

HOW TO GET HEIGHTS AND IMAGES FROM GOOGLE EARTH AND USE IT IN IRRIMAKER TO GENERATE CONTOUR PLANS

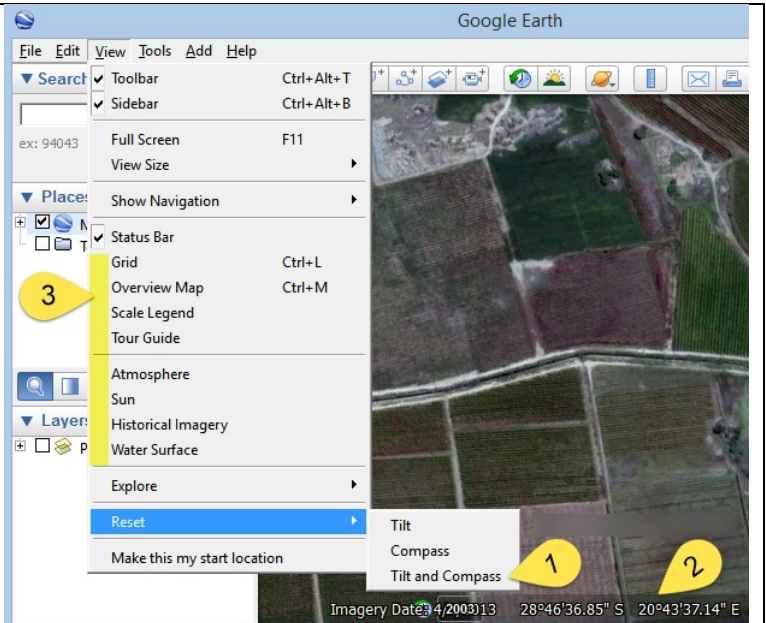
This is an updated method to use Google Earth for heights and contours in IrriMaker.

Step 1: Locate the required space in Google Earth

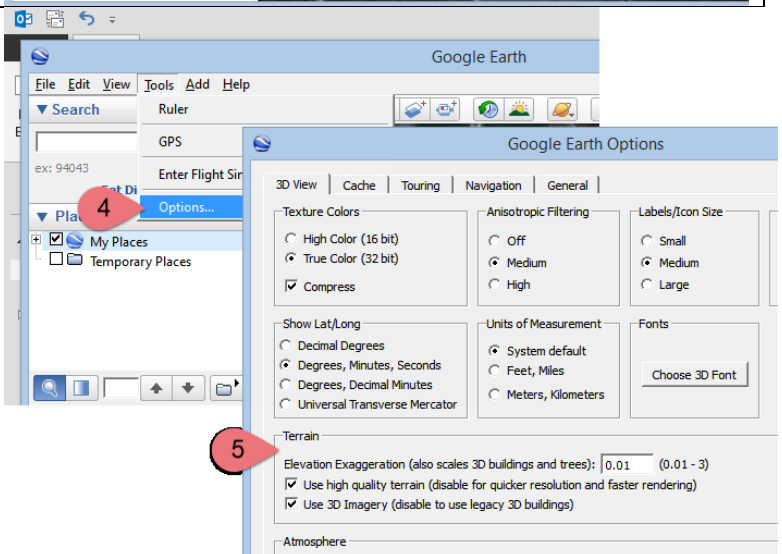
Tip: Reset Tilt and compass so that the image is perfectly orientated use the "R" button on your keyboard to reset tilt and rotate or click on View > Reset Tilt and Compass (1)

Make a note of the central meridian or UTM zone on the status bar as you move your cursor over the area on the image. In this case it is WGS84 LO 21 (2)

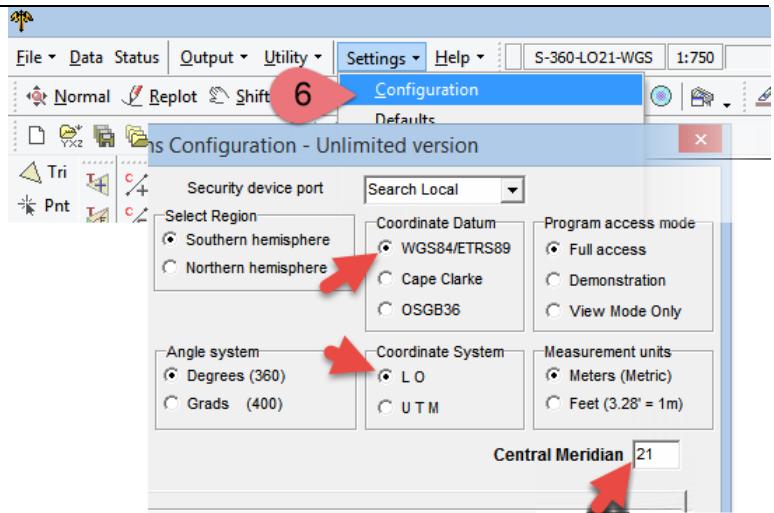
Switch off any un-needed toolbars and settings (3)



