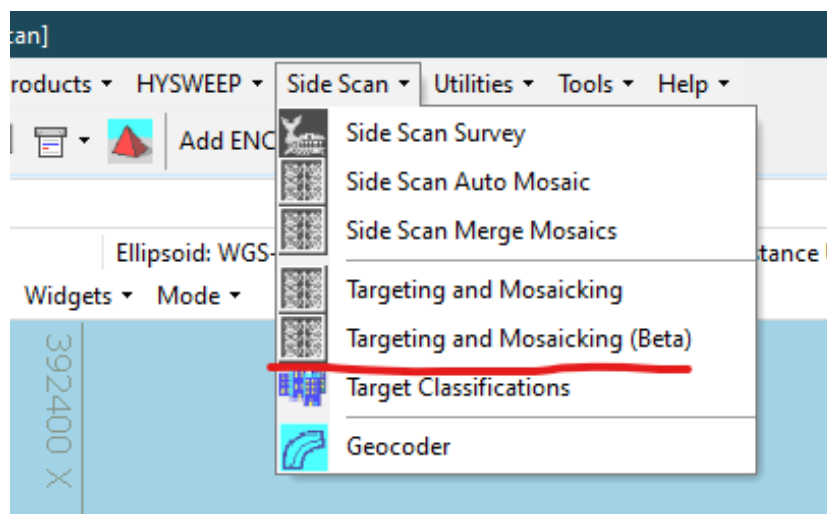




Targeting and Mosaicking Beta 2023 Q1 Updates

By Daniel Tobin

The HYPACK® 2023 Q1 update includes the latest Targeting and Mosaicking Beta. You can access the Beta by launching HYPACK® and clicking Side Scan -> Targeting and Mosaicking (Beta).



To see more new features in the Beta, check out this article:

https://www.hypack.com/File%20Library/Resource%20Library/Technical%20Notes/01_2023/Daniel-Tobin-2023-January-Targeting-and-Mosaicking-Beta.pdf

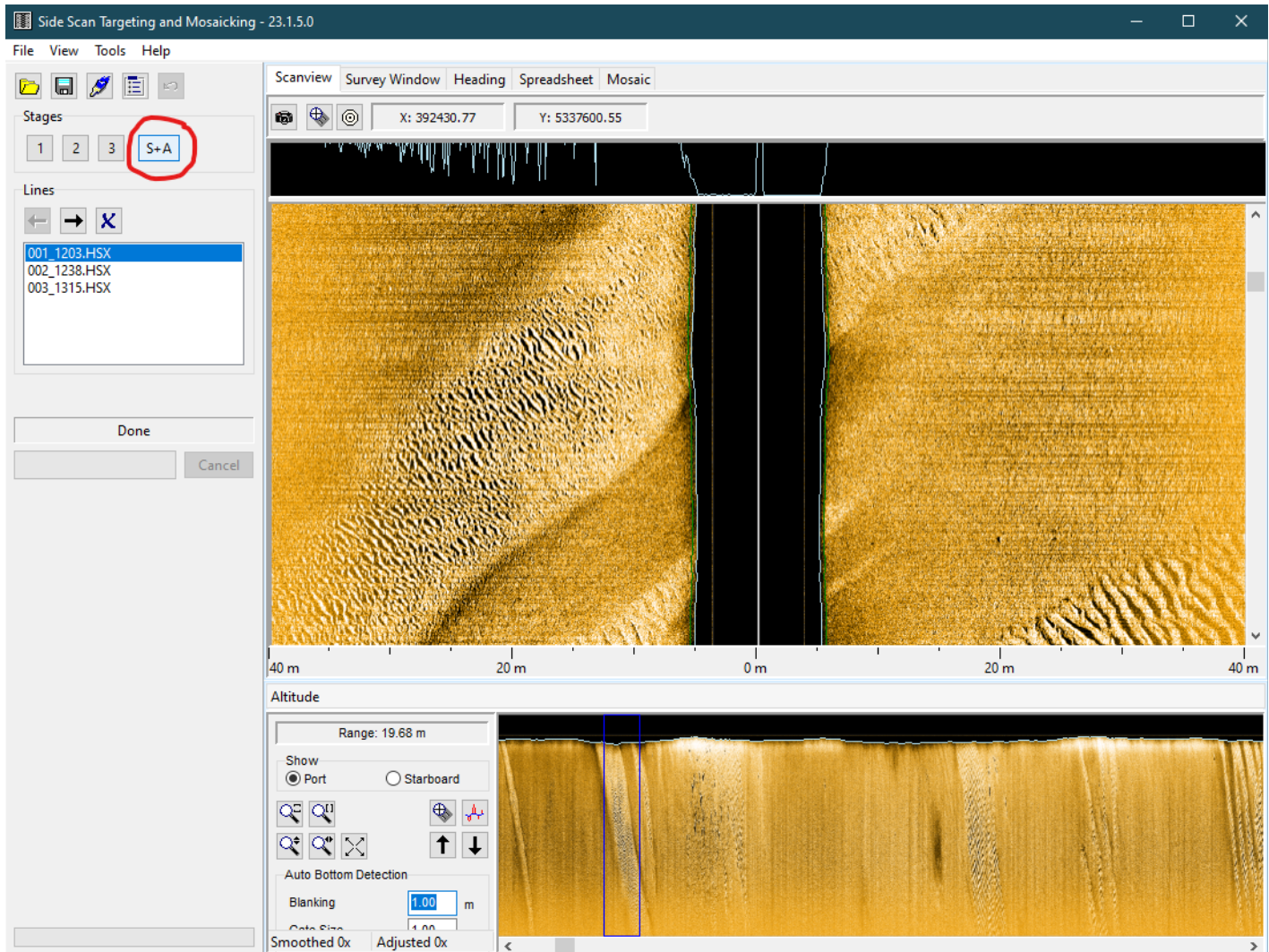
Since the last release of the Beta, the most significant change you will experience is in our waterfall renderer with its faster speed, improved stability, and increased robustness.

For a bit of context, older versions of Targeting and Mosaicking had dedicated waterfall rendering code for each place the waterfall would appear - there was separate code for the Altitude View, Scanview, and targets. Each place also rendered the waterfall slightly differently. This made updating the rendering code difficult, as code changes needed to be replicated in multiple places.

To speed up the display and simplify the code, a new rendering engine was previously created for the Beta. When a file is loaded, the waterfall immediately renders in a background process. Once it is rendered, the waterfall is stored in memory. When a window needs to display the waterfall, it will copy the imagery stored in memory rather than starting its own (slow) render. This is why scrolling through data and marking targets is significantly faster in the Beta.

The Q1 Beta update improves upon this design by rendering the waterfall using multiple threads. This means the more cores your computer has, the faster your waterfall render will be.

Another great addition is the Scanview + Altitude View mode. Next to the three Stages buttons is a new button, labeled “S+A”. Clicking this button brings up a merged view that stacks the Scanview and Altitude View.



If you click in the Altitude View at the bottom, the Scanview will jump to that position. Likewise, as you scroll through your Scanview, a blue box will scroll across the Altitude View, showing your current position. This is great for jumping quickly around files and getting a different view on your data.

Additionally, we now have better support for screen scaling in Windows. Previously, if your screen scaling was set higher than 100%, some text items would appear clipped. Now, text should appear clearly regardless of your screen scaling setting.

Some other smaller changes include reduced memory use and better support for files that have range changes.