



Real-Time Cloud Window in HYSWEEP® SURVEY: Features and 2015 Updates

By Joe Burnett

In the May 2014 *Sounding Better!* newsletter, an article gave a brief description of the new [Real Time Cloud window in HYSWEEP Survey](#). This article will go into detail of all the features and updates that have been made for this window in our upcoming HYPACK® 2015 release.

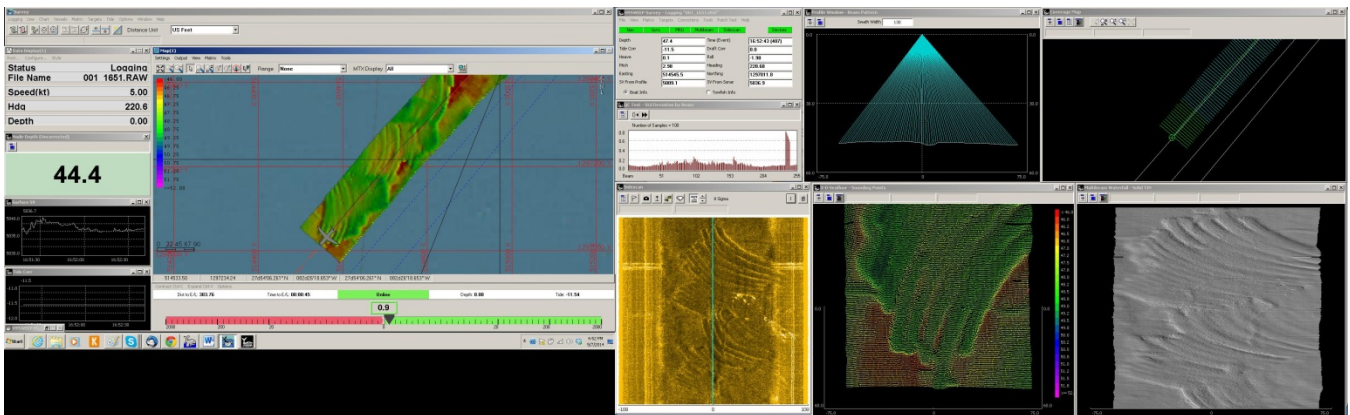
SETUP

There are neither **HARDWARE** interfacing nor other settings to be done prior to using this window in HYSWEEP® SURVEY.

HYPACK AND HYSWEEP SURVEY

1. Start the two SURVEY programs:

FIGURE 1. HYPACK® SURVEY (left) and HYSWEEP® SURVEY (right)



2. In the main HYSWEEP® SURVEY window, select **VIEW > HYPACK REAL TIME CLOUD**. The Real Time Cloud window will appear and begin plotting the soundings.

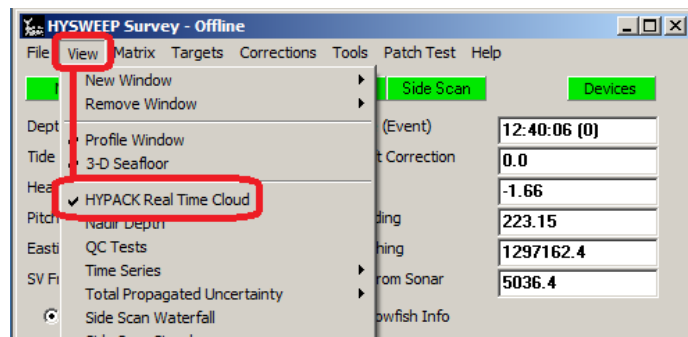
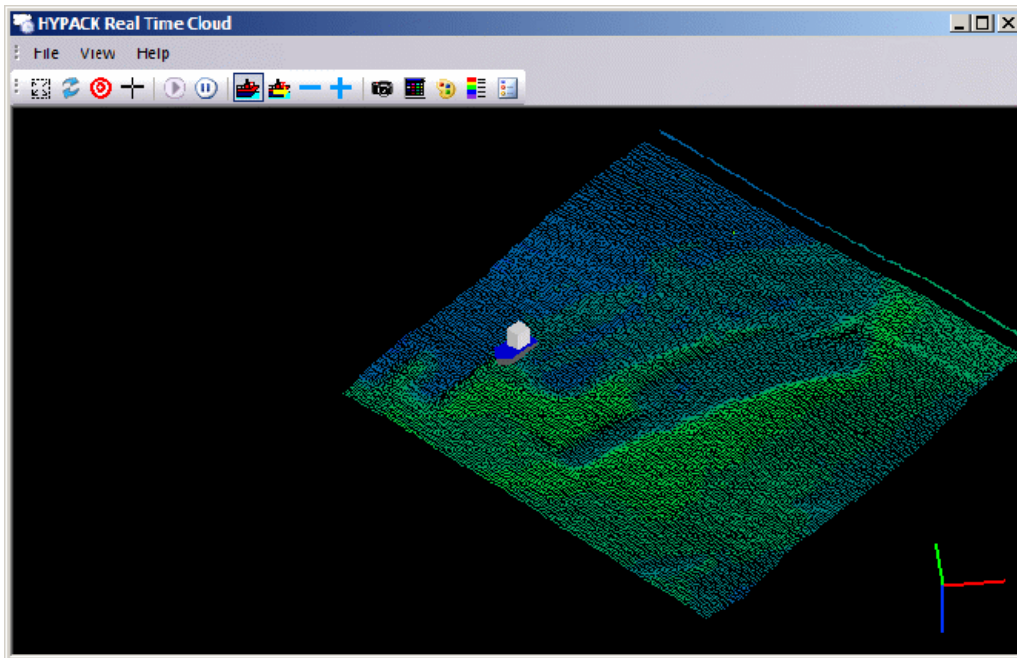