Step 2: Reset the height distortion in Google Earth to make the image as flat as possible using Tools > Options (4) set the Elevation Exaggeration value (5) as low as possible in this case 0.01



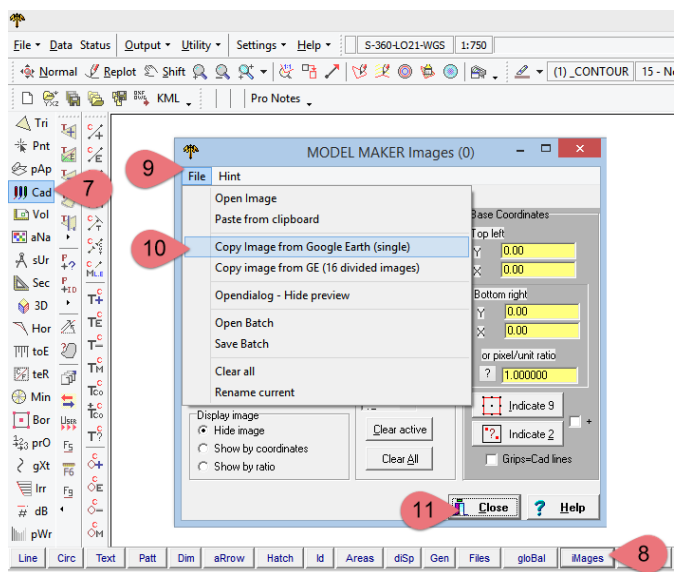
Step 2: Prepare the settings in IrriMaker using Settings > Configuration (6), set the co-ordinate datum (WGS84) and central meridian value (if you are using latitude & longitude) or zone value (if you are using UTM) exactly the same as in Google Earth.



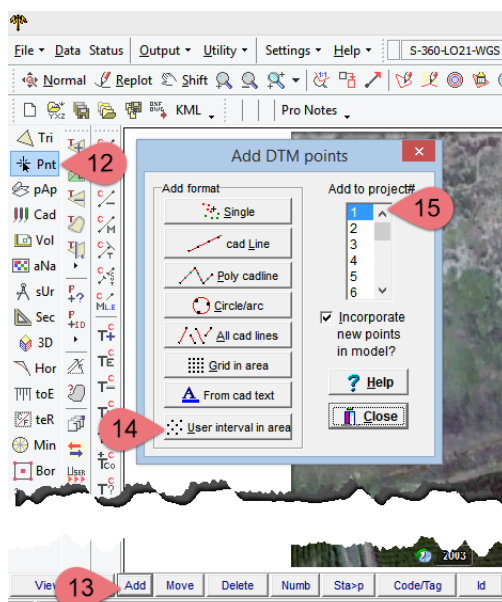
Step 3: In IrriMaker you may then import the Image from Google Earth using Cad (7) Images (8) File (9) Copy Image form Google Earth (10) and press Close (11) when done.

With the image now loaded you should see the Google Earth image is now geo-referenced and placed inside IrriMaker.

On some computers this stage may produce an error, read the trouble shooting section below to see how to overcome the problem.



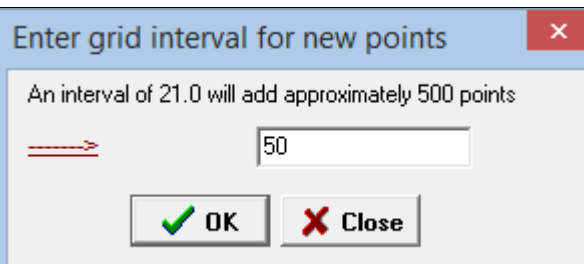
Step 4: Place the DTM points using Pnt (12) on the left main menu, Add (13), User interval (14) taking note of the active survey data project number (15).



