

Interactive comment on “Caspian Sea level changes during the last millennium: historical and geological evidences from the south Caspian Sea” by A. Naderi Beni et al.

E. Sauer (Referee)

eberhard.sauer@ed.ac.uk

Received and published: 3 May 2013

Caspian Sea level changes during the last millennium: historical and geological evidence [NB: not evidences] from the south Caspian Sea.

A. Naderi Beni¹, H. Lahijani², R. Mousavi Harami¹, K. Arpe^{3,4}, S. A. G. Leroy⁴, N. Marriner⁵, M. Berberian⁶, V. Andrieu-Ponel⁷, M. Djamali⁷, and A. Mahboubi⁸

Review/ comment

I am not a specialist on the last millennium or sea level fluctuations in general. It is thus with some reluctance that I have agreed to comment on a topic outside my expertise,

C621

as I was specifically asked to do so and as there are some aspects of it which I have some knowledge of. There are many other scholars who will be able to comment on the article as a whole more knowledgeably.

In general, the article is full of interesting information, and I hope it will be published, with some modifications.

Most importantly, in all citations, unless it the entire work is cited, page numbers should be added, not only because this is common academic practice, but, more importantly, as it is very difficult otherwise to find the relevant passage.

Similarly, when citing ancient or medieval authors (passim, e.g. on pp. 1409-10), if at all possible, passages should be indicated, as the edition used may not be easily available to scholars elsewhere. At the very least, page numbers in the edition used are essential, and it ought to be an edition that is accessible at least in top research libraries across the world. Many of the editions cited will be difficult or impossible to find for scholars in most countries. This is essential. References to entire works by medieval geographers will leave any scholar, trying to follow up the many important observations presented frustrated, as it will be exceptionally time-consuming or impossible to track them down.

The English is very good, as far I can judge, but not that ‘evidence’ is always singular. Gmelin (p. 1413) is spelled without an ‘i’ between the ‘G’ and the ‘m’.

I wondered whether Gumilev’s hypothesis that the Caspian Sea’s water level rose to -19m in the 14th c. (p. 1418) can be correct, when all observation on the ground, incl. our finding from the kiln in Trench I, which are cited and nicely compiled in Table 1, only indicate a lesser rise? If it is right, it ought to be later than our terminus post quem of 1344. This should be discussed further.

I entirely agree that Abeskun is likely to be at Gomish Tappeh. The harbour facilities probably had to be relocated from time to time. Useful on recent water level fluctua-

C622

tions at Abeskun is also Muraviev, N. 1823. *Voyage en Turcomanie et à Khiva fait en 1819 et 1820*, Paris. Dorn, B. 1875. *Caspia. Über die Einfälle der alten Russen in Tabaristan nebst Zugaben über andere von ihnen auf dem Kaspischen Meer und in den anliegenden Ländern ausgeführten Unternehmungen*. *Mémoires de l'Académie Impériale des Sciences de St.-Pétersbourg* 23.1, St. Petersburg: 4-7, cf. 66-68, 124 (and 22-23 on oriental coins found in Russia as evidence for hypothetical sea trade via Abeskun). Bosworth, C.E. 1985a. "Abaskun", *Elr* 1: 69-70. Sauer, E.W., Omrani Rekavandi, H., Wilkinson, T. and Nokandeh, J., 'Persia's Imperial Power in Late Antiquity: the Great Wall of Gorgan and Frontier Landscapes of Sasanian Iran. A joint fieldwork project by the Iranian Cultural Heritage, Handcraft and Tourism Organisation, the Iranian Center for Archaeological Research and the Universities of Edinburgh and Durham (2005-2009). *British Institute of Persian Studies Archaeological Monographs Series II*, Oxford, 2013: 601-602.

Taking into account these titles is recommendation, and I would not insist on it. By contrast, page references and passages really need to be added systematically prior to publication.

As far I can judge, being not a marine geologist, but an archaeologist whose interests focus on the first rather than the second millennium, this is a fascinating article. I certainly learned a great deal by reading it, and it compiles much relevant evidence about the chronology and degree of sea-level changes in the World's largest inland sea. It will be very useful for the scholarly community, and I would very much welcome publication, but only once page numbers and passages (as suggested above) have been added to all citations. This will take some time.

Eberhard Sauer

Interactive comment on *Clim. Past Discuss.*, 9, 1397, 2013.