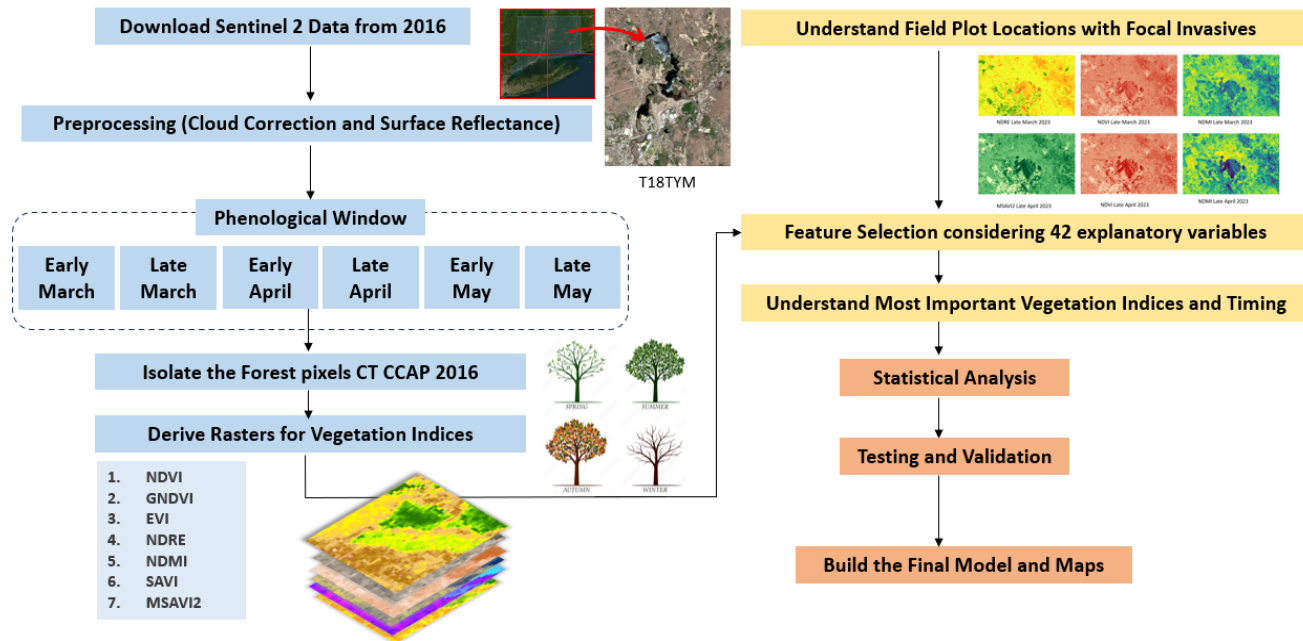


CONNECTICUTVIEW 2023 - 2024 ACTIVITIES

The goals of ConnecticutView are to further the awareness and promote the use of remote sensing technology, from space borne sensors to ground based systems, within the state of Connecticut. To meet these goals, ConnecticutView engages in various academic and outreach activities targeted at the education of K - 12 students, undergraduate students, graduate students, and the public. In addition, remote sensing technology is used to develop data and information that address specific issues within Connecticut.

Invasive Plant Monitoring: During the project year of 2023-2024, further analysis was carried on the invasive Japanese barberry (*Berberis thunbergii*) and multiflora rose (*Rosa multiflora*) mapping beneath the Connecticut forest understory. The main objective of the project launched by ConnecticutView is to identify the distribution of high-risk pixels to be infested by above mentioned two species. The extended leaf phenology of the invasive shrubs was opportunistically detected to distinguish the focal vegetation types (Invasive, Deciduous and Evergreen). The analysis was done using different vegetation indices to identify the most important variables and train the models. Spread of invasive shrubs can alter the soil microclimate and soil pH. Moreover, they compete with germination of native forest tree seedlings and elaborates a greater competitive advantage due to widespread root systems and more than 90 percent of seed viability. The early access to sunlight and nutrients makes community of focal invasive shrubs an aggressive invader due to the extended plant leaf phenology. As mentioned in 2020 Forest Action Plan from the Connecticut Department of Energy and Environmental Protection has identified taking measures to control and manage invasive plants in Connecticut forests as a key priority. Above infestations diminish the overall productive capacity of the forest, depreciates native songbird habitat, and pose risk on human health by making a habitat to blacklegged tick (deer tick) that can be infected with *Borrelia burgdorferi* bacteria. Due to high adaptability of the invasive shrubs and ability of easy re-emerge makes management practices more difficult and expensive. The resulting maps will be an initial guide to further development of more accurate maps with larger training data sets and will be a guide to begin the management practices to protect future Connecticut forests.



BENEFITS TO CONNECTICUT

While small in area, Connecticut is a diverse state. Connecticut has an abundance of forest, numerous water bodies, and the state borders the Long Island Sound, an ecologically important estuary into which a majority of Connecticut watersheds drain. Connecticut also has a high population density with its associated urban and suburban development, road networks, and golf courses. As such, remote sensing technology can serve as a valuable tool to assist in the monitoring and management of the diverse Connecticut landscape and help educate the citizens on the impacts of human activities on the earth, both locally and globally. Imagery can also serve to highlight the beauty of the planet on which we live.

- Provide remote sensing based informational and data products that address issues specific to Connecticut to improve monitoring and management of the landscape.
- Expose K-12 students to remote sensing technology and provide educational outreach programs and materials.
- Provide quality imagery through “Our Earth Revealed” satellite image exhibit to expose the public to local and global landscapes.



ConnecticutView is an active partner of UConn's Natural Resources Conservation Academy - an award winning early college experience program. Highschool student engaged in various geospatial and drone activities. (July 2024)

CONNECTICUTVIEW CONSORTIUM MEMBERSHIP

ConnecticutView collaborates with various partners on a per-project basis. Current partners include:



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