

Table S1 Name, abbreviation, size, land cover type, sampling period, and flow type of 64 lakes in Tibetan Plateau

Lake Name	Abb. (number)	Year/Month/Day	Area (km ²)	Elevation (m)	Land cover type ^a	Retention Time (day)	Saline (%)	Type	<i>N</i>
CuoChuoLong	CCL (1)	2017/08/28	10.4	4624	G+N	13254	22.5	Brackish	1
TuoSuHu	TSH (2)	2014/09/13, 2017/08/15	143.7	2808	G+N	10950	19.4-22.8	Brackish	11
JiangCuo	JC (3)	2017/08/20	40.6	4608	G+N	14598	12.2-13.5	Brackish	3
HaLaHu	HLH(4)	2017/08/14	600.5	4081	G+N	19852	12.2-12.4	Brackish	3
DaZeCuo	DZC (5)	2015/07/01, 2017/08/23	290.4	4470	G+N	12781	11.7-11.9	Brackish	10
DongBuCuo	DBC (6)	2015/07/02	17.8	4656	G	10046	11.4	Brackish	1
QingHaiHu	QHH (7)	2014/09/17	4349.9	3199	G+N	22054	9.64-10.12	Brackish	2
PengCuo	PC (8)	2017/08/20	178.6	4534	G+N	10762	8.0-8.5	Brackish	4
ZhaRiNanMuCuo	ZRNMC (9)	2017/08/25	1003.2	4617	G+N	19163	6.5-7.8	Brackish	7
SeLinCuo	SLC (10)	2015/06/30, 2017/08/22	2333.7	4701	G+N	16555	6.2-7.7	Brackish	11
DiBuCuo	DBC-2 (11)	2017/08/26	63.9	4660	G	12105	6.6-7.4	Brackish	2
Ang'ZiCuo	AZC (12)	2015/07/02	400.2	4544	G+N	11408	6.5	Brackish	1
BaMuCuo	BMC (13)	2015/06/27, 2017/08/21	252.5	4565	G+N	13440	6.2-7.2	Brackish	9
DangReYongCuo	DRYC (14)	2015/07/02	842.4	4540	G+N	18645	5.8-5.9	Brackish	4
Ang'RenJinCuo	ARJC (15)	2017/08/29	21.5	4303	G	6200	4.65-4.68	Brackish	3
GeMangCuo	GMC (16)	2015/07/02	103.6	4617	G+N	9875	4.6	Brackish	1
GongZhuCuo	GZC (17)	2015/07/04	53.1	4799	G	8950	3.7	Brackish	1
ZhangNaiCuo	ZNC (18)	2015/07/02	103.6	4616	G+N	8800	3.6	Brackish	1
GaHai-1	GH-1 (19)	2014/09/17	45.2	2756	G+N	7652	2.4	Brackish	1
WuZiHu	WZH (20)	2014/09/14	6.43	3204	G+F	6230	1.9-3.0	Brackish	3
BaiMaLaMuCuo	BMLMC (21)	2015/06/21	1.45	4729	G	3265	2.3-2.4	Brackish	3
E'Ling Around	ELA(22)	2015/06/30	6.43	4557	G+N	5100	2.1	Brackish	1
XuRuCuo	XRC (23)	2015/07/03	209.7	4723	G+N	8945	1.9	Brackish	1

