

Neither Tannehill (1938) nor any other author has cited a storm for 1868. The author of this study has documented four cases for that year which, of course, represents an increase from no storm to four storms that cannot be expressed percentagewise because it would be infinite.

Storm 1, 1868 (Sept. 3-6).

This storm has been documented as having occurred over the western portion of the Atlantic over the period Sept. 3-6. A track for Storm 1, 1868 was achieved and is displayed in Fig. 3.

The following information was used in documenting this storm:

- 1) Schr. "Mollie" put into Bermuda on Sept. 8, having encountered a hurricane on Sept. 3. The schooner was heading for Cartagena, Colombia (The New York Times, Sept. 21, 1868, p.8, col.6 and 7).
- 2) Brig "New Thomas and Joan" experienced a hurricane at lat. 33 N., long. 68 W. on Sept. 4 (The New York Times, Sept. 29, 1868, p.8, col.3).
- 3) Ship "John Richardson" (from St. John to Buenos Aires) encountered a gale on the night of Sept.5, making the ship a complete wreck (The New York Times, Sept. 24, 1868, p.8, col.5).
- 4) Bark "Johannie Marie" encountered a cyclone off Cape Sable on Sept. 5 and 6. It lasted 8 hours; wind from S.S.W., going around to N.W. (The New York Times, Sept. 16, 1868, p.8, col.6).
- 5) Bark "Henry Booth" experienced a hurricane from S.E. to N.W. off Cape Sable on Sept. 6 (The New York Times, Sept. 16, 1868, p.8, col. 6).
- 6) Bark "Lorena" experienced a hurricane from S.E. off Sable Island on Sept. 6 (The New York Times, Sept. 16, 1868, p.8, col.6).
- 7) Ship "Whapoa". Sept. 10, lat. 42 35 N., long. 55 54 W., took off the mate and seven crew of ship "Greenock" who reported that the vessel encountered a terrific hurricane at lat. 40 N., long. 59 W. on Sept. 6, lasting 14 hours during which the captain and one of the crew were washed overboard and drowned (The New York Times, Sept. 21, 1868, p.8, col.6 and 7).
- 8) Bark "Eva" encountered a cyclone at lat. 42 N., long. 57 W. on Sept. 6 (The New York Times, Sept. 19, 1868, p.8, col.4).
- 9) Bark "Annie Ada" experienced a heavy gale from S.E to S.W. at the edge of the Banks on Sept. 6, lasting for 8 hours (The New York Times, Sept. 19, 1868, p.8, col.4).
- 10) Bark "Annie Mc Adam". Had a terrific hurricane at lat. 45 N., long. 55 30 W. on Sept. 6 (The New York Times, Sept. 19, 1868, p.8, col.4).
- 11) Steamship "Celia" had a terrific gale from S.W. on Sept. 6, lasting 6 to 8 hours. The "Celia", which was heading from Le Havre to Honduras and Aspinwall (Panama), reported a position at lat. 43 32 N., long. 57 40 W. at midnight Sept. 7 (The New York Times, Sept. 14, 1868, p.8, col.7).
- 12) Bark "Ceres" experienced a heavy gale from S. increasing to a hurricane and shifting to W.N.W., lasting from 6 A.M. to 3 P.M. Sept. 6. At 4 A.M. Sept. 8 was taken in tow by the steamship "Celia" (The New York Times, Sept. 14, 1868, p.8, col.7)
- 13) Bark "Waino" had a hurricane near lat. 40 N., long 50 W. on Sept. 6, blowing from S.S.E. to W. and lasting for 10 hours (The New York Times, Sept. 21, 1868, p.8, col.6 and 7).
- 14) Ship "Daniel Webster" encountered a heavy S.W. gale at lat. 44 40 N., long. 50 32 W. on Sept. 6 (The New York Times, Sept. 16, 1868,

p.8, col.6).

All indications are that Storm 1, 1868 attained hurricane intensity.

