

Assignment 3: Computing viewsheds

Name:

Date:

How to compile and run your code:

List of files in your project with a brief description of what they do:

Small tests

What small grids have you created to test your code? When you check in the code, please check these in as well. Describe the grids and describe if your code works or not.

Testing set1.asc

Using your code compute the viewshed on on set1.asc with vp=(100,100) and vp=(250,250).

Visualize the viewshed computed by your program with QGIS and attach a snapshot for these two viewpoints.

Does your code give the correct (looks visually identical) output on set1.asc with vp=(100,100) and vp=(250,250)?

Testing larger datasets

Please run your code on the datasets below (pick a viewpoint approx. in the middle of the terrain) and record the running time. You can use your laptop, one of the public linux machines, or the desktops in the labs. In each case, visualize in QGIS and attach a snapshot of the viewshed computed by your code.

DATASET (size in points)	time to run viewshed from vp=middle
brunsdem (200K)	
kawahasc (1M)	
sierra.asc (6M)	
portland_me (120M)	
usadem2 (250M)	
portland_me (1000M)	

Comments: