Table 1. Title Card - Format and Contents

Computer Card Columns	Contents
1 - 5	Card sequence number
7- 8	Month
10 - 11	Day (first day of storm on record)
13 - 16	Year
20 - 21	Value of M (M=number of days storm existed)
23 - 24	Storm number for that year
31 - 34	Cumulative storm number
36 - 47	Storm name
53	Crossing (1=hit U.S. coastline, 0=did not)
59	Saffir/Simpson Hurricane Scale number
80	Last storm of year if L

Table 2. Storm Data Card - Format and Contents

Latitudes and longitudes are rounded to the nearest tenth.
Wind speed is rounded to the nearest 5 kt.
Pressure is rounded to the nearest millibar.

Computer Card Columns	Contents
1 - 5	Card sequence number
7 - 8	Month
10 - 11	Day
12	Storm type at 0000Z
13 - 15	Latitude at 0000Z
16 - 19	Longitude at 0000Z
21 - 23	Wind speed at 0000Z
25 - 28	Central pressure at 0000Z
29	Storm type at 0600Z
30 - 32	Latitude at 0600Z
33 - 36	Longitude at 0600Z
38 - 40	Wind speed at 0600Z
42 - 45	Central pressure at 0600Z
46	Storm type at 1200Z
47 - 49	Latitude at 1200Z
50 - 53	Longitude at 1200Z
55 - 57	Wind speed at 1200Z
59 - 62	Central pressure at 1200Z
63	Storm type at 1800Z
64 - 66	Latitude at 1800Z
67 - 70	Longitude at 1800Z
72 - 74	Wind speed at 1800Z
76 - 79	Central pressure at 1800Z

Table 3. Classification Card - Format and Contents

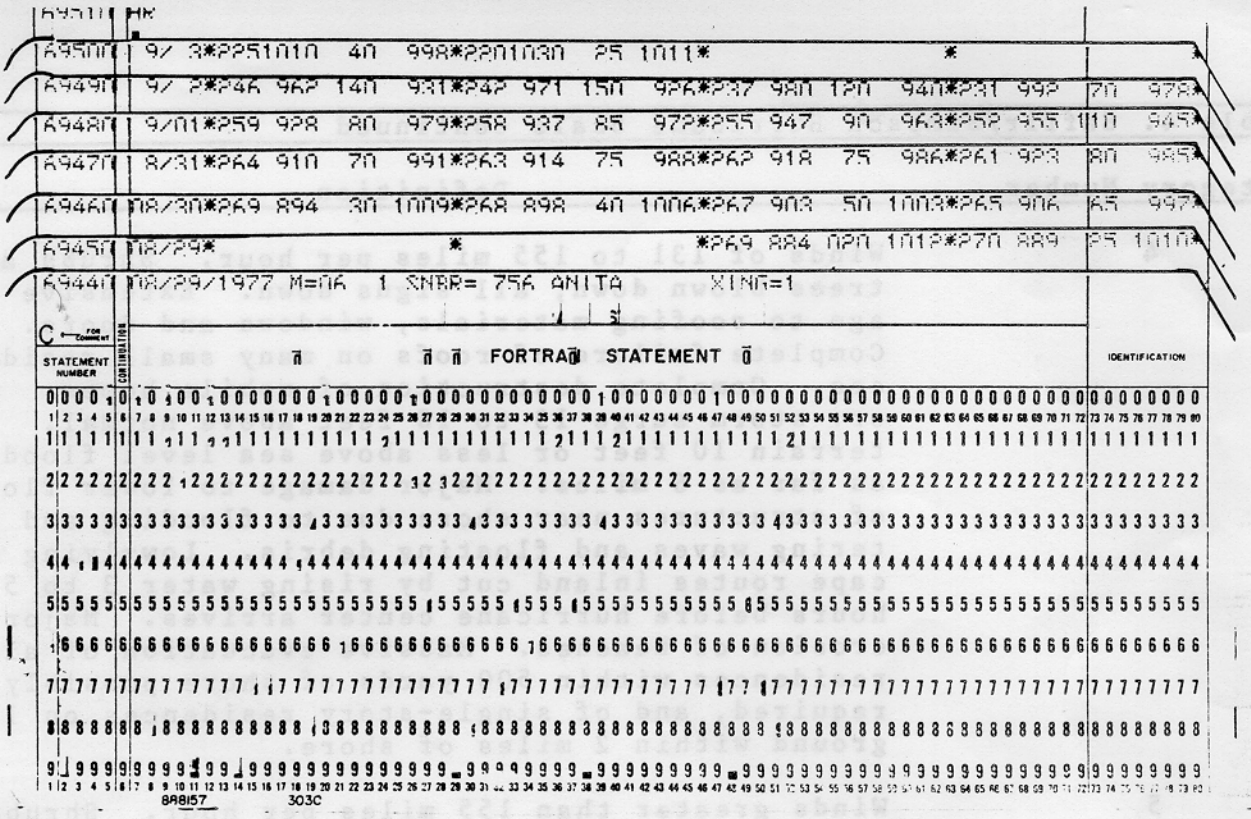
Computer Card Column	Contents
1 - 5	Card sequence number
7 - 8	Maximum status of storm during its life

