



Cloud Editing in MBMAX64 – Revisions and Updates

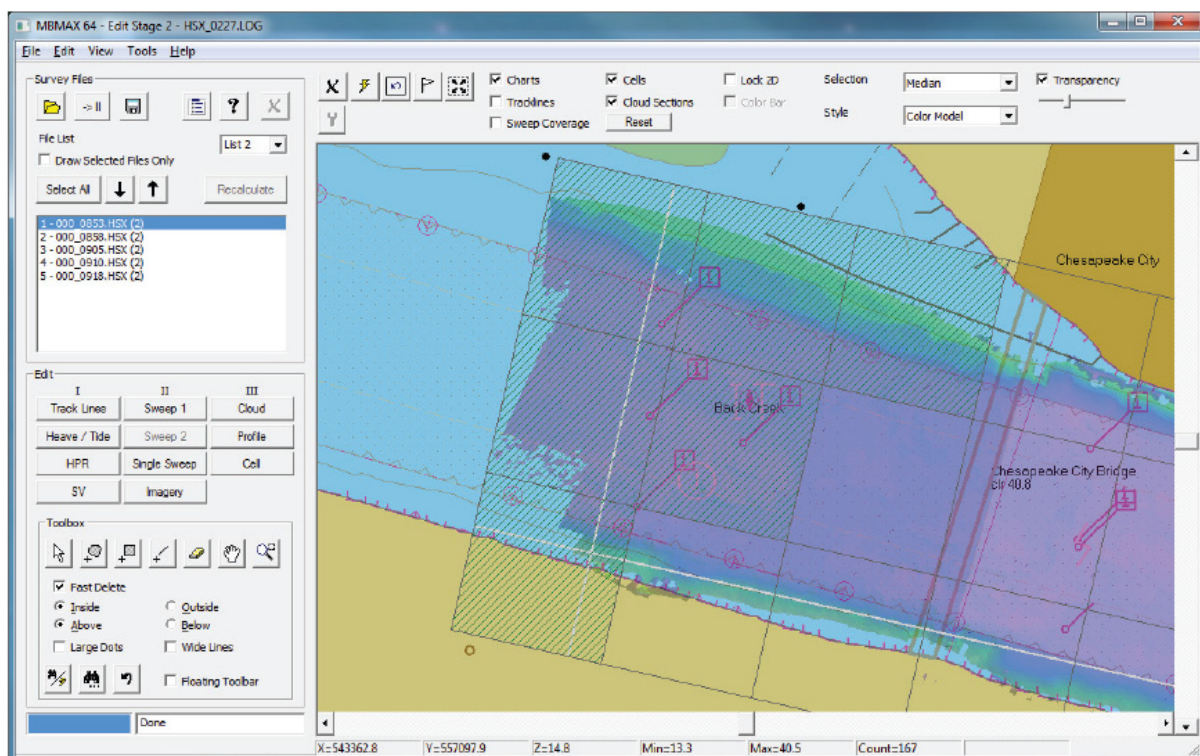
By Joe Burnett

When the beta version of the MBMAX64 (64-bit HYSWEEP® EDITOR) program was introduced 2 years ago, Cloud editing was also integrated into the program. Since then, the MBMAX64 program has gone through approximately 45+ changes and updates. Two of these changes and updates have been within the Cloud editing.

