Comments on Revised version "Turbulent length scales in a fast-flowing, weakly-stratified Strait: Cook Strait, New Zealand.

I find the revised manuscript much improved over the first draft, and the author has responded carefully and fully to the various questions I initially raised. I would recommend publication and have only minor final suggestions listed below.

On the general question of the use of the Thorpe scale L_T , it is obtained from a one-dimensional re-sort of the vertical density profile. As the author is aware, this has its limitations because the scale can exceed the depth. However, there us a deeper fundamental problem. One interpretation of the important ideas proposed by Peltier and Caulfield (Annual Review Fluid Mechanics, 35, 2003), is that one must do a three-dimensional resort to get a true measure of the energy and turbulence locked in a stratified fluid. That can't be done from a single microstructure profile, and hence its hard to interpret what is the meaning of a quantity like the Thorpe scale.

The Bluteau et al 2017 paper also stresses that the mixing efficiency can also be considerably less than 0.2, depending on the local flow field. Note also the paper by Salehipour and Peltier (JFM, 775, 2015) demonstrates the limitations of the usual 0.2 efficiency assumption in the Osborn model - see their Fig 2.