CHAPTER 10

ON DETERMINATION OF THE TIDAL HARMONIC CONSTANTS AND TIDE PREDICTION FOR THE MEXICAN PORTS

Pedro Lezama Instituto de Geofísica, U.N.A.M. and

Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional

ABSTRACT*

- A canonical computation of the tidal harmonic constants for some of the Mexican ports is obtained.
- 2) Following Doodson's Tide Generating Potential, the determination of the node factors f₁(t) and the angle u₁(t) for a period of twenty years (1950 1970) is obtained by electronic computation.
- 3) The I.B.M. 650 electronic computer's program for the height of tide is given, and this program is applied to the values of high and low water at any day and time of the year.
- 4) A graphical and numerical comparison for the height of the tide is shown.
- 5) The determination of the port establishment for some Mexican ports is obtained.

Because of the length of this paper, only the above abstract can be presented in this publication.