Spatial Informatics Group

SERVIR Southeast ASIA

Oregon State University OSU College of Earth, Ocean, and Atmospheric Sciences

GFOI Global Forest Observations Initiative | Plenary 9-11 May 2023

SAR-based alerts in SERVIR-Southeast Asia

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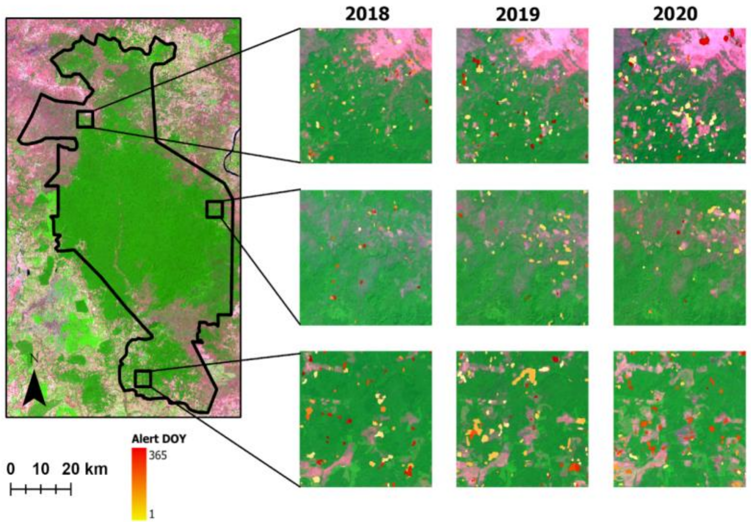
1: Spatial Informatics Group; 2: SERVIR-SEA, 3: Oregon State University

