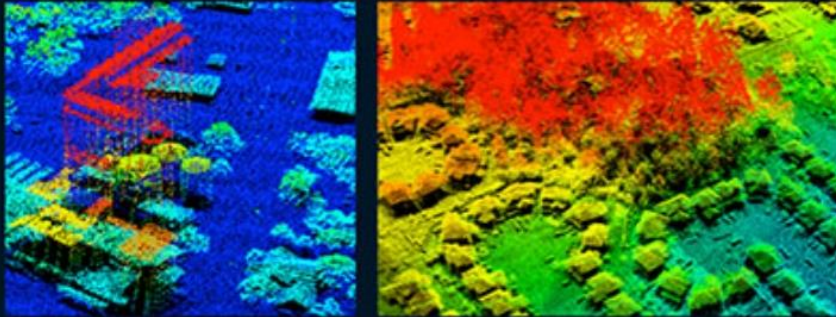


GEOG 4570/5570: Special Topics in GIS: LiDAR Applications



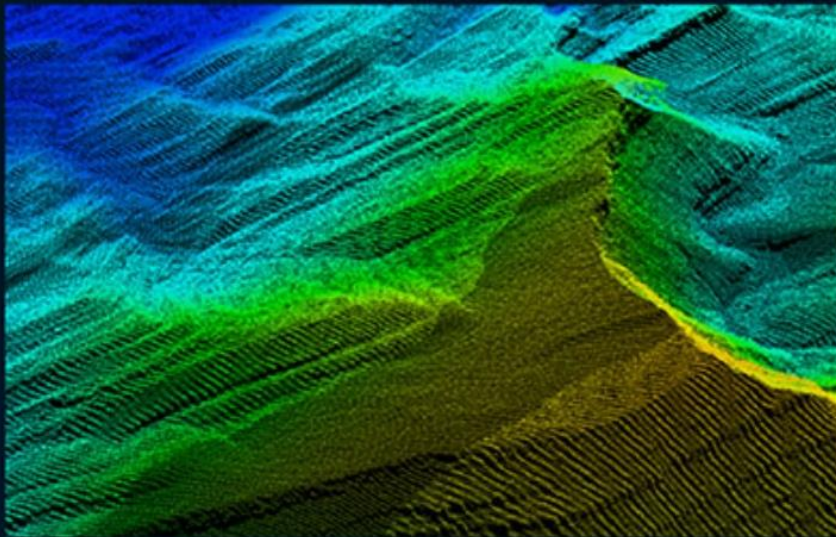
Taylor & Francis Series in Remote Sensing Applications

Qihao Weng, Series Editor



LiDAR Remote Sensing and Applications

Pinliang Dong and Qi Chen



LiDAR Remote Sensing and Applications,
CRC Press/Taylor & Francis Group, 200
pages. Authors: Pinliang Dong and Qi
Chen (2018). ISBN: 9781138747241, or
9781482243017.

Conflict of Interest:
See “UNT Faculty-Authored
Instructional Materials Request
Form” (next slide).

UNT Faculty-Authored Instructional Materials Request Form

UNT Faculty-Authored Instructional Materials Request Form

In the fall of 2016, the Faculty Senate affirmed the deletion of UNT Policy 19.8, Adoption and Pricing of Instructional Materials Including Classroom and Supplemental Texts Authored by UNT Faculty, Staff, and Departments. This policy was initially approved in 1990. Because the policy was antiquated and it is unknown as to the extent of the need for such a policy, the policy was deleted. The Office of the Provost will track the need for such a policy over the 2016-17 and 2017-18 academic years and reassess in 2018-19. These procedures do apply to electronically distributed materials.

Faculty-Authored Materials:

Faculty involvement in the writing or editing of instructional materials published and marketed through national or regional publishing houses is regarded by the university as valuable scholarship. It is not in the best interest of students to prohibit instructors from assigning textbooks they have written, given that such materials may be the best materials available. On that premise, instructional materials should be assigned based on their pedagogical value.

While the majority of faculty-authored instructional materials should be published and marketed through national or regional publishing houses, or distributed by a reputable provider of open educational resources (OER), there may be times when faculty members may wish to develop instructional materials such as workbooks, answer sheets, or custom texts intended for use only in their classrooms. These nontraditional, duplicated packets or booklets of materials may be used supplementary to or in place of traditional textbooks. It is expected that such materials either will be distributed to enrolled students through UNT's learning management system or will be printed by Eagle Images and distributed through the campus bookstore.

