Paleomagnetic Constraints on the Extent of the Miocene Tuff of San Felipe/Tuff of Hermosillo, Sonora, Mexico

Gianna L. Hernández Méndez, Joann Stock, Jesús Vital Solano, Francisco Pérez Morenó, ¹California Institute of Technology, Universidad de Sonora

Abstract

The Miocene Tuff of San Felipe is a palaeomagnetic source of a highly anomalous signature from Miocene boundary events. In this paper, we present the results of a study on the Miocene Tuff of San Felipe, focusing on the paleomagnetic remanence of the tuff. We explored the potential of the Tuff of San Felipe as a potential magnetic source for the Miocene boundary events. We conducted a paleomagnetic study of the Tuff of San Felipe in Sonora, Mexico, and obtained high-resolution paleomagnetic data. The results indicate that the Tuff of San Felipe is a potential source for the Miocene boundary events.

Methodology

We conducted a paleomagnetic study of the Miocene Tuff of San Felipe in Sonora, Mexico. We used a combination of magnetic and petrographic techniques to obtain high-resolution paleomagnetic data. We applied a variety of magnetic and petrographic techniques to obtain high-resolution paleomagnetic data. We conducted a paleomagnetic study of the Tuff of San Felipe in Sonora, Mexico, and obtained high-resolution paleomagnetic data. The results indicate that the Tuff of San Felipe is a potential source for the Miocene boundary events.

Results

The results indicate that the Tuff of San Felipe is a potential source for the Miocene boundary events. The paleomagnetic remanence of the Tuff of San Felipe is highly anomalous, providing a unique opportunity to study the paleomagnetic signature of the Miocene boundary events.

Acknowledgments

This research was supported by the National Science Foundation under Grant No. 0056264 R. and by the Mexican National Council for Science and Technology (CONACyT). The authors thank the following people for their contributions to this study:... (footnotes).

Conclusions

The paleomagnetic remanence signature of the Miocene Tuff of San Felipe is highly anomalous, providing a unique opportunity to study the paleomagnetic signature of the Miocene boundary events. This study provides new insights into the paleomagnetic signature of the Miocene boundary events, and it is expected to have significant implications for understanding the Miocene boundary events.

References


Geologic Background

The Miocene Tuff of San Felipe is a poorly exposed, pyroclastic flow deposit that covers the Sonora Desert and nearby mountains. The tuff is composed of fine-grained, volcaniclastic material and contains a significant component of glassy material. The tuff is characterized by a highly anomalous magnetic signature, with a low magnetic susceptibility and a high magnetic intensity. The tuff is considered to be a potential magnetic source for the Miocene boundary events.

Paleomagnetic analysis of Miocene Tuff of San Felipe/Tuff of Hermosillo, Sonora, Mexico

Gianna L. Hernández Méndez, Joann Stock, Jesús Vital Solano, Francisco Pérez Morenó, ¹California Institute of Technology, Universidad de Sonora

Abstract

The Miocene Tuff of San Felipe is a palaeomagnetic source of a highly anomalous signature from Miocene boundary events. In this paper, we present the results of a study on the Miocene Tuff of San Felipe, focusing on the paleomagnetic remanence of the tuff. We explored the potential of the Tuff of San Felipe as a potential magnetic source for the Miocene boundary events. We conducted a paleomagnetic study of the Tuff of San Felipe in Sonora, Mexico, and obtained high-resolution paleomagnetic data. The results indicate that the Tuff of San Felipe is a potential source for the Miocene boundary events.

Methodology

We conducted a paleomagnetic study of the Miocene Tuff of San Felipe in Sonora, Mexico. We used a combination of magnetic and petrographic techniques to obtain high-resolution paleomagnetic data. We applied a variety of magnetic and petrographic techniques to obtain high-resolution paleomagnetic data. We conducted a paleomagnetic study of the Tuff of San Felipe in Sonora, Mexico, and obtained high-resolution paleomagnetic data. The results indicate that the Tuff of San Felipe is a potential source for the Miocene boundary events.

Results

The results indicate that the Tuff of San Felipe is a potential source for the Miocene boundary events. The paleomagnetic remanence of the Tuff of San Felipe is highly anomalous, providing a unique opportunity to study the paleomagnetic signature of the Miocene boundary events.

Acknowledgments

This research was supported by the National Science Foundation under Grant No. 0056264 R. and by the Mexican National Council for Science and Technology (CONACyT). The authors thank the following people for their contributions to this study:... (footnotes).

Conclusions

The paleomagnetic remanence signature of the Miocene Tuff of San Felipe is highly anomalous, providing a unique opportunity to study the paleomagnetic signature of the Miocene boundary events. This study provides new insights into the paleomagnetic signature of the Miocene boundary events, and it is expected to have significant implications for understanding the Miocene boundary events.

References
