Interactive comment on “Glider Technology for Ocean Observations: A Review” by David Meyer

Anonymous Referee #2

Received and published: 20 September 2016

I was at first pleased to see the title of this manuscript as I would welcome a thorough, critical review of ocean glider technology. Buoyancy driven gliders are undoubtedly changing the face of oceanography and there is considerable confusion within the ocean observing communities over which platform is best for different purposes and what the true capability of these exciting vehicles is. This manuscript unfortunately only provides a fairly light-touch and quite out of date perspective and so shouldn’t be considered a thorough or even accurate review of glider technology. Information provided was lacking in detail throughout the manuscript. For example; there is no discussion of the problems relating to the day-to-day problems glider operators face including thermal inertia issues, calculating glider velocity, glider body compression, oxygen sensor lag, and many other aspects that require expert appraisal. Further, the review is out of date to a quite astounding degree. There are new gliders emerging, both from the recognised and new manufacturers that offer features and capability not even touched upon. The ACSA Seaexplorer and the UW 6000m Deepglider are not
mentioned. I was particularly frustrated that the author recommended one glider over another based on a previous comparison made in a 2001 paper: "It has a finer entry shape than the Slocum electric and therefore is more energy efficient (50% less drag) (Sherman et al., 2001)." This may or may not be the case but more up to date information is required. In summary, this manuscript offers nothing new to inform the Ocean Science readership, and even runs the risk of mis-informing them of the current state of capability of ocean gliders and so should not, in my opinion, be published.