

# Importing Data



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## Overview

### About This Chapter

This chapter describes how to import map files into X-Map. This chapter contains the following sections:

- [Loading Data](#) describes how to import a map into X-Map.
- [Properties](#) describes how to view and set the properties of a map.

## Loading Data



To create a new blank map, choose **File | New** or click the **New Map** button.



X-Map displays one map at a time. When you load a second map, the previous map is unloaded. To prevent data loss, be sure to save the previous map before loading another. When you load a second map, a dialog box prompts you to save your previous work in the *\*.xmp* format.

To open an existing data source, select **File | Open**.

The choices are:

- Open *\*.xmp* file, an X-Map file that contains all of the original data.
- Open a Level II file, to open a Level II format map file, which contain one of the following types of data:
  - Elevations
  - Contours
  - Features
  - Elevations and Polygons.

## Data Pane

The Data pane lists all data sources that make up the current map. The original file name is displayed along with the Layer and Group in which the Components in this Data Source have been placed.

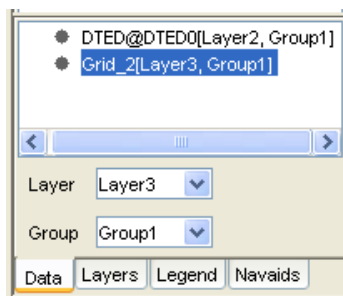


Figure 2-1. The Data pane

- Double-click** Double-click a data source in the **Data** pane to open the data source **Properties** dialog box.
- Right-click Menu** Right-click a data source and select **Delete** to delete it.
- To Place Data in a Group** To place a data source in a particular **Layer** or **Group**, choose the data source and then choose the **Layer** and **Group** from the drop-down lists below.

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## Importing Data



When importing data from other sources, you must know the relevant data parameters, such as the projection type, the latitude and longitude range, etc., so that you can enter them in the Data Import dialog box. All Components outside the map bounds will be ignored. Entering the wrong parameters may produce unexpected results. Your map provider will supply you with the relevant information, frequently in an accompanying text file.

## Importing a XTED Map

X-Map supports two levels of XTED data, XTED 0 and XTED 1. To load XTED data, choose the directory containing the XTED directories. To load a subset of XTED data, you can select a XTED sub-directory, or even an individual file.

To import a XTED map:

- 1 Choose **Data | Import | XTED**.  
The **Open** dialog box for XTED data opens.

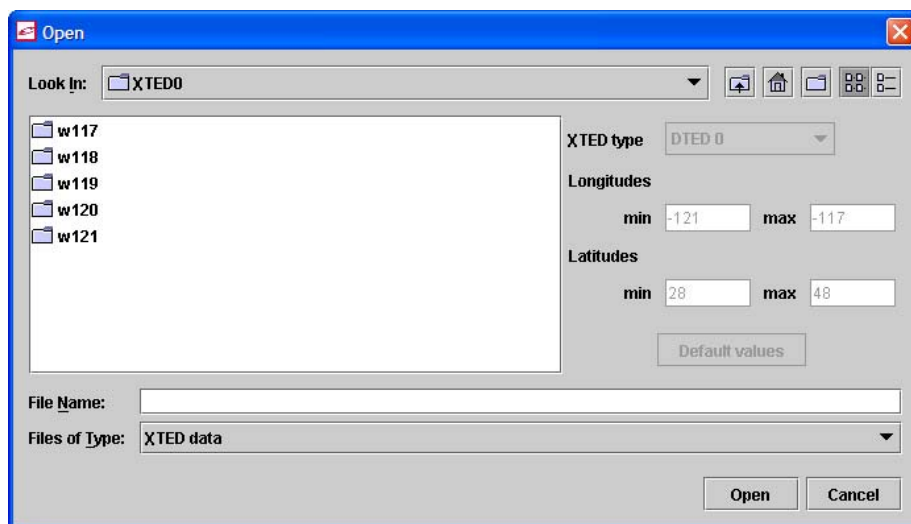


Figure 2-2. The Open dialog box for XTED data

- 2 Browse and choose the directory that contains the target XTED directories. The XTED data type, either **XTED0** or **XTED1**, is selected automatically, based on the content of the selected directory.
- 3 To open an individual XTED file, select the XTED file type from the **Files of Type** drop-down list and proceed to Step 6.
- 4 Click the **Default Values** button to display the default latitude and longitude range available in this XTED map.
- 5 If necessary, modify the **Minimum** and **Maximum** for the **Longitude** and **Latitude**.
- 6 Click **Open**.  
The specified XTED files are imported.

