water

Stable Hydrogen and Oxygen Isotope Characteristics of Bottled Water in China: A Consideration of Water Source

Supplementary Materials:

Table 1. Inventory of sampling stations.

Brand	Source site	Origin	Lon./°	Lat./°	Alt/m	Ave.(‰)		σ(‰)		Date
						δ^2H	$\delta^{18}O$	δ^2H	$\delta^{18}O$	
Daqishanquan	Tonglu	spring	119.72	29.77	158.41	−31.3	−5.53	–	–	2015.5.22
Bamaboquan	Bama	spring	107.25	24.14	244.08	−46.3	−6.99	–	–	2015.6.6
Baishite	Lanzhou	spring	103.81	36.02	1626.95	−63.06	−9.61	–	–	2015.4.22
Wudangshanquan	Danjiangkou	spring	111.48	32.55	147.41	−18.75	−3.86	–	–	2015.3.11
Xiaoyushanquan	Guantao	spring	115.30	36.53	43.33	−65.01	−9.24	–	–	2015.7.05
Lao Shan (4)	Qingdao	spring	120.68	36.20	4.06	−50.87	−7.65	0.36	0.09	2015.4.24 2015.5.31 2015.7.16
Shenshuiyu	Sishui	spring	117.30	35.55	340.20	−63.66	−8.88	-	-	2015.5.20 2015.6.27
HOSANMI (2)	Haikou	spring	110.01	19.7	63.46	−45.80	−6.99	0.05	0.00	2015.5.20 2015.6.09
AER (3)	Arxan	spring	119.94	47.19	1062.58	−107.08	−14.58	1.96	0.71	2015.1.07 2015.3.29 2015.5.07
Angsiduo (2)	Haidong	spring	102.13	36.20	2695.23	−57.37	−8.73	0.08	0.08	2015.6.04 2015.6.01
Nongfu Spring (2)	Changbai Shan	spring	127.84	42.52	738.31	−94.15	−13.6	0.33	0.04	2015.8.09 2015.8.10
Evergrande ice spring (4)	Changbai Shan	spring	127.88	41.99	2720.52	−86.00	−12.22	0.34	0.11	2014.11.04 2015.3.06 2015.4.11 2015.8.17
ALKAQUA (4)	Antu	spring	128.17	42.48	655.72	−98.68	−13.88	0.02	0.02	2015.4.02 2015.7.09 2015.7.10 2015.9.06
Master Kong	Yanbian	spring	129.52	42.90	183.16	−85.54	−12.06	-	-	2015.6.04
Yaquan	Hotan	spring	79.92	37.12	1379	−43.23	−7.12	-	-	2015.3.20
Wahaha	Xianyang	spring	108.91	34.63	423.92	−51.88	−6.78	-	-	2015.8.08
Wahaha	Tianshui	spring	105.68	34.55	1316.23	−57.68	−9.21	1.13	0.07	2015.3.04
Beijixiong (2)	Guiyang	spring	106.65	26.41	1208.86	−45.76	−7.03	2.18	0.46	2015.6.20 2015.10.22
Jianlong (2)	Wuda Lianchi	spring	126.21	48.75	283.99	−83.00	−11.05	0.43	0.03	2015.6.30 2015.7.30
Shihanquan	Qiqihar	spring	126.21	48.17	252.72	−84.12	−11.75	0.14	0.18	2015.8.09
Guashui	Huoshan	spring	116.19	31.14	1287.50	−38.91	−6.56	-	-	2015.6.02
Nongfu Spring	Emei Shan	spring	103.51	29.62	442.23	−47.63	−8.38	-	-	2015.7.19
Xuenanshanquan	Kunming	spring	104.13	30.71	529.14	−82.35	−12.41	-	-	2015.9.09
Ganten (2)	Guangzhou	spring	113.42	23.60	37.25	−35.80	−5.82	0.17	0.02	2015.5.20 2015.9.27
Ganten (3)	Huizhou	spring	114.30	23.18	22.42	−39.66	−6.29	1.98	0.15	2015.3.28 2015.6.20
Ganten	Changsha	spring	113.15	28.32	45.20	−19.28	−4.08	-	-	2015.6.22 2015.6.30

