



# The CLMTV technical Cooperation on Geohazard Study Progress

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# OUTPUT / OUTCOME

## ► Output

1) **Seismic Hazard** and Landslide Hazard **Maps of CLMTV countries**

*(Potentially Disaster Map)*

2) Technical reports and information media indicating the technical cooperation on geohazard study of CLMTV countries

## ► Outcome

1) Information, technology transfer and their relevant approach can be used for sustainable geohazard management for CLMTV countries.

2) CLMTV countries staffs have highly skilled on geohazard management for working on their country after the entire project.

3) Sustainable international relations of Cambodia, Lao PDR, Myanmar, Thailand and Vietnam.

# The CLMTV technical Cooperation on Geohazard study proposed the tentative work plan 2016 - 2021

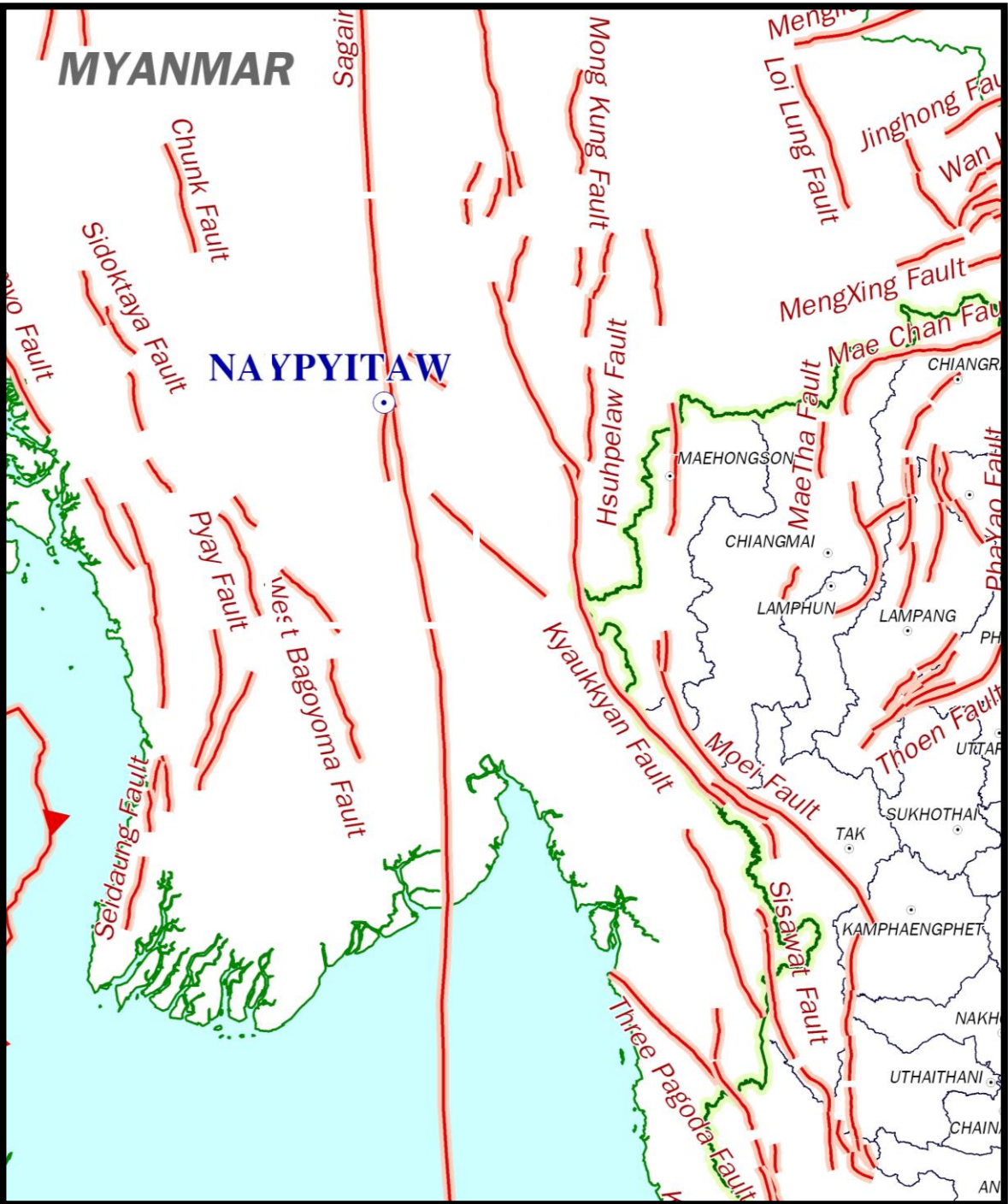
- ❑ 2016 : The CLMTV technical Cooperation on Geohazard study Executives Agreement Meeting (on Nov. 2, 2016)
- ❑ 2017 : Active Fault study in N Lao PDR - E Myanmar – N Thailand– N Vietnam Area (Dec 11 - 30, 2016)
  - :Training Course on Active Fault / Earthquake Geology Investigation in Thailand by EOS's & USGS's Experts (Feb. 15 – 25, 2017)
  - : Outreach: Seminar on Geohazards in CLMTV countries at Bangkok (Sep. 27, 2017)
- ❑ 2018 : Active Fault study in C Myanmar Area – W Thailand (the mid of 2018, possibly)
- ❑ 2019 : Active Fault study in C Lao PDR Area – NE Thailand
- ❑ 2020 : Landslide study in N Lao PDR – E Myanmar – N Thailand – N Vietnam Area
- ❑ 2021 : Seismic / Landslide Hazard Assessment in CLMTV



