

SOME CHARACTERISTICS OF PHILIPPINE TYPHOONS

By Rev. CHARLES E. DEPPERMAN, S. J.,
*Assistant Director, Manila Observatory, Philippine
Weather Bureau*

I. INTRODUCTION

(A) SCOPE.

This monograph is the fruit of an examination of practically all the records of typhoons contained in our Observatory, from its foundation in 1865 up to the present. From 1865 to about 1884 observations were mainly but not entirely confined to Manila. Then, with the recognition of the Observatory by the Spanish Government as the official Weather Bureau of the Philippines, observing stations were gradually added, especially in Luzon. Finally, a full reorganization after the American occupation and subsequent introduction of the weather map gradually increased the observational material to its present scope. Evidently, therefore, the data do not form an even distribution; but care has been taken to avoid any conclusions as to typhoon frequency, periodicity of typhoon characteristics, etc., that would depend mainly upon such an even distribution of data.

It is definitely not our purpose in any way to replace the classical work of Fr. Algué, "Cyclones of the Far East."⁽⁴⁾ We have endeavored to supplement rather than supplant. Much new information has been gathered and many new viewpoints introduced into meteorology since Fr. Algué wrote; and our intention has been to clarify, when possible, many points still necessarily obscure in those earlier days, to apply the data to the newer meteorological outlook, and, finally, to correct some ancient errors about typhoons which still creep into the most standard text-books. Our monograph bears the same relation to the "Cyclones of the Far East" as a collection of rather random essays bears to a unified epic. The typhoon records of the Observatory are a real treasure trove, which this present monograph certainly does not exhaust; no doubt some years hence, with other theories in vogue, this same material can again be worked over and conclusions fully as interesting and as valuable as those presented in our present paper formulated.

Since the writer has fully his share of human frailty, mistakes in working over such a vast amount of data must surely have crept in. We feel, however, that in almost all instances these errors are likely to be innocuous, since practically all our conclusions are based, not on single isolated facts, but upon a wealth of instances, too numerous to be disturbed by solitary mistakes.

To avoid disputes, we have taken special care in the reproduction of barograms. Hence we present not mere tracings by our draughtsmen but actual photographic reproductions. The number of illustrations has been made as large as the budget permitted and as varied as possible, so as to make a sort of "Typhoon Barogram Atlas." It would have entailed far too much expense to print, together with the barograms, complete details as to accompanying wind direction and intensity, rainfall, humidity, etc. For many of the barograms such data will be found scattered throughout this paper and in our Bulletins; additional data, if required for research purposes, will gladly be furnished upon request.

To meteorologists acquainted with the tropics and the difficulty encountered there in obtaining neat records because of damp paper and blurring ink, no apology is needed for the appearance of some of the barograms reproduced in this monograph. It must