and ending abruptly, it was possible to distinguish two successive shocks. At Bombarde it was also felt strongly.	CHF(4)
-72.8024	19.7799	Bassin-Bleu	(Scherer, 1912c): Strong tremor, direction E, 10 seconds duration, movement undulating did not cause damages. Noise of dishes but without any objects falling, intensity V [Rossi-Forel Intensity] Before and after the shock, noises similar to that of a train going at full speed. At Port-au-Paix the same tremor was very strong. The same day at 17:00 a light tremor accompanied by noise, intensity II [Rossi-Forel Intensity].	CHF(4)
-72.5230	19.8463	Borgne	(Scherer, 1912c): Tremor very strong awaking everyone, no damages, intensity V [Rossi-Forel Intensity].	CHF(4)
-72.2006	19.7616	Cap Haitien	(Scherer, 1912c): The tremor commenced lightly growing stronger in three seconds and finally ending strongly and abruptly without noise or rolling. Lasted 30 seconds, intensity IV to V [Rossi-Forel Intensity].	CHF(4)
-72.1260	19.6688	Limonade	(Scherer, 1912c): Strong tremor lasting 7 seconds, intensity V [Rossi-Forel Intensity].	CHF(4)
-71.8397	19.6668	Fort Liberte	(Scherer, 1912c): Strong tremor weaker than that of October 6th last, direction E, lasting 15 seconds, no serious damages, intensity VI [Rossi-Forel Intensity] But SW of Fort-Liberte the church of Perches had two cracks. The tremor was accompanied by a noise similar to that of a large cavalry moving away to the west.	CHF(4)
-74.1657	18.2746	Chardonnières	(Scherer, 1912c): A slight tremor unnoticed by most people, intensity II [Rossi-Forel Intensity].	CHF(3)
-74.2572	18.5613	Moron	(Scherer, 1912c): Tremor fairly light, intensity III [Rossi-Forel Intensity].	CHF(3)
-	-	Hispaniola	(Scherer, 1912c): The earthquake was not felt in Tiburon, Cayes, Aquin, Puerto Plata or in Santiago de los Caballeros.	-
September 6, 1912 to September 13, 1912				

<b>September 6, 1912 to September 13, 1912</b>				
<b>Time:</b> Various times <b>Phenomenon Notes:</b> Aftershocks of September 6, 1912. <b>Number of Observations:</b> 3				
Longitude	Latitude	City	Description	Intensity
-72.6929	19.4458	Gonaives	(Scherer, 1912c): September 7, 15:00, distinct tremor lasting 5 seconds intensity III [Rossi-Forel Intensity], September 8, one weak tremor in the morning.	-
-72.5126	18.7701	Arcahaie	(Scherer, 1912c): September 9, light tremor at 17:00 and on September 10 at 11:00.	-
-72.8024	19.7799	Bassin-Bleu	(Scherer, 1912c): September 13, at Port-au-Paix and Bassin Bleu, one light tremor at 6:00, lasting 2 seconds.	-

<b>April 24, 1916</b>				
<b>Time:</b> 04:26:42 UTC earthquake origin time; April 23, 1916, 11:30:00 PM, Santo Domingo local time (about 04:30:00 UTC, April 24, 1916) <b>Phenomenon Notes:</b> (-68.0° W, 18.5° N) depth=80 km, mb=7.0 (Engdahl and Villaseñor, 2002). Magnitude intensities reported from the Bulletin are Rossi-Forel Intensities. The Port-au-Prince observatory recorded this earthquake with an Omori-Bosch seismometer. The P-wave arrival was at 04:24:54 UTC (Scherer, 1916). The seismic station in Vieques, Puerto Rico also recorded this earthquake with a Pn-wave arrival at 04:27:23 UTC (Humphreys, 1917). <b>Number of Observations:</b> 25				
Longitude	Latitude	City	Description	Intensity
-69.7923	18.9458	Boya	(Scherer, 1916): At Boya, south of the Central Cordillera, their church was ruined.	CHF(6)
-69.6370	18.7520	Bayaguana	(Scherer, 1916): A little further south at Guerra and Bayaguana the churches are almost completely destroyed, Intensity IX.	CHF(6)
-69.8877	18.4722	Santo Domingo	<p>(New York Times, 1916b): Santo Domingo, Dominican Republic April 24, A severe earthquake occurred here at 11:30 o'clock last night. No damage was done.</p> <p>(Pittsburgh Press, 1916): Severe earthquake shocks caused heavy damage throughout the island of Haiti last night and early today. Communication with interior points was broken off and it is feared there has been heavy loss of life. The tremors began before midnight but the most severe shock occurred early today. Many houses were razed. The government buildings were shaken.</p> <p>(Scherer, 1916): In Santo Domingo the intensity seems to have been VIII. There were cracks in the walls of many buildings (the Church of Mercedes,</p>	CHF(5) SISF(8.5)

April 24, 1916				
			<p>a former Dominican convent and the Government Palace). The bells were ringing in the churches.</p> <p>(Taber, 1922): The earthquake of April 23, 1916, which had an intensity of VIII-IX in the eastern part of Santo Domingo, seems to have originated near the inner margin of the coastal plain or the southern flank of the Cordillera Central, but farther west than the epicenter area of the earthquake of 1882.</p>	
-70.6937	19.7971	Puerto Plata	(Scherer, 1916): Between 23h 49m and 23h 50m one observes three successive tremors: the middle one lasted 25 seconds, intensity VI; direction ENE. At the Cumbre Tunnel (Monte Cristi Mountain Chain) NNE direction. There were no damages at Puerto-Plata.	CHF(4)
-72.1260	19.6688	Limonade	(Scherer, 1916): A strong tremor, Intensity V, direction NE lasting 30 seconds.	CHF(4)
-72.2006	19.7616	Cap Haitien	(Scherer, 1916): Strong tremor, intensity V; direction E, lasting 10 seconds. Tremor felt at Bayeux.	CHF(4)
-72.8370	19.9408	Port-de-Paix	(Scherer, 1916): Fairly strong tremor, intensity IV, creaking of wood, no objects overthrown, direction E.	CHF(4)
-72.5504	19.6652	Pilate	(Scherer, 1916): Tremor well felt, resembling a roll, intensity IV, lasting 20 seconds, direction ENE.	CHF(4)
-72.6929	19.4458	Gonaives	(Scherer, 1916): One strong tremor, intensity V, direction E, people began to worry, lasting 35 seconds.	CHF(4)
-72.1040	18.8336	Mirebalais	(Scherer, 1916): One strong tremor composed of many oscillations from E to W, intensity V to VI.	CHF(4)
-72.0943	18.6519	Thomazeau	(Scherer, 1916): The bells, placed 3 meters from the ground, sounded, intensity Vi to VII.	CHF(4)
-72.3062	18.4165	Furcy	(Scherer, 1916): All of the inhabitants were awoken, objects fell, Intensity VI.	CHF(4) WHB(5)
-72.3388	18.5432	Port-au-Prince	(Scherer, 1916): One strong tremor, intensity V to VI, direction NE, lasting 50 seconds, Omori-Bosch recorded P at 04:24:54 GMT.	CHF(4)
-72.5345	18.2359	Jacmel	(Scherer, 1916): A fairly strong tremor, intensity IV, direction N. One could distinguish three successive tremors.	CHF(4)
-72.7558	18.1819	Bainet	(Scherer, 1916): A fairly strong tremor, many people were woken up. The earthquake does not appear to have been felt on the rest of the southern peninsula.	CHF(4)

April 24, 1916				
-71.1462	21.4674	Grand Turks Island	(Robson, 1964 quoting Barbados Globe, Apr. 25, 1916): <i>At 11:40 pm, a shock of marked intensity.</i>  (Tomblin and Robson, 1977 quoting Daily Chronicle, Apr. 26, 1916): <i>23:40 local time, A shock of marked intensity followed by a weaker one which lasted for several minutes.</i>	CHF(3) SISF(5) R1964(5)
-66.6141	18.0115	Ponce, Puerto Rico	(Tomblin and Robson, 1977 quoting Barbados Globe, Apr. 25, 1916): <i>00:30 A prolonged shock.</i>	CHF(3)
-64.9299	18.3500	St. Thomas, Virgin Islands	(Robson, 1964 quoting Barbados Globe, Apr. 25, 1916): <i>At 12:10 am, a prolonged shock.</i>	CHF(3) SISF(4) R1964(4)
-66.1057	18.4665	San Juan, Puerto Rico	(New York Times, 1916a): San Juan P.R, April 24 – An earthquake shock lasting from six to ten seconds was felt here early this morning, shortly after midnight. No damage is reported.  (Robson, 1964, quoting Port of Spain Gazette, Apr. 26, 1916): <i>At 12:30 am, a severe shock.</i>  (Humphreys, 1917): Two shocks felt, 10 seconds duration, Timbers creaked.	CHF(4) SISF(5) R1964(5)
-67.1407	18.2009	Mayaguez, Puerto Rico	(Humphreys, 1917): Four shocks felt, 20 seconds duration, rattling sounds, various buildings cracked.	CHF(5) SISF(6)
-66.8777	18.2950	Lares, Puerto Rico	(Humphreys, 1917): One shock felt, 30 seconds duration, partitions creaked.	CHF(4)
-66.2664	18.1391	Aibonito, Puerto Rico	(Humphreys, 1917): Three shocks felt, rumbling sound, doors moved.	CHF(4)
-67.0250	18.5017	Isabela, Puerto Rico	(Humphreys, 1917): One shock felt, walls cracked slightly.	CHF(4)
-65.4248	18.1281	Vieques, Puerto Rico	(Humphreys, 1917): Recorded Pn at 4:27:23 GMT, reported to have been felt in Vieques, PR.	CHF(3) SISF(2.5)
-	-	Georgetown University, Washington D.C., U.S.	(Evening News, 1916): Washington, April 24 – Two severe earth vibrations estimated to be 1600 miles distant from Washington, were recorded by the seismograph at the Georgetown University. The first shock was recorded at 11:31 o'clock last night, the vibrations continuing until 12:07 o'clock this morning. The second and most severe shock occurred at 3:06 o'clock this morning and continued until 4:15 o'clock. The second vibration was so intense that the needles of the seismograph were loosened.	-

<b>January 15, 1922</b>
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<b>January 15, 1922</b>				
<b>Time:</b> 06:37:58 UTC, 01:38:00 AM Port-au-Prince, 75th Meridian Time				
<b>Phenomenon Notes:</b> Intensities inside the descriptions were assigned by the Port-au-Prince observatory and are Rossi-Forel Intensities (Scherer and Baltenweck, 1922).				
<b>Number of Observations:</b> 11				
Longitude	Latitude	City	Description	Intensity
-73.7500	18.1945	Les Cayes	(Scherer and Baltenweck, 1922): One very strong tremor that woke up everyone, intensity of V to VI duration of 4 seconds, direction S SE. The earthquake was felt at Canot, 32 km to the NW of Les Cayes at l'Ile a Vaches, and even some sailors say at sea. The houses were tremendously cracked, even those with reinforced concrete, many clocks were stopped, bottles and jars from the pharmacy were hitting each other. People had to abandon their homes. The main shock was preceded by a less violent jerk.	-
-72.3388	18.5432	Port-au-Prince	(Scherer and Baltenweck, 1922): At 1 h 38 m a.m. A very strong tremor, minor direction East, major direction South, duration 40 seconds, intensity IV to V. The tremor was felt at Petionville and at Furcy and within the plain Cul-de-Sac close to the Selle.	-
-73.3447	18.5028	Anse-a-Veau	(Scherer and Baltenweck, 1922): One very strong tremor, intensity V, duration of 10 seconds, direction E. The motion began with sharp vibrations, objects fell down. The tremor was followed by two more tremors at 5 minute intervals.	-
-73.0861	18.4423	Miragoane	(Scherer and Baltenweck, 1922): One strong tremor, lasting about 30 seconds, direction S. The movements had very large amplitudes, followed by two weak oscillations separately. Telegram from Mr. A. Tovar.	-
-74.1145	18.6446	Jeremie	(Scherer and Baltenweck, 1922): Two very strong tremors, creaking doors, intensity IV to V.	-
-72.8668	18.4315	Petit Goave	(Scherer and Baltenweck, 1922): One strong tremor, intensity IV to V, duration 6 seconds.	-
-72.7558	18.1819	Bainet	(Scherer and Baltenweck, 1922): Two strong tremors, together lasting 20 seconds, intensity IV.	-
-72.5345	18.2359	Jacmel	(Scherer and Baltenweck, 1922): One very strong tremor, intensity IV direction W.	-
-72.6978	19.1081	St. Marc	(Scherer and Baltenweck, 1922): One tremor of intensity III, duration 4 seconds.	-
-72.6929	19.4458	Gonaives	(Scherer and Baltenweck, 1922): One light tremor at 1h 38m a.m., intensity III direction W, duration 40 seconds.	-

January 15, 1922				
-74.3959	18.3242	Tiburón	(Scherer and Baltenweck, 1922): The earthquake was not noticed.	-

November 4, 1922				
<b>Time:</b> 05:35:11 UTC, 00:35:00 AM Port-au-Prince local time, 75th Meridian Time				
<b>Phenomenon Notes:</b> Intensity values in the descriptions were assigned by the Port-au-Prince observatory and are Rossi-Forel Intensities (Scherer and Baltenweck, 1923).				
<b>Number of Observations:</b> 18				
Longitude	Latitude	City	Description	Intensity
-72.3388	18.5432	Port-au-Prince	(Scherer and Baltenweck, 1923): At midnight 35 m. One very strong tremor that woke up everyone causing fear. Intensity VI, duration 15 seconds. Remarkable vertical component, general barking of dogs.	-
-72.2864	18.5107	Pétionville	(Scherer and Baltenweck, 1923): At the same hour. One very strong tremor, intensity VI, general awakening of those asleep, duration 10 seconds. Noises from the walls. The earthquake was preceded by two loud subterranean noises.	-
-72.0943	18.6519	Thomazeau	(Scherer and Baltenweck, 1923): One strong tremor, intensity V.	-
-72.5345	18.2359	Jacmel	(Scherer and Baltenweck, 1923): One quite strong tremor, intensity IV duration of 6 seconds.	-
-72.7558	18.1819	Bainet	(Scherer and Baltenweck, 1923): One strong tremor, intensity IV to V duration 6 seconds, direction E.	-
-73.3971	18.2816	Aquin	(Scherer and Baltenweck, 1923): One strong tremor, intensity IV to V duration 6 seconds, direction E.	-
-73.7500	18.1945	Les Cayes	(Scherer and Baltenweck, 1923): Two tremors felt by many persons with a duration of 2 to 4 seconds, intensity III to IV.	-
-74.1145	18.6446	Jérémie	(Scherer and Baltenweck, 1923): Vibrating motion, accompanied by a loud sound in some places. Intensity IV, coming from the east, duration of 10 seconds.	-
-73.3447	18.5028	Anse-a-Veau	(Scherer and Baltenweck, 1923): One very strong tremor, intensity V, direction N, duration 15 seconds.	-
-72.8668	18.4315	Petit Goave	(Scherer and Baltenweck, 1923): One strong tremor, intensity V, duration 7 seconds.	-
-72.6978	19.1081	St. Marc	(Bulletin, 1912): One very strong tremor, intensity IV, duration 5 seconds.	-
-72.1040	18.8336	Mirebalais	(Scherer and Baltenweck, 1923): The oscillatory motions of the east to west direction, duration 10 seconds, intensity IV.	-

November 4, 1922				
-72.6929	19.4458	Gonaives	(Scherer and Baltenweck, 1922): One strong tremor, intensity IV to V, duration 30 seconds, direction E.	-
-72.0984	18.3755	St. Michel	(Scherer and Baltenweck, 1922): The tremor was generally noticed, intensity IV.	-
-72.5504	19.6652	Pilate	(Scherer and Baltenweck, 1922): One very strong tremor, duration 10 seconds; intensity IV to V, the dogs were making a commotion.	-
-73.3745	19.8052	Mole-St.Nicolas	(Scherer and Baltenweck, 1922): One tremor lasting 15 seconds, intensity IV, direction S to N, it is said that the earthquake was preceded by another.	-
-72.8370	19.9408	Port-de-Paix	(Scherer and Baltenweck, 1922): Two tremors of 4 and 6 seconds of duration felt by some of the inhabitants, some had left their houses, the bottles were thrown down, the dogs were howling, intensity V. The direction seemed to be vertical.	-
-72.2006	19.7616	Cap Haitien	(Scherer and Baltenweck, 1922): One tremor of intensity IV.	-

July 29, 1943				
<b>Time: 03:02:20.56 UTC earthquake origin time;</b> July 28, 1943, 11:06:00 PM San Juan, Puerto Rico local time <b>Phenomenon Notes: (-66.983° W, 19.090° N) depth = 35 km, Mw=7.6 (Engdahl and Villaseñor, 2002).</b> A small description of this earthquake came out in the Seismological Notes section of the Bulletin of the Seismological Society of America (Ulrich, 1943). The Port-au-Prince observatory recored the iP wave at 03:03:38 UTC. <b>Number of Observations: 11</b>				
Longitude	Latitude	City	Description	Intensity
-66.6141	18.0115	Ponce, Puerto Rico	(McCann and others, 2011 quoting El Mundo, July 30, 1943): <i>There were no personal injuries or damages worth complaining about except for the electric cables that snapped in various locations, especially on Molina Street, in front of the police station. At the tearing of the cables, it caused a small fire.</i>	CHF(5)
-67.1407	18.2009	Mayaguez, Puerto Rico	(McCann and others, 2011 quoting El Mundo July 30, 1943): <i>At 11:00 PM two strong earthquakes were felt that occurred almost seconds apart and each lasted about one minute. These shakes repeated again at 1:00 in the morning and then at 3:00 and at 4:00 in the morning but with less intensity. According to information from the police, there were no damages or personal injuries however the phones were interrupted. The habitants of Mayaguez comment the curious event that the clock of the Presbyterian church in the Marine stopped at 11:00 at night at the moment the first shock was felt.</i>	CHF(5)