Yearround Spring	Shijiazhuang	spring	114.51	38.00	75.26	−62.84	−8.58	-	-	2015.7.23	
Nongfu Spring (3)	Tongren	spring	109.12	27.72	379.25	−36.74	−6.54	1.47	0.09	2015.6.22 2015.7.17 2015.9.07	
Yaquan	Pishan	spring	78.28	37.62	1371.35	−43.23	−7.12	-	-	2015.6.05	
Everest Glacier Natural Living Water	Xigazê	spring	86.71	28.68	4595.30	−163.98	−20.85	-	-	2015.4.03	
Yulonghanzhu (2)	Mudanjiang	spring	129.61	44.62	249.15	−80.95	−10.55	0.08	0.08	2015.7.04 2015.7.24	
Huoshanyan	Wuda Lianchi	spring	126.20	48.52	248.00	−86.80	−11.56	-	-	2015.7.20	
Royalquan (3)	Wuda Lianchi	spring	126.11	48.71	322	−82.92	−10.91	0.85	0.24	-	-
Bamalilang	**Bama**	**spring**	**107.32**	**24.12**	**421**	**−49.90**	**−7.14**	-	-	-	
Yeshu	**Haikou**	**spring**	**110.21**	**20.01**	**12**	**−43.96**	**−6.31**	-	-	-	
Alkaqua	**Bama**	**spring**	**107.31**	**24.11**	**421**	**−50.84**	**−7.57**	-	-	-	
Quanyangquan	**Changbai Shan**	**spring**	**128.13**	**42.02**	**2302**	**−93.52**	**−13.13**	-	-	-	
Runtian	**Laiwu**	**spring**	**117.71**	**36.21**	**204**	**−49.63**	**−6.29**	-	-	-	
Jingtian	**Nantong**	**spring**	**120.91**	**32.03**	**11**	**−55.61**	**−7.90**	-	-	-	
Beidahuangguo	**Wuda Lianchi**	**spring**	**126.12**	**48.71**	**307**	**−83.36**	**−11.05**	-	-	-	
Kelan	**Qingdao**	**spring**	**120.40**	**36.12**	**112**	**−48.40**	**−6.00**	-	-	-	
Lanjian	**Beijing**	**spring**	**116.10**	**39.92**	**102**	**−66.06**	**−9.36**	-	-	-	
Meizhi	**Langfang**	**spring**	**116.72**	**39.53**	**29**	**−79.68**	**−10.92**	-	-	-	
S.Z.Spring	**Yuxi**	**spring**	**102.52**	**24.46**	**1696**	**−83.83**	**−11.58**	-	-	-	
Cestbon	**Guangzhou**	**spring**	**113.31**	**23.15**	**17**	**−45.68**	**−6.83**	-	-	-	
Nestle	**Jixian**	**spring**	**117.46**	**40.23**	**23**	**−59.64**	**−8.31**	-	-	-	
Beidahuangguo	**Wuda Lianchi**	**spring**	**126.13**	**48.71**	**307**	**−82.95**	**−11.12**	-	-	-	
Beidahuangguo	**Heihe**	**spring**	**127.55**	**50.22**	**125**	**−81.86**	**−10.57**	-	-	-	
Baidaganquan	Nêdong	glacier	91.76	29.22	3562.31	−135.7	−17.25	-	-	2015.9.30	
Himalayans	Himalayans	glacier	90.00	29.34	6462.67	−155.00	−19.39	-	-	2015.7.10	
Zangshenyuan	Lhasa	glacier	91.16	29.71	3764.12	−134.82	−17.65	-	-	2015.7.04	
Zhufengshenquan	Xigazê	glacier	86.71	28.68	4595.30	−165.94	−21.63	-	-	2015.6.10	
5100	Nyaínqêntanglha	glacier	91.11	30.51	3663.09	−142.38	−19.01	-	-	2015.5.28	
Shendi	Goola pass	glacier	91.11	29.92	3660.43	−155.05	−19.76	-	-	2015.7.13	
Zangyushenshui	Lhasa	glacier	91.16	29.71	4129.67	−136.57	−18.43	-	-	2015.7.04	
Binchuanbindong	Aksu	glacier	80.26	42.14	1980.15	−64.05	−10.09	-	-	2014.9.14	
PaMIRS	Kashi	glacier	74.95	38.30	7509.26	−81.99	−11.88	-	-	2015.4.22	
Gailaixue	Ürümqi	glacier	86.81	43.22	3700.00	−59.92	−9.22	-	-	2015.4.12	
Xuebaizhen	Ürümqi	glacier	87.42	43.53	1717.23	−59.5	−9.59	-	-	2015.9.07	
Lhasabinquan	Donggar	glacier	90.99	29.65	3663.09	−137.81	−17.66	-	-	2014.7.24	
Klunshan (3)	Golmud	glacier	94.68	35.92	3568.09	−66.96	−10.67	0.11	0.11	2014.7.25 2015.7.15 2015.7.30	
Jingdu	**Qinghai**	**glacier**	**102.0**	**35.51**	**2535**	**−79.60**	**−11.39**	-	-	-	
Qomolangma	**Xigazê**	**glacier**	**88.92**	**29.32**	**3825**	**−160.21**	**−20.91**	-	-	-	
Kongur	Akto	glacier	76.02	39.25	7649.23	−74.52	−10.81	-	-	2014.12.3	
Watson's Distilled water	Beijing	distilled	116.42	39.73	29.41	−66.15	−8.93	-	-	-	-