CHECKED SECTIONS

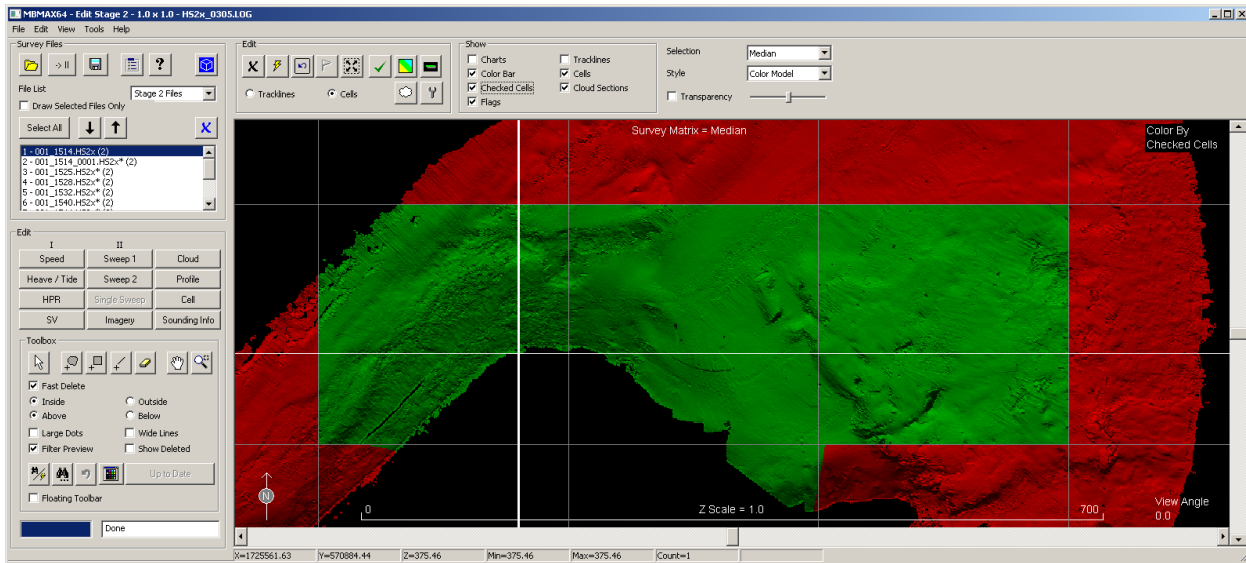
One change has been to the Checked Sections feature: originally, the Checked Sections feature was displayed as hatched lines in each cloud section.

FIGURE 1. Original Checked Sections Display



Now, the checked sections are shown as green-colored cloud data in those sections that you have verified to be complete in their editing process, and red-colored cloud data, for those sections that you have *not yet verified* as completed.

FIGURE 2. Checked Data (green) vs Unchecked Data (red)



CLOUD POPUP TOOL

A new update to the Cloud editing in MBMAX64 is the addition of the Cloud Popup Tool.

You can now create a user-defined cloud section in the Survey window that is completely independent of the existing Cloud Sections currently displayed in the Survey window.

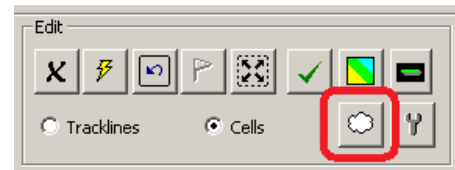
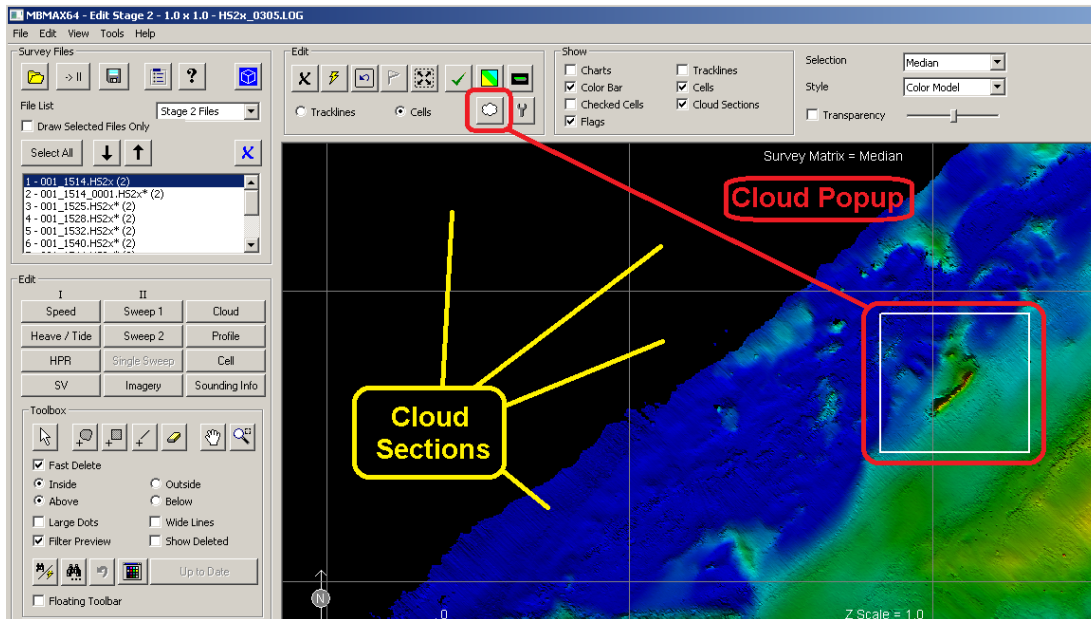


