

A REASSESSMENT OF HISTORICAL ATLANTIC BASIN TROPICAL CYCLONE ACTIVITY, 1700–1855

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Abstract. The chronological table of Atlantic basin tropical cyclones produced by Andrés Poey in 1855 is the foundation stone for present-day knowledge of historical Atlantic tropical cyclone activity. Subsequent researchers have used his table and built upon it, rejecting some of his entries, modifying others, and accepting the rest. A re-analysis of the 1700–1855 portion of Poey's original published list was made using historical newspaper accounts, weather diaries, and ships' logbooks. Of the 348 separate entries in Poey's original list, 149 were rejected and 198 accepted. Due to errors in dating and location, and the linking of separate entries as parts of the same storm, only 170 of the 198 accepted entries are unique storms. Thirteen undated storms of the remaining 170 are now dated. The authorities cited by Poey vary in their reliability. Of those cited 10 or more times, there was an average of one incorrect citation for every 3.1 correct citations. The most and least reliable authorities used by Poey are identified. An updated corrected chronology from all published sources is presented and includes 383 unique storms through 1855.

1. Introduction

Hurricanes and tropical storms in the Atlantic Ocean have threatened the inhabitants of the region for thousands of years. Written records from European witnesses to these storms date from the voyages of Christopher Columbus. The Spanish, French, English, Dutch, and other Europeans soon discovered the destructiveness of these storms and numerous accounts of the misfortunes brought to mariners and colonists were reported to their home countries.

When the first histories of the Caribbean colonies were written, hurricanes often were mentioned as important events in their history. Du Tertre (1667) mentioned twelve storms in the Lesser Antilles between 1642 and 1666 and his accounts are the main source we have for this time period. Other historians and almanac makers produced local chronologies over the years. Long (1774) apparently used one or more of these accounts to produce his modest list of hurricanes in the Caribbean region. Bryan Edwards's *The history, civil and commercial, of the British Colonies in the West Indies* first published in 1805, listed 18 separate storms. Poey (1855) considered Moreau de Jonnés's chronology of 1822 to be the first chronological list to attempt to document all of the known hurricanes in the West Indies dating back to 1495. Southey (1827) produced an important list of hurricanes. He also appears to be the first person to use the newspaper collections of the Reverend Dr. Charles Burney, purchased by the British Museum in 1818. This collection is the core of the

British Library Newspaper Library collection today. Subsequent lists tended to rely heavily on pre-existing chronologies (Evans, 1848; Schomburgk, 1848; Johnston, 1855; Poey, 1855).

By the time Poey produced his 1855 chronology, the scientific investigation of tropical cyclones had been underway for more than three decades. Sir William Reid (1838, 1849), William Redfield (1831, 1854), and Henry Piddington (1848) were the most important researchers publishing their results at this time. None of them produced a chronology as such, but Poey drew on their work to supplement his list. He spent time in New York with Redfield copying out all of the notes on storms that Redfield possessed (Poey, 1855).

The list of Poey is a famous document for students of tropical meteorology. Since 1855, dozens of authors have used his list to produce their own updated lists of hurricanes and tropical storms. Tannehill (1938) used Poey's list (and those made since Poey's time) in his updating of the Atlantic basin hurricane history, omitting all storms in the months of December through May that were included in Poey's list. This was done because it was well known by this time that tropical cyclones in these months are very rare and the number too great in the historical record to be accurate. Subsequent work by Millás (1968) confirmed the dating errors from English sources prior to 1752 due to the late acceptance of the Gregorian calendar in England, relative to that of France and Spain. He also made the first critical analysis of the sources used by Poey, rejecting some storms, and including new storms made by his own research. Ludlum (1963) constructed the best chronology of landfalling tropical cyclones in the United States; a number of these storms can be associated with their earlier history in the Caribbean region. Fernandez-Partagás and Diaz (1995a,b, 1996a,b,c, 1997, 1999) make critical reference to Tannehill's (and, therefore, Poey for 1851 to 1855) chronology in their documentation of Atlantic tropical cyclones from 1851–1910. Their results are available on-line at http://www.aoml.noaa.gov/hrd/hurdat/hurdat_pub.html. Likewise, Rappaport and Fernandez-Partagás (1995) also drew on the same secondary sources. These sources are carried into the North Atlantic hurricane database known as HURDAT (Landsea et al., 2004), and an assessment of their reliability based on new information was made.

2. The Need to Re-Analyze the Poey Chronology

The importance of the Poey chronology lies in its persistent use for nearly 150 years. The accuracy of the historical record is important for many research communities. Attempts to reconstruct long-term variability in Atlantic basin hurricanes (e.g., Walsh and Reading, 1991) assume that the available record in populated regions of the Caribbean is largely complete since about 1650, which is highly unlikely. Boose et al. (2004) use some of these sources in their work on hurricane impacts on Puerto Rican tropical rain forest ecology. Paleohurricane studies using proxy

data are dependent on accurate historical records for evaluating strike probabilities over time (Liu, 2004; Donnelly et al., 2001; Liu and Fearn, 2000). The insurance industry also requires accurate information of hurricane occurrences (Malmquist, 1998; Elsner and Kara, 1999).

The use of primary source documents is the most accurate way to rediscover historical tropical cyclones. Redfield, Reid and Piddington all used such sources, particularly ships' logbooks, to track tropical cyclones in different parts of the world. More recently, Ludlum (1963), Fernandez-Partagás and Diaz (1995a,b, 1996a,b, 1997, 1999), Rappaport and Fernandez-Partagás (1995), Rappaport and Ruffman (1999), Sandrik and Landsea (2003), Chenoweth (2003), Mock (2004) and Garcia-Herrera et al. (2005) have used a variety of primary source documents to reconstruct individual storms and local time series of tropical storms and hurricanes. During the course of investigating Jamaican tropical cyclones, evidence was found that many of the accepted accounts of historical tropical cyclones were in error (Chenoweth, 2003). The high frequency of errors led to a more detailed search for new information to determine the reliability of the Poey chronology, and subsequent work that has relied on Poey and/or the sources he consulted.

3. Poey's Record

The original list of Poey, published in the *Journal of the Royal Geographical Society* in 1855, contains 401 separate entries of "cyclonic hurricanes" from 1493 through 1855. The dates, localities affected, and the authorities cited are included, along with footnotes of additional information and analysis. Poey suspected, usually correctly, that some individual entries were probably related to adjacent entries in the same year but he made no effort to narrow down his original count. He also notes conflicts on dates of storms between different sources. Dozens of authorities are cited; many provide information on only one hurricane. Only fifteen sources provide ten or more different entries. Poey did not investigate the degree to which later authors used the same sources. The result is the apparent large number of citations for individual storms, which ultimately derive from a single or very small number of sources. The reliability of the most important sources used by Poey will be documented in Section 6.

4. Source Documents

The original source for Atlantic basin hurricanes is still not always discernible. Judging from sources mentioned in Poey, historians most often used secondary sources for the majority of cases in the 18th and early 19th centuries. The ultimate sources are most often newspaper accounts. Different newspapers often used the same original colonial newspaper account. The exact source may not be known, but

in such instances when details are given they can be compared with the newspaper accounts and a source confirmed. Millás (1968) quotes the *Annual Register* and *The Gentleman's Magazine* as two sources that were used by early hurricane chroniclers in the mid and late 18th century. These were indeed used but both tended to provide a reduced and edited version that appeared in full in other contemporary English newspapers. Private letters were often published in newspapers giving additional information. Major disasters to naval fleets often received extensive press attention in the official government accounts of European countries. Ship logbook accounts become more frequent in appearance in 19th century newspapers. Mariners often brought accounts of storms encountered at sea to the press in ports throughout the region. Redfield, Reid and Piddington used such press clippings to gather much of their marine data.

The main weakness of newspaper accounts, particularly those carrying accounts of storms elsewhere, is the risk of inaccurate information being propagated any number of ways. Incorrect information passed from the original source, or through misunderstanding by the reporter, could introduce an error in fact at the first point. Typeset could be incorrectly inserted by a hurried or inattentive typesetter. The newspaper item could be picked up by a neighboring newspaper and garbled and this could then be picked up by other sources. Some accounts omit dates and locations, or are vague about the exact time and place of a storm. In some instances, information that is known to be possibly vague is later found to be in error. This requires a more thorough search of newspapers beyond an initial report. A good example of this is reporting on a 1779 tropical cyclone that passed some distance off the South Carolina coast in September of that year. Millás (1968) places the storm near Charles Town, the island of Nevis in the Lesser Antilles, when in fact his source is discussing Charles Town [Charleston] in South Carolina. Information in the original accounts is vague, involving the search of the British Navy for the French Fleet intent on invading the American colonies during the American Revolutionary War. Hence, Millás made a bad assumption based only on the port's name and introduced a major error into his chronology.

Most Caribbean newspapers from the 18th century no longer exist. Accounts must be drawn from other newspapers that republished their original accounts. Another primary source document is ships' logbooks, which remain in great numbers for the entire 1700–1855 period (Chenoweth, 1996; see also www.nmm.ac.uk for an excellent introduction to ships' logbooks in the Climate of the World's Oceans (CLIWOC) section). These records fill in the newspaper gap and are extremely useful for verifying the existence of a tropical cyclone. They provide wind and weather data at sub-hourly to daily resolution, which is invaluable in determining prevailing synoptic weather conditions. Their main limitation can be their failure to make any mention of land-based storm damage, which newspaper accounts provide in greater detail. In fact, both records are excellent sources that add to the other. When a newspaper record is unavailable, the logbook record must be scrutinized

more closely to infer the potential damage done from the weather reports included in the logbook.

While newspapers and logbooks are important sources of information it should be pointed out that many other archive sources remain to be examined. The huge record of the British Colonial Office provides accounts from all of the colonies on a wide range of topics concerning the important political and economic affairs of the colonies, including storm damage from hurricanes. Likewise, similar Spanish colonial records are beginning to yield invaluable information on Atlantic hurricanes, especially in the Spanish colonies (e.g. Garcia-Herrera et al., 2005). In terms of length of record, Spanish records have potential to provide the longest local time series. A truly comprehensive record of Atlantic hurricanes will require examination of all European and former colonial archives.

5. Data and Methods

Newspaper accounts for the period 1700–1855 were consulted from newspaper archives in the U.S. Library of Congress, Washington, DC, the University of Maryland, College Park, Maryland, the British Library Newspaper Library, in London as well as newspapers included in the records of the Colonial Office in the UK National Archives, London. Scores of different newspapers were used and are too numerous to enumerate here. A few of the titles read include *The Boston News Letter* (1705–1775), *The Pennsylvania Gazette* (1729–1776, 1783–1792); *Lloyd's List* (1740–1855), *London Times* (1785–1855), *Jamaica Royal Gazette* (1778–1781; 1811–1838); *The Royal Gazette and Bahama Advertiser* (1804–1811, 1813–1837); *Diario de la Marina* (Havana) (1844–1855) to name only a few newspapers. A total of 5,606 newspaper accounts were used. Due to duplication of original sources in other newspapers, the estimated number of “unique” accounts is 3,447, after adjusting for duplications and probable same sources being used in other press accounts. British Navy ships’ logbooks were used to supplement newspaper coverage. These logbooks are available at the U.K. National Archives in London. Additional logbook data were obtained from other archives in the United States archives (US National Archives, Washington, DC; Mystic Seaport Museum, Mystic, Connecticut; Old Dartmouth Whaling Museum, New Bedford, Massachusetts; Peabody Essex Museum, Salem, Massachusetts). Four hundred and fifty-six logbook records were used in the re-analysis of the Poey chronology. Precisely dated logbook entries allow for improved temporal and spatial continuity in tracking individual storms and detecting potential associations (or their absence) in the mapping and plotting of individual tropical cyclones. Details in press coverage were compared with accounts published in Poey (1855), Ludlum (1963), Millás (1968), Mock (2004) and Garcia-Herrera et al. (2005). In a number of instances, the same (unattributed) newspaper account that was cited

in the original source was found in the English press. Such sources are likely the original record from which all subsequent accounts are originally based. Table I lists the original Poey entries, with a column indicating whether or not the storm was accepted or rejected and another column indicating the reason for its status.

The period 1700–1855 was chosen for several reasons. First, the great majority of the storms listed by Poey occur after 1700. Secondly, English language sources are easily available and abundant from 1700 onward; newspapers in England began to proliferate in number after 1695, following the end of royal licensing with the first daily newspaper established in 1703 (Rogers, 2003). Thirdly, newspaper publishing in North America began on a regular basis about the same time. Fourth, logbook records are abundant since 1670 from English sources. Using the Poey record, these primary sources were used to check the chronology for accuracy in the date and location of tropical cyclones.

The Poey record was entered into a database. This record was compared against a separate record of tropical cyclones from original sources cited above, along with daily weather records kept in Jamaica from 1750–1786 (Chenoweth, 2003), St. Eustatia from 1787–1793 (Fahlberg MS Met Obs obtained from the Royal Academy of Sweden), Nassau, Bahamas from 1812–1840 (Chenoweth, 1998), and other shorter weather records. Together, they constitute the most comprehensive collection of daily weather data from the tropical Atlantic for this time period.

Storms included in Poey’s list were considered to be in error for the following reasons. (1) absence of independent evidence from primary sources; (2) incorrect years, but correct date; (3) correct dating, but incorrect location; (4) cited source failed to mention weather as a cause of a disaster; (5) correct day of month, but wrong month; (6) date and location are correct, but weather was not associated with a tropical cyclone (e.g., heavy flooding from a thunderstorm).

Storms were accepted even when some errors were evident. These include (1) correct location and month (or just year) without a given day of month which fits, or could plausibly link with independent data; (2) deviations of plus or minus one day from the actual date of maximum storm impact; (3) incorrectly linked storms, but based on otherwise accurate accounts; (4) dates given in old style Julian form, but correct when converted to the modern Gregorian calendar.

