

## ***Interactive comment on “Water masses and zonal current in the Western Tropical Atlantic in October 2007 and January 2008 (AMANDES project)” by A. C. Silva et al.***

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Thank you for your comments and suggestions. We tried to improve the quality of written in the new version of the paper, and also the presentation and discussion of the results. Please find hereafter the answers about the scientific concerns.

1. p. 1955, line 4: "Trade Winds." Are they northeasterly in this region? Ok, it has been reviewed and explained in the text. 2. p. 1955, line 21: Add "(WBUC)" after it is mentioned for first time. Ok, it has been corrected. 3. p. 1955, line 22: "NEUC" What does this stand for? It hasn't been mentioned yet. Ok, it has been mentioned in the new version of the paper. 4. p. 1958, line 7: "advecting waters from the Southern

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Hemisphere" How do you know it's from the S. Hemisphere? Ok, it has been corrected in the text. 5. p. 1958, line 13: "a portion of the NBC..." How do you know it's only a portion of the NBC? Based on previous observations of a stronger NBC in this region? Based on previous observations a mean -69.3 has observed in Lat. 3°52.4'N/Long. 48°43.5'W at 60 m, during the months August – November. It has been corrected in the new version of the paper. 6. p. 1958, lines 14 and 17: "northwestward" and "southeastward" You only show zonal velocity, though. Maybe plot meridional velocity in the figures? Ok, meridional velocity were plotted below (Figure A, B and C). 7. p. 1959, line 26: "relatively high O<sub>2</sub> concentrations" Looks like low O<sub>2</sub> based on Fig. 3b. Ok, it has been corrected. 8. Section 3.2.1: What about Eastern Atlantic Water? Does this play a role in the surface water mass characteristics? Ok, it has been reviewed in the text. 9. p. 1961, lines 1-4: Why are intermediate water masses characterized by curved profiles? It's not clear how weaker currents lead to this. Ok, it has been reviewed in the text. 10. p. 1962, line 2: "NADW is warm" Warm compared to what? Looks cold in Fig. 4c. Ok, it has been reviewed in the text. 11. Fig. 2: Show meridional component as well? Ok, It has been done. 12. Figs. 3, 4, 5: Label panels with (a), (b), etc. Ok, It has been done 13. Fig. 7: Label top plot with "depth" and "latitude" Ok, it has been reviewed in the text.

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Interactive comment on Ocean Sci. Discuss., 7, 1953, 2010.

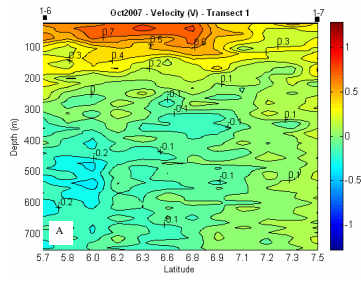


Fig. 1.

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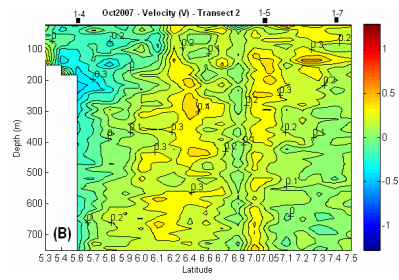
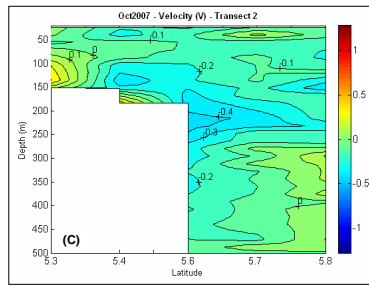


Fig. 2.

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**Fig. 3.**

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