

18 October 2021

PRELIMINARY SATELLITE- DERIVED FLOOD ASSESSMENT

Lower Northeastern Part of Thailand

การประเมินพื้นที่น้ำท่วมด้วยข้อมูลจากดาวเทียมพื้นที่ภาคตะวันออกเฉียงเหนือตอนล่าง
ณ วันที่ 18 ตุลาคม 2564



LOWER NORTHEASTERN PART, THAILAND



LOWER NORTHEASTERN PART

ภาคตะวันออกเฉียงเหนือตอนล่าง

Thailand



Satellite detected waters



10 – 11 October 2021 (GMT +7)

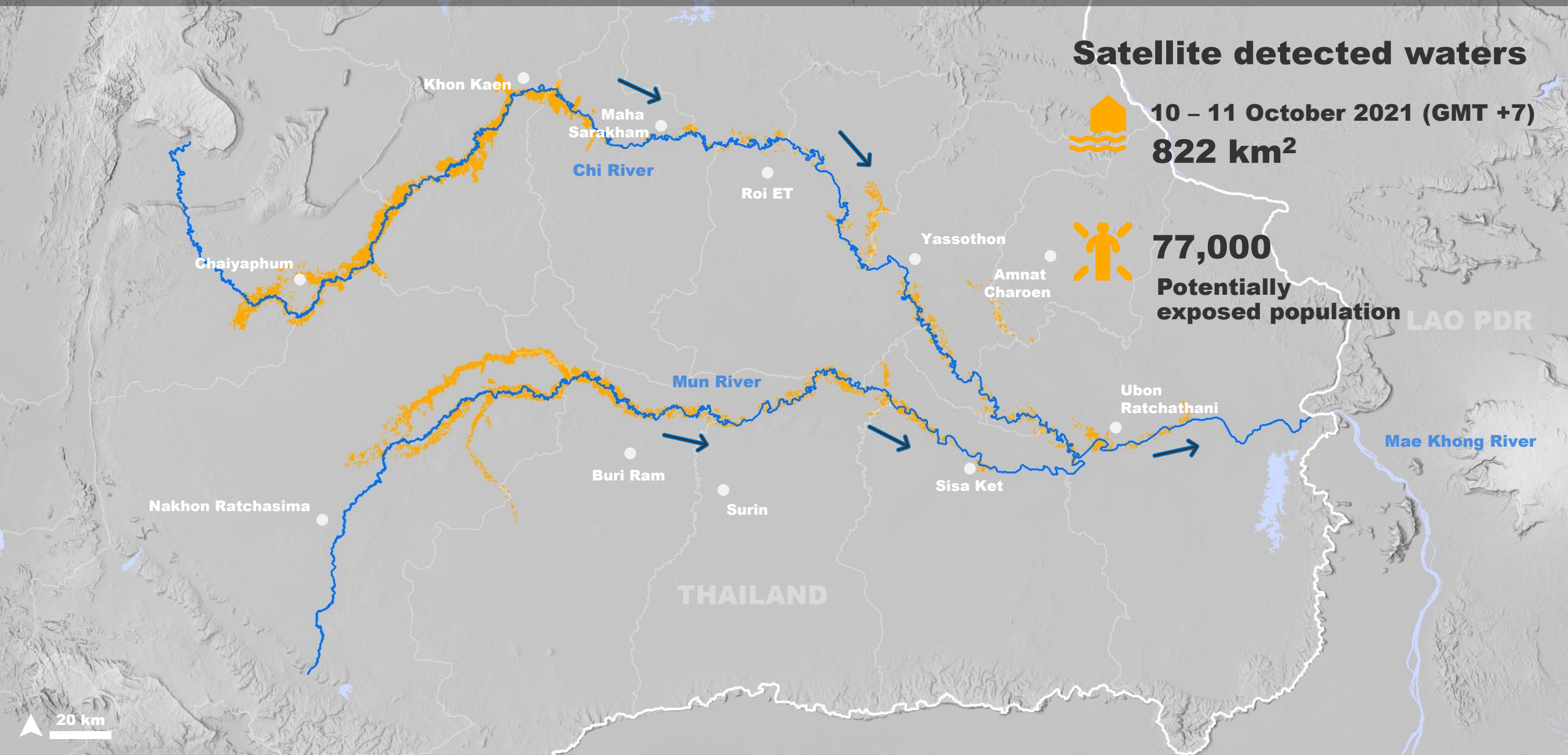
822 km²



77,000

Potentially
exposed population

LAO PDR



20 km

LOWER NORTHEASTERN PART

ภาคตะวันออกเฉียงเหนือตอนล่าง

Thailand



Satellite detected waters



17 - 18 October 2021 (GMT +7)