Nongfu Spring	Hangzhou	lake	119.05	29.61	100.00	−41.78	−6.21	1.06	0.17	2014.7.14
Nongfu Spring (2)	Danjiangkou	reservoir	111.51	32.59	109.88	−57.96	−8.52	-	-	2015.3.08 2015.6.15
Cestbon (3)	Suzhou	-	120.54	31.33	5.49	−55.98	−7.82	0.23	0.07	2015.5.24 2015.5.28 2015.6.03
Binlu (2)	Huaian	-	119.10	33.55	8.26	−35.37	−4.65	3.06	0.37	2015.2.12 2015.4.03
Cestbon	Nanchanig	-	115.93	28.72	15.86	−43.43	−6.74	-	-	2015.5.05
Run Tian	Nanchanig	-	115.92	28.75	28.02	−40.82	−6.24	-	-	2015.4.12
Pepsico	Wuhan	-	114.33	30.62	13.23	−52.98	−7.82	-	-	2015.5.04
Binlu	Wuhan	-	114.24	30.65	27.23	−47.74	−7.29	-	-	2015.6.10
Wahaha	Yichang	-	111.30	30.72	62.23	−45.73	−7.21	-	-	2015.8.15
Xiyinli	Zhengzhou	-	113.63	34.84	115.23	−75.94	−10.28	-	-	2015.3.29
Qinlin	Shunyi	-	116.73	40.14	20.12	−64.85	−8.62	-	-	2015.6.04
Huiyuan	Shunyi	-	116.74	40.15	20.12	−82.14	−10.61	-	-	2015.3.17
Bingtianxue	Baoding	-	115.51	38.92	15.23	−71.30	−9.84	-	-	2015.8.13
Yili	Baoding	-	115.51	38.92	15.23	−71.09	−9.98	-	-	2015.8.21
Wahah (2)	Gaobeidian	-	115.87	39.33	34.21	−67.64	−9.61	1.67	0.24	2015.4.03 2015.8.02
Yangdao (Wahaha)	Baoding	-	115.52	38.91	15.33	−24.53	−2.13	-	-	2015.6.08
Baixiang	Baoding	-	115.5 2	38.91	15.33	−70.02	−9.47	-	-	2015.8.06
Cestbon	Taiyuan	-	112.62	37.91	800.23	−63.79	−8.85	-	-	2015.4.16
Wahaha (2)	Jingzhou	-	112.68	37.68	780.29	−75.57	−10.12	0.7	0.08	2015.3.12 2015.5.22
Wahaha (2)	Aksu	-	80.26	41.19	1107.54	−76.60	−11.51	0.55	0.30	2015.4.20 2015.5.04
Zilali	Artux	-	76.10	39.71	1340.64	−62.79	−9.86	-	-	2015.10.7
Cestbon (2)	Chengdu	-	103.98	30.56	500.37	−64.82	−9.51	1.82	0.57	2015.5.04 2015.9.10
Wahaha	Guiyang	-	106.62	26.71	1305.71	−45.14	−6.41	-	-	2015.9.05
Binlu	Chongqing	-	106.57	29.63	284.92	−62.89	−9.25	18.5	2.39	2015.6.11
Binlu (2)	Harbin	-	126.86	45.24	169.68	−74.69	−9.93	-	-	2015.3.17 2015.5.18
Jingyue (2)	Quanzhou	-	118.74	24.92	300.21	−53.89	−8.63	-	-	2015.5.14 2015.5.26
Binlu	Hefei	-	117.23	31.78	25.80	−40.87	−5.85	-	-	2015.8.09
Master Kong−Youyue	Chuzhou	-	118.32	32.25	31.42	−38.21	−5.84	-	-	2015.7.16
Fuyang (3)	Hangzhou	-	120.24	30.31	15.23	−32.74	−4.46	1.65	2.98	2014.11.03 2015.4.04 2015.4.05
Yangdao	Wuhan	-	114.34	30.62	13.21	−27.11	−3.07	-	-	2015.4.20
Tianranhunquan	Shangqiu	-	115.65	34.41	50.14	−74.45	−10.06	-	-	2015.4.02
Watson's Distilled water (4)	Daxing	-	116.42	39.73	29.23	−64.21	−8.71	1.11	0.26	2015.5.13 2015.5.14 2015.6.01 2015.6.04
Jinmailang	Beijing	-	116.52	40.03	44.22	−77.28	−10.24	-	-	2015.6.13
Shangjianwang	Tianjin	-	117.04	39.38	8.50	−78.17	−10.31	-	-	2015.3.23
Chunyue	Tianjin	-	117.42	40.01	8.51	−78.34	−10.49	-	-	2015.5.07
Master Kong	Shijiazhuang	-	114.39	37.96	81.00	−60.02	−8.06	-	-	2015.3.17
Binlu	Shijiazhuang	-	114.51	38.13	82.16	−66.60	−9.17	-	-	2015.7.24
Master Kong	Taiyuan	-	112.59	37.81	770.77	−63.96	−8.51	0.19	0.05	2015.7.11
Binlu	Ürümqi	-	87.52	43.85	821.05	−71.44	−10.53	0.54	0.13	2015.3.14
Master Kong	Aksu	-	80.22	41.22	1107.54	−75.02	−11.33	-	-	2015.8.01
Nongfu Spring (3)	Baoji	-	107.92	34.32	513.02	−66.78	−9.72	1.44	0.47	2015.3.13 2015.5.23 2015.6.18