Reasons for rejection of the storms were most frequently due to garbled dates. Very frequently the year was incorrect, often offset by a single year. In some instances, the digits in the date were transposed or omitted. Errors in the month, but with a correct day, were common; a few errors were off by one week. This indicates that the original source may have made a reference to the day of the week of the storm, which was correct, but the day of the month was in error for some reason. In some instances, the date was correct, but the location completely in error (“July 27, 1805 – Jamaica” as cited by Poey from Schomburgk’s work is actually a storm encountered in the North Atlantic on this date by the fleet sailing from

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TABLE I
 Chronological list of Poey (1855), reproducing exactly his entries for dates and locations, including spelling errors in original text. Status indicates if the storm report is accepted as an accurately dated and located report or not accepted by criteria described in Section 5. Candidate storm number is a one-up number to track the original source report. The accepted storm number is only for storms accepted as being accurately reported. When multiple reports are for the same storm, the storm numbers are kept the same for each unique storm. Poey (1855) did not number his storms

Year	Date	Localities	Status	Candidate storm		Reason for rejected status
				Number	Accepted storm Number	
1700	no date	Barbados	Accepted	1	1	
1701	Apr. 3	Antilles	Rejected	2		Non-tropical system
1702	no date	Barbados	Accepted	3	2	
1705	Feb. 7	Antilles	Rejected	4		Non-tropical system
1707	no date	Nevis, Antigua	Accepted	5	3	
1712	Aug. 28	Jamaica	Accepted	6	4	
1712	Oct.	Cuba	Rejected	7		Incorrect month – corrected by Millás (1968)
1713	no date	Guadeloupe, St. Thomas	Accepted	8	5	Millás (1968) has two separate storms
1714	Aug. 13, 14	Guadeloupe	Accepted	9	6	
1714	Aug. 29	Jamaica	Accepted	10	7	
1714	no date	Cuba	Accepted	10	7	
1718	Mar. 6, 7	St. Vincent	Rejected	11		Non-tropical system
1718	Sept.	Nevis	Accepted	12	8	
1720	no date	Barbados	Rejected	13		No evidence in logbooks
1722	Aug. 28	Jamaica, Carolina, U.S.	Accepted	14	9	
1722	Aug. 31	Antilles	Rejected	14		No evidence in logbooks
1725	no date	Martinique	Accepted	15	10	
1726	Oct. 22	Jamaica	Accepted	16	11	
1728	Aug. 19	Antigua	Accepted	17	12	
1728	no date	Carolina, U.S.	Accepted	18	13	Storm now dated from logbooks and newspapers
1730	no date	Cuba	Accepted	19	14	Original sources provide mistaken details

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TABLE I
(Continued)

Year	Date	Localities	Status	Candidate storm		Reason for rejected status
				Number	Accepted storm Number	
1731	no date	Barbados	Accepted	20	15	Storm now dated from logbooks and newspapers
1733	June	St. Kitts	Accepted	21	16	Correct date provided by Millás (1968)
1733	July 16	Cuba	Accepted	21	16	
1734	Sept. 1	Jamaica	Accepted	22	17	
1737	Sept. 9	St. Domingo, St. Kitts, Montserrat	Accepted	23	18	
1738	no date	Guadeloupe, St. Thomas	Accepted	24	19	Storm now dated from logbooks and newspapers
1739	Sept. 9	Antilles	Rejected	25		No evidence in logbooks
1740	Aug.	Antigua, Martinique, Dominica	Rejected	26		No evidence in logbooks
1740	no date	Porto Rico	Accepted	27	20	Storm now dated from logbooks and newspapers
1742	no date	St. Thomas	Accepted	28	21	Storm now dated from logbooks and newspapers
1744	Oct. 20	Jamaica	Accepted	29	22	Oct. 31 in Gregorian calendar
1744	Nov.	Cuba	Accepted	29	22	Same storm as above
1745	no date	Caribbean Islands	Accepted	30	23	
1746	Jan.	Lat. 40 N	Rejected	31		Non-tropical system
1747	Sept. 21	St. Christopher, Leeward Islands	Accepted	32	24	Oct. 2 in Gregorian calendar
1747	Oct. 24	St. Christopher, Leeward Islands	Accepted	33	25	Nov. 4 in Gregorian calendar
1751	Mar. 7	Jamaica	Rejected	34		Non-tropical system
1751	Aug. 10	Jamaica	Rejected	35		Garbled date
1751	Sept. 2	Jamaica	Rejected	35		Garbled date
1751	Sept. 15	St. Domingo	Rejected	35		Correct date, wrong location
1751	Oct.	Jamaica, St. Domingo	Rejected	35		No evidence in logbooks or newspapers
1752	Sept.	Charleston, U.S.	Accepted	36	26	
1753	Sept. 15	Charleston, U.S.	Rejected	36		Garble of September 14, 1752 hurricane

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TABLE I
(Continued)

Year	Date	Localities	Status	Candidate storm		Reason for rejected status
				Number	Accepted storm Number	
1754	Sept.	St. Domingo	Accepted	37	27	
1756	Aug. 23	Barbados	Rejected	38		No evidence in logbooks; misdated 1758 storm
1756	Sept. 12	Martinique	Accepted	39	28	
1757	no date	Florida to Boston	Accepted	40	29	
1757	Aug. 29	Barbados	Rejected	41		No evidence in logbooks or newspapers
1758	Aug. 23	Barbados, South Carolina, U.S.	Accepted	38	30	Correct date for Barbados; no S. C. storm
1759	Sept.	Gulf of Mexico	Accepted	42	31	
1761	May 4	Charleston, U.S.	Rejected	43		Tornado
1761	June 1	Charleston, U.S.	Rejected	43		No evidence in logbooks or newspapers
1762	Dec. 9	Cartagena	Rejected	44		Incorrect Year
1765	July 31	Martinique, St. Eustatius, Guadeloupe	Accepted	45	32	
1765	Sept.	Martinique, Guadeloupe, St. Christopher	Rejected	45		Confused with July 31 storm
1765	Nov. 13, 14	St. Domingo	Accepted	46	33	
1766	Aug. 13, 14	Martinique	Accepted	47	34	
1766	Aug. 16	West of Jamaica	Accepted	47	34	
1766	Sept. 11	Virginia, U.S.	Accepted	48	35	
1766	Sept. 13-15	St. Christoval, Montserrat	Rejected	49	36	Incorrect dates
1766	Sept. 21	St. Eustatius, Tortuga	Accepted	49	36	Date is correct only for Tortuga
1766	Oct. 6	Dominica, St. Eustatius, Guadeloupe	Accepted	50	37	
1766	Oct. 22	Pensacola	Accepted	51	38	
1768	Aug. 12	Grenada	Rejected	52		Mis-dated; happened on 10 August
1768	Oct. 15	Cuba	Accepted	53	39	
1769	Oct. 25	Cuba (Havana)	Rejected	53		Confused with 15 October storm

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(Continued)

Year	Date	Localities	Status	Candidate storm		Reason for rejected status
				Number	Accepted storm Number	
1769	Aug. 30	West of Florida	Rejected	54		No evidence in logbooks
1769	Oct. 29	East of Florida	Rejected	55		No evidence in newspapers
1770	June 6.	Charleston	Accepted	56	40	
1771	Aug.	St. Eustatius	Rejected	57		No evidence in logbooks
1772	Aug. 4	St. Domingo	Accepted	58	41	
1772	Aug. 16	Cuba ? (St. Jago)	Rejected	59		Incorrect date
1772	Aug. 17	Antigua	Rejected	60		Garble of correct 27-28 August date
1772	Aug. 28	Porto Rico, Jamaica	Rejected	60	42	Puerto Rico is Aug. 31; no storm at Jamaica
1772	Aug. 31	Leeward and Virgin Islands, Antigua	Accepted	60	42	
1772	Sept. 1-4	Dominica, St. Domingo	Rejected	60	42	Bad dates; details are for above storm
1772	Nov. 22	St. Christopher, St. Eustatius	Rejected	61		No evidence in logbooks or newspapers
1773	July	St. Thomas, Cuba	Accepted	62	43	No evidence for St. Thomas
1773	Aug.	Boston	Rejected	63		No evidence in newspapers
1774	Sept. 6	Guadeloupe	Rejected	64		Incorrect year
1774	Oct. 2	Jamaica	Rejected	65		No evidence in Thistlewood MS weather record
1775	July 30	St. Croix, Martinique	Accepted	66	44	
1775	Aug. 25	Martinique	Accepted	67	45	
1775	Aug. 27	St. Domingo	Accepted	67	45	
1775	Sept. 14	Cuba, St. Domingo	Rejected	68		Garbled account
1775	Oct. 16	St. Christopher	Accepted	69	46	
1776	Sept. 4	Antigua, Martinique, Guadeloupe	Accepted	64	47	
1776	Sept. 5, 6	Martinique, Guadeloupe, St. Kitts	Accepted	64	47	
1778	Oct. 28	Cuba	Rejected	70		Incorrect year - occurred on Oct. 28, 1777

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Year	Date	Localities	Status	Candidate storm		Reason for rejected status
				Number	Accepted storm Number	
1779	no date	New Orleans	Accepted	71	48	
1780	Aug. 24	New Orleans	Accepted	72	49	
1780	Aug. 25	St. Kitts	Accepted	73	50	
1780	Oct. 3–12	Jamaica, Cuba, Martinique, Barbados	Accepted	74	51	Confusion of 3 Oct and 10–12 Oct storms
1780	Oct. 10–18	Barbados, Dominica, Antigua, Tobago, Grenada, St. Vincent, St. Domingo	Accepted	75	52	Ending date is incorrect for specified islands
1780	Oct. 16	Cuba	Accepted	76	53	
1780	Oct. 31	Barbados	Rejected	77		Garbled date
1781	Mar. 15	West Indies	Rejected	78		Non-tropical system
1781	Aug. 1	Jamaica	Accepted	79	54	
1781	Aug. 10	North Carolina, U.S.	Accepted	80	55	
1781	Sept. 5	St. Domingo	Accepted	81	56	
1782	Apr. 12	North Atlantic	Rejected	82		Non-tropical system
1782	July. 25	Lat 43 33N long. 42 20W	Rejected	83		Incorrect date – occurred on Aug. 25
1782	July. 31	Kingston (Jamaica)	Rejected	79		No evidence in Jamaican newspapers
1782	Aug. 1	Jamaica	Rejected	79		No evidence in Jamaican newspapers
1782	Sept. 16	North Atlantic	Accepted	84	57	
1784	March 8	Cuba	Rejected	85		Non-tropical system
1784	July 10	Jamaica	Rejected	86		No evidence in Jamaican newspapers
1784	July 30	Jamaica, St. Domingo	Accepted	86	58	
1785	July 6	West Indies	Rejected	87		Garbled reference; incorrect year and date
1785	July 25	St. Croix	Rejected	88		Garbled date – is August storm
1785	Aug. 25	Guadeloupe	Accepted	88	59	
1785	Aug. 27	Jamaica	Accepted	88	59	

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Year	Date	Localities	Status	Candidate storm Number	Accepted storm Number	Reason for rejected status
1785	Aug. 31	Guadeloupe, Barbados, St. Domingo	Rejected	88		Garbled date – is August storm
1785	Sept. 22–24	Carolina, Virginia, U.S.	Accepted	89	60	
1785	Sept. 27	St. Domingo	Rejected	88		Garbled date – is August storm
1786	Aug. 11	St. Domingo, St. Eustatius, Barbados	Rejected	90		No evidence in logbooks
1786	Aug. 29	United States	Accepted	91	61	
1786	Sept. 2	Barbados	Accepted	92	62	
1786	Sept. 10	Guadeloupe	Rejected	93		No evidence in logbooks; garbled reference
1786	Oct. 5	Barbados, Grenada	Rejected	92		No evidence in logbooks
1786	Oct. 20	Jamaica	Accepted	94	63	
1787	April	United States, Bermuda	Rejected	95		Non-tropical system
1787	July 30.	United States	Rejected	96		No evidence in newspapers
1787	July	Guadeloupe, French Islands	Rejected	97		No evidence in logbooks
1787	Aug. 3	Dominica	Accepted	97	64	
1787	Aug. 15	Florida	Accepted	98	65	
1787	Aug. 23	Dominica	Accepted	99	66	
1787	Aug. 29	Dominica	Accepted	100	67	
1787	Sept. 2	Honduras	Accepted	100	67	
1787	Sept. 19	United States	Rejected	101		No evidence in newspapers
1787	Sept. 23	Belize	Accepted	102	68	
1787	Dec. 1	West Indies	Rejected	103		Non-tropical system
1787	Jan. 1	Honduras	Rejected	104		Non-tropical system
1788	Mar. & Apr.	St. Croix	Rejected	105		Non-tropical system
1788	July 22	United States	Accepted	106	69	

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Year	Date	Localities	Status	Candidate storm		Reason for rejected status
				Number	Accepted storm Number	
1788	Aug. 14	Martinique	Accepted	107	70	
1788	Aug. 16	Porto Rico, St. Domingo	Accepted	107	70	
1788	Aug. 19	United States	Accepted	108	71	
1788	Aug. 29	Dominica	Rejected	100		Incorrect year
1788	Sept. 19, 20	United States	Accepted	109	72	
1790	Aug.	Nevis	Rejected	110		Report is actually for Tobago
1790	July 31	Jamaica	Rejected	111		No evidence in Jamaican newspapers
1791	June 21	Cuba	Accepted	112	73	
1791	Sept. 27	Cuba	Accepted	113	74	
1792	July 15	West Indies	Accepted	114	75	
1792	Aug. 1	Antigua	Accepted	115	76	
1792	Aug. 6	Bermudas, U.S.	Accepted	115	76	
1792	Sept. 10	Antigua	Rejected	116		No evidence in logbooks
1792	Oct. 29	Cuba	Accepted	117	77	
1793	Aug. 12	St. Christoval, St. Eustatius, St. Thomas	Accepted	118	78	
1794	Aug. 27, 28	Cuba	Accepted	119	79	
1795	Aug. 10	Jamaica	Rejected	120		No storm at Jamaica
1795	Aug. 18	Antigua	Accepted	121	80	
1796	Oct. 3	Bahamas	Accepted	122	81	
1796	Oct. 24	Cuba	Rejected	122		Probable garble of "2-4" October
1796	Nov. 2	Cuba	Rejected	122		No storm - happened 2 Oct.
1799	no date	Cuba	Accepted	123	82	Probable June storm
1800	Nov. 2	Cuba	Accepted	124	83	
1801	July 22	Nassau	Accepted	125	84	

(Continued on next page)

TABLE I
(Continued)

Year	Date	Localities	Status	Candidate storm Number	Accepted storm Number	Reason for rejected status
1802	Feb. 21–23	Charleston to Nova Scotia	Rejected	126		Non-tropical system
1802	Sept. 16	Cumana	Rejected	127		No evidence in logbook data
1803	July 10	Bahamas	Rejected	128		No evidence in logbook data
1804	Aug. 29	Jamaica	Rejected	129		No evidence found
1804	Sept. 3–9	Martinique, Caribbean Islands, U.S.	Accepted	130	85	
1804	Sept. 3–9	Windward Isles	Accepted	130	85	
1804	Sept. 3–6	Leeward Islands	Accepted	130	85	
1804	Sept. 22	Jamaica, Lat 2018 N	Accepted	131	86	
1804	Oct. 4	Savanna, Georgia	Rejected	130		Garbled date – September storm
1804	Oct. 9	United States	Rejected	130		Confused with September storm
1805	July 27	Jamaica	Rejected	132		No evidence found
1805	July 29	Lat. 26 17 long. 57 42, north of Barbados	Accepted	133	87	
1806	Aug. 30	Bahamas, Eleuthera	Accepted	134	88	
1806	Sept. 9	Dominica	Accepted	135	89	
1806	Sept. 24	Dominica	Rejected	136		No evidence in newspapers or logbooks
1806	Sept. 27	West Indies	Rejected	137		No evidence in newspapers or logbooks
1806	Oct. 5	Bahamas	Accepted	138	90	
1806	Oct. 27	Bahamas	Rejected	139		No evidence in logbooks
1807	July 25–28	St. Christoval, Montserrat	Rejected	140		July 25 only; St. Christopher, not St. Christoval
1807	Sept. 5	Cuba	Accepted	141	91	
1809	July 27	Dominica, Guadeloupe	Rejected	142		No evidence in logbooks
1809	Aug. 1–3	Dominica, Guadeloupe	Accepted	142	92	
1809	Sept. 2	Guadeloupe, Porto Rico	Rejected	143		No evidence in logbooks

(Continued on next page)

REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

TABLE I
(Continued)

