



HYSWEEP® EDITOR 64 – Preview 2

By Mike Kalmbach

The 64-bit HYSWEEP® EDITOR (HSE64) will allow us to examine heave measurements in great detail. That can be useful. For example, we know that real time heave can be insufficient for small boat surveys in rough water. But the errors have been difficult to quantify. Detailed examination of heave data in HSE64 shows both phase and magnitude of real time heave errors. That's accomplished by comparison of real time heave to delayed (and more accurate) heave.

Figure 1 shows real time heave (labeled MRU Heave in red) and delayed heave (in green). It's easy to see that the overlay is not perfect.

FIGURE 1. Delayed Heave (Green) Overlaid on Real Time Heave (Red).

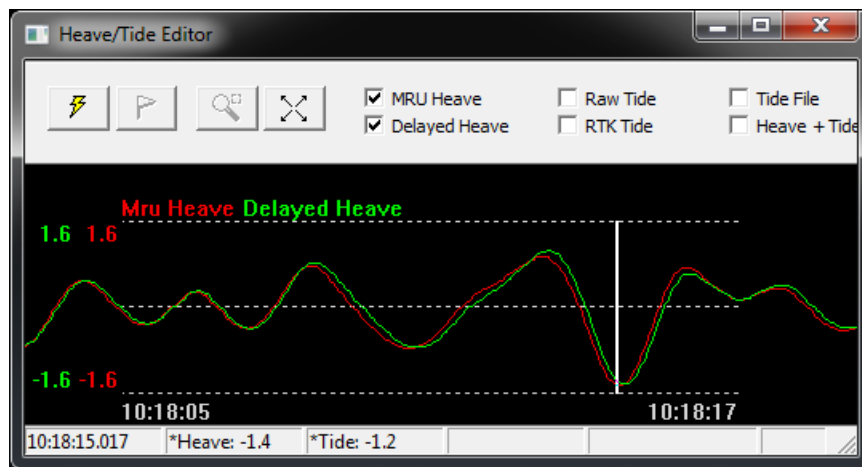
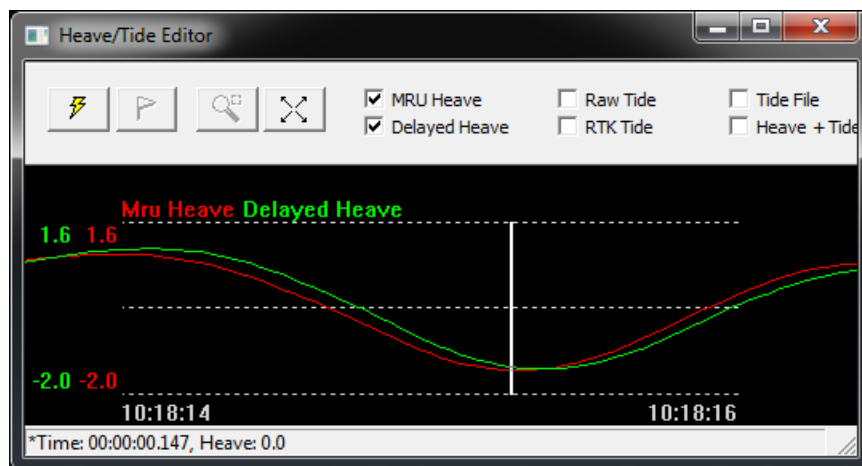


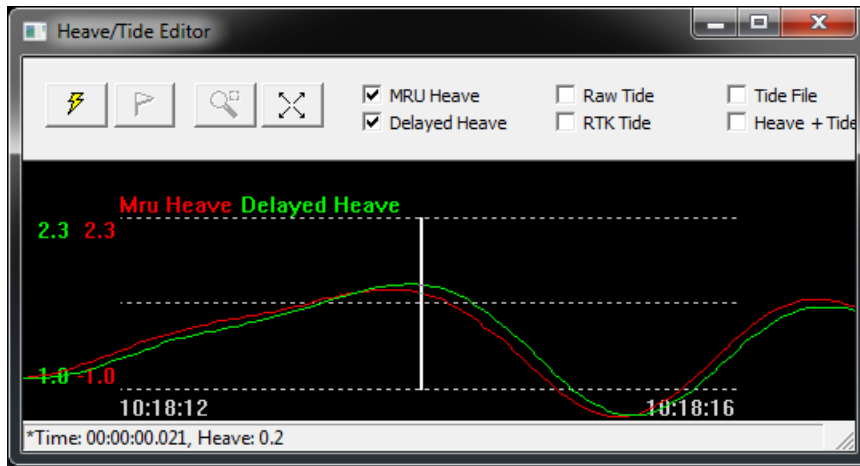
Figure 2 zooms in and we use the mouse to measure phase difference = 0.147 seconds. That's a lot!

FIGURE 2. Phase difference



Finally, figure 3 shows heave difference of 0.2 ft.

FIGURE 3. Heave difference



In summary, detailed examination of survey data will be available in HSE64. RTK tides are on the programming list and perhaps will be ready for the next newsletter!