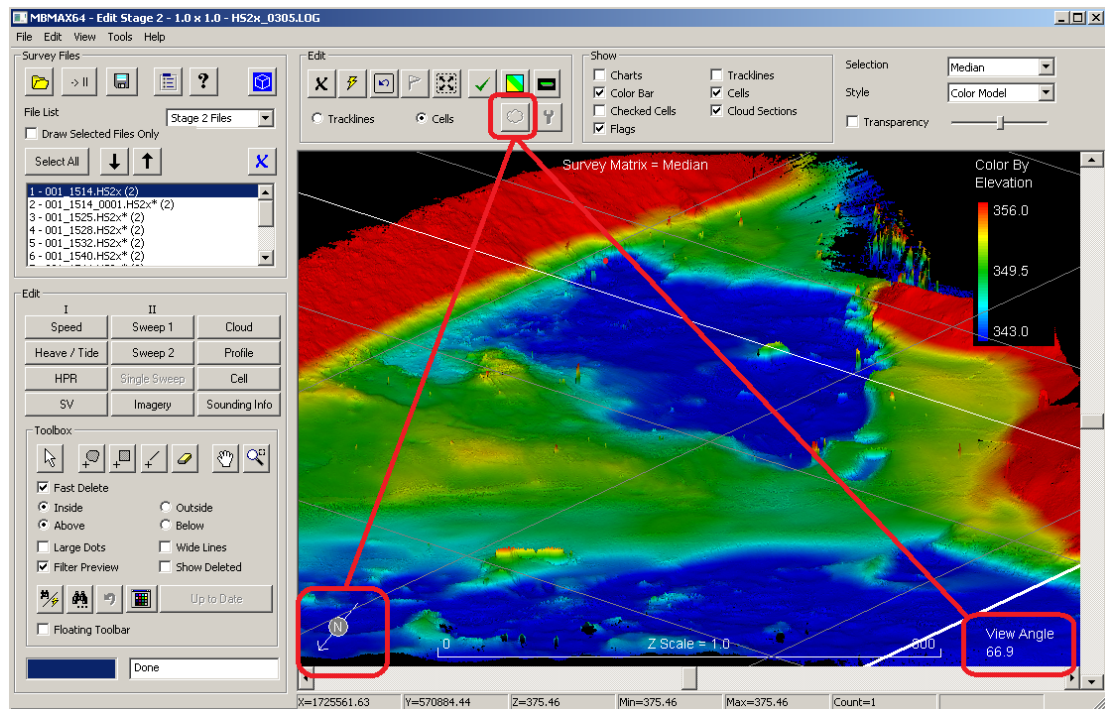
FIGURE 3. Cloud Sections vs Cloud Popup



There are a couple of parameters that must be followed before this tool can be used:

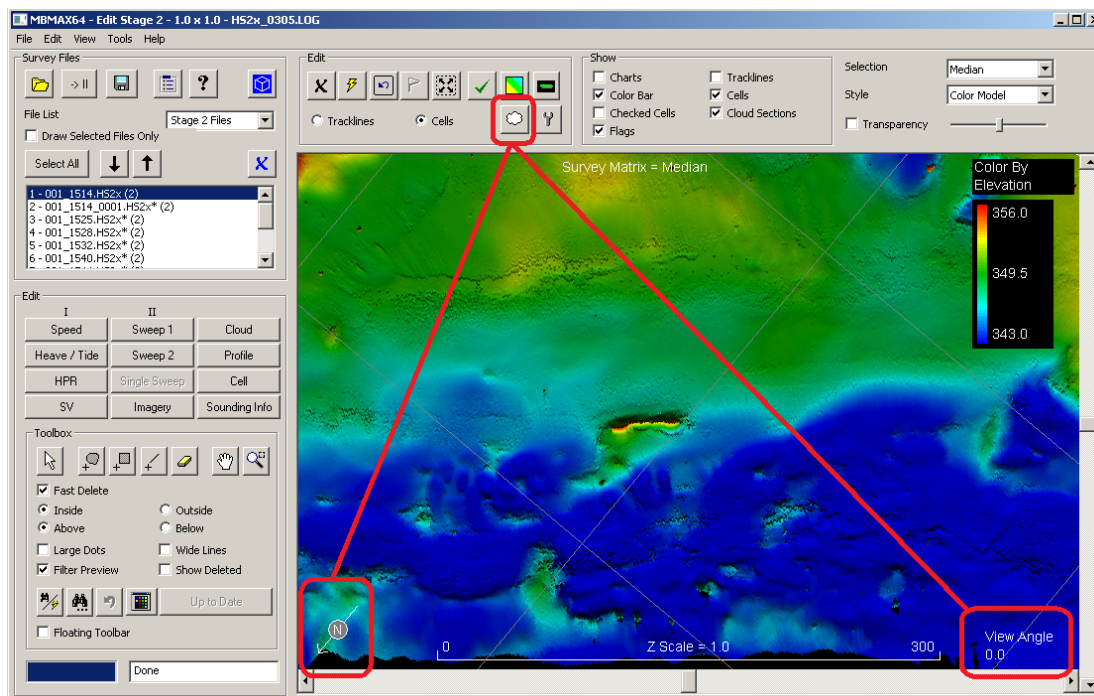
- **You must be in Stage 2 editing.**
- **Your view angle must be zero.** If you have used the HAND tool to tilt and/or rotate the image in the Survey window, the Cloud Popup Tool may be disabled. However, the Cloud Popup Tool is enabled if the view angle is zero, even though the chart is not in a North up orientation.

FIGURE 4. The Cloud Popup Tool is Disabled When Data is Rotated



You can select the Cloud Popup tool and create a window around the area on which you would like to focus your editing. Be aware, you might not see the exact area that you captured in the Cloud Popup window; the Cloud Popup Selection Tool *a/ways* orients its capture area to North Up.

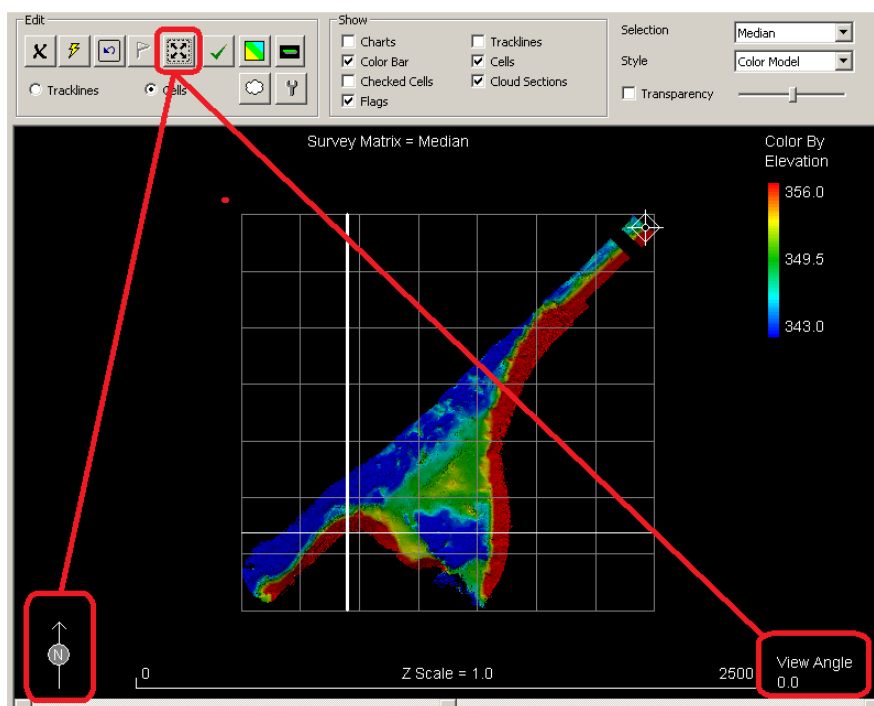
FIGURE 5. Cloud Popup Tool is Enabled when the View Angle is 0, Though the Orientation is not North Up.



