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SUPPLEMENTARY MATERIAL

Changes in and driving factors of the lake area of Huri Chagannao'er Lake in Inner Mongolia

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Tab. S1. Landsat remote sensing data information used in this study.

Satellite name	Spatial resolution	WRS-2 Path/Row	Date	Cloud cover
Landsat 5/TM	30 m	125/30	1988/9/26	6%
Landsat 5/TM	30 m	125/30	1989/9/13	0%
Landsat 5/TM	30 m	125/30	1990/10/18	0%
Landsat 5/TM	30 m	125/30	1991/9/3	0%
Landsat 5/TM	30 m	125/30	1992/9/21	0%
Landsat 5/TM	30 m	125/30	1993/9/8	0%
Landsat 5/TM	30 m	125/30	1994/9/27	0%
Landsat 5/TM	30 m	125/30	1995/9/14	34%
Landsat 5/TM	30 m	125/30	1996/9/16	0%
Landsat 5/TM	30 m	125/30	1997/9/3	0%
Landsat 5/TM	30 m	125/30	1998/9/6	0%
Landsat 5/TM	30 m	125/30	1999/10/11	0%
Landsat 5/TM	30 m	125/30	2000/10/13	0%
Landsat 5/TM	30 m	125/30	2001/8/13	17%
Landsat 5/TM	30 m	125/30	2002/9/1	4%
Landsat 5/TM	30 m	125/30	2003/9/20	1%
Landsat 5/TM	30 m	125/30	2004/10/8	0%
Landsat 5/TM	30 m	125/30	2005/8/8	4%
Landsat 5/TM	30 m	125/30	2006/9/28	0%
Landsat 5/TM	30 m	125/30	2007/10/1	9%
Landsat 5/TM	30 m	125/30	2008/9/17	0%
Landsat 5/TM	30 m	125/30	2009/10/6	0%
Landsat 5/TM	30 m	125/30	2010/9/23	0%
Landsat 5/TM	30 m	125/30	2011/9/26	0%
Landsat 7/ETM+	30 m	125/30	2012/10/6	0%
Landsat 8/OLI	30 m	125/30	2013/9/15	0.16%
Landsat 8/OLI	30 m	125/30	2014/9/2	2.85%
Landsat 8/OLI	30 m	125/30	2015/10/23	0.97%
Landsat 8/OLI	30 m	125/30	2016/9/23	0.02%
Landsat 8/OLI	30 m	125/30	2017/9/26	0.03%

Tab. S2. Lake area information for Huri Chagannao'er Lake between 1988 and 2017.

Date	Lake area	Amount of change	Rate of change
1988/9/26	98.99 km ²		
1989/9/13	97.68 km ²	-1.32 km ²	-1.34%
1990/10/18	93.57 km ²	-4.11 km ²	-4.20%
1991/9/3	93.50 km ²	-0.07 km ²	-0.07%
1992/9/21	98.08 km ²	4.57 km ²	4.89%
1993/9/8	97.33 km ²	-0.75 km ²	-0.77%
1994/9/27	91.74 km ²	-5.58 km ²	-5.74%
1995/9/14	92.24 km ²	0.50 km ²	0.55%
1996/9/16	92.72 km ²	0.48 km ²	0.52%
1997/9/3	88.70 km ²	-4.02 km ²	-4.33%
1998/9/6	94.05 km ²	5.35 km ²	6.03%
1999/10/11	86.19 km ²	-7.86 km ²	-8.36%
2000/10/13	81.54 km ²	-4.65 km ²	-5.40%
2001/8/13	46.78 km ²	-34.76 km ²	-42.63%
2002/9/1	27.69 km ²	-19.08 km ²	-40.80%
2003/9/20	55.23 km ²	27.54 km ²	99.42%
2004/10/8	85.83 km ²	30.60 km ²	55.41%
2005/8/8	75.12 km ²	-10.72 km ²	-12.48%
2006/9/28	32.17 km ²	-42.94 km ²	-57.17%
2007/10/1	26.28 km ²	-5.90 km ²	-18.33%
2008/9/17	54.27 km ²	27.99 km ²	106.53%
2009/10/6	27.38 km ²	-26.88 km ²	-49.54%
2010/9/23	34.77 km ²	7.39 km ²	26.97%
2011/9/26	29.39 km ²	-5.38 km ²	-15.47%
2012/10/6	77.49 km ²	48.10 km ²	163.64%
2013/9/15	81.23 km ²	3.74 km ²	4.83%
2014/9/2	62.66 km ²	-18.57 km ²	-22.86%
2015/10/23	45.10 km ²	-17.56 km ²	-28.02%
2016/9/23	32.30 km ²	-12.81 km ²	-28.40%
2017/9/26	29.81 km ²	-2.49 km ²	-7.71%

The amount of change is equal to the difference between the area of the current year and the area of the previous year. The rate of change is equal to the difference between the area of the current year and the area of the previous year as a percentage of the area of the previous year.