

Interactive comment on “Spatial distribution of turbulent mixing in the upper ocean of the South China Sea” by Xiao-Dong Shang et al.

Anonymous Referee #2

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The authors conducted an extensive field campaign to survey turbulence in the South China Sea and reported a spatial pattern of turbulent intensity from the observed data. They also compared the observed data against two theoretical models. The results are well known. I found no new information. I appreciate that the amount of work involved in the data collection, but as far as the science concerns the present manuscript reads like a data report. I found no new scientific finding and no new facts other than the survey was conducted in the South China Sea. Unless Ocean Science accept a manuscript aimed at a data report, I would not recommend this manuscript for an official scientific paper. For their revision purpose I will comment on this manuscript as followed:

1. Material and methods should be explained in more detail. Also those mooring data outside the observation period should be removed from the text. The Luzon Strait is not well known to the audience. Indicate where LS is.

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2. P.4 line83: “caused by instrument vibrations” If so, you can verify the vibration with accelerometer data. Those are mostly electronic noise.

3. You have to focus the science. What is deriving high turbulence in Region 1. Most likely internal tides are playing a major role in generation of turbulence.

4. Discussion should be separated from Summary. The summary should summarize both results and a punch line of the discussion.

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