IJG> Vol.1 No.1, May 2010

OPEN ACCESS

The Bayamo Earthquake (Cuba) of the 18 October 1551

PDF (Size:4447KB) PP. 1-13 DOI: 10.4236/ijg.2010.11001

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ABSTRACT

Using contemporary and original documents from the Archivo General de Indias it has been possible to complete the data for the 18 October 1551 earthquake in Cuba. The seism took place at midday, approximately. It had foreshocks and aftershocks. In Bayamo, 7 inhabitants were injured, and the town was severely affected. Maximum seismic intensity was IX degrees on the MSK scale, and the area of perceptibility is estimated at 40,000 km2. Liquefaction processes and soil type in Bayamo contributed to the damage. This locality is in the Eastern region of the island, and continues to suffer the most and the strongest seismic events. The epicenter was in the southern marine area of the western segment of Oriente trough (19.6 N 77.8 W, h = 15 km, Ms = 6.6), where there is a crossing of faults, and neotectonics and focal mechanisms are affected by transtension, although the Bartlett-Cayman region ' s tendency to left-lateral strike-slip movement is maintained, in the Caribbean and North American plate boundary zone.

KEYWORDS

Bayamo, Cuba, Earthquake, Historical Seismicity

Cite this paper

M. Cotilla-Rodríguez and D. Córdoba-Barba, "The Bayamo Earthquake (Cuba) of the 18 October 1551," *International Journal of Geosciences*, Vol. 1 No. 1, 2010, pp. 1-13. doi: 10.4236/ijg.2010.11001.

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