NOTICE OF MAGNETIC DISTURBANCE DURING ERUPTION OF MONT PELÉE, MARTINIQUE.

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On May 8, 1902, at 11.59 A. M., Greenwich mean time, a magnetic disturbance occurred which began simultaneously at the two Coast and Geodetic Survey magnetic observatories in the United States, viz: at Cheltenham, Maryland, and Baldwin, Kansas. Taking the longitude of Mont Pelée, Martinique, as 4.04.6 W. of Greenwich or of St. Pierre 4.04.7, this magnetic disturbance began at 7.54 A. M., St. Pierre (or Mont Pelée) local mean time. The newspaper reports, in general, agree that the first eruption of Mont Pelée occurred at about 8 A. M. May 8th and it has been reported that the town clock of St. Pierre was found stopped at 7.50.

The reports received thus far from other observatories, viz: Honolulu (Hawaiian Islands), Toronto (Canada), Stonehurst (England), Val Joyeux (France), Potsdam (Germany), and Pola (Austria) show that this disturbance was quite general, and that it began practically simultaneously at all of them. The horizontal intensity was the element principally disturbed.

Several extremely interesting magnetic disturbances occurred between April 10th and May 8th, possessing striking similarities with each other and the one of May 8th, the similarities in magnitude and direction extending to the three elements, declination, horizontal, and external intensity. Throughout the period of the eruptions there were magnetic perturbations of greater or less degree, another striking coincidence occurring at the second eruption of May 20th, in which case, however, the perturbations were not as great as on May 8th.

A seismic effect on May 18 referable to the Guatemala earthquake has also been experienced by all observatories which have thus far reported.

Fuller information regarding these disturbances will be given in a future number. In response to a request sent by Mr. O. H. Tittmann, Superintendent of the Coast and Geodetic Survey, to the various observatories, reports and copies of the magnetograms are being received.

The diagram opposite is a reproduction (half-scale) of the magnetograms May 7th-8th obtained with the Adie magnetograph mounted at the Cheltenham Magnetic Observatory at which an Eschenhagen magnetograph has likewise been installed. The suddenness with which the disturbance of May 8th began is especially exhibited by the horizontal intensity curve.

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