Storm 2, 1868 (Oct. 1-7).

This is the second storm that the author of this study has documented for 1868. A track for Storm 2, 1868 is shown in Fig. 4. According to this track, the storm developed over the western Gulf of Mexico and then moved towards the E.N.E., having crossed over the Florida panhandle and southeastern Georgia and continued off the Carolina coast into the Atlantic. Documentation of Storm 2, 1868 was based on the following information: 1) Steamship "Texas", from Indianola Sept. 30 for New Orleans, foundered in a gale which commenced the next day and lasted for several days -the same storm that inundated New Orleans (The New York Times, Oct. 20, 1868, p.8, col.6). 2) Message from New Orleans, Oct. 3. A storm of wind and rain commenced here on Thursday (Oct. 1) and raged ever since. Continuous E. winds have piled up the waters of Lake Pontchartrain. This evening (Oct. 3) the wind is very high and is increasing. The whole rear of the city is inundated with an unbroken sheet of water from Claibourne Street to the Lake. There are three steamers from Galveston to here which are overdue, and several New York steamers are overdue as well (The New York Times, Oct. 4, 1868, p.1, col.1). 3) Message from Savannah, Oct. 5. Heavy gales from N.E. last night which continue. It has rained continuously since Friday, Oct. 2 (The New York Times, Oct. 5, 1868, p.1, col.3). 4) Message from Fortress Monroe, Oct. 4. Heavy easterly gales prevail (The New York Times, Oct. 5, 1868, p.1, col.3). 5) Message from Savannah, Oct. 5. The storm abated this morning. Some little damage was done by water in this city. The captain of the ship "America" reports very heavy weather but no marine disasters are reported so far (The New York Times, Oct. 6, 1868, p.7, col.3). 6) Message from Key West, Oct. 7. The steamer "Maryland" has arrived here. She encountered bad weather on Oct. 5 and threw deck-load overboard (The New York Times, Oct. 8, 1868, p.1, col.4). 7) Schr. "Edward W. Dehart". Oct. 5, experienced a heavy gale from S.W. off Hatteras; carried away flying jib and did other light damages (The New York Times, Oct. 20, 1868, p.8, col.5). 8) Ship "Franklin" (from Manila, Apr. 28). Oct. 5, lat. 36 49 N., long. 73 W., had a gale from S.E. which lasted 14 hours (The New York Times, Oct. 10, 1868, p.8, col.5). 9) Schr. "Cazique" (from Rio de Janeiro in 47 days). Fine weather up to Hatteras, then S.E. to E. winds with heavy head seas (The New York Times, Oct. 10, 1868, p.8, col. 5). 10) Bark "Carpione" (from Antwerp in 66 days). Light winds and calm up to Oct.4; then encountered a heavy gale at lat. 37 20 N., long.72 W., which lasted for 24 hours (The New York Times, Oct. 11, 1868, p.8, col.6). 11) Bark "Annie Kimball". Oct. 7, lat. 43 18 N., long. 58 W., had a hurricane from S.E. to N.W., lasting for 20 hours (The New York Times, Oct. 10, 1868, p.10, col.5 and 6).

It is likely that Storm 2, 1868 had started to gradually acquire extratropical characteristics after moving over the Florida panhandle on Oct. 4.

