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## Corrigendum

## Corrigendum to “Comparative study of carbonic anhydrase activity in waters among different geological eco-environments of Yangtze River basin and its ecological significance” [J. Environ. Sci. 66 (2018) 173–181]

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We would like to clarify that the abstract in published paper, should be replaced by the modified abstract since some sentences were lost during typesetting.

“This study provides the presence of carbonic anhydrase (CA) activity in waters of the Yangtze River basin, China, as well as the correlation of CA activity with HCO<sub>3</sub> concentration and CO<sub>2</sub> sink flux. Different degrees of CA activity could be detected in almost all of the water samples from different geological eco-environments in all four seasons. The CA activity of water samples from karst areas was significantly higher than from non-karst areas (PP3- concentration ( $r = 0.672$ , P2 sink flux ( $r = 0.602$ ,  $P = 0.076$ ) in karst areas. This suggests that CA in waters might have a promoting effect on carbon sinks for atmospheric CO<sub>2</sub> in karst river basins. In conditions of similar geological type, higher CA activity was generally detected in water samples taken from areas that exhibited better eco-environments, implying that the CA activity index of waters could be used as an indicator for monitoring ecological environments and protection of river basins. These findings suggest that the role of CA in waters in the karst carbon sink potential of river basins is worthy of further in-depth studies.”

**Abstract with correction:** “This study provides the presence of carbonic anhydrase (CA) activity in waters of the Yangtze River basin, China, as well as the correlation of CA activity with HCO<sub>3</sub> concentration and CO<sub>2</sub> sink flux. Different degrees of CA activity could be detected in almost all of the water samples from different geological eco-environments in all four seasons. The CA activity of water samples from karst areas was significantly higher than from non-karst areas ( $P < 0.01$ ), indicating that the geological type of river basin affected the CA activity of waters. Distinct seasonal changes in CA activity were found, and the variational trend differed among different sampling sites. Generally, CA activity in summer and autumn was higher than in spring ( $P < 0.01$ ) for karst areas. The correlation analysis showed that water CA activity was positively correlated with HCO<sub>3</sub> concentration ( $r = 0.672$ ,  $P < 0.01$ ), and that the annual average water CA activity was positively correlated with the CO<sub>2</sub> sink flux ( $r = 0.602$ ,  $P = 0.076$ ) in karst areas. This suggests that CA in waters might have a promoting effect on carbon sinks for atmospheric CO<sub>2</sub> in karst river basins. In conditions of similar geological type, higher CA activity was generally detected in water samples taken from areas that exhibited

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better eco-environments, implying that the CA activity index of waters could be used as an indicator for monitoring ecological environments and protection of river basins.

These findings suggest that the role of CA in waters in the karst carbon sink potential of river basins is worthy of further in-depth studies.”