Preliminary decoding of the rebirth of Lop Nur. Scientific study from Lop Nur and its surrounding areas published by *Scientific Reports*, a *Nature* portfolio journal

By LU Shanlong

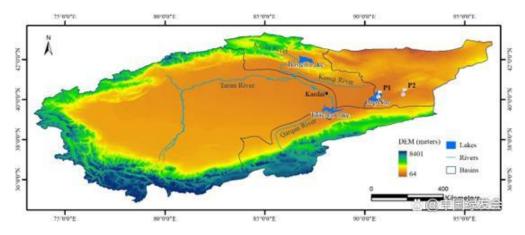
Abstract: Protecting and restoring the ecological environment of lakes in degraded arid regions is an urgent and global concern. The question is "under the background of climate warming and humidification in recent decades, can Lop Nur, a lake that has been 'dead' due to drought, regain its vigor and ripple and sparkle?". This latest scientific paper published by *Scientific Reports*, a *Nature* portfolio journal argues that if the regional climate trends, the intensity of ecological water supply and groundwater pumping are not reversed, the Lop Nur underground water level will be resumed wholly or partly. This study shows an encouraging case for the protection and restoration of degraded lakes in dryland regions around the world.

Key words: Lop Nur, arid area, degraded lake, ecological restoration

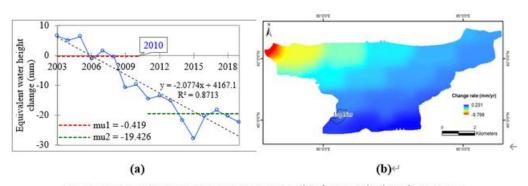
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Photo source: Nature



Digital terrain and surface water system of the Tarim River Basin and geographical location of Lop Nur



2003~2019 年罗布泊及周边区域地下水时间过程和空间变化率分布图



2021年7月在罗布泊核心区(左)和山前边缘地带(右)观察到的地下水出器深浸。