

Mobile devices help collect and stream data from ecological sensor network into the cloud

Yu-Huang Wang¹, Tony Fountain², Peter Shin², Sheng-Shan Lu¹, Chau-Chin Lin¹, Sara Taghizadeh², Ariana Tsai², Thaddeus Trinh², Mullica Jaroensutasinee³, and Krisanadej Jaroensutasinee³

¹*Division of Forest Protection, Taiwan Forestry Research Institute*

²*University of California, San Diego, CA, USA*

³*Walailak University, Thailand*

The Story

- 2010 -2013 PRIME students worked with TFRI
- 20-22 March 2013, PRAGMA 24 in Bangkok, Thailand
- 1-5 July 2013, The first SensorPod workshop at TFRI, Taiwan



Objectives of the first SensorPod workshop

- To facilitate the exchange of ideas, data, technologies, and methods for using wireless sensor networks for environmental science applications
- To identify common scientific agendas and initiate cross-site data analysis applications and collaborations
- To reduce the fragmentation of technology and infrastructure in environmental science research groups
- To provide international research experience to undergraduate and graduate students in environmental science and sensor network technologies
- To enhance existing collaborations and to create new opportunities for technology sharing and scientific research

2013 The First SensorPod workshop

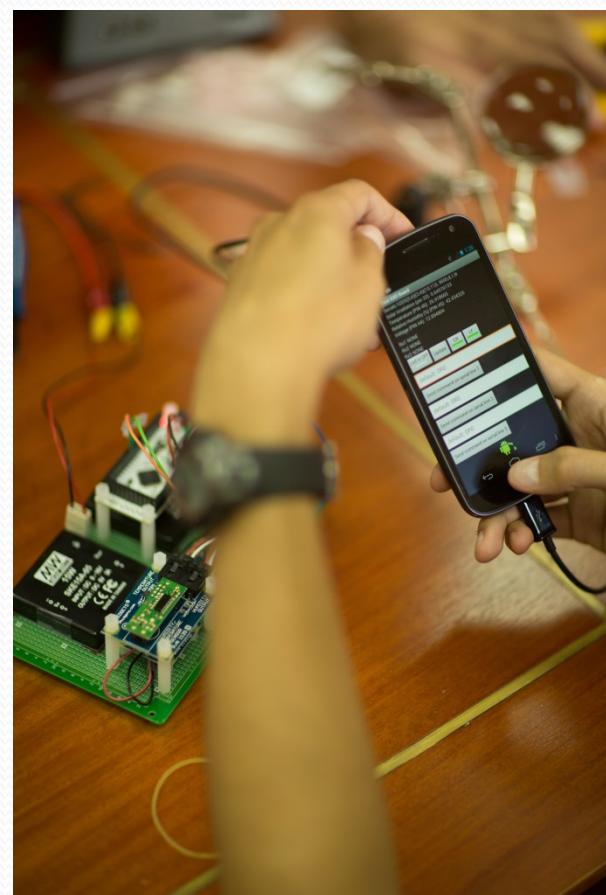
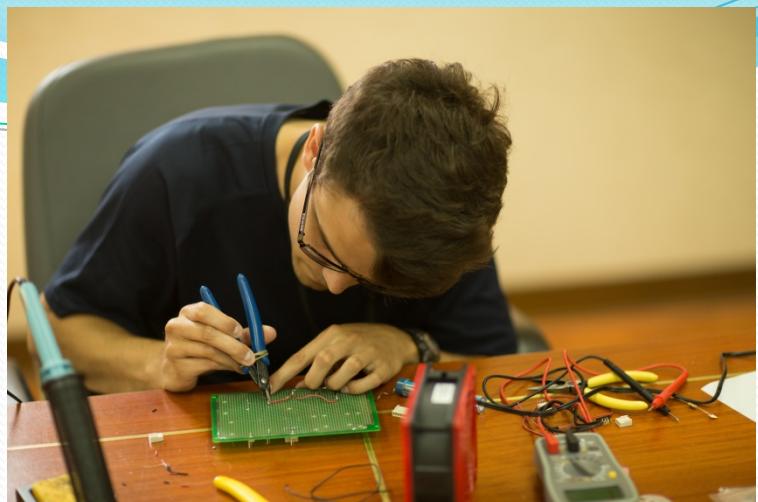


