

***Interactive comment on “Snapshot observation of physical structure and stratification in deep-water of the South Caspian Sea (western part)” by P. Ghaffari et al.***

**S.A.G. Leroy (Referee)**

suzanne.leroy@brunel.ac.uk

Received and published: 31 March 2010

general comments This is a well-written and clear manuscript presenting the results of one campaign of measurements of the physical parameters of Caspian Sea water offshore the Lagoon of Anzali (Iran). This area is poorly known; therefore the data are very welcome.

specific comments Title: I would not use the word deepwater as most of the discussion is about the shallow part. Moreover the south basin is much deeper than 720 m. p. 2558, lines 26-28: so does it mean that the deep water is coming from the north? p. 2559: I would change the title of section 2.3 to “Methods”, and add here the explanation

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of formula 4 on N2. p. 2562, lines 23-24: this plunging needs much more explanation. Please develop what happened in the early 1970s and why. p. 2564, line 29: explain what happened in 1976. p. 2565, line 3: what triggered the mixing in 2008? Also look at p. 2570, line 3. p. 2566, lines 10-11: only cooling can lead to turnover. Lines 24-25: would therefore your turbidity data become relevant to this manuscript?

technical corrections - The English of the manuscript needs to be revised by a native English speaker. - p 2558: the numbering sequence of figure and the call to figure is not logical. Line 3 calls to fig. 1 ; then the next call is to fig. 5 (line 10). - Is the name of the river not Sefirood, rather than Sepirood? - Figure 2 a, b, c and d. The manuscript would greatly benefit if you could modify this graph and show a zoom in of the shallow part as it contains important information that is discussed here. Would it be useful to add more contour lines in fig. 2b? In fig. 2d, add more contour lines, such 1.5 and 0.5 (especially in relation with what is said on p. 2565 lines 6-7).

Interactive comment on Ocean Sci. Discuss., 6, 2555, 2009.