Table 4. Saffir/Simpson Hurricane Scale

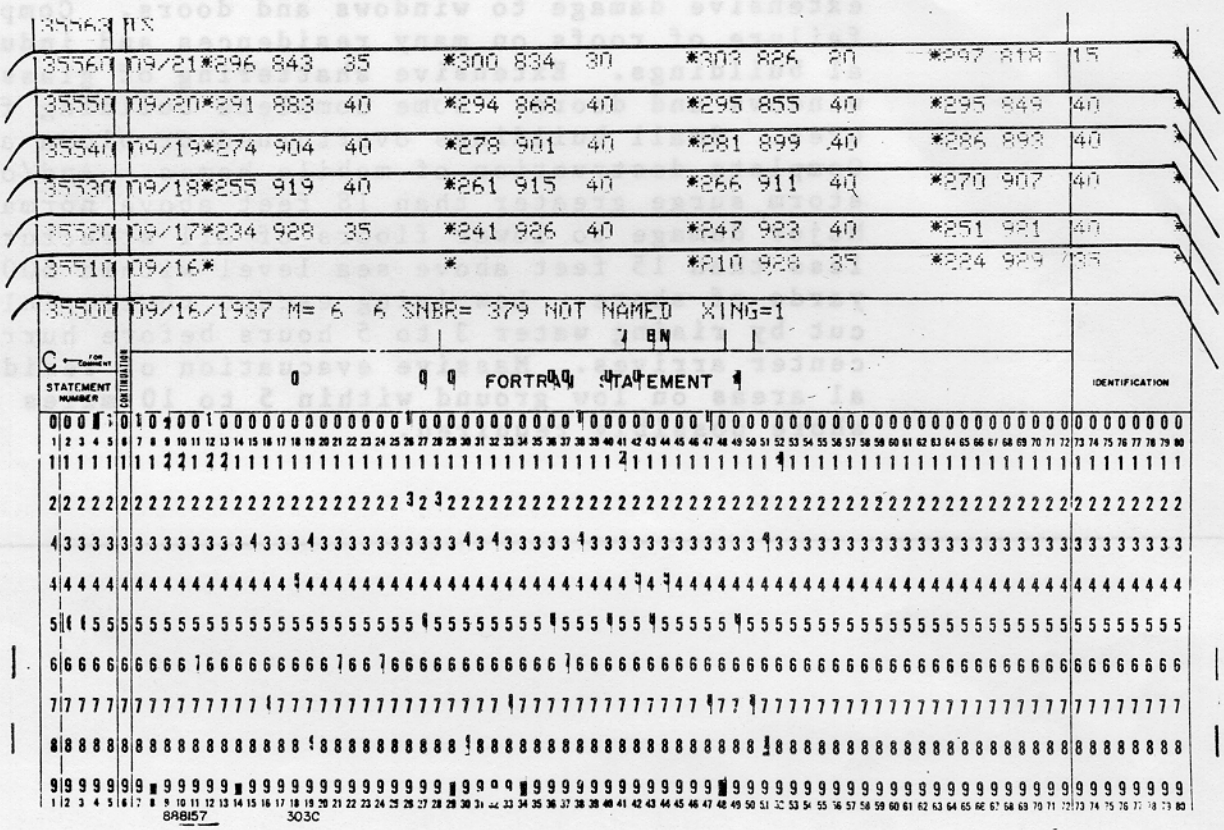
Category Number	Definition
1	Winds of 74 to 95 miles per hour. Damage primarily to shrubbery, trees, foliage, and unanchored mobile homes. No real damage to other structures. Some damage to poorly constructed signs. And/or: storm surge 4 to 5 feet above normal. Low-lying coastal roads inundated, minor pier damage, some small craft in exposed anchorage torn from moorings.
2	Winds of 96 to 110 miles per hour. Considerable damage to shubbery and tree foliage; some trees blown down. Major damage to exposed mobile homes. Extensive damage to poorly constructed signs. Some damage to roofing materials of buildings; some window and door damage. No major damage to buildings. And/or: storm surge 6 to 8 feet above normal. Coastal roads and low-lying escape routes inland cut by rising water 2 to 4 hours before arrival of hurricane center. Considerable damage to piers. Marinas flooded. Small craft in unprotected anchorage torn from moorings. Evacuation of some shoreline residences and low-lying island areas required.
3	Winds of 111 to 130 miles per hour. Foliage torn from trees; large trees blown down. Practically all poorly constructed signs blown down. Some damage to roofing materials of buildings; some window and door damage. Some structural damage to small buildings. Mobile homes destroyed. And/or: storm surge 9 to 12 feet above normal. Serious flooding at coast and many smaller structures near coast destroyed; larger structures near coast damaged by battering waves and floating debris. Low-lying escape routes inland cut by rising water 3 to 5 hours before hurricane center arrives. Flat terrain 5 feet or less above sea level flooded inland 8 miles or more. Evacuation of low-lying residences within several blocks of shoreline possibly required.