The First Annual OSDT Android SensorPod Workshop

2nd-4th July 2013

Lienhuachih Research Center, Taiwan Forestry Research Institute







Wireless Camera Trap Net

Vaisala WXT 520



Shared Wi-Fi



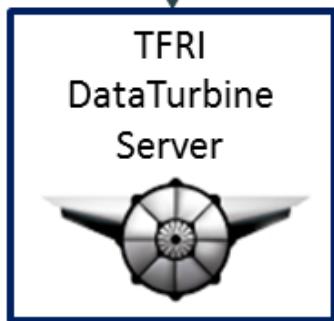
3G

DropSync

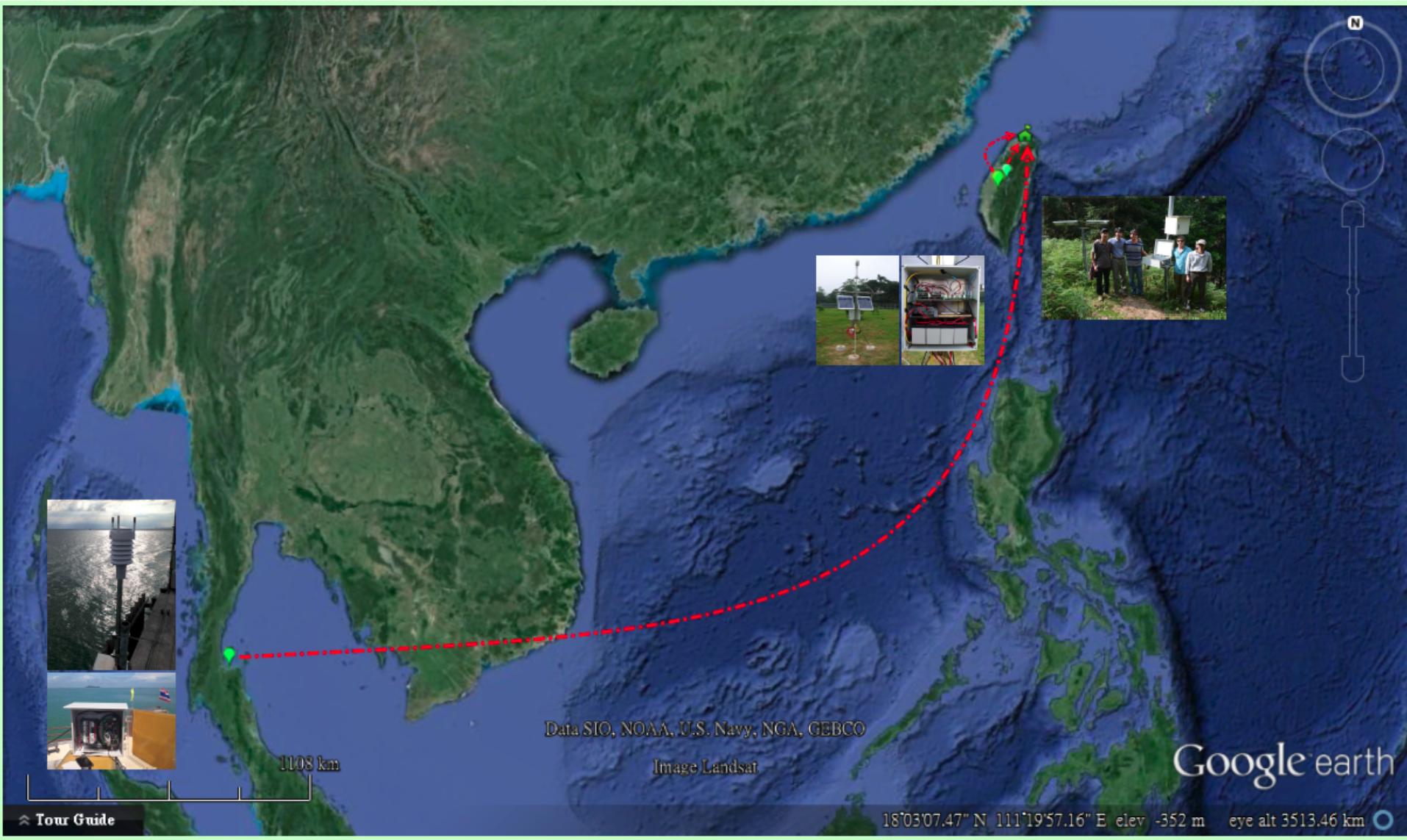


OpenSource-DataTurbine OS-DT

Dropbox



SensorPod Network in Asia





Real Time Data Viewer (RDV) TARI_YLGK_VWS - Dropbox https://www.dropbox.com/home/TARI_YLGK_SensorPod/DataGather_Service/TARI_YLGK_VWS SensorNetwork EcoInfo ▾