## Importing DFAD Data

DFAD (Digital Feature Analysis Data) consists of vector-format selected natural and man-made features classified as point, line, or area features, depending on their size and composition. Data are segregated into geographic cells. X-Map accepts DFAD files with the extension *.df1* or *.df2*.

- 1 From the **Menu** bar choose **Data | Import | DFAD**.  
The **Open** dialog box for DFAD data opens.

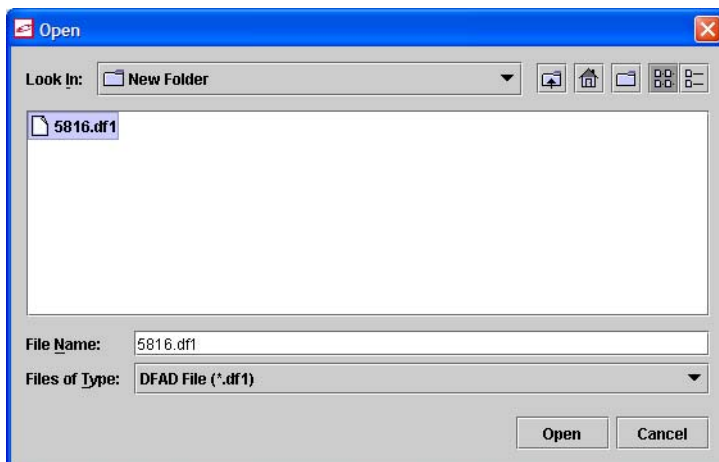


Figure 2-3. The Open dialog box for DFAD

- 2 Browse to and choose the *\*.df1* or *.df2* file to open.
- 3 Click **Open**.  
The selected file is loaded and displayed.

## Importing OpenFlight Data

- 1 From the **Menu** bar choose **Data | Import | OpenFlight**.  
The **Open** dialog box for OpenFlight data opens.

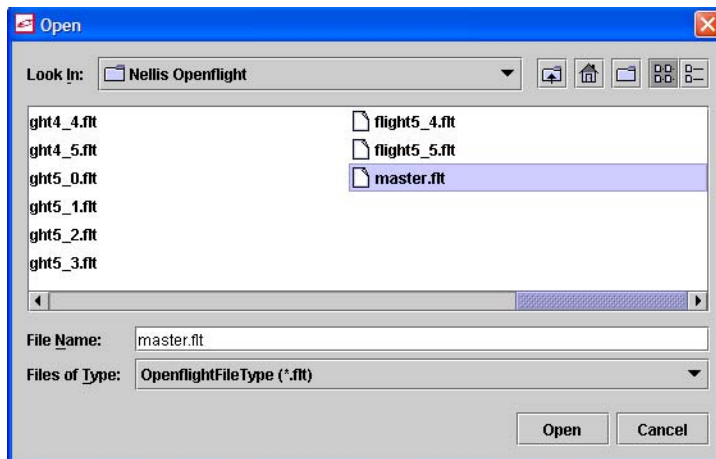


Figure 2-4. The Open dialog box for OpenFlight

- 2 Browse to and choose the \*.flt file to open.
- 3 Click **Open**.  
The selected file is loaded and displayed.

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Only the elevation data is read for OpenFlight files. However, the polygons and terrain data will be available in the X-Map file.

## Importing DFD Data

- 1 From the **Menu** bar choose **Data | Import | DFD**.  
The **Open** dialog box for DFD data opens.



Figure 2-5. The Open dialog box for DFD

- 2 Browse to and choose the file to open.
- 3 Click **Open**.  
The selected file is loaded and displayed.

## Importing DBDB5 Data

DBDB5 data describe underwater topographical details. You can load a DBDB5 directory, sub-directory, or individual file. To import a **DBDB5** map:

- 1 Choose **Data | Import | DBDB5**.  
The Open dialog box for DBDB5 data opens.

