



## Abstract View

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## Normal Modes of the World Ocean. Part III: A Procedure for Tidal Synthesis

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### ABSTRACT

In preceding parts of this study a set of normal modes was constructed as a basis for synthesizing diurnal and semidiurnal solutions of Laplace's tidal equations. The present part describes a procedure by which such solutions can be computed as eigenfunction expansions. Since the calculated normal modes are nondissipative, it is necessary to incorporate dissipation into the synthesis procedure. This is done by a variational treatment of the tidal equations.

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