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HURRICANE HUGO

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Hurricane Hugo originated as a tropical depression near the Cape Verde Islands on September 11 and became a hurricane two days later as is slowly tracked westward across the Atlantic. The course changed to more northwesterly around September 18. A track of the hurricane positions determined by aircraft reconnaisance from September 20, 1300 UTC to landfall at 0400 UTC on September 22 is shown in Fig.1. The hurricane intensified during the final hours before landfall and arrived during the time of high tide as a strong Category 4 hurricane to produce widespread devastation on the South Carolina coast.

The hurricane reached the coast just north of Folly Island, South Carolina C-MAN station. A time series plot, produced by the National Data Buoy Center, showing conditions at the Folly Island station during landfall is given in Fig.2. Barometric pressure (BAR01), wind direction (WDIR1), wind speed (WSPD1), and peak 5-second gust (GUST1) are shown in this plot. The passage of the eye is seen dramatically around 0400 UTC on September 22. These data were obtained during the 2-minute sampling period starting at 2 minutes before the hour. The highest winds recorded, 35 meters per second (m/s) with gusts to 45 m/s occurred just before the eye wall arrived at the station. It is likely that higher winds occurred, but these are the highest winds officially recorded that have become available at this time.

The hurricane lost strength very slowly as it moved inland and wreaked havoc across interior portions of South and North Carolina. The hurricane's rapid movement, in excess of 20 knots, coupled with it's large circulation envelope, likely attributed to the retention of hurricane force winds all the way to Charlotte, NC. The storm became extratropical as it crossed the Appalachians and continued to accelerate moving northward into Canada.

Hurricane Hugo was probably the most severe hurricane to strike South Carolina this century. The severity and extent of damage will also rank high among infamous hurricanes to hit the U. S. Atlantic coast and will be long remembered in the Eastern Region!

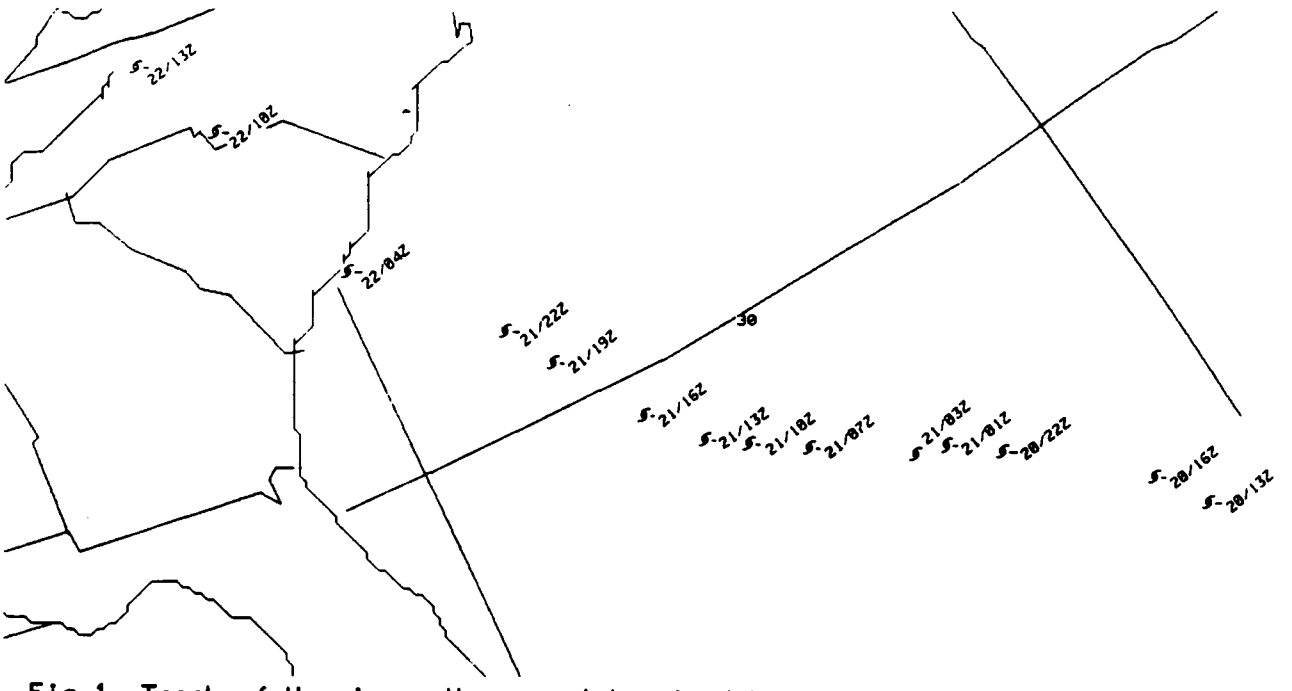

Fig.1. Track of Hurricane Hugo as determined by aircraft reconnaisance from 1300 UTC on September 20 to landfall at 0400 UTC, September 22.