# Sagaing Fault in Myanmar CLMTV + China

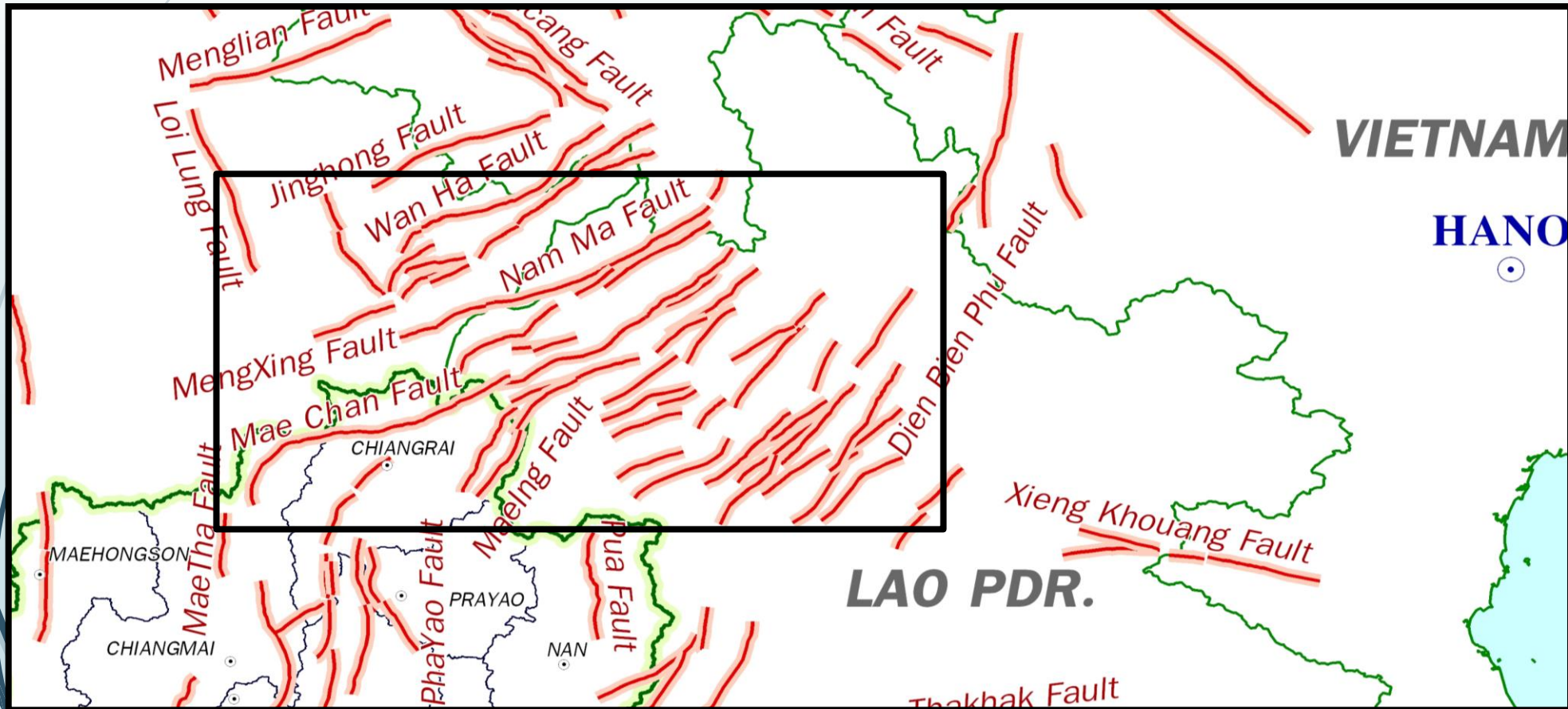
- Method : Active Fault Study by trenching and dating
- Places : Naypyitaw, Myannar
- Period : **the end of 2017 year**
- Support Agency : YEA
- Researchers : 2 DMR (Thailand), 4 DGSE (Myanmar), 3 YEA (China)
- Outputs : Active fault Map of Sagaing fault in scale 1: 100,000  
: MCE, Slip rate, Recurrence Interval

