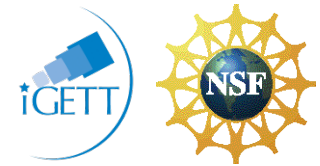


Mapping Wildfire Burn Severity in Southern California



Topic: Natural disasters, environmental management

Problem Statement: Effective recovery after a wildfire requires assessment of burn severity within the fire perimeter.

Level: Introductory – Intermediate

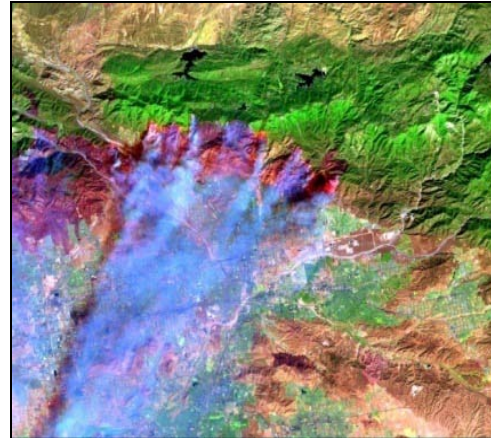
Software: ENVI, ArcGIS

Description: Landsat imagery offers a cost-effective way to create a preliminary burn severity map. Draft maps are utilized by field personnel to create a final map, which can then be used to determine treatments to prevent further destruction from erosion and landslides.

This Learning Unit uses remotely sensed data for the area of the 2003 “Old Fire” in Southern California in ITTVIS ENVI software & ESRI ArcGIS Spatial Analyst to:

- (1) determine burn severity due to the wildfire
- (2) import the derived datasets into a GIS where the burn perimeter is overlaid with ownership data to calculate the number of acres of each type of burn severity.

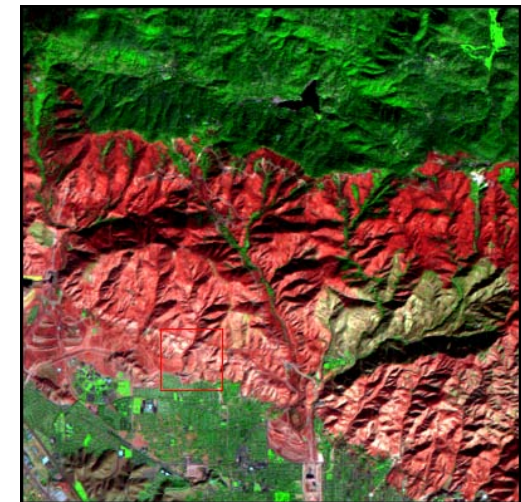
Key words: Image processing, GIS integration, Landsat, burn severity, burn perimeter



Fire



Pre-fire



Post-fire