July 29, 1943				
-69.8877	18.4722	Ciudad Trujillo (Santo Domingo)	(Miami Daily News, 1943): Fairly strong earth tremors rocked this city and numerous inland centers late Wednesday night, but first reports indicated no serious damage.	CHF(5)
-66.1057	18.4665	San Juan, Puerto Rico	<p>(McCann and others, 2011 quoting El Mundo, July 29, 1943): <i>Last night at 11:06 it was felt in San Juan and Santurce the first of two earthquakes that according to calculations by the clock lasted close to a minute.</i></p> <p>(McCann and others, 2011 quoting El Mundo, July 30, 1943): <i>In P.R. the first shock occurred at exactly 11:02 Wednesday night when the majority of the population had retired for the night in their homes. Thousands of people exited their homes at feeling the first tremor especially in the biggest cities on the island where the majority of the buildings are made of concrete. Fortunately, in the morning of yesterday, Thursday, there has been no information from personal injuries or damage to property according to the version dispatched by the police headquarters. We wait for final information.</i></p> <p>(Bodle, 1984): July 28, 23:02 [60th Meridian Time] Felt in San Juan by many. Instrumental data indicated the shock centered near 19.0° north, 67.2° west, about thirty-five miles off northwestern Puerto Rico. July 29: 21:04 [60th Meridian Time] San Juan Puerto Rico, Considerably less intense than the shock on the 28th, but was sufficient intensity to stop the pendulum clock in the Weather Bureau Office. It was felt by thousands of persons in Puerto Rico.</p>	CHF(4)
-66.0720	18.4487	Santurce, Puerto Rico	(McCann and others, 2011 quoting El Mundo, July 29, 1943): <i>At 11:09 the second one was felt that was shorter of duration and was felt more in Santurce.</i>	CHF(4)
-66.1120	18.3579	Guaynabo, Puerto Rico	(McCann and others, 2011 quoting El Mundo, July 29, 1943): <i>The seismic motions were also felt in Guaynabo and in Ponce, according to information we were able to receive last night.</i>	CHF(4)
-66.0347	18.2344	Caguas, Puerto Rico	(McCann and others, 2011 quoting El Mundo, July 30, 1943): <i>There were no reported damages or personal injuries.</i>	CHF(3)
-65.8265	18.1502	Humacao, Puerto Rico	(McCann and others, 2011 quoting El Mundo, July 30, 1943): <i>Dr. Carlos Munoz McCormick, director of Civil Defense informed us that they started to receive information soon after the first earthquake was felt. From Humacao, our correspondent informed us to following, "Of great intensity was the earthquake from last night. It generated alarm especially with the</i>	CHF(3)

July 29, 1943				
			<i>public that were leaving the theater.”</i>	
-72.3388	18.5432	Port-au-Prince	<p>(Le Nouvelliste, 1943): Last night at exactly 10h 5m 30s an earthquake was felt in Port-au-Prince. Here are later observations from the Meteorological Station of the Petit Seminary College St. Martial: Initial shock was in the East direction, following vibrations transverse aligned North to South. The earthquake lasted one minute and ten seconds, its intensity 4 to 5. The meteorological station of the Seminary thinks the serious shock occurred far enough from the East.</p> <p>(Bettembourg and others, 1950): [Instrument] iP 03:03:38 GMT, Felt at Port-au-Prince, Intensity V-VI stopped clocks * * * July 28, 22:03:38 75th Meridian Time, Port-au-Prince, Bainet, St. Marc, Cap Haitien, Intensity V, duration 5 seconds, direction E-W.</p>	CHF(4)
-	-	SJP, Magnetic Observatory, San Juan, Puerto Rico (Carl A. Ludy)	<p>(McCann and others, 2011 quoting El Mundo, July 30, 1943): <i>There were 19 earthquakes registered the night before last. They started at 11:02 PM and ended at 7:45 AM. The epicenter was near the Mona Canal and recorded in the U.S. The island was shaken 19 times by the earthquakes that were registered starting at 11:00 PM the night of Wednesday until 8:00 in the morning on Thursday according to information from the Magnetic Observatory on the island. Mr. Carl A. Ludy, director of the observatory, informed us yesterday that one of the stronger shocks occurred in the early morning of Thursday and broke the seismometers in the observatory. Director Ludy added that the epicenter of the earthquake evidently was near the Mona Canal and it was most likely the earthquakes were recorded by seismic stations on the continent.</i></p>	-
-	-	Fordham University, New York City, U.S.	<p>(McCann and others, 2011 quoting El Mundo, July 30, 1943): <i>The news agency Prensa Unida, informed us yesterday morning “that this was one of the most severe earthquakes ever registered by the seismometer at Fordham University in the last few years, occurring about 1,500 miles to the south of New York, near the areas of Cuba or the Dominican Republic with the possibility that substantial damages have occurred in the West Indies. The first shock was registered at 11:07 PM and was followed by many other of lesser intensity that evidently occurred near the same location”.</i></p>	-
-	-	Weston, Massachusetts, U.S.	<p>(Reading Eagle, 1943): An earthquake, potentially “very destructive” believed to be in the vicinity of Puerto Rico, was recorded on the seismograph at Weston College last night, the Rev. Daniel Linehan,</p>	-

<b>July 29, 1943</b>				
			seismologist reported today. He said the main shock came at 11:07.25 PM eastern war time and was followed by 25 aftershocks in the next six hours. All were about 1,655 miles from Boston, in a south by southeast direction.	

<b>August 4, 1946</b>				
<p><b>Time: 17:51:12.68 UTC earthquake origin time;</b> 12:52:00 PM Port-au-Prince local time, 75th meridian</p> <p><b>Tsunami:</b> According to Small (1948) a wave four to five meters high inundated communities along the northeastern coast of the Dominican Republic from Matancitas to Cabrera. The largest aftershock on August 8, 1946 also generated a tsunami.</p> <p><b>Landslides and other surface effects:</b> According to an eyewitness report from the United Press, 1946c: The sea off northern Santo Domingo boiled like a pot of water on the stove and sent up a loud rumbling from the bottom as a result of Sunday's Caribbean earthquake. Capt. William C. Chishom of the Canadian motor ship Cameo said on his arrival here [San Juan, PR] today. The Dominican shore line, along which he was navigating when the quake struck, appeared to sink into the sea, sending a dust cloud half a mile in diameter 200 feet into the air. "It looked like a big shell had exploded on the shore," he said. "I was sitting in my cabin writing a letter when the ship suddenly began bucking. It threw me out of the chair. I thought we had run on a reef. I ran to the deck and noticed a cloud of dust, about the color of ginger, rising from the shore. It was about half a mile in diameter and rose about 200 feet in the air. The ship was trembling terribly and the sea was boiling like a pot of water on the stove. A loud rumbling came from the bottom of the ocean. I still thought we were on a reef and ordered all engines stopped. The boiling and rumbling lasted about two minutes and then all was quiet and the sea became calm. Thirty minutes later, at 2:40 PM, the ship began to tremble again but not as badly as at first, and the water boiled too. This lasted about 3 minutes and then it was all over." Location of the ship is not indicated in the article other than somewhere on the north shores of the Dominican Republic. There was also a report of a loud "submarine noise like an atomic bomb" heard before feeling the earthquake and the arrival of the tsunami at Matanzas, today called Matancitas (Miura, 1946).</p> <p><b>Phenomenon Notes:</b> (-69.000° W, 18.959° N) depth = 51.2 km, Mw= 7.9, Ms=8.0, mb = 7.6 (Engdahl and Villaseñor, 2002). Lynch and Bodle (1948) wrote a detailed report on their descriptions of damages, with photographs, suffered in the Dominican Republic during their reconnaissance done in the middle of September 1946, published in the Bulletin of the Seismological Society of America. They also included an isoseismic intensity map for the Dominican Republic. Many seismometers, including those in San Juan, Guantanamo, Port-au-Prince, and New Orleans reported clipping while recording this earthquake. At the Port-au-Prince observatory, the iP wave was recorded at 17:51:59 UTC.</p> <p><b>Number of Observations:</b> 45</p>				
Longitude	Latitude	City	Description	Intensity
-69.8255	19.3546	Matanzas (Matancitas)	(Miura, 1946): Persons reaching here from Matanzas said there were many casualties. Four persons were reported dead. Broken communications delayed a check on casualties and the toll may run much higher. Before the earthquake, witnesses said, booming submarine explosions of great intensity were heard. They compared them to descriptions of atom bomb explosions. Then the quake hit. Buildings collapsed. Railroad tracks were twisted like strands of steel wire. Roads were torn up. Villagers passing a sleepy Sunday afternoon in the excessive heat jumped up and ran for open country. Next came the tidal wave. With a swelling roar it rolled up the bay and smashed against the towns. Dwellings and shops were swept away by the waves. Slabs of walls and roofs were hurled inland from the shore. (A U.S. Navy pilot from Puerto Rico who flew over Matanzas said the tidal wave seemed to have destroyed most of the town). After the tidal wave, reports said there	-

August 4, 1946				
			<p>were jagged ruptures in the earth's surface. Fountains of sulfurous waters were said to have spurted from the crevices.</p> <p>(Lynch and Bodle, 1948): This town was so much damaged by the sea wave it was abandoned. Loss of life, approaching a total of 100, was greater than at any other place in the Republic. The intensity of the earthquake was very great, but most if not all deaths were from drowning. There were no heavy masonry buildings to collapse. Reports indicated that the rise of water probably did not exceed 2 ½ m.</p>	
-69.8465	19.3759	Julia Molina (Nagua)	<p>(Associated Press, 1946a): Nagua and Miches – Partly flooded by the rush of water from the sea.</p> <p>(Miura, 1946): The towns of Matanzas and Villa Molina at the head of Escocesa bay were reported virtually flattened by the tidal wave.</p> <p>(Lynch and Bodle, 1948): Though only about three kilometers northwest from Matanzas, the village of Julia Molina suffered very little from the sea wave. Apparently it was protected by a rather high sandy beach. Most of its buildings being of frame construction, most of the damage was from the displacement of furniture, the overthrow of water tanks, and the settling of buildings. * * * A heavy chest 172 cm. high, 72 cm. deep and 52 cm. wide, facing roughly N 70° E, fell in the direction in which it was facing. A china closet in the next room fell in the opposite direction, and a lamp with heavy base which had been on top of the closet was found sitting upright on the floor. A dresser on castors rolled to the center of the room, in a direction away from the epicenter region. We visited by automobile to coast to the north of Julia Molina to a point near the mouth of the Boba River. For some distance here, the river, several hundred yards inland, parallels the beach. In some places the sea wave was said to have risen above the high sandy shore to join with the river. This would have required a rise of some four or five meters. Watchers noted that when the beach was flooded to the north it was bare to the south.</p>	LB1948(10)
-70.6937	19.7971	Puerto Plata	<p>(United Press, 1946b): The tidal wave hit Puerto Plata, a seaport of 4,500 in population on the northern shore of the Dominican Republic, and rolled a considerable distance inland. Shattered communication delayed reports on the casualties and damage. Five towns on or near the northern Dominican shore, including Puerto Plata, suffered severe blows from the earthquake</p>	LB1948(8)

August 4, 1946				
			<p>which struck at 1:49 p.m. Sunday. Earthquake damage was said to extend all the northern edge of Santo Domingo island in both the Dominican Republic and Haiti.</p> <p>(Lynch and Bodle, 1948): Puerto Plata, where the shock was of intensity IX on the basis of questionnaires, * * * We first visited the church of St. Philip, a brick structure facing almost northwest. No serious damage was done to the building itself, but its movable objects were disturbed. The baptismal font * * * was toppled over due east. The font was massive and weighed some 600 lb. It was 106.5 cm high, and its center of gravity was estimated to be about 67 cm. from the bottom. The base was 59 cm. in diameter. * * * The statue over the main altar was toppled forward to the ground and apparently did not first topple backward since there were no scratches on the back. The statue was of hollow plaster, top-heavy, about 60 lb in weight, 6 ft tall, base 15 inches square, and center of gravity about in the middle. * * * Two other side statues were toppled from lesser heights in the same general direction. The motion to account for this would seem to have been a compression coming roughly from the east. In the Dominican bank (Banco de Reservas), a heavy safe measuring 6 by 4 by 3 feet, of massive iron, on wheels turned parallel with its front to prevent it sliding, was pushed off its pedestal toward the front a distance of some three inches. This motion was slightly south of east. * * * Warehouse walls facing E-W were found with 45-degree cracks, indication motion parallel with the wall. The roof cornice of one such building was torn from the base but did not fall. It was significant that, of walls running E-W, the wall facing east received the more damage.</p>	
-70.7075	19.4502	Santiago de los Caballeros	<p>(Associated Press, 1946a): Santiago-Severe damage to a church, orphanage, stadium and cigarette factory. One killed.</p> <p>(Lynch and Bodle, 1948): At the race track, a brick wall surrounding the track, about 7 ft. high, was destroyed except for a few feet of its length * * * The mortar, good enough in itself, did not grip the bricks at all. Concrete telling booths, well constructed, were undamaged. Twelve pillars, about 2 in. in diameter, which had just been erected as supports for a projected enlargement of the grandstand, were thrown to the ground, ten falling slightly south of east and two in the opposite direction. * * * The east parapet of a bridge running almost N-S near the race track, 25 m. long by 1 m. high and 20 cm. thick, was thrown toward the east in a dried-up gully</p>	SISF(7) LB1948(8)



August 4, 1946				
			below. The west parapet was not damaged. All the outside buttresses of the Basilica Major, which faces west, were shaken loose from the body of the church. There was evidence that the joints had previously been patched. All the circular arches in the side aisles running the length of the church were broken in the middle. Two statues on the epistle side of the church, near the middle, were thrown to the north, * * * A painted wooden statue of the Sacred Heart was thrown from the main altar to the floor, but it was not broken. * * * The evidence from Santiago seems to point to strong motion from the east, but also strong N-S motion.	
-70.5327	19.2239	La Vega	(Lynch and Bodle, 1948): From Santiago we headed for Moca. On the way we passed Vega Real, or Concepcion de La Vega, a city founded earlier than Ciudad Trujillo and destroyed by an earthquake on December 2, 1562. It is amazing how well preserved the brick walls of the old town are. One of the cross-bow emplacements is shown in figure 9. Ancient brick cross-bow emplacement undamaged by earthquakes of 1946 at Vega Real, a town that was destroyed by an earthquake of December 2, 1562.	SISF(7)
-70.5468	19.2797	Santo Cerro	(Lynch and Bodle, 1948): From Vega Real we went to Santo Cerro, or the Holy Hill, * * * Some minor damage was done to the Jesuit church.	-
-70.5246	19.3929	Moca	(Associated Press, 1946a): Moca – Municipal palace and market place destroyed.  (United Press, 1946b): The five Dominican towns known to be hard hit were Puerto Plata, Santiago, Moca, Macoris and San Francisco. * * * In Moca, the city hall and church collapsed in ruins. Many stores and homes were destroyed. Earth shocks continued for two hours after the initial tremor.  (Lynch and Bodle, 1948): A brick wall encircling the rear of the city hall at Moca was thrown down toward the north. Some 45 degree cracks in the rear wall of the building indicated an E-W motion parallel with the wall. A tank in a near-by yard (fig. 10) was toppled down, but there was disagreement whether it now lay where it had fallen; * * * A very interesting piece of evidence, however, was found in the Church of the Rosary. The tower was thrown down through the roof and landed on the choir railing (fig 11). The tower was thrown toward the north-east, the church itself facing west. Two statues on the south side of the church fell toward the north.	LB1948(9)
-70.2593	19.2969	San Francisco de Macoris	(Miura, 1946): Material damage from the earth tremors was reported very	SISF(7.5)

August 4, 1946				
			<p>great in San Francisco de Macoris and other cities a few miles inland.</p> <p>(Lynch and Bodle, 1948): It was evident as we drove into the town that it had suffered much more damage than its immediate neighbors. The reason became clear as we walked down to the near-by encircling stream. The bed of the shallow stream was of solid rock, and the town was built on a silt plateau perhaps one hundred feet higher. One death occurred here from the collapse of a house. Many buildings were severely damaged, including a large church which was being torn down when we arrived. Its roof had fallen in and the side walls were badly cracked. The circular portion and dome over the altar, however, were fairly intact. * * * A short distance away were ruins of a frame house with a front part of brick. The brick part was so severely damaged that it had to be torn down. This left the staircase and living room exposed to the street.</p>	LB1948(10)
-70.0295	19.2089	Castilla	<p>(Lynch and Bodle, 1948): Brick walls around yards of residences were toppled; one running in an E-W direction fell to both north and south, and one running N-S fell to east and west. Another N-S wall some 15 to 20 feet long by 10 inches thick fell to the west. Damage was also caused at a cemetery near the edge of the town. A wall some 3 feet high and about 19 m. in length along its north side was almost entirely thrown down. Some parts fell north, others south. Just inside the north gate, damage was done to a brick burial vault. The corner in triangular section on the sides, with apex just below the roof, fell away. At the south gate a heavy cross fell approximately N 60° W.</p>	-
-69.3390	19.2061	Samana	<p>(Lynch and Bodle, 1948): No damaging effects of sea waves were seen by us here or at any other point on Samana Bay though some abnormal ebb-and-flow effects were noted. Buildings near the beach were damaged little short of severely. As the party moved back to higher ground, less severe effects were seen. Inspection of a recently completed hospital of concrete showed no damage of consequence, probably because its construction was good and its site more satisfactory. A brick wall around the hospital grounds was damaged by cracks, indicating that there had been considerable motion.</p>	SISF(7.5) LB1948(9)
-69.3847	19.0648	Sabana de la Mar	<p>(Lynch and Bodle, 1948): Sabana de la Mar on the south shore of Samana Bay was not badly damaged. The front parapet on a school building fell into the street, but it was said this was the only building seriously damaged. No sea-wave effects were observed on August 4. On August 8 a mild recession was</p>	-

August 4, 1946				
			noted, but no high water of consequence was observed.	
-69.6131	19.2279	Sanchez	(Lynch and Bodle, 1948): At Sanchez the damage of most interest occurred at the pier. The railroad tracks were warped where the pier made contact with the shore. (see fig. 14) At the offshore end, four large concrete columns were either broken or tilted. They were made of concrete poured into tubular steel forms rising some 15 feet above the pier deck. Two were at the offshore corners of the pier, and the other two at some distance out in the water, * * * Both columns at the end of the pier were broken off a short distance above deck level, where the size of the tubular steel forms had been reduced by some 4 to 5 inches in radius. (see fig. 15) Both of these columns fell in an easterly direction. Although the outer pair did not break, they were left tilting toward the south.	LB1948(9)
-69.8605	19.1876	Arenoso	(Lynch and Bodle, 1948): At Arenoso, several houses perched at the edge of the river bank had been damaged by the slumping effects.	-
-69.9112	19.1823	Villa Rivas	(Lynch and Bodle, 1948): * * * the local church had been destroyed on August 4. Perhaps the direction in which the steeple fell was controlled to an appreciable degree by the orientation of the structure. The long dimension was nearly coincident with the direction of the epicenter. The front of the church faced approximately S 55° W. The local pastor * * * reported that the steeple rocked to and fro some three times before falling into the body of the church. As it fell, the north and south walls of brick were forced outward. People who were passing reported that the steeple swayed out over the street before going down. The spire was some 53 ft. above ground. Side walls of the main building were 22 ft. high. It was interesting to note that some of the rear wall fell into the interior of the church but that most of it remained standing. A few hundred yards away a heavy store safe fell approximately N 65° W.	-
-72.3388	18.5432	Port-au-Prince	(United Press, 1946a): The shocks were felt in Port au Prince, Haiti at the western end of Santo Domingo.  (Bettembourg and others, 1950): August 4, iP – 17:51:59 GMT, Felt all over the island, Intensity VII – VIII. Undulatory motion, duration more than a minute.  (Bettembourg, 1950): Hour: 12 h 52 m 05 s (75th meridian time) Twelve seconds after it started, the instrument of the Observatory of the Seminary	-

