

CS855: Data Visualization

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Term I: 2014-15: Lecture 03

- Discussion of Assignment 1
 - Color mapping, elevation map, contour mapping

Assignment 1: Grand Canyon Dataset

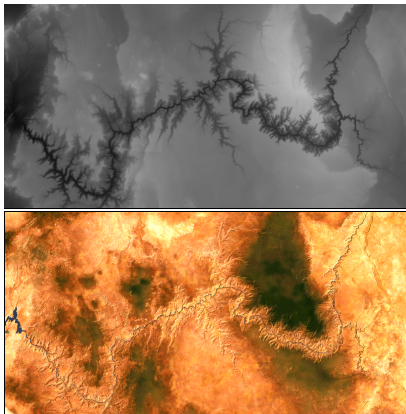


Image courtesy: http://www.cc.gatech.edu/projects/large_models/gcanyon.html

Deliverables for the assignment:

5 different interaction 3D visualizations of the dataset using the concepts of colormapping, elevation map, and contour mapping.

Assignment 1: Elevation Map

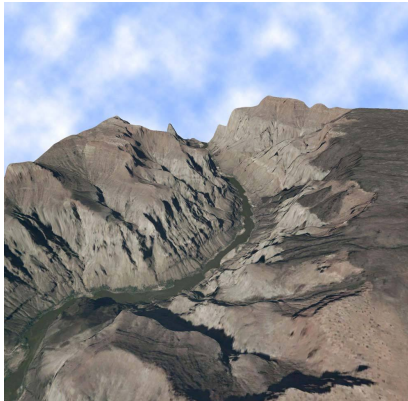


Image courtesy: http://www.emap-int.com/wp/wp-content/uploads/2011/03/GrandCanyon_Intermap_3D_7_big_moresky2.jpg

Contour mapping using marching squares: Example.

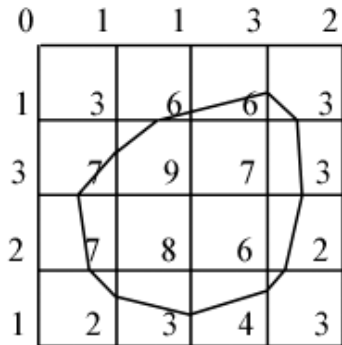


Image courtesy: <http://users.polytech.unice.fr/~lingrand/MarchingCubes/algo.html>

Contour mapping using marching squares: Case table.

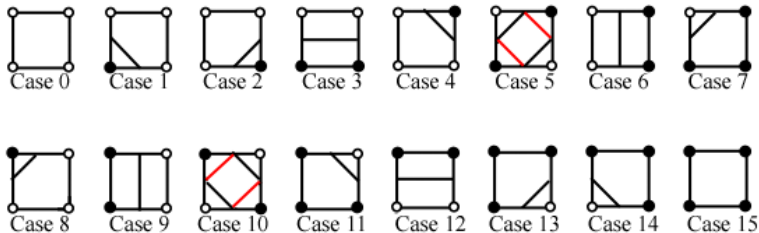
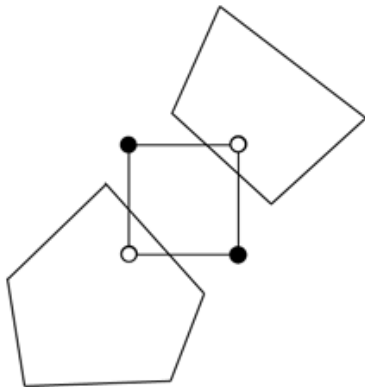
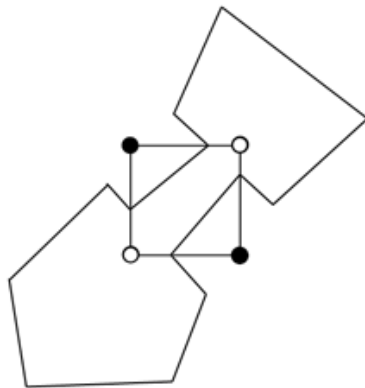


Image courtesy: <http://users.polytech.unice.fr/~lingrand/MarchingCubes/algo.html>

Contour mapping using marching squares: Ambiguous case.



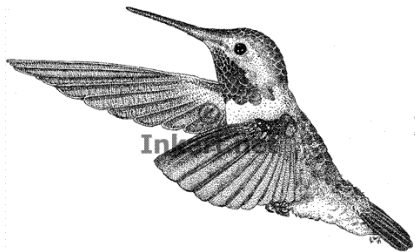
Break contour

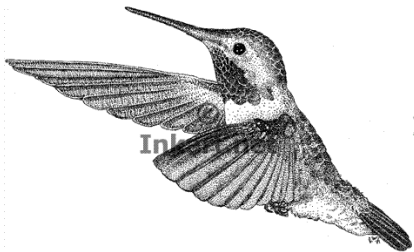


Join contour

Image courtesy: <http://users.polytech.unice.fr/~lingrand/MarchingCubes/algo.html>







Happy Independence Day!