



High amplitude internal tides in the Northwest Pacific

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Characteristics of tidal internal waves in the Northwest Pacific were calculated from the data of measurements on 54 moorings during two months (Megapolygon study region). High amplitude internal tides were revealed. Two internal wave systems were distinguished. One was generated to the east and southeast of the study region admittedly over the Shatsky Rise and Emperor Seamounts. The second system was generated in the region of the Kuril Islands. We averaged a large amount of current measurements at different points and calculated the ellipses of the barotropic tide currents, which appeared close to the estimates based on the satellite altimetry data. The currents of the barotropic tide were used to calculate the characteristics of tidal internal waves after subtraction of tidal currents from the data of measurements. Wave parameters based on the measurements of currents and temperature appeared close to each other. Wavelengths were close to the estimates based on dispersion relation.