

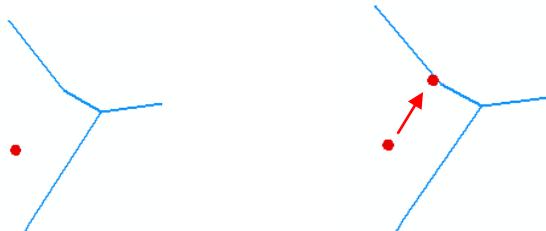
How to Attribute Points with TauDEM Variables

1. Snap Thermograph Points to Stream Layer

1. Go to this website to download and install Hawth's Analysis Tools on your computer: <http://www.spatial ecology.com/htools/download.php>

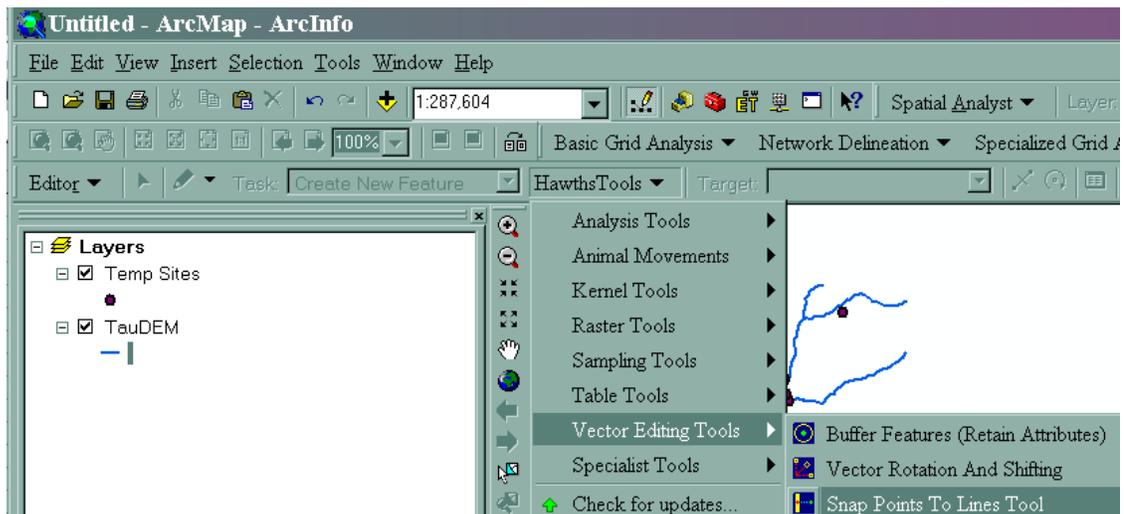
Note: You must have administrative privileges before installing Hawth's Tools. The current version of Hawth's tools is for ArcGIS 9.2.

2. Open ArcMap and install the Hawth's toolbar (follow directions on the website).
3. Add the temperature point file and the related TauDEM stream layer to ArcMap. The files must be in the same projection.
4. Review all points before snapping them to be sure they will snap to the correct stream. Use the editor to move points closer to the correct stream, if necessary.



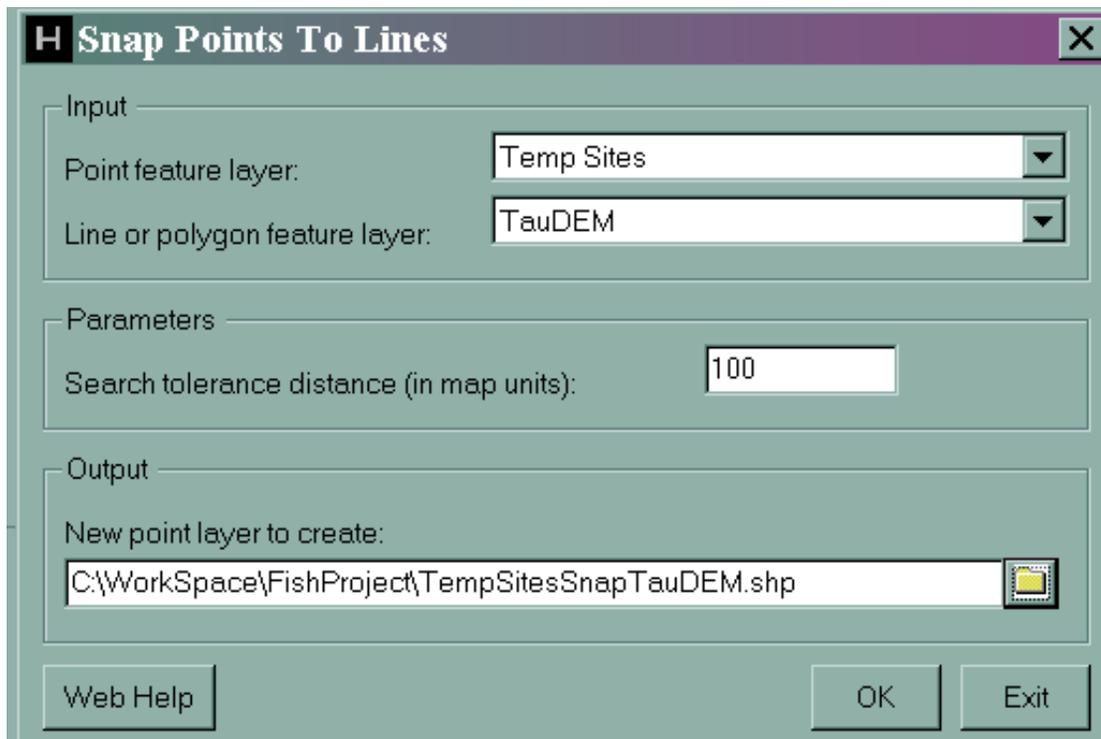
In this example, the point would have snapped to the lower stream, in error.

