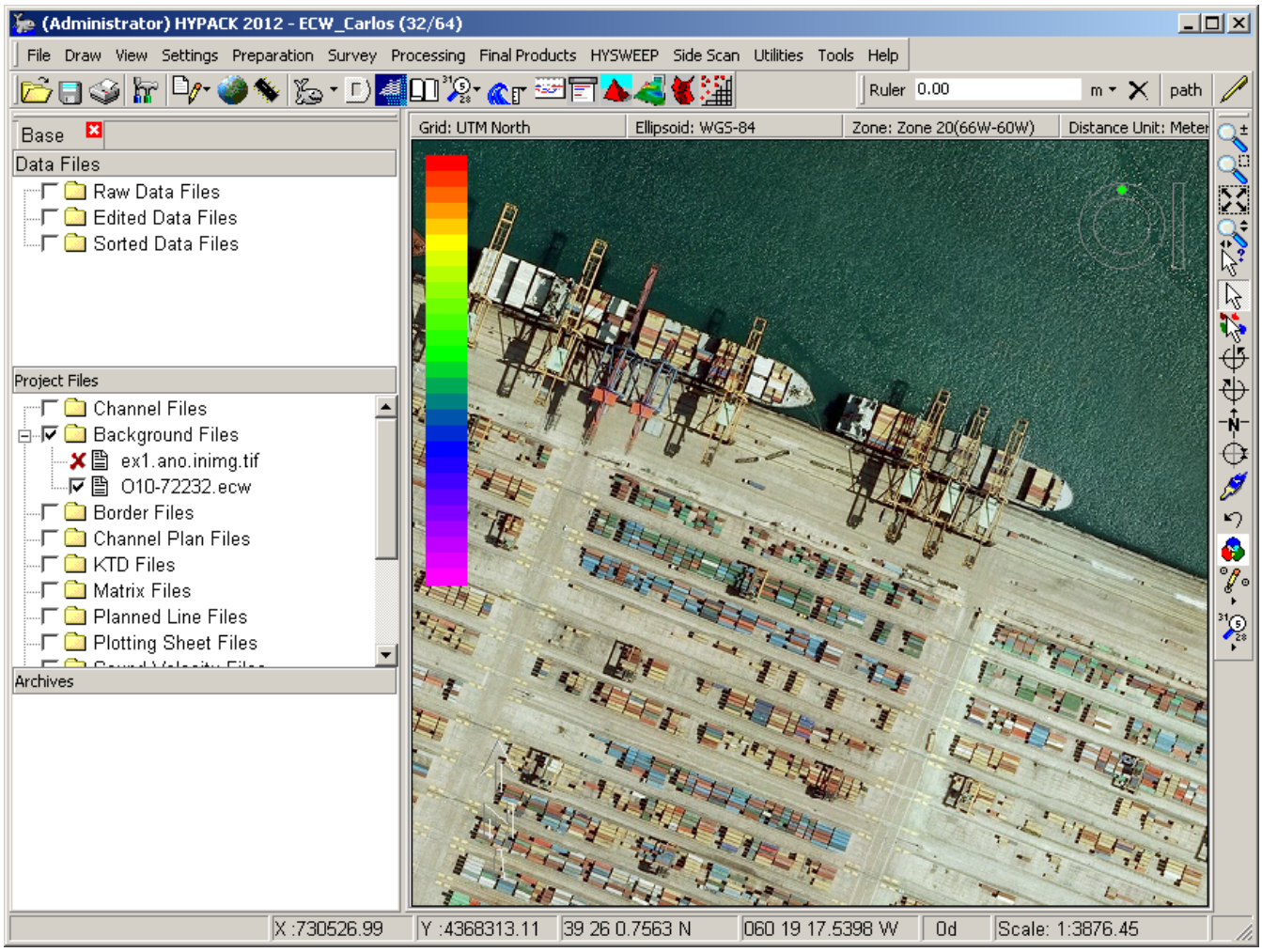
ECW Chart

by Bill Bergman

Figure 1 shows a digital image stored in the ECW format displayed in the HYPACK® shell. The geo-referencing information is embedded within the chart, making this a very friendly format to use.

FIGURE 1. *Saple ECW Chart*



ECW is an acronym for Enhanced Compressed Wavelet. This is an impressive compression technology developed by ERDAS for storing very large digital images. The files can range from a few kilobytes to multiple terabytes in size (1 terabyte = 1000 gigabytes, try that with a TIF image!). It was developed to fill an emerging need, mainly the storage and efficient transmission of the vast amount of large digital images being generated from systems such as satellites and aerial photography. It should be noted that ECW is a lossy compression, meaning some of the information from the original image will not be recovered after an encoding / decoding cycle. This loss in digital fidelity is nearly imperceptible and, when compared to the benefits of the large compression factor obtained, seems quite acceptable.

I am sure many of our customers are already familiar with this format, as it has become increasingly popular over the years. It is also probable that some of these users have been disappointed with the drawing speed in HYPACK® when loading charts of more than a few megabytes in size. We recently revisited the code for managing these charts to address this size vs speed trade off issue. After making some important internal changes, I am happy to announce that the loading and display is now very fast. You will simply need to get an updated coRTL.dll to receive the benefit of our improved ECW support. These modifications are available only for the recent 2012 release of our HYPACK® software.