Conflict(s) of Interest:

A conflict of interest may be present when textbooks and other educational materials produced by a faculty member are required for a class that faculty member teaches, and where the sale of such materials produces financial gain for the faculty member. Such practices are questionable financially and ethically. Faculty shall refrain from selling textbooks or instructional materials directly to the students. If a faculty member uses self-authored materials in their classroom, it is suggested that they donate the royalties to a charitable organization. To avoid real or perceived conflicts of interest regarding personal gain, this document outlines procedures for faculty intending to use self-authored instructional materials.

Procedures:

Faculty members wanting to utilize self-authored instructional material(s), shall do the following:

1. Complete the UNT Faculty-Authored Instructional Materials Request Form
2. Obtain department chair and dean signatures
3. Forward completed form to the vice provost for academic administration

Department chairs and deans shall ensure that: (a) faculty-authored materials are consistent with the course description, (b) faculty-authored materials follow the aforementioned guidelines, and (c) there isn't a conflict of interest (real or perceived) regarding the proceeds of the faculty-authored instructional materials.

UNT Faculty-Authored Instructional Materials Request Form

Date: 1/4/2018

Semester/Year for Request: Fall 2018

Faculty's Last Name: Dong

First Name: Pinliang

Department: Geography and the Environment

Course Name: GEOG 4570/5570 Special Topics in GIS: LiDAR Applications

Number of Anticipated Students Enrolled: 25

Requested Materials:

Pinliang Dong and Qi Chen, 2017, LiDAR Remote Sensing and Applications. CRC Press/Taylor & Francis Group. 200 pages. ISBN 9781138747241 - CAT# K32539

1. Are the requested materials available for free online or in a free downloadable version?

Yes ☐ No ☒

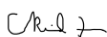
2. Are the requested instructional materials recognized and used by others (outside UNT) in the field? If so, please include examples.

Yes. The book is recently published (December 2017), and has been adopted by University of Hawaii at Manoa and Kennesaw State University - Marietta Campus, Georgia.

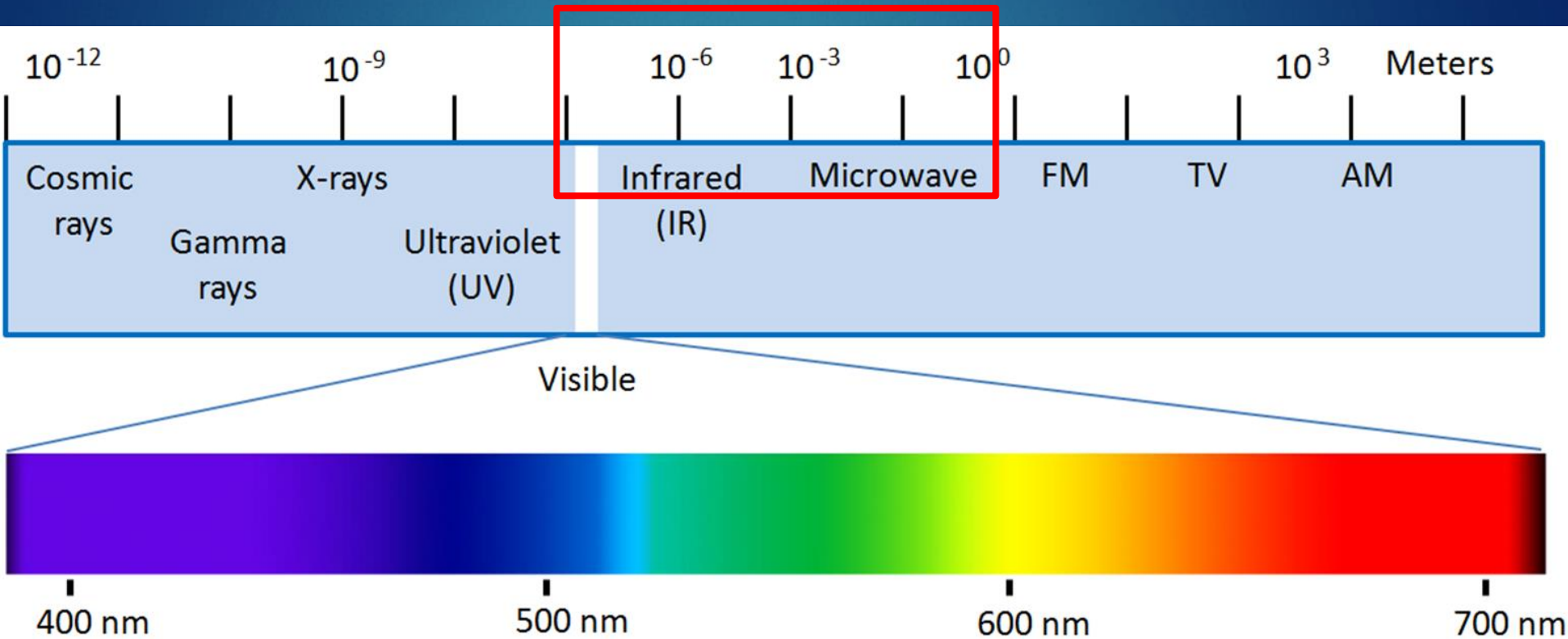
3. How will you disclose to students the actual or perceived conflict of interest regarding the use of self-authored material in your classroom?