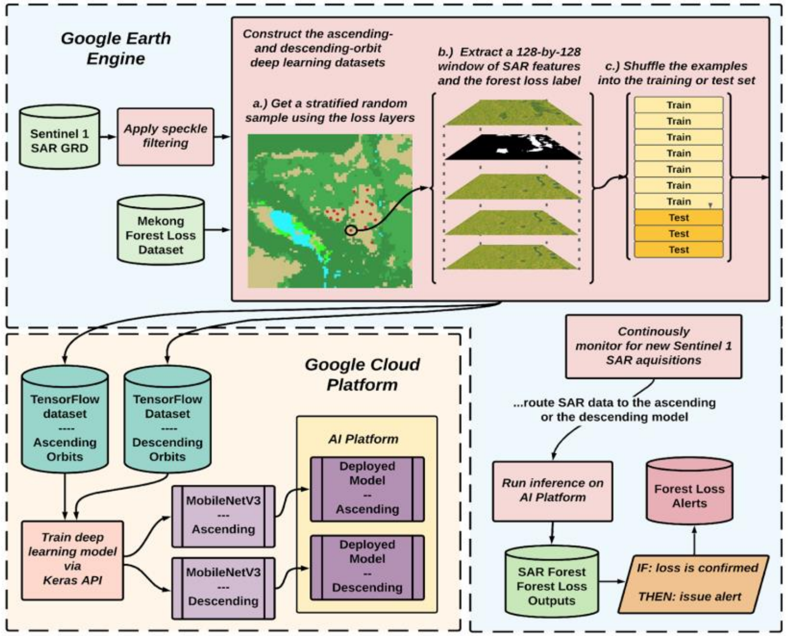
S1-based alert in Cambodia

SERVIR-Mekong (now SEA) protected area alert system



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

Convolutional Neural Net trained on optical alert data



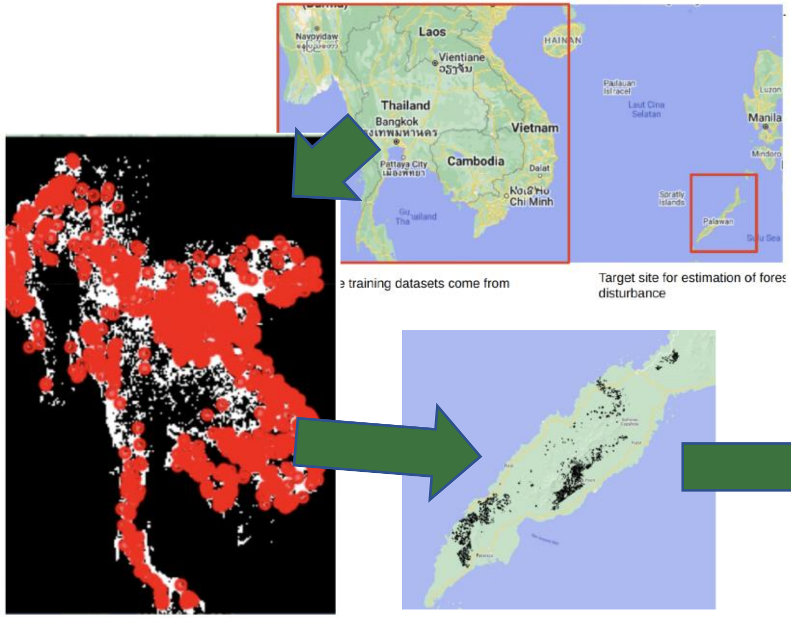
Paper: "Near real-time mapping of tropical forest disturbance using SAR and semantic segmentation in Google Earth Engine" Kilbride et al. in pre

SARFDAS

https://sarfdas.sig-gis.com

SARFDAS - Synthetic Aperture Radar Forest Disturbances Alert System

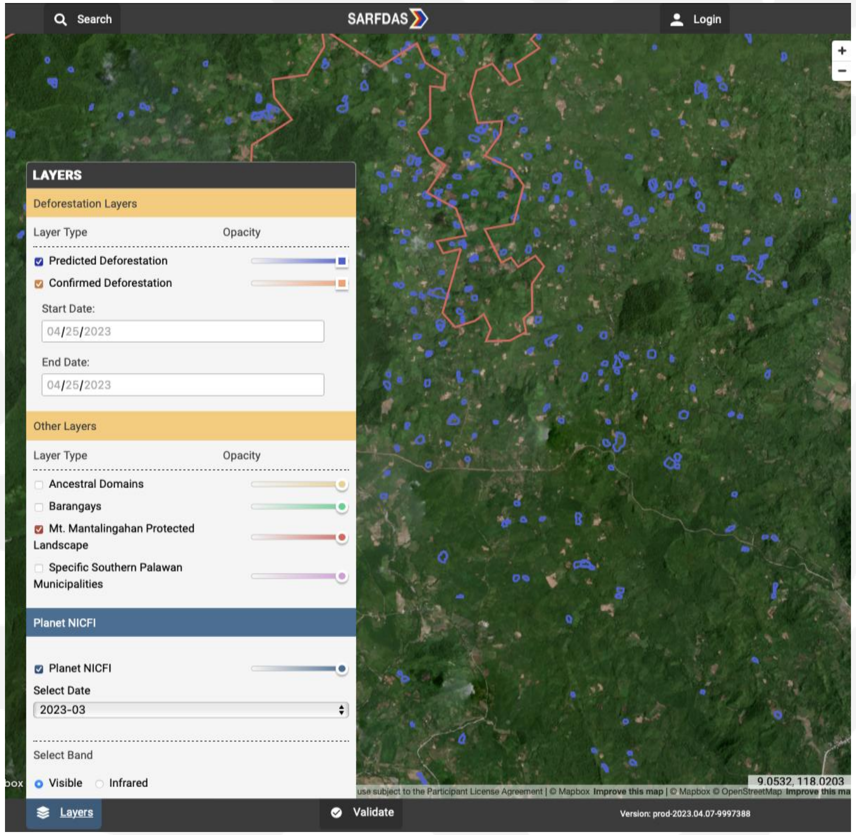
Co-developed by Spatial Informatics Group and Conservation International



Transfer-learning validation: f1-, precision, recall, accuracy > 0.95

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



Thank you.

Author