August 4, 1946				
			St-Martial, stopped recording, disrupted by the violence of the stroke. It was a very slow movement, which proves that Port-au-Prince was not directly on the epicenter, we only felt the longitudinal waves that lasted over a minute. The intensity can be regarded as VI to VII. An intensity of VIII for Port-au-Prince would be too strong. The clocks with pendulums that move E-W were stopped. We also observed the lamp swinging in the same direction that seems to suggest that the direction was from NE-SW.	
-72.0107	19.1453	Hinche	(Bettembourg, 1950): Duration about 4 minutes. The walls of the barracks of Hinche, Maissade, Los Palis, Thomonde, Madame Joie and Thomassique were slightly cracked.	-
-72.3459	19.5091	Marmelade	(Bettembourg, 1950): 14 houses damaged, an oven collapsed and the walls of the barracks were cracked.	-
-72.6978	19.1081	St. Marc	(Bettembourg, 1950): The wall of the fencing of the house of Mr. Philoxème Mortel and 2 sighs of the house of Basia Moril were thrown down. Throughout the afternoon, small tremors were felt thorough the department [of l'Artibonite].	-
-72.1695	19.5772	Grand Riviere du Nord	(Bettembourg, 1950): Two houses collapsed, one other partially, sections of walls of sixteen houses damaged including the General Quarters of the District and the bell tower of the parochial church collapsed in part, two houses strongly damaged.	-
-72.2403	19.5257	Dondon	(Bettembourg, 1950): Sections of walls of many houses cracked and many others have become uninhabitable.	-
-71.7223	19.5501	Ouanaminthe	(Bettembourg, 1950): Two thirds of the columns of the parochial church were shaken, 15 houses destroyed, 50 houses gravely damaged, many sections of wall in the general district quarter cracked, the gallery of the Customs outpost cracked at the base.	-
-71.8397	19.6668	Fort Liberte	(Bettembourg, 1950): A few shacks destroyed.	-
-72.4685	19.5974	Plaisance	(Bettembourg, 1950): Cracks in the walls of the church.	-
-72.4025	19.6688	Limbe	(Bettembourg, 1950): Four houses including the telegraph post-office and the rectory damaged.	-
-71.9207	19.4350	Vallieres	(Bettembourg, 1950): Walls of the barracks cracked, housing quarters of the sub-district seriously damaged. Walls of the church and the boy's school shaken, 2 cottages damaged.	-
-72.0223	19.6186	Trou du Nord	(Bettembourg, 1950): A few shacks collapsed.	-

<b>August 4, 1946</b>				
-69.8877	18.4722	Ciudad Trujillo (Santo Domingo)	<p>(Associated Press, 1946a): This capital was only slightly damaged * * * The Ciudad Trujillo docks suffered slight cracks and some ancient churches also were damaged.</p> <p>(Lynch &amp; Bodle, 1948): * * * little damage was done except to some old buildings including some minor damage to the cathedral in which the remains of Columbus rest. [Description of damage to a bridge near Santo Domingo.] The bridge was built by the United States Steel Export Company of New York. The picture (fig. 1), taken about 9:30 A.M., shows the bridge running roughly N-S. The factory to the right, with the tall chimneys, is a newly completed cement factory, and suffered no damage. The bridge had been subjected to a distinct E-W motion and suffered a lateral displacement at each end toward the east. [Describing the series of photographs in the article.] The north ends moved a good inch more than the south ends. There was evidence of a to-and-fro motion with a resulting permanent displacement toward the east. This displacement amounted to 2 5/8 inches at the north end and 1 1/4 inches at the south end.</p>	LB1948(6)
-70.7291	18.4534	Azua	(Lynch and Bodle, 1948): Intensity V based on isoseismic map in Lynch and Bodle, 1948.	LB1948(5)
-71.0925	18.2051	Barahona	(Lynch and Bodle, 1948): Intensity IV based on isoseismic map in Lynch and Bodle, 1948.	LB1948(4)
-71.6507	19.8474	Monte Cristi	(Lynch and Bodle, 1948): Intensity V based on isoseismic map in Lynch and Bodle, 1948.	LB1948(5)
-69.3112	18.4526	San Pedro de Macoris	(Lynch and Bodle, 1948): Intensity VI based on isoseismic map in Lynch and Bodle, 1948.	LB1948(6)
-69.0364	18.7648	Seibo	(O'Loughlin and Lander, 2003): Much damage from the earthquake was also reported at Cabrera, San Francisco de Macoris, and Castilla, all Intensity $\cong$ X; Puerto Plata, Moca and Cabo Cabron, all Intensity $\cong$ IX; El Seibo, Santiago, Ciudad Trujillo, San Pedro de Macoris, La Romana and many other places.	-
-69.2602	19.3204	Cabo Cabron	(O'Loughlin and Lander, 2003): Much damage from the earthquake was also reported at Cabrera, San Francisco de Macoris, and Castilla, all Intensity $\cong$ X; Puerto Plata, Moca and Cabo Cabron, all Intensity $\cong$ IX; El Seibo, Santiago, Ciudad Trujillo, San Pedro de Macoris, La Romana and many other places.	-
-68.9663	18.4238	La Romana	(O'Loughlin and Lander, 2003): Much damage from the earthquake was also	-

August 4, 1946				
			reported at Cabrera, San Francisco de Macoris, and Castilla, all Intensity $\cong$ X; Puerto Plata, Moca and Cabo Cabron, all Intensity $\cong$ IX; El Seibo, Santiago, Ciudad Trujillo, San Pedro de Macoris, La Romana and many other places.	
-66.6141	18.0115	Ponce, Puerto Rico	<p>(United Press, 1946a): Barrels of rum were shaken from their racks in Ponce, on the southern Puerto Rican shore. They bounced into the streets and burst.</p> <p>(Campbell, 1972 quoting El Mundo, date not specified): <i>It was reported from Ponce Beach that 1,100 casks of alcohol, each containing 48 gallons, were overturned. Twelve casks were broken and spilled alcohol into Bonaire Ave. Also it was stated that two high voltage lines were broken and the fire department was called. The whole city was in great state of fear and confusion for over an hour. There was no serious damage however.</i></p>	-
-66.2989	17.9774	Salinas, Puerto Rico	(Campbell, 1972 quoting El Mundo, date not specified): <i>From Salinas the earthquake was reported as strong: dishes rattled, suspended lamps moved to and fro, small objects were displaced, etc. but there was no loss of life or serious property damage.</i>	-
-67.1407	18.2009	Mayaguez, Puerto Rico	<p>(Spartanburg Herald, 1946): Spanish passengers excitedly chattering in broken English said they “saw people knocked down by the force of the quake”. They came by carrier plane from Mayaguez on the west side of the island.</p> <p>(Campbell, 1972 quoting El Mundo, date not specified): <i>From Mayaguez reports came that the earthquake was felt very strongly but no lives were lost and only minor property damage [...] Parked automobiles resembled boats on the water as they moved to and fro.</i></p>	-
-66.1057	18.4665	San Juan, Puerto Rico	<p>(United Press, 1946a): In San Juan, Puerto Rico, 325 miles southeast of Puerto Plata, the earth shocks interrupted telephone and electric service for a short time, stopped clocks and swayed chandeliers. There was no report of damage or casualties.</p> <p>(Campbell, 1972 quoting El Mundo, date not specified): <i>At San Juan, small objects moved about, doors opened and closed, lamps were swinging. However, no lives were lost nor was there extensive property damage.</i></p>	-
-67.1540	18.4275	Aguadilla, Puerto Rico	(Campbell, 1972 quoting El Mundo, date not specified): <i>Aguadilla reported the shock lasted two minutes but no serious damage resulted.</i>	-

<b>August 4, 1946</b>				
-67.1414	18.2885	Añasco, Puerto Rico	(Campbell, 1972 quoting El Mundo, date not specified): <i>At Añasco, the school was slightly damaged and classes were suspended.</i>	-
-66.9911	18.3383	San Sebastian, Puerto Rico	(Campbell, 1972 quoting El Mundo, date not specified): <i>At San Sebastian, the Catholic church was badly damaged and clocks stopped at 13:56. Churches were not in session.</i>	-
-66.9799	18.1808	Maricao, Puerto Rico	(Campbell, 1972): IV at Comerio Plants, Maricao, and Mona Island.	-
-67.8923	18.0860	Mona Island, Puerto Rico	(Campbell, 1972): IV at Comerio Plants, Maricao, and Mona Island.	-
-75.2162	20.1419	Guantanamo, Cuba	(Associated Press, 1946a): The naval station at Guantanamo Bay reported no damage in Cuba. The other naval reports did not mention damage.  (Associated Press, 1946b): Slight tremors were felt in Cuba.	-
-64.9309	18.3420	Charlotte Amalie, St. Thomas, Virgin Islands	(Associated Press, 1946b): The Virgin Islands had only a mild shock and no damage reported.  (Daily News, 1946): The earthquake which racked the Virgin Islands on Sunday afternoon at 2 o'clock is described as being more severe than the one which leveled San Francisco in 1906. Although only the tail-end of it was felt here the full force is reported to have done terrific damage to northern towns of Santo Domingo.	-

<b>October 28, 1952</b>				
<b>Time: 04:25:56.4 UTC earthquake origin time;</b> Oct. 27, 1952, at 23:29:51 local time, 75th meridian Port-au-Prince <b>Phenomenon Notes:</b> (-73.520° W, 18.510° N) depth = 24 km, Ms=5.9 (Sykes and Ewing, 1965). The observatory at Seminare-College St-Martial conducted a geologic reconnaissance of this earthquake in the Asile valley south of Anse-a-Veau. The Haitian government invited the United States Coast and Geodetic Survey (USCGS) Chief Seismologist Frank Neumann to provide his professional opinion and assessment of earthquake risk in Haiti. The Port-au-Prince bulletin for 1952 generated and published a report that included a geology map of the region most affected by this earthquake and an intensity map where some of the lower intensities are included in this list. The seismometer at the observatory recorded the P wave arrival at 23:30:16 local time, 04:30:16 UTC (Bettembourg and others, 1955). <b>Number of Observations:</b> 29				
Longitude	Latitude	City	Description	Intensity
-73.3447	18.5028	Anse-a-Veau	(Bettembourg and others, 1955): Two tremors at a low interval, accompanied by a low rumble coming from the South-East. Movement vertical and swaying from two perpendicular directions North-South, East-West. Damages in the church: cracks on the facade and various locations inside, one display, placed above the altar and supported by marble columns a meter high, lies crushed at the foot of the altar. It fell in the NW direction. *	CHF(8.5)

October 28, 1952				
			* * Damages in Basse Ville: Wooden houses partially destroyed 80%; entirely destroyed 20%. Masonry Houses partially destroyed 2 of 2. Basse Ville is mostly an alluvial zone. Damages in Haute Ville: Wooden houses partially destroyed 90%; entirely destroyed one, or 2%. Masonry houses cracked 50%; partially destroyed 33%, or a total percentage of 83 %. One note: the new classes of wooden houses, built recently have kept perfectly. Among the houses of masonry that resisted perfectly are two low buildings, the hospital and tax office. A further note: the vulnerability of buildings of stone, brick and unreinforced concrete. Intensity IX weak.	
-73.5079	18.5264	Petit Trou de Nippes	(Bettembourg and others, 1955): Three tremors felt by everyone; the second was the strongest, a rumble was heard. Movement vertical and vibrations. Damages: not completely destroyed; some houses more seriously damaged, all the houses cracked. Intensity VII strong.	CHF(7)
-	-	Chapelle Sainte Croix	(Bettembourg and others, 1955): (Reynolds Mining Corp.) On the plateau of Rochelois. Tremor strongly felt by everyone. Indicated direction, West. No damages. Etang Rey, on the southern slopes of the plateau - Vertical tremor felt by everyone accompanied by a rumble. Roof of the chapel collapsed, the method of construction perhaps has something to do with it. Intensity VII.	CHF(7)
-	-	Chapelle Saint Yves	(Bettembourg and others, 1955): (Sault du Baril) Tremor vertical up and down, with a rumbling similar to that of an airplane in the air, after which the inhabitants related "tete Sault cassee". A note: the columns of brick from the rectory under construction indicate a rotational movement in the clockwise direction. Intensity VIII weak.	CHF(7.5)
-73.3758	18.4657	Brossard	(Bettembourg and others, 1955): (Report from District Commander) Tremor vertical, up and down, prolonged, accompanied by a rumbling. The radio unit has undergone a rotation in the clockwise direction. House heavily damaged, dirty water in the river, crack in the road. Direction North-South. Intensity VIII.	CHF(7.5)
-73.4330	18.3786	Asile	(Bettembourg and others, 1955): A tremor felt by everyone. Rapid swaying, direction probably East-West. The church bell rang. Damages: Wooden houses partially destroyed about 15; entirely destroyed 0. Masonry houses: partially destroyed 2; entirely destroyed 0. A note: one house with a cement frame held perfectly. Intensity VII.	CHF(7)
-	-	Morne Sault	(Bettembourg and others, 1955): (South (?) of Petit Trou de Nippes) Tremor	CHF(7)



October 28, 1952				
			vertical, up and down, felt by everyone. Cracks in the soil, landslides. Damages reported by various chapels. Intensity VIII.	
-72.6334	18.5111	Leogane	(Bettembourg and others, 1955): Tremor felt by almost everyone. Rapid swinging East – West. Cracking noises from houses, no damages. Intensity V.	CHF(4)
-72.7709	18.4256	Grand Goave	(Bettembourg and others, 1955): Tremor felt by all the inhabitants. Rapid swinging East – West. Church clock stopped. Minor damages, however it was noted: the collapse of a wall of the chapel of Saint Antoine. Intensity: VI strong.	CHF(5)
-72.8668	18.4315	Petit Goave	(Bettembourg and others, 1955): Tremor felt by all the inhabitants. A low rumble was heard. Vibrations North-South and swaying. Stopped the clock. Insignificant damages. Intensity VI strong.	CHF(5)
-73.0861	18.4423	Miragoave	(Bettembourg and others, 1955): Two tremors at a low interval. Rapid swinging North–South. Cracking noises in houses, several small cracks. Intensity VI.	CHF(6)
-73.2446	18.4770	Petite Riviere de Nippes	(Bettembourg and others, 1955): Two tremors felt by all the inhabitants, accompanied by a continuous low rumble. Motion vertical. Damages: The zone lying east of the church, damaged and the zone west intact. The east zone is particularly alluvial and swampy. Wooden houses: partially destroyed 40%; 8 out of 400 completely destroyed. Masonry houses: cracked 80%; fully destroyed 0. Intensity VII strong.	CHF(7)
-73.6387	18.4829	Baraderes	(Bettembourg and others, 1955): One tremor felt by everyone. Direction North-South. Swinging in all directions. No damages. Intensity V weak.	CHF(4.5)
-74.1145	18.6446	Jeremie	(Bettembourg and others, 1955): Two tremors at three second intervals; the second was very strong. Slow swinging. Direction East-West. No damages. Intensity IV.	CHF(4)
-72.3388	18.5432	Port-au-Prince	(Bettembourg and others, 1955): At the seismograph the primary waves are clearly marked at 23h. 30m. 16s. The initial displacement of the needles on the E-W component is towards the North; the needles on the N-S component are towards the South, the earthquake came from the West. The oscillations quickly amplified and 20 seconds after the first traces were registered, the moving needles stopped recording and at the same time the clock stopped. From the report by a reader of the “Match” at this late hour, the movement was somehow announced by the howls of his dog and of all	CHF(4)

October 28, 1952				
			those in the neighborhood. He felt a sudden jolt, followed by a horizontal rocking from West to East, with a duration of twelve seconds. It all ended with a vertical jolt, by another source of information, they awakened by the first shock, confirmed.	
-73.3971	18.2816	Aquin	(Bettembourg and others, 1955): From earthquake intensity map in report: V.	CHF(5)
-73.7500	18.1945	Les Cayes	(Bettembourg and others, 1955): From earthquake intensity map in report: IV.	CHF(4)
-73.8890	18.5671	Corail	(Bettembourg and others, 1955): From earthquake intensity map in report: IV.	CHF(4)
-74.3959	18.3242	Tiburón	(Bettembourg and others, 1955): From earthquake intensity map in report: III.	CHF(3)
-74.4222	18.5605	Dame-Marie	(Bettembourg and others, 1955): From earthquake intensity map in report: III.	CHF(3)
-72.0683	18.2370	Saltrou	(Bettembourg and others, 1955): From earthquake intensity map in report: III.	CHF(3)
-72.5126	18.7701	Arcahaie	(Bettembourg and others, 1955): From earthquake intensity map in report: III.	CHF(3)
-72.1040	18.8336	Mirebalais	(Bettembourg and others, 1955): From earthquake intensity map in report: III.	CHF(3)
-72.8673	18.8365	Anse-a-Galets	(Bettembourg and others, 1955): From earthquake intensity map in report: IV.	CHF(4)
-72.6978	19.1081	St. Marc	(Bettembourg and others, 1955): From earthquake intensity map in report: III.	CHF(3)
-72.6929	19.4458	Gonaives	(Bettembourg and others, 1955): From earthquake intensity map in report: III.	CHF(3)
-	-	Ciudad Trujillo (Santo Domingo)	(Bettembourg and others, 1955): From the information by courtesy of Dr. Franco y Franco, Ambassador of the Dominican Republic, to whom we are pleased to express our gratitude, the devices in Ciudad Trujillo recorded for one hour. The distance is estimated to be 445 km. Arrival time of the phases: (Local Time 75th Mer.) P: 23h 30m 54s, S: 23h 31m 36s; (Greenwich Time on Oct. 28) P: 04h 30m 54s, S: 04h 21m 36s.	-
-	-	BCIS	(Bettembourg and others, 1955): The Bulletin of the Bureau Central International de Seismologie de Strasbourg (B.C.I.S.) the hour of the earthquake source is fixed for October 28, 1952, H = 04h 29m 52s, Geographic Coordinates 18.3 deg N and 73.3 deg W.	-
-	-	USCGS	(Bettembourg and others, 1955): The United States Coast and Geodetic Survey (U.S.C.G.S.) gives H = 04h 29m 51s at 18 deg 30 min N and 73 deg 30 min W.	-

January 25, 1953				
<b>Time: 19:47:57.4 UTC earthquake origin time; 02:50:00 PM Anse-a-Veau local time 75th meridian</b> <b>Phenomenon Notes: (-73.420° W, 18.470° N) depth = 0 km, Ms=5.7 (Sykes and Ewing, 1965).</b> Aftershock of October 28, 1952. The seismometer at the Port-au-Prince observatory recored the iP wave at 19:48:14 UTC (Bettembourg, Schneider and Schumacher, 1956). <b>Number of Observations: 5</b>				
Longitude	Latitude	City	Description	Intensity

January 25, 1953				
-73.3447	18.5028	Anse-a-Veau	<p>(Le Nouvelliste,1953a): The tremor registered yesterday about three o'clock in the afternoon at Port-au-Prince was also felt in other parts of the territory of the Republic in particular Petit-Riviere de Nippes, Anse-a-Veau and towns in the south point of the country. The courageous people of Anse-a-Veau were again hit hardest yesterday. Two houses in the lower town collapsed causing the deaths of two villagers * * * Several other houses were also damaged. Water pipes broke in town that had been particularly hit by the earthquake yesterday afternoon. The first witnesses met this morning at the capitol to inform this last earthquake of high intensity was felt. At 2H 50M in Anse-a-Veau, and it lasted about five seconds.</p> <p>(Bettembourg and others, 1956): Following the earthquake of October 27, 1952, small tremors were frequently felt by the residents of Anse-a-Veau, until the end of March 1953. The earthquake of January 25, 1953, was very strong in Port-a-Prince and in many localities in the Republic, seems to have been preceded by a night of January 24 to 25. Later information provided by the General Headquarters of the Army of Haiti, the intensity seems to have been the strongest on the side of Sault du Baril.</p>	CHF(5) SISF(7)
-73.2446	18.4770	Petite Riviere de Nippes	(Le Nouvelliste,1953a): The tremor registered yesterday about three o'clock in the afternoon at Port-au-Prince was also felt in other parts of the territory of the Republic in particular Petit-Riviere de Nippes, Anse-a-Veau and towns in the south point of the country.	CHF(4)
-72.3388	18.5432	Port-au-Prince	(Bettembourg and others, 1956): Felt in Port-au-Prince, stopped the clock, Pi: 19H 48M 14S GMT.	CHF(3)
-73.7500	18.1945	Les Cayes	(Bettembourg and others, 1956): Felt.	CHF(3)
-72.7558	18.1819	Bainet	(Bettembourg and others, 1956): Felt.	CHF(3)

February 26, 1953				
<b>Time: 16:09:24.7 UTC earthquake origin time; 10:11:00 AM local time 75th meridian</b> Phenomenon Notes: (-73.310° W, 18.500° N) depth=0, Ms=4.9 (Sykes and Ewing, 1965). Aftershock attributed to the October 28, 1952, earthquake. The seismometer at the Port-au-Prince observatory was down for repairs and did not record this earthquake. (Bettembourg and others, 1956). <b>Number of Observations: 2</b>				
Longitude	Latitude	City	Description	Intensity
-73.3447	18.5028	Anse-a-Veau	(Le Nouvelliste,1953b): A strong tremor was felt yesterday in Anse-a-Veau about two o'clock in the afternoon. This earthquake caused damages with the collapse of the columns of the parish church. A few of our remaining	CHF(5)

February 26, 1953				
			buildings in the city were also damaged.  (Bettembourg and others, 1956): Intensity III – IV.	
-72.3388	18.5432	Port-au-Prince	(Bettembourg and others, 1956): Felt in Port-au-Prince. On February 26, new tremor around 10H 11M. The instrument, because of repairs, was not functioning on that day. Felt in Port-au-Prince with an intensity III, it seems to have been stronger at Anse-a-Veau. Since then the balance seems to have been restored because, it no longer reports or rarely very small tremors.	CHF(3)

## Other Significant Earthquakes of the Caribbean:

### Puerto Rico and Virgin Islands

Intensity, Mercalli Magnitude Intensities (3-10); CHF, assigned by C. H. Flores (author); WHB, assigned by W. H. Bakun (co-author); SISF, assigned by SisFrance/Antilles (2010); R1964, assigned by Robson (1964); - no intensity assigned.

