

Supplementary Materials

Supplementary figures:

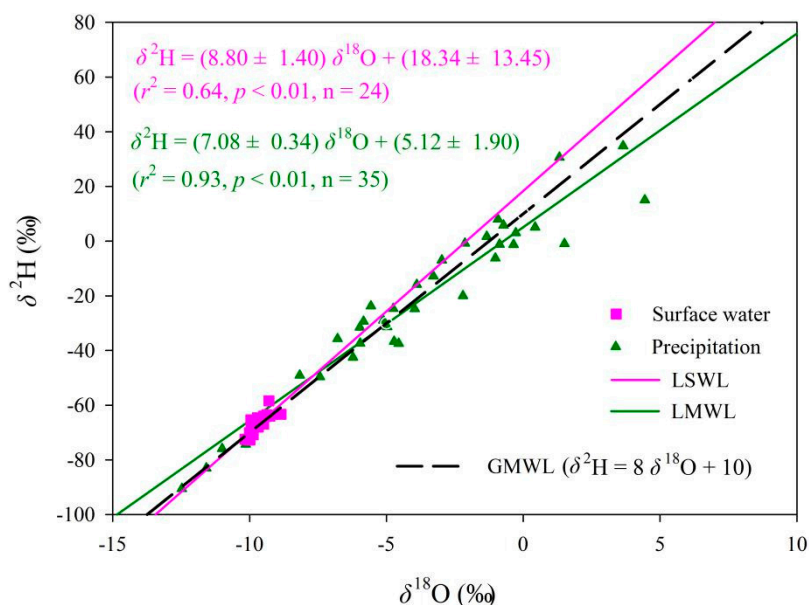


Figure A1. Relationship between $\delta^2\text{H}$ and $\delta^{18}\text{O}$ in collected precipitation and surface water in Lanzhou. 35 precipitation samples were gathered from 35 precipitation events at the site of Qiujiawan from April 2016 and October 2016. 24 surface water samples were monthly collected at the site of Zhongshan Bridge in the Yellow River located in Lanzhou between March 2016 and February 2018. (GMWL: Global Meteoric Water Line, LMWL: Local Meteoric Water Line, LSWL: Local Surface Water Line).

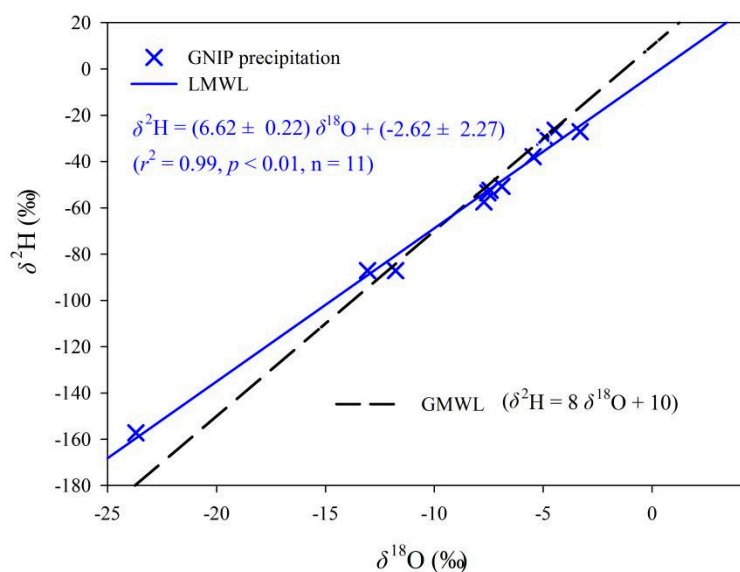


Figure A2. Relationship between $\delta^2\text{H}$ and $\delta^{18}\text{O}$ in precipitation of Lanzhou from the Global Network of Isotopes in Precipitation (GNIP). The monthly mean values of $\delta^2\text{H}$ and $\delta^{18}\text{O}$ in precipitation at the site of Lanzhou from

1985 to 1999 were used, and the monthly mean values of $\delta^2\text{H}$ and $\delta^{18}\text{O}$ in February were absent. (GMWL: Global Meteoric Water Line, LMWL: Local Meteoric Water Line).

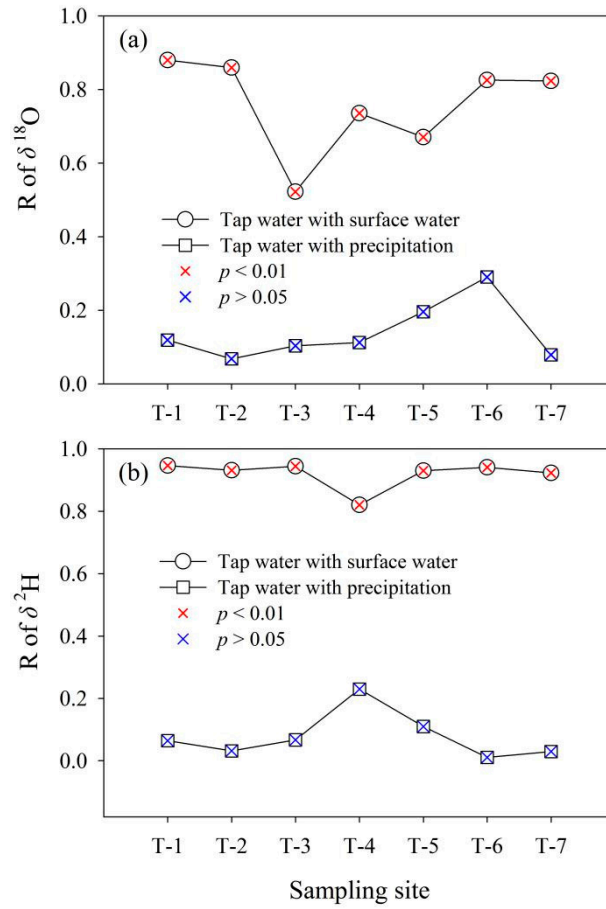


Figure A3. Correlation coefficients of stable isotope ratios in tap water with those in collected precipitation and surface water at all sampling sites. (a) correlation coefficient (R) of $\delta^{18}\text{O}$, (b) correlation coefficient (R) of $\delta^2\text{H}$.