

GEPL 4500/5500 – Homework 1 & 2

January 12, 2005

First summary (remote sensing application) due: 2/14/05

Second summary (remote sensing integration with GIS) due: 3/6/05

The purpose of this exercise is to acquaint you with professional publications that communicate how remotely sensed data is being applied to address a diversity of geographical/spatial analysis issues. Your assignment is to find and read **two** recently published journal articles that discuss the remote sensing applications and their integration with GIS. One article should be a paper that is geared towards the development of a remote sensing application while the other should be about integration of remote sensing with GIS data. The articles do not have to be about the same type of remote sensing data, instrument or application. The first paper should be about the application of remote sensing data whether it is from aerial photographs, weather satellites, radar, Landsat or other remote sensing platform. Again, your first and second paper do not have to be related, however, it may help you understand the topic better if they use the same type of data.

Read through the articles and write a summary of each addressing the following issues in your summary:

- 1) Article reference (Author(s), year. Article title, *Journal*, volume: page numbers.)
- 2) What was the problem/research topic?
- 3) What kind of analysis was conducted (What was the research approach)?
- 4) Did the authors note any problems/challenges in their application of remote sensing to solve the problem(s)?
- 5) What was the overall conclusion of the work?
- 6) Did you become aware of any new applications of remote sensing to geographical studies, or learn some new/different analysis approach(es) which can be applied to remotely sensed data?

Your summary should be no more than a **total of 1 typed page** in length.

We will spend time discussing your findings during class on the days that they are due so be prepared to get in front of class and speak.

Do not get articles from popular magazines.

Potential Journals:

Photogrammetric Engineering and Remote Sensing

International Journal of Remote Sensing - UT does not have this journal

Remote Sensing of Environment - UT has through 1993 and more recent on the Internet.

International Journal of Geographic Information Systems

Cartography and Geographic Information Systems

Journal of Geophysical Research

Nature

Science

IEEE for Geosciences...

Bulletin of Am. Meteorological Society - UT has through '96

Geocarto International

Journal of Atmospheric Sciences - UT has through '94

For the GIS/remote sensing paper, you will need to do a library search. Go to the <http://www.utoledo.edu> web site and find libraries on the left hand side. I prefer to look at the electronic journals.