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Overlap Counts in MBMAX64

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A new feature in MBMAX64 allows mapping of overlap data.

Overlap is defined as areas sounded by multiple survey lines. If a location is sounded by a single line, there is no overlap (0X). If sounded by two lines, there is 1X overlap, and so on.

An alternate term for this analysis is coverage mapping, which is defined a little differently: Coverage is simply overlap + 1.

Figure 1 shows our test data from the C&D Canal. The color selection shows median depth. We can select Overlap Count from the drop-down list at the upper right. This list selects the statistic displayed for matrix cells. At the bottom is the new entry; Overlap Count.

Overlap Count may be selected when saving data to XYZ (one point per cell) or MTX format. Overlap Counts are available in MBMAX64 18.1.2 and higher.

FIGURE 1. Median Depths

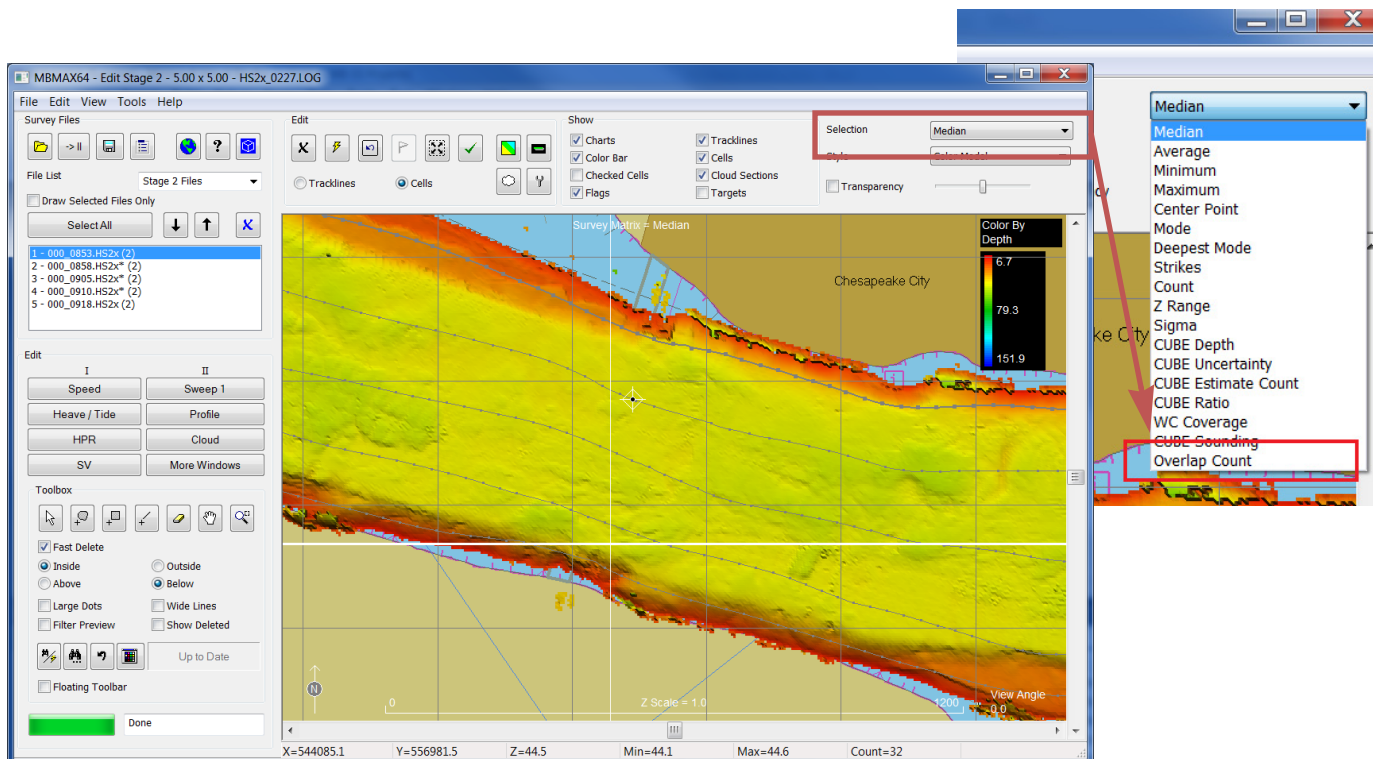
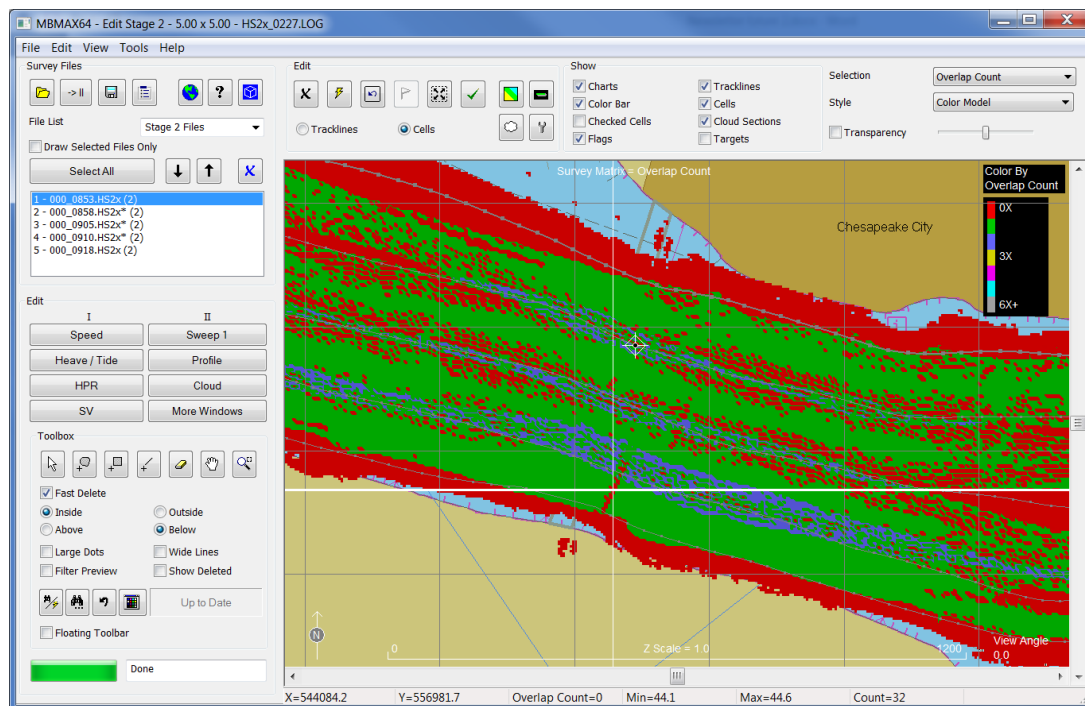


