# Article information:

Journal of Advances in Modeling Earth Systems
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# Article summary:

1. This article presents a new quasi-strongly coupled data assimilation (QSCDA) system that assimilates monthly mean atmospheric reanalysis data under the coupled model framework of FGOALS-g2.

2. The QSCDA system is evaluated using observational cost function, monthly biases of the atmospheric and oceanic control variables, global averaged root mean square errors (RMSEs) of atmospheric control variables, the correlation coefficients of global mean annual surface air temperature anomalies (SATAs) and SST anomalies (SSTAs), the interannual and decadal variabilities of the East Asian Summer/Winter Monsoon (EASM/EAWM) indices, climate variabilities over the Pacific and the Atlantic.

3. The QSCDA system performs better than WCDA system, and WCDA system performs better than the uninitialized simulation in terms of DCP skills.

# 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:

This article presents a new quasi-strongly coupled data assimilation (QSCDA) system that assimilates monthly mean atmospheric reanalysis data under the coupled model framework of FGOALS-g2. The authors provide evidence for their claims by evaluating the QSCDA system using observational cost function, monthly biases of the atmospheric and oceanic control variables, global averaged root mean square errors (RMSEs) of atmospheric control variables, the correlation coefficients of global mean annual surface air temperature anomalies (SATAs) and SST anomalies (SSTAs), the interannual and decadal variabilities of the East Asian Summer/Winter Monsoon (EASM/EAWM) indices, climate variabilities over the Pacific and the Atlantic. The authors also declare that they have no conflict of interest which adds to its trustworthiness.

However, there are some potential biases in this article that should be noted. Firstly, there is no mention or exploration into any possible risks associated with this QSCDA system such as potential impacts on ecosystems or human health due to changes in climate variability over time. Secondly, there is no discussion on any unexplored counterarguments or alternative solutions to this problem which could lead to partiality in reporting. Thirdly, there is no mention or exploration into any other sources or methods for obtaining data which could lead to one-sided reporting on this topic. Finally, it is unclear if both sides were presented equally as there is no discussion on any opposing views or arguments regarding this topic which could lead to promotional content in this article.

# Topics for further research:

* Risks associated with data assimilation systems
* Alternative solutions to data assimilation systems
* Sources of data for data assimilation systems
* Counterarguments to data assimilation systems
* Impacts of data assimilation systems on ecosystems
* Impacts of data assimilation systems on human health

# Report location:

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