



HYPACK® Buckets Program

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In HYPACK® 2012 there is a new program: BUCKETS. This program will allow you to create a DG2 background chart of an array of bucket prints for use in DREDGEPACK® to assist bucket dredging. The interface is quite simple.

FIGURE 1. BUCKETS Interface

- You must first create a new Bucket session.** Select FILE>NEW and name the session. The session saves all parameter data into a *.BUD file. This file can be opened in the future for modification if necessary.
- Enter the parameters to create the array.**
 - The first criteria is to **specify along what track to create the bucket prints**. A channel plan (*.PLN) or a planned line file (*.LNW) can be used. Simply change the “File of Type”.
 - A **border file** must now be added. Borders limit the bucket print area to this boundary.
 - A **background file** (optional) can show you charts of your area the array will overlay (ie. DXF, S-57 etc.) for display purposes only.
 - Specify the **Bucket Width and Length** as measured.
 - Bucket radius** is the distance of the arc calculated from the swing of the bucket port and starboard.
 - Overlapping Percentages** tell the program how much of the print to place in the neighboring bucket mark.
 - Rows Before Move** is how many boom sets you can reach before you move the dredge. It places additional buckets in print pattern.
 - Move Overlap** is the percentage of overlap along the intended direction of movement of the dredge during a reposition. This ensures that, if the move forward or backward is not precise, there is extra overlap coverage.
 - Hooks** set the buckets to stay within the toes of Channel Plan file or Planned Line file. You can set to port, starboard or both.
 - Target depth** – Future Development
 - Multiple lanes** can be set into one bucket session. Specify which lane you wish to create or modify and type this lane into input box. If you have several cuts, you can lay out separately.
- Generate the bucket array** based on the your parameters. Click [Create Buckets]. At the top, the BUCKETS interface will show you a Bucket Count. This count shows how many buckets were created in your lane. An editing window displays a map view of your results.

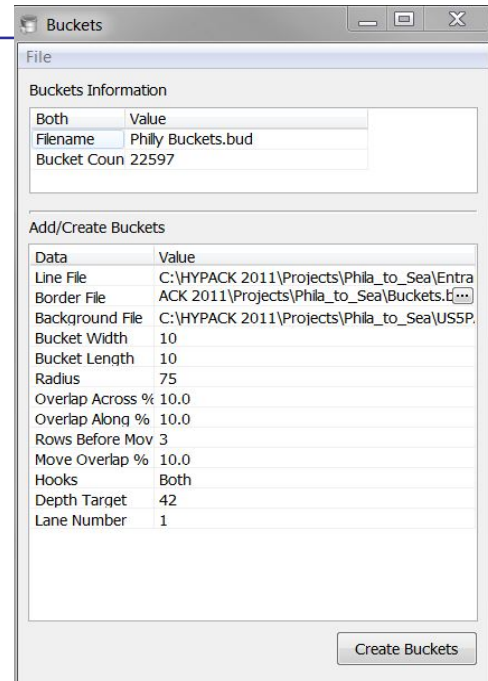
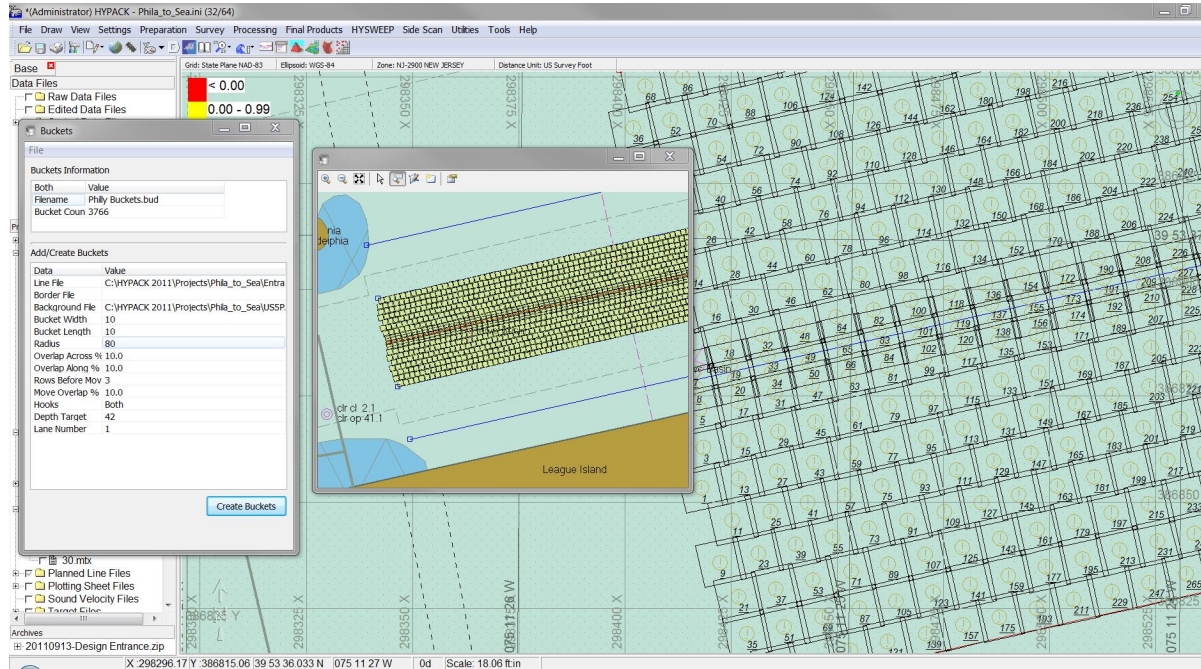
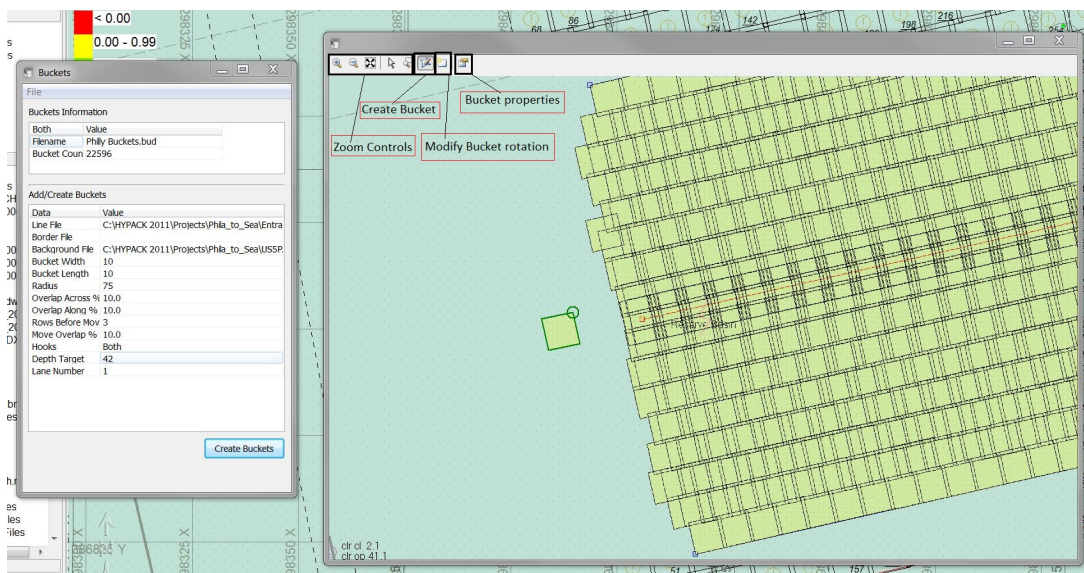


