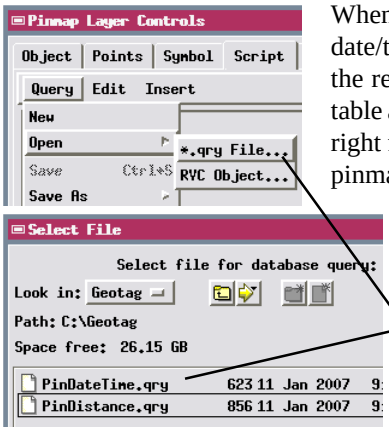
Digital Photos

Pinmap Digital Photos Using Queries



When you pinmap digital photos you can use a script to limit the photos mapped to those meeting specific date/time, spatial, or other criteria. Below are two examples of such selection scripts with illustrations of the results. The full set of photos in the example table are shown pinmapped in the illustration to the right for comparison. For basic information about pinmapping a geotagged photo table, see the Technical Reference Plate entitled *Digital Photos: Pinmap Digital Photos with Photo DataTips*.

Use the Query menu on the Script panel of the Pinmap Layer Controls to select an existing script, or enter a new script in the editing pane.

Choose By Script from the Records menu on the Pinmap Layer Controls window's Object panel to use the script selected or entered on the Script tab to select records for mapping.

Full set of photo pins (no selection script).

Select Photos by Date and Time: PinDateTime.qry

Pins selected by date and time.

The DATETIME class members and methods can be used in a script to select photos taken on a particular date or before or after a certain date and time. The photos in the sample table were taken from 14 November 2004 through 7 July 2005. The sample script selects photos taken after 12 noon on 1 June 2005.

```
class DATETIME dt;
```
class for storing and converting date/time information

set target date 2005/06/01 and time 12 noon for comparison

```
dt.SetDateYYYYMMDD(20050601);
dt.SetTime(12, 0, 0);
```
set time in hours, minutes, seconds

the Date-Time field value is returned as a Julian date, so must use DATETIME class method to convert target date-time to Julian for comparison

```
if (`WPN Geotagged Images`.`Date and Time` > dt.GetDateTimeJulian() ) then
   return true;
```
selects records meeting criterion

Select Photos by Spatial Proximity: PinDistance.qry

This script selects photos taken within 200 meters distance of a reference location, in this case the center of the pitcher's mound in the baseball diamond (red dot in illustration). Because photo locations are in latitude/longitude coordinates, a predefined function is used to get the projected distance between points in the specified coordinate reference system.

```
numeric distance = 200;
class POINT2D refpt, photo;
```
specified distance in meters

reference and photo points

```
class SR_COORDREFSYS crs;
crs.Assign("Geographic2D_WGS84_Deg");
```
set coordinate reference system

```
refpt.x = -96.6767763;   refpt.y = 40.8087643;
```
set longitude / latitude coordinates of reference point

```
photo.x = `WPN Geotagged Images`.Longitude;
photo.y = `WPN Geotagged Images`.Latitude;
```
get coordinates of current photo from table

call function that returns distance in meters between two points in specified map projection and compare to target distance

```
if (ProjDistanceToMeters(crs, photo.x, photo.y, refpt.x, refpt.y) <= distance )
   return true;
```
selects records meeting criterion

Pins selected by proximity to reference point (red dot).

NOTE: These sample scripts can be found in the SelectionQuery directory of the TNT 2007:73 Sample Scripts collection (available from www.microimages.com/downloads/scripts.htm).