SAR-based alerts in SERVIR-Southeast Asia

Ate Poortinga\textsuperscript{1}, Nyein Soe Thwal\textsuperscript{2}, Jack Kilbride\textsuperscript{3}, Karis Tenneson\textsuperscript{1}, Robert Kennedy\textsuperscript{3}, David Saah\textsuperscript{1}

1: Spatial Informatics Group; 2: SERVIR-SEA, 3: Oregon State University
SERVIR-Mekong (now SEA) protected area alert system

**Convolutional Neural Net trained on optical alert data**

Part of a growing pipeline to EarthRanger tool used by Protected-Area rangers and communities

Paper: “Near real-time mapping of tropical forest disturbance using SAR and semantic segmentation in Google Earth Engine” Kilbride et al. in pre
SARFDAS

SARFDAS - Synthetic Aperture Radar Forest Disturbances Alert System

Co-developed by Spatial Informatics Group and Conservation International

Based on Cambodia example, expanded to GLAD alerts in Lower Mekong Basin countries, with transfer-learning and heads-up digitizing in Palawan, Philippines

Web-based interface for evaluation and validation

Transfer-learning validation: ft, precision, recall, accuracy > 0.95

https://sarfdas.sig-gis.com
Thank you.

Author