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Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2014_BJAST_9809
Title of the Manuscript:	REGIONAL STRATIGRAPHIC INTERPRETATION OF AN ANTARCTIC SHELF EDGE SEISMIC LINES
Type of the Article	Research paper

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (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)
<u>Compulsory</u> REVISION comments	The paper 'Regional stratigraphic interpretation of an Antarctic shelf edge seismic lines' describes 2D seismic data acquired in the Bellingshausen Sea to interpret stratigraphic nature and causes of sediment deposition. It provides insights of how grounded ice can modify the stratigraphy of the continental shelf over long periods of geological time. Though, the paper uses a good dataset for such scientific investigations, there are some serious issues with this paper. Some violations of copyright law of usage of published figures and incidences of text plagiarism have been detected. 6 out of 14 figures have been taken from the literature. The paper must be rejected until all above issues have been resolved and major revisions, given below, have been made; after which the paper can be resubmitted for review.	Noted
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments	The manuscript is POORLY structured. Methodology is not explained clearly. Results and Discussion is absent from the manuscript. I am not aware of the article structure style of the journal,	Noted



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	but it is much easier for the reader if the paper is structured under separate headings of Introduction, Study area, Methodology, Results and Discussion, and Conclusions. The objectives of the study are not clearly mentioned in the beginning of the paper. Various headings and subheadings are not organized.	
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	The paper 'Regional stratigraphic interpretation of an Antarctic shelf edge seismic lines' describes 2D seismic data acquired in the Bellingshausen Sea to interpret stratigraphic nature and causes of sediment deposition. It provides insights of how grounded ice can modify the stratigraphy of the continental shelf over long periods of geological time. Though, the paper uses a good dataset for such scientific investigations, there are some serious issues with this paper. Some violations of copyright law of usage of published figures and incidences of text plagiarism have been detected. 6 out of 14 figures have been taken from the literature. The paper must be rejected until all above issues have been resolved and major revisions, given below, have been made; after which the paper can be resubmitted for review. General Comments: The manuscript is POORLY structured. Methodology is not explained clearly. Results and Discussion is absent from the manuscript. I am not aware of the article structure style of the journal, but it is much easier for the reader if the paper is structured under separate headings of Introduction, Study area, Methodology, Results and Discussion, and Conclusions. The objectives of the study are not clearly mentioned in the beginning of the paper. Various headings and subheadings are not organized. Please be consistent with the spelling of 'Antarctic' or 'Antarctica' throughout the paper and within figures. Introduction: Please expand Introduction section. It lacks previous work using seismic lines, glacial sediment history, etc.	Noted Noted
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	Merge some sections into Introduction. Please discuss the sediment core analysis from the literature to link the deposition of sediments caused by ice movement during glacial maximum. Please discuss the literature on the general (current and past) sea ice motion trends in this continental shelf region of the Bellingshausen Sea. Have similar results been reported in other parts of Antarctic continental shelves? What is the significance/implications of this study from cryosphere/global climate change point of views? Do underwater currents also play a role in shifting sediment layers, horizontally and vertically? Are these dominant in this part of Antarctic? Please provide literature on the grounded ice and its movement. Specific Comments: L.23. Ref. Nitsche et al. (1997) is missing in reference list. L.37. Wrong style of citation. Please provide full citation for both Beaglehole (1961) and Anderson (1991). L.47-49. Where is Ronne entrance located? Please locate Ellsworth Land, Alexander Island, and Thurston Island. L.50. To support this sentence, please provide a bathymetric map. L.51-53. Provide reference for both sentences. L.56. Use degree symbol instead of zero.Ensure consistency throughout. Figure1: Location map does not provide much information. Some more work is required. World map is not necessary; please remove. Please provide a zoomed map of Bellingshausen Sea and Antarctic Peninsula clearly showing the seismic profile locations and the demarcate shelf area mentioned. A bathymetric map of	Noted Noted Noted
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	the whole area can be useful. This will add to detailed seismic lines given in Figure 2. Figure1: VIOLATION OF COPYRIGHT LAW DETECTED. Please ensure that you have received written permission from the publishers of Dowdeswell et al. (2008), before using their Figure in your paper. Check the copyright issues. You cannot reproduce a copyrighted figure by cropping it, without the written permission. L.63-76. Please identify Eastern and Western Antarctic regions on a map. Also, locate major mountains and ice shelves described in the paragraph. L.73-76. Please give exact reference of BAS publication mentioned. Include it in reference list. L.81. Insert space between number and unit, '500 m'. Make similar changes throughout. L.82. Wrong style of citation. Please provide full reference of Shepard (1973) in the reference list. Simply cite both references individually. L.85. Have you obtained written permission from the publishers of Anderson (1991) for using their figure in your paper? Or have you changed the figure a little to claim it as yours? If not, please remove the Figure 3. L.89. References Holtsdahl (1929, 1958) are missing in the list. L.90. Reference Shepard (1931) is missing in the list. L.97. Do you mean Free-air gravity anomaly? How did you acquire gravity data? Which instrument was used? Please describe instrument details in Methodology section. Or was it acquired from airborne surveys or satellite data? Give proper references. L.112-114. Please show on a geographic map where West ice shelf, Shackleton ice shelf, Voyeykov ice shelf, and Cook ice shelf are located.	Noted Noted Noted Noted