Table 4. Saffir/Simpson Hurricane Scale continued

Category Number	Definition
4	Winds of 131 to 155 miles per hour. Shrubs and trees blown down; all signs down. Extensive damage to roofing materials, windows and doors. Complete failure of roofs on many small residences. Complete destruction of mobile homes. And/or: storm surge 13 to 18 feet above normal. Flat terrain 10 feet or less above sea level flooded as far as 6 miles. Major damage to lower floors of structures near shore due to flooding and battering waves and floating debris. Low-lying escape routes inland cut by rising water 3 to 5 hours before hurricane center arrives. Major erosion of beaches. Massive evacuation of all residences within 500 yards of shore possibly required, and of single-story residences on low ground within 2 miles of shore.
5	Winds greater than 155 miles per hour. Shrubs and trees blown down; considered damage to roofs of buildings; all signs down. Very severe and extensive damage to windows and doors. Complete failure of roofs on many residences and industrial buildings. Extensive shattering of glass in windows and doors. Some complete building failures. Small buildings overturned or blown away. Complete destruction of mobile homes. And/or: storm surge greater than 18 feet above normal. Major damage to lower floors of all structures less than 15 feet above sea level within 500 yards of shore. Low-lying escape routes inland cut by rising water 3 to 5 hours before hurricane center arrives. Massive evacuation of residential areas on low ground within 5 to 10 miles of shore possibly required.



a.



b.

Figure 6. Copies of computer cards giving the information for tropical cyclone Anita, 1977 (a.) and an unnamed tropical cyclone, 1937 (b.).

8. USES OF THE DATA

This section highlights some of the uses of the HURDAT tape at the National Hurricane Center. The thousands of requests received over the years indicate a much broader usage of the data than presented here.

The most requested products are the tracks. Figure 7 shows the tracks for all tropical cyclones beginning September 1 through 5, 1886 through 1977.