# Sagaing Fault



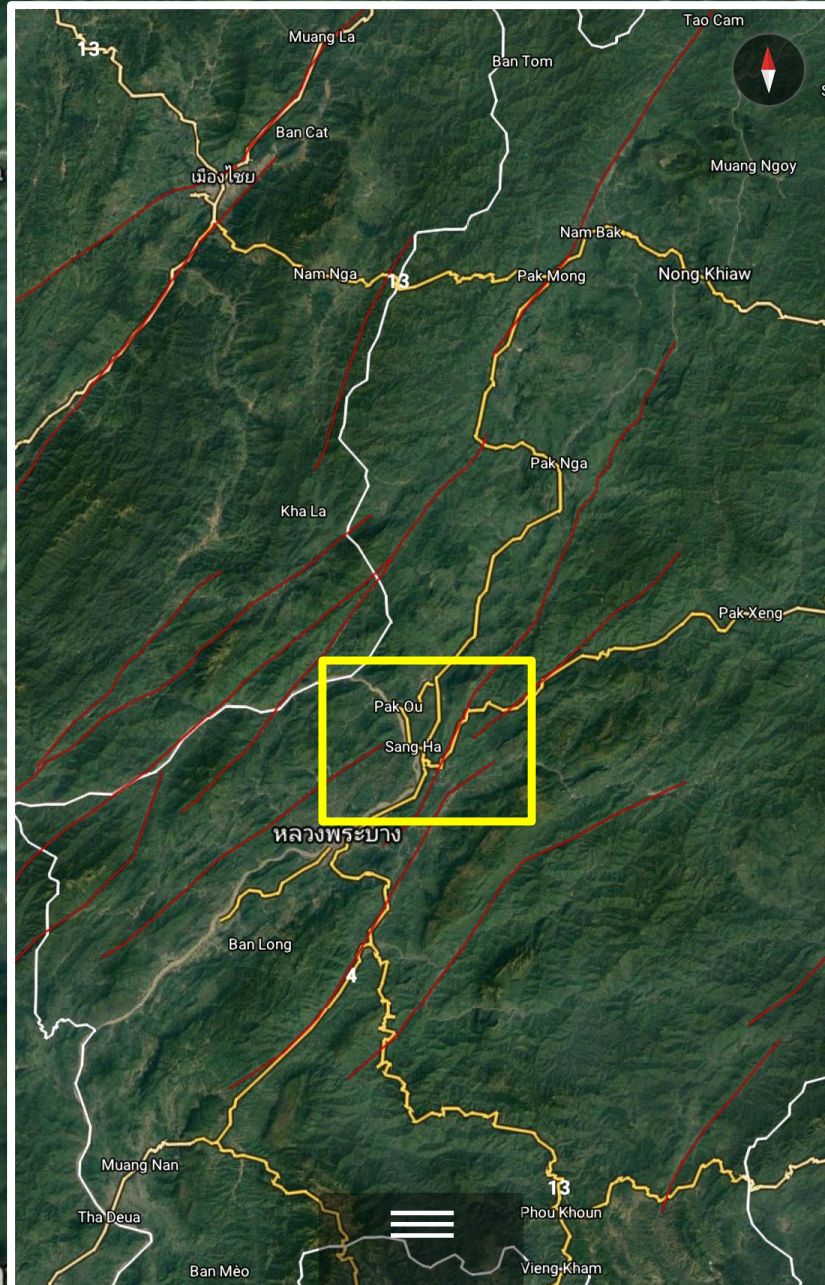