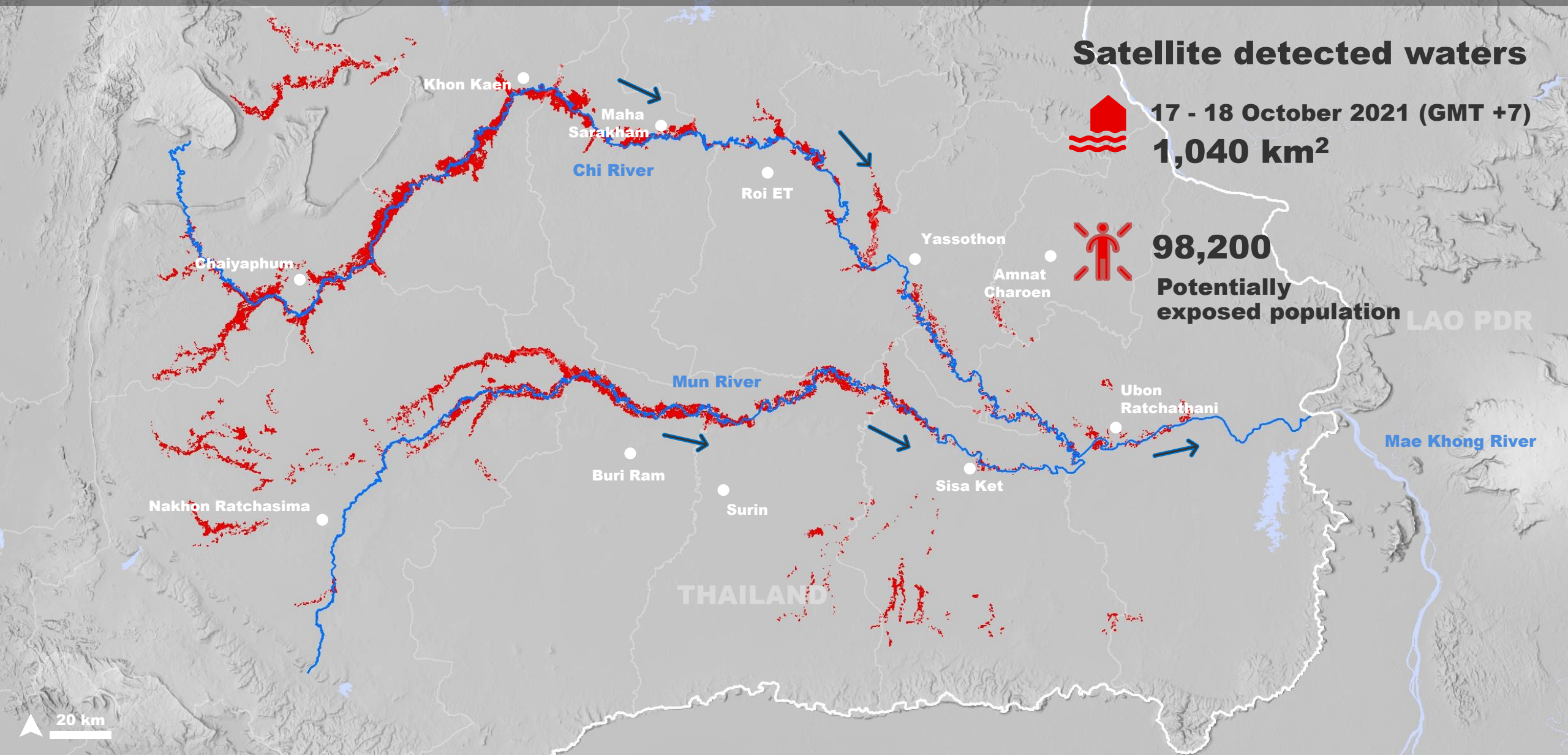
1,040 km²



98,200

**Potentially
exposed population**

LAO PDR



20 km

LOWER NORTHEASTERN PART

ภาคตะวันออกเฉียงเหนือตอนล่าง