For the best results with the Cloud Popup Tool and its selection of the area for editing, follow these steps:

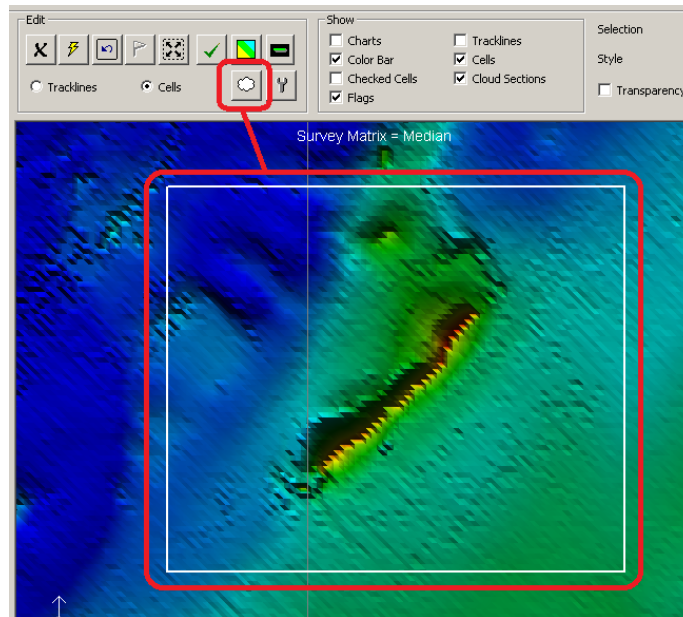
1. **Click the Zoom Extents button.** (This orients your data to North Up and Map View Mode.)

FIGURE 6.



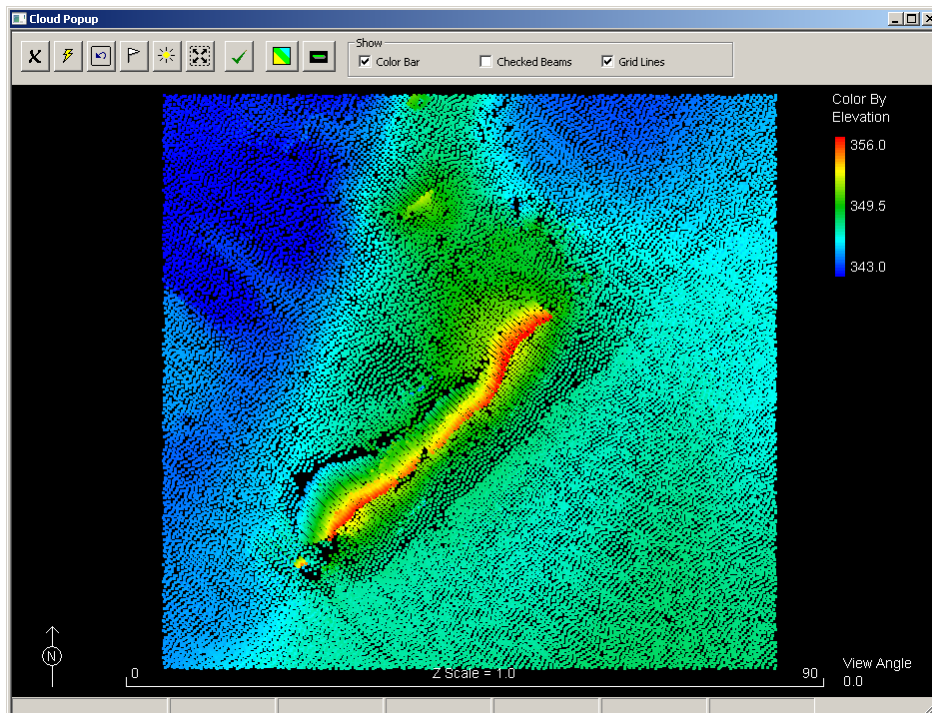
2. **Zoom In and Pan** to the area that you want to edit in the Cloud Popup window.
3. **Click the Cloud Popup Tool** button.
4. **Click and Drag** the Cloud Popup cursor to encompass the area you want to edit.