Binlu (2)	Lanzhou	-	103.89	36.07	1516.97	−69.50	−10.02	2.59	0.18	2015.6.23 2015.7.20
Master Kong (2)	Lanzhou	-	103.72	36.14	1535.55	−70.13	−9.89	0.91	0.20	2015.3.17 2015.5.20
Yueyashenquan	Wuwei	-	103.12	37.01	2403.23	−64.31	−10.4	-	-	2015.6.22
Master Kong	Chengdu	-	104.14	30.72	529.45	−82.35	−12.41	-	-	2015.8.22
Master Kong	Kunming	-	102.82	24.92	1891.23	−73.99	−10.06	-	-	2015.6.23
Master Kong	Dalian	-	121.81	39.08	71.76	−94.28	−13.13	-	-	2015.10.18
Nongfu Spring (2)	Changbai Shan	-	127.81	42.52	738.13	−94.16	−13.27	0.01	0.02	2015.4.26 2015.5.10
Ganten (2)	Yuyao	-	121.14	29.91	304.12	−40.27	−6.43	0.6	0.02	2015.2.18 2015.6.12
Lutuni	Kashi	-	76.04	39.56	1276.21	−86.96	−12.44	-	-	2015.5.10
Pepsico (3)	Lanzhou	-	103.72	36.13	1535.23	−71.47	−10.05	1.05	0.10	2015.4.23 2015.5.20 2015.6.04
Cestbon	Harbin	-	126.52	45.81	131.13	−74.31	−9.89	-	-	2015.6.17
Master Kong	Guiyang	-	106.62	26.71	1299.12	−46.27	−6.86	-	-	2015.5.26
JingYue	Quanzhou	-	118.71	24.92	300.56	−53.89	−8.63	-	-	2015.6.16
Alkaqua (2)	Xuzhou	-	117.33	34.23	46.36	−57.06	−7.92	0.02	0.03	2015.5.06 2015.7.14
Master Kong (2)	Xuzhou	-	117.32	34.22	49.26	−53.27	−7.42	0.65	0.13	2015.6.02 2015.6.20
Nestle (2)	Jixian	-	117.52	40.01	32.24	−60.09	−8.02	0.48	0.02	2014.12.03 2015.3.20
Nongfu Spring	Shiyan	-	111.51	32.52	130.14	−55.70	−8.41	-	-	2015.4.25
Suyefon	ShiJiazhuang	-	114.52	38.02	75.26	−70.99	−10.16	-	-	2015.6.20
Binlu (2)	Jinzhou	-	115.01	38.02	38.23	−69.36	−9.49	1.36	0.17	2015.7.03 2015.7.10
Master Kong	Arxan	-	87.62	43.83	806.00	−60.63	−9.56	-	-	2015.6.13
Ruojian	Shihezi	-	86.12	44.33	476.32	−72.13	−11.15	-	-	2015.5.23
Fengqu	Shihezi	-	86.12	44.33	476.5	−75.43	−10.93	-	-	2015.8.23
Aquafina (2)	Liupanshui	-	104.82	26.62	1798.10	−69.53	−9.85	2.01	0.20	2015.6.03 2015.7.01
Bettern	Yibin	-	104.62	28.83	384.25	−68.42	−10.52	-	-	2015.7.20
Master Kong	**Shunyi**	-	**116.61**	**40.31**	**54**	**−57.93**	**−7.83**	-	-	-
Wahaha	**Wuqing**	-	**116.32**	**39.71**	**9**	**−57.77**	**−7.91**	-	-	-
Binlu	**Wuqing**	-	**116.30**	**39.72**	**9**	**−57.77**	**−7.92**	-	-	-
Wahaha	**Hangzhou**	-	**120.12**	**30.31**	**14**	**−63.26**	**−8.73**	-	-	-
Youzhen	**Xinxiang**	-	**113.81**	**35.22**	**80**	**−65.32**	**−9.06**	-	-	-
Youzhen	**Xinxiang**	-	**113.82**	**35.21**	**80**	**−65.61**	**−9.01**	-	-	-
Sukesudashui	**Dongke**	-	**126.22**	**48.11**	**295**	**−85.14**	**−12.44**	-	-	-
Mingren	**Jiaozuo**	-	**113.23**	**35.21**	**101**	**−79.87**	**−11.12**	-	-	-

Bold brands come from [17]. The source site is the water source marked on the label, not necessarily the real water source. sign "-" means "unmarked".

Table S2. Correlation coefficients (r) between measured δ^2H and δ^{18}O values of bottled water and 16 climatic parameters.

