

Submerged Islands opposite the Strait of Gibraltar

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Summary:

Recent investigations into the cause of the 1755 Lisbon earthquake have brought focus upon the fault lines and seamounts opposite the Strait of Gibraltar and the threat to Iberia from future mega tsunamis. These may be compared to ancient reports of such earthquakes and catastrophes that suggest earlier episodes, as well as the probability that the seamounts were islands above sea-level during earlier human prehistory and are remembered in myths and legends.

Plato's dialogues give us a clear indication of where he believed the sunken island of Atlantis to have been situated. However, modern commentators, academic and popular alike, tend to disregard his actual words. This has led them in different directions: to seek alternative locations within the Mediterranean and elsewhere. So firstly, let's examine what he actually says.

...in those days the Atlantic was navigable; and there was an island situated on front of the straits which are by you called the Pillars of Heracles; the island was larger than Libya and Asia put together, and was the way to other islands, and from these you might pass to the whole of the opposite continent, for this sea which is within the Straits of Heracles is only a harbour...
[Timaeus, Jowett translation]

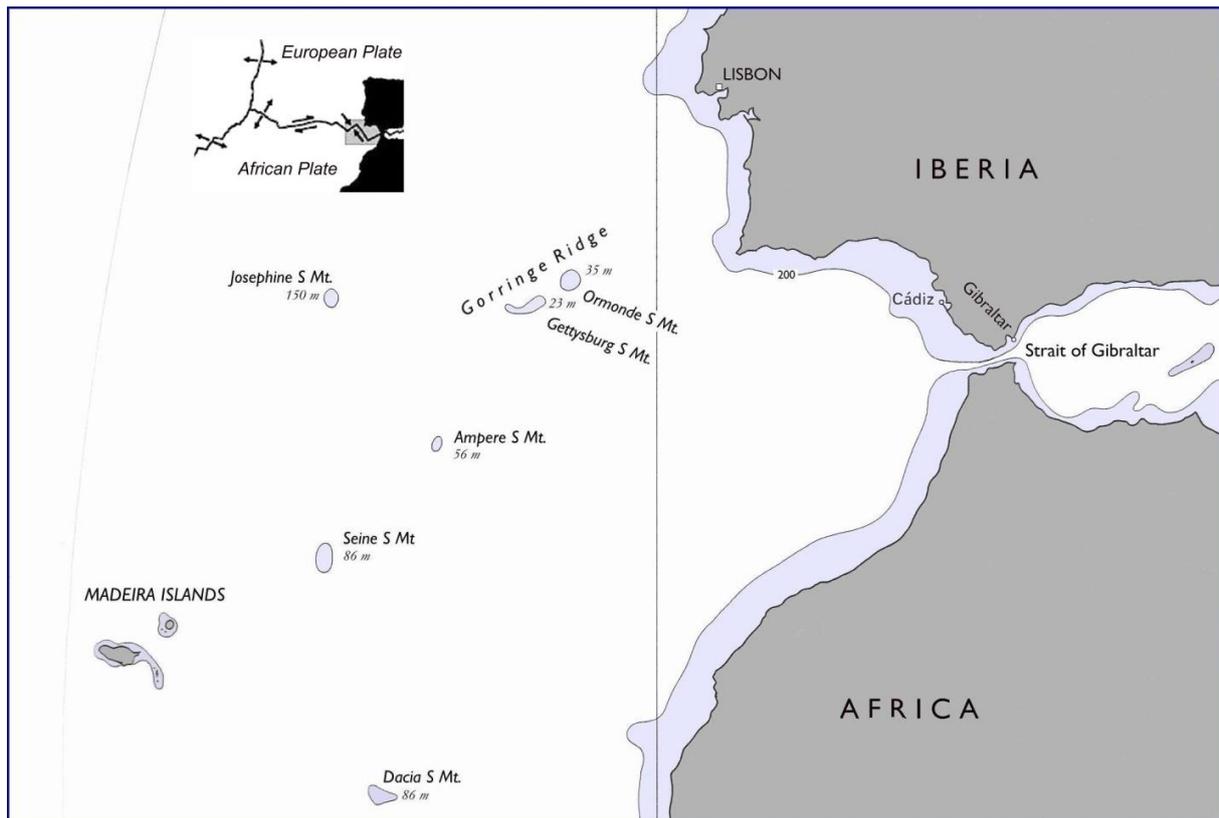
In the *Critias* he describes a peninsula of Atlantis: "*facing the country which is now called the region of Gades [Cadiz] in that part of the world*". Therefore it is clear that Solon's Egyptian sources are describing a location outside the Strait of Gibraltar.

In 1979 a team of Russian investigators led by Andrei Aksyonov would claim to have found walls and staircases on underwater photographs taken on the Ampere Seamount, which lies some 450 miles west of the Strait of Gibraltar. This is a prominent feature on navigation charts peaking at 56 m depth, together with the Gettysburg Seamount at just 35 m depth and nearby Ormond Seamount at 23 m depth. The Russian reports have been subsequently pursued by various authors as the site of a 'sunken continent', or of an island colony of Atlantis. The details of the Russian and related claims have been amply recorded with numerous links on the excellent [Atlantipedia](#) website and therefore need not be repeated here in such detail.

We should perhaps be wary of Russian research. A search for Atlantis would have made excellent cover for Cold War underwater spying activities, after the manner of the U.S. Glomar Challenger expedition and the search for the lost Titanic! Aksyonov would later declare that all the submerged features were entirely natural. After 1986 all went quiet.