FIGURE 7.



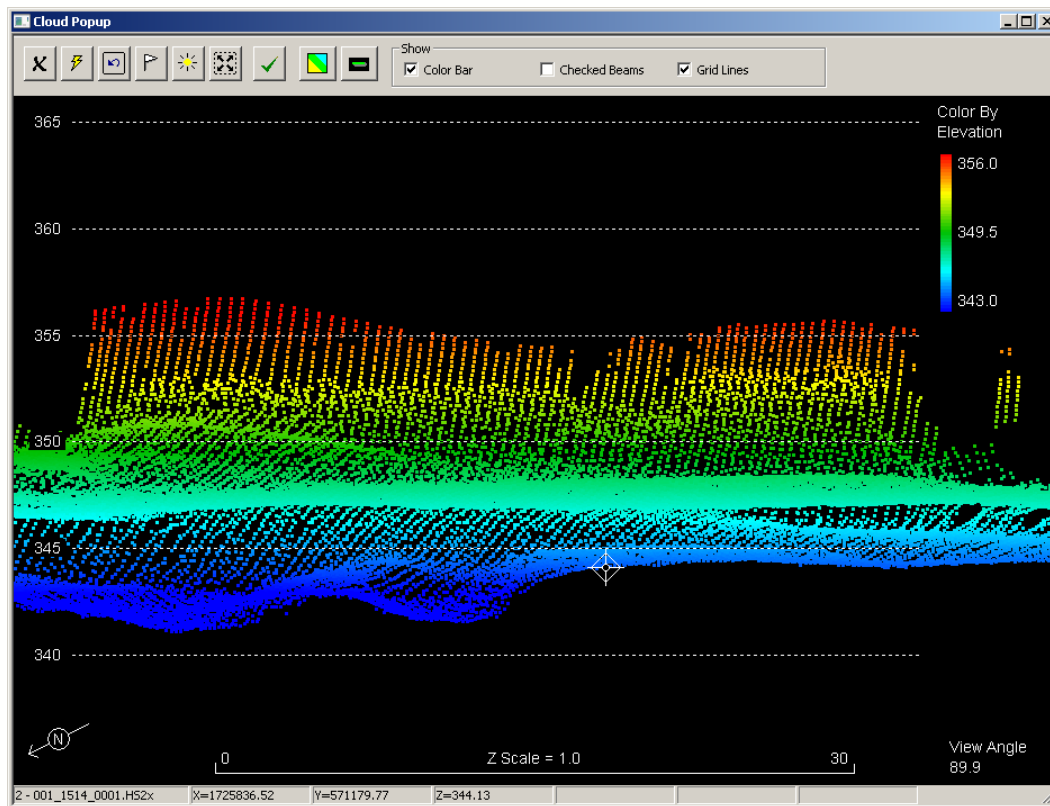
The Cloud Popup window appears with all of the points in your selected area. Now you can use the Hand Tool to tilt and rotate the data points.

FIGURE 8. Cloud Popup Window



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5. Use the manual editing tools in the toolbar to remove any bad data points.