	P	P^2	T	T^2	L	L^2	A	A^2	O	O^2	V	V^2	R	R^2	S	S^2
δ^2H	0.51	0.51	0.61	0.61	−0.17	−0.17	−0.60	−0.48	0.28	0.27	0.64	0.56	−0.32	−0.38	−0.30	−0.28
δ^{18}O	0.51	0.49	0.620	0.60	−0.17	−0.67	−0.63	−0.49	0.34	0.33	0.65	0.56	−0.28	−0.31	−0.28	−0.26

$p<0.01$ Where P, T, L, A, O, V, R, and S are precipitation amount, temperature, latitude, altitude, longitude, water vapor pressure, solar radiation and wind speed and, respectively.

Table S3. Regional precipitation water lines.

Region	Equation	Document

Xinjiang	$\delta^2H = 7.36\ \delta^{18}O - 0.50$ ($r^2 = 0.97$, $p < 0.01$)	[43]
Qinghai (Qinghai lake)	$\delta^2H = 8.69\ \delta^{18}O + 17.5$ ($r^2 = 0.96$, $p < 0.01$)	[44]
Xizang	$\delta^2H = 8.04\ \delta^{18}O + 10.9$ ($r^2 = 0.94$, $p < 0.01$)	[28]

Table S4. Different brands and origins bottled water in same place of production. We use the annual average $\delta^{18}O$ and δ^2H values of tap water provided by [26].

Place of Production	Brand	Origin	Date	Bottled Water		Tap Water	
				δ^2H (‰)	$\delta^{18}O$ (‰)	δ^2H (‰)	$\delta^{18}O$ (‰)
			Case 1				
Chengdu	Cestbon (2)	- -	2015.5.04 2015.9.10	−64.82	−9.51	−84.83	−12.43
	Master Kong	-	2015.8.22	−82.35	−12.41		
Shunyi	Qinlin	-	2015.6.04	−64.85	−8.6	-	-
	Huiyuan	-	2015.3.17	−82.14	−10.61		
	Master Kong	-	-	-	−7.83		
Baoding	Bingtianxue	-	2015.8.13	−71.3	−9.84	−63.81	−8.75
	Yili	-	2015.8.21	−71.09	−9.98		
	Yangdao (Wahaha)	-	2015.6.08	−24.53	−2.1		
	Baixiang	-	2015.8.06	−70.02	−9.47		
			Case 2				
Bama	Bamaboquan	spring	2015.6.06	−46.27	−6.99	-	-
	Bamaliliang	spring	2015.4.22	−49.90	−7.14		
	Alkaqua	spring	-	−50.84	−7.57		
Jinzhou	Wahaha (2)	-	2015.3.12 2015.5.22	−75.57	−10.1		
	Binlu (2)	-	2015.7.03 2015.7.10	−69.36	−9.49		
Changbai Shan	Nongfu Spring (2)	spring	2015.8.09 2015.8.10	−94.15	−13.6	−61.56	−7.67
	Evergrande ice spring(4)	spring	2015.3.06 2015.4.11 2015.4.11	−86.00	−12.22		
	Quanyangquan	spring	2015.8.17 -	−93.52	−13.13		
	Nongfu Spring (2)	-	2015.4.26 2015.5.01	−94.16	−13.27		
Haikou	HOSANMI (2)	spring	2015.5.20 2015.6.09	−45.80	−6.99	−36.15	−5.27
	Yeshu	spring	–	−43.96	−6.3		
Harbin	Binlu (2)	-	2015.3.17 2015.5.18	−74.69	−9.93	−88.63	−12.20
	Cestbon	-	2015.6.17	−74.31	−9.89		
Lanzhou	Baishite	spring	2015.5.22	−63.06	−9.61	−71.52	−10.20
	Binlu (2)	-	2015.6.23 2015.7.20	−69.50	−10.02		
	Master Kong (2)	-	2015.3.17 2015.5.20	−70.13	−9.89		
	Pepsico (3)	-	2015.4.23 2015.5.20	−71.47	−10.05		
Nanchanig	Cestbon	-	2015.5.05	−43.43	−6.74	−32.24	−5.45
	Run Tian	-	2015.4.12	−40.82	−6.24		
Qindao	Lao Shan (4)	spring	2015.4.24 2015.5.31 2015.5.20	−50.87	−7.65	−49.45	−6.32
	Kelan	spring	2015.7.16 -	−48.40	−6.00		

