# Article information:

Three-Dimensional Lightning Positioning in Low-Frequency Band Using Time Reversal in Frequency Domain | IEEE Journals & Magazine | IEEE Xplore
<https://ieeexplore.ieee.org/document/8738848/metrics>

# Article summary:

1. A low-frequency lightning location system was established and operated using the time-reversal approach in the frequency domain (TRFD).

2. Three cases are reported to showcase the capability of the method, including 3-D localization of an intra-cloud flash, localization of an artificially triggered lightning flash, and a multi-stroke cloud-to-ground flash.

3. The TRFD method reveals more details and is more continuous compared to those obtained by TOA method used in this paper.

# 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 is generally reliable and trustworthy as it provides detailed information about the research conducted on a low-frequency lightning location system using the time reversal approach in the frequency domain (TRFD). The article also presents three cases to showcase the capability of the method, which provides evidence for its claims. Furthermore, it compares TRFD with TOA methods used in this paper, which further supports its claims.

However, there are some potential biases that should be noted. For example, there is no mention of any possible risks associated with using TRFD or any other methods discussed in this paper. Additionally, there is no discussion of any unexplored counterarguments or missing points of consideration that could have been included in this paper. Moreover, there is no mention of any promotional content or partiality towards one side over another when discussing different methods used for lightning location systems. Finally, both sides are not presented equally as only one side (TRFD) is discussed in detail while other methods such as TOA are only briefly mentioned without providing much detail or evidence for their claims.

# Topics for further research:

* Risks associated with lightning location systems
* Counterarguments for lightning location systems
* Points of consideration for lightning location systems
* Promotional content for lightning location systems
* Partiality towards one side for lightning location systems
* Comparison of different methods for lightning location systems

# Report location:

<https://www.fullpicture.app/item/99a2cdf7eec0c87b80adc40f51a4f6f2>