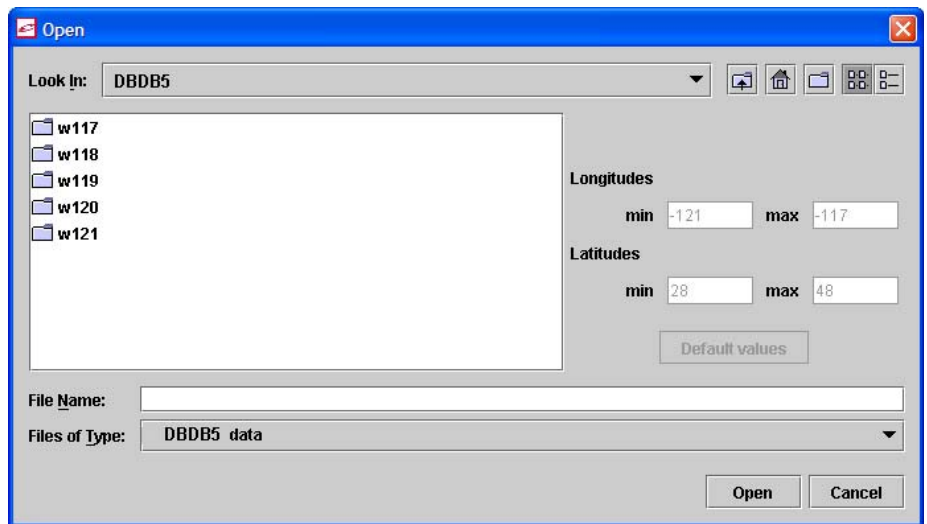


Figure 2-6. The Open dialog box for DBDB5 data

- 2 Browse and choose the directory that contains the target DBDB5 directories. The Minimum and Maximum Latitude and Longitude are selected automatically, based on the content of the selected directory.
- 3 To load an individual file, select the file and proceed to Step 6.
- 4 If necessary, modify the **Minimum** and **Maximum** for the **Longitude** and **Latitude**.
- 5 Click the **Default Values** button to restore the default latitude and longitude range available in this map.
- 6 Click **Open**.  
The specified DBDB5 files are imported.

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## Properties

Map Properties provide synthetic information about the current map, such as size, layers, modification date, titles, comments, print parameters, configuration, etc. These parameters, including the Projection, are used to display the map. They do not become a part of the imported data sources for the map.



To view or modify the **Properties** of a map, choose **File | Properties**, or click the **Properties** button.

The map **Properties** dialog box opens.

The **Properties** window has tabs for **General**, **Configuration**, and **Printing**.

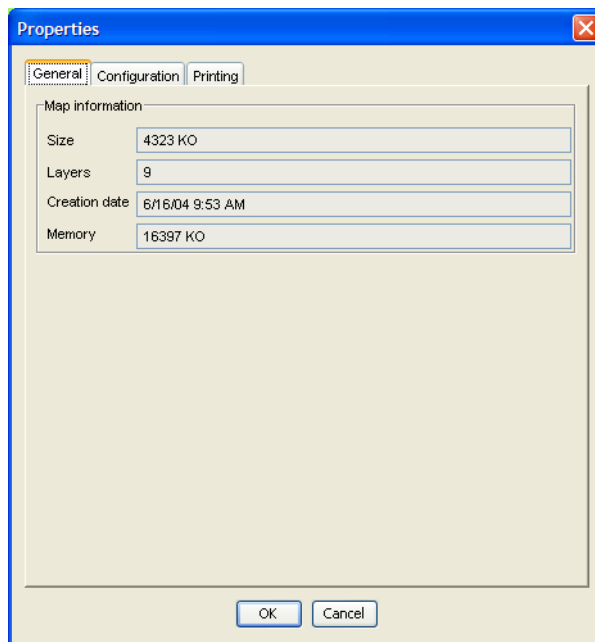


Figure 2-7. The map Properties dialog box



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## General Properties

The Properties windows defaults to the **General** tab, which displays the map **Size**, numbers of **Layers**, the **Creation Date**, and the amount of **Memory** used by X-Map.

