



## **Skempton Coefficient B before and after the 2008 Wenchuan earthquake in Chinese Mainland via Well Water level observation**

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Generally, the B value is suggested as a constant and was obtained via rock mechanic experiment. Recent research pointed out that the B value can be calculated from groundwater level/pore pressure observation data set of bore holes. In this paper, we use the observed barometric information and earth tide information of groundwater level to calculate the B value of Chinese mainland before and after the 2008 Wenchuan earthquake based on poroelastic theory. The result showed that the B value occurred prominent changes after the 2008 Wechuan earthquake. Furthermore, most of the B value get smaller than before. The wells/bore holes with prominent B value changes mainly distributed along the tectonic belt and/or active fault. We discussed the B value changes from rock mechanics and poroelasticity in this paper.