5. Click on HawthTools > Vector Editing Tools > Snap Points to Lines



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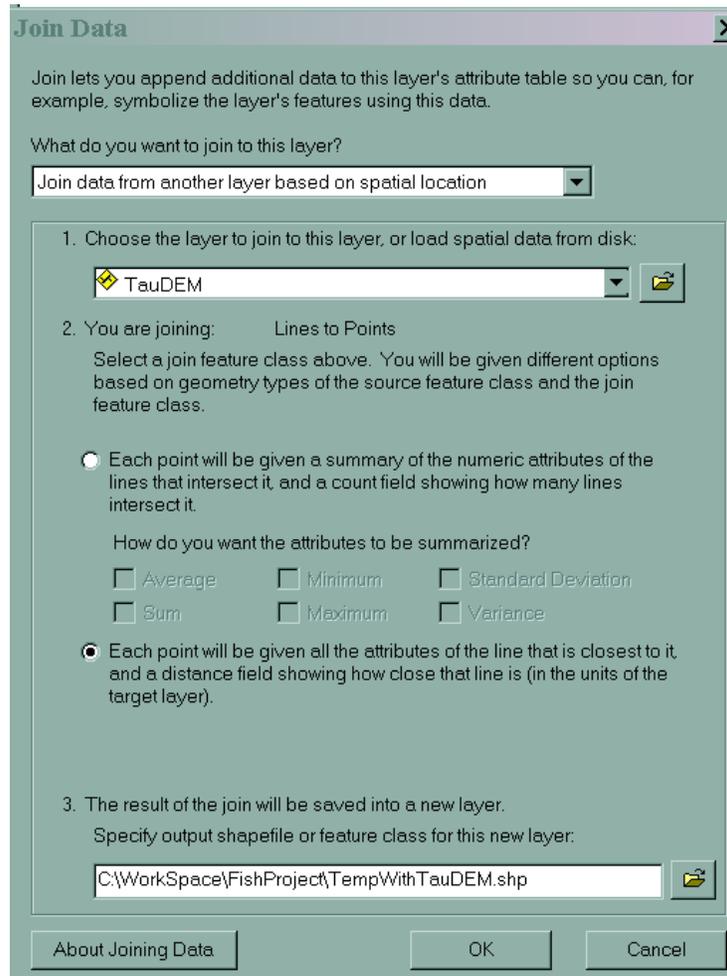
6. When the dialogue box opens, choose these options:
 - Input
 - Point feature layer: Temp Sites
 - Line layer: TauDEM
 - Parameters 1000 (m)
(select any distance, but make sure that all points are within that distance or they will not be snapped and they will not be in the newly created point file)
 - Output
 - New point layer: ...*TempSitesSnapTauDEM*
(tip: if you add *SnapTauDEM* to the point file name, in the future, you will know that these are snapped points)



7. Add the new point file to ArcMap
8. Compare the number of records in the unsnapped and snapped files to ensure that all points were snapped.

2. Attribute Temperature Point File with TauDEM Stream Variables

1. Join the temperature point file to the TauDEM stream layer using a spatial join:
 - Right click on the point file > Joins and Relates > Join
2. When the dialogue box opens, choose these options (see below):
 - Join data from another layer based on spatial location
 - Choose the correct stream layer (TauDEM)
 - Choose “Each point will be given all the attributes...”
 - Specify an output file name
 - OK



3. The new point file will automatically be added to the ArcMap project. Open the attribute table and familiarize yourself with the new variables.