Tianjin	Shangjianwang	-	2015.3.23	−78.17	−10.31	-	-
	Chunyue	-	2015.5.07	−78.34	−10.49		
Wuda Lianchi	Jianlong	spring	2015.6.30 2015.7.30	−83.00	−11.05	-	-
	Huoshanyan	spring	2015.7.20	−86.80	−11.56		
	Royalquan (3)	spring	-	−82.92	−10.91		
	Beidahuangguo	spring	-	−82.95	−11.12		
XuZhou	Alkaqua (2)	-	2015.5.06 2015.7.14	−57.06	−7.9	−51.64	−6.88
	Master Kong (2)	-	2015.6.02 2015.6.20	−53.27	−7.42		
Shijiazhuang	Yearround Spring	spring	2015.7.23	−62.84	−8.58	−63.67	−8.67
	Master Kong	-	2015.7.16	−60.02	−8.06		
	Binlu	-	2015.7.24	−66.60	−9.17		
	Suyefon	-	2015.6.20	−70.99	−10.16		
Shihezi	Ruojian	-	2015.5.23	−72.13	−11.15	-	-
	Fengqu	-	2015.8.23	−75.43	−10.93		
Lhasa	Zangshenyuan	-	2015.7.04	−134.82	−17.65	−146.60	−18.52
	Zangyushenshui	-	2015.7.04	−136.57	−18.43		
Guiyang	Beijixiong (2)	spring	2015.6.20 2015.10.22	−45.76	−7.03	−51.74	−7.88
	Wahaha	-	2015.9.05	−45.14	−6.4		
	Master Kong	-	2015.5.26	−46.27	−6.86		
Jixian	Nestle	spring	-	−59.64	−8.3		
	Nstle (2)	-	2014.12.30 2015.3.20	−60.09	−8.02		
Case 3							
Hangzhou	Nongfu Spring	lake	2015.5.23	−41.78	−6.21	−41.61	−6.66
	Fuyang (3)	-	2015.4.04	−32.74	−4.463		
	Wahaha	-	-	−63.26	−8.73		
Danjiangkou	Wudangshanquan	spring	2015.3.11	−18.75	−3.86	-	-
	Nongfu Spring (2)	reservoir	2015.3.08 2015.6.15 2015.9.27	−57.96	−8.52		
	Cestbon	spring	−	−45.68	−6.83		
	Huiyuan	-	2015.3.17	−82.14	−10.61		
	Master Kong	-	-	−57.9	−7.83		

sign "-" means "unmarked".

Table S5. Comparison of isotope ratios of spring−sourced bottled water from 11 sites in this study and local tap water in [26].

Brand	Water Source Site	Bottled Water		Tap Water	
		δ^2H (‰)	δ^{18}O (‰)	δ^2H (‰)	δ^{18}O (‰)
Baishite	Lanzhou	−63.06	−9.61	−67.64	−9.82
Lao Shan (4)	Qindao	−50.87	−7.65	−49.45	−6.32
Wahaha	Tianshui	−57.68	−9.21	−59.73	−8.67
Xuenanshanquan	Kunming	−82.35	−12.41	−82.75	−11.12
Yearround Spring	Shijiazhuang	−62.84	−8.58	−63.67	−8.67
Huoshanyan	Wuda Lianchi	−86.8	−11.56	−87.55	−12.00
Royalquan (3)	Wuda Lianchi	−82.92	−10.91	−87.55	−12.00
Kelan	Qingdao	−48.4	−6.00	−49.45	−6.32
Meizhi	Langfang	−79.68	−10.9	−74.99	−10.48
Beidahuangguo	Wuda Lianchi	−82.95	−11.12	−87.55	−12.00
Beidahuangguo	Wuda Lianchi	−83.36	−11.05	−87.55	−12.00

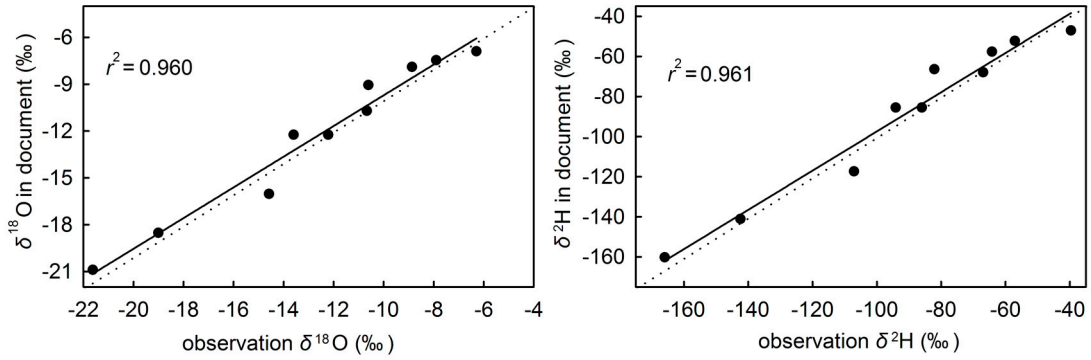

Figure S1. Correlations between 11 sites in [17] to our current of $\delta^{18}O$ ($\delta^{2}H$) values in bottled water. The dotted line is the line of equality (y = x) and the solid line is the linear least squares fitting.