Figure 2 is the map. As expected there is no overlap at the edges and 1X and even 2X overlap further in. If 100% overlap is a survey requirement one would hope to see no red. Figure 2 is drawn before filtering.

FIGURE 2. Map of Overlap Counts. Full Swath Data +/- 75 Degrees.



The legend (Figure 3) explains the colors. The colors span 0X overlap (none) to 6X+. Cells with 6X and higher overlap count are displayed in gray.

FIGURE 3. Color Legend for Overlap Counts.

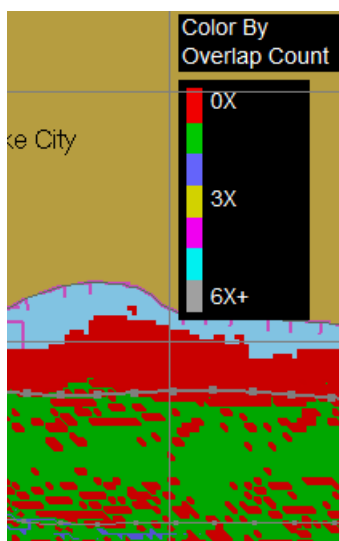


Figure 4 shows overlap counts after the angle filter is applied. There's quite a difference between this and Figure 2 from before filtering.

FIGURE 4. *Overlap Counts After Filtering +/- 60 Degrees.*

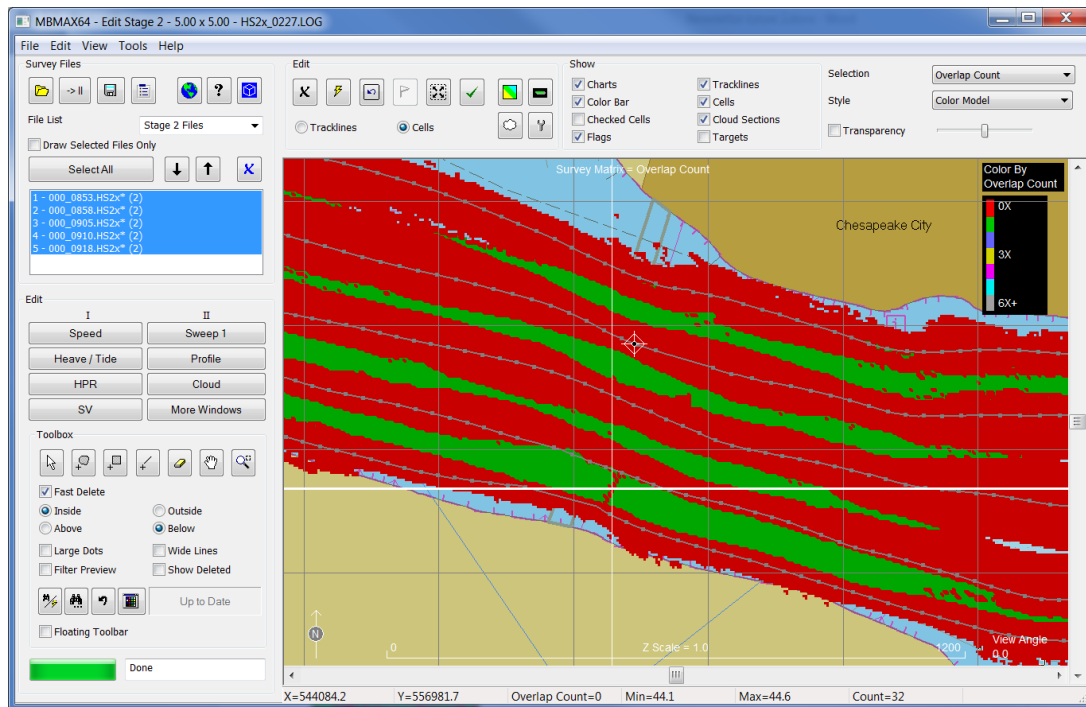


Figure 5 shows overlap counts at a densely surveyed section. There's plenty of overlap here!

FIGURE 5. *Overlap Counts Showing Lots of Coverage.*