Thailand



Satellite detected waters



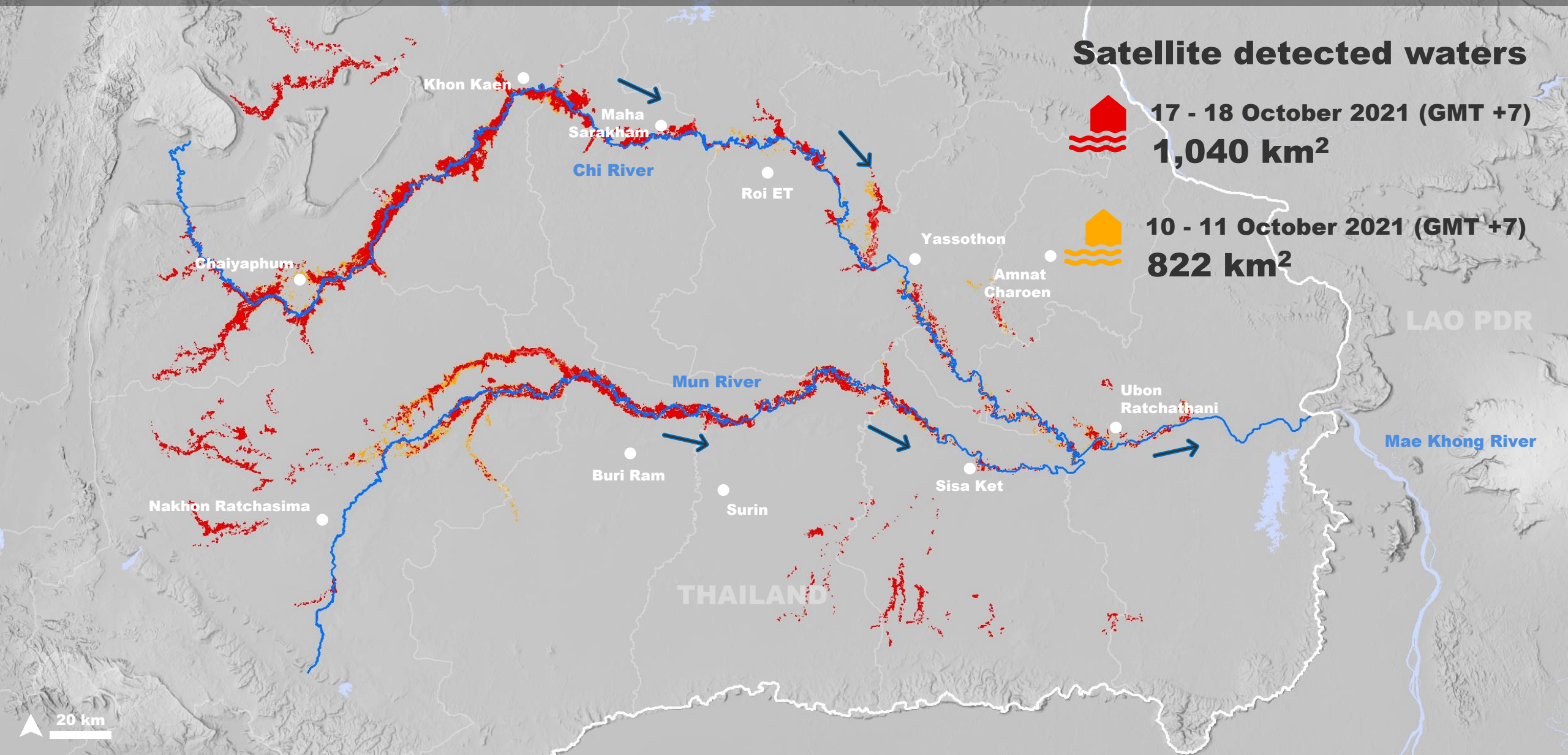
17 - 18 October 2021 (GMT +7)

1,040 km²



10 - 11 October 2021 (GMT +7)