July 11, 1785				
<b>Time:</b> 3:00 AM, Tortola local time <b>Phenomenon Notes:</b> None <b>Number of Observations:</b> 7				
Longitude	Latitude	City	Description	Intensity
-64.6223	18.4290	Tortola, British Virgin Islands	<p>(McCann and others, 2011, quoting The Times of London, Sept. 8, 1785): <i>By Capt. Black of the Mary, from Tortola, we are informed that between two and three o'clock in the morning of Monday, the 11th of July, there was a violent and tremendous shock of an earthquake in Tortola, which continued near half a minute. It was felt with more or less violence in all adjacent islands but with little damage* * *The subterraneous noise was like rolling a great number of casks in a large loft. The report ashore was it lasted above a minute, several fractures of rocks were precipitated from the mountains, and several houses damaged, but at Spanish-Town the report was, that a large part of the island severed, and several large fractures of rocks whirled to a considerable distance. There was an uncommon agitation of the sea caused by it, but a strong smell of sulfur in some places immediately followed.</i></p> <p>(Mallet and Mallet, 1858): In Tortola the earthquake made great clefts in the rocks, and separated completely a part of the island, forming a new island.</p> <p>(Perrey, 1847): at Tortola and by ships out at sea.</p> <p>(Shaler, 1869): The island of Tortola, which was swept over during this convulsion by an earthquake wave, was rent asunder by the earthquake of 1785, a new island being formed. Our accounts of this remarkable event are not sufficiently detailed to enable us to form an idea of the precise character of the movement which brought the separation about.</p>	CHF(5) WHB SISF(6) R1964(8)
-64.4341	18.4496	Spanish Town, Virgin Gorda	<p>(McCann and others, 2011, quoting The Times of London, Sept. 8, 1785): * * * <i>but at Spanish-Town the report was, that a large part of the island severed, and several large fractures of rocks whirled to a considerable distance.</i></p>	CHF(6.5)

July 11, 1785				
			<i>There was an uncommon agitation of the sea caused by it, but a strong smell of sulfur in some places immediately followed.</i>	
-62.7494	17.3174	St. Christopher (St. Kitts)	<p>(McCann and others, 2011, quoting The Times of London, Sept. 15, 1785): <i>It was felt experienced by all the neighboring islands much about the same time, and several vessels a number of leagues out at sea felt it, especially a small one at St. Kitt's, which by the commotion it made in the water, lost her rudder, split her pump and fore-top, and was so shook that the captain was afraid she would have gone in pieces.</i></p> <p>(Cotte, 1807): Earthquake at St. Christopher in the Americas, July 11, 1785.</p> <p>(Perrey, 1847): It was felt in St. Christopher.</p>	CHF(4)
-62.9765	17.4890	St. Eustatius	<p>(McCann and others, 2011, quoting The Times of London, Sept. 15, 1785): Extract of a letter from St. Eustatia, dated July 22nd, 1785: <i>On Monday morning, the 11th instant, about half after two o'clock, we were much alarmed here by a violent shock of an earthquake which lasted upwards of a minute. As I in general sleep very sound, I believe I should not have felt it, had I not been waked by shrieks of the ladies of the house * * * The bed shook almost like the rocking of a cradle and the house rattled * * * It however went off without doing any damage. They say here they have not felt so severe a shock these 40 years.</i></p>	CHF(4)
-61.8456	17.1176	St. John, Antigua	<p>(McCann and others, 2011, quoting The Times of London, Sept. 8, 1785): St. Johns letter dated July 12, “<i>About three o'clock yesterday morning we had the most violent shock of an earthquake that has been know in the memory of the oldest inhabitant here. * * * I was awoken suddenly by an unusual noise * * * Three or four minutes; after * * * poor hound in the yard began to howl, and the poultry to make a noise * * * in an instant the whole house was in a gentle trembling, which continued about half a minute. Before I could get out of bed for a candle * * * another dreadful shock succeeded. The house was rocked like a cradle for nearly three minutes. The windows, and some glasses were in a perfect clatter, and a dismal noise accompanied the earthquake. It has done no material damage on this island, except injuring some old houses * * * The shock it seems was felt severely at sea, many leagues from the land</i>”.</p> <p>(Perrey, 1847): At Antigua, disastrous shaking.</p>	CHF(5)

July 11, 1785				
			(Gentleman's Magazine, 1785): On the 11th of July, about three in the morning, a dreadful earthquake shook the Island of Antigua to its foundation. It threw the inhabitants into the utmost consternation but no material damage ensued.	
-72.2006	19.7616	Cap Haitien, Hispaniola	(Moreau de St. Méry, 1798): We had three in 1785 * * * the third and strongest on July 10 in the night.	CHF(3)
-72.0223	19.6186	Trou-du-Nord, Hispaniola	(Moreau de St. Méry, 1798): It was felt fifteen earthquakes in these four years, two of which were sensibly felt, June 18, 1784 and July 11, 1785. They undulated from West to East and their motion vibratory.	CHF(3)

May 2, 1787				
<b>Time:</b> A little before noon, San Juan, Puerto Rico local time <b>Phenomenon Notes:</b> Aftershocks were felt. No reports of this earthquake as being felt or noted was found for the other islands. McCann and others (2011) contains more details of the letters than are cited here. <b>Number of Observations:</b> 11				
Longitude	Latitude	City	Description	Intensity
-66.1057	18.4665	San Juan, Puerto Rico	<p>(McCann and others, 2011, quoting letter written by J. Dabian on May 23, 1787, Archivo General de Indias, Santo Domingo #2307): <i>I give to you excellent correspondence the account of what has been experienced on this island during my governance a recent earthquake on the second of this month [May] a little before noon, followed by other minor ones that have not stopped, accompanied by the injuries suffered by the mentioned activities on the works of the fortification of this capital, buildings both military and civil of the same cost and occupied by the Real Hacienda * * * but observed by myself the need to demolish the small fort built in the middle the Bridge of San Antonio, immediately since it is so close to ruin and will surely fall * * * and to repair without delay the Fort of San Geronimo adjoining the aforementioned bridge, the surrender houses, prisoner quarters, the hospital, storage and guard houses, * * * and like the warehouse, in the fortress of Conception it is damaged and collapsed completely, its demolition is absolutely necessary after its evacuation. The houses in this city have been more or less been damaged by the impulse of the aforementioned first earthquake, including the convents of the Dominicans and the Franciscans but without causing loss of life or ruin.</i></p> <p>(McCann and others, 2011, quoting letters written by J.F. Mestre May 9, 1787,</p>	CHF(7)

May 2, 1787				
			<p>Archivo General de Indias, Santo Domingo #2307): <i>In the drape of the semi-fortress of the Gate of Santiago, the barricade mostly has cracks with a few of its terraces sunk * * * The Port of San Cristobal, the cavalry quarters have damages along the low walls and half sunk along the terraces * * * The hospital of Caridad that at present serves the sick from the Guarnicion Plaza, had been damaged with three considerable cracks on the wall that runs with the church, along the part where it connects with the stairs, the arches have settled that formed part of the first floor * * * In considering the old age of the roof of the Cathedral, and the various works done for its maintenance and prevent the danger its ruin, and with attention to how it was assembled, it experienced the earthquakes that has befallen us and ultimately the three arches that form the alcove to the left a small crack near the corner formed, it has been noted</i></p>	
-66.7321	18.4636	Arecibo, Puerto Rico	<p>(McCann and others, 2011, quoting letter written by J. Dabian on May 23, 1787, Archivo General de Indias, Santo Domingo #2307): <i>In the rest of the island, having experienced [the earthquake] all over equally strong, it has been less damaging owing to their construction in wood except for the following churches that were made of masonry; counting among them the ones from Arecibo, and with distinct cracks those of Mayaguez, Bayamon, and Toa-Alta. Much needs to be done to rebuild the first and repair the rest in the best possible manner.</i></p> <p>(McCann and others, 2011, quoting letters written and received by Matos, 1787, Archivo General de Indias, Santo Domingo #2525): <i>* * * that of Arecibo is completely useless, which it wasn't, is now collecting stone and materials and I have given orders of what needs to be done until I return and that it is necessary to re-edify it. Decent church and sufficient before this destruction.</i></p>	CHF(7)
-67.1407	18.2009	Mayaguez, Puerto Rico	<p>(McCann and others, 2011, quoting letter written by J. Dabian on May 23, 1787, Archivo General de Indias, Santo Domingo #2307): <i>In the rest of the island, having experienced [the earthquake] all over equally strong, it has been less damaging owing to their construction in wood except for the following churches that were made of masonry; counting among them the ones from Arecibo, and with distinct cracks those of Mayaguez, Bayamon, and Toa-Alta. Much needs to be done to rebuild the first and repair the rest in the best possible manner.</i></p>	CHF(6)
-66.1616	18.3809	Bayamon, Puerto Rico	<p>(McCann and others, 2011, quoting letter written by J. Dabian on May 23, 1787,</p>	CHF(6)



May 2, 1787				
			Archivo General de Indias, Santo Domingo #2307): <i>In the rest of the island, having experienced [the earthquake] all over equally strong, it has been less damaging owing to their construction in wood except for the following churches that were made of masonry; counting among them the ones from Arecibo, and with distinct cracks those of Mayaguez, Bayamon, and Toa-Alta. Much needs to be done to rebuild the first and repair the rest in the best possible manner.</i>	
-66.2550	18.4425	Toa Alta, Puerto Rico	(McCann and others, 2011, quoting letter written by J. Dabian on May 23, 1787, Archivo General de Indias, Santo Domingo #2307): <i>In the rest of the island, having experienced [the earthquake] all over equally strong, it has been less damaging owing to their construction in wood except for the following churches that were made of masonry; counting among them the ones from Arecibo, and with distinct cracks those of Mayaguez, Bayamon, and Toa-Alta. Much needs to be done to rebuild the first and repair the rest in the best possible manner.</i>	CHF(6)
-67.0381	18.0808	San German, Puerto Rico	(McCann and others, 2011, quoting letters written and received by Matos, 1787, Archivo General de Indias, Santo Domingo #2525): <i>Dear sir, from all over the place [island] I receive nothing more but of the damages that have occurred on May 2nd * * * the chapel for the choir has been found to be unsafe so we may move out, finally, dear sir, it is unconcealed and after determination of what is best to have because neither can we have the people exposed to a church with a collapsed roof and be buried nor the majority of its ruins; as much as I am hurt by this calamity.</i>	CHF(5)
-66.6141	18.0115	Ponce, Puerto Rico	(McCann and others, 2011, quoting letters written and received by Matos, 1787, Archivo General de Indias, Santo Domingo #2525): <i>* * * the same agent adjusted the one in Ponce, the entire [church] vault and even though there was much trouble in the neighborhoods, in the end they overcame it.</i>	CHF(5)
-66.3565	18.0801	Coamo, Puerto Rico	(McCann and others, 2011, quoting letters written and received by Matos, 1787, Archivo General de Indias, Santo Domingo #2525): <i>* * * of Coamo we knew that the church did not receive damages.</i>	CHF(4)
-66.1659	18.1127	Cayey, Puerto Rico	(McCann and others, 2011, quoting letters written and received by Matos, 1787, Archivo General de Indias, Santo Domingo #2525): <i>* * * that at Cayey they felt it [earthquake] is not unusual because they just recently put together two halves of their two vestries and they will complement very well the whole work.</i>	CHF(5)
-67.1414	18.2885	Añasco, Puerto Rico	(McCann and others, 2011 quoting letters written and received by Matos, 1787,	CHF(5)

May 2, 1787				
			Archivo General de Indias, Santo Domingo #2525): * * * <i>those of Añasco have taken shelter in Yaguas.</i>	
-66.0347	18.2344	Caguas, Puerto Rico	(McCann and others, 2011 quoting Cordova, 1968): <i>The church at Arecibo was ruined, and those of Mayaguez, Caguas, and Toa Alta their walls were cracked.</i>	CHF(5)

## Lesser Antilles

Intensity, Mercalli Magnitude Intensities (3-10); CHF, assigned by C. H. Flores (author); WHB, assigned by W. H. Bakun (co-author); SISF, assigned by SisFrance/Antilles (2010); L&S1995, assigned by Lynch and Shepherd (1995); S&L1992, assigned by Shepherd and Lynch (1992); T&R1977, assigned by Tomblin and Robson (1977); T&A1975, assigned by Tomblin and Aspinall (1975); R1974, assigned by Robson (1964); - , no intensity assigned.

April 5, 1690				
<b>Time:</b> Between 4 and 5 in the afternoon, Antigua local time.				
<b>Phenomenon Notes:</b> None				
<b>Number of Observations:</b> 11				
Longitude	Latitude	City	Description	Intensity
-61.8003	17.0864	Antigua	(Shepherd and Lynch, 1992, quoting Colonial Records Office, London): <i>Antigua, having more stone houses suffered much, most of the houses being either shaken down or being so split and cracked that they will have to be taken down.</i>  (Robson, 1964, quoting the Calendar State Papers, 1689-1692, 1901): <i>Between four and five in the afternoon a terrible earthquake "laid some * * * buildings in rubbish and killed some persons". Governor Codrington lost property to the value of £ 2000. Aftershocks almost daily for a month: further aftershocks in June...</i>	CHF(8) WHB(8) SISF(7.5) S&L1992(8) R1964(9)
-62.3414	16.9419	Redonda	(Shepherd and Lynch, 1992, quoting Colonial Records Office, London): <i>A rocky islet called Rockadunda was a great part of it split and turned into the sea.</i>  (Oldmixon, 1741): <i>Others passing the uninhabited island, or rather rock, called Redunda, found the earthquake so violent there, that a great part of that rocky isle split and tumbled into the sea where it was sunk, making as loud a noise as if several cannon had been fired. A very great cloud of dust ascended into the air at the fall.</i>	CHF(8) WHB SISF(7) S&L1992(8)
-62.1899	16.7376	Montserrat	(Shepherd and Lynch, 1992, quoting Colonial Records Office, London): <i>And yet felt as severely (as in Antigua) in Montserrat.</i>	CHF(8) WHB(8)

April 5, 1690				
				SISF(7) S&L1992(8)
-62.5894	17.1541	Nevis	<p>(Smith, 1745): * * * the foundation [fountain] rock in the lower part of the town, bursting at the same instant and casting out a considerable quantity of water; and indeed some of the marks of this bursting were visible enough in my time. This Convulsion was on a Sunday in the afternoon, whilst some of my parishioners were drinking a bowl of rum punch, which one of them had then in his hand, in order to set it down upon the table* * * he assured me he did not spill a single drop, though the bowl was two thirds full. A huge piece of our Nevis Mountain...fell down and left a monstrous rocky spot of it quite naked and bare, which continues in that state to this very day (about 20 years later).* * * No one has lost his life by this earthquake.</p> <p>(Oldmixon, 1741): On Sunday the 6th of April, about 5 a clock in the evening, a strange hollow noise was heard for some few minutes, which was thought to proceed from the great mountain in the middle of this islands. The inhabitants were surprised and amazed at it; and immediately after, to their greater amazement, began a mighty earthquake, with so much violence, that almost all the houses in Charles Town, which were of brick or stone, were in an instant leveled to the ground, and those built of timber shook. In the streets the ground in several places clove about a foot asunder, and hot stinking water spouted out of the earth to a great height * * * It is usual almost at every house in this island to have a large cistern to contain the rain water, of about 9 or 10 foot deep and 15 or 20 foot diameter, threw out the water 8 or 10 foot high, and the motion of the earth all over the island was such, that nothing could be more terrible.</p>	CHF(9) WHB(9) SISF(7.5) S&L1992(8) R1964(9)
-62.7494	17.3174	St. Kitts	(Oldmixon, 1741): * * * there happened an earthquake here, which was felt in the other islands. The earth opened nine foot in many places and buried solid timber, sugar-mills, etc. It threw down the Jesuit College and other stone buildings.	CHF(8) WHB(7) SISF(7.5) S&L1992(8) R1964(9)
-61.5443	16.2539	Guadeloupe	(Robson, 1964, quoting Calendar of State Papers, 1689-1692, 1901): <i>The French islands</i> * * * <i>suffered as severely</i> * * *	CHF(6) WHB(6) S&L1992(6) R1964(9)
-60.9988	14.6680	Martinique	(Shepherd and Lynch, 1992, quoting Calendar of State Papers, 1690): <i>It is reported to have been more violent (than in Barbados) at Martinico and the other French islands.</i>	CHF(4) WHB(4) SISF(4)

