

## Global Geo-Referenced Field Photo Library

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A picture is worth a thousand words. Geo-referenced field photos, taken from GPS cameras and smartphones, are even better as they document location specific observations of croplands, forests, wetlands, lakes, flood, fire and insect outbreaks. Many of those field photos can be used to assess the impacts of drought, flood, fire and insect infestations. Additionally, these cameras are useful in evaluating water quality and assist with the support of interpretation of airborne and satellite images.

In 2011, researchers at the University of Oklahoma released the Global Referenced Field Photo Library to the public, which is a web-based data portal for researchers, stakeholder and citizen scientists to share and archive geo-referenced field photos across the world (Xiao et al., 2011). The data portal has a simple user interface that allows people to upload, query, visualize and download geo-referenced field photos in the library. All field photos are linked with time series satellite images (2000 to present) from the Moderate Resolution Imaging Spectroradiometer (MODIS) sensors onboard the Terra and Aqua satellites, part of the NASA Earth Observing System (EOS).

Imagine thousands of people with GPS cameras and smartphones participating in this project and sharing field photos across the globe, with a result of large amounts of field photos available. This could potentially enhance the capacity in monitoring this rapidly changing world.

The image provides: A schematic workflow illustrating an integration of geo-referenced field photos; the web-based field photo library and satellite image analysis for dynamic mapping of agriculture and forests in monsoon Asia during an era of community remote sensing.

Xiao, X., Dorovskoy, P., Birader, C., and Bridge, E., 2011: A Library of Geo-referenced Photos from the Field. AGU EOS, 98 (49): 453-454.