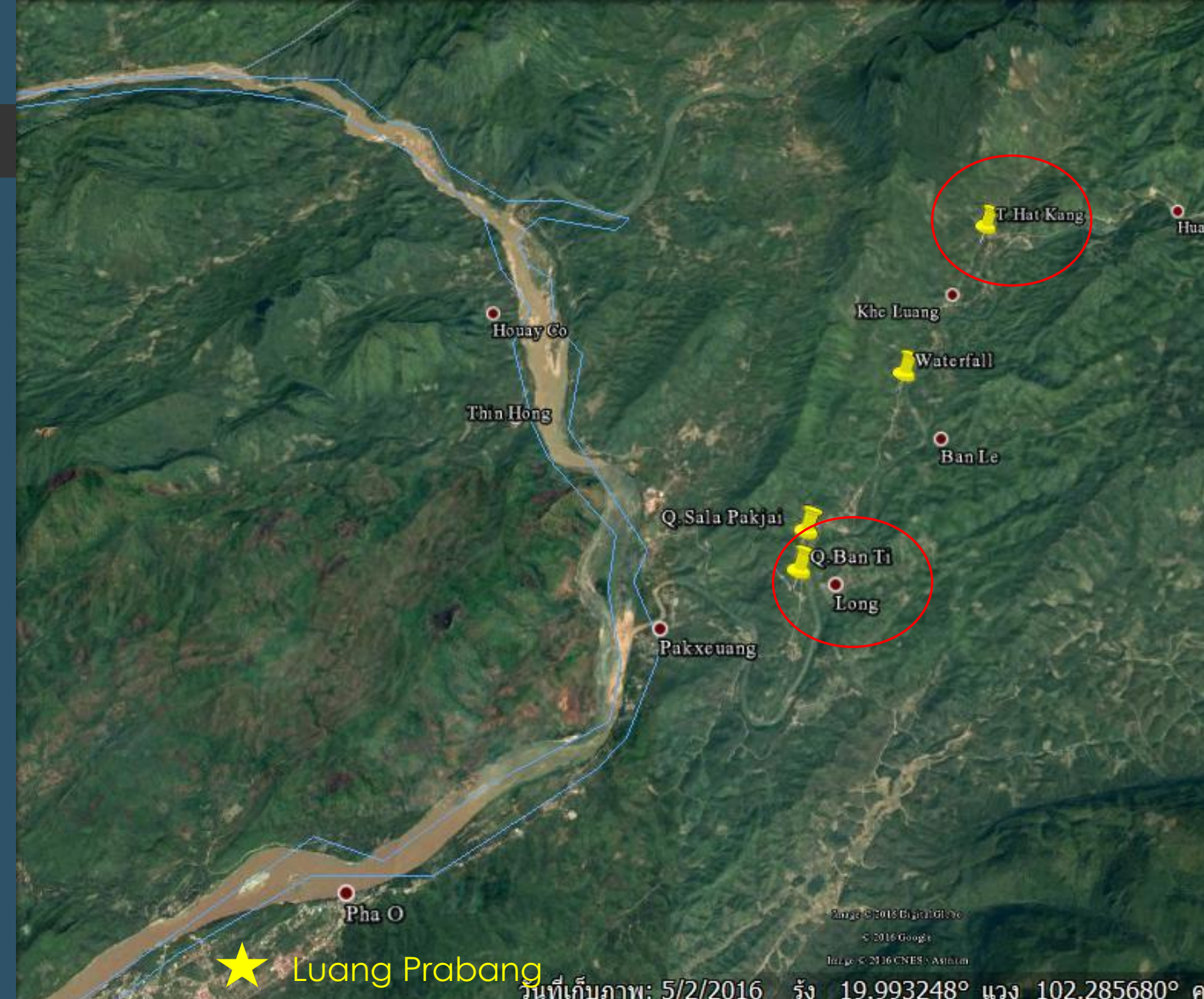
# Activity : CLMTV (+ China + Singapore)

