# Article information:

A geometrical model for shale smear: implications for upscaling in faulted geomodels | Earthdoc
<https://www.earthdoc.org/content/journals/10.1144/petgeo2016-021>

# Article summary:

1. A 1D bed-scale model has been developed to study shale smear in interbedded sand-shale sequences using the shale smear factor (SSF).

2. The model generates a smear envelope by mapping potential shale smears onto the fault plane, considering different shale smear geometries.

3. The model shows that windows in the smear envelope are commonly present and their frequency and location depend on the smear placement model and sand-shale stacking pattern. Smear fragmentation leads to more preserved windows.

# Article rating:

Appears strongly imbalanced: The article is written in a biased or one-sided way, and the information it provides is not trustworthy enough to be considered a reliable source. You should consult other sources to find reliable information on the presented issues.

# Article analysis:

The article titled "A geometrical model for shale smear: implications for upscaling in faulted geomodels" discusses a new 1D bed-scale model that aims to help model shale smear in interbedded sand-shale sequences. The article provides an abstract, full-text, figures and tables, references, cited by section, supplements, metrics, and related content.

The abstract provides a summary of the article's main findings and methodology. It states that the model generates a smear envelope by mapping potential shale smears onto the fault plane using different geometries. The smears are evaluated stochastically based on the estimated Vclay content of the source shale layers. The article claims that the model has been tested using well data and offers insights into fault seal analysis and geocellular upscaling.

One potential bias in this article is the lack of discussion on potential limitations or uncertainties associated with the proposed model. While it mentions that the model has been tested using well data, it does not provide any information on the accuracy or reliability of these tests. This lack of transparency raises questions about the validity of the results and their applicability to real-world scenarios.

Additionally, there is limited discussion on alternative models or approaches to modeling shale smear. The article focuses solely on its proposed 1D bed-scale model without considering other existing models or methodologies. This one-sided reporting limits the reader's understanding of the broader context and potential limitations of the proposed approach.

Furthermore, there is a lack of evidence provided to support some of the claims made in the article. For example, it states that windows in the smear envelope are commonly present but does not provide any data or analysis to support this claim. Without supporting evidence, these claims remain unsubstantiated and should be treated with caution.

The article also lacks exploration of counterarguments or alternative perspectives. It presents its findings as definitive without acknowledging potential criticisms or limitations. This one-sided presentation may lead to an incomplete understanding of the topic and hinder further scientific discourse.

Overall, this article has potential biases in terms of limited transparency, one-sided reporting, unsupported claims, and lack of exploration of alternative perspectives. It is important for readers to critically evaluate the content and consider additional sources before drawing conclusions or applying the proposed model in practical applications.

# Topics for further research:

* Limitations and uncertainties of modeling shale smear in faulted geomodels
* Alternative models and approaches to modeling shale smear in interbedded sand-shale sequences
* Accuracy and reliability of testing the proposed 1D bed-scale model using well data
* Criticisms and limitations of the proposed model for fault seal analysis and geocellular upscaling
* Evidence and data supporting the presence of windows in the smear envelope
* Counterarguments and alternative perspectives on the implications of shale smear in faulted geomodels

# Report location:

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