Year	Date	Localities	Status	Candidate storm		Reason for rejected status
				Number	Accepted storm Number	
1809	Oct. 13	Martinique	Accepted	144	93	
1809	Oct. 18	Trinidad	Rejected	144		Actually Trinidad de Cuba
1810	Aug. 12	Trinidad, Barbados	Accepted	145	94	
1810	Aug. 28	Barbados	Rejected	146		No evidence in Barbados newspaper
1810	Sept. 28	Cuba	Accepted	147	95	
1810	Oct. 25, 26	Cuba	Accepted	148	96	
1812	Aug. 14	Jamaica	Accepted	149	97	
1812	Aug. 19	New Orleans	Accepted	149	97	
1812	Oct. 12	Jamaica	Accepted	150	98	
1812	Oct. 14	Jamaica	Accepted	150	98	
1812	Oct. 14	Trinidad in Cuba	Accepted	150	98	
1813	July 20	Bermuda	Rejected	151		Incorrect date; garbled location
1813	July 26	Barbados	Accepted	151	99	
1813	July 22, 23	Dominica, Martinique, St. Christoval	Accepted	151	99	
1813	July 26	Bermuda, Bahamas	Rejected	151		Incorrect date for both locations
1813	July 31	Jamaica	Accepted	152	100	
1813	Aug. 1	Jamaica	Accepted	152	100	
1813	Aug. 5-9	N. Atlantic, lat. 41	Accepted	152	100	
1813	Aug. 25	Dominica	Accepted	153	101	
1813	Nov. 19	Nova Scotia	Rejected	154		Non-tropical system
1813	no date	Belize	Rejected	152		Source written 29 years after supposed storm
1815	Aug. 9	Gulf Stream, lat. 40 long. 60	Accepted	155	102	
1815	Aug. 31 to Sept. 1	N. Atlantic, lat. 39 long. 56, Bartholomew	Rejected	156		Incorrect date; garbled locations

(Continued on next page)

TABLE I
(Continued)

Year	Date	Localities	Status	Candidate storm Number	Accepted storm Number	Reason for rejected status
1815	Sept. 18-23	St. Bartholomew	Accepted	157	103	
1815	Sept. 20	Turk's Island	Accepted	158	103	
1815	Sept. 29	Barbados	Rejected	158		No evidence in Barbados newspaper
1815	Oct. 18	Jamaica	Accepted	159	104	
1816	Sept. 15	Barbados, Martinique, Dominica	Accepted	160	105	
1816	Oct. 16	Dominica, Martinique	Rejected	160		Confused with September storm
1817	Sept. 15	Dominica	Rejected	160		Year incorrect; should be 1816
1817	Oct. 21	Small islands, St. Vincent	Accepted	161	106	
1817	Oct. 23	Barbados, St. Lucia, Martinique	Rejected	161		Date incorrect
1818	Aug. 28	Bermuda	Rejected	162		Incorrect date
1818	Sept. 10-12	Cayman Isles, Campeche	Accepted	163	107	
1818	Sept. 19	St. Domingo	Rejected	164		Incorrect date of Sept. 26 storm
1818	Sept. 21	Barbados, Dominica	Accepted	164	108	
1818	Sept. 22-25	Antigua	Accepted	164	108	
1818	Sept. 27-30	Barbados	Rejected	164		No evidence in Barbados newspaper
1818	Oct. 7	Port Royal (Jamaica)	Rejected	165		No evidence in Jamaican newspapers
1818	Oct. 21	St. Lucia	Rejected	161		No evidence in newspapers
1818	Nov. 17-20	Jamaica (Cornwall County)	Accepted	166	109	
1819	Aug. 25	Dominica	Rejected	167		No evidence in newspapers
1819	Sept. 21, 22	St. Lucia, Barbados, Virgin Islands, Porto Rico	Accepted	168	110	
1819	Oct. 13-15	Barbados, St. Lucia	Accepted	169	111	
1819	no date	Cuba	Accepted	170	112	
1821	Sept. 1	Guadeloupe	Accepted	171	113	

(Continued on next page)

REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

TABLE I
(Continued)

Year	Date	Localities	Status	Candidate storm		Reason for rejected status
				Number	Accepted storm Number	
1821	Sept. 1	Turk's Island to Long Island, U.S.	Accepted	171	114	
1821	Sept. 9	Antigua, St. Bartholomew	Accepted	172	115	
1821	Sept. 23	New Haven, U.S.	Rejected	157		Confused with 1815 storm
1821	no date	Cuba	Accepted	172	115	
1822	Mar. 11	Jamaica	Rejected	173		Non-tropical system
1822	July 11	Mobile, U.S.	Rejected	174		Incorrect date
1822	Dec. 18	Barbados	Accepted	175	116	
1824	July 26	West Indies	Rejected	176		Incorrect year
1824	Sept. 7, 8	Guadeloupe	Accepted	177	117	
1825	July 25	Dominica, Martinique, Guadeloupe	Accepted	176	118	
1825	Oct. 1	Cuba	Accepted	178	119	
1826	Aug. 18	Antilles	Rejected	179		No evidence in logbooks or newspapers
1826	Nov. 6-9	Atlantic, Tenerife	Rejected	180		Non-tropical system
1826	no date	Cuba	Accepted	181	120	
1827	July 30	North Carolina	Rejected	182		No evidence in newspapers
1827	Aug. 17-28	Windward Islands to the Porpoise Bank, U.S.	Accepted	183	121	
1827	Aug. 28	St. Thomas, Virgin Islands	Accepted	184	122	
1827	Sept. 7, 8	N. Atlantic	Accepted	185	123	
1827	Oct. 11	Bahamas	Rejected	186		No evidence in Bahamas newspapers
1827	no date	Belize	Rejected	187		No evidence found
1828	Mar. 15	Gulf of Mexico	Rejected	188		Non-tropical system
1828	Sept. 19	N. Atlantic, NW of Bermuda	Accepted	189	124	
1829	July 24	Boston, U.S.	Rejected	190		No evidence in newspapers
1830	Apr. 24, 25	Vera Cruz	Rejected	191		Non-tropical system

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TABLE I
(Continued)

Year	Date	Localities	Status	Candidate storm Number	Accepted storm Number	Reason for rejected status
1830	Aug. 7	Jamaica	Accepted	192	125	
1830	Aug. 11–18	Dominica, St. Thomas, Barbados	Accepted	193	126	
1830	Aug. 19–24	Martinique, U.S.	Accepted	194	127	
1830	Aug. 22–26	Turk's Island, N. of the Bahamas	Accepted	194	127	
1830	Sept. 29	Caribbean islands, N. side	Accepted	195	128	
1830	Dec. 5, 6	American Coast from the lat. of 30 N	Rejected	196		Non-tropical system
1831	April 27	United States	Rejected	197		Non-tropical system
1831	no date	Belize	Accepted	198	129	
1831	Jan. 13–15	Florida Stream	Rejected	199		Non-tropical system
1831	June 10	Florida	Accepted	200	130	
1831	June 23–27	Trinidad, Tobago, Antigua, Grenada	Accepted	198	129	
1831	Aug. 10–17	Barbados, Cuba	Accepted	201	131	
1832	June 3–6	Cuba, Bahamas, Bermuda	Accepted	202	132	
1832	Aug. 7	Jamaica	Rejected	192		Incorrect year
1833	Aug. 14	Guadeloupe, Antigua, Bermuda	Accepted	203	133	
1833	Sept. 20	Dominica	Rejected	204		Incorrect year
1833	Oct. 16–19	Cuba, Gulf of Mexico	Accepted	205	134	Apparently non-tropical in Gulf of Mexico
1834	Sept. 20	Dominica	Accepted	206	135	
1834	Oct. 20, 21	Martinique	Rejected	206		Incorrect month
1835	April 28	United States Coast	Rejected	206		Non-tropical system
1835	July 26	Barbados	Rejected	207		No evidence in logbooks
1835	Aug. 12–18	Antigua, Cuba, Galveston Bay	Accepted	208	136	
1835	Sept. 3	Barbados	Accepted	209	137	
1835	Sept. 13	Matamoros, Gulf of Mexico	Rejected	208		Incorrect month
1835	Nov. 10	Redfield's Chart XI	Rejected	210		Non-tropical system

(Continued on next page)

REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

TABLE I
(Continued)

Year	Date	Localities	Status	Candidate storm Number	Accepted storm Number	Reason for rejected status
1836	Nov. 30 to Dec. 21	United States, Nova Scotia	Rejected	211		Non-tropical system
1837	July 9	Barbados, St. Lucia	Accepted	212	138	
1837	July 26	Barbados, Cuba, Martinique	Accepted	213	139	
1837	July 31	Antigua, St. Thomas	Rejected	214		Incorrect dates
1837	Aug. 2-4	Antigua, St. Thomas, Barbuda	Accepted	214	140	
1837	Aug. 6	Little Antilles	Rejected	212		Incorrect dates
1837	Aug. 12	NE of the Caribbean Islands	Accepted	215	141	
1837	Aug. 18-21	Lat 30 45N long 77 27 W	Accepted	215	141	
1837	Aug. 12-23	Turk's Island	Accepted	215	141	
1837	Aug. 31	St. Mark	Accepted	216	142	
1837	Aug. 31 to Sept. 3	Apalachicola, U.S.	Accepted	216	142	
1837	Sept. 27 to Oct. 10	Gulf of Mexico	Accepted	217	143	
1837	Oct. 1-3	Yucatan Channel into the Sea of Mexico	Accepted	217	143	
1837	Oct. 26	Cuba	Accepted	218	144	
1838	Sept. 10	Bahamas	Accepted	219	145	
1838	Nov. 1	Vera Cruz	Rejected	220		Non-tropical system
1838	Nov. 26	Vera Cruz	Rejected	221		Non-tropical system
1838	Nov. 26-28	Atlantic, European side	Rejected	222		Non-tropical system
1839	June 9	Antigua	Rejected	223		Local Thunderstorm
1839	Sept. 8-14	Bermuda	Accepted	224	146	
1839	Nov. 5	Galveston, near St. Louis Island, Gulf of Mexico	Rejected	225		Non-tropical system
1839	Dec. 13-17	United States, North Atlantic	Rejected	226		Non-tropical system
1840	May 23	Madeira	Rejected	227		Non-tropical system

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TABLE I
(Continued)

Year	Date	Localities	Status	Candidate storm Number	Accepted storm Number	Reason for rejected status
1840	Sept. 16	Porto Rico	Rejected	228		Incorrect date – July storm
1841	Oct. 3–6	Nantucket, U.S.	Accepted	229	147	
1841	Oct. 6	Barbados, St. Lucia	Accepted	230	148	
1841	Oct. 21–28	Bermuda	Rejected	231		Storm limited to 21 October
1841	Nov. 28	Cuba	Rejected	232		Storm was October 28
1842	July 12	Acracoke, Cape Hatteras, U.S.	Accepted	233	149	
1842	Aug. 30 to Sept. 9	Atlantic to the shores of Mexico	Accepted	234	150	Redfield's Track XII
1842	Sept. 4	Cuba	Accepted	234	150	
1842	Oct. 2–10	Bermuda	Accepted	235	151	
1842	Oct. 24–29	Madeira	Accepted	236	152	
1842	Nov. 3	Lat 36 40 long 61	Rejected	237		Extratropical
1843	Oct. 13	Florida	Rejected	238		No evidence in newspapers
1844	Feb. 22	Martinique	Rejected	239		Non-tropical system
1844	May 12	Lat 37 47 N long 65 22 W	Rejected	240		Non-tropical system
1844	Oct. 3–6	Cuba	Accepted	241	153	
1845	Oct. 12	Florida Channel	Rejected	242		Non-tropical system
1845	Oct. 22	Bermuda	Rejected	243		Non-tropical system
1845	Oct. 27	Bermuda, E. side	Accepted	244	154	
1845	Nov. 9	Bermuda	Rejected	245		Non-tropical system
1846	Sept. 11–21	Barbados, Guadeloupe, Antigua	Accepted	246	155	
1846	Oct. 6–18	Cuba, United States	Accepted	247	156	
1846	Dec. 9		Rejected	248		No location given
1847	Feb. 21	Atlantic	Rejected	249		Non-tropical system
1847	Oct. 10	Tobago, Trinidad	Accepted	250	157	

(Continued on next page)

REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

 TABLE I
 (Continued)

Year	Date	Localities	Status	Candidate storm Number	Accepted storm Number	Reason for rejected status
1848	Aug. 22 to Sept. 3	Antigua	Accepted	251	158	References Redfield's Track XXI
1848	Sept. 19	Barbados, St. Christopher	Accepted	252	159	
1848	Dec. 16	Atlantic	Rejected	253		Non-tropical system
1849	March 27	Lat. 48 N long. 20 W	Rejected	254		Non-tropical system
1850	March 30	Nassau	Rejected	255		Non-tropical system
1850	July 14–16	Southward and Westward Isles	Rejected	256		Location uncertain
1850	Aug. 21	Cuba	Accepted	257	160	
1850	Sept. 2	St. Nicholas, Cape Verde Islands	Accepted	258	161	
1850	Oct. 14	Lat. 24 59N, long. 47 10W	Accepted	259	162	Probably same as below.
1850	Oct. 18	Lat. 25 58N, long. 41 19W	Accepted	259	162	Probably same as above.
1851	Aug. 16–22	St. Mark, Florida, St. Christopher, St. Thomas, Cuba	Accepted	260	163	
1851	July 10	Barbados, St. Domingo, St. Christopher	Rejected	256		No evidence in newspapers
1852	Jan. 12	Vera Cruz	Rejected	261		Non-tropical system
1852	Sept. 22–26	St. Christopher, St. Eustatius, Porto Rico	Accepted	262	164	
1852	Oct. 9	St. Mark, Florida	Accepted	263	165	
1853	Aug. 30, Sept. 11	Cape Verde, Hatteras, U.S.	Accepted	264	166	
1853	Sept. 27 to Oct. 10	Lat 35 19, long. 56 36	Accepted	265	167	
1853	Sept. 28	Lat 15N long. 34 50W	Accepted	266	168	
1854	Oct. 21	Bermuda	Accepted	267	169	
1855	Jan. 20	Baltimore to Halifax, U.S.	Rejected	268		Non-tropical system
1855	Feb. 10	Bermuda	Rejected	269		Non-tropical system
1855	May 24	Trelawny (sic)	Rejected	270		No information found in cited reference
1855	Aug. 25, 26	Martinique, St. Domingo	Accepted	271	170	

Jamaica). Some entries are rejected because precisely dated primary sources show no evidence for a storm at the cited location.

A number of storm entries in Poey refer to the same storm. The newly gathered reports allowed a number of entries to be linked, thereby reducing the total number of storms that were ultimately accepted. Likewise, the number of rejected entries is actually larger than the actual number of rejected storms, because the year was incorrect and could be connected with a storm the year before or after on the same date at the same location as well as multiple misdated, but otherwise identical, storm reports. A good example of this latter error can be found in the listings for 1785 (Table I).

Determination of the nature of storms and gales require knowledge of modern synoptic meteorology. A discussion of these challenges is provided by Rappaport and Fernandez-Partagás (1995) available at the web site <http://www.nhc.noaa.gov/pastdeadly2.shtml>. Methods for locating the approximate center of a tropical cyclone such as that described in Landsea et al. (2004) were used. Criteria for inclusion in the new final compilation included evidence consistent with a tropical storm or hurricane (tropical depressions are not included in this list). The evidence for each storm which can be consistently applied throughout the 1700–1855 period includes one or more of the following: evidence of a closed surface low pressure center; gradual wind shifts consistent with the apparent motion of the storm; sustained gale force or greater winds; description of sea states and coastal storm surges; barometric pressure (when available and reliable); descriptive accounts which are consistent with the features of tropical cyclones (e.g., strong wind squalls interspersed with periods of much lighter winds that are not associated with local thunderstorm activity); the taking of action by the crew of a ship in the furling and reefing of sails, use of anchors, and other protective measures that are consistent with gale force winds; damage reports on land to natural and man-made structures that are caused by wind damage and not solely by the action of flood waters or heavy rains; protective measures taken on land in preparation for what is believed to be an oncoming tropical cyclone. The last point is to emphasize the direct eyewitness reactions to the weather that we can only reconstruct from written records, even if the eyewitnesses were fortunate enough to be by-passed by an anticipated storm. Candidate storms from all months of the year were examined. Most storms in the months of December through May were rejected because they were determined to be extra-tropical in nature, although powerful and producing hurricane force winds in some instances. A good example of such a rejected storm is the storm of 20 January 1855, which was actually a major winter snowstorm that affected the eastern coast of the United States. An example of an accepted out-of-season storm is that of December 19–20, 1822, which is copiously documented in newspaper accounts of the Lesser Antilles, and probably originated as an extra-tropical low that moved southward into the region and transformed into a tropical cyclone.

REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

TABLE II
Reliability of sources used by Poey to construct his chronology (1700–1855 only)

Authority cited by Poey	Rejected	Accepted	Total	Ratio of rejected to accepted storms
Edwards (1805)	1	17	18	1:17
Southey (1827)	5	30	35	1:6
Warden	3	18	21	1:6
Morreau de Jonnès (1822)	5	29	34	1:5.8
<i>Annual Register</i> (London)	2	11	13	1:5.5
Johnson (1855)	12	54	66	1:4.5
Schomburgk (1848)	20	86	106	1:4.3
Thomson	2	8	10	1:4
Herrera (1847)	6	23	29	1:3.8
Evans (1848)	23	64	87	1:2.8
Cotte (1787)	4	9	13	1:2.3
Redfield (1831–1843)	29	51	80	1:1.7
Tegg's Chronology (1824)	14	23	37	1:1.7
Perrey	8	14	22	1:1.7
<i>Phillip's Barbados Almanac</i>	11	7	18	1:0.6
Totals	145	444	589	1:3.1

Only sources providing ten or more reports are included. The most reliable source is at top, the least reliable at bottom. Later chroniclers frequently used earlier records when building their chronologies which allows for the propagation of errors forward through time. Poey's bibliography entries for Warden, Perrey, Tegg's Chronology, published in London in 1824 and *Phillip's Barbados Almanac* for 1839 are absent or incomplete and could not be located.

6. Reliability of Early Hurricane Compilers

Table II lists the sources cited by Poey in his compilation and the number of storms they included in their accounts that were accepted and rejected based on the new chronology produced by the author. A ratio of rejected to accepted storms is included. Of the 15 sources that provided ten or more separate storms, an average ratio of rejected to accepted storms was 1:3.1. The most prolific source (and user of previous accounts) Schomburgk (1848) had 106 entries, 20 of which were rejected, and 86 accepted. His ratio of 1:4.3 is better than average. Edwards (1805) is the most accurate source, with a 1:17 ratio, while four sources (Redfield, Perrey, Tegg, and the *Barbados Almanac*) have ratios of 1:2 or worse.

That Redfield should be among the least reliable sources is a surprise. When consideration is made for his research purposes, which involved gathering large amounts of data for all types of storms, both tropical and non-tropical, then the error rate is understandable. Redfield was trying to determine the nature of storms, and being the father of this type of research considerable allowance must be accounted

for. In addition, Poey chose from the records he was provided by Redfield, which may also skew the numbers.

The records produced by Bryan (1805), Warden (1819), Morreau de Jonnès (1822) and Southey (1827) are the most reliable. Apparently, other compilers consulted them. They include Schomburgk (1848), Evans (1848) and Johnston (1855). Johnston apparently borrowed from Schomburgk, as the original edition of his physical atlas included 50 hurricanes through 1837, but the 1855 edition included 127 hurricanes (Poey, 1855), the exact same number included in Schomburgk's 1848 book. In many instances, the authors do not mention the works they consulted, so it is difficult to determine the source document(s) consulted by the original author.

7. Results

7.1. POEY RECORD

Of the 348 individual entries for the years 1700–1855 in the original Poey record (Table I), 198 were accepted and 149 were rejected. Of the 198 entries, a total of 170 unique tropical cyclones were derived, since some entries were for locations affected by the same storm. Of the 149 rejected entries, 131 were unique rejected entries, the excess being due to garbled dating of years, and multiple entries of bad data for the supposed same storm. So, the original Poey list of 348 storms (1700–1855) actually consisted of only 271 separate storm/non-storm events.

Of the 170 accepted tropical cyclones, 13 were undated in Poey and are now dated. The entire 156-year period has an average of just over one tropical cyclone per year, or about 10% of the probable average for the period (assuming modern Atlantic basin seasonal totals of 10 tropical cyclones (Pasch et al., 2004) was also true at this time).

7.2. MILLÁS RECORD

Until the work of Millás (1968), the sources used by Poey were not critically examined. So, for more than a century many of these errors continued to be carried forward by historians of the region and meteorologists without much investigation to its accuracy. The original list of Poey was culled of its obvious non-tropical origin storms and several of the storms correctly assumed to be part of the same system by Tannehill and his predecessors. As mentioned earlier, the Tannehill (1938) record continues to be used as a reference in most hurricane compilations to this day. Millás makes frequent reference to Tannehill.

Millás (1968) modified the Poey record, even though he also uncritically considered Tannehill, Poey and other compilers as equal authorities. The strength of Millás's work was his re-reading of as many of the secondary sources listed in Poey

(1855) as he could find, including those in non-English languages. He also emphasized the calendar differences in the sources he consulted and corrected many long-standing dates. His reliance on these secondary sources was also a major limitation to his efforts as the analysis of primary documents now reveals.

Since Millás made adjustments to the pre-1801 portion of the Poey record, it is of importance to document his adjustments for the years 1700–1800. Twelve storms accepted by Millás (1968), and not included in Poey (1855) were confirmed from independent sources but a number are undated or misdated. Other storms accepted by Millás were rejected outright or the date so garbled (even though the source was valid) as to be useless. Some of these dating and location errors for 1750–1786 are documented in Chenoweth (2003). Table III lists the accepted and rejected Millás storms. The new assessment of his record is that 85 storms from 1700–1800 are accepted with 12 not previously known. Ten of the 85 storms were undated or misdated, limiting their usefulness for climatologists. Between Poey and Millás, a total of 100 unique storms were recorded, with 16 undated prior to this study and only one now remaining undated.

7.3. OTHER WORKS AND A “COMPREHENSIVE” CHRONOLOGY

Many storms that pass through the Caribbean eventually make landfall somewhere within the borders of the United States. Tropical systems documented by Ludlum (1963) were also linked with the new chronology of Caribbean storms and appear in a separate column in Table IV. A number of Ludlum’s storms are undated but new evidence helps to date the storms exactly, or to narrow the date range down to a narrow range of likely dates.

Since 1982, a number of researchers have gathered new information on previously unknown tropical cyclones. Teachout (1982) identified six new storms affecting Bermuda in the 1710s and 1720s. Rappaport and Fernandez-Partagás (1995) identified a number of new storms in both primary and secondary literature. Fernandez-Partagás and Diaz (1995a) cover the final years of the Poey list and added previously unidentified tropical cyclones. Table IV includes only those storms included in HURDAT that were known prior to the work of Fernandez-Partagás. For this reason, readers interested in a complete list of Atlantic tropical cyclones need to consult the HURDAT record as well as Table IV. One new storm in Jamaica and the merging of two HURDAT systems are listed in Table IV and have not yet been added to HURDAT. Other researchers have also added to the record of U.S. land-falling tropical cyclones (e.g. Sandrik and Landsea, 2003; Mock, 2004).

Two additional columns in Table IV include the work by Mock (2004) on South Carolina tropical cyclones. His work is based on extensive archival work on sources from South Carolina not previously studied. Garcia-Herrera et al. (2005) have published a list of tropical cyclones from Spanish archive records and include important new details on both new and previously documented storms.

TABLE III
 Chronological list of Millás (1968) for the years 1700–1800 and cross-referenced with Poey's chronology from Table I. Millás assigned a case number for each storm report, for each century, hence the "Millás assigned case number" for 1700 is the last case assigned by him for 17th century storms. There are gaps in the sequence of numbers between Poey and Millás because Millás studied only storms of the Caribbean region whereas Poey included storms from throughout the Atlantic basin

Year	Date(s)	Location	Status	Millás assigned case number	Millás accepted storm number	Poey candidate storm number	Poey accepted storm number	Reason for rejected status
1700	no date	Barbados	Accepted	65	1	1	1	
1702	no date	Barbados	Accepted	1	2	3	2	
1705	no date	Havana, Cuba	Accepted	2	3			
1707	no date	Antigua, Nevis	Accepted	3	4	5	3	
1708	Oct or Nov	Extreme southern ... Caribbean ...	Rejected	4				Weather not cited in source.
1711	Late July	Jamaica	Rejected	5				Vague reference; no support from logbook data
1712	Sept. 8	Jamaica	Accepted	6	5	6	4	
1712	Sept. 10	Western part of Cuba ...	Accepted	7	5	6	4	Same as above
1713	Sept. 5–6	Guadeloupe, Puerto Rico	Accepted	8	6	8	5	
1713	Oct. 9–10	Northern ... Leeward[s], Virgin Islands ...	Accepted	8	7			
1714	Aug. 13–14	Guadeloupe	Accepted	10	8	9	6	
1714	Sept. 9	Jamaica	Accepted	11	9	10	7	
1714	Sept. 11	Cuba	Accepted	12	9	10	7	
1715	July 30	Southern Bahamas, Straits of Florida	Accepted	13	10			
1715	no date	Santo Domingo	Accepted	14	10			
1718	Sept. 7	Northeastern Puerto Rico	Accepted	15	11			
1718	About Sept. 26	Nevis	Accepted	16	11	12	8	Same as above

(Continued on next page)

REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

 TABLE III
 (Continued)

Year	Date(s)	Location	Status	Millás assigned case number	Millás accepted storm number	Poey candidate storm number	Poey accepted storm number	Reason for rejected status
1718	no date	Martinique	Accepted	17	12			
1720	no date	Barbados	Rejected	18		13		No evidence in logbooks or newspapers
1720	no date	Seas north of Puerto Rico, Bahamas . . .	Accepted	19	13			
1722	Aug. 31	Antilles	Rejected	20				Rejected by Millás also
1722	Sept. 8-9	Jamaica, Grand Cayman	Accepted	21	14	14	9	
1725	no date	Martinique	Accepted	22	15	15	10	
1725	no date	Trinidad	Rejected	23				No evidence of stormy weather cited
1726	Nov. 2	Jamaica	Accepted	24	16	16	11	
1728	Aug. 30	Antigua	Accepted	25	17	17	12	
1728	Sept. 21	North of Antigua, St. Kitts, Nevis	Accepted	26	18			
1730	Aug. 30	Puerto Rico	Accepted	27	19			
1730	Sept. 1	Jamaica	Accepted	28	19			Same as above
1730	Sept. 1	Vibora Key, south of Jamaica	Accepted	29	19			Same as above
1730	Sept. 2-3	Between Havana and Matanzas, Cuba	Accepted	30	20	19	14	See also Millás (1968) p. 184 postscript
1731	no date	Barbados	Accepted	31	21	20	15	Storm now dated from logbooks and newspapers
1731	no date	Windward Passage, between Cuba & Haiti	Accepted	32	21			Same as above
1733	July 10-11	Marie Galante, Guadeloupe . . . Saba	Accepted	33	22	21	16	

(Continued on next page)

TABLE III
(Continued)

Year	Date(s)	Location	Status	Millás assigned case number	Millás accepted storm number	Poey candidate storm number	Poey accepted storm number	Reason for rejected status
1733	July 15	Southern Bahamas, Florida Straits...	Accepted	34	22	21	16	Same as above
1733	July 16	Pinar del Rino Province, western... Cuba	Rejected	35				Newspapers and logbooks disprove location
1734	Sept. 12	Jamaica	Accepted	36	23	22	17	
1737	Sept. 8-9	Montserrat... , St. Kitts, Santo Domingo	Accepted	37	24	23	18	
1738	Aug. 30-31	Puerto Rico, southern Hispanolia	Accepted	38	25	24	19	
1738	Sept. 10-13	Guadeloupe, St. Thomas, Puerto Rico...	Rejected	39	25			Details are for above storm
1738	no date	Aneagada, Virgin Islands	Accepted	40	25			Same as Aug. 30-31 storm
1739	Sept. 9	Antilles	Rejected	41				Rejected by Millás also
1740	Aug. 1-4	Martinique, Dominica... , Santo Domingo	Rejected	42				No evidence in logbooks or newspapers
1740	Sept. 11-12	Puerto Rico	Accepted	43	26	27	20	
1742	Oct. 27-28	Virgin Islands, Puerto Rico	Accepted	44	27	28	21	
1743	Sept.	Caribbean Sea	Accepted	45	28			Location is very suspect
1744	Oct. 31-Nov. 1	Jamaica	Accepted	46	29	29	22	
1744	Nov.	Cuba	Accepted	47	29	29	22	
1745	no date	Lesser Antilles, between Cuba and Haiti	Accepted	48	30	30	23	Same as above
1747	Oct. 2	Leeward Islands	Accepted	49	31	32	24	
1747	Nov. 4	Leeward Islands	Accepted	50	32	33	25	

(Continued on next page)

REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

 TABLE III
 (Continued)

Year	Date(s)	Location	Status	Millás assigned case number	Millás accepted storm number	Poey candidate storm number	Poey accepted storm number	Reason for rejected status
1751	July 6	Haiti	Rejected	51		34		Rejected by Millás (1968)
1751	Aug. 21	Jamaica	Rejected	52		34		Rejected by Millás (1968)
1751	Sept. 13	Jamaica	Rejected	53		34		Rejected by Millás (1968)
1751	Sept. 15	Santo Domingo	Rejected	54		34		Incorrect date
1751	Aug. 18	Puerto Rico	Rejected	55				No evidence in logbooks or newspapers
1751	Sept. 21–22	Seas south of . . . Jamaica	Accepted	56	33			
1751	late Oct.	Santo Domingo, Haiti, Jamaica	Rejected	57		35		
1754	Sept. 13–15?	Leeward Islands, Santo Domingo	Accepted	58	34	37	27	
1755	Nov. 1	Cuba (Santiago de Cuba)	Rejected	59				Rejected by Millás also
1756	Aug. 23	Barbados	Rejected	60		37		No evidence in logbooks; misdated 1758 storm
1756	Sept. 12	Martinique	Accepted	61	35	39	28	
1756	Oct. 1	Cayman Islands	Accepted	62	36			
1756	Oct. 2–3	A short distance east of Havana, Cuba	Accepted	63	36			Same as above
1757	Aug. 29	Barbados	Rejected	64		40		Rejected by Millás also
1758	Aug. 23–24	Seas north of Barbados . . .	Accepted	65	37	38	30	
1759	Sept.	Central part of Cuba	Accepted	66	38	42	31	
1760	Oct. 25	Barbuda	Rejected	67				No evidence in logbook
1762	Dec. 9	Cartagena, Colombia	Rejected	68		44		Incorrect year

(Continued on next page)

TABLE III
(Continued)

Year	Date(s)	Location	Status	Millás assigned case number	Millás accepted storm number	Poey candidate storm number	Poey accepted storm number	Reason for rejected status
1764	no date	Martinique, Cartagena, Caribbean Islands	Rejected	69				Rejected by Millás also
1765	July 31	Martinique, Guadeloupe	Accepted	70	39	45	32	
1765	Sept.	Martinique... Saint Christopher	Rejected	71		45		Confused with July storm
1765	Nov. 13-14	Santo Domingo	Accepted	72	40	46	33	
1766	June 11	Cuba	Rejected	73				Rejected by Millás also
1766	Aug. 13	Northern part of Martinique	Accepted	74	41	47	34	
1766	Aug. 16	West of Jamaica	Accepted	75	41	47	34	
1766	Sept. 13-15	Montserrat, Redonda, Nevis, St. Kitts	Rejected	76	42	49		Misdated
1766	Sept. 19	Eastern part of Puerto Rico	Accepted	77	42	49		
1766	Sept. 21	Saint Eustatius and Tortugas	Accepted	78	42	49	36	Same storm as above
1766	Oct. 6-8	Dominica, Guadeloupe... Puerto Rico	Accepted	79	43	50	37	
1766	Oct. 31	Western Caribbean sea...	Accepted	80	44			See Garcia-Herrera et al. (2005)
1767	Aug. 7	Puerto Rico	Accepted	81	45			
1768	Aug. 12	Grenada, Windward Islands	Rejected	82		52		Storm was on Aug. 10
1768	no date	Antigua	Rejected	83				No evidence in logbooks or newspapers
1768	Oct. 15	Western part of Cuba, Havana	Accepted	84	46	53	39	
1768	Oct. 25	Cuba, Havana	Rejected	85				Rejected by Millás also
1771	Aug.	St. Eustatius	Rejected	86		57		Rejected by Millás also

(Continued on next page)

REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

 TABLE III
 (Continued)

Year	Date(s)	Location	Status	Millás assigned case number	Millás accepted storm number	Poey candidate storm number	Poey accepted storm number	Reason for rejected status
1772	July 16	Seas north of Puerto Rico	Rejected	87				de Cordova unreliable source
1772	Aug. 4–5	Santo Domingo	Accepted	88	47	58	41	
1772	Aug. 16	Santiago de Cuba, Cuba	Rejected	89		60		Incorrect date
1772	Aug. 17	Southern part of Antigua	Rejected	90		60		Garble of correct 27–28 August date
1772	Aug. 28–Sept. 3	Northern Leeward[s]... Gulf of Honduras	Accepted	91	48	60	42	Latter part of track incorrect
1772	Aug. 30–Sept. 1	Lesser Antilles... Puerto Rico	Accepted	92	49	60	42	
1772	Sept. 1–4	Dominica, Santo Domingo	Accepted	93		60	42	Rejected by Millás
1772	Oct. 18	Leeward Islands	Rejected	94				No evidence in logbooks or newspapers
1772	Nov. 22	St. Kitts, St. Eustatius	Rejected	95		61		No evidence in logbooks or newspapers
1773	July 18–22	... near Virgin Islands...; western Bahamas	Accepted	96	50	62	43	
1773	Aug. (second half)	Tobago	Rejected	97				No storm anytime in August or September
1774	no date	Cuba	Rejected	98				See also Millás (1968) p. 241 postscript
1774	Sept. 6	Guadeloupe	Rejected	99		64		Incorrect year; see 1776 entry
1774	Oct. 2 or 20	Jamaica	Rejected	100		65		No evidence (Chenoweth, 2003)
1775	July 30–Aug. 1	Martinique, Aves... Santo Domingo	Accepted	101	51	66	44	
1775	Aug. 25	Martinique	Accepted	102	52	67	45	
1775	Aug. 27	Santo Domingo	Accepted	103	52	67	45	Same as above

(Continued on next page)

TABLE III
(Continued)

Year	Date(s)	Location	Status	Millás assigned case number	Millás accepted storm number	Poey candidate storm number	Poey accepted storm number	Reason for rejected status
1775	Sept. 14–15	Santo Domingo, Haiti... Great Inagua Island	Rejected	104	68			Garbled account
1775	Oct. 16	St. Kitts	Accepted	105	53	69	46	
1776	Sept. 5–7	Lesser Antilles... distant from Puerto Rico	Accepted	106–108	54	64	47	
1778	no date	Havana, Cuba	Rejected	109	70			Rejected by Millás also
1778	Oct. 28–31	Province of Oriente, Cuba	Rejected	110	70			Incorrect year – occurred on Oct. 28, 1777
1779	Aug. 28	Martinique	Accepted	111				
1779	Sept. 4–5	Northern part of Antigua; Nevis	Rejected	112	55			Charleston, SC account, not Nevis
1779	Oct. 3	Windward Islands and Jamaica	Rejected	113				Rejected by Millás also
1780	June 12–14	St. Lucia, Puerto Rico, Santo Domingo	Rejected	114				Confused with Oct. 12–14 storm in same year
1780	Aug. 25	St. Kitts	Accepted	115	56	73	50	
1780	Sept. 30	Dominica	Rejected	116				Rejected by Millás also
1780	Oct. 3–5	Western Jamaica... central Bahamas	Accepted	117	57	74	51	
1780	Oct. 10–16	Barbados and several other islands	Accepted	118	58	75	52	
1780	Oct. 17–21	Seas north of ... Cuba... Gulf of Mexico	Accepted	119	59	76	53	

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REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

TABLE III
(Continued)

Year	Date(s)	Location	Status	Millás assigned case number	Millás accepted storm number	Poey candidate storm number	Poey accepted storm number	Reason for rejected status
1780	Oct. 31	Barbados	Rejected	120				Rejected by Millás also
1781	Aug. 1	Jamaica	Accepted	121	60	79	54	
1781	Sept. 5	Santo Domingo	Accepted	122	61	81	56	
1782	probably July 28	Dominica	Rejected	123				No evidence in logbooks or newspapers
1782	July 31–Aug. 1	Jamaica	Rejected	124		79		No evidence in logbooks or newspapers
1784	July 10–11	Jamaica	Rejected	125		86		No evidence in logbooks or newspapers
1784	July 30	Jamaica	Accepted	126	62	86	58	
1784	Aug. 1–3	Santo Domingo	Rejected	127	62			Misdated; actually same as above storm
1784	no date	Curacao	Accepted	128	63			
1785	July 6	West Indies	Rejected	129	64	87		Garbled date – is August storm
1785	July 25	St. Croix	Rejected	130	64	88		Garbled date – is August storm
1785	Aug. 25	Guadeloupe, St. Kitts	Accepted	131	64	88	59	
1785	Aug. 27	Jamaica, Cayman Islands	Accepted	132	64	88	59	
1785	Aug. 31	Barbados, Guadeloupe, . . .	Rejected	133	64	88		Garbled date – is August storm
1785	Sept. 25	Puerto Rico	Rejected	134	64	88		Garbled date – is August storm
1785	Sept. 27	St. Domingo	Rejected	135	64	88		Garbled date – is August storm
1786	Aug. 11–14	Barbuda. . . Jamaica	Rejected	136	64	90		No evidence in logbooks or newspapers
1786	Sept. 2–3	Barbados	Accepted	137	65	92	62	
1786	Sept. 10	Guadeloupe, Marie Galante, . . .	Rejected	138		93		
1786	Oct. 5	Barbados, Grenada	Rejected	139		92		No evidence in logbooks or newspapers
1786	Oct. 20	Jamaica	Accepted	140	66	94	63	
1787	July 6	Grenada, Windward Islands	Rejected	141				No evidence in logbooks or newspapers

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TABLE III
(Continued)

Year	Date(s)	Location	Status	Millás assigned case number	Millás accepted storm number	Poey candidate storm number	Poey accepted storm number	Reason for rejected status
1787	around July 20	French Antilles	Rejected	142	96			No evidence in logbooks or newspapers
1787	Aug. 3	Dominica	Accepted	143	67	97	64	
1787	Aug. 23	Dominica . . . Guadeloupe and Martinique	Accepted	144	68	99	66	
1787	Aug. 29	Dominica	Accepted	145	69	100	67	
1787	Sept. 2	Honduras	Accepted	145	69	100	67	Same as above
1787	Sept. 23	Belize, British Honduras	Accepted	146	70	102	68	
1788	Aug. 14–15	Martinique, Dominica, Guadeloupe	Accepted	147	71	107	70	
1788	Aug. 16–17	Seas south of . . . Puerto Rico . . .	Accepted	148	71	107	70	Same as above
1788	Aug. 29–31	Dominica, Santo Domingo	Rejected	149	69	100		Incorrect year
1788	Oct. 12	Grenada, Windward Islands	Rejected	150				Earthquake only – logbooks show no storm
1790	July 31	Jamaica	Rejected	151		108		No evidence in Jamaican newspapers
1790	Aug. 10	Tobago	Accepted	152	72			
1790	Aug.	Antigua, Nevis, . . . Redonda	Rejected	153	72	107		Details are for Tobago storm
1791	June 21–22	Western part of Cuba; Havana	Accepted	154	73	112	73	
1791	Sept. 27	Cuba, probably eastern half	Accepted	155	74	113	74	
1791	Oct. 20	Jamaica	Rejected	156				
1792	July 14	St. Kitts and probably other . . . islands	Accepted	157	75	114	75	

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REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

 TABLE III
 (Continued)

Year	Date(s)	Location	Status	Millás assigned case number	Millás accepted storm number	Poey candidate storm number	Poey accepted storm number	Reason for rejected status
1792	Aug. 1–6	Antigua, St. Kitts, . . . ; Bermuda Islands	Accepted	159	76	115	76	
1792	Sept. 10	Antigua	Rejected	159		116		
1792	Oct. 29	Western half of Cuba	Accepted	160	77	117	77	
1793	Aug. 12–13	St. Kitts, St. Eustatius, St. Thomas	Accepted	161	78	118	78	
1794	Aug. 27–28	Havana, Cuba	Accepted	162	79	119	79	
1794	Oct. 27–28	Cuba	Rejected	163				Rejected by Millás also
1795	Aug. 10	Jamaica	Rejected	164		120		No storm at Jamaica
1795	Aug. 18	Antigua	Accepted	165	80	121	80	
1796	Oct. 2–4	Cuba, Bahamas	Accepted	166	81	122	81	
1796	Oct. 24	Cuba (Havana)	Rejected	167		122		Garble of October 2–4 dates
1796	Nov. 2	Havana, Cuba	Rejected	168		122		Incorrect month; actually is October storm
1799	no date	Southern coast of central Cuba	Accepted	169	82	123	82	
1800	Aug.	Great Inagua Island, Bahamas	Accepted	170	83			
1800	Aug. 10	North of . . . Tobago and Trinidad	Accepted	171	84			
1800	Oct. 14–15	Cuba	Rejected	172				Rejected by Millás also
1800	Nov. 2	Province of Oriente, Cuba	Accepted	173	85	124	83	

TABLE IV

Chronological list of the most important chronologies and data sources for Atlantic basin tropical cyclones for 1700–1850. The 1851–1855 portion of the table is included to maintain continuity with the cross-references in Tables 1 and 2 but the HURDAT record (Landsea et al., 2004) should also be consulted for a more complete list of storms in these years. The “final storm number” is an arbitrary storm number assigned and cross-referenced with Tables I and II and also with Ludlum (1963), Mock (2004) and Garcia-Herrera et al. (2005). The number of logbooks and individual newspaper accounts used in the re-analysis are listed and do not represent the number of sources used by earlier compilers. “This work” refers to sources used by this author to re-analyze and correct erroneous information in previous chronologies (e.g., incorrect linking of unique storms). In many instances, the dates and locations are expanded beyond the work done by other researchers based on original source documents collected by the author but too numerous to be listed in this publication. The record in Chenoweth (2003) is updated and corrected here to account for new research since its compilation, removing and adding a small number of storms in the Jamaica area

Modern calendar dates are used	Year	Date range	Localities	Final storm number	Poey accepted storm number	Millás accepted storm number	Ludlum accepted storm number	Mock (2004) accepted storm number	Garcia-Herrera et al. (2005) accepted storm number	This work re-analysis		Other references and notes	
										Number of logbooks consulted	Estimated maximum items from newspapers intensity		
	1700	13–14 September	South Carolina and Virginia	1		1	1	1		1	0	HU	
	1700	20 September	Barbados	2	1	1				1	0	HU	Previously undated
	1702	24–26 September	Barbados to 1711N 6949W	3	2	2				1	0	HU	Previously undated
	1703	18–19 October	Virginia to New England	4			2			1	0	HU	Rappaport and Fernandez-Partagás (1995)
	1705	16–18 August	Havana, southeast coast of Florida	5		3				1	2	HU	
	1706	5–15 October	Barbados to New England	6			3			1	1	TS	
	1707	9–11 September	Nevis, Antigua, Montserrat, St. Thomas	7	3	4			1	4	3	HU	
	1707	30 September	St. Augustine, Florida	8						0	0	HU	Sandrik and Landsea (2003) see http://www.aoml.noaa.gov/hrd
	1712	6–10 September	Barbados-Jamaica-Cuba	9	4	5				5	2	HU	

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REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

 TABLE IV
 (Continued)

Year	Date range	Localities	Final storm number	Poey storm number	Millás accepted storm number	Ludlum accepted storm number	Mock (2004) accepted storm number	García-Herrera et al. (2005) accepted storm number	This work re-analysis		Other references and notes	
									Number of logbooks consulted	Number of items from newspapers		
1712	19 September	Bermuda	10						0	1	HU	Teachout (1982)
1713	4–6 September	Lesser Antilles, Puerto Rico	11	5	6				1	2	HU	
1713	10–17 September	North of Antigua to South Carolina	12			4	2		1	2	HU	
1713	7–15 October	Antigua to Nova Scotia	13		7				2	1	HU	
1713	24–26 October	Jamaica (to Bermuda?)	14						2	0	HU	Teachout (1982)
1714	13–14 August	Guadeloupe	15	6	8				0	0	HU	
1714	5–9 September	Barbados to Jamaica	16	7	9				1	0	TS	
1715	21–31 July	Barbados to Florida	17		10	5			0	3	HU	See also http://www.ucm.es/info/tropical/data.htm
1715	26 August	Tampico, Mexico	18					2	0	0	HU	
1715	14–20 October	West of Jamaica to Mobile, Alabama	19			6			1	0	HU	
1716	20 August	Bermuda	20						0	2	HU	Teachout (1982)
1716	13–22 October	Jamaica to Alabama to off New England	21	8	11	7			5	0	HU	
1718	6–7 September	Antigua, Puerto Rico	22		12			3	1	0	HU	

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TABLE IV
(Continued)

Modern calendar dates are used	Year	Date range	Localities	Final storm number	Poey accepted storm number	Millás accepted storm number	Ludlum accepted storm number	Moek (2004) accepted storm number	Garcia-Herrera et al. (2005) accepted storm number	This work re-analysis		Other references and notes
										Number of consulted logbooks	Number of items from maximum intensity newspapers	
	1718	19–21 September	Martinique	23		13				1	0	HU
	1720	No date	North of Puerto Rico to Florida Straits	24	9	14				2	0	HU
	1722	6–12 September	Jamaica to Louisiana	25			8			5	6	HU
	1722	18–23 September	Charleston, South Carolina	26			9	3		3	3	TS
	1723	4–9 August	North of Antigua to New York City	27			10			4	7	HU
	1724	22–30 August	Lesser Antilles to South Carolina to Pennsylvania	28			11	4		6	5	HU
	1725	23–24 September	Martinique	29	10	15				1	0	HU
	1726	11–19 September	North of Antigua to Bermuda	30						4	1	HU
	1726	No date	Bermuda	31						0	0	HU
	1726	1–2 November	Jamaica	32	11	16				1	5	HU
	1727	24–27 September	3837N 6715W; Eastern New England	33			12			1	2	HU
	1728	13–14 August	Charleston, South Carolina	34	13		13	5		0	2	HU
	1728	28 Aug.–2 Sept.	Antigua to St. Thomas to Hispanolia	35	12	17				6	5	HU

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REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

TABLE IV
(Continued)

Year	Date range	Localities	Final storm number	Poey accepted storm number	Millás accepted storm number	Ludlum accepted storm number	Mock (2004) accepted storm number	Garcia-Herrera et al. (2005) accepted storm number	This work re-analysis		Other references and notes
									Number of logbooks consulted	Number of items from newspapers	
1728	31 Aug.-8 Sep.	North of Leewards to Bermuda to 42N 53W	36						2	1	HU Teachout (1982)
1728	21-30 September	Antigua to 33N 71W	37		18				2	0	HU
1729	14-19 August	Northern Leeward Islands to South Carolina	38					4	7	3	HU Garcia-Herrera et al. (2005) http://www.ucm.es/info/tropical/data.htm have undated Puerto Rico storm. Undated in Mock (2004)
1730	26 Aug.-7 Sep.	Barbados to South Carolina	39		19	14	6		7	8	HU
1730	15-20 Oct.	Jamaica, Cuba	40	14	20			5	3	0	HU
1731	24 Aug.-5 Sep.	Barbados to Windward Passage to off South Carolina to 41N 51W	41	15	21			6	7	8	HU
1733	10-16 July	Central Lesser Antilles to Florida Straits	42	16	22			7	2	17	HU
1733	Probably August	Florida Keys to Alabama	43			15			0	1	HU
1734	9-12 September	Barbados to Jamaica	44	17	23			3	3	5	HU

(Continued on next page)

TABLE IV
(Continued)

Modern calendar dates are used	Year	Date range	Localities	Final storm number	Poey accepted storm number	Millás accepted storm number	Ludlum accepted storm number	Mock (2004) accepted storm number	Garcia-Herrera et al. (2005) accepted storm number	This work re-analysis		Other references and notes
										Number of consulted logbooks	Number of items from newspapers	
	1736	16-?? September	West of Grand Cayman to Pensacola, Florida	45			16			1	2	HU
	1737	7-10 September	Antigua to Hispanolia	46	18	24				3	7	HU
	1738	28-31 August	Antigua to Puerto Rico	47	19	25				5	21	HU
	1740	8-22 September	Antigua to Nassau to Dry Tortugas to Lotuisiana	48	20	26	17		8	9	17	HU
	1740	29 September	Mobile, Alabama	49			18			0	0	HU
	1742	25-31 October	Virgin Islands to Puerto Rico to Hispanolia	50	21	27				7	0	TS
	1743	10 September	Jamaica Fleet and South Carolina coast	51		28		7		0	0	HU
	1743	28 Oct.-4 Nov.	Jamaica to off coast of U.S.	52			19			3	3	TS
	1744	31 Oct.-1 Nov.	Jamaica, Cuba	53	22	29			9	1	1	HU
	1745	16-19 October	Windward Passage	54	23	30				4	0	TS
	1746	10-14 September	Barbados to Florida Keys to central U.S. Gulf Coast	55			20			0	3	HU

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										Number of consulted logbooks	Number of items from newspapers	
	1747	26–27 September	3847N 5423W to 4014N 5254W	56						0	2	HU Rappaport and Fernandez-Partagás (1995); This work
	1747	29 Sep–6 Oct.	Lesser Antilles to 4306N 5530W	57	24	31				5	9	HU
	1747	13–18 October	Jamaica to Nassau to Bermuda	58				8		0	3	HU
	1747	3–6 November	St. Kitts	59	25	32				2	5	HU
	1749	16–21 September	Dominica to Rattan (Bay of Honduras)	60						0	5	HU Misdated in R & F-P (1995); This work
	1749	14–21 October	Jamaica to Delaware	61			21			1	15	HU
	1750	28–30 August	28–29N off Florida to Virginia Capes	62					10	2	6	HU Misdated in R & F-P (1995); Undated in Garcia-H et al. (2005) and http://www.ucm.es/info/tropical/data.htm
	1751	24 July	Havana	63						0	1	HU Rappaport and Fernandez-Partagás (1995)
	1751	18–28 September	Antigua to Jamaica to Florida	64		33			11	5	20	HU See also Chenoweth (2003)
	1751	6–7 October	Jamaica	65						0	0	TS Chenoweth (2003)
	1752	8–16 September	St. Kitts to South Carolina	66	26		22	9	3	3	12	HU

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										Number of consulted logbooks	Number of items from newspapers	
	1752	26 Sept.–2 Oct.	Havana to Nova Scotia	67			23		12	3	22	HU See also R & F-P (1995) and Chenoweth (2003)
	1752	28 Oct.–3 Nov.	Havana to Pensacola	68			24			0	8	HU See also Chenoweth (2003); mis-dated in R & F-P (1995)
	1753	24–25 August	Cumberland Is., Georgia	69						0	0	TS Sandrik and Landsea (2003) see http://www.aoml.noaa.gov/hrd
	1754	12–26 September	Lesser Antilles to off North Carolina	70	27	34				5	20	HU
	1755	8 October	Jamaica	71						0	0	TS Chenoweth (2003)
	1756	12–17 September	Leewards Islands to Jamaica	71	28	35				1	6	HU Chenoweth (2003)
	1756	1–3 October	Cayman Islands, Cuba	72						0	1	HU
	1757	22–25 September	Eastern New England, Nova Scotia	73	29		25			1	6	HU
	1758	22–24 August	Lesser Antilles	74	30	37				2	15	HU See also Chenoweth (2003)
	1758	17–24 October	West of Jamaica to Florida to New Jersey coast	75			26			0	3	HU
	1759	12–15 September	Near Jamaica to Southwest Florida	76	31	38	27			1	0	HU See also Chenoweth (2003)
	1760	6 July	Charleston, South Carolina	77					10	0	0	TS

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									Number of logbooks consulted	Number of items from newspapers		Estimated maximum intensity
1760	12 August	Pensacola, Florida	78			28			0	0	HU	See also http://www.ucm.es/info/tropical/data.htm
1760	7–8 September	Vera Cruz, Mexico	79				13		0	0	HU	
1760	1–6 October	Jamaica to South Carolina to 36N 72W	80				11		0	3	HU	Chenoweth (2003)
1761	22–23 September	West of Jamaica	81						0	0	TS	Chenoweth (2003)
1761	19–25 October	Northwest of Jamaica to Hispanolia to Quebec	82			29			0	4	HU	Chenoweth (2003); now assessed to be the same storm
1761	9–10 November	Cartagena, Colombia	83						1	0	HU	This work
1762	4–5 October	Southwest of Jamaica	84						0	0	TS	Chenoweth (2003)
1763	16 June	West of Jamaica	85						0	0	TS	Chenoweth (2003)
1763	5–6 November	South of Jamaica	86						0	0	TS	Chenoweth (2003)
1764	2–3 October	Near western Jamaica	87						0	0	HU	Chenoweth (2003)
1764	16–20 November	Apalachee Bay, Florida and western Carolinas	88			30			3	0	HU	
1765	30–31 July	Lesser Antilles	89	32	39				1	18	HU	

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										Number of consulted logbooks	Number of items from newspapers	Estimated maximum intensity	
	1765	7–16 August	Lesser Antilles-Hispaniola-off New England coast	90						3	11	HU	This work
	1765	17 October	South Carolina	91				12		0	0	TS	
	1765	13–14 November	Caribbean to St. Domingo	92	33	40				2	0	TS	
	1766	13–16 August	Martinique to south of Jamaica	93	34	41				1	20	HU	See also Chenoweth (2003)
	1766	1–4 September	Gulf of Mexico to Texas	94			31			0	4	HU	See also Rappaport and Fernandez-Partagas (1995)
	1766	8–13 September	Atlantic to Off Virginia to west of New York City	95	35		32		14	1	1	TS	
	1766	17–24 September	Lesser Antilles to 2345N 6403W to 33N 57W to Azores	96	36	42			15	0	16	HU	
	1766	5–13 October	Lesser Antilles to Puerto Rico to off South Carolina	97	37	43			16	5	45	HU	
	1766	15–24 October	South of Haiti and Jamaica to Pensacola, Florida	98	38				3	3	5	HU	See also Chenoweth (2003)

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									Number of logbooks consulted	Number of items from newspapers		Estimated maximum intensity
1766	29 Oct.–1 Nov.	Havana to east of Florida	99		44			17	0	2	HU	
1767	6–10 August	Lesser Antilles to 3148N between SC and Bermuda	100		45				1	26	HU	
1767	21–24 September	Off North Carolina to southeast Massachusetts	101						0	4	TS	Rappaport and Fernandez-Partagás (1995); This work
1767	13–18 October	Gulf of Mexico to SE US coastal waters to 35N 73W	102			33	13		3	15	HU	
1768	8–10 August	Barbados to Grenada	103						2	3	HU	This work
1768	15 October	Western Cuba	104	39	46			18	1	4	HU	
1769	7–9 August	South of Jamaica	105						0	1	TS	Chenoweth (2003)
1769	4–9 September	23N 64W to New England	106			34	14		3	46	HU	
1769	28–29 September	South Carolina	107						0	6	TS	
1770	6 June	Charleston, South Carolina	108	40					3	3	TS	
1770	19–20 October	3530N 7330W to New England	109			35			1	13	HU	
1771	23–24 May	West of Jamaica to Cuba	110						1	1	TS	Chenoweth (2003)

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										Number of consulted logbooks	Number of items from newspapers	
	1771	30 Sept.–4 Oct.	Florida Keys to off coast South Carolina	111				17		2	3	HU This work
	1772	2–6 August	Antigua to north of Jamaica to Bayamo, Cuba	112	41	47			19	3	11	HU See also Chenoweth (2003)
	1772	30 August to 3 Sept.	3330N 7455W to off Cape Henlopen	113			37			2	7	HU
	1772	28 August to 3 Sept.	Havana to Louisiana	114			36		20	0	1	HU See also Chenoweth (2003)
	1772	27–29 August	North of Antigua	115		48				2	9	HU
	1772	29 August to 5 Sept.	Antigua to western Cuba	116	42	49				2	23	HU See also Chenoweth (2003)
	1773	21 June	Tobago to Grenada	117						1	2	TS This work
	1773	20–21 July	Bahamas to Cuba	118	43	50				0	1	HU
	1773	26 August	North Carolina to Virginia	119			38			0	2	HU North Carolina portion misdated 01 September See also http://www.ucm.es/info/tropical/data.htm
	1773	10–19 September	Tobago to Venezuela to southwest of Western Cuba	120					21	8	4	HU
	1774	1–3 November	Cuba to north of Bahamas to 30N 67W	121					22	0	4	HU This work
	1775	30 July–1 August	Martinique to Puerto Rico	122	44	51				1	3	TS

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										Number of logbooks consulted	Number of items from newspapers	
	1775	24 August–3 Sept.	Barbados to Maryland	123	45	52	39		23	6	5	HU
	1775	5–12 September	Leeward Islands to Newfoundland	124						6	14	HU
	1775	12–14 September	Antigua to Cuba	125						1	1	TS
	1775	16–19 October	North and Central Leeward Islands	126	46	53				3	8	TS
	1776	5–12 September	Guadeloupe to Louisiana	127	47	54				3	15	HU
	1777	23–31 October	Eastern Caribbean to Cuba	128					24	4	2	HU
	1777	22–23 November	Southeast of Jamaica and across western Haiti	129						4	0	TS
	1778	5 June	Jamaica	130						1	0	TS
	1778	7–13 August	Bahama Banks to New England	131			40	18		3	8	HU
	1778	16–17 September	Jamaica	132						1	0	HU
	1778	29 Sept.–10 Oct.	Tobago to Pensacola, Florida	133			41		25	4	0	HU
	1779	25–26 May	West of Jamaica	134						0	0	HU
	1779	18 August	New Orleans	135	48		42		26	0	1	HU
	1779	28 Aug.–3 Sept.	Martinique to near South Carolina	136		55			3	10	10	TS

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										Number of consulted logbooks	Number of items from newspapers	Estimated maximum intensity		
	1780	24 August	Louisiana	137	49		43		27	1	0	0	HU	
	1780	25–26 August	St. Kitts	138	50	56				6	1	1	TS	
	1780	2–8 October	Western Jamaica to 37N 6745W	139	51	57	44		28	3	12		HU	See also Chenoweth (2003)
	1780	10–20 October	Barbados to Bermuda to 43N 50W	140	52	58	45			15	19		HU	
	1780	15–26 October	Near Jamaica to Gulf of Mexico to 4450N 4228W	141	53	59	46		29	2	1		HU	See also Chenoweth (2003)
	1781	1–2 August	Jamaica	142	54	60				2	12		HU	See also Chenoweth (2003)
	1781	9–11 August	South Carolina and North Carolina	143	55		47	19		0	1		HU	
	1781	16–23 August	West of Jamaica to New Orleans	144						0	0		HU	Tannehill (1938); Chenoweth (2003)
	1781	3–7 September	St. Lucia to southwest of Jamaica	145	56	61				6	6		TS	See also Chenoweth (2003)
	1781	2–3 November	West of Jamaica	146						0	0		TS	Chenoweth (2003)
	1782	30 June	Southwest of western Jamaica	147						0	0		TS	Chenoweth (2003)
	1782	15 August	Florida Straits	148						0	4		HU	Rappaport and Fernandez-Partagás (1995); This work
	1782	16 September	North Atlantic	149	57					0	8		HU	

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										Number of consulted logbooks	Number of items from newspapers		Estimated maximum intensity
	1783	15–20 September	Off U.S. coast	150						0	7	HU	Rappaport and Fernandez-Partagás (1995)
	1783	5–9 October	West of Jamaica to New England	151			48	20		3	15	HU	See also Chenoweth (2003)
	1784	10–17 July	Grenada to Curacao to Honduras	152		63				3	3	HU	Undated in all previous chronologies
	1784	27 July–5 Aug.	Dominica to Jamaica to Pensacola, Florida	153	58	62				2	21	HU	See also Chenoweth (2003)
	1785	23–31 Aug.	Northern Leewards to Jamaica to Belize	154	59	64			30	5	48	TS	See also Chenoweth (2003)
	1785	10 September	Charleston, South Carolina	155				21		0	0	TS	
	1785	16–25 September	Leeward Islands to Bahamas to NC to Canada	156	60		49			3	29	HU	
	1786	5 June	Western Jamaica	157						0	1	TS	Chenoweth (2003)
	1786	29 August	Off US coast	158	61		50			0	4	HU	
	1786	2–10 September	Barbados to Nassau to off South Carolina	159	62	65		22		0	15	HU	
	1786	28 September	Charleston, South Carolina	160				23		0	0	TS	
	1786	19–23 Oct.	Jamaica to Havana to Bahamas	161	63	66				1	15	HU	See also Chenoweth (2003)

