# Article information:

Emergent constraints on future projections of the western North Pacific Subtropical High | Nature Communications  
<https://www.nature.com/articles/s41467-020-16631-9>

# Article summary:

1. The western North Pacific Subtropical High (WNPSH) is a dominant circulation system in East and Southeast Asia, and its future changes have important implications for the region.

2. Uncertainty in future projections of the WNPSH is high due to zonal oscillatory behavior under greenhouse gas forcing.

3. Emergent constraints based on relationships between future and current climate states can reduce uncertainty in the WNPSH projection by 45%.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article “Emergent Constraints on Future Projections of the Western North Pacific Subtropical High” provides an overview of the potential impacts of climate change on the western North Pacific Subtropical High (WNPSH). The article presents a novel approach to reducing uncertainty in future projections of the WNPSH by using emergent constraints based on relationships between future and current climate states. The authors provide evidence that two particular modes associated with tropical cold tongue and marine stratocumulus errors are closely linked with intermodel spread of future WNPSH projections, which can be observationally constrained.

The article is generally well-written and provides a comprehensive overview of the topic, however there are some areas where it could be improved. Firstly, while the authors discuss potential sources of uncertainty in model simulations, they do not explore any possible counterarguments or alternative explanations for their findings. Secondly, while they present evidence that two particular modes are closely linked with intermodel spread of future WNPSH projections, they do not provide any evidence to support their claim that these biases can be observationally constrained. Thirdly, while they discuss potential impacts of climate change on East and Southeast Asia, they do not mention any possible risks associated with these changes or how people in this region might be affected by them. Finally, while they present evidence that emergent constraints can reduce uncertainty in the WNPSH projection by 45%, they do not provide any information about how this reduction could be used to inform policy decisions or adaptation strategies for this region.

In conclusion, while this article provides an interesting overview of potential impacts of climate change on East and Southeast Asia, it could benefit from further exploration into counterarguments or alternative explanations for its findings as well as providing more evidence to support its claims about observational constraints and potential risks associated with climate change in this region.

# Topics for further research:

* Climate change impacts on East and Southeast Asia
* Climate change adaptation strategies for East and Southeast Asia
* Climate change risks for East and Southeast Asia
* Intermodel spread of future WNPSH projections
* Observationally constrained future WNPSH projections
* Counterarguments to emergent constraints on future WNPSH projections

# Report location:

<https://www.fullpicture.app/item/c2f9c5027cb367748d284c71da175d62>