



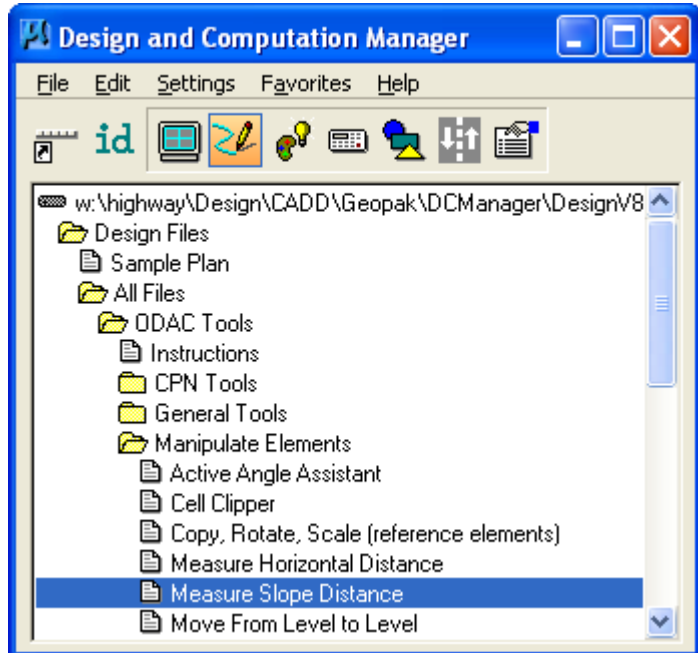
Measure Slope Distance tool

Design Manual
Chapter 21
Automation Tools
Instructions

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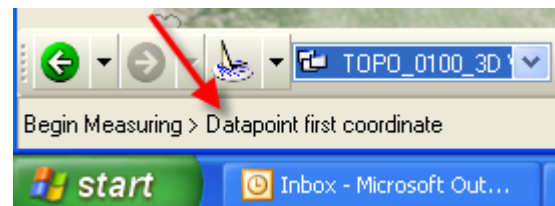
This tool can be accessed from the Geopak:
D&C Manager, as shown at the right.

(If the item is not found as shown, use the
D&C > Edit > Find tool to locate it.)



The **Measure Slope Distance** tool is designed as a 3D measurement tool, between points containing X, Y, and Z coordinates, with the Z distance being the change in elevation. A simple "data point" only provides X & Y coordinate location, therefore this command requires a tentative snap to the element to also identify the elevation of the element.

When the **Measure Slope Distance** tool is *double-clicked*, a message will display, as shown at the right, directing to **Datapoint first coordinate**. This is instructing to tentative snap to the first location, and accept.



After the first measurement point has been accepted, the following dialog will display, showing the X, Y, and Z coordinates, in the form of Northing, Easting, and Elev., as shown below.

The 'Measure Distance Results' dialog box displays the following data for the first measurement point:

Northing:	3657423.96248537	Northing:		Slope Dist:	
Easting:	4120179.27498352	Easting:		XY Dist:	
Elev:	1101.10694444008	Elev:		Vert Dist:	
Calc	Latitude:		Departure:		Exit

After the second measurement point has been accepted, the dialog will populate with the remaining data, including the X, Y, and Z, coordinates of the second point, along with the Slope Distance, Horizontal XY distance, and the Vertical rise or fall elevation difference. To make a second measurement it is only necessary to snap to and accept two new points.

The 'Measure Distance Results' dialog box displays the following data for the second measurement point:

Northing:	3657423.96248537	Northing:	3657216.31526315	Slope Dist:	211.21907084559
Easting:	4120179.27498352	Easting:	4120217.92498352	XY Dist:	211.213615555923
Elev:	1101.10694444008	Elev:	1099.58888888474	Vert Dist:	-1.5180555534361
Calc	Latitude:	-207.647222221363	Departure:	38.6499999994412	Exit

The Calc button produces a Calculator for your convenience, as shown below.

The Windows Calculator application is shown with the following interface:

- Window title: Calculator
- Menu bar: Edit View Help
- Display: 0.
- Buttons: Backspace, CE, C, MC, 7, 8, 9, /, sqrt, MR, 4, 5, 6, *, %, MS, 1, 2, 3, -, 1/x, M+, 0, +/-, ., +, =