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Carbonic gas exchange on the Lake Baikal

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In given paper results of research of carbonic gas exchange between water surface and atmosphere of Lake Baikal during winter time are presented. Now many works are devoted to studying of one of components of a carbon cycle - gas exchange. Just few researches are focused on studying of gas exchange between fresh reservoirs and atmosphere. Considering the huge area of Baikal and high biota activity it is important to study a role of the lake as possible source and drain of CO2 in the Baikal region. Measurements were spent at southeast coast of Lake Baikal with use of a method of the close chamber. The diurnal variation of carbonic gas fluxes through border "wateratmosphere" is revealed. It is revealed, that water pH maximum corresponds to the greatest hour values of absorption CO2, and its minimum at night and morning hours to allocation of carbonic gas in atmosphere. Comparison of CO2 fluxes intensity in the winter and during thawing an ice cover of Baikal is given. The given work is executed at support of the grant of Russian Foundation for Basic Research N05-05-97240 and SB RAS Integration project N3.14.