



Influence of the Moon on genesis of tropical cyclones in Atlantic Ocean

M.S. Dement'ev

Polytechnical Institute, branch of the Ural State Technical University -UPI, Kamensk-Uralskiy, Russia
(mstepanovich@e-sky.ru).

Dependence of frequency of occurrence of tropical cyclones in Atlantic Ocean both on a phase and anomaly of the Moon, and on a phase of a perigee of a lunar orbit is established. All curves show onto two peaks, and the quantity of cyclones changes of 1.5 times in unit of time. Connection between a geographical longitude of a place of occurrence of cyclones (in a depression stage) and Moon position on its orbit is found out. The full amplitude of fluctuations of a geographical longitude is equaled to 15 degrees. For creation of sample of tropical cyclones and hurricanes (233 events), taking place in 1954-1979, annual reviews Weatherwise were used. Ranges of change of a phase, anomaly and a phase of a perigee of a lunar orbit have been divided on 8 equal parts (sectors). Events were summed in each sector. The effects connected with non-uniformity of movement of the Moon and a perigee of a lunar orbit on sectors, were considered. Our frequency dependences are shifted relatively the curves received Bradley D.A. (Nature, 1964, V.204, N 4954, P.136-138) for 1899-1957.