April 5, 1690				
				S&L1992(5)
-60.9719	13.9003	St. Lucia	(Oldmixon, 1741): Several Sloops that passed from [Nevis] to Antego [Antigua] felt it at sea, between St. Lucia and Martinico [Martinique], in their way to Barbados, the agitation of the water being so violent, that they thought themselves on rocks and shelves, the vessels shaking as if they would break to pieces.  (Shepherd and Lynch, 1992, quoting Colonial Records Office, London): <i>Sloops at sea between Martinique and St. Lucia thought themselves aground so violently were they shaken.</i>	CHF(4) WHB(4) SISF(4) S&L1992(4)
-59.5514	13.1556	Barbados	(Oldmixon, 1741): In April, 1690 there was an earthquake at Barbadoes, but it did no manner of hurt to men or cattle.	CHF(3) WHB(3) S&L1992(3)

February 8, 1843				
<p><b>Time:</b> Between 10:30 AM Pointe-a-Pitre, Guadeloupe local time and 10:40 AM English Harbour, Antigua local time.</p> <p><b>Tsunami:</b> The only report of the sea rushing in is from Antigua.</p> <p><b>Land Surface Effects:</b> Crevasses were observed as well as water gushing out of the ground in coastal areas especially in Guadeloupe.</p> <p><b>Phenomenon Notes:</b> The dockyard of English Harbour, Antigua, sank. Wells were observed to have dried up in Guadeloupe. Point-a-Pitre was completely destroyed partly from the earthquake but also from the immediate fires. Also, the governor of Guadeloupe claims that the earthquake lasted 70 seconds (Gourbeyre, 1843). Many publications concerning this earthquake were written in the scientific literature including those of Charles Joseph Sainte-Claire Deville in which he did a reconnaissance of the islands and recorded the land surface effects and a list of aftershock sequence, and republished some of the eyewitness accounts. There are newspaper accounts of claims the effects of this earthquake were felt as far north as Bermuda and South Carolina and as far south as French and British Guiana colonies on the northern coast of South America.</p> <p><b>Number of Observations:</b> 43</p>				
Longitude	Latitude	City	Description	Intensity
-61.7652	17.0073	English Harbour, Antigua	(Helmsley, 1843): The Dockyard at English Harbour is sunk considerably, many parts being under water, the whole of the stone houses in a complete ruinous state, the walls partly or wholly down; the water tanks containing nearly 11,000 tons of water burst with an awful crash; the Earthquake lasted about 4 minutes. Mr. Hart, Clerk in charge of the Dockyard, English Harbour, states that 3 clocks in the neighborhood stopped at 10h: 40m: a.m. Precise accounts had not been received from the interior. It is ascertained 40 lives had been lost – tears [?] were entertained it was short of the actual loss. The Governor's house (Dows Hill) is partially destroyed with nearly all its furniture; the Ridge Barracks much damaged; the Custom House, Court House, and Wesleyan Meeting House destroyed.	CHF(9) WHB(9) S&L1992(9-10)

February 8, 1843				
			(Barbadian, 1843a): The Town, I am told, presents one scene of destruction, * * * My poor friend * * * in the pride of human wisdom, thought that he would provide for future casualties, and erected a fire-proof store all of arches at the expense of £1000 sterling, and, in one moment it was a heap of ruins, * * * The dock yard, which was the wharf [?] of Antigua, has been so cracked, and the pier so sunk, as to be rendered almost useless, the estimated expense of repair is upwards of £50,000 sterling. The Garrison shared a similar fate, as the barracks were in such a state as to be uninhabitable. The troops are under canvass – in fact almost all our houses present the appearance of an umbrella, the roofs standing, but the houses gutted.	
-61.8456	17.1176	St. John's, Antigua	<p>(Helmsley, 1843): The organ in the Church of St. John's totally destroyed.</p> <p>(Barbadian, 1843a): The Governor, who has been residing out here, has been forced to abandon Dow's Hall, after having lost the greater part of his furniture; fortunately for him the Government House in St. John's is a wooden building, and is safe.</p>	CHF(8) WHB(8) SISF(9) S&L1992(9)
-61.8003	17.0864	Antigua	<p>(Helmsley, 1843): This island has suffered most severely, the whole of the churches and mills throughout the Island being a heap of ruins.</p> <p>(Barbadian, 1843a): (letter from a clergyman in Antigua dated Feb. 11) On Wednesday morning, the 8th between the hours of ten and eleven, we experienced one of the severest shocks (perhaps with the exception of Hayti) that has ever been felt in the Western world. I had just time to drag my wife and little Charlotte out of the house to prevent our being buried in the ruins. Jenny escaped out of the drawing-room door. Willy was fortunately in the yard, and my poor wife and self had the agony of knowing that our youngest child and the nurse were still in the building; fortunately they were in the wooden part; and here we are all, God be praised, unhurt. It lasted upwards of two minutes, in which time the work of destruction was incalculable, to Antigua positive ruin. Every Church, with the exception of the old wooden one, leveled or ruined, my own dear little one among the number; and, what is still more distressing, most of the mills and bedding-houses either thrown down or so severely rent as to require almost re-building before they can be used. I do not believe that there are at this moment more than a dozen windmills in the island effective; and this</p>	CHF(8) WHB(8) R1964(9)

February 8, 1843				
			<p>melancholy to relate, at the commencement of one of the finest crops Antigua has had for many years. The greater part of the crop must perish for want of machinery to take it off; if persons even had the means, the mechanics necessary could not be obtained to re-erect them. I have lost all my little property, the accumulation of years, as my furniture was almost all destroyed or injured, and am now left almost houseless and destitute, with a wife and four children, and on the eve of her confinement with another. The only shelter we have is a bedroom and dressing room which being of wood and the old part of the house remains, although the foundation on which they stand has been so shattered that it is very unsafe. My personal loss accounts to almost £300 sterling * * * Every building at the Rectory is either thrown down or rendered useless, and no prospect of their being rebuilt immediately, as my unfortunate flock are in the same deplorable condition * * * At one time I expected that the mountain in rear of the house would have tumbled over and buried us, as a large avalanche of stone and earth came tumbling over; the sea also rose considerably and as we are on low alluvial soil, I expected momentarily when it would have rushed up the base of the mountain and overwhelmed us. But God was merciful to us and spared us.</p>	
-61.5342	16.2415	Pointe-a-Pitre, Guadeloupe	<p>(Helmsley, 1843): (Mr. Risley of Philadelphia). At about 10h. 30m. a.m., of the 8th instant, a company of 150 to 160 persons, I was breakfasting at the Hotel [?] in the large square, when all of a sudden a dreadful noise not to be described, with a rocking movement, was felt; being near the door, I instantly rushed out and perceived the buildings falling in every direction. I perfectly recollect what happened for the first 15 to 20 seconds, and saw many persons either buried or killed; the whole of my fellow companions at breakfast I never saw again. In the midst of all this calamity the earth in several parts of the town opened to a considerable extent, when volumes of water spouted forth with awful fury to the extent of a hundred feet perpendicular in columns of several feet in thickness, momentary and also[?] awfully swallowing up hundreds of the inhabitants the earth closed again. What followed for 20 seconds after I have no recollection of – on recovering I found myself beside 3 dead bodies, in the midst of a heap of ruins, my clothes torn, and my hat broken. My son, a child six years of age most providentially escaped unhurt finding him shortly, after on a heap of ruins. The scene which presented itself was more than words can express.</p>	<p>CHF(9) WHB(9) SISF(9) S&amp;L1992(9)</p>

February 8, 1843				
			Thousands were buried among the ruins and living and raising their voices for [?], many were saved; but alas, the work of destruction was not yet finished; a cry of fire was heard, which proved to be true; what the Earthquake and water had begun, the Fire finished.	
-61.7281	15.9960	Basse-Terre, Guadeloupe	(Gourbeyre, 1843): At Basse-Terre, many gables are fallen; many houses strongly shaken are uninhabitable and must be demolished; fortunately nobody perished.	CHF(8) WHB(8) SISF(8)
-61.2626	15.9396	Capesterre de Marie Galant, Guadeloupe	(Barbadian, 1843c): The dependencies of The Saints and Marie-Galante have also suffered. The first was shaken with much violence, and some of the houses on the high lands thrown down; of the disasters on the lower lands, we are as yet ignorant. The new military establishment at l'Iera Cantit [?] has been thrown down and the powder magazine destroyed. At Marie Galante, half of the town is down, that is to say, all the stone houses, barracks, coals [?], and churches.	CHF(8) WHB(8) SISF(8)
-61.5834	15.8661	Iles de Saintes (Terre-de-haut), Guadeloupe	(Barbadian, 1843c): The dependencies of The Saints and Marie-Galante have also suffered. The first was shaken with much violence, and some of the houses on the high lands thrown down; of the disasters on the lower lands, we are as yet ignorant. The new military establishment at l'Iera Cantit[?] has been thrown down and the powder magazine destroyed. At Marie Galante, half of the town is down, that is to say, all the stone houses, barracks, coals [?], and churches.  (Gourbeyre, 1843): For Saintes, all the houses made of masonry were thrown down.	CHF(8) WHB(8) SISF(8)
-61.3453	16.3310	Le Moule, Guadeloupe	(Gourbeyre, 1843): All the quarters in the colony has suffered destruction. The town Monte destroyed. They deplore the death of 30 inhabitants. The countryside near the city was afflicted with similar calamity. In the boroughs of Saint-Francois, Saint-Anne, Port Louis, Bernard Bay, Sainte-Rose were damaged; dead or injured almost everywhere.	CHF(9) WHB(9) SISF(9)
-61.5914	16.1940	Petit-Bourg, Guadeloupe	(Gourbeyre, 1843): Petit-Bourg is destroyed.	CHF(9) WHB(9) SISF(9)
-61.5328	16.4178	Port-Louis, Guadeloupe	(Gourbeyre, 1843): All the quarters in the colony has suffered destruction. The town Monte destroyed. They deplore the death of 30 inhabitants. The countryside near the city was afflicted with similar calamity. In the boroughs of Saint-Francois, Saint-Anne, Port Louis, Bernard Bay, Sainte-	CHF(8.5) SISF(9)

February 8, 1843				
			Rose were damaged; dead or injured almost everywhere.	
-61.3809	16.2274	Sainte-Anne, Guadeloupe	(Gourbeyre, 1843): All the quarters in the colony has suffered destruction. The town Monte destroyed. They deplore the death of 30 inhabitants. The countryside near the city was afflicted with similar calamity. In the boroughs of Saint-Francois, Saint-Anne, Port Louis, Bernard Bay, Sainte-Rose were damaged; dead or injured almost everywhere.	CHF(8.5) SISF(9)
-61.6970	16.3334	Sainte-Rose, Guadeloupe	(Gourbeyre, 1843): All the quarters in the colony has suffered destruction. The town Monte destroyed. They deplore the death of 30 inhabitants. The countryside near the city was afflicted with similar calamity. In the boroughs of Saint-Francois, Saint-Anne, Port Louis, Bernard Bay, Sainte-Rose were damaged; dead or injured almost everywhere.	CHF(8.5) SISF(9)
-61.2744	16.2520	Saint-Francois, Guadeloupe	(Gourbeyre, 1843): All the quarters in the colony has suffered destruction. The town Monte destroyed. They deplore the death of 30 inhabitants. The countryside near the city was afflicted with similar calamity. In the boroughs of Saint-Francois, Saint-Anne, Port Louis, Bernard Bay, Sainte-Rose were damaged; dead or injured almost everywhere.	CHF(8.5) SISF(9)
-62.6267	17.1415	Charleston, Nevis	<p>(Helmsley, 1843): Charlotte Town Court House to the ground, Bath house much damaged. Custom House partly down and all the Mills in the Island more or less injured, nearly the whole of the Town destroyed, most of the Wood built houses are left standing, all the Stone Buildings are so injured that they must be taken down and re-built, estimated damage at £50,000, only 2 Mills on the Island that can be worked.</p> <p>(Barbadian, 1843c): * * * in the morning we had a shock that it is impossible for me to faithfully to describe. It was preceded by the usual low rumbling noise like distant thunder. The earth then commenced a tremulous motion which continued for half a minute. This was succeeded by a dreadful heaving and shaking, which I am told lasted a full minute and a half. I was upstairs at the commencement, and instantly ran down, calling out to my mother and sister to follow me into the yard. Scarcely had I left the house, when the violent motion I have mentioned came on, and the sensation was as if a vast wave was moving violently beneath my feet. At this time the scene beggared description. Houses cracking and shaking as if ready to be precipitated from their foundation; stone buildings falling and crashing in every direction, people running to and fro, overwhelmed with terror and consternation, and shrieking in the most appalling manner. For myself, I</p>	CHF(8) WHB(8) SISF(8.5) S&L1992(9)



February 8, 1843				
			stood up in the centre of the yard, expecting every moment when the ground would open and Charlestown be swallowed up, and its inhabitants ushered into eternity. Thank Heaven it passed; and though Charlestown is almost in ruins, it stands and not a life has been lost and scarcely any personal accident of any kind has happened to any one * * * My house, which is as you know, a wooden one, has sustained no damage; but all the wall of the servants rooms which forms one entire side of them is down, also the greatest part of the kitchen (very lately put up) and the wall which divides the premises from Lennington's (formerly the Smith's).	
-62.2193	16.7060	Plymouth, Montserrat	(Helmsley, 1843): Wesleyan Meeting House so much injured must be taken down, the whole of the Mills on the Sugar Estates unfit for use, several large fissures (from land slips) appear on the sides of the Hills, lasted 2 minutes, six lives lost, the whole of the Stone buildings more or less injured and at present not inhabitable.	CHF(8.5) WHB(7) SISF(8.5) S&L1992(9)
-62.7147	17.2969	Basseterre, St. Kitts	(Helmsley, 1843): Houses much shaken but not materially injured lasted 3 minutes.  (Barbadian, 1843b): Basseterre Church irreparably injured. The Churches of St. Peter's St. Mary's, Cayon, P. Point, Old Road, and Sandy Point are materially injured. The Town of Basseterre has suffered severely. Wall House in the square down. Part of the Reading House – Mr. Mathew's Store – all down. The House occupied by the Director of the West India Bank nearly down, and every stone building in Town so much injured, that it will be necessary to take down many of them. One house in Town partly sunk into the cellar. All the estates throughout the island much injured. Steam Engines, Boiling Houses, Dwelling Houses, and Works, leveled with the earth. The works of the Bevon Island Estate thrown into a ravine below them. The loss of property in stores, furniture, &c. very great. Four Mile Bridge undermined – St. Vincent Observer, Feb. 14.	CHF(8) WHB(7) SISF(8) S&L1992(9)
-62.8000	17.3199	Old Road, St. Kitts	(Barbadian, 1843b): The Churches of St. Peter's St. Mary's, Cayon, P. Point, Old Road, and Sandy Point are materially injured. All the estates throughout the island much injured. Steam Engines, Boiling Houses, Dwelling Houses, and Works, leveled with the earth. The loss of property in stores, furniture, &c. very great. – St. Vincent Observer, Feb. 14.	CHF(7.5) SISF(8)
-62.7364	17.3515	Cayon, St. Kitts	(Barbadian, 1843b): The Churches of St. Peter's St. Mary's, Cayon, P. Point, Old Road, and Sandy Point are materially injured. All the estates	CHF(7.5) WHB(7)

February 8, 1843				
			throughout the island much injured. Steam Engines, Boiling Houses, Dwelling Houses, and Works, leveled with the earth. – St. Vincent Observer, Feb. 14.	SISF(8)
-62.8460	17.3538	Sandy Point, St. Kitts	(Barbadian, 1843b): The Churches of St. Peter's St. Mary's, Cayon, P. Point, Old Road, and Sandy Point are materially injured. All the estates throughout the island much injured. Steam Engines, Boiling Houses, Dwelling Houses, and Works, leveled with the earth. – St. Vincent Observer, Feb. 14.	CHF(7.5) SISF(8)
-61.3006	15.5454	Melville Hall, Dominica	(Dominican, 1843a): * * * we have learned with regret that the Windward Quarter – of the island has sustained material injury by the awful calamity, and that amongst other loses the Sugar Works and other stone buildings of the Melville Hall and Londonderry Estates have been destroyed.  (Dominican, 1843b): The walls of the curing houses dwelling house, and distilleries in fact every stone building on this Estate are almost in every part down. Those of the Boiling and Mill houses shaken. the sugar boilers sunk in their seats, and the Chimneys entirely destroyed, the canal split to the length of four hundred yards. The land of both these valleys has sunk inward from the N. and the S. falling five inches and the river thrown out of its accustomed bed to the south about 20 feet, one child killed.	CHF(7.5) WHB(7) SISF(8) S&L1992(9)
-61.2565	15.4411	Castle Bruce, Dominica	(Dominican, 1843b): The chimneys of the boiling and still houses were both thrown down, the former fell upon the roof and in part crushed it in - part of the east end of the curing house wall is thrown down, the north wall of the Little House is split literally from top to bottom, the walls are otherwise much injured and must be taken down in part and rebuilt after crop is gathered in, the Mill House is rent and much shaken and must also in part be rebuilt.	CHF(7) WHB(7) SISF(7)
-61.4616	15.5532	Picard, Dominica	(Dominican, 1843b): At this place the sugar works have been shaken to their foundation; and the chimneys rendered quite unsafe. These will have to be rebuilt as soon as the present crop is taken off * * * York Valley Estate - We commence then by stating that the dwelling house of the York Valley Estate has been rendered uninhabitable: the Works however have been but slightly shaken * * * Layon[?] Valley and Prince Ruperts - No serious injury has been done to the other Estates in the Layon Valley, nor to any other on the Leeward coast as far as to Prince Ruperts.	CHF(7.5) WHB(6)

February 8, 1843				
-61.4519	15.5707	Sugar Loaf, Dominica	(Dominican, 1843b): The chimneys of the sugar works and distilleries together with the walls of a Blacksmith Shop, stables, pens, stock houses, &c. have been thrown to the ground – a mass of ruins! and the boiling house so shaken that part has already been taken down. It must be rebuilt after crop.	CHF(7.5) WHB(7)
-61.2977	15.5575	Londonderry, Dominica	(Dominican, 1843b): The whole of the Sugar works, Curing houses, distilleries, store rooms, with chimneys, boilers &c. have been leveled to the ground. There is not a Stone building on this property which has not either been totally or partially destroyed.	CHF(7) WHB(7)
-61.2828	15.5211	Hutton Garden (Hatton Garden), Dominica	(Dominican, 1843b): The state of the Hutton Garden estate is portrayed in the following extract of a letter in the last Colonist: - “Our Works were in full play, making sugar when the Earthquake commenced, in a few seconds I observed part of the wall of the Mill House falling and the roof (of slate) with it – at the same time the chimney of the boiling house, part of the wall of the still house, and curing house, were tumbling in, and clouds of dust, then arose as if the whole buildings were demolished. Fortunately, the roofs of the boiling curing and still houses remain up. The back part of the wall of the boiling house, is so rent and shattered, that it must be taken down by degrees and rebuilt, I may say the same of the great part of the curing and still houses, it being unsafe for any person to remain in them, I am glad to say the horse stable, though in mason work, has not suffered, my house fortunately is built of wood, but rest on a breast wall, which has given way in several places, my kitchen walls partly thrown down. - I observed that earth is cracked within six feet of my house, and ready to slide away, so violent was the shock of the Earthquake, that the trash was thrown from off of several of our negro houses.”	CHF(7) WHB(7)
-61.3068	15.5709	Eden, Dominica	(Dominican, 1843b): Chimney and boiling house down and walls partly injured, thanks be to God no lives lost here.	CHF(7) WHB(7)
-61.3856	15.2977	Roseau, Dominica	(Dominican, 1843a): The inhabitants of Roseau were, at seven minutes to Eleven o'clock this forenoon, suddenly and justly alarmed beyond all description by the terrible shock of an earthquake which for violence the oldest of them say, has not even been exceeded here which its duration was longer than they ever experienced! As far as the agitated mind of everyone in town can at this moment calculate the violation rocked from NE. to the S.W. producing a roaring noise like a hurricane, and afterwards the ground seemed to heave perpendicularly, shaking the houses with a cracking noise	CHF(7) WHB(7) SISF(7) S&L1992(8)