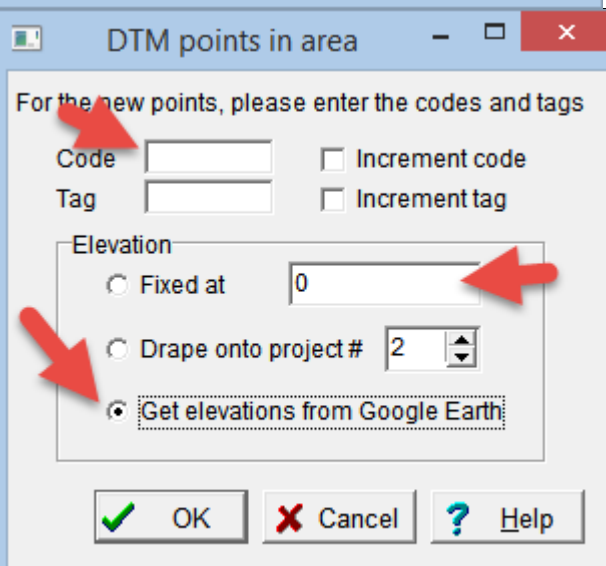
Step 5: Define the area larger than the area required, at least by 50m outside the required area.



When prompted add a suitable interval, I normally use 50m to limit the number of points that is placed, this will speed up the heighting process that will follow this step, especially if you have a relatively slow internet connection



Step 6: [GOOGLE EARTH METHOD]
Set the "Get elevations from Google Earth" option and press OK.

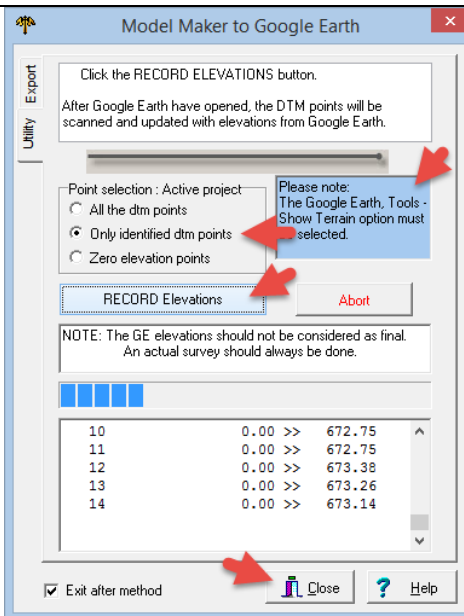


Click the Record Elevations button then Close when the function is done.

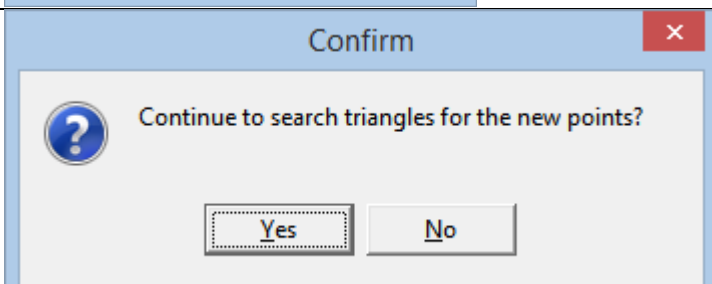
You will see the following message when the function is completed”

“# Elevations updated : 87
Close the dialog and REPLOT ”

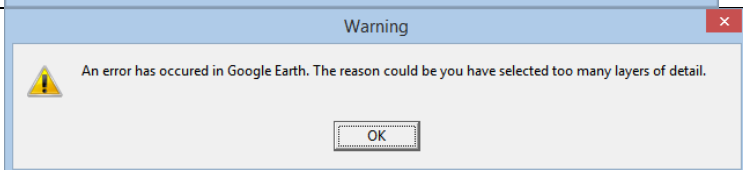
Tip: Refer to the Trouble shooting section below should you encounter errors



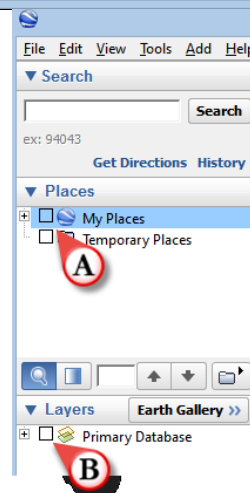
Triangles may now be connected to the new point elevations to finish the contour plan automatically. Click Yes if this is required.