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									Number of consulted logbooks	Number of items from newspapers	
1787	2–7 August	Dominica to Grand Caicos to 40N 64W	162	64	67			2	11	TS	
1787	6–11 August	Grenada to Jamaica to Bahamas Bank	163					3	2	TS	This work
1787	15–16 August	South tip of Florida	164	65				4	4	HU	
1787	23–28 August	Central Leewards to Bahamas to South Carolina	165	66	68	24		3	33	HU	
1787	29 August–2 Sept.	Dominica to Belize	166	67	69			3	12	HU	
1787	16 September	South Carolina	167			25		0	0	TS	Ludlum (1963) quotes a Redfield MS giving incorrect date of 19 September
1787	19–23 September	Eastern Cuba and Jamaica to Belize	168	68	70			1	1	HU	
1788	4 June	Near western Jamaica	169					0	1	TS	Chenoweth (2003)
1788	19–24 July	Bermuda to US	170	69		51		3	32	HU	
1788	14–16 August	Central Leewards to Haiti	171	70	71			3	35	HU	
1788	17–19 August	SE Pennsylvania to western New England	172			52		0	11	TS	
1788	8–9 September	Jamaica	173					0	1	TS	Chenoweth (2003)

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									Number of consulted logbooks	Number of items from newspapers		
1788	19–23 September	US Coast to Newfoundland	174	71			26		1	4	TS	
1788	29 Sept.–6 October	South of Jamaica to eastern Caymans to South Carolina	175			27			3	2	TS	Chenoweth (2003)
1789	17–18 August	New Orleans	176					31	0	0	HU	See also http://www.ucm.es/info/tropical/data.htm
1790	10–12 August	Tobago to Curacao	177		72			32	1	12	HU	See also http://www.ucm.es/info/tropical/data.htm
1790	29 Aug.–2 Sept.	Barbados to Jamaica	178						1	17	HU	This work
1791	18–23 June	Western Cuba to Florida Panhandle	179	73	73				0	4	HU	
1791	27 Sept.–4 Oct.	Jamaica to Bahamas to 37N 62W	180	74	74				0	10	HU	
1792	14 July	St. Eustatia, St. Kitts	181	75	75				0	3	TS	
1792	1–12 August	Leeward Islands to near Caicos Is. To 37N 57W	182	76	76				0	53	HU	
1792	29–31 October	Western Cuba to South Carolina	183	77	77	53	28	33	0	9	HU	

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									Number of consulted logbooks	Number of items from newspapers	Estimated maximum intensity		
1793	12–18 August	Northern Leewards to Bahamas to Louisiana	184	78	78	54		34	1	33		HU	
1793	21–23 October	Western Jamaica to Bermuda	185						0	14		HU	Chenoweth (2003)
1794	28 May	West of Jamaica	186						0	1		TS	Chenoweth (2003)
1794	10–11 August	New Orleans	187					35	0	0		HU	
1794	25 Aug.–1 Sept.	Cuba to Louisiana	188	79	79	55		36	0	12		HU	
1795	20 July	Near Mouth of Mississippi River	189					37	0	0		HU	See also http://www.ucm.es/info/tropical/data.htm
1795	27 July–3 August	Central Leewards to North Carolina	190			56			1	16		HU	See also Rappaport and Fernandez-Partagás (1995)
1795	2–13 August	North of Puerto Rico to north of Hispanolia to Virginia	191			57			1	3		TS	Chenoweth (2003)
1795	18–21 August	Northern Leewards to Caicos Islands	192	80	80				1	4		HU	
1795	10 October	South Carolina	193				29		0	0		TS	
1796	25–27 August	Florida Straits to Louisiana	194					38	1	8		HU	See also http://www.ucm.es/info/tropical/data.htm
1796	2–4 October	Jamaica to Bahamas	195	81	81				3	10		HU	

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									Number of logbooks consulted	Number of items from newspapers		
Modern calendar dates are used									Estimated maximum intensity			
1797	17–21 October	Bahamas to South Carolina	196			58	30		1	11	HU	
1799	2–9 June	Central Cuba to off U.S. Coast	197	82	82		31		3	9	HU	Chenoweth (2003)
1799	25 September	Charleston, South Carolina	198				32		0	0	TS	
1800	10–18 August	Leeward Islands to Louisiana	199		83				2	4	HU	
1800	27–28 August	Exuma, Grand Bahamas	200		84				0	2	HU	
1800	2–5 October	South Carolina	201			59	33		0	2	HU	
1800	31 Oct–5 Nov.	Jamaica to Eastern Cuba to Crooked Island to Bermuda	202	83	85				2	7	HU	Chenoweth (2003)
1801	22–25 July	Nassau to Gulf of Mexico	203	84					1	2	HU	
1801	15–16 August	Mobile, Alabama	204					39	0	0	HU	See also http://www.ucm.es/info/tropical/data.htm Chenoweth (2003)
1802	6–10 October	West of Jamaica	205						0	2	HU	
1803	31 Aug–1 Sept.	North Carolina	206			60			0	12	HU	
1803	2–3 October	Norfolk, Virginia	207			61			1	3	HU	
1804	18–19 August	Jamaica	208						0	1	HU	Chenoweth (2003)

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									Number of consulted logbooks	Number of items from maximum intensity newspapers	
1804	3–12 September	Barbados to New England	209	85	62	34	8	84	8	84	HU
1804	22–24 September	Cuba to South Carolina	210	86		35	0	5	0	5	TS
1804	4–10 October	North of Puerto Rico to southeast New England	211		63		0	15	0	15	HU
1805	27 July–1 August	27N 58W to 36N 62W	212	87			0	9	0	9	HU
1805	30 Sept.–3 Oct.	Matanzas, Cuba to Maine	213		64		0	9	0	9	HU
1806	17–24 August	17N 57W to Carolinas to 4139N 59W	214		65	36	5	15	5	15	HU
1806	26 Aug.–3 Sept.	Mona Passage to 35N 72W	215	88	66		1	36	1	36	HU
1806	8–18 Sept.	Dominica to Mississippi	216	89	67		40	38	3	38	HU
1806	27–29 Sept.	South Carolina, North Carolina and Virginia	217		68	37	0	10	0	10	HU
1806	2–9 October	Jamaica to South Carolina	218	90	69	38	2	8	2	8	TS
1807	25 July	Leeward Islands	219	91			3	7	3	7	TS
1807	1–5 September	Leeward Islands to Trinidad de Cuba	220	92			3	0	3	0	TS

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									logbooks consulted	Number of items from newspapers	Estimated maximum intensity	
1807	16–20 October	Tobago-Curacao-near and west of Jamaica	221						0	5	HU	This work; see also Rappaport and Fernandez-Partagás (1995)
1809	1–3 August	Dominica, Guadeloupe	222	93					3	0	TS	
1809	9–13 October	Northern Leeward Islands	223	94					6	7	TS	
1810	30–31 July	Jamaica	224						6	3	TS	Chenoweth (2003)
1810	12–15 August	Trinidad to near Jamaica	225	95					0	9	HU	Rappaport and Fernandez-Partagás (1995)
1810	11–13 September	South Carolina	226			70	39		2	6	TS	
1810	28 September	Eastern Cuba	227	96					0	1	HU	
1810	20–27 October	South of Cuba to Southwest Atlantic	228	97					2	17	HU	Chenoweth (2003)
1811	8–12 September	Key Sal, Cuba to Charleston, South Carolina	229			71	40		2	6	HU	
1811	11 October	Pensacola to Fort Stoddart, Alabama	230					41	0	1	HU	See also http://www.ucm.es/info/tropical/data.htm
1811	20–25 October	West of Jamaica to Cuba	231						3	5	HU	Chenoweth (2003)
1812	5–11 June	Northwest Caribbean Sea	232						0	3	TS	

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Modern calendar dates are used	Year	Date range	Localities	Final storm number	Poey accepted storm number	Millás accepted storm number	Ludlum accepted storm number	Mock (2004) accepted storm number	García-Herrera et al. (2005) accepted storm number	This work re-analysis		Other references and notes
										Number of logbooks consulted	Number of items from maximum newspapers intensity	
	1812	8 August	South Carolina	233				41		0	0	TS
	1812	14–20 August	East of Jamaica to Louisiana	234	98		72			1	7	HU
	1812	12–17 October	Jamaica to 37N 51W	235	99					0	18	HU
	1813	22–29 July	Barbados to 3830N 6500W	236	100					7	41	HU
	1813	29 July–3 August	Leeward Islands to Belize	237	101					1	10	HU
	1813	3–7 August	2923N 6347W to 4127N 5619W	238			73			1	12	HU
	1813	24–29 August	Caicos Islands to South Carolina to Virginia & Maryland	239				42		2	25	HU
	1813	25–28 August	Dominica to south of Jamaica	240	102					1	3	TS
	1814	23–24 July	Dominica to Puerto Rico	241						3	1	TS
	1815	27 July–10 August	17N 53W to Grand Banks of Newfoundland	242	103					0	32	HU
	1815	26 Aug.–5 Sept.	16N 51W to off the U.S. Coast	243			74	43	42	7	36	HU
	1815	16–23 September	Martinique to New England	244	104		75			4	31	HU

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TABLE IV
(Continued)

Year	Date range	Localities	Final storm number	Poey accepted storm number	Millás accepted storm number	Ludlum accepted storm number	Moek (2004) accepted storm number	Garcia-Herrera et al. (2005) accepted storm number	This work re-analysis			Other references and notes
									Number of consulted logbooks	Number of items from newspapers	Estimated maximum intensity	
1815	18–22 October	Jamaica to Catcos Islands	245	105					5	17	HU	Chenoweth (2003)
1816	1–12 June	West of Jamaica to South Florida to 3128N 6823W	246						6	16	HU	Chenoweth (2003); This work
1816	3–11 September	Martinique to eastern Cuba to South Carolina	247				44		3	10	HU	This work
1816	15–25 September	Dominica to 38N 70W	248	106			45		3	36	HU	
1817	1–9 August	Tobago to Pennsylvania	249			76	46		1	26	HU	
1817	20–26 October	Barbados to Nicaragua	250	107					1	63	HU	
1818	26 Aug.–5 Sept.	26N 50W to 5002N 2648W	251						0	46	HU	Tannehill (1938)
1818	10–16 September	Yucatan to Texas to Mississippi	252	108		77			0	0	HU	
1818	21–28 September	Leeward Islands to North Atlantic	253	109					0	58	HU	
1818	12–14 October	Northeast of Jamaica to central Bahamas	254						0	15	HU	Chenoweth (2003)
1818	6–13 Nov.	Southwest Caribbean to Cuba	255	110					1	24	HU	Chenoweth (2003)

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TABLE IV
(Continued)

Year	Date range	Localities	Final storm number	Poey accepted storm number	Millás accepted storm number	Ludlum accepted storm number	Mock (2004) accepted storm number	Garcia-Herrera et al. (2005) accepted storm number	This work re-analysis		Other references and notes	
									Number of logbooks consulted	Number of items from newspapers		
1819	24–30 July	Bahamas to Mississippi	256			78			0	12	HU	
1819	19–26 September	1530N 56W to 3026N 6755W	257	111					0	66	HU	Tannehill (1938)
1819	13–15 October	Leeward Islands	258	112					0	22	HU	
1819	27–28 October	Cuba to Bahamas	259	113					0	2	TS	Tannehill (1938)
1820	8–10 September	Florida to North Carolina	260		79	47			0	19	HU	
1820	26 Sept.–1 Oct.	Dominica to Haiti to South Carolina	261				48		1	31	HU	This work
1821	1–9 September	Guadeloupe to western Cuba	262	114					0	19	TS	This work
1821	1–3 September	Off US Coast to New York City	263	115		80			0	33	HU	Previously linked with above
1821	9–17 September	Antigua to U.S. Gulf Coast	264	116		81			1	51	HU	
1822	7–9 July	Central U.S. Gulf Coast	265			82			1	6	HU	
1822	25–28 September	Bahamas to North Carolina	266			83	49		0	26	HU	
1822	13–22 December	Eastern Caribbean Sea to Martinique to Venezuela	267	117					1	23	HU	

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REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

TABLE IV
(Continued)

Year	Date range	Localities	Modern calendar dates are used	Final storm number	Poey accepted storm number	Millás accepted storm number	Ludlum accepted storm number	Mock (2004) accepted storm number	Garcia-Herrera et al. (2005) accepted storm number	This work re-analysis		Other references and notes
										Number of logbooks consulted	Number of items from newspapers	
1823	8–10 July	Curacao to near Jamaica		268						0	3	TS Chenoweth (2003)
1823	2–3 August	Seas south of Jamaica		269						0	1	TS Chenoweth (2003)
1823	11–14 September	2324N 9504W to Central U.S.		270		84				1	9	HU
1824	7–15 September	Gulf Coast Guadeloupe to Georgia and South Carolina		271	118		50			0	57	HU
1824	26–27 September	1630N south of Jamaica		272						0	2	TS Chenoweth (2003)
1825	28 May–5 June	Southeast of Jamaica to Florida to 37N 74W		273		85	51			0	35	HU Chenoweth (2003)
1825	25 July–2 August	Leeward Islands to 38N 6650W		274	119	86				1	71	HU
1825	28 Sept.–3 Oct.	Haiti to northeast coast of Florida		275	120					0	20	HU Chenoweth (2003)
1826	31 Aug.–10 Sept.	Dominica to near Jamaica to Grand Banks		276	121					1	5	TS Chenoweth (2003); Boose et al. (2004)
1827	17–23 August	Antigua to Jamaica to Vera Cruz, Mexico		277						0	75	HU Chenoweth (2003) and this work

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TABLE IV
(Continued)

Year	Date range	Localities	Final storm number	Poey accepted storm number	Millás accepted storm number	Ludlum accepted storm number	Mock (2004) accepted storm number	Garcia-Herrera et al. (2005) accepted storm number	This work re-analysis			Other references and notes
									Number of logbooks consulted	Number of items from newspapers	Estimated maximum intensity	
1827	20–27 August	Northern Leewards to New England	278	122	87	52	0	73	0	73	HU	
1827	27 Aug.–5 Sept.	Northern Leewards to Northwest Florida	279	123			0	20	0	20	HU	
1827	29 Aug.–8 Sep.	North of Leewards to 3650N 6650W	280	124			0	15	0	15	TS	
1828	15–20 September	18N 60W to 44N 5218W	281	125			0	26	0	26	HU	
1829	9–13 July	Gulf of Mexico	282		88		0	2	0	2	TS	This work
1829	23–30 August	South Carolina to 3830N 6609W	283			53	0	18	0	18	HU	
1830	3–9 August	Trinidad to Western Cuba	284	126			0	25	0	25	HU	Chenoweth (2003)
1830	11–19 August	Leeward Islands to South Carolina	285	127	89	54	0	73	0	73	HU	
1830	19–26 August	North of Leeward Islands to 37N 69W	286	128	90		0	28	0	28	HU	
1830	29 Sept.–1 Oct.	2246N 65W to 4025N 5824W	287	129			0	16	0	16	HU	
1830	6 October	South Carolina	288			55	0	0	0	0	TS	
1831	10 June	Northeast coast of Florida	289	130	91		0	3	0	3	TS	

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REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

TABLE IV
(Continued)

