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Ocean loading tides - a review

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With the increasing accuracy and temporal resolution in mind, the demands on ocean tide loading models a rising. Conversely there is increasing opportunity to estimate loading parameters and test model computations using low-noise GPS time series. This presentation will review the background and current status of models and their implications for international geodetic reference frames. We emphasise centre-of-mass terms, frequency resolution, tides of degrees beyond 2, the very-long term and permanent tides, and the nearly-diurnal free wobble. We also give thought to future implementation of code for temporal prediction of the loading tide. Finally we reflect on future ocean tide models that become available, anticipating requirements for generality and flexibility to incorporate a growing number of terms. Thus, we aim to make recommendations about the use of particular astronomical tide potential expansions, formulating admittance methods.