University of California, San Diego Extension
Guangzhou University
Summer 2019 GIS Program

Day 07 - Activities: Rasters and Terrain Analysis

Lecture (in class):
- Lecture 7: Rasters and Terrain Analysis (PDF)
- Demonstration:
    - Video: Raster Calculator
    - Digital Elevation Model: La Jolla Marine Protected Areas (MPAs)

Lab (in class):
- ArcGIS Pro Tutorials
    - Tutorial 7a: Map Hurricane Storm Surge
        - Instructions: English / Chinese
    - Tutorial 7b: Visualize Shrinking Malaria Rates in Africa

Reading (Homework):
- ArcGIS Book - Chapter 04: Great Maps Need Great Data
    - English version
    - Chinese version

- ArcGIS Pro Documentation:
    - What is the ArcGIS Spatial Analyst extension?
    - Essential Spatial Analyst terms
    - Data formats supported by Spatial Analyst
    - Analysis environments and Spatial Analyst
    - A quick tour of using Map Algebra

- Essentials of GIS (Campbell, 2011)
    - Chapter 8 - Geospatial Analysis II: Raster Operations (pp 167-184)

Homework:
- Complete Tutorial 7a or 7b (above) using one of the following softwares:
    - ArcMap **or** ArcGIS Online **or** QGIS
- Story Maps - **Finish**: Create a Story Map Cascade (San Diego):
- Begin: Getting to Know the New Story Maps

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