I'll inform students that any royalties I received from the books they purchased will be donated to the Department of Geography and the Environment as scholarship. I'll collect copies of their receipts or book covers after midterm, and send a check to the Department of Geography and the Environment along with the copies of receipts/book covers and explanations of royalty rates from the publisher.

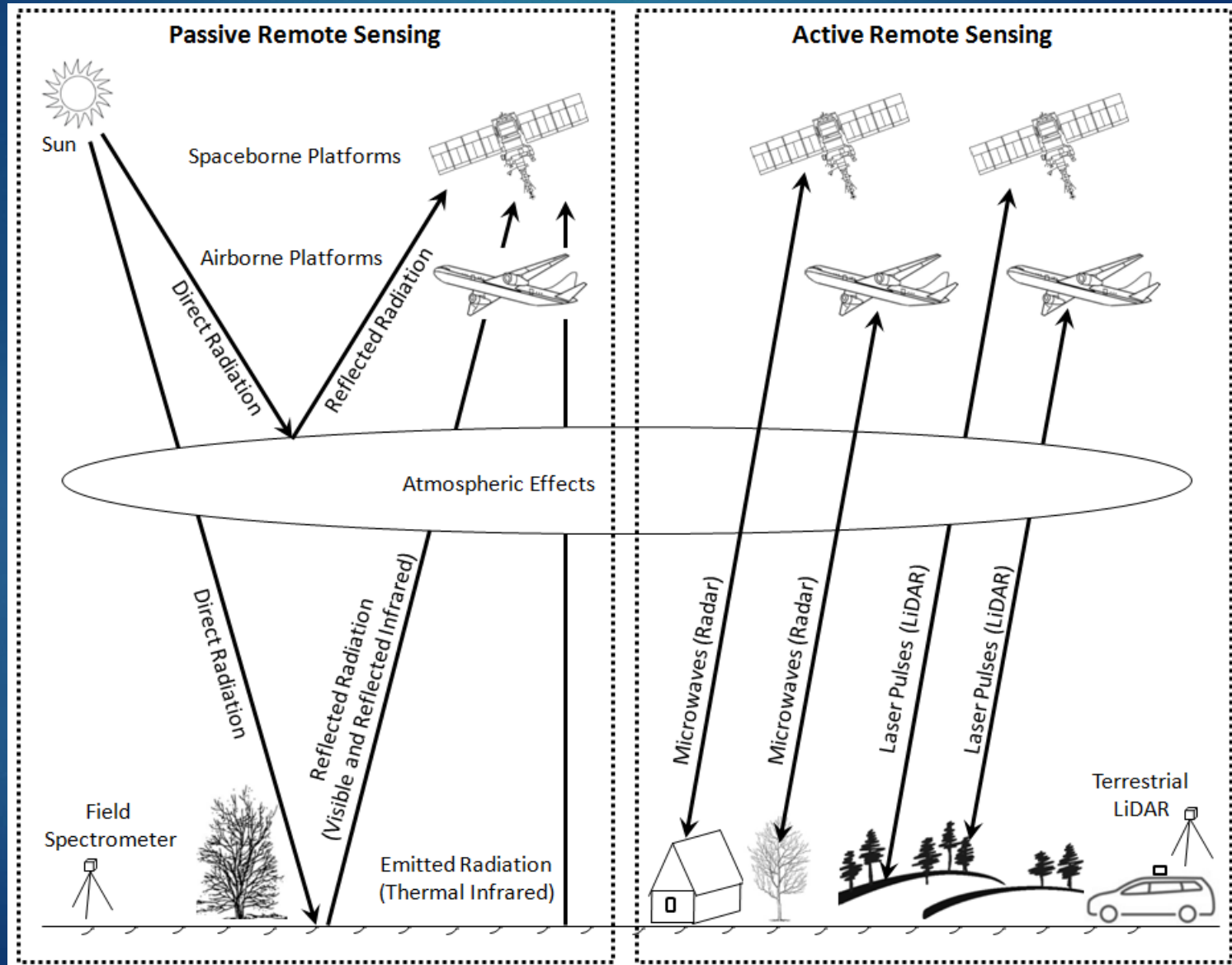
Additional Comments:

	1/4/2018
Department Chair Signature	Date
	1/4/2018
Dean Signature	Date
	1/4/2018
Vice Provost for Academic Administration Signature	Date

Electromagnetic Spectrum

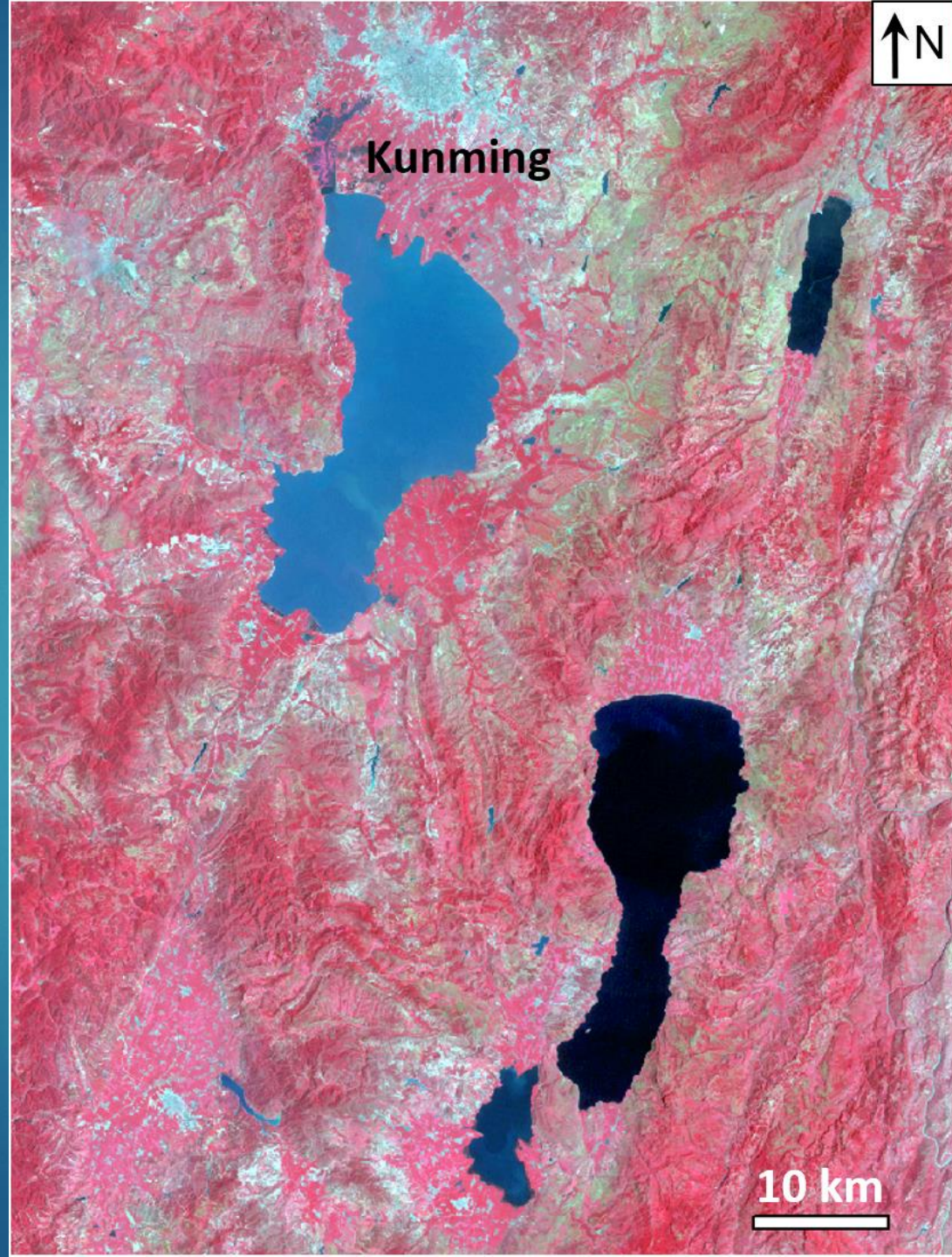


Active and Passive Remote Sensing

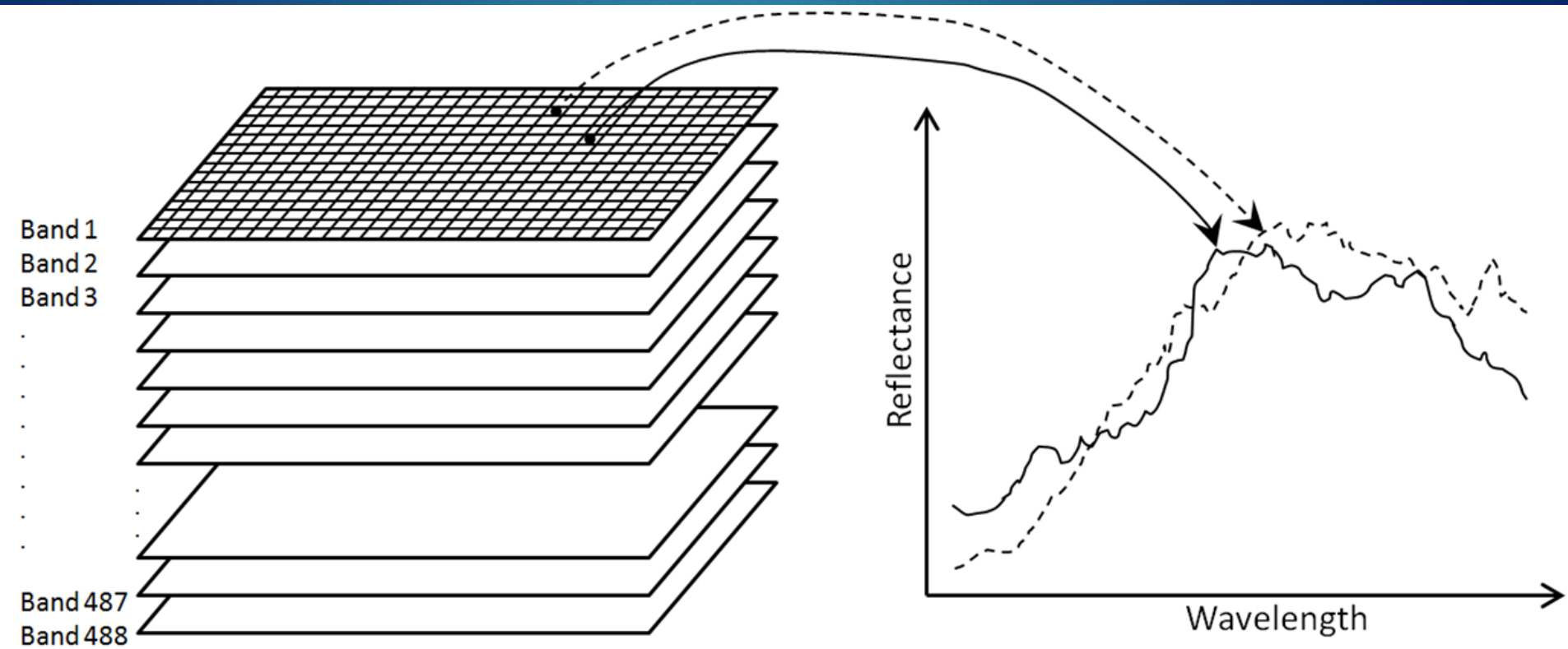


Landsat Thematic Mapper (TM) multispectral Images

(Kunming, China)