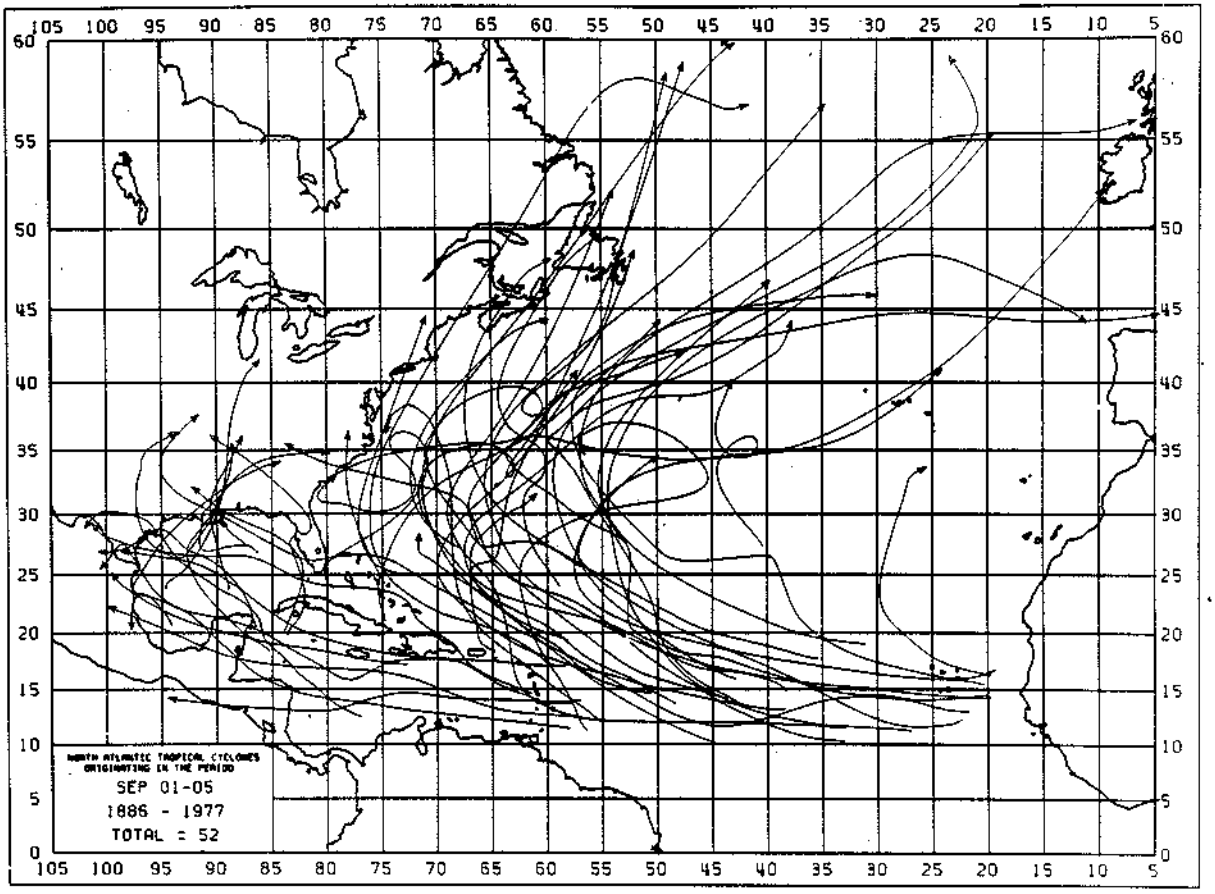


Figure 7. Tracks of tropical cyclones originating September 1 through 5, 1886 through 1977.

There are frequent requests for all tropical cyclones passing within a given distance from a particular location. Figure 8 shows all tracks of tropical cyclones of hurricane intensity when they were within 50 n.mi. of Miami, Florida, for 1886 through 1983. Table 5 is a copy of the printout giving additional information, such as the point and time of closet approach of the tropical cyclone to Miami and the maximum wind within the 50 n.mi. circle. A legend is included to explain each value in the table.