You cannot modify these values. If you are displaying a new map that has yet to be saved, the **Size** is listed as 0. The **Creation Date** is the date that this map was created.

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## Configuration Properties

The **Configuration** tab controls how the map is displayed. It has sub-tabs for:

- **Limits and Projection**
- **Titles and Comments**
- **Map Properties.**

## Projection Tab

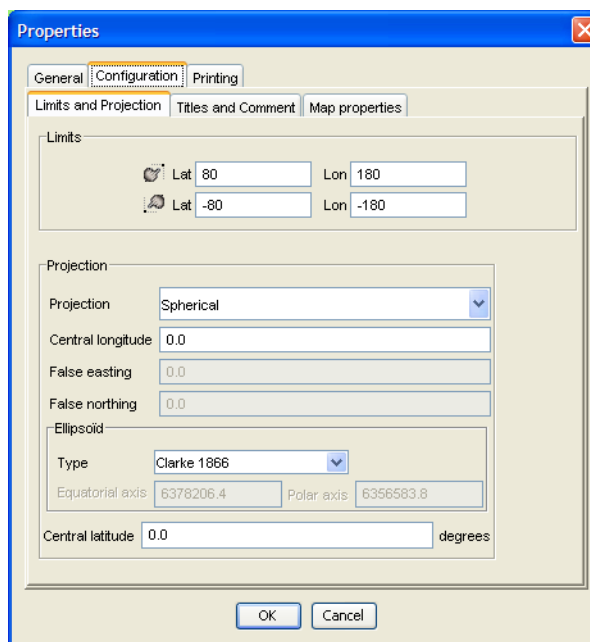


Figure 2-8. The Projection tab

The Projection tab lets you specify a **Projection** type for how the current map is displayed. The Projection type specified allows you to use the same projection to display different data sources, whatever their original projection types. If you change the projection once the data source has already been loaded, the data source will be reloaded.

You can also specify the **Limits** for minimum and maximum latitude and longitude and other display parameters.

Bounds specified here are used when importing data. Polygons falling partially outside of the bounds are clipped to the bounds. Data falling outside of the bounds are ignored. Changing these bounds prompts X-Map to reload the data.

Because the earth is spherical and maps are flat, every map distorts shapes or sizes to some degree. A Projection type is a mathematical rule that stipulates where in the flat map to draw each point on the sphere.

Except for **Central Longitude**, **False Easting**, **False Northing**, and **Ellipsoid**, the parameters are dependant on the **Projection** type. Entering the wrong parameter values may produce unexpected results in the display. If you are not sure what these values should be, use the **Identity** projection.

## Supported Projection Types

The supported Projection types are:

### Identity

Identity is a simple projection where  $x = \text{longitude}$  and  $y = \text{latitude}$ . The Identity projection is useful as a default projection.

### Lambert

The Lambert Conformal Conic is a projection that strongly distorts shapes towards the poles of a worldwide map. The projection is accurate along one or two chosen standard parallels, usually located on the same side of the Equator, and frequently at one-sixth and five-sixths of the latitude range.

Suitable for world maps, it also works for smaller rectangular zones with a greater latitudinal than longitudinal dimension. From a given point, the scale is constant in all directions.

### Universal Transverse Mercator

The Universal Transverse Mercator (UTM) projection uses 60 pre-defined standard zones, each  $6^\circ$  wide, spanning from  $80^\circ$  N to  $84^\circ$  S, to supply parameters. Each zone exists in a North and South variant. Developed for military use, UTM is now widely used in civil mapping.

Transverse Mercator projection accuracy quickly decreases from the central meridian. Therefore, you should restrict the longitudinal dimension of the projected region to  $\pm 6$  degrees from the central meridian.

## Ellipsoid Types

The supported **Ellipsoid** types are:

- Custom, where you enter the Major axis and Inverse Flattening values. You must also provide the radii values for the Equatorial and Polar axes.
- Clarke\_1866 (default)
- International\_1924
- WGS\_1972 and 1984
- Everest
- Clarke 1880
- Krasovsky
- GRS 80.