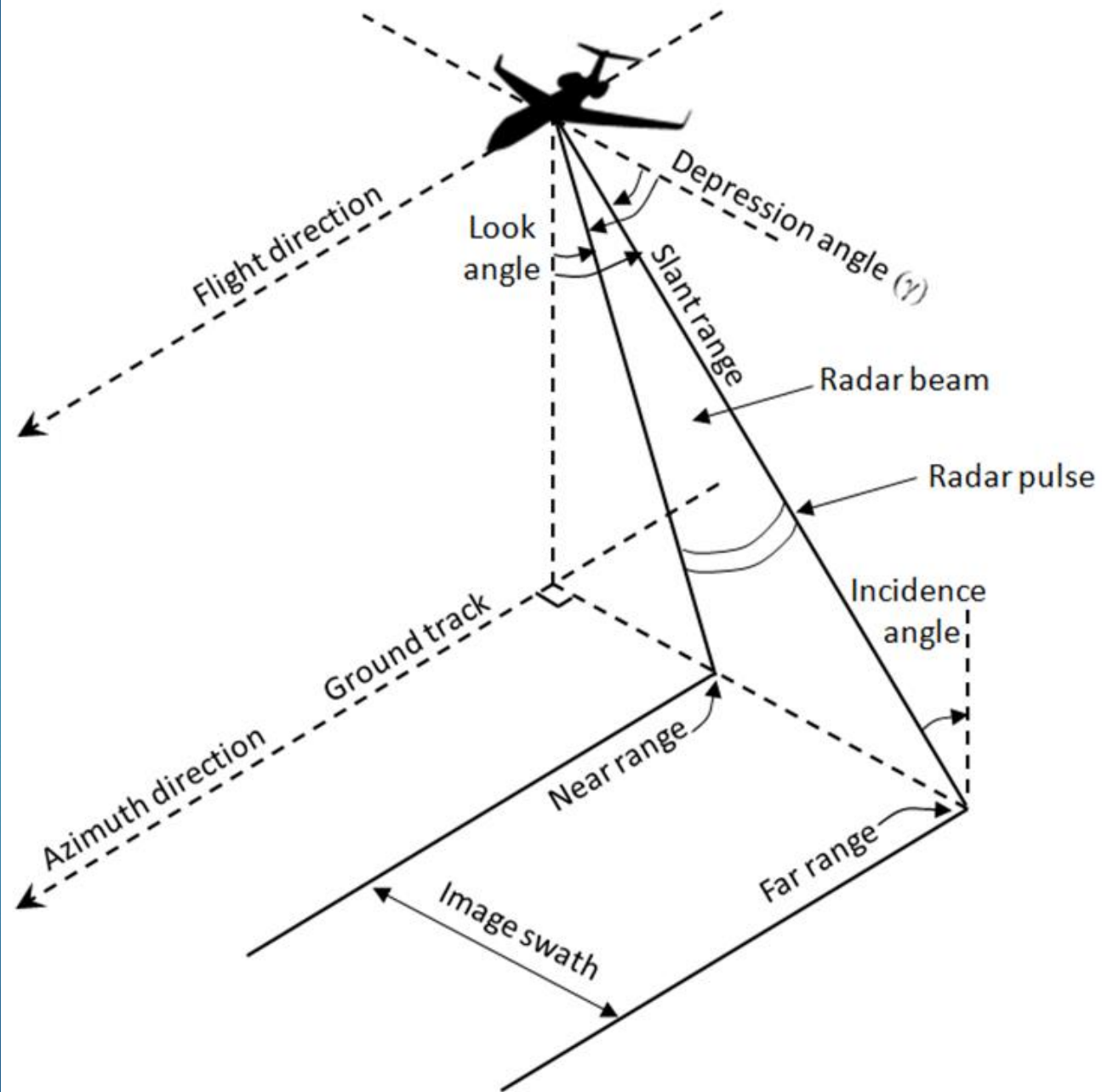
Hyperspectral Remote Sensing



