

CO₂ fluxes on El Chichón volcano, México.

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During 2013-2015, four CO₂ flux surveys were performed in the El Chichon crater both, from the lake surface and from the soil of the crater floor. The chemistry of the lake water, as well as its physical parameters (surface area, depth, temperature) were also determined. The CO₂ flux in 2014-2015 compared to the 2007-2008 data (Mazot et al., 2011, BV, 73: 423-441) increased almost one order of magnitude (from ~ 140 t/d in 2008 to ~ 840 t/d in 2014). A large degassing spot in the middle of the lake for the first time was observed in April 2015 with more than 10,000 g m⁻² d⁻¹ of the CO₂ flux. These observations evidence that the volcano-hydrothermal system of El Chichón volcano came into a new stage of activity.