February 8, 1843				
			<p>similar to that heard when a roof is being unshingled. At the same moment the larger buildings clearly appeared to be rolling to and fro, and columns of smoke were seen issuing from several of the Mountains in sight of Town. During the morning as for several days past the sky had been exceedingly clear and serene. We think the shock lasted 2 ½ minutes but one gentleman assures us that by a watch he had in his hand it occupied three minutes and a half! In about half a minute from the * * * almost every house was vacated leaving the streets covered with the inhabitants of every Class, Sex, and Age. Several Stone buildings have been cracked and some old walls and chimneys thrown down. The Jail, Police Office, and Roman Catholic Church are included in the report – At the Militia Arsenal the Arm racks were so shaken as to bring the Muskets to the floor. - Several messengers have already reached Town from the neighboring Estates with reports of accidents to Buildings and of the tumbling down of bodies of earth from the hills and cliffs but we prefer today confining ourselves to the Town to avoid mistakes * * *.</p>	
-62.9859	17.4816	Oranjestad, St. Eustatius	(Barbadian 1843c): Estates all severely injured; and crops will consequently be lost.	CHF(6.5) WHB(6) SISF(7.5) S&L1992(8)
-62.8249	17.8972	St. Barts (St. Barthelemy)	(Barbadian, 1843c): All the stone houses split – many must be pulled down. No lives lost. For about a half a-cubit [?] in the town, along the streets, there was an opening in the ground of about 10 inches wide.	CHF(6) WHB(6) SISF(6) S&L1992(8) T&R1977(8) R1964(8)
-63.0538	18.0642	St. Martin	(Barbadian, 1843c): Estates all ruined, and stone houses all thrown down – No lives lost.	CHF(6) WHB(6) SISF(5) S&L1992(8) T&R1977(8) R1964(8)
-61.1757	14.7405	St. Pierre, Martinique	(Barbadian, 1843b): An Earthquake took place at St. Pierre on Wednesday last, at the hour at which one was felt here; it was marked by the same tremulous motion, without shock, which characterized its action in this Colony. The vibrations are said to have continued without interruption for several minutes. The whole of the inhabitants of St. Pierre fled down to the sea beach and part of what we understand to be celebrated overhanging	CHF(6) SISF(7) S&L1992(7)

February 8, 1843				
			Rock, fell into the Town. The General Grant was getting under weigh at the time and had no subsequent communication with the shore, so that it is not known what if any lives were lost, or what damage has been done – Standard, February 13.	
-60.9988	14.6680	Martinique	<p>(Helmsley, 1843): Shaken but no injury in town – the sugar mills a little damaged.</p> <p>(Times, 1843): On the 8th, the day of the catastrophe which reduced Point-a-Pitre to a heap of ruins and ashes, I was going towards the Savannah, about 20 minutes past 10 o'clock, in order to reach the palace, when I heard cries of distress coming from every side of me. The people rushed from their homes, the women carrying their children in their arms, all hurrying to the open promenade. I then felt the earth tremble under my feet, and began to hasten my own steps. The shocks continued with increased violence for nearly two minutes but, fortunately, there was no vertical movement, which would have inevitably thrown down our houses, as in 1839. We soon ascertained that our town remained uninjured.</p>	CHF(6) WHB(6) R1964(7)
-60.9719	13.9003	St. Lucia	<p>(Helmsley, 1843): A little shaken but no injury.</p> <p>(Saint George Chronicle, 1843a): At St. Lucia, the Custom House, Jail and one or two other buildings sustained slight injury.</p> <p>(Saint George Chronicle, 1843b): Yesterday at 28 minutes past 10, A.M., this place was visited by a vehement shock of earthquake, which lasted nearly three minutes. The motion was rapid and tremulous, accompanied with alternate undulations North and South, which seemed to threaten the demolition of every building in the town. - Like the great shock in January 1893, that which occurred yesterday was unaccompanied by the rumbling noise generally heard to precede the shocks of earthquake. In this instance the startling phenomenon was equally alarming with that, the sad recollection of whose appalling effects is still fresh upon our minds. In a moment after the first vibration, nearly all the houses in town were deserted by their inmates, who were to be seen clustered about the street and squares, kneeling and recommending themselves to the Almighty Protection. Happily, the dreadful vibrations ceased without causing that destruction, which there had been so much cause to apprehend while they lasted. The Roman Catholic Church, the Custom House, Goal enclosure, and some</p>	CHF(5) WHB(5) R1964(7)

February 8, 1843				
			other buildings of mason-work, have been cracked, but none materially injured in the town. Slight shocks were also felt during the night of Tuesday and last night. – St. Lucia Palladium, February 9.	
-64.6344	18.4295	Tortola, British Virgin Islands (Roadtown)	(Helmsley, 1843): At 10.30, AM. a severe shock but no injured, lasted 4 minutes.	CHF(4) SISF(5.5) S&L1992(5) T&R1977(5) R1964(5)
-64.9299	18.3500	St. Thomas, Virgin Islands (Charlotte Amalie)	(Helmsley, 1843): On reaching St. Thomas on the 9th instant from Jamaica and St. Jago de Cuba I learnt that the shock of an Earthquake had been felt there 10. 30, of the 8th instant but fortunately without doing any damage, from thence I proceeded thro' the Islands.  (Barbadian, 1843c): The earthquake which took place the morning was from N.E. and the vibrations were felt without intermission for the space of nearly two minutes. -St. Thomas Times February 8.	CHF(4) SISF(5.5) S&L1992(5) T7R1977(5) R1964(4)
-64.7032	17.7467	Christiansted, St. Croix Virgin Islands	(Sainte-Claire Deville, 1848): Violent shaking of an earthquake, which lasted nearly half a minute, proceeded and accompanied by a strange noise, which had at the same time a rumble and a squeal. The roof of my house began to creak and shake, while the panel on which I was writing at that moment was shaking such that it was impossible for me to continue; the floor swayed also very noticeably. Back at my residence in the countryside, situated one mile east of the city, I found that my astronomical clock in the small observatory where it is fixed to the astronomic circle, had been arrested by the earthquake, in perfect agreement, as sidereal time, with the average time I noted in the city, and I certify exactly to be less than fifteen seconds.	CHF(4) WHB(4) SISF(5.5)
-61.2290	13.1576	Kingstown, St. Vincent	(Saint George Chronicle, 1843b): One of those awful visitations of providence, which so frequently occur in these colonies – an earthquake – was experienced here about half past ten on Wednesday morning last, and continued for an unusual length of time, probably from a minute to a minute and a half, though it was by no means so violent as we have before experienced, and fortunately was silenced with no injury -St. Vincent Gazette, Feb. 11.	CHF(4) SISF(6) S&L1992(5)
-59.6141	13.0972	Bridgetown, Barbados	(Saint George Chronicle, 1843b): At 20 minutes before Eleven o'clock this morning, sitting at our desk, we were alarmed by the shaking of the chair, and instantly felt the terrifying conviction that we were experiencing an	CHF(4) WHB(4) SISF(5.5) S&L1992(4)

February 8, 1843				
			<p>earthquake. The vibration of the earth from South to North increased to an awful degree, and lasted at least a minute and a half. The shock was so severe as to induce very many persons to run out of their houses. It was particularly violent on the Wharf and on Broad Street. Many persons were seized with great nausea at the stomach, some even to vomiting -Barbadian Feb.8, 1843.</p>	
-61.6798	12.1100	Grenada	<p>(Barbadian, 1843b): On Wednesday fortnight[?] last, a severe shock of earthquake was felt here, 20 minutes before 11 o'clock and there was too much probability to suppose that it had extended to the Northern Islands...Grenada Free Press February 15.</p>	CHF(4) R1964(5)
-61.2611	10.4441	Trinidad	<p>(Barbadian, 1843b): A slight shock of Earthquake was felt yesterday in the Town and Suburbs; the motion was tremulous slow and unbroken, and of about a minute's duration. Like all similar awful visitations, it caused anxiety; but as the shock was not repeated, the admonitory warning, as usual, was speedily forgotten, or disregarded. We [?] hear that what was felt here was merely the vibration of a much more powerful convulsions at some distant spot – Trinidad Standard, Feb. 9.</p>	CHF(4) R1964(3)
-59.1636	6.8126	British Guinea (Georgetown, Guyana)	<p>(Barbadian, 1843a): We understand that the earthquake was very alarming in British Guinea.</p> <p>(Barbadian, 1843b): Yesterday, this City was visited by two very smart shocks of earthquake, which, together, lasted about forty five seconds. Houses and Churches were violently rocked to and fro – the spire of the Scottish Church, in especial, we are informed, vibrated considerably, even after the cessation of the shock. In a certain Wine-store in Water-street, we are told, the bottles played such fantastic tricks, as their contents are apt to produce on mortals. We believe, also, some few chimneys fell; and it is very possible that, in the country, some of the tall chimneys of the boiling houses may have suffered. But as the shock was accompanied with more of an undulating motion, than the sharp violent jar which generally marks these fearful phenomena of nature, the damage is not likely to be great in this Colony. It is impossible to say, however, what may have been the effects in the neighboring Islands. Our soil – our wooden tenements – the flatness of the land, whereby no buildings are erected on declivities, are all circumstances combining to lessen the desolating effects of earthquakes in Guiana.-Guiana Herald, February, 9.</p>	CHF(4) S&L1992(4) R1964(4)

February 8, 1843				
			(Barbadian, 1843b): At ten minutes past eleven o'clock, this forenoon, occurred as severe an earthquake as some of the oldest inhabitants have any recollection of. Every moveable in every house was in motion, and every house shook violently; some old chimney stacks fell; people were seized with giddiness and nausea, similar to the feelings incidental to incipient sea sickness. As quickly [?] as conclusion would other persons to judge, the shock, or rather the two shocks, lasted, altogether, forty seconds. But on three occasions no man thinks of taking out his watch, and counting time, for the Philosopher is lost in the helpless and apprehensive human being. - Guiana Times, February 8.	
-52.3315	4.9387	Cayenne, Guyane (French Guiana)	(Sainte-Claire Deville, 1847): We felt a strong earthquake on February 8, at ten and three quarters* * *for here all the houses are made of wood.	CHF(3) WHB(3) SISF(3.5)
-66.6141	18.0115	Puerto Rico (Ponce)	(Helmsley, 1843): At the time of the Earthquake the ship was off the island of Porto Rico, no shock was felt on board.	-

October 8, 1974				
<b>Time: 09:50:57.08 UTC earthquake origin time;</b> <b>Phenomenon Notes: (-61.976° W, 17.349° N) depth =21.3 km, Mw=6.9, Ms=7.3 (Engdahl and Villaseñor, 2002)</b> According the United States Earthquake report for 1974, this event was not felt in the U.S. Virgin Islands (Coffman and Stover, 1984). Tomblin and Aspinall (1975) did a reconnaissance report of the earthquake and published their results in the Bulletin of the Seismological Society of America. The figure references inside the descriptions also refer to the figures in their publication. <b>Number of Observations: 19</b>				
Longitude	Latitude	City	Description	Intensity
-61.8003	17.0864	Antigua	(Coffman and Stover, 1984): Intensity VIII on Antigua and Barbuda.  (Tomblin and Aspinall, 1975): From an examination of the damage by the authors, the MM intensity was rated VIII in Antigua and VII in St. Kitts and Montserrat. * * * Nearly all the visible damage outside St. John's, Antigua, is also on a line trending approximately north-south, figure 26. This line extends from slight damage at the Anchorage Hotel on the northwest coast, through the oil refinery, the town of St. John's, the Golden Grove Technical College, the Creekside Bridge, to the damage at the Ministry of Agriculture Plant Propagation Station in Christian Valley. Slight damage occurred to buildings elsewhere on the island but the above line of obvious damage stands out and demands further study.	L&S1995(8) T&A1975(8)



October 8, 1974				
-61.8456	17.1176	St. John, Antigua	(Tomblin and Aspinall, 1975): The most severe damage occurred to unreinforced masonry structures, especially the taller ones. These included the Anglican Cathedral in St. John's Antigua in which the limestone blocks were partly dislodged along the mortared joints, or the blocks themselves fractured in numerous parts of the building, while several of the masonry columns in the twin towers, figure 3, and sections of the parapet, completely collapsed, figure 4. Similar fracturing and outward bulging of the parapet wall occurred in the Court House in St. John's, figure 5. At the prison in St. John's (built in 1735) a complete limestone-block wall fell outward from an upper floor office, and numerous cells suffered collapse of masonry and plaster. * * * The majority of buildings with reinforced concrete or steel frames came through the earthquake with superficial, not structural damage. * * * In the town of St. John's Antigua, several underground cast-iron water mains, approximately 10 cm in diameter, were fractured, figure 16, but in general, supplies were not interrupted.	SISF(8)
-61.7904	17.6357	Barbuda	(Coffman and Stover, 1984): Intensity VIII on Antigua and Barbuda.  (Tomblin and Aspinall, 1975): Reports from other islands have been rated at MM intensity VII in Barbuda, intensity VI in St. Bartholomew and Guadeloupe, intensity V in Dominica, intensity III in St. Lucia and intensity II in Puerto Rico.	SISF(7.5) L&S1995(7) T&A1975(7)
-62.7494	17.3174	St. Kitts	(Tomblin and Aspinall, 1975): From an examination of the damage by the authors, the MM intensity was rated VIII in Antigua and VII in St. Kitts and Montserrat.	SISF(7) L&S1995(7) T&A1975(7)
-62.8031	17.3232	Middle Island, St. Kitts	(Tomblin and Aspinall, 1975): In St. Kitts, the church at Middle Island was severely damaged by the collapse of the upper half of the tower through the roof, figure 6. This tower dated 1860 was an example of one of the poorest imaginable kinds of construction for a seismically active region. The walls, about 60 cm thick, consisted of 10-cm-thick hewn lava blocks cemented by very poor mortar to form the outer faces, while the interiors were filled with loose earth and rounded boulders with no binding agent, figure 7.	-
-62.7147	17.2969	Basseterre, St. Kitts	(Tomblin and Aspinall, 1975): The Treasury Building at Basseterre, St. Kitts showed serious cracking and a minor fall of unreinforced masonry from its block work parapet, figure 8; the Anglican Church in Basseterre suffered a similar loss of masonry from the crest of its western parapet.	-

<b>October 8, 1974</b>				
-62.1899	16.7376	Montserrat	(Tomblin and Aspinall, 1975): From an examination of the damage by the authors, the MM intensity was rated VIII in Antigua and VII in St. Kitts and Montserrat.	SISF(7) L&S1995(7) T&A1975(7)
-62.1548	16.7467	Bethel, Montserrat	(Tomblin and Aspinall, 1975): In Montserrat, similar damage and a minor fall of blocks, occurred from upper corners of the Bethel Church tower, situated on the eastern side of the island.	-
-62.2126	16.7056	Plymouth, Montserrat	(Tomblin and Aspinall, 1975): Where structural damage had occurred, for example in reinforced concrete columns * * * and the National State Building, Plymouth, Montserrat, it was clear that there had been overloading of these columns due to inadequate design.	-
-62.8249	17.8972	St. Bartholomew (St. Barthelemy)	(Tomblin and Aspinall, 1975): Reports from other islands have been rated at MM intensity VII in Barbuda, intensity VI in St. Bartholomew and Guadeloupe, intensity V in Dominica, intensity III in St. Lucia and intensity II in Puerto Rico.	L&S1995(6) T&A1975(6)
-61.5443	16.2539	Guadeloupe	(Tomblin and Aspinall, 1975): Reports from other islands have been rated at MM intensity VII in Barbuda, intensity VI in St. Bartholomew and Guadeloupe, intensity V in Dominica, intensity III in St. Lucia and intensity II in Puerto Rico.	SISF(6) L&S1995(6) T&A1975(6)
-61.3365	15.4259	Dominica	(Tomblin and Aspinall, 1975): Reports from other islands have been rated at MM intensity VII in Barbuda, intensity VI in St. Bartholomew and Guadeloupe, intensity V in Dominica, intensity III in St. Lucia and intensity II in Puerto Rico.	L&S1995(5) T&A1975(5)
-60.9719	13.9003	Saint Lucia	(Tomblin and Aspinall, 1975): Reports from other islands have been rated at MM intensity VII in Barbuda, intensity VI in St. Bartholomew and Guadeloupe, intensity V in Dominica, intensity III in St. Lucia and intensity II in Puerto Rico.	SISF(3) L&S1995(3) T&A1975(3)
-65.6382	18.3361	Fajardo, Puerto Rico	(Coffman and Stover, 1984): Intensity V at Fajardo, P.R.	-
-66.1137	17.9832	Guayama, Puerto Rico	(Coffman and Stover, 1984): Intensity IV at Guayama, Humacao, and Ponce.	-
-65.8265	18.1502	Humacao, Puerto Rico	(Coffman and Stover, 1984): Intensity IV at Guayama, Humacao, and Ponce.	-
-66.6141	18.0115	Ponce, Puerto Rico	(Coffman and Stover, 1984): Intensity IV at Guayama, Humacao, and Ponce.	-
-65.6120	18.2289	Roosevelt Roads, Puerto Rico	(Coffman and Stover, 1984): Intensity III at Roosevelt Roads, P.R. U.S. Naval Station.	-

## List of Events Studied by the Authors

**Table 1.** Earthquakes studied further in Bakun and others (2012) and ten Brink and others (2011).

[Below are earthquakes studied further using Bakun and Wentworth's (1997; 1999) method for estimating Magnitude Intensity on the basis of earthquake damage reports. The publication column indicates where to find the discussion of the results for that earthquake. S, South; Dom. Rep., Dominican Republic; long, longitude; lat, latitude]

Event	Page number in this report	Publication	Intensity Location (long, lat)	Magnitude Intensity ( $\pm 1$ sigma)
December 2, 1562	15	ten Brink	-70.68, 19.37	$7.7 \pm 0.3$
September 7, 1615	16	ten Brink	S. coast of Dom. Rep.	$7.5 \pm 0.7$
January, 1665 (day unknown)	17	ten Brink	S. coast of Dom. Rep.	$6.8 \pm 0.7$
May 9, 1673	18	ten Brink	S. coast of Dom. Rep.	$7.3 \pm 0.7$
1684 (month and day unknown)	18	ten Brink	S. coast of Dom. Rep.	$7.0 \pm 0.7$
April 5, 1690 (Lesser Antilles)	154	ten Brink	-62.51, 17.08	$7.5 \pm 0.2$
1691 (month and day unknown)	19	ten Brink	S. coast of Dom. Rep.	$7.5 \pm 0.7$
November 9, 1701	20	Bakun	-72.65, 18.42	$6.6 \pm 0.3$
October 18, 1751	24	Bakun	-70.84, 18.36	$7.4 - 7.5 \pm 0.2$
November 21, 1751	31	Bakun	-72.32, 18.54	$6.6 \pm 0.2$
June 3, 1770	41	Bakun	-72.86, 18.50	$7.5 \pm 0.2$
July 11, 1785 (Puerto Rico)	149	ten Brink	-64.60, 19.21	$6.9 (-0.3, +0.2)$
May 2, 1787 (Puerto Rico)	151	ten Brink	-67.54, 17.33	$6.9 (7.2) \pm 0.2$ (d)
May 7, 1842	56	ten Brink	-70.80, 19.42	$7.6 (+0.2, -0.1)$
February 8, 1843 (Lesser Antilles)	156	ten Brink	-61.49, 16.34	$7.8 (-0.2, +0.1)$
April 8, 1860	73	Bakun	-73.17, 18.55	$6.3 \pm 0.2$
September 23, 1887	81	ten Brink	-72.65, 19.86	$6.7 \pm 0.2$
December 29, 1897	90	ten Brink	-70.76, 19.70	$6.5 \pm 0.2$
April 24, 1916	126	ten Brink	-69.38, 19.20	$6.8 \pm 0.2$
August 4, 1946	134	Bakun, ten Brink	-69.80, 19.35 (a)	$7.8 \pm 0.2$
October 28, 1952	143	Bakun	(b)	$6.0 \pm 0.2$
October 8, 1974 (Lesser Antilles)	168	ten Brink	-61.76, 17.36 (c)	$7.0 \pm 0.2$

(a) The location of the instrument for measuring intensity for August 4, 1946, is (-68.94, 18.92). (b) The location of the instrument for October 28, 1952, is (-73.52, 18.51) from Sykes and Ewing, (1965). (c) The location of the instrument for October 8, 1974, is (-61.976, 17.349). (d) The second magnitude in parenthesis is the estimated magnitude if using the Hispaniola attenuation relationship instead of the one for Puerto Rico and the Virgin Islands; see reference ten Brink and others (2011).

