

Answer

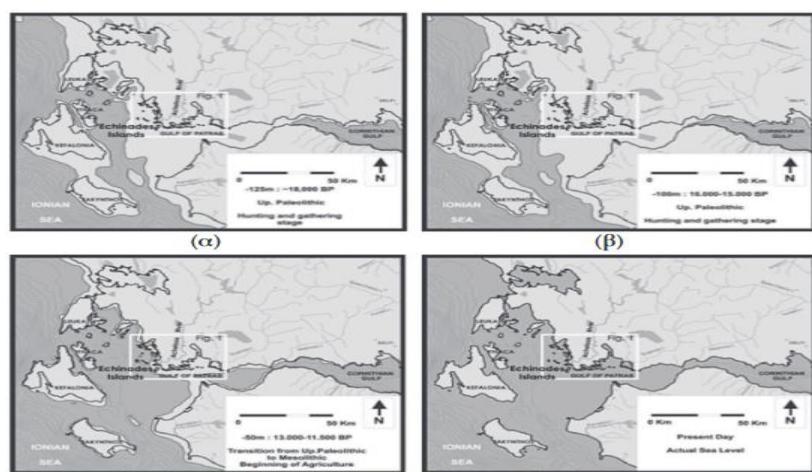
Dear Mr. Beer,

We are glad that our paper enlarged your knowledge in connection with the Argonautic Campaign. It seems that your interest starts from your young years from the Argonauts' club of Australia.

In your text you have sent to the site of the journal you express a doubt about our ideas expressed in the paper. Initially, you assume that Apollonius' text cannot be correct since 1000 years have been elapsed since the events. I would like to inform you that Apollonius was director of the famous library of Alexandria in which all the wealth of the ancient knowledge was available to the researchers there. Consequently he could have many and serious primary sources.

In the paper 'Voett A., Bruckner H., Schiever A., Handi M., Besonen M. and Van der Borg K. (2004): Holocene coastal evolution around the ancient sea port of Oiniadai, Acheloos alluvial plain, N.W. Greece. In Schernewski, G., Dolch, T. (Eds) Geographie der Meere und Kunsten. Coastline Reports, vol. I, pp.43-53, Rostock-Warnemunde, you can recognize the evolution versus time of this region after the start of the melting of the last ice age from 18000 before present and onwards. Ovidius a Latin author, in Metamorphoses, VIII, 576 described an old myth which exhibited a cataclysmic event occurred in West Greece involving, not 1000 years distance from him, as it was the case of Apollonius, but several thousands of years distance from him. What he described has been proven fully as the following maps illustrate clearly. Mariolakos et al., 2017. Proceedings of the International symposium 'Ancient Greece and the modern world: Ancient Olympia 28-31 August in 2016. p.p. 299-322.

The geological studies dated the gradual raising of the sea level. The local population, there, conceived the river deposits of the proto-Acheloos river as Nymphs of the river and the latter as a 'god'. In the following Figures the evolution of the coast lines is presented. The studies dated the sea event versus time and they explained it fully validating Ovidius.



In these Figures you can see successfully our understanding of the coastal changes of West Greece in which the river deposits became islands due to raising of the sea's level which was

a result of the melting of the glaciers of the last ice age. The old myth wanted 'god' Acheloos to be angry because his nymphs did not respect him anymore. Time has passed and Zeus and the Olympians were in action. Therefore he took the nymphs and their land into the sea! The nymphs today are called Echinades and they are islands

Your comment: ' this allows the authors the latitude to claim that certain parts of the text are exact, if they agree with their arguments, but that other parts are inexact or poetic if they disagree with their arguments. Such latitude in interpretation does not sit well with scientists', has nothing to do with the reality. On the contrary, in all the flow of our paper we give emphasis to the reader that we follow the ancient text very carefully and we demonstrate the absolute agreement between our findings and the writings of Apollonius. We never wrote that we found disagreement between our findings and the ancient text or that we accepted 'poetic permission'. Where did you see that in our paper?

It does not make sense your remark 'their claims to have proved them diminish their credibility', since we have proved, with all the information, we supply, our conclusions. If we did not produce the proofs you could write about lack of credibility. But we have supplied all the evidence of our findings in a stepwise mode. Therefore your *statement* is out of *time and space*.

