Pacific plate subduction in 1978–1981

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Abstract

Oceanic plate subduction under continental one took place as a result increase of lithospheric kinetic energy by value of order 10²⁷ erg/year (because of the Earth rotation acceleration in 1978–1981) that caused response of region interiors in form of standing wave of horizontal compression of amplitude 10⁻⁵ and surface slope of the Honshu and Shikotan islands in the direction of deep-water trenches. The Pacific plate possessing the greatest inert mass involve in rapid regime of rotation for the last turn, before that’ll do offer resistance rotating lithosphere that conduce to its subduction.

Keywords

Standing wave of horizontal compression, Inclination of surface islands, the Earth rotation acceleration

References