hammer conditions. (4) The lithosphere conforms easily in the limit of its elastic response to the new velocity so that relative to the hydrosphere (rotating essentially at the original velocity) the equatorial coastlines emerge a small amount but in the higher latitudes, submerge. (5) Frictional forces finally bring the air-ocean masses to the new velocity, and in doing so a reversal in trend of the coastline emersion-submersion takes place because the fluid shell can conform easily to the centrifugal forces whereas the friction in the lithosphere retards the assumption of the new figure. (6) This adjustment, however, eventually does take place, so that again equatorial coastlines emerge relative to the submergence of those at higher latitudes.

Assignment of time intervals can only be *guessed* at and these *guesses* shall be made for their heuristic value. Phases 1 and 2, one day to one week; phase 3, two to six months; phase 4, elastic response concurrent with 2 but coastline changes related to 3; phase 5, one to two years; phase 6, one hundred to ten thousand years.

Adjustments of the lithosphere to the rotation figure imposed by a new angular velocity are on a truly significant scale which may be evaluated by interpretations of Fig. 3. The diagram shows a

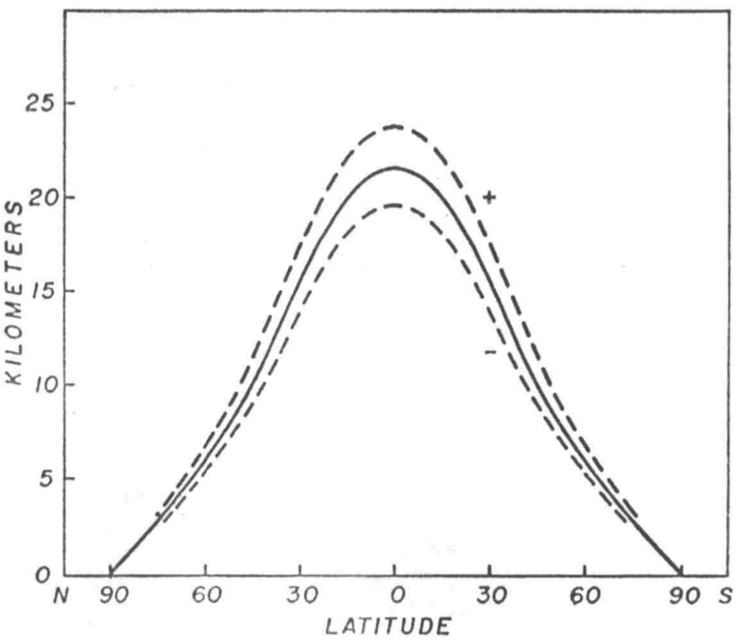

FIGURE 3.—Excess of radii over polar radii plotted as a function of latitude. The full line is for present rotation, the dashed lines are for ±5% change in velocity.