

Does Chagan Lake in China have a PCO₂ change?

This study used Landsat satellite images to analyze the spatiotemporal characteristics and factors influencing the CO₂ changes in Chagan Lake in China. We conducted six water sampling campaigns at Chagan Lake in 2020-2021 and determined the partial pressure of carbon dioxide (pCO₂) from 110 water samples.

Does Chagan Lake have water?

Chagan Lake has progressed from "no water" to "water" to "clear water", and the lake area has been stable at 300 km² since 2012. The concentration of nitrogen and phosphorus in the water has decreased significantly, with mean nitrogen and phosphorus concentrations of 0.949 mg/L and 0.088 mg/L in 2021, respectively (Figure 11).

Is Chagan Lake a eutrophication Lake?

Chagan Lake is the seventh-largest freshwater lake in China and the largest natural lake in Jilin Province, with a surface area of 420 km² and a mean water depth of 2.5 m [31,32]. The main input source of Chagan Lake is the Songhua River, and the lake is one of the eutrophication lakes in China [33].

What is the main input source of Chagan Lake?

The main input source of Chagan Lake is the Songhua River, and the lake is one of the eutrophication lakes in China [33]. Chagan Lake is endowed with rich natural resources and is a well-known fishery and reed industry base.

Does Chagan Lake have a high CO₂ level?

Moreover, the measured water temperature, chlorophyll, TSM, and turbidity of Chagan Lake revealed high values in summer and low values in autumn, and their Pearson correlation coefficients with the pCO₂ values were 0.61, 0.82, 0.85, and 0.84, respectively (Figure 10).

Where is Lake Chagan located?

Published by Elsevier Ltd. Not far from Semey (formerly Semipalatinsk), one of the main cities in the northeast of Kazakhstan, the vast steppe is interrupted by a big lake that resembles a natural pond, called Lake Chagan.

?????. ??? Lake Chagan. 14??TNT???????????????? [1] 1965?1?15?,?????178?????14?? TNT ??????.
???4800??????????,? ...

The one in the city of Baicheng aims to eventually harness 15 gigawatt of solar PV - which is the largest yet announced in China to integrate renewable generation and hydrogen infrastructure within a so-called "hydrogen ...

Chagan Lake Solar Power Generation

Lake Chagan, The Atomic Lake Filled With Radioactive Water Kaushik Patowary Mar 22, 2014 12 comments
During the hey days of Cold War, the Soviet started blowing up nukes all over northeastern Kazakhstan to ...

Location of the study area (a) China and its provincial borders; (b) the location of the study area in Jilin Province; (c) the image map of the study area in 2010, including the ...

In order to study the evolution of landscape patterns and the main driving forces in the Chagan Lake Nature Reserve in recent years, we used landscape type data from 2005, 2010, 2015, and 2019 to study the ...

Water quality safety is the key factor to maintain the ecosystem service functions of lakes. Field investigations and statistical analyses were carried out to study the water quality of a large, agriculture-stressed lakes ...

The novel advancements of hybrid systems and poly-generation energy systems for power generation and water desalination with a focus on the improvement of overall energy/exergy efficiency of ...

KUALA TERENGGANU (Sept 11): Terengganu Incorporated (Terengganu Inc), in collaboration with TNB Power Generation Sdn Bhd (TNB Genco), has launched a floating solar farm at Lake ...

Shagan (Kazakh: SHaghan) or Chagan (Russian: CHagan) is a lake in Zhanasemey District, Abai Region, Kazakhstan. Formed by a nuclear test explosion in 1965, it is part of the Balapan complex, one of the main tourist attractions of the Semipalatinsk Test Site.

This study used Landsat satellite images to analyze the spatiotemporal characteristics and factors influencing the CO₂ changes in Chagan Lake in China. We conducted six water sampling campaigns at ...

Chagan Lake, located in Songyuan City, is one of China's largest freshwater lakes with abundant fishery resources. For centuries, the locals living by Chagan Lake have kept alive the tradition ...

geochemical environment, human activities, such as the expansion of irrigation areas around Chagan Lake and groundwater exploitation, have accelerated the dissolution of ...



Chagan Lake Solar Power Generation