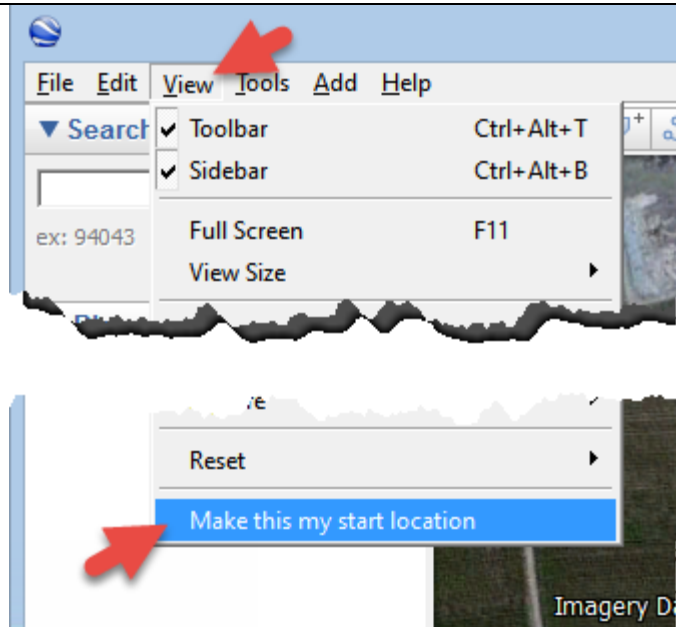
Trouble Shooting: If this error is encountered, please do the following:



- i) In Google Earth, make sure that your My Places (A) and Layers (B) are switched off.

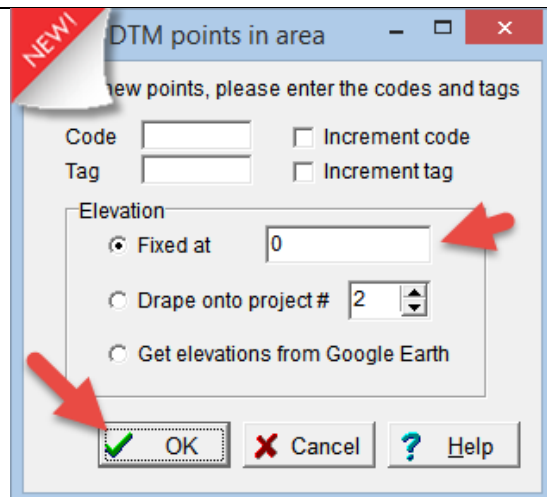


- ii) In the View menu, activate the "Make this my start location."
- iii) Close Google Earth completely. File > Exit.
- iv) Retry Step 3 above.



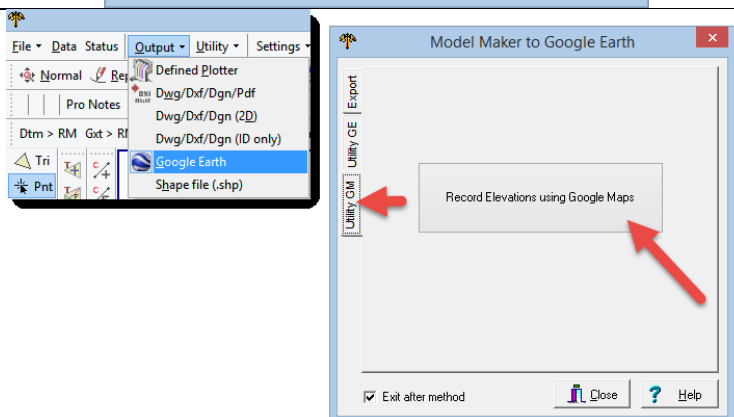
The method described above will take some time to elevate all the points based on the internet speed and Google Earth's speed. While I was writing this tutorial the Model Maker Systems developers came up with a faster method using Google Maps instead. The dialog in step also changed somewhat, but I feel it is worth it to mention both methods in this feature as a backup.

Step 6: (GOOGLE MAPS METHOD)
Follow all the steps up to step 5 above.
Set the "Fixed at 0" option and click OK



Step 7: Click Output on the main toolbar then click on Google Earth, notice that the dialog changed to include the Google Maps (Utility GM) tab. Click the Record elevations button. You will notice the program finds the point elevations a lot faster than using the Google Earth option.

Warning: We tested the two options in various locations and noticed that the Google Earth elevations differed from the Google Maps elevation on average by about a meter! Use these functions carefully and as always – only use these methods for preliminary planning. Be sure to compare the levels with your survey



grade survey performed by conventional survey methods.	
---	--