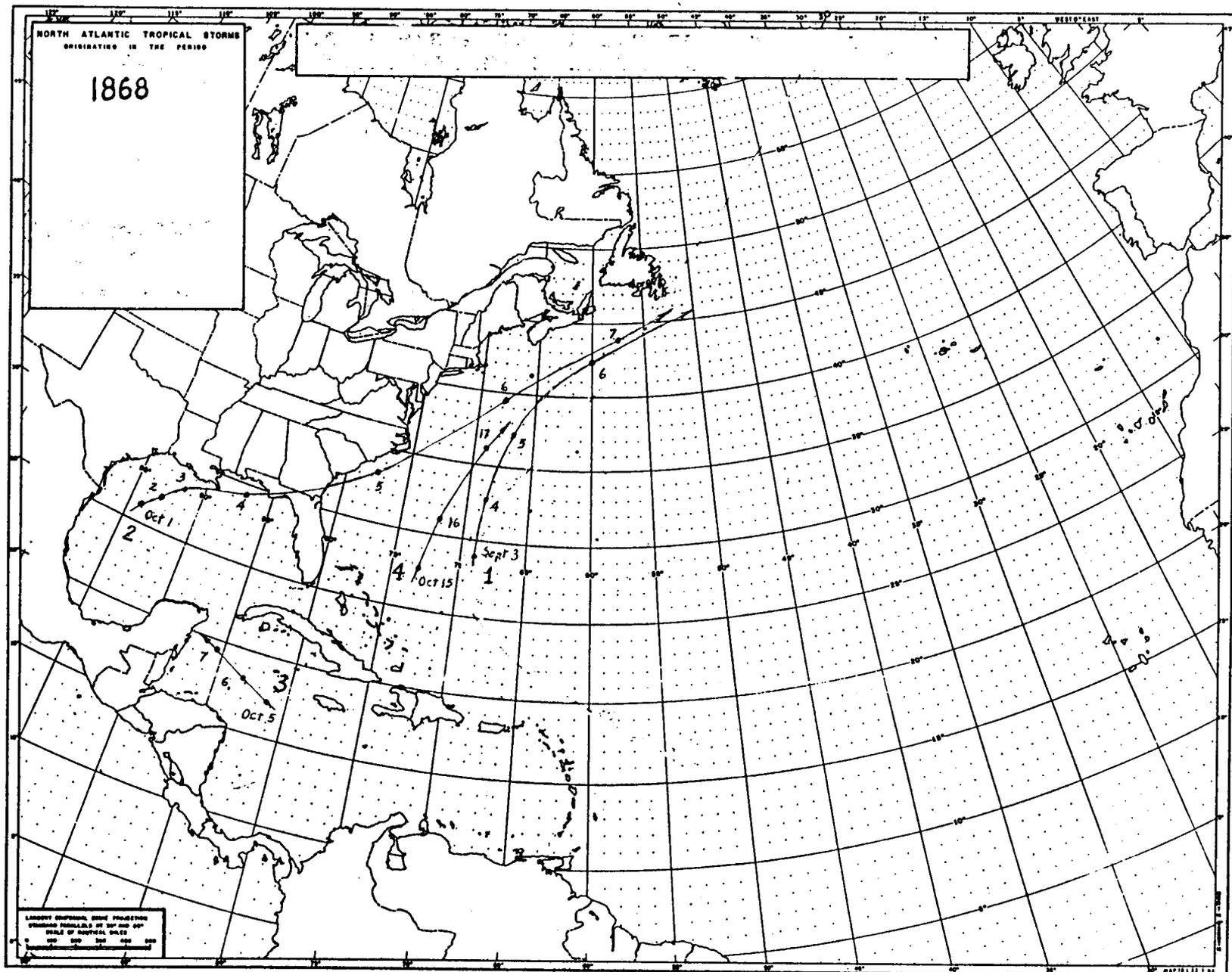


Fig. 4

Storm 3, 1868 (Oct. 5-7).

This is the third storm that the author of this study has recently documented for 1868. The storm occurred in the western Caribbean Sea and a track for it was achieved and is displayed in Fig. 4.

The following information allowed one to document Storm 3, 1868: 1) Schr. "Mary E. Mangan" (from San Blas, Panama, in 26 days). Oct. 5, lat. 18 N., long. 81 W. Experienced a heavy hurricane from E.S.E. lasting 38 hours (The New York Times, Oct. 27, 1868, p.8, col.6). 2) Brig "Haidee" (from Jamaica in 33 days). Oct. 7, lat. 20 30 N., long. 83 20 W., experienced a heavy hurricane from S.E., lasting for 40 hours (The New York Times, Oct. 30, 1868, p.10, col.6).

