Newton Institutional Link 2020-21 Project

Robust Burnt Scar Profiling using Deep Learning and Ensemble Modeling with Remote Sensing Data

Background:

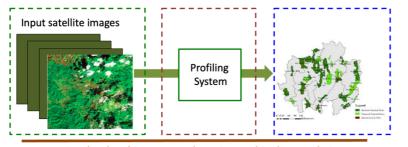
- Forest fire has contributed to high level of smoke and PM 2.5 especially in the northern part of Thailand
- Recently, this became an annual problem to health, travel, and tourism/economy
- Limited attempts to create a long-term or unified solution by authority and governmental agency
- Many existing studies provide information to public, but knowledge should also be sharable





Methodology:

- Cloud based data deposit and storage
- Data specification and collection (with Thai partners)
- Automated detection of burnt scars (deep learning + ensemble technology)
- Profiling burnt scars in spatial domain (with knowledge repository)



On cloud architecture and services to big data analytic

Outreach & Impact: Public demonstration and training.



- 5 journal articles (SJR Q1)

Outputs:

- 1 journal special issue (ISI)
- 1 conference workshop (Scopus)
- 2 MOUs within network
- 3 technical workshops

prototype & knowledge repo.



Contact: for more information.



Dr. Tossapon Boongoen Mae Fah Luang University email: tob45@aber.ac.uk



email: qqs@aber.ac.uk 1872