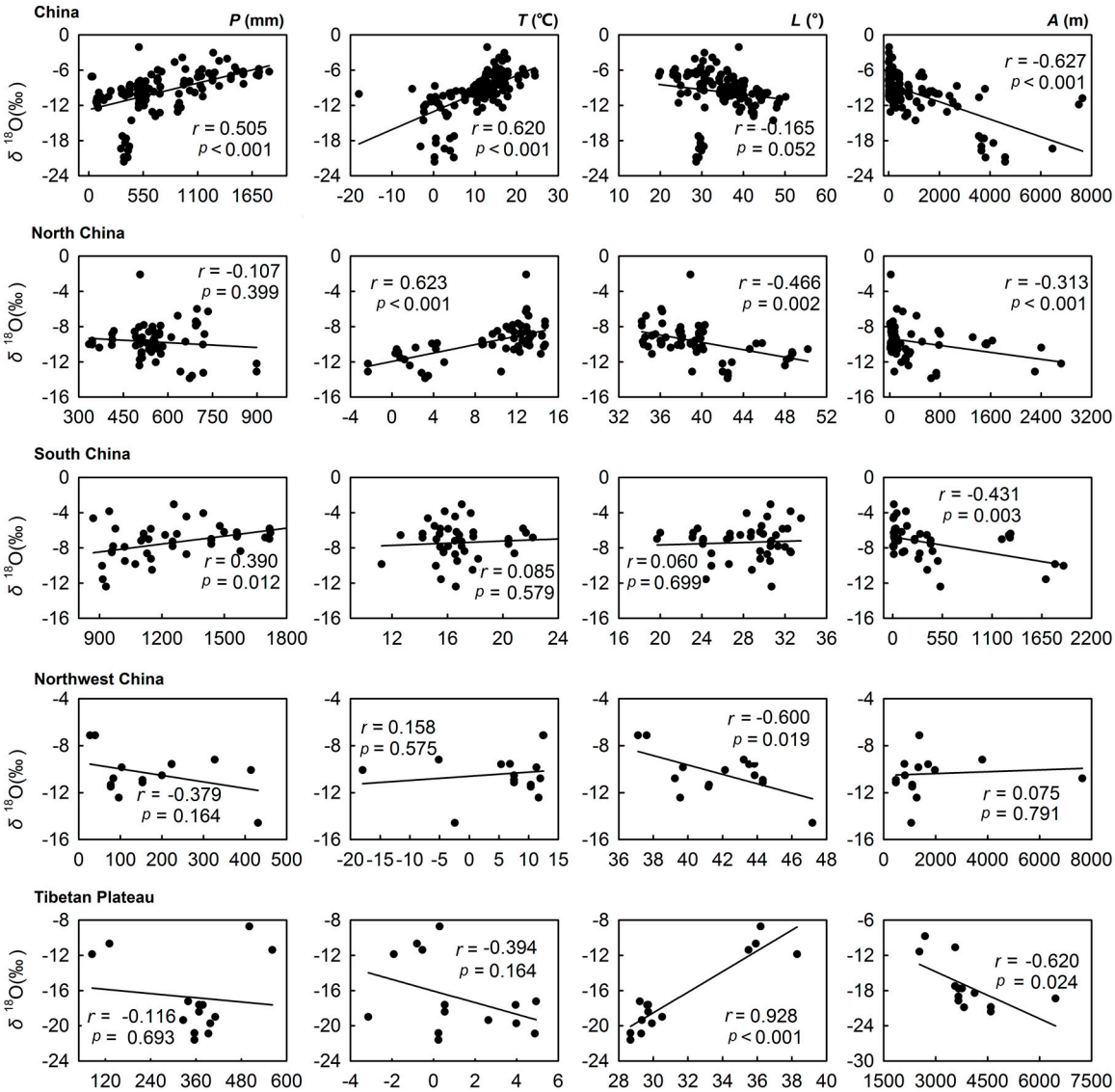

Figure S2. Correlations between measured $\delta^{18}O$ values of bottled water and four environmental factors using precipitation amount, temperature, altitude and latitude during 1970–2000, derived from the WorldClim–Global Climate Data version 2 ([21]; http://worldclim.org/version2).