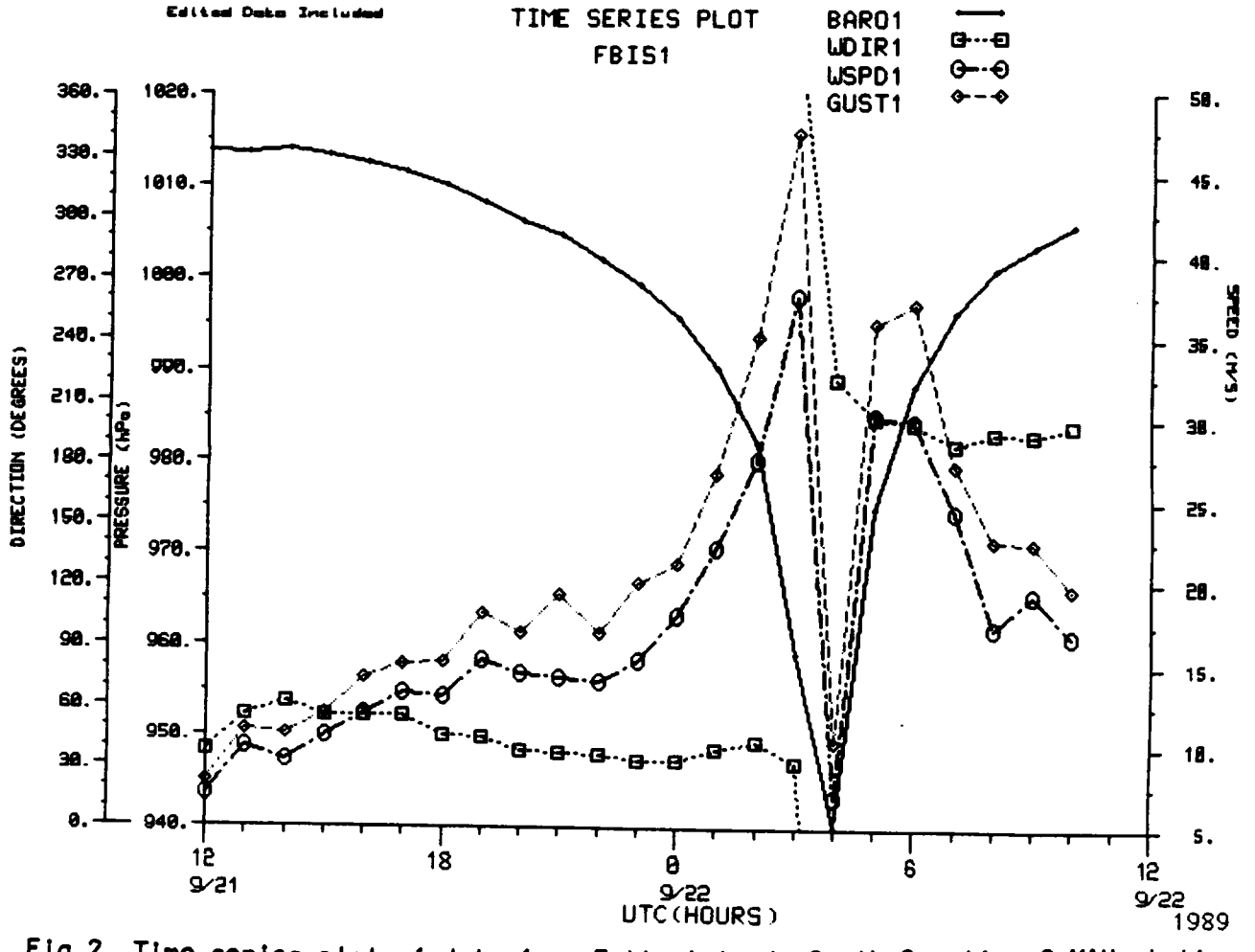

Fig.2. Time series plot of data from Folly Island, South Carolina C-MAN station around time of Hurricane Hugo landfall. Barometric pressure (BARO1), wind direction (WDIR1), wind speed (WSPD1), and peak 5-second gust (GUST1) are shown