The fact that Storm 3, 1868 moved towards the W.N.W. (Fig. 4) and not towards the N. and N.E. suggests that it missed the trough associated with Storm 2, 1868, and the slow motion of the storm should have contributed to the rough weather conditions the vessels above endured over a good number of hours.

As it was referred to as a hurricane by the two vessels, Storm 3, 1868 apparently attained hurricane intensity.

Storm 4, 1868 (Oct. 15-17).

This is the fourth storm which the author of this study has documented for 1868. His track for the storm is shown in Fig. 3.

Documentation of this storm was based on this information: 1) Captain Ryan of the brig "Rover", which arrived at Jamaica on Oct. 29 coming from Halifax, reported having spoken to brigantine "Jim Cow" at lat. 29 40 N., long. 70 15 W. The "Jim Cow", from New York to Aspinwall (Panama), was struck on Oct. 15 by a hurricane, causing very great damage to her mast and starting her deck. She had to put into Bermuda and requested to be reported (The Times, London, Nov. 27, 1868, p.10, col.6). 2) Brig "Chieftain" (from Yabacoa, Puerto Rico, in 19 days). Oct. 16, lat. 28 40 N., long. 68 20 W. Had a heavy gale from S.S.E. (The New York Times, Oct. 29, 1868, p.8, col.5).

The author of this study believes that these were the only two reports which were definitively related to the storm. These reports allowed him to estimate crude morning positions for the storm on Oct. 15 and 16. However, the storm track was extended to Oct. 17, when Storm 4, 1868 is believed to have been absorbed by the circulation of a rapidly intensifying extratropical cyclone. This cyclone has been identified off Nova Scotia as early as Oct. 16 and the evolution of this extratropical weather event is supported by the following information: 1) Bark "Lizzie Morrow" experienced a heavy gale from S. off George's Bank on Oct. 16 (The New York Times, Oct. 23, 1868, p.8, col.6). 2) Bark "Crusoe" (from Cow Bay, Cape Breton Island, Nova Scotia, in 18 days). Oct. 16, had a heavy gale from N.; shifted cargo (The New York Times, Oct. 25, 1868, p.8, col.6). 3) Ship "Fairbanks" (from Wilmington to New York) was compelled to enter Hatteras Inlet because of very heavy head winds and stayed there until Oct. 19. The surveyor ship "Hibb" put into the inlet on Oct. 18 with loss of bowsprit and reported very heavy

weather (The New York Times, Oct. 22, 1868, p.8, col.5). 4) Brig "Amanda Joan" experienced a heavy N.W. gale at lat. 40 39 N., long. 72 10 W. on Oct. 17, lasting for 18 hours. She lost several sails and shipped considerable quantities of water (The New York Times, Oct. 22, 1868, p.8, col.5). 5) Brig ""Victoria Ameiza" (from Cow Bay in 10 days). Oct. 17, during a heavy squall from N.W. which lasted 8 hours, split several sails and sustained other damages (The New York Times, Oct. 23, 1868, p.8, col.6). 6) Schr. "Vrail" encountered a heavy gale off Nantucket Shoals on Oct. 17 (The New York Times, Oct. 24, 1868, p.8, col.6). 7) Ship "Guttenberg" (from Hamburg in 35 days). Oct. 17, experienced a severe hurricane from W.N.W. (The New York Times, Oct. 25, 1868, p.8, col.6). 8) Brig "Rocky Glen". Oct. 17, off Cape Sable (coming from Cow Bay in 10 days). Had a hurricane from N.N.W.; scud under bare poles for 20 hours (The New York Times, Oct. 29, 1868, p.8, col.6). 9) Schr. "Volunteer" (coming from Europe). Experienced a hurricane over the Gulf Stream on Oct. 17 (The New York Times, Oct. 30, 1868, p.10, col.6).