

Table S1 Annual rainfall, discharge and sediment load from 1960-2020

Year	Rainfall (mm)	Discharge ($\times 10^8$ m ³)	Sediment load ($\times 10^8$ t)
1960	313.4	12.57	0.886
1961	622.3	16.97	1.93
1962	457	12.59	0.683
1963	582.9	13.79	1.85
1964	663.5	20.15	3.1
1965	273.8	11.33	0.426
1966	398.1	15.95	3.75
1967	543.9	17.85	2.73
1968	387.1	15.92	1.59
1969	473.9	15.02	1.72
1970	404.9	15.76	2.56
1971	340.8	12.89	1.34
1972	311.9	10.55	0.596
1973	558.4	11.83	0.684
1974	318.4	9.46	0.526
1975	512.7	9.19	0.346
1976	508.9	10.36	0.316
1977	686.7	14.7	2.69
1978	678.7	14.9	1.92
1979	433.8	11.4	0.619
1980	392.5	9.78	0.446
1981	384.8	11	0.653
1982	364.2	10.3	0.611
1983	452.1	9.49	0.254
1984	450.8	10.1	0.41
1985	558.6	11.7	0.728
1986	313.3	9.7	0.24
1987	391.9	9.56	0.555
1988	506.2	12.5	1.02
1989	461.2	9.48	0.353
1990	553.5	9.848	0.558
1991	448.8	9.417	0.632
1992	473.7	10.24	0.882
1993	480.3	7.179	0.334
1994	598.7	11.61	2.08
1995	454	10.93	1.45
1996	488.1	10.79	0.875
1997	264.2	7.536	0.407
1998	429.2	8.511	0.842
1999	307.7	7.36	0.346
2000	421.8	6.749	0.285
2001	451.1	8.672	0.958

2002	553.3	9.024	0.697
2003	530.6	8.363	0.137
2004	311.8	6.964	0.369
2005	362.3	6.086	0.12
2006	504.6	6.722	0.563
2007	652.8	7.37	0.336
2008	440.7	6.203	0.0267
2009	635.3	9.276	0.119
2010	464.8	8.437	0.037
2011	558	7.629	0.058
2012	500.9	9.029	0.198
2013	680.5	10.39	0.273
2014	577.4	8.448	0.061
2015	423.9	7.71	0.061
2016	478.7	10.23	0.139
2017	697.7	10.74	0.845
2018	489.8	8.895	0.193
2019	334.1	7.995	0.179
2020	668.2	8.259	0.036

Table S2 Water use, population and GDP of Yulin city from 1991-2015

	Water use (100 million m ³)	Population (10,000)	GDP (100 million yuan)
1991	5.4	300.15	17.31
1992	5.52	305.30	21.68
1993	6.31	309.40	25.58
1994	5.70	305.00	41.94
1995	5.74	309.73	45.97
1996	5.75	313	59.35
1997	5.59	315	58.27
1998	5.73	316.22	65.11
1999	5.92	317.74	70.02
2000	5.77	326.04	75.05
2001	5.84	327.98	92.63
2002	5.98	329.56	111.36
2003	6.00	333.54	138.1
2004	6.02	336.79	185.04
2005	6.33	329.93	320.04
2006	6.76	30.33	439.47
2007	6.90	332.80	674.25
2008	7.09	333.98	1008.26
2009	6.90	334.73	1302.31
2010	6.92	335.42	1756.07
2011	7.32	335.24	2292.25

2012	7.53	335.69	2669.88
2013	8.08	337.03	2846.75
2014	7.59	338.39	2920.58
2015	7.72	340.11	2491.88

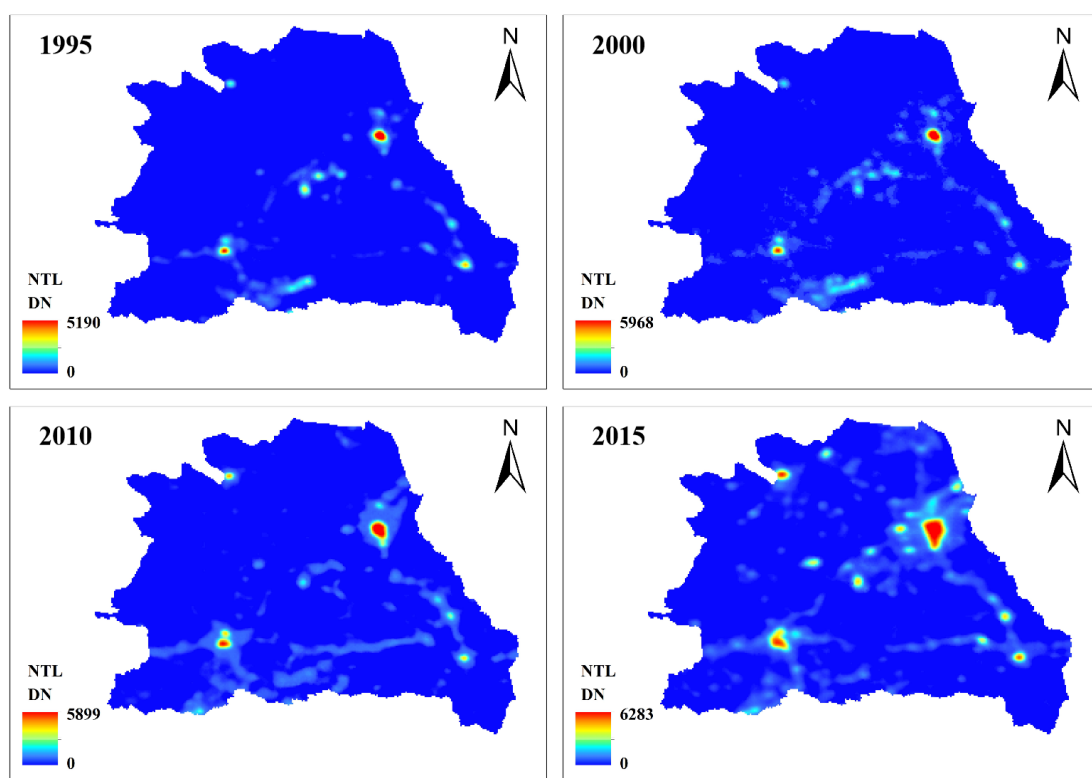


Figure S1 A Prolonged Artificial Nighttime-light Map of Wuding River Basin from 1995-2015