FIGURE 2. Sample Real-Time Cloud Window



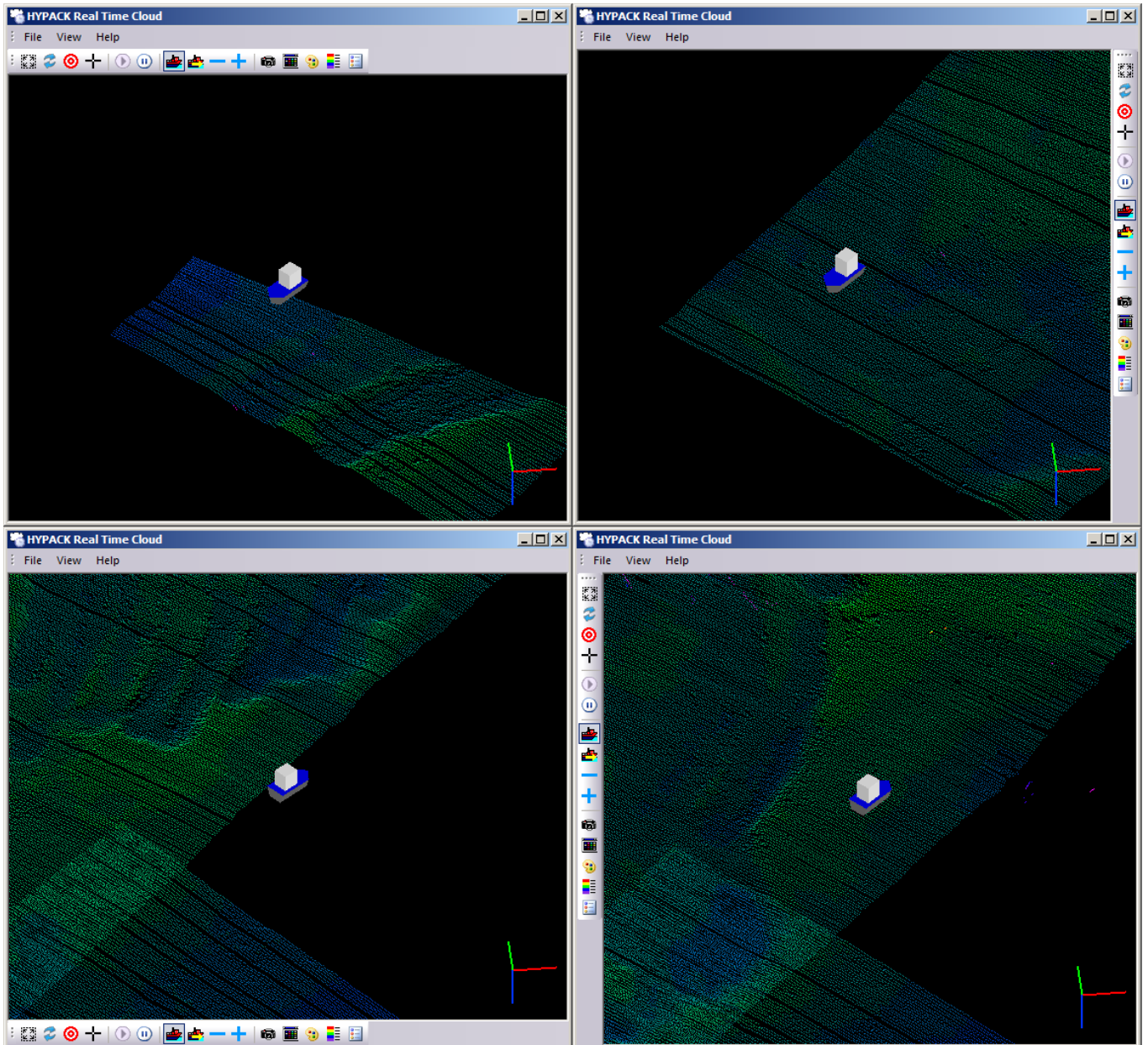
PULLDOWN MENU

		 File View Help
<ul style="list-style-type: none"> • File > Exit 	Allows you to Close and Exit the window	
<ul style="list-style-type: none"> • View > Toolbar 	Allows you to Turn On/Off the Toolbar display.	
		
<ul style="list-style-type: none"> • Help > About 	Allows you to see the version number of the Real-Time Cloud program	

TOOLBAR

To move the toolbar, click on the '3 dots' on the left edge of the toolbar and drag it to a new position. Dock it on the top, bottom, right, or left of the window:




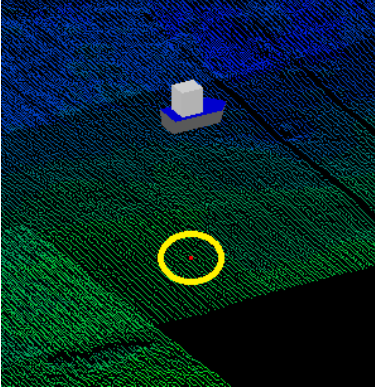







FIGURE 3. The Toolbar Docks on Any Side of the Display



It can also be dragged as a stand-alone window, anywhere on the screen:



TABLE 1. Toolbar Functions:

 Zoom Extents	Zooms the window to show all of the soundings currently being displayed.
 Reset	Removes all of the current soundings and starts displaying soundings from the current location of the boat.
 Add Target	<p>Allows you to use the cursor to mark a target (shown as a RED point) in the window. Targets also display in the Survey Map and in the HYPACK® Shell, and can be edited in the new TARGET VIEWER EDITOR.</p> 
 Set Center Point	Allows you to choose a new/different 'center point', from which you can view, and around which you can tilt and rotate the point cloud.
 Play >	<p>Allows you to resume plotting the soundings after you have paused the display.</p> <hr/> <p>NOTE: If you pause the display and then resume it with the play button, any data that came in during the pause, <i>will not be displayed</i>. However, all of the data that came in during the pause will be stored in the HSX file. <i>No data will be lost during the pause.</i></p> <hr/>
 Pause	Allows you to pause the display, so that you can tilt and rotate to a desired view, or capture an image.
 Center on Boat	Allows you to quickly relocate the center point of the display to the boat, if you used the Set Center Point button to choose a different rotation point.
 Change Mobile	Allows you to relocate the center point to a different mobile, if you have multiple mobiles loaded in the HARDWARE program.
 Reduce Point Size	Allows you to make the sounding points smaller in the display.
 Increase Point Size	Allows you to make the sounding points larger in the display.

