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.

J.-D. Stanley

stanleyd@si.edu

Received and published: 25 March 2013

It is with much interest that I have read the recent contribution by A. Naderi Beni and nine collaborators on sea level changes in the Caspian Sea, an article that focuses primarily on the South Caspian sector. I could easily, and with pleasure, recommend this synthesis to those particularly focused on the historical records that bear on sea-level changes in this large saline lake bounded by six countries. The references cited are a treasure-trove, especially for those interested in the rich historic background.

It is helpful to consider the authors’ analyses of the relation among morphological zones along the Caspian coasts, and discussions of earlier and recent climatic cycles, hydrological balances, and their historic relations with sea-level rises and lowerings during the past millenium.

I am afraid, however, that the title and contents of this article do not really meet expectations for a study that proposes comprehensive historical and geological explanations for sea-level changes in the south Caspian Sea. No in-depth considerations in the text are given as to the specific role of the frequent earthquakes, some powerful, that are distributed mostly in the mid- and southern sectors of this sea. Thus, the reader is for the most part left uninformed as to the role of relative sea level versus the more climatically related sea-level fluctuations they emphasize. A good recent earthquake epicenter map would indicate to the uninformed reader the direct role that land fluctuations in and around the sea have had on coastline elevations and sea level. This leaves an almost fully open door for much needed further research that will emphasize relative sea-level changes and their effects on the margins of the Caspian Sea.

Jean-Daniel Stanley, Professor and Director, Coastal and Marine Geoarchaeological Studies, NMNH-Smithsonian Institution, Washington, D.C. 20013 USA

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