

# How do I create a top a given distance from another top?

Copyright 2006 TERRASCIENCES

*Application: It is sometimes useful to be able to specify the depth limits for a curve track as being from, say, 50 feet above one marker to 50 feet below another. This document describes how to create tops meeting this condition. The tops can then be used in IMAGELog for plotting images between specific markers, with some additional depth displayed for context.*

1. Go to **Applications** on the *Main Menu Bar*; select **Mapping** from the pull down menu.
2. Select a map and Click **Accept**. Choose any pick value from the list and Click **Accept**.
3. Click on **Z Operations** on the Power Bar. Next Click on the **Two Z Operations Tab**.

**Z Operations**

General | **Z Operations** | Two Z Operations

Input Z Variables

ZOLD1: 451NEVA  
Select Z

ZOLD2: 451NEVA  
Select Z

Z Operation

Zero Isopach  
Isopach  
Zero Linear Comb.  
Linear Combination  
Multiply  
Divide  
Absolute Diff  
Minimum  
Maximum

Operation Definition

ZNEW = ZOLD1 - ZOLD2  
(ZERO IF ONE IS NULL)

A coefficient: 0  
B coefficient: 0

Save As Fixed

Fixed means values are computed and stored.  
Otherwise only the operation is stored. Values are computed as needed, but cannot be edited.

Name of Result (ZNEW)

Accept Close

4. Under Input Z Variables select Surface Elevation on the **ZOLD1** button. The **existing top** from which your offset top will be created, Select this on the **ZOLD2** button.
5. Choose **Absolute Diff** from the list of available calculations and name your new top in the dialog box, e.g. MRK1 MD. **Note: Do not put check mark in the dialog box to save as fixed.**
6. Click on **Accept**. (You will be presented with a report window. Close this when you have finished viewing the report.) This step creates an intermediate Z variable containing MD values for the original Z. It eliminates confusion over the basis for the original values, since they are sometimes obscured by the screen representation which is computed on the fly. The *type* of this Z variable is initially set to *Other*.
7. Now we are ready to create the offset marker. Click on **Z Operations Tab**.
8. Click the **Select Z** button and select the top you created earlier.
9. Choose **Linear Combination** from the list of available calculations.
10. Type "1" (one) in the dialog box for **A coefficient**. Enter the number of feet/meters for **B coefficient**, e.g. 100. *Note: enter a positive number if the result you want should represent a top below the original top. Type a negative number if the result should represent a top above the original top.*
11. Type the name of the result in the dialog box, e.g. MRK1-100. **Note: Do not put check mark in the dialog box to save as fixed.**
12. Click **Accept** on the bottom of the control panel. You will be presented with a report window. (Close this when you have finished viewing the report.) The type of this Z variable will be set to *Other*.
13. Click on **General Tab**. Next Click **Set to Structure** button.
14. Select the new Z variable, e.g. MRK1-100. Click on **Accept**. Click **Status of Z Variables** button to check the new top, Click **Close** when finished.

*Leaving the markers unfixed means that if the top is moved, the new values are automatically updated.*

***Thanks for using TerraStation***