# Article information:

Effect of Cyclic Freezing-Thawing on the Shear Mechanical Characteristics of Nonpersistent Joints  
<https://www.hindawi.com/journals/amse/2019/9867681/>

# Article summary:

1. This paper investigates the effect of freezing-thawing cycles and joint persistency on the shear strength deterioration of joints.

2. Shear strength damage mainly occurs in the initial stage of the freezing-thawing cycle, and freeze-thaw cycles have a minimal effect on joints with low persistency.

3. Cohesion is the dominant factor that controls shear strength, while friction angle is the dominant factor when freezing-thawing cycles are constant.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article “Effect of Cyclic Freezing-Thawing on the Shear Mechanical Characteristics of Nonpersistent Joints” provides an overview of how freezing-thawing cycles and joint persistency affect shear strength deterioration in joints. The article is well written and provides a comprehensive review of relevant literature as well as detailed descriptions of experimental methods and results.

The authors provide evidence to support their claims, such as citing relevant studies conducted by other researchers, providing detailed descriptions of experimental methods used, and presenting data from experiments conducted for this study. However, there are some potential biases in the article that should be noted. For example, there is no discussion about possible risks associated with freezing-thawing cycles or any counterarguments to their findings. Additionally, there is no mention of any alternative explanations for their results or any potential limitations to their study that could affect their conclusions.

In conclusion, this article provides a thorough overview of how freezing-thawing cycles and joint persistency affect shear strength deterioration in joints. While it does provide evidence to support its claims, there are some potential biases that should be noted such as lack of discussion about possible risks associated with freezing-thawing cycles or any counterarguments to their findings.

# Topics for further research:

* Freezing-thawing cycle risks
* Joint persistency effects
* Alternative explanations for shear strength deterioration
* Limitations of freezing-thawing experiments
* Counterarguments to freezing-thawing effects
* Shear strength deterioration in nonpersistent joints

# Report location:

<https://www.fullpicture.app/item/76440891bf5bfc77b76e77e518bce5e7>