Modern calendar dates are used	Year	Date range	Localities	Final storm number	Poey accepted storm number	Millás accepted storm number	Ludlum accepted storm number	Mock (2004) accepted storm number	García-Herrera et al. (2005) accepted storm number	This work re-analysis			
										Number of logbooks consulted	Number of items from newspapers	Estimated maximum intensity	Other references and notes
	1831	22–28 June	South of Barbados to Yucatan	290	131					0	27	HU	
	1831	10–17 August	Barbados to Louisiana	291	132					0	80	HU	Chenoweth (2003)
	1831	27–30 August	Western Louisiana	292			92			0	5	HU	
	1832	5–8 June	Nassau to Bermuda	293	133					0	30	HU	
	1832	12–18 August	Key West to NW Florida to South Carolina	294				56		0	9	HU	
	1832	21 August	125°N 392°W	295						0	1	TS	Redfield (1854)
	1832	23–27 August	Central Leeward Islands to east of Jamaica	296	134					0	18	HU	Chenoweth (2003)
	1832	14 October	South Carolina	297				57		0	0	TS	
	1833	10 August	South Carolina	298				58		0	0	TS	
	1833	14–20 August	St. Kitts to 23°N 66°W	299						0	10	TS	Tannehill (1938)
	1833	4–5 September	Western Louisiana	300			93			0	3	TS	
	1833	14 September	South Carolina	301				59		0	0	TS	Mock (2004)
	1833	16–19 October	Cuba, Gulf of Mexico	302	135					0	0	TS	
	1834	3–6 September	Off Georgia coast to 39°N 67°W	303			94	60		0	15	HU	
	1834	5–7 September	Gulf of Mexico to Western Louisiana	304			95			0	4	TS	
	1834	20–30 September	Central Leeward Islands to Western Louisiana	305	136		96			0	25	HU	

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TABLE IV
(Continued)

Year	Date range	Localities	Final storm number	Poey accepted storm number	Millás accepted storm number	Ludlum accepted storm number	Mock (2004) accepted storm number	Garcia-Herrera et al. (2005) accepted storm number	This work re-analysis		Other references and notes
									Number of logbooks consulted	Number of items from newspapers	
1835	12–18 August	1655N 5345W to Rio Grande, Texas	306	137	97	97	0	44	44	HU	
1835	2–13 September	Barbados to North Carolina	307	138	98	98	0	18	18	HU	Reid (1849)
1835	15–19 September	Key West to 3109N 78W to South Carolina	308	61	99	61	0	15	15	HU	
1835	22–29 October	Turks Island to South Carolina	309	62	62	62	0	16	16	HU	This work
1836	2–3 September	Cayman Islands	310				0	3	3	HU	Chenoweth (2003)
1836	9–11 October	South Carolina to North Carolina	311		100	63	0	8	8	HU	
1837	9–12 July	Barbados to Hispanolia	312	139			0	16	16	TS	
1837	26 July–5 August	Barbados to Georgia	313	140	101	101	0	34	34	HU	
1837	1–7 August	Leeward Islands to Northwest Florida	314	141	102	64	0	76	76	HU	
1837	13–23 August	18N 60W to SE U.S. coast to 39N 58W	315	142	103	65	0	58	58	HU	
1837	23–25 August	28N 61W to 3537N 5742W	316				0	4	4	HU	Reid (1838)

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REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

TABLE IV
(Continued)

Year	Date range	Modern calendar dates are used	Localities	Final storm number	Poey accepted storm number	Millás accepted storm number	Ludlum accepted storm number	Mock (2004) accepted storm number	García-Herrera et al. (2005) accepted storm number	This work re-analysis		Other references and notes
										Number of consulted logbooks	Number of items from newspapers	
1837	30 Aug.–2 Sept.		Northwest Florida to North Carolina	317	143		104	66		0	13	HU
1837	11–16 September		Nassau to 31°N 71°W	318			105			0	18	HU
1837	22 Sept.–10 Oct.		Barbados to 33°N 76°W	319	144		106	67		0	25	HU
1837	18–26 October		20°N 75°W to Cuba	320	145					0	12	HU
1838	20–21 May		West of Jamaica	321						0	2	TS
1838	3 June		South Carolina	322				68		0	0	TS
1838	15–21 June		Florida Straits to South Carolina	323				69		0	22	HU
1838	29 July–12 August		to 40°11'N 44°W Northeast Caribbean to Texas	324						0	7	HU
1838	2–4 September		29°48'N 68°06'W to 37°N 66°W	325						0	14	HU
1838	30 Aug.–13 Sept.		Barbados to off U.S. Coast	326	146			70		0	86	HU
1838	28–30 September		South Carolina to off SE U.S. Coast	327				71		0	8	TS
1839	23 Aug.–1 Sept.		17°N 62°W to North Carolina to Grand Banks	328			107	72		0	27	HU

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TABLE IV
(Continued)

Year	Date range	Localities	Final storm number	Poey accepted storm number	Millás accepted storm number	Ludlum accepted storm number	Mock (2004) accepted storm number	García-Herrera et al. (2005) accepted storm number	This work re-analysis		Other references and notes	
									Number of consulted logbooks	Number of items from newspapers		Estimated maximum intensity
1839	11–16 September	24N 84W to Lake Charles, Louisiana	329						0	3	TS	See also http://www.srh.noaa.gov/ch/research/laerly19hu.htm
1839	7–14 September	21N 46W to Newfoundland	330	147					0	37	HU	
1840	19–23 June	Gulf of Mexico to Western Louisiana	331						0	0	TS	See also http://www.srh.noaa.gov/ch/research/laerly19hu.htm
1840	17–18 September	Galveston, Texas	332						0	1	TS	Tannehill (1938)
1841	23–24 August	South U.S. Atlantic Coast	333		108	73			0	3	TS	
1841	7–16 September	Barbados to Northwest Florida	334		109				0	10	HU	
1841	25–27 September	Off Hatteras to Nova Scotia	335		110				0	5	HU	
1841	25 Sept.–4 Oct.	Barbados to Southeast New England	336	148	111				0	29	HU	
1841	18–21 October	Cuba to Bermuda	337		112				0	16	HU	
1842	10–14 July	Off North Carolina coast	338	149	113				0	19	HU	
1842	31 July–2 August	Cedar Keys to Jacksonville	339						0	0	TS	Sandrik and Landsea (2003); This work
1842	24 Aug.–8 Sept.	Leeward Islands to Rio Grande, Texas	340	150	114				0	66	HU	

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REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

TABLE IV
(Continued)

Modern calendar dates are used	Year	Date range	Localities	Final storm number	Poey accepted storm number	Millás accepted storm number	Ludlum accepted storm number	Mock (2004) accepted storm number	Garcia-Herrera et al. (2005) accepted storm number	This work re-analysis			Other references and notes
										Number of logbooks consulted	Number of items from newspapers	Estimated maximum intensity	
	1842	9–30 September	Tobago to Gulf of Mexico to Newfoundland	341			115			0	18	HU	
	1842	30 Sept.–9 Oct.	St. Thomas to Louisiana to Florida to Bermuda	342	151		116	74		0	50	HU	
	1842	24–27 October	Southwest of Madeira to northeast of Madeira	343	152					0	1	HU	
	1842	24 Oct.–1 Nov.	Off Florida to Bermuda	344				75		0	14	TS	Tannehill (1938); This work
	1843	11–14 July	Jamaica to Florida Keys	345						0	2	TS	Chenoweth (2003)
	1843	15–20 August	North of Leeward Islands to Nova Scotia	346						0	17	HU	Tannehill (1938)
	1843	13–15 September	Central Florida to Maryland	347			117	76		0	7	HU	
	1844	4–5 August	Matamoros, Mexico	348			118			0	3	HU	
	1844	8–16 September	Central Florida to South Carolina to North Atlantic	349			119	77		0	25	HU	This work
	1844	25 Sept.–2 Oct.	Southern Leewards to Jamaica to Key West	350						0	14	TS	Reid (1849), Chenoweth (2003)
	1844	30 Sept.–7 Oct.	Barbados to Cuba	351	153		120			0	128	HU	Chenoweth (2003); second of two storms
	1845	27–29 October	Bermuda to 37N 53W	352	154					0	3	HU	

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TABLE IV
(Continued)

Modern calendar dates are used	Year	Date range	Localities	Final storm number	Poey accepted storm number	Millás accepted storm number	Ludlum accepted storm number	Mock (2004) accepted storm number	Garcia-Herrera et al. (2005) accepted storm number	This work re-analysis		Other references and notes	
										Number of logbooks consulted	Number of items from maximum intensity newspapers		
	1846	5–11 September	Northeast of Crooked Island to 35N 7330W	353			121			0	42	HU	
	1846	10–24 September	Leeward Islands to 5130N 2730W	354	155					0	118	HU	
	1846	14 September	South Carolina	355		78				0	0	TS	
	1846	5–13 October	14N 72W to Atlantic Coast	356	156	79	122			0	87	HU	Chenoweth (2003)
	1847	10–13 October	12N 54W to Venezuela	357	157					0	25	HU	
	1848	19 Aug.–2 Sept.	East of Barbados to 42N 43W	358	158					0	75	HU	
	1848	23–28 September	25N 90W to Grand Banks of Newfoundland	359			123			0	62	HU	
	1848	17–24 September	Northeast of Leeward Islands to 4824N 5001W	360	159					0	49	HU	
	1848	28–29 September	West of Cape Verde	361						0	0	TS	Piddington (1860)
	1848	5–15 October	Cuba to near South Carolina to 3900N 4930W	362		80	124			0	58	HU	
	1849	4–15 September	26N 60W to South Texas	363			125			0	16	HU	
	1849	10–22 September	26N 6620W to Nassau to North Carolina to Bermuda	364		81				0	48	HU	

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REASSESSMENT OF HISTORICAL ATLANTIC TROPICAL CYCLONES

TABLE IV
(Continued)

Modern calendar dates are used	Year	Date range	Localities	Final storm number	Poey accepted storm number	Millís accepted storm number	Ludlum accepted storm number	Mock (2004) accepted storm number	Garcia-Herrera et al. (2005) accepted storm number	This work re-analysis			Other references and notes
										Number of consulted logbooks	Number of items from newspapers	Estimated maximum intensity	
	1850	10–19 July	Leeward Islands to New England	365			126			0	75	HU	
	1850	16–25 August	Barbados to 36N 75W	366	160		127	82		0	67	HU	
	1850	2–9 September	Cape Verde to 42N 28W	367	161					0	7	HU	CLAWOC data indicates one storm, not two as recorded in Poey
	1850	4–10 September	31.58N 75W to North Atlantic	368			128			0	36	HU	
	1850	14–18 October	24.59N 47.10W to 25.58N 41.19W	369	162					0	3	HU	
	1851	16–28 August	13.4N 48.0W to 48.5N 54.2W	370	163			83		0	127	HU	Storm No. 4 of 1851 in HURDAT
	1851	7–8 November	Western Jamaica	371						0	18	HU	Chenoweth (2003); Not presently included in HURDAT
	1852	19–30 August	20.5N 67.1W to 41.0N 68.0W	372			129	84		0	28	HU	Storm No. 1 of 1852 in HURDAT
	1852	3–13 September	Antigua to Florida Keys to Tampa to 35N 65.45W	373			130	85		0	35	HU	Merger of Storms No. 2 and 3 in HURDAT
	1852	21 Sept.–3 Oct.	16.1N 58.5W to 36.50N 32.30W	374	164					0	75	HU	Storm No. 4 of 1852 in HURDAT
	1852	5–11 October	Western Jamaica to 39.23N 68.40W	375	165			86		0	23	HU	Storm No. 5 of 1852 in HURDAT; Rappaport and Fernandez-Partagas (1995)

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TABLE IV
(Continued)

Year	Modern calendar dates are used	Date range	Localities	Final storm number	Poey accepted storm number	Millik's accepted storm number	Ludlum accepted storm number	Mock (2004) accepted storm number	Garcia-Herrera et al. (2005) accepted storm number	This work re-analysis			Other references and notes
										Number of logbooks consulted	Number of items from newspapers	Estimated maximum intensity	
1853	30 Aug.–10 Sept.	12.1N 23.2W – 47.10N 2530W		376	166		131			0	66	HU	Storm No. 3 of 1853 in HURDAT
1853	26–28 September	25.8N 62.0W to 35.10N 5320W		377	167					0	5	HU	Storm No. 6 of 1853 in HURDAT
1853	28–29 September	15N 3710W		378	168					0	1	TS	Storm No. 7 of 1853 in HURDAT
1853	19–25 October	2730N 7830W to Nova Scotia		379				87		0	26	HU	Storm No. 8 of 1853 in HURDAT
1854	3–12 September	Nassau to 38N 4530W		380			132	88		0	80	HU	Storm No. 3 of 1854 in HURDAT
1854	9–21 September	Leeward Islands to Texas		381			133			0	15	HU	Storm No. 4 of 1854 in HURDAT; Chenoweth (2003)
1854	18–22 October	North of St. Thomas to northeast of Bermuda		382	169					0	26	HU	Storm No. 5 of 1854 in HURDAT
1855	24–31 August	12.0N 55.9W to Louisiana		383	170					0	45	HU	Storm No. 5 of 1855 in HURDAT; Chenoweth (2003)
										456	5606		

The records of Poey (1855), Millás (1968), Ludlum (1963), Mock (2004) and Garcia-Herrera et al. (2005) in Table IV, along with previous and new work by this author, provides a “comprehensive” chronology of Atlantic basin storms through 1850 and a partial list for 1851–1855 which should be used in combination with the current HURDAT lists for 1851–2004 (Landsea et al., 2004). This final “comprehensive” chronology lists all of the published information available as of 2005 and consists of 383 published, independently-confirmed tropical cyclones for 1700–1855. It should replace all previous hurricane chronologies prior to 1851. The most complete list of post-1850 Atlantic tropical cyclones is found in HURDAT but Table IV adds to and corrects HURDAT. The “comprehensive” chronology in Table IV should now finally replace Poey’s list, and succeeding chronologies published since that time for years prior to 1851. Tables I, III and IV are also included on the author’s web site hosted at <http://www.aoml.noaa.gov/hrd/hurdat/chenowethcc05.pdf>.

8. Conclusions and Summary

A new analysis of Atlantic basin tropical cyclones for the period 1700–1855 was compared against the previously published chronology of Poey (1855). Thirty-seven percent of the entries were found to be in error and rejected. Since the Poey record has been used in lists of Atlantic basin tropical cyclones for nearly 150 years, this error rate makes these lists of little use for serious climatological research. Other historical records of tropical cyclones by Millás (1968) and Ludlum (1963) were also compared with the new chronology. Millás was found to have continued to propagate errors from Poey’s list, corrected others, and added both new storms and new errors. Ludlum was more successful in correctly dating and identifying tropical cyclones based largely on his use of primary sources, and searching for multiple independent sources before accepting them. Millás, in turn, largely read the secondary literature, which is often flawed. Mock (2004) and Garcia-Herrera et al. (2005) have also made important contributions to the chronology from original documents in archives in South Carolina and Spain.

The new chronology, including 383 unique storms from 1700 through 1855, should now replace all previous compilations of pre-1851 Atlantic basin tropical cyclones, as it is based on the most exhaustive search of primary documents ever done for the basin as a whole. Other research projects, such as that of the Climate of the World’s Oceans (CLIWOC) (www.nmm.ac.uk and the CLIWOC homepage at [http://www.ucm.es/info\(reclido/en/home-en.htm\)](http://www.ucm.es/info(reclido/en/home-en.htm)), provide additional information on ships’ logbooks and climate reconstruction, that is of interest for tropical cyclone reconstruction. Readers interested in post-1850 records should consult the HURDAT data set (Landsea et al., 2004), Chenoweth (2003) and Mock (2004) as well as Table IV of this work. The inclusion of this data into HURDAT is planned.

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