ABE 485/585

Remote Sensing Data and Methods

MWF: 10:00 –10:50AM (Shantz 338)

Remote Sensing Data and Methods is a course designed to provide an in depth overview of practical topics in land remote sensing with big data, data sourcing and provenance, data characteristics, generating algorithms, data discovery, advanced analysis techniques, and data limitations. Students will learn how to discover and acquire a variety of global to regional remote sensing data records and time series, learn about the various sensors/platforms collecting these data, learn how to interpret and use these data emphasizing real-world applications and research topics.

The course is aimed at students of environmental sciences, natural resources & management, and engineering students interested in big data and analytic in the context of spaceborne observations. The course aims at bridging the gap between the theoretical aspects of remote sensing and current Earth science data records, algorithms, and analytics.

Upon completing this course, the student will become an expert and advanced user of remote sensing big data and time series, capable of understanding the algorithms used to derive them, identifying, using, analyzing, and understanding the limitations of any remote sensing data with focus on data fusion and advanced research.

Any prior course in Remote Sensing, Image Processing, Geographic Information Systems, Geospatial Analysis, Geostatistics, or general statistics will be helpful.

Instructor and Contact Information

Kamel Didan, Ph.D.
Ag. and Biosystems Engineering
Shantz Building, Room 501A and Lab. Forbes Room 134
Phone: 520-621-8514, didan@email.arizona.edu, https://vip.arizona.edu