



National GeoTech Center (NGTC)

Geospatial Technology

2009 Summer Workshop

(Collaborative efforts between SDSU and Southwestern College)

This workshop will introduce fundamental geospatial technology (GIS, remote sensing, GPS, and cartography) and customizable geospatial learning modules for your own classes and students as well as textual materials.

Instructors: Anita & Roger Palmer, GISetc.

Hosts: Professor Ming Tsou, SDSU and Professor Ken Yanow, SWC

Location: San Diego State University, Geography SAL lab.

Date: July 8, 9, and 10, 2009

Time: 9:00AM – 4:00PM

Workshop Schedule:

DAY 1, July 8, Wednesday:

0900 **Opening & Introduction (Tsou and Yanow)**

0930-1030 **Web GIS technology and online GIS learning modules (Tsou)**

1030-1045 **Break**

1045-1200 **“The Leveler”**
Discovery – Earthquake and plate tectonics
Confidence - March of Time

1200-1315 **Lunch (at the Faculty Club)**

1315-1430 **“The Leveler (continue). “**
Inter-relational – Seasonal Differences
Estimation – Size, numbers, and shape, Waterworld

“Stepping Out”:
Mapping Tectonic Hot Spots.
GPS Activites

1430-1445 **Break**

1445-1600 **“Stepping Out” Cont.**
Windblown
Confidence bulder: ocean depth.
Intermediate: Plankton productions or cloud cover.
Advanced: My NASA Data

DAY 2, July 9, Thursday:

0900-1030 **Impressive: Hurricanes of 2005 – animation**
Whalenet
Confidence builder: map an animal
Comfortable: find three animals

Advanced: prep several animals and look for trends – add water temperature.

1030-1045 Break
1045-1200 Sibling Rivalry
All: image registration
Rumsey historic map registration onto streamed imagery.

1200-1315 Lunch (at the Faculty Club)
1315-1430 More GPS outside – book activities and geocatching
Explore EarthCatching back in class.

1430-1445 Break
1445-1600 “Data development – a little work before the payoff”
Introduction: Gapminder
Mapping the Millennial Development Goals
Population Pyramids
Who’s Next?

DAY 3, July 10, Friday:

0900-1030 Local projects – using GIS in your classroom
Probeware mapping
Start with a dataset already collected
Temperature/humidity drive? Sea breeze land breeze?
Rollercoaster g forces? Forces, position, velocity, acceleration?
Around the university on a “heat island” mission

1030-1045 Break
1045-1200 “Designing you own lessons”
Template and storyboarding: practice
Ideas: data sources
100 topos
Nation Master, World Mapper, Factfinder
NASA NEO
My NASA Data
GLOBE

1200-1315 Lunch (at the Faculty Club)
1315-1430 “Where do you go from here?”
The development of the teacher using GIS
The development of a topic of study
Use of data in the book to build other projects
School based projects: Water quality, tree projects, fire analysis, crime studies,
urban development, sustainable development, green design, google’s smart grid
Remote Sensing: US remote sensing course, Canadian natural resources tutorial.
ENVI software

1430-1445 Break
1445-1600 Discussion/Feedback and Closing (Tsou and Ken)