Reply on RC2
Takenori Shimozono

In my previous reply, I forgot to respond to a few minor comments by Reviewer #2. Here I would like to add my responses to them.

Comment: I think that the expressions for tpm in the equation (24) are simply the two branches of some specific characteristic curves in the (x; t)-plane. Indeed they may be cast in the following compact form: \( x = [ t - 2 - T (m-1) ]^2 \); where \( T = 4 \) is the time "period" that takes a signal to travel back and forth in the fluid region.

Reply: Thank you for the comment. I was not aware of the way of interpretation. I will add this viewpoint to the revised manuscript.

Comments: Equation (19). Here the author should point out that the damping factor has an upper limit. Specifically, it should be \( \alpha < c_1 \) where \( c_1 \approx 2.405 \) is the first real zero of the Bessel function \( J_0 \).

Reply: I agree with the reviewer and will explain it in the revised manuscript.