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Long-term tides in the bays,seas and straits of the North-West part of Pacific

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The fine structure of spectra of sea level variations in vicinity of known maximum Mf (period 13.66 days) is investigated for records in several points of Okhotsk and Japan Seas. The additional maxima (periods are 14.75, 14.17, 13.16 days) are discovered. The periods are interpreted as periods of combination of frequencies Mf + i S, where S =2pi/365.25 days and i is integer. The space dependence of amplitudes of additional maxima shows that the most amplitude is observed in vicinity of the mouth of River Amur. The combined analysis of variation of river discharge and sea level variations near to the mouth shows that the variations of sea level on the combination of frequencies arrive due to modulation of river discharge by the tidal variations. Due to seasonal variation of river discharge the modulated variations arrives on the combinations of frequencies. The phenomena is observed as a maxima on combination of frequencies. The combined analysis uses essential the method of sequential spectrum. Analysis of phenomena permits to estimate the main parameters of estuary, which must be known for estimation of storm surges and seasonal floods in mouth region of large river.