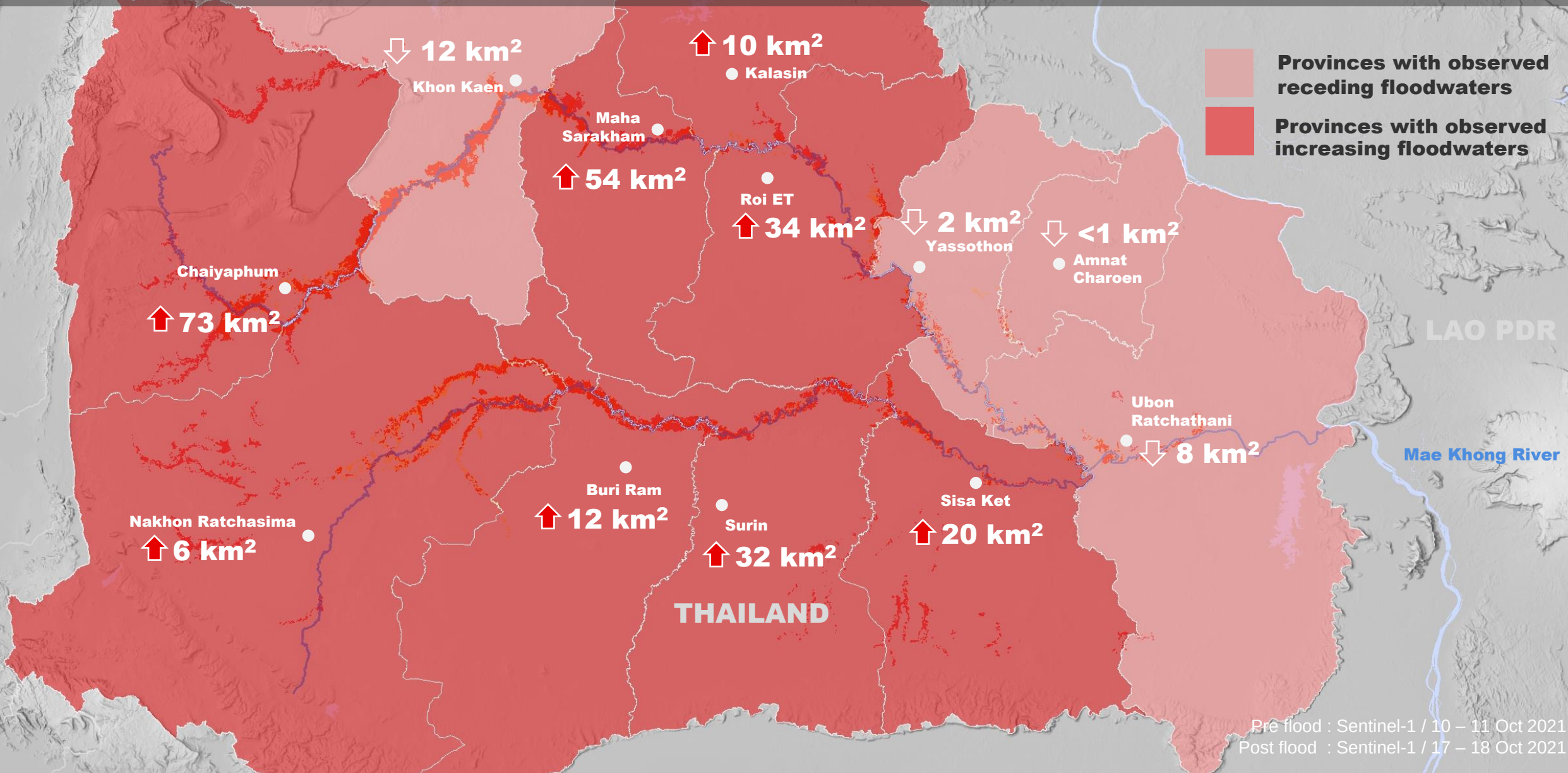
822 km²



LOWER NORTHEASTERN PART

ภาคตะวันออกเฉียงเหนือตอนล่าง

Thailand



Provinces with observed receding floodwaters

Provinces with observed increasing floodwaters

LAO PDR

Mae Khong River

THAILAND

Pre flood : Sentinel-1 / 10 – 11 Oct 2021
Post flood : Sentinel-1 / 17 – 18 Oct 2021

SUMMARY OF FINDINGS

- Floodwaters observed in 12 provinces as of 18 October 2021;
- Increasing floodwaters observed in Lower Northeastern Region as of 18 October 2021;
- Receding floodwaters observed in Khon Kaen, Yassothon, Amnat Chareon, and Ubon Ratchathani provinces as of 18 October 2021;
- Floodwaters increase observed in Chaiyaphum, Nakhon Ratchasima, Maha Sarakham, Buri Ram, Surin, Roi ET, Si Sa Ket and Kalasin provinces as of 18 October 2021.

COPYRIGHTS AND SOURCES

Data sources:

(1) Satellite Image [Pre-image]

Sentinel-1 / 09 October 2021 at 23:00 UTC

Sentinel-1 / 10 October 2021 at 22:52 UTC

Resolution: 10m

Copyright: Contains modified Copernicus Sentinel Data [2021]

Source: ESA

(2) Satellite Image [Post-image]

Sentinel-1 / 17 October 2021 at 11:20 UTC

Sentinel-1 / 18 October 2021 at 11:12 UTC

Resolution: 10m

Copyright: Contains modified Copernicus Sentinel Data [2021]

Source: ESA

(3) Ancillary data

Administrative boundaries: Royal Thai Survey Department

Reference water : ESRI 2020 Land Cover

Waterways: Open Street Map

Background: ALOS Global DSM

Flood Analysis / 17 Oct 2021 UTC : GISTDA, Thailand

Flood Analysis / 9 and 10 Oct 2021 UTC : United Nations Satellite Centre (UNOSAT) Machine learning method

Production: United Nations Satellite Centre (UNOSAT)



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