Many maps assume that the Earth is a sphere, whereas it is more like a slightly flattened sphere, called an oblate spheroid. This is an ellipse rotated about its shorter axis. This flattening is only about one part in three hundred; however, it is a necessary consideration in plotting accurate maps at a scale of 1:100,000 or larger. On small-scale maps, the oblateness is negligible.

In reality, the Earth is not an exact ellipsoid. Because the Earth is such an irregular ellipsoid, no single smooth model provides an accurate reference surface for the entire Earth. The result is several different reference ellipsoids used for mapping different regions on Earth.

## Map Properties Tab

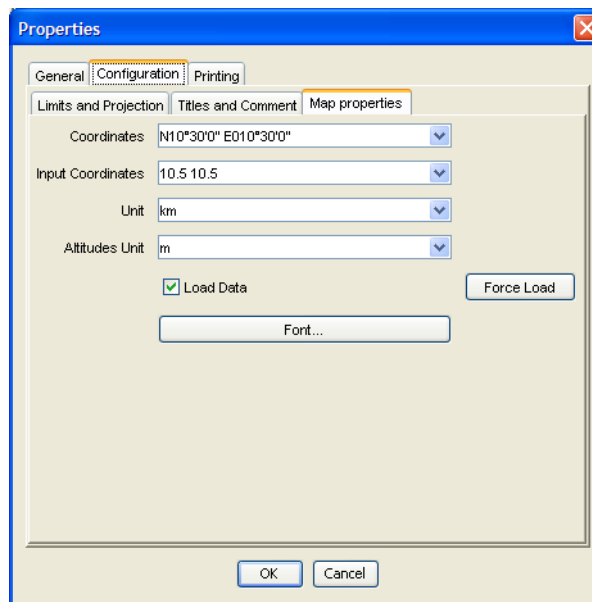


Figure 2-9. The Map Properties tab

The **Map Properties** tab contains the following parameters:

- **Coordinates**, to set the way coordinates are shown in the status bar and measuring tool.
- **Input Coordinates**, to set the way that you enter coordinates.
- **Unit**, to set the unit of measurement for measuring and for display in the scale area.
- **Altitude Unit**, to set the unit of measurement for altitude display.
- **Load data** check box, when unchecked, prepares the map without actually loading the data to save time when dealing with large data sources. When checked, it loads all data from the data source.
- **Force Load** button loads any data in the data sources that have not already been loaded.
- **Font**, to set the default display font used for all text Components and for labeling.

## Print Properties

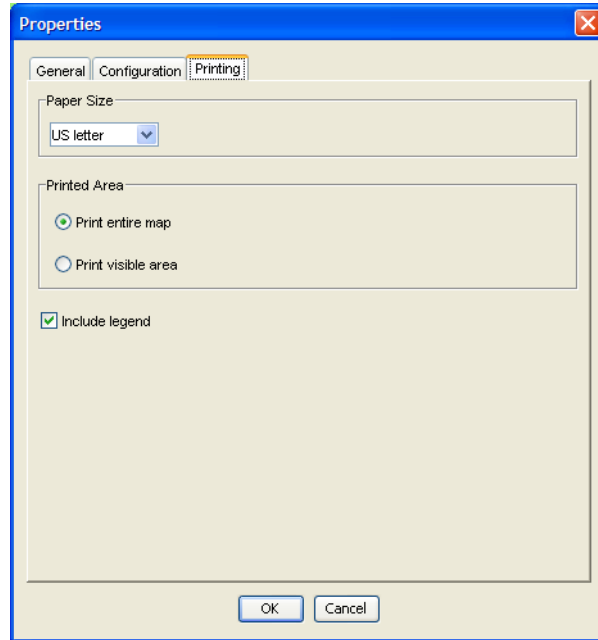


Figure 2-10. The map Print Properties tab

The **Printing** tab allows you to specify the default paper size, whether to print just the visible area or the entire map, and whether or not to include the **Legend** in the printout. Print properties set here are saved in the \*.xmp file, unlike print properties set in the **Print** dialog box, which are retained for the current session only.

**File | Print** opens a dialog box that contains numerous additional printing options, including whether to fit the map onto a single sheet or to tile the printing over numerous sheets.

For full information on print options, see “[Print](#)” on page 74.