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Interactive comment on "Fast thermistor string observations at the slope of Great Meteor Seamount" *by* H. van Haren et al.

H. van Haren et al.

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Reply to Referee #2 commenting on manuscript OSD-2004-0003

We thank the reviewer for his/her comments and for the appreciation of our contribution to the understanding of internal wave dynamics.

We will certainly consider all of the specific comments, as will be clear from our replies: p.37. High sampling rate sounds fine. p.38. Yes there are several, see our quotations of the work of Marmorino et al and Moum et al; Perhaps that could be clearer stated. And, we can add a few more. We like to note that in all of the suggested references the thermistor strings were used in a towed fashion in the upper ˜200 m of the water column, not as a stand-alone in a mooring in the deep sea. p.41. Diagram can be given. p. 42. No, not on the thermistor string, but there were pressure and tilt sensors on the AquaDopp current meter just above the string. Tilt was never more than 4.5 degrees (so that halfway the T-string maximum vertical excursion was 15 cm and max.

hor. excur. was 4 m). Typically values: 1.5 degree; 6 cm, 1.5 m). p.43.OK. The small stratification is near the end of the profile. p.45. In time only, with linear interpolation between nearest calibration values (temperatures). p.46. No, it refers to Fig. 8c (nog 5c). Yeardays is easy reference to link the different figures, but we can insert other time axis (and put the reference in the figure caption). p.49. It is breaking against the flow (the flow is weakly up the slope, and weakly in negative along-slope direction)? This agrees with laboratory model predictions of K-H as given in Turner (1973), e.g. from experiments by Thorpe, 1971. Yes, we will refer to the suggested near-surface observations. Thank you for pointing out our error in the calculation. No idea had that got there. Values k ˜0.25 cpm, labda ˜ 25 m.

Thank you for the technical corrections.

Interactive comment on Ocean Science Discussions, 1, 37, 2004.