## SOME PRELIMINARY MAPS OF THE MAGNETIC FIELD OF THE PHILIPPINE ISLANDS

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The object of this paper is to present some maps of the magnetic field of the Philippine Islands in order to enable magnetometric prospecting work with the Schmidt Field-Balance (Variometer, Askania Magnetometer)) As this work is closely connected with the official magnetic survey of the Philippines I had to take reference very often to the observations of the Weather Bureau and the U.S. Coast and Geodetic Survey. I am very much obliged to Rev. M. Selga S.J., Director of the Weather Bureau, and Rev. Repetti, S.J., Chief of the Magnetic Division at the Weather Bureau, furthermore to Commander F.B.T. Siems, Director of the U.S. Coast and Geodetic Survey, Manila, and to Mr. Maynard for their kind cooperation and advise.

PRINCIPLE OF MAGNETOMETRIC PROSPECTING: - The principle underlying such work is to measure the vertical and horizontal intensity of the magnetic field. These quantities depend upon many factors one of which is the character of rock at the point of observation. So in measuring the magnetic field at this point we are able to draw conclusions as to the character of minerals and rocks at this place. It is a well known fact that many famous iron ore deposits like in Sweden, Lake Superior in U.S., have been discovered by means of even less sensitive magnetic instruments

<sup>)1</sup> J.W. Joyce: Mangual on Geological Prospecting with Magnetometer. U.S. Bureau of Mines, 1937