**Table 2.** Earthquake Modified Mercalli Intensity Criteria.

[Below is the Modified Mercalli Intensity (MMI) scale used in this catalog and in the research publications Bakun and others (2012) and ten Brink and others (2011). Intensities are modified from Richter (1958) and listed both in Arabic (form used in this catalog) and Roman numerals.]

MMI	Damage
9 - IX	Total destruction
8 - VIII	Most structures destroyed. Only a few buildings remain standing.
7 - VII	Damage to several structures. Most of the building stock remains standing.
6 - VI	Some damage reported for a few significant structures. Damage to the cathedral was often reported to secure rebuilding funds from Spain.
5 - V	No damage reported. Intensity V, as described in Richter (1958).
4 - IV	No damage reported. Intensity IV, as described in Richter (1958).
3 - III	No damage reported. Intensity III, as described in Richter (1958).

## Maps of the Northern Caribbean

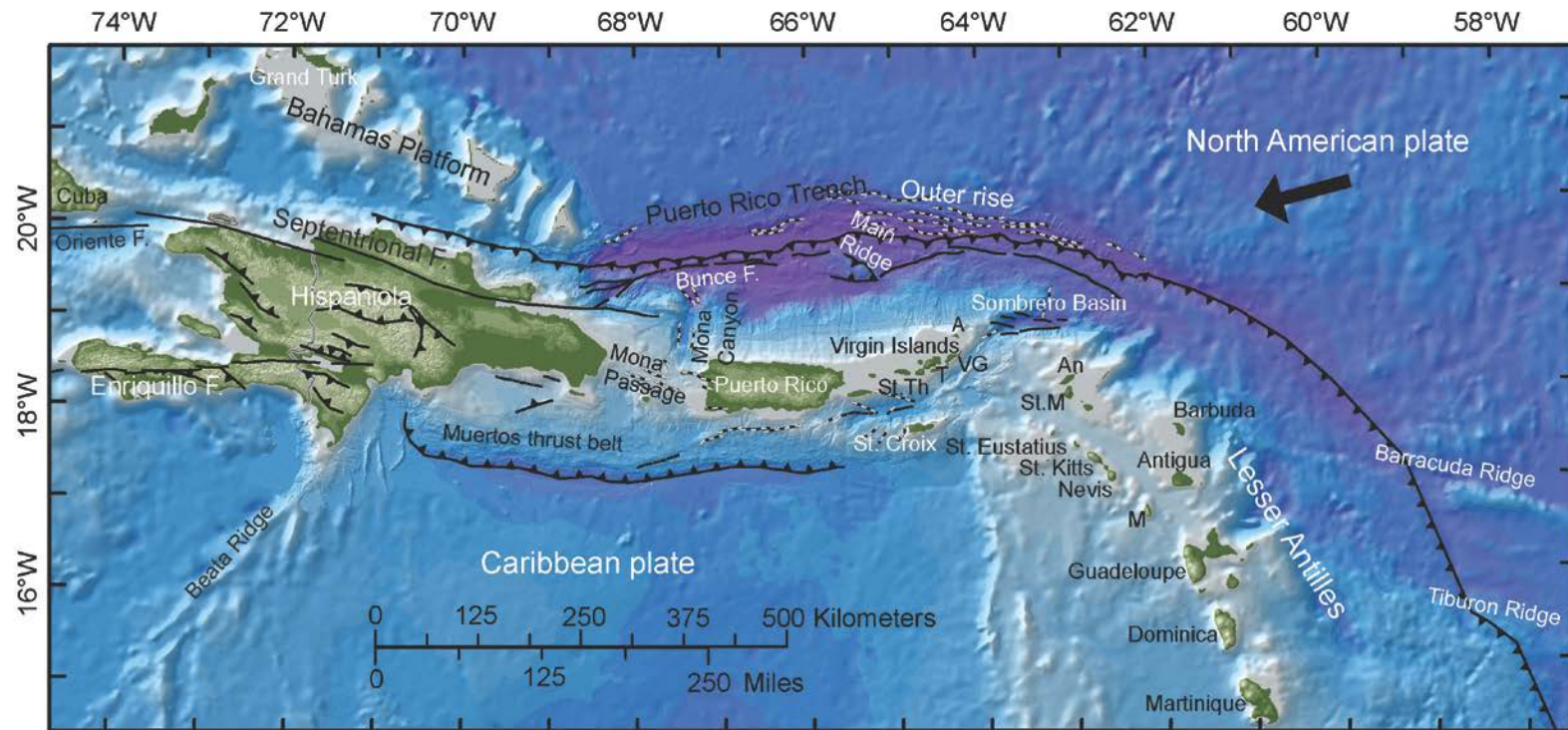


Figure 1. Tectonic map of the northern Caribbean showing the islands of Hispaniola, Puerto Rico, Virgin Islands, and Northern Lesser Antilles. Abbreviated place names on map: St. Th = St. Thomas; T = Tortola; VG = Virgin Gorda; A = Anegada; An = Anguilla; St. M = St. Martin/St. Maarten; M = Montserrat.

### EXPLANATION

- = Thrust fault
- = Normal or mixed normal and strike-slip faults
- = Strike-slip fault
- = Direction of plate motion of the North American Plate with respect to the Caribbean Plate

Figure 1. Tectonic map of the northern Caribbean showing the islands of Hispaniola, Puerto Rico, Virgin Islands, and Northern Lesser Antilles.





Figure 2. Map of the island of Hispaniola showing the locations of cities and towns with significant populations. The countries of Haiti and Dominican Republic share the island.

Figure 2. Map of the island of Hispaniola showing the locations of cities and towns with significant populations.

## Historical events of interest on the island of Hispaniola

Various significant political and historical events contribute to the population growth or decline on the island. Changes in population distribution directly affect the availability of eyewitness testimony for any natural hazards, including earthquakes. The list below was compiled using the references of Charlevoix (1731), Garcia (1900), del Monte y Tejada (1890), Hazard (1873), Schoenrich (1918), Ornes (1958), Heintl and Heintl (1978), and Figueredo and Argote-Freyre (2008).

**1492** - December 5, 1492 – Discovery of the American continent by Columbus during his first voyage (del Monte y Tejada, 1890; Garcia 1900). La Isabella (de Juan de Aguado) was the site of the first landing by Columbus on the island and the site of the first European settlement.

**1582** – The Gregorian Calendar is adopted by the Catholic nations of Spain, Portugal, France, and Poland.

**1586** - Invasion of Drake into Santo Domingo on January 10, 1586, in the morning.

**1606** - Closing of the ports trading with other countries by the King of Spain. The governor of the island Senor Don Diego Acuna and the archbishop Don Fray Pedro Oviedo carried out the order of the Real Audience of Spain. Puerto de Plata, Monte Cristi, Bayaja, La Iguana (Yaguana), or Santa Maria del Puerto were ordered destroyed. The governor carried out the order in 1606 according to Garcia (1900). Two new towns were created for the coastal populations, San Juan Bautista de Bayaguana (inhabitants from Bayaja and Yaguana) and Monte Plata (inhabitants from Monte Cristi and Puerto Plata).

**1608** - Santo Cerro is established.

**1630** – Establishments in the island of St. Christopher (today St. Kitts) destroyed by the Spaniards. Refugees settled in Tortuga.

**1638** – Governor of Santo Domingo had the settlement of Tortuga attacked and destroyed.

**1639**- Invasion of the island of Tortuga by the English adventurer Willis.

**1655** – Invasion by Admiral William Penn (English) in Santo Domingo May 14, 1655. Sustained many losses and left June 3, proceeded to take Jamaica.

**1653** – Count of Penalva, governor, took over Tortuga and built a garrison.

**1664** – Port-de-Paix is established.

**1673** – Delisle invasion into Puerto Plata (fort) and Santiago.

**1678** – French import of African slaves.

**1685** – Tentative boundary agreements made between the Spanish and French.

**1689** – War between France and Spain over Hispaniola. French burn Santiago to the ground.

**1692** – Admiral Perez Caro invades the French side in the plain of La Limonade, kills the French governor and principal officers, exterminates Samana, attacks French settlements.

**1695** – English and Spanish fleets join forces; enter Manzanillo Bay, burning and sacking Cape François (Cape Haitien) and Port-de-Paix.

**1697** - Peace Treaty of Ryswick 20 December, 1697, among France, Spain, Holland, and Germany. France acquired the western third of the island of Santo Domingo; Spain regained all its territories won after the Peace treaty of Nimega.

**1700** – The Gregorian Calendar is adopted by the countries of Germany and the Netherlands.

**1730** – Santo Domingo, the Spanish colony, had 6,000 inhabitants with only the following cities: Santo Domingo, Cotui, Santiago, Azua, Banica, Monte Plata, Bayaguana, La Vega, Higüey, and Seibo.

**1740** – Spanish opening of ports for foreign trade.

**1752** – The Gregorian Calendar is adopted by Great Britain.

**1777** – Establishment of the boundary between Haiti and the Dominican Republic by treaty.

**1789** – French Revolution.

**1791** – Mulattoes are granted civil and political rights by the French National Assembly, resistance by the colony results in a bloody uprising.

**1793** – France goes to war with England and Spain.

**1795** – Treaty of Basle, peace declared between France and Spain; Santo Domingo ceded to France.

**1799** – The Audiences of Santo Domingo is moved to Puerto Principe, Cuba.

**1801** – Toussaint l'Ouverture takes over city of Santo Domingo, January 27, 1801. He fully takes over the island. Mass exodus of European whites to neighboring colonies.

**1804** – After winning the last battle with France, the black generals claim independence and call the island Haiti. Jean Jacques Dessalines makes himself governor for life with dictatorial powers, orders the massacre of all the French living in Haiti. Two years later Dessalines himself was assassinated.

**1805** – Dessalines continues in campaign to control the entire island, Santiago invaded, church burned down, Santo Domingo City under siege. Azua, San José de las Matas, Monte Plata, Cotui, San Francisco de Macoris, La Vega, Santiago, and Monte Cristi were reduced to ashes. Inhabitants of Moca were massacred. Ferrand stays to defeat Dessalines in Santo Domingo and force his retreat back to Haiti.

**1814** – Spain takes back its dominion of Santo Domingo in the Treaty of Paris.

**1822** – Haiti invades Santo Domingo and the Haitian President Boyer claims the entire island as the country of Haiti.

**1824** – Americans immigrate to the island.

**1844** – Dominican Republic is formed and the border disputes between Haiti and the Dominican Republic begin.

**1849** – Baez elected president of the Dominican Republic.

**1861** – Spain regains power of the Dominican Republic under General Pedro Santana. The Spanish take over all offices to the exclusion of native Dominicans and forced Catholicism, shutting down the Protestant churches.

**1865** – Dominican Republic reclaims its independence from Spain.

**1871** – Report published by a subcommittee delegated by the United States Congress for the possible annexation of the Dominican Republic by order of President U.S. Grant. The original treaty between the United States and the Dominican Republic for its annexation as a U.S. territory had been negotiated in 1869. Congress voted both against the treaty and annexation of the territory.

**1878** – The Seminare-College St. Martial of Port-au-Prince is established.

**1884** – On October 13, 1884, Greenwich is voted to be the Prime Meridian, Longitude 0°, by the International Meridian Conference held in Washington, D.C. It would still take decades for countries to adopt and implement a time zone based on the Prime Meridian.

**1889** – The newspaper *Le Nouvelliste* is established in Port-au-Prince, Haiti.

**1898** – The Spanish-American war began on April 1898 soon after the sinking of the USS Maine. The United States occupied Puerto Rico in July of 1898. Peace was declared with the treaty of Paris in December of 1898. The United States acquired the territories of Puerto Rico, Guam, and the Philippines and control of Cuba.

**1905** – Establishment of the Astronomical and Meteorological Society of Port-au-Prince. Dr. Destouches was the first president of the society.

**1914–1918** – World War I.

**1915** – July 28, United States invades Haiti. The United States occupies Haiti until August 1, 1934.

**1916** – May 16, U.S. occupies the Dominican Republic. U.S. occupation ends in October 1922.

**1930** – The Dominican Republic overthrows their previous dictator Horacio Vasquez Lajara by civil and military coup. Rafael Leonidas Trujillo Molina was then general of the armed forces and involved in the coup. However, Trujillo established the *La 42*, a military police used to socially and politically terrorize his opponents and as a result wins the elections held that year after the opposition steps down. Trujillo is named president of the country.

**(1935 – 1945)** – World War II

**(1936 – 1961)** – The city of Santo Domingo was nearly destroyed by a hurricane in 1931. After rebuilding the capitol, the city was renamed Ciudad Trujillo. The name of the city was not changed back to Santo Domingo until after the assassination of the dictator.

**1937** – Trujillo orders the massacre of all the Haitians on the Massacre River near the border of Haiti and Dominican Republic as part of his anti-Haitian policy.

**1957** – Dr. Francois Duvalier also known as “Papa Doc” is elected president of Haiti. Duvalier proclaimed himself president for life in 1964. His administration is described as despotic and contributes to the breakdown of the education system in Haiti as well as the exodus of Haitian intellectuals. He died while still in power in 1971, succeeded by his son Jean-Claude Duvalier “Baby Doc.”

**1961** – May 30, Trujillo assassinated.



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# Appendix

## Additional Material

Quoted text extracted from de Utrera (1995, p. 17–18) explaining that the true date of the “1564” earthquake is actually December 2, 1562, based on evidence from contemporary sources.

“Que el terremoto que hizo que dieran por el suelo las ciudades de Santiago de los Caballeros y Concepción de la Vega acaeció el año 1564. - García pone la fecha del sábado 20 de Abril, según unos, y la de 2 de Noviembre, según otros [Gracia, 1900; insertado por los autores]. Como el 20 de Abril y el 2 de Noviembre caen siempre, en un mismo año, en día de la semana del mismo nombre, parece que hay acierto siquiera en el año comúnmente recibido por todos, aunque no ha faltado quien diga que como de esto no hay otra noticia, sino que así lo escribió Echagoian al rey, y fue coetáneo, debemos atenernos a la autoridad del mismo. Atengámonos a Echagoian, pero no por su testimonio único y personal, porque en el Archivo de indias se hallan los papeles siguientes: Carta del licenciado Herrera a Su Majestad, en su Real Consejo de Indias, sobre diversas materias y entre ellas noticias del terremoto ocurrido el día 2 de Diciembre anterior; tiene la fecha de 16 de Febrero de 1563. Otra carta del 13 de Febrero de 1563 suscrita por los licenciados Herrera y Echagoian y el doctor Cáceres a Su Majestad, en su Real Consejo de Indias, sobre el temblor de tierra sucedido el día 2 de Diciembre anterior de ocho a nueve de la noche, que ocasionó la calda de la Iglesia Catedral de la Vega. Otra carta del Cabildo eclesiástico de la Concepción a S. M. en su Real Consejo de Indias, sobre los destrozos hechos por el temblor de tierra del día 2 de Diciembre de 1562, y es carta que tiene la fecha de 6 de Octubre de 1563. Como se ve, esto no requiere corroboración; con todo, aquí se da para que sea cierto que lo que abunda no daña. En 1575 hicieron los dominicos de Puerto Plata una petición de socorro para su iglesia maltrecha, y en la información, que se hizo, habla una pregunta, la cuarta, escrita como sigue: ‘ IIII. Iten, si saben que después que se boluio [sic] a reedificar (el monasterio) y hauer [sic] hecho en el muchos costos, se boluio [sic] a caer el dormitorio del dicho monasterio de un temblor de tierra que ubo [sic] el año de sesenta y dos...’ y los testigos llamados y rogados depusieron que ‘ dicho convento se cayo parte del, porque fue parte del dormitorio con el temblor de la tierra que la pregunta dize [sic] que ubo [sic] en esta ysla [sic] el año que la pregunta dize [sic], y hasta oy [sic] día se esta caydo [sic]. ’ ”

**Translation by C. Flores:** [That the earthquake that threw to the ground the cities of Santiago de los Caballeros and Concepcion de la Vega occurred in the year 1564. – Garcia attributes the date to be either Saturday April 20 according to some or November 2 according to others. [Garcia, 1900; inserted by the authors]. Since November 2 and April 20 always fall on the same year and on the same named day of the week, there seems to be, to get right at least, the year which is commonly accepted by everyone. Even though, as is the case, there is no lack of persons saying that no other information exists and that this is how it was written by Echagoian to the king who was a contemporary and we must therefore abide by his authority similarly. Let us abide to Echagoian but not by his single and personal testimony because in the Archive of the Indies we find the following papers: Letter from the honorable Herrera to His Majesty, in the Real Council of the Indies, over various matters and among them news of an earthquake that occurred December 2 of the year before; which is dated February 16, 1563. Another letter dated February 13, 1563, signed by the Honorable Herrera, the honorable Echagoian, and by the doctor Caceres to His Majesty, in the Real Council of de Indies, about the earthquake that occurred on December 2 of the year before, between eight and nine at night, which resulted in the fall of the church cathedral in la Vega. Another letter from the ecclesiastical Council from Concepcion de la Vega to His Majesty, in the Real Council of de Indies, over the destruction caused by the earthquake of December 2, 1562, and this is a letter dated October 6, 1563. We see that this does not require corroboration; with everything shown here given to be true, that which is plentiful does not harm. In 1575 the Dominican friars in Puerto Plata made a petition to help their battered church and among the information that was made available was a fourth question, and was written as follows: “ IIII. Item, You do know that after it (the monastery) was again rebuilt and after having cost so much, the dormitory of the before mentioned monastery fell again from an earthquake that occurred in the year of sixty-two \* \* \*,” and the named witnesses begged and testified that “part

of the named monastery fell because it was part of the dormitory due to the earthquake that the question names that occurred on this island in the before mentioned year that the question names and up until now is still on the ground.”]