FIGURE 9. Rotating the Data in the Cloud Popup Window



Once you have completed your editing in the Cloud Popup window, you have a few options you can perform.:


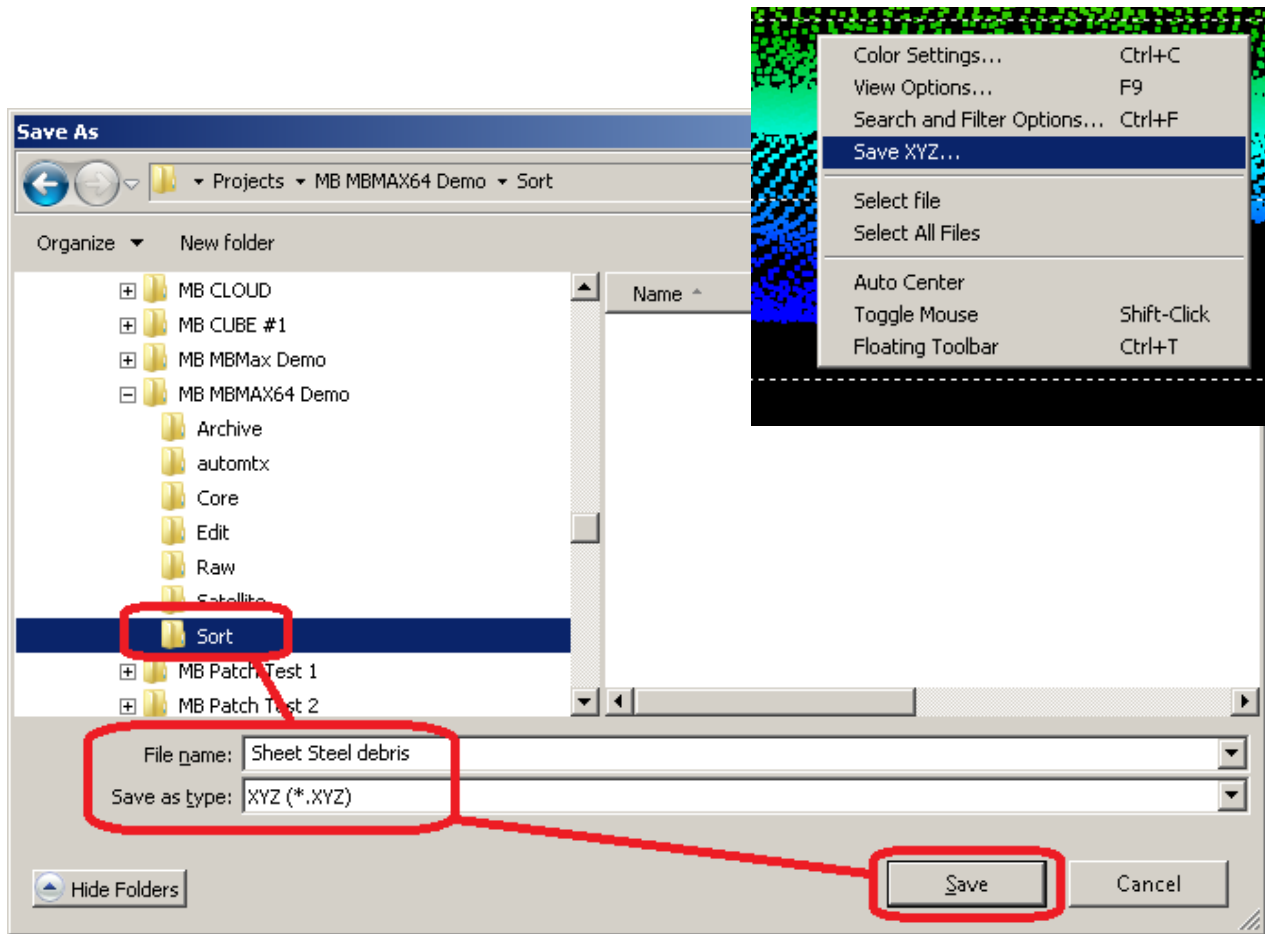
- **Click the Checked Beams button, to indicate that editing is complete** for this data. 
- **Right-click inside the Cloud Popup window and select the Save XYZ... option.** This allows you to save *only* the data points in the Cloud Popup window to a separate XYZ file.

FIGURE 10. Saving your Cloud Popup Data to an XYZ File



6. **Save the file.** Select the location, enter the file name, and click the Save button. This XYZ file can be used to develop some high-resolution images in the TIN MODEL program.