

Review Form2

Book Name:	Research Advances in Environment, Geography and Earth Science
Manuscript Number:	Ms_BPR_2492
Title of the Manuscript:	The Test Flight of iFTEM-I Fixed-Wing Airborne Time-Domain Electromagnetic System in Binxian, Heilongjiang Province, China
Type of the Article	Book chapter

PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimumof 3-4 sentences may be required for this part.	This manuscript is significant for the scientific community as it presents advancements in airborne geophysical exploration through the development of the iFTEM-I system, which enhances the efficiency and depth of electromagnetic surveys. By providing a comprehensive comparison between airborne and ground-based methods, it contributes valuable insights into the effectiveness of different geophysical techniques, particularly in challenging environments. The detailed analysis of data processing and noise evaluation also offers a framework for future research and applications in mineral exploration and hydrogeology. Personally, I appreciate this manuscript for its thorough methodology and the practical implications of its findings, which can guide further innovations in the field. However, it could benefit from more extensive validation through additional field studies to strengthen its conclusions.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title "The Test Flight of iFTEM-I Fixed-Wing Airborne Time-Domain Electromagnetic System in Binxian, Heilongjiang Province, China" is suitable as it clearly indicates the focus of the study on the iFTEM-I system and its application in a specific geographical location	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The abstract of the article provides a good overview of the iFTEM-I system, its applications, and the context of its development. However, it could be enhanced by including a few additional points for clarity and completeness: Objectives: Clearly state the primary objectives of the study, such as the specific goals of the test flight and what the authors aimed to demonstrate or evaluate. Key Findings: Include a brief mention of the key findings or results from the test flight, such as the effectiveness of the iFTEM-I system compared to traditional methods, and any significant data obtained during the survey. Implications: Highlight the broader implications of the findings for future research or practical applications in geophysical exploration, which would provide context for the importance of the study. Limitations: Acknowledge any limitations encountered during the study or areas for future improvement, which would give a more balanced view of the research. Incorporating these elements would make the abstract more comprehensive and informative for readers, allowing them to quickly grasp the significance and outcomes of the research.	
Are subsections and structure of the manuscript appropriate?	The subsections and structure of the manuscript appear to be appropriate for conveying the research effectively.	

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Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	The manuscript demonstrates scientific robustness and technical soundness through its detailed methodology and comprehensive data analysis. The authors employ a systematic approach to the development and testing of the iFTEM-I system, ensuring that the experimental design is well-structured and replicable. The use of established software platforms for data processing and analysis, along with a thorough evaluation of noise levels and measurement accuracy, further supports the reliability of the findings. Additionally, the comparison between airborne and ground TEM surveys provides a solid basis for assessing the effectiveness of the iFTEM-I system, highlighting its potential contributions to the field of geophysical exploration. Overall, the manuscript is grounded in rigorous scientific principles, making it a valuable addition to the literature on airborne electromagnetic systems.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :	The manuscript demonstrates scientific robustness and technical soundness through its detailed methodology and comprehensive data analysis. The authors employ a systematic approach to the development and testing of the iFTEM-I system, ensuring that the experimental design is well-structured and replicable. The use of established software platforms for data processing and analysis, along with a thorough evaluation of noise levels and measurement accuracy, further supports the reliability of the findings. Additionally, the comparison between airborne and ground TEM surveys provides a solid basis for assessing the effectiveness of the iFTEM-I system, highlighting its potential contributions to the field of geophysical exploration. Overall, the manuscript is grounded in rigorous scientific principles, making it a valuable addition to the literature on airborne electromagnetic systems.	

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Minor REVISION comments		
Is the language/English quality of the article suitable for scholarly communications?	Yes	
Optional/General comments	Here are some general comments regarding the manuscript: 1. Clarity and Readability: The manuscript is generally well-written, but some sections could benefit from clearer language and more concise phrasing. Simplifying complex sentences and avoiding jargon where possible would enhance readability for a broader audience. 2. Figures and Tables: The inclusion of figures and tables is effective in illustrating key points and data. However, ensuring that all visual aids are clearly labeled and referenced in the text will improve comprehension. Providing captions that summarize the main findings depicted in the figures would also be beneficial. 3. Literature Context: While the manuscript presents valuable findings, it could strengthen its impact by situating the research within the broader context of existing literature. A more thorough review of related studies and technologies would help to highlight the novelty and significance of the iFTEM-I system. 4. Future Work: The manuscript would benefit from a section discussing potential future research directions or applications of the iFTEM-I system. This could include suggestions for further improvements to the technology or additional areas of exploration that could be pursued based on the findings. 5. Technical Details: While the technical aspects are generally well-covered, ensuring that all relevant parameters and specifications of the iFTEM-I system are clearly presented will aid in replicability and understanding. Including more detailed descriptions of the data processing techniques used could also enhance the manuscript's technical rigor. Overall, the manuscript presents a significant contribution to the field, and with some refinements, it could be even more impactful and accessible to readers. Here are some editorial comments that could be included in the manuscript review process: 1. Overall Quality: The manuscript presents a significant advancement in the field of airborne electromagnetic systems, particularly with the introduction of the iFTEM-I system. The research is well-structured and provides valuable insights into the effectiveness of this technology in mineral exploration. 2. Formatting and Style: Ensure that the manuscript adheres to the journal's formatting guidelines, including citation style, figure and table formatting, and overall layout. Consistency in these areas will enhance the professionalism of the submission. 3. References: A thorough review of the reference list is recommended to ensure that all cited works are relevant and up-to-date. Additionally, consider including more recent studies that may provide further context or support for the findings presented. 4. Peer Review Process: Given the technical nature of the research, it may be beneficial to seek reviewers with expertise in airborne electromagnetic methods and geophysical exploration to provide a comprehensive evaluation of the manuscript. 5. Ethical Considerations: Confirm that all ethical guidelines have been followed, particularly regarding data collection and reporting. If applicable, ensure that any necessary approvals or permissions for the research have been obtained and documented. 6. Clarity of Objectives: The manuscript would benefit from a clearer articulation of its objectives in the introduction. Clearly stating the research questions or hypotheses will help guide the reader	

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	through the subsequent sections. 7. **Conclusion and Implications** : The conclusion should not only summarize the findings but also discuss their broader implications for the field. Highlighting potential applications or future research directions would strengthen the manuscript's impact	
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PART 2:

	Reviewer’s comment	Author’s comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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