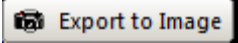
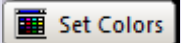
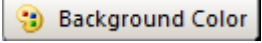
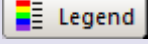
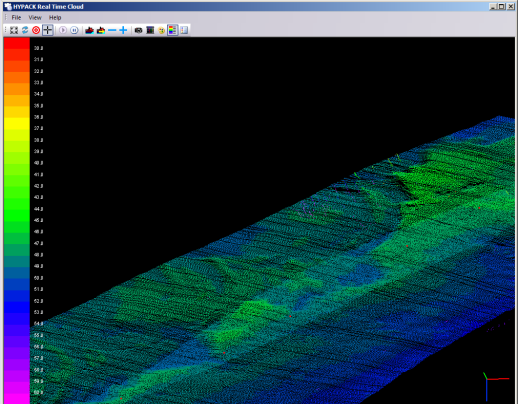
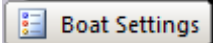
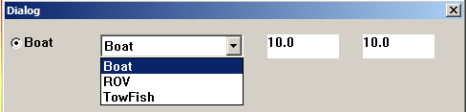
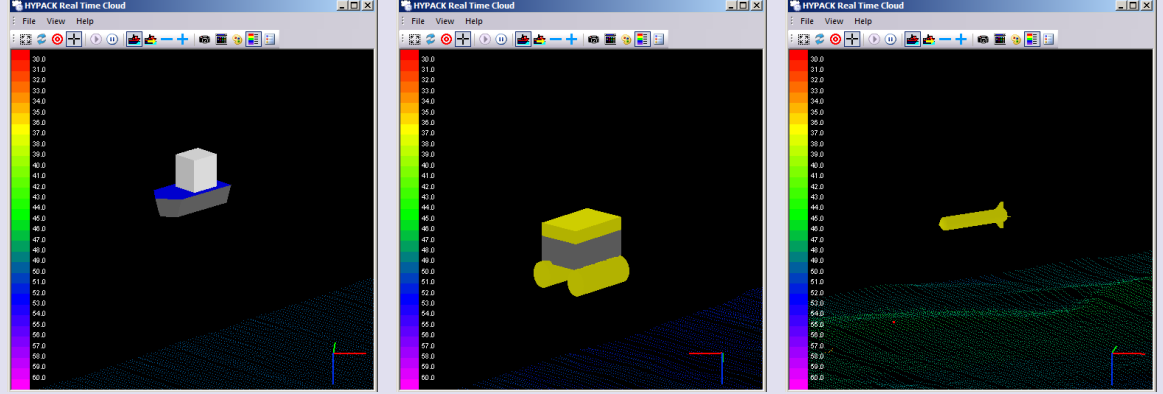
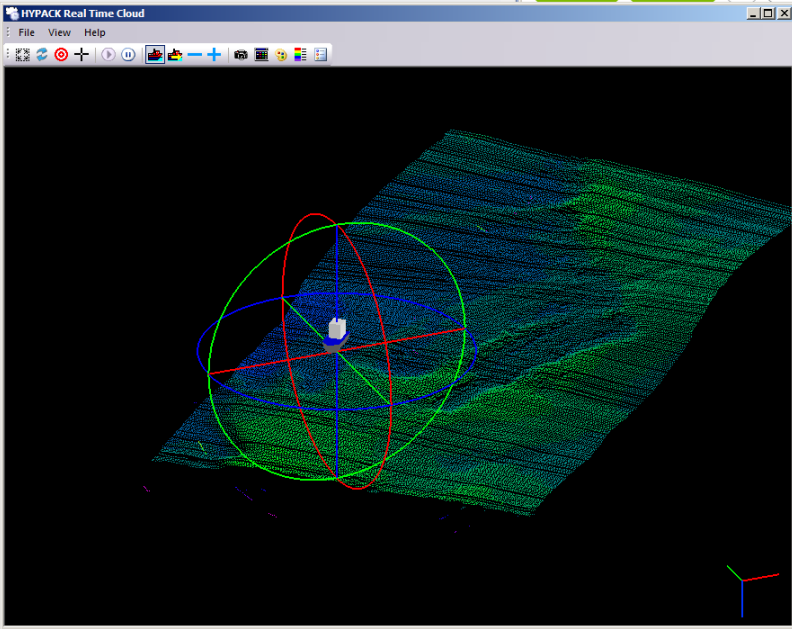
	<p>Allows you to capture an image of the current display in the window, to a *.BMP, *.TIF, or *.PNG format file.</p> <hr/> <p>NOTE: The display pauses during the process and resumes after the image has been saved. Again, any data that came in during the Export to Image process, <i>will not be displayed</i>. However, <i>all</i> of the data that came in during that time, will be stored in the HSX file. <i>No data will be lost</i> during the Export to Image process.</p>
	<p>Allows you to choose/change the color palette that is currently being used.</p>
	<p>Allows you to choose/change the color of the background</p>
	<p>Allows you to display the color palette on the left side of the window.</p> 
	<ul style="list-style-type: none"> Allows you to choose from three (3) pre-built boat shapes. Allows you to change the size of the boat shape: 
	
	<p>NOTE: All of the above functions can be performed as often as you like and <i>will not affect raw data collection</i>.</p>

TABLE 2. Additional Functions

<ul style="list-style-type: none">• Tilt and Rotate	<ul style="list-style-type: none">• Use your mouse to click and drag• Use the arrow keys on the keyboard  <p>The screenshot shows a window titled 'HYPACK Real Time Cloud'. The window has a menu bar with 'File', 'View', and 'Help'. Below the menu bar is a toolbar with various icons for navigation and manipulation. The main area of the window displays a 3D point cloud of a terrain, colored in shades of green and blue. A 3-axis coordinate system is overlaid on the point cloud, with red, green, and blue axes. A white mouse cursor is positioned over the center of the coordinate system.</p>
<ul style="list-style-type: none">• Pan	Use your mouse to right-click and drag.
<ul style="list-style-type: none">• Zoom In/Out	<ul style="list-style-type: none">• Use your mouse scroll wheel.• Use the +/- keys on the keyboard

We are always looking for suggestions for additional features that can be added to our programs, so please feel free to send me any ideas that you may have, for this or any HYPACK® program. Send them to joe@hypack.com.