



Importing Text Data

By Roy Goyette

Importing text data into HYPACK® has always been a tough job. Our first attempt at an import utility worked but not as smoothly as we intended. Sometimes it would just be easier to type your data into the spreadsheets and forget about importing the points entirely. But the 2012 version brought some welcomed changes to importing some data and the process became easier and quicker. Three programs got their own import routines: the Line Editor, the Border Editor and the Target Editor. Hopefully, as time goes on, we'll be able to create more import routines for other programs, saving you from recreating the wheel when you already have this data in an ASCII format. (For those of you unfamiliar with the term ASCII it's simply another computer term that means "in text format".)

FIGURE 1. Sample ASCII Text File

First, there are some rules we'll have to follow in order to ensure the file imports work correctly. The first we've already discussed.

1. The file from which you want HYPACK® to import must be an ASCII text file.
2. Each line must represent the information for one point of the feature in either the project geodesy or in WGS84.
3. Each point must be represented in the exact same manner. For example, if the first line of the file from which you intend to import data starts with the X value, the remaining lines must all begin with the X value.

Let's start with a border file. Figure 1 is our ASCII text file with the points we need to import to HYPACK® to represent a border area. Let's walk through the steps.

1. **Open the HYPACK® BORDER EDITOR** by selecting PREPARATION-EDITORS-BORDER EDITOR.

FIGURE 2. Launching the BORDER EDITOR

2. **In the BORDER EDITOR, select FILE-IMPORT** and the Import screen will open for you. Here you tell the import routine what your file contains and how to import that information into the BORDER EDITOR.

Borders of Survey Area

```
611203.92 665839.78
610183.55 666407.94
610177.75 666500.70
609464.64 666865.95
607180.38 667845.75
605800.55 667352.95
605707.79 667179.02
605615.03 666981.91
605400.52 666674.63
605516.47 666268.80
605644.02 665938.34
605690.40 665700.63
605765.77 665457.13
605893.31 665404.96
605973.03 664910.71
606088.98 664783.16
606123.77 664533.86
606199.14 664307.76
606280.30 664186.01
606332.48 664371.53
606807.89 664325.15
609045.76 663635.23
611203.92 665839.78
607277.49 666018.05
```

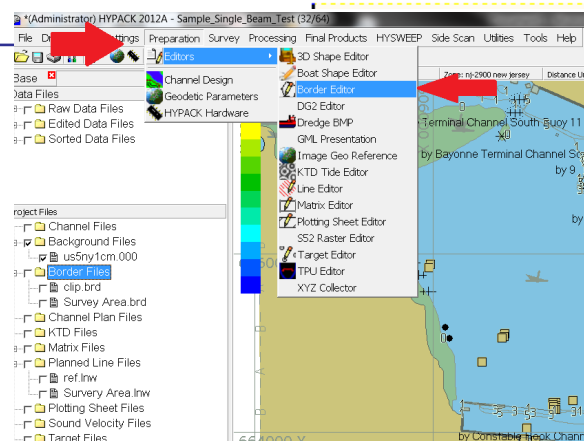


FIGURE 3. Import Screen in the BORDER EDITOR

3. **Starting on the left top of the form, place your check boxes in the order the data appears in the text file.** For example, this very simple text file contains only X and Y coordinates. Just place a check in the X and Y check boxes by clicking each box. That's the order of my data in the text document that I have to import.

Now let's say you have a different text document that lists the name of each point then the X and Y coordinates.

Somehow you have to tell the routine that the first field is not used. (Border files in HYPACK® are just X and Y points.) That's where the 'Ignore' check box comes into play. You can instruct the import routine to ignore the first field by placing an 'Ignore' item at the top of the list.

To move the Ignore check box, click on the Ignore item in the listing and drag it to the top of the list.

If there is more than one item to ignore, just click [Add Ignore Field] then drag the new Ignore item to its proper list location.

