Measurements of the intensity of Gravity in the Philippines.

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Efforts have been made at various times to measure the intensity of gravity in the Philippines.

1767 — Le Gentil. — The earliest measurements of the force of gravity in the Philippines were probably made during the third quarter of the eighteenth century. Hardly twenty five years had elapsed since the French astronomer Pierre Bouguer determined the length of the seconds pendulum at Quito, Ecuador, when another French astronomer, Le Gentil, set out from Madagascar for the Philippines, to observe the transit of Venus, which was to take place on June 3, 1769. Le Gentil reached Manila on August 10, 1766. In the pursuit of better atmospheric conditions, Le Gentil left Manila on February 5, 1768, for Pondicherry, India : but to his great disappointment, the sky was cloudy at Pondicherry on June 3, 1769, while the transit of Venus across the disc of the Sun was succesfully observed at Manila under a clear sky. During his sejourn in the Philippines, Le Gentil witnessed an eclipse of the sun on January 30, 1767, observed immersions and emersions of the satellites of Jupiter and determined the longitude, latitude and intensity of gravity at Manila. One of the pendulums used by Le Gentil, in addition to being very good and uniform, had a remarkable historical value, as it had been used in the Peru expedition by Bouguer, *de qui je le tiens*, as Le Gentil says with pride. It is admitted that the changes of temperature, specially during the summer season and within the walled city of Manila, were not conducive to accuracy of results. To minimize the effect of temperature changes, Le Gentil resorted to the use of a thin long thread of abaca fiber, from which a small weight was suspended. Observations were made by the method of coincidences. Only oscillations of small amplitude were accepted. The observations were made on April