You write: 'dogmatic statements' isolating one only phrase from an entire paragraph. This phrase is our comment to a Herodotus' text. Herodotus does write for another Argo's voyage. In that other voyage Argo reached to Minor Syrtis. The historian does not mention the trip of the Argonautic Campaign. See our relative comment in our paper. Consequently we judged to give emphasis and set this difference to the international reader and say that if the Argonauts had arrived for second time to Minor Syrtis during the Argonautic Campaign, Herodotus would have reported it.

Your comment about Herodotus may lead you in the complete rejection of his entire work. It would be a great scientific mistake.

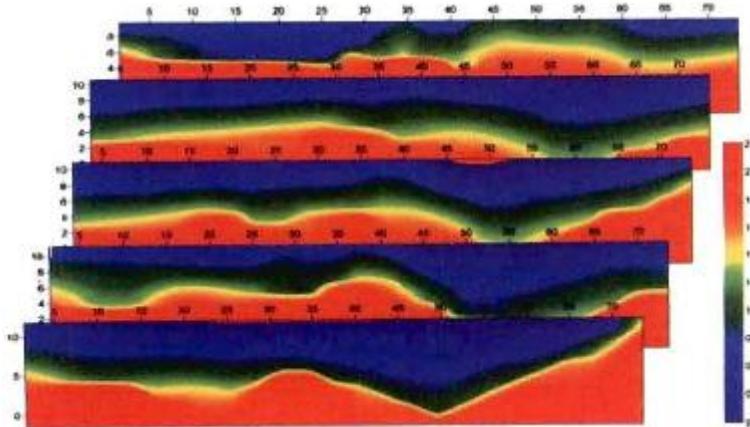
Not all modern historians view the same attitude with respect to Herodotus as a historian. Especially, those, who are informed from the scientific contributions from other realms of sciences such as Geophysics. For instance the following contribution demonstrated very clearly, to the international scientific community, that Herodotus was absolutely exact in all he narrated in connection with the Xerxes' Canal.

We offer you geophysical literature in which we demonstrated, very clearly, how we tested Herodotus in East Chalkidiki peninsula in Greece and we found him exact at all points he stated.

Karastathis, V.K. and Papamarinopoulos, St.P., (1997). The detection of the King Xerxes' Canal by the use of shallow seismic reflection seismic. Preliminary results. Geophysical Prospecting, 45, 3899-401. (The paper presented in the European Geophysical Union and was characterized the very paper of the symposium)

Karastathis, V.K., Papamarinopoulos, St.P. and Jones, R.E., (2001) 2-D velocity of the buried ancient canal of Xerxes: an application of seismic methods in archaeology, Journal of Applied Geophysics 47, p.p. 2943.

The canal in East Chalkidiki peninsula is visible exhibiting all the measurable parameters described by Herodotus in his text. (Herodotus Histories 7.23.8 7.23.29).



We have used advanced geophysics in order to test Herodotus and we found him correct at all aspects.

I would like to inform you that in the original ancient Greek text the lake is called Tritonis and not Triton's lake. Consequently your comment 'Tritonis lake as they call it, meaning us, is not correct. The naming of the lake was not given by us.

You judge the paper interesting but it is not well written. You had the kindness to show us some points of improvement. We shall consider them after receiving the answer from the reviewers.

For instance we could add a map in the Appendix as you suggest. We could add a glossary in the end if the reviewers ask it and the journal allows some extra pages.

By the way, Minor Syrtis is in Tunisia, is the Gulf of Gabes.

Figure 6 is mentioned in our text normally in the line 475.

The Dark Ages of Greece have nothing to do with other Dark Ages of other countries. I thank you for your remark and for the *correction* of the phrase 'West and Central African Coast'.

We shall take account your remarks in connection with the bibliography.

The 'modern technology' could be written indeed 'digital elevation model'.

We also used *forward and reverse engineering* in order to locate the departure's point of the Argonauts to sail from the African coast initially within the Mediterranean and eventually to reach Aegean Sea.

Our paper offers useful information for the hidden water sources to the geophysical science in the form of detailed aeromagnetic, aerogravimetric and aeroradar mapping supplying data for further researches for the tectonic regime and the unknown hydrogeological environment of North East Africa for which the water resources will be needed badly in the near future.

Our paper contributed in defining an important astrogeodetic point located in Siwa Oasis, the understanding of the ancient cartography within North East Africa defining an unknown water exit towards the Mediterranean Sea, the understanding of ancient maritime voyages connecting the Aegean Sea and Africa. This is not a *gross exaggeration* but a simple and plain truth.

Prof.Dr. Stavros P. Papamarinopoulos

University of Patras-Lab of Geophysics

Lead Author, HG SS Topical Editor