4 DEM Generation

4.1 Exercise: DEM Generation

Use contour of **W111_1_4**. Execute the following batch sample. Check the dem ArcCatalog or ArcMap.

[Batch sample]

topogrid dem_50 50
contour contour elevation
outputs # # log_dem_50
end

[Arc session sample]

Arc: &run job_topogrid.aml Output diagnostic file log_dem_50 exists Arc: lg Workspace: D:¥KAKIUCHI¥SAMPLE_DATA¥DEM_GENERATION¥W111_1_4 Available GRIDs ------DEM_50 Arc:

[DEM sample]



4.2 ArcScene

Step 1: Select ArcScene to open the program.



Step 2: Add your dem data (dem_50) clicking 1 and 2 sequentially.

🦉 無題 - ArcScene - ArcInto	
<u>File Edit View Selection Tools</u>	<u>Window</u> <u>H</u> elp
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<u>3</u> D Analyst ▼ Layer:	
Scene layers	Add Data Look in: w111_1_4 Contour dem_50 2 Name: Show of type: Scene supported Datasets and Layers Cancel

❶ 無題 - ArcScene - ArcInfo	
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>S</u> election <u>T</u> ools <u>W</u> indow <u>H</u> elp	
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3D Analyst 👻 Layer: dem_50	
Scene layers Value High : 1 Low : 50 Value High : 1 Copy Value High : 1 Copy Refresh Open Attribute Table Joins and Relates Save As Layer Properties.	

Step 3: Right-click on dem_50 and select Properties by left-click.

Step 4: Check 'Obtain height for layer from surface:'

Layer Properties	<u>?</u> ×
General Source Extent Display Symbology Base Heights Rendering	
┌ Height	
C Use a constant value or expression to set heights for layer:	
Obtain heights for layer from surface	
🖌 🖌 🚽 🚽 Ykakiuchi¥sample_data¥dem_generation¥w111_1_4¥dem_50	
Raster Resolution	
C Layer features have Z values. Use them for heights.	
Z Unit Conversion	
Apply conversion factor to place heights in same units as scene: custom 1.0000	
_ Offset	
Add an offset using a constant or expression:	
OK キャンセル 適用	(<u>A</u>)



Step 5: Try 1) Navigate and 2) Fly and the others.

Step 6: Click 3D Analyst, Surface Analysis sequentially and then try Slope, Aspect, Hillshade, etc.



Slope

-	
	<value></value>
	0.013995503 - 4.621621743
	4.621621744 - 8.434829666
	8.434829667 - 11.93027026
	11.93027027 - 15.2668272
	15.26682721 - 18.44450046
	18.44450047 - 21.93994106
	21.93994107 - 25.91203265
	25.91203266 - 30.67854255
	30.67854256 - 40.68821335



Aspect





Hillshade

Hillshade