The geography of these submerged seamounts is now much better known and the bathymetry of this region has been explored to a level of detail that we could only wish for most other undersea locations. The Ormond and Gettysburg Seamounts lie on the Goringe Ridge which runs along the Azores-Gibraltar fracture zone, where the African Plate is colliding with the European Plate and pushing up the Iberian peninsula. A colourful introduction to the oceanography of the Goringe Ridge may be found in this linked [Oceanea](#) report.

A detailed bathymetric study of the seamounts on the Goringe Bank is that of de Aletriis et al, which records the cruise-expedition that surveyed the entire area in 2003. [1] The mapping reveals the two seamounts as convex, almost flat, 'shelf' areas, which they describe as resembling 'Pacific-type' guyots (submerged coral atolls).



A summarised bathymetric chart showing coasts, islands and seamounts above 200m depth lying opposite the Strait of Gibraltar. The transform fault passes through the middle of Gettysburg Seamount.

The studies published by the various oceanographers will give the impression that the two seamounts could have been above the sea during the lowered sea-levels of the late-Pleistocene. However, in the 2003 survey the authors admit that: *“dating these features is still not allowed by present data”* – a typical plea for more data that is almost standard in sea-level studies! The tentative dating comes solely from the usual glacio-isostatic modelling assumptions. Terraces are found at -60 m on the Gettysburg slopes and at -120 m on both seamounts. [3] These correspond with terraces of similar depth found along the Spanish-Portuguese coasts. Four main platforms have been recorded, at depths of 35–40 m, 60–70 m, 80–90 m and 120–140 m; some being tilted by about one degree. [5] As the sea level is believed to have risen by around 120 m since the Ice Age maximum then it is *assumed* that any such deep features must therefore be of glacial age. Other papers then cite this and thus it enters the chain of evidence as unquestioned fact.

Portuguese researchers have researched the history of earthquakes and tsunamis in this region in pursuit of the causes of the great Lisbon tsunami of 1755. The earliest historically known quakes were recorded by Medieval Spanish and Portuguese chroniclers at 246 BC, 218 BC and 210 BC. [2] These tsunamis may be associated with the disappearance of the lost city of *Tartessos* somewhere in the Gulf of Cadiz, which some have compared with Atlantis. [3] The earthquakes have their origin along the Azores-Gibraltar fracture zone; the Goringe region being a seismically complex region where other faults converge and where subduction can occur. The Spanish coastal sediments record many earlier tsunamis – but this can tell us little about stable ancient coastlines, as tsunami waves can penetrate far inland. [3]

Scientific research places little value on legendary evidence, such as that of the classical historian Diodorus Siculus. He records that a low-lying region called the Marsh Tritonis lay “near the ocean which surrounds the earth” and that it disappeared in the course of an earthquake “when those

parts...which lay towards the ocean were torn asunder". [4] The earthquakes are discussed by Diodorus along with events during the earliest period of the Egyptian state (predynastic or First Dynasty c.3100 BC). Therefore they may remember those same earthquakes that Solon attributed to the Mediterranean region as far away as Greece and occurring along the same fault line, as it continues east from the Straits to Malta and Greece.

Unlike volcanic Madeira and the Canary Islands further out, the two Goringe seamounts could only have been flat-top atolls; more like modern Bermuda. It should be apparent that even if these two islets did appear above the sea during the Holocene then they cannot have been Atlantis. They are simply too small to hold all the features described.

The modern bathymetric studies cited above are highly detailed and they offer no evidence of patterned ground or any obvious human structures. They offer nothing to support the Russian claims of the 1970s to have seen walls and buildings.

However, the submerged seamounts could explain the memory of an island lying 'opposite Gades' or opposite the 'Pillars of Heracles', which was the way to other islands beyond. The seamounts could have been shallow islets until 10,000 years ago (Plato's Atlantis date) or even as recently as 5,000 years ago when there is general consensus that the 'post-glacial sea-level rise' finally stabilized.

As an author on these subjects, I can scarcely argue for a lower sea-level during Neolithic times five-thousand years ago, without at the same time acknowledging that small islands may have existed on the Goringe Ridge. I did note this possibility briefly in *Atlantis of the West* (The Atlantis Researches) which predated the above Spanish and Portuguese studies; but as with the submergences around Malta and Sicily, there was no field evidence to cite at that time. Perhaps it is now worth someone taking another look for archaeology and dating evidence on these submerged terraces?

Relevant Hyperlinks

<http://atlantipedia.ie/samples/tag/gettysburg-seamount/>

https://eu.oceana.org/sites/default/files/reports/seamounts_goringe_bank_eng.pdf

References

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2. Álvarez Marti-Aguilar, M. (2017) https://www.academia.edu/35530049/Tsunamis_in_the_Iberian_Peninsula_during_antiquity_the_historical_sources_5th_International_Tsunami_Field_Symposium_Lisboa_3-5_September_2017
3. Abril, J-M., Perriáñez, R. and Escacena, J-L. [Modeling tides and tsunami propagation in the former Gulf of Tartessos, as a tool for Archaeological Science](#) *Journal of Archaeological Science*, Vol 40, Issue 12 (2013) pp 4499-4508
4. *Diodorus Siculus, Histories Book III, 53-55*
5. Pastouret, L., Auzende, J-M., Le Lan, A. (1980) Temoins des variations glacio-eustatiques du niveau marin et des mouvements tectoniques sur le banc de Goringe (Atlantique du Nord-Est) *Paleo*, 32, (1980) 99-118 <https://www.sciencedirect.com/science/article/pii/0031018280900346?via%3Dihub>

Tags: sea level change, raised beach, Atlantis, Goringe, Ormond, Gettysburg Seamount, catastrophism, sea-levels, ancient climate, ice ages, pole shift

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