Interactive comment on “The evolution of Mode-2 nonlinear internal waves over the northern Heng-Chun ridge south of Taiwan” by S. R. Ramp et al.

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This paper describes a set of measurements designed to expand on a previous observation of mode-2 nonlinear internal waves at the same site. These really are a nice set of observations and I think the basic result is worthwhile and interesting. However, I think that the present version of the manuscript will require some effort to organize into a concise report for eventual publication. As it stands, it does not seem to be well-organized. Begin with the abstract. I do not think that the “key result . . . is that a profusion of mode-2 waves were observed . . .”. In fact I do not think that is even a result. At the same time, I think that there is a key result and this is briefly stated in the final line of the abstract, even though it is not particularly surprising. I encourage the authors to focus and expand on this.

I found the paper to be a little tedious. Too many case studies. I would urge the authors to produce a concise version that 1. establishes the existence and structure of these mode-2 waves with the minimum # of figures 2. provides a clear explanation of the theoretical energy budget and how this version differs from what has been discussed elsewhere (Lamb, Scotti, Moum, Henyey . . .) 3. shows precisely how each term is evaluated

I think that the real result is Figure 13, which requires confidence limits.

L465 – I think what we want to know is the wave speed relative to the fluid. This is what can be compared to KdV or DJL, for example

I don’t think all of the references in the text are consistently listed. (e.g., Nash etal, 2012, l 539)

L766-771 – a simple graphical or tabular summary of energetics comparison might be helpful

L776 – why J/s/mˆ2 ? and not W/mˆ2?