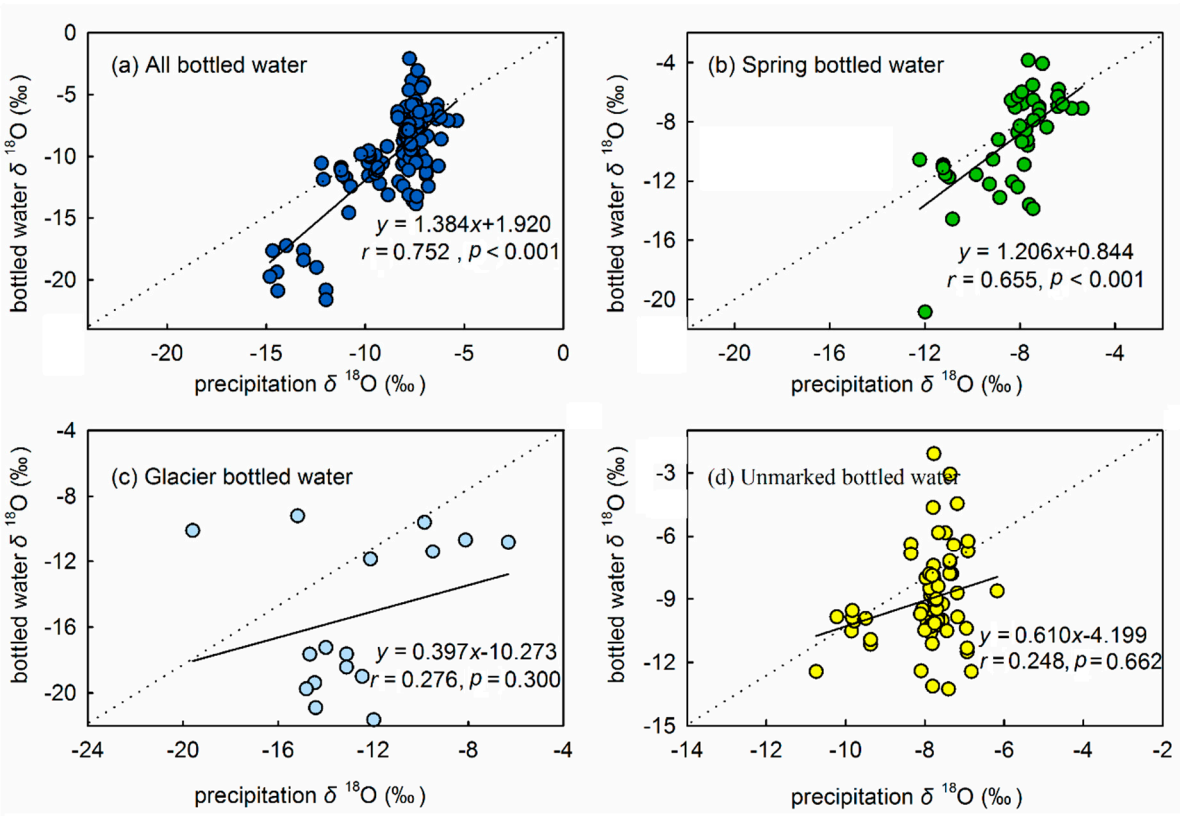

Figure S3. Correlations between $\delta^{18}O$ in precipitation and (**a**) all bottled water, (**b**) spring bottled water, (**c**) glacier bottled water and (**d**) unmarked bottled water using annual databases of RCWIP. The solid line is the linear least squares fitting. The dotted line is the line of equality (y = x).

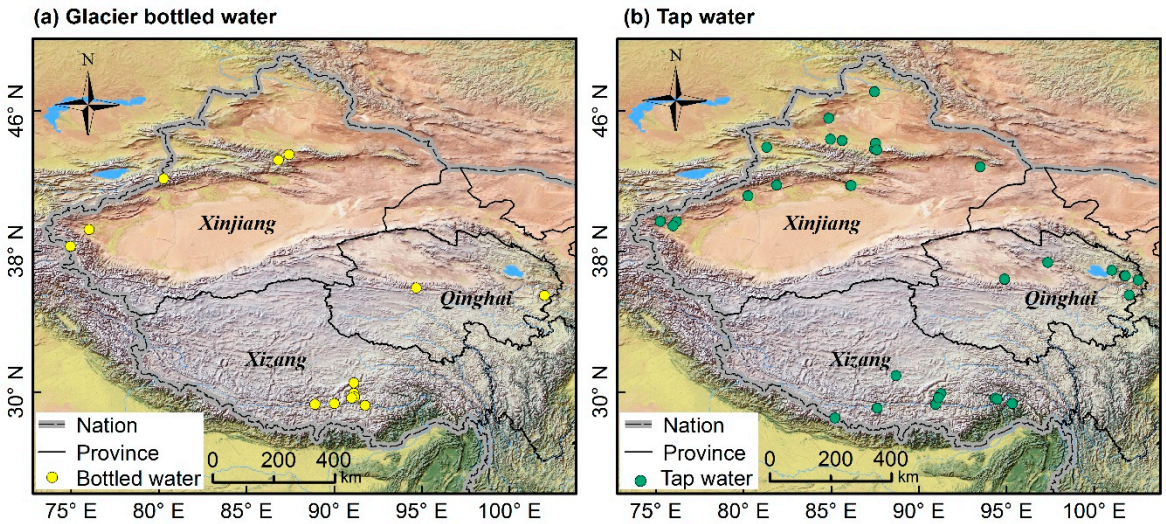

Figure S4. The distribution of glacier bottled water and tap water sample locations in Xinjiang, Qinghai and Xizang. Base map as in Figure 1.