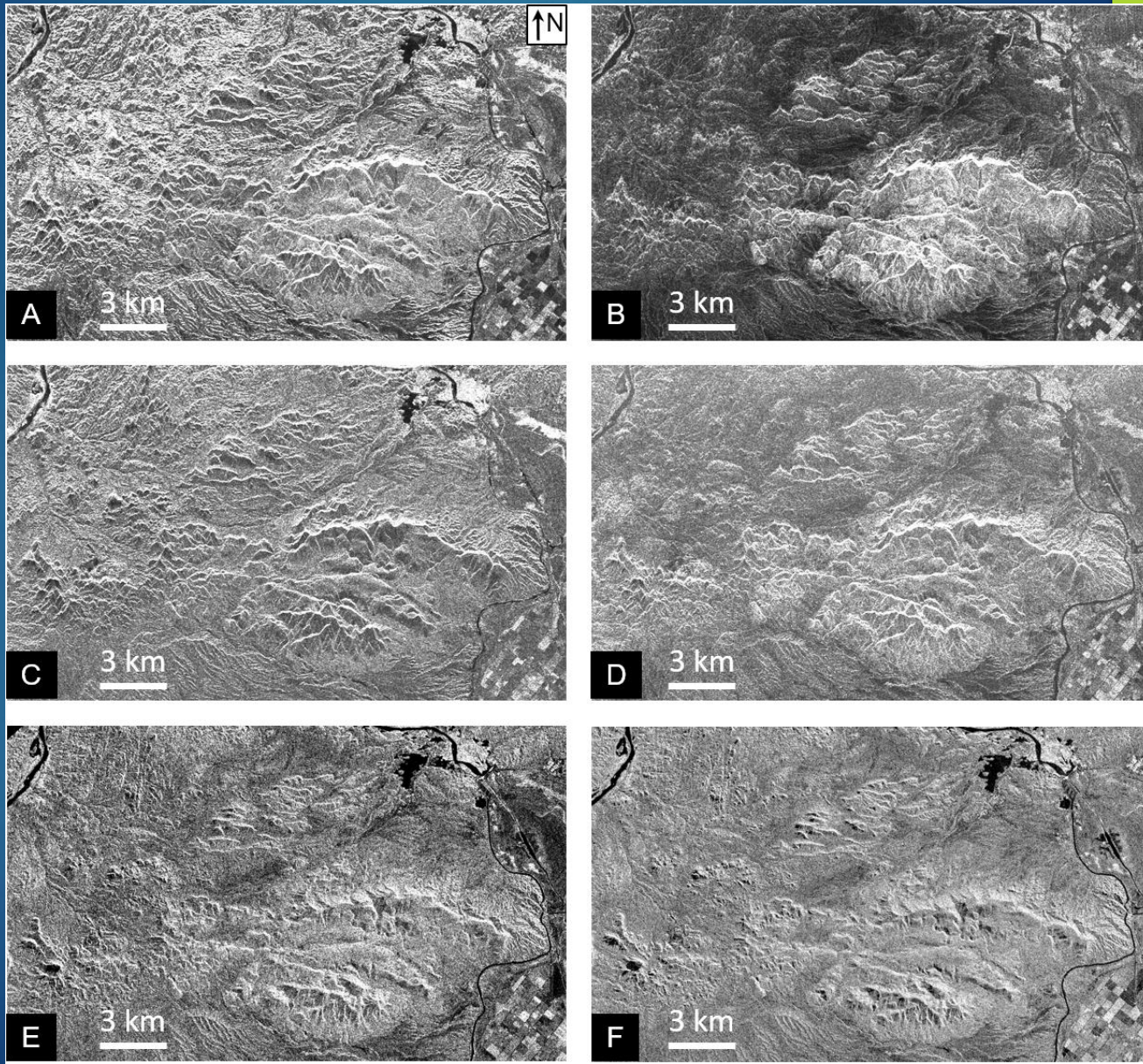
Airborne
hyperspectral
Image
(Surrey, Canada)