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	L.116. Which instrument (s) did you use? What was the methodology? How did you acquire data? Please describe all of these in a separate Methodology section. L.119. Wrong style of citation. Reference Larter and Cunningham (1993) is missing in the list. L.120-156. It appears that you are reviewing Cooper et al. (1991) paper. Please separate your results into two individual sections, 1. Results, and 2. Discussion. Minimize Cooper's discussion into your paper. L.121. Where are Weddell Sea and Marie Byrd Land located? Please show on a geographic map. L.124. References Hinz and Krause (1982), Hinz and Block (1984), Wannesson et al. (1985), Wannesson (1990), and Cooper (1989a, 1991a) are missing from the reference list. L.127-156. TEXT PLAGIARISM DETECTED. A lot of text has been copied, without change, from Cooper et al. (1991). L.136. Please ensure consistency: 'Type IA' or 'type IA'. Figure4. VIOLATION OF COPYRIGHT LAW DETECTED. Have you obtained written permission from the publisher of Cooper et al. (1991) to use and modify the copyrighted Figure? If not, please remove Figure 4. Please limit this paper to your results only. You cannot reproduce a copyrighted figure by cropping it, without the written permission. Figure5. VIOLATION OF COPYRIGHT LAW DETECTED. Figure 5 has been copied from Fig. 11 of Cooper et al. (1991). Have you obtained written permission from the publisher of Cooper et al. (1991) to use and modify the copyrighted Figure? If not, please remove Figure 5. Please limit this paper to your results only. You cannot reproduce a copyrighted figure by cropping it, without	Noted Noted Noted
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	the written permission. Figure6. VIOLATION OF COPYRIGHT LAW DETECTED. Figure 6 has been cropped from Fig. 14 of Cooper et al. (1991). Have you obtained written permission from the publisher of Cooper et al. (1991) to use and modify the copyrighted Figure? If not, please remove Figure 6. Please limit this paper to your results only. You cannot modify a copyrighted figure by cropping it, without the written permission. L.195. TEXT PLAGIARISM DETECTED. Caption of Figure 6 is copied from Cooper et al. (1991). Earlier you considered your study area Bellingshausen Sea, but you are showing shelf section of Ross Sea? Why? L.180-186. TEXT PLAGIARISM DETECTED. The text caption of Figure 5 is taken from Fig. 14 of Cooper et al. (1991). L.204. Reference Cochrane and Cooper (1991), and Solheim et al. (1991) are missing from the reference list. Wrong style of citation. Figure7. VIOLATION OF COPYRIGHT LAW DETECTED. Is Figure 7 taken from Cunningham et al. (1994)? Have you obtained written permission from the publisher of Cunningham et al. (1994) to use and modify the copyrighted Figure? If not, please remove Figure 7. Please limit this paper to your results only. You cannot modify a copyrighted figure by cropping it or adding annotation to it, without the written permission. L.222. What is the length of each line? L.226. What does SEG-Y stand for? Expand it at its first	Noted Noted Noted
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	mention in the manuscript. Figure9. What do green, pink, dark green, and orange lines signify? What does TWT stand for? Figure10. Reference Vail et al. (1987) is missing from the reference list. VIOLATION OF COPYRIGHT LAW DETECTED. Is Figure 10 taken from Vail et al. (1987)? Have you obtained written permission from the publisher of Vail et al. (1987) to use and modify the copyrighted Figure? If not, please remove Figure 10. Please limit this paper to your results only. You cannot modify a copyrighted figure by cropping it or adding annotation to it, without the written permission. Figure11. What do different colors of lines signify? What does TWT stand for? Figure12. What do different colors of lines signify? The text is not readable. What does TWT stand for? Figure13. Please merge Figure 13 and 14 and use the same legend for both. The legend is missing. L.275-277. Which figure are you referring to? Please cite figure in the text. L.285. What was shot frequency? What was sound wave frequency? What kind of explosives or techniques was used? How did you clean the data, i.e. pre-processing? Please also give a description of air gun and hydrophones in the Methodology section, for future repeatability of the experiment. L.308. Do you mean 'this unit also consists of...'? L.309.The thickness cannot be expressed in time units.	Noted Noted Noted
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	Please translate 0.1 to 0.25 s into meters or km. L.323-324. The thickness cannot be expressed in time units. Please translate 0.05 to 0.15 s and 0.04 to 0.18 s into meters or km. Please make similar changes throughout the manuscript. L. 329. Do you mean '...consists...'? Conclusions: L.332-346. Some sentences in the Conclusion belong to Discussion section. Please identify and separate such sentences. The first sentence should also be appended to the end of Introduction to clarify the objectives of this paper. L.352. Do you mean '...show similar...'? L.355-356. 'These differences...drainage patterns.' I cannot understand this sentence. Please rewrite with correct grammar. Please provide suggestions for future work, for example, issues with 3D seismic data acquisition; correlation with geological events, benefits and limitations of 2D seismic lines data. References: The list is incomplete. Many cited references are missing. Please ensure the alphabetical order of listing. <i>If any ethical issue, Please clarify</i> <i>If any Plagiarism issue, Please clarify</i>	Noted Noted NOTED
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