



Subaqueous hot springs in Köyceğiz Lake and Dalyan Channel (SW Turkey)

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The preliminary investigations within the scope of a subaqueous geothermal exploration project revealed a total of seven underwater hot springs in the Köyceğiz Lake and through its outlet, namely Dalyan Channel. Within the scope of this project, horizontal temperature and electrical conductivity profiles of the lake water were obtained by using an YSI CTD probe along a dense survey grid. Any anomaly in the temperature and/or electrical conductivity profiles was inspected by scuba divers in detail, and water samples were taken from the explored hot springs by using a syringe type sampler. Four of these explored hot springs are located on the southern shore of Köyceğiz Lake and the remaining ones are on the northern part of the Dalyan Channel. The temperature of the subaqueous hot springs range from 26.41 to 29.57 °C, which is slightly lower than the temperature range of the on-land hot springs in the region (i.e. 30-39 °C). Discovery of subaqueous hot springs and investigation of chemistry of these sources will lead a more comprehensive assessment of the hydrogeochemistry of the region.