PeiKuCuo	PKC (24)	2017/08/28	269.8	4585	G+N	9870	1.84-1.87	Brackish	4
DaJiaCuo	DJC (25)	2017/08/27	115.5	5151	G+N	8300	1.7-1.9	Brackish	2
GaHai-2	GH-2 (26)	2014/09/12	33.6	2859	G+N	7481	1.7	Brackish	1
CaiJiCuo	CJC (27)	2017/08/24	32.7	4677	G	8935	1.55-1.56	Brackish	2
QiGeCuo	QGC (28)	2017/08/24	20.22	4671	G	7630	1.3-1.6	Brackish	2
YangHu	YH (29)	2015/06/24	571.4	4447	G	9980	1.16-1.23	Brackish	11
LangCuo	LC (30)	2017/08/29	12.1	4944	G	6970	1.1-1.3	Brackish	2
YanHu	YH-2 (31)	2014/09/13	6.98	2695	N	6450	1.1	Brackish	1
CuoRuiCuo	CRC (32)	2017/08/27	34.6	4807	G	3999	0.9	fresh	1
NaMuCuo	NMC (33)	2015/06/22, 2017/08/31	2027	4729	G+N	10370	0.7-0.9	fresh	15
XiaWan Reservoir	XWR (34)	2014/09/12	5.23	3825	G+N	6590	0.73	fresh	1
KeLuKeHu	KLKH (35)	2014/09/31, 2017/08/16	54.7	2817	G+N	5300	0.6-0.7	fresh	13
WeiZhi-1	WZ-1(36)	2017/08/30	0.37	4715	G	4980	0.68	fresh	1
La'AngCuo	LAC (37)	2015/07/04	257.5	4575	G	7690	0.64-0.76	fresh	4
TaRuoCuo	TRC (38)	2017/08/26	485.2	4572	G	8090	0.51-0.52	fresh	4
BanGongCuo	BGC (39)	2015/07/05	451.1	4244	G	9830	0.50-0.54	fresh	5
HuaiTouTaLa	HTTL (40)	2014/09/13	0.49	2922	G+N+C	5650	0.48	fresh	1
GaRongCuo	GRC (41)	2017/08/27	3.51	4863	G	5688	0.48	fresh	1
DongJiCuoNa	DJCN (42)	2014/09/15	234.9	4088	G+N	7741	0.34-0.35	fresh	4
GaRenCuo	GRC-2 (43)	2017/08/26	63.89	4664	G	6332	0.3	fresh	1
CuoNa	CN (44)	2017/08/19	216.2	4590	G+N	10325	0.29-0.3	fresh	7
ZhaLingHu	ZLH (45)	2017/09/16, 2017/09/05	552	4295	G+N	2676.2	0.24-0.35	fresh	7
XingXingHai	XXH (46)	2014/09/15, 2017/09/04	28.87	4237	G+N	4364	0.21-0.41	fresh	7
CuoLongQue	CLQ (47)	2015/06/22	6.33	4743	G+N	6744	0.28	fresh	1
LiuJiaXia	LJX-1 (48)	2017/09/08	128.5	1733	G+N	9345	0.26-0.28	fresh	10
E'LingHu	ELH (49)	2014/09/16, 2017/09/05	659.3	4273	G+N	6166.2	0.25-0.26	fresh	6

MaPangYongCuo	MPYC (50)	2015/07/04	412.6	4600	G+N	11275	0.25	fresh	2
WeiZhi-2	WZ-2(51)	2017/09/04	0.33	4236	G+N	5630	0.22-0.27	fresh	2
QiaGuiCuo	QGC-2 (52)	2015/06/30	89.4	4561	G+N	7518	0.24	fresh	1
CuoBaGu	CBG (53)	2015/06/27	3.1	4612	G+N	6862	0.24	fresh	1
Li'JiaXia	LJX-2 (54)	2017/09/07	28	2164	G+F	5302	0.22-0.23	fresh	6
PuMoYongCuo	PMYC (55)	2015/06/25	292.1	5024	G	7813	0.22-0.24	fresh	4
LongYangXia	LYX (56)	2014/09/18	348	2572	G+N+C	8999	0.20-0.21	fresh	11
CuoE	CE (57)	2015/06/30	270.2	4570	G	8137	0.15-0.22	fresh	4
WeiZhi-3	WZ-3 (58)	2015/06/28	0.2	4742	G	5602	0.19	fresh	1
WuRuCuo	WRC (59)	2015/07/01	353.3	4559	G	8316	0.18-0.22	fresh	5
GeRenCuo	GRC-3 (60)	2015/06/29	477.4	4654	G+N	10952	0.16-0.18	fresh	6
KongTianCuo	KTC (61)	2015/06/25	39.3	4452	G	5191	0.16	fresh	1
TongZeCuo	TZC (62)	2017/08/27	60.2	4837	G	6548	0.14	fresh	1
ShiBuCuo	SBC (63)	2015/06/30	14.8	4573	G	4982	0.08	fresh	1

