

GULF OF MEXICO WARM IN AUGUST

The sea surface temperatures observed by a number of ships in the Gulf of Mexico and Gulf Stream in August, 1924, averaged about 87°F., or some 3 to 4 degrees F. above the average for 1906-1910. The latter half of the month was the warmer, averages for some portions being above 88°F. Observations of 90°F. were numerous.

On a trip from New York to Trinidad and return in late August and mid-September the water temperatures taken by Dr. P. E. James in the Bahamas Current and the Equatorial Current entering the Caribbean Sea were generally 80-84, or about 1 degree above the average.

It is difficult not to associate these supernormal temperatures with the strong Azores High of this summer, which from June to August presumably made the trade winds of greater strength than usual and so pushed the warmed surface waters more rapidly than usual into the Caribbean and Gulf of Mexico. Furthermore, it seems reasonable to ascribe some of the considerable cyclone activity in the West Indian Region in August, September and October to the warm and moist air that must have attended these high water temperatures. Until observations are mapped it will not be possible to say whether or not the great storminess near Nova Scotia and Newfoundland in September and October had any connection with the unusually warm Gulf Stream water starting in that direction in August.—*Charles F. Brooks.*

THE YEAR WITHOUT A SUMMER, 1816, AND THE WARM WINTER OF 1815-1816

Assuming that the deficit in solar radiation observed at Mount Harqua Hala, Arizona, and Montezuma, Chili, by the Smithsonian Institution, is a real solar phenomenon and not due, even in part, to differences in atmospheric transmission, there has been much speculation as to what the effect will be on the weather of 1924, 1925 and 1926. In this connection the "year without a summer, 1816," has received frequent mention. In a recent number of the *Scientific American*¹ appears a definite prediction that the year 1925 will be a severe one generally throughout the world, and that 1926-1927 may "witness a return of 1816."

But those who speak of the cold summer of 1816, or attempt to explain it, invariably sidestep or overlook the fact that the winter that preceded it was unusually warm. Stated in meteorological terms and for the northeastern portion of the United States, barometric contrasts and intensities were materially diminished during the winter and materially increased during the summer. There was thus a reversal of usual conditions rather than an intensification of those that are normal. Any theory of causation should be able to account for this, and any prediction of a recurrence should be based upon such adequate theory.

The following are some of the authentic statements in regard to the winter of 1815-1816 in the northeast portion of the United States.

1. "December, 1815, and January, 1816, were very warm, indeed so mild that fires were seldom lighted in our rooms. February was also as mild as springtime, with the exception of one or two cold days. March was cold and boisterous the first half, and then mild to the middle of April, when winter set in with ice and deep snows, which continued until June."