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Storms of 1909 - 1910

By

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Prefatory Note

José J. Fernández-Partagás passed away on 23 August, 1997 near the Otto G. Richter library on the University of Miami campus, where he spent a great deal of his life. His last day, like many others, was spent doing the things he loved most—quietly working among the stacks of books and reports in pursuit of knowledge. José was continuing work on a multiyear project to update and extend information on Atlantic hurricane tracks prior to 1920. This is the last in the series of reports—Part VI, covering the years 1909 and 1910.

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Introduction.

The present report describes results of the author's continuing effort of seeking improvement of the historical knowledge of Atlantic tropical cyclones. The improved knowledge is planned to be used in determining more accurately the frequency variation of these storms during the second half of the nineteenth century and early this century. The present report covers the period 1909-1910. The storm documentation in Neumann et al. (1993) has already covered that period, but the study of individual storms corresponding to those years was undertaken by the present author in order to check storm tracks for correctness using information contained in other sources and, at the same time, trying to identify new storms to be added to the ones in the above mentioned publication.

Sources and Methods.

Sources that were used in checking the tracks in Neumann et al. (1993) were available cyclone lists such as those published in Garcia-Bonnelly (1958), Tannehill (1938), Dunn and Miller (1960) and Mitchell (1924), books, reports and articles about the storms such as Sarasola (1928), Tucker (1982), Martinez-Fortun (1942), Cline (1975), Academia de Ciencias (1970), Instituto Cubano de Geodesia y Cartografia (1978), Salivia (1972), Simpson and Riehl (1981) and Weather Bureau (1911, 1912), and meteorological information contained in the Monthly Weather Review, the Historical Weather Maps and in sections of marine and general news published in newspapers such as The New York Times, The Times (London), The Daily Metropolis (Miami), The Miami Metropolis, The Tampa Morning Tribune and Diario de la Marina (Havana, Cuba). Each storm in Neumann et al. (1993) for the period 1909-1910 was checked against the above information sources and appropriate modifications were implemented for the tracks which were found to be in error. The above sources were also used in trying to identify new storms and some weather systems which seem to have had a possibility of having reached tropical storm intensity.

For each year, if new storms were documented, their tracks were combined with those of previously known storms after having applied the necessary corrections to the latter ones; then the storms were numbered in chronological order in accordance with the date they were first detected. Storm tracks for 1909-1910 are displayed on maps in Figs. 1 and 2. Estimated 7 A.M. (E.S.T.) positions were denoted by black dots along the tracks, the adjacent numbers indicating the day of the month. The month was indicated for only the starting day of each track and, in addition, for the first day of the month when a track was found to continue from one month to the next. Portions of the tracks corresponding to tropical storm intensity or to hurricane intensity were denoted by dashed lines or solid lines, respectively; in addition, the depression (dissipation) stage was denoted by asterisks and the extratropical stage was denoted by crosses. The above symbolism was made to be consistent with the one used in Neumann et al. (1993) for the years 1899-1950.

Results.

The detailed study of the storms for the period 1909-1910 is presented in the Appendix. The appendix presents 15 storms on a one-by-one basis. These storms are listed in Table 1. Note in the table that one new storm was found for the above mentioned period and that it occurred in 1910. This new case was detached from Storm 1, 1910 in Neumann et al. (1993), which was found to have wrongly combined the evolution of two independent storms into one. Table 1 shows that some changes along the tracks were implemented for all of the 14 previously known storms in Neumaann et al. (1993). Therefore, 100 percent of the previous tracks were modified. This very large percentage was associated with the use of Historical Weather Maps as a new source for checking storm tracks starting in 1899.

Acknowledgment

Materials in the Otto G. Richter Library of the University of Miami and in the Tropical Prediction Center / Hurricane Center Library were used in this study. The cooperation given to the author by the personnel of both libraries is gratefully acknowledged. Ms Arice Morales and Mrs. Ana M. Braga graciously assisted in some computer related matters.

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Captions

Fig. 1. Storms of 1909. Estimated positions shown by black dots are for 7 A.M. (E.S.T.). Dashed lines denote portions of the tracks along which storms attained tropical storm status and solid lines denote portions of the tracks showing hurricane intensity. Depression (dissipation) stages are denoted by asterisks and extratropical stages are denoted by crosses.

Fig. 2. Same as Fig. 1, but for 1910.

NOTE: José had not done the maps before his death.

Table 1List of Storms
(1909–1910)

Item Number	Identification Number and Dates	New Case?	Track Modified?
1	Storm 1, 1909 (June 25–30)	No	Yes
2	Storm 2, 1909 (June 27–July 4)	No	Yes
3	Storm 3, 1909 (July 17–22)	No	Yes
4	Storm 4, 1909 (Aug. 6–10)	No	Yes
5	Storm 5, 1909 (Aug. 20–28)	No	Yes
6	Storm 6, 1909 (Aug. 28–31)	No	Yes
7	Storm 7, 1909 (Sept. 14–21)	No	Yes
8	Storm 8, 1909 (Sept. 25–28)	No	Yes
9	Storm 9, 1909 (Oct. 6–13)	No	Yes
10	Storm 10, 1909 (Nov. 8–14)	No	Yes
11	Storm 1, 1910 (Aug. 23–29)	No	Yes
12	Storm 2, 1910 (Aug. 26–31)	Yes	---
13	Storm 3, 1910 (Sept. 5–15)	No	Yes
14	Storm 4, 1910 (Sept. 24–29)	No	Yes
15	Storm 5, 1910 (Oct. 11–23)	No	Yes