^a denotes land use type, G= grass, N= non-utilization, F=frost, and C=cultivate land

Figure S1 The distributions of average DOC concentrations (mg L^{-1}) in water samples from 63 lakes in Tibetan Plateau

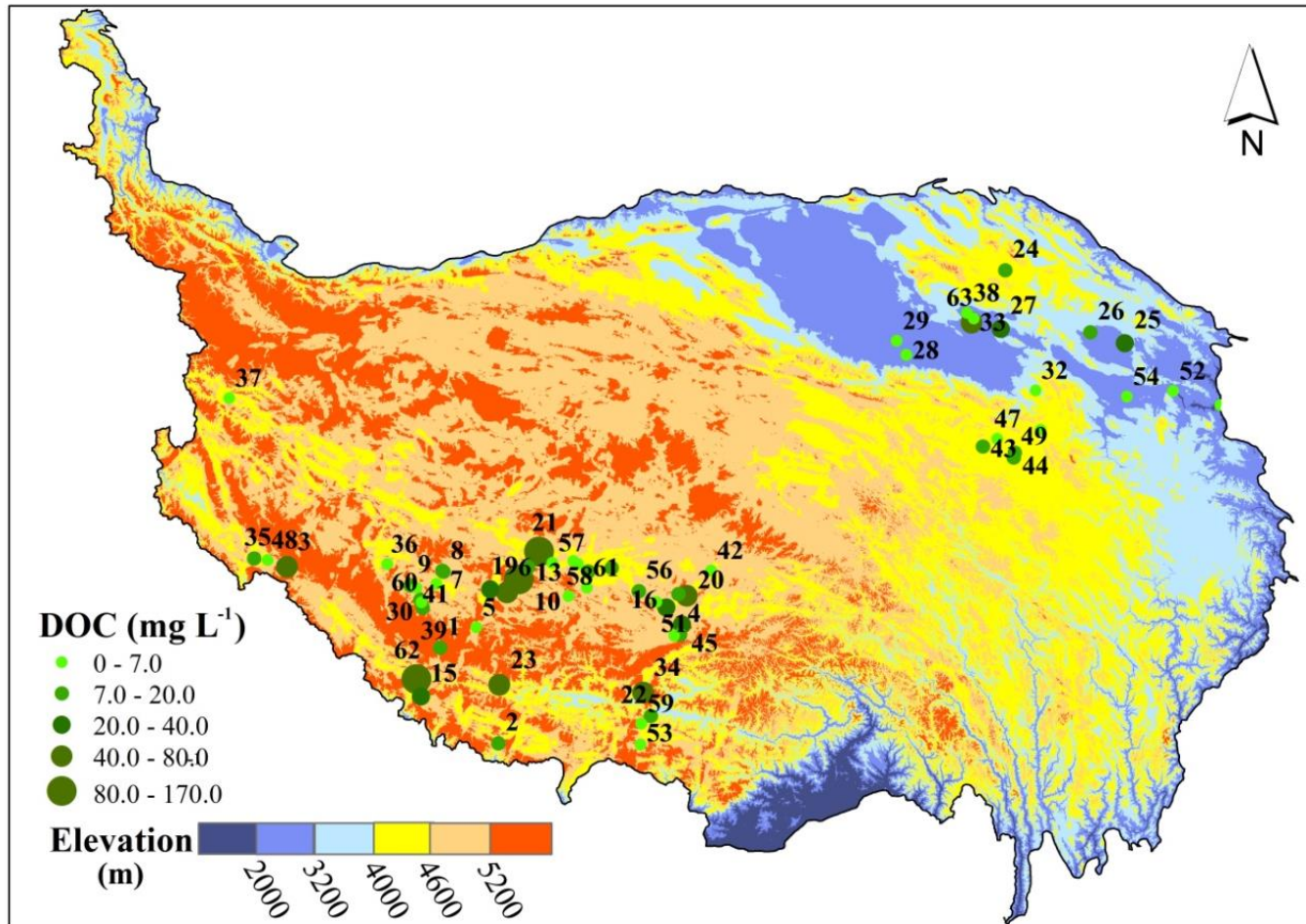


Figure S2 The DOC concentrations (mg L^{-1}) in lakes samples ($N=244$) and inflow river samples in Tibetan Plateau