4. **Set the delimiter.** A delimiter is simply a name for the character or item that separates the fields in each text line. In the sample file, the delimiter is a space. Other common delimiters are a comma or a tab. (If you are not sure, text editors often include ways to display this delimiter. Consult the help files of your text editor to see if this is possible.)
5. **Instruct the program how to process the imported data for your project** using the remaining items on the right side of the screen.
 - **Geo Units:** If the geodesy of your text file points matches your project geodesy, select 'Local'. (this is the way you want to import these items always get the points in the same geodetic basis as the project is set for.)
 - **Skip Problem Lines** will pass by a line that is not in the format that you have listed in the check boxes and continue with the good lines. This helps a lot if you don't have a perfect import file.
6. **Check to see if you set this up correctly.** We've built in a little check function for you for this purpose.
 - a. **Load your text file to the routine.** Click [Load File] then navigate to your text file and double-click.
 - b. **Select one line in the Lines area.**
 - c. **Click [Check Syntax].** If everything is good, you will get a new window that tells you how many lines are in the text document you are importing and how many are good and available to be imported. If your syntax checks out, you are ready to convert the text file into a border file and import it into HYPACK®.

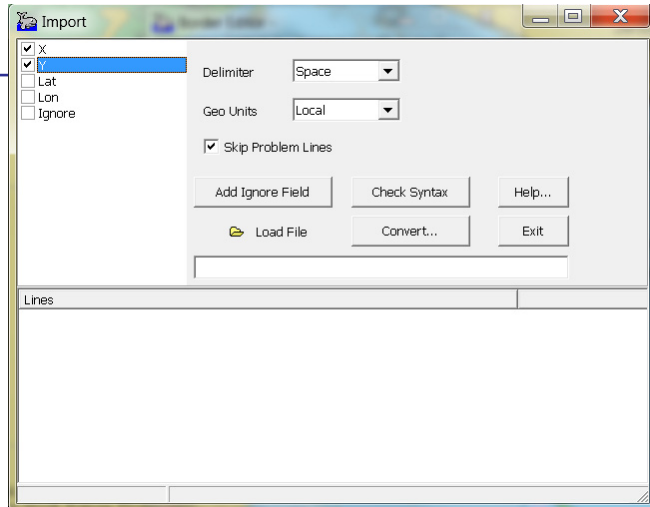
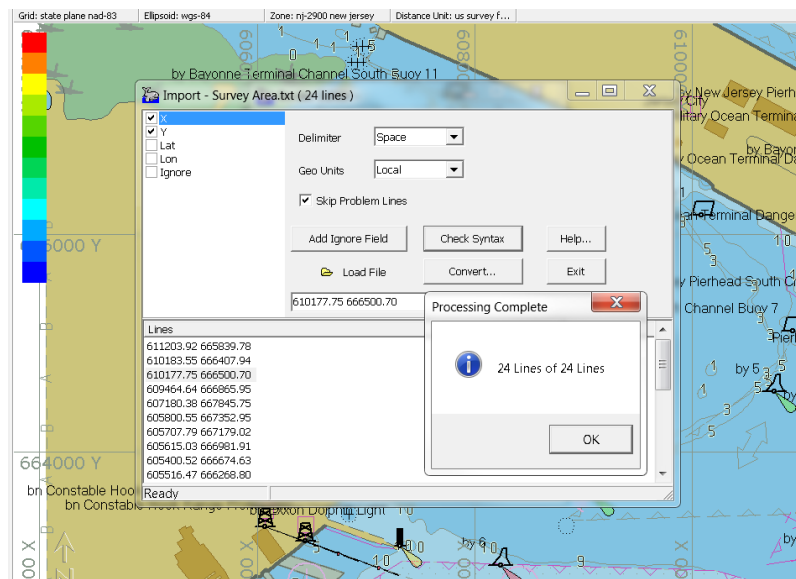


FIGURE 4. Checking Your Syntax



7. **Import the text file.** Click [Convert] and the points from the text file will be loaded into the Border Editor for you.
8. **Define the in/out point of the border file.** To do so, you can do either of the following:

FIGURE 5. Defining the In/Out Point

- **Cursor method:** Click the Cursor button in the Border Editor then right-click in the area you wish to keep.
- **Text Method:** Type the X and Y coordinates of a point in the area you wish to keep.

9. **Save your border file.** Select FILE-SAVE and give the border a name. You are finished!