Files Photos Sharing Links Events Get Started 1

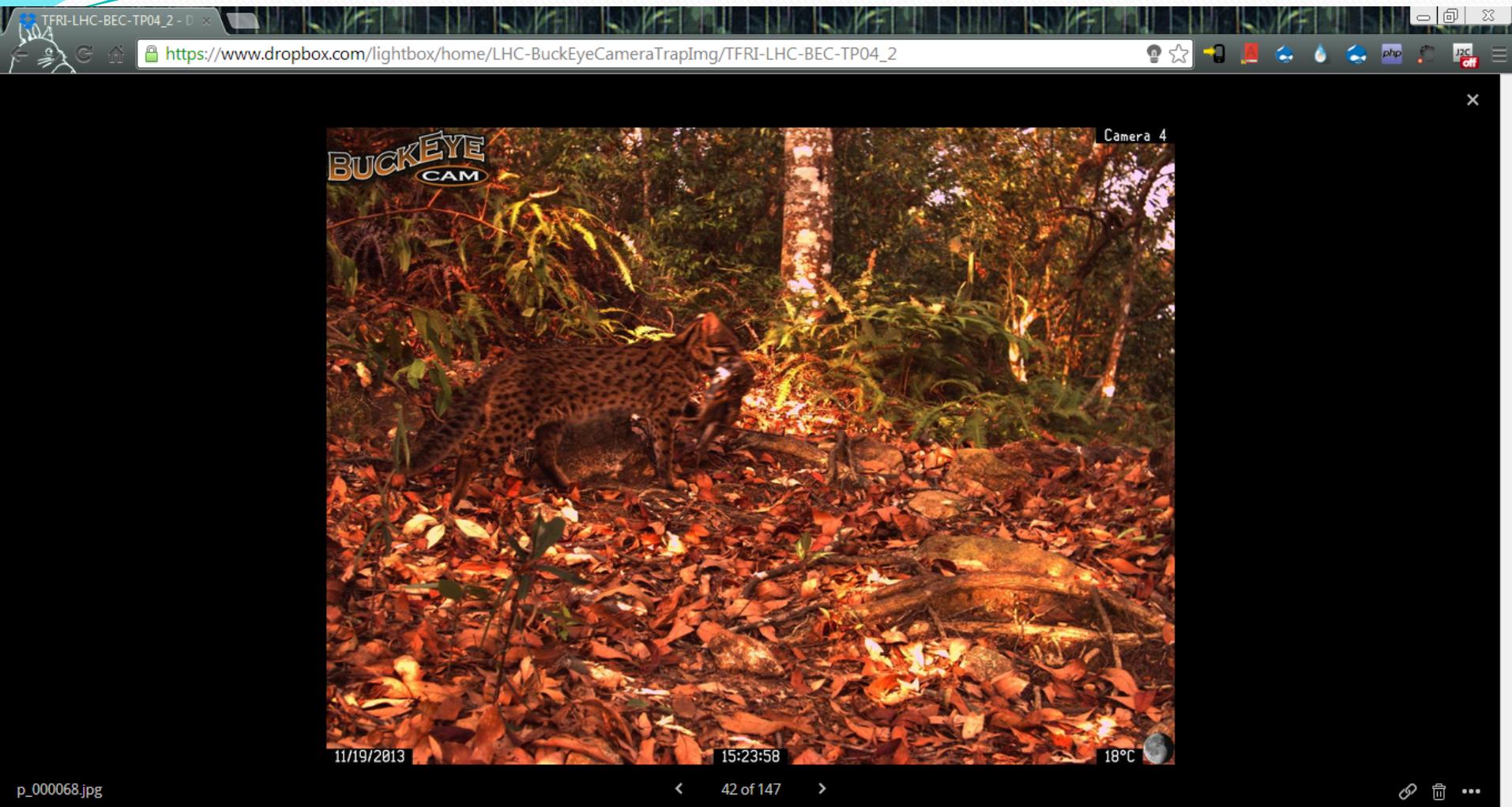
> TARI_YLGK_VWS

Name Kind Modified

1218_000027_dataLog.txt	document	5 hrs ago
1218_000026_testLog.txt	document	5 hrs ago
1217_000027_dataLog.txt	document	7 hrs ago
1217_000026_testLog.txt	document	7 hrs ago
1216_000027_dataLog.txt	document	Yesterday 3:13 PM
1216_000026_testLog.txt	document	Yesterday 3:13 PM
1215_000027_testLog.txt	document	Yesterday 3:13 PM
1215_000026_dataLog.txt	document	Yesterday 3:13 PM
1214_000027_dataLog.txt	document	Yesterday 3:13 PM
1214_000026_testLog.txt	document	Yesterday 3:13 PM
1213_000027_dataLog.txt	document	Yesterday 3:13 PM

Help Privacy ...





Acknowledgements

- The workshop was supported with funding from the Taiwan Forestry Research Institute, and an award to UCSD from the Gordon and Betty Moore Foundation.
- The workshop benefitted from additional support from the National Science Foundation (SI2 DataTurbine, PRAGMA, PRIME for undergraduate research experience). The workshop also benefited from the contributions from The Global Lakes Ecological Observatory Network (GLEON), The Coral Reef Environmental Observing Network (CREON), the Long Term Ecological Research Network (LTER), and the International Long Term Ecological Research Network (ILTER).