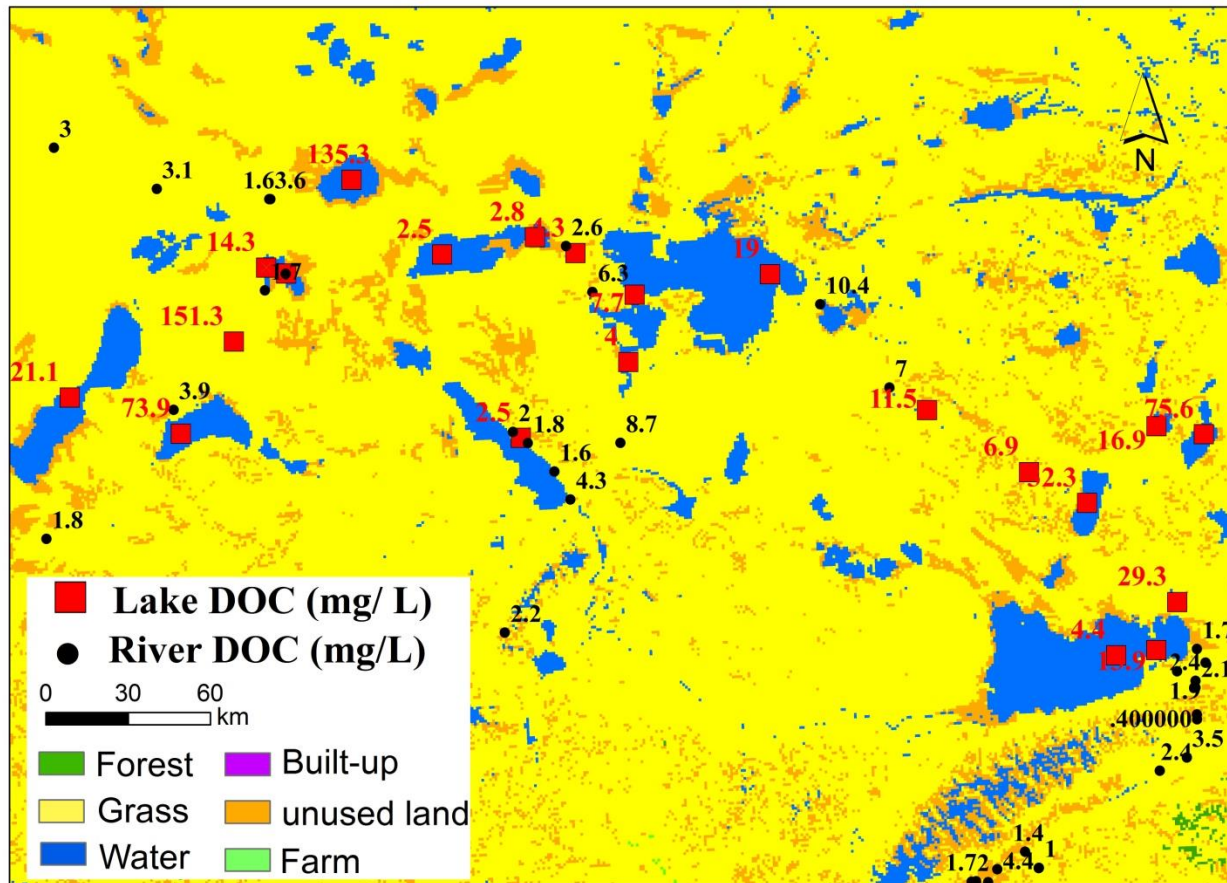


Figure S3 The land use type area (%) of main basins (B1-B20) of lakes in Tibet Plateau

