



## **Relationship between moon phases and ocean surges in the city of Lagos**

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The moon phases we have over the earth do have effects on ocean tides, the rising and falling of ocean waters. This fact has been established. Ocean surges are more emphatic than ocean tides in terms of their effects on coastal areas—on life and property. As such, this study is to see if there is a relationship between the moon phases and ocean surges. Ocean surges have been a major problem to most coastal countries and often contribute to environmental disaster. This is mainly experienced in many of the coastal areas of the world.

In this study, some meteorological parameters of the ocean are examined; some of them are velocity of wind moving the ocean waters, sea surface temperature, percentage of the moon illuminated, moon and sunrise times, transit times and set times for some specific dates from 1994 to 2007.

Statistical analyses of the data gives rise to a clear relationship through graph plotting. The data of moon phases (percentage of moon illuminated) is a daily data, as well as the wind, temperature, etc.

This paper concludes with an attempt to investigate the relationship between moon phases (in the period of 1994 to 2007) and intensity of ocean surges in the Atlantic ocean.