

Friday, September 27, 11:30 a.m.-12:00 p.m.
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The climate from the ground up: Trying to use all the world's webcams

The web has an enormous collection of live cameras viewing images of parks, roads, cities, beaches, mountains, ski-resorts, buildings and more. Over the last 5 years, I have been archiving imagery from most (>22000) publically available outdoor cameras, and working to understand how to effectively use this massively distributed resource as a tool for phenology, environmental, atmospheric and social measurement. The talk includes discussion of geo-locating, calibrating and inferring 3D scene structure from outdoor time-lapse imagery, interfaces to integrate the webcams with Google Earth and strategies that we have developed to visualize and categorize this data archive. I will conclude by describing early work that uses webcam data to evaluate satellite estimates of the spring green-up time of trees in North America and the potential for smart phone apps to allow citizen scientists to capture more calibrated and directed imagery.

