Winfred Thomas Agricultural Research Station (WTARS)

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Web Site: wx.aamu.edu/2053/

Location within Domain: 34.9017N, 86.5386 W



History: The 367 ha Winfred Thomas Agricultural Research Station (WTARS), named in honor of Dean Emeritus, Dr. Winfred Thomas, is part of Alabama A & M University, located in Normal, Alabama, within the Huntsville metropolitan area. The station is administered through the School of Agricultural and Environmental Sciences at Alabama A & M University, which currently houses eleven Research Centers within its various academic units. Alabama A&M University scientists use the Thomas Research Station for investigations of water management, the effects of chemical movement through the soil profile, and wildfire management.

Key Characteristics: WTARS is situated in the rapidly developing northern urban fringe of Huntsville, AL. With a population of 510,088 in the Huntsville-Decatur CSA, it is the most populated sub-region of North Alabama, and is the second fastest growing region in the State of Alabama. Since 2000, the area has undergone a population growth of over 4%. Thus, the area is an excellent opportunity to track the impacts of urbanization, warming and pollution in this region of Domain 8. A tower with capabilities to measure gas and energy fluxes is appropriate for installation at this site. Residential development is currently on-going in the area around the research station and is expected to continue to the north of the current facility. It can be anticipated that in the coming years the urban fringe will continue progressing northward and that a pad further to the north will have to be erected to follow the development of the city.

Existing Infrastructure: This site and Alabama A&M University are extremely well positioned to leverage ecological research resources with a large array of existing infrastructure. Already onsite and operating is an Alabama mesonet site, and Dr. Tsegaye, who is a participant in this response is the science director for the mesonet network. The site is also a participant in the Soil Climate Analysis Network. GIS and remote sensing facilities are available on the main campus. Within the Huntsville area are major federal research facilities at the University of Alabama-Huntsville, NASA, and the Marshall Space Flight Center.

Facilities: The site is located near the campus of Alabama A & M University; therefore, all the facilities of a modern university campus are close-by, as well as the buildings and infrastructure at the research station.