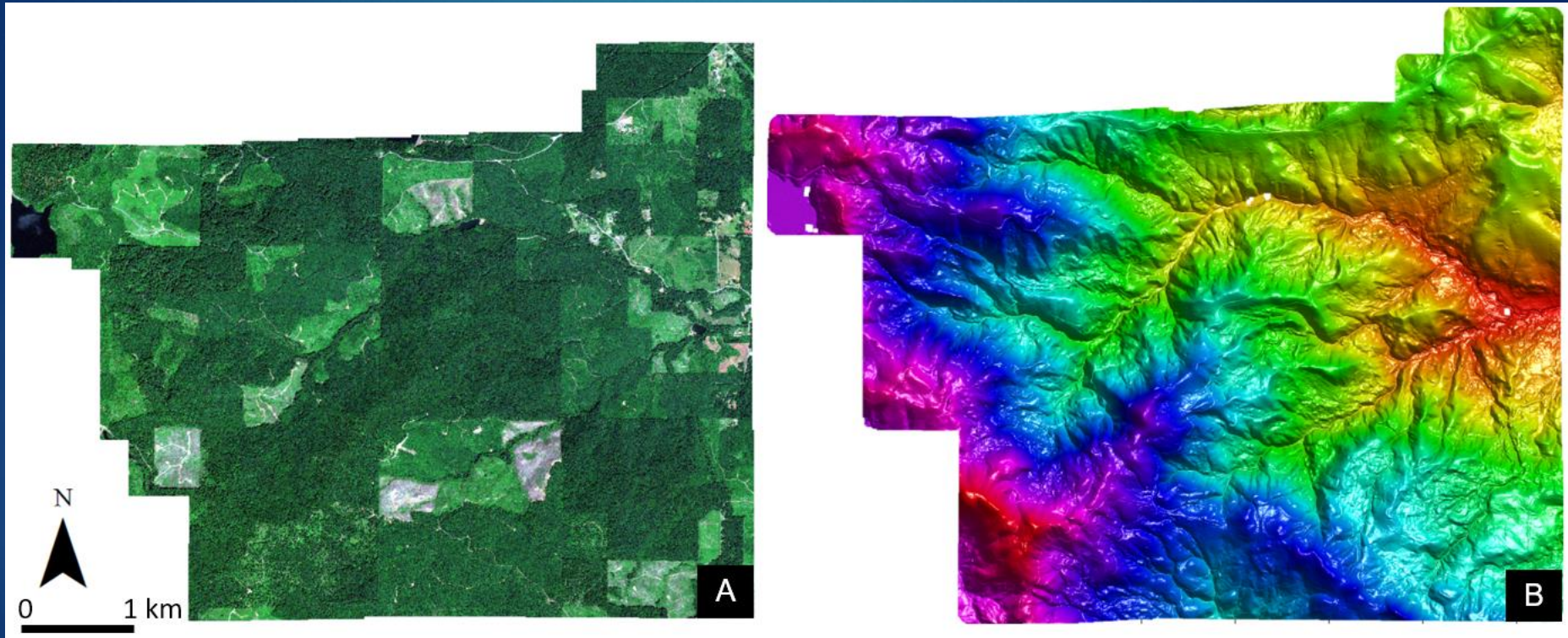
Airborne Radar



Radar images from Shuttle Image Radar (SIR-C) and Radarsat (Yuma, USA)



Aerial image and LiDAR-derived DEM



Summary:



- Get your textbook
- Refresh your ArcGIS skills
- Syllabi: GEOG4570.pdf, GEOG5570.pdf
- Course project instructions.pdf
- Denton County LiDAR LAS Tiles.pdf
- Steps for downloading LiDAR data from TNRRIS
- Steps for taking Esri E-Learning courses.pdf

The PDF files are also available online at

<http://geography.unt.edu/~pdong/courses/4570/data/> (UNTGIS: sunshine)

Note: All students should complete the module “Review of GIS Basics” in Canvas. Students who have not taken GEOG 4550/5550 “Advanced GIS” should also complete the module “Basics of Raster Data” in Canvas and complete Labs 1.1, 1.2, 1.3, 1.4, 3.1, 3.2, 3.3, and 3.4.

Video Clips:

<https://www.youtube.com/watch?v=Rv8na-zcqlA> (3'16")

<https://www.youtube.com/watch?v=sBI3MIbzIBA> (2'04")

Additional reading:

https://earthobservatory.nasa.gov/Features/RemoteSensing/remote_08.php