FIGURE 2. Generating a Bucket Array



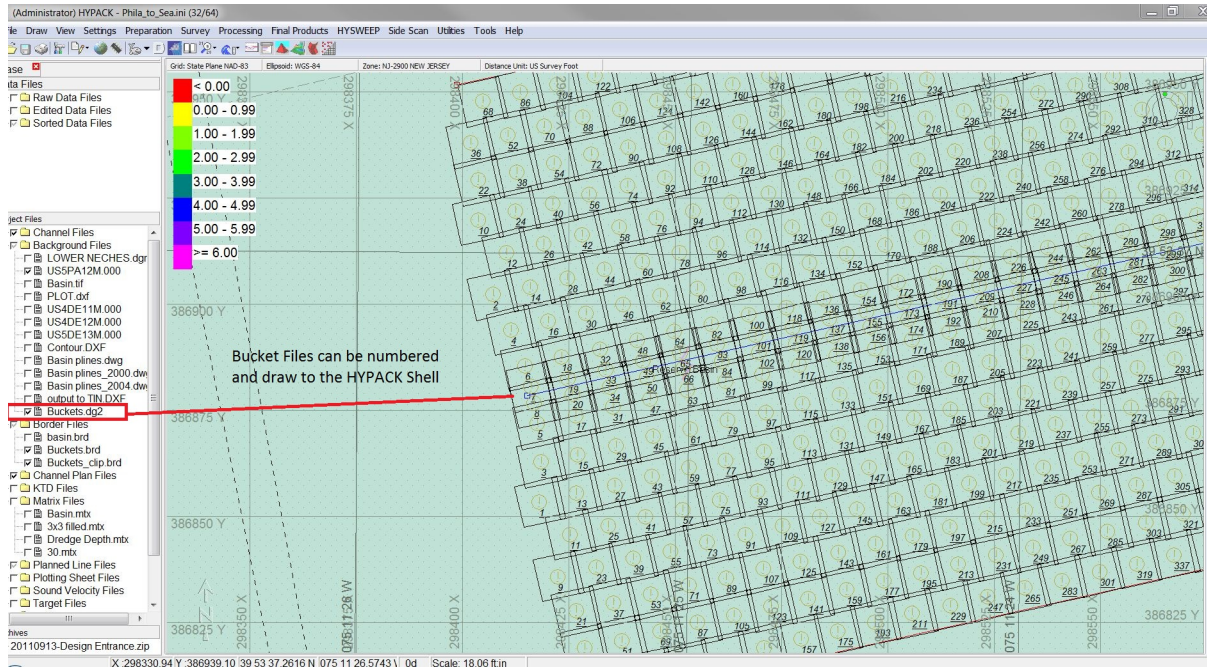
4. Use the tools in the editing window to modify your results as necessary.

FIGURE 3. Editing a Bucket Array



5. Generate the HYPACK® DG2 chart file from your bucket array, select FILE>EXPORT to DG2 and choose whether or not to number the buckets cells.

FIGURE 4. The Buckets Array DG2 Chart



This program will be available exclusively in HYPACK® 2012!