- ▶ **Active Fault study in N Thailand – E Myanmar – N Lao PDR**  
**Mae Chan Fault, Nam Ma fault, and Dien Bien Phu Fault**



# Dien Bien Phu Fault in Lao PDR CLMTV + China

- Method : Active Fault Study by trenching and dating
- Places : Luang Prabang, Lao PDR
- Period : Dec 11 - 30, 2016
- Support Agency : YEA
- Researchers : 2 DMR (Thailand), 4 DGM (Laos), 2 YEA (China)
- Outputs : Active fault Map of DBP fault in scale 1: 100,000  
: Max Credible Earthquake (MCE), Slip rate,  
Recurrence Interval



Ban Hat Klang trench,  
Luang Prabang, Lao PDR

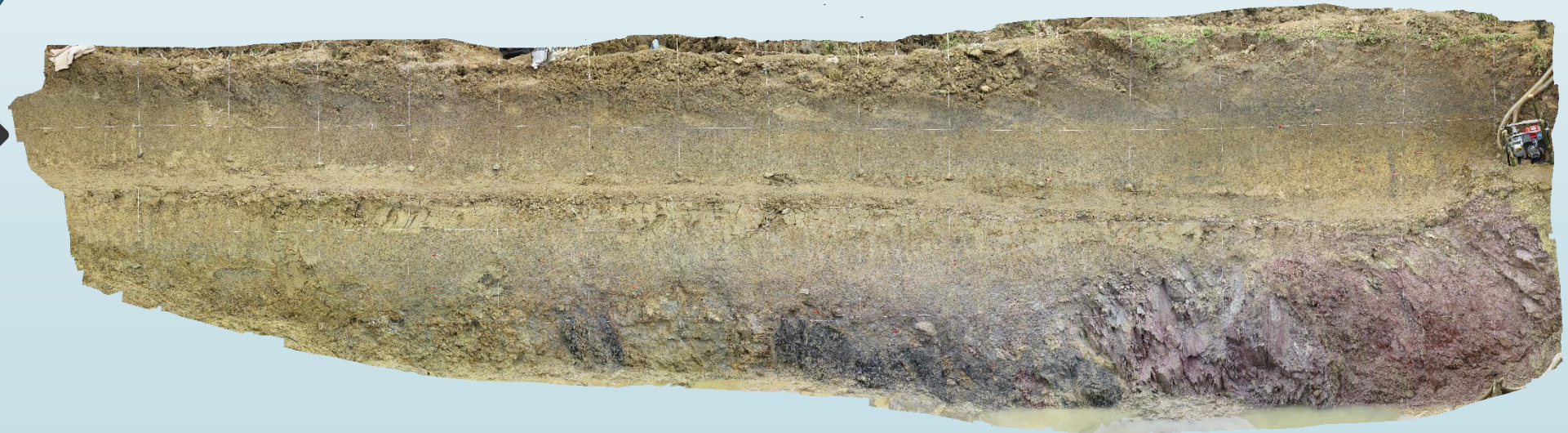


Ban Hat Klang trench wall,  
Luang Prabang, Lao PDR

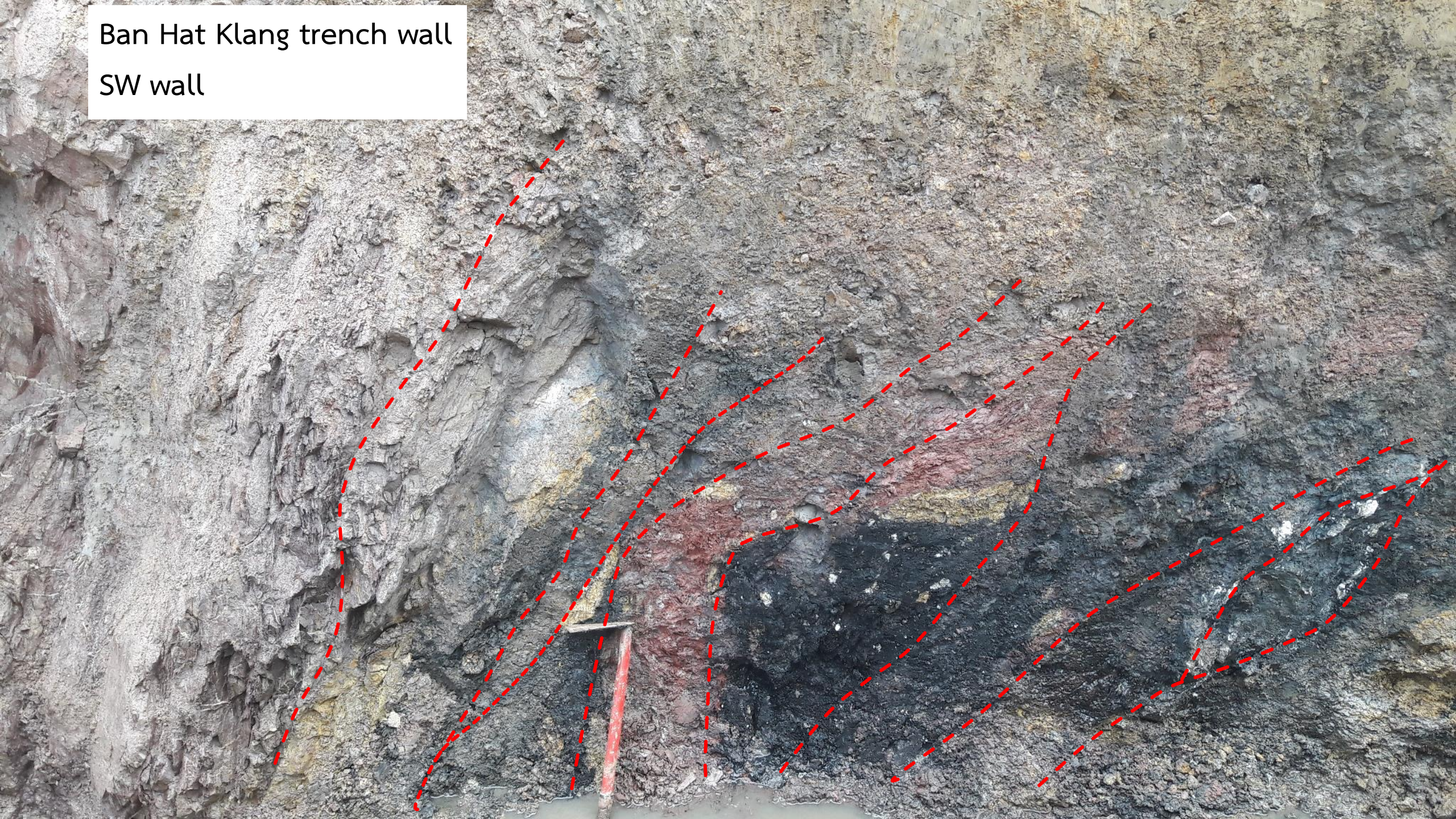
SW wall



NE wall



Ban Hat Klang trench wall  
SW wall





# Mae Chan Fault, Nam Ma fault CLMTV + Singapore

- Method : DMR- EOS Paleoseismic Training Course
- Places : Mae Chan Fault in Thailand and Nam Ma Fault in Myanmar (Tarlay)
- Period : Feb. 15 – 26, 2017
- Researchers : 8 CLMV, 20 DMR, 3 EOS, 3 USA, 15 MEC, 4 Students UO, 1 Malaysia
- Outputs : Active fault Map of Mae Chan and Nam Ma faults  
: MCE, Slip rate, Recurrence Interval











# Seminar on Geohazards in CLMTV countries at Asia Hotel, Bangkok 27 September 2017

- ▶ Method : Seminar
- ▶ Places : Asia Hotel, Bangkok
- ▶ Period : 27 September 2017
- ▶ Support Agency : DMR, EOS
- ▶ speakers : 13 DMR (Thailand), 4 DGSE (Myanmar), 3 YEA (China)
- ▶ Participants : 8 CLMV countries





***Thank You***