Geographic locations used in the catalog for the Northern Caribbean.

**Table 3.** List of Locations

Tables are ordered from West to East and grouped by country or territory. For regions or large cities, a specific landmark is listed, and for small islands, the island center is also listed.

Jamaica			
Longitude	Latitude	City/town name	Island name
-77.6575	18.4928	Falmouth	Jamaica
-76.7909	17.9840	Kingston	Jamaica
-76.9525	17.9943	Spanish Town (La Vega Cathedral)	Jamaica
Cuba			
Longitude	Latitude	City/town name	Island name
-74.4963	20.3459	Baracoa	Cuba
-76.6501	20.3734	Bayamo	Cuba
-76.4736	20.5584	Cristo Cautu	Cuba
-75.2162	20.1419	Guantanamo	Cuba
-76.2579	20.8854	Holguin	Cuba
-77.1199	20.3457	Manzanillo	Cuba
-75.8296	20.0209	Santiago de Cuba	Cuba
Bahamas			
Longitude	Latitude	City/town name	Island name
-73.6741	20.9335	Matthew Town (lighthouse)	Great Inagua
-71.1462	21.4674	Cockburn Town	Grand Turks Island
Haiti			
Longitude	Latitude	City/town name	Island name
-75.0128	18.4018	Navassa Island (island center)	Navassa Island
-72.3197	19.6803	Acul du Nord	Hispaniola
-72.8673	18.8365	Anse-a-Galets	Gonave Island
-73.3447	18.5028	Anse-a-Veau	Hispaniola
-74.4519	18.4850	Anse d'Hainault	Hispaniola
-73.3971	18.2816	Aquin	Hispaniola
-72.5126	18.7701	Arcahaie	Hispaniola
-73.4330	18.3786	Asile	Hispaniola
-72.7558	18.1819	Bainet	Hispaniola
-73.6387	18.4829	Baraderes	Hispaniola
-72.8024	19.7799	Bassin-Bleu	Hispaniola
-72.4308	19.8144	Bayeux	Hispaniola
-72.5230	19.8463	Borgne	Hispaniola
-73.3758	18.4657	Brossard	Hispaniola

Haiti			
Longitude	Latitude	City/town name	Island name
-72.2006	19.7616	Cap Haitien	Hispaniola
-72.4105	18.5528	Carrefour	Hispaniola
-73.6552	18.2992	Cavaillon	Hispaniola
-72.3953	18.2311	Cayes de Jacmel	Hispaniola
-71.7894	19.1634	Cerca-La-Source	Hispaniola
-74.1657	18.2746	Chardonnières	Hispaniola
-73.8890	18.5671	Corail	Hispaniola
-72.2272	18.5758	Croix de Bouquets	Hispaniola
-72.2808	18.6042	Cul-de-Sac	Hispaniola
-74.4222	18.5605	Dame-Marie	Hispaniola
-72.2403	19.5257	Dondon	Hispaniola
-71.8397	19.6668	Fort Liberte	Hispaniola
-72.3062	18.4165	Furcy	Hispaniola
-72.0630	18.5331	Ganthier	Hispaniola
-72.1892	18.4909	Grande Riviere	Hispaniola
-72.1695	19.5772	Grande Riviere du Nord	Hispaniola
-72.7709	18.4256	Grand Goave (cemetery)	Hispaniola
-72.6929	19.4458	Gonaives	Hispaniola
-72.5290	18.5379	Gressier	Hispaniola
-72.6836	19.6699	Gros-Morne	Hispaniola
-72.2004	18.8160	Haut Saut-D'Eau	Hispaniola
-72.0107	19.1453	Hinche	Hispaniola
-73.0366	18.8388	Ile de la Gonave (island center)	Hispaniola
-72.8043	20.0507	Ile de la Tortue (island center)	Hispaniola
-74.4673	18.4588	Ile Pierre Joseph (near Anse d'Hainault)	Pierre Joseph
-72.5345	18.2359	Jacmel	Hispaniola
-74.1145	18.6446	Jeremie	Hispaniola
-71.9362	18.8303	Las Cahobas	Hispaniola
-72.6334	18.5111	Leogane	Hispaniola
-73.7500	18.1945	Les Cayes	Hispaniola
-72.4025	19.7066	Limbe	Hispaniola
-72.1260	19.6688	Limonade	Hispaniola
-72.1395	19.1747	Maissade	Hispaniola
-72.6101	18.5383	Mariani	Hispaniola
-72.3459	19.5091	Marmelade	Hispaniola
-73.0861	18.4423	Miragoane	Hispaniola
-72.1040	18.8336	Mirebalais	Hispaniola
-73.3745	19.8052	Mole-St. Nicolas	Hispaniola
-71.6507	19.8474	Monte Cristi	Hispaniola
-72.8344	18.4395	Mont Tapion	Hispaniola
-74.2572	18.5613	Moron	Hispaniola
-71.7223	19.5501	Ouanaminthe	Hispaniola
-72.2864	18.5107	Petionville	Hispaniola
-72.8668	18.4315	Petit Goave	Hispaniola
-73.2446	18.4770	Petit Riviere de Nippes	Hispaniola

Haiti			
Longitude	Latitude	City/town name	Island name
-73.5079	18.5264	Petit Trou de Nippes	Hispaniola
-72.5504	19.6652	Pilate	Hispaniola
-72.6933	19.2464	Plain Artibonite	Hispaniola
-72.4685	19.5974	Plaisance	Hispaniola
-72.9872	19.6123	Port-a-Piment	Hispaniola
-72.3400	18.5400	Port-au-Prince	Hispaniola
-72.3388	18.5432	Port-au-Prince (Presidential Palace)	Hispaniola
-72.8370	19.9408	Port-de-Paix	Hispaniola
-72.4291	19.7512	Port Margot	Hispaniola
-73.9277	18.0938	Port Salud	Hispaniola
-72.1575	19.6973	Quartier Morin	Hispaniola
-72.0683	18.2370	Sale-Trou (or Saltrou)	Hispaniola
-72.2186	19.6047	Sans-Souci Palace	Hispaniola
-72.7239	19.9337	St. Louis du Nord	Hispaniola
-73.5466	18.2630	St. Louis du Sud	Hispaniola
-72.6978	19.1081	St. Marc	Hispaniola
-72.3340	19.3708	St. Michel de l'Atalaye	Hispaniola
-72.0984	18.3755	St. Michel du Sud	Hispaniola
-72.7275	19.5622	Terre-Neuve	Hispaniola
-72.0943	18.6519	Thomazeau	Hispaniola
-74.3959	18.3242	Tiburón	Hispaniola
-72.0223	19.6186	Trou-du-Nord	Hispaniola
-72.3297	18.5324	Turgeon	Hispaniola
-71.9207	19.4350	Valliere	Hispaniola

Dominican Republic			
Longitude	Latitude	City/town name	Island name
-70.8305	19.6717	Altamira	Hispaniola
-69.8605	19.1876	Arenoso	Hispaniola
-70.7291	18.4534	Azua (modern, after 1751)	Hispaniola
-70.8359	18.3504	Azua (old, before 1751)	Hispaniola
-70.3320	18.2799	Bani	Hispaniola
-71.7074	19.0793	Banica	Hispaniola
-71.0925	18.2051	Barahona	Hispaniola
-68.4518	18.7169	Bavaro (hotel)	Hispaniola
-69.6370	18.7520	Bayaguana	Hispaniola
-70.4116	18.9427	Bonao	Hispaniola
-69.7923	18.9458	Boya	Hispaniola
-70.1982	18.7060	Buenaventura	Hispaniola
-69.2602	19.3204	Cabo Cabrón	Hispaniola
-70.0295	19.2089	Castilla	Hispaniola
-70.5442	19.2937	Concepcion de La Vega (ruins)	Hispaniola

Dominican Republic			
Longitude	Latitude	City/town name	Island name
-70.1531	19.0577	Cotui	Hispaniola
-71.3984	19.6687	Guayubin	Hispaniola
-69.2566	18.7622	Hato Mayor (Mercedes Church)	Hispaniola
-68.7168	18.6154	Higuey	Hispaniola
-71.7151	18.4211	Laguna Icanoa	Hispaniola
-68.9663	18.4238	La Romana (church)	Hispaniola
-70.5327	19.2239	La Vega (modern , cathedral)	Hispaniola
-71.0276	19.6400	Maizal	Hispaniola
-71.0735	19.5539	Mao	Hispaniola
-69.8255	19.3546	Matancitas (Matanzas)	Hispaniola
-70.5246	19.3929	Moca	Hispaniola
-69.7845	18.8103	Monte Plata	Hispaniola
-69.8465	19.3759	Nagua	Hispaniola
-70.8751	19.5625	Naverette	Hispaniola
-71.4178	18.4832	Neyba	Hispaniola
-70.5068	18.5471	Ocoa (Maniel)	Hispaniola
-70.1099	19.3929	Pimentel	Hispaniola
-70.6937	19.7971	Puerto Plata	Hispaniola
-69.3847	19.0648	Sabana de la Mar	Hispaniola
-70.4180	19.3796	Salcedo	Hispaniola
-69.3390	19.2061	Samana	Hispaniola
-70.1092	18.4135	San Cristobal	Hispaniola
-70.2593	19.2969	San Franciso de Macoris	Hispaniola
-71.2325	18.8074	San Juan de la Maguana	Hispaniola
-69.3112	18.4525	San Pedro de Macoris (cathedral)	Hispaniola
-69.3112	18.4526	San Pedro de Macoris (cemetery)	Hispaniola
-69.6131	19.2279	Sánchez	Hispaniola
-70.5468	19.2797	Santa Cerro	Hispaniola
-70.7075	19.4502	Santiago de los Caballeros	Hispaniola
-69.8840	18.4734	Santo Domingo (Catedral de St. Maria)	Hispaniola
-69.8877	18.4722	Santo Domingo (Colonial)	Hispaniola
-69.8978	18.4744	Santo Domingo (National Palace)	Hispaniola
-69.8940	18.4754	Santo Domingo (Iglesia San Carlos)	Hispaniola
-69.0358	18.7625	Seibo, Santa Cruz del	Hispaniola
-69.0364	18.7648	Seybo (modern)	Hispaniola
-70.7289	18.5090	Sierra Viajama	Hispaniola
-70.7816	19.4521	St. Yague	Hispaniola
-70.6150	19.4865	Tamboril	Hispaniola
-69.9112	19.1823	Villa Rivas	Hispaniola
-70.9246	18.6107	Yayas de Viajama	Hispaniola

United States, Puerto Rico			
Longitude	Latitude	City/town name	Island name
-67.1880	18.3796	Aguada	Puerto Rico
-67.1540	18.4275	Aguadilla	Puerto Rico
-66.2664	18.1391	Aibonito	Puerto Rico
-67.1414	18.2885	Anasco	Puerto Rico
-66.7321	18.4636	Arecibo	Puerto Rico
-66.0614	17.9665	Arroyo	Puerto Rico
-66.1616	18.3809	Bayamon	Puerto Rico
-67.1461	18.0871	Cabo Rojo	Puerto Rico
-66.0347	18.2344	Caguas	Puerto Rico
-66.1659	18.1127	Cayey	Puerto Rico
-66.1609	18.1757	Cidra	Puerto Rico
-66.3565	18.0807	Coamo	Puerto Rico
-65.2828	18.3207	Culebra (island center)	Culebra
-65.3010	18.3031	Culebra	Culebra
-65.4732	18.0980	Esperanza	Vieques
-65.6382	18.3361	Fajardo	Puerto Rico
-66.9085	17.9724	Guanica	Puerto Rico
-66.6702	18.1255	Guaraguaos	Puerto Rico
-66.1137	17.9832	Guayama	Puerto Rico
-66.7916	18.0194	Guayanilla	Puerto Rico
-66.1121	18.3579	Guaynabo	Puerto Rico
-67.0250	18.5017	Isabela	Puerto Rico
-66.5992	17.9868	Hacienda Santa Cruz	Puerto Rico
-66.4047	17.9664	Hacienda Santa Isabel	Puerto Rico
-65.8265	18.1502	Humacao	Puerto Rico
-66.5062	18.0537	Juana Diaz	Puerto Rico
-65.9213	18.2284	Juncos	Puerto Rico
-66.8777	18.2950	Lares	Puerto Rico
-65.8775	18.4300	Loisa	Puerto Rico
-66.4842	18.4314	Manati	Puerto Rico
-66.9799	18.1808	Maricao	Puerto Rico
-67.1407	18.2009	Mayaguez	Puerto Rico
-67.8923	18.0860	Mona Island	Mona
-65.7350	18.2119	Naguabo	Puerto Rico
-66.6207	17.9811	Playa	Puerto Rico
-66.6141	18.0115	Ponce	Puerto Rico
-66.0499	18.3994	Rio Piedras	Puerto Rico
-65.6120	18.2289	Roosevelt Roads	Puerto Rico
-66.2989	17.9774	Salinas	Puerto Rico
-67.0438	18.0819	San German	Puerto Rico
-66.1057	18.4665	San Juan	Puerto Rico
-66.9911	18.3383	San Sebastian	Puerto Rico
-65.4321	18.1524	Santa Maria	Vieques
-66.0720	18.4487	Santurce (Sagrado Corazon Church)	Puerto Rico
-66.2550	18.4425	Toa Alta	Puerto Rico

United States, Puerto Rico			
Longitude	Latitude	City/town name	Island name
-66.3876	18.4452	Vega Baja	Puerto Rico
-65.4248	18.1281	Vieques (island center)	Vieques
-65.4449	18.1474	Vieques	Vieques

United States, Virgin Islands			
Longitude	Latitude	City/town name	Island name
-64.7613	17.7377	St. Croix (island center)	St. Croix
-64.7798	17.7066	Anguilla	St. Croix
-64.7032	17.7467	Christiansted	St. Croix
-64.8815	17.7125	Frederiksted	St. Croix
-64.9299	18.3500	St. Thomas (island center)	St. Thomas
-64.9309	18.3420	Charlotte Amalie	St. Thomas
-64.9343	18.3280	Hassel Island	St. Thomas
-64.9269	18.3343	St. Thomas Harbour	St. Thomas
-64.9533	18.3195	Water Island	St. Thomas
-64.7533	18.3435	St. John (island center)	St. John
-64.7939	18.3312	Cruz Bay	St. John

United Kingdom, British Virgin Islands			
Longitude	Latitude	City/town name	Island name
-64.6166	18.3167	Norman Island (island center)	Norman Island
-64.5274	18.3724	Salt Island (island center)	Salt Island
-64.6344	18.4295	Tortola (island center)	Tortola
-64.5704	18.4384	Parham Town	Tortola
-64.6129	18.4247	Road Harbour	Tortola
-64.6223	18.4290	Road Town	Tortola
-64.5717	18.3522	PeterIsland (island center)	Peter Island
-64.5089	18.3822	Cooper Island (island center)	Cooper Island
-64.4022	18.4797	Virgin Gorda (island center)	Virgin Gorda
-64.4341	18.4496	Spanish Town	Virgin Gorda
-64.3211	18.7280	Anegada (island center)	Anegada
-63.4258	18.5889	Sombrero (island center)	Sombrero

Lesser Antilles				
Longitude	Latitude	City/town name	Country	Island name
-63.2312	17.6392	Saba Island (island center)	Netherlands	Saba Island
-63.0538	18.0642	St. Martin (island center)	Netherlands/French	St. Martin/Sint Maarten
-63.0829	18.0729	Marigo	French	St. Martin/Sint Maarten
-63.0543	18.0258	Fort William	Netherlands	St. Martin/Sint Maarten
-63.0509	18.2216	Anguilla (island center)	United Kingdom	Anguilla
-62.9765	17.4890	St. Eustatius (island center)	Netherlands	St. Eustatius
-62.9859	17.4816	Oranjestad	Netherlands	St. Eustatius
-62.7494	17.3174	St. Kitts (island center)	Saint Kitts and Nevis	St. Kitts
-62.7147	17.2969	Basseterre	Saint Kitts and Nevis	St. Kitts
-62.8031	17.3232	Middle Island	Saint Kitts and Nevis	St. Kitts
-62.5894	17.1541	Nevis (island center)	Saint Kitts and Nevis	Nevis
-62.6267	17.1415	Charlestown	Saint Kitts and Nevis	Nevis
-62.8249	17.8972	St. Barthelemy (island center)	France	St. Barthelemy
-62.8522	17.8964	Gustavia	France	St. Barthelemy
-61.7904	17.6357	Barbuda (island center)	Antigua and Barbuda	Barbuda
-61.8251	17.6410	Codrington	Antigua and Barbuda	Barbuda
-61.8003	17.0864	Antigua (island center)	Antigua and Barbuda	Antigua
-61.8456	17.1176	St. Johns	Antigua and Barbuda	Antigua
-62.3414	16.9419	Redonda (island center)	Antigua and Barbuda	Redonda
-62.1899	16.7376	Montserrat (island center)	United Kingdom	Montserrat
-62.1548	16.7467	Bethel	United Kingdom	Montserrat
-62.2126	16.7056	Plymouth	United Kingdom	Montserrat
-61.5443	16.2539	Guadeloupe (island center)	France	Guadeloupe
-61.7281	15.9960	Basse Terre	France	Guadeloupe
-61.5342	16.2415	Pointe-A-Pitre	France	Guadeloupe
-61.2626	15.9396	Marie Galante (island center)	France	Marie Galante
-61.3365	15.4259	Dominica (island center)	Dominica	Dominica
-60.9988	14.6680	Martinique (island center)	France	Martinique
-61.0728	14.6091	Fort de France	France	Martinique
-61.1673	14.8097	Mount Pelee	France	Martinique
-61.1153	14.8685	Basse-Pointe	France	Martinique
-60.9719	13.9003	St. Lucia (island center)	St. Lucia	St. Lucia
-60.9905	14.0089	Castries	St. Lucia	St. Lucia
-59.5514	13.1556	Barbados (island center)	Barbados	Barbados
-59.6187	13.0985	Bridgetown (St. Mary Church)	Barbados	Barbados
-59.6141	13.0972	Bridgetown (Parliament)	Barbados	Barbados

For more information concerning this report, contact

Director

U.S. Geological Survey

Woods Hole Coastal and Marine Science Center

384 Woods Hole Road

Quissett Campus

Woods Hole, MA 02543-1598

*WHSC\_science\_director@usgs.gov*

508-548-8700 or 508-457-2200

or visit our Web site at

*<http://woodshole.er.usgs.gov>*



